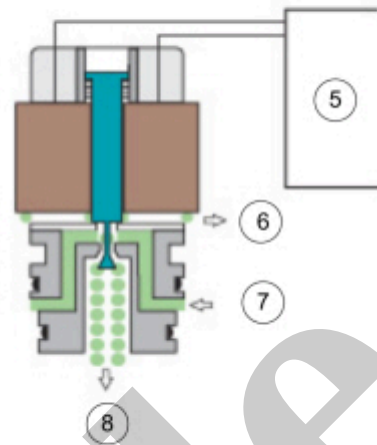
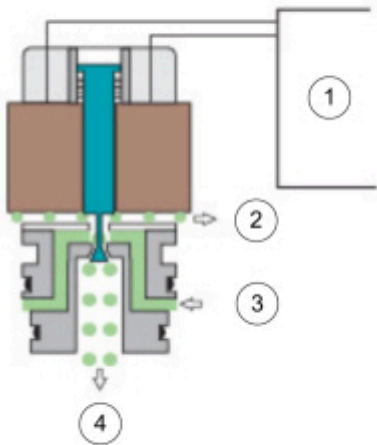


Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2009 FORD Flex OEM Service and Repair Workshop Manual

[Go to manual page](#)



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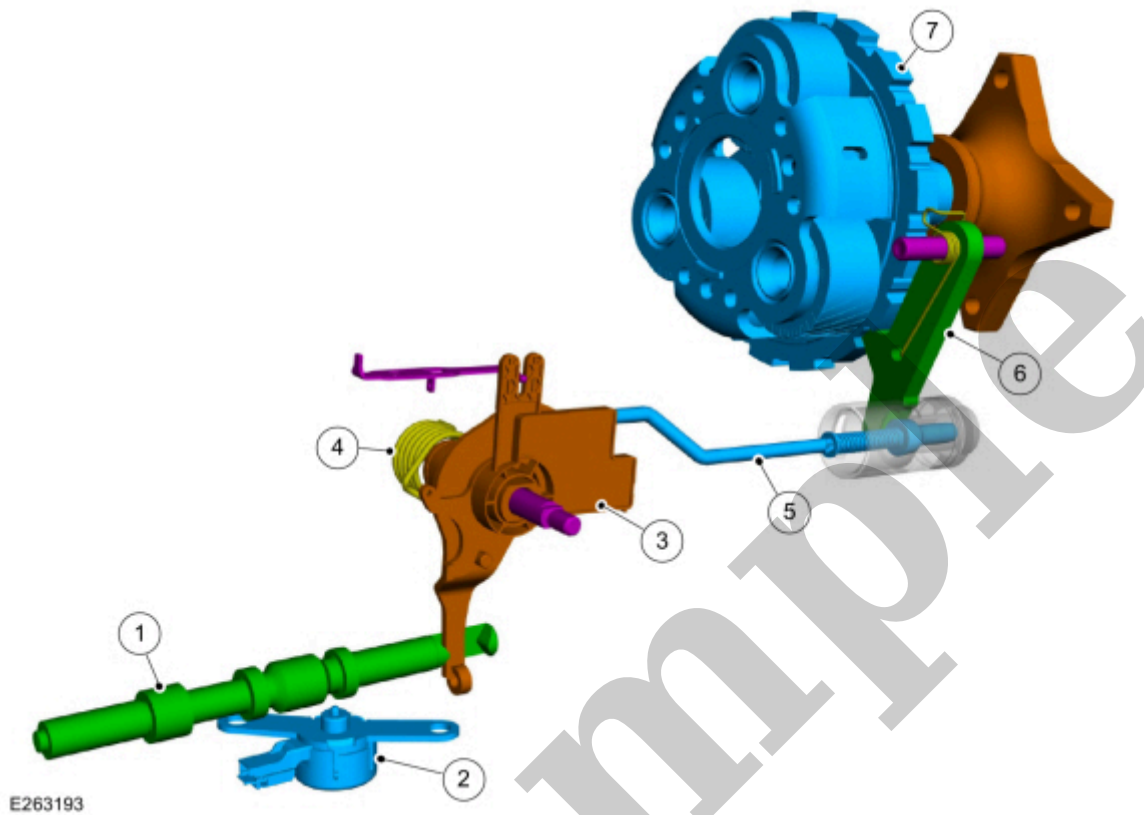
Item	Description
1.	Low Current
2.	High Exhaust
3.	SF Circuit Fluid (Supply)
4.	Low Pressure Output
5.	High Current
6.	Low Exhaust
7.	SF Circuit Fluid (Supply)
8.	High Pressure Output

The TCC (torque converter clutch) solenoid is a variable force solenoid that varies hydraulic pressure by actuating a hydraulic valve. The TCC (torque converter clutch) solenoid uses proportional operation. Normally low solenoids provide hydraulic pressure proportional to supplied current. A normally low solenoid will output very low pressure with low (50 mA) or no current, while it will supply high pressure with high current (850 mA).

Normally high solenoids provide full output of pressure with low or no current (50 mA) and very low pressure with high current (850 mA).

Vehicle Shift System

This vehicle uses an electronic Park by Wire system in place of the mechanical shifter.



Component	Number
Park Lock Pawl Valve	1
Park Lock Pawl Solenoid	2
TR Sensor	3
Park Return Spring	4
Park Pawl Actuator rod	5
Park Pawl	6
Output Shaft and Planetary Carrier	7

Normal mode is a perfect balance of excitement, comfort and convenience for everyday driving.

- **Sport Mode:**

For aggressive on-road driving, sport mode increases throttle response, provides a sportier steering feel, along with quicker shifting. The transmission also holds gears longer, helping your vehicle accelerate faster when shifting gears.

- **Tow Haul:**

For improved transmission operation when towing a trailer or a heavy load. Tow Haul moves upshifts to higher engine speeds to reduce the frequency of transmission shifting. This mode also provides engine braking in all forward gears, which slows the vehicle and assists in controlling the vehicle when descending a grade. The amount of downshift braking provided varies based on the amount the brake pedal is pressed.

Off-Road Drive Modes

- **Snow/Wet (4X2) or Grass/ Gravel/Snow (AWD):**

For firm surfaces covered with loose or slippery material such as packed snow, ice, water, grass or a thin layer of gravel or sand.

- **Sand Mode:**

For soft dry sand or deep gravel.

- **Mud/Rut:**

For muddy, rutted, soft or uneven terrain.

For information on driving mode diagnosis,

Refer to: [Four-Wheel Drive Systems - Vehicles With: 2-Speed Torque On Demand Transfer Case](#)

(307-07A Four-Wheel Drive Systems, Diagnosis and Testing).

Transmission External Sealing

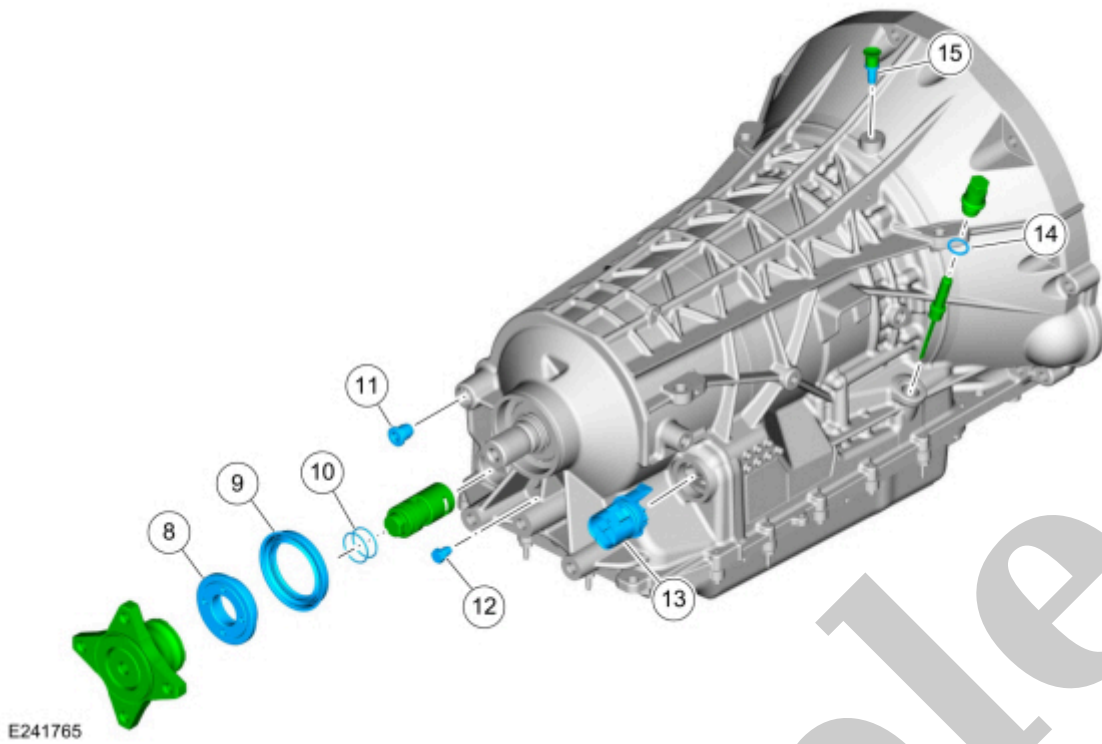
The front support cover and seal assembly has a bonded rubber seal around the outside that seals to the front support housing. A removable rubber seal on the inside of the front support cover seals the area around the front support cover bolt. A torque converter hub seal is held into the front support cover with a snap ring.

The front support assembly uses a large rubber seal that seals the support housing to the transmission case.

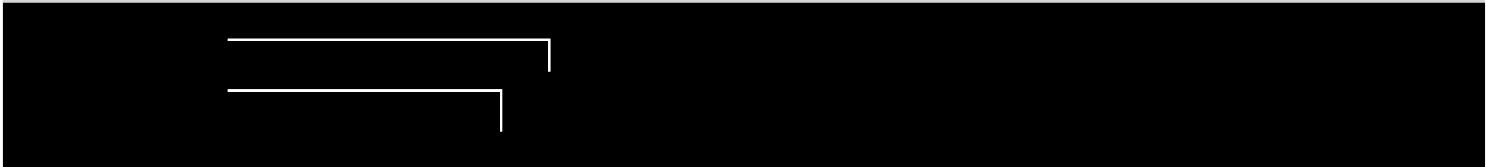
The transmission fluid cooler tubes or cooler use 2 rubber seals with plastic backing rings to seal the tubes to the transmission case.

On the left side of the transmission case, there is a line pressure tap plug.

The manual control shaft has a lip seal that is pressed in the transmission case.



Item	Description
1	Front support cover and seal assembly
2	Seal part of front support cover and seal assembly
3	Front support-to-case seal
4	Transmission fluid cooler tube seals (2 required)
5	Line pressure tap plug
6	Manual control shaft seal
7	Transmission fluid pan gasket
8	Output shaft nut
9	Output shaft seal
10	Park pawl actuator rod sleeve seals (2 required)
11	Park pawl shaft plug



Transmission Description

307-01A Automatic Transmission - 10-Speed Automatic Transmission - 10R80	2022 F-150
Description and Operation	Procedure revision date: 08/10/2022

Transmission Description

Transmission Assembly

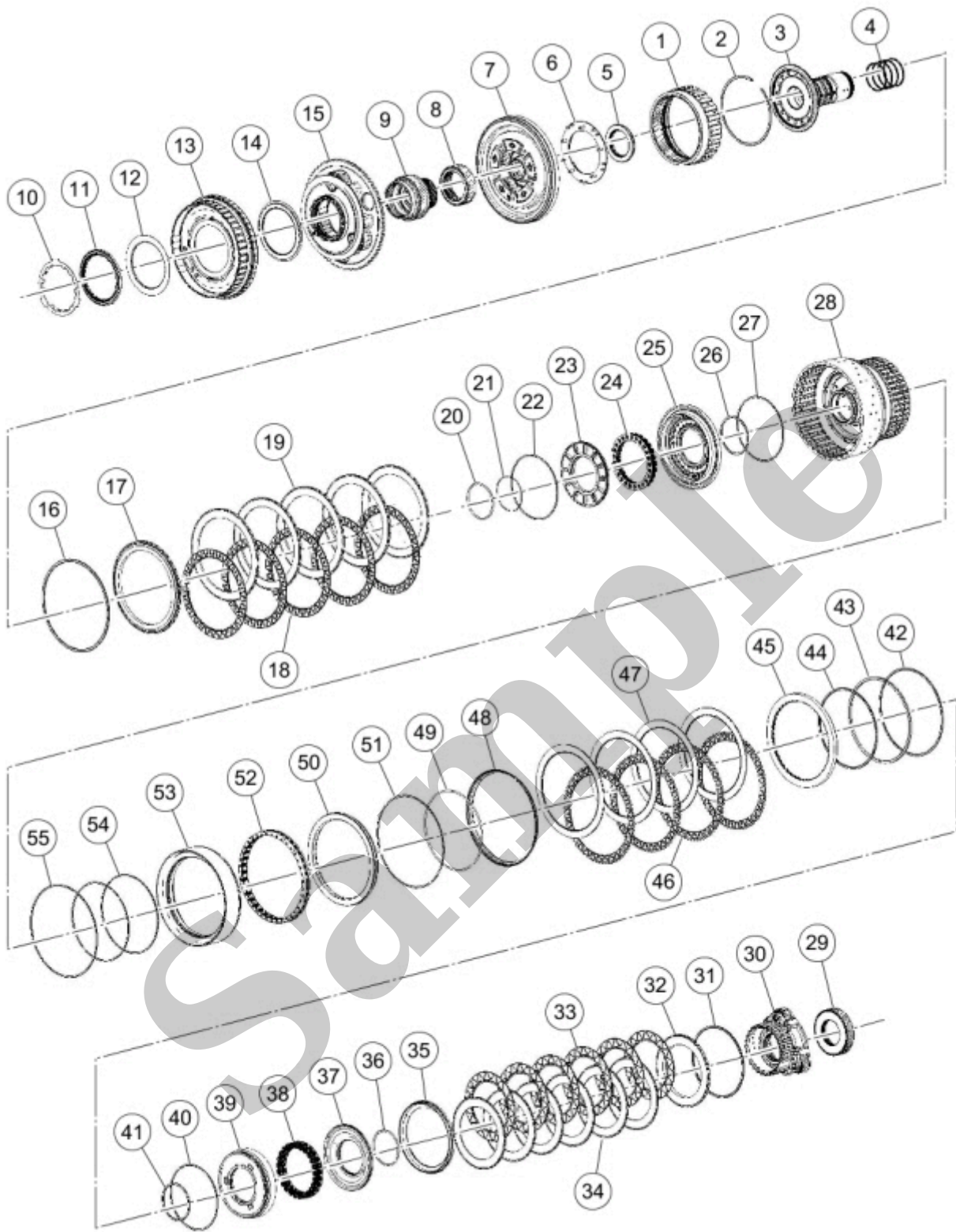
Sample

1	7902	Torque converter
2	W714629	Transmission fluid pan stud bolts (6 required)
3	W500215	Transmission fluid pan bolts (12 required)
4	7A194	Transmission fluid pan
5	7A191	Transmission fluid pan gasket
6	7E389	Transmission fluid level indicator and plug assembly
7	W708500	Transmission fluid auxiliary pump tube bolt (model dependent)
8	7A209	Transmission fluid auxiliary pump tube (model dependent)
9	W718548	Transmission fluid auxiliary pump bolts (3 required) (model dependent)
10	7P086	Transmission fluid auxiliary pump (model dependent)
11	7J135	Transmission fluid auxiliary pump tube seal (model dependent)
12	W700123	Transmission fluid filter bolt (71 mm length)
13	W500214	Transmission fluid filter bolt (20 mm length)
14	7G186	Transmission fluid filter
15	W708500	Main control-to-transmission case bolts (68 mm length) (8 required)
16	7A100	Main control assembly
17	7N265	Main control-to-transmission fluid pump seal
18	7M183	Intermediate Speed A (ISSA) sensor
19	7M101	Turbine Shaft Speed (TSS) sensor
20	7H103	Intermediate Speed B (ISSB) sensor
21	7H103	Output Shaft Speed (OSS) sensor

43	7E332	Transmission Range (TR) sensor detent spring
44	7N134	Front support assembly bolts (12 required)
45	7G033	Front support assembly
46	7M157-C	B clutch (overdrive) snap ring
47	7C576	B clutch (overdrive) pressure plate
48	7B442-A	B clutch (overdrive) steel plates (quantity model dependent)
49	7B164	B clutch (overdrive) friction plates (quantity model dependent)
50	7J402	B clutch (overdrive) separating springs (quantity model dependent)
51	7B442-B	B clutch (overdrive) apply plate
52	7G206	One-Way Clutch (OWC)
53	7G418	B clutch (overdrive) piston
54	7N169	A clutch (intermediate) piston return spring snap ring
55	7G297	A clutch (intermediate) piston return spring
56	7J015	A clutch (intermediate) piston
57	7F225	A clutch (intermediate) piston inner seal
58	7F224	A clutch (intermediate) piston outer seal
59	7B031	Front support-to-case seal
60	7M157-J	Torque converter hub seal snap ring
61	7A248	Torque converter hub seal
62	7N134-C	Front support cover and seal assembly bolt
63	7M157	Front support cover and seal assembly snap ring

85	W715937	Plug assembly transmission case
86	W716240	Plug assembly park pawl shaft
87	7D071	Park pawl shaft
88	7A441	Park pawl
89	7D070	Park pawl return spring
90	7052	Output shaft seal (model dependent)
91	7G355	Thrust bearing (T11) (RWD only)
92	7A433	Thrust washer (RWD only)
93	7A415-B	Output shaft bearing (outer)
94	7B314	Fluid passage sleeve
95	7A415-A	Output shaft bearing (inner)
96	7F337	Manual control shaft seal
97	W715937	Plug (line pressure tap)
98	7G063	Transmission case vent assembly
99	7006	Transmission case

Clutch and planetary assembly



E233606

Item	Part Number	Description
1	7D392	Ring gear No. 2