

## FORD MOTOR CO., CABLE OPERATED

**Pinto, Bobcat,  
Fairmont, Zephyr, Mustang II**

### DESCRIPTION

Clutch is of single dry disc design, with cable operated mechanical linkage

### REMOVAL & INSTALLATION

#### CLUTCH

**Removal, Pinto & Bobcat** – 1) Raise vehicle on hoist. Loosen clutch cable adjusting nuts to provide slack in cable. Pull back on rubber dust cover and disengage clutch cable from release lever. Disconnect clutch cable from flywheel housing. Remove starter. Remove bolts that secure engine rear plate to front lower part of flywheel housing. Remove transmission and clutch housing as an assembly.

2) Loosen the six pressure plate cover attaching bolts evenly to avoid distorting the cover. If the same pressure plate and cover are to be reinstalled, mark cover and flywheel so that pressure plate can be reinstalled in original position. Remove pressure plate and clutch disc from flywheel.

**Removal, Fairmont & Zephyr** – 1) Raise vehicle on hoist. Remove release lever return spring and dust shield. Loosen clutch cable lock and adjusting nut and disconnect cable from flywheel housing. Remove starter. Remove bolts holding engine rear plate to front lower part of flywheel housing. Remove transmission and flywheel housing as an assembly.

2) Loosen the six pressure plate cover attaching bolts evenly to release the spring tension gradually to avoid distorting cover. If the same pressure plate and cover are to be reinstalled, mark the cover and flywheel so that the pressure plate can be reinstalled in original position. Remove pressure plate and clutch disc from the flywheel.

**Removal, Mustang II V8 & 4 Cyl.** – 1) Raise vehicle on hoist. Loosen clutch cable adjusting nut to provide slack in cable. Remove transmission. Remove clutch lever cover and cable retainer. Disengage clutch cable from release lever. Disconnect clutch cable from flywheel housing. Remove starter motor. Remove the bolts that attach housing to cylinder block. Move housing back just far enough to clear pressure plate and remove housing.

2) Loosen the six pressure plate cover attaching bolts evenly to avoid distorting cover. If the same pressure plate and cover are to be reinstalled, mark the cover and flywheel so that pressure plate can be reinstalled in original position. Remove pressure plate and clutch disc from flywheel.

**Removal, Mustang II V6** – 1) Raise vehicle on hoist, then loosen clutch cable adjusting nut to provide slack in cable. Remove transmission. Remove release bearing. Remove clutch cable retaining clip and clevis pin from clevis at release lever connection. Disengage clevis from cable. Disconnect clutch cable from flywheel housing by removing nut that attaches cable to housing and pulling cable toward front of vehicle until it clears housing boss.

2) Remove clutch retracting spring. Remove starter. Remove the four bolts holding crossmember and remove crossmember. Remove bolts that secure engine rear plate to front lower part of flywheel housing. Remove bolts that attach housing to cylinder block. This will remove engine decking shield which should be set aside. Move housing back just far enough to clear pressure plate and remove housing.

3) Loosen the six pressure plate cover attaching bolts evenly to avoid distorting cover. If the same pressure plate and cover are to be reinstalled, mark the cover and flywheel so that pressure plate can be reinstalled in original position. Remove pressure plate and clutch disc from flywheel.

**Removal, Fairmont & Zephyr 6-Cyl.** – 1) Raise vehicle on hoist. Remove dust shield and loosen clutch adjusting nut to provide slack in clutch cable. Disengage cable from release lever and flywheel housing. Remove starter and bolts holding engine rear plate to front lower part of flywheel housing. Remove bolts that attach housing to cylinder block. Move housing back far enough to clear pressure plate and remove.

2) Loosen six pressure plate cover attaching bolts evenly to release spring tension without distorting cover. If the same pressure plate and cover assembly is to be installed after the clutch is removed, mark cover and flywheel so that pressure plate can be reinstalled in same position. Remove pressure plate and clutch disc from flywheel.

**Installation, All** – 1) Position clutch disc and pressure plate assembly on flywheel. The three dowel pins on flywheel must be properly aligned with pressure plate. Bent, damaged, or missing dowels must be replaced. Align clutch disc, then alternately and evenly tighten cover bolts.

2) Apply a light film of lithium base grease (C1AZ-19590-B) to the following surfaces: Outside diameter of transmission front bearing retainer, release lever fork and anti-rattle spring where they contact the release bearing hub, and release bearing surfaces that contact pressure plate release fingers. Fill grease groove of release bearing hub with the same grease. Be sure that there is no excess grease anywhere on assembly. From this point, install by reversing removal procedure.

#### CLUTCH CABLE

**Removal & Installation, Pinto & Bobcat** – 1) Disconnect negative battery cable. Working under vehicle, loosen cable lock nut at flywheel housing boss. Pull nylon adjuster nut forward toward engine until tabs on nut clear flywheel housing and cable can be removed through slotted hole in housing boss.

2) Remove rubber boot covering clutch release lever and disconnect clutch cable at release lever. Inside the vehicle, remove hair pin clip, clevis pin and clevis attaching cable to clutch pedal. Remove clevis from cable. Depress tangs holding cable retainer to dash panel and push cable forward through dash panel. Remove cable from vehicle. To install, reverse removal procedure.

# Clutches

## FORD MOTOR CO., CABLE OPERATED (Cont.)

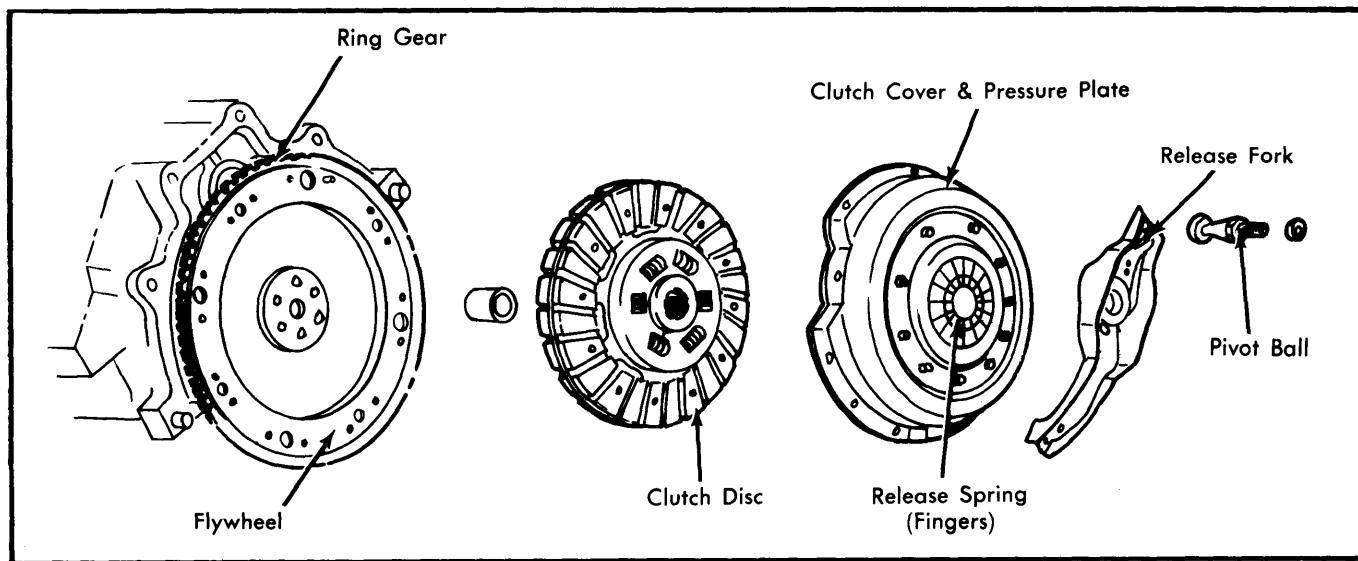


Fig. 1 Exploded View of Clutch Assembly

**Removal & Installation, Mustang II V8 & 4 Cyl. – 1)** At dash panel, remove cable retaining clip and pull cable toward front of car until adjusting nut can be rotated. Rotate nut away from adjusting sleeve approximately one inch. Remove sheet metal screw from bracket holding cable to fender apron. Remove cable end fitting from top of clutch pedal arm. Push cable through dash.

**2)** Working under car, remove sheet metal screws holding metal release lever cover. Remove plastic cable retaining clip and disconnect cable from release lever. Remove rear nut that attaches cable to clutch housing and pull cable toward front of car until it clears clutch housing boss. Remove cable from car along with remaining lock nut and retaining spring. For installation, reverse removal procedures.

**Removal & Installation, Mustang II V6 – 1)** At dash panel, remove cable retaining clip and pull cable toward front of car until adjusting nut can be rotated. Rotate nut away from adjusting sleeve approximately two inches. Remove sheet metal screw from clamp bracket holding cable to fender apron. Remove cable end fitting from top of clutch pedal arm and push cable through dash.

**2)** Working under vehicle, remove clutch cable retracting spring. Remove retaining clip and clevis pin holding clutch cable to release lever shaft assembly. Remove clevis from clutch cable. Remove nut that attaches cable to flywheel housing and pull cable toward front of vehicle until it clears flywheel housing boss. Remove cable from vehicle. To install, reverse removal procedure.

**Removal & Installation, Fairmont & Zephyr – 1)** Disconnect negative battery cable. Working under car, remove release lever return spring and dust shield. On 4-Cyl. engine, loosen locking nut and adjusting nut and remove clutch cable from release lever. On 200" engine, pull nylon adjusting nut forward to disengage tabs from rubber insulator and loosen nut.

**NOTE** – Do not try to rotate nylon nut until it is free of rubber insulator.

**2)** Remove cable from release lever and retaining clip at flywheel housing. Remove clip on clutch pedal relay lever and remove cable. To install, reverse removal procedure.

### CLUTCH PILOT BEARING

With transmission removed and using suitable tools (T58L-101-A and T59L-100-B) remove pilot bearing. Before installing new bearing, coat inside bore of bearing with wheel bearing lubricant; but do not use too much, since it would be thrown onto clutch.

## ADJUSTMENT

### CLUTCH CABLE ADJUSTMENT

**Pinto & Bobcat – 1)** Loosen clutch cable lock nut located on transmission side of flywheel housing. Pull cable toward front of car until tabs on nylon adjuster nut are clear of housing boss, then rotate nut toward front of vehicle approximately  $\frac{1}{4}$ ". Release cable, then pull cable forward again until free movement of release lever is eliminated.

**2)** Rotate adjusting nut toward housing until contact is made between face of index tabs and housing, then index tabs so that they drop into nearest housing groove. Tighten lock nut.

**Mustang II – 1)** Remove cable retaining clip at dash panel. Remove screw holding cable attaching bracket on fender apron and pull cable toward front of car until adjusting nut can be rotated. Rotate nut away from adjusting sleeve approximately  $\frac{1}{4}$ ". Release cable to neutralize system and then pull cable again until free movement of release lever is eliminated.

**2)** Rotate adjusting nut toward adjustment sleeve until contact is made, then index into next notch. Reinstall cable retaining clip and cable attaching bracket.

## FORD MOTOR CO., CABLE OPERATED (Cont.)

**Fairmont & Zephyr** — 1) From under car, release return spring and dust shield. Loosen clutch cable lock nut until free movement is eliminated and hold during adjustment. Insert 0.30" spacer against release lever cable spacer. Run adjusting nut against the 0.30" spacer finger tight.

2) Tighten lock nut against adjusting nut, being careful not to disturb adjustment. Torque lock nut to 5 - 8 ft. lbs. Remove spacer and cycle clutch system several times to seat system and recheck free play setting. Reset if required. Free travel setting should result in approximately 1½" of minimum effort clutch pedal free travel. Reinstall dust shield and return spring.

**200" Engine** — 1) Pull clutch cable toward front of car until adjusting nut can be rotated. Rotate away from rubber insulator approximately 0.30".

**NOTE** — Do not try to rotate nylon nut until it is free of rubber insulator.

2) If required, free adjusting nut from dash insulator. It may be necessary to remove clutch pedal bumper stop from clutch pedal. Replace rubber bumper in clutch before continuing free play adjustment.

3) Release cable to neutralize system, pull cable slightly to remove slack in system until free movement of release lever is eliminated. Rotate adjusting nut toward rubber insulator until contact is made, then index tabs into next notch. Free play

setting should result in approximately 1½" of minimum effort clutch pedal free travel. Cycle clutch system several times to seat system and recheck free play setting. Reset if necessary.

### Clutch Pedal Free Play

Application	① Free Play
Pinto, Bobcat .....	7/8 - 1 1/8"
Mustang II .....	1 3/8 - 1 5/8"
Fairmont & Zephyr .....	1 1/2"

① — With engine running.

### TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Pinto, Bobcat, Mustang II	
Flywheel-to-Engine .....	38-61
Pressure Plate-to-Flywheel .....	12-20
Fairmont, Zephyr	
Flywheel-to-Engine .....	28-28
Pressure Plate-to-Flywheel .....	12-24
200" Engine	
Flywheel-to-Engine .....	38-55
Pressure Plate-to-Flywheel .....	12-20