

1965-74 FORD MOTOR CO.

DESCRIPTION

Two different types of clutches are used in Ford vehicles. Both types are single plate, dry types, with one being non-centrifugal and the other being semi-centrifugal. Clutch release is accomplished through hydraulic linkage on "P" models, and through mechanical linkage on all others. On a hydraulic clutch, pedal pressure is transmitted to clutch fork through master cylinder and slave cylinder. On a mechanical clutch, pedal pressure is transmitted through a series of rods and an equalizer shaft.

REMOVAL & INSTALLATION

CLUTCH

Removal & Installation — Raise and support vehicle under frame. Disconnect clutch fork retracting spring and clutch fork push rod at clutch fork. On "P" models, remove slave cylinder attaching bolts, and support cylinder out of the way. Remove transmission. See *Ford Motor Co. Manual Transmission Removal in this Section*. On vehicles equipped with two-piece clutch housing, remove underpan, clutch fork, and clutch release bearing. On vehicles equipped with one-piece clutch housing, remove starter and clutch housing. Mark flywheel and clutch cover for reassembly reference, then loosen clutch cover attaching bolts evenly until spring tension is relieved. Remove

bolts, and remove clutch assembly from vehicle. To install, clean flywheel surface, and reverse removal procedure. Tighten bolts evenly and alternately.

CLUTCH MASTER CYLINDER

Removal & Installation — Disconnect clutch pedal push rod at clutch pedal. Disconnect master cylinder hydraulic line at master cylinder, and remove master cylinder attaching bolts. Remove master cylinder from vehicle, remove cylinder cover, and drain fluid from cylinder. To install, reverse removal procedure, and bleed system. See *Hydraulic System Bleeding*.

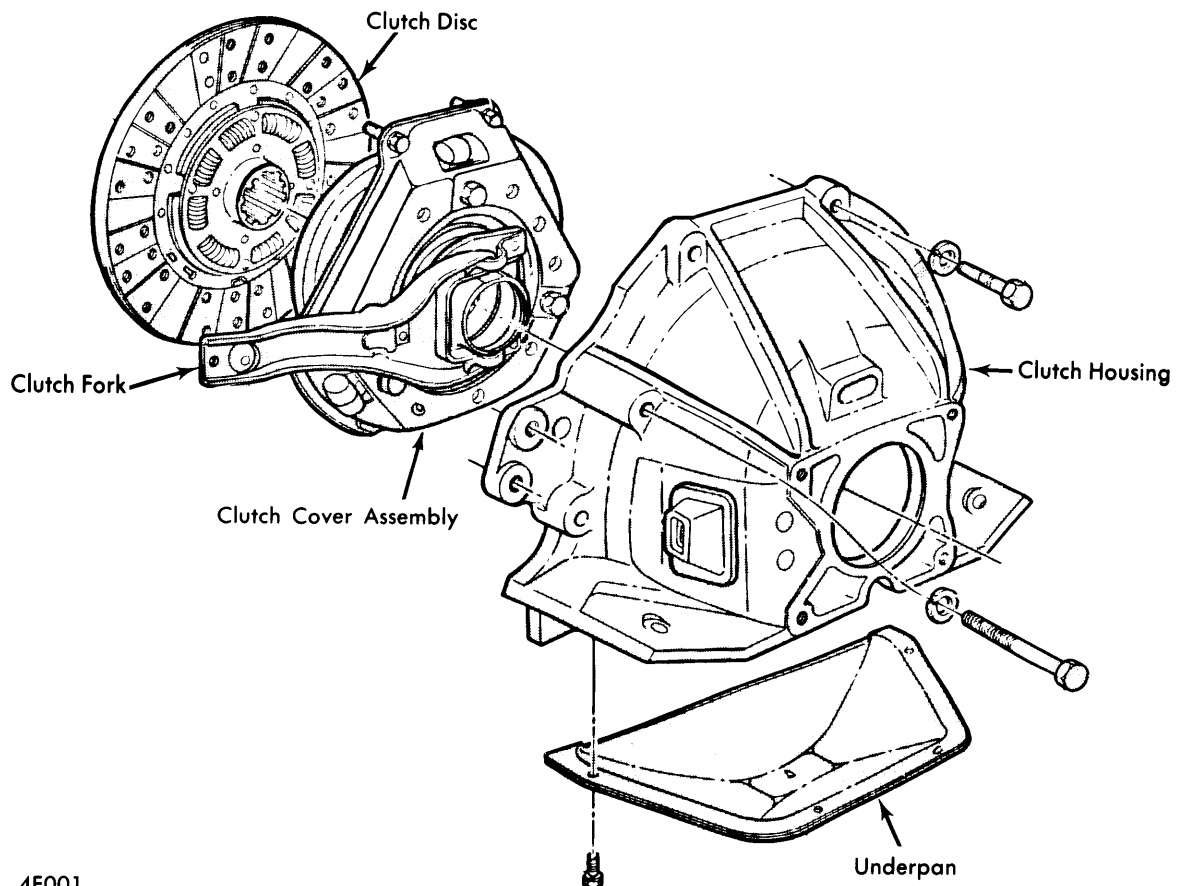
CLUTCH SLAVE CYLINDER

Removal & Installation — Clean outside of cylinder thoroughly and disconnect hydraulic line at slave cylinder. Remove bolts attaching slave cylinder to clutch housing, and remove cylinder from vehicle. To install, reverse removal procedure and bleed system. See *Hydraulic System Bleeding*.

OVERHAUL

CLUTCH MASTER CYLINDER

Disassembly & Reassembly — With master cylinder removed from vehicle, remove dust boot and piston stop from end of cylinder. Remove piston, cup, and spring from cylinder bore, and inspect cylinder for damage. To reassemble, reverse disassembly procedure, using new rubber parts.



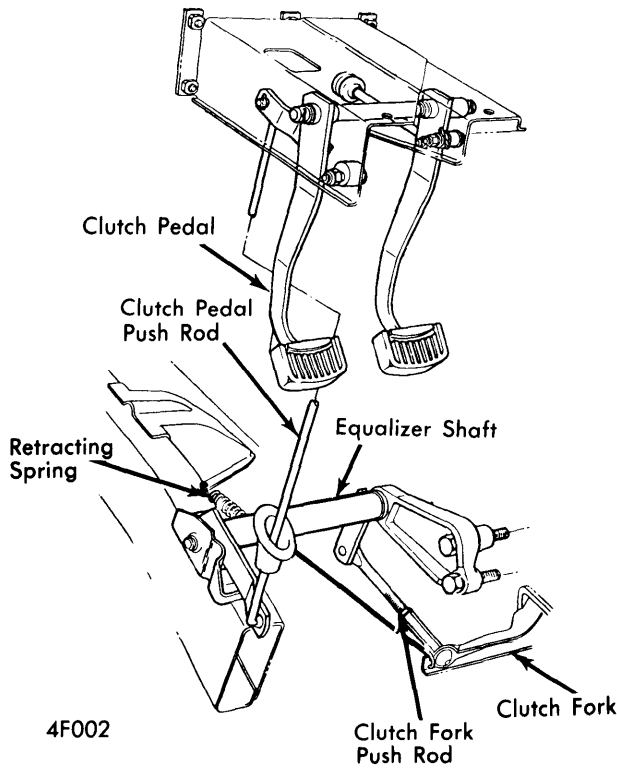
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CLUTCH ASSEMBLY (TYPICAL)

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CLUTCH SLAVE CYLINDER

Disassembly & Reassembly — With slave cylinder removed from vehicle, remove dust boot and retainer ring. Remove piston and cup from cylinder bore. Inspect cylinder for signs of excessive wear and damage. To reassemble cylinder, reverse disassembly procedure, using new rubber parts.



TYPICAL CLUTCH LINKAGE

ADJUSTMENT

CLUTCH LINKAGE

Clutch Pedal Height — Loosen pedal stop lock nut and adjust pedal stop to obtain proper clutch pedal height.

Application	Clutch Pedal Height	Height
"E" Models.....		7 1/2 - 7 3/4 "
"P" Models.....		6 5/8 - 6 7/8 "
"U" Models.....		6 5/8 - 6 7/8 "
F100/250 2WD		
1965-67.....		6 5/8 - 6 7/8 "
1968-74.....		6 3/8 - 7 1/4 "
F100/250 4WD		
1965-67.....		8 3/16 - 8 3/8 "
1968-74.....		7 3/8 - 7 3/4 "
F350		
1965-67.....		8 3/16 - 8 3/8 "
1968-74.....		7 3/8 - 7 3/4 "

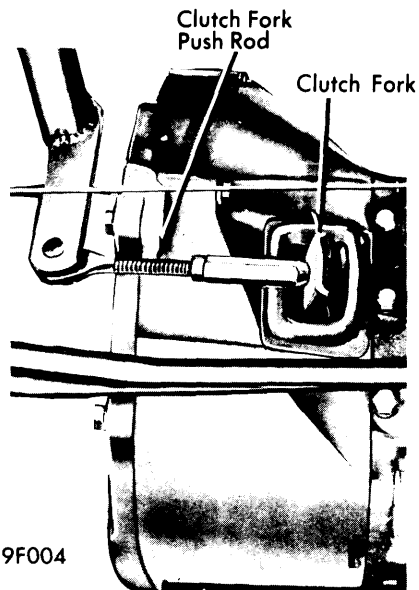


Free Travel Pedal Height

PEDAL HEIGHT ADJUSTMENT

Clutch Pedal Free Travel (W/Mechanical Linkage) — Loosen adjusting nut lock nut, and turn spherical adjusting nut on clutch fork push rod to obtain correct clutch pedal free travel.

Application	Clutch Pedal Free Travel	Travel
"E" Models.....		1 1/16 - 1 1/8 "
"P" Models.....		1 1/16 - 1 1/4 "
"U" Models.....		1 1/8 - 1 3/8 "
F100/250 2WD.....		1 1/16 - 1 1/4 "
F100/250 4WD.....		1 1/8 - 1 3/8 "
F350.....		1 1/8 - 1 3/8 "

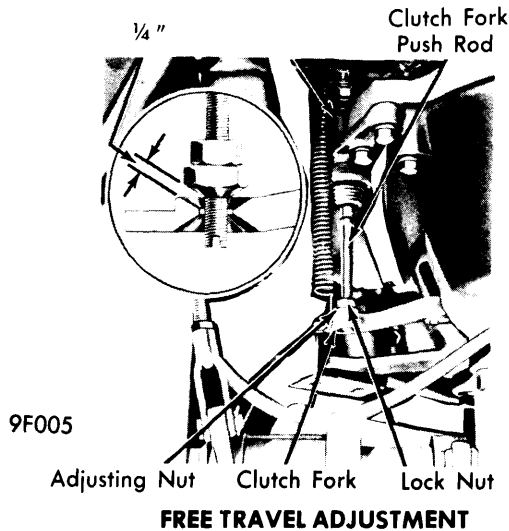


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FREE TRAVEL ADJUSTMENT

1956-74 FORD MOTOR CO. (Cont.)

Clutch Pedal Free Travel (W/Hydraulic Linkage) — Loosen adjusting nut lock nut, and adjust spherical adjusting nut to obtain ¼" clearance between spherical nut and edge of hole in clutch fork.



HYDRAULIC SYSTEM BLEEDING

Pressure Bleeding Method — Clean bleeder screw on slave cylinder, and attach bleeder hose to screw. Submerge free end of hose in jar ½ full of clean brake fluid. Pressurize clutch master cylinder, and open and close bleeder screw at four second intervals until no air appears in fluid running from bleeder hose. Check that fluid level in master cylinder is within ½" of top, and that clutch fork push rod travel is at least 1 ⅛".

Gravity Flow Method — Attach transparent hose to funnel, and attach free end of hose to bleeder screw on slave cylinder. With funnel held higher than master cylinder, and bleeder screw open slowly pour fluid into funnel until fluid level in master cylinder is within ½" of top. Check that clutch fork push rod travel is at least 1 ⅛".

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs.
Clutch Cover-to-Flywheel	23-28
Clutch Housing-to-Engine Block	40-50
Transmission-to-Clutch Housing	70-90
Adjusting Nut Lock Nuts	12-18