

BRAKE SYSTEM BLEEDING

1988 Jeep Cherokee

1988 BRAKES
Jeep - Brake System Bleeding

Cherokee, Comanche, Grand Wagoneer, Wagoneer, Wrangler

BRAKE SYSTEM BLEEDING

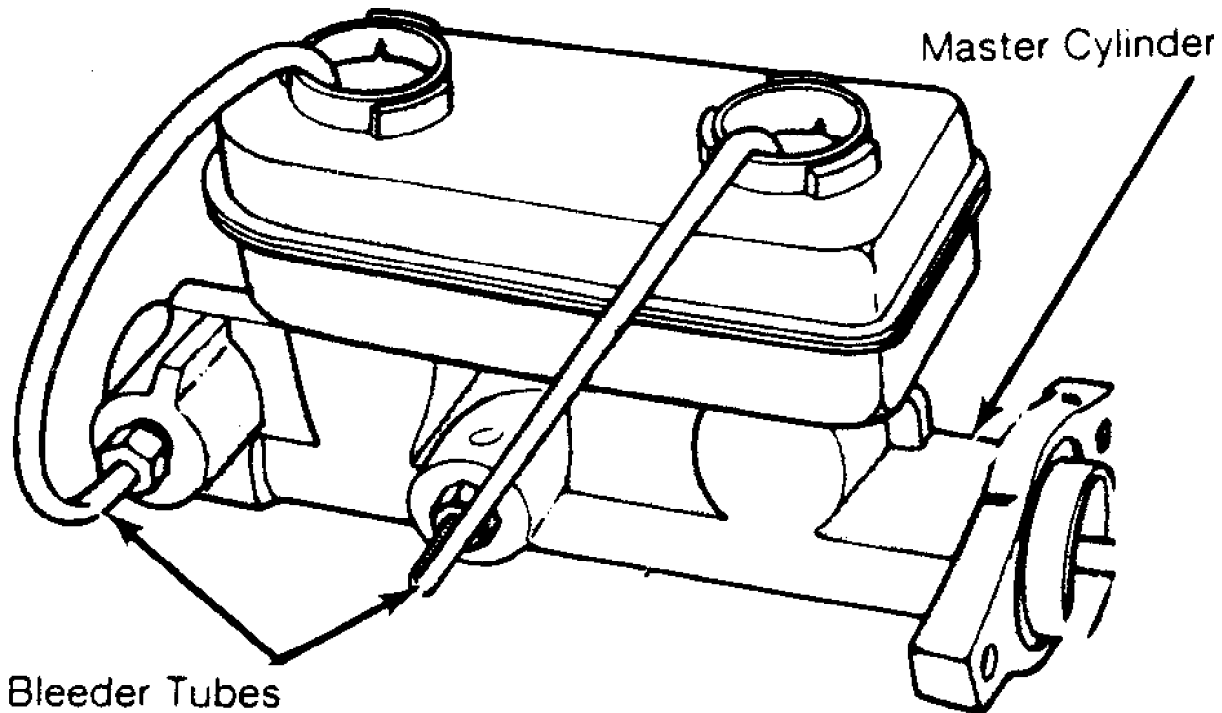
Hydraulic system bleeding is necessary any time air has been introduced into system. Bleed brakes at all 4 wheels if master cylinder lines have been disconnected or master cylinder has run dry. Bleed brakes with vacuum bleeding equipment, pressure bleeding equipment or by manually pumping brake pedal while using bleeder tubes. Always bleed brake lines in sequence. See BLEEDING SEQUENCE table.

MASTER CYLINDER BLEEDING

Bench Bleeding

1) Master cylinder must be bled before installation to prevent excessive amounts of air from entering the brake system, creating poor brake operation.

2) Place master cylinder in soft-jawed vise. DO NOT tighten vise enough to damage master cylinder. Install bleeder tubes in both outlets of master cylinder. See Fig. 1.



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Fig. 1: Bleeding Master Cylinder
Courtesy of American Motors/Jeep Corp.

3) Fill master cylinder with clean brake fluid that meets DOT 3 specifications. Ensure that the end of bleeder tubes are submerged

in the brake fluid.

4) Using proper sized rod, apply and release master cylinder until no air bubbles exist in brake fluid flow. Once all air bubbles are gone from master cylinder secure cap and install.

5) Bleeder tubes should be left installed on master cylinder until master cylinder is installed. Master cylinder must be bled at brake lines and wheels after installation.

Bleeding On Vehicle

1) Install master cylinder on vehicle after bench bleeding. Remove bleeder lines and install brake lines. DO NOT fully tighten brake lines at this time.

2) Slowly force brake pedal to the floor and hold in this position. Tighten brake lines and release brake pedal. Repeat procedure until no air bubbles exist at brake lines. Remaining wheel cylinder or calipers may be require bleeding.

HYDRAULIC CONTROL VALVES

Hold Off Valve

1) Prior to the pressure tank bleeding procedure, the hold off valve incorporated in the combination valve must be correctly positioned. This allows brake fluid to flow through the combination valve to the entire brake system.

2) The valve stem of the hold off valve may be retained using tools available from Chrysler Motors (C-4121) or General Motors (J-23709) during bleeding procedure. See Figs. 2 and 3. Remove valve retainer once brake bleeding procedure is complete.

CAUTION: DO NOT use rigid clamp to position valve stem. Damage to the valve assembly may result causing brake failure.

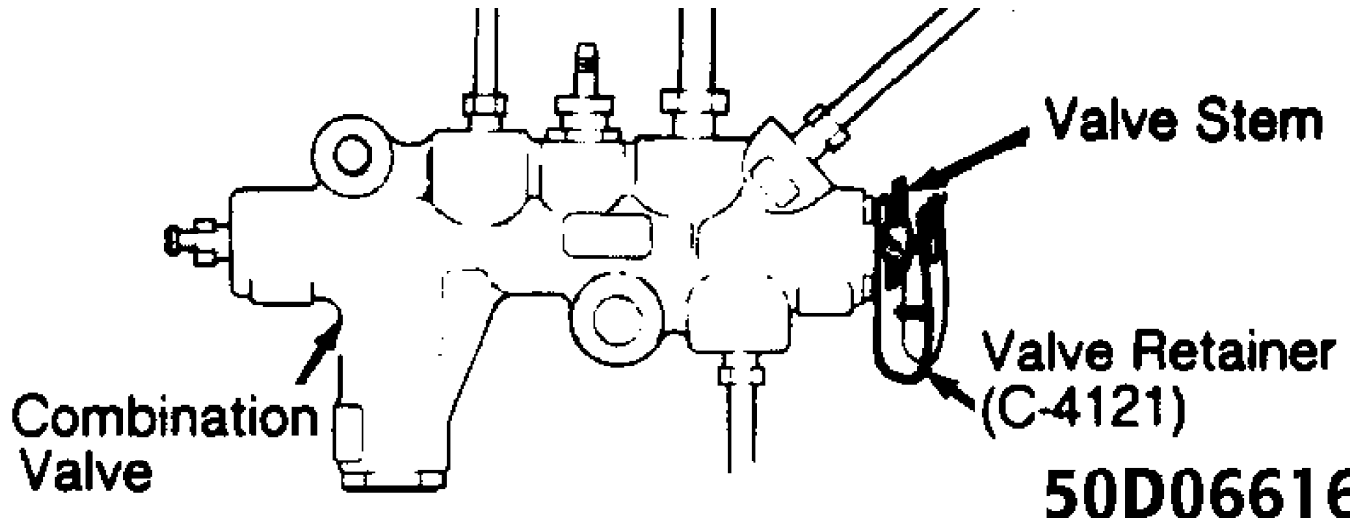
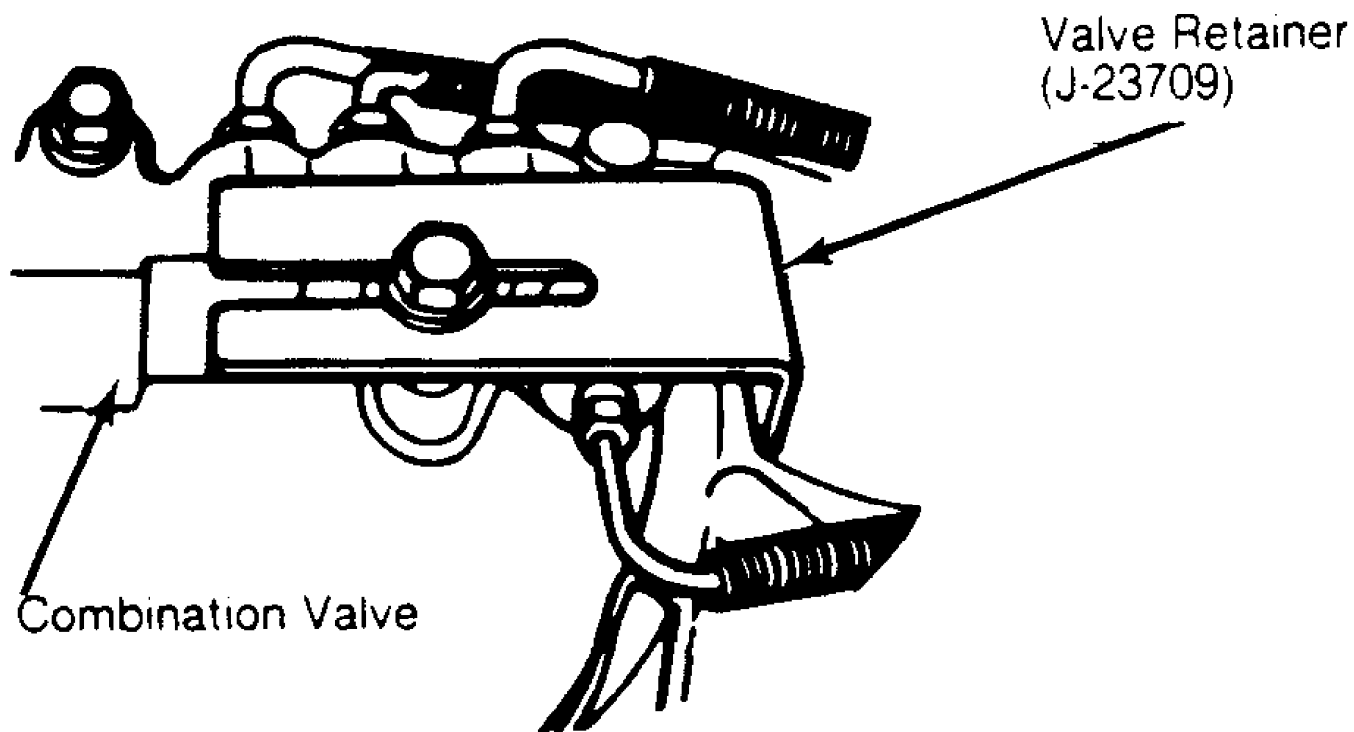


Fig. 2: Positioning Hold Off Valve
Courtesy of American Motors/Jeep Corp.



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Fig. 3: Positioning Hold Off Valve
 Courtesy of American Motors/Jeep Corp.

VACUUM BLEEDING

Fill master cylinder. Install vacuum bleed equipment to first bleeder valve to be serviced. Open bleeder valve 3/4-1 turn. Depress vacuum pump and pull fluid into reservoir jar. Bleed each bleeder valve in sequence. See BLEEDING SEQUENCE table.

PRESSURE BLEEDING

1) Clean master cylinder cap and surrounding area. Remove cap. With pressure tank at least 1/2 full, connect to master cylinder with adapters. Attach bleeder hose to first bleeder valve to be serviced. See BLEEDING SEQUENCE table.

2) Place other end of hose in clean glass jar partially filled with clean brake fluid so end of hose is submerged in fluid. The hold off valve must be positioned properly before pressure bleeding (if equipped). See HYDRAULIC CONTROL VALVES under BRAKE SYSTEM BLEEDING in this article.

3) Open release valve on pressure bleeder. Follow equipment manufacturer's pressure instructions or see PRESSURE BLEEDER SETTINGS table. Open bleeder screw 3/4-1 turn and note fluid flow.

4) Close bleeder screw when fluid flowing is free of bubbles. Repeat procedure on remaining wheels in proper sequence. Check brake pedal operation after bleeding has been completed.

5) Remove pressure bleeding equipment and valve retainer from hold off valve. Ensure that master cylinder is full of fluid.

PRESSURE BLEEDER SETTINGS TABLE

Application

psi (kg/cm²)

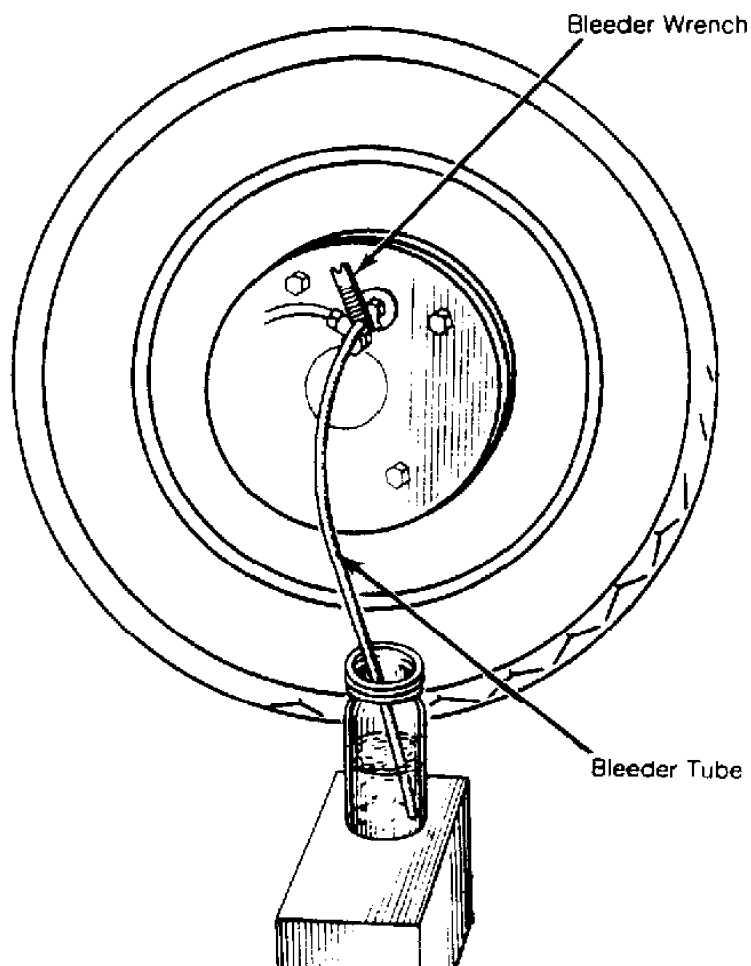
MANUAL BLEEDING

NOTE: When bleeding disc brakes, air may tend to cling to caliper walls. Lightly tap caliper, while bleeding, to aid in removal of air.

1) Fill master cylinder. Install bleeder hose to first bleeder valve to be serviced. See BLEEDING SEQUENCE table. Submerge other end of hose in clean glass jar partially filled with clean brake fluid. See Fig. 4.

2) Open bleeder valve 3/4-1 turn. Depress brake pedal slowly through full travel. Close bleeder valve and release pedal. Repeat procedure until flow of fluid shows no signs of air bubbles.

NOTE: When bleeding brake system manually, ensure bleeder valve is closed when brake pedal is released.



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Fig. 4: Wheel Cylinder Bleeding Procedure
Courtesy of American Motors/Jeep Corp.

BLEEDING SEQUENCE

Before bleeding system, exhaust all vacuum from power unit by depressing brake pedal several times. Bleed master cylinder (if equipped) with bleeder screws. Bleed slave cylinder on vehicles equipped with remote mount power assist units. Bleed wheel cylinders and calipers in sequence. See BLEEDING SEQUENCE table.

BLEEDING SEQUENCE TABLE

Application	Sequence
All Models	RR, LR, RF, LF
