

# BRAKE BLEEDING PROCEDURE

## BRAKE SYSTEM BLEEDING— MANUALLY

Whenever any part of the brake system has been disconnected or when the level of brake fluid in the reservoir becomes so low as to allow air to be drawn into the master cylinder, bleeding the air from the brake system is required.

If brake component seals are worn or deteriorated it is possible for air to enter the caliper piston bores without any indication of leaking brake fluid and thus creating a 'spongy' pedal feel. This spongy pedal feel is the usual indication of air in the system.

**NOTE:** It is important that cleanliness be strictly practiced during the entire brake bleeding procedure. Care should be exercised to ensure that dirt or water are not allowed to enter the brake system, especially at the reservoir.

## BLEEDING PROCEDURE

1. Inspect brake fluid reservoir for proper fluid level (at MAX mark) and top up if necessary with fresh, unused brake fluid of the specified grade (DOT 4) (SAE 1703).

**NOTE:** Never use brake fluid which has been bled from any system to top up the fluid in the reservoir as it may be contaminated or aerated.

**NOTE:** Periodically inspect the level of brake fluid in the brake reservoir during the bleeding procedure. Care should be exercised not to allow the level of fluid to drop to a point where air could enter the hydraulic system via the reservoir.

A clean glass container holding approximately 1/2" of clean, unused brake fluid (DOT 4) should be used to receive the brake fluid being bled from the system. In addition, the end of the transparent drain tube should always be immersed in this fluid during the bleeding procedure.

When bleeding the brake system it is important to start with the longest length of hydraulic line first.

2. With the engine off remove the vacuum reserve in the brake servo booster by applying the brakes several times.
3. Raise car on hoist.

When bleeding all four wheels, the following sequence **MUST** be followed:

- A. Right Rear
- B. Left Rear
- C. Right Front
- D. Left Front

4. Install a box end wrench over the caliper bleeder screw and install a transparent drain hose over the bleeder screw. The drain hose should then be placed into the receiving container with the other end immersed in brake fluid.
5. Repeat the following steps for each wheel in the sequence previously listed:
  - A) Fully depress the brake pedal slowly one time and hold.
  - B) Loosen the bleed screw to purge the air from the line.
  - C) Re-tighten the bleed screw.
  - D) Slowly release the brake pedal and wait 5 seconds to allow the master cylinder piston to fully retract.
  - E) Repeat A through D until brake fluid containing no bubbles emerges from the drain tube.

**NOTE:** There may be a small amount of red fluid discharged from the drain tube on the initial bleeding of the brake system. This fluid is test fluid used by the manufacture during production and is not harmful to the system.


**NOTE:** Top-up the brake fluid reservoir as required during the bleeding procedure making certain air is not drawn into the system.

6. Lower car and top up brake fluid reservoir as required.

## BRAKE SYSTEM BLEEDING— PRESSURE TECHNIQUE

Bleeding the brake system with available pressure bleeder tools considerably assists in performing this procedure. These tools are equipped with brake fluid holding tanks pressurized.

The variety of equipment consists of a holding tank partially filled with brake fluid and a rubber hose which is intended to be connected to master cylinder adapter suitably designed to be installed on specific master cylinder reservoirs. Compressed air is then placed in the holding tank which forces the brake fluid into the brake hydraulic system via the master cylinder reservoir.

Pressure bleeding equipment must be of the diaphragm type, that having a rubber diaphragm between the brake fluid and the air supply to prevent moisture, air or other contaminants from entering the brake hydraulic system. 

# TRAILING ARM BUSHING, RIGHT OR LEFT

## REMOVAL

1. Raise car on hoist.
2. Remove trailing arm pivot bolt and nut. Position trailing arm out of the way to gain access to bushing retaining plate.

**NOTE:** Quantity of removed shim washers should be noted and replaced upon installation.

3. Remove both bushing mounting plate nuts and bolts. Remove plate and bushing.
4. Fit new bushing. Reverse removal procedures and torque fasteners.
5. Check rear suspension for specified tow-in alignment and adjust if necessary.