

303-01 Engine - 2.3L EcoBoost (201kW/273PS)

2019 Ranger


Removal and Installation

Procedure revision date: 01/4/2019

Engine Mount LH

Base Part Number: 6038

Special Tool(s) / General Equipment

	303-F072 Support Bar, Engine
Oil Drain Equipment	

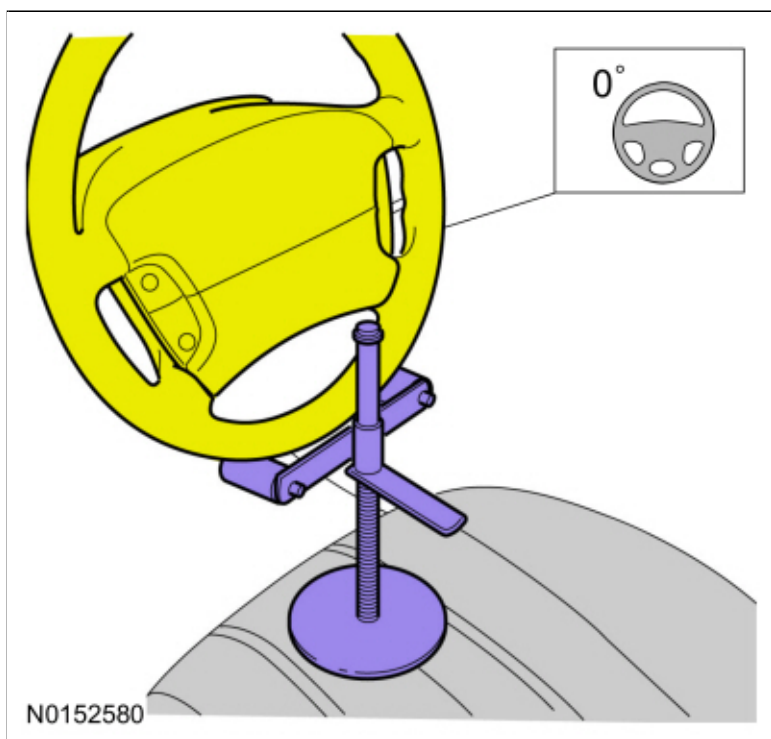
Materials

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

Removal**LHD 4WD/LHD RWD**

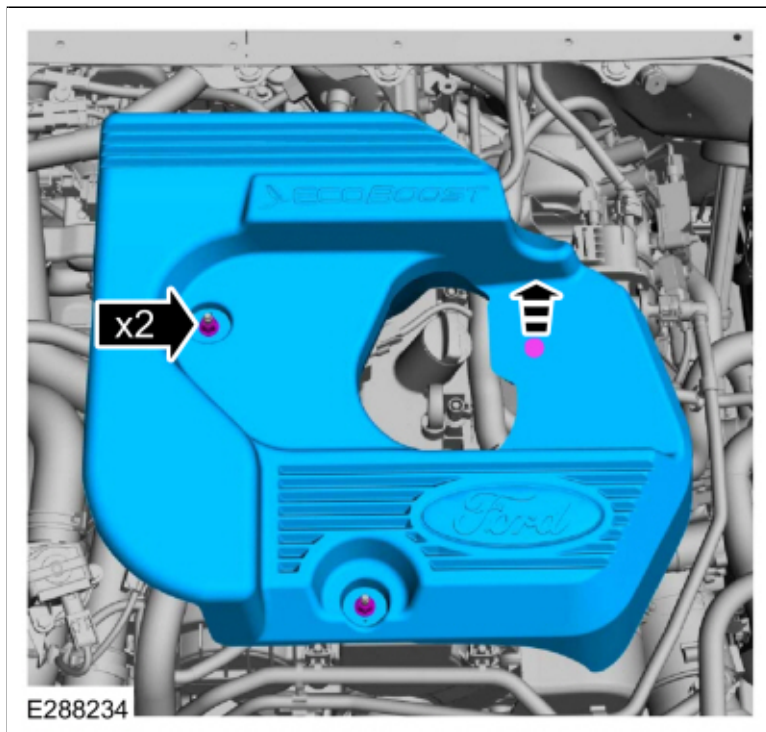
1. With the vehicle in NEUTRAL, position it on a hoist.
Refer to: [Jacking and Lifting](#) (100-02 Jacking and Lifting, Description and Operation).
2. Using a holding device, hold the steering wheel in the straight-ahead position.



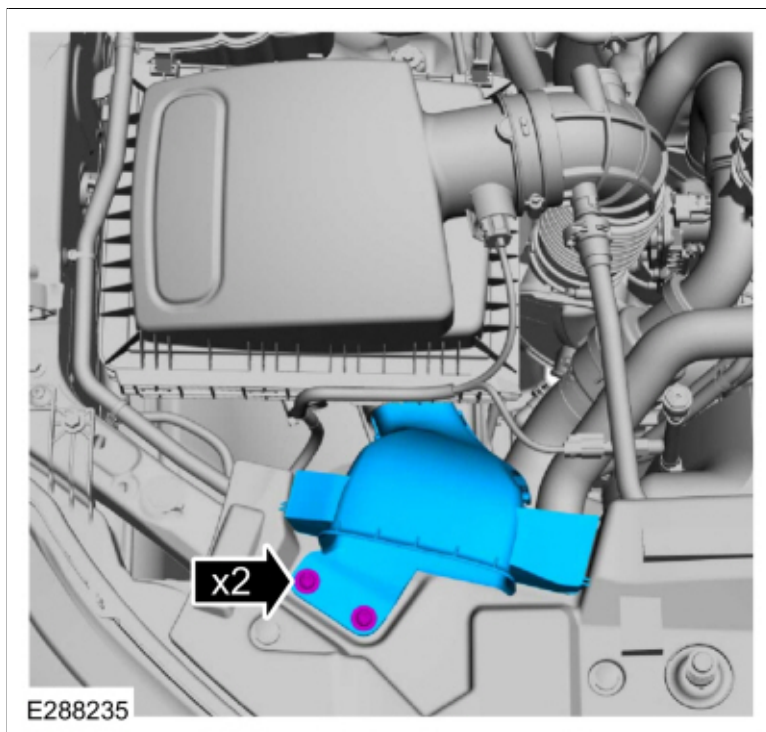


3. **NOTICE:** Do not pull the engine appearance cover forward or sideways to remove. Failure to press straight upward on the underside of the cover at the attachment points may result in damage to the cover or engine components.
1. Remove the engine appearance cover nuts.
 2. Place your hand under the engine appearance cover at each grommet location and push straight up to release each grommet from the studs.
 3. After all of the grommets have been released from the studs, remove the appearance cover from the engine.

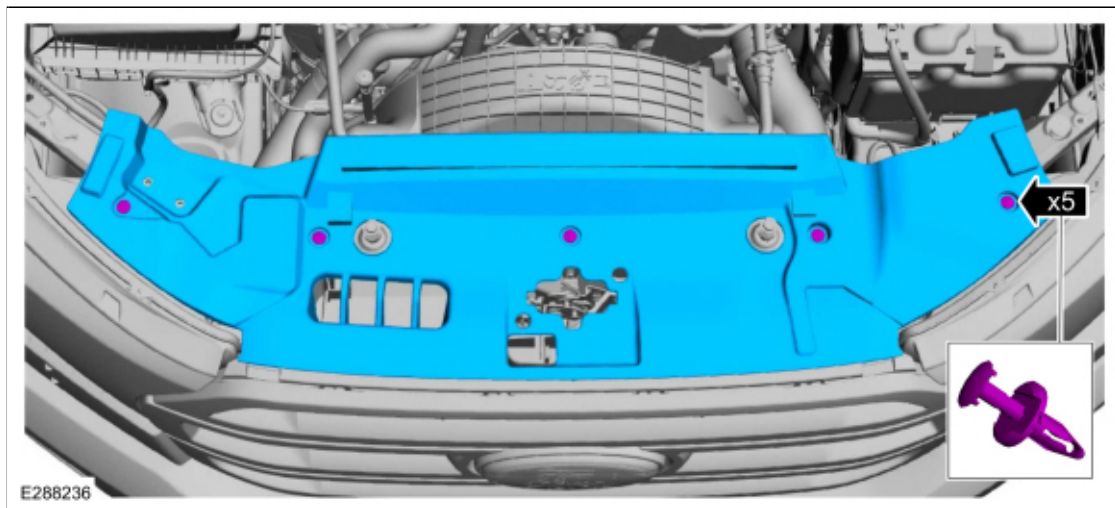




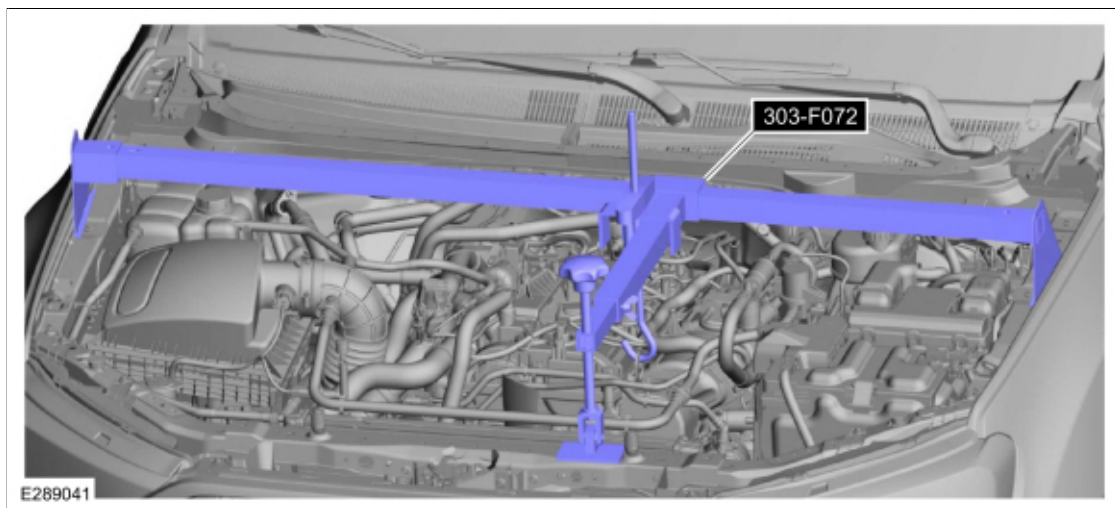
4. Remove the bolts and the air cleaner inlet pipe.



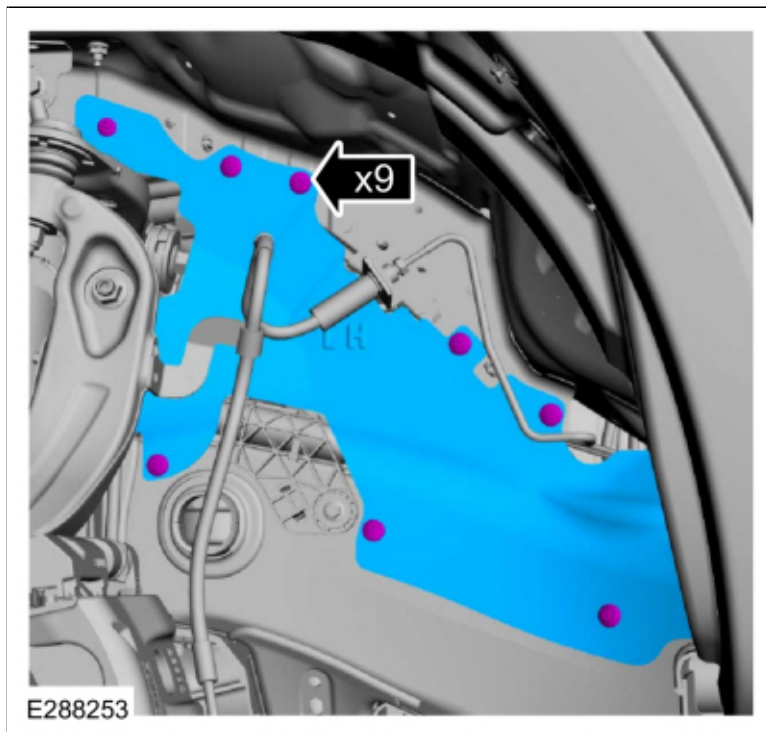
5. Remove the retainers and the upper air deflector.



6. Remove the upper cooling fan shroud.
Refer to: [Cooling Fan Upper Shroud](#) (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Removal and Installation).
7. Install the 3 bar support.
Install Special Service Tool: [303-F072 Support Bar, Engine](#).



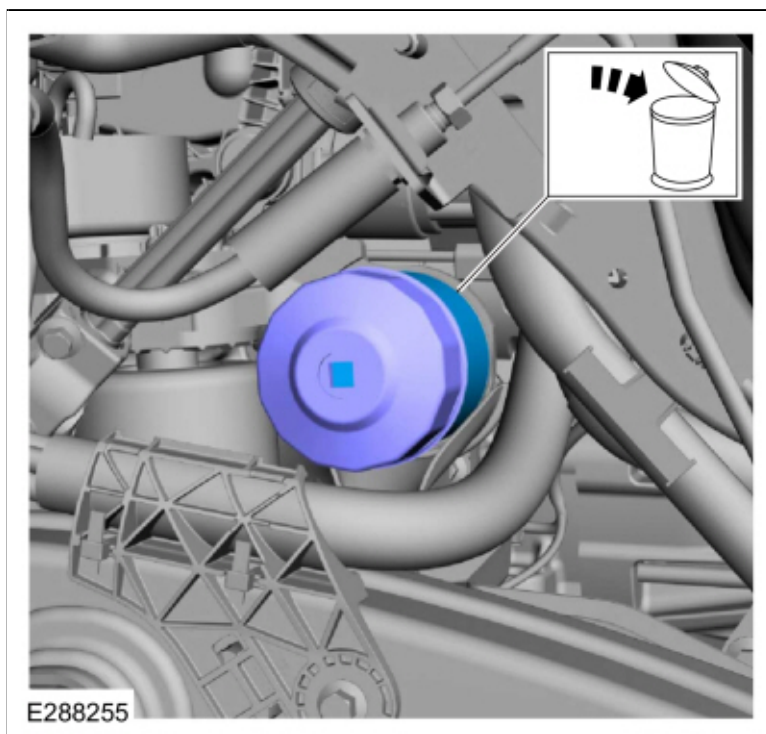
8. Remove LH front wheel and tire.
Refer to: [Wheel and Tire](#) (204-04A Wheels and Tires, Removal and Installation).
9. Remove the retainers LH fender splash shield.



10. **NOTE:** Use a commercially available end cap oil filter wrench.

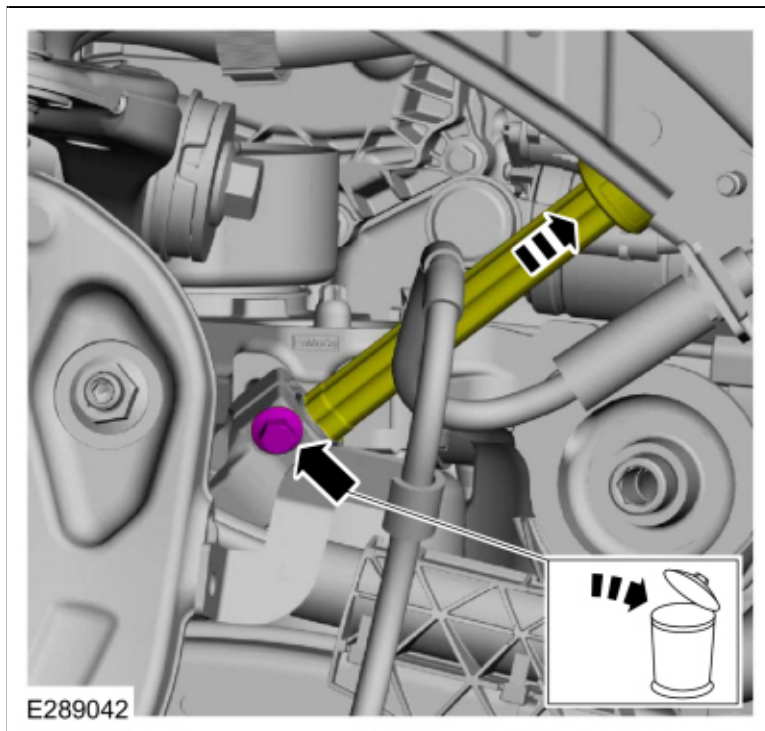
Remove and discard the engine oil filter.

Use the General Equipment: Oil Drain Equipment



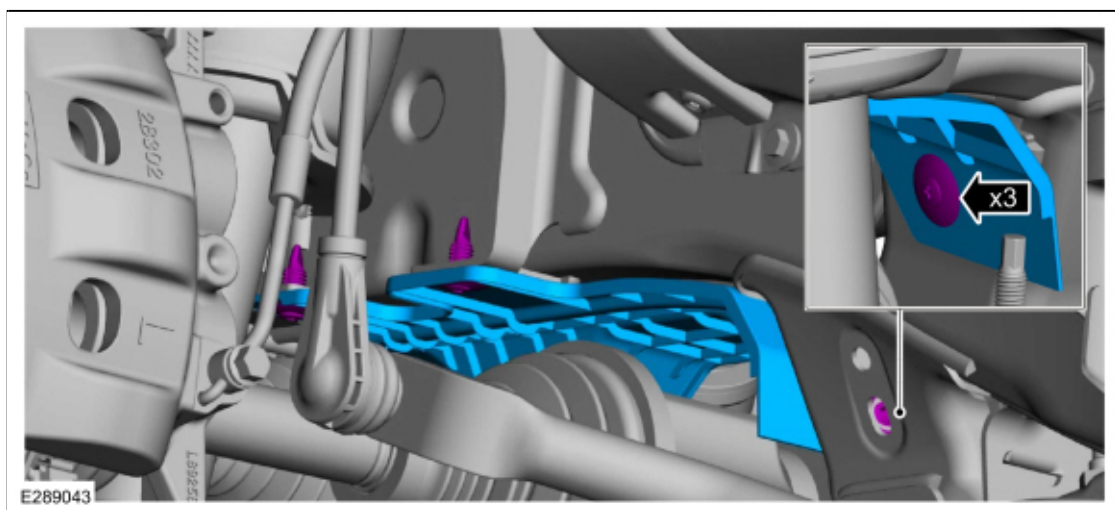
- 11.

- Remove and discard the bolt.
- Separate the steering shaft and position up.



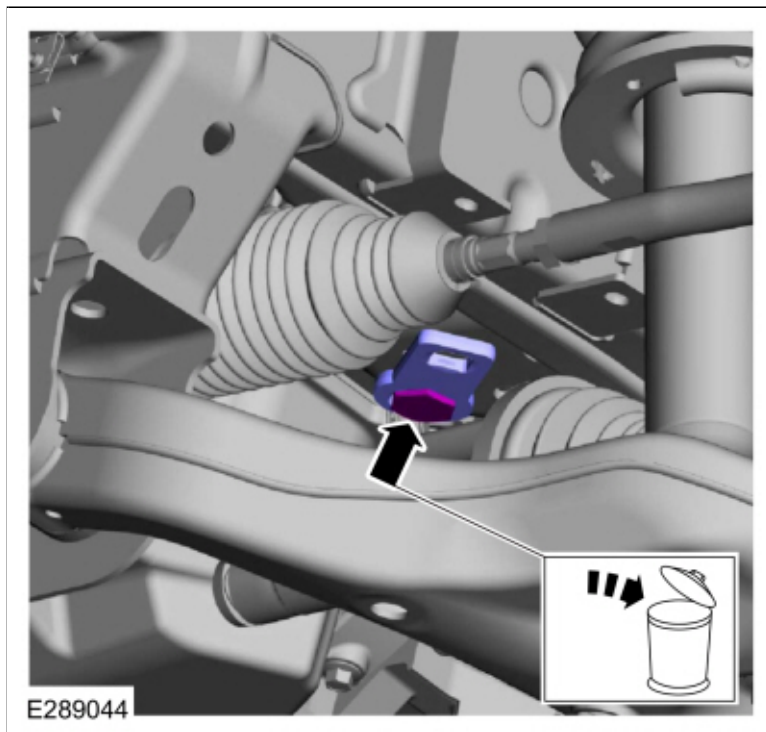
LHD 4WD

12. Remove the retainers and the LH axle shaft shield.

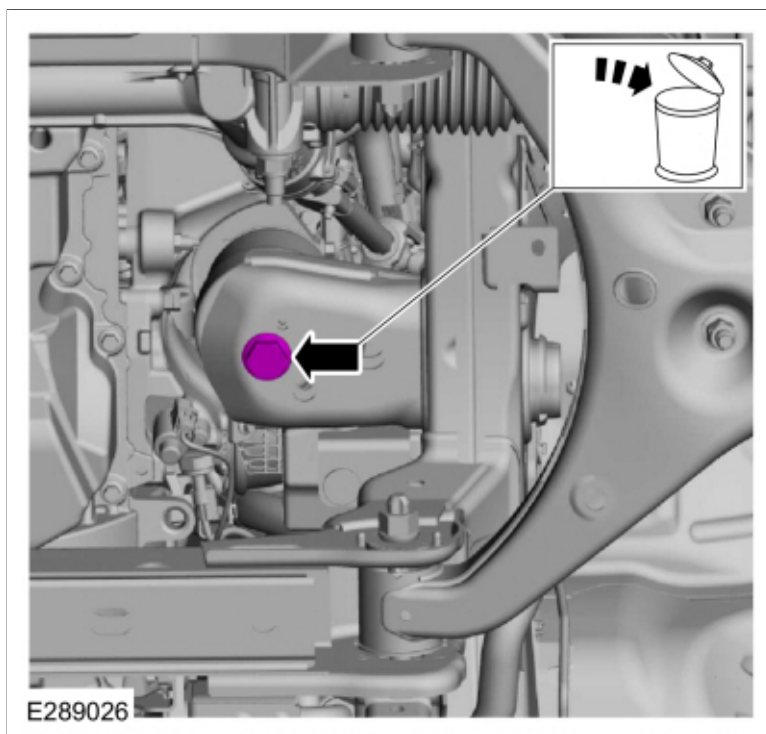


13. **NOTE:** Use a 1/2 inch drive 12-point 1 inch standard torque adaptor (such as a Snap-on SRDH321, or equivalent).

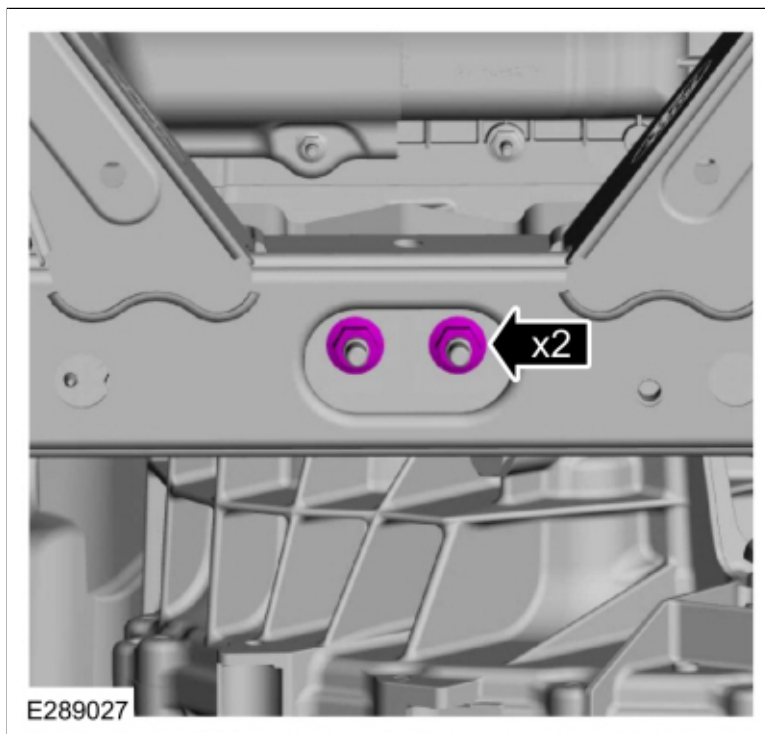
Using a standard torque adaptor, remove and discard the LH engine mount bolt.

**LHD FWD**

14. Remove and discard the LH engine mount bolt.

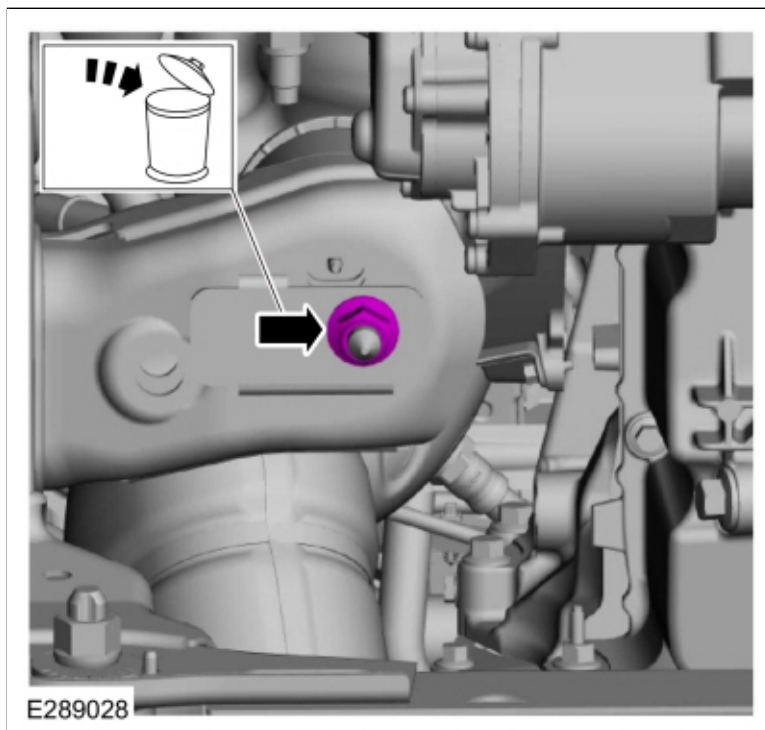
**LHD 4WD/LHD RWD**

15. Loosen the transmission mount nuts.

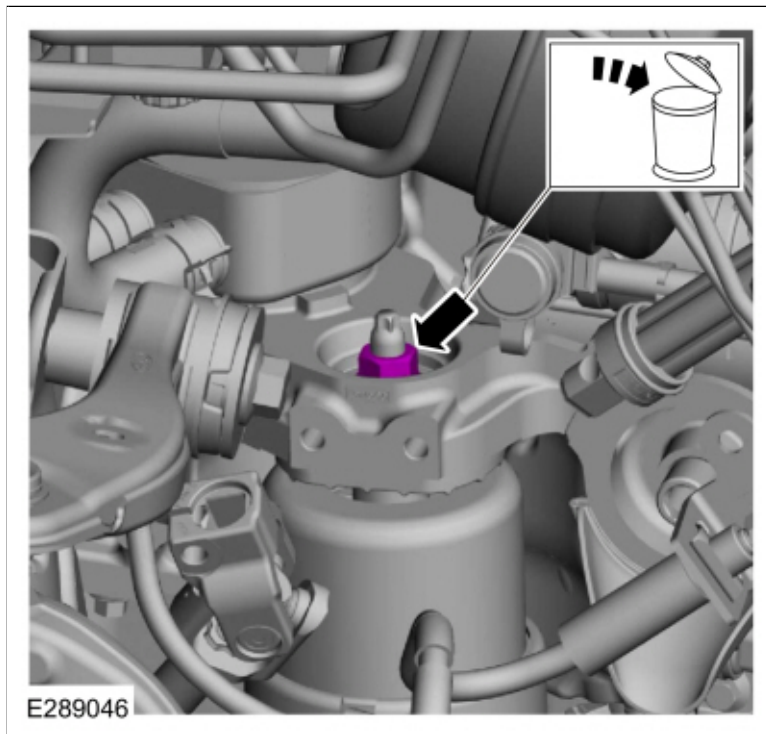


16. **NOTE:** RWD shown, 4x4 similar.

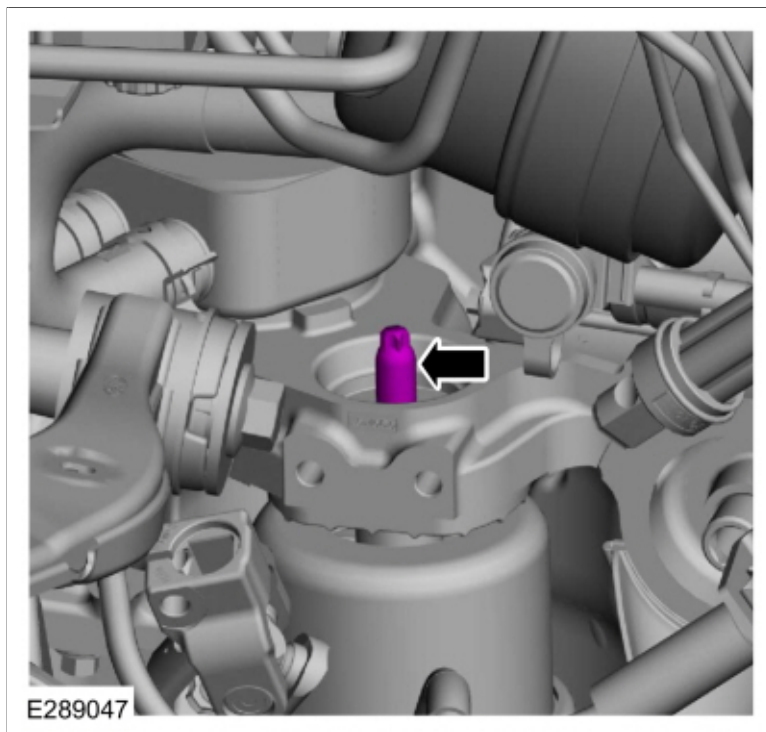
Remove and discard the RH engine mount nut.



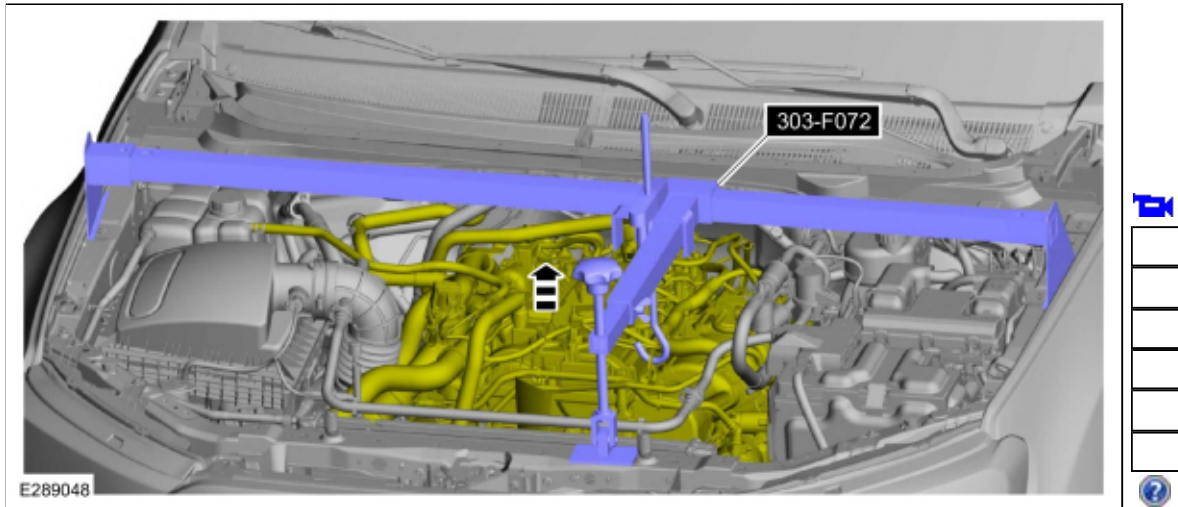
17. Remove and discard the LH engine mount nut.



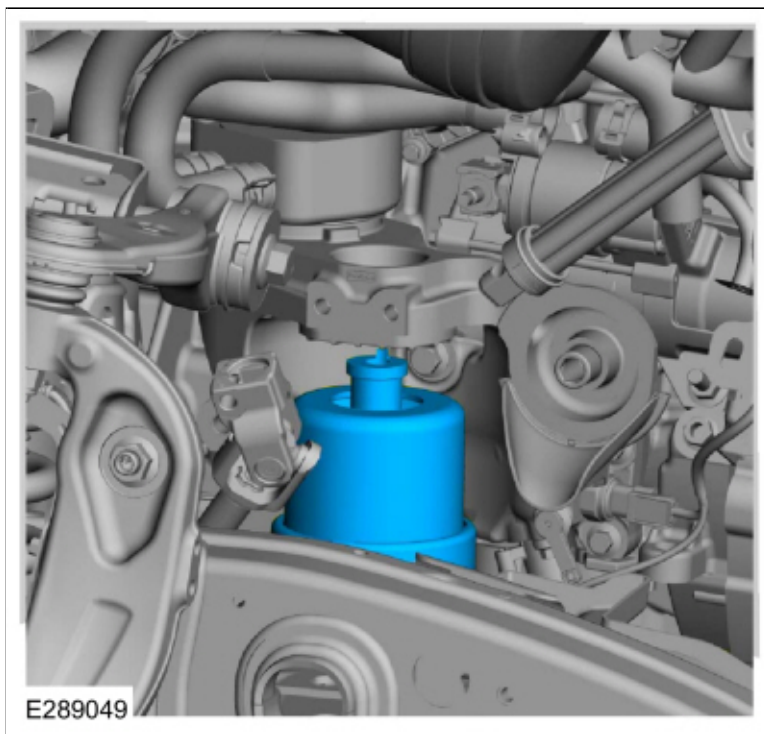
18. Remove the LH engine mount stud.



19. Using the 3 bar support, raise the engine.
Use Special Service Tool: [303-F072 Support Bar, Engine](#).



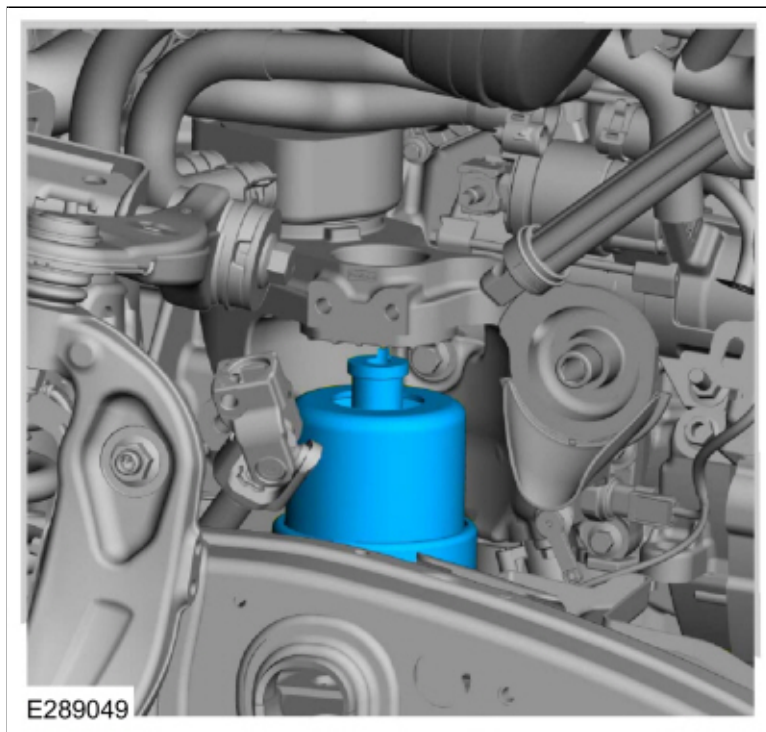
20. Remove the engine mount.



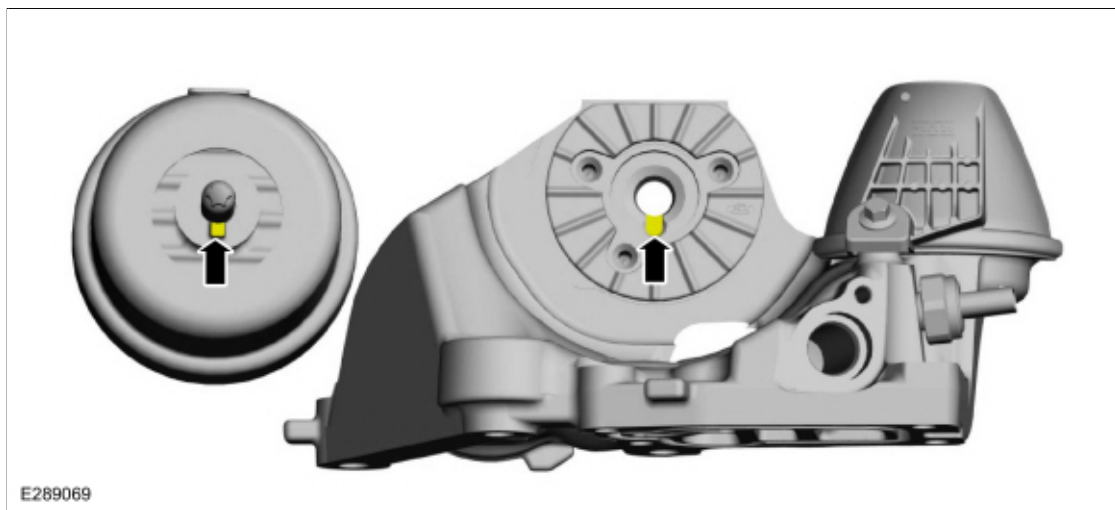
Installation

LHD 4WD/LHD RWD

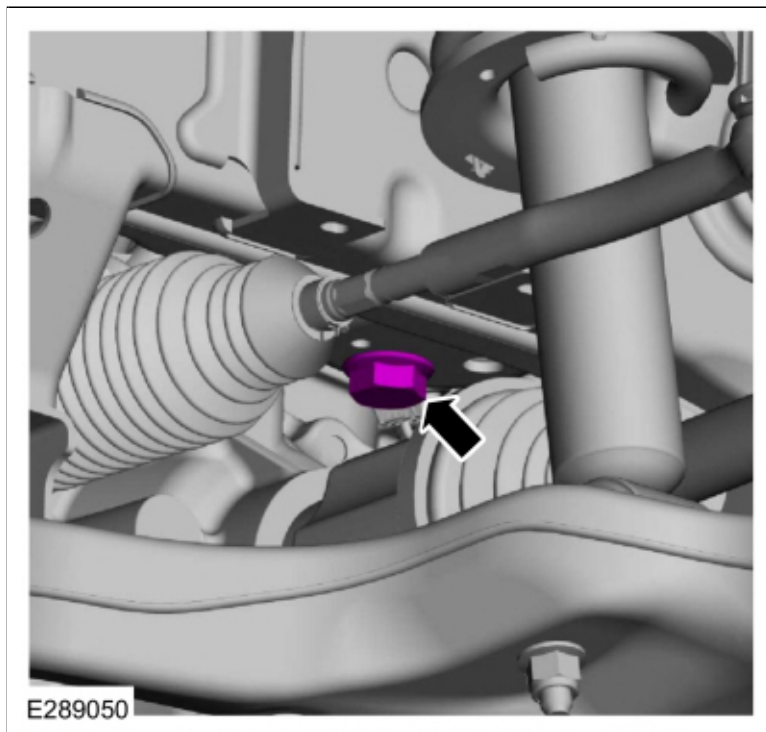
1. Install the engine mount.



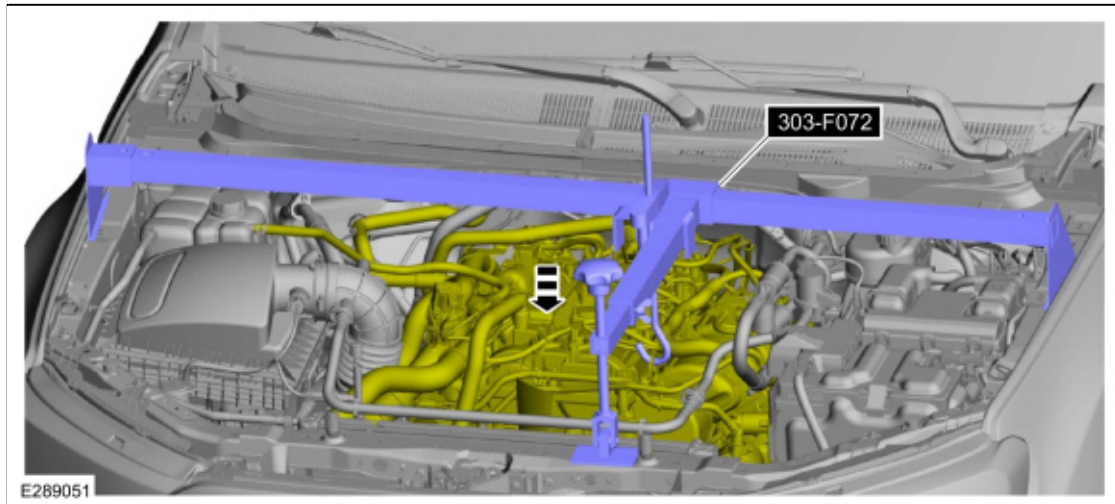
2. Align the tab on the LH engine mount to the slot on the engine mount bracket.



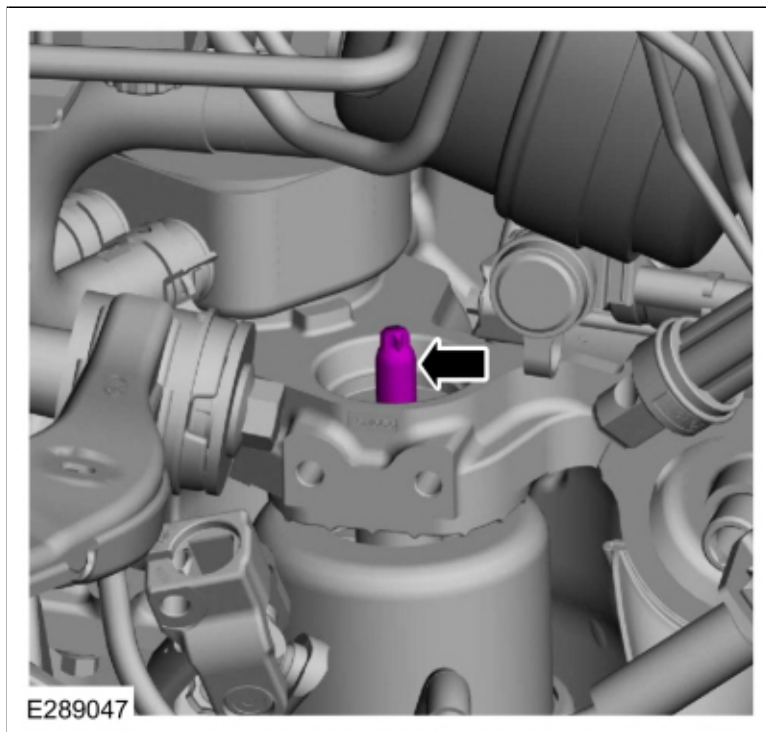
3. Install a new LH engine mount bolt finger tight.



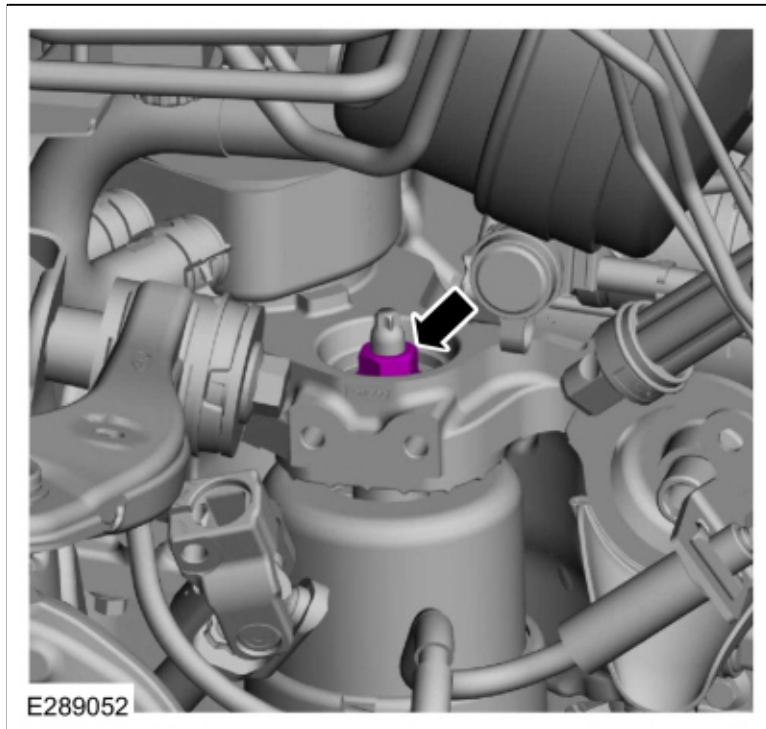
4. Using the 3 bar support lower the engine.
Use Special Service Tool: [303-F072 Support Bar, Engine](#).



5. Install the engine mount stud.
Torque: 22 lb.ft (30 Nm)

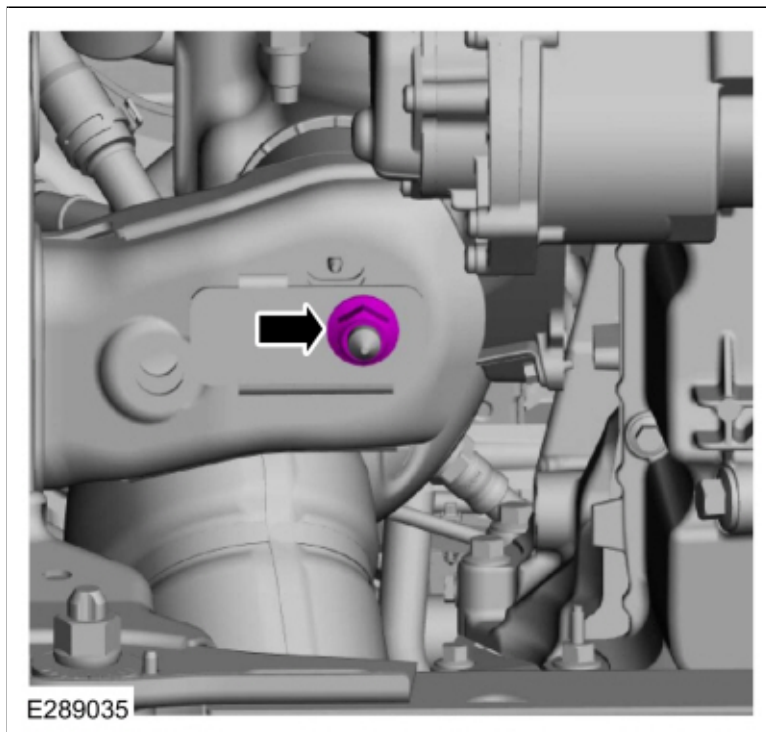


6. Install a new engine mount nut and tighten.
Torque: 92 lb.ft (125 Nm)

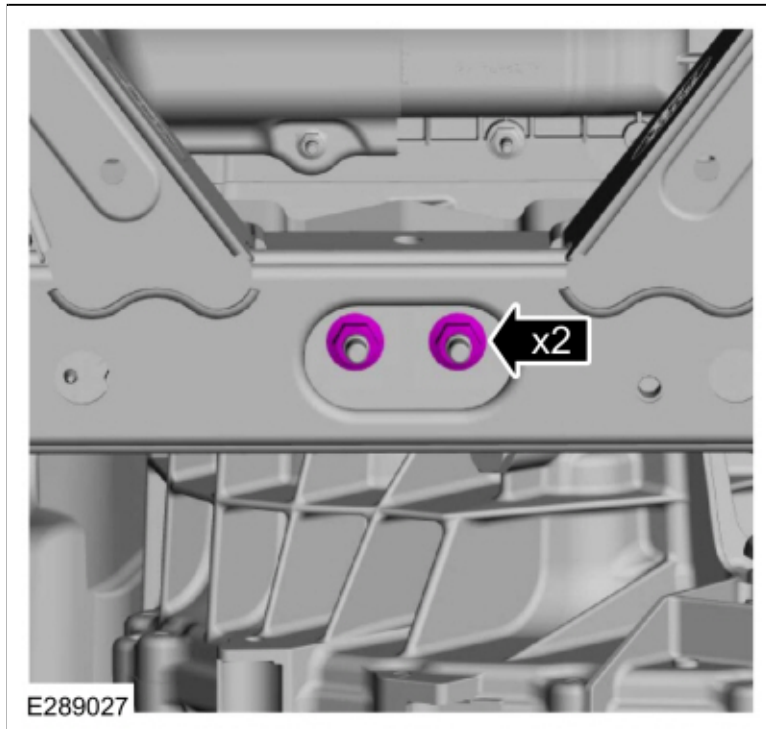


7. **NOTE:** *RWD shown, 4x4 similar.*

Install a new RH engine mount nut and tighten.
Torque: 129 lb.ft (175 Nm)

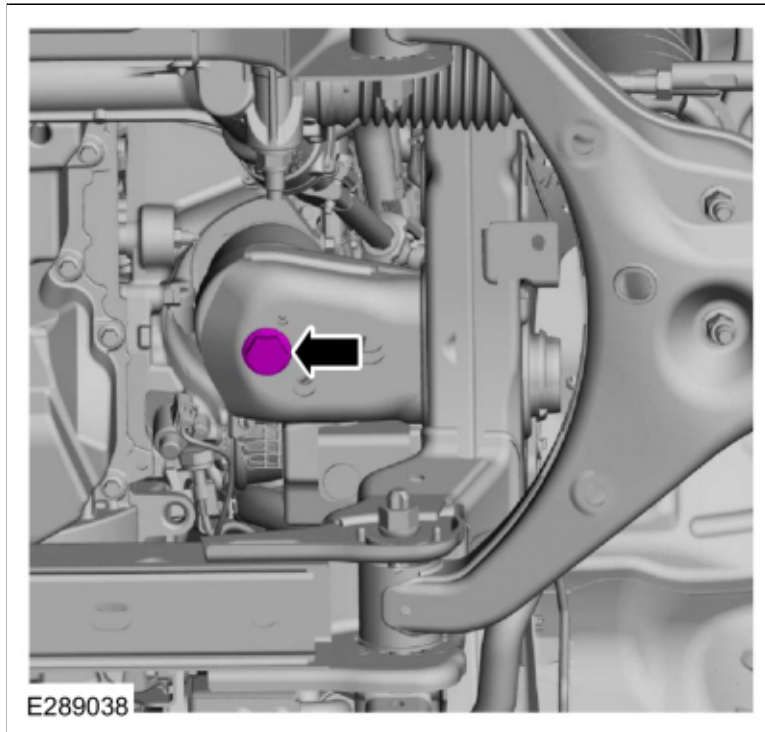


8. Tighten the transmission mount nuts.
Torque: 66 lb.ft (90 Nm)



LHD FWD

9. Install a new LH engine mount bolt and tighten.
Torque: 129 lb.ft (175 Nm)

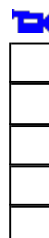


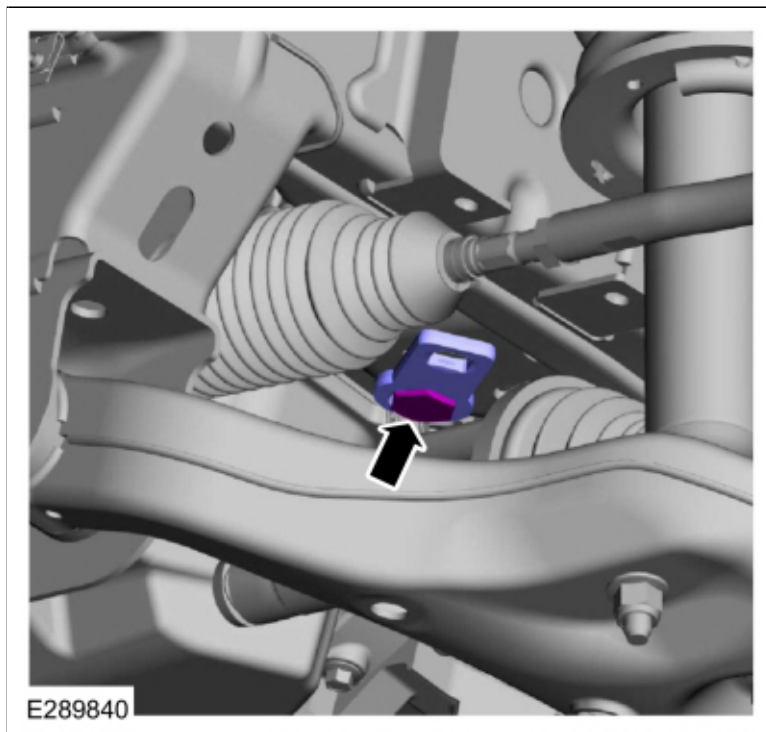
LHD 4WD

10. **NOTE:** Use a 1/2 inch drive 12-point 1 inch standard torque adaptor (such as a Snap-on SRDH321, or equivalent).

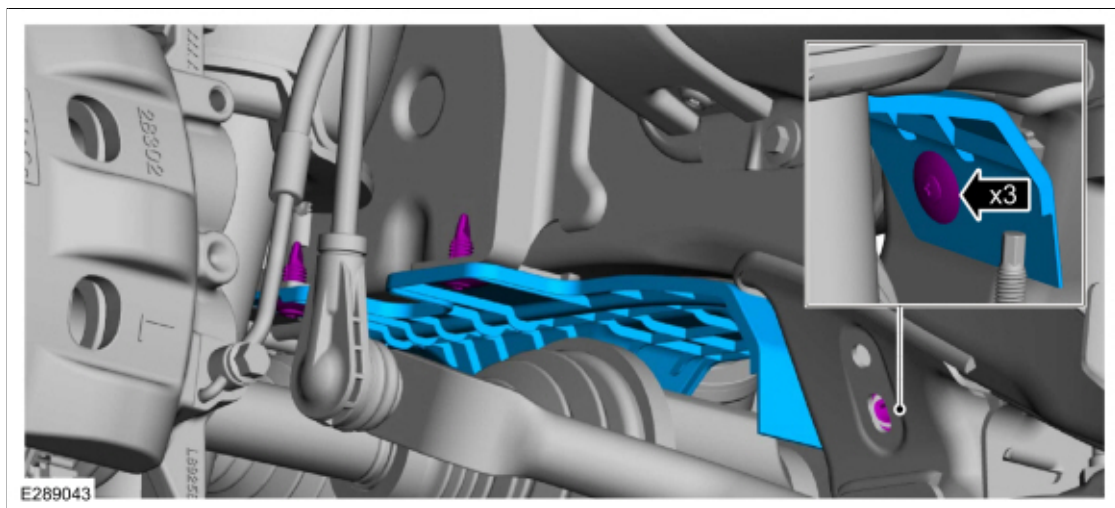
NOTE: Calculate the correct torque wrench setting for the following torque using the Torque Wrench Adapter Formulas.

Tighten the LH engine mount bolt using the standard torque adaptor.
Torque: 129 lb.ft (175 Nm)





11. Install the LH axle shield and the retainers.



LHD 4WD/LHD FWD

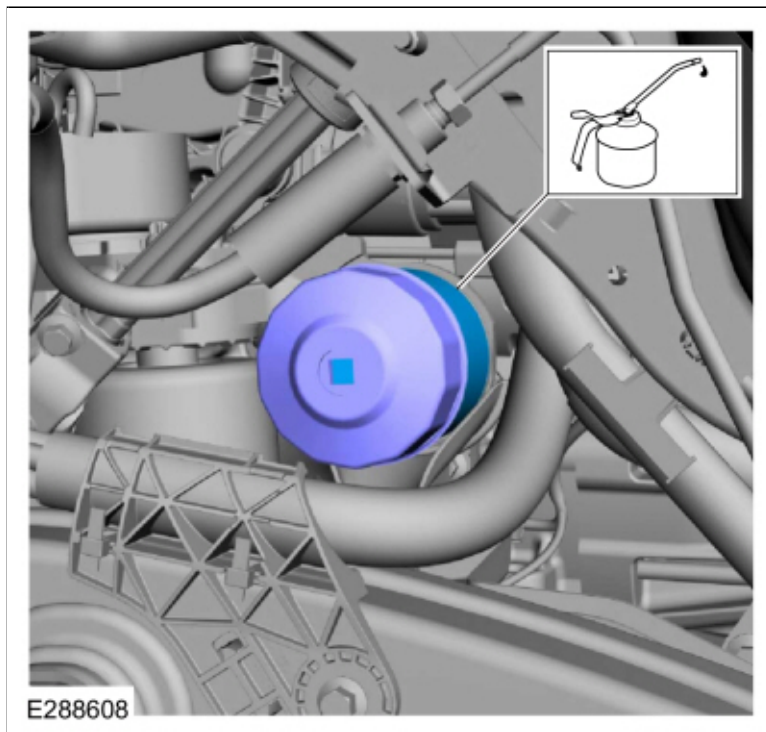
12. **NOTE:** Use a commercially available end cap oil filter wrench.

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

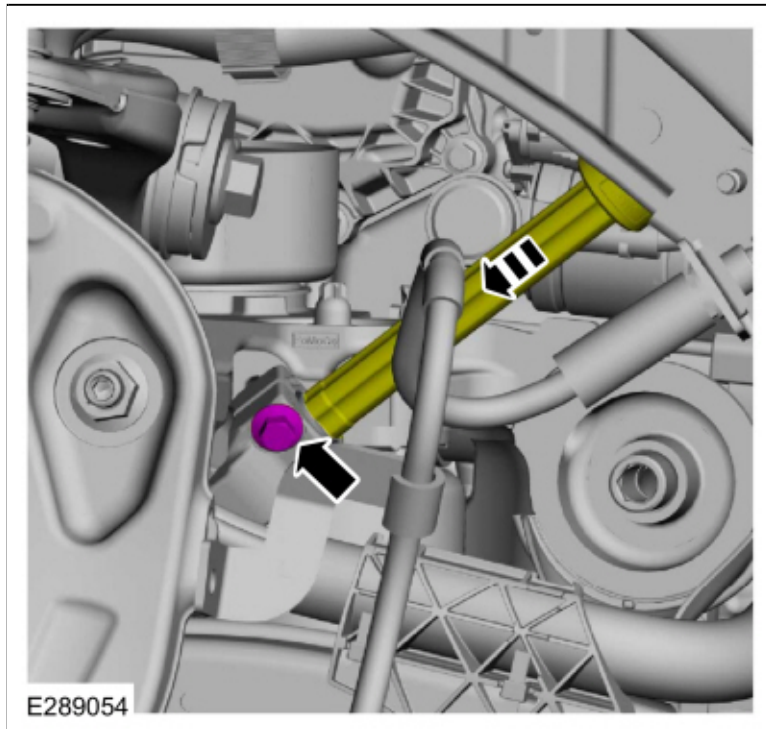
Torque:

Stage 1: 71 lb.in (8 Nm)

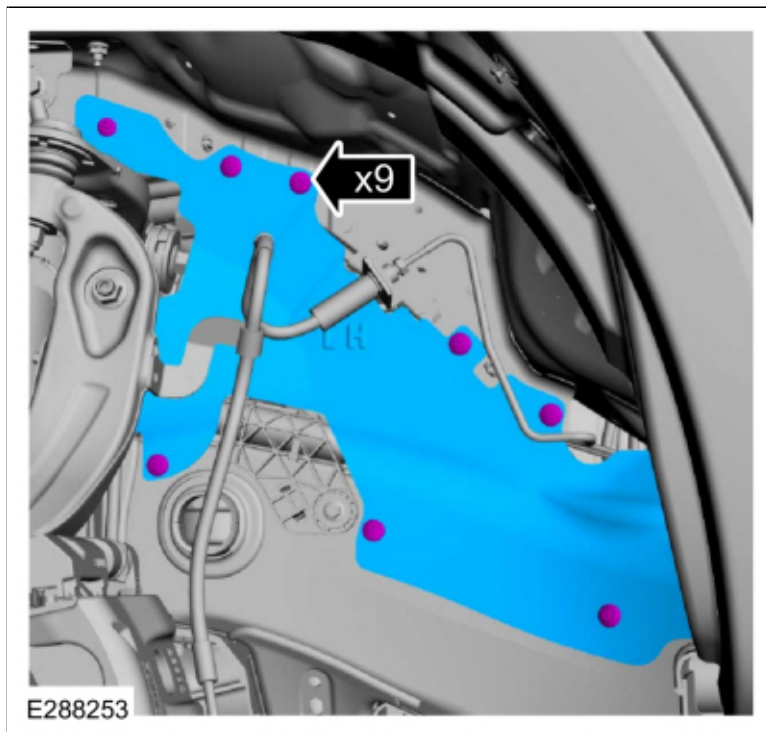
Stage 2: 180°



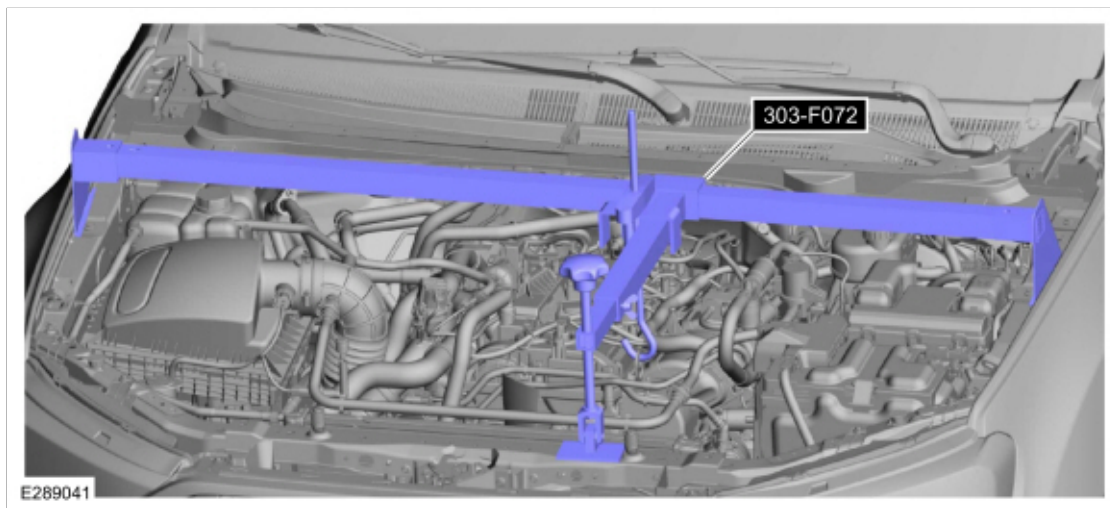
13. Install the steering shaft and the new bolt.
Torque: 17 lb.ft (23 Nm)



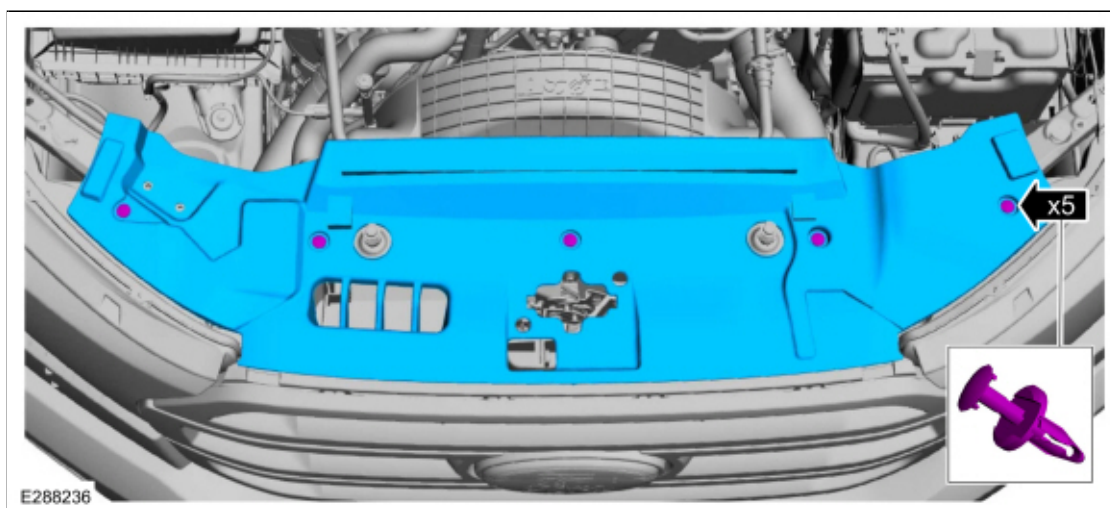
14. Install the LH fender splash shield and the retainers.



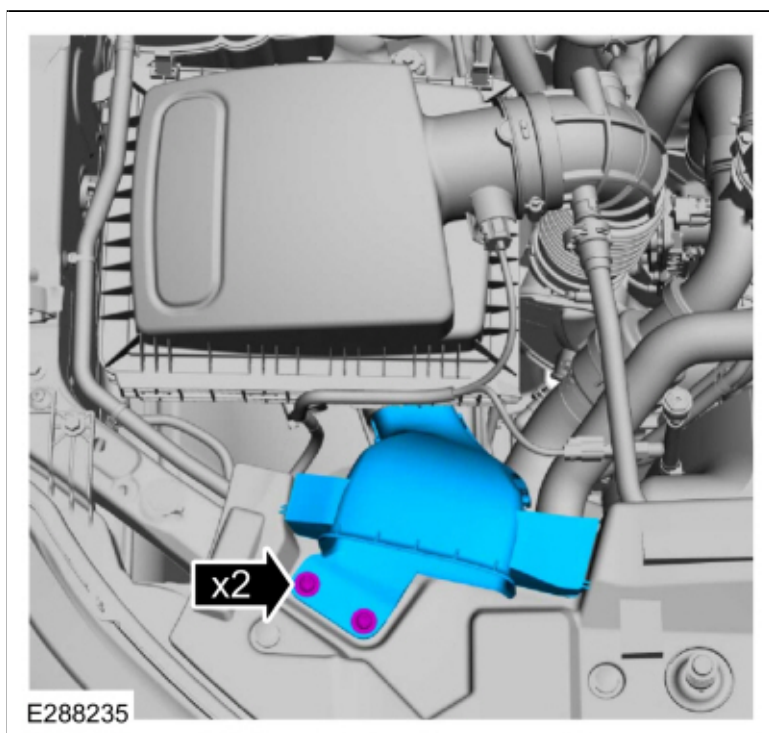
15. Install LH front wheel and tire.
Refer to: [Wheel and Tire](#) (204-04A Wheels and Tires, Removal and Installation).
16. Remove the 3 bar support.
Remove Special Service Tool: [303-F072 Support Bar, Engine](#).



17. Install the upper cooling fan shroud.
Refer to: [Cooling Fan Upper Shroud](#) (303-03 Engine Cooling - 2.3L EcoBoost (201kW/273PS), Removal and Installation).
18. Install the upper air deflector and the retainers.

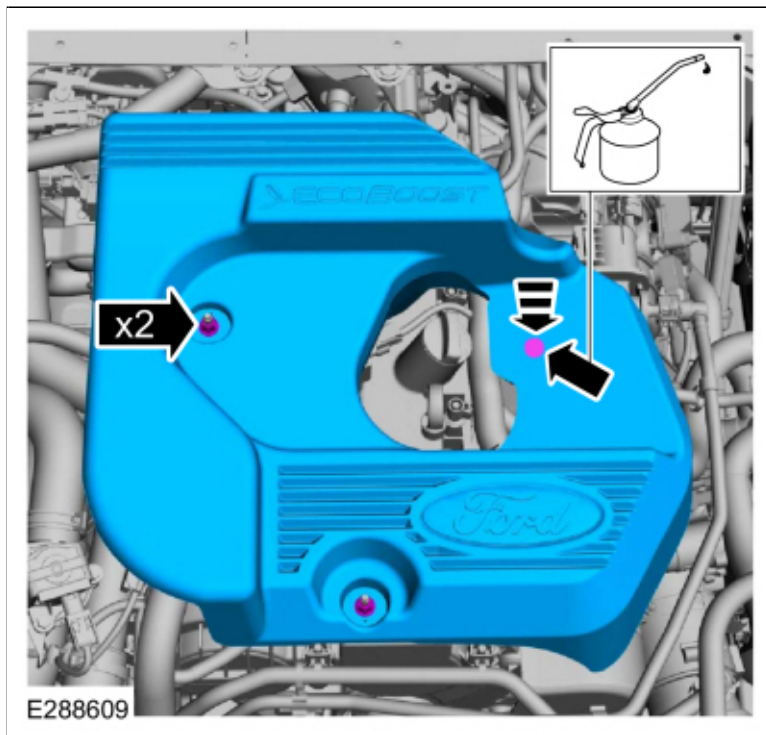


19. Install ACL inlet and the screws.
Torque: 22 lb.in (2.5 Nm)

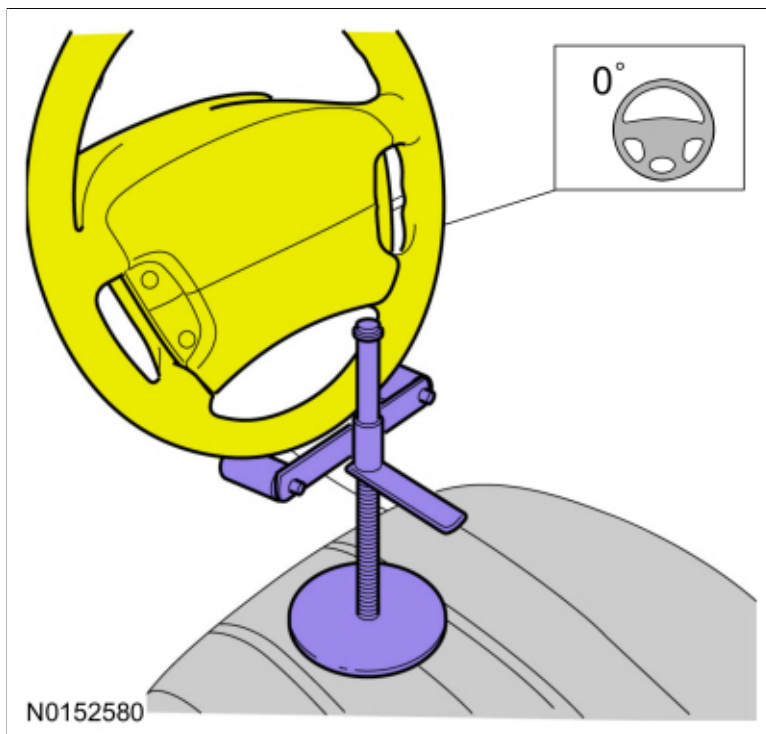


- 20.
1. **NOTE:** *Lubricating the grommets with silicone grease will aid in the installation of the engine appearance cover, and any future removal and installation of the cover.*

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



21. Remove the holding device.



22. Inspect and adjust the engine oil level.
Refer to: [Specifications](#) (303-01 Engine - 2.3L EcoBoost (201kW/273PS), Specifications).

