

CONSUMER TIPS THAT MAY SAVE YOUR LIFE

There are several widespread misconceptions about tire failures and motor vehicle accidents. The first and most important misconception is that blow outs are the most dangerous type of tire failure leading to accidents. There is also a mistaken belief that front tire failures are the more dangerous, and thus the best tires should be on the front of your vehicle. Next, there is widespread misinformation that drivers should be able to control their vehicle when there is a catastrophic tread separation failure at highway speed on a rear tire of the vehicle. Finally, there is a great deal of misinformation indicating that tire failures, including tread separations, are somehow caused by something the consumer did, or did not do. We will attempt to address all of these misconceptions and will help to educate you on how to avoid tire failure accidents.

The most dangerous type of tire failure that can occur on passenger car or light truck is a rear tire tread separation. Tread separations are discussed extensively elsewhere on this website, but essentially it is a situation where the tread and upper steel belt of a steel belted radial tire detach from the carcass while the tire is operating at normal highway speed. When this occurs the handling characteristics of the vehicle can change dramatically.

For example, if your left rear tire were to suffer a tread belt separation while you were driving down the highway you would first experience a pull to the left. In order to avoid going into the oncoming lane of traffic, or off the roadway, the natural reaction, and sometimes your only option is to steer to the right to avoid leaving roadway, or to have a head on collision with oncoming traffic. Unfortunately, when you steer to the

right your vehicle will most likely go out of control and if it is an unstable vehicle such as top heavy SUV, you will in all likelihood rollover. However, loss of control can occur with virtually any vehicle and once it is off the roadway, at highway speed, most vehicles will overturn.

As indicated above, rear tire tread separation is extremely dangerous because it changes the handling characteristics of your vehicle. When you have a front tire tread separation it is often possible to control the vehicle. Unfortunately, this isn't the case with a rear tire tread separation which invariably results in loss of control and a catastrophic accident. The best way to avoid this hazard is to follow the safety tips set forth below.

First you should know that in a properly designed and constructed modern steel belted radial tire, you should never suffer a tread belt separation. Tread belt separations are usually caused by design defects, manufacturing defects, or a combination of the two. In our experience, most tires that suffer tread belt detachment have both design and manufacturing defects. This was true with most of the Firestone tires that failed on Explorers because Bridgestone had decided to cut the costs of their Firestone tires and reduced several critical safety components in the Firestone Wilderness and ATX tires that were placed on Explorers. As a result, a great many of these tires failed during normal operation causing catastrophic injuries and deaths across the United States.

Firestone, like other tire manufacturers, attempted to blame the drivers with tread separation accidents claiming that the tires were underinflated or had suffered impact

damage. The truth is neither under inflation, nor impact should cause a tread belt detachment in a properly designed and constructed tire. However, if the tire has design and manufacturing defects such as the Firestone ATX and Wilderness tires, under inflation can exacerbate the defects leading to catastrophic tread separation failure. It is important to understand that all steel belted radial tires leak air. Some worse than others.

It is noteworthy that Ford recommended to the operators of the Explorers that they underinflate their tires by 9 lbs. This was done in order to try and improve the unsafe handling of the Explorers in emergency situations. Unfortunately, this resulted in stressing the defective Firestone tires which caused the tread separations that everyone is familiar with. It is also noteworthy that there were virtually no tread separations with either Michelin or Goodyear tires that were also underinflated on Ford Explorers because they did not have the inherent design and manufacturing defects present in the Firestone tires.

Even though under inflation should not cause tread belt separations can stress defective tires as noted above and accordingly there are several steps the consumer can take to try and protect themselves. One thing you can do is replace the compressed in your tires with nitrogen, which is now readily available at most tire service centers. Nitrogen, unlike compressed air, does not contain oxygen or moisture. Both moisture and oxygen can permeate from the inner liner of the tire through the components causing degradation and premature failure. Again, this is especially true with defective tires. Secondly, it's a good idea to have your tire air pressure checked regularly even when they are inflated with nitrogen. Perhaps more importantly if you

purchase quality tires with design measures to counteract tread separation failures, you will substantially reduce the potential for a tread separation accident.

One of the safety components that have been utilized in steel belted radial tires for decades is what is known as a “nylon safety belt” or “nylon overlay.” Our overlays are noted on the pictorial on this website. As you can see they overlay both steel belts. Nylon overlays are used by every tire manufacturer in some tire, but unfortunately not all tires. They are inexpensive to produce and do not substantiate the price of tires. By being placed over the steel belts they substantially increase tire durability and resistance to tread separation. You can determine whether a tire you intend to purchase has nylon overlays by reading on the sidewall of the tire where it will reflect “2 body plies, 2 steel belts, and one nylon belt” or words to that effect. You can also ask your tire dealer to ensure that your tires have nylon overlays or also known as nylon cap plies.

SUMMARY: CONSUMER TIPS

1. Purchase high quality tires with nylon cap plies.
2. Ensure that your tires are inflated with nitrogen.
3. Have your tires checked periodically to ensure that they are properly inflated and that they do not have any surface abnormalities.