



Tailgate Safety Talk

Information You Can Use to Prevent Accidents & Injuries

Anti-Lock Brake Systems

Teaching Old Drivers New Tricks. A common safety feature on vehicles these days are anti-lock brakes. Like many new pieces of technology, **Anti-lock Braking Systems (ABS)** require that operators forget an ingrained habit and learn a new trick. It's important to master this new trick, since it's estimated that over 80% of all cars, vans, and light-duty trucks will soon be ABS equipped.

Press Hard But Don't Pump! Most people who have been driving for several years have been taught, "Never slam on the brakes in slippery road conditions-pump the brakes to avoid a skid." With four-wheel ABS brakes this is not good advice. *The new rule is to brake firmly and keep your foot steadily on the brake pedal, because ABS does the pumping for the driver.* At speeds above 8mph, the system can pump the brakes as fast as 15 times per second.

This leaves the driver free to concentrate on controlling the vehicle, which is the goal of ABS brakes. The system improves one's ability to steer the vehicle accurately during emergency situations. Drivers get a stronger braking force on most surfaces than locked wheels will provide.

How ABS Systems Work. ABS brakes work by electronically monitoring the speed of the vehicle's wheels with an on-board computer. When one wheel begins to slow before the others, indicating a lock-up, ABS pumping begins, which keeps all the wheels rolling. ABS brakes take some getting used to, however.

When they are applied with a steady force, drivers often feel a pulsating sensation, or may even hear a bumping or grinding noise. This feels all wrong, so that many drivers back off and pump the brakes like they've always done. But these sounds and sensations are normal.

ABS systems do not replace, but work in *conjunction* with the vehicle's normal braking system. If the ABS system fails for any reason, a logo on the dashboard lights up full-time, and the basic braking system (non-ABS) will take over. Also, all-wheel ABS systems do not necessarily reduce stopping distance. Although they help the vehicle stop more quickly on wet and icy surfaces, the braking distance may be longer than normal on gravel roads. Control, however, will be better.

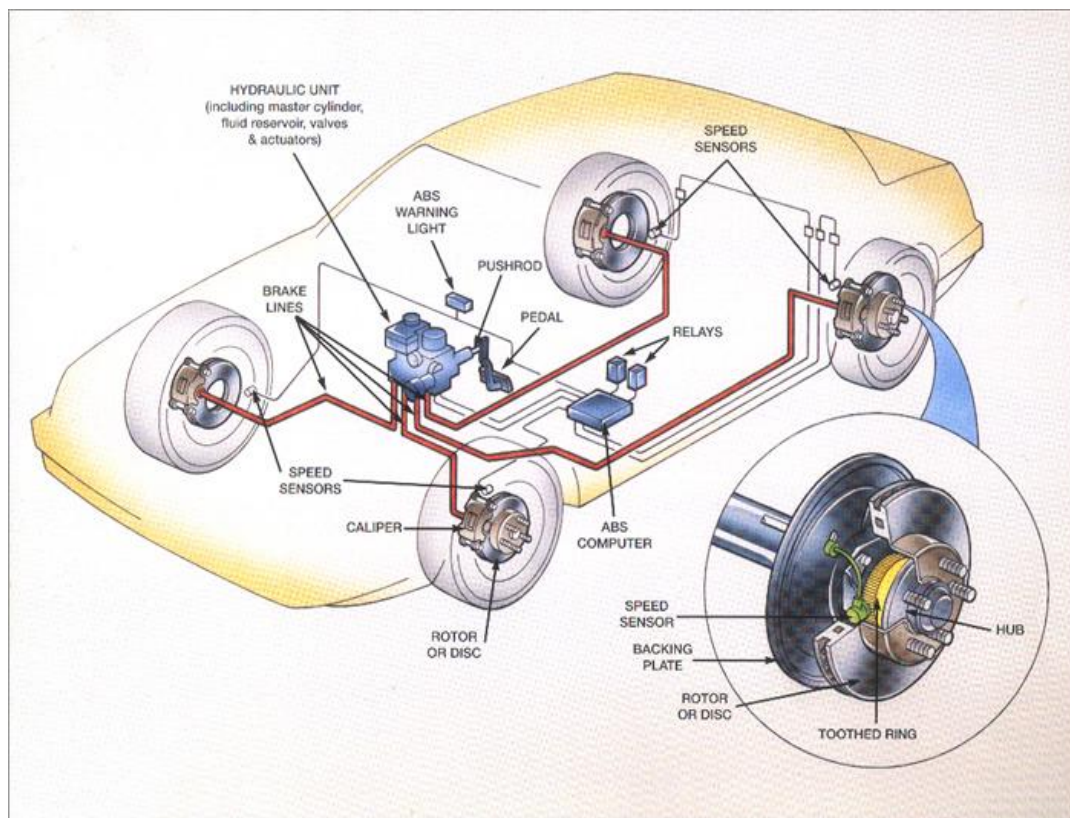
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An Exception For Some Trucks & Vans. There are two types of ABS systems--All-Wheel and **Rear-Wheel Anti-Lock** brakes. RWAL's are commonly found on trucks and vans. Since the rear-ends of these vehicles are typically light in weight, RWAL helps maintain overall vehicle control.

In the case of RWAL brakes, the driver *does* need to pump brakes. When you get into a vehicle, look for the ABS dashboard indicator light that is activated when you start the engine. Recognize whether you are driving with all-wheel ABS or RWAL brakes, and what must be done differently. Read the owner's manual-it has some terrific information.

Practice A New Move Before You Need It. Learning a new trick always requires an adjustment period. Don't let this adjustment take place when you need your brakes the most. Practice ABS activated stops. Try them in a safe place that is free from obstacles and get a feel for the brakes.

Remember, the goal of ABS equipped vehicles is to provide the driver with better control during emergencies. So, apply *continuous* brake pressure, **DON'T pump the brakes!** Let ABS do its job while you concentrate on steering your vehicle to a safe, controlled stop.



Users of this tailgate talk are advised to determine the suitability of the information as it applies to local situations and work practices and its conformance with applicable laws and regulations.