



Technical Journal

TITLE:

Service Campaign A89772: Thermal Expansion Valve (TXV)

REF NO:
TJ 31603

ISSUING DEPARTMENT:
Technical Service

CAR MARKET:
United States and Canada

PARTNER:
3 US 7510 Volvo Car USA

ISSUE DATE:
2016-05-13

STATUS DATE:
2016-05-19

FUNC GROUP:
8743

FUNC DESC:
compressor and mounting;
compressor moun

Page 1 of 10

“Right first time in Time”

Attachment

File Name	File Size
QBI-493597-1_1_0_en-US.pdf	4.0622 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
256	BC	B1BPHEV					2016-2016	21	0000548-0069530	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 of Canada Ltd (Volvo) on behalf of Volvo Car Corporation, has decided to launch Service Campaign A89772 on model year 2016 XC90 Hybrid T8 vehicles.

Volvo has identified that Thermal Expansion Valve (TXV) may stick and not allow refrigerant to pass the shut off valve fast enough during opening. This condition can result in no or poor cooling in the passenger compartment, and/or noise from the Air Conditioning Compressor.

A Driver Information Module (DIM) message may appear.

SERVICE:

The corrective action is to replace the TXV. See attached instructions.

VEHICLE REPORT:

N/A

To view TJ attachment continue to next page. This TJ has one attachment.



Volvo Car Customer Service

QB Instruction VCC-493597-1

Title	Expansion valve	Page	1 (8)
Action	Replacement	Operation number:	87436-2 87004-2 87007-2 87010-3

Affected vehicles

Model year	Model	Engine
2016	XC90 (16-)	B4204T28

Materials

Materials	Qty.	Part No.	Notes
Strip clamp	1.0	983750	
Oil AC-compressor	0.1	31449270	
Expansion valve	1.0	31497064	(R134a);
O-ring	1.0	999266	
O-ring	1.0	999267	
O-ring	2.0	988844	
O-ring	3.0	988839	
O-ring	1.0	988845	

Orientation view

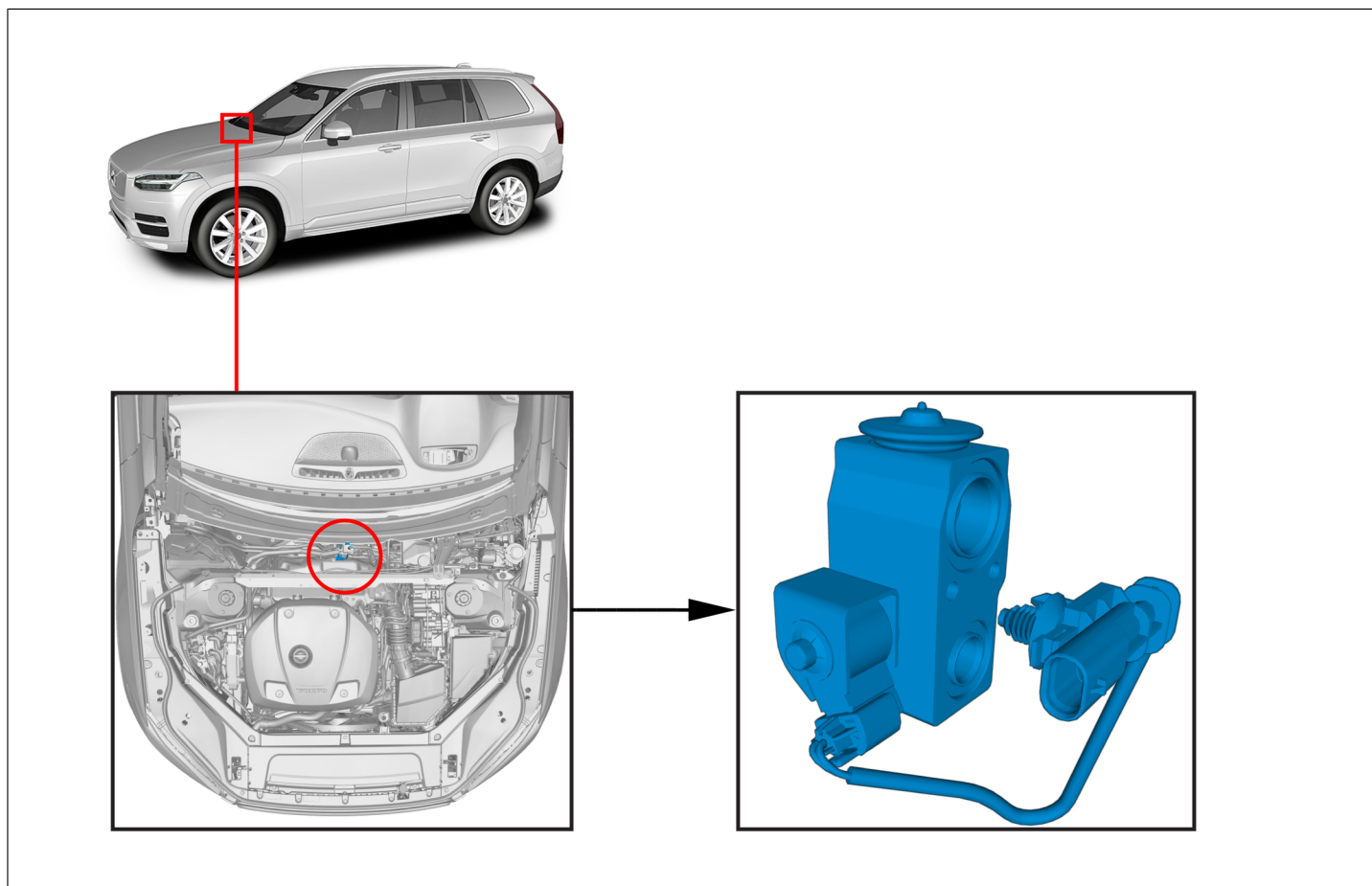
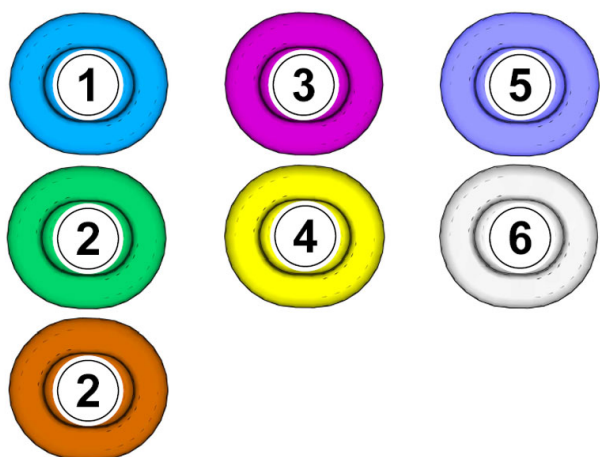


Image philosophy



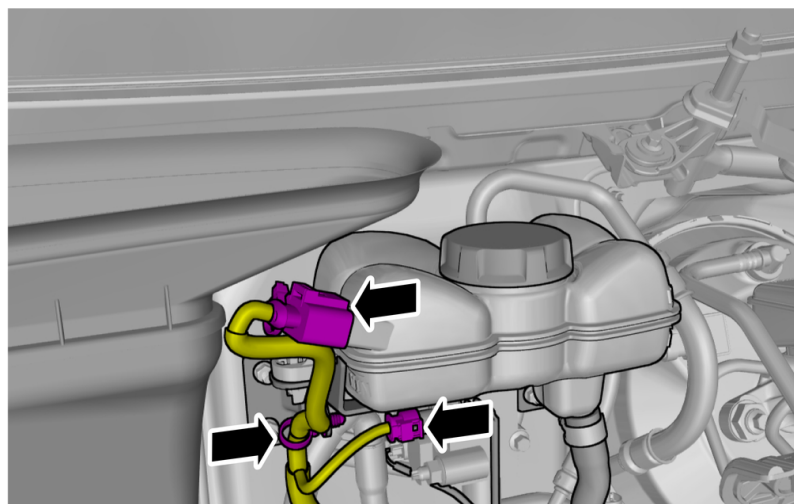
Note! This colour chart displays (in colour print and electronic version) the importance of the different colours used in the images of the method steps.

- 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.

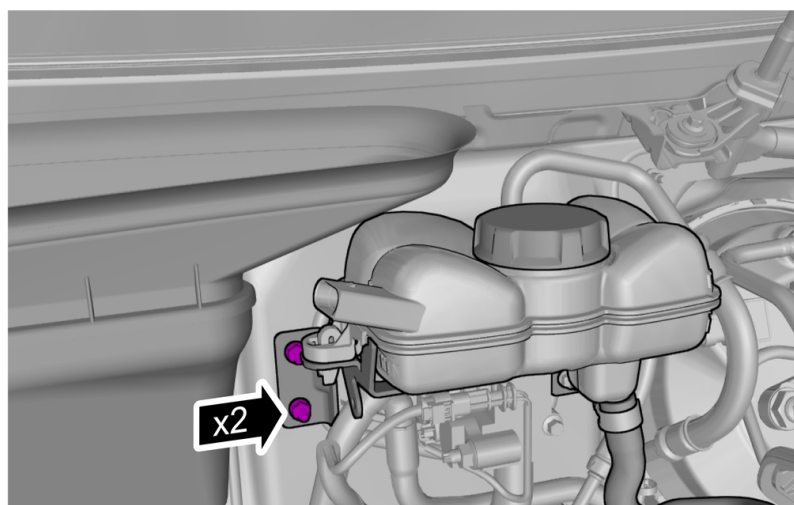
Drain the refrigerant , refer to:
Cleaning, Inspection and Adjustment
8 - Body and interior
87 - Climate units
870 - general

Removal

Remove the secondary bulkhead panel RH ,
refer to:
Removal, replacement and installation
8 - Body and interior
81 - Body frame
811 - floor, frame section, wheel housing,
bulkhead



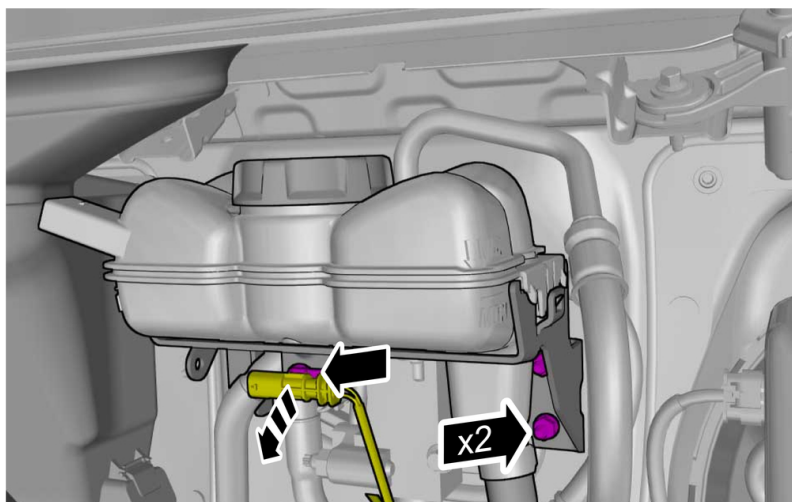
Disconnect the connectors.
Remove the cable harness clips.



Remove the nuts.

Torque:

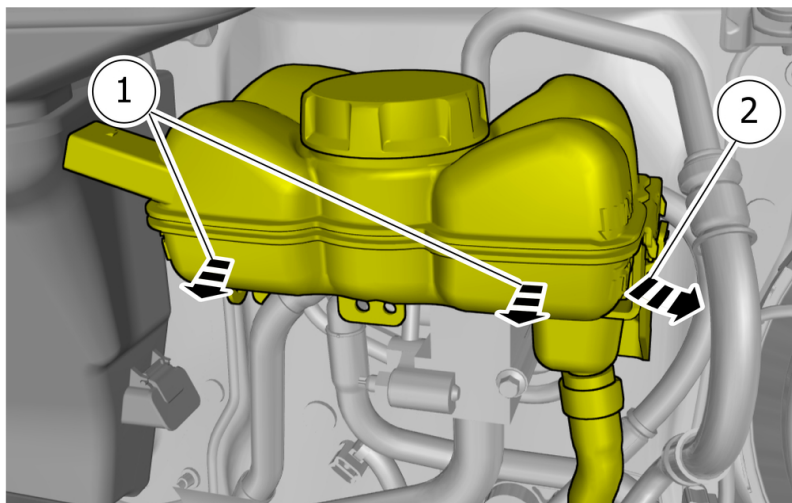
M6 , 10 Nm



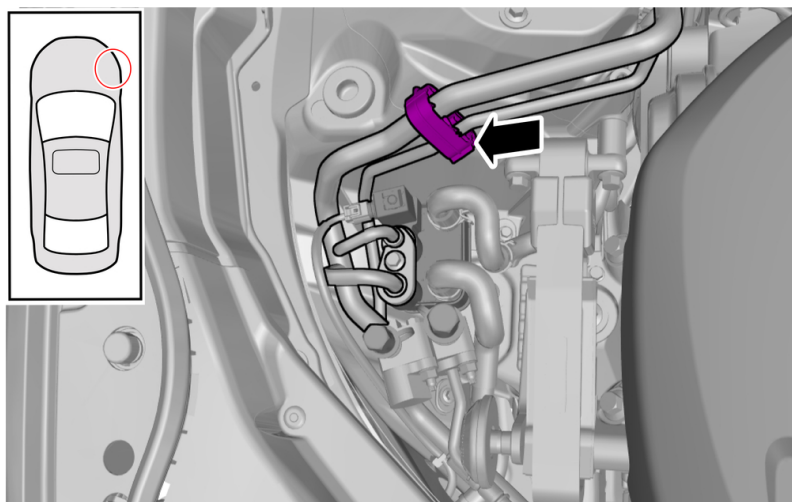
Loosen the clip.
Remove the nuts.

Torque:

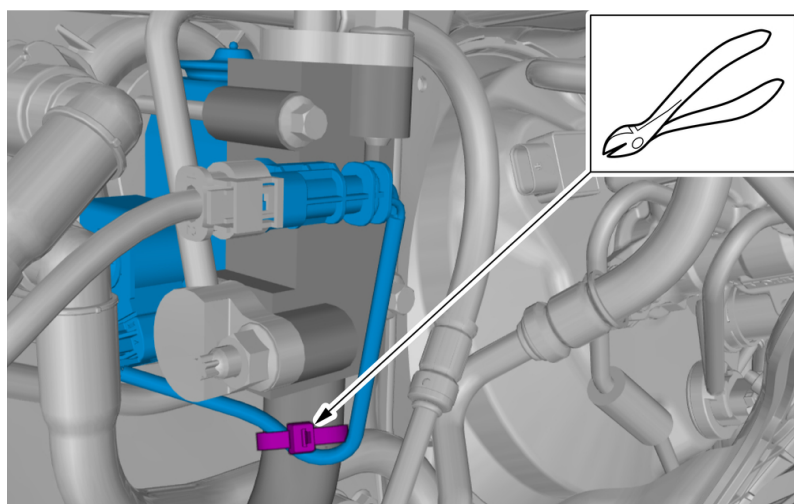
M6 , 10 Nm



- 1 . Remove the part carefully
- 2 . Fold marked part to one side.

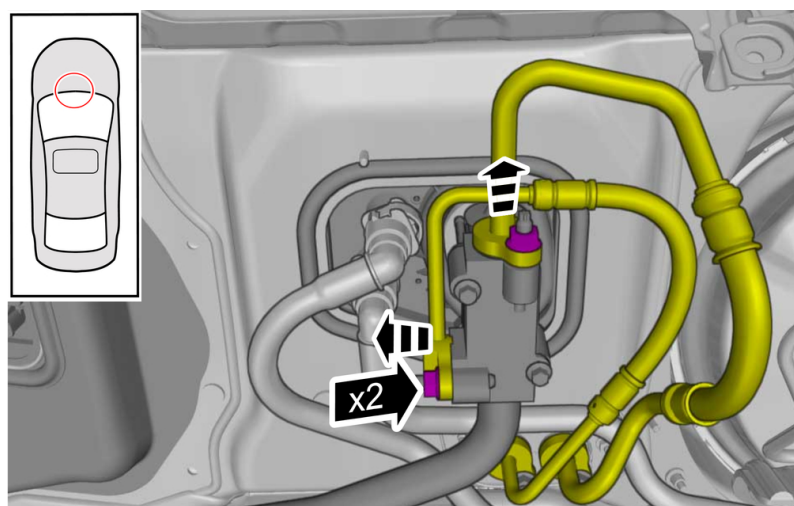


Loosen the clip.



Remove the cable tie(s).

Use: Strip clamp , 983750



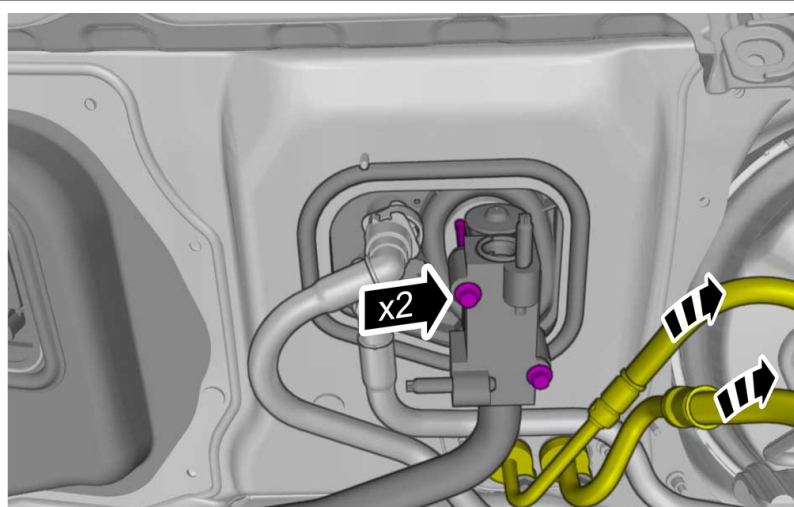
Caution! Make sure that all openings are sealed.

Remove the nuts.

Torque:

Refrigerant pipe to junction block , 16 Nm

Undo the hoses from the connections.

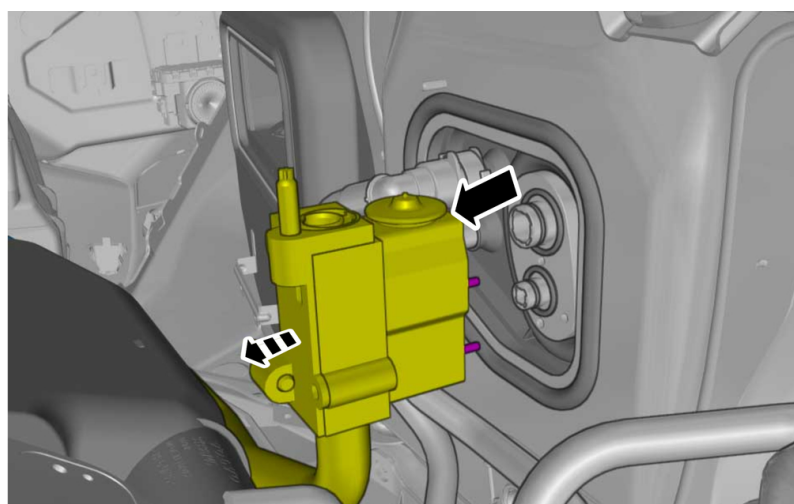


Fold marked part to one side.

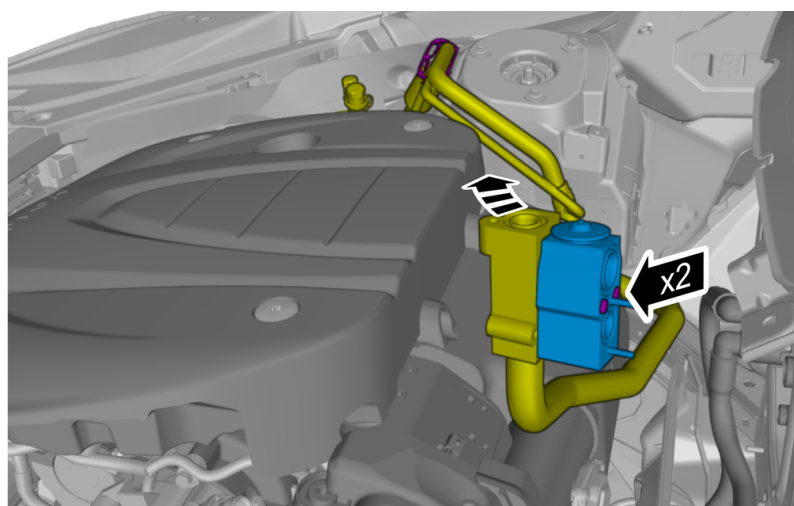
Remove the screws.

Torque:

M6 , 10 Nm



Remove the part carefully



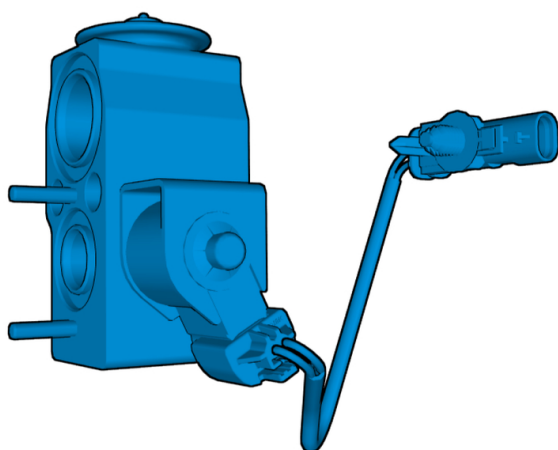
Caution! Make sure that all openings are sealed.

Fold marked part to one side.

Remove the screws.

Remove the marked part.

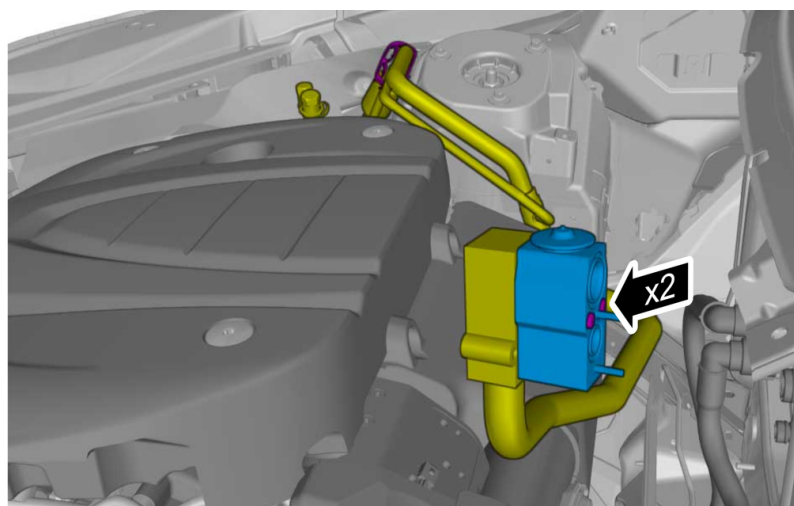
Installation



Caution! Only use the specified material to lubricate the O-ring seals.

Note! Use new O-ring seals.

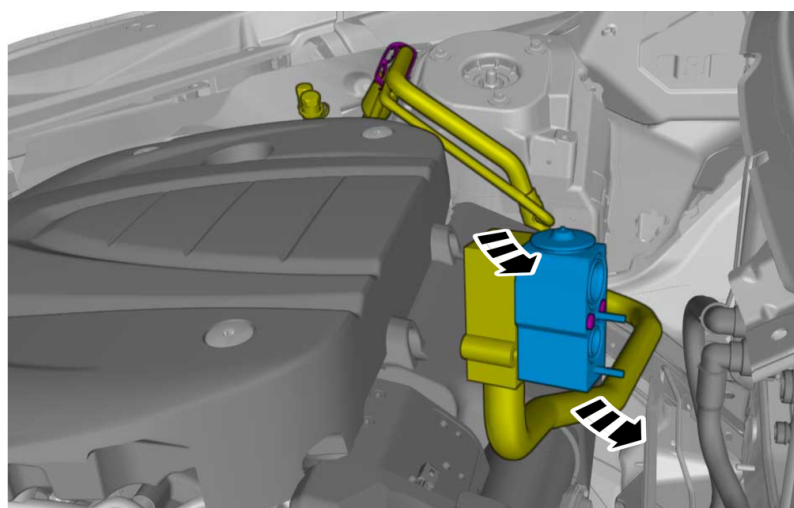
Note! Make sure that the O-ring seal is correctly located.



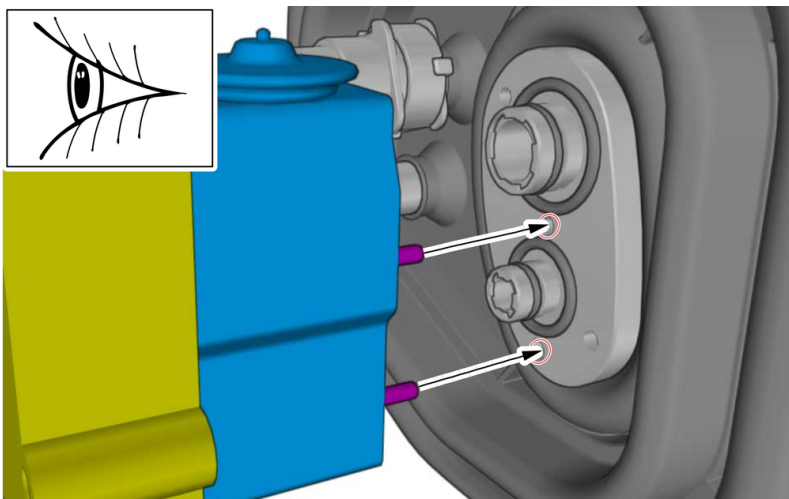
Install the screws.

Torque:

Expansion valve, to Connector block , 6 Nm



Install the marked component.



Caution! Make sure that the component is correctly located on the locating dowels.

To install, reverse the removal procedure.

See information about compressor oil AC , refer to:

- Specifications, mechanical
- 8 - Body and interior
- 87 - Climate units
- 870 - general

Perform refrigerant, filling , refer to:

- Cleaning, Inspection and Adjustment
- 8 - Body and interior
- 87 - Climate units
- 870 - general

Perform climate unit, checking , refer to:

- Cleaning, Inspection and Adjustment
- 8 - Body and interior
- 87 - Climate units
- 870 - general