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2020.0 DEFENDER (LE), 311-01

AUTOMATIC TRANSMISSION

TRANSMISSION – INGENIUM I6 3.0L PETROL (G2391377)

mcx30.com

REMOVAL

REMOVAL

SPECIAL TOOL(S)

303-1069



E53727

303-1069

Adapter, Wrench



E238238

JLR-303-1676

Engine lifting eyes

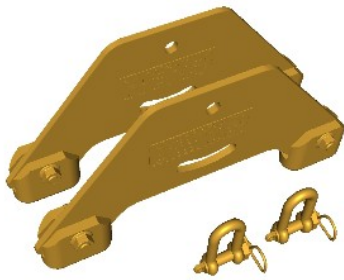


E243070

JLR-303-1692

Engine Support

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E264520

JLR-303-1692-04

Engine Bridge Adaptor



E263279

JLR-303-1713

Engine Brace Mountings

GENERAL EQUIPMENT

EQUIPMENT NAME
Transmission jack

⚠ CAUTION:

New transmission assemblies are supplied pre-filled with transmission fluid.

NOTES:

- Before disconnecting any components, make sure the area is clean and free from foreign material. When disconnected all openings must be sealed.
- ■ This procedure contains illustrations showing certain components removed to provide extra clarity.
- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.

1. Disconnect the startup battery ground cable.

Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).

2. Raise and support the vehicle on a suitable 2 post lift.

Refer to: [Jacking and Lifting](#) (100-02 Jacking and Lifting, Description and Operation).

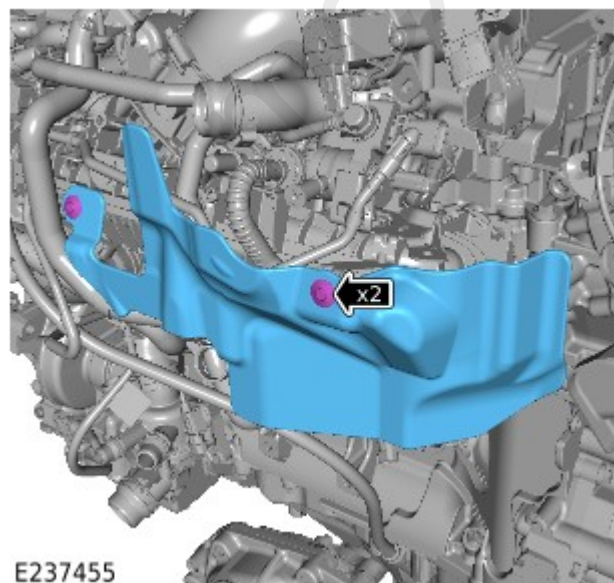
3. Remove the engine cover.

Refer to: [Engine Cover - INGENIUM I6 3.0L Petrol](#) (501-05 Interior Trim and Ornamentation, Removal and Installation).

4. Remove the secondary bulkhead center panel.

Refer to: [Secondary Bulkhead Center Panel](#) (501-02 Front End Body Panels, Removal and Installation).

- 5.

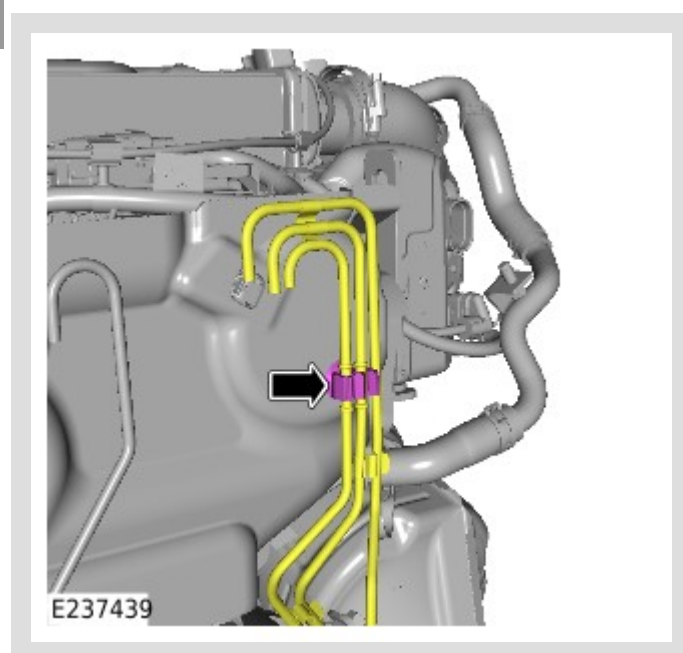


- Remove the 2 fasteners.
- Remove the heatshield.

6. Position the charge air cooler in the service position.

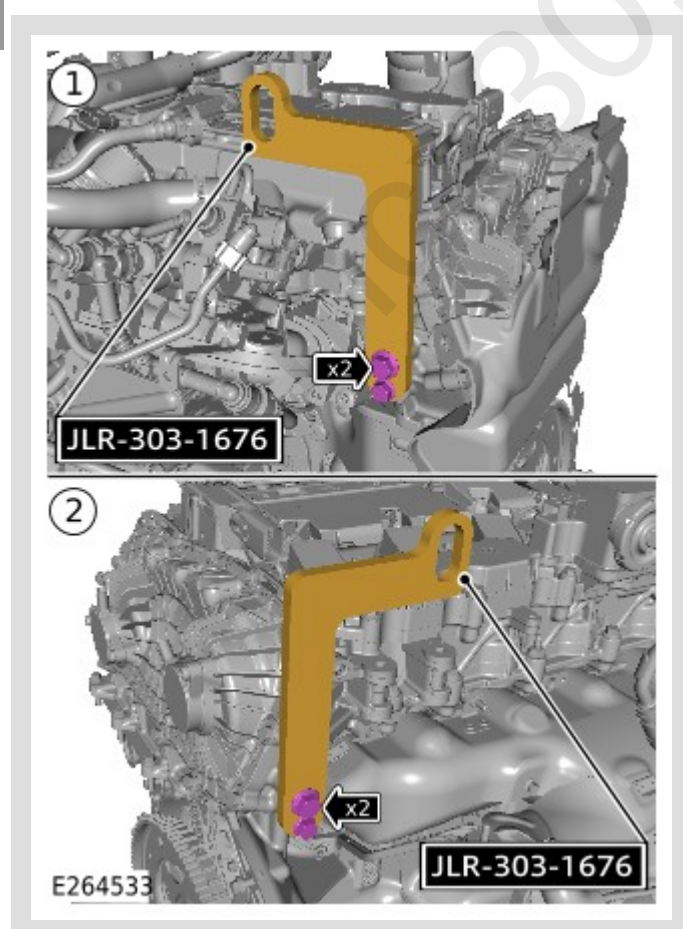
Refer to: [Charge Air Cooler Service Position](#) (303-12C Intake Air Distribution and Filtering - INGENIUM I6 3.0L Petrol, General Procedures).

7.



Disconnect the 3 breather pipes.

8.



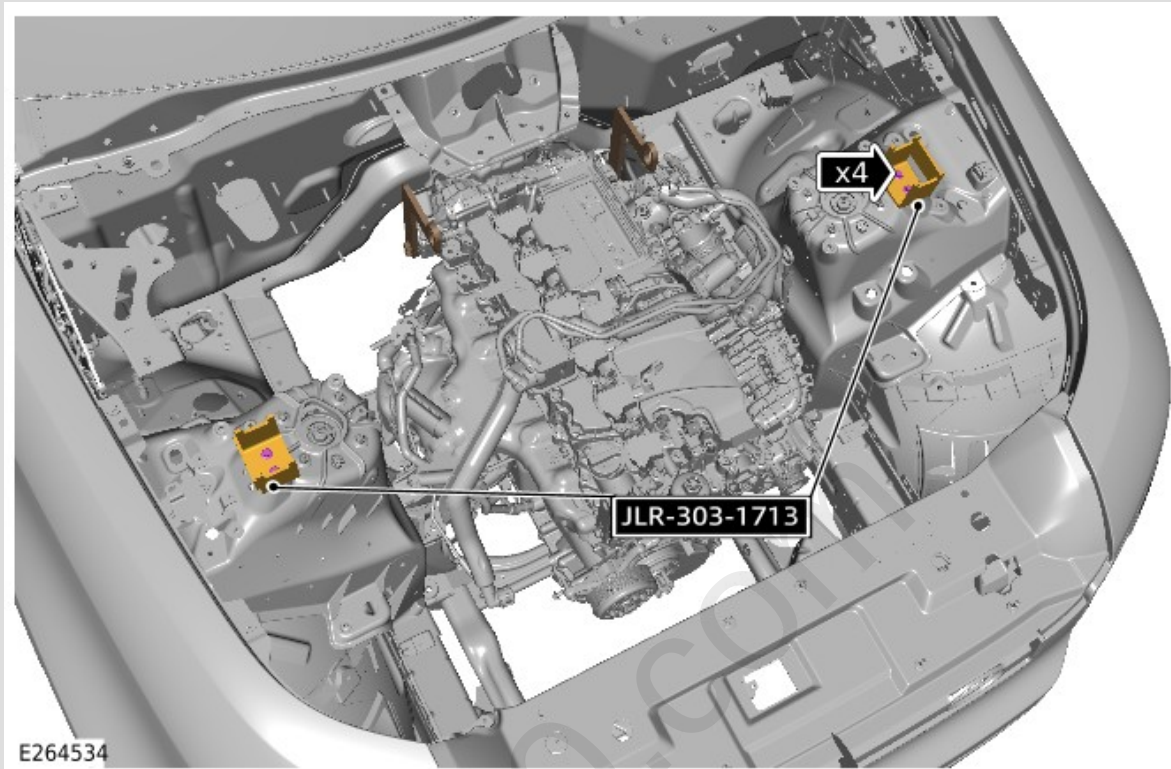
- Install the special tools.

Install the Special Tool(s): [JLR-303-1676](#)

- Install and tighten the 4 bolts.

Torque: **20Nm**

9.



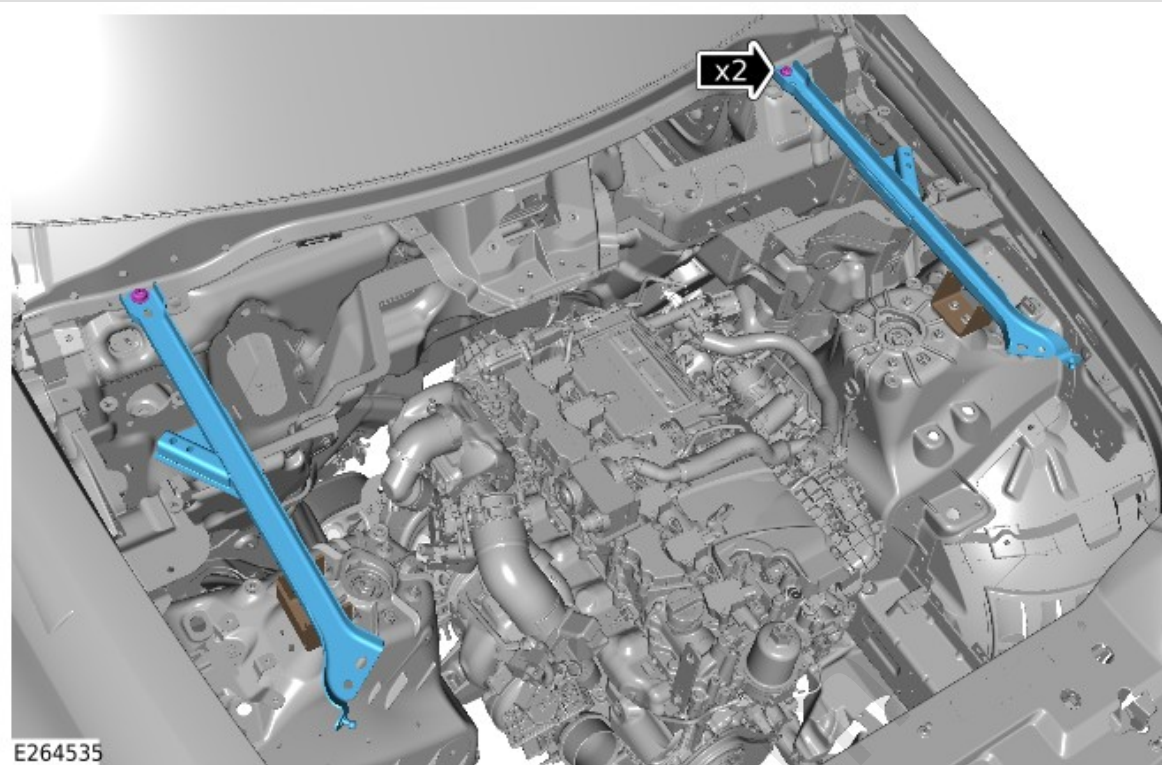
- Install the special tools.

Install the Special Tool(s): [JLR-303-1713](#)

- Install and tighten the 4 bolts.

Torque: **20Nm**

10.

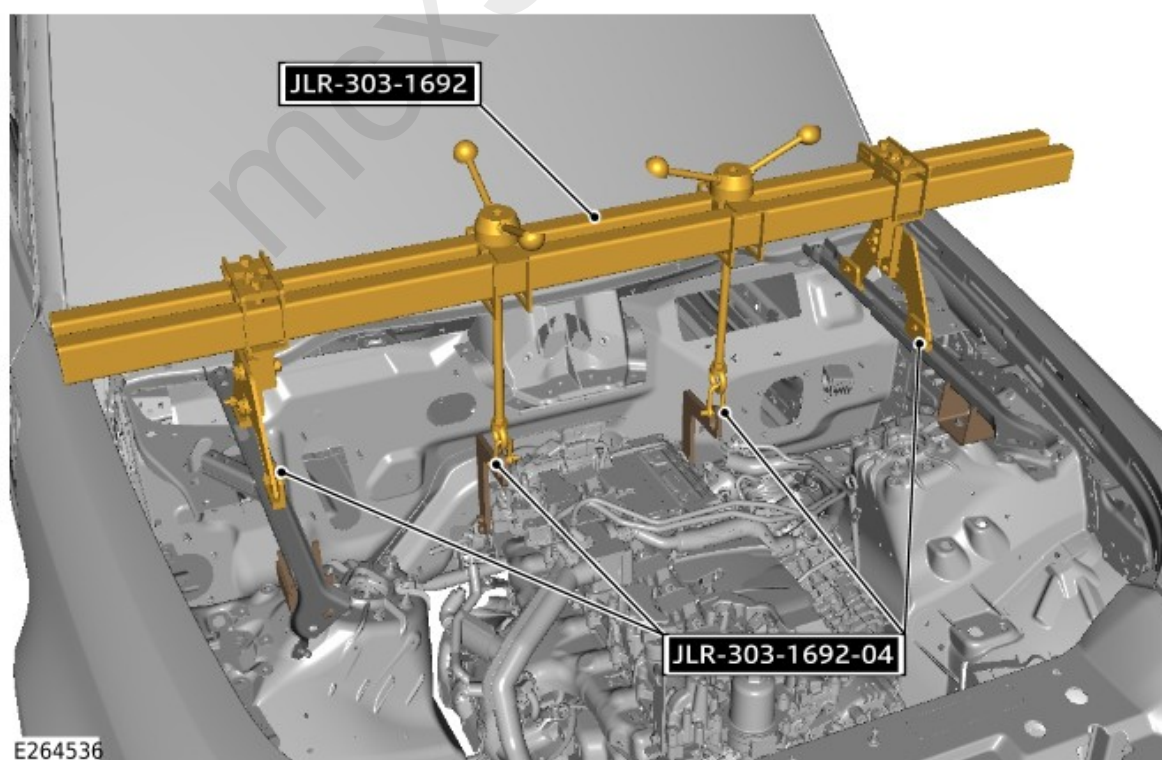


■ Install the 2 engine compartment braces as illustrated.

■ Install and tighten the 2 bolts.

Torque: 20Nm

11.



■ Install the engine support beam and the engine support adapter as illustrated.

Install the Special Tool(s): [JLR-303-1692](#), [JLR-303-1692-04](#)

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12. Remove the catalytic converter.

Refer to: [Catalytic Converter](#) (309-00C Exhaust System - INGENIUM I6 3.0L Petrol, Removal and Installation).

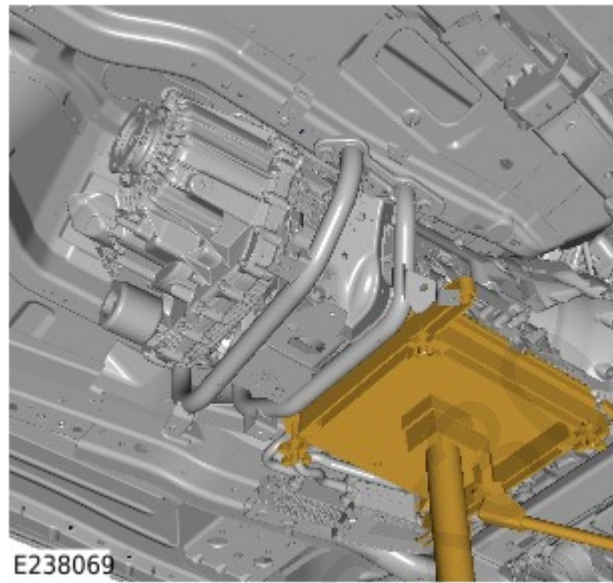
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13. Remove the rear driveshaft.

Refer to: [Rear Driveshaft](#) (205-01 Driveshaft, Removal and Installation).

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14. Remove the starter motor.

Refer to: [Starter Motor](#) (303-06C Starting System - INGENIUM I6 3.0L Petrol, Removal and Installation).

-
- 15.



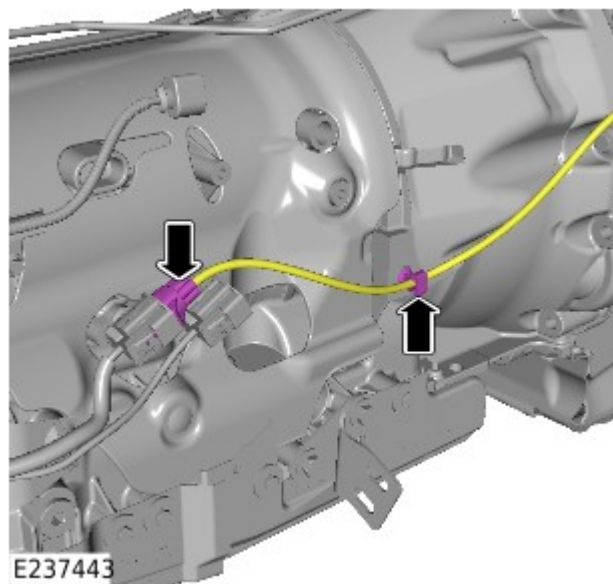
Use a transmission jack to support the transmission.

General Equipment: [Transmission jack](#)

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16. Remove the front driveshaft.

Refer to: [Front Driveshaft](#) (205-01 Driveshaft, Removal and Installation).

17.

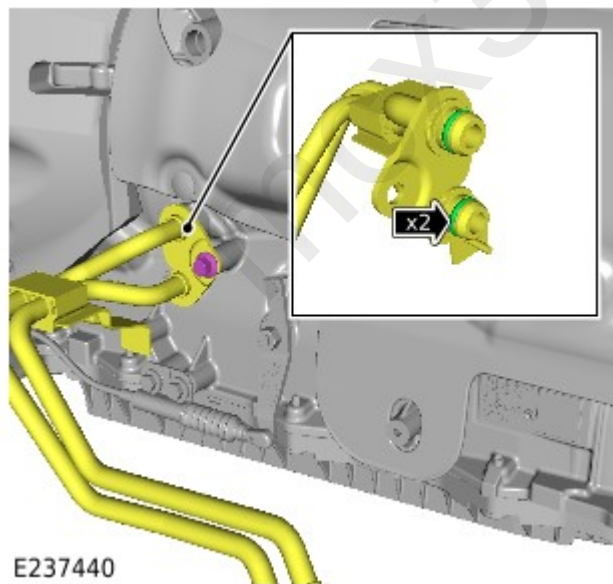


- Disconnect the electrical connector.
- Release the wiring harness clip.

18.

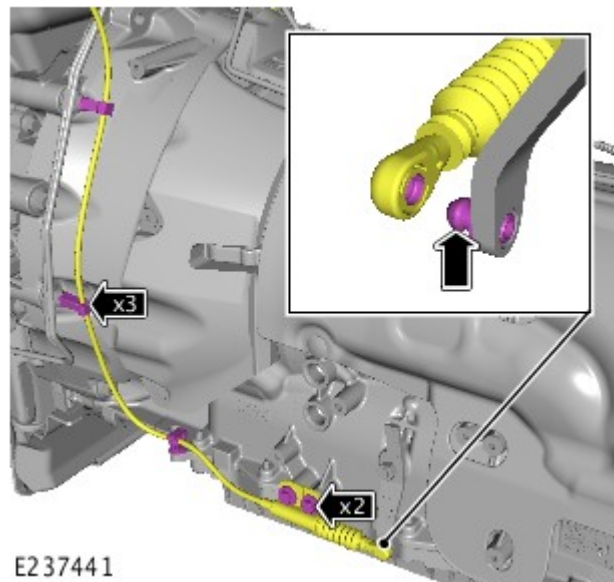
⚠ CAUTION:

Be prepared to collect escaping fluids.



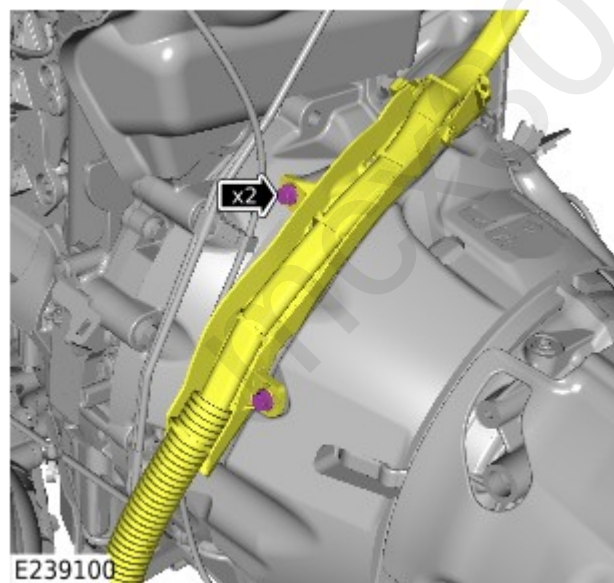
- Remove the bolt.
- Release the transmission oil cooler pipes.
- Discard the 2 O-ring seals.

19.



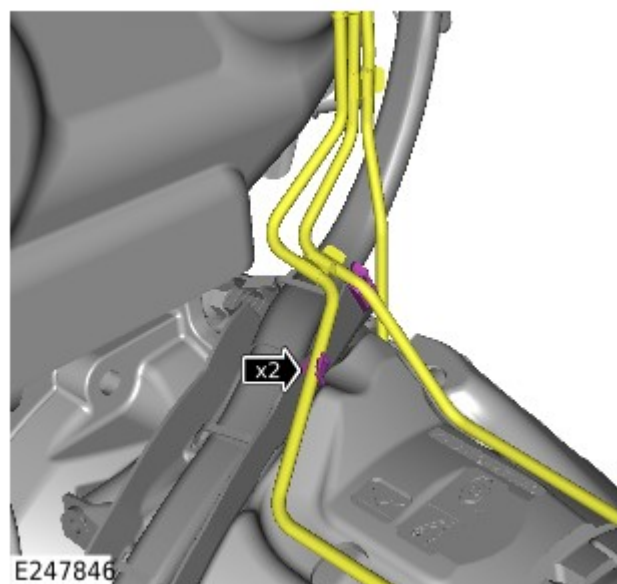
- Remove the 2 bolts.
- Release the Emergency Park Release (EPR) cable from the 3 clips.
- Release the EPR cable from the transmission.

20.



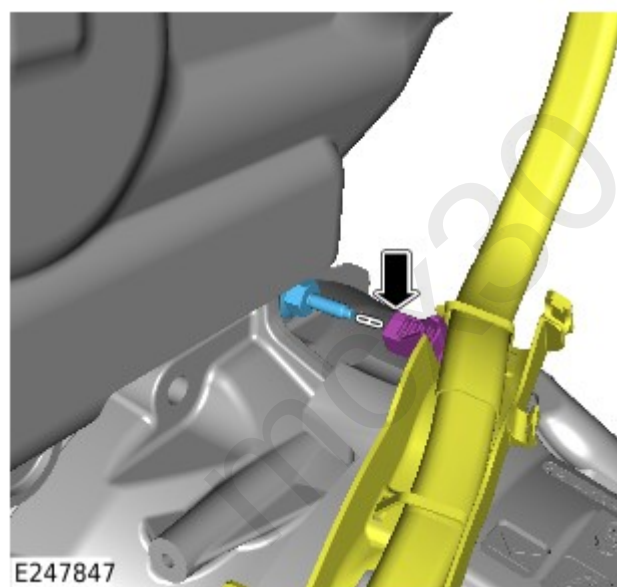
- Remove the 2 bolts.
- Release the Mild Hybrid Electric Vehicle (MHEV) battery cable.

21.



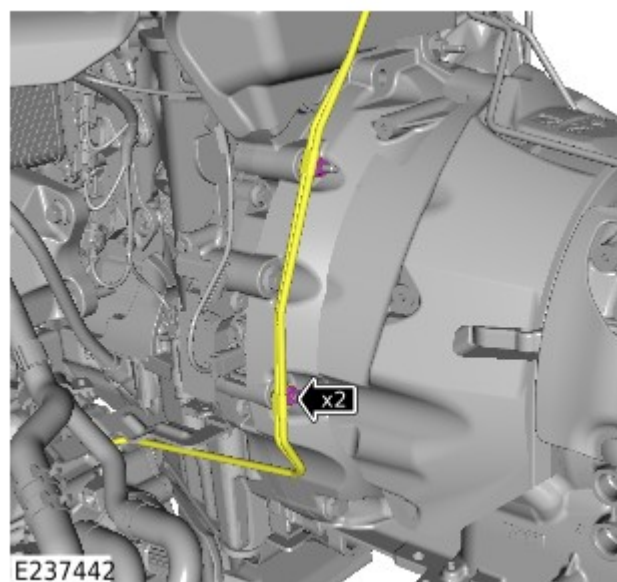
Release the 2 breather pipes from the 2 clips.

22.



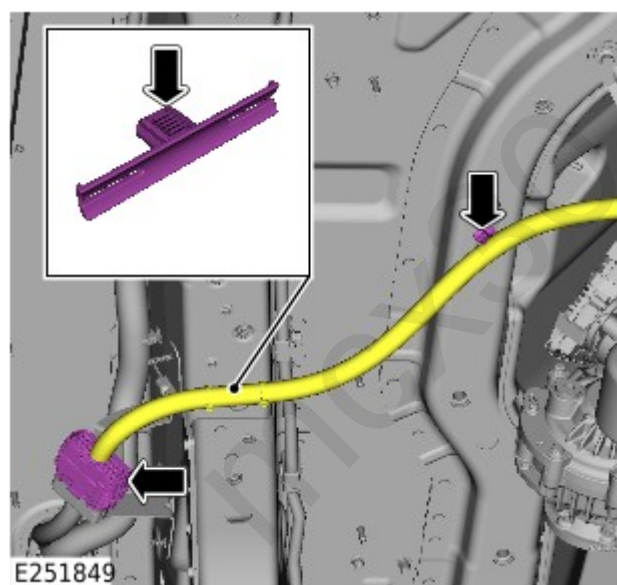
Release the cable clip.

23.



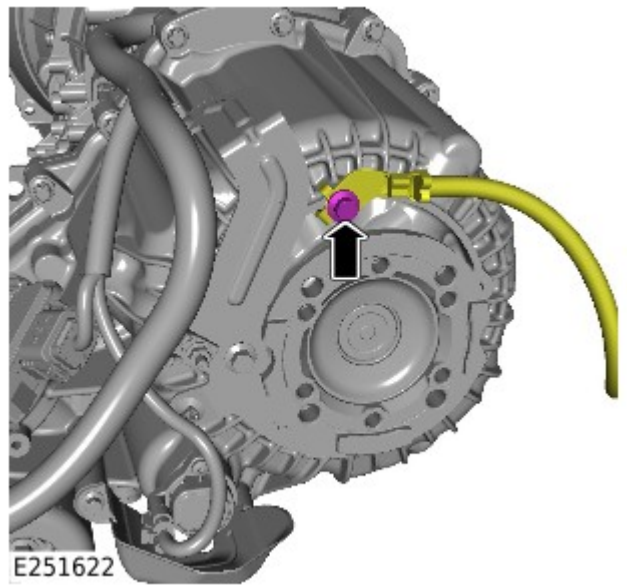
Remove the 2 nuts.

24.



- Disconnect the electrical connector.
- Release the 2 wiring harness clips.

25.

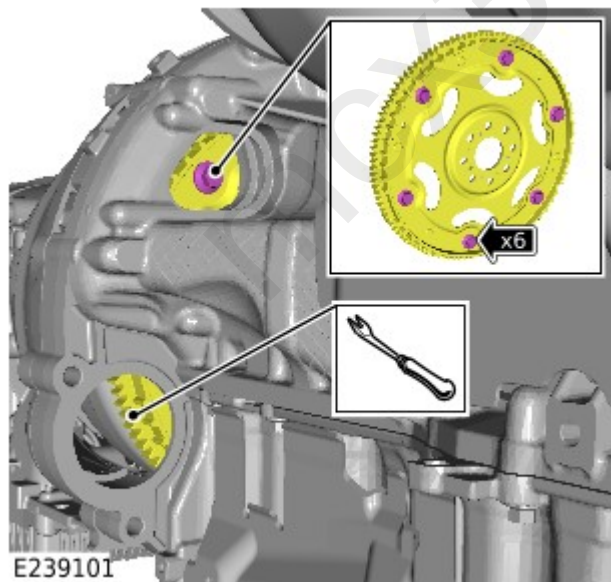


- Remove the bolt.
- Reposition the ground cable away from the transmission.

26.

⚠ CAUTION:

Only rotate the crankshaft clockwise.

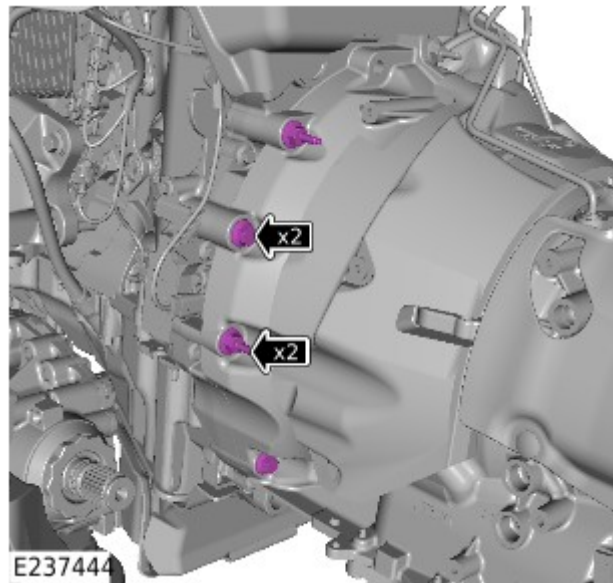


Remove and discard the 6 bolts.

27.

 NOTE:

Note the orientation of the bolts prior to removal.

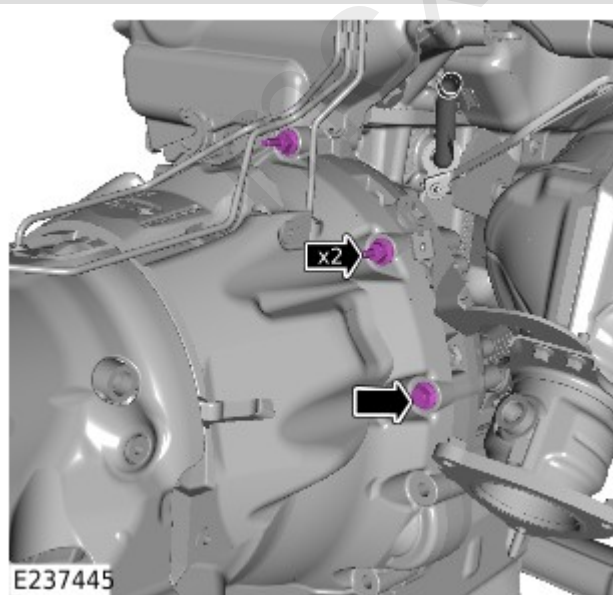


Remove the 4 left side transmission bolts.

28.

 NOTE:

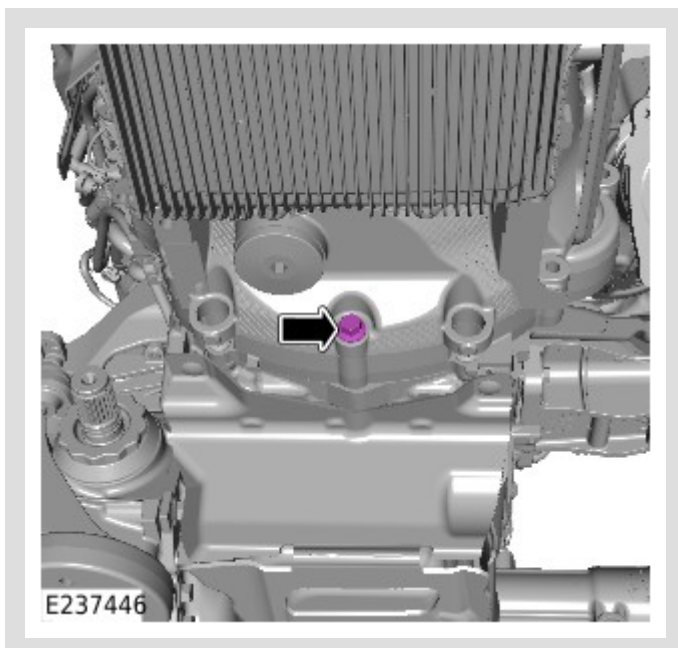
Note the orientation of the bolts prior to removal.



Remove the 3 right side transmission bolts.

NOTE:

Note the orientation of the bolt prior to removal.



Remove the lower transmission bolt.

⚠ WARNING:

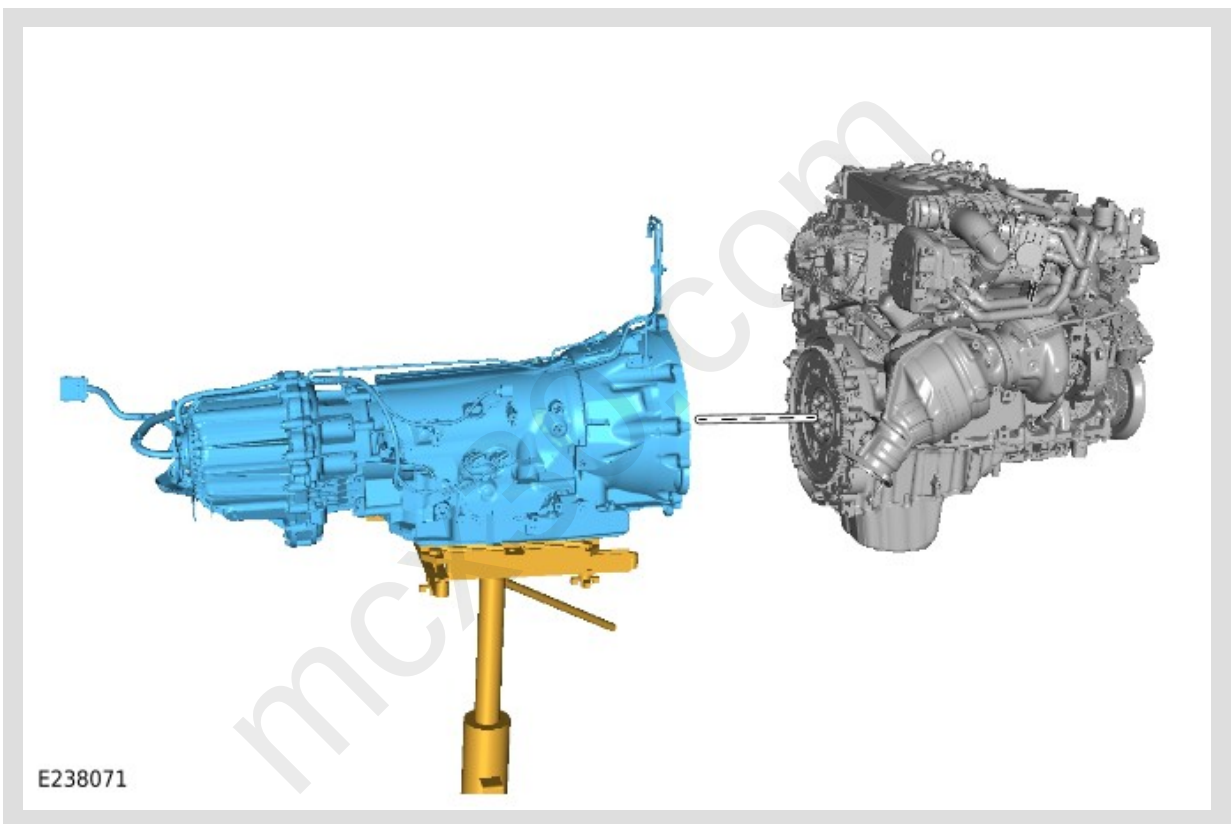
This step requires the aid of another technician.

⚠ CAUTION:

- Care must be taken to avoid damaging the surrounding components.
- Make sure that the torque converter remains in the transmission.

△ NOTE:

Use suitable retaining straps to secure the torque converter to the transmission,

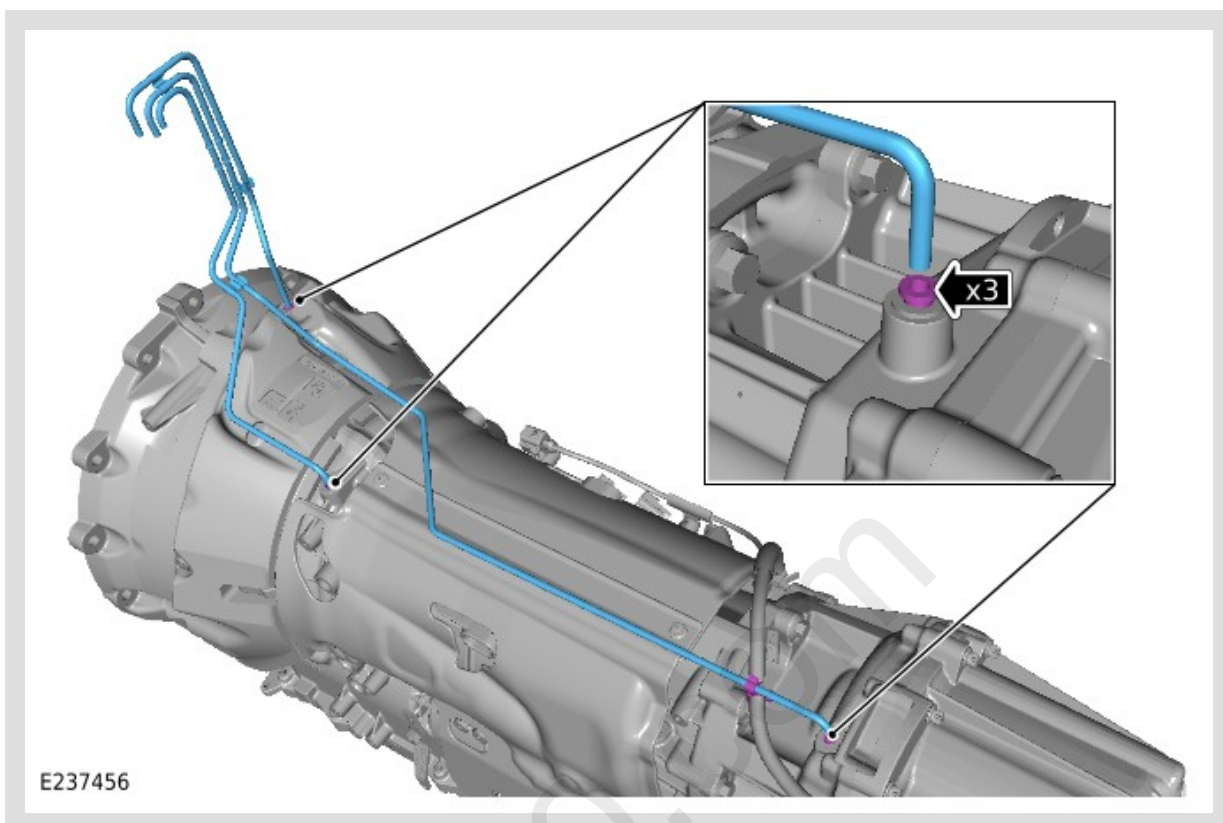


Remove the transmission assembly.

31.

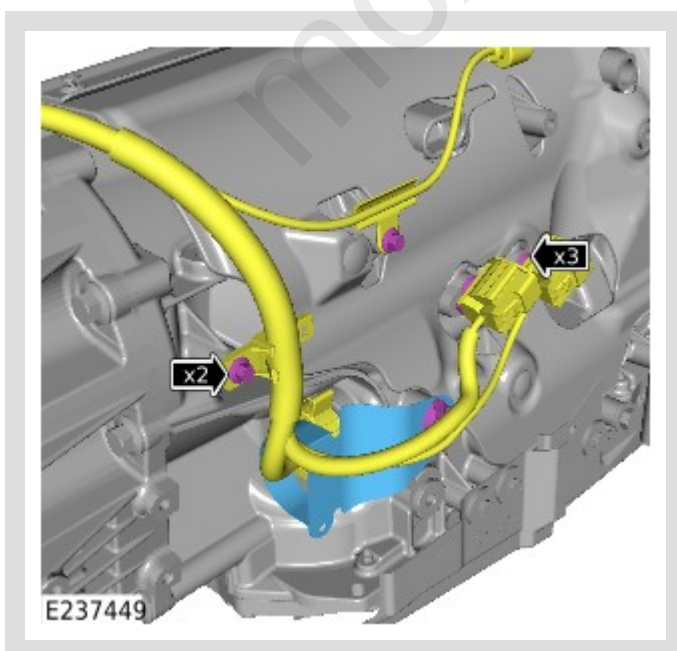
 NOTE:

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



- Disconnect the 3 breather pipes.
- Remove the 3 breather pipes.

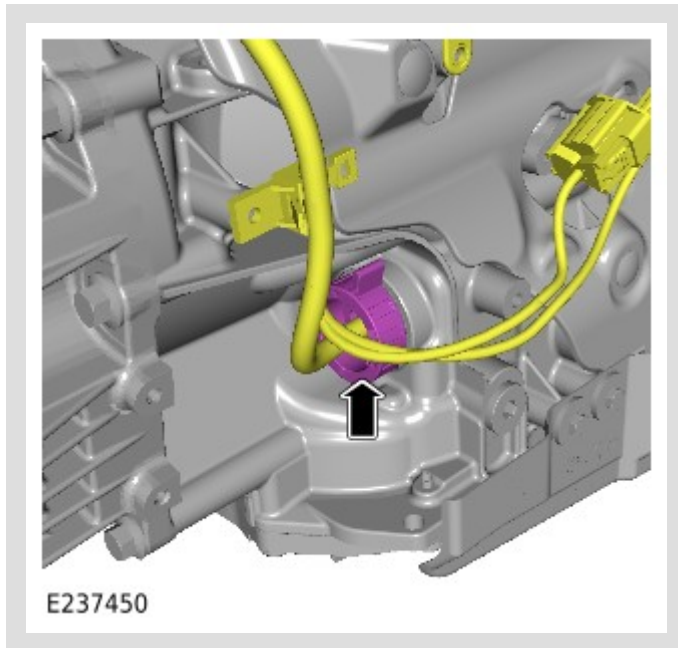
32.



- Remove the 2 wiring harness bolts.
- Remove the 3 wiring harness clips.

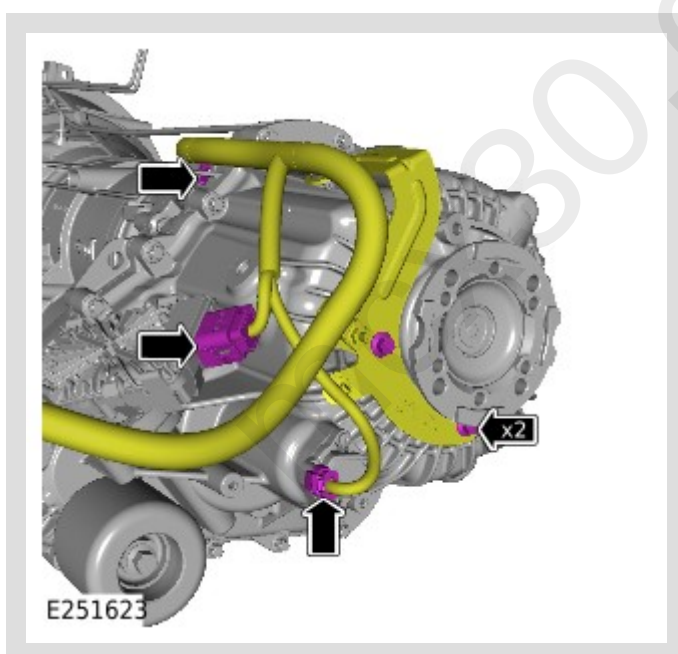
- Remove the heatshield.

33.



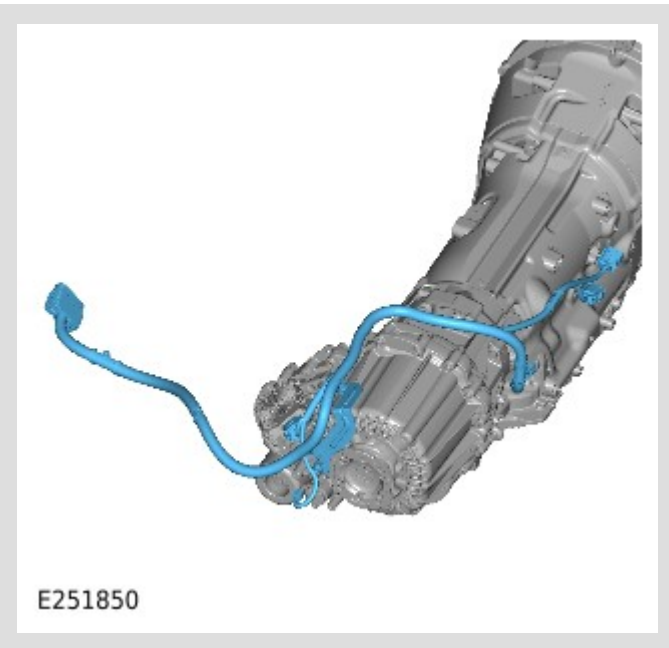
Disconnect the transmission electrical connector.

34.



- Remove the 2 bolts.
- Disconnect the 2 electrical connector.
- Release the wiring harness clip.

35.

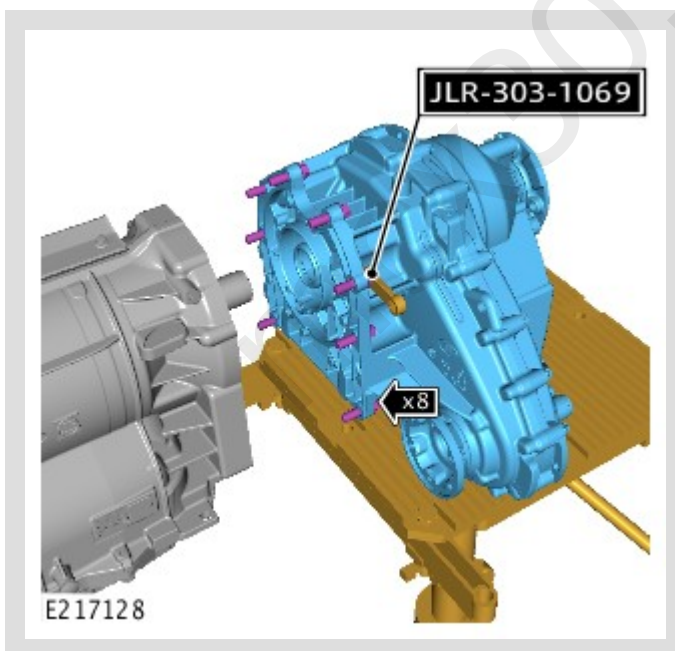


Remove the transmission wiring harness.

36.

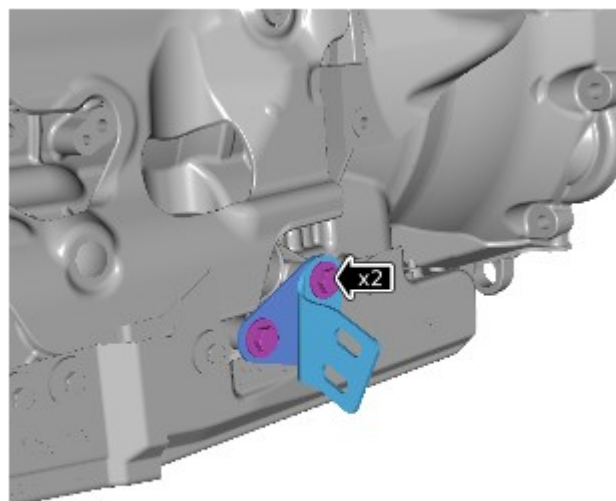
**WARNING:**

This step requires the aid of another technician.



- Use a suitable stand to support the transfer case.
General Equipment: [Transmission jack](#)
- Use the special tool to remove the 8 bolts.
Special Tool(s): [303-1069](#)
- Remove the transfer case.

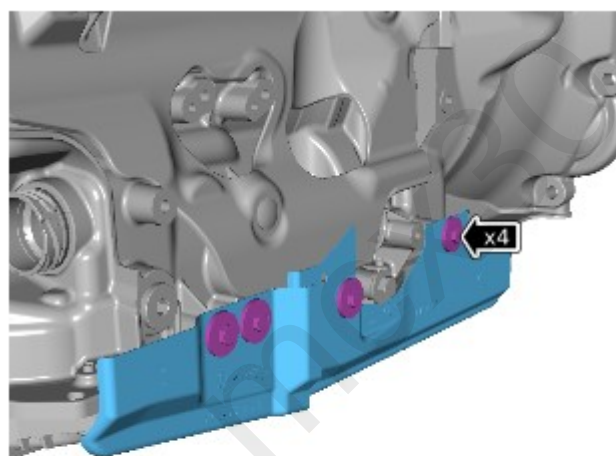
37.



E237452

- Remove the 2 bolts.
- Remove the 2 exhaust brackets.

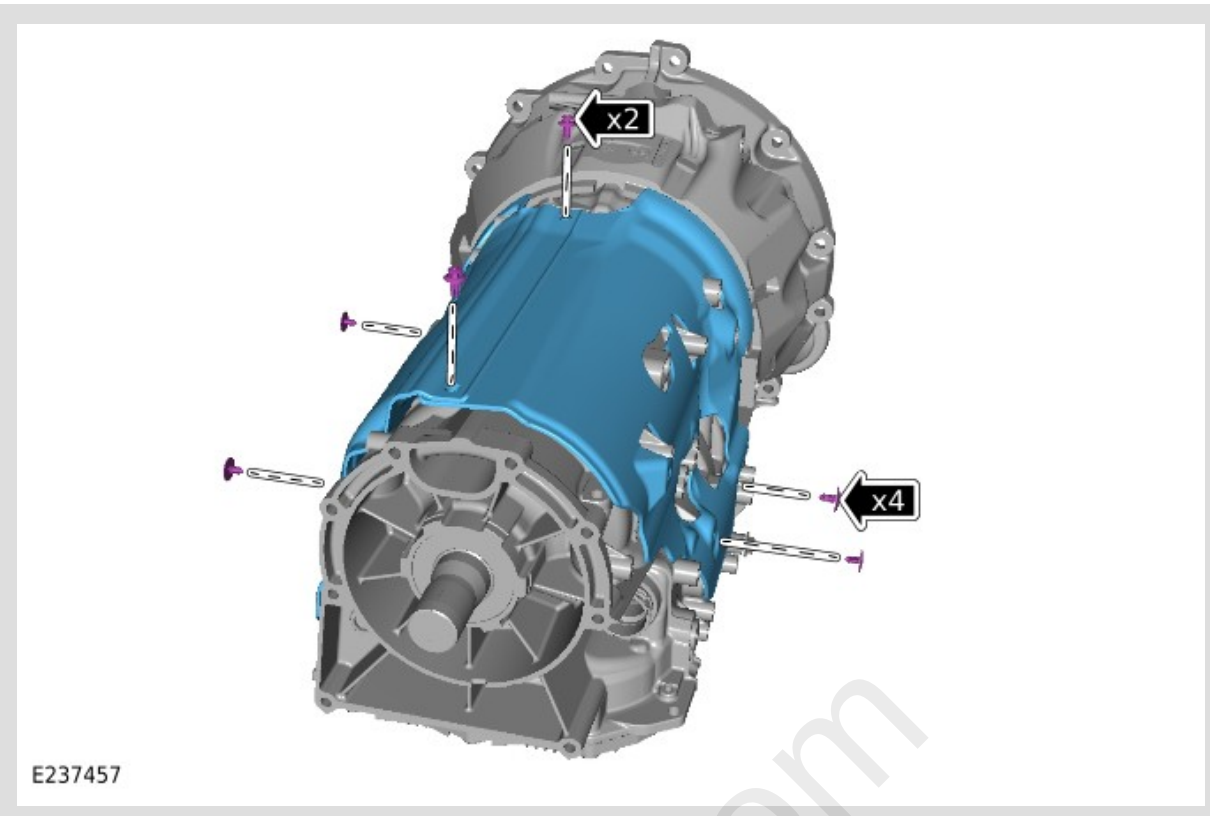
38.



E237453

- Remove the 4 bolts.
- Remove the 2 heatshields.

39.



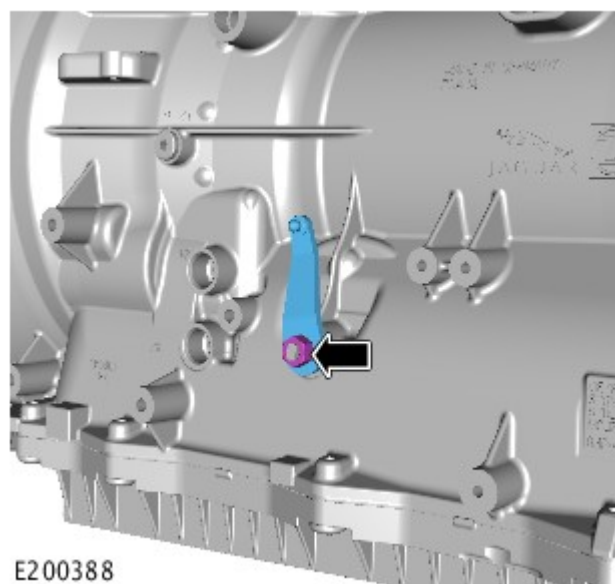
- Remove the 6 clips.
- Remove the 2 Noise, Vibration and Harshness (NVH) components.

40.



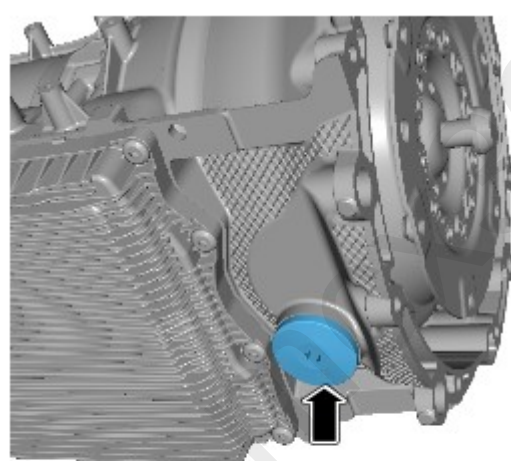
Remove the NVH material.

41.

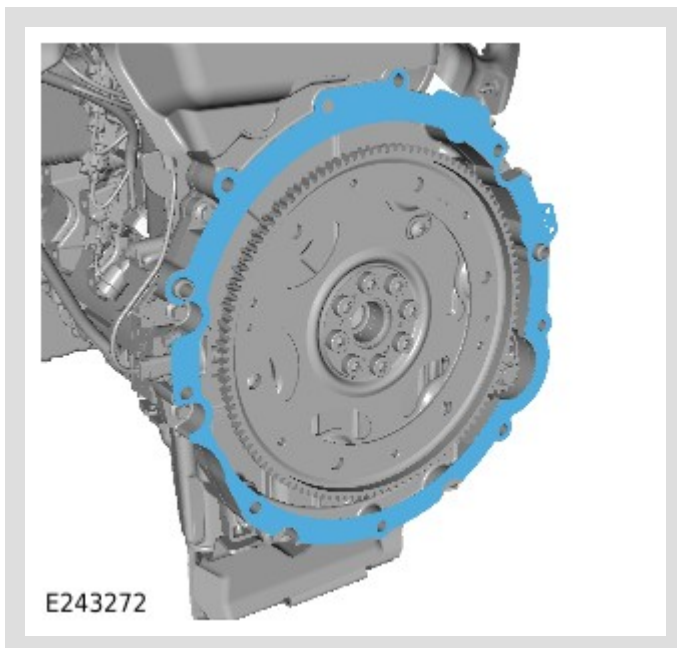


- Remove the nut.
- Remove the EPR lever.

42.



Remove the transmission plug.



Remove and discard the transmission gasket.