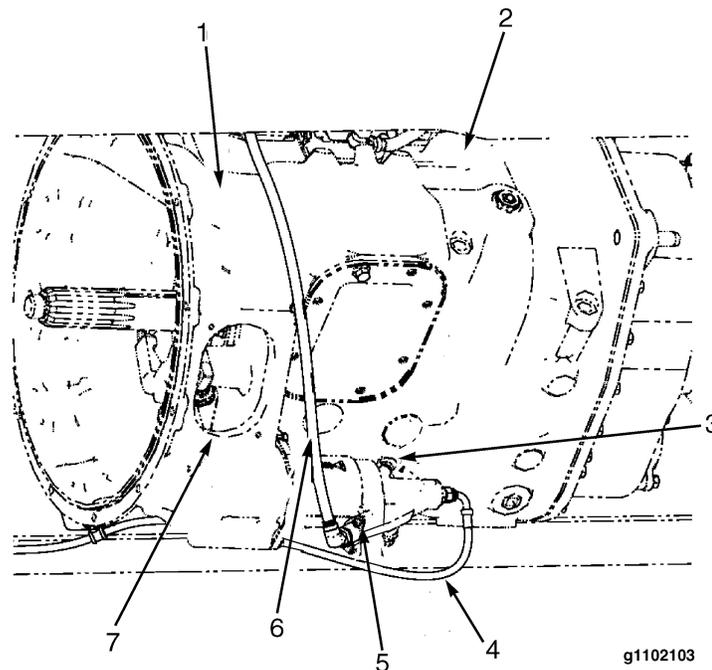


1.4. CLUTCH SERVO



- | | |
|------------------------|---------------------------------|
| 1. CLUTCH HOUSING | 5. CLUTCH SERVO |
| 2. TRANSMISSION | 6. AIR LINE TO SERVO |
| 3. BLEEDER VALVE SCREW | 7. HAND ACCESS COVER
OPENING |
| 4. HYDRAULIC HOSE | |

Figure 2 Clutch Servo

The clutch servo reduces the pedal effort needed to actuate the clutch. The clutch servo utilizes fluid pressure and air pressure to control the pushrod movement. The clutch servo has a hydraulic inlet, air inlet, and air exhaust valve. The clutch servo is attached to the transmission clutch housing. When the clutch master cylinder directs fluid to the clutch servo, the piston in the clutch servo moves the pushrod out against the release fork. The clutch release bearing is connected to the clutch release fork, the force is transmitted to the pressure spring of the clutch, and the clutch is then disengaged. The clutch servo is able to actuate (disengage) the clutch with increased pedal effort when loss of air pressure is experienced.

1.5. HYDRAULIC HOSE

The hydraulic hose materials are compatible with DOT 3 and DOT 4 brake fluid. Inspect hydraulic hoses regularly to make sure hydraulic hoses show no signs of wear from rubbing or leaks at the crimped fittings and at the adapter connections. If hydraulic hoses show evidence of leaks or damage, replace them.



Use only approved hydraulic fluid (DOT 3 or DOT 4 brake fluid) in the hydraulic clutch system. Although DOT 3 and DOT 4 brake fluids can be mixed with each other, do not mix DOT 3 and DOT 4 brake fluid with other types of brake and / or hydraulic fluid. The wrong fluid or fluid mix will damage the rubber parts of the system, causing loss of clutch function and the risk of serious personal injury or death. Failure to follow this warning could result in personal injury or death.



Hydraulic fluid (DOT 3 or DOT 4 brake fluid) is hazardous. It may be a skin irritant and can cause blindness if it gets in your eyes. Always wear safety glasses when handling hydraulic fluid or bleeding hydraulic lines. If hydraulic fluid comes into contact with skin, wash it off as soon as possible. Failure to follow this warning could result in personal injury or death.

CAUTION

To prevent damage to painted surfaces, do not spill hydraulic fluid (DOT 3 or DOT 4 brake fluid) on any painted surface. Clean surface off immediately if any hydraulic fluid is spilled. Hydraulic fluid / brake fluid can damage paint.

1.6. BLEEDER VALVE

The bleeder valve screw is located on the clutch servo and is utilized to fluid-fill and bleed the hydraulic clutch system. The hydraulic clutch system must be bled whenever a component in the hydraulic clutch system has been replaced or when disconnecting the hydraulic hose and permitting air into the system.

2. REMOVAL AND INSTALLATION



To prevent personal injury or death, park the vehicle on a flat, level surface. Make sure the engine ignition is in the OFF position and the transmission is in NEUTRAL. Set the parking brake, block the wheels, and disconnect the batteries at the negative terminal before doing any service procedures on the engine or vehicle.



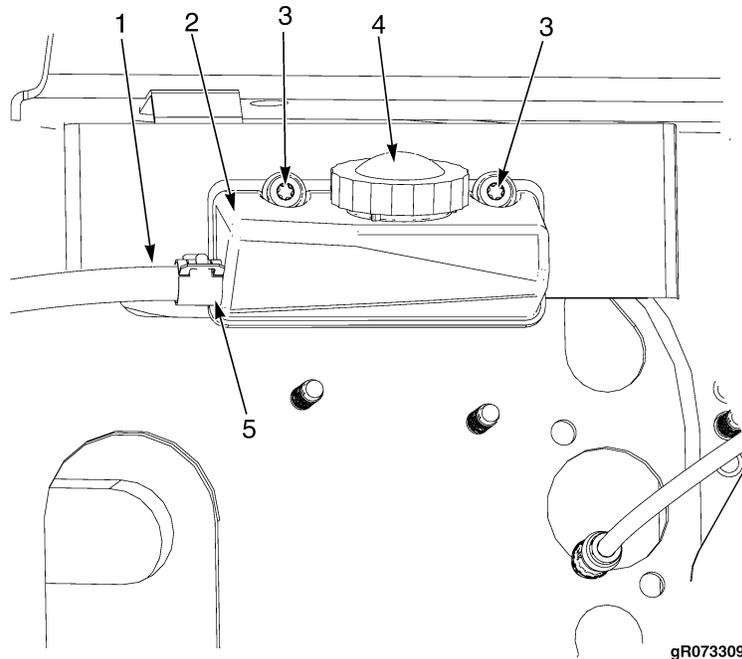
A jack must never be used alone to support a vehicle while under-chassis service is being performed. The jack may lower and serious personal injury could result. Always support vehicle with floor stands. Failure to follow this warning could result in personal injury or death.

NOTE – Before performing any work on the hydraulic clutch and / or hydraulic clutch components, the following steps must be performed:

1. Park vehicle on flat, level surface.
2. Place transmission in NEUTRAL (or PARK if automatic transmission).
3. Set parking brake.
4. Turn OFF ignition.
5. Install wheel chocks.
6. Disconnect battery.

2.1. RESERVOIR

Reservoir – Removal



1. SUPPLY HOSE
2. RESERVOIR
3. SCREW

4. FILL CAP
5. SPRING CLAMP

Figure 3 Reservoir

1. Remove reservoir fill cap.
2. Drain hydraulic fluid from reservoir.
3. Remove spring clamp and disconnect supply hose from reservoir.
4. Remove two screws from reservoir and remove reservoir.

Reservoir – Installation

1. Install reservoir and secure with two screws (Figure 3, Items 2 and 3). Torque screws to 89 lb-in (10 N•m).
2. Connect supply hose to reservoir and secure with spring clamp (Figure 3, Items 1, 2, and 5).
3. Fill reservoir using DOT 3 or DOT 4 brake fluid (Figure 3, Item 2).
4. Place fill cap on reservoir and tighten (Figure 3, Items 2 and 4).
5. Bleed air from hydraulic system. (See Hydraulic Fluid Changing, page 12)