

INSPECTION

The master cylinders should periodically be checked for:

1. **Cleanliness**—Visually inspect the master cylinder and surrounding area for evidence of hydraulic fluid and/or other contamination. Care should be taken to ensure that the piston rod is free of contamination which could cause damage to the O-ring.
2. **Leaks**—If there is evidence of leakage at the fittings, tightening or replacement of the fittings should remedy the problem. If the master cylinder has been overfilled, evidence of leakage will be present, but no correction is necessary other than cleaning the leaked fluid. If the cylinder is leaking around the piston rod, removal of the cylinder is required and inspection and maintenance should be performed as outlined in the following section.
3. **Failure to maintain or hold pressure**—If the master cylinder fails to maintain or hold pressure, the system should be bled in accordance with paragraph 5(c). If this fails to correct the problem, the master cylinder should be removed and inspected and repaired as outlined below.

MAINTENANCE AND REPAIR

1. Removal of the Master Cylinder

- a. Drain the hydraulic fluid from the system by loosening the bleeder valve on the brake caliper. Collect the drained fluid and dispose of in an appropriate manner. Pumping the master cylinder will aid in this process.
- b. Disconnect the hydraulic lines from the master cylinder and plug or cap the hydraulic lines to prevent entry of contaminants.
- c. Disconnect the attach bolts from the top and bottom of the master cylinder and remove the master cylinder.

2. Disassembly of the Master Cylinder

Disassembly, inspection and repair of the master cylinder should be done in a clean environment on a smooth flat working surface.

- a. Remove the snap ring from the top of the master cylinder. Apply enough downward pressure on the piston rod to alleviate the pre-loaded spring compressive force on the snap ring and rod support. Using snap-ring pliers, remove the snap ring using caution to maintain, then slowly release the pressure on the piston rod.
- b. Slide the piston rod, attached parts and compression spring out of the master cylinder body.