FACT SHEET

Module 5.2 Strategies for Emergencies
Tire Blowout

The term "blowout" is generally used by drivers to describe a bursting tire accompanied by a rapid loss of air pressure. While one might assume that all blowouts are caused by too much internal pressure bursting a weak spot in the tire, the main reason for them is just the opposite. Most blowouts are caused by too little air pressure allowing the tire to flex beyond its elastic limits until it overheats to the point where the rubber loses its bond to the internal fabric and steel cord reinforcement.

Tire blowouts are usually the result of overloading the vehicle, impact damage (either immediate or delayed depending on severity of the impact), a massive cut that causes rapid air loss, or an unnoticed small puncture that allows the tire to slowly lose air over time until it fails. Blowouts are typically caused by anything that allows air to escape and prevents the tire from supporting the weight of the vehicle.

While tires have become so reliable that "blowouts" are an uncommon occurrence today, their lack of frequency only makes them more surprising and potentially more dangerous when they do occur. Regardless of the cause, what a driver does following a blowout can be the difference between a simple inconvenience or ending up in the ditch.

Safe Behaviors During a Tire Blowout

Source: National Highway Traffic Safety Administration

BANG...whoosh...flap...flap...flap...flap! In less than a quarter of a second your drive has gone from cruising to heart-thumping concern.

- The goal in any rapid loss of tire pressure or “blowout” is to keep the vehicle balanced and controllable. Do not panic. Any over-reaction by the driver – including slamming on the brakes or abruptly removing your foot from the accelerator – can result in a loss of vehicle control.
- In any blowout situation, it’s most important to first remember the two things you should NOT do:
- Do not step on the brake. As instinctive as it may be, it’s the worst mistake you can make in any tire blowout situation. Applying the brakes will cause an even greater imbalance on the vehicle’s stability.
- Do not abruptly release your foot from the accelerator. This is the second worst mistake you can make. Rapidly releasing the accelerator causes the vehicle to transfer more of its weight from the rear tires to the front tires. With a flat tire, this can lead to loss of control of the vehicle.
- Gradually release the accelerator.
- Correct the steering as necessary to stabilize your vehicle and regain control. Look where you want the vehicle to go (target) and steer in that direction.
- Once your vehicle has stabilized, continue to slow down and pull off the road where and when you judge it’s safe to do so.
- Remember, no matter which tire blows out—front or rear—the do’s and don’t’s for safely maintaining control of your vehicle are exactly the same. The only difference between a front and rear tire blowout is that you will feel the force of a front blowout more in the vehicle’s steering, while you’ll feel a rear blowout more in the seat or body of the vehicle.

Check Tire Pressure Monthly

Check your tire pressure monthly and make certain that your tires are properly inflated. Properly inflated tires not only offer the greatest safety, but also can improve on fuel economy and extend tread wear.

- When you check your pressure, use your own gauge. Gauges at service stations are often inaccurate due to wear and tear and abuse.
- Check the tires after the car has not been driven for several hours.
- Know the proper tire pressure for your vehicle. Check your owner's manual or door sticker for this information.
- When inflating your tires at a service station, use the low-pressure numbers you recorded from your gauge before you went to the station. Your tires may have heated up during the ride to the station.
- Double check your tire pressure with your gauge to make sure your tire pressure is correct.