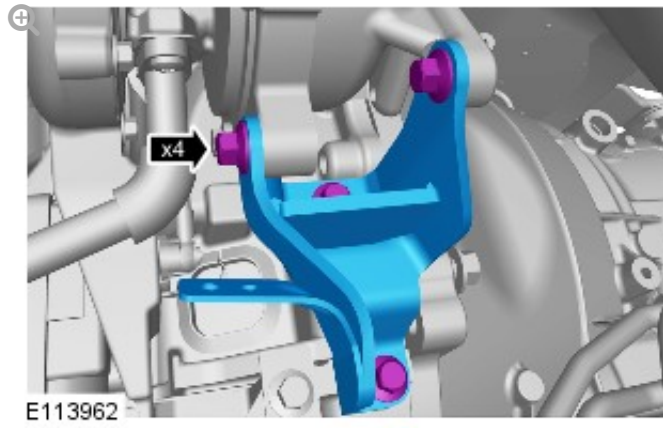
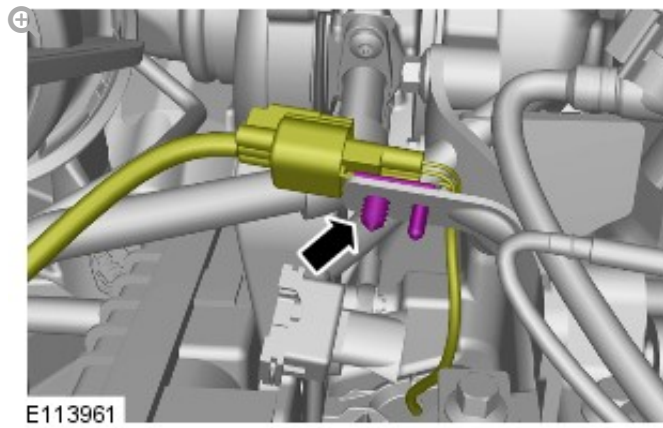


24.

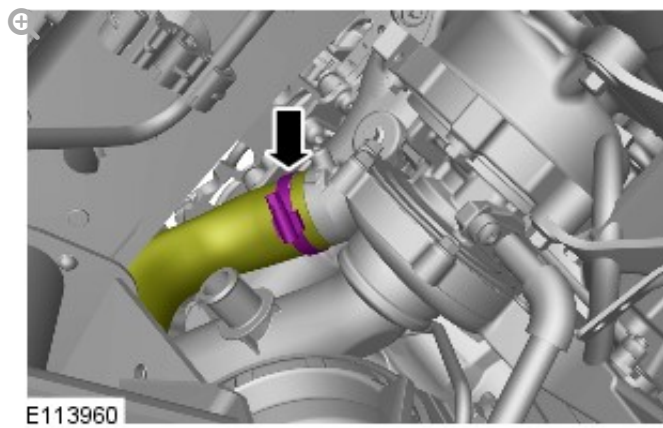


Torque: 33 Nm

25.

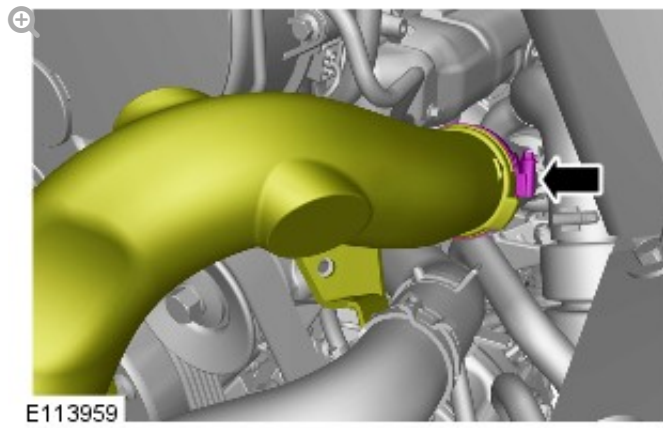


26.



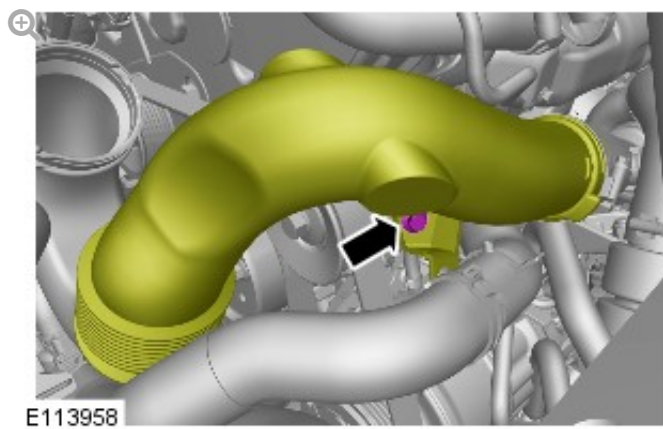
Torque: 7 Nm

27.



Torque: 7 Nm

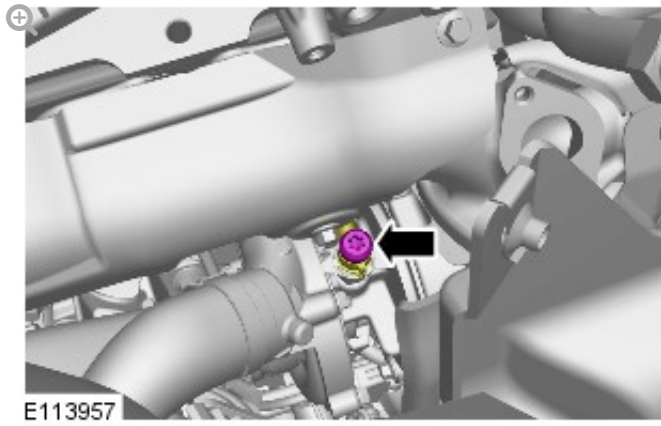
28.



Torque: 10 Nm

29.

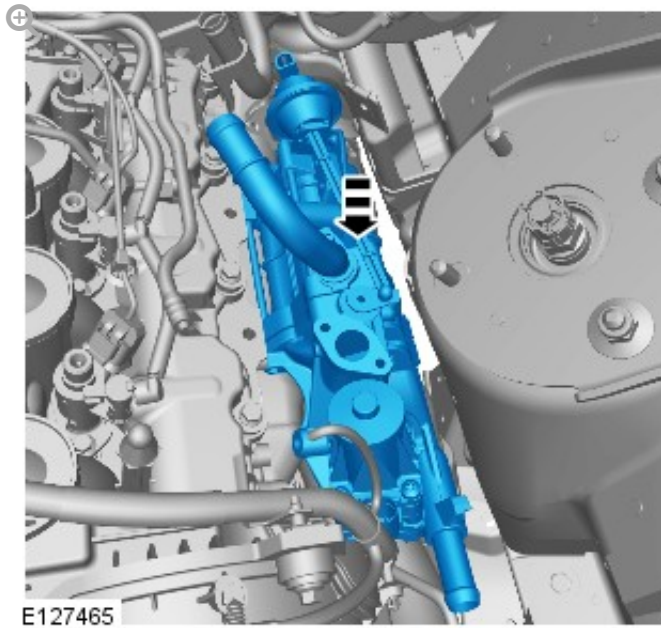
Make sure that a new sealing washer is installed.



Torque: 30 Nm

30. Refer to: [Diesel Particulate Filter](#) (309-00A Exhaust System - TDV6 3.0L Diesel, Removal and Installation).

31.



32. Refer to: [Glow Plugs](#) (303-07B Glow Plug System - TDV6 3.0L Diesel, Removal and Installation).
33. Refer to: [Left Camshaft](#) (303-01A Engine - TDV6 3.0L Diesel, Removal and Installation).
34. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

ENGINE - TDV6 3.0L DIESEL

LEFT ENGINE MOUNT [G1272044]

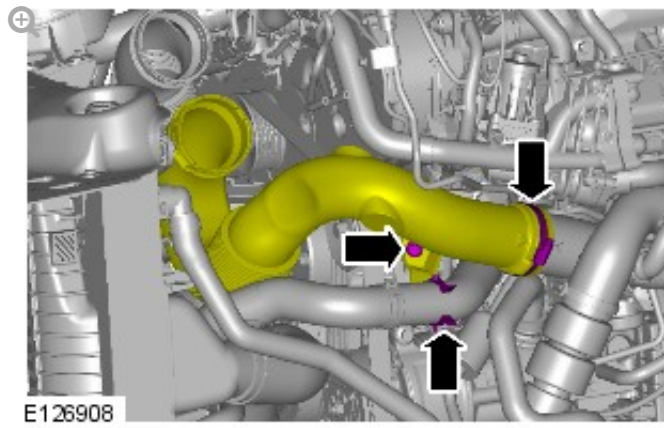


REMOVAL

Some variation in the illustrations may occur, but the essential information is always correct.

1. Refer to: [Air Cleaner](#) (303-12A Intake Air Distribution and Filtering - TDV6 3.0L Diesel, Removal and Installation).
- 2.

Engine shown removed for clarity.



Torque: 10 Nm

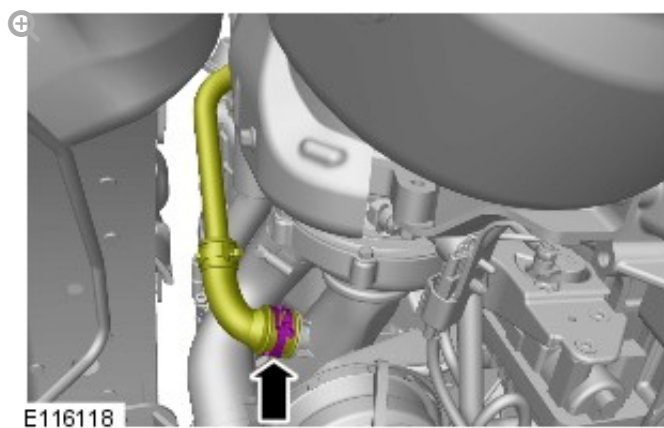
3.

Do not work on or under a vehicle supported only by a jack.
Always support the vehicle on safety stands.

Raise and support the vehicle.

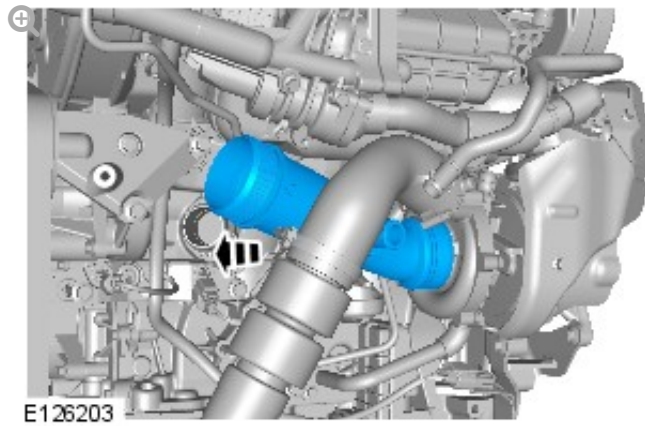
4. Refer to: [Air Deflector](#) (501-02 Front End Body Panels, Removal and Installation).

5.



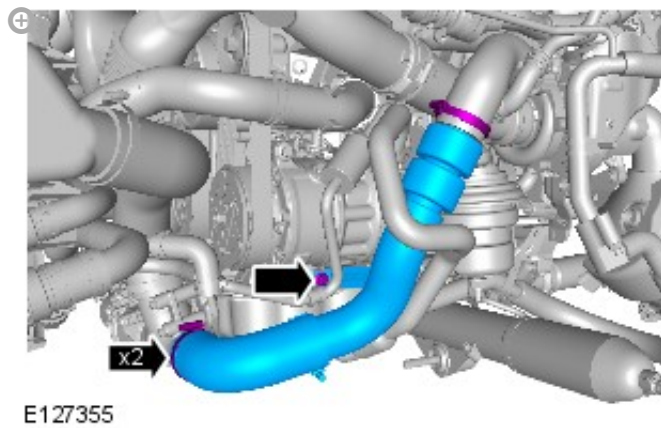
6.

Engine shown removed for clarity.



7.

Engine shown removed for clarity.

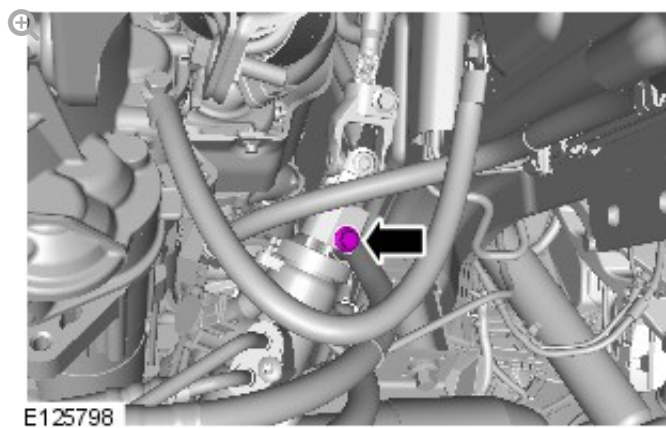


Torque: **10 Nm**

8.

Note the fitted position of the component prior to removal.

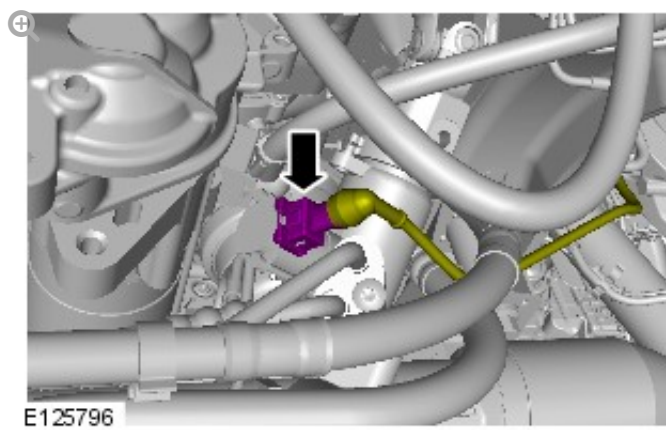
RHD shown, LHD is similar.



Torque: 35 Nm

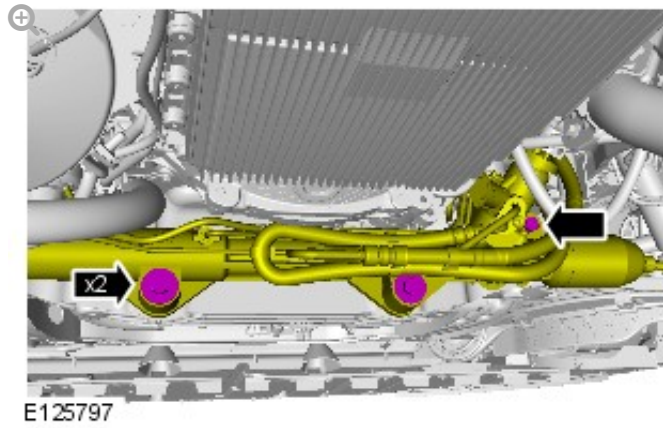
9.

RHD shown, LHD is similar.



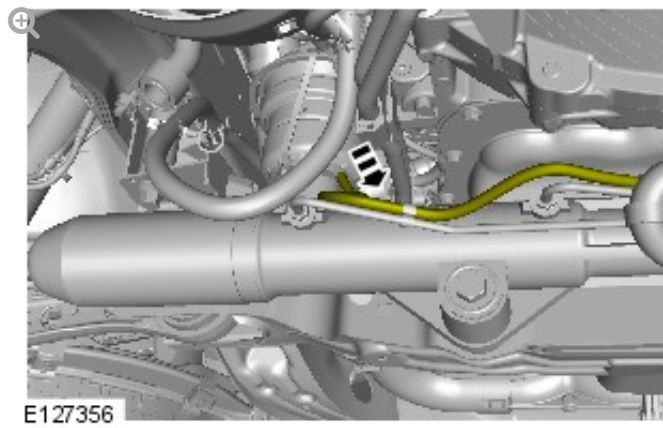
10.

- Support as necessary.
- RHD shown, LHD is similar.

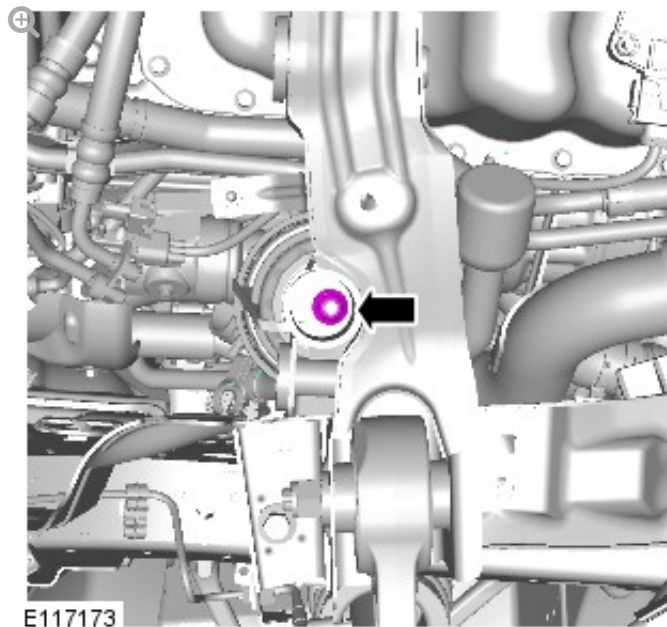


Torque: 100 Nm

11.



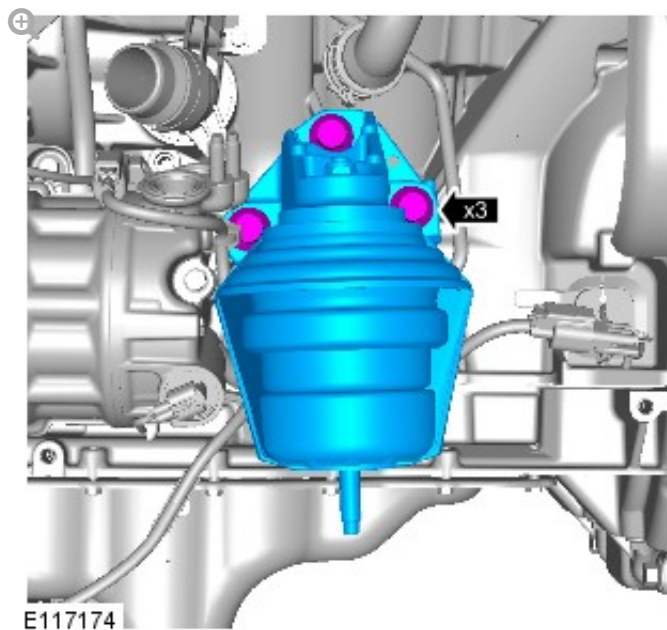
12.



Torque: 63 Nm

13. Using a suitable hydraulic jack, raise and support the engine.

14.



Torque: 90 Nm

15.

Note the fitted position of the component prior to removal.

- Position and secure component in a bench vice fitted with soft jaws.
- Do not disassemble further if the component is removed for access only.



E117175

Torque: **48 Nm**

INSTALLATION

1. To install, reverse the removal procedure.

ENGINE - TDV6 3.0L DIESEL

LEFT EXHAUST MANIFOLD

[G1272046]



REMOVAL

Some variation in the illustrations may occur, but the essential information is always correct.

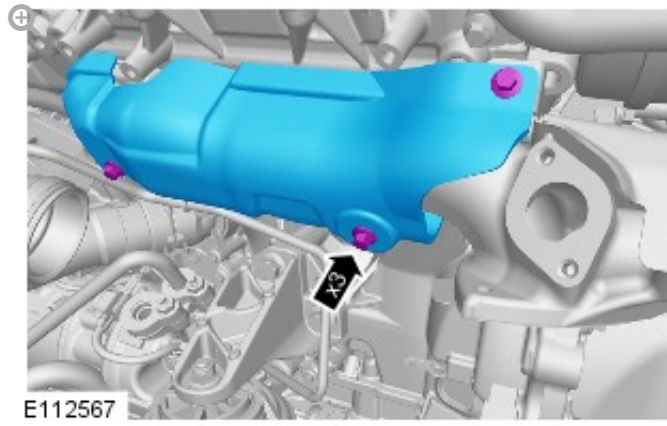
1.

Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

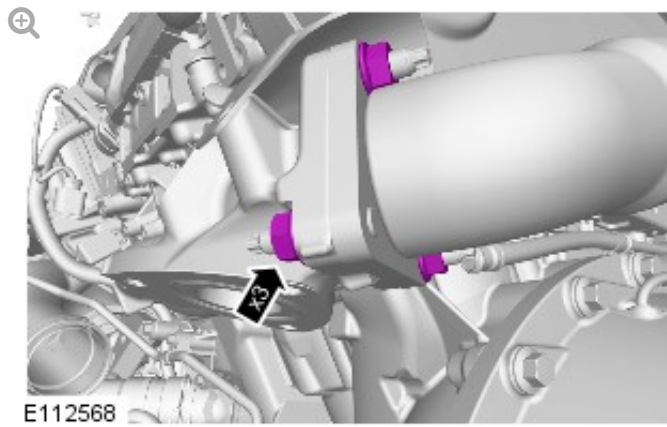
2. Refer to: [Left Turbocharger](#) (303-04B Fuel Charging and Controls - Turbocharger - TDV6 3.0L Diesel, Removal and Installation).

3.



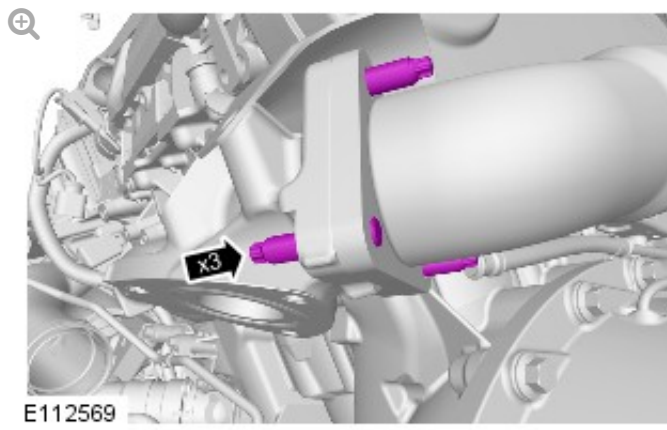
4.

Discard the nuts.



5.

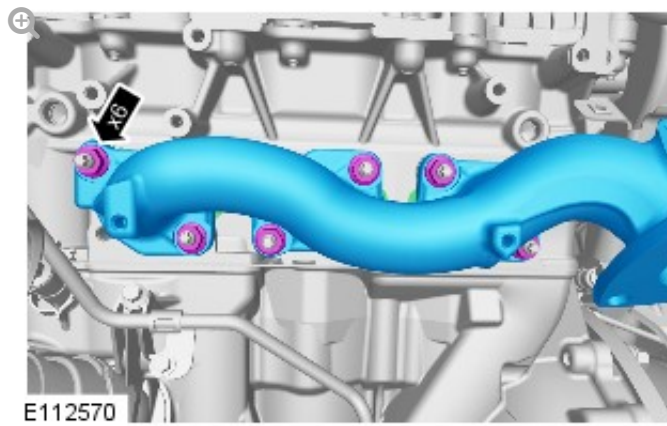
Discard the studs.



6.

Discard the nuts.

Discard the gasket.



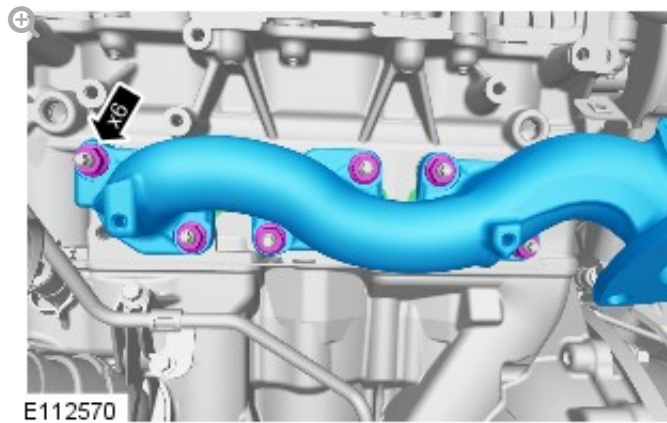
INSTALLATION

1.

Make sure that new nuts are installed.

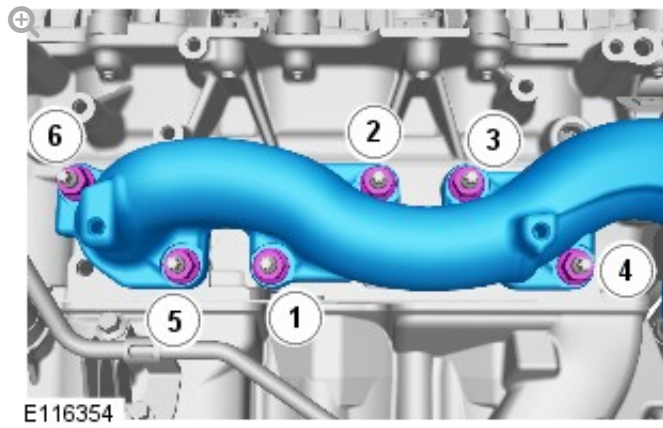
Install the nuts finger tight before final tightening.

Install a new gasket.



2.

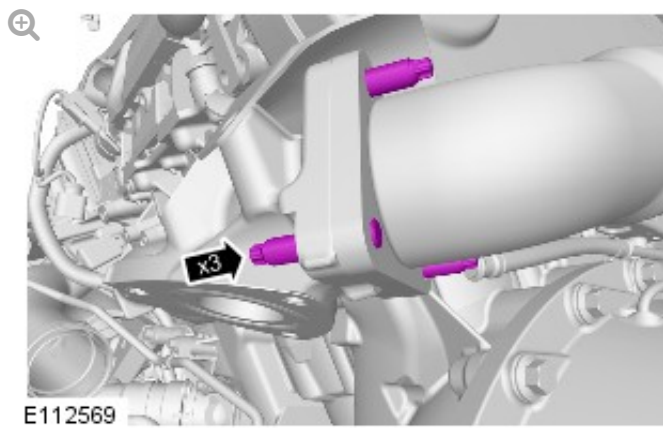
Tighten the bolts in the indicated sequence.



Torque: **28 Nm**

3.

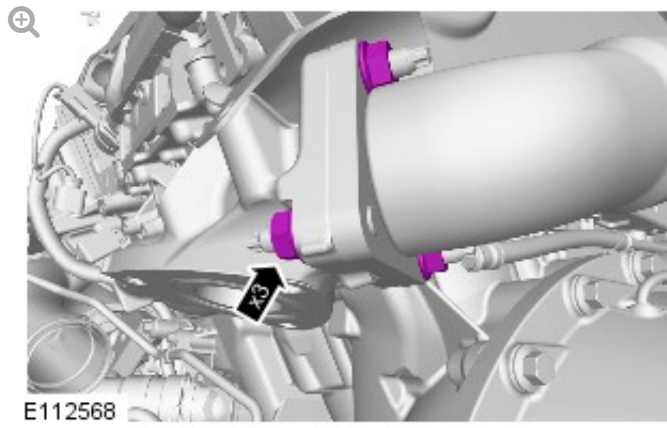
Install new studs.



Torque: **13 Nm**

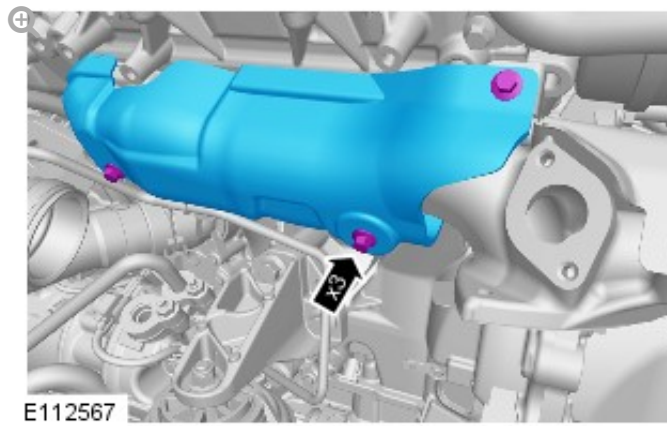
4.

Make sure that new nuts are installed.



Torque: **24 Nm**

5.



Torque: **10 Nm**

6. Refer to: [Left Turbocharger](#) (303-04B Fuel Charging and Controls - Turbocharger - TDV6 3.0L Diesel, Removal and Installation).

ENGINE - TDV6 3.0L DIESEL

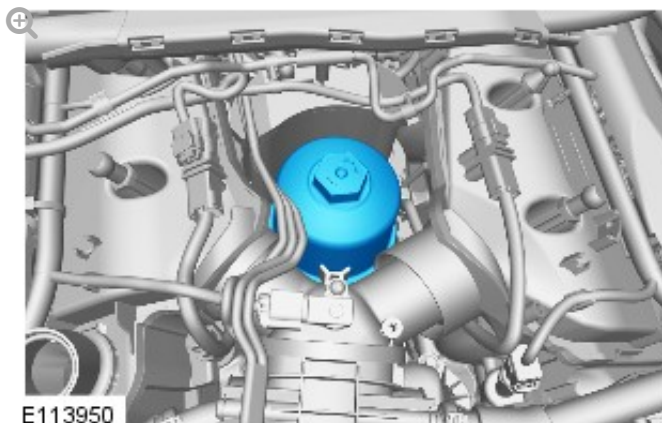
OIL FILTER ELEMENT [G1272048]



REMOVAL

1. Refer to: [Engine Cover - TDV6 3.0L Diesel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

2.



- Rotate the oil filter element housing six complete turns counter-clockwise.
- Allow the engine oil to drain from the oil filter element housing for two minutes.
- Remove the oil filter element housing.

3.

Remove and discard the O-ring seal.



E113951

INSTALLATION

1.

A new O-ring seal is to be installed.

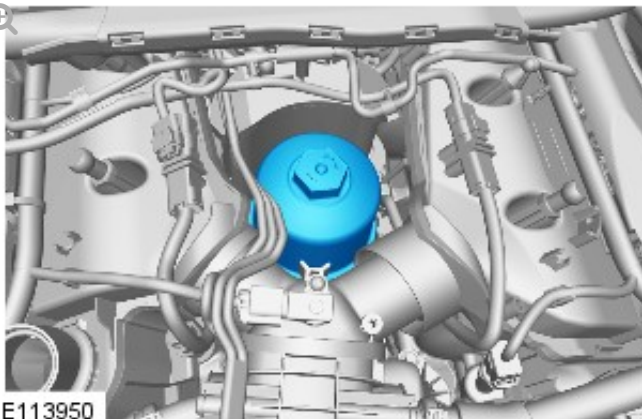
Lubricate the O-ring seal with clean engine oil.



E113952

2.

Make sure that only a hand wrench and socket is used to remove and install the oil filter cap.



E113950

Torque: **27 Nm**

3. Refer to: [Engine Cover - TDV6 3.0L Diesel](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).
4. Start and run the engine.
5. Check and top-up the engine oil.

ENGINE - TDV6 3.0L DIESEL

OIL PAN [G1272049]



REMOVAL

1. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

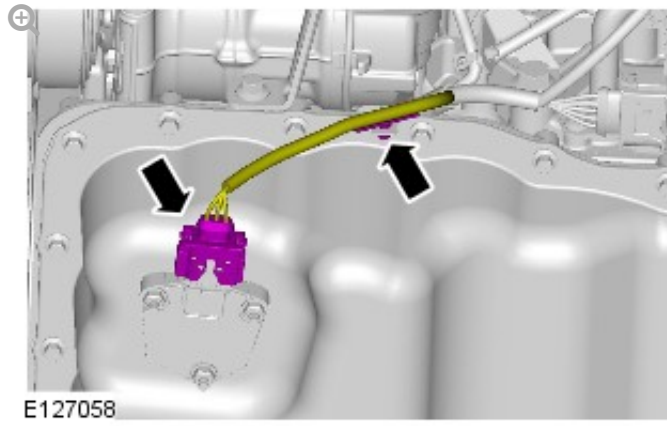
2.

Make sure to support the vehicle with axle stands.

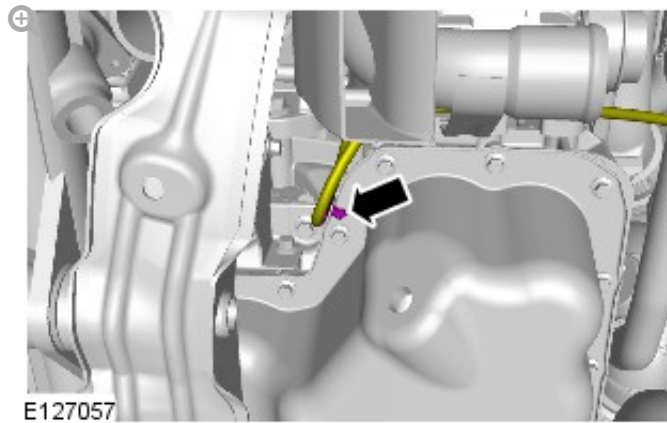
Raise and support the vehicle.

3. Refer to: [Engine Oil Draining and Filling](#) (303-01A Engine - TDV6 3.0L Diesel, General Procedures).

4.



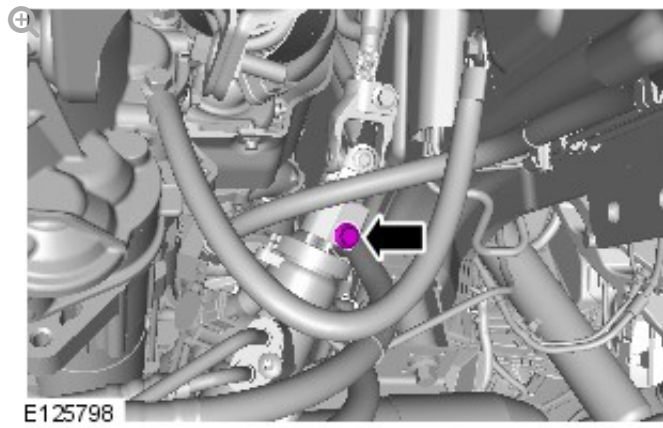
5.



6.

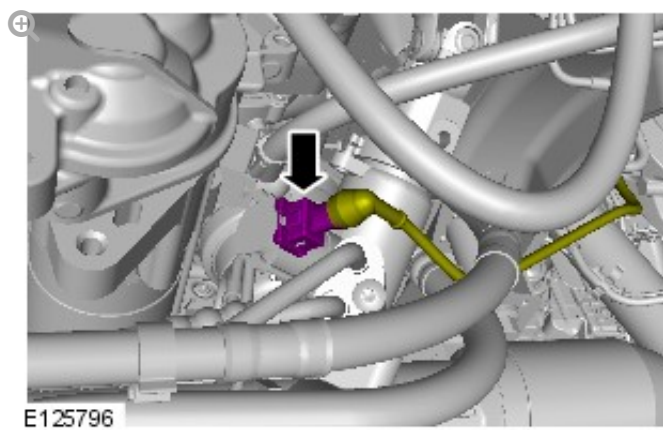
- Note the fitted position of the component prior to removal.
- Discard the bolt.

RHD shown, LHD is similar.



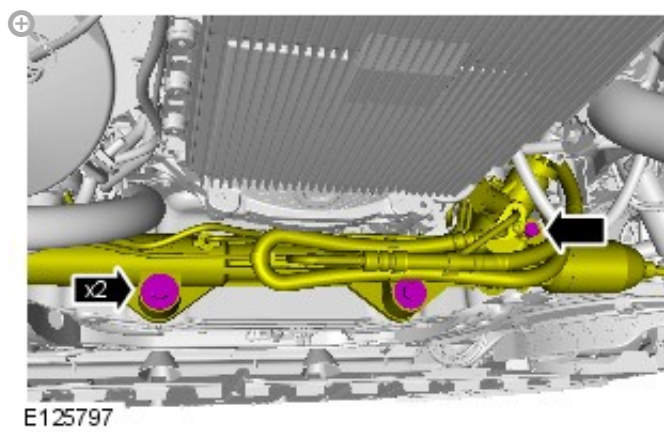
7.

RHD shown, LHD is similar.

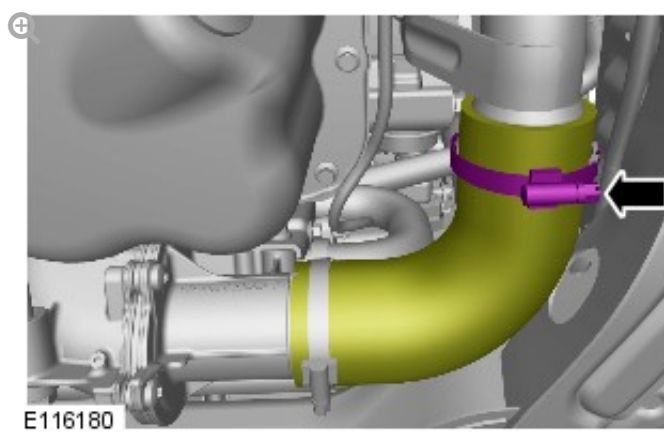


8.

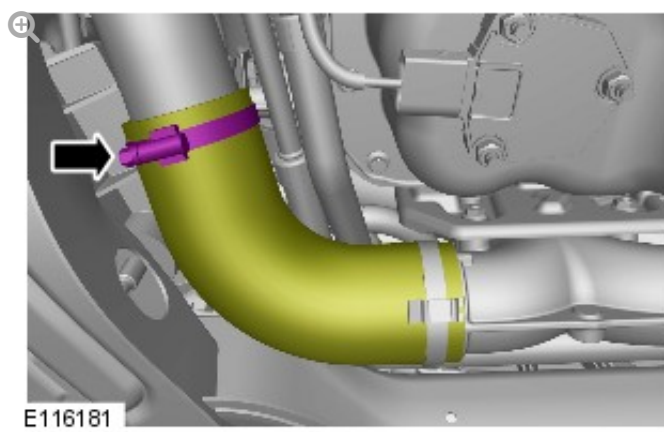
- Support as necessary.
- RHD shown, LHD is similar.



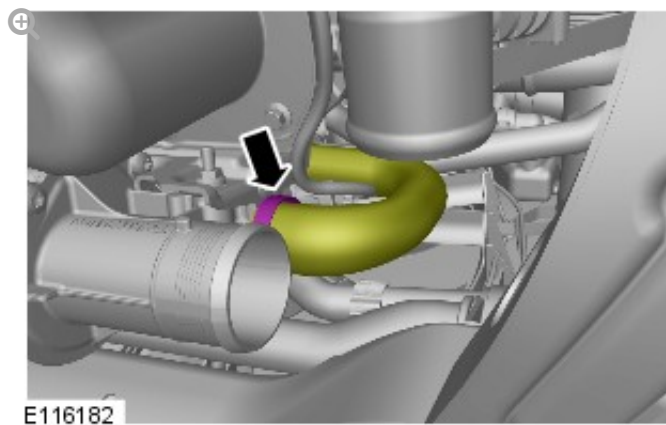
9.



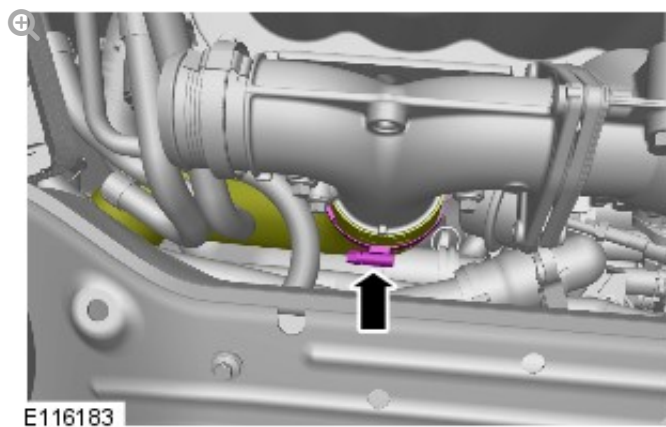
10.



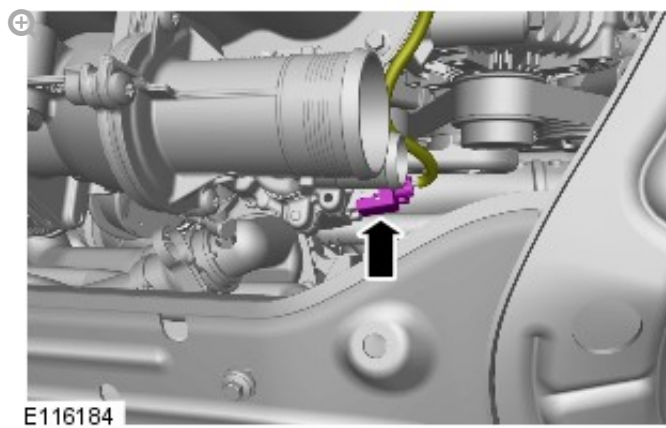
11.



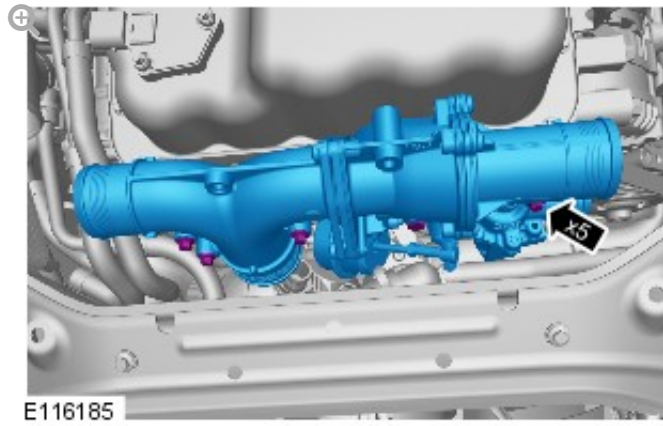
12.



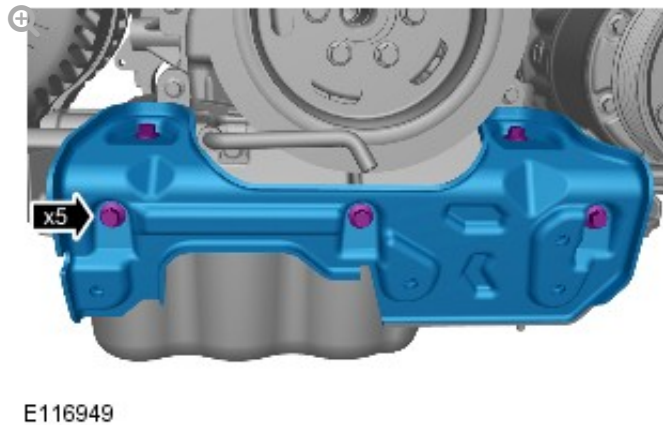
13.



14.

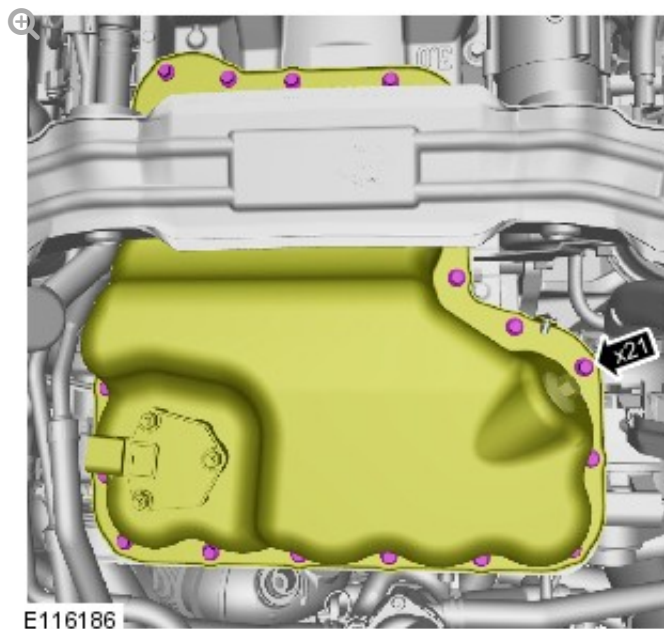


15.

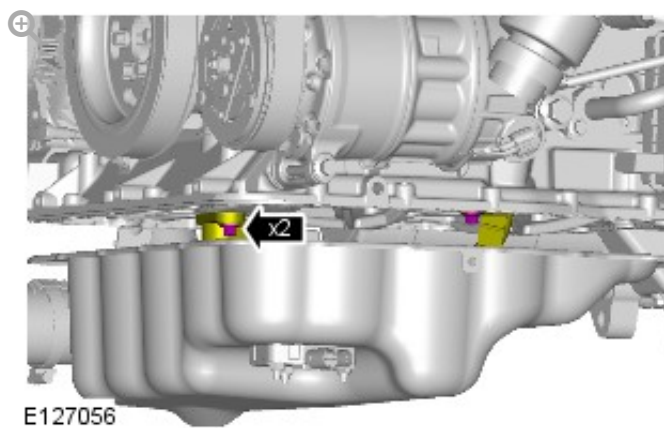


16.

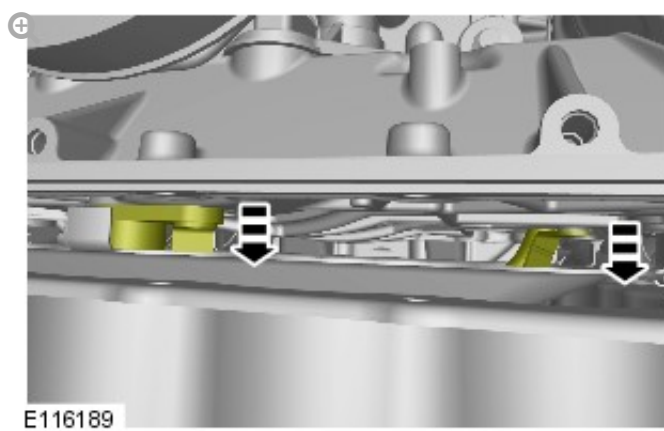
- Discard the seal.
- Make sure that the mating faces are clean and free of foreign material.



17.

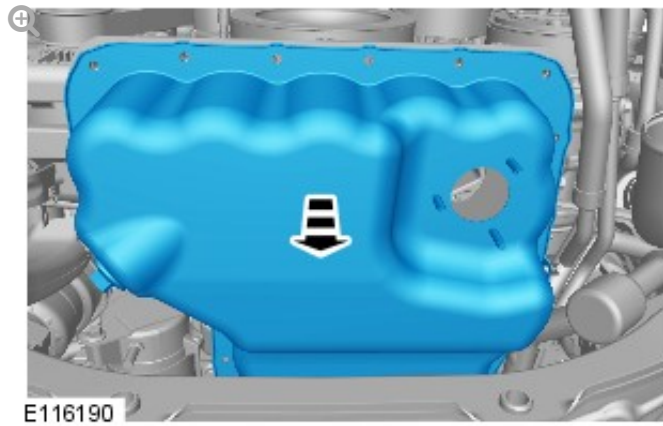


18.



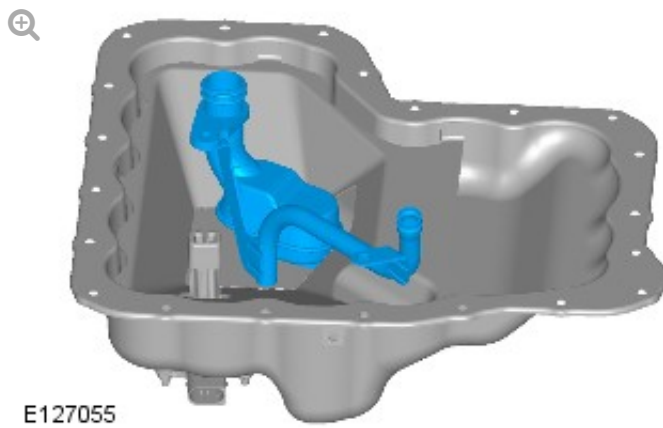
19.

Discard the gasket.



20.

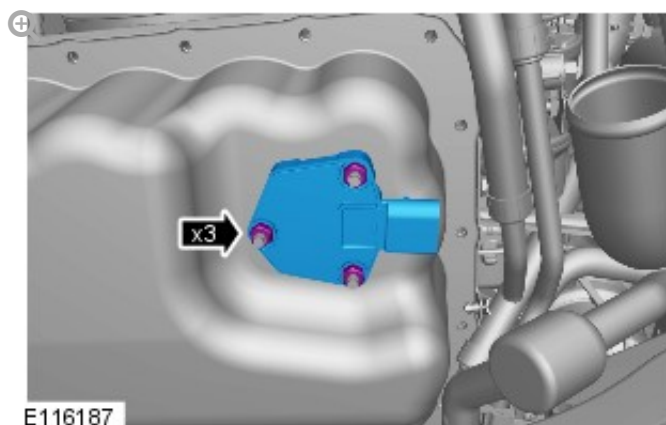
Discard the seal.



21.

Discard the seal.

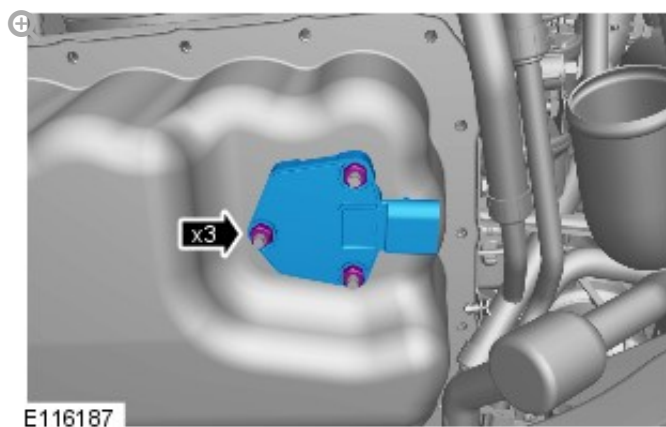
Do not disassemble further if the component is removed for access only.



INSTALLATION

1.

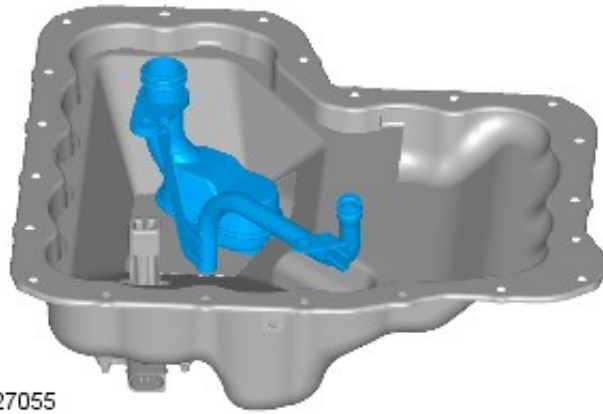
Install a new seal.



Torque: **10 Nm**

2.

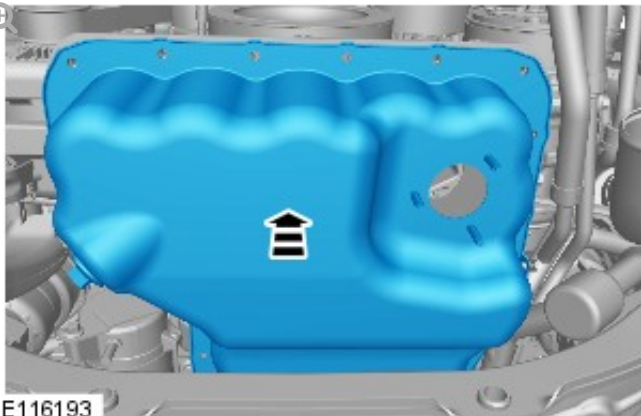
Install the new seals.



E127055

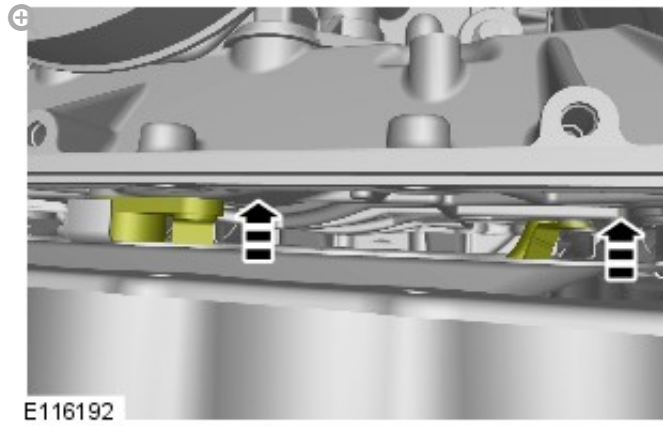
3.

Install a new gasket.

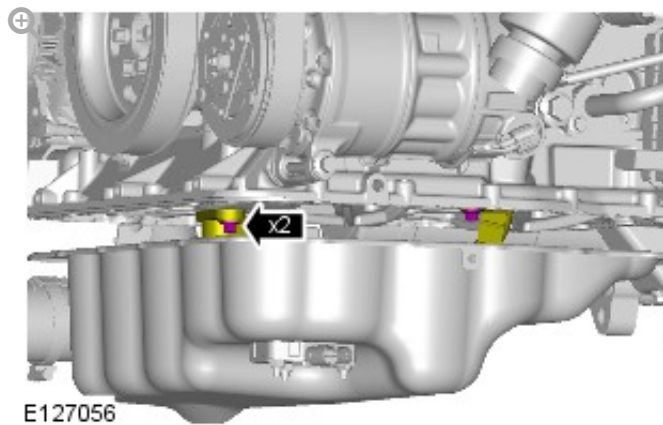


E116193

4.



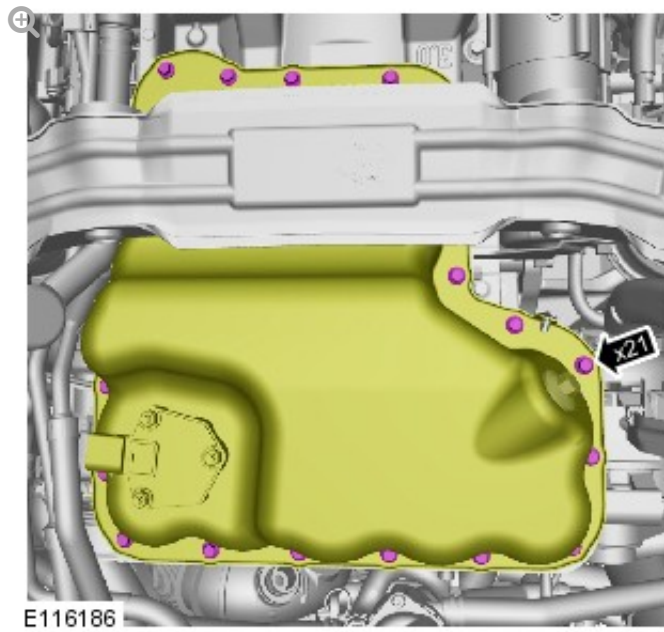
5.



Torque: 10 Nm

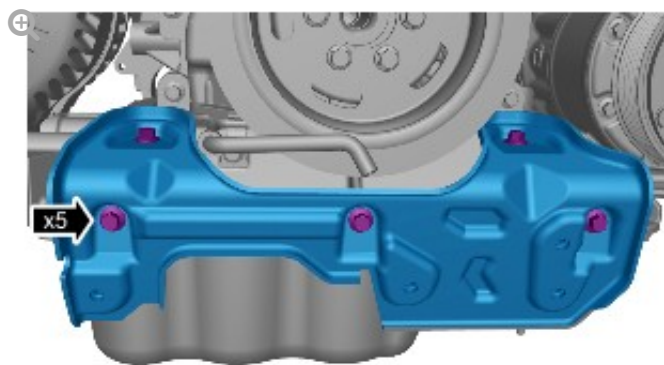
6.

- Install a new seal.
- Make sure that the mating faces are clean and free of foreign material.



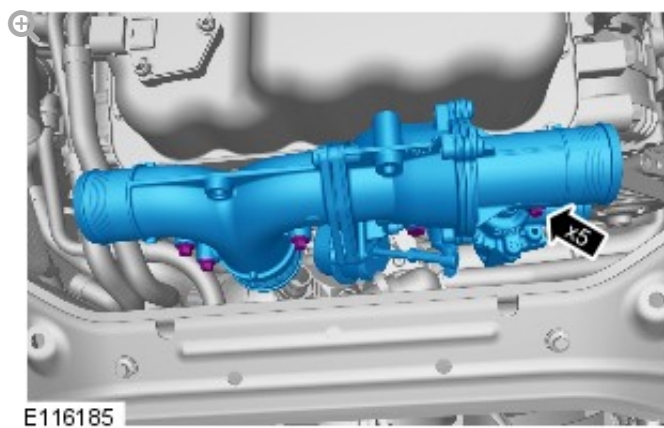
Torque: 10 Nm

7.



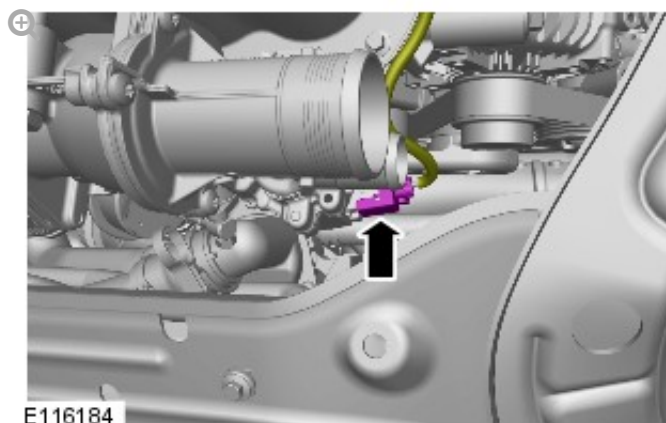
Torque: 10 Nm

8.

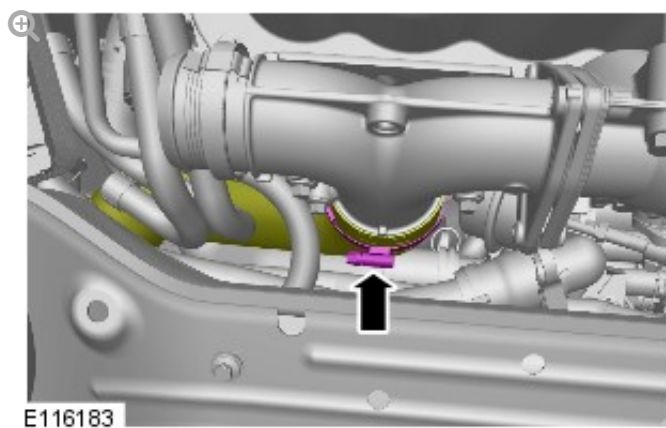


Torque: 10 Nm

9.

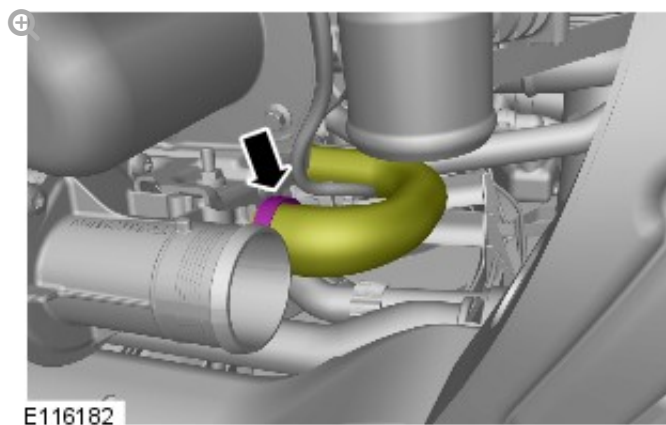


10.



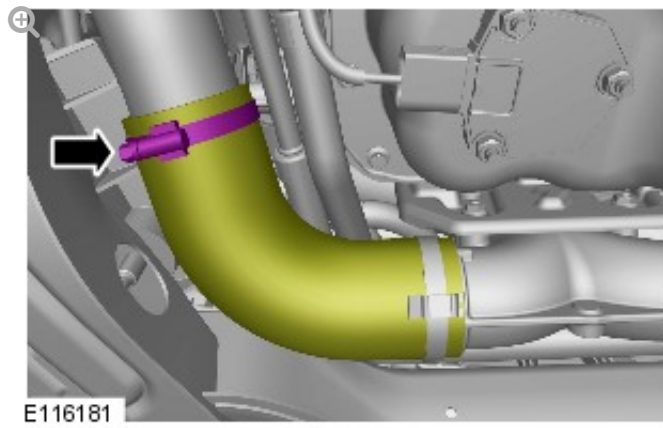
Torque: 7 Nm

11.



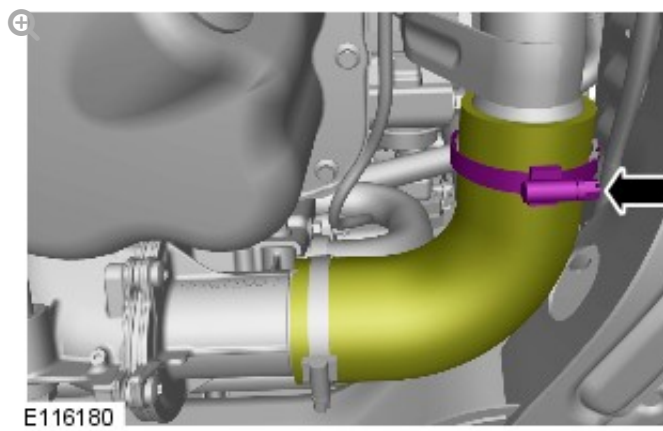
Torque: 7 Nm

12.



Torque: 7 Nm

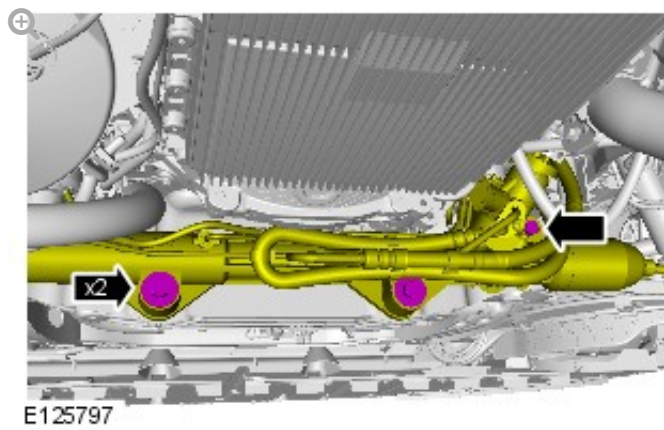
13.



Torque: 7 Nm

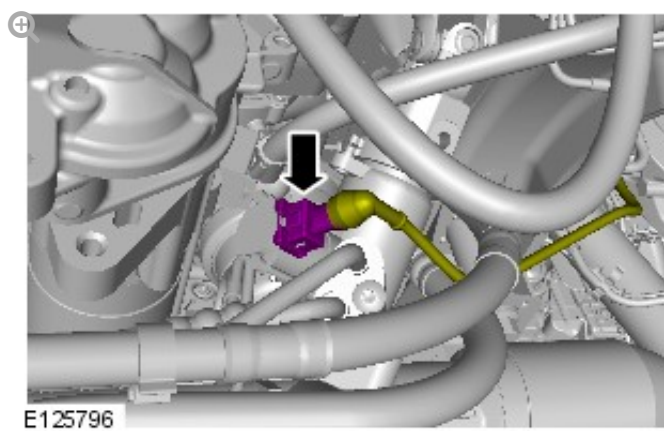
14.

Support as necessary.



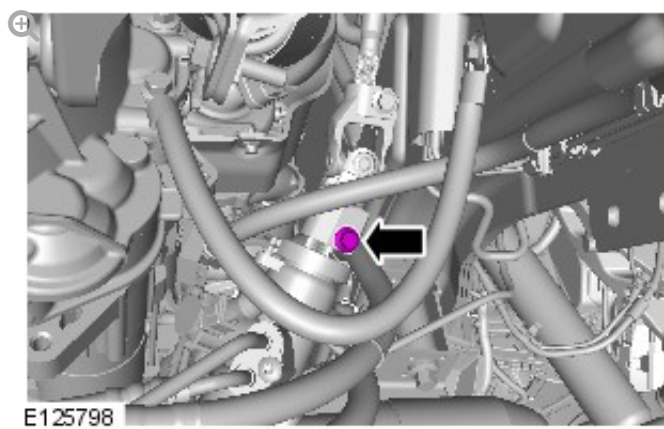
Torque: 100 Nm

15.



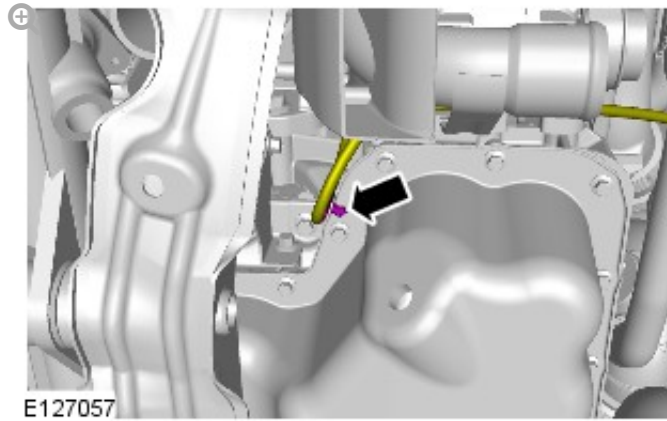
16.

Make sure that a new bolt is installed.

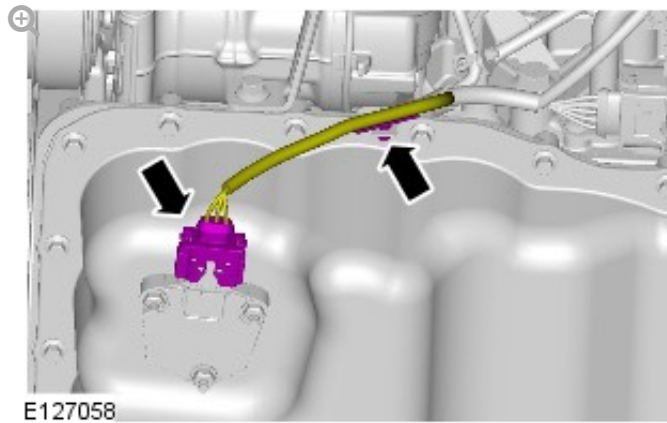


Torque: 35 Nm

17.



18.



19. Refer to: [Engine Oil Draining and Filling](#) (303-01A Engine - TDV6 3.0L Diesel, General Procedures).
20. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

ENGINE - TDV6 3.0L DIESEL

OIL PAN EXTENSION [G1272050]



REMOVAL

1. Refer to: [Battery Disconnect and Connect](#) (414-01 Battery, Mounting and Cables, General Procedures).

2.

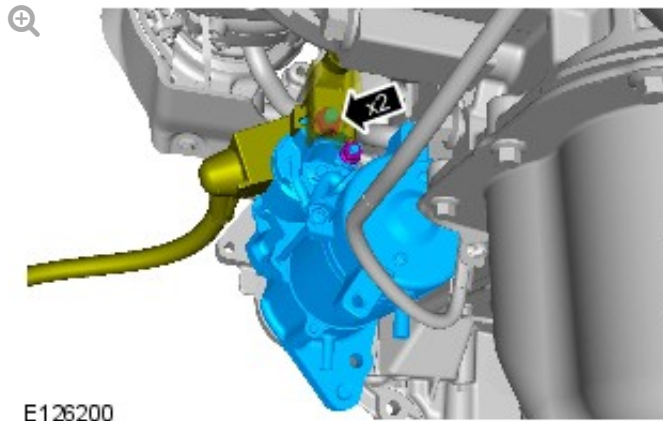
Make sure to support the vehicle with axle stands.

Raise and support the vehicle.

3. Refer to: [Transmission - TDV6 3.0L Diesel](#) (307-01 Automatic Transmission/Transaxle, Installation).
4. Refer to: [Oil Pan](#) (303-01A Engine - TDV6 3.0L Diesel, Removal and Installation).

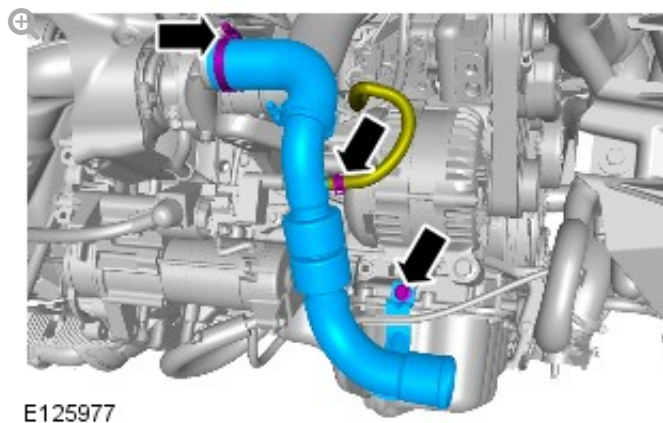
5.

- Some variation in the illustrations may occur, but the essential information is always correct.
- Engine shown removed for clarity.

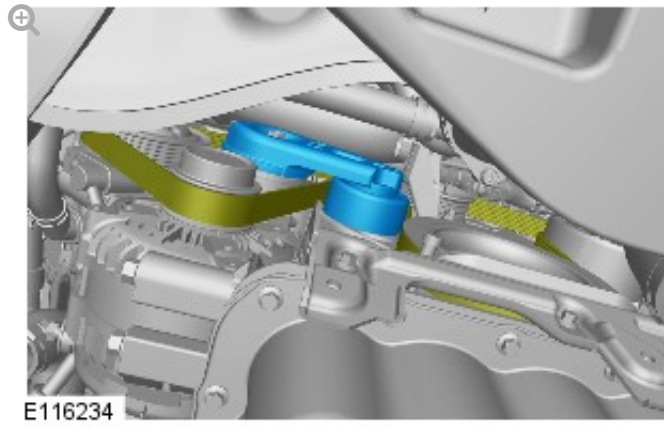


6.

Engine shown removed for clarity.

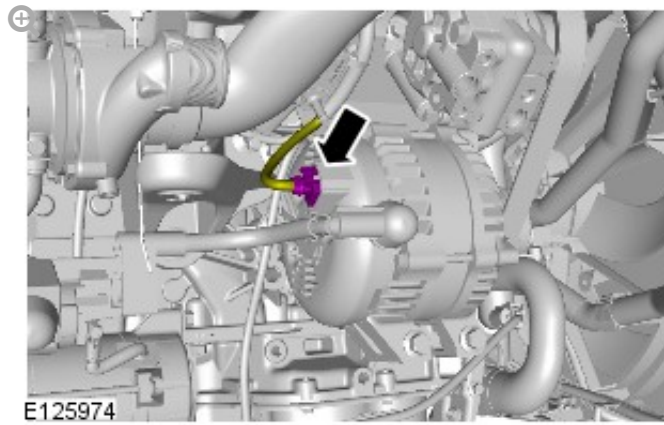


7.



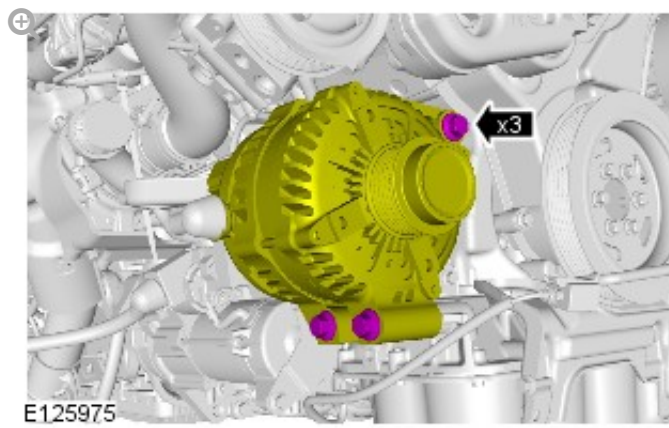
8.

Engine shown removed for clarity.

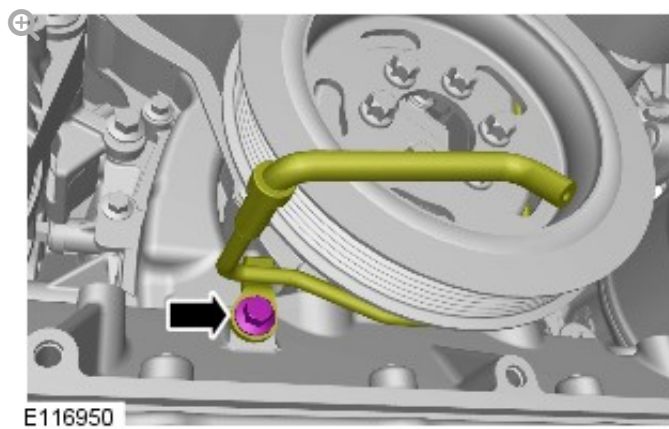


9.

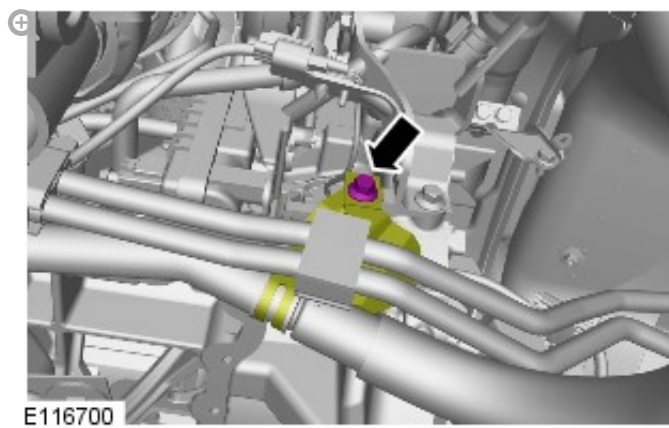
Engine shown removed for clarity.



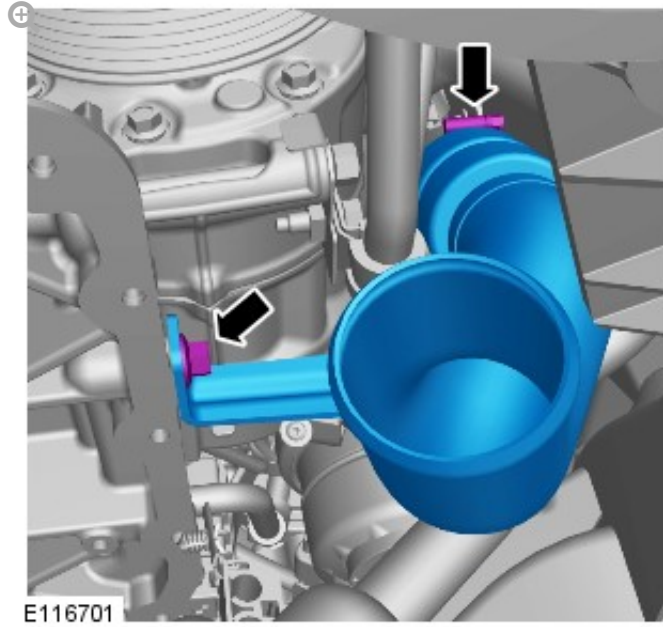
10.



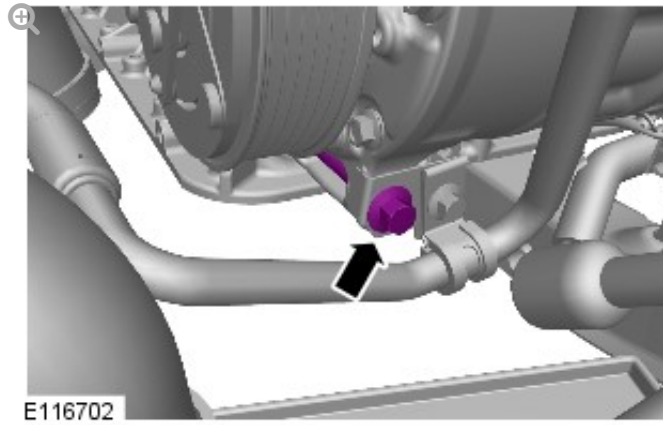
11.



12.

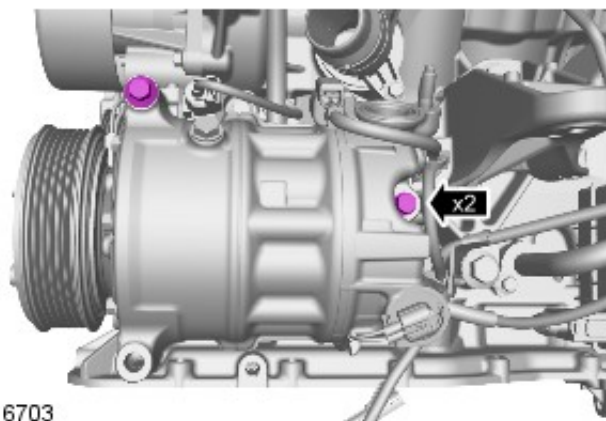


13.



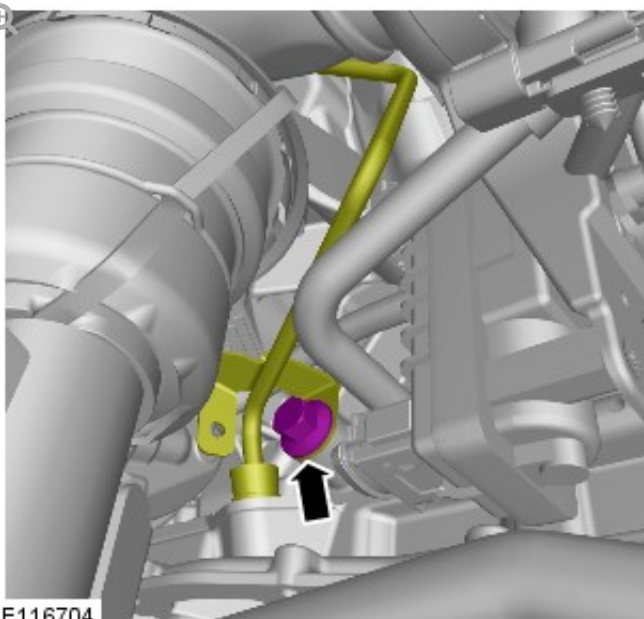
14.

Loosen the bolt, but do not fully remove.



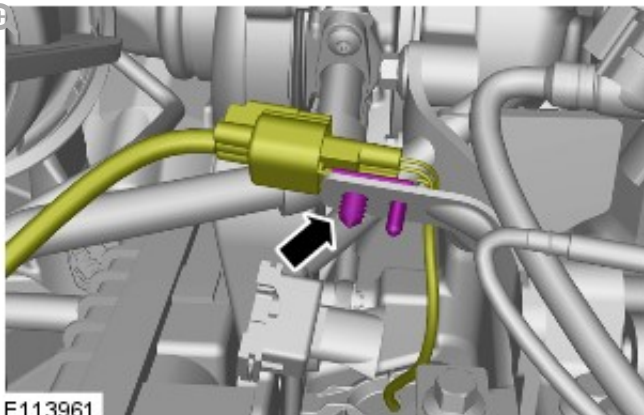
E116703

15.



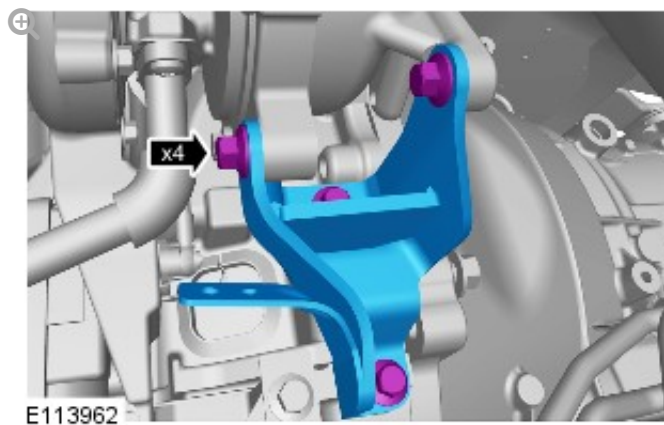
E116704

16.



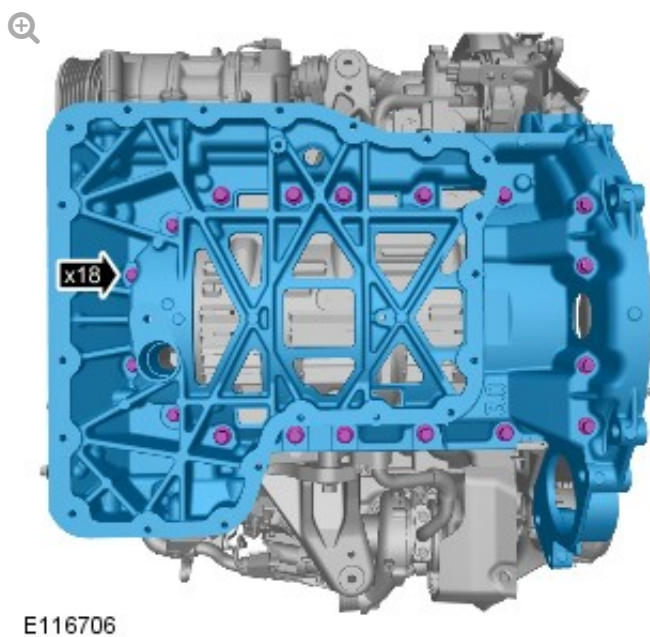
E113961

17.



18.

Discard the gasket.

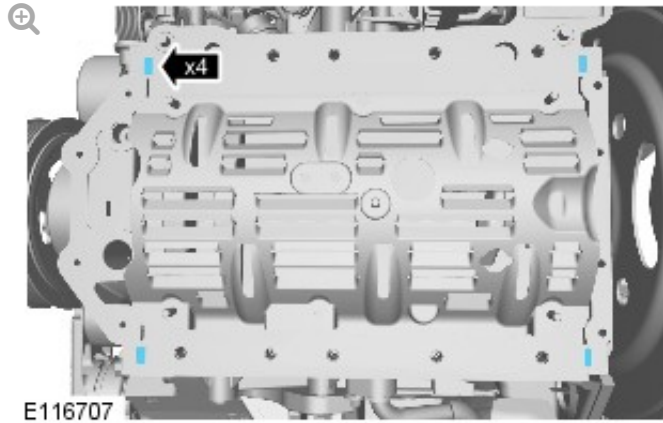


INSTALLATION

1.

Make sure that the mating faces are clean and free of corrosion and foreign material.

2.

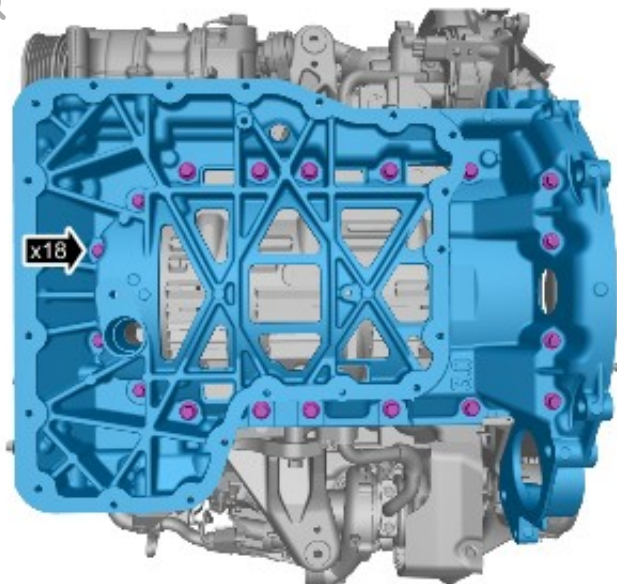


Apply the sealant as shown.

3.

Only tighten the bolts finger-tight at this stage.

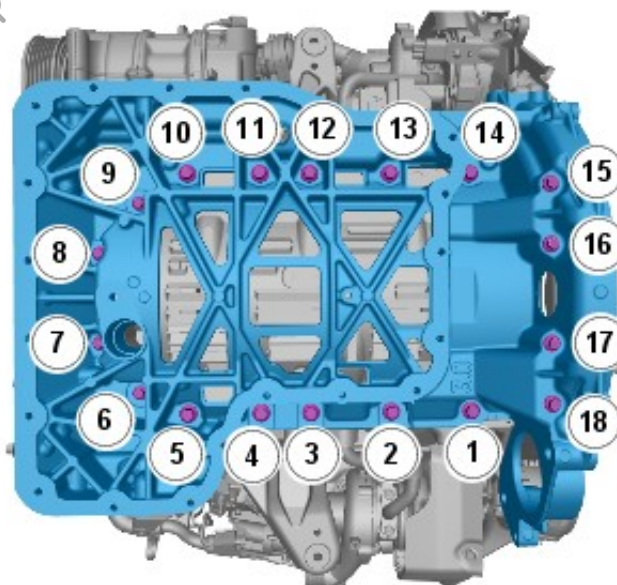
Install a new gasket.



E116706

4.

Tighten the bolts in the indicated sequence.



E116708

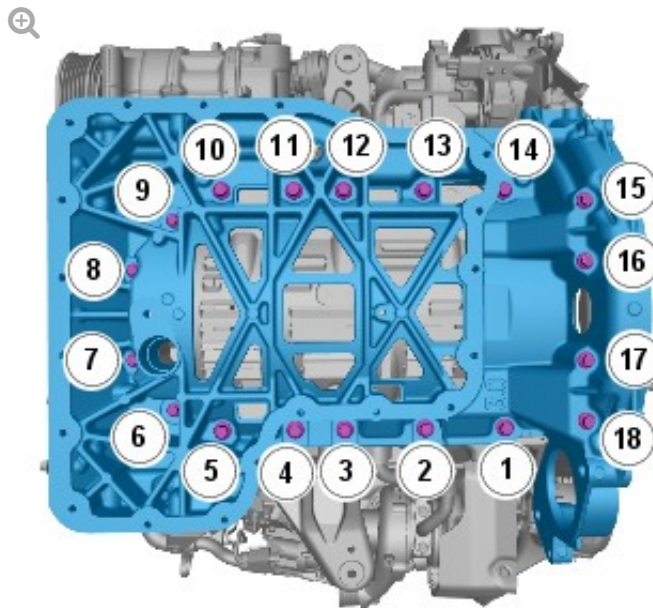
Torque:

M8 10 Nm

M6 4 Nm

5.

Tighten the bolts in the indicated sequence.



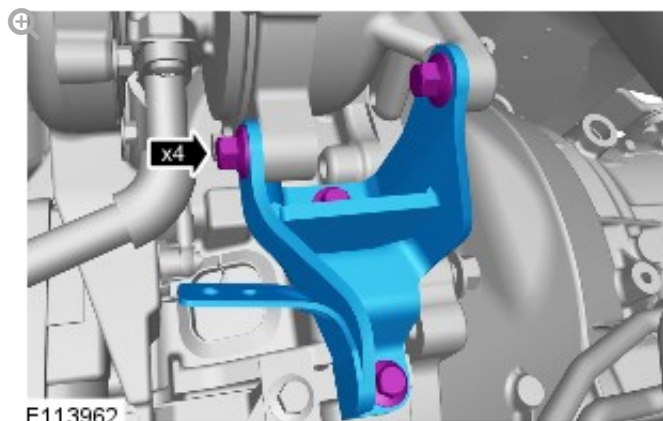
E116708

Torque:

M8 **24 Nm**

M6 **10 Nm**

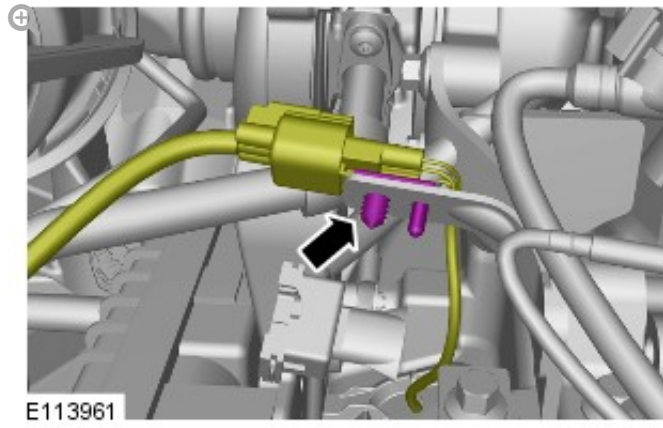
6.



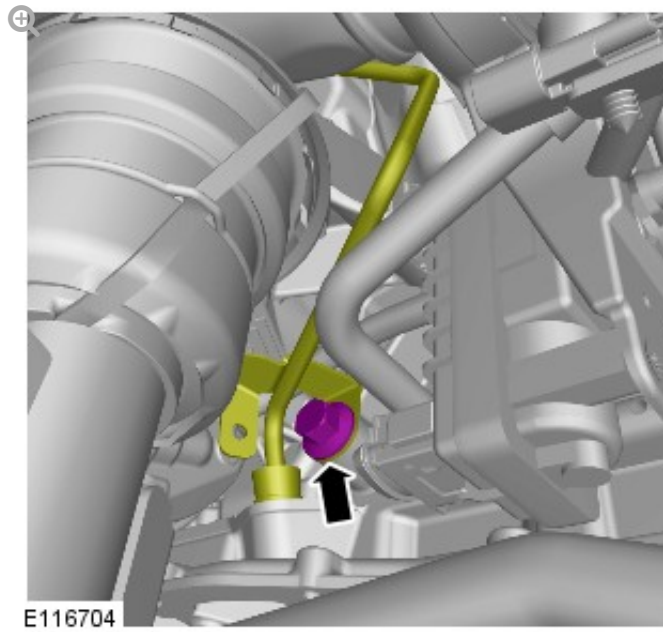
E113962

Torque: **33 Nm**

7.



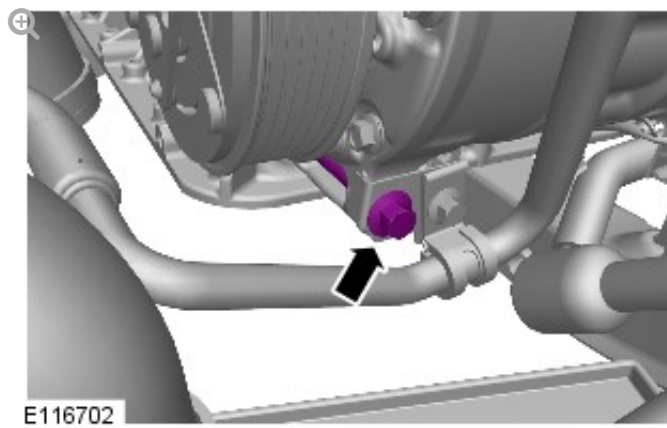
8.



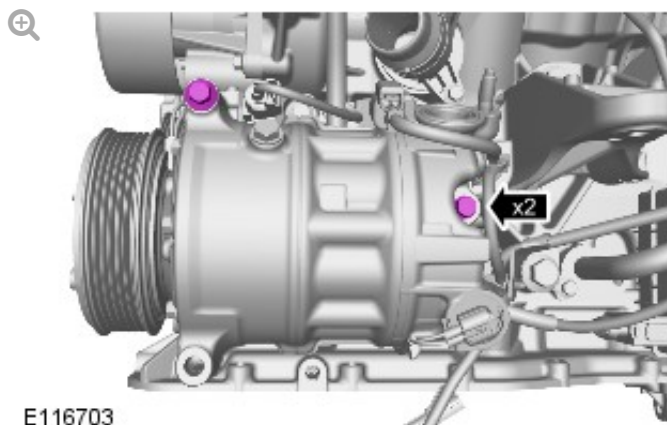
Torque: **24 Nm**

9.

Only tighten the bolt finger-tight at this stage.

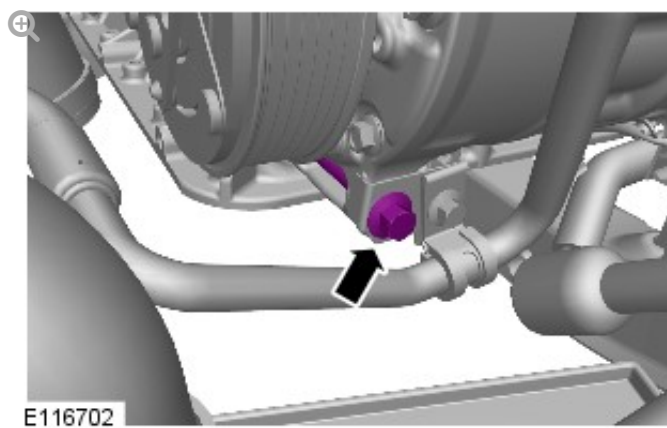


10.



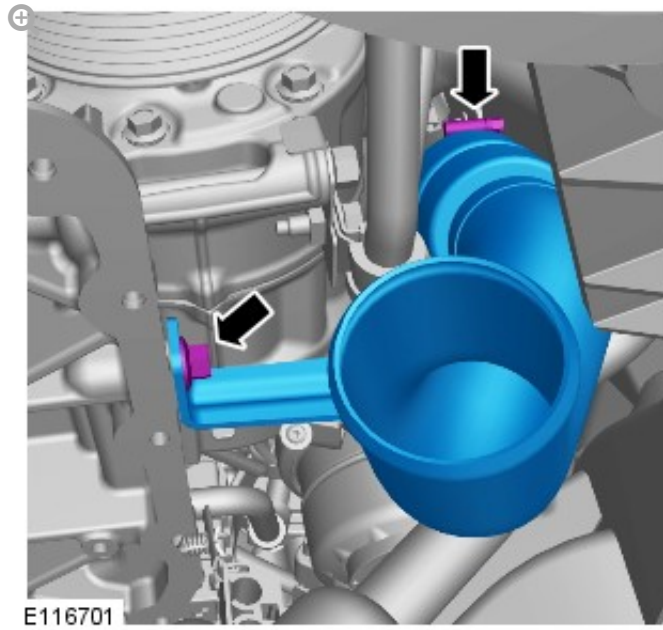
Torque: **24 Nm**

11.



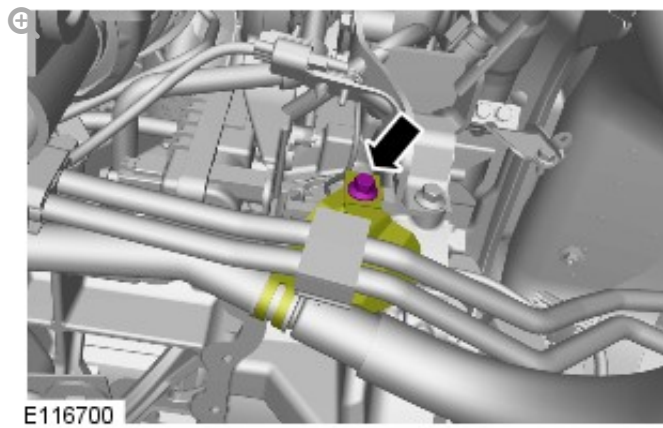
Torque: **24 Nm**

12.



Torque: 10 Nm

13.



Torque: 10 Nm

14.

