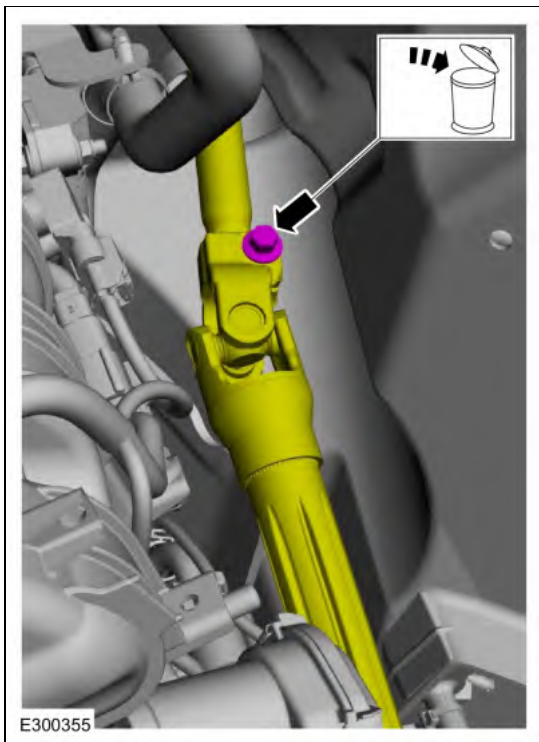
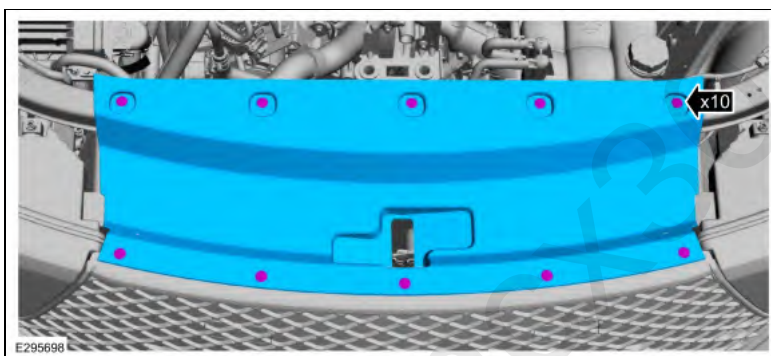
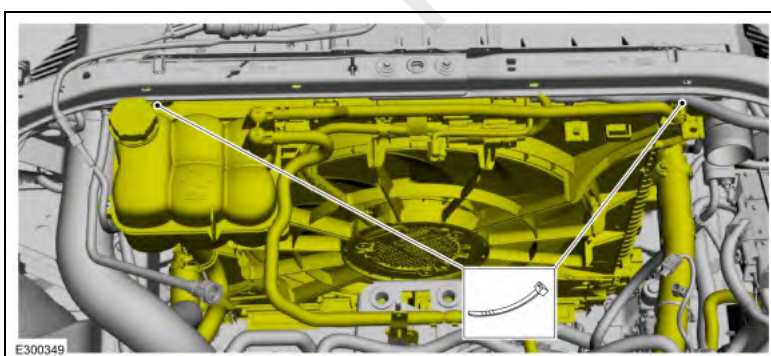




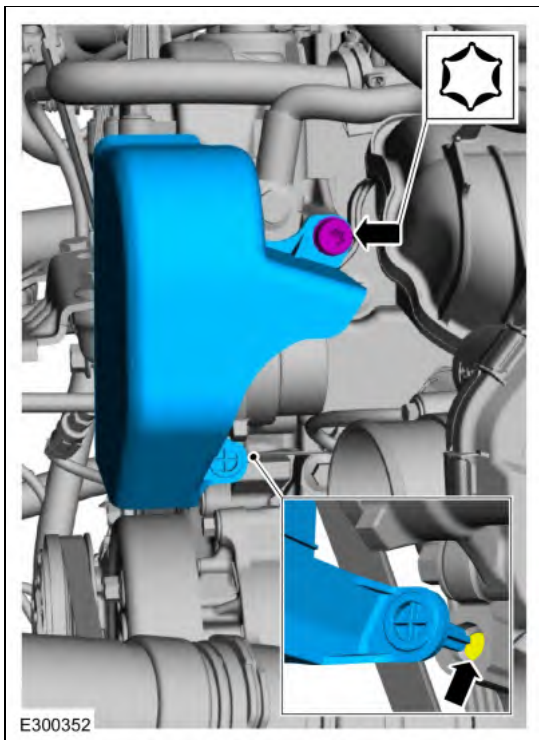
8. If equipped, remove the retainers and the upper radiator panel.



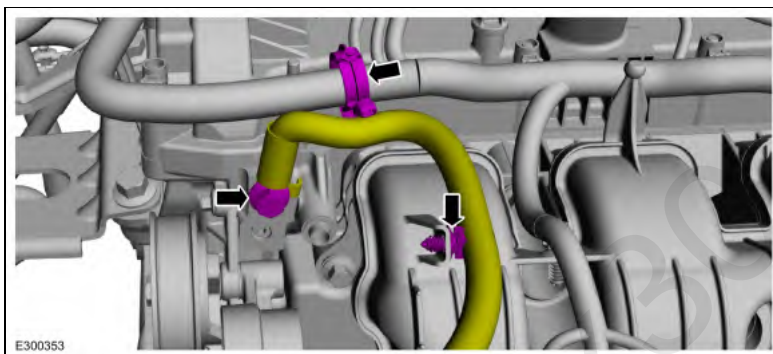
9. Using cable ties or mechanics wire through the upper location holes, to support the cooling module.
Use the General Equipment: Cable Ties



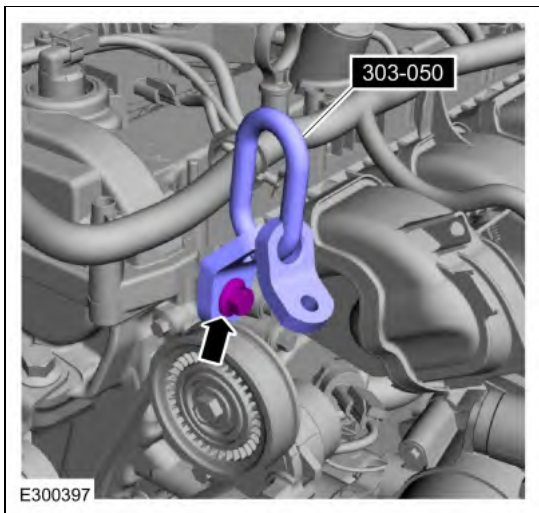
10. Remove the bolt (Enhanced Hexalobular or TORX PLUS Â® Acument Intellectual Properties, LLC as the owner) and the shield.



11. Detach the retainers, remove the bolt and position the ground wire aside.

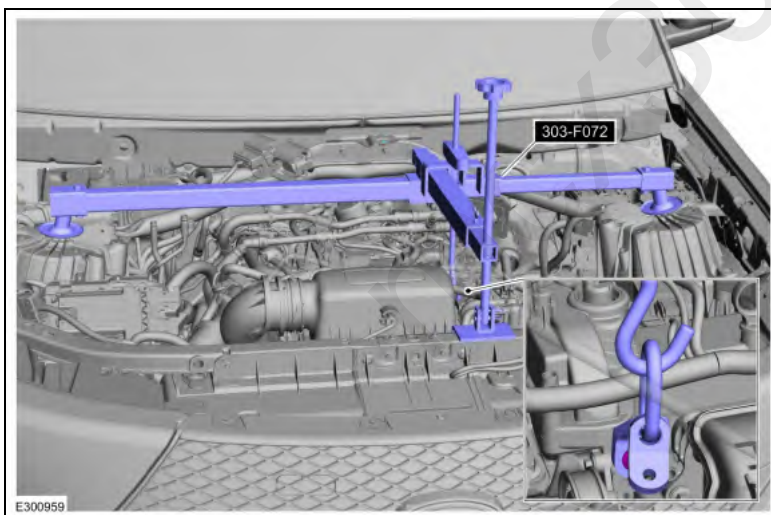


12. Using the ground wire bolt, install the special tool.
Install Special Service Tool: 303-050 (T70P-6000) Lifting Bracket, Engine.

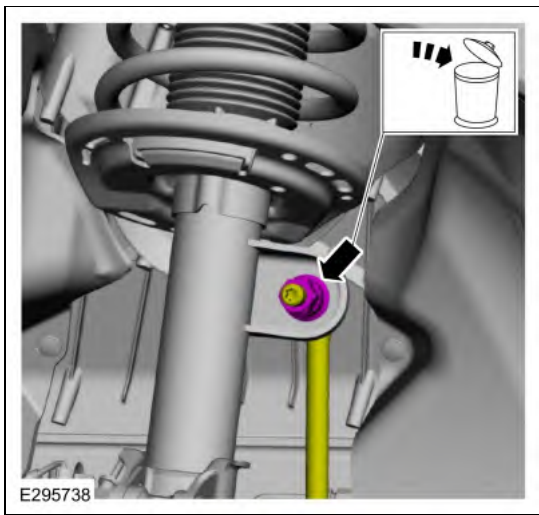


13. **NOTE:** Make sure to use the round feet on the shock towers or damage may occur.

Install Special Service Tool: 303-F072 Support Bar, Engine.

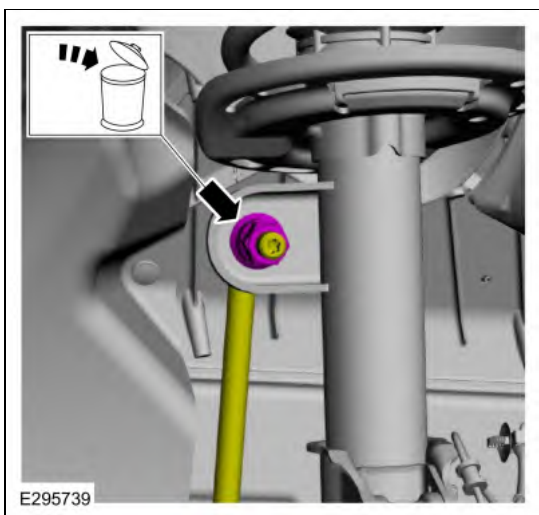


14. Remove the LH and RH front wheels and tires.
Refer to: Wheel and Tire (204-04A Wheels and Tires, Removal and Installation).
15. **NOTICE:** Use the internal or external hex-holding feature to prevent the ball and stud from turning while removing or installing the stabilizer bar link nuts. The link boot seal must not be allowed to twist while tightening the link nuts or damage to the boot seal will occur.
- Remove the nut and position the LH sway bar link aside.

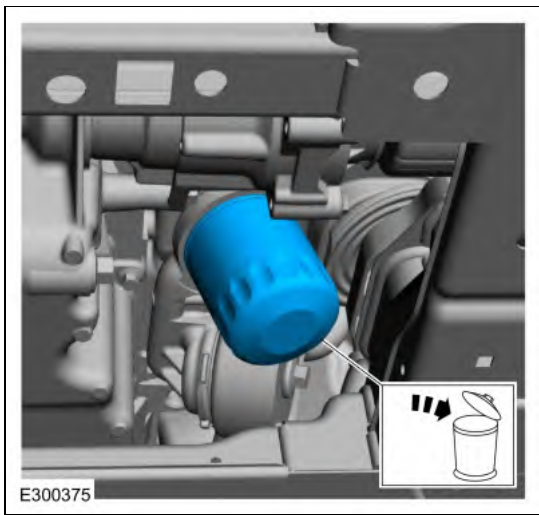


16. **NOTICE:** Use the internal or external hex-holding feature to prevent the ball and stud from turning while removing or installing the stabilizer bar link nuts. The link boot seal must not be allowed to twist while tightening the link nuts or damage to the boot seal will occur.

Remove the nut and position the RH sway bar link aside.

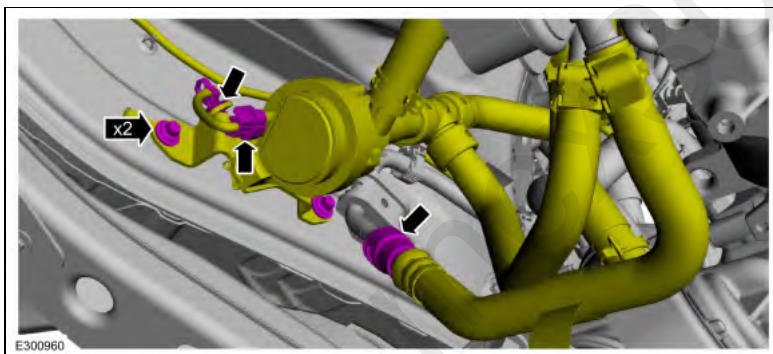


- 17.
- Remove pin-type retainer.
 - Remove the bolts and the underbody shield.

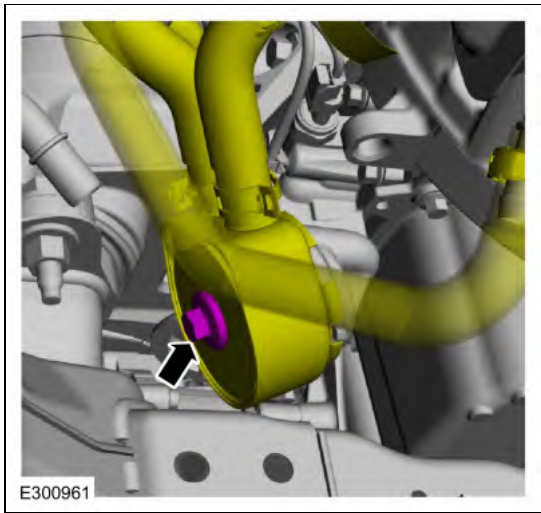


20.

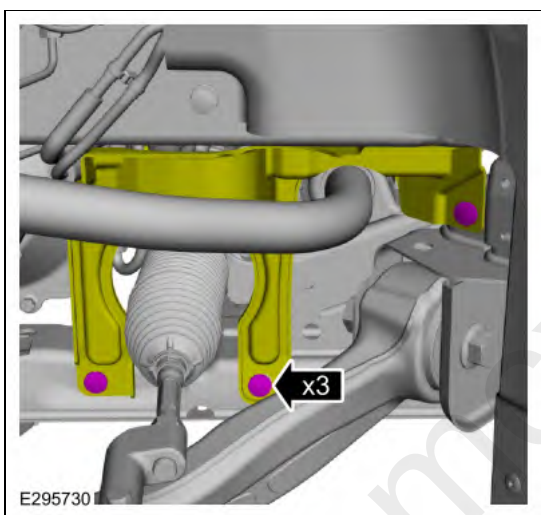
- Disconnect the coolant hose quick connect coupling and position aside.
- Disconnect the auxiliary coolant pump wiring harness electrical connector and the retainer.
- Remove the bolts and position the auxiliary coolant pump aside.



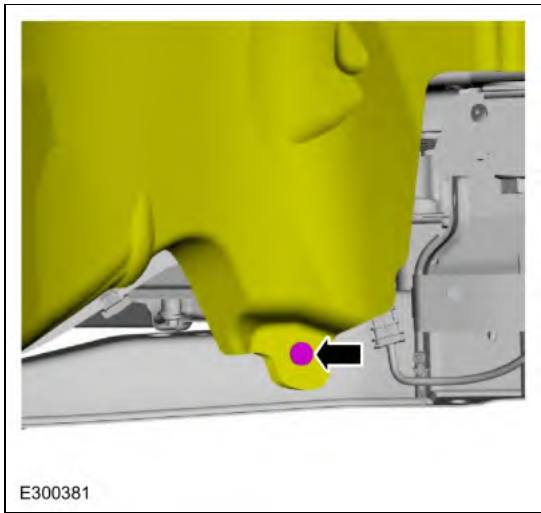
21. Remove the bolt and position the oil cooler aside.



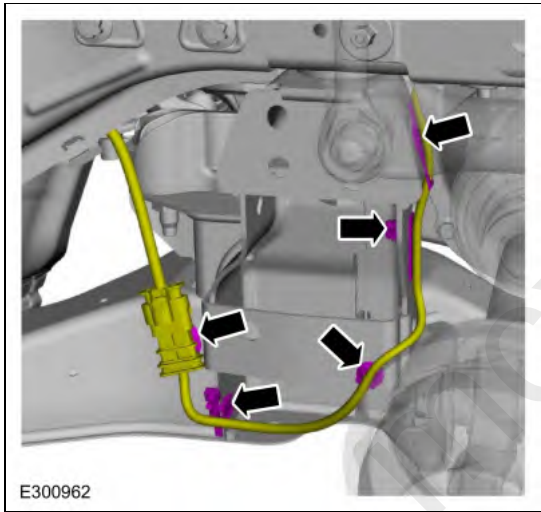
22. If equipped, remove the steering shield pin-type retainers from the RH subframe.



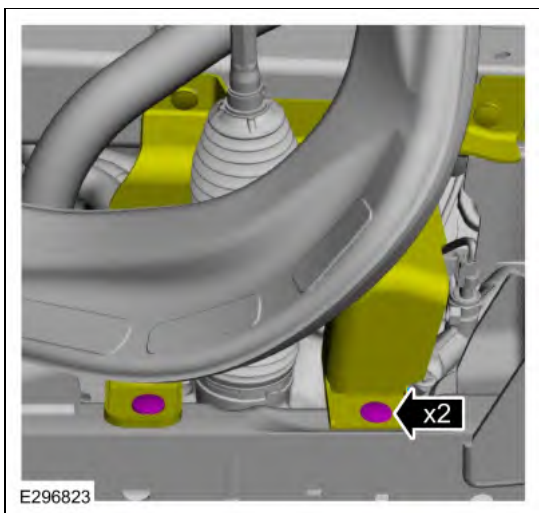
23. Remove the splash shield pin-type retainer from the RH subframe.



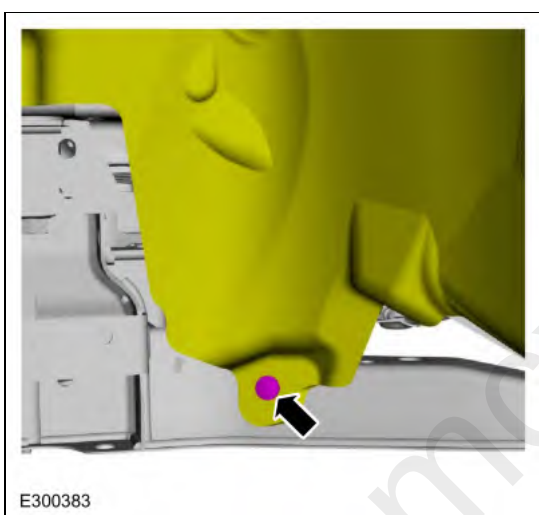
24. Detach the HO2S wiring harness retainers from the RH subframe.



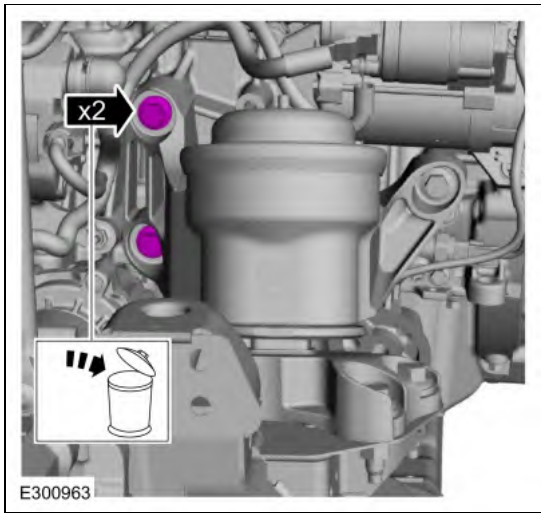
25. If equipped, remove the steering shield pin-type retainers from the LH subframe.



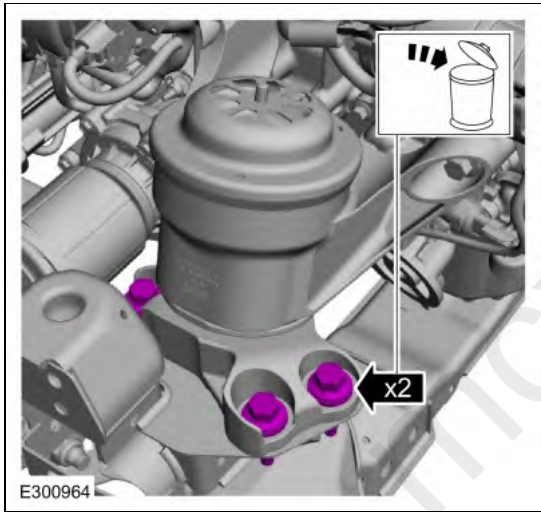
26. Remove the splash shield pin-type retainer from the LH subframe and position aside.



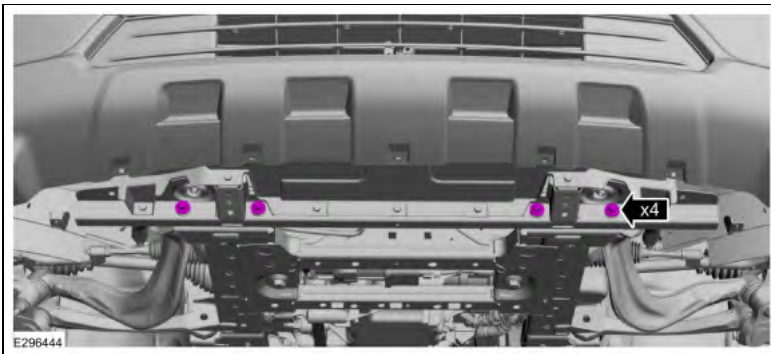
27. Remove and discard the LH engine mount bolts.



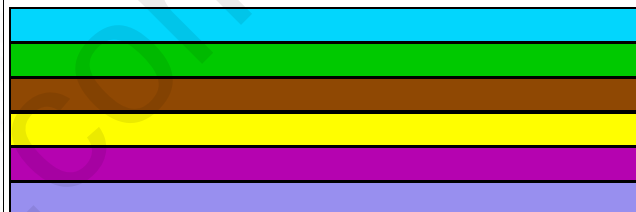
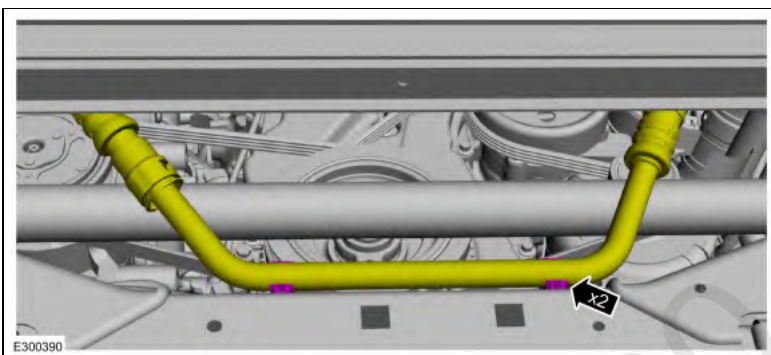
28. Remove and discard the LH engine mount bolts.



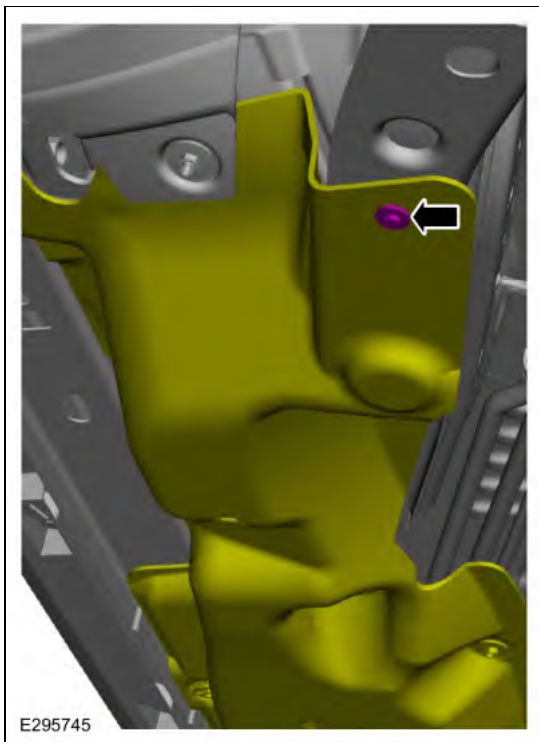
29. Remove the front radiator support bar bolts.



30. Detach the coolant tube retainers from the front of the subframe.



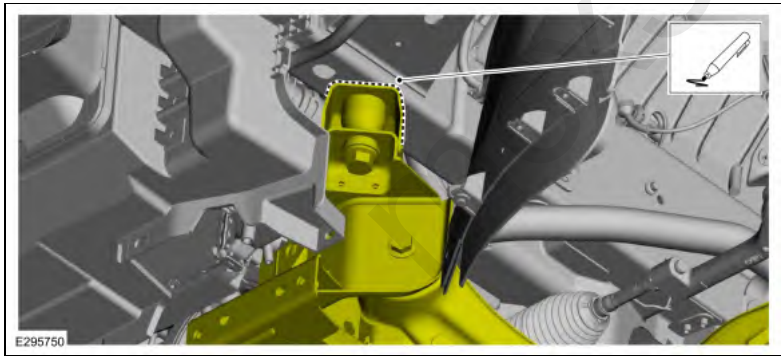
31. Remove the bolt and position the RH underbody shield aside.



32. Remove the bolt and position the LH underbody shield aside.



33. Mark the front subframe location.



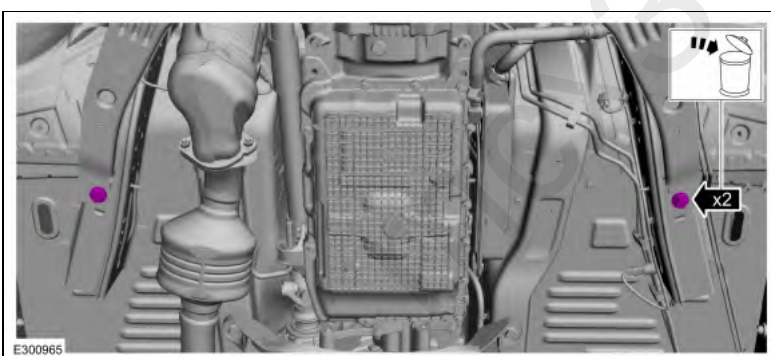
34. Mark the rear subframe location.



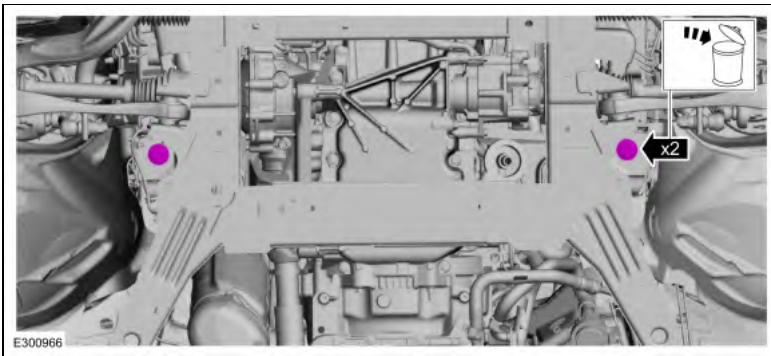
35. Support the front and rear of the subframe with adjustable jack stands.



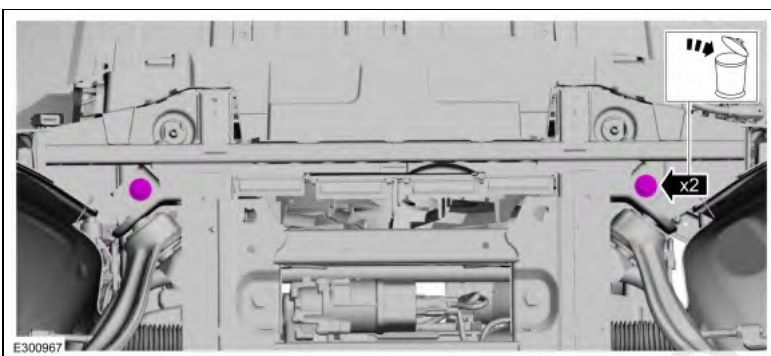
- 36.
- Remove the rear subframe bolts.
 - Discard the bolts.



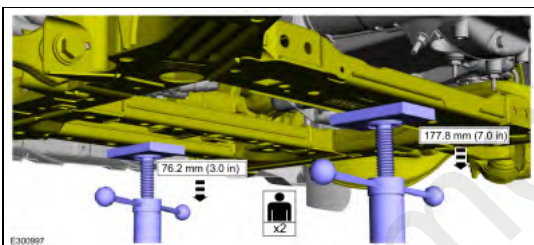
- 37.
- Remove the middle subframe bolts.
 - Discard the bolts.



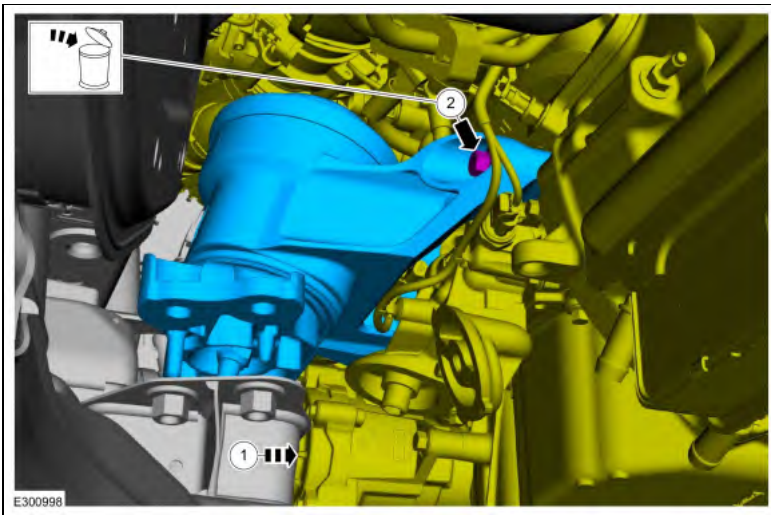
- 38.
- Remove the front subframe bolts.
 - Discard the bolts.



39. With the aid of an assistant, lower the front jack stand 76.2 mm (3.0 in) and the rear jack stand 177.8 mm (7.0 in) evenly or until engine mount stud clears the subframe.

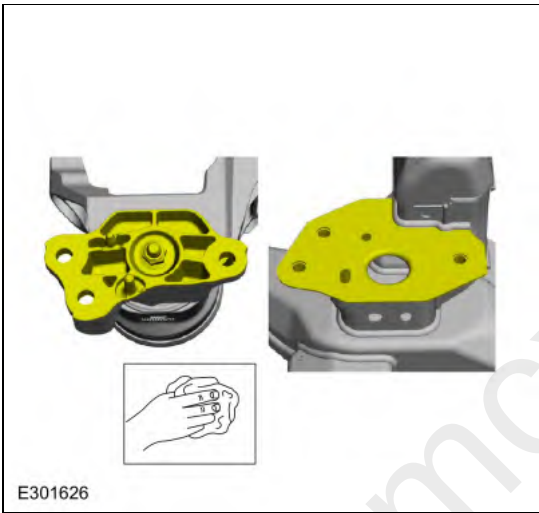


- 40.
1. With the aid of an assistant, position the engine and transmission assembly to the right side to give clearance for engine mount to clear the frame.
 2. Remove and discard the engine mount bolt and remove the LH engine mount.

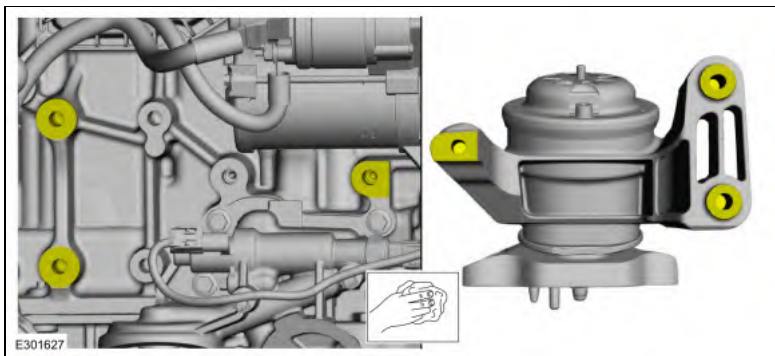


Installation

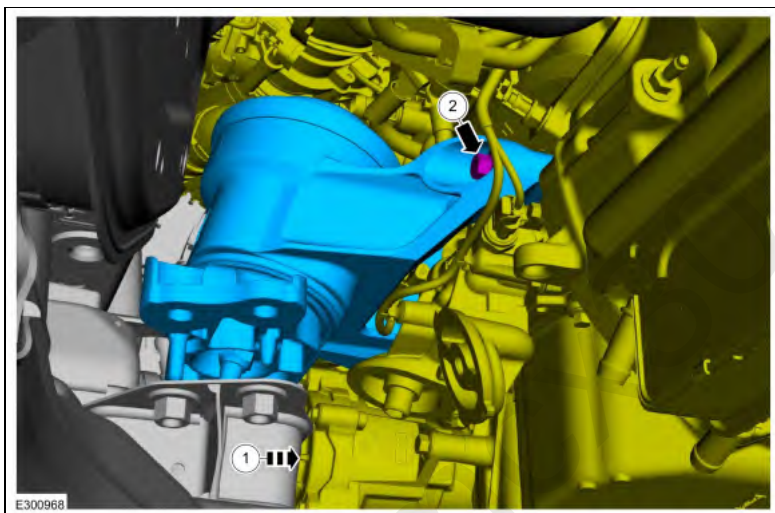
1. Clean the LH engine mount-to-frame mating surfaces of any dirt or foreign material prior to installation.



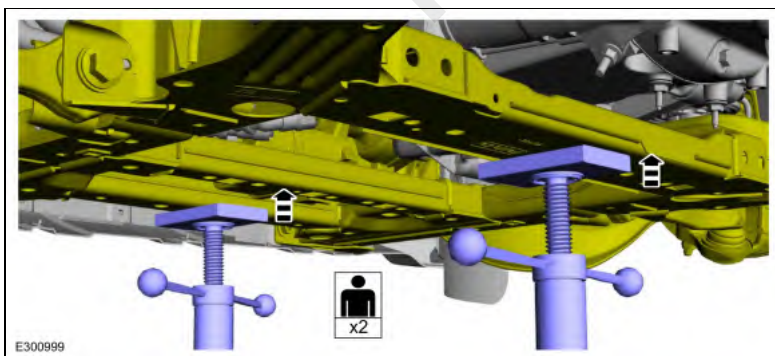
2. Clean the LH engine mount-to-engine block mating surfaces of any dirt or foreign material prior to installation.



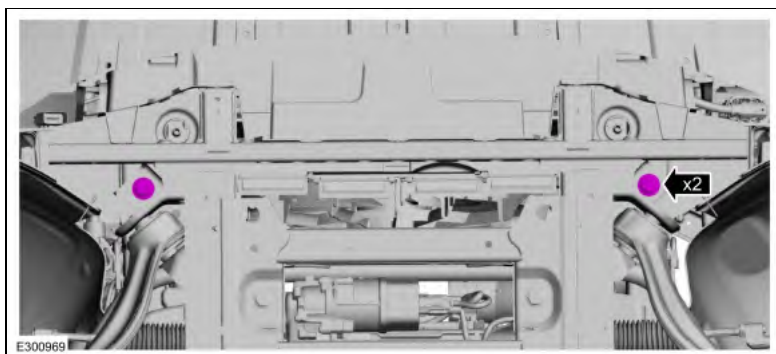
3.
 - With the aid of an assistant, position the engine and trans assembly to the right side to give clearance for engine mount to clear the frame.
 - Install the LH engine mount and the bolt finger tight.



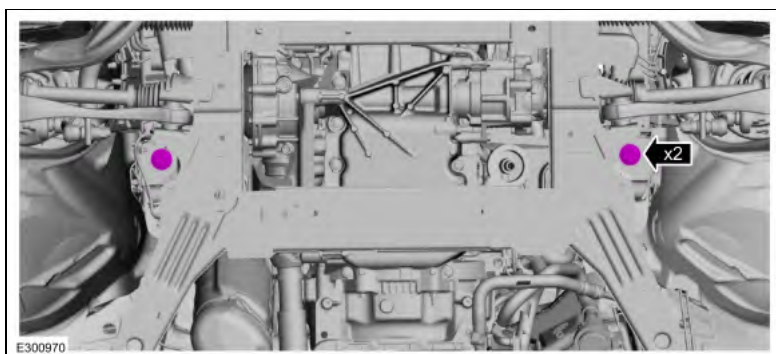
4. With the aid of an assistant, raise the front and rear jack stand evenly.



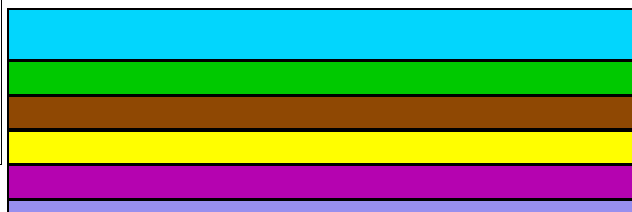
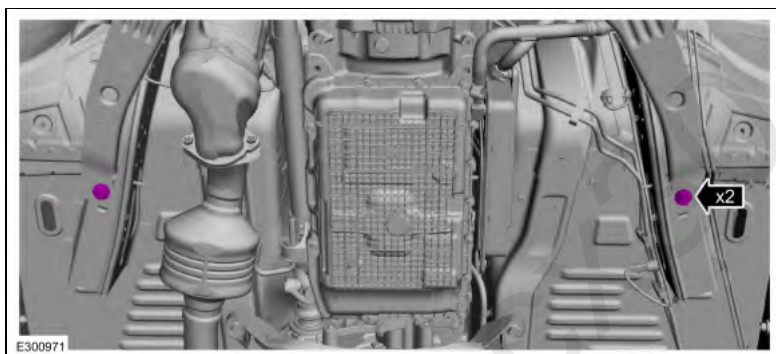
5. Install the new front subframe bolts finger tight.



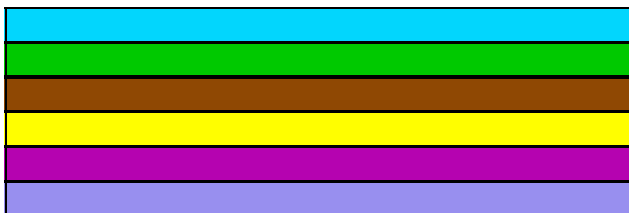
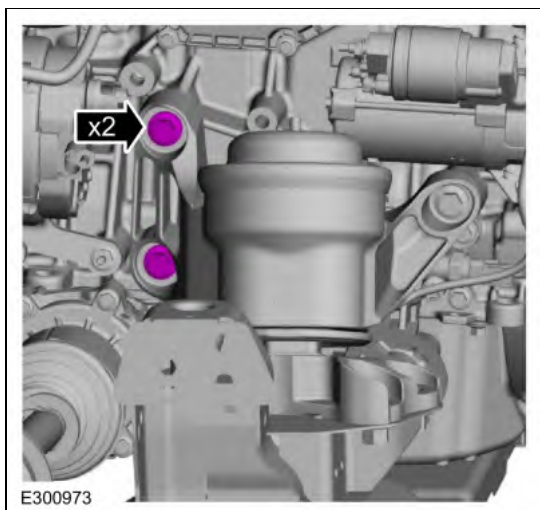
6. Install the new middle subframe bolts finger tight.



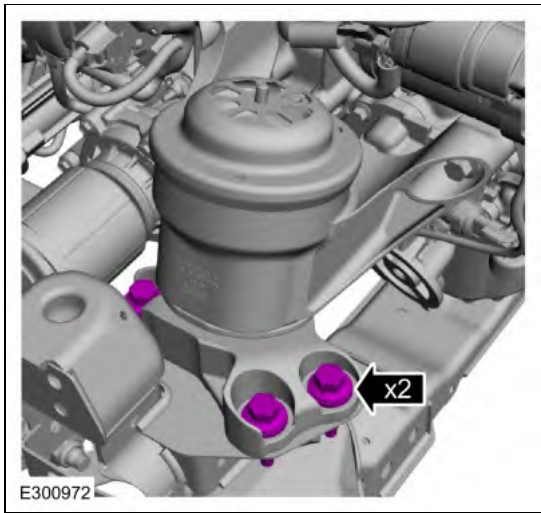
7. Install the new rear subframe bolts finger tight.



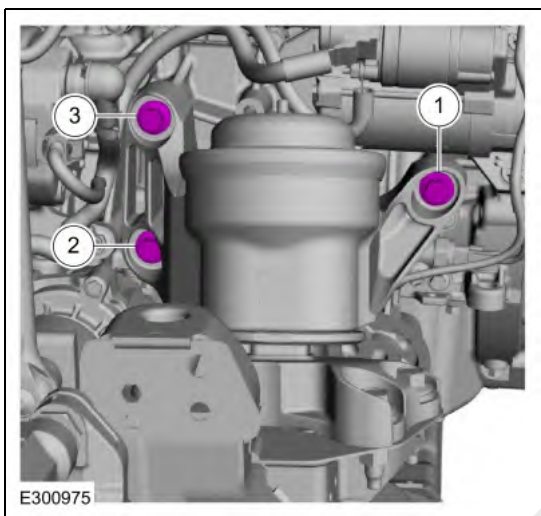
8. Install the new LH engine mount bolts finger tight.



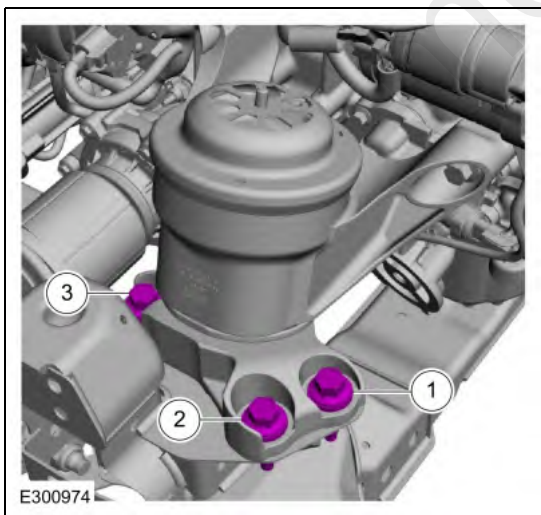
9. Install the new RH engine mount bolts finger tight.



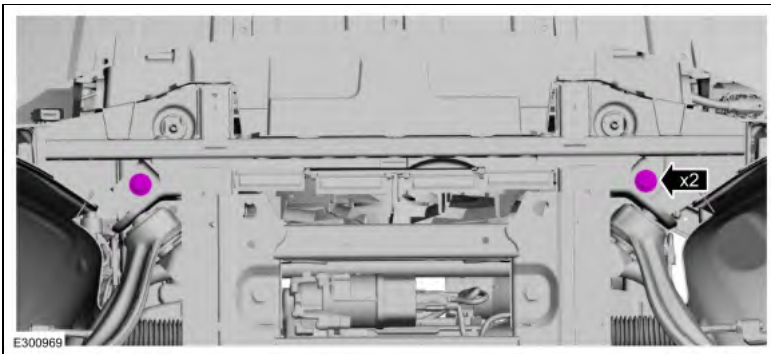
10. Tighten the LH engine mount bolts in sequence shown.
Torque:
 Stage 1: 44 lb.ft (60 Nm)
 Stage 2: 90Å°



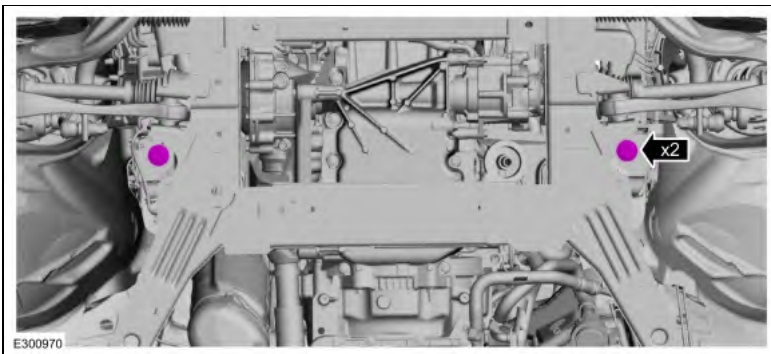
11. Tighten the LH engine mount bolts in sequence shown.
Torque: 76 lb.ft (103 Nm)



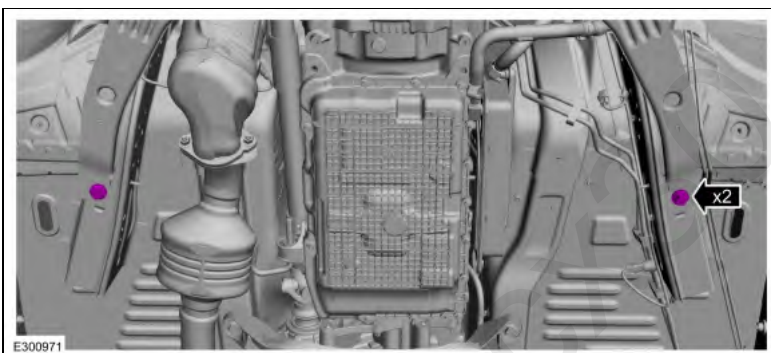
12. Tighten the front subframe bolts.
Torque: 195 lb.ft (265 Nm)



13. Tighten the middle subframe bolts.
Torque: 195 lb.ft (265 Nm)



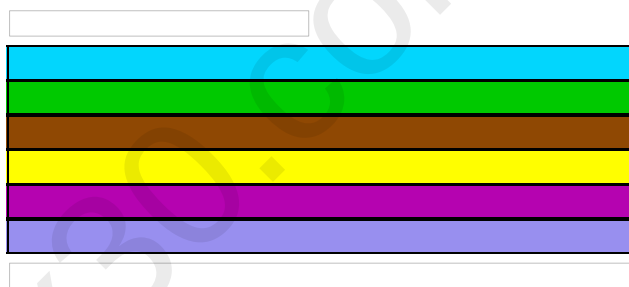
14. Tighten the rear subframe bolts.
Torque: 52 lb.ft (70 Nm)



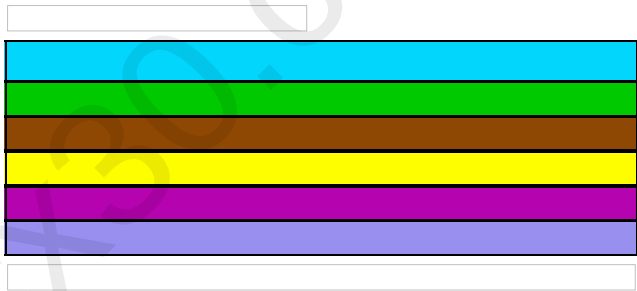
15. Remove adjustable jack stands.



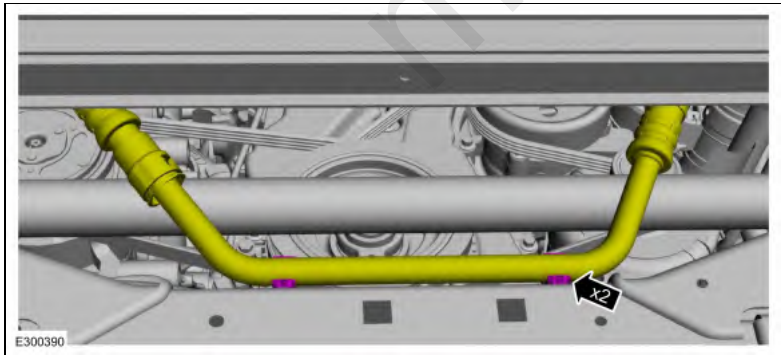
16. Position the LH underbody shield and install the bolt.
Torque: 22 lb.in (2.5 Nm)



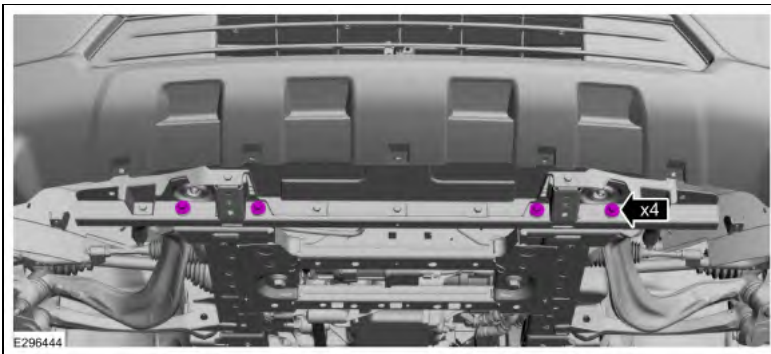
17. Position the RH underbody shield and install the bolt.
Torque: 22 lb.in (2.5 Nm)



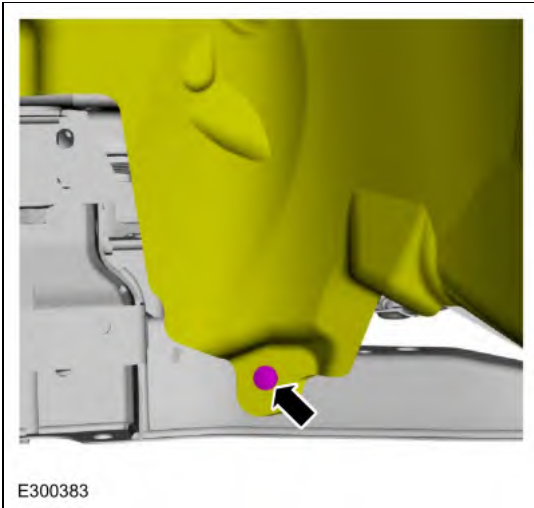
18. Attach the coolant tube retainers to the front of the subframe.



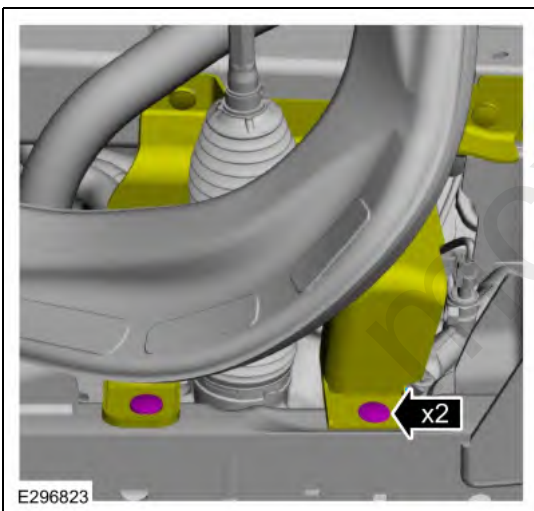
19. Install the front radiator support bar bolts.
Torque: 46 lb.ft (63 Nm)



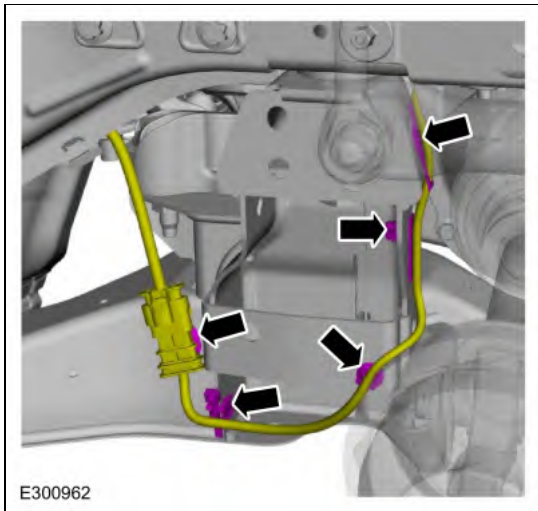
20. Position the splash shield and install the pin-type retainer to the LH subframe.



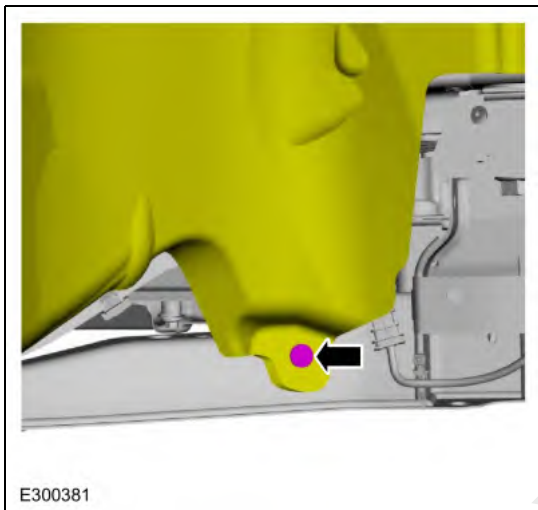
21. Install the steering shield pin-type retainers to the LH subframe.



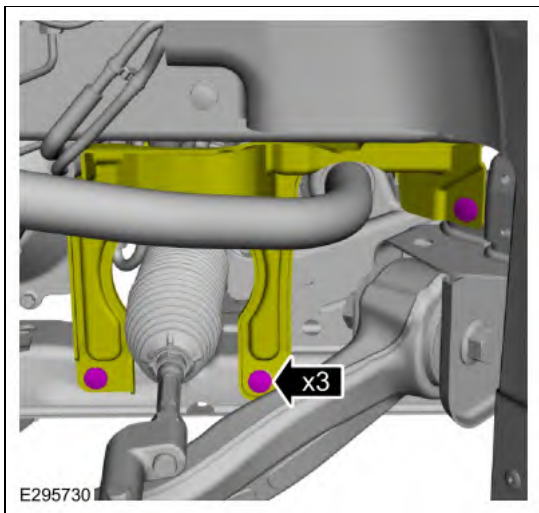
22. Attach the HO2S wiring harness retainers to the RH subframe.



23. Install the splash shield pin-type retainer to the RH subframe.



24. Install the steering shield pin-type retainers to the RH subframe.



25. Position the oil cooler and install the bolt.

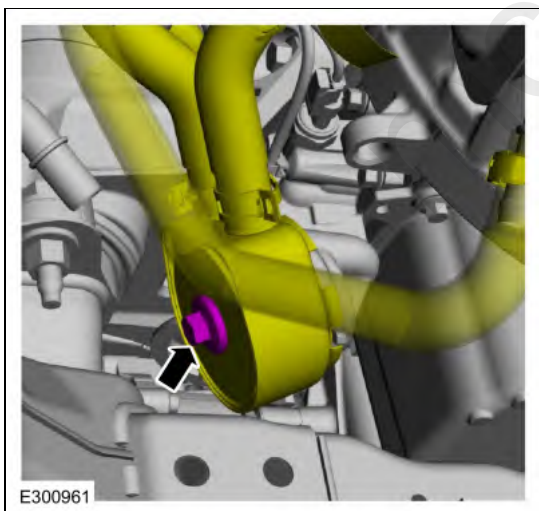
Torque:

Stage 1: 17 lb.ft (22.5 Nm)

Stage 2: 75°

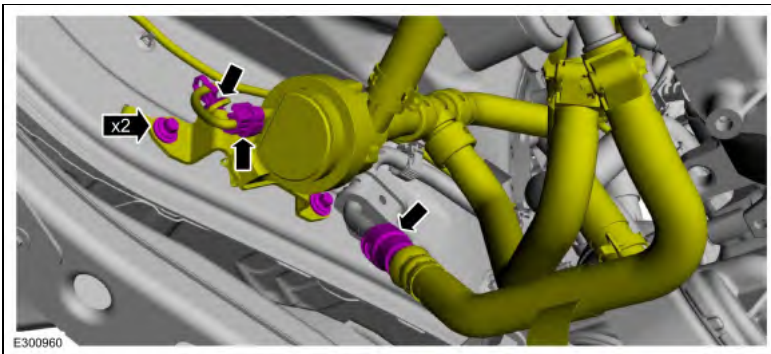
Stage 3: Wait 2s

Stage 4: 15°



26.

- Position the auxiliary coolant pump and install the bolts.
Torque: 62 lb.in (7 Nm)
- Connect the auxiliary coolant pump wiring harness electrical connector and the retainer.
- Connect the coolant hose quick connect coupling.

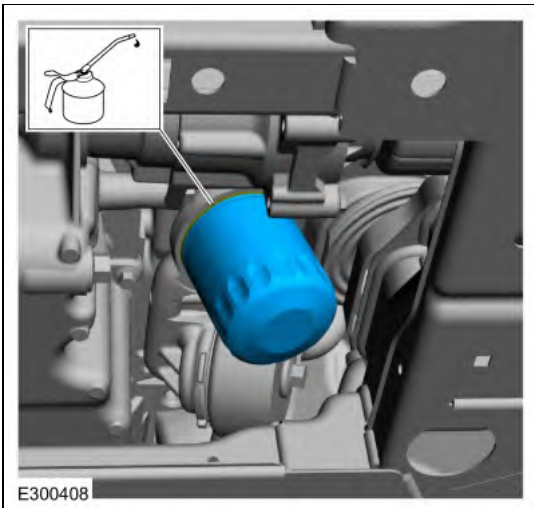


27. Lubricate the new engine oil filter sealing surface with clean engine oil and install.

Torque:

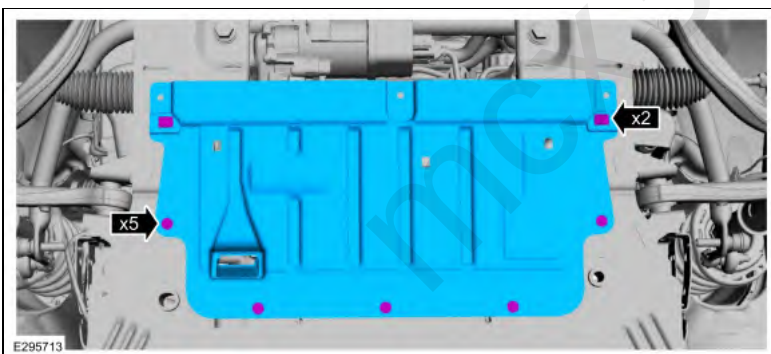
Stage 1: 71 lb.in (8 Nm)

Stage 2: 180°



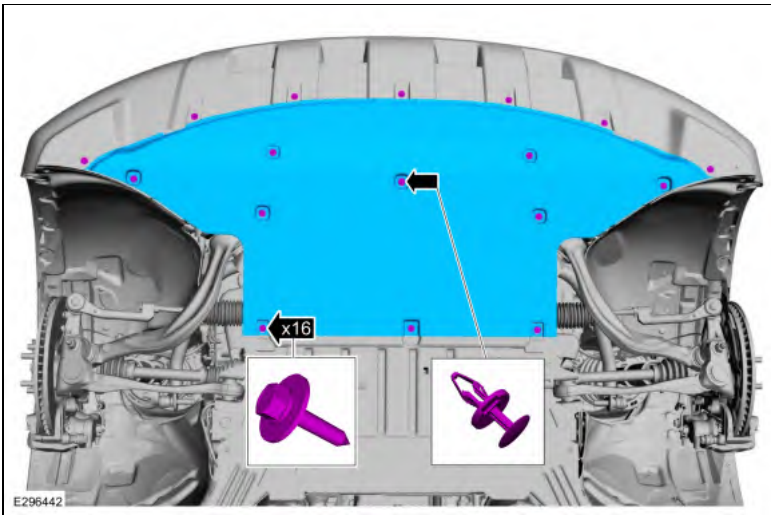
28. Install the rear underbody shield, bolts and the pin-type retainers.

Torque: 22 lb.in (2.5 Nm)



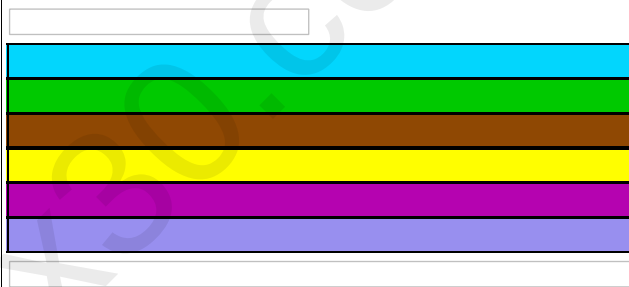
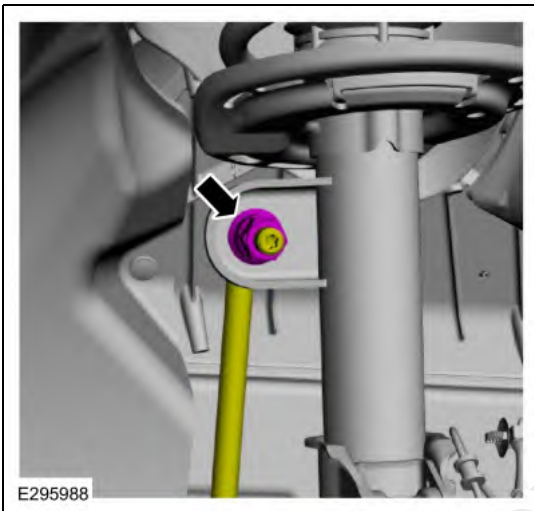
29.

- Install the underbody shield and the bolts.
Torque: 22 lb.in (2.5 Nm)
- Install pin-type retainer.



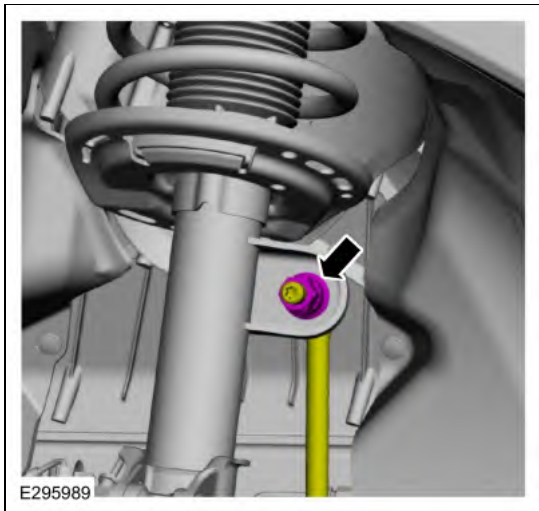
30. **NOTICE:** Use the internal or external hex-holding feature to prevent the ball and stud from turning while removing or installing the stabilizer bar link nuts. The link boot seal must not be allowed to twist while tightening the link nuts or damage to the boot seal will occur.

Position the RH sway bar link and install the new nut.
Torque: 129 lb.ft (175 Nm)

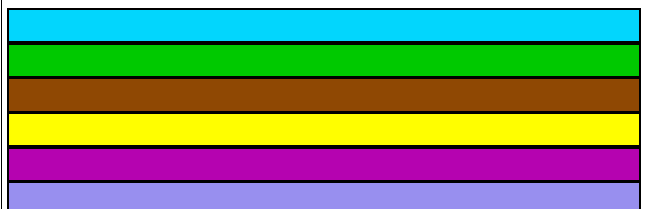
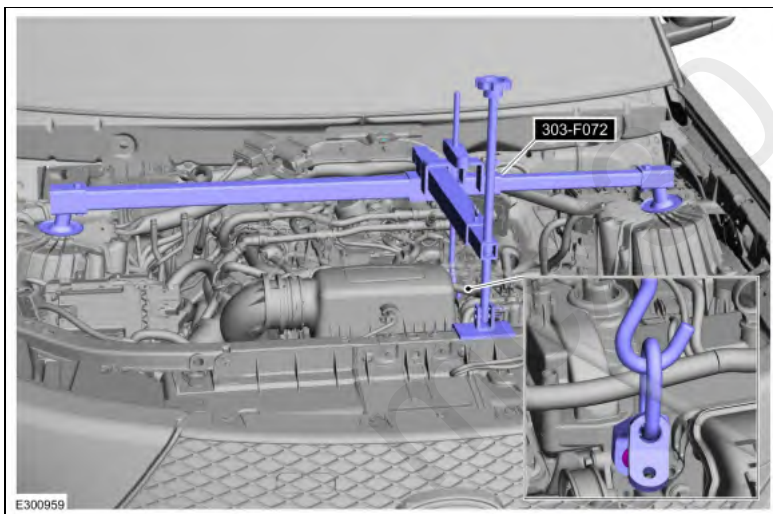


31. **NOTICE:** Use the internal or external hex-holding feature to prevent the ball and stud from turning while removing or installing the stabilizer bar link nuts. The link boot seal must not be allowed to twist while tightening the link nuts or damage to the boot seal will occur.

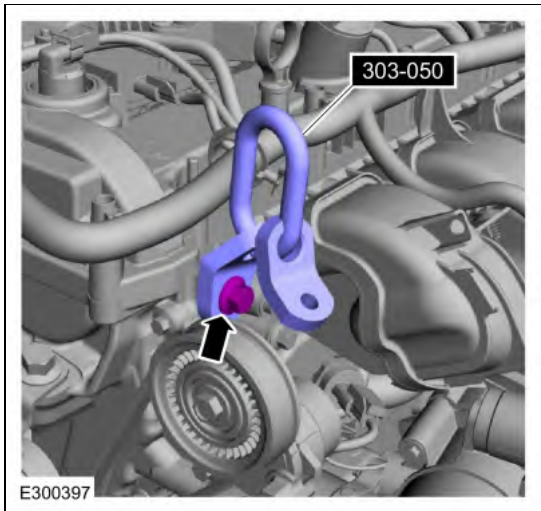
Position the LH sway bar link and install the new nut.
Torque: 129 lb.ft (175 Nm)



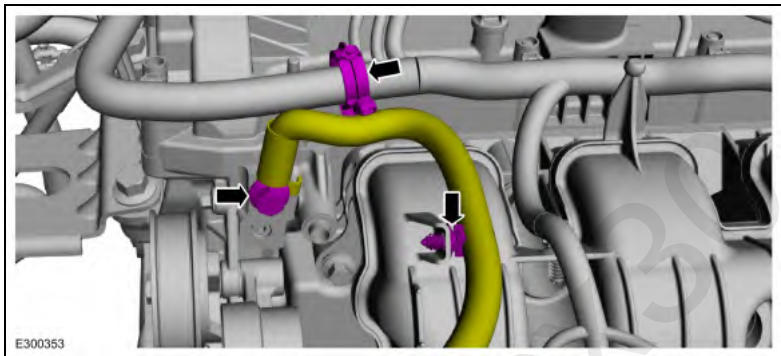
32. Install the LH and RH front wheels and tires.
Refer to: Wheel and Tire (204-04A Wheels and Tires, Removal and Installation).
33. Remove Special Service Tool: 303-F072 Support Bar, Engine.



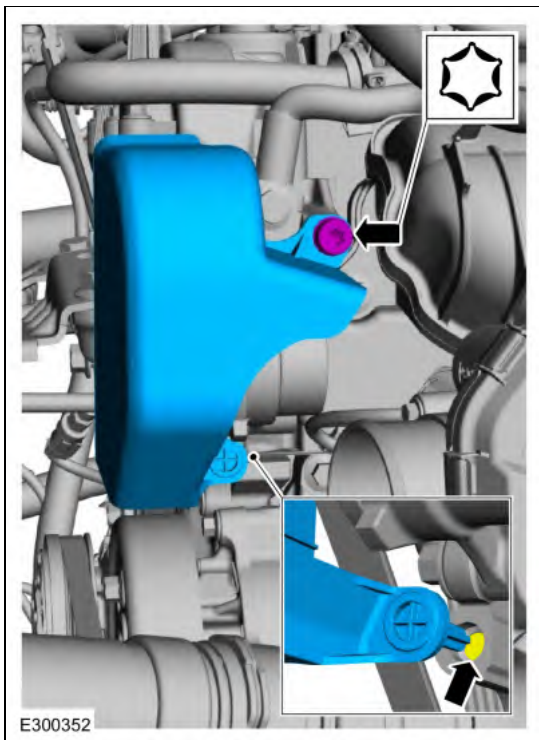
34. Remove Special Service Tool: 303-050 (T70P-6000) Lifting Bracket, Engine.



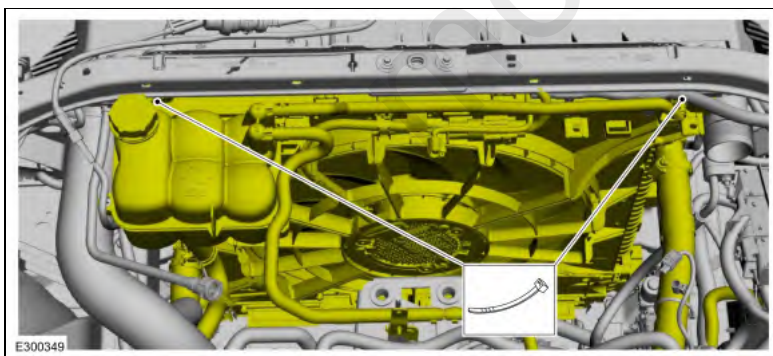
35. Position the ground wire and install the bolt and attach the retainers.
Torque: 159 lb.in (18 Nm)



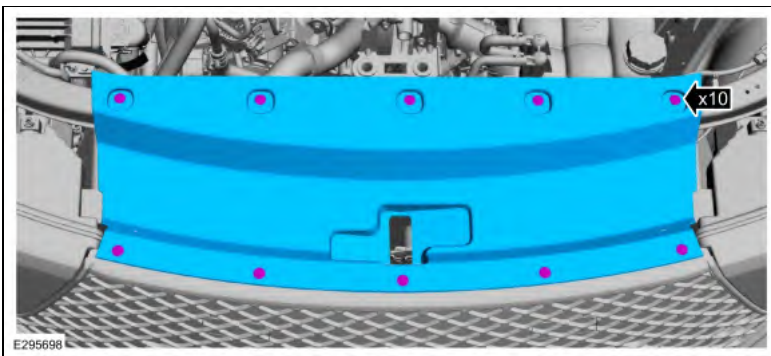
36. Install the shield and the bolt (Enhanced Hexalobular or TORX PLUS Â® Acument Intellectual Properties, LLC as the owner).
Torque: 18 lb.ft (25 Nm)



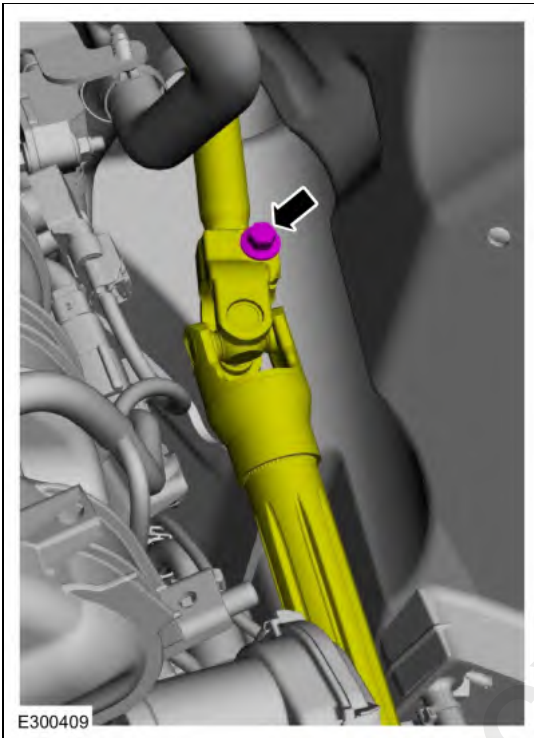
37. Remove the radiator support cable ties or mechanics wire.



38. Install the upper radiator panel and the retainers.

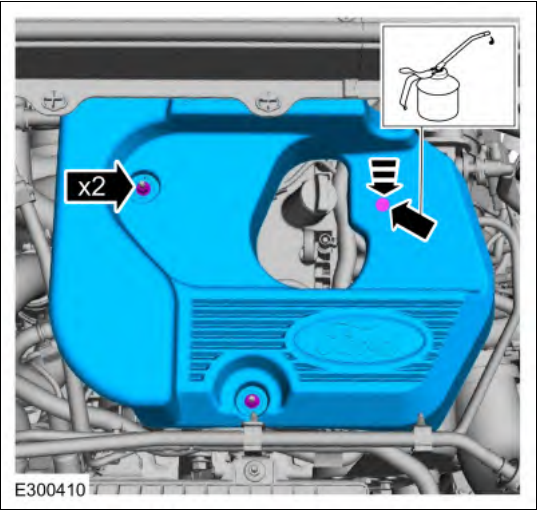


39. Install the new steering shaft bolt.
Torque: 22 lb.ft (30 Nm)

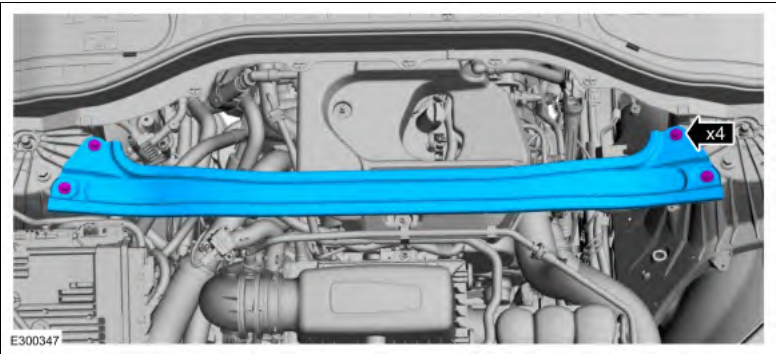


40. Inspect and adjust the engine oil level.
Refer to: Specifications (303-01A Engine - 2.3L EcoBoost (201kW/273PS), Specifications).
41. Install the cowl panel.
Refer to: Cowl Panel (501-02 Front End Body Panels, Removal and Installation).
42. Fill the cooling system.
Refer to: Engine Cooling System Draining, Vacuum Filling and Bleeding (303-03A Engine Cooling - 2.3L EcoBoost (201kW/273PS), General Procedures).
- 43.
- NOTE:** Lubricating the grommets with silicone grease will aid in the installation of the engine appearance cover, and any future removal and installation of the cover.

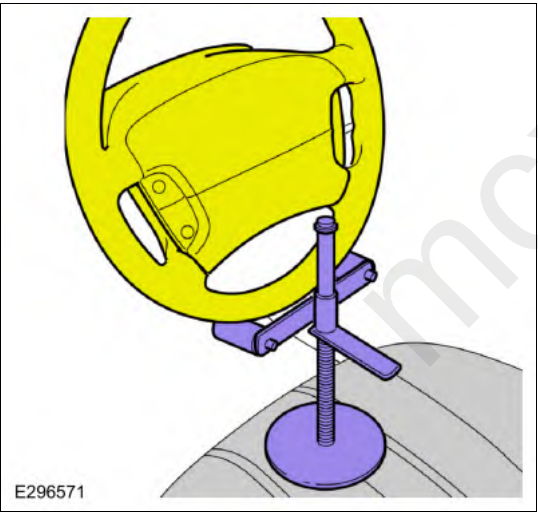
Lubricate each grommet with silicone grease.
Material: Motorcraft® Silicone Brake Caliper Grease and Dielectric Compound / XG-3-A (ESE-M1C171-A)
 - Position the engine appearance cover onto engine with the grommet aligned with the stud.
 - Press down on the engine appearance cover at the grommet location to attach the grommet onto the stud and install the nuts.
Torque: 44 lb.in (5 Nm)



44. Install the suspension support bar and the bolts.
Torque: 22 lb.ft (30 Nm)



45. Remove the holding device.



Engine Mount RH

Special Tool(s) / General Equipment

	303-050 (T70P-6000) Lifting Bracket, Engine
	303-F072 Support Bar, Engine
Cable Ties	

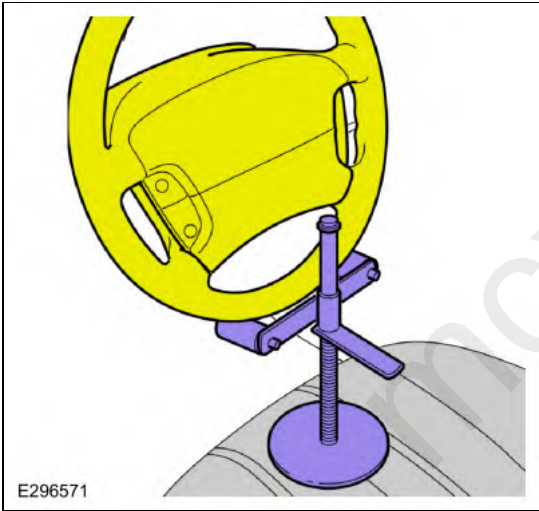
Materials

Name	Specification
Motorcraft® Silicone Brake Caliper Grease and Dielectric Compound XG-3-A	ESE-M1C171-A

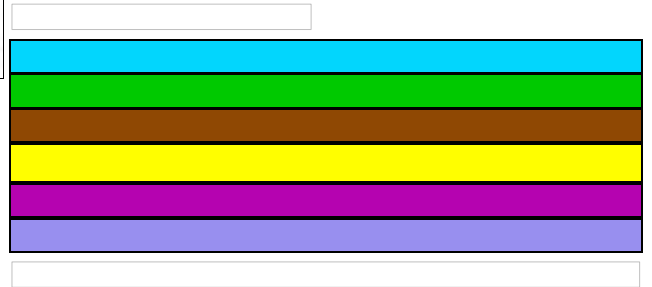
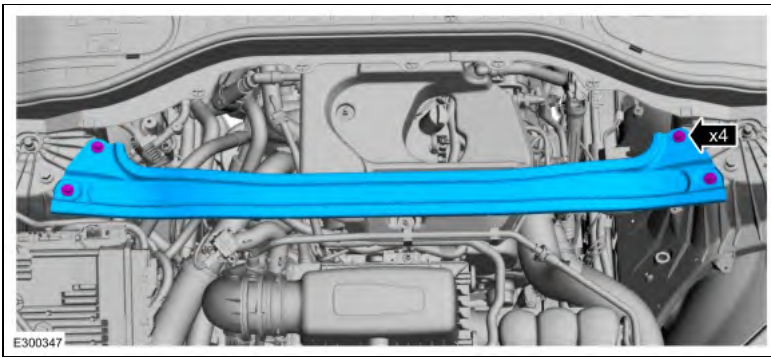
Removal

NOTE: AWD shown, RWD similar.

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. Using a holding device, hold the steering wheel.

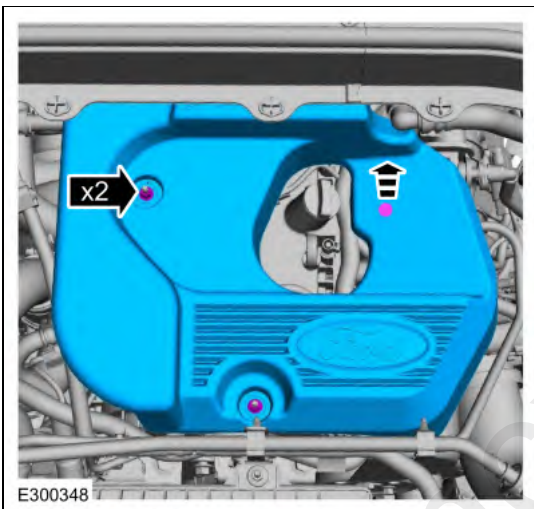


3. Remove the bolts and the suspension support bar.



4. **NOTICE: Do not pull the engine appearance cover forward or sideways to remove. Failure to press straight upward on the underside of the cover at the attachment points may result in damage to the cover or engine components.**

1. Remove the engine appearance cover nuts.
2. Place your hand under the engine appearance cover at the grommet location and push straight up to release the grommet from the stud.
3. After the grommet has been released from the stud, remove the appearance cover from the engine.



5. Remove the cowl panel.
Refer to: Cowl Panel (501-02 Front End Body Panels, Removal and Installation).
6. Remove the catalytic converter.
Refer to: Catalytic Converter (309-00A Exhaust System - 2.3L EcoBoost (201kW/273PS), Removal and Installation).
7.
 - Remove the bolt and disconnect the steering shaft.
 - Discard the bolt.