

A Rotating Information Center

By Marvin Bozarth TIA Senior Technical Consultant

Some people never look at a tire sidewall while others read every letter, number, mark and symbol on both sides. My wife gets her laughs when I try to read the markings while the tire is still on a moving vehicle. With a little practice, you'd be surprised at what you can read on the sidewall of a rolling truck tire. (I don't recommend attempting this while the tires on your own vehicle are rolling.)

If you think the average tire dealer knows the meaning of all the symbols on tire sidewalls and that the average customer doesn't care, you're wrong on both counts. I receive many inquiries from individuals about the meaning of these symbols.

Tire manufacturers are concerned that the markings required by regulations on tire sidewalls will get so extensive that they are both expensive



The lettering on this tire indicates that it should not be branded more than 1/32" (.8mm) deep. That's good advice.

TireRetreadingRepairing today

13

and will interfere with the space the manufacturers use to promote their product. I support that the sidewall marks promoting the ability of commercial truck tires are wasted, since most commercial users read the claim long before they actually look at the tires.



Would you guess that this is an agricultural tire?



Fuel efficiency is an important issue for tires, and manufacturers promote their product with symbols on the tire sidewalls.



Any tire manufactured for use in Europe must include the "E" symbol to designate that it meets European Standards. The "13" indicates the tire was made in the United States.



The load range on truck tires is marked in different ways. These rather large letters indicate this is a "Load Range G" tire.



This tire was manufactured in the 9th week of 2001. The crown symbol at right signifies that the tire was built to meet Canadian Standards.

TireRetreadingRepairing today

15

There is a substantial amount of information on the sidewalls of tires; some is very clear and precise, and some is in the form of symbols and codes that may require charts to decifer. Without including the promotional information, I noted 24 items of information on various tire sidewalls – and may have missed some:

- Speed rating
- Type fabric
- Max load
- Max inflation
- Load capacity
- Tubeless or tube-type
- Bias
- Radial
- M&S or all season
- Temperature rating
- Wear rating
- Traction rating
- Brand depth warning
- Regroovability
- Rim size
- Cross section
- Inflation warning
- Number of plies
- Date of manufacturer
- Location of manufacturer
- Brand placement
- Test pressure
- Production code
- Tread depth indicator

It is interesting to note that often even the sales personnel from the manufacturing companies don't know the meaning of the symbols. This is primarily because some of the markings are placed on the tires by development engineers and don't have meaning for anyone else.

I find that those most knowledgeable about sidewall markings are the tire service technicians. There is good reason for this, as careful attention to sidewall markings can save a technician's life. Knowing that a 16" tire cannot be mounted on a 16.5" wheel, or being aware of a tire's maximum inflation



If you want to say "tubeless" in German, this is your chance. Good luck!



Will the industry stick to speed symbols, or will we see the actual speeds?



The industry used a 3-digit code to signify the manufacturing date until the year 2000 when it switched to a 4-digit code. This tire was manufactured in the 20th week of 1997.

TireRetreadingRepairing today

17

pressure is critical for the safety of a tire service technician. Knowing that a smaller truck tire manufactured previously with fabric cords is now made with steel body cords can prevent technician injuries that may occur during inflation, if the tire had run flat.



The European "FRT" marking designates this as a tire designed for free rolling, not drive axle, use.



The "140" on this tire designates that it will carry 5,510 lbs in a single application; "137" indicates a load capacity of 5,070 lbs in a dual application; and "M" designates 80 mph (130 km) maximum. "E11" is the European Standard designation that the tire was manufactured in the United Kingdom. 115 psi is the pressure the tire held during testing.

In my opinion, the more clear, precise and understandable the information is on a tire sidewall, the better off everyone will be. Now, if we could just teach consumers to understand that if one tire sidewall bulges a lot more than the rest, the tire is probably low on air pressure. Better yet, let's teach them how and when to use a pressure gauge.



This tire is designated for use in trailer and piggyback operations.



"ECD" indicates Goodyear's Enhanced Casing Design with a rustproof polymide breaker ply in the belt package.

TireRetreadingRepairing today