

## Driving with Anti-Lock Brake Systems

Anti-lock brake systems (ABSs) are safe and effective when used properly. ABSs offer an important safety advantage by stopping your vehicle's wheels from locking during emergency braking situations. An ABS does not necessarily shorten your stopping distance, but does allow you to keep steering control and drive your vehicle more effectively.

## **Types of ABS**

- **Four-wheel**: generally found on passenger cars and some light trucks; designed to maintain steering ability in emergency braking situations
- Rear-wheel: found on some pickup trucks, vans, and SUVs; stops the rear wheels from locking to keep the vehicle from skidding sideways



The federal government requires all U.S. cars and minivans made in 2012 or after to have four-wheel ABS. To see if your vehicle has ABS and what type, consult your owner's manual, look for the "ABS" dashboard light when you start your vehicle, or ask your dealer, service technician, or car rental agent.

To take full advantage of an ABS's safety benefits, follow these tips.

## Do:

- When you feel or hear the ABS vibrating, press and hold the brake don't pump and steer to safety. Wheel sensors will detect when your car's tires start to lock, and then repeatedly apply and release the brakes to keep tires from skidding.
- Keep your tires filled at the correct air pressure and in good working condition.
- Check your brake lining and be sure you have clean brake fluid. ABS systems can also fail due to worn brake linings or to air or dirt in brake fluid.
- Give enough distance to stop. Follow at least three seconds behind vehicles when driving in good conditions, and allow more time in hazardous conditions such as wet, icy, or packed snow-covered roads. In ABS-equipped vehicles, stopping distances can increase by as much as 25 percent on loose gravel, sand, or lightly packed snow. No vehicle steers as easily on a slippery road as on dry pavement, but an ABS will still help you steer to safety.

## Don't:

- Pump your brakes or take your foot off the brake pedal, because that will release the anti-lock system. ONLY pump your brake if
  the ABS fails and your vehicle starts to skid.
- Drive aggressively. Driving around curves faster, changing lanes abruptly, or following too closely isn't safe with or without an ABS-equipped vehicle.
- Forget to steer. Four-wheeled ABS lets drivers steer in emergency braking situations, but the system itself does not steer. If you need to manually steer while the ABS is working to avoid an obstacle in front of you, avoid sudden or drastic steering changes, and carefully guide your vehicle where it needs to go.
- Be alarmed by mechanical noises or slight pedal pulses while applying the brake in an ABS-equipped vehicle. These conditions are normal and let the driver know ABS is working.

This document was produced by the Division of Workers' Compensation (DWC) and is considered accurate at the time of publication.

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