COMET, EDSEL, FALCON, FORD 2-SPEED AUTOMATIC TRANSMISSION (C ntinued)

►*1960 REAR PUMP PRODUCTION CHANGE & SERVICE REPLACEMENT NOTE:* In later production rear pumps, two slippers were omitted. This change does not affect operation of rear pump or transmission and it is not necessary to install the omitted slippers at time of overhaul. When assembling a pump having omitted slippers, make sure that slippers are placed on rotor so open pockets in rotors are approximately 180° apart.

DESCRIPTION

These two-speed automatic transmissions consist of a torque converter and a 2-speed planetary type transmission that provides automatic operation in "D" range. Other ranges are controlled manually. A single multiple disc clutch and two servo operated bands provide "high", "low", and "reverse" control of the transmission. With selector lever in "P" (Park) position, a manually operated pawl engages teeth in planet pinion carrier and locks output shaft against rotation. Transmission fluid is directed through an oil cooler located in lower end of radiator on Edsel & Ford models. Transmissions on other models are air-cooled.

OPERATION

With transmission selector lever in "D" (Drive) range (car stopped), the "low" band is applied and transmission is in first speed. As car speed is increased, rear pump pressure increases and causes the "low" band to release and the "high" clutch to apply, placing the transmission in second speed. At speeds below 55 MPH, the transmission can be downshifted (Kickdown) from second to first by depressing the accelerator pedal to the floor. When selector lever is placed in "R" (Reverse) position, both the "low" band and "high" clutch are released, and the "reverse" band is applied, causing the car to move rearward. *CAUTION - There are no automatic inhibitors for "L" or "R" in the transmissi n which means it is possible to shift to either "L" or "R" at any sp ed. Accidental shifts are prev nted by gate typ stops requiring the lifting of sel ctor l v r prior to shifting to either of these positions.*

LUBRICATION

Check fluid level every 1000 miles, drain and refill every 24,000 miles.

R c mmended Fluid - Automatic Transmission Fluid Type "A" or Automatic Transmission Fluid Type "A" suffix "A".

Checking Fluid L v l: With parking brake applied, engine at normal operating temperature, and car standing on a level floor, shift selector lever through all positions, then place selector lever in "P" (Park) position. Check fluid level on dipstick. Add sufficient fluid through filler tube to bring level to "F" (Full) mark on dipstick. *CAUTION - Do not overfill transmission.*

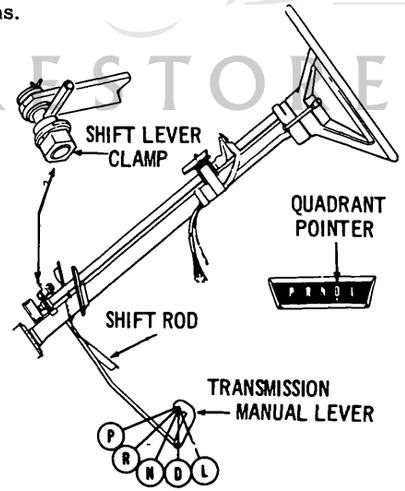
Capacity - 6¼ qts. (Comet & Falcon); 10½ qts. (1959 Edsel & Ford 332", 352" & 361" Engs.); 10 qts. (1959 Edsel & Ford 223" & 292" Engs.); 9 qts. (1960 Edsel & Ford 223" & 292" Engs.); 10 qts. (1960 Edsel & Ford 352" Eng.).

Draining & Refilling: Remove cover from lower front side of converter housing and remove one converter drain plug. Rotate converter 180° and remove other plug, then remove drain plug from oil pan. After draining is completed, remove and clean oil pan and screen. Reinstall oil pan and screen using a new gasket. Tighten oil pan drain plug to 10-15 ft. lbs. Install drain plugs in converter and tighten to 20-28 ft. lbs., then install converter cover. Add 4 qts. of Automatic Transmission Fluid Type "A" and run engine at idle speed for about 2 minutes, then add 2 qts. (Comet & Falcon); 4 qts. (Others) more fluid. Run engine at fast idle (1200 RPM) until normal operating temperature is obtained. Shift selector lever through all positions, then place in "P" (Park) position and check fluid level on dipstick. Add sufficient fluid to bring level to "F" (Full) mark on dipstick. *CAUTION - Do not overfill transmission.*

ADJUSTMENT

LINKAGE ADJUSTMENT: Throttle Linkage Adjustment - See *CARBURETOR on car model pages.*

Manual Linkage: With engine stopped, loosen shift lever clamp at lower end of steering column so that shift rod is free to slide in clamp. Position selector lever so pointer lines up over "D" (Drive). *NOTE - Lever must be held against quadrant stop (between "D" & "L") during linkage adjustment.* Position transmission detent lever on transmission into "D" (Drive) detent position (second from rear), then tighten clamp on shift rod. Check pointer alignment for all selector lever detent positions.



MANUAL LINKAGE ADJUSTMENT
1959-60 FORD
1959 EDSEL

NEUTRAL SAFETY SWITCH ADJUSTMENT: Check starter circuit in all selector lever positions. The circuit must be open in all positions except "N" (Neutral) & "P" (Park). To adjust, loosen switch-to-steering column attaching screws, then shift selector lever to "N". Rotate switch as far as it will go in either direction, then insert a .060" pin through switch housing at gauge pin hole. *NOTE - This hole will be located at end of switch housing or on the upper side of housing depending upon type of switch used.* Hold pressure against gauge pin and rotate switch in the free rotation direction until pin engages hole in plate. With gauge pin through housing and into plate, tighten attaching screws and remove gauge pin. Check starter circuit in all selector lever positions. Starter must operate with selector lever in "N" (Neutral) or "P" (Park).

1960 COMET, FALCON & EDSEL

NEUTRAL SAFETY SWITCH ADJUSTMENT: Check starter circuit in all selector lever positions. The circuit must be open in all positions except "N" (Neutral) and "P" (Park). To adjust, loosen screws securing switch to mounting bracket on lower end of steering column and rotate switch as required to obtain starter operation in "N" or "P" positions. Tighten switch screws.

BAND ADJUSTMENT: Adjust bands every 24,000 miles (Ford), check each time oil pan is removed and adjust when necessary (Edsel).

Front Band (Low Range): Loosen locknut on adjusting screw on left front side of transmission case, then tighten adjusting screw with Tool T59P-7730-A (Ford) or Tool 7345 (Edsel) until tool handle snaps (breaks) over center. *NOTE - These tools are pre-set torqu wrenches which overrun when torque on screw reaches 10 ft. lbs.* Back off the adjusting screw **exactly tw turns.** Hold adjusting screw at this position and tighten locknut to 35-40 ft. lbs.

Rear Band (Reverse Range): Drain transmission and remove oil pan and screen. Loosen rear servo piston rod locknut and adjusting nut, then install tool as follows: If Ford Tool T59P-77409-A used, place tool on rear servo rod so two forks straddle band apply lever. *NOTE - The inner fork must engage flat on servo pist n rod. The outer fork is a ¼" spacer and must be inserted between piston rod seat and adjusting nut.* If Edsel Tool 7355-A used, insert tool between adjusting nut and piston rod-to-actuating lever seat, with opposite end of tool resting on raised boss on control valve assembly. With wrench T59P-77423-A (Ford), or No. 7355-B (Edsel), tighten adjusting nut until wrench handle snaps (breaks) over center. *NOTE - These tools are pre-set torque wrenches which overrun when torque on screw reaches 45-50 inch pounds.* Back off adjusting nut **exactly tw turns.** Hold adjusting nut at this position and tighten locknut to 15-18 ft. lbs. Remove tools from servo piston rod. Install oil pan and screen using a new gasket. Fill transmission with Automatic Transmission Fluid Type "A".

TESTING

STALL TEST: With engine at normal operating temperature, install tachometer to engine and place it so it can be read from drivers seat. Apply service and parking brakes, then place transmission selector lever in either

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