

LTB01280NAS1



TECHNICAL BULLETIN

02 MAY 2019

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NOTE: The information in Technical Bulletins is intended for use by trained, professional Technicians with the knowledge, tools, and equipment required to do the job properly and safely. It informs these Technicians of conditions that may occur on some vehicles, or provides information that could assist in proper vehicle service. The procedures should not be performed by 'do-it-yourselfers'. If you are not a Retailer, do not assume that a condition described affects your vehicle. Contact an authorized Land Rover service facility to determine whether this bulletin applies to a specific vehicle.

SECTION:

412-01

SUBJECT/CONCERN:

Climate Control System Cooling Performance Not As Expected

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:	APPLICABILITY:
Discovery (LR)	2019	079571-091029	Solihull	V6 S/C 3.0L Petrol

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

SITUATION:

The climate control may exhibit poor cooling performance and not achieve the required interior temperature comfort level.

CAUSE:

This may be caused by the front electric cooling fan not being installed.

ACTION:

Should a customer express this concern, follow the procedure(s) below.

PARTS:

PART NUMBER	DESCRIPTION	QUANTITY
LR081688	Front electric cooling fan assembly	1
FS106206	Retaining bolt(s)	2
LR040736	Retaining nut(s)	2
LR126756	Wiring harness overlay kit Left Hand Drive (LHD)	1

TOOLS:

Refer to Workshop Manual for any required special tools.

WARRANTY:

NOTES:

- Repair procedures are under constant review, and therefore times are subject to change; those quoted here must be taken as guidance only. Use TOPIx to obtain the latest repair time.
- The JLR claims submission system requires the use of causal part numbers. Labor only claims must show the causal part number with a quantity of zero.

DESCRIPTION	SRO	TIME (HOURS)	CONDITION CODE	CAUSAL PART
Front electric cooling fan - Rework - Left Hand Drive (LHD)	82.90.18	5.2	39	LR081688

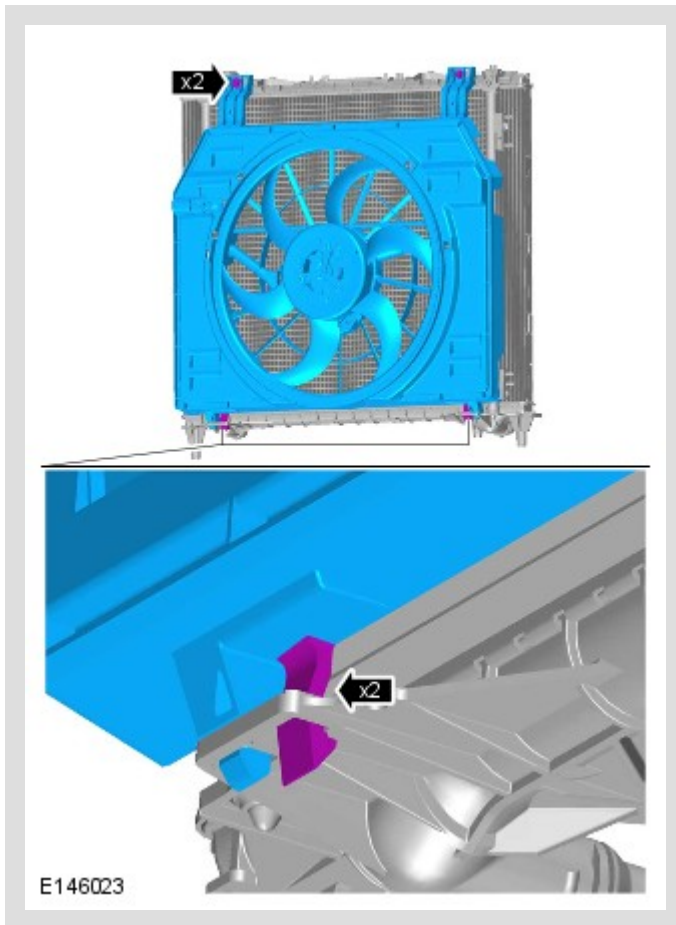
 **NOTE:**

Normal Warranty procedures apply.

SERVICE INSTRUCTION:

- 1** Inspect for the installation of the front electric cooling fan.
 - If a front electric cooling fan is installed, do not continue with this Technical Bulletin. Continue diagnosis per TOPIx Workshop Manual section 412-01: Climate Control.
 - If a front electric cooling fan is not installed, go to Step 2.
- 2** Remove the hood latch panel (see TOPIx Workshop Manual section 501-02: Front End Body Panels - Removal and Installation - Hood Latch Panel).
- 3** Remove the front armature (see TOPIx Workshop Manual section 501-19: Bumpers - Removal and Installation - Front Armature).

4



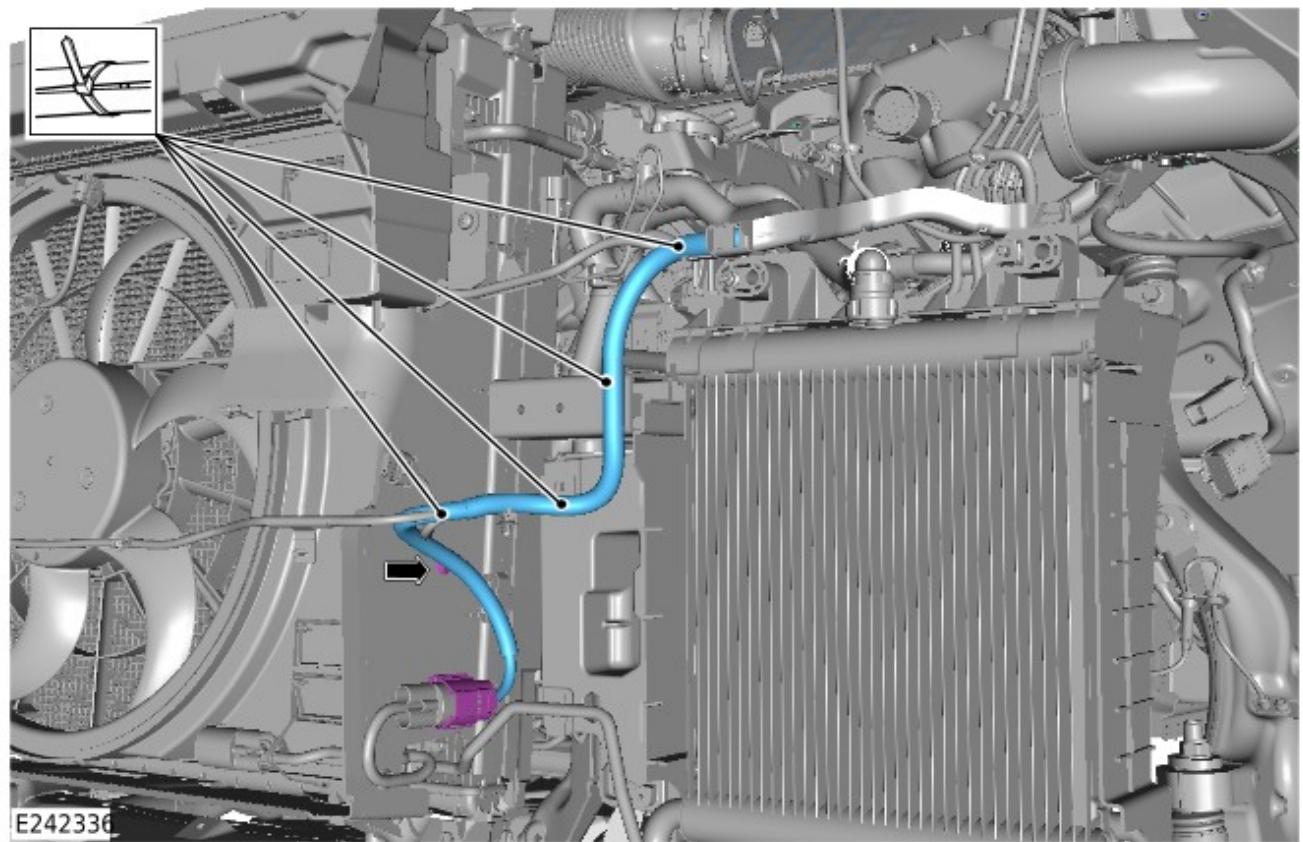
Install the front electric cooling fan assembly.

- Torque: **7 Nm**

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Remove the left air cleaner assembly (see TOPIx Workshop Manual section 303-12B: Intake Air Distribution and Filtering - V6 S/C 3.0L Petrol - Removal and Installation - Left Air Cleaner).

6



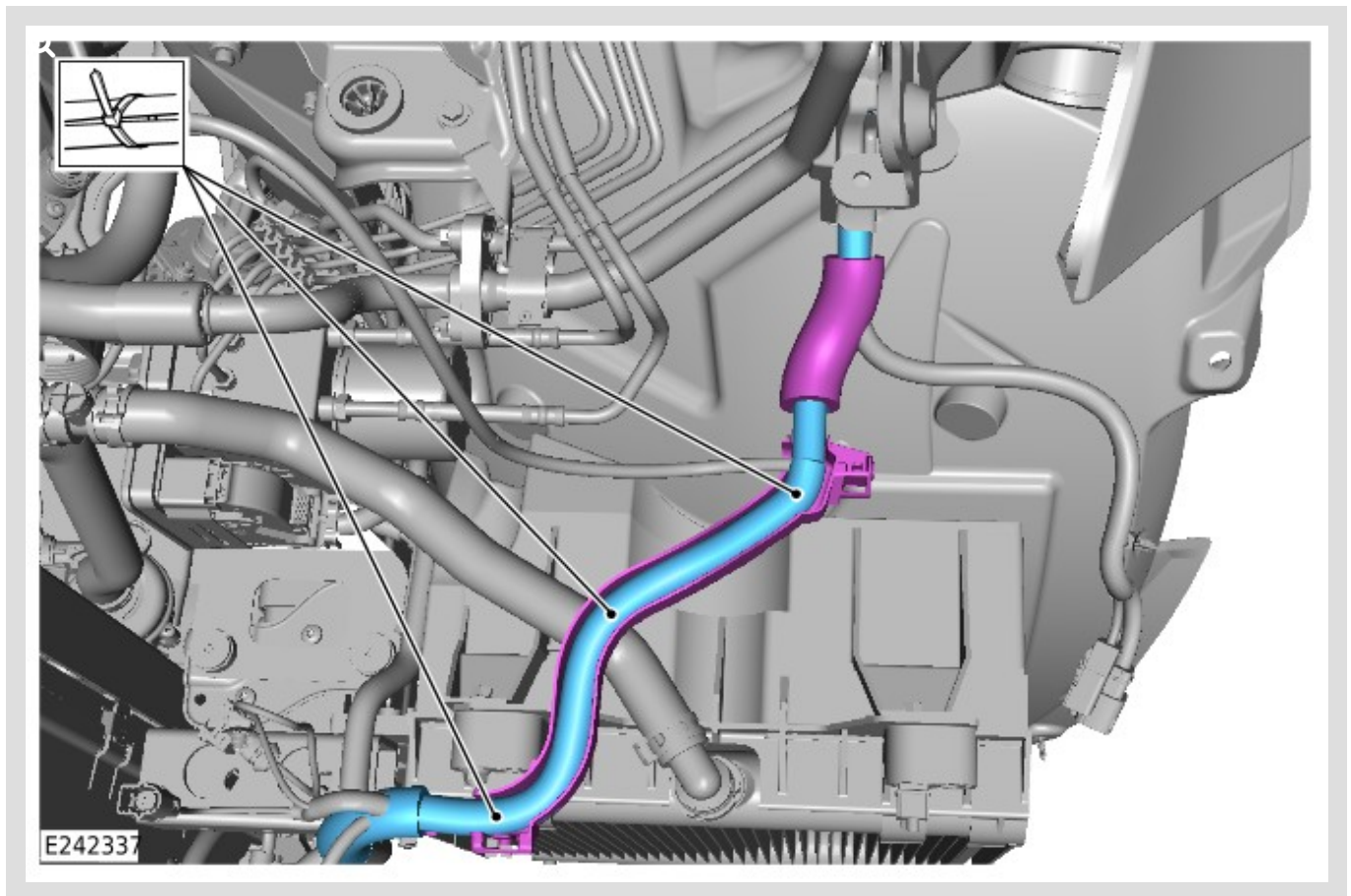
Install the electrical connector of the wiring harness overlay to the front electric cooling fan.

- 1 Install the fir tree clip into the front fan cowl.
- 2 Use cable ties at approximately 100 mm (or less) intervals to allow the overlay wiring harness to follow the existing wiring harness as shown.

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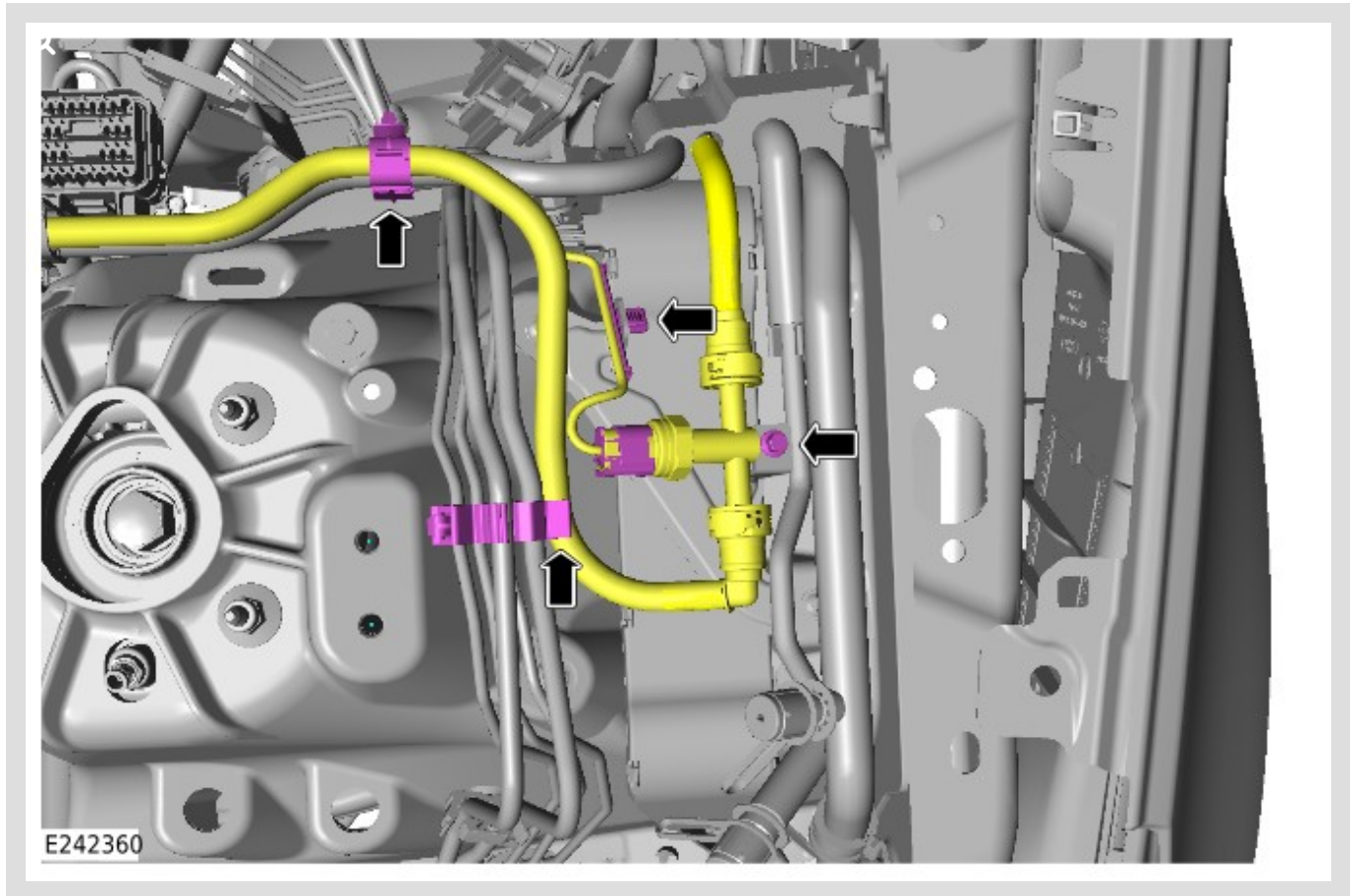
 **NOTE:**

Make sure the wiring harness overlay is installed through the large convolute as shown.

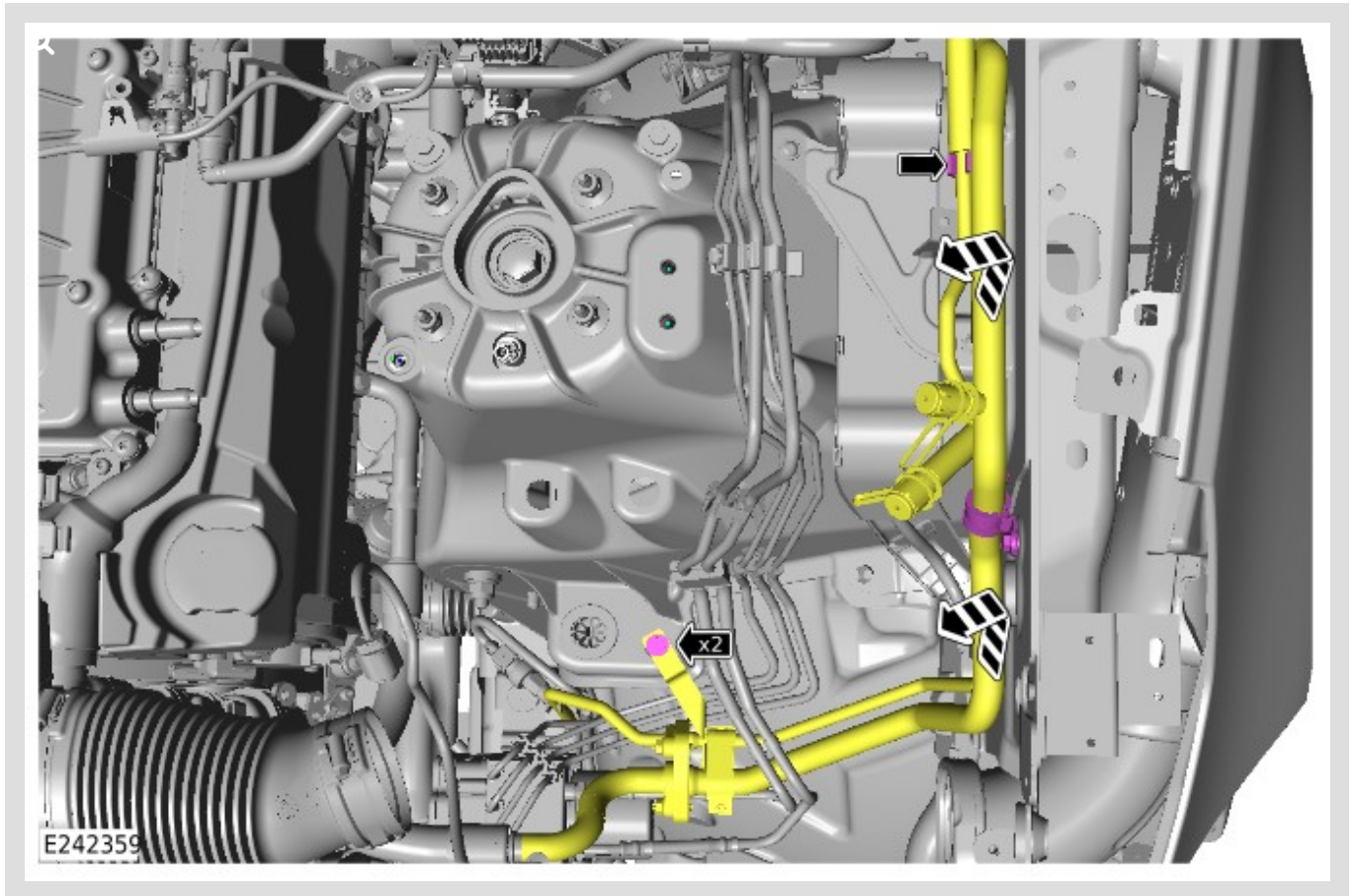


Use cable ties at approximately 100 mm (or less) intervals to allow the overlay wiring harness to follow the existing wiring harness as shown.

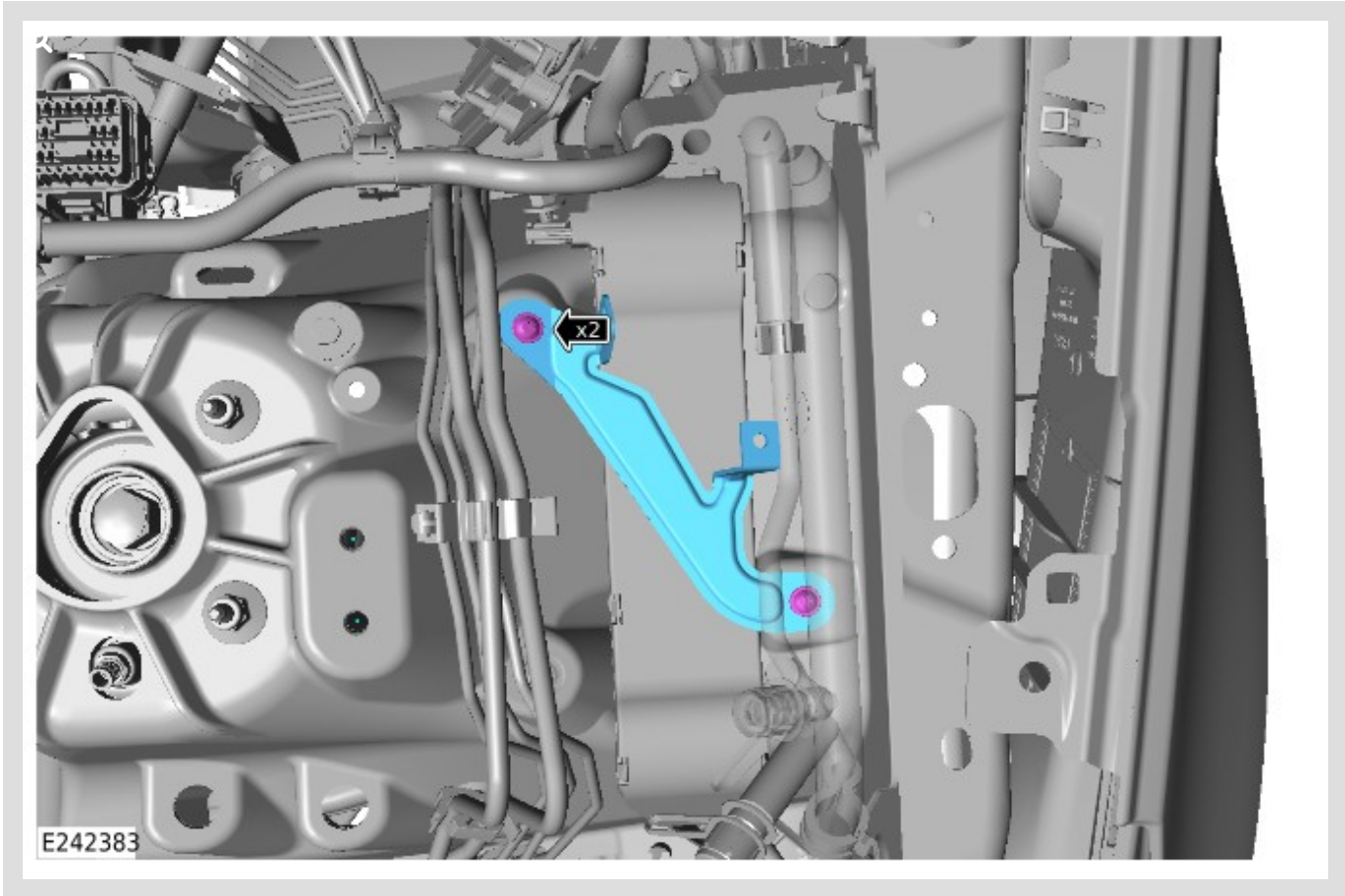
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- 8 Remove the secondary bulkhead left panel (see TOPIx Workshop Manual section 501-02: Front End Body Panels - Removal and Installation - Secondary Bulkhead Left panel).
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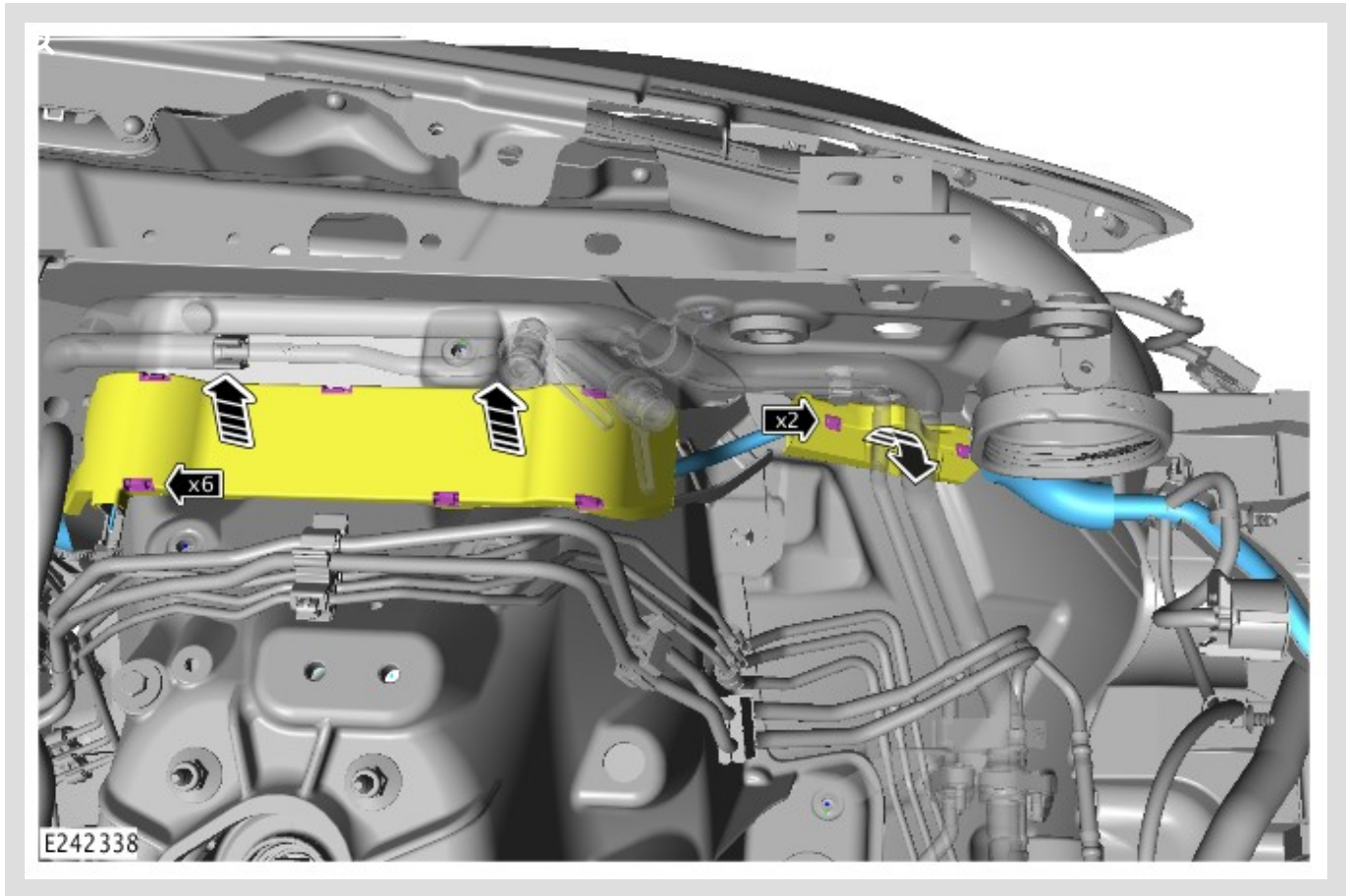
Remove the retaining nut(s), remove the low pressure fuel lines from the retaining clips, disconnect the electrical connector, and reposition the low pressure fuel lines.



Remove the 2 retaining nut(s) and reposition the Air Conditioning (A/C) refrigerant lines as shown.

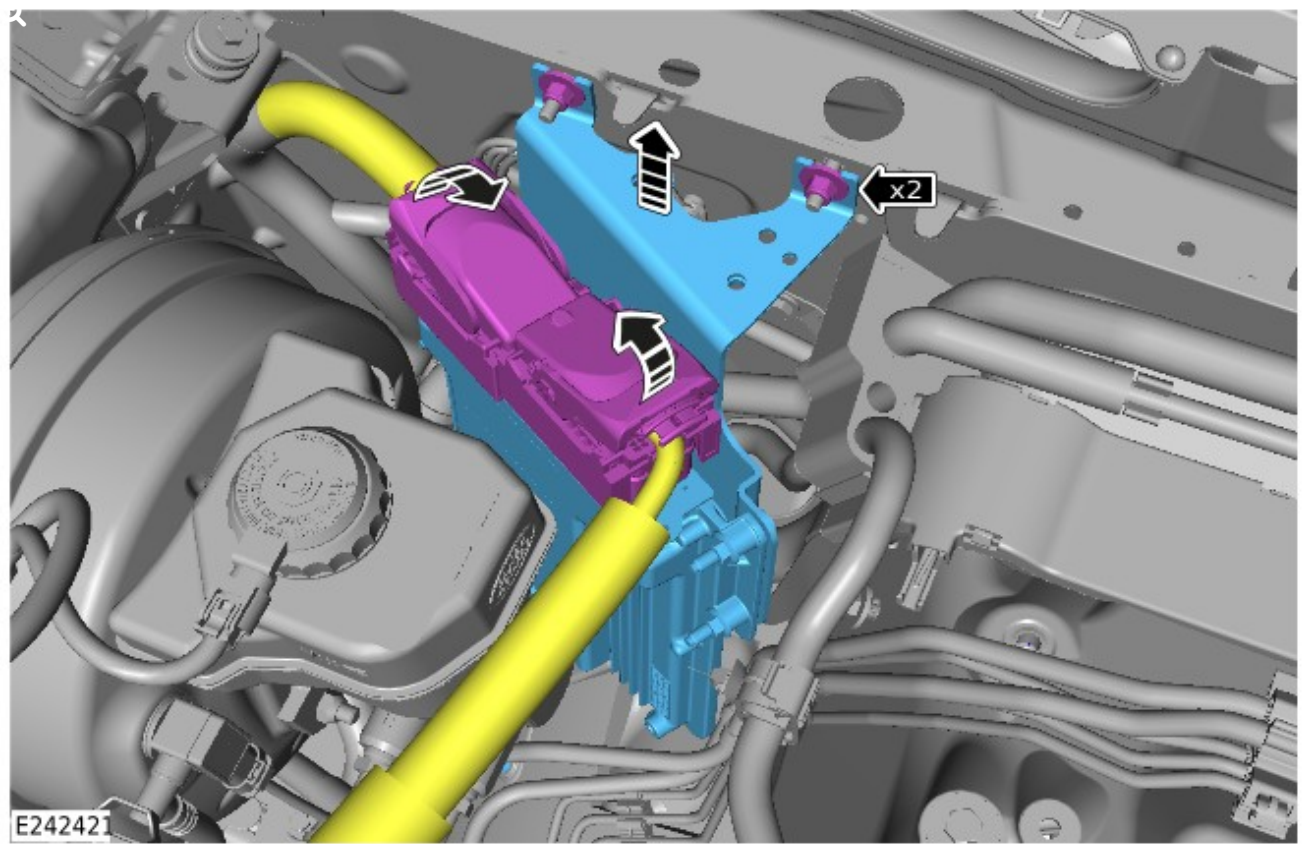


Remove the low pressure fuel line retaining bracket.



Open both engine compartment wiring harness forms and install the wiring harness overlay.

13



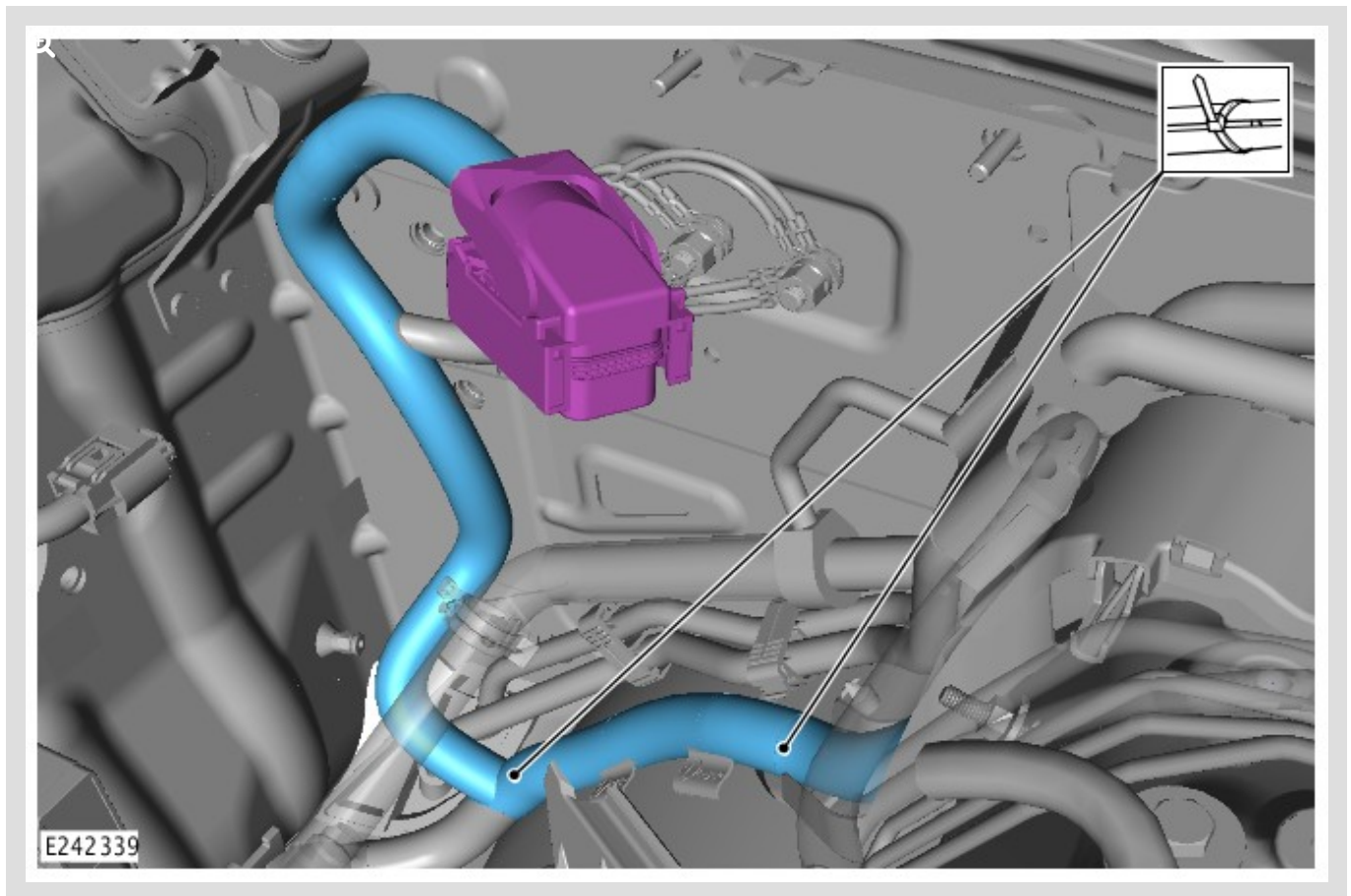
Remove the PCM (Powertrain Control Module).

- Torque: **9 Nm**

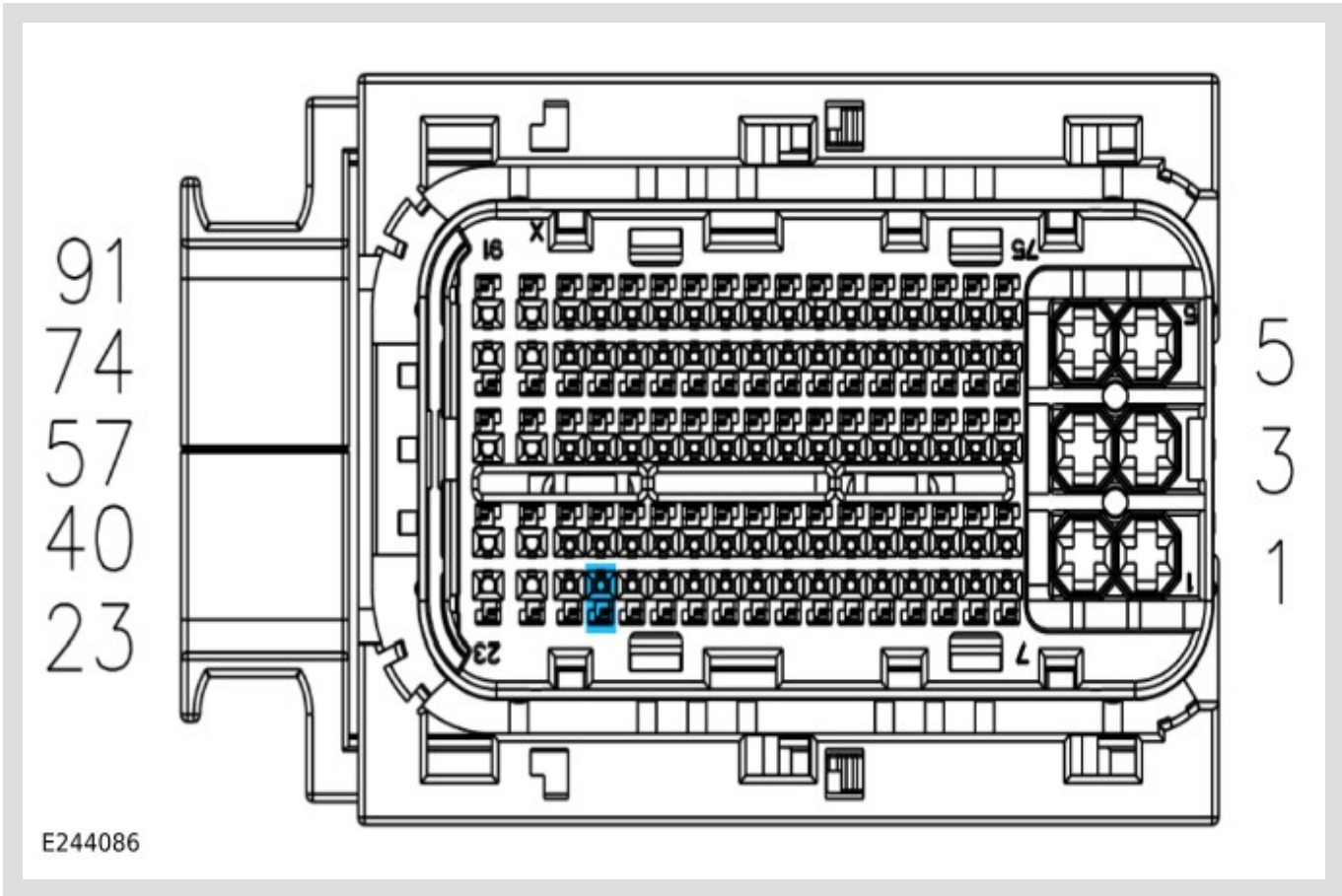
14

△ NOTE:

Make sure the PCM wiring harness overlay circuit is installed through the protective convolute.

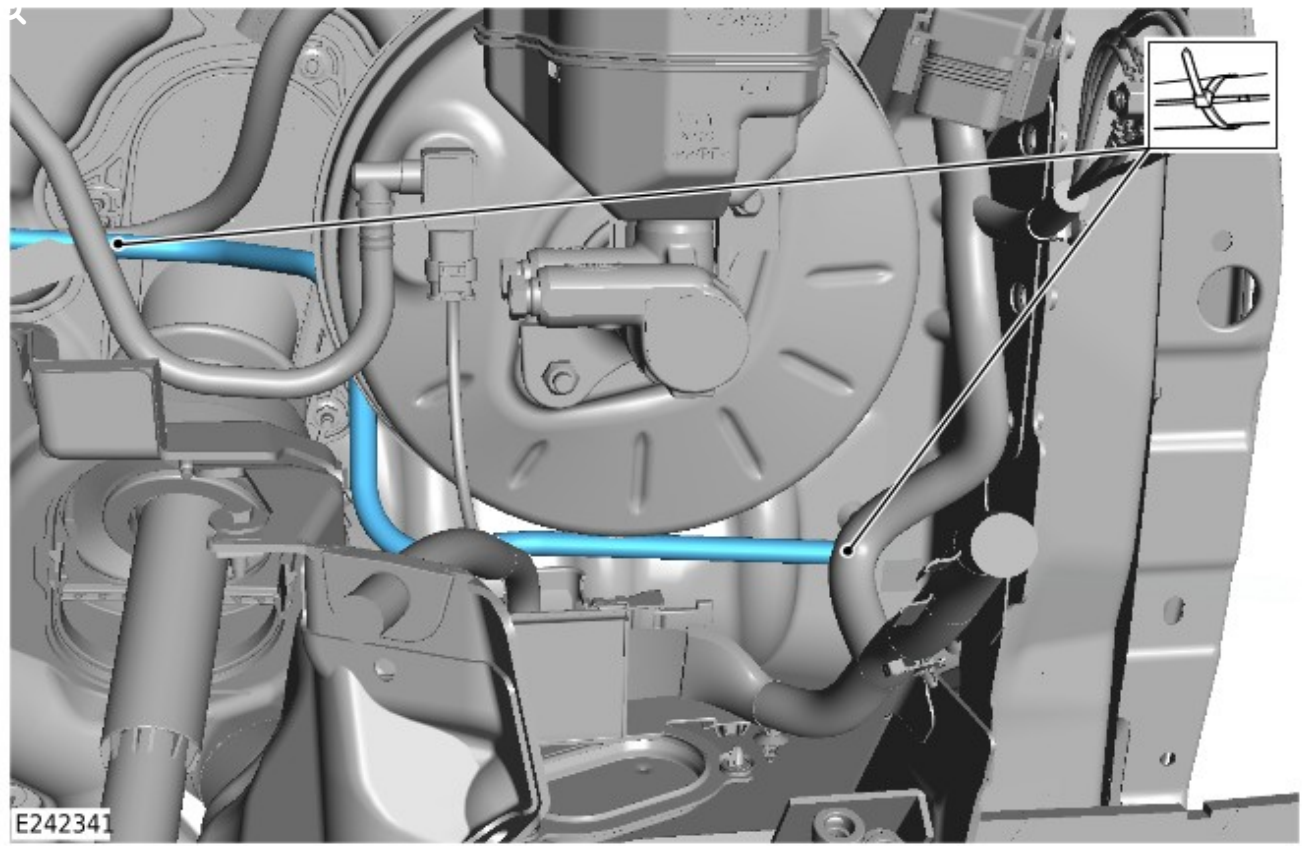


Use cable ties at approximately 100 mm (or less) intervals to allow the overlay wiring harness to follow the existing wiring harness as shown.



Install the black wire in cavity 20 of PCM connector **C1E120B**.

16



Route the remaining wiring harness overlay under the brake booster and over the steering gear boot.

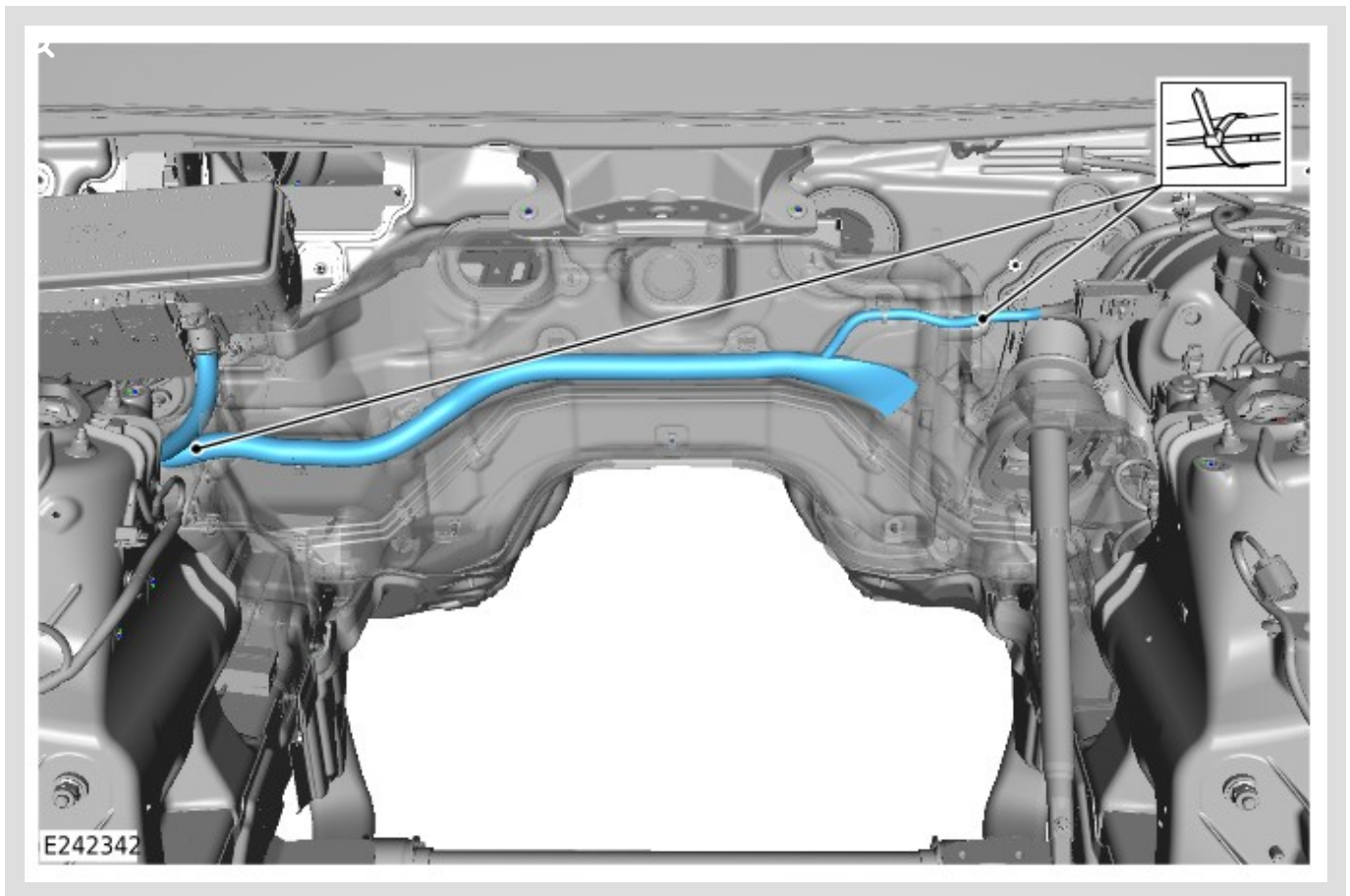
- 1 Secure with cable ties at the points shown

17 Remove the secondary bulkhead right panel (see TOPIx Workshop Manual section 501-02: Front End Body Panels - Removal and Installation - Secondary Bulkhead Right Panel).

18

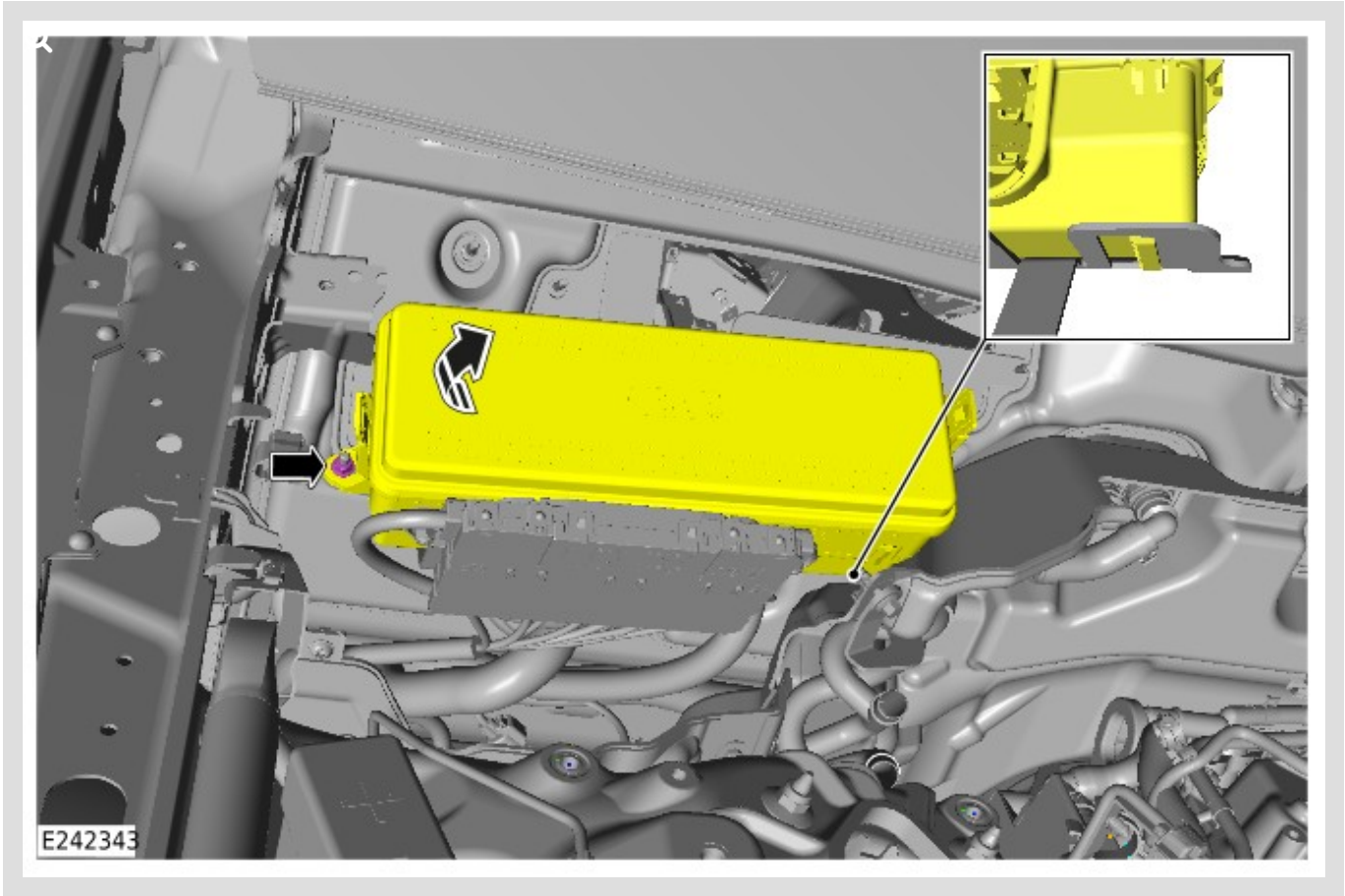
NOTE:

Pull through from the Engine Junction Box (EJB) side.

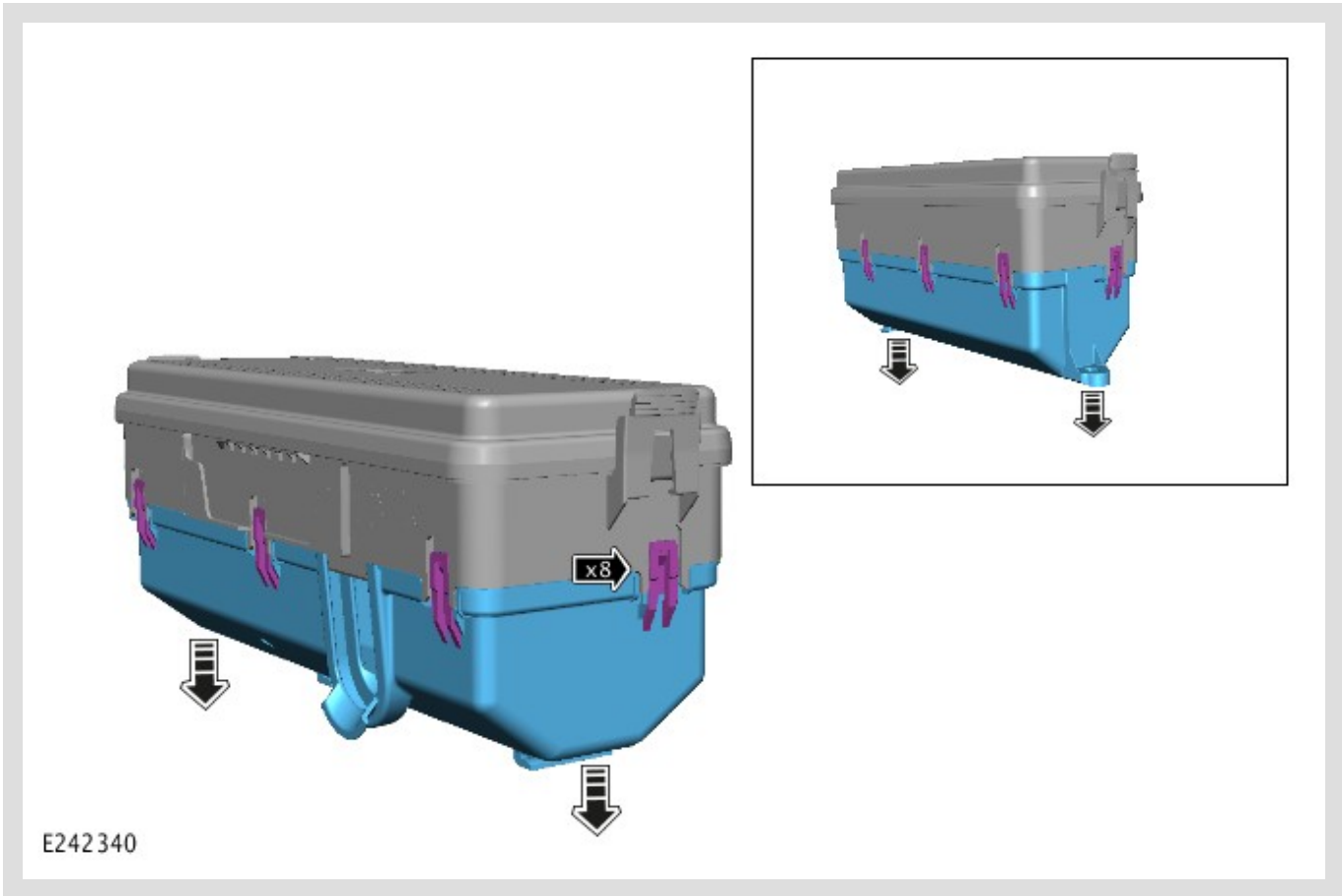


Attach the wiring harness overlay to a suitable tool and route the wiring harness overlay behind the bulkhead Noise, Vibration and Harshness (NVH) material.

- 1 Secure with cable ties at the points shown.

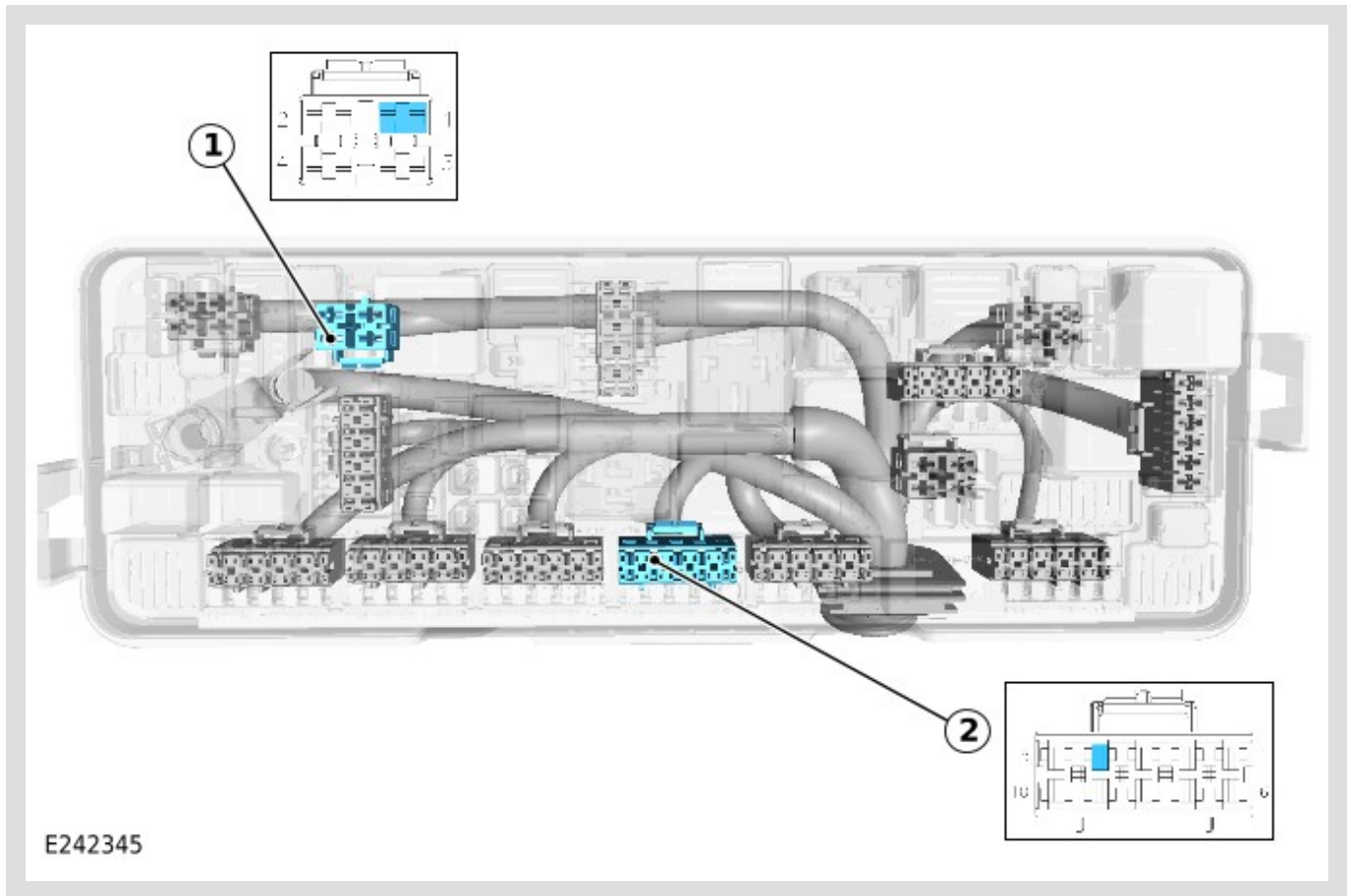


Reposition the EJB.



Remove the lower section of the EJB for access to the electrical connectors.

21

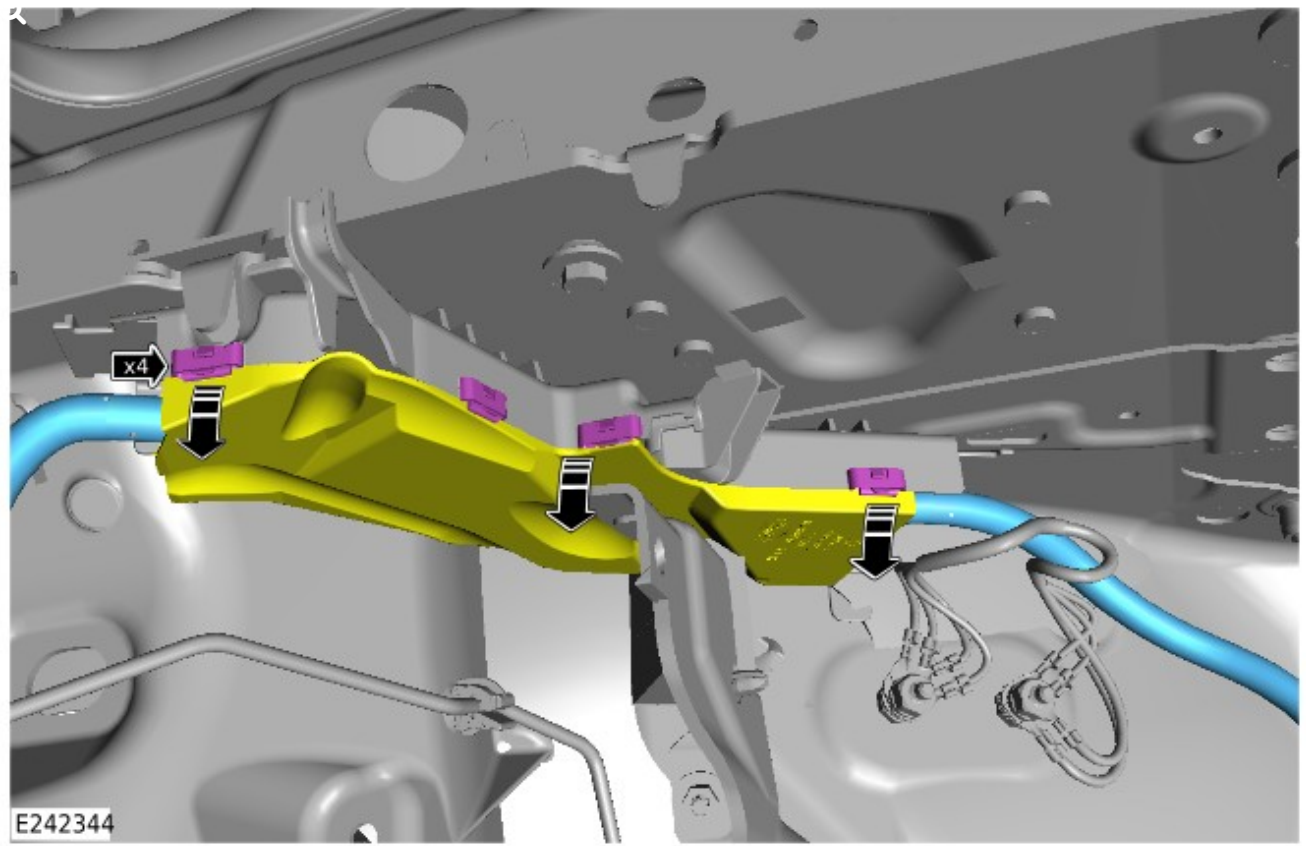


Install the black wire and the violet wire in to the EJB.

- 1 Install the black wire in cavity 1 of electrical connector **C1BB01N** and install a 60A fusible link to FL9.
- 2 Install the violet wire in cavity 4 of electrical connector **C1BB01D** and install a 10A fuse to F17.

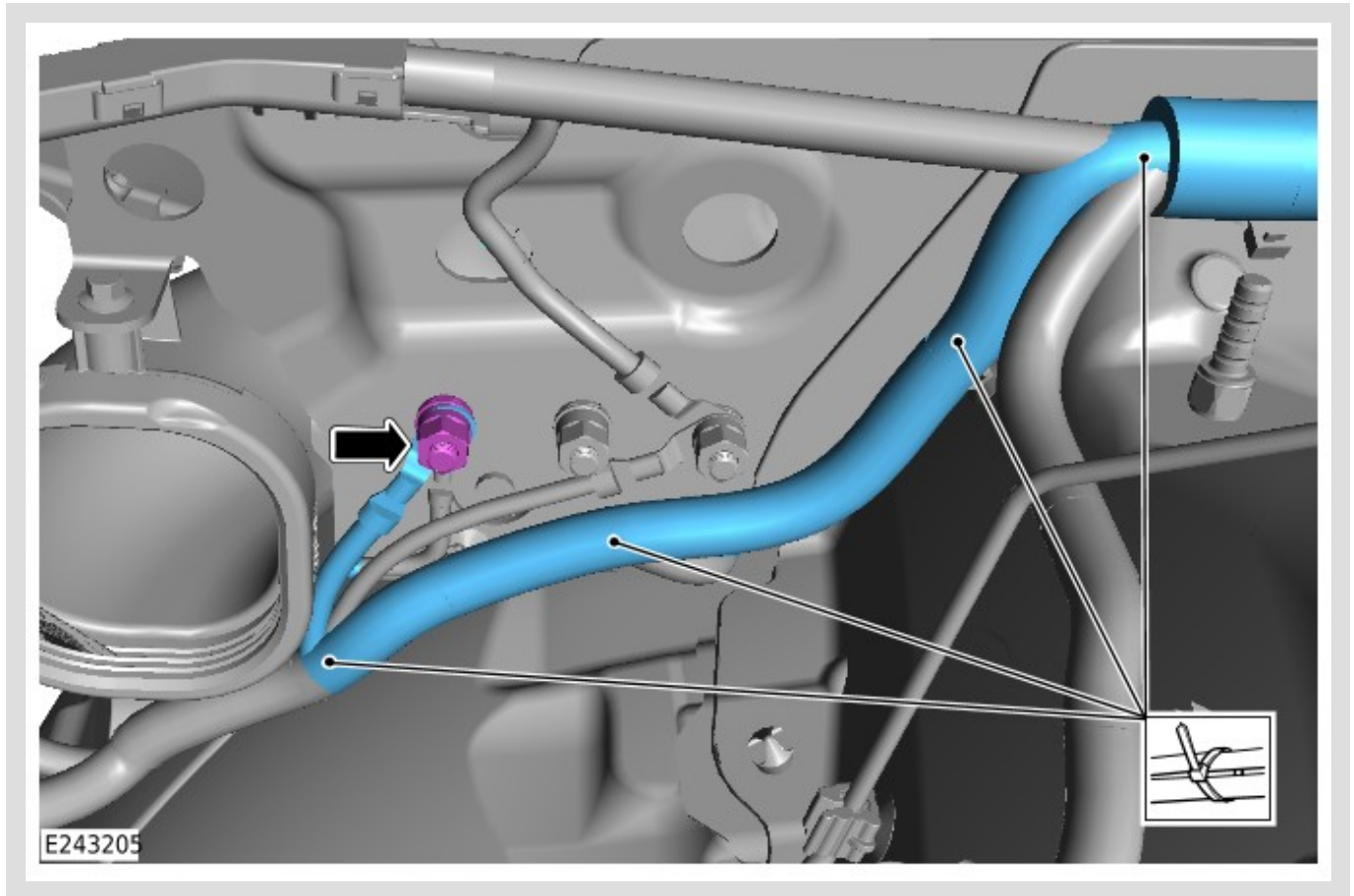
22 Install the EJB.

- Torque: **6 Nm**



Open the form wide enough to route the wiring harness overlay.

24

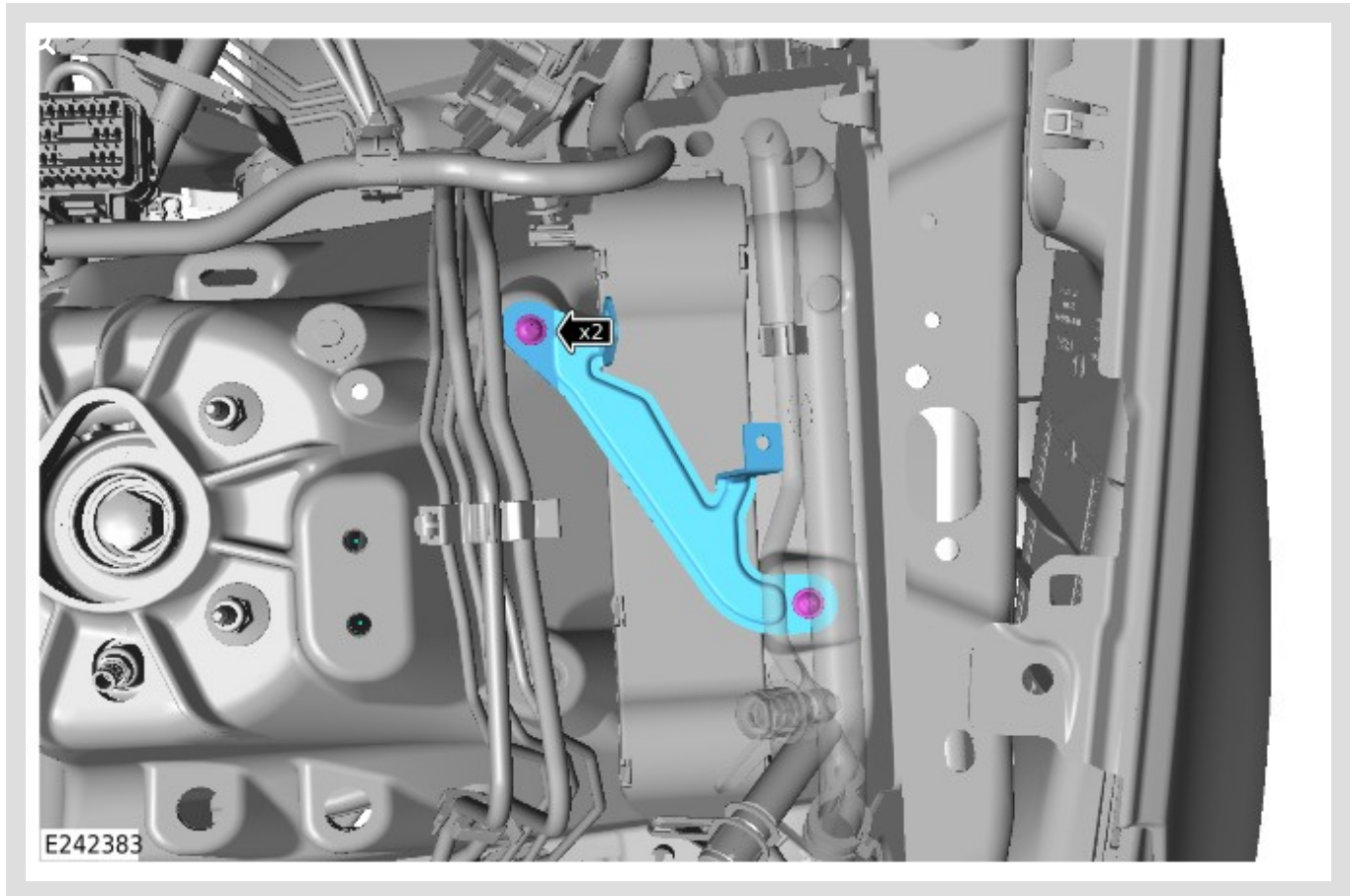


Use cable ties at approximately 100 mm (or less) intervals to allow the overlay wiring harness to follow the existing wiring harness as shown.

1 Install the ground eyelet to ground point G1D133D as shown

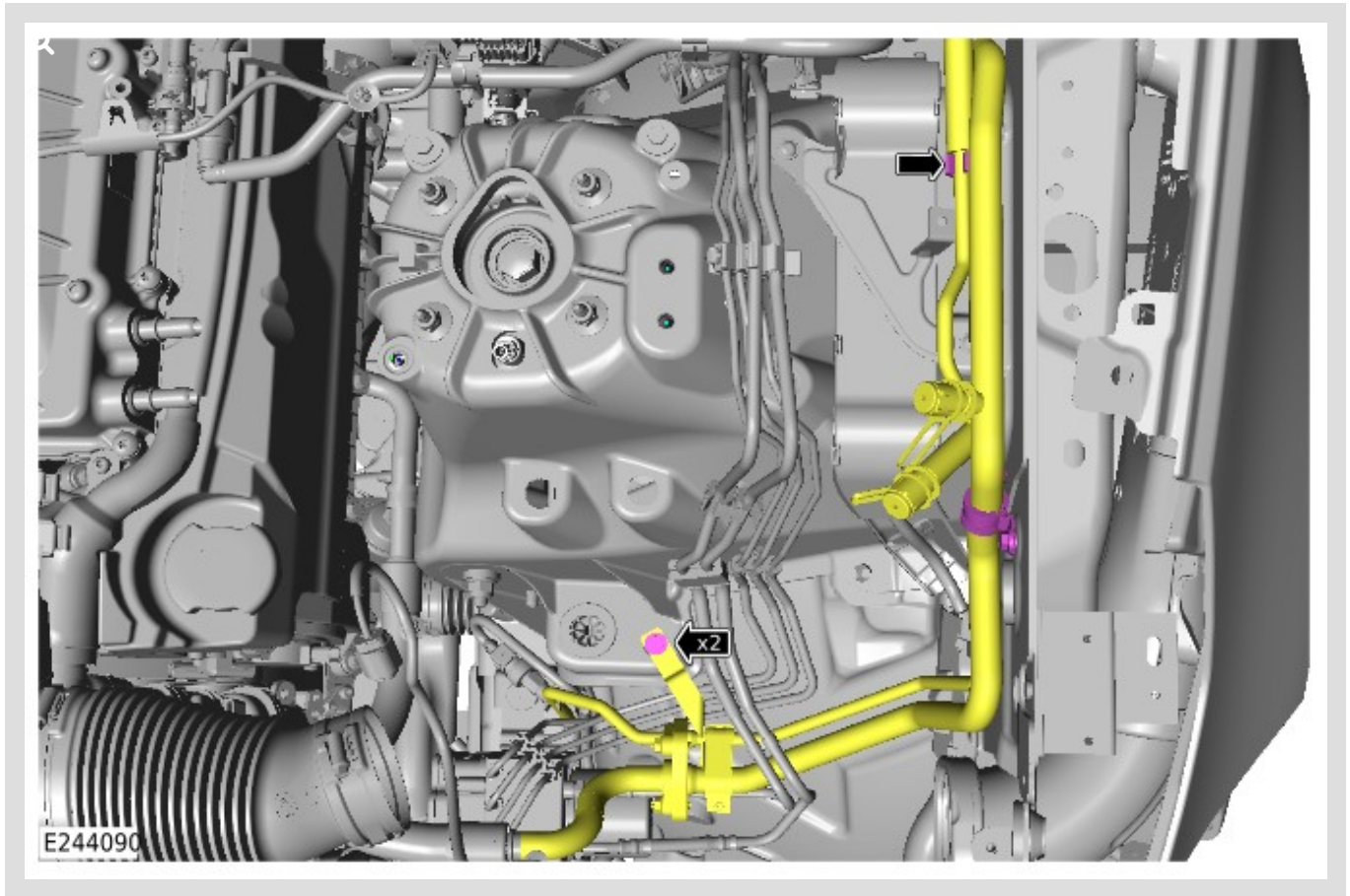
- Torque: **9 Nm**

25 Install the secondary bulkhead right panel (see TOPIx Workshop Manual section 501-02: Front End Body Panels - Removal and Installation - Secondary Bulkhead Right panel).



Install the low pressure fuel line retaining bracket.

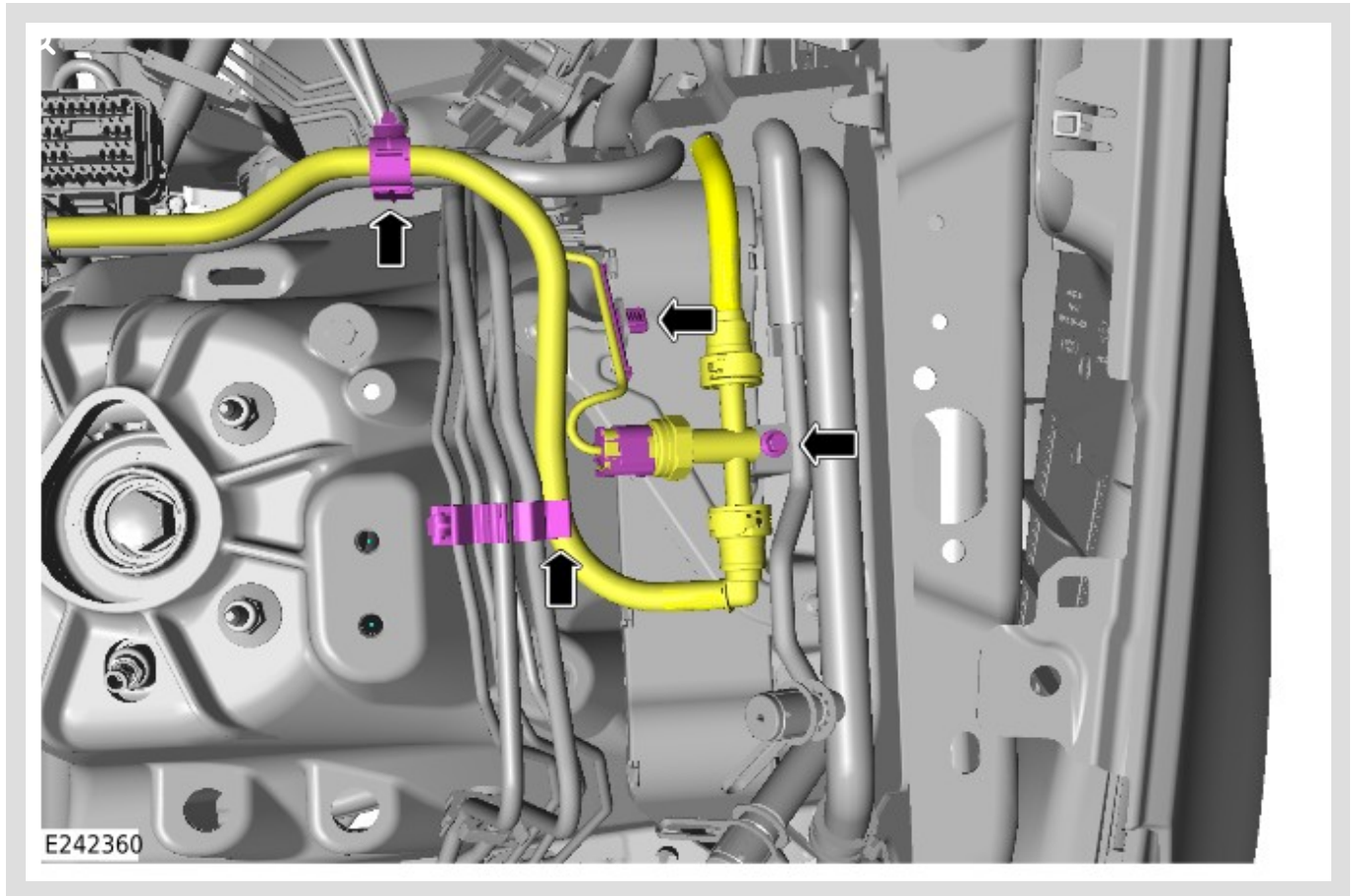
- Torque: **8 Nm**



Install the A/C refrigerant lines.

- Torque: **9 Nm**

28



Install the low pressure fuel lines.

- Torque: **8 Nm**

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- 29 Install the secondary bulkhead left panel (see TOPIx Workshop Manual section 501-02: Front End Body Panels - Removal and Installation - Secondary Bulkhead Left panel).
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- 30 Install the left air cleaner assembly (see TOPIx Workshop Manual section 303-12B: Intake Air Distribution and Filtering - V6 S/C 3.0L Petrol - Removal and Installation - Left Air Cleaner).
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- 31 Install the front armature (see TOPIx Workshop Manual section 501-19: Bumpers - Removal and Installation - Front Armature).
-
- 32 Install hood latch panel (see TOPIx Workshop Manual section: 501-02: Front End Body Panels - Removal and Installation - Hood Latch Panel).
-
- 33 Go to the Diagnostic Procedure below.

DIAGNOSTIC PROCEDURE:

 **CAUTIONS:**

- A Jaguar Land Rover-approved battery power supply must be connected to the vehicle startup battery during diagnosis / module programming.
- All ignition ON/OFF requests **MUST** be performed; failure to do so may cause damage to vehicle control modules.

1 Connect the Jaguar Land Rover-approved battery power supply to the vehicle startup battery.

2  **NOTE:**

The Jaguar Land Rover-approved diagnostic equipment must be loaded with PATHFINDER version 224 (or later).

Connect the Jaguar Land Rover-approved diagnostic equipment to the vehicle and begin a new session.

3  **NOTE:**

The Jaguar Land Rover-approved diagnostic equipment will read the correct Vehicle Identification Number (VIN) for the current vehicle and automatically take the vehicle out of Transit mode (if required).

Follow all on-screen instructions.

4 Select **ECU Diagnostics**.

5 Select **CCF**.

6 Select **Copy from AS BUILT**.

1 Follow the on-screen instructions until the application finishes successfully.

2 Go to the next Step.

7 Exit the current session.

1 Only if required: set the vehicle to Transit mode.

2 Select the **Exit** icon.

8 Disconnect the diagnostic equipment and battery power supply from the vehicle.