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PRIOR TO INSTALLATION READ THESE INSTRUCTION COMPETELY
For questions, Call the FORD PERFORMANCE Techline 1-800-367-3788

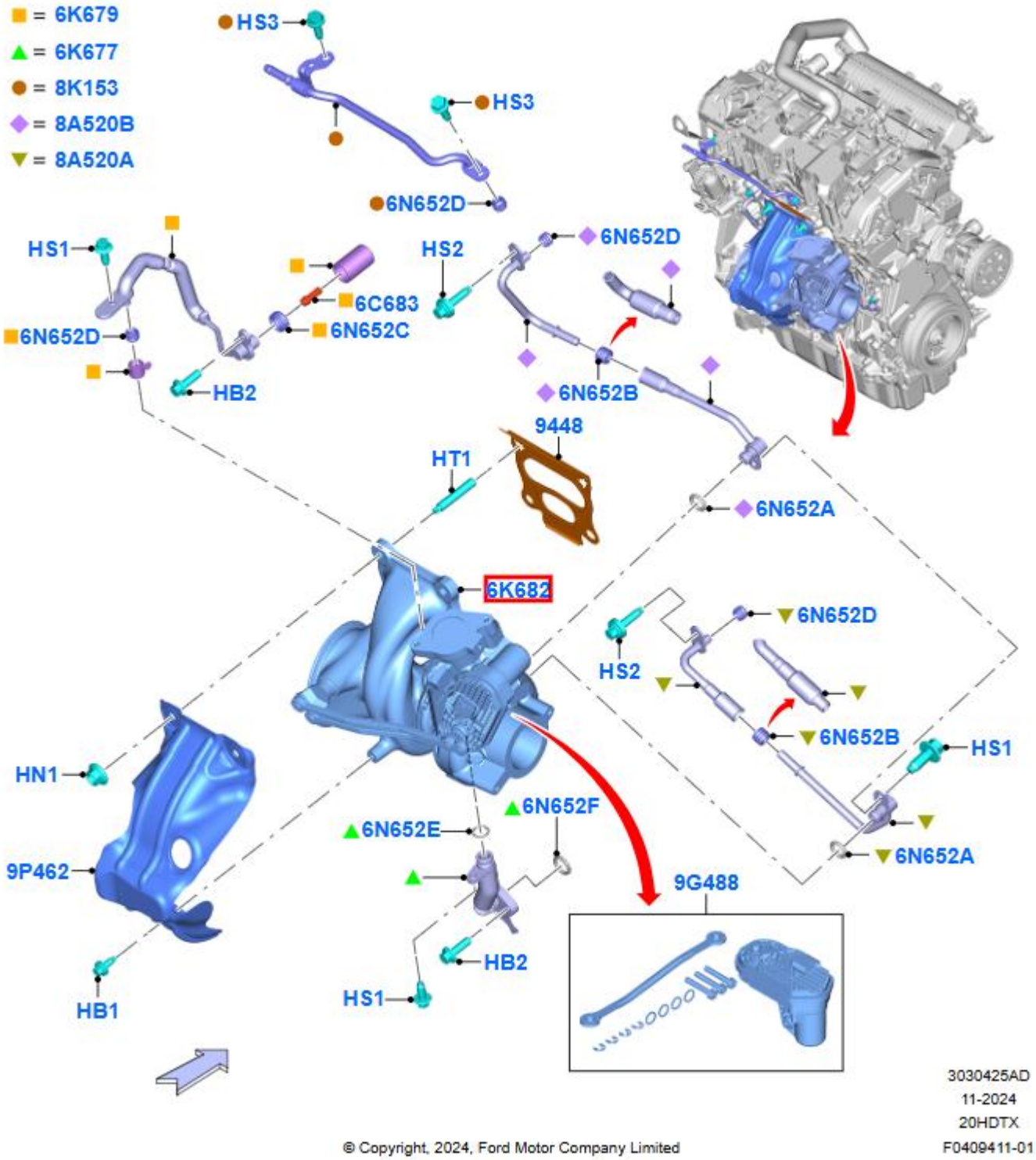
Please visit https://www.performanceparts.ford.com for warranty information

These instructions cover both 2025 Maverick AWD and Bronco Sport AWD. 2WD variants will be similar.

Parts List		Illustration Reference
(1) PB5Z-6K682-A	Turbocharger	
(1) P2GZ-9448-A	Turbocharger gasket	
(1) P2GZ-9P462-A	Turbocharger heatshield	
(1) EJ7Z-6N652-A	Turbo oil drain tube O-ring	6N652F
(1) FT4Z-6N652-E	Turbo oil drain tube O-ring	6N652E
(3) P2GZ-6N652-A	Turbo oil feed tube and coolant tube O-ring	6N652D
(1) P2GZ-6N652-B	Turbo oil feed tube O-ring	6N652C
(2) FT4Z-6N652-H	Turbo coolant tube O-ring	6N652A
(2) HL3Z-6N652-A	Turbo coolant tube seal	6N652B
(1) JT4Z-6C683-A	Turbo oil filter	6C683
(4) W713095-S450	Turbo exhaust nut	
(1) W722414-S437	Turbo heat shield bolt	
(1) PZ1Z-6758-C	PCV tube	
(1) CV6Z-9450-E	Exhaust gasket	
(2) W714265-S442	Exhaust nut	
(1) PZ1Z-5A215-C	Turbo exhaust clamp	
(4) W704474-S437	Exhaust stud	
(1) W520203-S440	Tie Rod nut	
(5) W719766-S439	PTU case bolt	
(1) W721614-S439	Lower ball joint bolt	
(1) W520515-S442	Lower ball joint nut	
(1) K2GZ-7275-B	Half shaft seal kit	
(3) LX6Z-4B496-B	Driveshaft bolt (set of 2)	
(2) W720388-S439	Subframe bolt	
(2) W719192-S439	Subframe bolt	
(4) W713199-S442	Subframe support bolt	

Ford Factory Shop Manual purchase options www.motorcraftservice.com

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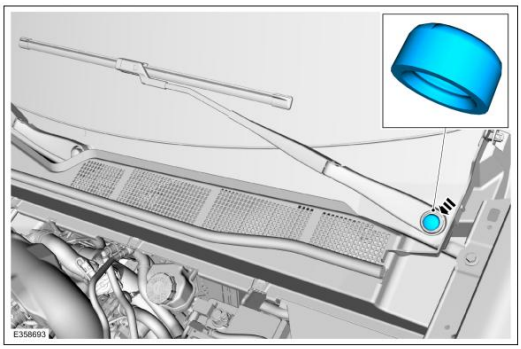


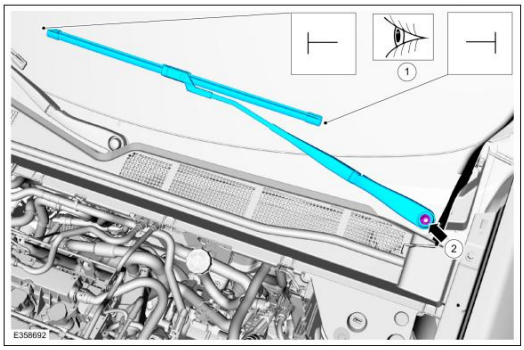
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1.

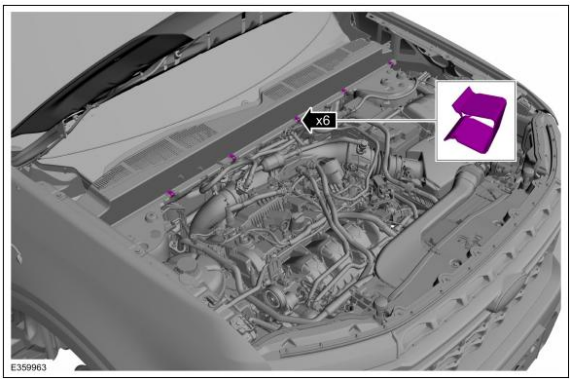
- Remove the windshield wiper pivot arm nut cover.
- Remove the windshield wiper pivot arm nut.

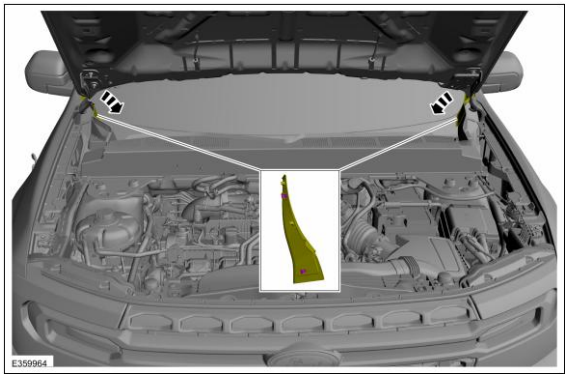




2.

- Remove the clips.
- Pull outward to release the locking clips and position the upper portion of the cowl panel grille away from the A-pillar.
- Pull upward and remove the cowl panel grille.



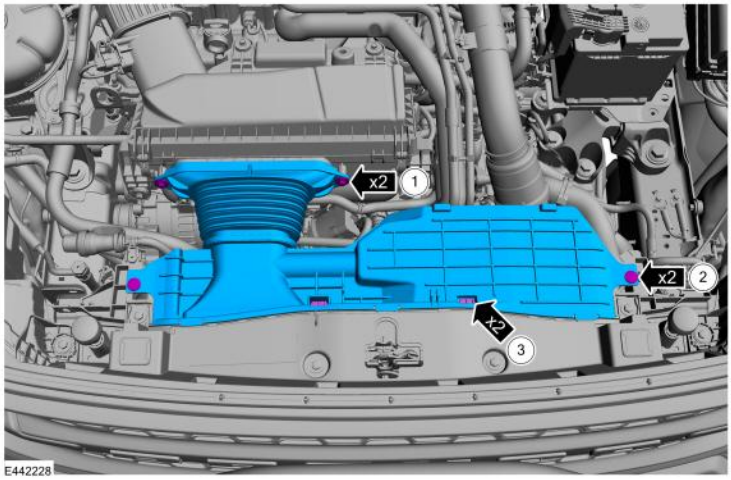




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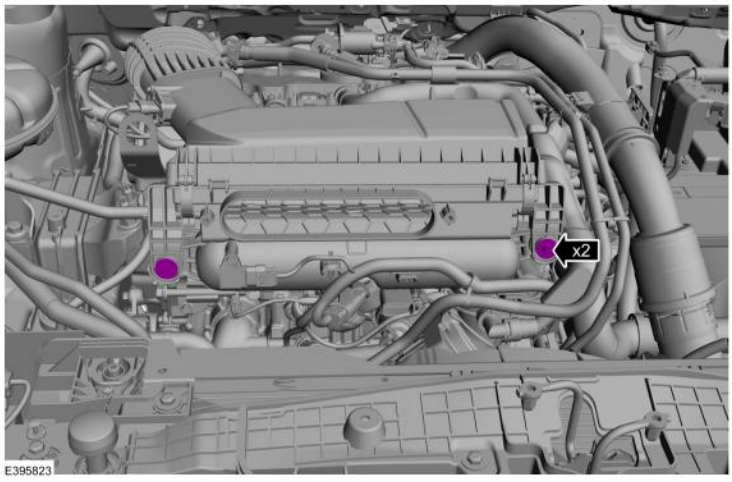
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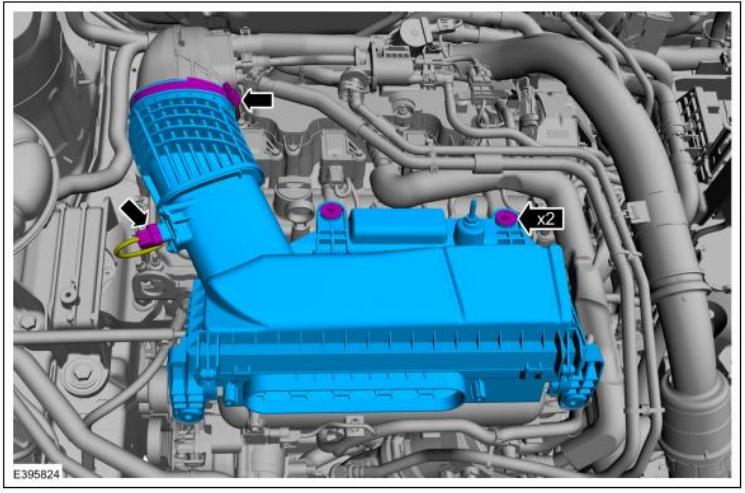
- Remove the bolts.
  Torque: 35 lb.in (4 Nm)
- Remove the push pins.
- Release the tabs and remove the air cleaner intake pipe.



4.

- Remove the bolts.
  Torque: 97 lb.in (11 Nm)
- Disconnect the electrical connector and position the wiring harness aside.
- Loosen the clamp and remove the air cleaner assembly.
  Torque: 42 lb.in (4.8 Nm)

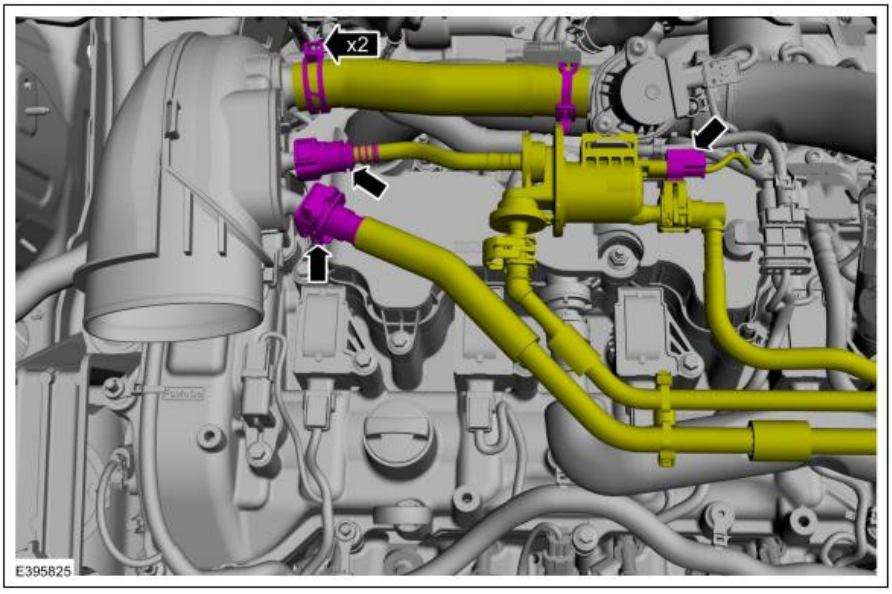




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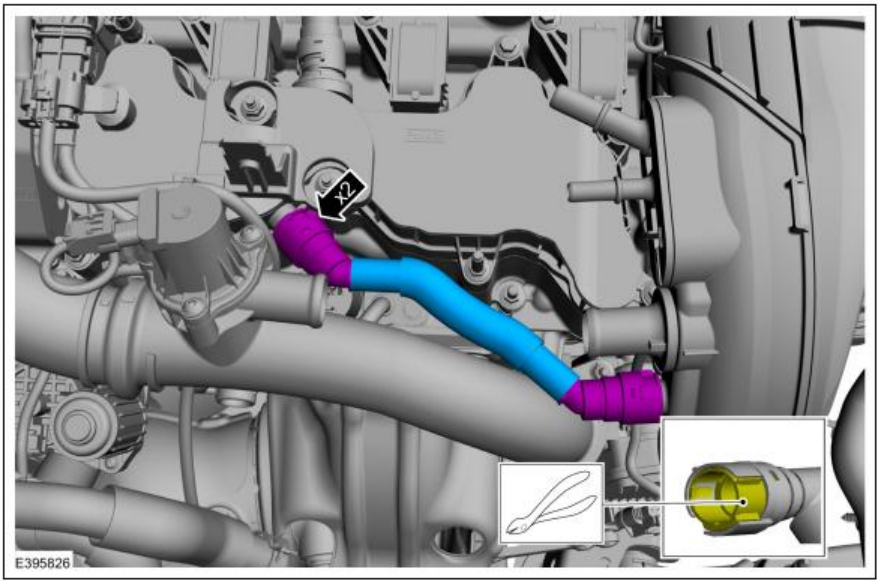
5.

- Disconnect quick release couplings and position aside the fuel vapor hoses.
- Disconnect the electrical connector and position aside the wiring harness.
- Loosen the clamp and position aside the air bypass hose.



NOTE: *For the crankcase vent tube, the permanent connector(s) must be cut to remove the tube. The tube will then need to be replaced with the new one provided in this kit.*

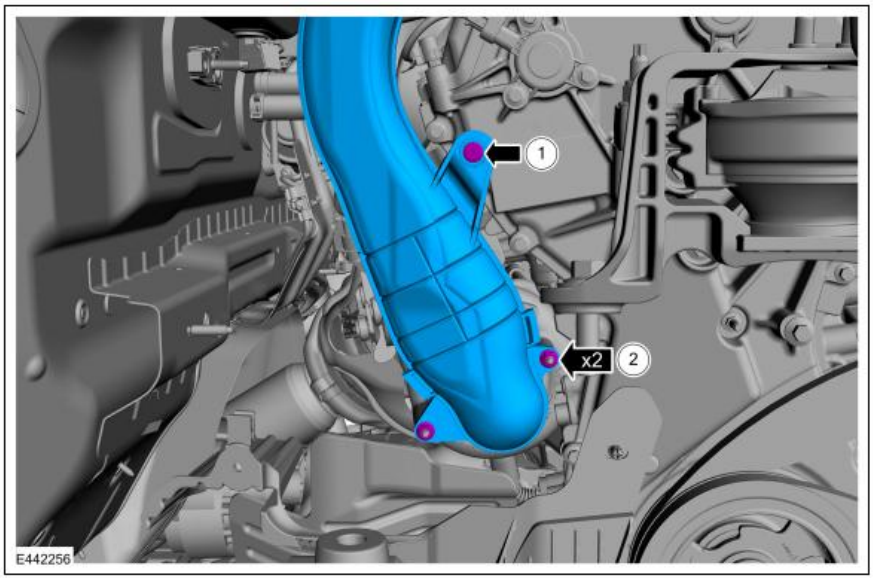
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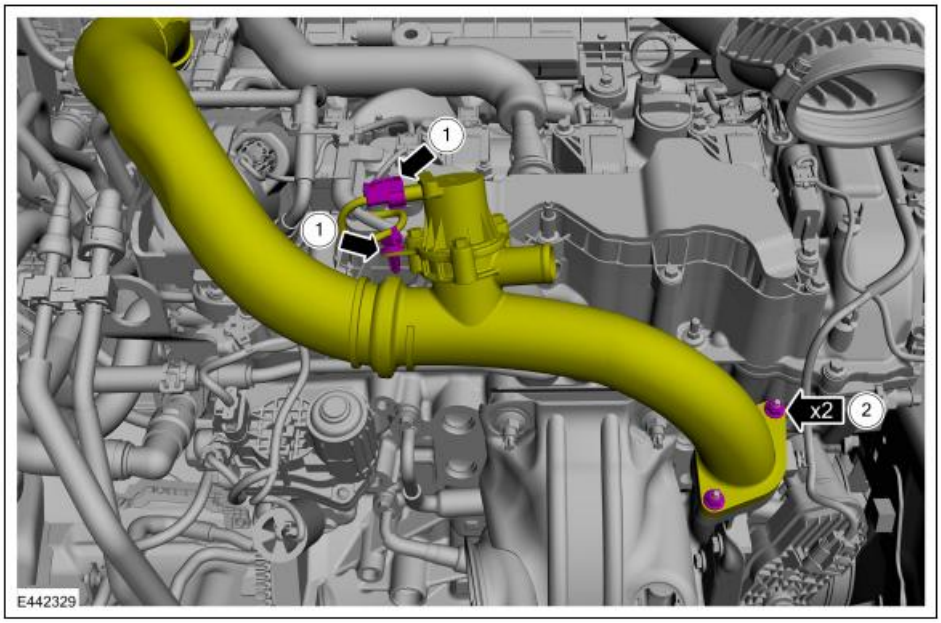
7.

- Remove the bolt.
  Torque: 97 lb.in (11 Nm)
- Remove the nuts and then the air cleaner outlet pipe.
  Torque: 97 lb.in (11 Nm)



8.

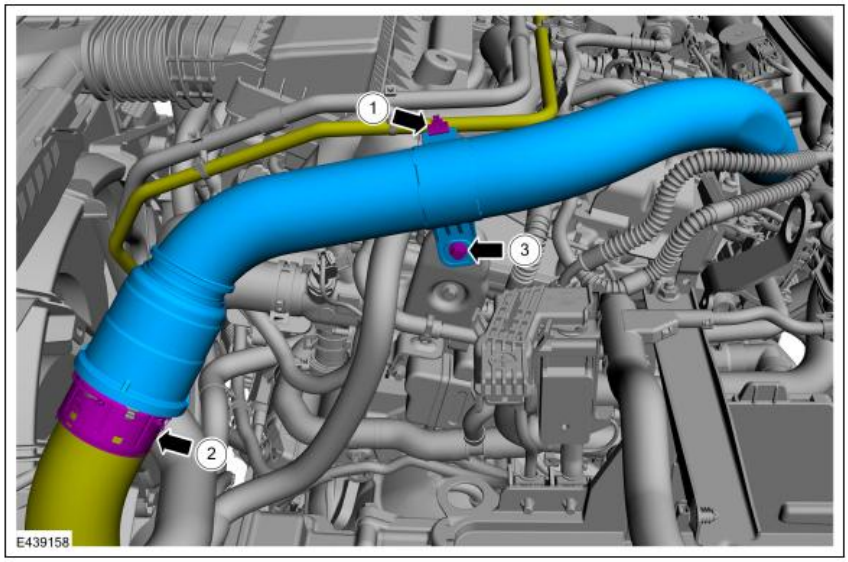
- Disconnect the electrical connector and release the retainer to position the wiring harness aside.
- Remove the nuts.
  Torque: 97 lb.in (11 Nm)



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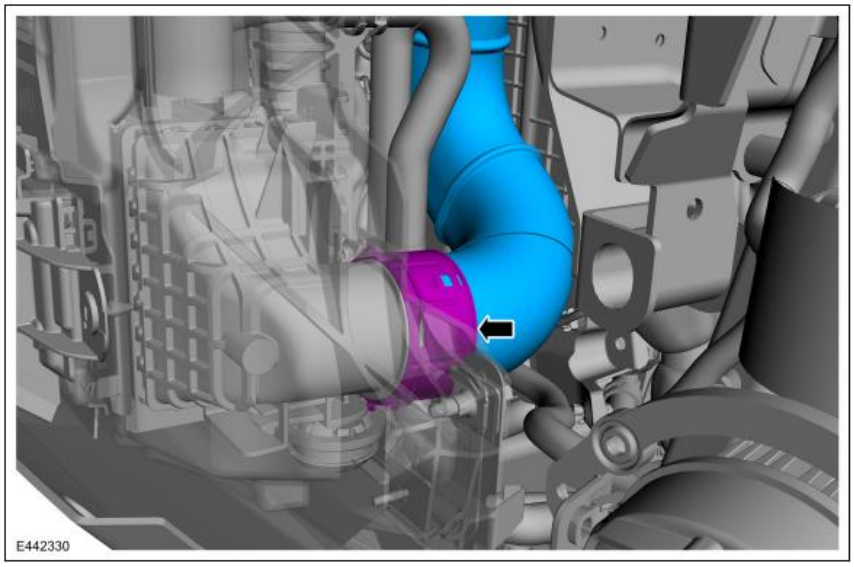
9.

- Release the retainer.
- Release the clip.
- Remove the bolt and the CAC intake pipe.
  Torque: 97 lb.in (11 Nm)



10.

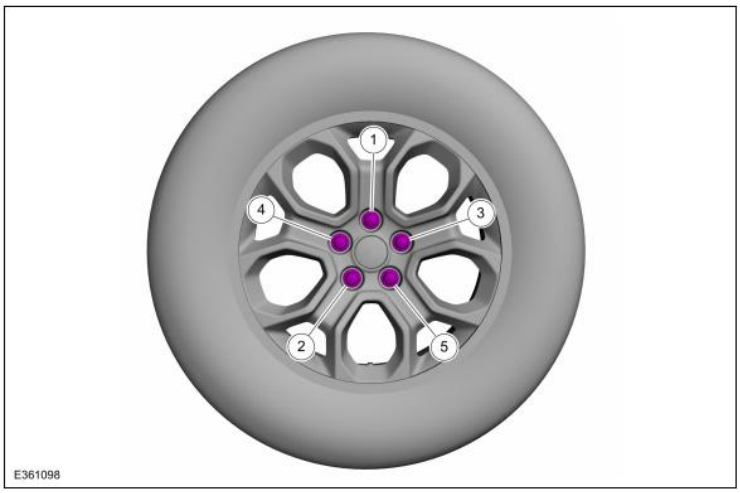
- Release the clip and remove the lower CAC intake pipe.



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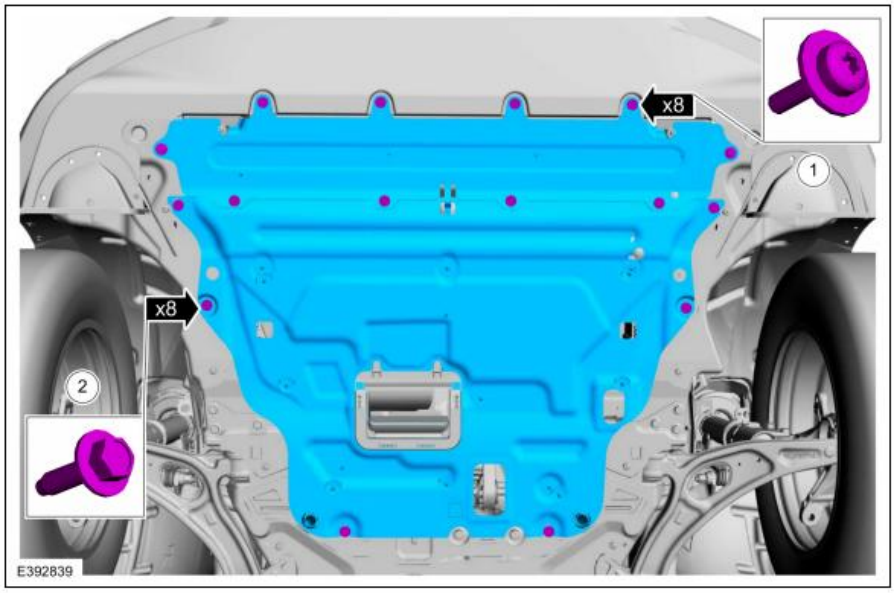
11.

- Support vehicle safely and remove pass side front wheel.
- Tighten the wheel nuts in the sequence shown.
  Torque: 150 lb.ft (204 Nm)



12.

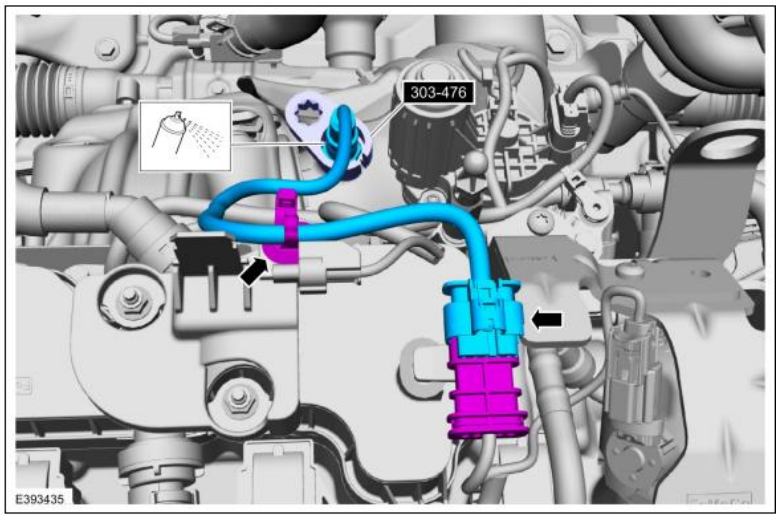
- If equipped, remove the underbody shield.
- Remove the bolts and the engine front undershield.
  Torque:
  Torque 1:: 27 lb.in (3 Nm)
  Torque 2:: 177 lb.in (20 Nm)



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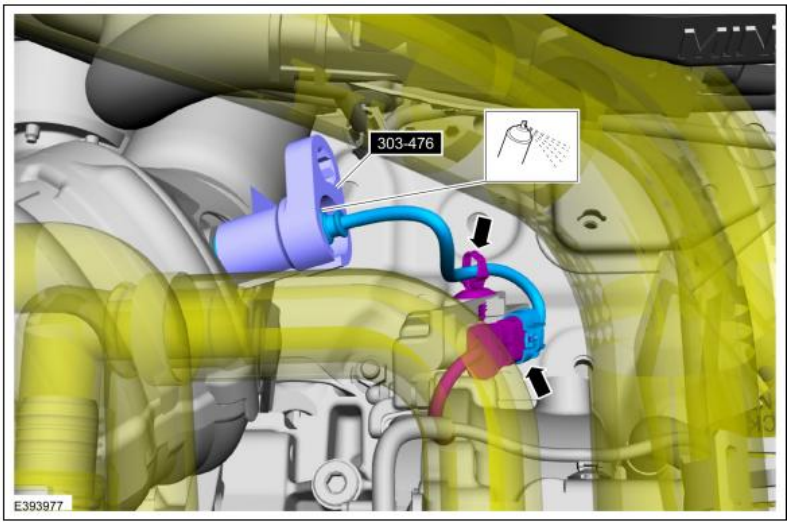
13.

- Disconnect the O2 sensor connector



14.

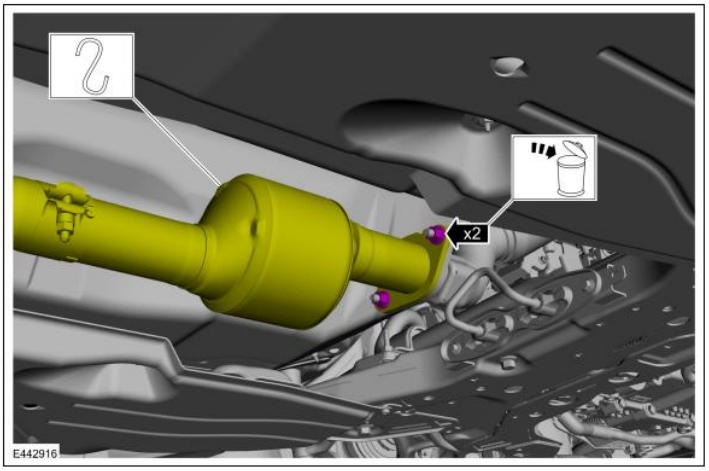
- Disconnect the Catalyst Monitor sensor connector



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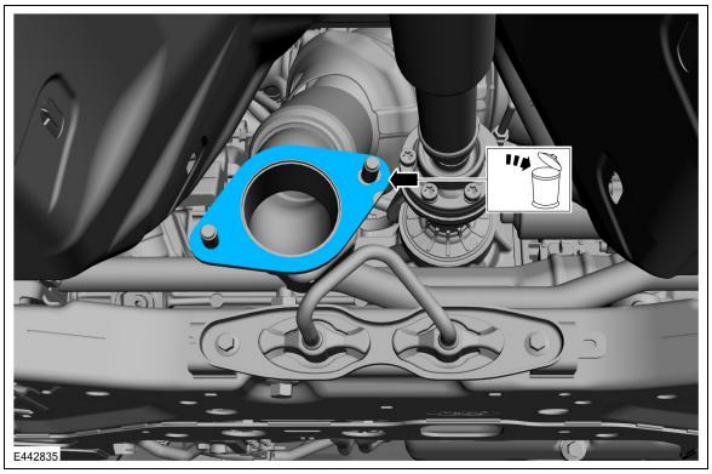
15. Catalytic Converter Assembly

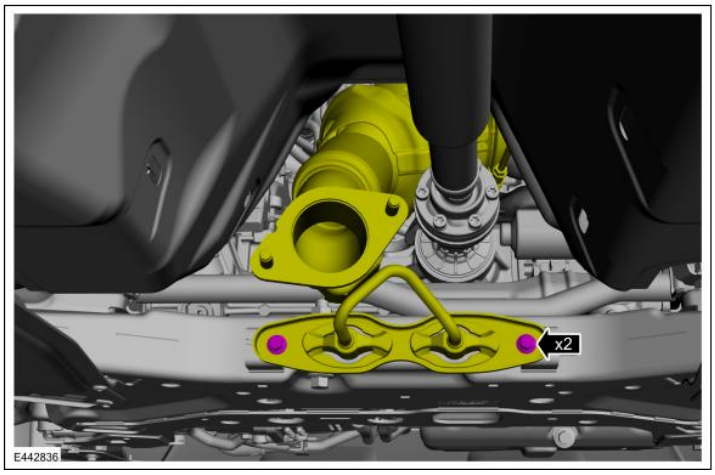
- Remove and discard the nuts. *Torque*: 30 lb.ft (40 Nm)
- Position aside the downstream catalytic converter assembly.



16.

- Remove and discard the gasket.
- Remove the exhaust hanger bracket bolts. *Torque*: 30 lb.ft (40 Nm)



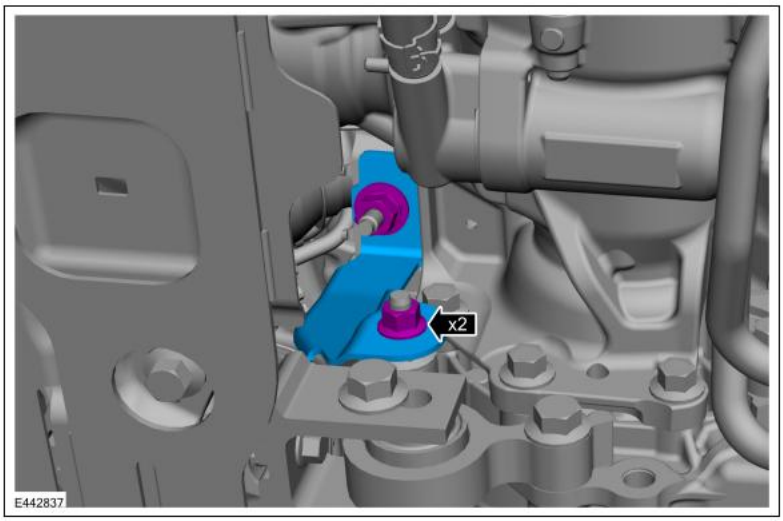


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17.

- Remove the nuts and the catalytic converter mounting bracket.

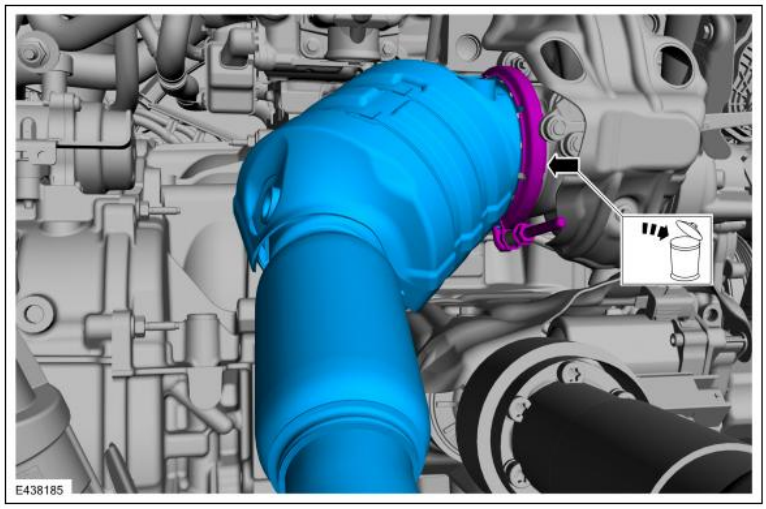
  Torque: 41 lb.ft (55 Nm)



- Remove and discard the clamp.
- Remove the catalytic converter.

  Torque: 159 lb.in (18 Nm)

NOTE: *Note the position of the clamp before removal.*

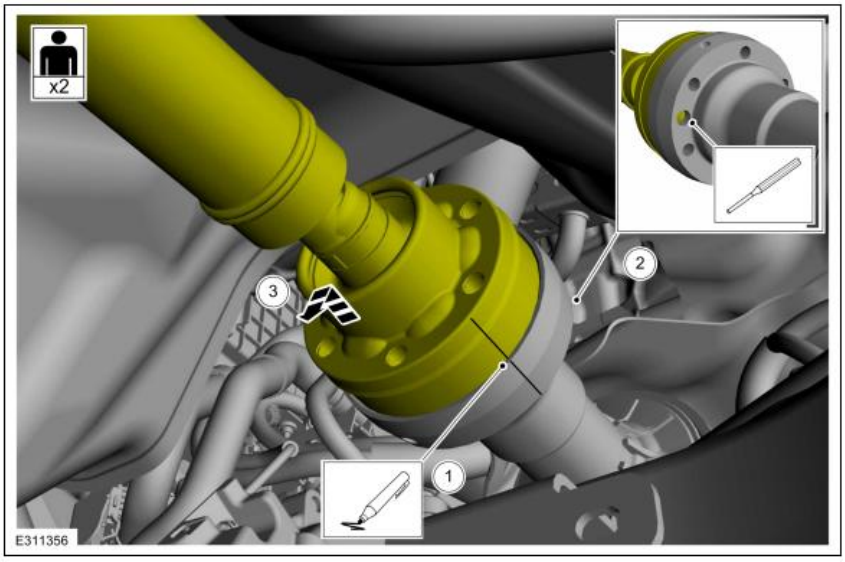


Installation of catalytic converter assembly

- Clean all the exhaust connections before reassembly.
- **NOTE:** *Make sure that the clamp is installed to the same orientation as when removed.*
- Match the alignment marks on the catalytic converter and the clamp.
- **NOTE:** *Make sure that new clamp is installed.*
- Tighten catalytic converter clamp prior to final tightening of mounting bracket.

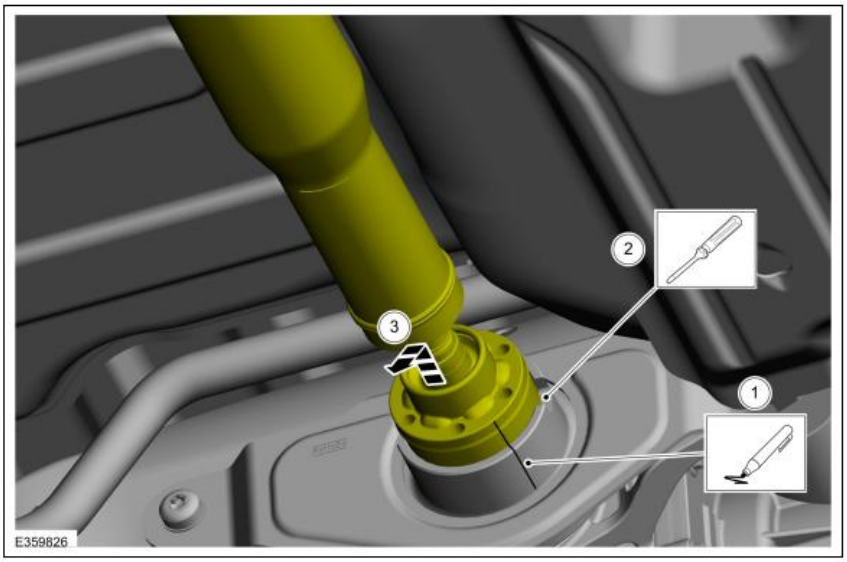
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18.



- Mark driveshaft to PTU flange
- Remove flange bolts
- Mark driveshaft to Rear Drive Unit
- Remove flange bolts
- Tighten in a criss-cross pattern

Torque: 26 lb.ft (35 Nm)

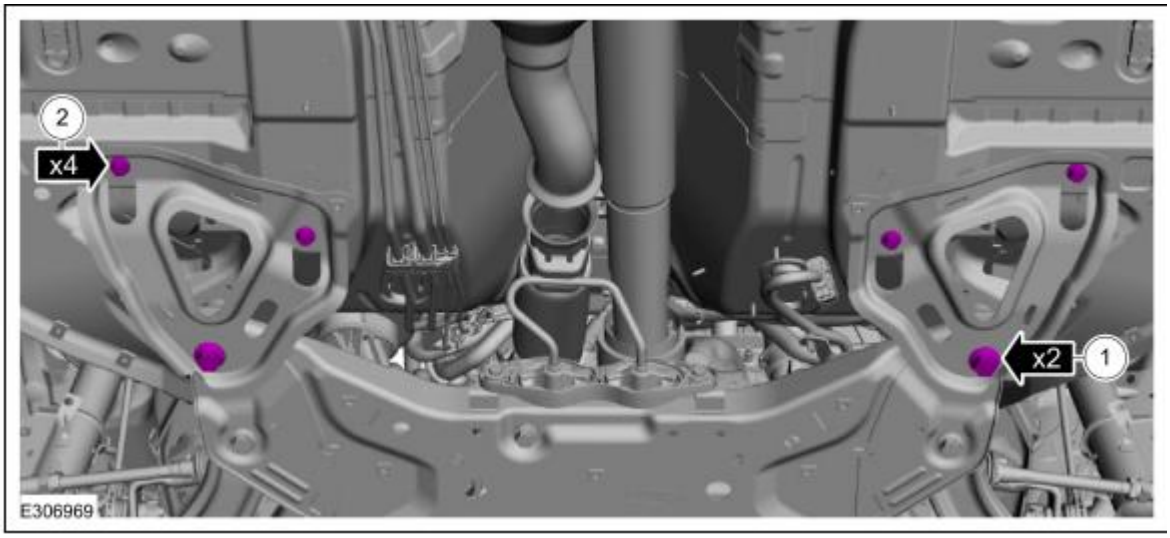


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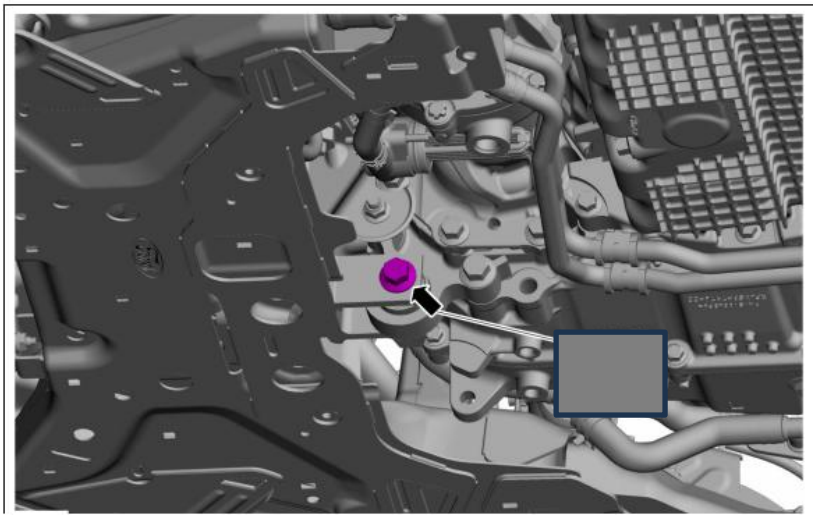
19.

1. It may be necessary to loosen rear mounting of front subframe for access to PTU on AWD variants.
   Torque:
   Stage 1: 159 lb.ft (215 Nm)
   Stage 2: 120°

2. *Torque*: 46 lb.ft (63 Nm)



20. It may be necessary to remove bolt from roll restrictor.
Torque: 129 lb.ft (175 Nm)

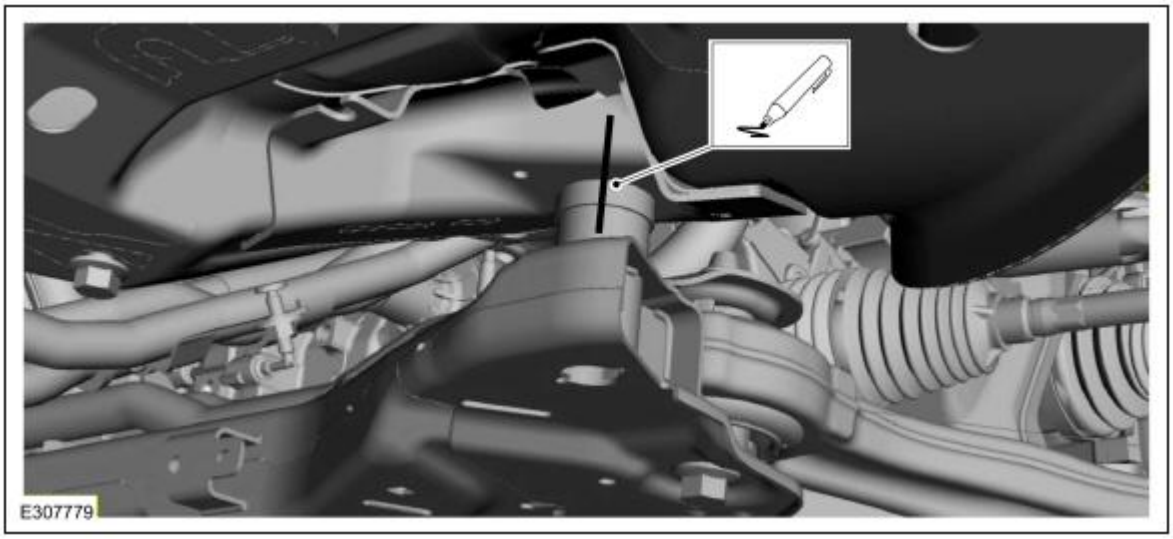


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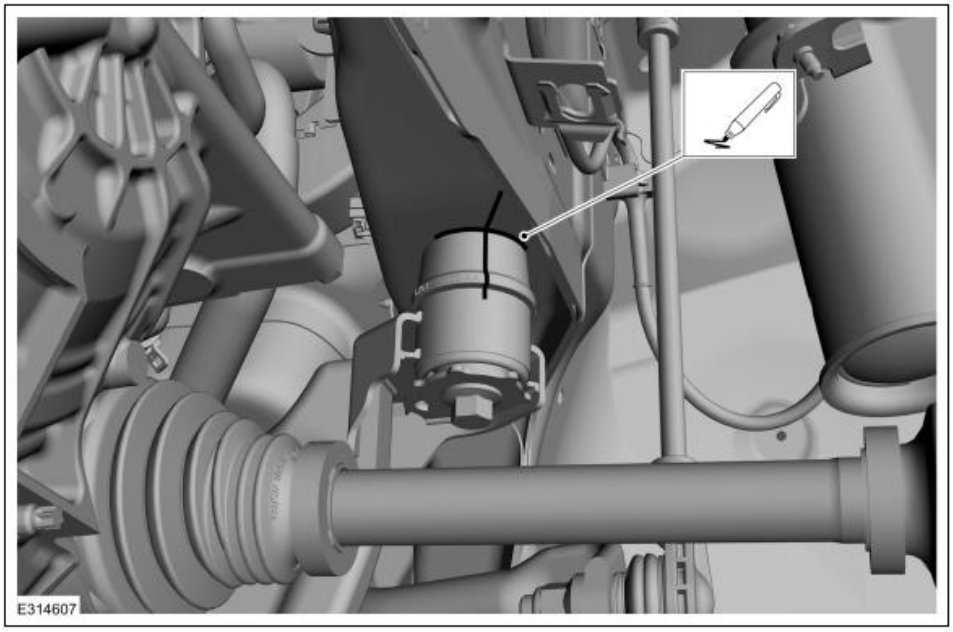
NOTE: If removal of the subframe is necessary/desired, follow these additional instructions.

****

On both sides.
Index-mark the subframe to the body.

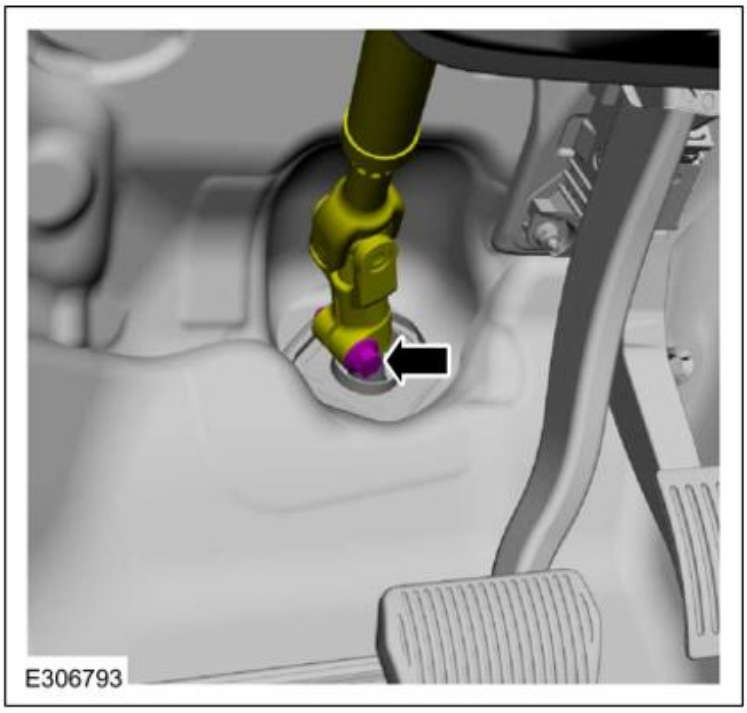


On both sides.
Index-mark the subframe to the body.

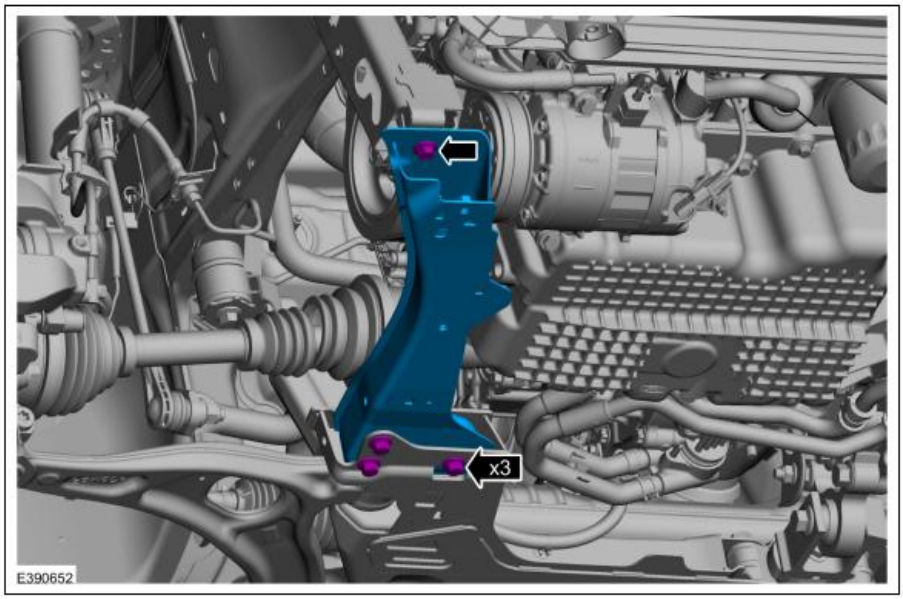


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Steering shaft coupler bolt.
Torque: 41 lb.ft (55 Nm)

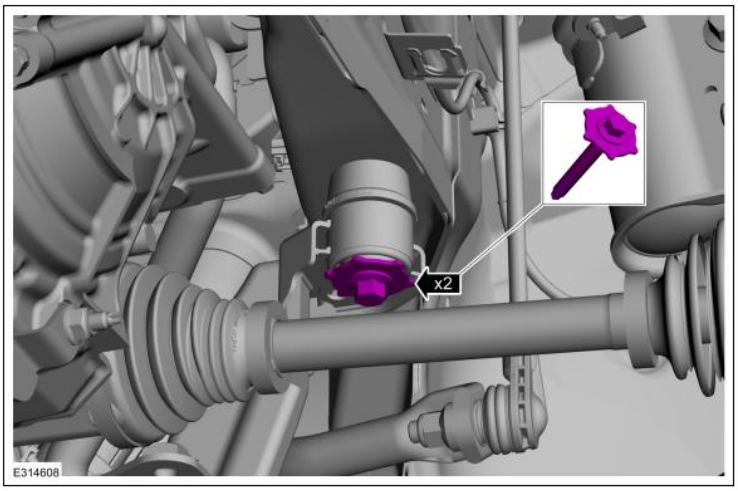


On both sides.
Install the front outer side member bolts.
Torque: 22 lb.ft (30 Nm)



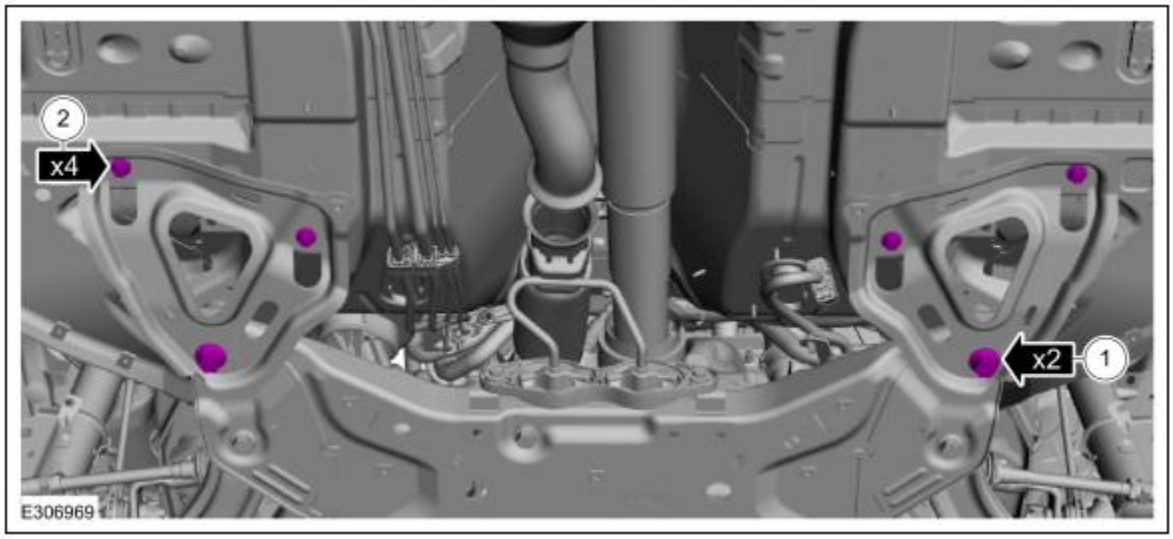
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On both sides.
Tighten the forward subframe bolts.
Torque: 85 lb.ft (115 Nm)



1. Tighten the bolts.
   Torque:
   Stage 1: 159 lb.ft (215 Nm)
   Stage 2: 120°

2. Tighten the bolts.
   Torque: 46 lb.ft (63 Nm)

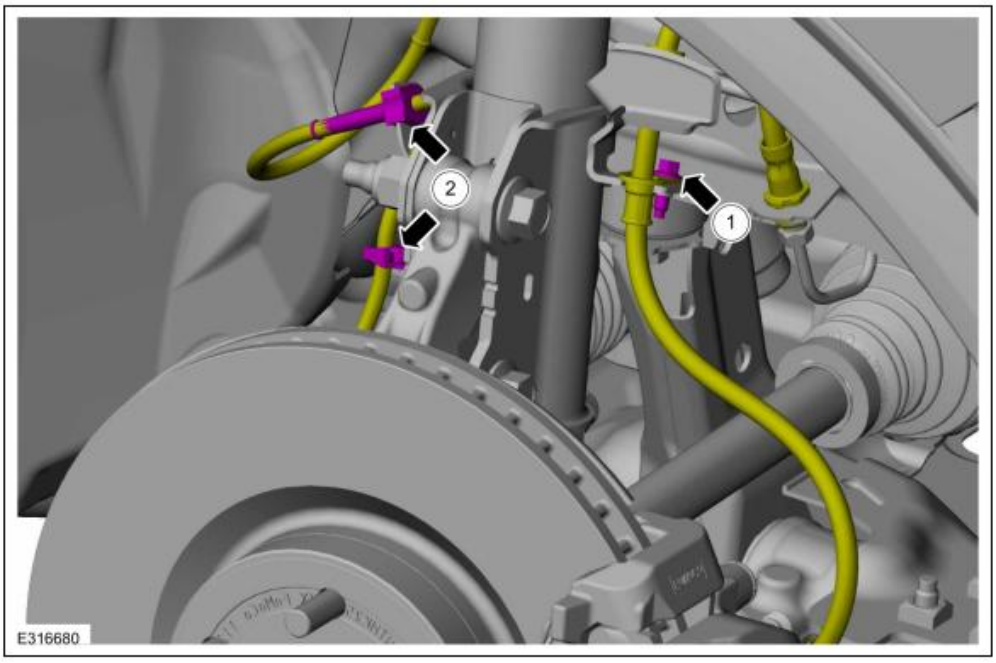


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21.

1. Remove the bolt and position aside the brake hose.
2. Unclip the 2 wire retainers and position aside the wheel speed sensor wiring harness.



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22.

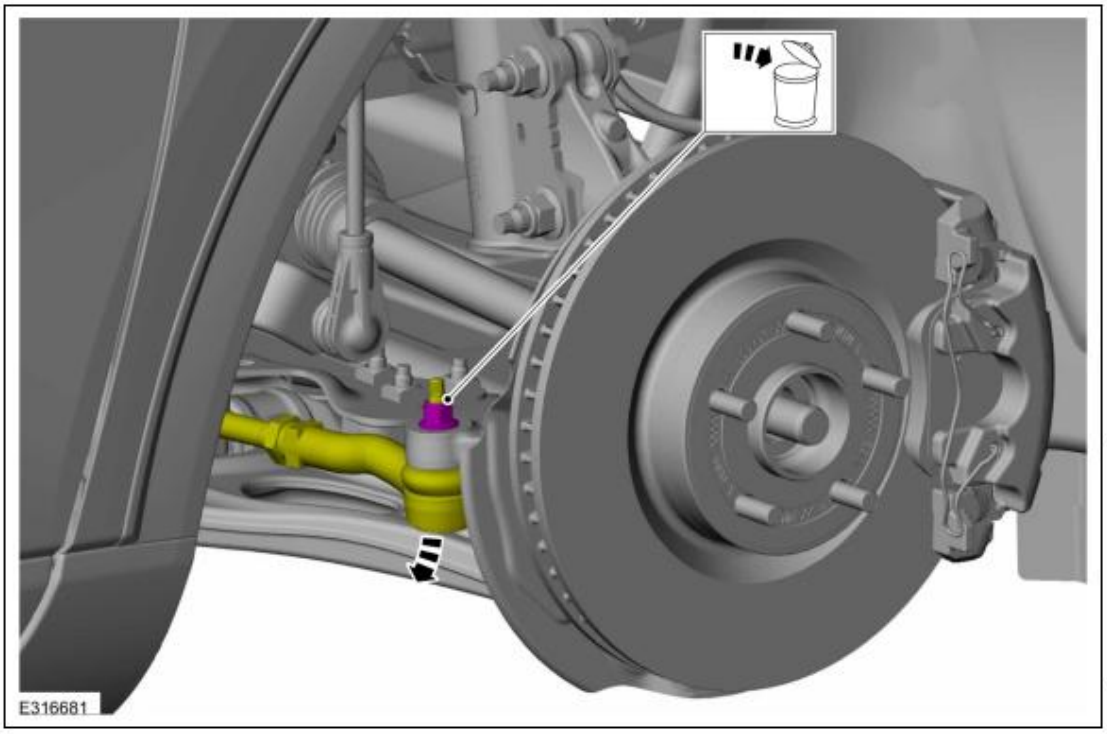
NOTICE: Do not use a hammer to separate the tie rod end from the wheel knuckle or damage to the wheel knuckle may result.

NOTICE: Use care when installing the tie rod separator or damage to the tie rod end boot may occur.

NOTE: *Use the hex-holding feature to prevent turning of the stud while removing the tie rod end nut.*

Remove and discard the tie rod end nut and separate the tie rod end from the wheel knuckle.
Use the General Equipment: Tie Rod End Remover

Torque: 35 lb.ft (48 Nm)



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23.

NOTICE: Do not use a prying device to open the slot in the knuckle to separate the lower ball joint from the knuckle assembly. Damage to the knuckle assembly may occur.

NOTICE: Do not use a prying device or separator fork between the ball joint and the wheel knuckle. Damage to the ball joint or ball joint seal may result. Only use the pry bar by inserting it into the lower arm body opening.

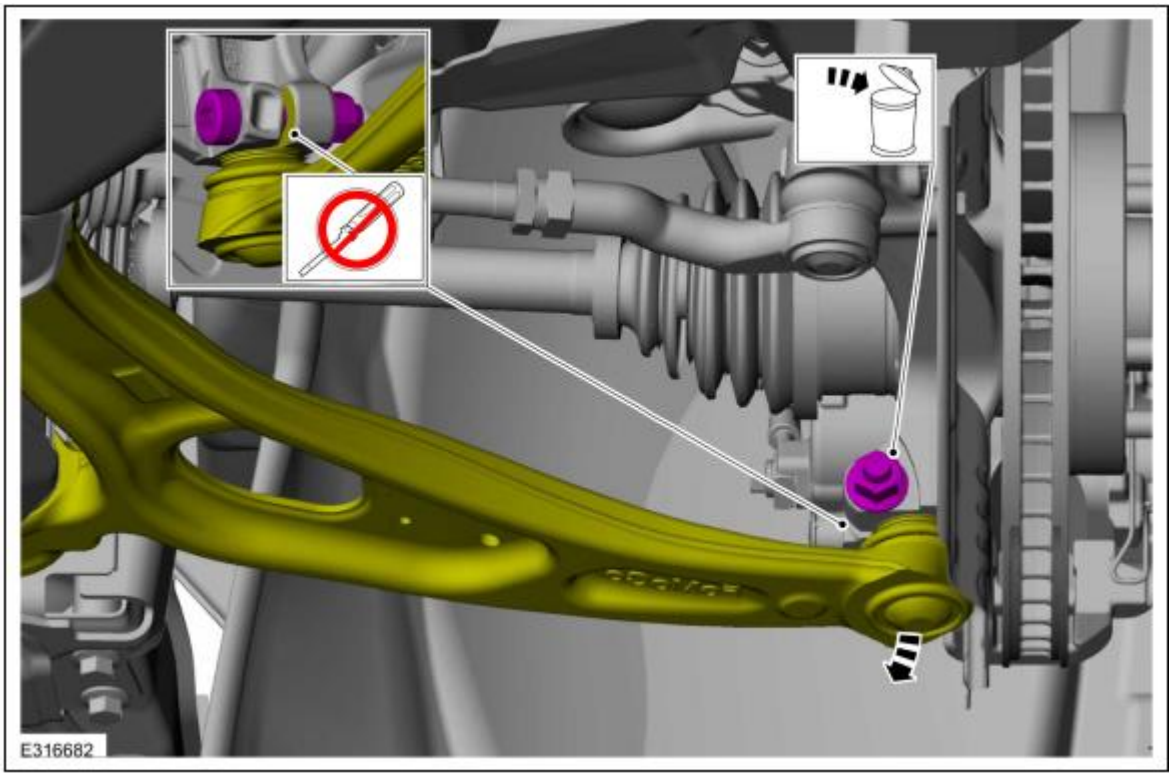
NOTICE: Use care when releasing the lower arm and wheel knuckle into the resting position or damage to the ball joint seal may occur.

NOTICE: Do not use power tools to remove or install the lower arm outboard nut. Damage to the ball joint or ball joint seal may occur.

NOTE: *Use the TORX PLUS® holding feature to prevent the ball stud from turning while removing or installing the lower arm outboard nut. Torx® and TORX PLUS® is a reg. tm of Acument Intellectual Properties, LLC.*

Remove and discard the ball joint pinch bolt and nut and separate the lower arm from the wheel knuckle.

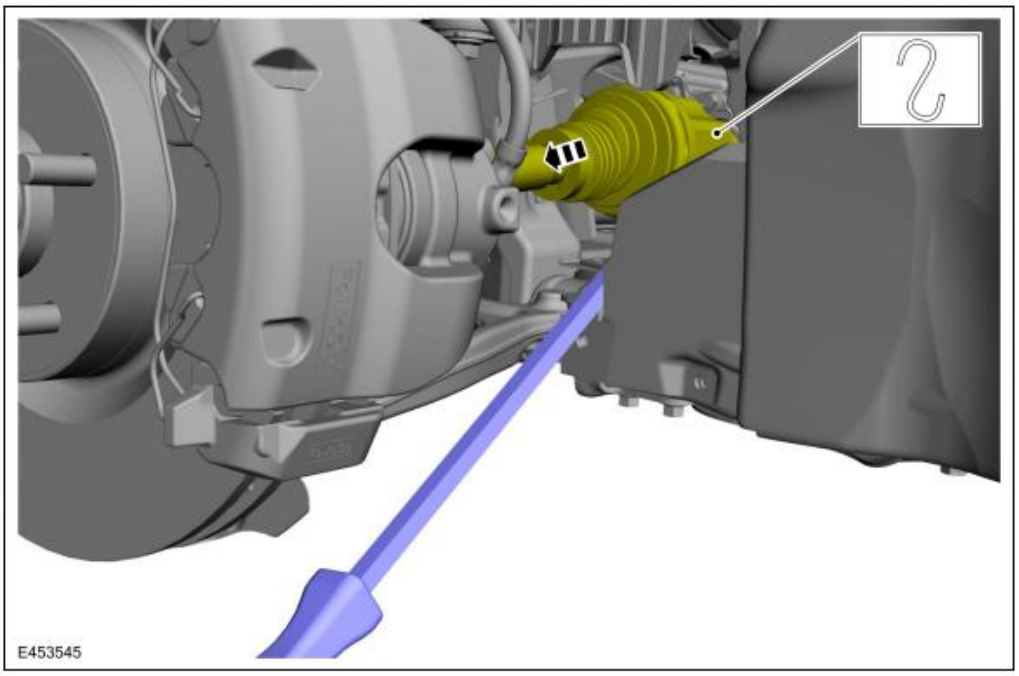
Torque: 81 lb.ft (110 Nm)



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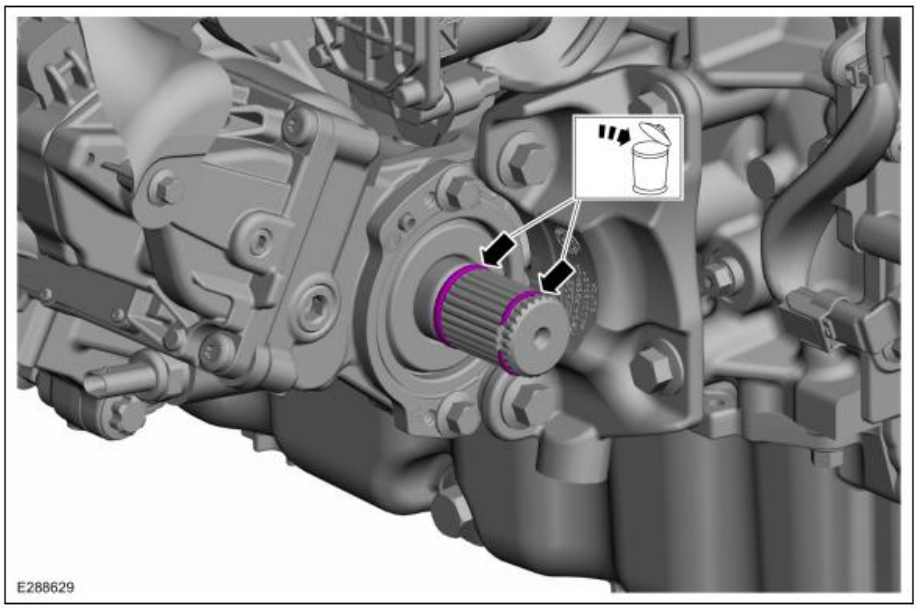
24.

Detatch the halfshaft from power transfer unit end and support using a hook at a safe angle.



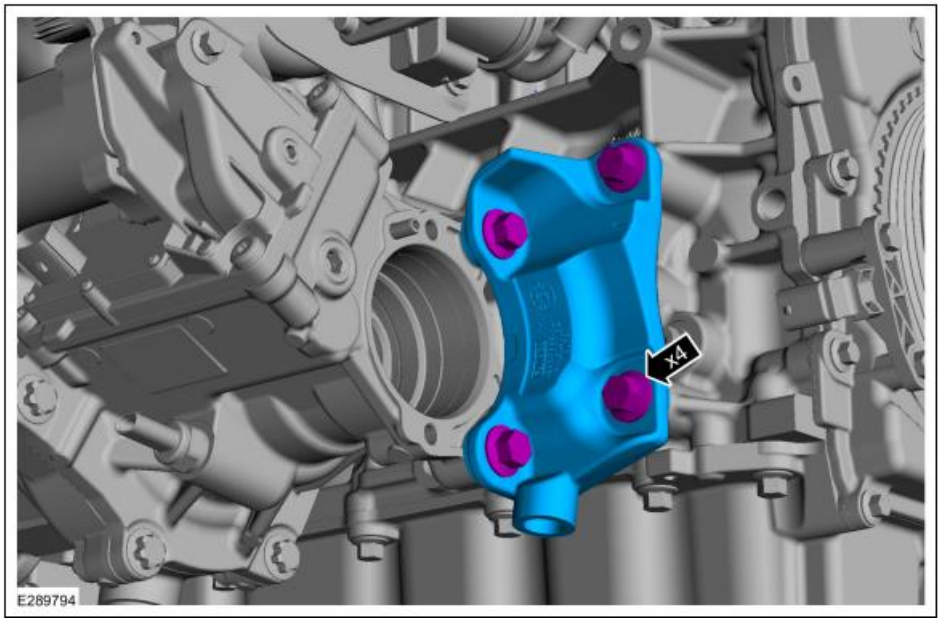
25.

Remove and discard the circlip and O-ring seal from the intermediate shaft.

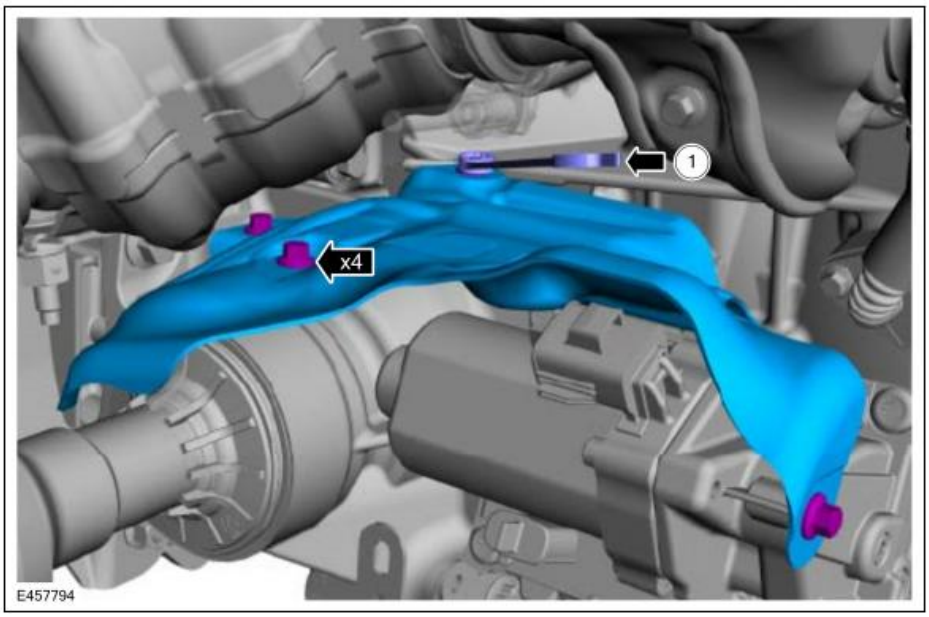


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26. Remove the bolts and the PTU support bracket. *Torque*: 35 lb.ft (48 Nm)

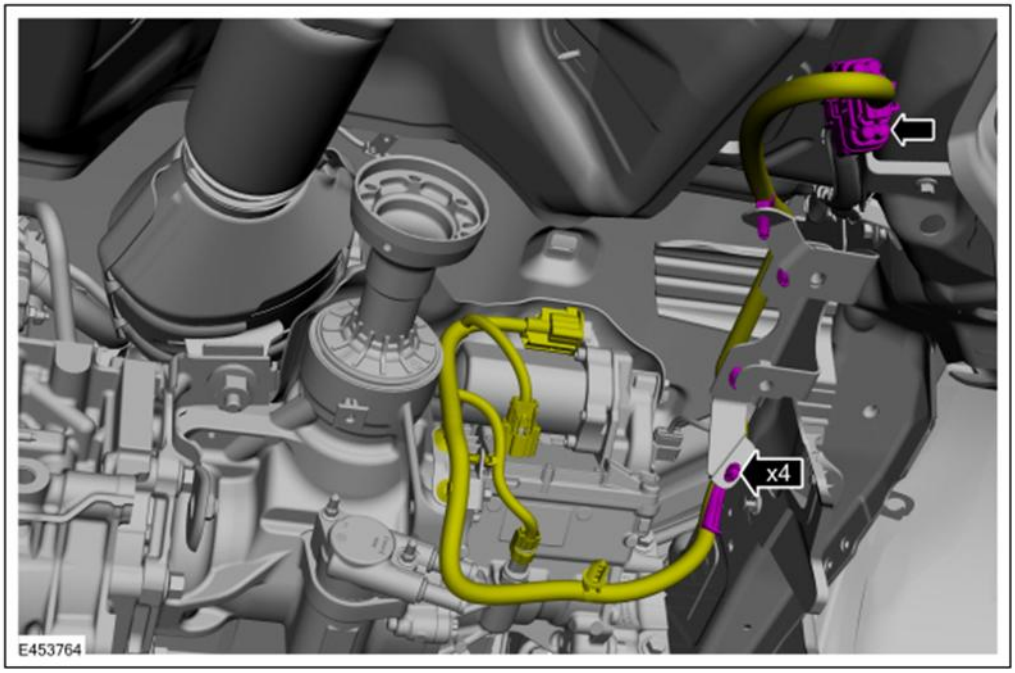


27. Remove the bolts and the heat shield. Front top bolt can be accessed with a ratcheting wrench. *Torque*: 89 lb.in (10 Nm)

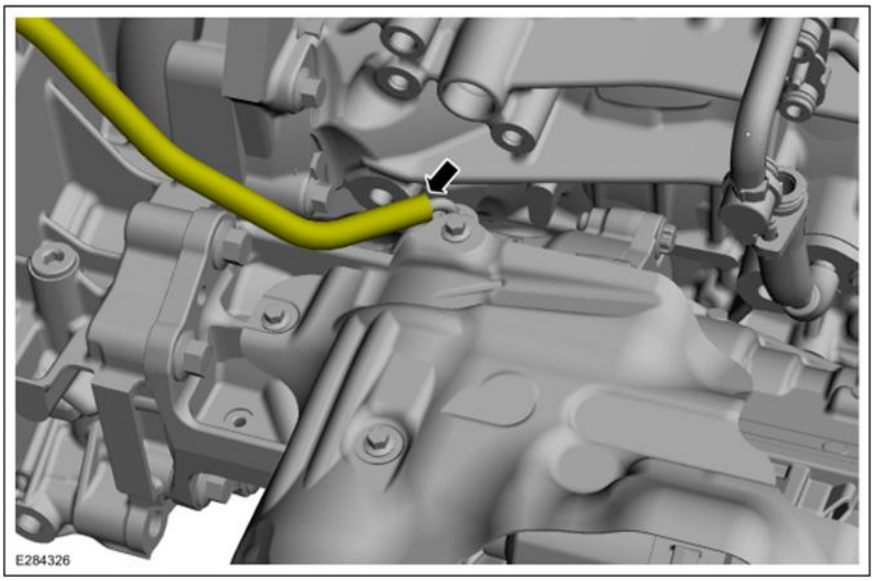


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28. Disconnect wiring connectors from PTU.



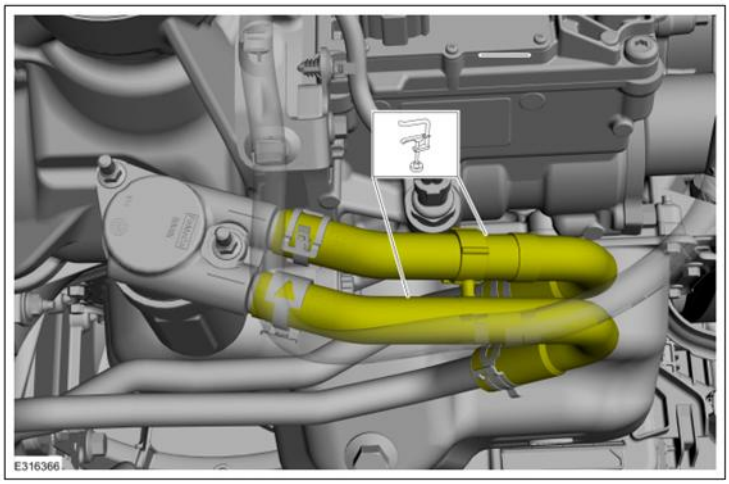
29. Disconnect and position aside the PTU vent hose

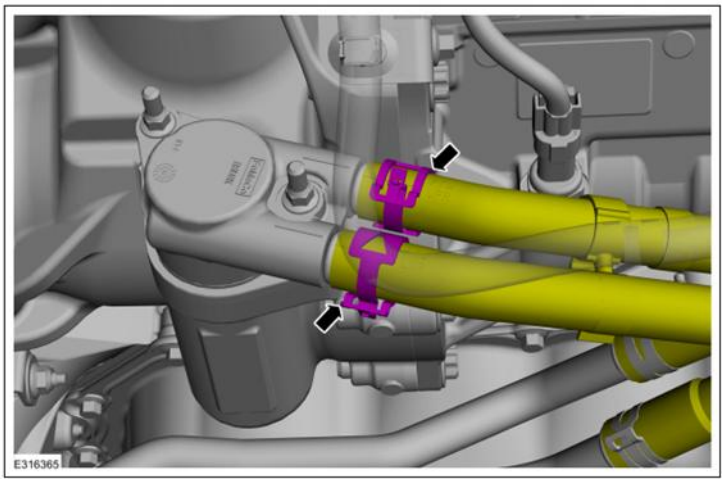


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30.

- Clamp the hoses.
- Release the hose clamps and position aside the PTU cooling system hoses.



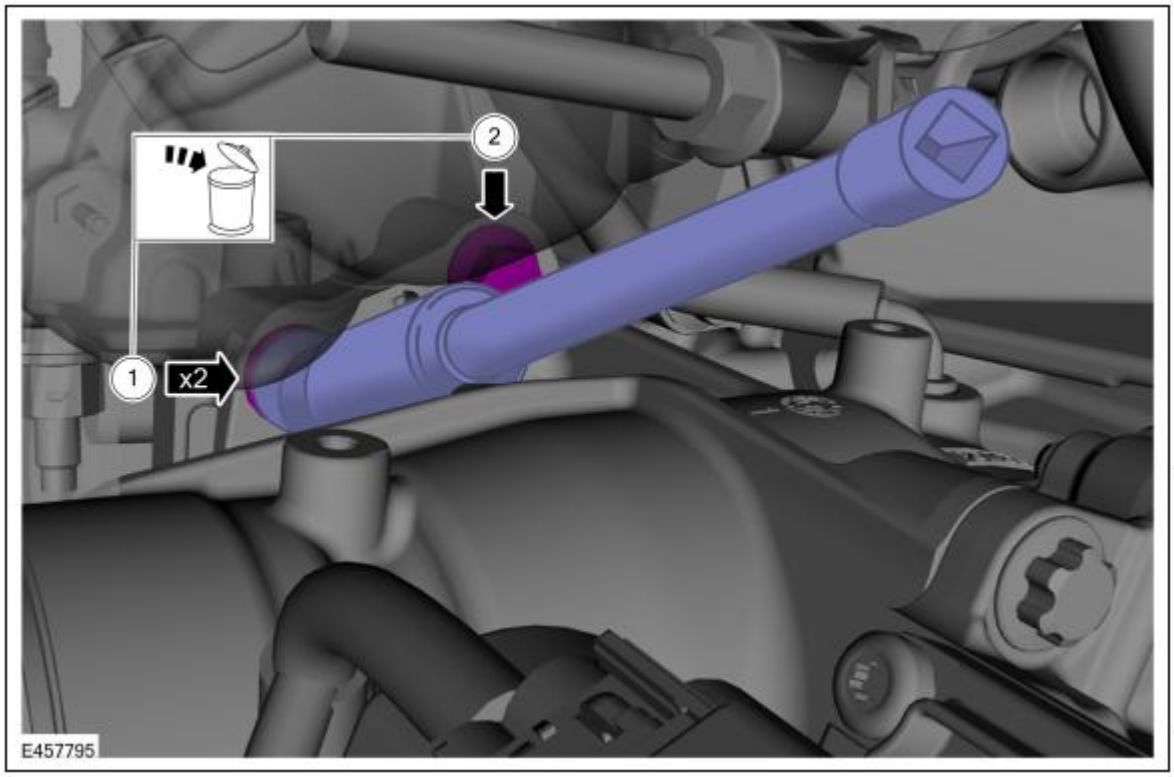


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31.

Remove and discard the top PTU bolts.

1. Front bolt can be accessed using a 3/8 drive extension and an impact swivel socket.
2. Rear bolt can be accessed using a 3/8 drive extension and an impact swivel socket.

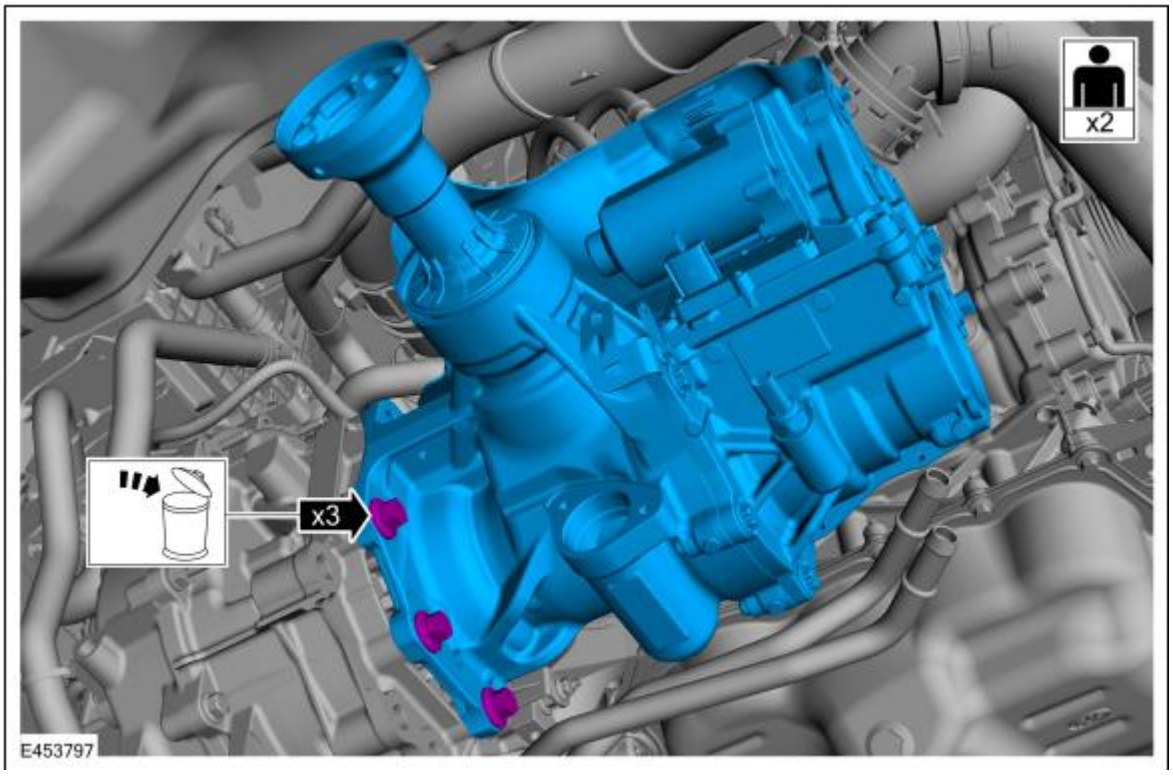


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32.

NOTICE: This is a tight fit, use care to not damage the transmission and PTU mating surfaces.

- Remove and discard the bolts.
- Remove the PTU.
- *Torque*: 76 lb.ft (103 Nm)



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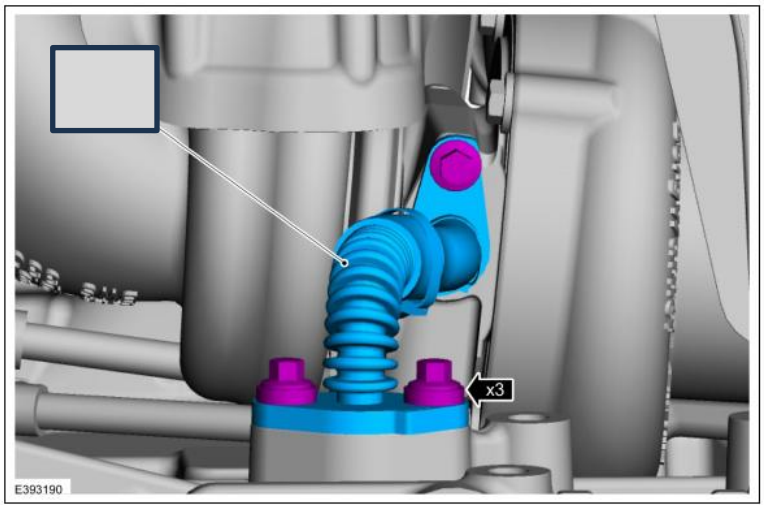
33.

- Remove the turbocharger oil return tube. *Torque*: 97 lb.in (11 Nm)

NOTICE: Do not use a metal brush, damage to sealing area will result in leaks.

- Replace both O-rings. 6N652E on turbo side and 6N652F on cyl block side.

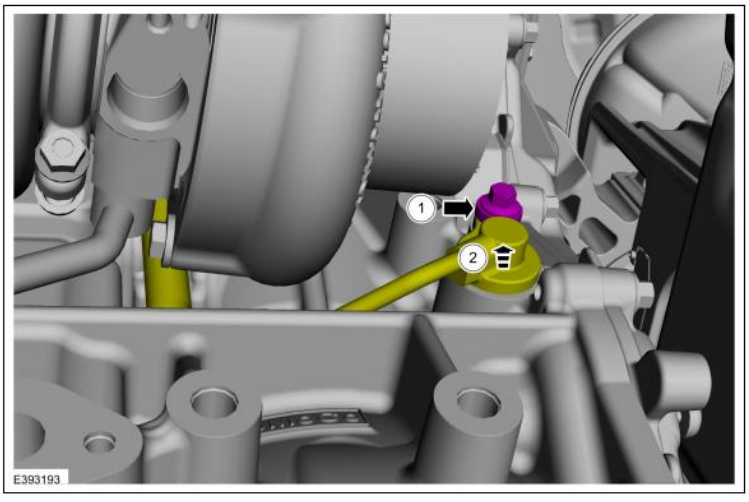
NOTE: *O-rings must be lubricated with clean engine oil upon reassembly.*



34.

- Remove the turbocharger oil supply tube. *Torque*: 97 lb.in (11 Nm)
- Replace both O-rings. 6N652D on turbo side and 6N652C on cyl block side.
- Replace 6C683 oil filter assembly

NOTE: *O-rings must be lubricated with clean engine oil upon reassembly.*



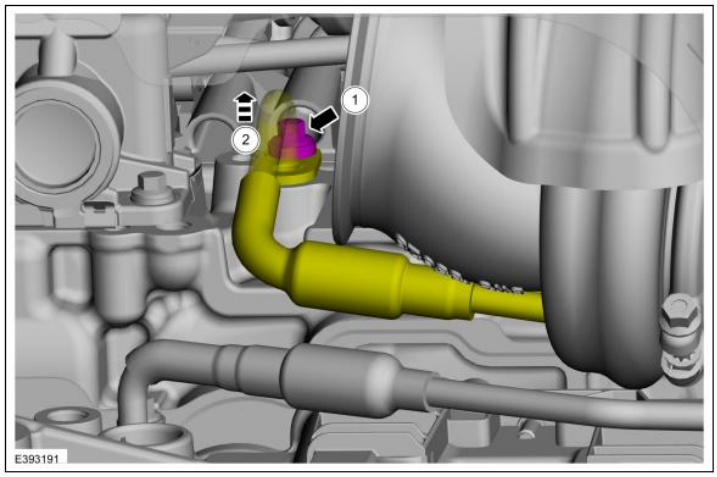
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35.

- Remove the turbocharger coolant supply tube. *Torque*: 97 lb.in (11 Nm)
- Replace both O-rings. 6N652A on turbo side and 6N652D on cyl block side. 6N652B O-ring in center of coolant tube.

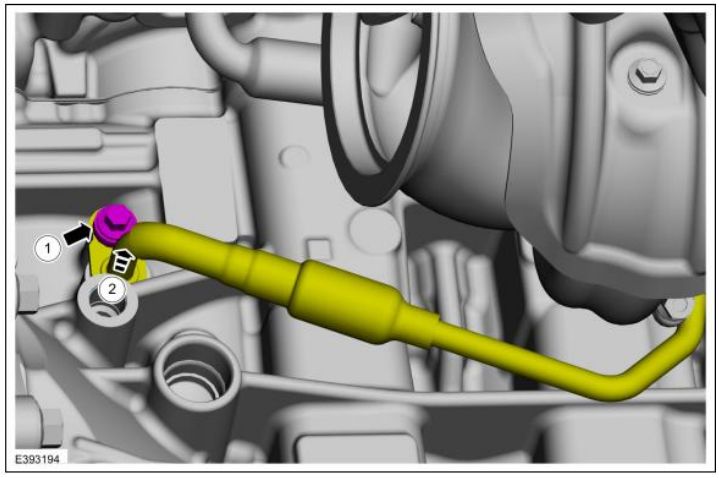
NOTE: *O-rings must be lubricated with clean engine oil upon reassembly.*



36.

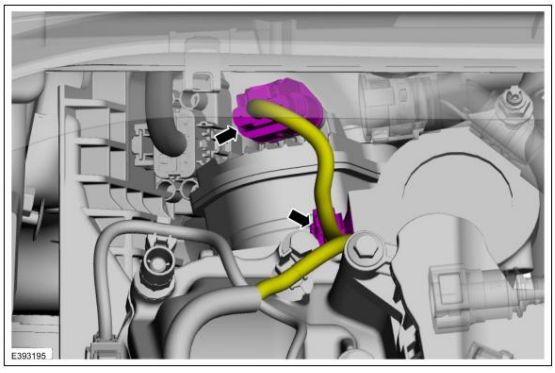
- Remove the turbocharger coolant return tube. *Torque*: 97 lb.in (11 Nm)
- Replace both O-rings. 6N652A on turbo side and 6N652D on cyl block side. 6N652B O-ring in center of coolant tube.

NOTE: *O-rings must be lubricated with clean engine oil upon reassembly.*



37.

- Detach the retainer and disconnect the turbocharger electrical connector from the wastegate actuator.



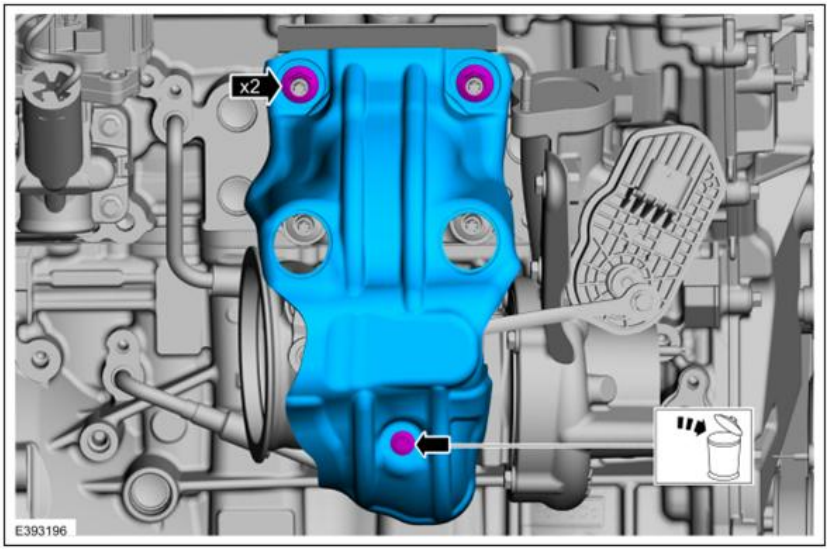
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38.

- Remove the two turbocharger mounting nuts and lower heatshield bolt.

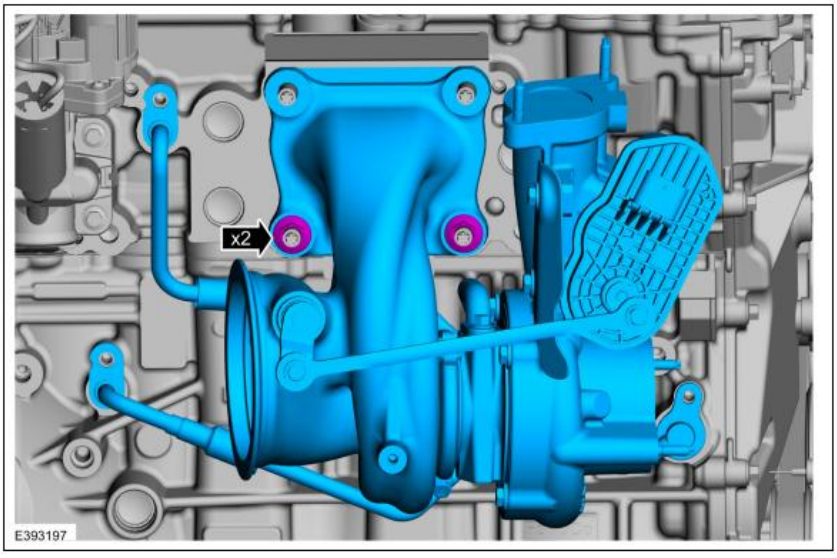
Torque:
Nuts: 39 lb.ft (53 Nm)
Bolt: 97 lb.in (11 Nm)

- Remove the heatshield and replace as necessary.



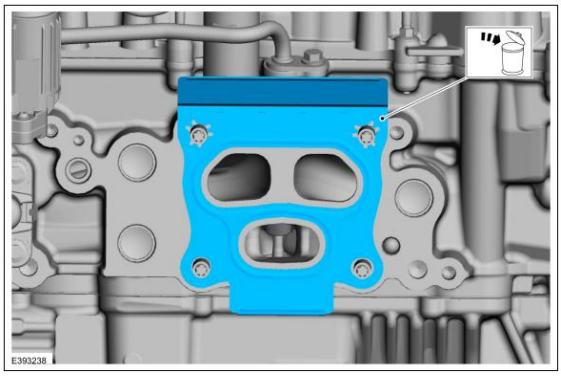
39.

- Remove the two remaining turbocharger mounting nuts.
- Remove turbocharger assembly.



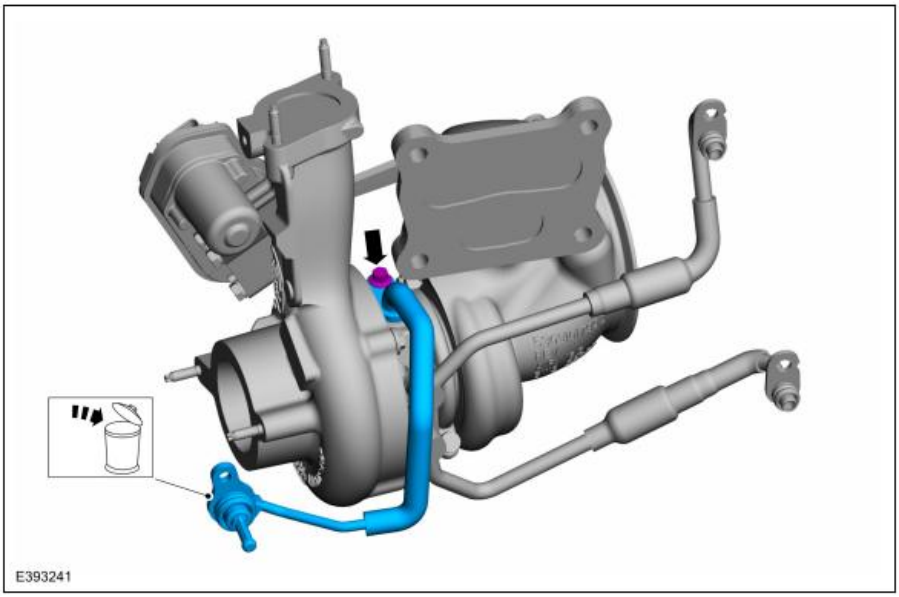
40.

- Remove turbocharger gasket
- DO NOT REUSE gasket.
- Replace exh studs as necessary.
  Torque: 159 lb.in (18 Nm)



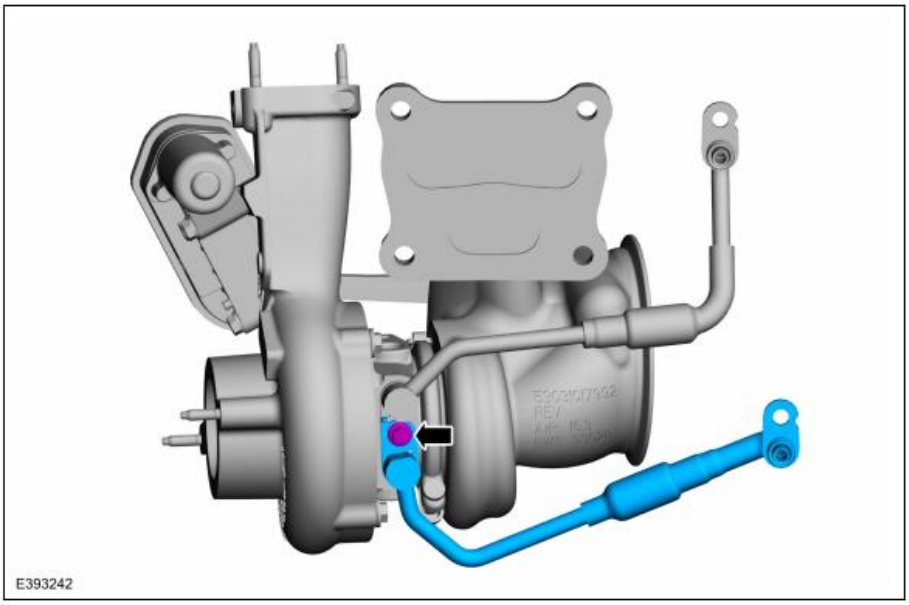
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41.



- Remove turbocharger oil supply and coolant tubes from turbocharger.
  Torque: 97 lb.in (11 Nm)

- Replace O-rings per reference chart on pg.1
- Replace oil feed filter
- Transfer tubes over to new turbocharger and begin installation.



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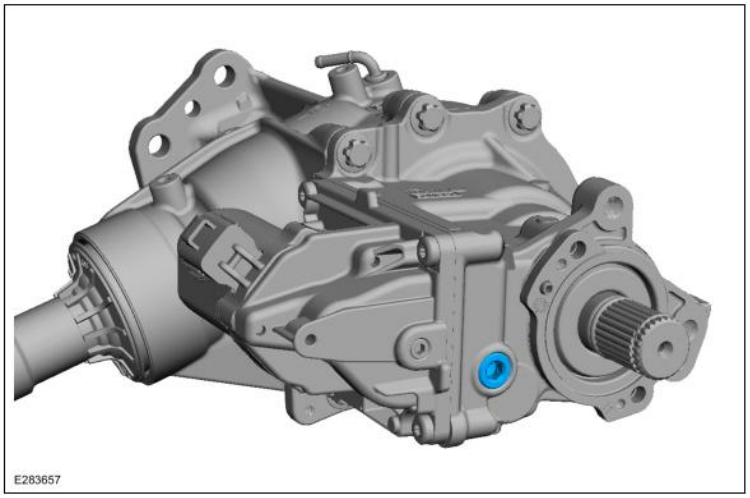
After installation is complete, it will be necessary to check the coolant, engine oil, PTU oil, and transmission fluid levels.

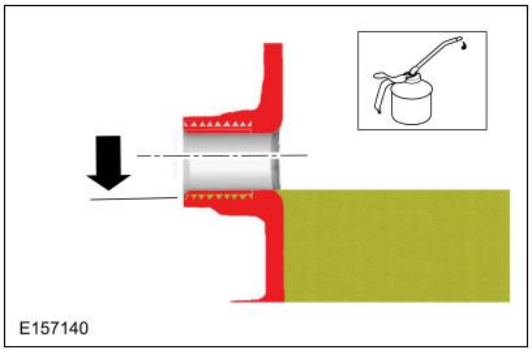
Engine oil specification: GF-6 SAE 5W-30
Coolant specification: Motorcraft® Yellow Concentrated Antifreeze/Coolant / VC-13-G
Motorcraft® Yellow Prediluted Antifreeze/Coolant / VC-13DL-G
Transmission fluid specification: Motorcraft® MERCON® ULV Automatic Transmission Fluid / XT-12-QULV
PTU fluid specification: Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant / XY-75W85-QL

PTU fluid level check procedure

Remove the PTU fill plug. Fill the PTU with clean fluid, level with the fill plug opening.

Install the PTU fill plug.
Torque:
32.5Nm +/- 7.5Nm

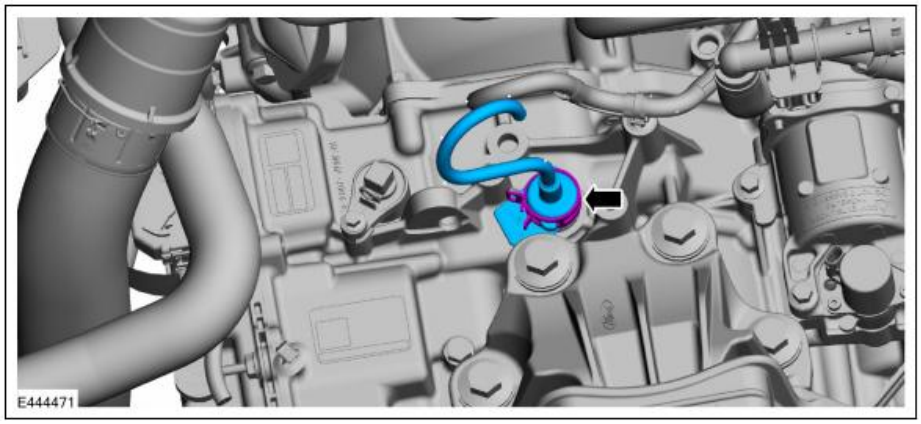




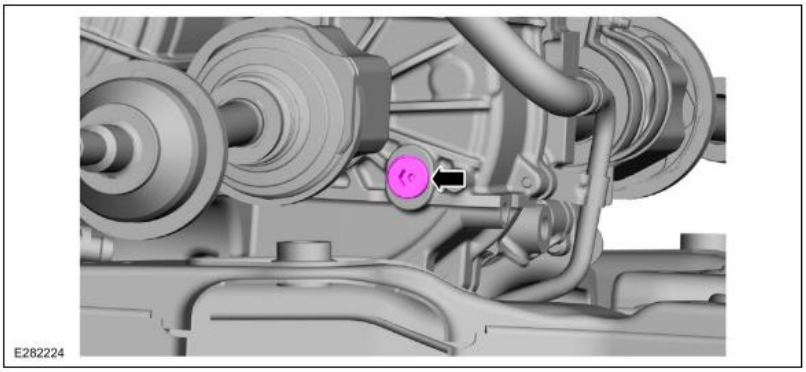
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Transmission fluid level check procedure

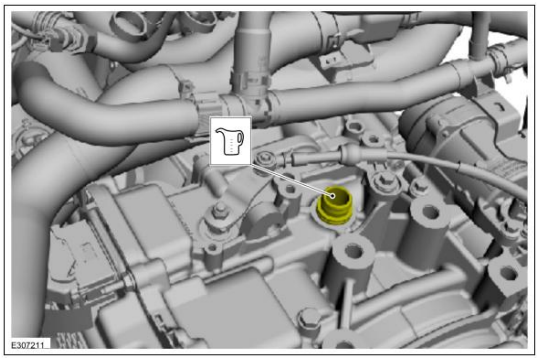
Remove the transmission vent.



With the engine running in PARK, remove the transmission fluid leveling plug.



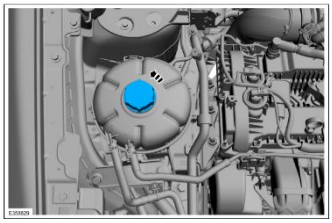
Add clean transmission fluid in increments of 0.25L (0.5 pt) until the transmission fluid is even with the transmission fluid leveling plug hole.



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Coolant Vacuum filling and Bleeding

Remove the pressure relief cap.



Install a vacuum cooling system filler and follow the manufacturer's instructions to fill and bleed the system.

Fill the degas bottle to the MAX FILL line.

Install the degas bottle cap until it contacts the hard stop.

Turn the climate control system off.

Start the engine and increase the engine speed to 3,500 rpm and hold for 30 seconds.

Turn the engine off and wait for 1 minute to purge any large air pockets from the cooling system.

WARNING: Always allow the engine to cool before opening the cooling system. Do not unscrew the coolant pressure relief cap when the engine is operating or the cooling system is hot. The cooling system is under pressure; steam and hot liquid can come out forcefully when the cap is loosened slightly. Failure to follow these instructions may result in serious personal injury.

Check the engine coolant level in the degas bottle and, if necessary, fill to the top of the MAX FILL line.

Start the engine and let it idle until the engine reaches normal operating temperature and the thermostat is fully open. A fully open thermostat is verified by the cooling fan cycling on at least once.

If necessary, start the engine. Increase the engine speed to 3,500 rpm and hold for 30 seconds.

Allow the engine to idle for 30 seconds.

Turn the engine off for 1 minute.

Check the engine coolant level in the degas bottle and, if necessary, fill to the top of the MAX FILL line on the degas bottle.

Install the pressure relief cap until it contacts the hard stop.