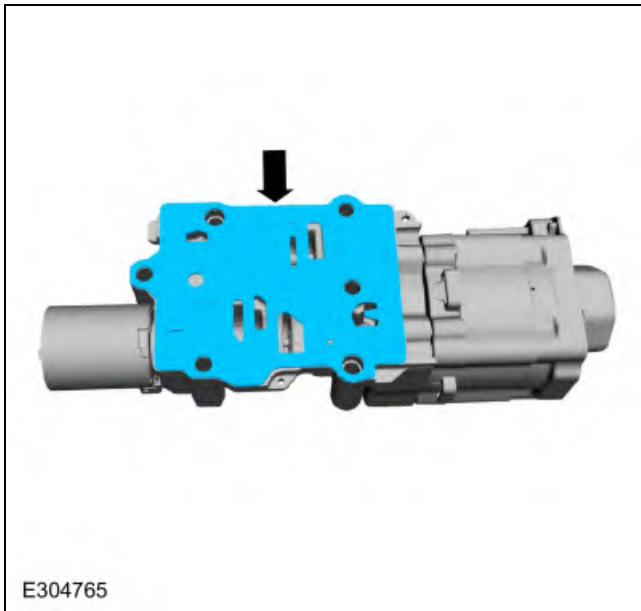


6. Remove the transmission fluid auxiliary pump gasket.



7. Remove the engine disconnect clutch solenoid retainer.



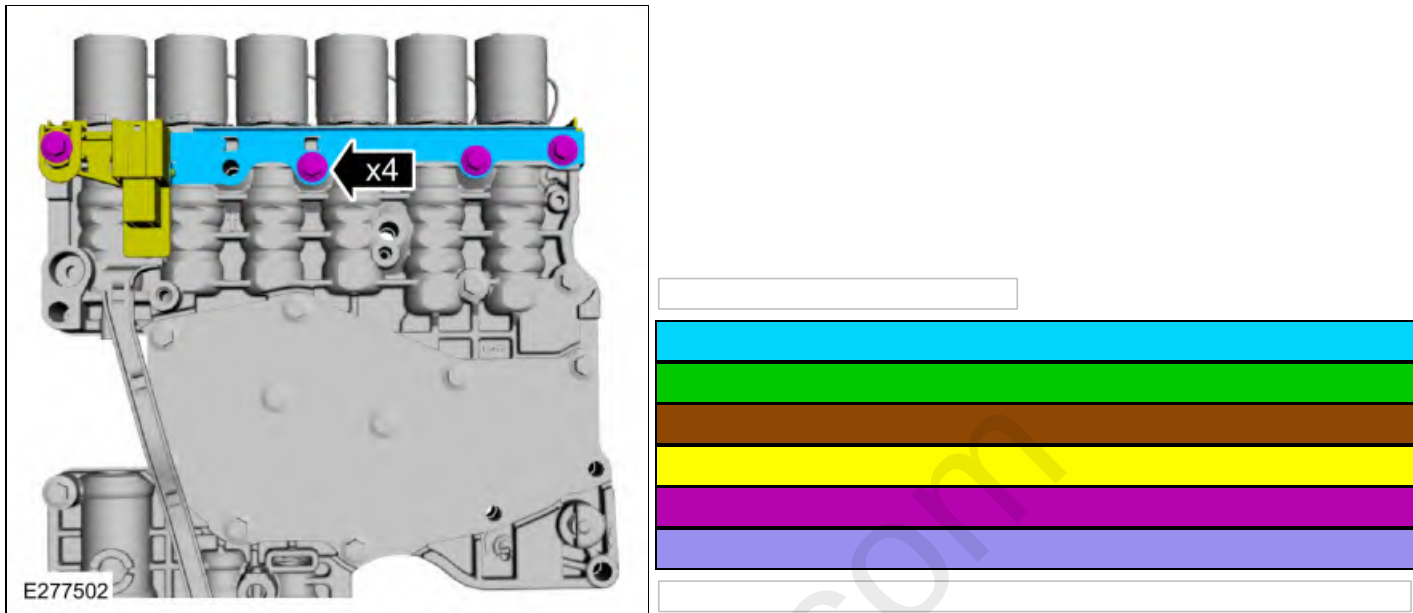
8. Remove the engine disconnect clutch solenoid.



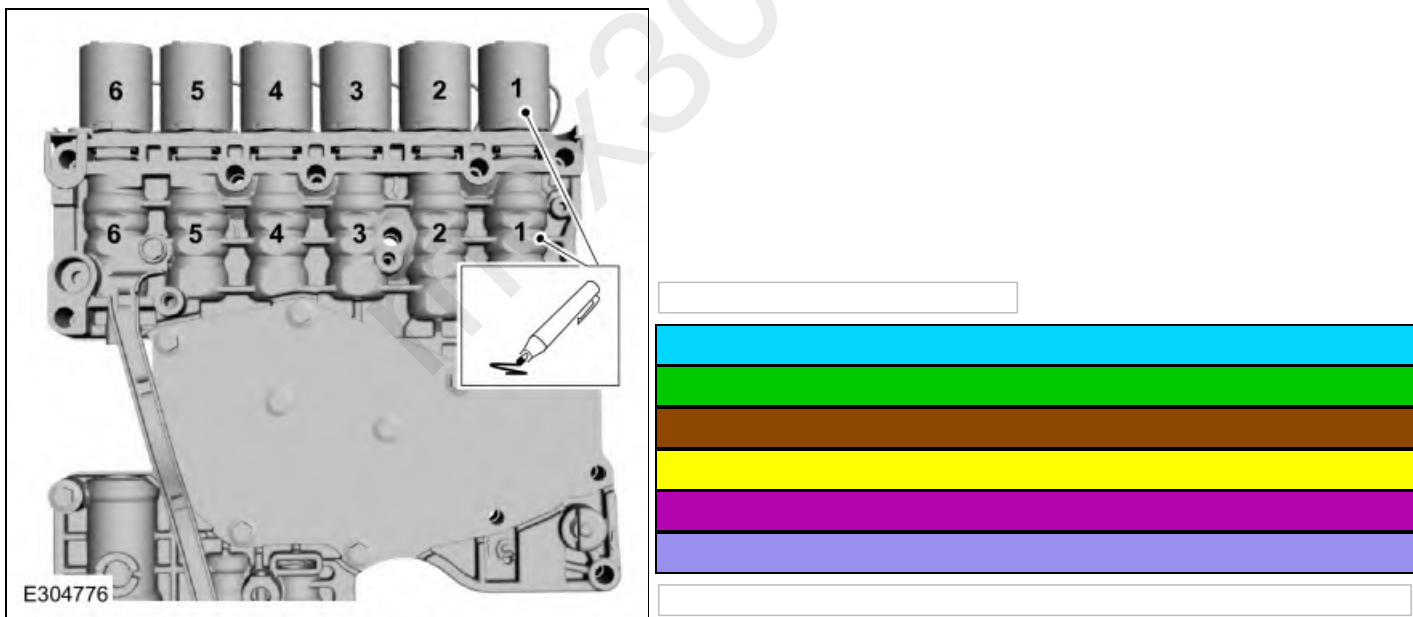
Color	Percentage
Cyan	33%
Green	22%
Brown	17%
Yellow	13%
Purple	10%
Light Blue	7%

Solenoids A through F

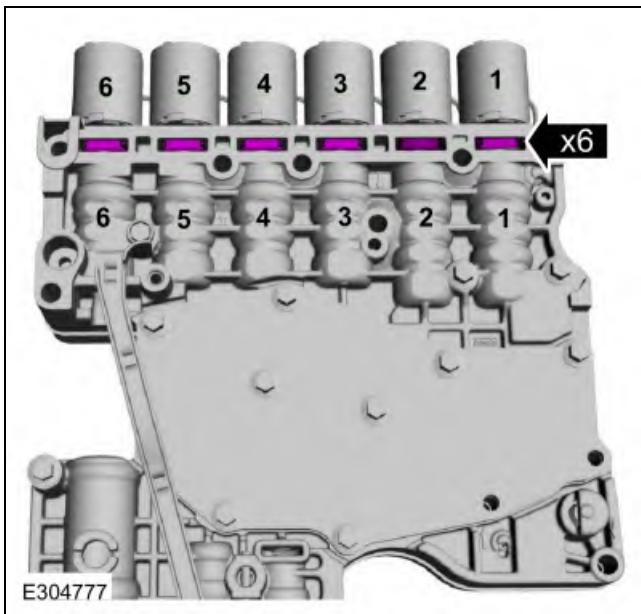
9. Remove the main control valve body.
- Refer to: Main Control Valve Body (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission & 10R80 MHT, Description and Operation).
- Refer to: Main Control Valve Body - Vehicles With: Column Shift (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission & 10R80 MHT, Removal and Installation).
10. Remove the bolts and the shift solenoid retaining plate.



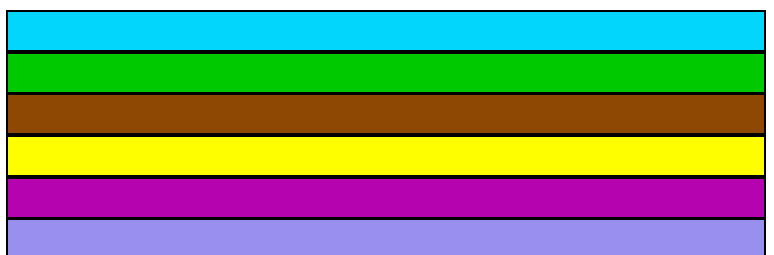
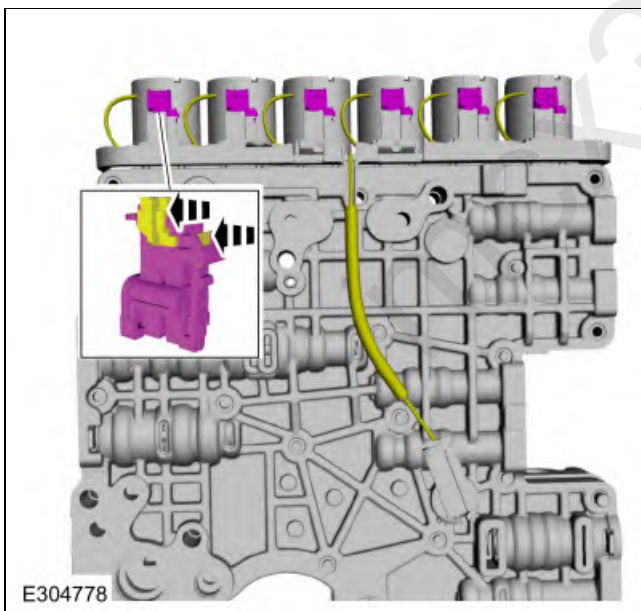
11. If replacing more then one solenoid, number the solenoids and number the main control valve body solenoid ports to correspond to the solenoid.



12. Remove the shift solenoid retainer(s).

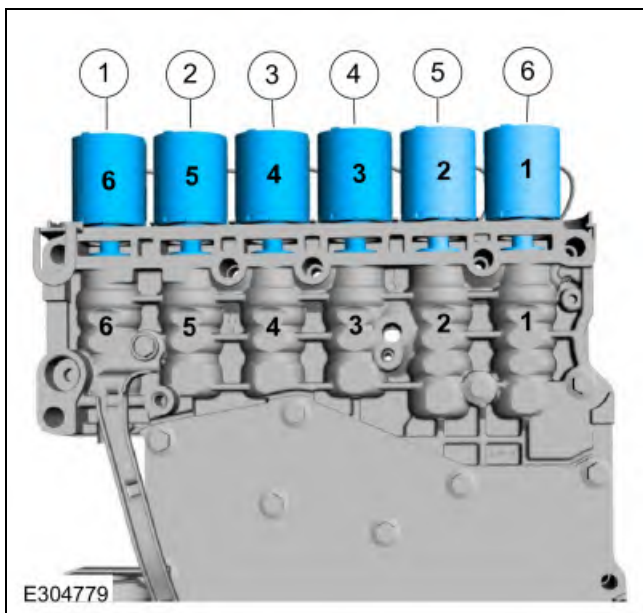


13. Slide the plastic lock to the unlock position. While pressing the plastic tab, disconnect the electrical connector(s).



14. Remove the solenoid(s) from the main control valve body.

1. SSA (7J136)
2. SSF (7J136)
3. SSC (7J136)
4. SSB (7J136)
5. SSE (7J136)
6. SSD (7J136)



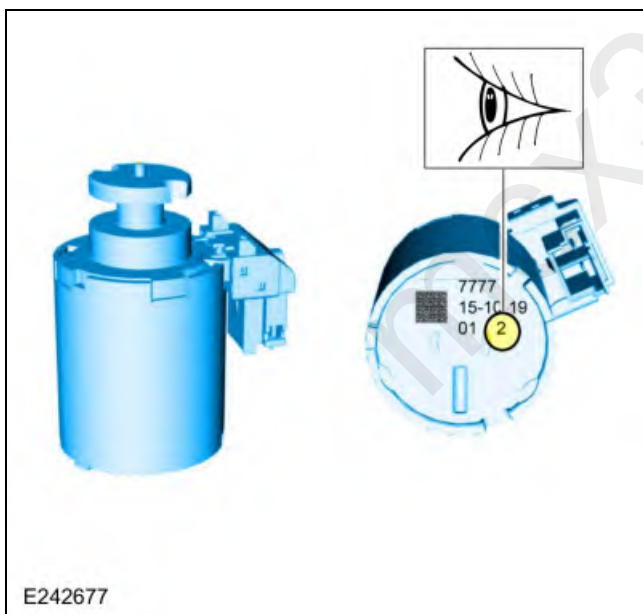


Installation

Solenoids A through F

- NOTICE:** Solenoids are calibrated from the factory and are not all the same. To replace a solenoid, match the band number with the original solenoid or harsh shifts or damage to the transmission can occur.

If new solenoids are needed, identify the solenoid band number.

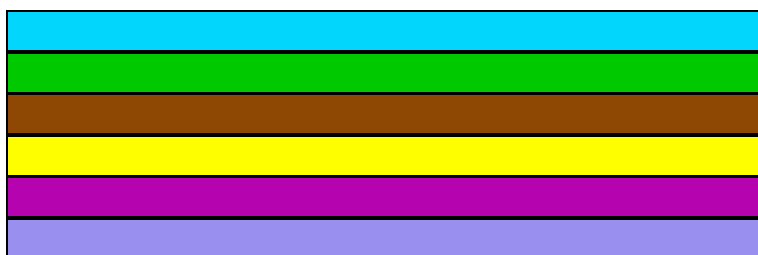
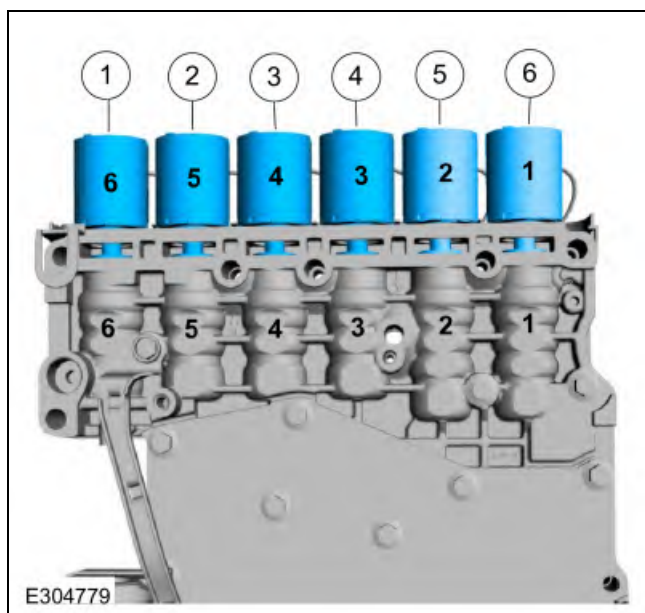




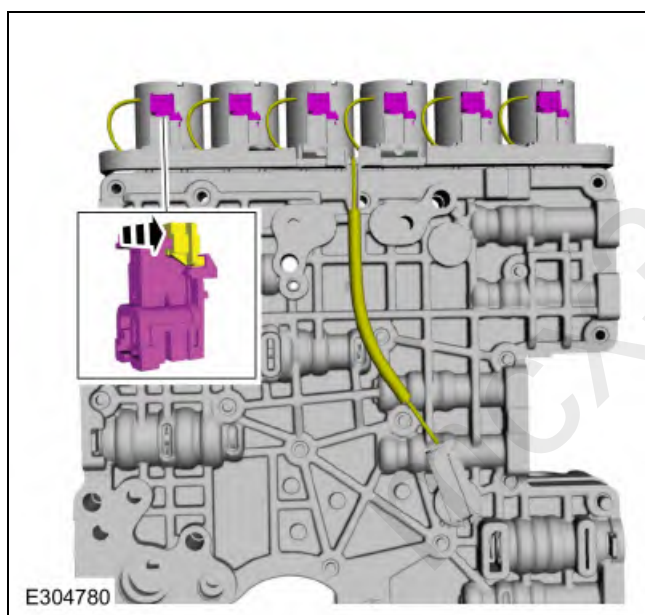
2.

Install the solenoid(s) in the main control valve body in the correct port(s) as marked during removal.

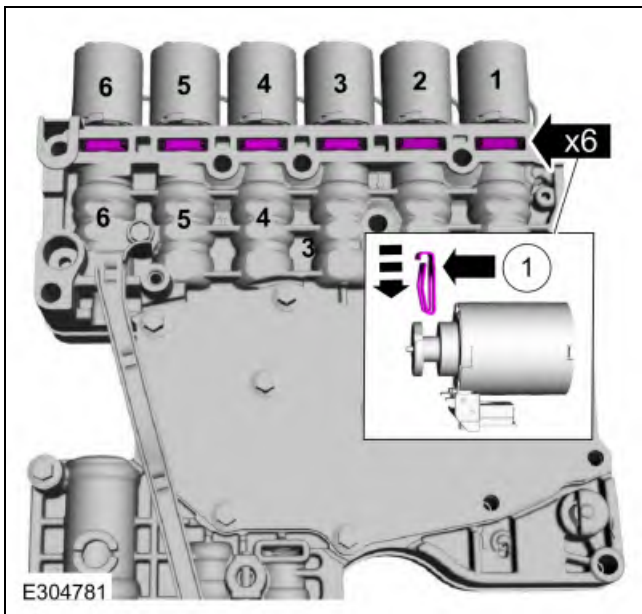
1. SSA (7J136)
2. SSF (7J136)
3. SSC (7J136)
4. SSB (7J136)
5. SSE (7J136)
6. SSD (7J136)



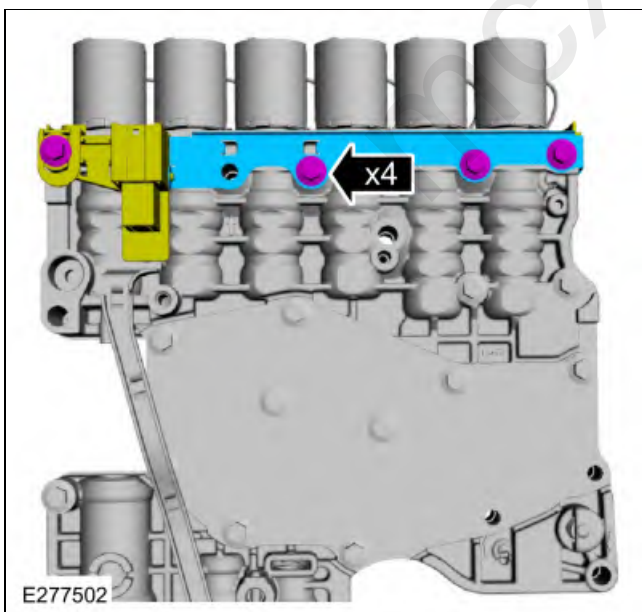
3. Connect the electrical connectors and slide the plastic lock to the locked position.



4. Install the shift solenoid retainer(s) with the flat side towards the solenoids.
1. Retainer flat side



5. Install the shift solenoid retaining plate and the bolts.
Torque: 106 lb.in (12 Nm)

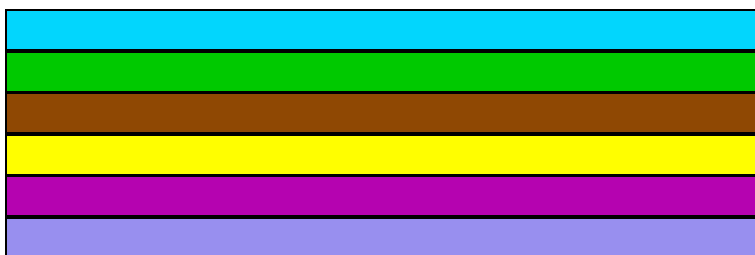
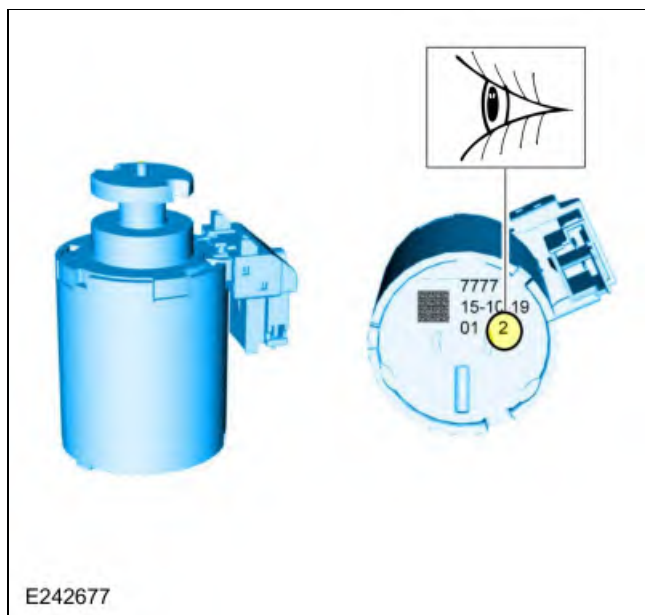


6. Install the main control valve body.
 Refer to: Main Control Valve Body (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission & 10R80 MHT, Removal and Installation).
 Refer to: Main Control Valve Body - Vehicles With: Column Shift (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission & 10R80 MHT, Removal and Installation).

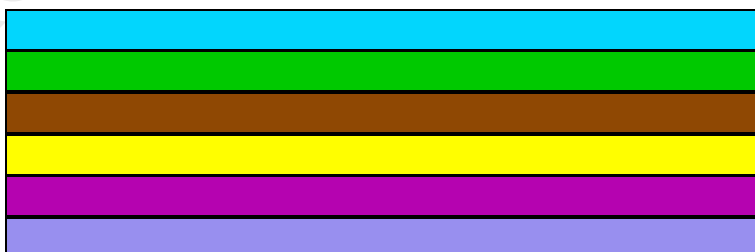
Engine Disconnect Clutch Solenoid

7. **NOTICE:** Solenoids are calibrated from the factory and are not all the same. To replace a solenoid, match the band number with the original solenoid or harsh shifts or damage to the transmission can occur.

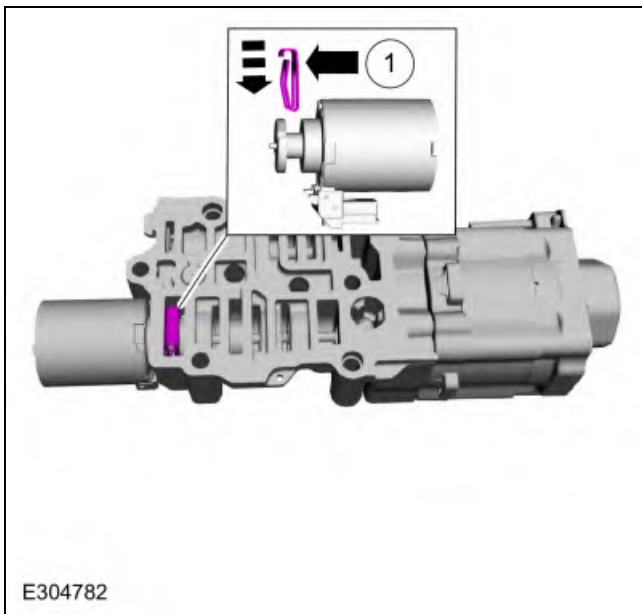
If a new solenoid is needed, identify the solenoid band number.



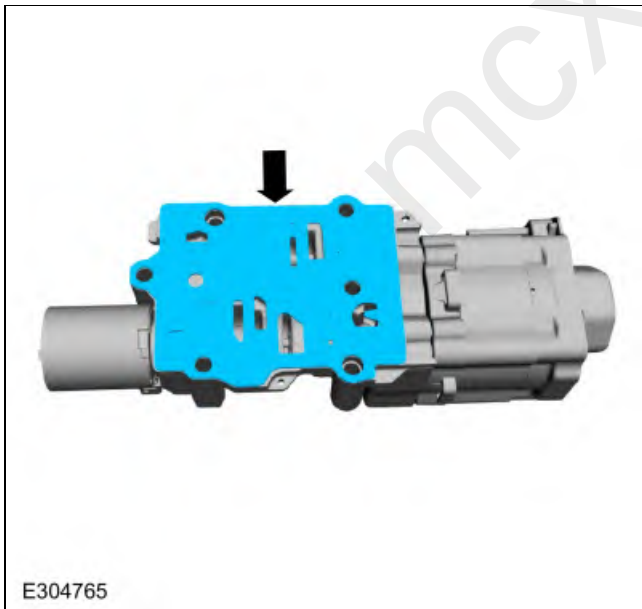
8. Install the engine disconnect clutch solenoid.



9. Install the engine disconnect clutch solenoid retainer with the flat side towards the solenoid.
1. Retainer flat side



10. Install the transmission fluid auxiliary pump gasket.



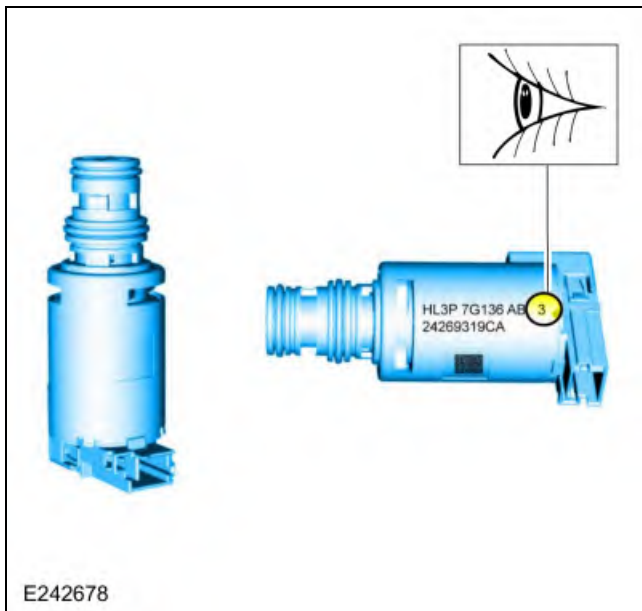
11. Install the transmission fluid auxiliary pump.

Refer to: Transmission Fluid Auxiliary Pump (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission “10R80 MHT, Removal and Installation).

LPC (line pressure control) and TCC (torque converter clutch) Solenoids

12. **NOTICE:** Solenoids are calibrated from the factory and are not all the same. To replace a solenoid, match the replacement solenoid type (normally high/normally low) and the band number with the original solenoid or harsh shifts or damage to the transmission can occur.

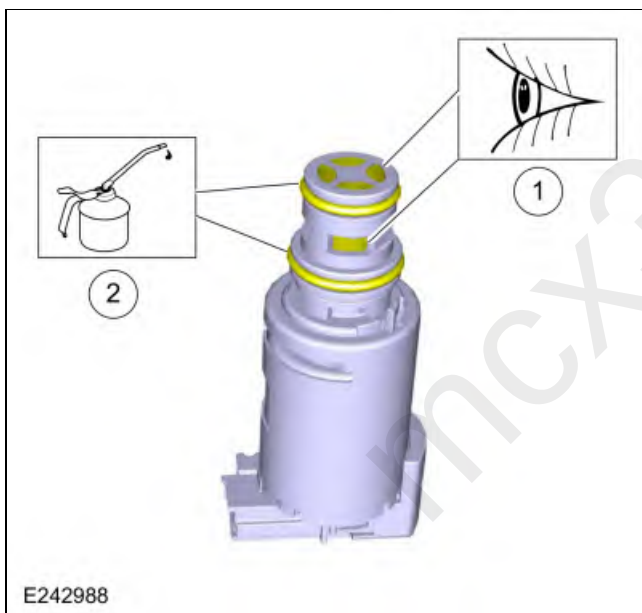
If new solenoids are needed, identify which type (normally high/normally low) of solenoid it is and the solenoid band number.



13.

1. Inspect the solenoid screens for debris that may restrict fluid flow.
2. Lubricate the solenoid O-ring seals.

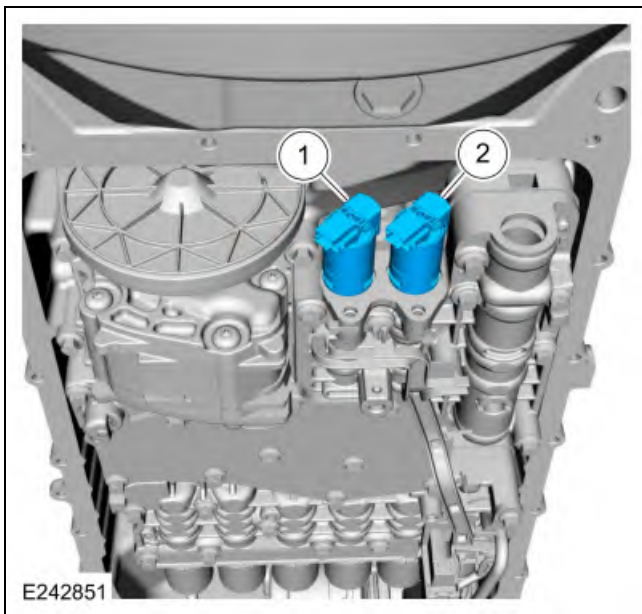
Material: Motorcraft® MERCON® ULV Automatic Transmission Fluid / XT-12-QULV (WSS-M2C949-A,)
(MERCON® ULV)



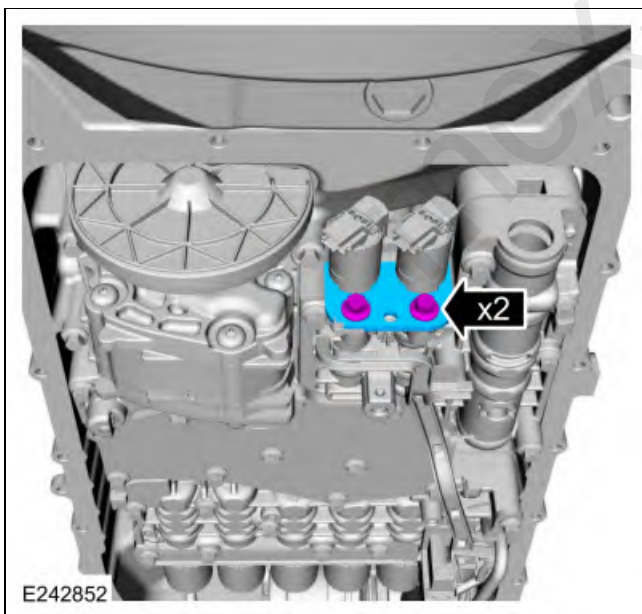
14.

Install the solenoid(s) in the main control valve body.

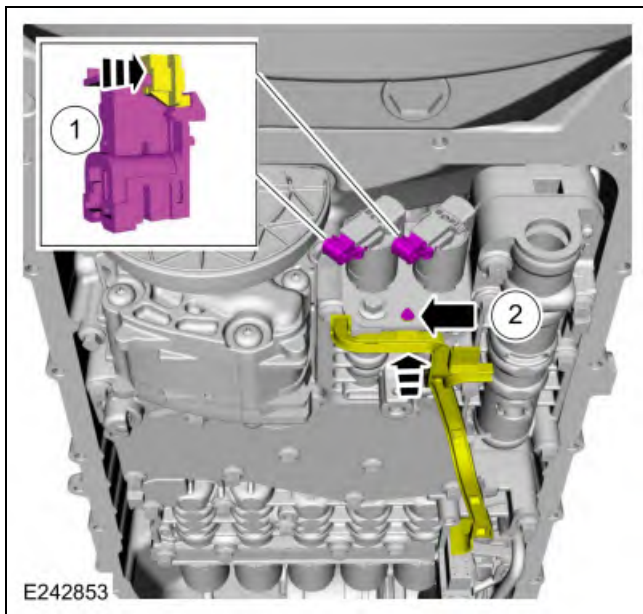
1. LPC solenoid (7G383)
2. TCC solenoid (7G136)



15. Install the solenoid retaining plate and the new bolts.
Torque: 80 lb.in (9 Nm)



- 16.
1. Connect the electrical connectors and slide the plastic lock to the locked position.
 2. Connect the internal wiring harness retainer.



All Solenoids

17. Install the transmission fluid pan gasket and filter.
Refer to: Transmission Fluid Pan, Gasket and Filter (307-01C Automatic Transmission, Transfer Case and Power Transfer Unit - 10-Speed Automatic Transmission & 10R80 MHT, Removal and Installation).

Transmission - 3.3L Duratec-V6 â€“ Hybrid (BP)

Special Tool(s) / General Equipment

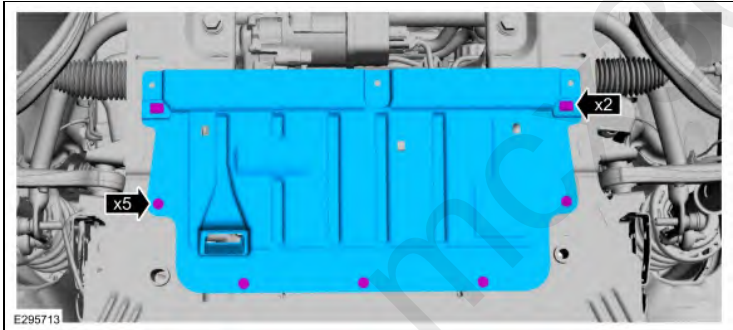
Transmission Jack
Retaining Strap
Wooden Block

Materials

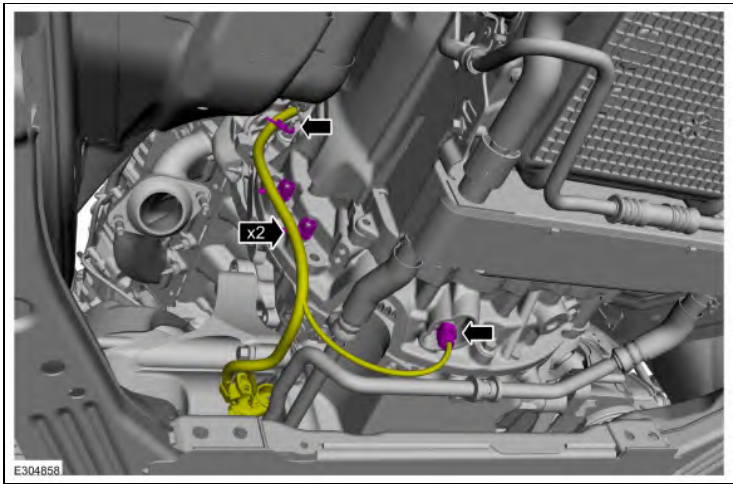
Name	Specification
Motorcraft® Multi-Purpose Grease Spray XL-5-A	ESB-M1C93-B
Motorcraft® MERCON® ULV Automatic Transmission Fluid XT-12-QULV	WSS-M2C949-A, MERCON® ULV

Removal

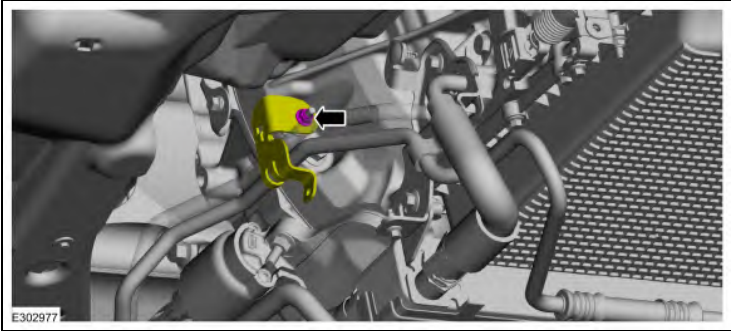
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: Jacking and Lifting - Overview (100-02 Jacking and Lifting, Description and Operation).
2. Disconnect the high voltage battery.
Refer to: High Voltage Battery Disconnect and Connect - Hybrid Electric Vehicle (HEV) (414-03 High Voltage Battery, Mounting and Cables - 10-Speed Automatic Transmission â€“ 10R80 MHT) .
3. Remove the starter motor.
Refer to: Starter Motor (303-06D Starting System - 3.3L Duratec-V6 â€“ Hybrid (BP), Removal and Installation).
4. Remove the LH catalytic converter.
Refer to: Catalytic Converter LH (309-00D Exhaust System - 3.3L Duratec-V6 â€“ Hybrid (BP), Removal and Installation).
5. Remove the RH catalytic converter.
Refer to: Catalytic Converter RH (309-00D Exhaust System - 3.3L Duratec-V6 â€“ Hybrid (BP), Removal and Installation).
6. Remove the pin-type retainer, bolts and the rear underbody shield.



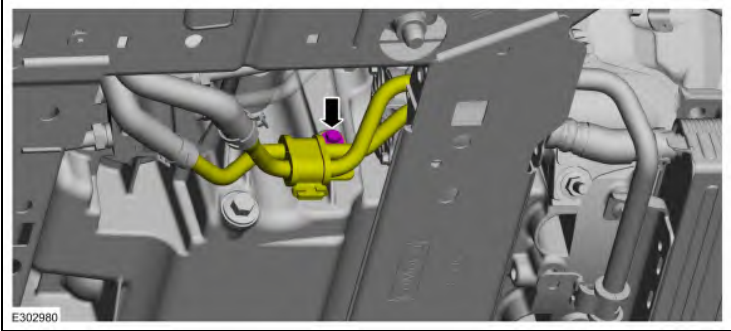
7. Disconnect the engine disconnect clutch pressure sensor electrical connector and the harness retainers.



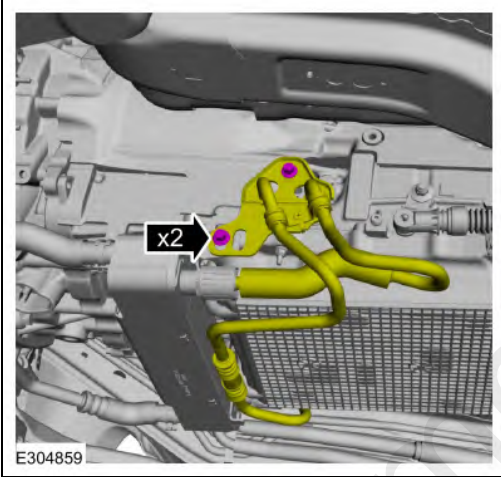
8. If equipped, remove the transmission fluid cooler tube bracket nut.



9. Remove the engine coolant tube bracket bolt.



10. Remove the bolts and disconnect the transmission fluid cooler tubes from the transmission.



11. Position aside and support the transmission fluid cooler assembly.
1. Remove the transmission fluid cooler bolts.