

**Model:**

|                                     |                                                                                 |
|-------------------------------------|---------------------------------------------------------------------------------|
| <b>Ford</b><br>2022-2024 Expedition | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80             |
| 2022-2024 Explorer                  | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80 / 10R80 MHT |
| 2022-2024 F-150                     | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80 / 10R80 MHT |
| 2022-2024 Mustang                   | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80             |
| 2022-2023 Ranger                    | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80             |
| 2022-2024 Transit                   | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80             |
| <b>Lincoln</b><br>2022-2023 Aviator | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80 / 10R80 MHT |
| 2022-2024 Navigator                 | Built on 16-Aug-2022 and through 23-Sep-2024<br>Transmission: 10R80             |

**Markets:** North American markets only**Issue:** Some of the vehicles listed in the Model statement above may exhibit at least one of the following conditions:

- Harsh 3-4, 4-5 upshifts
- Harsh 5-3, 4-3 downshifts
- Harsh reverse engagements

These symptoms may be worse when cold. This may be due to the F clutch friction plates brinelling into the clutch and planetary container cylinder (7B177).

**Action:** For vehicles that meet all of the criteria in the Issue and Model statements, follow the Service Procedure to replace the F clutch steel plates, The F clutch friction plates and the clutch and planetary container cylinder (7B177).

**Parts - All Vehicles - Clutch And Planetary Assembly Cylinder**

| Service Part Number | Claim Quantity | Description                                    | Note                                                           |
|---------------------|----------------|------------------------------------------------|----------------------------------------------------------------|
| PC3Z-7B177-A        | 1              | Clutch And Planetary Assembly Cylinder         |                                                                |
| PR3Z-7E313-A        | 4              | F Clutch Friction Plates                       |                                                                |
| HL3Z-7B164-G        | 4              | F Clutch Steel Plates                          |                                                                |
| HL3Z-7A098-A        | 1              | Fluid Filter                                   | Expedition/Navigator/Mustang/Ranger, Explorer/F-150 Non-Hybrid |
| L1MZ-7A098-B        | 1              | Fluid Filter                                   | 10R80 MHT                                                      |
| LK4Z-7G186-B        | 1              | Fluid Filter                                   | Transit Vehicles                                               |
| HL3Z-7A191-B        | 1              | Fluid Pan Gasket                               | 10R80                                                          |
| L1MZ-7F396-A        | 1              | Fluid Pan Gasket                               | 10R80 MHT                                                      |
| HL3Z-7A248-A        | 1              | Torque Converter Hub                           | 10R80                                                          |
| HL3Z-7A248-G        | 1              | Front Support To Case Seal                     | 10R80                                                          |
| HL3Z-7B399-C        | 4              | Sun Gear No. 3 Shaft Seals (F7)                |                                                                |
| LC3Z-7H223-AA       | 12             | Front Support Bolt Seals                       | 10R80                                                          |
| HL3Z-7G091-C        | 1              | Input Shaft Seal (F9)                          |                                                                |
| HL3Z-7G091-F        | 5              | Input Shaft Seals (F2)                         |                                                                |
| HL3Z-7G091-G        | 5              | Input Shaft To Sun Gear No. 3 Shaft Seals (F8) |                                                                |
| HL3Z-7G199-A        | 1              | Auxiliary Pump Tube Seal                       | Non Hybrid Vehicles, Equipped With Auto Start/Stop             |
| JL1Z-7N134-A        | 1              | Park Override Lever Bolt (If Equipped)         |                                                                |

**Parts - All Vehicles - Select One Of The Following If Needed**

| Service Part Number | Claim Quantity | Description                         |
|---------------------|----------------|-------------------------------------|
| HL3Z-7H365-C        | 1              | F Clutch Snap Ring 1.5 mm Selective |
| HL3Z-7H365-D        | 1              | F Clutch Snap Ring 1.7 mm Selective |
| HL3Z-7H365-E        | 1              | F Clutch Snap Ring 1.9 mm Selective |
| HL3Z-7H365-F        | 1              | F Clutch Snap Ring 2.1 mm Selective |
| HL3Z-7H365-G        | 1              | F Clutch Snap Ring 2.3 mm Selective |

**Parts - All Vehicles - Main Control Valve Body Overhaul**

| Service Part Number | Claim Quantity | Description                    |
|---------------------|----------------|--------------------------------|
| W712658-S439        | 2              | Solenoid Retaining Plate Bolts |
| HL3Z-7G007-A        | 6              | Shift Solenoid Retainers       |

**Parts - All Vehicles - Main Control Valve Body Overhaul - Parts To Inspect And Replace Only If Necessary**

| Service Part Number | Claim Quantity              | Description                | Note                                          |
|---------------------|-----------------------------|----------------------------|-----------------------------------------------|
| HL3Z-7Z490-E        | Only If Necessary (Up To 1) | Valve Body Channel Plate   |                                               |
| JL3Z-7Z490-F        | Only If Necessary (Up To 1) | Valve Body Separator Plate | Ranger                                        |
| L1MZ-7Z490-F        | Only If Necessary (Up To 1) | Valve Body Separator Plate | Transit/Explorer, 10R80/ 2024 Mustang         |
| L1MZ-7Z490-N        | Only If Necessary (Up To 1) | Valve Body Separator Plate | Explorer (Non-Police Interceptor) , 10R80 MHT |
| L1MZ-7Z490-P        | Only If Necessary (Up To 1) | Valve Body Separator Plate | Explorer Police Interceptor, 10R80MHT         |
| L1MZ-7Z490-M        | Only If Necessary (Up To 1) | Valve Body Separator Plate | F-150/Expedition/Navigator, 10R80             |
| L1MZ-7Z490-J        | Only If Necessary (Up To 1) | Valve Body Separator Plate | 2022-2023 Mustang                             |
| ML3Z-7Z490-C        | Only If Necessary (Up To 1) | Valve Body Separator Plate | F-150, 10R80 MHT                              |

**Parts - All Vehicles - Chemicals And Lubricants**

| Service Part Number | Claim Quantity | Description                                          | Note                      |
|---------------------|----------------|------------------------------------------------------|---------------------------|
| CPM-4-A             |                | Motorcraft® Brake Parts Cleaner - Low VOC Compliant  | Canada Only               |
| PM-4-A              | As Needed      | Motorcraft® Brake Parts Cleaner - Low VOC Compliant  | All Markets Except Canada |
| PM-4-B              | As Needed      | Motorcraft® Brake Parts Cleaner - High VOC Compliant | All Markets Except Canada |
| XL-5-A              | As Needed      | Motorcraft® Multi-Purpose Grease Spray               | All Markets               |
| XT-12-QULV          | As Needed      | Motorcraft® MERCON® ULV Automatic Transmission Fluid | All Markets               |

**Parts - All Vehicles - Parts To Inspect And Replace Only If Necessary**

| Service Part Number | Claim Quantity                 | Description                | Note  |
|---------------------|--------------------------------|----------------------------|-------|
| 7T4Z-7Z302-A        | Only If Necessary (1 Possible) | Fluid Filter Seal          |       |
| HL3Z-7B066-A        | Only If Necessary (1 Possible) | F Clutch Pressure Plate    |       |
| HL3Z-7J227-A        | Only If Necessary (1 Possible) | Auxiliary Pump Tube O-ring | 10R80 |

**Parts - Additional Parts For F-150**

| Service Part Number | Claim Quantity                                                            | Description                                          | Note                                            |
|---------------------|---------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------|
| TL1Z-6775-A         | 1                                                                         | Self-Adhesive Heat Shield                            |                                                 |
| N800594-S100        | 4 Or 8 Pieces (Flange Dependent)                                          | Driveshaft Flange To Flange Bolts                    | 8pcs For 4 Bolt Style Transmission Yoke         |
| PL3Z-5C226-A        | 1 piece required for 10R80 MHT, 2 pieces required for 10R80               | Exhaust Gasket                                       |                                                 |
| RL3Z-6L612-B        | 1                                                                         | Exhaust Manifold Gasket                              | 10R80 MHT                                       |
| W722614-S900        | 2                                                                         | Catalytic Converter Bolts                            | 2024 F-150, 2.7L Engine                         |
| W520514-S440        | 2 pieces required for 2.7L engine, 4 pieces required for 3.5L/5.0L engine | Catalytic Converter Nuts                             | All 2022-2023 F150, 2024 F-150 With 5.0L Engine |
| W705443-S900        | 4                                                                         | Catalytic Converter Nuts                             | 2024 F-150, 2.7L/3.5L Engine                    |
| W721940-S900        | 2                                                                         | LH Exhaust Studs                                     | 2024 F-150, 2.7L Engine                         |
| W722770-S900        | 2                                                                         | LH Exhaust Studs                                     | 2024 F-150, 3.5L Engine                         |
| W714717-S439        | 2                                                                         | Muffler Inlet Pipe Bolts                             | F-150, 5.2L Engine, 10R80 MHT                   |
| W520113-S440        | 4                                                                         | Stabalizer Bar Bracket Nuts                          |                                                 |
| W709771-S440        | 2                                                                         | Transmission Mount Nuts                              |                                                 |
| W711140-S901        | 3                                                                         | Transmission Support Insulator Bolts                 | RWD Vehicles, 10R80                             |
| W500120-S439        | 4                                                                         | Transmission Support Insulator Bolts                 | RWD Vehicles, 10R80MHT                          |
| W718353-S900        | 4                                                                         | Transmission Support Insulator Bolts                 | 4WD Vehicles, 10R80                             |
| W718926-S900        | 4                                                                         | Transmission Support Insulator Bolts                 | 4WD Vehicles, 10R80MHT                          |
| W714418-S439        | 4                                                                         | Transmission Support Crossmember Bolts               |                                                 |
| W520114-S442        | 4                                                                         | Transmission Support Crossmember Nuts                |                                                 |
| W715579-S439        | 2                                                                         | Driveshaft Center Bearing Bolt                       | For Vehicles Equipped With Two Piece Driveshaft |
| W715618-S437        | 4                                                                         | Torque Converter Nuts                                |                                                 |
| W715798-S442        | 1                                                                         | Transmission Fluid Cooler Tube Bracket Studbolt      | 5.2L/3.5L Engine                                |
| W718396-S439        | 4                                                                         | Skid Plate Nuts (If Equipped)                        |                                                 |
| W716375-S900        | 9 pieces required for 10R80, 12 pieces required for 10R80MHT              | Transfer Case And Vibration Damper Bolts             | 4WD Vehicles Only                               |
| 7L1Z-4B496-C        | 2                                                                         | CV Joint To Pinion Flange Bolts And Retaining Straps | 4WD Vehicles Only                               |
| ML3Z-3B478-B        | 1                                                                         | Front Driveshaft Slip Yoke Boot Clamp                | 4WD Vehicles Only                               |
| VC-13DL-G           | As Needed                                                                 | Motorcraft® Yellow Prediluted Antifreeze/Coolant     | All Markets Except Canada                       |

|            |           |                                                     |                                              |
|------------|-----------|-----------------------------------------------------|----------------------------------------------|
| CVC-13DL-G | As Needed | Motorcraft® Yellow Prediluted Antifreeze/Coolant    | Canada Only                                  |
| XG-1-E1    | As Needed | Motorcraft® Premium Long-Life Grease                | All Markets                                  |
| XT-10-QLVC | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid | All Markets Except Canada, 4WD Vehicles Only |
| CXT-10-LV6 | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid | Canada Only, 4WD Vehicles                    |
| TA-24-B    | As Needed | Motorcraft® Thread Sealant With PTFE                | All Markets, 4WD Vehicles Only               |

#### Parts - F-150 - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity             | Description                           | Note                       |
|---------------------|----------------------------|---------------------------------------|----------------------------|
| 5L7Z-7D285-A        | Only If Possible (Up To 2) | Fluid Tube Seals                      | 5.2L/3.5L Engine           |
| 5L7Z-7J324-A        | Only If Possible (Up To 2) | Fluid Tube Backing Rings              | 5.2L/3.5L Engine           |
| ML3Z-4421-A         | Only If Possible (Up To 1) | Front Driveshaft Slip Yoke Boot       |                            |
| ML3Z-3B478-A        | Only If Possible (Up To 1) | Front Driveshaft Slip Yoke Boot Clamp |                            |
| ML3Z-7869-C         | Only If Possible (Up To 2) | Transmission Fluid Heat Exchanger     |                            |
| W701228-S300        | Only If Possible (Up To 2) | Engine Block Dowel Pins               | 5.0L Engine                |
| F2AZ-6397-A         | Only If Possible (Up To 2) | Engine Block Dowel Pins               | 5.2L Engine                |
| W718758-S300        | Only If Possible (Up To 2) | Engine Block Dowel Pins               | 2.7/3.5L Engine            |
| W707753-S900        | Only If Possible (Up To 4) | Exhaust Studs                         | 2.7/3.5L Engine, 10R80 MHT |
| ML3Z-7A191-A        | Only If Possible (Up To 1) | Hybrid Drive Unit Gasket              | 10R80 MHT                  |

#### Parts - Additional Parts Needed For Explorer/Aviator/F150 - 10R80 MHT - Hybrid vehicles

| Service Part Number | Claim Quantity | Description                       |
|---------------------|----------------|-----------------------------------|
| BL8Z-7G199-A        | 2              | Hybrid Drive Unit Feed Tube Seals |
| L1MZ-7J135-A        | 1              | Auxiliary Pump Filter Seal        |
| L1MZ-7N265-A        | 2              | Fluid Pan To Case Seals           |

#### Parts - Additional Parts For Expedition/Navigator

| Service Part Number | Claim Quantity                   | Description                                          | Note                                            |
|---------------------|----------------------------------|------------------------------------------------------|-------------------------------------------------|
| TL1Z-6775-A         | 1                                | Self-Adhesive Heat Shield                            |                                                 |
| W520514-S440        | 4                                | Catalytic Converter Flange Nuts                      |                                                 |
| PL3Z-5C226-A        | 2                                | Exhaust Gasket                                       |                                                 |
| W520113-S440        | 4                                | Stabilizer Bar Bracket Nuts                          |                                                 |
| N811880-S100        | 4 or 8 pieces (flange dependent) | Driveshaft Flange To Flange Bolts                    |                                                 |
| W714682-S442        | 1                                | Driveshaft Center Bearing Nut                        | For Vehicles Equipped With Two Piece Driveshaft |
| W718772-S439        | 1                                | Driveshaft Center Bearing Bolt                       | For Vehicles Equipped With Two Piece Driveshaft |
| W719738-S439        | 1                                | Driveshaft Center Bearing Bracket Mounting Stud      | For Vehicles Equipped With Two Piece Driveshaft |
| W709771-S440        | 2                                | Transmission Mount Nuts                              |                                                 |
| W711140-S901        | 3                                | Transmission Insulator Bolts And Washers             | RWD Vehicles Only                               |
| W718353-S900        | 4                                | Transmission Insulator Bolts                         | 4WD Vehicles Only                               |
| W714418-S439        | 4                                | Transmission Support Crossmember Bolts               |                                                 |
| W520114-S442        | 4                                | Transmission Support Crossmember Nuts                |                                                 |
| W715618-S437        | 4                                | Torque Converter Nuts                                |                                                 |
| W720882-S442        | 1                                | Transmission Fluid Heat Exchanger Bolt               |                                                 |
| 7L1Z-4B496-C        | 2                                | CV Joint To Pinion Flange Bolts And Retaining Straps | 4WD Vehicles Only                               |
| ML3Z-3B478-B        | 1                                | Front Driveshaft Slip Yoke Boot Clamp                | 4WD Vehicles Only                               |
| W716375-S900        | 9                                | Transfer Case Bolts                                  | 4WD Vehicles Only                               |
| XT-10-QLVC          | As Needed                        | Motorcraft® MERCON® LV Automatic Transmission Fluid  | All Markets Except Canada, 4WD Vehicles Only    |
| TA-24-B             | As Needed                        | Motorcraft® Thread Sealant With PTFE                 | All Markets, 4WD Vehicles Only                  |
| VC-13DL-G           | As Needed                        | Motorcraft® Yellow Prediluted Antifreeze/Coolant     | All Markets Except Canada                       |
| CVC-13DL-G          | As Needed                        | Motorcraft® Yellow Prediluted Antifreeze/Coolant     | Canada Only                                     |
| XG-1-E1             | As Needed                        | Motorcraft® Premium Long-Life Grease                 | All Markets                                     |
| XT-10-QLVC          | As Needed                        | Motorcraft® MERCON® LV Automatic Transmission Fluid  | All Markets Except Canada, 4WD Vehicles Only    |
| CXT-10-LV6          | As Needed                        | Motorcraft® MERCON® LV Automatic Transmission Fluid  | Canada Only, 4WD Vehicles                       |

#### Parts - Expedition/Navigator - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity              | Description                     |
|---------------------|-----------------------------|---------------------------------|
| ML3Z-4421-A         | Only If Necessary (Up To 1) | Front Driveshaft Slip Yoke Boot |

|              |                             |                                       |
|--------------|-----------------------------|---------------------------------------|
| ML3Z-3B478-A | Only If Necessary (Up To 1) | Front Driveshaft Slip Yoke Boot Clamp |
| ML3Z-7869-C  | Only If Necessary (Up To 1) | Transmission Fluid Heat Exchanger     |
| W718758-S300 | Only If Necessary (Up To 2) | Engine Block Dowel Pins               |

#### Parts - Additional Parts For Mustang

| Service Part Number | Claim Quantity                                     | Description                                              | Note                           |
|---------------------|----------------------------------------------------|----------------------------------------------------------|--------------------------------|
| BR3Z-5B266-A        | 1                                                  | Exhaust Gasket                                           | 5.0L Engine                    |
| W705443-S900        | 2                                                  | Catalytic Converter Flange Nuts                          |                                |
| FR3Z-4B496-B        | 3                                                  | Driveshaft To Pinion Flange Bolts                        |                                |
| W717822-S439        | 2                                                  | Driveshaft Center To Bearing Bolts                       |                                |
| W710726-S437        | 3                                                  | Driveshaft To Transmission Flange Bolts                  | 2.3L Engine                    |
| N800594-S101        | 4                                                  | Driveshaft To Transmission Flange Bolts                  | 5.0L Engine                    |
| W710726-S437        | 2                                                  | Selector Lever Cable Bracket Bolts                       |                                |
| W715618-S437        | 4 pieces required (5.0L), 6 pieces required (2.3L) | Torque Converter Nuts                                    |                                |
| W712334-S440        | 4                                                  | Strut Tower Cross Brace Nuts                             | 2022-2023 Mustang, 5.0L Engine |
| W707654-S450        | 4                                                  | Strut Tower Cross Brace Nuts                             | 2024 Mustang, 5.0L Engine      |
| XL-1                | As Needed                                          | Motorcraft® Penetrating and Lock Lubricant               | All Markets                    |
| XL-2                | As Needed                                          | Motorcraft® High Temperature Nickel Anti-Seize Lubricant | All Markets                    |

#### Parts - Mustang - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity              | Description                                  | Note                           |
|---------------------|-----------------------------|----------------------------------------------|--------------------------------|
| JL3Z-9439-A         | Only If Necessary (Up To 8) | Intake Manifold Gasket                       | 5.0L Engine                    |
| JR3Z-4782-A         | Only If Necessary (Up To 1) | Flex Coupling                                | 2.3L Engine                    |
| W500545-S439        | Only If Necessary (Up To 3) | Driveshaft To Flex Coupling Bolts            | 2.3L Engine                    |
| W701183-S1300       | Only If Necessary (Up To 2) | Engine Block Dowel Pins                      | 2022-2023 Mustang, 2.3L Engine |
| W716841-S900        | Only If Necessary (Up To 2) | Engine Block Dowel Pins                      | 2024 Mustang, 2.3L Engine      |
| W701228-S300        | Only If Necessary (Up To 2) | Engine Block Dowel Pins                      | 2022-2023 Mustang, 5.0L Engine |
| LJ9Z-7J227-A        | Only If Necessary (Up To 4) | Transmission Fluid Cooler O-Ring Seals       |                                |
| 5L7Z-7D285-A        | Only If Necessary (Up To 2) | Transmission Fluid Cooler Tube Seals         | 2022-2023 Mustang              |
| 5L7Z-7J324-A        | Only If Necessary (Up To 2) | Transmission Fluid Cooler Tube Backing Rings | 2022-2023 Mustang              |

#### Parts - Additional Parts For Transit

| Service Part Number | Claim Quantity                                                               | Description                                                               | Note                                    |
|---------------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------|-----------------------------------------|
| KK2Z-00811-A        | 2                                                                            | Wheel Hub Nut                                                             |                                         |
| W500463-S442        | 4                                                                            | Brake Caliper Anchor Plate Bolts                                          |                                         |
| W520514-S440        | 4                                                                            | Catalytic Converter Flange Nuts                                           |                                         |
| W505434-S439        | 4                                                                            | Lower Load Push Bar Bolts                                                 |                                         |
| W506434-S439        | 8                                                                            | Lower Load Push Bar Bolts                                                 |                                         |
| W520215-S442        | 4                                                                            | Tie Rod End Nuts, Front Subframe Forward Nuts                             |                                         |
| W711076-S442        | 2                                                                            | Lower Ball Joint Nut                                                      |                                         |
| W712503-S440        | 2                                                                            | Front Stabilizer Bar Link Rod Nuts                                        |                                         |
| W709176-S300        | 2                                                                            | Splash Shield Push Pins                                                   |                                         |
| W709653-S303        | 8                                                                            | Muffler/Front Floor Heat Shield Rivets                                    |                                         |
| W711137-S442        | 1                                                                            | Steering Column Shaft Bolt                                                |                                         |
| N800594-S100        | 4 or 8 pieces (flange dependent)                                             | Driveshaft Flange To Flange Bolts                                         | 8pcs For 4 Bolt Style Transmission Yoke |
| W505264-S442        | 2                                                                            | Driveshaft Safety Strap Bolts (If Equipped)                               |                                         |
| W713078-S439        | 2 pieces required for medium wheelbase, 4 pieces required for long wheelbase | Driveshaft Center Bearing Bolts                                           |                                         |
| W710660-S441        | 2                                                                            | Transmission Support Insulator Nuts                                       |                                         |
| W716331-S439        | 4                                                                            | Transmission Crossmember Bolts                                            |                                         |
| W718943-S439        | 2                                                                            | Front Subframe Rearward Bolts                                             |                                         |
| W715618-S437        | 4                                                                            | Torque Converter Nuts                                                     |                                         |
| W719972-S439        | 3                                                                            | Front Axle To Torque Arm Bolts                                            | 4WD Vehicles Only                       |
| W720688-S439        | 2                                                                            | Front Axle To Transmission Bolts                                          | 4WD Vehicles Only                       |
| W719976-S439        | 3                                                                            | Front Axle Tube Bolts/Front Axle To Transmission Bolts                    | 4WD Vehicles Only                       |
| W714288-S438        | 8                                                                            | Transfer Case Mounting Bolts                                              | 4WD Vehicles Only                       |
| LK4Z-00815-A        | 1                                                                            | LH Halfshaft O-Ring Oil Seal                                              | 4WD Vehicles Only                       |
| LK4Z-3B498-A        | 1                                                                            | LH Halfshaft Snap-Ring Circlip                                            | 4WD Vehicles Only                       |
| LK4Z-4B496-A        | 3                                                                            | Front Driveshaft CV Joint-to-Pinion Flange Cup Bolts And Retaining Straps | 4WD Vehicles Only                       |

|              |           |                                                                          |                                              |
|--------------|-----------|--------------------------------------------------------------------------|----------------------------------------------|
| LK4Z-4B496-B | 2         | Rear Driveshaft CV Joint-to-Pinion Flange Cup Bolts And Retaining Straps | 4WD Vehicles Only                            |
| VC-13DL-G    | As Needed | Motorcraft® Yellow Prediluted Antifreeze/Coolant                         | All Markets Except Canada                    |
| CVC-13DL-G   | As Needed | Motorcraft® Yellow Prediluted Antifreeze/Coolant                         | Canada Only                                  |
| XG-1-E1      | As Needed | Motorcraft® Premium Long-Life Grease                                     | All Markets                                  |
| XL-1         | As Needed | Motorcraft® Penetrating and Lock Lubricant                               | All Markets                                  |
| XY-75W140-QL | As Needed | Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant                    | All Markets Except Canada                    |
| XT-10-QLVC   | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid                      | All Markets Except Canada, 4WD Vehicles Only |
| CXT-10-LV6   | As Needed | Motorcraft® MERCON® LV Automatic Transmission Fluid                      | Canada Only, 4WD Vehicles                    |
| XG-11        | As Needed | Motorcraft® High Temperature 4x4 Front Axle and Wheel Bearing Grease     | 4WD Vehicles Only                            |

#### Parts - Transit - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity              | Description                            | Note                 |
|---------------------|-----------------------------|----------------------------------------|----------------------|
| LJ9Z-7J227-A        | Only If Necessary (Up To 4) | Transmission Fluid Cooler O-Ring Seals |                      |
| W715471-S300        | Only If Necessary (Up To 2) | Engine Block Dowel Pins                | 3.5L DOHC Engine     |
| W718758-S300        | Only If Necessary (Up To 2) | Engine Block Dowel Pins                | 2.7/3.5L Engine      |
| W719583-S900        | Only If Necessary (Up To 4) | Catalytic Converter Studs              | 3.5L EcoBoost Engine |
| W720627-S900        | Only If Necessary (Up To 4) | Catalytic Converter Studs              | 3.5L EcoBoost Engine |

#### Parts - Additional Parts For Ranger

| Service Part Number | Claim Quantity | Number in Package | Description                                                                                     | Note                                            |
|---------------------|----------------|-------------------|-------------------------------------------------------------------------------------------------|-------------------------------------------------|
| KB3Z-6L612-A        | 1              |                   | Catalytic Converter Gasket                                                                      |                                                 |
| W714265-S442        | 3              |                   | Catalytic Converter Nuts                                                                        |                                                 |
| W716936-S442        | 2              |                   | Stabilizer Bar Bracket Nuts                                                                     |                                                 |
| W719427-S439        | 2              |                   | Stabilizer Bar Bracket Bolts                                                                    |                                                 |
| W700056-S450B       | 2              |                   | Selector Lever Cable Bracket Bolts                                                              |                                                 |
| W710233-S437        | 4              |                   | Driveshaft Flange To Pinion Flange Bolts                                                        |                                                 |
| W716344-S437        | 4              |                   | Driveshaft Flange To Transmission Flange Bolts                                                  |                                                 |
| W714780-S439        | 4              |                   | Driveshaft Center Bearing Bolts                                                                 | For Vehicles Equipped With Two Piece Driveshaft |
| W715618-S437        | 6              |                   | Torque Converter Nuts                                                                           |                                                 |
| BE8Z-6731-AB        | 1              |                   | Engine Oil Filter                                                                               | 4WD Vehicles Only                               |
| JB3Z-4B496-B        | 3              |                   | CV Joint To Transfer Case & Pinion Flange Bolts & Retaining Straps                              | 4WD Vehicles Only                               |
| W500121-S437        | 9              |                   | Transfer Case Bolts                                                                             | 4WD Vehicles Only                               |
| W500642-S437        | 4              |                   | Transmission Support Insulator Bolts                                                            | 4WD Vehicles Only                               |
| XT-10-QLVC          | As Needed      |                   | Motorcraft® MERCON® LV Automatic Transmission Fluid                                             | All Markets Except Canada, 4WD Vehicles Only    |
| CXT-10-LV6          | As Needed      |                   | Motorcraft® MERCON® LV Automatic Transmission Fluid                                             | Canada Only, 4WD Vehicles                       |
| CXO-5W30-LSP6       | As Needed      |                   | Motorcraft® SAE 5W-30 Super Premium Motor Oil                                                   | Canada Only                                     |
| XO-5W30-Q1SP        | As Needed      |                   | Motorcraft® SAE 5W-30 Synthetic Blend Motor Oil                                                 | All Markets Except Canada                       |
| PM-4-A              | As Needed      |                   | Motorcraft® Brake Parts Cleaner (Not Compliant With Low Volatile Organic Compound Requirements) | All Markets Except Canada                       |
| XL-2                | As Needed      |                   | Motorcraft® High Temperature Nickel Anti-Seize Lubricant                                        | All Markets                                     |

#### Parts - Ranger - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity              | Description                          |
|---------------------|-----------------------------|--------------------------------------|
| JB3Z-7J227-A        | Only If Necessary (Up To 4) | Transmission Fluid Cooler Tube Seals |
| W701183-S1300       | Only If Necessary (Up To 2) | Engine Block Dowel Pins              |

#### Parts - Additional Parts For Explorer/Aviator

| Service Part Number | Claim Quantity | Description                    | Note                          |
|---------------------|----------------|--------------------------------|-------------------------------|
| L1MZ-6L612-B        | 1              | Catalytic Converter Gasket     | Explorer/Aviator, 3.0L Engine |
| W719699-S442        | 2              | Catalytic Converter Nuts       | Explorer/Aviator, 3.0L Engine |
| W714265-S442        | 4              | Catalytic Converter Nuts       | 3.3L Engine                   |
| W520214-S440        | 1              | Transmission Mount Nut         |                               |
| W719431-S439        | 3              | Transmission Mount Bolts       |                               |
| W721083-S439        | 4              | Transmission Crossmember Bolts |                               |

|               |                                                       |                                                                      |                                                               |
|---------------|-------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------------------------|
| W700714-S437  | 2                                                     | Selector Lever Cable Bracket Bolts                                   | Explorer Police Interceptor Vehicles                          |
| W709653-S303  | 4                                                     | Plastic Skid Bar Rivets                                              | Explorer Police Interceptor Vehicles                          |
| W715618-S437  | 6 pieces (3.0L engine), 4 pieces (All Other Variants) | Torque Converter Nuts                                                |                                                               |
| W721084-S439  | 2                                                     | Rear Subframe Bolts                                                  | Explorer/Aviator, 3.0L Engine                                 |
| W719413-S439  | 2                                                     | Middle Subframe Bolts                                                | Explorer/Aviator, 3.0L Engine                                 |
| W719511-S439  | 3                                                     | Driveshaft Flex Coupling To Transfer Case/Transmission Flange Bolts  |                                                               |
| W717822-S439  | 2                                                     | Driveshaft Center Bearing Bracket Bolts                              |                                                               |
| W720545-S442  | 2                                                     | Transmission Cooler Tube Bracket Bolt                                | Explorer Police Interceptor                                   |
| W715131-S442  | 2                                                     | Transmission Fluid Cooler Tube Bracket Bolt                          | Explorer (Except Police Interceptor)/Aviator, 3.3/3.0L Engine |
| W500213-S442  | 1                                                     | Park Manual Release Cable Bracket Bolt                               | Explorer/Aviator, 10R80 MHT                                   |
| W716375-S900  | 8                                                     | Transfer Case Mounting Bolts                                         | 4WD Vehicles Only                                             |
| L1MZ-3B478-A  | 1                                                     | Front Drive Shaft Boot Clamp                                         | 4WD Vehicles Only                                             |
| L1MZ-4421-A   | 1                                                     | Front Drive Shaft Boot                                               | 4WD Vehicles Only                                             |
| LB5Z-3B498-A  | 1                                                     | Front Axle Pinion Stem Circlip                                       | 4WD Vehicles Only                                             |
| L1MZ-4A015-B  | 1                                                     | Front Axle Pinion Stem O-Ring                                        | 4WD Vehicles Only                                             |
| XT-10-QLVC    | As Needed                                             | Motorcraft® MERCON® LV Automatic Transmission Fluid                  | All Markets Except Canada, 4WD Vehicles Only                  |
| CXT-10-LV6    | As Needed                                             | Motorcraft® MERCON® LV Automatic Transmission Fluid                  | Canada Only, 4WD Vehicles                                     |
| XG-11         | As Needed                                             | Motorcraft® High Temperature 4x4 Front Axle and Wheel Bearing Grease | All Markets, 4WD Vehicles Only                                |
| 5L3Z-19A506-A | As Needed                                             | Slip Yoke Grease                                                     |                                                               |
| TA-29         | As Needed                                             | Motorcraft® Ultra Silicone Sealant                                   | All Markets                                                   |
| XG-1-E1       | As Needed                                             | Motorcraft® Premium Long-Life Grease                                 | All Markets                                                   |
| ZC-20         | As Needed                                             | Motorcraft® Engine Shampoo and Degreaser                             | All Markets                                                   |
| ZC-30-A       | As Needed                                             | Motorcraft® Silicone Gasket Remover                                  | All Markets                                                   |
| ZC-31-B       | As Needed                                             | Motorcraft® Metal Surface Prep Wipes                                 | All Markets                                                   |

#### Parts - Explorer/Aviator - Parts To Inspect And Replace Only If Necessary

| Service Part Number | Claim Quantity              | Description                          | Note        |
|---------------------|-----------------------------|--------------------------------------|-------------|
| 5L7Z-7D285-A        | Only If Necessary (Up To 2) | Transmission Fluid Cooler Tube Seals |             |
| 5L7Z-7J324-A        | Only If Necessary (Up To 2) | Fluid Tube Backing Rings             |             |
| L1MZ-4782-A         | Only If Necessary (Up To 1) | Flex Coupling Bolts                  |             |
| W719511-S439        | Only If Necessary (Up To 3) | Flex Coupling Bolts                  |             |
| L1MZ-4650-A         | Only If Necessary (Up To 1) | Driveshaft Alignment Bushing         |             |
| ML3Z-7A191-A        | Only If Necessary (Up To 1) | Hybrid Drive Unit Gasket             | 10R80 MHT   |
| W525585-S300        | Only If Necessary (Up To 2) | Engine Block Dowel Pins              | 3.0L Engine |
| W718758-S300        | Only If Necessary (Up To 2) | Engine Block Dowel Pins              | 3.3L Engine |
| W716963-S900        | Only If Necessary (Up To 4) | Catalytic Converter Studs            | 3.3L Engine |
| W719698-S900        | Only If Necessary (Up To 2) | Catalytic Converter Studs            | 3.0L Engine |

**Claim Quantity** refers to the total number of individual pieces required to repair the vehicle. This may differ from the number of service part number packages due to the unit of issue (UOI).

**As Needed** indicates the part is necessary but amount of the part may vary and/or is not a whole number. Parts can be billed out as non-whole numbers, including less than 1.

**Only If Necessary** indicates the part is not mandatory. Refer to the Service Procedure to determine the inspection/inclusion criteria.

**Warranty Status:** Warranty coverage limits and policies are not altered by a TSB. Warranty coverage limits are determined by the identified causal part.

#### Labor Times

| Description                                                                                                                             | Operation No. | Time     |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------|----------|
| 2022-2024 Explorer 3.3L 4WD Hybrid: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                            | 252587A       | 2.3 Hrs  |
| 2022-2024 Explorer 3.3L 4WD Hybrid: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch   | 252587B       | 13.9 Hrs |
| 2022-2023 Explorer 3.3L RWD Hybrid: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                            | 252587C       | 2.3 Hrs  |
| 2022-2023 Explorer 3.3L RWD Hybrid: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch   | 252587D       | 13.2 Hrs |
| 2022-2024 Explorer 4WD 3.0L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                          | 252587E       | 2.6 Hrs  |
| 2022-2024 Explorer 4WD 3.0L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch | 252587F       | 11.1 Hrs |

|                                                                                                                                                                                                     |          |          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
| 2022-2024 Explorer 4WD 3.3L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                         | 252587G  | 2.6 Hrs  |
| 2022-2024 Explorer 4WD 3.3L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                | 252587H  | 12.3 Hrs |
| 2022-2023 Ranger 4X2: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                      | 252587J  | 2.0 Hrs  |
| 2022-2023 Ranger 4X2: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                             | 252587K  | 11.8 Hrs |
| 2022-2023 Ranger 4X4: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                      | 252587L  | 2.0 Hrs  |
| 2022-2023 Ranger 4X4: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                             | 252587M  | 12.9 Hrs |
| 2022-2024 Transit 3.5L TiVCT RWD: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                          | 252587N  | 4.1 Hrs  |
| 2022-2024 Transit 3.5L TiVCT RWD: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                 | 252587P  | 11.2 Hrs |
| 2022-2024 Transit 3.5L TiVCT AWD: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                          | 252587Q  | 4.1 Hrs  |
| 2022-2024 Transit 3.5L TiVCT AWD: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                 | 252587R  | 13.0 Hrs |
| 2022-2024 Transit 3.5L EcoBoost RWD: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                       | 252587S  | 4.1 Hrs  |
| 2022-2024 Transit 3.5L EcoBoost RWD: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                              | 252587T  | 11.1 Hrs |
| 2022-2024 Transit 3.5L EcoBoost AWD: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                       | 252587U  | 4.1 Hrs  |
| 2022-2024 Transit 3.5L EcoBoost AWD: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                              | 252587V  | 12.7 Hrs |
| 2022-2024 Transit AWD/RWD: Additional Time To Remove And Install Running Boards If Equipped (Can Be Claimed With Operations N-V)                                                                    | 252587W  | 0.3 Hrs  |
| 2022-2024 Transit AWD/RWD: Additional Time To Check And Correct Front Toe (Can Be Claimed With Operation P, R, T, Or V)                                                                             | 252587X  | 1.0 Hrs  |
| 2022-2024 Transit AWD/RWD With Lane Departure Warning: Additional Time To Check And Correct Front Toe Includes Extra Time To Align LDW Camera System (Can Be Claimed With Operations P, R, T, Or V) | 252587Y  | 1.4 Hrs  |
| 2022-2023 Mustang Convertible 2.3L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                               | 252587AA | 2.7 Hrs  |
| 2022-2023 Mustang Convertible 2.3L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                      | 252587BB | 11.1 Hrs |
| 2022-2024 Mustang Coupe 2.3L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                     | 252587CC | 2.7 Hrs  |
| 2022-2024 Mustang Coupe 2.3L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                            | 252587DD | 10.4 Hrs |
| 2022-2024 Mustang Convertible 5.0L: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                        | 252587EE | 3.1 Hrs  |
| 2022-2024 Mustang Convertible 5.0L: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                               | 252587FF | 13.4 Hrs |
| 2022-2024 Mustang Coupe 5.0L: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                              | 252587GG | 3.1 Hrs  |
| 2022-2024 Mustang Coupe 5.0L: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                     | 252587HH | 12.7 Hrs |
| 2022-2024 Expedition 4X2: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                  | 252587JJ | 2.2 Hrs  |
| 2022-2024 Expedition 4X2: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                         | 252587KK | 10.4 Hrs |
| 2022-2024 Expedition 4X4: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                  | 252587LL | 2.2 Hrs  |
| 2022-2024 Expedition 4X4: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                         | 252587MM | 11.6 Hrs |
| 2022-2023 Navigator 4X2: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                   | 252587NN | 2.2 Hrs  |
| 2022-2023 Navigator 4X2: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                          | 252587PP | 10.7 Hrs |
| 2022-2024 Navigator 4X4: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                                   | 252587QQ | 2.2 Hrs  |
| 2022-2024 Navigator 4X4: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                                          | 252587RR | 11.8 Hrs |
| 2023-2024 F-150 4X4 Raptor 5.2L Predator: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                                                                  | 252587SS | 2.3 Hrs  |
| 2023-2024 F-150 4X4 Raptor 5.2L Predator: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch                                                         | 252587TT | 12.4 Hrs |

|                                                                                                                                            |          |          |
|--------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|
| 2022-2024 F-150 4X2 2.7L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                | 252587UU | 2.3 Hrs  |
| 2022-2024 F-150 4X2 2.7L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch       | 252587VV | 11.5 Hrs |
| 2022-2024 F-150 4X4 2.7L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                | 252587WW | 2.3 Hrs  |
| 2022-2024 F-150 4X4 2.7L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch       | 252587XX | 12.9 Hrs |
| 2022-2023 F-150 4X2 3.3L Duratec: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                 | 252587YY | 2.3 Hrs  |
| 2022-2023 F-150 4X2 3.3L Duratec: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch        | 252587ZZ | 10.6 Hrs |
| 2022-2023 F-150 4X4 3.3L Duratec: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                 | 252587B1 | 2.3 Hrs  |
| 2022-2023 F-150 4X4 3.3L Duratec: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch        | 252587B2 | 11.9 Hrs |
| 2022-2024 F-150 4X2 3.5L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                | 252587B3 | 2.3 Hrs  |
| 2022-2024 F-150 4X2 3.5L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch       | 252587B4 | 11.2 Hrs |
| 2022-2024 F-150 4X4 3.5L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                | 252587B5 | 2.3 Hrs  |
| 2022-2024 F-150 4X4 3.5L EcoBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch       | 252587C1 | 12.5 Hrs |
| 2022-2023 F-150 4X2 3.5L PowerBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                              | 252587C2 | 5.0 Hrs  |
| 2022-2023 F-150 4X2 3.5L PowerBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch     | 252587C3 | 14.1 Hrs |
| 2022-2024 F-150 4X4 3.5L PowerBoost: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                              | 252587C4 | 5.0 Hrs  |
| 2022-2024 F-150 4X4 3.5L PowerBoost: Check Build Date, Remove And Inspect Fluid Filter (FAIL) 15.1Overhaul Valve Body And Replace F Clutch | 252587C5 | 15.1 Hrs |
| 2022-2024 F-150 4X2 5.0L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                   | 252587D1 | 2.3 Hrs  |
| 2022-2024 F-150 4X2 5.0L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch          | 252587D2 | 10.7 Hrs |
| 2022-2024 F-150 4X4 5.0L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                   | 252587D3 | 2.3 Hrs  |
| 2022-2024 F-150 4X4 5.0L TiVCT: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch          | 252587D4 | 11.8 Hrs |
| 2022-2023 Aviator AWD 3.0L Hybrid: Check Build Date, Remove And Inspect Fluid Filter (PASS)                                                | 252587D5 | 2.3 Hrs  |
| 2022-2023 Aviator AWD 3.0L Hybrid: Check Build Date, Remove And Inspect Fluid Filter (FAIL) Overhaul Valve Body And Replace F Clutch       | 252587E1 | 13.2 Hrs |

#### Repair/Claim Coding

|                 |       |
|-----------------|-------|
| Causal Part:    | 7B177 |
| Condition Code: | 01    |

1. Remove the transmission fluid filter. Refer to WSM, Section 307-01.
2. Inspect the top side of the transmission fluid filter for gray silt. (Figure 1).

Figure 1



3. Is there gray silt present on the top side of the transmission fluid filter as shown in Figure 1?

- (1). Yes – proceed to Step 4.
- (2). No – this article does not apply. Refer to WSM, Section 307-01 for normal diagnostics.

4. Install the transmission fluid pan and bolts.

**NOTE: It is not necessary to torque transmission fluid pan bolts at this time.**

5. Remove the transmission and mount the transmission to the bench. Refer to WSM, Section 307-01.

6. Remove the main control valve body. Refer to WSM, Section 307-01.

7. Overhaul (clean and inspect) the main control valve body. Refer to WSM, Section 307-01.

8. Disassemble the transmission. Perform only the necessary steps to remove the clutch and planetary assembly from the transmission case. Refer to WSM, Section 307-01.

**NOTE: The transmission in vehicles built on or after 16-Aug-2022 are equipped with an upgraded CDF clutch cylinder (7H351), and do not require replacement.**

- (1). It is only necessary to remove the transmission fluid pan, transmission fluid pump, transmission fluid auxiliary pump (if equipped), all 4 speed sensors (intermediate speed sensor A [ISSA], intermediate speed sensor B [ISSB], TSS and OSS), torque converter or hybrid

drive unit (HDU), front support assembly and the clutch and planetary assembly. Refer to WSM, Section 307-01.

9. Disassemble the clutch and planetary assembly. Perform only the necessary steps to remove the clutch and planetary container cylinder, the CDF clutch cylinder and the No. 3 sun gear shaft and No. 2 ring gear assembly from the clutch and planetary assembly. Refer to WSM, Section 307-01.

(1). It is necessary to remove the A clutch assembly, the selective shim and T3 thrust bearing, remove and discard the 5-input shaft front seals.

(2). Remove the No. 1 planetary carrier snap ring and remove the clutch and planetary container cylinder. Remove the No. 4 ring gear snap ring and the No. 4 ring gear from the clutch and planetary container cylinder. Discard the clutch and planetary container cylinder. Refer to WSM, Section 307-01.

(3). Remove the E clutch and input shaft assembly, the No. 3 planetary carrier and No. 3 sun gear, the No. 3 sun gear shaft and No. 2 ring gear assembly. Refer to WSM, Section 307-01.

10. Remove and discard the sun gear No. 3 shaft seals. Refer to WSM, Section 307-01.

11. Install the 4 new sun gear No. 3 shaft seals. Refer to WSM, Section 307-01.

12. Remove and discard the F clutch steel plates and friction plates from the CDF cylinder. Refer to WSM, Section 307-01.

13. Install new F clutch steel plates and friction plates into the CDF clutch cylinder. Refer to WSM, Section 307-01.

14. Perform the F clutch pack endplay measurement for proper clearance. Refer to WSM, Section 307-01.

15. Remove and discard the input shaft-to-sun gear No. 3 shaft seals. Refer to WSM, Section 307-01.

16. Install the 5 new input shaft-to-sun gear No. 3 shaft seals. Refer to WSM, Section 307-01.

17. Remove and discard the input shaft Teflon seal. WSM, Section 307-01.

18. Install the new input shaft Teflon seal. Refer to WSM, Section 307-01.

19. Install the 5 new input shaft front seals. Refer to WSM, Section 307-01.

20. Install the No. 4 ring gear and snap ring into a new clutch and planetary container cylinder. Refer to WSM, Section 307-01.

21. To reassemble the clutch and planetary assembly, reverse the disassembly procedure. Refer to WSM, Section 307-01.

22. Reassemble the transmission. Refer to WSM, Section 307-01.

23. Install the transmission. Refer to WSM, Section 307-01.

24. Perform an adaptive learning drive cycle. Refer to WSM, Section 307-01.

**NOTE: Advise the customer that this vehicle is equipped with an adaptive transmission shift strategy which allows the vehicle's computer to learn the transmission's unique parameters and improve shift quality. When the adaptive strategy is reset, the computer will begin a relearning process. This relearning process may result in firmer than normal upshifts and downshifts for several days.**

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