

1971-73 VOLKSWAGEN TYPE 4

TYPE 4

Fastback Sedan (1971-73)
Squareback Sedan (1971-73)

DESCRIPTION

Clutch is a dry, single disc, diaphragm spring type. Clutch is engaged or disengaged hydraulically. A pre-lubricated clutch release bearing is also employed.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

- 1) Engine must be removed to gain access to clutch. See appropriate article in ENGINE Section. With engine removed, compress clutch with a suitable tool (VW657).
- 2) Install a suitable tool (VW215C) on crankcase to prevent flywheel from turning. Mark position of clutch on flywheel for installation and remove clutch assembly.
- 3) To install clutch assembly, reverse removal procedure. Make sure friction surface on flywheel is clean and apply grease to pilot bearing in crankshaft.
- 4) Align clutch disc with a suitable pilot shaft, install clutch cover and tighten bolts to specification.

CLUTCH MASTER CYLINDER

- 1) Remove front floor covering. Remove clutch master cylinder reservoir cap and syphon all hydraulic fluid out of reservoir. Carefully pull reservoir line out of sealing plug.
- 2) Disconnect line to slave cylinder from master cylinder. Remove master cylinder mounting bolts and remove master cylinder toward drivers seat.
- 3) Position master cylinder in mount and tighten bolts to specification. Check, and if necessary adjust clutch pedal free play. See *Clutch Pedal Free Play*.
- 4) Moisten sealing plug with brake fluid and insert tube from reservoir. Connect and tighten line to slave cylinder. Bleed clutch hydraulic system. See *Hydraulic System Bleeding*.

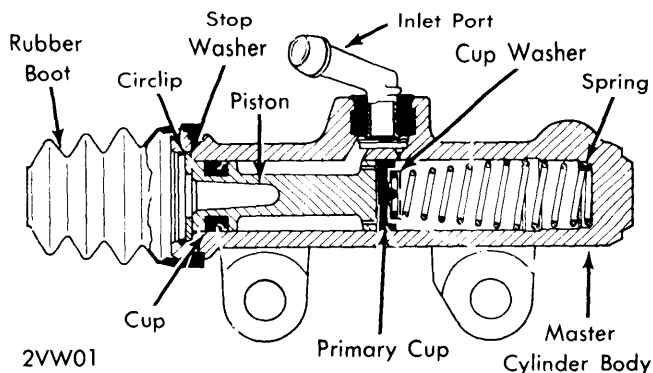
SLAVE CYLINDER

- 1) Disconnect line from master cylinder. Remove slave cylinder mounting nuts and remove slave cylinder.
- 2) To install slave cylinder, insert in position and tighten retaining nuts evenly. Connect pressure line and bleed hydraulic system. See *Hydraulic System Bleeding*.

OVERHAUL

CLUTCH MASTER CYLINDER

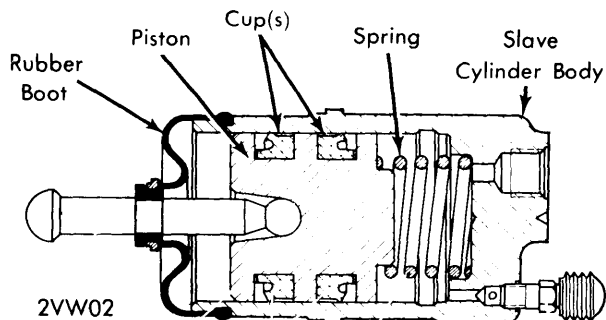
- 1) Remove master cylinder as previously outlined. Pull off rubber boot and remove circlip. Withdraw washer, piston with cup, washer primary cup and spring.
- 2) Thoroughly clean all components in methylated alcohol or brake fluid. Inspect all components for wear or damage. Make sure compensating port in master cylinder body is open.
- 3) If piston or cylinder is worn, complete master cylinder must be replaced. Install secondary cup on piston and reverse disassembly procedure to assemble master cylinder.



CLUTCH MASTER CYLINDER COMPONENTS

SLAVE CYLINDER

- 1) Remove rubber boot and withdraw piston and spring. Remove bleeder plug from slave cylinder body. Thoroughly clean all components in methylated alcohol or brake fluid.
- 2) Two different types of slave cylinders are employed. One utilizes a single cup on piston and the other type utilizes two cups on piston. To assembly slave cylinder, reverse disassembly procedure.

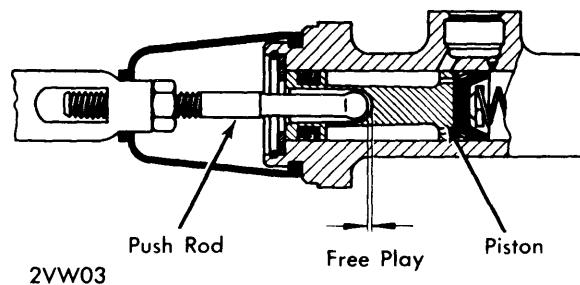


SLAVE CYLINDER COMPONENTS (TYPICAL)

ADJUSTMENT

CLUTCH MASTER CYLINDER PUSH ROD FREE PLAY

- 1) To ensure that master cylinder piston returns fully to stop, the correct free play between piston and push rod must be obtained.



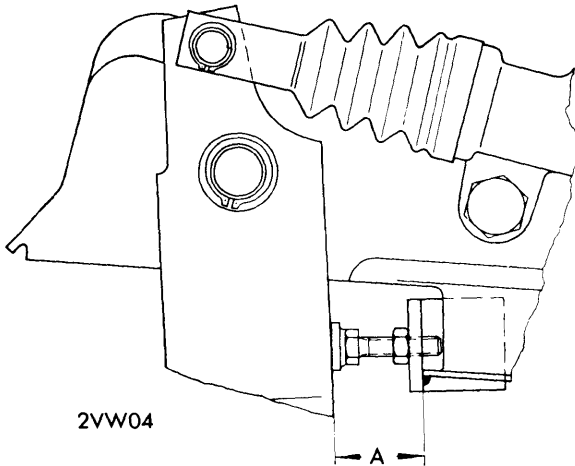
CLUTCH MASTER CYLINDER
PUSH ROD FREE PLAY

Clutches

1971-73 VOLKSWAGEN TYPE 4 (Cont.)

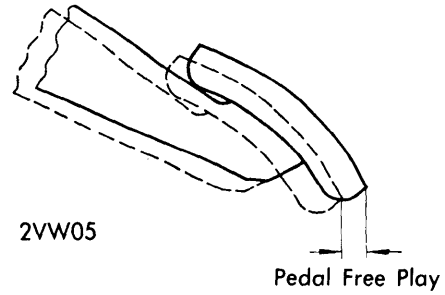
2) Push rod-to-piston free play is obtained by adjusting pedal free play. Back off push rod lock nut and shorten push rod slightly.

3) Remove rubber cap from pedal stop bolt and adjust distance **A** to .89" (23 mm), see illustration. Reinstall rubber cap on stop bolt.



PEDAL STOP BOLT MEASURING POINT

4) Adjust push rod until .118-.157" (3.0-4.0 mm) pedal free play is obtained (see illustration). Tighten push rod lock nut and reinstall rubber boot.



PEDAL FREE PLAY

HYDRAULIC SYSTEM BLEEDING

- 1) Make sure that master cylinder reservoir is full. At no time during bleeding procedure should master cylinder become empty.
- 2) Install a hose on slave cylinder bleeder plug and insert opposite end of hose in a container half full of fluid. Pump pedal several times to pressurize system.
- 3) With pressure on pedal, open bleeder plug until pedal is depressed. Close bleeder plug while pedal is depressed. Continue procedure until fluid coming from slave cylinder is free of air bubbles. Check reservoir fluid level.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Clutch Master Cylinder-to-Mount.....	29-33 (4.0-4.3)
Clutch Slave Cylinder-to-Mount.....	14 (2.0)
Clutch Cover-to-Flywheel.....	18 (2.5)