

## Various Chronic Master Cylinder Failure

Occasionally a vehicle will experience chronic failure of the primary side of the master cylinder due to fluid loss and what appears to be by-pass. As a result, a recently replaced master cylinder may be assumed to be defective and is replaced again, only to have the replacement unit fail after a short time, again due to fluid loss on the primary side.

The problem may, in fact, be caused by a faulty vacuum booster. If the seal at the master cylinder side of the booster is faulty, the adjoining end of the master cylinder will be exposed to manifold vacuum. Manifold vacuum may draw fluid past the rear seal of the master

cylinder and into the booster. To check for this condition, begin by connecting a vacuum gauge to the engine to measure manifold vacuum. With the engine at idle speed, note the amount of manifold vacuum present. With the engine idling, loosen the bolts at the master cylinder flange and separate the master cylinder from the booster. (Note that the brake lines do not need to be disconnected since the master cylinder will only have to be separated from the booster by approximately 1/8 inch.)

Again, note the amount of vacuum present at the vacuum gauge. A drop in manifold vacuum when the master cylinder is moved will indicate a faulty forward seal in the booster and booster service will be required.