

# Driving with Anti-Lock Braking Systems (ABS) FactSheet

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Four-wheel anti-lock brake system (ABS) is a safe, effective braking system when used properly. It offers an important safety advantage by preventing the wheels from locking during emergency braking situations, allowing drivers to maintain steering control and operate vehicles more effectively. To take full advantage of the maximum safety benefits drivers must learn how to operate their anti-lock brake systems correctly. The National Safety Council shares these recommendations by the ABS Education Alliance:

## DO's

- Keep your foot on the brake.
- Maintain firm and continuous pressure on the brake while steering to enable four-wheel ABS to work properly.
- Avoid pumping the brake, even if the brake pedal is pulsating. In light trucks that are equipped only with rear-wheel anti-lock brakes, however, the front wheels can still lock up. If that happens, the driver should ease up on the brake pedal with just enough pressure to allow the front wheels to roll again so you can steer.
- Allow enough distance to stop. Follow three seconds or more behind vehicles when driving in good conditions. Allow more time if conditions are hazardous.
- Practice driving with ABS. Become accustomed to pulsations that occur in the brake pedal when ABS is activated. Empty parking lots or other open areas are excellent places to practice emergency stops.
- Consult the vehicle's owner's manual for additional driving instructions on the anti-lock brake system.
- Know the difference between four-wheel and rear-wheel ABS. Four-wheel ABS is generally found on passenger cars and is designed to maintain steering ability in emergency braking situations. Rear-wheel ABS, found exclusively on light trucks, is designed to maintain directional stability and prevent the vehicle from skidding sideways.

## DON'Ts

- Drive an ABS-equipped vehicle more aggressively than vehicles without ABS. Driving around curves faster; changing lanes abruptly or performing other aggressive steering maneuvers is neither appropriate nor safe with any vehicle.
- Pump the brakes. In four-wheel ABS-equipped vehicles, pumping the brake turns the system on and off. ABS pumps the brakes for you automatically, at a much faster rate, and allows better steering control.
- Forget to steer. Four-wheeled ABS enables drivers to steer in emergency braking situations, but the system itself does not steer.
- Be alarmed by mechanical noises and/or slight pedal pulsations while applying the brake in an ABS-equipped vehicle. These conditions are normal and let the driver know ABS is working.

## Tips for driving with ABS

- Always "brake and steer" when using four-wheel anti-lock brakes. With ABS, all you have to do is "brake and steer". With four-wheel ABS, push the brake pedal while steering normally and keep your foot firmly on the brake pedal until the car comes to a complete stop. Don't take your foot off the brake pedal or pump the brakes, because that will disengage the anti-lock system.
- Remember that you can steer while you are braking with four-wheel anti-lock brake systems. Steer clear of hazards while keeping your foot firmly on the brake pedal. However, always be aware that no vehicle will steer as easily on a slippery road as it would on dry pavement.
- Drive safely, because your anti-lock brakes are only as good as the driver using them. Anti-lock brakes cannot compensate for driving faster, driving more aggressively, or maintaining unsafe following distances. They cannot guarantee recovery from a spin or skid prior to an emergency braking situation. Avoid extreme steering maneuvers while your anti-lock brake system is engaged.

- Expect noise and vibration in the brake pedal when your anti-lock brakes are in use. These sensations tell you the ABS system is working properly.
- Anti-lock brake systems can stop a vehicle more quickly than conventional brakes on wet paved surfaces and on icy or packed snow-covered roads. Stopping distances can be longer on loose gravel or freshly fallen snow, although drivers won't experience the lock-up of the wheels usually associated with conventional hard braking. Therefore, drivers will still have the ability to steer around objects in front of them -- such as another car.
- Know that there is a difference between four-wheel and rear-wheel ABS. Four-wheel ABS prevents wheel lock on all four wheels giving the

driver improved control over steering. Drivers of four-wheel ABS cars should step firmly on the brake in an emergency stopping situation and keep their foot on the pedal.

- It's easy to find out whether your car has anti-lock brakes. To determine if your car has anti-lock brakes, look for an illuminated ABS symbol on your dashboard immediately after starting the engine, check your owner's manual, or ask your dealer.

Information received from the National Safety Council-A Membership Organization Dedicated to Protecting Life and Promoting Health and the Texas Department of Insurance, Division of Workers' Compensation.

Remember to practice safety. Don't learn it by accident.