Headline: Nitrogen in tires is  
 not worth the effort

Nitrogen-filled tires are said to slow the loss of tire pressure. It’s been proved that gas escapes more slowly than air. Better gas mileage and extending the life of the tires are the benefits of moving on fully inflated tires.

Nitrogen also said to precent tire “rot” by limiting moisture that occurs inside the tire and stops corrosion of the wheel – an issue that is caused by contact with moisture.

These claims, however, are questionable. The advantages of tires filled with nitrogen rather than air, aren’t big enough to justify the cost or the inconvenience. On a new car, the cost can range from $70 to as much as $179. On existing tires, owners can expect to pay as much as $30 per tire for service to drain air and refill with N2. Refills could run $5 to $10 per tire. Drivers can expect to do this less often with air-filled tires, but they’ll need to be topped off every two or three months.

What makes nitrogen-filled tires unique?

Small amounts of air naturally leak from tires over a period of time, particularly when they are subject to large temperature swings. This is because the walls of the tires are slightly porous. When a tire gets hot, the air inside expands. The added pressure pushes minute quantities of air through the side pores, forcing drivers to have air occasionally added to their tires.

Promoters of nitrogen tires stress that they don’t lose pressure as quickly as air-filled tires. Since nitrogen molecules are bigger than normal air molecules, it’s more difficult for them to leak. Therefore, drivers will be operating vehicles on tires that always are properly inflated, resulting in better fuel economy and longer tire life.

Nitrogen will slow the amount of inflation lost by a tire by about one-third of what it would experience with air. Drivers still will need to check and top off their tires’ air roughly every other month to remain within ideal inflation range.

Drivers should expect to spend more having their tires filled with nitrogen than they would save on gas and tire-tread life, making it more economical to keep the tires filled with air.