MAZDA 626, RX7 & 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.

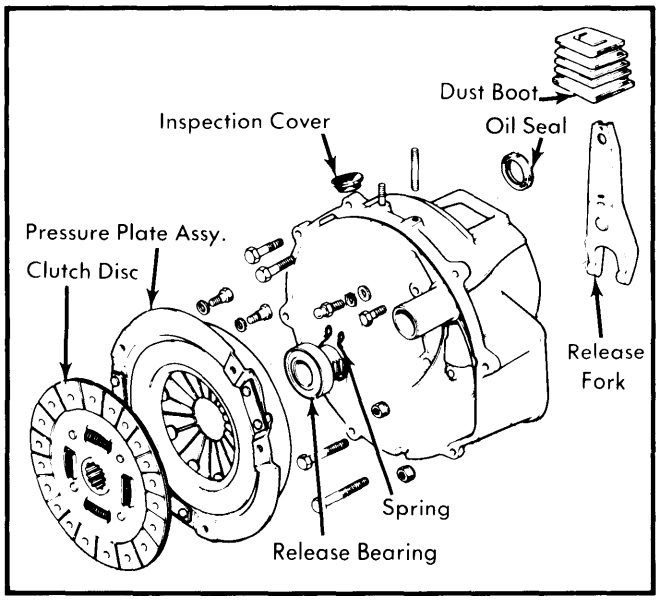

Fig. 1 Exploded View of Mazda Clutch Assembly

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

Removal – 1) Disconnect negative battery cable. Place gearshift lever in neutral and remove gear shift knob. Remove console box or insert (if equipped). Remove gearshift lever dust boot, retainer (if equipped) and gearshift lever. B2000 gearshift lever components include wave washer, shim and bushing.

2) Raise and support vehicle; drain transmission. Disconnect and remove propeller shaft. Disconnect and/or remove exhaust and emission control components as required. Remove clutch release cylinder and place out of way without disconnecting 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

Rotary Engine Models – Remove nut mounting flywheel to eccentric shaft. Free flywheel from shaft. It may be necessary to use puller to remove flywheel. Use a slide hammer (49 1285 071) to remove bearing and seals. Use installer tool 49 0823 72A (or equivalent) to seat new bearing into place. Install seal.

Piston Engine Models – Pilot bearing is pressed into flywheel. If replacement is required, remove using a suitable puller. To install lubricate bearing with grease and install into flywheel using a driver.

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 deforma-

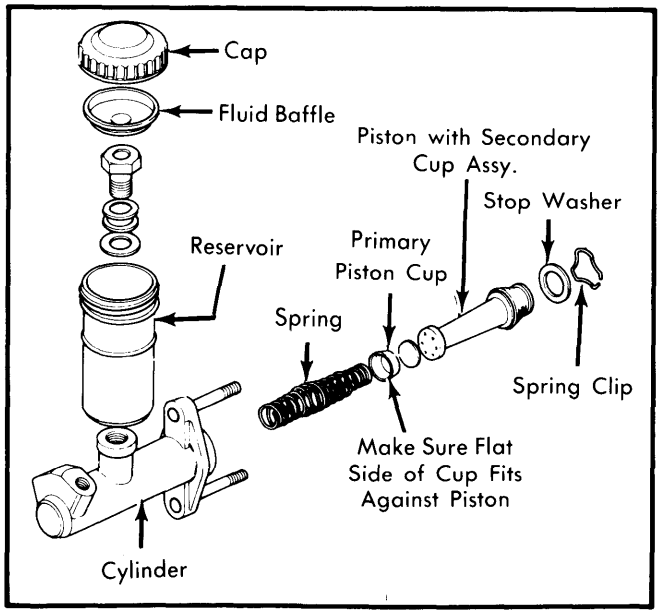

Fig. 2 Exploded View of Clutch Master Cylinder

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.

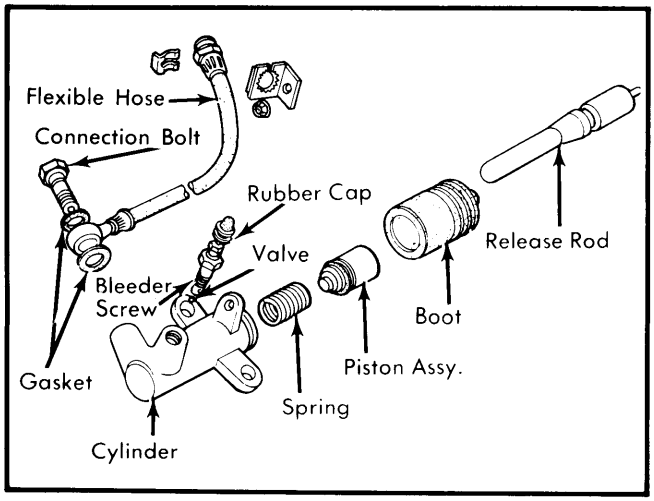

Fig. 3 Exploded View of Slave Cylinder

ADJUSTMENTS

CLUTCH PEDAL FREE PLAY

Adjust clutch pedal free play (measured at pedal pad) to .04-.12" (1-3 mm) on 626 and B2000 models, or .02-.12" (.5-3 mm) on RX7 models, by loosening lock nut and turning pedal stopper bolt to correct specifications. 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.

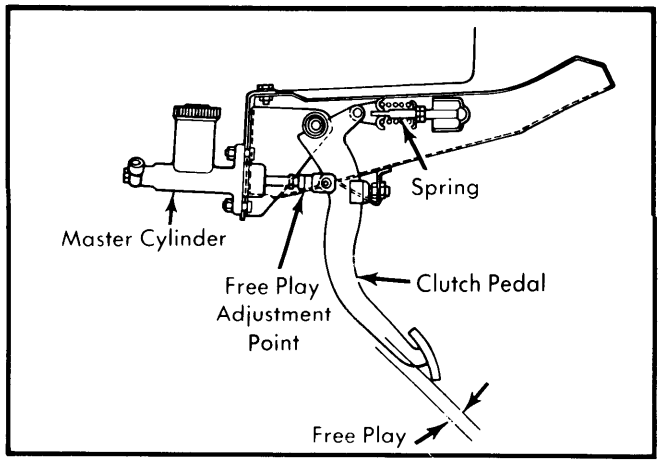

Fig. 4 Clutch Pedal Free Play Adjustment Location

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. (mkg)
Flywheel-to-Crankshaft (Piston Engines)	112-118 (15.5-16.3)
Flywheel-to-Eccentric Shaft (Rotary Engines)	289-362 (40-50)
Clutch-to-Flywheel	13-20 (1.8-2.7)