

Wheels: We've have received many letters and e-mails regarding tires and tire sizing. Could you help clarify this alphabet soup?

Halderman: It seems like there is a tire sale somewhere every week. Smart buyers know what size tire is needed for their vehicle and will start to look for pricing in the newspaper several weeks before actually purchasing the tires.

The size of the tire is always imprinted on the tire sidewall. A typical size would be 205/70x15 91H. The "205" represents the cross-sectional width of the tire in millimeters (25.4 millimeters equals 1 inch); the "70" represents the aspect ratio, which means that the height of the sidewall, in this case is 70 percent of the cross-sectional width; the "15" represents the diameter of the wheel in inches; the "91" is a load rating, which is an important consideration for trucks, vans, and sport-utility vehicles; and the "H" is a speed rating, representing in this case a maximum sustained speed of 130 mph.

Try to purchase tires that are the same size as those originally specified for your vehicle including the same or higher load range and speed rating. If you really must have larger tires, you can increase the width by 10 millimeters without any serious consequences. By choosing different widths, you will affect the speedometer and odometer calibrations, headlight aiming, and the shifting of the automatic transmission.

This point is important because by choosing wider tires, the tire is also higher with the same aspect ratio. If a wider tire is desired, then a tire with a lower number aspect ratio like a 60-series tire, would have to be selected to maintain the original, stock outside diameter. If you go too wide, replacement wheels will be necessary.

As for the speed rating, even though its illegal to travel at 130 mph in North American, I would still recommend H-rated tires if they were originally installed on the vehicle when it was built. The reason for this recommendation is that the suspension tuning is designed around an H-rated tire, and the vehicle may not handle as intended with a lower speed-rated tire. It's tempting to purchase tires with a lower speed rating because an S- or a T-rated tire is usually less expensive.

Wheels: Is there anything else to look for when purchasing tires?

Halderman: All tires today are rated for tread wear, traction, and temperature resistance. These ratings are imprinted on the tire sidewall and on the sticker attached to the tread of a new tire.

The treadwear rating is a number where 100 represents a standard test tire and usually indicates an anticipated tread lifetime of 20,000 miles. Therefore, a tire rated at 360 would represent an expected lifetime of 72,000 miles based on normal driving – or 20,000 miles for every 100.

Traction is represented by a letter of AA, A, B, or C, with "AA" being the highest and "C" the lowest. This rating represents wet braking traction only, and I would recommend against purchasing a tire with a "C" traction rating.

The third classification is temperature resistance, expressed as an A, B, or C. This rating is especially important for those vehicles that do a lot of highway driving. Again, I would recommend against purchasing a tire with a "C" rating for temperature resistance.

