

DATSUN EXCEPT F10

B210
200SX
280Z
510
810
Pickup

DESCRIPTION

Clutch is dry, single disc type. All models use a diaphragm spring type pressure plate and pre-lubricated clutch release bearing. Clutch is operated by a firewall mounted master cylinder and a clutch housing mounted slave cylinder. All models except B210 with 5-speed transmission have non-adjustable slave cylinder assembly.

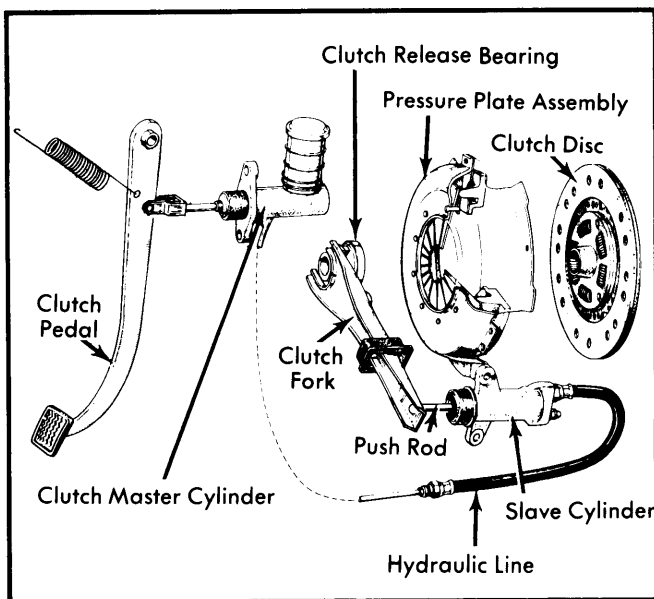


Fig. 1 View of Typical Datsun Clutch System – Note Some Models have Different Clutch Release Forks and Others Have Different Slave Cylinder Configurations

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

NOTE – Removal procedure is general. Not all steps apply to each model.

- 1) Disconnect ground cable at battery.
- 2) Remove console box.
- 3) Place transmission shift lever in Neutral.
- 4) On 280Z, disconnect accelerator linkage.
- 5) Remove snap ring (nut on B210) and shift lever pin, then pull out lever.
- 6) Raise vehicle and support on safety stands.
- 7) Disconnect exhaust pipe at manifold.

8) On 280Z and 200SX, remove bolts mounting exhaust pipe bracket to extension housing (280Z) or engine rear crossmember (200SX).

9) Disconnect back-up lights, transmission controlled spark (200SX), and speedometer cable.

10) Remove slave cylinder.

11) Remove exhaust pipe insulator and lay over on exhaust pipe.

12) On models so equipped, separate center support bearing from crossmember.

13) Index mark, disconnect, and remove propeller shaft.

14) Support engine.

15) Place appropriate jack under transmission.

16) Remove transmission rear crossmember.

17) Remove starter. Remove bolts mounting transmission to engine. With transmission supported, slide rearward until input shaft is cleared, then remove from vehicle.

18) Loosen bolts attaching pressure plate to flywheel. Use a criss-cross pattern to loosen bolts. Also, loosen bolts evenly until spring pressure is relieved.

Installation – To install, reverse removal procedure and note:

- Lubricate clutch disc splines with small amount of multipurpose grease.
- Slip clutch assembly over guide dowels.
- Use clutch aligning tool to center disc and pressure plate.
- Adjust linkage.
- Refill transmission, if necessary.
- Bleed clutch hydraulic system if it was opened.

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 & 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.

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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.

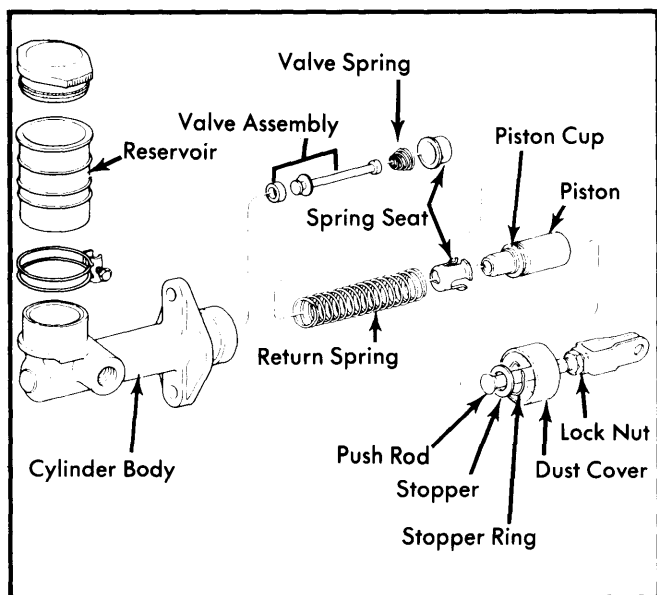


Fig. 2 Exploded View of Clutch Master Cylinder

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.

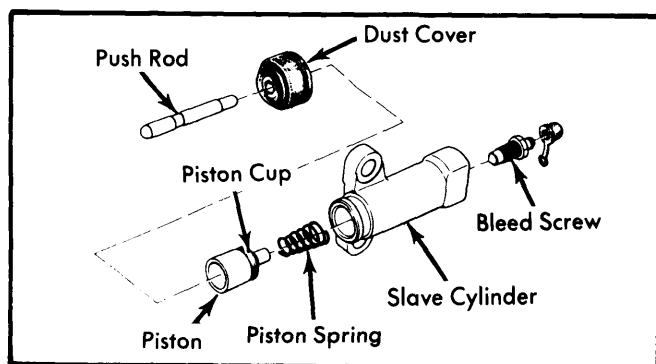


Fig. 3 Exploded View of Clutch Slave Cylinder Assembly — (Except B210 4-Speed)

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.

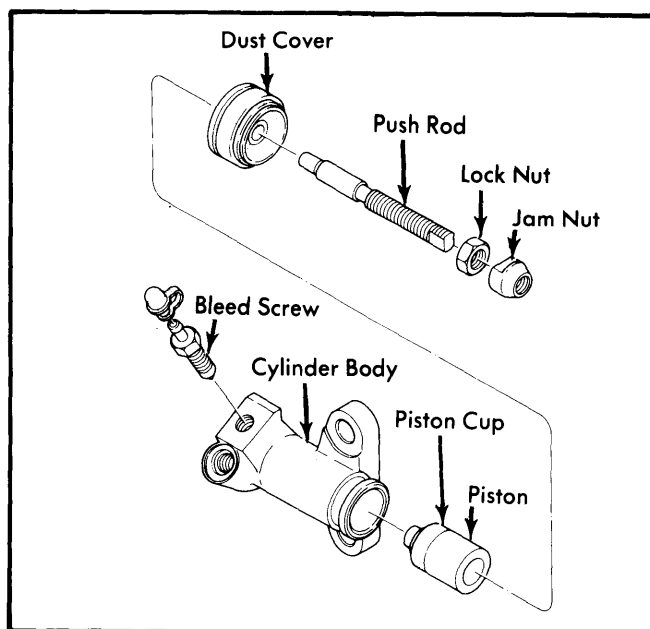


Fig. 4 Exploded View of Clutch Slave Cylinder (B210 Models Shown)

ADJUSTMENT

PEDAL HEIGHT & FREE PLAY

Adjust clutch pedal height to specification by turning pedal stopper adjusting nut in or out. Tighten lock nut. Adjust pedal free play to .039-.197" (1-5 mm) by turning clutch master cylinder push rod in or out.

Pedal Height Specifications

Application	Height In. (mm)
B210	6.02-6.26 (153-159)
200SX	7.36-7.59 (187-193)
280Z	8.78 (223)
510	6.34-6.57 (161-167)
810	6.90 (175.5)
Pickup	6.42 (163)

Clutches

DATSUN EXCEPT F10 (Cont.)

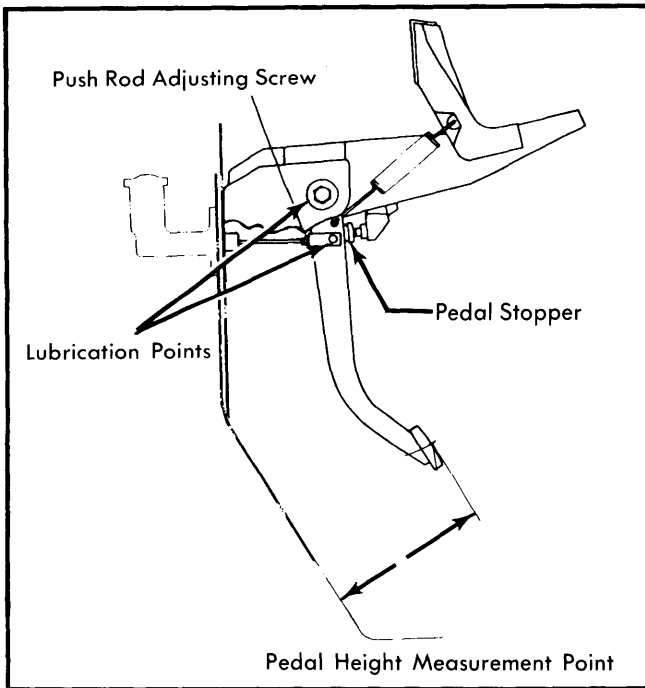


Fig. 5 Clutch Pedal Height and Free Play Adjustment Locations – All Models Similar

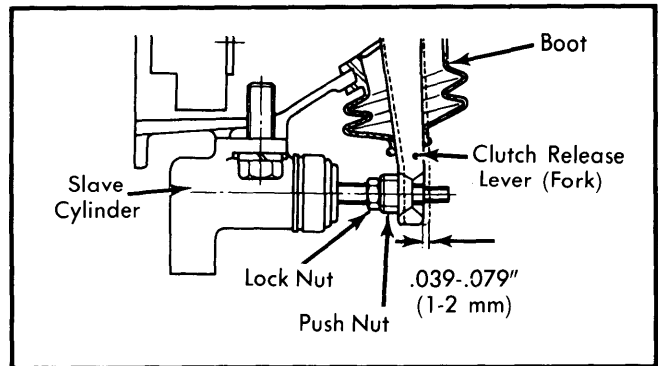


Fig. 6 Clutch Fork Free Play Adjustment Locations for Datsun B210

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.

CLUTCH FORK FREE PLAY

- 1) Loosen lock nut and push nut. See Fig. 6.
- 2) Turn push rod until release bearing lightly touches clutch diaphragm spring.
- 3) Turn rod back (opposite direction) about 1 1/4 turns. This provides about .039-.079" (1-2 mm) clearance between push nut and lever.
- 4) Tighten lock nut.
- 5) Work clutch pedal several times. Recheck pedal free play.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Clutch-to-Flywheel	11-16 (1.5-2.2)
Engine-to-Transmission	
B210	
4-Speed	12-16 (1.6-2.2)
5-Speed & 200SX	27-36 (3.7-5.0)
280Z, 810, Pickup	32-43 (4.4-5.9)
All Others	32-43 (4.4-5.9)
Slave Cylinder-to-Clutch Housing	
280Z & 510	18-25 (2.5-3.5)
Pickup	18-22 (2.5-3.0)
All Others	22-30 (3.1-4.1)