

Wheels: Bob of Dayton has a question about the ABS brakes on his Dodge pickup truck. Even with ABS, he said the front wheels of his truck would lockup and slide when braking on slippery road surfaces. Do you think there is a problem with the ABS system?

Halderman: It depends on what type of ABS system. Many pickup trucks use ABS only on the rear wheels. This type of ABS system is called rear wheel antilock (RWAL) or rear ABS (RABS). Rear wheel only ABS is used on many pickup trucks because there is little weight over the rear wheels if the truck is lightly loaded. When the brakes are applied, the weight of the vehicle shifts toward the front unloading the rear wheels. With less weight over the rear wheels, the rear brakes tend to lockup during hard braking. The rear antilock brake system would then pulse the rear brakes to help prevent the rear of the truck from swinging around causing the loss of control.

Wheels: Why did the front tires of Bob's truck skid?

Halderman: I think Bob's truck is equipped with rear ABS. The ABS system does not control the front brakes at all. The front brakes likely lockup and the tires skidded because they lost traction with the road surface.

Wheels: What can Bob do to prevent his wheels from locking up?

Halderman: There are several things that Bob could do to help prevent his truck from skidding including:

- Make sure all four tires have good tread.
- Check the air pressure and inflate to specifications found on the driver's doorpost or in the owner's manual.
- Drive cautiously to avoid having to stop quickly on slippery road surfaces.
- Purchase a large bag of cat litter and keep it in the bed of the truck to help maintain weight over the rear wheels.

ABS brakes do not necessarily result in shorter stopping distances. The primary purpose of ABS is to allow the driver to steer and brake at the same time. In the event of an emergency stop, the wheel brakes are prevented from locking.

