

## **Park & Ride DART Shuttle to Yankee Doodle Pops on July 3**

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The D-Line Downtown Shuttle is your free ride to Des Moines Symphony's Yankee Doodle Pops. Get on at any D-Line stop, located every block along the route, and ride to and from the concert on Thursday, July 3, 2014. The Free shuttle will run every 10 minutes from 6 p.m. to 11 p.m.

## **No DART Service on Independence Day**

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DART will not operate bus service on Friday, July 4, in observation of Independence Day. Service will resume Saturday, July 5. DART's administrative offices also will be closed on Friday.

## **Did You Know? – Brake Noise**

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Some brake noise is considered normal, but if you hear a sound that is more of a ripping-sheet-metal noise, instead of a single, high-pitched note, it's time to change brake pads.

Some driving conditions can affect brake noise, including severe braking, dusty or sandy conditions or humidity. Certain high-pitched brake noise happens because the semi-metallic brake pads used on newer cars are harder. It's a safer and longer-lasting alternative to the asbestos material it replaced, but the noise can be annoying.

Other things to consider: Does the noise occur at a certain time of day? It's normal to have brake noise in the morning while the brakes warm up and drive off any moisture that may have accumulated overnight. Is the noise consistent every time you brake? Have you noticed any change in your braking abilities with the noise?

Many brake pads have a small finger of spring steel that will scrape on the disc as the pad reaches its wear limit. This tells you that it's time to change pads for fresh, thicker ones before the friction material wears completely away, and you're trying to slow down on the metal backing plates.

As always, if you ever feel like something is unsafe with your van, please call and have your van serviced.

## **Nitrogen in Tires**

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Nitrogen use in passenger vehicle tires is controversial.

Proponents of nitrogen say that the gas's nature leads to better tire pressure retention. Over time, a tire will slowly lose pressure. Because nitrogen has larger molecules than oxygen, they are less likely to seep through the permeable tire walls. In 2006, Consumer Reports conducted a year-long study to determine how much air loss was experienced in tires filled with nitrogen versus those filled with air. The results

showed that nitrogen did reduce pressure loss over time, but only a 1.3 psi difference from air-filled tires.

Even though nitrogen shows a slight reduction in permeation loss, it is still affected by changes in ambient temperature. The general rule of thumb is every 10-degree Fahrenheit rise or fall in temperature results in a change of 1 psi. Nitrogen-filled and air-filled tires alike will need pressure added during the fall/winter months as temperatures and tire pressures drop.

Nitrogen proponents also claim it improves fuel economy. According to the EPA, underinflated tires can lower gas mileage by 0.3 percent for every 1 psi drop in pressure of all four tires. Since nitrogen loses pressure at a slower rate than air, you are more likely to be at the correct psi and, therefore, get better fuel economy. If you are proactive and check your tire pressure at least once a month, you can offset this difference with regular compressed air. Again, there is no substitute for regularly checking your car's tires.

Inflating tires with nitrogen won't hurt them and may provide some minimal benefits. But is it worth it? Having that green cap on your tire may take green from your wallet. If you go someplace that provides free nitrogen with new tires, go ahead and give it a try. You are not committed to nitrogen forever and can refill the tires at any time with regular compressed air. However, most places charge for nitrogen. In a quick internet search of dealerships in Greater Des Moines, filling four tires with nitrogen will cost around \$30. There is also an added time cost involved; one service center estimated the process to take 30 minutes.

Studies show that fewer than 60 percent of drivers rarely if ever check the inflation of their tires. Rather than pay extra for nitrogen, most drivers would be better off buying an accurate tire pressure gauge and checking and adjusting their tire pressures regularly.