

## VOLKSWAGEN TYPE 1 &amp; 2

Type 1  
Type 2

## DESCRIPTION

Clutch is dry, single disc, diaphragm spring type. Clutch operation is mechanical through cable actuation. A prelubricated clutch release bearing is also used.

## REMOVAL &amp; INSTALLATION

## CLUTCH ASSEMBLY

**Removal** — Remove engine. See *Engine Removal* in *ENGINE* Section. Install suitable holding tool to prevent flywheel from turning. Index mark pressure plate and flywheel for reassembly. Loosen pressure plate mounting bolts alternately and evenly. Remove assembly.

**Installation** — Apply multi-purpose grease to pilot bearing and light oil to felt ring. Lubricate transmission input shaft with molybdenum disulphide powder. Position clutch disc against flywheel and align using a suitable centering tool. Install pressure plate and mounting bolts, tightening alternately and evenly.

## CLUTCH CABLE

**Removal (Type 1)** — Disconnect clutch cable from clutch operating lever, then withdraw rubber sleeve from guide tube and cable. Remove accelerator pedal and disconnect accelerator cable. Remove push rod lock plate and disconnect brake pedal return spring at push rod pin. Remove pedal cluster mounting bolts, pull back pedal cluster and remove clutch cable by pulling toward front of vehicle.

**Installation** — Lubricate cable with multi-purpose grease. Insert threaded end of cable in guide tube and push completely through. Install pedal assembly with cable connected. Ensure rubber boot is seated correctly on rear of guide tube, connect clutch cable lever, then lubricate and install wing nut. Reverse removal procedure to install remaining components. Adjust free play.

**Removal (Type 2)** — Disconnect cable from clutch operating lever on transmission. Pull rubber boot from guide tube and rear of cable. Pull guide tube and cable out of bracket on transmission. From under vehicle, remove pedal cover plate. Unbolt clutch pedal and remove pedal lever assembly from frame. Disconnect cable, bend up lock plate and pull out cable toward front of vehicle.

**Installation** — Lubricate cable with multi-purpose grease and install into guide tube. Connect cable to pedal, push cable through boot, and install boot onto cable guide. Lubricate and install wing nut. Reverse removal procedure to install remaining components. Adjust free play.

## CLUTCH RELEASE BEARING

**Removal** — Remove engine. On Type 2 models, pry off spring clip retainers. On all models, disengage spring clips. Remove release bearing by sliding off guide tube.

**NOTE** — Do not wash bearing in solvent or any cleaning solution.

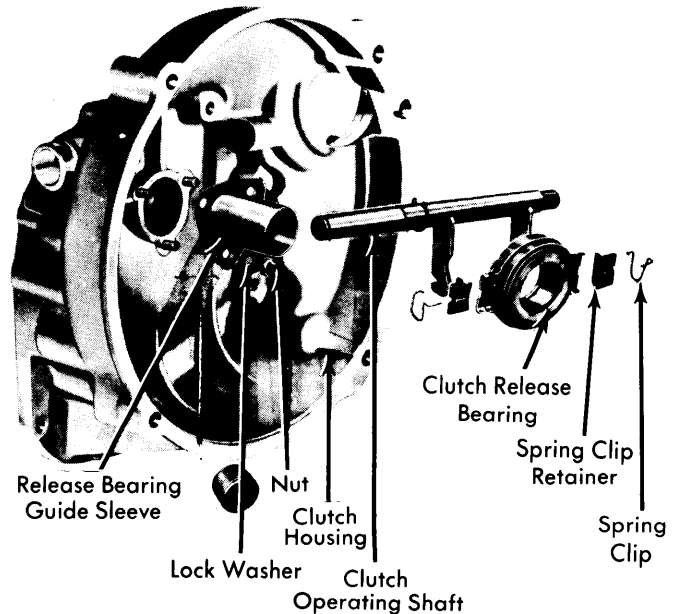


Fig. 1 Clutch Release Bearing Assembly (Type 2 Shown)

**Installation** — Roughen plastic ring with coarse emery paper and apply a light coating of molybdenum disulphide paste. Coat pivoting points between bearing and operating shaft with multi-purpose grease. Position bearing to shaft and install spring clips and retainers (Type 2). Make sure clips are correctly positioned. With engine installed, check and adjust clutch free play.

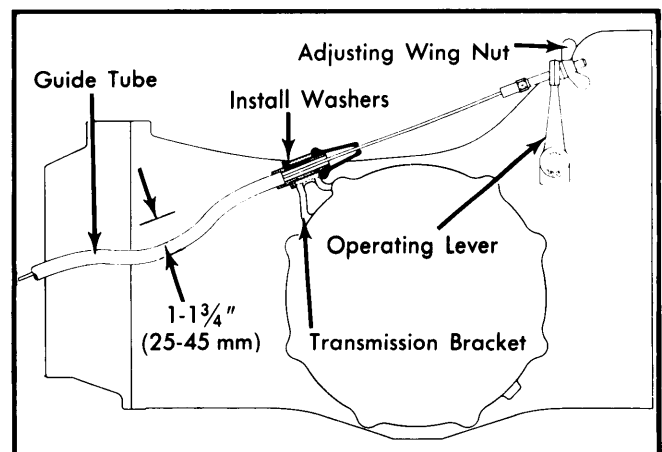


Fig. 2 Clutch Cable Measuring and Adjustment Points

## VOLKSWAGEN TYPE 1 & 2 (Cont.)

### ADJUSTMENT

#### CLUTCH ADJUSTMENT

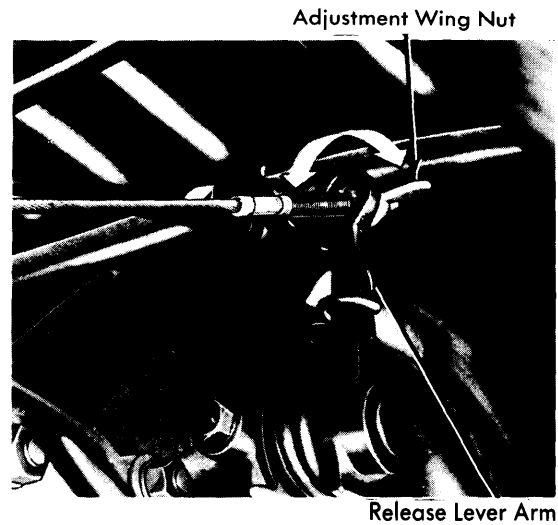
**Guide Tube** — Clutch cable guide tube should sag approximately 1-1<sup>3</sup>/<sub>4</sub>" (25-45 mm). See Fig. 2. This preload is obtained by inserting or removing washers between bracket on transmission and end piece of guide tube.

**NOTE** — If sag is greater than 1<sup>3</sup>/<sub>4</sub>" (45 mm), stiff operation and/or damage may result.

**Clutch Pedal Free Play** — 1) Clutch pedal free play should be about 3/8-3/4" (10-20 mm) for Type 1 and 5/8-1" (15-25 mm) for Type 2 models.

2) Adjust clutch free play as follows: Raise and support vehicle. Adjust wing nut located on end of clutch cable where cable attaches to release lever until there is about .063" (1.6 mm) for Type 1 or about .031" (.79 mm), for Type 2 between operating lever and wing nut. See Fig. 3. After adjustment make sure 2 lugs of wing nut engage cutouts in lever.

**NOTE** — On some replacement clutches, a white paint spot is used for a balance mark. Position mark 180° from 3/16" (5 mm) countersunk hole or 180° from white paint balance mark on flywheel.



**Fig. 3 Clutch Free Play Adjustment Point**

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Engine-to-Transmission Nuts .....	22 (3.0)
Flywheel-to-Crankshaft Bolt .....	80 (11.0)
Clutch-to-Flywheel Bolts .....	18 (2.5)