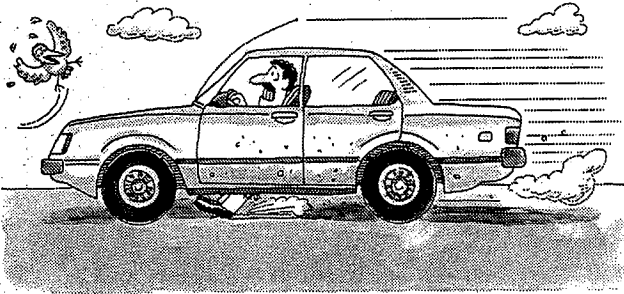


# YOUR CAR'S BRAKES

*Make Sure They're In Top Condition*



Keep your  
brakes in top  
working  
order.

Good brakes are essential for safe driving. Like other moving parts on your vehicle, they require periodic inspection and maintenance.

How do you know when your brakes are in trouble? Here's what to look for:

- The dashboard brake light flashes on.
- The vehicle pulls to one side during braking.
- You hear a chattering or grinding noise from any of the wheels.
- Power brakes suddenly become hard to operate.

## Check Your Brake Fluid

The important thing to remember in maintaining brakes is to check your brake-fluid level with every oil change.

Newer cars have a transparent plastic reservoir that lets you see the fluid level. The reading should fall between the high and low marks. On older vehicles, you may have to look inside to check the level. Brush away dirt before opening. Take care to avoid getting dirt in the reservoir. If the level is low, fill to the maximum line with the type of fluid recommended in your owner's manual.

If you often drive in an area with high humidity, mountains or stop-and-go traffic, change your fluid

every year. Frequent loss of brake fluid signals a problem that calls for a visit to a mechanic.


## Getting A Brake Job

Your brakes should be inspected by a mechanic every 12,000 to 15,000 miles. Many auto centers offer this service free. Even though front brakes wear three to four times faster than the rears, check the rear brakes each time you service the front ones.

Whether you go to a shop or do the work yourself, a proper brake job involves replacing what's needed rather than reconditioning everything. Brake job packages sometimes include rebuilding or replacing the master cylinder. There's no need for this unless the pedal sinks gradually to the floor.

A complete brake job should also involve inspection and maintenance of the emergency brake, which is also referred to as the parking brake.

## Your Brakes Are Important

No part of your vehicle is more important than the brakes. Check them often and have them serviced whenever there's any sign of wear. Your safety depends on keeping them in first-rate condition. 

## How Your Brakes Work

Disk brakes are used on the front wheels of all late-model cars. They're more efficient than drum brakes and do most of the work in stopping the vehicle.

When you step on the brake pedal, it causes a pair of pistons to move inside the brake master cylinder, which is filled with hydraulic brake fluid. The pistons exert pressure on the fluid and this pressure is transferred through fluid-filled tubing and hoses to the individual brakes at the wheels.

At each front wheel of a modern car, there's a C-clamp-like device called a "caliper." The fluid pressure forces another piston in each caliper to move a brake pad against a spinning disk that is attached solidly to the wheel. As the caliper piston moves, it also causes the caliper to slide in the opposite direction.

A second brake pad mounted on the other side of the caliper is pulled against the opposite side of the disk. The caliper's clamping action brings the disk and wheel to a stop.

On many vehicles, the drum system is often still used for the rear wheels. The brake lining is pushed against the inside of the drum by a wheel cylinder acting under the same hydraulic pressures as at the front calipers.