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The History of GM Performance Parts

Today, GM Performance Parts is the industry-leading source for small-block, big-block, and LS Family crate engines and engine components for all GM-specific applications. With a distribution network of more than 6000 dealers, GM Performance Parts offers a factory validated line of high performance parts that sets the standard for quality, dependability, value, warranty, and price. However, long before GM Performance Parts was a multi-million dollar division of General Motors, there was a small group of individuals who paved the way for this market segment. Identifying a demand for high quality, factory-sourced GM speed parts, this group of performance enthusiasts worked from within GM to offer just such a product line. This is the story of how a few individuals made it possible for a speed-hungry American subculture to get factory direct performance parts from General Motors.

The inception of GM Performance Parts started in the late 1960s during the height of the musclecar era. Entrenched in several forms of factory-backed racing, GM management was looking to form a group within GM to develop, manage, and distribute speed parts to their teams. While multiple GM employees, managers, and directors had a hand in shaping this new venture, Ernie Callard was the man who has been there from the very start. Beginning in May 1964, Callard served as a Dispatch Clerk, a Shipping/Receiving Clerk, and worked in the Scheduling Department at General Motors. Then, in March of 1967, Callard was transferred to the Materials Depart-

ment, and the concept of selling GM Performance Parts first came up.

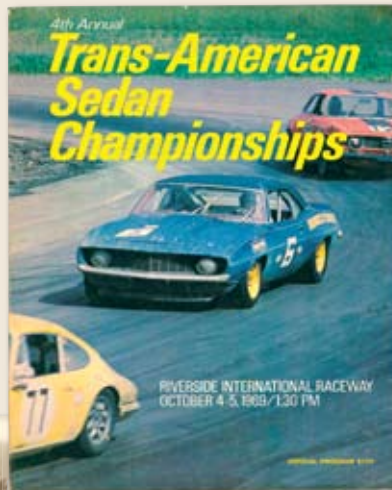
At only 27 years of age, Callard was invited to a high-level GM Directors meeting to discuss the factory support needed for various Trans Am racing teams, including those owned by Roger Penske. Management had two concerns: Where do they store the parts, and how do they ship the parts? Above all, Callard was instructed to never run out of parts for the GM teams.

"Vince Piggins was in the room," Callard recalls, "And, I can't remember everyone else that was there. I remember them telling me that I was to never run out of parts—never. I was told that they didn't care if we had to eventually throw them into the Detroit River, but I was never to run out of parts!" [Of course, no parts were ever actually thrown into the Detroit River.]

With those directions, Callard was put in charge of a new line of high performance GM Parts. The parts line included steering boxes, springs, spoilers, suspension pieces, and all the engine components necessary to keep a factory GM Trans Am team up and running.

"We had more than 300 part numbers that I was shipping to about 15 Trans Am teams. There were new parts constantly being developed by GM engineers for that program," Callard recalled.

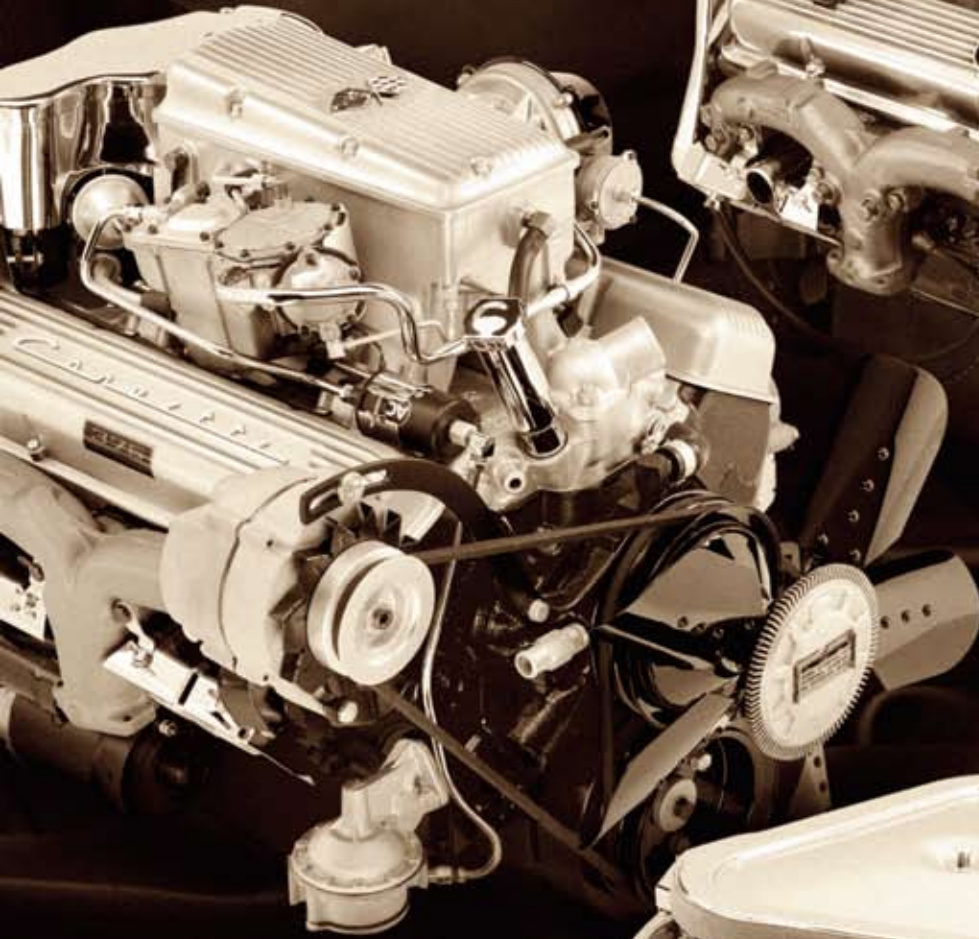
Initially, the parts were planned to be "no code" parts so that no one could track what they were, where they



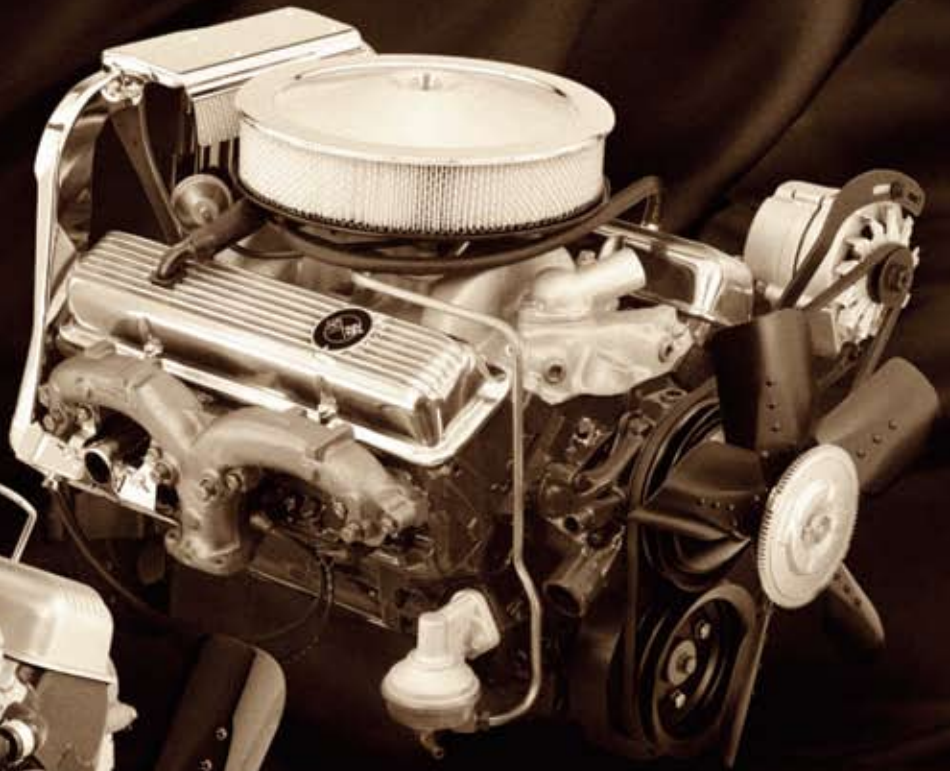
GM Performance Parts legend Ernie Callard in Dr. Dick Thompson's Trans Am racecar.

The original impetus for the development of a dedicated GM Performance Parts division grew out of the need to support the burgeoning Trans Am racing programs using GM cars.

Our family tree has borne a lot of fruit! When you ask the motoring world about legendary power plants, the GM small-blocks and big-blocks will dominate the conversation. Revered iron like the 283, the 427, the 454, the 400, the 350—and a whole host of others —have left their mark (often a parallel set of smoking rubber residue) on the race tracks and main streets of every corner of this country.



1965 327 cid V-8 FI (L84)



1970 350 cid V-8 (LT1)



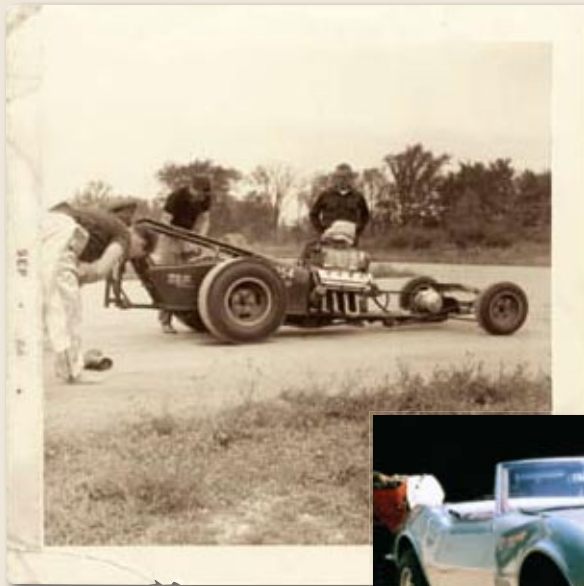
1967 427 cid V-8 (L71)

GM PERFORMANCE PARTS HISTORY

were going, or who finally received them. But, Callard had a slightly different idea: "I told them, 'Let's put a number on the parts. Let's sell them! Let's make these parts available to anyone who wants them for their own cars!'"

The GM executives agreed, and Callard was in the high performance parts business. Although it's doubtful that he knew it at the time, Callard's early concepts of high performance part numbering, configuration, packaging, and distribution would eventually evolve into today's modern portfolio of crate engines and engine components. As a side product, Callard had invented the concept of a "crate engine" as well as laid the groundwork for what is today GM Performance Parts.

One of the first orders of business was to develop a marketing strategy for the new line of high performance parts. The Chevrolet Corvette has always defined performance in the GM lineup, and in 1968,



GM Performance Parts has always been staffed by dedicated "gear heads." Here, Ernie Callard rolls out his 1964 Top Fuel dragster. Because many of the GM Performance Parts team members race themselves, they are in tune with the needs of high-performance aficionados.



The car that sparked a performance revolution — the Chevrolet Corvette. The inclusion of performance upgrade parts in the 1968 Corvette catalog helped drive the movement to offer a wide-range of performance parts.

the *Corvette Parts Catalog* offered up a full list of accessories and performance parts for the then-new Corvette. Barney Krass handled marketing for Chevrolet at the time, and he ensured that the *Corvette Parts Catalog* got to every dealer. Callard worked with Krass to get his "performance parts" list added to the *Corvette Parts Catalog*. It

was a nice addition to any GM dealer's lineup of high performance parts, and it allowed Callard to advertise his special line of GM engine components and crate engines. Many of the parts later ended up available for purchase in a catalog from the Chevrolet Merchandising Department, the precursor to the GM Performance Parts catalog.

It didn't take long for the word to get out about this "special" product line, and soon, high performance fans were buying up speed parts to enhance the performance of their Corvette, Camaro, Nova, Impala, or Hot Rod. Corvette-spec 427 crate engines could be purchased and installed in whatever project you could dream up. Chevrolet was able to add to the excitement with the release of the Central Office Production Order (COPO) Camaro in iron-block 427 cid/425 hp form or the legendary ZL1 — an all-aluminum 427 that was conservatively rated at 425 hp (experts place the real output as high as 600 hp). The ZL1 was built in a special assembly room in Tonawanda, NY. That room was named the "White Room" for its color and cleanliness. Callard was able to crate up ZL1 engines and sell them through GM Performance Parts. (The ZL1 block remains in the GM Performance Parts portfolio to this day.)

"GM built many more engines than vehicles that were sold," tells Callard. "So we grabbed up the remainder, put them into crates, and sold them as the first 'crate engines.'" For the early GM Performance Parts team, they were as excited as the end user at being able to provide factory support for hot rod efforts. One can only imagine some of the performance engines and

parts that they had their choice of.

With the release of the COPO Camaro—and crate engines and race parts available from Callard—performance-oriented GM dealerships started experimenting with putting high-end crate engines into production cars and offering them to the public for highway use. Yenko Chevrolet (Canonsburg, PA), Berger

Chevrolet (Grand Rapids, MI), Baldwin Chevrolet/Motion Performance (Long Island, NY), Scuncio Chevrolet (Greenville, RI), Fred Gibb Chevrolet (LaHarpe, IL), Dana Chevrolet (South Gate, CA), and Nickey Chevrolet (Chicago, IL) all took advantage of the opportunity to build dealer-prepped supercars. Legends the day they rolled off of the dealer's lot, today, these Camaros are



Car owner Junior Johnson prepared this Chevelle for Charlie Glotzbach to drive at Charlotte (now Lowe's) Motor Speedway. The Wilkesboro, N.C., native made headlines and became a legend for Chevrolet and GM through the years. From his win as a huge underdog in the 1960 Daytona 500 to his unmatched three successive NASCAR Cup championships as car owner for Cale Yarborough, he remained a fan favorite and a constant innovator. To stay on top, Johnson relied on GM muscle—often provided through Ernie Callard at GM Performance Parts.

some of the most desirable musclecars of all time amongst collectors.

In 1969, Callard was shifted over to the GM Warehousing Division, and he was put in charge of marketing, materials, and ordering for all of the GM Performance Parts line. By 1970, the crate engine line was in full swing. You could buy a brand new, 454-cubic-inch LS6 big-block for \$1200 or, if you had more exotic tastes, you could get a ZL1 for \$2300.

Something else happened in 1970 that would change the course of automotive history — GM got back into NASCAR. A “gentlemen’s agreement” had kept all of the Big Three automakers out of NASCAR, but a small group of enthusiasts deep within GM wanted to get back into the sport. GM’s involvement was on an unofficial level, but it brought about a big change behind the scenes at GM. Callard supported each NASCAR team, and each team had a Chevrolet dealer who handled parts distribution. Things really started to click from that point on. Chevrolet Engineering was developing and producing the racing parts and assigning the part numbers, while Callard bought the parts and shipped them to the assigned dealers. All of this engineering effort resulted in a huge influx of new parts for Chevy hot rodders. “Chevy Power” valve covers, suspension components, and dozens of new small-block parts started to make their way into production.

Soon, the *Sheetmetal Book* was published, a catalog for all of the production body panels that were routinely chewed up in racing. Again, it was Ernie Callard who was made responsible for making sure that every NASCAR team got the parts that they needed. This put Callard in direct contact with the teams, with their daily needs being addressed by GM Performance Parts.



Dale Earnhardt became the personification of GM high-performance. The seven-time NASCAR champion wore the GM Performance Parts colors proudly on his black No. 3 Goodwrench Chevy and his No. 2 Busch Series ACDelco car.

The company’s long association with Junior Johnson helped the legendary Wilkesboro, N.C., campaigner build one of the strongest organizations in NASCAR history, winning three straight titles with Cale Yarborough in the seat in 1976, ’77 and ’78, along with the Daytona 500 crown in 1977. Other NASCAR potentates like Ranier Racing, DiGard Racing, Rick Hendrick — and ultimately Richard Childress Racing — also drew heavily from Callard’s vault of GM Performance Parts to run up front.

With Childress, GM Performance Parts finally got its full due, as the logo was placed proudly on the number 3 of Dale Earnhardt’s Winston Cup car, and the number 2 ACDelco machine that he campaigned in Busch races. The association continued when Kevin Harvick wheeled the RCR machines after Earnhardt’s tragic death at Daytona in 2001.

GM PERFORMANCE PARTS HISTORY

Under the direction of Vince Piggins, Chevrolet Engineering also brought more marketing potential to GM Performance Parts. Their Racing Group, magazine project cars, and *Chevy Power Catalogs* helped put a national marketing plan behind the collection of high performance parts. The involvement of Chevrolet also brought a huge dealer network to the program. More and more Chevrolet dealers realized the advantage of having high performance support (and personalization options) for Chevrolet cars after the sale. At that point, local Chevrolet dealer promotions started to make a real impact on high performance sales. The support from Chevrolet was greatly appreciated by the small GM Performance Parts team that was in place at the time. Before this, the catalog sales were the



GM Performance Parts' association with some of racing's greatest names has created tremendous opportunities to prove our products—and promote them.



Humble beginnings — the 1982 Chevrolet Performance Parts display truck.

only marketing budget source, and there simply was no development/engineering money made available for new product. Callard was simply pulling production engines and giving them a service number or a service number for dealers to find. It wasn't until 1986 when a dedicated budget was made available for the promotion of high performance GM parts.

While marketing assets and product development were ramping up, the mobile marketing campaign behind GM Performance Parts was also going through a rapid development. In 1974—in an early attempt to get the word out on the offerings from GM Performance Parts—Ernie Callard and Ron Sperry traveled to the NHRA U.S. Nationals in Indianapolis to display GM Performance Parts products. They set up two small tables on the return road for the three-day event. They showed off a couple of cylinder heads and some other small-block components to the passing crowd. From that modest start, larger displays grew. Larger tents, bigger tables and more parts made their way to race-tracks around the country. By the late-70s, the “Chevy Power” tractor-trailer was sent out to races and car

shows, filled to the brim with the latest speed parts from GM Performance Parts. Today's GM Performance Parts Power Shop includes a virtual drag race simulator, a running ZZ572/720R engine display, and dozens of the latest crate engines, cylinder heads, and engine components on display.

To reach the street performance and hot rod enthusiast, in the early '90s GM Performance Parts began a long running association with AutoRama and World of Wheels. As title rights sponsor of these largest of indoor musclecar/street rod events, GM Performance Parts set up large parts displays at all of the 25 to 30 annual venues, and staffed the displays with personnel from a local dealer who specialized in the sale of GM Performance Parts.

Like the mobile rigs and car show displays, the business around GM Performance Parts quickly grew up around Callard. “Life is so much easier when you can do things all yourself,” Callard remembers. But, the fact remained that the GM Performance Parts team had done such a good job of moving high performance Chevrolet product that GM wanted to make sure that the parts would keep coming. In 1986, GM placed GM Performance Parts under the direction of the Materials and Product Development Department. This move was designed to expand the business through product engineering. In 1988, the modern version of the GM Performance Parts logo first appeared. This was yet another sign that GM Performance Parts was starting to stand alone as an integral high performance division within GM as well as the hot rod community.

In 1989, the first GM Performance Parts catalog hit the GM dealer's counters. In that catalog, you could buy a ZZZ crate engine (a 350-inch small-block that was rated at 345 hp)—the first non-production crate engine ever offered by GM Performance Parts. There were 500 ZZZ

crate engines sold in the first year that it was offered. The Chevy small-block, first introduced by Ed Cole and his engineering group to power the 1955 Corvette, had become a street legend by the 1960s, and the demand for parts (from race teams and enthusiasts) had been a key element in GM Performance Parts growth from the inception of the group. Now, dedicated performance engines could be ordered “in the crate” and the flood-gates were open. It was only logical that the big-displacement crowd would have its hunger satisfied in the very near future.

The 502 big-block shortly followed as the first non-production GM Performance Parts big-block. “The 502 was a great project,” Callard recalls. “We made some siamesed blocks for racing. Then, the marine industrial group developed a 502 from the block. We took that, swapped the cam and intake—and then went on to add aluminum heads.” In the mid-’90s, inventor and frequent contributor to GM Performance Parts, Cal Nicholson, developed the 502/502—our first crate engine rated over 500 horsepower.

Of course, the big-block crate engine lineup was quickly expanded to fill all the niches of large displacement community. Whether it was huge low-end torque that was desired, or big-time horsepower—or some combination thereof—GM Performance Parts was there with the necessary iron (or aluminum!). Innovations like Fast Burn head technology and fuel injection made their way from the small-block side of the fence to the big-block pastures, giving the entire GM performance family the tools they needed to build the project cars and racers of their dreams.

In the early ‘90s, the organization of the GM divisions supporting motorsports changed again. Jeff Kettman of GM Racing explains: “In 1991 GM combined the four divisional racing groups into one under Herb Fishel’s direction. Jim Spaulding was assigned to develop a racing parts department. That department worked closely with the racing engineers and designers to take an active role in designing and releasing high-performance and racing parts into the catalog. This allowed customers not only to purchase factory designed parts for NASCAR but also parts that were designed specifically for GM’s racing activities.” This realignment helped several divisions of GM funnel parts through GM Performance Parts for both professional and sportsman level racers. GM Racing parts continue to be an integral part of the GM Performance Parts portfolio of parts.

Racing has always been the cornerstone of product development and marketing at GM Performance Parts, whether it be on the high banks of NASCAR or the quarter mile of the NHRA. In 1986, GM Performance Parts began their official relationship with Warren Johnson as a sponsored NHRA Pro Stock drag racer. Six NHRA Championships later, “The Professor” is still one of the top threats to win on race day. Along the way, WJ has helped with the development of multiple drag race-specific parts, and his input

Meet the Managers

Through forty years of providing you with the very best in GM Performance Parts, there have been many talented managers who have helped grow the business. Without the dedication, creativity, and passion for fast cars, it is safe to say that the hot rod community would not be where it is today. Here’s a list of the GM employees who have at one time worn the hat as GM Performance Parts Marketing Manager.

1967–74	Ernie Callard
1975–1978	Gerry Bennett
1979	George Wissa
1980	Gene Wilkinson
1981	Don Zabo
1982	Gene Cumming
1983–1985	Don Fraser
1986	Janet Austin
1987–1989	Al Meredith
1990–1991	Don Vogren
1992	Bob Cheyne
1993–2001	Walt Campbell
2002–2003	Bill Fitzgerald
2003–2005	Will Handzel
2005–Present	Lisa Reffett

For 2008, GM Performance Parts consists of a talented team of high performance professionals that design, engineer, and market speed parts around the world. Today’s GMPP team consists of Dr. Jamie Meyer, Scott Roslund, John Cox, Thomas Bates, TJ Baldermann, Bill Martens, Micah Kern, Randy Leininger, Jeff Kremkow, Shawn Smith, Ryan O’Connor, Jay Zach, Tony Cubr, Jamie Worthington, and Rocko Parker.



From left to right: Thomas Bates, TJ Baldermann, Scott Roslund, Lisa Reffett, Dr. Jamie Meyer, Bill Martens and John Cox.

GM PERFORMANCE PARTS HISTORY

on the LSX Bowtie Block project have helped GM Performance Parts continue the tradition of racer-oriented speed parts that pace the industry.

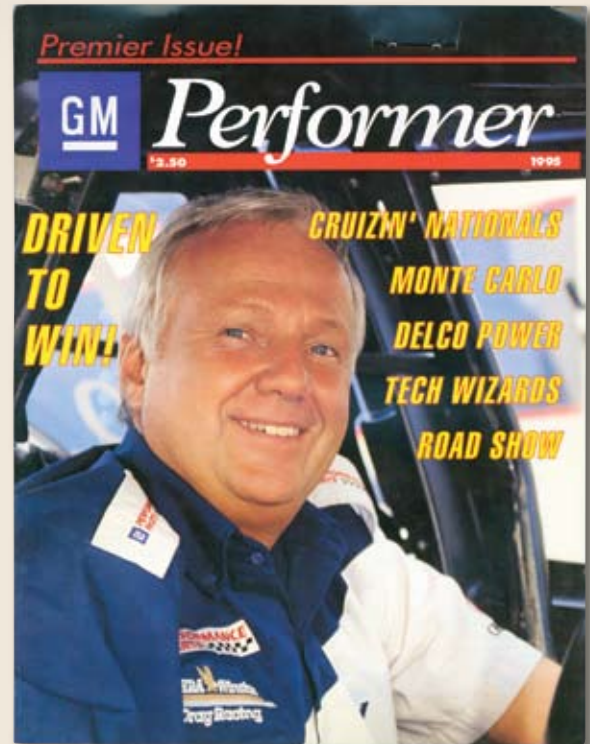
The decade of the '90s began an era of extreme growth in the performance parts business which continues to today. Under the direction of Walt Campbell, who managed GM Performance Parts from 1993–2001, annual sales more than tripled. The staff of Product Specialists, which started as just Ernie Callard, grew to five, to reflect the need for aggressive product development. The first fuel injected crate engines were introduced, with the Ram Jet 350 and 502. Significant efforts were also dedicated to the “tuner” market, with development of performance upgrades for four and six cylinder engines.

“The tremendous growth of the period,” recalls Campbell, “was due to the first of the Baby Boomers turning 50, and having the disposable income to build hot rod cars like they did—or dreamt of doing—during the '50's and '60s. GM Performance Parts was ready for, and capitalized on, that demand.”

One of the hottest products to come out of that demand was the ZZ572 big-block crate engine in both 620-horse pump gas and 720-horse race fuel configuration. GM Racing had planned on retooling the GM big-block in 2001, and when the team started looking into the possibilities a 572-cubic inch big-block was born. Jeff Kettman, Bob Cross, Todd Brechtelsbauer, Shawn Smith, Herb Fishel, and Jim Spaulding helped push this project to market in mid-2002 while the GMPP marketing



GM Performance Parts has been a strong supporter of racing at all levels since its inception. From grass roots stock cars to the top tiers of motorsports — we're there in spirit, and product.



Warren Johnson, “The Professor” to drag racing fans, has been a part of the GM Performance Parts team since 1986. Not only does the division sponsor the six-time NHRA champ, but he returns the favor by helping with engine development on their performance crate engines, blocks and components.

team prepared the buying public for the most powerful big-block GM had ever released. Jay Leno’s 1955 Buick Roadmaster, shown at the 2004 SEMA show, helped announce the launch of this massive big-block. An interesting note: the custom “Leno” valve covers were later retooled to read “572 Chevrolet”; added to the crate engine, and a classic big-inch rat was born.

At the same time, the GMPP team was also able to launch the circle track crate engine program. Initiated in April of 2001, following the super successful ASA program, GMPP started examining the possibilities of providing factory-sealed race engines for local dirt and asphalt circle track racers. That basic concept that supports the GMPP sealed crate engine program is that racers can now use a \$3000–\$5000 engine instead of the \$20,000–plus engines that had become commonplace. What separates the GM Performance Parts engines is that they are sealed (using proprietary labeled bolts) at the GM factory, ensuring that every racer starts with the same engine. The GM logo, a well-regarded trademark, is vehemently protected by the GM legal staff. Add in the high volume production for decreased cost, the highest level of engineering, and traditional GM validation requirements, and the circle track crate engine program was off and running.

“The only company that could do this is GM,” states Will Handzel, marketing manager at GMPP during the launch of this program. “I believe that we have saved the Saturday night racers.”

Handzel should know, as a former Street Stock and Late Model racer, as well as an editor for *Circle Track* magazine. And, while GMPP’s visionary crate engine was first met with some resistance, the industry that surrounds this great American motorsports quickly grew to embrace the possibilities of a factory-backed engine program for the sanctioning bodies.

No business can be successful without satisfied customers. To best reach the performance consumer with product, the GM Performance Parts Authorized Center Network of Dealers was developed in the mid-’90s. These dealers—covering all major markets in the US—always have a large supply of GM Performance Parts and provide knowledgeable assistance to the hobbyist or professional racer that employs the use of GM Performance Parts. This highly effective network also provides timely feedback of trends and other information important to GM Performance Parts.

To further extend their reach into the market, GM Performance Parts launched their own stand alone website on August 1, 2006 at the URL www.gmperformanceparts.com. The state-of-the-art GM Performance Parts website was immediately met with positive reviews from the automotive press and rave reviews from high performance fans. Among the many features, you can virtually build and dyno test a new crate engine; follow the progress of your favorite GM racer; get tips on how to build your project car; download a free catalog or ring tone; and find the right parts for your project. With an increased emphasis on digital marketing, www.gmperformanceparts.com has helped continue to keep GM Performance Parts as the leader in providing high performance GM crate engines and components.

Callard is the first to admit that today’s GM Performance Parts is much more visible and better run than what he

was first handed in the 1960s. His efforts, and the support of enthusiastic GM employees through four decades of development, have helped shape one of the most successful performance parts companies in the world. In February of 2006, Ernie Callard retired from GM, but he remains as a consultant for GM Performance Parts.

Today, GM Performance Parts is a marketing giant within the high performance aftermarket community: selling the very best in high performance GM parts; sponsoring and supporting all forms of motorsports; and developing the next generation of speed parts for automotive enthusiasts around the world. With a portfolio boasting over 30 crate engines, over 15,000 engine components, and dozens of engineering projects released monthly, the future of GM Performance Parts certainly looks bright.



While not officially sponsoring a vehicle at the time, GM Performance Parts was very much in tune with what was happening on the Winston Cup circuit. Ernie Callard was already making parts available to stalwarts like Junior Johnson—and was monitoring the action in the media of the time.



GM Performance Parts became a major player at a variety of industry trade shows and expositions, giving the motoring public a glimpse of the growing inventory of parts they were developing—and stocking.

GM Performance Parts Website Update

In 2006, GM Performance Parts launched one of the most sophisticated automotive-based websites on the internet at www.gmperformanceparts.com. Our home page features GM Performance Parts content, information, and activities that can provide hours of education and entertainment. Chief amongst these is our groundbreaking Virtual Engine Dyno Configurator. Our Virtual Dyno allows you to start with one of our crate engines and then “virtually” exchange the camshaft, heads, intake, and more with another GM Performance Parts part. Then, you can make a comparison virtual engine dyno pull to see how your modifications to our crate engine affected the performance. All of the data has been generated from actual dyno pulls with no extrapolation of data so that you get real numbers and real performance.

Besides our revolutionary Virtual Dyno Configurator, you’ll find loads of information on all things GM Performance Parts. At www.gmperformanceparts.com, you can download our entire current parts catalog, find the exact part that you are looking for, get detailed information on our entire crate engine lineup, and find the closest GM Performance Parts authorized center. New product launches are a regular part of the site updates. Put it all together, and it’s a quick way to find the right engine or engine component for your project vehicle.

If you need inspiration or support in building your project car, our website can help. In the Project Cars section of our website, you can find detailed descriptions of the parts we use to build our own cars like the Summer School ’70 Chevelle or the Reggie Jackson ’69 Camaro. Once your



Home Page

project car is complete, it’s time to have some fun. At www.gmperformanceparts.com, we’ve got a complete listing of car shows, events, and races that you’ll want to check out. Our Power Shop mobile rig tour is posted so that you’ll know where to find GM Performance Parts each weekend of the year. In addition, the NHRA, NMCA, and several circle track schedules are on our site. You should also be watching our site for big event announcements like last year’s LSX Shootout!

There’s even a bunch of free stuff for you to download like wallpaper featuring GM Performance Parts project cars and racers, as well as free ring tones for your cell phone.



Virtual Dyno Configurator



Engine Showcase

Or, step into the apparel section, and order yourself a new GM Performance Parts hat or T-shirt.

For 2008, we have a long list of upgrades that you can watch for at www.gmperformanceparts.com. You will find an expanded Project Car area with details on over 30 of the actual test vehicles that we use to engineer, test, and evaluate our own crate engine portfolio. Some of these Project Cars are national car show event caliber cars that have garnered international attention. Yet, others are vehicles just like the ones that you drive except that they have a GM Performance Parts crate engine installed.

Watch for an expansive frequently asked question (or FAQ) list at www.gmperformanceparts.com. Our engineers have worked hard to assemble the right answers to the most commonly asked questions about our products.

Each year, automotive enthusiasts magazines publish hundreds of technical articles that feature GM Performance Parts parts. We are very grateful for the enthusiasm with which these automotive editors test our products under all types of different conditions. However, with so much material available on GM Performance Parts products, it's been difficult for our customers to find all of them. To make it easier to find the latest information on GM Performance Parts products, check out our new "Magazine Articles" area on www.gmperformanceparts.com. There you will find links to dozens of different magazine articles from great titles like *HOT ROD*, *Super Chevy*, *Chevy High Performance*, *GM High-Tech Performance*, *Four Wheeler*, and many more. Each article includes the cover and every page of the article in a downloadable PDF file that is in

high-res. Find an article that you want, download it, save it, or print it off and read it at your leisure. They are all there in the GM Performance Parts "Magazine Article" section!

Do you live and breathe Circle Track racing? So do we! And, in 2008, look for a massive update to the Circle Track area on www.gmperformanceparts.com. Watch for more racing coverage, more track schedules, details on our sealed crate engine program, more drive information, and tips that will put you in the winner's circle. We are your source for Circle Track crate engines, and we want to be your choice for Circle Track internet content.

All of these 2008 updates will be supported by a video-based initiative that will include online instructional videos on all of our products. Look for "how to" videos on engine assembly, engine installation, and more. Videos on product releases will help you further understand why we are the leaders in crate engine and engine component technologies. And, online video coverage of your favorite types of racing—be it drag racing or off-road—can be found at www.gmperformanceparts.com.

As you can tell, there is a lot of material on our site and a lot more on the way. If you want to learn more about GM Performance Parts products or the GM Performance Parts lifestyle, there only one place to be: www.gmperformanceparts.com.



Project Car—Yellow LST GTO



Free Downloads

GM Performance Parts Increases Warranty

Since 1967, GM Performance Parts has brought you the very best in factory GM crate engines. Today, GM Performance Parts leads the industry in product testing, engineering, and GM factory support. And, just as General Motors has placed a 100,000-mile powertrain warranty on all new vehicles, GM Performance Parts is proud to announce an increase of our product warranty. Starting in 2007, GM Performance Parts street crate engines come with a 24-month/50,000 mile warranty, and our engine components come with a 12-month/12,000-mile warranty.

(Please see warranty statement at the end of this catalog for a full description of warranty and limitations.)

The result of four decades of engineering is a product lineup that is the most tested in the industry—crate engines and engine components that are held to the very highest of standards. Now, you can take advantage of that engineering when you buy genuine GM Performance Parts crate engines backed by this incredible new warranty.

2009 Camaro Watch

The world first saw the Chevrolet Camaro concept car at the 2006 Detroit Auto Show. It was an instant success, with media representatives, Camaro fans, and automotive enthusiasts from around the world asking when the production version would be ready for sale. With innovations and options never before seen in a pony car, the concept car had everyone excited to see what the production version would bring. Since that show, Chevrolet engineers have been working tirelessly to deliver to you the greatest Camaro ever produced.

The return of the Chevrolet Camaro may well be the most anticipated automotive launch in the history of General Motors. Like you, the engineers at GM Performance Parts are excited to not only drive a Camaro but to modify the Camaro for extreme street use, drag racing applications, and road racing.

First, here is what we know about Camaro: You should be able to buy your Camaro in early 2009. There will be at least one V-6 and V-8 model offered. We know that the convertible Camaro will be out later in the 2009 year. The car will come with an advanced independent rear suspension offering an incredible ride quality. Beyond that, we'll have to wait to tell you more.

As for our involvement, we can tell you that there are Camaro enthusiasts from several divisions of General Motors that are working on special editions, handling kits, engine parts, accessories, and general hot rod parts that should help you keep the wrenches flying for months after your purchase. We know that the Camaro is a special car—one that people will be passionate about. And, we want to make sure that the GM factory can provide you with just about anything you want in the way of high performance parts.

One thing is for sure—the 2009 Chevrolet Camaro will be one of the hottest cars to ever hit the streets and race-tracks of America. And, GM Performance Parts plans to be right there with crate engines, bolt-on parts, and serious engine upgrades to ensure that your Camaro performs to your expectations.



(Left to right): General Motors Vice President Global Design Ed Welburn, GM North America Engineering Vice President Ed Koerner and Chevrolet General Manager Ed Peper stand with the Camaro concept at a gathering to celebrate GM's 2006 announcement that it will build an all-new production version of the Chevrolet Camaro. The sport coupe will be nearly identical to this Camaro concept that was introduced at the North American International Auto Show. Production will begin at the end of 2008 and the Camaro will go on sale in the first quarter of 2009.

Special Cover Car Section: GM Performance Parts Powers PROJECT-X

Without question, the 1957 Chevrolet Bel Air has reached the status of American automotive icon. With its classic lines, massive tail fins, rumbling V-8 small-block, and yards of chrome, it instantly connects the onlooker with an exciting time in the history of American automobiles. In 2007, the world celebrated the 50th anniversary of the 1957 Chevrolet Bel Air, and in 2008 GM Performance Parts is celebrating the 50th anniversary of the big-block Chevy. Motivated by these two special events, we decided to build something truly extraordinary.



6-speed transmission, and—of course—a fresh coat of GM yellow paint.

The 2008 version of Project-X also features the first ever GM Performance Parts 50th Anniversary Big-Block crate engine.

This limited edition engine has been especially assembled to celebrate the 50th Anniversary of the GM big-block, and it is special indeed. Project-X gets the first of only 427 of these monster big-blocks based off the restored original tooling for the legendary ZL1 aluminum 427 block. Measuring 427 cubic inches, the 50th Anniversary big-block also features oval port aluminum GM Performance Parts heads; oval-port dual plane aluminum intake; and the same aggressive camshaft that you'll

find in our ZZ502 crate engine. All tolled, the all-aluminum big-block makes over 430 horsepower. Best of all, thanks to a streetable 9.6:1 compression ratio, this 427" big-block only requires pump gas. Wrapped in anniversary valve covers that are individually serial numbered up to 427, it's the ultimate way to celebrate 50 great years of big-block power from GM.

To learn more about Project-X, the GM Performance Parts 50th Anniversary 427 big-block crate engine, and how GM rebuilt this iconic classic Chevy, make sure to read the series of stories in *Popular Hot Rodding* magazine. We also have plans to drive Project-X on the 2008 HOT ROD Power Tour—see you there.



For decades, hot rodders of all ages have followed the seemingly endless technical and buildup stories of a very special '57 Bel Air named Project-X. Owned by PriMedia Publishing since 1962, Project-X is quite simply the most well known '57 Chevy on the face of the planet. Besides hundreds of feature stories, it even starred in the movie *Hollywood Nights*. And, when we decided that we wanted a '57 Chevy to show off our new crate engine, Project-X was the only choice.

Collaborating with Al Oppenheiser's team at GM Performance Division, we've brought Project-X back home—back to General Motors where it all started fifty years ago. Following the vision of renowned GM Design Center standout David Ross, the GM Performance Division team has updated Project-X with a modern interpretation of the Pro Street chassis. Monster rims wearing fat tires fill out the rear while the car remains quite stable at speed, thanks to a custom, computer-designed suspension package from GMPD. Project-X is rounded out with a modern interior, a Tremec



GM Performance Parts Hits the Highways of America on the Hot Rod Power Tour

The Hot Rod Power Tour is the ultimate experience for people who love cruising the streets of America. For 2007, the tour covered seven states in seven days—traveling from Cleveland, OH, to Little Rock, AR, through Michigan, Wisconsin, Illinois, Indiana, and Tennessee. Now in its twelfth year, the Hot Rod Power Tour attracts hot rodders from all over the world with over 2000 participants braving the over 2000-mile tour and earning themselves the coveted Long Haul Gang status.

Invited by the event's sponsor, GM Performance Division, GM Performance Parts was more than happy to bring along a few of our latest project cars to join in the fun. Here's a look at the GM Performance Parts project cars that made the long haul on this year's Hot Rod Power Tour:



The Reggie Jackson 1969 Camaro—A modern musclecar showcasing GM Performance Parts' new LSX engine family.

Reggie Jackson '69 Camaro

It's not every day that you see a legend rolling down the highways of America, but in the case of the Reggie Jackson '69 Camaro, you see two. The first is the obvious—the same gorgeous 1969 Camaro that graced the covers of our 2007 GMPP catalog and the May 2007 issue of *Super Chevy* magazine, as well as being the star of a *Hot Rod* TV special that covered the build of the car. The second legend is the man behind the machine—Reggie Jackson, world-renowned car collector who also happens to be a member of the Baseball Hall of Fame as a New York Yankee.

The Reggie Jackson '69 Camaro also used the prototype of our LSX 454/620 crate engine based on LSX Bowtie Block number one! The GMPP engineers thought that

the Hot Rod Power Tour would be a great way to test and validate the performance and durability of the LSX 454/620 crate engine, and were they ever right! The 600-plus horsepower Camaro made quick work of the 2000 mile trek with several media representatives, Hot Rod staffers, and GM engineers driving the machine the whole way—no enclosed trailers here!

After a quick detailing, the car will be placed on the show circuit for a few events in 2008. Then, the Reggie Jackson '69 Camaro will be retired to the GM Heritage Foundation, where it will go on display with dozens of other great GM musclecars. Check it out the next time that you are in Detroit.

Twin '96 Impala SS Supercars

Once again, GM Performance Parts has teamed with GM Performance Division to offer the hot rod community the extreme in street performance. Meet the twins: two 1996 Impala SS sedans that will have you seeing double! It may be the ultimate Dr. Jekyll and Mr. Hyde act—two Impalas that came from the same source but with obviously different intentions. The first Impala packs a twin-turbo punch with straight-line ambition. The second Impala offers you the perfect showcase for the latest in GM Performance Parts crate engine technology.



The new General Motors Performance Parts Power Shop exhibit truck and trailer on display in The Year One Experience at Road Atlanta in Baselson, GA, on April 22, 2006. This exhibit will travel cross-country.



The GM Performance Parts truck took the show on the road.

Outlaw Impala SS

How did GM Performance Parts prove to the world that their new LSX Bowtie Block (P/N 19166454) is capable of containing over 2000 horsepower? Simple, we went out and did it! Meet our evil new Outlaw 10.5W-tired car—home to our first ever 2000 horsepower LSX engine. Packing a 454-cubic-inch version of the LSX Bowtie Block, the engine also wears twin 88mm Turbonetics turbochargers, a custom Turbonetics intercooler, advanced aftermarket fuel injection from Accel, and a CNC-cut billet aluminum intake manifold designed in-house at General Motors. Every square inch of this car is built for speed including the carbon fiber body panels, funny car style roll cage, and complete NHRA-required safety equipment. How fast is the Outlaw Impala? Tune into www.gmperformanceparts.com to find out.

Car: 1996 Impala SS

Paint: Atomic Orange

Special Features:

- 2000 horsepower
- Billet aluminum LSX intake (Yes, we cut our own intake from a block of aluminum.)
- Four fuel rails with 16 fuel injectors
- 25.2 SFI-certified funny car cage for sub 7.50-second quarter mile passes
- Parachute
- Wheelie bars; carbon fiber body panels (all of them)
- Four-link suspension with two gear sets (one for cruising — the other for bruising)

Weight: 3150 pounds with driver

Parts:

- LSX Bowtie Block: P/N 19166454
- 4L85E Transmission: P/N 19156257

Partners:

Turbonetics Turbos, Turbonetics Intercooling, Accel Fuel Injection, Accel Ignition, TCI Race Converters and Shifter, Strange Engineering, Mickey Thompson Tires, Weld Racing Rims, QA1 Coil Over Shocks, Autometer Gauges, Specter Werks Carbon Fiber, Moroso Dry Sump Oil System, Wilson Throttle Body, ATI Crankshaft Damper, Vanishing Point Race Cars

Where the Outlaw Impala excels at straight-line dirty work, our Xtreme Street Impala makes quick work of any street. The main attraction is the GM Performance Parts LSX 454 crate engine. Like the Outlaw car, the Xtreme Street car packs the bomb-proof LSX Bowtie Block. But, this one has been GM factory configured to 454-cubic-inches and over

625 horsepower! We also made sure that the LSX 454 crate engine has loads of low-end torque to provide the kind of grunt it takes to move a big car like our Xtreme Impala.

In 2008, you will be able to purchase this exact same GM Performance Parts crate engine from any GM dealer in the country. Maybe you'll put your LSX 454 in a bright orange '96 Impala SS—or maybe not. Happy cruising!

Car: 1996 Impala SS

Paint: Atomic Orange

Parts:

- LSX 454 Crate Engine: P/N 19170112
- 4L85E Transmission: P/N 19156257

Partners:

TCI Race Converters, Budnik Wheels, Hotchkis Suspension, Stainless Works Headers and Exhaust

2002 LSX Trans Am

There's nothing like cruising with the top down and over 600 horsepower at your beck-and-call! The new GM Performance Parts LSX Bowtie Block has been all the rage for GM engine builders since its 2006 debut. Now, GM Performance Parts offers up our very first LSX-based crate engine—the amazing new LSX 454 that was first prototyped in the Reggie Jackson 1969 Camaro. With 6-bolt mains and six bolts per cylinder head design, the LSX block is a solid foundation, and the LSX aluminum cylinder heads flow big air for big power. Try over 600 horse and over 600 lb./ft. of torque at the crack of the throttle.

Car: 2002 WS6 Trans Am

Paint: GM Performance Parts Yellow

Rims: WS6

Parts:

- LSX 454 Crate Engine: P/N 19170112
- 4L65E Transmission: P/N 19156260

Partners:

TCI Race Converters, GM Accessories, Stainless Works Headers, Magna Flow Exhaust, Brembo Brakes, BMR Suspension, BMR Trailing Arm, BMR K-Member, Auburn Posi

Over the course of seven days of cruising, the GM Performance Parts project cars performed perfectly; we met thousands of fans of our products; and we saw some great scenery along the way. Above all, the Hot Rod Power Tour allowed the GM Performance Parts staff to share our passion for performance cars with enthusiasts from around the world. See you next year!

Trucks, Trucks, Trucks!

When it's time to replace or upgrade the powertrain in your truck, look no further than GM Performance Parts. With the largest selection of truck-specific crate engines in the industry, we are the source for your truck's next great engine. In fact, we have an entire line of High Torque crate engines designed by GM engineers especially for hard working American trucks.

If you are looking for a small-block, check out our 350/290 HP—it's a basic 350 Chevy made from all brand new GM parts. The 350/290 HP is a super affordable way to get your truck back up and running. Off-roaders know that fuel



Photos from the 2,800 mile "Chevy Silverado Drive for Farm Aid," featuring all-new Silverado pickup trucks and vintage Silverados.



2007 Chevy Avalanche LTZ

injection works on those steep inclines that can make a carburetor cough. For you folks, we build our Ram Jet 350. It's got a fuel-injected intake, Vortec heads, and 400 lb.-ft. of torque to keep you moving through the rough stuff. If max torque is your game, then look into the HT383—a 383" small-block that offers you 435 lb.-ft. of torque at 4000 rpm and enough grunt to do almost any job. We also offer the HT383E—an emission-legal version of the HT383 designed as a direct replacement for 5.7-liter engines in full-sized GM trucks and SUVs from '96-'99.

Our LS family of crate engines offers similar opportunities for truck and off-road enthusiasts. The LS 327 (formerly the 5.3 HO) give you a brand new 5.3-liter V-8 with a Hot Cam upgrade that is a perfect replacement for your stock 5.3. GM Performance Parts is also your source for LQ9 and L92 stock replacement crate engines. Off-roaders can use our LS2, LS3, or LS7 crate engines with our new GMPP fuel injection controller and harness to put a high-tech GM V-8 into almost anything. And, with the new LSX Bowtie Block as a starting point, you can build your own 500" small-block V-8 to really get your truck moving!

Big-block fans can take advantage of forty years of development from GM Performance Parts. The 454 HO is our entry-level big-block offering you 500 lb.-ft. of torque at 3250 rpm at a very affordable price. Our HT502 gets your project truck moving with an Earth-rotating 512 lb.-ft. of torque at only 3300 rpm with 377 horsepower to boot. If fuel injection is required in your next truck build, check out the amazing Ram Jet 502. It will get things started with 505 lb.-ft. of torque and 502 horsepower.



Chevrolet SSR Push Truck—2004 Bonneville Salt Flats

Like all of our street crate engines, the GM Performance Parts High Torque crate engines come with a 24 month/ 50,000-mile warranty. Designed by GM and manufactured with all brand new parts (not remanufactured), the only thing tougher than our line of High Torque crate engines is your truck.

LSX Development Continues for 2008

In 2007, GM Performance Parts unleashed the revolutionary LSX Bowtie Block (P/N 19166454). For 2008, engineering and development on the GM Performance Parts line of LSX engines and components continues.

"The LSX block was a breakthrough product for us," says Randy Leininger, manager of GMPP engineering. "We want to follow up that work with a solid portfolio of LSX-specific products for our customers."

In the works at GM Performance Parts is a selection of components that will capitalize on the solid foundation of the LSX Bowtie Block. Street and race heads that take advantage of the 6-bolt per cylinder; high-flowing intake manifolds; a large selection of LSX-specific camshafts; and crate engines that capitalize on a strong validation process are all part of the long term strategy.

Testing of all GMPP products starts with the industry-leading design and engineering that takes place at GM Powertrain. With a 1500-hour durability test, only the very best power-trains find their way into

GM vehicles. From those, GMPP uses that data to help develop our own line of components and engines. Once our engines are modified or re-engineered for the high-performance market, they enter our validation process—a grueling 50-hour durability test that is matched by no one in the aftermarket industry.

Even after all of that testing, the GMPP high-performance components or crate engines still have to survive testing in one of our dozens of project vehicles. In the case of our race components or LSX product line, the testing moves to one of our several race programs. We use NASCAR, NHRA, CORR, SCCA, and several sportsman-level forms of motorsports to ensure that our products not only survive in competition, but they will help you win. For the LSX family of engine components and engines, this has meant a severe testing regimen. In addition, we've enlisted the help of several sportsman racers to test the merits of the LSX block.

Early in 2007, GM Performance Parts teamed with RTM Productions (home of *Horsepower TV*, *MuscleCar*, *Trucks!*, and *Xtreme 4x4* television) to back Uncle Robin Lawrence, one of the most dynamic sportsman drag racers in the country. *Horsepower TV* provided the car, a 1969 Chevrolet Nova known as Project Super Nova from *Horsepower TV*,

and GM Performance Parts provided the LSX Bowtie Block with additional engineering for the project. The goal of the project was to update the beloved Nova for competition in the GM Performance Parts-sponsored Nostalgia Pro Street class held at the National Muscle Car Association (NMCA). Along the way, GMPP was looking to advance our understanding of the potential of the LSX platform of engines while identifying additional parts and components that were



"Uncle Robin" will use our power on the Sportsman circuit.



Under the Hood, "Uncle Robin's" car is an LSX dream.

needed to support the extreme horsepower levels needed for this tough class.

Nostalgia Pro Street is a heads-up pro-tree drag race featuring some of the toughest teams in street legal drag racing. This class routinely sees mid-7 second quarter mile performances and fields of over 25 cars. Robin's prototype LSX engine features a Lunati crank, GRP connecting rods, 14.5:1 Diamond pistons, a prototype Lunati camshaft, custom Don West C5R cylinder heads, Dan Hughes HRE sheetmetal intake, and twin Holley dominators. Assembly and dyno testing has been handled by Thomson Automotive of Redford, MI.

In initial testing, the LSX engine produced 930 horsepower at 8400 rpm without the use of nitrous, garnering the title of most powerful naturally aspirated LSX-based engine. Nostalgia Pro Street is a single power adder class, and the team has also installed a single-stage NOS Fogger unit jetted for 400-500 horsepower for an estimated total of 1500 horsepower on tap. In addition to *Horsepower TV* and GM Performance Parts, other major support comes from Eaton, Detroit Locker, Nitto, and the Holley performance group.

What's next for the LSX line of components and crate engines from GM Performance Parts? Watch gmperformanceparts.com for the latest developments on our testing program, racer updates, and new product releases.

Teaming Up For Success

NASCAR superstar Tony Stewart and Chevrolet are getting together to bolster Stewart's non-NASCAR racing endeavors. The deal will see GM Performance Parts inside and decals on the outside of Tony Stewart Racing (TSR) vehicles on the World of Outlaws, USAC Sprint and Midget circuits, and the two may pair up for some of his Late-Model efforts, as well. The sponsorship continues through the 2009 season.

"Our goal when we formed Tony Stewart Racing was to create a grassroots motorsports program that would compete for wins and championships while promoting qualified drivers



Levi Jones



Tracy Hines

to the next level," said Stewart, who earned his NASCAR success by way of USAC as he captured four USAC national championships, including the elusive Triple Crown in 1995 when he earned titles in each of USAC's top divisions—Sprint, Midget and Silver Crown. "We've been successful, but in order to remain successful we needed a partner committed to us and committed to motorsports. We found the perfect partner in Chevrolet."

With engine development by GM Racing, we know this partnership will produce winners. Stay tuned to GMPP for the latest in Bowtie performance!

Levi Jones, 2005 USAC National Sprint Car Series Champion, campaigns the No. 20 for TSR both In USAC National Sprint and Midget Car Series this season, as well as the No. 10 TSR/Chevrolet Maxim entry in USAC National Silver Crown Series dirt events. Among his many awards, Jones was named as "Driver of the Year" by the North American Non-Winged Sprint Car Poll voting panel in 2005.



Tracy Hines will be behind the wheel of the No. 21 in USAC sprint and midget action, and a Silver Crown car under the No. 22 TSR banner.



The 2005 USAC National Sprint Car champ, Levi Jones, will campaign the Chevy-powered TSR sprint and midget cars.

Tracy Hines joins TSR to pilot the No. 21 TSR/Chevrolet/Maxim in the USAC National Sprint, Midget Series and the No. 22 TSR/Chevrolet/Maxim in the USAC Silver Crown Series. Returning to open-wheel racing after competing in the NASCAR Craftsman Truck Series and the NASCAR Busch Series for three years, Tracy hopes to quickly regain the winning form that he experienced in his earlier USAC driving days, highlighted by his first USAC National Sprint Car Series championship in 2002.

TSR named Ricky Stenhouse, Jr. as the interim driver of the No. 21 and No. 22 TSR/Chevrolet/Maxim entries when Tracy Hines was injured in an



Paul McMahan



Ricky Stenhouse, Jr.



Paul McMahan will return to the World of Outlaws series in the No. 20 Bass Pro Shops ride.

off-road motorcycle accident. The youngest member of TSR, Stenhouse drove to victory lane in only his second start in USAC National Midget Car Series competition. The 2006 season served as Stenhouse's breakout year. He was the national Sprint Car Hall of Fame Driver Poll Wild Card winner in both the 360 and 410 Winged Sprint Car divisions.

Paul McMahan returns to TSR for 2007 to drive the No. 20 Bass Pro Shops/Chevrolet/Eagle in the World of Outlaws Sprint Series. The team, which spent 2006 in the National Sprint Tour Series, returns to the WoO Series with McMahan's 20 years of experience behind the wheel of a sprinter. With Chevrolet colors and branding, expectations are high for the winged sprint car to run at the front of the pack.

Steve Barnett started his racing career in 1975 at Brownstown Speedway in Brownstown, Indiana. Countless laps and 32 years later, Steve has quite a resumé, capturing 226 feature races in his career. Steve has won 15 career Track Championships, and is a 6-time Northern All Star Champion.

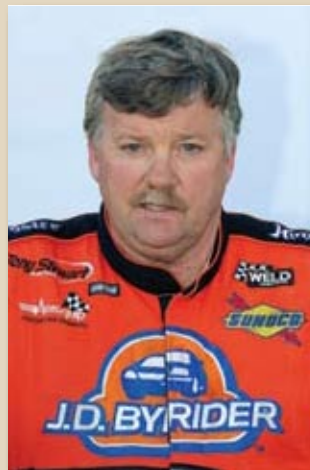
Steve and Tony Stewart became teammates in 1992, driving a Silver Crown car for the first time. Remaining friends while going in different directions, Steve and Tony became teammates again in 1996, when Tony added a dirt late



Veteran Steve Barnett will campaign the No. 20 Late-Model ride, bringing 226 career feature wins with him.

model to his stable. Steve maintains Tony's J.D. Byrider-sponsored late model and takes it to the track when Tony's schedule permits. Steve won the "GMPP Crate Late-Model" special feature race at Eldora in August of 2007 in his own car, powered by a CT400 circle track crate engine.

Team owner Tony Stewart has proven his ability to win in every racing venue he has competed in, from the IRL to NASCAR Nextel Cup. Since its formation in November 2000, TSR has earned seven owner championships in World of Outlaws, USAC National Sprint Car, Midget, and Silver Crown Series competition. The urge to compete is always strong, and Tony fills that need occasionally by competing in a late model dirt car, similar to those seen every weekend powered by GMPP racing crate engines.



Steve Barnett



Tony Stewart

What's New for 2008

19201992

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LS3 6.2L

The LS3 helps power the new Corvette to a top speed of 190 mph. What will it power you to?



19171224

Page 114

LS376/480

The hot new small-block V-8 in the GM lineup is the hyper-aggressive LS3.

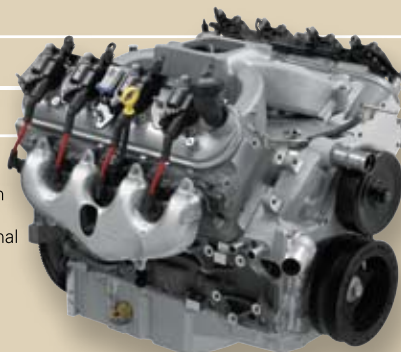


19171225

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LS376/515

The LS3 gets a big cam and carbureted intake manifold for an additional 85 horsepower!

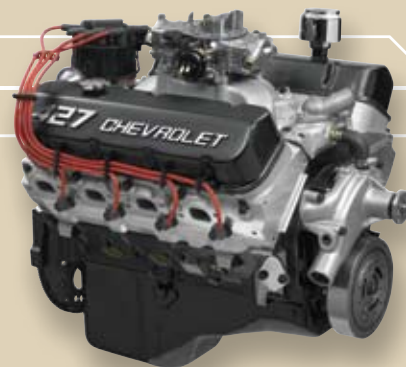


19166393

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ZZ427/430

The ZZ427/430 is an exciting trip back to one of the high points in the history of the Chevrolet big-block!

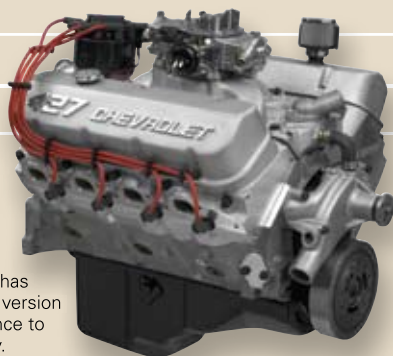


19166392

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Anniversary Edition 427

To celebrate the 50th anniversary of the Chevrolet big-block, GM Performance Parts has brought back a modern version of the ZL1 for your chance to relive musclecar history.



19171821

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CT525

Designed for racing classes requiring more power than our proven CT350, CT355 and CT400 GEN I based racing engines, the all-new CT525 delivers the goods!

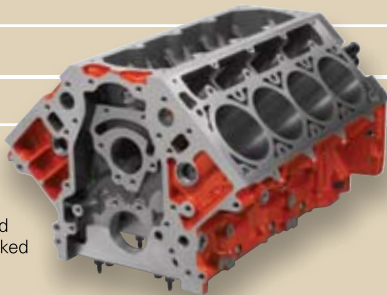


19166097

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LSX Tall Deck Block

Accepts all Gen III & IV LS heads, cranks, cams, etc. 9.70" semi-finished standard deck height (ready to be decked to your specifications).



88958698

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CNC L92 Heads

Fits any LS family engine with a bore of 4.00" or larger. Uses stock 2.165" and 1.590" valves, springs and hardware. Not compatible with LS7 intake manifolds. Stock intake and exhaust port locations. .510" more lift with stock springs.

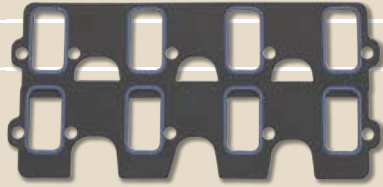


19172114

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L92/LS3 Carb Intake Gasket

Composition intake gasket for use with our 4-bbl intake manifold P/N 25534401 or 25534416.

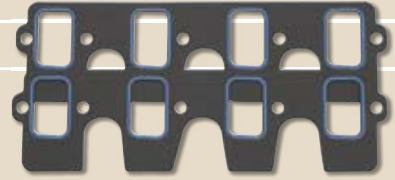


19172113

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LS7 Carb Intake Gasket

Composition intake gasket for use with our 4-bbl intake manifold P/N 25534394 or 25534413.

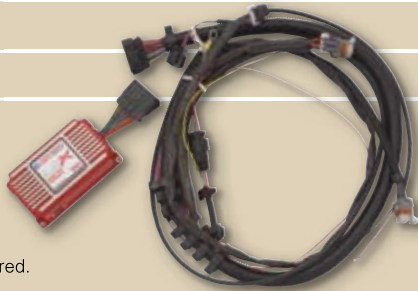


19171130

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LSX Ignition Module

For use with carbureted LS engines with 58X reluctor wheels. Distributor not required.

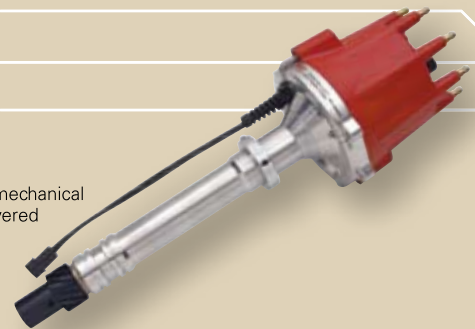


RCRDS251

Page 387

Pro Billet Distributor

With adjustable mechanical advance and powered metal gear.



19202588

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Valve Covers, "427 CHEVROLET", Natural Appearance

Clearcoated for durability with aluminum appearance. Used on the Anniversary 427 crate engine, but can be used on any big-block.



19202589

Page 319

Valve Covers, "427 CHEVROLET", Black Powder Coat

Used on the ZZ427/430 crate engine. Can be used on any big-block.



MORE NEW PRODUCT FOR 2008

25534446	Large Port Vortec Bowtie Head Assembly	Page 219
19171619	Modified LS7 Crankshaft	Page 286
19155066	Serpentine Accessory Drive System, with Air Conditioning	Page 289
19166567	Controller and Wiring Harness, LS7	Page 357
19166568	Controller and Wiring Harness, LS2	Page 357

19153789	Bare Block Completion Kit, Gen III	Page 274
19201327	Controller and Wiring Harness, LS367/480 EFI	Page 357
19155067	Serpentine Accessory Drive System, with Air Conditioning	Page 289
19201861	Controller and Wiring Harness, LS3 6.2 L	Page 357
19201171	Rebuild Gasket Set	Page 227
19201172	Rebuild Gasket Kit	Page 227

Crate Engines

Power in a convenient package

When it comes time to power your project car—whether it is a weekend street rod or a NASCAR monster—you need power and parts you can rely on. Let GM Performance Parts help by taking the guesswork out of the engine-building process.

Our comprehensive lineup of crate engines and components allows you to get the power you want with parts that are designed to work together, and guaranteed to perform. Our engines are assembled using the finest parts available, and every component is brand new.

A GM performance Parts crate engine features our premier blocks and reciprocating assemblies, high-performance heads—and if you choose the Turn-Key level, all the components needed to have a working engine the day you get it. Better yet, all the configurations have been dyno tested and used in real project cars, so you know exactly what you're getting. That process also involves 50 hours of peak horsepower and torque rating validation—and that's something no one in the industry can match.

We're so confident that our crate engines will perform that we put a 24-month warranty on those used in street cars (racing engines are excluded). This gives you the peace of mind you deserve—and something you won't get from the local rebuild center or salvage yard. Our components come with a 12-month warranty, so you can build with confidence.

Uncompromised performance, new parts that are designed to work together the first time, turn-key performance from the day the engine arrives and a 24-month warranty add up to unmatched value. Don't waste your time and money rebuilding a tired old engine. Get a GM Performance Parts crate engine and get your classic rod or racer back on the street, track or strip!





427

CHEVROLET

Crate Engine Quick Reference Chart

CHEVY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	HP	Torque	Page	Warranty
12499529	350/290 HP—Economy Performance Engine	350 cu in	352	290	326	60	
12499711	350 HO Turn-Key—with Iron Vortec Heads	350 cu in	575	330	380	66	
12496968	350 HO Deluxe—with Iron Vortec Heads	350 cu in	481	330	380	68	
12486041	350 HO Base—with Iron Vortec Heads	350 cu in	298	330	380	68	
12499712	ZZ4 Turn-Key—with Aluminum Heads	350 cu in	511	355	405	70	
24502609	ZZ4 Base—with Aluminum Heads	350 cu in	379	355	405	72	
12561723	ZZ4 Partial Engine	350 cu in	223	N/A	N/A	72, 82	
12499120	Ram Jet 350—PFI with Iron Vortec Heads	350 cu in	517	350	400	76	
12499710	Fast Burn 385 Turn-Key—with Aluminum Vortec Heads	350 cu in	511	385	385	80	
12496769	Fast Burn 385 Base—with Aluminum Vortec Heads	350 cu in	466	385	385	82	
12499101	HT383 Base—Performance Engine	383 cu in	405	340	435	84	
12499106	383 Partial Engine	383 cu in	335	N/A	N/A	86, 94	
17800393	HT383E	383 cu in	450	340	435	90	
12498772	ZZ383—High Performance Engine	383 cu in	397	425	449	92	

LS FAMILY SMALL-BLOCK V-8

Part Number	Description	Engine Size	Weight	HP	Torque	Page	Warranty
19165628	LS327/327	5.3L	433	332	352	98	
17801267	LS1—Without ECU and Wire Harness	5.7L	409	350	365	100	
17801268	LS6—2004 Corvette Z06 Gen III V-8	5.7L	464	405	400	102	
19156261	LS2—2006 Corvette Gen IV V-8 (58-Tooth Reluctor Wheel)	6.0L	412	400	400	104	
17802134	LS364/440—Carbureted LS2	6.0L	412	440	412	108	
19165485	L92—2007	6.2L	402	403	417	110	
19201992	LS3—2008 Corvette Gen IV V-8	6.2L	415	429	424	112	
19171224	LS376/480—EFI LS3 Gen IV V-8	6.2L	415	480	475	114	
19171225	LS376/515—Carbureted LS3 Gen IV V-8	6.2L	415	515	469	116	
17802397	LS7—2006 Corvette Z06	7.0L	440	505	470	118	

CHEVY BIG-BLOCK V-8

Part Number	Description	Engine Size	Weight	HP	Torque	Page	Warranty
19166393	ZZ 427/430	427 cu in	520	430	444	126	
19166392	Anniversary Edition 427	427 cu in	460	430	450	130	
12568774	454 HO—with Iron Heads and Roller Cam	454 cu in	590	425	500	134	
12498778	454 Partial Engine	454 cu in	361	N/A	N/A	136, 140	
12498777	ZZ454/440—440 Horsepower with Aluminum Heads	454 cu in	522	440	500	138	
88890534	HT502—Truck Replacement Engine	502 cu in	557	338	512	142	
12568782	ZZ502 Partial Engine	502 cu in	402	N/A	N/A	144, 150, 154, 158	
12568778	502 HO—with Iron Heads and Roller Cam	502 cu in	602	450	550	148	
12496962	ZZ502 Deluxe—(Deluxe/Assembled) with Aluminum Heads	502 cu in	611	502	567	152	
12371171	ZZ502 Deluxe Kit, with Aluminum Heads	502 cu in	602	502	567	154	
12496963	ZZ502 Base Engine, with Aluminum Heads	502 cu in	504	502	567	156	
12371204	ZZ502 Base Kit, with Aluminum Heads	502 cu in	532	502	567	158	
12499121	Ram Jet 502—PFI with Aluminum Heads	502 cu in	608	502	565	160	
12498793	ZZ572/620 Deluxe	572 cu in	580	620	650	164	
12498792	ZZ572/620 Base	572 cu in	514	620	650	166	











RPO ENGINES

Part Number	Description	Engine Size	Weight	HP	Torque	Page	Warranty
12363230	HT 3.4 V-6—S-10 Truck Repower	3.4L	289	160	194	174	
17802896	LC3 Northstar—Used in Cadillac STSV and XLRV	4.4L	467	469	439	175	

RACING ENGINES

Part Number	Description	Engine Size	Weight	HP	Torque	Page	Warranty
88958602	CT350	350 cu in	451	350	390	180	
88958603	CT355	350 cu in	402	355	405	182	
88958604	CT400	350 cu in	566	400	400	184	
19171821	CT525	364 cu in	415	525	471	188	
12498827	ZZ572/720R Deluxe	572 cu in	603	720	685	168	
12498826	ZZ572/720R Base	572 cu in	603	720	685	170	

GM PARTS ENGINES

Part Number	Description	Engine Size	HP	Torque	Page	Warranty
12491851	4.8L LR4	292 cu in	275	285-290	192	
12491854	5.3L LM7/L59	325 cu in	285	325-330	193	
12491857	6.0L LQ4/LQ9	364 cu in	300-325	360-370	194	
12607031	2.2L L61	134 cu in	135-143	142	195	
12491869	4.3L LU3	262 cu in	180-200	245-260	196	
89017618	8.1L L18	496 cu in	225-340	350-455	197	
10067353	5.7L Gen 0	350 cu in	195	N/A	198	
12568758	5.7L Gen I	350 cu in	N/A	N/A	199	
12491355	7.4L L19/L29	454 cu in	230-270	N/A	200	
12575091	4.2L LL8	256 cu in	275	275	201	

WARRANTY INFORMATION



NEW for 2008!
GM Performance Parts
Crate Engines include a
24-month or 50,000-mile
limited warranty.



GM Components include
a 12-month or 12,000-mile
limited warranty.



GM Performance Parts
Racing Crate Engines are
excluded from limited
warranty.



GM Parts Engines offer a
36-month or 100,000-mile
limited warranty when
the engine is installed in a
recommended application.

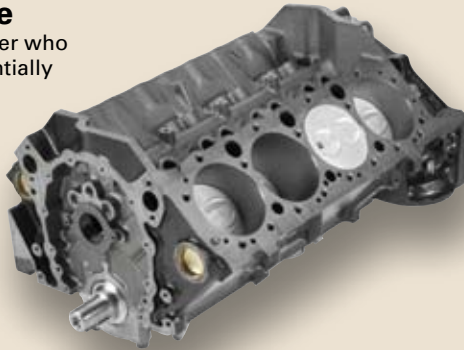
Note: Weights include crates and all packaging material. Approximate crate weight is 30 lbs.

Different Levels of Engine Assemblies

Recognizing that each customer has unique needs, GM Performance Parts offers four distinct levels of Crate Engines, covering the gamut from starter partial engines to complete turn-key engines that are ready to be dropped into your favorite vehicle. This variety gives builders the opportunity to customize an engine as much or as little as they need to, to meet their expectations.

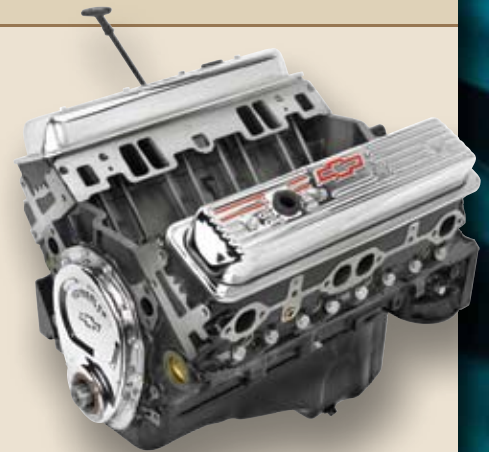
Partial Engine

This is for the builder who wants to start essentially from the block up. These engines typically include the block and reciprocating assembly. It allows the builder to choose the heads, cam and intake combination he/she wants.



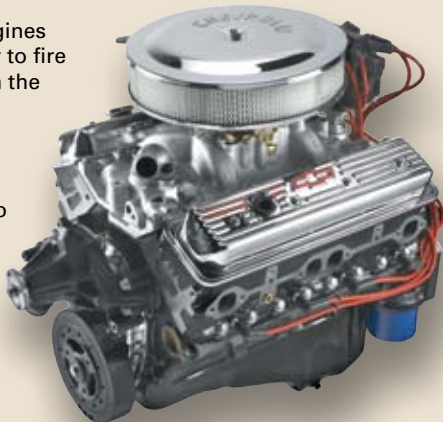
Base

The base engine assembly typically includes, block, crank, pistons, cam, heads and valve covers, but allows the builder to pick the carburetor/injection system and intake manifold they desire.



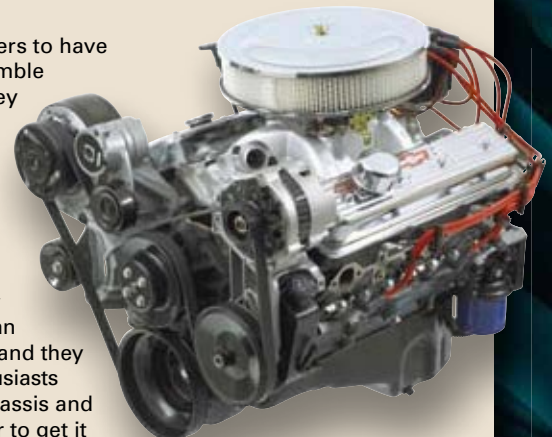
Deluxe

The deluxe crate engines are essentially ready to fire up, as they ship with the distributor installed, harmonic balancer bolted on and the carburetor in the crate. All you need to do is put the parts together and go!



Turn-Key

We told our engineers to have some fun and assemble engines the way they think it should be done ... we then took their combinations, built them up and put them in a crate that ships right to your dealer. The turn-key engines represent an outstanding value, and they are perfect for enthusiasts who have built a chassis and need reliable power to get it down the road.





350/290 HP

Power made affordable

Like its legendary precursor, the original small-block Chevy, the 350/290 has earned a spot in the hearts of performance enthusiasts due to its combination of power, durability and value. It weighs in with 290 horsepower and 350-cubic-inches of muscle, and a 24-month GM Performance Parts Warranty. Make it yours with the following GM Performance Parts:

350/290 HP Engine	12499529	Balancer	12551537
670-cfm Holley Carburetor	19170092	Metallic Gray Stamped Valve Covers	141-361*
Intake Manifold	10185063	Metallic Gray Steel Air Cleaner and Bowtie Nut	141-362*
HEI Distributor	93440806	Metallic Gray Timing Cover	141-363*
Push-In Oil Filler Cap	12341993	Metallic Gray Valve Cover Wing Nuts	141-364*
Chrome Water Neck	12342024	Metallic Gray Breather Cap	141-365*
Spark Plug Wires	10361057	Metallic Gray Valve Cover Hold Down Clamps	141-366*
Chrome High-Torque Mini Starter	12363128	Spark Plug Wire Loom Kit	141-638*
Street Performance Fuel Pump	12355612	Bowtie Freeze Plug Inserts	141-233*

To learn more about this engine, please turn to page 60.

**For more information on these and other Licensed Parts, refer to page 376.*

*1955 265 cid Chevy
Small-Block V-8*



350 HO

Muscle to spare

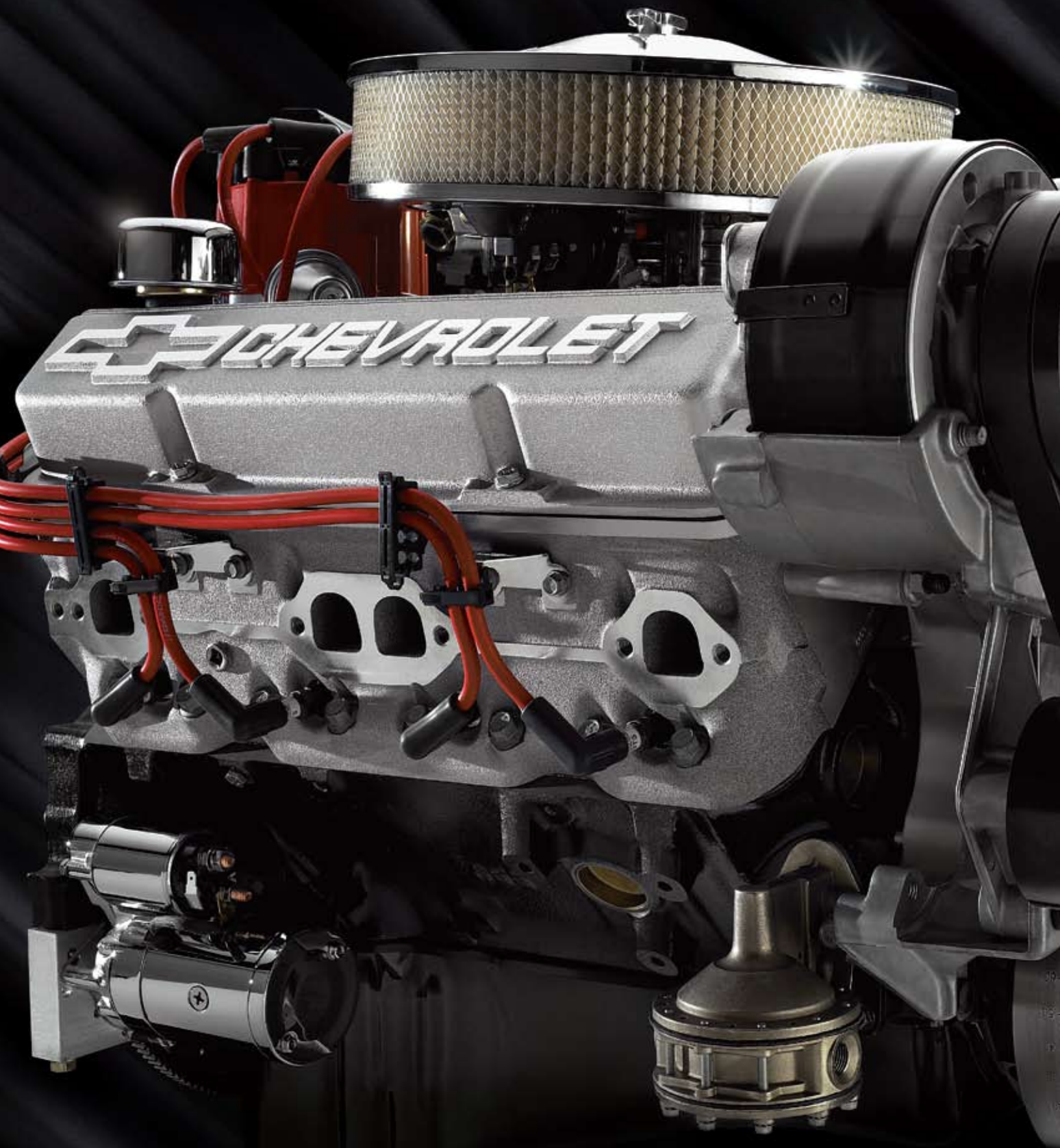
Why settle for a run-of-the-mill rebuild? With the 350 HO you get a classic small-block, enhanced with high-flow heads, performance cam and rippling with 330 horsepower. Make it yours with the following GM Performance Parts:

350 HO Turn-Key Engine	12499711
Chrome Finish Aluminum Valve Covers	12497985
Push-In Oil Filler Cap	12341993
Chrome Water Neck	12342024
Chrome Breather Cap	25534355
Oil Baffle Tube	88962074
Bowtie Air Cleaner Nut	141-322*

To learn more about this engine, please turn to page 66.

**For more information on these and other Licensed Parts, refer to page 376.*





ZZ4 350

Hard to keep bridled

With 355 horses kickin' to run free, the ZZ4 is everything a small-block should be. Aluminum heads, hydraulic roller camshaft and GM quality. Make it yours with the following GM Performance Parts:

ZZ4 350 Turn-Key Engine	12499712
Chrome Air Cleaner and Bowtie Nut	12342071
Billet HEI Distributor	88961867
Aluminum Valve Covers	12480127
Street Performance Fuel Pump	12355612
Chrome High-Torque Mini Starter	12363128
Push-In Oil Filler Cap	12341993
Chrome Water Neck	12342024
Chrome Breather Cap	141-616*

To learn more about this engine, please turn to page 70.

**For more information on these and other Licensed Parts, refer to page 376.*



Ram Jet 350

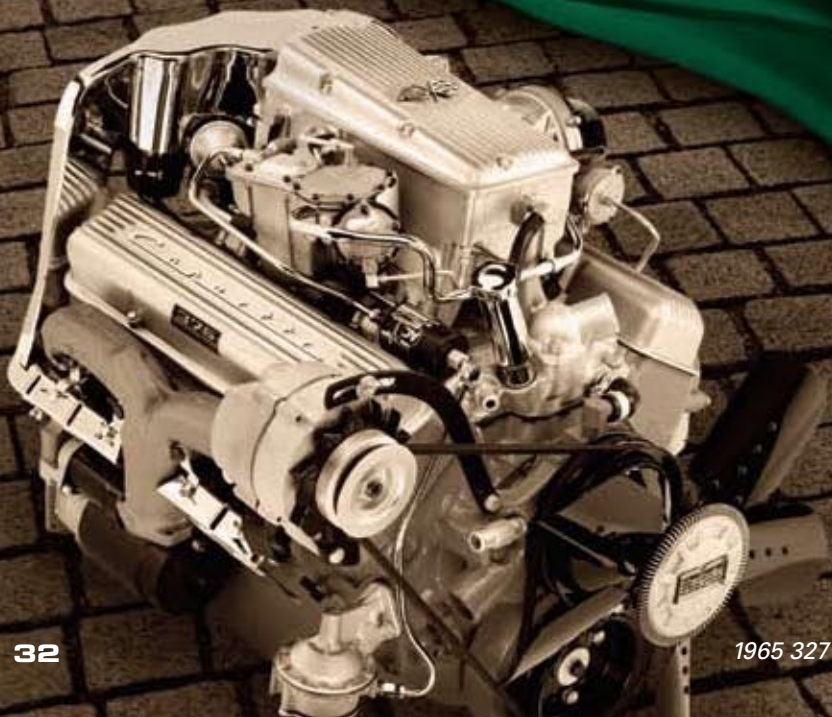
Fuel-injected fun

GM has always been a leader in the development of fuel injection technology. From our first fuelies in the late 1950s to the legendary L84 327, and now to the high-tech Ram Jet 350, we have set the standard others measure themselves by. Have fun when the light turns green—or when you pop the hood and your friends turn green with envy. Make it yours with the following GM Performance Parts:

Ram Jet 350 Engine	12499120
Deluxe Accessory Drive Kit	12497698
Aluminum Black Crinkle Valve Covers	12497979
Push-In Oil Filler Cap	12341993
Spark Plug Wire Loom Kit	12496806
Chrome Water Neck	12342024
Chrome Breather Cap	141-616*

To learn more about this engine, please turn to page 76.

**For more information on these and other Licensed Parts, refer to page 376.*





Fast Burn 385

Heads (and shoulders) above the crowd

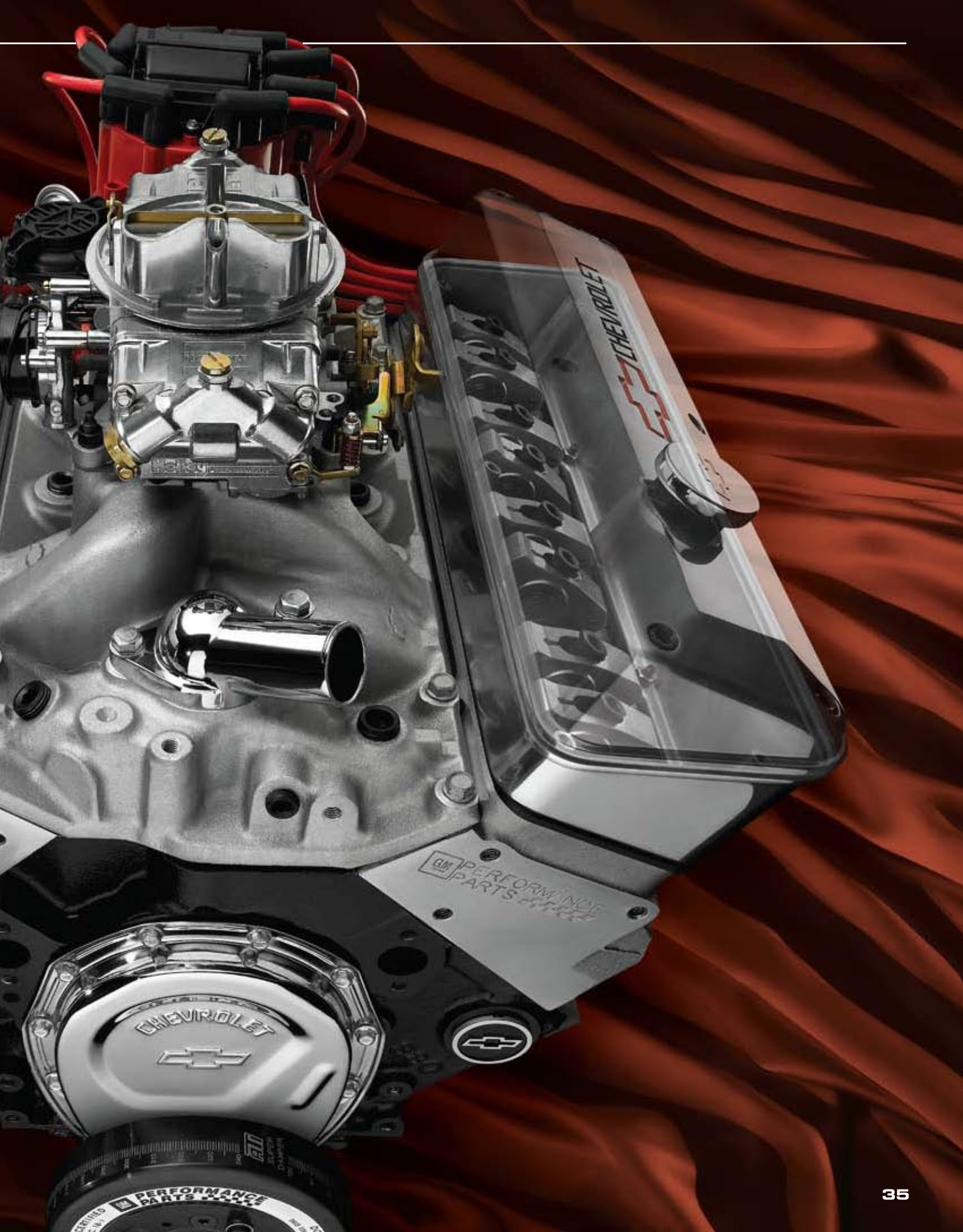
Fast Burn aluminum cylinder heads are complemented by a rock-solid bottom end to create a competition-gobbling small-block. Don't waste time pinching yourself. It's real. Make it yours with the following GM Performance Parts:

Fast Burn 385 Turn-Key Engine	12499710
Billet HEI Distributor	88961867
Street Performance Fuel Pump	12355612
Push-In Oil Filler Cap	12341993
Chrome Water Neck	12342024
Balancer	24502534
Chrome, Two-Piece Die-Cast Aluminum Valve Covers	141-912*
Chrome Breather Cap	141-616*
Bowtie Emblem Freeze Plug Inserts	141-232*
Chrome Timing Chain Cover	141-215*

To learn more about this engine, please turn to page 80.

*For more information on these and other Licensed Parts, refer to page 376.







HT383

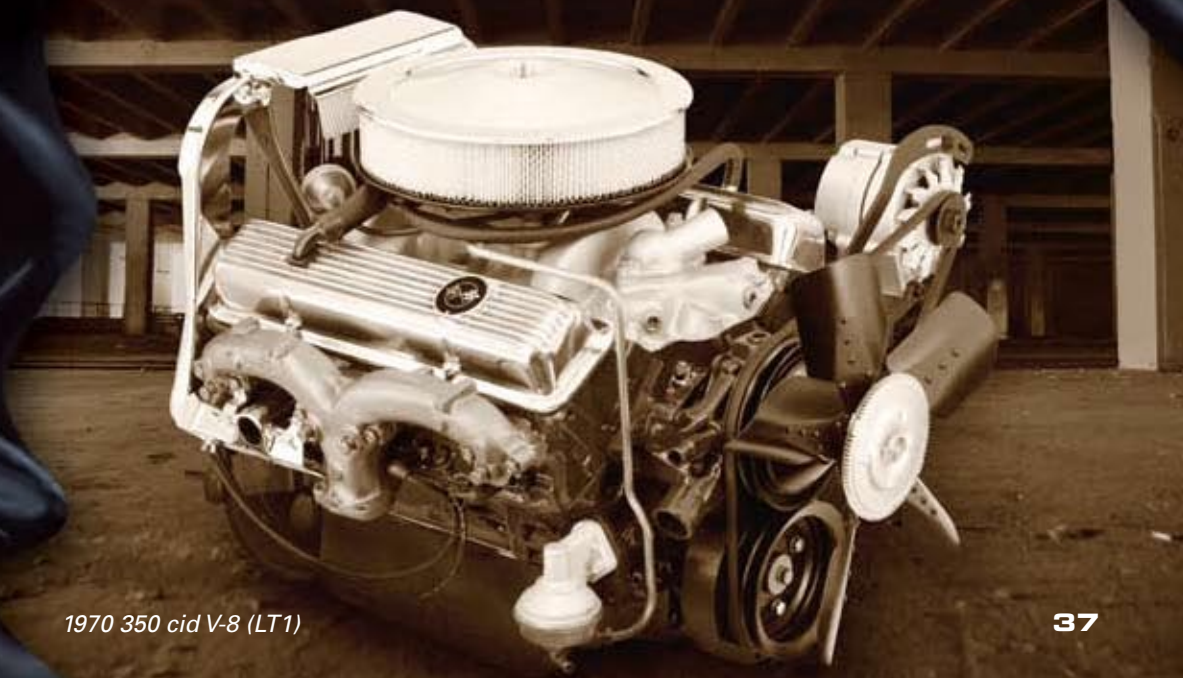
Get torqued

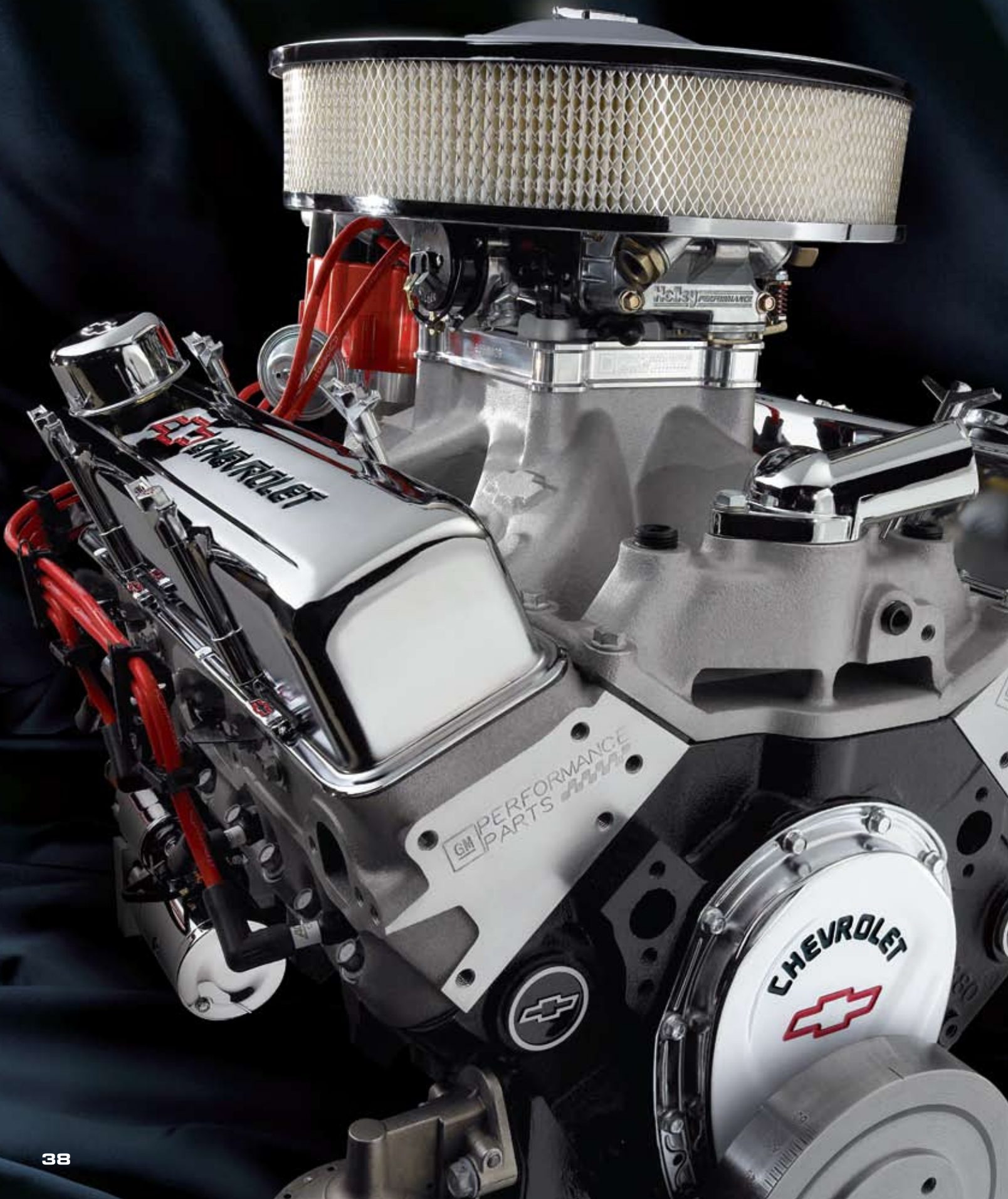
Big-block power in a small-block package is a hallmark of GM Performance Parts. The HT383 draws from the heritage of such legendary ground-grippers as the LT1, which produced 380 lb.-ft. of torque, giving the ZR1 'Vette its performance cred. With an ultra-generous torque band, topping out at 435 lb.-ft at 4000 rpm, the HT383 is just the answer for those towing trailers or boats for weekend fun. Make it yours with the following GM Performance Parts:

HT383 Engine	12499101	Spark Plug Wire Set	12361051
Deluxe Accessory Drive Kit	12497698	Wire Loom Kit	12496806
Holley 770-cfm Carburetor	19170093	Street Performance Fuel Pump	12355612
Chrome Water Neck	12342024	Black Crinkle Valve Covers	12497979
Push-In Oil Filler Cap	12341993	Black Crinkle Air Cleaner	141-762*
High-Torque Mini-Starter	12361146	Black Crinkle Air Breather	141-754*
Billet HEI Distributor	88961867	Black Crinkle Timing Chain Cover	141-753*

To learn more about this engine, please turn to page 84.

**For more information on these and other Licensed Parts, refer to page 376.*





ZZ383

Small-block, big power

The ZZ383 offers true big-block numbers in a small-block package, with 425 horses and 449 lb.-ft. of torque. The Fast Burn heads are backed up by a specially machined block, 4340 nitrided crank and heavy-duty powdered metal rods. Fast as a bullet and bullet-proof. What more can you ask for? Make it yours with the following GM Performance Parts:

Billet HEI Distributor	88961867	Street Performance Fuel Pump	12355612
Holley 670-cfm Carburetor	19170092	Chrome High-Torque Mini Starter	12363128
Carburetor Spacer, One-Inch, Single Plane	88965830	Chrome, Black/Red Emblem Air Cleaner	141-906*
Vortec Intake Manifold	12496822	Bowtie Air Cleaner Nut	141-322*
Chrome Breather Cap	12341989	Chrome, Black/Red Emblem Tall Valve Covers	141-905*
Push-In Oil Filler Cap	12341993	Chrome Valve Cover Wing Nuts	141-600*
Chrome Water Neck	12342024	Chrome Valve Cover Hold-Down Clamps	141-903*
Spark Plug Wire Set	12361051	Chrome, Black/Red Emblem Timing Chain Cover	141-904*
Wire Loom Kit	12495502	Bowtie Emblem Freeze Plug Inserts	141-232*

To learn more about this engine, please turn to page 92.

**For more information on these and other Licensed Parts, refer to page 376.*



LS3 NEW



A breed apart

LS might just stand for "lightning speed" with this rocket under your hood. A full 376 cubes, high-tech fuel injection or carbureted performance, a range of horsepower options, and a beefy reciprocating package will leave the competition slack-jawed and blinking. Make it yours with the following GM Performance Parts:

LEFT

LS376/480 Crate Engine	19171224
Center Bolt Competition Valve Covers	25534398 & 25534399
Push-In Oil Filler Cap	12341993

To learn more about this engine, please turn to page 114.

MIDDLE

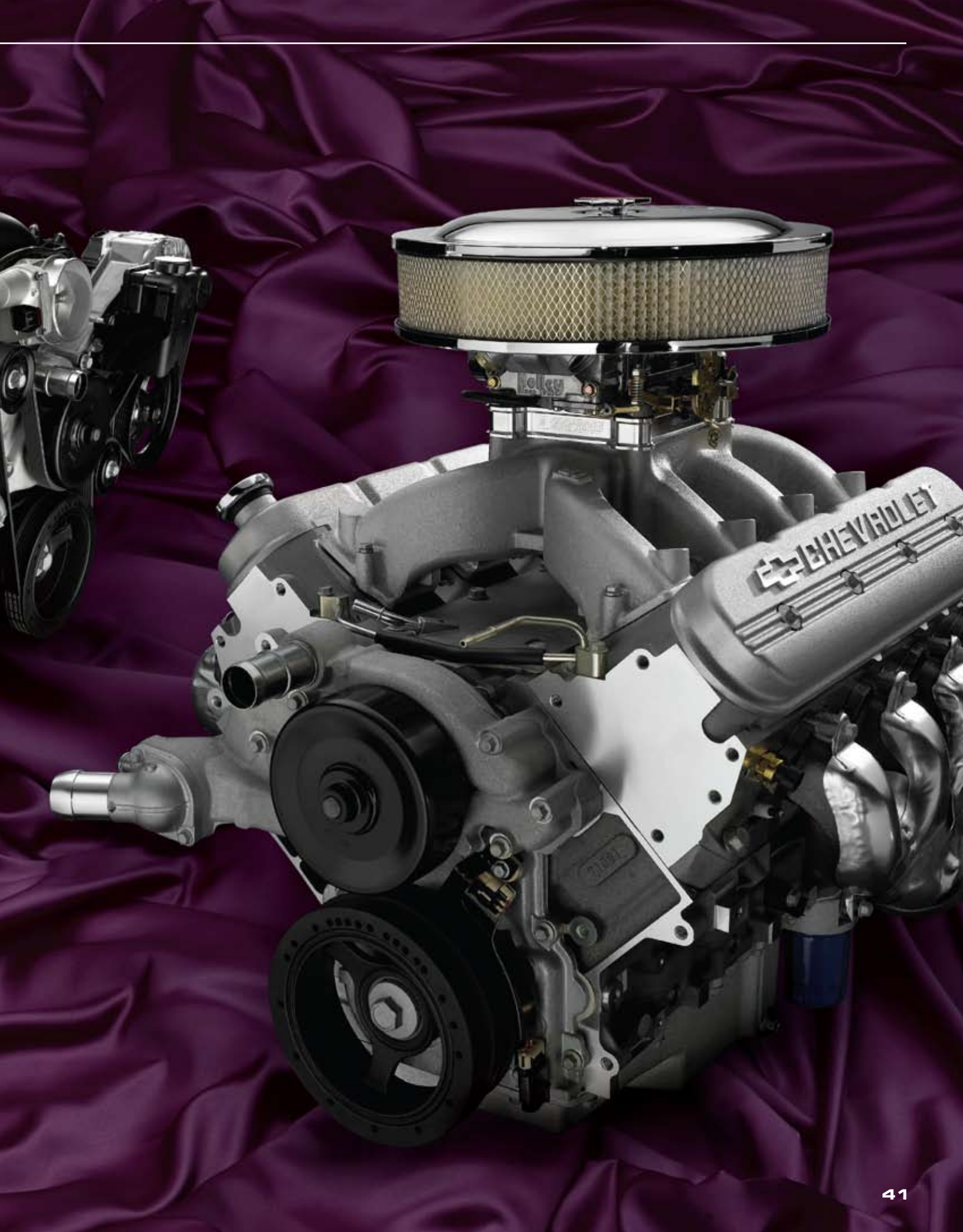
LS3 Crate Engine	19201992
Deluxe Accessory Drive Kit	19155067

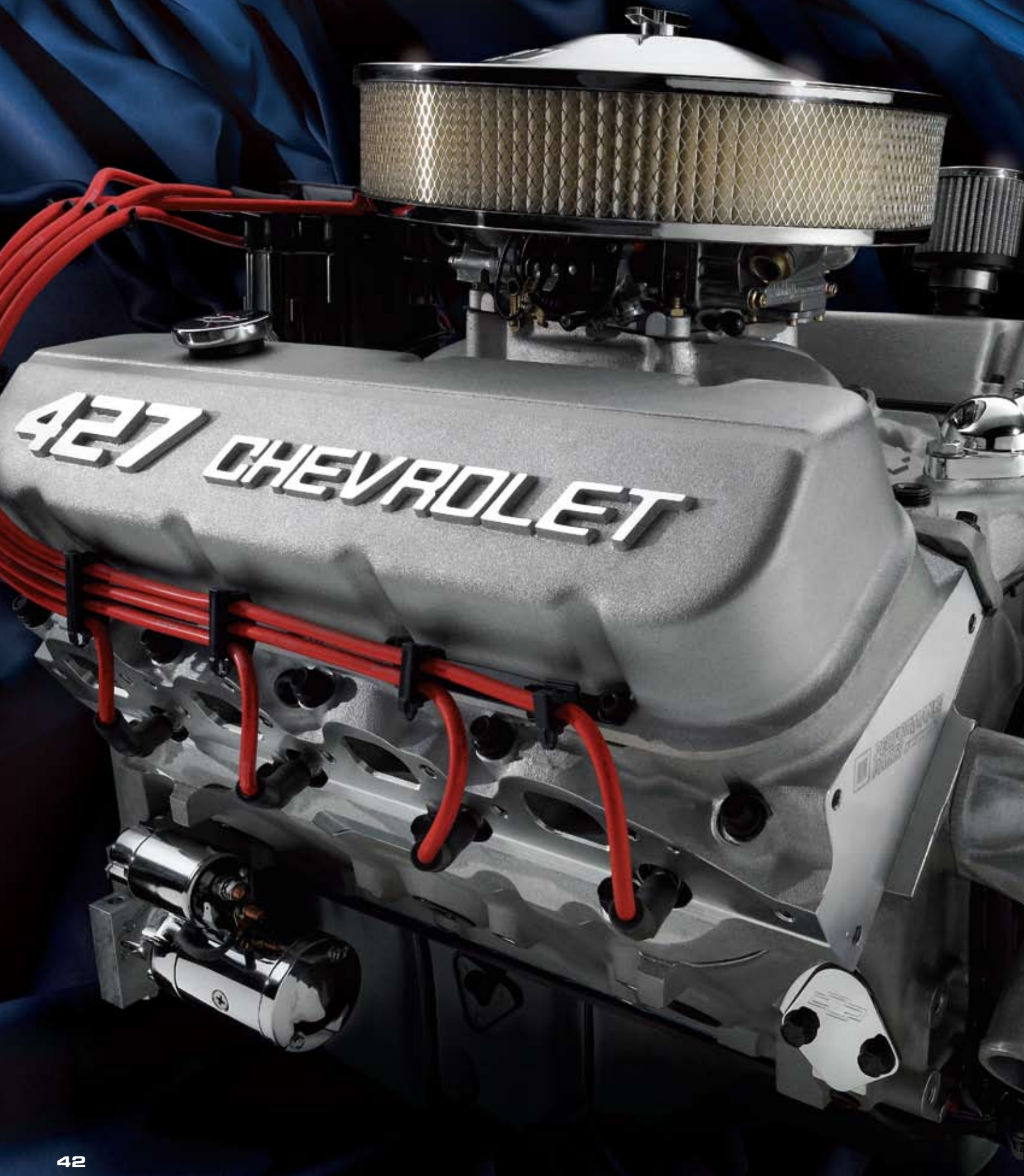
To learn more about this engine, please turn to page 112.

RIGHT

LS3 376/515 Crate Engine	19171225
Chrome Air Cleaner and Bowtie Nut	12342080
Holley 870-cfm Carburetor	19170094
Carburetor Spacer	88965839
Center Bolt Competition Valve Covers	25534398 & 25534399
Push-In Oil Filler Cap	12341993

To learn more about this engine, please turn to page 116.





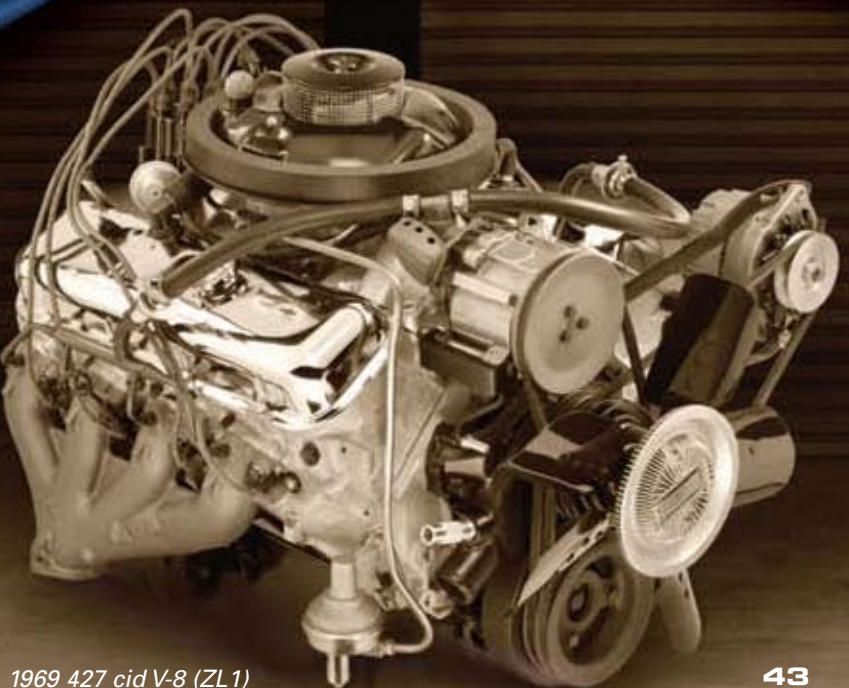
NEW Anniversary Edition 427

More than nostalgia

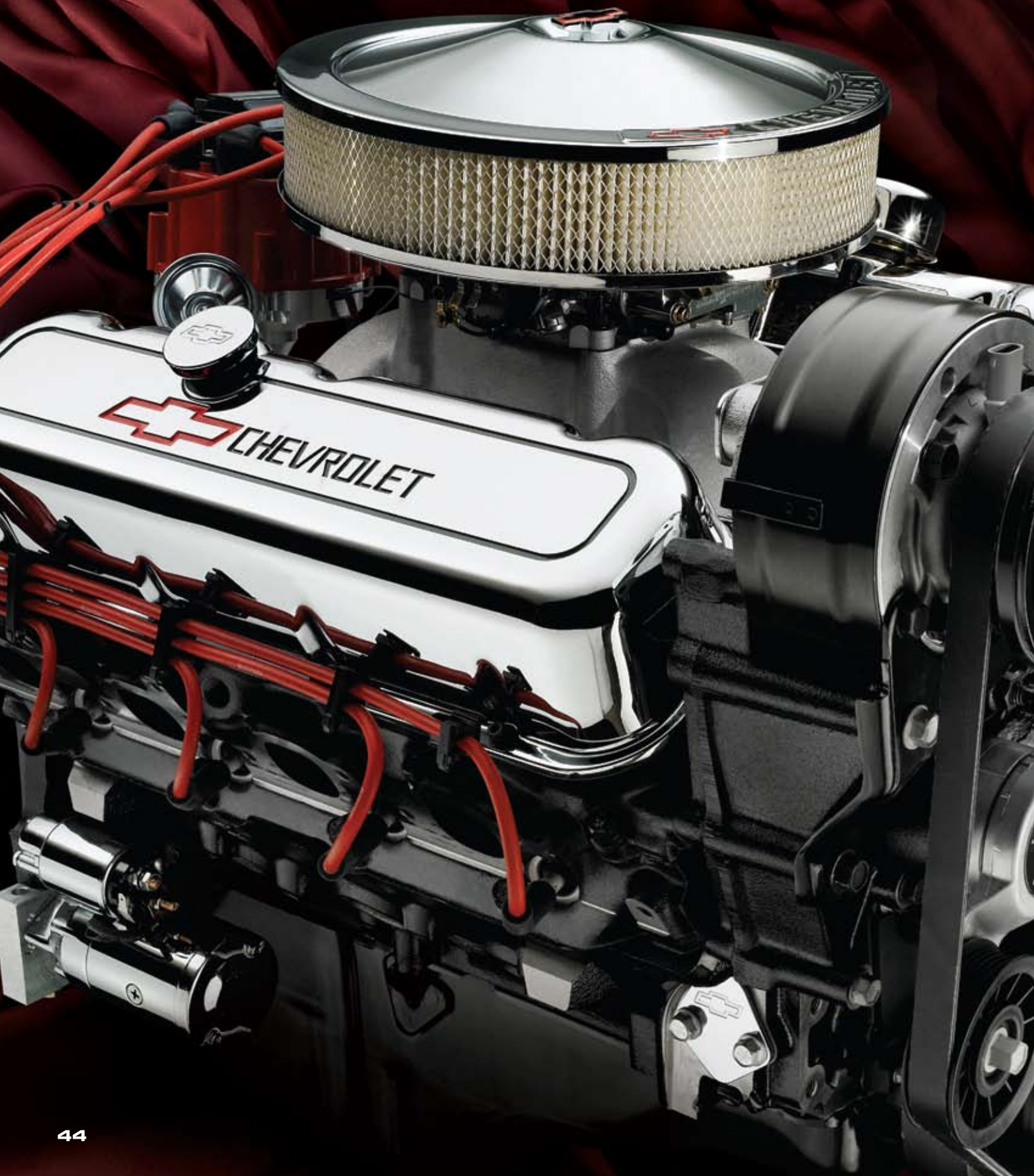
Like its predecessor, the new Anniversary Edition 427 is a lot more than a pretty face. Brains and brawn are found here, too. Start with a retooled ZL1 aluminum block with four-bolt mains, and aluminum oval port heads. Add in a forged steel crank, hydraulic roller cam and 870-cfm carb and you'll see what all the fuss is about! Make it yours with the following GM Performance Parts:

427 Anniversary Edition Crate Engine	19166392
Chrome High-Torque Mini Starter	12363128
Chrome Water Neck	12342024
Air Cleaner and Bowtie Nut	12342071

To learn more about this engine, please turn to page 130.



1969 427 cid V-8 (ZL1)



454 HO

Easy on the wallet, not the competition

Relive the musclecar era, with better durability. Meet the 454 HO, a clear descendant of the dominant powerplants that ruled the streets in the '60s. Built from a foundation of a Gen VI four-bolt big-block, the 454 HO features forged steel crank, pistons and connecting rods. It also has a hydraulic roller cam with big time lift numbers. Make it yours with the following GM Performance Parts:

454 HO Engine	12568774
Deluxe Accessory Drive Kit	12498733
Holley 770-cfm Carburetor	19170093
Billet HEI Distributor	88961867
Spark Plug Wire Set	12368383
Wire Loom Kit	12495502
Push-In Oil Filler Cap	12341993
Chrome Water Neck	12342024
Fuel Pump Block-Off Plate	12341999
Chrome High-Torque Mini Starter	12363128
Chrome Breather Cap	141-616*
Chrome Die-Cast Valve Covers	141-140*
Chrome, Black/Red Emblem Air Cleaner	141-906*
Bowtie Air Cleaner Nut	141-322*

To learn more about this engine, please turn to page 134.

**For more information on these and other Licensed Parts, refer to page 376.*

ZZ454/440

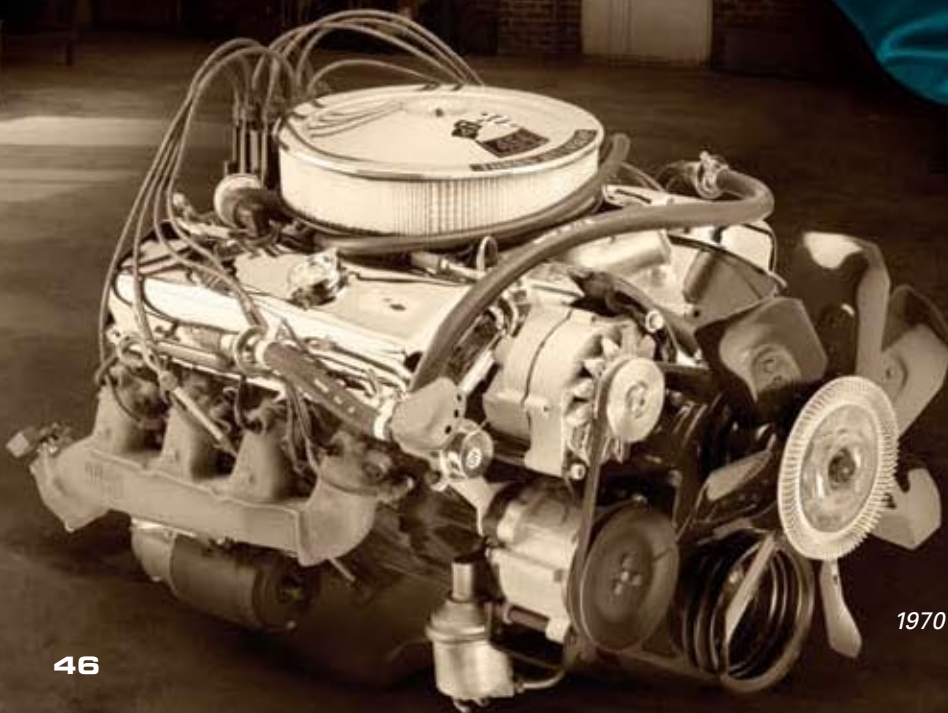
Aluminum-headed beast

The ZZ454/440 utilizes lightweight aluminum heads that also feature big 2.25" intake and 1.88" exhaust ports in an oval-port design. Like its predecessor, the LS6, it makes big power to make a big impression. Small combustion chambers are very efficient, delivering 440 horses with the help of a forged crank, connecting rods and pistons and roller cam. Make it yours with the following GM Performance Parts:

ZZ454/440 Engine	12498777	Billet HEI Distributor	88961867
Chrome Air Cleaner and Bowtie Nut	12342080	Spark Plug Wire Set	12361058
Holley 770-cfm Carburetor	19170093	Wire Loom Kit	12495502
Chrome Bowtie Valve Covers	12342099	Fuel Pump Block-Off Plate	12341999
Chrome Breather Cap	141-616*	Aluminum Water Pump	14058915
Push-In Oil Filler Cap	12341993	Chrome High-Torque Mini Starter	12363128
Chrome Water Neck	12342024		

To learn more about this engine, please turn to page 138.

*For more information on these and other Licensed Parts, refer to page 376.



1970 454 V-8 (LS6)





502 HO

Big-value big-block

We start with a four-bolt cast-iron block and fit it with a forged steel crank, forged and shot-peened rods and forged pistons. A hydraulic roller cam feeds air to the rectangular-ported heads. Together, the combo churns out 550 lb.-ft. of torque and 450 horses. Make it yours with the following GM Performance Parts:

502 HO Engine	12568778
Holley 770-cfm Carburetor	19170093
Chrome Water Neck	12342024
Billet HEI Distributor	88961867
High Torque Mini Starter	12361146
Water Pump	19168602
Push-In Oil Filler Cap	12341993
Spark Plug Wire Set	12361058
Wire Loom Kit	12495502
Black Anodized, Tall Valve Covers	141-803*
Black Anodized, Aluminum Air Cleaner	141-692*
Black Crinkle Air Breather	141-754*

To learn more about this engine, please turn to page 148.

**For more information on these and other Licensed Parts, refer to page 376.*

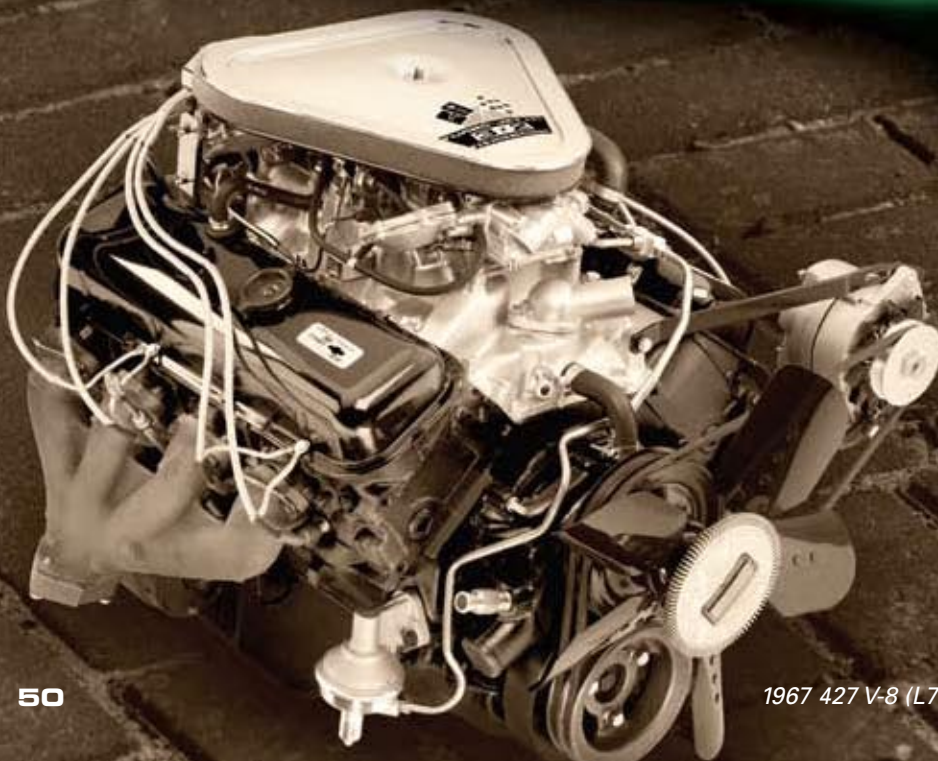
ZZ502/502

Shake, "Rat"-tle and roll

One horse per cube has long been a mark of great engines. GM first delivered on the promise in 1957 with its fuel injected 283, and through the years even surpassed it, with overachievers like the L71 that used three Holley carbs and advanced intake, head and reciprocating technology to make 435 ponies from 427-cubic-inches. Today, the standard is met in the ZZ502, an engine that is not just bigger, but better than the competition. Oval port aluminum cylinder heads feed the 502 horses, and the durable rotating assembly (like the rest of the engine) is warranted for 24 months! Make it yours with the following GM Performance Parts:

ZZ502/502 Deluxe Engine	12496962
Deluxe Accessory Drive Kit	19172805
Billet HEI Distributor	88961867
Black Powder Coated Valve Covers	25534323
Chrome Water Neck	12342024
Air Cleaner and Bowtie Nut	12342071

To learn more about this engine, please turn to page 152.





Ram Jet 502

Fuel-injected, fire-breathing

What do you get when you top a GM Performance Parts 502 with an 11" fuel-injected intake manifold? You get 502 horsepower and a pavement-ripping 565 lb.-ft. of torque. Aluminum heads, forged aluminum pistons, forged rods and a hydraulic cam also help make this monster go. Make it yours with the following GM Performance Parts:

Ram Jet 502 Engine	12498793
Natural Finish Valve Covers	12371244
Chrome Water Neck	12342024

To learn more about this engine, please turn to page 160.





ZZ572/620

Hold on to more than your hat

We've always had a good handle on big-block performance, starting with our "W" engine in 1958 and continuing right through to today's ZZ572/620. Significant engines, like the 409 L80 that inspired the Beach Boys, have paved the way for today's modern monsters. Pump-gas friendly and competition-hostile, this engine is at home on the street or the strip. The custom hydraulic camshaft delivers .632" of lift, and the forged crank, pistons and rods use that air-flow to full advantage. Make it yours with the following GM Performance Parts:

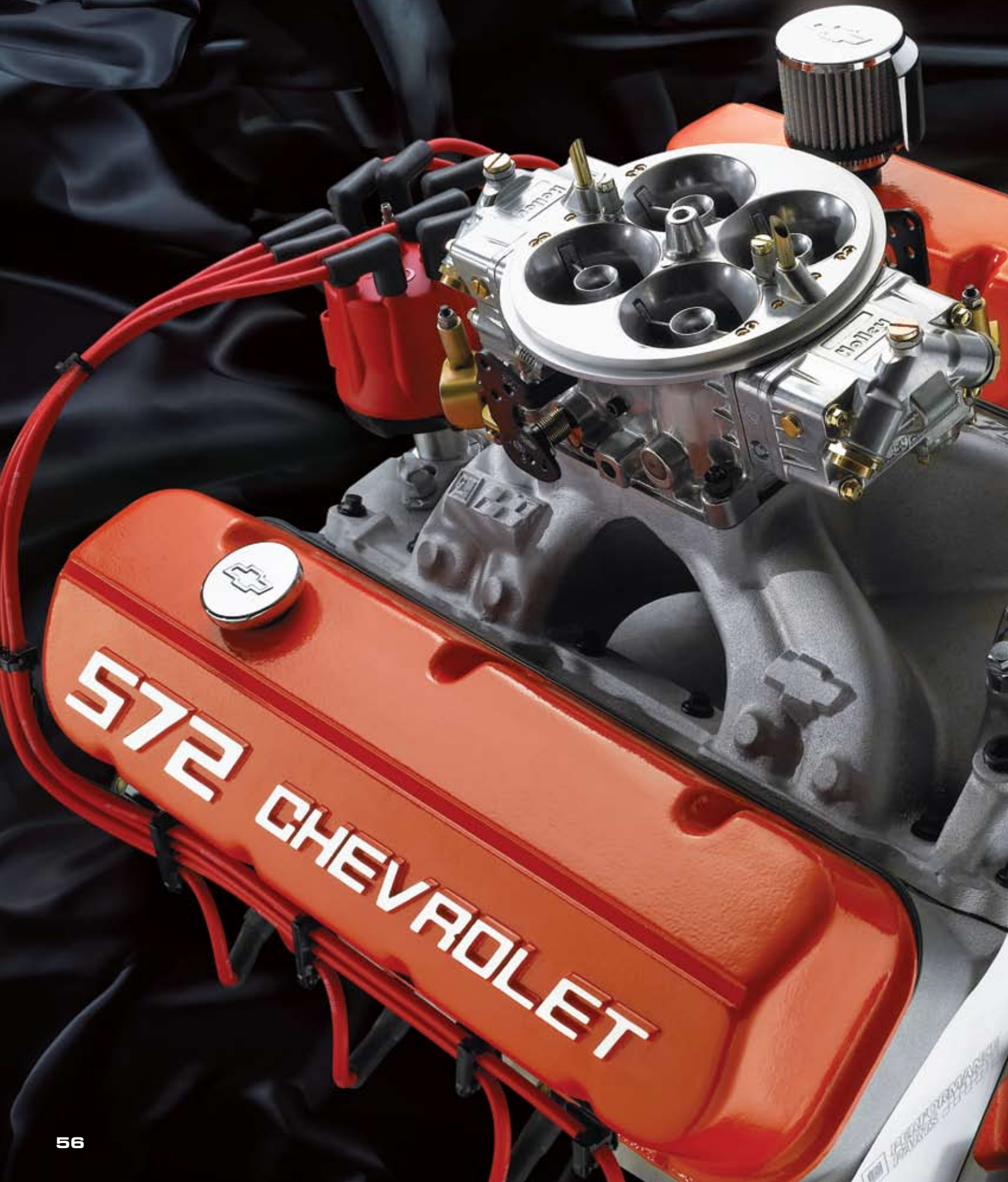
ZZ572/620 Deluxe Engine	12498793
Deluxe Accessory Drive Kit	19172805
Air Cleaner and Bowtie Nut	12342071
Chrome Water Neck	12342024

To learn more about this engine, please turn to page 164.

1964 409 V-8 (L80)







ZZ572/720R

Simply put, the ultimate powerplant

You can let the "R" stand for race, rat or radical — it doesn't matter. What does matter is that this thing needs to be bolted in tight or it will fly! With 720 horsepower and 685 lb.-ft. of torque there is little left to the imagination. Of course, it's not just powerful, it's durable, with 4340 steel forged crank, shot-peened and forged rods, and forged aluminum pistons with full-floating wrist pins to make sure you stay out front of the pack for the long haul. Make it yours with the following GM Performance Parts:

ZZ572/720R Deluxe Engine	12498827
Chrome Water Neck	12342024

To learn more about this engine, please turn to page 168.

Small-Block



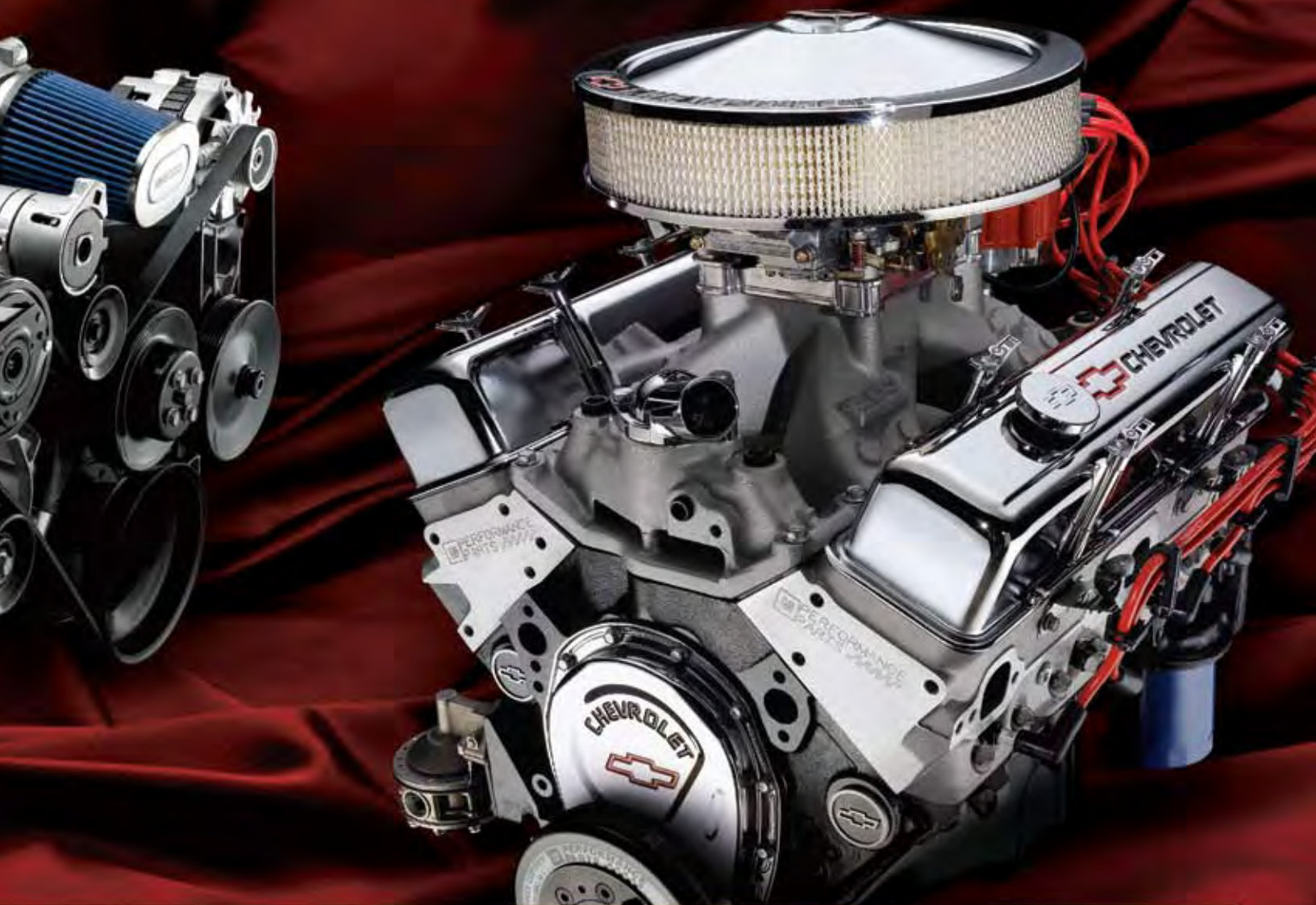
The engine that changed everything

There are few powerplants as revered as the Chevrolet small-block, first introduced in 1955. Coveted, collected — and copied — it became the benchmark for everything that would follow. The “Mouse Motor,” as it was called, served as the bedrock of the GM lineup for nearly five decades. Its architecture became the launching point for the LT and LS series of engines that would carry on the tradition of excellence begun by Ed Cole and his engineering group in the Eisenhower era.

The original small-block packed 195 horses into a 265 cubic-inch frame and was used to give the newly launched Corvette street

credibility. Utilizing the new technology of green-sand casting, the motor employed hydraulic lifters and a choice of two or four-barrel Rochester carb. The following year, three choices were offered for the 'Vette, including a 240 hp version featuring twin four-barrel carbs and dual exhaust.





The next big step occurred in 1957 with the 283 cubic-inch iteration. Used to power the ultra-classic '57 Bel Air, this motor could be ordered with two-barrel or four-barrel carbs—or the brand new mechanical fuel injection.



With this adaptation, the engine could produce an unheard of (and still impressive) one horsepower per cubic inch.

The impressive 327 would follow in the 1960s, dominating the performance scene. The L84 version of the 327, brought out in 1964, held the horsepower record (375) for naturally aspirated single-cam small-blocks until the release of the LS6 in 2001.

The steady progression of power has been matched by similar gains in quality and durability from the start. The GM small-block is the most common starting point for enthusiasts in every corner of the performance universe, from weekend racers to NASCAR champions, and from weekend showcar builders to street rod owners. The easy availability of genuine parts, and wrench-friendly design has made the GM small-block the preferred performance motor of all time.





12499529

350/290 HP

WHAT'S HOT?

- **Economical power**
- **Four-bolt block**
- **290 horsepower**

The best value crate engine in the GM Performance Parts lineup!

The 350/290 HP is the most popular GM Performance Parts crate engine because no one can deliver such performance for this kind of value. GM Performance Parts believes that everyone should be able to afford a high quality, high performance GM V-8 without going broke. The 350/290 is an answer to those car crafters who demand maximum return on their money. However, just because it's affordable, don't think that it's a stone. The 350/290 delivers 290 hp @ 5100 rpm and a solid 326 lb.-ft. of torque at 3750 rpm. With those kinds of numbers, it's the perfect replacement engine for the millions of GM vehicles that shipped with a small-block. Got a tired, old project car that needs a lift? This is the crate engine for you.

We've also loaded the 350/290 with a four-bolt main bearing block, aluminum pistons, and a hydraulic camshaft. The cast iron cylinder heads are designed to be extremely durable while still providing good airflow through the engine.

The 350/290 will ship to you as a Base-level long block. Add an intake manifold, carburetor, ignition system, starter, balancer, and water pump, and you'll be ready to hit the road with a fresh new motor. All of these parts are available from GM Performance Parts, and with its low price, you'll have no problem finishing off the 350/290 in style.



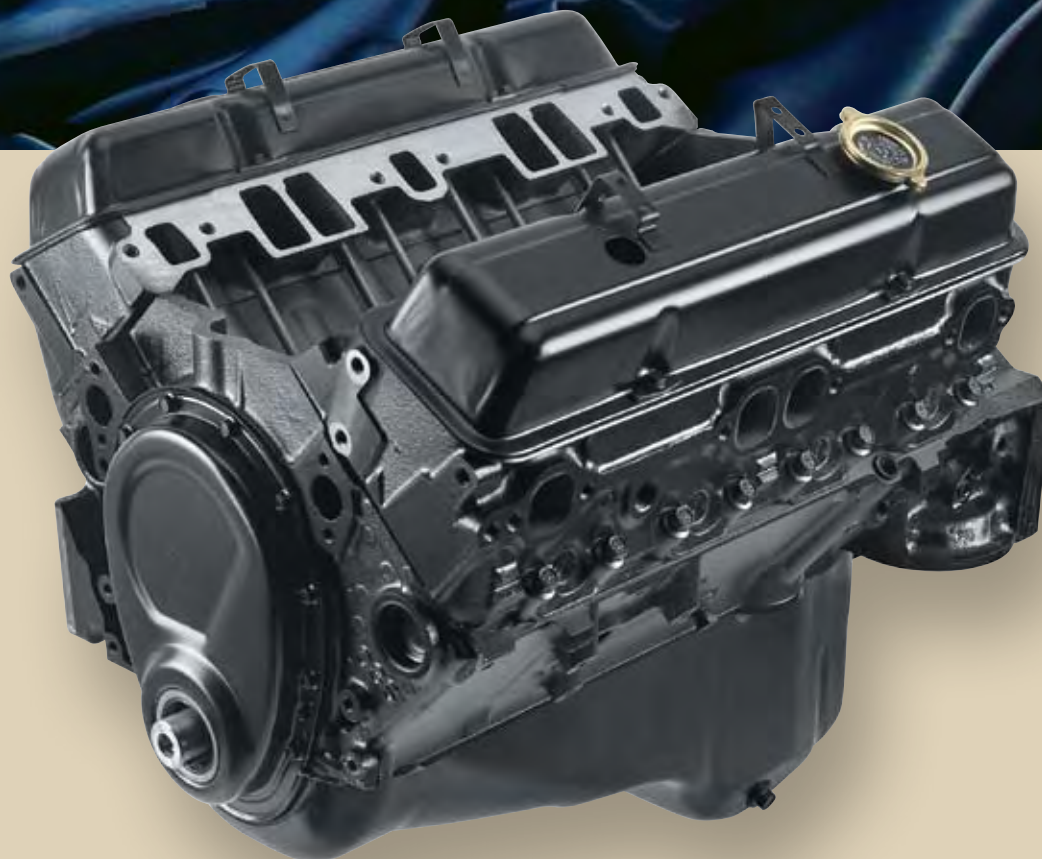
GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

350/290 HP TECH SPECS:

Part Number:	12499529	Cylinder Heads (P/N 93438648):	Iron; 76cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	8.5:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10066034):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 93426651):	Nodular iron	Recommended Fuel:	87 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 93422884):	Cast aluminum	Maximum Recommended rpm:	5100
Camshaft Type (P/N 3896962):	Hydraulic flat tappet	Balanced:	Internal
Camshaft Lift (in):	450 intake / .460 exhaust		
Camshaft Duration (@.050 in):	222° intake / 222° exhaust		

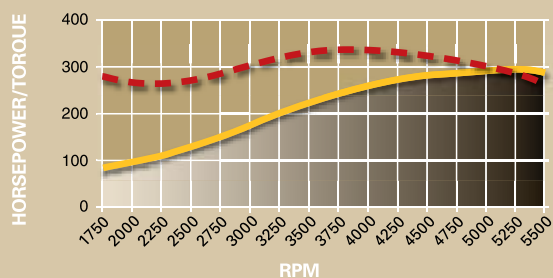


POSSIBLE APPLICATIONS*

- **Replace that tired old small-block that has served you well for years**
- **Finish your first Hot Rod**
- **A temporary stand-in while you build your dream engine**
- **An engine for that father/son project out in the garage**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

350/290 HP DYNO CHART



Horsepower: 290 @ 5250 rpm

Torque (lb-ft): 332 @ 3750 rpm

INSTALLATION NOTES

- For complete list of parts to complement and finish this engine, turn to page 62.
- Use internally balanced flexplate P/N 471529 for automatic transmission or flywheel P/N 14085720 for manual transmission (not included).
- Power ratings based on tests with Holley 670-cfm carburetor P/N 19170092 (not included).
- Does not accept GM Performance Parts roller lifter assemblies.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- Comes with black-painted valve covers with perimeter-style hold downs; see Valve Covers section on page 234 for selection of chrome, polished and aluminum valve covers.
- Recommended use in 6000 GVW or less vehicles.

Create Your Own 350/290 HP Turn-Key

Want the fun of building up your own engine, but want to have a proven blueprint to work from? No problem! With the 350/290 and the help of GM Performance Parts, you can have a DIY “turn-key” engine of your own—built with your own two hands!

Start with the 350/290 long-block, and add the needed parts from the specially assembled list from GM Performance Parts. Your dealer can easily fill your order when you bring the provided parts list with you.

By building up your engine this way, you’ll get validated parts that were designed to work with one another—no guess work, no back and forth to the parts store ... no hassles. And, in the end, you’ll have a proven winner. Iron block, with four-bolt mains. Great-breathing iron heads, hydraulic camshaft, 650-cfm carburetor—and the confidence that comes standard with GM Performance Parts!



P/N	DESCRIPTION	QTY	P/N	DESCRIPTION	QTY
12499529	350/290 HP Engine	1	10465143	Starter	1
141-905	Valve Covers	1	14097279	Starter Bolt	1
93440806	Distributor	1	14097278	Starter Bolt	1
11515758	Distributor Bolt	1	1485552	Heater Hose	1
10096197	Distributor Hold Down	1	6272959	Connector, Bypass Hose	2
12342089	Chrome Timing Cover	1	1470030	Clamp, Worm Type	2
12341993	Chrome Oil Fill Cap	1	12361057	Spark Plug Wire Kit	1
6415325	Fuel Pump	1	12496806	Spark Plug Wire Retainer	1
88891769	Fuel Pump Bolts	2	25522466	Plug	1
12560223	Fuel Pump Gasket	1	12551144	Dipstick	1
3704817	Fuel Pump Pushrod	1	12551154	Dipstick Tube	1
3719599	Fuel Pump Adapter	1	10202456	Thermostat	1
12342071	Air Cleaner Kit	1	12342024	Chrome Thermostat Housing	1
6487779	Valve, Crankcase Vent	1	10198997	Thermostat Bolts	2
88964766	Hose, PCV	1	10105135	Thermostat Gasket	1
19170093	Carburetor, 770 Holley	1	12551537	Harmonic Balancer	1
19131218	Breather, Crankcase	1	10185063	Intake Manifold	1
3952301	Oil Filter Adapter	1	88891769	Intake Bolts	2
3951644	Oil Filter Adapter Bolt	2	14091544	Intake Bolts	8
88894341	Water Pump	1	12525810	Intake Gasket	1
141-617	Chrome Breather	1			

Complete Your 350/290 HP Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

10185063

Intake Manifold

Make power with our low-profile, aluminum, four-barrel intake manifold.



12342089

Small-Block Chrome Timing Cover

Attractive chrome cover for 1969–1991 small-block V-8 and all 90° V-6 engines. Direct replacement for covers that use bolt-on timing pointer. Supplied with oil seal.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



19170092

Carburetor, Holley 670-cfm

Holley 4160-style 670-cfm four-barrel has show car quality polished finish, center-hung fuel bowls, vacuum secondaries, and power valve blowout protection.



93440806

HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



88965829

Carburetor Spacer

Fully CNC'd from billet aluminum, this spacer has the GM Performance Parts logo machined into its front and back, and accepts Quadrajet style carburetors.



88894341

Water Pump, Long-Style

Late-style cast iron pump with long mounting legs, reinforced snout and 3/4" diameter shaft, end of shaft is reduced to 5/8" diameter. Use with 350 HO, 383 and ZZ4 engines.



12480127

Short Aluminum Valve Covers

Cast aluminum Chevy Bowtie-design valve cover with a PCV hole in both covers (grommets included). Covers have oil baffle.



12361056

Spark Plug Wires

8mm red double-wall silicone plug wires with 135° spark plug boots.



12341670

Chrome Short Valve Covers

Short chrome valve covers, with baffle, for use on pre-1986 engines with perimeter hold downs. Chevrolet and the Bowtie logo are embossed on top.



ALSO AVAILABLE

Aluminum Black Crinkle Valve Covers, Center Bolt Design	12497979	Aluminum Water Pump, Long-Style	12495826
Wire Loom Kit, Small-Block	12496806	Roller Rocker Arm Set, 1.5:1 Ratio	12370838
Valve Cover Adapter	24502540	Standard Starter (Offset Bolt Holes)	10496873
Oil Filter Adapter	3952301	Standard Starter (Straight Bolt Holes)	10496871
Push-In Oil Filler Cap	12341993	Motor Mount—Truck (2 req.)	15731260
Aluminum Water Pump, Short-Style	14011012	Motor Mount—Car (2 req.)	22188497
Air Cleaner, Chevrolet-Logo Classic Design	12342071	Bolt (Motor Mount—2 req.)	460308
Air Cleaner, Chevrolet-Logo High-Performance Design	12342080	Transmission Mount (700R4)	22188145
Fuel Pump, High Capacity, Small-Block	6415325	Transmission Mount (TH400)	17990778
Engine Oil Primer	12368084	Transmission Mount (4L60 & 4L80)	15767858
Harmonic Balancer	12551537	Fan Clutch (Serpentine Belt)	15671898
Polished Aluminum Die-Cast Valve Covers	12363970	Fan Clutch (V-belt)	88961767

350/290 Power Packages From GM Performance Parts

The GM Performance Parts Power Packages start with our entry-level crate engine, the 350/290. It's a value-packed crate engine that offers you a traditional 350 cubic inch small-block V-8 with loads of features built in. With 290 horsepower, it's a great starting point for our Engine Dyno Configurator.

12499529 350/290 Crate Engine	Baseline = 290 hp and 326 tq
--------------------------------------	-------------------------------------

Total = 305 hp and 357 tq

POWER PACKAGE

1

12499529 350/290 Crate Engine
12353923 Camshaft

COMMENTS: The 350 small-block Chevy is loaded with potential. Just a camshaft change resulted in a 15 hp and 30-plus tq gain. This is a quick weekend upgrade that is affordable and results in good power.

NOTE: Hot Cam P/N 12353923 and 1.6 rocker arm kit P/N 12367346 require the valve guides to be machined for proper valve guide-to-retainer clearance when using the stock 350/290 heads.

Total = 341 hp and 358 tq

POWER PACKAGE

2

12499529 350/290 Crate Engine
12558060 Cast Iron Vortec Heads
12496822 Vortec Eliminator Intake

COMMENTS: The Vortec head and intake combination is an American classic! We picked up 50-plus hp and 30-plus torque with a head and matching intake swap. And, you can too!

Total = 349 hp and 392 tq

POWER PACKAGE

3

12499529 350/290 Crate Engine
12464298 Fast Burn Heads
12496822 Eliminator Vortec Intake

COMMENTS: The Fast Burn aluminum heads are serious upgrades to the 350/290 crate engine. They are highly efficient performance heads that leave you open to further modifications. Match those Fast Burn heads with the right intake, and you've got some magic happening under the hood. On our engine dyno, we picked up 59 hp and 66 tq!

Total = 362 hp and 396 tq

POWER PACKAGE

4

12499529 350/290 Crate Engine
12464298 Fast Burn Heads
12496822 Eliminator Vortec Intake
12367346 1.6 Roller Rockers

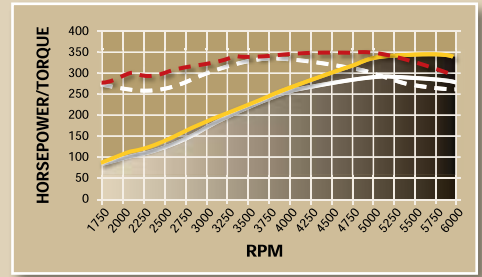
COMMENTS: Now, we are getting serious! To the above combination, we tried a set of 1.6 roller rockers just to see what a little bit more valve actuation would do for performance. And, the result was a 13 hp and 4 tq gain. Put a cam into this thing, and watch it take off!

Total = 343 hp and 348 tq

POWER PACKAGE
5

- | | |
|--|---|
| 12499529 350/290 Crate Engine | 12353923 Camshaft |
| 12464298 Fast Burn Heads | 19170092 670-cfm Holley Carburetor |
| 12496822 Vortec Eliminator Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: The Hot Cam and Eliminator Vortec intake manifold complement the Fast Burn heads to turn this into a great combo engine — very respectable horsepower and solid low end.

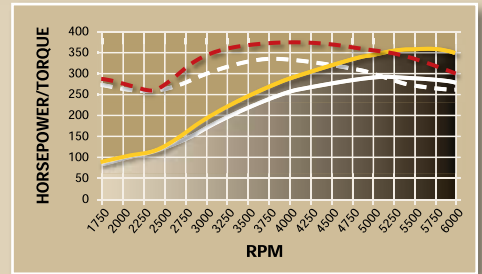


Total = 357 hp and 373 tq

POWER PACKAGE
6

- | | |
|--------------------------------------|---|
| 12499529 350/290 Crate Engine | 3896962 Camshaft |
| 12464298 Fast Burn Heads | 19170092 670-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: The Fast Burn heads and intake combo produce a gain of 67 horsepower and torque! The package also keeps horsepower rising up to 5750 rpm.

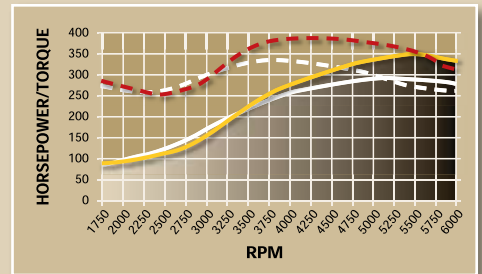


Total = 348 hp and 383 tq

POWER PACKAGE
7

- | | |
|--------------------------------------|---|
| 12499529 350/290 Crate Engine | 3896962 Camshaft |
| 12558060 Vortec Heads | 19170092 670-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: Vortec heads and an aggressive cam give this engine enough low end to leave the competition in the dust at the light and enough top end horsepower to keep you comfortably ahead.

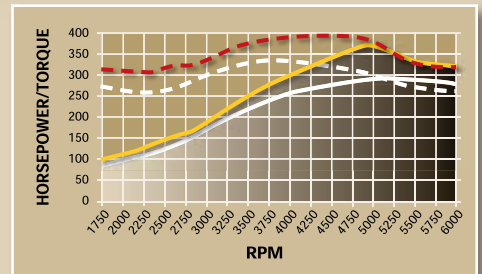


Total = 360 hp and 384 tq

POWER PACKAGE
8

- | | |
|--|---|
| 12499529 350/290 Crate Engine | 3896962 Camshaft |
| 12558060 Vortec Heads | 19170092 670-cfm Holley Carburetor |
| 12496822 Vortec Eliminator Manifold | 12370839 1.6 Rocker Arms |

COMMENTS: Why not have it all? Vortec heads and Eliminator Vortec intake, bad-lad camshaft and 1.6 rocker arms. This package tips the dyno at 360 horses and has a pavement-ripping 384 lb.-ft. of torque.



DYNO KEY: Baseline HP ——— Baseline TQ - - - - Pwr. Pkg. HP ——— Pwr. Pkg. TQ - - - -



12499711

NEW

350 HO Turn-Key

WHAT'S HOT?

■ 330 horses; 380 lb.-ft. of torque

■ Complete engine package

■ Aggressive cam lift

A 350 that's been stepped up in power.

You won't go broke finishing off your project car with our 350 HO Turn-Key crate engine! It's packed with all the features you need to get a reliable 330 horsepower and 380 lb.-ft. of torque from a dependable, time-tested combination of GM Performance Parts. Of course, all of the components used in this engine are brand new—not remanufactured parts like the competition is trying to sell you. Designed by our in-house engineers to give you maximum return for your hot rod dollar, the 350 HO Turn-Key is a great choice for your small-block crate engine needs.

The 350 HO is based on a tough, Chevy four-bolt block that holds a strong nodular iron crankshaft, good rods, and aluminum pistons. The high-lift camshaft gives the engine its own unique, aggressive idle. The cam is based on the same one found in 1965-67 Corvette 327 engines, but it has even more lift and duration.

Complete from top to bottom, the 350 HO comes pre-assembled with the intake manifold, carburetor, water pump, and distributor. With the Turn-Key trim level, you also get everything you need for a complete, running engine right out of the crate. We ship it with an accessory drive package, fuel pump, starter, and spark plug wires included in the package (not installed). The 350 HO Turn-Key crate engine offers you an incredible performance value—all you need to do is add the fuel and enjoy!



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

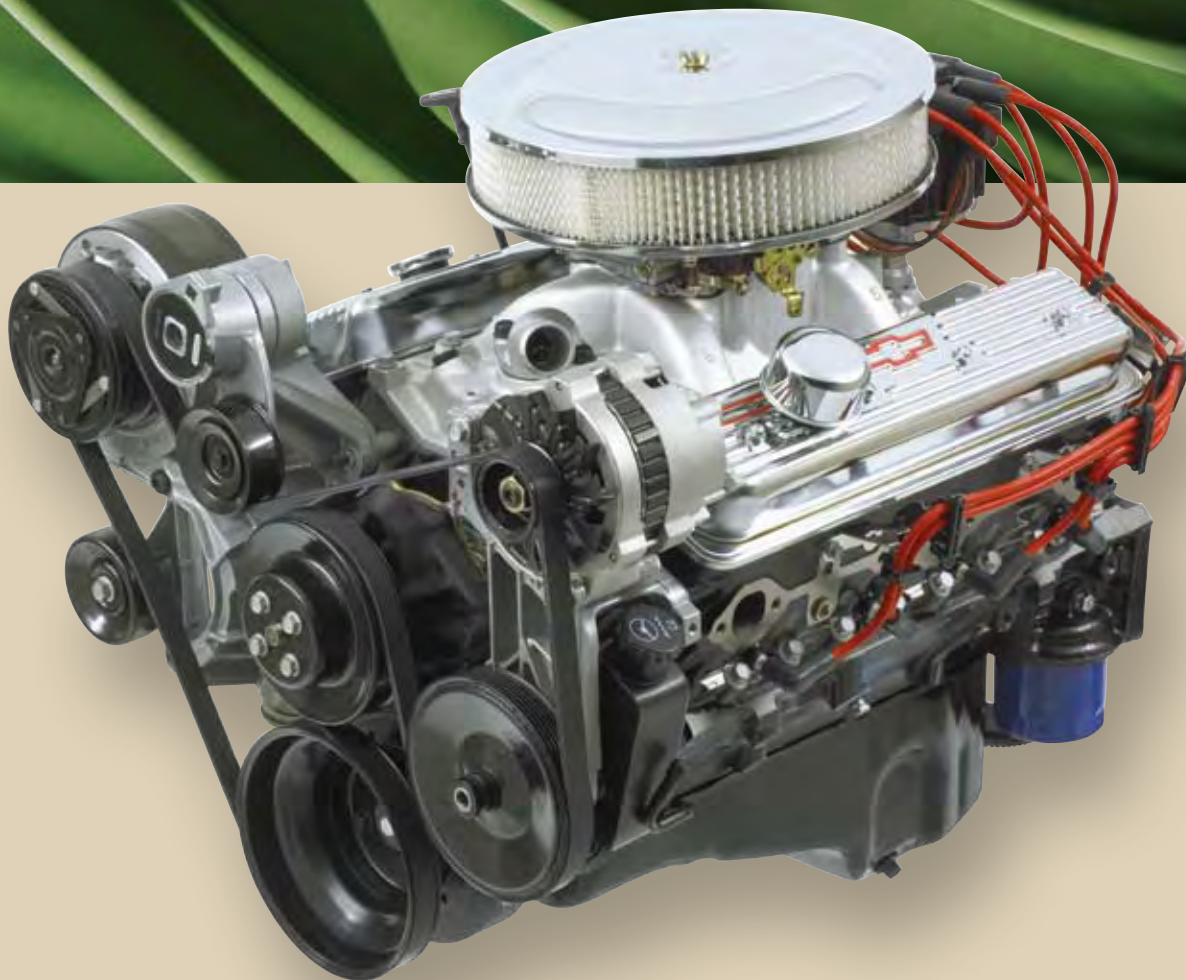


GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

350 HO TECH SPECS:

Part Number:	12499711	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 14088526):	Nodular iron	Water Pump (P/N 88894341):	Cast iron, long-style
Connecting Rods (P/N 10108688):	Powdered metal steel	Flexplate (P/N 14088765):	14"
Pistons (P/N 12514101):	Cast aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502476):	Hydraulic flat tappet	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Lift (in):	.435 intake / .460 exhaust	Maximum Recommended rpm:	5500
Camshaft Duration (@.050 in):	212° intake / 222° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

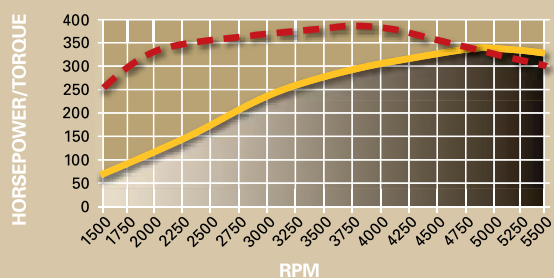


POSSIBLE APPLICATIONS*

- **Replace that V-6 with some all-American V-8 muscle**
- **Restore your musclecar with a little bit more than stock**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

350 HO DYNO CHART



Horsepower: 330 @ 5000 rpm

Torque (lb-ft): 380 @ 3800 rpm

INSTALLATION NOTES

- Comes with counterweighted flexplate for automatic transmission; requires counterweight flywheel for manual transmission. See chart on page 247.
- Has right-side oil dipstick.
- Requires fuel line from fuel pump to carburetor.
- Fuel pump pressure is pre-set, fuel pressure regulator not required.
- Some assembly and engine tuning may be required.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12496968

350 HO Deluxe

Complete from top to bottom, the 350 HO Deluxe comes with the intake manifold, carburetor, water pump, and distributor. It offers you an incredible performance value—one that delivers big-time performance without costing you big-time money.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

12486041

350 HO Base

The 350 HO Base trim level crate engine offers you all of the same great performance capability and internal components as the 350 HO Deluxe (and 350 HO Turn-Key) including chrome valve covers and timing cover, but it comes without the intake manifold, carburetor, water pump, balancer, distributor, and dampener—parts that you likely have in your garage already. However, these bolt-on components are available from GM Performance Parts, or you can use the 350 HO Base as the foundation for the custom engine of your own design.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

Complete Your 350 HO Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



12361051

Spark Plug Wires, Red GM Performance 90° Boot

Designed for a small-block, with 90° spark plug boots. Route over the valve covers. Recommended wire loom kit: P/N 12496806.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966–1975 Chevrolet, Camaro, and Chevelle V-8 engines.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12361146

High-Torque Mini-Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12496822

Intake Manifold, Eliminator Vortec Design

This manifold is designed to deliver the most power and torque with Vortec cylinder heads. P/N 89017465 and eight special manifold bolts P/N 12550027.



12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



6415325

Fuel Pump, High Capacity, Small-Block

For use on carbureted engines. Pump has 7 psi shutoff pressure and free flowing rate of 30 gph. Lower housing can be rotated to reposition inlet and outlet ports.



ALSO AVAILABLE

Spark Plug Wires, Red GM Performance 135° Boot	12361056	Transmission Mount (TH400)	17990778
Roller Rocker Arm Set, 1.5:1 Ratio	12370838	Transmission Mount (4L60 & 4L80)	15767858
Oil Filter Adapter	3952301	Fan Clutch (Serpentine Belt)	15671898
Serpentine Accessory Drive Belt System, without A/C	12497697	Fan Clutch (V-belt)	88961767
Magnetic Drain Plug	24241872	Fan 19.5" (Serpentine Belt)	15563127
Standard Starter (Offset Bolt Holes)	10496873	Fan 19.5" (V-belt)	15644302
Standard Starter (Straight Bolt Holes)	10496871	Fan Studs—4 req. (Serpentine Belt)	12338107
Motor Mount—2 req. (Truck)	15731260	Fan Studs—4 req. (V-belt)	382919
Motor Mount—2 req. (Car)	22188497	Fan Stud Nuts (4 req.)	12338130
Bolt (Motor Mount—2 req.)	460308	Fan Bolts (4 req.)	9440224
Transmission Mount (700R4)	22188145		



12499712

ZZ4 350 Turn-Key

WHAT'S HOT?

■ Forged steel crankshaft

■ Aluminum Corvette heads

■ Turn-Key option!

An aluminum-headed 350 that makes 355 horse!

As far as crate engines go, this one is a winner. The ZZ4 350 Turn-Key crate engine has been one of our most popular high performance crate engines since we started GM Performance Parts. Its legendary status is based on an incredible performance level that is stone cold reliable. We've packed the ZZ4 350 crate engine with a forged steel crankshaft, hypereutectic pistons, hydraulic roller camshaft and lifters, and aluminum cylinder heads. The ZZ4's Corvette-derived high-performance heads feature high velocity intake runners and D-shaped exhaust ports to promote efficient and unobstructed flow through the engine—providing strong power and torque at all rpm levels.

The ZZ4 350 is delivered with an aluminum dual-plane intake manifold, HEI distributor, cast iron water pump, dampener, and flexplate. Our Turn-Key ZZ4 350 crate engine also ships with all the parts you need to get it running. That includes an accessory drive package, fuel pump, chrome air cleaner kit, Holley 770-cfm carburetor, starter, and spark plug wires.

The ZZ4 comes to you with a full 355 horsepower and 405 lb.-ft. of torque. With its high level of performance and durability, it could very well be the perfect crate engine—able to meet the needs of car builders from all phases of the motorsports world.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator, and power steering pump.

ZZ4 350 TECH SPECS:

Part Number:	12499712	Cylinder Heads (P/N 12556463):	Aluminum; 58cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	10:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12556307):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 10159436):	High-silicon aluminum with offset pins	Maximum Recommended rpm:	5800
Camshaft Type (P/N 10185071):	Steel hydraulic roller	Balanced:	External
Camshaft Lift (in):	.474 intake / .510 exhaust		
Camshaft Duration (@.050 in):	208° intake / 221° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

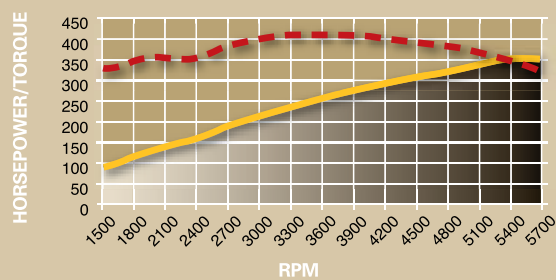


POSSIBLE APPLICATIONS*

- **Get that low 13-second bracket car going**
- **A new bullet for your Friday night cruiser**
- **A vintage Chevy that deserves a new heart**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ4 350 DYNO CHART



Horsepower: 355 @ 5400 rpm

Torque (lb-ft): 418 @ 3600 rpm

INSTALLATION NOTES

- Comes with 12.75" externally balanced automatic transmission flexplate; change to externally balanced flywheel for manual transmission applications. See chart on page 247.
- Requires fuel line from fuel pump to carburetor.
- Fuel pump pressure is pre-set, fuel pressure regulator not required.
- Some assembly and engine tuning may be required.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

24502609

ZZ4 350 Base

The ZZ4 350 comes to your door with an aluminum dual-plane intake manifold, HEI distributor, cast iron water pump, dampener, and flexplate. You only need to add a carburetor, starter, fuel pump, and plug wires to fire it up! Of course, all of those parts are available through GM Performance Parts (or buy a Turn-Key).



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



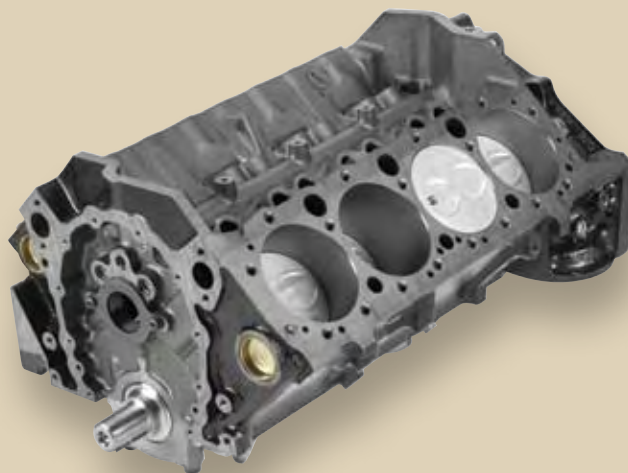
GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

12561723

ZZ4 Partial Engine

Want a replacement partial engine for your ZZ-series engine? This partial engine includes the ZZ4's forged steel crankshaft and comes with LT1-style pistons and connecting rods. It does not include the camshaft, cylinder heads, lifters, timing set, front cover, oil pump, oil pan, balancer, or flexplate. All parts needed to complete the engine assembly are available from your GM Performance Parts dealer.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

Complete Your ZZ4 350 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



12355612

Fuel Pump, Street Performance

For use on carbureted engines. Pump has 7 psi shutoff pressure and a free-flow rating of 110 gph.



12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



88965829

Carb Spacer, Dual Plane, One Inch

Fully CNC'd from billet aluminum, this spacer has the GM Performance Parts logo machined into it's front and back, and accepts Quadrajet style carburetors.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



10465143

Lightweight Starter (remanufactured)

Originally used on 1993-1997 Camaros and Firebirds with the LT1 engine, this lightweight high-performance starter can be used on any small-block or big-block engine with a 12.75", 153-tooth flywheel.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



88961867

Distributor, Aluminum Billet HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



ALSO AVAILABLE

Spark Plug Wires, Red GM Performance 90° Boot	12361057	Motor Mount—2 req. (Car)	22188497
Spark Plug Wires, Red GM Performance 135° Boot	12361056	Bolt (Motor Mount—2 req.)	460308
Fuel Pump	6415325	Transmission Mount (700R4)	22188145
Wire Loom Kit, Small-Block	12496806	Transmission Mount (TH400)	17990778
350 Hot Cam Kit	12480002	Transmission Mount (4L60 & 4L80)	15767858
Roller Rocker Arm Set, 1.5:1 Ratio	12370838	Fan Clutch (Serpentine Belt)	15671898
Roller Rocker Arm Set, 1.6:1 Ratio	12370839	Fan Clutch (V-belt)	88961767
Serpentine Accessory Drive Belt System, without A/C	12497697	Fan 19.5" (Serpentine Belt)	15563127
Oil Filter Adapter	3952301	Fan 19.5" (V-belt)	15644302
Magnetic Drain Plug	24241872	Fan Studs—4 req. (Serpentine Belt)	12338107
Chrome Air Cleaner	12342080	Fan Studs—4 req. (V-belt)	382919
Standard Starter (Offset Bolt Holes)	10496873	Fan Stud Nuts (4 req.)	12338130
Standard Starter (Straight Bolt Holes)	10496871	Fan Bolts (4 req.)	9440224
Motor Mount—2 req. (Truck)	15731260		

ZZ4 Power Packages From GM Performance Parts

The ZZ4 is exactly what a small-block should be—lightweight with aluminum heads, yet rippling with muscle. And, while its standard dress is more than enough for most enthusiasts, it also has the legendary small-block flexibility to be built for whatever use you have in mind. The baseline 355 horses and 405 ft.-lb. of torque are a great starting point for any project car.

12499712 ZZ4 Crate Engine

Baseline = 355 hp and 418 tq

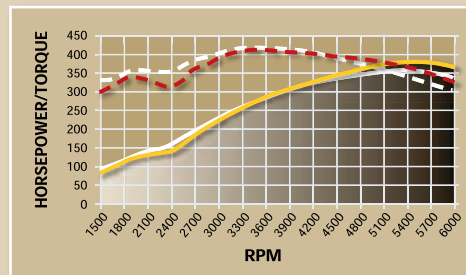
Total = 378 hp and 409 tq

POWER PACKAGE

1

- | | |
|----------------------------------|---|
| 12499712 ZZ4 Crate Engine | 12370845 Camshaft |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: Add a Fast Burn Vortec-style head and Vortec intake to start the upgrade. A hot hydraulic roller cam improves valve action and the end result is a gain of 23 horses and four ft.-lb. of torque.



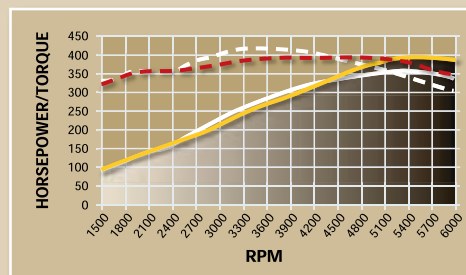
Total = 393 hp and 395 tq

POWER PACKAGE

2

- | | |
|----------------------------------|---|
| 12499712 ZZ4 Crate Engine | 12370845 Camshaft |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12496822 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: Add the Eliminator Vortec intake manifold and watch the horses run wild! Top end torque slips a bit, but is more than made up for by the much longer power band.



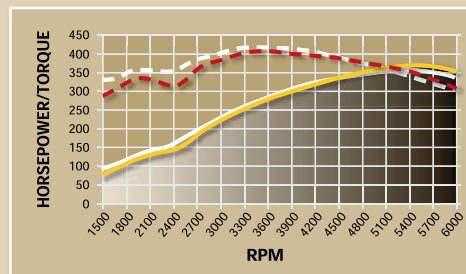
Total = 368 hp and 406 tq

POWER PACKAGE

3

- | | |
|----------------------------------|---|
| 12499712 ZZ4 Crate Engine | 12370845 Camshaft |
| 25534421 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: The swap-out of the aluminum angled head for the straight plug iron head boosts the torque while still keeping horsepower a comfortable 13 over the "stock" setup.



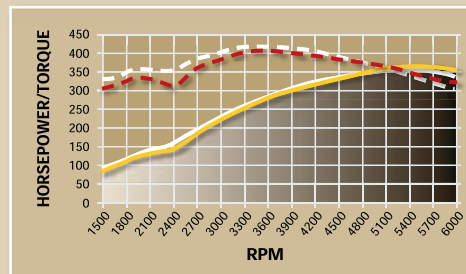
Total = 364 hp and 405 tq

POWER PACKAGE

4

- | | |
|----------------------------------|---|
| 12499712 ZZ4 Crate Engine | 10185071 Camshaft |
| 25534421 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: The big combustion chambers on these iron Vortec heads lead to a gain of high rpm torque and horsepower.



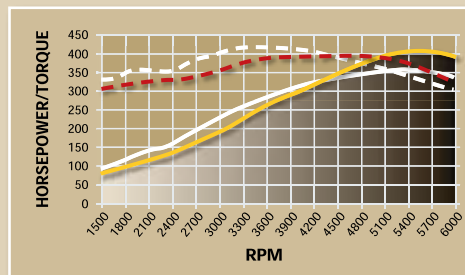
Total = 406 hp and 393 tq

POWER PACKAGE

5

- 12499712** ZZ4 Crate Engine
- 25534421** Cylinder Head
- 12496822** Intake Manifold
- 24502586** Camshaft
- 19170093** 770-cfm Holley Carburetor
- 12370839** 1.6 Rocker Arms

COMMENTS: Add a little hotter cam, 1.6 rocker arms and an Eliminator Vortec manifold and you're really rocking! Horsepower over 400 and torque near this mark makes any kind of performance driving fun.



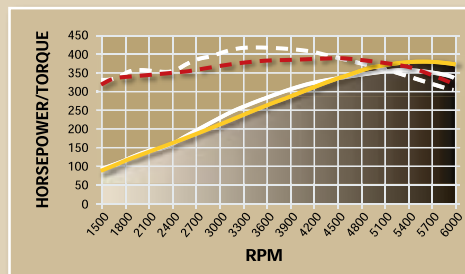
Total = 380 hp and 386 tq

POWER PACKAGE

6

- 12499712** ZZ4 Crate Engine
- 25534421** Cylinder Head
- 12496822** Intake Manifold
- 10185071** Camshaft
- 19170093** 770-cfm Holley Carburetor
- 10089648** 1.5 Rocker Arms

COMMENTS: Going back to a 1.5 rocker arm flattens out the torque curve and still boosts horsepower. A sweet, full-band package for any enthusiast!



DYNO KEY: Baseline HP ——— Baseline TQ - - - - Pwr. Pkg. HP ——— Pwr. Pkg. TQ - - - -

Why so many choices?

Many people wonder why GM Performance Parts offers so many different varieties of crate engines and components. The reason is found in our roots.

Initially, GM Performance Parts was set up as a means of getting specially developed parts to race teams using GM sheet metal and powerplants—and, since no two circuits are the same, neither were these teams' needs. Race-capable parts were developed to meet the unique demands of each series. They were then offered to the public, because we wanted all enthusiasts to be able to work with the good stuff.

We knew that some performance fans wanted high torque, some high horsepower, some a combination of both. Some wanted fuel injection, others wanted traditional carburetion, etc., etc., etc. We saw no reason to limit things.

The catalog you hold today is the culmination of years of listening to our buying public—whether they are NASCAR legends or shade-tree mechanics—and responding to their input.



From Trans Am to NASCAR to the NHRA—and all points in between—GM Performance Parts has supplied serious racers with proven parts.



12499120

Ram Jet 350 with calibrated controller & wiring harness

WHAT'S HOT?

■ Fuel injected power

■ Vortec cylinder heads

■ 350 horsepower

Port fuel injection meets a small-block classic.

GM Performance Parts has just what you need to put a modern new twist on your favorite classic hot rod with our amazing Ram Jet 350 crate engine. GM offered the Ram Jet fuel injection system on a variety of models in the late-1950s through the mid-1960s, but the Ram Jet has never looked as good as this!

Evoking the nostalgic look of the early fuel injection systems, the Ram Jet 350 has a styled intake plenum that actually leads to a modern day fuel injection system. Instead of a mechanical injection system, the Ram Jet 350 is fed by a state-of-the-art, electronically controlled port fuel injection system. Developed by GM to the same standards as production vehicle systems, the Ram Jet 350 delivers exceptional throttle response and performance. This is made possible by the sophisticated, latest-generation MEFI 4 controller, which has improved electronics and closed loop capability (compared with the previous MEFI 3 system) for great all-around drivability.

A venerable 350 cubic-inch small-block combination anchors the Ram Jet 350. It is designed for long-lasting durability and pump gas compatibility, with Vortec cylinder heads, a hydraulic roller camshaft, and 9.4:1 compression.

GM Performance Parts delivers the engine with the necessary wiring harness and detailed instructions. It can be installed on any 1977-or-earlier vehicle originally equipped with a carburetor. Now there's no reason you can't dump those old carbs and get fuel injected!



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

RAM JET 350 TECH SPECS:

Part Number:	12499120	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	9.4:1
Bore x Stroke (in) :	4.00 x 3.48	Rocker Arms (P/N 12367346):	Aluminum roller style
Block:	Cast iron with 2-bolt main caps	Rocker Arm Ratio:	1.6:1
Crankshaft (P/N 10243068):	Cast iron	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 88894280):	Hypereutectic aluminum	Maximum Recommended rpm:	5500
Camshaft Type (P/N 14097395):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.431 intake / .451 exhaust		
Camshaft Duration (@.050 in):	196° intake / 206° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

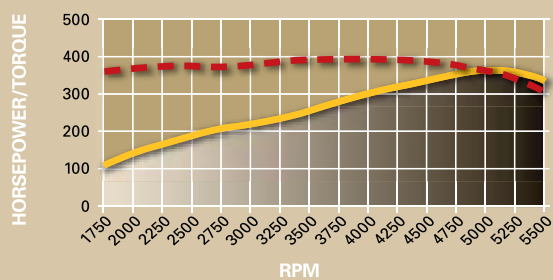


POSSIBLE APPLICATIONS*

- Update your favorite Corvette
- Round out any hot rod that needs a little “something” under the hood
- Use it to start a conversation on Friday night

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

RAM JET 350 DYNO CHART



Horsepower: 350 @ 5200 rpm

Torque (lb-ft): 400 @ 3500 rpm

INSTALLATION NOTES

- Comes with externally balanced, manual transmission flywheel; change to externally balanced flexplate for automatic transmission applications. See chart on page 247.
- Installer to supply 12-volt power source and fuel.
- See instructions for fuel pump recommendation.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- **IMPORTANT!** For a safe, proper and trouble-free engine break-in, the MEFI 4 computer has a “green” mode that controls rpm during the break-in period; from start-up to the end of the first hour is 4000 rpm, the second hour is 4500 rpm and the third hour is 5500 rpm.

12498032

Ram Jet 350 Fuel Injection System

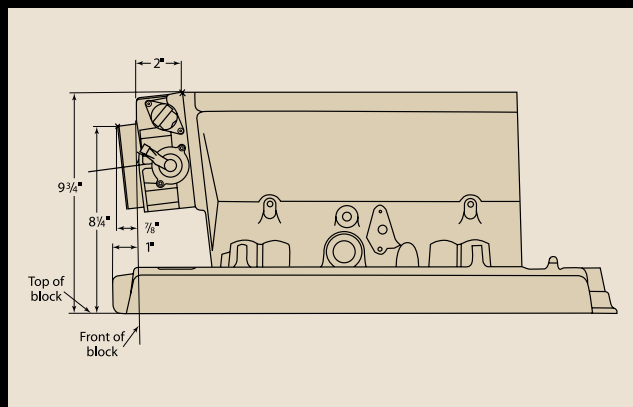


The Ram Jet 350 makes it easy to have electronic fuel injection on any 1979 and older vehicle originally equipped with a carburetor. The Ram Jet fuel injection unit is ideally suited for use in street rods, street machines, and custom truck applications. Installation is simple, as the Ram Jet 350 ships with detailed instructions.

This kit includes these major items plus brackets, sensors, bolts, nuts, gaskets, and other small parts. It does not include ECU or wiring harness.

P/N	Description	Qty.
1115498	Coil-Ignition	1
12097982	Wire Assembly-Marine Ignition	1
12489371	Manifold, Intake	1
1104060	Distributor Assembly-Ignition	1
10456126	Sensor Assembly-Knock	1
17096144	Throttle Body	1
12553918	Fuel Injection Rails	1
17124248	Injectors	8
16249939	MAP Sensor	1
17123897	Fuel Pressure Regulator	1

Use this chart to measure underhood clearance.



Complete Your Ram Jet 350 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



12361146

High-Torque Mini-Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12496806

Wire Loom Kit, Small-Block

Stainless steel supports with the Bowtie insignia laser-cut in each of the six supports. Twelve retainers, bolts, and washers are supplied to bolt to the side of the head. Use with spark plug wire set P/N 12361051 and P/N 12361057.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12368084

Engine Oil Primer

Use to lube engine bearings prior to starting your new crate engine.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



10465143

Lightweight Starter (Remanufactured)

Originally used on 1993–1997 Camaros and Firebirds with the LT1 engine, this lightweight high-performance starter can be used on any small-block or big-block engine with a 12.75", 153-tooth flywheel.



12361057

Spark Plug Wires

8mm red double-wall silicone plug wires with 90° spark plug boots.



12341998

Fuel Pump Block-Off Plate

Chrome plate has stamped Bowtie logo. A special non-asbestos gasket is included.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C	12497697	Transmission Mount (TH400)	17990778
Spark Plug Wires, Red GM Performance 135° Boot	12361056	Transmission Mount (4L60 & 4L80)	15767858
Oil Filter Adapter	3952301	Fan Clutch (Serpentine Belt)	15671898
Magnetic Drain Plug	24241872	Fan Clutch (V-belt)	88961767
Standard Starter (Offset Bolt Holes)	10496873	Fan 19.5" (Serpentine Belt)	15563127
Standard Starter (Straight Bolt Holes)	10496871	Fan 19.5" (V-belt)	15644302
Motor Mount—2 req. (Truck)	15731260	Fan Studs—4 req. (Serpentine Belt)	12338107
Motor Mount—2 req. (Car)	22188497	Fan Studs—4 req. (V-belt)	382919
Bolt (Motor Mount—2 req.)	460308	Fan Stud Nuts (4 req.)	12338130
Transmission Mount (700R4)	2218814	Fan Bolts (4 req.)	9440224



12499710

Fast Burn 385 Turn-Key

WHAT'S HOT?

■ Fast Burn aluminum heads

■ Hydraulic roller cam

■ ZZ4 block and rotating parts

Hot aluminum heads collaborate with a cool small-block V-8

GM Performance Parts designed our Fast Burn aluminum performance cylinder heads for small-block applications just like our Fast Burn 385 turn-key crate engine. Engineered to meet the demands of a hungry small-block with an aggressive camshaft, the Fast Burn cylinder heads are the featured component on this awesome small-block Chevy crate engine. The Fast Burn 385 blends the ZZ4 350 short block with the latest in cylinder head technology. With this hot turn-key option, all you need to do is install it, add the fuel, add 12V power, and go start some trouble.

Rated at 385 horsepower and 385 lb.-ft. of torque, the Fast Burn 385 is all ZZ4 inside the crank case including the forged steel crankshaft, hypereutectic pistons, and steel hydraulic roller camshaft. Thanks to a set of the GM Performance Parts Fast Burn cylinder heads, that same short block breathes deeper and more efficiently than ever. These heads have the exclusive Fast Burn combustion chamber design to maximize the efficiency of burning the air/fuel mixture—resulting in an impressive increase in power.

The Fast Burn 385 Turn-Key is delivered to you with an aluminum dual-plane intake manifold, HEI distributor, cast iron water pump, dampener, and flexplate. It also includes an accessory drive package, fuel pump, chrome air cleaner kit, Holley 770-cfm carburetor, starter, and spark plug wires. That's a lot of horsepower in one box—we hope you can handle it!



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator, and power steering pump.

FAST BURN 385 TECH SPECS:

Part Number:	12499710	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	2.00 intake / 1.55 exhaust
Displacement (cu in):	350	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12556307):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 10159436):	Hypereutectic aluminum	Maximum Recommended rpm:	5800
Camshaft Type (P/N 10185071):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.474 intake / .510 exhaust		
Camshaft Duration (@.050 in):	208° intake / 221° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

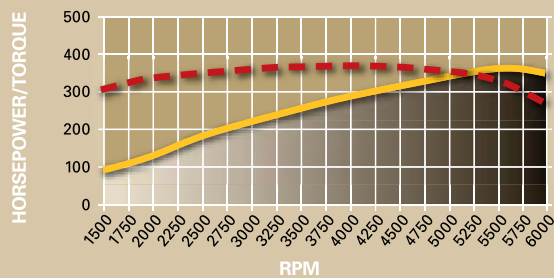


POSSIBLE APPLICATIONS*

- **Replace that iron-headed original**
- **Make that show car a little faster than you first planned**
- **Take it drag racing and see what happens**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

FAST BURN 385 DYNO CHART



Horsepower: 385 @ 5600 rpm

Torque (lb-ft): 385 @ 4000 rpm

INSTALLATION NOTES


- Comes with 12.75" externally balanced automatic transmission flexplate; change to externally balanced flywheel for manual transmission applications. See chart on page 247.
- Requires fuel line from fuel pump to carburetor.
- Fuel pump pressure is pre-set, fuel pressure regulator not required.
- Some assembly and engine tuning may be required.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12496769

Fast Burn 385 Base

The Fast Burn 385 Base crate engine is delivered with an aluminum dual-plane intake manifold, HEI distributor, cast iron water pump, dampener, and flexplate. You only need to add a carburetor, fuel pump, starter, and plug wires to fire it up. All of these parts can be purchased from your GM Performance Parts dealer.

 **NEW** GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

 GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.





NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

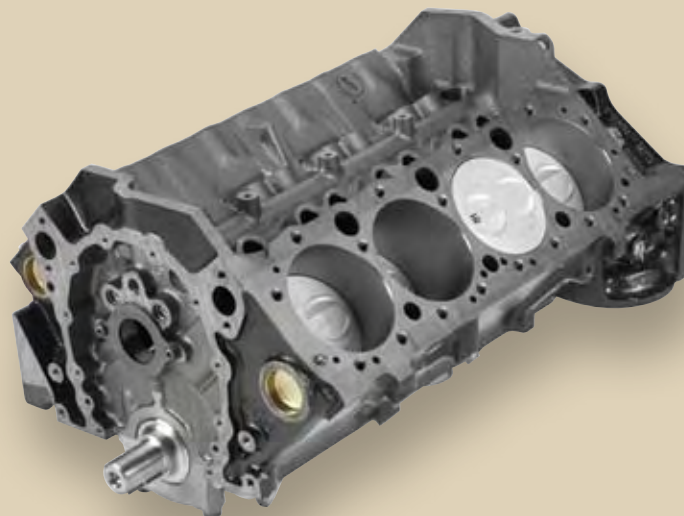
12561723

ZZ4 Partial Engine

For those wanting to build their own version of the Fast Burn 385, order this replacement partial engine for all ZZ-series engines. This partial engine includes the ZZ4's forged steel crankshaft and comes with LT1-style pistons and connecting rods. It does not include the camshaft, cylinder heads, lifters, timing set, front cover, oil pump, oil pan, balancer, or flexplate. All parts needed to complete the engine assembly are available from your GM Performance Parts dealer.

 GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

 GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

Complete Your Fast Burn 385 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



88961867

Distributor, Aluminum Billet HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



88965830

Carburetor Spacer, Single Plane, One-Inch

Fully CNC'd from billet aluminum. GM Performance Parts logo machined into front and back.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12496806

Wire Loom Kit, Small-Block

Stainless steel supports with the Bowtie insignia laser-cut in each of the six supports. Twelve retainers, bolts, and washers are supplied to bolt to the side of the head. Use with spark plug wire set P/N 12361051 and P/N 12361057.



12496822

Intake Manifold, Eliminator Vortec Design

This manifold is designed to deliver the most power and torque with Vortec cylinder heads. P/N 89017465 and eight special manifold bolts P/N 12550027.



ALSO AVAILABLE

Spark Plug Wires, Red GM Performance 135° Boot	12361056
Spark Plug Wires, Red GM Performance 90° Boot	12361057
350 Hot Cam Kit	12480002
Fuel Pump	6415325
Standard Starter (Offset Bolt Holes)	10496873
Standard Starter (Straight Bolt Holes)	10496871
Motor Mount—2 req. (Truck)	15731260
Chrome Air Cleaner	12342071
Oil Filter Adapter	3952301
Motor Mount—2 req. (Car)	22188497
Bolt (Motor Mount—2 req.)	460308

Transmission Mount (700R4)	22188145
Transmission Mount (TH400)	17990778
Transmission Mount (4L60 & 4L80)	15767858
Fan Clutch (Serpentine Belt)	15671898
Fan Clutch (V-belt)	88961767
Fan 19.5" (Serpentine Belt)	15563127
Fan 19.5" (V-belt)	15644302
Fan Studs—4 req. (Serpentine Belt)	12338107
Fan Studs—4 req. (V-belt)	382919
Fan Stud Nuts (4 req.)	12338130
Fan Bolts (4 req.)	9440224



12499101

HT383

WHAT'S HOT?

■ **Bullet-proof design**

■ **435 lb.-ft. of torque**

■ **Heavy duty rods**

A big-inch small-block tuned for torque!

There comes a time when you may not just want more power, you may need more power. Times like when you are towing your show car or bass boat with that 1970s-and-earlier GM truck, and it just doesn't have the low-end grunt that you need to flatten hills or make a safe pass. For those times, our engineers designed the HT (High Torque) 383 with lots of cubic inches and other components to enhance the low-rpm power that you need.

The GM Performance Parts HT383 has been specifically engineered for low-rpm torque, and it's packed with durable parts that are all brand new. It produces 435 lb.-ft. of torque at 4000 rpm, but more importantly, it produces more than 400 lb.-ft. of weight-moving torque from 2500 rpm all the way up to its 4000 rpm peak. In other words, your trailer's worth of weekend fun is barely noticeable when hooked to a vehicle equipped with the HT383.

The bottom end has a forged steel 383 stroker crankshaft, heavy-duty rods, and hypereutectic pistons. The block is cast iron with 4-bolt main caps, and it's up to the task of making lots of power for years to come.

A brand new HT383 makes a great alternative to salvage and rebuilt engines. Once installed, the HT383 makes it possible to look forward to that big hill or long haul. Don't just drive to your favorite fishing hole—be the first one there!



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

HT383 TECH SPECS:

Part Number:	12499101	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	383	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.00 x 3.80	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 88962516):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12489436):	4340 forged steel	Water Pump (P/N 88894341):	Cast iron
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Recommended Fuel:	87 octane
Pistons (P/N 12499103):	Hypereutectic aluminum	Ignition Timing:	Base 10° BTDC, 32° Total
Camshaft Type (P/N 14097395):	Hydraulic roller	Maximum Recommended rpm:	5000
Camshaft Lift (in):	.431 intake / .451 exhaust	Balanced:	External
Camshaft Duration (@.050 in):	196° intake / 206° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. We recommend HEI distributor P/N 93440806.

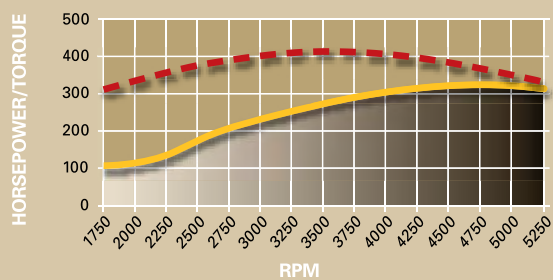


POSSIBLE APPLICATIONS*

- Your hot rod truck
- Your hot rod station wagon
- Your heavy project car
- Anything that requires big-block torque in a small-block package

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

HT383 DYNO CHART



Horsepower: 340 @ 4500 rpm

Torque (lb-ft): 435 @ 4000 rpm

INSTALLATION NOTES

- Requires addition of carburetor, ignition and starter (not included).
- Rochester Quadrajet or Holley 770-cfm carburetor recommended.
- Comes with 12.75" automatic transmission flexplate. Requires externally balanced flywheel for manual transmission. See chart on page 247.
- Has right-side oil dipstick.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12499106

383 Partial Engine

For those who want to build their own custom stroker small-block engine, this partial engine comes with the specially modified block, 3.80" 4340 forged steel stroker crankshaft, heavy-duty connecting rods, hyper-eutectic pistons, bearings, oil pan, oil pump, front cover, balancer, and 12.75" flexplate. This partial engine does not include a camshaft, lifters, timing chain, or cam sprocket. The oil pan is assembled loosely on the block so it can be disassembled without destroying the pan gasket. All parts needed to complete the engine are available from your GM Performance Parts dealer.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

Create Your Own HT383 Turn-Key

Now, you can benefit from years of GM Performance Parts testing and validation with our exclusive upgrade package so you can create your own Turn-Key HT383 crate engine. The following parts are needed to transform your base HT383 crate engine into a complete HT383 engine—ready to install in your project car and crank up.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



P/N	DESCRIPTION	QTY
12499101	HT383 Engine	1
141-107	Valve Covers	1
93440806	Distributor	1
11515758	Distributor Bolt	1
10096197	Distributor Hold Down	1
12497698	Accessory Drive Kit	1
6415325	Fuel Pump	1
88891769	Fuel Pump Bolts	2
12560223	Fuel Pump Gasket	1
3704817	Fuel Pump Pushrod	1
3719599	Fuel Pump Adapter	1
9440033	Bolt, Wiring Harness	2
12342080	Air Cleaner Kit	1
6487779	Valve, Crankcase Vent	1
88964766	Hose, PCV	1
19170093	Carburetor, 770-cfm Holley	1
19131218	Breather, Crankcase	1

P/N	DESCRIPTION	QTY
10465143	Starter	1
14097279	Starter Bolt	1
14097278	Starter Bolt	1
1485552	Heater Hose	1
6272959	Connector, Bypass Hose	2
1470030	Clamp, Worm Type	2
12361057	Spark Plug Wire Kit	1
12496806	Spark Plug Wire Retainer	1
14090911	Plug, Water Outlet	1
25522466	Plug	1
10198918	Engine Lift Bracket	2
12551144	Dipstick	1
12551154	Dipstick Tube	1
10202456	Thermostat	1
10108470	Thermostat Housing	1
10198997	Thermostat Bolts	2
10105135	Thermostat Gasket	1



Complete Your HT383 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



88961867

Distributor, Aluminum Billet HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



12361146

High-Torque Mini-Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12496822

Intake Manifold, Eliminator Vortec Design

This manifold is designed to deliver the most power and torque with Vortec cylinder heads. P/N 89017465 and eight special manifold bolts P/N 12550027.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12361056

Spark Plug Wires

8mm red double-wall silicone plug wires with 135° spark plug boots.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C	12497697	Fan Clutch (Serpentine Belt)	15671898
Chrome Air Cleaner	12342080	Fan Clutch (V-belt)	88961767
Standard Starter (Offset Bolt Holes)	10496873	Fan 19.5" (Serpentine Belt)	15563127
Standard Starter (Straight Bolt Holes)	10496871	Fan 19.5" (V-belt)	15644302
Motor Mount—2 req. (Truck)	15731260	Fan Studs—4 req. (Serpentine Belt)	12338107
Motor Mount—2 req. (Car)	22188497	Fan Studs—4 req. (V-belt)	382919
Bolt (Motor Mount—2 req.)	460308	Fan Stud Nuts (4 req.)	12338130
Transmission Mount (700R4)	22188145	Fan Bolts (4 req.)	9440224
Transmission Mount (TH400)	17990778	Roller Rocker Arm Kit, 1.5:1 Ratio	12370838
Transmission Mount (4L60 & 4L80)	15767858		

HT383 Power Packages From GM Performance Parts

The HT383 is a trusted partner to anyone who tows a trailer, or simply loves low end muscle. With 435 ft.-lb. of torque and a generous torque band, it satisfies a wide range of needs in its "factory" configuration. The horsepower is nothing to sneeze at either, coming in at a respectable 340. And, with a little tweaking, you can watch these numbers climb through the roof!

12499101 HT383 Crate Engine

Baseline = 340 hp and 435 tq

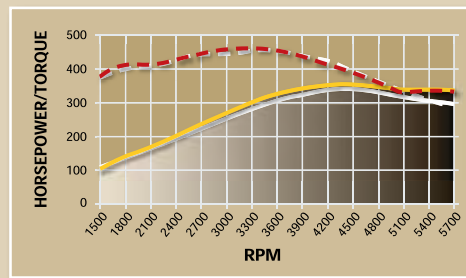
Total = 349 hp and 457 tq

POWER PACKAGE

1

- | | |
|------------------------------------|---|
| 12499101 HT383 Crate Engine | 14097395 Camshaft |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12366573 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: With a smaller-chambered Vortec head and a Vortec intake manifold, this configuration adds 22 ft.-lb. of torque and nine horses. It also retains the engine's fat torque band.



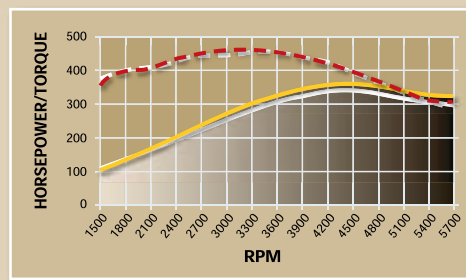
Total = 358 hp and 458 tq

POWER PACKAGE

2

- | | |
|------------------------------------|---|
| 12499101 HT383 Crate Engine | 14097395 Camshaft |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12496820 Intake Manifold | 12370839 1.6 Rocker Arms |

COMMENTS: The dual-pattern carb mount Vortec intake and Vortec heads match up nicely with the "stock" cam and rockers to deliver big gains in horsepower and torque. Again, the generous torque band is preserved.



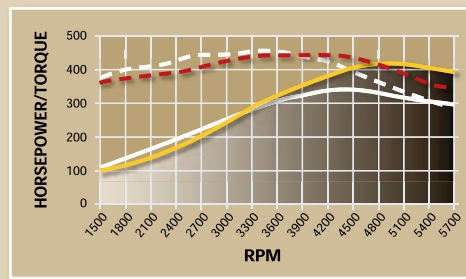
Total = 417 hp and 445 tq

POWER PACKAGE

3

- | | |
|------------------------------------|---|
| 12499101 HT383 Crate Engine | 24502586 Hot Cam |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12496822 Intake Manifold | 10089648 1.5 Rocker Arms |

COMMENTS: Swap in the Eliminator Vortec head and a hotter cam and you juice up the horsepower over 400! But, don't worry, there's no sacrifice of low end either. A great package for all around performance.



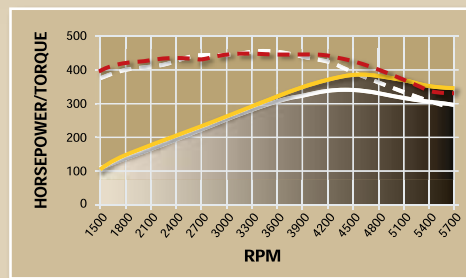
Total = 385 hp and 448 tq

POWER PACKAGE

4

- | | |
|------------------------------------|---|
| 12499101 HT383 Crate Engine | 14097395 Camshaft |
| 12464298 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12496822 Intake Manifold | 12370839 1.6 Rocker Arms |

COMMENTS: Backing off the cam numbers from Package Four produces more low rpm torque while maintaining a very peppy 385 horses. This package is great for highway towing—enough low end to get the job done and enough horses to make cruising fun.



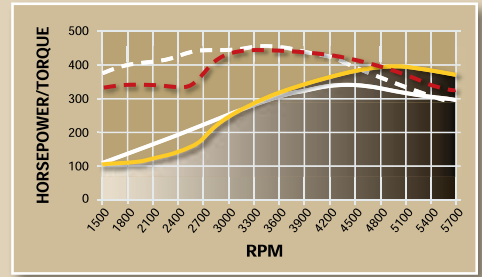
Total = 394 hp and 444 tq

POWER PACKAGE

5

- 12499101** HT383 Crate Engine **24502586** Camshaft
- 25534421** Cylinder Head **19170093** 770-cfm Holley Carburetor
- 12496820** Intake Manifold **12370839** 1.6 Rocker Arms

COMMENTS: Big time cam lift, iron Vortec heads and a Vortec intake manifold deliver an astounding mid-rpm performance. This baby will flatten out the hills on your next journey!



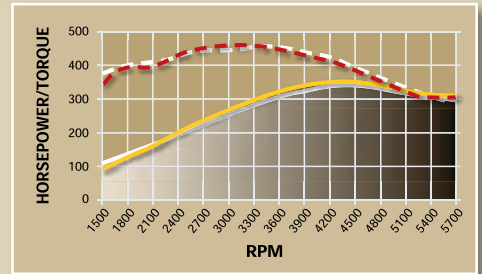
Total = 340 hp and 444 tq

POWER PACKAGE

6

- 12499101** HT383 Crate Engine **14097395** Camshaft
- 25534421** Cylinder Head **19170093** 770-cfm Holley Carburetor
- 12496820** Intake Manifold **10089648** 1.5 Rocker Arms

COMMENTS: More initial torque and a smoother application of horsepower make this package a winner. Nothing fancy, just a good, hard-working, honest engine package.



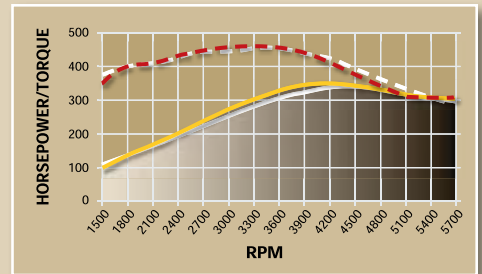
Total = 339 hp and 448 tq

POWER PACKAGE

7

- 12499101** HT383 Crate Engine **14097395** Camshaft
- 12558060** Cylinder Head **19170093** 770-cfm Holley Carburetor
- 12366573** Intake Manifold **10089648** 1.5 Rocker Arms

COMMENTS: Aluminum high-rise intake manifold and iron Vortec heads mimic the stock setup's performance, but give you a little more of that very good thing.



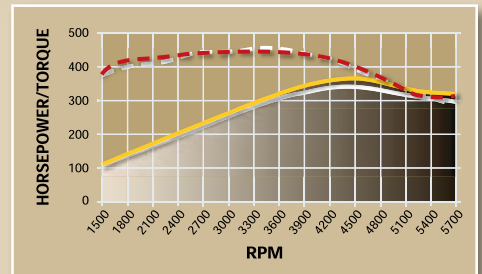
Total = 354 hp and 434 tq

POWER PACKAGE

8

- 12499101** HT383 Crate Engine **14097395** Camshaft
- 12558060** Cylinder Head **19170093** 770-cfm Holley Carburetor
- 12496822** Intake Manifold **10089648** 1.5 Rocker Arms

COMMENTS: Take Package 7 above and swap out the intake for an Eliminator style piece and watch the horses run up the scale. The slight decrease in top torque is offset by the virtually flat nature of the torque curve you get 400+ ft.-lb. from 1,800-4500 rpm!



DYNO KEY: Baseline HP ——— Baseline TQ - - - - Pwr. Pkg. HP ——— Pwr. Pkg. TQ - - - -



17800393

HT383E

WHAT'S HOT?

- Four-bolt mains**
- Perfect truck/SUV upgrade**
- Easy installation**

An emissions-legal small-block that brings on the torque for your '96-'99 GM truck/SUV!


The HT383E crate engine from GM Performance Parts is an exciting new extension of our "High Torque" line that is especially designed for your '96-'99 half-ton, full-sized GM pickup trucks and SUVs, with the L31 350. The HT383E is a direct replacement for your high-mileage 5.7L stock engine.

The HT383E offers you the same brute strength of our HT383: forged steel crank, 4-bolt main cast iron block, and a camshaft designed for towing and hard work. With 383 cubic inches, you also get a broad torque band that peaks at 3600 rpm with horsepower peaking at 4500 rpm.

Our GM Performance Parts engineers designed the HT383E so that installation is as easy as possible. Simply swap your new HT383E in place of your existing 5.7L engine using your stock intake manifold, wiring harness, and fuel injection system. The stock computer adapts to the new HT383E, and you suddenly have a stump-pulling, big-inch small-block at your disposal.

Go with the HT383E, and get the job done right!

 **NEW** GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

 GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

HT383E TECH SPECS:

Part Number:	17800393	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	383	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.00 x 3.80	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 88962516):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12489436):	4340 forged steel	Water Pump (P/N 88894341):	Cast iron
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Recommended Fuel:	87 octane
Pistons (P/N 12499103):	Hypereutectic aluminum	Maximum Recommended rpm:	5000
Camshaft Type (P/N 14097395):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.431 intake / .451 exhaust		
Camshaft Duration (@.050 in):	196° intake / 206° exhaust		



POSSIBLE APPLICATIONS*

- Give your '96-'99 Silverado a new lease on life
- The ideal crate engine for an SUV that sees a lot of towing
- It looks just like the stocker until you stomp it!

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

INSTALLATION NOTES

- Requires the reuse of the stock intake manifold, wiring harness, and fuel injection system.
- Due to calibration variances between half-, three-quarter- and one-ton vehicles, this engine is designed for half-ton trucks and SUVs only.
- This engine is not emissions legal in CA, CT, ME, MA, NJ, NY, RI or VT.
- Comes with 12.75" automatic transmission flexplate. Requires externally balanced flywheel for manual transmission. See chart on page 247.
- Has right-side dipstick.
- Not available as a partial.
- Proper recalibration of ECU will significantly increase torque and horsepower.



12498772

ZZ383

WHAT'S HOT?

- 4340 nitrided crank
- Large valves
- Fast Burn heads

Big-block-style power from a small-block engine!


If you're looking for a small-block Chevy that makes big-block power, we've got the engine for you! For the ultimate GM Performance Parts small-block crate engine, choose the ZZ383—a combination of Fast Burn aluminum performance heads and a 383" stroker small-block that adds up to 425 horsepower and 449 lb.-ft. of torque.

A carefully engineered balance of torque-producing bottom-end power and horsepower-inducing Fast Burn cylinder heads combine for the ZZ383/425's stellar performance statistics. The Fast Burn heads have large 2.00"/1.55" valves and specially designed chambers that draw in lots of air and fuel, burning the mixture quickly and completely. It's a combination that generates great mid- and high-rpm power, which, when combined with the 383-cubic-inch displacement, creates an awesome all-around performer.

The ZZ383 has a specially machined engine block and 3.80"-stroke crankshaft, which produce 383 cubic inches of pure performance. The reciprocating assembly is comprised of heavy-duty components including a 4340, nitrided, and induction-hardened forged crankshaft, and unique, heavy-duty powdered metal rods. It's 425 horses of bulletproof performance.

With the ZZ383/425, you get the power of a big-block with the size and weight of an aluminum-headed small-block. If you've never driven a car with a stroked small-block and the top end components to support it, now is your chance!

 **NEW** GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

 GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

ZZ383 TECH SPECS:

Part Number:	12498772	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	2.00 intake / 1.55 exhaust
Displacement (cu in):	383	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.00 x 3.80	Rocker Arms (P/N 12367345):	Aluminum roller style
Block (P/N 88962516):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12489436):	4340 forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 12497624):	Heavy-duty PM steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 12499103):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12370846):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.509 intake / .528 exhaust		
Camshaft Duration (@.050 in):	222° intake / 230° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. We recommend HEI distributor P/N 93440806.

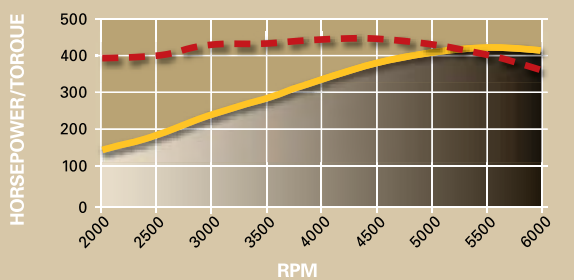


POSSIBLE APPLICATIONS*

- **The perfect small-block for your '55-'57 shoebox**
- **An 11-second starting point for your street/strip car**
- **A street car that deserves big power**
- **A weekend race car that sees a lot of action**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ383 DYNO CHART



Horsepower: 425 @ 5400 rpm

Torque (lb-ft): 449 @ 4500 rpm


INSTALLATION NOTES


- Requires addition of carburetor, ignition, intake manifold, fuel pump, water pump and starter (not included).
- 425 horsepower rating achieved during GM testing with high-rise single-plane intake manifold P/N 12496822 and a 770-cfm carburetor with vacuum secondaries.
- GMPP dual-plane intake manifold P/N 12366573 may be used to avoid hood clearance problems, but peak power may decrease by approximately 15-20 horsepower.
- Comes with 12.75" automatic transmission flexplate. Requires 1986-1999 350-style externally balanced flywheel for manual transmission. See chart on page 247.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12499106

383 Partial Engine

This partial engine comes with the specially modified block, 3.80" forged steel stroker crankshaft, heavy-duty connecting rods, hypereutectic pistons, bearings, oil pan, oil pump, front cover, balancer, and 12.75" flexplate. This partial engine does not include a camshaft, lifters, timing chain, or cam sprocket. The oil pan is assembled loosely on the block so it can be disassembled without destroying the pan gasket. All parts needed to complete the engine are available from your GM Performance Parts dealer.

 GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

 GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



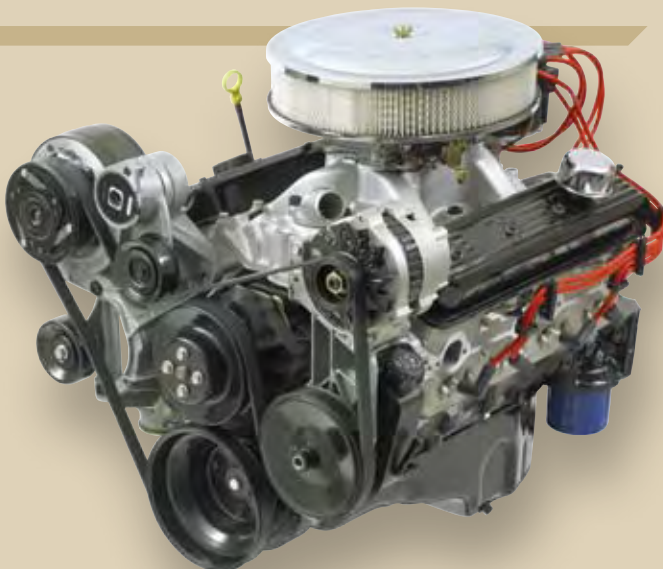
NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

Create Your Own ZZ383 Turn-Key

Now, you can benefit from years of GM Performance Parts testing and validation with our exclusive upgrade package so you can create your own Turn-Key ZZ383 crate engine. The following parts are needed to transform your base ZZ383 crate engine into a complete ZZ383 engine—ready to install in your project car and crank up.*

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.

* Some assembly required.



P/N	DESCRIPTION	QTY	P/N	DESCRIPTION	QTY
12498772	ZZ383 Engine	1	19131218	Breather, Crankcase	1
12496822	Intake	1	10465143	Starter	1
12550027	Intake Bolts	8	14097279	Starter Bolt	1
12497760	Intake Gaskets	1	14097278	Starter Bolt	1
93440806	Distributor	1	1485552	Heater Hose	1
11515758	Distributor Bolt	1	6272959	Connector, Bypass Hose	2
10096197	Distributor Hold Down	1	1470030	Clamp, Worm Type	2
12497698	Accessory Drive Kit	1	12361057	Spark Plug Wire Kit	1
6415325	Fuel Pump	1	12496806	Spark Plug Wire Retainer	1
88891769	Fuel Pump Bolts	2	14090911	Plug, Water Outlet	1
12560223	Fuel Pump Gasket	1	25522466	Plug	1
3704817	Fuel Pump Pushrod	1	10198918	Engine Lift Bracket	2
3719599	Fuel Pump Adapter	1	12551144	Dipstick	1
9440033	Bolt, Wiring Harness	2	12551154	Dipstick Tube	1
12342080	Air Cleaner Kit	1	10202456	Thermostat	1
6487779	Valve, Crankcase Vent	1	10108470	Thermostat Housing	1
88964766	Hose, PCV	1	10198997	Thermostat Bolts	2
19170093	Carburetor, 770-cfm Holley	1	10105135	Thermostat Gasket	1

Complete Your ZZ383 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12497698

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items: air conditioning compressor, alternator, water pump, power steering pump, plus all relevant pulleys, belts, brackets and fasteners.



12497978

Polished Aluminum Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



88961867

Distributor, Aluminum Billet HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

Approximately 1/4" taller than production covers. Kit includes bolts, washers and seals. NOTE: Use valve cover gasket P/N 10046089.



12496806

Wire Loom Kit, Small-Block

Stainless steel supports with the Bowtie insignia laser-cut in each of the six supports. Twelve retainers, bolts, and washers are supplied to bolt to the side of the head. Use with Spark Plug Wire Set P/N 12361051 and P/N 12361057.



12361146

High-Torque Mini-Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12366573

Intake Manifold, Vortec Design

Designed for 283-400-cubic-inch engines using Vortec cylinder heads. High-rise design maximizes horsepower and delivers a broad torque curve.



88965830

Carburetor Spacer, Single Plane, One-Inch

Fully CNC'd from billet aluminum. GM Performance Parts logo machined into front and back.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12342071

Air Cleaner

Fourteen-inch round classic-style air cleaner has chrome lid with embossed Chevrolet name. Fits most four-barrel and two-barrel carburetors.



ALSO AVAILABLE

Aluminum Water Pump, Long-Style	12495826	Transmission Mount (TH400)	17990778
Spark Plug Wires, Red GM Performance 135° Boot	12361056	Transmission Mount (4L60 & 4L80)	15767858
Valve Cover	12497879	Fan Clutch (Serpentine Belt)	15671898
Valve Cover	12407885	Fan Clutch (V-belt)	88961767
Standard Starter (Offset Bolt Holes)	10496873	Fan 19.5" (Serpentine Belt)	15563127
Standard Starter (Straight Bolt Holes)	10496871	Fan 19.5" (V-belt)	15644302
Motor Mount—2 req. (Truck)	15731260	Fan Studs—4 req. (Serpentine Belt)	12338107
Motor Mount—2 req. (Car)	22188497	Fan Studs—4 req. (V-belt)	382919
Bolt (Motor Mount—2 req.)	460308	Fan Stud Nuts (4 req.)	12338130
Transmission Mount (700R4)	22188145	Fan Bolts (4 req.)	9440224

Small-Block

LS Series



The tradition continues

While the initial small-block engine created by Ed Cole and his engineering team at Chevrolet raised eyebrows and pulses with its revolutionary design and unrivaled power numbers, the LS series of engines took more of a calculated path to the enthusiast's heart.

By the time the LS1 was introduced, the intricacies of squeezing more and more power out of less displacement were well understood. As was saving weight. But there were other possibilities to explore. The engineers working on the LS series also incorporated high-performance tricks like six-bolt main bearing caps, longer

stroke for better bottom end power, coil on plug ignition and all-aluminum construction. The result was a motor no less revolutionary than the first small-blocks turned out in 1955.

Known as the Generation III small-block (the LT series being the second generation), the LS Series powerplants shared one signifi-





cant characteristic with their earlier siblings — they were used to power the flagship Chevrolet model, the Corvette, beginning in 1997.



And, like the original small-block, the uses for this versatile family of engines continues to grow. From performance street cars to pickup trucks, the LS Series is at home in any vehicle that needs the latest in small-block technology.



Also true to form, the LS Series is causing enthusiasts to rethink the traditional boundaries. With the introduction of the LSX block in 2007, builders could produce true “big-block” numbers in terms of horsepower, torque and displacement in a small-block architecture.



19165628

LS327/327

WHAT'S HOT?

■ Performance camshaft

■ Grafal-coated pistons

■ Great fuel mileage

A souped up 5.3 that is ready and willing to deliver

Continuing the tradition of great small-block V-8 engines, the 5.3L LS engine has been one of the most popular we've ever built. It's been installed in millions of GM-built pickups, work trucks, vans, and SUVs. But, leave it to the GM Performance Parts engineers to go one step further and upgrade the 5.3L LS. The result is a High Output 5.3 that is just as capable serving as a workhorse—it's just a little bit more fun.

We started with the base engine—the tough, proven, and dependable 5.3L engine. It's the same long-lived production engine that you'll find in our award winning full-sized truck and SUV line. The stock 5.3 offers a dependable 295 horsepower and 325 lb.-ft. of torque from the 96mm bore by 92mm stroke engine design.

What makes our LS327/327 crate engine so special is that our engineers added a GM Performance Parts performance cam and Grafal-coated pistons. With these simple upgrades, the LS327/327 kicks out 327 horsepower and 347 lb.-ft. of torque. And, just like the stock 5.3, the LS327/327 is capable of thousands of miles of dependable service while returning outstanding fuel mileage, thanks to the superior design of the LS Family of engines.

Try the LS327/327 crate engine by GM Performance Parts. Your truck will thank you!



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS327/327 TECH SPECS:

Part Number:	19165628	Camshaft Duration (@.050 in):	196° intake / 201° exhaust
Engine Type:	LS Series small-block V-8	Cylinder Heads (P/N 12559865):	Aluminum; cathedral port
Displacement (cu in):	323 (5.3L)	Valve Size (in):	1.89 intake / 1.55 exhaust
Bore x Stroke (in):	3.78 x 3.62 (96 x 92mm)	Compression Ratio:	9.5:1
Block (P/N 12551360):	Cast-iron with 6-bolt, cross-bolted iron main caps	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Crankshaft (P/N 12553480):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12568734):	Powdered metal steel	Recommended Fuel:	87 octane
Pistons (P/N 12571545):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12561721):	Hydraulic roller	Reluctor Wheel:	24X
Camshaft Lift (in):	.467 intake / .479 exhaust	Balanced:	Internal

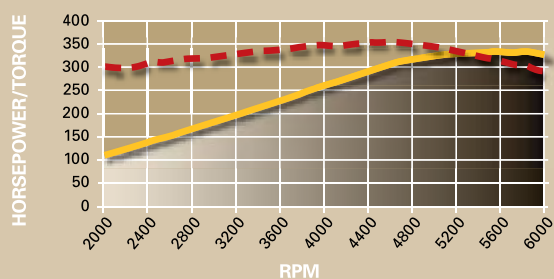


POSSIBLE APPLICATIONS*

- Give your work truck a workout
- Get your late model SUV back up and running
- Install a juiced-up 5.3 into something special

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS327/327 DYNO CHART



Horsepower: 327 @ 5500 rpm

Torque (lb-ft): 347 @ 4600 rpm

INSTALLATION NOTES

- Not for AFM applications.
- Assembly does not include any electronics.
- Includes oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



17801267

LS1 5.7L without ECU and Wire Harness

WHAT'S HOT?

- Six-bolt mains
- Fuel injected muscle
- 350 horsepower

A new small-block legend in its own time!

When GM dared to release a redesigned small-block in 1997, it succeeded beyond the expectations of enthusiasts around the world. Known as the LS Family V-8 small-block, the first and most popular version is the high-performance LS1—available here as a complete crate engine from GM Performance Parts.


In many ways, the LS1 is superior to any small-block that came before it. A deep-skirt, six-bolt-main block, with structural oil pan and other carefully engineered features, helps make the LS1 a strong, smooth running and dependable engine. A high-lift camshaft actuating big 2.00/1.55 valves in symmetrical-port cylinder heads helps make it an uncompromised performer.

The engine is rated at 350 horsepower and 365 lb.-ft. of torque. The engine includes a Holden oil pan, electronic drive-by-wire throttle body, intake manifold, exhaust manifolds, fuel rail with injectors, balancer, and 14" automatic transmission flexplate. It makes a great performance engine for your performance vehicle project—just add your wiring and electronics.

A handy reference guide (see page 374) is available to help install the engine in older cars with minimal guesswork.

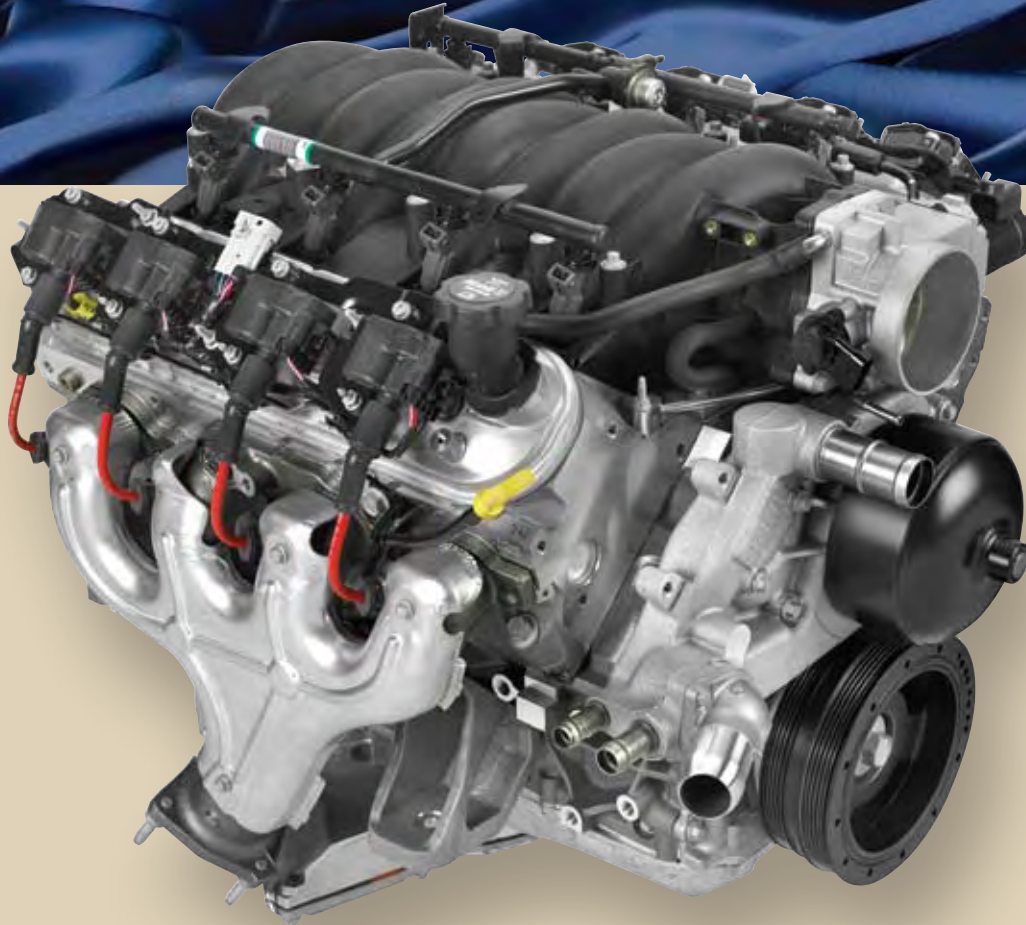
Go high-tech with your next project!

 **NEW** GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

 GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS1 5.7L TECH SPECS:

Part Number:	17801267	Camshaft Duration (@.050 in):	198° intake / 209° exhaust
Engine Type:	LS Series small-block V-8	Cylinder Heads (P/N 12559855):	Aluminum; cathedral port
Displacement (cu in):	346 (5.7L)	Valve Size (in):	2.00 intake / 1.55 exhaust
Bore x Stroke (in):	3.90 x 3.62 (99 x 92mm)	Compression Ratio:	10.25:1
Block (P/N 12561166):	Cast aluminum with 6-bolt, cross-bolted iron main caps	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Crankshaft (P/N 89017522):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12568734):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 88984245):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12560965):	Hydraulic roller	Reluctor Wheel:	24X
Camshaft Lift (in):	.500 intake / .500 exhaust	Balanced:	Internal

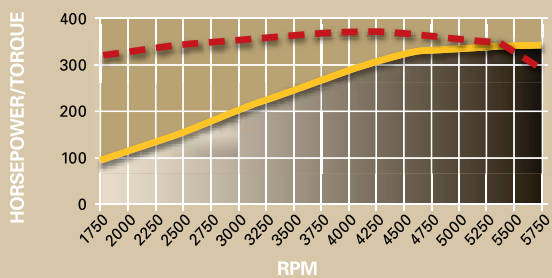


POSSIBLE APPLICATIONS*

- **The perfect replacement engine for your Gen IV Z28**
- **Add a high-tech twist to an old friend**
- **Discover the potential of a fuel-injected small-block Chevy**
- **Add it to a Jeep and get crawlin'!**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS1 5.7L DYNO CHART



Horsepower: 350 @ 5800 rpm

Torque (lb-ft): 365 @ 4000 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- Includes Holden oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



17801268

LS6 5.7L without ECU and Wire Harness

WHAT'S HOT?

- **Corvette performance**
- **High-lift cam**
- **405 horsepower**

Corvette Z06 performance straight out of the crate!

The LS1 was a milestone in efficiency, performance, and power. Then, the GM engineers outdid themselves by taking the LS1 to the next level with a bigger cam, intake, and more compression. We call this amazing 350 cubic inch small-block the LS6, and you'll see the LS6 as standard equipment in the amazing C5 Corvette Z06 and Cadillac CTS-V. Together with the sophisticated engineering from GM, these two cars utilize the LS6 small-block to dominate their class.

The 5.7L LS6 builds on the inherent strengths of the LS1 engine, but benefits from a higher-lift camshaft and higher-compression pistons to raise horsepower from 350 to 405, and torque from 340 lb.-ft. to 400 lb.-ft. Such tremendous power is produced through the use of hollow-stem valves, a more aggressive camshaft, an improved intake, and higher-rate valve springs.

GM Performance Parts delivers the LS6 as an all-inclusive assembly, complete with CTS-V aluminum oil pan, larger-volume composite intake manifold with single-bore throttle body, and high-performance log-style exhaust manifolds.

The LS6 has helped to take the C5 Z06 Corvette and the Cadillac CTS-V to new levels of performance. Let the same General Motors engineering, testing, and horsepower take you to a higher level of performance.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS6 5.7L TECH SPECS:

Part Number:	17801268	Camshaft Duration (@.050 in):	204° intake / 218° exhaust
Engine Type:	LS Series small-block V-8	Cylinder Heads (P/N 12564825):	Aluminum, cathedral port
Displacement (cu in):	346 (5.7L)	Valve Size (in):	2.00 intake / 1.55 exhaust
Bore x Stroke (in):	3.90 x 3.62 (99 x 92mm)	Compression Ratio:	10.5:1
Block (P/N 12561166):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms:	Investment cast, roller trunnion
Crankshaft (P/N 12583565):	Nodular iron	Rocker Arm Ratio (P/N 10214664):	1.7:1
Connecting Rods (P/N 12577583):	Powered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 88984245):	Hypereutectic aluminum	Maximum Recommended rpm:	6500
Camshaft Type (P/N 12565308):	Hydraulic roller	Reluctor Wheel:	24X
Camshaft Lift (in):	.550 intake / .550 exhaust	Balanced:	Internal

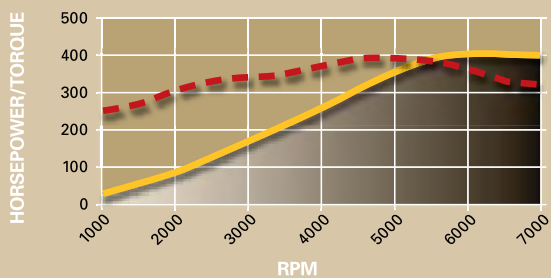


POSSIBLE APPLICATIONS*

- The perfect replacement engine for your late-model Camaro or Firebird
- Add a small-block LS6 to your vintage Chevelle
- Add one of the most sophisticated 350" engines to your project car

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS6 5.7L DYNO CHART



Horsepower: 405 @ 6000 rpm

Torque (lb-ft): 395 @ 4800 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- Includes CTS-V oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



19165484

WHILE SUPPLIES LAST

LS2 6.0L without ECU and Wire Harness

WHAT'S HOT?

■ Deep-skirt six-bolt mains

■ Electronic throttle control

■ 400 horsepower

A bigger, more powerful next-generation small-block from the new Corvette!

With the all-new, 400 horsepower LS2, GM has once again raised the bar for production-based small-block V-8 performance. As the standard engine in the 2005-'07 Corvette—as well as the '05-'06 Chevy SSR, '06-'08 Trailblazer SS, and '05-'06 Pontiac GTO—the 6.0L LS2 builds on the success of the popular LS1 V-8 engine with more displacement, power and technical innovation.

The LS2 is built on a new cylinder block, which shares much of its design with the previous LS1 V-8, including a deep-skirt, six-bolt-main block with structural oil pan. Subtle differences include the crankcase vent moved to the top of the valley, relocated knock sensors and the cam sensor moved to the front of the engine. The LS2's cylinder heads are high-flow pieces used previously on Corvette LS6 engines. High-tech features, such as an electronically controlled throttle, make the LS2 a state-of-the-art performer.

The LS2 crate engine comes complete with a composite intake manifold, electronically controlled 90mm throttle body, fuel rail with injectors, balancer, exhaust manifolds, water pump and a 14" flexplate for automatic transmissions, and a Corvette oil pan. The LS2 can be adapted to older cars and street rods. A handy reference guide (see page 374) is available to facilitate that installation with minimal guesswork.

And don't forget your ECU and Wiring Harness Kit! See page 357 for more information.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS2 6.0L TECH SPECS:

Part Number:	19165484	Camshaft Duration (@.050 in):	200° intake / 203° exhaust
Engine Type:	LS Series small-block V-8	Cylinder Heads (P/N 12564825):	Aluminum; cathedral port
Displacement (cu in):	364 (6.0L)	Valve Size (in):	2.00 intake / 1.55 exhaust
Bore x Stroke (in):	4.00 x 3.62 (101.6 x 92mm)	Compression Ratio:	10.9:1
Block (P/N 12568950):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Crankshaft (P/N 12570249):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12577583):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 89017478):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12574519):	Hydraulic roller	Reluctor Wheel:	58X
Camshaft Lift (in):	.500 intake / .500 exhaust	Balanced:	Internal

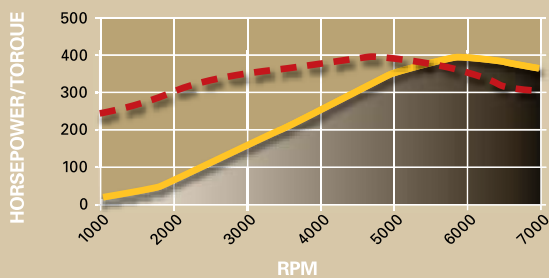


POSSIBLE APPLICATIONS*

- Put the most current small-block GM performance engine in your car
- A great replacement engine for your current late-model GM performance car
- Update your older Corvette with the new standard in Corvette engines!

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS2 6.0L DYNO CHART



Horsepower: 400 @ 6000 rpm

Torque (lb-ft): 400 @ 4400 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Starting with the 2006 model year, the LS2 now comes with a 58X reluctor wheel and new camshaft sensing, and is not compatible with pre-'06 ECUs.
- Assembly does not include any electronics.
- ECU and wiring harness kit, P/N 19166568, available for non-Corvette applications. Kit includes electronic throttle pedal which is required for throttle input to the ECU (see page 357).
- Includes Corvette wet sump oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.

LS2 Power Packages From GM Performance Parts

Deep-skirt six-bolt mains with structural oil pan and a Corvette heritage make the LS2 a popular crate engine for a multitude of applications. The cathedral-port heads and hydraulic roller cam flow air efficiently with the oversize valves, and the composite intake manifold delivers the air where it can be put to use. With initial torque and horsepower both pegging the 400 mark, this is a great starting point for serious performance

19165484 LS2 Crate Engine

Baseline = 400 hp and 400 tq

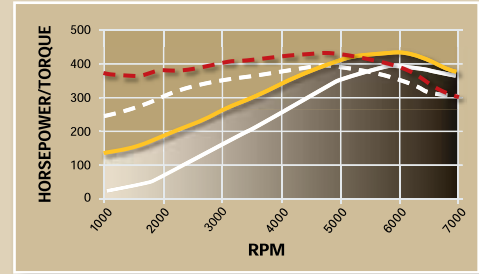
Total = 434 hp and 430 tq

POWER PACKAGE

1

- | | |
|-----------------------------------|---|
| 19165484 LS2 Crate Engine | 12595285 LS2 4-bbl Intake Manifold |
| 88958665 CNC Cylinder Head | 12574519 Camshaft |

COMMENTS: The swap out of cams gives this package more initial and top torque, while maintaining the tremendous torque-through-the-rpm-range that makes this engine so attractive. Of course, 434 ponies under the hood doesn't hurt either!



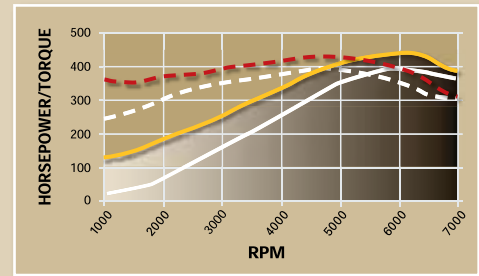
Total = 437 hp and 426 tq

POWER PACKAGE

2

- | | |
|-----------------------------------|---|
| 19165484 LS2 Crate Engine | 12595285 LS2 4-bbl Intake Manifold |
| 88958665 CNC Cylinder Head | 12565308 Camshaft |

COMMENTS: This package, which utilizes the LS6 cam, brings more low-rpm torque and flattens out the power curve to put the torque across a broader rpm spectrum.



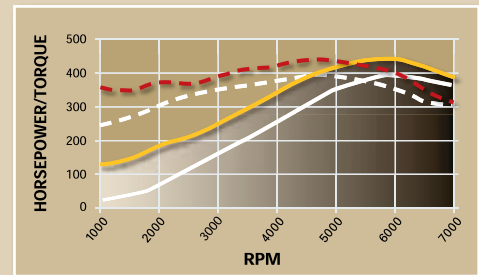
Total = 440 hp and 440 tq

POWER PACKAGE

3

- | | |
|-----------------------------------|---|
| 19165484 LS2 Crate Engine | 12590123 L92 EFI Intake Manifold |
| 12582713 L92 Cylinder Head | 12574519 Camshaft |

COMMENTS: Looking for a rock steady performer that isn't a stone? Check out this package. The beautiful symmetry of 440 horses and ft.-lb. of torque is an ideal balance of low-end grip and high-rpm cruising. You really can have it all!



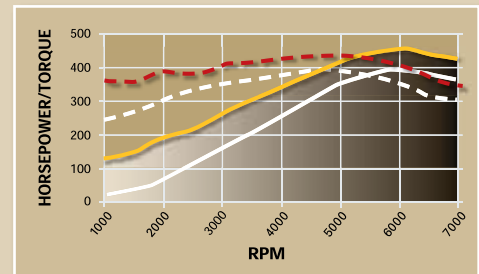
Total = 451 hp and 434 tq

POWER PACKAGE

4

- | | |
|-----------------------------------|---|
| 19165484 LS2 Crate Engine | 12595285 LS2 4-bbl Intake Manifold |
| 88958665 CNC Cylinder Head | 12480033 Camshaft |

COMMENTS: Put in our Hot Cam to beef the torque up a notch while remaining 51 horses over the "stock" setup.

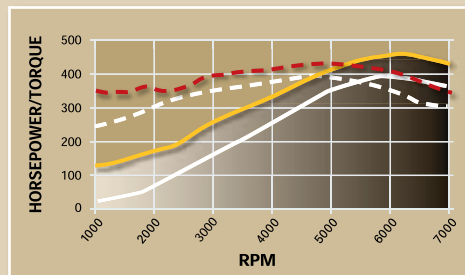


Total = 460 hp and 430 tq

POWER PACKAGE
5

- 19165484** LS2 Crate Engine **12955285** LS2 4-bbl Intake Manifold
- 12564825** Cylinder Head **12480110** Camshaft

COMMENTS: The lightweight aluminum heads and our new intake manifold match up well with the ASA cam to produce big horsepower and solid torque. A very good high-rpm package, both hp and torque top out after 5000 rpm.

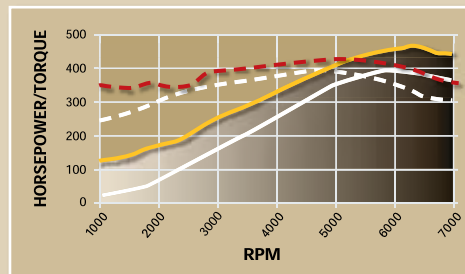


Total = 464 hp and 428 tq

POWER PACKAGE
6

- 19165484** LS2 Crate Engine **12595285** LS2 4-bbl Intake Manifold
- 88958665** CNC Cylinder Head **12480110** Camshaft

COMMENTS: Add a CNC-ported aluminum performance head and our ASA cam to make 64 additional horsepower and 28 more ft.-lb. of torque. This also gives a very noticeable increase in low-rpm torque.

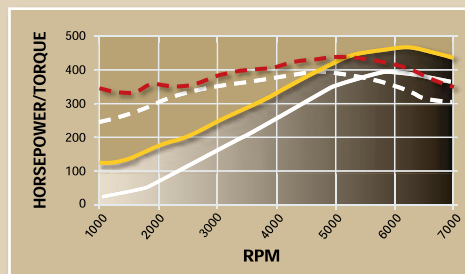


Total = 467 hp and 440 tq

POWER PACKAGE
7

- 19165484** LS2 Crate Engine **12590123** L92 EFI Intake Manifold
- 12582713** L92 Cylinder Head **12480033** Camshaft

COMMENTS: Using the Hot Cam gives you more low-rpm torque, while still delivering all-around power gains over the "stock" LS2 crate engine. Beefy low-end torque meets high-rpm horses in this package.

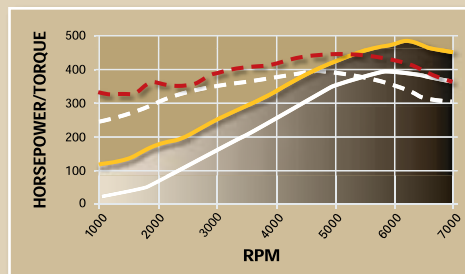


Total = 480 hp and 443 tq

POWER PACKAGE
8

- 19165484** LS2 Crate Engine **12590123** L92 EFI Intake Manifold
- 12582713** L92 Cylinder Head **12480110** Camshaft

COMMENTS: Put on our aluminum performance heads introduced last year and match them with our brand new intake manifold, and ASA cam to produce an instant winner. Outrageous horsepower and pavement-ripping torque are at your fingertips!



DYNO KEY: Baseline HP ——— Baseline TQ - - - - Pwr. Pkg. HP ——— Pwr. Pkg. TQ - - - -



19172842

LS364/440

WHAT'S HOT?

■ Six-bolt mains

■ Lightweight aluminum block

■ Carbureted performance

A high-tech small-block with a carbureted twist

The General Motors LS Family of small-block engines broke new ground with efficiency and power levels never before imagined from a small-block V-8. GM Performance Parts offers several of these engines as complete assemblies ready to bolt in to your project car as a replacement or upgrade. And now for the first time, GM Performance Parts has taken one of our LS2 engines and added to it a custom induction piece—our 4-barrel intake manifold!

Based on the LS2 engine, the LS364/440 ships with an aluminum LS block, which has a deep-skirt and six-bolt mains. Other features include lightweight flat-top pistons with a 10.9:1 compression, powdered-metal rods, and a nodular iron crankshaft. The LS6-style cylinder heads are truly high performance pieces that deliver large amounts of air to the awaiting engine. The camshaft specs out with .500/.500" lift numbers, and has been specifically designed to work with the LS Family.

The LS364/440 is easy to install with all of the major components shipping to you in one big box. Take advantage of this opportunity to enjoy the latest evolution of the small-block Chevy. Rated at 440 horsepower and 404 lb.-ft. of torque, the LS364/440 is a true blending of new technology with a proven air/fuel induction piece.

And don't forget your LSX Ignition Module! See page 291 for more information.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS364/440 TECH SPECS:

Part Number:	19172842	Camshaft Duration (@.050 in):	200° intake / 203° exhaust
Engine Type:	LS Series small-block V-8	Cylinder Heads (P/N 12564825):	Aluminum; cathedral port
Displacement (cu in):	364 (6.0L)	Valve Size (in):	2.00 intake / 1.55 exhaust
Bore x Stroke (in):	4.00 x 3.62 (101.6 x 92mm)	Compression Ratio:	10.9:1
Block (P/N 12568950):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664):	Investment cast, roller trunnion
Crankshaft (P/N 12570249):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12577583):	Powdered metal steel	Recommended Fuel:	92 octane
Pistons (P/N 89017478):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12574519):	Hydraulic roller	Reluctor Wheel (not used):	58X
Camshaft Lift (in):	.500 intake / .500 exhaust	Balanced:	Internal

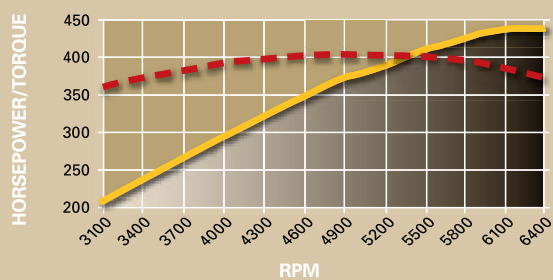


POSSIBLE APPLICATIONS*

- Add a carbureted combination to your '90s F-body
- Add a high-tech small-block to your classic '60s musclecar

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS364/440 DYNO CHART



Horsepower: 440 @ 6200 rpm

Torque (lb-ft): 404 @ 5000 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Use LSX ignition controller P/N 19171130 (page 291).
- Includes Corvette oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



19201991

L92 6.2L without ECU and Wire Harness

WHAT'S HOT?

■ All-aluminum design

■ Four-into-one exhaust

■ High-volume intake

The L92—a new standard in truck engines.

Standard equipment on the 2008 Cadillac Escalade and GMC Yukon Denali, the L92 has brought Corvette technology into the truck market. The L92 engine brings you the same 403-horse effort from a 6.2L Vortec V-8 small-block that borrows from all of the features that have made our LS Family of engines world renowned for their efficiency, design, and performance. Now, the L92 is available to you as a crate engine from GM Performance Parts.

The 6.2L L92 engine features an all-aluminum design; deep skirt 6-bolt main LS block; variable valve timing; coil-on-plug design; high-flow L92 heads designed with influences from the LS7 Corvette cylinder head; true four-into-one exhaust manifolds; high-volume intake plenum; beehive valve springs; cast-aluminum rockers on needle bearings with roller tips; and a large-volume throttle body. All together, the L92 kicks out an astonishing 403 horsepower and 417 lb.-ft. of torque with a broad, powerful torque band.

The L92 is the next great small-block truck engine from GM. Get your L92 crate engine from GM Performance Parts, and get your project car or truck moving in the fast lane.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

L92 6.2L TECH SPECS:

Part Number:	19201991	Cylinder Heads (P/N 12582713):	L76/L92 rectangle port; as cast with 70cc chambers
Engine Type:	LS Series Gen IV small-block V-8	Valve Size (in):	2.16 intake / 1.59 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.5:1
Bore x Stroke (in):	4.06 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roller trunnion
Block (P/N 12584727):	Cast aluminum with 6 bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roller trunnion
Crankshaft (P/N 12584997):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12604629):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 12584087):	Hypereutectic aluminum	Maximum Recommended rpm:	6000
Camshaft Type (P/N 12612273):	Hydraulic roller with phasing	Reluctor Wheel:	58X
Valve Lift (in):	.500 intake / .500 exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	198° intake / 209° exhaust		

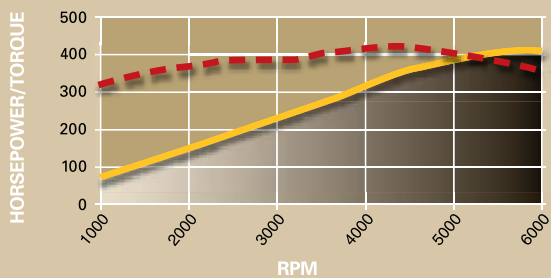


POSSIBLE APPLICATIONS*

- Put the latest technology into your classic project truck
- Drop a 6.2-liter stump-puller into your F-body
- Put your station wagon on the fast path

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

L92 6.2L DYNO CHART



Horsepower: 403 @ 5700 rpm

Torque (lb-ft): 417 @ 4300 rpm

INSTALLATION NOTES

- L92 engines utilize variable valve timing and performance will suffer if VVT is not optimized.
- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- Includes C/K truck oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.



See page 122 for a sampling of LS-Compatible components.



19201992

NEW

LS3 6.2L

WHAT'S HOT?

■ 430 horse

■ 376 cubes

■ 24-month GMPP warranty

The hottest new small-block now available in a box

Starting with the '08 Corvette, the world was first introduced to GM's latest small-block V-8 creation—the 6.2L LS3. A continuation of the industry leading V-8 engines from GM, the LS3 kicks out 430 horsepower and 424 lb.-ft. of torque. (In the Corvette, those numbers go to 436 hp and 428 lb.-ft. of torque with the optional dual mode exhaust system.)

The LS series of engines has broken new ground for efficiency and performance from a pushrod platform engine. The LS3 continues the engineering breakthroughs with revised cylinder heads featuring rectangle ports borrowed from the L92. The heads feature 63cc combustion chambers, 2.16" hollow-stem intake valves (reminiscent of the LS6), and 1.59" exhaust valves. The camshaft features an aggressive .551" of lift on the intake side with less overlap (than the LS2) for even greater airflow and power. Rocker arms with a 1.7:1 ratio sit on top of the heads. In the bottom end, the aluminum 6-bolts/main block features 4.06" bores and 3.62" stroke. A nodular iron crankshaft, powdered-metal rods, and aluminum pistons (10.7:1 compression ratio) round out a rev-happy short block. Red line for the LS3 comes at 6600 rpm, and you will get there very quickly.

With a high-tech GM foundation, aluminum block, and high flowing rectangular-port heads, the LS3 is the new standard in the small-block world. The LS3 helps power the new Corvette to a top speed of 190 mph. What will it power you to?

And don't forget your ECU and Wiring Harness Kit! See page 357 for more information.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS3 6.2L TECH SPECS:

Part Number:	19201992	Cylinder Heads (P/N 12598594):	LS3 rectangle port; as cast with 68cc chambers
Engine Type:	LS Series Gen IV small-block V-8	Valve Size (in):	2.16 intake / 1.59 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.06 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roller trunnion
Block (P/N 12584727):	Cast aluminum with 6 bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12617570):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19165089):	Hypereutectic aluminum	Maximum Recommended rpm:	6600
Camshaft Type (P/N 12603844):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.551" intake / .522" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	204° intake / 211° exhaust		



POSSIBLE APPLICATIONS*

- **Bring the latest GM small-block to an old friend**
- **Put it between the frame rails of your latest project car**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS3 6.2L DYNO CHART



Horsepower: 429 @ 5900 rpm

Torque (lb-ft): 424 @ 4600 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- ECU and wiring harness kit, P/N 19201861, available for non-Corvette applications. Kit includes electronic throttle pedal which is required for throttle input to the ECU (see page 357).
- Includes Corvette wet sump oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



19171224

NEW

LS376/480

WHAT'S HOT?

Hot cam

Big EFI power

24-month GMPP warranty

LS3 + Hot Cam = Loads of Fun

The hot new small-block V-8 in the GM lineup is the hyper-aggressive LS3. It offers a high-revving 376-cid combination that represents generations of small-block V-8 development and engineering. Not only is the LS3 an amazing engine in its stock configuration, but with those high-flowing rectangular port cylinder heads, the LS3 is loaded with potential. To tap into this, the engineers at GM Performance Parts offer you the LS376/480—an LS3 with an upgraded camshaft that ups power by a whopping 50 horsepower!

The LS376/480 comes with the same great features as the LS3 crate engine. The bottom end includes a 6-bolt aluminum block, nodular crank, high performance rods, and 10.7:1 pistons. The heads are high-flowing rectangular-port L92 units that have been upgraded with high-revving, hollow-stem valves. The same EFI intake manifold feeds the hungry engine, while 1.7:1 roller rockers work with the upgraded camshaft.

The GM Performance Parts engineers picked the LS Hot Cam (P/N 88958733) to take the LS3 to the next level. This cam specs out with .525" intake and exhaust valve lift. Duration (@ .050") is 219° intake and 228° exhaust, which allows for a dramatic increase in power. The engine will idle and cruise just like an LS3, but the power increase is there whenever you need it.

And don't forget your ECU and Wiring Harness Kit! See page 357 for more information.



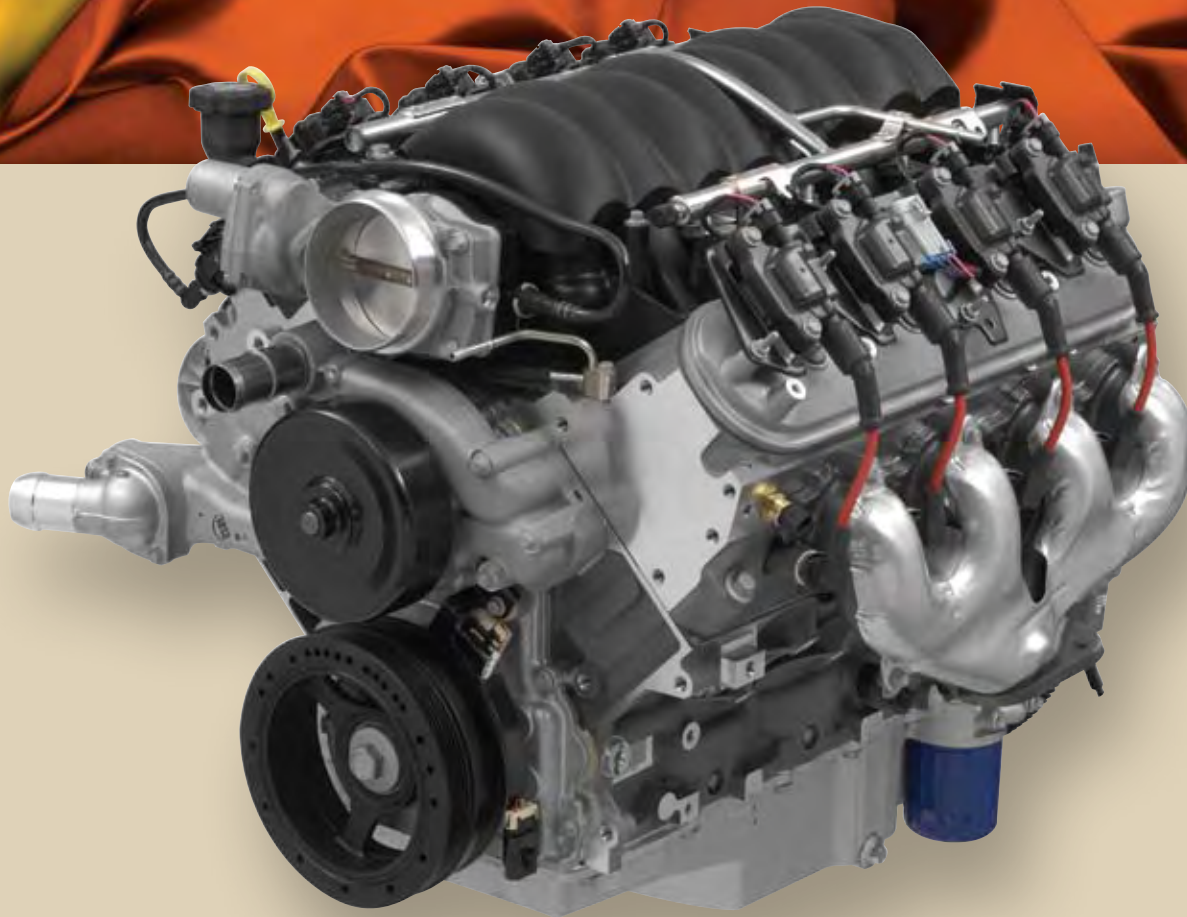
GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS376/480 TECH SPECS:

Part Number:	19171224	Cylinder Heads (P/N 12598594):	LS3 rectangle port; as cast with 68cc chambers
Engine Type:	LS Series Gen IV small-block V8	Valve Size (in):	2.16 int / 1.59 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.06 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roller trunnion
Block (P/N 12584727):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12617570):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19165089):	Hypereutectic aluminum	Maximum Recommended rpm:	6600
Camshaft Type (P/N 88958733):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	219° intake / 228° exhaust		

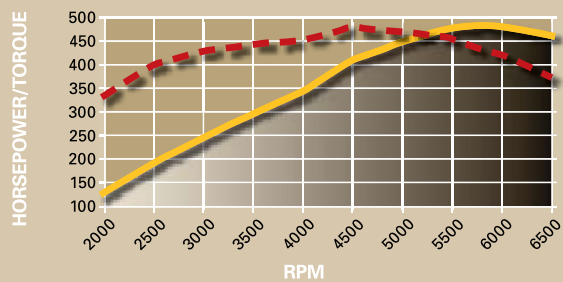


POSSIBLE APPLICATIONS*

- Give your late-model Corvette a new lease on life
- Update your fourth Gen Trans Am with an LS1 replacement

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS376/480 DYNO CHART



Horsepower: 480 @ 5750 rpm

Torque (lb-ft): 475 @ 4500 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- ECU and wiring harness kit, P/N 19201327, available for non-Corvette applications. Kit includes electronic throttle pedal which is required for throttle input to the ECU (see page 357).
- Includes Corvette wet sump oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.



19171225

NEW

LS376/515

WHAT'S HOT?

■ **Bigger Cam!**

■ **Carbed intake**

■ **24-month GMPP warranty**

The LS3 gets a big cam and carbureted intake manifold for an additional 85 horsepower!

You know that the LS3 is the hot new small-block V-8 in the GM arsenal, but you still want more. We proudly offer you the LS376/515, an upgraded LS3 that is equipped with an aggressive camshaft and GM Performance Part's exclusive carbureted intake manifold. Two simple upgrades that add up to 515 horsepower—an 85 horsepower bump over the stock LS3.

The LS3 comes fully equipped with components that only a few years ago would have been the exclusive property of race engines. The block is a rock-solid 6-bolt foundation that holds together the 4.06" bore by 3.62" stroke rotating assembly. The LS3 heads are high-flowing rectangular port aluminum castings. What separates the LS376/515 from the base LS3 is the addition of a GM Performance Parts high performance camshaft and a carbureted intake manifold.

To match the high flow rate of the LS3 cylinder heads, our GM Performance Parts engineers installed the "ASA Hot Cam" (P/N 12480110). This is a hydraulic roller camshaft that offers up .525" intake and exhaust valve lift numbers and duration @ .050" of 226° intake and 236° exhaust.

The GM Performance Part engineers coupled that aggressive camshaft and high flowing cylinder head design with our new carbureted intake manifold specific for the L92/LS3 cylinder heads (P/N 25534401). The manifold offers a dramatic increase in horsepower and a simplified installation.

And don't forget your LSX Ignition Module! See page 291 for more information.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS376/515 TECH SPECS:

Part Number:	19171225	Cylinder Heads (P/N 12598594):	LS3 rectangle port; as cast with 68cc chambers
Engine Type:	LS Series Gen IV small-block V8	Valve Size (in):	2.16 int / 1.59 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.06 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roller trunnion
Block (P/N 12584727):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12617570):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19165089):	Hypereutectic aluminum	Maximum Recommended rpm:	6600
Camshaft Type (P/N 12480110):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	226° intake / 236° exhaust		

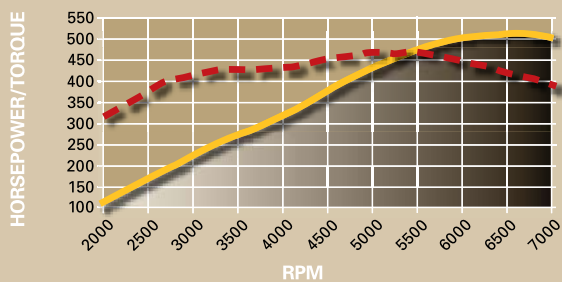


POSSIBLE APPLICATIONS*

- Put an LS engine where that old small-block used to be
- Replace the big-block with the hot new engine from GM
- Make that show car perform as good as it looks

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

LS376/515 DYNO CHART



Horsepower: 515 @ 6500 rpm

Torque (lb-ft): 469 @ 5000 rpm

INSTALLATION NOTES

- 14" automatic transmission flexplate included.
- Assembly does not include any electronics.
- Use LSX ignition controller P/N 19171130 (page 291)
- Includes Corvette wet sump oil pan.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- 770-cfm carb P/N 19170093 recommended for daily street use.

▶ See page 122 for a sampling of LS-compatible components.



17802397

LS7 7.0L without ECU and Wire Harness

WHAT'S HOT?

■ CNC-ported heads

■ Titanium guts

■ Badness in a box

Seven liters of pure trouble maker!

The king of all Corvettes is the amazing 2008 Z06. It tops out at 198 mph, runs the quarter mile in 11.5 seconds at 127 mph, and hits 60 mph in a jaw-dropping 3.5 seconds (in first gear). All of that performance is the result of superior GM engineering and an engine we call the LS7—the most technologically-advanced production GM small-block ever built. A natural continuation of the LS Family, the LS7 uses a 7.0L aluminum 6-bolt main block, CNC-ported cylinder heads, and titanium rods and valves to pump out 505 hp and 470 lb.-ft. of torque. Talk about efficient—the LS7 helps the 2008 Z06 get over 28 mpg while still being the fastest Corvette ever produced!

Is this the Chevy small-block in its highest form? Only you can decide, and GM Performance Parts has made it that much easier by offering the already legendary LS7 as a complete crate engine, ready to bolt into your favorite project car.

And don't forget your ECU and Wiring Harness Kit! See page 357 for more information.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

LS7 7.0L TECH SPECS:

Part Number:	17802397	Cylinder Heads (P/N 12578450):	CNC ported LS7 specific pattern
Engine Type:	LS Series small-block V-8		70cc CNC combustion chambers
Displacement (cu in):	427 (7.0L)	Valve size (in):	2.20" titanium intake, 1.61" sodium filled exhaust
Bore x Stroke (in):	4.125 x 4.00 (104.8 x 101.6mm)	Compression Ratio:	11.0:1
Block (P/N 17802854):	Cast aluminum with 6-bolt steel main bearing caps	Rocker Arms:	Investment cast, roller trunnion
Crankshaft (P/N 12568820):	Forged steel	Rocker Arm Ratio:	1.8:1 (offset, intake only)
Connecting Rods (P/N 12586258):	Forged titanium	Recommended Fuel:	91 octane
Pistons:	Hypereutectic aluminum	Maximum rpm:	7000
Camshaft Type (P/N 12571251):	Hydraulic roller	Reluctor Wheel:	58X
Camshaft Lift (in):	.591 intake / .591 exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	211° intake / 230° exhaust		

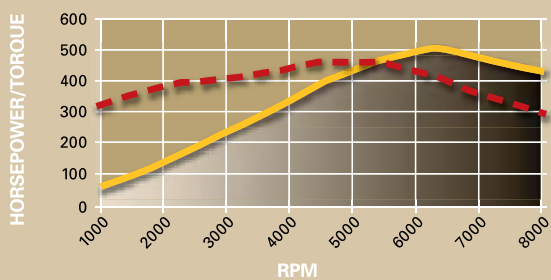


POSSIBLE APPLICATIONS*

■ Anything that you want to have the baddest, small-block Chevy on the planet!

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information.*

LS7 7.0L DYNO CHART



Horsepower: 505 @ 6300 rpm

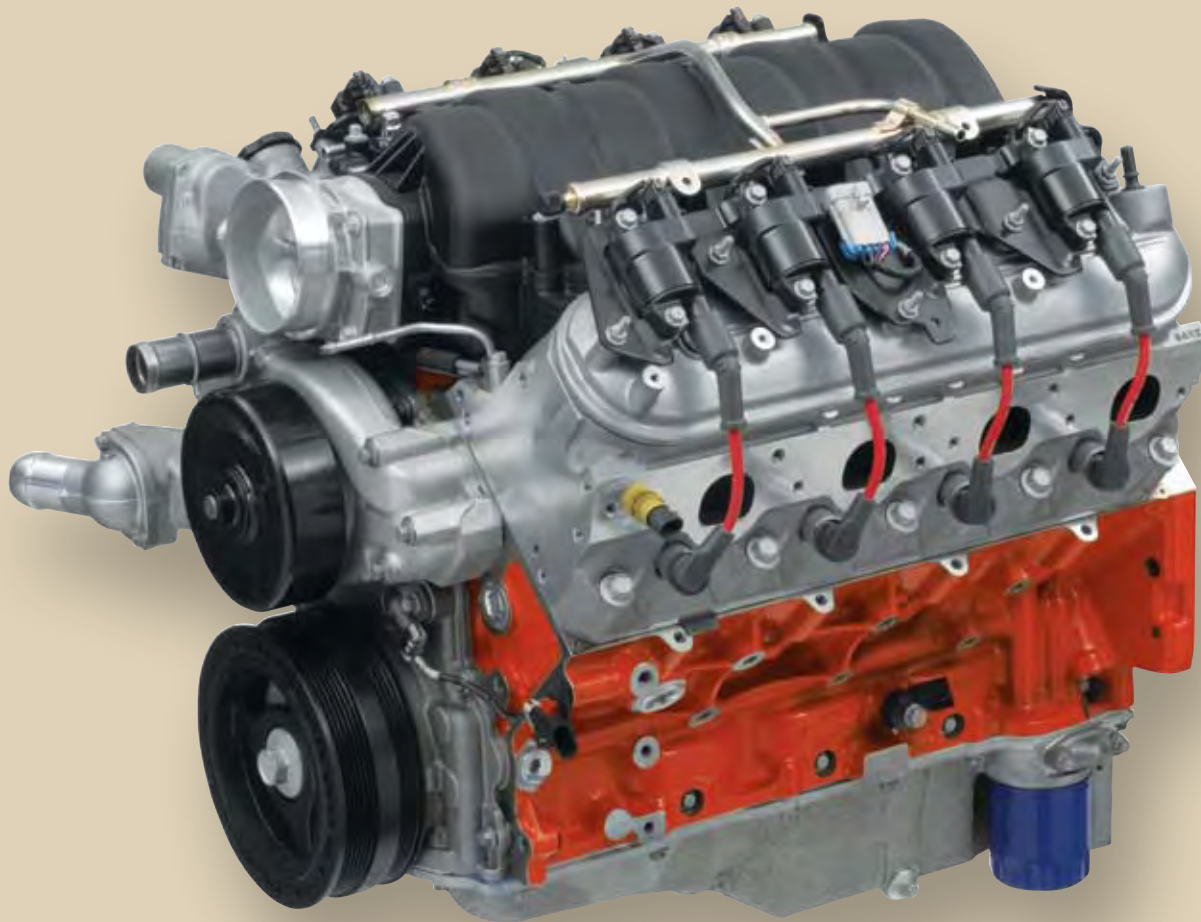
Torque (lb-ft): 470 @ 4800 rpm

INSTALLATION NOTES

- Assembly does not include any electronics.
- Comes assembled with 14" Corvette Z06 168 tooth flywheel.
- Comes with 58X reluctor wheel and camshaft sensing and is not compatible with pre-'06 ECUs.
- LS7 is the same size and mounts the same as previous LS series engines.
- ECU and wiring harness kit, P/N 19166567, available for non-Corvette applications. Kit includes electronic throttle pedal, which is required for throttle input to the ECU (see page 357).
- Use oil hose adapters P/N 25534412 to adapt to -12 AN fittings.
- Intended for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

▶ See page 122 for a sampling of LS-compatible components.

Create Your Own LSX 427



What's hotter than having a ready-to-roll LSX-based 427 to drop into your project car?

How about assembling it yourself? It's easy with GM Performance Parts.

First, have your authorized center order an LSX block. Have the block bored and honed to a finished size of 4.125" at a competent machine shop. Next, add the needed parts from the specially assembled list from GM Performance Parts. Your dealer can easily fill your order when you bring the provided parts list with you.

By building up your engine this way, you'll get the same, matched, validated parts that are used to build the LS7 —no guess work, no returned parts that don't fit ... no compromises. And now you've got a bullet-proof foundation for all of your future hot-rodding needs—a state-of-the-art fuel injected iron block with six-bolt mains, steel crank, titanium connecting rods, forged pistons, high-performance heads, hydraulic roller cam, dual-plenum intake, and all the other trimmings. Your local GM Performance Parts dealer has the parts—and the know-how to help you succeed!

No-Hassle "Turn-Key" Parts List

P/N	DESCRIPTION	QTY
19166454	LSX Cylinder Block Assembly	1
12585546	Crankshaft Position Sensor for 58X	1
11515756	Bolt, Crankshaft Position Sensor Hold Down	1
12570125	Knock Sensor with Bolts	2
CRANKSHAFT		
19171619	4" Stroke Crankshaft	1
12556582	Crankshaft Sprocket (lower timing chain gear)	1
89017469	Main Bearings, Position 1, 2, 4 & 5	4
89017470	Main Bearing, Position 3 (thrust)	1
12576652	Harmonic Balancer (GTO)	1
12600525	Harmonic Balancer Lock Washer	1
12557840	Harmonic Balancer Bolt	1
CAMSHAFT & DRIVE SYSTEM		
12571251	LS7 Camshaft	1
12499225	Hydraulic Roller Lifter Kit	1
12586482	Timing Chain	1
12586481	Camshaft Sprocket (upper timing chain gear)	1
12588670	Timing Chain Dampener	1
11589311	Timing Chain Dampener Bolts	2
11561283	Camshaft Timing Gear Bolts	1
12600325	Front Cover Assembly (with gaskets and bolts)	1
12556127	Front Cover Bolts	12
12585545	Cam Position Sensor	1
11588712	Cam Position Sensor Bolt	1
12593593	Cam Sensor Wiring Harness	1
12593344	Push Rods (LS7)	16
OIL SYSTEM		
17801830	Oil Pump (with bolts)	1
12558251	Oil Pump Pick Up Tube	1
11517517	6mm Pick Up Tube Bolt	1
12558762	Oil Pan Assembly (with gaskets and bolts)	1
12558253	Windage Tray (check for clearance)	1
11609746	Nuts, Locking Windage Tray	10
12570787	Oil Level Indicator Tube	1
12570788	Oil Level Indicator	1
89017524	Oil Filter (PF48)	1
12573107	Oil Pressure Switch	1
12570471	Valley Cover (includes bolts and gaskets)	1

P/N	DESCRIPTION	QTY
RECIPROCATING PARTS		
12586258	LS7 Connecting Rods (if using aftermarket pistons)	8
12602624	LS7 Connecting Rod and Piston Assembly (with rings)	8
89017811	Connecting Rod Bearings	8
CYLINDER HEADS		
12578449	Assembled LS7 Cylinder Heads	2
12579615	LS7 Rocker Arms, Intake	8
12579617	LS7 Rocker Arms, Exhaust	8
11588791	LS7 Rocker Arm Hold Down Bolts	16
12582224	Rocker Arm Cover, RH (includes bolts and gaskets)	1
12559505	Oil Filler Tube	1
12577268	Oil Fill Cap	1
12570427	Rocker Arm Cover, LH (includes bolts and gaskets)	1
15326388	Cylinder Head Temperature Sensor	1
12570326	Cylinder Head Dowels	4
11609289	Plug Coolant Cylinder Head	1
12582179	LS7 Head Gaskets	2
17800568	Head Bolt Kit	2
12602540	Engine Coolant Plugs	2
12602548	Engine Coolant Crossover	1
11588714	Engine Coolant Plug Bolts	4
COOLANT PUMP/COOLING PARTS		
89018053	Water Pump (GTO)	1
12551926	Water Pump Bolts	6
12581594	Thermostat Housing (includes thermostat and gasket)	1
11516480	Thermostat Housing Bolts	2
INDUCTION SYSTEM		
12568976	LS7 Production Intake Manifold Assembly (with injectors, fuel rail, throttle body and bolts)	1
IGNITION SYSTEM		
12580353	Coil Pack Assembly (mounting bracket)	2
12554211	Coil Pack Hold Down Bolts	10
12579355	Coil Pack Harness	2
12571165	Spark Plugs	8
12570616	Coil Assembly	8
12560038	Bolts, Coil Hold Down	3
15336959	Spark Plug Wires, with Heat Shield	8

Complete Your LS Series Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

88958665

LS6 CNC Ported Cylinder Head

Competition-style ports, but with 65cc chambers. It has hollow-stem valves.



19155067 NEW

LS2/LS7 Accessory Drive Kit

Includes all necessary bolts, brackets and related hardware. Includes alternator, A/C compressor pulleys, etc.



88958765

LS2 CNC Ported Cylinder Head

CNC-ported aluminum performance head. Lower cost alternative to the CNC LS6 head. Fits any 1997–2006 LS family engine.



25534398

LS Valve Cover with Breather Hole

25534399

LS Valve Cover without Breather Hole

Natural finish cast aluminum valve covers for center bolt LS Series heads. Sold individually.



12582713

L76/L92 Cylinder Head Assembly

This aluminum performance head has a higher flow than cathedral port LS heads, and fits any LS family engine with 4.00" bore or larger.



19171130 NEW

LSX Ignition Controller

Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel. Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and more! Compatible with LS1/LS6 and LS2/LS7 ignition coils.



88958679

LS Front Distributor Drive Cover

For applications requiring a 4-barrel carburetor and distributor.



19156260

Hydra-Matic 4L65-E Four-Speed Automatic Transmission

Electronically controlled four-speed overdrive transmission for LS Series V-8 engines producing up to 380 lb.-ft. of torque.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style 770-cfm has show car quality polished finish, center-hung fuel bowls, dual feed, vacuum secondaries, and automatic electric choke. Bolts and gaskets included.



10185094

Fuel Pressure Regulator

Suitable for single- or dual-carburetor applications, as well as single-carb setups with nitrous.



88965830

Carburetor Spacer, Single Plane, One-Inch

Spacer is fully CNC'd from billet aluminum, and has the GM Performance Parts logo machined into front and back.



88958675

LS2/LS6 4-bbl Intake Manifold

LS Series 4-barrel Competition Manifold. Cast aluminum 4150-style open plenum intake manifold for cathedral port needs.



88965831

Carburetor Spacer, Single Plane, Two-Inch

Spacer is fully CNC'd from billet aluminum, and has the GM Performance Parts logo machined into front and back.



88894339

LS6 Intake Manifold

Stock replacement nylon fuel injection intake manifold for cathedral port cylinder heads.



25534401

L76/L92 4-Barrel Intake Manifold
 LS series competition 4-barrel manifold. Cast aluminum 4150-style open plenum intake manifold for L92/LS3 rectangle port heads. Also available with EFI Bosses (P/N 25534416).

**12590123****L76 Production Car Intake Manifold Assembly**

Gen IV fuel injection nylon manifold used on the 2007 Australian Holden L76 car engine. Fully assembled with injectors, fuel rail, 90mm ETC throttle body and gaskets. For use only with L92/L76 cylinder heads P/N 12582713.

**12558762****F-Car Oil Pan**

Original equipment Gen IV Camaro/Firebird oil pan for LS series engines.

**12341993****Push-In Oil Filler Cap**

Round oil filler cap with Bowtie logo for valve covers with 1.22" diameter hole.

**12342080****Air Cleaner (14")**

High-performance-style 14" diameter chrome air cleaner. The top and base plates are chromed and have a great luster. Necessary mounting hardware included.

**12342071****Air Cleaner (14")**

Classic-style 14" diameter chrome air cleaner comes with Bowtie center nut.

**ALSO AVAILABLE**

High Performance Chevy LS1/LS6 V-8's Handbook	88958786
LS Series Spark Plug Wire Kit	12495519
Hot Cam Kit	12480033
Header Flange	12480130
ASA LS1 Camshaft	88958704
LS7 Non-Programmable Controller	19166567
Showroom Stock Camshaft	88958606
LS Stage-2 Camshaft	88958722
Racing Hydraulic Roller Lifter Kit	88958689
LS7 Intake Manifold Assembly	12568976
Carburetor Spacer, Single Plane, Two-Inch	88965831
LS7 4-bbl Intake Manifold	25534394
L76/L92 CNC Ported Cylinder Head	88958698
LS2 Non-Programmable Controller	19166568
Cylinder Head Bolt Kit (1997-2003 long-style)	12498545
Cylinder Head Bolt Kit (2004 short-style)	17800568
Cylinder Head Installation Kit (F-Car)	12499217
Cylinder Head Installation Kit (Corvette LS1 & LS6)	12499218
LS Series Starter	10465385
LS1/LS6 Accessory Drive Kit	19155066
C6 Corvette LS7 Oil Tank	12603281
C6 Corvette LS7 Oil Hose (tank inlet)	15210122
C6 Corvette LS7 Oil Hose (tank inlet)	15210117
Fuel Filter	854619
Electric Fuel Pump, High-Output	25115899

Big-Block



The big power, big torque answer



When you think “big-block” you immediately think “Big Power” —and torque. And, indeed, the need for increased horsepower and towing capabilities led General Motors to experiment with big displacement engines, initially for use in pickup trucks.

The original “big-block” V-8 was in reality no bigger than today’s small-blocks, but the 348 cubes were hefty for the day in 1958. Boasting an overhead and offset valve design and unique rocker covers, the engine was known as a “W” series by enthusiasts.

Once the big displacement cat (or Rat!) was out of the bag, there was no turning back. In 1961, a 409 version was released, followed by the Z11 427 — a special use piece intended for drag racers that ripped out 430 hp and 435 ft.-lb. of torque.



While the W engine earned a strong following—and a victory in the 1963 Daytona 500 qualifying race for Junior Johnson (who then also won the 400 mile feature in July)—the next iteration, the Mark IV, bore more of a resemblance to today's powerplants. With 90-degree

cylinder heads and a conventional wedge shaped combustion chamber, the Mark IV is an easily identified paternal influence—it was the first to be dubbed "Rat" by the motoring press.



The Mark IV reached its greatest heights with the legendary 427 ZL1, developed for Can-Am racing. This engine was forward looking in design and performance with an aluminum block and intake manifold giving the 600 hp monster little more weight than a small-block.

This engine also gave rise to the rapid development of post-production performance parts—establishing GM as the premier performance parts manufacturer, and giving birth to what would soon become a full-time division known as GM Performance Parts.





19166393

NEW

ZZ427/430

WHAT'S HOT?

430 horse

Pump-gas friendly

24-month GMPP warranty

The 427 rat in a box returns to GM!

There are few engines that conjure up images of greatness like the 427 Chevy big-block. New to the GM Performance Parts lineup, the ZZ427 big-block crate engine brings back all of the good things that you remember about the 427 with a few modern new upgrades. With an updated cast iron block, a 10.1:1 final compression ratio, and an aggressive hydraulic roller camshaft, the ZZ427 offers you outstanding performance while still living on low octane fuel.

The legendary 427" big-block Chevy powered some of the most storied cars in the history of the high performance automobile. This latest version holds true to that tradition, offering you a tough, 4-bolt main cast iron block with all a forged internal rotating assembly. The top half of the engine is the same as the limited edition Anniversary 427 crate engine: oval-port heads that use 2.19" intake and 1.88" exhaust valves work with 1.7:1 aluminum roller rockers and a .510" intake/.540" exhaust camshaft. The intake is a matching, high-flow oval-port aluminum piece that gets fed the air/fuel mix from a 870-cfm carburetor. An HEI distributor, aluminum water pump, spark plug wires, and a 14" flexplate round out the package. Internally balanced, the ZZ427 will spin to 6000 rpm before it's time for you to shift.

The ZZ427 is an exciting trip back to one of the high points in the history of the Chevrolet big-block. With a conservative rating of 430 horsepower and loads of torque, it's still one of the best crate engines for just about any big-block application.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

ZZ427/430 TECH SPECS:

Part Number:	19166393	Compression Ratio:	10.1:1
Engine Type:	Chevy big-block V-8	Rocker Arms (P/N 12361323):	Aluminum roller style
Displacement (cu in):	427 cu in	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.25 x 3.76	Distributor (P/N 93440806):	HEI type
Block (P/N 12561353):	Cast iron with 4-bolt main caps	Carburetor (P/N 19170094):	870-cfm
Crankshaft (P/N 19171620):	Forged steel	Water Pump (P/N 19168602):	Aluminum short-style
Connecting Rods:	Forged steel	Spark Plugs and Wires:	Included
Pistons (P/N 19171618):	Forged aluminum	Flexplate (P/N 12561217):	14 in
Camshaft Type (P/N 12366543):	Hydraulic roller	Recommended Fuel:	92 octane
Valve Lift (in):	.510 intake / .540 exhaust	Ignition Timing:	Base 8° BTDC, 36° Total
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Maximum Recommended rpm:	6000
Cylinder Heads:	Aluminum oval port, 110cc chambers	Balanced:	Internal
Valve Size (in):	2.19 intake / 1.88 exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

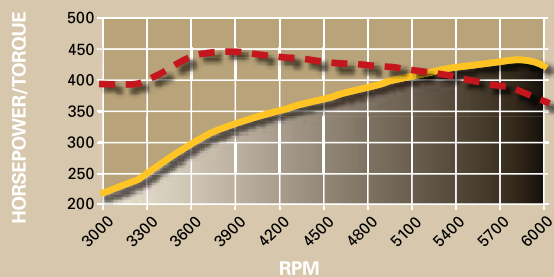


POSSIBLE APPLICATIONS*

- **A COPO clone Camaro**
- **Your favorite '61 Impala**
- **A Stingray with a big stinger**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ427/430 DYNO CHART



Horsepower: 430 @ 5800 rpm

Torque (lb-ft): 444 @ 3800 rpm

INSTALLATION NOTES

- Due to crate fitment, carburetor is shipped in a separate box and will need to be installed by engine installer.
- Requires addition of starter and fuel pump (not included).
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance.
- Comes with a 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

Complete Your ZZ427/430 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12342093

Short Chrome Bowtie Valve Cover

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12363128

Chrome High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction, chrome starter for either 153- or 168-tooth flywheels.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361146

High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12495488

Custom Aluminum Valve Covers

Die-cast aluminum valve covers are black with a brushed aluminum finish on top revealing the Chevrolet name and Bowtie insignia. Valve cover can be finished with a custom engine designation badge (see page 320).



93440806

HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



25534355

Breather

Special chrome breathers for use on the ZZ572 valve covers are 1-3/8", hose-clamp-style with the Bowtie logo on top. Use with oil baffle tube P/N 88962074. Includes two breathers.



12355614

Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965 through 1990. Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



25115899

High Output Electric Fuel Pump

Heavy-duty 12-volt electric rotary pump flows 72 gph at 6-8 psi.



12341999

Fuel Pump Block-Off Plate

Plate has stamped Bowtie logo, and a special non-asbestos gasket is included.



19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water and power steering pumps. Includes all pulleys, belts, brackets and fasteners for installation.



12341993

Push-In Oil Filler Cap

Round oil filler cap with Bowtie logo for valve covers with 1.22" diameter hole.



19168602

Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



88961867**Distributor, Aluminum Billet HEI**

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connect or P/N 12167658 attaches tach and 12-volt power supply wire.

**12606096****Lightweight Starter**

Lightweight gear reduction starter for 14", 168-tooth flywheels.

**6472657****Electric Fuel Pump**

For use on all carbureted engines. Flows 30–40 gph at 6–9 psi.

**12342071****Air Cleaner, Chevrolet-Logo Classic Design**

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.

**19170093****Carburetor, Holley 770-cfm**

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke, to produce even more bottom-end torque.

**88965829****Carburetor Spacer, Dual Plane, One-Inch**

Fully CNC'd from billet aluminum. GM Performance Parts logo machined into front and back. Accepts Quadrajets and Holley style carburetors.

**19202588 NEW Valve Covers, "427 CHEVROLET", Natural Appearance**

Clearcoated for durability with aluminum appearance. Used on the anniversary 427 crate engine, but can be used on any big-block engine.

**ALSO AVAILABLE**

Engine Oil Primer	12368084
Serpentine Accessory Drive Belt System, without A/C	19498741
4L85E Transmission	19156257
Transmission Controller	12497316
Motor Mount (2 req.)	15529452
Motor Mount Bracket (2 req.)	14067103
Motor Mount Bolt (2 req.)	460308
Transmission Mount (700R4)	22188145
Transmission Mount (TH400)	17990778
Transmission Mount (4L60 & 4L80)	15767858
Fan Clutch (V-belt)	19150657
Fan Blade—5 Blade (Serpentine)	15563127
Fan Blade—5 Blade (V-belt)	15989194
Fan Studs—(Serpentine—4 req.)	382919
Spark Plug Wire Set & Loom Kit	12495079



19166392

NEW

Anniversary Edition 427

WHAT'S HOT?

ZL1 Heritage

Limited production

24-month GMPP warranty

The legend of the all-aluminum big-block continues.

The year was 1969, and the musclecar wars were in full swing. Each one of the big three had developed their own version of the ultimate high performance big-block engine. Then, GM unleashed the ZL1, the most powerful engine ever released by General Motors. Based on an exotic aluminum block, the ZL1 offered only the best components from the L88 engine including a high compression piston, high flow aluminum heads and intake, and a bombproof bottom end. To celebrate the 50th anniversary of the Chevrolet big-block, GM Performance Parts has brought back a modern version of the ZL1 for your chance to relive musclecar history.

The Anniversary Edition 427 starts with the ZL1 aluminum block using the tooling that helped create this legend in 1969. The block offers a full-strength structure, thick deck surfaces and 4-bolt mains. Building on that foundation, the short block contains a forged steel crank, forged steel rods, and forged aluminum pistons for a 10.1:1 final compression ratio. Aluminum oval-port heads and matching high-flow aluminum oval-port intake are paired with an 870-cfm carburetor. The camshaft is a hydraulic roller with valve lift numbers of .510" on the intake and .540" on the exhaust. We even added 1.7:1 aluminum roller rockers. Like the original ZL1, the Anniversary 427 comes grossly underrated at 430 horsepower.

Once you purchase an Anniversary 427 big-block crate engine, you enter a very exclusive club because only 427 of these engines will ever be produced. A special owner's kit includes official Anniversary 427 emblems to place on your car, as well as an engine data plaque and certificate of authenticity that share a matching serial number with the valve covers.

Only 427 of these crate engines will ever be produced, and then the ZL1 tooling will be retired forever.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

ANNIVERSARY EDITION 427 TECH SPECS:

Part Number:	19166392
Engine Type:	Aluminum Chevy big-block V-8
Displacement (cu in):	427 cu in
Bore x Stroke (in):	4.25 x 3.76
Block (P/N 88958696):	Cast aluminum with 4-bolt main caps
Crankshaft (P/N 19171620):	Forged steel
Connecting Rods:	Forged steel
Pistons (P/N 19171618):	Forged aluminum
Camshaft Type (P/N 12366543):	Hydraulic roller
Valve Lift (in):	.510 intake / .540 exhaust
Camshaft Duration (@.050 in):	211° intake / 230° exhaust
Cylinder Heads:	Aluminum oval port, 110cc chambers
Valve Size(in):	2.19 intake / 1.88 exhaust

Compression Ratio:	10.1:1
Rocker Arms (P/N 12361323):	Aluminum roller style
Rocker Arm Ratio:	1.7:1
Distributor (P/N 93440806):	HEI type
Carburetor (P/N 19170094):	870-cfm
Water Pump (P/N 19168602):	Aluminum short-style
Spark Plugs and Wires:	Included
Flexplate (P/N 12561217):	14"
Recommended Fuel:	92 octane
Ignition Timing:	Base 8° BTDC, 36° Total
Maximum Recommended rpm:	6000
Balanced:	Internal

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

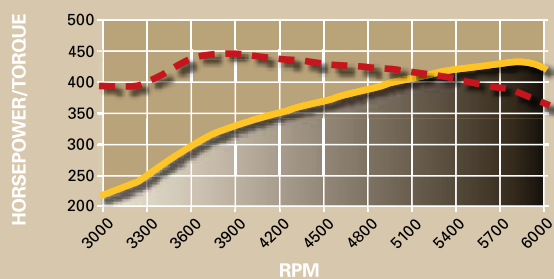


POSSIBLE APPLICATIONS*

- The perfect ZL1 Camaro clone
- A '69 Corvette like only two others
- Make your hot rod one of only 427 with this crate engine
- Put it on an engine stand and just enjoy!

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ANNIVERSARY 427 DYNO CHART



Horsepower: 430 @ 5800 rpm

Torque (lb-ft): 444 @ 3800 rpm

INSTALLATION NOTES

- Due to crate fitment, carburetor is shipped in a separate box and will need to be installed by engine installer.
- Requires addition of starter and fuel pump (not included).
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance.
- Comes with a 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

Complete Your Anniversary Edition 427 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12342093

Short Chrome Bowtie Valve Cover

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12363128

Chrome High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction, chrome starter for either 153- or 168-tooth flywheels.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361146

High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



12495488

Custom Aluminum Valve Covers

Die-cast aluminum valve covers are black with a brushed aluminum finish on top revealing the Chevrolet name and Bowtie insignia. Valve cover can be finished with a custom engine designation badge (see page 320).



93440806

HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



25534355

Breather

Special chrome breathers for use on the ZZ572 valve covers are 1-3/8", hose-clamp-style with the Bowtie logo on top. Use with oil baffle tube P/N 88962074. Includes two breathers.



12355614

Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965 through 1990. Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



25115899

High Output Electric Fuel Pump

Heavy-duty 12-volt electric rotary pump flows 72 gph at 6-8 psi.



12341999

Fuel Pump Block-Off Plate

Plate has stamped Bowtie logo, and a special non-asbestos gasket is included.



19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water and power steering pumps. Includes all pulleys, belts, brackets and fasteners for installation.



12341993

Push-In Oil Filler Cap

Round oil filler cap with Bowtie logo for valve covers with 1.22" diameter hole.



19168602

Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



88961867

Distributor, Aluminum Billet HEI
CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connect or P/N 12167658 attaches tach and 12-volt power supply wire.

**12606096**

Lightweight Starter
Lightweight gear reduction starter for 14", 168-tooth flywheels.

**6472657**

Electric Fuel Pump
For use on all carbureted engines. Flows 30–40 gph at 6–9 psi.

**12342071**

Air Cleaner, Chevrolet-Logo Classic Design
Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.

**19170093**

Carburetor, Holley 770-cfm
Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke, to produce even more bottom-end torque.

**88965829**

Carburetor Spacer, Dual Plane, One-Inch
Fully CNC'd from billet aluminum. GM Performance Parts logo machined into front and back. Accepts Quadrajets and Holley style carburetors.



19202589 **NEW**
Valve Covers, "427 CHEVROLET", Black Powder Coat

Used on the ZZ427/425 crate engine. Can be used on any big-block engine

**ALSO AVAILABLE**

Engine Oil Primer	12368084
Serpentine Accessory Drive Belt System, without A/C	19498741
4L85E Transmission	19156257
Transmission Controller	12497316
Motor Mount (2 req.)	15529452
Motor Mount Bracket (2 req.)	14067103
Motor Mount Bolt (2 req.)	460308
Transmission Mount (700R4)	22188145
Transmission Mount (TH400)	17990778
Transmission Mount (4L60 & 4L80)	15767858
Fan Clutch (V-belt)	19150657
Fan Blade—5 Blade (Serpentine)	15563127
Fan Blade—5 Blade (V-belt)	15989194
Fan Studs—(Serpentine—4 req.)	382919
Spark Plug Wire Set & Loom Kit	12495079

ANNIVERSARY EDITION 427 KIT

Each of the 427 special-edition Anniversary 427 crate engines produced will come with a presentation-quality special documentation kit. The kit will have engine details and serial number information, and will enhance the ownership experience. Visit gmperformanceparts.com for details!



12568774

454 HO

WHAT'S HOT?

■ Gen VI four-bolt block

■ Hydraulic roller cam

■ Pump-gas friendly

Musclecar power at a low-buck price!

Now, this is the stuff that legends are made of. Big-block, street-sweeping power just like the '60s GM musclecars that you grew up with or have worshipped for years. Now, GM Performance Parts has a 454 cubic inch crate engine that is big on power and low on dollar. Let's take a look ...

We started with a brand new (not remanufactured or sourced from a scrap yard) Gen VI four-bolt big-block. The 454 HO is stuffed with a forged steel crank, forged connecting rods, and forged pistons. A hydraulic roller camshaft with .510/.540" lift generates a nasty idle. Cast iron cylinder heads deliver a pump-gas friendly 8.75:1 compression ratio. Horsepower comes in at 425 with 500 lb.-ft. of big-block torque.

The 454 HO is delivered to you complete with water pump, balancer, intake manifold, and 14" automatic transmission flexplate. Add your carburetor, ignition, and starter to complete the engine. Check out the GM Performance Parts line of valve covers and chrome accessories to give the engine a more eye appealing, under hood look.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

454 HO TECH SPECS:

Part Number:	12568774	Cylinder Heads (P/N 12562920):	Iron rectangular port; 118cc chambers
Engine Type:	Chevy big-block V-8	Valve Size (in):	2.19 intake / 1.88 exhaust
Displacement (cu in):	454	Compression Ratio:	8.75:1
Bore x Stroke (in):	4.25 x 4.00	Rocker Arms (P/N 12523976):	Stamped steel
Block (P/N 12561353):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 14096983):	Forged steel	Water Pump (P/N 19168606):	Cast iron, long-style
Connecting Rods (P/N 19170198):	Forged steel	Flexplate (P/N 10185034):	14"
Pistons (P/N 10215228):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. GMPP HEI distributor P/N 93440806 is recommended.

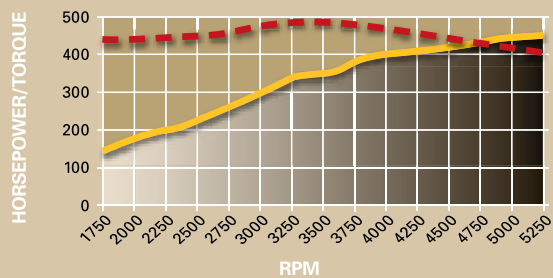


POSSIBLE APPLICATIONS*

- Turn that project car into a big-block legend
- The perfect replacement for a big-block car that needs a new mill
- Your first big-block
- A bright red 1970 Chevelle

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

454 HO DYNO CHART



Horsepower: 425 @ 5250 rpm

Torque (lb-ft): 500 @ 3250 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, fuel pump, distributor and ignition system (not included).
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads for clearance.
- Comes with a 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12498778

454 Partial Engine



For those who want the sturdy foundation of the 454 HO as the starting point of a custom engine, this brand-new partial engine includes the forged crank, rods and pistons, as well as the balancer, oil pan and front cover. This partial engine does not include a camshaft, lifters, timing chain or cam sprocket. All parts necessary to complete the engine are available from your GMPP dealer. Use externally balanced flywheel for manual transmission applications.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Also available for your 454 HO crate engine

Serpentine Accessory Drive Belt System, without A/C	19172806	Transmission Mount (TH400)	17990778
Spark Plug Wires and Loom Kit	12495078	Transmission Mount (4L60 & 4L80)	15767858
4L85-E Transmission	19156257	Fan Clutch (V-belt)	19150657
Transmission Controller	12497316	Fan Blade—5 Blade (serpentine)	15563127
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (V-belt)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Studs—(serpentine—4 req.)	382919
Motor Mount Bolt (2 req.)	460308	Fan Clutch—(serpentine)	15671898
Transmission Mount (700R4)	22188145		

Complete Your 454 HO Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805 Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water and power steering pumps. Includes all pulleys, belts, brackets and fasteners for installation.



12606096 Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



19170093 Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



25534374 Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12342071 Air Cleaner, Chevrolet-logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



12371244 Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361323 Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



25534323 Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



93440806 HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



12368084 Engine Oil Primer

Use to lube engine bearings prior to starting your new crate engine.



19168602 Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



12355614 Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965 through 1990. Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.





12498777

ZZ454/440

WHAT'S HOT?

■ Lightweight aluminum heads

■ Huge, air-flowing valves

■ High-lift roller cam

An aluminum-headed 440-horse monster in a box!

If you're going to put a big-block in your project car, why not add some aluminum heads into the mix? GM Performance Parts took the venerable 454 HO, swapped the cast iron production heads for a set of our oval-port aluminum castings, and created the ZZ454. Not only do the aluminum cylinder heads flow more air, but you also drop almost 100 pounds off the nose of your car—dramatically improving performance.

The aluminum heads of the ZZ454/440 account for 15 horse improvement over the iron-headed 454 HO. These oval-port aluminum heads use huge 2.25" intake and 1.88" exhaust valves as well as small combustion chambers to add to the efficiency of the 454" big-block. The bottom end includes a Gen VI four-bolt block, a forged steel crank, forged connecting rods, and forged pistons. A roller camshaft with a .510/.540" lift specs delivers a big-block loping idle as well as add to the high performance punch of the entire crate engine.

The ZZ454/440 is delivered as a complete assembly including water pump, balancer, intake manifold, and 14" automatic transmission flexplate. All you need to do is add your carburetor, ignition, and starter to complete the project. Of course, all of these parts are available through your GM Performance Parts dealer.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

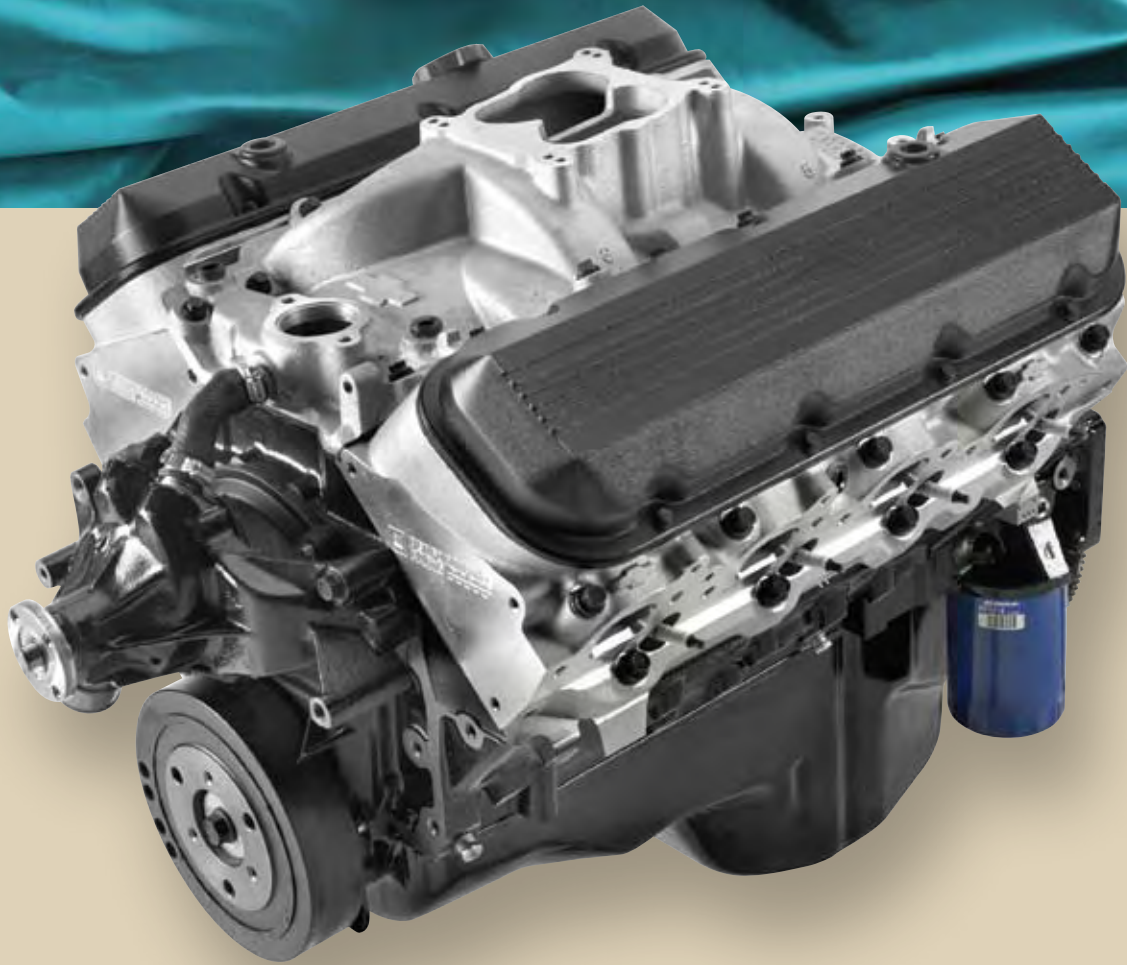


GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

ZZ454/440 TECH SPECS:

Part Number:	12498777	Cylinder Heads (P/N 12363392):	Aluminum oval port; 110cc chambers
Engine Type:	Chevy big-block V-8	Valve Size (in):	2.19 intake / 1.88 exhaust
Displacement (cu in):	454	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.25 x 4.00	Rocker Arms (P/N 12368082):	Stamped steel
Block (P/N 12561353):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 14096983):	Forged steel	Water Pump (P/N 19168606):	Cast iron, long-style
Connecting Rods (P/N 19170198):	Forged steel	Flexplate (P/N 10185034):	14"
Pistons (P/N 10215228):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with engines with steel camshafts, or engine damage will occur. GMPP HEI distributor P/N 93440806 is recommended.

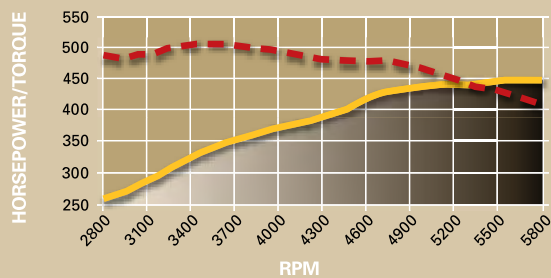


POSSIBLE APPLICATIONS*

- A hot rod that deserves a big-block with aluminum heads
- The starting point for a new race car
- A bright red 1969 Camaro

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ454/440 DYNO CHART



Horsepower: 440 @ 5250 rpm

Torque (lb-ft): 500 @ 3250 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, distributor and ignition system (not included).
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Comes with a 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12498778

454 Partial Engine



For those who want the sturdy foundation of the ZZ454 as the starting point of a custom engine, this brand-new partial engine includes the forged crank, rods and pistons, as well as the balancer, oil pan and front cover. This partial engine does not include a camshaft, lifters, timing chain or cam sprocket. All parts necessary to complete the engine are available from your GMPP dealer. Use externally balanced flywheel for manual transmission applications.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Also available for your ZZ454/440 crate engine

Serpentine Accessory Drive Belt System, without A/C	19172806	Transmission Mount (TH400)	17990778
Spark Plug Wires and Loom Kit	12495078	Transmission Mount (4L60 & 4L80)	15767858
4L85E Transmission	19156257	Fan Clutch (V-belt)	19150657
Transmission Controller	12497316	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (V-belt)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Studs—(Serpentine—4 req.)	382919
Motor Mount Bolt (2 req.)	460308	Fan Clutch—(Serpentine)	15671898
Transmission Mount (700R4)	22188145		

Complete Your ZZ454/440 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



19168602

Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



12342071

Air Cleaner, Chevrolet-Logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12342093

Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



88965829

Carburetor Spacer, Dual Plane, One-Inch

Fully CNC'd from billet aluminum. GM Performance Parts logo machined into front and back. Accepts Quadrajet and Holley style carburetors.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



93440806

HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



12371244

Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361323

Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



12355614

Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965 through 1990. Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.



12606096

Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



12368084

Engine Oil Primer

Use to lube engine bearings prior to starting your new crate engine.





88890534

HT502

WHAT'S HOT?

- 512 lb.-ft. of torque
- Forged steel crank
- Great value

Big towing power at an incredible value!

Nothing makes a towing job easier than 502 cubic inches of big-block torque maker! Our HT (High Torque) 502 will give you all of the power you need to move mountains or pull your trailer up over a mountain. The GM Performance Parts HT502 has all of the same great performance characteristics of our other 502 engines, but it has been specifically designed for 1977-and-older trucks that need to tow or work hard.

The HT502 is stuffed with a 4.00" stroke forged crankshaft, 4.47" forged aluminum pistons, forged rods, and a hydraulic roller camshaft. The deep-breathing iron cylinder heads, with their mid-size valves and oval-shaped intake ports, deliver maximum cylinder filling at a low rpm. Working together, this combination provides excellent low-end grunt with 512 lb.-ft. of torque coming in at only 3300 rpm.

The HT502 crate engine is delivered complete with an oil pan, valvetrain, valve covers, timing set, and balancer. You add an intake manifold, carburetor, water pump, starter, and ignition system. All of these parts are available from your local GM Performance Parts dealer.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

HT502 TECH SPECS:

Engine Type (P/N 88890534):	Chevy big-block V-8	Cylinder Heads (P/N 12562917):	Iron oval port; 118cc chambers
Displacement (cu in):	502	Valve Size (in):	2.07 intake / 1.73 exhaust
Bore x Stroke (in):	4.47 x 4.00	Compression Ratio:	8.75:1
Block (P/N 10237292):	Cast iron with 4-bolt main caps	Rocker Arms (P/N 12523976):	Stamped steel
Crankshaft (P/N 10183723):	Forged steel	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Flexplate (P/N 10185034):	14"
Pistons (P/N 12533507):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 12552296):	Hydraulic roller	Ignition Timing:	Base 4° BTDC, 26° Total
Camshaft Lift (in):	.480 intake / .483 exhaust	Maximum Recommended rpm:	5500
Camshaft Duration (@.050 in):	204° intake / 209° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. GMPP distributor P/N 93440806 is recommended.

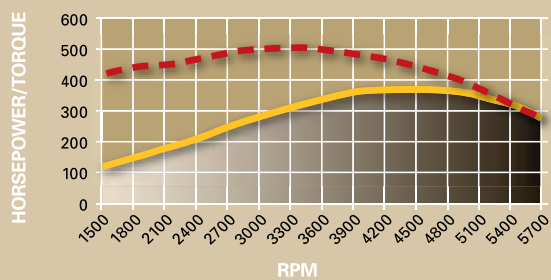


POSSIBLE APPLICATIONS*

- **Your big-block mud-bogger**
- **A tow rig that needs an attitude adjustment**
- **A pick-up truck that can pound most sports cars**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

HT502 DYNO CHART



Horsepower: 377 @ 4500 rpm

Torque (lb-ft): 512 @ 3300 rpm

INSTALLATION NOTES

- Requires the addition of carburetor, intake manifold, water pump, starter, distributor and ignition system.
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires electric fuel pump because the Gen VI block has no mechanical pump boss.
- Comes with an externally balanced 14" automatic transmission flexplate; use externally balanced flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12568782

ZZ502/502 Partial Engine



This brand new partial engine includes the forged reciprocating components, as well as the balancer, oil pan and timing chain set. Just add GMPP or your custom cylinder heads, intake, carburetor and ignition system to complete. This partial engine comes with camshaft P/N 12366543, but must be changed to camshaft P/N 12552296 to match HT502 specifications. Use externally balanced flywheel or flexplate.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Also available for your HT502 crate engine

Serpentine Accessory Drive Belt System, without A/C	19498741	Transmission Mount (700R4)	22188145
Spark Plug Wires and Loom Kit	12495078	Transmission Mount (TH400)	17990778
4L85E Transmission	19156257	Transmission Mount (4L60 & 4L80)	15767858
Transmission Controller	12497316	Fan Clutch (V-belt)	19150657
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Blade—5 Blade (V-belt)	15989194
Motor Mount Bolt (2 req.)	460308	Fan Studs—(Serpentine—4 req.)	382919

Complete Your HT502 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805 Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water and power steering pumps. Includes all pulleys, belts, brackets and fasteners for installation.



25534323 Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



12342071 Air Cleaner, Chevrolet-Logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



25534374 Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



19170093 Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12371244 Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12606096 Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



12342093 Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



88961867 Distributor, Aluminum Billet HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connect or P/N 12167658 attaches tach and 12-volt power supply wire.



19168602 Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



12361323 Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



12368084 Engine Oil Primer

Use to lube engine bearings prior to starting your new crate engine.



HT502 Power Packages From GM Performance Parts

When you've got a heavy job to do, you need the muscle to get it done right—and right away. The HT502 was designed with just these situations in mind. With 512 ft.-lb. of torque out of the gate (at just 3300 rpm!) this cast-iron block-based behemoth is a favorite around the campsite or the construction site. A forged steel crank and shot-peened forged steel rods let you know that this baby was meant to see action. And, with a few well-placed upgrades you can take this economical engine into new spheres of performance.

88890534 HT502 Crate Engine

Baseline = 377 hp and 512 tq

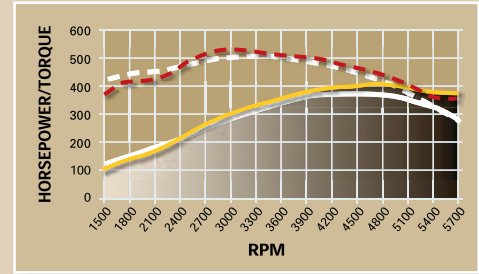
Total = 404 hp and 523 tq

POWER PACKAGE

1

- | | |
|------------------------------------|---|
| 88890534 HT502 Crate Engine | 12366543 Camshaft |
| 12552888 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12363406 Intake Manifold | 12523976 1.7 Rocker Arms |

COMMENTS: A beefed up cam and an oval-port intake manifold bring this otherwise stock HT502 with 27 additional horses and 11 more ft.-lb. of torque. The manifold is specially designed to be coupled with a Holley carb and is a dual-plane design.



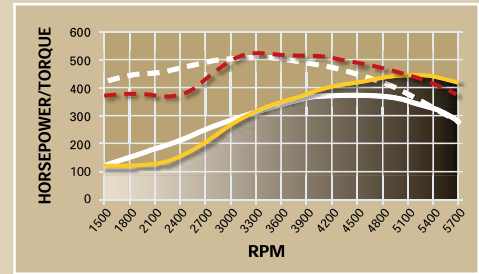
Total = 441 hp and 522 tq

POWER PACKAGE

2

- | | |
|------------------------------------|---|
| 88890534 HT502 Crate Engine | 88961557 Camshaft |
| 12552888 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12363406 Intake Manifold | 12523976 1.7 Rocker Arms |

COMMENTS: Grabbing the cam from a ZZ572/620, you can boost your horsepower up to 441 and push torque to 522. You also will get improved performance at the higher-rpm end of the scale.



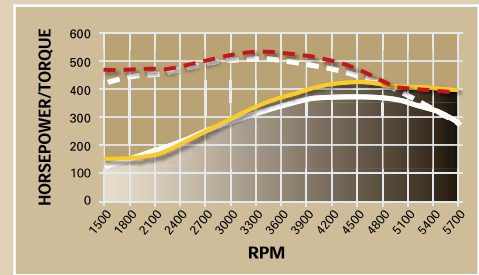
Total = 423 hp and 531 tq

POWER PACKAGE

3

- | | |
|------------------------------------|---|
| 88890534 HT502 Crate Engine | 12552296 Camshaft |
| 12363390 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12363406 Intake Manifold | 12523976 1.7 Rocker Arms |

COMMENTS: Trading the iron heads for aluminum, still in an oval-port design, helps net a nice power gain of 46 horsepower and 19 ft.-lb. of torque. We also have incorporated our new big-block cam to deliver great mid-band power.



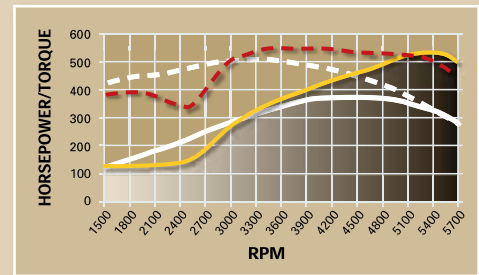
Total = 534 hp and 549 tq

POWER PACKAGE

4

- | | |
|------------------------------------|---|
| 88890534 HT502 Crate Engine | 88961557 Camshaft |
| 12363390 Cylinder Head | 19170093 770-cfm Holley Carburetor |
| 12363406 Intake Manifold | 12523976 1.7 Rocker Arms |

COMMENTS: Aluminum heads, dual-plane intake and a hot-shot cam put this package into the stratosphere. You're looking at enough horses to make Kentucky jealous and torque enough to move a mountain, or flatten a hill!



DYNO KEY: Baseline HP ——— Baseline TQ - - - Pwr. Pkg. HP ——— Pwr. Pkg. TQ - - -



The great idea that almost died



1953 Corvette

It is often argued that necessity is the mother of invention. It also is the mother of refinement.

When the brainchild of Harley Earl and Robert McLean, the Chevrolet Corvette, was introduced in 1953, the motoring public was not exactly overwhelmed. The car was beautiful, and had the distinction of a fiberglass body—but inside, under the skin, it was essentially a standard Chevy sedan. And at a price (for a Chevrolet of the day) \$3,500, sales were not exactly brisk. And, when unit sales again fell short of expectations in 1954, it looked like the Corvette might fall along the wayside of good ideas that never really caught on.

However, there were several visionaries at General Motors who recognized the car's potential and realized it was simply a matter of getting the right combination of parts to enhance the power and handling characteristics.

One of these visionaries was Zora Arkus-Duntov, who brought a European racing pedigree to his job as Chevrolet's chief engineer. He realized that the 'Vette needed better handling characteristics to make it stand out in a market that was growing ever more sophisticated.

The other side of the equation was being worked on by Ed Cole and his engine development team. Cole was so excited by the thought of a two-seat sports car that he immediately went to work developing a brand new engine worthy of the breed.

Cole's group introduced the small-block V-8 in 1955, just in time to rescue the Corvette from oblivion.

Arkus-Duntov used the newly refined 'Vette to set a production-car speed record at over 145 mph. and the legend of the Corvette as a performance enthusiast's dream was born.

The initial small-block was 265 cubic inches and delivered 195 horsepower. This was considerably better than the overhead Ford engines of the day, and was comparable in a power-to-

powered coupe of 1963, which introduced the five-year run of stingrays, has its own fan club.

The nose was lowered and the fenders raised for the distinctive Mako-shark era cars of the late-Sixties–1982. An awesome 427—the L88—was offered for the first time.

The rarest 'Vette—by far—is the 1983. A complete redesign that couldn't be rolled out in production mode until March of 1983 (for the model year 1984 Corvette), limited production to less than 50 units.



Harley Earl



Edward Cole



Zora Arkus-Duntov

weight ratio with the 292 Y-block motors that powered the newly introduced Thunderbird.

Once the bar was set, the race was on between the chassis, body and engine teams working on the Corvette. Each group made tremendous strides from model year to model year, keeping the 'Vette on the cutting edge of American sports car styling—a category that Ford conceded to GM when the Thunderbird added a second row of seats in 1958.

Each body style iteration of the Corvette found a group claiming it to be the best looking, best performing, most collectible. No one could deny that the 1956 and 1957 models, with their chrome grilles were beautiful, but the split-windowed Z06-

In 1997, the Corvette underwent a complete makeover inside and out. Powered by the LS1, the transmission was moved back away from the engine compartment, ala European stallions like Porsche, and the wheels were moved out toward the corners. The car was a performance gem and the general styling held until 2005.

The more-economical Corvette of the last few years has refined the look of previous 'Vettes, and has reinforced the nameplate's spot as a true performance car.

While engine technology was constantly improving since the introduction of Ed Cole's small-block, it took a leap forward when the new, aluminum-based Gen III LS series engines were dropped under the hood in 1997, followed by the Gen IV in 2004.

Now, as has been the case since 1953, the motoring public holds its collective breath when each model year Corvette is introduced. They know that this

car will carry the latest in GM engine technology, styling and performance parts.

The iconic American sports car, and the public that salutes it, deserve nothing less.



1968 Corvette



12568778

502 HO

WHAT'S HOT?

- Four-bolt block
- High-lift roller cam
- Big cubes


Maximum displacement with maximum value!

This is what all big-block crate engines should be: maximum power with a maximum return on your money invested. We started with the 454 that everyone loves, and pumped it up to a 502 cubic inch powerhouse that delivers gobs of low-end torque and top-end horsepower.

Even though the 502 is a great value, don't think for a minute that we skimped on parts or validation of those parts to the highest standard in the industry. The 502 HO bottom end consists of a cast iron four-bolt block, forged steel crankshaft, forged steel connecting rods that have been shot-peened for durability, and forged pistons. A high-lift hydraulic roller camshaft controls the airflow through our legendary rectangular-port cast iron cylinder heads—more than enough air to fill those hungry 502 cubes! One other key engineering feature is that the final compression ratio comes in at 8.75:1, so that when outfitted with our 502 HO, your performance GM car will make tremendous power from just pump gas.

GM Performance Parts has completed this amazing crate engine with an aluminum dual-plane intake manifold, cast iron water pump, 6-quart oil pan (with windage tray), dampener, and a 14" flexplate. Pick the carburetor, starter, and ignition system—all available from GM Performance Parts—and you are on your way to big-block bliss!

 **NEW** GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

 GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

502 HO TECH SPECS:

Part Number:	12568778	Cylinder Heads (P/N 12562920):	Iron rectangular port; 118cc chambers
Engine Type:	Chevy big-block V-8	Valve Size (in):	2.19 intake / 1.88 exhaust
Displacement (cu in):	502	Compression Ratio:	8.75:1
Bore x Stroke (in):	4.47 x 4.00	Rocker Arms (P/N 12523976):	Stamped steel
Block (P/N 10237292):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Water Pump (P/N 19168606):	Cast iron, long-style
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Flexplate (P/N 10185034):	14"
Pistons (P/N 12533507):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 24502611):	Hydraulic roller	Ignition Timing:	Base 8° BTDC, 30° Total
Camshaft Lift (in):	.510 intake / .540 exhaust	Maximum Recommended rpm:	5500
Camshaft Duration (@.050 in):	211° intake / 230° exhaust	Balanced:	External

NOTE: Distributor with melonized steel gear **MUST** be used with engines with steel camshafts, or engine damage will occur. GMPP HEI distributor P/N 93440806 is recommended.

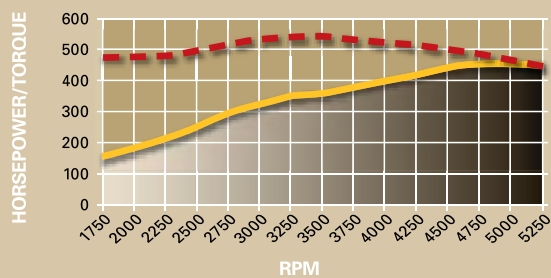


POSSIBLE APPLICATIONS*

- A hot Chevy that deserves a “big-inch” Rat
- Low 11-second bracket car
- Heavy metal hot rod that needs heavy metal power

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

502 HO DYNO CHART



Horsepower: 450 @ 5250 rpm

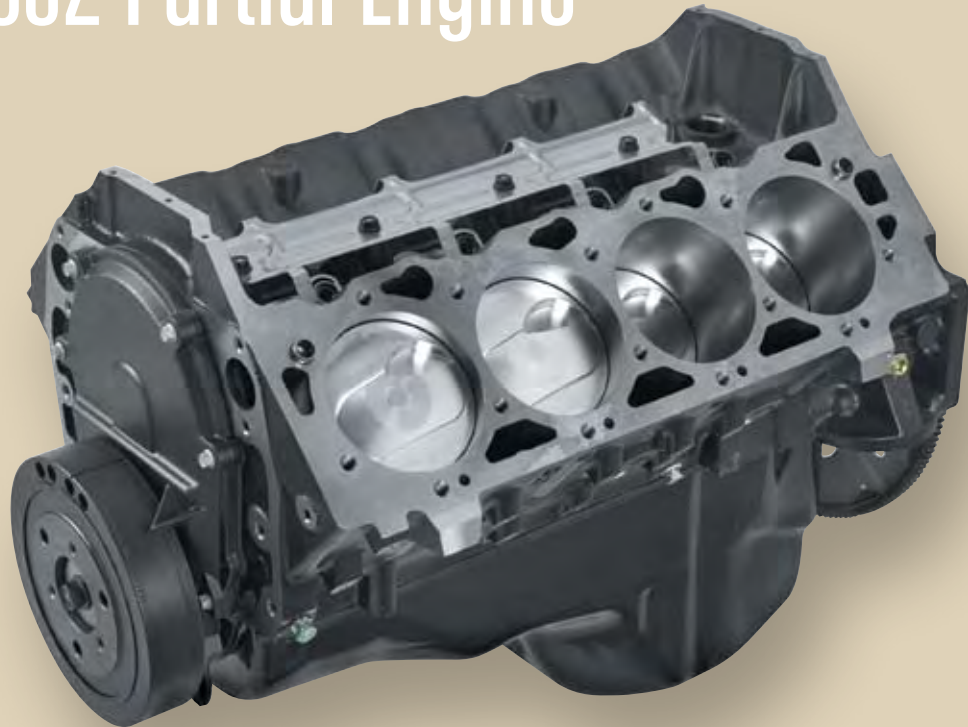
Torque (lb-ft): 550 @ 3500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, fuel pump, starter, distributor and ignition system.
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires electric fuel pump because the Gen VI block has no mechanical fuel pump boss.
- Comes with a 14" automatic transmission flexplate; use flywheel P/N 14096987 and 11" clutch assembly for manual transmission.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12568782

ZZ502/502 Partial Engine



For those who want the sturdy foundation of the 502 HO as the starting point of a custom engine, this brand-new partial engine includes the forged reciprocating components, as well as the balancer, oil pan and timing chain set. Just add GMPP or your custom cylinder heads, intake, carburetor and ignition system to complete. This partial engine comes with camshaft P/N 12366543, but must be changed to camshaft P/N 24502611 to match 502 HO specifications. Use externally balanced flywheel or flexplate.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Also available for your 502 HO crate engine

Serpentine Accessory Drive Belt System, without A/C	19498741	Transmission Mount (700R4)	22188145
Spark Plug Wires and Loom Kit	12495078	Transmission Mount (TH400)	17990778
4L85E Transmission	19156257	Transmission Mount (4L60 & 4L80)	15767858
Transmission Controller	12497316	Fan Clutch (V-belt)	19150657
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Blade—5 Blade (V-belt)	15989194
Motor Mount Bolt (2 req.)	460308	Fan Studs—(Serpentine—4 req.)	382919

Complete Your 502 HO Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



93440806

HEI Distributor

A must for steel roller cams. Has ignition advance curve for high-performance applications.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



19170093

Carburetor, Holley 770-cfm

Holley 4160-style four-barrel has show car quality polished finish, center hung fuel bowls, vacuum secondaries and automatic choke.



12371244

Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



88965829

Carburetor Spacer, Dual Plane, One-Inch

Fully CNC'd from billet aluminum with GM Performance Parts logo machined into front and back. Spacer accepts Quadrajet and Holley style carburetors.



12342093

Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12606096

Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



19168602

Aluminum Water Pump, Short-Style

Short leg standard-rotation pump. Reinforced snout and large-diameter hub with dual bolt patterns. Use with early-design V-belt drive rotation.



6472657

Electric Fuel Pump

For use on all carbureted engines. Flows 30–40 gph at 6–9 psi.



12341999

Fuel Pump Block-Off Plate

Plate has stamped Bowtie logo, and a special non-asbestos gasket is included.





12496962

ZZ502/502 Deluxe

WHAT'S HOT?

- Aluminum heads
- Big-time horsepower
- Great low-end

An out-of-the-box 502" powerhouse that is ready to go!

For those of you who want your ZZ502/502 already assembled, GM Performance Parts has just what you need. The ZZ502/502 Deluxe crate engine includes the entire engine, from carb to oil pan, and comes assembled from the factory. It includes a Holley 870-cfm four-barrel carburetor, dual-plane intake manifold CNC-port matched to the oval-port heads, starter, distributor, plug wires, and water pump. The ZZ502/502 Deluxe crate engine offers you a GM Performance Parts tested and validated 502 horsepower/567 lb.-ft. of torque combination with a 24-month warranty.

The ZZ502/502 comes with our aluminum oval-port, big-valve street heads that flow enough air to satisfy the demands of the hungry 4.47" bores and 4.00" stroke crankshaft. To ensure a long and productive life, this performance big-block is based on a Gen VI block with four-bolt mains, a forged steel crank, forged steel rods, and forged aluminum 9.6:1 pistons.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

ZZ502/502 DELUXE TECH SPECS:

Part Number:	12496962	Rocker Arms (P/N 12368082):	Stamped steel
Displacement (cu in):	502	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.47 x 4.00	Distributor (P/N 93440806):	HEI type
Block (P/N 10237292):	Cast iron with 4-bolt main caps	Carburetor (P/N 19170093):	870-cfm
Crankshaft (P/N 10183723):	Forged steel	Water Pump (P/N 19168602):	Aluminum, short-style
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Spark Plugs and Wires:	Included
Pistons (P/N 12533507):	Forged aluminum	Starter (P/N 12606096):	Included
Camshaft Type (P/N 12366543):	Hydraulic roller	Flexplate (P/N 10185034):	14"
Camshaft Lift (in):	.527 intake / .544 exhaust	Recommended Fuel:	92 octane
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Ignition Timing:	Base 8° BTDC, 30° Total
Cylinder Heads (P/N 12363390):	Aluminum oval port; 110cc chambers	Maximum Recommended rpm:	5800
Valve Size (in):	2.25 intake / 1.88 exhaust; stainless steel	Balanced:	External
Compression Ratio:	9.6:1		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. GMPP distributor P/N 93440806 is recommended.

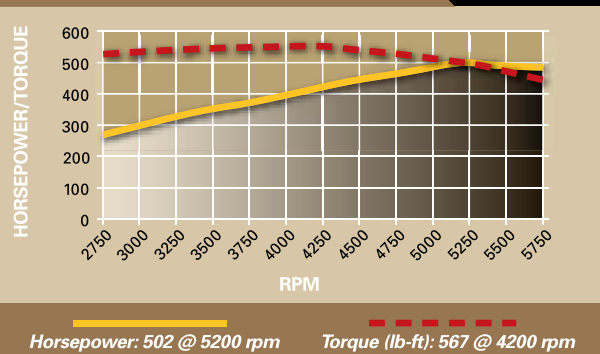


POSSIBLE APPLICATIONS*

- Anything that you want to have over 500 horsepower
- The perfect drag racing foundation
- A hot rod that you want to get noticed in for more than the paint quality

* Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.

ZZ502/502 DYNO CHART

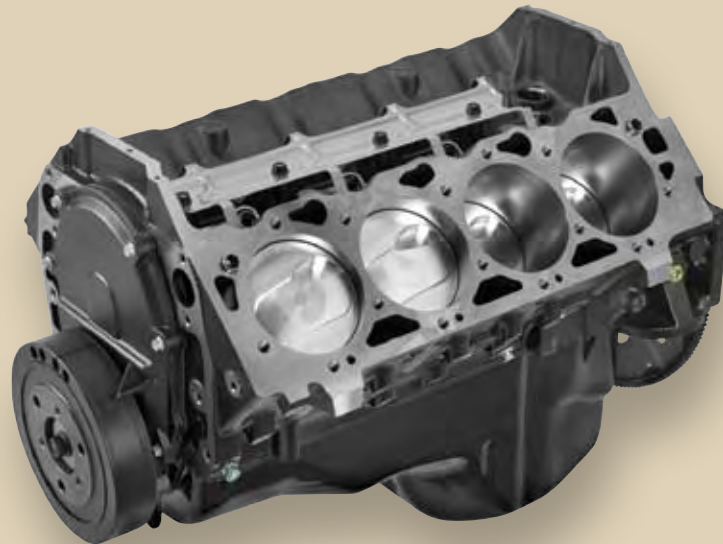


INSTALLATION NOTES

- Due to crate fitment, carburetor is shipped in a separate box and will need to be installed by engine installer.
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires electric fuel pump because Gen VI block has no mechanical pump boss
- Comes with a 14" automatic transmission flexplate.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12371171

ZZ502 Deluxe Kit



Building on the very popular ZZ502/502 Base engine kit, GM Performance Parts offers you the Deluxe kit version of that same engine combination. The Deluxe ZZ502/502 kit gives you the opportunity to get all the parts you need in one box to build your own high performance big-block Chevy. By offering you a tested combination of parts, GM Performance Parts has taken all of the frustration out of putting your own engine together—no mismatched parts that don't work together. When assembled and installed, you get a Rat motor that cranks out 502 horsepower (one horsepower per cubic inch) and 567 lb.-ft. of torque.

For the ZZ502/502 Deluxe kit, GMPP took the ZZ502/502 Base engine kit and added to it a Holley 870-cfm four-barrel carburetor, starter, distributor, plug wires, and water pump. Together, they add up to a GMPP tested and validated 502 horsepower and a stunning 567 lb.-ft. of torque at the crack of the throttle. Imagine the satisfaction that you'll feel when you fire it up for the first time.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

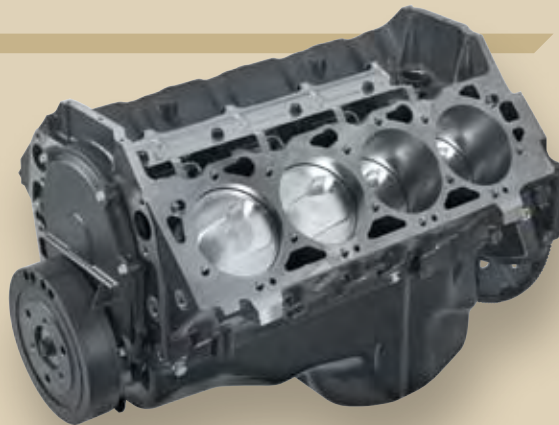


GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

12568782

ZZ502/502 Partial Engine

The same great foundation of the ZZ502/502 Deluxe and Partial engines, including the forged reciprocating assembly parts. Includes balancer, oil pan and timing chain set. Add GMPP or your custom cylinder heads, intake, carburetor and ignition system to complete.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Complete Your ZZ502 Deluxe Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



88961867

Distributor, Billet Aluminum HEI
CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361323
Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



25115899

High Output Electric Fuel Pump
Heavy-duty 12-volt electric rotary pump flows 72 gph at 6-8 psi.



12342093

Short Chrome Bowtie Valve Cover

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12342071

Air Cleaner, Chevrolet-Logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



12361146

High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C	19498741	Transmission Mount (TH400)	17990778
4L85E Transmission	19156257	Transmission Mount (4L60 & 4L80)	15767858
Transmission Controller	12497316	Fan Clutch (V-belt)	19150657
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Blade—5 Blade (V-belt)	15989194
Motor Mount Bolt (2 req.)	460308	Fan Studs—(Serpentine—4 req.)	382919
Transmission Mount (700R4)	22188145	Spark Plug Wire Set & Loom Kit	12495079



12496963

ZZ502/502 Base

WHAT'S HOT?

■ Aluminum heads

■ Forged steel crank

■ Hydraulic roller cam

GM Performance Parts' 502" Rat!

Get this "beast in a box" and then finish it to your satisfaction! GM Performance Parts has put together the ZZ502 Base as a convenient partial engine assembly. You get the big-block V-8, four-bolt main muscle and just enough of the "finish work" to take the headache out of choosing parts—without missing out on the fun stuff!

The Base Engine, which boasts 4.47" bores and is stroked to 4.00", comes with aluminum, oval port cylinder heads with generous 110cc combustion chambers. Its big-time valvetrain features 2.25" intake and 1.88" exhaust valves to keep it breathing easy! The crankshaft is forged steel and is paired up with a hydraulic roller camshaft for great performance.

All you need to add is attitude—and an intake manifold, carburetor, water pump, distributor and plug wires. Everything but the attitude is available from your GM Performance Parts dealer.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

ZZ502/502 BASE TECH SPECS:

Part Number:	12496963	Cylinder Heads (P/N 12363390):	Aluminum oval port; 110cc chambers
Engine Type:	Chevy big-block V-8	Valve Size (in):	2.25 intake / 1.88 exhaust; stainless steel
Displacement (cu in):	502	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.47 x 4.00	Rocker Arms (P/N 12368082):	Stamped steel
Block (P/N 10237292):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 10183723):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Ignition Timing:	Base 8° BTDC, 30° total
Pistons (P/N 12533507):	Forged aluminum	Maximum Recommended rpm:	5800
Camshaft Type (P/N 12366543):	Hydraulic roller	Balanced:	External
Camshaft Lift (in):	.527 intake / .544 exhaust		
Camshaft Duration (@.050 in):	224° intake / 234° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur. GMPP distributor P/N 93440806 is recommended.

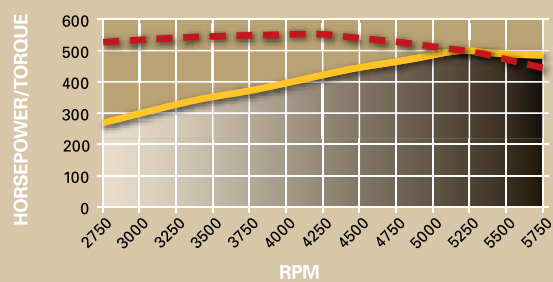


POSSIBLE APPLICATIONS*

- Any vehicle that needs big-time power
- Big-block bracket racing
- Powerplant for a big-displacement street rod

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ502/502 DYNO CHART



Horsepower: 502 @ 5200 rpm

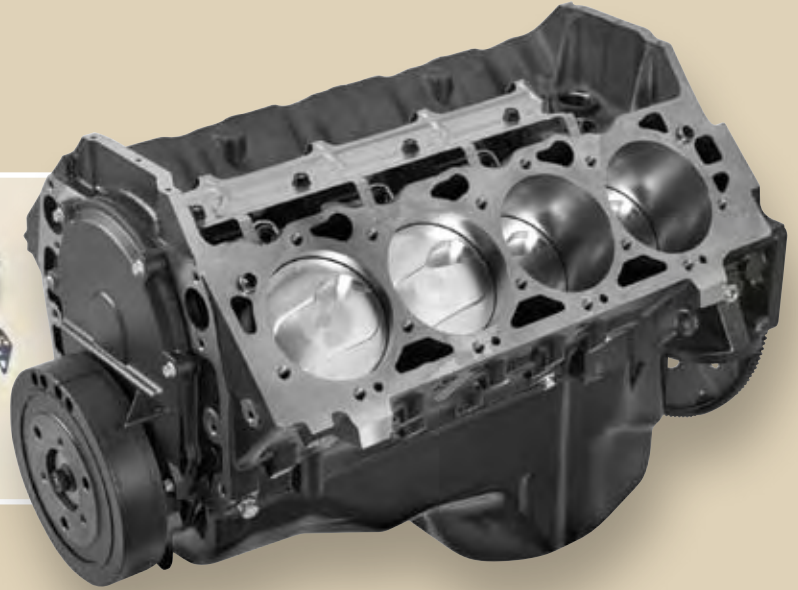
Torque (lb-ft): 567 @ 4200 rpm

INSTALLATION NOTES

- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires electric fuel pump because Gen VI block has no mechanical pump boss
- Comes with a 14" automatic transmission flexplate.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.

12371204

ZZ502 Base Kit



Build-it-yourself kit of GM Performance Parts' 502" Rat!

Nothing is quite as satisfying as building your own high-performance big-block. That's why GM Performance Parts offers the entire ZZ502 engine as a kit. Every part is engineered to work together to deliver 502 horses! Kit includes aluminum oval-port heads, forged steel crank and rods, and forged aluminum pistons. It also includes a hydraulic roller cam, valvetrain and valve covers. You need to add an intake manifold, carburetor, water pump, distributor and spark plug wires—all available from your GM Performance Parts dealer.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

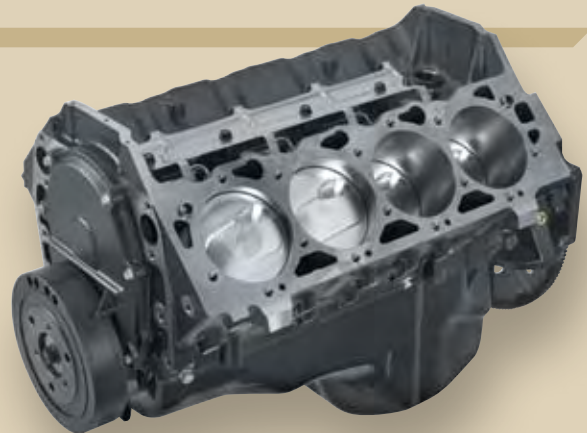


GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

12568782

ZZ502/502 Partial Engine

The same great foundation of the ZZ502/502 Deluxe and long block engines, including the forged reciprocating assembly parts. Includes balancer, oil pan and timing chain set. Add GMPP or your custom cylinder heads, intake, carburetor and ignition system to complete.



NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Components include a 12-month or 12,000-mile/20,000-kilometer limited warranty.

Complete Your ZZ502 Base Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



88961867

Distributor, Billet Aluminum HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361323

Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



25115899

High Output Electric Fuel Pump

Heavy-duty 12-volt electric rotary pump flows 72 gph at 6-8 psi.



12342093

Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12342071

Air Cleaner, Chevrolet-Logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



12606096

Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C	19498741	Transmission Mount (4L60 & 4L80)	15767858
4L85E Transmission	19156257	Fan Clutch (V-belt)	19150657
Transmission Controller	12497316	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (V-belt)	15989194
Motor Mount Bracket (2 req.)	14067103	Fan Studs—(Serpentine—4 req.)	382919
Motor Mount Bolt (2 req.)	460308	GMPP Plug Wire & Loom Kit	12495078
Transmission Mount (700R4)	22188145	Spark Plug Wire Set & Loom Kit	12495079
Transmission Mount (TH400)	17990778		



12499121

Ram Jet 502 with calibrated controller & wiring harness

WHAT'S HOT?

- Fuel injection
- Aluminum heads
- Forged steel crank

With an 11" fuel-injected intake manifold flexing out of the top of a 502" big-inch Rat, the GM Performance Parts Ram Jet 502 is just plain cool. Not only attractive, the Ram Jet intake adds a significant amount of function to the big-block with amazing throttle response that you just have to experience to believe. Combining our aluminum-headed 502 with a modern fuel-injected intake results in 502 horsepower and 565 lb.-ft. of face-slapping torque. With the Ram Jet intake, you also have over 500 lb.-ft. of torque available from 2200 rpm on up.

Without question, that big fuel injection intake stands out the most on the Ram Jet 502. Functional as it is attractive, the Ram Jet intake system enhances the already impressive torque band of the 502. The intake gobbles up air and stuffs it into the awaiting cylinders with incredible efficiency. The impressive intake only sits a half-inch taller than a comparable carbureted system with a high-rise intake manifold, Holley four-barrel carb and air cleaner.

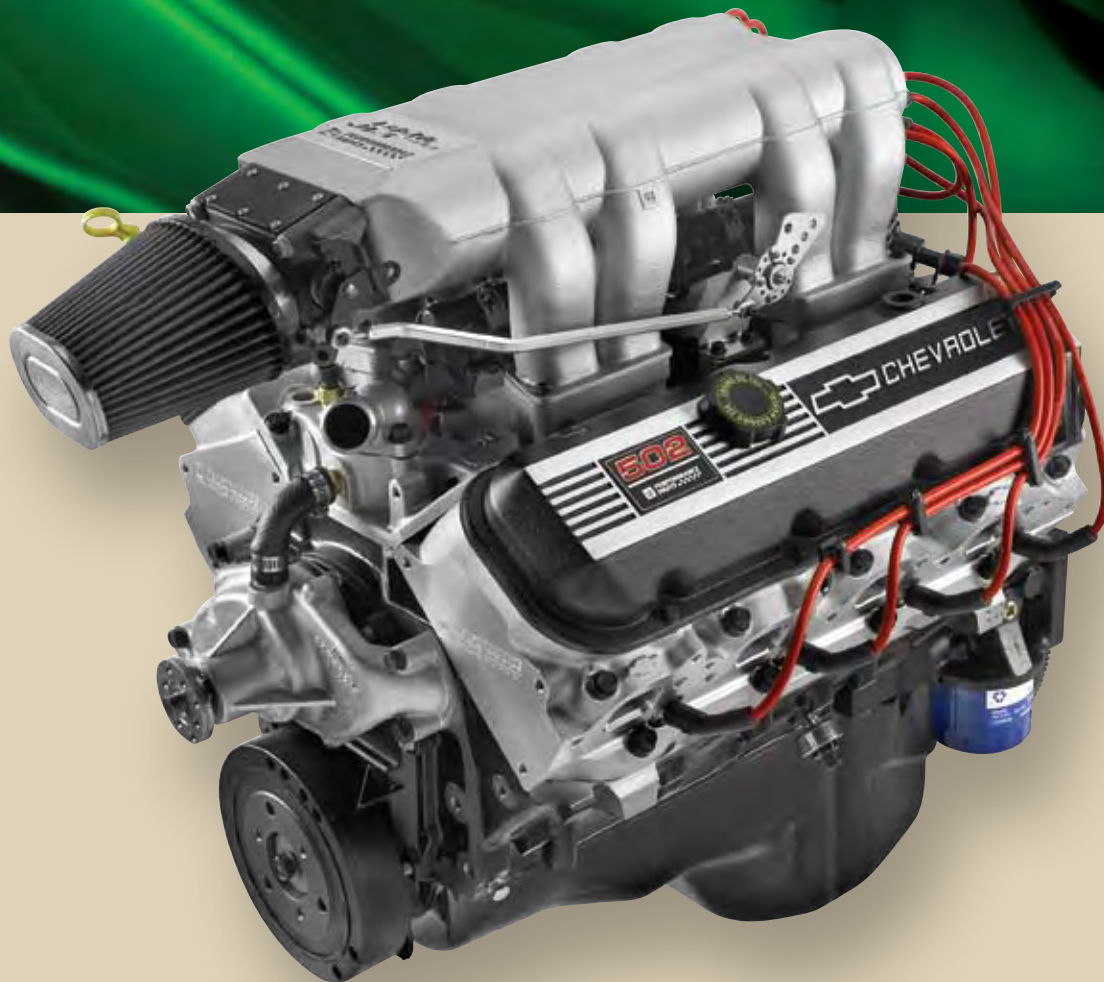
The Ram Jet 502 features a 4.00" stroke forged crankshaft, 4.47" forged aluminum pistons, forged rods, and a hydraulic roller camshaft. The aluminum heads are our highly efficient oval-port intake design, and they utilize 2.25" intake and 1.88" exhaust valves. Underhood clearance at the throttle body should be checked for interference.

NEW GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

RAM JET 502 TECH SPECS:

Part Number:	12499121	Compression Ratio:	9.6:1
Engine Type:	Chevy big-block V-8	Rocker Arms (P/N 12368082):	Stamped steel
Displacement (cu in):	502	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.47 x 4.00	Distributor (P/N 1104060):	HEI type
Block (P/N 10237292):	Cast iron with 4-bolt main caps	Throttle Body (P/N 17113524):	Included
Crankshaft (P/N 10183723):	Forged steel	Water Pump (P/N 19168602):	Aluminum, short-style
Connecting Rods (P/N 19170198):	Forged steel, shot peened	Flexplate (P/N 10185034):	14"
Pistons (P/N 12533507):	Forged aluminum	Recommended Fuel:	92 octane
Camshaft Type (P/N 12366543):	Hydraulic roller	Ignition Timing:	Base 8° BTDC, 30° Total
Camshaft Lift (in):	.527 intake / .544 exhaust	Maximum Recommended rpm:	5800
Camshaft Duration (@.050 in):	224° intake / 234° exhaust	Balanced:	External
Cylinder Heads (P/N 12363390):	Aluminum oval port; 110cc chambers		
Valve Size (in):	2.25 intake / 1.88 exhaust; stainless steel		

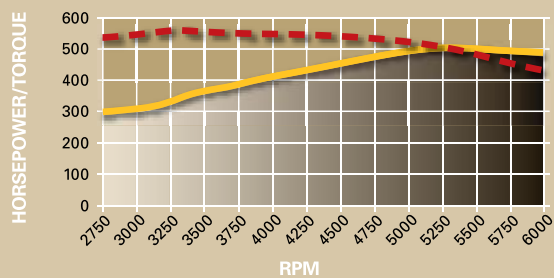


POSSIBLE APPLICATIONS*

- Build a fuel-injected '55-'57 shoebox
- Go high-tech with your '32 hot rod
- Restification for a show car

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

RAM JET 502 DYNO CHART



Horsepower: 502 @ 5100 rpm

Torque (lb-ft): 565 @ 3200 rpm

INSTALLATION NOTES

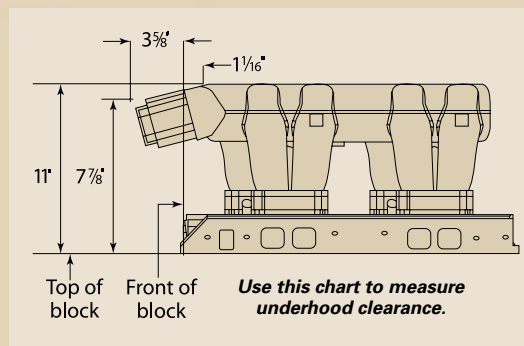
- The Ram Jet 502 requires a 12-volt power source (and ground), coolant, exhaust system, fuel feed and fuel return line (to the fuel tank). An in-tank fuel pump is recommended.
- Clutch linkage boss is cast into block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- **IMPORTANT!** For a safe, proper and trouble-free engine break-in, the MEFI 4 computer has a "green" mode that controls rpm during the break-in period; from start-up to the end of the first hour is 4000 rpm, the second hour is 4500 rpm and the third hour is 5500 rpm.

12499249

Ram Jet 502 Fuel Injection System



The Ram Jet 502 fuel injection system, P/N 12499249 makes it easy to have electronic fuel injection on any 1977 and older vehicle originally equipped with a carburetor. The secret is the industry leading MEFI 4 controller. This controller fits in the palm of your hand and was originally developed by GM Powertrain engineers for marine applications. MEFI 4 is ideally suited for use in street rod and street machine applications. Installation is simple as the Ram Jet 502 ships with the wiring harness, new MEFI 4 controller, and detailed instructions. Once installed in the vehicle, a user needs only to supply 12V power and fuel. The revised MEFI 4 controller has improved electronics and a closed loop capability to give a smooth idle and better performance.



PART	DESCRIPTION	QTY.	PART	DESCRIPTION	QTY.
12386610	Manual, Service, Big-Block Ram	1	12489596	Bracket Assembly, Transmission and Throttle Cable	1
12489400	Tool, Diagnostic Trouble Code	1	12489597	Rod, Throttle Control	1
12490939	Manifold, Lower Intake	1	1104060	Distributor Assembly-Ignition	2
12555320	Shield-Intake Manifold Oil Sph	1	1115491	Coil Assembly-Ignition	1
12366985	Gasket Package, Intake Manifold	1	12464482	Manifold, Lower Intake	1
12367959	Bolt/Screw Package, Intake Manifold	1	12464484	Manifold, Upper Intake	1
12490505	Manifold, Upper Intake	1	17113524	Body Assembly Throttle	1
12489372	Gasket, Upper Intake Manifold	4	12490257	Cleaner Kit, Air	1
12487372	Hose, Fuel Feed	1	12569240	Sensor Assembly-Map	1
22514722	Seal, O-Ring	1	25036751	Sensor, Intake Air Temperature	1
12487373	Hose, Fuel Return	1	17090919	Injector Assembly, TBI Fuel <6 MI	8
22516256	Seal, O-Ring	1	17113222	Retainer Kit, Fuel Injector	1
10216948	Tube Assembly-Fuel Press Reg Vac	1	17120039	Rail Assembly, M/Port, Fuel Injection Fuel	1
88961968	Harness Assembly, Engine Wrg	1	17113517	Regulator Assembly, Fuel Pressure	1
10456208	Sensor Assembly-Knock	1	88962718	Module Assembly Engine Cont.	1
12489595	Bracket Assembly, Transmission Cable	1	15326386	Sensor, Engine Cool Temperature	1

NOTE: This kit includes these major items plus brackets, sensors, bolts, nuts, gaskets, and other small parts.

Complete Your Ram Jet 502 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

12606096

Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



12363128

Chrome High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction, chrome starter for either 153- or 168-tooth flywheels.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12361323

Roller Rocker Arm Set, 1.7:1 Ratio

Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" studs.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



12371244

Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



88961867

Distributor, Billet Aluminum HEI

CNC-machined housing, ball bearing guide, oversized shaft and long sintered bushing. Mechanical and vacuum advance. Brass terminal cap. Connector P/N 12167658 attaches tach and 12-volt power supply wire.



12342093

Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12341993

Push-In Oil Filler Cap

Round oil filler cap with Bowtie logo for valve covers with 1.22" diameter hole.



ALSO AVAILABLE

4L85E Transmission	19156257	Transmission Mount (4L60 & 4L80)	15767858
Transmission Controller	12497316	Fan Clutch (V-belt)	19150657
Motor Mount (2 req.)	15529452	Fan Blade—5 Blade (Serpentine)	15563127
Motor Mount Bracket (2 req.)	14067103	Fan Blade—5 Blade (V-belt)	15989194
Motor Mount Bolt (2 req.)	460308	Fan Studs—(Serpentine—4 req.)	382919
Transmission Mount (700R4)	22188145	Spark Plug Wire Set & Loom Kit	12495079
Transmission Mount (TH400)	17990778		



12498793

ZZ572/620 Deluxe

WHAT'S HOT?

- 620 horsepower
- Pump-gas friendly
- Hydraulic roller cam

Big-block performance with torque to spare.

When you're ready to really step it up, it's time for the GM Performance Parts ZZ572 and its massive 620 horsepower and 650 lb.-ft. of torque! This is flat-out, the baddest street Rat available that still happily runs on pump gas. The ZZ572/620 features 572 cubic inches of pure big-block and ships to your door in the coolest collection of orange, chrome, and aluminum you've ever seen.

There are several custom-designed components that make the ZZ572/620 the king of the street. It has a strong, 4-bolt block that was created with a 4.560" bore just for the 572" displacement. The 572 block is fortified with a forged crank, forged rods, forged pistons—everything was designed to offer you the ultimate big-block experience. To feed all of those hungry cubes, we topped it off with a single-plane intake manifold that has been port-matched to the rectangular-port aluminum heads. A custom, hydraulic roller camshaft uses .632-inches of valve lift to lead the charge. We make no apologies if the loping, aggressive idle of this camshaft attracts attention.

The Deluxe ZZ572/620 comes complete from oil pan (with windage tray) to carburetor, including an 850-cfm Holley four-barrel, HEI distributor, red spark plug wires, aluminum short-style water pump, and automatic transmission flexplate. It's the ideal combination of big-block parts—designed, validated to GMPP standards, and tested in real world applications.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine, except for the starter, alternator and power steering pump.

ZZ572/620 DELUXE TECH SPECS:

Part Number:	12498793	Compression Ratio:	9.6:1
Engine Type:	Chevy big-block V-8	Rocker Arms (P/N 12361323):	Aluminum roller style
Displacement (cu in):	572	Rocker Arm Ratio:	1.7:1
Bore x Stroke (in):	4.560 x 4.375	Distributor (P/N 88961867):	HEI
Block (P/N 25534368):	Cast iron with 4-bolt main caps	Carburetor (P/N 19170095):	850-cfm
Crankshaft (P/N 88961554):	Forged steel	Water Pump (P/N 19168602):	Aluminum, short-style
Connecting Rods (P/N 88962926):	Forged steel, shot peened	Spark Plugs and Wires:	Included
Pistons (P/N 88962925):	Forged aluminum	Flexplate (P/N 12561217):	14"
Camshaft Type (P/N 88961557):	Hydraulic roller	Recommended Fuel:	92 octane
Camshaft Lift (in):	.632 intake / .632 exhaust	Ignition Timing:	Base 8° BTDC, 36° Total
Camshaft Duration (@.050 in):	254° intake / 264° exhaust	Maximum Recommended rpm:	6000
Cylinder Heads (P/N 12499255):	Aluminum rectangular port, 118cc chambers	Balanced:	Internal
Valve Size (in):	2.25 intake / 1.88 exhaust; stainless steel		

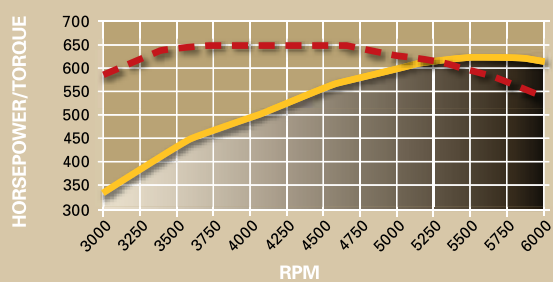


POSSIBLE APPLICATIONS*

- The ultimate hot rod starting point
- Pump gas drag racing—just add spray
- Wake up the neighborhood—anytime!
- Only install if you want to be the biggest dog on the porch

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ572/620 DYNO CHART



Horsepower: 620 @ 5500 rpm

Torque (lb-ft): 650 @ 4500 rpm

INSTALLATION NOTES

- Due to crate fitment, carburetor is shipped in a separate box and will need to be installed by engine installer.
- Clutch linkage boss is cast and machined in block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires addition of starter and fuel pump (not included).
- Gen VI tall-deck block has machined mechanical fuel pump boss.
- Comes with a 14" automatic transmission flexplate. Requires internally balanced flywheel for manual transmission applications.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- You do have a strong transmission and rear axle, don't you?

12498792

ZZ572/620 Base Engine



The ZZ572/620 long block includes all the features of the Deluxe, fully-dressed version, minus the water pump, carburetor, intake manifold, distributor and spark plug wires. Order all the parts to complete the engine from your GMPP dealer or finish with your custom parts. The 620 features rectangular port aluminum cylinder heads that deliver 9.6:1 compression ratios in a pump-gas friendly package. A hydraulic roller cam with 0.632" lift opens the stainless steel valves. Chromemoly retainers, roller rocker arms and dual valve springs help make the valvetrain virtually bullet-proof.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.

Complete Your ZZ572/620 Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



12363128

Chrome High Torque Mini Starter

Same as starter P/N 12361146 (see page 352), but with a chrome housing.



12606096

Lightweight Starter

Lightweight gear reduction starter for 14", 168-tooth flywheels.



88962218

Intake Manifold, ZZ572/720R Engine

Get that 572/720 look, with all the street ability of the 620. Some tuning will be required.



12371244

Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



19170096

Carburetor, Holley 1090-cfm

Holley 4150-style four-barrel has show car quality polished finish, mechanical secondaries, and is custom calibrated for the ZZ572/720R crate engine. Note: some tuning will be required.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



12341999

Chrome Bowtie Fuel Pump Block-Off Plate

Plate has stamped Bowtie logo. Special non-asbestos gasket included.



12355614

Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965-1990. 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.



12342071

Air Cleaner, Chevrolet-Logo Classic Design

Fourteen-inch round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut. Fits most four-barrel and two-barrel carburetors.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C	19498741	Fuel Filter	859619
Black Powder-Coated Valve Covers	25534223	Motor Mount (2 req.)	15529452
Chrome Tall Bowtie Valve Cover	12342099	Motor Mount Bracket (2 req.)	14067103
4L85E Transmission	19156257	Motor Mount Bolt (2 req.)	460308
Transmission Controller	12497316	Transmission Mount (700R4)	22188145
Bowtie Air Cleaner Nut	12341985	Transmission Mount (TH400)	17990778
Chrome Wire Loom Kit	12342049	Transmission Mount (4L60 & 4L80)	15767858
Electric Fuel Pump, High Output	25115899	Fan Clutch (V-belt)	19150657
Fuel Pressure Regulator Kit	171135361		



12498827

ZZ572/720R Deluxe

WHAT'S HOT?

■ **Baddest Rat on the block**

■ **720 HP and 685 lb.-ft. torque**

■ **Roller cam with .714" lift**

The ultimate beast!

Make no mistake, the ZZ572/720R is a race motor. It delivers a resounding 720 horsepower and 685 lb.-ft. of torque—creating at the same time the most powerful big-block crate engine ever offered by GM Performance Parts.

We took the ultra-popular ZZ572/620 pump gas street engine added 12:1 compression pistons, a hotter camshaft, and our rectangular-port aluminum Bowtie heads with stiffer valve springs to work with the new cam. The block is the Gen VI tall-deck Bowtie block which was designed for the 572" application. The solid roller camshaft is a .714" lift magic maker that aggressively feeds the air/fuel mixture into the hungry, high-squeeze, stroker big-block. This creates a rev-happy monster that rocks to a 6750 rpm redline, leaving the competition in its wake.

The ZZ572/720R is rated at 720 horsepower at 6250 rpm and 685 lb.-ft. of torque at 4500 rpm. The short block is built with the best heavy-duty parts in the GM Performance Parts part bin, including a 4340 forged steel crankshaft, shot-peened forged steel rods, forged aluminum pistons with full-floating wrist pins, stiff dual valve springs, and a louvered oiling windage tray. Our Deluxe ZZ572/720R ships with a Holley four-barrel carburetor, tall-deck single-plane intake manifold, HEI distributor, aluminum short-style water pump, and 8mm spark plug wires. Distinctive "572 CHEVROLET" cast aluminum valve covers complete the package. GM Performance Parts integrated, durability-tested, and validated this combination to the described performance levels, and all you need is a GM Performance Parts lightweight starter to fire it up!



GM Performance Parts does *not* utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

ZZ572/720R DELUXE TECH SPECS:

Part Number:	12498827	Valve Size (in):	2.25 intake / 1.88 exhaust
Engine Type:	Chevy tall deck big-block V-8		stainless steel
Displacement (cu in):	572	Compression Ratio:	12:1
Bore x Stroke (in):	4.560 x 4.375	Rocker Arms (P/N 12361323):	Aluminum roller style
Block (P/N 25534368):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.7:1
Crankshaft (P/N 88961554):	Forged steel	Distributor (P/N 10093387):	Electronic ignition
Connecting Rods (P/N 88962926):	Forged steel, shot peened	Carburetor (P/N 19170096):	1090-cfm Dominator
Pistons (P/N 88963227):	Forged aluminum	Water Pump (P/N 19168602):	Aluminum, short-style
Camshaft Type (P/N 88962216):	Mechanical roller	Spark Plugs and Wires:	Included
Camshaft Lift (in):	.714 intake / .714 exhaust	Recommended Fuel:	110 octane race gas
Camshaft Duration (@.050 in):	266° intake / 274° exhaust	Ignition Timing:	Base 8° BTDC, 36° Total
Cylinder Heads (P/N 88961160):	Aluminum rectangular port, 118cc chambers	Maximum Recommended rpm:	6750
		Balanced:	Internal

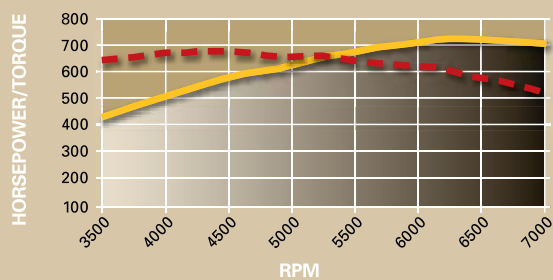


POSSIBLE APPLICATIONS*

- **Build a solid 9-second bracket car**
- **A street car with no equal**
- **A show car that shakes the trophies out of the judge's pocket**

**Applications have not been validated. They are merely suggestions of how you might enjoy your GM Performance Parts crate engine. Some applications may affect engine warranty. See page 448 for specific warranty information. Some applications may not be emission legal; check state and local ordinances.*

ZZ572/720R DYNO CHART



Horsepower: 720 @ 6250 rpm

Torque (lb-ft): 685 @ 4500 rpm

INSTALLATION NOTES

- Due to crate fitment, carburetor is shipped in a separate box and will need to be installed by engine installer.
- Clutch linkage boss is cast and machined in block, but must be drilled and tapped. When using cast iron exhaust manifolds, lower head bolts may need to be replaced with bolts with shorter heads, for clearance.
- Requires addition of starter, ignition coil, and fuel pump (not included).
- Gen VI tall-deck block has machined mechanical fuel pump boss.
- Requires internally balanced flywheel for manual transmission applications.
- Designed for pre-1979 street vehicles or any off-road vehicle.
- Not intended for marine applications.
- Big, sticky slicks will help hook up this monster!

12498826

ZZ572/720R Base Engine



From the special, orange powder-coated 572 block, aluminum rectangular-port heads, and 12:1 forged aluminum pistons, the ZZ572/720R long block includes all the features of the Deluxe, fully dressed version, minus the water pump, carburetor, intake manifold, distributor, and spark plug wires.

GMPP integrated, durability-tested, and validated this combination and determined it works best with the Deluxe version's Holley four-barrel carburetor, tall-deck single-plane intake manifold, HEI distributor, aluminum short-style water pump, and 8mm spark plug wires. Order all the parts to complete the engine from your GMPP dealer or finish with your custom parts.

NOTE: Designed for pre-1979 street vehicles or any off-road vehicle. Not intended for marine applications.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

Complete Your 572/720R Crate Engine

Select the parts below to finish off your crate engine and get running in less time!

19172805

Deluxe Serpentine Accessory Belt Drive System

Includes all accessory items to drive the A/C compressor, alternator, water pump and power steering pump. Includes pulleys, belts, brackets and fasteners.



12361146

High Torque Mini Starter

Crank up with this powerful, compact, gear-reduction starter for either 153- or 168-tooth flywheels.



25534374

Orange Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12363128

Chrome High Torque Mini Starter

Same as starter P/N 12361146 (see above), but with a chrome housing.



12371244

Natural Finish Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name.



12341999

Chrome Bowtie Fuel Pump Block-Off Plate

Plate has stamped Bowtie logo. Special non-asbestos gasket included.



12342093

Short Chrome Bowtie Valve Covers

Embossed show-quality covers. Standard height for use with most engines. May not clear brake booster on some Corvette models.



12355614

Fuel Pump, Street Performance (Chevy Big-Block)

For use on carbureted big-block engines built from 1965–1990. 7 psi shutoff pressure and a free-flow rating of 100 gph. Lower housing can be rotated to reposition inlet and outlet ports.



12342024

Chrome Water Neck

Chrome water neck with neoprene O-ring and chrome bolts. For 1966–1975 Chevrolet, Camaro, and Chevelle V-8 engines.



25115899

High Output Electric Fuel Pump

Heavy-duty 12-volt electric rotary pump flows 72 gph at 6-8 psi.



25534323

Black Powder-Coated Valve Covers

Aluminum covers with raised Bowtie insignia and Chevrolet name add flash to the big-block's wide shoulders.



19170094

Carburetor, Holley 1090-cfm

Dominator style 1090-cfm four-barrel carburetor. Features show car quality polished finish, mechanical secondaries, four-corner idle adjustment and power valve blowout protection. Custom calibrated for the ZZ572/720R crate engine.



ALSO AVAILABLE

Serpentine Accessory Drive Belt System, without A/C 19498741

4L85E Transmission 19156257

Transmission Controller 12497316

Fuel Pressure Regulator 10185094

Fuel Filter 854619

Lightweight Starter 12606096

Motor Mount (2 req.) 15529452

Motor Mount Bracket (2 req.) 14067103

Motor Mount Bolt (2 req.) 460308

Transmission Mount (700R4) 22188145

Transmission Mount (TH400) 17990778

Transmission Mount (4L60 & 4L80) 15767858

Fan Clutch (V-belt) 19150657

Fan Blade—5 Blade (Serpentine) 15563127

Fan Blade—5 Blade (V-belt) 15989194

Fan Studs—(Serpentine—4 req.) 382919

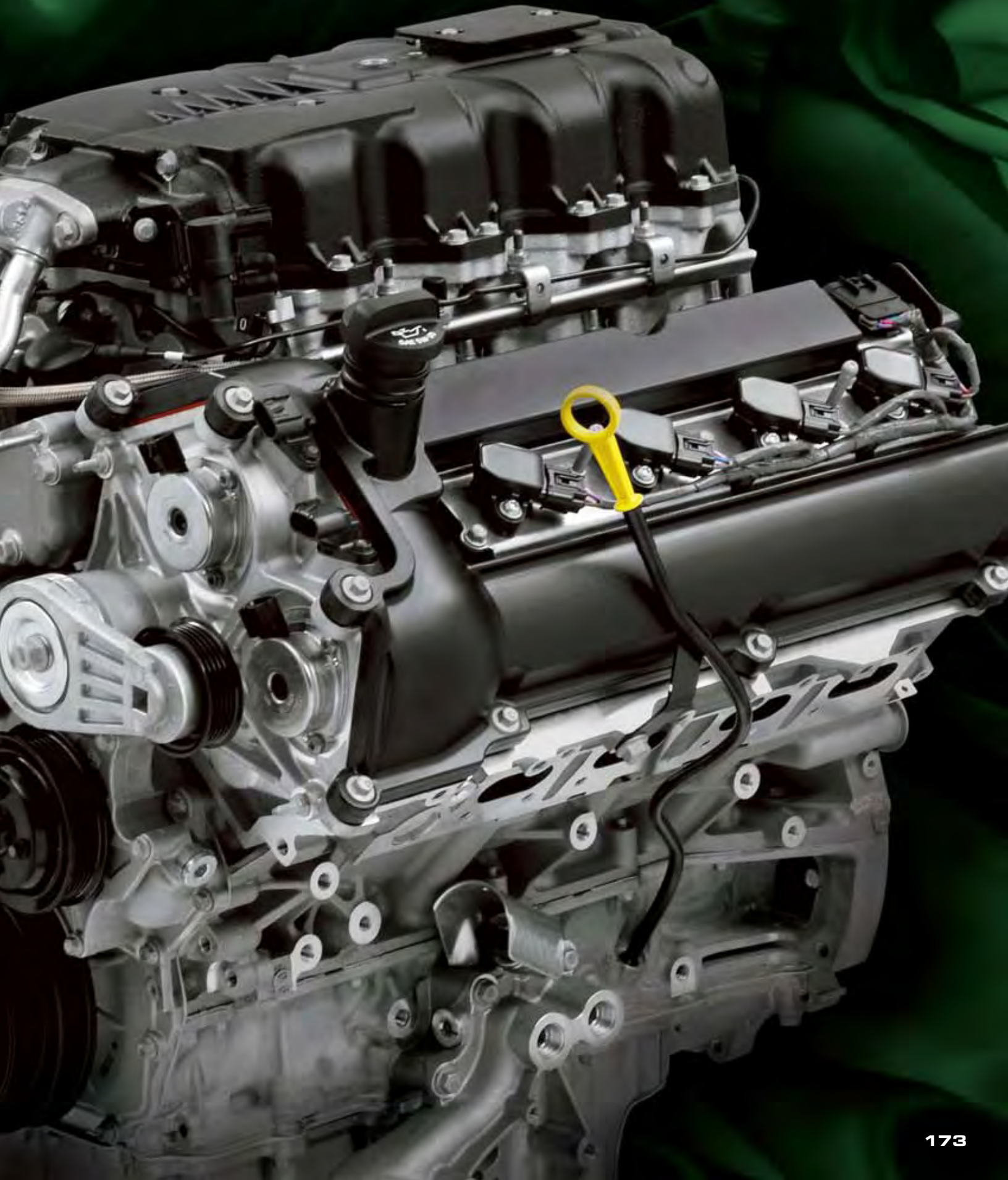
RPO Engines

Performance is a proud heritage at General Motors. And GM Performance Parts makes it possible for you to take advantage of that tradition with amazing Regular Production Option (RPO) crate engines for your specific application. Our RPO lineup includes two of the most technologically advanced small displacement engines ever produced. These engines feature all of the same high-tech fuel delivery and valvetrain components that make GM the leader in automotive innovation today.

Our RPO lineup includes the 4.6L Northstar for true performance application and the HT 3.4 V-6, which is the ideal truck replacement engine.

Choose the RPO engine that best fits your needs, and you can start enjoying the same state-of-the-art technology that drives GM!







12363230

WHILE SUPPLIES LAST

HT 3.4 V-6

A more powerful replacement for your S-truck's 2.8 V-6!

Your old S-truck has delivered 20 years of faithful service. It's time to reward it with an upgrade to an all-new, more powerful engine. The HT 3.4 is rated at 160 horsepower and 194 lb.-ft. of torque. That's an increase of 50 horses and 46 lb.-ft.! And it bolts right into the engine bay.

The HT 3.4 rejuvenates your truck with strong low-end torque and mid-range horsepower, giving it increased capability and towing capacity. It is a direct replacement for a 1982–1985 S-truck—S-10, S-15, Blazer and Jimmy—originally equipped with the 2.8L V-6 and automatic transmission.

GM Performance Parts delivers the HT 3.4 in a long-block assembly. To complete the engine, you simply swap the necessary parts, such as the intake manifold and carburetor, starter, water pump, from the 2.8L engine. It's that easy!

After all these years, your faithful truck deserves it.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

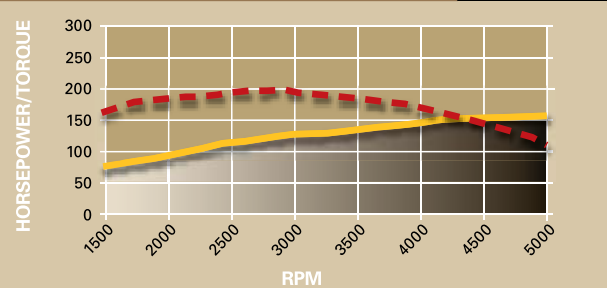
HT 3.4 V-6 TECH SPECS:

Part Number:	12363230
Engine Type:	OHV V-6
Displacement (cu in):	204
Bore x Stroke (in):	3.62 x 3.31
Block:	Iron
Cylinder Heads:	Iron
Compression Ratio:	9.0:1
Maximum Recommended rpm:	5200

INSTALLATION NOTES

- Intake manifold, carburetor, ignition system, exhaust manifolds, emissions equipment, water pump, starter and accessory drive system not included. Use parts from outgoing 2.8 V-6 engine.

HT 3.4 V-6 DYNO CHART



Horsepower: 160 @ 5000

Torque (lb-ft): 194 @ 2700

- Service parts similar to 3.4 V-6-equipped Camaro and Firebird, except camshaft and valve springs.



17802896

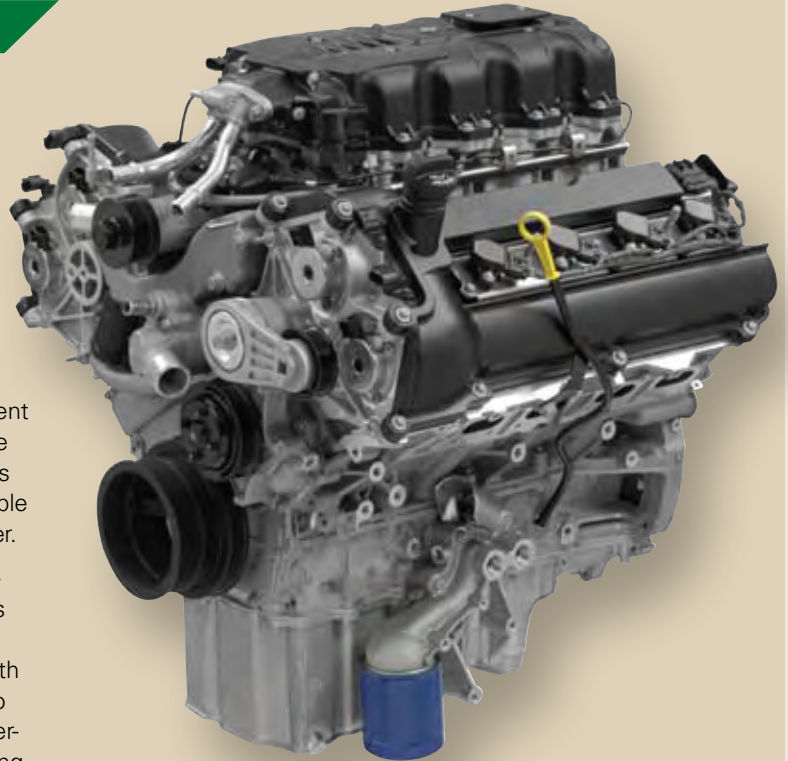
WHILE SUPPLIES LAST

4.4L LC3 Northstar

Power, efficiency and Cadillac pride delivered right to your door!

You want the ultimate in high-tech GM technology with the refinement that only Cadillac can bring you? Well, you are looking at your next project engine in our LC3 4.4L supercharged, 32-valve, DOHC V-8! The amazingly efficient (1.75 hp/cubic inch) LC3 takes the small-block V-8 to the extreme in performance, reliability, and quality. The keys to all of this are the roots-style supercharger, GM's variable valve timing valvetrain, and 4.4 liters of gentlemanly power.

Cadillac's supercharged Northstar 4.4L (LC3) V-8 is a showcase of advanced engine technology. Cadillac engineers held nothing back when building the exciting LC3 supercharged V-8. They wanted an excellent idle, smooth throttle response, and exhilarating top end power. To do this, they developed a new intercooled roots-style supercharger to work with the Northstar's variable valve timing to deliver high performance and exceptional refinement. Horsepower pops to 469 at 6400 rpm, and the extremely broad torque band peaks at 439 lbs.-ft. at 3800 rpm with 90% of that available from 2200–6000 rpm.



GM Performance Parts Crate Engines include a 24-month or 50,000-mile/80,000-kilometer limited warranty.

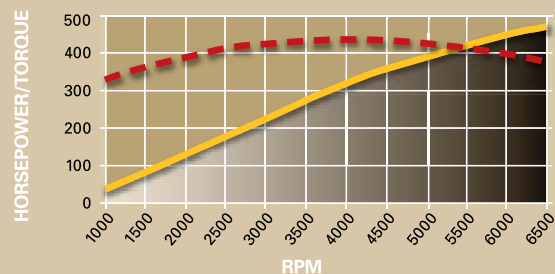


GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.

4.4L LC3 NORTHSTAR TECH SPECS:

Part Number:	17802896
Engine Type:	DOHC V-8
Displacement (cu in):	267 (4.4L)
Bore x Stroke (in):	3.58 x 3.31 (91 x 84mm)
Block:	Aluminum
Cylinder Heads:	Aluminum
Compression Ratio:	9.0:1
Fuel System:	Sequential fuel injection
Maximum Recommended rpm:	6700

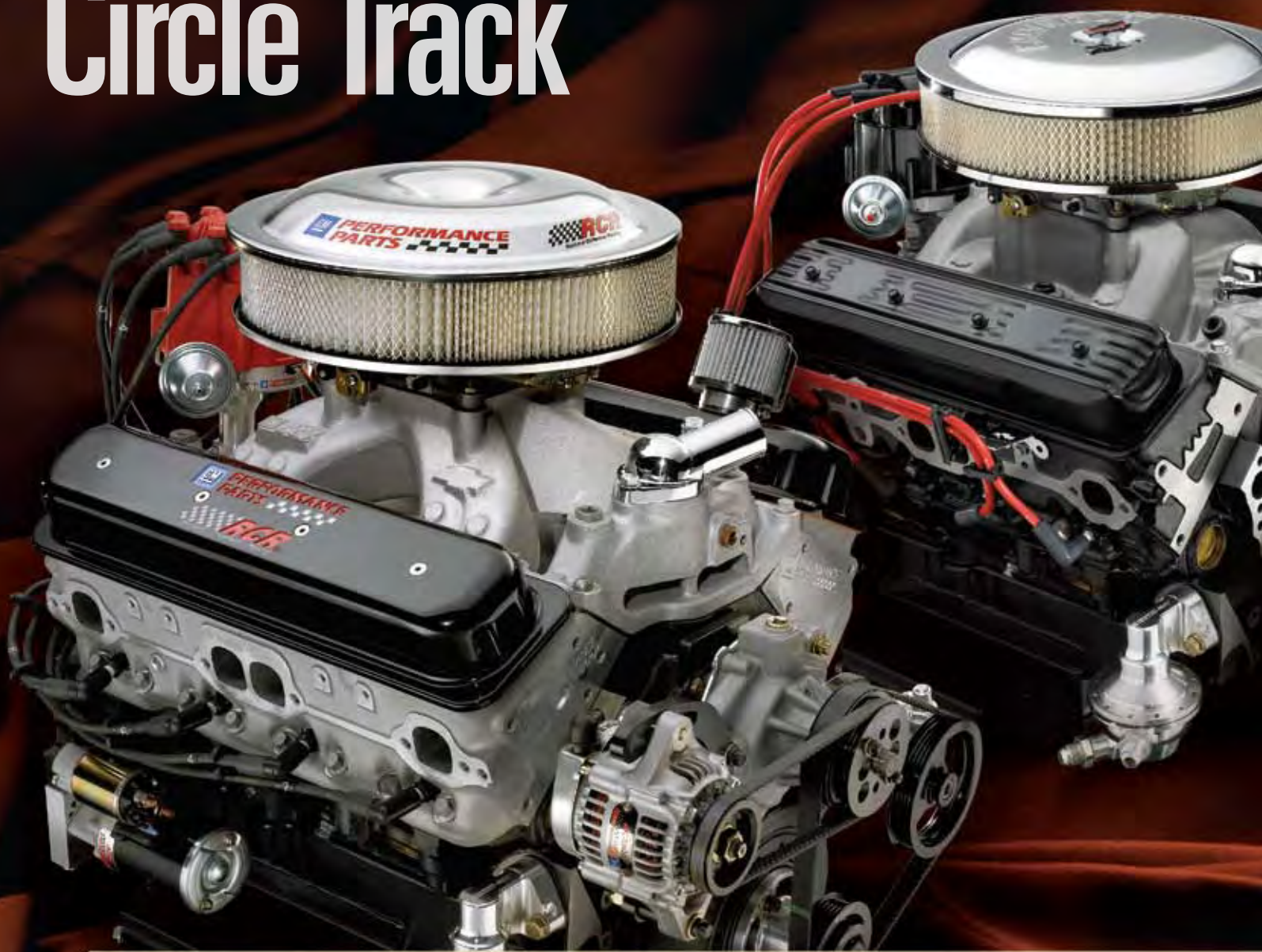
4.4L LC3 NORTHSTAR DYNO CHART



Horsepower: 469 @ 6400 rpm

Torque (lb-ft): 439 @ 3800 rpm

Circle Track

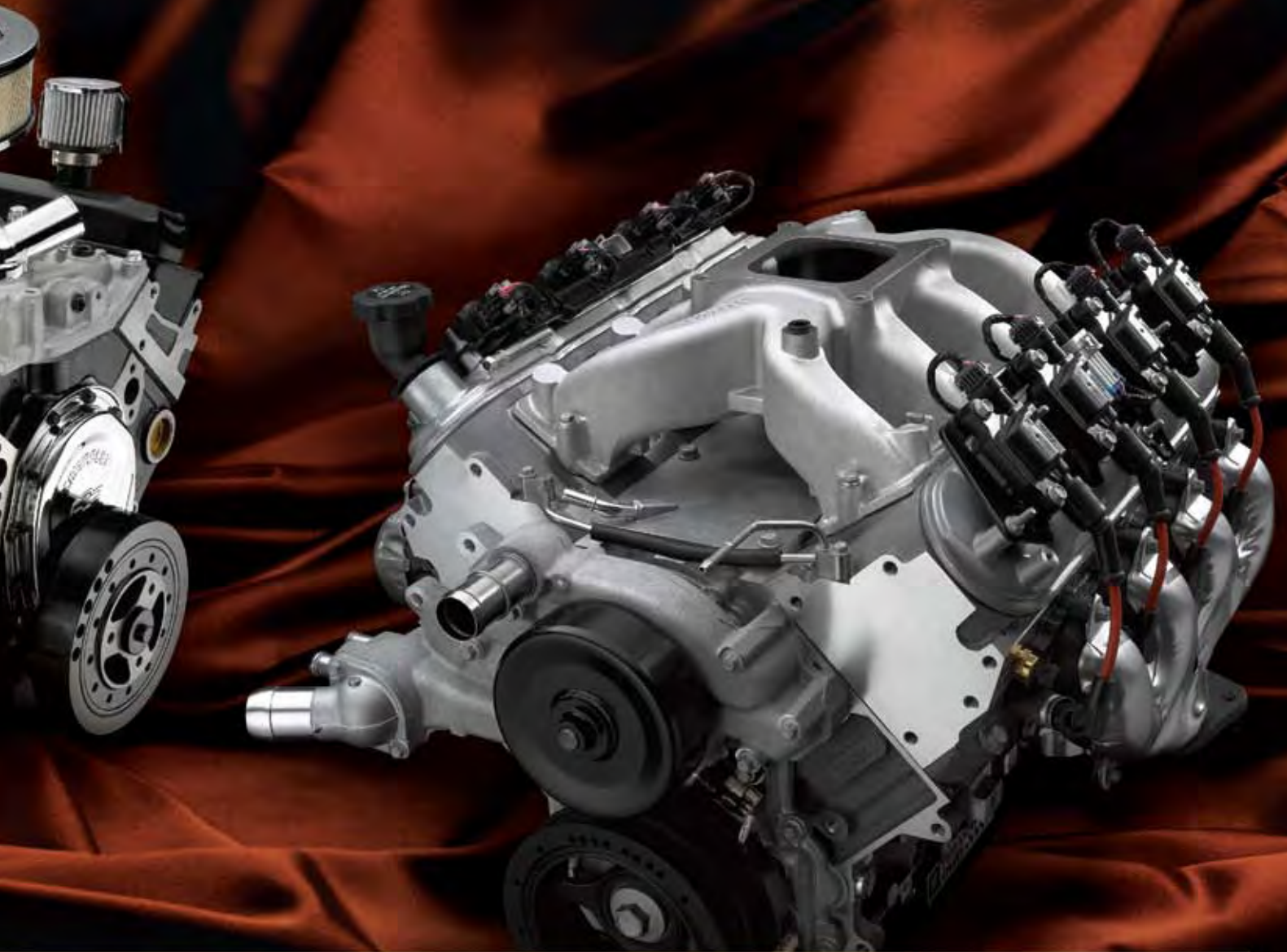


Race-proven technology at affordable prices

Racing has always been at the center of GM Performance Parts' efforts. The division was started, essentially, to supply Trans Am teams with the necessary high performance parts to compete on that ultra-competitive series.

Long before the vaunted crate engine program became a reality, GM was shipping teams from several series "power in a box." And, due to this vision, the parts used to assemble these track-ready powerplants were made available to enthusiasts at all levels. The culmination of all this was seen in 1989 with the first true "crate engine" the ZZZ 350.





The idea caught on rapidly and GM Performance Parts soon began offering crate engines in several levels of completion, allowing builders to tinker as much—or as little—as they liked. The most complete packages were known as “turn-key” engines.



Today, that concept has been taken to the next level as GM Performance Parts has created a full line of turn-key, race-ready engines that have been factory sealed with special tamper-resistant bolts. This allows racing series to “spec” an engine and know that competitors are racing on a level playing field.

And with four engines in a range of horsepower ratings to choose from, series and competitors can match an engine to their unique needs.

It helps keep the cost of racing in check, and puts the emphasis back where it belongs—on drivers and teams—rather than technology.

These bullet-proof engines give all teams the confidence of genuine GM Performance Parts.



Short Track Racing Overview



The GM Performance Parts Circle Track Crate Engine program has become an important component of many race sanctioning bodies nationwide. The ability to offer teams certified horsepower-rated engines with tamper-resistant parts at an extremely affordable price has helped level the playing field, and brought the emphasis back to driver skill and pit crew teamwork—right where it should be!

CORR

The Championship Off Road Racing series is one of the toughest tests of man and machine in all of motorsports. That's why GM Performance Parts is so proud of our partnership with CORR in the Pro Manufacturer's class featuring our LS7 crate engine.

Utilizing a new Pro Chassis as the spec chassis, Pro Manufacturer has been designed to decrease the cost of an entry level truck yet offer the same thrill of Pro-2 and Pro-4. An LS7 crate engine costs only a fraction of what a custom Pro-4 engine does, yet it offers trick parts like titanium connecting rods, titanium intake valves, and a dry-sump oiling system.

The lightweight LS7 crate engine has several other virtues that make it ideal for all forms of racing including the harsh environment of a Pro Manufacturer's truck at CORR. The LS7 also makes a ton of power—offering up 470 lbs.-ft. of torque at 4800 rpm, and 505 hp at 6300 rpm. It all adds up to 427 cubes of pure small-block perfection!



ASA Late Model Series

The ASA Late Model Series is the fastest growing Late Model Series in the country. The series has events throughout 1/3 of the country with a geographic span in the Northern, Midwest, Eastern, and Southern United States.

Top companies such as General Motors, Choice Hotels, Hoosier Tires, and dozens more have partnered with the series in an effort to strengthen our market shares together. General Motors has been a key component in the success of the series and the crate motor program overall, working to rejuvenate late-model racing throughout the country.

Over 200 professional racing teams have joined to participate in the ASA Late Model Series to garner recognition in the racing industry as a stepping stone for a higher level of professional racing. Our 2005 ASA Late Model Champion Stephen Leicht has signed and currently runs in the Busch Series as well as select Nextel Cup events. Our 2006 Champion, Kelly Bires has signed and runs the Busch Series and Craftsman Trucks.

There is a strong demand for more ASA Late Model Series racing throughout the country as many tracks are not only booking our events but developing our rules and body packages at their own tracks to offer even more exposure. This means more and more ASA Late Model Series teams that will participate with us and continue to build our market.



FASTRAK Racing Series

FASTRAK is a touring late-model dirt series that emphasizes fairness, close competition and cost reduction to deliver a great show for the fans. The FASTRAK Racing Series utilizes both the 350 hp and 400 hp GM Performance Parts CT engines. In 2007, the series expanded to 10 regions in 23 states and 39 weekly sanctioned tracks. Along with the increase in exposure came increased purses, with the championship weekend for the series posting a record \$350,000 in awards—the biggest payout ever for short track racing.

By working closely with manufacturers, FASTRAK has been able to keep costs in check for engines and tires—two major expenditures for racers.



IMCA

The International Motor Contest Association (IMCA), organized in 1915, is the oldest active automobile racing sanctioning body in the United States. IMCA is based on fair and consistent rules that promote affordability as the foundation of weekly short track racing. They have continued to see remarkable growth, in spite of the economic challenges of the last decade.

The IMCA SportMod division is where the CT350 from GM Performance Parts shines. Introduced in 2005, the division has taken off in its three years of existence, reaching a record 300 drivers in 2007. Tracy Wassenberg of Shawano, Wis., raced his crate motor into victory lane ahead of 103 other drivers at last year's 25th anniversary Speedway Motors Super Nationals at the Boone, IA, Speedway.

New this year is the Crate Model class, featuring the CT400 engine from GM Performance Parts in a full bodied late-model car.



StormPay.com Dirt Model Series Powered by Crate Racin' USA

"The GM Performance Crate Engine has provided an economical way to enable competitors to go dirt late-model racing, that otherwise wouldn't have been able to endure the cost to do so," Vaughn said. "The affordability of the GM Performance Crate Engine has given young up and coming racers the opportunity to move up to dirt late-model racing from the lower weekly divisions, and it has also extended the careers of seasoned veterans that could no longer afford the high costs of aftermarket engines. Through the StormPay.com Dirt Late Model Series utilizing the GM Performance Crate Engine, drivers can now economically compete on the national stage of dirt late-model racing with an affordable budget."



Westcar Late Model Series

Riding the plentiful power of the CT400 engine, crate racing has made a strong standing the western United States, with the Westcar Late Model Series running on paved tracks across northern California.

In 2007 action, rookie Jarred Beddow used patient, consistent racing to claim the series crown, recording six top-five finishes, and never finishing outside the top-ten. It is the same kind of consistency delivered by the GM Performance Parts crate engines used on the circuit—and consistency to match the quality of the racing on this growing circuit.





88958602

CT350

WHAT'S HOT?

■ Vortec cylinder heads

■ High-rise, dual-plane intake

■ Dual-pattern cam

Competitive and durable racing power at an economical price!

Designed for circle track's weekend warriors, this bullet-proof 350-horsepower, 350-cubic-inch factory-sealed racing engine is a tough combination of power and reliability—and it fits almost any racing budget.

Based on GM Performance Parts' popular 350 HO engine, including a brand-new, four-bolt-main block, 9:1 hypereutectic pistons, cast iron crankshaft and GM iron Vortec cylinder heads, the CT350 Factory Stock version features a high-rise dual-plane intake manifold, 8-quart single kick-out circle track oil pan, valve cover kit with breather tubes and filters, and special "kool nut" rocker arm nut design.

The 350 HO's unique dual-pattern cam is included, too. It's based on the one found in 1965–67 Corvette 327 engines, but with more lift and duration to clear the engine exhaust quickly and move in more air—providing excellent mid- and high-range power, where you need it on the track.

Delivered complete from the oil pan to the intake manifold—including an HEI distributor—the CT350 racing engine has the proven parts and horsepower to enable a competitive racecar. Getting it into the winner's circle, however, is your job!



GM Performance Parts *does not* utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

CT350TECH SPECS:

Part Number:	88958602	Cylinder Heads (P/N 12558060):	Vortec iron; 64cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	9.1:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 14088526):	Nodular iron	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 12514101):	Hypereutectic aluminum	Maximum Recommended rpm:	5500
Camshaft Type (P/N 24502476):	Hydraulic flat tappet		
Camshaft Lift (in):	.435 intake / .460 exhaust		
Camshaft Duration (@.050 in):	212° intake / 222° exhaust		

NOTE: Distributor included with CT350 engine has melonized steel gear P/N 10456413. This **MUST** be used with engines with steel camshafts, or engine damage will occur.

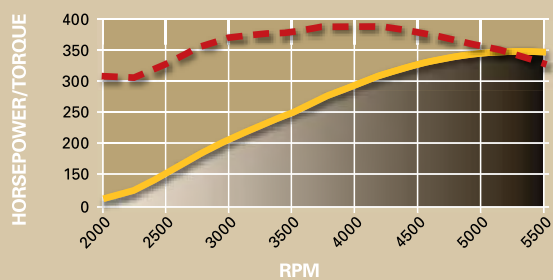


OUR "STREET-STOCK" ENGINE *

- Track-tested durability!
- Great mid-range power!
- Best horsepower value around!
- Factory-sealed for equal competition

*Check track rules for correct application.

CT350 DYNO CHART



Horsepower: 350 @ 5000 rpm

Torque (lb-ft): 390 @ 3800 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, water pump, plug wires and exhaust system (not included).
- Requires an externally balanced flywheel (not included). See page 247 for flywheel selection.
- The 8-quart circle track oil pan is 8" deep at the sump. It will clear most GM rear-steer chassis with stock engine location.



88958603

CT355

WHAT'S HOT?

■ Based on the ZZ4

■ 405 lb.-ft. of torque

■ High-performance heads

A great racing engine based on our proven ZZ4 small-block crate engine!

With the heart of the proven, durable ZZ4 crate engine, the CT355 Limited Late Model factory-sealed racing engine has all the power to keep you at the front of the pack for Saturday night's feature race.

The CT355 is rated at 355 horsepower and 405 lb.-ft. of torque and has all the tough basics of the ZZ4 street engine, including a forged steel crankshaft, hypereutectic pistons, steel hydraulic roller camshaft and aluminum cylinder heads. The high-performance ZZ4 heads feature D-shaped exhaust ports and high-velocity intake runners to promote fast and unobstructed flow through the engine, providing great high-rpm performance on the racetrack.

An 8-quart circle track oil pan, with dual kick-out design, handles the oil storage, along with a valve cover breather kit and special "kool nut" rocker nut design. The assembly also includes a dual-plane high-rise intake manifold, HEI distributor and cast iron water pump.

Add your carburetor, starter and exhaust—and don't forget to thank GM Performance Parts when giving your winner's circle interview!



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

CT355 TECH SPECS:

Part Number:	88958603	Cylinder Heads (P/N 12556463):	Aluminum; 58cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	1.94 intake / 1.50 exhaust
Displacement (cu in):	350	Compression Ratio:	10:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 10089648):	Stamped steel
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12556307):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 10159436):	Hypereutectic aluminum	Maximum Recommended rpm:	5800
Camshaft Type (P/N 10185071):	Steel hydraulic roller		
Camshaft Lift (in):	.474 intake / .510 exhaust		
Camshaft Duration (@.050 in):	208° intake / 221° exhaust		

NOTE: Distributor included with the CT355 engine has a melonized steel gear P/N 10456413. This **MUST** be used with engines with steel camshafts, or engine damage will occur.

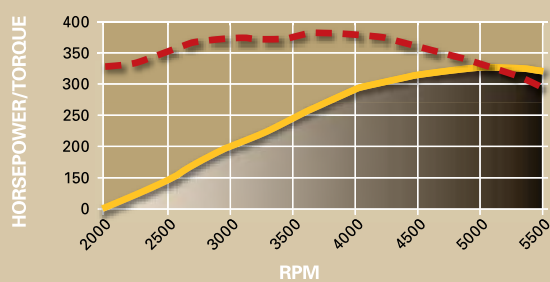


OUR "LIMITED LATE-MODEL" ENGINE *

- **Upgraded components for the long run!**
- **Great horsepower value!**
- **Factory-sealed for equal competition**

*Check track rules for correct application.

CT355 DYNO CHART



Horsepower: 355 @ 5250 rpm

Torque (lb-ft): 405 @ 3500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, plug wires and exhaust system (not included).
- Requires an externally balanced flywheel (not included). See page 247 for flywheel selection.
- The 8-quart circle track oil pan is 7" deep at the sump. It will clear most GM rear-steer chassis with stock engine location.



88958604

CT400

WHAT'S HOT?

Fast-Burn heads

Forged steel crankshaft

High-rise single plane intake

Run up front with our race-winning 400-horsepower 350 with Fast Burn heads!

GM Performance Part's Fast-Burn cylinder heads are the fast way to the winner's circle—and they're standard on the CT400 Late-Model GM racing engine from GM Performance Parts.

This brand-new, factory-sealed racing engine is based on the popular Fast-Burn 385-horsepower street crate engine, but includes a racing-only 8-quart circle track oil pan, with dual kick-out design, along with a valve cover breather kit and special "kool nut" rocker arm design. The assembly also includes an open-plenum high-rise intake manifold and 1.5:1-ratio aluminum roller rockers.

Because it's based on the 350 Fast-Burn engine, the CT400 racing engine includes a bulletproof bottom end, anchored by a forged steel crankshaft and hypereutectic pistons. The 23° Fast-Burn aluminum heads enable tremendous power in the small-block V-8 because of a unique chamber design that quickly and completely burns the air/fuel mixture—giving you maximum power.

With the CT400 racing engine under the hood of your late-model, you'll put a "fast-burn" on the competition.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

CT400 TECH SPECS:

Part Number:	88958604	Cylinder Heads (P/N 12464298):	Fast Burn aluminum; 62cc chambers
Engine Type:	Chevy small-block V-8	Valve Size (in):	2.00 intake / 1.55 exhaust
Displacement (cu in):	350	Compression Ratio:	9.6:1
Bore x Stroke (in):	4.00 x 3.48	Rocker Arms (P/N 12367345):	Aluminum; roller style
Block (P/N 10105123):	Cast iron with 4-bolt main caps	Rocker Arm Ratio:	1.5:1
Crankshaft (P/N 12556307):	Forged steel	Recommended Fuel:	92 octane
Connecting Rods (P/N 10108688):	Powdered metal steel	Ignition Timing:	Base 10° BTDC, 32° Total
Pistons (P/N 10159436):	Hypereutectic aluminum	Maximum Recommended rpm:	5800
Camshaft Type (P/N 10185071):	Steel hydraulic roller		
Camshaft Lift (in):	.474 intake / .510 exhaust		
Camshaft Duration (@.050 in):	208° intake / 221° exhaust		

NOTE: Distributor with melonized steel gear **MUST** be used with long blocks and partial engines with steel camshafts, or engine damage will occur.

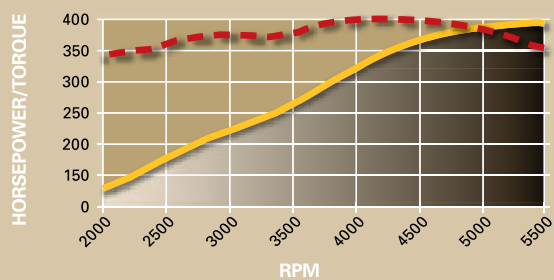


OUR "LATE-MODEL" ENGINE*

- **High-revving matched components!**
- **A fraction of the price of a custom engine!**
- **Factory-sealed for equal competition**

*Check track rules for correct application.

CT400 DYNO CHART



Horsepower: 400 @ 5500 rpm

Torque (lb-ft): 400 @ 4500 rpm

INSTALLATION NOTES

- Requires addition of carburetor, starter, ignition, plug wires, water pump and exhaust system (not included).
- Requires an externally balanced flywheel (not included). See page 247 for flywheel selection.
- The 8-quart circle track oil pan is 7" deep at the sump. It will clear most GM rear-steer chassis with stock engine location.

Richard Childress Racing Parts

His name is Richard Childress, and his racing efforts are legendary in the world of circle track and NASCAR. Richard Childress Racing (RCR) and GM Performance Parts have been teammates for over twenty years. That partnership has resulted in multiple event wins and championships for RCR, and countless engineering breakthroughs and validations for GM Performance Parts.

Starting in 2007, you will be able to take advantage of the RCR and GMPP effort with an exciting new line of circle track parts designed to enhance the capabilities of your circle track race car. These products include a high-flow 14" air cleaner, 50 amp alternator, HEI distributor, 70 GPH fuel pump, front drive kit, spark plug wires, lightweight starter, valve covers, competition water pump, power steering pump assembly, and more. Each part has been tested and approved by Richard Childress himself.

Looking for the winning edge with your circle track combination? Look to RCR and GMPP to take your circle track racing efforts to the next level.



**RCRST450
Starter**

This 10 lb. high-torque starter will work with both 153 and 168 tooth flywheels. It is a 3.75 to 1 gear reduction with a 1.4 KW motor.



**RCRAC100
Air Cleaner**

Clear anodized super-light 14" aluminum drop-down air cleaner with element.



**RCRDS251
Pro Billet Distributor**

Pro Billet Distributor with adjustable mechanical advance and powdered metal gear. Must be used with MSD 6, 7, 8 or 10 series ignition.



**RCRFP300
Fuel Pump**

Professionally designed billet mechanical fuel pump delivers 70 GPH at 7 PSI.



**RCRDS250
Distributor**

Pro Billet HEI Distributor with oversized shaft, sealed ball bearing and long sintered bushing. Extra springs and bushings are included to tailor your curve. It includes a removable vacuum advance canister.



**RCRVC500
Valve Covers**

A beautiful, powder-coated die cast aluminum cover set with breather tubes and a deep groove for good gasket retention. Comes with retaining bolts.



**RCRSP400
Spark Plug Wires**

An 8mm spiral core spark plug wire set fitted and numbered with a wire loom kit. Designed to route under the headers with 90° high temp spark plug boots and HEI Distributor boots.



**RCRWP550
Water Pump**

A competition proven water pump made from 356 T6 aluminum with heavy duty bearing and seal. Includes an installation kit complete with gaskets, bolts and spacers.



**RCRPS601
Power Steering
Pump Assembly**

This is a low drag pump designed for race applications. The internal design adjusts fluid volume/pressure resulting in lower operating temperatures and less parasitic horsepower loss. Comes complete with pulley and belt to work with RCRFD350 Front Drive Kit.

**RCRAL150
Alternator**

A lightweight 93mm housing 50 amp Denso alternator from Denso designed for professional motorsports use.

**RCRAL152
Alternator Mounting
Hardware**

Designed to be used with the 93mm RCRAL150 Denso alternator and the RCRFD350 Front Drive Kit.

**RCRAL151
Alternator
Installation Kit**

Complete your alternator installation with a 2.700" diameter pulley and a 25" 3 rib belt.

**RCRPS600
Power Steering
Bracket**

A billet aluminum power steering bracket allows a low-mount for the power steering pump, RCRPS601.

**RCRFD350
Front Drive Kit**

An upper and lower serpentine pulley set that provides a 7% underdrive for the water pump. Comes complete with drivehub, belt and necessary installation hardware.

GASKET KITS

**19201171 NEW
Rebuild Gasket Kit**

Fits P/N 88958602 and includes the following items:

2	10105117	Head Gasket
1	10108676	Oil Pan Gasket Set
1	12555771	Rear Main Seal Housing Gasket
1	89017465	Intake Manifold Gasket Set
1	10105135	Water Outlet Gasket
1	10108435	Front Cover Gasket
1	12560223	Fuel Pump Adapter Gasket
2	3754587	Water Pump Gasket
1	10108445	Distributor Gasket
2	10046089	Valve Cover Gasket
1	12554314	Crankshaft Rear Main Seal

**19201172 NEW
Rebuild Gasket Kit**

Fits P/N 88958603 and 88958604, and includes the following items:

2	12557236	Head Gasket
1	10108676	Oil Pan Gasket Set
1	12555771	Rear Main Seal Housing Gasket
1	89017465	Intake Manifold Gasket Set
1	10147994	Intake Manifold Gasket Set
1	10105135	Water Outlet Gasket
1	12560223	Fuel Pump Adapter Gasket
2	3754587	Water Pump Gasket
1	10108445	Distributor Gasket
2	10046089	Valve Cover Gasket
1	12554314	Crankshaft Rear Main Seal

ATTENTION GM DEALERS: The parts on these pages are General Motors LICENSED PRODUCTS and must be ordered from the supplier (except P/N 19201171 and P/N 19201172). See Bulletin number ACC06-039 for detailed instruction.



19171821

NEW

CT525 6.2L

WHAT'S HOT?

■ LS rectangular port heads

■ All-aluminum design

■ Racing camshaft

BIG POWER in a small-block package!

Designed for racing classes requiring more power than our proven CT350, CT355 and CT400 GEN I based racing engines, the all-new CT525 delivers the goods! It is an ideal engine for Super Late-Model-type cars.

Based on the latest production version of the now-famous Gen IV LS family of GM small-blocks that power the C6 Corvette, the CT525 is destined to set a new standard for affordable power. Aluminum block and heads, hypereutectic aluminum pistons, nodular iron crank and hydraulic roller tappet camshaft churn out an impressive 525 horses in a bullet-proof race-proven package. The recent design changes that have produced the power-building rectangular port cylinder head design, also create a torque-y, yet relatively high revving engine. The CT525 fills the "Need for Speed" at a surprisingly affordable price. The CT525 uses a conventional four-barrel carb, individual runner manifold, retaining the factory coil-near-plug ignition design.

And don't forget your LSX Ignition Controller! See page 291 for more information.



GM Performance Parts does not utilize any used or remanufactured parts in this crate engine.



GM Performance Parts Racing Crate Engines are excluded from limited warranty.

CT525 6.2L TECH SPECS:

Part Number:	19171821	Cylinder Heads (P/N 12598594):	LS3 rectangle port; as-cast with 68cc chambers
Engine Type:	LS Series Gen IV small-block V-8	Valve Size (in):	2.16 intake / 1.59 exhaust
Displacement (cu in):	376 cu in (6.2L)	Compression Ratio:	10.7:1
Bore x Stroke (in):	4.06 x 3.62 (103.25 x 92mm)	Rocker Arms (P/N 12569167 int):	Investment cast, roller trunnion
Block (P/N 12584727):	Cast aluminum with 6-bolt, cross-bolted main caps	Rocker Arms (P/N 10214664 exh):	Investment cast, roller trunnion
Crankshaft (P/N 12597569):	Nodular iron	Rocker Arm Ratio:	1.7:1
Connecting Rods (P/N 12617570):	Powdered metal	Recommended Fuel:	92 octane
Pistons (P/N 19165089):	Hypereutectic aluminum	Maximum Recommended rpm:	6700
Camshaft Type (P/N 12480110):	Hydraulic roller	Reluctor Wheel:	58X
Valve Lift (in):	.525" intake / .525" exhaust	Balanced:	Internal
Camshaft Duration (@.050 in):	226° intake / 236° exhaust		

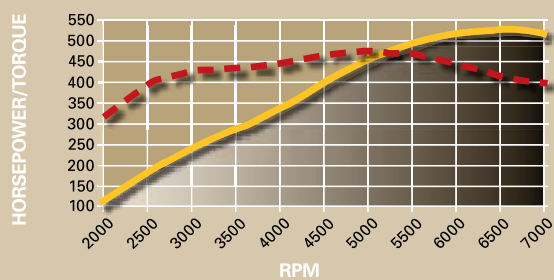


OUR "SUPER LATE-MODEL" ENGINE*

- The "Next Big Thing" in short track racing engines
- Best racing power-per-dollar value yet!
- New technology with a familiar 4-barrel carb

*Check track rules for correct application.

CT525 6.2L DYNO CHART



Horsepower: 525 @ 6700 rpm

Torque (lb-ft): 471 @ 5000 rpm

INSTALLATION NOTES

- Use LSX ignition controller P/N 19171130 (page 291).
- Requires addition of carburetor, starter, exhaust system and engine controller (P/N 19171130).
- Includes flywheel.
- The 8-quart circle track oil pan is designed to clear most GM rear-steer chassis with stock engine location.



Parts

After hundreds of thousands of miles, you may choose to replace your engine with a genuine GM Replacement Engine. You'll find that nothing meets the requirements of daily driving or work duty like a GM engine that has been built just like the original. We've listed the factory applications for these replacement engines, but feel free to dream up your own combination. Designed by GM engineers, validated in our test labs, and proven on the streets of America, it's hard to beat a GM Replacement Engine for performance and dependability. This is just a sample of some of the GM Engines we offer.







12491851

4.8L LR4

The LR4, or the Vortec 4800, is a proven V-8 truck engine. It displaces 4.8L with a 96mm bore and an 83mm stroke. A direct, cast iron relative to the LS1 small-block Corvette/F-body engine, it produces 275 hp and 285–290 lb.-ft. of torque. The LR4 shares the same block and cylinder heads as the Vortec 5300. Available new or remanufactured.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

4.8L LR4 APPLICATION DATA

12457703	NEW	1999 Chevy/GMC Pickup (CK1)
12457704	NEW	1999 Chevy/GMC Pickup (CK1)
12491851	REMAN	2001–2004 Chevy/GMC Pickup (CK1)
		2003–2004 Chevy/GMC Express, Savana (G2, 3)
88893289	NEW	2000 Chevy/GMC Pickup, Suburban, Tahoe (CK1)
88893290	NEW	2000 Chevy/GMC Pickup, Suburban, Tahoe (CK1)



12491854

5.3L LM7/L59

The Vortec 5300 LM7/L59 is a V-8 engine for 1999–2006 vehicles, such as the Silverado and Sierra, as well as sport utility vehicles. The LM7/L59 uses a cast iron block. In production form, the 5.3L LM7/L59 is rated at 285 hp and 325–330 lb.-ft. of torque. The LM7/L59 displaces 5.3L from its 96mm bore and 92mm stroke. Available new or remanufactured.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

5.3L LM7/L59 APPLICATION DATA

12457705	NEW	1999 Chevy/GMC Pickup (CK1, 2)
12491854	REMAN	2003–2004 Chevy/GMC Pickup, Suburban, Tahoe, Yukon (CK1)
		2003–2004 Chevy/GMC Express, Savana (GH1, 2)
		2002–2003 Chevy/GMC Pickup (CK1, 2)
		2002 Chevy/GMC Pickup (K1)
		2001 Chevy/GMC Pickup (CK1)
88893291	NEW	2000 Chevy/GMC Pickup, Suburban, Tahoe, Yukon (CK1, 2)



12491857

6.0L LQ4/LQ9

The LQ4/LQ9 or Vortec 6000 is a V-8 truck/sport utility engine. It is a bored version of the Vortec 5300 that displaces 6.0L from its 101.6mm bore and 92mm stroke. The LQ4/LQ9 uses an iron block and aluminum heads, and in production form produces 300–325 hp and 360–370 lb.-ft. of torque. Available new or remanufactured.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

6.0L LQ4/LQ9 APPLICATION DATA

12491357	REMAN	2001–2004 Chevy/GMC Pickup, Suburban, Yukon, Denali, Escalade (CK1, 2, 3)
		2003–2005 Chevy/GMC Pickup, Suburban, Yukon, Denali, Escalade (CK2, 3)
		2003–2005 Chevy/GMC Express, Savana (G2, 3)
		2003–2005 Chevy/GMC H2 Hummer (N257)
		2005 Chevy/GMC Pickup (CK157)
12491860	REMAN	2004 Chevy/GMC Pickup, Suburban, Yukon, Denali, Escalade (CK1)
		2002–2003 Chevy/GMC Pickup, Suburban, Yukon, Denali, Escalade (K1)



12607031

2.2L L61

The L61 displaces 2.2L from an 86mm (3.38") bore and a 94.6mm (3.72") stroke. Compression is 9.5:1 or 10:1, delivering 135–143 hp and 142 lb.-ft. of torque.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

2.2L L61 APPLICATION DATA

12607031	NEW	2002–2005 Chevrolet Cavalier (J)
		2004–2005 Chevrolet Classic 4 DR Notchback (N)
		2002–2005 Pontiac Sunfire (J)
		2002–2005 Pontiac Grand Am (N)
		2002–2004 Oldsmobile Alero (N)
		<i>NOTES: For 2002 and 2003, fuel rail/injectors must be changed to 2003 content. If using on vehicle with manual transmission, transfer flywheel from existing engine.</i>

12601063	NEW	2005–2006 Chevrolet Cobalt (3A)
		2004–2006 Chevrolet Malibu (3Z)
		2006 Chevrolet HHR (TA)
		<i>NOTES: If using on vehicle with manual transmission, transfer fly wheel from existing engine.</i>
89060389	REMAN	2002–2004 Alero, Grand Am, Cavalier, Sunfire, '04 Classic
89060390	REMAN	2005–2006 Vue, Ion, Cobalt, '06 HHR
89060391	REMAN	2005 Cavalier, Sunfire, Grand Am, Classic



12491869

4.3L LU3

The LU3 Vortec 4300 is a 90° V-6 truck/sport utility engine, that is based on the same architecture as the 350/5.7L Chevrolet small-block V-8. The LU3 uses a cast iron block and heads with a 101.60mm (4.00") bore and 88.39mm (3.48") stroke. Power output of the LU3 engine is 180–200 hp and 245–260 lb.-ft. of torque. Available new or remanufactured.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

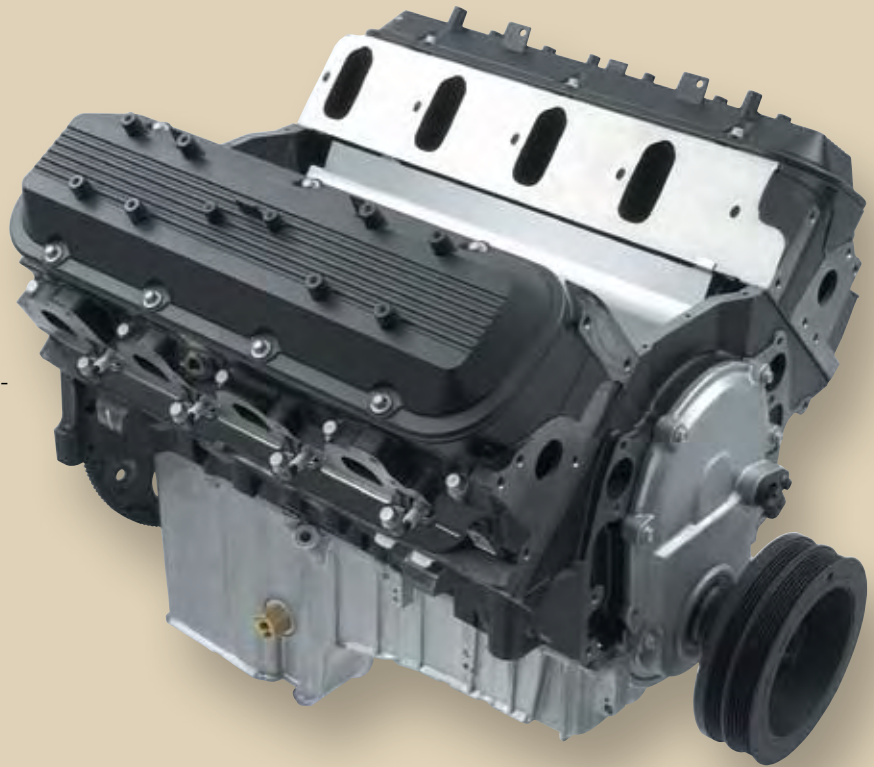
4.3L LU3 APPLICATION DATA

12491869	REMAN	2001–2002 Chevy/GMC Pickup, Blazer, Jimmy (ST1)	89017324	NEW	2003–2005 Chevy/GMC Pickup, Blazer, Jimmy (ST1)
		2001–2002 Chevy/GMC Pickup (CK1)			2003–2006 Chevy/GMC Express, Savana (G1, 2)
		2001–2002 Chevy/GMC Express, Savana (G1, 2)			2003–2005 Chevrolet Astro, Safari (LM1)
		2001–2002 Chevy/GMC Astro, Safari (LM1)			<i>NOTES: Swap oil pan from original engine or buy new P/N 12555653 as required for oil level switch.</i>
89017323	NEW	2001–2002 Chevy/GMC Pickup, Blazer, Jimmy (T1)			
		2001–2002 Chevy/GMC Astro, Safari (LM1)			
		<i>NOTES: Light duty deep oil pan</i>			

89017618

8.1L L18

The L18 Vortec 8100 is a V-8 truck/sport utility engine. It was first introduced in pickups, Suburbans and Yukons in 2001. It displaces 8.1L from a 107.95mm bore and 111mm stroke. It is an all-iron engine (block and heads) with two valves per cylinder. In production trim, the L18 produces 225–340 hp and 350–455 lb.-ft. of torque.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

8.1L L18 APPLICATION DATA

88894039 NEW 2001 Chevy/GMC Pickup, Suburban, Yukon (CK2, 3)

89017618 NEW 2001–2002 Chevy/GMC Pickup (C3)

2001–2002 Chevy/GMC Express, Savana (G3)

2001 Chevy/GMC Pickup, Suburban, Yukon (CK2, 3)

2002–2003 Chevy/GMC Pickup, Suburban, Avalanche, Yukon, Escalade (CK2, 3)

2004–2006 Chevy/GMC Pickup, Suburban, Yukon (CK2, 3)

NOTES: When using in a 2001–2002 vehicle, use a 2003 tube, oil fill.

89017619 NEW 2001–2002 Chevy/GMC Kodiak/Topkick 4 x 2 2WD

(C6, 7), Kodiak/Topkick 6 x 4 2WD (C6)

2001–2002 Chevy/GMC MD Bus Chassis (B7)

2002 Chevy/GMC Kodiak/Topkick 4 x 2 2WD (C7H0)

2003 Chevy/GMC Kodiak/Topkick 4 x 2 C 2WD (C6, 7)

2003–2006 Chevy/GMC Kodiak/Topkick 4 x 2 2WD (C6, 7, 8)

NOTES: 2002 or previous model years, transfer harmonic balancer, valve covers, spark plug wire harness, ignition coils and ignition coil harness.

89017620 NEW 2005–2006 Chevy/GMC Kodiak/Topkick 4 x 2 2WD

(C4, 5), Kodiak/Topkick 4 x 4 2WD (C4, 5)



Parts



10067353

5.7L Gen 0

The Gen 0 small-block features excellent performance and durability across a wide variety of applications. Part of GM's small-block V-8 series, it's one of the most successful engines in our automotive history. Available for most GM applications from 1970 to 1985. The nodular iron crankshaft features enlarged journal fillets for increased durability. The Gen 0 features a four-bolt main bearing block and aluminum sump head design pistons with full skirts. It has a hydraulic camshaft (P/N 12364051), and cast iron cylinder heads. The Gen 0 displaces 5.7L from a 101.60mm (4.00") bore and 88.39mm (3.48") stroke. The 5.7L is an all-iron GM small-block V-8.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

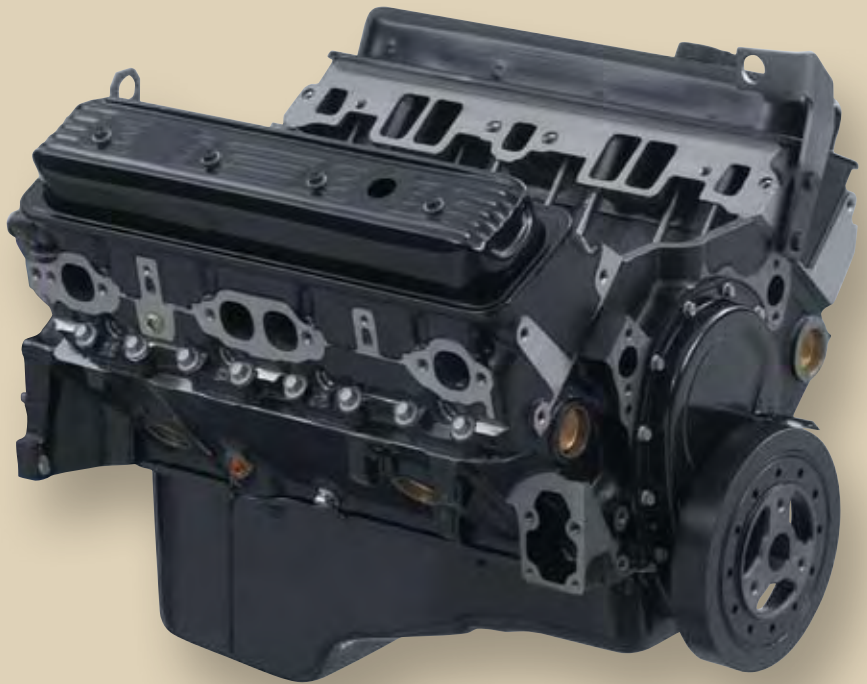
5.7L GEN 0 APPLICATION DATA

10067353 NEW	1975–1978 Chevy/GMC Pickup (C1)	1980–1985 Chevy/GMC Van (G1, 2, 3)
	1975 Chevy/GMC Blazer, Jimmy (C1)	1981–1982 Chevy/GMC Pickup (CK1)
	1975 Chevy/GMC Van (G1)	1983–1985 Chevrolet Caprice Classic, Impala (B)
	1978–1980 Chevy/GMC Van (G2, 3)	1973–1980 Chevrolet Corvette (Y)
	1979–1985 Chevy/GMC Pickup, Suburban, Blazer, Jimmy (K1)	1984–1985 Pontiac Parisienne (B)
	1979–1980 Chevy/GMC Pickup, Suburban, Blazer, Jimmy (CK1)	<i>NOTES: 4-bolt main cap, replacement timing pointer tabs P/N 3991435 or P/N 3991436, see catalog for specific applications.</i>
	1979–1980 Chevy/GMC Suburban (CK1, 2)	
	1979–1985 Chevy/GMC Suburban (CK1)	

12568758

5.7L Gen I

With all new castings and content, the 5.7L 350 cid Gen I is a short block assembly with a 9.0/1 compression ratio. It includes a cast iron alloy cylinder block, 4-bolt main bearing caps, a nodular cast iron crankshaft, a 1-piece rear main seal design, powdered metal steel connecting rods, cast aluminum alloy pistons with sump head design and closed skirts, bronze freeze plugs, and a gear driven oil pump assembly. The Gen I has the fuel pump pad machined, but does not have a hole for the fuel pump pushrod. It displaces 5.7L from a 101.60mm (4.00") bore and 88.39mm (3.48") stroke. The 5.7L is an all-iron GM small-block V-8.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

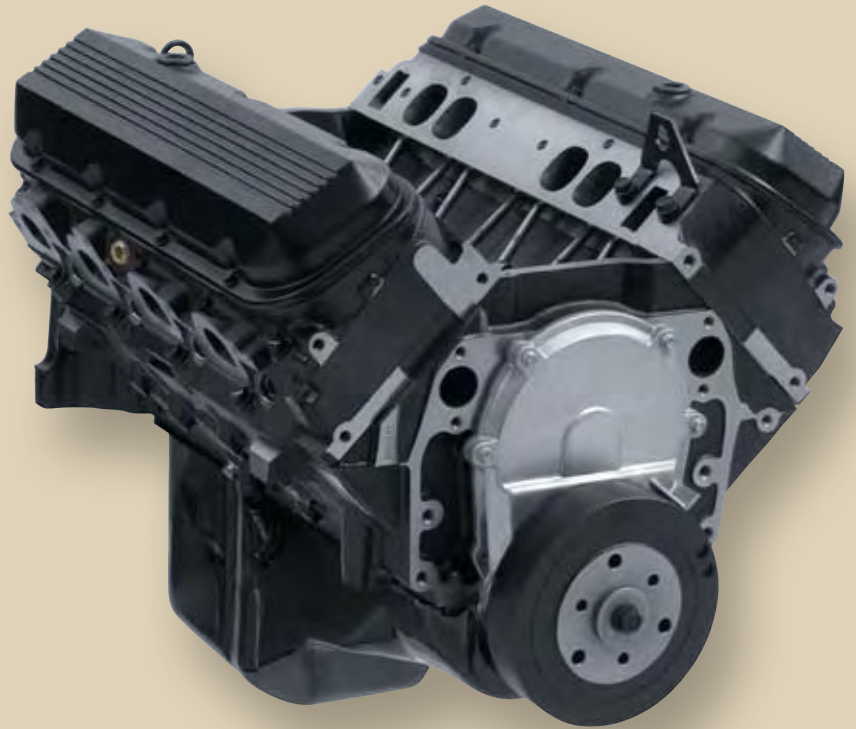
5.7L GEN I APPLICATION DATA

12568758	NEW	1987–1994 Chevy/GMC Van (G1, 2, 3)
		1987 Chevy/GMC Pickup, Suburban (RV1, 2)
		1988–1991 Chevy/GMC Suburban (RV1)
		1988–1991 Chevy/GMC Pickup (CK1, 2)
		1992–1995 Chevy/GMC Pickup, Suburban, Tahoe (CK1, 2)
		1995 Chevy/GMC Van (G2, 3)

12491355

7.4L L19/L29

This large displacement workhorse has the torque to handle big jobs—towing trailers, hauling heavy loads and other weighty tasks—while providing the power, strength and endurance truck owners have grown to expect. A single-piece rear oil seal helps reduce oil leaks. Reduced weight turned-skirt hypereutectic strut-less pistons reduce friction. The heavy-duty nodular crankshaft has deep-rolled fillets for increased strength and durability. Steel camshaft and roller lifters on newer applications help reduce friction, improve wear resistance and increase low-end torque. The priority main lubrication system keeps the bottom end lubed under tough duty. The L19/L29 V-8 displaces 454-cubic-inches. Available new or remanufactured.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

7.4L L19/L29 APPLICATION DATA

12339193 REMAN	1980–1986 Chevy/GMC Pickup, Suburban (C2)	12491353 REMAN	1994–1995 Chevy/GMC Pickup, Suburban (CK2, 3)	
	1980–1986 Chevy/GMC Pickup, Suburban (CK3)		1994–1995 Chevy/GMC Van (G3)	
	1987–1989 Chevy/GMC Pickup, Suburban (RV2, 3)		1994–1995 Chevy/GMC Chassis (P3)	
	1988–1990 Chevy/GMC Pickup (CK3)		<i>NOTES: 4-bolt main, 1-piece rear seal.</i>	
	1988–1990 Chevy/GMC Van (G3)		12491354 REMAN	1996–1997 Chevy/GMC Chassis (P3)
	1990 Chevy/GMC Pickup, Suburban (R2, 3)			1996 Chevy/GMC Van (G3)
12491352 REMAN	1990 Chevy/GMC Pickup (C1)	<i>NOTES: 6 bolt front cover, 4-bolt main, 1-piece rear seal.</i>	12491355 REMAN	
	1991–1993 GMC Pickup, Suburban (CK2, 3)			1996–2000 Chevy/GMC Pickup, Suburban (CK2, 3)
	1991–1993 Chevy/GMC Pickup, Suburban (C1)	1996–2000 Chevy/GMC Van (G3)	<i>NOTES: 4-bolt main, 1-piece rear seal.</i>	
	1991–1993 Chevy/GMC Van (G3)	1996–1999 Chevy/GMC Chassis (P3)		
	1991–1993 Chevy/GMC Chassis (P3)	12491356 REMAN		1999–2000 Chevy/GMC Kodiak/Topkick 4 x 2 2WD (C6, 7)
	1991 Chevy/GMC Pickup, Suburban (R2, 3)		Kodiak/Topkick 6 x 4 C 2WD (C6, 7)	
1991 Chevy/GMC Pickup, Suburban (V3)	1999–2000 Chevy/GMC MD Bus Chassis (B7)			
<i>NOTES: 4-bolt main, 1-piece rear seal.</i>		<i>NOTES: 4-bolt main, 1-piece rear seal.</i>		
		For LPG/CNG applications (KL5) use P/N 89060555.		



12575091

4.2L LL8

The Vortec 4200, or LL8, is a 4.2L straight-6 in the GM Atlas engine family. It has four valves per cylinder and is a double-overhead cam (DOHC) design. Introduced in 2002 for the Chevrolet Trailblazer, GMC Envoy, and Oldsmobile Bravada, the engine is also in use in the Buick Rainier, Saab 9-7X, and the Isuzu Ascender.



GM Parts Engines offer a 36-month or 100,000-mile/160,000-kilometer limited warranty when the engine is installed in a recommended application.

NOTE: Engine in photograph is representative of several part numbers, and may show items not included with each engine.

4.2L LL8 APPLICATION DATA

12491861	REMAN	2002–2003 Chevrolet Trailblazer, Envoy (ST1)
12491862	REMAN	2003–2004 Chevrolet Trailblazer, Envoy (ST1)
12491864	REMAN	2005 Chevrolet Trailblazer, Envoy (ST1)
89060411	REMAN	2006–2007 Chevy/GMC Trailblazer, Envoy (ST1) 2006 Chevrolet SSR (ST1)
89017685	NEW	2004–2005 Chevrolet Trailblazer, Envoy (ST1)

NOTES: When used for 2004 and prior, exhaust cam position actuator and fuel rail-ASM must be changed to 2004 and prior parts.

Small-Block Components

The Chevrolet small-block is a marvel of possibilities. Introduced over half a century ago, it has become the trusted project starting point for racers, hobbyists and the general motoring public. Recognizing the versatility of the "Mouse," GM Performance Parts has designed, developed and exhaustively validated all the parts and components enthusiasts might need to take their small-block in any direction imaginable. The pages that follow contain the culmination of five decades worth of experience supplying the proven enhancements that have helped make the Chevy small-block the most significant performance engine ever built.

The block is the foundation of any high performance engine build, and GM Performance Parts has the most diverse selection of custom-manufactured, custom-machined after-market performance blocks on the market! Whether you are looking for a cast iron Production block for a quick rebuild, a Bowtie Block to own the street or strip, a Rocket Block to go racing, or one of our all-out Bowtie aluminum race blocks to rule your local track, all of our engine blocks share one thing in common—race-proven design and quality through years of on-track testing.

If you want to make big power, you need a cylinder head that can swallow large amounts of air at the highest possible velocity. GM Performance Parts has an amazing selection of high performance cylinder heads that has been developed to match the performance of every small-block Chevy application. Our line of Bowtie, Vortec, Fast Burn, and Aluminum Race heads can help you beat the competition, whether that means NASCAR or the hot rod down the street. There are many cylinder heads on the market for your GM performance vehicle, but only a few of them can live up to the high standards set forth by GM Performance Parts.

Our Components section includes pistons, rods, fasteners, gasket sets, serpentine accessory drive systems, starters, valve covers, valvetrain components, high performance camshafts, intake manifolds, ignition systems, fuel systems—everything you need to build your next project engine. GM Performance Parts has tested every single component in this catalog to durability standards that no one can match. And, remember, these are the same parts that we use in our incredible line of GM Performance Parts crate engines.

Whichever high performance small-block part you choose, you can be certain that when you get your parts from GM Performance Parts, you are starting with the very best.





Chevy Small-Block Quick Reference Chart

CAST IRON SMALL-BLOCKS																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
10105123	14093638	9.025"	Std	Open	4.000"-4.030"	4	Straight	Grey iron	350	Wet	1 pc	3.75"	181	350	Street	205
88962516	—	9.025"	Std	Open	4.005"-4.030"	4	Straight	Grey iron	350	Wet	1 pc	3.80"	181	450	Street	205
10066034	—	9.025"	Std	Open	4.000"-4.030"	4	Straight	Grey iron	350	Wet	2 pc	3.75"	181	350	Street	205
10051183	10051184	9.025"	Std	Siamese	4.000"-4.155"	2	Straight	Grey iron	350	Wet	1 pc	3.75"	187	400	Street	206
10185047	10051184	9.025"	Std	Siamese	3.980"-4.155"	4	Straight	Grey iron	350	Wet	1 pc	3.75"	182	450	Amateur	207
12480174	10051184	9.025"	Std	Siamese	3.980"-4.155"	4	20 deg	Nodular	350	Wet	1 pc	3.75"	196	500	Amateur	207
12480047	10051184	9.025"	Std	Siamese	3.980"-4.155"	4	20 deg	Nodular	350	Wet	2 pc	3.75"	208	500	Amateur	207
12480175	10051184	9.025"	Std	Siamese	4.117"-4.155"	4	20 deg	Nodular	350	Wet	1 pc	3.75"	196	500	Amateur	207
12480157	10051184	9.025"	Std	Siamese	4.117"-4.155"	4	20 deg	Nodular	350	Wet	2 pc	3.75"	196	500	Amateur	207
12480049	10051184	9.025"	Std	Siamese	3.980"-4.155"	4	20 deg	Nodular	400	Wet	2 pc	3.75"	208	500	Amateur	207
12480159	10051184	9.025"	Std	Siamese	4.117"-4.155"	4	20 deg	Nodular	400	Wet	2 pc	3.75"	196	500	Amateur	207
24502503	10051184	9.025"	Std	Siamese	3.980"-4.155"	4	20 deg	8620 steel	350	Wet	2 pc	3.75"	208	700	Pro	209
12480045	10051184A	9.025"	Std	Siamese	4.116"-4.185"	4	17 deg	4140 steel	283	Dry	2 pc	3.75"	192	800	Pro	210
12480046	10051184A	9.025"	Std	Siamese	4.116"-4.185"	4	17 deg	4140 steel	350	Dry	2 pc	3.75"	192	800	Pro	210

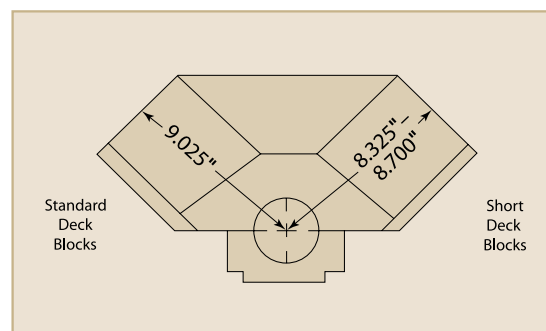
SHORT DECK CAST IRON BLOCK																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
12480050	12480050	8.700"	Std	Siamese	3.980"-4.190"	4	20 deg	8620 steel	283	Dry	2 pc	3.48"	216	800	Pro	209
24502650	24502650C	8.325"	Std	Siamese	3.980"-4.185"	4	20 deg	8620 steel	283	Dry	2 pc	3.25"	167	800	Pro	209

SB2.2 BLOCKS																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
12480097	10051184A	9.025"	SB2.2	Siamese	4.116"-4.185"	4	17 deg	4140 steel	283	Dry	2 pc	3.75"	192	800	Pro	210
12480098	10051184A	9.025"	SB2.2	Siamese	4.116"-4.185"	4	17 deg	4140 steel	350	Dry	2 pc	3.75"	192	800	Pro	210

R0X NON SB2.2 BLOCK																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
25534452	25534351	9.025"	None	Siamese	4.166"-4.250"	4	17 deg	4140 steel	283	Dry	2 pc	3.75"	196	800	Pro	N/S

ROCKET BLOCK																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
22551788	22551656	9.025"	None	Siamese	4.166"-4.250"	4	17 deg	4140 steel	283	Dry	2 pc	3.75"	196	800	Pro	212

ALUMINUM SMALL-BLOCKS																
Part Number	Cast Number	Deck Height	Lifter Pattern	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
10185075	10134398	9.025"	Std	Siamese	3.986"-4.135"	4	20 deg	8620 steel	350	Wet	2 pc	3.75"	90	800	Pro	213
10134400	10134398	9.025"	Std	Siamese	4.117"-4.135"	4	20 deg	8620 steel	400	Dry	2 pc	3.75"	89	800	Pro	213
24502495	24502495	9.525"	Std	Siamese	4.117"-4.135"	4	20 deg	8620 steel	400	Dry	2 pc	4.125"	101	850	Pro	N/S

Production-Based Block (front) **A**Production-Based Block (rear) **A**Straight 4-Bolt Mains **A**Production-Based Block (front, top) **A****DECK HEIGHT DIAGRAM****PRODUCTION-BASED BLOCKS**

The GM Performance Parts production-based blocks are the right choice for street car rebuilds or to start your own mild engine project. They come in the same dimensions that you are already familiar with and are produced to the high level of quality that GM is famous for. Remember, these are brand new castings that are machined to our exacting tolerances and delivered to you at an affordable price. These blocks are designed for street engines that demand good strength and a high level of durability.

Production-Based Block Technical Notes:

- Cylinder walls are the same thickness as current production engines
- Non-siamese bores
- Standard 350 main journal sizes
- Lifter valleys are machined for hydraulic roller and flat tappets
- Use seal adapter P/N 10051118 to use 2-piece rear main crankshafts in these blocks

See chart on page 204 for complete specifications

A. 10105123**350 Bare Block (1986–Later Style), 1-Piece Rear Main Seal**

- Cast iron 4-bolt block
- **4.00"** bore
- Machined for hydraulic roller or flat tappets

88962516**383 Bare Block (1986–Later Style), 1-Piece Rear Main Seal**

- Cast iron 4-bolt block
- **4.005"** bore
- Torque plate honed
- Clearanced for 3.80" stroker crankshaft
- Machined for hydraulic roller or flat tappets

10066034**350 Bare Block (Pre-1986 Style), 2-Piece Rear Main Seal**

- Cast iron 4-bolt block
- **4.00"** bore
- Can be used for 302, 327, or 350 engines
- Machined for flat tappets only
- Used in 1973–85 GM Goodwrench 350 engines

GM PERFORMANCE PARTS BOWTIE SPORTSMAN BLOCK

This is the block to buy if you want to build a serious street car or if you want to head to the race track! The GM Performance Parts Bowtie Sportsman block has been the starting point for countless racing engines. These iron blocks are available in a variety of finish options to build almost any engine combination. Most of these blocks have siamesed cylinder walls¹ and 4-bolt main caps² that are secured by Grade 8 bolts. All blocks in this family have a 9.025" deck height. The Bowtie Sportsman blocks are a great foundation for your serious street car, circle track, or drag car that makes between 350 and 500 horsepower.

NOTE:

Bowtie blocks are called out by main journal sizes (i.e., 283, 350 or 400) and then by bore size (i.e., 283, 305, 350 or 400) if the bore is not standard to the main size. Example: P/N 24502650—"283 Main-350 Bore size"—has standard 283 main journal sizes, however the bore is standard 350 size.

Bowtie Sportsman Block Technical Notes:

- 2.00" O.D. cam bearings (1.867" I.D.) P/N 12370843, required at all five locations (except for block P/N 10051183)
- 0.900" thick main bearing bulkheads, Grade 8 main bolts
- Priority main oiling system
- Standard 9.025" deck height
- Cylinder bores have a nominal wall thickness of 0.340"
- 0.225" minimum cylinder bore wall thickness at 4.155" bore (excluding P/N 10051181, P/N 10051183, & P/N 10185047)
- Extra thick deck surfaces with blind-tapped head bolt holes for improved head gasket sealing
- Tall lifter bore blocks may require clearancing the top of lifter bores for use with some roller lifters
- Timing system clearance must be checked for interference
- Lifter valley oil scavenging boss behind cylinder #8 below bell housing flange is present, but not drilled & tapped
- Oil dipstick holes are not drilled
- Use seal adapter P/N 10051118 to use 2-piece rear main crankshafts in 1-piece rear main blocks

See chart on page 204 for complete specifications.

2-Bolt 350 Main Blocks

2-Bolt main bearing caps are installed to simplify the installation of the heavy duty 4-bolt steel main caps with splayed outer bolts.

A. 10051183

350 Bowtie Block, 1-Piece Rear Main Seal

- Cast iron maximum effort block
- 2-bolt mains
- 3.980" rough bore
- **4.090"** max bore (siamese cylinder bores)

¹Siamesed cylinder walls have thicker cylinder wall material with no water between the bores. This allows for a bigger bore; a bigger bore allows for more cubic inches and more power!

²4-bolt mains have more material and more fasteners holding the crank in the block (4-bolts per main instead of just 2). 4-bolt mains help maintain the integrity of the block when you drop the hammer!



A 2-Bolt Main Block (front)



A 2-Bolt Main Block without Rear Seal Adapter (rear)



A 2-Bolt Rear Main (no seal adapter)



A 2-Bolt Main Block (front, top)

Sportsman Block (front) **B**Sportsman Block (rear) (For use with 1-piece seal adapter) **B**2-Piece Rear Main Seal **B**4-Bolt Splayed Main Caps **B**

4-Bolt 350 Main Blocks

B. 10185047

350 Bowtie Sportsman Block

- Cast iron maximum effort block
- 4-bolt "straight" nodular mains
- 3.980" rough bore
- **4.090"** max bore (siamese cylinder bores)
- Replaces older 4-bolt, 2-piece rear main seal block P/N 366287
- Rear main seal adapter required!

12480174

350 Bowtie Sportsman Block, 1-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 3.980" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores
- Comes with rear seal adapter

12480047

350 Bowtie Sportsman Block, 2-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 3.980" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

12480175

350 Main, 400 Bore Size Bowtie Sportsman Block, 1-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 4.117" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores
- Comes with rear seal adapter

12480157

350 Main, 400 Bore Size Bowtie Sportsman Block, 2-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 4.117" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

4-Bolt 400 Main Blocks

12480049

400 Main, 350 Bore Size Bowtie Sportsman Block, 2-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 3.980" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

12480159

400 Bowtie Sportsman Block, 2-Piece Rear Main Seal

- CNC-machined cast iron competition block
- +/-0.001" machining tolerances
- 4-bolt nodular mains, splayed caps on center 3 mains
- 4.117" finished bore
- **4.155"** max bore (siamese cylinder bores)
- Extra smooth gasket surfaces for better seal
- Tall lifter bores

GM PERFORMANCE PARTS RACE BLOCKS

Our race blocks take the guess work out of what block you need to make big horsepower. They are competition tested in NASCAR, BUSCH, and NHRA Competition Eliminator! GM Performance Parts offers you a huge selection of race blocks that have been precision, CNC-machined¹ with tighter tolerances than our Bowtie blocks before you even get them. These blocks feature full race-prep machining, 4-bolt splayed² main caps, and the very highest grade of materials throughout. When your competition has spilled their guts all over the racetrack, you'll still be in the show thanks to your GM Performance Parts race block!

See chart on page 204 for complete specifications.

GM Performance Parts Race Block Technical Notes:

- These blocks are CNC'd to +/- .001" machining tolerances!
- Cylinder decks, front and rear of case, oil pan rail surfaces and head dowel pins are blueprinted!
- Non-standard cam bearings required (see each block for details)
- Cam bosses are enlarged to allow machining for the use of larger bearings
- Extra thick main bearing bulkhead machined at 5°
- Premium quality main studs & SAE 8620 steel main bearing caps
- Billet wet sump rear main cap can be adapted to dry sump with plugs
- Bearing cap inner bolts are spread 0.210" to allow machining for use with 400 journal crankshafts
- Priority main oiling system
- 2-piece rear-main crankshafts & pre-1986 oil pans required
- Extra thick deck surfaces with blind-tapped head bolt holes for improved head gasket sealing
- Cylinder bores have a nominal wall thickness of .340"
- 0.225" min. cylinder bore wall thickness at 4.155" bore, Sonic bore check data sheet provided
- These blocks may require clearancing the top of lifter bores for some aftermarket mechanical roller lifters
- Timing system clearance should be checked before engine assembly
- Lifter valley oil scavenging boss behind cylinder #8 below bell housing flange is not drilled & tapped
- Oil dipstick holes are not drilled



A Short Deck Race Block (front)



A Short Deck Race Block (rear)



A Short Deck Race Block (bellhousing)

¹CNC or computer numerical controlled machining is an automated machining process that guarantees exact tolerances. No one offers as many CNC-machined blocks as GM Performance Parts! No one.

²Splayed main caps have additional material holding the crankshaft in the block. This makes it even more unlikely that you'll throw the crank through the oil pan.

Short Deck Race Block (front) **A**Short Deck Race Block (rear) **A**2-Piece Rear Main Seal **A**4-Bolt Main Caps **A****24502503****350 Cast Iron Bowtie Race Block**

- Cast iron competition block right out of the box
- 4-bolt SAE 8620 steel mains, 20° splayed caps on center 3 mains
- 2.00" O.D. cam bearings (1.867" I.D.) P/N 12370843 required at all five locations
- 3.980" finished bore
- **4.155"** max bore (siamese cylinder bores)
- 9.025" deck height
- Oil galleries for dry sump system are oversized and tapped for pipe plugs
- Supplied with sonic data sheet
- Tested to over 700 horsepower!

A. 24502650**283 Main, 350 Bore Size Short-Deck Bowtie Race Block**

- CNC Cast iron competition block designed for drag racing, road racing or restricted oval track racing!
- 4-bolt SAE 8620 steel mains, 20° splayed caps on center 3 mains
- **8.325"** deck (as of 10/03) (standard deck blocks are 9.025"), can be machined to 8.200" deck height
- Camshaft is raised 0.433" to 4.955"
- Cam bearing bores machined for 2.250" O.D. x 1.875 roller bearings
- 3.980" rough bore
- **4.190"** max bore (minimum of .250" cylinder bore wall thickness) (siamese bores)
- Integral oil restrictors
- Must use big-block water pump, must raise water pump with adapters for balancers larger than 6"
- Olds Aurora V-8 bell housing bolt pattern (12.25" max flywheel diameter)
- Lifter holes and cylinder head bolt holes are not drilled
- Will accept standard, SB2.2 and splayed valve lifter patterns
- Can be machined to accept any small-block Chevy cylinder head
- Machined as 4.400" bore and main centers, can be machined to 4.500" bore centers
- Shorter than production pushrods required
- Tested to over 800 horsepower!

12480050**283 Main, 350 Bore Size Medium-Deck Bowtie Race Block**

- CNC Cast iron competition block designed for drag racing, road racing or restricted oval track racing!
- 4-bolt SAE 8620 steel mains, 20° splayed caps on center 3 mains
- **8.700"** deck (standard deck blocks are 9.025"), can be machined to 8.500" deck height
- Camshaft is raised 0.433" to 4.955"
- Cam bearing bores machined for 2.250" O.D. x 1.875 roller bearings
- 3.980" rough bore
- **4.190"** max bore (minimum of .250" cylinder bore wall thickness) (siamese bores)
- Integral oil restrictors
- Must use big-block water pump, must raise water pump with adapters for balancers larger than 6"
- Standard Chevy V-8 bell housing bolt pattern
- Lifter holes and cylinder head bolt holes are not drilled
- Will accept standard, SB2.2 and splayed valve lifter patterns
- Can be machined to accept any small-block Chevy cylinder head
- Machined as 4.400" bore and main centers, can be machined to 4.500" bore centers
- Shorter than production pushrods required
- Tested to over 800 horsepower!

Race Blocks Continued

12480045

283 Main Size NASCAR Busch Series Block

- CNC-machined, cast iron NASCAR competition block
- 9.025" deck height
- 4-bolt NASCAR-block specific steel mains, 17° splayed caps on center 3 mains
- 4.116" rough bore
- **4.185"** max bore (siamese bores)
- Machined for 2.280" cam bearings
- **.875" lifter bores**
- -06AN water drains
- 45° -10AN front oil feed and valley scavenge
- AN O-ring pipe plugs
- (4) Center lifter valley drains (drilled & tapped)
- Steam holes drilled between cylinders .750" below deck surface
- 1/2" NPT water hole on each side of block
- Dry sump only (no oil filter boss)
- Tested to over 800 horsepower!

12480046

350 Main Size NASCAR Busch Series Block

- CNC-machined, cast iron NASCAR competition block
- 9.025" deck height
- 4-bolt NASCAR-block specific steel mains, 17° splayed caps on center 3 mains
- 4.116" rough bore
- **4.185"** max bore (siamese bores)
- Machined for 2.280" cam bearings
- **.875" lifter bores**
- -06AN water drains
- 45° -10AN front oil feed and valley scavenge
- AN O-ring pipe plugs
- (4) Center lifter valley drains (drilled & tapped)
- Steam holes drilled between cylinders .750" below deck surface
- 1/2" NPT water hole on each side of block
- Dry sump only (no oil filter boss)
- Tested to over 800 horsepower!

12480097

283 Main Size NASCAR SB2.2 Series Block

- CNC-machined, cast iron NASCAR competition block
- 9.025" deck height
- 4-bolt NASCAR-block specific steel mains, 17° splayed caps on center 3 mains
- 4.116" rough bore
- **4.185"** max bore (siamese bores)
- Machined for 58mm roller cam bearings
- **.875" lifter bores**
- -06AN water drains
- 45° -10AN front oil feed and valley scavenge
- AN O-ring pipe plugs
- (4) Center lifter valley drains (drilled & tapped)
- Steam holes drilled between cylinders .750" below deck surface
- 1/2" NPT water hole on each side of block
- Dry sump only (no oil filter boss)
- **SB2.2 Lifter pattern and lobe sprayers**
- Tested to over 800 horsepower!

12480098

350 Main Size NASCAR Busch Series Block, SB2 Lifter Pattern

- CNC-machined, cast iron NASCAR competition block
- 9.025" deck height
- 4-bolt NASCAR-block specific steel mains, 17° splayed caps on center 3 mains
- 4.116" rough bore
- **4.185"** max bore (siamese bores)
- Machined for 58mm roller cam bearings
- **.875" lifter bores**
- -06AN water drains
- 45° -10AN front oil feed and valley scavenge
- AN O-ring pipe plugs
- (4) Center lifter valley drains (drilled & tapped)
- Steam holes drilled between cylinders .750" below deck surface
- 1/2" NPT water hole on each side of block
- Dry sump only (no oil filter boss)
- **SB2.2 Lifter pattern and lobe sprayers**
- Tested to over 800 horsepower!



NASCAR Busch Series Block (front)



NASCAR Busch Series Block (rear)



NASCAR Specific Main Caps



2-Piece Rear Main Seal



R0X Race Block (front)



R0X Race Block (rear)



R0X Race Block (bottom)

GM PERFORMANCE PARTS R0X RACE BLOCKS

The new GM small-block R0X V-8 engine package is the next evolution in the design of the Chevrolet small-block. It has been successfully raced in ARCA & the Baja 1000. The design incorporates wider 4.500" bore centers for improved engine architecture. The R0X package has dedicated components to take advantage of the spread bores such as cylinder heads, intake manifolds and other aftermarket parts. These parts can be purchased from your local GM Performance Parts dealer. Specialty parts can be purchased from aftermarket suppliers.

See chart on page 204 for complete specifications.

GM Performance Parts R0X Block Technical Notes:

- CNC-machined, Cast iron competition block
- 7/16" Priority main oil system
- 9.025" deck height
- 4-bolt R0X-block specific SAE 4140 doweled steel mains
- 17° splayed caps on center 3 mains
- Center main thrust
- 4.166" rough bore (siamese bores)
- **4.250"** max bore (min .225" wall thickness)
- 4.500" bore and main spacing
- Special cylinder head bolt pattern, 3/8-24 UNF threads
- 68mm (2.677") cam bearing bores for 60mm roller bearings
- Cam tunnel is closed (no oil drain to rotating assembly)
- Cam tunnel raised 1.572" to 6.093"
- **.835" lifter bores** (1.06 max.) 42° intake, 52° exhaust, can be relocated
- Cam lobe squirter provisions
- Piston squirter provisions, not machined
- -.06AN water drains
- AN O-ring pipe plugs
- (4) Center lifter valley drains (drilled & tapped)
- Steam holes drilled between cylinders .750" below deck surface
- Dry sump only (no oil filter boss)
- Oil pan rails spread to 10.61"
- Front motor mounts only
- Dual starter mounts
- Tested to over 800 horsepower!

25534453

283 Main, R0X Series Block SB2.2 Lifter Pattern

- CNC-machined
- SB2.2 lifter pattern for P/N 88958667 cylinder head

ROCKET BLOCK

The Rocket Block was designed to be raced. GM Performance Parts has already done most of the precision machining for you, and The Rocket Block still retains a 0.245" wall thickness when you take the bore out to 4.180". That lets you go to some outrageous cubic inches (450+ cubes) from a small-block that makes sick power and stays together in competition.

22551788

Cast Iron Rocket Block (Standard Deck with Wet Sump)

- Precision CNC-machined (+/- 0.001") cast iron competition Rocket Block
- 9.025" deck (min 0.625" thickness)
- 4-bolt SAE 8620 20° splayed main caps on center 3 mains (2-bolt steel front and rear mains)
- Camshaft raised .390" to 4.912"
- Uses big-block cam bearings (no small base circle cams here!)
- **3.986"** rough-finished extra-thick siamese bore
- 4.180" max bore (min .225" wall thickness)
- Standard 4.400" bore spacing
- Can run up to 4.125" stroker crankshaft for big power
- Oil pan rails are spread .400" per side for extra stroke clearance (special oil pan required)
- Bottom of bores and oil pan rails may require notching with large strokes for connecting rod and counterweight clearance
- 350 main journal size
- Priority main wet sump oiling system (remote oil filter only)
- Two-piece crankshaft seal
- Dual starter mounts
- Bosses for side and front engine mounts
- Fuel pump mounting boss
- Tested to over 500 horsepower!

See chart on page 204 for complete specifications.

While Supplies Last!



Rocket Block (front)



Rocket Block (rear)



Rocket Block (bottom)



Aluminum Race Block (front)



Aluminum Race Block (rear)



Aluminum Race Block (bottom)

ALUMINUM RACE BLOCKS

The GM Performance Parts aluminum race blocks offer you the same competition-level strength of our cast iron race blocks, with the added benefit of reduced weight. This allows your chassis builder to put together a more balanced racecar while not sacrificing any strength under the hood. The GM Performance Parts aluminum race blocks come CNC-machined, made from our special super-tough aluminum, and ready for battle. If you want to go around corners at 200 mph or make over 1000 horsepower with a fuel-injected, turbocharged combination, this is your starting point.*

See chart on page 204 for complete specifications.

GM Performance Parts Aluminum Race Block

Technical Notes:

- These blocks are CNC'd to +/- .001" machining tolerances!
- Cylinder decks, front and rear of case, oil pan rail surfaces and head dowel pins are blueprinted!
- 2.00" O.D. cam bearings (1.867" I.D.) P/N 12370843 required at all five locations
- Cam bosses are enlarged to allow machining for the use of larger bearings
- Extra thick main bearing bulkhead machined at 5°
- Premium quality main studs & SAE 8620 steel main bearing caps
- Billet wet sump rear main cap can be adapted to dry sump with plugs
- Priority main oiling system
- 2-piece rear-main crankshafts & pre-1986 oil pans required
- Extra thick deck surfaces with blind-tapped head bolt holes for improved head gasket sealing
- Centrifugally spun cast iron cylinder sleeves
- These blocks may require clearancing the top of lifter bores (.842" diameter) for some roller lifters
- Timing system clearance should be checked before engine assembly
- Oil dipstick holes are not drilled

10185075

350 Aluminum Bare Block

- CNC-machined, A-356 aluminum competition block
- Increased wall thickness with siamesed bores
- 3.986" rough finished bore
- **4.150"** max bore (siamese bores)
- 350 main size
- Tested to over 800 horsepower!

10134400

400 Aluminum Bare Block

- CNC-machined, A-356 aluminum competition block
- Splayed 4-bolt steel mains
- For dry sump use only
- Increased wall thickness with siamesed bores
- 4.117" rough finished bore
- **4.150"** max bore (siamese bores)
- 400 main size
- Tested to over 800 horsepower!

*Proposed applications have not been specifically tested or validated by GM Performance Parts.

CYLINDER BLOCK COMPONENTS

A. 12363238

Universal Engine Lift Brackets

- Designed to bolt to the end of cylinder heads for removal and installation of the engine
- Made from 0.200" steel and have .88" x 1.00" hook slots
- Use with 3/8" or 7/16" bolts
- Includes two brackets and two 7/16" bolts



A Universal Engine Lift Brackets

B. 88891749

Freeze Plug, 1-5/8" Brass

- Corrosion-resistant brass freeze plug is recommended for marine applications



B Freeze Plug, 1-5/8" brass

10121044

Rear Oil Seal, Two-Piece Design (not shown)

- Rear oil seal for V-8 and V-6 engines with pre-1985-style two-piece oil seal design
- Used by many NASCAR teams for superior leak protection

C. 12480004

Cylinder Sleeve (standard)

- Standard-bore steel cylinder sleeve for new-design aluminum small-block V-8 and 90° V-6 aluminum blocks, including P/N 10134400, P/N 10134351 and P/N 10134371

NOTE: Sleeve has 3.980" bore; can be overbored to 4.125".



C Cylinder Sleeve (standard)



D Freeze Plug & Dowel Pin Kit

12480018

Oil Galley Plugs, Aluminum Blocks (not shown)

- Replacement oil galley plugs for all GM aluminum engine blocks, size AN-6

D. 12495500

Freeze Plug & Dowel Pin Kit

- For all Chevy Gen I-, and II-style small-block V-8 and 90° V-6 engines
- Includes eight brass freeze plugs, one cam plug, six oil hole plugs, four head dowel pins and one camshaft dowel pin



E Billet Steel 4-Bolt Main Cap

E. 14011072

Billet Steel 4-Bolt Main Cap

- Outer holes are angled toward the oil pan rails, tying it to the strongest part of the block for greater strength and reliability in competition engines
- Reduces distortion of the main bearing bores
- Cap is machined from 1010 cold drawn steel, with the Chevy Bowtie insignia laser-etched on top of the cap
- Designed for blocks with 2.45" main bearings

NOTE: Consult Chevy Power manual P/N 24502488 for machining instructions when installing splayed caps on blocks originally equipped with 2-bolt or production-style 4-bolt caps.

NOTE: Block must be align-bored after installation of replacement bearing cap.



F Billet Steel 2-Bolt Front Bearing Cap

9466814

Nodular 4-Bolt Main Cap (not shown)

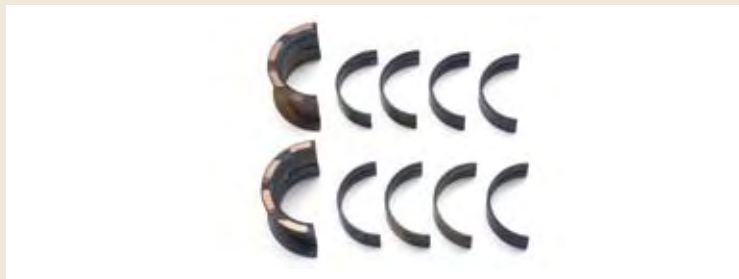
- Upgraded cap used for 383 engines
- Straight bolt design, cannot be used on blocks originally equipped with splayed bolt pattern

F. 14011052

Billet Steel 2-Bolt Front Bearing Cap

- Replaces the gray iron front bearing cap on small-block V-8 and 90° V-6 blocks with 2.45" main bearings
- Machined from 1010 cold drawn steel and uses the same bolts and studs as the production front bearing cap

NOTE: Block must be align-bored after installation of replacement front bearing cap.



G Main Bearing Kit, 383 Engine (standard)

G. 12499102

Main Bearing Kit, 383 Engine (standard)

- Complete main bearing kit for 383-cubic-inch small-block V-8 with standard-size mains

Main Bearing Bolt Kit, Sportsman Blocks **H**Timing Pointer, 6.75" & 7" Balancer **I**Small-Block Chrome Timing Cover **J**Front Cover With Bolts, Seal & Gasket **K**Small-Block Fuel Pump Block-Off Plate **L****12499138****Main Bearing Kit, 383 Engine, +0.010 (not shown)**

- Complete main bearing kit for 383-cubic-inch small-block V-8 with +0.010-undersize mains

H. 12480108**Main Bearing Bolt Kit, Sportsman Blocks**

- Sturdy main bearing cap bolts designed specifically for the following GMPP Sportsman racing blocks: P/N 12480047, P/N 12480049, P/N 12480157, P/N 12480159, P/N 12480174 and P/N 12480175
- Bolts are grade 8 with 12-point heads and black oxide-coated

Front Covers, Timing Pointers, Fuel Pump Block-Offs**I. 3991435****Timing Pointer, 6.75" & 7" Balancer**

- Steel timing pointer bolts on to engines with 6.75" or 7" balancers
- Pointer is not chromed

3991436**Timing Pointer, 8" Balancer (not shown)**

- Steel timing pointer bolts on to small-block with an 8" balancer
- Pointer is not chromed

J. 12342089 **Small-Block Chrome Timing Cover**

- Attractive chrome cover for 1969-1991 small-block V-8 and all 90° V-6 engines
- Direct replacement for covers that use bolt-on timing pointer
- Supplied with GM oil seal (Replacement oil seal P/N 10111769)

K. 12562818 **Front Cover**

- With crank trigger plug
- Includes bolts, seal and gasket

Chrome Fuel Pump Block-Off Plates**L. 12341998****Small-Block Fuel Pump Block-Off Plate**

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included



Don't Forget those corresponding parts!
See the chart below for specifics.

 **Timing Covers: Corresponding Parts**

Part Number	Bolts (Quantity)	Seals (Quantity)	Gasket (Quantity)	Bolt Grommets (Quantity)	Engine Application
12342089	11561767 (10)	10243247 (1)	10108435 (1)	N/A	88958602, 12499711, 12486041, 12496968, 12486041
12562818	10213293 (6) 12551135 (2)	10228655 (1)	N/A	10213294 (8)	12499101, 12499106, 12497317, 88958604, 12499710, 12498772, 12496769, 24502609, 88958603, 12499712

SMALL-BLOCK CYLINDER HEADS

Part Number	Description	Casting Number	Material	Port Size	Port Type	Valve Angle	Chbr CC's	Int Vlv	Exh Vlv	Exh Port	Plug Type	Heat Riser	Rocker Stud	Notes	Page Number
12480092	Camel back	3991492	Iron	157	—	23	64	2.02	1.60	—	Straight	Yes	Screw-in	Bare, discontinued	N/S
88958692	Camel back	3991492	Iron	157	—	23	64	1.94	1.60	—	Straight	Yes	Screw-in	Leaded 12480092, discontinued	N/S
10159552	Gen II	141010837 or 1409621	Iron	—	—	23	64	1.94	1.50	—	Straight	Yes	Press	Bare 10125377	N/S
12363287	LT4	12555690	Alum	195	—	23	54.4	2.00	1.55	LT4	Angled	No	Screw-in	For LT1 or LT4	221
12480034	Bowtie Phase III	12480034	Iron	184	—	23	64	2.02	1.60	—	Angled	No	Screw-in	Phase 3 Bowtie	218
12497186	Fast Burn	12367712	Alum	210	Vortec	23	62	2.00	1.55	LT4	Angled	No	Screw-in	Bare 12464298	N/S
12464298	Fast Burn	12367712	Alum	210	Vortec	23	62	2.00	1.55	LT4	Angled	No	Screw-in	Assembly	222
12556463	ZZ4	10088113	Alum	163	—	23	58	1.94	1.50	LT4	Angled	No	Screw-in	ZZ4 Assembly	220
12529093	Vortec	10239906 or 12558062	Iron	170	Vortec	23	64	1.94	1.50	LT4	Straight	No	Press	Bare 12558060	N/S
12558060	Vortec	10239906 or 12558062	Iron	170	Vortec	23	64	1.94	1.50	LT4	Straight	No	Press	Assembly	217
25534351	SPVB	25534351c	Iron	185	Vortec	23	66	2.00	1.55	LT4	Straight	No	Screw-in	Bare 25534421	N/S
25534445	LPVB	25534371c	Iron	215	Vortec	23	66	2.00	1.55	LT4	Straight	No	Screw-in	Bare 25534446	N/S
25534421	SPVB	25534351c	Iron	185	Vortec	23	66	2.00	1.55	LT4	Straight	No	Screw-in	Assembly	219
25534446	LPVB	25534371c	Iron	215	Vortec	23	66	2.00	1.55	LT4	Straight	No	Screw-in	Assembly	219
24502580	18 degree semi	10134363	Alum	215	18 deg	18	60	—	—	18 deg	Angled	No	Shaft	No seats/guides	223
24502615	15 degree	10134363	Alum	210	18 deg	15	35-37	—	—	18 deg	Angled	No	Shaft	No seats/guides	223
12480129	SB2.2	12480011	Alum	—	SB2.2	SB2.2	48	2.15	1.625	SB2.2	Angled	No	Shaft	No seats/guides	226
12480011	SB2.2 bare	12480011	Alum	—	SB2.2	SB2.2	48	2.15	1.625	SB2.2	Angled	No	Shaft	No seats/guides	226
88958667	ROX SB2.2	88958667	Alum	—	SB2.2	SB2.2	28	2.15	1.625	SB2.2	—	—	Shaft	No seats/guides	226
12480146	Rough bare splay	10185040	Alum	—	Splayed	Splay	45	2.20	1.65	Splayed	Angled	No	Shaft	Rough mach 24502517	224
12480147	Semi mach splay	10185040	Alum	—	Splayed	Splay	45	2.20	1.65	Splayed	Angled	No	Shaft	Semi mach 12480146	224
24502517	Splayed valve	10185040	Alum	—	Splayed	Splay	45	2.20	1.65	Splayed	Angled	No	Shaft	No seats/guides	224
12480153	ROX splayed	12480153	Alum	—	Splayed	Splay	—	—	—	Splayed	—	—	Shaft	No seats/guides	225
88958684	ROX splayed	12480153	Alum	—	Splayed	Splay	—	—	—	Splayed	—	—	Shaft	Rough mach, no seats/guides	225



Smokey and the Small-Block

The Chevrolet small-block brought out the best and the brightest in engine developers and racers. The small-block had been Chevy's first eight cylinder engine since pre-1920, and it made their cars a force on the NASCAR circuit, earning a win in the sixth race run with the new powerplant. Legendary car builder Smokey Yunick was an important driving force in the engine's early racing development. Working with some of the best drivers of the day, including Herb Thomas (shown) and Fireball Roberts, Smokey brought the Chevrolet V-8 to prominence.

Cast Iron Vortec Cylinder Head (exhaust) **A**Cast Iron Vortec Cylinder Head (intake) **A**Cast Iron Vortec Cylinder Head (combustion chamber) **A**

SERVICE REPLACEMENT HEADS

These heads are designed to be direct replacements for the heads that came standard on most GM V-8 small-block engines from 1987–newer. They are perfect for replacing worn or damaged heads, and they are built with the same high quality standards that you have come to expect from GM.

Service Replacement Head Technical Notes:

- Cast iron cylinder head
- Straight spark plugs
- Uses 1.94"/1.50" valves
- No heat risers

93438649 ⓘ

Cylinder Head Assembly With Valves For 290 HP (not shown)

This cast iron cylinder head services 350/290 HP crate engine as well as Goodwrench base 350 P/N 10067353. The bare head for this assembly is P/N 93438648.

- 76cc combustion chamber
- Standard 'old style' 6-bolt intake pattern

This head is assembled with the following components:

12550909	Exhaust Valves	10241744	Intake Spring Retainer
10241743	Intake Valves	14042575	Exhaust Spring Retainer
94666580	Valve Springs	10212810	Intake Seals
24503856	Valve Locks	12564852	Exhaust Seals

VORTEC CYLINDER HEADS

One of America's favorite high performance cast iron small-block cylinder head offers big power at an incredible value. The modified combustion chambers and high velocity port technology offer impressive power gains at an affordable price. The Vortec head significantly outflows our non-Vortec service replacement head and offers a 20–40 horsepower increase over earlier cast iron heads. They will fit 1955-and-later small-blocks except for the LT1/LT4 and LS Family of engines. Take your small-block to the 350 horsepower level with a set of Vortec cylinder heads! (These heads require Vortec-specific intake manifolds.)

A. 12558060 ⓘ

Cast Iron Vortec Cylinder Head Assembly

- Completely assembled with 1.94"/1.50" valves
- Uses bare head 12529093
- 64cc combustion chamber
- Straight spark plugs
- No heat risers
- Requires Vortec specific intake manifold
- Camshafts with more than 0.475" lift require machining valve guide bosses and checking valve seal to valve spring retainer clearance
- Can be machined for 2.02"/1.60" valves
- Rocker arm studs can be pinned or drilled and tapped to 3/8"
- Valve spring seat diameter is 1.28"
- Casting number 10239906 or 12558062

This head is assembled with the following components:

10241743	Intake Valves	10241744	Valve Spring Retainer
12550909	Exhaust Valves	10212810	Intake Seals
10212811	Valve Springs	12564852	Exhaust Seals
24503856	Valve Locks		



Don't Forget those corresponding parts!
See the chart on page 227 for specifics.

THE PHASE 3 CAST IRON BOWTIE HEAD

The Phase 3 Bowtie head was the first true cast iron performance head offered by GM Performance Parts. As such, it will outflow any production-style cast iron head. Intended for off-highway use only, the Phase 3 Bowtie head offers extra-thick castings for you to experiment with port modification. This head is designed for the all-out competitive racer who must run a production-style cast iron head.

A. 12480034

Phase 3 Cast Iron Bowtie Head

- Extra-thick walls for porting
- Machined for 2.02"/1.60" valves
- Exhaust seats are induction hardened
- Valve spring seat is machined for 1.50" competition springs
- 184cc intake runner
- 64cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/8" reach, tapered plugs)
- Requires early model intake manifolds
- Valve spring seat is machined for 1.50" competition springs
- Use P/N 12495497 screw-in studs for 3/8" rocker arms
- Use P/N 3921912 screw-in studs for 7/16" rocker arms
- Use P/N 3973418 guideplates for hardened pushrods



A Phase 3 Cast Iron Bowtie Head (exhaust)



A Phase 3 Cast Iron Bowtie Head (intake)



A Phase 3 Cast Iron Bowtie Head (combustion chamber)

Small and Large Port Vortec Bowtie Heads (intake). Bare head shown. **B**Small Port Vortec Bowtie Head (exhaust). Bare head shown. **B**Small Port Vortec Bowtie Head (chamber). **B**

VORTEC BOWTIE HEADS

These are GM Performance Parts' most powerful cast iron cylinder heads designed for street or racing applications in the 400–450 horsepower range. As an upgraded production head, they come with bigger valves, a thicker deck surface, and a 66cc combustion chamber, which offer tremendous low-lift flow numbers. They offer you Fast Burn performance in an affordable cast iron head that is often used for short-track racing applications.

Vortec Head Technical Notes:

- Cast iron small runner or large runner heads¹
- 66cc combustion chamber, .450" deck thickness
- Straight spark plugs
- No heat risers
- Machined for 2.00"/1.55" valves
- Hardened exhaust valve seats
- 0.530" max valve lift (without modifications)
- Drilled and tapped for screw-in studs (7/16-14)
- Dual bolt patterns for perimeter bolt and center-bolt valve covers
- Dual bolt patterns for both Vortec and early model intake manifolds (use early model P/N 10051103 or Vortec design P/N 12366573, P/N 12496820, P/N 12496821, P/N 12496822, or P/N 12499371)
- Use production intake gasket P/N 12529094 for Vortec intakes or dual bolt pattern intake gasket P/N 12497760 for either early model or Vortec design manifolds
- Vortec intake manifold torque specs: 1. tighten to 2 ft. lbs., 2. tighten to 9 ft. lbs., 3. final to 11 ft. lbs.
- Vortec logo (intake port roof), GM logo (intake port floors) & Bowtie logo (exhaust side) are cast-in

B. 25534421

Small Port Vortec Bowtie Head Assembly

- Completely assembled, ready to bolt-on
- 185cc intake port
- 65cc exhaust port
- Uses Fel-Pro® #1470 exhaust gasket
- Bare head P/N 25534351 available separately

25534446 **NEW**

Large Port Vortec Bowtie Head Assembly (not shown)

- Completely assembled, ready to bolt-on
- 225cc intake port
- 77cc exhaust port
- 65cc combustion chamber
- Improved air flow
- Flows 281-cfm@.600"
- Uses Fel-Pro® #1470 exhaust gasket, may require minor trimming
- Bare head P/N 25534445 available separately

These heads are assembled with the following components:

25534407	Intake Valves	10212808	Valve Spring Retainers
25534408	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	24503856	Valve Locks
12552126	3/8" Rocker Studs		

¹Larger intake and exhaust ports allow for more volume of air to pass through the engine. The more air you flow, the more power you can make.



Don't Forget those corresponding parts!
See the chart on page 227 for specifics.

THE ZZ4 ALUMINUM HEAD

The L98 Corvette small-block was a breakthrough in advanced-design and efficiency largely because of the lightweight aluminum heads that were used on that engine. GM Performance Parts now offers you that same cylinder head in one complete assembly that features a D-shaped exhaust port¹, high-velocity intake runners, and centrally-located spark plugs². The applications are endless.

A. 12556463

ZZ4 Aluminum Cylinder Head Assembly

- Aluminum performance head—used on ZZ4 engines
- Completely assembled with 1.94"/1.50" valves
- 163cc intake port
- 58cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/4" reach, tapered plugs)
- 1.48" Valve spring seat diameter
- Screw-in studs (3/8" top, 7/16" bottom)
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- Exhaust ports are raised .100", requires Fel-Pro® gasket #1470
- Use rail type rockers P/N 10089648, or kit P/N 12370838 (roller rockers!)
- Casting P/N 10088113

This head is assembled with the following components:

12550909	Exhaust Valves	10212808	Valve Spring Retainers
10241743	Intake Valves	460483	Intake Valve Stem Seals
12551483	Valve Springs	10147883	Exhaust Valve Stem Seals
10212809	Valve Spring Shims	24503856	Valve Locks
12552126	3/8" Rocker Studs		



A ZZ4 Aluminum Cylinder Head Assembly (intake)



A ZZ4 Aluminum Cylinder Head Assembly (exhaust)



A ZZ4 Aluminum Cylinder Head Assembly (combustion chamber)

¹D-shaped exhaust ports increase the scavenging of the exhaust after combustion. The quicker you can get the exhaust out, the quicker you can get the air/fuel mixture into the combustion chamber. And, that equals big power!

²Centrally-located spark plugs allow for a more efficient flame front and air/fuel mixture burn during combustion, greatly increasing the power potential of the cylinder head.



Don't Forget those corresponding parts!
See the chart on page 227 for specifics.

LT4 Aluminum Cylinder Head Assembly (intake) **B**LT4 Aluminum Cylinder Head Assembly (exhaust) **B**LT4 Aluminum Cylinder Head Assembly (combustion chamber) **B**

THE LT4 ALUMINUM HEAD

Like the L98 Corvette head, the LT4 casting ushered in the next generation of high-performance GM performance small-blocks. The LT4 head has the latest in GM Performance Parts technologies with all of our high-end quality materials. This head can only be used on 1992-and-newer LT1 and LT4 engines with the reverse-coolant flow design. It makes a great starting point for you to build a high horsepower version of one of these engines.

B. 12363287

LT4 Aluminum Cylinder Head Assembly

- Aluminum performance head
- **Can only be used on 1992–newer LT1 and LT4 engines**
- Completely assembled with 2.00"/1.55" valves
- 195cc intake port
- 54.4cc combustion chamber
- No heat riser
- Angled spark plugs (5/8" hex, 3/4" reach, tapered plugs)
- 1.48" Valve spring seat diameter
- Screw-in studs (3/8" top, 7/16" bottom)
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- Exhaust ports are raised .100", requires Fel-Pro® gasket #1470
- Use rail type rockers P/N 10089648, or kit P/N 12370838 (roller rockers!)

This head is assembled with the following components:

12555331	Intake Valves	10212808	Valve Spring Retainers
12551313	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	10212809	Valve Spring Shims
12552126	3/8" Rocker Studs	24503856	Valve Locks

ALUMINUM FAST BURN HEADS

When it comes time to own the street, this is the head for you! GM Performance Parts has brought together all of our new technologies to create the ultimate 23" small-block GM cylinder head. Fast Burn technology maximizes combustion of the air/fuel mixture, resulting in higher cylinder pressures and more power production. The combustion chamber (62cc) is designed for flat top pistons, and the head requires no additional porting for optimum performance, so it provides maximum "out-of-the-box" performance. Recommended for any standard coolant flow 1955-2000 283-400 cubic inch small-block, the Fast Burn head helps us make 425 horsepower from our own ZZ383 crate engine!

A. 12464298

Aluminum Fast Burn Cylinder Head Assembly

- CNC-machined aluminum performance head
- Completely assembled with 2.00"/1.55" valves
- 210cc intake port, roof raised .240"
- 78cc D-shaped exhaust ports, raised .200", requires Fel-Pro® gasket #1470 (may require minor trimming)
- 62cc combustion chamber, .400" thick deck (can be milled safely .060")
- No heat riser
- Angled spark plugs (5/8" hex, 3/4" reach, tapered plugs)
- 1.48" Valve spring seat diameter
- Use head gaskets with stainless steel fire rings
- Raised, machined rocker rails
- 0.530" max valve lift (without modifications)
- Screw-in studs, (3/8" top, 7/16" bottom)
- Dual bolt patterns for perimeter bolt and center-bolt valve covers
- Dual bolt patterns for both Vortec and early model intake manifolds
- Use production intake gasket P/N 12529094 for Vortec intakes or dual bolt pattern intake gasket P/N 12497760 for either early model or Vortec design manifolds (Fel-Pro® #1289 and #1207 may be used)

This head is assembled with the following components:

12555331	Intake Valves	10212808	Valve Spring Retainers
12551313	Exhaust Valves	10212810	Valve Stem Seals
12551483	Valve Springs	10212809	Valve Spring Shims
12552126	3/8" Rocker Studs	24503856	Valve Locks



A Fast Burn Cylinder Head (intake)



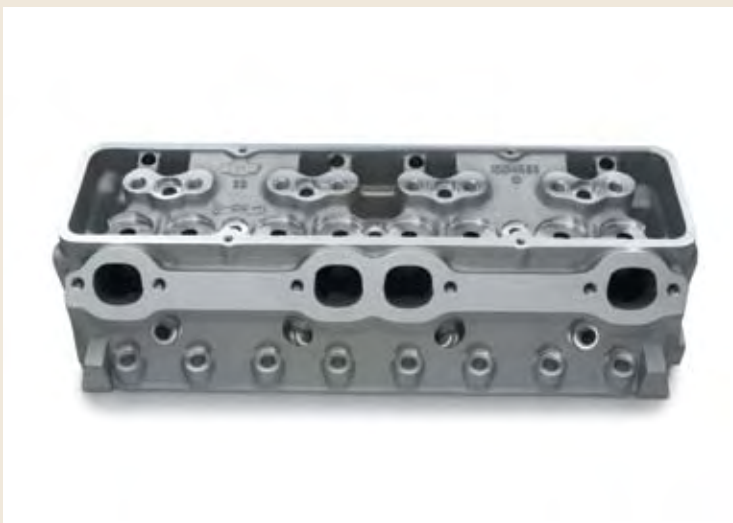
A Fast Burn Cylinder Head (exhaust)



A Fast Burn Cylinder Head (combustion chamber)



Don't Forget those corresponding parts!
See the chart on page 227 for specifics.



15°/18° Cylinder Head (exhaust)



15°/18° Cylinder Head (intake)



15°/18° Cylinder Head (combustion chamber)

LATE-MODEL ALUMINUM SHORT TRACK AND NHRA COMP ELIMINATOR RACING HEADS

GM Performance Parts has been making big power for decades! Now, the same technology that dominates NASCAR and the NHRA is available to the general public for use in your Late-Model Saturday night racecar or your serious drag car effort! We've designed an entire family of high performance in-line valve cylinder heads that are ready to take you to the winner's circle.

These heads come with thicker deck material and thicker manifold flange areas, powerful combustion chambers and high velocity air passages. Drag racers in NHRA's Competition Eliminator want big compression, lots of rpm, and a cylinder head that delivers maximum power at the crack of the throttle. Coupled with the correct valvetrain, intake, and short block, these Racing Heads are exactly what small displacement drag racers have been looking for. The GM Performance Parts engineers have dramatically altered the valve architecture in this head to improve airflow and maximize efficiency. We've also left some of these heads unported, so that your favorite aluminum artist can go to work on them to perfect your given application. Buy a set of these heads from GM Performance Parts, and the only thing you'll have to worry about is the driving!

Aluminum Racing Head Technical Notes:

- 355-T7 Aluminum Competition cylinder heads
- Extra thick decks for angle milling or heavy flat milling
- Recommended for 4.000"–4.155" cylinder bore
- Extra material around ports for professional porting
- Revised location angled spark plugs, (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- Raised & revised location intake and exhaust ports for superior airflow above .600" valve lift
- Longer than stock valves required
- Modified valve angles (not production 23°)
- Designed for aftermarket shaft-mount rocker systems
- Perimeter bolt pattern valve covers required
- Specific 18°/15° intake manifold bolt patterns
- Recommended intakes: P/N 24502481, P/N 24502579 or P/N 24502653 (with valley plate P/N 24502654)
- Intake manifold gasket P/N 10185007

24502580

Semi-Finished 18° Cylinder Head

- Fully machined, semi-finished, **no seats or guides**
- Non-CNC ports and combustion chamber are "as-cast"
- 60cc "as-cast" combustion chambers
- Designed for up to 2.20"/1.625" valves
- 215cc "as-cast" intake ports
- .080" extra material on deck face, and .055" on intake face

24502615

Semi-Finished 15° Cylinder Head

- Fully machined, semi-finished, **no seats or guides**
- Non-CNC ported, ports and combustion chamber are "as-cast"
- Great head for NHRA Comp-Eliminator, both V-8 and 4-cylinder applications!
- Casting has been "rolled" 2°, Valve-guides are also tipped 1°
- 210cc "as-cast" intake ports
- 35–37cc "as-cast" combustion chamber
- Capable of over 900 horsepower
- Multi-NHRA world records

SPLAYED-VALVE ALUMINUM RACE HEAD¹

Departing from the in-line valve head, our splayed-valve castings have a 0.240" minimum port wall thickness so your favorite head porting expert can perform extensive modifications for greater airflow. Intake valves are angled 16° to the deck surface and tilted (splayed) 4°. Exhaust valve angles are 11°, with a 4° tilt. This is an extremely aggressive, all-out competition race head designed to make the absolute maximum power from your small-block Chevy with no regard to street-ability. Our NHRA Competition Eliminator customers routinely make over 1000 horsepower (naturally aspirated) with this cylinder head!

Aluminum Splayed Valve Race Head Technical Notes:

- 355-T7 Aluminum Competition cylinder heads
- **No seats or guides**
- Extra thick decks for angle milling or heavy flat milling
- 45cc "as-cast" combustion chambers
- .240" extra material around ports for professional porting
- Revised location angled spark plugs, (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- Completely revised intake & exhaust ports offer the ultimate in airflow potential
- Designed for longer than stock 2.20" & 1.65" valves
- Modified valve angles, 16° x 4° intake, and 11° x 4° exhaust
- Valve Spring pads accommodate 1.625" diameter valve springs
- All pistons have same orientation
- Designed for aftermarket shaft-mount rocker systems
- Valve Cover P/N 10185045 and valve cover gaskets P/N 10185043 required
- P/N 10185042 intake manifold gasket required
- Custom fabricated intake manifold required

12480146

Rough-Machined Splayed-Valve Aluminum Cylinder Head (not shown)

- Main surfaces are machined, exhaust bolt pattern is machined
- Head bolt & dowel holes, intake bolt holes, spark plug holes & pushrod holes **are not machined**
- Valve guides valve seats, valve spring seats & rocker stands **are not machined**
- Valve locations and angles may be relocated
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers

12480147

Semi-Machined Splayed-Valve Aluminum Cylinder Head (not shown)

- Main surfaces are machined, exhaust bolt pattern, valve guides and spark plug holes **are machined**
- Head bolt holes, dowel holes, intake bolt holes, pushrod holes **are not machined**
- Valve seats, spring seats & rocker stands are not machined
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers
- Same casting as P/N 12480146

A. 24502517

Splayed-Valve Aluminum Cylinder Head

- Semi-machined aluminum race head
- 240cc "as-cast" intake ports
- 78cc "as-cast" exhaust ports
- 45cc "as-cast" combustion chambers
- Same casting as P/N 12480146

¹Splayed valves point the intake and exhaust valves at the center of the cylinder bore. As the valves open, they move away from the edges of the cylinder bore, allowing a larger valve to be installed in the same bore size while dramatically increasing airflow.



A Splayed-Valve Head (exhaust)



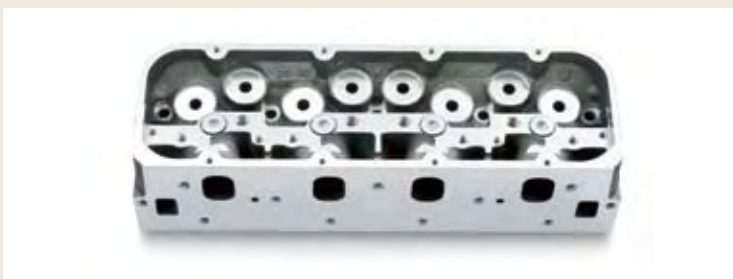
A Splayed-Valve Head (intake)



A Splayed-Valve Head (combustion chamber)



B Splayed-Valve R0X Cylinder Head (exhaust)

Splayed-Valve R0X Cylinder Head (intake) **B**Splayed-Valve R0X Cylinder Head (combustion chamber) **B**SB2.2 Cylinder Head (exhaust) **C**SB2.2 Cylinder Head (intake) **C**SB2.2 Cylinder Head (combustion chamber) **C****B. 12480153****Splayed-Valve R0X Aluminum Cylinder Head**

- Semi-machined aluminum race head
- Great for NHRA competition with dual carburetors
- As cast ports and combustion chambers for professional finishing
- Machined for 4.500" bore center R0X cylinder block P/N 25534352
- Special larger head-bolt pattern, 3/8" fasteners, 19 holes
- 240cc "as-cast peanut" intake ports
- 78cc "as-cast peanut" exhaust ports
- 40cc "as-cast" combustion chambers

88958684**Rough Machined Splayed-Valve R0X Aluminum Cylinder Head (not shown)**

- Main surfaces are machined and exhaust bolt pattern is machined
- No valve guide or valve seat machining

SB2.2 NASCAR RACE HEADS

The SB2 NASCAR racing head was first designed to improve durability, simplify preparation procedures, and reduce the overall cost of building and maintaining a small-block racing engine. It has "mirror" design intake ports, and all eight ports are angled toward the center of the engine, making this a perfect choice for single four-barrel applications. Spark plug holes were moved toward the bore center for greater combustion efficiency. This head is designed for aftermarket shaft-mounted rocker arms, and valve spring pads are large enough to use 1.625" springs. The combustion chambers are 48cc, which allow a 12.1:1 compression ratio with flat-top pistons. The head is machined for standard 1/2" valve guides.

Aluminum SB2.2 NASCAR Race Head Technical Notes:

- 355-T7 X-rayed and "hipped" aluminum competition cylinder heads
- Extra thick decks for heavy flat milling
- Combustion chambers are very small, shallow & wedge shaped
- Extra material around ports for professional porting
- Revised location angled spark plugs, (14mm, 5/8" hex, 3/4" reach, gasketed plugs)
- "Mirror" design intake ports are angled toward center of engine for single 4-barrel carb applications
- Designed for 2.15" & 1.625" valves, longer than stock valves required
- Valve Spring pads accommodate 1.625" diameter valve springs
- Modified valve angles, 11° x 4° intake, and 8° x 0° exhaust
- Requires left- and right-hand pistons
- Precision T-washers installed in all (4) center head bolt bosses
- Designed for aftermarket shaft-mount rocker systems
- Valve cover P/N 12480006 or P/N 12480012 required
- Replacement AN-08 intake port plugs are available as P/N 12480171

C. 12480011**Semi-Finished SB2.2 Aluminum Cylinder Head**

- Aluminum NASCAR accepted head
- Bare head, **no seats or guides** installed
- Standard .500" guide holes
- As cast "peanut" ports
- 48cc "as-cast" combustion chamber

SB2.2 NASCAR Race Heads Continued

12480129

Semi-Finished SB2.2 Aluminum Cylinder Head

- Aluminum NASCAR accepted head
- Bare head, **no seats or guides**
- Reduced size .375" diameter guide holes
- As cast "peanut" ports
- 48cc "as-cast" combustion chamber

A. 88958667

Semi-Finished SB2.2 Design R0X Aluminum Cylinder Head

- Fully CNC-machined aluminum race head
- Has cast ports and combustion chambers for professional finishing
- Machined for 4.500" bore center R0X cylinder block P/N 25534453
- Special spread head-bolt pattern, 3/8" fasteners, 19 holes
- Machined with additional .070" material on deck face.
- Valve centerlines moved apart .100 for additional valve clearance and larger valves
- Valve angles are 11° x 4° intake, and 7° x 2° exhaust
- Exhaust port positions are slightly reoriented, but same bolt pattern as standard SB2.2
- As cast "peanut" intake ports
- As cast "peanut" exhaust ports
- 28cc "as-cast" combustion chambers



A Semi-Finished SB2.2 Design R0X Cylinder Head (exhaust)



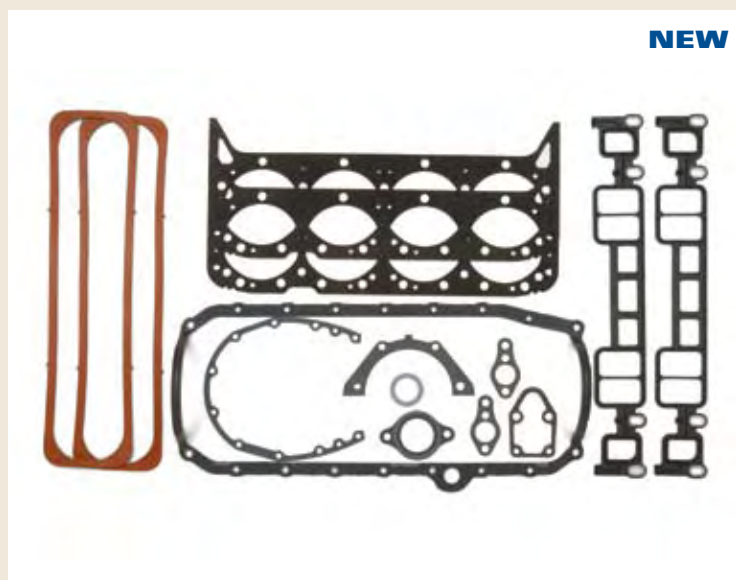
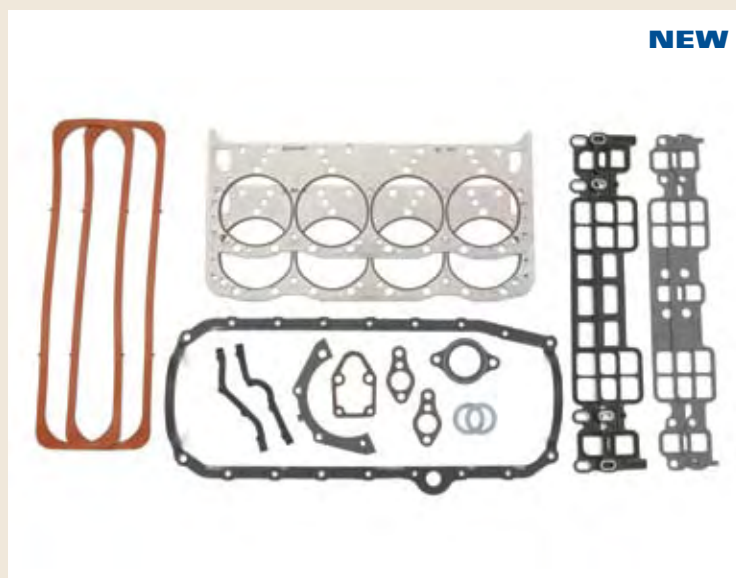
A R0X SB2.2 Head (intake)



A R0X SB2.2 Head (combustion chamber)

Cylinder Heads: Corresponding Parts

Part Number	Head Gaskets (Quantity)	Bolts (Quantity)	Plug	Engine Application
93438649	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529
93438648	10105117 (2)	10168525 (14), 10168526 (4), 10168527 (16)	N/A	12587265, 12499529
12558060	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	19157986	88958602, 12499711, 12499101, 12497317, 12486041, 12496968
12529093	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	19157986	88958602, 12499711, 12499101, 12497317, 12486041, 12496968
12464298	10105117 (2) OR 12557236 (2)	10168525 (14), 10168526 (4), 10168527 (16)	5614210	88958604, 12499710, 1249772, 12496769
12556463	1255723 (2)	10168525 (14), 10168526 (4), 10168527 (16)	5614210	24502609, 88958603, 12499712
25534446	10105117 (2), 10185054 (2) OR 12367763 (2)	10168525 (14), 10168526 (4), 10168527 (16)	—	Intake numbers 12366573, 12496820, 12496822, 12496820

Rebuild Gasket Kit **A**Rebuild Gasket Kit **B**

OVERHAUL GASKET KITS

A. 19201171 **NEW**

Rebuild Gasket Kit

- Fits 350 HO and Circle Track engine P/N 88958602
- Now includes crankshaft rear main seal

This kit includes the following items:

10105117	2	Head Gaskets
10108676	1	Oil Pan Gasket Set
12555771	1	Rear Main Seal Housing Gasket
89017465	1	Intake Manifold Gasket Set
10105135	1	Water Outlet Gasket
10108435	1	Front Cover Gasket
12560223	1	Fuel Pump Adapter Gasket
3754587	2	Water Pump Gaskets
10108445	1	Distributor Gasket
10046089	2	Valve Cover Gaskets
12554314	1	Crankshaft Rear Main Seal

B. 19201172 **NEW**

Rebuild Gasket Kit

- Fits ZZ4, Fast Burn 385, HT383 and Circle Track engines P/N 88958603 and P/N 88958604
- Now includes crankshaft rear main seal

This kit includes the following items:

12557236	2	Head Gaskets
10108676	1	Oil Pan Gasket Set
12555771	1	Rear Main Seal Housing Gasket
89017465	1	Intake Manifold Gasket Set
10147994	1	Intake Manifold Gasket Set
10105135	1	Water Outlet Gasket
12560223	1	Fuel Pump Adapter Gasket
3754587	2	Water Pump Gaskets
10108445	1	Distributor Gasket
10046089	2	Valve Cover Gaskets
12554314	1	Crankshaft Rear Main Seal

CYLINDER HEAD GASKETS & HEAD BOLTS

GM Performance Parts cylinder head gaskets, cylinder head bolts, and cylinder head studs are the finest quality parts available to ensure a secure seal between the engine block and cylinder heads.

NOTE:

Gasket packages contain one gasket unless otherwise specified. Order two per engine.

Small-block cylinder head gaskets are available in a variety of materials and thicknesses. Keep in mind your engine's intended usage and minimum piston-to-head clearance when selecting gaskets.

A. 10105117

Composition Head Gasket

- Composition head gasket with stainless steel fire ring
- For stock or mildly modified engines with **4.00"** cylinder bores
- Fits cast iron or aluminum heads
- Used on Ram Jet 350
- **0.028"** compressed thickness

3830711

Steel Shim Head Gasket (not shown)

- For stock and mildly modified engines with **4.00"** cylinder bores
- **0.026"** compressed thickness

12557236

Composition Head Gasket (not shown)

- Stainless steel fire rings
- Fits aluminum or cast iron heads
- Used on ZZ4 and 350 HO engines
- **0.051"** compressed thickness

B. 10185054

Heavy-Duty Composition Head Gasket

- Teflon-coated
- Pre-flattened wire O-rings around each cylinder
- For competition engines with cylinder bores of **4.00" to 4.125"**
- **0.041"** compressed thickness

NOTE:

Drill steam holes when used on 400-ci small-blocks. Gasket does not require re-torquing.

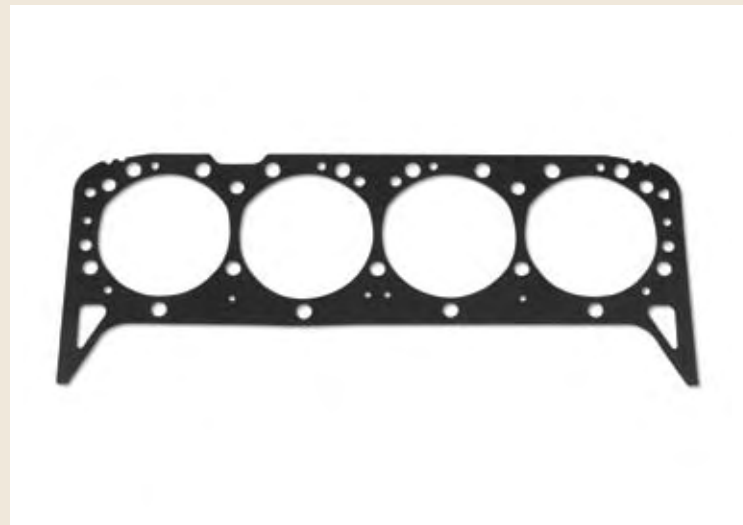
C. 12363763

Special Competition Head Gasket

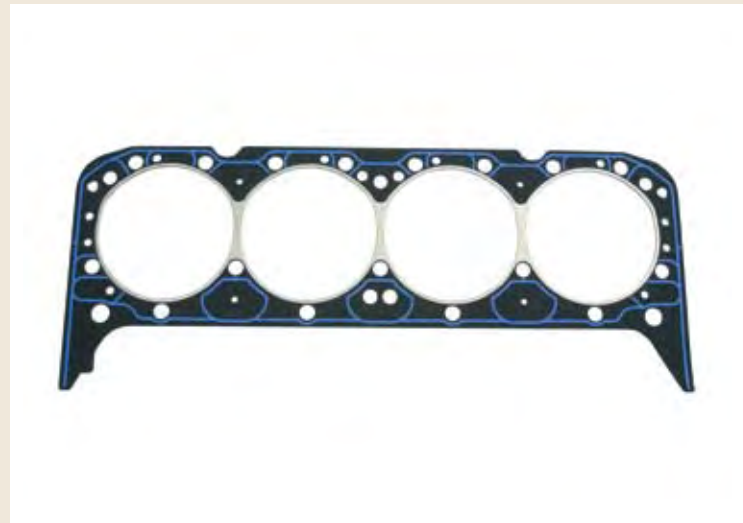
- Teflon-coated, heavy-duty composition gasket
- Pre-flattened steel fire rings and **4.200"** bore
- For Bowtie, 400 small-blocks, and aluminum blocks with cast iron or aluminum heads
- Revised coolant hole pattern
- No steam holes for production 400 engines
- **0.038"** compressed thickness

NOTE:

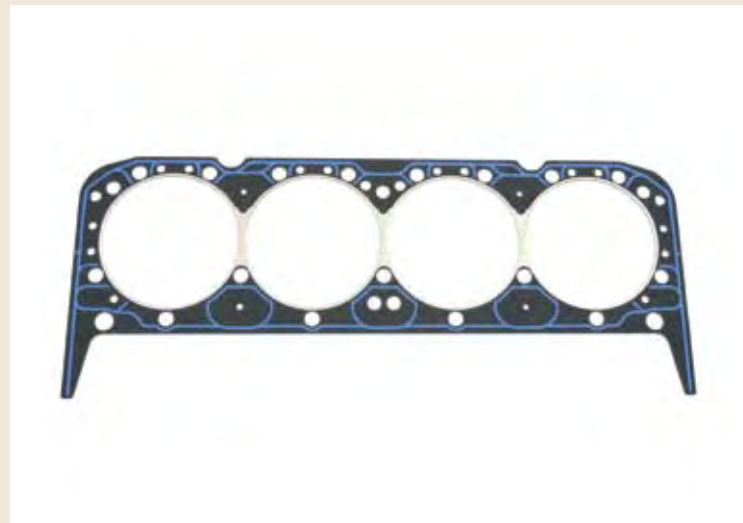
Gasket does not require re-torquing.



A Composition Head Gasket



B Heavy-Duty Composition Head Gasket



C Special Competition Head Gasket

Cylinder Head Installation Kit **D**Cylinder Head Dowel Pin **E**Cylinder Head Bolt Kit **F****12553160****LT1 Head Gasket (not shown)**

- Composition gasket for 1994–2001 iron head LT1 engines
- 0.028" compressed thickness

10168457**LT1 Head Gasket (Aluminum Head) (not shown)**

- Composition gasket for 1992–2001 aluminum head LT1 engines
- 0.050" compressed thickness

12551488**LT4 Head Gasket (not shown)**

- Composition gasket for 1996 aluminum head LT4 engines
- 0.043" compressed thickness

D. 12499223**Cylinder Head Installation Kit (5.7L L31 Engine)**

- Comprehensive kit
- Includes two cylinder head gaskets, two valve cover gaskets, two intake manifold gasket sets and two exhaust manifold gaskets
- .028" compressed thickness

PART	DESCRIPTION	QTY
10105117	Cylinder Head Gasket	2
10046089	Valve Cover Gasket	2
12529094	Intake Manifold Gasket	2
12550033	Exhaust Manifold Gasket	2

HEAD BOLTS AND STUDS**E. 585927****Cylinder Head Dowel Pin**

- Dowel pin 5/16" diameter by 9/16" long
- For all small-block V-8 and 90° V-6 engines

F. 12495499**Cylinder Head Bolt Kit**

- For iron or aluminum heads
- Includes 14 of P/N 10168525, 4 of P/N 10168526, 16 of P/N 1016852, and thread sealant

Head Bolts And Studs Continued

A. 14011040

Hardened Washer

- 0.45" I.D. x 0.778" O.D.
- Sold individually

B. 10051155

Hardened Washer

- 0.45" I.D. x 0.750" O.D.
- For Phase 6 and raised runner aluminum heads
- Sold individually

12366568

Cylinder Head Nut Kit (not shown)

- Set of 16 magnafluxed 1038 steel 7/16-20 hex head P/N 3942410 nuts for aftermarket head studs
- Complete for one cylinder head; order two per engine

12366569

Cylinder Head Nut Kit (not shown)

- Set of 16 magnafluxed 4037 steel 7/16-20 12-point P/N 14044866 nuts for aftermarket head studs
- Complete for one cylinder head; order two per engine

C. 3942410

Cylinder Head Stud Nut

- Magnafluxed hex head 1038 steel 7/16-20 nut
- Sold individually

D. 14044866

Cylinder Head Stud Nut

- Magnafluxed 12-point 4037 steel 7/16-20 nut
- Sold individually



A Hardened Washer



B Hardened Washer



C Hex Nut



D 12-Point Nut



2.02" Intake Valve



1.55" Exhaust Valve

SMALL-BLOCK VALVES

Part Number	Valve Size	Stem Size	Description
Intake Valves			
10241743	1.94"	11/32"	Stock replacement valve used in all of our crate engines except CT350/400, Fast Burn 385 & ZZ383/425
12363755	1.94"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
12555331	2.00"	11/32"	Stock replacement valve used in the 1996 LT4 engine, and in our CT350/400, Fast Burn 385 & ZZ383/425 also in LT4 and Fast Burn heads
12363757	2.00"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
25534407	2.00"	11/32"	Heavy-duty stainless steel one-piece valve, for Bowtie Vortec cylinder heads
12363753	2.02"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
366285	2.05"	11/32"	Swirl polished stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads, 10° back angle
Exhaust Valves			
12550909	1.50"	11/32"	Stock replacement valve used in all of our crate engines except CT350/400, Fast Burn 385 & ZZ383/425
12551313	1.55"	11/32"	Stock replacement valve used in the 1996 LT4 engine, and in our CT350/400, Fast Burn 385 & ZZ383/425 also in LT4 and Fast Burn heads
12363756	1.50"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
12363758	1.55"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads
12363754	1.60"	11/32"	Stainless steel valve with undercut stems to improve air flow, single groove design, chrome plated stems to reduce wear, hardened tips to withstand high loads



SMALL-BLOCK VALVE SPRINGS & SPRING KITS

Part Number	Spring Type	Outside Diameter	Pressure at Installed Height	Solid Height	Average Rate (lbs @ in)	Retainer Part Number	Valve Seal Kit	Technical Notes
3911068	Single w/dampener	1.241"	80# @ 1.70"	1.15"	267	14003715	10132715	Production spring for 350/300 HP and 350/290 HP engines
3927142	Single	1.273"	110# @ 1.70"	1.16"	358	14003974	10132715	Use with cam P/N 3927140 and all high-performance production cams to extend rpm range
10134358	Single w/dampener	1.273"	110# @ 1.70"	1.16"	356	14003974	10132715	Chrome silicone steel; use with aluminum heads P/N 10185086, orange color code.
330585	Dual	1.379"	140# @ 1.75"	1.15"	325	330586	10132715	Use with cams P/N 3927140, P/N 3965754, and all moderate lift racing cams
12495495	Dual kit	1.379"	140# @ 1.75"	1.15"	325	330586	10132715	Kit of 16 springs P/N 330585 (see above)
366282	Dual w/dampener	1.525"	128# @ 1.70"	1.26"	406	366254	Aftermarket	Use with high-lift mushroom or roller lifter racing cams (0.625" lift)
10206040	Single spring	1.30"	85# @ 1.78"	1.26"	373	10168424	N/A	1992–1993 LT1 production Corvette engine
12551483	Single spring	1.32"	101# @ 1.78"	1.22"	332	10212808	N/A	1996 LT4 Corvette, Z24, CT350/400 and ZZ383 engines;
12495494	Spring kit	1.32"	101# @ 1.78"	1.22"	332	10212808	N/A	Kit of 16 springs P/N 12551483 (see above)
10212811	Single spring	1.25"	80# @ 1.70"	1.20"	256	10241744	N/A	CT350/350, 350HO engines
19154761	Spring kit	1.25"	80# @ 1.70"	1.20"	256	10241744	N/A	Kit of 16 Springs P/N 10212811 (see above)

VALVE SPRINGS AND SHIMS



Aluminum Valve Spring Retainer



Titanium Valve Spring Retainer

12484788

Intake Valve Seat (not shown)

- Heat-treated, iron alloy intake valve seat
- Seat diameter is 2.149" O.D. and 1.85" I.D. +/- 0.0005"
- 0.312" thick +/-0.002"

12484789

Exhaust Valve Seat (not shown)

- Heat-treated, iron alloy exhaust valve seat
- Seat diameter is 1.688" O.D. and 1.330" I.D. +/- 0.0005"
- 0.3125" thick +/- 0.0025"

10212809

LT4 Valve Spring Shim (not shown)

- Lightweight shims as used on 1996 LT4 Corvette special LT service heads P/N 12363287, and Fast Burn heads
- Use with spring P/N 12551483

10185066

Spring Shim (not shown)

- Used on ZZ3 series 350 HO engines
- Spacer is 1.35" O.D. x 0.561" I.D. x .050" thick

3731058

Spring Shim (not shown)

- 55/64" I.D. x 1-15/16" O.D. x 0.030" thick

3875916

Spring Shim (not shown)

- 55/64" I.D. x 1-31/64" O.D. x 0.015" thick

3891521

Spring Shim (not shown)

- 55/64" I.D. x 1-31/64" O.D. x 0.065" thick

460483

Valve Stem Seal (not shown)

- Used on all ZZ series 350 HO engines
- Sold individually; 16 required per engine

10212810

LT4 Valve Stem Seal (not shown)

- Used on LT4 heads and GM Performance Parts head assemblies P/N 25534421, 25534431, 12363287 and 12464298.

12511890

Valve Stem Seal Kit (not shown)

- Late-model V-8 seal kit for 11/32" diameter valve stems
- Includes eight intake seals, eight exhaust seals, and 16 oil stem seals

NOTE: Check for seal-to-guide interference with high-lift cams.

10241744

Valve Spring Retainer (not shown)

- Used on 350 HO, 350 Ram Jet and HT383

12495493

Valve Spring Retainer Kit (not shown)

- Kit of 16 P/N 14003974 caps as used on ZZZ, ZZ1, ZZ2, 350/300 HP, and 350/290 HP engines
- Base caps for most V-8 and V-6 engines
- 1-13/32" diameter retainer for springs P/N 3911068 and P/N 3927142

10045007

Valve Spring Retainer (not shown)

- For all ZZ3 series engines

NOTE: When converting ZZZ, ZZ1 or ZZ2 engines to ZZ3 series cap, valve spring shield must be removed and add cap P/N 10045007, seal P/N 460483, and spacer P/N 10185066.

12495492

LT4 Valve Spring Cap Kit (not shown)

- Kit for 5.7L LT4 engines
- Includes 16 P/N 10212808 lightweight retainers
- Use with spring kit P/N 12495494 and key kit P/N 12495503
- Used on ZZ4, Fast Burn, LT4, and iron Vortec Bowtie heads

19169661

Heavy Duty Vortec Valve Spring Retainer (not shown)

- Fits Fast Burn and Vortec Bowtie cylinder heads
- Designed for circle track racing

330586

Aluminum Valve Spring Retainer

- For valve spring P/N 330585

366254

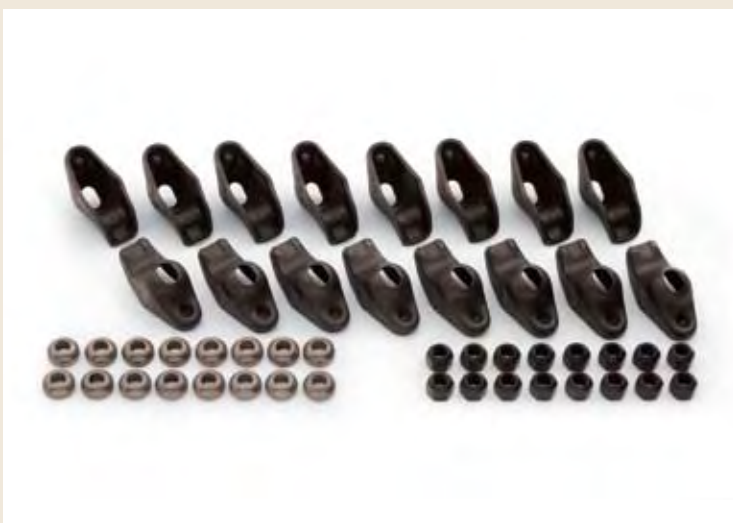
Titanium Valve Spring Retainer

- For valve spring P/N 366282

12495503

Valve Spring Key Kit (not shown)

- Kit includes 32 keys of P/N 24503856 for 11/32" valve stems
- Use on all small-block V-8 engines

Rocker Arm Kit, 1.5 Ratio **A**Roller Rocker Arm Set **B**Roller Rocker Arm (top) **B**Roller Rocker Arm (bottom) **B**

ROCKER ARMS

A. 12495490

Rocker Arm Kit, 1.5 Ratio (Set of 16)

- Self-aligning, high-quality rockers have a nominal 1.5:1 ratio
- Includes 16 stamped steel rockers with pivot balls and nuts
- Use P/N 10089648 for single service part; for 3/8" studs

NOTE: Does not fit LS Series engines. Not recommended for mechanical lifter camshafts.

Aluminum Roller Rocker Arm 3/8" Studs

These roller rocker arms are similar to the rockers used in the 1996 Corvette LT4 engine, except the trunnions have been machined for early-model 3/8" rocker studs. The arms are self-aligning with improved stiffness and accommodate up to 0.575" valve lift. Choose from 1.5:1 and 1.6:1 ratios below.

12370838

Roller Rocker Arm Set, 1.5:1 Ratio (not shown)

- Set of 16, 3/8" stud 1.5:1 ratio roller rockers
- Use P/N 12367345 for single service part

12370839

Roller Rocker Arm Set, 1.6:1 Ratio (not shown)

- Set of 16, 3/8" stud 1.6:1 ratio roller rockers
- Use P/N 12367346 for single service part

NOTE: When using a high lift camshaft, check valve spring coil bind, retainer-to-seal clearance, and piston-to-valve clearance. Check for adequate pushrod clearance when using on cast iron heads. It may be necessary to remove valve cover drippers for proper rocker arm clearance. P/N 12370839 cannot be used on ZZ3 engines with orange valve springs.

12367347

Adjuster Nut for Roller Rocker Arm (not shown)

- 3/8" adjustment nut
- Used on both aluminum rocker arm kits P/N 12370838 and P/N 12370839

88961233

"Kool Nut" Rocker Arm Kit (not shown)

- Special rocker arm nuts are used on GM circle track engines
- Contains 16 pieces

Aluminum Roller Rocker Arm 7/16" Studs

These roller rocker arms are for 7/16" studs and are CNC-machined from aluminum alloy. The bearings and fulcrum have an extra-wide design for load distribution and are lubricated with pressurized oil. The roller tip axle is made from 4130 steel, and the roller tip is machined and ground from 8620 steel. Bowtie logo is machined into each rocker. Choose from 1.5:1 and 1.6:1 ratios below.

B. 12361321

Roller Rocker Arm Set, 1.5:1 Ratio

- Set of 16, 7/16" stud 1.5:1 roller rocker arms
- Use P/N 12361328 for single service part

12361322

Roller Rocker Arm Set, 1.6:1 Ratio (not shown)

- Set of 16, 7/16" stud 1.6:1 roller rocker arms
- Use P/N 12361329 for single service part

NOTE: These aluminum rockers will not work with standard-height valve covers. When using a high lift camshaft, check valve spring coil bind, retainer-to-seal clearance, and piston-to-valve clearance. Check for adequate pushrod clearance when using on cast iron heads. It may be necessary to remove valve cover drippers for proper rocker arm clearance.

VALVE COVERS

Add a stylish finishing touch without sacrificing performance, with our branded valve covers. GM Performance Parts valve covers are made of heavy-gauge steel for better sealing and reduced likeliness of leakage from over-tightened fasteners. The variety of designs allows personalization to suit any taste. Competition covers are designed to clear taller valvetrains. All valve covers are sold in pairs.

NOTE:

Ordering note: Valve covers are sold in pairs unless otherwise specified.

Valve covers cannot be used with 15° or 18° heads unless otherwise stated.

A. 10185064

Tall Aluminum Valve Covers

- Competition racing valve cover displays the Chevrolet name and Bowtie insignia
- Natural cast finish
- No holes for PCV or oil fill, but has bosses for drilling them
- Designed for pre-1986 engines with perimeter hold downs
- Can be used with 15° and 18° heads
- Use P/N 10185052 for single service part

B. 12480127

Short Aluminum Valve Covers

- Cast aluminum Chevy Bowtie-design valve cover is similar to P/N 10185064 except it is a short style with a PVC hole in both covers (grommets included)
- Natural cast finish
- Designed for pre-1986 engines with perimeter hold downs
- Covers have oil baffle

NOTE: For use with 1.5 ratio stamped rocker arms only.

C. 10093393

Tall Aluminum Valve Covers, Pontiac Logo

- Perfect for Pontiac-bodied vehicles powered by a Chevrolet-style small-block V-8
- Natural cast finish
- No holes for PCV or oil fill, but has bosses for drilling them
- Designed for pre-1986 engines with perimeter hold downs
- Can be used with 15° and 18° heads



A Tall Aluminum Valve Covers



B Short Aluminum Valve Covers



C Tall Aluminum Valve Covers, Pontiac Logo

Tall Valve Covers, No Logo **D****D. 24502466****Tall Valve Covers, No Logo**

- Create your own custom valve covers!
- Cast aluminum valve cover is similar to P/N 10185064, but has no logo
- Cast with material to permit milling a custom logo

NOTE: Sold as single piece. Order two per engine.

E. 12341670**Chrome Short Valve Covers**

- Short chrome valve covers, with baffle
- For use on pre-1986 engines with perimeter hold downs
- Chevrolet and the Bowtie logo are embossed on top

NOTE: For use with 1.5 ratio stamped rocker arms only.

F. 12497978**Polished Aluminum Valve Covers, Center Bolt Design**

- Die-cast aluminum valve covers
- Polished to a bright shine
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980.

Chrome Short Valve Covers **E**Polished Aluminum Valve Covers, Center Bolt Design **F**

Don't Forget those corresponding parts!
See the chart on page 237 for specifics.

Valve Covers Continued

A. 12497979

Aluminum Black Crinkle Valve Covers, Center Bolt Design

- Die-cast with black crinkle finish
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980.

B. 12497985

Chrome-Finish Aluminum Valve Covers, Center Bolt Design

- Die-cast with chrome finish
- Approximately 1/4" taller than production covers
- For use on 1986-and-newer engines with center hold-downs
- Kit includes bolts, washers and seals

NOTE: Use valve cover gasket P/N 10046089 and replacement bolt and seal kit P/N 12497980.

C. 25534359

Circle Track Valve Covers, Center Bolt Design

- Sheet metal valve cover kit designed for Gen I design circle track engines equipped with center hold-down cylinder heads
- Covers equipped with two breather pipes on one cover and no pipes on the other

NOTE: Use breather kit P/N 25534355.

D. 10185045

Cast Aluminum Valve Cover, Splayed-Valve V-8

- For use only with splayed-valve V-8 cylinder heads P/N 24502517, P/N 12480147 and P/N 12480146
- Cover has Chevrolet name and Bowtie logo

NOTE: Sold as single piece. Order two per engine.

E. 12480006

Aluminum Valve Cover, SB2.2 "Chevrolet Logo"

- Attractive cast aluminum valve cover with Chevrolet name
- Used only on SB2.2 cylinder heads P/N 12480011 and P/N 12480129

NOTE: Sold as single piece. Order two per engine. Cover does not fit first design SB2 head. GM no longer offers a first-design SB2 cover.



A Aluminum Black Crinkle Valve Covers, Center Bolt Design



B Chrome-Finish Aluminum Valve Covers, Center Bolt Design



C CircleTrack Valve Covers, Center Bolt Design



D Cast Aluminum Valve Cover, Splayed-Valve V-8



E Aluminum Valve Cover, SB2.2 "Chevrolet Logo"



Don't Forget those corresponding parts!
See the chart on page 237 for specifics.

Aluminum Valve Cover, SB2.2 "Pontiac Logo" **F**Adapter, Center Bolt Design to Flange Mount **G**Bolt Kit, Center Bolt Design **H****F. 12480012****Aluminum Valve Cover, SB2.2 "Pontiac Logo"**

- Similar to P/N 1248006 described on page 236, but embossed with the Pontiac name
- Sold as single piece

88958653**R0X SB2.2 Aluminum Valve Cover (not shown)**

- Fits R0X head P/N 88958667
- Sold as single piece

ADAPTERS, HARDWARE AND BREATHERS**G. 24502540****Adapter, Center Bolt Design to Flange Mount**

- Allows use of old-style flange mount (perimeter hold-down) valve covers on 1986-and-newer center hold down-style heads
- CNC-machined from billet aluminum stock
- Kit includes two 3/8" thick adapters, O-rings and fasteners

NOTE: Use replacement O-ring gasket P/N 12480023.

H. 12497980**Chrome Bolt Kit, Center Bolt Design**

- Service replacement parts for 1986-and-newer center hold-down design, die cast aluminum valve covers in chrome, crinkle, and polished finishes
- Will not fit production valve covers

12356818**Chrome Hold-Down Bolt (not shown)**

- Chrome valve cover hold-down bolt
- Used on all 1986-and-newer engines with center hold-down design stamped valve covers

NOTE: Package contains one bolt. Order four per valve cover.

12338092**Black Hold-Down Bolt (not shown)**

- Black valve cover hold-down bolt
- Used on all 1986-and-newer engines with center hold-down design stamped valve covers

NOTE: Package contains one bolt. Order four per valve cover.

! Valve Covers: Corresponding Parts

Part Number	Gaskets (Qty)	Bolts (Qty)	Grommets (Qty)	Oil Fillers (Qty)	Engine Application
25534359	10046089 (2)	N/A	3989350 (1)	93439687 (1)	88958602, 88958603
12497979	10046089 (2)	12497980	12341988	—	Small-Block
12497985	10046089 (2)	12497980	12341988	—	Small-Block
12497978	10046089 (2)	12497980	12341988	—	Small-Block

Adapters, Hardware & Breathers Continued

A. 88962074

Oil Baffle Tube

- Pushes easily into most valve covers that have an oil baffle
- Requires breather P/N 25534355; used on ZZ572 engines

B. 25534355

Circle Track Breather

- Special breathers are for circle track
- Valve covers used on Circle Track and ZZ572 engines
- Chrome breathers are 1-3/8", hose-clamp-style with the Bowtie logo on top
- Installs on the left-side of each valve cover
- Kit includes two breathers

C. 12341993

Push-In Oil Filler Cap

- For valve covers with 1.22" hole

3894337

Rubber Grommet, Bowtie Valve Covers (not shown)

- Has 15/16" I.D. x 17/32" O.D.
- Can be used to plug the oil filler hole in Bowtie valve covers, or to mount a push-in breather

D. 12341986

Hold-Down Clamps

- Clamps to minimize distortion of valve cover flanges on 1955-1986 Chevrolet small-block V-8 and 90° V-6 engines
- Four clamps per package; order two per engine

E. 14082321

Spring Bar Retainer

- Special steel retainers prevent oil leaks
- Use under the valve cover bolts
- Distribute clamping force over a large area and prevent deformation of the flanges
- Narrow retainers are engineered to fit pre-1986 engines with perimeter-style hold downs

NOTE:

Package contains one retainer. Order four per valve cover.

F. 14044820

Spring Bar Retainer, Chrome Plated

- Similar to retainer P/N 14082321 described above
- Chrome plated to match chrome valve covers

NOTE:

Package contains one retainer. Order four per valve cover.

3933964

Valve Cover Gasket (not shown)

- Cork-type gasket
- Fits all valve covers with perimeter hold-down bolts
- One gasket per package

10045043

Valve Cover Gasket (not shown)

- For '86 and newer center hold down design valve covers

10185043

Valve Cover Gasket, Splayed Valve Head (not shown)

- Used with on splayed-valve V-8 cylinder head P/N 24502517
- Kit includes two gaskets



A Oil Baffle Tube



B CircleTrack Breather



C Push-In Oil Filler Cap



D Hold-Down Clamps



E Spring Bar Retainer



F Spring Bar Retainer, Chrome Plated



Heavy-Duty Pushrod Kit (0.100" longer than stock)

PUSHRODS

GM Performance Parts offers a complete line of heavy-duty pushrods for most GM engines. They are designed to deliver outstanding performance in high-performance street and competition applications and are available in two materials: 1010 mild steel, which is suitable for high-performance street cars, power boats, street rods, and limited competition applications, and 4130 chromemoly steel, for maximum-performance racing engines.

NOTE:

TECH NOTES: Heavy-duty pushrods for small-block V-8 and V-6/90° engines are available in standard and 0.100" extended lengths. Longer pushrods can be used to restore the correct valvetrain geometry when using a high-lift camshaft with a small base circle. Extra-long pushrods also are recommended when longer-than-stock valves are installed. GM Performance Parts pushrods are case-hardened for use with pushrod guideplates.

SMALL-BLOCK PUSHRODS

Part Number	Material	Diameter	Length	Usage	Description
12495491	1010 steel	5/16"	7.724"	Flat tappet	(16) Heavy-duty heat-treated .075" wall, hardened tip inserts. Standard length. Use 14044874 for single piece.
14044874	1010 steel	5/16"	7.724"	Flat tappet	(1) Heavy-duty heat-treated .075" wall, hardened tip inserts. Standard length.
12371057	1010 steel	5/16"	7.824"	Flat tappet	(16) Heavy-duty heat-treated .075" wall, hardened tip inserts. +.100 long. Use 366277 for single piece.
366277	1010 steel	5/16"	7.824"	Flat tappet	(1) Heavy-duty heat-treated .075" wall, hardened tip inserts. +.100 long.
10046173	1010 steel	5/16"	7.122"	Hyd. roller	(1) Heavy-duty heat-treated .060" wall, standard length. For use in early ZZ-series engines with guideplates
12371041	1010 steel	5/16"	7.122"	Hyd. roller	(16) Heavy-duty .060" wall, standard length. For use in 2nd design ZZ-series engines without guideplates. Use P/N 10241740 for single piece.
10241740	1010 steel	5/16"	7.122"	Hyd. roller	(1) Heavy-duty .060" wall, standard length. For use in 2nd design ZZ-series engines without guideplates.
10134309	4130 steel	5/16"	7.896"	Special	(1) Chromemoly 1-piece design racing pushrod

SMALL-BLOCK GUIDEPLATES

Part Number	Description	Technical Notes
3973418	Pushrod guideplate (cast iron head)	For use with production and Bowtie cast iron cylinder heads with screw-in studs. Can also be used with aluminum Bowtie V-6 head. Should not be used with self-aligning rockers. Pushrod slots are 0.325". For 90° V-6, use on cylinders 1, 2, 5 and 6; guideplate must be ground to clear valve cover hold-down bolts. Four required per V-8 head.
14011051	Pushrod guideplate (aluminum Bowtie head)	Hardened steel guideplate has the correct pushrod spacing for aluminum Bowtie heads. Should not be used with self-aligning rockers. Pushrod slots are 0.365". Four required per V-8 head.
10111771	Pushrod guideplate (Corvette aluminum head)	Non-hardened guideplate for use with Corvette aluminum cylinder head assembly P/N 12556463 and 350 HO engine assembly P/N 10185072. Four required per V-8 head.

Screw-In Rocker Stud Kit (LT1, LT4 style) **G**

ROCKER ARM STUDS

12495497

Screw-In Rocker Stud Kit (3/8") (not shown)

- 3/8" studs fit all high-performance small-block V-8 and 90° V-6 Chevrolet cylinder heads machined for screw-in studs and using guideplates
- Won't pull out of their bosses under high load
- Kit includes 16 pieces, for single stud usage, use P/N 10168410
- Lower thread section is 7/16-14

NOTE:

Screw-in studs can be installed on heads originally equipped with pressed studs by machining and tapping the stud bosses.

G. 12371058

Screw-In Rocker Stud Kit (LT1, LT4 style)

- 3/8" studs are used on all late-model LT1, LT4, and any head not using a pushrod guideplate
- Kit includes 16 pieces; for single stud usage, use P/N 12552126
- Lower thread section is 7/16-14

3921912

Screw-In Rocker Stud (7/16", big-block style) (not shown)

- Beefy 7/16" big-block V-8 rocker studs
- Improve valvetrain stability of any small-block V-8 or 90° V-6 racing engine by minimizing rocker stud flex
- Fits any small-block V-8 or 90° V-6 cylinder head machined for screw-in studs
- Requires rocker arm for 7/16" stud

VALVE LIFTERS

A. 14044875

Lifter Bore Repair Kit

- Don't scrap an expensive engine block because of a damaged lifter bore!
- Repairs scored or leaky lifter bores
- Also recommended for competition engine builders who "blueprint" the lifter bores

NOTE:

Drill the defective lifter bore to 1.044". Shrink the sleeve by cooling it to -40°F and insert it in the lifter bore, making sure that the bottom of the sleeve is flush with the camshaft cavity. Drill a 7/16" hole through the oil gallery and finish the sleeve ID to 0.8432/0.8442". The sleeve can also be pre-drilled with a 1/2" oil hole before installing it in the block.



A Lifter Bore Repair Kit

B. 88958652

Valve Lifter Guide, "Quick Cam"

- Composite lifter guide is the same as used on LS series GM small-blocks, but with mounting holes for use on Gen I GM small-blocks (block must be drilled & tapped)
- For use with hydraulic roller lifters only
- Makes it possible to remove the camshaft without removing the intake and lifters
- Enough friction in the guide to hold the lifters in place if the rocker arms are backed off and the camshaft is rotated two full revolutions to push up the lifters

NOTE: Package services one lifter bank.



B Valve Lifter Guide, "Quick Cam"

C. 12371042

Hydraulic Roller Lifter Kit

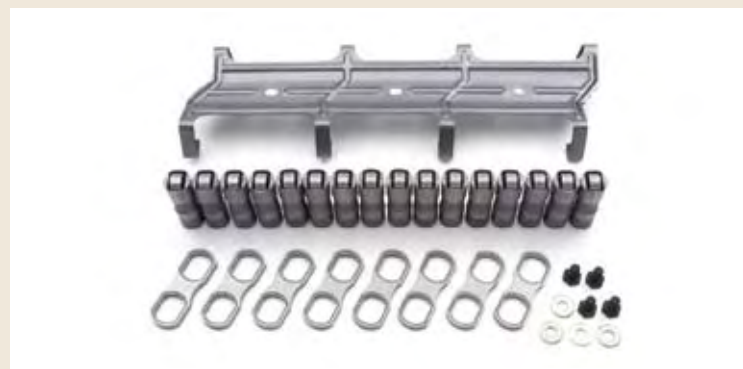
- Designed for 1986-and-later engines
- Second-design lifters are used in late-model 350 HO engines and use a higher checkball spring preload
- Includes 16 lifters of P/N 17120735, eight valve lifter guides, one valve lifter guide retainer, four retainer bolts, and four retainer washers
- This lifter kit plus pushrod kit P/N 12371041 and a roller-tappet design camshaft converts your engine to a roller-lifter engine
- For single lifter usage, use P/N 17120735

This kit includes the following items:

17120735 16 Roller Lifters

12550002 8 Lifter Guides

14101116 1 Guide Retainer



C Hydraulic Roller Lifter Kit

D. 12371044

Hydraulic Lifter Kit (Set of 16)

- Used on 1986-and-older Gen I and II-style engines
- Kit includes 16 hydraulic flat tappet lifters of P/N 5232720, and is designed for use with standard-length pushrod kit P/N 12495491 or 0.100" longer kit P/N 12371057
- Use P/N 5232720 for single lifter pieces



C Hydraulic Roller Lifter



D Flat Tappet Lifter



SMALL-BLOCK CAMSHAFTS

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in) w/1.5 rocker	Lobe Centerline (deg)	Technical Notes
3896962	Hydraulic flat tappet	I: 222 E: 222	I: .450 E: .460	114	Used in 290 HP 350 crate engine.
24502476	Hydraulic flat tappet	I: 212 E: 222	I: .435 E: .460	112.5	Used in 350/300 HP and 350/330 HP special performance engines.
14097395	Hydraulic roller design	I: 196 E: 206	I: .431 E: .451	109	For the HT383 truck engine with 1.5 rockers.
10185071	Hydraulic roller tappet	I: 208 E: 221	I: .474 E: .510	112	For Z23 350 HO, Z24, FB385 engine; use with spring P/N 10134358 or 12551483.
12551705	Hydraulic roller tappet	I: 201 E: 208	I: .447 E: .459	N/A	Used in 1995–1997 Corvette and Camaro LT1 engines, discontinued.
12551142 (1.6 rocker)	Hydraulic LT4 production cam	I: 203 E: 210	1.6 rocker I: .476 E: .480	115	1996 LT4 production.
24502586 (1.5 rocker)	Hydraulic roller (LT4 hot cam)	I: 218 E: 228	1.5 rocker I: .492 E: .492	112	Service only. For all V-8 engines with roller cams. See note below chart.
24502586 (1.6 rocker)	Hydraulic roller (LT4 hot cam)	I: 218 E: 228	1.6 rocker I: .525 E: .525	112	Service only. For all V-8 engines with roller cams. See note below chart.
12480002 (1.6 rocker)	Hydraulic roller (LT4 hot cam kit)	I: 218 E: 228	1.6 rocker I: .525 E: .525	112	Same as P/N 24502586 except this is a kit that includes aluminum rockers, valve springs, and retainers.
12370845	Hydraulic roller design	I: 214 E: 224	I: .488 E: .509	112	Off-highway use only. Contains eccentric for mechanical fuel pump.
12370846	Hydraulic roller design	I: 222 E: 230	I: .509 E: .528	112	Off-highway use only. Contains eccentric for mechanical fuel pump.
12370847	Hydraulic roller design	I: 234 E: 242	I: .539 E: .558	112	Off-highway use only. Contains eccentric for mechanical fuel pump.

ABOUT THE LT4 CAMSHAFT: The LT4 camshaft P/N 24502586 was designed to be used in many different engines. The following change may be necessary for correct engine assembly: For LT1 and L98 engines (pre-1996) the dowel pin in the end of the camshaft must be pushed in so extension from end of cam is .30" +/- .01". For 1996 LT1 and LT4 engines, the dowel pin is in the correct position extending .620" from the end of the camshaft. This cam has a fuel pump lobe.

SMALL-BLOCK CAMSHAFT & LIFTER KITS — INCLUDES CAMSHAFT AND 16 LIFTERS

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
12353915	Hydraulic flat tappet	I: 194 E: 204	I: .401 E: .423	104	Use with 1981–87 engines with computers, flat tappet and non-roller cam, except 305 HO; good mid-range torque
12353917	Hydraulic flat tappet	I: 204 E: 214	I: .420 E: .442	112	For 8.0-9.5 C.R. low rpm small-blocks including '55–66 CA emissions, '55–'68 Fed emissions, '66–92 off-highway, and all non-emissions trucks
12353918	Hydraulic flat tappet	I: 214 E: 224	I: .442 E: .465	112	For 8.75-10.5 C.R. low-medium rpm off-road and marine small-blocks
12353923	Hydraulic flat tappet	I: 224 E: 234	I: .465 E: .448	114	For 9.5-10.75 C.R. medium rpm small-blocks including '55–66 CA emissions, '55–68 Fed emissions, '66–92 off-highway, and all non-emissions trucks
12364050	Hydraulic flat tappet	I: 222 E: 222	I: .447 E: .447	114	For 9.5-10.75 C.R. medium rpm small-blocks. Single pattern, blueprinted replacement for factory P/N 3863151 w/350 HP and 327-ci camshaft.
12364051	Hydraulic flat tappet	I: 195 E: 202	I: .390 E: .410	112	For 7.75-8.75 C.R. low rpm small-blocks. Dual pattern, blueprinted replacement for factory P/N 3896929 w/300 HP and 327-ci camshaft.
12364052	Mechanical flat tappet	I: 254 E: 254	I: .485 E: .485	114	For 11.0-12.5 C.R. medium/high rpm small-blocks. Blueprinted replacement for factory P/N 3849346 w/290 HP and 302-ci camshaft. Auto needs 4000 converter.
12364053	Mechanical flat tappet	I: 257 E: 269	I: .493 E: .512	112	For 11.0-12.5 C.R. high rpm off-road small-blocks. Blueprinted replacement for factory P/N 3927140. Auto needs 4000 rpm stall converter.
12364054	Mechanical flat tappet	I: 242 E: 254	I: .459 E: .485	116	For 10.0-12.0 C.R. medium/high rpm small-blocks. Blueprinted replacement for factory P/N 3972182 w/330 HP and 350 camshaft. Auto needs 3000 rpm stall converter.

CAMSHAFTS

A great camshaft delivers power and easy drivability and that's exactly what you get with GMPP's factory-engineered cams. Extensive research and development, followed by precise manufacturing standards, are behind every one of our camshafts. Our extensive array of cams includes the best one for your GM engine.

NOTE:

IMPORTANT! Distributor with melonized steel gear **MUST** be used with steel camshafts or engine damage can occur.

A. 12480002

350 Hot Cam Kit

- Off-highway kit converts production LT1 engine for showroom stock racing
- Improves small-block originally equipped with roller tappet camshaft
- Significant horsepower gains
- Includes camshaft, 16 roller rocker arms (1.6 ratio), 16 valve springs, 16 valve spring caps, 16 valve spring keys, and 16 valve spring shims
- For roller blocks only
- Lifters are not included

This kit includes the following items:

24502586	1 Camshaft	12370839	16 Roller Rocker Arms Kit
12551483	16 Valve Springs	10212808	16 Valve Caps
24503856	16 Valve Keys	10212809	16 Valve Spring Shims

12499229

5.7L Vortec Camshaft Install Kit (not shown)

- Convenient, inclusive kit
- Includes two water pump gaskets, intake manifold gasket set, two valve cover gaskets, a distributor gasket and a front crankshaft seal assembly

B. 10088128

Camshaft Retainer

- First design with 3.62" bolt center as used on ZZZ, ZZ1 and ZZ2 engines

10168501

Camshaft Retainer (not shown)

- Second design with 3.294" bolt center as used on ZZ3 and ZZ4 engines

12370843

Camshaft Bearings (not shown)

- Cam bearing kit made from F830 bearing material with 2.00" O.D. and 1.867" I.D.
- Fits CNC-machined iron blocks: P/N 24502503, P/N 24502525, and aluminum blocks (after June 1996) P/N 10134400 and P/N 10185075

C. 24502459

Camshaft Rear Cover Kit

- Cover and O-ring gasket for sealing rear camshaft hole on all "CNC" aluminum and iron blocks
- Includes bolts

D. 12364085

Cam Button Spacer

- Solid aluminum button limits lateral movement of roller lifter camshafts
- Designed for 1955–1986 283–400 small-blocks without a cam thrust plate



A 350 Hot Cam Kit



B Camshaft Retainer



C Camshaft Rear Cover Kit



D Cam Button Spacer

Connecting Rod Kit **E**Connecting Rod Bearing Kit, 383 Engine **F**

The Chevy small-block has been a consistent winner whenever and wherever it has been campaigned. Bill Jenkins won the first-ever NHRA Pro Stock race in his small-block powered Camaro.

CONNECTING RODS & COMPONENTS

E. 12495071

Connecting Rod Kit

- High-quality, 5.70" powdered metal (PM) connecting rods
- For competition or street applications below 500 horsepower
- Replaces the old "pink rods" and are the same rods used in LT1 and LT4 Corvette engines
- Includes eight P/N 10108688 rods, available individually

12497870

383 Connecting Rod Kit, 1st Design (not shown)

- Set of 8 steel 5.70" PM connecting rods used in 383-cubic-inch engines
- Notched to clear camshaft in most stroked small-block applications
- First design, without chamfer
- Standard .927" pin and 2.100" rod journal
- Cap held on by stud and nut, not standard type bolt
- Good to 550 horsepower
- Use P/N 12497624 for single service part

19169670

383 Connecting Rod Kit, 2nd Design (not shown)

- Set of 8 steel 5.70" PM connecting rods used in 383-cubic-inch engines
- Notched to clear camshaft in most stroked small-block applications
- Second design, with chamfer
- Standard .927" pin and 2.100" rod journal
- Cap held on by stud and nut, not standard type bolt
- Good to 550 horsepower
- Use P/N 17803091 for single service part

F. 12499108

Connecting Rod Bearing Kit, 383 Engine (standard)

- Eight heavy-duty bearings
- First design, with chamfer
- For all 383-cubic-inch engines

17800761

Connecting Rod Bearing Kit, 383 Engine (standard) (not shown)

- Eight heavy-duty bearings
- Second design, without chamfer
- For all 383-cubic-inch engines

12499137

Connecting Rod Bearing Kit, 383 Engine (+0.010) (not shown)

- Eight bearings
- For +0.010-undersize 383-cubic-inch engines

12491166

Connecting Rod Stud & Nut Kit, 383 Engine (not shown)

- Studs and 12-point nuts (16 each) for all 383-cubic-inch engines
- Use with connecting rod P/N 12497624

14011092

Connecting Rod Bolt (not shown)

- Production bolt for all 302-350-cubic-inch engine connecting rods with 2.10" rod journals
- Size: 3/8-24 x 1 59/64"
- Use with nut P/N 225854

NOTE:

Cannot be used with small-journal (2.00") or 400-engine rods. Use with connecting rods P/N 14011090, P/N 14011091, P/N 14011082, and P/N 14011083.

PISTONS AND PISTON RINGS

GM Performance Parts pistons are premium quality and stand up to the rigors of high-performance street and competition use. They're factory tested, so you know you're getting the right parts for your engine.

Pistons are sold individually unless otherwise specified. Available in standard and oversize diameters. Wrist pins included with all pistons.



SMALL-BLOCK PISTONS

Part Number	Engine Size Ratio	Compression	Head Chamber Volume	Size	Pin Type	Technical Notes
93422884	350	8.5:1	76cc	Standard	Pressed	290 HP 350
10181389	350	9.8:1	58cc	Standard	Pressed	5.7L HO; second design with ZZ1, 2, 3 ID; hypereutectic aluminum
10181390	350	9.8:1	58cc	Standard high limit	Pressed aluminum	5.7L HO; second design with ZZ1, 2, 3 ID; hypereutectic aluminum
10181392	350	9.8:1	58cc	+0.030	Pressed	5.7L HO; second design with ZZ1, 2, 3 ID; hypereutectic aluminum
10159436	350	10:1	58cc	Standard	Pressed	5.7L HO, ZZ4 and LT1; high silicon aluminum
10159437	350	10:1 9.6:1	58cc 62cc	Standard high limit	Pressed	5.7L HO, ZZ4 and LT1; high silicon aluminum
10159438	350	10:1 9.6:1	58cc 62cc	+0.030	Pressed	5.7L HO, ZZ4 and LT1; high silicon aluminum
12371059	350	10:1 9.6:1	58cc 62cc	Standard high limit	Pressed	Kit containing 8 of P/N 10159437
12371060	350	10:1 9.6:1	58cc 62cc	+0.030	Pressed	Kit containing 8 of P/N 10159438
12514101	350	9.1:1	64cc	Standard	Pressed	350-cid 300 HP & 330 HP service engine with "SP" ID
12514102	350	9.1:1	64cc	+0.001	Pressed	350-cid 300 HP & 330 HP service engine with "SP" ID
12514103	350	9.1:1	64cc	+0.030	Pressed	350-cid 300 HP & 330 HP service engine with "SP" ID
12489437	383	9.1:1	64cc	Standard	Pressed	383 crate engine, first design
12497879	383	9.1:1	64cc	+0.030	Pressed	383 crate engine, first design
88962542	383	9.1:1 9.7:1	64cc* 62cc*	Standard	Pressed	383 engine, second design
88962748	383	9.1:1 9.7:1	64cc* 62cc*	+0.005	Pressed	383 engine, second design
88962749	383	9.1:1 9.7:1	64cc* 62cc*	+0.030	Pressed	383 engine, second design
12499103	383	9.1:1 9.7:1	64cc* 62cc*	+0.005	Pressed	Kit containing 8 of P/N 88962748
12499104	383	9.1:1 9.7:1	64cc* 62cc*	+0.030	Pressed	Kit containing 8 of P/N 88962749

*Compression ratio based on .028" thick head gasket.

SMALL-BLOCK PISTON RINGS

Part Number	Bore Size	Oversize	Ring Thicknesses	Description
3995667	4.000"	+0.030"	1/16, 1/16, 3/16"	For 302/327, 350 and select aftermarket 383 engines
366289	4.000"	Standard	1/16, 1/16, 3/16"	Racing piston pack for heavy duty pistons
366291	4.000"	+0.030"	1/16, 1/16, 3/16"	Racing piston pack for heavy duty pistons
88894219	4.000"	Standard	5/64, 5/64, 3/16"	Standard size, production style rings for 350HO and ZZ-series (except ZZ4) engines
14089026	4.000"	+0.030"	5/64, 5/64, 3/16"	Standard size, production style rings for 350HO and ZZ-series (except ZZ4) engines
12528817	4.000"	Standard	—	Low tension rings for ZZ4, LT1, and LT4 engines
12528818	4.000"	+0.005"	—	Low tension rings for ZZ4, LT1, and LT4 engines
12528819	4.000"	+0.030"	—	Low tension rings for ZZ4, LT1, and LT4 engines
12499135	4.000"	+0.005"	—	Premium quality standard size rings for 2nd design 383 engines
12499136	4.000"	+0.030"	—	Premium quality rings for 383 engines
12499107	4.000"	+0.005"	—	Set of 8 ring packs of P/N 12499135
12499231	4.000"	Standard	—	Set of 8 ring packs of P/N 12528817
12499236	4.000"	Standard	1.5, 1.5, 2.5mm	Set of 8 ring packs of P/N 88894243

Crankshaft, Forged Steel **A**Crankshaft, 383-cubic-inch Forged Steel **B**Crankshaft Forging **C**Crankshaft Forging **D**Rear Crankshaft Seal Adapter **E**

CRANKSHAFTS

GM Performance Parts crankshafts listed in this section are the backbone of a high-performance engine build and are the same components that go into GM Performance Parts crate engines.

14088526

Crankshaft, Cast Iron (not shown)

- Nodular cast iron with 3.48" stroke and 2.10" diameter rod journals
- One-piece rear main seal crankshaft for 300- and 330-horsepower engines

NOTE: *This crank does not have a pilot bearing.*

A. 14096036

Crankshaft, Forged Steel

- Forged 1053 steel with 3.48" stroke and 2.10" diameter rod journals
- Standard 350 mains for 350 HO engines with one-piece rear seal and 3.00" flywheel flange bolt circle
- Used on ZZ, ZZ2 and ZZ3 engines

NOTE: *Requires counterweighted flywheel.*

12556307

Crankshaft, Forged Steel

(used in late-style ZZ4 engine) (not shown)

- Forged 1053 steel crankshaft used in post-November 1998 ZZ4 engines
- Replaces all cast or steel ZZ4 crankshafts

NOTE: *Must be used with connecting rod P/N 10108688 and piston P/N 10159436.*

B. 12489436

Crankshaft, 383-cubic-inch Forged Steel

- Forged 4340 steel crankshaft used to create 383-cubic-inch engines with 3.800" stroke
- Rod journals are 2.10"
- Mains are standard 350 size

NOTE: *Should be used with connecting rods P/N 19169670, bearing kit P/N 17800761, standard pistons P/N 88962748 or 0.030" oversize pistons P/N 88962749, balancer P/N 12498008, and 1986-and-later one-piece crank seal design flywheel or flexplate.*

C. 10185100

Crankshaft Raw Forging (350-cubic-inch style)

- Raw forging from S38 micro alloy steel
- Can be machined for a 3.46" to 3.50" stroke
- Two-piece rear seal design

D. 24502460

Crankshaft Forging

- Exceptionally strong and durable 4340 steel raw forging
- Ideal for machining to custom stroke dimensions from 3.20" to 4.00"
- 2.900" diameter main bearing journals can be ground to fit 400-cubic-inch small-block main bearings
- Large front section can be machined for big-block or small-block balancer
- Uses early style two-piece rear seal

E. 10051118

Rear Crankshaft Seal Adapter

- Allows installation of early-style, two-piece seal crankshaft in block machined for one-piece rear seal
- Allows installation of heavy-duty crankshaft in cast iron Bowtie small-block V-8 or 90° V-6
- Kit includes two-piece aluminum seal retainer mounting bolts and hardware, gasket and seal not included

NOTE: *Use rear seal P/N 10121044, retainer gasket P/N 12555714, dowel pin P/N 9441003, and 1986 or later oil pan and gasket set.*

14061685

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications

BALANCERS & PULLEYS

A smooth running engine depends on an effective balancer or torsional dampener. A GM Performance Parts dampener not only helps your engine run smoothly, it can extend the life of the engine.

3858533

Crankshaft Pulley, 6-5/8" (not shown)

- Two-groove, high-rpm, 6-5/8" pulley
- For engines with short water pump

NOTE:

Can be used with water pump pulley P/N 3770245 and belt P/N 9433722 without an idler pulley or alternator.

3815933

Crankshaft Bolt (not shown)

- Positive retention 7/16-20 x 2-1/4" bolt for engines with tapped crank snouts
- Use with washer P/N 14001829

14001829

Washer (not shown)

- 1-3/4" x 1/2" x 5/16" thick washer for crankshaft bolt



383 Crate Engine Balancer with 1-Piece Crank Seal (P/N 12498008)



Racing Balancer (P/N 24502534 and 24502535)

SMALL-BLOCK BALANCERS

Part Number	Engine Application	Outside Diameter	Technical Notes
12551537	1969-up 305 and 350; 90° V-6 competition	6.75"	Smaller size for limited clearance. Timing mark is 10 degrees before keyway centerline. Use with timing pointer P/N 3991435.
3817173	1962-68 302 and 327	8"	Cast iron. Inertia ring is 1-11/16" wide; timing mark is 2 degrees before keyway centerline. Do not use pointer P/N 3991436 unless TDC mark is adjusted.
88960604	1970-74 350; ZZ4 crate engine	8"	Cast iron. Inertia ring is 1-11/16" wide. Use with timing pointer P/N 3991436.
12498008	383 crate engine with 1-piece crank seal	8"	Use with 383 engine components and crankshaft P/N 12489436.
6272225	400 cu in	8"	Counterweighted dampener for externally balanced crankshaft. Requires flexplate P/N 471578. Timing mark is 10 degrees before keyway centerline. Use with timing pointer P/N 3991436.
364709	All racing	8"	Heavy-duty nodular iron. Use with competition engines where a production-style balancer is required. Use with timing pointer P/N 3991436. Refer to Chevy Power manual for dampener prep procedure.
24502534	All racing Accepts standard pulleys.	7.074"	NASCAR-approved and specially tuned up to 9000 rpm. Uses standard crank hub diameter.
24502535	All racing	7.074"	NASCAR-approved and specially tuned. Use with large-diameter 1.598" crankshaft hub.

SMALL-BLOCK FLYWHEELS

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Clutch Diameter	Starter Ring Gear Teeth	Technical Notes
14085720	1955-85	12.75"	3.58"	10.4"	153	For two-piece crank seal. Lightweight nodular iron; weighs approximately 15 pounds.
3991469	1955-85	14"	3.58"	10.4"; 11"	168	For two-piece crank seal
14088646	1986-up	12.75"	3.00"	10"	153	For one-piece crank seal. Lightweight nodular iron; weighs approximately 17 pounds.
14088650	1986-up	12.75"	3.00"	10.4"	153	Standard-weight flywheel for one-piece crank seal
10105832	1986-up	14"	3.00"	11"; 11.85"	168	For one-piece crank seal

SMALL-BLOCK FLEXPLATES

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Converter Bolt Pattern	Starter Ring Gear Teeth	Technical Notes
471598	1970-85	14"	3.58"	10.75"; 11.50"	168	For internally balanced engine with two-piece crank seal
471578	1970-80	14"	3.58"	10.75"; 11.50"	168	For externally balanced 400-cu-in engine only. Use with balancer P/N 6272225.
471529	1969-85	12.75"	3.58"	9.75"; 10.75"	153	For internally balanced engine with two-piece crank seal
14088765	1986-up	12.75"	3.00"	10.75"	153	For one-piece crank seal
12554824	1986-up	14"	3.00"	11.50"	168	Heavy-duty flexplate with increased thickness for one-piece crank seal
14088761	1986-up	14"	3.00"	10.75"; 11.50"	168	For one-piece crank seal



Pre-'86 Flywheel



'86-up Flywheel



14" Flexplate



12-3/4" Flexplate

FLYWHEELS & FLEXPLATES

Find the right part to match your engine from the easy-to-follow guides above. Select flywheels for manual transmission vehicles and flexplates for automatic transmission vehicles.

NOTE:

IMPORTANT! All Chevy small-block and big-block engines with one-piece crankshaft seal require an externally balanced flywheel or flexplate.

BOLTS

12337973

Flywheel Bolt (not shown)

- Fits all Chevy small-block V-8, big-block V-8 and 90° V-6 engines
- Sold individually; six required per engine

3727207

Flexplate Bolt (not shown)

- Fits all Chevy small-block V-8, big-block V-8 and 90° V-6 engines
- Sold individually; six required per engine

TIMING CHAIN & SPROCKETS

The timing chain is the vital link for engine timing between the crankshaft and camshaft. GM Performance Parts' timing chains and sprockets deliver strength and accuracy for many miles of dependable service.

12371043

Single Roller Timing Chain Kit (not shown)

- Performance kit for all 1987-and-newer engines with roller lifter camshaft, except LT1, LT4 & LS series
- Includes chain P/N 14088783, crank sprocket P/N 14088784, cam sprocket P/N 12552129, retainers and bolts

NOTE: Will not work with flat tappet camshafts or LT1 and LT4 engines.

12370835

Extreme-Duty Timing Chain Kit, LT1 & LT4 Engines (not shown)

- Performance upgrade, extreme-duty timing chain kit for 1995-and-newer LT1 and LT4 engines
- Includes timing chain P/N 14088783, crankshaft sprocket P/N 14088784, camshaft sprocket P/N 10214880, and water pump gear P/N 12551728
- Use with pin drive camshaft only

NOTE: To convert 1993 and 1994 engines, use camshaft P/N 12551705, distributor P/N 1104032, timing cover P/N 12552426, vacuum harness P/N 12555323, and vacuum fitting P/N 14082470.

14088783

Roller Timing Chain (not shown)

- Heavy-duty, single-roller chain for ZZ-design 350 HO engine
- Use with crank sprocket P/N 14088784 and cam sprocket P/N 12552129

14088784

Crankshaft Sprocket (not shown)

- Single-roller-type for ZZ-design 350 HO engine

12552129

Camshaft Sprocket (not shown)

- Single-roller-type for ZZ-design 350 HO engine

A. 9424877

Camshaft Bolt

- 5/16-18 x 0.75" bolt

12555886

LT4 Crankshaft Sprocket (not shown)

- For all LT4 engines

12555885

LT4 Camshaft Sprocket (not shown)

- For all LT4 engines

12554553

Camshaft Dowel Pin (not shown)

12555887

LT4 Timing Chain (not shown)

- Quiet, roller design for all LT4 engines
- Use with crank sprocket P/N 12555886 and cam sprocket P/N 12555885

B. 12367600

LT1/LT4 Front Cover Plug

- Covers hole on front cover of engine when original distributor is removed and replaced with rear-mounted distributor



A Camshaft Bolt



B LT4 Front Cover Plug



By 1957 the original 265 cubic-inch small-block had grown in bore size to become a 283—and a fuel injection option allowed owners to get a coveted horsepower-per-cubic-inch from the avant-garde powerplant.

Water Pump Pulley **C**Water Pump Pulley **D**Water Pump Pulley Reinforcement **E**Water Pump, Long-Style **F**Aluminum Water Pump, Short-Style **G**Aluminum Water Pump, Long-Style **H**Aluminum Water Pump, Long-Style Serpentine **I**

WATER PUMPS, PULLEYS & COMPONENTS

Water Pump Pulleys

C. 3770245

Water Pump Pulley

- Fits short-leg water pumps with 5/8" shaft and small hub
- Use with crankshaft pulley P/N 3858533 and belt P/N 9433722 for captured fan belt system without idler or alternator
- Pulley is 7-1/8" diameter and 2.77" deep

NOTE: *Must be modified to fit water pump with 3/4" shaft.*

D. 3942992

Water Pump Pulley

- Fits 1971-and-newer and short-leg water pumps with large hubs

NOTE: *Must be modified to fit water pump with 3/4" shaft.*

E. 3720616

Water Pump Pulley Reinforcement

- Increases stiffness of water pump pulley
- Use with pulley P/N 3770245 (see above)

Water Pumps & Components

F. 88894341

Water Pump, Long-Style

- Late-style cast iron pump with long mounting legs, reinforced snout and 3/4" diameter shaft
- End of shaft is reduced to 5/8" diameter
- Use with 350 HO, 383 and Z24 engines

G. 14011012

Aluminum Water Pump, Short-Style

- Saves weight over comparable iron pump
- Casting has short-style mounting legs used on pre-1982 Corvettes
- Pump has reinforced snout and a large hub with dual bolt patterns

NOTE:

Pump housing has a boss which can be drilled and tapped for a cam stop. Can be used with the ZZ4 engine with composite front timing cover by exchanging the bolts that hold the rear sheet metal plate to the pump with pan-head bolts P/N 14010976 or equivalent aftermarket bolts.

NOTE:

Cam stop boss may interfere on engines with 8" dampener. Some clearancing may be required.

H. 12495826

Aluminum Water Pump, Long-Style

- Lightweight pump similar to the one used on the ZZ430 crate engine
- Standard rotation
- Can be used on late-style engines

NOTE:

Will not fit LT1 or LT4 engines.

I. 12497986

Aluminum Water Pump, Long-Style Serpentine

- Reverse-rotation pump
- Use with late-style engines with a serpentine belt system, including 90° V-6

NOTE:

Will not fit LT1 or LT4 engines.

25534390

R0X Water Pump Housing with Cassette (not shown)

- Housing bolts directly to the block
- Block openings are spread to 9.40"
- Standard front inlet and outlet openings
- Includes Water Pump Cassette P/N 25534391

25534391

R0X Water Pump Cassette (not shown)

- Designed for efficient operation
- Easy serviceability
- Refined impeller design and tolerances to improve flow

ACCESSORY DRIVE KITS

A. 12497698

Serpentine Accessory Drive System, with Air Conditioning

- Fits Gen I-style engines
- Deluxe kit includes all the components and hardware necessary to install on an engine with air conditioning, including water pump, alternator, power steering pump and idler bracket, belt included

The system includes:

10055800	Secondary Air Injector Pump Bracket
1134344	Air Compressor Assembly, (CR4)
10129569	Idler Belt Pulley Bracket
88894005	Water Pump Kit
10055880	Water Pump Pulley
10055879	Crankshaft Pulley
10463172	Alternator Assembly (reman)
12117361	Alternator Connector (with lead)
10055798	Drive Belt Tensioner Assembly
10085752	Belt (fan, water pump, A/C pump, and alternator)
10105212	Alternator and Power Steering Bracket
88985115	Power Steering Pump (reman)
14102096	Power Steering Pulley

12497697

Serpentine Accessory Drive System, without Air Conditioning (not shown)

- Fits Gen I-style engines
- Deluxe kit includes all the components and hardware necessary to install on an engine without air conditioning, including water pump, alternator, power steering pump and idler bracket, belt included

The system includes:

10055800	Secondary Air Injector Pump Bracket
10129569	Idler Belt Pulley Bracket
88894005	Water Pump Kit
10055880	Water Pump Pulley
10055879	Crankshaft Pulley
10463172	Alternator Assembly (reman)
12117361	Alternator Connector (with lead)
10055798	Drive Belt Tensioner Assembly
10085752	Belt (fan, water pump, A/C pump, and alternator)
10105212	Alternator and Power Steering Bracket
88985115	Power Steering Pump (reman)
14102096	Power Steering Pump Pulley

12497869

Serpentine Accessory Drive Belt System, Base System with Brackets & Bolts (not shown)

- Kit includes brackets, pulleys and hardware to install on engine
- Does not include water pump, alternator, power steering pump or belt

9433722

Fan Belt (not shown)

- Special "captured" belt eliminates need for idler pulley or alternator to maintain proper tension
- Use with crankshaft pulley P/N 3858533 and water pump pulley P/N 3770245
- Belt runs around crankshaft and water pump only

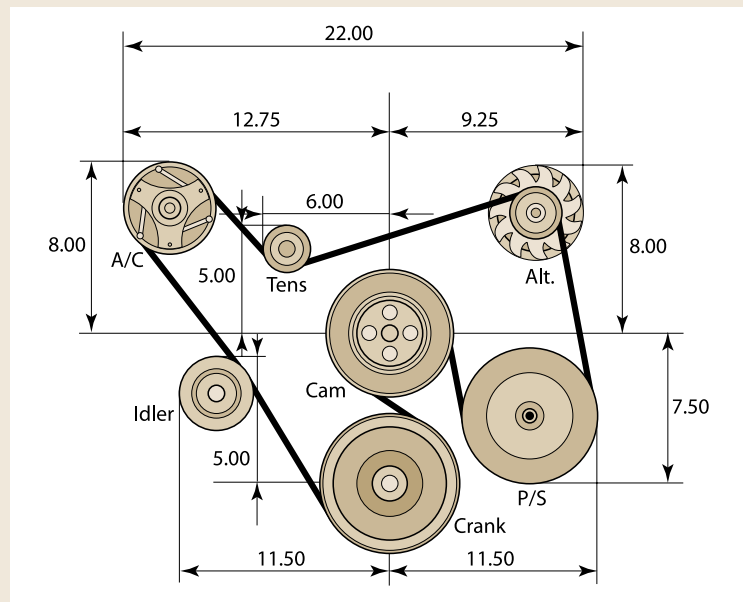
OIL PANS, GASKETS & ACCESSORIES

GM Performance Parts oil pans deliver the perfect fit for production engines, providing peace of mind against leaks. Oil pans and components are available for street and competition engines.

Pans do not come with dipsticks or other hardware unless otherwise noted.



A Serpentine Accessory Drive System



A Serpentine Accessory Drive System (with A/C): Diagram



B Oil Pan, 1986-1992 F-car & ZZ4

Oil Pan, Z28-Style **C**Oil Pan, 1986-1996 Corvette-Style **D**CircleTrack "Late Model" Oil Pan **E**Windage Tray **F**Windage Tray **G**

Oil Pans, Gaskets & Accessories Continued

ABOUT SMALL-BLOCK CHEVY OIL PANS: Production Chevrolet small-block V-8 and 90° V-6 engines were redesigned in 1986 to include a 1-piece rear main seal, resulting in a new oil pan design. For pre-1986 engines there is also a newer 1-piece pan gasket available. As a result of these changes, oil pans and gaskets are not interchangeable between pre-1986 and later engines. If you have installed crankshaft seal adapter P/N 10051118 on a block which is machined for a 1-piece rear seal, you must use an oil pan and gasket designed for 1986-and-newer engines.

B. 12557558**Oil Pan, 1986-1992 F-Car & ZZ4**

- Five-quart pan used on ZZ4 crate engines and 1986-92 Camaro and Firebird
- Internal baffling and right-hand dipstick
- Designed for 1-piece rear main and 1-piece oil pan gasket
- Fits with crankshaft seal adapter P/N 10051118

NOTE: Use with oil pan rail reinforcement P/N 12553058 (LH) and 12553059 (RH).

C. 360450**Oil Pan, Z28-Style (2-Piece Rear Main Seal)**

- Five-quart oil pan fits 1970-79 Camaro and 1979 Corvette
- Internal baffling and a left-hand dipstick
- Use with 2-piece rear main seal on 1955-1979 blocks
- Requires gasket P/N 14079399

D. 10055765**Oil Pan, 1986-1996 Corvette-Style (1-Piece Rear Main Seal)**

- Fits 1986-1996 Corvette models
- Has right-hand dipstick and fits crankshaft seal adapter P/N 10051118

NOTE: Use with oil pan rail reinforcements P/N 14088501 (LH) and 14088502 (RH).

25534353**CircleTrack "Factory Stock" Oil Pan (not shown)**

- Special black-powder-coated 8-quart circle track pan is used in the CircleTrack engine P/N 88958602
- 8" sump has a single 3.5" kickout on the right-hand side
- Includes a fully louvered windage tray, oil scraper, three trap doors, oil level plug, and 3/4" oil pick-up tube
- 8" deep

E. 25534354**CircleTrack "Late-Model" Oil Pan**

- Special black-powder-coated 8-quart circle track pan is used in the factory stock engines P/N 88958603 and P/N 88958604
- 7" sump has a 3.5" kickout on both sides
- Includes a fully louvered windage tray, three crankshaft scrapers, six trap doors, two runners, an oil temperature fitting provision, oil level plug, and 5/8" oil pick-up tube
- 7" deep
- Oil pickup tube available separately P/N 19171997

10108676**Oil Pan Gasket, 1-Piece Rear Main Seal (not shown)**

- Neoprene 1-piece gasket for 1986-and-newer engines

F. 3927136**Windage Tray**

- Separates the oil in the pan sump from the rotating crank assembly to reduce aeration of the oil
- Aids in oil control and minimizes oil slosh under hard braking
- Use with oil pan P/N 360450

NOTE: Requires five mounting studs P/N 14087508 for 1968-and-later blocks. Use mounting studs P/N 3872718 with pre-1968 blocks. On 400-cubic-inch small-blocks the baffle requires modifying by elongating mounting holes. Check tray clearance with long stroke crankshafts and/or non-stock connecting rods.

G. 12554816**Windage Tray**

- Flat oil pan baffle used with 1986-1996 Corvette pan P/N 10055765
- For 1968-and-newer blocks, use five mounting studs, P/N 14087508
- For pre-1968 blocks, use studs P/N 3872718

Oil Pans, Gaskets & Accessories Continued

12555884

Oil Pump, High-Pressure LT1/LT4-Style (not shown)

- Production-style high-pressure 1993–1997 LT1/LT4 oil pump with 1.20" gears
- Produces 60-70-psi oil pressure; screen not included

A. 14044872

Oil Pump, High Volume

- High-volume pump has 1.50" gears for increased volume
- Approximately 25% more capacity than a production pump at standard pressure; pick-up not included

Order These Parts To Complement Your New Oil Pump:

3892678

Oil Pump Bolt (not shown)

- Fits all models, 7/16-14" x 2"

3998287

Oil Pump Shaft (not shown)

- Fits all 1959-and-newer engines

3764554

Oil Pump Shaft Retainer (not shown)

- Fits all 1959-and-newer engines
- Use with oil pump shaft P/N 3998287

3848911

Oil Pump Spring (not shown)

- Regulates oil pressure at approximately 70 psi
- Use with high volume pump, P/N 12555884

NOTE: Minimum recommended oil pressure for off-highway use is 65 psi at engine operating speed.

B. 3952301

Oil Filter Adapter

- Mounts a spin-on cartridge for small-block V-8s (except LS Series)
- Contains a filter bypass valve and requires two attaching bolts, P/N 3951644

24241872

Magnetic Drain Plug (not shown)

- Catches and holds small pieces of metal before they can cause engine damage

C. 12368084

Engine Oil Primer

- Use to lube engine bearings prior to starting a new or rebuilt engine
- Fits small-block and big-block

D. 93440806

HEI Distributor

- A must for steel roller cams
- Has ignition advance curve for high-performance applications
- Comes with melonized steel gear, P/N 10456413

88961867

Distributor, Billet HEI (not shown)

- Most powerful and durable distributor for small- or big-block Chevrolet engines
- Oversized shaft is guided by a sealed ball bearing and long sintered bushing
- Treated coating on the shaft provides low friction
- Advance assembly features chromemoly weights that slide on nylon pads for smooth, timing advancement through the entire rpm range
- Also included are vacuum advance canister and billet aluminum housing that is CNC-machined for greater accuracy
- High quality cap with brass terminals

10456413

Distributor Gear (not shown)

- Melonized steel gear is required on all crate engines and roller camshafts that are made of steel
- Failure to use this gear may affect your engine's warranty

NOTE: This gear is part of distributor assembly P/N 1104067.



A Oil Pump, High Volume



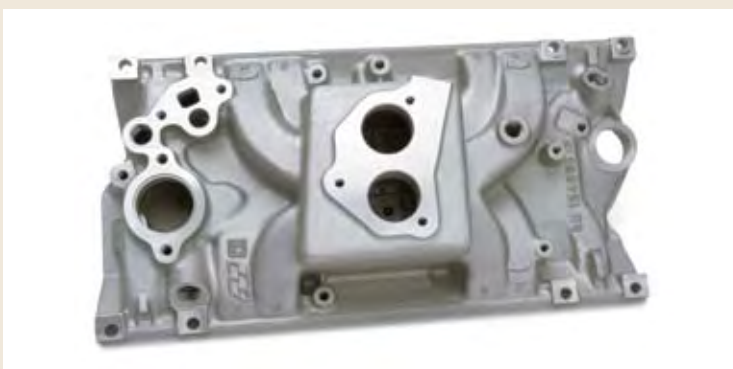
B Oil Filter Adapter



C Engine Oil Primer



D HEI Distributor

Intake Manifold, ZZ Series **E**Intake Manifold, Vortec Head Design **F**Intake Manifold, Vortec Head Design (dual pattern carb mount) **G**Intake Manifold, Vortec Head Design for TBI **H**

INTAKE MANIFOLDS, GASKETS & COMPONENTS

GM Performance Parts' wide range of intake manifolds offers enthusiasts everything from mild street performance to all-out competition applications—even fuel injection! Best of all, every GM Performance Parts intake design has been tested to deliver optimal performance for GM engines.

E. 10185063

Intake Manifold, ZZ Series

- Aluminum manifold used on all ZZ series 350 HO engines
- Can be used on all small-blocks through 1986
- Dual-pattern carburetor flange is approximately 1/2" lower than the 1970 LT1 intake, yet produces the same horsepower
- Provisions for all late-model accessory brackets, EGR, and an integral hot air choke
- A heat shield can be mounted underneath for improved performance

F. 12366573

Intake Manifold, Vortec Head Design

- Designed for 283–400-cubic-inch engines using Vortec cylinder heads P/N 12464298 or P/N 12558060
- Has four-bolts per side to attach it to these cylinder heads
- Aluminum high-rise design maximizes horsepower and delivers a broad torque curve
- Accepts a square-bore 4150-style carburetor and includes externally plumbed hot water crossover passage
- Use manifold gasket P/N 89017465 and eight attachment bolts, P/N 12550027

NOTE: *Vortec heads were originally released on 1996–1999 truck engines; check for hood clearance, especially with Corvette.*

G. 12496820

Intake Manifold, Vortec Head Design (Dual Pattern Carb Mount)

- This dual bolt pattern aluminum manifold will work with all Vortec cylinder heads P/N 12529093, P/N 12558060, P/N 12497186 or P/N 12464298
- Will accept Holley or Quadrajets-style carburetors
- Will accept an EGR, P/N 17052693
- Requires intake manifold gasket P/N 89017465 and eight special manifold bolts, P/N 12550027

H. 12496821

Intake Manifold, Vortec Head Design for TBI

- Designed for throttle body fuel injection
- Aluminum intake will work with all Vortec cylinder heads, including P/N 12529093, P/N 12558060, P/N 12497186 or P/N 12464298
- Also accepts EGR

NOTE: *The exhaust manifold from 1996-and-newer pickup trucks with RPO L31 350 engine, P/N 12557828, is drilled and tapped to accept an EGR tube. EGR pipe P/N 10220275 and fitting P/N 12552329 can be used with EGR Valve P/N 17113457 and gasket P/N 12337972.*



Don't Forget those corresponding parts!
See the chart on page 257 for specifics.

Intake Manifolds, Gaskets & Components Continued

A. 12496822 

Intake Manifold, Eliminator Vortec Head Design

- Designed to deliver the most power and torque with Vortec cylinder head P/N 12529093, P/N 12558060, P/N 12497186 or P/N 12464298
- Use intake manifold gasket—P/N 89017465 and eight special manifold bolts P/N 12550027

B. 24502592

LT1 Intake Manifold

- Fits 1992–1996 Gen II LT1 engines and permits the use of a carburetor
- Long runners increase engine torque up to 30 lb-ft without sacrificing top end horsepower
- There are no water coolant holes on this manifold

NOTE: Similar casting to 24502574.

C. 14097494

Cast Iron Intake Manifold (1987–newer)

- High-rise manifold fits all 1987-and-newer 305 and 350 engines with cast iron Gen I-style cylinder heads
- Same height as the aluminum Z28 manifold P/N 14096011 and has no EGR provision
- The center two bolt holes are at 72° angles instead of the normal 90° angle

14096011

Cast Iron, High-Rise Intake Manifold (not shown)

- Cast iron version of the aluminum high rise Z28 intake manifold
- Designed for budget builds, racing classes that mandate a cast iron intake, and marine applications
- Accepts both standard and spread bore four-barrel carburetors
- Manifold is identified by orange Bowtie insignia

D. 10051103

Bowtie Intake Manifold, Raised Runner

- Runners of this single-plane aluminum intake manifold are raised .200" to match the ports of Bowtie cylinder head P/N 10051101
- Air gap beneath the runners isolates the intake charge from hot engine oil
- A 2" carburetor spacer is recommended
- Accepts standard-flange four-barrel carb
- For competition use only, as there are no heat riser passages



A Intake Manifold, Eliminator Vortec Head Design



B LT1 Intake Manifold



C Cast Iron Intake Manifold (1987–newer)



D Bowtie Intake Manifold, Raised Runner



Don't Forget those corresponding parts!
See the chart on page 257 for specifics.

Bowtie Intake Manifold, Standard Runner **E**Carburetor Spacer, Dual Plane, One-Inch **F**Carburetor Spacer, Dual Plane, Two-Inch **G**Carburetor Spacer, Single Plane, One-Inch **H**Carburetor Spacer, Single Plane, Two-Inch **I**Ram Jet Fuel Injection Manifold Kit (less electronics) **J**

Intake Manifolds, Gaskets & Components Continued

E. 10051102**Bowtie Intake Manifold, Standard Runner**

- This standard-runner manifold is based on the raised-runner intake P/N 10051103 (see page 254)
- Designed for use on small-blocks using heavy-duty Bowtie cylinder heads P/N 10134392 and P/N 14011049

F. 88965829**Carburetor Spacer, Dual Plane, One-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets style carburetors

G. 19155949**Carburetor Spacer, Dual Plane, Two-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets style carburetors

H. 88965830**Carburetor Spacer, Single Plane, One-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

I. 88965831**Carburetor Spacer, Single Plane, Two-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

J. 12498032**Ram Jet Fuel Injection Manifold Kit (less electronics)**


- Retro-fit fuel injection kit will fit V-8 engines using iron Vortec cylinder heads P/N 12558060 or aluminum P/N 12464298
- Must be used with an aftermarket ECU and wiring harness with the proper calibration
- The same as used on Ram Jet 350 engine P/N 12499120. (MEFI with ECU and Wire Harness Kit P/N 12499116 is not calibrated for anything other than Ram Jet 350.)

Kit includes the following, (as well as brackets, sensors, bolts, nuts, gaskets, and other small parts):

88959339 Instruction Manual	12489371 Intake Manifold
17096144 Throttle Body	1115498 Coil
12097982 Ignition Wire	1104060 Distributor
12498951 Air Cleaner	12553918 Injector Rail
17124248 8 Fuel Injectors	16249939 MAP Sensor
10456126 Knock Sensor	15326386 Engine Temp Sensor
17123897 Fuel Pressure Regulator	

NOTE:

It does not include ECU or wiring harness, which must be sourced separately.

12489371 **Ram Jet 350 Intake Manifold (not shown)**

- Used on the Ram Jet 350 engine assembly P/N 12499120
- Bare manifold only—no throttle body, injector rails, injectors, bracket, or any other components
- See P/N 12498032 for complete manifold kit



Don't Forget those corresponding parts!
See the chart on page 257 for specifics.

Bowtie Competition Manifolds

A. 24502481

Intake Manifold, 18° Competition

- Developed for NASCAR's shorter tracks and works well on Trans-Am-series engines
- Features smaller runners and less plenum volume, which enhances mid-range torque
- Aluminum intake fits 18° heads casting P/N 10134363 and P/N 24502569
- Manifold is ideal for 310-cubic-inch road racing and 358-cubic-inch short track engines

24502579

Lightweight Intake Manifold, 18° Competition (not shown)

- Same design as the P/N 24502481 (see above), but 10 pounds lighter

B. 24502653

Intake Manifold, Spider Design

- A two-piece "dry" aluminum manifold "spider" consisting of the runners and plenum only
- The runners, called the spider assembly by racers, along with valley plate assembly—the common term for the bottom section of the intake—P/N 24502654 (see below), are designed for use with the 18° cylinder heads with a date code of June 1996 or newer

C. 24502654

Valley Plate Assembly

- Universal aluminum valley plate is designed for use with 18° cylinder heads
- Can be used with dedicated two-piece manifold spiders, existing one-piece intake manifolds which have been properly machined for use as a dry manifold, or fabricated manifold designs
- Valley plate assembly consists of: the valley plate P/N 24502652, the inspection cover P/N 24502651, O-ring material, and eight retaining bolts
- Valley plate has cast-in integral passages to equalize coolant flow from the front and the rear of the cylinder heads
- Fits heads dated June 1996 and later

NOTE:

Important information about gasket matching:

Gasket flanges are machined to provide the proper port alignment with standard runner locations; runners in heads and manifold must be matched by engine builder. Often the gasket will line up with the top of the port, so removal is required at the bottom of the port. Gaskets that can be used with this manifold are: Fel-Pro® P/N 1205 and P/N 1206, and Mr. Gasket® P/N 102. Always match the gasket to the cylinder head you plan to use to ensure a correct fit.

BOWTIE COMPETITION MANIFOLDS

Part Number	Weight	Volume	Notes
24502481	22.5 lbs	2700cc	Smaller cross-section for short tracks, (620cc, small-displacement engines, square plenum opening)
24502579	11.5 lbs	2700cc	Smaller cross-section (620cc, small displacement engines, square plenum opening), for short track racing applications

This chart illustrates the differences in some of the Bowtie Competition Manifolds. These single plane manifolds fit 18° cylinder heads and are designed with air gaps underneath the runners to insulate the intake charge from engine heat. Manifold flanges are 0.59" thick to promote a good gasket seal. An auxiliary water line boss at the rear of the casting improves water flow. P/N 24502481 has square bore carburetor flange openings to match the spacers specified by NASCAR.



A Intake Manifold, 18° Competition



B Intake Manifold, Spider Design



C Valley Plate Assembly



D Intake Manifold, Spider Restrictor Design—SB2.2

Intake Manifold, Spider Design—SB2.2 **E**Intake Manifold, Spider Design—SB2.2 **F**Valley Plate Assembly, SB2.2 **G**

NASCAR Intake Manifolds

D. 12480096

Intake Manifold, Spider Restrictor Design—SB2.2

- Aluminum manifold has more material in the runners and plenum to accept more flexibility in porting
- Designed for NASCAR restrictor plate racing and is used with Valley Cover Assembly P/N 12370840 (see below)

E. 88958617

Intake Manifold, Spider Design—SB2.2

- Designed for NASCAR-style racing and high-rpm engines
- Additional aluminum in the runners and plenum allows more flexibility in porting
- Must be used with valley plate P/N 12370840 or P/N 88958659

F. 88958691

Intake Manifold, Spider Design—SB2.2

- Closer to net shape for 390-cfm carburetor applications
- The plenum area is larger and the runners are stood up more (closer to line of sight) than the intake manifold P/N 88958617
- Has same carb height and plenum floor as P/N 88958617
- Must be used with valley plate P/N 12370840 or P/N 88958659

12370840

Valley Plate Assembly, SB2.2 (not shown)

- Aluminum valley cover is used with manifold runners P/N 12480096 and P/N 88958617 on SB2.2 cylinder heads for NASCAR racing

G. 88958659

Valley Plate Assembly, SB2.2

- Aluminum valley cover is used with manifold runners P/N 12480096, P/N 88958617 and P/N 88958691
- Does not incorporate an inspection cover, but has revised integral water passage for improved coolant flow from the front and rear of the cylinder heads

88958666

Intake Manifold, R0X Spider Design (not shown)

- Fits P/N 88958667 R0X heads

88958670

Valley Plate Assembly, R0X (not shown)

- Fits R0X manifold P/N 88958666 and R0X head P/N 88958667

Intake Manifolds: Corresponding Parts

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
12366573	89017465 (1)	12550027 (8)	88958602, 12499710, 12496769
12496820	89017465 (1)	12550027 (8)	12499711, 12499101, 12497317, 12496968
12496822	89017465 (1)	12550027 (8)	88958604, Vortec Heads
10185063	12525810 (1)	14091544 (8), 88891769 (2)	24502906, 88958603, 12499712
12489371	89017465 (1)	12550027	12499120, 12495515
12496821	89017465 (1)	12550027(8)	Vortec Head for TBI
24502481	10185007	N/A	18" high-port racing heads
24502653	10185007	N/A	18" high-port racing heads
24502654	10185007	N/A	18" high-port racing heads

Covers and Plugs

A. 14094792

Choke Hole Cover

- Covers the choke hole on the 350 HO manifold P/N 10185063
- Use gasket P/N 14096848 and screw P/N 9442184 with washer P/N 9439511

B. 6269414

Cover, EGR Valve

- Covers the EGR valve port on the 350 HO manifold P/N 10185063
- Use gasket P/N 12554530 and screw P/N 9442184 with washer P/N 9439511

C. 12556596

Plug, EGR Pipe Hole

- 7/8-15 plug is used to seal off EGR pipe holes on intake manifold P/N 12496820 and P/N 12496821

Chrome Water Necks

D. 12342024

Water Neck

- Chrome water neck with neoprene O-ring and chrome bolts
- For 1966–1975 Chevrolet, Camaro, and Chevelle V-8 engines

Intake Manifold Gaskets

E. 10147994

Gasket Kit, 1971-'86 & ZZ350

- For 302–350 high-performance small-blocks built from 1971–86, and all ZZ350 high-performance engines
- Gaskets fit standard intake port location
- Do not use with raised runner cylinder heads
- Includes two gaskets

F. 12497760

Gasket Kit, Vortec Design

- Designed for Vortec heads P/N 12529093, P/N 12558060, P/N 12464298 and P/N 12497186 only
- Gasket thickness is 0.120" (1/8"), post size is 1.08" x 2.16" with tapered wall
- Has both early style six-bolt pattern and Vortec 4-bolt pattern
- Includes two gaskets



A Choke Hole Cover



B Cover, EGR Valve



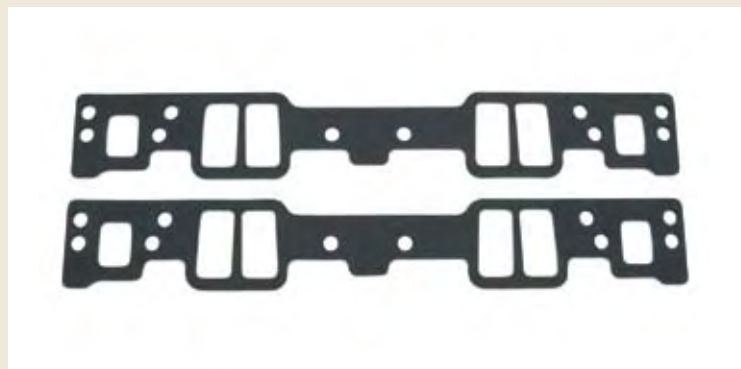
C Plug, EGR Pipe Hole



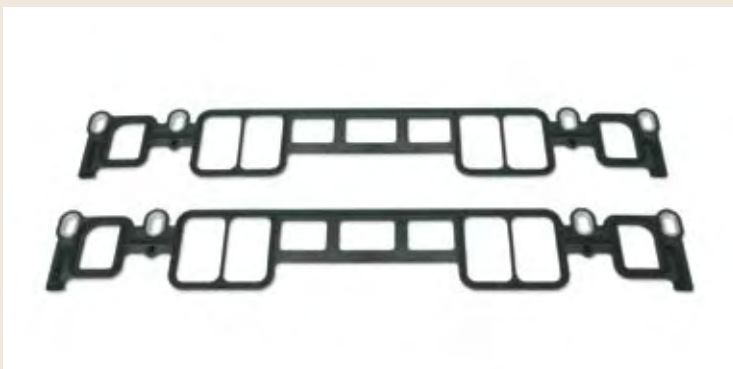
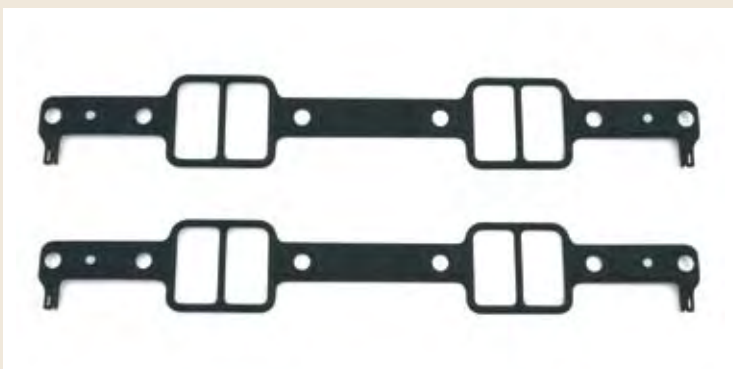
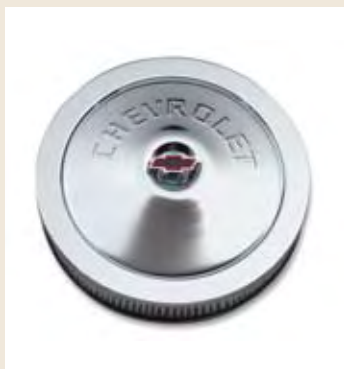
D Water Neck



E Gasket Kit, 1971-'86 & ZZ350



F Gasket Kit, Vortec Design

Gasket Kit, Production Vortec Design **G**Gasket, LT4 **H**Air Cleaner, **I**
High-Performance DesignAir Cleaner, Classic Design **J**Air Cleaner, Ram Jet 350 **K****G. 89017465****Gasket Kit, Production Vortec Design**

- Production gasket for all Vortec-design cylinder heads (4-bolt attachment to cylinder heads P/N 12529093 and P/N 12558060)
- Requires the use of GM attachment bolt P/N 12550027, because the bolt has a ball design on the end that seats in the head so it will not crush the intake manifold gasket
- Includes two gaskets

H. 12528884**Gasket Kit, LT4**

- Used on the LT4 engine P/N 12371172
- Can be used with all LT4 heads and is designed not to cover part of the cylinder head opening—as production gaskets do
- Includes two gaskets

10185042**Gasket Kit, Splayed-Valve (not shown)**

- Used only on the splayed-valve V-8 cylinder heads P/N 24502517
- Includes two gaskets

10185007**Gasket Kit, 18-degree High Port Heads (not shown)**

- Used only with V-8 18° high port cylinder heads P/N 10134363 and P/N 10134364
- Includes two gaskets

12524653**Gasket Kit, LT1 Four-barrel Conversion (not shown)**

- Required when installing a four-barrel manifold on any LT1 engine
- Includes two gaskets

AIR CLEANERS**I. 12342080****Air Cleaner, Chevrolet-Logo High-Performance Design**

- Fourteen-inch round high-performance style air cleaner
- Chrome lid with embossed Chevrolet name
- Fits most four-barrel and two-barrel carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.75" from top of carburetor gasket area to underside of hood.

J. 12342071**Air Cleaner, Chevrolet-Logo Classic Design**

- Fourteen-inch round classic-style air cleaner
- Chromed lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most four-barrel and two-barrel carburetors

K. 12498951**Air Cleaner, Ram Jet 350**

- Designed for use with throttle body on Ram Jet 350 crate engine, but can be used on other applications

LS Series Components

After more than a half century of tweaking, tuning and tinkering, you might think that the world knew everything there was to know about the Chevrolet small-block engine. We knew better. While the basic small-block architecture is as bulletproof as one could hope for, our engineers realized that there were still limitless possibilities for this tried and true powerplant.

When the LS series of engines was introduced, this thinking was proudly put on display. And, the continual parade of new engines within this series proves that there is no shortage of innovative thinking still going on.

For enthusiasts that is good news, indeed.

Not only have GM Performance Parts' engineers come out with new crate engines, but they also have expanded the components available to enthusiasts to build their own special brand of Mouse from scratch.

And, unlike the guesswork associated with other aftermarket parts, with GM Performance Parts, a builder can be assured of the highest quality and craftsmanship—and compatibility. Our parts have been engineered to work together, by the very people who developed the engine assemblies in the first place. And, if that weren't enough, they are validated to the highest industry standards—and carry a fantastic guarantee, further ensuring that you'll be happy with your purchase for the long haul.

From blocks, heads and reciprocating parts to chrome dress-up accessories, you can find everything you need right in one convenient place—the GM Performance Parts catalog.

So, go ahead and dream a little. Flip through the following pages and let GM Performance Parts make those dreams a reality.





Getting Started with the LS Engine Family

CONFUSED ABOUT LS ENGINES? FIND ANSWERS HERE!

The LS engine family is relatively new to the performance world, and because of this, there's a lot of confusion and all around lack of knowledge of these engines and their respective components. LS1, LS2, LS6, LS7 ... which parts are interchangeable, which parts are upgrades and which are down grades? Over the next couple pages we're going to explore and discuss the many differing aspects and compatibility of the many LS components available today from GM Performance Parts. This will include the main components, such as blocks, heads, intakes, cams, crankshafts, and valvetrain. There's a ton of good information packed here, so if you know which parts you have interest in, you can skip ahead if you don't have time right now to take it all in. Otherwise, sit back in a comfortable recliner and read from start to finish to learn 90% of what you'll ever need to know about the LS small-block engine family.

SHORT BLOCKS

We are going to start off with the short block, and the foundation of every engine—the engine block. Since its first offering in 1997 all the way to today, most of the characteristics of the small-block Gen III/Gen IV LS engine block have remained relatively unchanged. Every OEM block shares these distinct features: 6-bolt cross bolted mains, center main thrust bearing, 9.24" deck height, 4-bolt per cylinder head bolt pattern, standard GM bellhousing bolt pattern, 4.40" bore spacing, and .842" diameter lifter bores. Something to also note, the oiling system on every block will work with the standard wet sump system of non-LS7 engines, the dry sump system used on the LS7, as well as aftermarket dry sump oiling systems.

BLOCKS

Although there are several minor differences between the OEM blocks, there are really only 4 major changes/differences: casting material (iron vs. aluminum), cam sensing location, provision for active fuel management (AFM), and lastly the differences in bore size. For a complete list of block specs, see the chart on page 266. To verify block to head compatibility, look at the chart on page 263.

The real differences between the Gen III and Gen IV blocks are simple to recognize. Gen III blocks have cam sensing in the top rear of the block, Gen IV blocks rely on a sensor in the front timing cover. Gen III blocks generally do not have AFM capability, Gen IV generally do have these provisions.

LS1/LS6

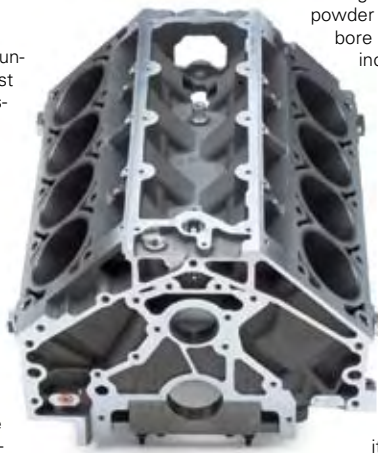
LS1 blocks were produced from 1997 through 2000 and used for LS6 engines, as well. They are cast aluminum with iron cylinder liners with a stock bore size of 3.89". This is a non-siamese bore block, over-boring is limited to .030". The liners were designed for a stock stroke of 3.6". Stroker combinations should be limited to around 4.00" (piston design will determine max stroke). They use Gen III cam sensing provisions, but Gen IV cam sensing can be used with this block through the use of a Gen IV front timing cover and blocking/plugging rear-sensing hole. There are no provisions for AFM. Main bearing bulkheads are solid, and the main caps are iron. Due to its smaller bore size, only LS1, LS6 and LS2 heads will work with this block.

LS2

LS2 blocks have been in use since 2005. They are cast aluminum with iron cylinder liners with a stock bore size of 4.00". This is a non-siamese bore block, over-boring is limited to .030". The liners were designed for a stock stroke of 3.6". Stroker combinations should be limited to around 4.00" (piston design will determine max stroke). They use Gen IV cam sensing provisions through the use of a Gen IV front timing cover. Provisions for AFM are present. Main bearing bulkheads are solid, and the main caps are iron. Due to its slightly bigger bore size, not only do LS1, LS6 and LS2 heads fit, but L92 and LS3 heads work with this block as well.

LS7

LS7 blocks have been in use since 2005. They are cast aluminum with iron cylinder liners with a stock bore size of 4.125". This is a siamese bore block, and over boring is limited to .030". The liners were designed for a stock stroke of 4.00". Stroker combinations should be limited to around 4.12" (piston design will determine max stroke). They use Gen IV cam sensing provisions through the use of a Gen IV front timing cover. Provisions for AFM are not present. Due to increased engine size, increased max RPM, and to increase power output, the main bearing bulkheads were designed with bay-to-bay



breathing windows. The main caps are high strength, fully profiled powder metal castings and are dowel located. Due to its larger bore size, all LS small-block heads will work with this block, including LS7 and C5R racing heads. GM Performance Parts offers a solid main bearing bulkhead block (P/N 25534427) for enthusiasts who will be using an aftermarket dry sump oiling system, or a scavenging pump system.

L92/LS3

L92/LS3 blocks have been in production since 2007 (LS3 starting in 2008). They are cast aluminum with iron cylinder liners with a stock bore size of 4.065". This is a non-siamese bore block, over-boring is limited to .030". The liners were designed for a stock stroke of 3.6". Stroker combinations should be limited to around 4.00" (piston design will determine max stroke). They use Gen IV cam sensing provisions through the use of a Gen IV front timing cover. Provisions for AFM are present, but only used in L92 engines. Main bearing bulkheads are solid, and the main caps are iron. Due to its slightly bigger bore size, LS1, LS6, LS2, L92 and LS3 heads will work with this block.

C5R

C5R blocks have been produced from 2000 through 2008. They are cast from a stronger, more durable proprietary aluminum alloy than OEM. After casting, these blocks are treated to a "hipping" process to provide even more strength and durability. Each block is also X-rayed to ensure there is no porosity. They are fitted with C5R spec cylinder liners with a stock bore size of 4.117". This is a siamese bore block, over-boring is limited to 4.160" max bore size. The liners were designed for a stroke of 4.00". Stroker combinations should be limited to around 4.12" (piston design will determine max stroke). These blocks have Gen III cam sensing provisions, the use of a Gen IV front timing cover will accommodate Gen IV cam sensing. There are no provisions for AFM. Due to its racing design, increased engine size, increased max RPM, and to increase power output, the main bearing bulkheads are machined with bay-to-bay breathing windows. The main caps are high strength billet steel, are dowel located and are secured with 4340 premium fasteners. Due to its larger bore size, all LS small-block heads will work with this block, including LS7 and C5R racing heads. Premium head studs are also included.

LSX Bowtie Block

LSX Bowtie blocks were introduced in 2007. They are cast from a more durable, stronger cast iron than production iron blocks. Stock bore size is 3.99" with .010 stock for honing to 4.000". This is a siamese bore block with a recommended max bore size of 4.200". Extra material was designed in, however, to accommodate an absolute max. bore of 4.250". The bore lengths were designed for maximum stroke, while still providing hone over travel clearance, which is cut at 4.28" diameter. Stroker combinations can reach 4.25", however rotating assembly design will be critical in stroke lengths exceeding 4.125" and heavy metal will be required for balancing the crankshaft. LSX blocks require the use of a Gen IV front timing cover to accommodate cam sensing. There are no provisions for AFM. Due to its racing design, increased engine size capability, increased max RPM capability, and to increase power output, the main bearing bulkheads are cast with bay-to-bay breathing windows. The main caps are high strength billet steel, are dowel located and are secured with LS7 fasteners. The deck height is .020" taller than stock to accommodate various engine builds. The head bolt pattern has been upgraded from the stock 4-bolt per cylinder design to include an additional 2-bolts per cylinder. Depending on final bore size, any LS small-block head will work with this block, including LS7 and C5R racing heads. The oiling system was redesigned to a true priority main system—oil is supplied first to the main bearings, and then to the rest of the engine. This feature is unique to the LSX block.

GEN III SMALL-BLOCKS

Part Number	Description	Liters	CID	HP	TQ	Bore	Stroke
19165628	LS327/327	5.3	327	327	347	3.780	3.622
17801267	LS1	5.7	346	350	365	3.898	3.622
17801268	LS6	5.7	346	405	395	3.898	3.622
19156262	LQ9	6.0	364	345	380	4.000	3.622
19165484	LS2	6.0	364	400	400	4.000	3.622
17802134	LS364/440	6.0	364	440	404	4.000	3.622
19171224	LS376/485	6.2	376	485	x	4.065	3.622
19171225	LS376/520	6.2	376	520	x	4.065	3.622
19201992	LS3	6.2	376	430	x	4.065	3.622
19171821	CT525	6.2	376	525	471	4.065	3.622
19165058	LS7	7.0	427	505	470	4.125	4.000



CRANKSHAFTS

Most Gen III and Gen IV crankshafts are nearly identical in design, all use the same rod and main journals sizes, all use the same rear seal. All but the LS7 are iron. One major difference that needs to be noted is that the LS7 crankshaft has a snout that is approximately 1" longer than all other cranks. This is to accommodate the 2-stage oil pump used on the LS7 engine. Otherwise, there are some minor variances, and these can be found below.

4.8L

The 4.8L crankshaft is an iron crankshaft with 2.1" rod journals and 2.65" main journals. The stroke is 3.267" and is designed to work with a connecting rod length of 6.275". They started out with a 24-tooth reluctor wheel and this was used through the 2007 model year in the classic 800 series trucks. However, in 2007 starting with the 900 series full size truck, they were to be changed to 58-tooth.

5.3L-6.2L

The crankshafts used in 5.3L-6.2L engines are iron, with 2.1" rod journals and 2.65" main journals. The stroke is 3.622" and is designed to work with a connecting rod length of 6.100". They started out with a 24-tooth reluctor wheel, but changed to 58-tooth in 2006. Each engine has a unique part number for its crankshaft assembly due to balancing differences of the piston weights.

7.0L LS7

The LS7 7.0L crankshaft is a steel crankshaft with 2.1" rod journals and 2.65" main journals. The stroke is 4.000" and is designed to work with a connecting rod length of 6.070". All LS7 crankshafts came with 58-tooth reluctor wheels. Due to the 2-stage oil pumps used in the LS7 engines, the nose of the crank-

shaft is longer than all other crankshafts by approximately 1". This crankshaft can be used with standard LS oil pumps. Here's what you need to do: replace the crankshaft timing gear with the standard LS gear (P/N 12556582), replace the LS7 oil pump with the standard LS oil pump (P/N 17801830), replace the LS7 timing cover with the LS2 timing cover (P/N 12600325). From here you have two choices: a 1" spacer hub can be used in front of the LS7 balancer to make up the difference in length between the two crank gears using the stock LS7 balancer bolt, or you can have the crankshaft snout shortened 1" and use an LS2 type balancer bolt. Or you can use the new GMPP 4" stroke camshaft (P/N 19171619).

CONNECTING RODS

The connecting rods are all very similar. All rods except for LS7 are powder metal steel, whereas LS7 rods are titanium. 4.8L rods are 6.275" long, 7.0L LS7 rods are 6.067" long, and all the rest are 6.098" long. Starting in 2006, all rods are now made with bushed small ends (wrist pin end). If you have a set of earlier model LS rods (pre-2000), we offer LS6 upgrade bolts (P/N 11600158) for performance use. As mentioned before, the LS7 rods are titanium, but there are also a couple of other items of interest we should discuss. First off, the small end of the rod is scalloped on the top half of the rod to clear the inner bracing of the piston (due to the bracing of the piston, non-LS7 rods will not work with LS7 pistons). Additionally, the bore in the big end is a little different size than that of the other rods, necessitating a different rod bearing (P/N 89017573). The bolts in the LS7 rod are stretch to yield, and need to be replaced at each rebuild. GM Performance Parts offers a convenient kit of 16 as P/N 11609825.

PISTONS

All the LS pistons are very similar. All are made of hypereutectic aluminum and should not be used in applications exceeding 550hp. The biggest difference between them all is bore size. 4.8L and 5.3L pistons are identical to each other. As mentioned in the connecting rod section, the inner bracing of the LS7 piston requires a uniquely designed LS7 rod. Opposite to this, the LS7 rods should fit any LS piston, but doing this would require checking piston to crankshaft clearance at BDC.

HEADS AND INTAKES

In this section we're going to talk about the induction system—the heads and intake manifolds. First we need to start off with the aspect that offers the most confusion: port designs.

The LS family employs 3 different ports designs. Each one is unique, and is not compatible with the others.

Port Designs

Cathedral Ports

The first port design is called the cathedral port. This is the original port design for the LS family. **Picture A** shows what the ports look like from the front. It's called cathedral due to its look. These ports flow considerably more air than the original small-block ports.

LS7 Rectangular Ports

The second port design is referred to as the LS7 rectangle port. It was first introduced in the 2006 Z06 Corvette LS7 7.0L engine. It is still dedicated only to the LS7 engine today. **Picture B** shows what this port looks like. It was originally derived from the C5R racing program, and tweaked for use in OEM applications. This head has the biggest airflow numbers of any of the factory LS heads.

L92 Rectangular Ports

Next is the L92 rectangle port. It was first introduced in 2007 RPO code L92 6.2L engines that were installed in Cadillac Escalades and also in 2007 RPO code L76 6.0L engines in 900 series trucks. **Picture C** shows this port design. It is similar to the LS7, but the ports are a little taller, and a bit thinner. These heads flow better than the cathedral port heads, but a little less than the LS7 heads. The new 2008 LS3 uses ports of the same design as the L92.

C5R

Lastly, we have the C5R ports. These heads were designed strictly for the C5R racing program. Again, this was the original rectangle port design before being adopted into the LS7 and L92 head programs. These ports are rectangle in shape, and have very high flow and power potential numbers, but are sold only as a head porters head ... they need to be fully ported by a professional head porter.

Bolt Patterns & Fitment

One of the most important items to know about the heads is that each port design has not only a unique shape, but each design has a unique intake manifold bolt pattern. This is good for you, because you don't need to concern yourself with mismatched port designs. In **pictures A, B and C**, it's easy to see the differences in these patterns. The exhaust bolt patterns, however, are all the same, and most headers will fit them all. The location of the bolt pattern varies slightly, so header to frame or body clearance may vary depending on which head is used. Otherwise, all other bolt patterns in the heads are the same. All accessory bolt holes and head mounting holes are identical.

Valve Sizes, Valve Locations & Minimum Bore Sizes

Each head design uses a specific valve size, & location, along with specific valve angles. These specifics are discussed below.

Cathedral Port Heads

These heads were designed to work on smaller engines with smaller 3.89" bore sizes, and because of this, they have the smallest valve sizes, which in part is a factor in why they flow the least of the LS series of heads. These heads all came with 2.00" intake, and 1.50" exhaust valves. Because these heads were designed for the smaller bore engines, they also have closest valve spacing and maximum valve sizes are limited. To achieve an increased maximum RPM on



A Cathedral Intake Port and Bolt Pattern



B LS7 Intake Port and Bolt Pattern



C L92 Intake Port and Bolt Pattern

LS6 engines, the standard solid stem valves were replaced with hollow stem intake valves, and sodium filled exhaust valves. When the LS2 was designed, the engine was larger, thus reducing the max RPM. This offered a savings because the expensive LS6 valves could be replaced with standard LS1 valves. Valve angle on these heads is 15 degrees.

L92 Style Heads

These heads were designed to work on slightly bigger engines with slightly bigger 4.00" and 4.06" bore sizes. Because of this, they have bigger valve sizes and increased flow numbers over non-CNC ported cathedral port heads. They come with 2.165" intake, and 1.59" exhaust valves, and were designed to be optimized for the 4.065" bore, therefore they perform better on engines with a minimum of 4.065" bore. To achieve an increased maximum RPM on LS3 engines, the standard solid stem valves were replaced with hollow stem

LS COMPATIBILITY — HEADS VS. INTAKES

INTAKES				HEADS									
Engine	P/N	Manifold Type	Port Type	12559855 std LS1	12564824 std LS6/LS2	12562319 std LQ9	88958665 CNC LS6	88958622 CNC LS6	12562713 std L76/L92	12598594 std LS3	88958698 CNC L92	12578450 std CNC LS7	12480090 C5R head
LS1/LS6	88894339	EFI	Cathedral	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
LS2/LQ4	88958675	4-bbl	Cathedral	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
LQ4/LQ9	n/a	EFI	Cathedral	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
L76/L92/LS3	12590123	EFI	L92	No	No	No	No	No	Yes	Yes	Yes	No	No
L76/L92/LS3	25534401	4-bbl	L92	No	No	No	No	No	Yes	Yes	Yes	No	No
L76/L92/LS3	25534416	4-bbl w/inj	L92	No	No	No	No	No	Yes	Yes	Yes	No	No
LS7	25534394	4-bbl	LS7	No	No	No	No	No	No	No	No	Yes	No
LS7	25534413	4-bbl w/inj	LS7	No	No	No	No	No	No	No	No	Yes	No
LS7	12568976	EFI	LS7	No	No	No	No	No	No	No	No	Yes	No

No = not compatible Yes = direct compatibility



LS6 Rockers **D**



LS7 Rockers **E**



L92 Rockers **F**

intake valves, sodium filled exhaust valves. Valve angle on these heads is 15 degrees like the cathedral portheads. However, when using these heads on an engine originally fitted with cathedral port heads, valve to piston clearance must be checked.

LS7 HEADS

These heads were designed to work on engines with 4.125" bore sizes. They have the biggest valve sizes and highest flow numbers of the LS series OEM heads. They are fully CNC-ported right from the factory, come with 2.200" titanium intake, and 1.61" exhaust valves, and were designed to be optimized for the 4.125" bore. Due to the valve sizes and valve spacing, these heads cannot be used on engines with less than 4.10" bore size. Valve angle is 12 degrees and because valve spacing is unique, when using these heads on an engine originally fitted with pistons not designed for LS7 heads, valve to piston clearance must be checked.

C5R HEADS

These heads were designed for the C5R racing engines with 4.125" bore sizes. They have accommodation for 2.20" intake, and 1.65" exhaust valves. Due to the valve sizes and valve spacing, these heads cannot be used on engines with less than 4.10" bore size. Valve angle is 11 degrees and valve spacing is unique, therefore, when using these heads on an engine originally fitted with pistons not designed for C5R heads, valve to piston clearance must be checked.

VALVETRAIN

The valvetrain system on the LS series engine is very simple. All production heads use bolt down style, investment cast, roller trunnion rockers. All rockers ratios are 1.7:1 except for LS7, which are 1.8:1. The rocker designs for each head are specific, and the part numbers shown below are the only part numbers that will work with each head. To help identify these rocker systems see **pictures D, E, and F**.

LS1, LS6 and LS2 heads use non-offset rockers P/N 10214664 for both the intake and exhaust. **(Picture D)**

L92 and LS3 heads use the same P/N 10214664 rocker for the exhaust, but use an offset rocker P/N 12569167 on the intake side. These are offset due to the wide opening of the port. **(Picture F)**

LS7 heads use unique, non-offset, rockers, P/N 12579617, for the exhaust, and unique, offset, P/N 12579615, for the intakes. **(Picture E.)**

C5R heads use aftermarket shaft mount style rockers only.

HEAD-TO-BLOCK FITMENT

Now that we've discussed the individual aspects of the parts you are going to use to build your engine, now we need to focus on which heads will actually work with which blocks. We've broken this down to stock production blocks, and aftermarket type blocks. See the chart at the bottom of this page for complete part number compatibility.

Production Blocks

Because LS1 and LS6 blocks have such a small bore size (3.89") with very little room to overbore, they can only use LS1, LS6 and LS2 type heads. Attempting to use any other type of head will cause the valves to hit the block. LS2 blocks have a 4.00" bore which allows for more valve clearance. Not only can you use LS1/LS6 heads, but also L92/LS3 heads. L92 and LS3 blocks with their 4.065" bore can only use L92/LS3 and LS1/LS6 heads. C5R and LS7 blocks have 4.125" bores and can use any of the LS heads.

All production blocks have the same head bolt pattern and use the same diameter bolts: (4) 11mm bolts per cylinder (10 bolts total per side) and 5 upper, 8mm bolts. Early model blocks like the LS1 and LS6 have 2 different length 11mm bolts, but the 2004 and newer blocks have bolts that are all the same length.

Aftermarket Blocks

Aftermarket blocks, such as our LSX Bowtie block, have generous bore ranges, so it's critical to understand the minimum bore sizes to use each head type. LS1/LS6/LS2 heads require a minimum of 3.89" bore, anything smaller than this runs the risk of having a valve-to-block clearance problem, and head gasket sealing failure. L92/LS3 heads require a minimum of 4.00", but work better on 4.065" and larger bores. Bores smaller than a 4.00" could cause valve-to-block interference, and be a potential for head gasket sealing issues. LS7 and C5R heads require a minimum of 4.10" bore, but work better on 4.125" and larger bores. Bores smaller than a 4.10" could cause valve to block interference, and be a potential for head gasket sealing issues.

LS COMPATIBILITY — HEADS VS. BLOCKS

BLOCKS			HEADS									
Engine	P/N	Bore Size	12559855 std LS1	12564824 std LS6/LS2	12562319 std LQ9	88958665 CNC LS6	88958622 CNC LS6	12562713 std L76/L92	12598594 std LS3	88958698 CNC L92	12578450 std CNC LS7	12480090 C5R head
LS1/LS6	12561166	3.89"	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No
LQ4/LQ9	12572808	4.00"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
LS2/L76	12568950	4.00"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
L92/LS3	12584727	4.065"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No
LS7	17802854	4.125"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LS7*	25534427	4.125"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
C5R	12480030	4.12" - 4.16"	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
LSX	19166454	3.99" - 4.25"	*	*	*	*	*	*	*	*	**	**

*No = not compatible Yes = direct compatibility * = 4.00 minimum bore ** = 4.125 minimum bore*

Chevy LS Series Quick Reference Chart

LS SERIES BLOCKS													
Origin	Part Number	Material	Deck Height	Bore	Main Bolt	Cap Material	Crankshaft Jnl Dia.	Oiling	Rear Main Seal	Max Stroke	Max Hp	Usage	Page Number
LS1/LS6	12561166	Alum	9.240	3.89"	6	Iron	Std. LS (2.56)	Wet	1 pc	4.00"	450	Street	267
LS2	12568950	Alum	9.240	4.00"	6	Iron	Std. LS (2.56)	Wet	1 pc	4.00"	450	Street	268
L92/LS3	12584727	Alum	9.240	4.065"	6	Iron	Std. LS (2.56)	Wet	1 pc	4.00"	525	Street	269
LS7	17802854	Alum	9.240	4.125"	6	PM	Std. LS (2.56)	Dry	1 pc	4.10"	550	Street	270
LS7	25534427	Alum	9.240	4.125"	6	PM	Std. LS (2.56)	Dry	1 pc	4.10"	550	Street	270
C5R	12480030	Alum	9.240	4.117–4.160"	6	8620 Steel	Std. LS (2.56)	Wet	1 pc	4.10"	900	Pro	271
LQ9	12572808	Iron	9.240	3.98"	6	Iron	Std. LS (2.56)	Wet	1 pc	4.00"	500	Street	268
LSX	19166454	Iron	9.260	3.99–4.250"	6	1045 Steel	Std. LS (2.56)	Wet	1 pc	4.25"	1500+	Street/Pro	272
LSX	19166097	Iron	9.700	3.99–4.250"	6	1045 Steel	Std. LS (2.56)	Wet	1 pc	4.50"	1500+	Street/Pro	273

GM Performance Parts and Racing

GM Performance Parts has been a part of the racing scene since the division's inception. Originally founded to support the GM Trans Am teams, GM Performance Parts also became critical components on cars campaigned on the NASCAR and NHRA circuits.

Through strategic alliances, GM Performance Parts was able to get design input and product evaluations from some of the greatest teams and drivers.

Such high-profile stars as Dale Earnhardt and Warren Johnson made great contributions to GM Performance Parts' popularity and track credibility. Earnhardt won seven NASCAR titles in Chevrolets, and Warren Johnson has netted six NHRA championships in his GM Pro Stock cars and hasn't shown any signs of letting up anytime soon.

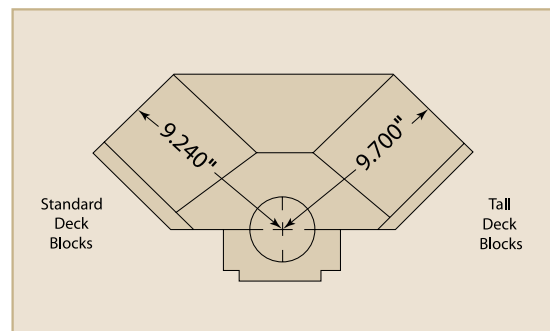
There is no laboratory like a racetrack to show what an engine or component can do—and there's no validation like a checkered flag to let you know you've passed the test.

At GM Performance Parts, we're proud to align ourselves with the best minds in motorsports—and to take the lessons learned and apply them to the parts we make available to all performance enthusiasts.



Top: Dale Earnhardt and his crew in 1992.

Bottom: NHRA Pontiac Driver Warren Johnson in his Pontiac Grand AM in 2003.

LS1/LS6 5.7L Bare Block (rear) **A**LS1/LS6 5.7L Bare Block (top) **A**LS1/LS6 5.7L Bare Block (bottom) **A****DECK HEIGHT DIAGRAM****LS SERIES BLOCKS**

GM took a chance with the LS engine. They stayed true to the pushrod small-block and continued to develop this technology to the point that building a daily-driven, 500-plus horsepower car is no big deal. The GM Performance Parts LS series cylinder blocks are designed specifically for late model small-block engines that run the LS Family cylinder heads. These include the LS1, LS2, LS3, LS6, LS7, LQ4, LQ9, L76 and L92. Our LS block selection ranges from a stock replacement all the way up to our LSX Bowtie block designed to support over 2000 horsepower!

A. 12561166 REDUCED PRICE!**LS1/LS6 5.7L Bare Block**

- Direct replacement for 2001–2004 LS1 and LS6 Corvette 5.7L
- Production 319-T5 aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use LS1/LS6 cylinder heads only
- **3.89"** finished bore (99.0mm)
- No provision for 'Active Fuel Management'
- Tested to over 400 horsepower!

12572808

LQ9 Cast Iron 6.0L Bare Block (not shown)

- Direct replacement for 1998–2004 LQ4 and LQ9 Truck and SUV 6.0L
- Production cast iron block
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use only LS1, LS6, LS2 or L92 cylinder heads
- **4.00"** finished bore (101.6mm)
- No provision for 'Active Fuel Management'
- Great for stroker cranks for even more cubes
- Tested to over 500 horsepower!

12568950

LS2 Aluminum 6.0L Bare Block (not shown)

- Direct replacement for 2005–2007 LS2 Corvette, SSR, GTO 6.0L, and TrailBlazer SS
- Production 319-T5 aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use only LS1, LS6, LS2, L92 or LS3 cylinder heads
- **4.00"** finished bore (101.6mm)
- Provisions for 'Active Fuel Management'
- Great for stroker cranks for even more cubes
- Tested to over 450 horsepower!

NEW



A L92 Aluminum 6.2L Bare Block (top)

NEW

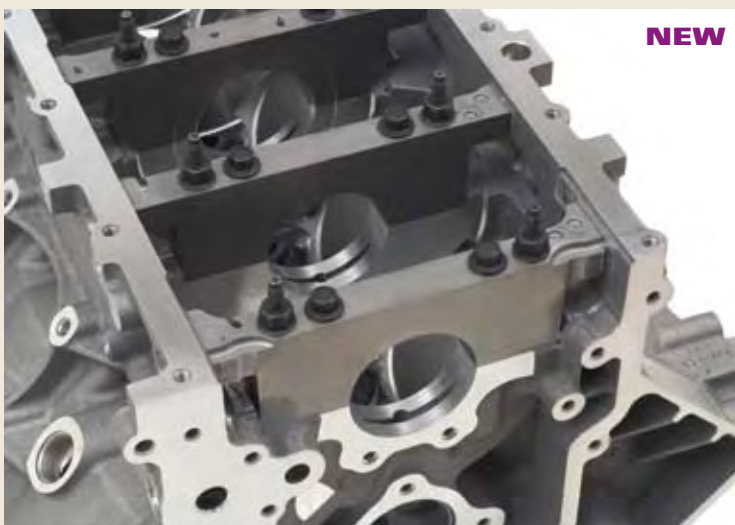


A L92 Aluminum 6.2L Bare Block (bottom)

NEW



A L92 Aluminum 6.2L Bare Block (front)



NEW

L92 Aluminum 6.2L Bare Block (rear) **A**

A. 12584727 NEW

L92/LS3 Aluminum 6.2L Bare Block

- Direct replacement for 2007–2008 L92, and 2008 LS3 6.2L
- Production aluminum block with iron sleeves
- Production oiling system
- 6-bolt iron main bearing caps
- 9.240" deck height
- Use only LS1, LS6, LS2, L92 or LS3 cylinder heads
- **4.065"** finished bore (103.25mm)
- Provisions for 'Active Fuel Management'
- Great for stroker cranks for even more cubes
- Tested to over 500 horsepower!



NEW

L92 Aluminum 6.2L Bare Block (bottom) **A**



NEW

L92 Aluminum 6.2L Bare Block (front) **A**

The LS Series Blocks Continued

A. 17802854

LS7 7.0L Corvette Bare Block

- Direct replacement for 2006–2008 7.0L LS7 engine
- Production 319-T5 aluminum block with pressed-in iron sleeves
- Production oiling system
- 6-bolt 'dowel located' steel main bearing caps
- 9.240" deck height
- For use with any LS series head
- **4.125"** finished bore (104.78mm), deck plate honed
- Siamese cylinder bores for large bore size
- No provision for 'Active Fuel Management'
- Based on C5R block development
- Tested to over 500 horsepower!

Parts required to complete your LS7 Block

PART NUMBER	QTY	DESCRIPTION
12570471	1	Valley Cover
12598292	1	Front Cover Assembly
21007339	4	Plug
12556437	1	Camshaft Retainer
11609289	1	Plug
11610259	1	Plug, Cylinder Head
12551177	5	M8 x 1.25 Flanged Hex Head Bolt
12570326	4	Dowel, Cylinder Head Locating
12572013	1	Rear Cover Assembly
12573460	1	Oil Plug
12596334	1	Windage Tray
11588426	2	Plug
09427693	4	Plug
01453658	2	Dowel, Bell Housing Locating
12561663	1	Plug
12573107	1	Oil Pressure Sensor
12585546	1	Crankshaft Position Sensor

25534427

LS7 Bare Block with Solid Main Bulkheads (not shown)

- 319-T5 aluminum block with pressed-in iron sleeves
- Production oiling system
- 6-bolt 'dowel located' steel main bearing caps
- 9.240" deck height
- For use with any LS series head
- **4.125"** finished bore (104.78mm), deck plate honed
- Siamese cylinder bores for larger bore sizes
- No provision for 'Active Fuel Management'
- Fully machined with caps and pressed-in liners
- Limited availability
- For competition use only
- Made to LS7 production standards for machining and cleanliness
- Based on C5R block development
- Tested to over 500 horsepower!

25534412

Oil Hose Adapters (not shown)

- Kit adapts the production LS7 Oil Pan to aftermarket AN style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 Oil Pan, and has AN male outlet for -12 AN fittings
- Includes (1) adapter, (2) fittings, (2) bolts, and (2) sealing gaskets



A LS7 7.0L Corvette Bare Block (rear)



A LS7 7.0L Corvette Bare Block (front)



A LS7 7.0L Corvette Bare Block (rear)

Aluminum C5R Racing Block (rear) **B**Aluminum C5R Racing Block (front) **B**Aluminum C5R Racing Block (front) **B****B. 12480030****Aluminum C5R Racing Block**

This is the ultimate race version of the aluminum LS block, which enjoys the state-of-the-art technology necessary to build an LS engine to over 440 cubic inches, and 900 horsepower! Our C5R race block has seen serious race time (including wins at LeMans, GT-S, and the 24 hours of Daytona). If you are building a "big" small-block for your late model Camaro, Firebird, or Corvette, this is the aluminum block for you.

- Premium "hipped" and x-rayed 356-T6M aluminum block
- Production oiling system
- 6-bolt SAE 8620 dowel located steel main bearing caps
- SAE 4340 premium main cap fasteners
- 9.240" deck height
- For use with LS1, LS6, LS2, L92, LS3 and LS7 cylinder heads
- C5R spec, special material cylinder liners
- Siamesed water jackets for larger bore size
- **4.117"** finished bore
- 4.160" max bore
- Standard camshaft location and bore sizes
- 100% CMM measured for accuracy
- Completely "blueprinted" and "squared"
- Includes 4340 premium head studs
- AN O-ring plugs throughout
- No provision for 'Active Fuel Management'
- Capable of over 900 horsepower!



LSX BOWTIE BLOCK

The next generation of high performance GM blocks has been released! It's the amazing LSX Bowtie block, designed from the ground up to deliver maximum value while providing you with the foundation to build the LS engine of your dreams.

GM Performance Parts, working with NHRA Pro Stock legend Warren "The Professor" Johnson, designed the LSX block to be the ultimate high performance LS block. Our goal was to bring the LS community race block technology at street car prices. Just like every engine part in the GM Performance Parts portfolio, the LSX Bowtie block is held to the highest industry standards for tolerances, materials, and construction.

We think that you'll find the LSX to be the ultimate in high performance LS engine block—check out these features:

- 100% CNC-machined cast iron
- True priority main oiling
- 6 head bolts per cylinder
- Standard 4.400" bore spacing
- Extra thick siamese cylinder bores
- Fully machined bores, ready to hone to fit
- Semi-finished, machined decks, ready to be decked to your spec's
- Increased deck thickness
- LS7-style 6-Bolt "dowel located" billet main bearing caps
- Wet sump and dry sump capability
- Deep skirted head bolt holes (same as OEM aluminum blocks)
- All stock bolt holes are stock thread size
- Maintains all OEM LS family exterior mounting features
- Front motor plate mounting holes added
- Added material around cam bearings for additional strength
- 8mm exterior/interior 5th and 6th head bolt holes
- All 5 cam bores machined for bearing P/N 12453169 (supplied)
- Standard .842" lifter bores
- Screw-in soft plugs
- Accommodates any LS small-block oil pan and oil pump
- External oil pump feed at rear of block
- Main web bay to bay breathing holes for increased horsepower
- Access windows for cylinder head stud access (intake side)
- Extra breathing pocket added near starter for better windage
- Includes unique new cam retainer, rear cover, lifter retainers and OEM replacement cam bearings

A. 19166454

LSX Bowtie Block (Standard Deck)

- 3.990" finished siamese cylinder bores (ready to be honed to your specifications)
- 9.26" semi-finished standard deck height (ready to be decked to your specifications)
- Max 4.250" recommended stroke
- Capable of 364 to 482+ cid
- Orange powder coat finish
- Accepts all Gen III & IV LS heads, cranks, cams, etc.
- Approximate finished weight: 225 lbs.

The LSX Block includes the following:

19166177	Cam Thrust Plate
19166178	LSX Rear Cover
19166182	Tappet Guides



A LSX Bowtie Block (front)



A LSX Bowtie Block (rear)



A LSX Bowtie Block (front)

LSX Bowtie Block (front) **A**Lifter Boss Detail **A**Bay-to-Bay Breathing Pocket Detail **A**LSX Tall Deck Block **B****Other service parts for your LSX Block:**

19166179	Cam Thrust Plate, O-Ring
19166180	Rear Cover, O-Ring
19166181	Rear Cover, O-Ring Seal
19167382	0.5mm Oversize Bearing
19167383	1mm Oversize Bearing
12567634	Main Cap Dowel

For the advanced LSX competition engine builder, you will fully enjoy reading the following features of the new LSX Bowtie Block:

- Front oil feed holes can be plugged/restricted for mechanical flat tappet or mechanical roller lifter applications
- Can be machined safely to 9.20" deck height
- Main bearing cap bolt threads can be machined for aftermarket premium 12mm fasteners
- Maximum 4.250" bore at .200" minimum wall thickness (naturally aspirated applications)
- 6-bolt head bolt pattern (for boosted applications)
- Machined for 8mm inner and outer 5th and 6th head bolts
- Standard bolt holes can be machined for 1/2" studs
- Cam bores can be machined to accept 60mm roller bearings
- Can be machined for larger diameter lifters and/or 1.060" bronze bushings
- Front oil feed lines can be plugged and external oil pump and/or aftermarket dry sump systems can be used via oil pump feed at rear of block—may be required with certain large stroke/aluminum rod combinations
- Belt cam drive systems can be accommodated—some machining will be required
- External oil pump feed at rear of block
- 7th transmission bolt hole has been added (per early SBC), stud can be installed for sanctioning body requirements
- Front motor plate can be used for racing chassis applications (sprint car, drag racing, truck pulling, etc.)
- Threaded water plugs can be used for external heaters or coolers

The LSX block made its public debut at the 2006 SEMA show in the Reggie Jackson '69 Camaro project car—a joint effort between GM Performance Parts and GM Performance Division. This car also starred in a Hot Rod TV episode—the first to air on ESPN. The engine that powers this amazing "evolved Camaro" features a 454-cubic-inch LSX short block, prototype LSX cylinder heads, an LS7 carbureted intake manifold, a pump gas-friendly compression ratio, and over 640 horsepower. This is just a sample of what you can do with your own LSX block!

Look for the LSX block to spawn LSX-specific cylinder heads, intakes, cams, and crate engines. And, watch for GM Performance Parts to continue to lead the industry in value-based high performance engine blocks, components, and crate engines.

B. 19166097 NEW**LSX Tall Deck Block**

- **3.990"** finished siamese cylinder bores (ready to be honed to your specifications)
- **9.70"** semi-finished standard deck height (ready to be decked to your specifications)
- Max 4.50" recommended stroke (some additional machining required)
- Capable of 364 to 500+ cid (some machining may be required)
- Orange powder coat finish
- Accepts all Gen III & IV LS heads, cranks, cams, etc.
- Approximate finished weight : 250 lbs.

CYLINDER BLOCK COMPONENTS

A. 19153789 **NEW**

Bare Block Completion Kit, Gen III

- Includes all parts to complete a Gen III bare block

The kit includes:

PART NUMBER	QTY	DESCRIPTION
12575742	01	Valley Cover
12561211	01	Cam Sensor
11570082	08	Bolt
12570471	01	Valley Cover
12561243	01	Front Cover
11515758	08	Bolt
12614813	01	Rear Crankshaft Seal Housing
12556127	12	Bolt
12602972	01	Rear Crankshaft Oil Seal
12614812	01	Rear Crankshaft Seal Housing Gasket
12618054	01	Oil Galley Plug
11588949	02	Oil Plug
09427693	04	Water Drain Plug
01453658	02	Transmission Alignment Dowel
12561663	01	Water Drain Plug
12556437	01	Camshaft Retainer Plate

B. 25534412

Oil Hose Adapters

- Kit adapts the production LS7 Oil Pan to aftermarket AN style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 Oil Pan, and has AN male outlet for -12 AN fittings
- Includes (1) adapter, (2) fittings, (2) bolts, and (2) sealing gaskets

89017877

Main Bearing (not shown)

- Positions 1,2,4,5
- Requires 4 per engine
- For LS7 engines

C. 89017808

Main Bearing

- Thrust bearing, position 3
- For LS7 engines

88894271

Main Bearing (not shown)

- Positions 1,2,4,5
- Requires 4 per engine
- For non-LS7 engines

89017572

Main Bearing (not shown)

- Thrust bearing, position 3
- For non-LS7 engines

FRONT COVERS & TIMING POINTERS

12561243

Front Timing Cover (not shown)

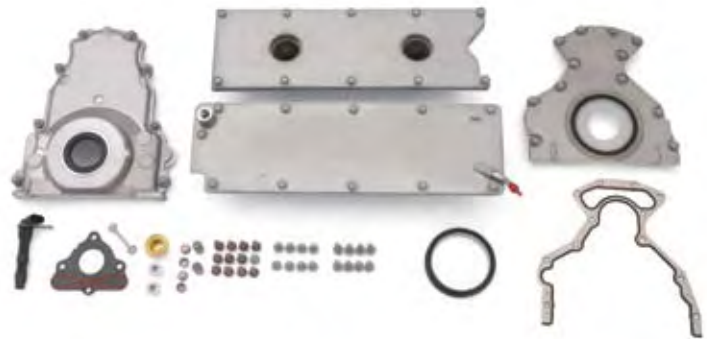
- For LS1 and LS6 engines
- No cam sensor

D. 12600325

Front Timing Cover

- For LS2 and LS3 engines
- Gen IV cam sensor included

NEW



A Bare Block Completion Kit, Gen III



B Oil Hose Adapters



C Main Bearing



Don't Forget those corresponding parts!
See the chart on page 275 for specifics.

Front Timing Cover **D**Rear Block Cover **E**LS Front Distributor Drive Cover **F****12616491** **Front Timing Cover (not shown)**

- Includes seals and bolts
- For L92 engines
- Gen IV cam sensor included

12598292 **Front Timing Cover (not shown)**

- Includes seals and bolts
- For LS7 engines
- For 2-stage oil pump
- Gen IV cam sensor included

12574294**Front Cover Gasket (not shown)**

- For all LS series engines

12585673**Front Crank Seal (not shown)**

- For all LS series engines

11515758**Front Cover Bolt (not shown)**

- Requires 8 per engine
- For all LS series engines

E. 12614813**Rear Block Cover**

- Includes seals and bolts
- For all stock LS engine blocks (will not work on LSX block P/N 19166454)

F. 88958679**LS Front Distributor Drive Cover**

- Assembly is manufactured for applications where a 4-barrel carburetor and distributor are required
- Can be combined with GM's Bowtie valve covers P/N 25534398 and P/N 25534399 for a complete traditional looking engine package
- For all LS series engines except LS7

NOTE:

Distributor and mechanical fuel pump not included. Uses small-block Ford style distributor and mechanical fuel pump.



Don't Forget those corresponding parts!
See the chart below for specifics.

! Timing Covers: Corresponding Parts

Part Number	Bolts (Quantity)	Seals (Quantity)	Gasket (Quantity)	Engine Application
12616491	11515758 (8)	12585673	12574294 (1)	MY07 L92
12561243	11515758 (8)	12585673 (1)	12574294 (1)	MY04 & MY06 LQ9, MY04/05 LS1, MY04/05 LS6
12598292	11515758 (8)	12585673 (1)	12574294 (1)	MY06/07 LS7

LS SERIES CYLINDER HEADS

Part Number	Description	Material	Port Size	Valve Angle	Chamber CC's	Int Vlv	Exh Vlv	Port Type	Heat Riser	Rocker Stud	Notes	Page Number
12564825	Bare LS2 & LS6	Aluminum	210	15 deg	64.5	2.00	1.55	Cathedral	No	Bolt	Bare LS2/LS6	N/S
12564824	Stock LS6	Aluminum	210	15 deg	64.5	2.00	1.55	Cathedral	No	Bolt	Hollow/sodium filled valves	276
12576063	Stock LS2	Aluminum	210	15 deg	64.5	2.00	1.55	Cathedral	No	Bolt	Solid stem valves	277
88958622	CNC LS6	Aluminum	250	15 deg	61.9	2.00	1.55	Cathedral	No	Bolt	11.2 compression	277
88958665	CNC LS6	Aluminum	250	15 deg	65	2.00	1.55	Cathedral	No	Bolt	10.5 compression	276
88958765	CNC LS2	Aluminum	250	15 deg	64.5	2.00	1.55	Cathedral	No	Bolt	Solid stem valves	277
12582714	Bare L76/L92	Aluminum	260	15 deg	70	2.16	1.59	L92	No	Bolt	Solid stem valves	N/S
12582713	Stock L76/L92	Aluminum	260	15 deg	70	2.16	1.59	L92	No	Bolt	Solid stem valves	278
88958698	CNC L76/L92	Aluminum	279	15 deg	68	2.16	1.59	L92	No	Bolt	Solid stem valves	278
12598594	Stock LS3	Aluminum	260	15 deg	70	2.16	1.59	L92	No	Bolt	Hollow/sodium filled valves	N/S
12578450	Bare LS7	Aluminum	270	12 deg	70	2.20	1.61	LS7	No	Bolt	Bare LS7	N/S
12578449	Stock LS7	Aluminum	270	12 deg	70	2.20	1.61	LS7	No	Bolt	Titanium/sodium filled valves	278
25534428	As-cast LS7	Aluminum	—	12 deg	66	2.20	1.61	LS7	No	Bolt	Titanium/sodium filled valves	279
12480005	C5R 1st design	Aluminum	210	11 deg	38	2.18	1.63	C5R	No	Shaft	As-cast, no seats/guides (DISCONTINUED)	N/S
12480090	C5R 2nd design	Aluminum	210	11 deg	30	2.18	1.63	C5R	No	Shaft	As-cast, no seats/guides	279

THE LS FAMILY ALUMINUM HEADS

The LS Family of GM engines has continued our tradition of raising the power potential of the legendary small-block V-8. The LS6 cylinder head came as standard equipment on the amazing 405-horse Z06 Corvette and the 2005 Corvette with the LS2 engine. These heads can be installed on any LS Series engine (except 4.8L & 5.3L versions), and the GM Performance Parts engineers have even designed fully-CNC-ported versions to get your late-model GM engine screaming right along. Our complete assemblies come with beehive valve springs and light weight hollow stem valves—innovations that our competitors have had to copy to catch up to our designs. We've already done the validation of these heads in competition in our show room stock C5R Corvette racecar, so you can be assured our LS6 race heads will live up to your demands.

Aluminum LS Family Head Technical Notes:

- Aluminum 356-T6
- High efficiency combustion chambers
- Symmetrical intake and exhaust ports (not mirrored like Gen I small-blocks)
- Angled spark plugs, (14mm, 5/8" hex, 3/4" reach, taper-seat plugs)
- 15° valve angles (except C5R and LS7)
- Bolt-down type rocker arms
- Center-bolt pattern valve covers required
- Will not work on Gen I or Gen II small-blocks

A. 12564824

LS6 Cylinder Head Assembly

- Fits any 1997–2008 LS Family engine*
- 2.00" hollow stem intake, and 1.55" sodium filled exhaust valves
- .570" max valve lift
- 210cc "cathedral port" intake ports
- 70cc D-shaped exhaust ports
- 65cc combustion chambers
- Bare head P/N 12564825 available separately

88958665

CNC-Ported LS6 Cylinder Head Assembly (not shown)

- CNC-ported aluminum performance head
- Fits any 1997–2008 LS family engine*
- 2.00" Hollow stem intake, and 1.55" sodium filled exhaust valves
- .570" max valve lift
- 250cc CNC'd "cathedral port" intake ports
- 85cc CNC'd D-shaped exhaust ports
- 65cc CNC'd combustion chambers

* GM Performance Parts heads will not fit 4.8L & 5.3L engines, due to their smaller bore sizes.



Don't Forget those corresponding parts!
See the chart on page 279 for specifics.



A LS6 Cylinder Head Assembly (exhaust)



A LS6 Cylinder Head Assembly (intake)



A LS6 Cylinder Head Assembly (exhaust)

CNC-Ported LS2 Cylinder Head Assembly (exhaust) **B**CNC-Ported LS2 Cylinder Head Assembly (intake) **B**CNC-Ported LS2 Cylinder Head Assembly (combustion chamber) **B****88958622** **CNC-Ported LS6 Racing Cylinder Head Assembly (not shown)**

- CNC-ported aluminum racing head
- 2.00" Hollow stem intake, and 1.55" sodium filled exhaust valves
- .570" max valve lift
- 250cc CNC'd "cathedral port" intake ports
- 85cc CNC'd D-shaped exhaust ports
- 62cc CNC'd combustion chambers

Heads P/N 12564824, P/N 88958665 and P/N 88958622 are assembled with the following components:

12565311	Intake Valves	10166344	Valve Spring Retainers
12565312	Exhaust Valves	12482063	Intake Valve Stem Seals
12586484	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		

12576063 **LS2 Cylinder Head Assembly (not shown)**

- Lower cost alternative to the LS6 head
- Fits any 1997–2008 LS family engine*
- 2.00" Solid stem intake, and 1.55" solid stem exhaust valves
- .570" max valve lift
- 210cc "cathedral port" intake ports
- 70cc D-shaped exhaust ports
- 65cc combustion chambers
- Bare head P/N 12564825 available separately
- Upgrade the valves to LS6 hollow stem valves with P/N 17801930

B. 88958765 **CNC-Ported LS2 Cylinder Head Assembly**

- CNC-ported aluminum performance head
- Lower cost alternative to the CNC LS6 head
- Fits any 1997–2008 LS family engine*
- 2.00" solid stem intake, and 1.55" solid stem exhaust valves
- .570" max valve lift
- 250cc CNC'd "cathedral port" intake ports
- 85cc CNC'd D-shaped exhaust ports
- 65cc CNC'd combustion chambers
- Upgrade the valves to LS6 hollow stem valves with P/N 17801930

Heads P/N 12576063 and P/N 88958765 are assembled with the following components:

12563063	Intake Valves	10166344	Valve Spring Retainers
12563064	Exhaust Valves	12482063	Intake Valve Stem Seals
12586484	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		


LS2 & LS6 Head Flow Data:

Lift	0.200"	0.300"	0.400"	0.500"	0.600"
Stock intake	136	195	237	260	260
Stock exhaust	104	135	157	169	180
CNC intake	147	215	262	290	307
CNC exhaust	111	155	198	210	218

* GM Performance Parts heads will not fit 4.8L & 5.3L engines, due to their smaller bore sizes.



Don't Forget those corresponding parts!
See the chart on page 279 for specifics.

A. 12582713 

L76/L92 Cylinder Head Assembly

- Aluminum performance head
- Higher flow than cathedral port LS heads
- Fits any LS family engine with 4.00" bore or larger
- 2.16" solid stem intake, and 1.59" solid stem exhaust valves
- .510" max valve lift
- As-cast "rectangle port" intake ports (not compatible with LS7 intake manifolds)
- D-shaped exhaust ports
- As-cast combustion chambers
- Uses bare head P/N 12582714

Head 12582713 is assembled with the following components:

12590771	Intake Valves	10166344	Valve Spring Retainers
12582719	Exhaust Valves	12482063	Intake Valve Stem Seals
12589774	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks		

L76/L92 Head Flow Data (4.00" Bore):

Lift	0.200"	0.300"	0.400"	0.500"	0.600"
Intake	151	208	256	294	316
Exhaust	111	152	174	183	189

88958698 NEW 

CNC-Ported L92 Cylinder Head Assembly (not shown)

- CNC-ported performance head
- Fits any LS family engine with a bore of 4.00" or larger
- Uses stock 2.165" and 1.590" valves, springs and hardware
- Stock intake and exhaust port locations
- .510" max lift with stock springs
- 280cc intake port, 100cc D-shaped exhaust port, 68cc combustion chamber
- Not compatible with LS7 intake manifolds

CNC L92 Head Flow Data (4.065" bore):

Lift	0.200"	0.300"	0.400"	0.500"	0.600"
Intake	150	222	260	298	332
Exhaust	105	140	168	190	201

12578449 

LS7 Cylinder Head Assembly (not shown)

- 356-T6 aluminum head
- Fully CNC'd ports and chambers
- LS7 rectangle port design—requires rectangle port intake manifold P/N 25534394, P/N 25534413 or P/N 12568976
- Assembled with 2.20" titanium intake and 1.61" sodium filled exhaust valves
- 12° valve angle
- Designed for big bore LS7/C5R/LSX blocks (min 4.100" bore)
- 270cc CNC'd intake ports
- 85cc CNC'd exhaust ports
- 70cc CNC'd combustion chambers
- All fasteners are metric
- Capable of over 600 horsepower
- Bare head P/N 12578450 available separately




A L76/L92 Cylinder Head Assembly (exhaust)

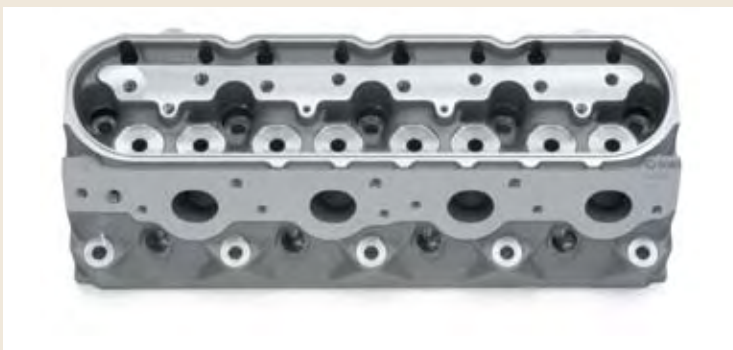


A L76/L92 Cylinder Head Assembly (intake)



A L76/L92 Cylinder Head Assembly (combustion chamber)

 **Don't Forget those corresponding parts!**
See the chart on page 279 for specifics.

Bare C5R Racing Cylinder Head (exhaust) **B**Bare C5R Racing Cylinder Head (intake) **B**Bare C5R Racing Cylinder Head (combustion chamber) **B****Head 12578449 is assembled with the following components:**

12591644	Intake Valves	12596508	Valve Spring Retainers
12578455	Exhaust Valves	12482063	Intake Valve Stem Seals
12578457	Valve Springs	12482062	Exhaust Valve Stem Seals
10166345	Valve Locks	12596509	Intake Valve Lash Cap

LS7 Head Flow Data:

Lift	0.100"	0.200"	0.300"	0.400"	0.500"	0.550"	0.600"	0.700"
Intake	71.0	145.0	222.0	271.0	315.0	332.0	348.0	352.0
Exhaust	60.0	120.0	159.0	192.0	207.0	214.0	219.0	221.0

25534428 **LS7 Bare Unported Cylinder Head (not shown)**

- 356-T6 aluminum head
- LS7 rectangle port design—requires rectangle port intake manifold P/N 25534394, P/N 25534413 or P/N 12568976
- Machined for 2.20"/1.61" valves
- Designed for big bore LS7/C5R/LSX blocks (min 4.065" bore)
- Limited availability

B. 12480090 **Bare C5R Racing Cylinder Head**

- 355-T7 "as-cast" Aluminum racing head
- Professional porting and machining of combustion chambers required
- No seats or guides
- C5R rectangle port design—requires aftermarket rectangle port intake manifolds
- Designed for 2.180"/1.625" valves
- 11° valve angle
- Machined for 1.625" diameter valve springs & .500" guides
- Designed for big bore (4.100" min) LS7/C5R/LSX blocks
- 210cc "as-cast" intake ports
- 70cc "as-cast" exhaust ports, same as production LS6
- 30cc "as-cast" combustion chambers
- All fasteners are metric
- Valve cover rails have O-ring groove for .125" O-ring
- Capable of over 800 horsepower!



Don't Forget those corresponding parts!
See the chart on page 279 for specifics.

 Cylinder Heads: Corresponding Parts

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Plug	Engine Application
12576063	12589227 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	MY05/06/07 LS2 and Carb LS2
12564825	12589226 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	MY07 LS4
12564824, 12564825	12589226 (2) OR 19170418	11588291 (16), 12560745 (4), 12558840 (10)	12571164	MY04/05 LS6
12578449	12582179 (2) OR 19170419	11562524 (20), 12558840 (10)	12571165	MY06/07 LS7
25534428	12582179 (2) OR 19170419	11562524 (20), 12558840 (10)	12571165	Bare unported LS7
12582713	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	MY07 L92
12582714	12610046 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	MY07 L92
88958622	12589226 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	CNC LS6
88958665	12589226 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	CNC LS6
88958765	12589227 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	CNC LS2
88958698	12610046 (2) OR 19170418	11562524 (20), 12558840 (10)	12571164	CNC L92
12480090	12582179 (2) OR 19170419	11562524 (20), 12558840 (10)	12571164	C5R

CYLINDER HEAD GASKETS & BOLT KITS

12498543

Cylinder Head Gasket Kit (not shown)

- Two head gaskets for 1997–2001 LS1 Camaro/Firebird and Corvette engines
- Also fits 2001 LS6 Corvette engine

12498544

Cylinder Head Gasket Kit (not shown)

- Two head gaskets for 2002–2004 LS1 Camaro/Firebird and Corvette engines

A. 19170418

LSX 4.100 Bore MLS Head Gasket Kit

- Multi-layer steel gaskets for naturally aspirated and forced induction applications
- 0.051" thick
- Includes (1) LH and (1) RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.100"

19170419

LSX 4.200 Bore MLS Head Gasket Kit (not shown)

- Multi-layer steel gaskets for naturally aspirated and forced induction applications
- 0.051" thick
- Includes (1) LH and (1) RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.200"

19170420

LSX 4.250 Bore MLS Head Gasket Kit (not shown)

- Multi-layer steel gaskets for naturally aspirated and forced induction applications
- 0.051" thick
- Includes (1) LH and (1) RH gasket
- For standard LS and LSX 6-bolt pattern blocks and heads
- For bores up to 4.250"

12498545

Cylinder Head Bolt Kit (1997–2003) (not shown)

- Kit of 15 head bolts for 1998–2003 LS1 Camaro/Firebird and 1997–2003 Corvette; and 2001–2003 LS6 Corvette
- One kit per cylinder head; order two per engine
- Head bolts cannot be reused on these engines

NOTE:

IMPORTANT!! LS series engines produced from January 2004 forward have a new, "short-style" head bolt design. Earlier head bolts will not fit. Order P/N 17800568 for engines produced from January 2004 and after.

17800568

Cylinder Head Bolt Kit, Gen III and Gen IV (not shown)

- Kit of 15 bolts for LS series engines produced from January 2004 and later
- Bolts are 5mm shorter than previous design

B. 12499217

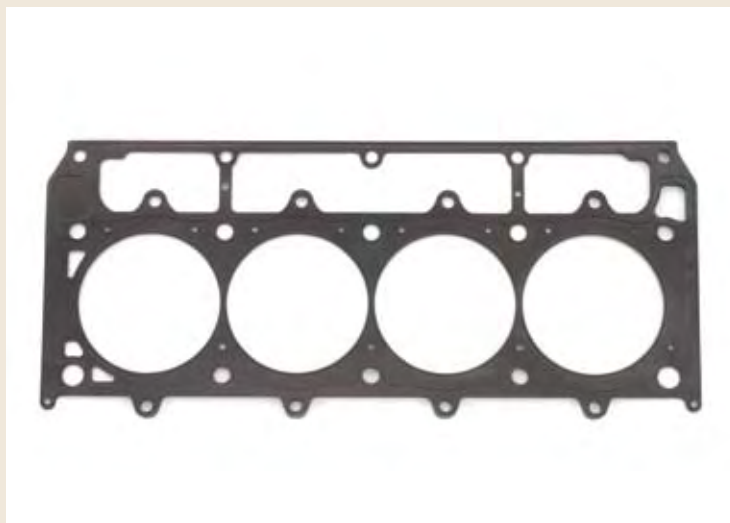
LS1 Cylinder Head Installation Kit (F-Car)

- Comprehensive cylinder head installation kit for 2002 Camaro and Firebird models equipped with the LS1 engine
- Kit includes 2 head gaskets, 2 valve cover gaskets, 8 intake manifold gaskets, 2 exhaust manifold gaskets, 2 intake manifold-to-block seals, 16 cylinder head bolts and 14 cylinder head bolt/screws

12499218

Corvette LS1/LS6 Cylinder Head Installation Kit (not shown)

- Comprehensive cylinder head installation kit for 2002–2005 Corvette models equipped with the LS1 engine, or 2002–2004 Corvette models equipped with the LS6 engine
- Kit includes 2 head gaskets, 2 valve cover gaskets, 8 intake manifold gaskets, 2 exhaust manifold gaskets, 2 intake manifold-to-block seals, 16 cylinder head bolts and 14 cylinder head bolt/screws



A LSX 4.100 Bore MLS Head Gasket Kit



B LS1 Cylinder Head Installation Kit (F-Car)



By 1957 the Corvette had matched its performance to its promise, giving enthusiasts a world-class sports car. GM would never look back, and today's LS models, which have a history of powering the latest and greatest Corvettes, carry on the tradition started by Ed Cole back in 1955.

CYLINDER HEAD GASKETS & BOLT KITS CONTINUED

12589226**LS1/LS6 Head Gasket (not shown)**

- Single gasket, (2) required
- For LS1, and LS6 engines
- .051" thick
- 3.92" max bore
- Standard LS bolt pattern

12610046**LS3, L92 Head Gasket (not shown)**

- Single gasket, (2) required
- For LS3 and L92 engines
- .051" thick
- 4.080" max bore
- Standard LS bolt pattern

12589227**LS2, L76 Head Gasket (not shown)**

- Single gasket, (2) required
- For LS2 engines
- .051" thick
- 4.02" max bore
- Standard LS bolt pattern

12582179**LS7 Head Gasket (not shown)**

- Single gasket, (2) required
- For LS7 engines
- .051" thick
- 4.140" max bore
- Standard LS bolt pattern

HEAD BOLTS AND STUDS

11562524**Head Bolt (not shown)**

- 11mm bolts
- 10 required per cylinder head
- For LS1, LS2, LS6, LS7 and L92 engines

12558840**Head Bolt (not shown)**

- 8mm bolts
- 5 required per cylinder head
- For LS1, LS2, LS6, LS7 and L92 engines

LS SERIES VALVES

Part Number	Valve Size	Stem Size	Description
<i>Intake Valves</i>			
12565311	2.00"	8mm	Stock replacement hollow stem valve used in LS6 engines
12563063	2.00"	8mm	Stock replacement solid stem valve used in LS2 engines
12590773	2.165"	8mm	Stock replacement valve used in L76 and L92 engines
12569427	2.165"	8mm	Stock replacement hollow stem valve used in LS3 engines
12591644	2.20"	8mm	Stock replacement titanium valve used in LS7 engines
<i>Exhaust Valves</i>			
12565312	1.50"	8mm	Stock replacement sodium filled stem valve used in LS6 engines
12563064	1.50"	8mm	Stock replacement solid stem valve used in LS2 engines
12582719	1.59"	8mm	Stock replacement solid stem valve used in L76, L92 and LS3 engines
12578455	1.61"	8mm	Stock replacement sodium filled stem valve used in LS7 engines

VALVE SPRING COMPONENTS

12499224**LS Valve Spring Kit (not shown)**

- Beehive style springs
- 1.800" installed height @ 90# pressure
- 1.250" @ 295# pressure
- Used on LS2/LS6 cylinder heads
- Max lift .570"
- Includes 16 of P/N 12586484

12578457**Valve Springs (not shown)**

- Beehive style springs
- Used on LS7 cylinder heads
- 1.960" installed height @ 101# pressure
- 1.368" @ 310# pressure
- Max lift .600"

12586484**Valve Springs (not shown)**

- Beehive style springs
- Standard LS6/LS3 springs
- 1.800" installed height @ 90# pressure
- 1.250" @ 295# pressure
- Max lift .570"

17801930**LS6 Hollow Stem Valve Kit (not shown)**

- Kit of (4) intake and (4) exhaust valves originally for LS6 engines to drop right into your LS2 head
- One kit services one head

12589774**Valve Springs (not shown)**

- Beehive style springs
- Standard L76/L92 springs
- 1.800" installed height @ 90# pressure
- 1.300" @ 264# pressure
- Max lift .530"

ROCKER ARMS AND ROCKER ARM BOLTS

Rocker Arms

10214664

Rocker Arm (not shown)

- For LS1, LS2 and LS6 intake and exhaust valves
- For L76, L92 and LS3 exhaust valves
- Straight design, no offset
- 1.7:1 ratio

12569167

Rocker Arm (not shown)

- Intake valves only
- For L76, L92 and LS3 style heads only
- Offset design
- 1.7:1 ratio

12579615

Rocker Arm (not shown)

- Intake valves only
- For LS7 style heads only
- Offset design
- 1.8:1 ratio

12579617

Rocker Arm (not shown)

- Exhaust valves only
- For LS7 style heads only
- Straight design, no offset
- 1.8:1 ratio

Rocker Arm Bolts

12560961

Rocker Arm Bolts (not shown)

- For cathedral port and L92 style heads
- 16 required per engine

11588791

Rocker Arm Bolts (not shown)

- For LS7 Heads
- 16 required per engine

12552203

Rocker Arm Stand (not shown)

- For LS1, LS2 and LS6 style heads only
- Sold individually
- Requires 1 per cylinder head

12600936

Rocker Arm Stand (not shown)

- For L76, L92 and LS3 style heads only
- Sold individually
- Requires 1 per cylinder head

VALVE COVERS

A. 25534398 ⓘ

LS Center-Bolt Competition Valve Cover (with breather hole)

- Aluminum valve cover designed for production center-bolt LS series cylinder heads
- Includes bolts and seal
- Sold individually

B. 25534399 ⓘ

LS Center-Bolt Competition Valve Cover

- Aluminum valve cover designed for production center-bolt LS series cylinder heads
- Includes bolts and seal
- Sold individually

12341993

Push-In Oil Filler Cap (not shown)

- Round oil filler cap with Bowtie logo for valve covers with 1.22" diameter hole

12573338

Oil Fill Cap (not shown)

- Production
- For LS1 engines

12573337

Oil Fill Cap (not shown)

- Production
- For L92 engines

C. 12577268

Oil Fill Cap

- Production
- For LS2 and LS6 engines



A LS Center-Bolt Competition Valve Cover (with Breather Hole)



B LS Center-Bolt Competition Valve Cover



Don't Forget those corresponding parts!
See the chart on page 283 for specifics.

! Valve Covers: Corresponding Parts

Part Number	Gaskets (Qty)	Bolts (Qty)	Breathers (Qty)	Engine Application
25534398	12560696 (1)	12577115 (4)	25534355	All LS series engines
25534399	12560696 (1)	12577115 (4)	None	All LS series engines

LS SERIES PUSHRODS

Part Number	Material	Diameter	Length	Useage	Description
12593344	1010 steel	3/8"	7.750	LS7	Production pushrod, individually packed
10238852	1010 steel	5/16"	7.325	LS1, LS2, LS3, LS6, L92	Production pushrod, individually packed

Oil Fill Cap **C**Racing Hydraulic Roller Lifter Kit **D**

ADAPTERS, HARDWARE AND BREATHERS

12577215

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For L92 engines

12560961

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For LS1, LS2 and LS6 engines

11588791

Valve Cover Bolt (not shown)

- Requires 4 per valve cover
- For LS7 engines

12560696

Valve Cover Gasket (not shown)

- Requires 1 per valve cover
- For LS1, LS2, LS6, LS7 and L92 engines

VALVE LIFTERS & COMPONENTS

12499225

LS Series Camshaft Lifter Kit (not shown)

- Set of 16 lifters for LS series engines
- Same lifter used in LS2 and LS7

17803305

Lifter Guide Kit (not shown)

- Includes lifter guides and 4-bolts
- Makes for quick and easy cam swaps without having to remove the intake manifold, valley plate or heads
- Works in Gen III and IV applications (except with AFM)

D. 88958689

Racing Hydraulic Roller Lifter Kit

- As developed by GM Racing and GM Powertrain
- For use in Gen III and Gen IV engines where sustained high rpm's are typical
- Special reduced-mass internal components allow for higher limiting speeds with aggressive camshaft designs
- Improved valvetrain dynamics and stability will improve horsepower, and high rpm's
- Tested to 8000 rpm in GM Racing applications
- Set of 16

LS SERIES CAMSHAFTS

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in) (1.7 rocker)	Lobe Separation (deg)	Technical Notes
12565308	2002–2004 LS6 Cam	I: 204 E: 218	I: .550 E: .550	117.5	Cam requires valve spring P/N 12586484
12560950	2001 LS6 Cam	I: 207 E: 217	I: .525 E: .525	116	Cam requires valve spring P/N 12586484
12480110	ASA Cam	I: 226 E: 236	I: .525 E: .525	110	Cam requires valve spring P/N 12586484; "ASA" cam for off-highway use.
12480033	Hot Cam Kit	I: 219 E: 228	I: .525 E: .525	112	Kit includes 16 LS6 valve springs P/N 12565117 and retainers
88958733	LS Hot Cam	I: 219 E: 228	(1.7 rocker) I: .525	112	Same cam as in kit P/N 12480033
88958606	Showroom Stock Cam	I: 239 E: 251	I: .570 E: .570	106.5	Showroom Stock racing design; requires hollow stem intake valves P/N 12565311, hollow stem exhaust valves P/N 12565312, valve springs P/N 12586484, and aftermarket notched pistons OR machine stock pistons
12571251	LS7	I: 211 E: 230	(1.8 rocker) I: .591 E: .591	121	Stock LS7 camshaft
12561721	LQ9: 2002–2006 LS1: 2001–2004	I: 196 E: 201	I: 467 E: 479	116	Stock cam for 2002–2006 LQ9 and 2001-2004 LS1 engines
88958722	LS Stage 2 Cam	I: 227 E: 239	(1.7 rocker) I: 551 E: 551	108	Max lift with 1.8 rockers .583/.583
88958723	LS Stage 3 Cam	I: 233 E: 276	(1.7 rocker) I: 595 E: 595	107	Max lift with 1.8 rockers .630/.630

Living up to the promise

The original Chevrolet small-block inspired enthusiasts at all levels, and rapidly became the preferred engine of serious builders. The basic architecture was so well-thought-out, that other than a few tweaks, very little needed to be improved.

Displacement and power numbers continued to rise as bigger bore sizes were offered, and head, piston and intake technology improved, leading to gains in durability and performance. But, the basic engine remained: an iron block, iron-head, pushrod driven, naturally aspirated model of efficiency.

The bore potential of the small-block was aided by two innovations—green sand casting (a Pontiac process) and Siamese cylinder walls, which eliminated coolant channels between the block's cylinders; both advances allowed for more "cutting."

These two agents helped push the small-block dimensions from the original 265-cubic-inches to 283, 302, 327 and eventually 400.

But, if size is one measure of performance, weight is another, and ultimately GM engineers knew that to keep the Chevy small-block on the leading edge, a serious re-design was in order.

While the Gen II engines were little more than a face lift (reverse cooling flow). The Gen III and IV engines of the LS series were a radical departure. Iron blocks were replaced by weight-saving aluminum blocks with cast-in iron sleeves. Recognizing the



Cutaway illustration of the 2006 7.0L V-8 LS7 crate engine for the Chevrolet Corvette; done by Rick Kimble.

monumental torque and horsepower ratings these engines would see, the block was designed with six-bolt main bearing caps. Improved intake technology and hotter camshafts also greeted the buying public.

The Gen IV series also brought in variable valve timing and displacement on demand technology that allowed the user to shut down half the cylinders for fuel savings when the power was not needed.

The LS series now has culminated in the introduction of the LSX block, a marvel of engine technology co-designed by GM Performance Parts and NHRA legend Warren Johnson. The iron block can be bored and stroked to big-block dimensions at 454 cubes.

Today, as has been the case since 1955, the sky is the limit for enthusiasts at all levels, with crate engines and components available to take a builder anywhere they might want to go!

1997–2004 Connecting Rod **A**LS7 Connecting Rod **B**

There a few muscle cars as revered as the Pontiac GTO. This 1968 model featured the first year of the A-cars' fastback styling and also sported a bigger-bore engine, pumping out 350 horsepower with 400 cubic inches.

CAMSHAFT COMPONENTS

12499228

Cam Installation Kit, LS Engine (not shown)

- Complete gasket kit to make cam swaps easier
- Includes all necessary gaskets and balancer bolt
- For LS1, LS2 and LS6 engines

The kit includes:

PART NUMBER	QTY	DESCRIPTION
12574294	01	Gasket—Engine Front Cover
12588372	02	Gasket—with Pump
89017589	01	Gasket Kit, Intake Manifold
12612045	02	Gasket—Valve Rocker Arm Cover
12557840	01	Bolt/Screw—CR/SHF Balance
12585673	01	Seal ASM—CR/SHF Front Oil

CONNECTING RODS & COMPONENTS

A. 12568734

1997–2004 Connecting Rod

- Connecting rod for use on all 1997–2004 production Corvettes and 1998–2002 Camaro/Firebird with LS1/LS6
- Press fit design
- 6.098" C-C length
- Sold individually

12617570

Connecting Rod (not shown)

- Connecting rod used in 2005–2007 LS2 and 2008 LS3 engines has bronze bushing
- 6.098" C-C length
- Sold individually

11610158

LS6 Rod Bolts (not shown)

- Recommended for use in performance Gen III engines
- Bolts have greater strength than pre-2000 rod bolts
- One bolt per package; order two per connecting rod

B. 12586258

LS7 Connecting Rod

- Titanium connecting rod used in 2006–2008 LS7 crate engines
- 6.067" C-C length
- Sold individually

11609825

LS7 Connecting Rod Bolt Kit (not shown)

- Required for LS7 engine builds
- Includes 16 bolts

89017573

Rod Bearing (not shown)

- 1 required per connecting rod
- For all LS series engines, except LS7

89017811

LS7 Rod Bearing (not shown)

- 1 required per connecting rod
- For LS7 engines only

PISTONS & RINGS

GM Performance Parts pistons are top quality and are ready for the rigors of high-performance street and competition applications. They're factory tested, so you know you're getting the right parts for your LS series engine. Pistons are sold individually unless otherwise specified.

LS SERIES PISTONS								
Part Number	Engine Size	Bore Size	Oversize	Rod Length	Pin Type	Comp Ratio	With Chamber	Description
88984245	5.7L	3.898"	—	Standard	Pressed	—	65	Hypereutectic LS1 & LS6 replacement
88984246	5.7L	3.898"	+0.010"	Standard	Pressed	—	65	Hypereutectic LS1 & LS6 replacement
89017478	6.0L	4.000"	—	Standard	Floated	10.9	65	Hypereutectic LS2 & LQ9 replacement
89017479	6.0L	4.000"	+0.020"	6.098"	Floated	10.9	65	Hypereutectic LS2 & LQ9 replacement
12602624	7.0L	4.125"	—	6.067"	Floated	11.0	70	Hypereutectic LS7 replacement, includes titanium rod
89018171	7.0L	4.125"	+0.020"	6.067"	Floated	11.0	70	Hypereutectic LS7 replacement

LS SERIES RINGS				
Part Number	Bore Size	Oversize	Ring Thicknesses	Description
12499234	3.898"	—	1.5, 1.5, 2.5mm	Set of 8 ring packs, standard size for LS1 & LS6
12499236	4.000"	—	1.5, 1.5, 2.5mm	Set of 8 ring packs, standard size for 1999–2005 LQ4 & LQ9
12499235	3.780"	—	1.5, 1.5, 2.5mm	Set of 8 ring packs, standard size for 1999–2005 5.3L engines
89017484	4.000"	—	1.2, 1.5, 2.5mm	Production ring pack for '05–'06 LS2, '06 L76
88894243	4.000"	—	1.5, 1.5, 2.5mm	Production ring pack for '05–'06 LQ9
89017776	4.125"	—	1.2, 1.2, 2.0mm	Production ring pack for '06 LS7
89017777	4.125"	+0.020"	1.2, 1.2, 2.0mm	Oversize LS7 ring pack

CRANKSHAFTS

A. 89017522

Crankshaft Assembly 1997–2004

- Nodular cast 3.622" stroke crankshaft assembly has 24X reluctor wheel installed
- Used on 1998–2002 F-cars and 1997–2005 Corvettes
- Balanced for 3.898" bore engines

12588612

LS2 Crankshaft Assembly (not shown)

- Nodular cast 3.622" stroke crankshaft assembly has 58X reluctor wheel installed
- Used on 2006–2007 Corvettes
- Balanced for 4.00" bore engines

12568820

LS7 Forged Steel Crankshaft (not shown)

- Forged 4" stroke crankshaft for LS7 engine
- Includes 58X reluctor wheel
- Rebalancing required if LS7 rods and pistons are not used

19171619 NEW

4" Stroke Crankshaft (not shown)

- Forged 4" stroke crankshaft
- For standard wet sump oiling system engines
- Includes 58X reluctor wheel
- Rebalancing required if LS7 rods and pistons are not used

B. 12559353

Reluctor Wheel, 24X

- 24-tooth crankshaft position sensor timing wheel for 1997–2005 engines

12586768

Reluctor Wheel, 58X (not shown)

- 58-tooth crankshaft position sensor timing wheel for 2006 and newer engines



A Crankshaft Assembly 1997–2004



B Reluctor Wheel, 24X

CRANKSHAFTS CONTINUED

89060436**Rear Crank Seal (not shown)**

- Requires 1 per engine
- For all LS series engines

12557583**Roller Pilot Bearing (not shown)**

- Used in high-performance manual transmission applications

TIMING CHAINS AND SPROCKETS

12588670**LS2 Timing Chain Dampener (not shown)**

- Production LS2 Dampener
- Will not fit LS1 and LS6 blocks fitted with P/N 88958607 (P/N 88958607 is no longer serviced)
- For use with standard oil pumps

12581276**Timing Chain Dampener (not shown)**

- Production LS7 dampener
- 1.1mm thinner than P/N 12588670
- For use with LS7 2-stage oil pump

12576407**Camshaft Sprocket (not shown)**

- Fits LS1, LS2 and LS6
- 1X camshaft gear
- 3-bolt design; uses (3) bolts P/N 12556127

12586481**Camshaft Sprocket (not shown)**

- Fits LS1, LS2 and LS6
- 4X camshaft gear
- 3-bolt design; uses (3) bolts P/N 12556127

12585994**VVT Camshaft Sprocket (not shown)**

- Combination camshaft sprocket and VVT activator
- Production on 2007–2008 Cadillac Escalade L92 engines
- Single-bolt design; use P/N 12588151 bolt
- 4X camshaft gear

12556582**Crankshaft Sprocket (not shown)**

- Fits non-LS7 applications
- For standard single-stage oil pumps
- Works with both P/N 12576407 and 12586481 cam sprockets

12581278**Crankshaft Sprocket (not shown)**

- For use with 2-stage LS7 oil pump only
- Works with P/N 12576407 and P/N 12586481 cam sprockets

12586482**Timing Chain (not shown)**

- Fits 1997–2007 LS based engines

12585997**Timing Chain Tensioner (not shown)**

- Requires 1 per engine
- Includes retainer and bolts
- For L92 and LS3 engines

12556127**Camshaft Sprocket Bolt (not shown)**

- For use with 3-bolt (non VVT) cams
- For LS1, LS2, LS6 and LS7 engines

12588151**Camshaft Sprocket Bolt (not shown)**

- Combination bolt and valve for variable valve timing (VVT) engines
- For L92 engines
- Use with VVT camshaft sprocket P/N 12585994

BALANCERS

A smooth running engine depends on an effective balancer or torsional dampener. A GM Performance Parts damper not only helps your engine run smoothly, it can extend the life of the engine.

Balancers

12576652

Harmonic Balancer (not shown)

- For L92 engines

A. 12553118

Harmonic Balancer

- For LS1 and LS2 engines

B. 12599862

Harmonic Balancer

- For LS7 engines

12601402

Harmonic Balancer

- For LS3 engines

Balancer Bolts & Washers

12557840

Balancer Bolt (not shown)

- For LS1, LS2, LS6 and L92 engines

11570163

Balancer Bolt (not shown)

- For LS7 engines

12600525

Balancer Washer (not shown)

- For LS3, LS7 and L92 engines

FLYWHEELS & FLEXPLATES

Select flywheels for manual transmission vehicles and flexplates for automatic transmission vehicles.

Bolts & Dowels

11569956

Flywheel Bolt (not shown)

- Requires 6 per engine
- For LS1, LS2, LS3, LS6, LS7 and L92 engines
- For manual transmission flywheels only

11505820

Flywheel Dowel (not shown)

- For all LS series engines

12553332

Flexplate Bolt (not shown)

- Requires 6 per engine
- For LS1, LS2 and LS6 engines
- For automatic transmission flexplates only



A LS1 and LS2 Balancer



B LS7 Balancer

LS SERIES FLYWHEELS

Part Number	Description
12571611	Flywheel for LS2, LS3 and LS7 Corvette engines
24238412	Clutch disc and pressure plate for LS2, LS3 and LS7 Corvette engines
12581650	Flywheel with pressure plate and disc for LS1 Camaro engines
12570806	Flywheel, clutch and press-plate kit for LS2 GTO engines

Water Pump for L92 Engines **C**Water Pump for LS2 and LS7 Engines **D**Serpentine Accessory Drive System, with Air Conditioning **E****WATER PUMPS AND ACCESSORIES****C. 12600767****Water Pump**

- For L92 engines

D. 89018052**Water Pump**

- For LS2, LS3 and LS7 Corvette engines only

89018053**Water Pump (not shown)**

- For LS1, LS2 and LS6 engines

12610311**Water Pump Gasket (not shown)**

- Requires 2 per engine
- For LS1, LS2, LS3, LS6, LS7 and L92 engines

12551926**Water Pump Bolt (not shown)**

- Requires quantity of 6
- For LS1, LS2, LS3, LS6, LS7 and L92

ACCESSORY DRIVE KITS**19155066 NEW****Serpentine Accessory Drive System, with Air Conditioning (not shown)**

- Fits LS1 and LS6 engines
- Deluxe kit includes all the components and hardware necessary to install on an engine with air conditioning, including alternator, power steering pump and idler bracket, (belt included)

The system includes:

12572188	Belt (water pump, alternator, and power steering)
12569528	Belt (A/C compressor)
12568181	Tensioner Assembly
12560345	A/C Belt Tensioner Assembly
12557334	A/C Compressor Idler Pulley
1137031	A/C Compressor
12556444	A/C Compressor Bracket
15261472	Power Steering Pump (reman)
12555222	Power Steering Bracket
12578068	Alternator and Power Steering Pump Bracket
12555693	Power Steering Pump Brace
12559890	Power Steering Pump Pulley
10353440	Alternator
26046502	Power Steering Reservoir

E. 19155067 NEW**Serpentine Accessory Drive System, with Air Conditioning**

- Fits LS2 and LS7 engines
- Deluxe kit included all the components and hardware necessary to install on an engine with air conditioning, including alternator, power steering pump and idler bracket, (belt included)

The system includes:

12579229	Belt (water pump, alternator, and power steering)
12585476	Belt (A/C compressor, LS7)
12569301	Tensioner Assembly
12595289	A/C Belt Tensioner Assembly
12568996	Idler Pulley
88958093	A/C Compressor
12569286	A/C Compressor Bracket
15261472	Power Steering Pump (reman)
26046502	Power Steering Reservoir
12578067	Alternator and Power Steering Pump Bracket
12555693	Power Steering Pump Brace
12568997	Power Steering Pump Pulley
15841234	Alternator
12579228	Belt (A/C compressor, LS2)

OIL PANS & ACCESSORIES

A. 12561828

Corvette Oil Pan (2002–2004 LS6)

- Used on 2002–2004 Corvettes with LS6 V-8

B. 12558762

F-Car Oil Pan

- Used on 1998–2003 Camaro and Firebird LS1 V-8

C. 19172376

Circle Track Oil Pan

- Used on CT525, P/N 19171821
- 8-quart capacity
- Includes oil filter adaptor
- Uses oil pan gasket P/N 12558760 (not included)

D. 24241872

Magnetic Drain Plug

- Catches and holds small pieces of metal before they can cause damage

12558760

Oil Pan Gasket (not shown)

- Requires 1 per engine
- Fits all LS series engines, except LS7

12596691

Oil Pan Gasket (not shown)

- Requires 1 per engine
- For LS7 engines

11515758

Oil Pan Bolt (not shown)

- M8 x 30mm lg
- Requires 12 per engine (use 13 with LS7 and L92 engines)
- For LS1, LS2, LS6, LS7 and L92 engines

12554990

Oil Pan Bolt (not shown)

- M6 x 136mm lg
- Requires 2 per engine
- For all LS series engines

12612289

Oil Pump (not shown)

- For L92 engines

17801830

High Volume LS Oil Pump Kit (not shown)

- High Volume pump assembly for LS series engines (except LS7 applications)
- Pump pick up seal included

12598212

Oil Pump (not shown)

- 2-stage pump for LS7 engines
- Will not work on standard LS crankshafts
- Must use crank sprocket P/N 12581278, timing dampener P/N 12581276, LS7 pickup tube P/N 12580855, LS7 oil pan P/N 12596689, and LS7 timing cover P/N 12598292

11519133

Oil Pump Bolt (not shown)

- Requires 4 per engine
- For all LS series engines



A Corvette Oil Pan (2002–2004 LS6)



B F-Car Oil Pan



C CircleTrack Oil Pan



D Magnetic Drain Plug

LS7 Oil Hose Adapters **E**

OIL FILTERS AND ADAPTERS

E. 25534412

LS7 Oil Hose Adapters

- Kit adapts the production LS7 Oil Pan to aftermarket AN style hoses for aftermarket dry sump oil tanks
- Bolts directly to LS7 Oil Pan, and has AN male outlet for -12 AN fittings
- Includes (1) adapter, (2) fittings, (2) bolts, and (2) sealing gaskets

12603281

Oil Tank (not shown)

- Fits Z06 Corvette

15210122

Oil Inlet Hose (not shown)

- Fits Z06 Corvette

15210117

Oil Outlet Hose (not shown)

- Fits Z06 Corvette

LSX Ignition Controller **F**

DISTRIBUTORS AND IGNITION SYSTEMS

F. 19171130 NEW

LSX Ignition Controller

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible only with LS1/LS6 and LS2/LS7 ignition coils

STARTERS

G. 10465385

LS Series Starter

- Works with all LS series and Gen IV V-8 engines, including the LS1, LS2, LS6, LQ9, LQ4 and LS7

89017844

Starter (reman) (not shown)

- Requires 1 per engine
- For L92 engines

10465547

Starter (reman) (not shown)

- Requires 1 per engine
- For F-Car applications

89017664

Starter (reman) (not shown)

- Requires 1 per engine
- For 2005 Corvette applications
- For LS2 engines

89017847

Starter (reman) (not shown)

- Requires 1 per engine
- For 2006–2007 Corvette applications
- For LS2, LS3 and LS7 engines

NOTE: All LS starters require one bolt P/N 11588456, and one bolt P/N 12561848

LS Series Starter **G**

INTAKE MANIFOLDS

12568976



LS7 Production Intake Manifold Assembly (not shown)

- Gen IV fuel injection nylon manifold used on the 2006–2007 Corvette Z06 LS7 engine
- Fully assembled with injectors, fuel rail, 90mm ETC throttle body and gaskets
- For use only with LS7 cylinder heads P/N 12578449 and P/N 25534428

A. 12590123

L76 Production Car Intake Manifold Assembly

- Gen IV fuel injection nylon manifold used on the 2007 Australian Holden L76 car engine
- Fully assembled with injectors, fuel rail, 90mm ETC throttle body and gaskets
- For use only with L76/L92 cylinder heads P/N 12582713, and LS3 cylinder heads P/N 12598594

B. 88894339



LS6 Intake Manifold

- Gen III fuel injected nylon manifold used on the 2001–2004 LS6 Corvette engine
- Supplied with the intake manifold seal P/N 12560251, gasket P/N 12533587, throttle body seal P/N 12552542, MAP sensor P/N 16212460, and MAP sensor seal P/N 16194007

C. 88958675

LS2 4-Barrel Intake Manifold

- Allows you to install a four-barrel carburetor on a LS series engine with cathedral ports (LS1, LS6, LS2)
- Cast aluminum open-plenum intake manifold accepts a 4150-style square-bore carburetor
- Bosses for EFI injectors for custom applications
- Bolts and instructions supplied

NOTE:

LSX Ignition Controller P/N 19171130 is required for carbureted applications.



A L76 Production Car Intake Manifold Assembly



B LS6 Intake Manifold



C LS1/LS2/LS6 Series 4-Barrel Intake Manifold



Don't Forget those corresponding parts!
See the chart on page 294 for specifics.

LS7 4-Barrel Intake Manifold **D**L76/L92/LS3 4-Barrel Intake Manifold **E**Carburetor Spacer, Single Plane, One-Inch **F**Carburetor Spacer, Single Plane, Two-Inch **G**LS Front Distributor Drive Cover **H****D. 25534394** **LS7 4-Barrel Intake Manifold**

- GM Racing design for use on LS7 heads
- As-cast design requires no porting for maximum performance
- Includes mounting bolts and instructions
- Uses new LS7 carb intake gasket set P/N 19172113
- Machined for 4150-style carburetors and has 3/8" NPT vacuum boss
- **Also available with injector bosses P/N 25534413**

NOTE: LSX Ignition Controller P/N 19171130 is required for carbureted applications.

E. 25534401 **L76/L92 4-Barrel Intake Manifold**

- GM Racing design for use on "as-cast" rectangle port Gen IV cylinder heads
- As-cast design requires no porting for maximum performance
- Includes mounting bolts and instructions
- Uses new L92/LS3 carb intake gasket set P/N 19172114
- Machined for 4150-style carburetors and has 3/8" NPT vacuum boss
- **Also available with injector bosses P/N 25534416**

NOTE: LSX Ignition Controller P/N 19171130 is required for carbureted applications.

F. 88965830**Carburetor Spacer, Single Plane, One-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

G. 88965831**Carburetor Spacer, Single Plane, Two-Inch**

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

H. 88958679**LS Front Distributor Drive Cover**

- Assembly is manufactured for applications where a 4-barrel carburetor and distributor are required
- Can be combined with GM's Bowtie valve covers P/N 25534398 and P/N 25534399 for a complete traditional looking engine package

NOTE: Distributor and mechanical fuel pump not included. Uses small-block Ford style distributor and mechanical fuel pump. Requires use of aftermarket dampener.



Don't Forget those corresponding parts! See the chart on page 294 for specifics.

Intake Manifolds Continued

A. 19172113 **NEW**

LS7 Carb Intake Gasket

- For use with intake manifold P/N 25534394 or 25534413

B. 19172114 **NEW**

L92/LS3 Carb Intake Gasket

- For use with intake manifold P/N 25534401 or 25534416

EXHAUST MANIFOLD/HEADER

C. 12480130

Header Flange

- These 3/8" thick steel header flanges are a great way to start a fabricated set of LS series Headers for a racecar or street rod
- For stock LS1, LS2, LS3, LS6, LS7 and L92 (may require clearancing) exhaust ports
- Sold individually

SPARK PLUGS

12571165

Spark Plug (not shown)

- Requires 8 per engine
- AC 41-101
- For LS7 engines

12571164

Spark Plug (not shown)

- Requires 8 per engine
- AC 41-985
- For LS1, LS2, LS6 and LS92 engines

15336959

Spark Plug Wire (not shown)

- Requires 8 per engine
- For all LS series engines

NEW



A LS7 Carb Intake Gasket

NEW



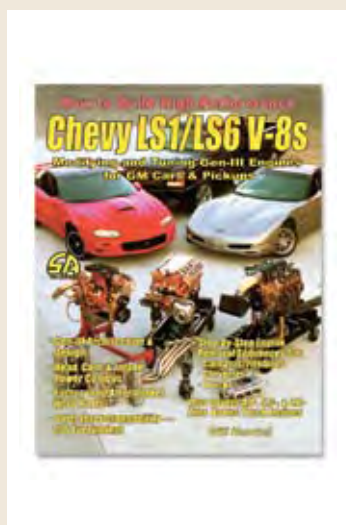
B L92/LS3 Carb Intake Gasket



C Header Flange

⚠ Intake Manifolds: Corresponding Parts

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
88894339	12533587 (2)	12552344 (10)	MY04/05 LS1 and LS6
12568976	89017840, Kit (1), 89017852 (1)	12579938 (10)	MY06/07 LS7
25534394	19172113	Included with manifold	LS7 Carb Applications
25534401	19172114	Included with manifold	L76/L92 and LS3 Carb Applications

Air Cleaner, Chevrolet-Logo High-Performance Design **D**Air Cleaner, Chevrolet-Logo Classic Design **E**LS1 Engine Kit Installation Guide **F**High Performance Chevy LS1/LS6 V-8's **G**

AIR CLEANERS

D. 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- Fourteen-inch round high-performance style air cleaner
- Chrome lid with embossed Chevrolet name
- Fits most four-barrel and two-barrel carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.75" from top of carburetor gasket area to underside of hood.

E. 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- Fourteen-inch round classic-style air cleaner
- Chromed lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most four-barrel and two-barrel carburetors

ENGINE MOUNTS

15254700

Engine Mount (not shown)

- Requires 2 per engine
- For '05-'08 Corvette engines
- For LS2 and LS7 engines

22179268

Engine Mount (not shown)

- Requires 2 per engine
- For '98-'02 F-Car engines
- For LS1 engines

10284134

Engine Mount (not shown)

- Requires 2 per engine
- For '97-'04 Corvette engines
- For LS1, LS2 and LS6 engines

15854941

Engine Mount (not shown)

- Requires 2 per engine
- For L92 engines

BOOKS & MANUALS

F. 88959384

LS1 Engine Kit Installation Guide

- Includes notes and technical explanations for necessary parts
- Includes part numbers you can order from your GM dealer to get the job done easily

G. 88958786

High Performance Chevy LS1/LS6 V-8's

- Discusses the LS series engine architecture and design, and parts interchangeability
- Step-by-step engine removal sequences for many GM vehicles with LS series engines
- Shows how to build, modify and tune high-performance LS engines
- 160 pages



Big-Block Components



At GM Performance Parts we know what big-inch enthusiasts need. It's not just having impressive cubes, it's what you do with them that matters. That's been the driving force behind our big-block efforts since our first 502/502 crate engines rolled off the line in the mid-1990s. We have what you need—blocks, heads, cranks, cams, pistons and everything in between—to let you live your big-displacement dream to its fullest.

No one—and we mean no one—builds a big-block Chevy like real GM engineers who demand only the best in machining and CNC preparation. Not only are they the highest quality, highest strength cylinder blocks money can buy, GM Performance Parts has the most diverse selection of custom-manufactured, custom-machined aftermarket performance blocks on the market. Our block lineup begins with production-based blocks to replace your 427 or 454 legend. If you need more than that, take a look at the Bowtie blocks, which feature CNC-machining to guarantee perfect dimensions, and manufacturing tolerances that are matched by no one. Bowtie Race Blocks feature full CNC-machining, 4-bolt mains, super thick wall design, and special machining procedures not found in other aftermarket blocks. If you're a real big-block fan, then check out our Drag Race Competition Engine (DRCE) blocks—the same engine blocks used in NHRA Pro Stock competition—for the ultimate in big-block GM power.

It's a big-block, so stuff that thing with as much atmosphere as a heavy-breathing monster mill deserves. The GM Performance Parts big-block cylinder head lineup begins with cast iron Service Replacement castings that are perfect for your restoration efforts. If your big-inch Rat motor was destined for the race track or serious street use, then you'll want to look at our line of high performance Bowtie Iron, Bowtie Aluminum, or NHRA Pro Stock DRCE heads. Some of these heads come as bare castings, and some are completely assembled and ready to make big numbers. All of our big-block cylinder heads are machined to the highest standards, and some are even CNC-ported to make even more power. Hey, big inches need big air—fill'em up!

From pistons, rods, fasteners, gasket sets, accessory drive systems, starters, valve covers, valvetrain components, high performance camshafts, intake manifolds, ignition systems, fuel systems—GM Performance Parts has everything you need to build your next project big-block. Remember, these are the same parts that we use in our incredible line of GM Performance Parts crate engines including that 720-horse ZZ572 race mill!

Whichever high performance big-block part you choose, you can be certain that when you get your parts from GM Performance Parts, you are starting with the very best.

Chevy Big-Block Quick Reference Chart

PRODUCTION-BASED CAST IRON BLOCKS

Part Number	Casting Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Dia.	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
12561353	—	9.800"	Yes	Open	4.250"—4.310"	4	Straight	Cast Iron	2.75"	Wet	1 pc	4.25"	247	—	Street	—
10237292	—	9.800"	No	Siamese	4.470"—4.500"	4	Straight	Cast Iron	2.75"	Wet	1 pc	4.25"	269	700	Mod	—
19170538	—	9.800"	Yes	Open	4.250"—4.310"	4	Straight	Cast Iron	2.75"	Wet	1 pc	4.25"	247	700	Street	299
19170540	—	9.800"	Yes	Siamese	4.470"—4.500"	4	Straight	Cast Iron	2.75"	Wet	1 pc	4.25"	269	700	Mod	299

BOWTIE CAST IRON BIG-BLOCKS

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
25534362	24502504A	9.800"	Yes	Siamese	4.494"—4.600"	4	16°	Nodular	2.75"	Wet	2 pc	4.50"	258	800	Sport	300
25534363	24502504A	9.800"	Yes	Siamese	4.494"—4.600"	4	16°	Nodular	2.75"	Wet	1 pc	4.50"	258	800	Sport	300
25534364	24502506A	10.200"	Yes	Siamese	4.494"—4.600"	4	16°	Nodular	2.75"	Wet	1 pc	4.50"	263	800	Sport	301
25534367	24502506A	10.200"	Yes	Siamese	4.494"—4.600"	4	16°	Nodular	2.75"	Wet	2 pc	4.50"	263	800	Sport	301
25534368	24502506A	10.200"	Yes	Siamese	4.560"—4.600"	4	16°	Nodular	2.75"	Wet	1 pc	4.50"	263	800	Sport	301
24502500	24502504A	9.800"	Yes	Siamese	4.240"—4.600"	4	16°	8620 steel	2.75"	Wet	2 pc	4.50"	281	1200	Pro	303
24502502	24502506A	10.200"	Yes	Siamese	4.240"—4.600"	4	16°	8620 steel	2.75"	Wet	2 pc	4.50"	296	1200	Pro	303

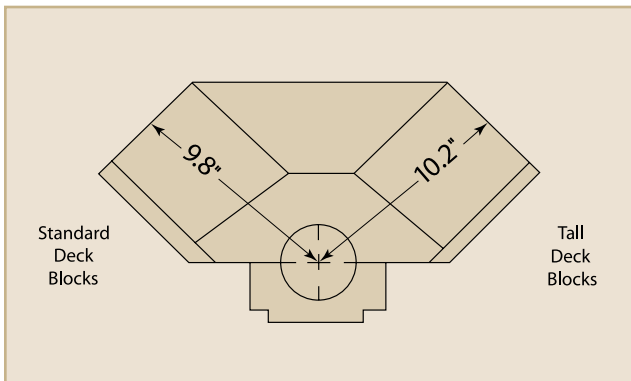
ALUMINUM ZL1 BLOCK

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
12370850	3946053	9.800"	Yes	Siamese	4.240"—4.300"	4	16°	8620 steel	2.75"	Wet	2 pc	4.38"	110	650	Pro	302
88958696	88958695	9.800"	Yes	Siamese	4.250"—4.300"	4	16°	8620 steel	2.75"	Wet	1 pc	4.38"	110	650	Pro	302

DRCE BLOCKS

Part Number	Cast Number	Deck Height	F Pump Boss	Cyl Wall	Bore Range	Main Bolt	Main Bolt Degree	Cap Material	Crank Jnl Size	Oiling	Seal Type	Max Stroke	Weight (lbs)	Max HP	Usage	Page Number
24502572	1A626	9.525"	No	Siamese	4.500"—4.700"	4	16°	8620 steel	2.75"	Dry	2 pc	4.60"	255	1400+	Pro	304
12480026	1A629	9.525"	No	Siamese	4.500"—4.700"	4	16°	8620 steel	2.75"	Dry	2 pc	4.60"	255	1400+	Pro	304
25534403	Grey	9.25"—9.0"	No	Siamese	4.590"—4.700"	4	22°	4140 steel	2.50"	Dry	2 pc	4.60"	N/A	1400+	Pro	305
25534406	CG	9.25"—9.0"	No	Siamese	4.590"—4.700"	4	22°	4140 steel	2.50"	Dry	2 pc	4.60"	N/A	1400+	Pro	305

DECK HEIGHT DIAGRAM



502 Mark IV/Gen VI Block (front) **A**502 Mark IV/Gen VI Block (bottom) **A**502 Mark IV/Gen VI Block (rear) **A****19170538 NEW****427/454 Bare Block (not shown)**

- New casting incorporating the best designs of Mark IV and Gen VI
- Production type cast iron 4-bolt block
- 4.25" finished bore
- 4.31" max bore (non-siamese bore)
- Machined fuel pump pad
- New water jackets for use with Mark IV heads
- Revised oiling to allow for bigger cam bearings/cam lift
- Bolt boss (not machined) added near distributor hole like 8.1L
- Can be drilled for use with 10-bolt front timing cover
- Additional clearance added for roller timing chains
- Auxiliary oil pressure line added to front of block
- Racing style oil filter cast feature with added oil pressure port
- Additional boss for manual transmission clutch pivot (machined)
- Additional material added around lifter bosses

A. 19170540 NEW**502 Mark IV/Gen VI Bare Block**

- New casting incorporating the best designs of Mark IV and Gen VI
- Production type cast iron 4-bolt block
- Improved Main bearing bulkheads—Bowtie block style bulkhead
- Cleared for bigger strokes
- 4.466" finished bore
- 4.500" max bore (siamese)
- Fuel pump pad has been added/machined
- New water jackets for use with Mark IV heads
- Revised oiling to allow for bigger cam bearings/cam lift
- Bolt boss (machined) added near distributor hole like 8.1L
- Can be drilled for use with 10-bolt front timing cover
- Additional clearance added for roller timing chains
- Auxiliary oil pressure line added to front of block
- Racing style oil filter cast feature with added oil pressure port
- 2 bosses added for manual transmission clutch pivot (machined)
- Additional material added around lifter bosses

BOWTIE SPORTSMAN BLOCKS

For the ultimate in sportsman drag racing or extreme street performance, GM Performance Parts has a full line of big-block blocks that feature full CNC-machining¹, premium materials, and designs directly from GM. Our Sportsman blocks are available with tall decks², one-piece or two-piece crankshaft seals³, splayed main caps⁴, and can easily be bored and stroked to 500+ cubic inches. Buy one of these blocks if you are a weekend drag racer looking to make 800 horsepower, or if you are building a serious street car with enough motor to crush the competition.

Bowtie Sportsman Block Technical Notes:

- Available in short deck (9.800") or tall deck (10.200")
- Requires Gen V-VI design one-piece rear main seal oil pans
- Machined for hydraulic roller and flat tappets
- CNC-machined to +/- .001" tolerance
- Nodular iron 4-bolt main caps, 16° splayed on center 3 mains
- Machined mechanical fuel pump pad
- Priority main oiling system
- Siamese Cylinder bores
- Gen V & VI style front timing cover required
- All bore finishes are ready to hone to size
- Clearance for 4.500" stroke

See chart on page 298 for complete specifications.

Standard Deck Sportsman Blocks

25534363

Standard Deck Bowtie Sportsman Block

- **1-piece rear main seal**
- CNC-machined cast iron 4-bolt block
- 4.494" finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

25534362

Standard Deck Bowtie Sportsman Block

- **2-piece rear main seal**
- CNC-machined cast iron 4-bolt block
- 4.494" finished bore
- **4.600"** max bore
- Tested to 800 horsepower!



Bowtie Sportsman Block (front)



Bowtie Sportsman Block (rear)



Top—Splayed Main Cap
Bottom—Machined Bottom (close-up)



2-Piece Rear Main

¹CNC or computer numerical controlled machining is an automated machining process that guarantees exact tolerances. No one offers as many CNC-machined blocks as GMPP! No one.

²Tall Deck blocks allow you to run a longer rod and/or a bigger stroke crankshaft for more cubic inches. More cubic inches means more power. Pump it up!

³A one-piece crankshaft seal is desirable to decrease the chance of oil leaks, but the two-piece seals allow for more aftermarket component attachments. You can retro-fit 2-piece seal blocks (built from 1965 to the present) for the one-piece seal.

⁴Our 16° splayed main caps have additional material holding the crankshaft in the block. GM Performance Parts uses splayed main caps throughout our entire line of performance-built big-blocks.



Tall Deck Sportsman Block (front)



Tall Deck Sportsman Block (rear)



Machined Lifter Valley Detail



One-Piece Rear Main

Tall Deck Sportsman Blocks

25534364

Tall Deck Bowtie Sportsman Bare Block

- 1-piece rear main seal
- CNC-machined cast iron 4-bolt block
- 4.494" finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

25534367

Tall Deck Bowtie Sportsman Bare Block

- 2-piece rear main seal
- CNC-machined cast iron 4-bolt block
- 4.494" finished bore
- **4.600"** max bore
- Tested to 800 horsepower!

25534368

Tall Deck 572 Bowtie Sportsman Bare Block

- 1-piece rear main seal
- CNC-machined cast iron 4-bolt block
- 4.560" fully honed bore
- **4.600"** max bore
- Powdercoated Chevy orange
- (5) windage tray bolts installed
- Tested to 800 horsepower!
- This is the block used for our 572 engines

ZL1 ALUMINUM BIG-BLOCK

The ZL1-optional '69 Corvette and Camaro were—without question—two of the most feared musclecars ever produced. The massive ZL1 427 aluminum big-block under the hood elevated these cars to instant classics the first day they hit the streets of America. Now, GM Performance Parts has re-introduced that same legendary aluminum block. It comes with state-of-the-art materials in our own flawless, blueprinted dimensions. Buy the ZL1 aluminum big-block, and you can build your own supercar!

See chart on page 298 for complete specifications.

ZL1 Aluminum Block Technical Notes:

- 356-T6M Aluminum block
- Steel 4-bolt main caps, 16° splayed on center 3 mains, dowel located
- Siamesed cylinder walls
- Centrifugally spun cast iron sleeves
- 4.240" finished bore
- **4.300"** max bore
- **4.375"** max stroke
- Standard deck height (**9.800"**)
- Provision for hydraulic roller camshafts
- Oil and water plugs are AN O-ring style
- Tested to 650 horsepower!

12370850

ZL1 Aluminum Big-Block

- 4.240" finished bore
- **4.300"** max bore
- **4.375"** max stroke
- Use sleeve P/N 12480035 (see page 306)
- 2-piece rear main seal
- Uses Mark IV front timing cover

88958696

427 Cylinder Block

- 4.250" finished bore
- **4.300"** max bore
- Deck plate honed
- **4.375"** max stroke
- Used in the Anniversary 427 crate engine
- 1-piece rear main seal
- Uses Gen V/VI oil pan and front timing cover



ZL1 Aluminum Big-Block (front)



ZL1 Aluminum Big-Block (rear)

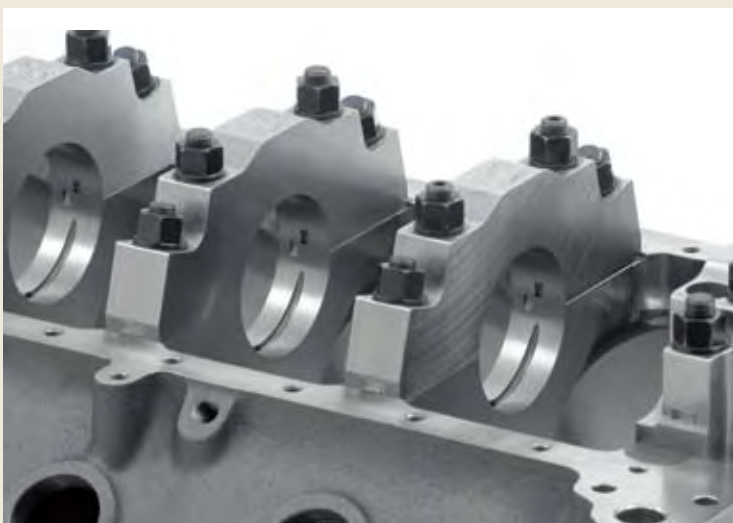


ZL1 Aluminum Big-Block, 4-Bolt Mains





Tall Deck Bowtie Race Bare Block (front)



Bowtie Sportsman Bare Block, Nodular 4-Bolt Splayed Caps



Tall Deck Bowtie Race Bare Block (rear)

BOWTIE RACE BLOCKS (CAST IRON)

These blocks are premium Bowtie big-block castings, designed for the engine builder who wants to machine their race block to their racing application. All of these blocks have thick deck surfaces, improved oiling, improved coolant flow, premium fasteners, premium 4-bolt steel splayed bearing caps—everything you need to start up a serious race program. If you want to build a 1200 horsepower big-block for your drag car, then buy one of these blocks and get to work. Hey, let's go racing!

See chart on page 298 for complete specifications.

Bowtie Race Block Technical Notes:

- Available in short deck (9.800") or tall deck (10.200")
- Accepts Mark IV, Gen V–VI cylinder heads
- Use Gen V head gaskets with Mark IV and Gen V cylinder heads
- Use Gen VI head gaskets with Gen VI cylinder heads
- Blind tapped head bolt holes, extra inner head bolt bosses provided
- Requires Mark IV design two-piece rear main seal oil pans
- Requires Mark IV design crankshafts
- Can use Mark IV and Gen V–VI cams, timing sets, lifters and timing cover (Jesel belt drive cover may need machining for clearance)
- CNC-machined to +/- .001" tolerance
- 4-bolt SAE 8620 main caps, 16° splayed on center 3 mains
- Machined mechanical fuel pump pad
- Priority main oiling wet-sump system
- Provisions for dry sump oil line provided
- Honed cam and crankshaft bore
- Siamese cylinder bores
- Improved cooling around No. 1 cylinder
- .842" lifter bores, max 1.06", may be relocated
- Check distributor gear clearance at bottom of No. 8 cylinder bore
- Each block supplied with sonic test data sheet

24502500

Standard Deck Bowtie Race Block

- CNC-machined cast iron 4-bolt block
- 4.240" finished bore
- **4.600"** max bore (.250" min wall thickness)
- Standard deck height (**9.800"**)
- Tested to 1200 horsepower!

24502502

Tall Deck Bowtie Race Block

- CNC-machined cast iron 4-bolt block
- 4.240" finished bore
- **4.600"** max bore (.250 min wall thickness)
- Tall deck height (**10.200"**)
- Tested to 1200 horsepower!

BIG-BLOCK DRCE (DRAG RACE COMPETITION ENGINE) BLOCKS

Six-time NHRA Pro Stock world champion, Warren 'The Professor' Johnson, runs DRCE, why don't you? This family of blocks was specifically designed for 500-cubic-inch Pro Stock drag racing competition. The camshaft has been raised, the distributor hole has been moved, and the bore spacing allows for the preferable big bore with short-stroke pistons and crankshaft for enhanced performance. The big bore design unshrouds the heads so you can run bigger valves and get more air into the engine. Even the head bolt holes are not drilled, so either Pontiac S/D, Olds DRCE, or Chevrolet bolt pattern heads can be used. Our DRCE 3 block is the latest Pro Stock block that features a raised camshaft, lighter weight, and the latest evolution of Pro Stock design from some of the best racers in the world. All of these blocks are sold 'solid', without the lifter or head bolt holes drilled and tapped, which allows Pro Stock race teams to design their own specific locations for maximum power. Whatever it takes to make you a champion, GM Performance Parts is there!

See chart on page 298 for complete specifications.

DRCE Block Technical Notes:

- CNC-machined to +/- .001" tolerance
- No. 2 & 4 main bearing bulkheads moved .060"
- Priority main oiling dry-sump system
- No lifter bosses, solid bar can be drilled as required
- No head bolt holes
- Siamese Cylinder bores, 4.900" bore spacing
- Bell housing bolt pattern accommodates Olds, Pontiac, & Chevy bolt patterns
- Each block supplied with sonic test data sheet
- Dual starter mounting locations
- Front engine mounts only
- Requires camshaft with distributor gear behind rear bearing
- Uses Big-Block Chevrolet crank, cam, balancer, flywheel and water pump

A. 24502572

DRCE 2 Bare Block, Gray Iron

- CNC-machined iron 4-bolt block
- 9.525" deck height, may be machined to 9.000"
- Camshaft raised to 5.750"
- Cam tunnel accommodates 55mm cam bearings
- 4.500" semi-finished bore
- **4.700"** max bore
- 4-bolt SAE 8620 main caps, 16° splayed on center 3 mains
- Oil pan rails spread .400" per side for additional stroke clearance
- Tested to 1400-plus horsepower!

12480026

DRCE 2 Bare Block, Compacted Graphite¹

- CNC-machined compacted graphite 4-bolt block
- 9.525" deck height, may be machined to 9.000"
- Camshaft raised to 5.750"
- Cam tunnel accommodates 55mm cam bearings
- 4.500" semi-finished bore
- **4.700"** max bore
- 4-bolt SAE 8620 main caps, 16° splayed on center 3 mains
- Oil pan rails spread .400" per side for additional stroke clearance
- Tested to 1400-plus horsepower!

¹Compacted graphite is an extremely high strength material that helps the block combat bore distortion and crank deflection under heavy loads—like making 1400-plus horsepower at 10,000 rpm!



A DRCE 2 Bare Block (front)



A DRCE 2 Bare Block (rear)



A DRCE 2 Lifter Valley



A DRCE 2 Main Caps

DRCE 3 Bare Block (front) **B**DRCE 3 Bare Block (bottom) **B**DRCE 3 Lifter Valley **B**DRCE 3 Main Caps **B****B. 25534403****DRCE 3 Bare Block, Gray Iron**

- CNC-machined gray iron 4-bolt block
- 9.250" deck height, can be machined to 9.000"
- Camshaft raised to 7.067"
- Cam tunnel accommodates (9) 60mm cam bearings
- Cam tunnel is closed (no oil drain to rotating assembly)
- 4.590" semi-finished bore
- **4.700"** max bore
- 2.500" crankshaft main journal
- 4-bolt SAE 4140 "doweled after assembly" main caps, 22° splayed on center 3 mains
- Highest available quality main studs
- Oil pan rails spread to 12"
- Oil and water plugs are AN O-ring style
- Tested to 1400-plus horsepower!

25534406**DRCE 3 Bare Block, Compacted Graphite¹**

- CNC-machined compacted graphite material 4-bolt block
- 9.250" deck height, can be machined to 9.000"
- Camshaft raised to 7.067"
- Cam tunnel accommodates (9) 60mm cam bearings
- Cam tunnel is closed (no oil drain to rotating assembly)
- 4.590" semi-finished bore
- **4.700"** max bore
- 2.500" crankshaft main journal
- 4-bolt SAE 4140 "doweled after assembly" main caps, 22° splayed on center 3 mains
- Highest available quality main studs
- Oil pan rails spread to 12"
- Oil and water plugs are AN O-ring style
- Tested to 1400-plus horsepower!

¹Compacted graphite is an extremely high strength material that helps the block combat bore distortion and crank deflection under heavy loads—like making 1400-plus horsepower at 10,000 rpm!

CYLINDER BLOCK COMPONENTS

A. 14015334

4-Bolt Main Bearing Cap

- Heavy-duty iron 4-bolt main cap is used on bearings #1, #2, #3 and #4
- Semi-finished cap must be machined to register the cap in the block
- Main bearing housings must be align-bored after installing new caps

B. 6264902

O-Ring Seal (sold individually)

- Use under the rear main bearing cap on all 1991-and-newer Gen V and Gen VI 454 and 502 engines

C. 10106460

Outer Main Cap Bolt, Gen V and Gen VI

- Used with Gen V and Gen VI (1991-and-newer) big-blocks with 4-bolt mains
- Sold individually; order 10 per engine

3859927

Outer Main Cap Bolt, Mark IV (not shown)

- Used with Mark IV (1965–1990) cast iron big-blocks with 4-bolt mains
- Sold individually; order 10 per engine

D. 10106461

Inner Main Cap Bolt, Gen V and VI

- Used with Gen V and Gen VI (1991-and-newer) big-blocks with 4-bolt mains
- Sold individually; order 10 per engine

3909834

Inner Main Cap Bolt, Mark IV (not shown)

- Used with Mark IV (1965–1990) cast iron big-blocks with 4-bolt mains
- Sold individually; order 10 per engine

E. 88962212

Main Bearings, 572 Engine

- Complete main bearing kit for 572 block with standard-size mains

Freeze Plugs & Oil Plugs

PART NUMBER	DESCRIPTION	QUANTITY
03826963	Plug-Expansion	8
03999200	Plug-CM/SHF BRG hole	1
00444777	Plug	8
14090911	Plug-Wat OTLT	1
00444613	Plug-Automotive Hex Head Pipe	1
03894327	PIN-CYL HD LOC	4
12338119	PIN-Trans	2
14090911	Plug-Wat OTLT	1

3743389

Freeze Plug, Steel (Mark IV) (not shown)

- Steel freeze plug for Mark IV (1965–1990) engines

3826963

Freeze Plug, Brass (Mark IV) (not shown)

- Brass freeze plug for Mark IV (1965–1990) engines
- Suitable for marine applications



A 4-Bolt Main Bearing Cap



B O-Ring Seal



C Outer Main Cap Bolt



D Inner Main Cap Bolt



E Main Bearings, 572 Engine

Freeze Plug, Brass (Gen V & Gen VI) **F**Windage Tray Bolt, 572 **G**Timing Chain Cover Gen V & VI **H**Big-Block Fuel Pump Block-Off Plate **I****F. 88891749****Freeze Plug, Brass (Gen V and Gen VI)**

- Brass freeze plug for Gen V and Gen VI (1991-and-newer) engines
- Suitable for marine applications

12480035**Cylinder Sleeve (standard) (not shown)**

- Steel cylinder sleeve for aluminum block P/N 12370850 and P/N 88958696
- Sleeve has 4.240" bore and finish-bores to 4.250"

3902885**Windage Tray Stud (not shown)**

- Used for mounting splash shield P/N 3967854

10224104**Windage Tray Stud, Gen V 454 and 502 (not shown)**

- Used with Gen V 454 and 502 engines

G. 88958656**Windage Tray Bolt, 572**

- Used with 572 engines

FRONT COVERS & TIMING POINTERS**H. 10230954** **Timing Chain Cover, Gen V & VI**

- Aluminum cover with timing indicator fits all 1996-and-newer Gen V & VI engines
- Used on all GMPP big-block crate engines

11609914**Front Oil Galley Plug (not shown)**

- Fits front oil galley (cam tunnel) holes
- .030" oil squirter hole for cooling and lubricating the timing chain

I. 12341999**Big-Block Fuel Pump Block-Off Plate**

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included



Don't Forget those corresponding parts!
See the chart below for specifics.

 Timing Covers: Corresponding Parts

Part Number	Bolts (Quantity)	Seals (Quantity)	Gasket (Quantity)	Engine Application
10230954	10243771 (6)	10191640 (1)	10198910 (1)	12498793, 12498777, 12498778, 12371054, 12498827, 12498792, 12498826, 24502620, 12568779, 12568778, 12499121, 12496962, 12371054, 88890534, 24502618, 12568774, 12371204, 12568782, 12497323, 12496963, 12371171, 19166392, 19166393

BIG-BLOCK CYLINDER HEADS

Part Number	Description	Casting Number	Material	Port Size	Port Type	Valve Angle	Chbr CC's	Int Vlv	Exh Vlv	Exh Port	Plug Type	Heat Riser	Rocker Stud	Notes	Page Number
12562920	Gen 5,6 BBC	12562934	Iron	325	Rect	bbc	118	2.18	1.88	Square	Std	yes	Screw-in	Ass'd 2925's	308
12562925	Gen 5,6 BBC	12562934	Iron	325	Rect	bbc	118	2.18	1.88	Square	Std	yes	Screw-in	7/16 accy holes	308
12562926	Gen 5,6 BBC	12562934	Iron	325	Rect	bbc	118	2.18	1.88	Square	Std	yes	Screw-in	3/8 accy holes	308
12552888	Gen 5,6 BBC	10114156	Iron	—	Round	bbc	118	2.07	1.72	Square	Std	yes	Screw-in	HT 502 head	N/S
12363390	Oval alum	12363391	Alum	290	Oval	bbc	110	2.25	1.88	Square	Std	no	Screw-in	Semi-open, oval port	309
12363392	Oval alum	12363391	Alum	290	Oval	bbc	110	2.19	1.88	Square	Std	no	Screw-in	Semi-open, oval port	309
12363399	Oval alum	12363391	Alum	290	Oval	bbc	110	2.19	1.88	Square	Std	no	Screw-in	Bare 3392	309
12363408	NHRA L88	12363401	Alum	315	Rect	bbc	118	2.19	1.88	Square	Std	no	Screw-in	Bare, NHRA legal	310
12363400	Rect alum	12363401	Alum	300	Rect	bbc	118	2.25	1.88	Square	Std	no	Screw-in	Assembled	310
12363410	Rect alum	12363401	Alum	300	Rect	bbc	118	2.25	1.88	Square	Std	no	Screw-in	Bare 3400	310
12363425	BBC Bowtie	14044861	Alum	380	Rect	bbc	115	2.19	1.88	Square	Std	no	Screw-in	Bare, raised int/exh	311
14044876	BBC Bowtie	14044861	Alum	380	Rect	bbc	115	2.19	1.88	Square	Std	no	Screw-in	Unmach 12363425	N/S
12499255	572/620	—	Alum	310	Rect	bbc	118	2.25	1.88	Square	Std	no	Screw-in	ZZ572/620	310
88961160	572/720	—	Alum	310	Rect	bbc	118	2.25	1.88	Square	Std	no	Screw-in	ZZ572/720R	311
10051129	Prostock BBC	—	Alum	400	—	Special	72	—	—	Square	—	no	Shaft	Unmachined 1128	N/S
22530959	DRCE 1	—	Alum	—	—	DRCE 1	—	—	—	DRCE	—	no	Shaft	Pro Stock—raw	N/S
24502585	DRCE 2	—	Alum	—	Peanut	DRCE 2	—	—	—	DRCE	—	no	Shaft	Pro Stock—raw	312
25534404	DRCE 3	—	Alum	—	Peanut	DRCE 3	—	—	—	DRCE	—	no	Shaft	Pro Stock—raw	313
25534405	DRCE 3	—	Alum	—	Peanut	DRCE 3	—	—	—	DRCE	—	no	Shaft	Semi-finished	313

SERVICE REPLACEMENT HEADS

These heads are designed to be direct replacements for the heads that came standard on most 454" and 502" GM V-8 big-block engines from 1990–2000. They are perfect for replacing worn or damaged heads, and they are built with the same high quality standards that you have come to expect from GM.

Service Replacement Head Technical Notes:

- Cast iron cylinder head
- Machined for 2.18"/1.88" 3/8" stem valves
- Non-adjustable rocker design
- Rectangular¹ intake ports
- Heat risers
- Will not work on Production Mark IV cylinder blocks

A. 12562925

Bare Cast Iron Gen V and VI Cylinder Head

- Bare cast iron head
- 118cc combustion chambers
- 7/16" accessory bolt holes

12562926

Bare Cast Iron Gen V and VI Cylinder Head

- Bare cast iron head
- Machined for 2.18"/1.88" 3/8" stem valves
- 118cc combustion chambers
- 3/8" accessory bolt holes (otherwise identical to P/N 12562920)

12562920

Cast Iron Gen V and VI Cylinder Head Assembly

- Cast iron head
- Completely assembled with 2.18"/1.88" valves
- 118cc combustion chambers
- Uses P/N 12562925 bare casting

This head is assembled with the following components:

14097045	Intake Valves	12360874	Valve Spring Retainer & Seal Kit
14097049	Exhaust Valves	3947880	Valve Locks
14097002	Valve Springs	3875916	Valve Spring Shims

¹Rectangular intake ports are larger in volume and designed to enhance high rpm horsepower. They are an ideal street head for those big-block enthusiasts who want more power from a street car that sees a lot of drag strip action.



Don't Forget those corresponding parts!
See the chart on 313 for specifics.



A Bare Cast Iron Gen V & VI Cylinder Head (exhaust)



A Bare Cast Iron Gen V & VI Cylinder Head (intake)

Bare Cast Iron Gen V & VI Cylinder Head (combustion chamber) **A**Bowtie Oval Port Aluminum Cylinder Head (intake) **B**Bowtie Oval Port Aluminum Cylinder Head (exhaust) **B**Bowtie Oval Port Aluminum Cylinder Head (combustion chamber) **B**

BOWTIE STREET HEADS

GM Performance Parts is pleased to offer our Bowtie line of high performance street heads. They come with rectangular² or oval³ intake port configuration, thick deck surfaces, and high velocity airflow passages. These heads also offer increased machining tolerances to live up to your high performance needs. With good throttle response and mid-range torque, the Bowtie line of big-block heads are perfect for street/strip big-block fans who want good low end grunt and loads of top end power.

Bowtie Street Head Technical Notes:

- 356-T6 Aluminum
- 9/16" thick decks
- No heat risers
- Will work on Mark IV and Gen V and VI cylinder blocks
- 1.55" Valve spring seat diameter
- Heli-coiled 7/16" screw-in rocker stud holes
- Designed for use with 3/8" pushrods
- Available as oval and rectangle ports
- As-cast intake and exhaust ports
- Use intake gasket P/N 12366985 and bolt kit P/N 12367959
- Use head gasket P/N 12363414 for bores to 4.370" and P/N 12363413 for bores 4.470" to 4.540" (Mark IV)
- Use head gasket P/N 12363412 for bores to 4.370" and P/N 12363411 for bores 4.470" to 4.540" (Gen V & VI)
- Use Head bolt kit P/N 12367779

Oval Port Heads

12363399

Bowtie Oval Port Aluminum Cylinder Head, Bare (not shown)

- Fully machined
- Bronze guides can be finished to 11/32" or 3/8"
- Semi-finished for 2.19"/1.88" valves
- 290cc high-velocity oval intake ports
- 110cc exhaust ports
- 110cc semi-open combustion chambers

B. 12363392

Bowtie Oval Port Aluminum Cylinder Head Assembly

- Completely assembled with 2.19"/1.88" 11/32" stem valves
- 290cc oval intake ports
- 110cc exhaust ports
- 110cc combustion chambers

This head is assembled with the following components:

12366986	2.19 Intake Valves	12366990	Valve Spring Retainers
12366988	Exhaust Valves	12366992	Valve Locks
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		

12363390

Bowtie Oval Port Aluminum Cylinder Head Assembly

- Completely assembled with 2.25"/1.88" 11/32" stem valves
- 290cc oval intake ports
- 110cc exhaust ports
- 110cc combustion chambers

This head is assembled with the following components:

12366987	2.25" Intake Valves	12366990	Valve Spring Retainers
12366988	Exhaust Valves	12366992	Valve Locks
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		

²Rectangular intake ports are larger in volume and designed to enhance high rpm horsepower. They are an ideal street head for those big-block enthusiasts who want more power from a street car that sees a lot of drag strip action.

³Oval intake ports are smaller in volume and designed to enhance low rpm torque. They are an ideal street head for those big-block enthusiasts who want tons of bottom and power.



Don't Forget those corresponding parts!
See the chart on page 313 for specifics.

Bowtie Street Heads Continued

Rectangle Port Heads

12363408

Bare Bowtie Rectangular Port Aluminum Cylinder Head

This head is NHRA-legal and is a replacement for 1969 L88 cylinder heads used on 1969 Camaros and 1968–1971 Corvette big-block engines.

- Aluminum performance head
- Replacement for P/N 14011076
- Machined for 2.19"/1.88" 11/32" stem valves
- 315cc rectangular cast intake port
- 110cc exhaust port
- 118cc combustion chamber

12363410

Bowtie Rectangular Port Aluminum Cylinder Head (bare)

- Bare aluminum performance head
- Machined for 2.19"/1.88" valves
- 300cc rectangular intake port
- 110cc exhaust port
- 118cc combustion chamber

A. 12363400

Bowtie Rectangular Port Aluminum Cylinder Head Assembly

- Aluminum performance head
- Completely assembled with 2.25"/1.88" 11/32" stem valves
- 300cc rectangular intake port
- 110cc exhaust port
- 118cc combustion chamber
- Uses bare head P/N 12363410

This head is assembled with the following components:

12366987	2.25" Intake Valves	12366990	Valve Spring Retainers
12366988	Exhaust Valves	12366992	Valve Locks
12462970	Valve Springs	12495690	Valve Seals
3875916	Valve Spring Shims	3921912	Rocker Arm Studs
3860038	Pushrod Guideplates		



B. 12499255

Bowtie 572/620 Cylinder Head Assembly

- Aluminum head assembly
- Used in the 572/620 GMPP crate engine
- Completely assembled with 2.25"/1.88" 11/32" stem valves
- Valve springs for hydraulic roller cams for up to .632" lift
- 310cc rectangular intake port
- 118cc exhaust port—raised 5/8"
- 118cc combustion chamber
- Not recommended for engines smaller than 572 cid

This head is assembled with the following components:

12366987	2.25" Intake Valves	12366990	Valve Spring Retainers
88963128	Exhaust Valves	12366992	Valve Locks
88963934	Valve Springs	88963936	Valve Seals
88963937	Valve Spring Shims	3921912	Rocker Arm Studs
88963935	Valve Spring Locators	3860038	Pushrod Guideplates



A Bowtie Rectangular Port Aluminum Cylinder Head (intake)



A Bowtie Rectangular Port Aluminum Cylinder Head (exhaust)



A Bowtie Rectangular Port Aluminum Cylinder Head (combustion chamber)



Don't Forget those corresponding parts!
See the chart on page 313 for specifics.

Bowtie 572/620 Cylinder Head (intake) **B**Bowtie 572/620 Cylinder Head (exhaust) **B**Bowtie 572/620 Cylinder Head (combustion chamber) **B****88961160** ⓘ**Bowtie 572/720R Cylinder Head Assembly (not shown)**

- Aluminum racing head assembly
- Used in the 572/720R GM Performance Parts
- Completely assembled with 2.25"/1.88" 11/32" stem valves
- Mechanical roller valve springs—not for use with hydraulic roller cams
- Good to .720" valve lift
- 310cc rectangular intake port
- 118cc exhaust port—raised 5/8"
- 118cc combustion chamber
- Not recommended for engines smaller than 572 cid

This head is assembled with the following components:

12366987	2.25" Intake Valves	12366990	Valve Spring Retainers
88963128	Exhaust Valves	12366992	Valve Locks
88963933	Valve Springs	88963936	Valve Seals
88963937	Valve Spring Shims	3921912	Rocker Arm Studs
88963935	Valve Spring Locators	3860038	Pushrod Guideplates

BOWTIE RACE HEADS

There's no question that our Bowtie line of cylinder heads are just what you need for making extreme power from your GM big-block. GM Performance Parts has added huge intake ports that are raised, larger valves, smaller combustion chambers, and even two additional head bolts to increase the clamping force on the head gaskets. The runners have been left smaller so that engine builders can modify them after purchase. If you've got a stroked-out, big-inch, monster big-block that needs more air, our Bowtie Racing heads are just what you are looking for.

Bowtie Race Head Technical Notes:

- 356-T6 Aluminum
- 9/16" thick decks
- No heat risers
- Will work on Mark IV cylinder block
- Heli-coiled 7/16" screw-in rocker stud holes
- As-cast intake and exhaust ports

12363425**Bowtie Racing Cylinder Head (not shown)**

- Aluminum racing head
- Machined for 2.19"/1.88" valves (+.400" long required)
- 380cc rectangular intake ports—raised .100"
- 110cc exhaust port—raised .750", vanes in port floor ("W" port)
- 115cc "open chamber" combustion chamber
- Rocker cover rails raised .250"
- (2) additional head bolt holes in valley
- Pushrod guide plates P/N 3860038 must be ground for clearance
- Made from un-machined cylinder head P/N 14044876



Don't Forget those corresponding parts!
See the chart on page 313 for specifics.

DRCE PRO STOCK HEADS

Six-time NHRA Pro Stock world champion, Warren "The Professor" Johnson, runs DRCE, why don't you? The GM Performance DRCE 2 aluminum cylinder head was specifically designed for DRCE 2 block P/N 24502572 and intended for NHRA Drag Racing Pro Stock competition applications. Complies with rule for 500-cubic-inch engines with 4.900" cylinder bore spacing. Special features include: high capacity water jackets, symmetrical port layout, ample wall material for custom porting, thick deck surface (7/8") to facilitate angle milling, and reduced weight casting to minimize CNC-machine time. Typical CNC-prepared head without valves or valvetrain weighs approximately 40 pounds.

DRCE Pro Stock Race Head Technical Notes:

- T355-T7M Aluminum
- 7/8" thick decks allow for angle milling or heavy flat milling
- High capacity self-purging water jackets
- Symmetrical intake port layout
- Intake and exhaust ports are extremely small "peanut ports"
- Requires professional porting and machining
- Complies with NHRA Pro Stock 500 cid, 4.900" bore spacing rules
- Custom, aftermarket rocker arm assemblies required

A. 24502585

DRCE 2 Raw Aluminum Cylinder Head

- Raw aluminum casting, not machined
- Accommodates 10°–14° x 5° intake and 5°–9° x 2.5° exhaust valve angles
- Made to work on DRCE 2 block P/N 24502572



A DRCE 2 Raw Aluminum Cylinder Head (exhaust)



A DRCE 2 Raw Aluminum Cylinder Head (intake)



A DRCE 2 Raw Aluminum Cylinder Head (combustion chamber)

DRCE 3 Aluminum Cylinder Head Casting (exhaust) **B**DRCE 3 Aluminum Cylinder Head Casting (intake) **B**DRCE 3 Aluminum Cylinder Head Casting (combustion chamber) **B****B. 25534404****DRCE 3 Aluminum Cylinder Head Casting**

- Raw aluminum casting, not machined
- Newest design DRCE—rocker arm mounting pads and valve spring seat pads allow greater flexibility with valve angles and locations than DRCE 2
- Made to work on DRCE 3 block P/N 25534403 and DRCE 2 P/N 24502572

25534405**Semi-Finished DRCE 3 Aluminum Cylinder Head (not shown)**

- Starts out as un-machined head P/N 25534404
- Deck, end faces, and valve cover rail with tapped mounting holes are machined
- Tapped water jacket access holes provide opportunity to plumb water near exhaust ports
- Head includes eight #8 A/N plugs and one #16 A/N plug

25534387**DRCE 3 Water Jacket Plug (not shown)**

- For ends of DRCE 3 cylinder head casting P/N 25534404
- Aluminum #16 A/N with internal hex for Allen wrench
- Includes O-ring
- Sold individually; use two per head

25534388**DRCE 3 Water Jacket Plug (not shown)**

- For water jacket access holes of DRCE 3 cylinder head casting P/N 25534404
- Aluminum #8 A/N with internal hex for Allen wrench
- Includes O-ring
- Sold individually; use eight per head

! Cylinder Heads: Corresponding Parts

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Plug	Engine Application
12562920	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	5613438	24502620, 12568778, 24502618, 12568774
12562926	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	5613438	24502620, 12568778, 24502618, 12568774
12562925	14097001 (2) OR 12555728 (2)	10141204 (24), 10141205 (8)	5613438	24502620, 12568778, 24502618, 12568774
12363390	12363411 (2)	12367779 (1 Kit)	19145286	12499121, 12496962, 12371204, 12497323, 12496963, 12371171
12363392	12555728 (2)	12555728 (16), 88960334 (8)	19145286	12498777
12363399	12555728 (2)	88960333 (16), 88960334 (8)	19145286	12498777
88961160	88961561 (2)	88960333 (16), 88960334 (8)	5613100	12498827, 12498826
12499255	88961561 (2)	88960333 (16), 88960334 (8)	5613878	12498792

CYLINDER HEAD GASKETS & HEAD BOLTS

GM Performance Parts cylinder head gaskets, cylinder head bolts, and cylinder head studs are the finest quality parts available to ensure a secure seal between the engine block and cylinder heads.

NOTE:

Gasket packages contain one gasket unless otherwise specified. Order two per engine.

Big-block cylinder head gaskets are available in a variety of materials and thicknesses. Keep engine's intended usage and minimum piston-to-head clearance in mind when selecting gaskets. Use Gen V for 1991–1992 applications.

A. 12363414

Composition Head Gasket (1965–1990)

- With pre-flattened copper wire ring and permatorque/blue stripe coating for engines with aluminum heads
- Bore sizes between **4.250" and 4.370"**
- Use with **Mark IV** (1965–1990) engines only
- Compressed thickness is **0.039"**

10159507

Composition Head Gasket (1965–1990) (not shown)

- For Mark IV 1965–1990 big-blocks with **4.440"** cylinder bores
- No sealer required
- Re-torque after engine is first run
- Use with **Mark IV** (1965–1990) engines only
- Compressed thickness is **0.039"**

12363413

Composition Head Gasket (1965–1990) (not shown)

- With pre-flattened copper wire ring and permatorque/blue stripe coating for engines with aluminum heads and bore sizes **4.375" to 4.540"**
- Use with **Mark IV** (1965–1990) engines only
- Compressed thickness is **0.041"**

12363412

Composition Head Gasket (1991–Newer) (not shown)

- For 1991-and-newer **Gen V and VI** big-blocks with aluminum heads and **4.250" to 4.370"** bore size
- Has pre-flattened wire ring and stainless core which makes it ideal for saltwater marine use
- Compressed thickness is **0.039"**

12555728

Head Gasket, 454 Engine (not shown)

- Head gasket for 1991–2000 **Gen V** 454 big-blocks

B. 12366984

Head Gasket Kit, 502 Engine

- For all **Gen V and Gen VI** 502 big-blocks with cast iron heads
- Has additional water hole for improved cooling of siamesed cylinder walls
- Includes two gaskets (right and left) per package
- Compressed thickness is **0.041"**

12363411

Composition Head Gasket (1991–newer) (not shown)

- For **Gen V and VI** big-blocks with aluminum heads and **4.375" to 4.540"** bore size
- Has pre-flattened wire ring and stainless core which makes it ideal for saltwater marine use
- Compressed thickness is **0.039"**

C. 88961561

Head Gasket, 572 Engine

- With pre-flattened wire ring for all **572** big-blocks with either cast iron or aluminum heads
- Compressed thickness is **0.030"**



A Composition Head Gasket (1965–1990)



B Head Gasket Kit, 502 Engine



C Head Gasket, 572 Engine

Hex Nut **D**12-Point Nut **E****12367779****Cylinder Head Bolt Kit (not shown)**

- Universal kit for cast iron and aluminum big-block heads
- Includes (8) 7/16-14 x 2.08" bolts P/N 88960334, (24) 7/16-14 x 4.06" bolts P/N 88960333, (8) 7/16-14 x 5.06" bolts P/N 12367329, and (40) hardened washers P/N 14011040
- Use part numbers above for replacement parts
- Use thread sealant on all big-blocks except 502 due to blind bolt holes

3899696**Hardened Washer (not shown)**

- 0.45" I.D. x 0.86" O.D.; sold individually

D. 3942410**Head Stud Nut**

- Magnafluxed 1038 steel 7/16-20 hex head nut; sold individually

E. 14044866**Head Stud Nut**

- Magnafluxed 4037 steel 7/16-20 12-point nut; sold individually

**BIG-BLOCK VALVES**

Part Number	Valve Size	Stem Size	Description
Intake Valves			
14097045	2.19"	3/8"	Stock replacement valve for Gen V & VI 454 and 502 HO engines
12366986	2.19"	11/32"	Stainless steel valve with undercut chrome plated stems, single groove design, hardened tips, used on ZZ454, ZZ427 and the Anniversary Edition 427 crate engines
12366987	2.25"	11/32"	Stainless steel valve with undercut chrome plated stems, single groove design, hardened tips, used on ZZ502 and ZZ572
Exhaust Valves			
14097049	1.88"	3/8"	Stock replacement valve for Gen V & VI 454 and 502 HO engines
12366988	1.88"	11/32"	Stainless steel valve with undercut chrome plated stems, single groove design, hardened tips, used on ZZ454, ZZ427 and the Anniversary Edition 427 crate engines
88963128	1.88"	11/32"	Stainless steel valve with undercut chrome plated stems, single groove design, hardened tips, used on ZZ502 and ZZ572



BIG-BLOCK VALVE SPRINGS

Part Number	Description	Outside Diameter	Pressure at Installed Height	Solid Height	Average Rate (lbs per in)	Retainer Part Number	Valve Seal Kit	Technical Notes
3970627	Dual	1.487"	105# @ 1.88"	1.28"	267	3964264	460527	For high-performance 396/427/454 LS6 engines
12371061	Dual Kit	1.487"	105# @ 1.88"	1.28"	267	3964264	460527	Kit of 16 P/N 3970627 springs
12371062	Dual with dampener kit	1.538"	128# @ 1.90"	1.26"	356	3989353	Aftermarket PC-type seal	Kit of 16 P/N 3989354 springs, use with cam P/N 3994094
12495514	Dual Kit	1.487"	110# @ 1.88"	1.37"	316	14096274	12550422	Kit of 16 P/N 14097002 springs, use with 454 and 502HO engines
12495691	Dual Spring Kit	1.514"	140# @ 1.94"	1.20"	325	12366990	12495690	Kit of 16 P/N 12462970 springs, use with 502/502 engines
88963934	Dual Spring	1.540"	197# @ 1.80"	N/A	N/A	12366990	88963936	Use with 572/620 HP engines
88963933	Dual Spring	1.567"	205# @ 2.30"	N/A	N/A	12366990	88963936	Use with 572/720 HP engines
366282	Dual Spring	1.525"	128# @ 1.70"	1.26"	406	366254	Aftermarket PC-type seal	For competition engines

VALVE SPRING COMPONENTS

3875916

Spring Shim (not shown)

- 55/64" I.D. x 1 31/64" O.D. x 0.015" thick

3731058

Spring Shim (not shown)

- 55/64" I.D. x 1-15/16" O.D. x 0.030" thick

3891521

Spring Shim (not shown)

- 55/64" I.D. x 1 31/64" O.D. x 0.065" thick

88963937

Spring Shim (not shown)

- Shim for all 572 engines

88963935

Valve Spring Locator (not shown)

- Valve spring locator for setting the valve spring in the right location on all 572 engines

12360874

Retainer/Seal Kit (not shown)

- Kit of 16 retainers P/N 12550421 and 16 seals P/N 12550422 for 1991-and-newer Gen V and VI engines
- New design improves oil economy
- The valve guide bosses require minor machining with high-lift cams

12495688

Valve Spring Cap Kit (not shown)

- Kit of 16 special machined steel performance valve spring caps P/N 12366990 for use with spring P/N 12462970 on 502 and 572 engines

3964264

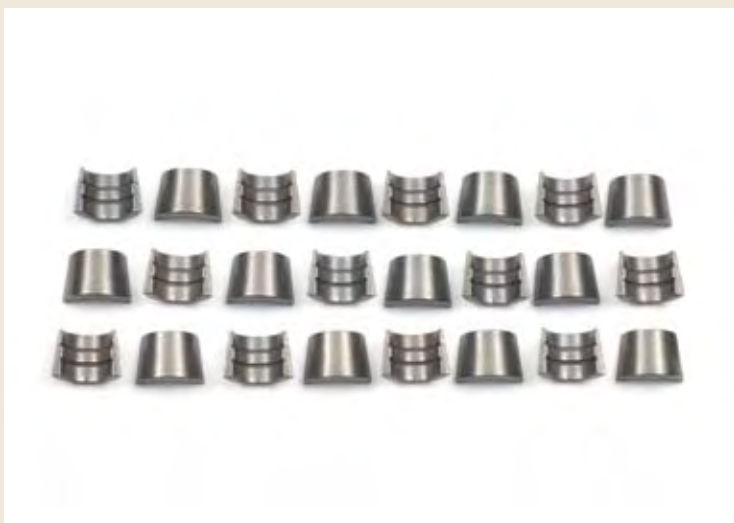
Valve Spring Retainer (not shown)

- Retainer and seal for valve spring P/N 3970627

3989353

Valve Spring Retainer (not shown)

- Steel retainer for valve spring P/N 3989354

Valve Spring Retainer **A**Valve Spring Key **B**Roller Rocker Arm Set, 1.7:1 Ratio **C****A. 12550421****Valve Spring Retainer**

- For 1991-and-newer Gen V and VI engines

B. 3947880**Valve Spring Key**

- Hardened steel split locks for production and racing engines
- Color-coded purple
- Sold individually, order 32 per engine

12366992**Valve Spring Cap Lock (not shown)**

- For 502 and 572 engines with aluminum heads

12550422**Valve Stem Seal (not shown)**

- Seal for 1991-and-newer Gen V and VI engines
- Use with valve spring P/N 12550421
- The valve guide boss must be machined slightly for seal to retainer clearance when using high-lift cams

12495690**Valve Spring Stem Seal Kit (not shown)**

- Kit of 16 special high-performance seals for the 502 engine kit
- Use with spring kit P/N 12495691

88963936**Valve Spring Seal (not shown)**

- Use with all 572 engines

ROCKER ARMS**Steel Rocker Arms****12523976****Steel Rocker Arm Assembly (not shown)**

- Designed for use on Gen V & Gen VI design 454 and 502 HO engines, these rocker arms have long slots for high-lift camshafts

NOTE: Kit includes rocker arm and ball. One rocker assembly per package; order 16 per engine.

12368082**Steel Long Slot Rocker Arm, 1.7:1 Ratio (not shown)**

- These 1.7:1 ratio hardened steel rocker arms have elongated slots to provide extra clearance for high-lift (.600" and greater) camshafts
- Use with all 396-502 big-block heads with adjustable rockers
- Each assembly includes rocker arm P/N 3959182 as well as the ball P/N 12338047 and nut P/N 3896648

NOTE: Can be used on any Gen V or Gen VI by using rocker stud kit P/N 12495518.

12368085**Long Slot Rocker Arm Kit (not shown)**

- Set of 16 rocker arms (P/N 12368082) with the balls and nuts

NOTE: These long slot rocker arms are stamped "H".

Aluminum Roller Rocker Arm for 7/16" Studs

Aluminum roller rockers have a 1.7:1 ratio for 7/16" studs. The bearings and fulcrum have an extra-wide design for load distribution and are lubricated with pressurized oil. The roller tip axle is made from 4130 steel, and the roller tip is machined and ground from 8620 steel. A Bowtie logo is machined into each rocker.

NOTE: Not for use with production height valve covers.

C. 12361323**Roller Rocker Arm Set, 1.7:1 Ratio**

- Set of 16 1.7:1 ratio roller rocker arms and nuts for 7/16" stud
- Used on 572 engines
- Use P/N 12361330 for single replacement part

VALVE COVERS

Add a stylish finishing touch without sacrificing performance, with our branded valve covers. GM Performance Parts valve covers are made of heavy-gauge steel for better sealing and reduced likelihood of leakage from over-tightened fasteners. The variety of designs allows personalization to suit any taste. Competition covers are designed to clear taller valvetrains. All valve covers are sold in pairs.

NOTE:

Ordering note: Valve covers are sold in pairs unless otherwise specified.

Valve covers cannot be used with 15" or 18" heads unless otherwise stated.

A. 12342093 


Short Chrome Bowtie Valve Cover

- Show-quality covers embossed with the famous Bowtie insignia and Chevrolet name
- Standard height, for use with 1965–1994 engines
- May not clear brake booster on some Corvette models

B. 12495488 

Custom Aluminum Valve Covers

- Die-cast aluminum valve covers are black with a brushed aluminum finish on top revealing the Chevrolet name and Bowtie insignia
- Can be finished with a custom engine designation badge (see page 320)
- For use on 1965–1994 engines
- Includes two covers, one grommet P/N 10198941, one grommet P/N 10198949, oil cap P/N 15681150, and 14 retaining bolts

C. 12371244 

Aluminum Competition Design Valve Covers

- Display the Chevrolet name and Bowtie insignia
- No holes for PCV or oil fill, but bosses for drilling them
- Can be used on most big-block Chevrolet cylinder heads
- Use P/N 12370836 for single replacement part

NOTE: Use with valve cover gasket P/N 14085759.

D. 25534323 

Aluminum Competition Design Valve Covers, Black Powder Coat

- Display the Chevrolet name and Bowtie insignia in brushed aluminum on black-powder-coated covers
- No holes for PCV or oil fill, but bosses for drilling them
- Can be used on most big-block Chevrolet cylinder heads

NOTE: Use with valve cover gasket P/N 14085759.



A Chrome Short Bowtie Valve Cover



B Custom Aluminum Valve Covers



C Aluminum Competition Design Valve Covers



D Aluminum Competition Design Valve Covers, Black Powder Coat



Don't Forget those corresponding parts! See the chart on page 319 for specifics.

Valve Covers, "572 CHEVROLET" **E**Valve Covers, "427 CHEVROLET", Natural Appearance **F**Valve Covers, "427 CHEVROLET", Black Powder Coat **G****E. 12499200** **Valve Covers, "572 CHEVROLET"**

- Used on all 572-cubic-inch crate engines and can be used on most big-blocks
- Cast aluminum with "572 CHEVROLET" as part of the casting
- One cover has oil fill and breather holes and the second cover has the breather hole only

NOTE:

Requires push on oil cap P/N 12341993, breather P/N 25534355, and breather tube P/N 88962074 that incorporates a baffle in the tube.

F. 19202588 **NEW** **Valve Covers, "427 CHEVROLET", Natural Appearance**

- Clearcoated for durability with aluminum appearance
- Used on the anniversary 427 crate engine
- Can be used on any big-block engine

G. 19202589 **NEW** **Valve Covers, "427 CHEVROLET", Black Powder Coat**

- Used on the ZZ427/425 crate engine
- Can be used on any big-block engine



Don't Forget those corresponding parts!
See the chart below for specifics.

! Valve Covers: Corresponding Parts

Part Number	Gaskets (Qty)	Bolts (Qty)	Grommets (Qty)	Oil Fillers (Qty)	Engine Application
12495488	14085759 (2) OR Mark IV, V, VI (2)	25520079	10198941 OR 3989350	15681150	12499121, 12496962, 12371204, 12497323, 12496963, 12371171, Mark IV, V, VI BB
12499200	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826
19202588	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826
19202589	14085759 (2)	88961871 (8)	12341988 (1)	12341993 (1)	12498793, 12498827, 12498792, 12498826
25534329	14085759 (2)	88961871 (8)	N/A	12341993 (1)	12498793, 12498827, 12498792, 12498826

BREATHERS AND HARDWARE

88962074

Oil Baffle Tube (not shown)

- Pushes easily into most valve covers that have an oil baffle
- Requires breather P/N 25534355, used on ZZ572 engines

A. 25534355

ZZ572 Breather

- Special breathers for the ZZ572 valve covers
- Chrome breathers are 1-3/8", hose-clamp-style with the Bowtie logo on top
- Use with oil baffle tube P/N 88962074
- Includes two breathers



A ZZ572 Breather

B. 12341993

Push-In Oil Filler Cap

- For valve covers with 1.22" hole

3894337

Rubber Grommet, Bowtie Valve Covers (not shown)

- Has 15/16" I.D. x 17/32" O.D.
- Can be used to plug the oil filler hole in Bowtie valve covers, or to mount a push-in breather

14085759

Valve Cover Gasket (not shown)

- Steel-reinforced gasket fits all big-block Chevy valve covers
- Order two per engine

VALVE COVER BADGES

Designed to fit mounting area on valve covers P/N 12495488 (see page 318), these good looking badges will fit some other big-block valve covers.

NOTE: One badge per package. Order two per engine.

12363951

Valve Cover Badge, "427-Cubic-Inches" (not shown)

12363952

Valve Cover Badge, "454-Cubic-Inches" (not shown)

12366995

Valve Cover Badge, "454 GM Performance Parts" (not shown)

12363953

Valve Cover Badge, "502-Cubic-Inches" (not shown)

C. 12366994

Valve Cover Badge, "502 GM Performance Parts"



B Push-In Oil Filler Cap



C Valve Cover Badge, "502 GM Performance Parts"



Premium 7/16" Intake Pushrod



Intake Pushrod, Roller Lifter Style

PUSHRODS

GM Performance Parts offers a complete line of heavy-duty pushrods for most GM engines. They are designed to deliver outstanding performance in street and competition applications and are available in two materials: mild steel, which is suitable for high-performance street cars, power boats, street rods, and limited competition applications, and 4130 chromemoly steel, for maximum-performance racing engines.

NOTE:

Heavy-duty pushrods for big-block V-8 engines are available in standard and extended lengths. Longer pushrods can be used to restore the correct valve-train geometry when using a high-lift camshaft with a small base circle diameter. Extra-long pushrods also are recommended when valves with longer-than-stock stems are installed. GM Performance Parts pushrods are case-hardened for use with pushrod guide plates. Pushrods are available for flat tappet, hydraulic roller, and mechanical roller applications. Look under "usage" in chart below to verify proper application before ordering.

BIG-BLOCK PUSHRODS

Part Number	Material	Diameter	Length	Usage	Port	Description
10134307	1010 steel	3/8"	8.285"	Flat tappet	Intake	One-piece design. Recommended for high-performance street engines. Use with pushrod guideplate P/N 3860038.
10134308	1010 steel	3/8"	9.256"	Flat tappet	Exhaust	One-piece design. Recommended for high-performance street engines. Use with pushrod guideplate P/N 3860038.
10134304	1010 steel	7/16"	8.285"	Flat tappet	Intake	One-piece design. Recommended for high-performance and limited competition engines. Use with pushrod guideplate P//N 3879620.
10134303	1010 steel	7/16"	9.256"	Flat tappet	Exhaust	One-piece design. Recommended for high-performance and limited competition engines. Use with pushrod guideplate P//N 3879620.
10134306	4130 steel	7/16"	8.285"	Flat tappet	Intake	Premium quality one-piece design. Recommended for racing engines. Use with pushrod P/N 3879620.
10134305	4130 steel	7/16"	9.256"	Flat tappet	Exhaust	Premium quality one-piece design. Recommended for racing engines. Use with pushrod P/N 3879620.
14097068	1010 steel	3/8"	8.171"	Flat tappet	Intake	For Gen V 454 and 502 HO engines
14097070	1010 steel	3/8"	9.151"	Flat tappet	Exhaust	For Gen V 454 and 502 HO engines
10227762	1010 steel	3/8"	7.592"	Hyd. roller	Intake	(1) heavy-duty heat-treated .060" for use in Gen VI 454 and 502 engines with hydraulic roller lifters
10227763	1010 steel	3/8"	8.569"	Hyd. roller	Exhaust	(1) heavy-duty heat-treated .060" for use in Gen VI 454 and 502 engines with hydraulic roller lifters
12368081	1010 steel	3/8"	7.592"-8.569"	Hyd. roller	—	Kit of (8) P/N 10227762 and (8) P/N 10227763
88961559	4130 steel	3/8"	7.900"	Hyd. roller	Intake	Chromemoly 1-piece for 572/620 (Tall Deck Block)
88961558	4130 steel	3/8"	8.900"	Hyd. roller	Exhaust	Chromemoly 1-piece for 572/620 (Tall Deck Block)
88962284	4130 steel	3/8"	8.550"	Mech. roller	Intake	Chromemoly 1-piece for 572/620 (Tall Deck Block)
88962283	4130 steel	3/8"	9.525"	Mech. roller	Exhaust	Chromemoly 1-piece for 572/620 (Tall Deck Block)

ROCKER ARM STUDS & ACCESSORIES

A. 3896648

Rocker Adjusting Nut

- Positive locking 7/16–20 nut for all big-block V-8s

B. 12495498

Rocker Arm Stud Kit (1960–1990 engines)

- Strong, 7/16" diameter screw-in studs are built to stand up to stiff valve springs and high-lift camshafts
- Suitable for all high-performance and competition applications
- Includes 16 pieces
- For single stud usage, use P/N 3921912

12495518

Rocker Arm Stud Kit (3/8" x 7/16") (not shown)

- Designed for 1991-and-newer Gen V and Gen VI heads when adjustable tappets are desired
- Heat-treated, 8720 steel stud has a 3/8-16 thread that screws into the head and a 7/16-20 upper shaft for the rocker arm nut
- Use with rocker arm kit P/N 12368085 only
- For single stud usage, use P/N 12368941

10114123

Rocker Arm Stud Kit (Gen V style) (not shown)

- Used on the Gen V engines
- Holds the "non-adjustable" rocker arms in place

GUIDE PLATES

C. 3860038

Pushrod Guide Plate (3/8")

- Designed for all 1960–1990 iron and aluminum cylinder heads with 3/8" diameter pushrods
- Slotted style with hardened steel construction aligns rocker arms with valve stem tips on big-block's splayed-valve head
- Eight required for each engine

NOTE: Use with screw-in rocker stud P/N 3921912.

3879620

Pushrod Guide Plate (7/16") (not shown)

- Similar to guide plate described above, but for use with heavy-duty 7/16" diameter pushrods

12562369

Pushrod Guide Plate (Gen V 454/502 style) (not shown)

- Used on all Gen V 454 and 502 engines with 3/8" diameter pushrods



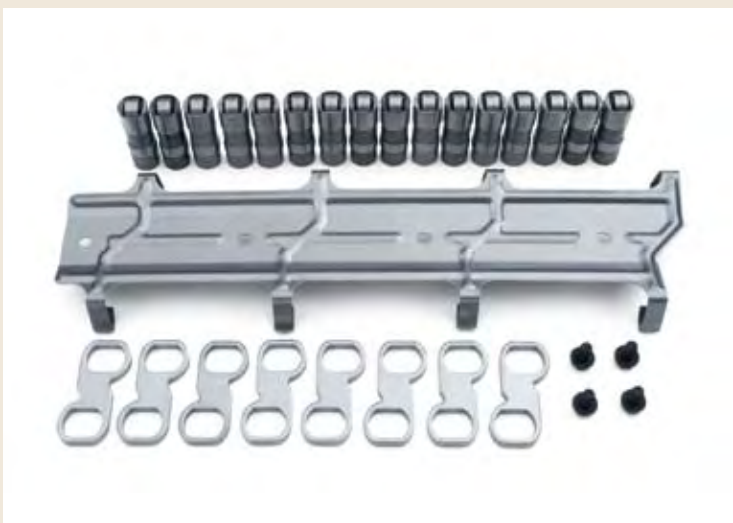
A Rocker Adjusting Nut



B Rocker Arm Stud Kit (1960–1990 engines)



C Pushrod Guide Plate (3/8")

Hydraulic Roller Lifter, ZZ572/620 **D**Hydraulic Roller Lifter Kit **E**Mechanical Roller Lifter, ZZ572/720 **F**

VALVE LIFTERS & COMPONENTS

12371044

Hydraulic Lifter Kit (set of 16) (not shown)

- For use on all 396, 427, 454, and 502 engines that use hydraulic flat tappet lifters
- For single service replacement use P/N 5232720

17102353

Lifter Assembly (single piece) (not shown)

- Designed for use with the Gen V 454 and 502 engines
- Used when no adjustable rocker arms are required
- Package contains one lifter assembly

D. 17120060

Hydraulic Roller Lifter, ZZ572/620

- Roller valve lifters used on the ZZ572/620 engines
- Use with camshaft P/N 88961557, intake pushrod P/N 88961559, exhaust pushrod P/N 88961558, rocker arm P/N 12361323

E. 12371056

Hydraulic Roller Lifter Kit

- Hydraulic roller lifter retainer kit can be used on all Gen VI 454 and 502 engines that are machined for hydraulic roller lifters
- Includes 16 of roller lifter P/N 17120061, eight lifter guides, one lifter guide retainer and four retainer bolts
- For single service replacement lifter, use P/N 17120061

NOTE: *These lifters allow more oil to the rocker arms than the late-model truck roller lifters.*

F. 88962920

Mechanical Roller Lifter, ZZ572/720

- Mechanical roller valve lifters used on the ZZ572/720 horsepower engines
- Use with camshaft P/N 88962216, intake pushrod P/N 88962284, exhaust pushrod P/N 88962283, rocker arm P/N 12361323

12551397

Roller Tappet Guides (not shown)

- Roller tappet guides used with all 502 engines and 454 HO engines
- Used with roller camshaft engines
- Sold individually; order eight per engine

12551399

Roller Tappet Guide Retainer (not shown)

- Roller tappet guide retainer used with all 502 engines and 454 HO engines
- Used with roller camshaft engines
- Order only one per engine

CAMSHAFTS

A great camshaft delivers power and easy drivability and that's exactly what you get with GMPP's factory-engineered cams. Extensive research and development, followed by precise manufacturing standards, are behind every one of our camshafts. Our extensive array of cams includes the best one for your GM engine.



BIG-BLOCK CAMSHAFTS					
Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
10185060	Hydraulic flat tappet 454ci	I: 220 E: 220	I: .500 E: .500	115	Street high performance and marine cam as used in Gen V 454 HO engines. Advanced 5 degrees. Use spring P/N 3970627.
14096209	Hydraulic flat tappet 502ci	I: 220 E: 220	I: .500 E: .500	115	Street high performance and marine cam as used in Gen V 502 HO engines. Use spring P/N 3970627.
12366543	Steel hydraulic roller	I: 224 E: 234	I: .527 E: .544	110	For 502/502 special engine. Must use distributor gear P/N 10456413.
24502611	Steel hydraulic roller	I: 211 E: 230	I: .510 E: .540	112	For 454 and 502 HO engines. Must use distributor gear P/N 10456413.
88961447	Steel mechanical roller	I: 236 E: 232	I: .640 E: .598	I: 110 ATDC E: 109 BTDC	For ZL1 Ram Jet, discontinued
88961557	Steel hydraulic roller	I: 254 E: 264	I: .632 E: .632	112	For ZZ572/620 engine
88962216	Steel mechanical roller	I: 266 E: 274	I: .714 E: .714	112	For ZZ572/720 engine

BIG-BLOCK CAMSHAFT & LIFTER KITS — INCLUDES CAMSHAFT AND 16 LIFTERS					
Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
12361314	Hydraulic flat tappet	I: 202 E: 210	I: .468 E: .485	110	Low-end truck torque cam for all big-block truck applications from normal driving to towing/hauling; suitable for computer controlled Mark IV and V engines
12361316	Hydraulic flat tappet	I: 210 E: 218	I: .485 E: .490	115	Designed for '90-93 454SS pickup. Offers increased mid-range and top-end performance.
12353920	Hydraulic flat tappet	I: 228 E: 238	I: .540 E: .238	114	For all 9.5-10.75 C.R. big-block V-8s including '65-66 CA, '65-68 Fed emissions, and '66-92 off-highway/marine; good idle, daily performance and mild bracket racing use; 2200-5700 rpm range
12353922	Hydraulic flat tappet	I: 218 E: 228	I: .500 E: .500	114	For 8.75-10.5 C.R. 396, 427, 454, 502 big-blocks; good mid-range 2000-4500 rpm, idle, fuel efficiency, and towing capabilities
12364055	Hydraulic flat tappet	I: 214 E: 218	I: .461 E: .480	115	Blueprinted, dual pattern replacement for P/N 3883986 350 HP 396 cam; for 8.75-10.0 C.R., 1500-3800 rpm range
12364058	Mechanical lifters	I: 264 E: 269	I: .560 E: .580	112	Blueprinted, dual pattern replacement for P/N 3925535 435 HP 427 early L88 camshaft; for 11.5-12.0 C.R. and 4400-7000 rpm

NOTE: *IMPORTANT! Distributor with melonized steel gear MUST be used with steel camshafts or engine damage can occur.*

Camshaft Components

A. 12364086

Cam Button Spacer

- Solid aluminum button for all 1965-1995 big-blocks
- Limits lateral movement of roller lifter camshafts when installed in engines without a cam thrust plate

B. 12499434

Camshaft Bearings, 572 Engine

- Five standard-size premium camshaft bearings for the ZZ572 engine



A Cam Button Spacer



B Camshaft Bearings, 572 Engine

Forged Steel Connecting Rod **C**572 Connecting Rod **D**572 Connecting Rod Bearings **E**12-Point Nut **F**

CONNECTING RODS & COMPONENTS

C. 19170198

Forged Steel Connecting Rod

- Magnafluxed 4340 steel, LS6/LS7 connecting rod, including heavy-duty 7/16" rod bolts with knurled shanks
- Machined for pressed piston pins and color-coded white
- Used on Gen V 454 and 502 engines
- 6.135" c-c length
- Use rod bearing P/N 12329715

D. 88962926

572 Connecting Rod

- Premium-quality forged 4340 steel H-beam connecting rod for all 572 engines
- 6.535" c-c length
- Use rod bearing P/N 88961556

E. 88961556

572 Connecting Rod Bearings

- Standard-size, premium connecting rod bearings for 572 engines
- Includes all eight rod bearings

14096148

Connecting Rod Bolt (not shown)

- Knurled shank 7/16-20 x 2.28" bolt
- Used in LS6 and LS7 big-block engines with connecting rod P/N 19170198

F. 340289

Connecting Rod Nut

- Extra heavy-duty, aircraft quality, 6304 steel 12-point 7/16-20 nut

12366569

Connecting Rod Nut Set (not shown)

- Set of 16 aircraft quality, 6304 steel 12-point 7/16-20 nuts for all 396, 427, 454, and 502 engines
- For single service replacement use P/N 14044866

PISTONS & RINGS

GM Performance Parts pistons are top quality and are ready for the rigors of high-performance street and competition applications. They're factory tested, so you know you're getting the right parts for your big-block engine. Pistons are sold individually unless otherwise specified. Available in standard and oversize diameters. Wrist pins included with all pistons.

NOTE: Part numbers are for one piston; order eight per engine.



BIG-BLOCK PISTONS

Part Number	Engine Size	Bore Size	Oversize	Rod Length	Pin Type	Compression Ratio	Chamber Size	Ring Size	Description
10215228	454	4.250"	—	6.135"	Pressed	8.75:1	118cc	5/64, 5/64, 3/16"	Forged Gen V & VI 454 HO replacement
12529559	454	4.250"	+ .030"	6.135"	Pressed	8.75:1	118cc	5/64, 5/64, 3/16"	Forged Gen V & VI 454 HO replacement
12533507	502	4.470"	—	6.135"	Pressed	8.75:1	118cc	5/64, 1/16, 3/16"	Forged Gen V & VI 502 replacement
12533553	502	4.470"	+ .030"	6.135"	Pressed	8.75:1	118cc	5/64, 1/16, 3/16"	Forged Gen V & VI 502 replacement
88962925	572	4.560"	—	6.535"	Floating	9.6:1	118cc	1/16, 1/16, 3/16"	Forged 572/620
88963227	572	4.560"	—	6.535"	Floating	12.0:1	118cc	1/16, 1/16, 3/16"	Forged 572/720R
19171618	427	4.250"	—	—	—	10.1:1	110cc	1/16, 1/16, 3/16"	Forged 427 rings



BIG-BLOCK PISTON RINGS

Part Number	Bore size	Oversize	Ring Thicknesses	Description
12523921	4.250"	Standard	5/64, 5/64, 3/16"	Standard size ring pack for Gen V 454 HO
12523923	4.250"	+ .030"	5/64, 5/64, 3/16"	Oversize ring pack for Gen V 454 HO
12524293	4.470"	Standard	5/64, 1/16, 3/16"	Standard size low-tension ring pack for all 502 engines
12524294	4.470"	+ .030"	5/64, 1/16, 3/16"	Oversize low-tension ring pack for all 502 engines
12499212	4.560"	Standard	1/16, 1/16, 3/16"	Standard size ring pack for 572 engines
12499232	4.250"	Standard	—	Set of 8 ring packs of P/N 12523921

Crankshaft, Forged Steel (Gen V & Gen VI 502) **A**Crankshaft, 572 **B**

Recognizing that our vehicles would be used in a variety of settings, GM developed a wide range of engine choices—including the original big-block used in trucks and off-road vehicles in the late 1950s—to satisfy owners. Today, GM Performance Parts keeps that tradition alive with the most comprehensive lineup of performance engines available.

CRANKSHAFTS

GM Performance Parts crankshafts listed in this section are the backbone of a high-performance engine build and are the same components that go into GM Performance Parts crate engines.

3963524

Crankshaft, Forged Steel (454 & Mark IV 502-cubic-inches) (not shown)

- Premium quality
- Externally balanced
- Nitride-treated 5140 forged steel with 4.00" stroke, cross-drilled 2.75" diameter main journals, and 2.20" diameter rod bearing journals
- Used on 1965–'90 454 and 502 with two-piece rear seal

NOTE: *Must be used with counterweighted torsional dampener and flywheel or flexplate.*

14096983

Crankshaft, Forged Steel (Gen V & Gen VI 454) (not shown)

- Externally balanced
- Forged 1053 steel crankshaft with one-piece rear main seal

A. 10183723

Crankshaft, Forged Steel (Gen V & Gen VI 502)

- Externally balanced
- Cross-drilled
- Nitride-treated forged 1053 steel crankshaft with one-piece rear main seal
- Forging P/N 14097044

19171620

Crankshaft, Forged Steel (Gen V & Gen VI 427) (not shown)

- Steel crankshaft with 3.76" stroke for 1991 and later 427-cubic-inch engines
- Used in ZZ427 and Anniversary Edition 427 engines
- Internally balanced

B. 88961554

Crankshaft, Forged Steel (572-cubic-inches)

- Internally balanced
- Premium 4340 steel forging for 572-cubic-inch engines
- Use neutral balance dampener and flexplate or flywheel
- One-piece rear seal

NOTE: *Must use main bearing P/N 88962212 and rod bearing P/N 88962926.*

14061685

Roller Pilot Bearing (not shown)

- Used in high-performance manual transmission applications

BALANCERS & PULLEYS

A smooth running engine depends on an effective balancer or torsional dampener. A GM Performance Parts dampener not only helps your engine run smoothly, it can extend the life of the engine.

Pulleys

3899660

Crankshaft Pulley, 6" (not shown)

- Two groove
- Cast iron
- High rpm, powersaving crankshaft pulley

Balancer Bolts & Washers

9419218

Crankshaft Bolt (not shown)

- Positive retention 1/2-20 x 1-1/2" bolt
- For engines with tapped crank snout
- Use with washer P/N 3864814

3864814

Washer (crankshaft bolt) (not shown)

- 2.06" OD x 0.52" ID x 0.28" thick washer
- For crankshaft bolt

FLYWHEELS & FLEXPLATES

Find the right part to match your engine from the easy-to-follow guides to the right. Select flywheels for manual transmission vehicles and flexplates for automatic transmission vehicles.

NOTE:

IMPORTANT! All Chevy small-block and big-block engines with one-piece crankshaft seal require an externally balanced flywheel or flexplate (except for ZZ427/430 P/N 19166393 and the Anniversary Edition 427 P/N 19166392).

Bolts & Dowels

12337973

Flywheel Bolt (not shown)

- Fits all Chevy small-block V-8, big-block V-8 and 90° V-6 engines
- Sold individually; six required per engine

10046031

Flywheel Dowel (big-block) (not shown)

- Highly recommended for all high-performance and competition big-block engines

1453658

Bellhousing Dowel, Clutch Housing/Transmission Dowel (big-block) (not shown)

- Use with big-block engine
- Sold individually; two required per engine

3727207

Flexplate Bolt (not shown)

- Fits all Chevy small-block V-8, big-block V-8 and 90° V-6 engines
- Sold individually; six required per engine

BIG-BLOCK BALANCERS

Part Number	Engine Application	Outside Diameter	Technical Notes
3879623	Originally used on 1967–1969 427, ZZ427 and Anniversary Edition 427	8"	Can be used on all engines with internally balanced crank. Use with timing pointer P/N 3991436.
10216339	454 and 502 with 4.00"-stroke crank	8"	Counterweighted for externally balanced engines. Use chrome timing pointer P/N 3991436.
88962814	572	8"	This internal balance dampener is designed with inner and outer shells. It utilizes matched "O-rings" to control destructive crankshaft vibrations. Black zinc chromate finish. Laser engraved 360° timing marks.

BIG-BLOCK FLYWHEELS

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Clutch Diameter	Starter Ring Gear Teeth	Technical Notes
14085720	1965–89	12.75"	3.58"	10.4"	153	Lightweight nodular iron; weighs approximately 15 lbs. For internally balanced engines.
3963537	1979–90	12.75"	3.58"	10.4"	153	Lightweight nodular iron. Counterweighted for externally balanced 454 engines. Use with balancer P/N 3963530.
3991469	1965–69	14"	3.58"	11"	168	Use with internally balanced engines and balancer P/N 3879623.
3993827	1970–90	14"	3.58"	11"	168	Counterweighted for externally balanced Mark IV 454 engines. Use with balancer P/N 3963530.
14096987	1991–up	14"	3.58"	11"	168	Lightweight nodular iron. For external balanced engines.
12582964	1991–up	14"	3.58"	11.5"	168	Used with 572 crate engine

BIG-BLOCK FLEXPLATES

Part Number	Year of Engine	Outside Diameter	Crank Flange Bolt Pattern	Converter Bolt Pattern	Starter Ring Gear Teeth	Technical Notes
10185034	1991–up	14"	3.58"	10.4"	168	Use with forged steel crank. Has dual-bolt pattern. Only three attaching bolts used with 4L80 transmission.
12561217	1991–up	14"	3.58"	11.75"	168	Use with 572/620 engine and crank P/N 88961554
471597	1965–69	14"	3.58"	11.75"	168	For internally balanced engines
14001992	1970–90	14"	3.58"	11.5"	168	For externally balanced engines



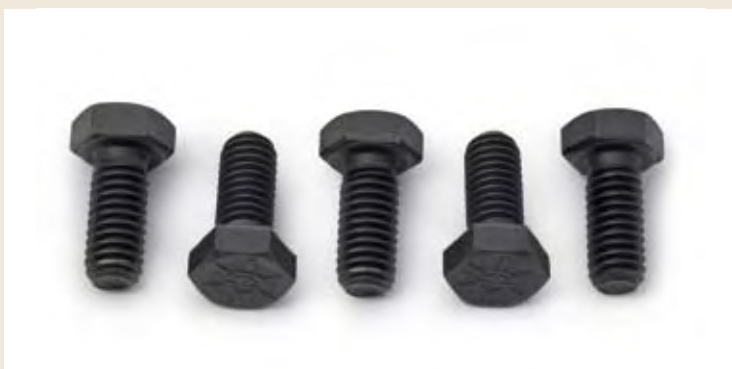
88962814 Balancer (see chart at left)



14096987 Flywheel (see chart at left)



12561217 Flexplate (see chart at left)

Timing Chain Kit, 502 **A**
(second design Gen VI)Timing Chain, 502 (second design Gen VI) **B**Camshaft Bolt **C**

TIMING CHAINS & SPROCKETS

The timing chain is the vital link for engine timing between the crankshaft and camshaft. GM Performance Parts' timing chains and sprockets deliver strength and accuracy for many miles of dependable service.

A. 12371053

Timing Chain Kit, 502 (second design Gen VI)

- Heavy-duty timing chain kit for all second-design 502 Gen VI roller-lifter engines with aluminum front timing cover
- Kit includes chain P/N 10114177, crankshaft sprocket P/N 12550039, camshaft sprocket P/N 12551401, camshaft retainer and bolts
- Also used in 572

B. 10114177

Timing Chain, 502 (second design Gen VI)

- Single-roller design for all second-design 502 Gen VI engines
- Use with crankshaft sprocket P/N 12550039 and camshaft sprocket P/N 12551401

12554553

Camshaft Dowel Pin (not shown)

C. 9424877

Camshaft Bolt

- 5/16-18 x 0.75" bolt

3975949

Shim (not shown)

- Camshaft sprocket shim, 0.10" thick

WATER PUMPS, PULLEYS & ACCESSORY DRIVE SYSTEMS

A. 19168602

Aluminum Water Pump, Short-Style

- Lightweight standard-rotation pump has reinforced snout and large-diameter hub with dual bolt patterns for early- and late-model pulleys
- Has short mounting legs
- Use with early-design V-belt drive rotation

B. 19168606

Cast Iron Water Pump, Long-Style

- Same standard-rotation pump used on all GMPP 454 and 502 crate engines
- Not for use with a serpentine belt system

C. 19172805

Serpentine Accessory Drive Belt System, with Air Conditioning

- Deluxe kit includes all the components and hardware necessary to install on a 9.800" deck or 10.200" tall deck engine (including bolts, nuts and spacer)
- Belt included

The system includes:

10463415	Alternator Assembly (cs130) (reman)
26010328	Power Steering Pump (reman)
12456326	Water Pump Kit
88964862	A/C Compressor, R134a
10187612	A/C Compressor Bracket
10187613	A/C Compressor Bracket
10108470	Water Outlet
10085753	Crankshaft Pulley
88986828	Belt (water pump, A/C, alternator)
88986813	Belt (fan, water pump, A/C)
12552359	Tensioner
12552361	Idler Pulley
10085760	Fan and Water Pump Pulley
6272959	Thermal Bypass Hose Connector
1470030	Clamp
1485552	Heater Hose
12604004	Power Steering Pump Pulley
88961892	Power Steering Bracket (tall deck)
10187611	Alternator Bracket
10187610	Alternator/Power Steering Bracket

19498741

Serpentine Accessory Drive Belt System, without Air Conditioning (not shown)

- Deluxe kit includes all the components and hardware necessary to install on a 9.80" deck or 10.20" tall deck engine
- Kit includes hardware and belt

The system includes:

10463415	Alternator Assembly (cs130) (reman)
26010328	Power Steering Pump (reman)
12456326	Water Pump Kit
10108470	Water Outlet
10085753	Crankshaft Pulley
88986828	Belt (water pump, A/C, alternator)
88986813	Belt (fan, water pump, A/C)
12552359	Tensioner
12552361	Idler Pulley
10085760	Fan and Water Pump Pulley
6272959	Thermal Bypass Hose Connector
1470030	Clamp
1485552	Heater Hose
12604004	Power Steering Pump Pulley
88961892	Power Steering Bracket (tall deck)
10187611	Alternator Bracket
10187610	Alternator/Power Steering Bracket
10055890	Idler Pulley



A Aluminum Water Pump, Short-Style



B Cast Iron Water Pump, Long-Style



C Serpentine Accessory Drive Belt System, with Air Conditioning



D Corvette Oil Pan (1965-1974)

6-Quart Oil Pan **E**6-Quart Oil Pan, Gen V & Gen VI **F**8-Quart Oil Pan **G**4-Quart Oil Pan Kit, Gen V & Gen VI **H**Dipstick Tube, 6-Quart **I**Dipstick Tube, 4-Quart **J**

OIL PANS, OIL PUMPS, GASKETS & ACCESSORIES

GM Performance Parts' oil pans deliver the perfect fit for production engines, providing peace of mind against leaks. Oil pans and components are available for street and competition engines.

Pans do not come with dipsticks or other hardware unless noted.

D. 14091356

Corvette Oil Pan (1965–1974)

- Five-quart pan has a trap door baffle that controls oil slosh during cornering and heavy braking
- Windage tray is included and requires four mounting studs, P/N 3902885
- Used on LS7 engine assembly P/N 3965774

E. 14103141

6-Quart Oil Pan

- Six-quart pan fits all 1965–1990 engines

F. 10240721

6-Quart Oil Pan, Gen V & Gen VI

- Six-quart pan fits all 1991-and-newer Gen V and Gen VI, 427, 454, 502 and 572 engines

G. 12552968

8-Quart Oil Pan

- Designed for 1991-and-newer Gen VI engines in medium-duty trucks
- Also suitable for custom, competition and marine applications

NOTE:

The sump extends approximately three-quarters of the length of the pan and cannot be used in production cars without modification.

H. 12495360

4-Quart Oil Pan Kit, Gen V & Gen VI

- Fits 1991-and-newer Gen V and Gen VI 427, 454 and 502 engines
- Fits many early-model Chevelles and Camaros
- Includes a 4-quart oil pan, four main cap bolts, oil pump screen, oil level tube, oil level gauge, and oil pan gasket
- Pan is not available separately

12557083

Dipstick, 6-Quart (not shown)

- For use with production 6-quart oil pan P/N 10240721 (see above)
- Use oil indicator tube P/N 12550533 and seal P/N 274244

I. 12550533

Dipstick Tube, 6-Quart

- For use with production 6-quart oil pan P/N 10240721 (see above)
- Use oil indicator P/N 12557083 and seal P/N 274244

274244

Oil Dipstick Tube Seal, 6-Quart (not shown)

- For use with the production 6-quart oil pan P/N 10240721
- Use oil dip stick tube P/N 12550533 and dip stick P/N 12557083

3989391

Dipstick, 4-Quart (not shown)

- For use with 4-quart oil pan kit P/N 12495360 for all Gen V and Gen VI engines (see above)
- Use oil indicator tube P/N 329231

J. 329231

Dipstick Tube, 4-Quart

- For use with 4-quart oil pan kit P/N 12495360 (see above)
- Use oil indicator P/N 3989391

Oil Pans, Oil Pumps, Gaskets & Accessories Continued

A. 14097040

Windage Tray

- Use with the Gen V and Gen VI 454 and 502 engines

B. 3967854

Windage Tray

- Separates the oil from the spinning crank assembly to reduce aeration of the oil, aids in oil control, and minimizes oil slosh under hard braking
- Use with oil pan P/N 14091356
- Requires four mounting studs, P/N 3902885

C. 88962187

Windage Tray, 572 Engine

- Used on all 572-cubic-inch engines
- Use with oil pan P/N 14091356
- Requires four mounting studs, P/N 88958656

3969870

Oil Pump & Pick-Up (not shown)

- Heavy-duty pump
- 1.30" wide gears for increased volume; suitable for all Mark IV engines
- Distance from the pump mounting surface to the bottom of the pick-up tube screen is 4.94"
- Pick-up tube is tack welded to the pump body
- Use with Corvette-style oil pan P/N 14091356

10051105

High-Volume Oil Pump (not shown)

- Delivers 25-percent more capacity than a production pump at standard pressure
- Use with oil pan P/N 12495360 and pick-up P/N 3955281

D. 19131250

Oil Pump & Pick-Up, 572 Engine

- For use with all 572-cubic-inch engines
- Use with oil pan P/N 10240721, oil pan gasket P/N 10106407, and windage tray P/N 88962187

E. 3865886

Oil Pump Shaft

- Heavy-duty all-metal
- Intermediate shaft fits all big-block engines

12555167

Oil Pump & Pick-Up, Gen V & Gen VI (not shown)

- For use with the Gen V and Gen VI 454 and 502 engines with one-piece rear main seal
- Pump has 1.30" gears and will fit Mark IV engines
- Distance from the mounting surface to the bottom of the screen is 5.87"

NOTE: Tack-welding pick-up tube to pump is recommended.

3955283

Oil Pump Pick-Up (not shown)

- Distance from pump mounting surface to lowest point of screen is 6.05"

NOTE: Weld or braze the pick-up tube to the pump cover for off-highway applications.

3955281

Oil Pump Pick-Up (not shown)

- Distance from pump mounting surface to lowest point of screen is 4.88"

NOTE: Weld or braze the pick-up tube to the pump cover for off-highway applications.

6269895

Oil Pump Screen (not shown)

- Distance from pump mounting surface to lowest point of screen is 4.94"

NOTE: Weld or braze the pick-up tube to the pump cover for off-highway applications.



A Windage Tray



B Windage Tray



C Windage Tray, 572 Engine



D Oil Pump & Pick-Up, 572 Engine



E Oil Pump Shaft

Oil Filter Adapter **F**Oil Cooler Bypass Valve **G**Engine Oil Primer **H**Distributor **I**Distributor, Billet HEI **J**Distributor, Adjustable Slip Collar **K****F. 3952301****Oil Filter Adapter**

- Mounts a spin-on cartridge oil filter
- Contains a filter bypass valve used on all V-8 engines

G. 25013759**Oil Cooler Bypass Valve**

- For high-performance and Bowtie big-blocks with 4-bolt main bearing caps
- Must be installed in the rear hole behind the oil filter adapter bolt to route oil through the cooler

24241872**Magnetic Drain Plug (not shown)**

- Catches and holds small pieces of metal before they can cause engine damage

H. 12368084**Engine Oil Primer**

- Use to lube engine bearings prior to starting a new or rebuilt engine
- Fits both big-block and small-block engines

DISTRIBUTORS AND IGNITION SYSTEMS

Components in this group are interchangeable with small-block Chevrolet V-8s.

NOTE:

GM Performance Parts distributors cannot be used with "tall deck" Bowtie block P/N 14044808.

I. 93440806**Distributor**

- Has melonized cam drive gear P/N 10456413 for steel roller camshafts
- Required on all crate engines and roller camshafts that are made of steel
- If engines are assembled not using this gear it may affect your engine warranty
- Use connector wire P/N 8917052 to ignition

J. 88961867**Distributor, Billet HEI**

- Most powerful and durable distributor for small- or big-block Chevrolet engines that GM Performance Parts has serviced
- For strength and high rpm stability the oversized shaft is guided by a sealed ball bearing and long sintered bushing
- Treated coating on the shaft provides low friction
- Advance assembly features chromemoly weights that slide on nylon pads for smooth, timing advancement through the entire rpm range
- Vacuum advance canister and billet aluminum housing is CNC-machined for greater accuracy
- Has melonized cam drive gear P/N 10456413 for steel roller camshafts
- High quality cap with brass terminals

10456413**Distributor Gear (not shown)**

- Melonized steel gear is required on all crate engines and roller camshafts that are made of steel
- If engines are assembled not using this gear it may affect the warranty

NOTE:

This gear is part of distributor assembly P/N 1104067

K. 10093387**Distributor, Competition Adjustable Slip Collar**

- Designed primarily for competition use
- Billet aluminum housing, ball bearing guide, and adjustable mechanical advance assembly
- Magnetic pickup provides accurate trigger signals to GMPP Heavy Duty Ignition P/N 10037378 (not included)
- Uses a standard Chevrolet V-8 cap and rotor
- Will clear most induction systems
- Slip collar that can be adjusted to make up for block or head machining, or a tall-deck Bowtie block

INTAKE MANIFOLDS, GASKETS & COMPONENTS

A. 14097092

Intake Manifold, Oval Port (iron)

- Economical iron four-barrel intake manifold
- Fits all 396–502 engines with large oval port heads
- Use oil splash shield P/N 346243 (if required)

B. 19131359

High-Rise Intake Manifold, Rectangular Port

- Aluminum, dual-plane manifold can be used with high-performance cast iron or aluminum rectangular port heads
- Same as used on 454 HO and 502 HO engine assemblies

NOTE:

Ports do not match Bowtie cylinder heads P/N 14044861 and P/N 14044862, or symmetrical port heads P/N 10051128 and P/N 10051129.

C. 12363420

High-Rise Intake Manifold, Oval Port

- Designed for all 396–502 engines with GM aluminum heads (1975 and earlier) and large oval port iron heads
- Has a dual-plane design with spread bore flange and a dual bolt pattern
- Has no provisions for a hot air choke, but will accept a divorced choke or electric choke
- Accepts air conditioning and alternator brackets
- Use intake manifold gasket P/N 12366985 and bolt kit P/N 12367959

NOTE:

May not fit on many Corvette models. Manifold height is 6" at the rear and 4.5" in front. Check for hood clearance before ordering.

12363421

High-Rise CNC-Port-Matched Intake Manifold, Oval Port (not shown)

- Similar manifold design as P/N 12363420 (see above), but it is "CNC" port-matched to GM Performance Parts oval port aluminum cylinder heads

D. 12363406

Intake Manifold, Oval Port (Holley carburetors)

- Same as manifold P/N 12363420 (see above), but designed for use with a Holley carburetor
- Dual-plane design requires bolt kit P/N 12367959, which includes 16 bolts (8740 chromemoly 3/8-16 x 1.5" with 3/8" hex head and 16 5/8" O.D. washers), and manifold gasket kit P/N 12366985
- Accepts air conditioning and alternator brackets and a late-model water neck

NOTE:

Will not fit production Corvettes, and may not fit Chevelles. Manifold carb flange height is 4.45".



A Intake Manifold, Oval Port (iron)



B High-Rise Intake Manifold, Rectangular Port




C High-Rise Intake Manifold, Oval Port



D Intake Manifold, Oval Port (Holley carburetors)



Don't Forget those corresponding parts!
See the chart on page 338 for specifics.

CNC-Port-Matched Intake Manifold, Oval Port (Holley carburetors) **E**Intake Manifold, ZZ572/620 Engine **F****E. 12363407** **CNC-Port-Matched Intake Manifold, Oval Port (Holley Carburetors)**

- Same as P/N 12363406 (see previous page), except it has been CNC-port-matched for GM aluminum oval port heads with large oval port heads (1975-and-older), and all aluminum heads with oval ports

F. 88961161 **Intake Manifold, ZZ572/620 Engine**

- Aluminum single plane intake manifold is used on the ZZ572/620 engine
- The carburetor flange is for a 4150-style carburetor
- Use intake gasket P/N 88962213
- For tall-deck blocks



Don't Forget those corresponding parts!
See the chart on page 338 for specifics.

Zora Arkus-Duntov

In many ways, Zora Arkus-Duntov was the father of high-performance at General Motors. Coming on board because he loved the potential of the Corvette, Arkus-Duntov soon headed up the high performance efforts within the company.

A racer at heart, Arkus-Duntov didn't engineer from an ivory tower. When the Corvette was improved with Ed Cole's small-block and Arkus-Duntov's chassis work, the Belgian-born genius drove the car at the Pikes Peak Hill Climb, setting a stock car record. He then took to the Daytona Beach course and set a flying mile record at over 150 miles per hour.


An expert at valvetrain geometry, Arkus-Duntov is remembered for the legendary Duntov high-lift camshaft, and he also helped bring fuel injection technology to the Corvette (and other GM models) in the late 1950s.

But, his most lasting legacy was his belief (and proof) that a well-made, performance-minded lineup of cars could win over the American public and change Chevrolet's image as a conservative, utilitarian brand, into one of high-performance, with its marquee nameplate being his beloved 'Vette.



Zora Arkus-Duntov organized a record-setting session with a trio of Corvettes on the sands of Daytona Beach, and set the flying mile speed record at 150.583 mph.

Intake Manifolds, Gaskets & Components Continued

A. 88962218 

Intake Manifold, ZZ572/720R Engine

- Aluminum single plane intake manifold is used on the ZZ572/720R engine
- The carburetor flange is for a Dominator-style carburetor
- Use intake gasket P/N 88962213
- For tall-deck blocks

B. 88965829

Carburetor Spacer, Dual Plane, One-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets style carburetors

C. 19155949

Carburetor Spacer, Dual Plane, Two-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets style carburetors

D. 88965830

Carburetor Spacer, Single Plane, One-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

E. 88965832

Carburetor Spacer, Single Plane, One-Inch, Dominator

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

F. 88965831

Carburetor Spacer, Single Plane, Two-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

G. 88966018

Carburetor Spacer, Single Plane, Two-Inch, Dominator

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back



A Intake Manifold, ZZ572/720R Engine



B Carburetor Spacer, Dual Plane, One-Inch



C Carburetor Spacer, Dual Plane, Two-Inch



D Carburetor Spacer, Single Plane, One-Inch



E Carburetor Spacer, Single Plane, One-Inch, Dominator



F Carburetor Spacer, Single Plane, Two-Inch



G Carburetor Spacer, Single Plane, Two-Inch, Dominator




Don't Forget those corresponding parts!
See the chart on page 338 for specifics.

Ram Jet Fuel Injection Kit, with MEFI-4 Electronics **H**Lower Manifold, 502 Ram Jet **I**Upper Manifold, 502 Ram Jet **J****H. 12499249****Ram Jet Fuel Injection Kit, with MEFI-4 Electronics**

- Retro-fit fuel injection kit is calibrated for a 502/502 GM engine and is the same as used on the Ram Jet 502 P/N 12499121
- May be used on other big-block applications by replacing the ECU unit with an aftermarket unit with the proper calibration
- Includes brackets, sensors, bolts, nuts, gaskets, and other small parts, including:

PART	DESCRIPTION	QTY
88962744	Service Manual	1
12489400	Diagnostic Trouble Code Tool	1
12490939	Lower Intake Manifold	1
12555320	Intake Manifold Oil Shield	1
12366985	Gasket Package	1
12367959	Bolt/Screw Package	1
12490505	Upper Intake Manifold	1
12489372	Upper Intake Manifold Gasket	1
12487372	Fuel Feed Hose	1
10216948	Tube Assembly—Fuel Press Regulator	1
88961968	Engine Harness Assembly	1
10456208	Knock Sensor	1
12489595	Bracket Assembly, Transmission Cable	1
12489596	Bracket Assembly, Transmission And Throttle Cable	1
12489597	Rod, Throttle Control	1
1104060	Distributor	2
1115491	Ignition Coil	1
12464482	Lower Intake Manifold	1
12464484	Upper Intake Manifold	1
17113524	Body Assembly Throttle	1
12490257	Air Cleaner Kit	1
12569240	MAP Sensor	1
25036751	Intake Air Temperature Sensor	1
17090919	Injector Assembly	8
17113222	Fuel Injector Retainer Kit	1
17120039	Rail Assembly, Multi-Port Fuel Injection	1
89060414	Fuel Pressure Regulator Assembly	1
88962718	Module Assembly Engine Cont.	1
15326386	Coolant Temperature Sensor	1

I. 12464482 **Lower Manifold, 502 Ram Jet**

- Aluminum lower portion of the intake manifold is used on Ram Jet 502 crate engine P/N 12499121
- Use with upper manifold P/N 12464484 (see below), upper manifold gasket P/N 12489372, and eight bolts P/N 12490255

J. 12464484 **Upper Manifold, 502 Ram Jet**

- Aluminum upper portion of the intake manifold is used on Ram Jet 502 crate engine P/N 12499121
- Use with lower manifold P/N 12464482 (see above), upper manifold gasket P/N 12489372, and eight bolts P/N 12490255



Don't Forget those corresponding parts!
See the chart on page 338 for specifics.

Intake Manifolds: Corresponding Parts

Part Number	Gaskets (Quantity)	Bolts (Quantity)	Engine Application
12464484	12366985 (1)	12497460 (1)	12499121, 12497323
12464482	12366985 (1)	12367959 (1)	12499121, 12497323
88961161	88962213 (1)	12367959 (1)	12498793
12363420	12366985 (1)	12367959 (1)	12498777, BB Oval Port High Rise
12363407	12366985 (1)	12367959 (1)	12496962, 12371171, CNC version of 12363406
19131359	12506106 (2)	10198997 (14), 9349918 (2)	12568774, BB Dual Plane
88962218	88962213 (1)	12367959 (1)	12498827

MANIFOLD ACCESSORIES & GASKETS

A. 12555320

Oil Shield

- Isolates hot engine oil from the air/fuel mixture

B. 10174981

Gasket Kit, 1965-'81 Oval Port Heads

- This kit is used on all 1965–1981 oval port iron cylinder heads
- Includes two gaskets

C. 12366985

Gasket, Aluminum Oval Port Heads

- Designed for big-block aluminum heads P/N 12363390, P/N 12363392 and P/N 12363399
- Use with manifold P/N 12363406, P/N 12363407, P/N 12363420, or P/N 12363421



A Oil Shield



B Gasket Kit, 1965-'81 Oval Port Heads



C Gasket, Aluminum Oval Port Heads

Bolt Kit, Intake Manifold **D**Water Neck **E**Air Cleaner, High-Performance Design **F**Air Cleaner, Classic Design **G****88962213****Intake Manifold Gasket (not shown)**

- Use on all big-block engines with rectangular intake port heads 396 through 572-cubic-inch
- Includes two gaskets

12506106**Gasket, 454 & 502 Engines (not shown)**

- Used on 454 and 502 engines; with restricted heat cross-over passages
- One gasket per package; order two per engine.

D. 12367959**Bolt Kit, Intake Manifold**

- For any big-block Chevrolet engine
- Includes 16 bolts: 3/8-16 x 1.5" with wide, underhead flange with a 7/16" hex head
- Rated at 170,000 psi and will give consistent torque load
- Includes 16 hardened flat washers

NOTE: Four of these washers are smaller in diameter for use around the front water passages.

Chrome Water Necks**E. 12342024****Water Neck**

- Chrome water neck with neoprene O-ring and chrome bolts
- For 1966-1975 Chevrolet, Camaro, and Chevelle V-8 engines

AIR CLEANERS**F. 12342080****Air Cleaner, Chevrolet-Logo High-Performance Design**

- 14" round high-performance style air cleaner has chrome lid with embossed Chevrolet name
- Fits most four-barrel and two-barrel carburetors

NOTE: Check clearance between hood and top of air cleaner. Minimum clearance is 3.75" from top of carburetor gasket area to underside of hood.

G. 12342071**Air Cleaner, Chevrolet-Logo Classic Design**

- 14" round classic-style air cleaner has chromed lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most four-barrel and two-barrel carburetors

CYLINDER BLOCKS

A. 88958630

Ecotec Race Cylinder Block

- Foundation for truly fast compacts
- Fully-machined aluminum block with 3.400" bores and 8.700" deck height
- Cylinders use steel liners machined for stainless steel O-rings and head gasket P/N 88958614
- High quality 1/2" head studs and 7/16" main studs are included

CYLINDER HEADS

B. 88958640

Ecotec High Performance CNC-Ported Cylinder Head

- Aluminum cylinder head is fully CNC-machined with high-performance-oriented ports and three-angle valve seats
- Deck surface has O-ring grooves
- Accepts a complete stock valvetrain
- Flow sheet included
- Uses head gasket kit P/N 88958614 (not included)

88958619

Ecotec "Street" CNC-Ported Cylinder Head (not shown)

- Aluminum cylinder head is fully CNC-machined with high-performance-oriented ports and three-angle valve seats
- Accepts a complete stock valvetrain
- Flow sheet included
- Uses stock head gasket
- Fits L61 2.2L only

C. 88958632

Exhaust Header Flange

- Use this .375"-thick steel flange as the starting point for your custom header system



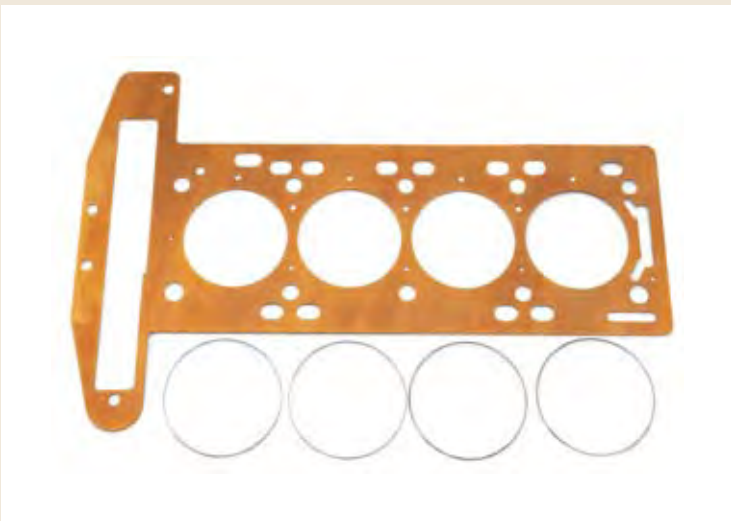
A Ecotec Race Cylinder Block



B Ecotec CNC-Ported Cylinder Head, Exhaust Ports & Combustion Chambers



B Ecotec CNC-Ported Cylinder Head, Intake Ports & Combustion Chambers

Ecotec CNC-Ported Cylinder Head, Top View & Exhaust Ports **B**Exhaust Header Flange **C**Ecotec Head Gasket & O-Ring Kit **D**

CYLINDER HEAD GASKETS & HEAD BOLTS

D. 88958614

Ecotec Head Gasket & O-Ring Kit

- Reduces cylinder bore distortion and improves cylinder sealing at high horsepower/boost levels
- Requires special machining to head and blocks per included instructions
- Includes copper head gasket and four one-piece stainless steel O-rings
- For use on head P/N 88958640

12499222

2.2L Cylinder Head Installation Kit (not shown)

- Comprehensive kit includes the gaskets and hardware necessary to install the cylinder head on the 2.2L engine
- Includes a cylinder head gasket assembly, four intake manifold gaskets, an exhaust manifold gasket, and special cylinder head bolts/screws

CAMSHAFTS

88958648

Ecotec Performance Camshaft Set (not shown)

- For increased power in naturally aspirated and turbocharged engines
- Duration @ 0.050" lift is 247° on the intake and 249° on the exhaust
- Maximum lift is 0.499" for the intake and 0.499" on the exhaust
- Lobe centerline is 116°

A. 88958611

Ecotec Intake Camshaft Blank

- Heat-treated camshaft blank for grinding custom-profile intake cam

B. 88958612

Ecotec Exhaust Camshaft Blank

- Heat-treated camshaft blank for grinding custom-profile exhaust cam

C. 88958613

Ecotec Adjustable Cam Gear Set

- Includes intake and exhaust
- Allows valve timing to be advanced or retarded up to 16° of crankshaft rotation

D. 88958615

Ecotec Neutral Balance Shaft Set

- High-performance neutral balance shaft set (two shafts) used to replace stock balance shafts

E. 88958618

Ecotec Billet Connecting Rod Set

- Set of four machined billet 4350 steel connecting rods
- Length is 5.888", rod bearing diameter is 1.888", and floating piston pin diameter is 0.829"
- Designed for use with billet crankshaft P/N 88958620



A Ecotec Intake Camshaft Blank



B Ecotec Exhaust Camshaft Blank



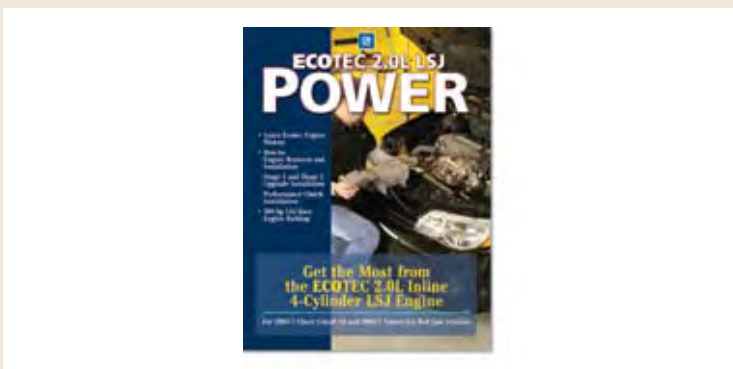
C Ecotec Adjustable Cam Gear Set



D Ecotec Neutral Balance Shaft Set



E Ecotec Billet Connecting Rod Set

Ecotec Crankshaft, Billet Steel **F**Fabricated Aluminum Intake Manifold **G**Sport Compact Build Book **H**Ecotec 2.0L LSJ Power Book **I**

CRANKSHAFTS

F. 88958620

Ecotec Crankshaft, Billet Steel

- Internally balanced, full-race, billet 4130 steel crankshaft
- 1.888" rod bearings and stock-size main bearings
- Reduced stroke of 3.505" for high rpm use

NOTE: Displacement is 2.0 liters with 3.400" bore.

88958631

Ecotec Crankshaft Pulley (not shown)

- Billet pulley has a reduced diameter to minimize horsepower-robbing drag of the alternator and air conditioning compressor

INTAKE MANIFOLDS, GASKETS & COMPONENTS

G. 88958629

Fabricated Aluminum Intake Manifold

- Accepts a 75mm LS1 throttle body

88958633

Ecotec Intake Manifold Flange Set (not shown)

- 0.555"-thick aluminum flanges can be used to fabricate your own custom intake manifold

BOOKS & MANUALS

H. 88958728 **NEW**

Sport Compact Build Book

- Describes all the parts and procedures needed to transform your stock Ecotec engine into a high-performance racing engine for drag racing or drifting competition
- Also includes race modifications for a 4T65E automatic transmission

I. 88958636

Ecotec 2.0L LSJ Power Book

Step-by-step guide to boosting the horsepower and torque in this versatile four-cylinder powerplant.

- Detailed instructions on engine removal/reinstallation
- Special instructions on Installing Stage 1 and Stage 2 upgrade kits
- Build a 300+ horsepower Ecotec!

A. 17802110

Cat-Back Exhaust Systems

Offered in two distinct sound options: The Performance System gives your Cobalt an "aggressive growl" while the Touring System provides a "throaty purr."

- T-304 stainless steel
- Mandrel bent tubing
- Semi-polished muffler embossed with GM Performance Parts logo
- GM-validated
- Two sound levels
- Single-outlet, production location

P/N	MODEL YEAR	DESCRIPTION
17802111	2005–08	Performance
17802110	2005–08	Touring

NOTE: Requires separate purchase of performance exhaust tip.

NOTE: Check local and state or provincial and territorial noise ordinances to ensure compliance.



A Cobalt Cat-Back Exhaust System and Exhaust Tip

B. 17802112

Performance Exhaust Tips

Add high-performance appearance to the Cat-Back Exhaust System on your Cobalt with one of these highly polished exhaust tips.

- Unique design
- Rolled lip
- Polished T-304 stainless steel

P/N	MODEL YEAR	DESCRIPTION
17802112	2005–08	Bowtie Logo, Angle Cut
17802113	2005–08	Bowtie Logo, Straight Cut

NOTE: Use only with GM Performance Parts Exhaust Systems.



B Performance Exhaust Tips



C Extrude Honed Exhaust Manifold

C. 19131972

Extrude Honed Exhaust Manifold

Provides improved flow over production exhaust manifold.

P/N	MODEL YEAR	DESCRIPTION
19131972	2005–08	SS/Supercharged (exc CA emissions)

NOTE: Fits production or GM Performance Part Exhaust Systems.



D 16" Wheel



E 18" Wheel

D. 17800578

16" Wheel

Personalize your Cobalt with attractive wheels.

- Chromed
- Available with matching center cap and lug nuts
- Validated to GM specifications

E. 17800195

18" Wheel

P/N	MODEL YEAR	DESCRIPTION
17800578	2005–08	AZ577, 16" Cast Chrome
17800195	2005–08	AP194, 18" Forged Polished

88958710

Heavy-Duty Front Steering Knuckle (not shown)

- Chevrolet Cobalt SS, Saturn ION Red Line
- Designed to provide enhanced load capacity for off road use
- Designed to use the existing interfaces to the bearing, brake caliper, strut and control arm
- Installation requires caliper mounting bolts P/N 11588889, lower ball joint bolt P/N 11589341 and nut P/N 11511799 included with the kit
- Bearing spacer plate needs modification for installation
- Specific suspension point geometry—may induce increased tire wear during street duty
- LH P/N 88958710 and RH P/N 88958711



Stage 3 Kit, 2006–2007 Cobalt SS Supercharged (see chart at right)

SUPERCHARGER UPGRADE KITS

17801947

Stage 1 Performance Upgrade Kit: Cobalt SS/ION Red Line

Increase the performance of your 2005–2007 Chevrolet Cobalt SS or Saturn ION Red Line with our Stage 1 Performance Upgrade Kit. This kit includes a recalibrated computer and high-flow injectors to meet the demands of more rpm and higher horsepower. The Stage 1 kit takes the factory-blown 2.0L Ecotec from 205 horsepower up to 230 horse. Keep the fun rolling with a performance upgrade kit for your daily-driven supercar. *Please note: premium (93-octane) fuel is required for Stage 1.*

Kit Includes:

- High-flow injectors
- PCM Reprogramming

17803229

Stage 2 Performance Upgrade Kit

Make that Cobalt SS or Saturn ION Red Line sit up and beg with our Stage 2 Performance Kit. Building on the success of our Stage 1 Kit, our GM Performance Parts engineers wanted to push the overachieving four-banger just a little bit more. Stage 2 takes your Cobalt SS or ION Red Line from a stock rating of 205 horsepower all the way up to 245 horsepower.

The key to making that power is increasing the boost on the factory supercharger by swapping out the stock blower pulley. Increased boost means more air getting pumped into the high-revving Ecotec, and the increased airflow requires more fuel. That's why GM high-flow injectors are included in the kit. Together, this Performance Kit will keep your Cobalt/ION Red Line boosted ahead of the competition. *Please note: premium (93-octane) fuel is required for Stage 2.*

Kit Includes:

- High-flow injectors
- Supercharger pulley
- Correct length supercharger belt
- PCM Reprogramming

17803230

Stage 1 to Stage 2 Upgrade Kit

If you've already got our Stage 1 upgrade kit, and you just have to have some more, this upgrade kit is what you are looking for. This takes the 230 horse level supercharged 2.0L Ecotec to 245 horsepower.

Kit Includes:

- Supercharger pulley
- Correct length supercharger belt
- PCM Reprogramming

NOTE:

Due to the display rate of the production tachometer in 1st and 2nd gears, the tachometer may not display 7000 RPM at fuel cutoff.



Stage 1 Performance Upgrade Kit: Cobalt SS/ION Red Line

Stage 3 Kit for Cobalt SS/ION Red Line

Take your Cobalt SS or ION Red Line to the next level with our Stage 3 Off-Road kit! The Stage 3 kit consists of the following:

- Smaller, 76mm supercharger pulley
- 2-pass intercooler end plate
- Unique PCM which includes a calibration for the smaller pulley, an adjustable rev limiter, a 100 octane mode, and a nitrous control algorithm

Our Stage 3 kit will take your supercharged Ecotec 2.0L engine to a whole new level of performance. Stage 3 takes horsepower output to 248 horsepower on 93 octane fuel and to 260 horsepower on 100 octane fuel. In addition to the power increase, you'll also get an adjustable rev limiter and calibration for a 50 shot of nitrous (nitrous kit not included). For best power, we recommend also installing a high-flow exhaust.

This PCM is equipped with a user adjustable rev limit from 6750 to 8000 rpm. The rev limit is adjusted by pressing on the throttle pedal with the ignition on and engine off. At about 50% throttle the tachometer will show the current rev limit. Pressing the throttle further will adjust the rev limit in 250 rpm increments. This PCM is also equipped with a control scheme for the equivalent of a 50-horse shot of Nitrous. The PCM will automatically provide the proper spark and fuel for Nitrous up to 500 rpm below the current selected rev limit when the trigger is activated.

NOTE:

The Stage 3 Kit is for off-road use only. The Stage 3 upgrades are meant for off-road use only and are not certified to be emissions legal. The vehicle's air conditioning is disabled by the Stage 3 PCM.

NOTE:

This kit is an upgrade to Stage 2. It requires the following parts from the Stage 2 kit: high-flow fuel injectors, pulley adapter hub, and serpentine belt.

Kits

88958718	Stage 3 Kit, 2005 Cobalt SS Supercharged
88958719	Stage 3 Kit, 2006–2007 Cobalt SS Supercharged
88958715	Stage 3 Kit, 2004 ION Red Line
88958716	Stage 3 Kit, 2005 ION Red Line
88958717	Stage 3 Kit, 2006–2007 ION Red Line

Parts List

88958721	Intercooler Endplate, 2 Pass Style
12610641	PCM, Stage 3, 2004 ION Red Line
12610642	PCM, Stage 3, 2005 ION Red Line
12610643	PCM, Stage 3, 2006–2007 ION Red Line
12610644	PCM, Stage 3, 2005 Cobalt SS Supercharged
12610645	PCM, Stage 3, 2006–2007 Cobalt SS Supercharged



Stage 2 Performance Upgrade Kit

V-6 90° ENGINE BLOCK QUICK REFERENCE CHART

Part Number	10205294	10134371	10134351
Block Material	Cast Iron	A356-T6 aluminum	A356-T6 aluminum
Cylinder Wall Type	Non-Siamesed	Siamesed	Siamesed
Cylinder Deck Height	9.025"	9.025"	9.025"
Cylinder Bore Range	4.000"	4.125"	4.125"
Number Bearing Cap Bolts	2	4	4
Cap Bolt Orientation	Straight	Splayed (20 deg)	Splayed (20 deg)
Bearing Cap Type	Cast iron	8620 steel	8620 steel
Crankshaft Journal Dia.	350 size	350 size	400 size Oil Sump Type
Wet	Wet	Dry	Crankshaft Seal Type
2 pc	2 pc	2 pc	
Design Max Stroke	3.75"	4.00"	4.00"
Weight (lbs; bare)	N/A	78	78
Intended Usage	Discontinued	Professional competition	Professional competition
Non-Standard Parts Required	Has fuel pump boss	No mechanical fuel pump boss	No mechanical fuel pump boss

V-6 90° ENGINE BLOCKS

10134371

Aluminum Racing Bare Block (350 ci main size) (not shown)

- Improved, new-design 90° V-6 A-356 aluminum racing block with 3.980" bores (maximum bore of 4.125")
- Will accommodate 4.000" stroke and can be built in displacements ranging from 3.0L to 5.2L
- Deck surface is 0.620" thick, with reinforced front and rear bulkheads
- Head bolt holes are blind-tapped to eliminate coolant leaks
- 4-bolt main caps are machined from 4340 chromemoly steel
- Block has an upgraded V-8-style oiling system
- Uses a two-piece rear main seal

A. 10134351

Aluminum Racing Bare Block (400 ci main size)

- Has the same features as block P/N 10134371 (see above), except it has 4.117" bores, a 2.65"-diameter main bearing bore and a provision for dry sump oiling
- Maximum recommended bore is 4.130"



A Aluminum Racing Bare Block (front)



A Aluminum Racing Bare Block (rear)

V-6 90° CYLINDER HEADS QUICK REFERENCE CHART

Part Number	Description	Casting Number	Material	Port Size	Port Type	Valve Angle	Chamber CC's	Int Vlv	Exh Vlv	Plug Type	Heat Riser	Rocker Stud	Notes
10134359	18° V-6	12480009	Aluminum	215	Raised	18 deg	43	2.15	1.62	Angled	No	Shaft	No seats/guides
12480009	18° V-6	12480009	Aluminum	215	Raised	18 deg	43	2.15	1.62	Angled	No	Shaft	As cast ports

18° Aluminum Cylinder Head (exhaust) **B**18° Aluminum Cylinder Head (top/intake) **B**18° Aluminum Cylinder Head (combustion chamber) **B**

V-6 90° CYLINDER HEADS

B. 10134359**18° Aluminum Cylinder Head**

- Low-port 18° aluminum cylinder head for maximum-effort competition engines
- Offers significant improvements over conventional head designs with 18° valve angles (vs. older 23° angles) and 43cc combustion chambers
- Spark plug holes are centrally located and valve centerlines are relocated
- Exhaust ports are high-flow
- Head face has an extra 0.080" of material for 9.1:1 compression, and up to 2.20" intake valves can be used
- Shallow wedge-shaped combustion chambers allow builders to achieve high compression ratios with small piston domes
- Heads do not include valve seats or guides
- Aftermarket shaft-mounted rocker arm assemblies and pushrods are required
- Piston domes and valve pockets must be matched to the revised combustion chamber design

12480009**18° Aluminum Cylinder Head (not shown)**

- Low-port 18° aluminum cylinder head for competition engines
- Identical to P/N 10134359 (see above), except that it has a new design intake port for Daytona Dash Racing Series

V-6 VALVE SPRINGS

12363215**Valve Spring (not shown)**

- Moderate-performance chrome silicone wire spring, as used in the 3.4L conversion package
- Produces 105 pounds of seat pressure at an installed height of 1.70" and 296 pounds open pressure at a height of 1.20"
- Use with retainer P/N 12363216 (see below)

12363216**Valve Spring Retainer (not shown)**

- Heavy-duty 4140 heat-treated steel retainer with 1.203" diameter for use with 11/32" valve stems
- Same part used in the 3.4L conversion package

V-6 90° PUSHROD GUIDEPLATES

14011051

Pushrod Guide Plate (aluminum Bowtie head) (not shown)

- Hardened steel guide plate has the correct pushrod spacing for aluminum Bowtie heads
- Should not be used with self-aligning rockers
- Pushrod slots are 0.365"

V-6 90° SPARK PLUG WIRES

A. 12361054

Spark Plug Wire Set, 90° V-6 (Chevy Bowtie logo)

- Designed for a 90° V-6, with 135° spark plug boots
- Route over the valve covers

12361060

Spark Plug Wire Set, 90° V-6 (GM Performance Parts logo) (not shown)

- Designed for a 90° V-6, with 135° spark plug boots
- Route over the valve covers



A Spark Plug Wire Set, 90° V-6

V-6 90° INTAKE MANIFOLDS, GASKETS & COMPONENTS

B. 14097284

Cast Iron Intake Manifold, Four-Barrel

- Low-profile, cast iron intake manifold accepts a Quadrajets four-barrel carburetor
- Designed for marine applications with no provisions for EGR

C. 10134390

Aluminum Intake Manifold, Four-Barrel

- High-performance aluminum manifold is used on all conventional-design 200/229/262 (3.8L and 4.3L) Chevrolet V-6 engines
- Designed to use with 390-cfm, 500-cfm, or 600-cfm 4150-style carburetors
- There is no provision for EGR
- Check manifold and carburetor-to-hood clearance before installation

NOTE: This manifold will not fit 18° head or 3800 V-6.



B Cast Iron Intake Manifold, Four-Barrel



C Aluminum Intake Manifold, Four-Barrel

Manifold Deflector **D**Raised Runner Intake Manifold Base **E**Raised Runner Intake Manifold Cover **F****D. 10134327****Manifold Deflector**

- Manifold airflow deflector is used with intake manifolds P/N 10051125 and P/N 10051126

E. 10051125**Raised Runner Intake Manifold Base (aluminum)**

- Cross-ram intake manifold is recommended for all maximum-performance competition engines
- Second-design box-style
- Designed for raised runner cylinder heads
- An air gap beneath the runners insulates the intake charge from engine heat

NOTE:

An aluminum plate should be mounted between the runner entries for optimum performance; see the Chevy Power manual for information. This manifold will clear a large-diameter HEI distributor.

F. 10051126**Raised Runner Intake Manifold Cover**

- Upper cover for use with Raised Runner Intake Base P/N 10051125
- Carburetor mounting flange fits standard flange and 4500-type four-barrel carburetors
- Carb pad is not drilled to allow the carburetor to be mounted per application

10185004**Splayed Valve Gasket Kit (not shown)**

- Used only with splayed-valve cylinder head P/N 10134394
- Includes two gaskets

V-6 90° CAMSHAFTS

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
10051147	Hydraulic roller tappet	I: 222 E: 222	I: .447 E: .447	114	Excellent power and torque for engines without balance shaft. Use only with roller tappet block.
10134321	Hydraulic flat tappet	I: 224 E: 224	I: .450 E: .460	112	High performance street and marine cam for 4.3L V-6. Use only with roller tappet block.

OLDSMOBILE

Books & Manuals

12480027

Oldsmobile High-Performance Manual (not shown)

- Contains proven methods for building power in Olds V-8 engines
- Contains a detailed list of casting numbers for most Oldsmobile V-8 engines

Wheels & Accessories

22551491

Olds Rocketparts Wheel Studs (not shown)

- Long, 12mm studs have rounded ends to make tire changes quicker in the pits
- Fits all GM hubs designed for 12mm studs

NOTE: Do not use with closed-end wheel nuts; bottom of the wheel nut on the stud can cause the wheel to separate from the vehicle.

Valve Covers

A. 22525295

Olds V-8 Aluminum Valve Cover

- Cast aluminum valve cover fits all production 307–455 Oldsmobile V-8 engines
- Can be used with five- and ten-bolt cylinder heads

NOTE: Sold as single piece. Order two per engine.

PONTIAC V-8 & SUPER-DUTY FOUR CYLINDER

Valve Covers

B. 25534420

301–455 Valve Covers

- Stylish covers fit 301–455 cubic-inch Pontiac engines manufactured from 1965–1979
- Designed for stock valvetrains and may not clear aftermarket rocker arms, springs, or stud girdles
- Each cover has one 1.22" hole on left side for oil fill cap, or grommet for PCV or fresh air inlet
- Covers have a natural aluminum finish with machined Pontiac name and insignia
- Includes two covers and grommet kit P/N 12341988

C. 10093393

Aluminum Valve Covers, "Pontiac Logo"

- Perfect for Pontiac-bodied vehicles powered by a Chevrolet-style small-block V-8
- Has no holes for PCV or oil fill, but has bosses for drilling them
- Designed for pre-1986 engines with perimeter hold downs
- Can be used with 18° heads

D. 12341643

Pontiac Big-Block Aluminum Valve Covers

- Cast aluminum competition valve covers
- Designed for the Pontiac racing cylinder head that bolts onto a Chevrolet big-block engine
- Designed to accept most roller rocker arms and support systems
- Pontiac name is on the top of the cover
- There are no holes for oil fill or PCV



A Olds V-8 Aluminum Valve Cover



B 301–455 Valve Covers



C Aluminum Valve Covers, "Pontiac Logo"



D Pontiac Big-Block Aluminum Valve Covers

Super-Duty Valve Cover **E**Aluminum Valve Cover, SB2.2 "Pontiac Logo" **F**Super-Duty Intake Manifold **G****E. 10031327****Super-Duty Valve Cover**

- Stout, brightly polished die-cast aluminum valve cover
- Functional and stylish addition to any Super-Duty four-cylinder engine
- Top half of the cover can be removed quickly for easy valve adjustments
- O-ring seal prevents oil leaks

F. 12480012**Aluminum Valve Cover, SB2.2 "Pontiac Logo"**

- Embossed with the Pontiac name

Intake Manifolds, Gaskets & Components**G. 10038470****Super-Duty Intake Manifold**

- Single-plane aluminum intake manifold for racing only
- Mounts a single standard-flange 4150-style four-barrel carburetor
- Runners are engineered to work with Super-Duty cylinder heads

NOTE: Does not fit production or high port special head P/N 10049801.

12371032**Gasket (not shown)**

- Designed for Super-Duty engines

NOTE: Does not fit high port special head P/N 10049801.

PONTIAC V-8 CAMSHAFTS

Part Number	Description	Duration @ .050" Lift (deg)	Maximum Lift (in)	Lobe Centerline (deg)	Technical Notes
12364043	Hydraulic flat tappet	I: 215 E: 225	I: .408 E: .407	N/A	For all 1955–1981 Pontiac V-8 engines with 8.5-10.0 C.R. and 1800–4000 basic rpm range. 50-state emissions legal.
12364044	Hydraulic flat tappet	I: 230 E: 240	I: .469 E: .469	N/A	For all 1955–1981 Pontiac V-8 engines with 9.5-11.0 C.R. and 2600–5800 basic rpm range. 50-state emissions legal.

STARTERS & ALTERNATORS

Flywheels with two different diameters are used on Chevrolet small-block, big-block, and 90° V-6 engines. Large flywheels are 14" in diameter and have 168 teeth on the starter ring gear. Small-diameter flywheels are 12.75" in diameter, with 153 teeth on the ring gear.

This difference in flywheel diameters requires two distinct starter housings. Starter noses used with large-diameter flywheels have two offset bolt holes, while starters for small flywheels have two bolt holes which are parallel to the back of the block. Most Chevy blocks are drilled for both types of starters.

Starters

A. 12361146

High-Torque Mini Starter

- Gear reduction starter is designed for 1958–1996 V-8 and all 90° V-6 engines
- Compact design provides increased clearance
- Weighs only 10.5 pounds and has a gear reduction of 3.75:1
- Equipped with a dual bolt pattern for 12.75" (153-tooth) and 14" (168-tooth) flywheels
- Housing can be rotated to clear exhaust systems
- Includes starter, mounting bolts, shims, gaskets, and electrical connectors

NOTE: *Not recommended for competition use.*

B. 12363128

High-Torque Mini Starter, Chrome

- Same as starter P/N 12361146 (see above), but with a chrome housing

C. 10465143

Lightweight Starter (remanufactured)

- Lightweight high-performance starter was originally used on 1993–1997 Camaros and Firebirds with the LT1 engine
- Can be used on any small-block or big-block engine with a 12.75", 153-tooth flywheel

D. 12606096

Lightweight Starter, Big-Block and Small-Block

- Gear reduction starter can be used on big-block and small-block engines with a 14", 168-tooth flywheel

E. 10465385

LS Series Starter

- Works with all LS series and Gen IV V-8 engines, including the LS1, LS2, LS3, LS6, LQ9, LQ4, L92 and LS7



A High-Torque Mini Starter



B High-Torque Mini Starter, Chrome



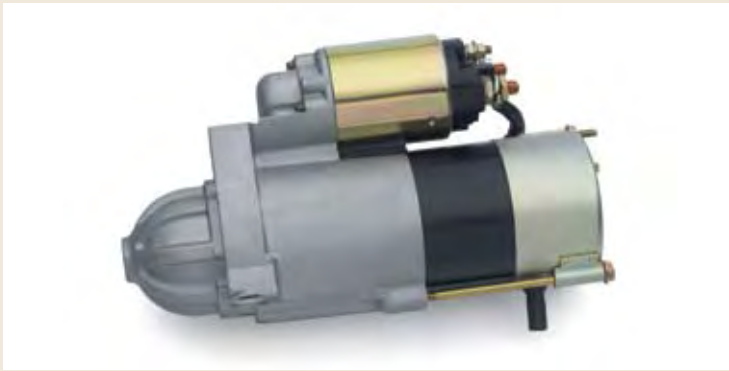
C Lightweight Starter 12.75" Flywheel (remanufactured)



D Lightweight Starter 14" Flywheel



Don't Forget those corresponding parts!
See the chart on page 353 for specifics.



LS Series Starter **E**



Alternator, 74 Amp (competition use) **F**

Alternators

F 1101641

Alternator, 74 Amp (competition use)

- Has an electronic regulator assuring safe and reliable operation with positive turn-on, integral load response control and over/under voltage monitoring
- The “P” and “F” terminals permit on-board computer interface and a new bridge has passivated chips with high reliability
- Integral capacitor eliminates wiring, suppresses radio interference and uses less space
- Dynamically-balanced rotor assembly provides stable operation at speeds to 18,000 rpm

88958690

Alternator, 90 Amp (competition use) (not shown)

- Proven in NASCAR use
- Similar to P/N 1001641
- CS121 design housing
- Serpentine belt pulley
- Hand assembled and dyno tested

Starters: Corresponding Parts

Part Number	Bolts (Quantity)	Engine Application
12361146	14097279 (1) 14097278 (1)	Small-Block (except LT or LS Engines)
12361146	12338064 (2)	Big-Block
10465143	14097279 (1) 14097278 (1)	Small-Block (except LT or LS Engines) and 12499711, 12499710, 12499712
10465143	12338064 (2)	Big-Block
12606096	12338064 (2)	Big-Block and 12499121, 12496962, 12497323, 12371171
12363128	14097279 (1) 14097278 (1)	Small-Block (except LT or LS Engines)
12363128	12338064 (2)	Big-Block
10465385	11588456 (1) 12561848 (1)	LS Series

SPARK PLUG WIRES 

GM Performance Parts spark plug wire kits are designed to fit your GM engine, eliminating the guesswork in selecting the correct length.



GM Performance Parts Spark Plug Wire Set; 90° Boots shown



Spark Plug Wire Set, 135° Boot



Chevrolet Bowtie Spark Plug Wire Set, 90° Boots

GM Performance Parts Logo Wires

These performance 8mm spark plug wires exhibit only 600 ohms per foot of resistance, with high noise suppression capabilities. Features include red wires with white GM Performance Parts insignia and black boots. Manufactured with double-wall silicone construction. Kits include a 10" coil wire for engines—such as the Ram Jet 350 and ZZ572 engines that have remote-coil HEI—four wire separators and HEI terminals and boots for the distributor cap.

Part Number	Description	Notes
12361056	Spark Plug Wire Set, Small-Block	Designed for a small-block, with 135° spark plug boots. Route over the valve covers.
12361057	Spark Plug Wire Set, Small-Block (90° Boot)	Designed for a small-block, with 90° spark plug boots. Route below the valve covers. Recommend wire loom kit: P/N 12496806.
12361058	Spark Plug Wire Set, Big-Block	Designed for a big-block, with 135° spark plug boots. Route over the valve covers.
12368383	Spark Plug Wire Set for GMPP Loom Kit, Big-Block	Custom-fit set designed to be used with black wire loom P/N 12495502.
12495078	Spark Plug Wire Set & Loom Kit, Big-Block	Supplied with wire set P/N 12368383 and black loom kit P/N 12495502.
12361060	Spark Plug Wire Set, 90° V-6	Designed for a 90° V-6, with 135° spark plug boots. Route over the valve covers.
12495519	Spark Plug Wire Set, LS Series V-8	Direct-fit wire set with factory-style boots and terminals.

Chevrolet Bowtie Logo Wires

These red wires share the same high quality features as the GM Performance Parts wires, but have the Chevrolet Bowtie logo in white.

Part Number	Description	Notes
12361050	Spark Plug Wire Set, Small-Block (135° Boot)	Designed for a small-block, with 135° spark plug boots. Route over the valve covers.
12361051	Spark Plug Wire Set, Small-Block (90° Boot)	Designed for a small-block, with 90° spark plug boots. Route over the valve covers. Recommend wire loom kit: P/N 12496806.
12361052	Spark Plug Wire Set, Big-Block	Designed for a big-block, with 135° spark plug boots. Route over the valve covers.
12368384	Spark Plug Wire Kit for GMPP Loom Kit, Big-Block	Custom-fit set designed to be used with black wire loom P/N 12495502 or chrome wire loom P/N 12342049.
12495079	Spark Plug Wire Set & Loom Kit, Big-Block	Supplied with wire set P/N 12368384 and black loom kit P/N 12495502.
12361054	Spark Plug Wire Set, 90° V-6	Designed for a 90° V-6, with 135° spark plug boots. Route over the valve covers.

GM Racing Wires

Part Number	Description	Notes
24502521	Spark Plug Wire Set	Superior quality racing plug wires used by NASCAR teams. Designed to route over the valve cover, with 135° spark plug boots. 50 ohm/ft premium cable covered with 8mm of silicone and a black abrasive resistant cover. Not for SB2 cylinder heads.



Don't Forget those corresponding parts!
See the chart on page 355 for specifics.

ⓘ Spark Plug Wires: Corresponding Parts

Part Number	Engine Type	Loom Number	Logo	Ends	Routing	Engine Application
12361056	Small-Block	12496806 OR 88891792	GMPP	135 degree	Over valve covers	Small-Block V-8
12361057	Small-Block	12496806 OR 88891792	GMPP	90 degree	Below valve covers	12499711: 350 HO Turn-Key, 12499710: FB 385 Turn-Key, 12499712: ZZ4 Turn-Key, 12499120: Ram Jet 350, 12496968: 350 HO Deluxe, 12495515: Ram Jet 350
12361058	Big-Block	N/A	GMPP	135 degree	Over valve covers	
12368383	Big-Block	12495502	GMPP	135 degree	Over valve covers	12499121: Ram Jet 502, 12497323: Ram Jet 502
12495078	Big-Block	Included in kit	GMPP	135 degree	Over valve covers	12496962: 502 Deluxe, 12371171: 502 Deluxe Kit
12361060	90 degree V-6	N/A	GMPP	135 degree	Over valve covers	
12495519	LS Series	N/A	None		Over valve covers	
12361050	Small-Block	N/A	Bowtie	135 degree	Over valve covers	
12361051	Small-Block	12496806	Bowtie	90 degree	Below valve covers	Small-Block with 90° spark plug boots
12361052	Big-Block	N/A	Bowtie	135 degree	Over valve covers	
12368384	Big-Block	12495502 OR 12342049	Bowtie	90 Degree	Below valve covers	
12495079	Big-Block	12495502	Bowtie	90 degree	Below valve covers	
12361054	90 degree V-6	N/A	Bowtie	135 degree	Over valve covers	
24502521	NASCAR	N/A	None	135 degree	Over valve covers	



LOOM KITS

Part Number	Description	Technical Notes
12496806	Wire Loom Kit, Small-Block	Stainless steel supports with the Bowtie insignia laser-cut in each of the six supports. Twelve retainers, bolts, and washers are supplied to bolt to the side of the head. Use with spark plug wire set P/N 12361051 and P/N 12361057.
12495502	Wire Loom Kit, Big-Block	Used on late-model big-block trucks. Supplied with one left-hand support P/N 12553397, one right-hand support P/N 12553398, three four-wire retainers P/N 12132223, two three-wire retainers P/N 12047523, two two-wire retainers P/N 12132229, and two single-wire retainers P/N 12132228.

Little Red Corvette

When popular recording artist Prince released his breakthrough hit “Little Red Corvette” in 1983, it is unlikely he realized the irony of his timing.

From 1953 until the present, there has been a new Corvette model every year—except 1983.

The 1983 ‘Vette was due to be launched in December of 1982, but the complete changeover in design delayed the release until March of 1983, when it was released as a 1984. Of the 44 prototype 1983s made, only one survives. It is located at the National Corvette Museum in Bowling Green, Kentucky.



IGNITION & ELECTRONIC CONTROL UNIT SYSTEMS

Ignition Components

A. 10037378

Ignition Controller

- Capacitive discharge ignition control can be used on four, six- or eight-cylinder racing engines
- Each spark is at full power from idle to racing rpm
- Below 3000 rpm there is a series of sparks that last for 20° of crankshaft rotation
- Ignition box is supplied with shock mounts

NOTE: Use with GM heavy-duty electronic distributors P/N 10051133 and P/N 10051134. Do not use with production HEI system.



A Ignition Controller

B. 10039932

Ignition Wire Harness (engine compartment-mounted)

- Will connect all GMPP heavy-duty electronic distributors to ignition controller P/N 10037378 when the control box is mounted in the engine compartment

C. 10037379

Rev Limiter for CD Ignition Controller

- Plugs directly into the GM High Performance CD Ignition Control P/N 10037378
- Rpm limit is set with plug-in rpm modules
- When engine reaches set limit, sparks are cut to cylinders
- Kit is supplied with 6000, 7000, and 8000 modules



B Ignition Wire Harness (engine compartment-mounted)

RPM Limit Module Kits

These kits are supplied with five rpm modules for the Rev Limiter P/N 10037379 (see above). Choose from the following:

10039933

5000 rpm Module Kit (not shown)

- Includes 5000, 5200, 5400, 5600, and 5800 rpm modules

10039934

6000 rpm Module Kit (not shown)

- Includes 6000, 6200, 6400, 6600, and 6800 rpm modules

10039935

7000 rpm Module Kit (not shown)

- Includes 7000, 7200, 7400, 7600, and 7800 rpm modules

10039936

8000 rpm Module Kit (not shown)

- Includes 8000, 8200, 8400, 8600, and 8800 rpm modules



C Rev Limiter for CD Ignition Controller

ELECTRONIC CONTROL UNITS & COMPONENTS CONTINUED



NEW

Controller and Wiring Harness, LS7

19166567 NEW**LS7 Controller Kit**

- Includes all the components required to run your GM Performance Parts crate engine (see chart below for detailed list)
- For individual engine controller, use P/N 19166569

19166568**LS2 Controller Kit**

- Includes all the components required to run your GM Performance Parts crate engine (see chart below for detailed list)
- For individual engine controller, use P/N 19166570

19201327 NEW**LS376/480 Controller Kit**

- Includes all the components required to run your GM Performance Parts crate engine (see chart below for detailed list)
- For individual engine controller, use P/N 19201790

19201861 NEW**LS3 Controller Kit**

- Includes all the components required to run your GM Performance Parts crate engine (see chart below for detailed list)
- For individual engine controller, use P/N 19201859

The kits above (P/N 19166567, 19166568, 19201327, 19201861) include the following items:

19166573	Engine Harness
12576410	Mass Air Flow Meter
19166574	Mass Air Flow Meter Mounting Boss
10367117	Accelerator Pedal Assembly
12581966	Oxygen Sensor (Qty 2 Per Kit)
15156588	Oxygen Sensor Mounting Boss (Qty 2 Per Kit)
19171935	Instruction Sheet

NOTE:

The controller will not function in a production vehicle unless all kit components are used. These controllers will not operate any of the production gauges. Aftermarket gauges are required.



NEW

LSX Ignition Controller

19171130 NEW**LSX Ignition Controller**

- Distributorless plug-in ignition system for carbureted LS engines with 58X reluctor wheel
- Several pre-programmed timing curves provided
- Supplied software allows you to create custom vacuum advance curves, timing curves, program lo and hi rpm rev limiter and step retard
- Plugs into stock sensors (not provided)
- MAP sensor provided
- Compatible with all LS series ignition coils

Chevy Small-Block V-8 (LS Style)**12480112****ECU, LS1 V-8 (not shown)**

- Calibrated for the LS1 Camaro/Firebird engine and can be used in a street rod or other early-model vehicles

NOTE:

Use with Camaro/Firebird LS1 engine and wire harness P/N 12480113.

12480054**ECU, LS1/ASA Racing (not shown)**

- LS1 ECU is similar to P/N 16238212, but is calibrated for ASA racing only
- Use with wire harness P/N 12480055

12480055**Wire Harness, LS1, ASA Racing (not shown)**

- Designed for ASA racing ECU P/N 12480054 only

ELECTRONIC CONTROL UNITS & COMPONENTS

Chevy Small-Block V-8 (Gen I)

88962717

MEFI 4 ECU, Ram Jet 350 (not shown)

- Replacement ECU for all Ram Jet 350 crate engines, MEFI 3 P/N 12495515 or MEFI 4 P/N 12499120
- MEFI 4 Ram Jet engine is a closed loop system that gives a much smoother idle and improved performance

NOTE:

Replacing the ECU on MEFI 3 Ram Jet engine P/N 12495515 requires using new wire harness kit P/N 12499116, or use jumper wire P/N 88963118 to use MEFI 4 ECU as an open loop system.

88961967

MEFI 4 ECU Wire Harness, Ram Jet 350 (not shown)

- Designed to be used with the MEFI 4 Ram Jet 350 P/N 12499120 and MEFI 4 ECU P/N 88962717

12499116

MEFI 4 ECU & Wire Harness Kit, Ram Jet 350 (not shown)

- Used to convert a Ram Jet 350 from MEFI 3 to the newer MEFI 4 design, which provides a better idle through closed-loop operation
- Includes ECU module P/N 88962717, wire harness P/N 88961967, oxygen sensor P/N 25312200, intake air temp sensor P/N 25036751, oxygen sensor fitting P/N 15156588

NOTE:

ECU is programmed with a "green mode" that controls the rpm for the break-in period. From start up to the end of first hour is 4000 rpm, second hour is 4500 rpm, and third hour is 5500 rpm.

15156588

Fitting, Oxygen Sensor (not shown)

- Used on all MEFI 4 electronic controlled ignition systems
- Should be welded into the exhaust pipe so the oxygen sensor can be screwed in to the exhaust system

19171873

MEFI 3 ECU Wire Harness, Ram Jet 350 (not shown)

- Designed for use with the MEFI 3 350 Ram Jet engine P/N 12495515 using ECU P/N 12489488

Chevy Big-Block V-8

88962718

ECU, Ram Jet 502 (not shown)

- Replacement ECU for all Ram Jet 502 engines (MEFI 3 P/N 12497323 or MEFI 4 P/N 12499121)
- MEFI 4 Ram Jet engine is a closed loop system that gives a much smoother idle and improved performance

NOTE:

Replacing the ECU on MEFI 3 Ram Jet engine P/N 12497323 requires using new wire harness kit P/N 12499117 or use jumper wire P/N 88963118 to use MEFI 4 ECU as an open loop system.

12499117

MEFI 4 ECU & Wire Harness Kit, Ram Jet 502 (not shown)

- Module/harness kit is used to convert a Ram Jet 502 from MEFI 3 to the newer MEFI 4 design, which offers improved idle and performance through a closed loop system
- Includes module P/N 88962718, wire harness P/N 88961968, oxygen sensor P/N 25312200, intake air temp sensor P/N 25036751 and oxygen sensor fitting P/N 15156588

NOTE:

The ECU is programmed with a "green mode" that controls the rpm for the break-in period. From start up to the end of first hour is 4000 rpm, second hour is 4500 rpm, third hour is 5500 rpm and fourth hour is 5800 rpm.

88963118

Jumper Harness, MEFI 3 to MEFI 4 (not shown)

- Allows an MEFI 4 module to be used with an MEFI 3 wiring system (to stay as an open loop system)

88958621

PROM, 502 Truck Conversions (1991–1993) (not shown)

- Used in the 502 emission-legal engine conversions for 1991–1993 trucks

12489494

MEFI 3 ECU Harness, 502 (not shown)

- Designed for the MEFI 3 ECU P/N 12489493 on the MEFI 3 Ram Jet 502 engine P/N 12497323
- Part of engine kit P/N 12499121

88961968

MEFI 4 ECU Harness, Ram Jet 502 (not shown)

- Used in the MEFI 4 Ram Jet 502 P/N 12499121 with the MEFI 4 closed loop oxygen sensor-equipped system
- Use with MEFI 4 ECU P/N 88962718

DISTRIBUTORS & COMPONENTS

High-quality, durable and dependable GM Performance Parts distributors optimize the performance of your GM engine. These distributors are interchangeable among standard GM small-block and big-block V-8s. For tall-deck engines, use adjustable slip collar distributor P/N 10093387.

NOTE:

Melonized distributor gear P/N 10456413 is required on all GM Performance Parts crate engines, or serious damage will occur

A. 93440806

Distributor, HEI

- Cast aluminum distributor for all small-block and big-block V-8 engine assemblies
- High-performance mechanical advance curve
- Vacuum advance canister included
- Use connector P/N 12167658 to attach tachometer and 12-volt power supply wire to distributor
- Includes module P/N 10482820, cap P/N 19110931, and rotor P/N 19110934



A Distributor, HEI

Distributor, Billet HEI **B**Distributor, Ram Jet 350 & Ram Jet 502 **C**Distributor, Adjustable Slip Collar **D****B. 88961867****Distributor, Billet HEI**

- CNC-machined billet aluminum housing provides great strength
- Ball bearing guide, oversized shaft and long sintered bushing for stability
- Offers mechanical advance and vacuum advance
- Includes brass terminal cap
- Use connector P/N 12167658 to attach tachometer and 12-volt power supply wire to distributor

C. 1104060**Distributor, Ram Jet 350 & Ram Jet 502**

- Used on the fuel-injected Ram Jet 350 and Ram Jet 502
- Includes ignition module P/N 10482830, cap P/N 19166099, and rotor P/N 10477219

1103952**Distributor, Late-Model EFI (not shown)**

- Used on late-model V-8 engines with fuel injection and computer controls
- Kit includes ignition module, cap, and rotor

D. 10093387**Distributor, Adjustable Slip Collar**

- Designed for competition use
- Billet aluminum housing
- Ball-bearing guide
- Adjustable mechanical advance
- Magnetic pickup
- Uses standard cap and rotor
- Adjustable slip collar for tall-deck blocks or to compensate for cylinder head or block machining

10456413**Distributor Gear (not shown)**

- Melonized steel gear is required on all GMPP crate engines
- Failure to use this gear will affect the engine warranty

NOTE: Supplied on distributor P/N 93440806.

12167658**Connector, HEI Distributor Power & Tachometer (not shown)**

- Used to attach the power and tachometer wires to the cap of the HEI distributor

12498335**Coil, HEI (not shown)**

- Production HEI coil

CHASSIS WIRING HARNESS

If you're building a hot rod or restoring an old musclecar, GM Performance Parts inclusive wiring harness kits make a great replacement for old, worn or damaged wires. These universal wiring kits come with the wires pre-installed on the fuse block, so wiring the vehicle is simply a matter of mounting the fuse block and routing the wires. Each wire is preprinted with the necessary application and is GM-color-coded. The kits also come with all necessary fuses, flashers, horn relay, tach leads, wire ties and grommets. High-temperature, 275°F wire is used—one size larger than factory specs. In all, it's everything you need to electrify your vintage GM car or truck!

NOTE:

Installation note: These universal systems will re-wire any car, truck or competition vehicle using a GM-keyed column. Kits come with extra-long wire to accommodate almost any vehicle.

12355691**12-Circuit Wiring Harness (not shown)**

- Basic system is wired for: heat/air conditioning, brake lights, coil, electric fan, emergency flashers, gauges/dash instruments, headlamps, horn, radio, turn signals, wipers, dome light and third brake light

12355693**18-Circuit Wiring Harness (not shown)**

- Includes wiring for all circuits in P/N 12355691
- Also includes: cigarette lighter, power windows, power door locks, electric fuel pump, back-up lights/cruise control and speakers

CARBURETORS, THROTTLE BODIES & AIR CLEANERS

GM Performance Parts has the right carburetor or throttle body to complete your new crate engine, or give life to your rebuilt engine. Then, top off your engine with one of our great looking air cleaners.

Carburetors

19170097

Carburetor, Holley 650-cfm (not shown)

- Holley 4150-style 650-cfm four-barrel carburetor
- Features show car quality polished finish
- Mechanical secondaries
- Electric choke
- Four-corner idle adjustment
- Power valve blowout protection
- Bolts and gaskets included
- Replaces Holley 4160 600-cfm carburetor P/N 12497147

A. 19170092

Carburetor, Holley 670-cfm

- Holley 4160-style 670-cfm four-barrel carburetor
- Features show car quality polished finish
- Dual-feed center-hung fuel bowls
- Vacuum secondaries
- Power valve blowout protection
- Quick change adjustable vacuum secondary
- Bolts and gaskets included

19170093

Carburetor, Holley 770-cfm (not shown)

- Holley 4160-style 770-cfm four-barrel carburetor
- Features show car quality polished finish
- Dual feed, center-hung float bowls
- Vacuum secondaries
- Automatic electric choke
- Quick change adjustable vacuum secondary
- Recommended for small-block and big-block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces Holley 4160 750-cfm carburetor P/N 12485506

B. 19170095

Carburetor, Holley 850-cfm

- Holley 4150-style 850-cfm four-barrel carburetor
- Features show car quality polished finish
- Mechanical secondaries
- Electric choke
- Four-corner idle adjustment
- Power valve blowout protection
- Custom calibrated for the ZZ572/620 crate engine
- Recommended for 502 crate engines and suitable for big-block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces Holley 4160 850-cfm carburetor P/N 12366996

NOTE: Carburetor can be recalibrated for use with other large-displacement engines.

C. 19170094

Carburetor, Holley 870-cfm

- Holley 4160-style 870-cfm four-barrel carburetor
- Features show car quality polished finish
- Dual feed, center-hung float bowls
- Vacuum secondaries
- Automatic electric choke
- Quick change adjustable vacuum secondary
- Recommended for 502 crate engines and suitable for big-block engines, including street, competition, towing and off-road vehicles
- Bolts and gaskets included
- Replaces Demon 4150 850-cfm carburetor P/N 88961560



A Carburetor, Holley 670-cfm



B Carburetor, Holley 850-cfm



C Carburetor, Holley 870-cfm



D Carburetor, Holley Dominator 1090-cfm



Carburetor Spacer, Dual Plane, One-Inch **E**



Carburetor Spacer, Dual Plane, Two-Inch **F**



Carburetor Spacer, Single Plane, One-Inch **G**



Carburetor Spacer, Single Plane, Two-Inch **H**



Carburetor Spacer, Single Plane, One-Inch, Dominator **I**



Carburetor Spacer, Single Plane, Two-Inch, Dominator **J**

D. 19170096

Carburetor, Holley Dominator 1090-cfm

- Dominator style 1090-cfm four-barrel carburetor
- Features show car quality polished finish
- Mechanical secondaries
- Four-corner idle adjustment
- Power valve blowout protection
- Custom calibrated for the ZZ572/720R crate engine
- Bolts and gaskets included
- Replaces Demon 4150 1090-cfm carburetor P/N 88962217

Throttle Bodies

17096144

Throttle Body, Ram Jet 350 (not shown)

- Used on the Ram Jet 350 crate engine
- Use throttle body gasket P/N 12551240 and bolt P/N 11516425 for installation
- Single 75 mm blade
- Flows 440-cfm

17113524

Throttle Body, Ram Jet 502 (not shown)

- Used on the Ram Jet 502 crate engine
- Use throttle body gasket P/N 10105379 and bolt P/N 11516344 for installation
- Dual 49.9 mm blade
- Flows 440-cfm

NOTE: Also fits L98 TPI engines.

E. 88965829

Carburetor Spacer, Dual Plane, One-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets and Holley style carburetors

F. 19155949

Carburetor Spacer, Dual Plane, Two-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back
- Spacer accepts Quadrajets and Holley style carburetors

G. 88965830

Carburetor Spacer, Single Plane, One-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

H. 88965831

Carburetor Spacer, Single Plane, Two-Inch

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

I. 88965832

Carburetor Spacer, Single Plane, One-Inch, Dominator

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

J. 88966018

Carburetor Spacer, Single Plane, Two-Inch, Dominator

- Fully CNC'd from billet aluminum
- GM Performance Parts logo machined into front and back

Air Cleaners

A. 12342071

Air Cleaner, Chevrolet-Logo Classic Design

- 14" round classic-style air cleaner
- Has chromed lid with embossed Chevrolet name and Bowtie attaching nut
- Fits most four-barrel and two-barrel carburetors
- Does not fit Dominator style carburetors

B. 12342080

Air Cleaner, Chevrolet-Logo High-Performance Design

- 14" round high-performance style air cleaner
- Has chrome lid with embossed Chevrolet name
- Fits most four-barrel and two-barrel carburetors
- Does not fit Dominator style carburetors

C. 12498951

Air Cleaner, Ram Jet 350

- Designed for use with throttle body on Ram Jet 350 crate engine
- Can be used on other applications

19172061

Air Cleaner, Ram Jet 502 (not shown)

- Designed for use with throttle body on Ram Jet 502 crate engine
- Can be used on other applications



A Air Cleaner, Classic Design



B Air Cleaner, High-Performance Design



C Air Cleaner, Ram Jet 350

FUEL PUMPS AND ACCESSORIES

D. 6415325

Fuel Pump, High Capacity, Small-Block

- For use on carbureted engines
- Pump has 7 psi shutoff pressure and free flowing rate of 30 gph
- Lower housing can be rotated to reposition inlet and outlet ports



D Fuel Pump, High Capacity, Small-Block



E Fuel Pump, Street Performance, Small-Block

E. 12355612

Fuel Pump, Street Performance, Small-Block

- For use on carbureted engines
- Pump has 7 psi shutoff pressure and a free-flow rating of 110 gph
- Lower housing can be rotated to reposition inlet and outlet ports

F. 12355613

Fuel Pump, Competition, Small-Block

- For use on carbureted racing engines
- Pump has 9 psi shutoff pressure and a free-flow rating of 115 gph
- Lower housing can be rotated to reposition inlet and outlet ports



F Fuel Pump, Competition, Small-Block



G Fuel Pump, Street Performance, Big-Block

G. 12355614

Fuel Pump, Street Performance, Big-Block

- For use on carbureted big-block engines built from 1965 through 1990
- Pump has 7 psi shutoff pressure and a free-flow rating of 100 gph
- Lower housing can be rotated to reposition inlet and outlet ports

Chrome Fuel Pump Block-Off Plates

H. 12341998

Small-Block Fuel Pump Block-Off Plate

- Plate has stamped Bowtie logo
- Special non-asbestos gasket included



H Small-Block Fuel Pump Block-Off Plate



I Big-Block Fuel Pump Block-Off Plate



Electric Fuel Pump **J**



Electric Fuel Pump, High-Output **K**



Fuel Pressure Regulator **L**



Fuel Filter **M**

J. 6472657

Electric Fuel Pump

- For use on all carbureted engines
- Flows 30–40 gph at 6–9 psi

K. 25115899

Electric Fuel Pump, High-Output

- Heavy-duty 12-volt electric rotary pump
- Flows 72 gph at 6–8 psi

12574986

Fuel Pressure Regulator Kit (not shown)

- Used on Ram Jet 502 crate engine
- Fits other fuel-injected engines

L. 10185094

Fuel Pressure Regulator

- Suitable for single- or dual-carburetor applications, as well as single-carb setups with nitrous

M. 854619

Fuel Filter

- High-capacity inline filter
- Suitable for all high-performance carbureted applications

19170365

Carb High Idle Solenoid (not shown)

- Used to increase idle speed on carbureted applications
- Increases idle when air conditioning compressor is engaged
- Fits all Holley 670, 770, 870 carburetors

SUPERCHARGERS

Turn your GM car into a true sport compact with the horsepower boost of a supercharger. By squeezing pressurized air into the engine, a supercharger dramatically increases the performance of your vehicle while maintaining excellent drivability. GM Performance Parts Roots-type supercharger systems are factory engineered and extensively tested to meet the same rigorous standards of GM's production vehicles and components. The supercharger systems are covered under the vehicle's warranty if installation is performed by a GM dealer. For the do-it-yourself installer, the parts are covered by a 12-month warranty. Kits include all mounting brackets and fasteners.

A. 12498660

**2.4L Twin Cam Supercharger
(Cavalier, Sunfire, Grand Am, Alero)**

- Add up to 50 horsepower and 40 lb.-ft. of torque!
- Designed for 2000–2002 GM vehicles equipped with the 2.4L Twin Cam engine (engine code RPO LD9)
- Includes all mounting brackets, air ducts, adapters, Gen II MAP sensor and spark plugs
- Can be installed with normal hand tools
- Includes new serpentine drive belt

NOTE: *Recalibration of Vehicle Control Module is included, but must be performed by an authorized GM dealership.*

B. 12498927

Pontiac Vibe Supercharger (automatic transmission)

- Add up to 30 percent more power and 18 percent more torque to your 2003–2004 Pontiac Vibe, for new power outputs of 170 horsepower and 150 lb.-ft. compared to the stock 1.8L engine
- Supercharger produces up to 7.5 pounds of boost
- Includes mounting brackets, air ducts, serpentine drive belt, PCV hoses, new fuel injectors and add-on controller for calibration of the Vehicle Control Module

12499105

**Pontiac Vibe Supercharger (manual transmission)
(not shown)**

- Same as P/N 12498927
- Includes upgraded engine mounts

C. 17800003

Ecotec 2.2L Cavalier/Sunfire Supercharger Kit

- For '03-'05 2.2L Ecotec-powered Chevrolet Cavaliers and Pontiac Sunfires
- Upgrades power to 200 horsepower (up from stock 145 horsepower)
- Includes a supercharger, all necessary hardware, brackets, gaskets, and specific E.O. performance engine calibration
- Premium fuel required
- Supercharger P/N 12584331 available separately

12341998

Fuel Pump Block-Off Plate (not shown)

- Chrome plate has stamped Bowtie logo
- A special non-asbestos gasket is included



A 2.4L Twin Cam Supercharger



B Pontiac Vibe Supercharger



C Ecotec 2.2L Cavalier/Sunfire Supercharger Kit



Stage 2 Performance Upgrade Kit, Cobalt SS/ION Red Line **D**



Stage 3 Kit for Cobalt SS/ION Red Line **E**



Service Manual, Ram Jet 350 (MEFI 3) **F**



Service Manual, Ram Jet 502 (MEFI 3) **G**

17801947

Stage 1 Performance Upgrade Kit, Cobalt SS/ION Red Line (not shown)

- For '05-'07 Saturn ION Red Line and Chevrolet Cobalt SS only
- Enhances engine performance to 236 horsepower (up from stock 205 horsepower)
- Includes high-flow injectors & specific performance engine calibration
- Premium fuel required

D. 17803229

Stage 2 Performance Upgrade Kit, Cobalt SS/ION Red Line

- For '05-'07 Saturn ION Red Line and Chevrolet Cobalt SS only
- Enhances engine performance to 241 horsepower (up from stock 205 horsepower)
- Includes high-flow injectors, supercharger pulley, new special length supercharger belt & specific performance engine calibration
- Premium fuel required

17803230

Stage 1 to Stage 2 Upgrade Kit, Cobalt SS/ION Red Line (not shown)

- For '05-'07 Saturn ION Red Line and Chevrolet Cobalt SS with Stage 1 Performance upgrade kit already installed only
- Converts your Stage 1 kit to Stage 2, increasing performance from 236 horsepower to 241 horsepower
- Includes supercharger pulley, & new special length supercharger belt
- Premium fuel required

E. Stage 3 Kit for Cobalt SS/ION Red Line

Take your Cobalt SS or ION Red Line to the next level with our Stage 3 Off-Road kit!

The Stage 3 kit consists of the following:

- A smaller, 76mm supercharger pulley
- A 2-pass intercooler end plate
- A unique PCM which includes a calibration for the smaller pulley, an adjustable rev limiter, a 100 octane mode, and a nitrous control algorithm
- Please see page 345 for more information

88958721

Two Pass Intercooler Endplate Kit (not shown)

- Upgrade from Stage 3
- Kit includes: seal P/N 12584355, seal P/N 12584333, nipple P/N 10235669, and instruction sheet
- Go to tunersource.gmblogs.com for more information

SERVICE MANUALS

F. 12486611

Service Manual, Ram Jet 350 (MEFI 3)

- Covers the installation and service of the MEFI 3 Ram Jet 350 P/N 12495515

88962723

Service Manual, Ram Jet 350 (MEFI 4) (not shown)

- Covers the installation and service of the MEFI 4 Ram Jet 350 P/N 12499120

G. 12486610

Service Manual, Ram Jet 502 (MEFI 3)

- Covers the installation and service of the MEFI 3 Ram Jet 502 P/N 12497323

88962724

Service Manual, Ram Jet 502 (MEFI 4) (not shown)

- Covers the installation and service of the MEFI 4 Ram Jet 502 P/N 12499121

TRANSMISSIONS & COMPONENTS

Back your GM performance engine with a genuine GM transmission and torque converter. Transmissions from GM Performance Parts are brand-new—not cleaned-up rebuilds—and deliver smooth, dependable performance for a variety of high-torque applications. These new transmissions are purchased outright, so there's no need to deal with messy cores. Conversion kits allow the use of electronically controlled automatic transmissions in older and vintage vehicles, giving them the drivability and economic benefits of a modern overdrive transmission. All GMPP automatic transmissions include a new torque converter. All transmissions come with a 12-month warranty.

NOTE: *Installing an electronic automatic transmission in an older vehicle with a mechanical speedometer will require an aftermarket signal converter. Transmission assembly includes new torque converter.*

Transmissions

A. 19156259

Hydra-Matic 4L60-E Four-Speed Automatic Transmission (Gen III/IV)

- Electronically controlled four-speed overdrive transmission
- Suitable for engines producing up to 370 lb.-ft. of torque
- Has a two-piece case and bolts up to engines with a Chevy V-8 bellhousing bolt pattern
- Includes torque converter with stall speed of approximately 2300 rpm
- Gear ratios: 1st: 3.06, 2nd: 1.75, 3rd: 1.00, 4th: 0.70

NOTE: *Use with electronic controller P/N 12497316. Works with LS series V-8 engines (LS1, LS2, LS6; works with Gen I and II-style small-block engines if adapter kit P/N 19154766 is used).*

B. 19156260

Hydra-Matic 4L65-E Four-Speed Automatic Transmission (LS series V-8)

- Similar in design to the 4L60-E
- "L65" electronically controlled four-speed overdrive transmission is suitable for LS series V-8 engines producing up to 380 lb.-ft. or torque
- Features heavy-duty upgrades including five-pinion gearsets, heat-treated stator shaft splines, induction-hardened turbine shaft, seven-plate clutch, shot-peened output shaft and revised valve body calibration
- Includes torque converter
- Gear ratios: 1st: 3.06, 2nd: 1.62, 3rd: 1.00, 4th: 0.70

NOTE: *Use with electronic controller P/N 12497316. Works with LS series V-8 engines (LS1, LS2, LS6; works with Gen I & II-style small-block engines if adapter kit P/N 19154766 is used).*

C. 19156257

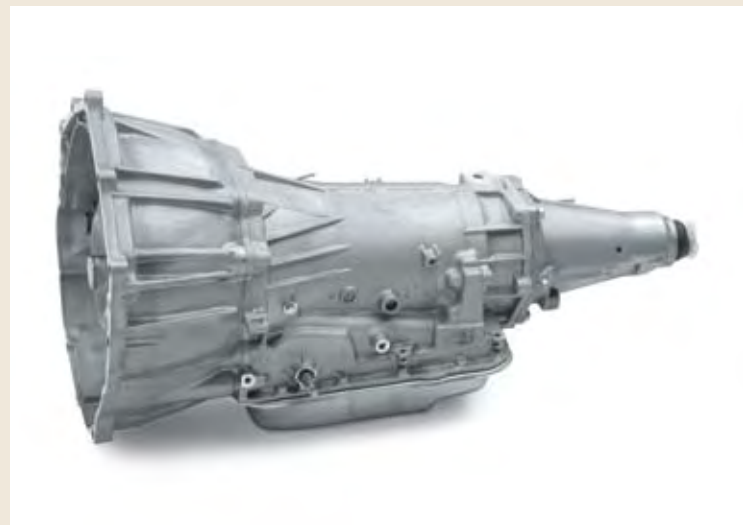
Hydra-Matic 4L85-E Four-Speed Automatic Transmission, 2WD

- The strongest 2WD performance transmission offered by GM Performance Parts
- Rated for a maximum torque output of 460 lb.-ft. in two-wheel-drive applications using a Gen I and II-style or big-block engine
- Die-cast aluminum case reduces weight to just 255 pounds
- Includes torque converter with stall speed of approximately 2300 rpm
- Gear ratios: 1st: 2.482, 2nd: 1.482, 3rd: 1.000, 4th: 0.750
- **Also available in 4WD as P/N 19156258**

NOTE: *Use with electronic controller P/N 12497316.*



A Hydra-Matic 4L60-E Four-Speed Automatic Transmission



B Hydra-Matic 4L65-E Four-Speed Automatic Transmission (LS series V-8)



C Hydra-Matic 4L85-E Four-Speed Automatic Transmission, 2WD



Transmission Controller, 4L60-E, 4L65-E, 4L80-E & 4L85-E Automatic **D**



4L60/700R4 Transmission Swap Kit **E**



Crankshaft Spacer **F**



8.625" Differential Cover **G**



Torsen Differential **H**



Transmission Adapter Kit **I**

12581400

F23 Manual Transmission '07 Cobalt/G5 (not shown)

- Non supercharged applications
- 3.84 ratio
- 05–07 Cobalt/G5 LE5, L6I

Controllers & Accessories

D. 12497316

Transmission Controller, 4L60-E, 4L65-E, 4L80-E & 4L85-E Automatic

- Required when using a GM electronically controlled automatic transmission (see page 366)
- Includes wiring harness, software and connector for lap-top computer
- Controller allows full programming of shifting, as well as part-throttle, wide-open throttle and shift firmness control
- Comes pre-programmed—simply enter rear tire diameter and axle ratio
- Wiring harness P/N 124894 included

E. 24502513

4L60/700R4 Transmission Swap Kit

- Adapts the 4L60 or 700R4 automatic transmission (non-electronic version) for use in early-model vehicles, with or without an engine management computer
- Includes instruction sheet, throttle valve spring for carbureted engines, a normally-closed fourth-gear clutch switch and wiring connector for the torque converter

F. 12563532

Crankshaft Spacer

- For use with Gen I style (Turbo 350/400, 700R4, 4L60, 4L60E and 4L85E) transmission on Gen III- and Gen IV-engines
- Also requires longer bolts P/N 12553332

DIFFERENTIAL COMPONENTS

G. 12498974

8.625" Differential Cover

- Heavy duty cast aluminum differential cover to fit your C/K 1500 series truck
- Doubles the fluid capacity of the differential allowing it to run cooler and ultimately extending the life of the differential
- Be sure to add the proper amount of fluid, see instructions

H. 88958682

Torsen Differential

- Used in GM 4T65E Racing's FWD drag racing programs
- Tested to 900+ horsepower
- In drag-race style, straight-line acceleration runs, this results in a close to ideal 50/50 power split to both drive wheels
- In cornering, while accelerating out of a turn, the Torsen biases power to the outside wheel, reducing inside-wheel spin
- Provides constant and infinitely variable drive
- Power is transferred automatically without the use of normal friction
- Extremely strong and durable, since it is gear operated
- No plates or clutches that can wear out
- Comes with new pinion gears already loaded

I. 19154766

Transmission Adapter Kit

- Allows installation of Gen III/IV style 4L60E/4L65E transmission onto Gen I and II engine
- Includes spacer ring, shims, dowels, bolts and flexplate
- Works on 1-piece rear main seal engines only

Cadillac CTS-V

A. 12499241

Shock Absorber Kit

- Performance-oriented kit consisting of two 45mm monotube front shocks and two 32mm self-leveling Nivomat rear shock absorbers
- Developed at the famed Nürburgring racetrack in Germany to work with the stock 2004–07 CTS-V suspension, providing exceptional road handling
- Nivomat rear shocks have a self-compensating hydropneumatic spring that helps maintain ride control, but also maintains level vehicle height when carrying passengers or cargo

NOTE:

Shock absorber kit improves handling, but may result in a harsher overall ride.

B. 88964607

Front Rotors

- Cross-drilled rotors for 2004–07 Cadillac CTS-V
- Sold as a pair

C. 88964608

Rear Rotors

- Cross-drilled rotors for 2004–07 Cadillac CTS-V
- Sold as a pair

25534462

CTS-V Transmission Cooler Kit (not shown)

- Developed for SCCA T2 racing series
- Improved cooling during sustaining high speed driving

Kit includes:

12480081	Pump
12480118	Clamp Pump Mount
12480087	Thermostat
25534489	Cooler
25534490	Bracket (Cooler Mount)
25534491	Fastener Kit
25534492	Plumbing Kit
25534493	Harness
25534482	Filter
25534494	Instruction Sheet

D. 25534463

Cadillac CTS-V Differential Cooler Kit

- Developed for SCCA T2 racing series
- Improved cooling during sustaining high speed driving

Kit includes:

12480081	Pump
12480118	Clamp Pump Mount
25534477	Cooler/Differential
12480087	Thermostat
25534478	Fastener Package
25534479	Mounting Bracket
25534480	Plumbing Kit
25534481	Wiring Harness
25534482	Filter
25534483	Assembly Instructions
25534499	Fitting Differential Outlet



A Shock Absorber Kit



B Front Rotors



C Rear Rotors



D Cadillac CTS-V Differential Cooler Kit



E Heavy Duty Front Steering Knuckle, Left-Hand



F Heavy Duty Front Steering Knuckle, Right-Hand



G Strut Tower Braces

Heavy-Duty Rear Stabilizer Bar **H**Heavy-Duty Front Stabilizer Bar **I**Tubular Rear Trailing Arm Kit **J**High-Performance Front Brake Upgrade Kit **K**Heavy-Duty Front Brake Caliper Brackets **L****Cobalt SS, Saturn ION Red Line****E. 88958710****Heavy Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Left-hand****F. 88958711****Heavy Duty Front Steering Knuckle for Chevrolet Cobalt SS, Saturn ION Red Line, Right-hand**

- Designed to provide enhanced load capacity for off-road use
- Designed to use the existing interfaces to the bearing, brake caliper, strut and control arm
- Installation requires caliper mounting bolts P/N 11588889, lower ball joint bolt P/N 11589341 and nut P/N 11511799 included with the kit
- Bearing spacer plate needs modification for installation
- Specific suspension point geometry—may induce increased tire wear during street duty

W-Body: 2000–2005 Monte Carlo & Impala; 1997–2003 Grand Prix**G. 12498648****Strut Tower Braces**

- Install these easy bolt-on braces on your car to reduce body flex for firmer feel when cornering
- Includes hardware and installation instructions

H. 12498642**Heavy-Duty Rear Stabilizer Bar**

- For reduced body roll, install this thick, 19mm rear bar
- Includes bushings

I. 12498643**Heavy-Duty Front Stabilizer Bar**

- Get the look and feel of performance with this sturdy 34mm front bar
- Includes bushings and end links

J. 12498649**Tubular Rear Trailing Arm Kit**

- Replace your car's production stamped steel parts with stronger tubular steel arms
- Rear suspension performance is increased with reduction in flex under load
- Includes two trailing arms

K. 12498644**High-Performance Front Brake Upgrade Kit**

- Attain increased braking performance with 12" vented disc rotors and high-performance brake pads
- Includes rotors, caliper mounting brackets, pads and bushings

NOTE:

Monte Carlo and Impala models already have this system installed as standard production. Will not fit stock Grand Prix "crosslace" wheels and spare tire may not fit. Heat generated by performance brake pads can cause rotor warping if not allowed to cool sufficiently between severe uses.

L. 12498646**Heavy-Duty Front Brake Caliper Brackets**

- Same brackets used in brake kit P/N 12498644 (see above)
- Includes brackets, bushings and pins
- Rotors equivalent to P/N 12498647 must be used

FACTORY ENGINEERED RACE PARTS F & Y CAR



T1 Suspension Package

3rd Gen Camaro & Firebird GM Racing Brake Components

For the racer, GM Performance Parts offers a line of superior brake components for the F-car. Originally developed for the 1996 Corvette, the brake components are modified to fit 1993–1999 Camaro and Firebird models. **They are intended for racing only and not street use.** Available components include:

12480038
Mounting Bracket, Race-Cut Rotor, Right-Hand Side (not shown)

12480039
Mounting Bracket, Full Rotor, Left-Hand Side (not shown)

12480041
Race-Cut Rotor, Left-Hand Side (not shown)

12480042
Race-Cut Rotor, Right-Hand Side (not shown)

12480044
Brake Pad Set, RR 1993–1997 (not shown)

12528689
Front Brake Caliper, Left-Hand Side (Production Corvette Grand Sport) (not shown)

12528690
Front Brake Caliper, Right-Hand Side (Production Corvette Grand Sport) (not shown)

Lightweight Racing Aluminum Driveshaft

Lose less power transferred from the transmission to the rear axle. These lightweight aluminum driveshafts are designed for F-cars equipped with the MM6 six-speed manual transmission:

12564004
Aluminum Driveshaft (not shown)
• 1998–1999 LS1 with MM6 transmission

Corvette

The Corvette engineering group and GM Racing collaborated to develop components that improves the durability and performance of production-based 1997–2004 Corvettes in professional Showroom Stock racing. GM Performance Parts offers these winning parts in convenient, comprehensive kits to make your Corvette's transformation from street car to racecar simple and straightforward.

NOTE: C5 racing parts are validated for off-road use only and are not intended for street car use. Modification with these parts will void the vehicle's warranty.

C5 Corvette

12480062

T1 Suspension Package

- Developed and approved for SCCA Touring 1 racing
- Comprehensive kit dramatically improves the handling of the Corvette
- Includes front and rear springs, front and rear stabilizer bars, stabilizer bar end links and isolators, upper and lower front A-arms
- Provides maximum performance when used with the SACHS shock absorbers (see below)

This kit includes the following items:

12480063	Spring-Front	12480064	Spring-Rear
12480065	Stabilizer Bar-Front	12480066	Stabilizer Bar-Rear
12480067	Stabilizer Link-Front and Rear (4 rqd)	12480068	Insolator-Front Stabilizer Bar (2 rqd)
12480069	Insolator-Rear Stabilizer Bar (2 rqd)	12480072	Upper Control Arm-Front LH
12480073	Upper Control Arm-Front RH	12480077	Lower Control Arm-Front LH
12480078	Lower Control Arm-Front RH		

12480094

SACHS Shock Absorber, Front (not shown)

- Tuned for use with the T1 suspension package (see above)
- Sold individually; order two per vehicle

12480095

SACHS Shock Absorber, Rear (not shown)

- Tuned for use with the T1 suspension package (see above)
- Sold individually; order two per vehicle

12480093

Camber Spacer Kit (not shown)

- Two kits required per wheel

Kit includes one of each of the following:

12480071	Camber Plate, Large	12480076	Camber Plate, Small
15688265	Bolt, Lower Control Arm	11516382	Nut, Lower Control Arm

12480080

C5 Transmission Oil Cooler Kit (not shown)

- Intended for cars equipped with the six-speed manual transmission and has been updated for use on Z06 and export-model Corvettes
- Includes transmission pump, cooler assembly, wiring harness, plumbing kit, filter bracket, thermal switch, brackets and fasteners

C6 Corvette

25534430

T1 Suspension Kit for C6 Corvette (not shown)

- Approved by the SCCA for racing in the T1 class
- Similar to the championship winning C5 kit, but made to fit the C6

This kit includes the following items:

25534418	Spring-Front	25534419	Spring-Rear
12480065	Bar-Anti-Roll Front	25534433	Bar-Anti-Roll Rear (4 rqd)
12480067	Link-Anti-Roll Bar (4 rqd)	12480068	Insolator-Front Anti-Roll Bar (2 rqd)
12480069	Insolator-Rear Anti-Roll Bar (2 rqd)	25534436	Arm-Front Upper LH
25534437	Arm-Front Upper RH	25534438	Arm-Front Lower LH
25534439	Arm-Front Lower RH	25534442	Arm-Rear Lower LH
25534443	Arm-Rear Lower RH		

5-Spoke Wheel Kit, 16" ZQ8-Style **A**Impala SS Wheel Kit **B**Camaro Wheel Kit, Aluminum with Painted Insert **C**Camaro Wheel Kit, Painted Silver **D**

WHEELS & ACCESSORIES

Perhaps nothing gives your vehicle a more distinct look than its wheels. GM Performance Parts wheels are factory engineered and give your vehicle an integrated, production appearance. And best of all, they look great!

ZQ8 Wheels

A. 12498299

5-Spoke Wheel Kit, 16" ZQ8-Style

- Originally designed for S-trucks with the ZQ-8 suspension
- 16" x 8" aluminum wheels have a -6.4mm rim offset and look great on 1987-and-older A-body and G-body cars; 1992-and-older F-body cars; and other vehicles that have the GM-style 5" x 4.75" five-lug bolt pattern
- Includes four wheels, Bowtie-insignia center caps, valve stems, wheel nuts and wheel nut caps

NOTE: If GMC-logo center caps desired, order cap P/N 9593761 (sold individually; order four per vehicle).

Corvette & Impala SS Wheels

B. 12495438

Impala SS Wheel Kit

- Original-equipment set of 17" wheels used on the 1994–1996 Chevy Impala SS
- Includes four 17" x 8.5" wheels, center caps, wheel nuts and valve stems

Camaro Wheel Kits

Production-style 17" x 9" aluminum wheels will fit 1993–2002 F-cars. The 10-spoke design is similar to wheels offered on 2002 Z28 models, including the 35th Anniversary model. The wheels have a 50mm offset and fit a 70.2mm hub. The kits include four wheels, four center caps, 20 wheel nuts and 20 wheel nut caps. Tires not included.

C. 12498899

Camaro Wheel Kit, Aluminum with Painted Insert

- Contains four wheels, four caps, 20 lug nuts and 20 lug nut caps

D. 12498900

Camaro Wheel Kit, Painted Silver

- Contains four wheels, four caps, 20 lug nuts and 20 lug nut caps

WHEEL HARDWARE & ACCESSORIES

12363989

Valve Stem Assembly, Rubber (not shown)

- Rubber valve stem has chrome metal sleeve and metal hex head
- Four per P/N

22551491

Olds Rocketparts Wheel Studs (not shown)

- Long, 12mm studs have rounded ends to make tire changes quicker in the pits
- Fits all GM hubs designed for 12mm studs

NOTE: Do not use with closed-end wheel nuts; bottom of the wheel nut on the stud can cause the wheel to separate from the vehicle.

TOOLS

A. 12363238

Engine Lift Bracket Kit

- Bolt to the ends of cylinder heads for secure removal or installation
- Contains two 7/16" thick brackets

NOTE: Must use with Grade 5 or higher bolts.

B. 12364087

Piston Stop

- Helps positively locate piston at Top Dead Center (TDC) during camshaft degreasing
- Made from brass with drilled center to vent cylinder pressure
- Screws into spark plug hole

C. 12368084

Engine Oil Primer

- Lubricates bearings prior to start-up of new or rebuilt engine
- For use on all Gen I and Gen II Chevy small-block V-8, all big-block V-8 and all V-6 engines

12346004

Pipe Sealant (50cc) (not shown)

- GM-recommended sealant

D. 88958663

Rocker Arm Ratio Checking Tool

- Checks 1.5 and 1.6 aluminum rocker arm ratios
- For use only with GM Performance Parts aluminum rocker arms

NOTE: Intended for use by racing sanctioning bodies.

E. 12364088

Valvetrain Organizer Tray

- Keeps your engine's valvetrain components correctly organized
- With provisions for rocker arms, pushrods, adjusting nuts and lifters



A Engine Lift Bracket Kit



B Piston Stop



C Engine Oil Primer



D Rocker Arm Ratio Checking Tool



E Valvetrain Organizer Tray

E-Z UP Shelter, 10' x 10', GM Performance Parts Logo **F**E-Z UP Shelter, 10' x 10', Bowtie Insignia **G**

RACETRACK ACCESSORIES

Instant Shelters

Made for GM Performance Parts by shelter manufacturer E-Z UP. Can be erected in less than 60 seconds without special assembly tools or ropes. They are available in 10' x 10', 10' x 15', and 10' x 20' sizes. Available in blue with either the Chevy Bowtie insignia or the GM Performance Parts logo. Side walls also available. See below for part numbers and descriptions:

F. 12364231
E-Z UP Shelter, 10' x 10', GM Performance Parts Logo

12364232
E-Z UP Shelter, 10' x 15', GM Performance Parts Logo
(not shown)

12364233
E-Z UP Shelter, 10' x 20', GM Performance Parts Logo
(not shown)

G. 12364234
E-Z UP Shelter, 10' x 10', Bowtie Insignia

12364235
E-Z UP Shelter, 10' x 15', Bowtie Insignia (not shown)

12364236
E-Z UP Shelter, 10' x 20', Bowtie Insignia (not shown)

12364229
E-Z UP Shelter Side Walls, 10' (blue, no logo)
(not shown)

12364230
E-Z UP Shelter Side Walls, 15' (blue, no logo)
(not shown)

BOOKS & MANUALS

Get the most from your vehicle and its GM Performance Parts. These books and manuals provide insider information and technical tips from direct sources within General Motors. They are invaluable for building an engine for the street or racetrack.

A. 24502488

Chevrolet Power

- Seventh edition of the time-tested guide to building competition engines for oval track racing, drag racing, road racing and marine applications
- Includes information on small-block, big-block, 90° V-6 and 60° V-6
- Contains more than 600 photos, illustrations, blueprints and charts

12486611

Service Manual, Ram Jet 350 (MEFI 3) (not shown)

- Covers the installation and service of the MEFI 3 Ram Jet 350 P/N 12495515

B. 88962723

Service Manual, Ram Jet 350 (MEFI 4)

- Covers the installation and service of the MEFI 4 Ram Jet 350 P/N 12499120

C. 12486610

Service Manual, Ram Jet 502 (MEFI 3)

- Covers the installation and service of the MEFI 3 Ram Jet 502 P/N 12497323

88962724

Service Manual, Ram Jet 502 (MEFI 4) (not shown)

- Covers the installation and service of the MEFI 4 Ram Jet 502 P/N 12499121

D. 88959384

LS1 Engine Kit Installation Guide

- Detailed instructions to help you install an LS1 engine in your older vehicle
- Includes notes and technical explanations for necessary parts, along with part numbers you can order from your GM dealer to get the job done easily

E. 88958786

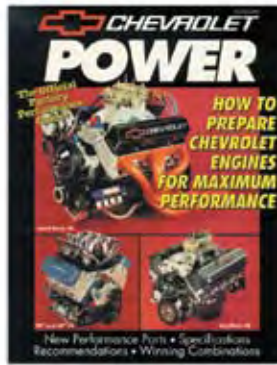
High-Performance Chevy LS1/LS6 V-8's

- 160 pages
- Discusses the LS series engine architecture and design, parts interchangeability along with step-by-step engine removal sequences for many GM vehicles with LS series engines
- Shows how to build, modify and tune high-performance LS engines

F. 12480027

Oldsmobile High-Performance Manual

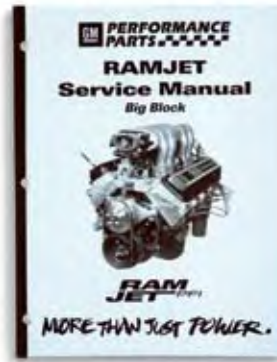
- Contains proven methods for building power in Olds V-8 engines
- Also contains a detailed list of casting numbers for most Oldsmobile V-8 engines



A Chevrolet Power



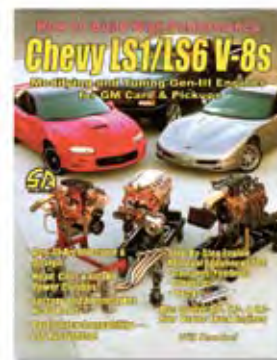
B Service Manual, Ram Jet 350 (MEFI 4)



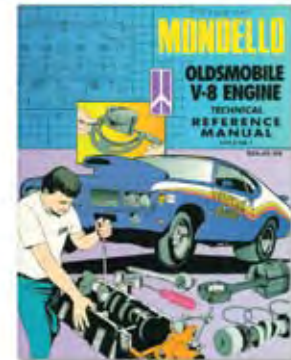
C Service Manual, Ram Jet 502 (MEFI 3)



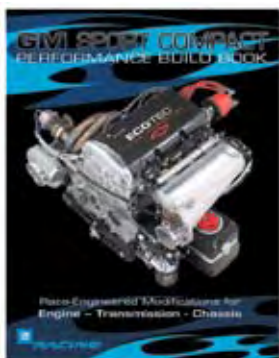
D LS1 Engine Kit Installation Guide



E High-Performance Chevy LS1/LS6 V-8's



F Oldsmobile High-Performance Manual

NEWSport Compact Build Book **G**Ecotec 2.0L LSJ Power Book **H**Motorsports Aurora V-8 Engine Handbook **I**Busch Grand National Engine Handbook **J**SuperTruck Engine Handbook **K****NEW**Solstice Performance **L****G. 88958728 NEW****Sport Compact Build Book**

- Describes all the parts and procedures needed to transform your stock Ecotec engine into a high-performance racing engine for drag racing or drifting competition
- Also includes race modifications for a 4T65E automatic transmission

H. 88958686**Ecotec 2.0L LSJ Power Book**

Step-by-step guide to boosting the horsepower and torque in this versatile four-cylinder powerplant.

- Detailed instructions on engine removal/reinstallation
- Special instructions on Installing Stage 1 and Stage 2 upgrade kits
- Build a 300+ horsepower Ecotec!

I. 24502570**Motorsports Aurora V-8 Engine Handbook**

- Covers component selection and recommendations, as well as engine building procedures, for engines used in specific racing series

J. 12370848**Busch Grand National Engine Handbook**

- Covers component selection and recommendations, as well as assembly procedures, for building a 358-cubic-inch engine for use in the NASCAR Busch Grand National series
- Includes specifications for bore clearances, bearing clearances, etc.

K. 12370844**SuperTruck Engine Handbook**

- Covers component selection and recommendations, as well as assembly procedures, for building a 358-cubic-inch engine for use in the NASCAR Craftsman Truck series
- Includes specifications for bore clearances, bearing clearances, etc.

88958668**Circle Track Techbook (not shown)**

- Technical manual for GM CircleTrack crate engines P/N 88958602, P/N 88958603 and P/N 88958604
- Covers all details regarding rebuilding specifications, including parts lists
- 47 pages with photos and details on valve machining, valve springs, camshafts and other factory specifications

L. 88958697 NEW**Solstice Performance**

- Shows how to take advantage of the performance capabilities of the Pontiac Solstice
- Loaded with almost 900 images, a plethora of part numbers and detailed technical information to help everyone from the beginner to the expert
- Shows how a Sports Car Club of America (SCCA) road racing Solstice is created, along with the buildup of a 'drifting' Solstice and a brute performance Solstice
- 132 pages, color

GM Licensed Products





Patented Innovations



Precision Welding



Plating more than four times thicker than some aftermarket parts.

Chrome & Engine Dress-Up Parts: The Real Story

GM Performance Parts entered the chrome and engine dress-up parts business in 1991, releasing more than 200 new part numbers simultaneously. From the very outset, GM Performance Parts made a decision that set it apart from all other brands, both OEM or aftermarket: for GM Performance Parts, quality would be the number one consideration!

This was a courageous decision because high quality chrome parts and low quality chrome parts often look the same. Unlike other brands, GM Performance Parts insisted that every part be worthy of its brand name: it would not permit those famous brand names to be slapped onto cheaply made parts. Seventeen years later, this decision has proven sound: enthusiasts have learned through experience that every dress-up part bearing a CHEVROLET or Bowtie Emblem will be worthy of their monetary investment or of the time to install it. Ironically, due to GM Performance Parts popularity and resulting high manufacturing volume, the cost of purchasing parts in this licensed product line is highly competitive with the cost of purchasing parts of uncertain quality.

When we say quality, what are we talking about? For stamped parts we're talking about the quality and specifications of the steel. For chrome plated parts we're talking mostly about the thickness of the underlying nickel plating which determines the level of corrosion resistance. And for all parts we're talking about optimized engineering designs, good fit, clear product descriptions, useful installation instructions where needed, strong visual appeal, and constant innovation.

Ordering Information:

You may conveniently purchase the licensed dress-up parts shown on the following pages from GM Performance Parts Authorized Centers and participating GM dealers. To locate products, additional product information, or receive technical support, please visit gmperformanceparts.com, and click on *Parts*.

ATTENTION GM DEALERS: The following pages are General Motors LICENSED PRODUCTS and must be ordered from the licensee. For detailed instructions see Bulletin number ACC06-039 or visit the gmperformanceparts.com website, click on *Dealer Info*, and then click on *Dealer Sites*.

Engine Dress Parts Continued

SUPER-LIGHT, FABRICATED ALUMINUM VALVE COVERS

These precision-welded fabricated aluminum valve covers are offered in two designs: For racing with no holes, and for street (where permitted) with the traditional 1.22 hole and GM-designed baffle. They have recessed Bowtie and CHEVROLET emblems, inlaid with classic Chevrolet red, billet mounting rails for maximum leak resistance, and weigh approximately 3 lbs (45%) less than stamped steel die-cast pairs! Sold in pairs.

A.-B.

Chevrolet Small-Block V-8, 1958-1986

- Clear anodized, tall, no baffle 141-800
- Clear anodized, tall, with baffle (shown A) 141-801
- Black anodized, tall, no baffle (shown B) 141-802
- Black anodized, tall, with baffle 141-803

C. Chevrolet Big-Block, 1965-Later

- Clear anodized, tall, no baffle (shown C) 141-805
- Black anodized, tall, no baffle 141-806
- Black anodized, tall, with baffle 141-807
- Clear anodized, tall, with baffle 141-808

DIE-CAST VALVE COVERS

These premium valve covers are die-cast aluminum, manufactured to GM specifications, equipped with internal oil drippers (small-block only) and GM-designed baffles. They have recessed Bowtie and CHEVROLET emblems, inlaid with classic Chevrolet red. Sold in pairs.

D. Chevrolet Big-Block, 1965-Later

- Chrome, tall, with baffle (shown D) 141-140
- Black crinkle, tall, with baffle 141-141
- Polished, tall, with baffle 141-142

E.-F.

Chevrolet Small-Block V-8, 1958-1986

- Polished, tall, with baffle (shown E) 141-108
- Black crinkle, tall, with baffle 141-116
- Chrome, tall, with baffle (shown F) 141-117

LATE-MODEL DIE-CAST VALVE COVERS

Center hold-down. Tall. Supplied with mounting bolts, steel & rubber washers (also available separately P/N 141-133). All valve covers come with baffles and grommets. Sold in pairs.

G.-H.

Chevrolet Small-Block V-8, 1987-Current

- Polished, with baffle (shown G) 141-130
- Black crinkle, with baffle (shown H) 141-131
- Chrome, with baffle 141-132
- Replacement bolt and washer kit 141-133
- Polished, Circle Track, with vent tubes on one cover, no baffle, no Bowtie emblem 141-139

SLANT-EDGE DIE-CAST VALVE COVERS

Angled edges and progressive design give this new die-cast valve cover an aggressive and modern look. All covers have a raised "CHEVROLET," Bowtie emblem, and baffle. Tall. Sold in pairs. 2008 release date to be determined.

Chevrolet Small-Block V-8, 1958-1986 (not shown)

- Polished 141-920
- Black powder coat 141-921
- Chrome plated 141-922
- Metallic gray powder coat 141-923
- Orange powder coat 141-924
- Cast gray crinkle 141-925
- Polished, no emblem 141-926



A 141-801



B 141-802



C 141-805



D 141-140



E 141-108



F 141-117



G 141-130



H 141-131



141-905 **I**



141-813 **J**



141-102 **K**



141-115 **L**



141-751 **M**



141-361 **N**



141-811 **O**



141-814 **P**

STAMPED VALVE COVERS

These CHEVROLET Bowtie valve covers are made of heavy-gauge steel, 20% thicker than typical aftermarket valve covers, greatly reducing the likelihood of leakage around the valve cover flange area, caused by fasteners being over-torqued. The chrome plating meets GM quality specifications. All valve covers bear the powerful Bowtie and CHEVROLET emblems. Stamped valve covers are offered in either tall or production height (short). Oil restricting baffles are offered in many valve covers for those who wish to maintain the PCV hookup. All valve covers are sold in pairs, equipped with air breather and PCV grommets, unless specified otherwise.

NOTE: *Technical Note: Production height Chevy small-block valve covers and valve covers with baffles will not clear most stud girdle applications.*

I., K., M.-N.

Chevrolet Small-Block V-8, 1958-1986

- Chrome, tall, no baffle 141-101
- Chrome, short, with baffle (shown K) 141-102
- Chrome, tall, with baffle 141-103
- Metallic gray, tall, with baffle (shown N) 141-361
- Black crinkle, short, with baffle 141-750
- Black crinkle, tall, with baffle (shown M) 141-751
- Chrome, short, with baffle, black/red logo 141-899
- Chrome, tall, with baffle, black/red (shown I) 141-905

J., L., O.-P.

Chevrolet Big-Block V-8, 1965-1996

- Chrome, short, with baffle 141-114
- Chrome, tall, with baffle (shown L) 141-115
- Black crinkle, short, with baffle 141-810
- Black crinkle, tall, with baffle (shown O) 141-811
- Chrome, short, with baffle, black/red logo 141-812
- Chrome, tall, with baffle, black/red (shown J) 141-813
- Metallic gray, short, with baffle (shown P) 141-814
- Metallic gray, tall, with baffle 141-815

TRANSMISSION OIL PANS

The large GM emblem is stamped prominently onto this finned pan for maximum visibility. Stock-pan depth. Chrome drain plug makes it easier to change the fluid and filter.

Transmission Oil Pans (not shown)

- Turbo 350 141-250
- Turbo 400 141-251

Personalize your engine with a distinctive component combo in three easy steps:

(1) Select your preferred color theme, choosing from various offerings in classic chrome, chrome with recessed painted emblems, black crinkle, high-tech metallic gray, polished, or clear anodized.

(2) Select your basic materials, choosing from stamped steel, die-cast aluminum, stamped aluminum, fabricated aluminum, or composite fiber.

(3) Consider the importance of functionality, considering internal and external clearance, weight, mechanical strength, and surface finish characteristics.

...the result will be an appearance that is uniquely yours.

Engine Dress Parts Continued

TWO-PIECE DIE-CAST ALUMINUM VALVE COVERS

Two-piece valve covers with the popular CHEVROLET and Bowtie emblems. Now you can easily check your valvetrain while the engine is running. The diagonal cut of the top section ensures no mess. Each valve cover features oversize bolts for fast removal, a top and bottom section, and a retained gasket for a tight seal. These valve covers will clear roller rockers and stud girdles and are available in six choices. Includes required Allen wrench. Fits Chevy small-block 1958 to 1986 engines. Removable OEM style baffle. Tall. All valve covers come equipped with baffle and grommets. Sold in Pairs. U.S. Pat. D543, 998 S.

A.-C.

Chevrolet Small-Block V-8, 1958-1986

- Polished, recessed emblem 141-910
- Black crinkle, recessed emblem..... 141-911
- Chrome, recessed emblem (shown B)..... 141-912
- Polished, raised emblem 141-913
- Black crinkle, raised emblem (shown A)..... 141-914
- Polished, no emblem (shown C)..... 141-915
- Replacement gasket kit (2)..... 141-916

NOTE: Will not fit cylinder head 12340034 or similar (with three rectangular raised internal sections near the valve cover mounting surface), unless such sections are milled off.

LATE-MODEL STAMPED STEEL VALVE COVERS

Center hold-down. Short. Not supplied with mounting bolts. All valve covers come with baffles and grommets. Sold in pairs.

D.-F.

Chevrolet Small-Block V-8, 1987-Current

- Chrome, short (shown D) 141-107
- Black crinkle, short (shown E) 141-907
- Metallic gray, short (shown F) 141-908

DRESS-UP KITS

G.-H.

Chevrolet Small-Block V-8, 1958-1986

- Includes two short baffled Bowtie valve covers (141-102), plus Bowtie timing chain cover with GM production oil seal installed (141-215), two black/red Bowtie 4-wire looms (141-636), one Bowtie push-in air breather (141-616), oil dipstick (141-550), timing tab for 8" Balancer (141-202), and two grommets (air breather cap and PCV) (shown G) 141-001
- Includes two short baffled Bowtie valve covers (141-102), plus eight Bowtie valve cover wing nuts (141-600), four valve cover hold-down clamps (141-610), two black/red Bowtie 4-wire looms (141-636), one Bowtie push-in air breather cap (141-616), oil dipstick (141-550), and two grommets (air breather cap and PCV) (shown H)..... 141-002

DELUXE DRESS-UP KITS

These dress-up kits include one pair of tall valve covers, air cleaner, timing chain cover, breather cap, 8 wing nuts, and 8 hold-down clamps.

- Metallic gray (not shown) 141-360
- Black crinkle (not shown)..... 141-758
- Chrome, black/red emblems (not shown) 141-900

	141-360	141-758	141-900
Valve Covers	141-361	141-751	141-905
Air Cleaner	141-362	141-752	141-906
Timing Chain Cover	141-363	141-753	141-904
Air Breather Cap	141-365	141-754	141-616
8 Wing Nuts	141-364 x2	141-756 x2	141-902 x2
8 Hold-Down Clamps	141-366 x2	141-757 x2	141-903 x2



A 141-914



B 141-912



C 141-915



D 141-107



E 141-907



F 141-908



G 141-001



H 141-002



141-302 **I**



141-693 **J**



141-362 **K**



141-752 **L**



141-906 **M**



141-793 **N**



141-307 **O**



141-333 **P**



141-323 **Q**



141-327 **R**

AIR CLEANERS

These air cleaner kits are offered in two styles, the classic, which reflects many years of GM air cleaner styling, and the newer high-performance look. They are equipped with the CHEVROLET emblem, and they are supplied with genuine GM (AC) air filter elements for maximum airflow. The bases are chrome plated to exacting standards for long-lasting appearance, and each kit is supplied with mounting hardware. The classic air cleaner kits are supplied with special die-cast Bowtie center nuts (except 141-906) (also offered separately). Minimum clearance of 3-3/4" is required from the top of the carburetor gasket area to the underside of the hood. The 14" air cleaner kits are supplied with 3" tall filter GM P/N 6421746 (AC P/N A212CW). For buyers interested in a taller (4-1/32") filter, purchase GM P/N 8997189 (AC P/N A697C). The bases of the 14" air cleaner kits are recessed for a low profile appearance, maximum performance, and hood clearance.

I., K., L., M., O.

14" Steel Air Cleaners

- 14" Classic with Bowtie center nut (shown I) 141-302
- 14" High-performance (shown O) 141-307
- 14" Metallic gray (shown K) 141-362
- 14" Black crinkle (shown L) 141-752
- 14" Chrome, black/red emblem (shown M) 141-906

10" Steel Air Cleaners

- 10" Classic with Bowtie center nut..... 141-309
- 10" High-performance 141-315

SUPER-LIGHT 14" AIR CLEANERS

Save critical front-end pounds! Choose from five race-winning combinations: air cleaner lids ranging from genuine composite fiber to aircraft aluminum, with or without the famous Bowtie and CHEVROLET emblems, in black or clear anodized finishes; plus a 3" tall genuine AC filter (AC P/N A697C), and a color-matched, super-deep aluminum base for maximum hood clearance when using optional, extra-tall air filter elements. These weight-saving high-performance air cleaner kits blend traditional OEM appearance profiles with optimized air-flow dynamics to achieve checkered-flag results. Supplied with necessary mounting hardware and standard wing nuts.

J., N.

14" Super-Light Air Cleaners

- Black anodized aluminum, no logo 141-690
- Clear anodized aluminum, no logo 141-691
- Black anodized aluminum, Chevrolet Bowtie emblem 141-692
- Clear anodized aluminum, Chevrolet Bowtie emblem (shown J)..... 141-693
- Composite fiber, Bowtie emblem (shown N) 141-793

AIR CLEANER CENTER NUTS

Available with the distinctive GM and Chevrolet Bowtie emblems, these chrome plated zinc die-cast air cleaner center nuts are offered in three popular styles, in both large and small sizes. The large size is recommended for 14" and 10" air cleaner kits, and the small for smaller air cleaner kits. They fit both 1/4"-20 and 5/16"-18 studs.

P.-R.

Large and Small Air Cleaner Center Nuts

- Bowtie, small..... 141-322
- Bowtie, large (shown P) 141-333
- Hi-tech Bowtie, small..... 141-328
- Hi-tech Bowtie, large (shown Q)..... 141-323
- Hi-tech GM, small..... 141-332
- Hi-tech GM, large (shown R) 141-327

Engine Dress Parts Continued

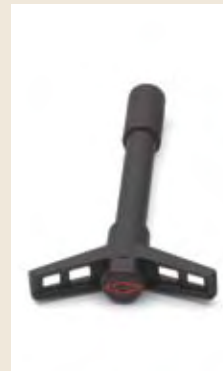
VALVE COVER WING NUTS

The Bowtie emblem is cut sharply into the top of each wing nut. The lower ends of the shafts are manufactured with wide shoulders for broad load distribution, and each wing nut is supplied with a separate stud which permits precise gasket positioning on the head prior to mounting the valve covers. Fits Chevrolet small- and big-block, and V6. 1/4" x 20 threads. 4 per package.

- A.-D.**
- Valve Cover Wing Nuts**
- Chrome (shown D) 141-600
 - Metallic gray (shown A) 141-364
 - Black crinkle (shown B) 141-756
 - Chrome, with red Bowtie (shown C) 141-902



A 141-364



B 141-756



C 141-902

AIR BREATHER CAPS

The top of each air breather cap is embossed handsomely with a raised Bowtie emblem to complement the genuine factory-parts appearance of the engine. Black crinkle breather cap is the perfect match for die-cast or stamped black crinkle valve covers. For use in valve covers with grommets fitting 1.22" holes unless otherwise specified. Technical Note: Use with grommet in Grommet Set PROFORM P/N 141-615.

- E. Push-In, Rectangular**
- Chrome (shown E) 141-619



D 141-600



E 141-619

- F.-H.**
- Push-In, 3" Diameter**
- Metallic gray (shown F) 141-365
 - Chrome (shown G) 141-616
 - Black crinkle (shown H) 141-754

- Push-On, 3" Diameter, For Use with Oil Filler Tube, 1.82" Opening**
- Chrome 141-617

- Twist-On, 3" Diameter**
- Chrome 141-618

These popular push-in filter air breathers, with the raised Bowtie emblem stamped prominently in the top, are offered in two styles: with the heat-shield hood and without. 3" diameter. Fits valve covers with 1.22" holes.

- I.-J.**
- Push-In Filter Air Breathers**
- Chrome, with hood (shown I) 141-621
 - Chrome, without hood (shown J) 141-622

- Clamp-On Filter Air Breather, Fits 1-3/8th**
- Chrome, with hood 141-625



F 141-365



G 141-616



H 141-754

WATER NECKS

These Chevrolet water necks utilize neoprene O-ring gaskets instead of regular gaskets eliminating leakage. Supplied with chrome bolts.

- V-8, 1955-1965, Chevy II V-8 1965, Corvette 1956-1963 (not shown) 141-500
- Chevrolet, Camaro, & Chevelle 1966-1975 (not shown) 141-501

MASTER CYLINDER COVERS

These GM dual line master cylinder covers are offered for the most popular applications. Supplied with clips and a precisely positioned GM emblem. PDB = Power Disk Brakes

- Single clip, 5"x 2-3/8", PDB (not shown) 141-225
- Double clip, 5-3/4"x 3", PDB (not shown) 141-226
- Single clip, 5-5/8"x 3", PDB or manual (not shown).. 141-227



I 141-621



J 141-622



141-366 **K**



141-757 **L**



141-903 **M**



141-363 **N**



141-753 **O**



141-904 **P**



141-215 **Q**



141-216 **R**



141-218 **S**



141-729 **T**

VALVE COVER HOLD-DOWN CLAMPS

By spreading the load over a wider area, these clamps minimize distortion of the valve cover flanges, thereby decreasing the possibility of oil leakage. Fits stamped valve covers for Chevrolet small-block V-8 and V6/90 engines through 1986. 4 per package.

K.-M.

Hold-Down Clamps

- Chrome, no emblem 141-610
- Metallic gray (shown K) 141-366
- Black crinkle (shown L) 141-757
- Chrome, red Bowtie (shown M) 141-903

TIMING CHAIN COVERS

Engineered to GM standards for reliable installation, these stamped steel covers are supplied with a GM production oil seal installed, and are direct replacements for all late model stamped front covers that use bolt-on timing pointers. Technical Note: Replacement oil seal: GM P/N 10111769.

N.-P, Q.

Chevrolet Small-Block V-8 1969-1991 & V6/90°

- Chrome (shown Q) 141-215
- Metallic gray (shown N) 141-363
- Black crinkle (shown O) 141-753
- Chrome, black/red emblem (shown P) 141-904

R. Chevrolet Big-Block 1965-1990

- Chrome (shown R) 141-216

Striking die-cast timing covers, supplied with separate GM production oil seal. Bowtie emblem directly cast into the upper surface.

S. Die-Cast Aluminum, Chevrolet Small-Block V-8 1965-1990

- Polished 141-217
- Chrome (shown S) 141-218

HARMONIC BALANCER COVERS

These patented harmonic balancer covers offer improved readability, more stable Top Dead Center indication and timing accuracy, enhanced appearance for a previously ignored underhood area, and the elimination of timing tapes which are inevitably flung off. They are available in chrome and black, resulting in parts with the appearance of \$200 balancers. Each cover is distinctively marked with the famous Bowtie emblem, Top Dead Center and the proper timing degrees. Using this cover improves timing accuracy because over time the etched outer inertia ring of a typical harmonic balancer may slip in relation to the center hub of the balancer, causing the etched markings to provide an inaccurate indication of Top Dead Center for the #1 piston. Mounted directly through the center hub, this cover eliminates the affect of any outer inertia ring slippage. Aluminum. U.S. Patent 5,675,078.

Chevrolet Small-Block, 6-3/4"

- Black 141-727
- Chrome 141-725

Chevrolet Small-Block, 8"

- Black 141-728
- Chrome 141-726

T. Chevrolet Big-Block

- Black 141-730
- Chrome (shown T) 141-729

Engine Dress Parts Continued

100% NEW CHROME ALTERNATORS

It is now possible to obtain four sought-after and popular features in one alternator! 100% NEW with absolutely no re-built components. Assured quality with generous, over-spec amperage, a machined pulley, and the popular Chevy Bowtie emblem in red. Each unit is supplied with its own individual Quality Assurance graph documenting its operating performance. For a new level of functionality, insist on these 100% new Bowtie alternators.

A. 100% New Chrome Alternators

- 1973–1986 internal regulator 141-656
- 100 amp, 1-wire (shown A) 141-657
- 60 amp, 1-wire 141-658
- 80 amp, 1-wire 141-659
- 120 amp, 1-wire 141-660

ALTERNATOR BRACKETS

Made of heavy steel and offered for the most popular Chevrolet small-block V-8 applications, these brackets become a very noticeable addition to every chrome-accessorized engine. Includes upper and lower brackets.

B. Alternator Brackets

- For use when top bracket bolts to intake manifold (shown B) 141-402
- For use when top bracket bolts to neck (except Corvette) 141-403

BOWTIE HIGH PERFORMANCE ELECTRIC FANS

These fans help prevent overheating in stop-and-go traffic. Designed to fit the most popular cars and trucks, increases gas mileage, improves engine performance, frees the waterpump pulley for more rpm, and installs easily within minutes using simple hand tools. The 10", 12", 14", and 16" fans are : reversible (mount in front or back of radiator). Ultra-thin design to fit cramped locations. Reinforced glass filled polypropylene blade and plastic housing for minimized weight. Nylon tie mounting kit included. Each fan features the popular Chevy Bowtie emblem in red.

C. Bowtie High Performance Electric Fans

- 10" fan 141-641
- 12" fan 141-642
- 14" fan (shown C) 141-644
- 16" fan 141-646

Your stock fan robs your engine of up to 15 or more horsepower! Replace it with a rugged, Bowtie emblem, universal-fit fan equipped with an adjustable 180–240°F thermostat. Bolts to your radiator supports using sturdy brackets. With a heavy-duty motor, highly angled blades, and 15" diameter, this unit pulls up to 2,800-cfm of air, cooling engines with up to 250+ HP (without air) and 220+ HP (with air). Overall: 18 x 16-1/8 x 4. Amp draw, 14 amps.

D. Electric Fan with Thermostat

- 15" fan with adjustable thermostat (shown D) 141-647

ELECTRIC WATER PUMPS

Eliminates unnecessary weight and impeller-drag experienced at high rpm, pumps up to 35+ gallons of water per minute, and delivers the cooling that can make the difference between a win and second place! Durable but lightweight die-cast aluminum, epoxy powder coated for corrosion resistance in the color of your choice. Each unit comes with the popular Chevy Bowtie emblem in red. Race or street. Fitting (1" pipe to 1 3/4" hose), and mating weather-tight connector included.

E-F Chevrolet Big-Block, Red Bowtie

- Polished (shown E) 141-670
- Chrome 141-671
- Red 141-672
- Blue (shown F) 141-673
- Black 141-674

G-H Chevrolet Small-Block, Red Bowtie

- Chrome 141-650
- Black (shown G) 141-651
- Red (shown H) 141-652
- Blue 141-653
- Polished 141-654



A 141-657



B 141-402



C 141-644



D 141-647



E 141-670



F 141-673



G 141-651



H 141-652



141-232 **I**



141-233 **J**



141-630 **K**



141-210 **L**



141-638 **M**



141-636 **N**



141-200 **O**



141-550 **P**

BOWTIE EMBLEM FREEZE PLUG INSERTS

Give your engine block the ultimate trick look with machined billet aluminum Bowtie emblem freeze plug inserts. Fits all Chevy small-block engines except LS-series. This is NOT a freeze plug replacement. 2 per pkg.

I.-J.

Freeze Plug Inserts

- Black, raised emblem (shown I) 141-232
- Red, recessed emblem (shown J)..... 141-233

PUSH-IN OIL FILLER CAP

Chevrolet Bowtie embossed and raised on top. For valve covers with 1.22" diameter hole.

K. Oil Filler Cap

- Chrome (shown K)..... 141-630

TWIST-ON OIL FILLER CAP

This large oil filler cap has a large white-on-blue epoxy coated GM emblem in the center. For Chevrolet style holes. Manufactured with a non-asbestos gasket.

Twist-On Oil Filler Cap

- Chrome with GM emblem (not shown) 141-631

FUEL PUMP BLOCK-OFF PLATES

For use on Chevrolet V-8's. Stamped with the handsome Chevrolet Bowtie, these plates are supplied with special non-asbestos gaskets.

L. Fuel Pump Block-Off Plates

- Small-block, chrome (shown L).....141-210
- Big-block, chrome 141-211

LINEAR WIRE LOOMS

Using the valve cover mounting bolts, these handsome Chevrolet chrome looms are positioned along the valve cover to hold the wires in a neat parallel arrangement. The epoxy-coated Bowtie emblem is centrally located for maximum visibility. The wire holders are opened and closed individually with a patented nylon wedge to permit the chrome tops to have a smooth surface free of screw holes. Manufactured under U.S. design patents 298,798 and 284,262 and 311,487. 1 pair per package.

M. Linear Wire Looms

- Small-block V-8, 1959-1986 (shown M)..... 141-638
- Big-block V-8, 1965-1991 141-639

IGNITION WIRE LOOMS

Using the divisional red color, the CHEVROLET and Bowtie emblems are molded onto the black nylon head of each wire loom, mounted on chrome stems. Fits Chevrolet small-block V-8 1959-'86, and Chevrolet big-block V-8 1965-'91. 4-wire looms, 2 per package.

N. Ignition Wire Looms

- Wire looms (shown N)..... 141-636

TIMING CHAIN POINTERS

O. Chevrolet Small-Block V-8 or V6/90°, 1969-1990

- 6-3/4" or 7" balancer (shown O) 141-200
- 8" balancer 141-202

Chevrolet Big-Block, 1965-1991

- 8" balancer 141-201

OIL DIPSTICK KITS

Available for a wide selection of popular Chevrolet small- and big-block engines, these kits consist of both the stick and the tube. The sticks have classic hook handles and the Bowtie emblem stamped near the fill indicator mark.

P. Chevrolet Oil Dipstick Kits

- Small-block V-8, thru 1977 (shown P) 141-550
- Small-block V-8, 1978-1981 141-551
- Big-block V-8, 1965-1991 141-553



RCR PARTS

GM Performance Parts has partnered with Richard Childress Racing to offer the parts needed to make your GMPP circle track racing crate engine a runner. These high-quality parts have been selected based on the standards RCR uses to choose its Cup, Busch and Truck engine parts. Race with confidence and look sharp using these RCR accessories, only from GM Performance Parts.

NOTE:

ATTENTION GM DEALERS: The following pages are General Motors LICENSED PRODUCTS and must be ordered from the licensee. For detailed instructions see Bulletin number ACC06-039 or visit the gmperformanceparts.com website, click on Dealer Info, and then click on Dealer Sites.

A. RCRAC100

Air Cleaner

- Clear anodized super-light 14" aluminum drop-down air cleaner
- With element

B. RCRAL150

Alternator

- Lightweight
- 93mm housing
- 50 amp alternator from Denso
- Designed for professional motorsports use

C. RCRAL151

Alternator Installation Kit

- Complete your alternator installation with this kit
- 2.700" diameter pulley
- 25" 3 rib belt (not shown)

D. RCRAL152

Alternator Mounting Hardware

- Designed to be used with the 93mm RCRAL150 Denso alternator and the RCRFD350 Front Drive Kit



A Air Cleaner



B Alternator



C Alternator Installation Kit (rib belt not shown)



D Alternator Mounting Hardware



Distributor **E**



Pro Billet Distributor **F**



Fuel Pump **G**



Front Drive Kit **H**

E. RCRDS250

Distributor

- Pro Billet HEI Distributor
- With oversized shaft sealed ball bearing and long sintered bushing
- Extra springs and bushings are included to tailor your curve
- Includes a removable vacuum advance canister

F. RCRDS251 NEW

Pro Billet Distributor

- With adjustable mechanical advance
- Powdered metal gear
- Must be used with MSD 6, 7, 8 or 10 series ignition

G. RCRFP300

Fuel Pump

- Professionally designed billet mechanical fuel pump
- Delivers 70 gph at 7 PSI

H. RCRFD350

Front Drive Kit

- Upper and lower serpentine pulley set
- Provides a 7% underdrive for the water pump
- Comes complete with drive hub, belt and necessary installation hardware

RCR Parts Continued

A. RCRSP400

Spark Plug Wires

- 8mm spiral core spark plug wire set fitted and numbered with a wire loom kit
- Designed to route under the headers with 90° high temp spark plug boots and HEI Distributor boots

B. RCRST450

Starter

- 10 lb. high-torque starter will work with both 153 and 168 tooth flywheels
- 3.75 to 1 gear reduction
- 1.4 KW motor

C. RCRVC500

Valve Covers

- Beautiful, powder-coated die cast aluminum cover set
- With breather tubes and a deep groove for good gasket retention
- Comes with retaining bolts
- Sold in pairs



A Spark Plug Wires



B Starter



C Valve Covers



Water Pump **D**



Power Steering Bracket **E**



Power Steering Pump Assembly **F**

D. RCRWP550

Water Pump

- Competition proven water pump
- Made from 356 T6 aluminum with heavy duty bearing and seal
- Includes an installation kit complete with gaskets, bolts and spacers

E. RCRPS600

Power Steering Bracket

- Billet aluminum power steering bracket
- Allows a low-mount for the power steering pump, RCRPS601

F. RCRPS601

Power Steering Pump Assembly

- Low drag pump designed for race applications
- Internal design adjusts fluid volume/pressure resulting in lower operating temperatures and less parasitic horsepower loss
- Comes complete with pulley and belt to work with RCRFD350 Front Drive Kit

CHEVROLET LOGO GAUGES

Monitor your vehicle's vital signs with these rugged, precise gauges—while flying the GM Performance Parts or Chevy Bowtie flag. A wide array of instruments in several styles is offered to better suit your vehicle. GM Performance Parts-logo gauges are designed for the rigors of high performance street use or racing. All gauges are intended for 12-volt electrical systems and feature a matte black bezel and 12-volt back-lighting. Mounting hardware is included unless otherwise noted. Don't forget mounting cups or brackets, also available from GM Performance Parts.

NOTE:

ATTENTION GM DEALERS: The following pages are General Motors LICENSED PRODUCTS and must be ordered from the licensee. For detailed instructions see Bulletin number ACC06-039 or visit the gmperformanceparts.com website, click on Dealer Info, and then click on Dealer Sites.

A. 3627-00406

2-1/16" Oil Pressure, 0–100 psi Electrical Gauge

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

B. 3697-00406

3-3/8" Tachometer, 10,000 rpm

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- 4, 6 & 8 cyl compatible
- In-dash mount

C. 3699-00406

5" Tachometer, 10,000 rpm with Shift Light

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

D. 5780-00406

3-3/4" Tachometer, 8,000 rpm

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

E. 5891-00406

2-5/8" Voltmeter, 8–18 Volt

- Red Bowtie logo
- White dial, black numbers



A 2-1/16" Oil Pressure, 0–100 psi Electrical Gauge



B 3-3/8" Tachometer, 10,000 rpm



C 5" Tachometer, 10,000 rpm with Shift Light



D 3-3/4" Tachometer, 8,000 rpm



E 2-5/8" Voltmeter, 8–18 Volt



2-5/8" Fuel Level **F**



5" Tachometer, 10,000 rpm **G**



5" Tachometer, 10,000 rpm with Shift Light **H**



Five Piece Kit Box with Electrical Speedometer **I**



3-1/8" Tachometer, 7,000 rpm **J**

F. 5814-00406

2-5/8" Fuel Level

- Red Bowtie logo
- White dial, black numbers
- 0 Ohms empty, 90 Ohms full

G. 5898-00406

5" Tachometer, 10,000 rpm

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash mount

H. 5899-00406

5" Tachometer, 10,000 rpm with Shift Light

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

I. 1302-00408

Five Piece Kit Box with Electrical Speedometer

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature and fuel level gauges, and all required sensors and sending units

J. 1398-00408

3-1/8" Tachometer, 7,000 rpm

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- 4, 6 & 8 cyl compatible

BOWTIE LOGO GAUGES, ELECTRICAL

3613-00406

2-1/16" Fuel Level, 0–90 Ohms GM Short Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3627-00406

2-1/16" Oil Pressure, 0–100 PSI Short Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- See photo on page 390

3637-00406

2-1/16" Water Temperature, 100–250° F Short Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3644-00406

2-1/16" Pyrometer Kit, 0–1600° F Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3645-00406

2-1/16" Pyrometer Kit, 0–2000° F Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3649-00406

2-1/16" Trans Temperature, 100–250° F Short Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3653-00406

2-1/16" Oil Press, 0–100 PSI

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3655-00406

2-1/16" Water Temperature, 100–260° F Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3657-00406

2-1/16" Trans Temperature, 100–260° F Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3659-00406

2-1/16" Boost, Vac. 30 In Hg/30 PSI

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3674-00406

2-1/16" Nitrous, 0–1600 PSI Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3675-00406

2-1/16" Air/Fuel Ratio Full Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3688-00406

3-3/8" Speedometer, 160 mph Programmable

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3690-00406

3-3/8" Tachometer, 10,000 rpm with Shift Light

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- 4, 6 & 8 cyl compatible

3692-00406

2-1/16" Voltmeter, 8–18 Volt Short Sweep

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3697-00406

3-3/8" Tachometer, 10,000 rpm

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- 4, 6 & 8 cyl compatible
- In-dash mount
- See photo on page 390

3699-00406

5" Tachometer, 10,000 rpm with Shift Light

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount
- See photo on page 390

5780-00406

3-3/4" Tachometer, 8,000 rpm

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount
- See photo on page 390

5795-00406

5" Tachometer, 10,000 rpm with Memory, Standard Ignition

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

5814-00406

2-5/8" Fuel Level

- Red Bowtie logo
- White dial, black numbers
- 0 Ohms empty, 90 Ohms full
- See photo on page 391

5827-00406

2-5/8" Oil Pressure, 0–100 psi

- Red Bowtie logo
- White dial, black numbers

5837-00406

2-5/8" Water Temperature, 100–250° F

- Red Bowtie logo
- White dial, black numbers

5889-00406

5" Speedometer, 160 mph

- Red Bowtie logo
- White dial, black numbers

BOWTIE LOGO GAUGES, ELECTRICAL CONTINUED

5891-00406**2-5/8" Voltmeter, 8–18 Volt**

- Red Bowtie logo
- White dial, black numbers
- See photo on page 390

5898-00406**5" Tachometer, 10,000 rpm**

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash mount
- See photo on page 391

5899-00406**5" Tachometer, 10,000 rpm, with Shift Light**

- Red Bowtie logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount
- See photo on page 391

BOWTIE LOGO GAUGES, MECHANICAL

3603-00406**2-1/16" Boost, Vac. 30 in Hg/30 psi**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3604-00406**2-1/16" Boost, 0–35 psi**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3605-00406**2-1/16" Boost, 0–60 psi**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3607-00406**2-1/16" Boost, Vac. 30 In Hg/20 psi**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3621-00406**2-1/16" Oil Pressure, 0–100 psi**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3632-00406**2-1/16" Water Temperature, 120–240° F**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

3663-00406**2-1/16" Fuel Pressure, 0–100 psi Full Sweep**

- Red Bowtie logo
- Through-the-dial lighting
- Black dial, white numbers

5812-00406**2-5/8" Fuel Pressure, 0–100 psi**

- Red Bowtie logo
- White dial, black numbers

5813-00406**2-5/8" Fuel Pressure, 0–15 psi with Isolator**

- Red Bowtie logo
- White dial, black numbers

5821-00406**2-5/8" Oil Pressure, 0–100 psi**

- Red Bowtie logo
- White dial, black numbers

5828-00406**2-5/8" Nitrous, 0–2000 psi**

- Red Bowtie logo
- White dial, black numbers

5832-00406**2-5/8" Water Temperature, 120–240° F**

- Red Bowtie logo
- White dial, black numbers

VINTAGE BOWTIE LOGO GAUGES

1300-00408**Five-Piece Kit Box with Mechanical Speedometer**

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- Includes electric speedometer, oil pressure, voltmeter, water temperature, fuel level gauges and all required sensors and sending units

1303-00408**5" Quad Gauge & Speedometer**

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature, fuel level gauges and all required sensors and sending units

1398-00408**3-1/8" Tachometer, 7,000 rpm**

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- 4, 6 & 8 cyl compatible
- See photo on page 391

1302-00408**Five-Piece Kit Box with Electrical Speedometer**

- Vintage logo
- White dial, black logo
- Embossed logo in chrome bezel
- Orange pointer
- Includes speedometer, oil pressure, voltmeter, water temperature and fuel level gauges, and all required sensors and sending units
- See photo on page 391

GM PERFORMANCE PARTS LOGO GAUGES

A. 5780-00407

3-3/4" Tachometer, 8,000 rpm

- GM Performance Parts logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible

B. 5795-00407

5" Tachometer, 10,000 rpm with Memory, Standard Ignition

- GM Performance Parts logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

C. 5827-00407

2-5/8" Oil Pressure, 0–100 psi

- GM Performance Parts logo
- White dial, black numbers

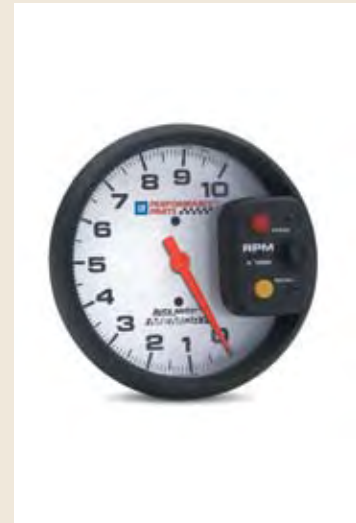
D. 5837-00407

2-5/8" Water Temperature, 100–250° F

- GM Performance Parts logo
- White dial, black numbers



A 3-3/4" Tachometer, 8,000 rpm



B 5" Tachometer, 10,000 rpm with Memory, Standard Ignition



C 2-5/8" Oil Pressure, 0–100 psi



D 2-5/8" Water Temperature, 100–250° F



2-5/8" Voltmeter, 8-18 Volts **E**



5" Tachometer, 10,000 rpm with Shift Light **F**



5" Tachometer, 10,000 rpm In-Dash **G**

E. 5891-00407

2-5/8" Voltmeter, 8-18 Volts

- GM Performance Parts logo
- White dial, black numbers

F. 5899-00407

5" Tachometer, 10,000 rpm with Shift Light

- GM Performance Parts logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible
- In-dash or pedestal mount

G. 5898-00407

5" Tachometer, 10,000 rpm In-Dash

- GM Performance Parts logo
- White dial, black numbers
- 4, 6 & 8 cyl compatible

GM PERFORMANCE PARTS LOGO GAUGES, ELECTRICAL

5780-00407

- 3-3/4" Tachometer, 8,000 rpm**
- GM Performance Parts logo
 - White dial, black numbers
 - 4, 6 & 8 cyl compatible
 - See photo on page 394

5795-00407

- 5" Tachometer, 10,000 rpm with Memory, Standard Ignition**
- GM Performance Parts logo
 - White dial
 - Black numbers
 - 4, 6 & 8 cyl compatible
 - In-dash or pedestal mount
 - See photo on page 394

5814-00407

- 2-5/8" Fuel Level**
- GM Performance Parts logo
 - White dial, black numbers
 - 0 Ohms empty, 90 Ohms full

5827-00407

- 2-5/8" Oil Pressure, 0–100 psi**
- GM Performance Parts logo
 - White dial, black numbers
 - See photo on page 394

5837-00407

- 2-5/8" Water Temperature, 100–250° F**
- GM Performance Parts logo
 - White dial, black numbers
 - See photo on page 394

5889-00407

- 5" Speedometer, 160 mph**
- GM Performance Parts logo
 - White dial, black numbers

5891-00407

- 2-5/8" Voltmeter, 8–18 Volt**
- GM Performance Parts logo
 - White dial, black numbers
 - See photo on page 395

5899-00407

- 5" Tachometer, 10,000 rpm with Shift Light**
- GM Performance Parts logo
 - White dial, black numbers
 - 4, 6 & 8 cyl compatible
 - In-dash or pedestal mount
 - See photo on page 395

5898-00407

- 5" Tachometer, 10,000 rpm**
- GM Performance Parts logo
 - White dial, black numbers
 - 4, 6 & 8 cyl compatible
 - In-dash mount
 - See photo on page 395

GM PERFORMANCE PARTS LOGO GAUGES, MECHANICAL

5812-00407

- 2-5/8" Fuel Pressure, 0–100 psi**
- GM Performance Parts logo
 - White dial, black numbers

5813-00407

- 2-5/8" Fuel Pressure, 0–15 psi with Isolator**
- GM Performance Parts logo
 - White dial, black numbers

5821-00407

- 2-5/8" Oil Press, 0–100 psi**
- GM Performance Parts logo
 - White dial, black numbers

5828-00407

- 2-5/8" Nitrous, 0–2000 psi**
- GM Performance Parts logo
 - White dial, black numbers

5832-00407

- 2-5/8" Water Temperature, 120–240° F**
- GM Performance Parts logo
 - White dial, black numbers

GAUGE PODS & PILLAR MOUNTS

10002-00409

2-1/16" Four Gauge Console (Camaro '68–'69)

10183-00409

2-1/16" Dual Pod (Chevelle A-Body '68–'72)

10184-00409

2-1/16" Single Pod (Chevelle A-Body '68–'72)

10190-00409

2-1/16" Dual Pod (Chevy Corvette '84–'96)

10200-00409

2-1/16" Dual Pod ('82–'92 Camaro/Firebird)

10204-00409

2-1/16" Dual Pod ('95–'02 Cavalier Z24)

10210-00409

2-1/16" Dual Pod (Camaro/Firebird '93–'02)

10233-00409

2-1/16" Dual Pod (Impala/Caprice '92–'96)

10402-00409

2-1/16" Dual Pod (Grand Prix/Cutlass/Monte Carlo '78–'87)

12192-00409

2-1/16" Dual Pillar (Corvette '97–'01)

12193-00409

2-1/16" Dual Pillar (Corvette '03–'04)

12194-00409

2-1/16" Dual Pillar (Corvette '05)

12195-00409

2-1/16" Triple Pillar (Corvette '05)

12200-00409

2-1/16" Dual Pillar (Camaro/Firebird Hard Top '82–'92)

GAUGE PODS & PILLAR MOUNTS

12201-00409

2-1/16" Triple Pillar (Camaro/Firebird Hardtop '82-'92)

12202-00409

2-1/16" Dual Pillar (Camaro/Firebird T-Top '82-'92)

12203-00409

2-1/16" Triple Pillar (Camaro/Firebird T-Top '82-'92)

12212-00409

2-1/16" Dual Pillar (Camaro T-Top '97-'01; Firebird '93-'01)

12213-00409

2-1/16" Triple Pillar (Camaro T-Top '97-'01; Firebird '93-'01)

12234-00409

2-1/16" Triple Pillar (Chevy Impala/Caprice '92)

15007-00409

2-1/16" Steering Column (C/K Truck '00-'03 Automatic)

15008-00409

2-1/16" Steering Column (C/K Truck '00-'03 Manual)

15103-00409

2-1/16" Dual Pod (C/K Truck '95-'98)

15104-00409

2-1/16" Dual Pod (C/K Truck '00-'03)

15110-00409

2-1/16" Dual Pod (S-10 '94-'02 & Blazer '95-'02)

15113-00409

2-1/16" Dual Pod (S-10 & Blazer '86-'93)

17100-00409

2-1/16" Dual Pillar (C/K Truck '88-'94)

17101-00409

2-1/16" Triple Pillar (C/K Truck '88-'94)

17102-00409

2-1/16" Dual Pillar (C/K Truck '95-'98)

17103-00409

2-1/16" Triple Pillar (C/K Truck '95-'98)

17104-00409

2-1/16" Dual Pillar (C/K Truck '00-'01)

17105-00409

2-1/16" Triple Pillar (C/K Truck '00-'01)

17106-00409

2-1/16" Dual Pillar with Speaker (C/K Truck '00-'03)

17107-00409

2-1/16" Triple Pillar with Speaker (C/K Truck '00-'03)

17110-00409

2-1/16" Dual Pillar ('94-'98 S-10 & '95-'97 Blazer)

17113-00409

2-1/16" Dual Pillar (S-10 '86-'93)

17114-00409

2-1/16" Triple Pillar (S-10 '86-'93)

18022-00409

2-1/16" Dual Overhead Console (C/K Truck '00-'04)

18023-00409

2-1/16" Triple Overhead Console (C/K Truck '00-'04)

18024-00409

2-1/16" Quad Overhead Console (C/K Truck '00-'04)

2203-00409

2-1/16" Mounting Cup Chrome Plastic Gauge

2204-00409

2-1/16" Mounting Cup Black Plastic Gauge

2237-00409

2-1/16" 2-Hole Gauge Panel, Black Aluminum

2238-00409

2-1/16" 3-Hole Gauge Panel, Black Aluminum

2259-00410

Electrical Cyl Head Replacement Sender

2277-00410

1/8" Npt To M12 X 15 Metric Adapter

2280-00410

Heater Hose Adapter 5/8"

2281-00410

Heater Hose Adapter 3/4"

2282-00410

Radiator Hose Adapter 1" To 1-1/4"

2283-00410

Radiator Hose Adapter 1-1/2"

3201-00409

2-5/8" Mounting Cup Press Gauge (Chrome)

3202-00409

2-5/8" Mounting Cup Press Gauge (Black)

3203-00409

2-5/8" Mounting Cup Temp Gauge (Chrome)

3204-00409

2-5/8" Mounting Cup Temp Gauge (Black)

3232-00409

2-5/8" 2-Hole Gauge Panel, Black Aluminum

3233-00409

2-5/8" 3-Hole Gauge Panel, Black Aluminum

3284-00410

LED Replacement Bulb Kit (Red)

3285-00410

LED Replacement Bulb Kit (Green)

3286-00410

LED Replacement Bulb Kit (Blue)

5291-00410

Speedometer Sender 7/8" (18THD Hall Effect, 16 Pulse)



TO ORDER CALL TOLL FREE:

888-821-4646

IN CANADA CALL:

810-629-0373

VISA/MASTERCARD ACCEPTED

DEALER—CALL FOR PRICING.

Qualifies for Co-op Reimbursement from Dealer's GM Parts Promotional Fund.



Pit Crew Polo

PP-23B02 (Men's)

\$40.75 each for SM–XL

PP-23B02A (Men's)

\$43.75 each for 2XL

PP-23B02A (Men's)

\$47.25 each for 3XL

Performance Parts logo on left chest. Available in Yellow (shown), Red, Black or Royal Blue with checkered accents.



Velocity Repel & Release Twill Shirt

PP-39716 (Men's)

\$30.00 each for SM–XL

\$34.00 each for 2XL and 3XL

Performance Parts logo on left chest. 55% cotton/45% polyester, 4.5 oz. microsanded twill with stain resistant and stain release properties. Available in White or Black (shown).



Honeycomb Jacquard Polo

PP-39627 (Men's)

\$38.60 each SM–XL

\$42.60 for 2XL and 3XL

Performance Parts logo on left chest. Available in Granite/Latte (shown), Navy/Bay Blue and Khaki/Latte.



Denim Jacket

PP-39715 (Men's)

\$45.50 each for SM–XL

\$49.50 for 2XL and 3XL

Performance Parts logo on left chest. 100% cotton garment.



Tournament Jacket

PP-MI-0066-06 thru 0072-06

\$35.00 each for SM–XL

\$38.00 for 2XL

\$42.00 for 3XL and 4XL

Performance Parts logo on left chest. Versatile, water repellent and lightweight. Available in Black.



Crewneck Sweatshirt
PP-39310 (Men's)
\$25.00 each for SM-XL
\$29.00 each for 2XL and 3XL
 Performance Parts logo on left chest. Available in Black.



Polysonic Camp Shirt
PP-30275 (Men's)
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PPGM2229 – LS7

PPGM2230 – 454 HO

PPGM2234 – Ram Jet 502

PPGM2235 – ZZ572/620



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\$55.00 set of 2

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PPGM2237

\$34.99 each

1/64th Scale
Replica of Power
Shop Rig



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PPGM2211

\$7.00 each

6" x 12" Aluminum Plate



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PP-24B27

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Silver, 16 oz travel mug.



Koozie

PPGM2213 – Black with white imprint

PPGM2214 – Yellow with black imprint

\$1.00 each

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Ergo Pack

PP-71450

\$12.00 each

Soft side cooler with
mesh pockets.



12" Wall Clock

PP49004

\$24.99 each

Performance Parts logo
with tagline.



Start-Up and Break-In Procedures

1. After installing the engine, ensure the crankcase has been filled with the correct (refer to instruction sheets that come with the crate engine) motor oil (non-synthetic) to the recommended oil fill level on the dipstick. Also check and fill as required any other necessary fluids such as coolant, power steering fluid, etc.
2. The engine should be primed with oil prior to starting. Do this by using an engine oil priming tool. If you do not have one, one can be obtained through GM, part number 12368084. Follow the instructions enclosed with the tool. This is the sure way to get oil to the bearings before you start the engine for the first time. Also, prime the engine if it sits for extended periods of time.
3. Safety first. If the vehicle is on the ground, be sure the emergency brake is set, the wheels are chocked and the car cannot fall into gear.
4. Start the engine and adjust the initial timing. Set the ignition timing to timing specified in the instruction sheet and the engine idle to the speed as specified in the instruction sheet. Rotate the distributor counterclockwise to advance the timing. Rotate the distributor clockwise to retard the timing. Leave the vacuum advance disconnected.
5. When possible, you should always allow the engine to warm up prior to driving. It is a good practice to allow the oil sump and water temperature to reach 180° F before towing heavy loads or performing hard acceleration runs.
6. Once the engine is warm, set the total advance timing as specified in the instruction sheet.
7. The engine should be driven at varying loads and conditions for the first 30 miles or one hour without wide open throttle (WOT) or sustained high RPM accelerations.
8. Run five or six medium throttle (50%) accelerations to about 4000 rpm and 55 mph (if application is a vehicle), and back to idle (0% throttle) in gear.
9. Run two or three hard throttle (WOT 100%) accelerations to about 5000 rpm and 55 mph (if application is a vehicle), and back to idle (0% throttle) in gear.
10. Change the oil and filter. Replace with 20W50 racing motor oil (not synthetic) and an ACDelco oil filter. Inspect the oil and the oil filter for any foreign particles to ensure that the engine is functioning properly.
11. Drive the next 500 miles (or 12 to 15 engine hours) under normal conditions. Do not run the engine at its maximum rated engine speed. Also, do not expose the engine to extended periods of high load.
12. Change the oil and filter. Again, inspect the oil and oil filter for any foreign particles to ensure that the engine is functioning properly.
13. Do not use synthetic oil for break-in. It would only be suitable to use synthetic motor oil after the second recommended oil change and mileage accumulation.

Other Common LS Series Engine Sizes

Liters	CID	Bore	Stroke	Liters	CID	Bore	Stroke	Liters	CID	Bore	Stroke
5.7	346	3.898	3.622	6.2	376	4.065	3.622	6.5	399	4.185	3.622
5.9	358	3.898	3.75	6.4	389	4.065	3.75	6.8	413	4.185	3.75
6.3	382	3.898	4	6.8	415	4.065	4	7.2	440	4.185	4
6.4	391	3.898	4.1	7	426	4.065	4.1	7.4	451	4.185	4.1
6.5	394	3.898	4.125	7	428	4.065	4.125	7.4	454	4.185	4.125
6.6	400	3.898	4.187	7.1	435	4.065	4.187	7.6	461	4.185	4.187
6.6	406	3.898	4.25	7.2	441	4.065	4.25	7.7	468	4.185	4.25
6.8	418	3.898	4.375	7.4	454	4.065	4.375	7.9	481	4.185	4.375
7	430	3.898	4.5	7.7	467	4.065	4.5	8.1	495	4.185	4.5
6	364	4	3.622	6.3	387	4.125	3.622	6.7	411	4.25	3.622
6.2	377	4	3.75	6.6	401	4.125	3.75	7	426	4.25	3.75
6.6	402	4	4	7	428	4.125	4	7.4	454	4.25	4
6.8	412	4	4.1	7.2	438	4.125	4.1	7.6	465	4.25	4.1
6.8	415	4	4.125	7.2	441	4.125	4.125	7.7	468	4.25	4.125
6.9	421	4	4.187	7.3	448	4.125	4.187	7.8	475	4.25	4.187
7	427	4	4.25	7.4	454	4.125	4.25	7.9	482	4.25	4.25
7.2	440	4	4.375	7.7	468	4.125	4.375	8.1	497	4.25	4.375
7.4	452	4	4.5	7.9	481	4.125	4.5	8.4	511	4.25	4.5

Recommended Oil, Plugs, Filters

Small-Block

Engine Part Number	Engine Name	Oil	ACDelco Oil Filter	ACDelco Spark Plugs	Spark Plug Gap	Thermostat	Thermostat Gasket
12499529	350/290HP	10W30 motor oil (synthetic after break in)	P/N PF454 or PF1218	P/N R45TS	.045"	N/A	N/A
12499711, 12496968, 12486041	350 HO	10W30 motor oil (synthetic after break in)	P/N PF25 or Premium ACDelco P/N UPF25	P/N MR43LTS	.040"	10202456 180°F Optional: 10207373 195°F.	10105135
12499712, 24502609, 12561723	ZZ4	10W30 motor oil (synthetic after break in)	P/N PF25 or Premium ACDelco P/N UPF25	P/N MR43LTS	.040"	10202456 180°F Optional: 10207373 195°F.	10105135
12499120	Ram Jet 350	10W30 motor oil (synthetic after break in)	P/N 1218	P/N MR43LTS	.040"	10202456 180°F Optional: 10207373 195°F.	10105135
12499710, 12496769	Fast Burn 385	10W30 motor oil (synthetic after break in)	P/N PF25 or Premium ACDelco P/N UPF25	P/N MR43LTS	.040"	10202456 180°F Optional: 10207373 195°F.	10105135
12499101	HT383	10W30 motor oil (synthetic after break in)	P/N PF25 or Premium ACDelco P/N UPF25	P/N R44LTS	.040"	Not included. 10202456 180°F Rec. Optional: 10207373 195°F.	Not included. 10105135 Rec.
17800393	HT383E	10W30 motor oil (synthetic after break in)	P/N PF454 or PF52 (4WD)	P/N R44LTS	.040"	N/A	N/A
12499106, 12498772	ZZ383	10W30 motor oil (synthetic after break in)	P/N PF25 or Premium ACDelco P/N UPF25	P/N R44LTS	.040"	Not Included. 10202456 180°F Rec. Optional: 10207373 195°F.	Not included. 10105135 Rec.

LS Series

Engine Part Number	Engine Name	Oil	ACDelco Oil Filter	ACDelco Spark Plugs	Spark Plug Gap	Thermostat	Thermostat Gasket
19165628	5.3L HO	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12571263	N/A
17801267	LS1	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12600171	N/A
17801268	LS6	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12600171	N/A
19156261	LS2	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12600171	N/A
17802134	LS 364/440	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12600171	N/A
19156262	LQ9	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF46	P/N 41-985	.040"	12600171	N/A
19165485	L92	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF48	P/N 41-985	.040"	89018168	N/A
17802397	LS7	5W30 Synthetic oil that meets the GM4718M specifications (See label)	P/N PF48	P/N 41-104	.040"	12600171	N/A

Big-Block

Engine Part Number	Engine Name	Oil	ACDelco Oil Filter	ACDelco Spark Plugs	Spark Plug Gap	Thermostat	Thermostat Gasket
12568774, 12498778	454 HO	5W30 motor oil (synthetic after break in)	P/N PF 1218	P/N MR43T	.040"	Not included. 10202456 180°F Rec. Optional: 10207373 195°F.	Not included. 10105135 Rec.
12498777	ZZ454	5W30 racing oil (synthetic after break in)	P/N PF 1218	P/N Rapidfire #4	.040"	Not included. 10202456 180°F Rec. Optional: 10207373 195°F.	Not included. 10105135 Rec.
88890534	HT502	5W30 motor oil (synthetic after break in)	P/N PF 1218	P/N R43T	.040"	N/A	N/A
12568782, 12496962, 12371171, 12496963, 12371204	ZZ502	5W30 motor oil (synthetic after break in)	P/N PF 454	P/N Rapidfire #4	.040"	10202456 180°F. Optional: 10207373 195°F.	10105135
12568778	502 HO	5W30 motor oil (synthetic after break in)	P/N PF 1218	P/N MR43T	.040"	Not included. 10202456 180°F Rec. Optional: 10207373 195°F.	Not included. 10105135 Rec.
12499121	Ram Jet 502	5W30 motor oil (synthetic after break in)	P/N PF 454	P/N Rapidfire #4	.040"	10202456 180°F. Optional: 10207373 195°F.	10105135
12498793, 12498792, 12499190	ZZ572/620	20W50 racing oil (synthetic after break in)	P/N UPF35L	P/N R45XLS	.035"	10202456 180°F. Optional: 10207373 195°F.	10105135

Racing

Engine Part Number	Engine Name	Oil	ACDelco Oil Filter	ACDelco Spark Plugs	Spark Plug Gap	Thermostat	Thermostat Gasket
88958602	Circle Track 350/350	15W50 motor oil (synthetic after break in)	P/N PF35 or PF35L	P/N MR43LTS	.045"	10202456 180°F. Optional: 10207373 195°F.	10105135
88958603	Circle Track 350/355	15W50 motor oil (synthetic after break in)	P/N PF35 or PF35L	P/N MR43LTS	.045"	10202456 180°F. Optional: 10207373 195°F.	10105135
88958604	Circle Track 350/400	15W50 motor oil (synthetic after break in)	P/N PF35 or PF35L	P/N MR43LTS	.045"	10202456 180°F. Optional: 10207373 195°F.	10105135
12498827, 12498826, 12498825	ZZ572/720	20W50 racing oil (synthetic after break in)	P/N UPF35L	P/N R42XLS	.035"	10202456 180°F. Optional: 10207373 195°F.	10105135

Small-Block Universal Parts List

These parts are used on all Small-Block Engines

Part No.	Description	Qty
12561388	Main Bearing Cap Bolt Outer	10
3877669	Main Bearing Cap Bolt Inner	6
12561389	Main Bearing Cap Stud Inner	3
9442946	Main Bearing Cap Nut for Windage Tray	1
12453170	Camshaft Bearing—Camshaft #1	1
12453171	Camshaft Bearing—Camshaft #2	1
12453172	Camshaft Bearing—Camshaft #3, 4	2
10241154	Camshaft Plug—Rear	1
88891749	Freeze Plug, Cup—Brass 41.1mm	8
10120990	Main Bearing (Std) #1, 2, 3, 4 (All Small-Blocks Except 383)	4
10120993	Main Bearing (Std) Rear (All Small-Blocks Except 383)	1
1453658	Transmission Dowel Pin 5/8" x 1 3/16"	2
12554553	Front Dowel Pin 1/4" x 5/8"	2
585927	Dowel Pin 5/16" x 9/16"	4
14081701	1/4" Pipe Plug (Thread Socket Head)	4
14091563	Oil Galley, Steel Cup Plug (.476")	4
9441003	Rear Seal Housing Locator Pin 7/16" x 9/16"	1
14084945	Block Drain Plug (1/4-18 x .56) Threaded	2
14088556	Rear Seal Retainer	1
10088158	Rear Crank Seal 1-Pc Style	1
14080362	Oil Pan Stud—Outboard	1
12555771	Rear Adapter Gasket to Block	1
14101058	Adapter Stud	2
14088561	Adapter Bolt—Torx Upper	1
9439915	Hex Nut, Adapter to Stud 1/4-20 x .234	1
14088562	Adapter Bolt, Torx thru Loc Pin 1/4-20 x .75	1
10121044	Rear Seal (2-Piece Seal Design)	1
12513961	Front Cover, Sheet Metal with Welded Pointer	1
10108435	Front Cover Gasket—Sheet Metal Cover	1
10243247	Front Crank Seal—Sheet Metal Cover	1
12562818	Cover, Engine Front without Pointer ZZ4 Design Engines	1
10228655	Front Crank Seal	1
9439930	Front Cover Bolt	10
10213293	Front Cover Bolt	6
12551135	Front Cover Bolt	2
10213294	Engine Front Cover Bolt Grommet	8
14090911	Plug (3/8-18 Threaded)	AR
10168527	Head Bolt—Short	4
10168526	Head Bolt—Medium	20
10168525	Head Bolt—Long	4
10089648	Rocker Arm—with Nut and Ball (Use with all Steel Rockers)	AR
10088128	Camshaft Retainer 1st Des 3.620 Bolt Pattern	1
10168501	Camshaft Retainer 2nd Des 3.294 Bolt Pattern	1
14093637	Camshaft Bolt Retainer (Torx)	2
12554553	Camshaft Sprocket Locator Pin to Cam 1/4 x 5/8	1
9424877	Camshaft Bolt Sprocket 5/16-18 x 3/4 300m	3

Part No.	Description	Qty
10108688	Connecting Rod—All Except 383 Engines	AR
461372	Connecting Rod Bolt—All Except 383 Engines	AR
225854	Connecting Rod Nut—All Except 383 Engines	AR
12523924	Connecting Rod Bearing (Std) Except 383 Engine	AR
10046031	Flywheel Locator Pin 7/16 X 7/8	1
14061685	Clutch Pilot Bearing All with Manual Transmission	1
106751	Dampener Key—Front of Crankshaft (Woodruff)	1
3754587	Water Pump Gasket	2
9442012	Water Pump Bolts 3/8-16/ 2 1/4	4
14088753	Water Outlet	1
10198997	Water Outlet Bolts	2
10105135	Water Outlet Gasket	1
10207373	Thermostat, 195 Deg	1
10202456	Thermostat, 180 Deg	1
10108676	Oil Pan Gasket (1-Pc Des)	1
11518377	Oil Pan Drain Plug 12mm	1
3536966	Oil Pan Drain Plug O-Ring Seal	1
3921988	Oil Pan Drain Plug, 1/2	1
14090908	Oil Pan Drain Plug Gasket	1
12553058	Oil Pan Reinforcement LH	1
12553059	Oil Pan Reinforcement RH	1
9440033	Oil Pan Bolt 1/4-20 x 5/8	14
12338130	Oil Pan Nut 5/16-18	2
9424877	Oil Pan Bolt 5/16-18 x 3/4	2
12551154	Oil Tube Indicator	1
12551144	Oil Tube Indicator	1
3952301	Oil Filter Adapter with Bypass Valve	1
3951644	Oil Filter Adapter Bolt 5/16-18 x 1 1/8	2
3764554	Oil Pump Shaft Retainer (Nylon)	1
12525810	Intake Manifold Gasket Set (for ZZ4 Engines)	1
89017465	Intake Manifold Gasket (for Vortec Design Heads)	1
12550027	Bolt, Intake Manifold (All with Vortec Design Heads)	8
88891769	Bolt, Intake (3/8-16 x 1 1/2) ZZ4 Design Engines	4
14091544	Bolt, Intake (3/8-16 x 1 1/8) ZZ4 Design Engines	4
9439918	Bolt, Intake (3/8-16 x 1 3/8) ZZ4 Design Engines	4
6269414	Manifold, EGR Cover, ZZ4 Engine	1
12554530	EGR Gasket ZZ4 Engine	1
9442184	EGR Cover Bolt T/W 9439571 Washer	2
14094792	Manifold, Choke Cover ZZ4 Engine	1
14096848	Manifold Choke Cover Gasket ZZ4 Engine	1
14094069	Fuel Pump Block Off Plate	1
12560223	Fuel Pump Cover Gasket	1
3719599	Fuel Pump Adapter Plate	1
9440033	Bolts, Fuel Pump 1/4-20 x 5/8	2
9442963	Bolts, Fuel Pump 3/8-16 x .3/4	2
3704817	Fuel Pump Pushrod	1

350/290 hp Service Parts List

12499529

Part No.	Description
10066034	Block, Bare (Cast Iron—4-Bolt Main with 2-Pc Rear Seal)
12453170	Camshaft Bearing #1
12453171	Camshaft Bearing #2 and Rear
12453172	Camshaft Bearing #3, 4
10120990	Crankshaft Main Bearing (Std) #1, 2, 3, 4
10120993	Crankshaft Main Bearing (Std) Rear
458625	Crankshaft Rear Main Seal (2-Pc Design)
12531283	Front Engine Cover (Sheet Metal with Pointer)
93438649	Cylinder Head—with Valves (Cast Iron—76cc)
93438648	Cylinder Head, Bare
3814692	Stud, Rocker Stud Pressed
10241743	Intake Valve 1.94"
12550909	Exhaust Valve 1.50"
3911068	Valve Spring, Valve with Dampener
14042575	Cap Rotator
14003974	Valve Spring Cap
24503856	Key, Valve Keeper
10212810	Intake Valve Stem Oil Seal
12564852	Exhaust Valve Stem Oil Seal
10105117	Head Gasket
93438952	Valve Cover
93412642	Valve Cover

Part No.	Description
3933964	Rocker Cover Gasket (Perimeter Hold Down)
14095256	Pushrod
5232720	Lifter, Hydraulic (Flat)
3896962	Camshaft, Hydraulic (Flat Tappet)
10108688	Connecting Rod
93422884	Piston, Std with Ring
88894219	Piston Ring
93426651	Crankshaft (Nodular Iron—2-Pc Seal Design)
14088783	Timing Chain
14088785	Camshaft Sprocket
14088784	Crankshaft Sprocket
9424877	Camshaft Sprocket Bolt
12523924	Rod Bearing (Std)
12523925	Rod Bearing (.001)
10066039	Oil Pan (4-qt)
12553059	Oil Pan Reinforcement
10066041	Oil Pan Reinforcement
10089606	Oil Pan Gasket
3951600	Oil Level Tube (Lower)
93442037	Oil Pump (.742" Diameter Tube)
12551165	Oil Pump Screen (.742" Diameter Tube)

Small-Block 350/330-350 hp Service Parts List

Part No.	Description				
		88958602	12496968	12499711	12486041
		CT	DLX	TK	Base
10105123	Block Cast Iron (4-Bolt, 1-Pc Rear Seal)	x	x	x	x
12342089	Cover, Front Engine (Chrome)	x	x	x	x
12342011	Tab, Engine Timing (Chrome)	x	x	x	
12558060	Cylinder Head with Valves (Complete)	x	x	x	x
12529093	Cylinder Head (Bare with Studs)	x	x	x	x
10241743	Intake Valve 1.94"	x	x	x	x
12550909	Exhaust Valve 1.50"	x	x	x	x
10212811	Valve Spring	x	x	x	x
10212810	Intake Valve Stem Seal	x	x	x	x
12564852	Exhaust Valve Stem Seal	x	x	x	x
10241744	Valve Spring Cap	x	x	x	x
10105117	Head Gasket	x	x	x	x
10089648	Rocker Arm (with Ball and Nut)	x	x	x	x
12355350	Rocker Cover (Chrome—Pair)		x	x	x
25534359	Rocker Cover (Circle Track Only)	x			
19131218	Air Breather with Cover (Chrome)			x	
25534355	Breather, Crank Case Vent Valve, Circle Track Engine	x			
14095256	Pushrod—Valve	x	x	x	x
5232720	Lifter, Hydraulic (Flat Tappet)	x	x	x	x
24502476	Camshaft, Hydraulic (Flat Tappet)	x	x	x	x
10108688	Connecting Rod	x	x	x	x
12514101	Piston, Std (with Piston Rings)	x	x	x	x
14088526	Crankshaft (Nodular Iron—1-Pc Seal)	x	x	x	x
88960604	Balancer, Crankshaft	x	x	x	
14088765	Flexplate		x	x	
14087014	Timing Chain	x	x	x	x

Part No.	Description				
		88958602	12496968	12499711	12486041
		CT	DLX	TK	Base
340235	Camshaft Sprocket	x	x	x	x
10128346	Crankshaft Sprocket	x	x	x	x
88894341	Water Pump (Normal Rotation)		x		
88894005	Water Pump (Reverse Rotation)			x	
12557558	Oil Pan (with Deflector and Gasket—5-qt)	x	x	x	x
25534353	Oil Pan, 350 hp 8-qt. Circle Track Engine, with Drain Plug # 25534356	x			
12554816	Windage Tray		x	x	x
25534360	Reinforcement LH, for Circle Track Pan	x			
12553058	Reinforcement LH, Oil Pan		x	x	x
12553059	Reinforcement RH, Oil Pan	x	x	x	x
10055724	Oil Dip Stick Tube		x	x	x
10077153	Oil Dip Stick (Black Handle)		x	x	x
93442037	Oil Pump (.742" Diameter Tube 2nd Design)		x	x	x
12550042	Oil Pump Screen (2nd Design)	x	x	x	
93440806	Distributor Assembly	x	x	x	
19157986	Spark Plug (R44Its)		x	x	
12361057	Wire Kit, Spark Plug		x	x	
12496820	Intake Manifold Vortec Dual Plane Design	x	x		
12366573	Intake Manifold Vortec Single Plane	x			
89017465	Gasket Intake Manifold	x	x	x	
12550027	Bolt, Intake Manifold	x	x	x	
12497147	Carburetor (Holley 600-cfm 4-bbl)		x	x	
12342080	Air Cleaner (Classic 14")		x	x	
10465143	Starter Motor (Reman)			x	
6415325	Fuel Pump (High Performance)			x	
12496968	Serpentine Belt Drive Accessory Kit			x	

Small-Block ZZ Engines (350-345 & 355 hp)

ZZ Series Engines Service Parts List

Part No.	Description	10134338	10185025	10185072	24502609	12499712	88958603
		ZZZ	ZZ1	ZZ3	ZZ4	TK	Base
12561723	Partial Engine (ZZ4)	x	x	x	x	x	x
10105123	Block, Bare Cast Iron 4-Bolt Main	x	x	x	x	x	x
12513961	Front Engine Cover with Pointer	x	x	x			
12562818	Front Engine Cover (Plastic with Pointer)				x	x	x
12556463	Head, Complete with Valves—alm	x	x	x	x	x	x
10241743	Intake Valve 1.94"	x	x	x	x	x	x
12550909	Exhaust Valve 1.50"	x	x	x	x	x	x
10134358	Valve Springs, Hi Perf (Orange)	x	x	x			
12551483	Valve Springs, LT4				x	x	x
10185066	Shim/Spacer, Under Spring	x	x	x			
10212809	Shim/Spacer, Under Spring (LT4)				x	x	x
14003974	Valve Spring Cap	x	x				
10045007	Valve Spring Cap			x			
10212808	Valve Spring Cap (LT4)				x	x	x
24503856	Key, Valve Keeper	x	x	x	x	x	x
10168410	Rocker Arm Stud	x	x	x			
12552126	Rocker Arm Stud				x	x	x
10111771	Pushrod Guide Plate	x	x	x			
460483	Seal, Intake Stem	x	x	x			
10147883	Seal, Exhaust Stem	x	x	x			
10214034	Seal, Intake and Exhaust Valve Guide (ZZ4)				x	x	x
10212810	Seal, Intake and Exhaust Valve Stem	x	x	x	x	x	x
10007818	Shield, Valve Stem	x	x				
12557236	Head Gasket (.051" Thick)	x	x	x	x	x	x
10089648	Rocker Arm with Nut and Ball (Steel)	x	x	x	x	x	x
25534352	Rocker Arm Nut (Circle Track Engine)						x
12555269	Rocker Cover—Painted, Ctr Bolt (RH & LH)	x	x	x	x	x	
25534359	Rocker Cover Circle Track Engine						x
25534355	Rocker Cover Breather Circle Track						x
10241740	Pushrod	x	x	x	x	x	x
5234890	Valve Lifter, Hyd Roller Design	x	x	x	x		
17120735	Valve Lifter, Hyd Roller Design					x	x
10134334	Camshaft, Hyd Roller Design	x	x				
10185071	Camshaft, Hyd Roller Design			x	x	x	x
10108688	Connecting Rod (Powdered Metal)	x	x	x	x	x	x
10181390	Piston, Std—with Pin (Hypereutectic)		x	x			

Part No.	Description	10134338	10185025	10185072	24502609	12499712	88958603
		ZZZ	ZZ1	ZZ3	ZZ4	TK	Base
10159436	Piston, Std—with Pin (Cast 10:1)				x	x	x
88894219	Piston Ring (Std) Single Cylinder	x	x	x			
12528817	Piston Ring (Std) Single Cylinder				x	x	x
14096036	Crankshaft (Forged Steel)	x	x	x			
12556307	Crankshaft (Forged Steel)				x	x	x
12551537	Dampener (6-3/4" Diameter)	x	x	x			
88960604	Dampener (8" Diameter)			x	x	x	x
14088765	Flywheel, Automatic 12-3/4"	x	x	x	x	x	x
14088783	Timing Chain (Roller Design)	x	x	x	x	x	x
12552129	Camshaft Sprocket (Roller Design)	x	x	x	x	x	
12552128	Crankshaft Sprocket (Roller Design)		x				
14088784	Crankshaft Sprocket (Roller Design)	x		x	x	x	x
88894341	Water Pump (Long Leg, Iron)	x	x	x	x	x	x
25534354	Oil Pan Circle Track Engine						x
25534346	Oil Pan Fill Hole Plug (Circle Track Engine)						x
12557558	Oil Pan Kit with Baffle (5-qt)	x	x	x	x	x	
12553058	Oil Pan Reinforcement ZZ4 Engine	x	x	x	x	x	
125534360	Oil Pan Reinforcement (Circle Track Engine)						x
12553059	Oil Pan Reinforcement All Late-Model	x	x	x	x	x	x
10077153	Oil Dip Stick	x	x	x			
12551144	Oil Dip Stick				x	x	
10055724	Oil Pan Dip Stick Tube	x	x	x			
12551154	Oil Pan Dip Stick Tube				x	x	
12555284	Oil Pump (.620" Diameter Tube)	x	x	x			
93442037	Oil Pump (.742" Diameter Tube)				x	x	
14044872	Oil Pump Circle Track Engine						x
3855152	Screen, Oil Pump Pick-Up (.620" Dia)	x	x	x	x	x	
12550042	Screen, Oil Pump Pick-Up (.742" Dia)	x	x				
12554816	Windage Tray			x	x	x	x
93440806	Distributor, Complete (HEI)	x	x	x	x	x	x
10185063	Manifold, Intake	x	x	x	x	x	x
10148096	Gasket, Intake Set	x	x	x	x	x	x

Ram Jet 350 Service Parts List

Part No.	Description	12495515	12499120
12556121	Engine, Partial	x	x
93800970	Front Engine Cover Assembly	x	x
12558060	Cylinder Head (Cast Iron)	x	x
10241743	Intake Valve 1.94"	x	
12550909	Exhaust Valve 1.50"	x	x
10212811	Valve Spring	x	x
24503856	Valve Stem Key	x	x
10212810	Intake Valve Stem Oil Seal	x	x
12564852	Exhaust Valve Stem Oil Seal	x	x
10241744	Valve Spring Cap	x	x
14096405	Cylinder Head Gasket	x	x
12367346	Valve Rocker Arm (1.6 Alum Roller)	x	x
12355350	Valve Rocker Cover Assembly (Pair)	x	x
10241740	Pushrod	x	x
17120735	Valve Lifter Assembly	x	x
14097395	Camshaft Assembly	x	x
10108688	Connecting Rod	x	x
88894280	Piston Assembly—with Pin (Std)	x	x
12522848	Piston Ring Kit (Std)	x	x
10243068	Crankshaft	x	x
12557231	Crankshaft Oil Deflector	x	x
10243271	Balancer Assembly—Crankshaft	x	x
10105832	Flywheel (Manual Transmission)	x	x
14088783	Timing Chain	x	x
12552129	Camshaft Sprocket	x	x
14088784	Crankshaft Sprocket	x	x
12594658	Water Pump Assembly—with Gasket (Iron)	x	x
10242245	Oil Pan	x	x
12550042	Oil Pump Screen	x	x
93442037	Oil Pump Assembly	x	x
3998287	Oil Pump Drive Shaft	x	x
12562818	Front Engine Cover Assembly	x	x
10228655	Crankshaft Front Seal Assembly	x	x
1104060	Distributor	x	x
10482830	Distributor Module	x	x
5614210	Spark Plug (Mr 43lts)	x	x
12489371	Intake Manifold	x	x
12529094	Intake Manifold Gasket	x	x
12550027	Intake Manifold Bolt	x	x
14082470	Intake Manifold Vacuum Fitting	x	x
25036751	Intake Air Temp Sensor (Use with MEFI 4 Only)		x
17096144	Throttle Body	x	x
17123852	Throttle Position Sensor	x	x
17113209	Idle Air Control Valve	x	x
17082049	Idle Air Control Valve Seal	x	x

Part No.	Description	12495515	12499120
17113168	Idle Air Bolt Kit	x	x
12570168	Throttle Body Gasket	x	x
11517591	Throttle Body Bolt	x	x
17124248	Fuel Injector	x	x
12553918	Multi-Port Fuel Injection Rail Assembly	x	x
17123897	Fuel Pressure Regulator	x	x
9439930	Fuel Pressure Regulator Bolt	x	x
12557247	Fuel Pressure Regulator Hose	x	x
12489599	Fuel Line Connector	x	x
12489600	Fuel Line Connector Seal	x	x
24454610	Fuel Injection Bolt	x	x
15306045	Fuel Pump Relay Connector	x	x
12193601	Fuel Pump Relay	x	x
1115498	Ignition Coil	x	x
11507041	Coil Bracket Bolt	x	x
10180301	Coil Bracket Nut	x	x
12097982	Ignition Coil Wire	x	x
15156508	O ² Sensor (Use with MEFI 4 Ignition System Only)		x
15156588	ECU Pipe Fitting O ² Sensor (Requires Welding)		x
12489488	ECU Module Assembly-MEFI 3 (Engine P/N 12495515)	x	
88962717	ECU Module Assembly-MEFI 4 (Engine P/N 12499120)		x
12499116	ECU Ignition (Conversion Kit from MEFI 3 to MEFI 4)	x	
12489584	ECU Mounting Bracket	x	x
11509024	ECU Bracket Mounting Nut	x	x
10456126	Knock Sensor	x	x
9359409	MAP Sensor	x	x
16194007	MAP Sensor Seal	x	x
12489583	MAP Sensor Bracket	x	x
12489598	MAP Sensor Bracket Bolt	x	x
15326386	Engine Coolant Temp Sensor	x	x
25312200	HTD Oxygen Sensor—(Use with MEFI 4 Only)		x
10029398	Multiuse Fuse Bracket	x	x
25171792	Fuel Filter	x	x
12181943	Throttle Body Harness Assembly	x	x
12129228	Engine Control Connector Module	x	x
12129231	Retainer, ECU Wiring Harness	x	x
12489492	Wire Harness ECU (MEFI 3)	x	
88961967	Wire Harness ECU (MEFI 4)		x
12129234	ECU Wiring Harness Retainer	x	x
12129232	ECU Wiring Harness Retainer	x	x
12129233	ECU Wiring Harness Retainer	x	x
12102746	Fuse Connector	x	x
12186406	Engine Wire Harness Fuse Cover	x	x
88909753	Wire Harness Fuse Assembly	x	x

Fast Burn 385 350ci-385/400 hp Service Parts List

Part No.	Description				Part No.	Description			
		12496769	12499710	88958604			12496769	12499710	88958604
12561723	Partial Engine	x	x	x	88960604	Dampener (8" Diameter)	x	x	x
10105123	Block, Bare Cast Iron 4-Bolt Main	x	x	x	14088765	Flywheel, Automatic 12-3/4	x	x	
12562818	Front Engine Cover (Plastic with Pointer)	x	x	x	12552129	Camshaft Sprocket	x	x	x
12464298	Cylinder Head Complete (Fastburn Alum) (64cc)	x	x	x	14088783	Timing Chain	x	x	x
12497186	Cylinder Head Bare	x	x	x	14088784	Crankshaft Sprocket	x	x	x
12555331	Intake Valve 2.00"	x	x	x	88894341	Water Pump (Long Leg—Iron)	x	x	
12551313	Exhaust Valve 1.55"	x	x	x	12528916	Oil Pan Kit with Baffle (5-qt)	x	x	
12551483	Valve Springs LT4 Design	x	x	x	25534354	Oil Pan Kit (Race Design 8-qt with Screen)			x
10212809	Valve Spring/Spacer, Under Spring	x	x	x	12553058	Oil Pan Reinforcement (All)	x	x	x
10212808	Valve Spring Cap	x	x	x	12553059	Oil Pan Reinforcement, Oil Pan	x	x	
24503856	Key, Valve Keeper	x	x	x	25534360	Oil Pan Reinforcement (Race Pan Only)			x
12552126	Rocker Arm Stud	x	x	x	12551154	Oil Dip Stick Tube	x	x	
10214034	Intake and Exhaust Valve Guide Seal	x	x	x	12551144	Oil Dip Stick	x	x	
10212810	Intake and Exhaust Valve Stem Seal	x	x	x	93442037	Oil Pump (.742" Diameter Tube)	x	x	
12557236	Head Gasket	x	x	x	14044872	Oil Pump (High Volume)			x
10089648	Rocker Arm with Nut and Ball (Steel)	x	x		12550042	Oil Pump Screen (.742" Dia Tube)	x	x	
12370838	Rocker Arm Kit (Includes 16 Alum Roller Rockers)			x	5614210	Spark Plug (Mr43lts)	x	x	x
12555269	Rocker Cover, Painted, Ctr Bolt (RH and LH)	x	x		12361057	Spark Plug Wires		x	
25534359	Rocker Cover (Circle Track Racing Only)			x	93440806	Distributor, Complete (HEI)	x	x	
25534355	Rocker Cover Breather (Circle Track Racing Only)			x	12366573	Intake Manifold, (Vortec-Dual Plane)	x	x	
10046089	Rocker Cover Gasket, Valve Cover	x	x	x	12496822	Intake Manifold, (Vortec-Single Plane)			x
10241740	Valve Pushrod	x	x	x	89017465	Intake Gasket (Vortec Design)	x	x	x
17120735	Lifter, Hyd Roller Valve	x	x	x	12550027	Intake Manifold Bolt	x	x	x
10185071	Camshaft, Hyd Roller	x	x	x	6415325	Fuel Pump (Manual HP)			x
10108688	Connecting Rod	x	x	x	12485506	Carburetor (Holley 750-cfm)			x
12523924	Rod Bearing (Std)	x	x	x	12342080	Air Cleaner			x
10159436	Piston, Std—with Pin (Cast 10:1)	x	x	x	12497698	Accessory Drive Package			x
12556307	Crankshaft (Forged Steel)	x	x	x	10465143	Starter (Remanufactured)			x

383 Engine Service Parts List

Part No.	Description	12497317	12499101	12498772
12499106	Partial Engine 383 ci	x	x	x
88962516	Block, Bare Cast Iron 4-Bolt Main	x	x	x
12499102	Crankshaft Main Bearing Kit (#1 thru #5)	x	x	x
12562818	Front Engine Cover	x	x	x
12558060	Cylinder Head with Valves (340 hp Engine) Iron	x	x	
12464298	Cylinder Head with Valves (425 hp Engine) Alum			x
10241743	• Intake Valve 1.94"	x	x	
12555331	• Intake Valve 2.00"			x
12550909	• Exhaust Valve 1.50"	x	x	
12551313	• Exhaust Valve 1.55"			x
10212811	• Valve Spring	x	x	
12551483	• Valve Spring			x
10241744	• Valve Spring Cap	x	x	
10212808	• Valve Spring Cap			x
24503856	• Key, Valve Keeper	x	x	x
3814692	• Rocker Arm Stud .003 O.S.	x	x	
12552126	• Rocker Arm Stud			x
10212810	• Seal, Intake and Exhaust Valve Stem	x	x	x
12564852	• Exhaust Stem Oil Seal	x	x	
12557236	Head Gasket (.051" Thick) (340 hp Engine)	x	x	
10105117	Head Gasket (.028" Thick) (425 hp Engine)			x
10089648	Rocker Arm with Nut and Ball (Steel)	x	x	
12370838	Rocker Arm Kit (16 Alum Roller)			x
12555269	Rocker Cover, Valve—Painted, Ctr Bolt (RH and LH)	x	x	
10241740	Pushrod	x	x	x
17120735	Valve Lifter	x	x	x
14097395	Camshaft	x	x	
12370846	Camshaft			x
12497624	Connecting Rod	x	x	x

Part No.	Description	12497317	12499101	12498772
12499108	Bearing, Rod (Std)	x	x	x
12489437	Piston, Std—First Design	x		
88962542	Piston, Std—Second Design		x	x
12499103	Piston, Std—Second Design (Set of 8)		x	x
12522848	Rings, Piston (Std) First Design (Single Cyl Set)	x		
12499135	Rings, Piston (Std) Second Design (Single Cyl Set)		x	x
12499107	Rings, Piston (Std) Second Design (Set of 8)		x	x
12489436	Crankshaft (4340 Steel 3.80" Stroke)	x	x	x
12498008	Balancer	x	x	x
14088765	Flywheel, Automatic 12-3/4"	x	x	x
14088783	Timing Chain	x	x	x
12552129	Camshaft Sprocket	x	x	x
14088784	Crankshaft Sprocket	x	x	x
88894341	Water Pump (Long Leg) Iron	x	x	x
12557558	Oil Pan Kit	x	x	x
10108676	Oil Pan Gasket	x	x	x
12553058	Reinforcement, Oil Pan	x	x	x
12553059	Reinforcement, Oil Pan	x	x	x
93442037	Oil Pump	x	x	
12550042	Oil Pump Screen	x	x	x
3998287	Oil Pump Shaft	x	x	x
3784554	Oil Pump Shaft Retainer	x	x	x
10077153	Oil Dip Stick	x	x	x
10055724	Oil Dip Stick Tube	x	x	x
12554816	Deflector, Crankshaft Oil (Windage Tray)	x	x	x
12496820	Intake Manifold Vortec Design (340 hp Engine)	x	x	
89017465	Intake Manifold Gaskets	x	x	x
12550027	Intake Manifold Bolts	x	x	x

LS1 Crate Engine Service Parts List

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Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12561166	Block	1	89017582	Piston with Pin		12560384	Bracket, Fuel Inj Rail	1
12561168	Block		88984247	Ring Kit	8	12554211	Stud, Fuel Inj Rail	4
89017466	Bearing, Cam	2	88984248	Ring Kit		12556074	Bracket, Fuel Inj Rail	1
12453167	Bearing, Cam	2	12493714	Bearing Kit, Rod	8	12590211	Body, Throttle	1
12453169	Bearing, Cam	1	12617570	Rod, Connecting	8	11514008	Bolt, Throttle Body	3
12560273	Stud, Main	10	12581209	Pan, Oil	1	12555242	Seal, Throttle Body	1
12560272	Bolt, Main Cap	10	11562588	Plug, Oil Drain	1	12552542	Sensor, MAP	1
12575742	Cover, Lifter Valve	1	25014051	Valve, Filt B/Pas	1	12563277	Manifold, Exhaust	1
11517094	Bolt, PCV Tube	10	12552357	Fitting, Oil Filter	1	12563278	Manifold, Exhaust	1
88894271	Bearing, Main	4	92064339	Stud, Oil Pan	2	11518860	Bolt, Exhaust Manifold	12
89017470	Bearing, Main	1	11503747	Nut	2	12600530	Gasket, Exhaust Manifold	2
12566127	Bolt, Main	10	12599020	Gasket, Oil Pan	1	12560965	Camshaft	1
11609289	Plug, Blk Cool H	1	12586665	Pump, Oil	1	12576407	Sprocket, Camshaft	1
11588949	Plug, Blk Cool H	1	12572654	Screen, Oil Pump	1	12556582	Sprocket, Crankshaft	1
12559855	Head, Cylinder	2	11588949	Plug, Oil Galley	2	12586482	Chain, Timing	1
12559853	Head, Cylinder	NS	12593348	Seal, Oil Fill Tube	1	12556127	Bolt, Camshaft Sprocket	3
12562126	Plug, Head Core	4	12559505	Tube, Oil Fill	1	12588670	Dampener Kit	1
12589774	Valve Spring	16	12557520	Plug, Oil Level Tube	1	10238852	Rod, Valve Push	16
10166344	Cap, Valve Spring	16	11588736	Bolt Oil Level Tube	1	12595365	Guide, Valve Lifter	4
12563063	Valve, Intake	8	88984215	Filter, Oil	1	17122490	Lifter, Valve	16
12563064	Valve, Exhaust	8	12594779	Tube, PCV	1	12551163	Bolt, Lifter Guide	4
12589226	Gasket, Head	2	12579145	Plug, PCV Cover	1	12556437	Retainer, Camshaft	1
11562524	Bolt, Head	20	12561243	Cover, Front Eng	1	11515756	Bolt, Camshaft Retainer	4
12558840	Bolt, Head	10	12574294	Gasket, Front Cover	1	10214664	Arm, Valve Rocker	16
12570326	Pin, Head Loc.	4	12585673	Seal, Front Crk	1	12570427	Cover, Valve	1
11610259	Plug, Head Core	2	11515758	Bolt, Front Cover	8	12570696	Gasket, Valve Cover	2
12583565	Crankshaft	1	89018053	Pump, Water	1	12577215	Bolt, Valve Cover	8
12552216	Crankshaft	NS	12600172	Inlet Assembly	1	12582224	Cover, Valve	1
12559353	Ring, Crankshaft	1	12600171	Thermostat	1	12589867	Sensor, Knock	1
12598301	Housing, RR Seal	1	12570307	Seal, Water Inlet	1	12561211	Sensor, Camshaft	1
12602972	Seal, RR Main	1	11516480	Bolt, Water Inlet	2	11515756	Bolt, Camshaft Sensor	1
12574293	Gasket, RR	1	12610311	Gasket, Water Pump	2	12560228	Sensor, Crankshaft	1
12556127	Bolt, RR Housing	12	12551923	Bolt, Water Pump	6	11515756	Bolt, Crnk Sensor	1
11517031	Nut	9	88894339	Manifold, Intake	1	12571164	Spark Plug	7
12558189	Deflector, Oil	1	12533587	Gasket Kit, Intake Manifold	1	12563288	Bracket, Coil	4
12553118	Balancer	1	12560251	Seal, Intake Manifold	2	12558948	Coil, Ignition	8
12557840	Bolt, Balancer	1	12561858	Rail	1	89017270	Wire Kit, Spark Plug	1
12561513	Key, Balancer	1	12482704	Injector, Fuel	8	1453658	Pin, Trans Loc	2
12602448	Flexplate	1	12482706	Seal Kit	1	15326388	Sensor, Cool Tmp	1
11569956	Bolt, Flexplate	6	12554679	Retainer, Fuel Inj	8	12614969	Sensor Oil Press	1
89017581	Piston with Pin	8	12555909	Dampener, Fuel Pres	1			

LS6 Crate Engine Service Parts List

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Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12561166	Block	1	89017582	Piston with Pin		25532662	Cap Assembly	1
89017466	Cam Bearing	2	12617570	Rod, Connecting	8	12555909	Dampener	1
12453167	Cam Bearing	2	88984247	Ring Kit, Piston	8	17113669	Throttle Body	1
12453169	Cam Bearing	1	88984248	Ring Kit, Piston		17113566	Sensor, Throttle Body	1
12453167	Cam Bearing	2	12493714	Bearing, Rod	8	11514008	Bolt	3
12560273	Stud, Main Cap	10	12598152	Oil Pan Assembly	1	12614970	Sensor, MAP	1
12560272	Bolt, Main Cap	10	11562588	Plug, Oil Drain	1	12552344	Bolt, Intake Manifold	10
125558177	Grommet	2	12558760	Gasket, Oil Pan	1	12578030	Manifold, Exhaust	1
11515758	Bolt	10	11515758	Bolt, Oil Pan	12	12578032	Shield, Exhaust Manifold	1
12558178	Gasket Valve Cover	1	12554990	Bolt, Oil Pan	2	24505098	Bolt, Exhaust Manifold	12
11517094	Bolt PCV Baffle	10	12577904	Baffle, Oil Pan	1	11589264	Stud, Exhaust Manifold	4
88894272	Bearing, Main	1	11519133	Bolt, Oil Baffle	6	12578029	Manifold, Exhaust	1
89017571	Bearing, Main	4	12378190	Sealer	AR	12578031	Shield, Exhaust Manifold	1
12556127	Bolt	10	12586665	Oil Pump	1	12600530	Gasket, Exhaust Manifold	2
11609289	Plug	1	11515758	Bolt, Oil Pump	4	12565308	Camshaft	1
11588949	Plug	1	12577906	Screen with Pipe	1	12576407	Sprocket, Camshaft	1
12564824	Head, Cylinder	2	12573460	Plug, Oil Galley	1	12556127	Bolt, Camshaft Sprocket	3
12564825	Head, Cylinder	2	11588949	Plug, Oil Galley	2	12565582	Sprocket, Crankshaft	1
12560799	Head, Cylinder		12559505	Tube, Oil Fill	1	12588670	Dampener, Timing Chain	1
12564243	Head, Cylinder		12593348	Seal, Oil Fill Tube	1	10238852	Rod, Valve Push	16
11562126	Plug	4	12577268	Cap, Oil Fill	1	12595365	Guide, Valve Lifter	4
12586484	Spring, Valve	16	12584736	Indicator, Oil	1	17122490	Lifter, Valve	16
10166344	Cap, Valve Spring	16	88984215	Filter, Oil	1	12551163	Bolt, Lifter Retain	4
12565311	Valve, Intake	8	12582226	Tube, PCV	1	12556437	Retainer, Camshaft	1
12565312	Valve, Exhaust	8	12594779	Tube, PCV	1	11515756	Bolt, Camshaft Retainer	4
12482063	Seal, Intake Valve	8	12561243	Cover, Front Engine	1	10214664	Arm, Rocker	16
12482060	Seal, Exhaust Valve	8	12585673	Seal, Front Crank	1	12552203	Support, Valve Rocker	2
12589226	Gasket, Head	1	12574294	Gasket, Front Engine	1	12560961	Bolt, Support Rocker	16
15188291	Bolt, Cylinder Head	16	11515758	Bolt, Front Cover	8	12570427	Cover, Rocker Arm	1
12560745	Bolt, Cylinder Head	8	89017592	Pump, Water	1	12589867	Sensor, Knock	1
12558840	Bolt, Cylinder Head	10	12600172	Inlet Assembly, with Pump	1	12561211	Sensor, Cam Posi	1
12570326	Pin	4	12600171	Thermostat	1	11515756	Bolt Cam Posi	1
11610259	Plug	2	12570307	Seal, with Inlet	1	12560228	Sensor, Cr/Pos	1
12583565	Crankshaft Assembly	1	11516480	Bolt, Inlet with Pump	2	11515756	Bolt, Cr/Pos	1
12615666	Housing Assembly	1	12360311	Gasket	2	12571164	Spark Plugs	8
12585671	Seal RR Main	1	12551926	Bolt, Water Pump	6	12558948	Coil Assembly	4
12574293	Gasket	1	12602540	Cover,	2	11519133	Bolt, Ignition Coil	5
12556127	Bolt	10	88890523	Manifold, Intake	1	12102741	Connector, Coil	4
11517031	Nut	7	12533587	Gasket Kit, Intake	1	12560038	Bolt, Ignition Coil	3
12611129	Deflector	1	12560251	Seal	2	89017271	Wire Kit, Spark Plug	1
12560115	Balancer	1	12561858	Rail, Fuel Injector	1	15326388	Sensor, Engine Clnt	1
12561513	Key	1	12482704	Injector, Fuel	8	12373107	Sensor, Oil Pres	1
12557840	Bolt, Balancer	1	12482706	Seal, Fuel Injector	1	12601822	Connector, Knock Sensor	1
3890192	Weight	AR	12554679	Retainer Fuel Injector	8			
3890193	Weight	AR	24500246	Ring	1			
89017581	Piston with Pin	8	25532663	Valve Assembly	1			

LS2 Crate Engine Service Parts List

19156261

Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12569850	Cylinder Block	1	12617570	Rod, Connecting	8	16212460	MAP Sensor	1
89017466	Cam Bearing	2	19178307	Ring, Kit	8	12552344	Bolt Intake, Manifold	10
12453167	Cam Bearing	2	12598186	Oil Pan Assembly	1	12603758	Manifold, Exhaust	1
12453169	Cam Bearing	1	25014051	Valve	1	12576823	Shield, Exhaust Manifold	1
12560273	Stud	10	12552357	Fitting, Oil Filter	1	12603760	Manifold, Exhaust	1
12560272	Bolt	10	12558760	Gasket, Oil Pan	1	12576822	Shield, Exhaust Manifold	1
12570471	Cover Assembly	1	11515758	Bolt, Oil Pan	13	24505098	Bolt, Exhaust Manifold	12
89017571	Crank Bearing	4	12554990	Bolt, Oil Pan	2	11518424	Stud, Exhaust Manifold	4
89017572	Crank Bearing	1	12346004	Sealer	1	12600530	Gasket, Exhaust Manifold	2
12556127	Bolt, Crankshaft Cap	10	12586665	Pump Assembly, Oil	1	12574519	Camshaft	1
12576063	Cylinder Head	2	11516479	Bolt, Oil Pump Cv	7	12588670	Dampener	1
12564825	Cylinder Head	2	11515758	Bolt, Oil Pump	4	11588364	Bolt, Timing Dam	2
11562126	Plug	2	12558750	Screen, Oil Pump	1	12586481	Sprocket, Camshaft	1
12586484	Valve Spring	16	12557752	Seal	1	12586482	Spocket, Crankshaft	1
10106344	Cap	16	11517031	Nut	1	12586482	Chain, Timing	1
12345885	Lubricant	AR	12559505	Tube, Oil Fill	1	12556127	Bolt, Camshaft Sprocket	3
12563063	Intake Valve	8	12593348	Seal, Oil Fill Tube	1	10238852	Rod, Valve Push	16
12563064	Exhaust Valve	2	12572268	Cap, Oil Fill	1	12595365	Guide, Valve Lifter	4
10166345	Key, Valve Stem	32	12570788	Indicator, Oil Level	1	17122490	Lifter Assembly	16
12482063	Intake Valve Seal	16	12570787	Tube, Oil Level	1	12551163	Bolt	4
12482062	Exhaust Valve Seal	16	11588736	Bolt, Oil Level Tube	1	12556437	Retainer, Camshaft	1
12589227	Gasket, Head	2	88984215	Filter, Oil	1	11515756	Bolt, Cam Retainer	4
11562524	Bolt, Cylinder Head	20	12579145	Plug, PCV Valve C	1	10214664	Arm, Rocker	16
12558840	Bolt, Cylinder Head	10	12594779	Tube, PCV Valve	1	12552203	Support, Rocker Piv	2
12570326	Pin, Cylinder Head Loc	4	12600325	Cover, Front Engine	1	12560961	Bolt	16
11610259	Plug, Cylinder Head Co	2	12600172	Inlet Assembly	1	12570427	Cover, Valve Rocker	1
12588612	Crankshaft	1	12600171	Thermostat	1	12582224	Cover, Valve Rocker	1
12586768	Ring	1	11516480	Bolt, Water Inlet	2	12570125	Sensor, Knock	1
24502262	Plug, Cylinder Head Co	2	12610311	Gasket, Water Pump	1	11588726	Bolt, Knock Sensor	1
12615666	Housing RR Seal	1	12551926	Bolt, with Pump	6	12585546	Sensor, Crankshaft	1
89060436	Seal Assembly	1	12602548	Pipe, Air Bleed	1	11515756	Bolt, Crank Sensor	1
89060436	Gasket	1	12602540	Cover Assembly	1	12571164	Spark Plugs	8
12556127	Bolt	12	12602048	Plug, Air Bleed Pipe	2	12580353	Bracket, Coil	2
11517031	Nut	9	89017648	Manifold, Intake	1	12570616	Coil Assembly	4
12558189	Deflector	1	89017586	Injector, Fuel	8	12579355	Wire Assembly, Coil	2
12598831	Balancer Assembly	1	89017587	Seal Kit, Fuel Injector	1	11516424	Bolt, Coil Brkt	16
12557840	Bolt, Balancer	1	12572174	Rail Assembly Fuel Injector	1	89018057	Wire, Spark Plug	8
12561513	Key, Balancer	1	12590276	Bolt, Fuel Injector Rail	4	15326388	Sensor, Engine Cool	1
12602448	Plate Assembly	1	12570790	Body, Throttle	1	12614969	Sensor, Oil Press	1
11569956	Bolt, Flywheel	6	12570790	Bolt, Throttle Body	4			
89017478	Piston with Pins	8	12576549	Seal, Throttle Body	1			

L92 Crate Engine Service Parts List

19165485

Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12584724	Block	NS	11515758	Bolt, Oil Pan	13	12616286	Manifold, Exhaust	1
89017466	Bearing, Cam	2	12554990	Bolt, Oil Pan	2	10228350	Bolt, Exhaust Manifold	5
12453167	Bearing, Cam	2	12608835	Valve, Oil Pr Rlf	1	24505098	Bolt, Exhaust Manifold	5
12453169	Bearing, Cam	1	12600225	Fitting, Oil Filter	1	12617944	Gasket, Exhaust Manifold	2
12560273	Stud, Main Cap	10	12603782	Switch, Oil Level	1	11518860	Bolt, Exhaust Manifold	12
12560272	Bolt, Main Cap	10	12612289	Pump, Oil	1	12578463	Stop, Fuel Inj	1
89017571	Bearing, Main	4	11514300	Bolt, Oil Pump Cover	7	12612273	Camshaft	1
89017572	Bearing, Main	1	12608579	Screen, Oil Pump	1	24575061	Pin, Cam Locat	1
125988323	Cover, Engine Block Valley	1	9427693	Plug, Oil Galley	1	12588151	Valve, Cm/Ps Ac	1
11609289	Plug, Engine Block Dr	1	11588949	Plug, Oil Galley	2	12585994	Actuator, Cam/S	1
11588949	Plug, Engine Block Dr	1	12574385	Tube, Oil Fill	1	1256582	Sprocket, Crankshaft	1
12582713	Head, Cylinder	2	24504091	Seal, Oil Tube	1	12586482	Chain, Timing	1
12582714	Head, Cylinder	2	12610053	Indicator, Oil Level	1	12585997	Tensioner, Timing Chain	1
12595364	Head, Cylinder	NS	11588736	Bolt, Oil Level Tube	1	11515758	Bolt, Chain Tensioner	2
12600823	Head, Cylinder	NS	89017524	Filter, Oil	1	12595365	Guide, Valve Lifter	4
12589774	Spring, Valve	16	12593999	Cover Front Engine	1	17122490	Lifter, Valve	16
10166344	Cap, Valve Spring	16	11515758	Bolt, Front Cover	8	12551163	Bolt, Lifter Guide	4
12617533	Valve, Intake	8	12585673	Seal, Front Cover	1	1256437	Retainer, Cam	1
12582719	Valve, Exhaust	8	12591720	Sensor, Cam	1	11515756	Bolt, Cam Ret	4
10166345	Key, Valve Stem	32	11588712	Bolt, Upper Int	2	10238852	Rod, Valve Push	16
12482063	Seal, Valve Stem	8	12585995	Magnet, Cm/Sensor	1	12570427	Cover, Valve Rocker	1
12482062	Seal, Valve Stem	8	12594339	Seal, Cm/Sensor	1	12582224	Cover, Valve Rocker	1
12588840	Bolt, Head	10	11588712	Bolt, Cm/Sensor	2	12577215	Bolt, Valve Cover	8
11562524	Bolt, Head	20	12580162	Tensioner Assembly	1	12569167	Arm, Rocker	8
12570326	Pin, Head Loc	4	11518633	Bolt, Tensioner	2	12560961	Bolt, Rocker Arm	16
11610259	Plug, Head Core	1	11518625	Bolt, Tensioner	1	10214664	Arm, Rocker	8
12584997	Crankshaft	1	12600767	Pump, Water	1	12570125	Sensor, Knock	1
12552216	Crankshaft	NS	89018168	Thermostat	1	11588726	Bolt, Knock Sensor	1
12586768	Ring	1	12588372	Gasket, Water Pump	2	12585546	Sensor, Crankshaft	1
12614813	Housing Assembly	1	12580678	Manifold, Intake	1	11515756	Bolt, Crankshaft Sensor	1
11517031	Nut, Oil Deflector	8	12575384	Bolt, Intake Manifold	10	12571164	Spark Plug	8
12611129	Deflector, Oil	1	12580681	Injector, Fuel	8	89018058	Wire Kit, Spark	1
12576652	Balancer	1	12570620	Retainer Kit	1	15336959	Shield, Plug Wire	8
1257480	Bolt, Balancer	1	12587147	Seal Kit, Fuel Inj	1	12580352	Bracket, Coil	1
12561513	Key, Balancer	1	89018111	Rail	1	12580353	Bracket, Coil	1
12602448	Plate, Flexplate	1	12580910	Bolt, Fuel Inj Dvr	4	12570616	Coil, Ignition	8
11569956	Bolt, Flexplate	6	12580760	Body, Throttle	1	12573190	Coil, Ignition	8
89018047	Piston	8	12589235	Seal, Throttle Body	1	11588713	Bolt, Ignition Coil	8
12617570	Rod, Connecting	8	89017591	Stud, Throttle Body	1	12554211	Stud, Ignition Coil Brk	10
89018049	Ring Kit	8	12614973	Sensor, MAP	1	3736406	Pin,Trans Locate	2
12493714	Bearing, Rod	8	16194007	Seal, MAP Sensor	1	12608814	Sensor Clnt Tem	1
12609074	Pan, Oil	1	12614973	Sensor, MAP	1	12614969	Sensor, Oil Pres	1
12558760	Gasket, Oil Pan	1	12617897	Retainer, MAP	1			
11562588	Plug, Oil Drain	1	12616285	Manifold, Exhaust	1			

LS7 Crate Engine Service Parts List

19165058

Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12598723	Block		12599862	Balancer	1	16212460	Sensor, MAP	1
12571246	Block		03890192	Weight, Balancer	AR	12579938	Bolt, Intake Manifold	10
89017466	Cam Bearing	2	12571611	Flywheel	1	12606310	Manifold, Exhaust	1
12453167	Cam Bearing	2	03890191	Weight, Flywheel	AR	12606309	Manifold, Exhaust	1
12453169	Cam Bearing	1	00274584	Weight, Flywheel	AR	15029769	Stud, Exhaust Manifold	8
12560273	Stud, Crankshaft Cap	10	11569956	Bolt, Flywheel	6	11518860	Bolt, Exhaust Manifold	12
12560272	Bolt, Crankshaft Cap	10	89017811	Bearing, Rod	8	12594171	Gasket, Exhaust Manifold	2
11609289	Plug, Block Cool Dr	1	12602624	Piston	8	12571251	Camshaft	
01453658	Pin, Trans Loca	2	12596689	Oil Pan	1	12586481	Sprocket, Camshaft	1
09427693	Plug Engine Block Gal	1	12600225	Fitting, Oil Filter	1	12556127	Bolt, Camshaft Sprocket	3
11588949	Plug, Engine Block C	1	12346004	Sealer	AR	12581278	Sprocket, Crankshaft	1
12570471	Cover, Engine, Valve	1	12598212	Oil Pump	1	12586482	Chain, Timing	1
11517094	Bolt, PCV Baffle	8	09427693	Plug Cup	1	12581276	Dampener, Timing Chain	1
89017877	Bearing, Crankshaft Cap	4	12573460	Plug Assembly	1	11588327	Retainer, Ch Dam	2
89017808	Bearing, Crankshaft Cap	1	11588949	Plug, Oil Galley	2	12593344	Rod Assembly, Push	16
12556127	Bolt, Main Cap	10	12587599	Cap, Oil Fill	1	12595365	Guide Assembly, Lifter	4
12578449	Head, Cylinder	2	12594779	Tube, PCV	1	17122490	Lifter, Valve	16
12578450	Head, Cylinder	2	12598292	Cover, Front Engine	1	12589016	Retainer, Cam S	1
12578452	Head, Cylinder		89018052	Water Pump	1	11515756	Bolt, Cam Ret	4
12578457	Spring, Valve	16	12600171	Thermostat	1	12579615	Arm, Intake Rocker	8
12596508	Cap, Valve Spring	16	12610311	Gasket, with Pump	2	12579617	Arm, Exhaust Rocker	8
12591644	Valve, Intake	8	12551926	Bolt, with Pump	6	11588791	Bolt, Rocker Arm	16
12578455	Valve, Exhaust	8	12602548	Pipe Assembly	1	12595262	Cover, Valve Rocker	1
10166345	Key, Valve Stem	16	12602540	Cover, Air Bleed H	1	12595265	Cover, Valve Rocker	1
12482063	Seal, Intake Valve Stem	8	12569011	Manifold, Intake	1	12570125	Sensor, Knock	1
12482062	Seal, Exhaust Valve Stem	8	89017852	Gasket Kit	1	11588726	Bolt, Knock Sensor	1
12596509	Pad	8	12560251	Seal, Intake Manifold	2	12585546	Sensor, Crk Posi	1
12582179	Head, Gasket	2	12576341	Injector Assembly	8	12571165	Spark Plugs	8
11562524	Bolt, Cylinder Head	20	89017587	Seal Kit	1	12580353	Bracket, Ignition Coil	2
12558840	Bolt, Cylinder Head	10	24503227	Retainer, Fuel Inj	8	12570616	Coil, Ignition	8
12570326	Pin, Head Locate	4	12569124	Rail	1	12579355	Wire, Ignition Coil	2
11610259	Plug	1	12580072	Bracket, Fuel Inj Rail	1	11516424	Bolt, Ignition Coil Brkt	16
12611649	Crankshaft Assembly	1	12580073	Stop, Fuel Inj	1	89088058	Wire, Spark Plug	1
12568818	Crankshaft Assembly		12597444	Stop, Fuel Inj	1	12608814	Sensor, Cool Tem	1
12614813	Housing, RR Seal	1	12570790	Body, Throttle	1	12616646	Sensor, Oil Press	1
11515742	Nut, Oil Deflect	10	11519971	Bolt, Throttle Body	4			
12618422	Deflector, Oil	1	12576549	Seal, Throttle Body	1			

LS Crate Engines Service Parts List

Part No.	Description	Qty.	LS376/480	LS376/515	LS3 RPO	CT 520
3531733	Bolt/Screw, PCV Bfl	8	x	x	x	x
3736406	Pin, Trans Loc	2	x	x	x	x
9427693	Plug Assembly, Engine Block Oil Galley	1	x	x	x	x
10166344	Cap, Valve Spring	16	x	x	x	x
10166345	Key, Valve Stem	16	x	x	x	x
10214664	Arm Assembly, Valve Rocker	8	x	x	x	x
10238852	Rod Assembly, Valve Push	16	x	x	x	x
11509800	Bolt/Screw, Oil Pump Cover	7	x	x	x	x
11516076	Nut, Crankshaft Oil Deflector	9	x	x	x	x
11516076	Nut, Oil Pump Suction Pipe	1	x	x	x	x
11516424	Bolt/Screw, Oil Pan	2				x
11516424	Bolt/Screw, Ignition Coil	8	x	x	x	x
11516480	Bolt/Screw, Water Pump Inlet	2	x	x	x	x
11516486	Bolt/Screw, Engine Coolant Air Bleed Pipe	4	x	x	x	x
11518424	Stud, Exhaust Manifold	4	x	x	x	x
11518860	Bolt/Screw, Exhaust Manifold Flange	12	x	x	x	x
11519840	Bolt/Screw, Exhaust Manifold Heat Shield	6	x	x	x	x
11519971	Bolt/Screw, Throttle Body	4	x		x	x
11519978	Bolt/Screw, Engine Block Valley	11	x	x	x	x
11561283	Bolt/Screw, Camshaft Sprocket	1			x	
11561455	Bolt/Screw, Camshaft Thrust Plate	4	x	x	x	x
11562253	Bolt/Screw, MAP Sensor	1	x		x	
11562524	Bolt/Screw, Cylinder Head	20	x	x	x	x
11569958	Plug Assembly, Engine Block Oil Galley	2	x	x	x	x
11569958	Plug, Engine Block Cool Dm Hole	1	x	x	x	x
11570662	Bolt/Screw, Connecting Rod	16	x	x	x	x
11588364	Bolt/Screw, Timing Chain Dampener	2	x	x		x
11588712	Bolt/Screw, Engine Front Cover	2	x	x	x	x
11588712	Bolt/Screw, Oil Pump Suction Pipe	1	x	x	x	x
11588723	Bolt/Screw, Crankshaft Rr Oil Seal	12	x	x	x	x
11588736	Bolt/Screw, Evaporative Emission Canister	1	x		x	
11588736	Bolt/Screw, Oil Level Ind	1	x	x	x	x
11588739	Bolt/Screw, Engine Lift Bracket	4	x	x	x	x
11609289	Plug, Engine Block Cool Dm Hole	1	x	x	x	x
11610259	Plug Assembly, Cyl Hd Core Hole	1	x	x	x	x
11900243	Bolt/Screw, Ignition Coil	8	x	x	x	x
12551163	Bolt/Screw, Valve Lifter Guide	4	x	x	x	x
12551177	Bolt/Screw, Camshaft Retainer	4	x	x	x	x
12551177	Bolt/Screw, Crankshaft Position Sensor	1	x	x	x	x
12551187	Bolt/Screw, Oil Pan	13	x	x	x	
12551187	Bolt/Screw, Oil Pan	11				x
12551187	Bolt/Screw, Engine Front Cover	8	x	x	x	x
12551187	Bolt/Screw, Oil Pump	4	x	x	x	x
12551926	Bolt/Screw, Water Pump	6	x	x	x	x
12552344	Bolt/Screw, Intake Manifold	10	x		x	
12553332	Bolt/Screw, Flywheel	6	x	x	x	x
12554211	Bolt/Screw, F/Injection Fuel Rail	4	x		x	
12554211	Stud, Ignition Coil Brkt	10	x	x	x	x
12554900	Bolt/Screw, Oil Pan	2	x	x	x	

Part No.	Description	Qty.	LS376/480	LS376/515	LS3 RPO	CT 520
12556127	Bolt/Screw, Camshaft Sprocket	3	x	x		x
12556127	Bolt/Screw, Crankshaft Brg Cap (Side)	10	x	x	x	x
12556582	Sprocket, Crankshaft	1	x	x	x	x
12557752	Seal, Oil Pump Suction Pipe (O Ring)	1	x	x	x	x
12557840	Bolt/Screw, Crankshaft Balancer	1	x	x	x	x
12558189	Deflector, Crankshaft Oil	1	x	x	x	x
12558539	Bearing, Camshaft (Position 3)	1	x	x	x	x
12558750	Screen Assembly, Oil Pump (with Suction Pipe)	1	x	x	x	x
12558760	Gasket, Oil Pan	1	x	x	x	x
12558840	Bolt/Screw, Cylinder Head	10	x	x	x	x
12559505	Tube, Oil Fill	1	x	x	x	x
12560251	Seal, Intake Manifold	2	x		x	
12560272	Bolt/Screw, Crankshaft Brg Cap	10	x	x	x	x
12560273	Stud, Crankshaft Brg Cap	10	x	x	x	x
12560696	Gasket, Valve Rocker Arm Cover	2	x	x	x	x
12560961	Bolt/Screw, Valve Rocker Arm	16	x	x	x	x
12561244	Seal Assembly, Crankshaft Front Oil	1	x	x	x	x
12561513	Key, Crankshaft Balancer	1	x	x	x	x
12565208	Seal, Intake Valve Stem Oil	8	x	x	x	x
12565209	Seal, Exhaust Valve Stem Oil	8	x	x	x	x
12567915	Fitting, PCV	1	x	x	x	x
12569167	Arm Assembly, Intake Valve Rocker	8	x	x	x	x
12569427	Valve, Intake	8	x	x	x	x
12569638	Retainer, Piston Pin	16	x	x	x	x
12570125	Sensor Assembly, Knock	2	x	x	x	x
12570307	Seal, Wat Inlet	1	x	x	x	x
12570326	Pin, Cylinder Head Loc	4	x	x	x	x
12570427	Cover Assembly, Valve Rocker Arm (Left)	1	x	x	x	x
12570616	Coil Assembly, Ignition (Square Shaped Coil)	8	x	x	x	x
12570787	Tube Assembly, Oil Level Indicator	1	x	x	x	x
12570788	Indicator Assembly, Oil Lvl	1	x	x	x	x
12570790	Body Assembly, Throttle	1	x		x	
12572174	Rail Assembly, M/Port Fuel Injection	1	x		x	
12573107	Sensor Assembly, Engine Oil Pressure	1	x	x	x	x
12573190	Coil Assembly, Ignition (Round Shaped Coil)	4	x	x	x	x
12573460	Plug Assembly, Engine Block Oil Galley	1	x	x	x	x
12574293	Gasket, Crankshaft Rear Oil Seal	1	x	x	x	x
12574294	Gasket, Engine Front Cover	1	x	x	x	x
12574413	Bearing, Camshaft (Positions 1, 5)	2	x	x	x	x
12574414	Bearing, Camshaft (Positions 2, 4)	2	x	x	x	x
12574525	Valve Assembly, Fuel Press Service	1	x		x	
12574634	Bracket, Fuel Injection Fuel Rail	1	x		x	
12576341	Injector Assembly, Seq M/Port	8	x		x	
12576549	Seal, Throttle Body	1	x		x	
12576822	Shield, Exhaust Manifold Heat (Right)	1	x	x	x	x
12576823	Shield, Exhaust Manifold Heat (Left)	1	x	x	x	x
12577215	Bolt/Screw, Valve Rocker Arm	8	x	x	x	x
12577268	Cap Assembly, Oil Fill	1	x	x	x	x
12577830	Bracket, Evaporative Emission Canister	1	x		x	

LS Crate Engines Service Parts List

Part No.	Description	Qty.				
			LS376/480	LS376/515	LS3 RPO	CT 520
12579145	Plug, PCV Valve Cover	1	x	x	x	x
12579355	Wire Assembly, Ignition Coil	2	x	x	x	x
12580353	Bracket, Ignition Coil	2	x	x	x	x
12582224	Cover Assembly, Valve Rocker Arm (Right)	1	x	x	x	x
12582437	Plate Assembly, A/Trns Flex (with Hub)	1	x	x	x	x
12582719	Valve, Exhaust	8	x	x	x	x
12584727	Block Assembly, Engine	1	x	x	x	x
12585545	Sensor Assembly, Camshaft Position	1	x	x	x	x
12585546	Sensor Assembly, Crankshaft Position	1	x	x	x	x
12585673	Seal, Engine Front Cover	1	x	x	x	x
12585997	Tensioner Kit, Timing Chain	1			x	
12586481	Sprocket, Camshaft	1	x	x		x
12586482	Chain Assembly, Timing	1	x	x	x	x
12586484	Spring Assembly, Valve	16	x	x	x	x
12586665	Pump Assembly, Oil	1	x	x	x	x
12586768	Ring, Crankshaft Position Sensor Exciter	1	x	x	x	x
12588670	Dampener Assembly, Timing Chain	1	x	x		x
12589016	Retainer, Camshaft	1	x	x	x	x
12591290	Sensor Assembly, MAP	1	x		x	
12591689	Sprocket, Camshaft	1			x	
12593593	Wire Assembly, Camshaft Position Sensor	1	x	x	x	x
12594090	Stop, Fuel Injection Fuel Rail	1	x		x	
12595365	Guide, Valve Lifter	2	x	x	x	x
12597341	Valve Assembly, Evaporative Emission Canister Purge	1	x		x	
12597569	Crankshaft Assembly	1	x	x	x	x
12598186	Pan Assembly, Oil	1	x	x	x	x
12599296	Cover Assembly, Engine Block Valley	1	x	x	x	x
12599298	Tube, PCV	1	x	x	x	x
12600171	Thermostat Assembly, Engine Cool	1	x	x	x	x
12600172	Inlet Assembly, Water Pump	1	x	x	x	x
12600254	Hose, Engine Cool Air Bleed Pipe	1	x	x	x	x
12600325	Cover Assembly, Engine Front	1	x	x	x	x
12600465	Pump Assembly, Water	1	x	x	x	x
12600525	Washer, Crankshaft Balancer	1	x	x	x	x
12600825	Head Assembly, Cylinder	2	x	x	x	x
12600936	Support, Valve Rocker Arm Pivot	2	x	x	x	x
12601402	Balancer, Crankshaft	1	x	x	x	x
12602048	Plug, Engine Cool Air Bleed	2	x	x	x	x
12602477	Manifold, Intake	1	x		x	
12602540	Cover Assembly, Engine Cool Air Bleed Pipe Hole	2	x	x	x	x
12602541	Seal, Engine Coolant Air Bleed Pipe (O-Ring)	2	x	x	x	x
12602548	Pipe Assembly, Engine Cool Air Bleed	1	x	x	x	x
12602972	Seal Assembly, Crankshaft Rear Oil	1	x	x	x	x
12603758	Manifold, Exhaust (Left)	1	x	x	x	x
12603760	Manifold, Exhaust (Right)	1	x	x	x	x
12603781	Sensor Assembly, Engine Oil Level	1	x		x	
12603843	Washer, Crankshaft Balancer	1	x	x	x	x
12603844	Camshaft Assembly	1			x	
12604708	Cover, Intake Manifold	1	x		x	

Part No.	Description	Qty.				
			LS376/480	LS376/515	LS3 RPO	CT 520
12607115	Tube, Evaporative Emission Canister Purge	1	x		x	
12608381	Stop, Fuel Injection Fuel Rail	1	x		x	
12608814	Sensor Assembly, Engine Coolant Temperature	1	x	x	x	x
12610046	Gasket, Cylinder Head	2	x	x	x	x
12610141	Gasket, Engine Block Valley Cover	1	x	x	x	x
12610160	Seal, Engine Block Valley Cover	8	x	x	x	x
12610305	Gasket, Exhaust Manifold	2	x	x	x	x
12610311	Gasket, Water Pump	2	x	x	x	x
12614813	Housing Assembly, Crankshaft Rear Oil Seal	1	x	x	x	x
12615666	Housing Assembly, Crankshaft Rear Oil Seal	1	x	x	x	x
12617570	Rod Assembly, Connecting	8	x	x	x	x
15336959	Shield, Spark Plug Wire	1	x	x	x	x
17122490	Lifter Assembly, Valve	8	x	x	x	x
19168089	Piston Assembly, (with Pin)	8	x	x	x	x
19168090	Ring Kit, Piston	8	x	x	x	x
19172114	Gasket Kit, Intake Manifold (2 Per Kit)	1		x		x
19172376	Pan Assembly, Oil	1				x
19201993	Carburetor Pkg	1		x		
19202162	Bolt/Screw, Oil Pan	2				x
24100002	Seal, Oil Fill Tube (O-Ring)	1	x	x	x	x
24502262	Plug, Cylinder Head Core Hole	1	x	x	x	x
24503227	Retainer, Fuel Injector	8	x		x	
24504031	Seal, Oil Level Ind Tube (O-Ring)	2	x	x	x	x
24575061	Pin, Camshaft Sprocket Loc	1	x	x	x	x
25532662	Cap, Fuel Press Serv Valve	1	x		x	
25534401	Manifold, Intake	1		x		x
88958733	Camshaft Assembly	1			x	
89017571	Bearing Kit, Crankshaft (Positions 1, 2, 4, 5)	4	x	x	x	x
89017572	Bearing Kit, Crankshaft (Position 3)	1	x	x	x	x
89017573	Bearing Kit, Connecting Rod	8	x	x	x	x
89017587	Seal Kit, Fuel Injector (Injector and Rail)	8	x		x	
89017839	Gasket Kit, Int Manifold (2 Per Kit)	4	x		x	
89018057	Wire Assembly, Spark Plug (1 Wire)	8	x	x	x	x
89018058	Wire Kit, Spark Plug (8 Wires)	1	x	x	x	x

Chevrolet 454ci Big-Block Service Parts List

Part No.	Description	24502618	12566874	12498777
12561353	Block, Bare Cast Iron (4-Bolt Main, 1-Pc Rear Seal)	x	x	x
10230954	Front Engine Cover with Pointer (6-Bolt)	x	x	x
17120061	Lifter, Hyd (Roller Design)	x	x	x
10227762	Pushrod (Intake)	x	x	x
10227763	Pushrod (Exhaust)	x	x	x
24502611	Camshaft	x	x	x
10114177	Timing Chain	x	x	x
12560176	Camshaft Sprocket	x	x	x
12560177	Crankshaft Sprocket	x	x	x
19170198	Connecting Rod Assembly (4340 Steelforged)	x	x	x
10215228	Piston with Pin (Std) (8.75 to 1 Comp)	x	x	x
12523921	Ring, Piston (Std)	x	x	x
14096983	Crankshaft (1053 Steel)	x	x	x
10216339	Dampener (8" Dia)	x	x	x
10185034	Flywheel (Automatic)	x	x	x
10240721	Oil Pan, (6-quart)	x	x	x
14097040	Oil Baffle	x	x	x
10106407	Oil Pan Gasket	x	x	x
3921912	Rocker Stud			x
12508879	Rocker Arm, with Ball (Steel)	x	x	
10213466	Rocker Arm Ball	x	x	
12368082	Rocker Arm, with Ball (Steel)			x
12553666	Rocker Cover, LH (Alum)	x	x	x
12553667	Rocker Cover, RH (Alum)	x	x	x
10126727	Valve Cover Gasket	x	x	x
12562920	Cylinder Head, with Valves (Cast Iron)	x	x	
12562925	Cylinder Head, Bare (Iron)	x	x	
12363392	Cylinder Head with Valves (Alum)			x
12363399	Cylinder Head, Bare (Alum)			x

Part No.	Description	24502618	12566874	12498777
14097045	• Intake Valve 2.19"	x	x	
12366986	• Intake Valve 2.19" (11/32 Stem)			x
14097049	• Exhaust Valve, 1.88"	x	x	
12366988	• Exhaust Valve 1.88" (11/32 Stem)			x
14097002	• Valve Springs, Hi Perf, Double	x	x	
12495691	• Valve Spring Kit (Engine Set)			x
3860038	• Pushrod Guide Plate			x
3875916	• Valve Spring Shim, Spacer, Under Spring	x	x	x
12550422	• Valve Stem Seal	x	x	
12495690	• Valve Stem Seal Kit (Engine Set)			x
12550421	• Valve Spring Cap, (with Seal)	x	x	
12495688	• Valve Spring Cap Kit (Engine Set)			x
12366992	• Valve Spring Keeper Kit (Engine Set)			x
3947880	• Key, Valve Keeper	x	x	
12555728	Head Gasket	x	x	x
19168606	Water Pump (Long Leg)	x	x	x
19145286	Spark Plug (Rapid Fire #4)	x	x	x
19131359	Intake Manifold (Holley Sq Flange Design)	x	x	
12363420	Intake Manifold Oval Port Design			x
12506106	Intake Manifold Gasket	x	x	
12366985	Intake Manifold Gasket			x
12367959	Intake Manifold Bolt Kit	x	x	x
12366985	Intake Manifold Gasket Kit	x	x	x
12555320	Oil Splash Shield (Engine Valley)	x	x	x

ZL1 Ram Jet Crate Engine Service Parts List

88961499

Part No.	Description	Qty	Part No.	Description	Qty	Part No.	Description	Qty
12370850	Block	1	3860038	Guide Plate	8	12181942	Engine Harness	1
12508998	Cam Bearing	5	12362414	Head Gasket	2	19145286	Spark Plug	8
3963523	Crankshaft	1	12366987	Intake Valve	8	12368383	Wire kit	1
3967416	Crankshaft		12366988	Exhaust Valve	8	12595502	Retainer Kit	1
106751	Key	1	12455690	Valve Seal	16	1104060	Distributor	1
12329723	Main Bearing	4	12361323	Rkr Arm Kit	1	10096197	Clamp, Distributor	1
10181307	Main Bearing	1	12464482	Lwr Intake	1	1115491	Ignition Coil	1
10117767	RR Oil Seal	1	12366985	Intake Gasket	1	12550039	Crankshaft Sprocket	1
3969870	Oil Pump	1	12489372	Intake Gasket	4	12551401	Camshaft Sprocket	1
14091356	Oil Pan	1	12464484	Upper Intake	1	10114177	Timing Chain	1
10159519	Gasket, Oil	1	25036751	Sensor	1	330850	Front Cover	1
3989391	Oil Indicator	1	12490255	Bolt	8	12369488	Gasket	1
329231	Tube	1	12366759	Intake Bolt Pkg	1	10191640	Seal	1
274244	Seal	1	88961462	Throttle Body	1	3992073	Pointer	1
3853870	Fitting	1	88961466	Air Cleaner	1	19168602	With Pump	1
25013454	Filter	1	12480177	Valve Cover	2	12569240	MAP Sensor	1
25013759	Bypass Valve	1	14085759	Valve Cover Gasket	2	14001992	Flywheel	1
12329715	Rod Bearing	8	88961871	Bolt	8	3727207	Bolt	6
19170198	Connecting Rod	8	88961915	Bolt	8	12606096	Starter	1
88961461	Piston	8	88961872	Bolt	6	12338064	Bolt	2
12498734	Ring Kit	8	88961915	Washer	14	10216948	Balancer	1
444613	Galley Plug	3	88962077	Hose	1	09419218	Bolt	1
88961447	Cam Shaft	1	10021028	Elbow	1	3864814	Washer	1
10168501	Cam Retainer	1	10198949	Grommet	1	12341999	Plate	1
88960001	Cylinder Head	2	12341993	Oil Fill Cap	1	101114141	Gasket	1
25534347	Stud Kit	1	17120039	Fuel Injector Rail	1	10201491	Sensor	1
3875916	Shim Valve Spring	16	17090919	Injector	8	10456208	Sensor	1
88961452	Valve Lifter	8	17113222	Inject Ret Kit	1	10202456	Thermostat	1
88961454	Valve Spring Pk	1	17113678	F/Regulator	1	10108470	Outlet	1
88961453	Valve Keys Kit	1	25179285	Retainer	1	10105135	Gasket	1
88961450	Intake Pushrod	1	15326386	Clnt Temp S	1			
88961451	Exhaust Pushrod	1	88961821	Engine Module	1			

502-450 & 502 hp Big-Block Service Parts List

Part No.	Description	10185085	24502620	12568778	12371204	12371171	12496963	12496962
12568782	Partial 502	x	x	x	x	x	x	x
10237292	Block, Bare Cast Iron, 4-Bolt Main	x	x	x	x	x	x	x
10230954	Cover, Front Engine with Pointer (6-Bolt)	x	x	x	x	x	x	x
10198910	Front Cover Gasket	x	x	x	x	x	x	x
17120061	Lifter, Hyd Roller	x	x	x	x	x	x	x
10227762	Pushrod (Intake)	x	x	x	x	x	x	x
10227763	Pushrod (Exhaust)	x	x	x	x	x	x	x
14096209	Camshaft	x						
24502611	Camshaft		x	x				
12366543	Camshaft with Pin				x	x	x	x
10114177	Timing Chain	x	x	x	x	x	x	x
12551401	Camshaft Sprocket				x	x	x	x
12560176	Camshaft Sprocket				x	x	x	x
12550039	Crankshaft Sprocket	x	x	x				
12560177	Crankshaft Sprocket				x	x	x	x
19170198	Connecting Rod	x	x	x	x	x	x	x
12533507	Piston with Pin and Rings (Std, 8.75 to 1 Comp)	x	x	x	x	x	x	x
12524293	Rings, Piston (Std)	x	x	x	x	x	x	x
10183723	Crankshaft (1053 Steel)		x	x	x	x	x	x
10216339	Dampener (8" Diameter)	x	x	x	x	x	x	x
10185034	Flywheel (Automatic)	x	x	x	x	x	x	x
10240721	Oil Pan (6-Quart)	x	x	x	x	x	x	x
14097040	Oil Deflector (Baffle)	x	x	x	x	x	x	x
10106407	Oil Pan Gasket	x	x	x	x	x	x	x
12368084	Oil Pump Primer (Pre-Lube Tool)				x	x	x	x
12557083	Oil Dip Stick	x	x	x	x	x	x	x
12550533	Oil Dip Stick Tube	x	x	x	x	x	x	x
274244	O-Ring Seal for Indicator Tube	x	x	x	x		x	x
12555167	Oil Pump (with Pick-Up Screen)	x	x	x	x	x	x	x
14097001	Head Gasket	x	x	x				
12363411	Head Gasket				x	x	x	x
12367779	Cylinder Head Bolt Kit (with Washers—Complete Set)				x		x	
12523976	Rocker Arm (with Ball)		x	x	x			
12368082	Rocker Arm (with Ball and Nut)				x	x	x	x
12368085	Rocker Arm (with Ball and Nut) (Set of 16 Arms)			x	x	x	x	
12553666	Valve Cover, with Gasket (LH)	x	x	x				
12553667	Valve Cover, with Gasket (RH)	x	x	x				
12495488	Valve Cover, with Gasket (Pair)				x	x	x	x
14085759	Rocker Cover Gasket				x	x	x	x
12366994	Decal, Engine Display (502 with Performance Parts Logo)				x	x	x	x

Part No.	Description	10185085	24502620	12568778	12371204	12371171	12496963	12496962
12562920	Cylinder Head (with Valves—Iron)	x	x	x				
12562925	• Cylinder Head, Bare Iron with Seats and Guides	x	x	x				
14097045	• Intake Valve (2.19")	x	x	x				
14097049	• Exhaust Valve (1.88")	x	x	x				
12550421	• Valve Spring Cap with Seal	x	x	x				
3947880	• Key, Valve Keeper	x	x	x				
12550422	• Valve Stem Seal	x	x	x				
14097002	• Valve Spring, Hi-Perf (Double)	x	x	x				
3875916	• Valve Spring Shim/Spacer —Under Spring	x	x	x	x	x	x	x
12363390	Cylinder Head, with Valves (Alum)				x	x	x	x
12363399	• Cylinder Head, Bare (Alum)				x	x	x	x
12366987	• Intake Valve (2.25")				x	x	x	x
12366988	• Exhaust Valve (1.88")				x	x	x	x
12495690	• Valve Stem Seal Kit				x	x	x	x
12495691	• Valve Spring Kit (Set of 16)				x	x	x	x
12495688	• Valve Spring Retainer Kit (Set of 16)				x	x	x	x
12495689	• Key, Valve Spring Cap Kit (Set of 16)				x	x	x	x
3921912	• Rocker Arm Stud (7/16)				x	x	x	x
3860038	• Pushrod Guide Plate				x	x	x	x
93440806	Distributor (HEI)				x			x
25164642	Spark Plug (Rapid Fire #4)	x	x	x	x	x	x	x
12495078	GM Performance Parts Spark Plug Wire Kit with Retainer						x	x
12368383	• Spark Plug Wire Kit (7mm Wires)						x	x
12132223	• Retainer, Spark Plug Wire (4 Hole)						x	x
12047523	• Retainer, Spark Plug Wire (3 Hole)						x	x
12132228	• Retainer, Spark Plug Wire (1 Hole)						x	x
12132229	• Retainer, Spark Plug Wire (2 Hole)						x	x
12553397	• Support, Spark Plug Wire Loom (LH)						x	x
12553398	• Support, Spark Plug Wire Loom (RH)						x	x
19131359	Intake Manifold (Holley Only/Aluminum)	x	x	x				
12363407	Intake Manifold (Alum Hi-Rise Oval Port)				x			x
12555320	Intake Manifold Splash Shield				x			x
12506106	Intake Manifold Gasket	x	x	x				
12366985	Intake Manifold Gasket				x			x
12367959	Intake Manifold Bolt Kit (Engine Set)				x			x
12366996	Carburetor (Holley 850-cfm)				x			x
19168606	Water Pump (Long Leg Iron)	x	x	x				
19168602	Water Pump (Short Leg Aluminum)				x			x
12606096	Starter (New)				x			x

502 Truck Engines Chevrolet Big-Block Service Parts List

Part No.	Description					Part No.	Description				
		12371054	12360893	88890533	88890534			12371054	12360893	88890533	88890534
12568782	Partial 502	x	x	x	x	3947880	• Key, Valve Stem	x	x	x	x
10237292	Bare Block, Cast Iron, 4-Bolt Main	x	x	x	x	10114119	• Valve Stem Seal	x	x	x	x
10230954	Front Engine Cover with Pointer (6-Bolt)	x	x	x	x	10240899	• Exhaust Valve Rotator	x	x	x	x
17120061	Lifter, Hyd Roller	x	x	x	x	14097001	Head Gasket	x	x	x	x
10227762	Pushrod (Intake)	x	x	x	x	12563976	Rocker Arm with Ball	x	x	x	x
10227763	Pushrod (Exhaust)	x	x	x	x	10213466	• Rocker Ball	x	x	x	x
12552296	Camshaft	x	x	x	x	12553666	Valve Cover, with Gasket (LH)	x	x	x	x
10114177	Timing Chain	x	x	x	x	12553667	Valve Cover, with Gasket (RH)	x	x	x	x
12560176	Camshaft Sprocket	x	x	x	x	10126727	Valve Cover Gasket	x	x	x	x
12560177	Crankshaft Sprocket	x	x	x	x	25520079	Valve Cover Bolt (1/4-20 X.87)	x	x	x	x
19170198	Connecting Rod	x	x	x	x	12366994	Engine Displacement *502 Perf. Decal				
12533507	Piston with Pin and Rings (Std, 8.75 to 1 Comp)	x	x	x	x	10181398	Intake Manifold Gasket	x			
12524293	• Rings, Piston (Std)	x	x	x	x	25163473	Fuel Pump		x		x
10183723	Crankshaft (1053 Steel)	x	x	x	x	17113186	Fuel Pressure Regulator		x		x
10216339	Dampener (8" Diameter)	x	x	x	x	25055461	Fuel Pump Strainer		x		x
10185034	Flywheel (Automatic)	x	x	x	x	12546252	Aux. Transmission Oil Cooler Kit		x		x
10240721	Pan, Oil (6-quart)	x	x	x	x	24200161	Auto Transmission Wire Harness Package		x		x
14097040	Baffle, Oil Deflector	x	x	x	x	8685921	Transmission Pan Kit with Gasket		x		x
10106407	Gasket, Oil Pan	x	x	x	x	12547190	Catalyst Converter		x		x
12555167	Pump, Oil with Pick-Up Screen	x	x	x	x	25166816	Oxygen Sensor		x		x
12562917	Cylinder Head Assembly with Valves (Iron)	x	x	x	x	12366555	Oxygen Sensor Jumper Wire		x		x
12562923	• Head, Bare (Iron)	x	x	x	x	88958621	Calibrator Prom		x		x
10240894	• Intake Valve, (2.07")	x	x	x	x	15637053	Muffler (Includes Tail Pipe)		x		x
14081040	• Exhaust Valve, (1.72")	x	x	x	x	15654904	Exhaust Muffler Front Hanger		x		x
10240898	• Valve Spring	x	x	x	x	10457708	Distributor Shaft Gear Kit		x		x
10213464	• Valve Spring Cap	x	x	x	x	12485976	Vacuum Hose		x		x

Ram Jet 502 Service Parts List

Part No.	Description	12497323	12499121
12568782	Partial 502	x	x
10237292	Block, Bare Cast Iron, 4-Bolt Main	x	x
10230954	Front Engine Cover, with Pointer (6-Bolt)	x	x
17120061	Lifter, Hydraulic Roller	x	x
10227762	Pushrod (Intake)	x	x
10227763	Pushrod (Exhaust)	x	x
12366543	Camshaft with Pin	x	x
10114177	Timing Chain	x	x
12560176	Camshaft Sprocket	x	x
12560177	Crankshaft Sprocket	x	x
19170198	Connecting Rod	x	x
12533507	Piston with Pin and Rings (Std, 8.75 to 1 Comp)	x	x
12524293	Piston Ring, Std (One Cylinder Only)	x	x
10183723	Crankshaft (1053 Steel)	x	x
10216339	Dampener (8" Diameter)	x	x
10185034	Flywheel (Automatic)	x	x
10240721	Pan, Oil (6-Quart)	x	x
12557083	Oil Dip Stick	x	x
12550533	Oil Dip Stick Tube	x	x
14097040	Oil Deflector (Baffle)	x	x
10106407	Oil Pan Gasket	x	x
12555167	Oil Pump (with Pick-Up Screen)	x	x
12363390	Cylinder Head, with Valves (Alum/Oval Port)	x	x
12363399	• Cylinder Head, Bare with Semi Finished	x	x
12366987	• Intake Valve (2.25")	x	x
12366988	• Exhaust Valve (1.88")	x	x
12495690	• Valve Stem Seal Kit	x	x
12495691	• Valve Spring Kit	x	x
12495688	• Valve Spring Retainer Kit	x	x
12495689	• Key, Valve Spring Cap Kit	x	x
12366992	• Key, Valve Spring Cap	x	x
3875916	• Shim, Valve Spring	x	x
3860038	• Pushrod Guide Plate	x	x
12367779	Head Bolt Kit, with Washers (Complete Set)	x	x
12363411	Head Gasket	x	x
12368082	Rocker Arm with Ball and Nut	x	x
12495488	Rocker Cover (Pair)	x	x
12366994	Decal, Engine Display (502 with Perf Parts Logo)	x	x
10227762	Intake Pushrod	x	x
10227763	Exhaust Pushrod	x	x

Part No.	Description	12497323	12499121
12464482	Intake Manifold, Lower	x	x
12555320	Intake Manifold Oil Shield	x	x
12366985	Intake Gasket Kit Lower	x	x
12367959	Intake Manifold Bolt Package	x	x
12464484	Intake Manifold, Upper	x	x
12489372	Intake Manifold Gasket, Upper	x	x
12497460	Intake Manifold Bolt Kit, Upper	x	x
1104060	Distributor Assembly	x	x
25164642	Spark Plug (Rapid Fire #4)	x	x
12368383	Spark Plug Wire Kit	x	x
12495502	Spark Plug Wire Retainer	x	x
17090919	Fuel Injector	x	x
17113222	Fuel Injector Retainers	x	x
17120039	Fuel Injector Rail (with Port Fuel Injection)	x	x
17113536	Fuel Pressure Regulator	x	x
25179285	Fuel Pressure Regulator Retainer	x	x
12570618	Fuel Pressure Regulator		x
12489493	Engine Control Module	x	
88962718	Engine Control Module		x
12489494	Wire Harness for ECU	x	
88961968	Wire Harness for ECU		x
10456208	Knock Sensor	x	x
15326386	Engine Cool Temp Sensor	x	x
12494151	Water Pump	x	x
12489595	Transmission Cable Bracket	x	x
17113524	Throttle Body	x	x
12490257	Air Cleaner	x	x
12569240	MAP Sensor	x	x
25312200	HTD Oxygen Sensor		x
15156588	Exhaust Pipe Fitting (O ² Sensor)		x
14082470	Emission Control Vacuum Harness Connector	x	x
12489596	Trans and Throttle Cable Bracket	x	x
12489597	Throttle Control Rod	x	x
9411893	Throttle Rod Nut	x	x
12498334	Ignition Coil	x	x
12606096	Starter Motor	x	x
12368084	Oil Pump Primer	x	x
12486610	Service Manual	x	
88962724	Service Manual		x
12489400	Diagnostic Trouble Code Tool	x	x

427 Big-Block Service Parts List

Part No.	Description	Qty	19166392	19166393	Part No.	Description	Qty	19166392	19166393
TBD	Adapter, Rear Oil Seal	1	x		1485552	Hose, Heater	1	x	x
12361323	Arm Kit, Rocker	1	x	x	3989391	Indicator, Oil	1	x	
10181307	Bearing, Main #5	1	x	x	12557083	Indicator, Oil	1		x
12329715	Bearings, Connecting Rods	8	x	x	106751	Key, Woodruff	1	x	x
12329723	Bearings, Main Journals 1-4	4	x	x	17120060	Lifter, Hydraulic	16	x	x
12370850	Block, Engine (Mark IV)	1	x		12363406	Manifold, Intake	1	x	x
12367959	Bolt Kit, Intake Manifold	1	x	x	10108470	Outlet, Water	1	x	
12561353	Block, Engine (Gen VI)	1		x	10240721	Pan, Oil	1		x
9419218	Bolt, Dampener	1	x		TBD	Piston	8	x	x
10126796	Bolt, Dampener	1		x	12341999	Plate, Fuel Pump Block Off	1	x	x
9442963	Bolt, Dist Clamp	1	x	x	14091356	Pan, Oil	1	x	
3727207	Bolt, Flexplate	6	x	x	3992073	Pointer, Timing	1		x
9442963	Bolt, Fuel Pump Block Off	2	x	x	3969870	Pump, Oil (with Screen)	1	x	
9440224	Bolt, Lifter Retainer	4	x	x	12555167	Pump, Oil (with Screen)	1		x
88961872	Bolt, Rocker Covers	6	x	x	19168602	Pump, Water	1	x	x
88961871	Bolt, Rocker Covers	8	x	x	10168501	Retainer, Camshaft	1	x	x
23047261	Bolt, Water Pump Mtg	1	x		12551399	Retainer, Lifter Guide	1	x	x
9441560	Bolt, Water Pump Mtg	3	x	x	TBD	Ring Set, Piston	8	x	x
9442008	Bolt, Front Cover	10	x		19170198	Rod, Connecting	8	x	x
10243771	Bolt, Front Cover	6		x	10227763	Rod, Push - Exhaust	8	x	x
12363238	Bracket Kit, Engine Lift	1	x	x	10227762	Rod, Push - Intake	8	x	x
25534355	Breather	1	x	x	274244	Seal, Indicator Tube	1	x	x
12341993	Cap, Oil Fill	1	x	x	10101164	Seal, Rear Main	1	x	x
12485506	Carburetor	1	x	x	3865886	Shaft, Oil Pump Drive	1	x	x
10114177	Chain, Timing	1	x	x	TBD	Sheet, Instructions	1	x	x
10096197	Clamp, Distributor	1	x	x	88963132	Sheet, Warranty	1	x	x
1470030	Clamp, Worm Type	2	x	x	25164642	Spark Plug	8	x	x
3853870	Connector, Oil Filter	1	x	x	12551401	Sprocket, Camshaft	1	x	x
6272959	Connector, Therm Bypass	1	x	x	12550039	Sprocket, Crankshaft	1	x	x
12342091	Cover, Front	1	x		25534347	Stud Kit, Cylinder Head	1	x	
TBD	Cover, Rocker (LH)	1	x	x	3866604	Stud, Oil Pump	1	X	x
TBD	Cover, Rocker (RH)	1	x	x	12367779	Bolt Kit, Head	1		x
10114186	Crankshaft	1	x	x	3902885	Studs, Windage Tray	4	x	x
10101159	Dampener	1	x		10202456	Thermostat	1	x	x
10216339	Dampener	1	x		3967854	Tray, Windage		x	x
93440806	Distributor	1	x		88962074	Tube, Baffled	1	x	x
3879623	Dampener	1		x	329231	Tube, Oil Indicator	1	x	
1453658	Dowel, Bell Housing	2	x	x	12550533	Tube, Oil Indicator	1		x
12554553	Dowel, Camshaft	1	x	x	6487779	Valve Assembly, PCV	1	x	x
12558081	Dowel, Cylinder Head Loc	4	x	x	25013759	Valve, Oil Filter Bypass	1	x	x
3701679	Dowel, Flexplate	1	x	x	3864814	Washer, Dampener	1	x	x
25013454	Filter, Oil	1	x	x	14011040	Washer, Oil Pump	1	x	x
10114196	Flexplate	1	x	x	88961915	Washer, Rocker Cover	14	x	x
3991469	Flywheel	1		x	88961873	Washer, Windage Tray	6	x	x
12366985	Gasket Set, Intake	1	x	x	12499211	Wires, Spark Plugs	1	x	x
12370850	Gasket, Front Cover	1	x	x	88961460	Windage Tray	1	x	
10114141	Gasket, Fuel Pump Plate	1	x	x	444777	Plug, 1/4"-18 NPT Internal Hex	3		x
12363412	Gasket, Head	2		x	361997	Plug, 1/4"-18 NPT Internal Hex with Holes	2		x
12363414	Gasket, Head	2	x		14084945	Plug, 1/4"-18 NPT External Hex	2		x
10159519	Gasket, Oil Pan	1	x		444613	Plug, 1/8"-27 NPT Internal Hex	5		x
10106407	Gasket, Oil Pan	1		x	25522466	Plug, 1/2"-14 NPT Internal Hex	1		x
14085759	Gasket, Rocker Cover	2	x	x	9409961	Plug, 3/4"-14 NPT	1		x
10105135	Gasket, Water Outlet	1	x	x	14090911	Plug, 3/8"-18 NPT Internal Hex	4		x
12341988	Grommet, Rocker Cover	1	x	x	3999200	Plug, Rear Cam	1		x
12551397	Guide, Lifter	8	x	x	12555320	Intake Oil Shield	1	x	x
12363390	Head, Cylinder	2	x	x	12366543	Camshaft	1		x
9438373	Hose, Evap	1	x	x					

572 Big-Block Service Parts List

Part No.	Description	12498792	12498793	12498826	12498827
12499190	Partial 572/620 hp	x	x		
12498825	Partial 572/720 hp			x	x
25534368	Block, Bare (Iron—4-Bolt Main)	x	x	x	x
10230954	Front Engine Cover with Pointer (6-Bolt)	x	x	x	x
17120060	Lifter, Hyd Roller	x	x		
88962920	Lifter, Mechanical Roller (Engine Set)			x	x
88961559	Pushrod (Intake)	x	x		
88961558	Pushrod (Exhaust)	x	x		
88962284	Pushrod (Intake)			x	x
88962283	Pushrod (Exhaust)			x	x
88961557	Camshaft	x	x		
88962216	Camshaft			x	x
10114177	Timing Chain	x	x	x	x
12551401	Camshaft Sprocket	x	x	x	x
12550039	Camshaft Sprocket	x	x	x	x
88962926	Connecting Rod	x	x	x	x
88962925	Piston	x	x		
88963227	Piston			x	x
88969212	Piston Ring Kit—Std (Engine Set)	x	x	x	x
88961554	Crankshaft (4340 Forged Steel)	x	x	x	x
88962814	Dampener (8" Dia)	x	x	x	x
12561217	Flywheel	x	x		
10240721	Oil Pan (6-quart)	x	x	x	x
88962187	Oil Deflector (Baffle)	x	x	x	x
10106407	Oil Pan Gasket	x	x	x	x
12557083	Oil Dip Stick	x	x	x	x
12550533	Oil Dip Stick Tube	x	x	x	x
274244	O-Ring Seal for Indicator Tube	x	x	x	x
88963707	Oil-Pump (with Pick-Up Screen)	x	x	x	x
88961561	Head Gasket	x	x	x	x
12361323	Rocker Arm (Alum Roller Design)	x	x	x	x
88958657	Valve Cover, with Gasket (LH)	x	x	x	x

Part No.	Description	12498792	12498793	12498826	12498827
88958658	Valve Cover, with Gasket (RH)	x	x	x	x
14085759	Rocker Cover Gasket	x	x	x	x
25534355	Valve Cover Breather	x	x	x	x
88962074	Oil Fill Baffle	x	x	x	x
12499255	Cylinder Head (Alum)	x	x		
88961160	Cylinder Head (Alum)			x	x
12366987	• Intake Valve (2.25")	x	x	x	x
88963128	• Exhaust Valve (1.88")	x	x	x	x
88963934	• Valve Spring	x	x		
88963933	• Valve Spring			x	x
88963936	• Valve Stem Seal Kit	x	x	x	x
12366990	• Valve Spring Retainer	x	x	x	x
12495689	• Key, Valve Spring Cap Kit (Set of 16)	x	x	x	x
12366992	• Key, Valve Spring Cap	x	x	x	x
3921912	• Rocker Arm Stud (7/16)	x	x	x	x
3860038	• Pushrod Guide Plate	x	x	x	x
88960332	Head Bolt (7/16-14 X 5.18)	x	x	x	x
88960333	Head Bolt (7/16-14 X 4.15)	x	x	x	x
88960334	Head Bolt (7/16-14 X 2.15)			x	x
88962919	Head Bolt (Cylinder Head Valley—Req. 4)			x	x
88961867	Distributor (Hei)		x		
10093387	Distributor				x
5613878	Spark Plug (R45XLS)	x	x	x	x
12499211	Spark Plug Wires		x		x
88961161	Intake Manifold (Holley Only/Aluminum)		x		
88962218	Intake Manifold (Alum Hi-Rise Oval Port)				x
88962213	Intake Manifold Gasket		x		x
12367959	Intake Manifold Bolt Kit (Engine Set)		x		x
88961560	Carburetor (Holley 850-cfm)		x		
88962217	Carburetor (Holley 1090-cfm)				x
19168602	Water Pump (Short Leg Aluminum)		x		x

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Internet Site	Email Address
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USA

Alabama

Bill Heard Chevrolet - Huntsville	Jack Straley	4930 University Dr	Huntsville	AL	35816	800-453-9815x182	800-681-9801	billheardhuntsville.com	jstraley@billheard.com
Capitol Chevrolet	Scott Dubose	711 Eastern Blvd	Montgomery	AL	36117	334-272-9595	334-270-9162	capitolchevrolet.com	scotty.dubose@capitolchevrolet.com
Ivan Leonard Chevrolet, Inc.		1620 Montgomery Hwy	Hoover	AL	35216	205-823-5427	205-979-3048		llparts@yahoo.com

Arizona

Brown & Brown Chevrolet	Randy Smith	145 E Main St	Mesa	AZ	85201	480-827-3442	480-827-3206	shopchevy.com	smithr@autonation.com
Chapman Chevrolet, LLC	Michael Jones	1717 E Baseline	Tempe	AZ	85283	480-752-1641	480-730-6745	chapmanchevy.com	michaeljones@chapmanchoice.com
Courtesy Chevrolet	Phil Graziano	1233 E Camelback Rd	Phoenix	AZ	85014	888-604-3003	602-604-3099	houseofcourtesy.com	pgraziano@houseofcourtesy.com
Midway Chevrolet Company	Rod Martin	2323 W Bell Rd	Phoenix	AZ	85023	602-866-0102	602-387-7526	parts4chevys.com	coachmen@vtaig.com
Power Chevrolet On Camelback Rd	Dan Bieber	2646 W Camelback Rd	Phoenix	AZ	85017	800-222-4389	602-249-7321		bieber@autonation.com
Sands Motor Company	Henry Walker	5418 Nw Grand	Glendale	AZ	85301	623-931-9349	623-842-5205		hwalker@sandchevrolet.com
Watson Chevrolet, Inc.		625 W Auto Mall Dr	Tuscon	AZ	85705	520-292-1500	520-292-3252		

Arkansas

Smith Chevrolet-Cadillac Co.	Larry Didway	1215 Hwy 71 S	Ft. Smith	AR	72901	479-646-1581	476-648-0439	smithchevyland.com	l_didway@yahoo.com
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California

Bonander Pontiac-Buick-GMC	Phil Bailey	231 S Center St	Turlock	CA	95380	209-632-8871	209-633-4749	bonanderauto.com	philb@bonanderauto.com
Center Chevrolet	Dan Burb	1355 South E St	San Bernardino	CA	92408	909-889-8561	909-383-1738	centerchevrolet.com	parts@centerchevrolet.com
City Chevrolet	D Perry	2111 Morena Blvd	San Diego	CA	92110	619-276-6900	619-276-2414		dperry@city-chevrolet.com
Connell Chevrolet	Dave Hardy	2828 Harbor Blvd	Costa Mesa	CA	92626	714-546-9400	714-979-3578	wearegm.com	wearegm@aol.com
Courtesy Chevrolet	Bill Chakos	750 Camino Del Rio N	San Diego	CA	92108	619-297-3961	619-297-4023	courtesysandiego.com	pgaprochakos@aol.com
Courtesy Chevrolet	Ed Kolodziej	3610 Thousand Oaks Blvd	Thousand Oaks	CA	91362	805-497-8631	805-497-6643		courtesyparts@hotmail.com
Crest Chevrolet	Don Young	909 W 21st St	San Bernardino	CA	92405	909-883-8833	909-882-4661		donyoung@crestfleet.com
Crown Chevrolet	John Vinci	7544 Dublin Blvd	Dublin	CA	94568	925-828-6500	925-829-2941	parts@crowndublin.com	joe49er@aol.com
Diamond Hills Auto Group	Brian Yates	4545 W Ramsey	Banning	CA	92220	951-849-7861	951-849-0970	diamondhillsautogroup.com	byyates@yahoo.com
F.H. Dailey Motor Co.	Peter Chin	800 Davis St	San Leandro	CA	94577	510-351-5800	510-614-9220	fhdaily.com	peter@fhdaily.com
Fitzpatrick Chevrolet	Roy Wold	2121 Diamond Blvd	Concord	CA	94520	925-349-3251	925-356-3049	fitzpatrickchevy.com	roy@fitzpatrickchevy.com
Golden Hills Auto Center	Mike Tate	2345 Golden Hill Rd	Paso Robles	CA	93446	805-238-0922	805-238-2260		parts@goldenhillsautocenter.com
Guaranty Chevrolet	Carl Lutes	711 E 17th St	Santa Ana	CA	92701	714-560-4277	714-543-3387	guarantyperformance.com	clutes@guarantychevrolet.com
Hardin Buick Pontiac GMC	Jeff Bass	1315 S Claudina St	Anaheim	CA	92806	800-576-8388	714-533-2370	hardingmc.com	gmparts@hardin.com
Mark Christopher Auto Center	Doug Reeves	2131 Convention Center Wy	Ontario	CA	91764	909-390-2900	909-390-4677	markchristopher.com	dreeves@markchristopher.com
Martin Cadillac Pontiac	Gary Carter	12101 Olymplc Blvd	Los Angeles	CA	90064	310-820-3611	310-207-8429	martincad.com	garyc@martincad.com
Motor City Auto Center	Keith Adams	3101 Pacheco Rd	Bakersfield	CA	93313	800-349-7278x753	661-827-9937	motorcitywest.com	gmparts@motorcitywest.com
Paradise Chevrolet Cadillac	Doug Raby	27360 Ynez Rd	Temecula	CA	92591	951-699-2699	951-676-4789	pardiseautos.com	
Rally Cad Chev Buick Pont GMC	M Zamudio	39012 Carriage Way	Palmdale	CA	93551	661-274-7050	661-266-1881		mzamudio@4rally.com
Rydell Automotive Group	Dan Colwell	18600 Devonshire	Northridge	CA	91324	818-832-1625	818-832-1635	rydells.com	dcolwell@rydell.com
Scott Chevrolet Pontiac GMC	Paul Urena	3333 Santa Anita Ave	El Monte	CA	91731	626-350-3200	626-401-4128		paulurena10@hotmail.com
Victory Chevrolet	Adrian Smith	1360 Auto Center Dr	Petaluma	CA	94952	707-762-2300	707-762-7606		jethydro@comcast.net

Colorado

Burt Chevrolet	Ken Casey Jr.	5200 S Broadway	Englewood	CO	80113	303-789-6331	303-789-6737	burt.com	kcasey@burt.com
Daniels Motors, Inc.	Jeff Williams	670 Automotive Dr	Colorado Springs	CO	80906	719-632-5591	719-228-3578		jeffw@danielschevrolet.com

Delaware

Nucar Connection	Bill Dirusso	174 N Dupont Hwy	New Castle	DE	19720	302-322-6606	302-322-7135	nucar.com	bdirusso@nucar.com
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Florida

Autoway Chevrolet of Tampa	George Hoover	1700 E Hillsborough Ave	Tampa	FL	33610	813-238-8861	813-237-4383		hooverg@autonation.com
Bill Branch Chevrolet	Scott Hendrix	3980 Fowler	Fort Myers	FL	33901	800-226-7806	239-936-9218	branchchevy.com	scotthendrix@branchchevy.com
Bill Heard Chevrolet	John Gerstner	127 N Oregon St	Sanford	FL	32771	800-826-1946	866-665-6566	orlandochevy.com	jgerstner@billheard.com
James-Rivard Pontiac-GMC, Inc.	Larry Folino	9740 Adamo Dr	Tampa	FL	33619	813-620-6565	813-620-6589	jrgmparts.com	parts@jrgmparts.com
Jon Hall Chevrolet	Scott Bowser	551 N Nova Rd	Daytona Beach	FL	32114	386-947-0692	386-947-0615	jonhall.com	parts@jonhall.com
Nimnicht Chevrolet	Jimmy Allen	1550 Cassat Ave	Jacksonville	FL	32210	904-387-4041	904-389-7779	nimnichtchevy.com	jallen@nimnichtchevy.com

AUTHORIZED CENTERS

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Internet Site	Email Address
Georgia									
Bill Heard Chevrolet	Butch Rolin	4490 S Lee St	Bufford	GA	30518	770-945-9748	678-686-2185	billheard.com	brolin@billheard.com
Bill Heard Chevrolet Cadillac	John Stofer	6301 Veterans Pkwy	Columbus	GA	31909	706-256-5346	706-596-6635	billheardchevy.com	jstofer@billheard.com
Carl Black Buick-Pont-GMC	Eddie Flowers	1110 Robers Blvd	Kennesaw	GA	30144	800-847-3221	770-424-9112	carlblackkennesaw.com	eflowers@carlblack.com
Hardy Chevrolet	Chip Youngblood	1249 Charles Hardy Pkwy	Dallas	GA	30157	770-445-9411	770-443-2224	hardychevy.com	chipyoungblood@yahoo.com
Maypole Chevrolet, Inc.	Jeremy Andrews	1223 S Big A Rd	Toccoa	GA	30577	877-777-3001	706-886-7481	maypolechevrolet.com	jandrews@maypolechevrolet.com
Nash Chevrolet, Inc.	George Pittman	630 Scenic Hwy	Lawrenceville	GA	30045	770-963-9266	770-822-6671	nashchevy.com	gpittman@yahoo.com
Nesmith Chev-Bk-Pont-GMC, Inc.	David Anderson Sr.	7334 Hwy 280 W	Claxton	GA	30417	800-673-6399	912-739-7000	nesmithnow.com	david@nesmithnow.com
Idaho									
Edmark Chevrolet Cadillac	Bob Robinson	15700 Idaho Center Blvd	Nampa	ID	83687	208-442-2700	208-442-2713	edmarksuperstore.com	partsroom@edmarksuperstore.com
Illinois									
Jim McComb Chevrolet	Bill Brouch	3622 N University	Peoria	IL	61604	309-686-2500	309-686-0121	jimmccomb.com	billbrouch@jimmccomb.com
Lattof Chevrolet	Mike Morgan	800 E Northwest Hwy	Arlington Hts	IL	60004	847-259-4100	847-255-2038	crateenginedepot.com	parts@lattof.org
Weir Chev-Buick-Pontiac-GMC	Verilyn Proctor or Chris Lutman	1107 S Main	Red Bud	IL	62278	800-334-1379	866-678-4894	weirparts.com	weirinet@htc.com
Indiana									
Hubler Chevrolet	Kasey Dillman	8220 S US 31	Indianapolis	IN	46227	800-382-9992	317-882-4719	drivehubler.com	kdillman@drivehubler.com
Schepel Buick-Pontiac-GMC, Inc.	Parts Manager	3209 West Lincoln Hwy	Merrillville	IN	46410	219-769-7757	219-755-0339	schepel.com	parts@schepel.com
Shepherds Chevrolet-Buick-Pontiac-Cadillac	Brandon Delorenzo	1520 E 9th St	Rochester	IN	46975	574-224-7278	574-223-2718	sheperdsgm.net	webmaster@sheperdsgm.com
Iowa									
Bob Brown Chevrolet	Ron Dorrian	4224 Merle Hay Rd	Des Moines	IA	50310	515-278-7888	515-278-7895	bobbrownauto.com	ron.dorrian@bobbrownauto.com
Karl Chevrolet	Jason Roach	1101 SE Oralabor Rd	Ankeny	IA	50021	515-299-4493	515-299-4380	karlchevrolet.com	jason@karlchevrolet.com
Knoepfler Chevrolet	Mark Baker	100 Jackson St	Sioux City	IA	51101	712-279-7153	712-279-0316	kchev.com	ebay@kchev.com
Rydell Chevrolet, Inc.	Brian Tenley	1325 E San Marnan Dr	Waterloo	IA	50702	319-234-4601	319-234-4815	rydellauto.com	brian@rydellauto.com
Kansas									
Superior Chevrolet	Dave Hosley	8300 Shawnee Mission Pkwy	Merriam	KS	66202	913-789-4308	913-789-1005	superiorchevyperformance.com	dhosley@hendauto.com
Kentucky									
Bachman Chevrolet	Tom Finley	9650 Bluegrass Pkwy	Louisville	KY	40299	800-334-3041	800-499-8330	bachmanparts.com	parts@bachmanparts.com
Bob Hook Chevrolet, Inc.	Jack Tillman	4144 Bardstown Rd	Louisville	KY	40218	502-499-8060	502-499-0917		jtillman@bobhook.net
Louisiana									
All Star Automotive	Mike Brown	11377 Airline Hwy	Baton Rouge	LA	70816	225-298-8080	225-298-8041	allstarautomotive.com	mbrown@allstarautomotive.com
Banner Chevrolet	C. B. Constantini	5950 Chef Menteur Hwy	New Orleans	LA	70126	800-477-8603	504-253-8590	bannerauto.com	constantini@bannerauto.com
Chevyland	Jeral Lawler	7500 Youree Dr	Shreveport	LA	71105	318-226-3277	318-425-1705	chevyland.com	jlawler@chevyland.com
Gerry Lane Chevrolet	Gerald Appe	6505 Florida Blvd	Baton Rouge	LA	70806	225-926-4600	225-925-9613	gerrylane.com	geraldappe@gerrylane.com
Maryland									
Courtesy Chevrolet Cadillac	Billy Cropper	2531 N Salisbury Blvd	Salisbury	MD	21801	410-749-9448	410-749-4257	courtesychevroletcadillac.com	parts@courtesychevrolet.biz
Criswell Chevrolet	Kevin Burdette	503 Quince Orchard Rd	Gaithersburg	MD	20878	301-590-1457	301-921-9806	criswellauto.com	kburdette@criswellauto.com
Jerry's Chevrolet	Vince Poling	1940 E Joppa Rd	Baltimore	MD	21234	800-638-1419	410-513-0196	jerrysautogroup.com	vpoling@jerrysautogroup.com
Ourisman's Rockmont Chevrolet	Bruce Jones	#20 Southlawn Court	Rockville	MD	20850	301-424-5900			
Massachusetts									
Central Chevrolet	Patrick Townsend	675 Memorial Ave	West Springfield	MA	01089	800-332-8504	413-732-5524	centralchevy.net	patricktownsendjr@yahoo.com
Clay Chevrolet	Brad Sassman	391 Providence Hwy, Rte 1	Norwood	MA	02062	800-559-9210	800-991-1009	claychevrolet.com	autoparts@claycars.com
Michigan									
Berger Chevrolet, Inc.	Dan Vosovie	2525 28th St SE	Grand Rapids	MI	49512	616-949-5200	616-949-2870	bergerchevy.com	parts@bergerchevy.com
Ed Rinke Chevrolet	Jim Hensley	26125 Van Dyke	Centerline	MI	48015	586-754-7000	586-754-5030	edrinke.com	jhensley@edrinke.com
Mississippi									
Turan-Foley Motors	Joe May	11123 Hwy 49 N	Gulfport	MS	39503	888-273-4922	228-539-5689	turanfoley.com	joemay@turanfoley.com

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Internet Site	Email Address
Missouri									
Lou Fusz Pontiac	Sean Speer	10950 Page Ave	St. Louis	MO	63132	800-325-1492	314-595-2790	pontiac.fusz.com	pontiacparts@fusz.com
Perry Chevrolet, Inc.	Rick Neuner	1 Business Loop 70	Columbia	MO	65203	573-442-6156	573-443-1821	perrychevrolet.com	rneuner@perrychevrolet.com
Reliable Chevrolet	Dean Jones	3655 S Campbell	Springfield	MO	65807	417-887-5800	417-887-4012	reliablechevy.com	djones@vtaig.com
Weber Chevrolet Company	E Breece	12015 Olive Blvd	St. Louis	MO	63141	314-567-3300	314-567-3088		ebreece@weberchevrolet.net
Nebraska									
Bob Spady, Inc.	Bunny Wampole	2302 E 4th St	North Platte	NE	69101	308-532-1750	308-532-1905		
Friesen Chevrolet	Jon Pedersen	806 S Way	Sutton	NE	68979	402-773-5538	402-773-5639	friesenchevy.com	info@friesenchevy.com
H & H Chevrolet Company	Curt Patton	4645 S 84th St	Omaha	NE	68127	402-339-2222	402-596-2719	hhchevy.com	cpatton@hhchevy.com
Spady-Runcie Chevrolet-Cad	Warren Raines	1840 Court St	Beatrice	NE	68310	402-223-4051	402-223-5875		warren@spadyruncie.com
Nevada									
Champion Chevrolet	Pat Lydon	800 Kietzke Lane	Reno	NV	89502	775-786-3111	775-786-0458	championchev.com	roger@championchev.com
Fairway Chevrolet	Sam Smith	3100 E Sahara Ave	Las Vegas	NV	89104	800-395-1440	702-432-3501	fairwaychevy.com	parts@fairwaychevy.com
Henderson Chevrolet Co.	Pete Zachrison	240 N Gibson Rd	Henderson	NV	89015	800-210-8566			
Vista Chevrolet	John Michaels	5501 Drexel Rd	Las Vegas	NV	89130	702-967-5659	702-967-5582	vistachevy.com	jmichaels@billheard.com
Winkel Pontiac-GMC Truck	George	900 Kietzke Lane	Reno	NV	89502	775-329-0831			
New Hampshire									
Dobles Chevrolet-Buick-Hummer	Dave Provencher	1250 S Willow St	Manchester	NH	03103	800-842-9600	603-622-2413	doblesgmpartsdepot.com	parts@dobles.com
New Jersey									
Bob Maguire Chevrolet	Bill Curren	840 Route 206	Bordentown	NJ	08505	800-524-0096	609-298-0231	bobmaguirechevrolet.com	bill.curren@maguireautomotivegroup.com
Great American Chevrolet, LLC	Ed Halatin	55 Hackensack Ave	Hackensack	NJ	07601	800-481-9105	201-883-6341	greatamericanchevy.com	parts@greatamericanchevy.com
New Mexico									
Galles Chevrolet	Richard Rodriguez	1601 Lomas Blvd NE	Albuquerque	NM	87102	800-695-3225	505-242-0350	galleschevy.com	firstrich1@galles.com
Watson Chevrolet Buick Pontiac	Robin Ashcraft	1501 N Grimes	Hobbs	NM	88240	505-397-2411	505-397-0838	watsonauto.com	
New York									
Fulton Chev-Cad Co., Inc.	Bruce Bartlett	5216 Route 17M	Middletown	NY	10940	845-343-8954	845-341-1361	fultonchev.com	bbartlett@fultonchev.com
Hoselton Chevrolet, Inc.	Mike F	909 Fairport Rd	East Rochester	NY	14445	585-586-7373	585-586-0273		mikef@hoselton.com
Nye Pontiac-GMC	Jon Curro	1479 Genesee St	Oneida	NY	13421	315-365-2200	315-363-2873	nyeaugroup.com	joncurro@nyeauto.com
Ramp Chevrolet	Mitchell Dobshinsky	1395 Route 112	Port Jefferson Station	NY	11776	631-473-1234	631-331-3094	rampchevy.com	mdobshinsky@rampmotors.org
North Carolina									
Bobby Murray Chevrolet	Scott Tilley	1820 Capital Blvd	Raleigh	NC	27604	800-662-7502	919-832-1603	bobbymurray.com	parts@bobbymurray.com
Burnsville Chevrolet-Buick	Mike Canipe	627 W Main St	Burnsville	NC	28714	828-682-6141	828-678-3481	burnsvillechevy.com	mikec@burnsvillechevy.com
City Chevrolet	Chris Knight	5101 E Independence Blvd	Charlotte	NC	28212	704-566-7450	704-568-7422	citychevrolet.com	cknight@citychevrolet.com
Confederate Motors	Steve Lowder	2307 Hwy 52 N, PO Box 669	Albemarle	NC	28001	800-255-6587	704-982-3134	confederatechevrolet.com	stevelowder@confederatechevrolet.com
Everett Chevrolet	Ted Brewer	161 Hwy 70 SE	Hickory	NC	28601	828-327-9171	828-327-6335	Everettchevy.com	tbrewer@Everettchevy.com
Flow Cadillac	Jake Baldwin	1400 S Stratford	Winston-Salem	NC	27103	336-760-7037	336-760-7074	gmpartsdirect.com	customerservice@gmpartsdirect.com
Flow Chevrolet, LLC	Jake Baldwin	1400 S Stratford	Winston-Salem	NC	27104	336-760-7037	336-760-7074	gmpartsdirect.com	customerservice@gmpartsdirect.com
Modern Chevrolet	Ivil Porter or Chris Hege	5415 Kelley-Moore Dr	Winston-Salem	NC	27105	800-334-0165	336-727-4809	modernautomotive.com	iporter@modernautonet.com
Ohio									
GreenWood Chevrolet Hummer, Inc.	Marc Briel	4695 Mahoning Ave	Austintown	OH	44515	800-926-4977	330-792-2101	greenwoodchevy.com	parts@greenwoodchevy.com
Pace Performance	Ron Milo	430 Youngstown Rd	Niles	OH	44446	888-748-3791	330-652-7484	paceperformance.com	parts@paceperformance.com
Roby Auto Group	Rich Wallace	15801 US Rte 36	Marysville	OH	43040	937-644-9000	937-644-3000	robautogroup.com	rwallace@robautogroup.com
Oklahoma									
Danny Beck Chevrolet, Inc.	Andy Boyce	8300 New Sapulpa Rd	Tulsa	OK	74131	918-227-1070	918-227-7746		andyb@dannybeck.com
Hudiburg Chevrolet	Zach Hines	6000 Tinker Diagonal	Midwest City	OK	73110	405-737-6641	405-739-0636	hudiberg.com	zach@hudiberg.com
Smicklas Chevrolet	Ron Kimbrough	3501 N Santa Fe	Oklahoma City	OK	73118	405-525-4402	405-525-4484		rkimbrough@bobhowardauto.com

AUTHORIZED CENTERS

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Internet Site	Email Address
Oregon									
Airport Chevrolet	Larry Lavada	3001 Biddle Rd	Medford	OR	97504	541-770-1300	541-772-8079	airportchevy.com	parts@airportchevy.com
Capitol Chevrolet Cadillac, Inc.	T Dalton	2711 Misson St SE	Salem	OR	97309	503-585-4141	503-316-4223		tdalton@capitolauto.com
Gilbert Chevrolet	Tom Sallee	1003 S Main	Milton-Freewater	OR	97862	800-545-0048	541-938-5580	gilbertautoparts.com	tsallee@gilbertauto.com
Kendall Chevrolet Cadillac	Art or Gary	846 Goodpasture Island Rd	Eugene	OR	97401	800-452-5059	541-335-6895	kendallauto.com	mmromiy@kendallauto.com
Ron Tonkin Chevrolet Co.	Kurt Gross	122 NE 122nd Ave	Portland	OR	97220	503-255-4100	503-257-2285	tonkin.com	kgross@tonkin.com
Wentworth Chevrolet	Darrin Rea	107 SE Grand Ave	Portland	OR	97214	800-232-8097	503-234-3374	wentworthchevrolet.com	darrinrea@wentworthchevrolet.com
Pennsylvania									
A.W. Golden Chevrolet Cadillac	Scott Schaeffer	801 Lancaster Ave	Reading	PA	19607	610-777-4113	610-777-6652	goldenpartscenter.com	scottschaeffer@awgolden.com
Apple Chevrolet Cadillac	Jason Alwood	1200 Loucks Rd, PO Box 7767	York	PA	17404	717-848-1300	717-843-5730	applechevrolet.com	jalwood@appleauto1.com
Fred Beans	Dave Wittlinger	131 Doyle St	Doylestown	PA	18901	877-385-5769	267-880-3319	877fullpower.com	dwwittlinger@fredbeans.com
Jones Buick Pontiac GMC	John Shuman	1335 Manheim Pike	Lancaster	PA	17604	717-394-7087	717-394-1752	gojones.com	jshuman@gojones.com
Sutliff Chevrolet	Troy White	1251 Paxton St	Harrisburg	PA	17104	717-232-1976	717-234-8825	sutliffchevrolet.com	gmparts@sutliff.net
Rhode Island									
Simon Chevrolet	Jim Newcomb	114 Fortin Dr	Woonsocket	RI	02895	401-769-3000	401-765-7913	simonchevroletbuick.com	simonparts@hotmail.com
South Carolina									
John Newsome, Inc.	Fred Bowker	1111 S 5th St	Hartsville	SC	29550	843-339-2719	843-339-2716	johnnewsomesuperstore.com	fbowker@newsomeparts.com
South Dakota									
Billion Motors, Inc.	Dale Zimmer	600 W 41st St	Sioux Falls	SD	57105	605-333-3436	605-333-3459		zimmer@billionauto.com
Tennessee									
Autofair Chevrolet	J Allen Sellers	5333 Hickory Hollow Pkwy	Antioch	TN	37013	615-731-3000	615-731-9478		
Bill Heard Chevrolet	Pat Wilburn	4605 Houston Levee Rd	Collierville	TN	38017	901-473-1100	901-473-1150	billheardcollierville.com	pwilburn@billheard.com
Dobbs Pontiac GMC	Jeff Sappington	2621 Mendenhall Rd S	Memphis	TN	38115	901-794-4500	901-367-3146		sappingtonj@autonation.com
West Chevrolet, Inc.	John Parker	3450 Airport Hwy	Alcoa	TN	37701	865-970-9378	865-970-4559	westchevrolet.com	johnparker@westchevrolet.com
Texas									
Atzenhoffer Chevrolet Cadillac	Robert / Parts Mgr	3211 N Navarro	Victoria	TX	77901	361-578-2841			
Bankston Chevrolet Fort Worth	Parts Manager	7769 Grapevine Hwy	N Richland Hills	TX	76180	817-498-2400			
Bill Heard Chevrolet	Kenny Williams	13115 SW Freeway	Sugarland	TX	77487	281-491-9000	281-269-1703	billheardchevrolet.com	kwilliams@billheard.com
Bruce Lowrie Chevrolet, Inc.	Jeff Sharrow	711 SW Loop 820	Ft. Worth	TX	76134	817-293-5811	817-293-8371		jsharrow@msn.com
Champion Chev Gulf Freeway	Martin Silva	13800 Gulf Freeway (At Beltway 8)	Houston	TX	77034	281-929-3200	281-929-3238	charliethomasparts.com	silvam@autonation.com
Classic Chevrolet	Tom Cross	1101 Hwy 114	Grapevine	TX	76051	817-421-7236	817-251-1633	classicchevytexas.com	tcross@classicchevytexas.com
Don Hewlett Chevrolet	Jeff Gilbert	7601 S IH-35	Georgetown	TX	78626	800-901-2990	512-681-3113	donhewlett.com	jeffg@donhewlett.com
Friendly Chevrolet	Kris Jones	2754 N Stemmons Blvd	Dallas	TX	75207	214-920-4199	214-920-4138	friendlypartscenter.com	kjones@friendlychevy.com
Henna Chevrolet	Hal Matthews	8805 N IH-35	Austin	TX	78753	512-719-6273	512-832-2355	henna.com	halmat@henna.com
Ray Huffines Chevrolet	Robert Jones	1001 Coit Rd	Plano	TX	75075	972-867-4000	972-596-5197	huffines.net	robert.jones@huffines.net
Scoggin-Dickey Chevrolet-Buick	David Erickson	5901 Spur 327	Lubbock	TX	79424	800-456-0211	806-798-4086	sdparts.com	parts@sdparts.com
Vara Chevrolet	Armin Beutnagel	8011 IH-35 S	San Antonio	TX	78224	210-293-1340	210-928-8199		parts@vara.com
Utah									
Brent Brown Chevrolet	Tom Max	2125 N University Pkwy	Provo	UT	84604	800-228-1358	801-375-0059	brenbrownauto.com	tomm@brentbrownauto.com
Larry H. Miller Chevrolet	Grant Martin	5650 S State St	Murray	UT	84107	801-264-3330	801-264-3336	lhmchevy.com	gmartin@lhm.com
Vermont									
Springfield Buick Pontiac GMC	Linley Messer	Rte 106	N Springfield	VT	05150	802-886-2281	802-886-2213	springfieldautomart.com	parts@vermontel.com

Company Name	Contact Name	Address	City	ST	Zip	Phone	Fax	Internet Site	Email Address
Virginia									
Berglund Chevrolet	Jim Colvin	1824 Williamson Rd	Roanoke	VA	24012	800-999-7474	540-345-7431	berglundperformance.com	jcolvin@berglundcars.com
Colonial Chevrolet	Keith Frazier	6252 Virginia Beach Blvd	Norfolk	VA	23502	757-455-4545	757-455-4427	colonialchevrolet.net	keith.frazier@bendrickauto.com
Dominion Chev-Buick-Pont-GMC	Zero Williams	12050 W Broad St	Richmond	VA	23233	804-364-4531	804-364-4598	dominionautogroup.com	
Heritage Chevrolet, Inc.	William Moats	12420 Jefferson Davis Hwy	Chester	VA	23831	800-523-6137	804-748-9770	heritagechevrolet.com	bmoats@heritagechevrolet.com
Radley Chevrolet	Mike Taylor	3670 Jefferson Davis Hwy	Fredericksburg	VA	22408	540-898-4000	540-891-2074	radleyauto.com	miketaylor@radleyautogroup.com
Strosnider Chevrolet, Inc.		5200 Oaklawn Blvd	Hopewell	VA	23860	804-458-9864	804-458-9864		

Washington

Camp Chevrolet-Cadillac	Brian O'Shaughnessey	101 Montgomery	Spokane	WA	99207	509-444-0799	509-458-3792	campchevrolet.com	boshaughnessey@lithia.com
Hall Chevrolet-Buick Co.		314 Sixth St	Prosser	WA	99350	800-676-4255	509-786-0239	parts@hallchevbuick.com	
Jet Chevrolet	Steve Haas	35700 Enchanted Pkwy S	Federal Way	WA	98003	800-257-6655	253-952-7419	jetchevrolet.com	oarts@jetchevrolet.com
Speedway Chevrolet	Greg White	16957 W Main St	Monroe	WA	98272	360-794-1155	360-863-9356	speedwaychevrolet.com	gwhite@speedwaychevrolet.com
Sunset Chevrolet, Inc.	Bruce Douglass	910 Traffic Ave	Sumner	WA	98390	800-201-4444	253-862-7983	sunsetchev.com	parts@sunsetchev.com

Wisconsin

Broadway Chevrolet	Rob Bauer	2700 S Ashland Ave	Green Bay	WI	54304	800-236-2819	920-498-6670	broadwayparts.com	rbauer@broadwayautomotive.com
Bud Weiser Motors, Inc.	Parts Manager	2676 Milwaukee Rd	Beloit	WI	53511	608-364-6340	608-364-6355	budweiserbeliot.com	parts@budweiserbeliot.com
Holz Chevrolet	Ron Roller	5961 S 108 Place	Hales Corners	WI	53130	414-425-2400	414-425-1402	holzmotors.com	dkemp@holzmotors.com
Ivan Gandrud Chevrolet	Chris Slack	919 Auto Plaza Dr	Green Bay	WI	54302	920-468-6800	920-468-3673	gandrud.com	parts@gandrud.com

AUTHORIZED CENTERS

Company Name	Contact Name	Address	City	PR	Postal Code	Phone	Fax	Internet Site	Email Address
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Canada

Alberta

CMP Classic	Brent Peterson	1313 36 St NE	Calgary	AB	T2A 6P9	403-207-1002	403-207-1033	cmpclassic.com	parts@cmpclassic.com
GSL Chev City	Melinda Parker	1729 Bow Trail SW	Calgary	AB	T2T 5P7	403-781-1520	403-237-5090	gschevcity.com	parts@gschevcity.com
Jack Carter Chevrolet Cadillac	Cameron Klem	6711 MacLeod Trail S	Calgary	AB	T2H 2C5	403-258-6300	403-258-6363	jackcarterchev.gmcanada.com	jackcarterchev@gmcanada.com
Shaganappi Motors	Kevin Craig	4720 Crowchild Trail NW	Calgary	AB	T3A 2N2	403-288-0555	403-288-4720	shaganappi.com	partsdepartment@shaganappi.com
Shaw GMC Pontiac Buick	Greg Schaffer	4620 Blackfoot Trail SE	Calgary	AB	T2G 4G2	403-287-5937	403-287-5727	shawgmc.com	gregschaffer@shawgmc.com
Stampede Pontiac Buick GMC	Tim Callaghan	1110 9th Ave SW	Calgary	AB	T2P 1M1	403-260-3756	403-260-6692	stampedepontiac.com	getit@stampedemotorsports.com
Devon Chevrolet	Robin Oetiker	7 Saskatchewan Ave W	Devon	AB	T9G 1B2	780-987-2433	780-987-2535	devonchev.gmcanada.com	devonchev@gmcanada.com
South Gate Pontiac Buick GMC	Carla Calhour	9751 34 Ave	Edmonton	AB	T6E 5X9	780-435-4000	780-435-5420	southgatepontiac.gmcanada.com	southgatepontiac@gmcanada.com
Ken Sargent Pontiac Buick GMC Ltd.	Gord Nellis	12308 100 St	Grande Prairie	AB	T8V 4H7	780-532-8865	780-532-8807	kensargentpontiac.gmcanada.com	kensargentpontiac@gmcanada.com
Davis Pontiac Buick GMC	Mike Schritt	1450 Trans Canada Way SE	Medicine Hat	AB	T1B 4M2	403-527-2787	403-580-5219	mschritt@davis pontiac.ca	
Murray Chevrolet	Ron Donald	1270 Trans Canada Way	Medicine Hat	AB	T1B 1J5	403-527-1141	403-526-7753	murraychevmedicinehat@gmcanada.com	rondonald@murraychev.ca
Marshall Automotive Ltd.	Rober Paul	7501 - 100 Ave	Peace River	AB	T8S 1S2	780-624-3681	780-624-4124	marshallautomotive.gmcanada	marshallautomotive@gmcanada.com
Kipp Scott Pontiac Buick Ltd.	Gerry Paquette	6841 50th Ave	Red Deer	AB	T4N 4E2	403-343-6633	403-350-2205	scottsville.com	kspbparts@scottsville.com
Petersen Pontiac Buick GMC	Randy Koberstein	PO Box 3320	Sherwood Park	AB	T8A 2A6	780-464-5123	780-467-5851	petersenpontiac.gmcanada.com	petersenpontiac@gmcanada.com
Ron Hodgson Pontiac Buick Ltd.	Peter Robinson	5 Galarneau Place	St. Albert	AB	T8N 2Y3	780-458-7100	780-418-6553	ronhodgson.com	parts@ronhodgson.com

British Columbia

Carter Pontiac Buick Ltd.	Earl Johnson	4550 Lougheed Highway	Burnaby	BC	V5C 3Z5	604-291-7501	604-291-8116	carterauto.com	gmparts@carterauto.com
Tyee Chevrolet, Olds, Cadillac	Bill Dennett	570 13th Ave	Campbell River	BC	V9W 4G8	250-287-9511	250-287-3851	tyeechev.gmcanada.com	tyeechev@gmcanada.com
Barnes Wheaton Chevrolet Cadillac Ltd.	Stan Zink	46125 Olds Dr, Box 100	Chilliwack	BC	V2P 6H7	604-792-1391	604-792-9177	barneswheatongm.com	szink@barneswheatongm.com
Eagle Ridge Pontiac Buick GMC	Steve Boylan	2595 Barnet Highway	Coquitlan	BC	V3E 1K9	604-464-6868	604-464-6559	eagleridgegm.com	performanceparts@eagleridgegm.com
BarnesWheaton Coquitlan	Paul Mossey	1090 Lougheed Highway	Coquitlan	BC	V2K 6G9	604-526-4566	604-526-2897	barneswheatongm.com	pmossey1@barneswheatongm.com
Zimmer Wheaton Pont Buick GMC Ltd.		685 Notre Dame Dr	Kamloops	BC	V2C 5N7	250-374-1139	250-374-3650	zimmerwheatongm.com	zimmerwheatontiac.kamloops@gmcanada.com
Don Folk Chevrolet, Inc.	Joey Stychin	2350 Highway 97 N	Kelowna	BC	V1X 4H8	250-860-6050	250-860-7189	donfolkchev@gmcananda.com	
Jacobsen Pontiac Buick Ltd.	Jim Patterson	2727 Highway 97 N	Kelowna	BC	V1X 4J8	250-860-3568	250-860-4999	jacobsenpontiac.gmcanada.com	parts@jacobsenexcellence.com
Preston Chev Cadillac	Larry McKinney	19990 Langley By-Pass	Langley	BC	V3A 4Y1	604-534-4154	604-532-4598	prestongm.com	lmcinney@prestongm.com
Tom Harris Chevrotet Cadillac	John A. Berry	2590 Bowen Road	Nanaimo	BC	V9T 3L3	250-758-0141	250-758-4731	tomharrisgm.com	parts@tomharrisgm.com
Carter Chevrolet	Andrew Thorp	1991 Lougheed Hwy	Port Coquitlan	BC	V3B 1A6	604-941-5455	604-941-0849	carterchevpoco.com	parts@carterchevpoco.com
Salmon Arm GM	Bob Menzies	Box 580 911 Trans Canada Hwy	Salmon Arm	BC	V1E 4N7	250-832-9781	250-832-5314	greatdeals@salmonarmgm.com	bmenzies@sunwaye.com
Barnes Wheaton GM	Richard Edwards	6280 120th St	Surrey	BC	V3X 1X7	604-594-2277	604-594-0275	barneswheatongm.com	parts.surrey@barneswheatongm.com
Don Carr Chevrolet	Rick warawa	5-3050 King George Highway	Surrey	BC	V4P Ab6	604-536-7661	604-541-7212	doncarrchevrolet.com	rickw@doncarr.com
Gold Key Pontiac Buick Ltd.	George Lino	19545 Langley By-Pass	Surrey	BC	V3S 6K1	604-534-8617	604-534-6910	goldkeypontiac.gmcanada.com	goldkeypontiac@gmcanada.com
MacCarthy GM	Dean Franzmann	5004 Highway 16 W	Terrace	BC	B8G 5S5	250-635-4941	250-635-6915	maccarthymgm.com	parts@maccarthymgm.com
Victoria Motor Products	Chris Lane	3050 Douglas St	Victoria	BC	V8T 4N4	250-386-3481	250-995-4310	victoriatorproducts.com	parts@victoriatorproducts.com

Manitoba

Jim Gauthier Chev	Ron Dueck	1400 McPhlips St	Winnipeg	MB	R2V 4G6	204-697-1400	204-633-1742	jimgauthierchev.gmcanada.com	parts@gauthierautogroup.com
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New Brunswick

J. Clark & Son Limited	Keith Grant	820 Prospect St W, Box 188	Fredericton	NB	E3B 4Z2	506-452-1010	506-457-3619	clark.fred.gmcanada.com	kgrant@clarks.ca
Oleary Pontiac Buick GMC	John Farris	1135 Hanwell Road	Fredericton	NB	E3C 1A5	506-453-7000	506-459-9139	olearypontiac.gmcanada	johnfarris@nb.iabn.com
Lounsbury Chevrolet Ltd.	David Steeves	2155 West Main Street	Moncton	NB	E1C 9P2	506-857-4300	506-857-4308	lounsbury.nb.ca	david.steeves@lounsbury.nb.ca
MacDonald Pontiac	Craig Champion	111 Baig Blvd, Box 1460	Moncton	NB	E1C 8T6	506-853-6200	506-853-6210	macdonaldpontiac.com	parts@macdonaldpontiac.com
Seaside Chev Olds Ltd.	Jacques P. Bourque	PO Box 5138	Shediac	NB	E4P 8T8	506-532-6666	506-532-1432	seasidechev.com	jacques.bourque@seasidechev.com

Newfoundland

Hickman Motors Limited (Main Loc)	Peter Cheeseman	85 Kenmount Road, Box 8340	St. John's	NFLD	A1B 3N7	709-726-6990	709-726-0323	hickmanmotors.stjohns.gmcanada.com	pcheeseman@hickmanmotors.ca
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Nova Scotia

Bordertown Pontiac Buick GMC (1991)	Scott Bishop	112 South Albion St	Amherst	NS	B4H 2X3	902-667-8788	902-667-2644	bordertownpontiac.gmcanada.com	bordertownpontiac@gmcanada.com
Forbes Chevrolet	Jarrett Fowler	580 Portland St	Dartmouth	NS	B2Y 3Y7	902-434-4000	902-462-7343	forbeschev.com	parts@forbeschev.com
MacPhee Pontiac Buick GMC Ltd.	Mark Cheverie	PO Box 875	Dartmouth	NS	B2Y 3Z5	902-434-4100	902-435-2270	macpheetpontiac.com	macpheetparts@accesswave.ca
Carroll Pontiac Buick GMC Hummer	Peter Dickens	44 Bedford Hwy	Halifax	NS	B3M 2J2	902-445-5575	902-443-5474	carrollgm.com	peterd@carrollgm.ca
Ron May Pontiac Buick GMC Ltd.	Peter J. Macdonald	147 Prince St	Sydney	NS	B1P 6J7	902-539-6494	902-539-3183	ronmaypontiac.gmcanada.com	ronmaypontiac@gmcanada.com

Company Name	Contact Name	Address	City	PR	Postal Code	Phone	Fax	Internet Site	Email Address
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Ontario

Boyer Chevrolet (Alliston) Ltd.	Wayne Dudgeon	217 Victoria St W	Alliston	ON	L9R 1W1	705-435-7777	705-435-9801	boyerchev.gmcanada.com	boyerchev@gmcanada.com
Greavette Chevrolet Pontiac Buick Cadillac GMC Ltd.	Ron Wood	375 Ecclestone Dr	Bracebridge	ON	P1L 1T6	705-645-2242	705-645-8993		ronw@greavettepontiac.com
Heuvelmans Chevrolet Cadillac Ltd.	Al Pellerin	7555 Grand Ave W	Chatham	ON	N7M 5L1	519-354-3550	519-352-5080	heuvelmanschev.gmcanada.com	heuvelmanschev@gmcanada.com
Roy Nichols Chevrolet	Dana Damant	2728 Courtice Rd	Courtice	ON	L1E 2M7	905-436-2227	905-493-6866	infor@roynicholsmotors.com	bob.adams@roynicholsmotors.com
Courtesy Chevrolet Ltd.	Tom Magyar Trevor Janes	1635 The Queensway	Etobicoke	ON	M8Z 1T8	416-251-5211	416-251-8873	courtesychevolds.com	courtesychev@gmcanada.com
John Bear Pontiac Buick Cadillac Ltd.	Nikki Cupit	1200 Upper James St	Hamilton	ON	L9C 5S2	905-575-9400	905-575-4428	johnbear.com	parts@johnbear.com
Brian Finch Pontiac Buick GMC Ltd.	Steve Williams	300 Southdale Rd	London	ON	N6C 5Y7	519-649-7779	519-685-2756	brianfinchpontiac.gmcanada.com	brianfinchpontiac@gmcanada.com
MacMaster Chevrolet Ltd.	Brad Walker	1470 Dundas St E	London	ON	N5W 3B9	519-455-1365	519-455-1886	macmaster.on.ca	brad@macmaster.on.ca
Ray Cullen Chevrolet Ltd.	Wade Webb	730 Wharncliffe Rd S	London	ON	N6J 2N4	519-686-7282	519-686-2642	raycullen.com	parts@raycullen.com
Applewood Chevrolet Cadillac	Gord Guerin	3000 Woodchester Dr	Mississauga	ON	L5L 2R4	905-828-7111	905-828-2551	acoc.com	gguerin@applewoodauto.com
Briar Wood Chevrolet Ltd.	Caesar Desilva	321 Lakeshore Rd W	Mississauga	ON	L5H 1G9	905-278-6116	905-891-2313	briarwoodchev.com	briarwoodchev@gmcanada.com
P.H. Armstrong Motors Ltd.	Reg Toupin	88 Lakeshore Rd	New Liskeard	ON	P0J 1P0	705-647-8141	705-647-6290	pharmstrongmotors.gmcanada.com	pharmstrongmotors@gmcanada.com
Slessor Motors (Newmarket 1979) Ltd.	Chris Lauzon	17645 Yonge St	Newmarket	ON	L3Y 5H6	905-895-3823	905-895-8486	slessormotors.com	chrislauzon@slessormotors.com
Falls Chevrolet Cadillac	Dave Miller	5888 Thoroldstone Rd	Niagara Falls	ON	L2J 1A2	905-358-7791	905-358-8837	fallschev.com	parts@fallschev.com
MacMaster Pontiac Buick GMC (1999), Inc.	Jeff Marshall Paul Darch	Highway #9, E	Orangeville	ON	L9W 2Z5	888-279-9922	519-941-6107	macmasterpontiac.com	parts@macmasterpontiac.com
Mews Chevrolet Ltd.	Mark Reid	1875 St Joseph Blvd	Orleans	ON	K1C 7J2	613-834-6397	613-837-4533	mewschevolds.com	mewschev@gmcanada.com
Ontario Motors Sales Ltd.	Parts Department	140 Bond St	Oshawa	ON	L1H 7L8	905-728-9476	905-436-7445	ontariomotorsales.com	parts@ontariomotorsales.com
Jim Tubman Motors	Wayne Soutar	1770 Bank St	Ottawa	ON	K1V 7Y6	613-733-5483	613-733-9164	jimtubmanmotors.com	wsoutar@jimtubmanmotors.com
Lauria Pontiac Buick GMC Ltd.	Jason Clark Rick Monteith	50 Benson Court	Port Hope	ON	L1A 2V6	905-885-8154	905-885-7770	lauriapontiac.gmcanada.com	lauriapontiac@gmcanada.com
Quantrill Chevrolet Cadillac Ltd.	Dean Longyear	265 Peter St	Port Hope	ON	L1A 3Z4	905-885-1499	905-885-6141	quantrillchev.gmcanada.com	quantrillchev@gmcanada.com
Wilson Niblett Motors	Deb Kay	10675 Yonge St	Richmond Hill	ON	L4C 3E1	905-884-7708	905-884-0033	wilsonniblett.com	dkay@wilsonniblett.com
Wallis Pontiac Buick GMC Ltd	Jim Rops	1103 Confederation St	Sarnia	ON	N7S 3Y4	519-336-4060	519-332-5068		parts@wallismotors.com
Alex Irvine Motors Ltd.	Mark Mercer	2655 Lawrence Ave E	Scarborough	ON	M1P 2S3	416-751-1440	416-751-8966	irvinechev.com	parts@irvinechev.com
Foster Pontiac Buick, Inc.	Tammy Elson	3445 Sheppard Ave E	Scarborough	ON	M1T 3K5	416-291-7733	416-291-6322	fosterpontiac.gmcanada.com	fosterpontiac@gmcanada.com
Golden Mile Motors Ltd.	Dominic Colamartino	1765 Eglinton Ave E	Scarborough	ON	M4A 1J8	416-759-2201	416-752-4812	goldenmilemotors.gmcanada.com	goldenmilemotors@gmcanada.com
Stratford Motor Products (1984) Ltd.	Steve Court	824 Ontario Str	Stratford	ON	N5A 3K1	519-271-5900	519-271-6320	stratfordmotorproducts.com	gm.parts@stratfordmotorproducts.com
Crosstown Chevrolet Ltd.	Donovan Proulx	280 Falconbridge Rd	Sudbury	ON	P3A 5K3	705-566-9000	705-566-9723	crosstownchev.gmcanada.com	crosstownchev@gmcanada.com
Roy Foss Motors Ltd.	Steve Barclay	7200 Yonge St	Thornhill	ON	L4J 1V8	905-886-2947	905-886-9418	royfossmotors.gmcanada.com	sbarclay@royfoss.com
Timmins Garage, Inc.	Mitch Cloutier	1395 Riverside Dr	Timmins	ON	P4R 1A6	705-268-4122	705-264-1540	timminsgarage.com	timminsgarage@gmcanada.com
Alex Williamson Motor Sales	Bill Short	259 Toronto St S	Uxbridge	ON	L9P 1S3	905-852-5252	905-852-3358	wukusansibuxbridge.com	bshort@williamsonuxbridge.com
Niagara Motors Ltd.	Dennis Wilms	1537 Hwy 55, PO Box 70	Virgil	ON	LOS 1T0	905-468-4204	905-468-4454	niagaramotors.com	parts@niagaramotors.com
Forbes Motors, Inc.	Dave Stanley	165 Weber St S	Waterloo	ON	N2J 4A6	519-742-4463	519-743-5623	forbesauto.com	dstanley@forbesmotors.com

Quebec

Boisvert Pontiac Buick	Andre Bougie	470 Bld Cure Labelle	Blainville	PQ	J7C 2H2	450-430-9421	450-430-7583	wboisvertpontiac.com	abougie@boisvertpontiac.com
Accent Chev Olds	Sebastien Legault	740 Route 117	Piedmont	PQ	J0R 1K0	450-227-4649	450-227-8528	accentchev.gmcanada.com	accentchev@gmcanada.com
Parkway Pontiac GMC Buick, Inc.	Gilles Normand	9595 Trans Canada Highway	St. Laurent	PQ	H4S 1T6	514-333-7070	514-333-6547	parkway.ca	gnormand@parkway.ca
Drouin et Freres Auto Ltd.	Alain Tuimel	1020 Boul Vachon	Ste Maire	PQ	G6E 1M2	418-387-6601	418-387-8159	drouinetreresauto.com	pieces1@drouinetreresauto.com
Ste-Therese Autos, Inc.	Bernard Lavigone	105 Est Desjardins	Ste-Therese	PQ	J7E 1C5	450-430-6660	450-430-9397	stethereseautos.gmcanada.com	info@ste-therese-autos.com
Maurice Goyete	Nmark Jaxsar	1623 Route 132	Vaernese	PQ	J3X 1&7	514-875-3933	450-652-4480	mauricgoyetepontiac.gmcanada.com	servicemgpb@videotron.ca

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Eagle Auto Parts	8 Marigold Place	Revsby	New South Wales		2212	02 97715566	02 97715599		
Eagle Auto Parts	Unit 1, 100 Park Road	Slacks Creek	Queensland		4127	07 34428000	07 34428099		

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NOTES

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GM SERVICE REPLACEMENT POWERTRAIN & GM PERFORMANCE PARTS LIMITED WARRANTY

Engines, Engine Components, Transmissions, Transmission Components & Transfer Cases

To retain the safety and dependability built into this product, it is essential that your product receives the scheduled maintenance at the recommended intervals contained in your vehicle Owner's Manual/ Maintenance Schedule.* Since emissions-related components vary by model and engine application, you should follow the emissions maintenance recommendations also contained in your vehicle's manuals.

Maintenance services should be performed by an authorized GM dealer or other qualified independent service centre.

General Motors of Canada Limited ("GM Canada") warrants to the purchaser for the time and/or mileage indicated that it will repair or replace, at its option, using new or remanufactured parts, GM Parts Service Replacement Engine, Engine Component, Transmission/Transaxle, Transmission Component, Transfer Case or Short Block Assembly that fails due to a defect in material or workmanship.



Effective with purchases on or after 4/15/05	Passenger Car & Light-Duty Truck ³	Medium-Duty Truck, Class A Motor Home, Taxi, Police ² & Tow Truck ⁴	Other ⁵
Engines & Automatic Transmissions ^{6,10}	36 months or 160,000 kilometers ^{1,2,7,8}	18 months or 160,000 kilometers ^{1,2}	12 months or 20,000 kilometers ^{1,11}
Transfer Cases	24 months or 40,000 kilometers ^{1,2}	24 months or 40,000 kilometers ^{1,2}	12 months or 20,000 kilometers ¹
Short Block Assemblies ⁹	24 months or 40,000 kilometers ^{1,2}	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ^{1,11}
Manual Transmissions	12 months or 20,000 kilometers ^{1,2}	12 months or 20,000 kilometers ^{1,2}	12 months or 20,000 kilometers ^{1,11}
Engine & Transmission Components ⁹	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ¹	12 months or 20,000 kilometers ¹



Effective with purchases on or after 3/1/07	Passenger Car & Light-Duty Truck ^{3,12}
Performance Parts Transmissions, Components & Short Block Assemblies ⁹	12 months or 20,000 kilometers ^{1,12}
Performance Parts Engines	24 months or 80,000 kilometers ^{1,2,8,11,12,13}

¹ Whichever occurs first, months or mileage; ² Parts and labor warranty; ³ Light-Duty series 10-30; ⁴ Medium-Duty series 40-70; ⁵ Parts only warranty for non-cataloged applications; ⁶ Includes Allison assemblies sold through GM Dealers; ⁷ 3 year / 80,000 kilometer warranty applies to purchases prior to 4-15-05; ⁸ Engine upgrades require appropriate associated parts to ensure proper engine and transmission cooling and torque capacity, fuel/air delivery and emission controls (upgrade example: 305 engine replaced with 350 engine); ⁹ Parts only warranty when sold over the counter or to a qualified independent repair facility; ¹⁰ Excludes ACDelco and Performance Parts; ¹¹ Includes marine, propane, natural gas, and certain industrial applications (excludes industrial stationary applications); ¹² 12 month / 20,000 kilometers warranty applies to purchases prior to 3-1-07; ¹³ Must be installed in a street legal automotive application.

WARRANTY BEGINS ON THE DATE OF INSTALLATION BY AN AUTHORIZED GM DEALER OR BY A QUALIFIED INDEPENDENT SERVICE CENTER. PARTS ONLY WARRANTY (NO LABOUR) APPLIES FOR WARRANTY REPAIRS NOT PERFORMED BY AN AUTHORIZED GM DEALER OR QUALIFIED INDEPENDENT SERVICE CENTER.

GM sells other engines and transmissions in various states of completion. This warranty covers only those engines and transmissions that are marketed by GM as Goodwrench or GM Parts.

THIS WARRANTY DOES NOT COVER:

- Damage due to improper installation, negligence, alteration, accident, improper use, or any use related to racing or competition. Proper vehicle use is discussed in the vehicle Owner's Manual. In addition, coverage does not apply if the odometer has been disconnected or the mileage reading has been altered.
- Damage caused by lack of proper maintenance as described in the vehicle's original Maintenance Schedule/Owner's Manual, failure to follow Maintenance Schedule intervals, or failure to use or maintain

proper type and levels of fluid, fuel, oil and lubricants recommended in the Maintenance Schedule/Owner's Manual. Proof of proper maintenance is the owner's responsibility. Keep all receipts and be prepared to make them available if questions arise about maintenance.

- Damage as a result of overheating, contamination or lack of lubrication.
- Damage caused by a turbocharger, supercharger, nitrous oxide, or similar product, which is not an approved GM Performance Part or Accessory.
- Racing engines and/or their components.
- Use of components in excess of maximum torque specification.
- Damage as a result of modification/replacement of torque converter that is part of transmission assembly.
- Loss of time, inconvenience, loss of use, or other economic loss.
- Vehicles registered and normally operated outside of Canada.
- This warranty does not apply to any unit installed under the General Motors New Vehicle Warranty.

DOCUMENTATION REQUIREMENTS

The GM dealer or independent service center must be furnished with this warranty statement, purchase receipt, installation date invoice and proof of proper maintenance. This warranty is transferable to subsequent owners by providing the above required documents to any purchaser of the vehicle in which the assembly/component was originally installed.

OBTAINING REPAIRS

GM Dealer Installation—The GM dealer who initially installed the assembly/component or any GM dealer may perform the repairs. You must allow a reasonable period of time for repairs following delivery of the vehicle to the GM dealer's place of business.

Independent Service Center Installation—The independent service center that installed the assembly/component or any GM dealer may perform repairs. Before any repairs can be performed under warranty by an independent repair center, the selling GM dealer (or any GM Dealer) must first authorize needed repairs as a sublet service.

OTHER TERMS

TO THE FULL EXTENT PERMITTED BY APPLICABLE CANADIAN LAW: The foregoing warranty is the only and the entire warranty provided by GM Canada and is in lieu of and excludes all other representations, warranties or conditions, express or implied (including any implied warranty of merchantability or fitness for a particular purpose).

The performance of repairs, the provision of replacement parts, or reimbursement thereof, as described above, is the exclusive remedy under this written warranty or under any otherwise applicable implied warranty or condition.

GM CANADA DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATIONS or liability in connection with the products and no person is permitted to extend or enlarge this warranty on behalf of GM Canada by written, verbal or other representation and if made, such representation or warranty will not be enforceable against GM Canada.

DISCLAIMER OF LIABILITY: Except as provided in this limited warranty, GM Canada will not be liable in contract, tort or otherwise for any direct, indirect, economic, commercial, incidental, or consequential or special loss or damage or expense or claim howsoever caused, arising in connection with the sale, use, loss of use, performance or non-performance of the product.

NOTICE REGARDING LIMITATIONS: The terms contained in this limited warranty are not intended to limit or otherwise modify or exclude any warranty that by law cannot be limited, disclaimed or excluded. When and to the extent that any applicable Canadian law prohibits in a particular situation, any term contained in this warranty, such term will be considered severable and deemed deleted from this warranty in that situation.

Some states/provinces do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, therefore, the above limitation or exclusions may not apply to you.

SERVICE CHECKS:

Transmissions: It is important for you or a service technician to check the transmission/transaxle fluid level at regular intervals.

Engines: It is important for you or a service technician to perform these underhood checks at each fuel fill:

- Check engine oil level and add if necessary.
- Check engine coolant level in coolant reservoir and add if necessary.
- Check belts and hoses for visible wear and replace if necessary.

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WARRANTY: USA

GM SERVICE REPLACEMENT POWERTRAIN & GM PERFORMANCE PARTS LIMITED WARRANTY

Engines, Engine Components, Transmissions, Transmission Components & Transfer Cases

To retain the safety and dependability built into this product, it is essential that your product receives the scheduled maintenance at the recommended intervals contained in your vehicle Owner's Manual/ Maintenance Schedule* or GM Performance Parts Engine Instruction Sheet. Since emissions-related components vary by model and engine application, you should follow the emissions maintenance recommendations also contained in your vehicle's manuals.

Maintenance services should be performed by an authorized GM dealer or other qualified independent service center.

General Motors Corporation warrants to the purchaser for the time and/or mileage indicated that it will repair or replace, at its option, using new or remanufactured parts, GM Parts Service Replacement Engine, Engine Component, Transmission/Transaxle, Transmission Component, Transfer Case or Short Block Assembly that fails due to a defect in material or workmanship.

*If owner's manual/maintenance schedule is lost, visit www.ownercenter@mygmink.com



Effective with purchases on or after 4/15/05	Passenger Car & Light-Duty Truck ²	Medium-Duty Truck, Class A Motor Home, Taxi & Police ⁴	Other ⁵
Engines & Automatic Transmissions ^{6,10}	36 months or 100,000 miles ^{1,2,7,8}	18 months or 100,000 miles ^{1,2}	12 months or 12,000 miles ¹
Transfer Cases	24 months or 24,000 miles ^{1,2}	24 months or 24,000 miles ^{1,2}	12 months or 12,000 miles ¹
Short Block Assemblies ⁹	24 months or 24,000 miles ¹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹
Manual Transmissions	12 months or 12,000 miles ^{1,2}	12 months or 12,000 miles ^{1,2}	12 months or 12,000 miles ¹
Engine & Transmission Components ⁹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹	12 months or 12,000 miles ¹



Effective with purchases on or after 3/1/07	Passenger Car & Light-Duty Truck ^{3,12}
Performance Parts Transmissions, Components & Short Block Assemblies ⁹	12 months or 12,000 miles ^{1,12}
Performance Parts Engines	24 months or 50,000 miles ^{1,2,8,11,12}

¹Whichever occurs first, months or mileage; ²Parts and labor warranty; ³Light-Duty series 10-30; ⁴Medium-Duty series 40-80, unlimited miles; ⁵Parts only warranty for non-cataloged applications; ⁶Includes Allison assemblies sold through GM Dealers; ⁷3 year, 50,000 mile warranty applies to purchases prior to 4/15/05; ⁸Engine upgrades require appropriate associated parts to ensure proper engine and transmission cooling and torque capacity, fuel/air delivery and emission controls (upgrade example: 305 engine replaced with 350 engine); ⁹Parts only warranty when sold over the counter or to a qualified independent repair facility; ¹⁰Excludes ACDelco and Performance Parts; ¹¹12 month, 12,000 mile warranty applies to purchases prior to 3/1/07; ¹²Must be installed in a street legal automotive application.

Warranty begins on the date of installation by an authorized GM dealer or by a qualified independent service center. For over-the-counter sales, warranty begins on date of retail sale.

This Warranty Does Not Cover:

- Damage due to improper installation, negligence, alteration, accident, improper use, or any use related to racing, track or competition. Proper vehicle use is discussed in the vehicle Owner's Manual. In addition, coverage does not apply if the odometer has been disconnected or the mileage reading has been altered.
- Damage caused by lack of proper maintenance as described in the vehicle's original Maintenance Schedule/Owner's Manual, failure to follow Maintenance Schedule intervals, or failure to use or maintain proper type and levels of fluid, fuel, oil and lubricants recommended in the Maintenance Schedule/Owner's Manual. Proof of proper maintenance is the owner's responsibility. Keep all receipts and be prepared to make them available if questions arise about maintenance.
- Damage as a result of overheating, contamination or lack of lubrication.
- Damage caused by a turbocharger, supercharger, nitrous oxide, or similar product, which is not an approved GM Performance Part or Accessory.

- Racing engines and/or their components.
- Use of components in excess of maximum torque specification.
- Damage as a result of modification/replacement of torque converter that is part of transmission assembly.
- Loss of time, inconvenience, loss of use, or other economic loss.
- Vehicles registered and normally operated outside of the United States.
- This warranty does not apply to any unit installed under the General Motors New Vehicle Limited Warranty.

Documentation Requirements:

The GM dealer or independent service center must be furnished with the purchaser's original repair order or sales slip (or dealer's photo copy), and this warranty certificate properly completed. This warranty is transferable to subsequent owners by providing the above required documents to any purchaser of the vehicle in which the assembly/component was originally installed.

Obtaining Repairs:

GM Dealer Installation—The GM dealer who initially installed the assembly/ component or any GM dealer may perform the repairs. You must allow a reasonable period of time for repairs following delivery of the vehicle to the GM dealer's place of business.

Independent Service Center Installation—The independent service center that installed the assembly/component or any GM dealer may perform repairs. Before any repairs can be performed under warranty by an independent repair center, the selling GM dealer (or any GM Dealer) must first authorize needed repairs as a sublet service.

Emergency Repairs (GM Dealers Only)—Reimbursement to an owner for repairs performed by other than a GM dealer will be considered when GM dealer service was not available (e.g. weekends, evenings, etc.) or when repairs were made in a foreign country where warranty repairs by a GM dealer were difficult to obtain.

Other Terms:

GM sells other engines and transmissions in various states of completion. This warranty covers only those engines and transmissions that are marketed by GM as Goodwrench, GM Parts or GM Performance Parts.

This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

General Motors does not authorize any person to create for it any other obligations or liability in connection with these assemblies.

ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO ASSEMBLIES OR PARTS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. THE PERFORMANCE OF REPAIRS OR REPLACEMENT IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. GM SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.

Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, therefore, the above limitation or exclusions may not apply to you.

Service Checks:

Transmissions: It is important for you or a service technician to check the transmission/transaxle fluid level at regular intervals.

Engines: It is important for you or a service technician to perform these underhood checks at each fuel fill:

- Check engine oil level and add if necessary.
- Check engine coolant level in coolant reservoir and add if necessary.
- Check belts and hoses for visible wear and replace if necessary.

Direct any inquiries to:

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Consumer Relations Dept.
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