

## DATSUN

B210  
280Z  
610  
710  
Pickup

## DESCRIPTION

Clutch is dry, single disc type. All models use a diaphragm spring type pressure plate and a prelubricated clutch release bearing. Clutch is operated by a firewall mounted master cylinder and a clutch housing mounted slave cylinder. All models use a nonadjustable slave cylinder assembly.

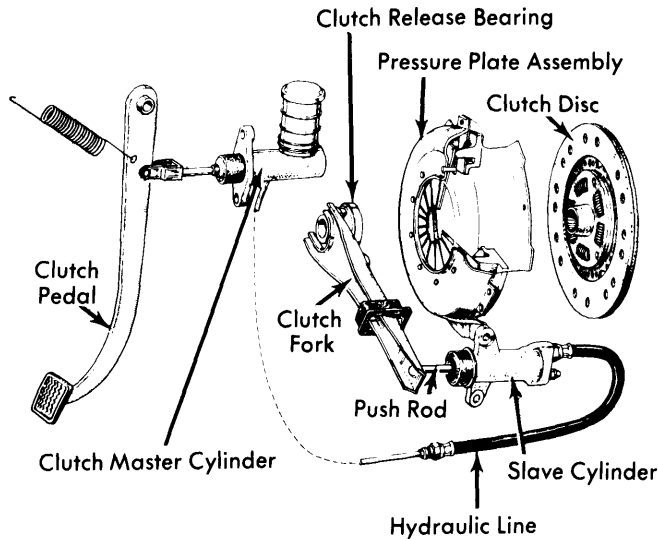


Fig. 1 Datsun Hydraulic Clutch System Components

## REMOVAL &amp; INSTALLATION

## CLUTCH ASSEMBLY

1) Disconnect battery ground cable. On 610 and 710 models only, remove CAT converter harness protector. Remove console assembly, if equipped, and place transmission lever in neutral. On 280Z models only, disconnect accelerator control arm linkage. Disconnect shifter assembly from inside driver's compartment. Raise vehicle, using a suitable hoist and appropriately place jack stands. Disconnect exhaust pipe at manifold and move out of way. On 610 and 710 Calif models only, remove lower CAT converter housing and disconnect exhaust pipe at manifold.

2) Disconnect speedometer cable and electrical wires from transmission. On B210, 280Z and Pickup models only, remove clutch slave cylinder from transmission case, but do not disconnect hydraulic line. Remove propeller shaft and plug opening at rear extension housing. On B210 models only, center bearing bracket must be removed from third member before removing propeller shaft.

3) Suitably support engine with jack stand and wood block. Support transmission with proper jack and remove nuts and bolts securing transmission to crossmember; slide out crossmember. Slightly lower transmission and remove starter. Disconnect and withdraw bolts mounting transmission to engine. Carefully pull transmission rearward until clear. Remove clutch bolts by loosening alternately and evenly one turn at a time, and remove clutch assembly.

4) To install clutch assembly, reverse removal procedure and note the following: Lubricate clutch disc splines with a small amount of multipurpose grease. Use a suitable clutch aligning tool to center disc on flywheel. Install pressure plate to flywheel, aligning holes in cover with dowels on flywheel. Adjust linkage, refill transmission, and bleed hydraulic system if necessary.

## CLUTCH MASTER CYLINDER

**Removal & Installation** – Disconnect master cylinder push rod at clevis. Disconnect hydraulic line to slave cylinder. Remove cylinder attaching bolts and remove cylinder from firewall. To install, reverse removal procedure, bleed hydraulic system and adjust clutch pedal height.

## CLUTCH SLAVE CYLINDER

**Removal & Installation** – Remove clutch fork return spring (if equipped). Disconnect hydraulic line from cylinder, remove bolts attaching cylinder to clutch housing, and remove slave cylinder. To install, reverse removal procedure and bleed hydraulic system.

## CLUTCH RELEASE BEARING &amp; LEVER

**Removal** – With transmission removed from vehicle, remove dust boot from clutch housing. Disconnect release lever retaining spring or return spring, as required, and retaining clips holding release bearing to lever. Remove bearing and lever through front of clutch housing. Remove bearing from collar using a puller.

**Installation** – To install, reverse removal procedure and note the following: Apply multi-purpose grease to inside surface of bearing collar, release bearing contact points, release bearing, ball pin in clutch housing, and ball contact points on release lever.

## OVERHAUL

## CLUTCH MASTER CYLINDER

1) With master cylinder removed, remove filler cap and drain brake fluid. Pull back dust boot and remove snap ring. Remove stopper, push rod and piston assembly. Remove spring seat from piston and take off piston cup. Thoroughly clean all components in brake fluid.

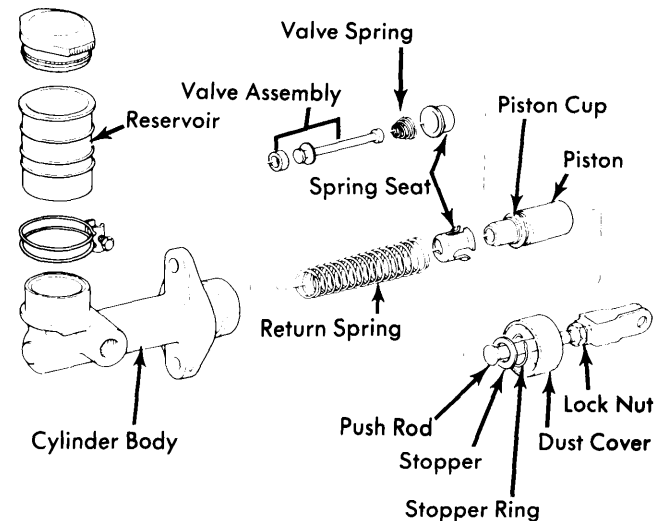


Fig. 2 Exploded View of Clutch Master Cylinder Assembly

## DATSUN (Cont.)

- 2) Inspect all parts for wear or damage. If clearance between cylinder and piston exceeds .006", replace master cylinder. Replace piston cup any time master cylinder is disassembled.
- 3) Lubricate all parts with clean brake fluid before assembly. To assemble, reverse disassembly procedures.

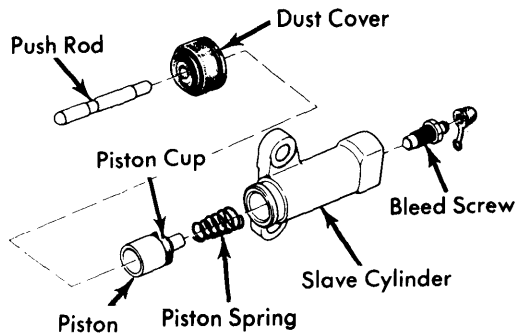


Fig. 3 Exploded View of Clutch Slave Cylinder Assembly (All Exc. B210 Models)

### CLUTCH SLAVE CYLINDER

- 1) With slave cylinder removed, take out push rod along with dust boot. Remove entire piston assembly and piston spring. Remove bleed screw.
- 2) Visually inspect all parts and replace those determined un-useable. To assemble, reverse disassembly procedure noting the following: Dip all components in clean brake fluid and ensure cup is installed in correct direction.

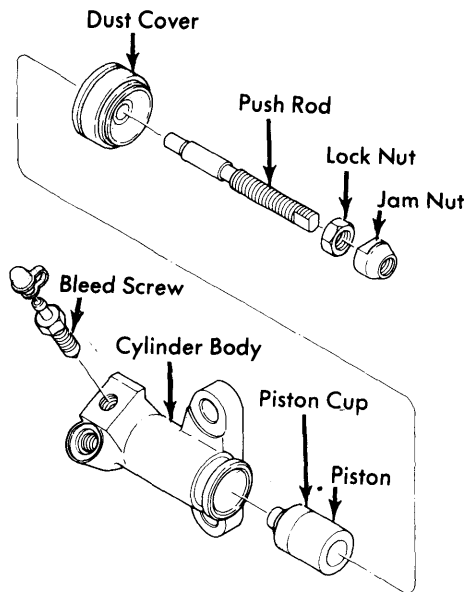


Fig. 4 Exploded View of Clutch Slave Cylinder Assembly (B210 Models)

### ADJUSTMENT

#### PEDAL HEIGHT & FREE PLAY

**280Z** — Adjust pedal head height to 8.90" (226 mm) by rotating the master cylinder push rod to obtain desired length. Adjust pedal height to 8.78" (223 mm) by screwing the pedal stopper; tighten lock nut. These adjustments will correspond with .071-.173" (1.8-4.4 mm) free play.

**All Others** — Adjust clutch pedal height to specification "A" by turning pedal stopper adjusting nut in or out; tighten lock nut. Adjust pedal free play to specification "B" by turning clutch master cylinder rod in or out.

#### Pedal Height Specifications

Application	A Height In. (mm)	B Free Play In. (mm)
B210 .....	6.02-6.26 (153-159)	.039-.118 (1-3)
610 & 710 .....	7.08 (180)	.039-.197 (1-5)
Pickup .....	6.02 (153)	.039-.118 (1-3)

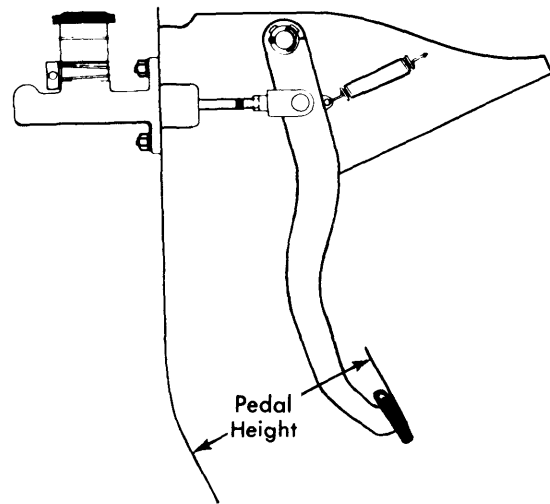


Fig. 5 Clutch Pedal Height Measuring Point

### CLUTCH FORK FREE PLAY

**NOTE** — All models use automatic wear adjuster type slave cylinders; no adjustment is required.

### HYDRAULIC SYSTEM BLEEDING

- 1) Remove dust cap from slave cylinder bleed plug. Check fluid level in master cylinder, fill as necessary. Open bleed plug approximately 3/4 turn.
- 2) Attach a tube to slave cylinder bleed plug, and place opposite end of tube in a container half-full of brake fluid. Push clutch pedal to bottom of travel.
- 3) With pedal down, tighten bleed plug. Continue operation until air bubbles are no longer seen in container. Close bleed plug on a downward stroke of pedal. Install dust cap and adjust fluid level in master cylinder.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Clutch-to-Flywheel .....	11-16 (1.5-2.2)
Engine-to-Transmission	
B210 .....	12-16 (1.6-2.2)
610 .....	29-35 (4.0-4.8)
620 .....	30-36 (4.0-5.0)
710 .....	29-35 (4.0-4.8)
280Z .....	32-43 (4.4-5.9)