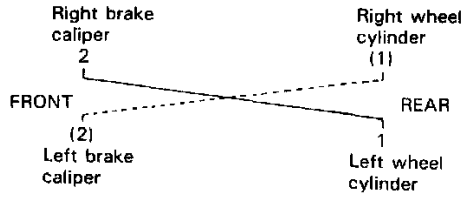
Brake Bleeding: Service and Repair

BLEEDING BRAKES

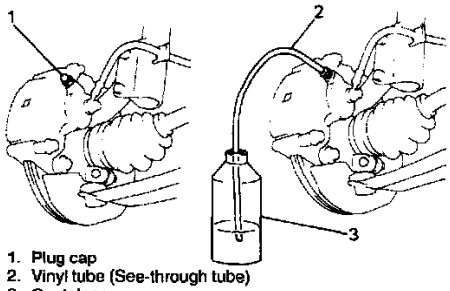
CAUTION: Brake fluid is extremely damaging to paint. If fluid should accidentally touch painted surface, immediately wipe fluid from paint and clean painted surface.

Bleeding operation is necessary to remove air whenever it enters the hydraulic brake system.
Hydraulic lines of brake system are based on the diagonal split system. When a brake pipe or hose is disconnected at the wheel, bleeding operation must be performed at both ends of the line of the removed pipe or hose. When any joint part of the master cylinder or other joint part between the master cylinder and each brake (wheel) is removed, the hydraulic brake system must be bled at all 4 wheel brakes.



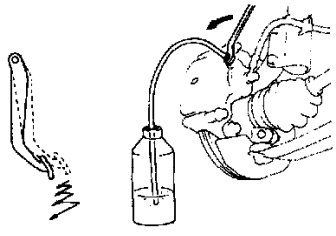
NOTE: Perform bleeding operation starting with wheel cylinder farthest from master cylinder and then at front caliper of the same brake line. Do the same on the other brake line.

1. Fill master cylinder reservoir with brake fluid and keep at least one-half full of fluid during bleeding operation.



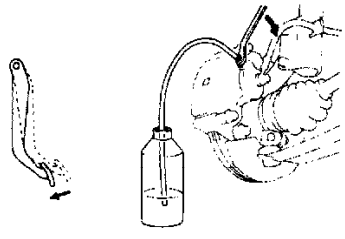
1. Plug cap
2. Vinyl tube (See-through tube)
3. Container

2. Remove bleeder plug cap.
   Attach a vinyl tube to bleeder plug of wheel cylinder, and insert the other end into container.



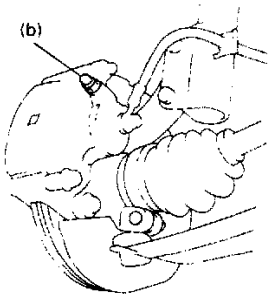
Depress brake pedal several times and with pedal depressed, loosen bleeder plug a little.

3. Depress brake pedal several times, and then while holding it depressed, loosen bleeder plug about one-third to one half turn.

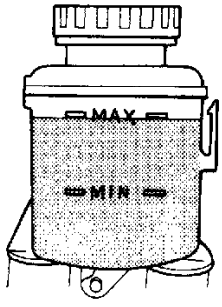


With brake pedal depressed, retighten bleeder plug.

4. When fluid pressure in the cylinder is almost depleted, re-tighten bleeder plug.



5. Repeat this operation until there are no more air bubbles in hydraulic line.
6. When bubbles stop, depress and hold brake pedal and tighten bleeder plug.
   Tightening torque (b): 11 Nm (1.1 kg.m, 8.0 ft. lbs.)
7. Then attach bleeder plug cap.



8. After completing bleeding operation, apply fluid pressure to pipe line and check for leakage.
9. Replenish fluid into reservoir up to specified level.
10. Check brake pedal for "sponginess". If found spongy, repeat entire procedure of bleeding.