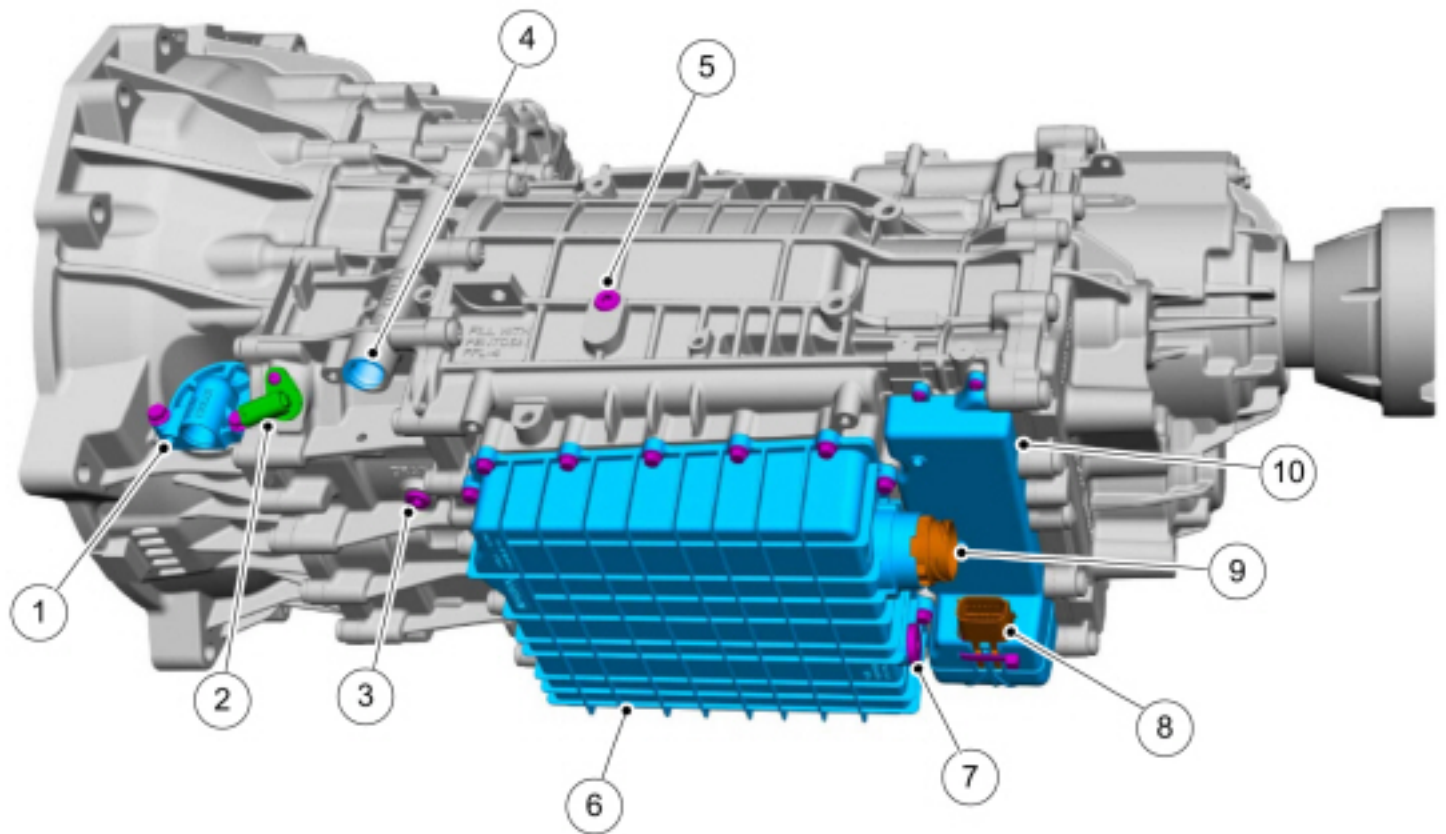


Transmission Description - Overview



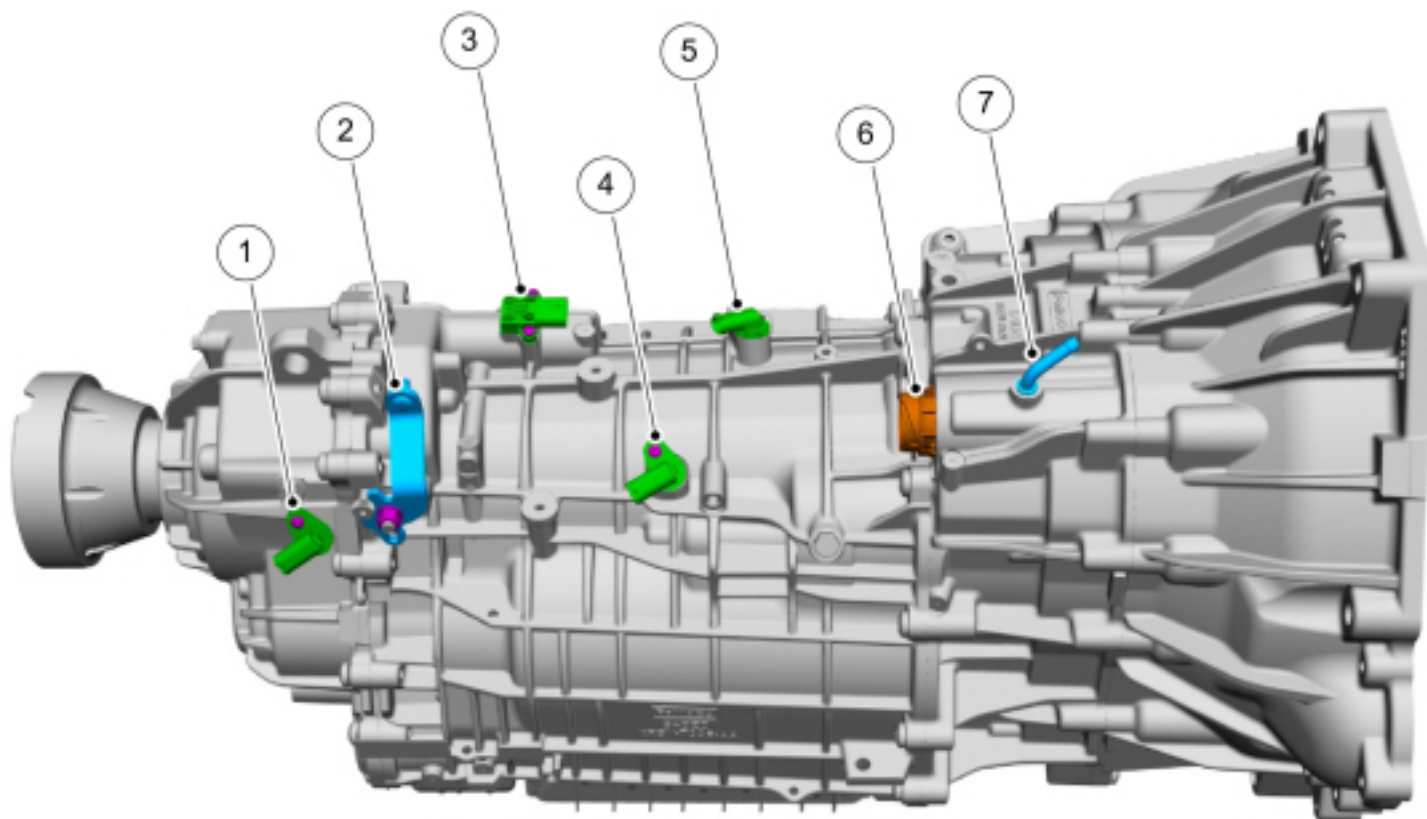
Overview

The Tremec TR-9070 DCT 7 speed Dual Clutch transmission is a automatic shifting manual transmission with full manual paddle shifting option. This is a fuel efficient transmission that is capable of handling high torque applications up to 10,000 RPM maximum. The internal clutch is a high efficient virtually dry dual wet clutch. The planetary gerotor pump provides the system pressure and lubrication. Electro-hydraulic actuation system with low leak solenoids provides the fast and precise clutch and gear control.



E307569

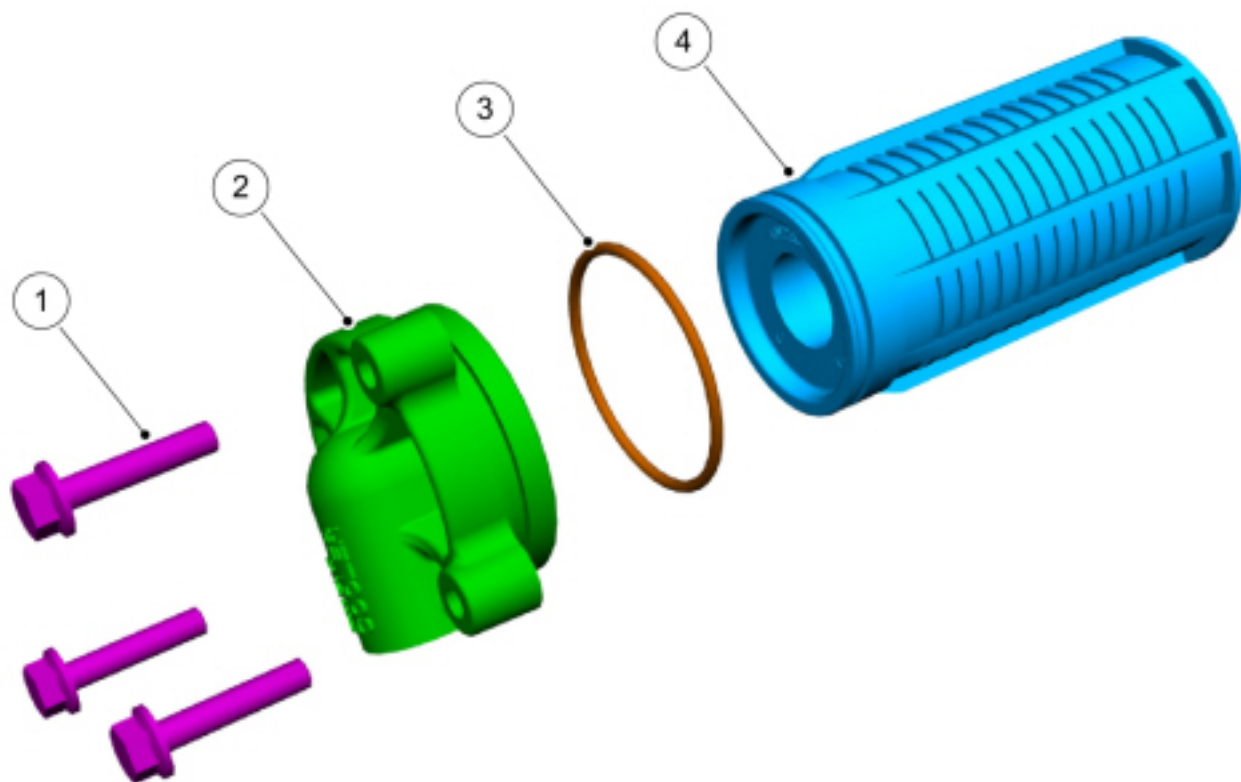
Item	Description
1	Fluid fine filter cover (return to transmission cooler line connection)
2	Input shaft speed (ISS) sensor
3	Transmission drain plug
4	Fluid cooler line connection (to cooler)
5	Transmission fill plug
6	Fluid filter pan
7	Transmission fluid filter pan drain plug
8	Harness sensor connector
9	Transmission bulkhead connector
10	Harness sensor connector cover



E307570

Item	Description
1	Output shaft speed (OSS) sensor
2	Park lock lever
3	Park position sensor
4	Intermediate Speed Sensor B (ISSB)
5	Intermediate Speed Sensor A (ISSA)
6	Input hub bulkhead
7	Transmission vent

Transmission fluid fine filter



E307571

Item	Description
1	Transmission fluid fine filter cover bolts
2	Transmission fluid fine filter cover
3	Transmission fluid fine filter cover O-ring
4	Transmission fluid fine filter

Transmission Control Module (TCM)

Transmission Fluid Filter



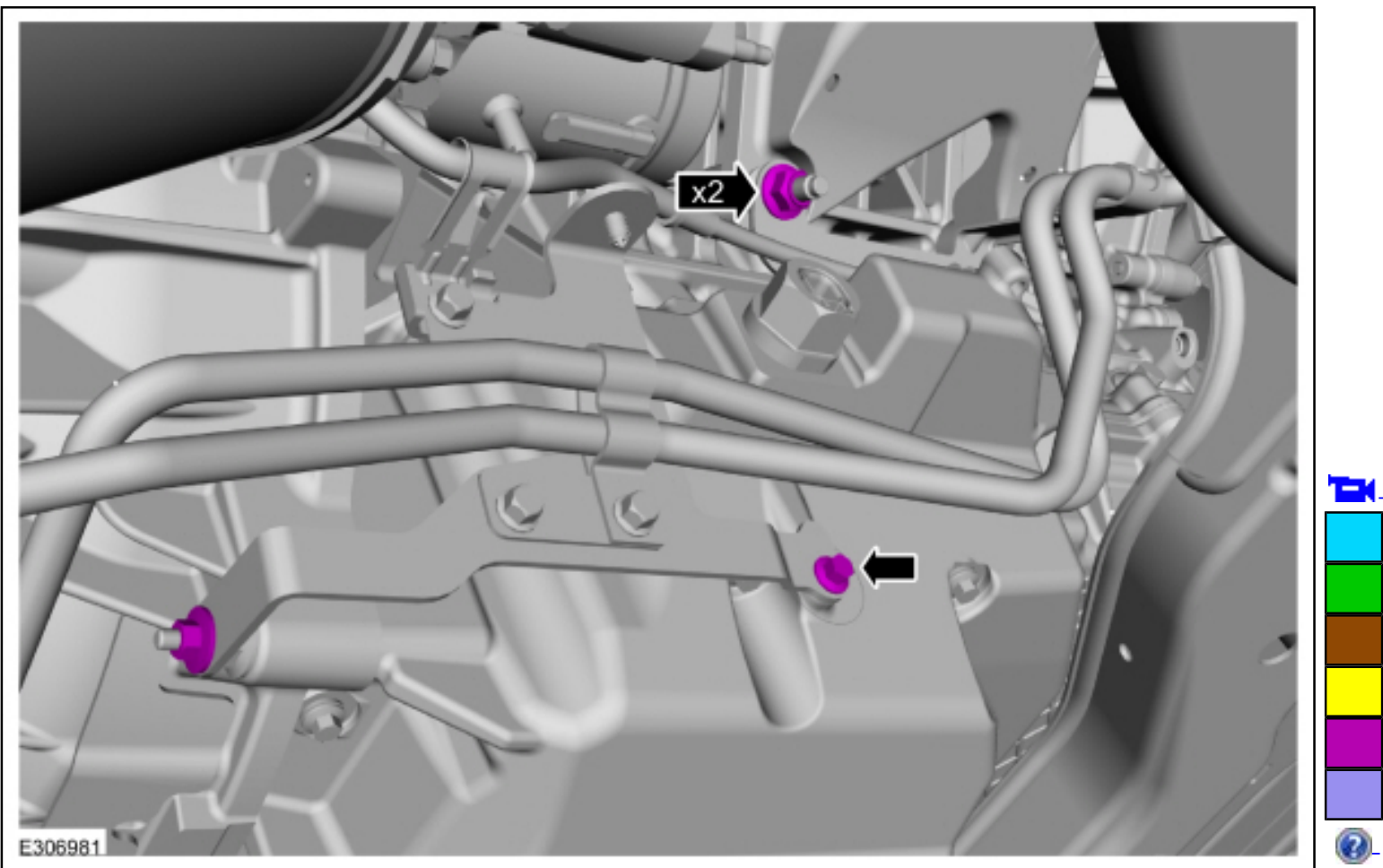
Materials

Name	Specification
GT500 Dual Clutch Transmission Fluid XT-14-L	-

Removal

NOTE: Removal steps in this procedure may contain installation details.

1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: [Jacking and Lifting - GT500 - Overview](#) (100-02 Jacking and Lifting, Description and Operation).
2. Remove the rear transmission fluid cooler tubes bracket retainers.
Torque:
 bracket nut : 35 lb.ft (48 Nm)
 bracket bolts : 89 lb.in (10 Nm)

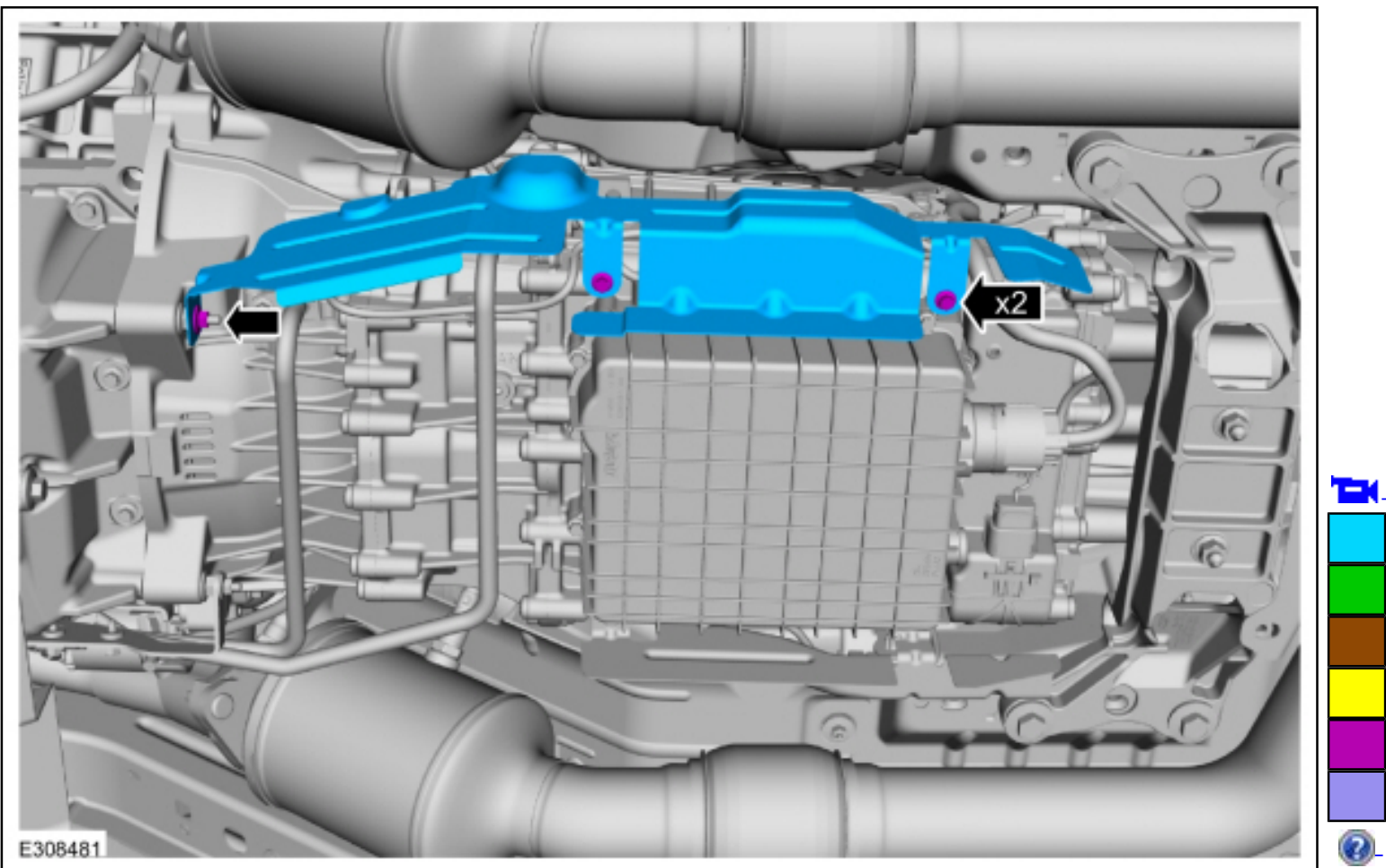


3. Remove the retainers and transmission heat shield.

Torque:

Nut: 53 lb.in (6 Nm)

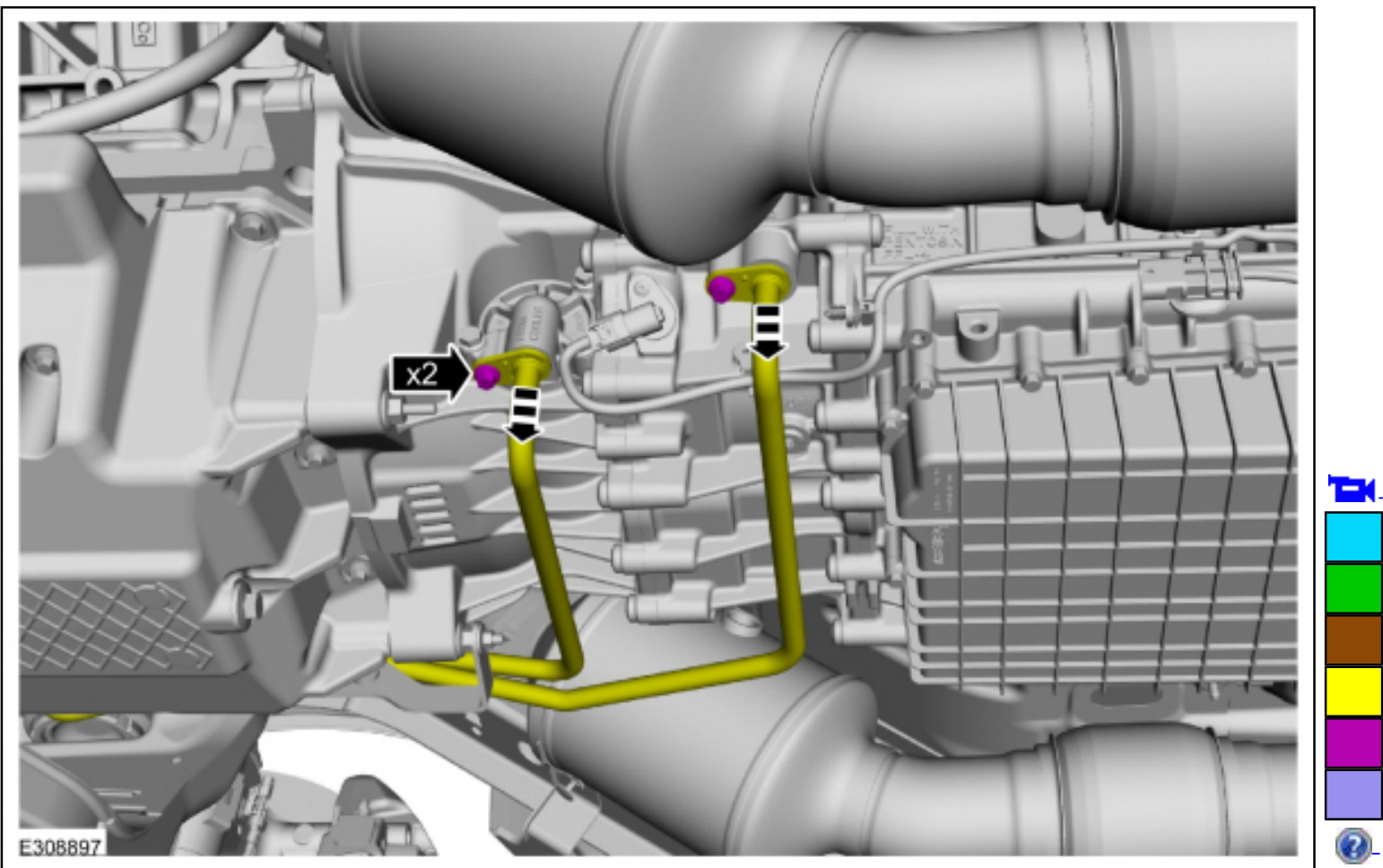
Bolts: 62 lb.in (7 Nm)



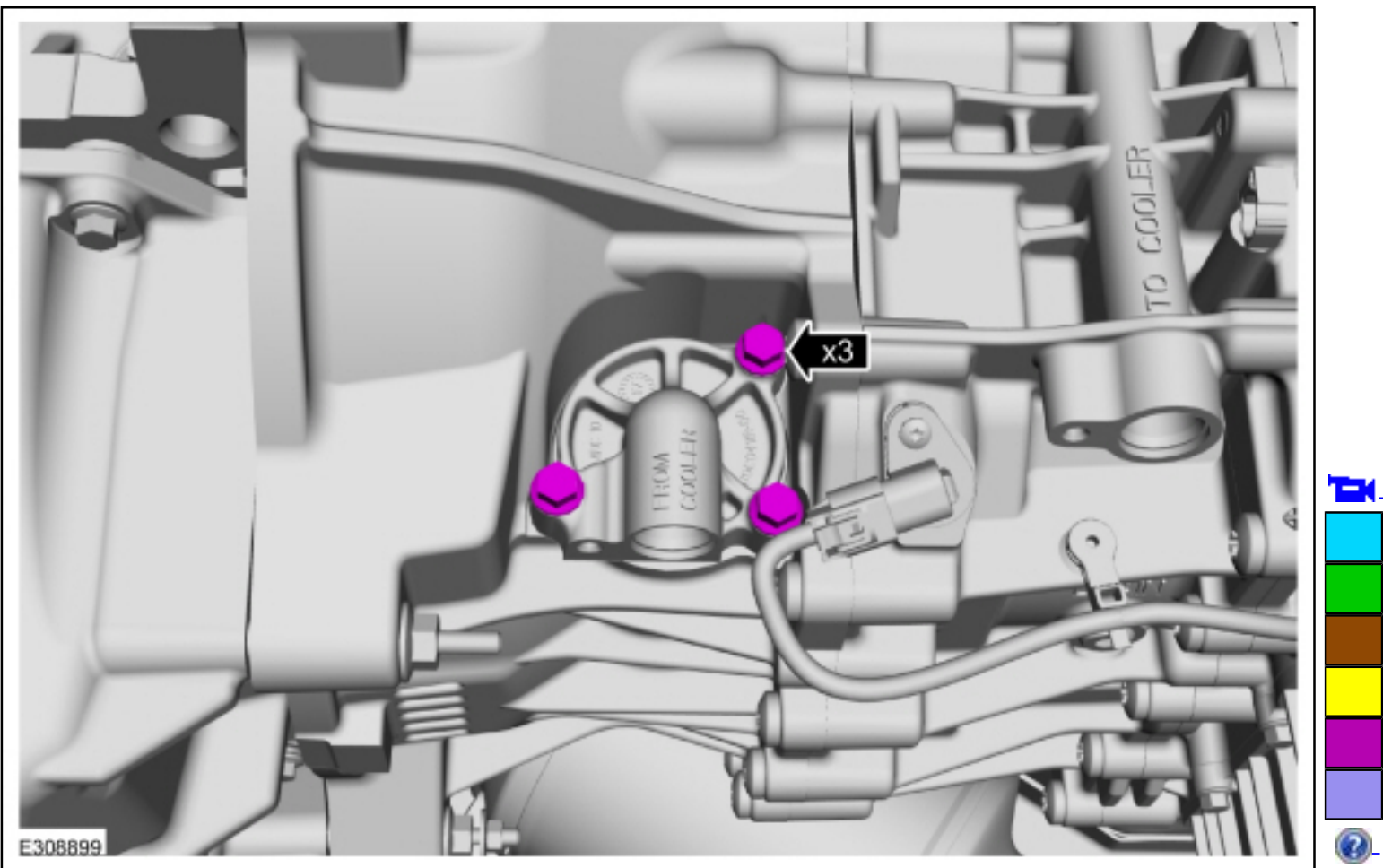
4. **NOTE:** *Be prepared to collect escaping fluid.*

Remove the bolts and the rear transmission fluid cooler tubes.

Torque: 89 lb.in (10 Nm)



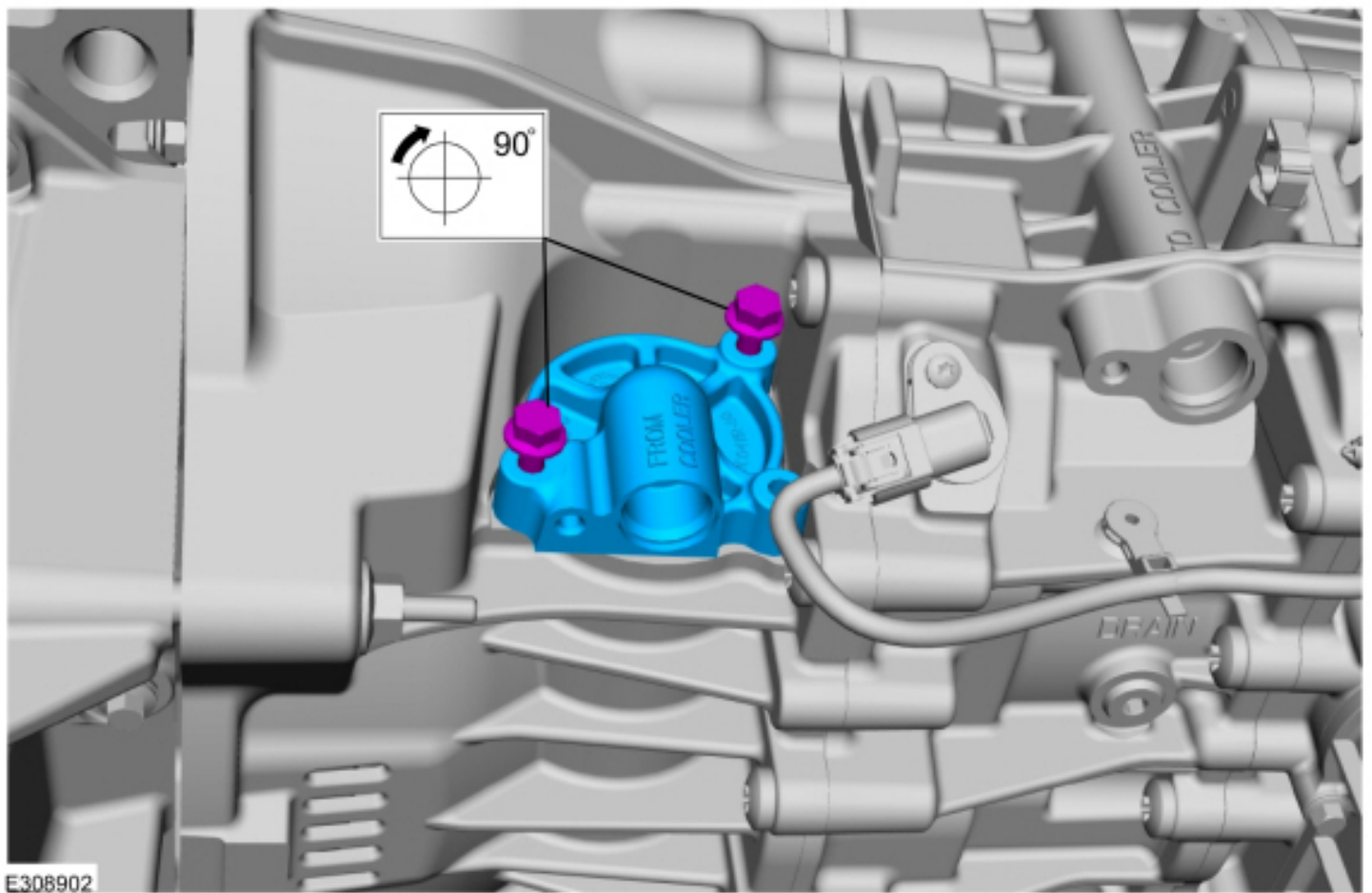
5. Remove the fine filter bolts.
Torque: 89 lb.in (10 Nm)



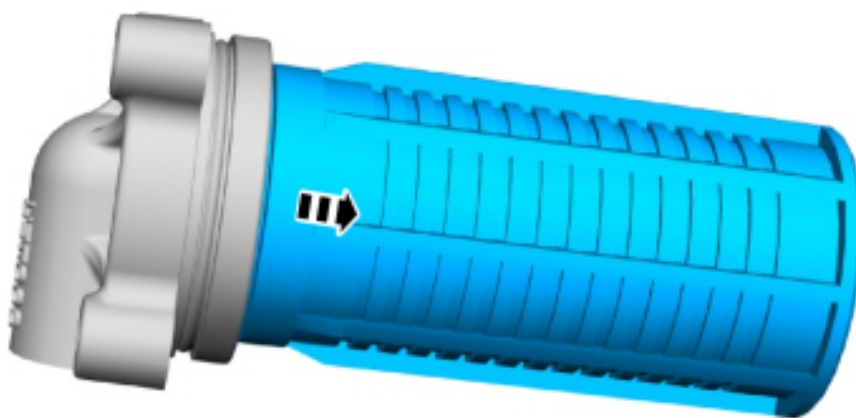
6. **NOTE:** *Be prepared to collect escaping fluid.*

1. Using bolts supplied in the filter kit, Thread bolts in until they bottom out by hand.
2. **NOTE:** *Turning bolts in uneven amounts could bind the fine filter housing and may cause damage.*

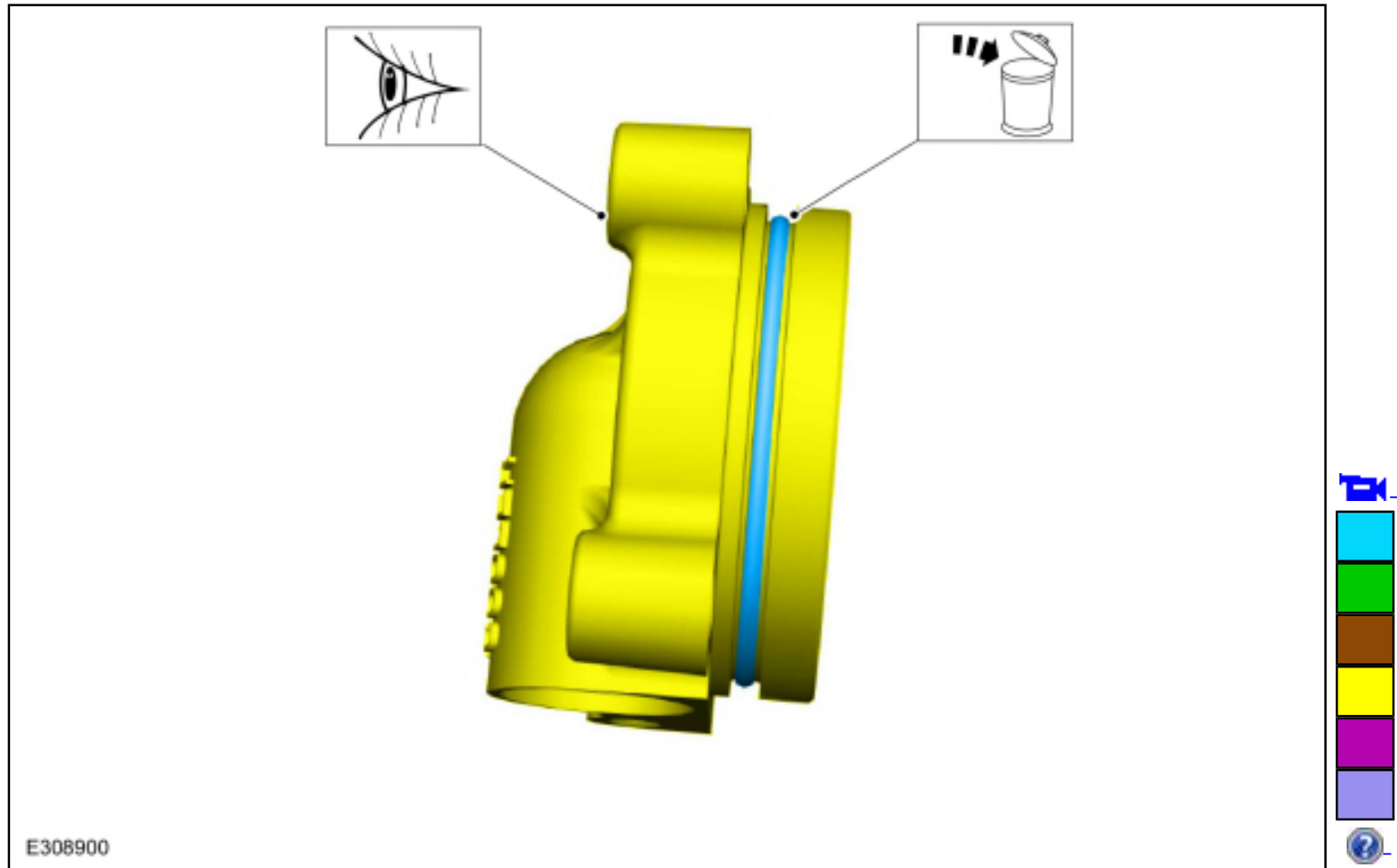
Turn bolts in a 1/4 turn evenly at a time until the fine filter is removed.



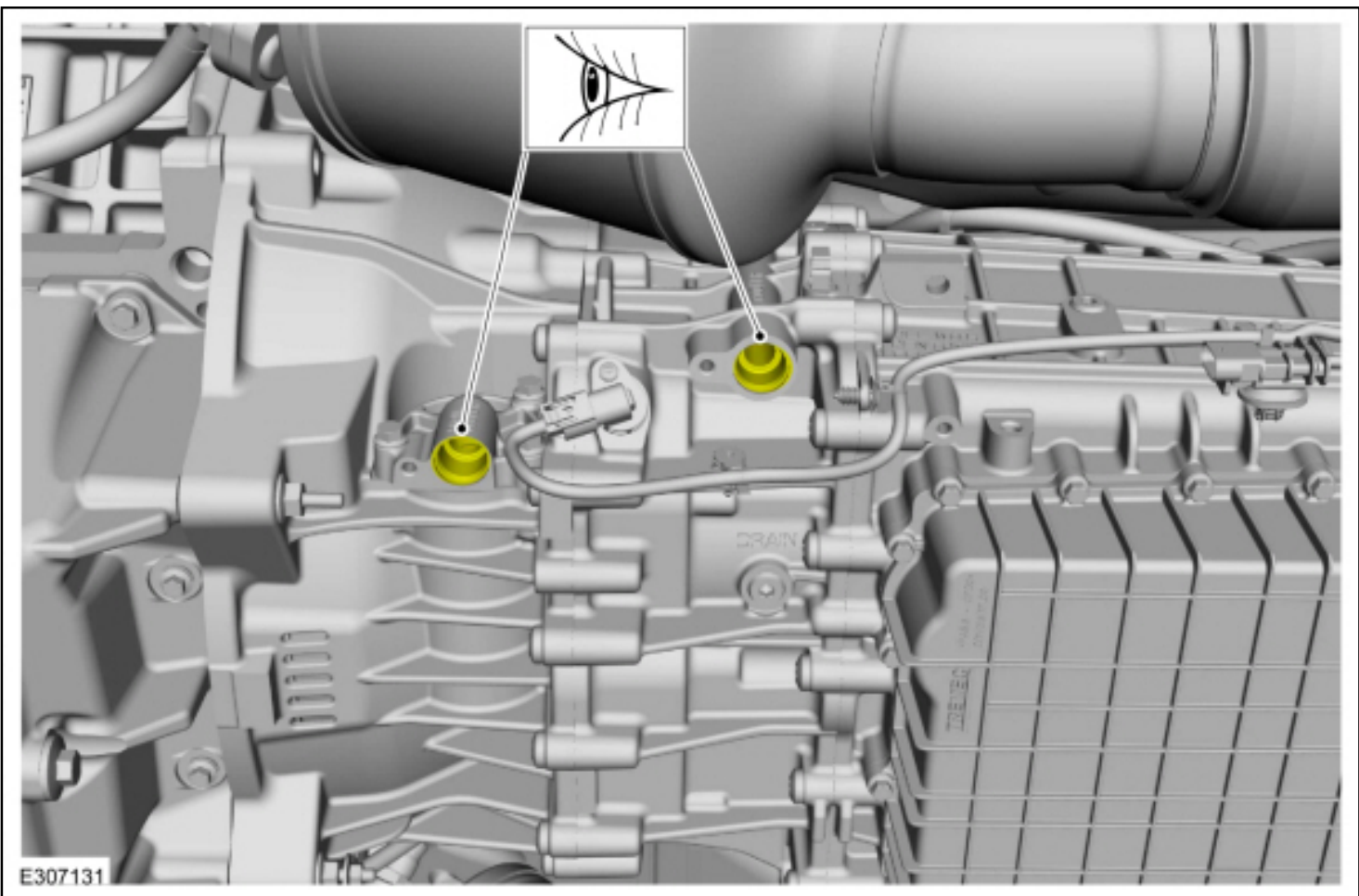
7. Remove the fine filter from the fine filter housing. Replace if necessary.



8. Remove and discard the fine filter housing O-ring. Clean and inspect the fine filter housing. Install a new O-ring.



9. Inspect the transmission case to be sure that the transmission fluid cooler inlet tube seals and backing rings were removed with the transmission fluid cooler tubes and are not stuck in the transmission case. If the transmission fluid cooler tube seals or backing rings are stuck in the transmission case, remove the seals and backing rings, if needed.

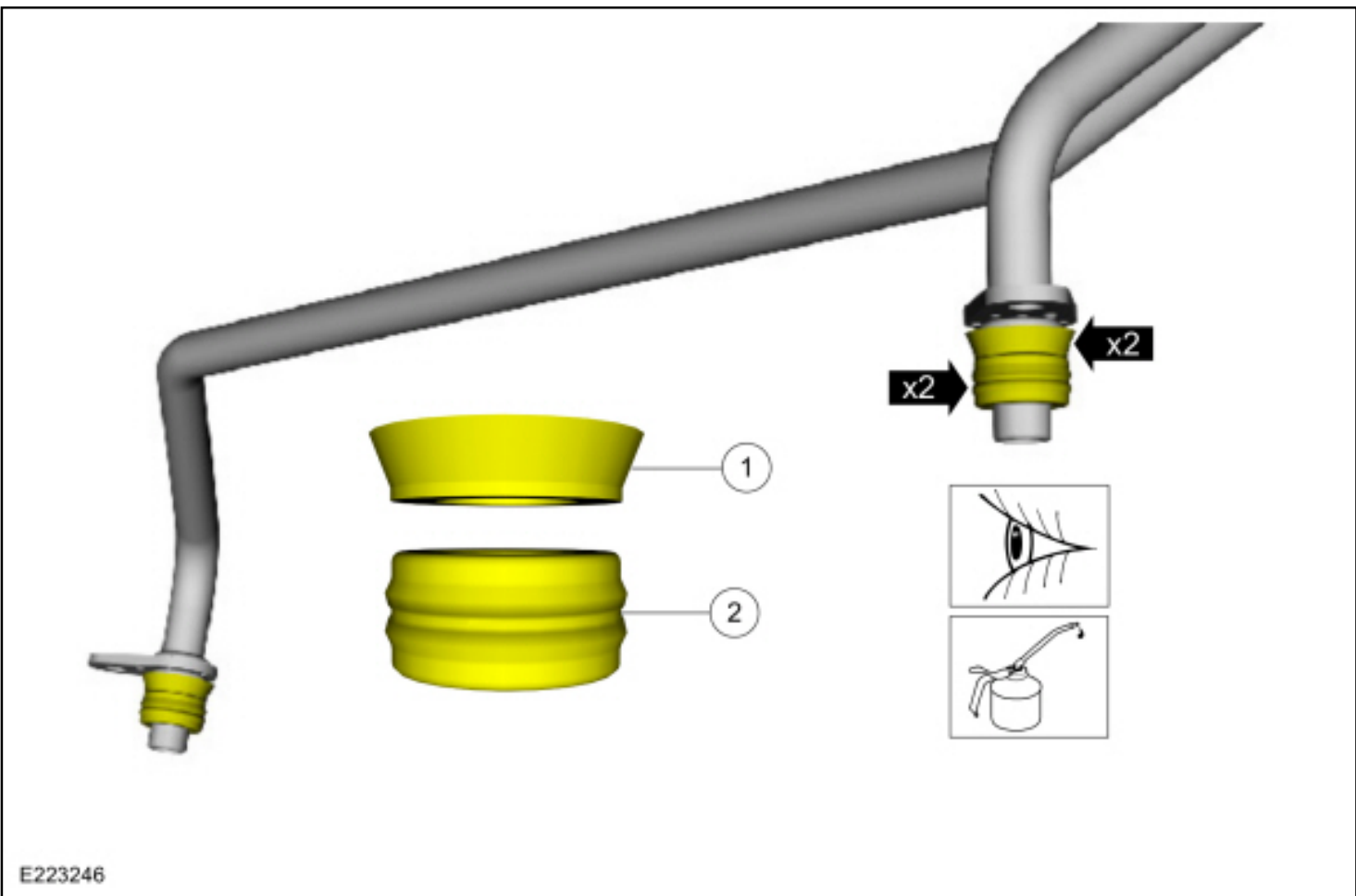


10.

Inspect and lubricate the band seals and backing rings. Replace if necessary.

1. Backing ring.
2. Band seal.

Material: GT500 Dual Clutch Transmission Fluid / XT-14-L



Installation

- 1. To install, reverse the removal procedure.
- 2. Check the transmission fluid level.
Refer to: [Transmission Fluid Level Check](#) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 7-Speed Automatic Transmission – TR9070, General Procedures).

Transmission Fluid Level Check



Materials

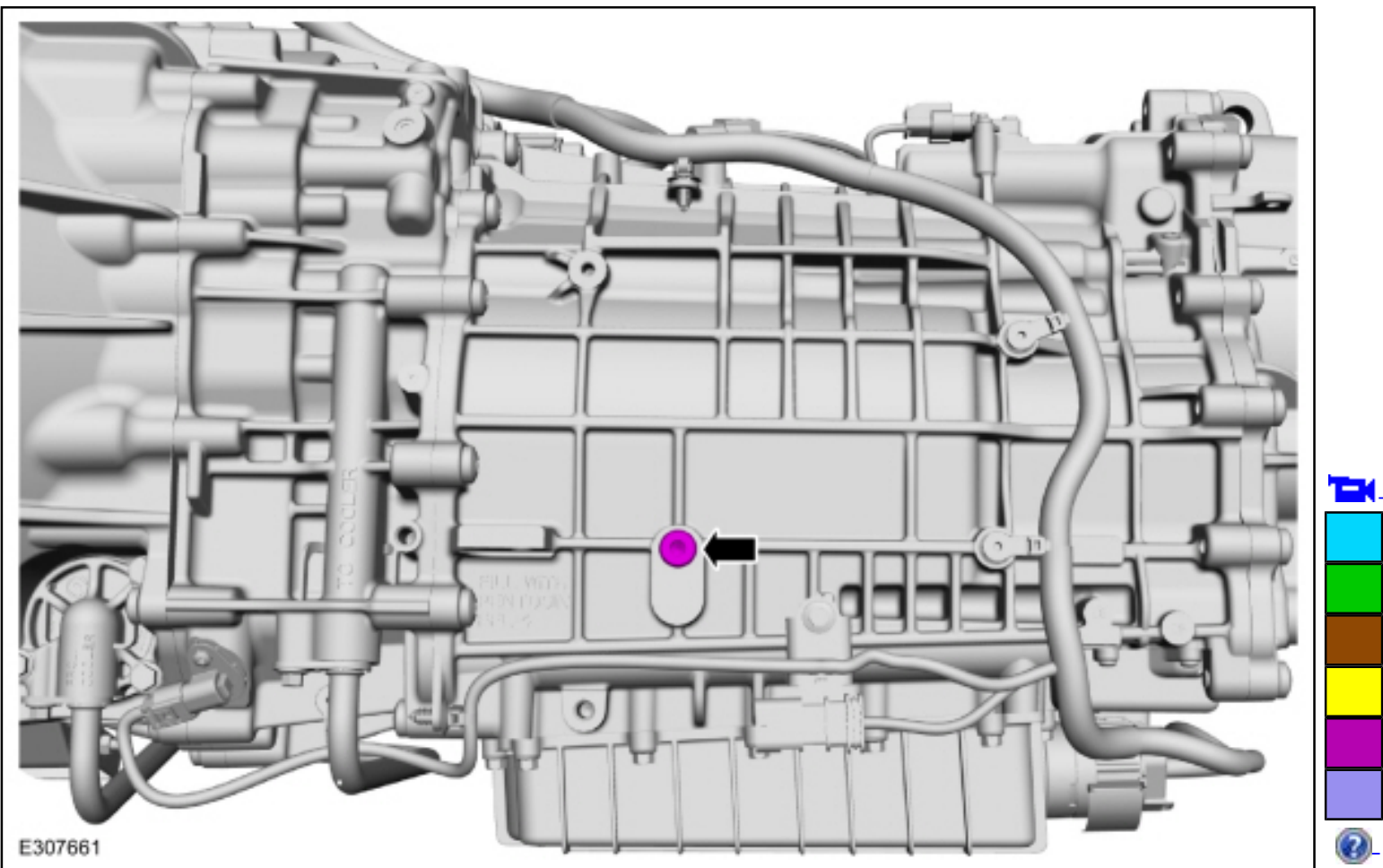
Name	Specification
Motorcraft® Thread Sealant with PTFE TA-24-B	WSK-M2G350-A2

Inspection

NOTICE: The vehicle should not be driven if the transmission fluid level is low. Internal failure could result.

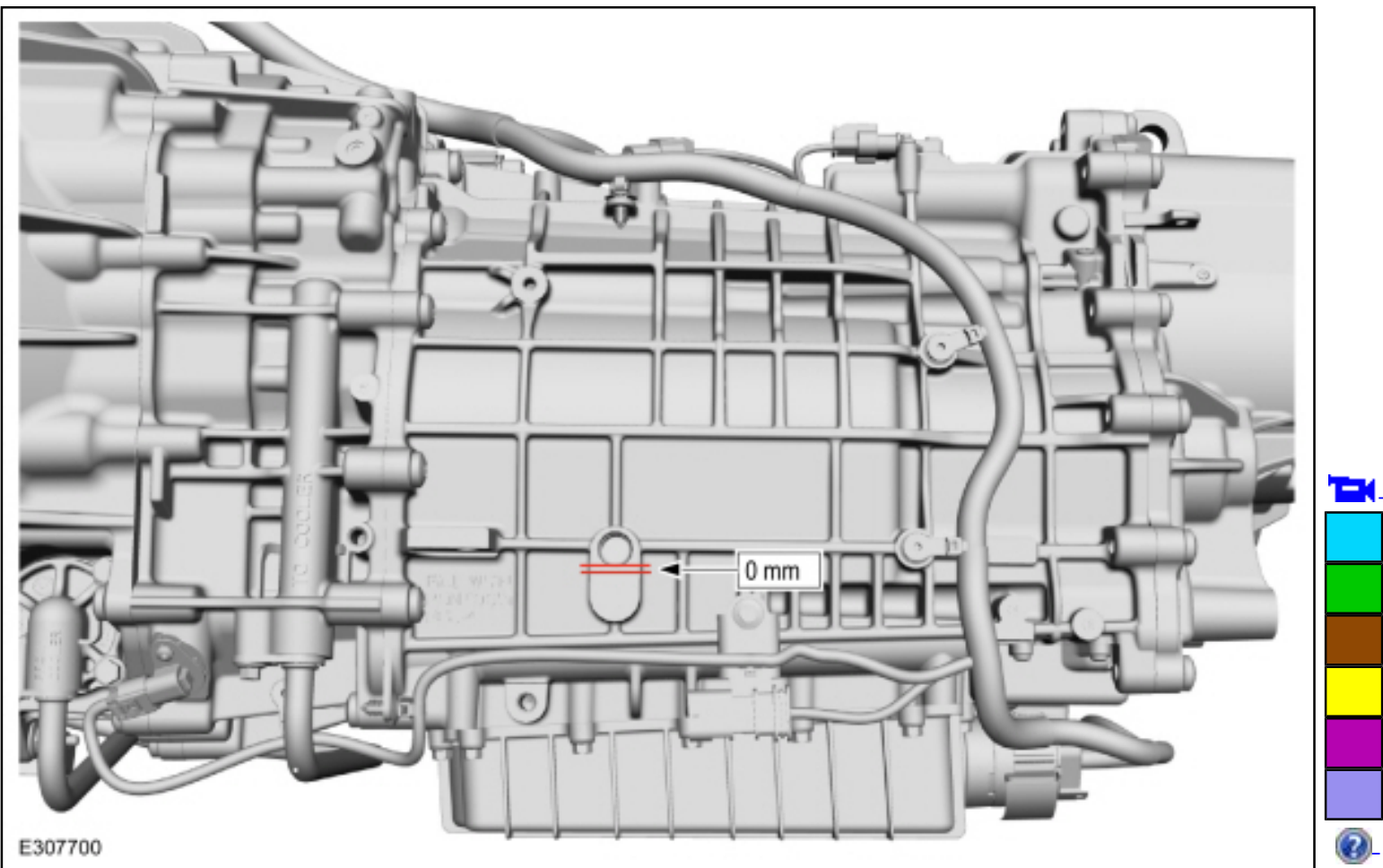
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: Brake Shift Interlock Actuator Manual Override (307-05 Automatic Transmission External Controls - 7-Speed Automatic Transmission – TR9070) .
Refer to: [Jacking and Lifting - Overview](#) (100-02 Jacking and Lifting, Description and Operation).
2. **NOTE:** Make sure that the vehicle is level.

Remove the transmission fluid fill plug.



3. If the transmission fluid is not at the correct level, follow the steps for adding or removing transmission fluid.

Refer to: [Transmission Fluid Drain and Refill](#) (307-01B Automatic Transmission, Transfer Case and Power Transfer Unit - 7-Speed Automatic Transmission – TR9070, General Procedures).



4. If the transmission fluid is at the correct level, install the transmission fluid fill plug.
Material: Motorcraft® Thread Sealant with PTFE / TA-24-B (WSK-M2G350-A2)
Torque: 133 lb.in (15 Nm)

