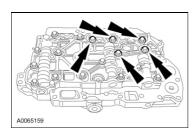
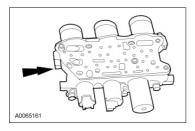
| | | <u> </u> |
|----|---------|---|
| 16 | 7F445 | Retainer plate — main regulator valve |
| 17 | 7A270 | Spring — main fluid pressure regulator valve |
| 18 | 7C338 | Valve — main fluid pressure regulator |
| 19 | 7G411 | Spring — solenoid regulator valve |
| 20 | 7H392 | Valve — solenoid regulator valve |
| 21 | 7D400 | Spring — intermediate servo accumulator |
| 22 | 7D398 | Piston — intermediate servo accumulator |
| 23 | 7G408 | Valve — converter pressure relief |
| 24 | 7G316 | Spring — converter regulator valve |
| 25 | 7M040 | Valve — lock up control |
| 26 | 7Z490 | Gasket — solenoid body |
| 27 | 7G179 | Valve — low reverse shift |
| 28 | 7M040 | Valve — 3-4 shift |
| 29 | 7H148 | Shift Solenoid B (SSB) (on/off) valve |
| 30 | 7H148 | Shift Solenoid A (SSA) (on/off) valve |
| 31 | 7G383 | Main regulator valve Variable Force Solenoid (VFS)Pressure Control Solenoid A (PCA) |
| 32 | 7G484 | Pulse-Width Modulation (PWM) solenoid valve Shift Solenoid C (SSC) |
| 33 | 7G484 | PWM solenoid valve Shift Solenoid E (SSE) |
| 34 | 7G484 | PWM solenoid valve Shift Solenoid D (SSD) |
| 35 | 7H185 | Bracket — shift control solenoid hold down |
| 36 | W500211 | Screws M6 x 15 (7 required) |
| 37 | W500012 | Screw M6 x 72 (2 required) |
| 38 | 7G391 | Body — solenoid shift throttle pressure |
| | | |

Disassembly

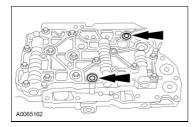
1. Remove the solenoid body bolts and the solenoid body.



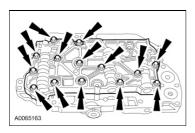
2. Remove and discard the solenoid body gaskets.



3. Remove and discard the seals.



4. Disassemble the main control valve body.



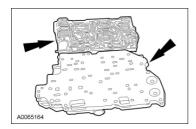
Assembly

1. **NOTE:** The top side of the separator plate has a bonded gasket.

NOTE: The separator gasket goes on the bottom side.

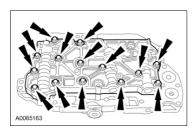
NOTE: Inspect the main control valve body.

Install new control valve body plate assembly and separator gaskets.

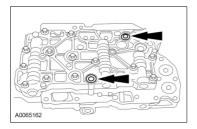


2. **NOTE:** Do not fully tighten the bolts at this stage.

Assemble the main control valve body and loosely install the bolts.

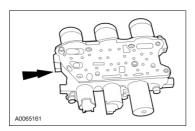


3. Install the seals.

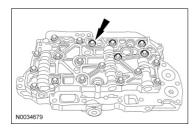


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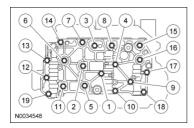
4. Install a new solenoid body gasket.



5. Install the solenoid body and loosely install the bolts.



- 6. Tighten the solenoid body bolts in the sequence shown.
 - Tighten to 9 Nm (80 lb-in).



SECTION 307-01: Automatic Transaxle/Transmission — 4F27E

2012 Transit Connect Workshop Manual Procedure revision date:

01/18/2012

DISASSEMBLY AND ASSEMBLY OF SUBASSEMBLIES

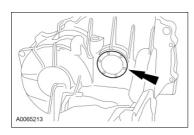
Transaxle Case

Special Tool(s)

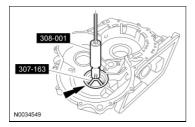
| E | Handle 205-153 (T80T-4000-W) |
|----------|--|
| ST1255-A | |
| 14040 | Installer, Axle Oil Seal 205-259 (T87P-3254-A) |
| ST2350-A | Installer, Differential Bearing Cup 205-118 (T77F-4222-A) |
| ST2509-A | Installer, Differential Bearing Cup 308-163 (T88C-77000-FH) |
| ST2427-A | Installer, Transfer Gear Bearing Cup 307-418 |
| ST2791-A | Remover, Pilot Bearing 308-001 (T58-L-101-B) |
| ST1556-A | Remover, Stator Case Bearing 307-163 (T86P-70043-A) |

Disassembly

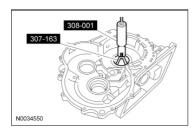
1. Remove the halfshaft seals (LH shown).



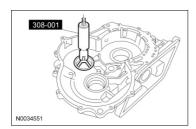
2. Using the Pilot Bearing Remover and Stator Case Bearing Remover, remove the differential case bearing cups (LH shown).



3. Using the Pilot Bearing Remover and Stator Case Bearing Remover, remove the final drive input gear bearing cup.



4. Using the Pilot Bearing Remover, remove the transfer shaft gear bearing cups (LH shown).

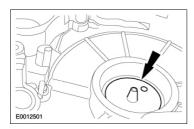


5. **NOTE:** Note the location of the bleed hole in the funnel in relation to the bottom of the case.

NOTE: Inspect the bleed hole for foreign material.

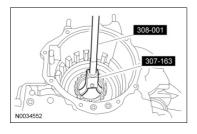
NOTE: If flatness of funnel is compromised during bearing removal, install a new funnel.

Remove the funnel.



6. Rotate the transaxle 180 degrees.

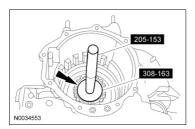
7. Using the Pilot Bearing Remover and Stator Case Bearing Remover, remove the final drive input gear bearing cup.



Assembly

1. **NOTE:** The converter housing side bearing cups for the transfer shaft bearing and differential case bearing will be installed during the assembly of the transaxle.

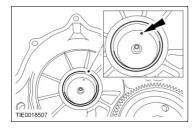
Using the Differential Bearing Cup Installer and Handle, install the final drive input gear bearing cup.



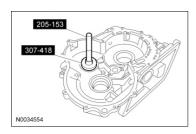
- 2. Rotate the transaxle 180 degrees.
- 3. **NOTE:** Note the location of the bleed hole.

NOTE: Inspect the bleed hole for foreign material.

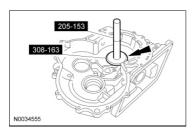
Install the funnel.



4. Using the Transfer Gear Bearing Cup Installer and Handle, install the LH transfer shaft gear bearing cup.

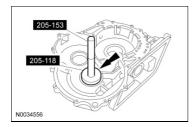


5. Using the Differential Bearing Cup Installer and Handle, install the final drive input gear bearing cup (LH shown).

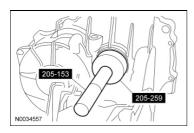


6. Using the Differential Bearing Cup Installer and Handle, install the LH differential case bearing cup.

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7. Using the Axle Oil Seal Installer and Handle, install the halfshaft seals (LH shown).



SECTION 307-01: Automatic Transaxle/Transmission — 4F27E

2012 Transit Connect Workshop Manual

Procedure revision date:

01/18/2012

ASSEMBLY

Transaxle

Special Tool(s)

| .0 | Alignment Tool, Transmission Range |
|----------|--------------------------------------|
| W @ | Sensor |
| 307-415 | 307-415 |
| 301.410 | TT 11 |
| F | Handle |
| | 205-153 (T80T-4000-W) |
| ST1255-A | |
| | Handle, Torque Converter |
| | 307-091 (T81P-7902-C) |
| ST1631-A | |
| 31103174 | H 11' T 1 F' 1 D ' I 4 C |
| 200 | Holding Tool, Final Drive Input Gear |
| - A B | 307-413 |
| ST2756A | |
| | Installer, Axle Oil Seal |
| | 205-259 (T87P-3254-A) |
| | 203 233 (1071 323 111) |
| 14040 | T 11 5100 1.15 |
| (0) | Installer, Differential Bearing Cup |
| | 205-118 (T77F-4222-A) |
| ST2350-A | |
| | Installer, Differential Fluid Seal |
| 1/2 | 307-256 (T92P-77000-FH) |
| 160 | 307-230 (192F-77000-FII) |
| ST2349-A | |
| | Installer, Drive Pinion Bearing Cone |
| | 205-005 (T53T-4621-C) |
| ST1367-A | |
| | Installer, Drive Pinion Bearing Cup |
| 61611000 | 205-024 (T67P-4616-A) |
| | 203-02 4 (10/1-4010-71) |
| ST1361-A | |
| | Installer, Output Shaft Seal |
| | 307-572 |
| ST2957-A | |
| | Installer, Transfer Gear Bearing Cup |
| | 307-418 |
| | 307-410 |
| ST2427-A | |
| 1 | Mounting Bracket, Transmission |
| | 307-410 |
| 307-410 | |
| | Plata Pagring/Oil Sagl |
| (0) | Plate, Bearing/Oil Seal |
| 8 | 205-090 (T75L-1165B) |
| ST1254-A | |

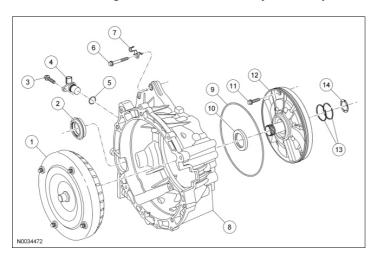
Transaxle 1911

| | Retainer, Torque Converter |
|-----------|--|
| lo II | 307-346 (T97T-7902-A) |
| | |
| ST1636-A | |
| | Select Gauge, Transmission Band |
| | 307-416 |
| 0 | 307 110 |
| 307-416 | |
| | Shim Gauge, Differential/Transfer Gear |
| T | Bearing |
| | 307-417 |
| ST2757A | 307-417 |
| | Shim Selection Set |
| | 308-161 (T88C-77000-C) |
| | 100 101 (1000 77000 0) |
| ST1564-A | |
| | Shim Selection Set |
| 99999999 | 308-164 (T88C-77000-JF) |
| 3333333 | 100 101 (1000 77000 31) |
| ST2486-A | |
| | Socket, Final Drive Input Nut |
| | 307-414 |
| | |
| 307-414 | |
| - I / - 2 | Wrench Guide Plate |
| 11/0/ | 307-420 |
| \c/ | 120 |
| 307-420 | |

Material

| Item | Specification |
|--|---------------|
| Motorcraft® MERCON® LV Automatic Transmission Fluid XT-10-QLVC | MERCON® LV |
| Thread Sealant with PTFE TA-24 | WSK-M2G350-A2 |
| Ultra Silicone Sealant TA-29 | _ |

Converter Housing with Converter Assembly and Pump Assembly

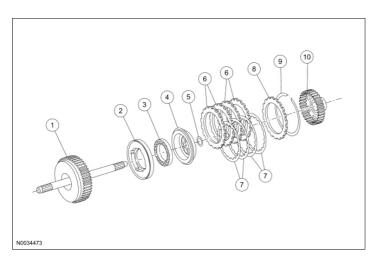


| Item | Part Number | Description |
|------|-------------|-------------|
|------|-------------|-------------|

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| 1 | 7902 | Converter assembly |
|----|--------------|--------------------------------------|
| 2 | 1177 | Seal assembly — differential |
| 3 | _ | Output Shaft Speed (OSS) sensor bolt |
| 4 | 7H103 | OSS sensor |
| 5 | W706315-S300 | O-ring — OSS sensor |
| 6 | | Bolt — converter housing |
| 7 | | Retainer — fluid tube |
| 8 | 7005 | Converter housing |
| 9 | 7A248 | Seal — pump |
| 10 | 7A248 | Seal assembly — pump |
| 11 | | Bolt — pump |
| 12 | 7A103 | Pump assembly |
| 13 | 7D019 | Seals — forward clutch cylinder |
| 14 | 7H042 | Washer — pump support thrust |

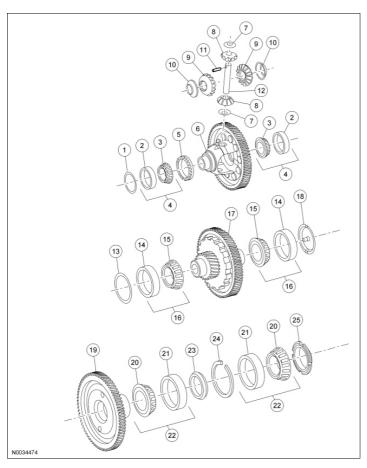
Forward Clutch



| Item | Part Number | Description |
|------|-------------|---|
| 1 | 7F207 | Shaft assembly — turbine |
| 2 | 7A262 | Piston assembly — forward clutch |
| 3 | 7F235 | Spring assembly — forward piston return |
| 4 | 7H360 | Piston — forward clutch balance |
| 5 | 7H365 | Snap ring — forward clutch balance piston |
| 6 | 7B442 | Steel plates — forward clutch separator (4 required) |
| 7 | 7B164 | Friction plate assembly — forward clutch (4 required) |
| 8 | 7B066 | Plate — forward/direct clutch pressure (1 each) |
| 9 | 7D483 | Retaining ring (selective) |
| 10 | 7B067 | Hub — forward clutch cylinder |

Forward Clutch 1913

Differential Assembly and Final Drive Input



| Item | Part Number | Description |
|------|-------------|--|
| 1 | 4067 | Shim — differential bearing |
| 2 | 4222 | Cups — differential bearing |
| 3 | 4221 | Cone and roller assemblies |
| 4 | 4221 | Bearing assemblies |
| 5 | 7H150 | Wheel — Output Shaft Speed (OSS) sensor |
| 6 | 7F465 | Differential and gear assembly — transaxle |
| 7 | 4230 | Pinion thrust washers (2 required) |
| 8 | 4215 | Differential pinion gears (2 required) |
| 9 | 4236 | Differential side gears (2 required) |
| 10 | 4228 | Side gear thrust washers (2 required) |
| 11 | 4241 | Pin |
| 12 | 4211 | Differential pinion shaft |
| 13 | 7H367 | Shim — transfer shaft roller bearing |
| 14 | 7H344 | Cups — transfer shaft roller |
| 15 | 7170 | Cone and roller assemblies |
| 16 | 7H338 | Bearing assemblies — transfer shaft (2 required) |
| 17 | 7H348 | Transfer shaft gear assembly |
| 18 | 7L267 | Funnel — transfer shaft |
| 19 | 7F342 | Gear — final drive input |
| 20 | 7M102 | Cone and roller assemblies |