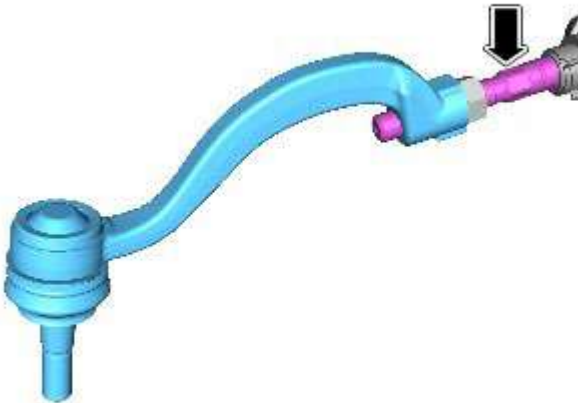
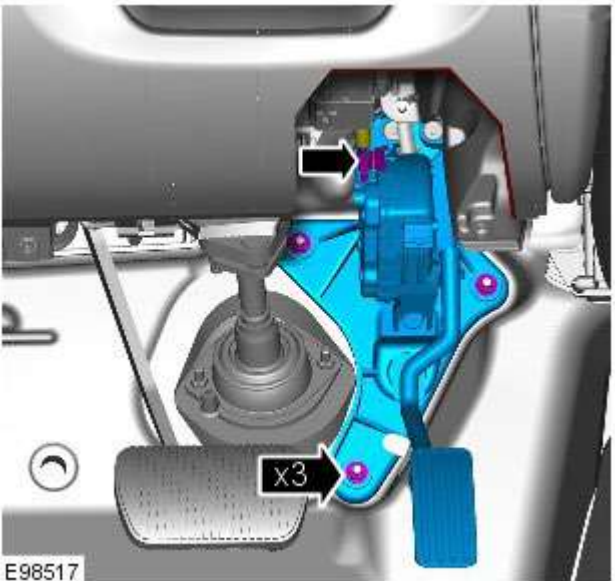
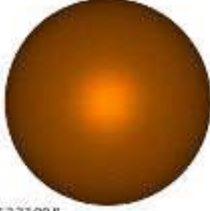


 E223027	 E223012
 E197849	 E145946
 E204832	 E98517

Focus Item - Alternative

An alternative color when multiple parts are to be removed in succession. This color, in addition to focus blue, is clearer to see how many parts are to be removed.

2018 Onwards	Pre 2018
	 E223008

Interior

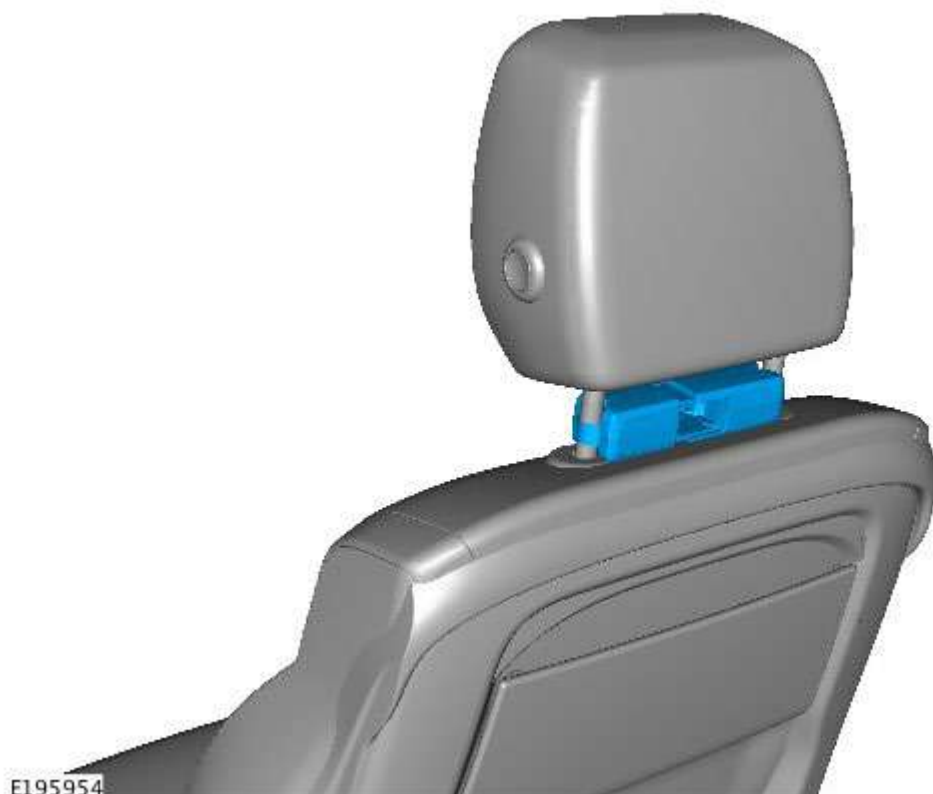
Click & Go System Base Unit (G2219238)

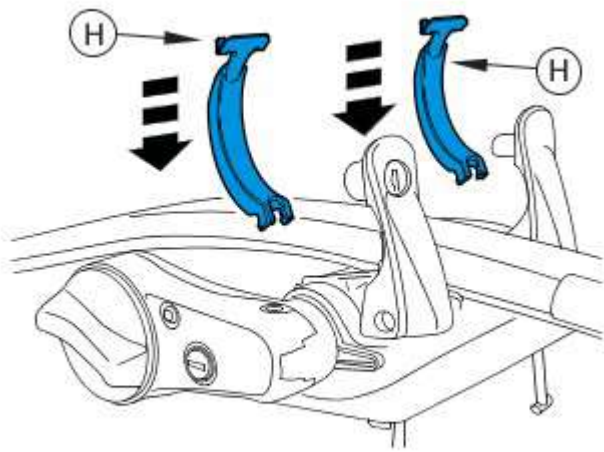
REMOVAL AND INSTALLATION

J9C2168

WARNINGS:

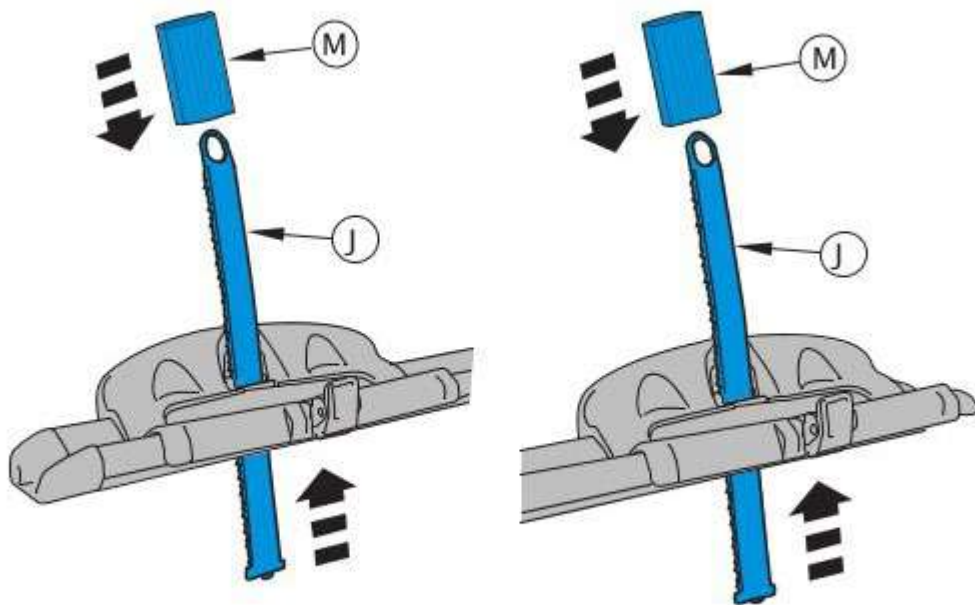
- Accessories which are not correctly installed can be dangerous. Read the instructions carefully prior to installation. Comply with instructions at all times. If in doubt, contact your nearest approved retailer.
- Head restraints are designed to support the head, not the back of the neck. The head restraint must be positioned correctly to restrain rearward movement of the head in a collision or sudden stop. While stationary, adjust the head restraint so that the top of the head restraint is the same height as the top of the seat occupant's head. An incorrectly adjusted head restraint increases the risk of death or serious injury in the event of a collision.
- Never adjust the head restraints while the vehicle is in motion.





8. E198144

Insert part (H) of the 2 roof cross bar locking handles through the gaps in the front cycle carrier bracket.



9. E198145

Attach the wheel straps to both ends of the cycle carrier.

- Make sure the strap orientation is correct.
- Make sure the strap button is not locked.

10. WARNING:

Be aware of the vehicle height and seek assistance if required.

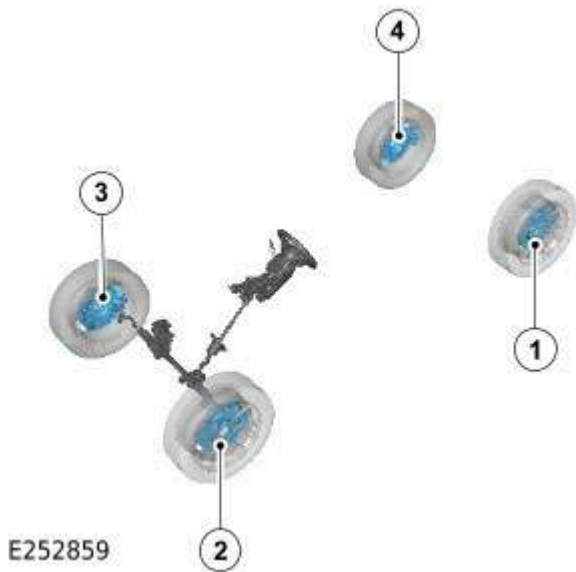
General Equipment: Brake bleeding equipment

2. Connect the Jaguar Land Rover (JLR) approved diagnostic equipment to the vehicle and begin a new diagnostic session.

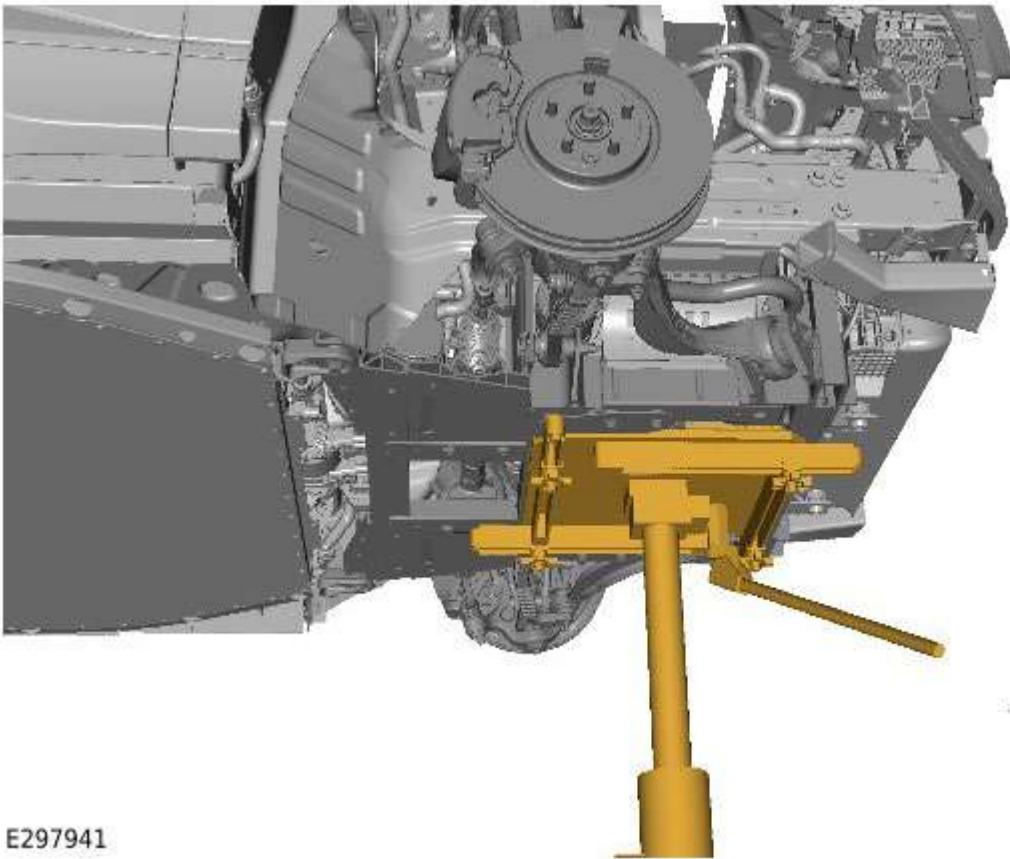
General Equipment: Jaguar Land Rover approved diagnostic equipment

3.
 - Use the JLR approved diagnostic equipment to put the Brake Booster Module (BBM) into manufacturing service mode.
 - Select 'ECU Diagnostics'.
 - Select 'Brake Booster Module (BBM) Diagnostics'.
 - Select 'ECU Functions'.
 - Select 'Activate Control Module Manufacturing Service Mode'.
4. WARNING:

Braking efficiency may be seriously impaired if the incorrect bleed sequence is followed.

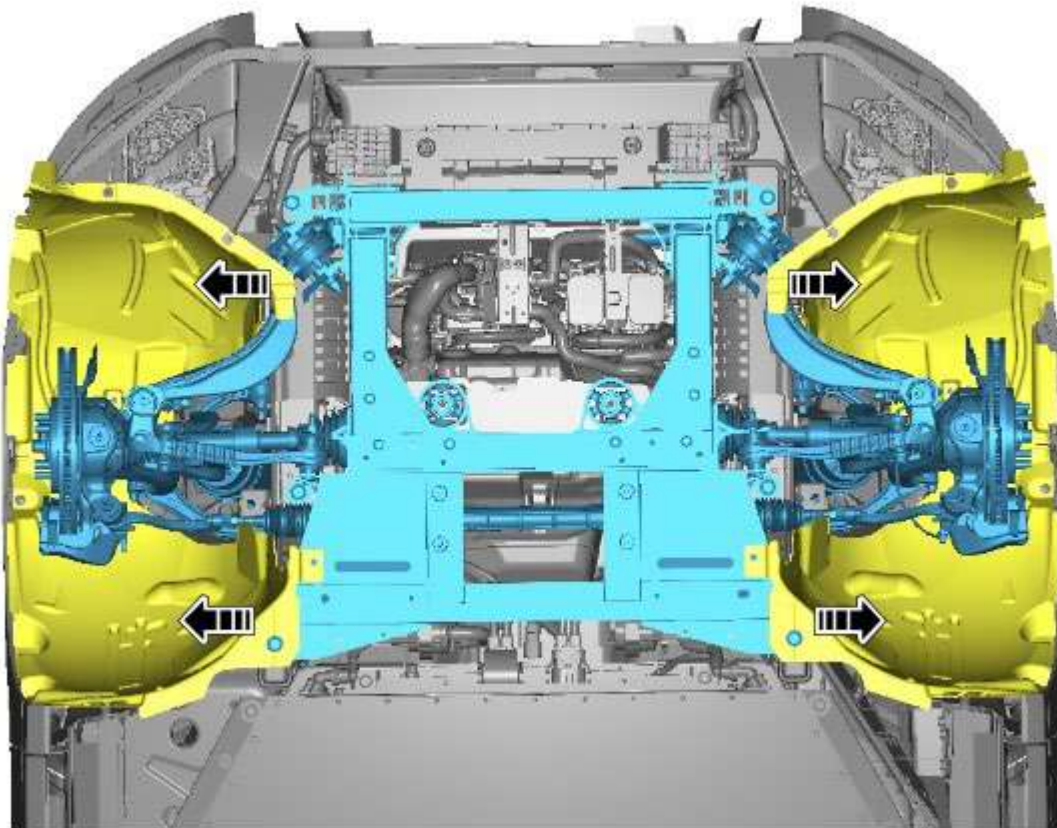


- Use the JLR approved diagnostic equipment to complete the Anti-lock Brake System (ABS) module brake bleed procedure.
 - Select 'ECU Diagnostics'.
 - Select 'ABS Module Diagnostics'.
 - Select 'ECU Functions'.
 - Select 'Brake Bleed'.
 - Follow the on-screen prompts to bleed the brake system starting with caliper number 1 shown in the illustration.
5.
 - Tighten all the bleed screws.
Torque: 15Nm
 - Install all the bleed screw caps.
 6.
 - On completion of the brake bleed procedure, exit the 'Brake Bleed' application.
 - Select 'ECU Diagnostics'.
 - Select 'ABS Module Diagnostics'.
 - Select 'ECU Functions'.
 - Select 'Exit Brake Bleed'.
 - Follow the on-screen prompts.
 7.
 - Take the BBM out of 'Manufacturing Service Mode'.
 - Select 'ECU Diagnostics'.
 - Select 'Brake Booster Module (BBM) Diagnostics'.
 - Select 'ECU Functions'.
 - Select 'Exit Control Module Manufacturing Service Mode'
 - Follow the on-screen prompts.



E297941

16. Use a suitable transmission stand to support the subframe.
General Equipment: Transmission jack



E297935

17. Reposition the wheel arch liners to gain access to the bolts and allow the subframe to be lowered.

control section on the LWC is signed.

- The Person-In-Charge (EVSAP) may only leave the Live Work activity for a short period of time, they must sign the Working Party control section of the LWC and instruct all members of the Working Party to stop any Live Work activity and leave the designated Live Work area. During the absence of the Person-In-Charge (EVSAP) it is the responsibility of the Safety Accompanying Person to prevent unauthorized access to the Live Work Area. If the Person-In-Charge is required to leave the Live Working activity for longer periods of time or permanently then they must end the LWC by signing the Clearance and Cancellation section. Before the Live Working activity can continue a replacement Person-In-Charge(EVSAP) must be present and a new Live Work Certificate (LWC) issued by the EVSAP.

8.12.3 The Safety Accompanying Person positioned outside the Live Working Area Shall prevent unauthorized access, only the Person-in-Charge and the assisting person (if required) are permitted inside the Live Working Area.

8.13 Assistance whilst Work/Testing is in progress on Live Components

8.13.1 Persons performing work or testing activities under this EV Safety Rules Procedure can have assistance within the Live Working Area by an assisting Person in accordance with the Approved workshop manual procedure.

8.13.2 The Assisting Person Shall:

- Be a minimum EVCP Jaguar Land Rover trained Person.
- Clearly understand his/her role as an Assisting Person.
- Be under the instruction at all times of the Person-in-Charge(EVSAP) during Live Working.

8.14 Safety Accompanying Person whilst Work/Testing is in progress on Live Components

8.14.1 Persons undertaking work or testing activities under this EV Safety Rules Procedure Shall have a Safety Accompanying Person positioned outside the Live Working Area in accordance with the Approved procedure.

8.14.2 The Safety Accompanying Person Shall:

- Be a minimum EVCP Jaguar Land Rover trained Person.
- Be able to recognize Danger and, if necessary, render assistance in the event of an emergency.
- Clearly understand his/her role as a 'Safety Accompanying Person'.
- Be aware of the procedure for requesting emergency assistance at the location where the work is performed.

8.14.3 The Person-in-Charge responsible for the work Shall make sure that the correct equipment is available to enable the Safety Accompanying Person to provide assistance in the event of an emergency. The verification of the availability of this equipment shall be recorded on the Live Work Certificate.

8.15 Completion of Live Work Certificate

8.15.1 Before any Live Work/Testing a Live Work Certificate (LWC) Shall be issued by the nominated Person-in-Charge responsible for the Live Work/Testing activity.

8.15.2 The LWC has 7 parts which Shall be completed before any work commences:

1. General Information
2. Work/Testing details
3. Confirmation of Control Measures BEFORE commencing work
4. Additional Precautions
5. Working Party Confirmation
6. Working party control
7. Live Work Certificate (LWC) clearance and cancellation

8.15.3 Working party control

Section 6 of the LWC is the Working Party control section and Shall be used throughout the Live Working activity to sign members of the party on or off the activity. Persons within the Working Party can sign off the LWC if breaks are required or the Person is required to be exchanged with another Person of the same or higher EV authorization.

Section 7 of the LWC Shall be signed after the Live Working activity has finished and the components have been either re-assembled to their original built state or left in a safe state so that conductors at High Voltage (HV) are not exposed. The Working Party are also instructed that the Live Working activity has finished and no further work is permitted, all members of the Working party Shall sign to confirm they understand. If the components worked on cannot be rebuilt to their original state and further work is required then this information should be detailed in the additional notes section at the end of the LWC.

SECTION 9 - TERMINOLOGY AND DEFINITIONS

D1. Approved - as specified in the Jaguar Land Rover workshop manual.

D2 Assisting Person - referred to within the LWC as an extra Person that is a minimum level of EVCP and required to help the Person-in-Charge (EVSAP) during certain procedure steps for Live Working- these steps are detailed in the Jaguar Land Rover Approved procedures.

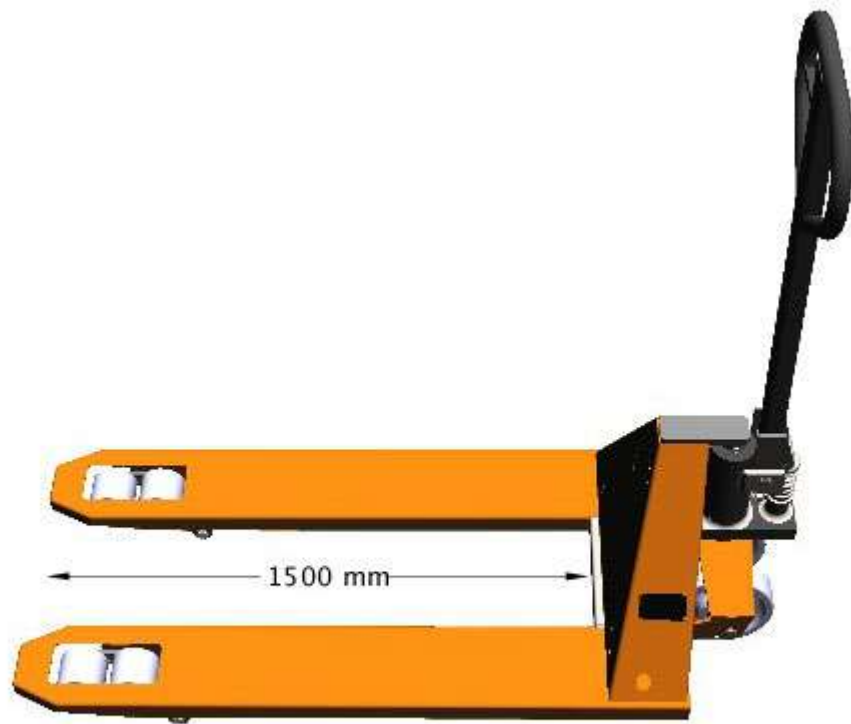
D3. Company (The) – the organization or company, undertaking servicing and repair work on Jaguar Land Rover Electric Vehicles.

D4. Component – a part of the vehicle requiring service as detailed in the Jaguar Land Rover workshop manual procedures.

D5. Danger– a risk to health and of bodily injury.

D6. Dead – at zero voltage and disconnected from any Live System.

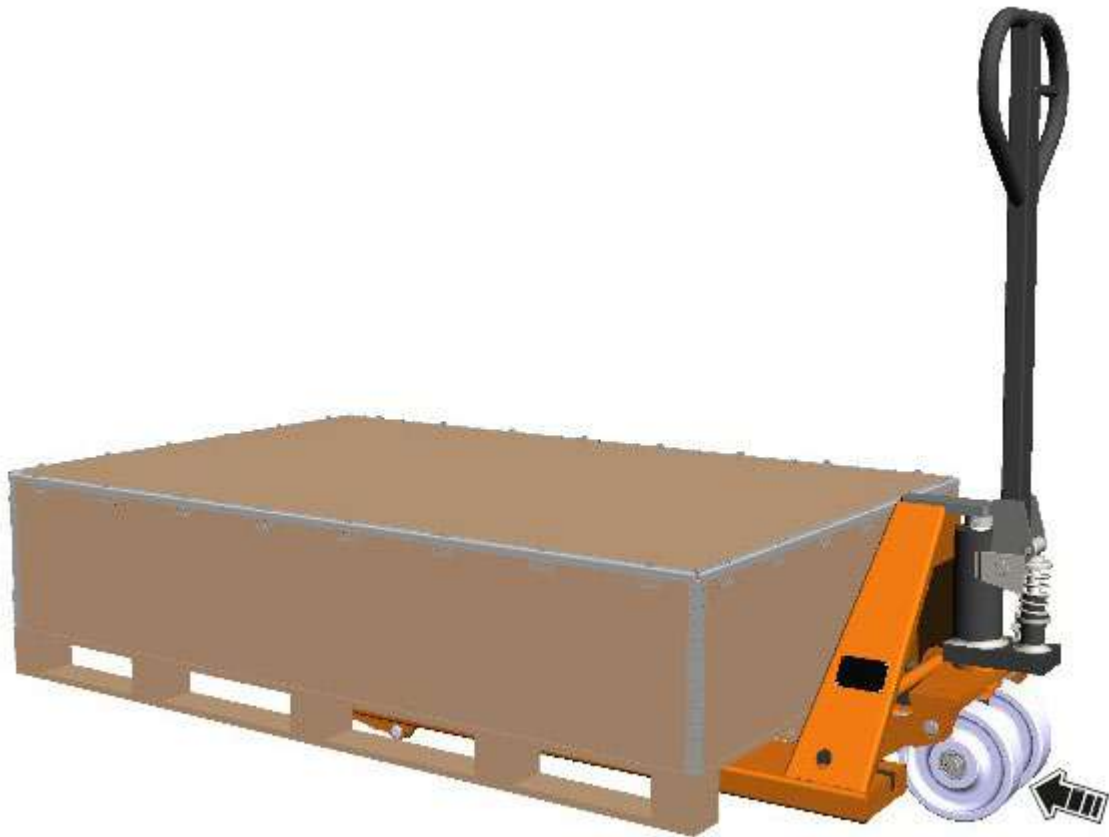
D7. Electric Vehicle - any vehicle equipped with an integrated high energy electrical source system or systems where the nominal design operating voltage



E234893

1.

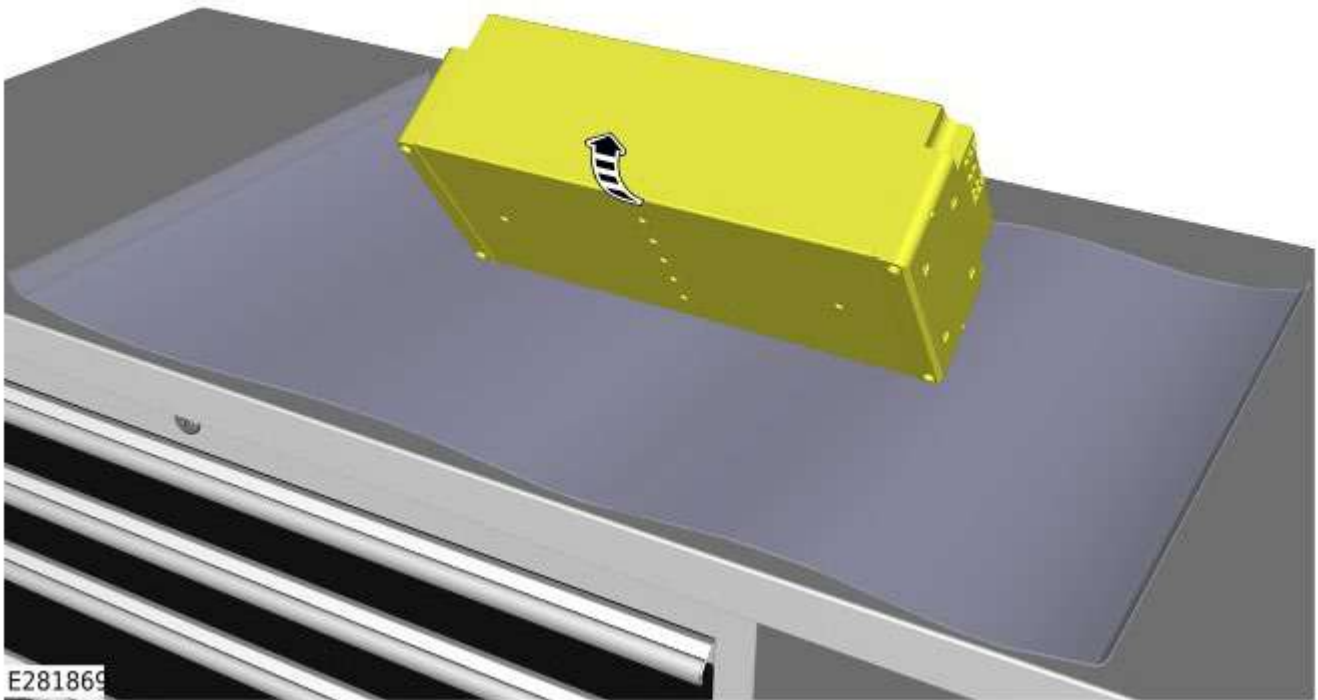
Before moving the Electric Vehicle (EV) battery delivery box, make sure the pallet truck legs have a minimum length of 1500 mm long.



E234892

2.

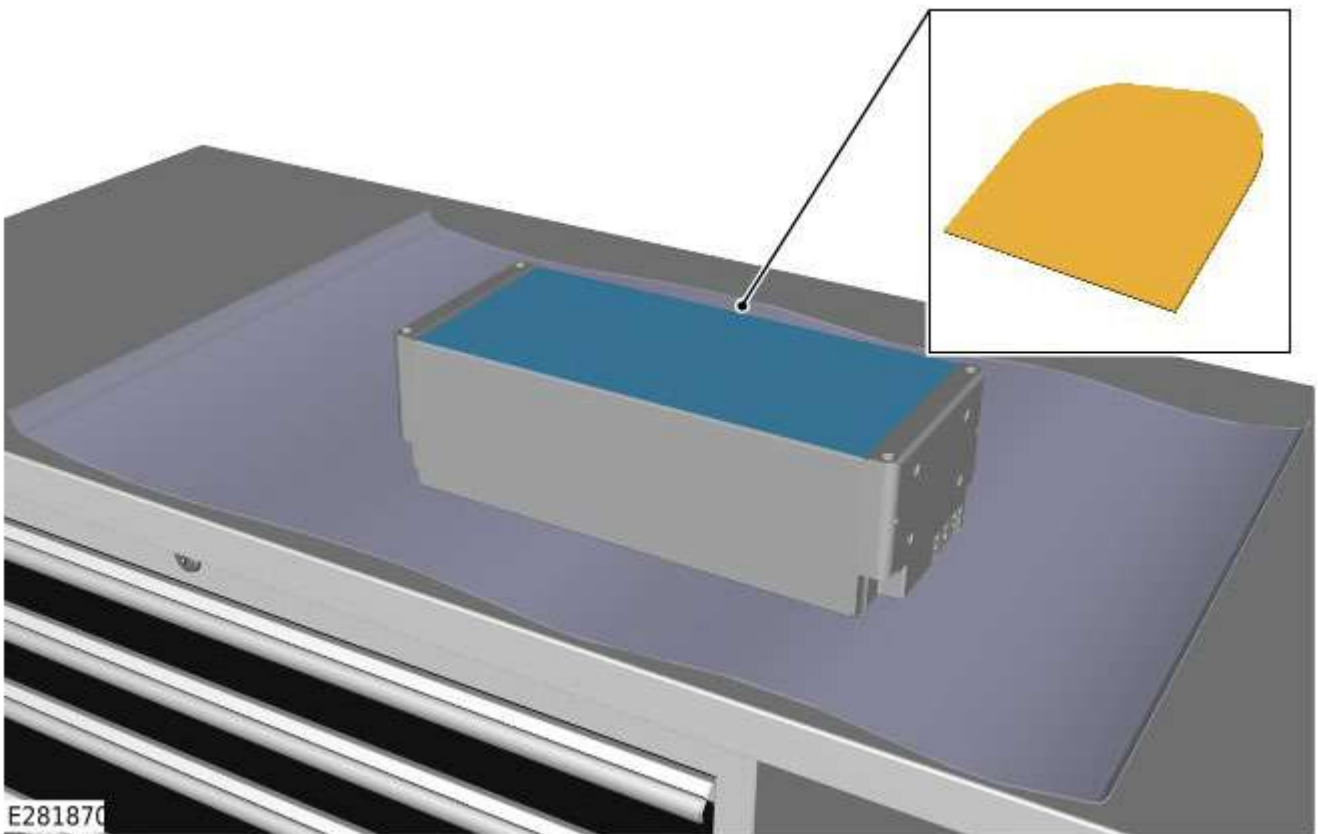
- Insert the pallet truck underneath the EV battery delivery box as shown in the illustration.
- With assistance, move the EV battery from kerbside in to the storage space allocated for a new EV battery.



Rotate the EV battery module to access the thermal paste.

24. NOTES:

- This step is only required if the Electric Vehicle (EV) battery module is being removed for access.
- This step does not require Personal Protective Equipment (PPE).



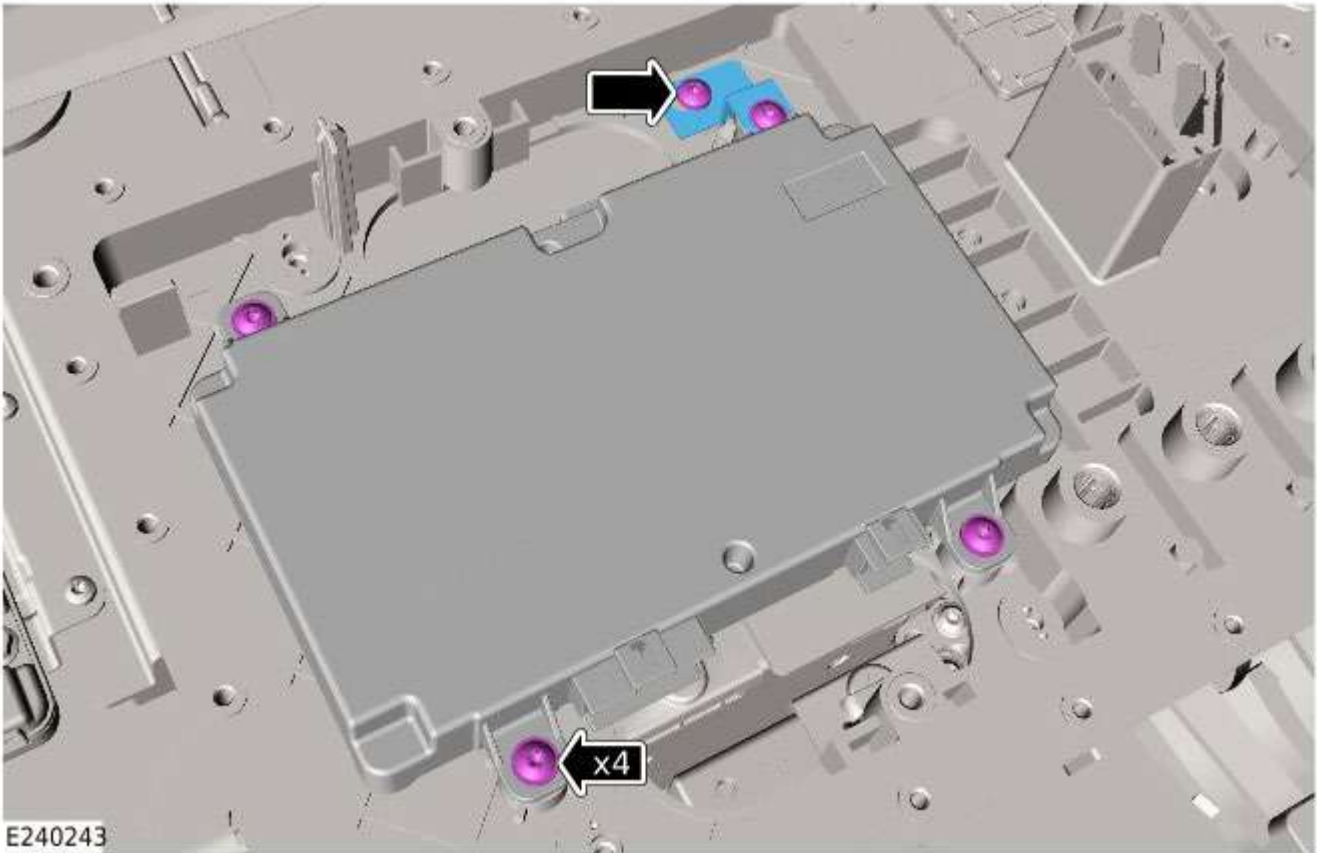
Use the spreader from special tool JLR-415-061 to remove and discard the thermal paste from the battery module.

Installation

1.

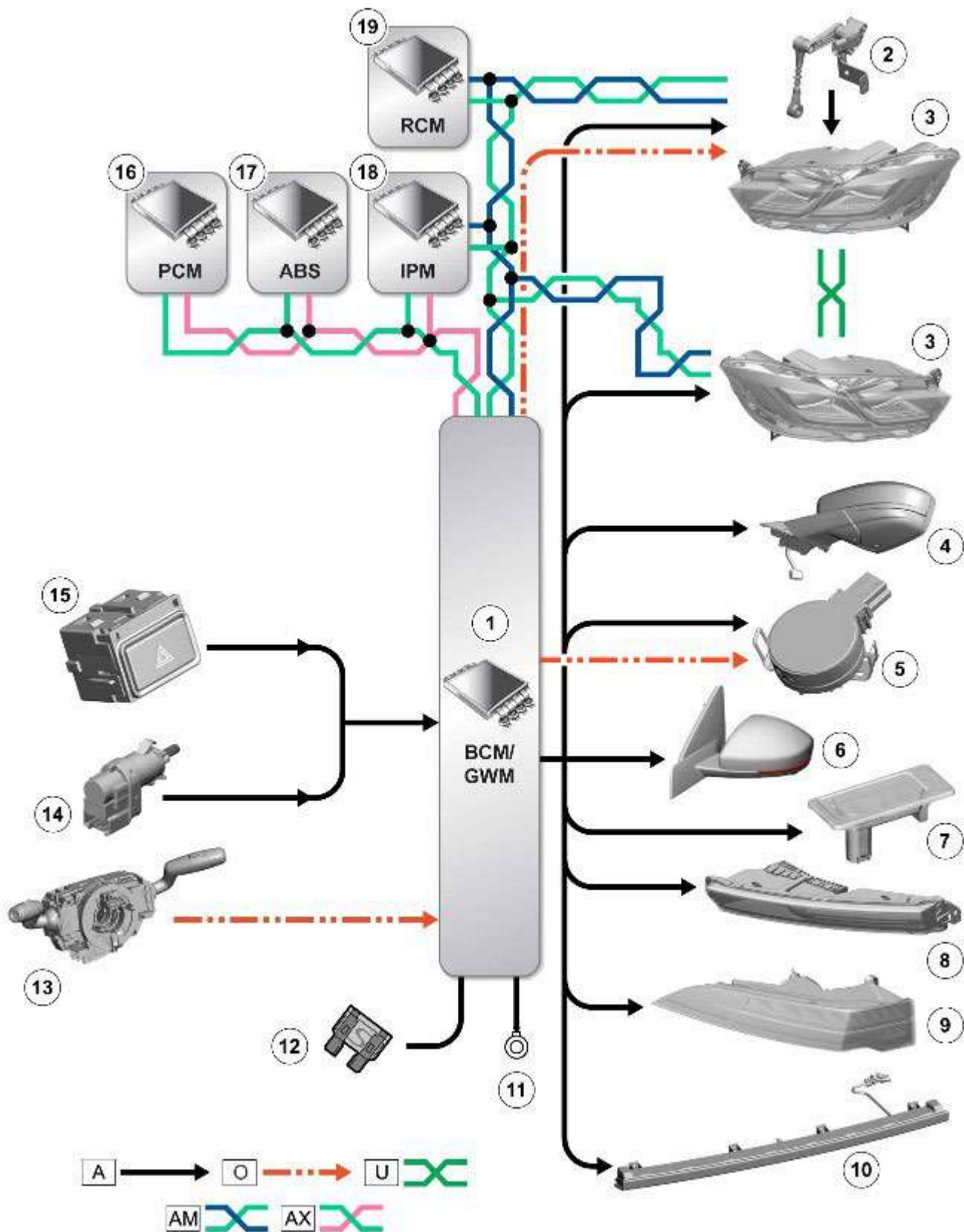
The following steps require the safety accompanying person with the safety hook outside the live working area, this person must remain in position for the duration of this procedure.

2.



- Install the Battery Energy Control Module (BECM).
- Install the ground busbar.
- Install and tighten the 4 bolts.
General Equipment: Insulated 3/8 Drive Torx Socket T30
General Equipment: Insulated 3/8 Drive Wrench
Torque: 12Nm
- Connect the 6 electrical connectors to the BECM.

3.



E221249

A = Hardwired: O = LIN bus: U = Private bus: AM = HS CAN chassis system bus: AX = Flexray.

Item	Description
1	BCM/GWM
2	Height sensor (quantity 2)
3	Headlamp assembly (quantity 2)

- A selection of extraction tools
- A wire cutter and insulation stripper
- Crimpers

Extraction Tools

The extraction tools are used to remove a terminal from an electrical connector. Refer to the Wire Chart and Service Repair Information for the correct extraction tool for each terminal (where applicable). Each extraction tool has been specially designed to extract a particular type of electrical connector terminal. The use of any other tool is not recommended and is liable to cause damage to the electrical connector.

CAUTION:

Inspect the electrical connector housing for evidence of damage. The damage may affect the security of a terminal inside the connector housing. The damage may affect the operation of the anti-backout device. The damage may affect the secure installation of the connector housing to the intended component/connector housing. Replace a damaged electrical connector housing.

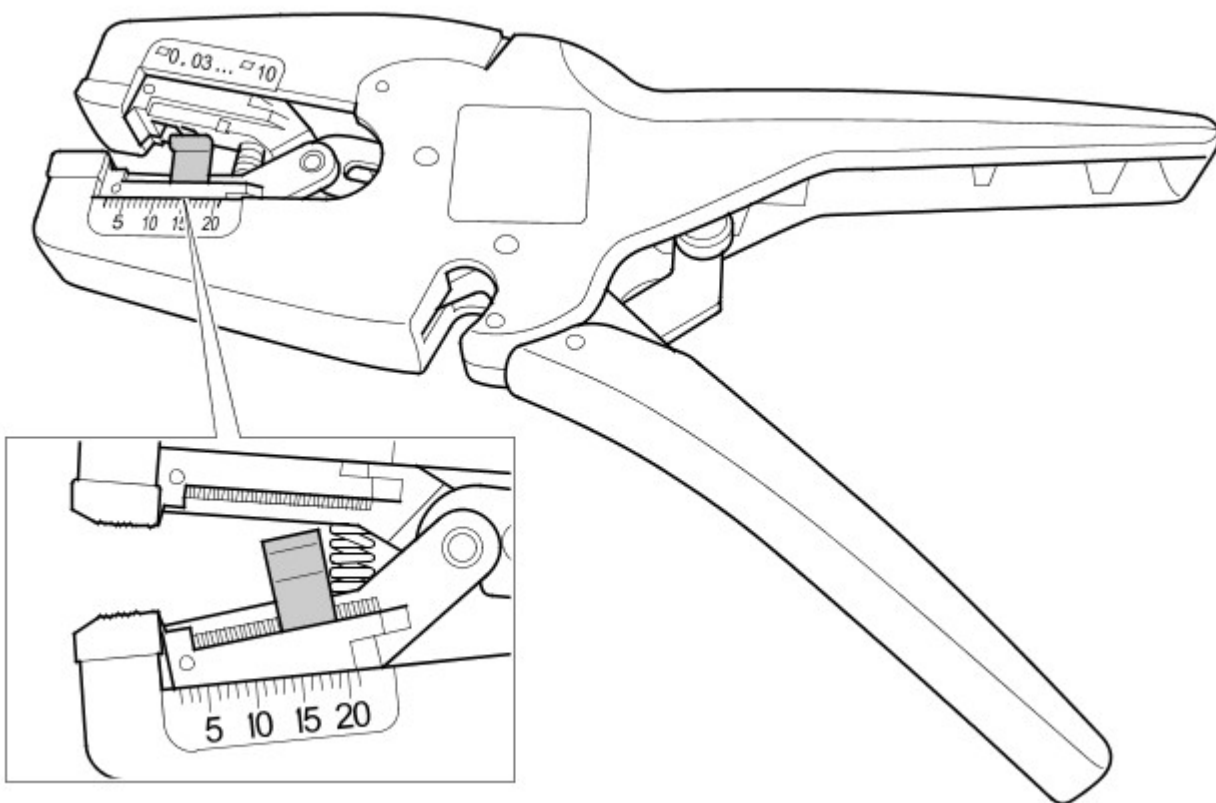
Insulation (Wire) Stripper

By pressing the outer edges of the wiring harness cable length stop together the adjuster can be slid up or down the jaw. This decreases or increases the length by which the cable insulation will be stripped from the pre-terminated lead or wiring harness cable.

NOTE:

Some wiring harness insulation may be harder and require more effort to make a clean strip but exercise care not to damage the wire.

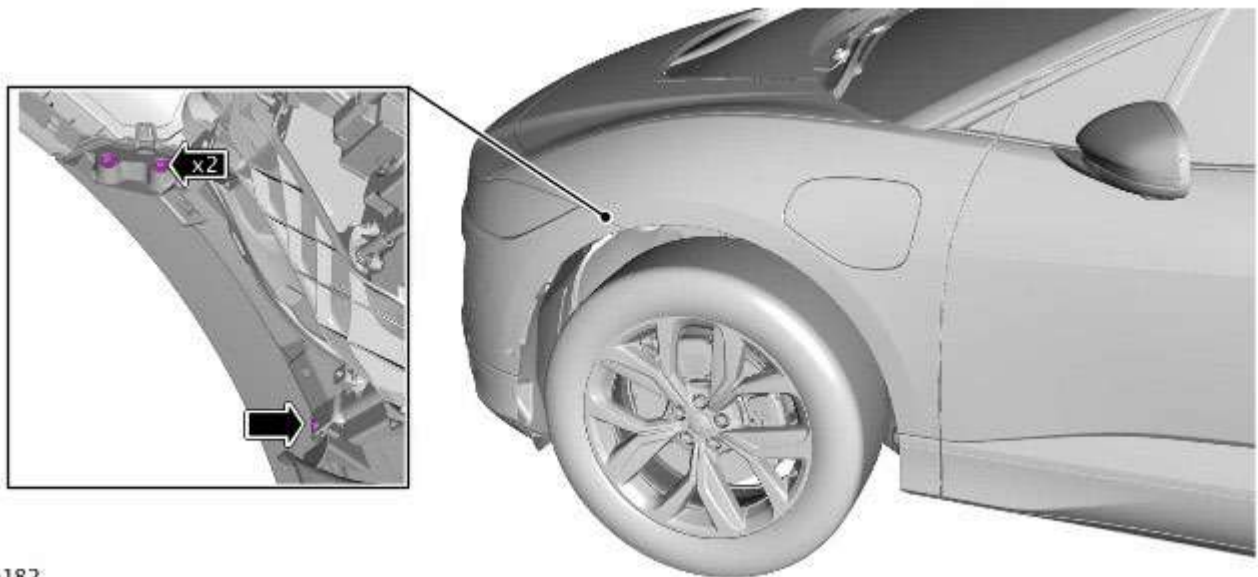
Insulation (Wire) Stripper



E178846

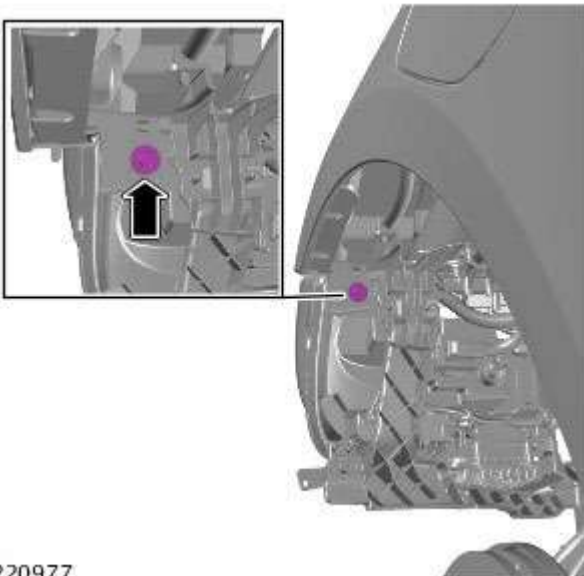
The adjuster has a position indicator to align with a graduated scale and this sets the correct length in millimeters, of insulation to be stripped. The amount of insulation to be stripped is shown in the Electrical Wiring Harness Repair

- Remove the 3 screws.
- Remove the 2 clips.
- Release the front section of the wheel arch liner.



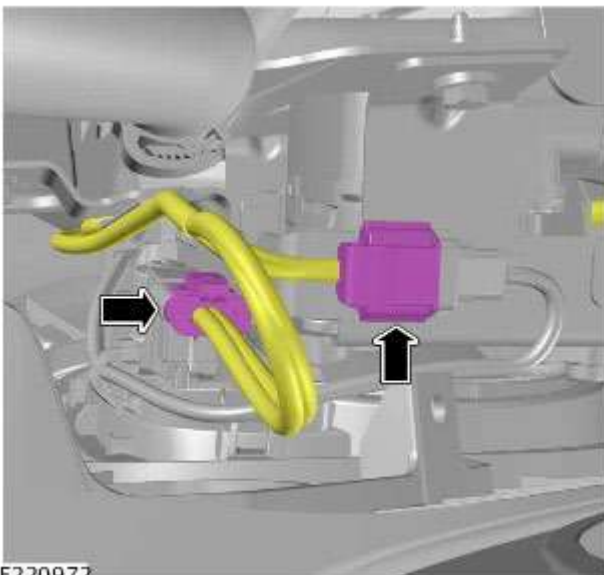
4. E220182

- Remove the 2 bolts.
- Remove the screw.

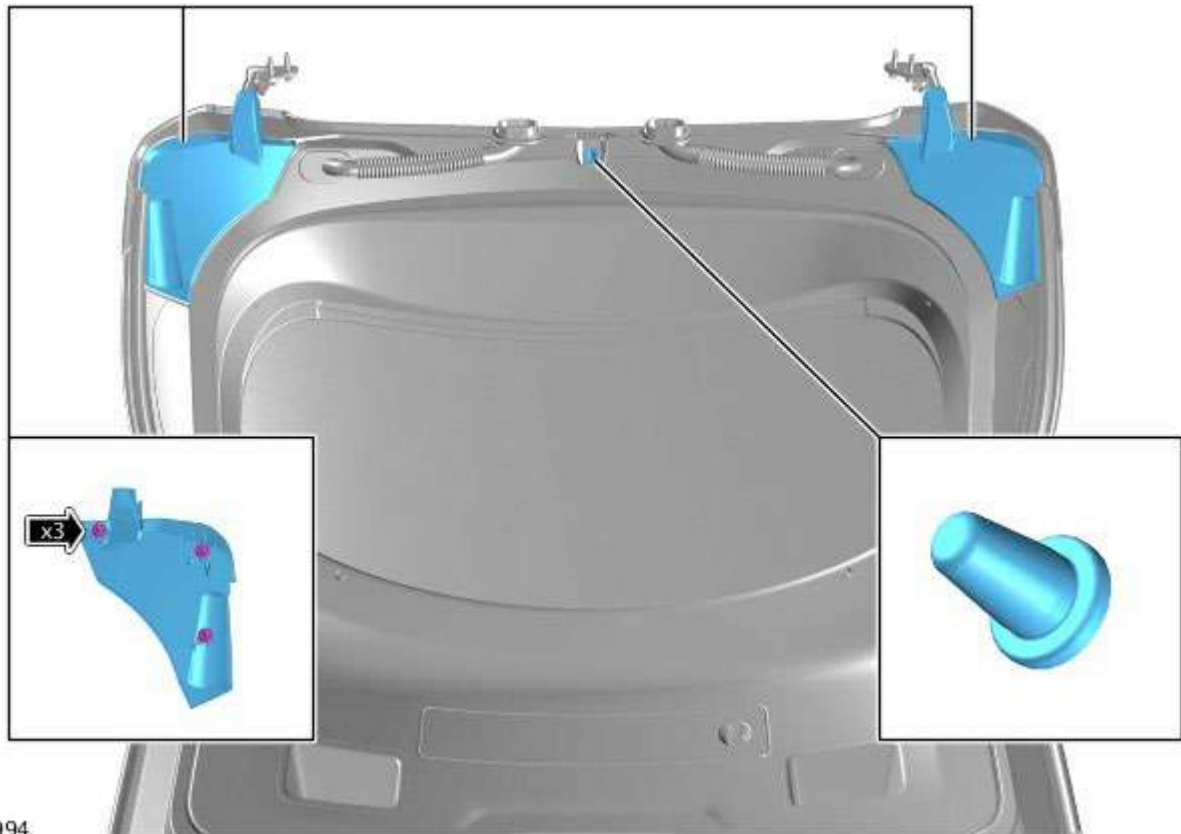


5. E220977

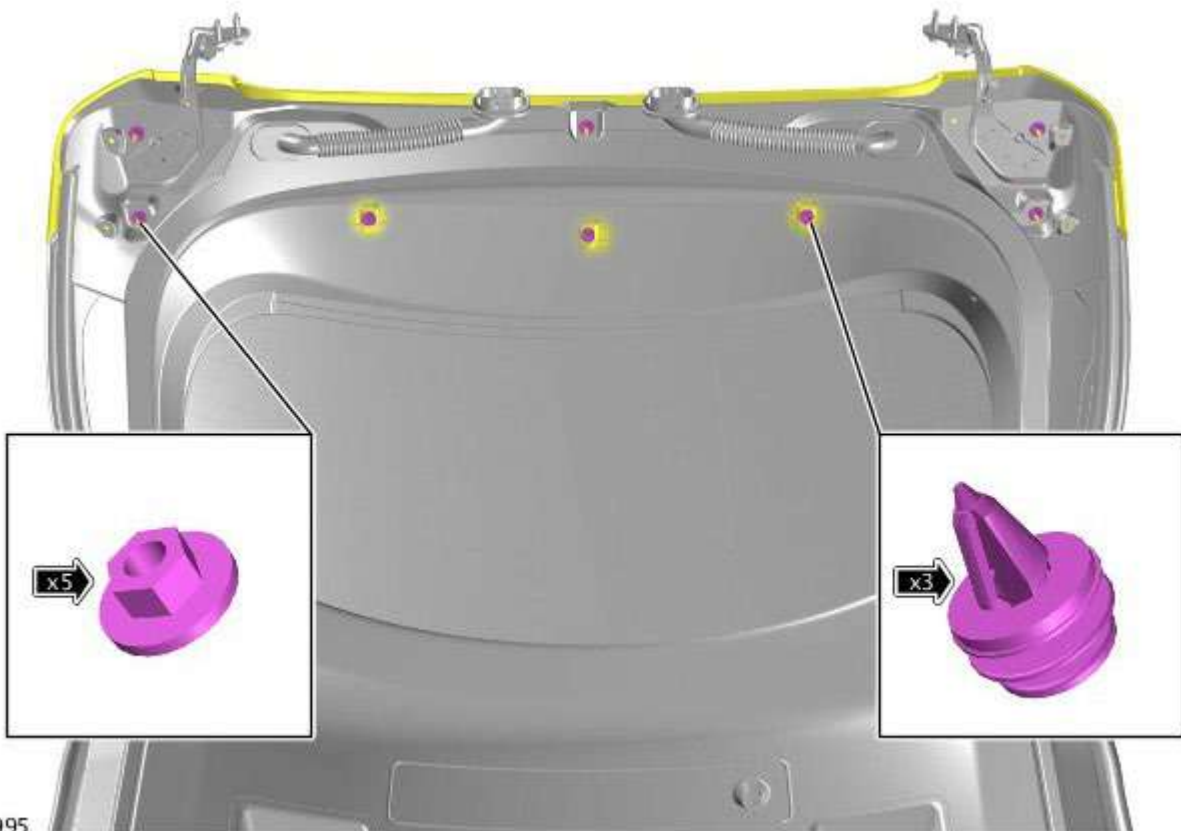
Remove the bolt.



6. E220972



2. E218994
- Remove the cap.
 - Remove the 2 hinge covers.



3. E218995
- Remove the 5 nuts.
 - Release the rear spoiler.
4. CAUTIONS:

- Components must be removed in the sequence illustrated.

Diagnostics

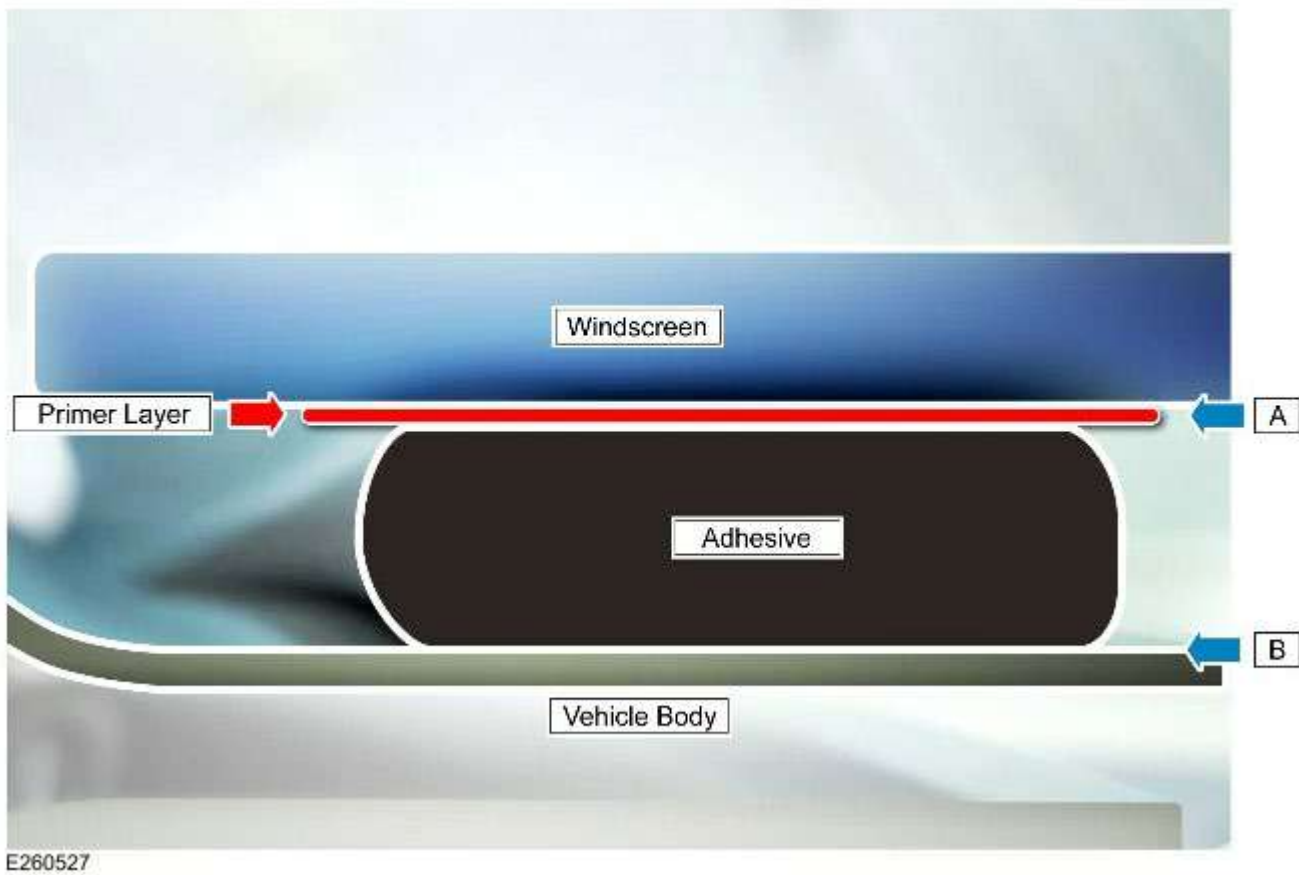
The JLR approved diagnostic equipment can read live data and activate certain components.

CONTROL DIAGRAM

Control Diagram - 1 Of 3 - Front Door Window



A = Hardwired: O = LIN: AZ = HS CAN body systems bus.



Water test

NOTES:

- Never aim a jet of water directly at a weather strip or rubber seals.
- DO NOT use a high pressure water hose for water testing.
- Complete the water test with a second person present (in the passenger compartment).
- Use variable washer nozzles (concentrated water jet to fine spray mist).
- Lower the headliner at the front of the vehicle to give clear access to the upper section of the windshield inside the vehicle.
- The outer trims must be raised carefully using a plastic wedge.
- Start in the lower section and spray the whole area, working upwards in stages.
- The leak should be located from inside by a second assistant.

Washer test

- Further tests can be completed in the washer system.
- Some leaks originate here, or only occur here.
- The relevant passenger compartment should be checked using a flashlight during the wash procedure.

Road test

- If no leaks are located during the tests above, road tests should be completed on wet roads.
- Road tests under various conditions:
 - At various speeds.
 - On various road surfaces (asphalt to cobbles).
 - With loaded or unloaded vehicle.
 - Driving through puddles (splash water).

Other test equipment