

JAGUAR

XJ6 Sedan

DESCRIPTION

Clutch is dry single disc type, using a diaphragm spring type pressure plate. Clutch actuation is hydraulic through a master cylinder and slave cylinder. A graphite type release bearing is also used.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

NOTE — Engine and transmission must be removed from vehicle as an assembly to service clutch.

Removal — 1) With engine removed, take out bolts securing transmission breather tube to rear exhaust manifold. Disconnect slave cylinder inlet line and plug opening. Remove two bolts holding starter to bell housing and lift off starter.

2) Remove bolts and spring washers securing flywheel inspection cover. Remove bolts mounting bell housing to engine block. Note position of long bolts. Index mark pressure plate and flywheel. Pull out clutch assembly bolts evenly until pressure is off clutch.

Installation — To install, reverse removal procedure and note the following: Use suitable centering tool to align clutch disc. Ensure pressure plate and flywheel index marks align. Adjust clutch fork free play.

CLUTCH MASTER CYLINDER

Removal — Disconnect hydraulic line from master cylinder. Remove screws securing pedal box to firewall (accessible from inside driver compartment), and remove pedal box and master cylinder as an assembly. Remove locking screw and pedal pivot pin. Pull back pedal and remove cotter pin and clevis pin from push rod fork end. Removing attaching bolts and remove master cylinder from pedal box mounting.

Installation — To install master cylinder, reverse removal procedure and bleed hydraulic system.

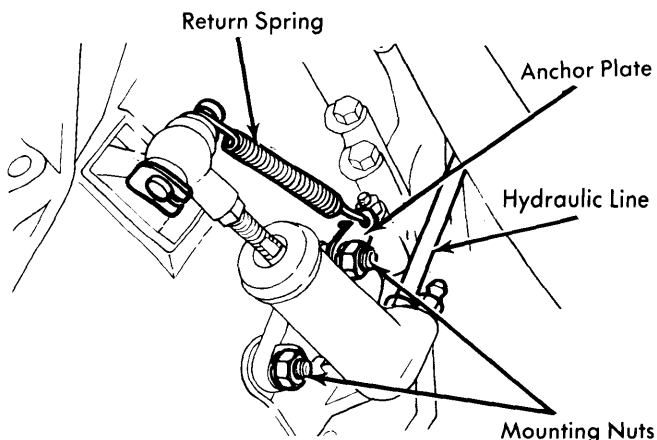


Fig. 1 Installed View of Clutch Slave Cylinder Showing Mounting Nuts

CLUTCH SLAVE CYLINDER

Removal — Release return spring. Remove spring clip and push rod clevis pin. Disconnect hydraulic line and plug opening. Note fitted position of return spring anchor plate and remove nuts and spring washers securing slave cylinder, then lift out slave cylinder.

Installation — To install slave cylinder, reverse removal procedure, adjust clutch fork free play and bleed hydraulic system.

RELEASE BEARING & LEVER

Removal — 1) With bell housing removed, release spring clips securing release bearing to lever and lift out bearing.

2) Remove spring clip from slave cylinder push rod and disengage return spring and clevis pin. Loosen lock nut and remove locating screw from release lever. Press shaft downward from bushings and remove lever.

Installation — To install all components, reverse removal procedure.

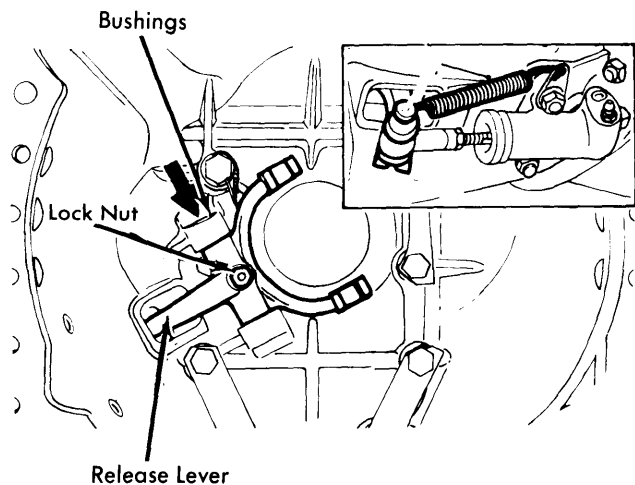


Fig. 2 Installed View of Clutch Release Lever Showing Location of Lock Nut

ADJUSTMENT

CLUTCH FORK FREE PLAY

1) Move slave cylinder push rod and measure total free movement between slave cylinder and clutch lever. Free play should be approximately .125" (3.2 mm).

2) To adjust, loosen lock nut and screw push rod in or out of trunnion until correct free play is obtained. Tighten lock nut and reconnect return spring.

JAGUAR (Cont.)

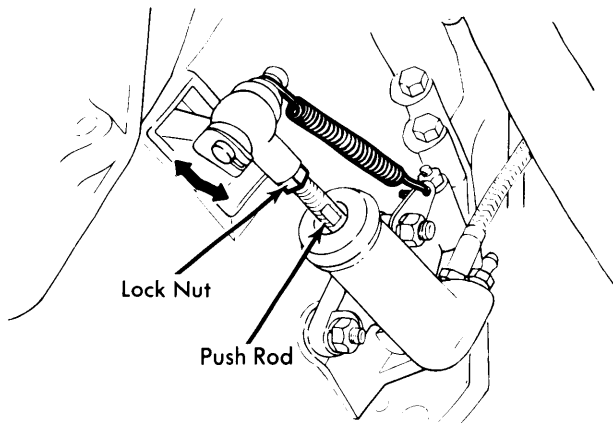


Fig. 3 Clutch Slave Cylinder Push Rod Adjustment

HYDRAULIC SYSTEM BLEEDING

1) Fill master cylinder reservoir with Castrol/Girling Universal Brake Fluid. Attach one end of a bleed tube to slave cylinder bleeder screw, and immerse opposite end in a clean container partially filled with hydraulic fluid.

2) Open slave cylinder bleeder screw, and pump clutch pedal slowly up and down, pausing between each stroke. Refill master cylinder reservoir after every three pedal strokes. **CAUTION** — Do not use fluid bled from system, as it will contain air.

3) Pump clutch pedal until pedal becomes firm, tighten bleeder screw. Refill master cylinder reservoir, operate clutch pedal for two or three minutes, and check system for leaks.

OVERHAUL

CLUTCH MASTER CYLINDER

Disassembly — Separate rubber boot from end of body and move it along push rod until free. Depress push rod and remove snap ring. Extract following components: push rod, piston, piston washer, primary cup, spring retainer, and spring.

Inspection — Examine cylinder bore for damage. Clean all components in brake fluid and ensure by-pass hole in cylinder bore is not restricted.

Installation — 1) Begin by fitting end plug on new gasket. Fit spring retainer to smaller end of spring. It may be necessary to bend over retainer ears.

2) Insert spring with larger end leading into cylinder bore. Fit primary cup with lip leading. **NOTE** — Insure lip is not

damaged on snap ring groove. Using fingers, pull secondary cup onto piston with smaller end toward drilled end in groove.

3) Insert piston washer into bore with curved edge toward primary cup. Install piston into bore with drilled end facing forward. Install rubber boot to push rod. Fit push rod to piston and press into bore until snap ring can be inserted into position.

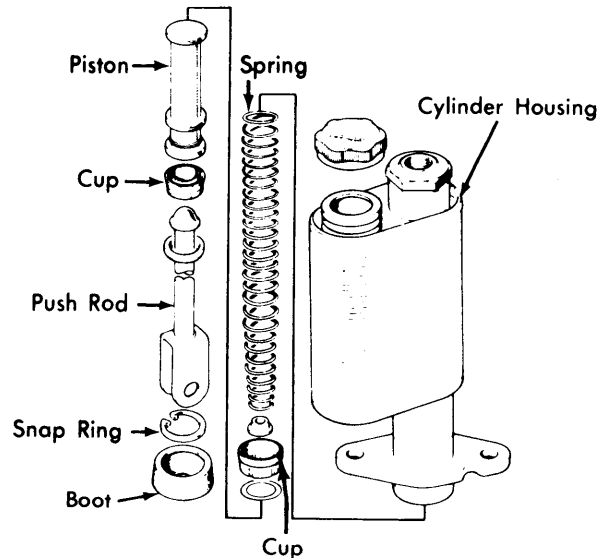


Fig. 4 Exploded View of Clutch Master Cylinder Assembly

CLUTCH SLAVE CYLINDER

Disassembly — Remove snap ring. Apply low air pressure to hydraulic inlet port and allow piston, cup, cup filler, and spring to be removed.

Inspection & Reassembly — Clean all components in denatured alcohol and thoroughly dry. Inspect all parts for wear or damage, replace as necessary. To complete reassembly, reverse disassembly procedure.

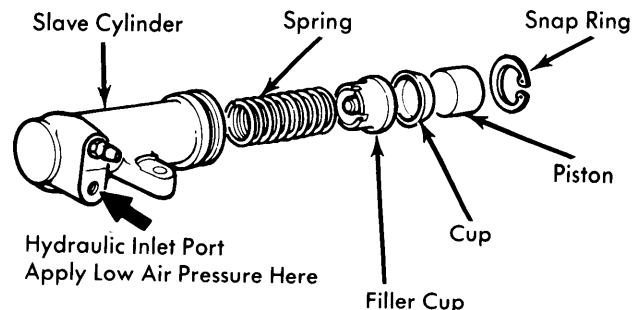


Fig. 5 Exploded View of Clutch Slave Cylinder Assembly