

Wheels: Tom wrote via e-mail: “I read and enjoy your columns. You always say to follow the manufacturer’s guidance re tire pressure. On my 2000 Park Avenue, I have the door sticker prescribed tires. The door sticker says to inflate to 30 psi. The tire itself says not to inflate beyond 44 psi. When I have the car serviced at a Buick dealership, they inflate to 37 psi and recommend that I do the same. I don’t like the disparity and would appreciate some sort of official answer. The 30 psi seems a bit low and it seems like that would be hard on the tire. Do you have an opinion? Thanks for your advice.

Halderman: Sorry, I cannot give you an official answer. I asked a tire engineer this question and all he told me was that the 44 psi designation represents the maximum pressure and where the maximum load weight carrying is determined. The proper inflation pressure should be what is specified by the vehicle manufacturer and printed on the driver’s door placard and/or owner’s manual. Inflating your tires to 30 psi will not harm your tires. Many vehicle manufacturers recommend inflating the tires 2 psi to 4 psi higher than the specified pressure if the vehicle is driven for extended periods of time at highway speeds and/or driven fully loaded. I typically inflate my tires to the recommended higher pressure. The higher pressure does make the ride harsher. This harsher ride may not be acceptable to some drivers or passengers.

Wheels: Do you have any suggestions as to what tire pressure Tom should inflate his tires?

Halderman: A rule of thumb that I have used in the past regarding tire pressure is to inflate the tires to the recommended inflation pressure and try to keep it within 80% of the maximum pressure on the tire. Eighty percent of 44 psi is 35 psi. Therefore, I think that you could safely inflate your tires between 30 psi and 35 psi and be perfectly safe. Try the various inflation pressures and check for acceptable ride quality. Be sure to check the inflation before the vehicle has been driven and do not let air out of a hot tire or it will be under inflated when it cools.

Wheels: Why does the vehicle manufacturer recommend tires be inflated to only 30 psi?

Halderman: The recommended tire inflation pressure is determined after extensive testing by both the vehicle manufacturer and the tire manufacturer. Beside ride quality, tire inflation pressure also determines how the vehicle handles and corners which includes evasive maneuvers, which may be necessary to avoid a collision. Many vehicle manufacturers recommend different tire inflation pressure for the front and rear tires. This is done to provide the proper handling. Many newer vehicles are equipped with a tire pressure sensor inside the tire itself or calculated by the vehicle computer based on information from the wheel speed sensors. A tire about 8 psi below the others will signal the driver of a problem.

