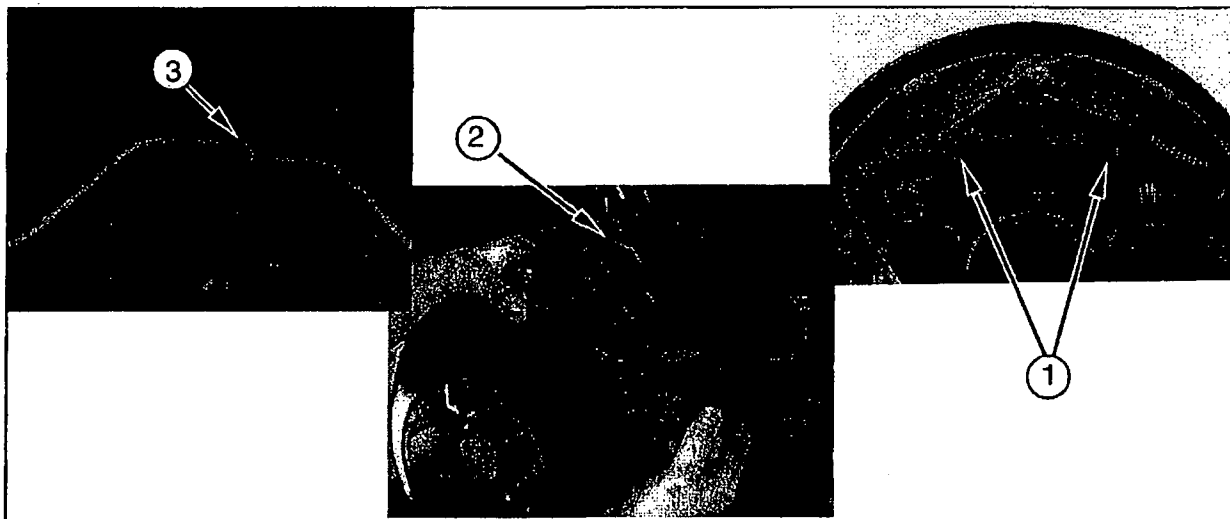


External Leak Test**Common External Leak Points**

Item	Description	Item	Description
1	Wheel Cylinders	3	Line Fittings
2	Caliper Pistons		

Hydraulic leaks can be external or internal. When external leaks occur, the system loses pressure. External leaks are caused by cracks or breaks in the master cylinder reservoir, loose system connections, damaged seals, or leaking brake lines or hoses. The external leak test should be performed if the pedal is low, the BRAKE warning lamp is on, and if the reservoir fluid level is low or empty.

- To perform this test, first fill the reservoir to the proper level and bleed the brakes.
- Press the brake pedal several times; the pedal will go to the floor if the system is leaking.
- Check to see whether the fluid level is dropping with each pedal stroke. If the reservoir is losing fluid, a possible external leak exists.
- Check all possible leak points. Remember, brake fluid is water soluble, so the evidence of an external leak may be washed away.
- Repair the system anywhere a leak is occurring, then bleed the system.
- If the leak is not located inspect the wheel cylinders or caliper pistons.

Master Cylinder Non-Pressure External Leak Test

If the reservoir empties, but there is no external pressure leak, the problem may be an external leak from the master cylinder. Brake fluid loss can be caused by:

- a missing or poorly-fitted brake master cylinder filler cap.
- a punctured or otherwise damaged brake master cylinder reservoir.
- a missing or damaged brake master cylinder filler cap gasket.
- missing, damaged or poorly-fitted sealing grommets between the brake master cylinder and the brake master cylinder reservoir.

A thorough visual inspection should reveal the cause of a non-pressure external leak.