

**Wheels:** This is the fourth of eight columns covering the operation of the dash warning lamps.

### **Red Brake Warning Lamp**

The red brake warning lamp comes on when the ignition is turned on as a bulb check. When the engine is started, the red brake warning lamp should go out. The red brake warning lamp is turned on if one or more of the following conditions exists:

- the parking brake is applied
- the brake fluid level in the master cylinder is low
- there is a hydraulic fault in the brake system

**Wheels:** What should a driver do if the red brake warning light comes on?

**Halderman:** If the red brake warning lamp comes on during driving, be aware that the brakes may not work. Slow down and check the operation of the brakes. If the brake pedal goes to the floor or does not seem to be slowing the vehicle, apply the parking brake to slow and stop the vehicle. If the brakes operate normally, drive slowly and be prepared to use the parking brake to stop until the cause of the problem can be determined.

**Story Time:** One evening last winter, the red brake warning lamp came on as I was driving. The brakes felt OK so I carefully drove home. After several minutes of driving with the warning light on, the light went out. Apparently, there was an intermittent problem with the brakes. When I got home, I discovered that the brake fluid level was at the minimum and this had triggered the red brake warning lamp. The cold temperature and the need for new disc brake pads had caused the low brake fluid.

**CAUTION:** Most vehicle manufacturers warn to not “top off” the brake fluid as a regular service item. If the brake fluid is low, the brake system should be checked for a possible leak or worn brake pads.

**Wheels:** How would a service technician determine the cause of the red brake warning lamp.

**Halderman:** After being sure that the master cylinder reservoir is properly filled and that the parking brake is fully released, the service technician could temporarily disconnect wire to the pressure differential switch to see if this turned off the lamp. If the warning lamp is off with the wire removed, the technician knows that there is a hydraulic pressure failure and will continue to inspect and test the brake system to determine the root cause.

**Wheels:** What are some faults that cause the brake hydraulic system to lose pressure?

**Halderman:** A leak on one of the wheel cylinders or calipers can cause a lower pressure in this part of the brake system. The pressure differential switch will detect this difference and turn on the red brake warning lamp.

**BRAKE**