

1966-73 OPEL

Kadett (1966-70)
 GT (1969-73)
 1900 Sedan (1971-73)
 Manta (1973)

DESCRIPTION

Clutch is a dry, single disc, diaphragm spring type. Clutch is actuated by a cable connected to clutch pedal. A pre-lubricated clutch release bearing is also employed.

REMOVAL & INSTALLATION

CLUTCH ASSEMBLY

All Models With 1.1 Engine – 1) Remove air cleaner and disconnect throttle rod at carburetor and support. Raise vehicle and support front and rear with safety stands.

2) Disconnect exhaust pipe at manifold. On all models except Sport models, place transmission in neutral, pull up rubber boot and remove shift lever with a suitable tool (J-21709).

3) To remove shift lever on Sport models, remove cover plate retaining screws, pull up rubber boot and remove snap ring. Pull shift lever up and out.

4) On all models, remove clutch cable lock nut and adjusting nut. Separate cable from clutch fork taking care not to twist cable.

5) Disconnect back-up light switch and speedometer cable. Remove clutch lower cover. Disconnect parking brake return spring and remove nut, equalizer and spacer.

6) Remove one of two bolts securing rear transmission support to chassis and loosen other. Mark position of mating parts of "U" joint and drive pinion extension shaft.

7) Loosen bolt locks and remove bolts or nuts. Pull drive shaft forward, lower rear of shaft and remove to rear. Plug rear of transmission to prevent loss of transmission oil.

8) Remove both transmission retaining bolts from each side. Install two suitable guide pins (J-21722) in transmission retaining bolt holes.

9) Place a jack under alternator-to-engine mounting bracket. Remove right side front motor mount and raise engine lowering rear of transmission.

10) Remove remaining transmission-to-engine bolts. Slide transmission to rear on guide pins and lower to remove. Mark position of clutch on flywheel for installation.

11) Alternately loosen clutch assembly retaining bolts and remove assembly. Check friction surface of flywheel for cracks or damage. Replace as necessary.

12) To install clutch assembly, align marks and using suitable pilot shaft (J-21714), to align clutch. Tighten clutch retaining bolts to specifications.

13) To install transmission, reverse removal procedure. Align drive shaft mating marks and adjust clutch. See *appropriate story in Adjustment Section*.

All Models With 1.5 & 1.9 Engines – 1) Remove air cleaner and disconnect throttle rod at carburetor and support. Remove fan shroud retaining screws.

2) Place gear shift lever in neutral and remove gear shift lever. Raise vehicle and support front and rear with safety stands. Disconnect exhaust pipe at manifold.

3) Disconnect clutch cable at clutch fork by pushing fork and unsnapping cable out of slot. Disconnect back-up light switch and speedometer cable.

4) Disconnect parking brake cable return spring and remove adjusting nut, spacer and equalizer. Remove drive shaft as outlined in 1.1 engine clutch assembly removal procedure.

5) Remove transmission support, lower transmission and separate from bell housing. Remove bell housing retaining bolts and pry bell housing from engine.

6) Mark position of clutch on flywheel for installation and remove clutch assembly by alternately loosening clutch bolts. Check friction surface of flywheel for cracks or damage.

7) To install clutch assembly, match marks and align clutch with a suitable pilot shaft (J-22934). Tighten clutch bolts to specifications.

8) To install bell housing and transmission, reverse removal procedure. Align drive shaft marks and tighten bolts to specifications. Adjust clutch. See *appropriate story in Adjustment Section*.

CLUTCH CABLE REPLACEMENT

All Models W/ 1.1 Engine – 1) Remove lock nut and adjusting nut. Disconnect cable from clutch fork. Pull off bellows. Pull cable out of attaching clip and slide cable out of guide hole in clutch housing.

2) Remove rubber grommet from clutch pedal and pull cable from housing. To install, reverse removal procedure. Adjust clutch. See *appropriate story in Adjustment Section*.

All Models W/ 1.5 & 1.9 Engines – 1) Disconnect return spring and cable from clutch fork. Slide cable out of eye in bell housing.

2) Pry "E" ring in cable at firewall out with a screwdriver. Disconnect cable from pedal. Pull cable out of retainer at dash panel and remove washers and rubber grommet.

3) To install clutch cable, reverse removal procedure. Adjust clutch. See *appropriate story in Adjustment Section*.

CLUTCH RELEASE BEARING

With transmission or bell housing removed, rotate bearing and check for roughness or noise during rotation. If bearing is found defective, it must be replaced.

PILOT BEARING

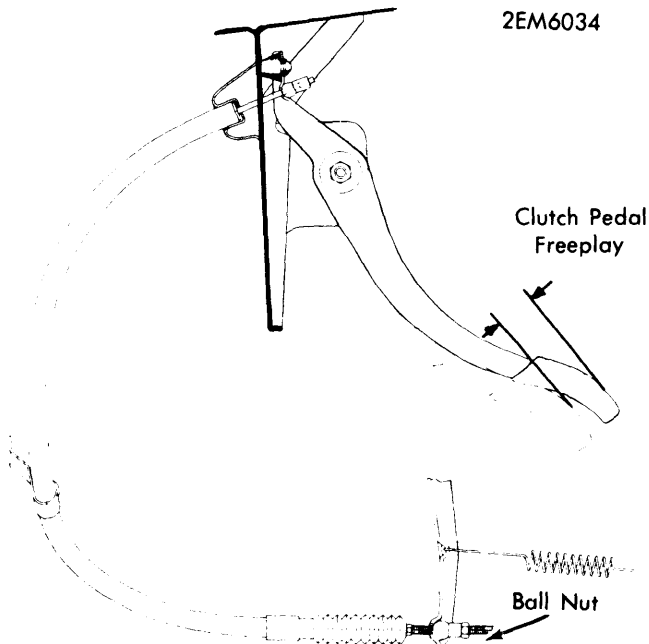
With clutch assembly removed, rotate bearing in crankshaft and check for roughness or noise during rotation. If bearing is found defective, pull out with suitable puller (J-21718). Drive in new bearing with suitable driver (J-21706).

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ADJUSTMENT

PEDAL FREE PLAY & CABLE ADJUSTMENT 1.1 ENGINE

To obtain correct clearance between clutch release bearing and clutch, correct pedal free play must be obtained. Loosen lock nut on clutch cable at clutch fork. Adjust ball nut until specified pedal free play is obtained.



1.1 ENGINE MODEL PEDAL FREE PLAY MEASURING POINT

Application	Clutch Pedal Free Play	Free Play
1966-68 Models	3/4 - 1" (19-25 mm)
1969 Models	1/2 - 1" (13-25 mm)
1970-71 Models	3/4 - 1 1/4" (19-32 mm)

PEDAL FREE PLAY ALL MODELS WITH 1.5 & 1.9 ENGINES (EXCEPT 1971-73 1900 MODELS)

NOTE — This adjustment procedure is for readjustment only. If cable or clutch disc is replaced, see Cable Adjustment procedure.

2) Loosen clutch fork ball stud lock nut and adjust ball stud until specified amount of stud protrudes from bell housing. Tighten lock nut finger tight.

3) Now readjust ball stud until specified pedal free play is obtained. Tighten lock nut and recheck pedal free play.

Clutch Pedal Free Play

Application	Stud Ball Protrusion	Free Play
1968 Models 5/8" (16 mm) 3/4 - 1" (19-25 mm)
1969 Models 5/8" (16 mm) 1/2 - 1" (13-25 mm)
1970-73 Models 3/4" (19 mm) 3/4 - 1 1/4" (19-32 mm)

PEDAL ADJUSTMENT 1971-72 1900 MODELS

NOTE — This adjustment procedure is for readjustment only. If cable or clutch disc is replaced, see Cable Adjustment procedure.

1) Clutch pedal free play is not required on 1900 models. A warning light, integral with pedal assembly, comes on as clutch wears and pedal moves out toward driver and contacts switch.

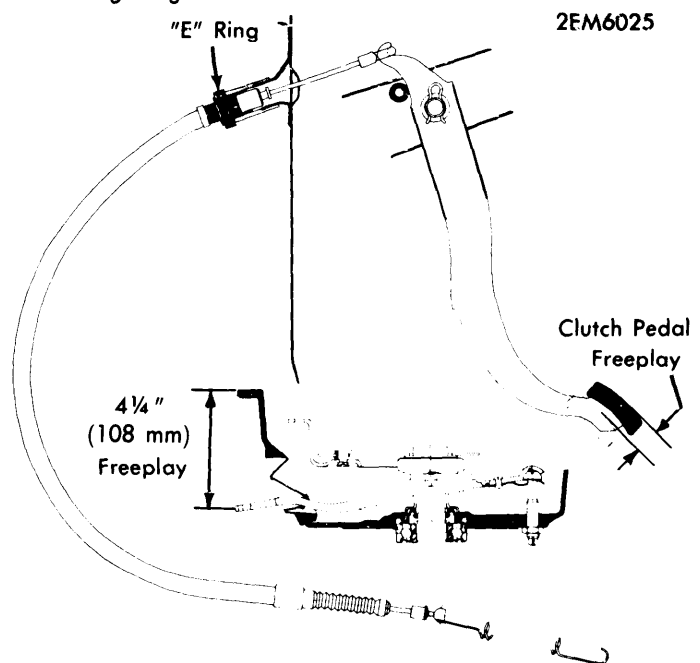
2) To correctly adjust pedal, parking brake must be disengaged. Parking brake indicator light and clutch warning light are the same light.

3) Loosen lock nut on clutch fork ball stud and adjust ball stud until distance between clutch housing, engine mating surface, and clutch fork is 4 1/4" (108 mm).

CLUTCH CABLE ADJUSTMENT MODELS WITH 1.5 & 1.9 ENGINES EXCEPT 1971-73 1900 MODELS

NOTE — This procedure is to be done when clutch cable or disc (or both) have been replaced.

1) Loosen clutch fork ball stud lock nut and adjust ball stud until end of stud protrudes from clutch housing 5/8" (16 mm) on 1968 models, or 3/4" (19 mm) on 1969-73 models. Tighten lock nut finger tight.



1.5 & 1.9 ENGINE MODEL (EXC. 1900) CLUTCH COMPONENT ADJUSTMENT

2) Then adjust ball stud until distance between clutch housing, engine mating surface, and clutch fork is 4 1/4" (108 mm), see illustration.

3) Hold clutch fork and cable in this position. Withdraw "E" ring from grooves in cable next to firewall and reposition in second groove from washer on rubber grommet.

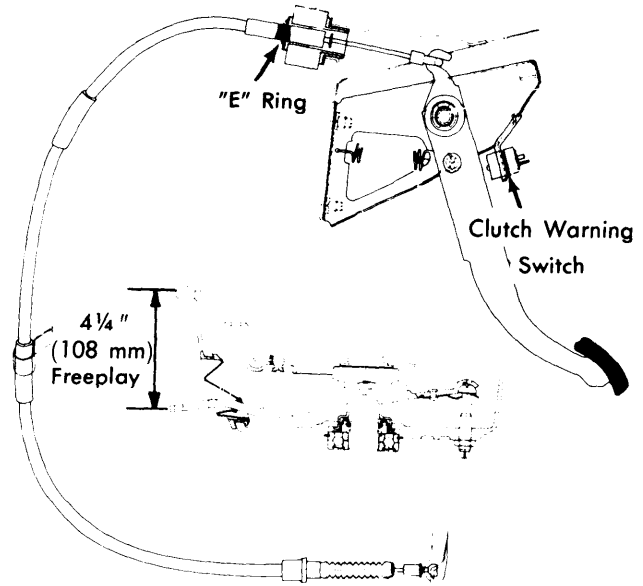
Clutches

1966-73 OPEL (Cont.)

CLUTCH CABLE ADJUSTMENT 1971-73 1900 MODELS

NOTE — This procedure to be done when clutch cable, disc or both have been replaced.

- 1) Loosen lock nut on clutch fork ball stud and adjust ball stud until end protrudes $\frac{3}{4}$ " (19 mm) from clutch housing. Disconnect clutch cable from clutch fork.
- 2) Push clutch fork forward until release bearing contacts clutch. Adjust ball stud until distance between bell housing and engine mating surface and clutch fork (see illustration).
- 3) Pull cable out of firewall until pedal contacts switch and clutch warning light comes on. With cable in this position, install "E" ring in third groove from firewall. Reconnect clutch cable to clutch fork.



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**1900 MODEL CLUTCH FORK FREE PLAY
MEASURING POINT**

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Models With 1.1 Engine	
Clutch-to-Flywheel	15 (2.0)
Flywheel-to-Crankshaft	25 (3.5)
Models With 1.5 & 1.9 Engines	
Flywheel-to-Crankshaft	43 (6.0)
Clutch-to-Flywheel	36 (5.0)
Transmission-to-Clutch Housing	29 (4.0)