NAPA AutoCare

TechTips

BULLETIN NO. ST-85-16U
AUGUST 12, 1985

BRAKE SYSTEM DIAGNOSIS

After installing a new master cylinder, a low or spongy brake pedal is a common complaint. The following procedure will allow quick, effective troubleshooting:

SYSTEM CHECK FOR AIR

- Remove master cylinder reservoir cap and fill reservoir to 1/8" of the top.
- Replace cap loosely and rapidly pump the pedal (25) times. Hold pedal in applied position on the 25th pump.
- Remove reservoir cap. Release brake pedal while assistant observes reservoir.

Normal compensating. A slight ripple verifies system contains no air.

A geyser of fluid 6–7" jump in fluid indicates air trapped in that portion of system.

- Repeat test (3) times to verify results.

MASTER CYLINDER CHECK FOR OPERATION

- Remove outlet lines at master cylinder.
- Block outlet ports of master cylinder with bleeder screws or plugs. Check for leaks at plugs.
- Pump brake pedal until hard. (No pump condition.)
- Allow vehicle to stand (15) minutes.
- Recheck for same hard pedal.

Master cylinder is good – High hard pedal.

Master cylinder is bad – Spongy or sinking pedal.