

1966-71 BMW (4 CYLINDER ENGINE) MECHANICAL CLUTCH

1600-2 (1966-71)

2000 (Up To Chassis No. 985060)

NOTE — Some 1600-2 models utilize a hydraulic system to actuate clutch. See BMW (4 Cylinder Engine) Hydraulic in this section.

DESCRIPTION

Clutch is a dry, single disc, coil spring type. Clutch is engaged or disengaged mechanically through clutch pedal, an intermediate shaft and two connecting rods. A pre-lubricated clutch release bearing is also employed.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

All Models With Longneck Transmission — 1) Pull rubber boot up shift lever. Lift up foam rubber ring and small rubber boot. Pry up spring plate, remove pivot pin and shift lever.

2) Disconnect accelerator linkage from carburetor and ground strap from transmission. Remove starter. Raise vehicle and support front and rear with safety stands.

NOTE — Front wheels must be completely off of ground.

3) Disconnect exhaust pipe at manifold, center exhaust pipe mounting bracket and remove muffler. Disconnect drive shaft from transmission and tie to parking brake cable tubes.

4) Disconnect back-up light switch and speedometer cable at transmission. Disconnect clutch fork return spring and remove push rod from intermediate shaft and clutch fork.

5) Support engine by attaching a hoist and a suitable lifting fixture (BMW 600) to engine. Separate steering idler arm from chassis and turn steering wheel fully to right.

6) Push steering linkage and idler arm assembly toward rear of vehicle as far as it will go. Turn steering wheel back easily and place idler arm on suspension strut rod.

7) Remove clutch inspection cover from transmission and bolt securing transmission to engine. Remove bolt through rubber insulator at transmission crossmember.

8) Remove crossmember and lower transmission. Attach a hoist to engine lifting fixture and raise front of engine. From chassis number 917584, air cleaner must be removed.

9) Pull transmission carefully to rear and lower to remove. Remove clutch assembly bolts alternately in a criss-cross pattern and remove clutch assembly.

10) To install, reverse removal procedure. Use a suitable pilot shaft (BMW 603) to align clutch and tighten all bolts and nuts to specifications.

1600-2 With 232 Transmission — 1) From inside drivers compartment, pull rubber boot and foam rubber ring up on gear shift lever. Remove snap ring.

2) Remove starter and disconnect exhaust pipe from manifold. Remove exhaust pipe support bracket. Remove clutch fork return spring and remove clutch fork push rod.

3) Place a wooden block between oil pan and crossmember to support engine. Remove rear transmission crossmember. Disconnect drive shaft at transmission.

4) Disconnect drive shaft center support bearing and push drive shaft to rear. Disconnect speedometer drive and back-up light switch at transmission.

5) Remove pivot pin from shift lever junction and push shift

lever up and out. Remove clutch inspection cover from transmission. Turn steering to right.

6) Remove bolts securing transmission to engine and remove transmission to rear. Remove clutch assembly bolts alternately in a criss-cross pattern and remove clutch assembly.

7) To install, reverse removal procedure. Use a suitable pilot shaft (BMW 603) to align clutch. Push drive shaft center support bearing forward .08" (2 mm) before tightening. Tighten all nuts and bolts to specifications.

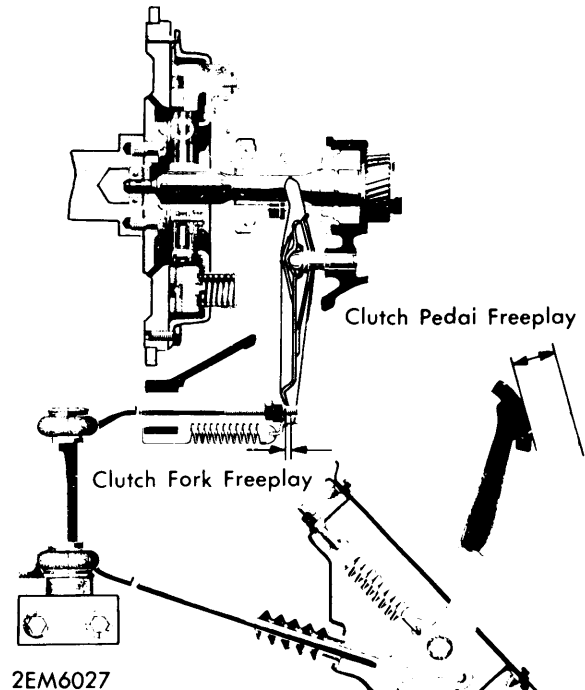
CLUTCH PILOT BEARING

With clutch removed, rotate pilot bearing in crankshaft and check for noise or roughness. If bearing is defective, pull out of crankshaft with a suitable puller. Pack new bearing with grease before installing. Install cover plate with projection facing out. Install felt washer and drive cap completely in.

ADJUSTMENT

CLUTCH FORK FREE PLAY

Adjust ball nut on clutch fork push rod until clutch fork free play is .12-.14" (3.0-3.5 mm). If all other conditions in clutch are correct, clutch pedal free play should be .79-.91" (20-23 mm).



CLUTCH FORK AND PEDAL FREEPLAY MEASURING POINTS

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Engine-to-Transmission Bolts (8 mm).....	18 (2.5)
Engine-to-Transmission Bolts (10 mm).....	34 (4.7)
Drive Shaft Center Bearing Support.....	18 (2.5)
Drive Shaft-to-Transmission Bolts.....	22 (3.0)