MGB

DESCRIPTION

Clutch is single dry disc type, using a diaphragm spring type pressure plate. Clutch actuation is hydraulic, using a firewall mounted master cylinder and a bell housing mounted slave cylinder. Release bearing is graphite type, and is mounted in a cup which fits into fork of clutch release lever.

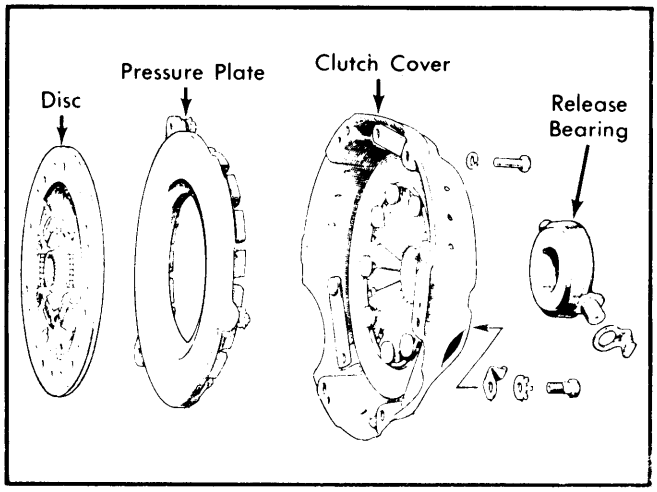

Fig. 1 Exploded View of Clutch Assembly

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal – 1) Disconnect battery, remove hood, and drain oil and coolant. Disconnect oil cooler lines at filter and oil pressure line at block. Remove all coolant hoses and radiator.

2) Remove air cleaner, heater valve, and distributor cap. Disconnect all electrical wiring, vacuum hoses and throttle linkage. Remove shift lever. Disconnect wires from transmission and remove from retaining clips. Separate clutch slave cylinder from housing and wire out of way.

3) Disconnect speedometer cable, exhaust pipe at manifold, and drive shaft. Remove engine restraint rod. Remove 4 bolts holding rear mounting crossmember to chassis, and lower transmission to fixed crossmember.

4) Remove bolts holding bracket to crossmember, then remove nuts holding rear mounts to crossmember. Remove crossmember. Attach hoist and lift engine slightly, free front engine mounts, and lift out engine/transmission assembly.

5) Remove bolts securing transmission to engine. Separate engine from transmission, then loosen the clutch bolts evenly to remove plate from flywheel. Flywheel side of clutch disc is marked.

Installation – Use aligning tool to center clutch disc and install disc with "Flywheel Side" marking toward flywheel. Place pressure plate in position with marks on flywheel and pressure plate aligned. Tighten mounting bolts gradually to 25-30 ft. lbs. (3.5-4.1 mkg). To complete installation, reverse removal procedure.

CLUTCH MASTER CYLINDER

Removal – 1) Drain fluid from master cylinder through slave cylinder bleeder. Remove facia panel below left side of steering wheel, then remove rubber plug in bulkhead. See *Fig.* 2.

2) Remove 8 screws holding cover plate and seal to pedal box. Separate push rod from clutch pedal at clevis pin. Disconnect hydraulic outlet line and remove master cylinder.

NOTE – *Access to lower bolt is achieved inside car through hole in bulkhead.*

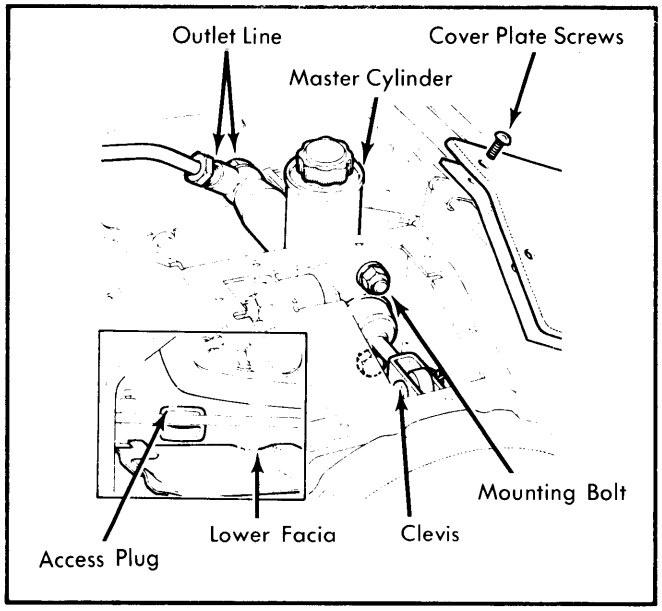

Fig. 2 Items to Take Off in Order to Free Master Cylinder for Removal

Installation – Reverse removal procedure and bleed hydraulic system.

CLUTCH SLAVE CYLINDER

Removal – Remove bolts and washers holding slave cylinder. Slide cylinder from push rod. Remove fluid hose from cylinder being careful not to lose copper sealing washer. Plug open end of hose.

Installation – Reverse removal procedure and bleed hydraulic system.

CLUTCH RELEASE BEARING

Removal & Installation – With transmission separated from engine, release clips holding release bearing to fork by rotating clips forward. Slide bearing from fork. To install, reverse removal procedure, ensuring that spring arms on clips are on transmission side of clutch fork.

MGB (Cont.)

OVERHAUL

CLUTCH MASTER CYLINDER

Disassembly – 1) Drain fluid and pull dust boot back. Remove circlip from push rod, then withdraw rod, washer, clip, and boot.

2) Remove piston with secondary cup seal. Remove piston washer, main cup, seal spring retainer, and spring. Remove secondary cup seal from piston by stretching over end of piston.

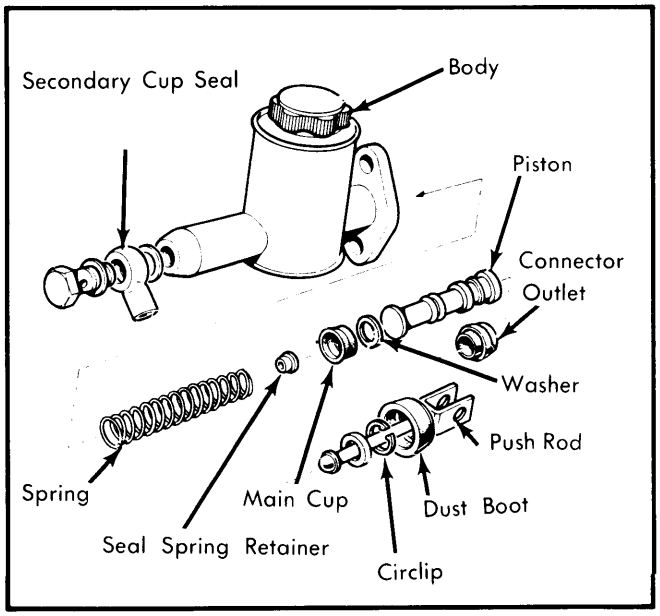

Fig. 3 Exploded View of MGB Clutch Master Cylinder

Inspection – Wash cylinder body in alcohol and clean internal parts with brake fluid. If bore is free of ridges, scores or grooves, new seals may be used. If not, replace master cylinder body.

Reassembly – Coat all components with brake fluid. reverse removal procedure and note the following: Be sure secondary cup seal lip faces toward rear of piston. Insert spring into cylinder bore, large end first. Install circlip, then dust boot.

CLUTCH SLAVE CYLINDER

Disassembly – Remove retaining ring, pull back dust cover and remove small internal retaining ring. Apply air pressure to fluid port and remove piston, cup, spring retainer, and spring. Remove bleeder screw.

Inspection – Wash cylinder in alcohol and clean internal parts with brake fluid. Check bore for scoring, grooves or ridges and replace slave cylinder as necessary.

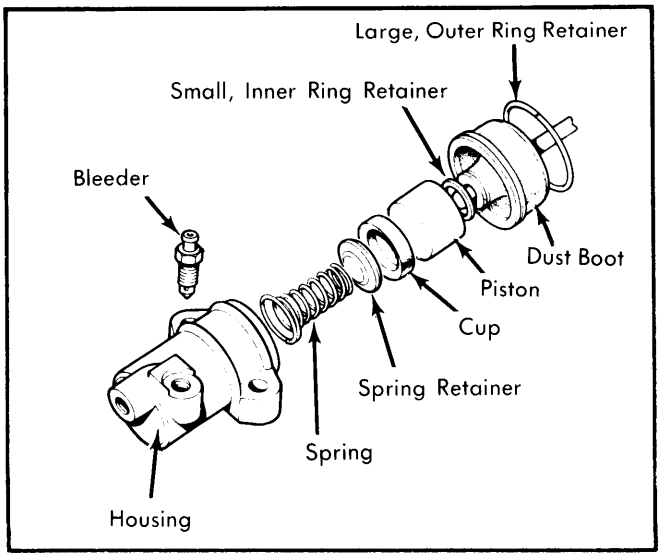

Fig. 4 Exploded View of MGB Clutch Slave Cylinder

Reassembly – Reverse removal procedure, noting the following: Install bleeder screw last, after checking that orifice is not blocked. Use a new cup seal.

ADJUSTMENT

HYDRAULIC BLEEDING

1) Fill master cylinder. Attach bleed tube to bleed valve on slave cylinder. Submerge free end of tube in container of brake fluid.

2) Slowly depress pedal to force air out. Close bleed valve and let pedal rise unassisted. Check that fluid level does not drop too low, and repeat until no more bubbles of air are visible.