

Hydraulic Brake System Bleeding (J57, J6H, JL9)

Special Tools

- CH-29532-A Pressure Brake Bleeder
- CH-44894-A Brake Bleeder Adapter

For equivalent regional tools. [Special Tools](#)

Warning: [Brake Dust Warning](#)

Warning: [Brake Fluid Irritant Warning](#).

Caution: [Brake Fluid Effects on Paint and Electrical Components Caution](#).

Caution: Only use products that comply with GM specifications and check manufacturer information respectively. We recommend the use of GM genuine products. Instructions must be followed at all times. The use of any type of fluid other than the recommended type of brake fluid, may cause contamination which could result in damage to the internal rubber seals and/or rubber linings of hydraulic brake system components.

Caution: While performing the hydraulic brake system bleed procedure for vehicles equipped with a manual transmission, DO NOT apply pressure to the transmission clutch pedal. Applying pressure could introduce air into the hydraulic clutch system requiring the hydraulic clutch system bleed procedure to be performed unnecessarily.

Note: If the system is opened at the brake master cylinder, a full hydraulic brake system bleed is necessary.

[Bleeding a Single Hydraulic Brake Circuit](#)

1. Disconnect brake fluid level sensor
2. Use Global Diagnostic System (GDS) to deactivate brake boost system.
3. Place a clean shop cloth beneath the brake master cylinder to prevent brake fluid spills.
4. Clean the outside of the reservoir on and around the reservoir cap prior to removing the cap and diaphragm.
Note: The pressure bleeding equipment must be the diaphragm type. The rubber diaphragm between the air supply and the brake fluid prevents air, moisture, oil, and other contaminants from entering the hydraulic system.
5. Fill the brake master cylinder reservoir with GM approved brake fluid from a clean, sealed brake fluid container. Ensure that the brake master cylinder reservoir remains at least half-full during this bleeding procedure. Add fluid as needed to maintain the proper level. [Brake Master Cylinder Reservoir Filling](#)
6. Check the brake fluid level in the CH-29532-A Pressure Brake Bleeder. Add GM approved brake fluid from a clean, sealed brake fluid container as necessary to bring the level to approximately the half-full point. [Adhesives, Fluids, Lubricants, and Sealers](#)
7. Install the CH-44894-A Brake Bleeder Adapter to the brake master cylinder reservoir.
8. Connect the CH-29532-A Pressure Brake Bleeder, to the CH-44894-A Brake Bleeder Adapter.
9. Charge the CH-29532-A Pressure Brake Bleeder, air tank to **207 - 310 kPa (30 - 45 psi)**.
10. Open the CH-29532-A Pressure Brake Bleeder, fluid tank valve to allow pressurized brake fluid to enter the brake system.
11. Wait approximately 30 seconds, then inspect the entire hydraulic brake system in order to

require repair prior to completing this procedure. [Brake System External Leak Inspection](#)

12. Install a proper box-end wrench onto the wheel hydraulic circuit bleeder valve which has been serviced.
13. Install a transparent hose over the end of the bleeder valve.
14. Submerge the open end of the transparent hose into a transparent container partially filled with GM approved brake fluid from a clean, sealed brake fluid container. [Adhesives, Fluids, Lubricants, and Sealers](#)
15. Loosen the bleeder valve to purge air from the wheel hydraulic circuit.
16. Allow fluid to flow until air bubbles stop flowing from the bleeder.
17. Cycle the park brake ON and OFF after opening the bleeder valve on the rear calipers.
18. After all air has been purged from the hydraulic circuit, tighten the bleeder valve to the necessary torque specification and install the dust cap.
 - [Front Brake Caliper Bleeder Valve Replacement](#)
 - [Rear Brake Bleeder Valve Replacement](#)

Note: The brake reservoir may have residual pressure after the bleeding operation is complete. Wrap a clean shop towel around the bleeder adapter and all hose connections before disconnecting the pressure bleeding equipment to prevent brake fluid from contacting and damaging vehicle components and painted surfaces

19. Close the CH-29532-A Pressure Brake Bleeder, fluid tank valve, then disconnect the CH-29532-A Pressure Brake Bleeder, from the CH-44894-A Brake Bleeder Adapter.
 20. Remove the CH-44894-A Brake Bleeder Adapter from the brake master cylinder reservoir.
 21. Fill the brake master cylinder reservoir to the maximum-fill level with GM approved brake fluid from a clean, sealed brake fluid container. [Adhesives, Fluids, Lubricants, and Sealers](#)
 22. Inspect the brake system for external leaks. [Brake System External Leak Inspection](#)
 23. Run the GDS - Brake Hydraulic Test, if it fails, perform the Bleeding the Complete Brake Hydraulic System procedure.
 24. Connect the brake fluid level sensor
 25. Turn the ignition ON, with the engine OFF. Check to see if the brake system warning lamp remains illuminated.
 26. Inspect the brake system for external leaks. [Brake System External Leak Inspection](#)
- Note:** DO NOT allow the vehicle to be driven until it is diagnosed and repaired.
27. If the brake system warning lamp remains illuminated, go to [Diagnostic Starting Point - Vehicle](#).

Bleeding Complete Brake Hydraulic System

1. Disconnect brake fluid level sensor
2. Use Global Diagnostic System (GDS) to deactivate brake boost system.
3. Place a clean shop cloth beneath the brake master cylinder to prevent brake fluid spills.
4. Clean the outside of the reservoir on and around the reservoir cap prior to removing the cap and diaphragm.

Note: The pressure bleeding equipment must be the diaphragm type. The rubber diaphragm between the air supply and the brake fluid prevents air, moisture, oil, and other contaminants from entering the hydraulic system.
5. Fill the brake master cylinder reservoir with GM approved brake fluid from a clean, sealed brake fluid container. Ensure that the brake master cylinder reservoir remains at least half-full during this bleeding procedure. Add fluid as needed to maintain the proper level. [Brake Master Cylinder Reservoir Filling](#)
6. Check the brake fluid level in the CH-29532-A Pressure Brake Bleeder. Add GM approved brake fluid from a clean, sealed brake fluid container as necessary to bring the level to

approximately the half-full point. [Adhesives, Fluids, Lubricants, and Sealers](#)

7. Install the *CH-44894-A* Brake Bleeder Adapter to the brake master cylinder reservoir.
 8. Connect the *CH-29532-A* Pressure Brake Bleeder, to the *CH-44894-A* Brake Bleeder Adapter.
 9. Charge the *CH-29532-A* Pressure Brake Bleeder, air tank to **207 - 310 kPa (30 - 45 psi)**.
 10. Open the *CH-29532-A* Pressure Brake Bleeder, fluid tank valve to allow pressurized brake fluid to enter the brake system.
 11. Wait approximately 30 seconds, then inspect the entire hydraulic brake system in order to ensure that there are no existing external brake fluid leaks. Any brake fluid leaks identified require repair prior to completing this procedure. [Brake System External Leak Inspection](#)
 12. Install a proper box-end wrench onto the LEFT REAR wheel hydraulic circuit bleeder valve.
 13. Install a transparent hose over the end of the bleeder valve.
 14. Submerge the open end of the transparent hose into a transparent, graduated container partially filled with GM approved brake fluid from a clean, sealed brake fluid container. Note amount of fluid in the container. [Adhesives, Fluids, Lubricants, and Sealers](#)
 15. Loosen the bleeder valve to purge air from the wheel hydraulic circuit.
 16. Allow fluid to flow until air bubbles stop flowing from the bleeder.
 17. After all air has been purged from the hydraulic circuit, close the bleeder valve.
 18. Install a proper box-end wrench onto the LEFT FRONT wheel hydraulic circuit bleeder valve, then repeat steps 12-17.
 19. Install a proper box-end wrench onto the RIGHT FRONT wheel hydraulic circuit bleeder valve, then repeat steps 12-17.
 20. Install a proper box-end wrench onto the RIGHT REAR wheel hydraulic circuit bleeder valve, then repeat steps 12-17.
 21. After all air has been purged from the hydraulic circuit, tighten the bleeder valve to the necessary torque specification and install the dust cap.
 - [Front Brake Caliper Bleeder Valve Replacement](#)
 - [Rear Brake Bleeder Valve Replacement](#)
 22. Close the *CH-29532-A* Pressure Brake Bleeder, fluid tank valve, then disconnect the *CH-29532-A* Pressure Brake Bleeder, from the *CH-44894-A* Brake Bleeder Adapter.
 23. Remove the *CH-44894-A* Brake Bleeder Adapter from the brake master cylinder reservoir.
 24. Fill the brake master cylinder reservoir to the maximum-fill level with GM approved brake fluid from a clean, sealed brake fluid container. [Adhesives, Fluids, Lubricants, and Sealers](#)
 25. Inspect the brake system for external leaks. [Brake System External Leak Inspection](#)
 26. Run the GDS — Brake Hydraulic Test, if it fails. [Antilock Brake System Automated Bleed](#)
 27. Connect the brake fluid level sensor
 28. Turn the ignition ON, with the engine OFF. Check to see if the brake system warning lamp remains illuminated.
- Note:** DO NOT allow the vehicle to be driven until it is diagnosed and repaired.
29. If the brake system warning lamp remains illuminated, go to [Diagnostic Starting Point - Vehicle](#).