

DATSUN EXCEPT F10

B210
200SX
280Z
710
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 have non-adjustable slave cylinder assembly.

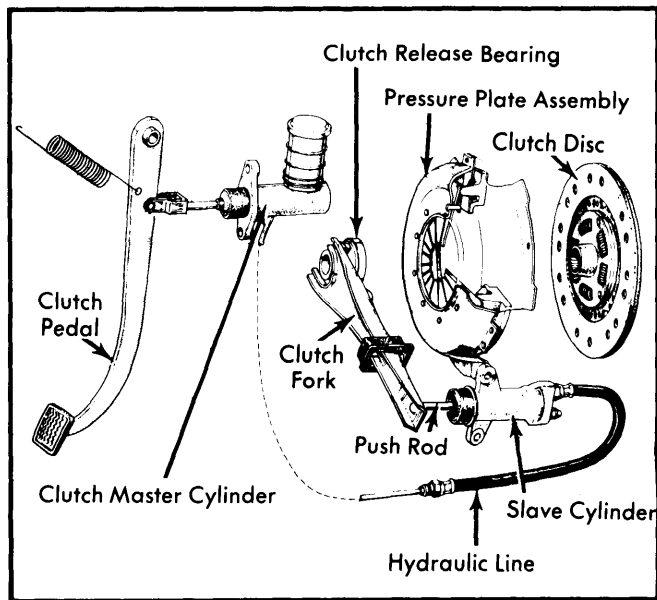


Fig. 1 View of Typical Datsun Clutch System – Note Some Models have Different Clutch Release Forks and Others Have Different Slave Cylinder Configurations

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

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

- 1) Disconnect battery ground.
- 2) Remove console. Place gear shift lever in "N". Disconnect shift lever.
- 3) On 280Z models only, disconnect accelerator linkage.
- 4) Raise vehicle and place on safety stands.
- 5) Disconnect front exhaust pipe from exhaust manifold. It may be necessary to remove entire pipe on some models.
- 6) On 710, California models only, remove lower CAT shield before disconnecting front exhaust pipe.
- 7) Disconnect speedometer cable.

- 8) Disconnect electrical leads from transmission.
- 9) Remove slave cylinder from clutch housing.
- 10) On 280Z models only, remove insulator mounting bolts and place insulator on exhaust pipe.
- 11) Remove propeller shaft.
- 12) Support engine under oil pan with a jack and block of wood.
- 13) Support transmission with an adjustable jack.
- 14) On California, Pickup models only, separate exhaust pipe bracket from mounting.
- 15) Remove nut mounting rear crossmember-to-rubber bushing.
- 16) Remove bolts mounting rear crossmember-to-body.
- 17) Remove starter.
- 18) Remove bolts securing transmission-to-engine.
- 19) Slide transmission back until clear and lower on jack until it can be removed.
- 20) Loosen bolts attaching pressure plate to flywheel. Use a criss-cross loosening pattern.

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.

DATSUN EXCEPT F10 (Cont.)

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.

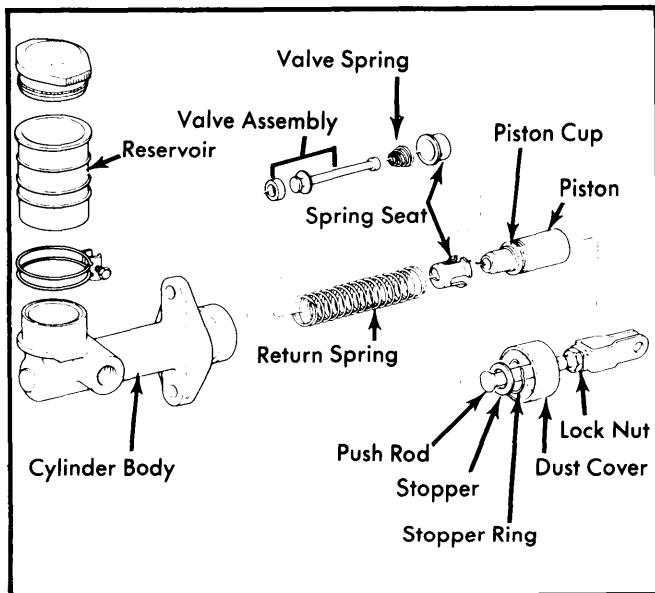


Fig. 2 Exploded View of Clutch Master Cylinder

- 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.

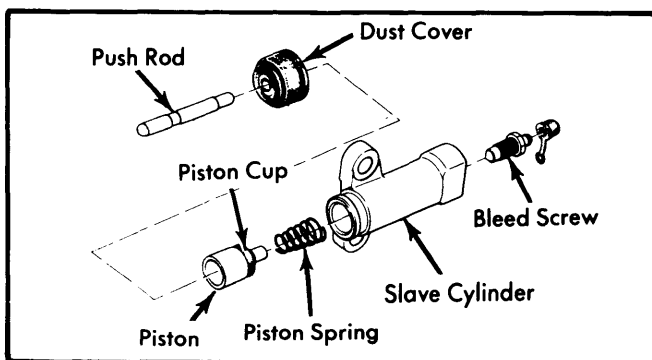


Fig. 3 Exploded View of Clutch Slave Cylinder Assembly — (Except B210 Models)

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.

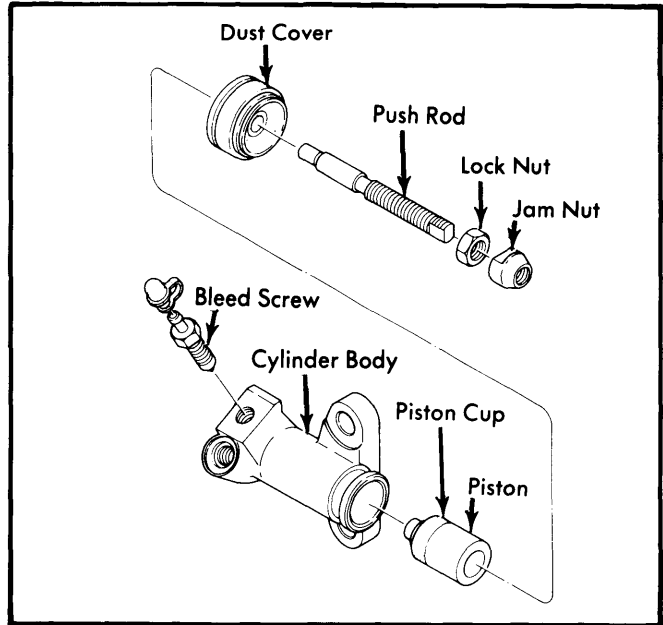


Fig. 4 Exploded View of Clutch Slave Cylinder (B210 Models Shown)

ADJUSTMENT

PEDAL HEIGHT & FREE PLAY

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" (clearance between clevis pin and clutch pedal) by turning clutch master cylinder rod in or out.

Pedal Height; Free Play Specifications

Application	"A" Height In. (mm)	"B" Free Play In. (mm)
B210.....	6.02-6.26 (153-159)	.039-.118 (1-3)
200SX	7.36-7.6 (187-193)	.039-.118 (1-3)
280Z.....	8.78 (223)	.039-.118 (1-3)
710.....	7.08 (180)	.039-.197 (1-5)
810.....	6.9 (175.5)	.039-.197 (1-5)
Pickup	6.02 (153)	.039-.118 (1-3)

Clutches

DATSUN EXCEPT F10 (Cont.)

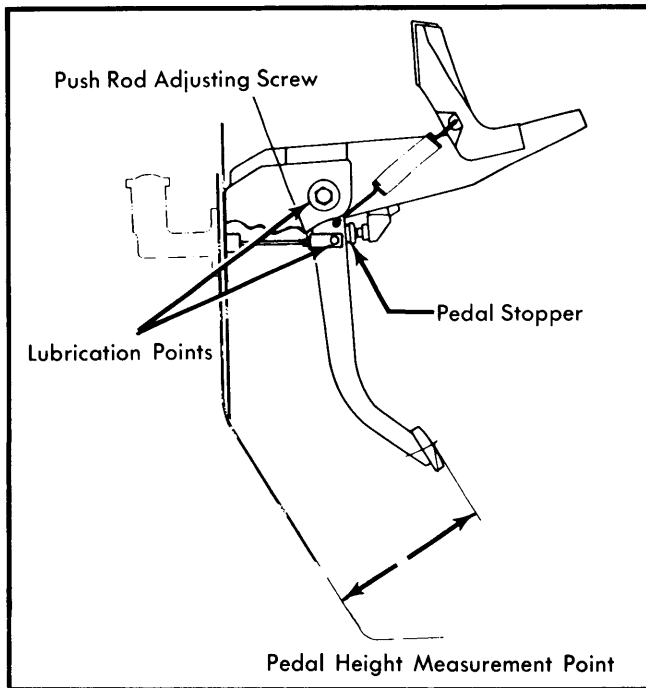


Fig. 5 Clutch Pedal Height and Free Play Adjustment Locations – All Models Similar

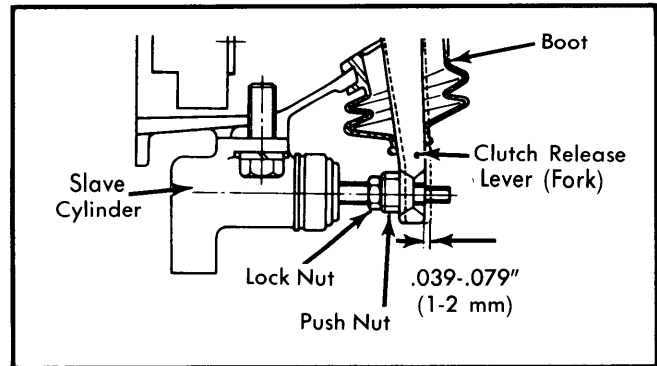


Fig. 6 Clutch Fork Free Play Adjustment Locations for Datsun B210

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)
710	29-36 (4.0-4.8)
Slave Cylinder-to-Clutch Housing	
280Z	18-25 (2.5-3.5)
Pickup	18-22 (2.5-3.0)
All Others	22-30 (3.1-4.1)