

Title Recall R89707: Air conditioner drain hose

Ref No US31955.1.4 en-US

Issuer Technical Service

Partner 3 US 7510 Volvo Car USA

Func Group 8700

Func Desc air conditioning unit

Status Saved

Status 2016-

Date 10-06

Issue 2016-

Date 10-06

Reference

Attachment

| File Name | File Size |
|--------------------------------------|-----------|
| TJ 31955 Inspection.pdf | 4.9656 MB |
| TJ 31955 Replacement.pdf | 4.1918 MB |
| TJ 31955 Wiring_Repair_if_needed.pdf | 1.8667 MB |

Vehicle Type

| Type | Eng | Eng Desc | Sales | Body | Gear | Steer | Model Year | Plant | Chassis range | Struc Week Range |
|------|-----|----------|-------|------|------|-------|------------|-------|-----------------|------------------|
| 234 | | | | | | | 2017-2017 | 21 | 0000001-0005452 | 0-0 |
| 256 | | | | | | | 2016-2017 | 21 | 0000064-0129750 | 0-0 |

CSC Customer Symptom Codes

| Code | Description |
|------|---|
| XW | Service action/Recall/Service action/Recall |

VST Operation Number

DTC Diagnostic Trouble Codes

Rows beginning with * are modified

Note! If using a printed copy of this Technical Journal, first check for the latest online version.

Text

Description:

Volvo Car USA LLC and Volvo Car Canada LTD (Volvo) on behalf of Volvo Car Group has decided to launch Recall R89707 on model year 2016 & 2017 XC90 & S90 vehicles.

Condensation water, transferred through the air conditioning drain hose, may leak into the passenger compartment due to incorrect installation during vehicle assembly. If this condition should occur, it may result in moisture inside the passenger compartment, which could lead to air conditioning functionality issues.

If the leakage has not been detected over a period of time, this condition could affect SRS systems (airbag), engine management systems etc. In such a case, the driver may experience various warning messages displayed in the Driver Information Module (DIM) identifying that a fault may be present and also providing guidance on how to proceed. Volvo therefore considers this a potential safety risk over time.

Service:

*Updated videos added 10/06/2016

The corrective action is to inspect the air conditioning drain hose to ensure correct installation per the attached Tech Journal 31955, and if necessary replace the drain hose.

See <https://youtu.be/6tDCYCmvJUM>

Should there be water present beneath the carpet, the wire harness should be inspected.

If the wiring is wet or corroded repair per the attached instruction.

See <https://youtu.be/AYVltPYBBcA>

Vehicle Report:

N/A

To view TJ attachment continue to next page. This TJ has three attachments.



Volvo Car Customer Service

TJ 31955

| | | | |
|---------------|-------------------------|--------------------------|----------|
| Title | Climate unit drain hose | Page | 1 (11) |
| Action | Inspection | Operation number: | 98635-2 |

| | | |
|--------------|-------------|---------------|
| Issue | Date | Reason |
| 1 | 2016-09 | First issue |

Affected vehicles

| | |
|-------------------|--------------|
| Model year | Model |
| 2017 | S90 (17-) |
| 2016, 2017 | XC90 (16-) |

Equipment

| | |
|-----------------------|-----------------|
| Designation | Part No. |
| Interior trim remover | |

Orientation view



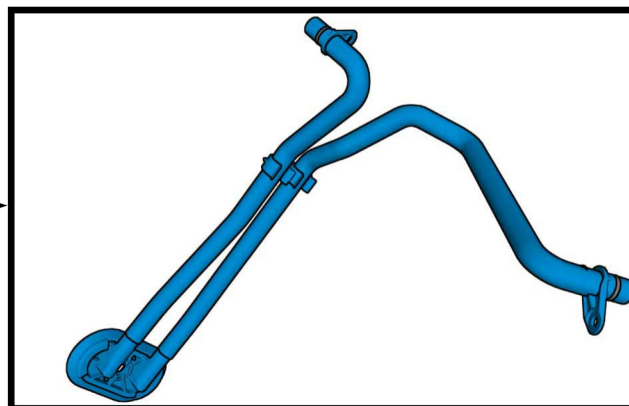
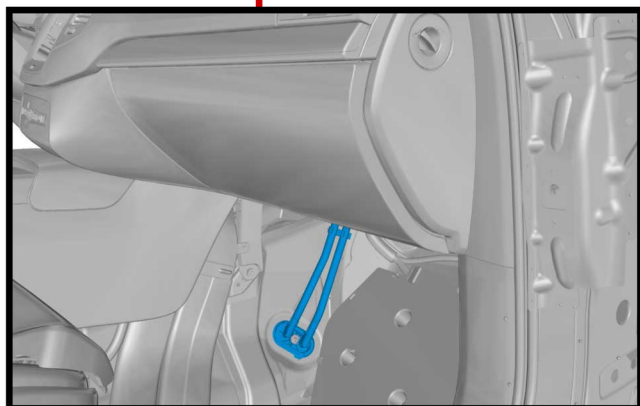
XC90



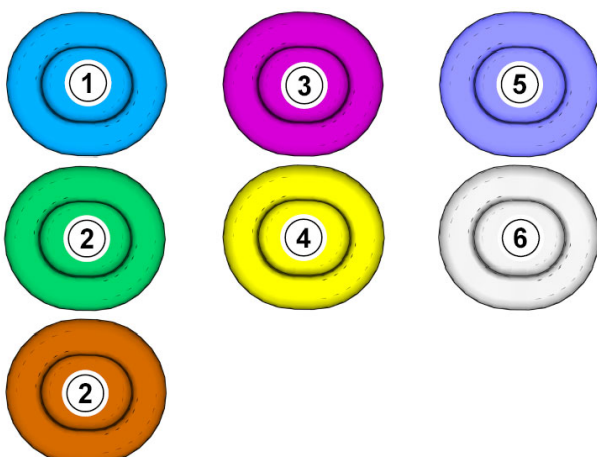
S90



V90



Color symbols

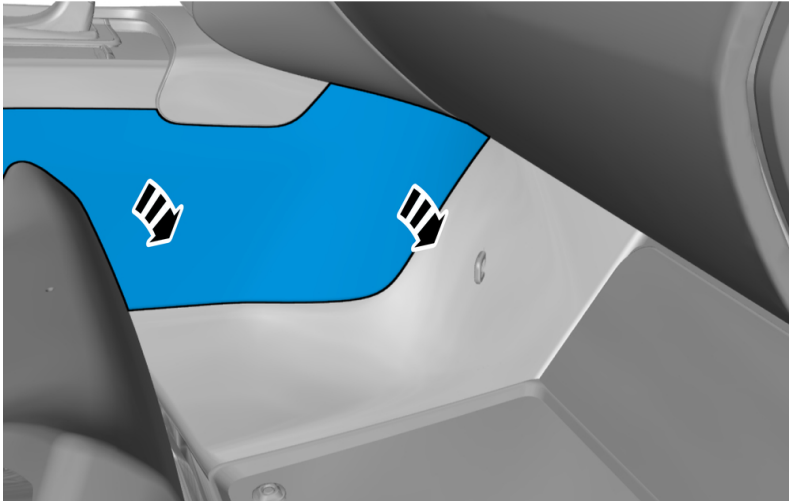


Note! This colour chart displays (in colour print and electronic version) the importance of the different colours used in the images of the method steps.

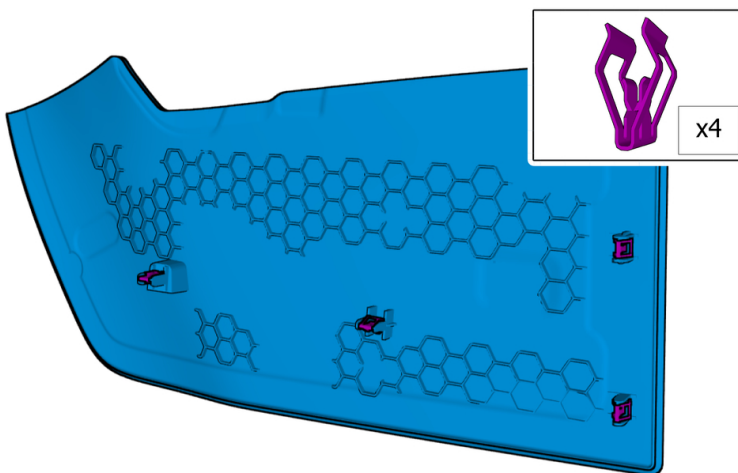
- 1 . Used for focused component, the component with which you will do something.
- 2 . Used as extra colors when you need to show or differentiate additional parts.
- 3 . Used for attachments that are to be removed/installed. May be screws, clips, connectors, etc.
- 4 . Used when the component is not fully removed from the vehicle but only hung to the side.
- 5 . Used for standard tools and special tools.
- 6 . Used as background color for vehicle components.

Applies to the passenger side

Removal



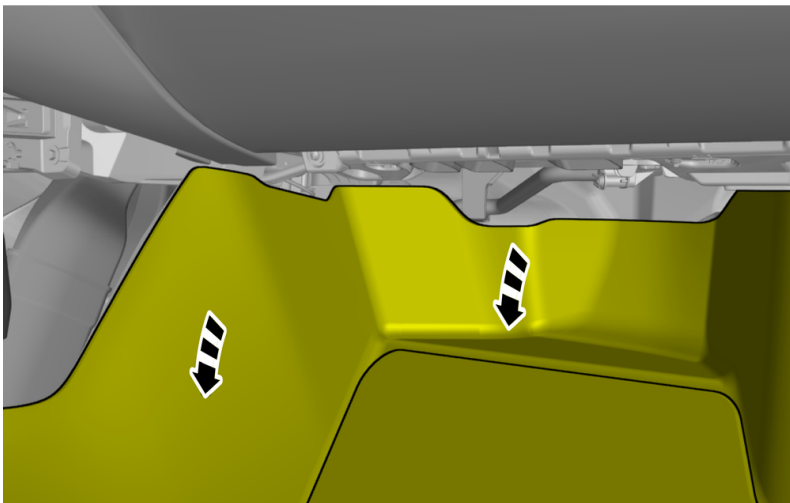
Remove the part carefully
Remove the panel.



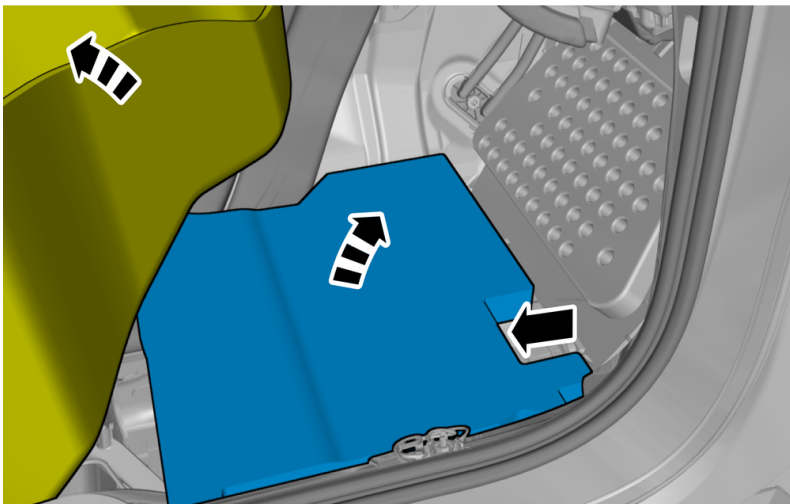
The graphic shows the back of the component.

Remove passenger side sill moulding front ,
refer to:

- Removal, replacement and installation
- 8 - Body and interior
- 84 - Exterior trim, glass, weatherstrips
- 845 - sealing and protect. molding for
door, lid, and side window



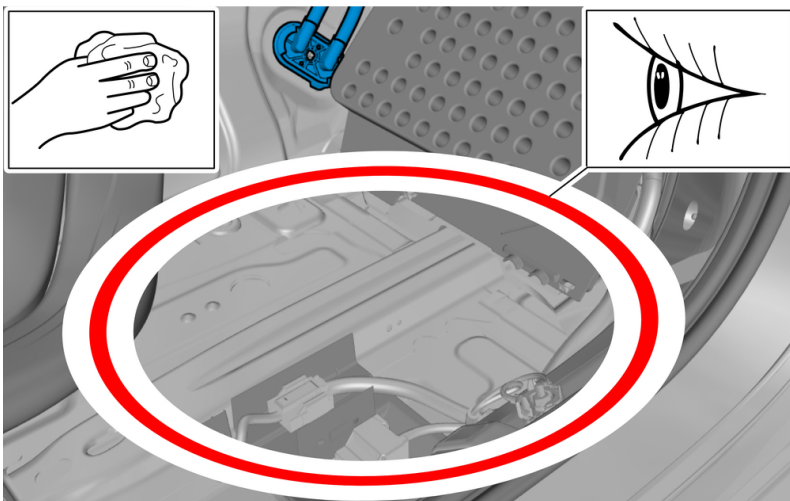
Remove the part carefully
Fold the carpet to the side.



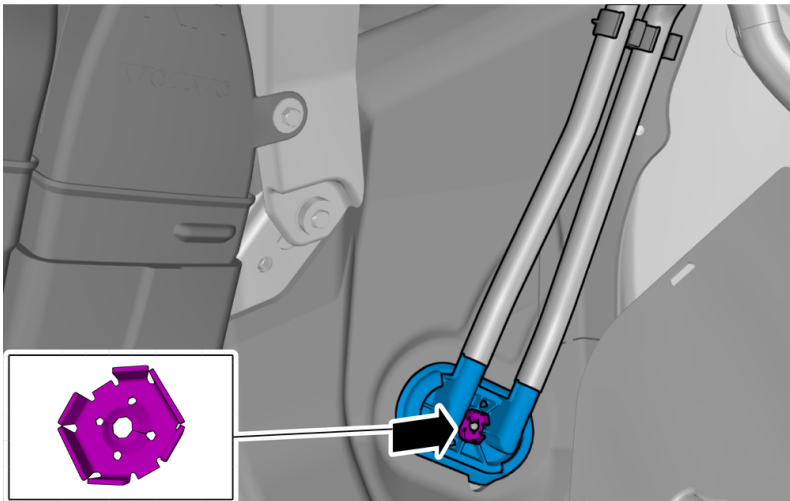
Caution! Make sure that the component is positioned correctly.

Fold the carpet to the side.
Remove the part carefully
Remove the marked part.

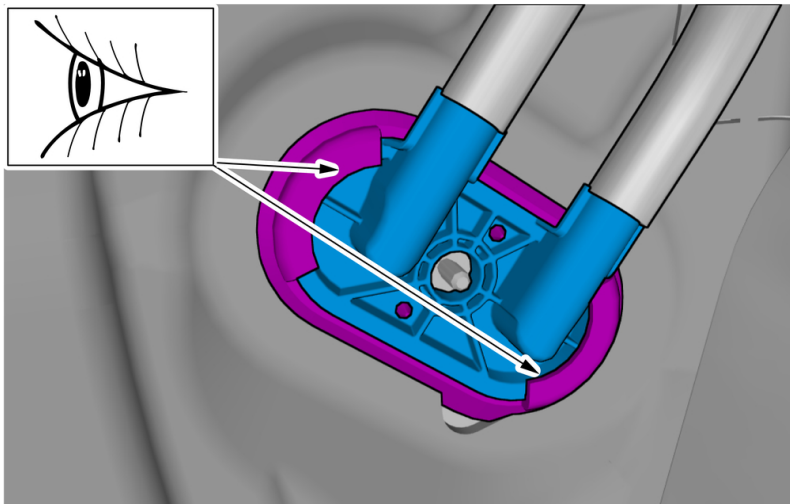
Check



Note! Check for moisture in the area indicated.

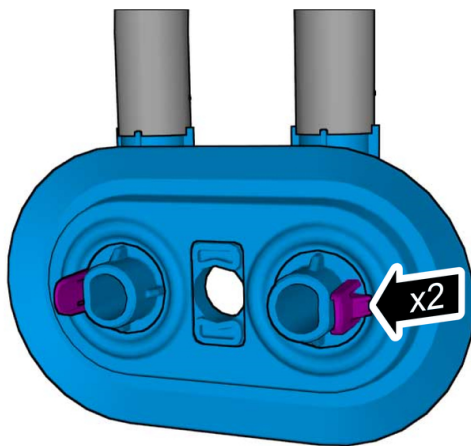


Remove the nut.

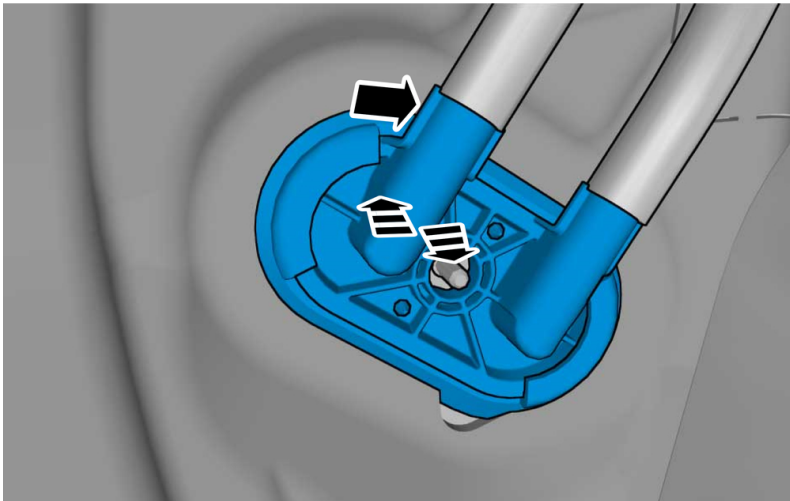


Caution! The grommet seal must rest on the metal surface, not on the carpet.

Note! Make sure that the seal is correctly located.

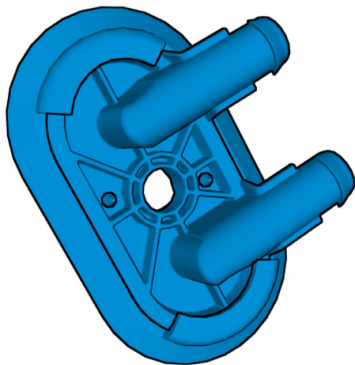


The graphic is just to show the back of the component and the location of the tabs. The component does not need to be removed if it is already correctly installed.



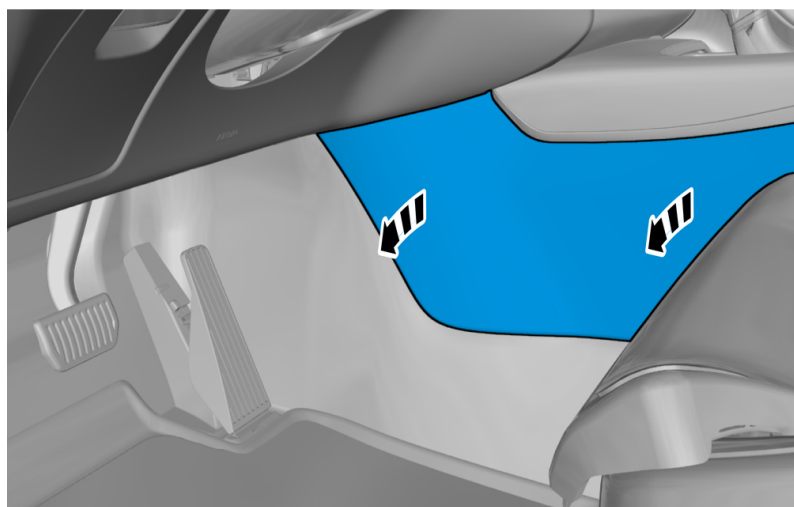
Check that the rubber grommet is not loose:
1 -First grab the hose connection and press inwards. 2 -Then pull outwards. 3 -Again push inwards.

If no faults are detected, to install, reverse the removal procedure.

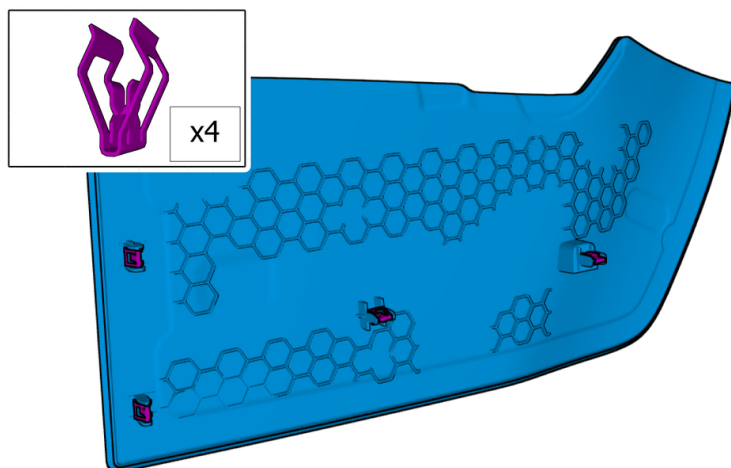


If the result of the checking procedure is not OK, the component must be replaced with a new component.

Applies to the driver's side



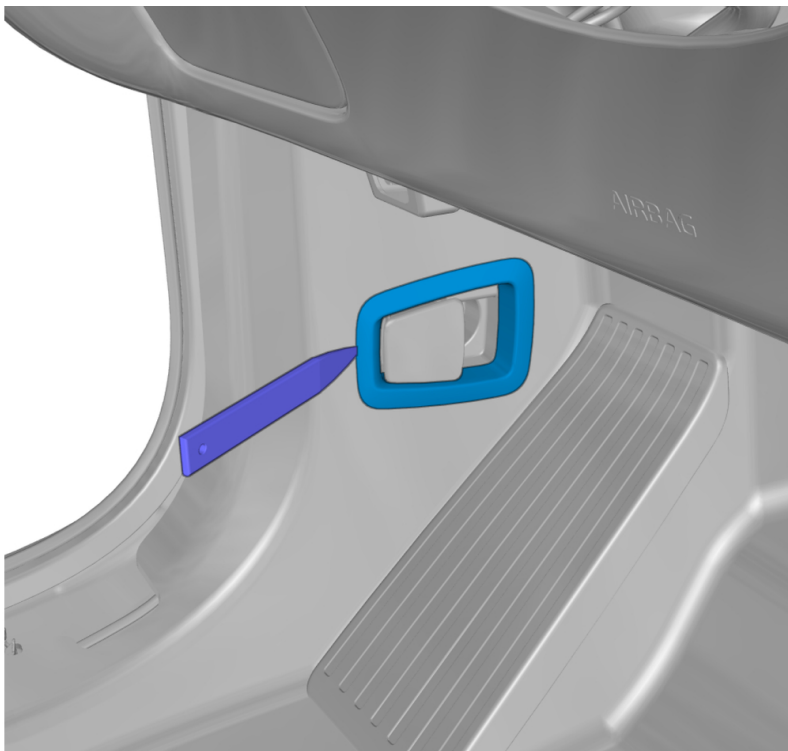
Remove the part carefully
Remove the panel.



The graphic shows the back of the component.

Remove driver side front sill trim panel , refer to:

- Removal, replacement and installation
- 8 - Body and interior
- 84 - Exterior trim, glass, weatherstrips
- 845 - sealing and protect. molding for door, lid, and side window



Remove the part carefully

Use: Interior trim remover

Remove the marked part.

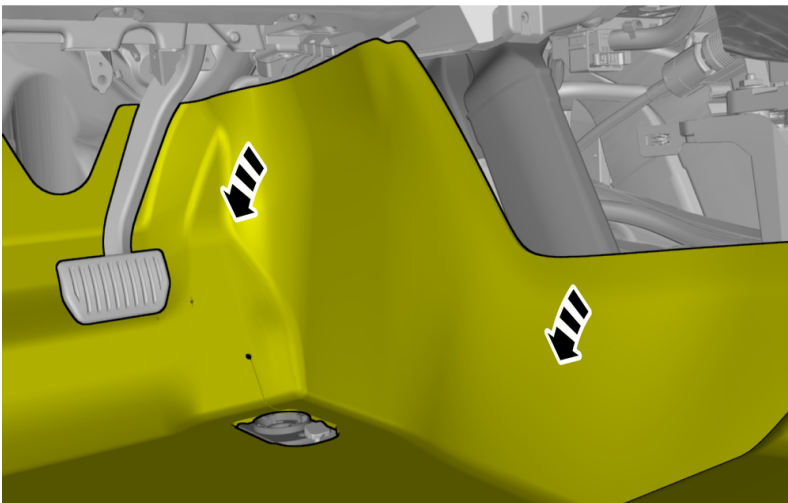
Remove accelerator pedal , refer to:

Removal, replacement and installation

2 - Engine with mountings and equipment

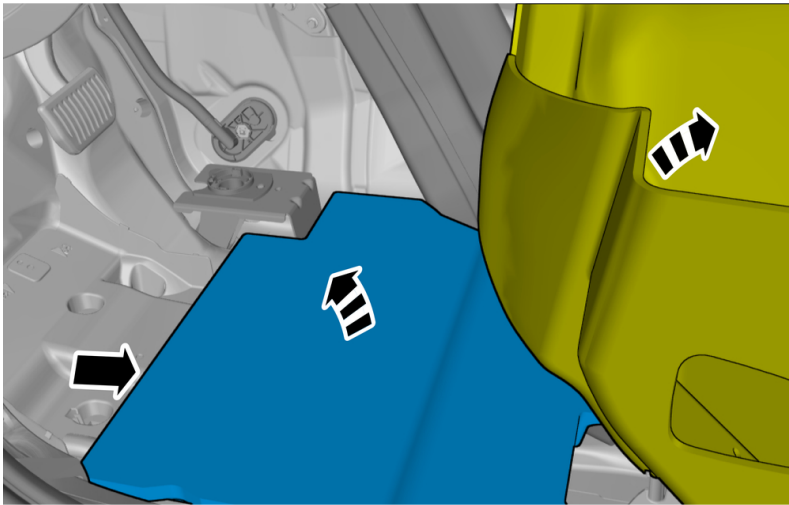
27 - Engine control

271 - gas pedal control



Remove the part carefully

Fold the carpet to the side.



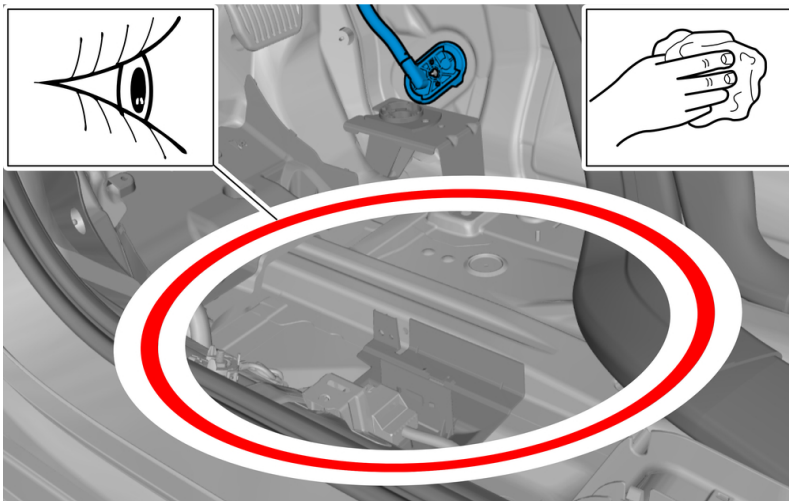
Caution! Make sure that the component is positioned correctly.

Fold the carpet to the side.

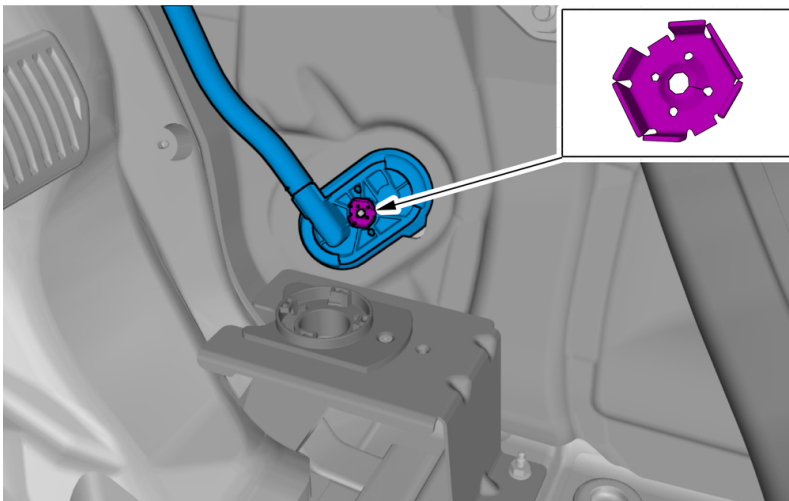
Remove the part carefully

Remove the marked part.

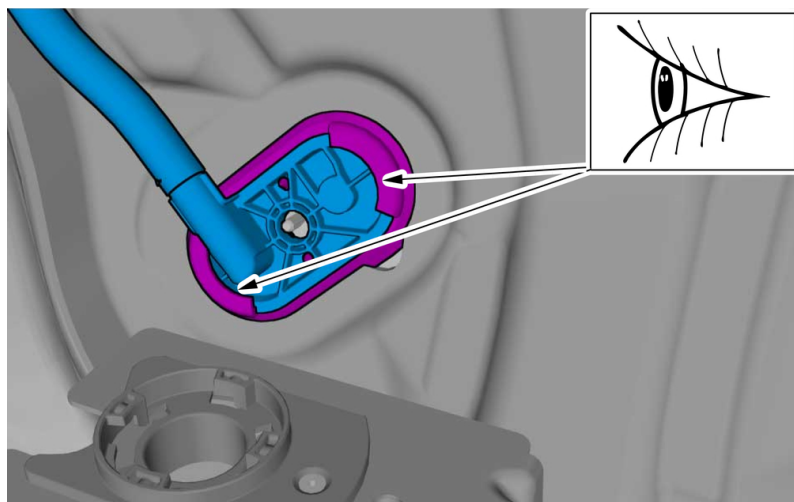
Check



Note! Check for moisture in the area indicated.

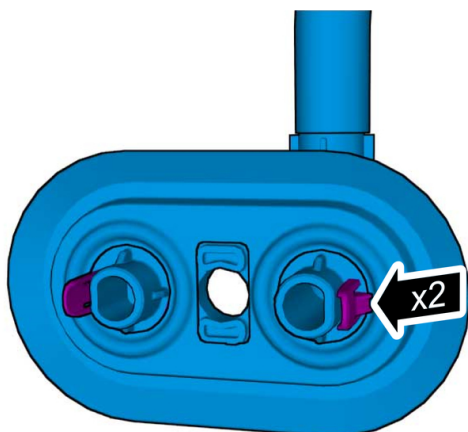


Remove the nut.



Caution! The grommet seal must rest on the metal surface, not on the carpet.

Note! Make sure that the seal is correctly located.

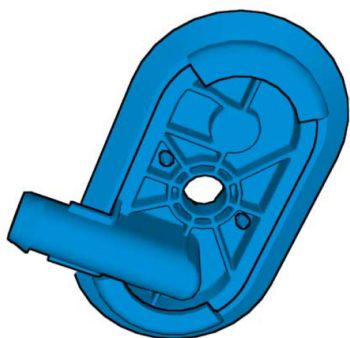


The graphic is just to show the back of the component and the location of the tabs. The component does not need to be removed if it is already correctly installed.



Check that the rubber grommet is not loose:
1 -First grab the hose connection and press inwards. 2 -Then pull outwards. 3 -Again push inwards.

If no faults are detected, to install, reverse the removal procedure.



If the result of the checking procedure is not OK, the component must be replaced with a new component.



Volvo Car Customer Service

TJ 31955

| | | | |
|---------------|-------------------------|--------------------------|----------|
| Title | Climate unit drain hose | Page | 1 (10) |
| Action | Replacement | Operation number: | 98636-3 |

| Issue | Date | Reason |
|-------|---------|-------------|
| 1 | 2016-09 | First issue |

Affected vehicles

| Model year | Model |
|------------|------------|
| 2017 | S90 (17-) |
| 2016, 2017 | XC90 (16-) |

Materials

| Materials | Qty. | Part No. | Notes |
|---------------|------|----------|------------------------------|
| Draining hose | 1.0 | 31455693 | XC90 - LHD - DRIVER SIDE; |
| Draining hose | 1.0 | 31455694 | XC90 - LHD - PASSENGER SIDE; |
| Draining hose | 1.0 | 31390488 | S90 - LHD - DRIVER SIDE; |
| Draining hose | 1.0 | 31390489 | S90 - LHD - PASSENGER SIDE; |

Orientation view



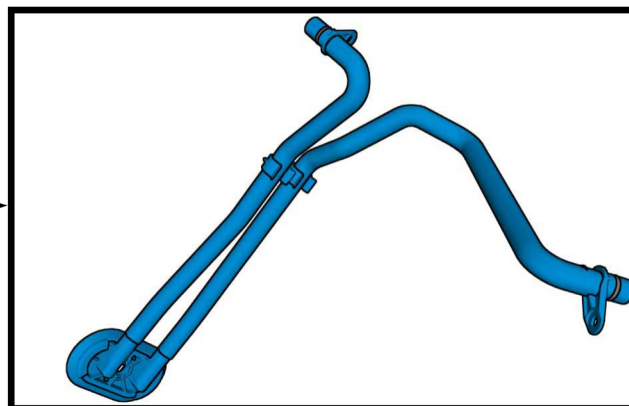
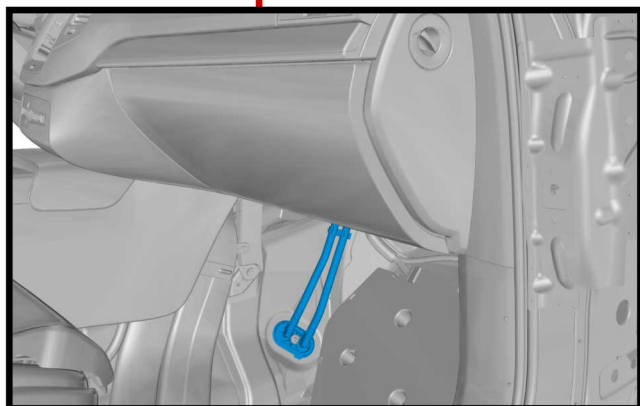
XC90



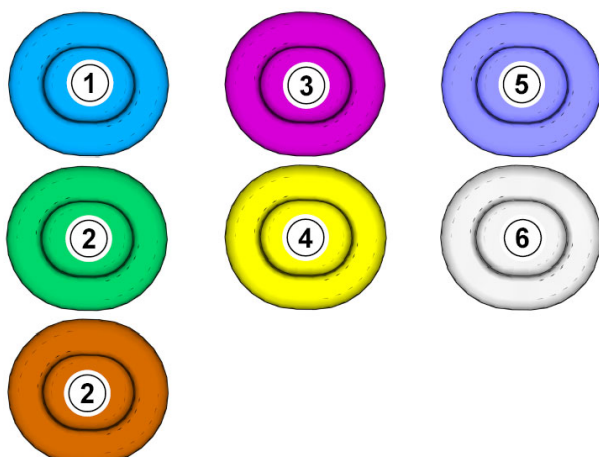
S90



V90



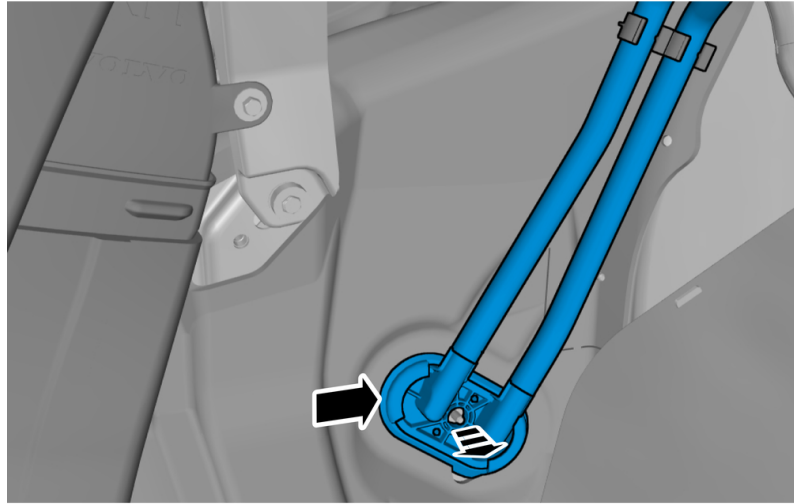
Color symbols



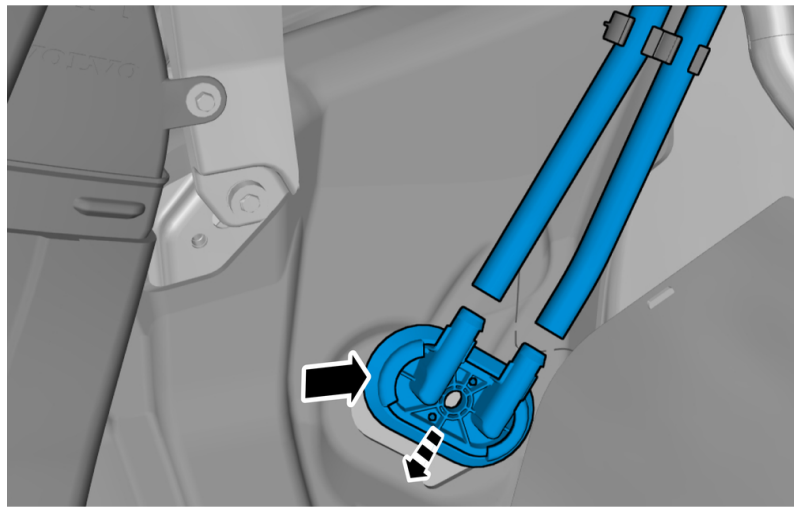
Note! This colour chart displays (in colour print and electronic version) the importance of the different colours used in the images of the method steps.

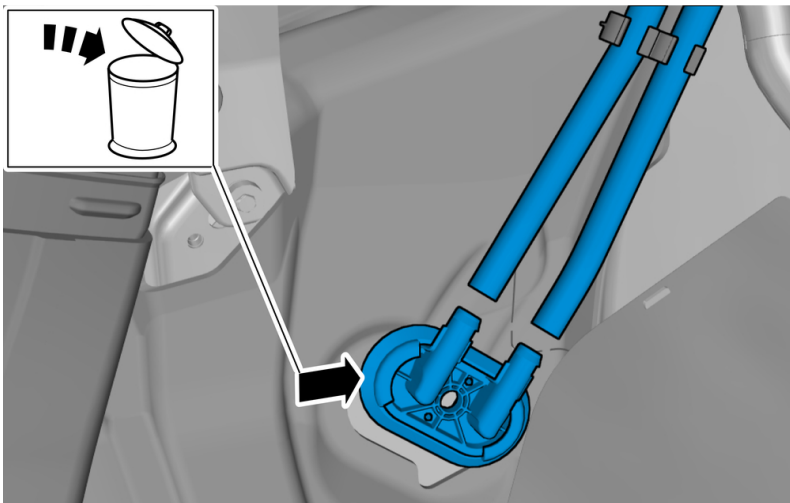
- 1 . Used for focused component, the component with which you will do something.
- 2 . Used as extra colors when you need to show or differentiate additional parts.
- 3 . Used for attachments that are to be removed/installed. May be screws, clips, connectors, etc.
- 4 . Used when the component is not fully removed from the vehicle but only hung to the side.
- 5 . Used for standard tools and special tools.
- 6 . Used as background color for vehicle components.

Applies to the passenger side

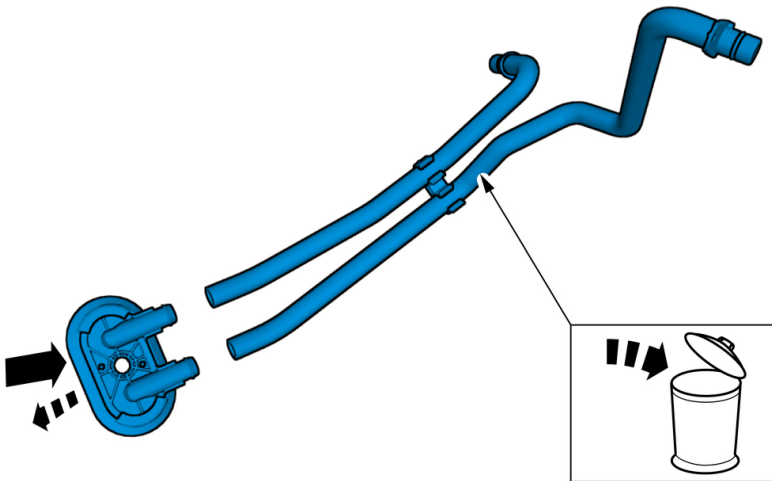
Removal

Remove the part carefully

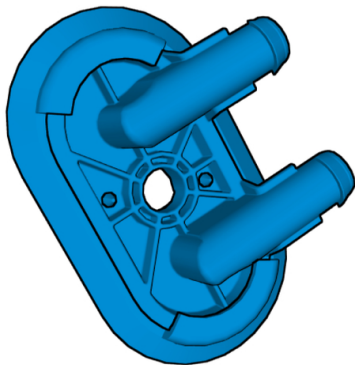
**Note! Use suitable paper to absorb any escaping fluid.**Undo the hoses from the connections.
Remove the marked part.

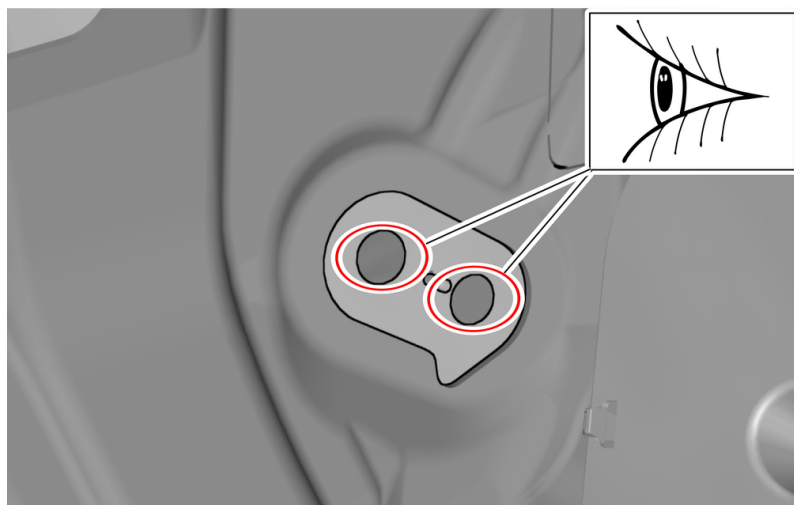


Make sure to replace the marked component with a new.
Undo the hoses from the connections.
Remove the marked part.

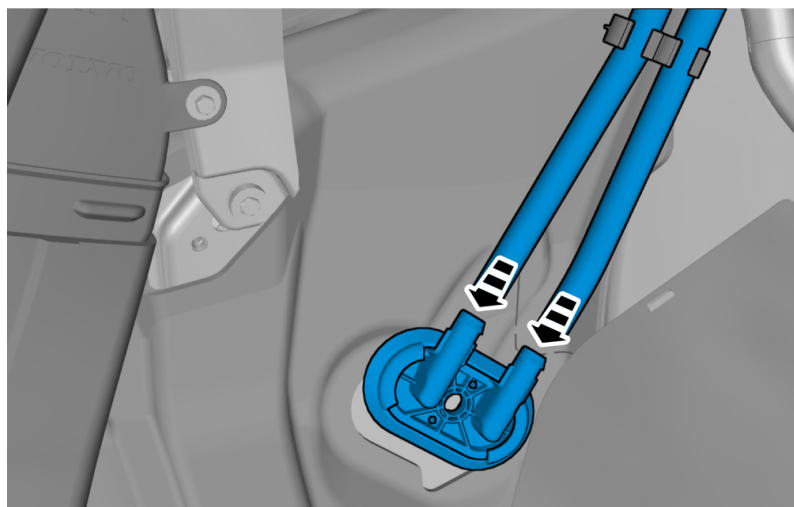


Use the marked component only.



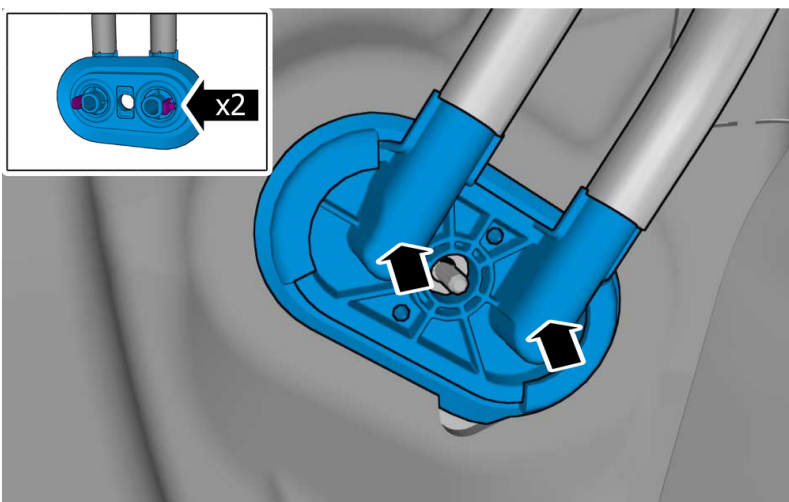
Check

Caution! Make sure that the area indicated is flat and free from damages.

Installation

Note! Use soap solution.

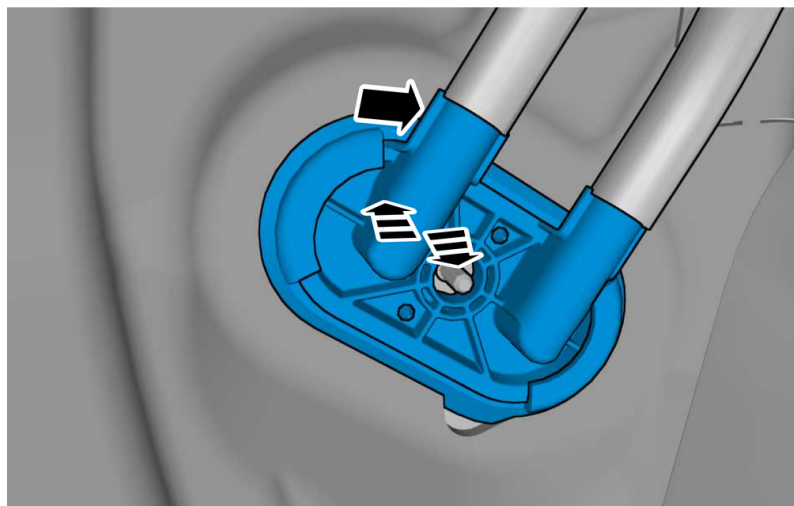
Install the hoses.



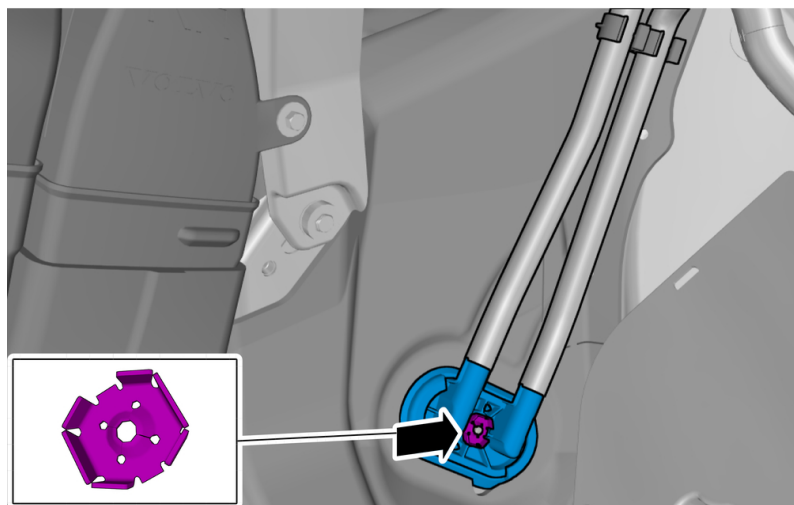
Caution! The grommet seal must rest on the metal surface, not on the carpet.

Caution! Be careful not to damage the catches.

Install the marked component.
Press the marked component.



Check that the rubber grommet is not loose:
1 -First grab the hose connection and press inwards. 2 -Then pull outwards. 3 -Again push inwards.

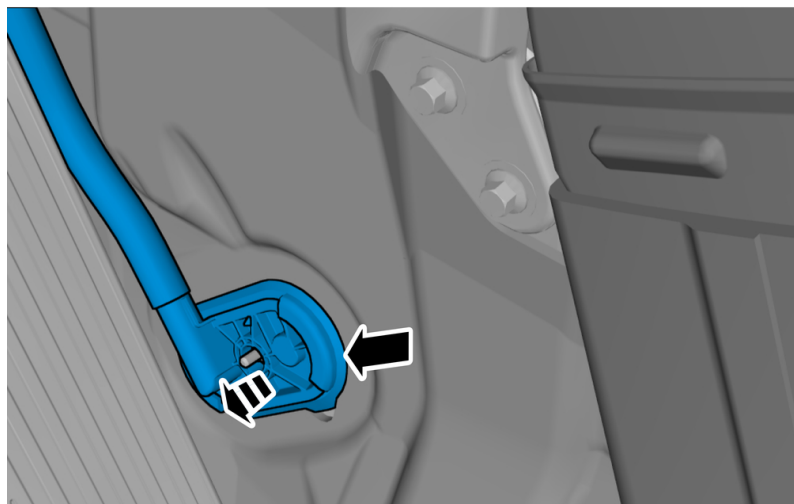


Note! Make sure that the seal is correctly located.

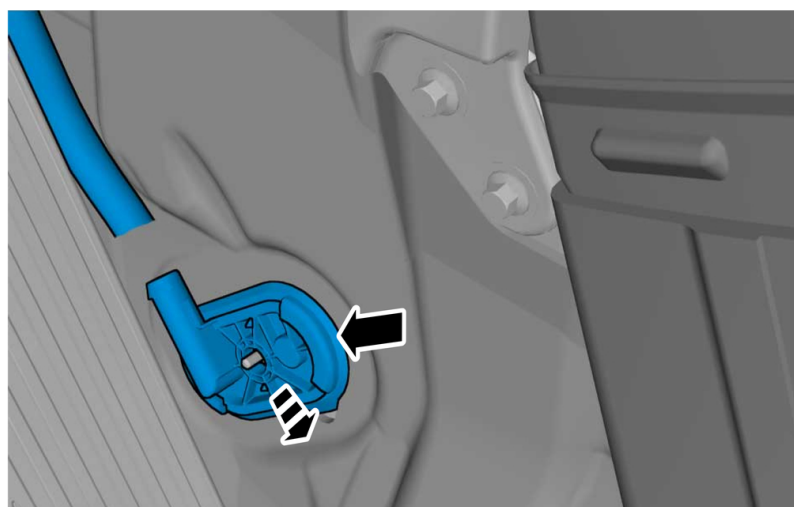
Install the nut.

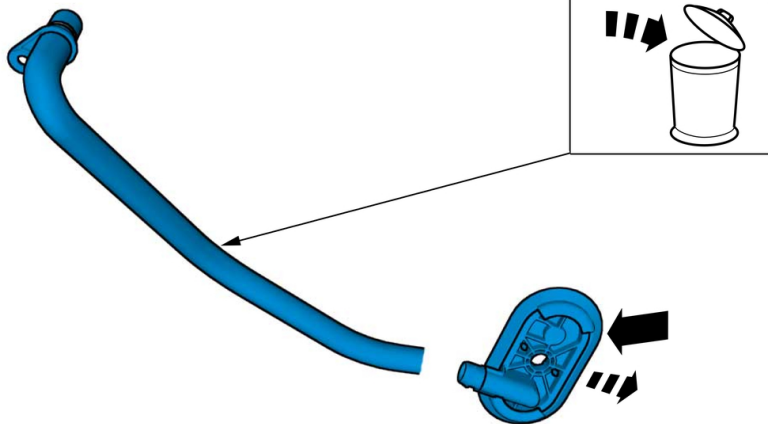
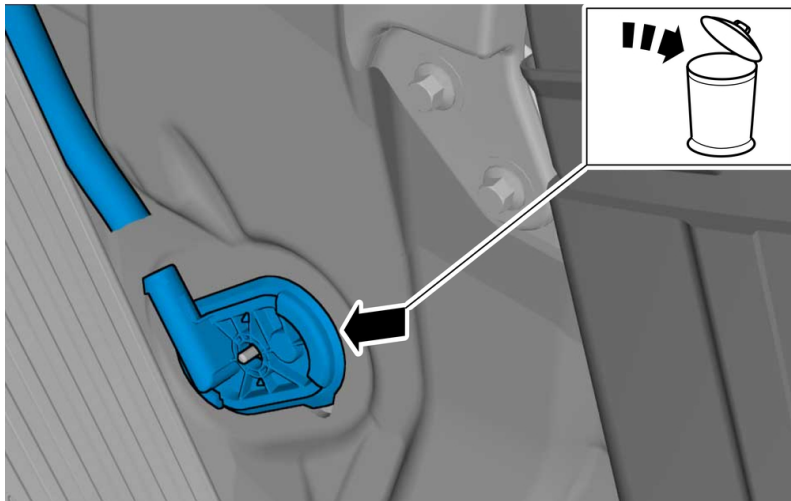
To install, reverse the removal procedure.

Applies to the driver's side

Removal

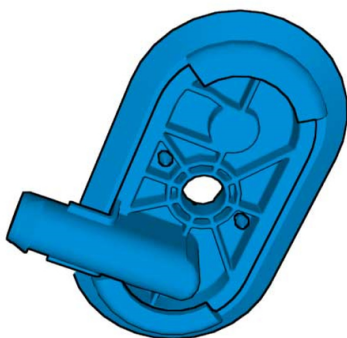
Remove the part carefully

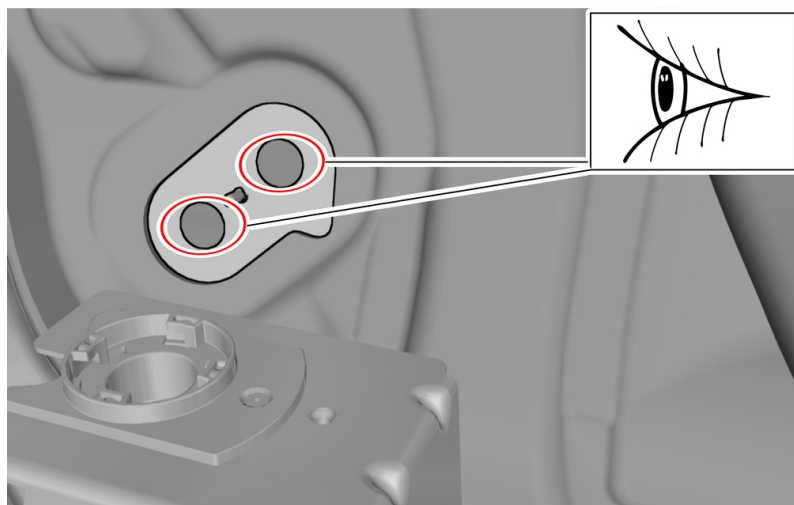
**Note! Use suitable paper to absorb any escaping fluid.**Undo the hose from the connection.
Remove the marked part.



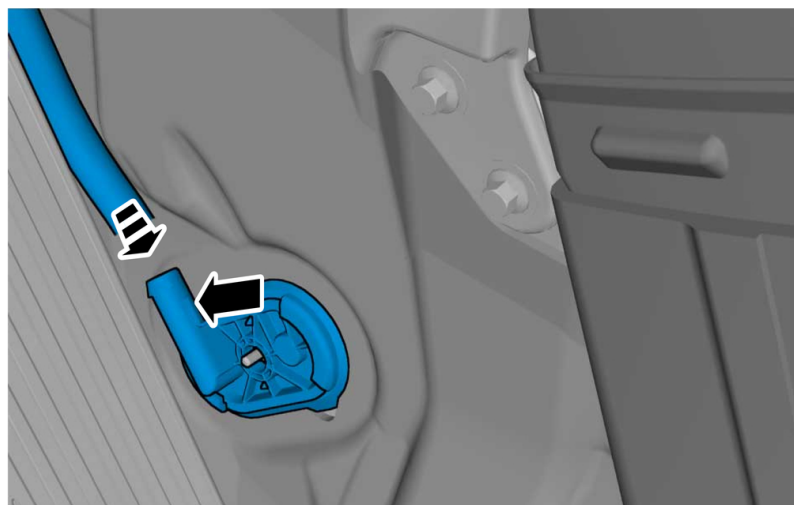
Make sure to replace the marked component with a new.
Undo the hose from the connection.
Remove the marked part.

Use the marked component only.



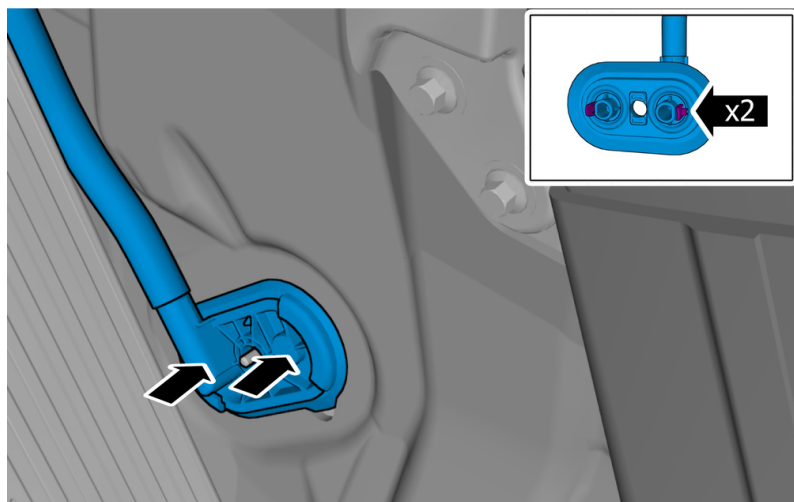
Check

Caution! Make sure that the area indicated is flat and free from damages.

Installation

Note! Use soap solution.

Install the hose.



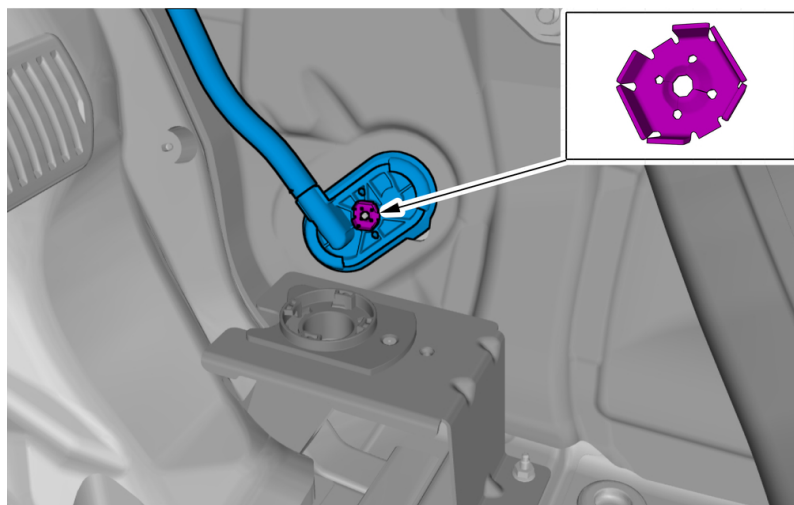
Caution! The grommet seal must rest on the metal surface, not on the carpet.

Caution! Be careful not to damage the catches.

Install the marked component.
Press the marked component.



Check that the rubber grommet is not loose:
1 -First grab the hose connection and press inwards. 2 -Then pull outwards. 3 -Again push inwards.



Note! Make sure that the seal is correctly located.

Install the nut.

To install, reverse the removal procedure.



Volvo Car Customer Service

TJ 31955

| | | | |
|---------------|---|--------------------------|---------|
| Title | Floor Harness Wiring Repair, if needed | Page | 1 (7) |
| Action | Only needed if the wiring is wet or corroded. | Operation number: | 97172-3 |

| Issue | Date | Reason |
|-------|---------|----------------|
| 1 | 2016-10 | Method updated |

Affected vehicles

| Model year | Model |
|------------|------------|
| 2016, 2017 | XC90 (16-) |
| 2017 | S90 |

Materials

| Materials | Qty. | Part No. | Notes |
|-----------------|---------------|----------|---|
| Electrical tape | 0.4 (roll) | 9511028 | 2m. - PASSENGER SIDE 2m. - DRIVER SIDE |
| Splice | 2.6 (package) | 9130476 | PASSENGER SIDE |
| Splice | 92 | 9512783 | DRIVER SIDE |
| Splice | 38 | 9512783 | PASSENGER SIDE |
| Repair terminal | 1.3 (package) | 30656639 | PASSENGER SIDE |
| Repair terminal | 46 | 31288306 | DRIVER SIDE |
| Repair terminal | 19 | 31288306 | PASSENGER SIDE |

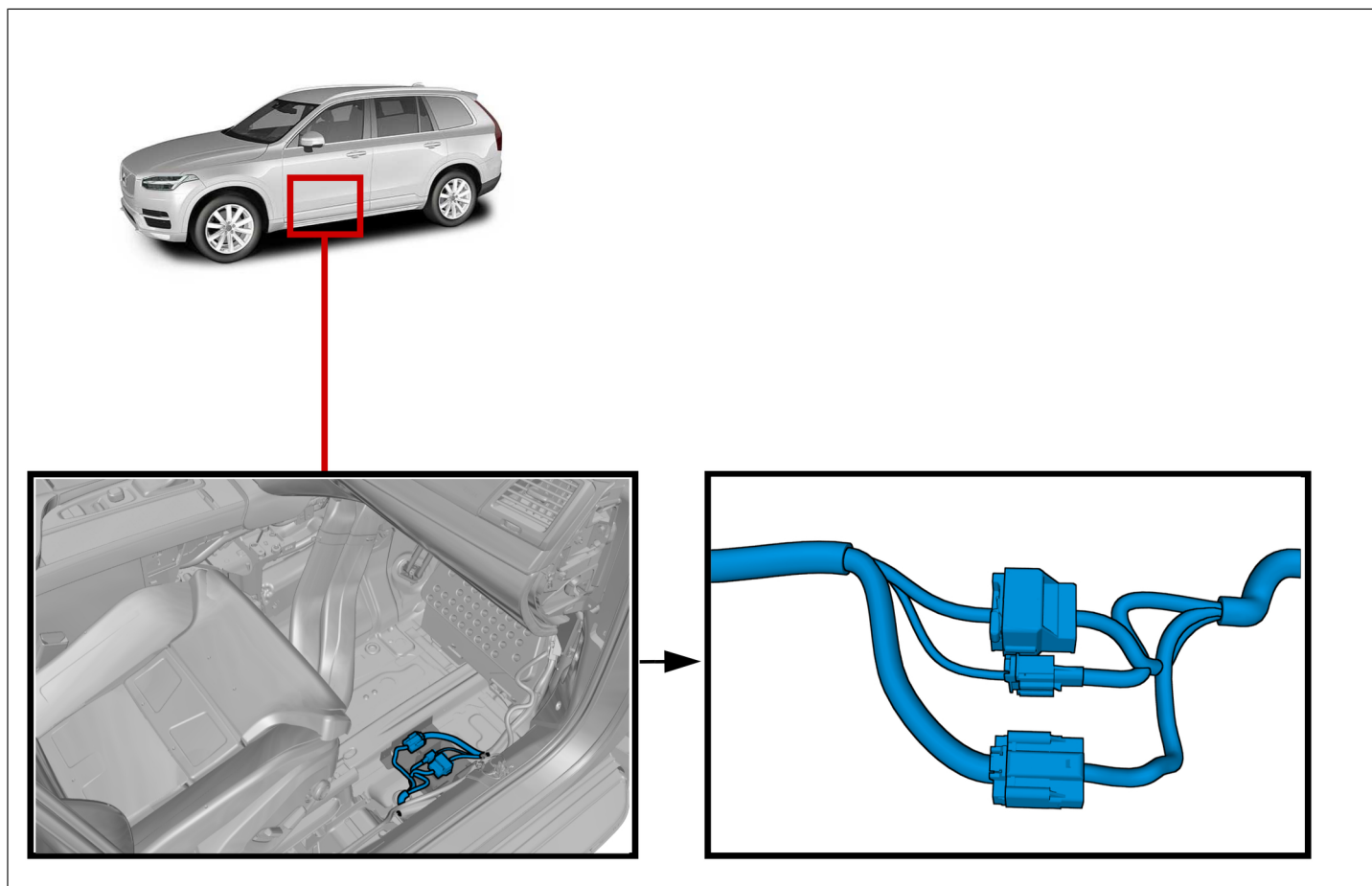
Special tools

| Description | Part No. |
|-------------------------------------|----------|
| Crimping tool (included in 9512669) | 951 2785 |

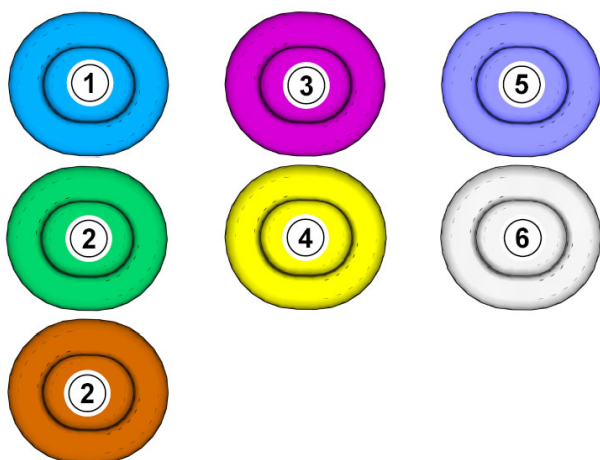
Equipment

| Designation | |
|-------------|--|
| Hot-air gun | |

Orientation view



Color symbols



Note! This colour chart displays (in colour print and electronic version) the importance of the different colours used in the images of the method steps.

- 1 . Used for focused component, the component with which you will do something.
- 2 . Used as extra colors when you need to show or differentiate additional parts.
- 3 . Used for attachments that are to be removed/installed. May be screws, clips, connectors, etc.
- 4 . Used when the component is not fully removed from the vehicle but only hung to the side.
- 5 . Used for standard tools and special tools.
- 6 . Used as background color for vehicle components.

Removal

Remove front floor carpet, refer to:

Removal, replacement and installation

8 - Body and interior

85 - Interior

855 - other upholstery

Repair

Applies to both sides.

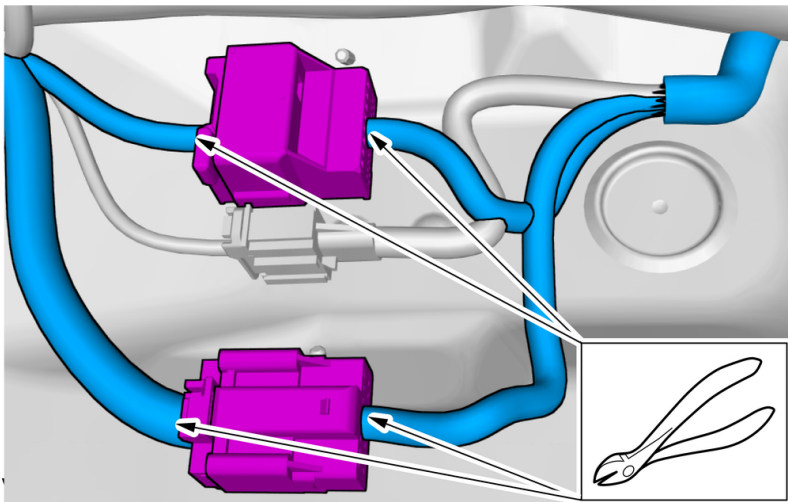
Follow VIDA instructions regarding cable splicing, refer to:

Cleaning, Inspection and Adjustment

3 - Electrical system

37 - Cables and fuses

371 - cables



Cut off and discard of connector/connectors.
Only work on one harness at a time.

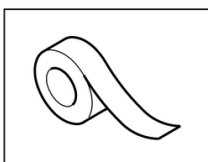
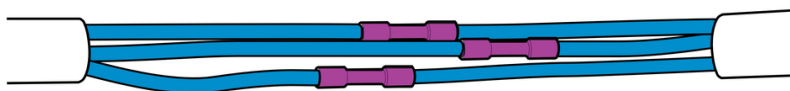
Wire splicing without extension wire.

Special Tool: T9512785, Crimping tool
(included in 9512669)

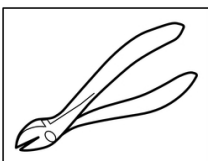
Remove any length of wire that is corroded.

Use hot air gun, use tape.

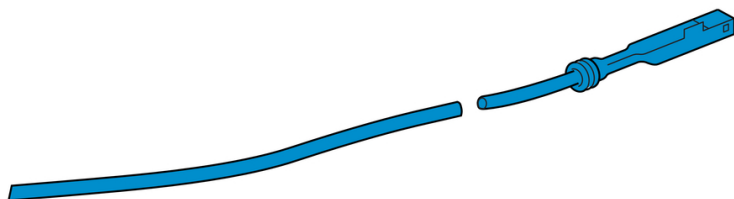
If extension of a wire is needed, see below:



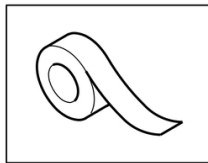
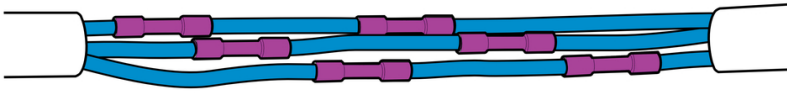
Wire splicing with extension wire.



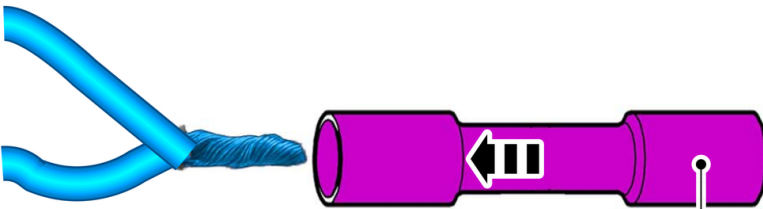
Remove and discard the terminal. Use the wire only.
Use the appropriate gauge repair terminal for the
specific wire being repaired.



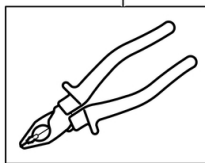
Special Tool: T9512785, Crimping tool
(included in 9512669)
Remove any length of wire that is corroded.
Use hot air gun, use tape.
If extension of a wire is needed, see below:

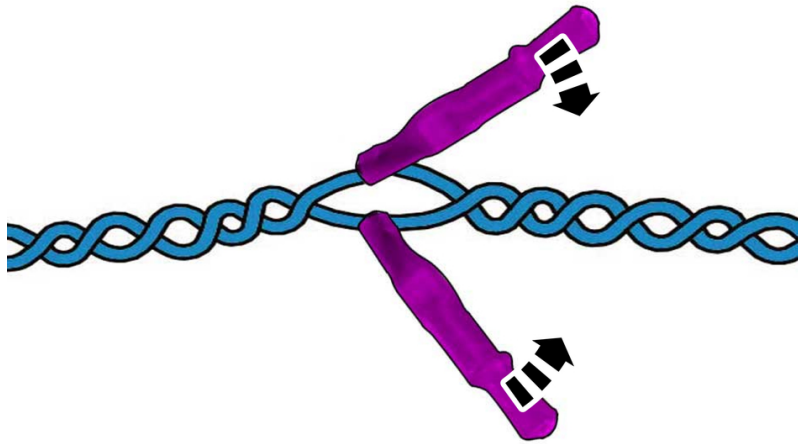


Splicing twisted pairs (CAN and FlexRay networks)

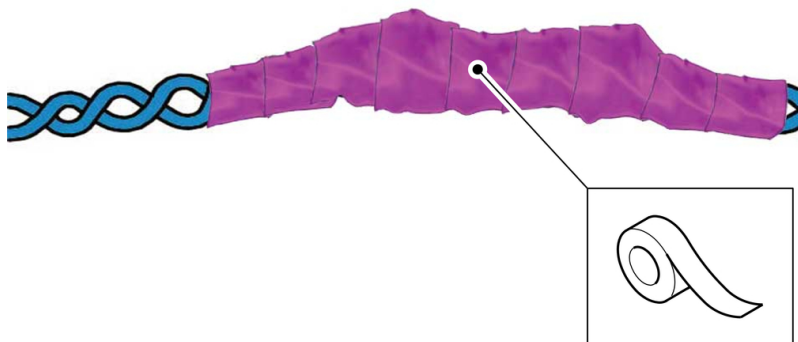


When splicing wires that are part of a twisted pair, both ends of the mating wires can be inserted into the same end of the splice. This reduces the untwisted length.

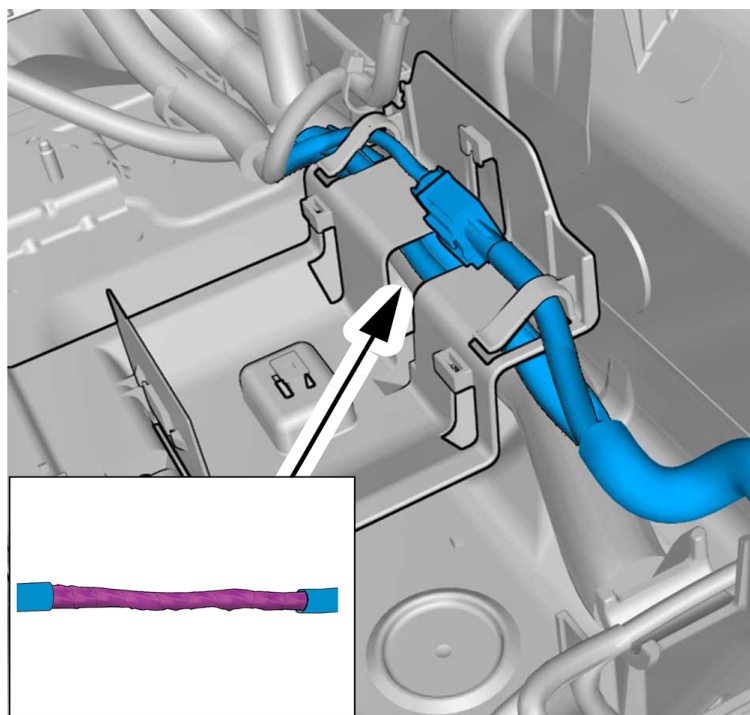




Minimize the untwisted length.
Point both splices in the same direction.
Use hot air gun, use tape.
Seal the unused end of the splice.



Tape up the twisted pair.

Installation

Route the repaired harness back in the same position.

To install, reverse the removal procedure.