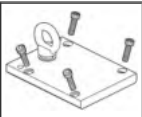


Engine Mount LH

Special Tool(s) / General Equipment

	303-1518
	Bracket, Engine Removal
	TKIT-2009C-F TKIT-2009C-ROW
Floor Crane	
Wooden Block	

Removal

NOTICE: Change the engine oil any time the turbocharger is removed from the engine. The passages in the block, located underneath the turbocharger, are direct passages to the lubrication system. Debris and/or coolant may enter the lubrication system and engine damage may occur.

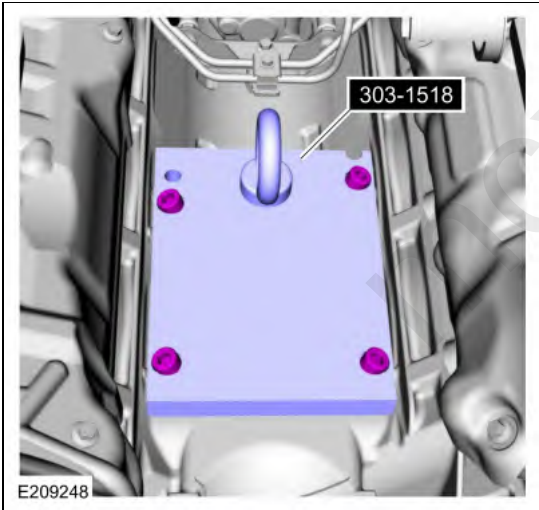
NOTE: For EXPORT ONLY vehicles (outside US/Canada), an Export Supplement is provided and should be referenced to identify differences that can impact service procedures. Vehicles can be identified by referring to the underhood Vehicle Emission Control Information (VECI) label which states, "Not certified for US EPA or CARB Regulations."

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. Remove the following items:

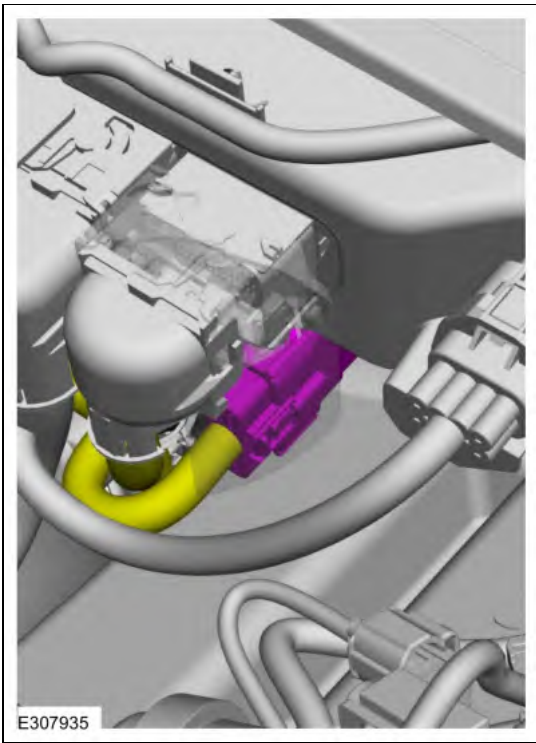
1. Remove the turbocharger.
Refer to: Turbocharger (303-04C Fuel Charging and Controls - Turbocharger - 6.7L Power Stroke Diesel, Removal and Installation).

2. Remove the cooling fan stator.
Refer to: Cooling Fan Stator (303-03B Engine Cooling - 6.7L Power Stroke Diesel, Removal and Installation).

3. Remove the oil cooler.
Refer to: Oil Cooler (303-01B Engine - 6.7L Power Stroke Diesel, Removal and Installation).
3. Install Special Service Tool: 303-1518 Bracket, Engine Removal.
Torque: 41 lb.ft (55 Nm)



4. Disconnect and position aside the wire harness.



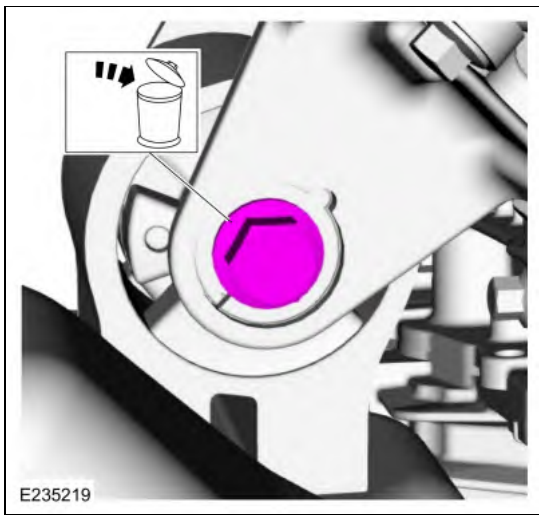
5. **NOTICE:** Failure to replace the transmission support insulator nuts may result in transmission support insulator damage.

Loosen the transmission support insulator nuts.



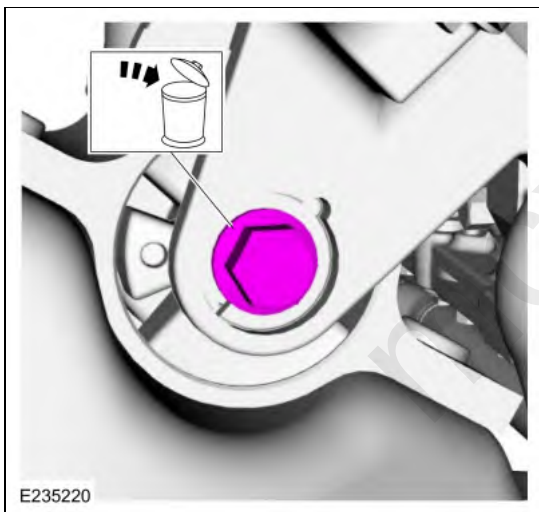
6. **NOTICE:** Failure to replace the engine mount cross bolts may result in engine mount damage.

Remove and discard the RH engine mount cross bolt.



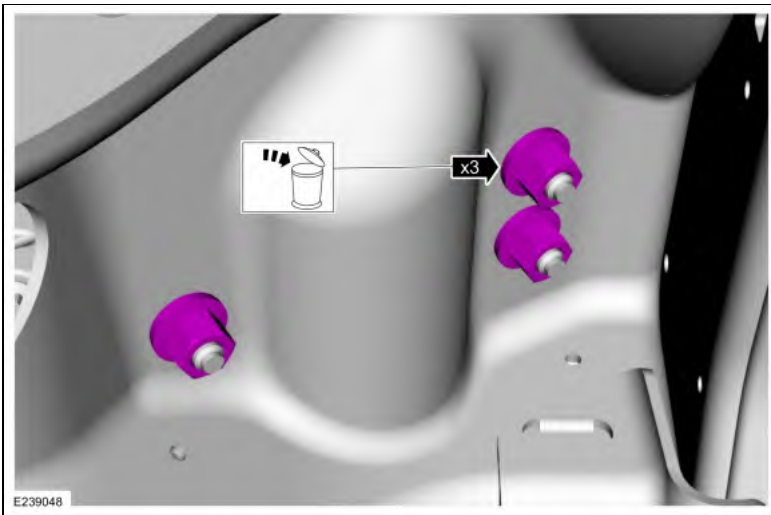
7. **NOTICE:** Failure to replace the engine mount cross bolts may result in engine mount damage.

Remove and discard the LH engine mount cross bolt.



8. **NOTICE:** Failure to replace the engine mount nuts may result in engine mount damage.

Remove and discard the nuts for the LH engine mount.



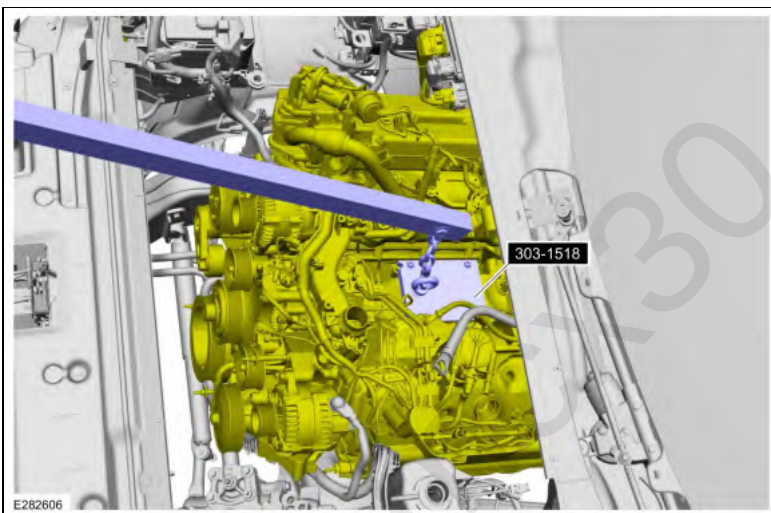
9.

- **NOTE:** Use care not to damage the PCM and wire harness on the RH side when raising the engine.

Using a floor crane and the special tool, raise the engine 2 in. (51 mm).

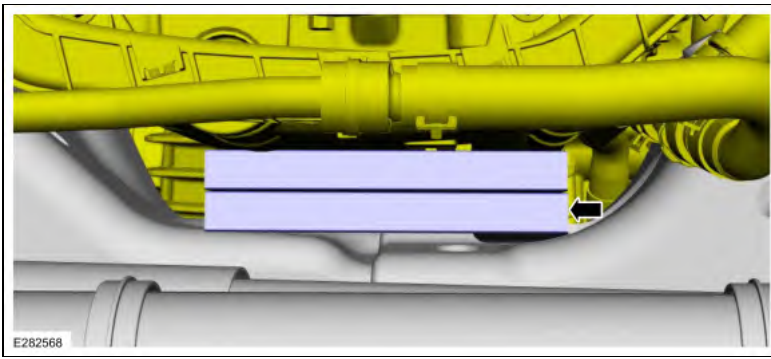
Use Special Service Tool: 303-1518 Bracket, Engine Removal.

Use the General Equipment: Floor Crane



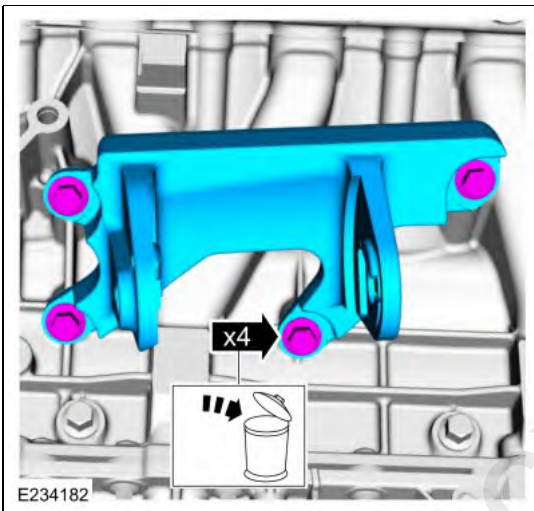
10. Position wooden blocks between the frame and engine for added safety.

Use the General Equipment: Wooden Block

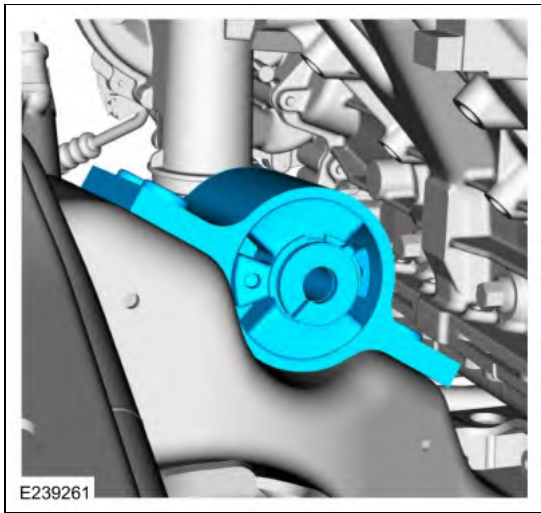


11. **NOTE:** The engine mount bracket needs to be removed in order to remove the engine mount.

- Remove the bolts and the LH engine mount bracket.
- Discard the bolts.

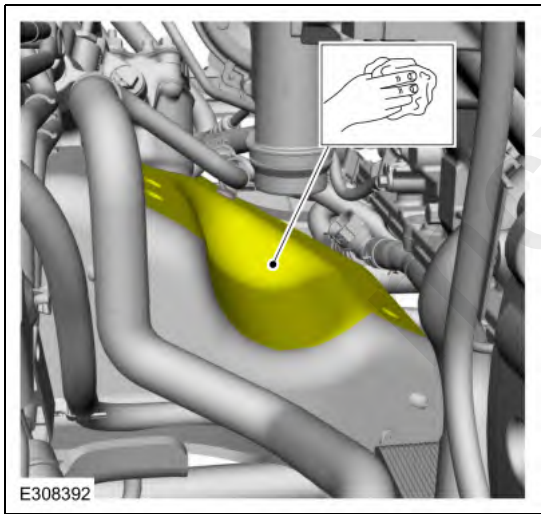


12. Remove the LH engine mount.

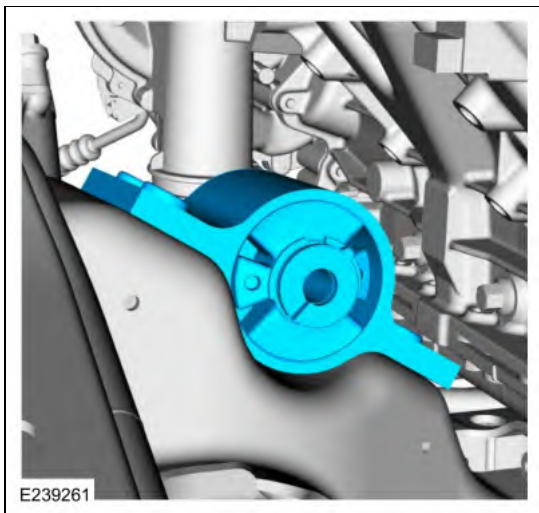


Installation

- 1. Clean the LH engine mount-to-frame mating surfaces of any dirt or foreign material prior to installation.



- 2. Install the LH engine mount.



3. **NOTICE:** Do not tighten the engine mount bracket bolts more than 90 degrees after initial torque or damage to the bolts may occur.

NOTE: Place a visible mark on the engine mount bracket and bracket bolts. Turning the bolt 1 flat of the bolt head is equal to 60 degrees.

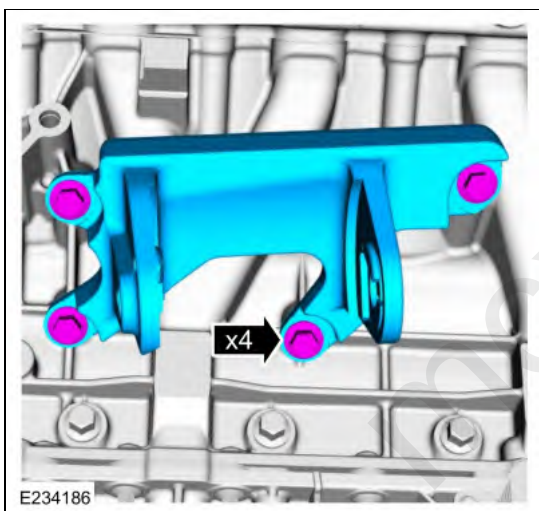
NOTE: Verify that the engine mount bracket bushing is position out prior to installing the engine mount bracket.

Install the LH engine mount bracket and the new bolts.

Torque:

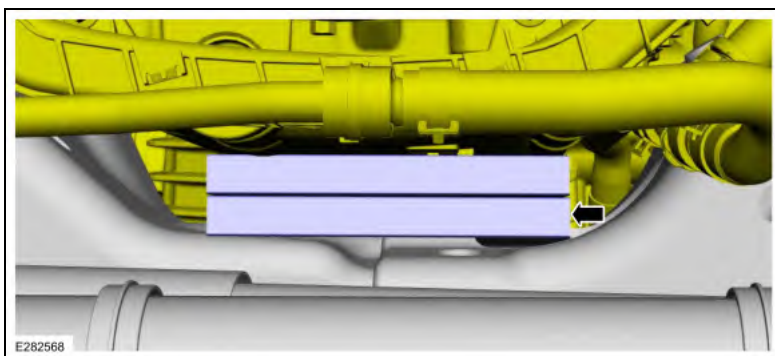
Stage 1: 41 lb.ft (55 Nm)

Stage 2: 60 Å°



4. Remove the wooden blocks.

Use the General Equipment: Wooden Block



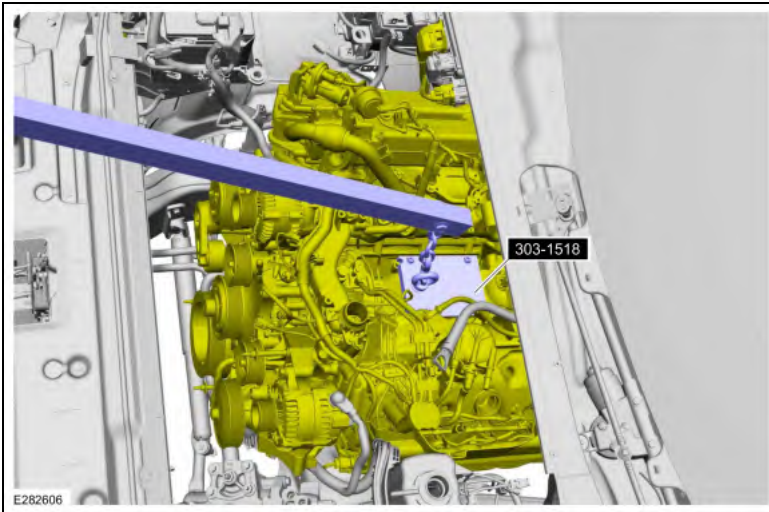
5.

- **NOTE:** The engine mount may have to be adjusted during the lowering of the engine.

Using the floor crane and the special tool, lower the engine.

Use Special Service Tool: 303-1518 Bracket, Engine Removal.

Use the General Equipment: Floor Crane

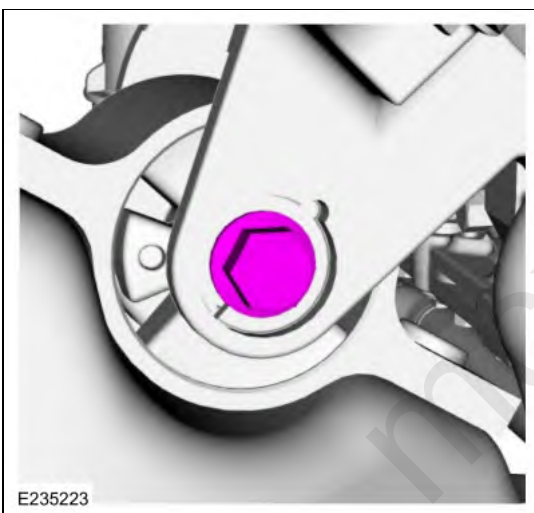


6. **NOTICE:** Failure to replace the engine mount cross bolts may result in engine mount damage.

NOTICE: Only use hand tools when installing the engine mount cross bolts or damage to the engine mount cross bolts may occur.

Install the LH engine mount cross bolt.

Torque: 258 lb.ft (350 Nm)

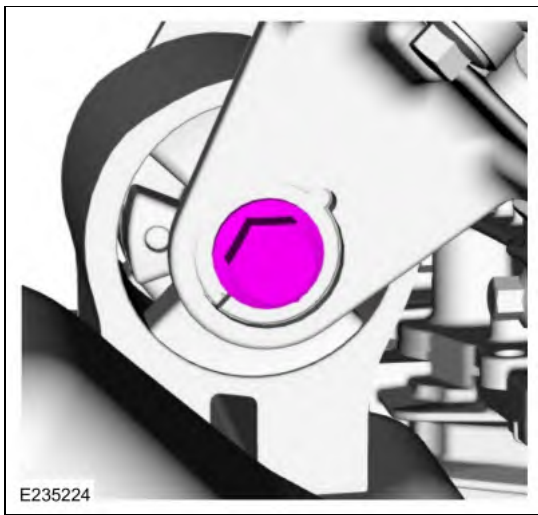


7. **NOTICE:** Failure to replace the engine mount cross bolts may result in engine mount damage.

NOTICE: Only use hand tools when installing the engine mount cross bolts or damage to the engine mount cross bolts may occur.

Install the RH engine mount cross bolt.

Torque: 258 lb.ft (350 Nm)



8.

- **NOTE:** The engine mount have to be adjusted during the lowering of the engine.

Using the floor crane, raise the engine as needed to get the required lift to equalize the engine mounts.

Use the General Equipment: Floor Crane

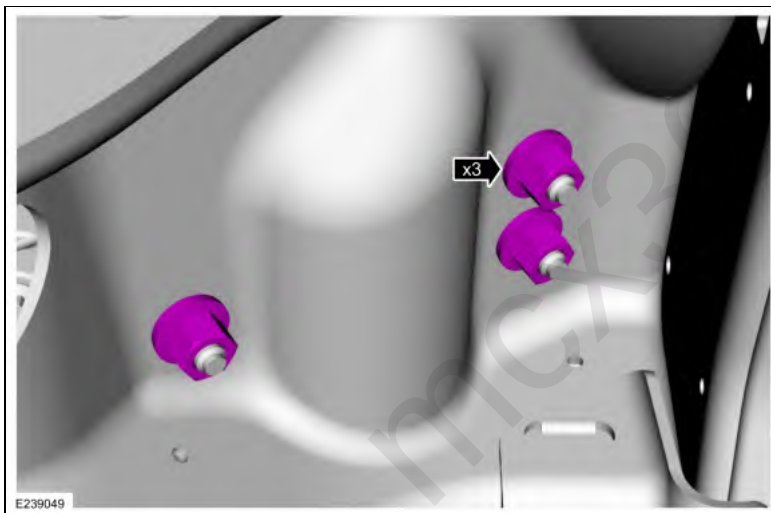
- Lower the engine and remove the floor crane.

9. **NOTICE:** Failure to replace the engine mount nuts may result in engine mount damage.

NOTICE: Only use hand tools when installing the engine mount nuts or damage to the engine mount may occur.

Install the LH engine mount nuts.

Torque: 148 lb.ft (200 Nm)



10. **NOTICE:** Failure to replace the transmission support insulator nuts may result in transmission support insulator damage.

Remove and discard the transmission support insulator nuts.



11. Tighten the transmission support insulator studs.

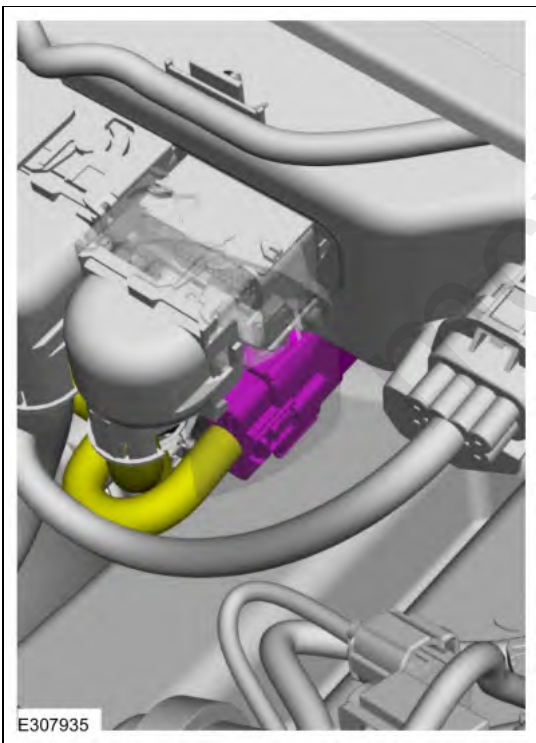
Torque: 66 lb.ft (90 Nm)



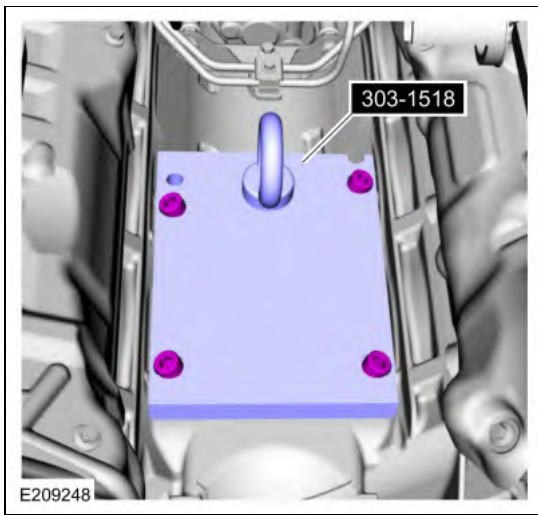
12. **NOTICE:** Failure to replace the transmission support insulator nuts may result in transmission support insulator damage.
- NOTICE:** Only use hand tools when installing the transmission support insulator nuts or damage to the transmission support insulator may occur.
- Install the new transmission support insulator nuts.
Torque: 85 lb.ft (115 Nm)



13. Position back and connect the wire harness.



14. Remove Special Service Tool: 303-1518 Bracket, Engine Removal.



15. Install the following items:

1. Install the oil cooler.
Refer to: Oil Cooler (303-01B Engine - 6.7L Power Stroke Diesel, Removal and Installation).
2. Install the cooling fan stator.
Refer to: Cooling Fan Stator (303-03B Engine Cooling - 6.7L Power Stroke Diesel, Removal and Installation).
3. Install the turbocharger.
Refer to: Turbocharger (303-04C Fuel Charging and Controls - Turbocharger - 6.7L Power Stroke Diesel, Removal and Installation).