

## MAZDA 626, RX7 &amp; B2000 PICKUP

## DESCRIPTION

Clutch is a dry, single disc, diaphragm spring type. Clutch system is hydraulic using a firewall mounted master cylinder and a slave cylinder attached to clutch housing. Release bearing is pre-lubricated and sealed.

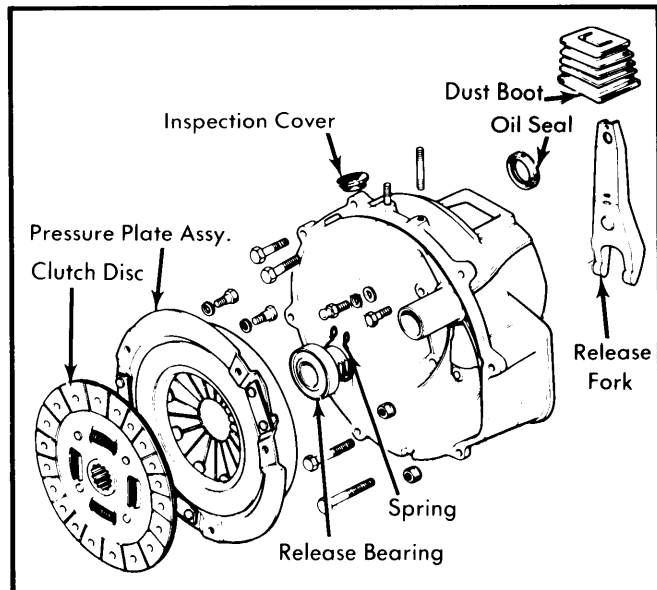


Fig. 1 Exploded View of Mazda Clutch Assembly

## REMOVAL &amp; INSTALLATION

## CLUTCH ASSEMBLY

**Removal** — 1) Disconnect negative battery cable. Place gearshift lever in neutral and remove gearshift knob. Remove console box (if equipped). Remove gearshift lever dust boot, retainer (if equipped) and gearshift lever. B2000 gearshift lever components include wave washer, shim and bushing. On RX7, remove air cleaner.

2) On all vehicles, raise and support vehicle and drain transmission. Disconnect and remove propeller shaft. Disconnect and/or remove under covers and exhaust and emission control components as required. Remove clutch slave cylinder and place out of the way without removing fluid line. Disconnect and remove starter, speedometer cable, back-up lights and other electrical connections.

3) Place jack under rear end of engine, protecting oil pan with wooden block. Position transmission jack under transmission and remove transmission-to-engine mounting bolts. If equipped, remove transmission-to-crossmember bolts, crossmember-to-frame bolts and crossmember.

4) Slide transmission back until input shaft is cleared and remove from vehicle. Install flywheel holding tool and loosen pressure plate mounting bolts evenly until assembly can be removed. Separate clutch disc and pressure plate. Remove release bearing and fork.

**Installation** — To install, reverse removal procedure and note: Lightly coat input shaft splines with grease and use clutch alignment tool to center clutch assembly. Clutch cover and flywheel "O" alignment marks must be aligned at installation.

## CLUTCH MASTER CYLINDER

**Removal & Installation** — Disconnect hydraulic line from master cylinder. Remove nuts mounting cylinder to firewall. Unhook clutch pedal from cylinder push rod. Remove cylinder. To install, reverse removal procedure and bleed hydraulic system.

## CLUTCH SLAVE CYLINDER

**Removal & Installation** — Raise vehicle and support. Disconnect fluid hose. Remove nuts mounting slave cylinder to clutch housing and slide off cylinder. To install, reverse removal procedure and bleed clutch.

## PILOT BEARING

**RX7** — Remove bearing and seals with slide hammer (49 1285 071 or equivalent). Use driver (49 0823 72A or equivalent) to install new bearing. Apply multipurpose grease and install seal.

**All Other Models** — Pilot bearing is pressed into flywheel. To replace, remove flywheel and using arbor press and driver, press old bearing out and new bearing in. Lubricate with multipurpose grease.

## OVERHAUL

## CLUTCH MASTER CYLINDER

**NOTE** — Master cylinder used on B2000 has different external appearance. Disassembly procedure is identical.

**Disassembly** — 1) Clean outer portion of cylinder. Remove reservoir cap assembly and drain brake fluid. Remove reservoir connector link and reservoir. Remove piston stop ring, washer and piston assembly. Separate piston, cups and return spring.

2) Clean all parts in alcohol or brake fluid and blow dry with compressed air. Check all parts for wear, damage or deformation.

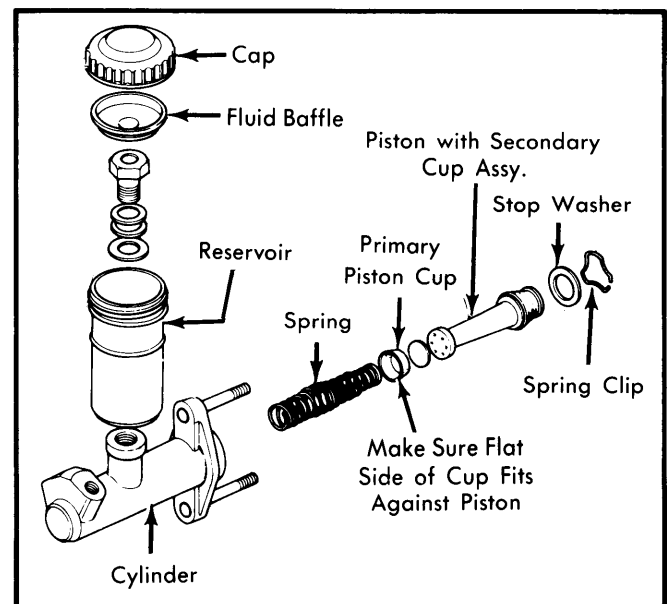


Fig. 2 Exploded View of Clutch Master Cylinder

## MAZDA 626, RX7 & B2000 PICKUP (Cont.)

tion. If cylinder bore-to-piston clearance exceeds .006" (.15 mm), replace defective part. Replace parts as required and coat all components with brake fluid before assembly.

**Reassembly** — Reverse disassembly procedure and note: Install primary cup with flat side of cup against piston and ensure compensating port is open. After assembly, fill reservoir with clean brake fluid and operate piston with screwdriver until fluid is ejected at outlet port.

### CLUTCH SLAVE CYLINDER

1) Clean outside of cylinder. Remove dust boot and release rod. Remove piston and cup assembly from cylinder, using compressed air if required. Remove spring, bleeder screw and valve. Clean all parts in brake fluid or alcohol and dry with compressed air.

2) Check all parts for wear or damage. If cylinder bore-to-piston clearance exceeds .006" (.15 mm), replace piston or cylinder. To reassemble, reverse disassembly procedure.

**NOTE** -- Before assembly, coat pistons and cups with clean hydraulic fluid.

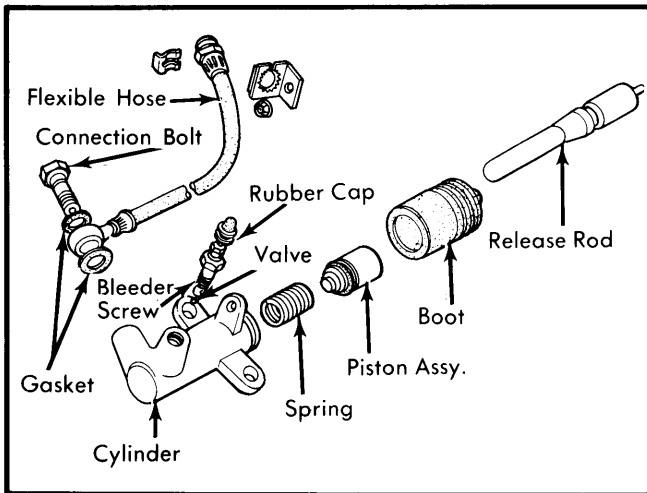


Fig. 3 Exploded View of Typical Slave Cylinder

### ADJUSTMENTS

#### CLUTCH PEDAL FREE PLAY

Adjust clutch pedal free play (measured at pedal pad) to .02-.12" (0.6-3.0 mm) by loosening lock nut and turning pedal stopper bolt. Tighten lock nut. When free play is correct, pedal

height should be 7.5-7.7" (190-195 mm) on RX7, 7.6-7.8" (193-198 mm) on 626 and 8.5-8.7" (215-220 mm) on B2000 models.

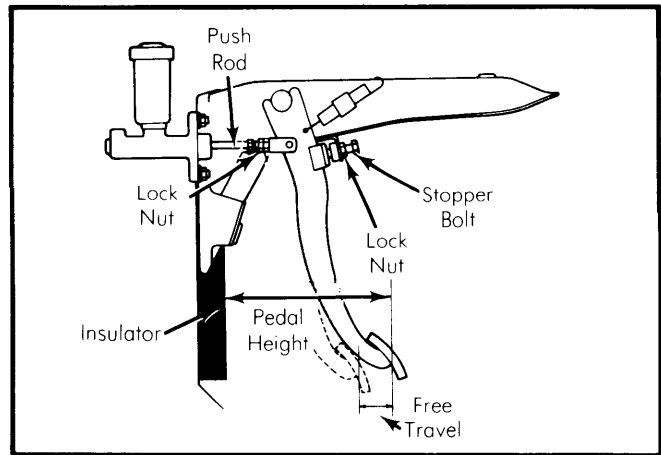


Fig. 4 Clutch Adjustment Locations

### HYDRAULIC SYSTEM BLEEDING

1) Clutch hydraulic system must be bled whenever a fluid line has been disconnected or air has entered system. To bleed system, remove bleed screw cap at slave cylinder and attach a hose. Place opposite end in a jar partially filled with brake fluid. Check master cylinder fluid reservoir often during bleeding process and maintain level at 3/4 full.

2) Open bleed screw, depress clutch pedal and allow pedal to return slowly. Continue operation until no air bubbles are seen in discharged fluid. Close bleeder screw, remove hose and attach dust cap to bleed screw.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (N·m)
Flywheel-to-Crankshaft (Piston Engines)	112-117 (152-159)
Flywheel-to-Eccentric Shaft (Rotary Engines)	289-362 (393-492)
Clutch-to-Flywheel	13-20 (18-27)