

ELECTRONIC ENGINE CONTROLS – INGENIUM I6 3.0L PETROL

POWERTRAIN CONTROL MODULE (G2394587)

REMOVAL AND INSTALLATION

18.30.01	POWERTRAIN CONTROL MODULE (PCM) – RENEW	2000 CC, INGENIUM DIESEL	0.50	USED WITHINS	
18.30.01	POWERTRAIN CONTROL MODULE (PCM) – RENEW	2000 CC, INGENIUM PETROL	0.50	USED WITHINS	
18.30.01	POWERTRAIN CONTROL MODULE (PCM) – RENEW	3000 CC, INGENIUM PETROL	0.80	USED WITHINS	

GENERAL EQUIPMENT

EQUIPMENT NAME
Jaguar Land Rover approved diagnostic equipment

REMOVAL

ⓘ CAUTIONS:

- Be prepared to collect escaping coolant.
- Before disconnecting any components, make sure the area is clean and free from foreign material. When disconnected all openings must be sealed.



NOTES:

- This procedure contains some variation in the illustrations depending on the vehicle specification, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.
- This procedure contains illustrations for left hand drive vehicles, right hand drive vehicles are similar.

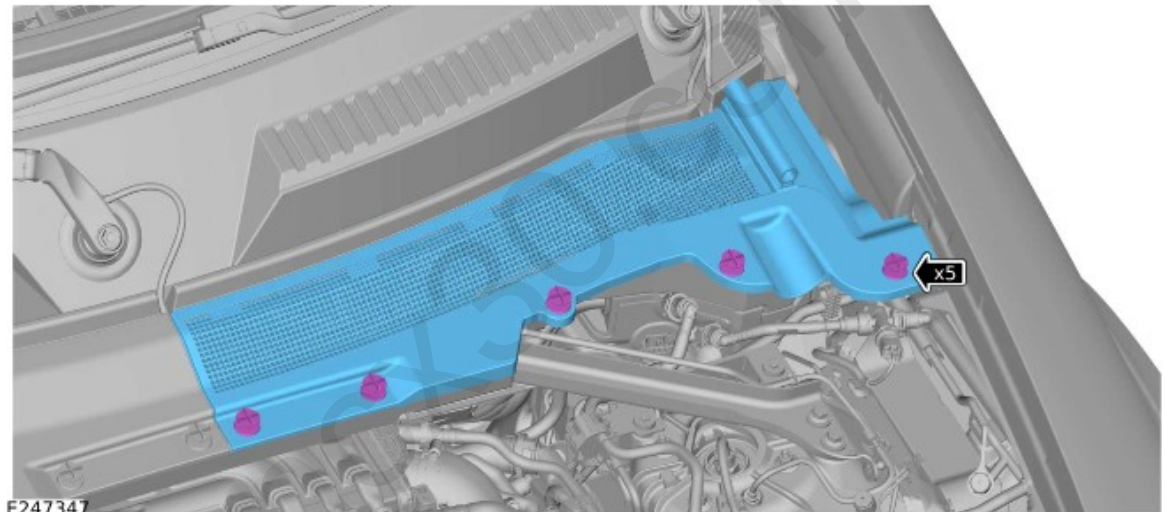
The following step(s) applies to:

All vehicles

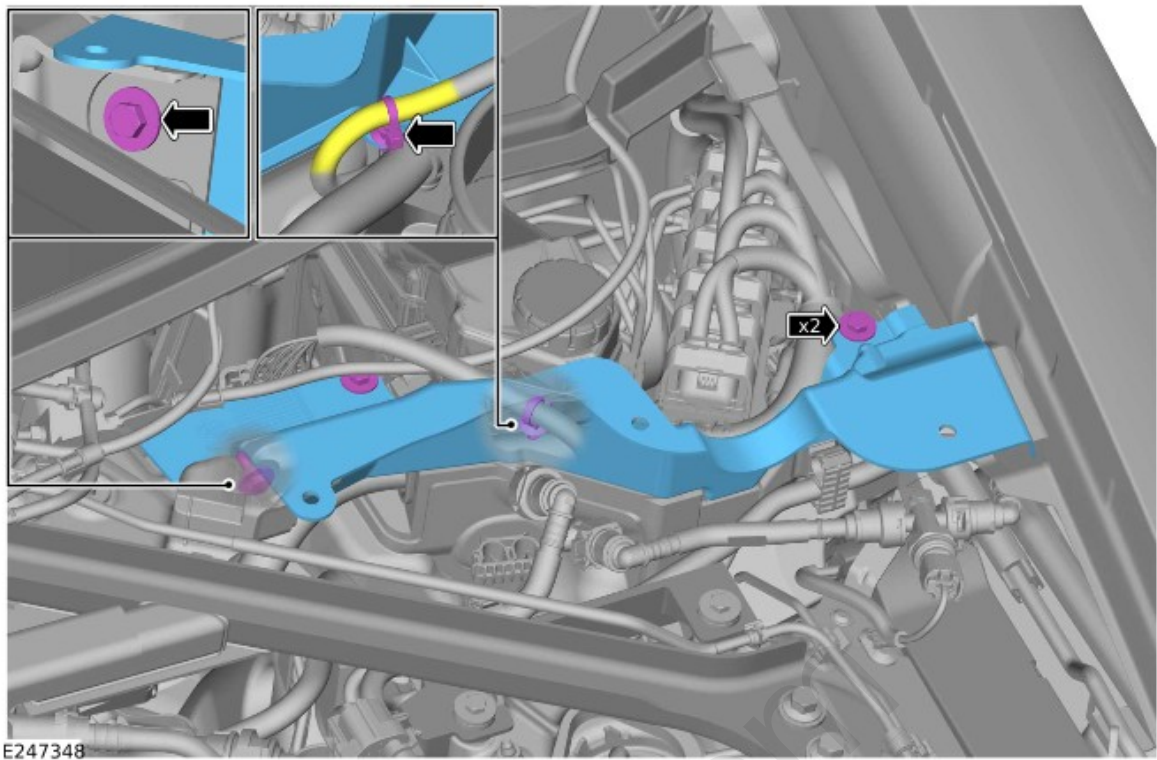
1. Disconnect the startup battery ground cable.

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

2.



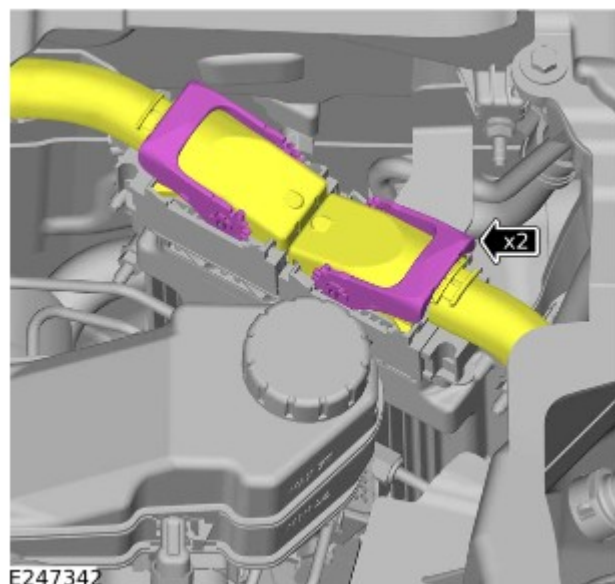
- Remove the 5 clips.
- Remove the access cover.



- Release the wiring harness clip.
- Remove the 3 bolts.
- Remove the bulkhead left upper panel.

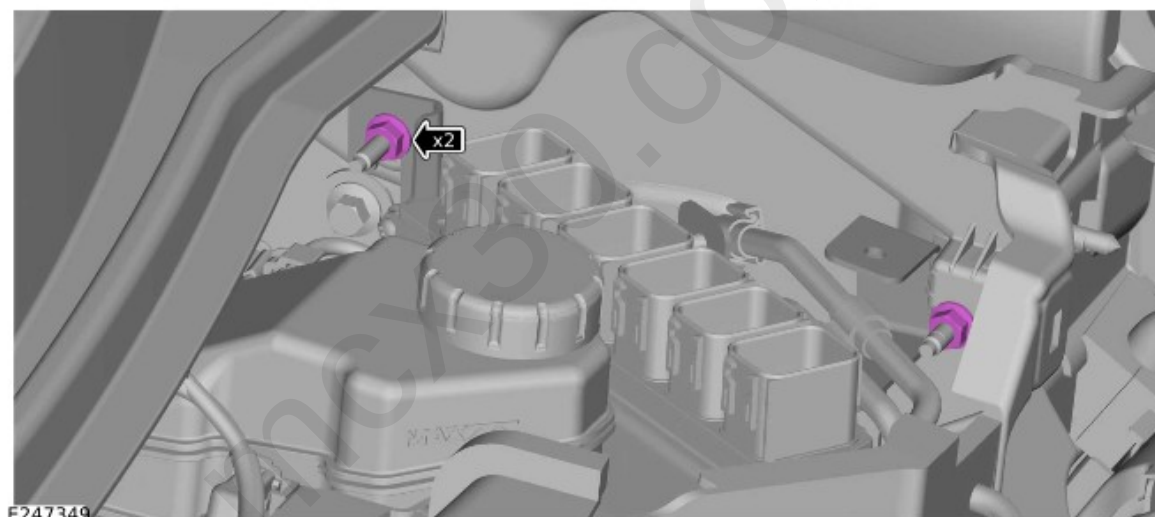
The following step(s) applies to:
Vehicles with 2.0L engine

4.



Disconnect the 2 electrical connectors.

5.

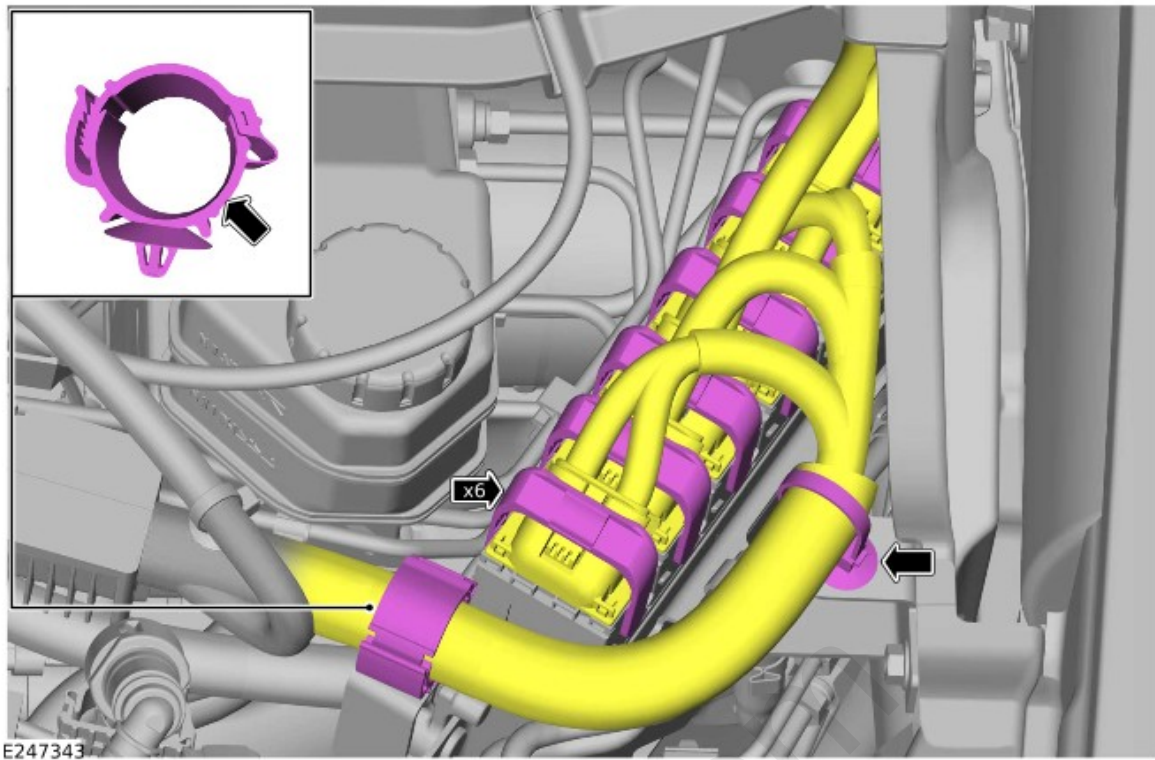


Remove the 2 nuts.

The following step(s) applies to:

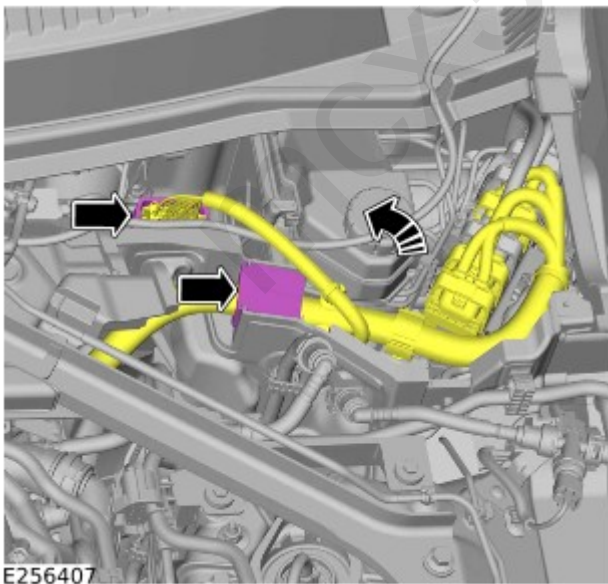
Vehicles with 3.0L engine

6.



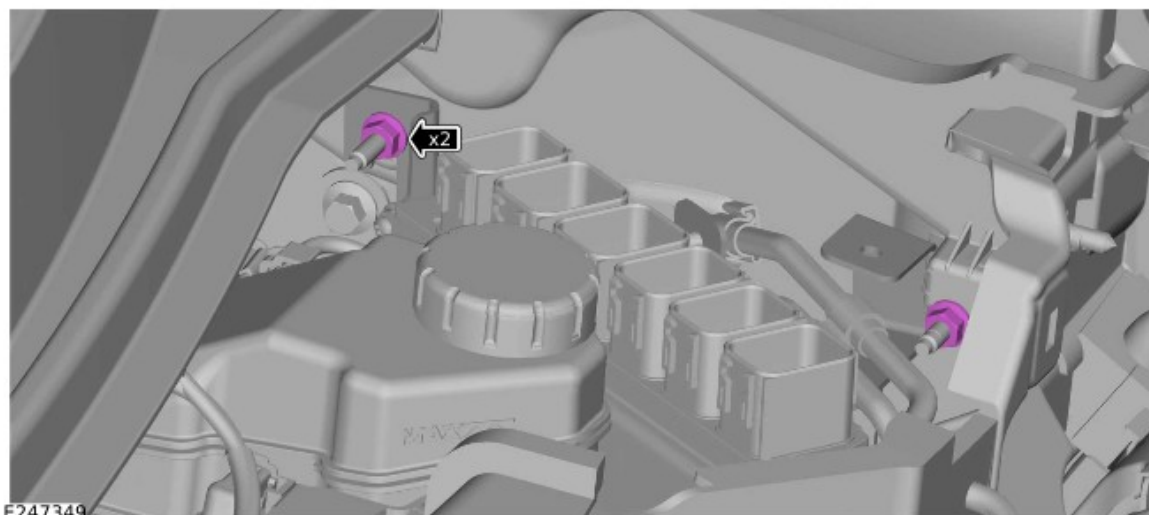
- Release the 2 wiring harness clips.
- Disconnect the 6 electrical connectors.

7.



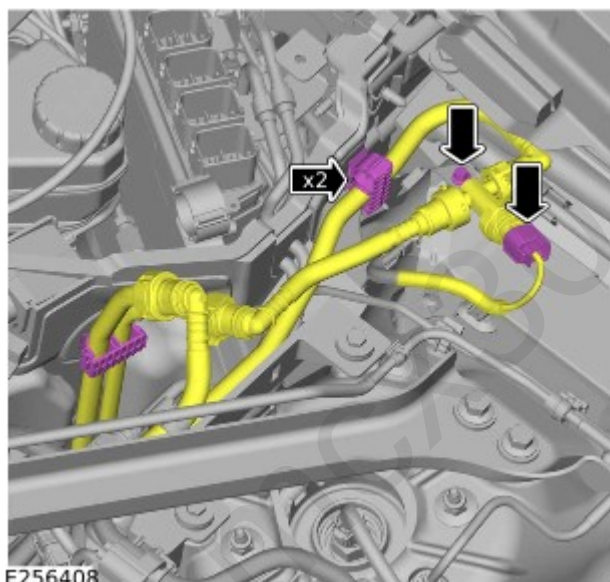
- Disconnect the electrical connector.
- Release the grommet.
- Reposition the wiring harness away from the Powertrain Control Module (PCM).

8.



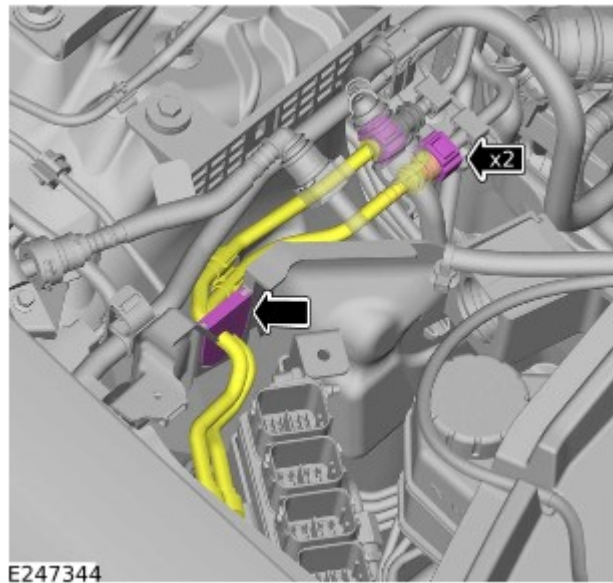
Remove the 2 nuts.

9.



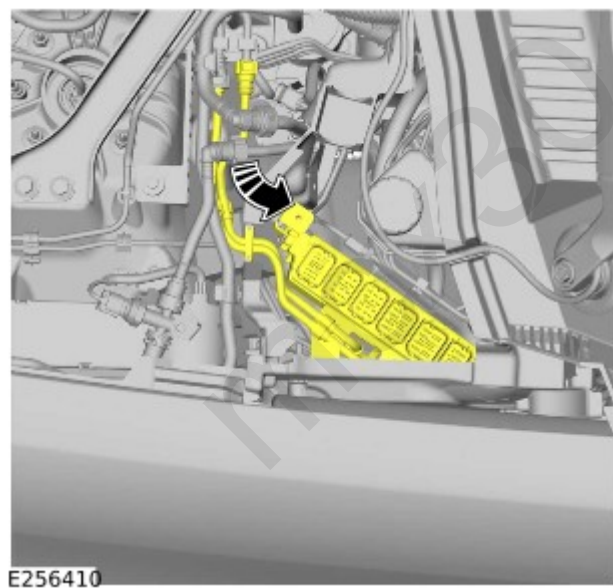
- Remove the bolt.
- Disconnect the electrical connector.
- Release the 2 fuel lines from the 2 clips.

10.



- Disconnect the 2 coolant pipes.
- Release the grommet.

11.

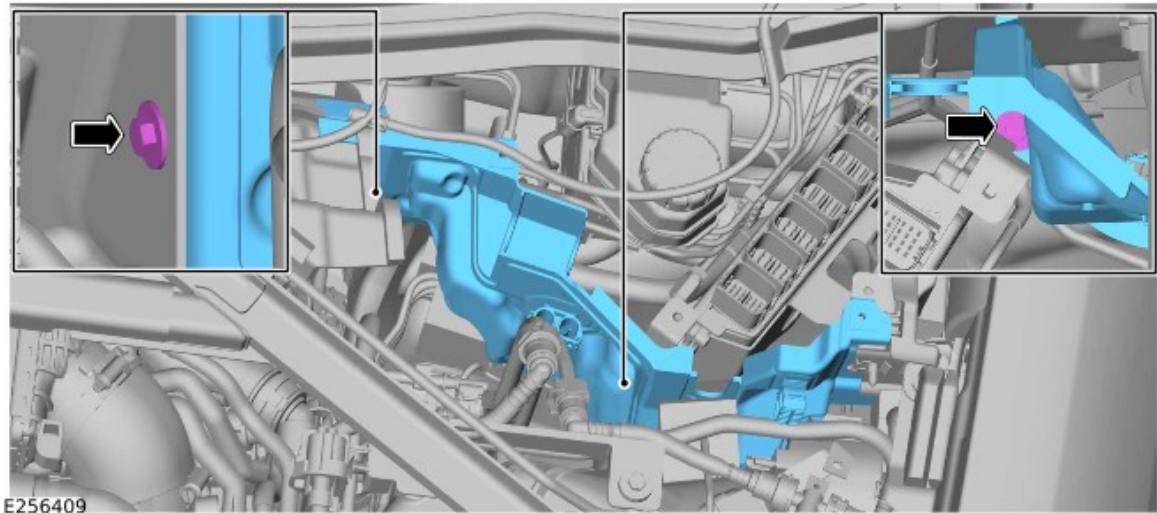


Reposition the 2 coolant pipes away from the fuel lines.

The following step(s) applies to:

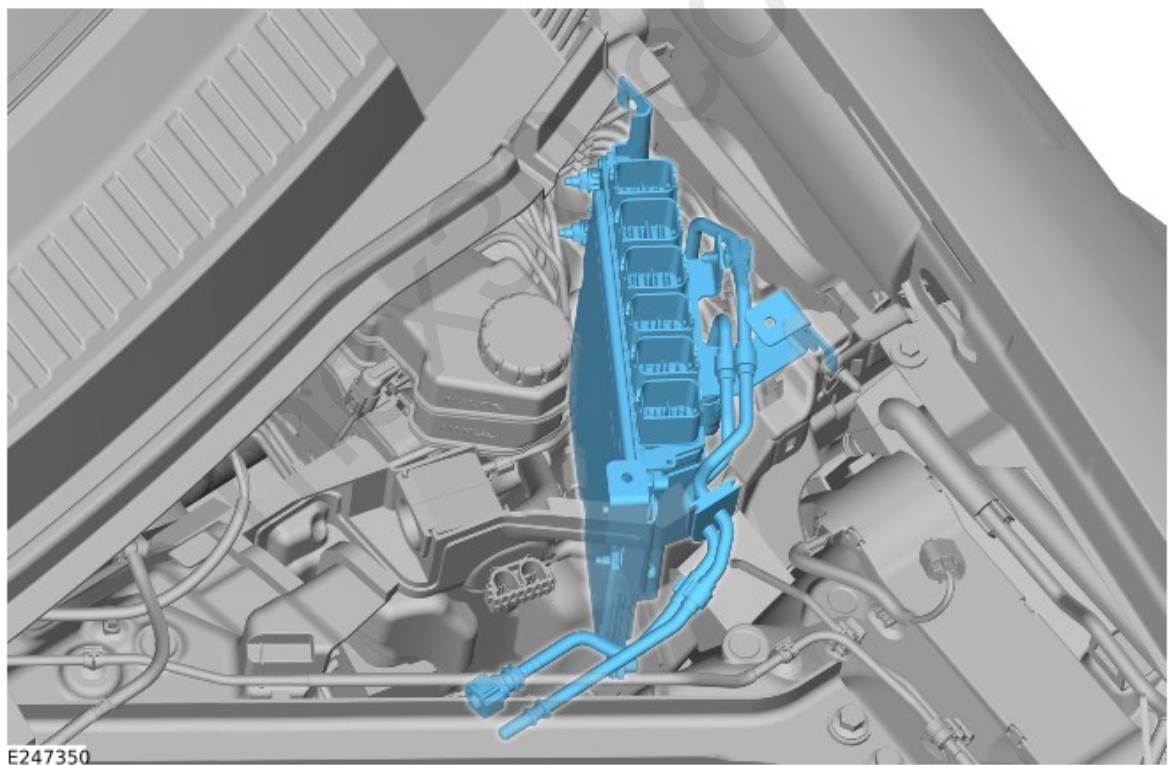
All vehicles

12.



- Remove the 2 bolts.
- Remove the bulkhead left lower panel.

13.



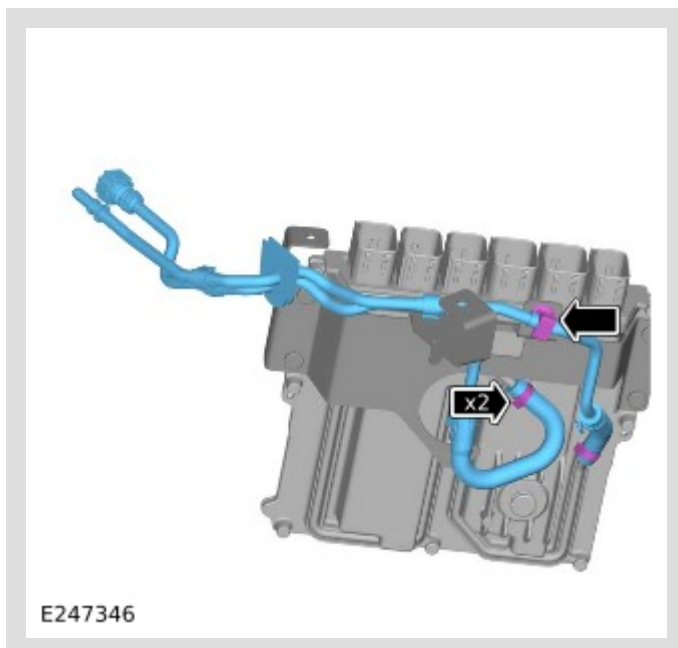
Remove the PCM assembly.

The following step(s) applies to:

Vehicles with 3.0L engine

 NOTE:

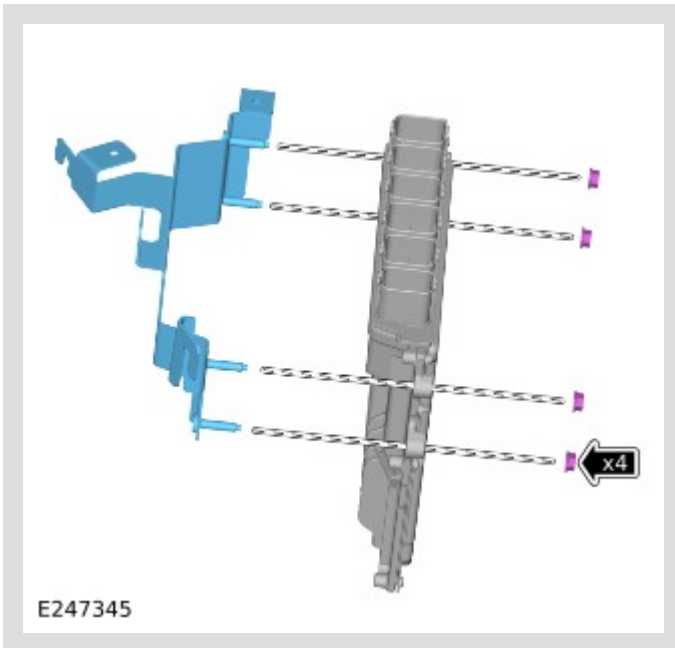
Do not disassemble further if the component is removed for access only.



- Release the 3 clips.
- Release the 2 hoses.
- Remove the coolant pipe assembly.

The following step(s) applies to:
All vehicles

15.



- Remove the 4 nuts.
- Remove the bracket.

INSTALLATION

The following step(s) applies to:

All vehicles

1.

NOTE:

Steps 1-2 are only required if previously removed.

- Install the bracket.
- Install and tighten the 4 nuts.
Torque: 7Nm

The following step(s) applies to:

Vehicles with 3.0L engine

2.

- Install the coolant pipe assembly.
- Attach the 2 hoses.
- Install the 3 clips.

The following step(s) applies to:

All vehicles

3. Install the PCM assembly.

- 4.
- Install the bulkhead left lower panel.
 - Install and tighten the 2 bolts.
- Torque: 9Nm*

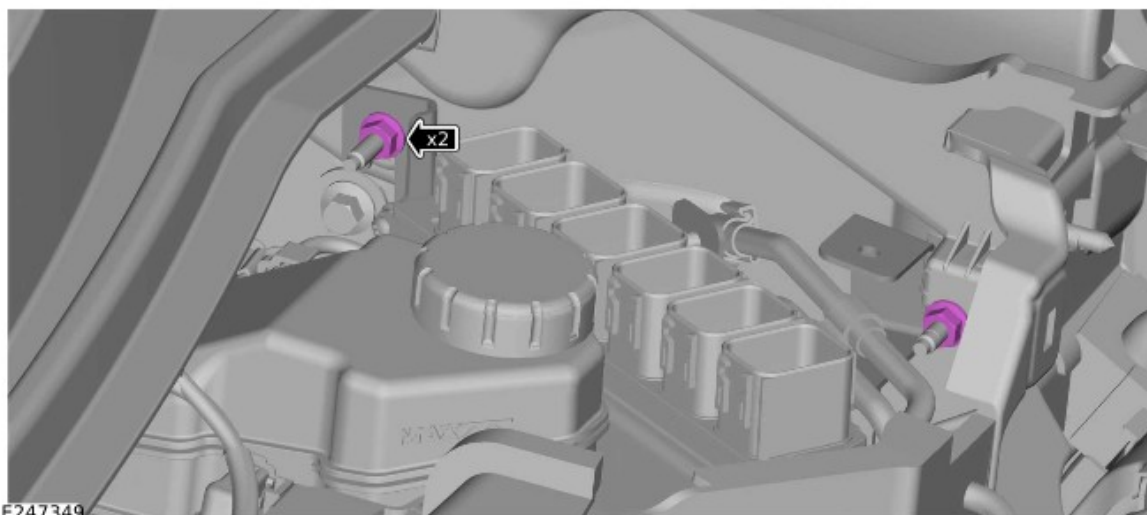
The following step(s) applies to:

Vehicles with 3.0L engine

- 5.
- Position the 2 coolant pipes in the correct location.
 - Connect the 2 coolant pipes.
 - Install the grommet.

- 6.
- Install the 2 fuel lines to the 2 clips.
 - Connect the electrical connector.
 - Install and tighten the bolt.
- Torque: 7Nm*

7.



Install and tighten the 2 nuts.

Torque: 9Nm

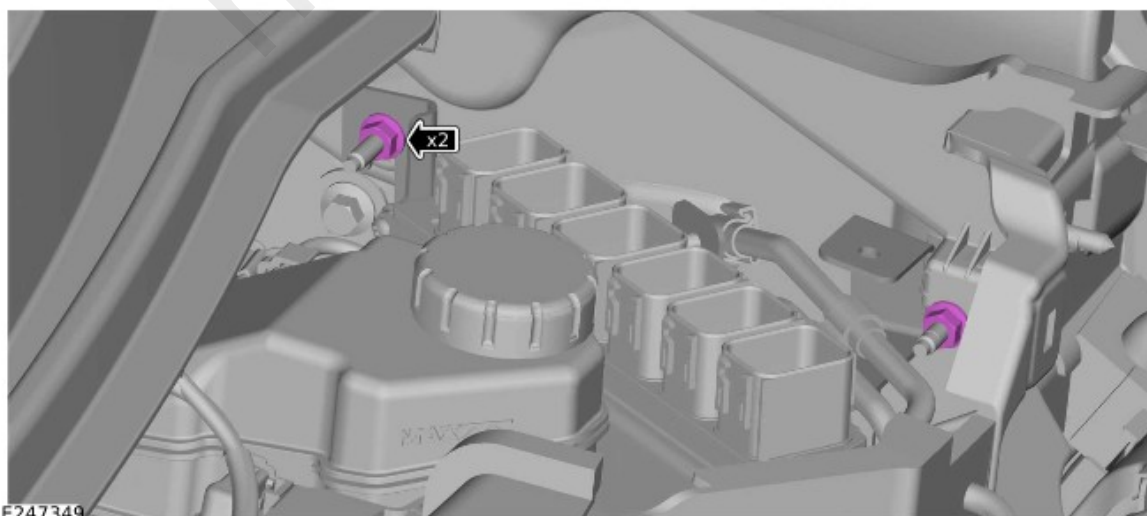
8.

- Position the wiring harness in the correct location.
- Install the grommet.
- Connect the 7 electrical connectors.
- Install the 2 wiring harness clips.

The following step(s) applies to:

Vehicles with 2.0L engine

9.



Install and tighten the 2 nuts.

Torque: 9Nm

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10. Connect the 2 electrical connectors.

The following step(s) applies to:

All vehicles

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- 11.
- Install the bulkhead left upper panel.
 - Install and tighten the 3 bolts.
Torque: 9Nm
 - Install the wiring harness clip.

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- 12.
- Install the access cover.
 - Install the 5 clips.

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13. Connect the startup battery ground cable.
Refer to: [Startup Battery Disconnect and Connect](#) (414-00 Battery and Charging System - General Information, General Procedures).

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14. If a new PCM is installed, use the Jaguar Land Rover approved diagnostic equipment to configure the PCM .
General Equipment: [Jaguar Land Rover approved diagnostic equipment](#)