



N143NAS2

TECHNICAL BULLETIN

21 MAR 2018

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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.

INFORMATION

SECTION:

414-01: Climate Control

SUBJECT/CONCERN:

SAFETY RECALL: HVAC Inlet Door Linkage

AFFECTED VEHICLE RANGE:

MODEL:	MODEL YEAR:	VIN:	ASSEMBLY PLANT:
Range Rover Velar (LY)	2018	700315-740292	Solihull

MARKETS:

NORTH AMERICA

CONDITION SUMMARY:

This SAFETY RECALL supersedes Service Action N143 with immediate effect.

SITUATION:

An issue has been identified on certain vehicles within the listed Affected Vehicle Range where the linkages between the climate control system fresh air inlet door and servo motor may become detached, leading to a failure of the inlet door required for automatic temperature control.

ACTION:

Retailers are required to **HOLD** affected new vehicles that are within your control and refrain from releasing the vehicles for **new vehicle sale** pending completion of the appropriate Workshop Procedure detailed in this Technical Bulletin. Unsold vehicles should have this performed as part of the Pre-Delivery Inspection (PDI) process but **must** have it completed prior to vehicle handover to the customer.

Affected vehicles already in the hands of customers should be updated at the next available opportunity.

PARTS:

 NOTE:

Order only the expected percentage demand of parts identified.

DESCRIPTION	PART NO./SUNDRY CODE	QTY./VALUE	EXPECTED PERCENTAGE DEMAND
Lever arm kit - Left Hand Drive (LHD)	LR114130	1	30
Sill trim clip	LR092197	4	41

SPECIAL TOOLS:

Jaguar Land Rover-approved Midtronics Battery Power Supply

Jaguar Land Rover-approved diagnostic tool with latest PATHFINDER software

Refer to TOPIx Workshop Manual/Workshop Procedure for any additional required special tools.

WARRANTY:**△ NOTE:**

Check DDW to make sure that a vehicle is affected by this program prior to undertaking any rework action.

At the time of confirming a booking for vehicle repair, make sure that all outstanding Recall and Service Actions are identified to ensure the correct parts are available and adequate workshop time is allocated for repairs to be completed at one visit.

Warranty claims must be submitted quoting the Program Code and the relevant Option Code; this will result in payment of the stated time. The SRO and parts information is included for information only. The Option Code(s) that allows for the drive in/drive out allowance may only be claimed if the vehicle is brought back into the workshop for this action alone to be undertaken.

Repair procedures are under constant review and therefore times / prices are subject to change; those quoted here must be taken as guidance only. Refer to TOPIx to obtain the latest repair time.

Warranty claims must be submitted for payment within 30 calendar days of completion of the repair.

UNSOLD VEHICLE

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)	PARTS/SUNDRY CODE	QTY./VALUE
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PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)	PARTS/SUNDRY CODE	QTY./VALUE
N143	A	Configuration - Automatic Temperature Control (ATC) ECU Motor - Recirculation flap - Inspect	80.90.12 80.10.89.39	0.2 0.1	- -	- -
N143	B	Configuration - Automatic Temperature Control (ATC) ECU Motor - Recirculation flap - Inspect Drive in/drive out	80.90.12 80.10.89.39 02.02.02	0.2 0.1 0.2	- - -	- - -
N143	C	Configuration - Automatic Temperature Control (ATC) ECU Lever - Recirculation flap - Inspect and install	80.90.12 80.10.89.40	0.2 0.6	- -	- -
N143	E	Configuration - Automatic Temperature Control (ATC) ECU Lever - Recirculation flap - Inspect and install Drive in/drive out	80.90.12 80.10.89.40 02.02.02	0.2 0.6 0.2	- - -	- - -

SOLD VEHICLES

PROGRAM CODE	OPTION CODE	DESCRIPTION	SRO	TIME (HOURS)	PARTS/SUNDRY CODE	QTY./VALUE
N143	G	Lever - Recirculation flap - Renew and update software	80.10.89.41	1.0	LR114130 LR092197	1 4
N143	H	Lever - Recirculation flap - Renew and update software Drive in/drive out	80.10.89.41 02.02.02	1.0 0.2	LR114130 LR092197 -	1 4 -

Normal Warranty policies and procedures apply.

DIAGNOSTIC/WORKSHOP PROCEDURE - UNSOLD VEHICLES:

ⓘ CAUTIONS:

- A Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle startup battery during diagnosis / module programming.
- The Jaguar Land Rover-approved diagnostic equipment must remain connected during this procedure.
- All ignition ON/OFF requests must be carried out; failure to perform these steps may cause damage to control modules in the vehicle.

⚠ NOTES:

- Some variation in the illustrations may occur, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.
- The Automatic Temperature Control Module (ATCM) is also known as the Heating Ventilation Air Conditioning (HVAC) control module.

This procedure is for UNSOLD vehicles only.

The following steps must be followed as written to ensure proper positioning of the actuator arm for linkage reconnection.

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

2

⚠ NOTE:

The Jaguar Land Rover-approved diagnostic tool must be loaded with PATHFINDER version 146 (or later).

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

3

⚠ NOTE:

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

Follow the on-screen prompts.

4 Select **ECU Diagnostics**.

5 Select **HVAC Control Module [HVAC]**.

6  **NOTES:**

- The Steps must be followed and completed carefully. Failure to follow the diagnostic procedure steps may result in damage to the vehicle.
- Repair instructions will be presented if the software level and VIN are in the affected vehicle range.

Select **Update ECU**.

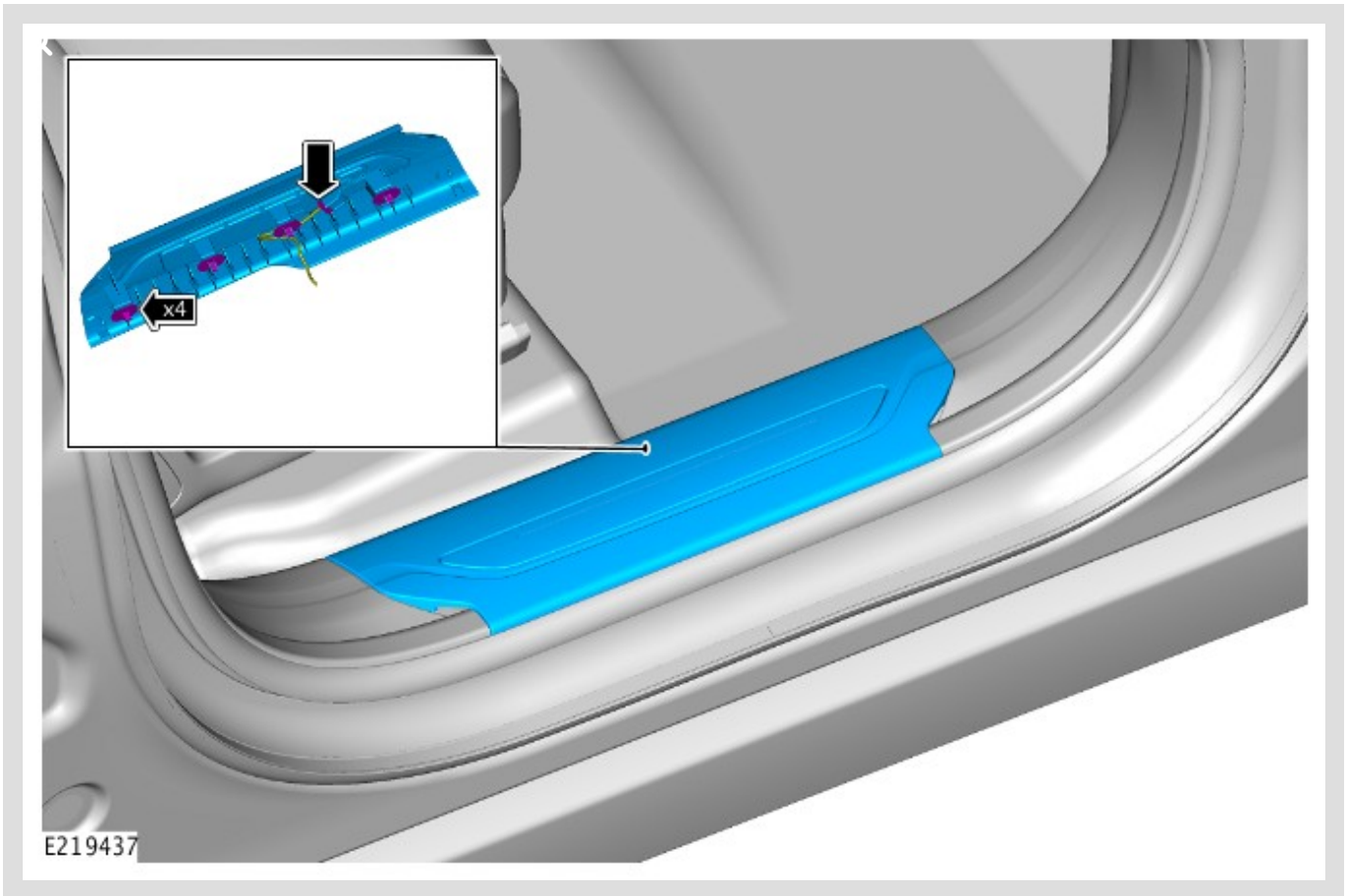
1 Follow all on-screen instructions until the application completes successfully and the link inspection steps are completed.

- If the recirculation blend door actuator lever arm is connected and the recirculation blend door does operate correctly, go to Step 18.
- If the recirculation blend door actuator lever arm is not connected and the blend door does not operate correctly, go to Step 7.

7 Disconnect the vehicle startup battery ground cable (see TOPIx Workshop Manual section 414-01: Battery and Charging System - Battery, Mounting and Cables - General Procedures - Battery Disconnect and Connect).

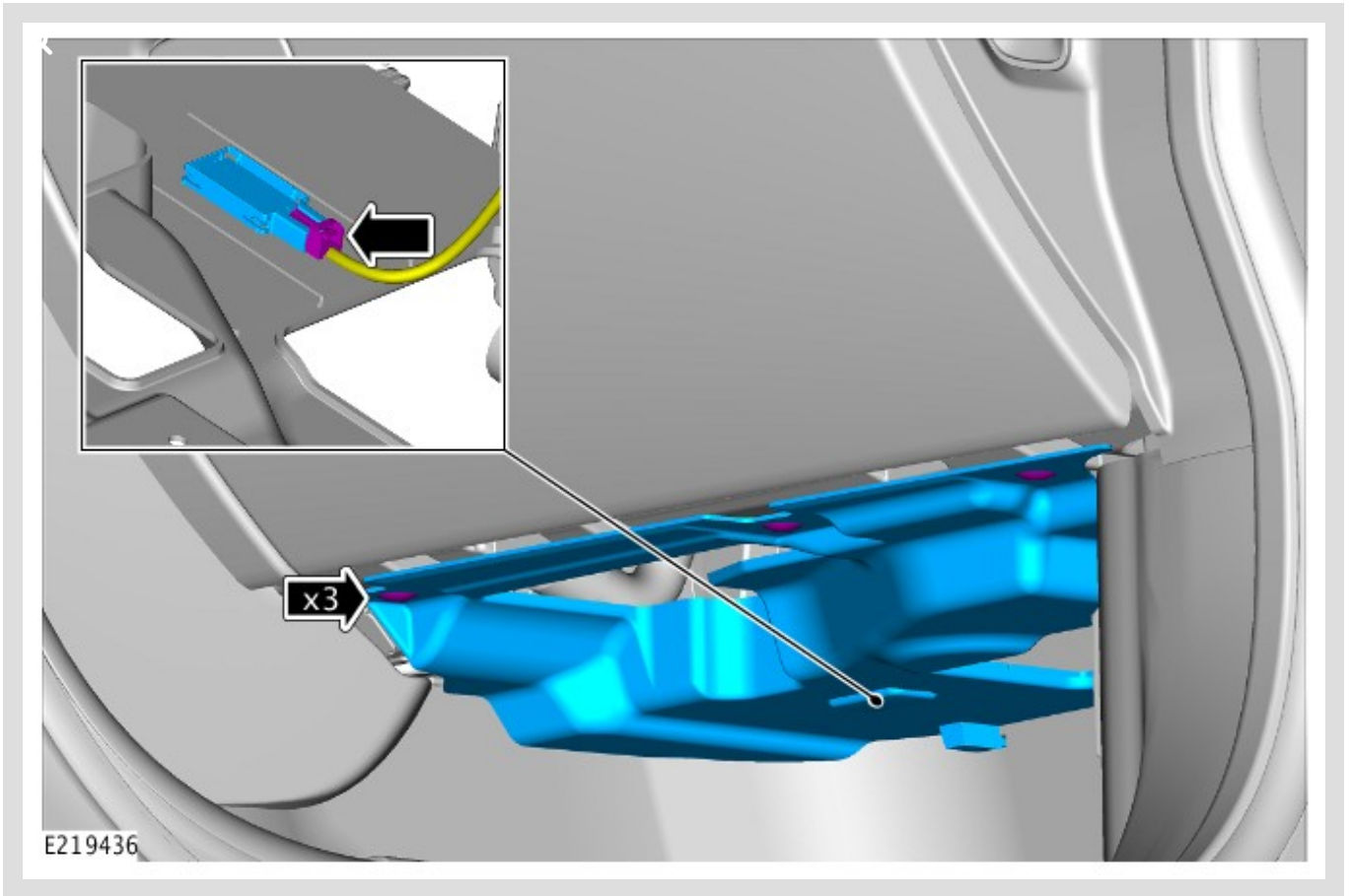
8  **CAUTION:**

Make sure the treadplate retaining clips do not drop into the body.



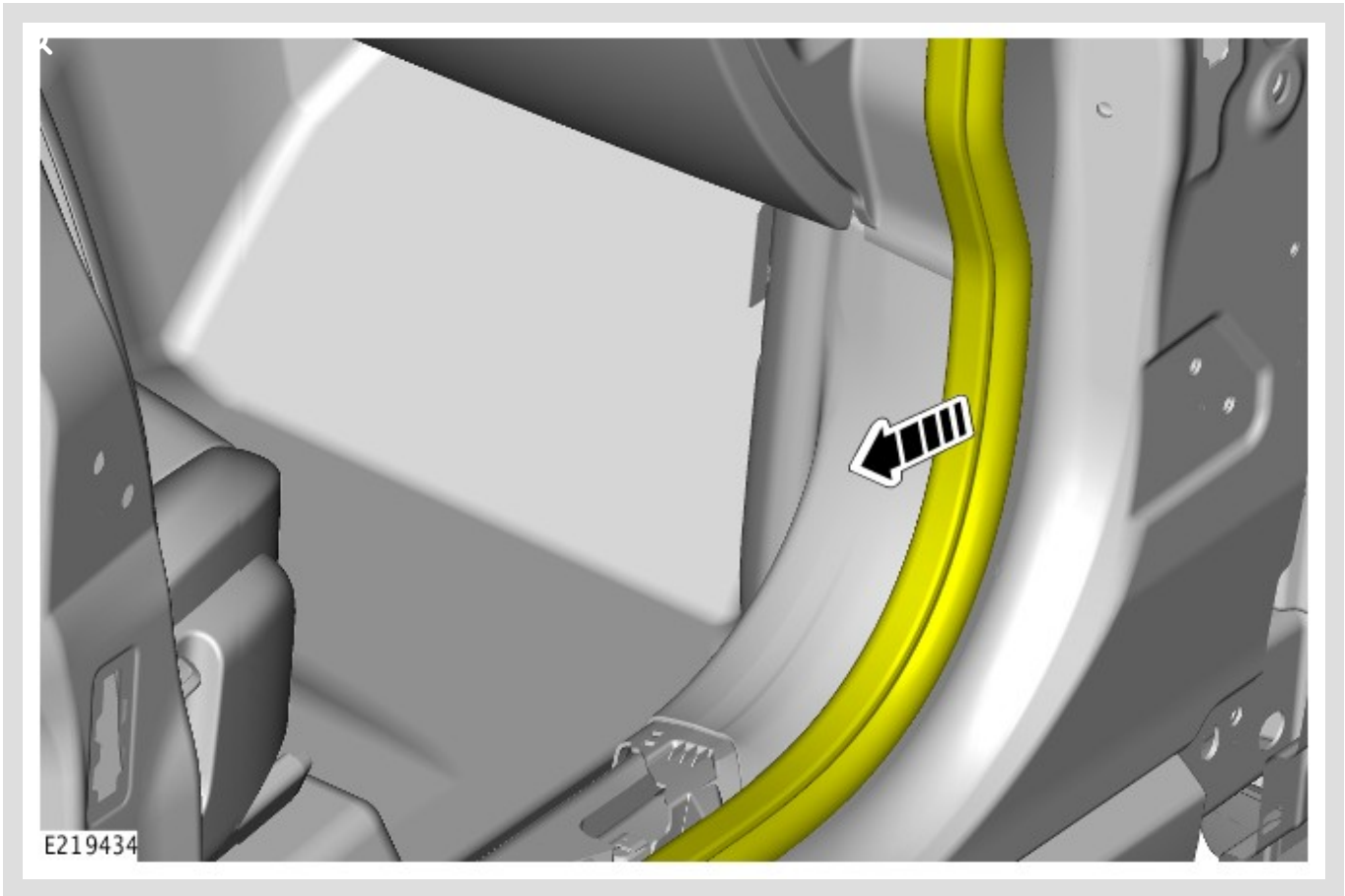
Remove the front right treadplate.

9



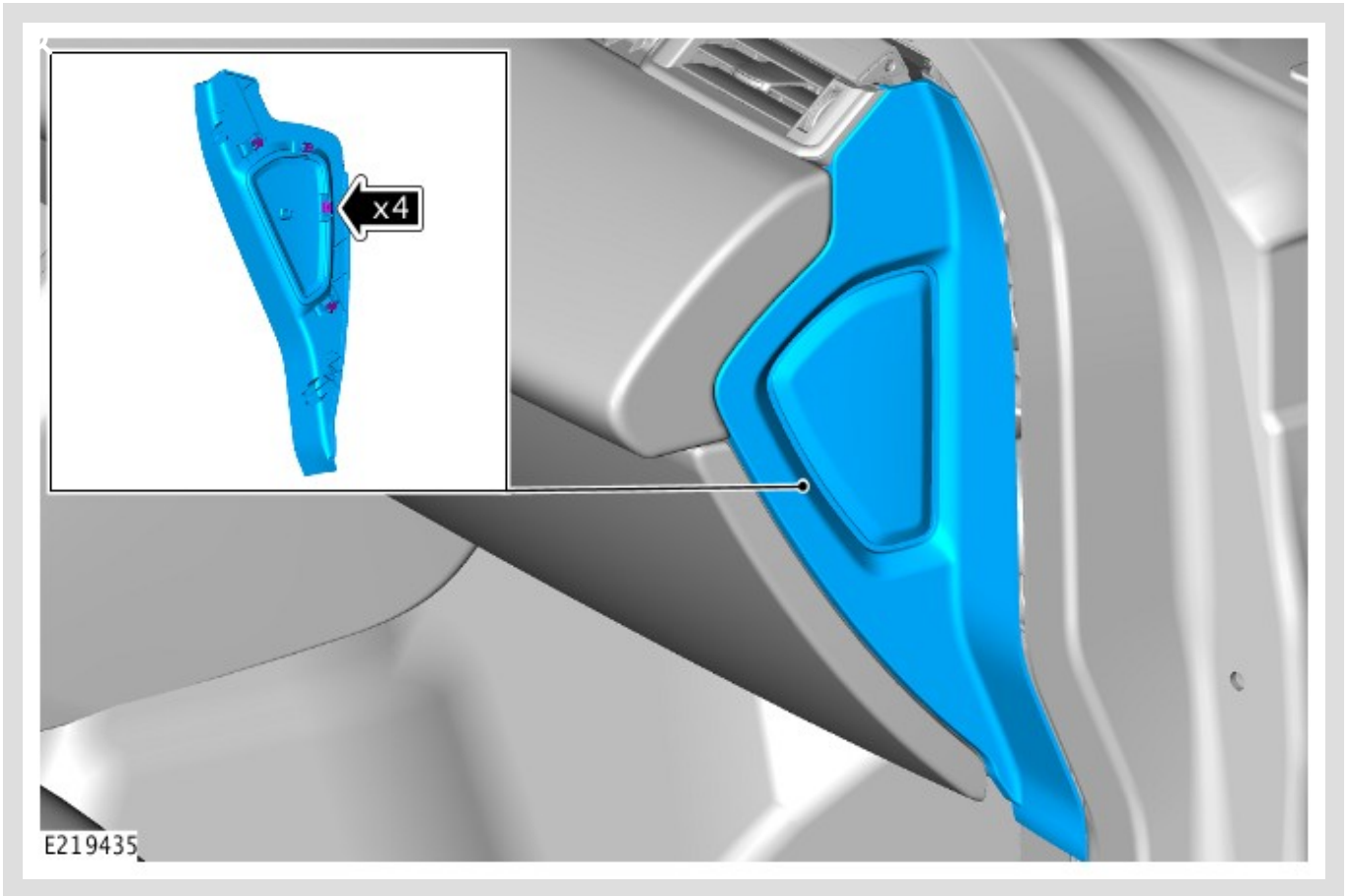
Remove the front right footwell trim panel.

10



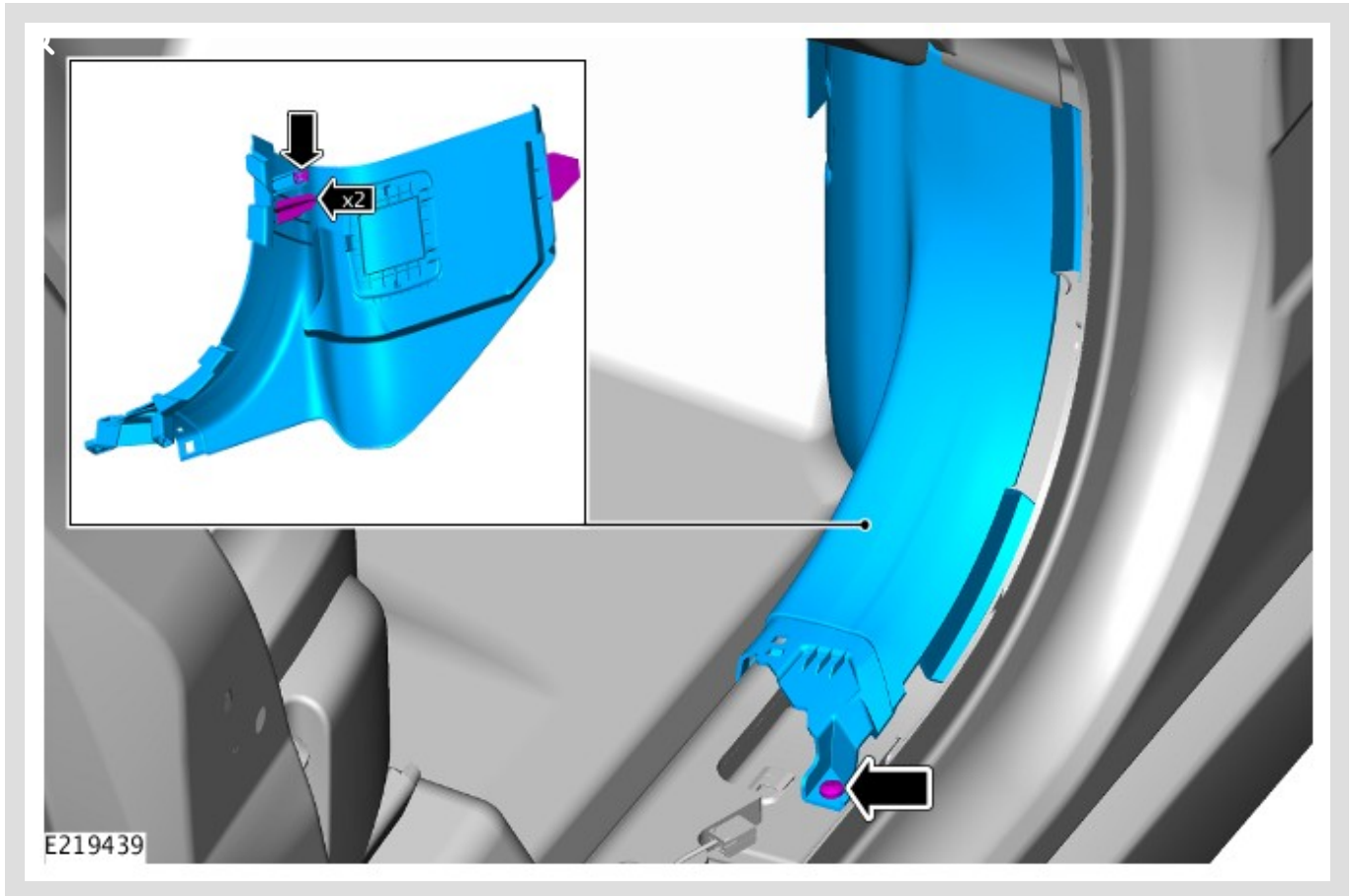
Release the front right door aperture seal and position to one side.

11



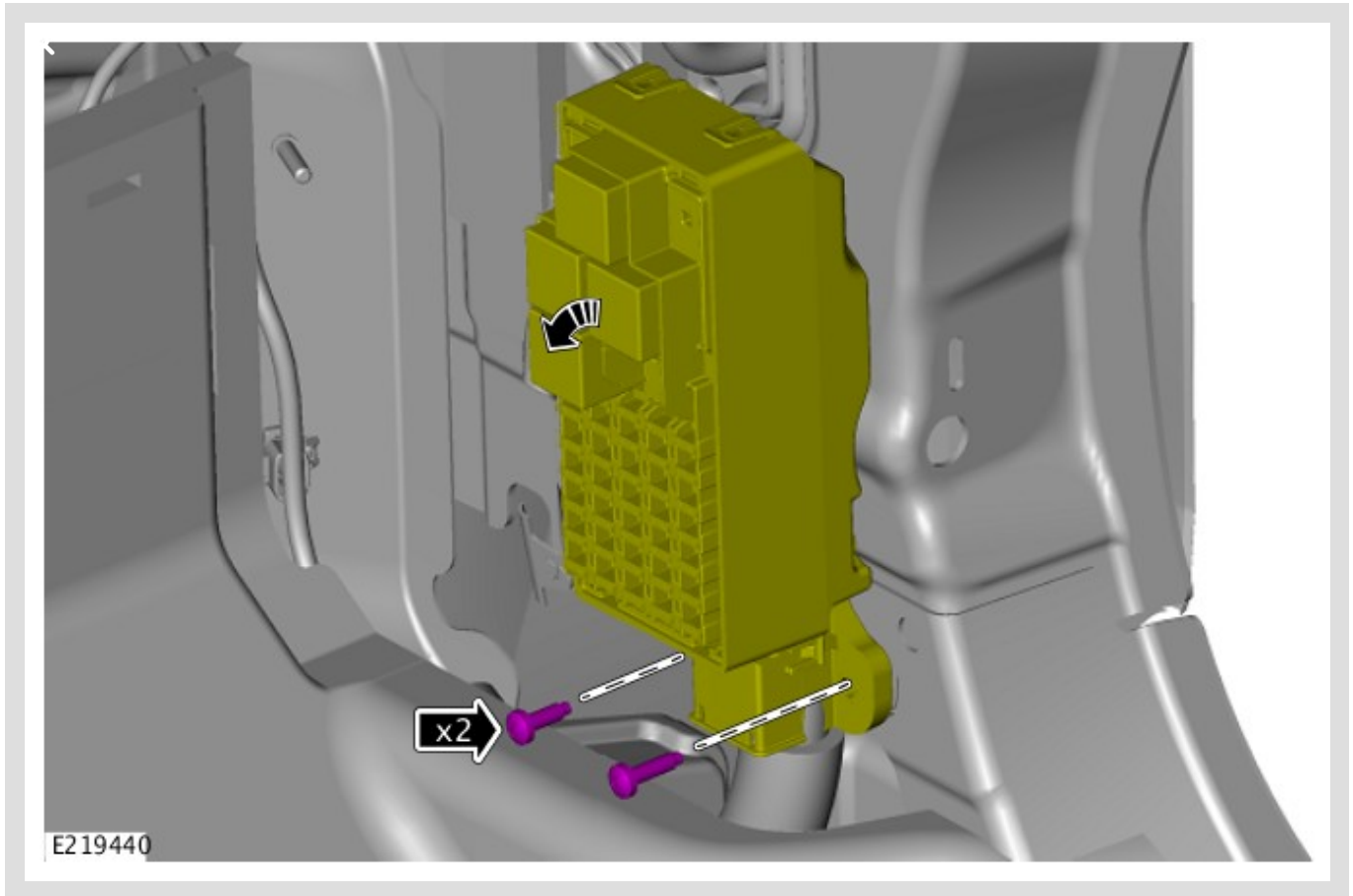
Remove the instrument panel right trim.

12



Remove the right A-pillar lower trim panel.

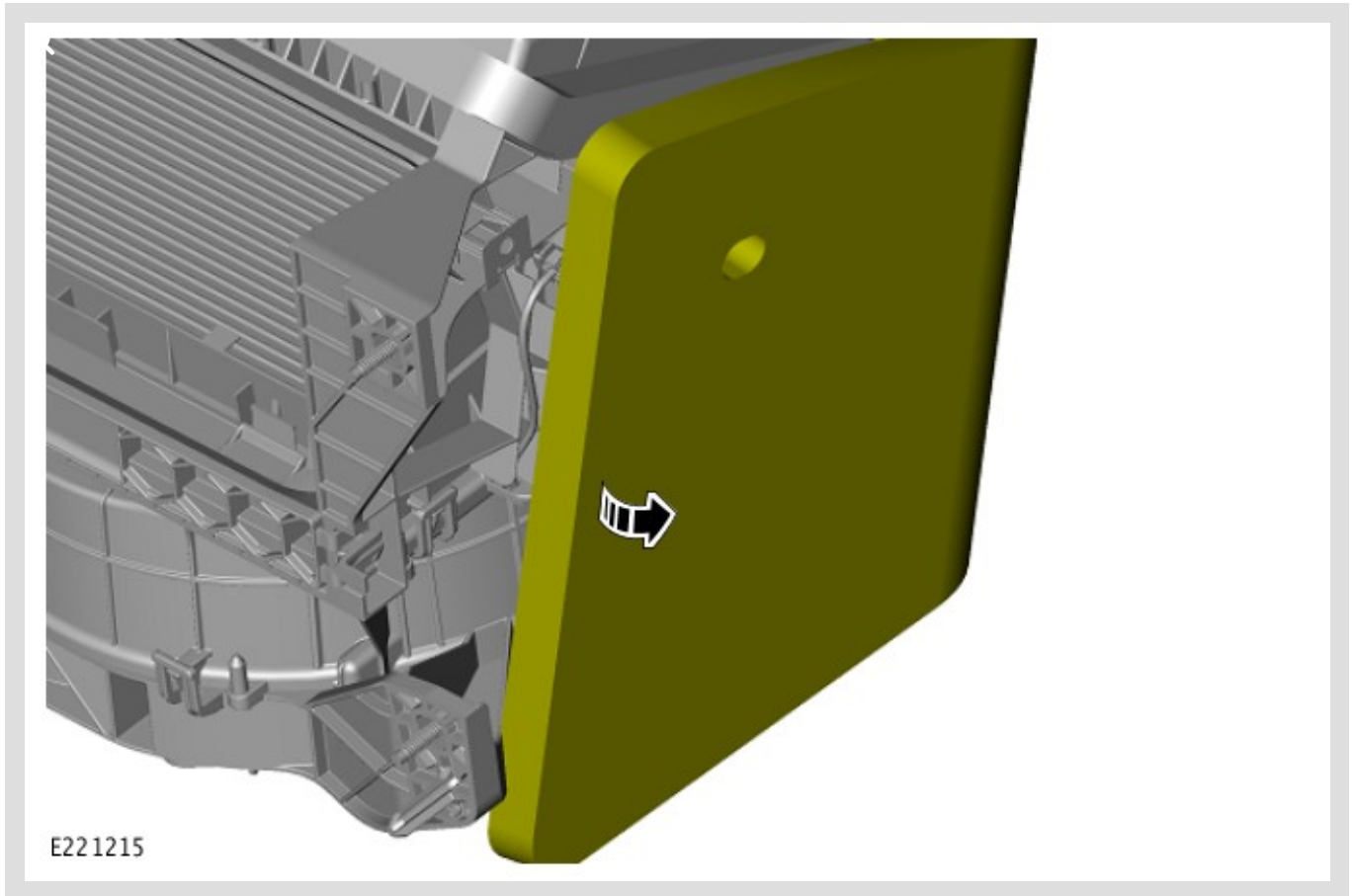
- Torque: **3.5 Nm**



Position the junction box to one side.

- Torque: **10 Nm**

14

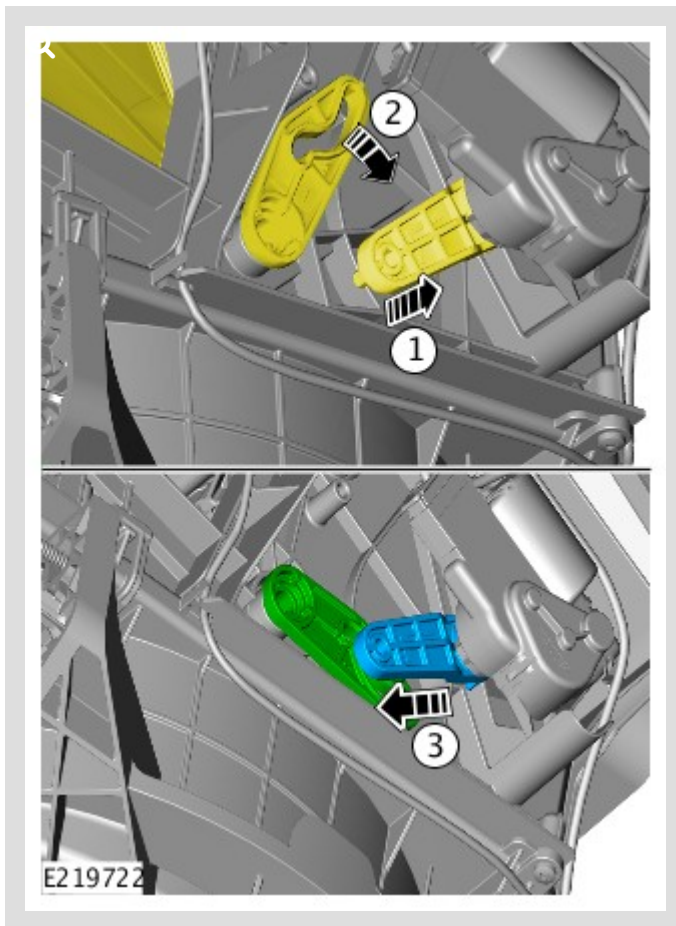


Position the Noise, Vibration & Harshness (NVH) material to one side.

15

ⓘ CAUTION:

Do not use excessive force to install the actuator lever arm.



Install the recirculation blend door actuator lever arm into the recirculation door.

16 Reverse steps 9-16.

17 Connect the vehicle startup battery ground cable (see TOPIx Workshop Manual section 414-01: Battery and Charging System - Battery, Mounting and Cables - General Procedures - Battery Disconnect and Connect).

18 Exit the current session.

1 If required, reset the vehicle to **Transit mode**.

2 Select the **Exit** icon.

19 Disconnect the diagnostic tool and battery power supply from the vehicle.

DIAGNOSTIC/WORKSHOP PROCEDURE - SOLD VEHICLES:

ⓘ CAUTIONS:

- A Jaguar Land Rover-approved Midtronics battery power supply must be connected to the vehicle startup battery during diagnosis / module programming.
- The Jaguar Land Rover-approved diagnostic equipment must remain connected during this procedure.
- All ignition ON/OFF requests must be carried out; failure to perform these steps may cause damage to control modules in the vehicle.

⚠ NOTES:

- Some variation in the illustrations may occur, but the essential information is always correct.
- This procedure contains illustrations showing certain components removed to provide extra clarity.
- The Automatic Temperature Control Module (ATCM) is also known as the Heating Ventilation Air Conditioning (HVAC) control module.

This procedure is for SOLD vehicles only.

The following steps must be followed as written to ensure proper positioning of the actuator arm for linkage reconnection.

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

2

⚠ NOTE:

The Jaguar Land Rover-approved diagnostic tool must be loaded with PATHFINDER version 146 (or later).

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

3

⚠ NOTE:

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

Follow the on-screen prompts.

4 Select **ECU Diagnostics**.

5 Select **HVAC Control Module [HVAC]**.

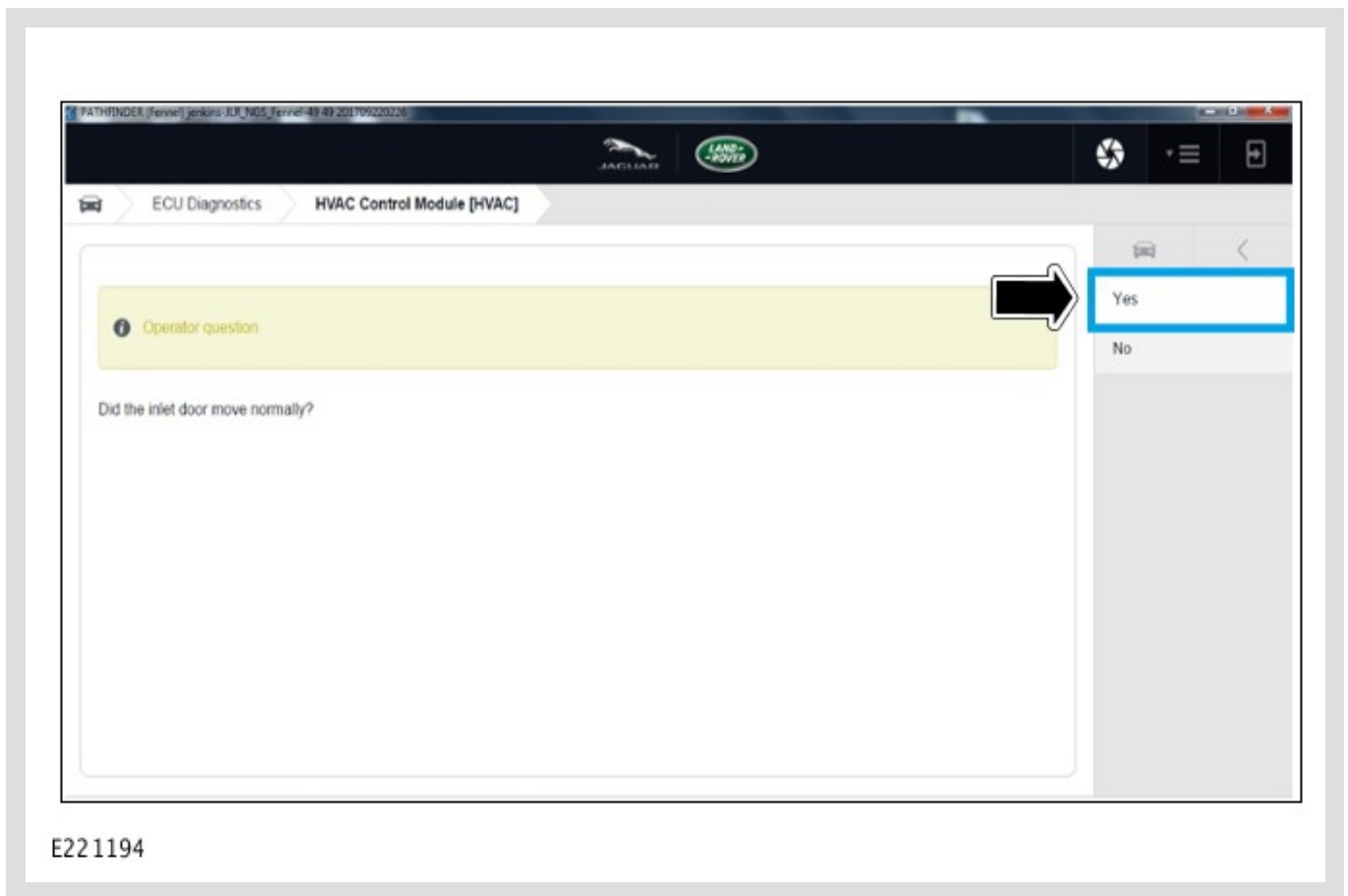
6  **NOTES:**

- The Steps must be followed and completed carefully. Failure to follow the diagnostic procedure steps may result in damage to the vehicle.
- Repair instructions will be presented if the software level and VIN are in the affected vehicle range.

Select **Update ECU**.

7  **CAUTION:**

When selecting '**Yes**', the software will update. This update **MUST** be completed **BEFORE** replacing the lever arm.



Follow the on-screen prompts until the following text appears on-screen.

- You are required to select 'Yes' in order to continue with the procedure, this will then update the HVAC control module software.

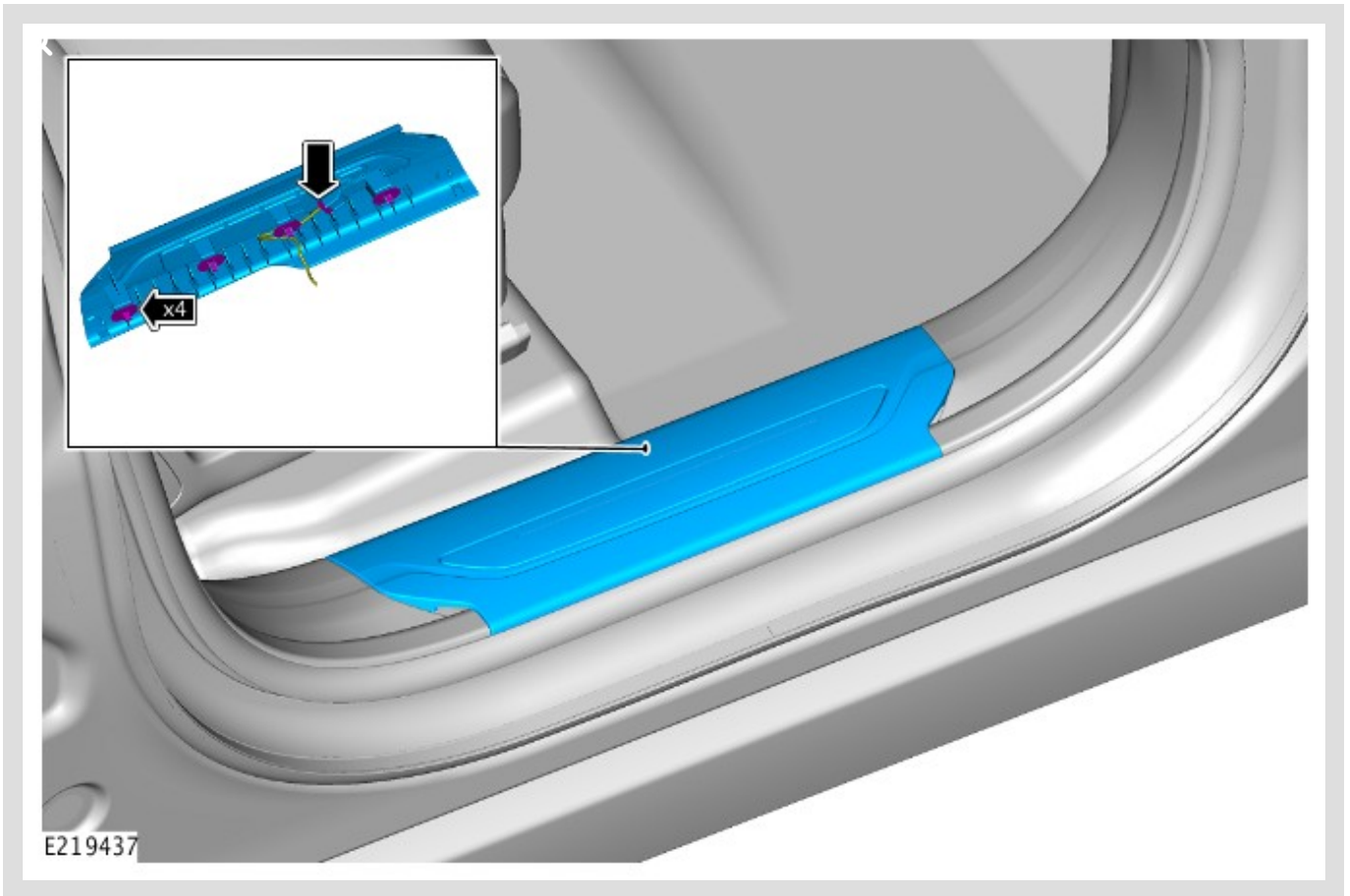
8 Follow the on-screen prompts.

9 Disconnect the diagnostic tool and battery power supply from the vehicle.

10 Disconnect the vehicle startup battery ground cable (see TOPIx Workshop Manual section 414-01: Battery and Charging System - Battery, Mounting and Cables - General Procedures - Battery Disconnect and Connect).

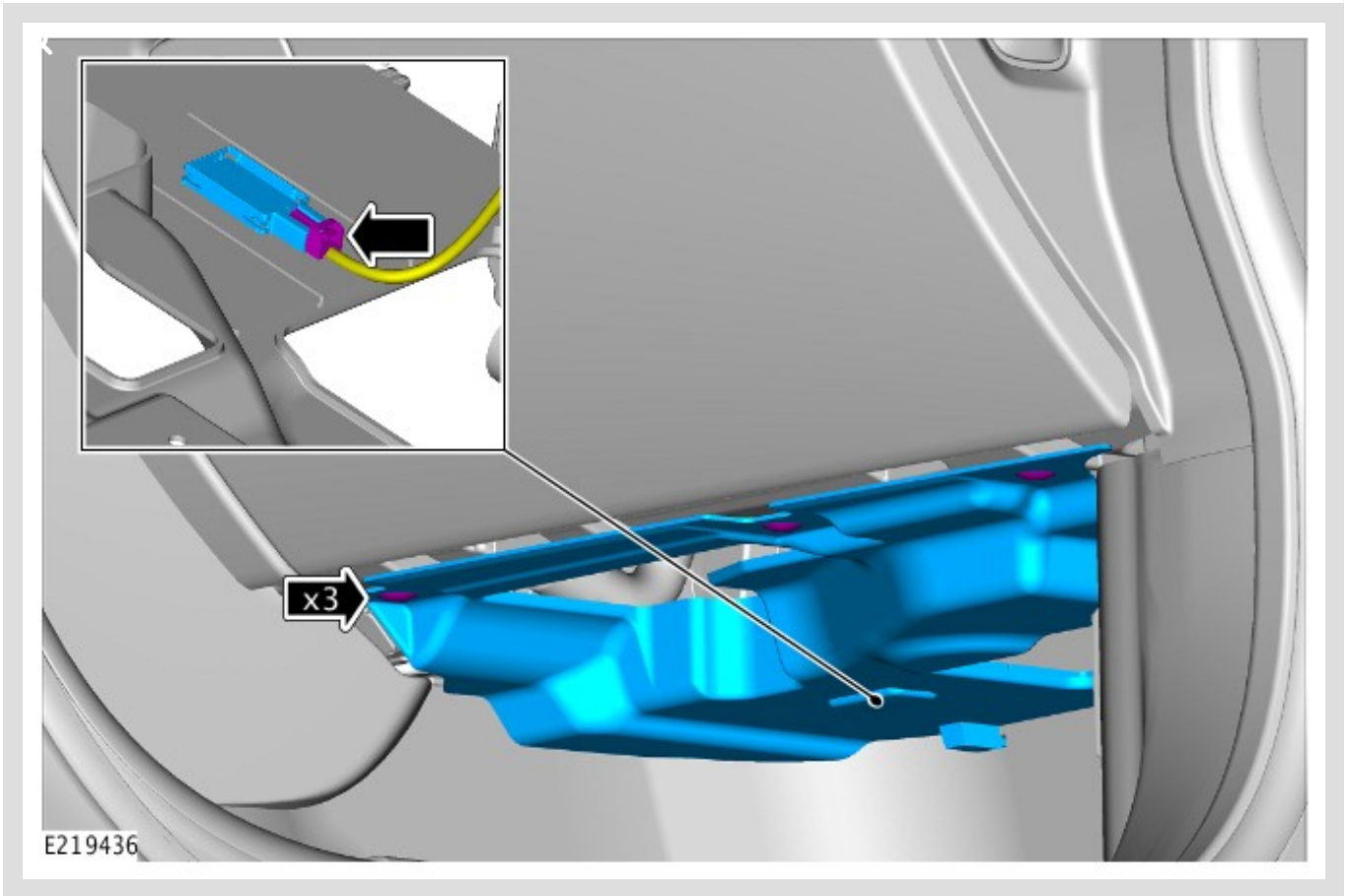
11 **CAUTION:**

Make sure the treadplate retaining clips do not drop into the body.



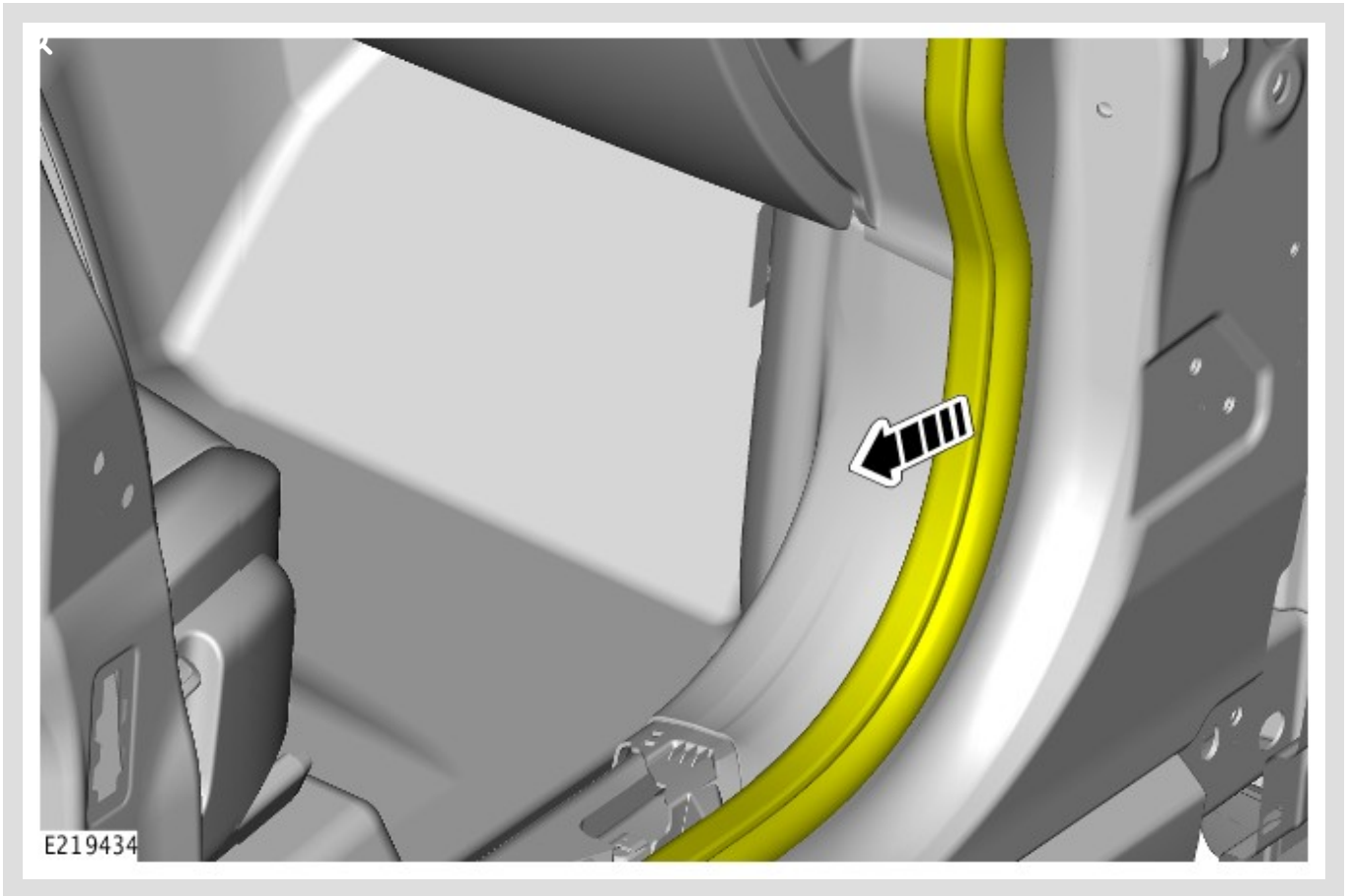
Remove the front right treadplate.

12



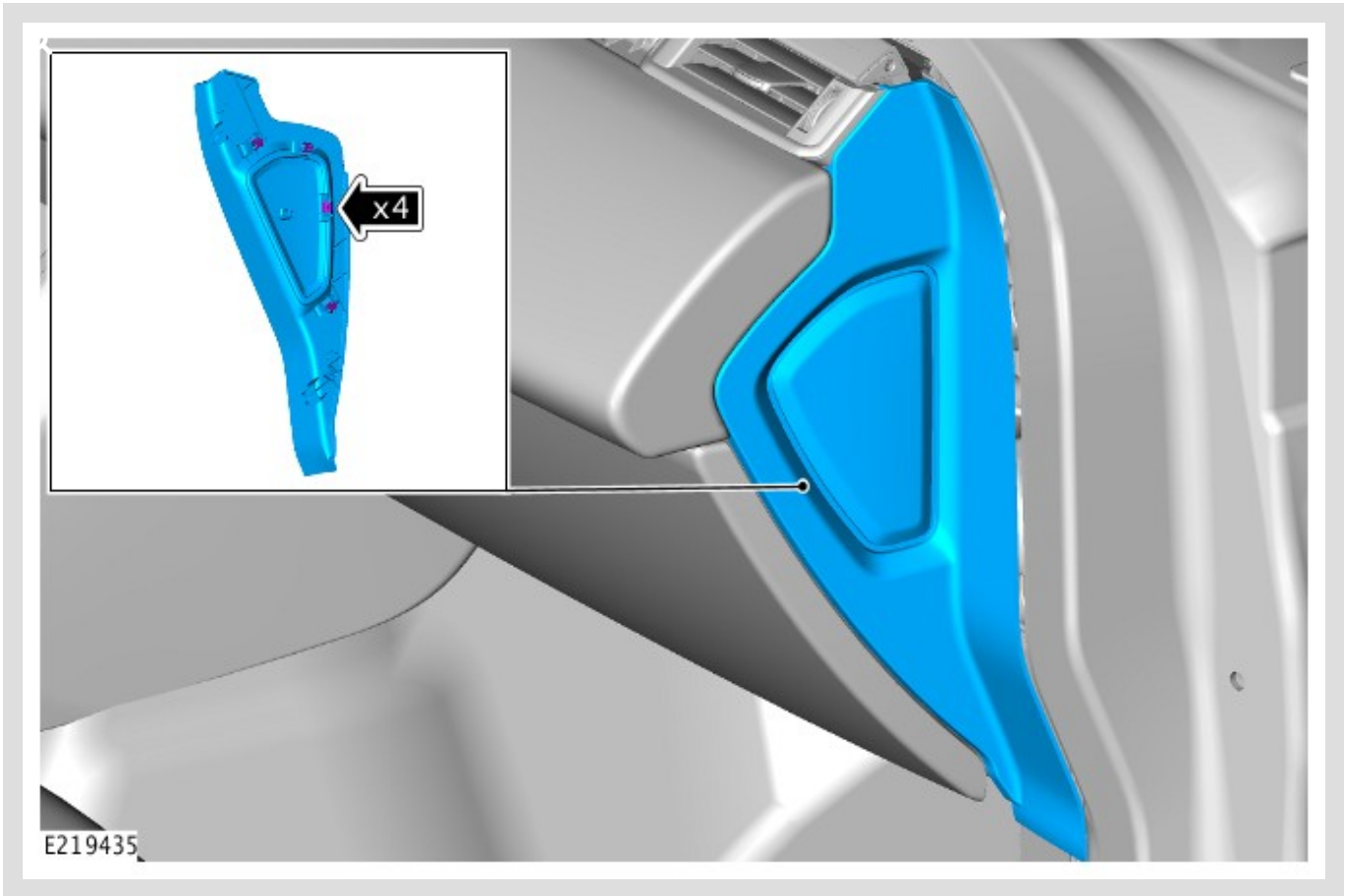
Remove the front right footwell trim panel.

13



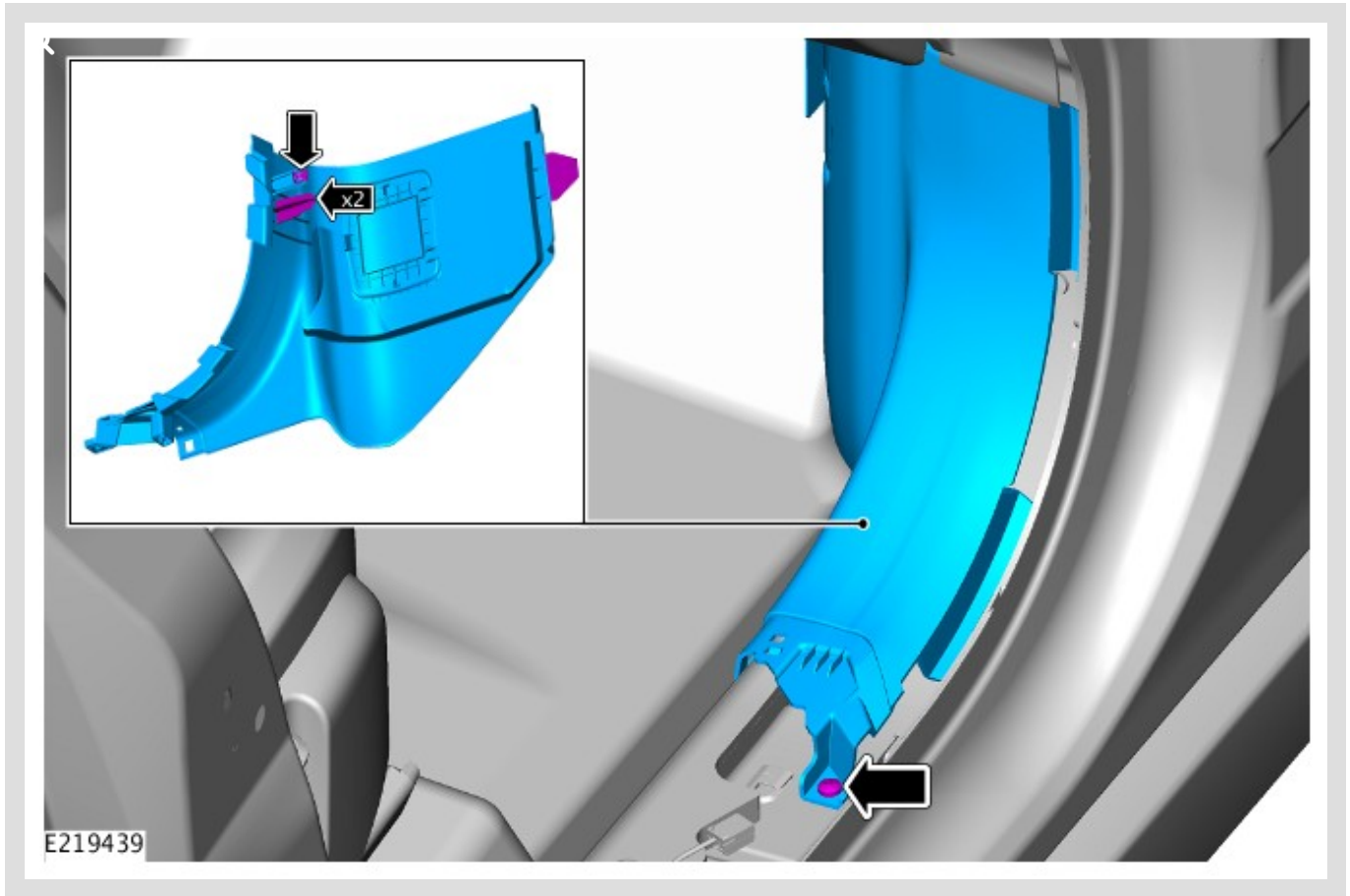
Remove the front right door aperture seal and position to one side.

14



Remove the instrument panel right trim.

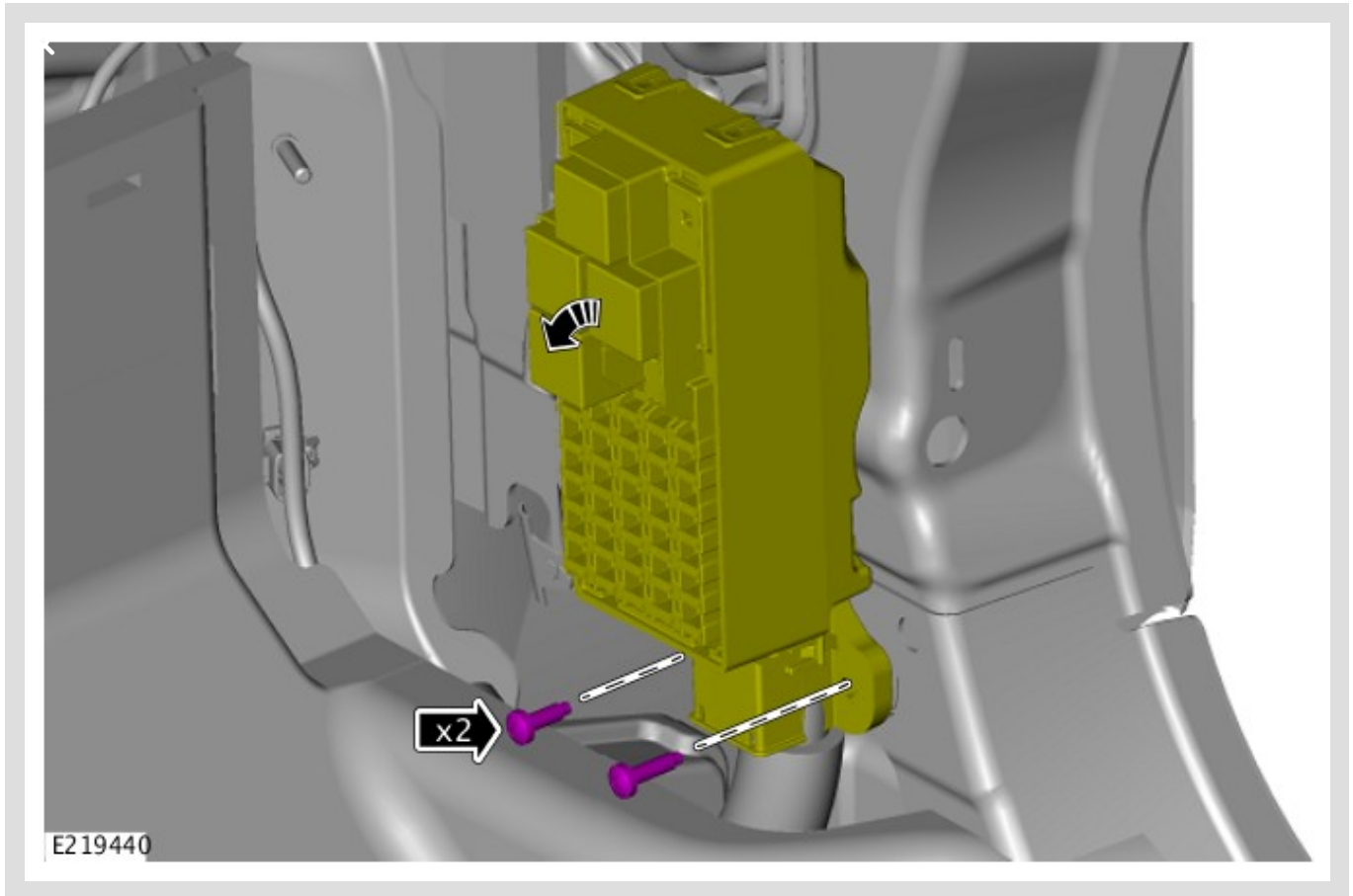
15



Remove the right A-pillar lower trim panel.

- Torque: **3.5 Nm**

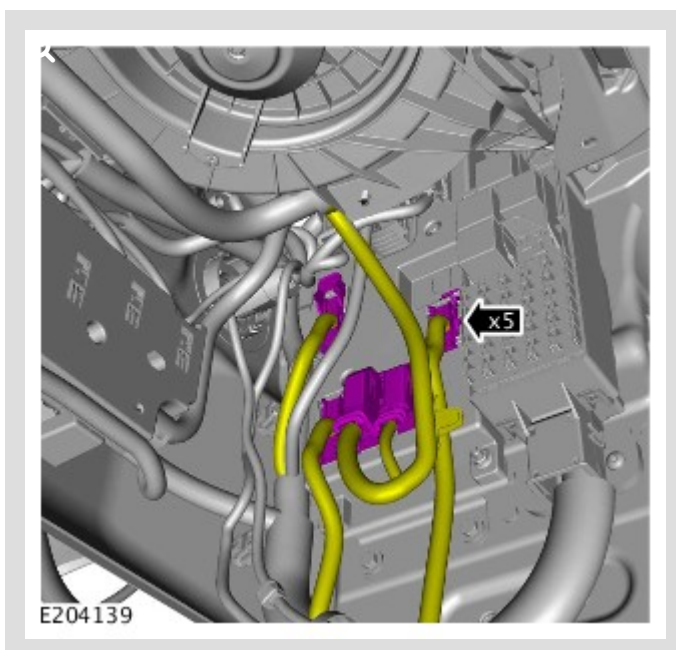
16



Position the junction box to one side.

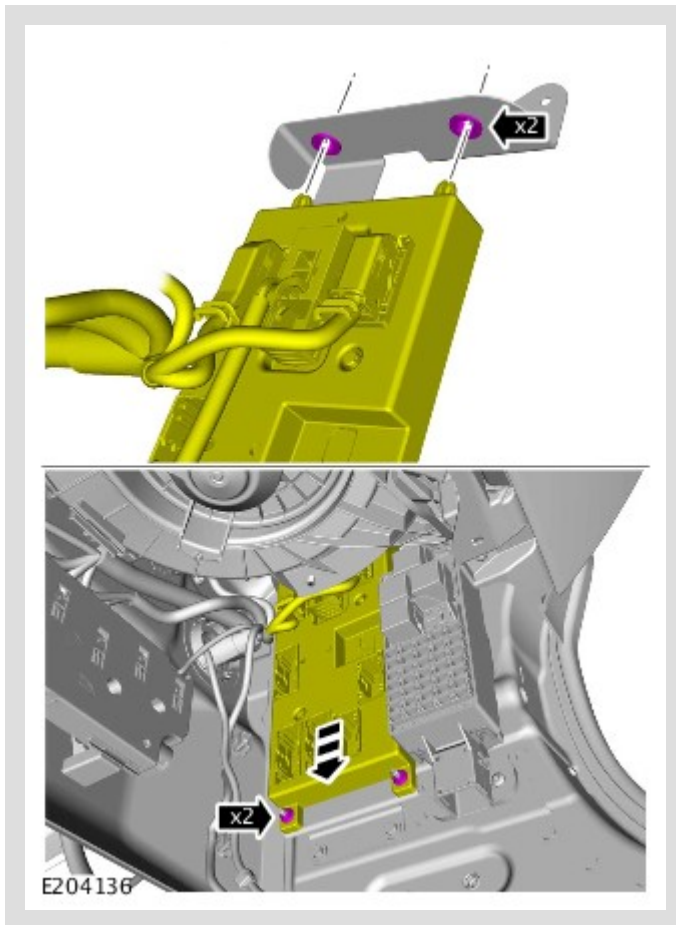
- Torque: **10 Nm**

17



Disconnect the 5 electrical connectors from the Body Control Module/Gateway Module (BCM/GWM) assembly.

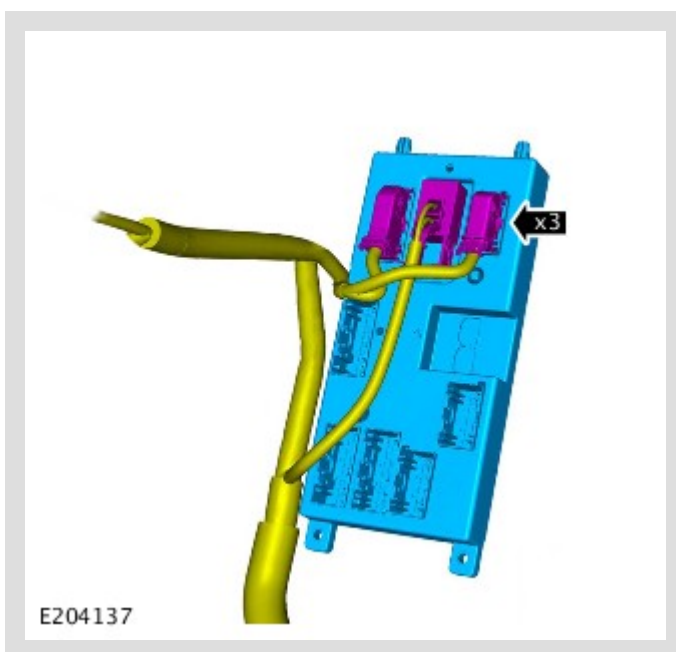
18



Remove the 2 retaining nuts.

- Lower the BCM/GWM assembly.
- Torque: **10 Nm**

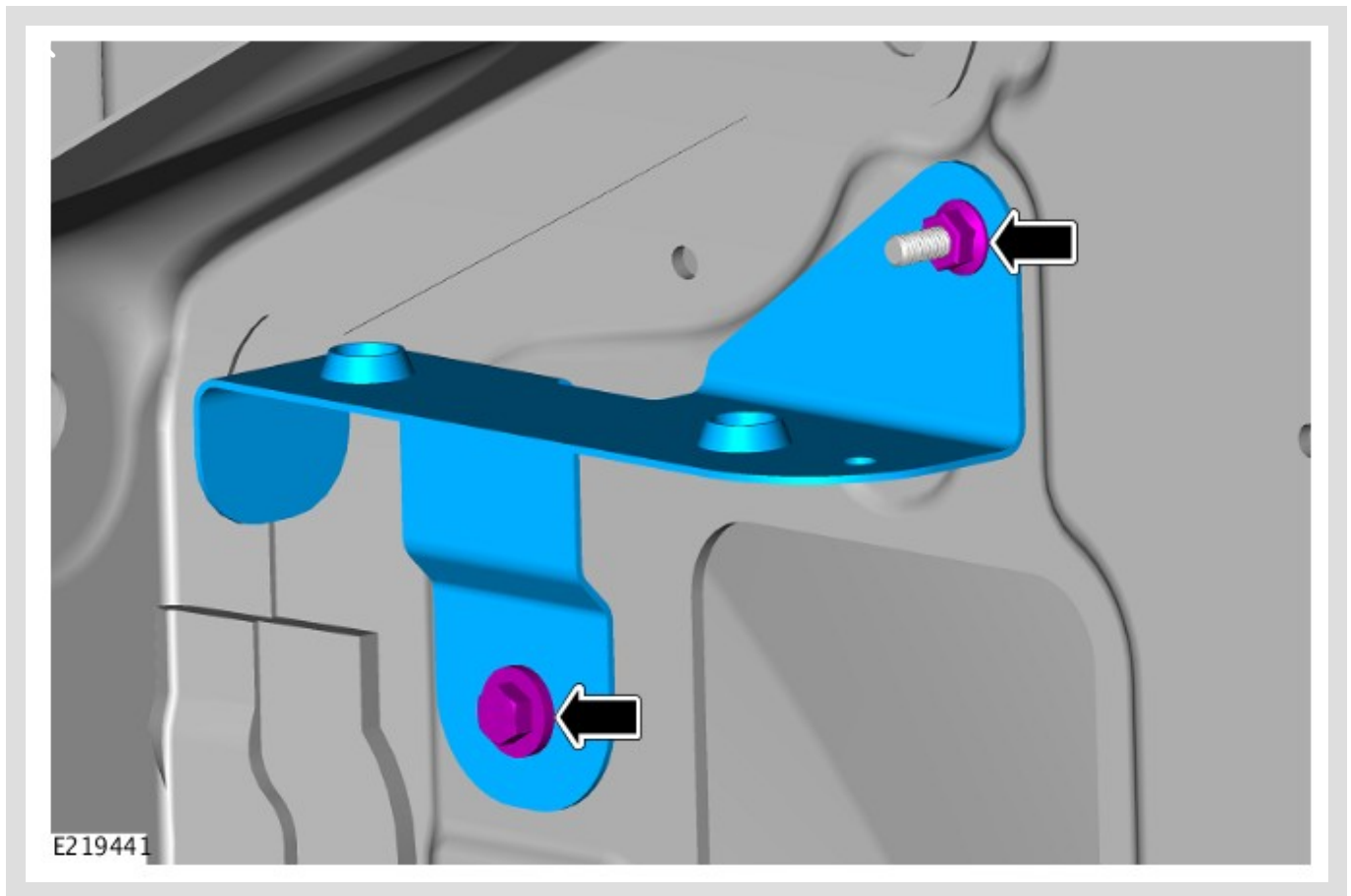
19



Disconnect the 3 electrical connectors from the BCM/GWM assembly.

- Remove the BCM/GWM assembly.

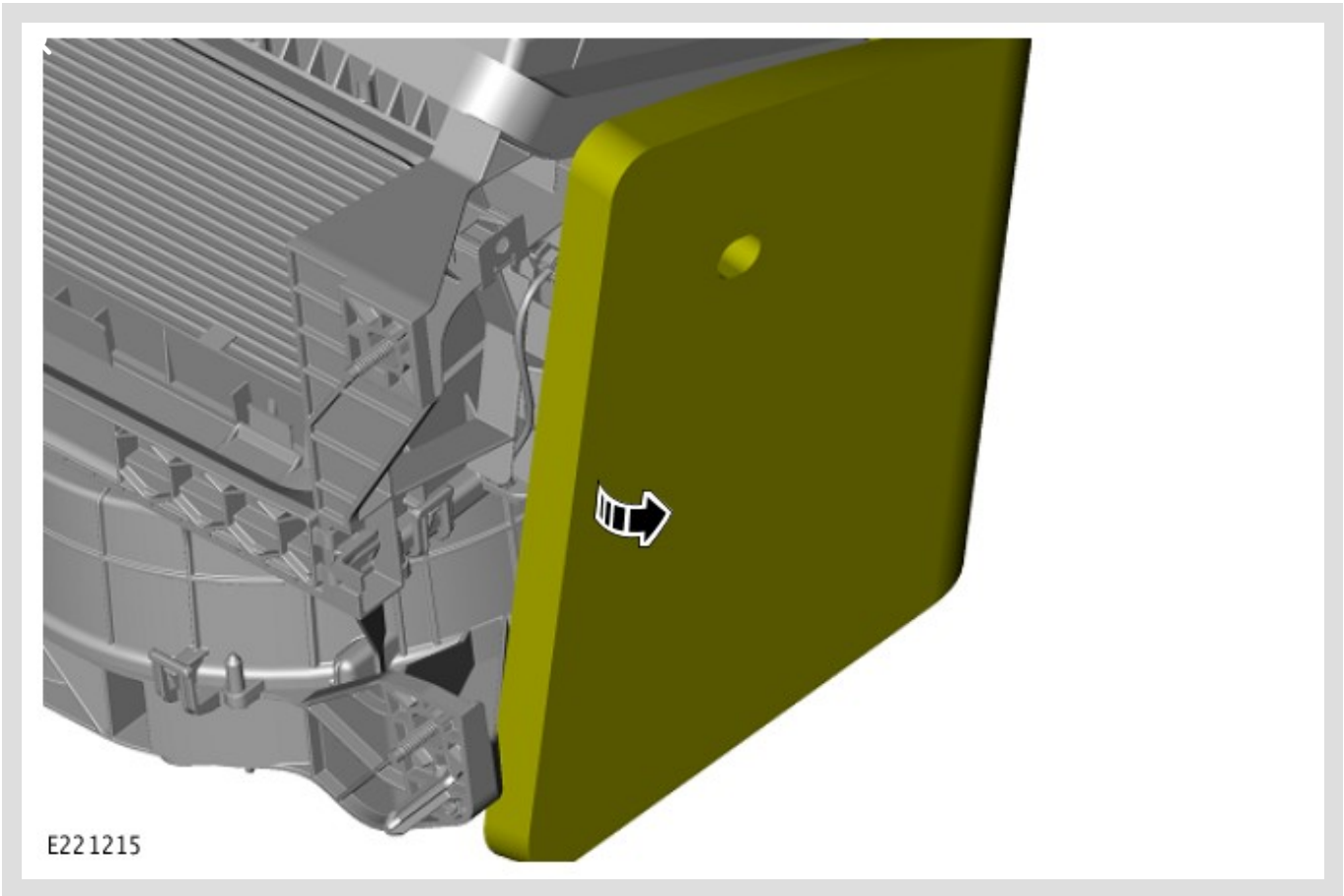
20



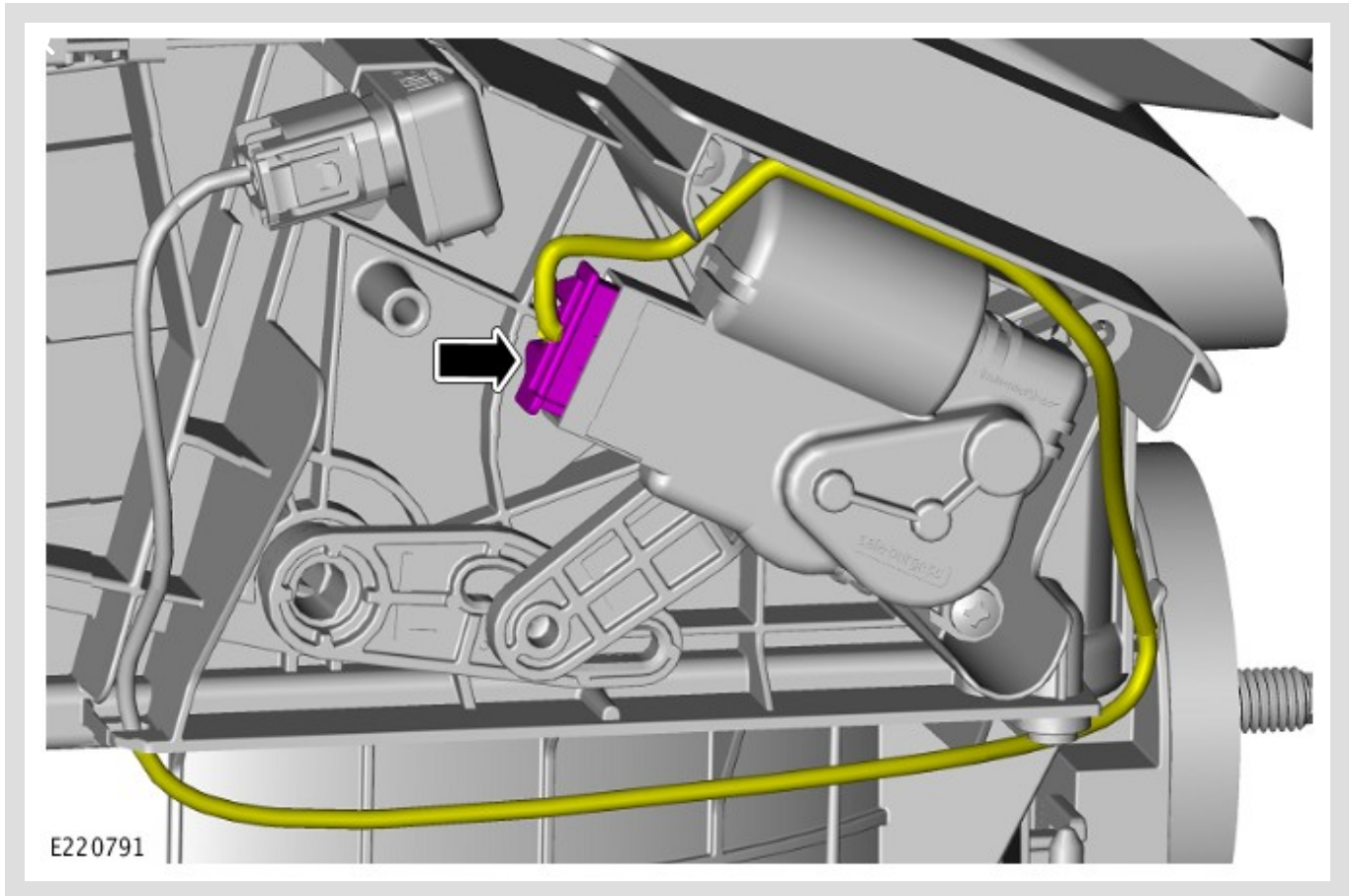
Remove the BCM/GWM upper mounting bracket.

- Torque: **10 Nm**

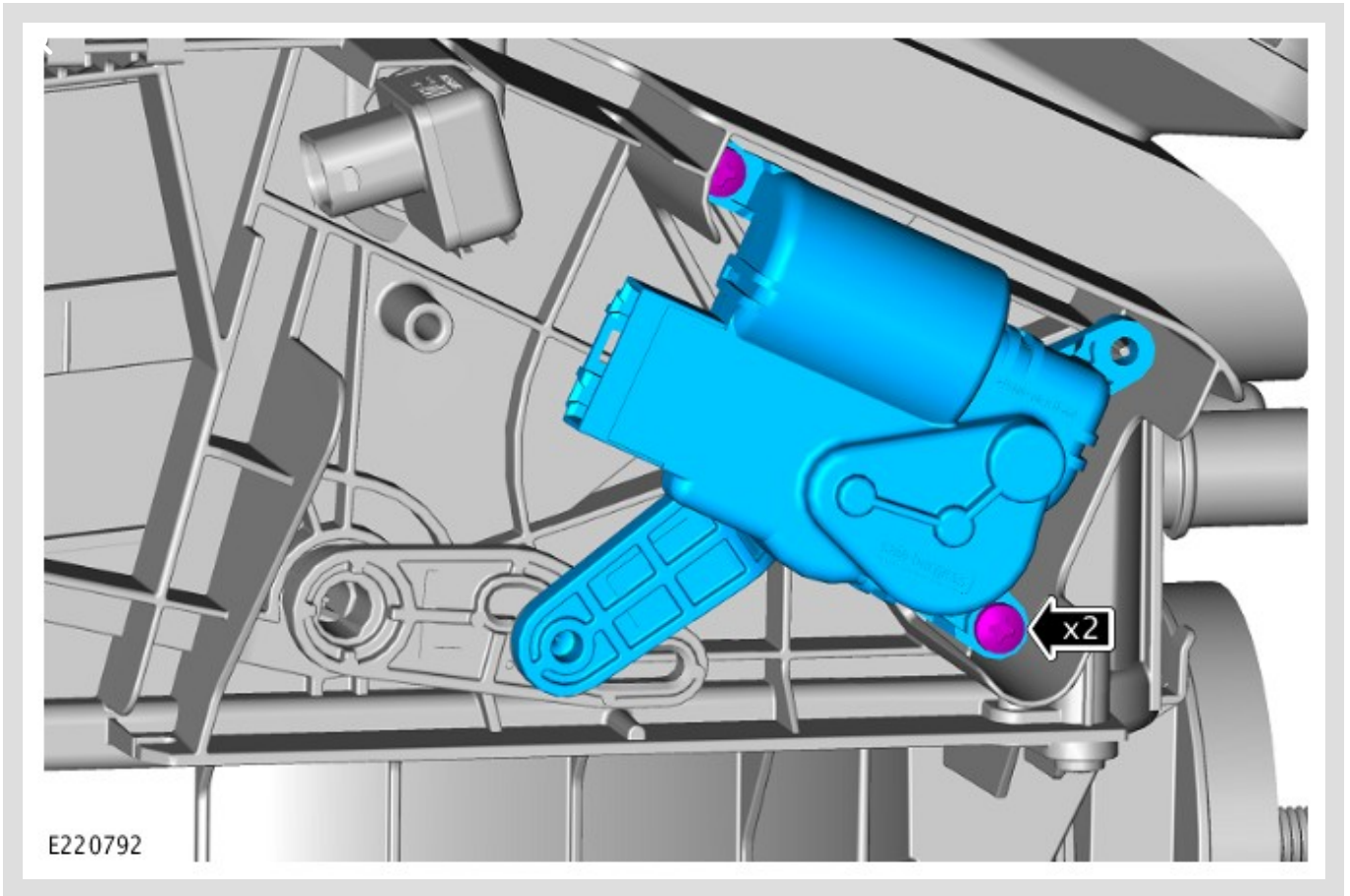
21



Position the Noise, Vibration & Harshness (NVH) material to one side.

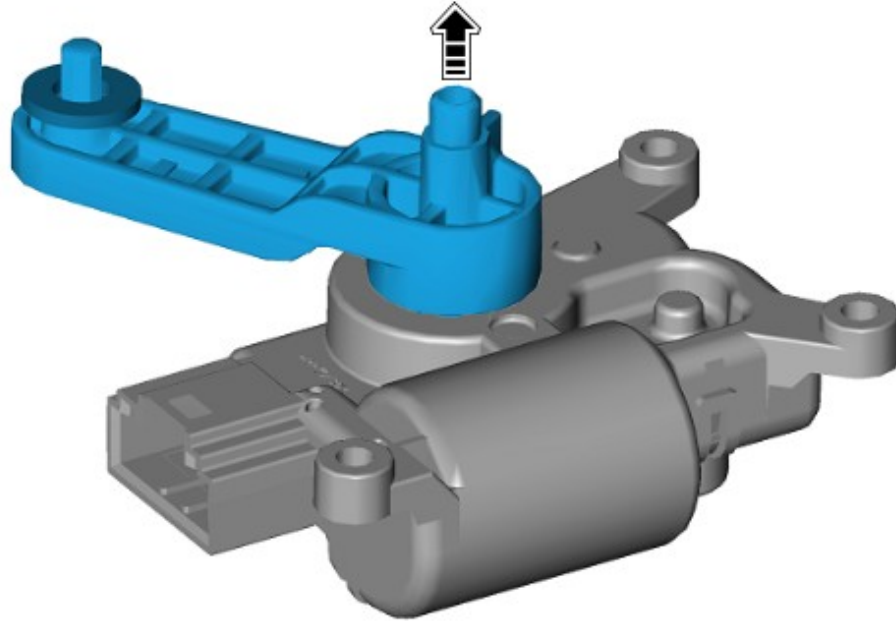


Disconnect the recirculation blend door actuator electrical wiring harness and position to one side.



Remove the recirculation blend door actuator.

24



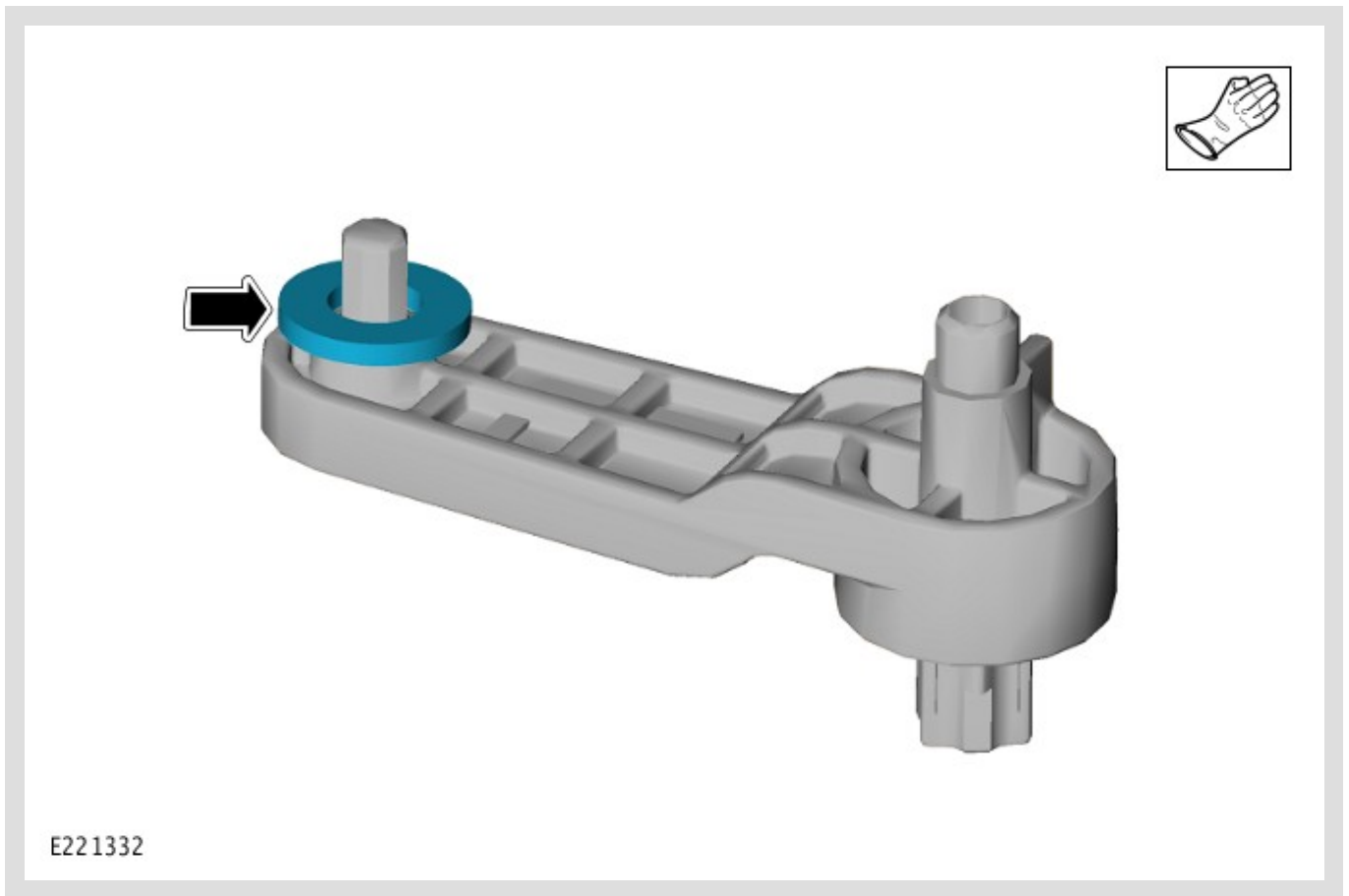
E221331

Remove the recirculation blend door actuator lever arm from the actuator.

25

ⓘ CAUTION:

This step must be completed using a clean glove.

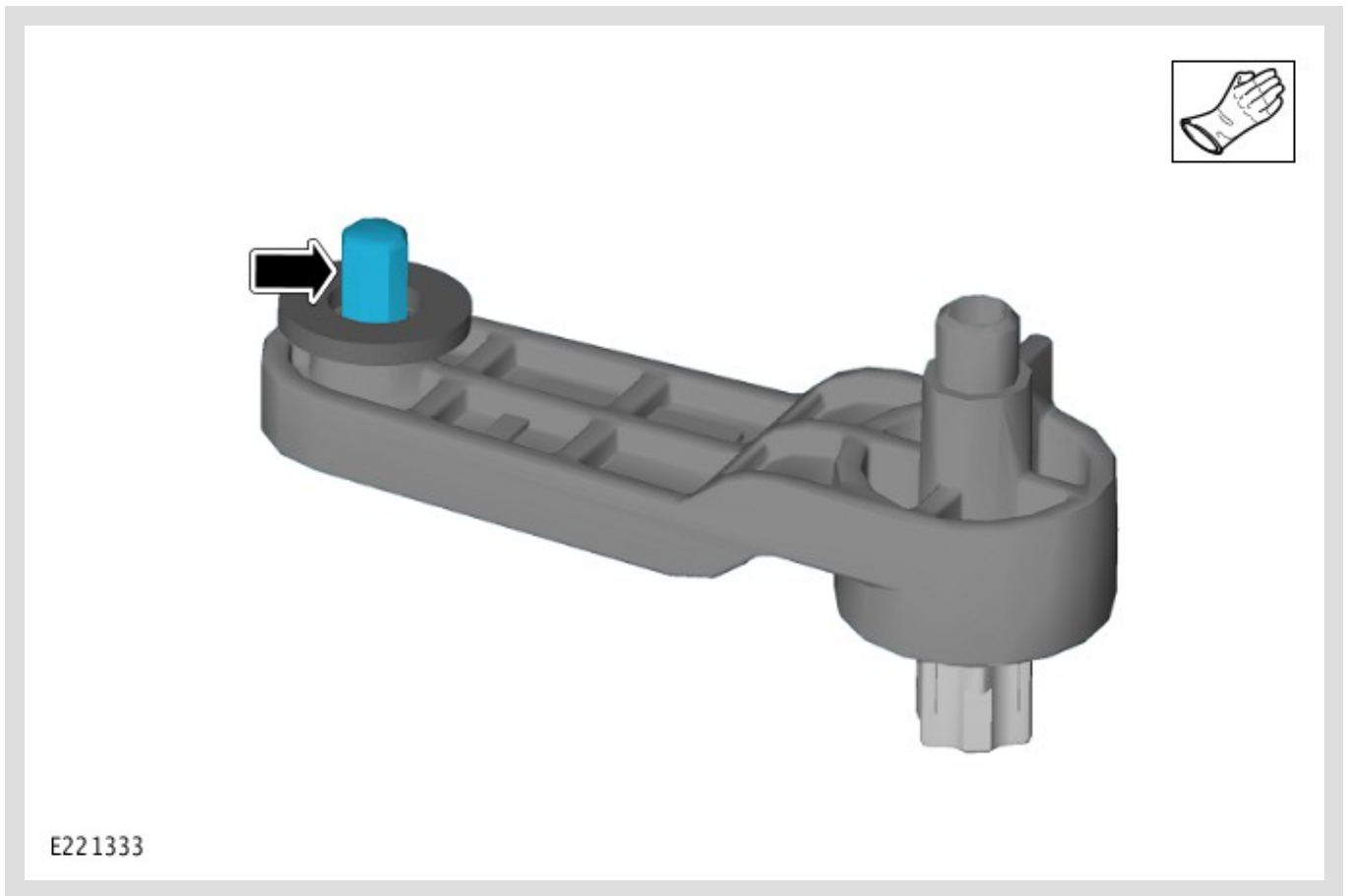


Remove and retain the foam washer from the recirculation blend door actuator lever arm.

26

⚠ CAUTION:

This step must be completed using a clean glove.

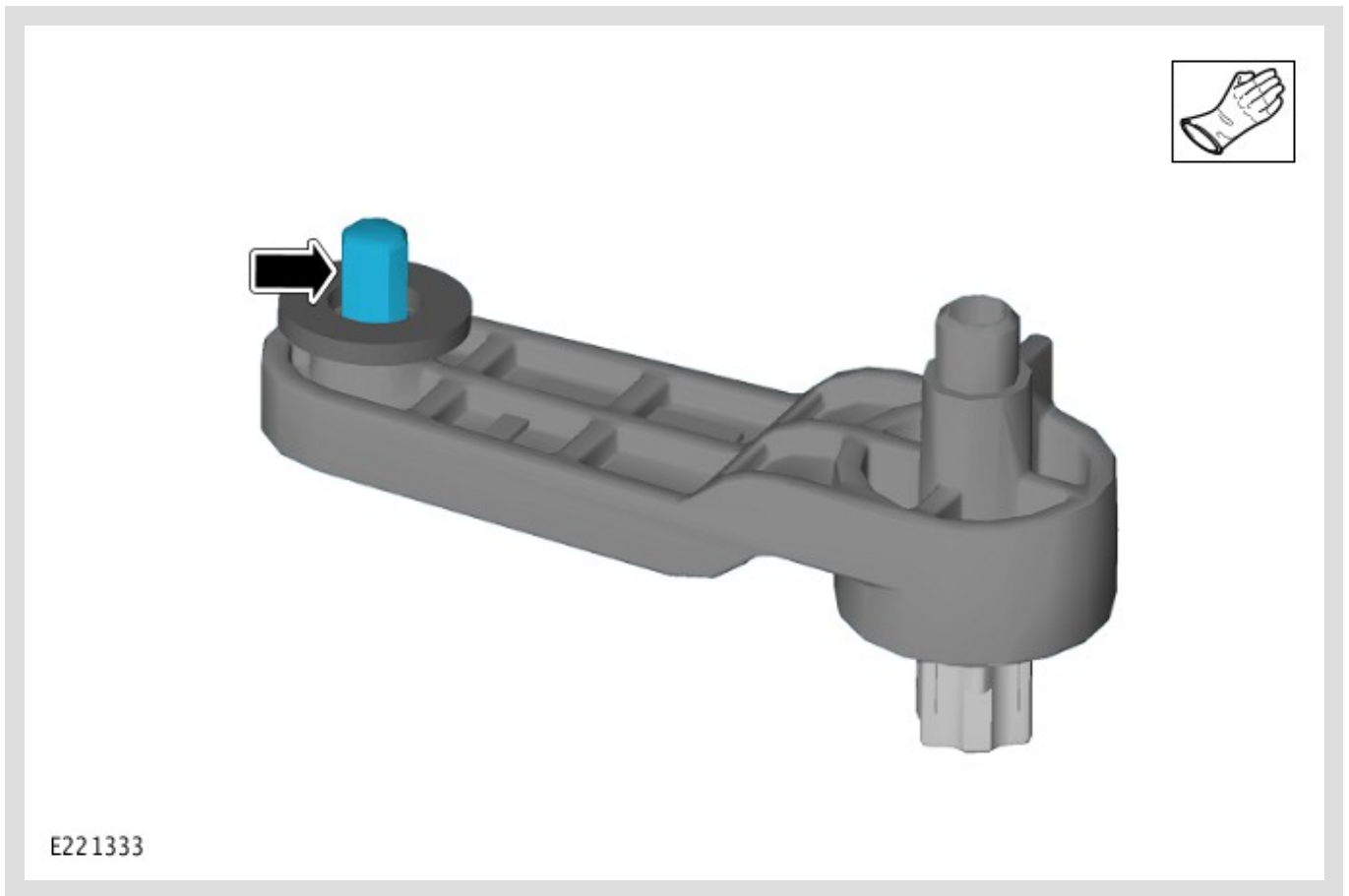


Recover any grease from the recirculation blend door actuator lever arm as shown.

27

⚠ CAUTION:

This step must be completed using a clean glove.

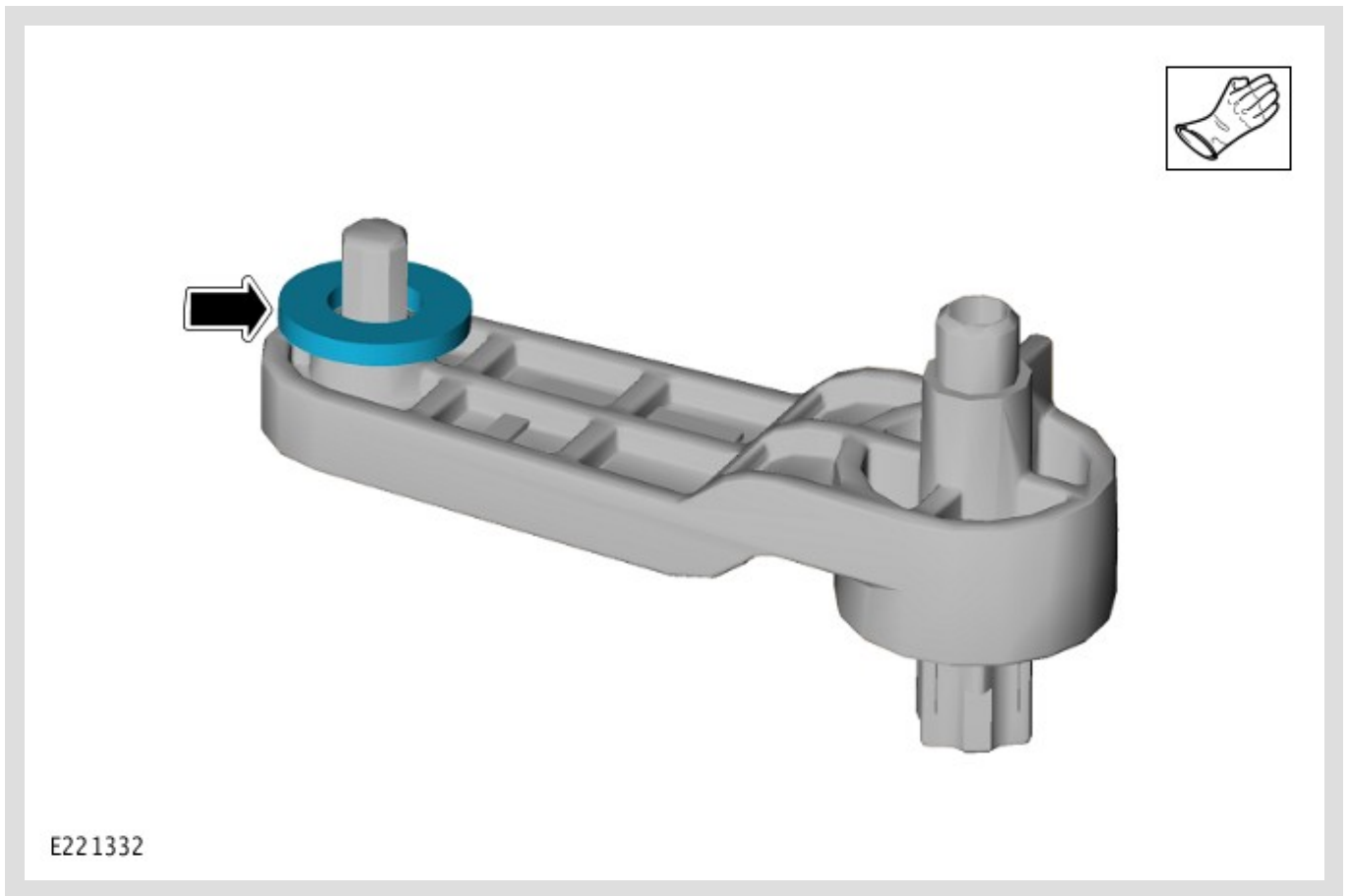


Apply the recovered grease to the new recirculation blend door actuator lever arm as shown.

28

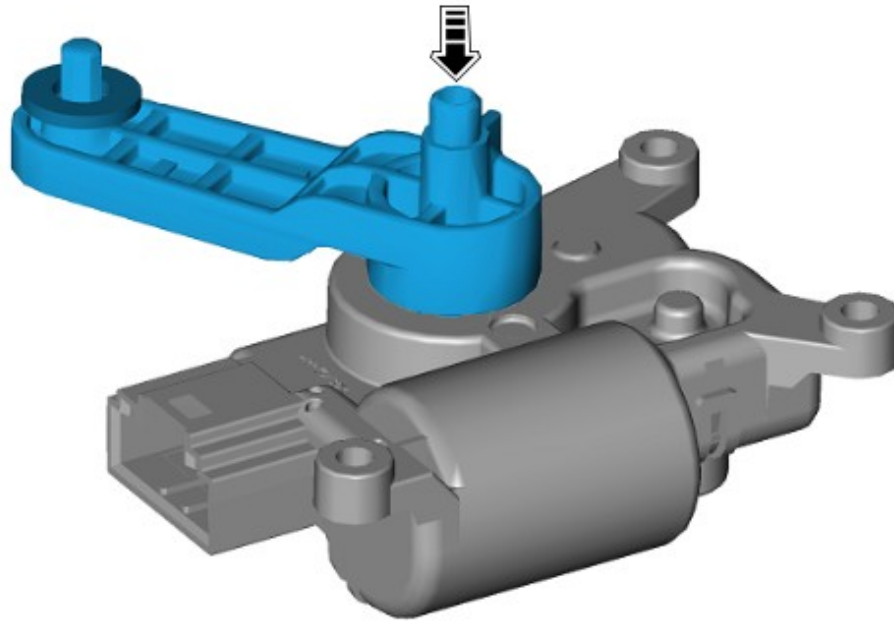
⚠ CAUTION:

This step must be completed using a clean glove.



Install the original foam washer to the new recirculation blend door actuator lever arm.

29



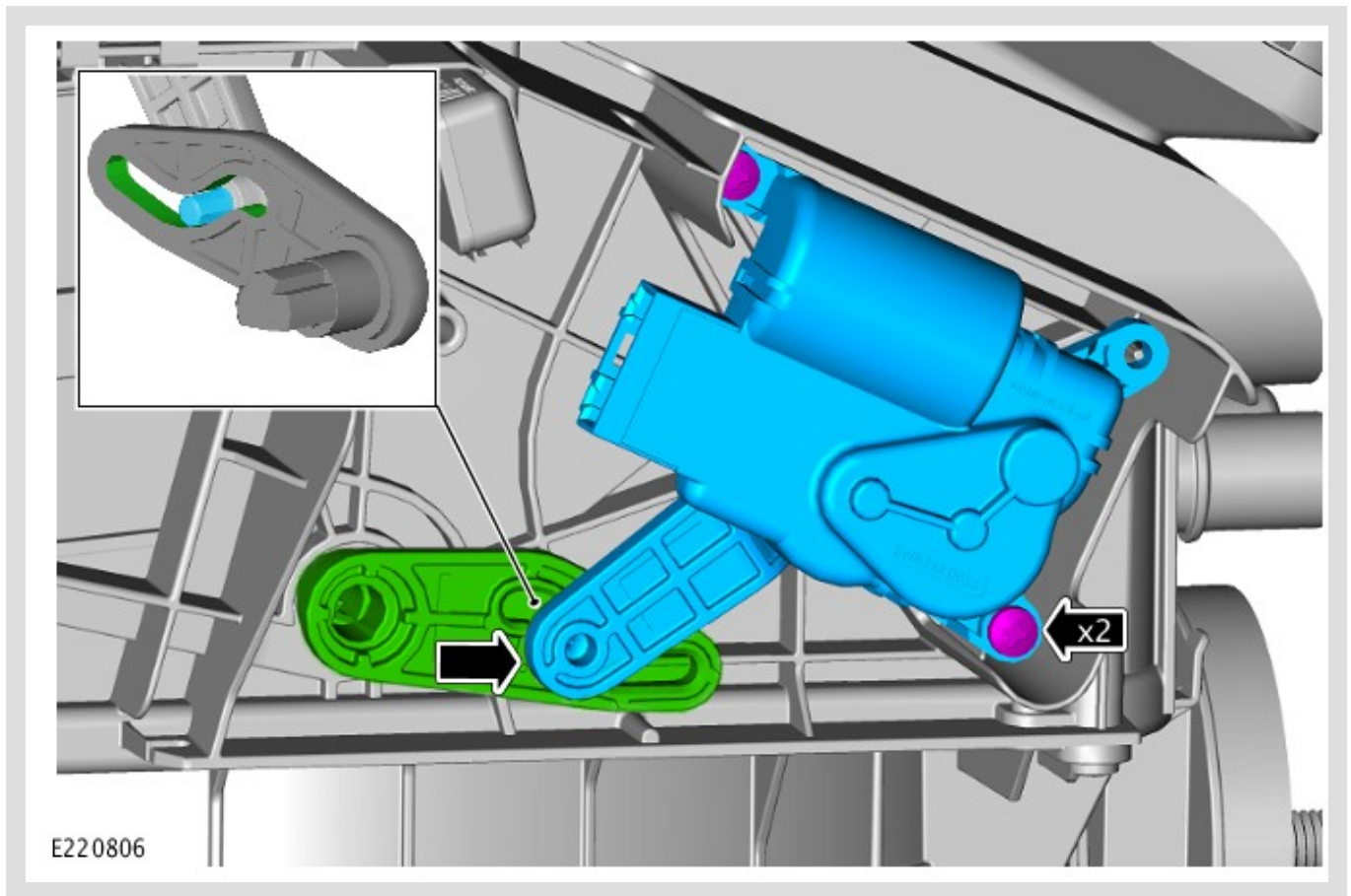
E221334

Install the recirculation blend door actuator lever arm to the actuator.

30

ⓘ CAUTIONS:

- New retaining screws from the link arm kit must be used to install the recirculation blend door actuator.
- The recirculation blend door actuator lever arm must be located correctly into the blend door lever arm.



Install the recirculation blend door actuator.

- Install the recirculation blend door actuator retaining screws.
- Torque: **1.5 Nm**

31 Reverse steps 11-21.

32 Connect the vehicle startup battery ground cable (see TOPIx Workshop Manual section 414-01: Battery and Charging System - Battery, Mounting and Cables - General Procedures - Battery Disconnect and Connect).

33 Connect the battery power supply to the vehicle startup battery.

34 Connect the diagnostic tool to the vehicle and continue the session.

35 Exit the current session.

1 If required, reset the vehicle to **Transit mode**.

2 Select the **Exit** icon.

36 Disconnect the diagnostic tool and battery power supply from the vehicle.