Wheels: Paul of Beavercreek writes, "How can I be sure my tire pressure gauge is accurate. I use a pencil-style gauge I bought at an auto parts store. Recently I discovered that my gauge and the one in my wife's car (same brand) differed by 2.5 psi. I do not remember that there was that much difference between the two when I bought the last one. Do they wear out? Is there an accurate gauge that I could buy?"

Halderman: It is difficult to determine the accuracy of a tire pressure gauge outside of a laboratory. There are many variables such as temperature and friction of the movable scale rod. I would suggest you purchase an electronic tire pressure gauge. This type displays the tire pressure in a small LCD (liquid crystal display). Even with this type of gauge, it is possible to get various readings due to how you make contact with the tire valve. To get the most accurate reading, check each tire several times and before the vehicle has been driven. All tire pressures are specified for cold tires (about 70°). Tire pressure changes about 1 pound per square inch (psi) for each 10°. Even though your tires were properly inflated last fall at 70°, they may be under inflated by 5 psi if the outside air temperature is 20°. It has been my experience that it is more important that all four tire pressures be the same rather than exactly as specified on the driver's door jam sticker. Therefore, you could continue to use any tire pressure gauge you own and at least your tires will be evenly inflated. Unequal inflation can lead to pulling or other handling concerns.

