

JEEP 1941-2002 and SCOUTS Transfer Case Adapters

This section of the Buyer's Guide deals with transfer case adapters in Jeeps 1941 to 2002, and International Harvester Scouts. On the Jeep Transfer Case Selection chart to follow, you will find numerous listings of both transfer cases and the most popular GM, Ford, and Chrysler automatic & manual transmissions. By using this chart, you will be able to identify the specific adapter for your application. Most of these adapters will require additional components to complete your conversion needs. (i.e. Motor mounts for engine swaps, crossmember mount, transfer case & transmission shifter components, transfer case alignment retainers, etc.)

In addition, most transmission swaps will normally require driveline modifications. We have listed both transmission and adapter lengths for your reference. Beginning on Page 67, you will find specific transmission identification information. The paragraphs to follow are listed by year of vehicle and transfer case application.

1941-79 JEEPS & SCOUTS

(Dana Spicer 18 & 20 T/C) and SCOUTS (1980 Dana 300):

These transfer cases, although used in different vehicles, all have the same bolt pattern. When considering a new transmission for one of these transfer cases, there are just a few things you must confirm: transfer case indexing to the new adapter and the female splines on the transfer case input gear.

INDEXING: The Dana Spicer transfer cases were indexed to the stock transmission by either a bearing or a bearing retainer. The early Jeeps that were equipped with the T90 or T84 transmissions used a bearing to index the transmission to transfer case. We classify this as a small hole transfer case. This small hole transfer case will require a bearing when you adapt to this transfer case. In addition to this bearing, our adapter will also require a thin bearing support retainer. This support retainer is necessary to align our adapter to the transfer case. This support retainer can be purchased from us or be obtained off of a stock T90 transmission.



Small Hole transfer case (3-1/8")



Large Hole transfer case (4")

All other Jeep transmissions were indexed to the transfer case by either a retainer housing or an index hub which was part of the stock transmission case. These transfer cases are classified as large hole transfer cases. Our adapters will require this indexing retainer to obtain proper alignment. This retainer can be purchased from us or you can also use a retainer from a Jeep T86 transmission. All large hole transfer cases require this retainer. (Scout Dana 300s are also a large hole transfer case). When utilizing either one of these retainers, we also recommend that a new 307 sealed bearing be used.



Small Hole T90



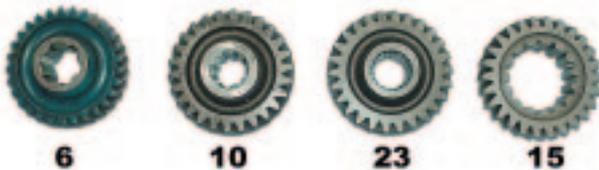
Large Hole T86

- P/N 716002 - Small hole index retainer (T90)
- P/N 716001 - Large Hole index retainer (T86)
- P/N 716302 - Sealed bearing (307)

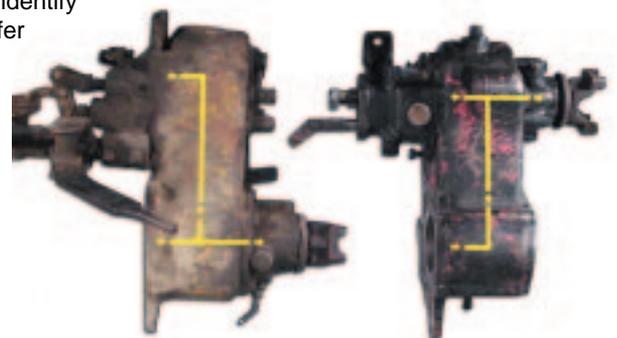
Both retainers can also be purchased through a Jeep dealership and the sealed bearing through a local bearing supplier.



SPLINES: These transfer cases all require a male shaft to extend from the rear of the stock transmission or the new adapter housing. The transmission output shaft fits into the drive gear of the transfer case. Jeep standardized most drive gears with a 6 tooth female spline; however, there were some exceptions. Between the years 1969 to 1971, Jeeps equipped with a T14 transmission used a 10 spline female drive gear; and Scout transfer cases, used with an automatic, were always a 23 spline female drive gear. *(Note: On Scouts, we recommend that you verify your input spline count before ordering parts.)* Jeeps that were equipped with an AMC TH400 used a 15 tooth female drive gear. We manufacture transfer case adapters to fit most of the different splines that Jeep used. The transfer case adapter selection chart on Pages 12 & 13 will help you to identify the proper adapter for your transfer case. If for some reason we do not offer the adapter for your female spline count, you can change out the transfer case drive gear. Please check with a qualified transfer case rebuilder if changing your drive gear, since there were some external gear tooth differences.



Four different female spline transfer case drive gears



Power flow of a Dana 20 (left) & Dana 18 (right)

FRONT DRIVESHAFT CLEARANCE: On most vehicles, we have tried to allow for proper clearance. However, with some automatic transmissions we are unable to compensate for this. These applications will require the centerline of the drivetrain offset 1" to the driver's side and you will be limited on your driveshaft diameter. On some 1965 and earlier Jeeps, the front yoke can also present some interference problems on both the automatic & manual transmissions.

T/C SHIFTERS: The 1941 to 1979 transfer cases use several designs of shifters. These shifters are always supported off the front of the stock transfer case. On some of the truck 4 speed adapters and the New Venture adapters, you may need to modify your stock shifter. The instruction sheets provided with the kits will give you this information.

CROSSMEMBER SUPPORT: All of the adapters we manufacture offer a support pad machined on the casting. The location of this pad will normally require you to relocate your crossmember on your frame rails. We offer a few options to aid you in this area.

P/N 716003 - New rubber support (Jeeps 1941-71) *(photo right)*

P/N 716021 - New rubber support (Jeeps 1972-79)

P/N 716017 - Aluminum adapter block (used to help retain your stock rubber support)



JEEP DANA 20 32 SPLINE OUTPUT SHAFT KIT: The Dana 20 transfer case is a good strong cast iron transfer

case; however, with the introduction of the various low gear options for this unit and the popularity of rock crawling, a growing concern for drivetrain reliability has materialized. Since low gear kits increase the torque to the output shaft and rock crawling usually demands tire size, we've developed a heavy-duty rear output shaft kit for the Dana 20 transfer case to add strength and reliability to your drivetrain. Our kit fits all Dana 20 transfer cases with or without a low gear kit installed. The stock Dana 20 output shaft is a 1-1/8" diameter 10 spline, and our new output shaft is a larger 1-3/8" diameter 32 spline output. The output shaft kit is approximately 1.5" longer than your stock tailhousing; however, you do gain the option to calibrate your speedometer to compensate for a different axle ratio and/or larger tires. Our kits come complete with a new tailhousing, output shaft, taper roller bearings, yoke, and speedometer drive. When you require strength and reliability, then install the Advance Adapters Dana 20 output shaft kit.



P/N 50-3020 - Heavy duty 32 spline Dana 20 output shaft with 1310 non C.V. yoke.

JEEP DANA 18/20 INTERMEDIATE GEAR KIT: These kits are available for Jeep transfer cases 1946-53 (with an 1-1/8" intermediate shaft), or Jeeps 1953-79 (1-1/4") to fit the stock cluster gear. These kits use tapered roller bearings and a new shaft that aid in the noise reduction of your stock transfer case. Machining is required on your cluster gear.

P/N 716005 - 1-1/4" Kit

P/N 716006 - 1-1/8" Kit



DANA 18/20 3.15:1 LOW GEAR SETS: Kits are available for both the Dana 18 and Dana 20 transfer cases. These kits are shipped complete with the necessary hardware and gaskets to obtain the 3.15:1 low gear ratio.

The Dana 20 kit fits transfer cases 1963 to 1979 in CJ's, Jeepsters, Jeep trucks, Wagoneers, and 1972 to 1979 Scouts. This is a 5-gear low range kit replacing the stock 2.03:1 gears. A slight amount of internal case grinding is necessary.

P/N 420315 Dana 20 kit \$855.36



The Dana 18 kit fits large hole transfer cases only (refer to Page 6). This 4-gear kit requires the shortening of the shift rod for intermediate gear clearance. A slight amount of internal case grinding may be necessary. CJs 1965 and older will require the use of a case from either a 1966 to 1971 CJ, 1963 to 1979 Wagoneer/pickup (Dana 20), or a 1972 to 1979 CJ (Dana 20). If a Dana 20 T/C is to be used with the Dana 18 components, you will still be able to retain your stock driveshaft offset. For Warn and Saturn O.D. owners, we offer a complete gear set to retain your overdrive using the 3.15:1 low gears, **P/N 418315OD**. We also offer just the Saturn overdrive bowl gear if you have already obtained you low gear set, **P/N 911098**.

P/N 418315 Dana 18 kit \$734.40

P/N 418315OD Dana 18 kit (for Saturn & Warn Overdrives) \$749.95

The Saturn/Warn overdrive replacement parts and new Saturn units can be found on Page 34.

WINDSHIELD LATCHES:

The CJ5 & CJ6 Jeep vehicles (up to 1978) always had a problem with the stock windshield. The stock latches had a tendency of loosening up and allowing the windshield to fall forward.

We remedied this problem by designing aluminum castings that would replace the stock dash & windshield brackets. This kit is available with a polished aluminum finish and is directly interchangeable with your stock latching mechanism. **Part # 716127**

