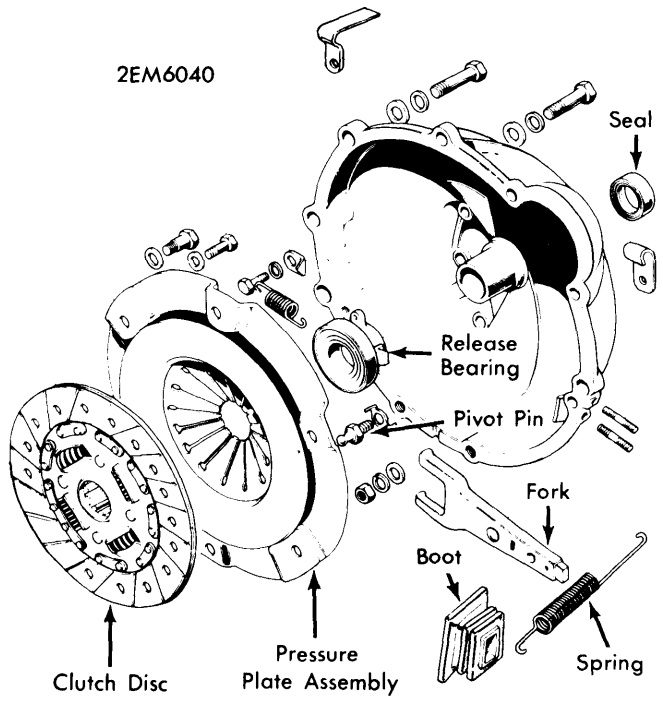
1972-73 FORD COURIER PICKUP

Courier (1972-73)

DESCRIPTION

Clutch is of the single dry-disc type. Main components are disc, pressure plate assembly, and clutch release bearing (pre-lubricated). Clutch bell housing serves to cover pilot bearing, to house input shaft, and secure input shaft thrust washer. Clutch is hydraulically operated, with main components being a dash mounted master cylinder and clutch slave cylinder. To control clutch engagement, a one-way valve is attached to master cylinder. Valve regulates flow of return fluid when pressure is released.



CLUTCH ASSEMBLY

REMOVAL & INSTALLATION

CLUTCH

1) Place transmission in neutral. Remove shift tower and cover vacancy. Suitably raise vehicle and disconnect drive shaft at rear and at center bearing. Pull shaft from transmission and plug drainage.

2) Disconnect exhaust pipe brackets from transmission case and hanger from bell housing. Disconnect exhaust system and secure to one side.

3) Disconnect clutch linkage and place it, with slave cylinder, out of way. Disconnect transmission and starter wiring. Using a suitable jack, support engine.

4) Position suitable jack under transmission and withdraw engine mounting bolts. Remove nuts attaching rear mount to crossmember and unbolt crossmember. Lower engine, work bell housing off dowels and slide transmission rearward until input shaft clears clutch disc.

5) Remove bolts mounting clutch assembly to flywheel and remove from vehicle. To install transmission and clutch assembly, reverse removal procedure.

CLUTCH MASTER CYLINDER

1) Disconnect fluid outlet line at master cylinder fitting. Remove nuts and bolts attaching cylinder to firewall. Lift cylinder directly out from mounting.

2) To install, start push rod into master cylinder and then align bolt holes. Connect fluid outlet line. Bleed hydraulic system and check pedal freeplay.

See Hydraulic Bleeding and Clutch Adjustment.

CLUTCH SLAVE CYLINDER

1) Disconnect slave cylinder inlet line and unhook return spring. Extract nuts and washers mounting cylinder to bell housing. Lift off slave cylinder.

2) To install, position slave cylinder on studs and tighten nuts. Connect cylinder inlet line. Fill master cylinder and bleed air from system. *See Hydraulic System Bleeding.* Hook spring. Check and adjust freeplay. *See Clutch Adjustment.*

CLUTCH RELEASE BEARING

1) With transmission removed, visually inspect clutch release bearing and input shaft for burrs. Remove bearing (collar) and fork.

2) Hold bearing inner race and rotate outer race, applying pressure. If bearing rotation is rough or noisy, replace bearing.

3) To install, reverse removal procedure, noting the following: Apply suitable lubricant on both sides of fork, bearing, and input shaft. Check clutch free travel. *See Clutch Adjustment.*

PILOT BEARING

Check fit of pilot bearing in bore of flywheel. Bearing is pressed into flywheel and must not be loose. Replace any bearing that is loose or burred.

OVERHAUL

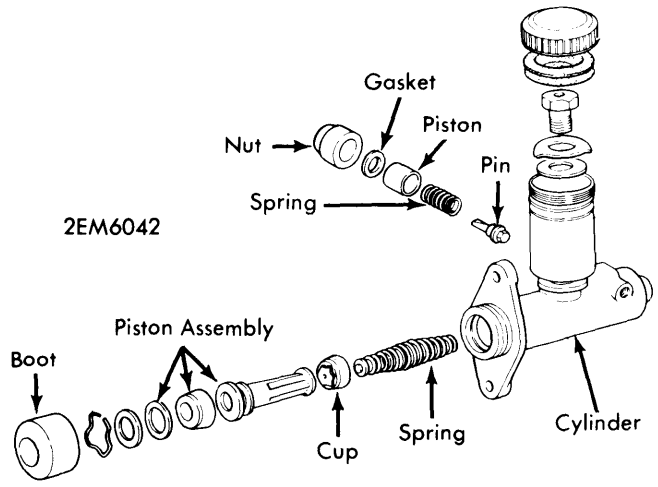
CLUTCH MASTER CYLINDER

1) Clean outside of cylinder housing. Remove dust boot. Using suitable tool, remove piston stop ring. Separate one-way valve. Completely disassemble internal components.

2) Wash all parts in brake fluid or alcohol. Check all rubber components and replace if any are worn, softened, or swollen.

1972-73 FORD COURIER PICKUP (Cont.)

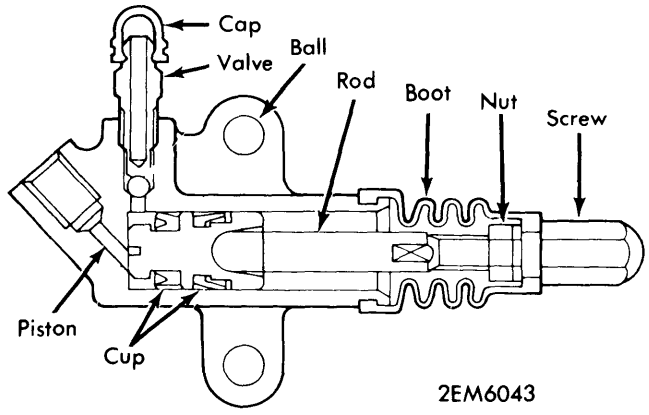
3) Examine cylinder bore for scoring or roughness. Hone, if necessary. Inspect piston-to-bore clearance. If wear is more than .004" (.10 mm), replace cylinder or piston. To assemble, reverse removal procedure.



CLUTCH MASTER ASSEMBLY

CLUTCH SLAVE CYLINDER

1) Clean outside of cylinder housing. Remove dust boot and clutch release rod. Remove piston and disassemble bleed valve.



SLAVE CYLINDER

2) Separate one-way valve. Clean all internal components in brake fluid or alcohol. Replace any worn, rubber parts.

3) To assemble, dip piston in brake fluid and fit as shown in illustration. Install release rod and boot. Insert bleed valve assembly.

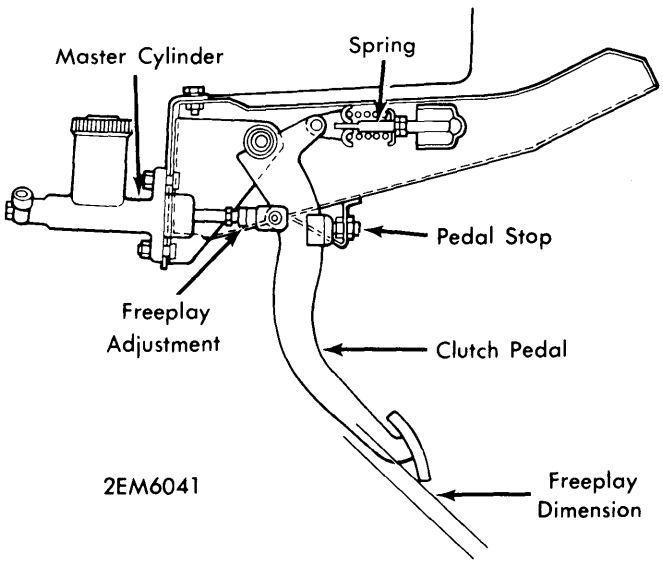
ADJUSTMENT

CLUTCH ADJUSTMENT

With vehicle raised, disconnect clutch fork return spring. Loosen lock nut and rotate adjusting nut until a clearance of 1/8-9/64" (3.2-3.5 mm) is obtained between nose end of adjuster nut and clutch fork. Tighten lock nut.

PEDAL ADJUSTMENT

Clutch pedal freeplay is adjusted by: loosening lock nut on push rod and set push rod length by rotating rod until pedal has 3/16-1 3/16" (4.7-30 mm) free play. Tighten lock nut. Measurement is taken at pedal pad.



CLUTCH PEDAL ADJUSTMENT

HYDRAULIC SYSTEM BLEEDING

Remove rubber plug from bleeder and attach suitable hose. Submerge hose into a half-full can of brake fluid. Open bleed valve and lightly pump clutch pedal until all air bubbles stop. Close bleeder and refill master cylinder.

NOTE – Do not allow cylinder to go dry during bleeding process.

TIGHTENING SPECIFICATIONS

Application	Ft. Lbs. (mkg)
Clutch Housing-to-Engine	24-42 (3.3-5.8)
Pressure Plate-to-Flywheel	13-20 (1.8-2.7)
Release Lever Return Spring Bracket	5-8 (.69-1.1)
Slave Cylinder-to-Clutch Housing	12-17 (1.6-2.3)
Master Cylinder-to-Firewall	12-17 (1.6-2.3)