

Module Communications Network -**Torque Specifications**

Description	Nm	lb-ft
Battery junction box (BJB) retaining bolt	10	7
Battery positive cable to battery junction box (BJB) nut	10	7
Body panel ground cable nuts	10	7
Central junction box (CJB) bracket retaining nuts	10	7
Engine compartment ground cable nuts:		
M6	10	7
M8	25	18

Module Communications Network - Communications Network

Description and Operation

OVERVIEW

A number of different types of communication network are incorporated into the vehicle wiring harnesses for the transmission of commands and information between control modules. The configuration installed on a particular vehicle depends on the model and equipment level.

The communication networks available on the vehicle are:

- Local Interconnect Network (LIN) bus
- Medium speed Controller Area Network (CAN) bus
- High speed CAN bus
- Media Orientated System Transport (MOST) ring

Bus	Baud Rate
LIN bus	9.6 kbits/s
Medium speed CAN bus	125 kbits/s
High Speed CAN bus	500 kbits/s
MOST ring	24 Mbits/s

LOCAL INTERCONNECT NETWORK BUS

The Local Interconnect Network (LIN) bus is a low speed broadcast network that employs master and slave components. The master component transmits a message along a single wire to the slave components identifying which slave is to respond. The message has a header (slave identifier) and an empty data field. The identified slave component fills the data field with the relevant information and returns a message to the master component along the same wire.

CONTROLLER AREA NETWORK BUS

The Controller Area Network (CAN) bus is a high speed broadcast network where control modules automatically transmit information every few microseconds. Information is broadcast down a pair of twisted wires, known as 'CAN high' and 'CAN low'. Information is transmitted on the CAN bus as a voltage difference between the 2 wires.

Two CAN bus networks are used on the vehicle; medium speed and high speed, with the Central Junction Box (CJB) acting as a gateway between the 2 networks. The table below shows the wire colors used on both networks.

Network	High	Low
Medium Speed	Grey and orange	Violet and orange
High Speed	White and blue	White

MEDIA ORIENTATED SYSTEM TRANSPORT (MOST) RING

The Media Orientated System Transport (MOST) ring uses fiber optic cables to transport data and audio signals around the information and entertainment system. The fiber optic cables are arranged in a ring, with each unit on the ring having a 'MOST in' and 'MOST out' connection.

The MOST ring is a synchronous network. A timing master supplies the clock and all other components on the ring synchronize their operation to this clock. The timing master for the MOST ring is the integrated control module.

When handling MOST fiber optic cables the following precautions should be observed:

- After disconnection of any cables carefully install appropriate dust caps to protect the mating faces of the connectors from damage and contamination.
- Avoid introducing bends of less than 25 mm (0.98 inches) radius or kinks into the fiber optic cable during service or repair. Tight bends or kinks could impair operation, cause immediate system failure, or future system failure.
- Avoid excessive force, strain or stress on the fibers or connectors especially permanent stress after reinstallation.

Ring Break Diagnostics

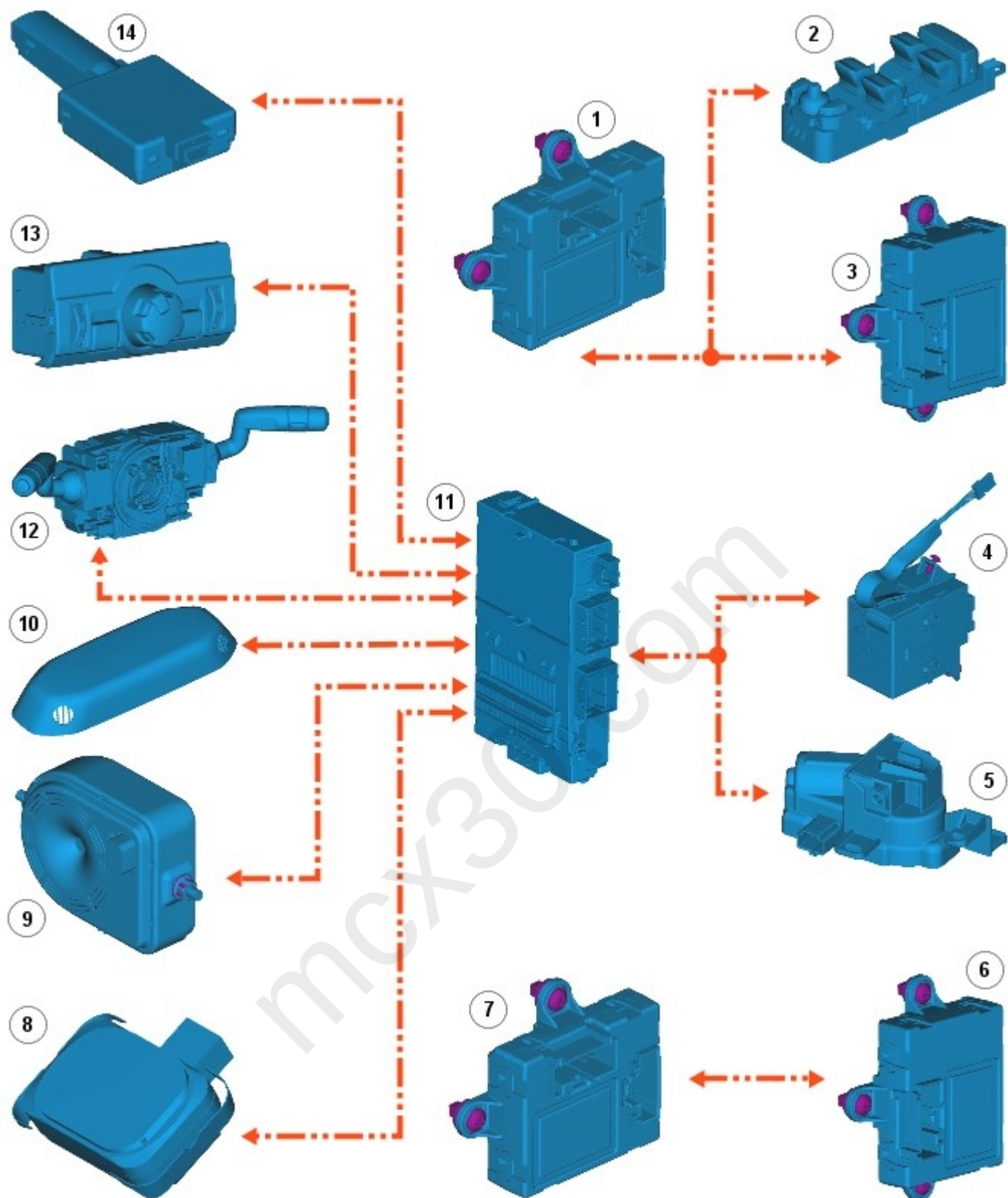
Incorporated into the Auxiliary Junction Box (AJB) is a Ring Break Diagnostics (RBD) link. The RBD link houses a copper link which when removed initiates the ring break diagnostics mode. The ring break diagnostics mode allows the technician to locate an optical fiber break in the MOST ring. To initiate the ring break diagnostics mode, carry out the following process:

- Connect the Land Rover approved diagnostic system.
- Ensure the vehicle is in power mode 4 or greater.
- Remove the RBD link for the length of time specified by the Land Rover approved diagnostic system.
- Replace the RBD link.

After approximately 30 seconds a Diagnostic Trouble Code (DTC) will be logged in the Integrated Control Module, identifying the location of the fault. The DTC can be read and interrogated using the Land Rover approved diagnostic system.

CONTROL DIAGRAM - LIN BUS (SHEET 1 OF 2)

- NOTE: ○ = LIN bus



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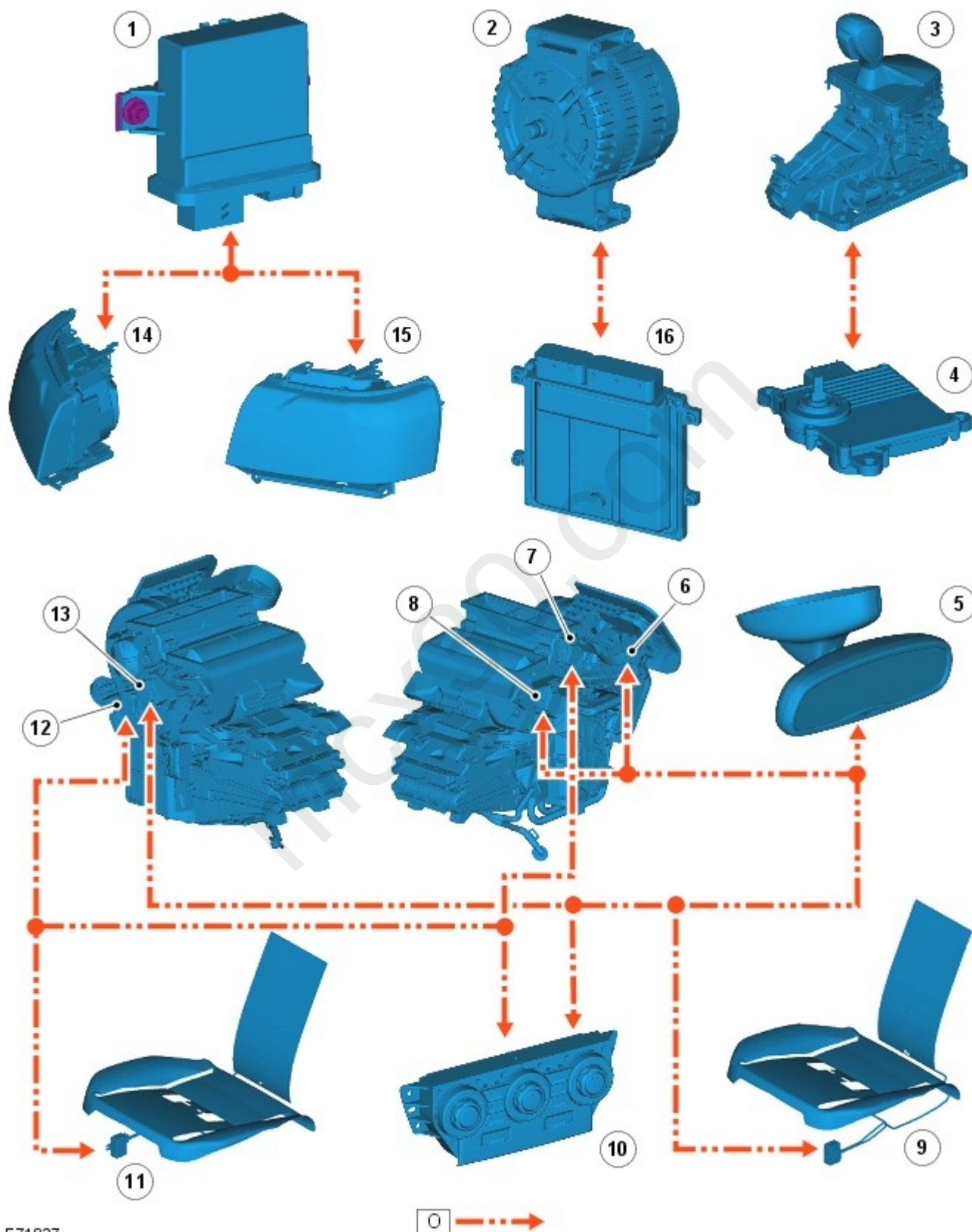


Item	Part Number	Description
1	-	Driver door module
2	-	Driver door switch pack
3	-	Rear door module (driver side)
4	-	Start control module
5	-	Electronic steering column lock
6	-	Rear door module (passenger side)
7	-	Passenger door module
8	-	Rain sensor
9	-	Battery backed sounder
10	-	Intrusion detection module
11	-	CJB

12	-	Steering wheel module
13	-	Light switch module
14	-	Radio Frequency (RF) receiver

CONTROL DIAGRAM - LIN BUS (SHEET 2 OF 2)

• NOTE:  = LIN bus



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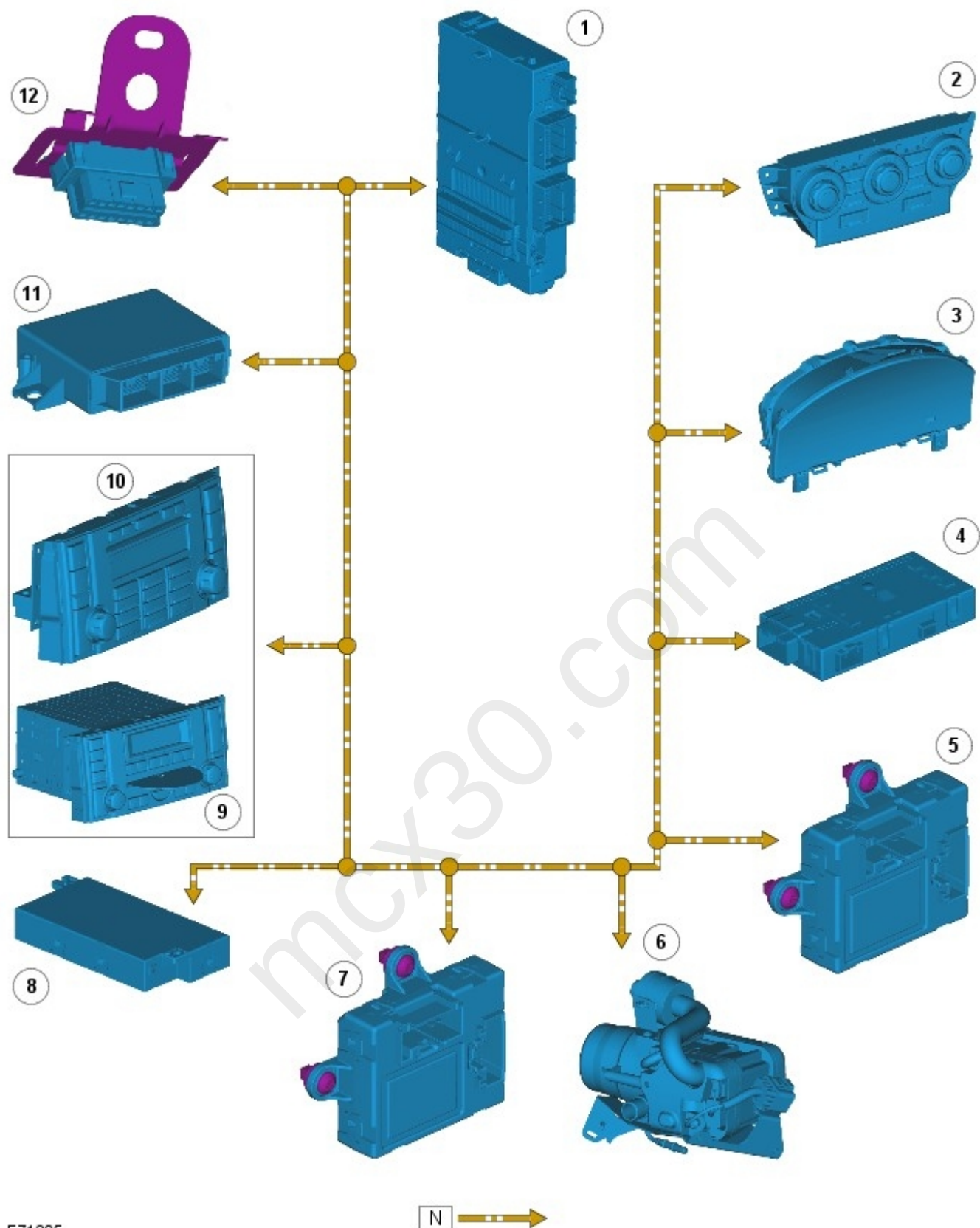
Item	Part Number	Description
1	-	Headlamp leveling control module
2	-	Generator control module
3	-	Selector lever module

4	-	Transmission Control Module (TCM)
5	-	Cabin humidity sensor
6	-	Air intake stepper motor
7	-	Windshield distribution (defrost) stepper motor
8	-	Right Hand (RH) temperature blend stepper motor
9	-	RH seat heat module
10	-	Automatic Temperature Control (ATC) module
11	-	Left Hand (LH) seat heat module
12	-	LH temperature blend stepper motor
13	-	Face/feet stepper distribution motor
14	-	RH headlamp control module
15	-	LH headlamp control module
16	-	Engine Control Module (ECM)

CONTROL DIAGRAM - MEDIUM SPEED CAN BUS

- NOTE: **N** = Medium speed CAN bus

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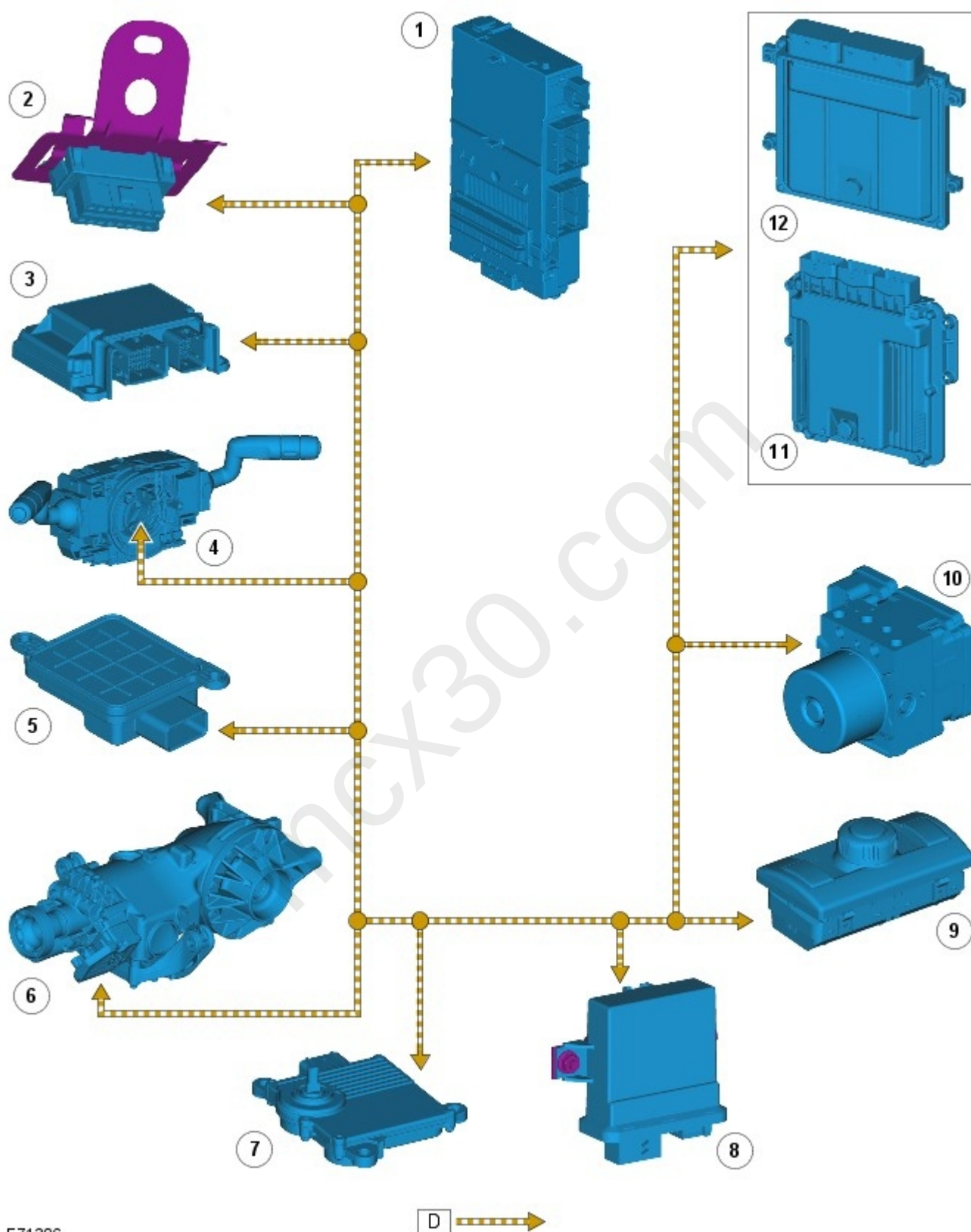
E71305

Item	Part Number	Description
1	-	CJB
2	-	ATC module
3	-	Instrument cluster (Intelligent Drivers Module)
4	-	Trailer module
5	-	Driver door module
6	-	Fuel fired booster heater
7	-	Passenger door module
8	-	Seat memory module
9	-	Integrated head unit/Integrated control module - Low line audio
10	-	Integrated control module - High line audio
11	-	Parking aid module

12	-	Diagnostic socket
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CONTROL DIAGRAM - HIGH SPEED CAN BUS

• NOTE: **D** = High speed CAN bus



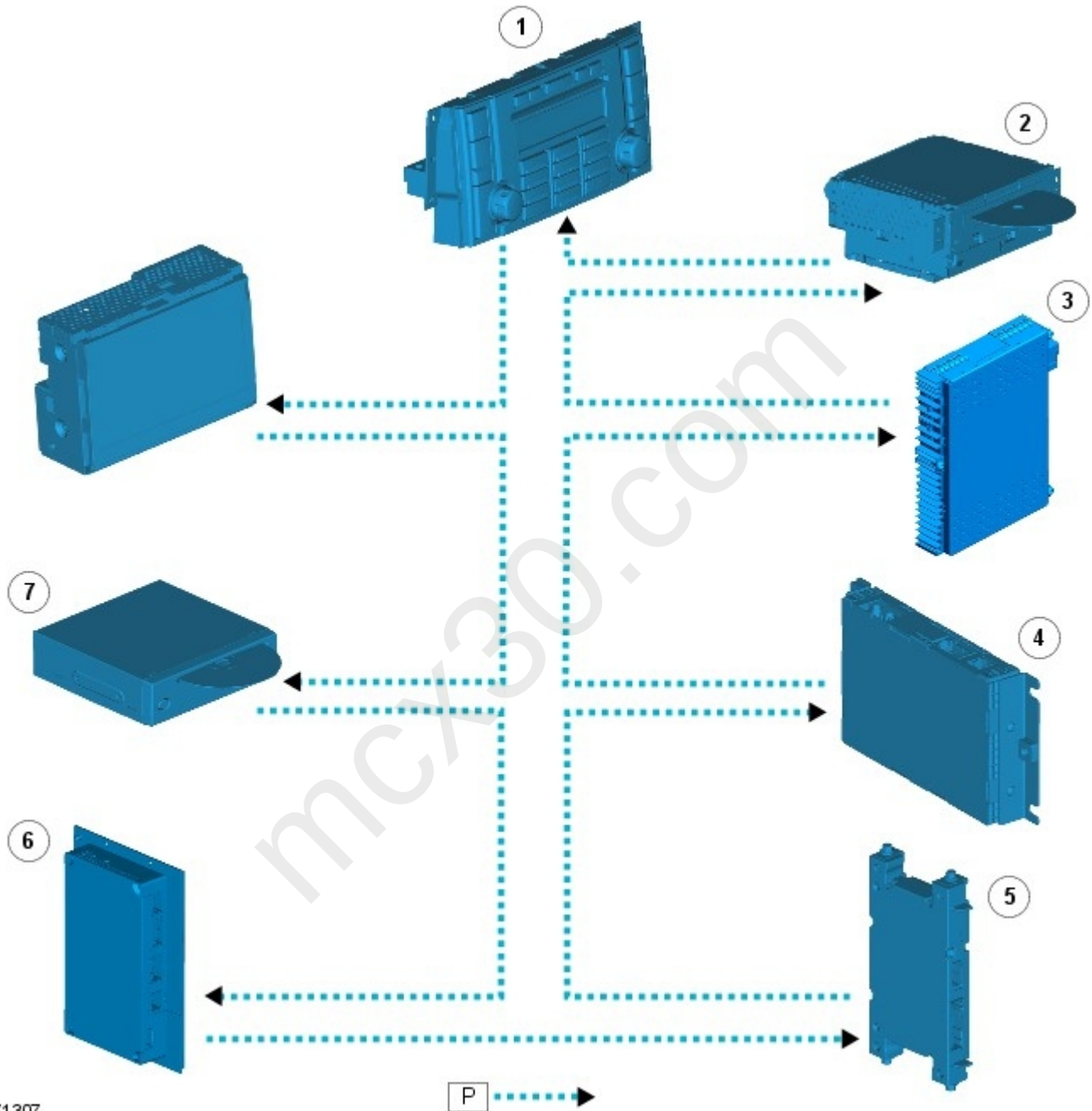
E71306

Item	Part Number	Description
1	-	CJB
2	-	Diagnostic socket
3	-	Restraints Control Module (RCM)
4	-	Steering wheel angle sensor
5	-	Occupant classification sensor - North American Specification (NAS) vehicles only

6	-	Electronic rear differential control module
7	-	TCM
8	-	Headlamp leveling control module
9	-	Terrain Response control module
10	-	Anti-lock Brake System (ABS) module
11	-	ECM - TD4
12	-	ECM - i6

CONTROL DIAGRAM - MOST

- NOTE: P = MOST



E71307

Item	Part Number	Description
1	-	Integrated control module
2	-	Integrated head unit
3	-	High Definition (HD) radio module (NAS only from 2009MY)
4	-	Digital Audio Broadcast (DAB) receiver / Satellite Digital Audio Radio Sytem (SDARS) (NAS only from 2009MY) receiver
5	-	Bluetooth telephone module
6	-	Amplifier
7	-	Satellite navigation computer
8	-	Touch Screen Display (TSD)

Module Communications Network - Communications Network

Diagnosis and Testing

Principles of Operation

For a detailed description of the Communications Network, refer to the relevant Description and Operation section in the workshop manual.

REFER to: [Communications Network](#) (418-00 Module Communications Network, Description and Operation).

Inspection and Verification



CAUTION: Diagnosis by substitution from a donor vehicle is **NOT** acceptable. Substitution of control modules does not guarantee confirmation of a fault, and may also cause additional faults in the vehicle being tested and/or the donor vehicle.

1. **1.** Verify the customer concern.
2. **2.** Visually inspect for obvious signs of mechanical or electrical damage and system integrity.

Visual Inspection

Electrical

- Fuses (refer to electrical guide)
- Wiring harness
- Correct engagement of electrical connectors
- Loose or corroded connections
- Routing of fibre optic harnesses
- Correct engagement of optical connectors
- Correct placement of optical connectors (ring order)
- Correct assembly of optical connectors (backout, etc)
- Damage to fibre (chafing, abrasion, kinking, cuts, etc)

3. **3.** If an obvious cause for an observed or reported concern is found, correct the cause (if possible) before proceeding to the next step
4. **4.** If the cause is not visually evident, check for Diagnostic Trouble Codes (DTCs) and refer to the DTC Index.

For a complete list of all diagnostic trouble codes that could be logged on this vehicle, please refer to section 100-00.

REFER to: [Diagnostic Trouble Code \(DTC\) Index - DTC: Body Control Module \(BCM\)](#) (100-00 General Information, Description and Operation).

Module Communications Network - Central Junction Box (CJB)

Removal and Installation

Removal

1. If renewing the CJB, use Land Rover approved diagnostic equipment to interrogate the module and upload the stored data, prior to removal of the CJB.

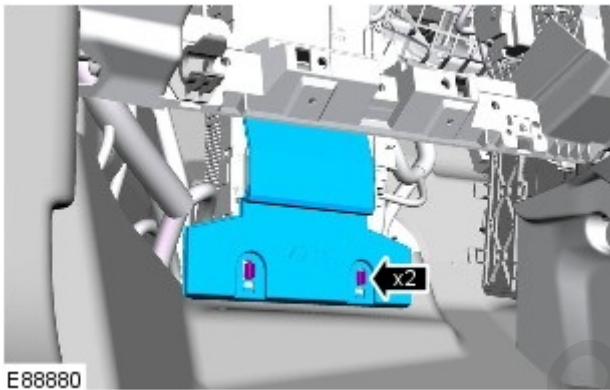
2. Disconnect the battery ground cable.

Refer to: [Specifications](#) (414-00 Battery and Charging System - General Information, Specifications).

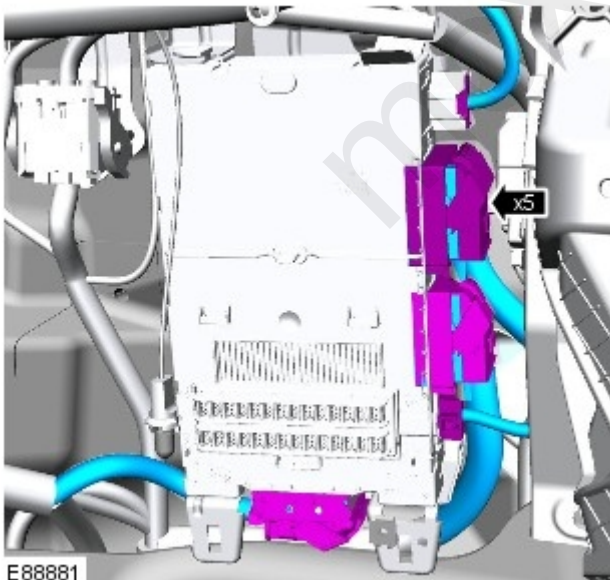
3. Remove the glove compartment.

Refer to: [Glove Compartment](#) (501-12 Instrument Panel and Console, Removal and Installation).

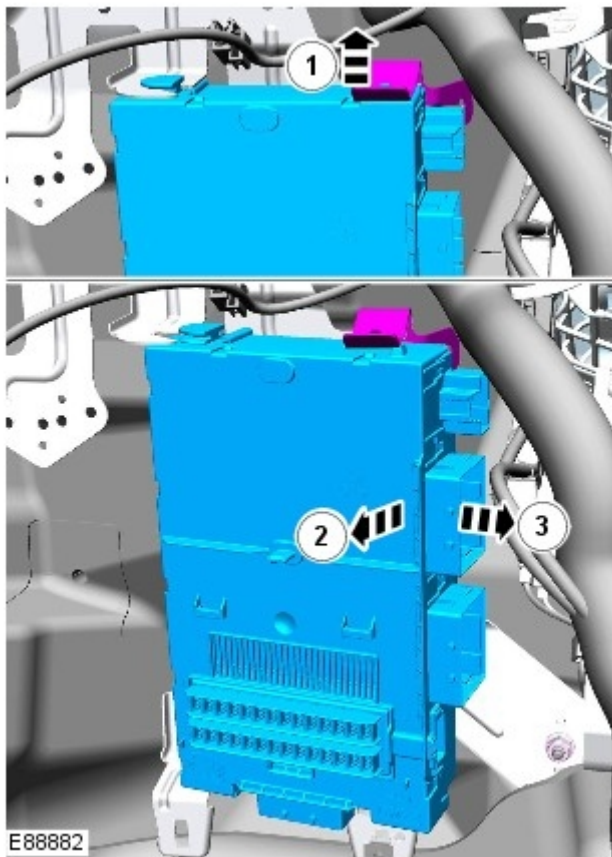
4.



5.



6.



Installation

1. **NOTE:** The Central Junction Box is pre-programmed by Land Rover and therefore no IDS connection is required. Original remote keys will function. Any additional remote keys will no longer function.

To install, reverse the removal procedure.

Module Communications Network - Battery Junction Box (BJB)TD4 2.2L Diesel

Removal and Installation

Removal

1. Remove the bumper armature.

Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).

2. Remove the air cleaner housing.

Refer to: [Air Cleaner](#) (303-12A Intake Air Distribution and Filtering - I6 3.2L Petrol, Removal and Installation).

3. Remove the secondary bulkhead center panel.

Refer to: [Secondary Bulkhead Center Panel - TD4 2.2L Diesel](#) (501-02 Front End Body Panels, Removal and Installation).

4. Remove the brake booster.

Refer to: [Brake Booster](#) (206-07 Power Brake Actuation, Removal and Installation).

5. Remove the ABS module.

Refer to: [Anti-Lock Brake System \(ABS\) Module](#) (206-09A Anti-Lock Control, Removal and Installation).

6. Remove the fuel fired booster heater.

Refer to: [Fuel Fired Booster Heater](#) (412-02B Auxiliary Climate Control, Removal and Installation).

7. Remove both headlamps.

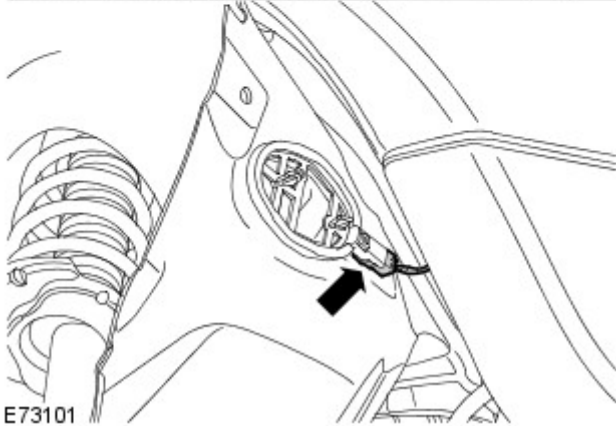
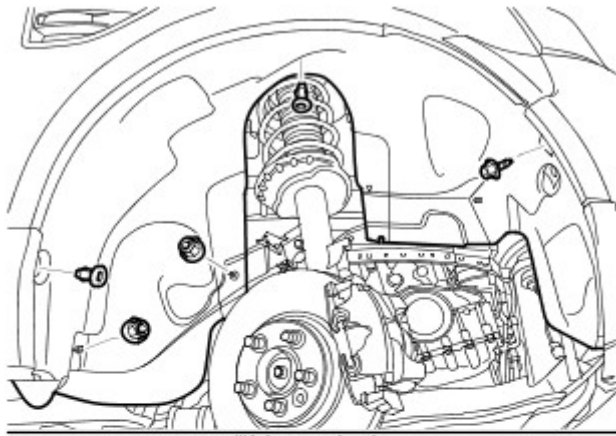
Refer to: [Headlamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).

8. Remove the engine upper support insulator.

Refer to: [Engine Upper Support Insulator](#) (303-01A Engine - I6 3.2L Petrol, Removal and Installation).

9. Remove the glove compartment lid.

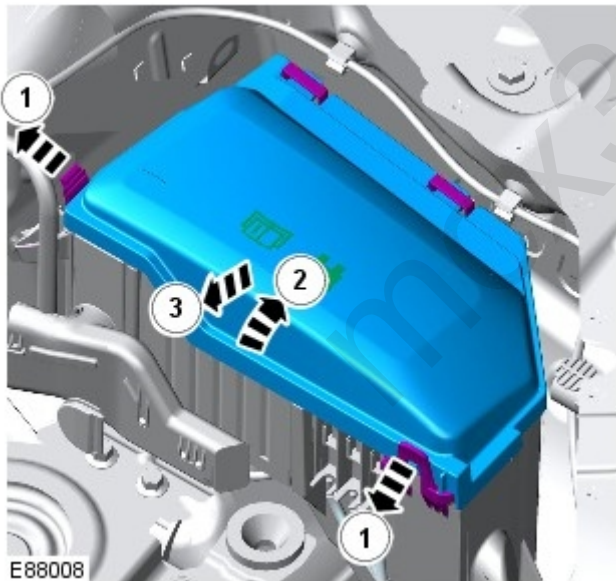
Refer to: [Glove Compartment](#) (501-12 Instrument Panel and Console, Removal and Installation).



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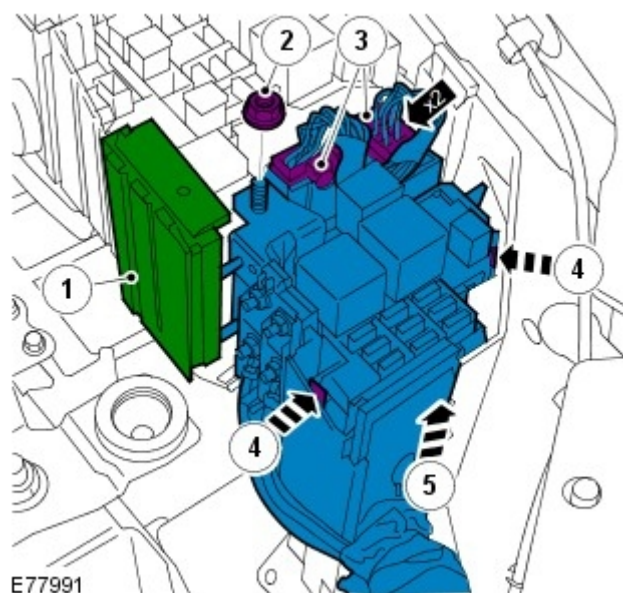
10. **10.** NOTE: RHD illustration shown, LHD is similar.

Remove the LH fender splash shield.



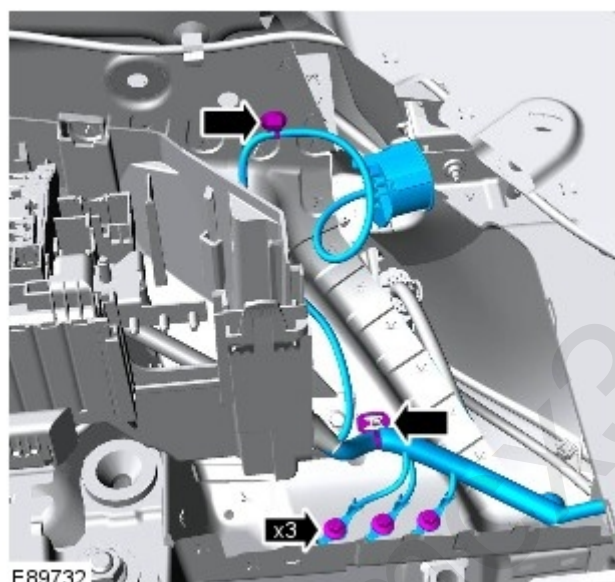
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11.



E77991

12.



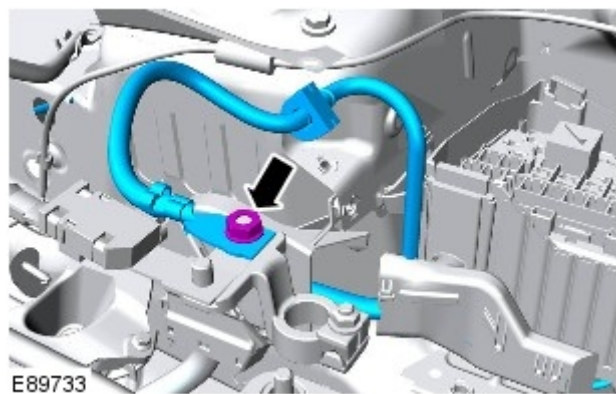
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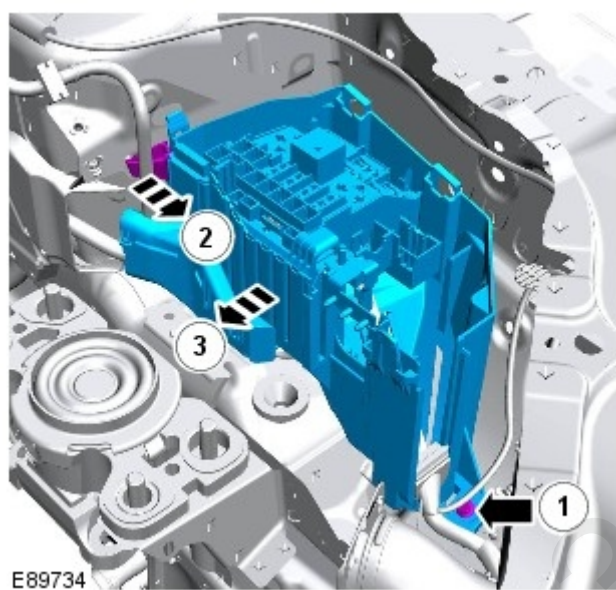


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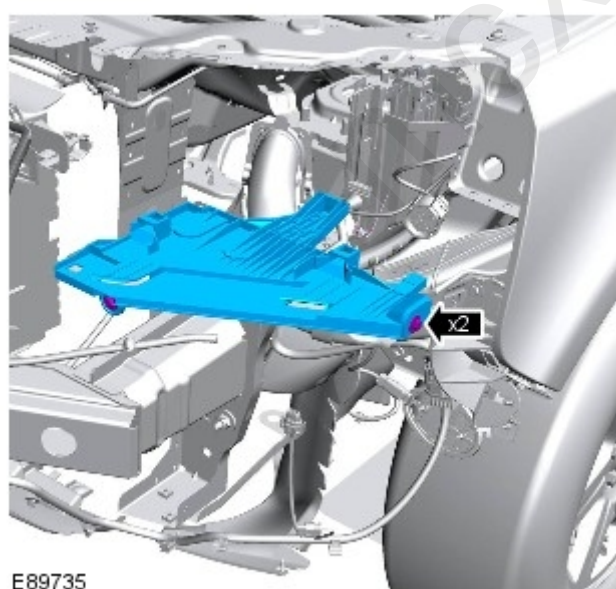
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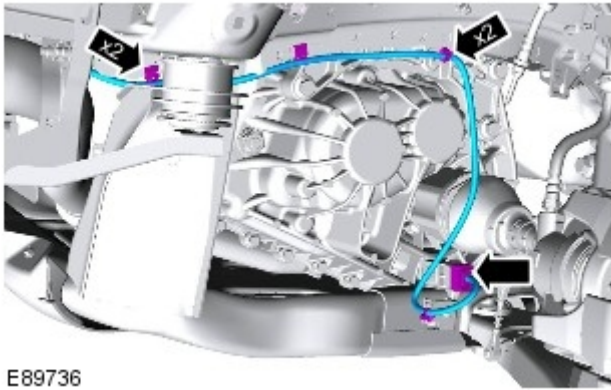
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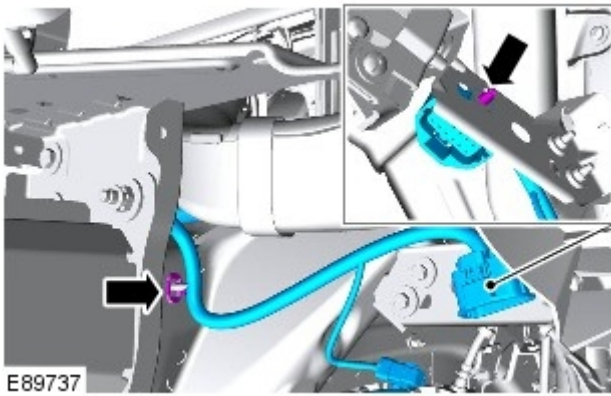
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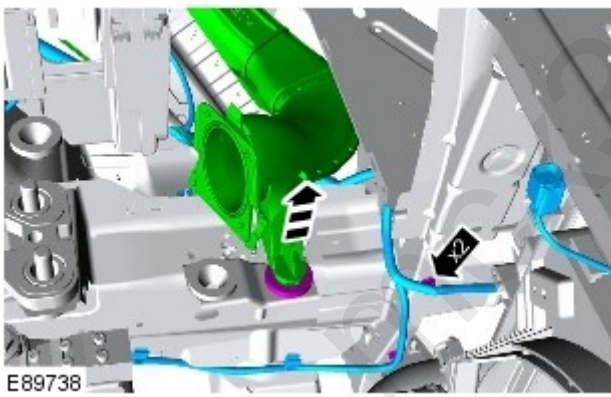
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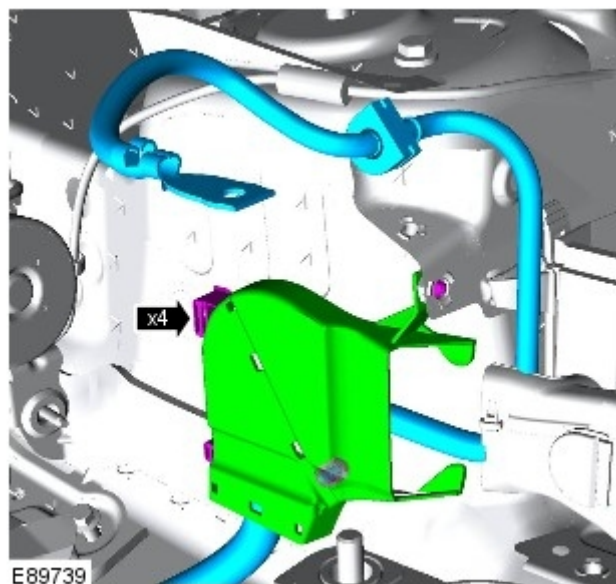
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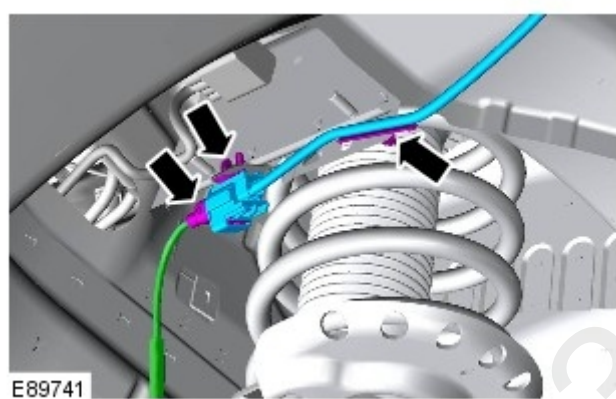
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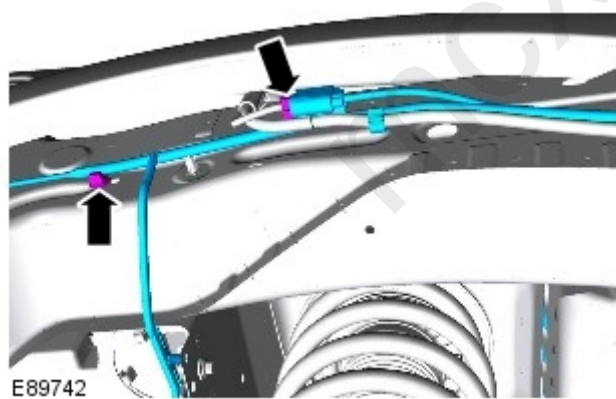
20. Release the harness and withdraw into engine bay area.



21.

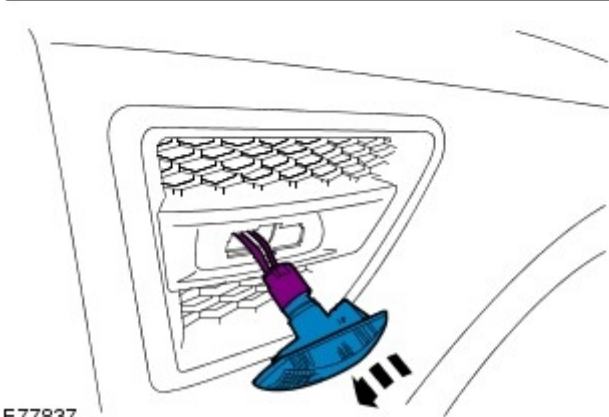
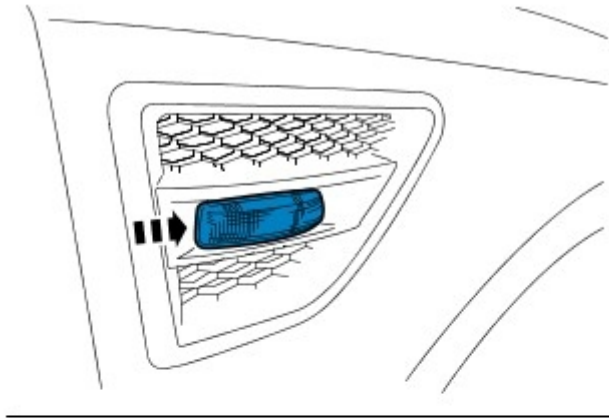


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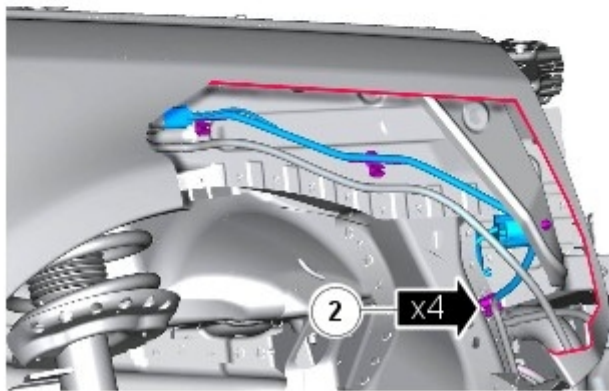
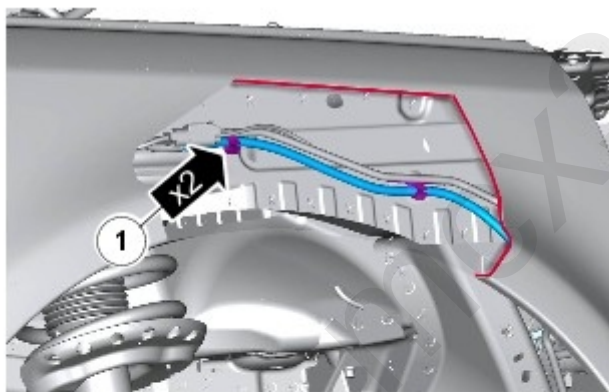
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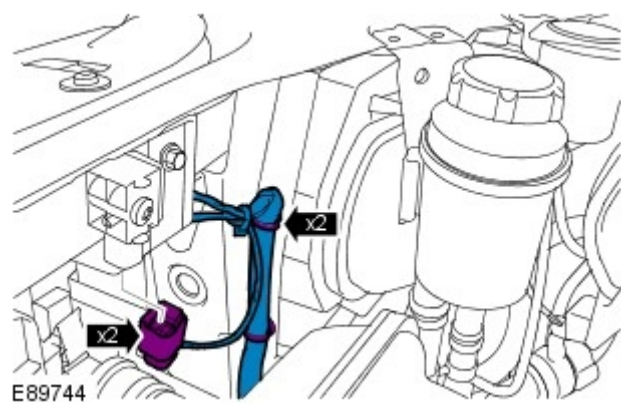
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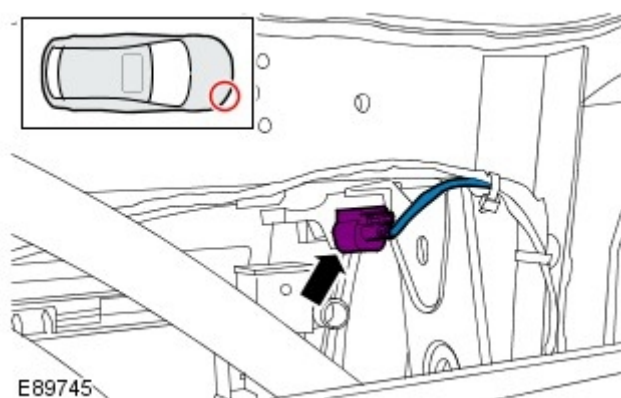


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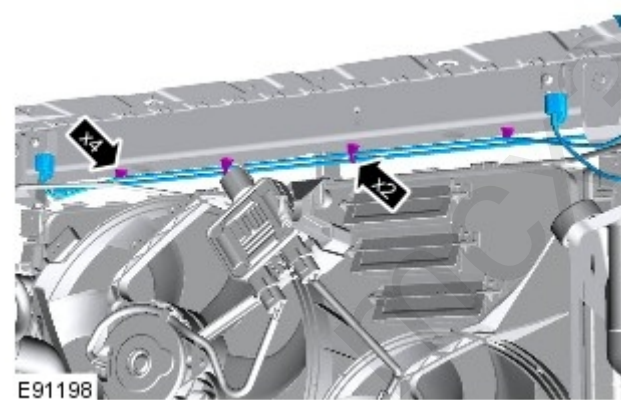
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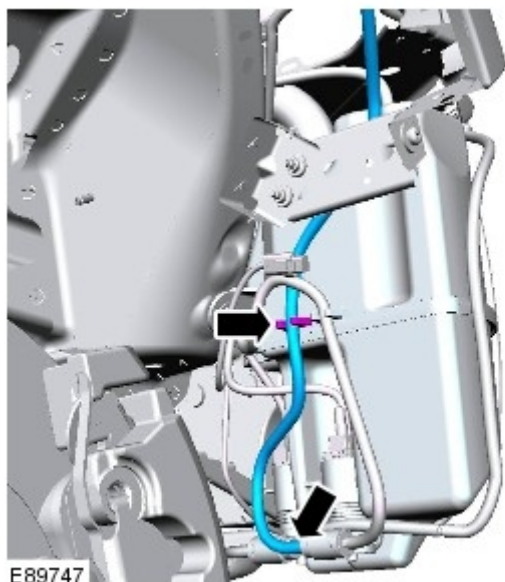
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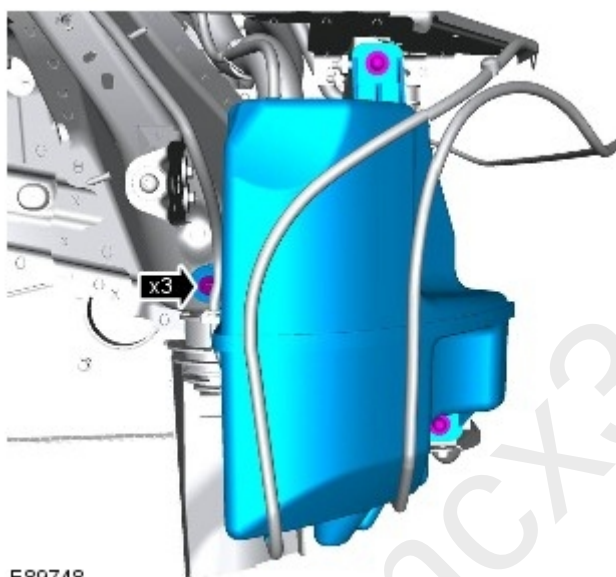


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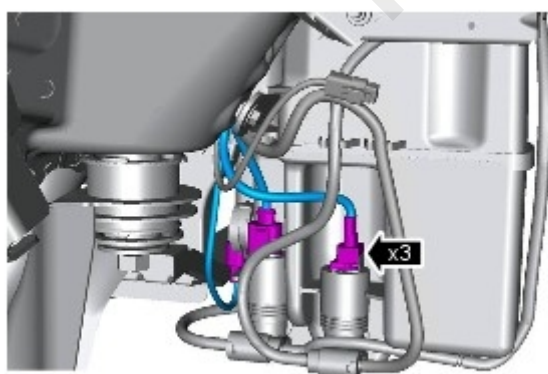
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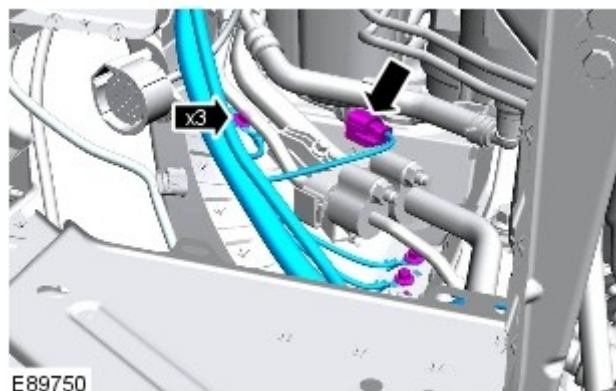


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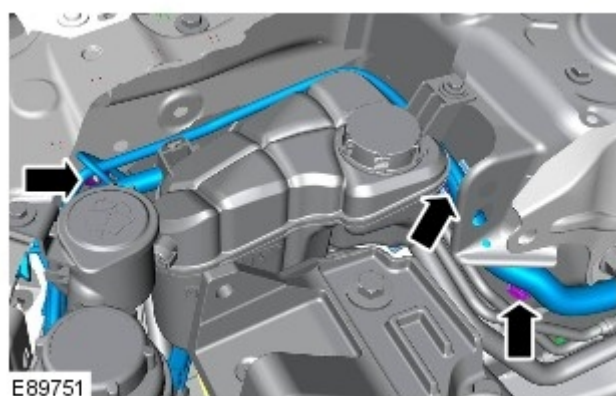
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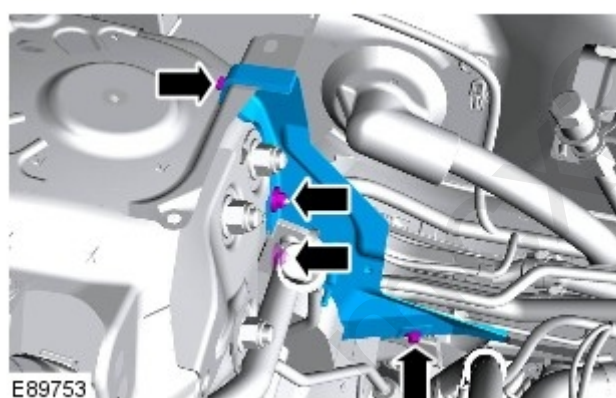
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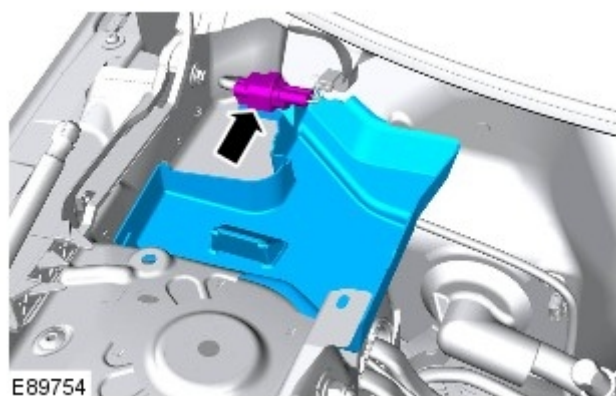
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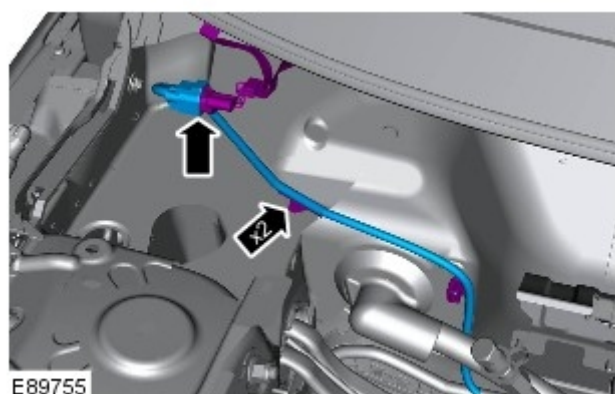
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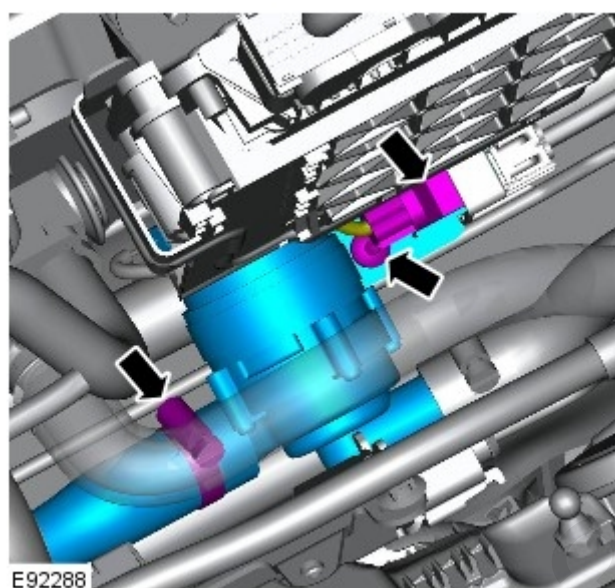
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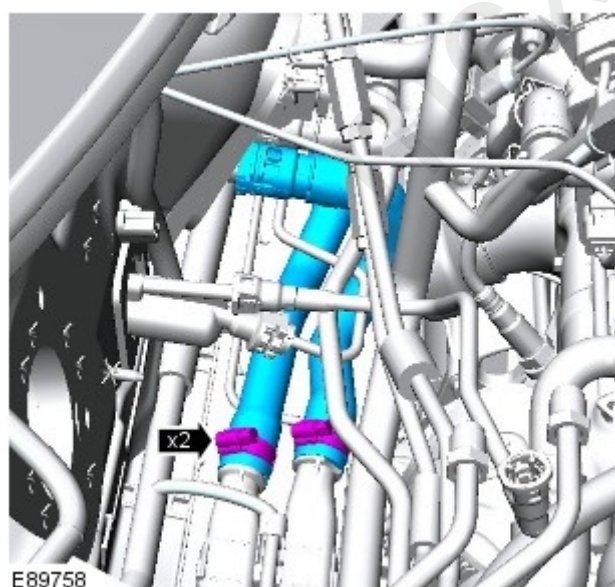
35. Unclip the windscreen heater electrical connector from the plenum side extension panel and remove the panel.



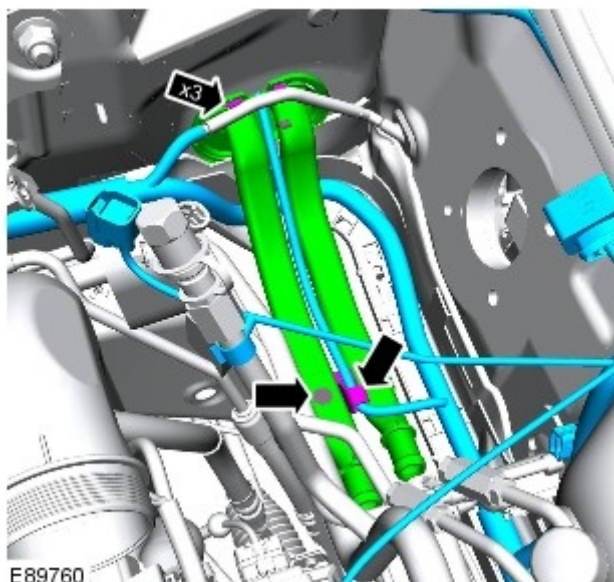
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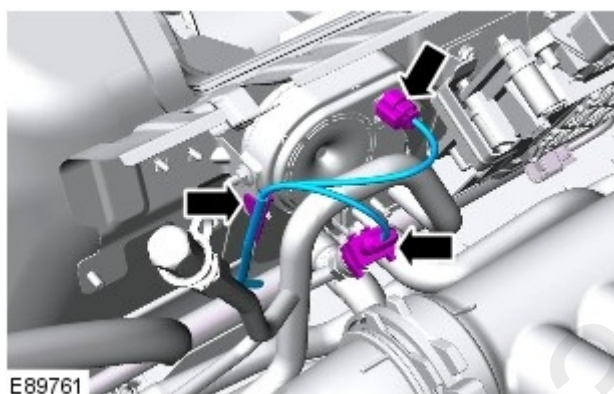
37. **37.** NOTE: LHD illustration shown, RHD is similar.



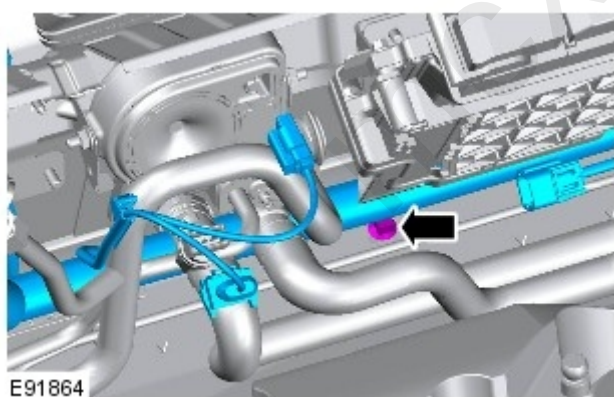
38. **38.** NOTE: LHD illustration shown, RHD is similar.



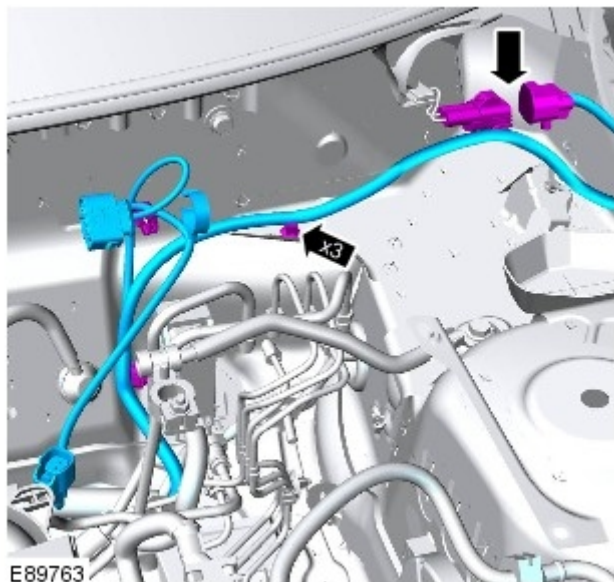
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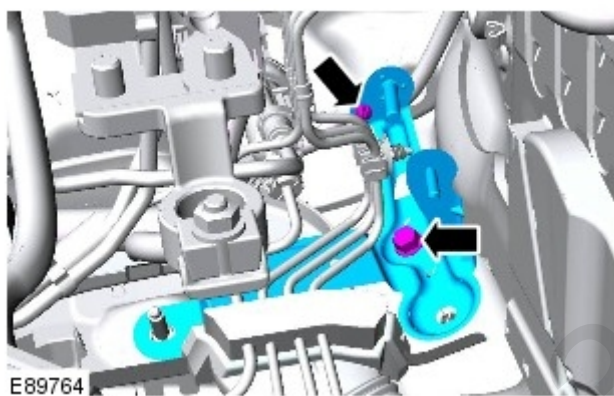
40. **40.** NOTE: LHD illustration shown, RHD is similar.



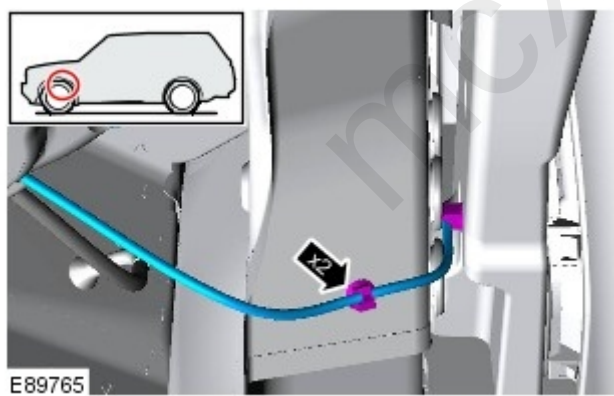
41. **41.** NOTE: LHD illustration shown, RHD is similar.
Release the engine compartment harness from clip securing it to the vehicle bulkhead.



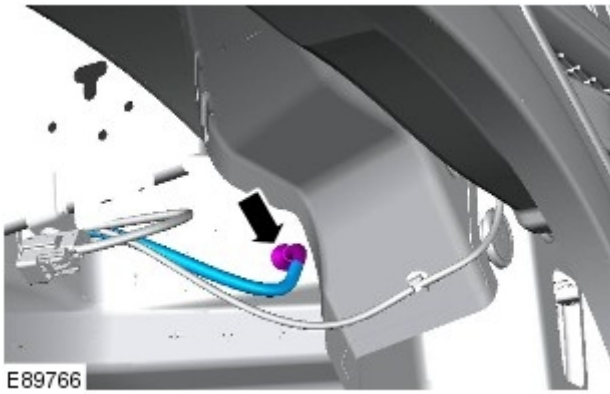
42. **42.** NOTE: RHD illustration shown, LHD is similar.



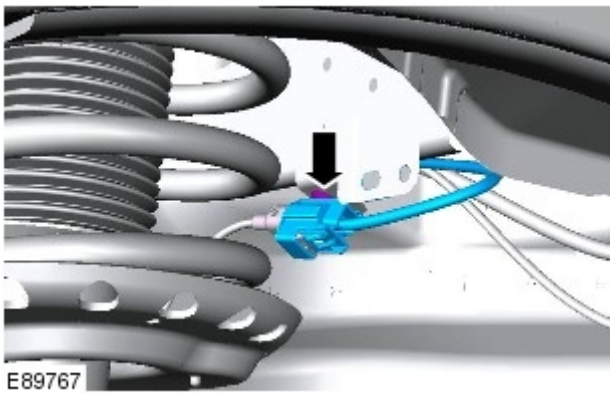
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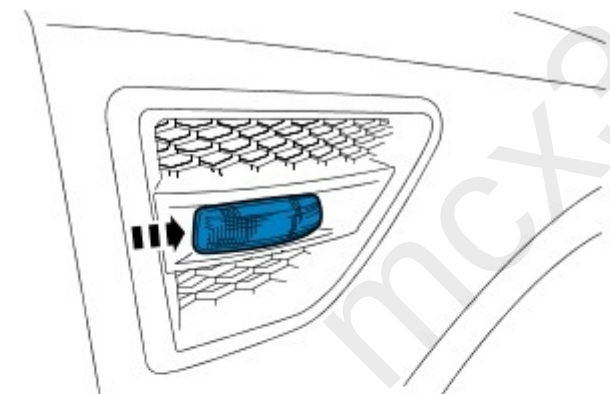
44. **44.** NOTE: LHD illustration shown, RHD is similar.



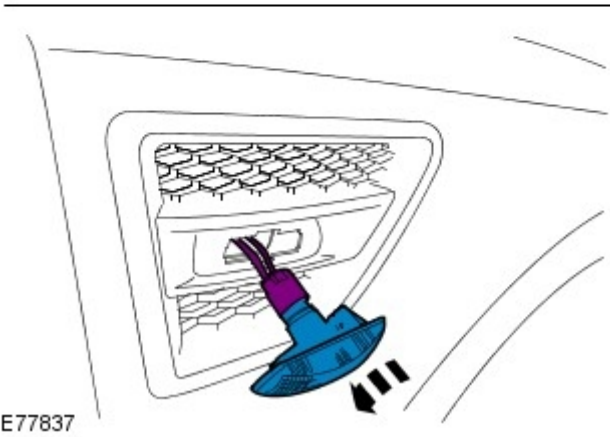
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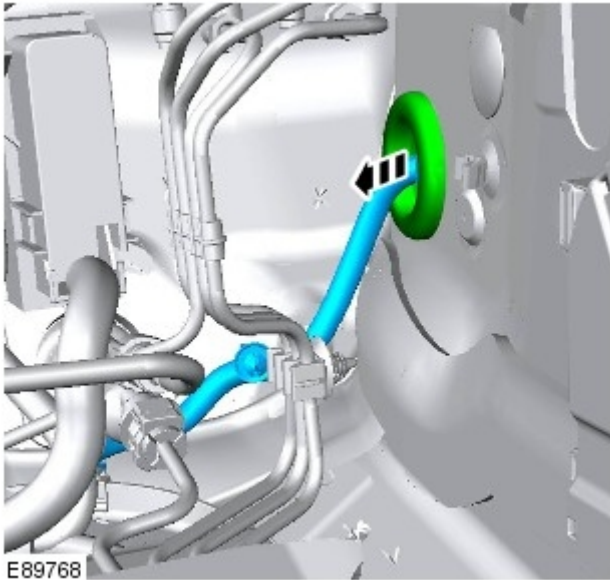


46. **46.** NOTE: LHD illustration shown, RHD is similar.



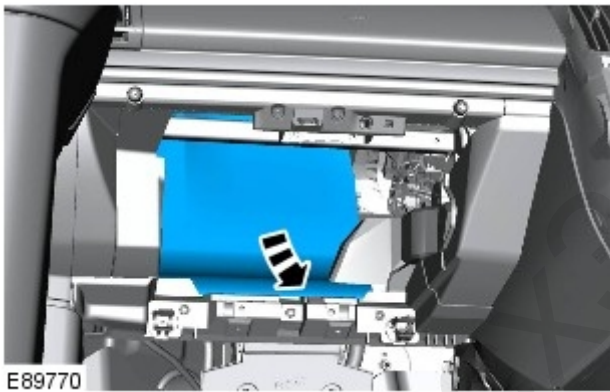
47. Release the LH side repeater from the vehicle body and disconnect the electrical connector.



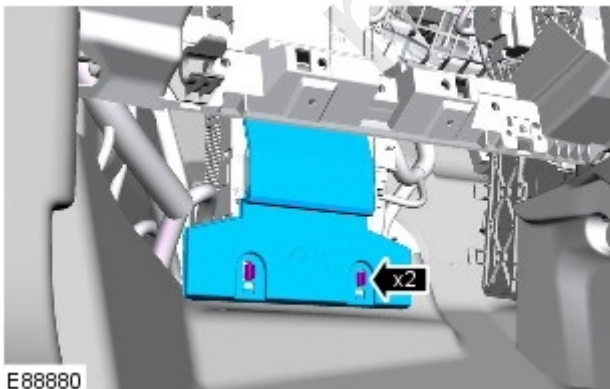


48. **48.** NOTE: LHD illustration shown, RHD is similar.

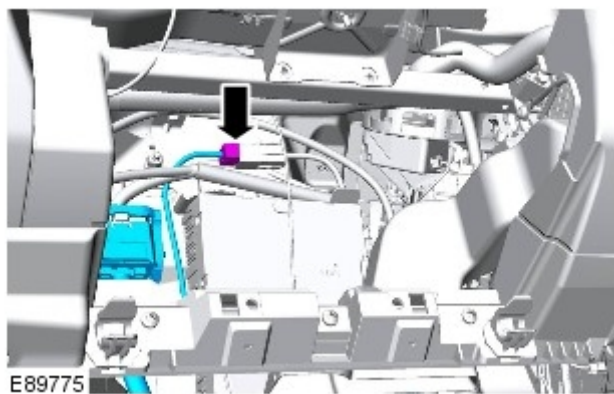
49. Unclip the harness tray from the vehicle bulkhead and route the RHS of the harness around the brake pipes into the LHS of the engine bay.



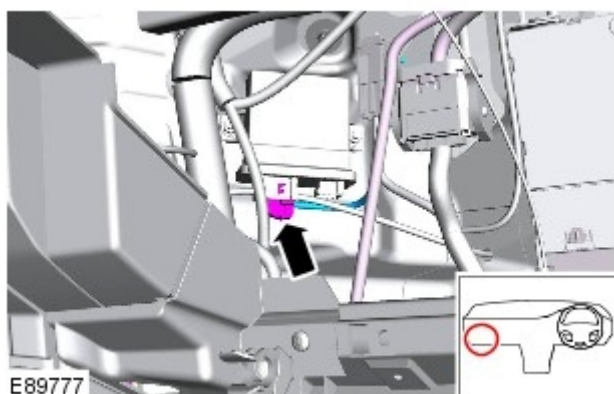
50. **50.** NOTE: RHD illustration shown, LHD is similar.



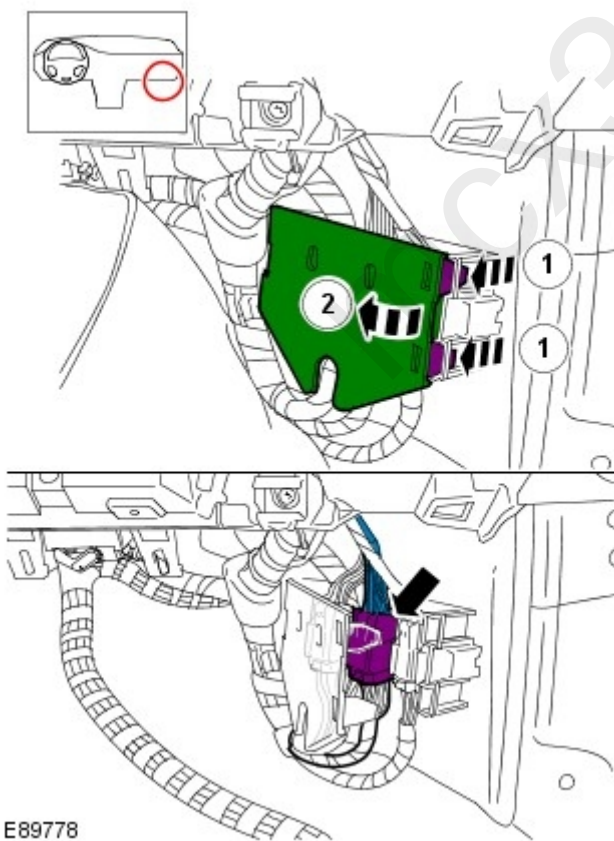
51. **51.** NOTE: RHD illustration shown, LHD is similar.



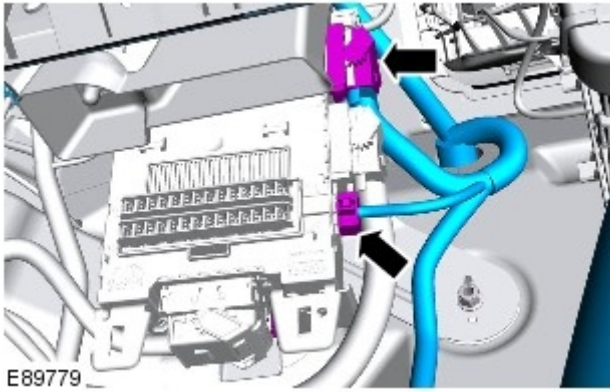
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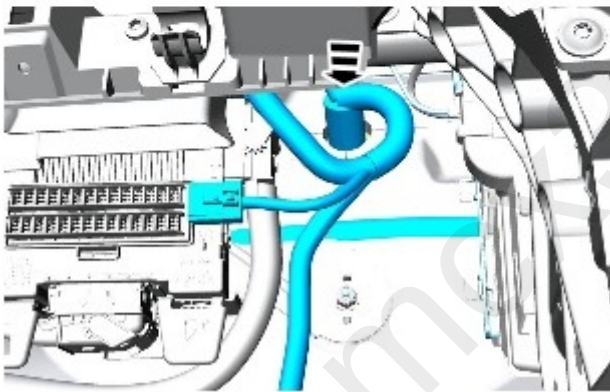
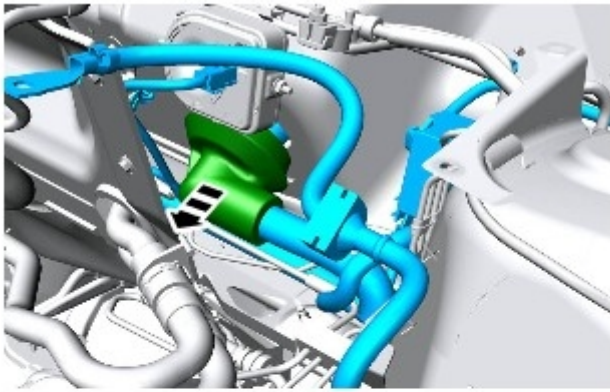
53. **53.** NOTE: LHD illustration shown, RHD is similar.



54. **54.** NOTE: LHD illustration shown, RHD is similar.



55. **55.** NOTE: RHD illustration shown, LHD is similar.



56. **56.** NOTE: RHD illustration shown, LHD is similar.

Installation

1. Place harness to vehicle plenum, feed connectors into inside of vehicle and install grommet. Use assistance inside vehicle to pull connectors through.
2. Secure harness tray clips and secure rubber grommet to vehicle body.

3. Install and secure fusebox to body.

Torque: 10 Nm

4. Install the engine mounting plate.

Torque:
M8 24 Nm
M12 80 Nm

5. Secure the engine harness to the fusebox.

6. Install and secure the battery lead to the fusebox and install the small battery lead cover.

Torque: 10 Nm

7. Connect the two electrical connectors to the BJB.

8. Secure the 3 earth points and secure the harness clips to the vehicle body.

Torque: 10 Nm

9. Secure the battery lead to the battery terminal clamp.

Torque: 25 Nm

10. Install the fuse box cover.

11. Install the harness cover to the suspension turret.

12. Feed harness under the air cleaner duct and secure the duct to the grommet.

13. Secure headlamp and bumper harness clips.

14. Connect the height sensor electrical connector and secure the harness with the clips.

15. Install headlamp mounting plate.

Torque: 10 Nm

16. Connect the side repeater electrical connector.

17. Connect the heated washer jet electrical connection and secure the harness to the vehicle body.

18. Connect the ABS sensor and secure the harness to the vehicle body.

19. Secure the washer pipe to the harness and secure the harness to the body.

20. Connect the crash sensor electrical connectors.

21. Connect the the bonnet lock electrical connector

22. Secure the harness to the body and then secure the bonnet release cable to the harness.

23. Secure the washer pipe to the washer bottle.

24. Install the washer bottle and connect the electrical connections.

Torque: 10 Nm

25. Secure the 3 ground cables to the vehicle body.

Torque: 10 Nm

26. Secure the harness to the vehicle body.

27. Connect the the bonnet lock electrical connector

28. Install the RH secondary bulkhead mounting bracket.

Torque: 10 Nm

29. Install the inner plenum plate and secure the electrical connector to the plate.

30. Connect the heated screen RH electrical connector.

31. Install the auxiliary coolant pump and connect the feed hose.

Torque: 10 Nm

32. Install the FFB heater coolant feed and return pipes.

33. Connect the FFB heater coolant feed and return hoses to the pipes.

34. Connect the A/C pressure switch and the BBUS electrical connectors. Also secure the harness to the vehicle body.

35. Secure the engine compartment harness to the vehicle bulkhead.

36. Secure the harness tray to the LHS of the vehicle bulkhead.

37. Connect the LH heated screen electrical connector and secure the harness to the vehicle body.

38. Feed the harness into the LH wheel arch and secure the grommet.

39. Install the ABS modulator bracket.

Torque: 25 Nm

40. Install the LH side repeater lamp and secure the clips to the vehicle body.

41. Connect the rear washer pipe.

42. Connect the ABS sensor electrical connector and secure the harness to the vehicle body.

43. Connect the two electrical connectors to the CJB.

44. Connect the main engine compartment harness to the instrument panel harness and close the cover.

45. Connect the main engine compartment harness to the headlamp levelling ECU.

47. Install the fuse cover and refit the sound deadening sheet.

48. Install the LH fender splash shield.

Torque: 6 Nm

49. Install the glove compartment lid.

Refer to: [Glove Compartment](#) (501-12 Instrument Panel and Console, Removal and Installation).

50. Install the engine upper support insulator.

Refer to: [Engine Upper Support Insulator](#) (303-01A Engine - I6 3.2L Petrol, Removal and Installation).

51. Install both headlamps.

Refer to: [Headlamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).

52. Install the fuel fired booster heater.

Refer to: [Fuel Fired Booster Heater](#) (412-02B Auxiliary Climate Control, Removal and Installation).

53. Install the ABS module.

Refer to: [Anti-Lock Brake System \(ABS\) Module](#) (206-09A Anti-Lock Control, Removal and Installation).

54. Install the brake booster.

Refer to: [Brake Booster](#) (206-07 Power Brake Actuation, Removal and Installation).

55. Install the secondary bulkhead center panel.

Refer to: [Secondary Bulkhead Center Panel - TD4 2.2L Diesel](#) (501-02 Front End Body Panels, Removal and Installation).

56. Install the air cleaner housing.

Refer to: [Air Cleaner](#) (303-12A Intake Air Distribution and Filtering - I6 3.2L Petrol, Removal and Installation).

57. Install the bumper armature.

Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).

Module Communications Network - Battery Junction Box (BJB)I6 3.2L

Petrol

Removal and Installation

Removal

1. Remove the bumper armature.

Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).

2. Remove the air cleaner housing.

Refer to: [Air Cleaner](#) (303-12A Intake Air Distribution and Filtering - I6 3.2L Petrol, Removal and Installation).

3. Remove the secondary bulkhead center panel.

Refer to: [Secondary Bulkhead Center Panel - I6 3.2L Petrol](#) (501-02 Front End Body Panels, Removal and Installation).

4. Remove the brake booster.

Refer to: [Brake Booster](#) (206-07 Power Brake Actuation, Removal and Installation).

5. Remove the ABS module.

Refer to: [Anti-Lock Brake System \(ABS\) Module](#) (206-09A Anti-Lock Control, Removal and Installation).

6. Remove both headlamps.

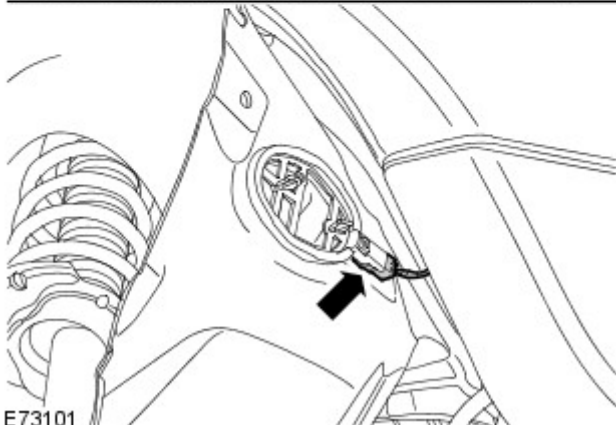
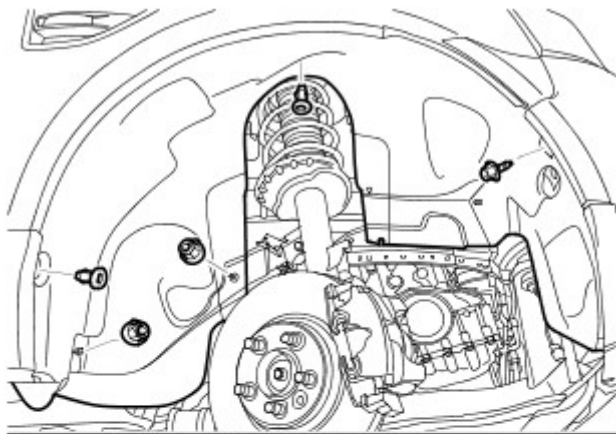
Refer to: [Headlamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).

7. Remove the engine upper support insulator.

Refer to: [Engine Upper Support Insulator](#) (303-01A Engine - I6 3.2L Petrol, Removal and Installation).

8. Remove the glove compartment lid.

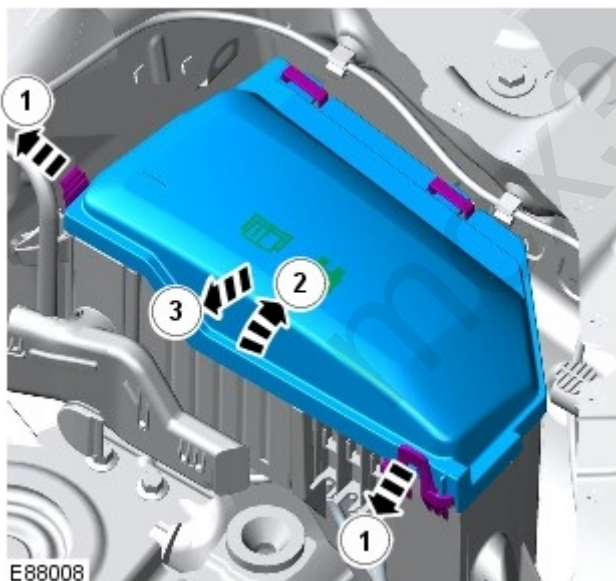
Refer to: [Glove Compartment](#) (501-12 Instrument Panel and Console, Removal and Installation).



E73101

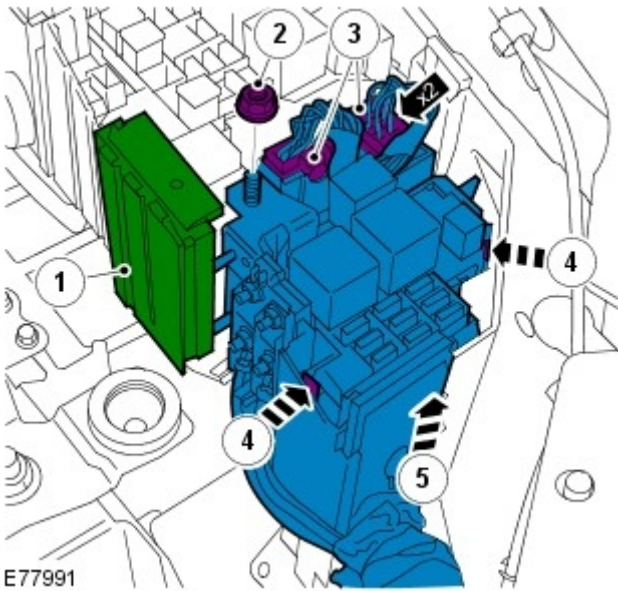
9. **9.** NOTE: RHD illustration shown, LHD is similar.

Remove both front fender splash shields.

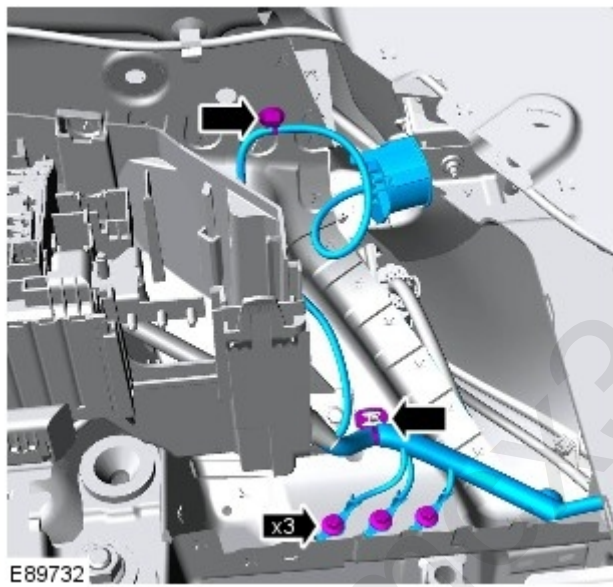


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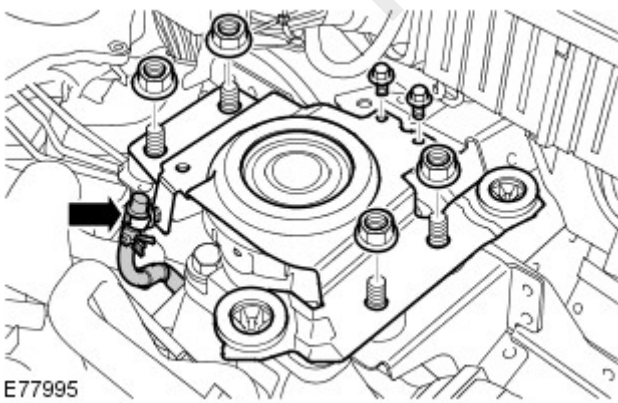
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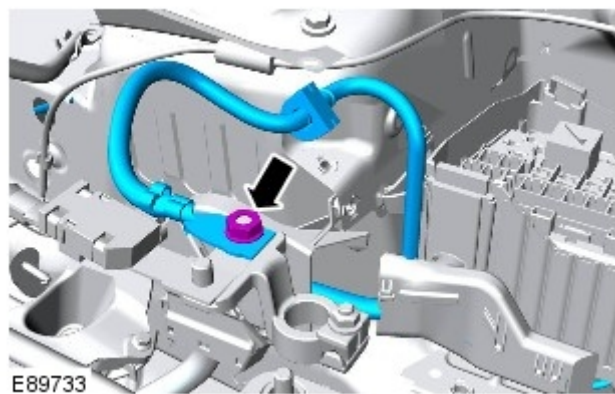
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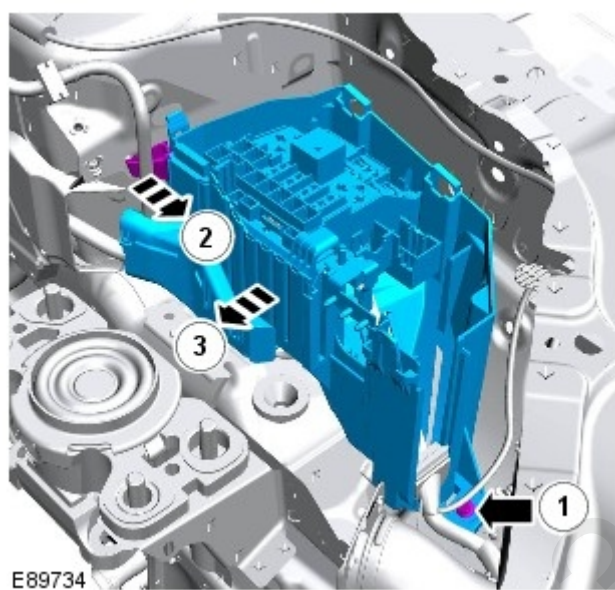
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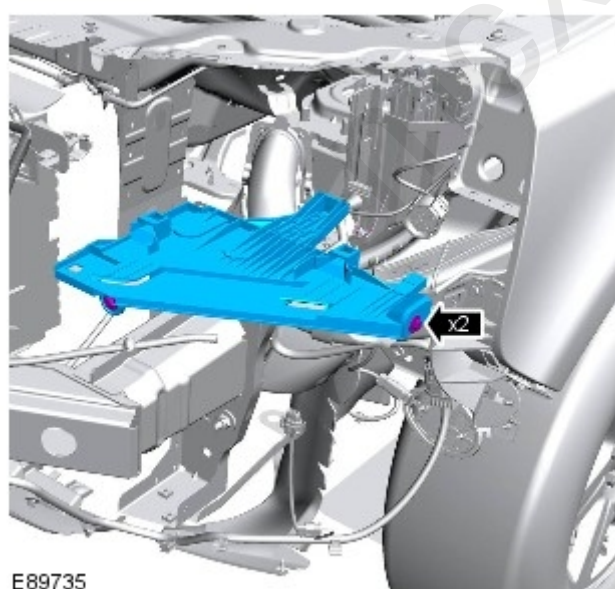
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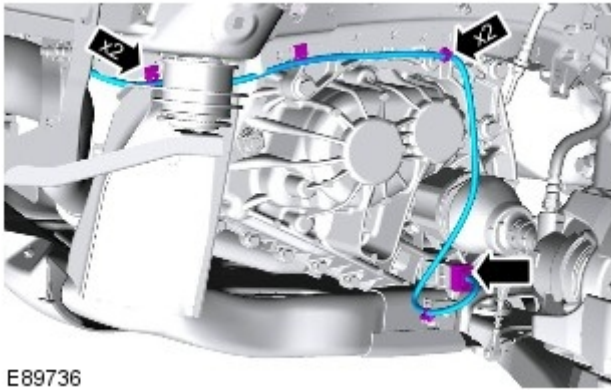
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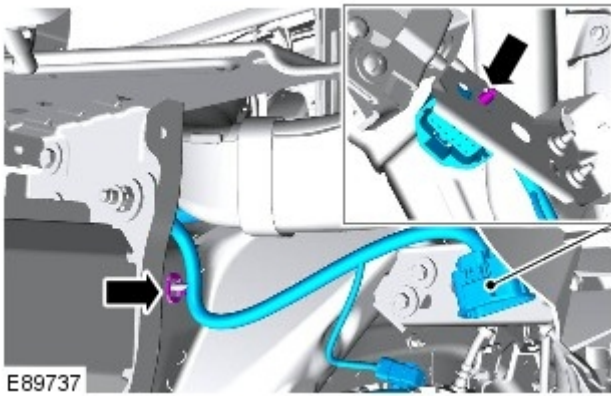
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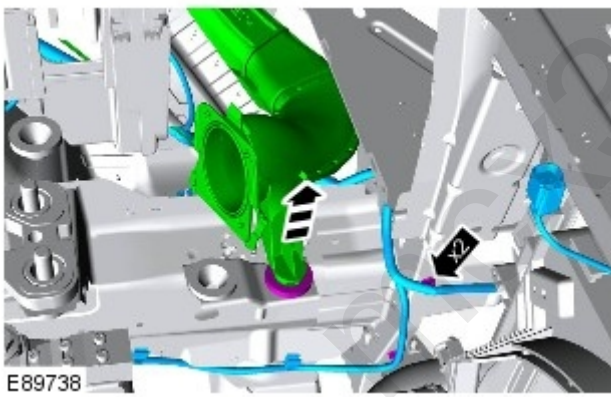
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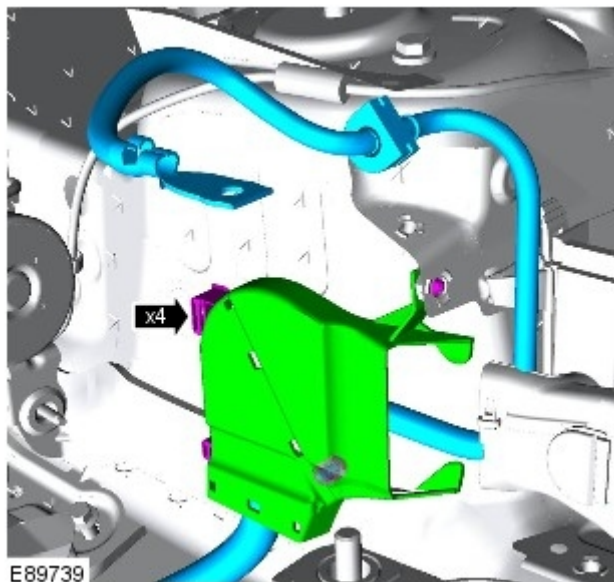
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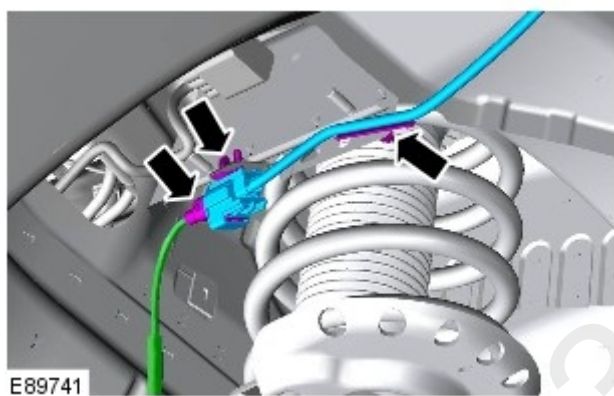
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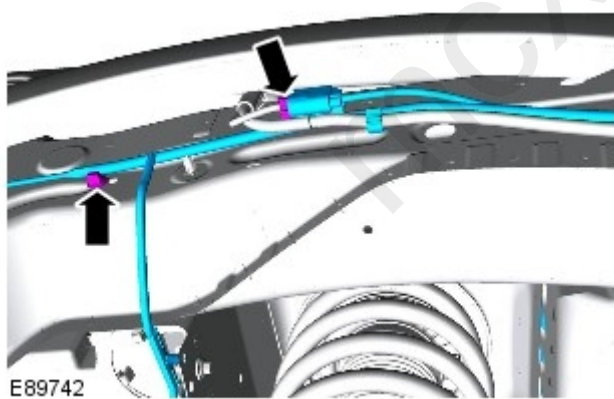
19. Release the harness and withdraw into engine bay area.



20. Release the harness cover and withdraw harness into engine bay area.

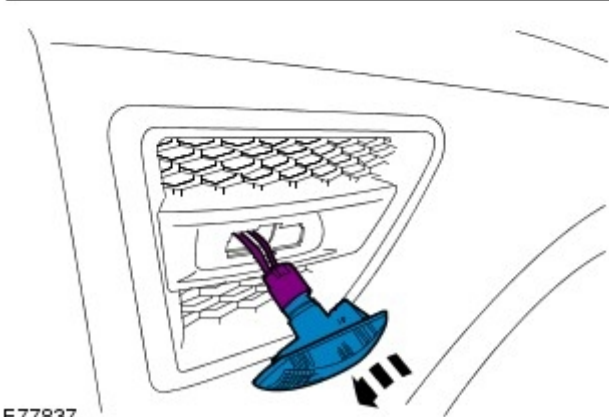
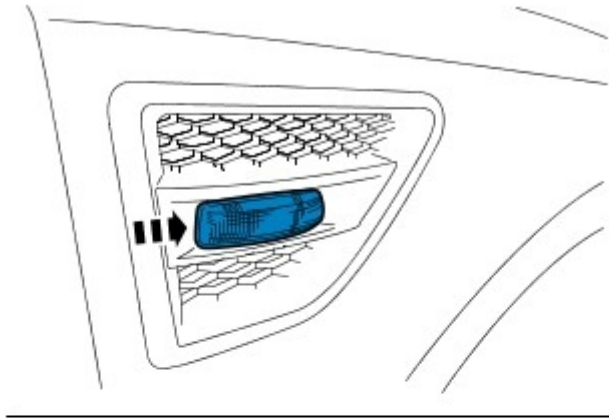


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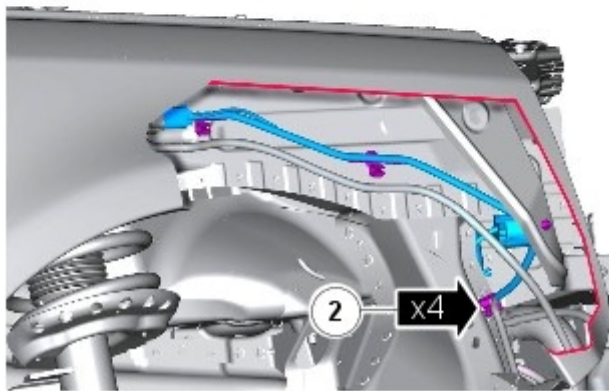
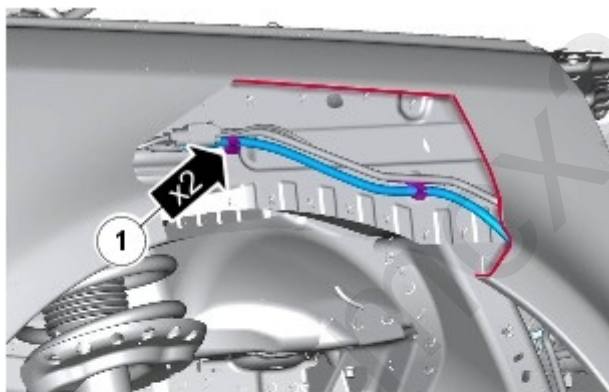
22.

23.

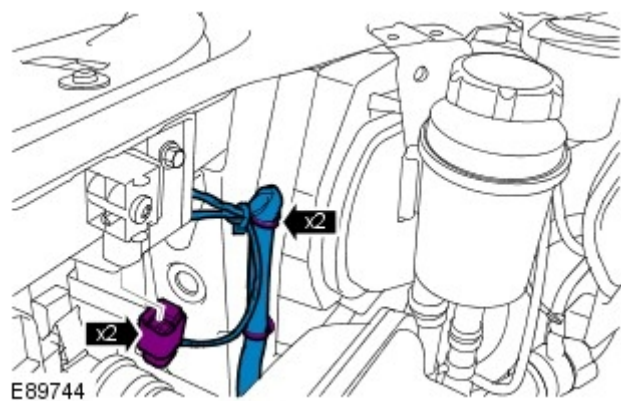


E77837

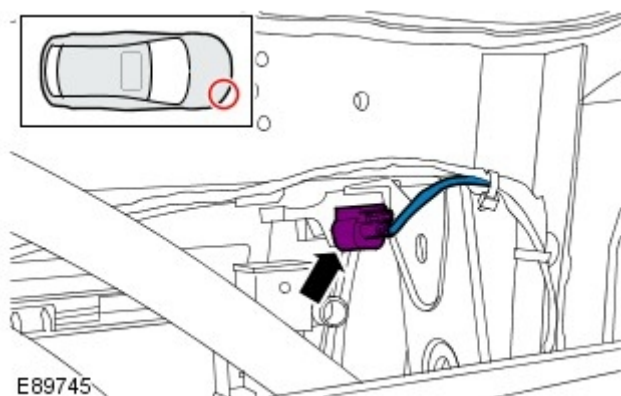
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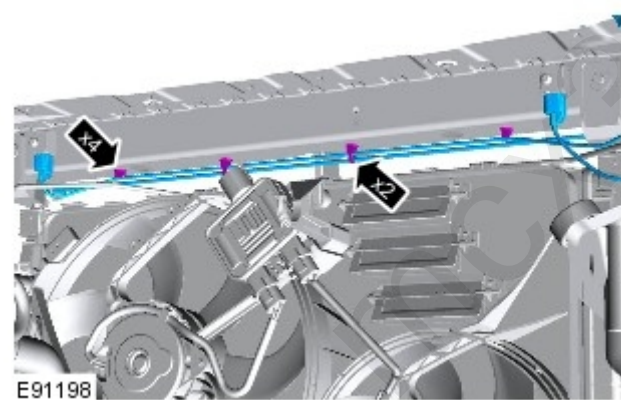
E89743



25. Repeat for both sides.

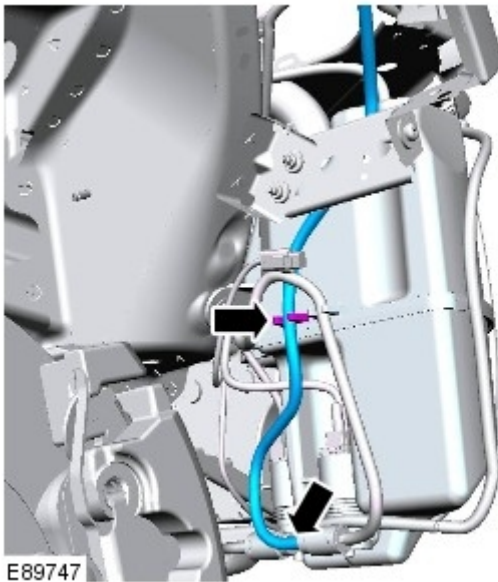


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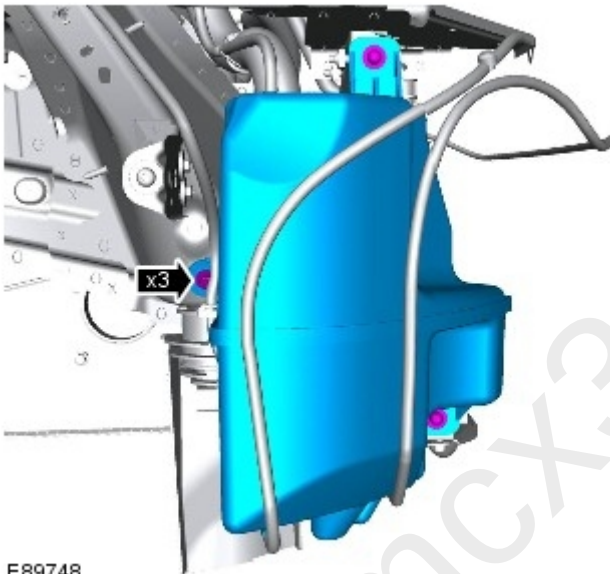
27.

28.



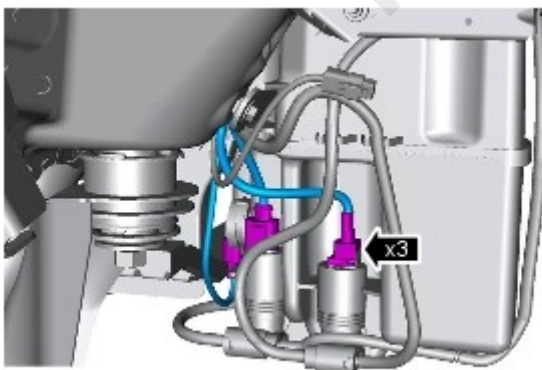
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29.

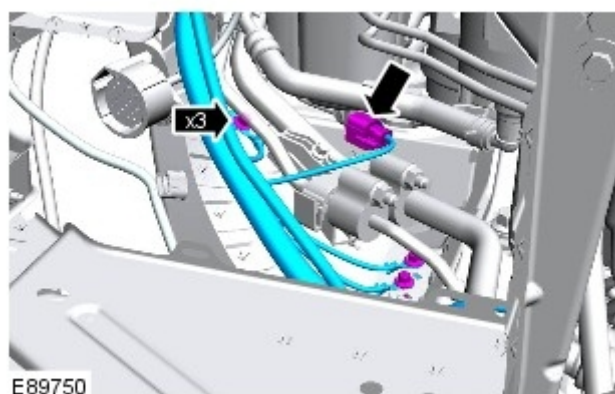


E89748

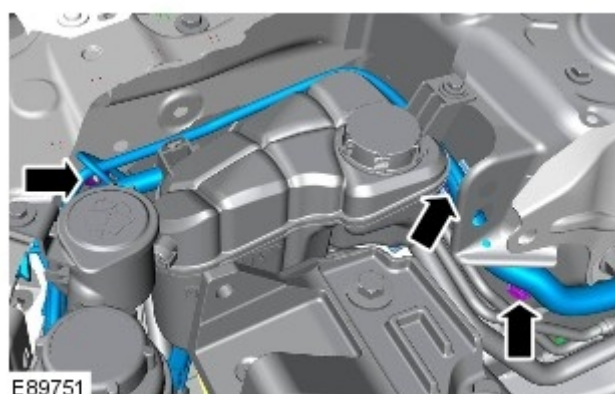
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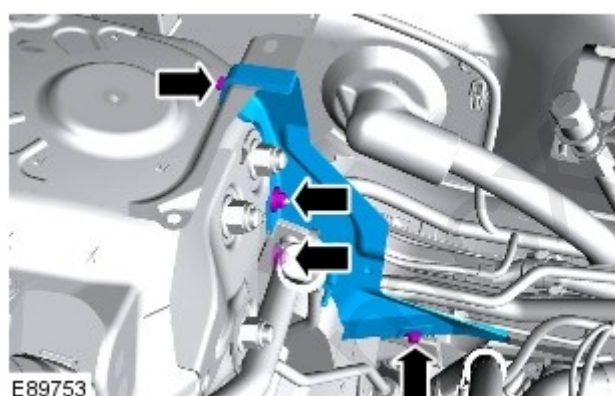
E89749



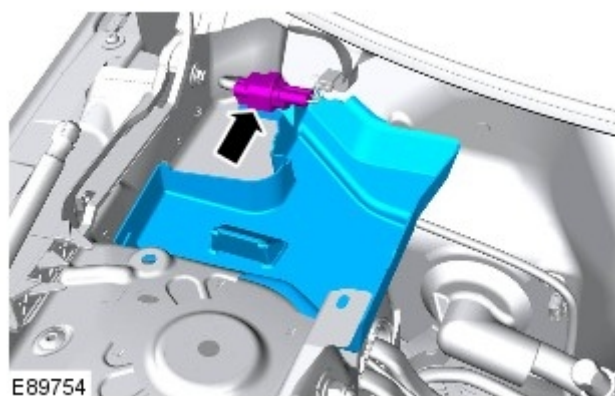
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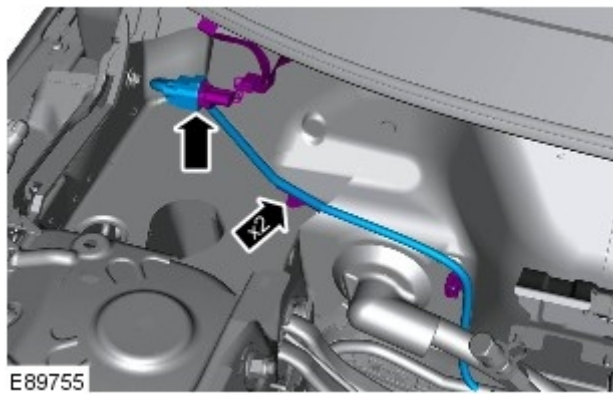
32.



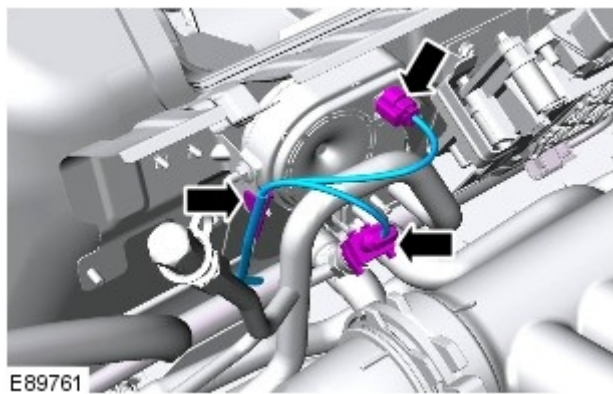
33.



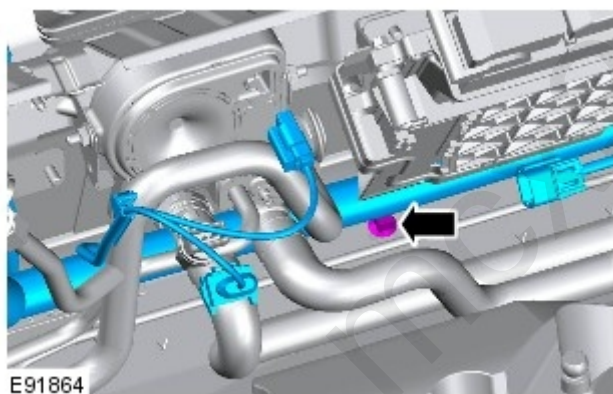
34. Unclip the windscreen heater electrical connector from the plenum side extension panel and remove the panel.



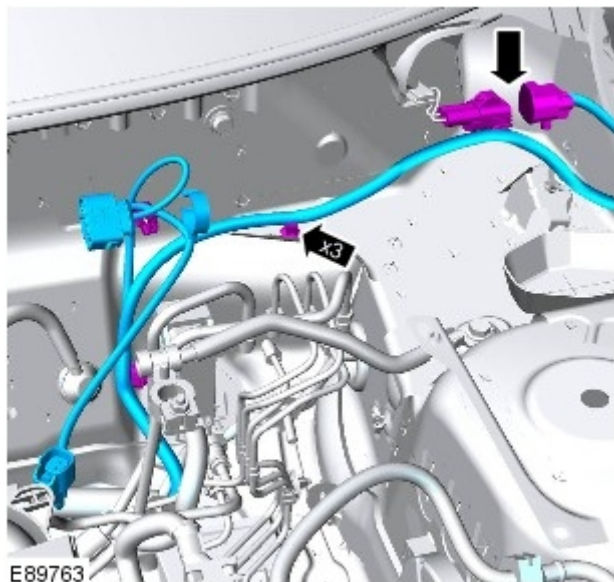
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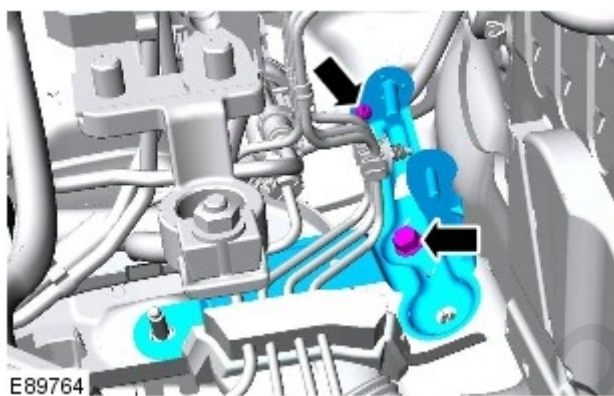
36. **36.** NOTE: LHD illustration shown, RHD is similar.



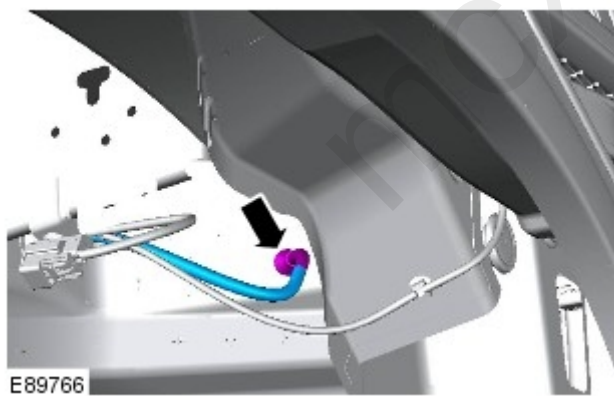
37. Release the engine compartment harness from clip securing it to the vehicle bulkhead.



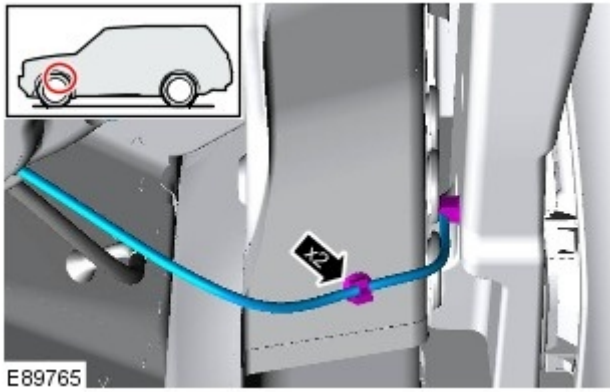
38. **38.** NOTE: RHD illustration shown, LHD is similar.



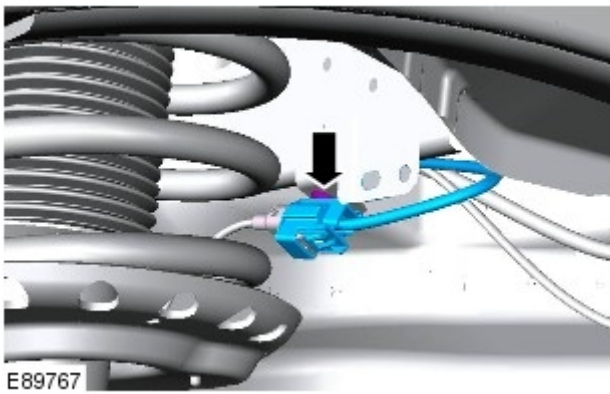
39.



40.

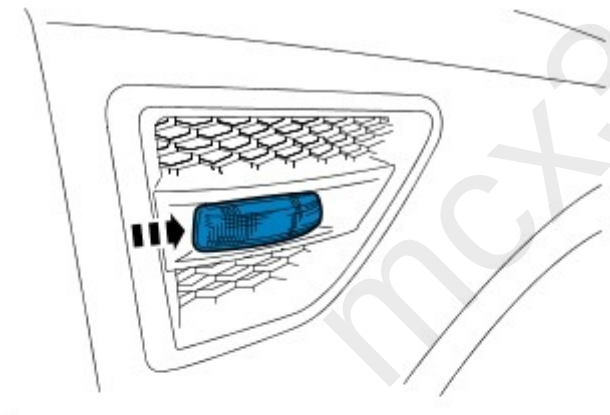


41. **41.** NOTE: RHD illustration shown, LHD is similar.



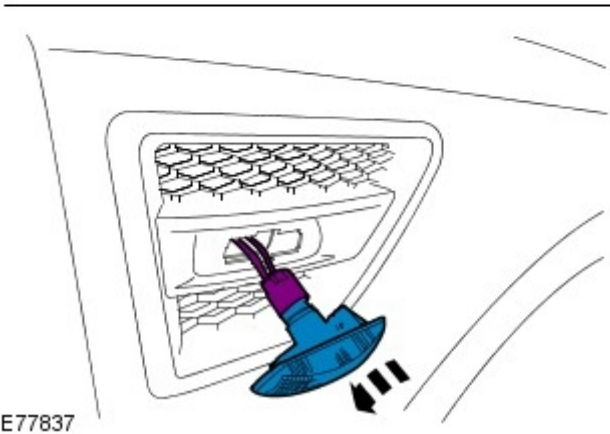
42. **42.** NOTE: RHD illustration shown, LHD is similar.

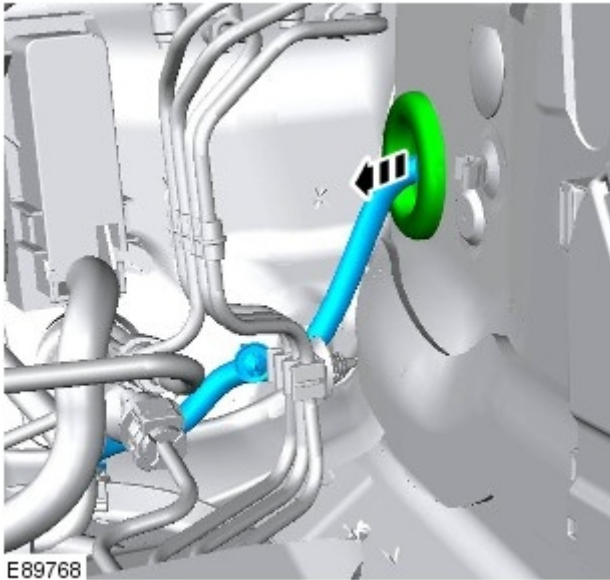
RH side front: Release the ABS sensor lead and disconnect the electrical connector.



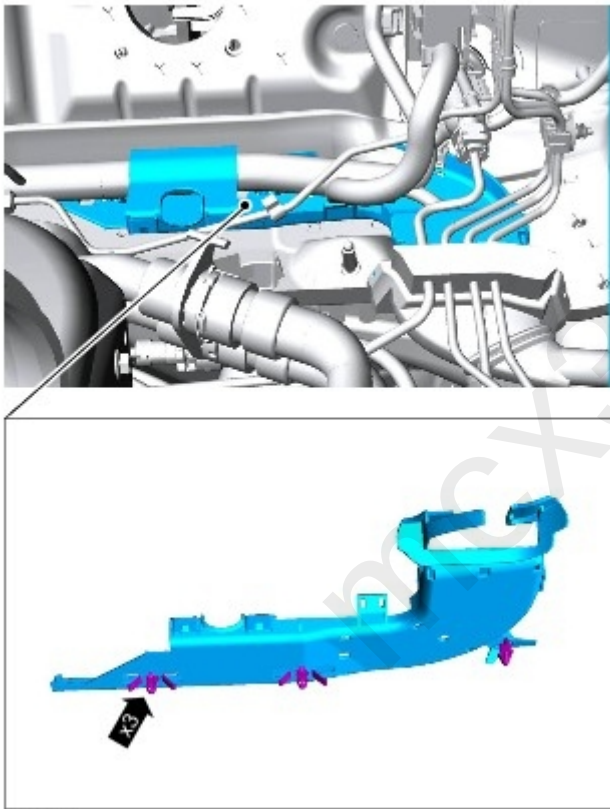
43. **43.** NOTE: RH illustration shown, LH is similar

Release the LH side repeater from the vehicle body and disconnect the electrical connector.



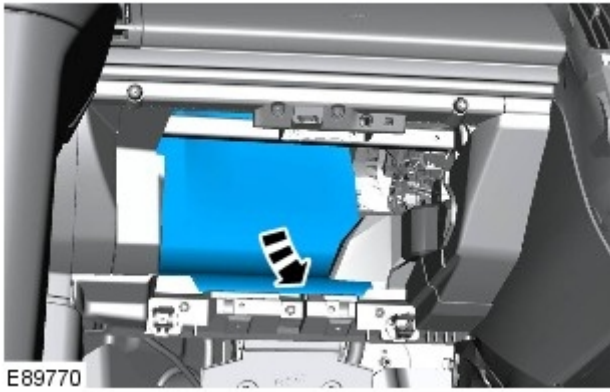


44. **44.** NOTE: RHD illustration shown, LHD is similar.

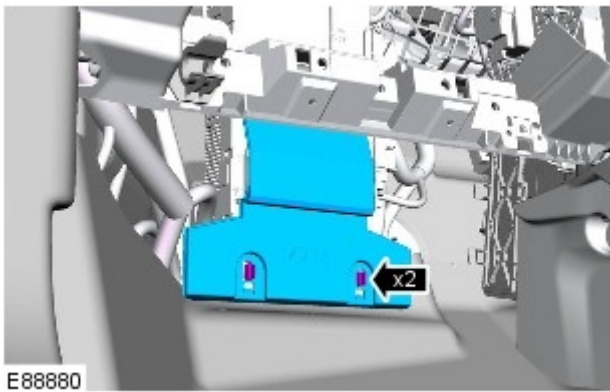


45. **45.** NOTE: RHD illustration shown, LHD is similar.

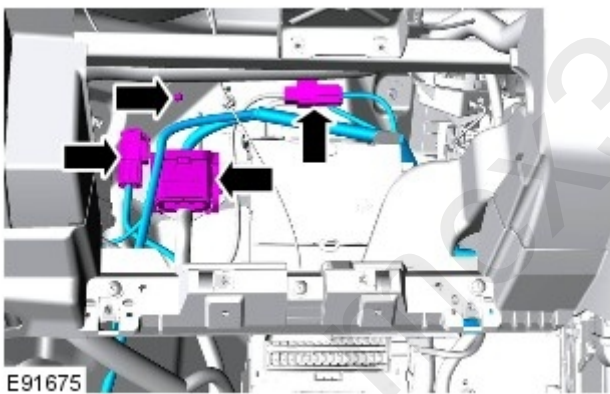
Unclip the harness tray from the vehicle bulkhead and route the RHS of the harness around the brake pipes into the LHS of the engine bay.



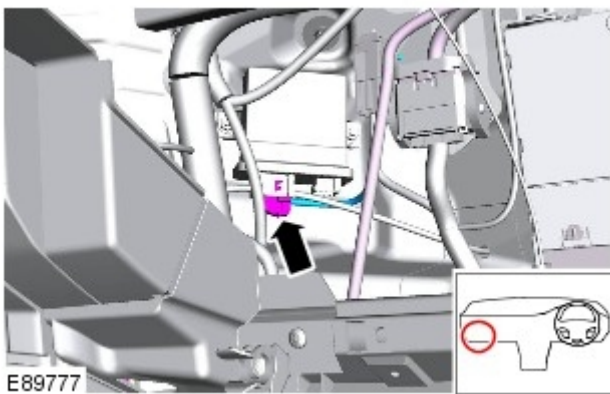
46. **46.** NOTE: RHD illustration shown, LHD is similar.



47. **47.** NOTE: RHD illustration shown, LHD is similar.

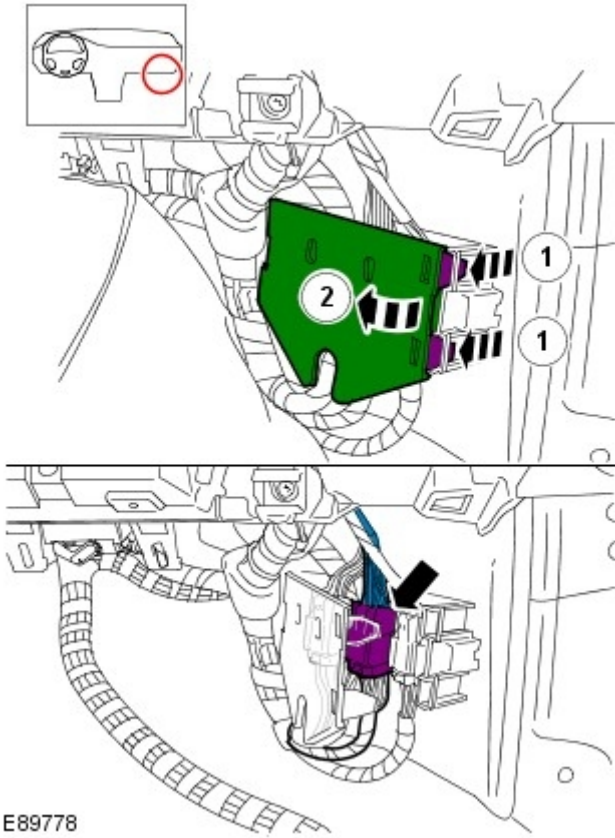


48. **48.** NOTE: RHD illustration shown, LHD is similar.

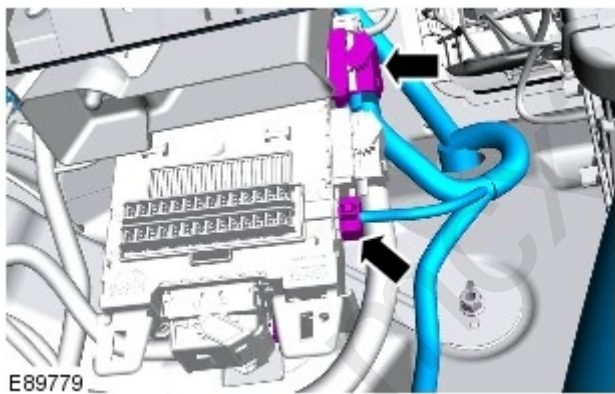


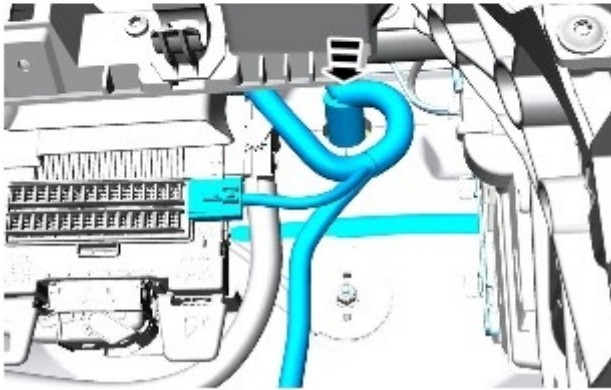
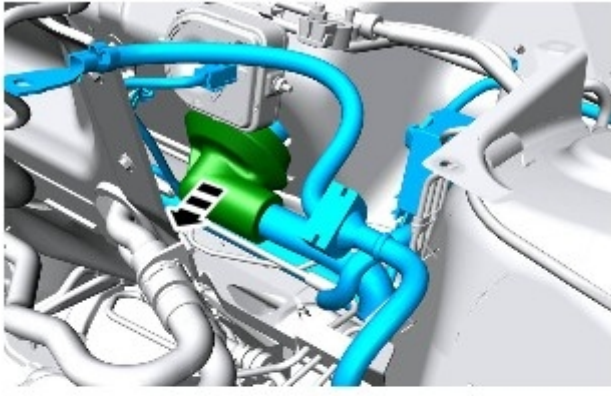
49. **49.** NOTE: RHD illustration shown, LHD is similar.

50. **50.** NOTE: LHD illustration shown, RHD is similar.



51. **51.** NOTE: RHD illustration shown, LHD is similar.





E89781

52. **52.** NOTE: RHD illustration shown, LHD is similar.

With assistance, release the harness.

53. **53.** NOTE: With assistance remove the component.

Remove the engine compartment harness.

Installation

1. Place harness to vehicle plenum, feed connectors into inside of vehicle and install grommet. Use assistance inside vehicle to pull connectors through.

2. Secure harness tray clips and secure rubber grommet to vehicle body.

3. Install and secure fusebox to body.

Torque: 10 Nm

4. Install the engine mounting plate.

Torque:
M8 24 Nm
M12 80 Nm

5. Secure the engine harness to the fusebox.

6. Connect the two electrical connectors to the BJB.

7. Install and secure the battery lead to the fusebox and install the small battery lead cover.

Torque: 10 Nm

8. Secure the 3 earth points and secure the harness clips to the vehicle body.

Torque: 10 Nm

9. Secure the battery lead to the battery terminal clamp.

Torque: 25 Nm

10. Install the fuse box cover.

11. Install the harness cover to the suspension turret.

12. Feed harness under the air cleaner duct and secure the duct to the grommet.

13. Secure headlamp and bumper harness clips.

14. Connect the height sensor electrical connector and secure the harness with the clips.

15. Install headlamp mounting plate.

Torque: 10 Nm

16. Connect the side repeater electrical connector.

17. Connect the heated washer jet electrical connection and secure the harness to the vehicle body.

18. Connect the ABS sensor and secure the harness to the vehicle body.

19. Secure the washer pipe to the harness and secure the harness to the body.

20. Connect the crash sensor electrical connectors.

21. Connect the the bonnet lock electrical connector

22. Secure the harness to the body and then secure the bonnet release cable to the harness.

23. Secure the washer pipe to the washer bottle.

24. Install the washer bottle and connect the electrical connections.

Torque: 10 Nm

25. Secure the 3 ground cables to the vehicle body.

Torque: 10 Nm

26. Secure the harness to the vehicle body.

27. Connect the coolant level sensor electrical connector.

28. Install the RH secondary bulkhead mounting bracket.

Torque: 10 Nm

29. Install the inner plenum plate and secure the electrical connector to the plate.

30. Connect the heated screen RH electrical connector.

31. Connect the BBUS electrical connector.

32. Connect the A/C pressure switch electrical connector.

33. Secure the engine compartment harness to the vehicle bulkhead.

34. Secure the harness tray to the LHS of the vehicle bulkhead.

35. Connect the LH heated screen electrical connector and secure the harness to the vehicle body.

36. Feed the harness into the LH wheel arch and secure the grommet.

37. Install the ABS modulator bracket.

Torque: 25 Nm

38. Install the LH side repeater lamp and secure the clips to the vehicle body.

39. Connect the rear washer pipe.

40. Connect the ABS sensor electrical connector and secure the harness to the vehicle body.

41. Connect the two electrical connectors to the CJB.

42. Connect the main engine compartment harness to the instrument panel harness and close the cover.

43. Connect the main engine compartment harness to the headlamp levelling ECU.

44. Connect the 3 floor harness electrical connections.

45. Install the fuse cover and refit the sound deadening sheet.

46. Install the LH fender splash shield.

Torque: 6 Nm

47. Install the glove compartment lid.

Refer to: [Glove Compartment](#) (501-12 Instrument Panel and Console, Removal and Installation).

48. Install the engine upper support insulator.

Refer to: [Engine Upper Support Insulator](#) (303-01A Engine - I6 3.2L Petrol, Removal and Installation).

49. Install both headlamps.

Refer to: [Headlamp Assembly](#) (417-01 Exterior Lighting, Removal and Installation).

50. Install the ABS module.

Refer to: [Anti-Lock Brake System \(ABS\) Module](#) (206-09A Anti-Lock Control, Removal and Installation).

51. Install the brake booster.

Refer to: [Brake Booster](#) (206-07 Power Brake Actuation, Removal and Installation).

52. Install the secondary bulkhead center panel.

Refer to: [Secondary Bulkhead Center Panel - I6 3.2L Petrol](#) (501-02 Front End Body Panels, Removal and Installation).

53. Install the air cleaner housing.

Refer to: [Air Cleaner](#) (303-12A Intake Air Distribution and Filtering - I6 3.2L Petrol, Removal and Installation).

54. Install the bumper armature.

Refer to: [Front Bumper](#) (501-19 Bumpers, Removal and Installation).