

# SECTION 08-02 Clutch Controls

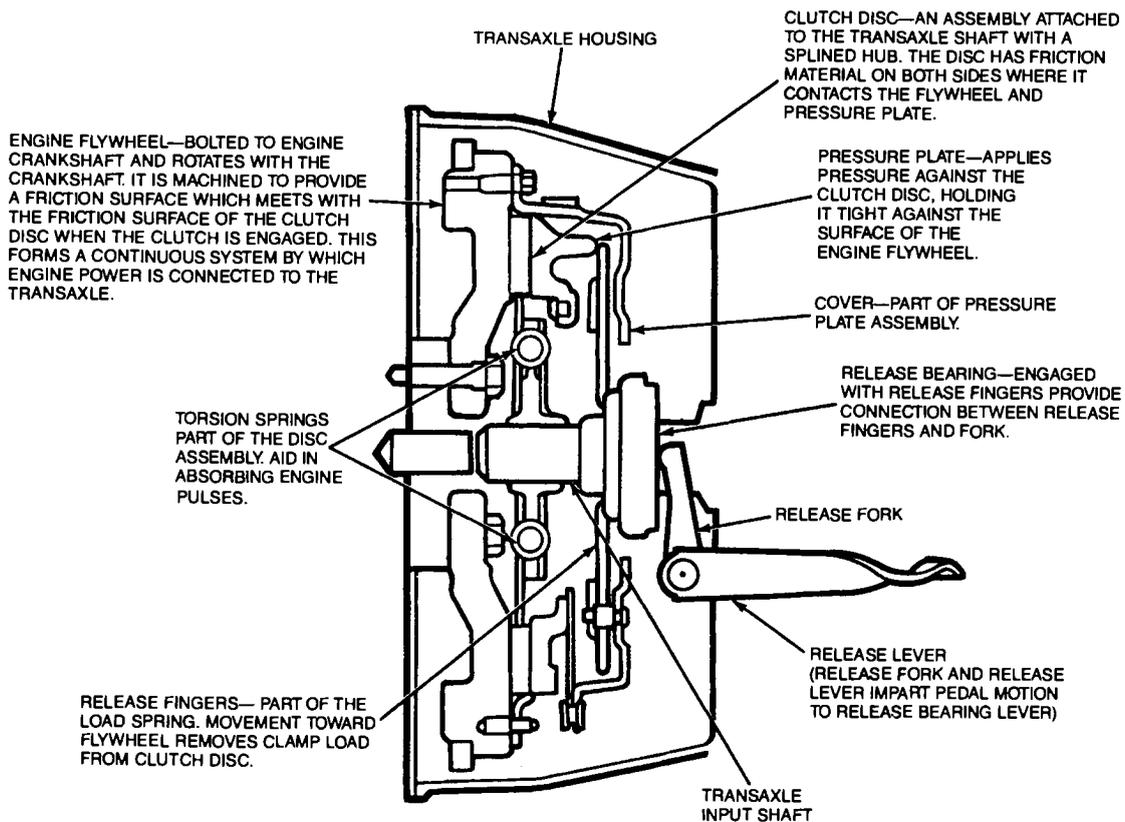
SUBJECT	PAGE	SUBJECT	PAGE
<b>ADJUSTMENTS</b>		<b>REMOVAL AND INSTALLATION (Cont'd.)</b>	
Clutch Pedal Height .....	08-02-5	Clutch Pedal .....	08-02-3
Hydraulic Clutch Bleeding .....	08-02-7	Clutch Pedal Switch .....	08-02-2
Hydraulic Clutch Reservoir Fluid Level .....	08-02-7	Hydraulic Clutch Master Cylinder .....	08-02-5
Pedal Freeplay .....	08-02-6	Hydraulic Clutch Slave Cylinder .....	08-02-5
<b>DESCRIPTION AND OPERATION</b> .....	08-02-1	<b>SPECIFICATIONS</b> .....	08-02-7
<b>REMOVAL AND INSTALLATION</b>		<b>VEHICLE APPLICATION</b> .....	08-02-1
Clutch Cable .....	08-02-2		

## VEHICLE APPLICATION

Capri.

## DESCRIPTION AND OPERATION

This vehicle uses two types of clutch release systems. The turbocharged vehicles with a type G transaxle use a mechanical cable system. The naturally aspirated vehicles with a type F2 transaxle use a hydraulic clutch system. When performing any service procedures, be sure of the system being serviced.



C6951-B

**DESCRIPTION AND OPERATION (Continued)**

On turbocharged vehicles, pedal freeplay adjustment is performed at the release lever end of the cable. On naturally aspirated vehicles, pedal freeplay is adjusted at the brake pedal push rod. Pedal height is adjustable using the pedal stop bolt located on the clutch pedal.

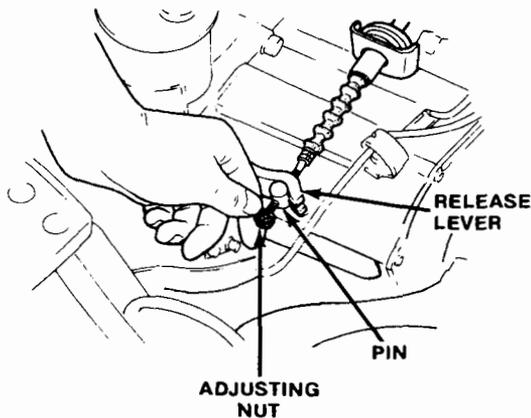
**REMOVAL AND INSTALLATION****Clutch Pedal Switch****Removal and Installation**

1. Disconnect electrical connector.
2. Remove switch retaining nuts.
3. Remove switch from pedal bracket.
4. To install, reverse Removal procedure.

NOTE: For switch testing, refer to Section 03-06.

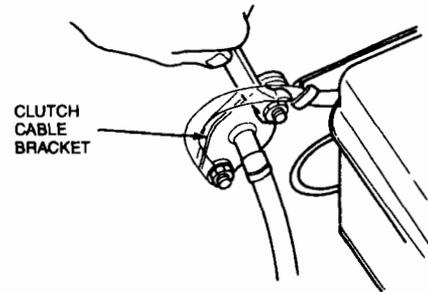
**Clutch Cable****Turbocharged Vehicles****Removal**

1. Remove the adjusting nut and pin so the cable can be removed from the release fork.



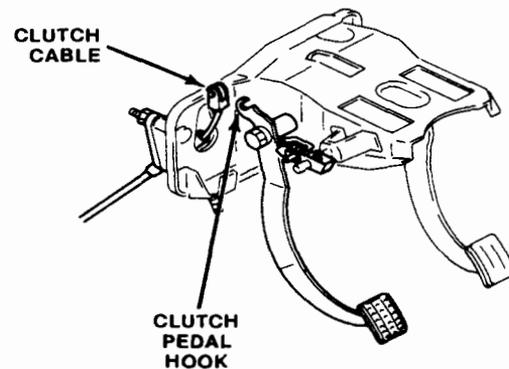
C7460-A

2. Remove the clutch cable bracket by removing the two nuts.



C6946-A

3. From underneath the instrument panel, remove the clutch cable from the top of the clutch pedal hook.
4. Remove the cable from the engine side.



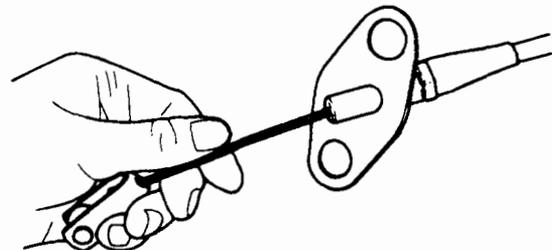
C7462-A

**Inspection**

Check for the following:

1. Damage to the cable or cable housing (frayed cable wire, worn or cracked housing).
2. Smooth operation of the cable (no binding).

NOTE: Replace the cable if necessary.



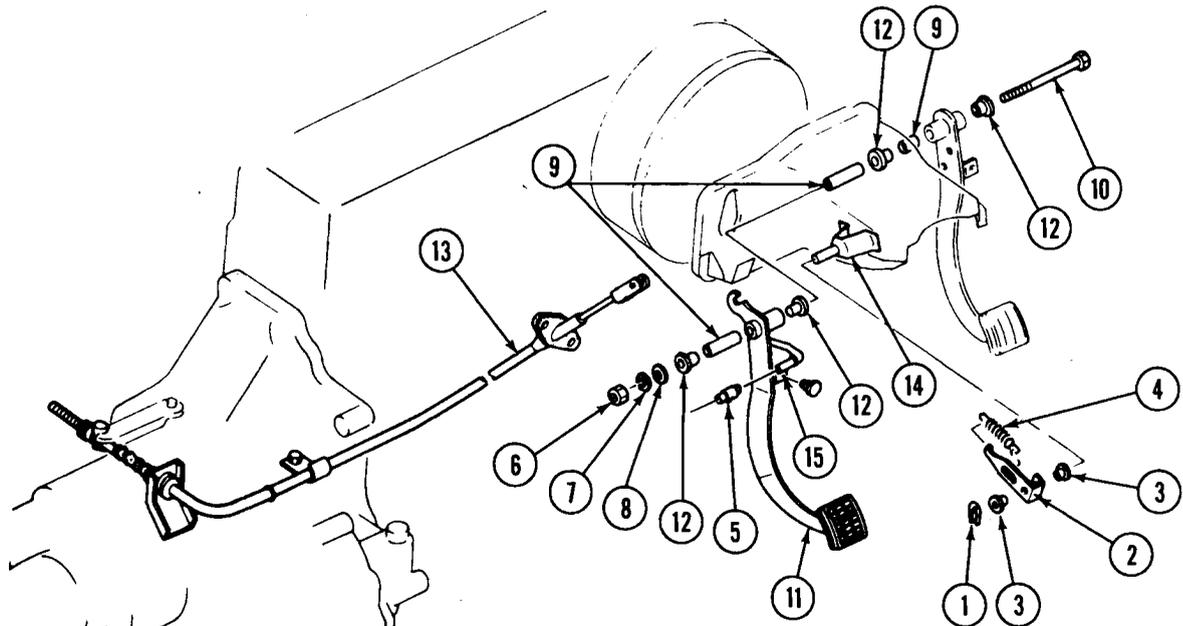
C7463-A

**REMOVAL AND INSTALLATION (Continued)****Installation**

1. Apply Premium Long-Life Grease XG-1-C (ESA-M1C75-B) or equivalent to the pedal cable hook and the joint between the release lever and pin.
2. Install cable through the engine side.
3. From underneath the instrument panel, connect clutch cable over the top of the clutch pedal hook.
4. Install the clutch cable bracket to the dash panel. Install the two retaining nuts. Tighten to 16-23 N·m (12-16 lb-ft).
5. Install end of the cable through the slot in the release fork. Install the pin so that it rests in the groove of the release lever and attach the adjusting nut to the cable.
6. Adjust the pedal freeplay as outlined.

**Clutch Pedal****Removal**

1. Remove left side window defogger duct by carefully pulling and slightly twisting.
2. On naturally aspirated vehicles, remove snap ring and pin retaining push rod to pedal.
3. Disengage the retaining ring from the clutch spring bracket. On turbocharged vehicles, grasp the lever at the bushings and pull the lever and spring assembly straight out.
4. Remove nut attaching clutch pedal to the through bolt.
5. While removing the through bolt, note position of the spring washer, flat washer (turbocharged vehicles), both bushings, and the spacers for installation.
6. On turbocharged vehicles, remove the clutch cable from the clutch pedal.
7. Remove the pedal.

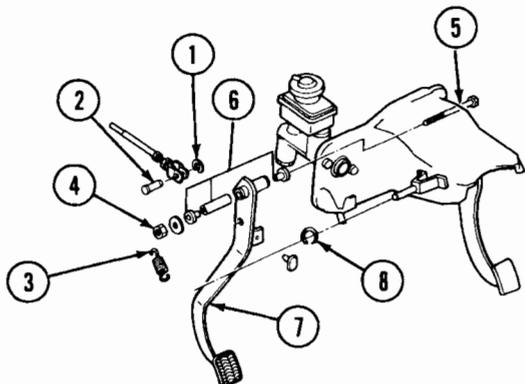
**Turbocharged Vehicles**

1. RETAINING RING — 9957 50600
2. LEVER — 7503
3. BUSHING — 9C805
4. RETURN SPRING — 2472
5. BUSHING, SPRING ANCHOR — 7526
6. NUT — 0603 34307
7. SPRING WASHER — 9987 11000
8. FLAT WASHER — 9995 21000
9. SPACER — 2461
10. THROUGH BOLT — 9981
11. CLUTCH PEDAL — 7519
12. BUSHING — 2481
13. CLUTCH CABLE — 7K553
14. CLUTCH SPRING BRACKET
15. CLUTCH SPRING ANCHOR

C4198-A

REMOVAL AND INSTALLATION (Continued)

Naturally Aspirated Vehicles



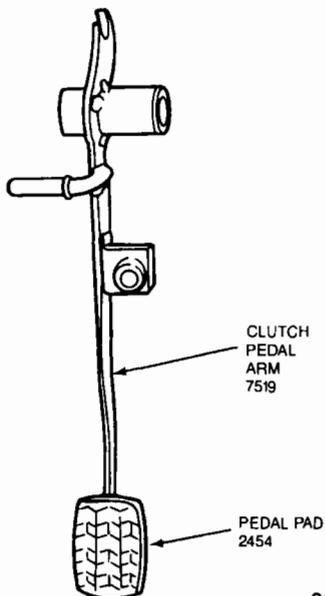
ITEM	DESCRIPTION	PART NUMBER
1.	SNAP RING	D001 43152
2.	PIN	9923 20822
3.	RETURN SPRING	2472
4.	NUT	0603 34307
5.	THROUGH BOLT	9981 31021
6.	BUSHING AND SPACER	2481, 2461
7.	CLUTCH PEDAL	7519
8.	SPRING RETAINING RING	9957 50600

C6954-A

Inspection

Check for the following:

- Worn or damaged pedal bushings
- Twisted or bent pedal
- Pedal pad worn or damaged



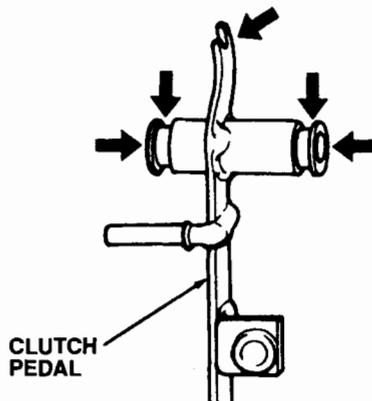
C4199-A

NOTE: Service or replace parts as required.

Installation

1. Apply Multi-Purpose Grease DOAZ-19584-AA (ESR-M1C159-A and ESB-M1C93-A) or equivalent to the inner and outer surfaces of the pedal bushing, pedal cable (turbocharged vehicles), and hook unit.

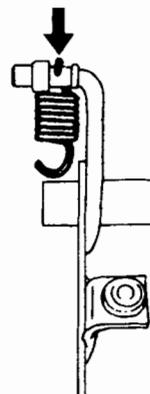
APPLY MULTI-PURPOSE GREASE AS SHOWN BY ARROWS



C10657-A

2. On turbocharged vehicles, install the end of clutch cable to the clutch pedal hook.
3. Install the through bolt into the support bracket, install the pedal and related parts (bushings, spacers, and washers) to the through bolt in the reverse order removed.
4. Slide the through bolt into the hole in the support bracket and attach the nut to the through bolt. Tighten the nut to 20-35 N·m (15-25 lb-ft).
5. On turbocharged vehicles, assemble the lever, spring and bushings.
6. On turbocharged vehicles, install lever assembly to the clutch spring bracket and the clutch spring anchor. Apply Multi-Purpose Grease DOAZ-19584-AA (ESR-M1C159-A and ESB-M1C93-A) or equivalent to the spring contact area as shown.

APPLY MULTI-PURPOSE GREASE



C10658-A

**REMOVAL AND INSTALLATION (Continued)**

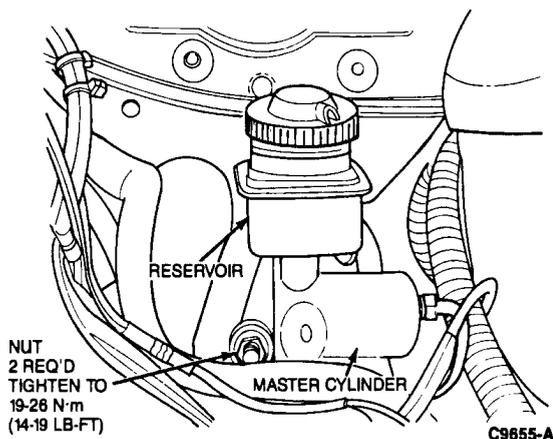
7. On naturally aspirated vehicles, attach the return spring to the spring bracket and clutch pedal.
8. Install the retaining ring to the clutch spring bracket.
9. On naturally aspirated vehicles, position the push rod, install the pin and install the snap ring.
10. After installing the clutch pedal, adjust the pedal height and pedal freeplay as outlined.

**Hydraulic Clutch Master Cylinder**

**WARNING: BRAKE FLUID CONTAINS POLYGLYCOL ETHERS AND POLYGLYCOLS. AVOID CONTACT WITH EYES. WASH HANDS THOROUGHLY AFTER HANDLING. IF BRAKE FLUID CONTACTS EYES, FLUSH EYES WITH RUNNING WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. IF TAKEN INTERNALLY, DRINK WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY.**

**Naturally Aspirated Vehicles****Removal**

1. Remove battery. Refer to Section 14-01.
2. Remove windshield wiper motor. Refer to Section 01-16.
3. Disconnect hydraulic line fitting at retaining bracket on transaxle case and drain fluid. Reconnect fitting after draining fluid.
4. Disconnect hydraulic line from master cylinder.
5. Remove master cylinder retaining nuts and remove master cylinder.

**Installation**

1. Position master cylinder to dash panel. Make sure clutch pedal push rod aligns properly.
2. Install retaining nuts. Tighten to 19-26 N·m (14-19 lb-ft).

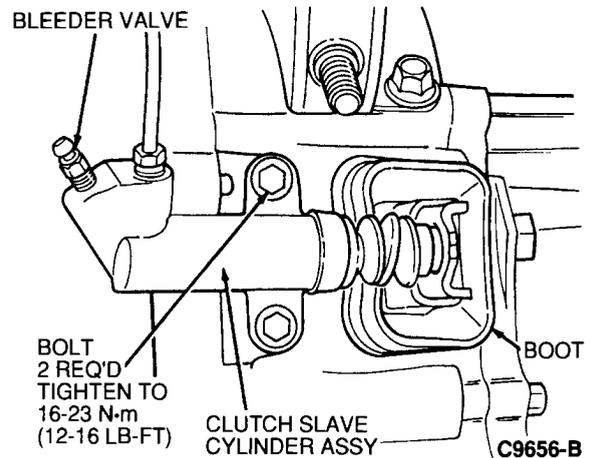
3. Connect hydraulic line to master cylinder.
4. Fill reservoir. Bleed clutch system as outlined.
5. Install windshield wiper motor. Refer to Section 01-16.
6. Install battery. Refer to Section 14-01.

**Hydraulic Clutch Slave Cylinder****Naturally Aspirated Vehicles****Removal**

1. Disconnect hydraulic line and plug to prevent fluid loss.
2. Remove two bolts retaining slave cylinder.
3. Remove slave cylinder.

**Installation**

1. Position slave cylinder.
2. Install two retaining bolts. Tighten to 16-23 N·m (12-16 lb-ft).
3. Connect hydraulic line.
4. Fill reservoir. Bleed clutch system as outlined.

**ADJUSTMENTS****Clutch Pedal Height**

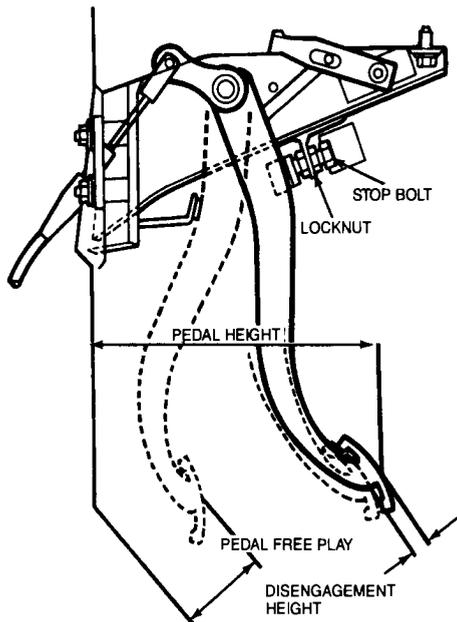
With the clutch pedal at the top of its travel, measure the distance from the upper center of the pedal pad to the dash panel and ensure the distance is 214-219mm (8.4-8.6 inch) on turbocharged vehicles or 229-234mm (9.02-9.21 inch) on naturally aspirated vehicles.

**Adjustment**

1. Loosen locknut located on clutch pedal.
2. Turn stop bolt to obtain correct pedal height.

## ADJUSTMENTS (Continued)

3. Tighten locknut.



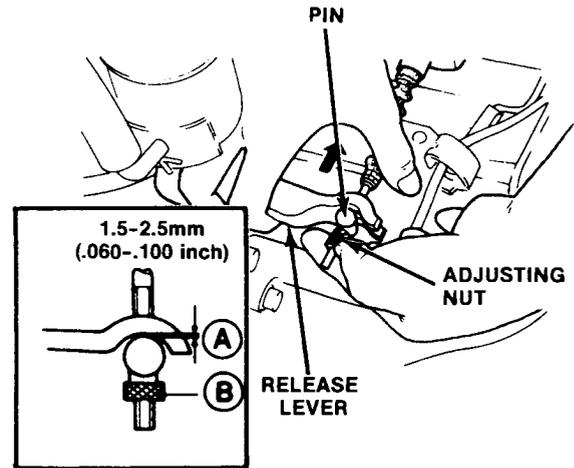
NOTE: TURBOCHARGED PEDAL ASSEMBLY SHOWN.  
ADJUSTMENT FOR NATURALLY ASPIRATED SIMILAR. C6952-A

**Pedal Freeplay****Turbocharged Vehicles**

Depress the pedal lightly by hand until all freeplay is removed and measure freeplay distance. Pedal freeplay distance should measure 9-15mm (0.354-0.590 inch).

**Adjustment**

1. Depress the clutch release lever and pull pin away from lever.
2. Adjust clearance "A" to 1.5-2.5mm (0.06-0.100 inch) by turning adjusting nut "B".



C7459-A

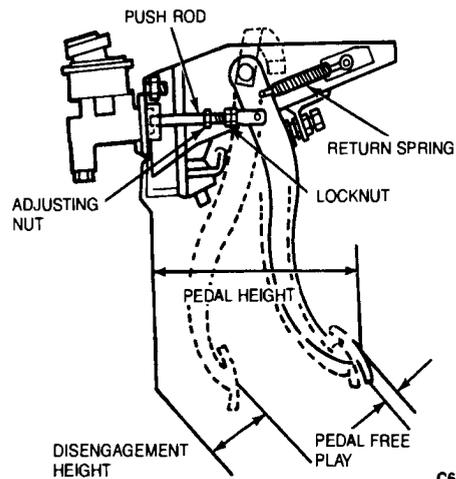
3. After the adjustment, make sure that when the clutch is disengaged, the pedal height is 214-219 mm (8.4-8.6 inches).

**Naturally Aspirated Vehicles**

Depress the pedal lightly by hand until all freeplay is removed and measure freeplay distance. Pedal freeplay distance should measure 0.6-3.0mm (0.02-0.12 inch).

**Adjustment**

1. Loosen locknut.
2. Turn push rod adjusting nut in direction required to achieve required clearance.
3. Tighten locknut to 12-17 N·m (9-12 lb-ft). Ensure that pedal height is 229-234mm (9.02-9.21 inch).



C6953-A

**ADJUSTMENTS (Continued)****Hydraulic Clutch Bleeding**

**WARNING: BRAKE FLUID CONTAINS POLYGLYCOL ETHERS AND POLYGLYCOLS. AVOID CONTACT WITH EYES. WASH HANDS THOROUGHLY AFTER HANDLING. IF BRAKE FLUID CONTACTS EYES, FLUSH EYES WITH RUNNING WATER FOR 15 MINUTES. GET MEDICAL ATTENTION IF IRRITATION PERSISTS. IF TAKEN INTERNALLY, DRINK WATER AND INDUCE VOMITING. GET MEDICAL ATTENTION IMMEDIATELY.**

**Naturally Aspirated Vehicles**

1. Raise vehicle on hoist. Refer to Section 00-02.
2. Attach a hose to bleeder valve on clutch slave cylinder.
3. Open bleeder valve one-half turn.
4. Watch for air bubbles in brake fluid at open end of hose.

**NOTE:** Keep reservoir full of fluid while bleeding.

5. Close bleeder valve when bubbling stops.
6. Depress clutch pedal to floor and hold.
7. Open bleed valve one-quarter turn and push clutch pedal down as far as it will go. Close valve, then release pedal.

8. Top up fluid.
9. Check clutch for proper operation.

**Hydraulic Clutch Reservoir Fluid Level**

**NOTE:** If hydraulic clutch fluid level is low, or requires replacement, fill to the max line on the reservoir. Use Heavy-Duty Brake Fluid C6AZ-19542-AA (ESA-M6C25-A) or equivalent.

**SPECIFICATIONS****TORQUE SPECIFICATIONS**

Description	N·m	Lb·Ft
Clutch Pedal Push Rod Locknut (Naturally Aspirated Vehicles)	12-17	9-12
Clutch Cable Bracket Nuts	16-23	12-16
Clutch Pedal Through Bolt Nut	20-35	15-25
Master Cylinder Retaining Nuts	19-26	14-19
Clutch Slave Cylinder	16-23	12-16