

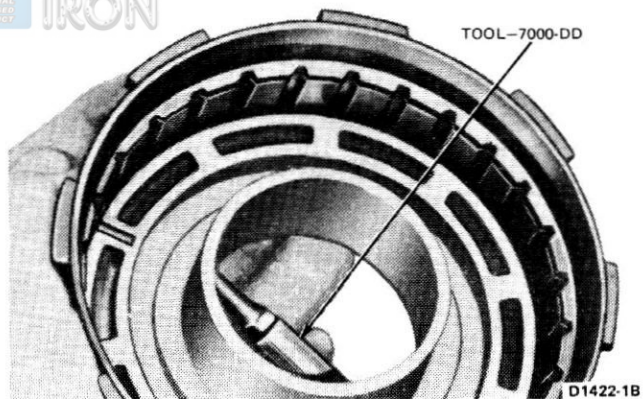


FIG. 39. Removing Reverse-High Clutch Piston

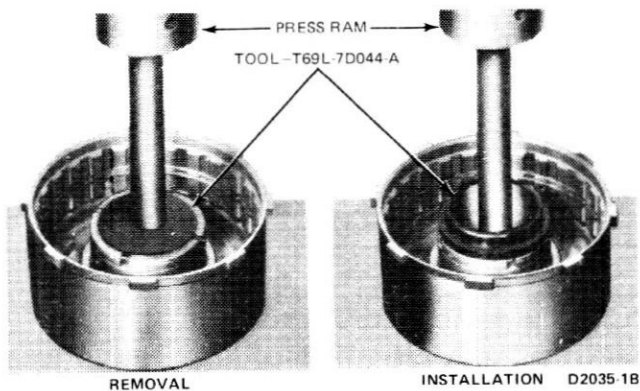


FIG. 40 Replacing Reverse-High Clutch Rear Bushing

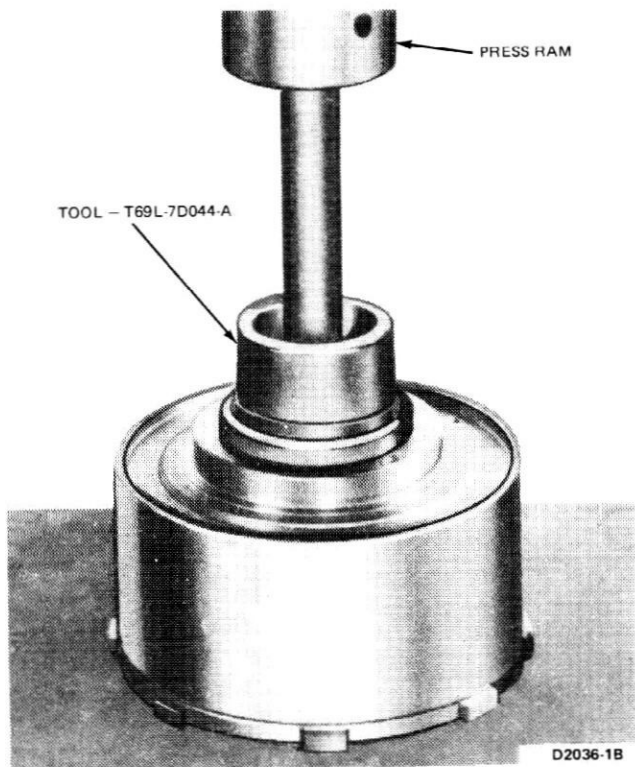


FIG. 41 Installing Reverse-High Clutch Front Bushing

SPRINGS MUST BE INSTALLED
IN POCKETS MARKED X ONLY



10 SPRING DESIGN

D2354-1C

FIG. 42 Reverse-High Clutch Piston Return Spring Locations

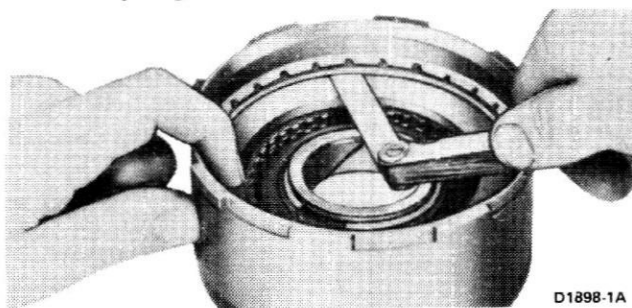


FIG. 43 Checking Reverse-High Clutch Snap Ring Clearance

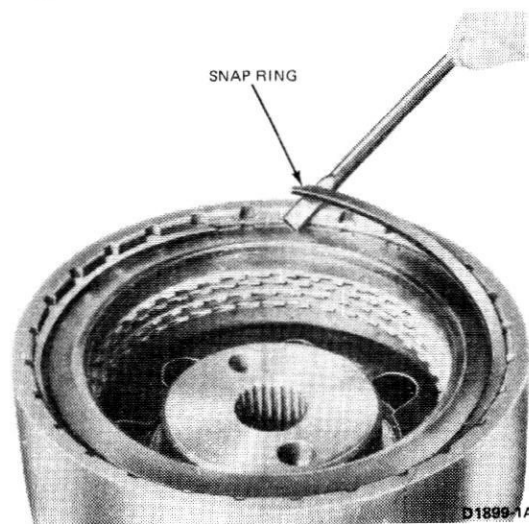


FIG. 44 Removing Forward Clutch Pressure Plate Snap Ring

2. Secure the hub with the snap ring. Make certain that the snap ring is fully engaged with the groove.

ONE-WAY CLUTCH

Disassembly

1. Remove the snap ring and bushing from the rear of the low-reverse clutch hub (Fig. 53).
2. Remove the rollers from the spring assembly and lift the spring assembly from the hub.

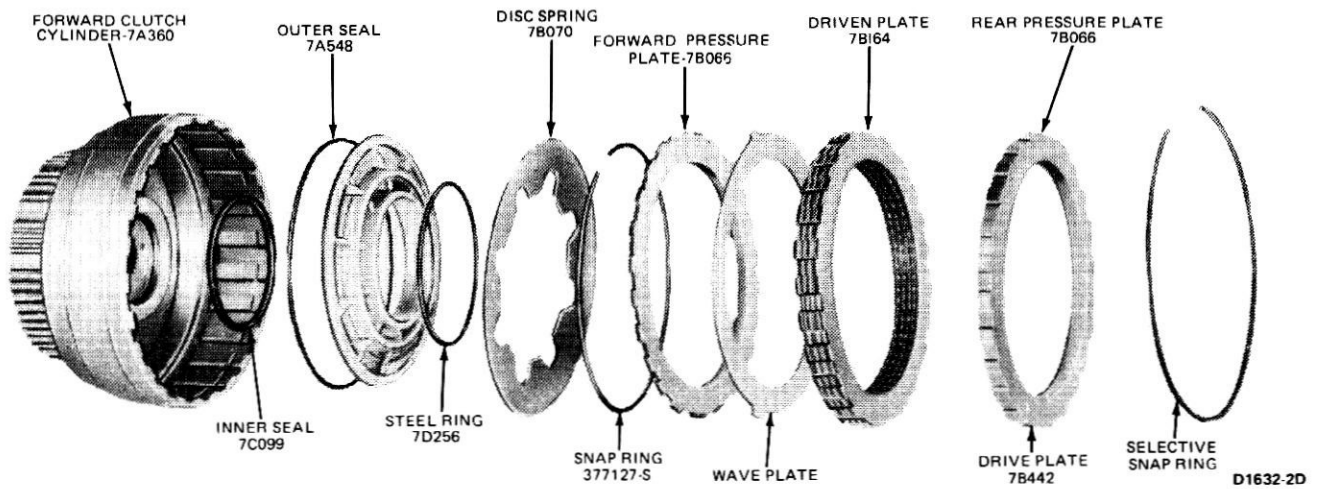
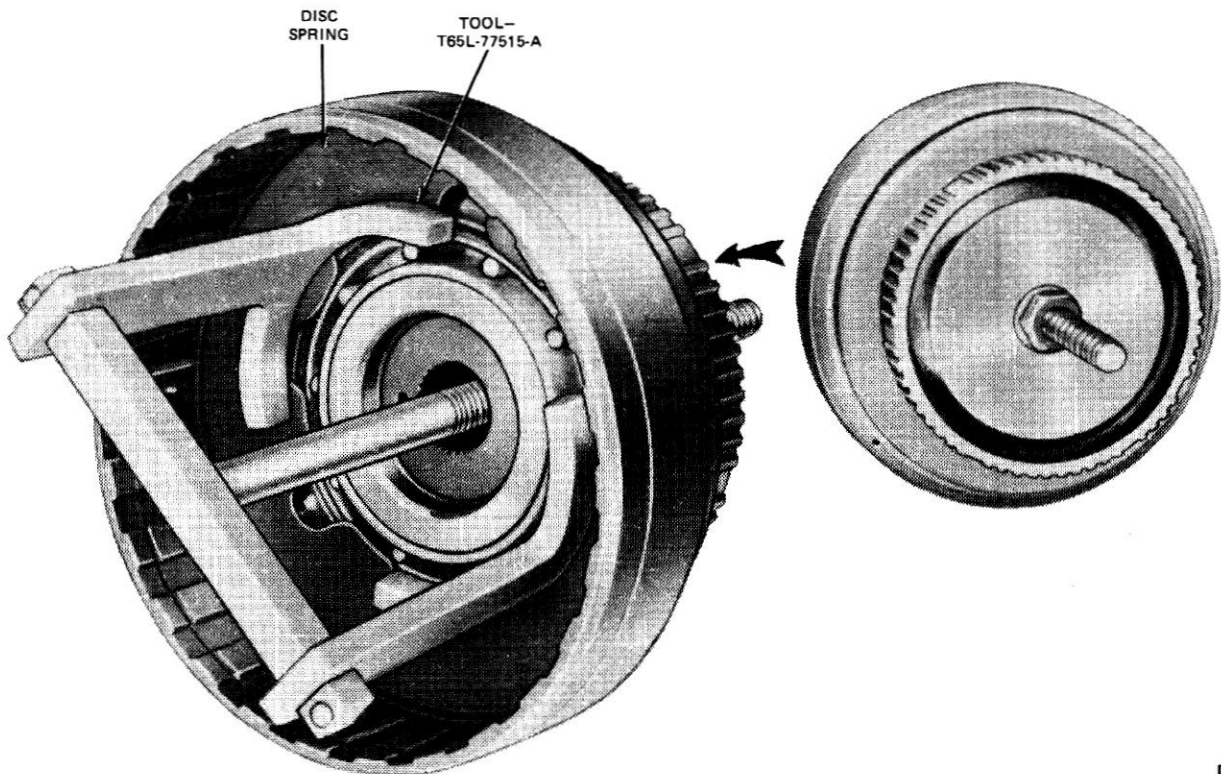
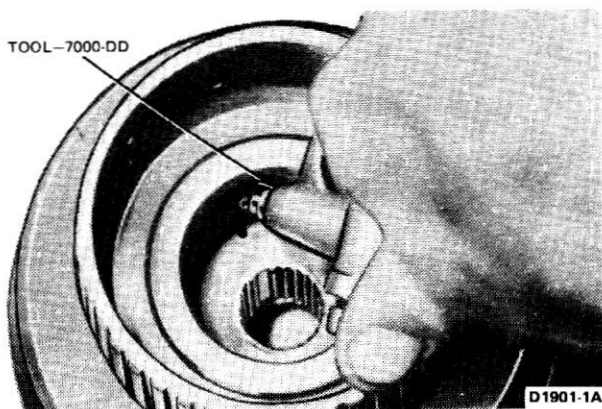


FIG. 45 Forward Clutch Disassembled



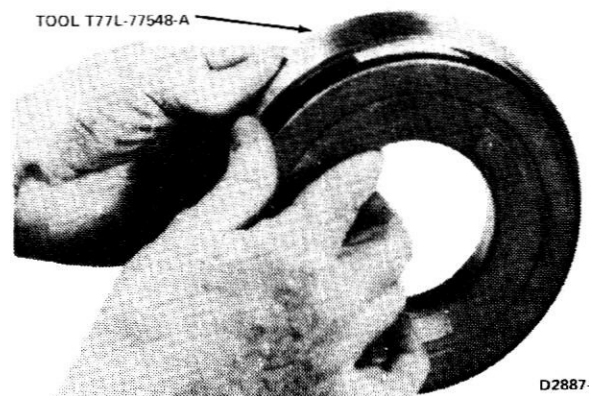
D1635-2A

FIG. 46 Removing or Installing Disc Spring



D1901-1A

FIG. 47 Removing Forward Clutch Piston



D2887-1B

FIG. 48 Installing Forward Clutch Piston

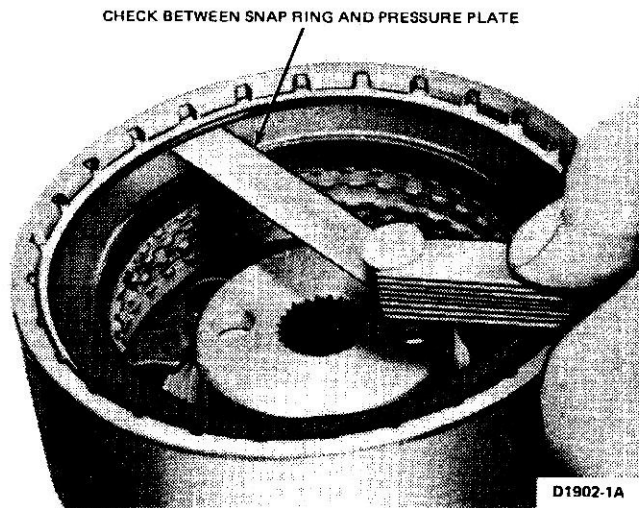


FIG. 49 Checking Forward Clutch Clearance

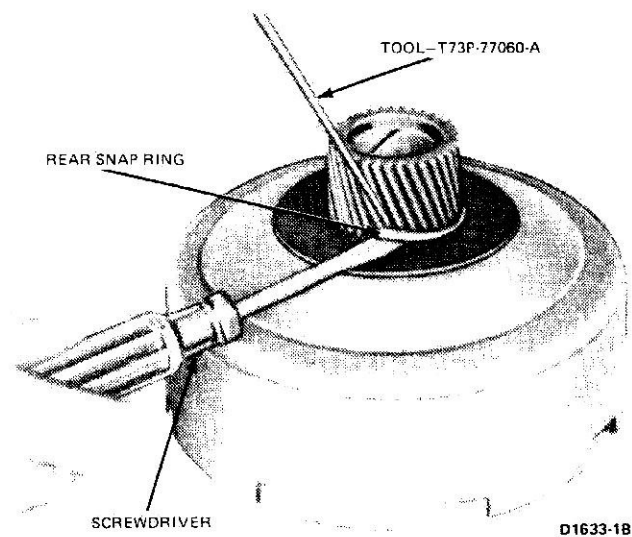


FIG. 50 Removing Sun Gear Snap Ring

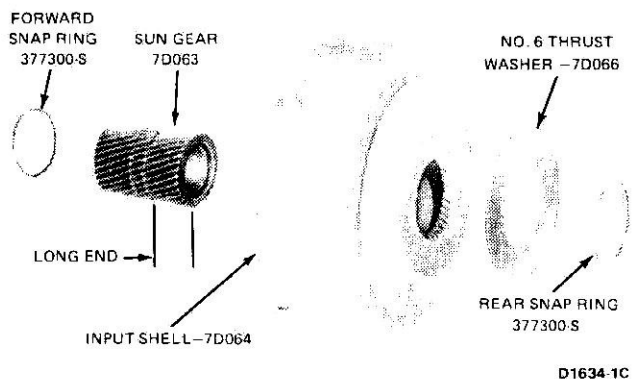


FIG. 51 Input Shell and Sun Gear Disassembled

3. Remove the remaining snap ring from the hub.

Assembly

1. Install a snap ring in the forward snap ring groove of the low-reverse clutch.

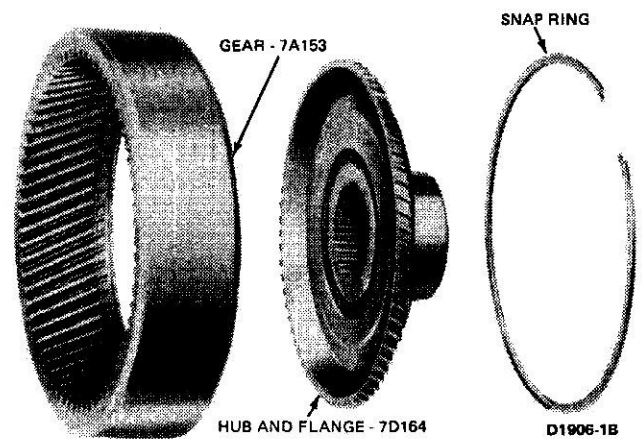


FIG. 52 Output Shaft Hub and Ring Gear

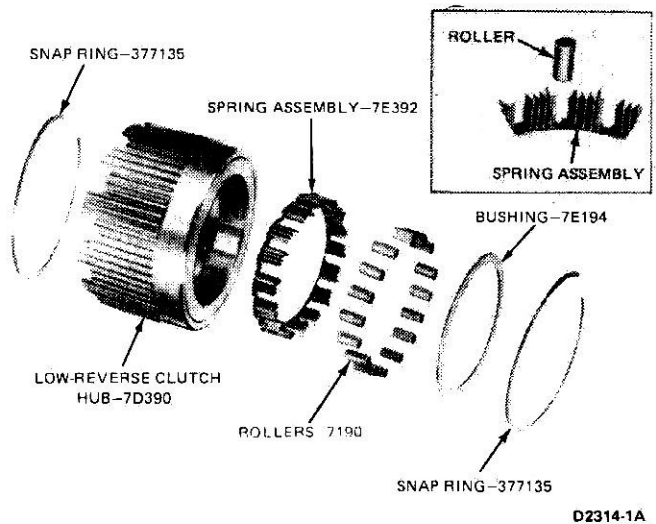


FIG. 53 One-Way Clutch Disassembled

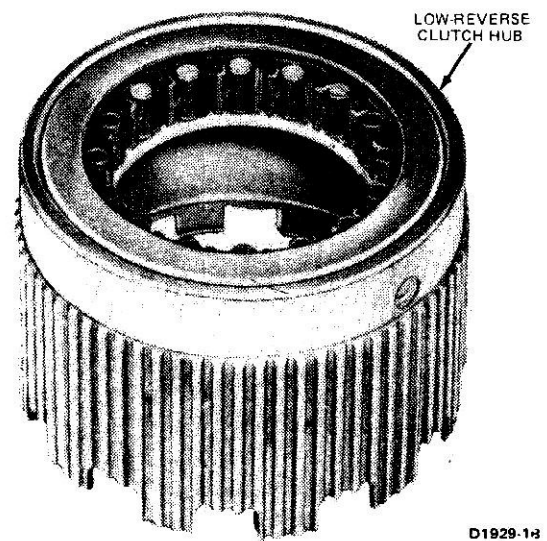


FIG. 54 One-Way Clutch Installed

2. Place the low-reverse clutch hub on the bench with the forward end down (Fig. 54).

3. Install the one-way clutch spring assembly on top of the snap ring.

4. Install a roller into each of the spring assembly compartments (Fig. 53).
5. Install the bushing on top of the spring assembly.
6. Install the remaining snap ring at the rear of the low-reverse clutch hub to secure the assembly (Fig. 53).

LOW-REVERSE CLUTCH PISTON

Disassembly

1. Remove the inner and the outer seal from the reverse clutch piston.

Assembly

1. Dip the two new seals in clean transmission fluid.
2. Install the seals on the piston.

SPECIFICATIONS

APPROXIMATE REFILL CAPACITIES C6 TRANSMISSION

	U.S. Measure	Imp. Measure
All Models	12-1/4 qts.	10-1/4 qts.

SELECTIVE THRUST WASHERS C6 TRANSMISSION

Identification Color	Thrust Washer Thickness-Inch
Blue	0.056-0.060
Natural (White)	0.073-0.077
Red	0.088-0.092

CLUTCH PLATES - C6 TRANSMISSION

Transmission Model	Steel Plates	Friction Plates
Forward Clutch Plates - All	4	4
High Clutch Plates - All Except PJC-H, -N	3	3
PJC-H, -M	4	4
Reverse Clutch Plates - All	5	5

SPECIAL TOOLS - C6 TRANSMISSION

Ford Tool No.	Description	Ford Tool No.	Description
T00L-1175-AC	Grease Seal Remover (Head Only)	T61L-7657-B	Transmission Extension Housing Oil Seal Replacer
T50T-100-A and T00L-1175-AC	Seal Remover	T57P-7697-A	Transmission Extension Housing Bushing Remover
T59L-100-B and T58L-101-A	Slide Hammer and Puller	T57P-7697-B	Transmission Extension Housing Bushing Replacer
T00L-4201-C	Differential Backlash and Runout Gauge, with Universal Bracket, Dial Indicator and Bracket	T59P-77067	Dial Indicator Support Fixture
T00L-7000-DD	Air Nozzle Rubber Tip Assembly	T00L-77288	Control Shaft Seal Replacer
T66L-7003-B9	Front Pump Bushing Replacer	T71P-77370-A	Band Adjustment Kit
T69P-7D044	Automatic Transmission Bushing Kit Remover and Replacer	T65L-77515-A	Band Adjustment Torque Wrench
T64P-7A128-A	Manual Valve Detent Spring	T77L-77548-A	Rear Clutch Spring Compressor
		T63L-77837-A	Forward Clutch Piston Lip Seal Installer
			Front Pump Seal Replacer

CHECKS AND ADJUSTMENTS C6 TRANSMISSION

Operation	Specification
Transmission End Play	0.008-0.042 (Selective Thrust Washers Available)
Turbine and Stator End Play	New or rebuilt 0.021 max. Used 0.040 max. (1)
Intermediate Band Adjustment	Remove and discard lock nut. Adjust screw to 10 ft-lbs torque, then back off 1-1/2 turns, install new lock nut and tighten lock nut to 40 ft-lb.
Forward Clutch Pressure Plate to Snap Ring Clearance	0.021-0.046
Selective Snap Ring Thicknesses	0.056-0.060, 0.065-0.069, 0.074-0.078, 0.083-0.087, 0.092-0.096, 0.110-0.114, 0.128-0.132
Reverse High Clutch Pressure Plate to Snap Ring Clearance	0.022-0.036 0.027-0.043
Selective Snap Ring Thicknesses	0.056-0.060, 0.065-0.069, 0.074-0.078, 0.083-0.087, 0.092-0.096
(1) To check end play, exert force on checking tool to compress turbine to cover thrust washer wear plate. Set indicator at zero.	

TORQUE LIMITS

C6 TRANSMISSION

Item	Ft-Lbs	Item	Ft-Lbs
Converter to Flywheel	20-30	Pressure Gauge Tap	6-12
Front Pump to Trans Case	16-30	Band Adj. Screw Locknut to Case	35-45
Overrunning Clutch Face to Case	18-25	Cooler Tube Connector Lock	20-35
Oil Pan to Case	12-16	Converter Drain Plug	14-28
Stator Support to Pump	12-16	Manual Valve Inner Lever to Shaft	30-40
Diaphragm Ret. Clip to Case	12-16	Downshift Lever to Shaft	12-16
Guide Plate to Case	12-16	Filler Tube to Engine	20-25
Intermediate Servo Cover to Case	14-20	Transmission to Engine	40-50
Distributor Sleeve to Case	12-16	Engine Rear Cover to Conv. Hsg.	20-30
Extension Assy. to Trans. Case	25-35	Oil Line Connector to Case Fitting	12-18
Oil Connector to Case	10-14		
		Item	In-Lbs
End Plates to Body	20-45	Control Assy to Case	95-125
Inner Downshift Lever Stop	20-45	Gov. Body to Collector Body	80-120
Reinforcement Plate to Body	20-45	Detent Spring to Case	80-120
Screen and Lower Body to Upper Valve Body	40-55	Converter Cover to Converter Hsg.	30-60

C02315-2H

FMX Automatic Transmission

PART
17-15

Applies To Ford/Mercury/LTD II/Thunderbird/Cougar

SUBJECT	PAGE	SUBJECT	PAGE
ADJUSTMENTS		DISASSEMBLY AND ASSEMBLY (Cont'd.)	
Front Band Adjustment	15-4	Rear Support Bushing Removal	
Rear Band Adjustment	15-5	and Installation	15-22
DESCRIPTION	15-1	Transmission	15-11
DISASSEMBLY AND ASSEMBLY		REMOVAL AND INSTALLATION	
Control Valve Body	15-16	Control Valve Body	15-6
Downshift and Manual Linkage	15-21	Extension Housing	15-9
Front Clutch	15-24	Extension Housing Bushing and	
Front Pump	15-21	Rear Seal	15-8
Front Servo	15-18	Front Servo	15-7
Governor	15-20	Governor	15-9
Pressure Regulator	15-20	Parking Pawl	15-10
Primary Sun Gear	15-25	Pressure Regulator	15-10
Rear Clutch	15-23	Rear Servo	15-8
Rear Servo	15-19	Transmission	15-5
		SPECIFICATIONS	15-27

CD2886-2A

DESCRIPTION

The FMX transmission is a three speed unit capable of providing automatic upshifts and downshifts through the three forward gear ratios. The transmission is also capable of providing manual selection of first and second gears.

Fig. 1 shows the location of the converter, front pump, clutches, bands, gear train and most of the internal parts used in the FMX Transmission.

The identification tag (Fig. 2) on the FMX transmission is attached under the lower right hand extension-to-case bolt. The tag includes the model prefix and suffix, build date code and serial number. The first line on the tag shows the transmission model prefix and suffix. A number appearing after the suffix (Fig. 2) indicates that the internal parts in the

transmission have been changed after initial production startup. For example, a PHA-F model transmission that has been changed internally would read PHA-F1. Both transmissions are basically the same, but some service parts in the PHA-F1 transmission are slightly different than the PHA-F transmission. **Therefore, it is important that the codes on the transmission identification tag be checked when ordering parts or making inquiries about the transmission.**

The tag must be kept with the individual transmission it was originally installed on. If the tag was removed during disassembly, reinstall it on the same unit.

The transmission consists essentially of a torque converter, planetary gear train, two multiple disc clutches and a hydraulic control system (Fig. 3).