

TRANSMISSION REASSEMBLY

NOTE: Exploded views of internal parts, thrust washer and needle bearing locations can be found in Figs. Fig. 30-Fig. 33. Lubricate all parts with transmission fluid during reassembly. Thrust washers and gaskets should be held in place with petroleum jelly.

1. With transmission mounted in fixture, rotate bellhousing to face upward. Install inner and outer seals on reverse clutch piston. See Fig. 22. Using Spring Compressor (T65L-77515 A), install reverse clutch piston. Remove spring compressor.
2. Install reverse piston return spring assembly and one-way clutch inner race. Ensure lubrication hole of inner race is in 6 o'clock position. Tighten bolts to specification. See TORQUE SPECIFICATIONS.
3. Install reverse clutch pack (5- or 6-plate depending on model) starting with an external spline plate. Alternate external spline plates with internal spline plates. Install reverse clutch pressure plate and retaining ring. Ensure retaining ring is installed with opening between 12 and 3 o'clock. Clearance measurement is not required.
4. Rotate transmission to horizontal position. Lubricate steel side of thrust washer, and place on rear of case bronze side outward. Install retaining ring on output shaft. Slide park ear onto shaft with thrust surface opposite retaining ring. Install output shaft. DO NOT overextend retaining ring when installing. Ensure retaining ring is securely seated in groove.
5. Install reverse hub and low-reverse one-way clutch. Install output shaft hub and reverse ring gear with needle bearing on rear surface of hub. Hold bearing in place with petroleum jelly.
6. Install NEW retaining ring on output shaft. Rotate transmission with bellhousing facing upward. Install reverse planet into hub with thrust washer. Install retaining ring into low-reverse hub. Ensure retaining is securely seated in groove.
7. Using Clutch Remover-Installer (T89T-70010-E), install intermediate brake drum assembly, forward clutch assembly and input shell assembly into case as a unit. See Fig. 27. It may be necessary to rotate output shaft to seat reverse sun gear. Remove installer.

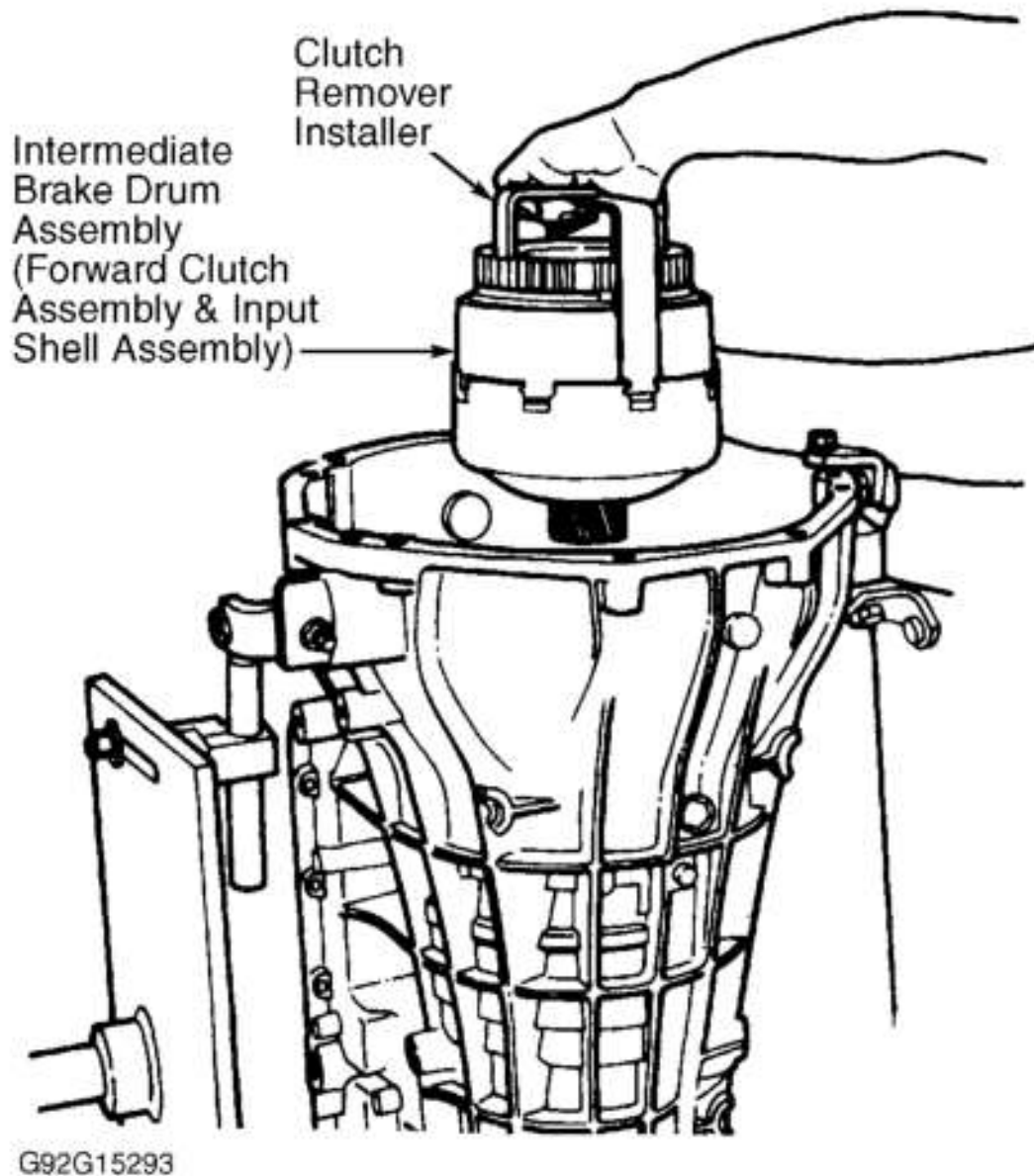


Fig. 27: Installing Input Shell

Courtesy of FORD MOTOR CO.

8. Install intermediate band with one ear on reaction pin. Install servo retaining ring, retaining plate, piston and rod assembly, and servo spring. Install intermediate pressure plate. Install clutch pack starting with internal spline plate. Install apply plate.
9. Measure transmission rear end play to determine amount of space between thrust washer surfaces of center support and intermediate brake drum. Ensure transmission end play is .032-.081" (.81-2.06 mm).
10. Fabricate a depth gauge fixture from an overdrive center support. See **Fig. 28**. Drill a 1/8" hole through thrust washer surface of center support. This allows a measurement between thrust surfaces of support and intermediate brake drum.

NOTE: Remove cast iron seals from center support to allow easy insertion into intermediate brake drum.

11. Place Depth Micrometer (D80P-4201-A) over drilled hole. Extend micrometer probe until flush with thrust washer surface fixture and note reading. Install fabricated depth gauge fixture into intermediate brake drum. See **Fig. 29**.

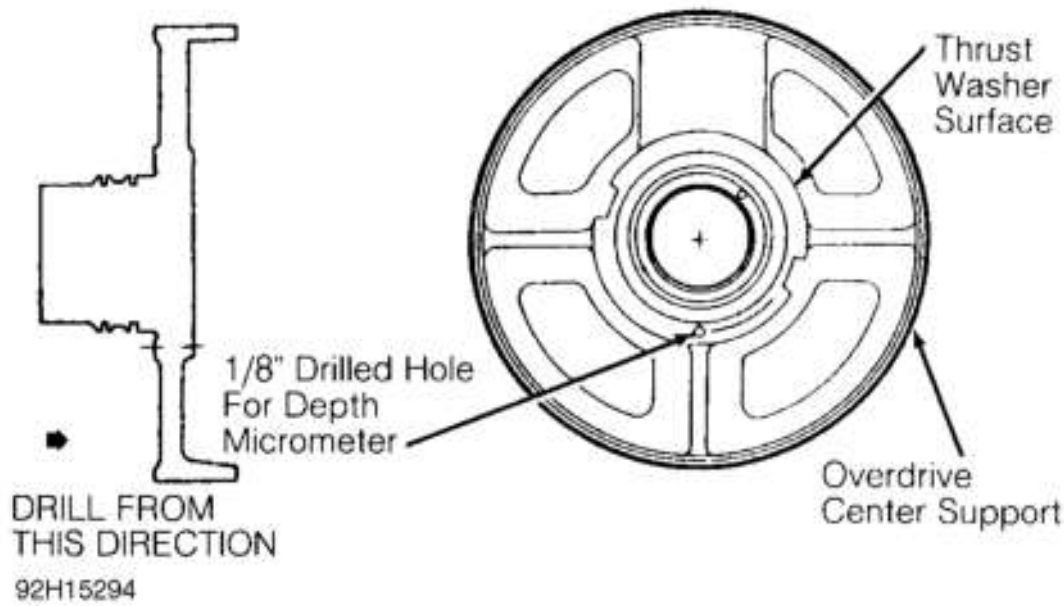


Fig. 28: Drilling Fabricated Depth Gauge Fixture
Courtesy of FORD MOTOR CO.

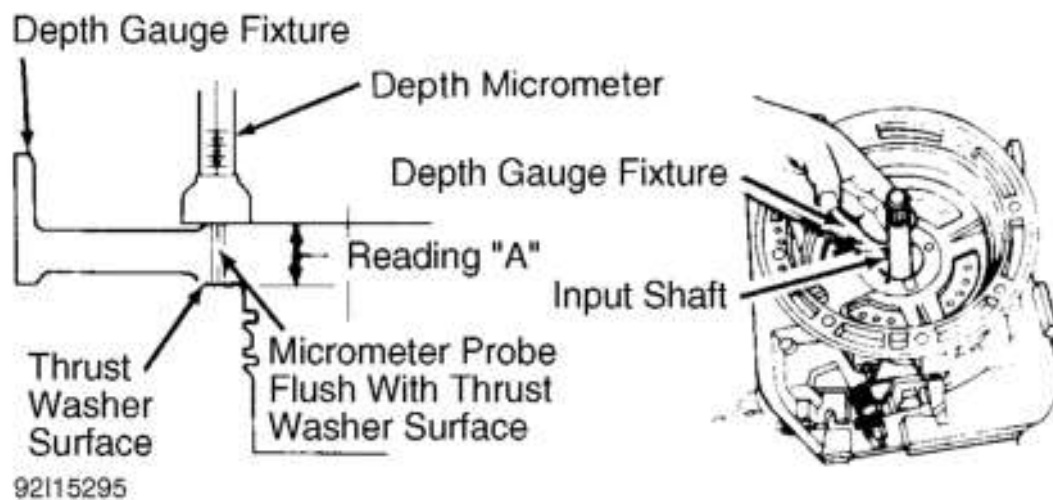


Fig. 29: Measuring Rear End Play
Courtesy of FORD MOTOR CO.

12. Gently wiggle input shaft to allow center support fixture to slide into intermediate brake drum. Ensure support fixture is fully seated. Place depth micrometer over drilled hole. Extend micrometer probe until probe bottoms against thrust washer surface. Note reading. Subtract first reading from second reading.
13. If average reading is outside of specifications, this indicates improper reassembly, missing parts or parts out of specification. Correct before continuing reassembly. If within specifications, remove depth gauge. Install thrust washer and retain with grease.
14. Install center support, and align with holes in feed port. Install feed bolts finger tight. Install intermediate clutch return spring with dish surface inward. Ensure spring locator legs are properly located in center support circular coast rib.
15. Install intermediate-overdrive cylinder. DO NOT cock cylinder when installing. Align cylinder threaded feed hole with hole in case.
16. Install retaining ring over intermediate clutch cylinder with ring opening at bottom of case for proper oil drainback. Using Spring Compressor Plate (T89T-70010-F) and Spring Fixture (T89T-70010-C), tighten center bolt to specification. See **TORQUE SPECIFICATIONS**.
17. Seat selective retaining ring in case ring groove. Install feed bolts finger tight. No clearance measurement is required. Remove spring tool assembly. Tighten all feed bolts to specification. See **TORQUE SPECIFICATIONS**.

CAUTION: Front feed bolt torque is lower than rear feed bolts. Ensure proper torque specification is used.

18. Coat needle bearing with grease and install on rear face of center shaft. Install center shaft, overdrive ring gear, overdrive planetary gear set and coast clutch cylinder as an assembly.
19. Install overdrive clutch pack, starting with a steel plate. Install pressure plate with dot facing outward and toward top of case. Install trial selective retaining ring with opening at bottom of case.
20. Using a feeler gauge, measure clearance of clutch pack. Ensure clearance is .022-.047" (.055-1.20 mm). If clearance is not within specifications, selective snap rings are available in various sizes. See **OVERDRIVE CLUTCH PACK SELECTIVE SNAP RINGS**. Install correct size snap ring and recheck clearance.

OVERDRIVE CLUTCH PACK SELECTIVE SNAP RINGS

| Part No. | (1) Thickness: In. (mm) |
|-----------------|--------------------------------|
| E9TZ-7D483-D | .059 (1.50) |
| E9TZ-7D483-E | .079 (2.01) |
| E9TZ-7D483-F | .100 (2.54) |
| E9TZ-7D483-G | .117 (2.97) |
| E9TZ-7D483-H | .139 (3.53) |

(1) Snap ring thicknesses have .002" (.05 mm) tolerance.

21. Install pump gasket into case. Install thrust washer and needle bearing on pump with Pump Puller (T89T-70010-A) and Slide Hammer (T59L-100-B). Using Alignment Pin (T89T-70010-B), install input shaft long splined end first into case.
22. Install pump and orient filter inlet tube bore toward valve body mounting surfaces. Draw pump into case evenly to avoid seal damage. Install NEW pump bolts and washers. Remove aligning pin. Tighten bolts to specification. See **TORQUE SPECIFICATIONS**. Remove input shaft.

23. Using Shift Lever Seal Replacer (T74P-77498-A), install manual lever seal. Install manual lever detent spring bolts. Tighten bolts to specification.
24. Install manual lever, inner lever, park actuating rod assembly and NEW nut. Tighten nut to specification. Refer to the **TORQUE SPECIFICATIONS**. Ensure manual valve detent spring is installed on inner detent lever.
25. Install manual lever and roll pin, with pin just below case surface. Install parking pawl, pin and parking pawl return spring on rear race. Parking pawl return spring end rests on inside surface of case.
26. Install parking pawl abutment with Torx bolt (40A) and tighten to specification. See **TORQUE SPECIFICATIONS**. Attach parking rod guide plate with 2 bolts and washers. Tighten bolts to specification. Ensure plate dimple is facing inward and parking rod is in guide plate slot.
27. Install manual lever position sensor with 2 bolts and washer. DO NOT tighten bolts at this time. Using Sensor Adjuster (T87T-70010-J), align sensor on neutral gear position. Tighten bolts to specification.
28. Install gasket on extension housing. Ensure parking pawl return spring is properly located on inside surface of case when installing extension housing. Install extension housing and wiring bracket on rear case. Tighten bolts to specification. Refer to the **TORQUE SPECIFICATIONS**. The 2 bottom bolts are longer on 4WD vehicles.
29. Rotate transmission with pan surface facing upward. Install one steel and 9 rubber check balls, and EPC blow-off spring and ball into case pockets. See **Fig. 7**. Check placement of EPC blow-off ball. Install accumulator regulator filter assembly. See **Fig. 5**.
30. Install case-to separator plate gasket. Install separator plate. Attach reinforcing plate with 3 bolts. Ensure stamped "UP" on reinforcing plate faces up. Tighten bolts to specification. Install NEW separator-to-control gasket. Install solenoid screen into separator plate. Turn and lock solenoid screen.
31. Install accumulator body over studs. Attach with 2 nuts and 11 bolts. Tighten nuts and bolts to specification. Refer to the **TORQUE SPECIFICATIONS**.
32. Lower main valve body over studs. Align manual valve with manual lever. Ensure detent spring is on detent lever. Attach valve body with 2 nuts and 14 bolts. Tighten nuts and bolts to specification.
33. Ensure case connector bore is coated with grease prior to installing solenoid body. Install solenoid body over stud and attach with 9 Torx bolts (30A) and one nut. Tighten nut and bolts to specification.
34. Install NEW filter and seal assembly. Lubricate seal with ATF. Press filter into place. Install pan magnet on dimple in bottom of pan.
35. Install NEW pan gasket on pan. Attach pan with bolts. Tighten bolts to specification. See **TORQUE SPECIFICATIONS**.
36. If necessary, install stub tube using Installer (T89T-70010-G). Use stripe on side of tube for alignment. The stripe should be farthest outboard when installed. Reinstall input shaft, long splined end first.

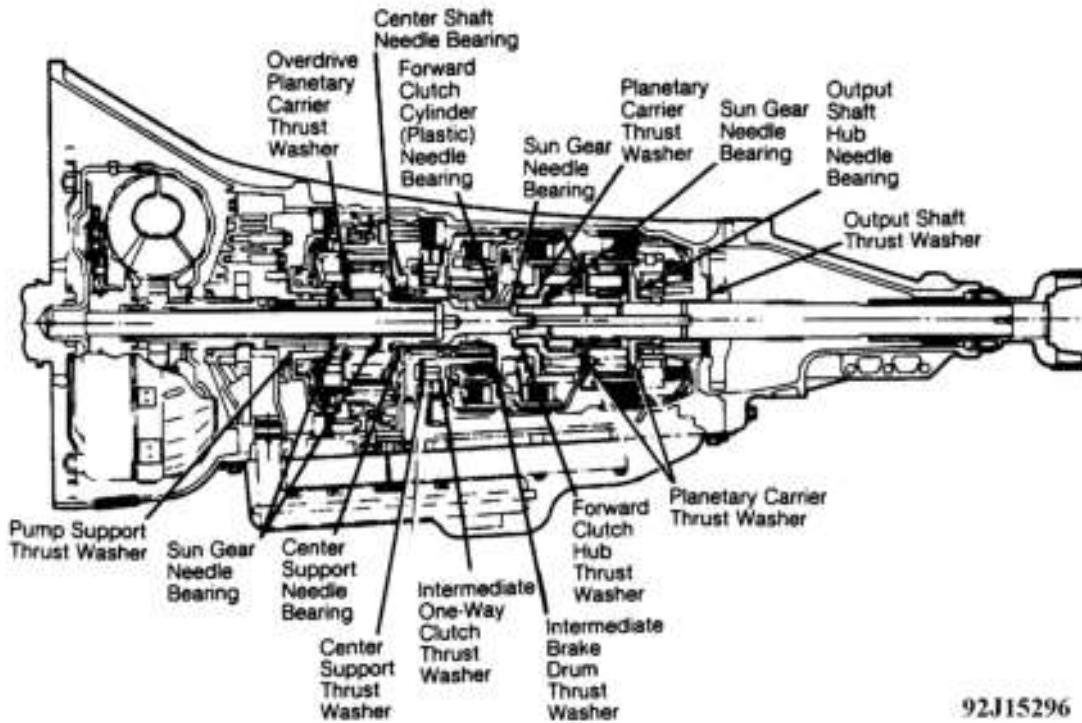


Fig. 30: Locating Thrust Washers & Bearings
 Courtesy of FORD MOTOR CO.

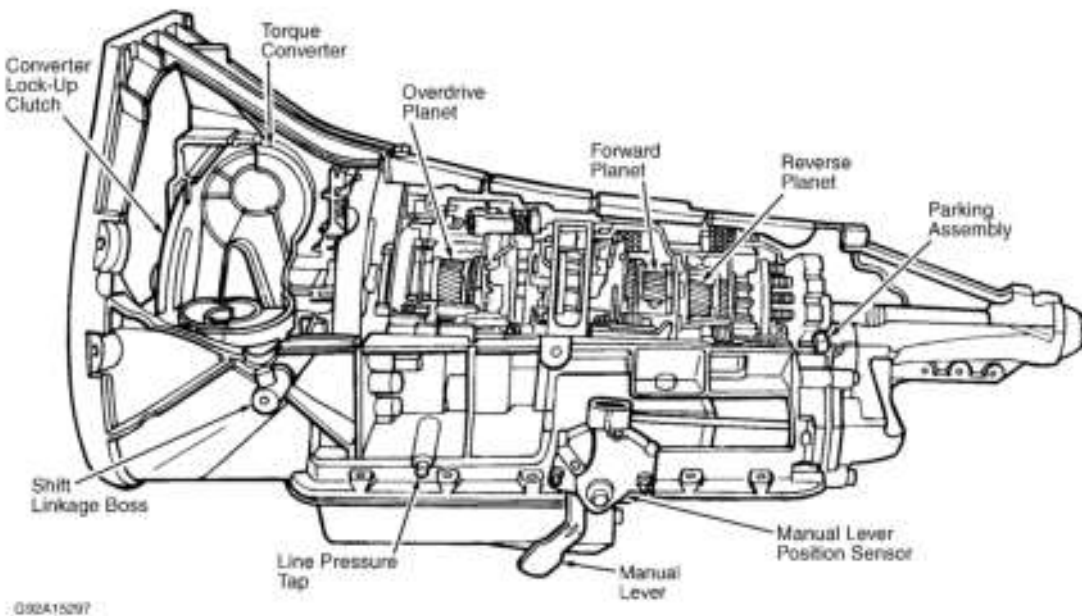


Fig. 31: Cross-Sectional View Of E4OD Automatic Transmission
 Courtesy of FORD MOTOR CO.

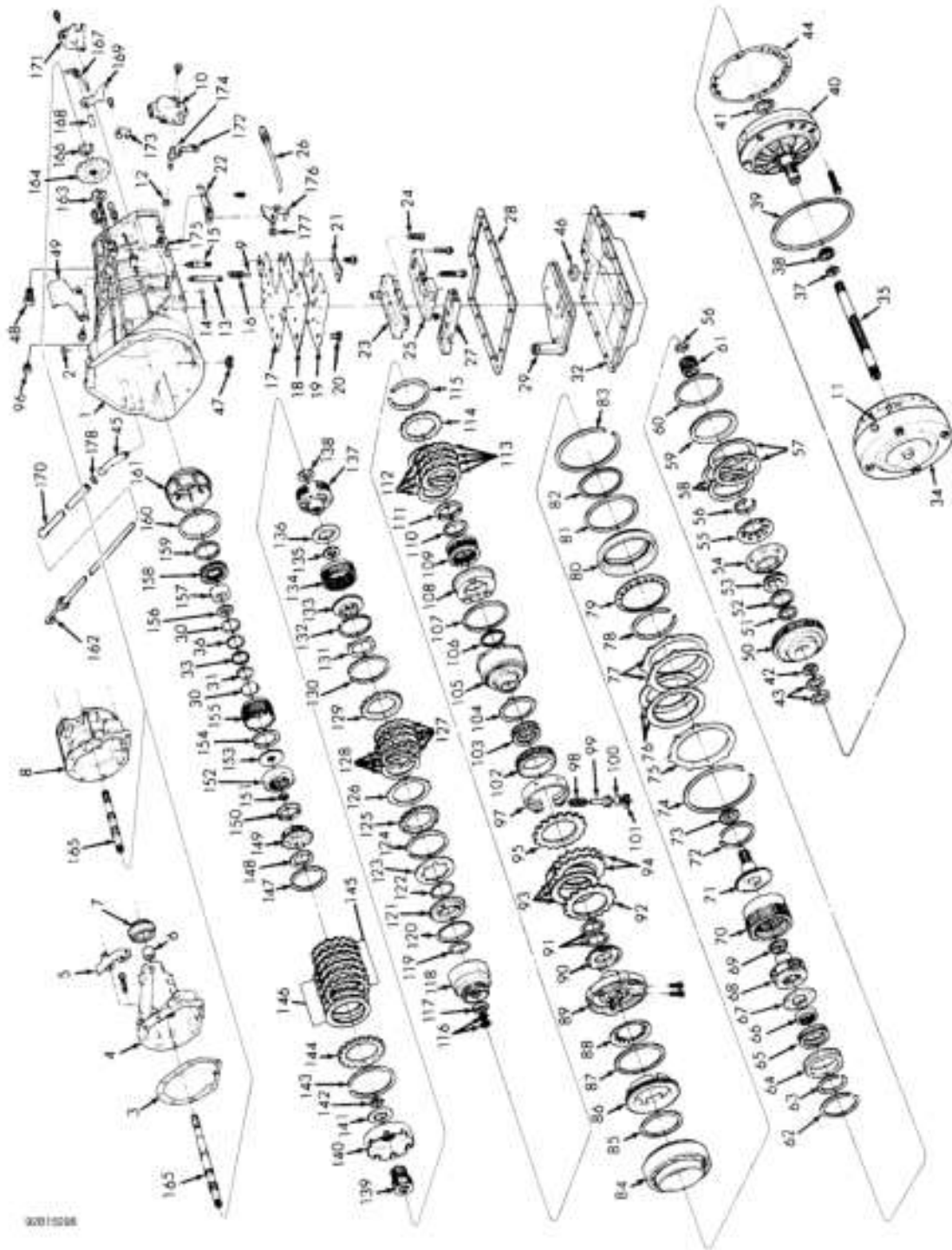


Fig. 32: Exploded View Of E4OD Automatic Transmission (1 of 2)
 Courtesy of FORD MOTOR CO.

| | | |
|---|--|--|
| 1. Case Assembly | 60. Selective Fit Retaining Ring | 119. Inner Seal |
| 2. Vent Assembly | 61. Overdrive Sun Gear Assembly | 120. Outer Seal |
| 3. Extension Housing Gasket | 62. Retaining Ring | 121. Piston Assembly |
| 4. Extension Housing | 63. Retaining Ring | 122. Piston Apply Ring |
| 5. Wing Bracket | 64. Overdrive One Way Clutch Outer Race | 123. Piston Return Spring |
| 6. Extension Housing Bushing | 65. Overdrive One Way Clutch Assembly | 124. Retaining Ring |
| 7. Extension Housing Seal | 66. Overdrive One Way Clutch Inner Race | 125. Forward Clutch Pressure Plate |
| 8. Extension Housing | 67. Thrust Washer | 126. Cushion Spring |
| 9. EPC Blow-Off Ball | 68. Overdrive Planet Assembly | 127. Forward Clutch External Spine Plate |
| 10. Manual Lever Position Sensor | 69. Needle Bearing Assembly | 128. Forward Clutch Internal Spine Plate |
| 11. Converter Drain | 70. Overdrive Ring Gear | 129. Rear Clutch Pressure Plate |
| 12. Manual Lever Seal | 71. Center Shaft | 130. Selective Fit Retaining Ring |
| 13. Case-To-Solenoid Body Stud | 72. Retaining Ring | 131. Plastic Thrust Washer |
| 14. Rubber Check Ball | 73. Needle Bearing Assembly | 132. Retaining Ring |
| 15. Case-To-Control Assembly Stud | 74. Selective Fit Overdrive Retaining Ring | 133. Forward Hub |
| 16. EPC Blow-Off Spring | 75. Overdrive Clutch Pressure Plate | 134. Forward Ring Gear |
| 17. Case-To-Separator Plate Gasket | 76. Overdrive Clutch Internal Spine Plate | 135. Needle Bearing Assembly |
| 18. Separator Plate | 77. Overdrive Clutch External Spine Plate | 136. Thrust Washer |
| 19. Separator Plate-To-Control Gasket | 78. Return Spring Retaining Ring | 137. Forward Planet Assembly |
| 20. Solenoid Screen | 79. Overdrive Return Spring | 138. Needle Bearing Assembly |
| 21. Separator Plate Reinforcement | 80. Overdrive Piston | 139. Forward/Reverse Sun Gear Assembly |
| 22. Manual Valve Detent Spring Assembly | 81. Overdrive Outer Seal | 140. Input Shell |
| 23. Solenoid Body Assembly | 82. Overdrive Inner Seal | 141. Thrust Washer |
| 24. Torx Head Bolt | 83. Cylinder Retaining Ring | 142. Retaining Ring |
| 25. Man Control Body Assembly | 84. Intermediate/Overdrive Cylinder | 143. Retaining Ring |
| 26. Parking Pawl Actuating Rod Assembly | 85. Intermediate Inner Seal | 144. Reverse Clutch Pressure Plate |
| 27. Accumulator Body Assembly | 86. Intermediate Piston | 145. Reverse Clutch External Spine Plate |
| 28. Oil Pan Gasket | 87. Intermediate Outer Seal | 146. Reverse Clutch Internal Spine Plate |
| 29. Filter & Seal Assembly | 88. Intermediate Return Spring | 147. Retaining Ring |
| 30. Retaining Ring | 89. Center Support Assembly | 148. Thrust Washer |
| 31. Overrunning Clutch Spring Assembly | 90. Thrust Washer | 149. Reverse Planet Assembly |
| 32. Oil Pan | 91. Direct Clutch Cast Iron Seal | 150. Thrust Washer |
| 33. Overrunning Clutch Roller | 92. Intermediate Clutch Apply Plate | 151. Retaining Ring |
| 34. Torque Converter Assembly | 93. Intermediate Clutch Internal Spine Plate | 152. Reverse Ring Gear |
| 35. Input Shaft | 94. Intermediate Clutch External Spine Plate | 153. Output Shaft Hub |
| 36. Overrunning Clutch Bushing | 95. Intermediate Clutch Pressure Plate | 154. Retaining Ring |
| 37. Teflon Seal Ring | 96. Oil Tube Connector Assembly | 155. Reverse Clutch Hub Assembly |
| 38. Converter Hub Seal | 97. Band Assembly | 156. Needle Bearing Assembly |
| 39. Pump Seal | 98. Servo Return Spring | 157. Low/Reverse One Way Clutch Inner Race |
| 40. Pump Assembly | 99. Servo Piston Assembly | 158. Piston Return Spring Assembly |
| 41. Pump Thrust Washer | 100. Servo Cover Plate | 159. Inner Seal |
| 42. Needle Bearing Assembly | 101. Servo Retaining Ring | 160. Outer Seal |
| 43. Teflon Seal Ring | 102. Intermediate One Way Clutch Outer Race | 161. Piston |
| 44. Pump Gasket | 103. Intermediate One Way Clutch Assembly | 162. Dipstick |
| 45. Lube Inlet Short Tube | 104. Thrust Washer | 163. Thrust Washer |
| 46. Pan Magnet | 105. Intermediate Brake Drum Assembly | 164. Parking Gear |
| 47. Converter Access Plug | 106. Inner Seal | 165. Output Shaft Assembly |
| 48. Oil Cooler Check Valve Assembly | 107. Outer Seal | 166. Retaining Ring |
| 49. Solenoid Body Connector Heat Shield | 108. Piston Assembly | 167. Parking Pawl Return Spring |
| 50. Coast Clutch Cylinder Assembly | 109. Piston Return Spring | 168. Parking Pawl Pin |
| 51. Inner Seal | 110. Spring Retaining Ring | 169. Parking Pawl |
| 52. Outer Seal | 111. Thrust Washer | 170. Oil Filler Tube Assembly |
| 53. Piston Coast Clutch | 112. Direct Clutch Internal Spine Plate | 171. Parking Rod Guide Plate |
| 54. Piston Apply Ring | 113. Direct Clutch External Spine Plate | 172. Insulator |
| 55. Piston Return Spring | 114. Direct Clutch Pressure Plate | 173. Parking Pawl Actuating Abolment |
| 56. Retaining Ring | 115. Selective Fit Retaining Ring | 174. Manual Control Lever Assembly |
| 57. Coast Clutch External Spine Plate | 116. Teflon Seal Ring | 175. Manual Lever Retaining Pin |
| 58. Coast Clutch Internal Spine Plate | 117. Needle Bearing Assembly | 176. Inner Detent Lever |
| 59. Coast Clutch Pressure Plate | 118. Forward Clutch Assembly Cylinder | 177. Inner Detent Lever Nut |
| | | 178. Oil Filler Tube Seal |

Fig. 33: Legend For Exploded View Of E4OD Transmission (2 of 2)

Courtesy of FORD MOTOR CO.

SHIFT SPEEDS (MPH)

NOTE: Figures below are approximate. All shift speeds may vary somewhat due to production tolerances, rear axle ratios or emission control equipment.

NOTE: Specifications given are for 1991 models; 1992 models are similar. Ensure all tires are factory recommended sizes.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | | | |
|------------------------------|-------------|-------|----------------------------|-------------------|-------------------|-------------------|
| | | | Axle Ratios | | | |
| | | | 3.08 ^② | 3.55 ^③ | 3.55 ^④ | 3.73 ^⑤ |
| Light Throttle $\frac{1}{2}$ | Ⓛ or D | 1-2 | 10-11 | 9-9.5 | 9.5-10.5 | 9.5 |
| | Ⓛ or D | 2-3 | 18-19.5 | 15.5-17 | 17-18.5 | 16.5-17 |
| | Ⓛ | 3-4 | 38.5-41.5 | 33.5-36 | 36.5-40 | 35-36 |
| | Ⓛ | 4-3 | 36-39 | 31-33.5 | 34-37.5 | 33-33.5 |
| | Ⓛ or D | 3-2 | 15.5-17 | 13.5-14.5 | 15-16 | 14-14.5 |
| | Ⓛ or D | 2-1 | 9-9.5 | 8-8.5 | 8.5-9.5 | 8-8.5 |
| Wide Open Throttle (WOT) | Ⓛ or D | 1-2 | 36-39 | 31-33.5 | 34-37.5 | 33-33.5 |
| | Ⓛ or D | 2-3 | 61-66 | 53-57 | 58-63.5 | 56-57 |
| | Ⓛ | 3-4 | 90.5-97.5 | 78.5-85 | 86-94 | 82.5-85 |
| | Ⓛ | 4-3 | 85-92 | 74-79.5 | 81-88.5 | 78-79.5 |
| | Ⓛ or D | 3-2 | 54-57.5 | 46.5-50 | 51-55.5 | 49-50 |
| | Ⓛ or D | 2-1 | 28-30.5 | 24.5-26.5 | 27-29 | 26-26.5 |

Note: D is the same as Ⓛ with the Ⓛ cancel switch actuated (light on).

① Nominal shift speed shown. Actual shift speed will depend on tire brand and size.

② E-150, F-150

③ E-150, F-150, Bronco

④ F-250, Bronco

⑤ E-250

⑥ Throttle position is less than 10°.

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Fig. 34: 4.9L Bronco, E150/250 & F150/250 Shift Speed Table
Courtesy of FORD MOTOR CO.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | | | | |
|------------------------------|-------------|-------|----------------------------|-------------------|------------------------|-------------------|-------------------|
| | | | Axle Ratios | | | | |
| | | | 3.08 ^② | 3.55 ^③ | 3.54/3.55 ^④ | 3.73 ^⑤ | 4.10 ^⑥ |
| Light Throttle $\frac{1}{2}$ | Ⓛ or D | 1-2 | 10-11 | 9-9.5 | 10-10.5 | 9-9.5 | 8.5-9 |
| | Ⓛ or D | 2-3 | 19-20.5 | 16.5-18 | 18.5-20 | 17.5-18 | 16-17 |
| | Ⓛ | 3-4 | 39.5-42.5 | 34.5-37 | 38-41 | 36-37 | 33-35.5 |
| | Ⓛ | 4-3 | 37-40 | 32.5-35 | 35.5-38.5 | 34-35 | 31-33.5 |
| | Ⓛ or D | 3-2 | 18.5-20 | 16-17.5 | 18-19.5 | 17-17.5 | 15.5-16.5 |
| | Ⓛ or D | 2-1 | 9.5-10.5 | 8.5-9 | 9-10 | 8.5-9 | 8-8.5 |
| Wide Open Throttle (WOT) | Ⓛ or D | 1-2 | 41-44 | 36-38.5 | 39.5-43 | 38-38.5 | 34.5-37 |
| | Ⓛ or D | 2-3 | 71-76.5 | 61.5-66 | 68-73.5 | 64.5-66 | 58.5-63.5 |
| | Ⓛ | 3-4 | 97-105 | 84.5-91 | 93-100.5 | 89-91 | 80.5-87 |
| | Ⓛ | 4-3 | 91-98.5 | 79-85.5 | 88-94.5 | 83.5-85 | 75.5-82 |
| | Ⓛ or D | 3-2 | 65.5-70.5 | 56.5-61 | 62.5-68 | 60-61 | 54-58.5 |
| | Ⓛ or D | 2-1 | 33.5-36 | 29-31.5 | 32-35 | 31-31.5 | 28-30 |

Note: D is the same as Ⓛ with the Ⓛ cancel switch actuated (light on).

① Nominal shift speed is shown. Actual shift speed will depend on tire brand and size.

② E-150, F-150, Bronco

③ E-150, F-150, Bronco

④ E-250, F-250

⑤ E-250

⑥ E-250, F-250

⑦ Throttle position is less than 10°.

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Fig. 35: 5.8L Bronco, E150/250 & F150/250 Shift Speed Table
Courtesy of FORD MOTOR CO.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | | |
|-----------------------------|-------------|-------|----------------------------|-------------------|-------------------|
| | | | Axle Ratios | | |
| | | | 3.55 ^② | 4.10 ^③ | 4.10 ^④ |
| Light Throttle ^⑤ | Ⓛ or D | 1-2 | 10-11 | 9-9.5 | 9-10 |
| | Ⓛ or D | 2-3 | 16-17 | 14-15.5 | 15.5-16 |
| | Ⓛ | 3-4 | 34.5-36 | 30-32 | 33-34.5 |
| | Ⓛ | 4-3 | 32.5-34 | 28-29 | 31-32.5 |
| | Ⓛ or D | 3-2 | 14.5-15.5 | 12.5-13.5 | 14-14.5 |
| | Ⓛ or D | 2-1 | 9-9.5 | 8-8.5 | 8.5-9 |
| Wide Open Throttle (WOT) | Ⓛ or D | 1-2 | 34.5-36 | 30-32 | 33.5-34.5 |
| | Ⓛ or D | 2-3 | 63.5-66 | 55-57 | 63-60.5 |
| | Ⓛ | 3-4 | 91-94 | 76.5-83 | 86.5-89 |
| | Ⓛ | 4-3 | 86-89 | 74-77 | 82-84.5 |
| | Ⓛ or D | 3-2 | 57.5-59.5 | 50-54 | 55-57 |
| | Ⓛ or D | 2-1 | 27-28 | 23-25 | 26-27 |

Note: D is the same as Ⓛ with Ⓛ cancel switch actuated (light on).

② F-250

⑤ Throttle position is less than 10°.

① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.

② F-150, Bronco

③ F-150, Bronco

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Fig. 36: 5.0L Bronco & F150/250 Shift Speed Table
Courtesy of FORD MOTOR CO.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | |
|-----------------------------|-------------|-------|----------------------------|-------------------|
| | | | Axle Ratios | |
| | | | 3.54/3.55 ^② | 4.10 ^③ |
| Light Throttle ^④ | Ⓛ or D | 1-2 | 12-12.5 | 10-10.5 |
| | Ⓛ or D | 2-3 | 21.5-22.5 | 18-19 |
| | Ⓛ | 3-4 | 40.5-42 | 34-36 |
| | Ⓛ | 4-3 | 38.5-39.5 | 32-34 |
| | Ⓛ or D | 3-2 | 19-20 | 16-17 |
| | Ⓛ or D | 2-1 | 10-10.5 | 8.5-9 |
| Wide Open Throttle (WOT) | Ⓛ or D | 1-2 | 41-42.5 | 34.5-37 |
| | Ⓛ or D | 2-3 | 70.5-73 | 58.5-63 |
| | Ⓛ | 3-4 | 97-100 | 80.5-86.5 |
| | Ⓛ | 4-3 | 91-94 | 75.5-81 |
| | Ⓛ or D | 3-2 | 63-65 | 52.5-56 |
| | Ⓛ or D | 2-1 | 32.5-33.5 | 27-29 |

Note: D is the same as Ⓛ with the Ⓛ cancel switch actuated (light on).

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① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.

② E-250, E-350, F-250, F-350

③ E-250, E-350, F-250, F-350

④ Throttle position is less than 10°.

Fig. 37: 5.8L E250/350 & F250/350 Shift Speed Table
Courtesy of FORD MOTOR CO.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | |
|-----------------------------|-------------|-------|----------------------------|-------------------|
| | | | Axle Ratios | |
| | | | 3.55/3.54 ^② | 4.10 ^③ |
| Light Throttle ^④ | Ⓧ or D | 1-2 | 9.5 - 10.5 | 8 - 8.5 |
| | Ⓧ or D | 2-3 | 18 - 19 | 15.5 - 16.5 |
| | Ⓧ | 3-4 | 37 - 39.5 | 32.5 - 34.5 |
| | Ⓧ | 4-3 | 35 - 37.5 | 30.5 - 32.5 |
| | Ⓧ or D | 3-2 | 16.5 - 17.5 | 14.5 - 15.5 |
| | Ⓧ or D | 2-1 | 8.5 - 9 | 7 - 7.5 |
| Wide Open Throttle (WOT) | Ⓧ or D | 1-2 | 33.5 - 34.5 | 29 - 30 |
| | Ⓧ or D | 2-3 | 50 - 52 | 43 - 45 |
| | Ⓧ | 3-4 | 88 - 91 | 76.5 - 79 |
| | Ⓧ | 4-3 | 76 - 79 | 64.5 - 69.5 |
| | Ⓧ or D | 3-2 | 46.5 - 48.5 | 40.5 - 42 |
| | Ⓧ or D | 2-1 | 24 - 25 | 20.5 - 22 |

Note: Ⓧ is the same as Ⓧ with the Ⓧ cancel switch actuated (light on).

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- ① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.
- ② E-250, E-350, F-250, F-350
- ③ E-250, E-350, F-250, F-350
- ④ Throttle position is less than 10°.

Fig. 38: 7.3L Diesel E250/350 & F250/350 Shift Speed Table
 Courtesy of FORD MOTOR CO.

| |
|-------------------|
| Axle Ratio |
| 5.13 |

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① |
|-----------------------------|-------------|-------|----------------------------|
| Light Throttle ^② | Ⓧ or D | 1-2 | 8 - 8.5 |
| | Ⓧ or D | 2-3 | 13 - 13.5 |
| | Ⓧ | 3-4 | 26.5 - 27.5 |
| | Ⓧ | 4-3 | 24.5 - 25.5 |
| | Ⓧ or D | 3-2 | 11.5 - 12.5 |
| | Ⓧ or D | 2-1 | 7 - 7.5 |
| Wide Open Throttle (WOT) | Ⓧ or D | 1-2 | 22.5 - 23.5 |
| | Ⓧ or D | 2-3 | 39.5 - 41 |
| | Ⓧ | 3-4 | 61 - 63 |
| | Ⓧ | 4-3 | 51.5 - 53 |
| | Ⓧ or D | 3-2 | 31 - 32 |
| | Ⓧ or D | 2-1 | 14.5 - 15 |

Note: D is the same as Ⓧ with the Ⓧ cancel switch actuated (light on).

① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.

② Throttle position is less than 10°.

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Fig. 39: 7.3L Diesel "F" Super Duty Shift Speed Table
 Courtesy of FORD MOTOR CO.

| Throttle Opening | Drive Range | Shift | Vehicle Speed ^① | |
|-----------------------------|-------------|-------|----------------------------|-------------------|
| | | | Axle Ratios | |
| | | | 3.55/3.54 ^② | 4.10 ^③ |
| Light Throttle ^④ | Ⓧ or D | 1-2 | 9-10 | 8-8.5 |
| | Ⓧ or D | 2-3 | 16-19 | 15.5-16.5 |
| | Ⓧ | 3-4 | 38-41 | 33-35 |
| | Ⓧ | 4-3 | 36-38.5 | 31-33 |
| | Ⓧ or D | 3-2 | 16-17.5 | 14-16 |
| | Ⓧ or D | 2-1 | 8.5-9.5 | 7.5-8 |
| Wide Open Throttle (WOT) | Ⓧ or D | 1-2 | 38.5-41.5 | 33.5-36 |
| | Ⓧ or D | 2-3 | 64.5-69.5 | 55.5-60 |
| | Ⓧ | 3-4 | 93.5-100 | 80.5-86.5 |
| | Ⓧ | 4-3 | 87.5-94 | 75.5-81 |
| | Ⓧ or D | 3-2 | 57-61 | 49.5-53 |
| | Ⓧ or D | 2-1 | 30-32 | 26-28 |

Note: D is the same as Ⓧ with the Ⓧ cancel switch actuated (light on).

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- ① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.
- ② E-250, E-350, F-250, F-350
- ③ E-250, E-350, F-250, F-350
- ④ Throttle position is less than 10°.

Fig. 40: 7.5L E250/350 & F250/350 Shift Speed Table
 Courtesy of FORD MOTOR CO.

| Throttle Position | Drive Range | Shift | Vehicle Speed ^① | |
|-----------------------------|-------------|-------|----------------------------|-----------|
| | | | Axle Ratios | |
| | | | 4.63 | 5.13 |
| Light Throttle ^② | Ⓧ or D | 1-2 | 7.5-8 | 7-7.5 |
| | Ⓧ or D | 2-3 | 14-14.5 | 13-13.5 |
| | Ⓧ | 3-4 | 30.5-31.5 | 27.5-28.5 |
| | Ⓧ | 4-3 | 24-24.5 | 25.5-26.5 |
| | Ⓧ or D | 3-2 | 13-13.5 | 12-12.5 |
| | Ⓧ or D | 2-1 | 7-7.5 | 6.5-7 |
| Wide Open Throttle (WOT) | Ⓧ or D | 1-2 | 30.5-31.5 | 27.5-28.5 |
| | Ⓧ or D | 2-3 | 51.5-53 | 46.5-48 |
| | Ⓧ | 3-4 | 74.5-76.5 | 67-69 |
| | Ⓧ | 4-3 | 68-70 | 61-63 |
| | Ⓧ or D | 3-2 | 45.5-47 | 41-42 |
| | Ⓧ or D | 2-1 | 23-23.5 | 21-21.5 |

Note: D is the same as Ⓧ with the Ⓧ cancel switch actuated (light on).

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- ① Nominal shift speed is shown. Actual shift speed will depend on the tire brand and size.
- ② Throttle position is less than 10°.

Fig. 41: 7.5L "F" Super Duty Shift Speed Table
 Courtesy of FORD MOTOR CO.