

CHECKING : ANCILLARY DRIVE BELT

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Markings on dynamic roller tensioner

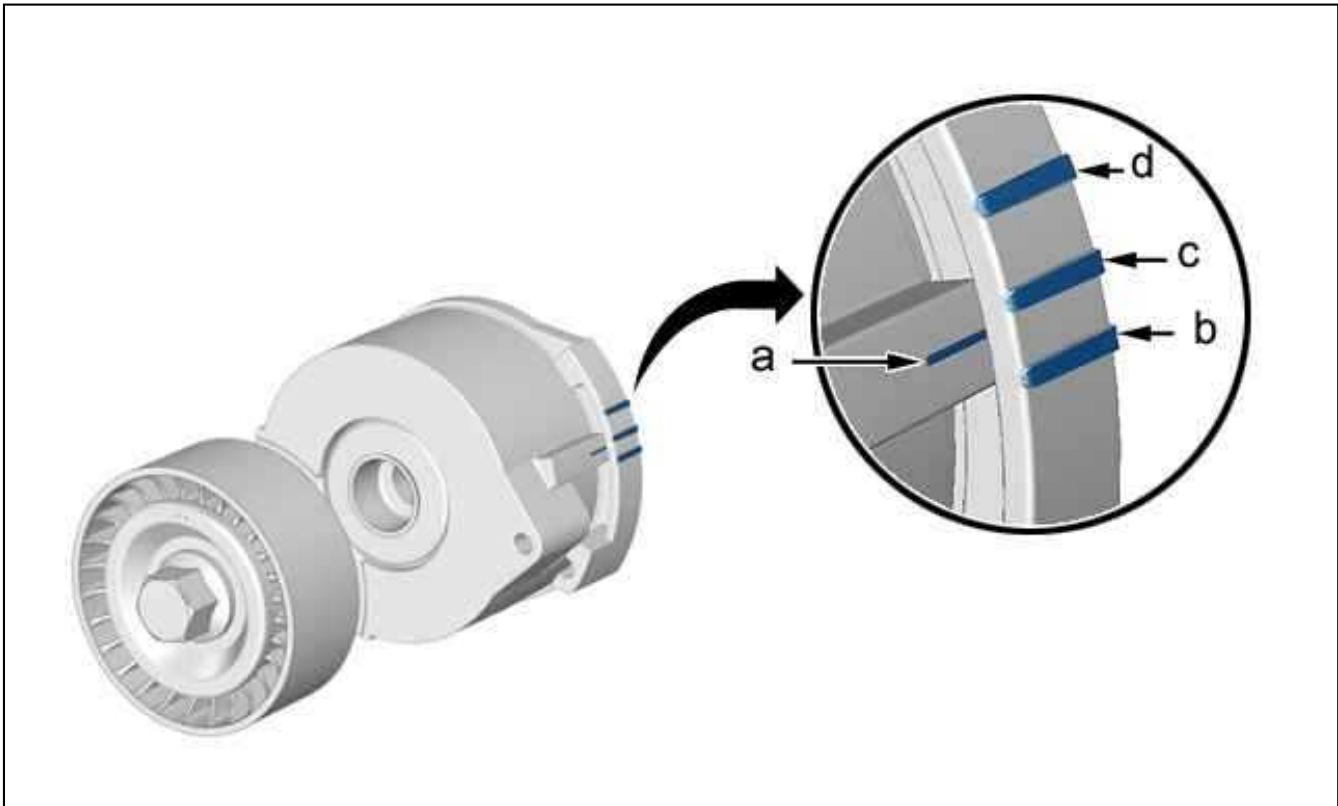


Figure : B1BD00LD

"a" indicator.

"b" Minimum elongation mark : Belt.

"c" Maximum elongation mark : Belt.

"d" Ancillary drive belt replacement mark.

N.B. : This marking system permits checking of the extension of the ancillary drive belt.

2. Checking the accessory drive belt

2.1. Removing

Visually check the extension of the ancillary drive belt on the dynamic tensioner.

CAUTION : If the indicator "a" is between marks "c" and "d" : Replace the ancillary drive belt.

CAUTION : Mark the direction of rotation of the elastic auxiliary drive belt if it is to be reused.

Remove the accessories drive belt ⓘ .

2.2. Checks

Make the following checks :

- Confirm the absence of points of resistance, noise and traces of grease on the dynamic tensioner and accessory pulleys
- Check there is no oil on the accessory drive belt
- Visually inspect the belt, flexing it slightly to check that it has no splits or cracks on the back or in the grooves

Replace any defective parts.

2.3. Refitting

Refit the ancillary belt .

Turn the engine through 4 revolutions and check the alignment of the accessory drive belt.

CAUTION : Check that the accessories drive belt is positioned correctly on the dynamic tensioner and in the grooves of the pulleys.

REMOVING - REFITTING : ANCILLARY DRIVE BELT

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

Equipment :

- 15 mm 6-sided socket
- Extension 1/2
- 1/2 sliding handle

tool	Reference	Designation
 [0188-Q1] Figure : E5AB05JT	[0188-Q1]	4 mm dia. peg

2. Removing

Raise the vehicle, wheels hanging.

Turn the steering to right-hand full lock.

Remove the right-hand front mudguard.

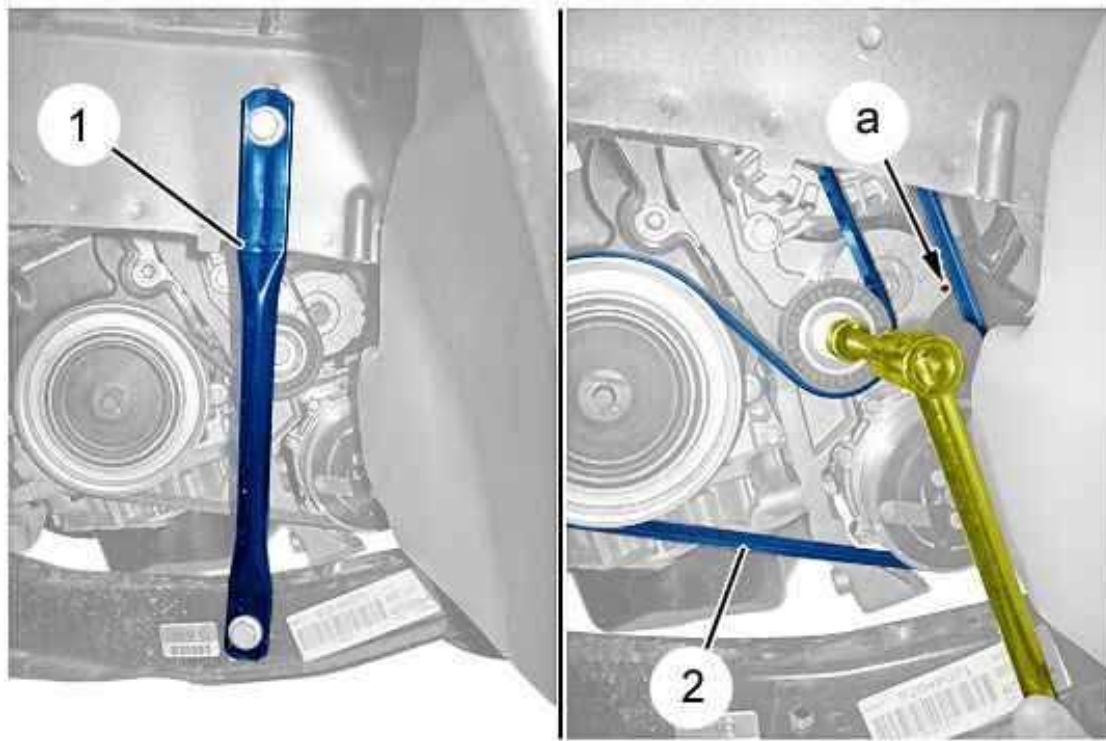


Figure : B1BG1EBD

CAUTION : Mark the direction of fitting of the ancillary drive belt if it is to be reused.

Remove the stiffener (1).

Keep the dynamic tensioner tensioned.

Peg (as "a") ; Using tool [0188-Q1].

Remove the accessories drive belt (2).

3. Checks

Make the following checks :

- Confirm the absence of points of resistance, noise and traces of grease on the dynamic tensioner and accessory pulleys
- Check there is no oil on the accessory drive belt
- Visually inspect the belt, flexing it slightly to check that it has no splits or cracks on the back or in the grooves

Replace any defective parts.

4. Refitting

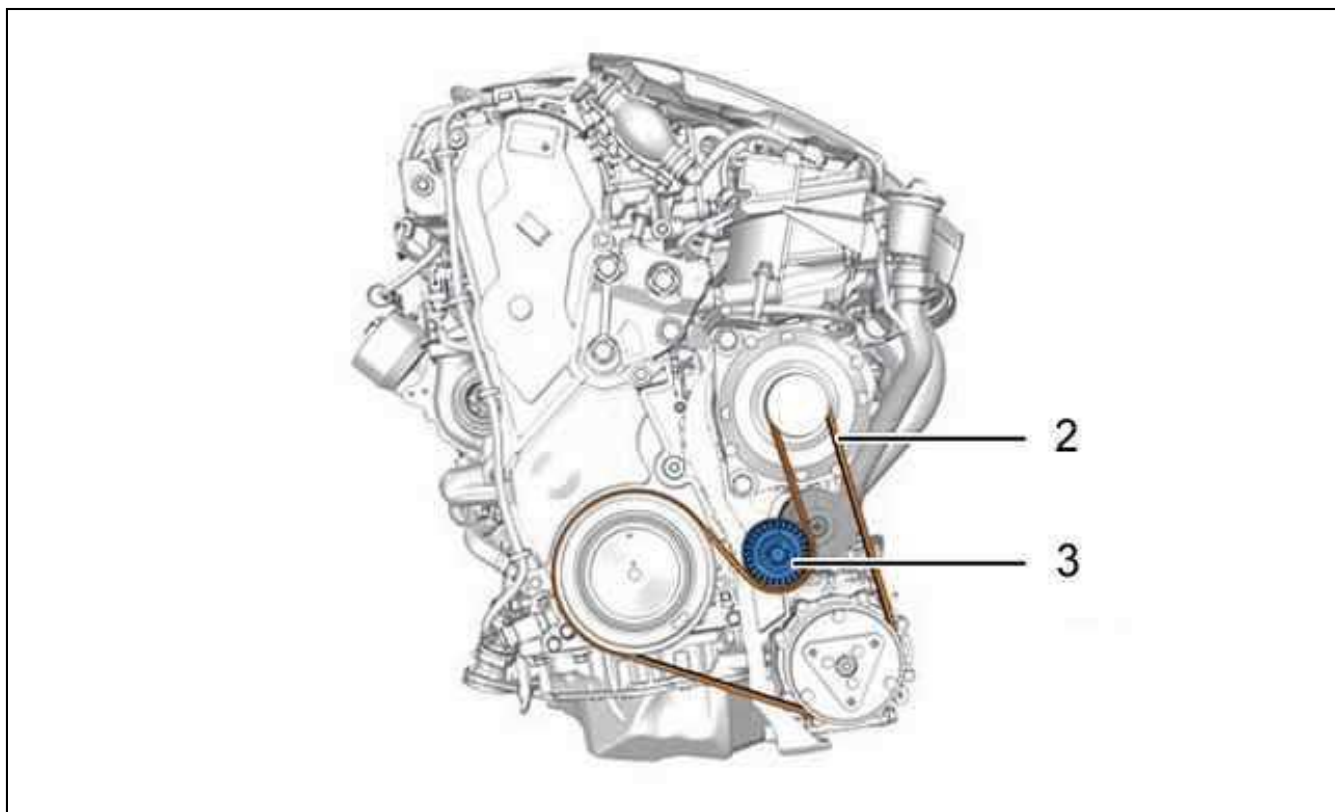


Figure : B1BG1ECD

CAUTION : If re-using the existing accessories drive belt, refit it in the correct fitting direction.

Refit the ancillary belt (2).

CAUTION : Check that the belt is correctly fitted in the grooves of the different pulleys.

Remove the peg [0188-Q1] while compressing the dynamic tensioner (3).

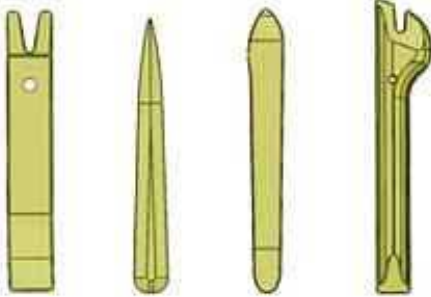
Refit :

- The stiffener (1)
- The front right mud guard

REMOVING - REFITTING : ESP SWITCH

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

tool	Reference	Description
[1350-ZZ]  Figure : E5AG02MT	[1350-ZZ]	Stripping tools

2. Preliminary operations

Disconnect the battery ⓘ .

3. Removing

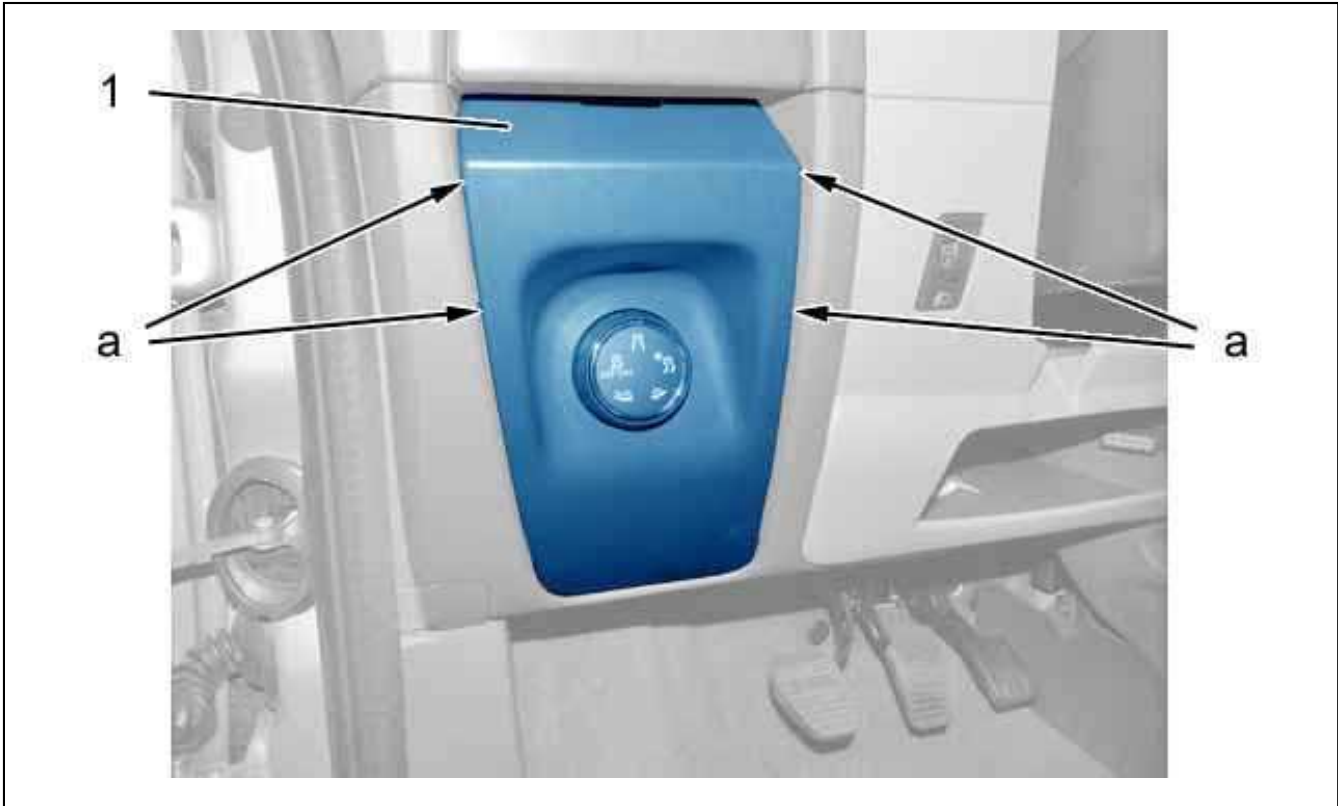


Figure : C5FG1N4D

Unclip the flap (1) (at "a") ; Using tool [1350-ZZ].
Release the flap (1).



Figure : C5FG1N5D

Disconnect the connector (at "c").

Unclip the clip (at "b") ; Using tool [1350-ZZ].
Release the flap (1).

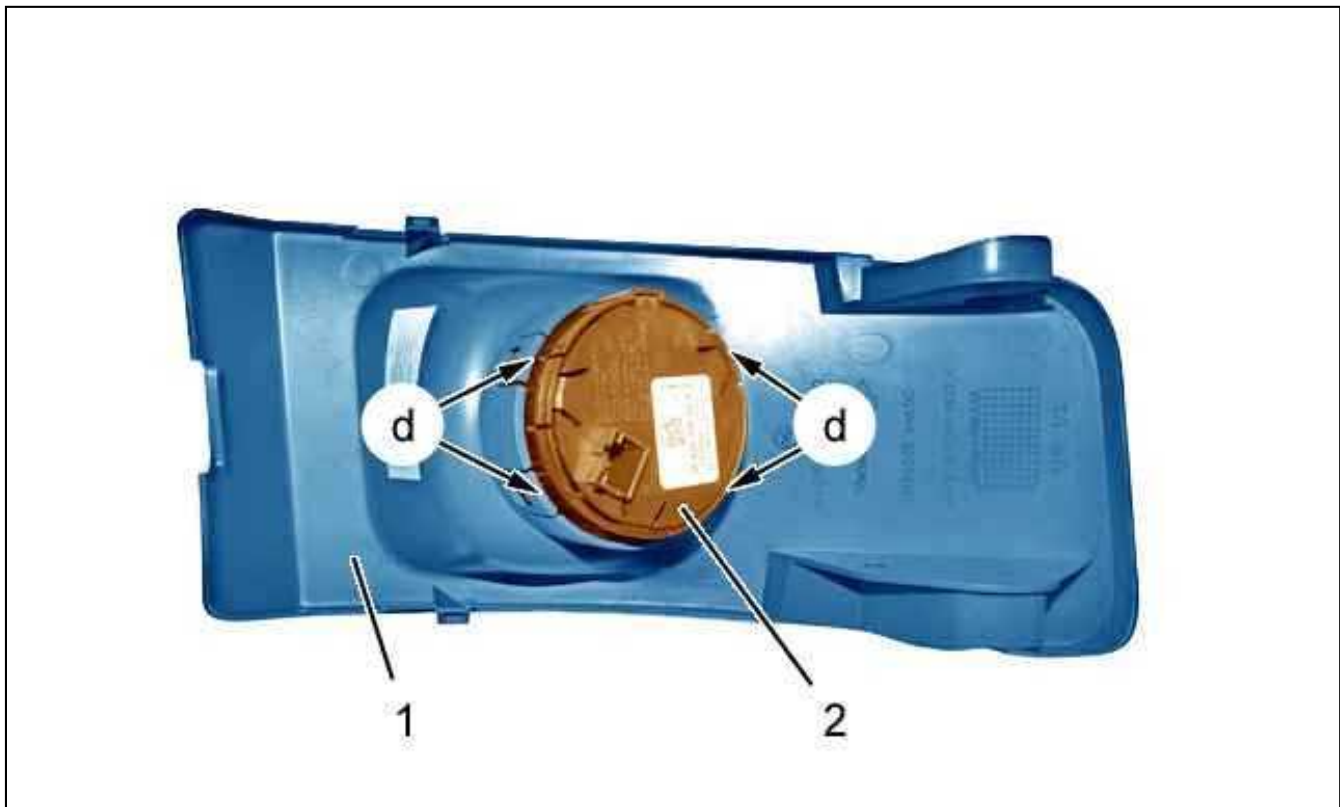


Figure : C5FG1N6D

Unclip : The switch ESP (2) (at "d") ; Using tool [1350-ZZ].

Remove :

- The switch (2)
- The flap (1)

4. Refitting

Proceed in the reverse order to removal.

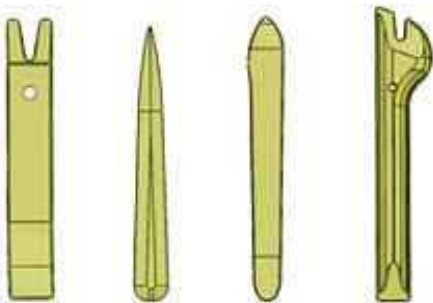
Reconnect the battery.

Check the operation of the equipment.

REMOVING - REFITTING : DEFLATION DETECTION CONTROL UNIT

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

tool	Reference	Description
[1350-ZZ]  Figure : E5AG02MT	[1350-ZZ]	Stripping tools

2. Preliminary operations

Disconnect the battery ⓘ .

3. Removing

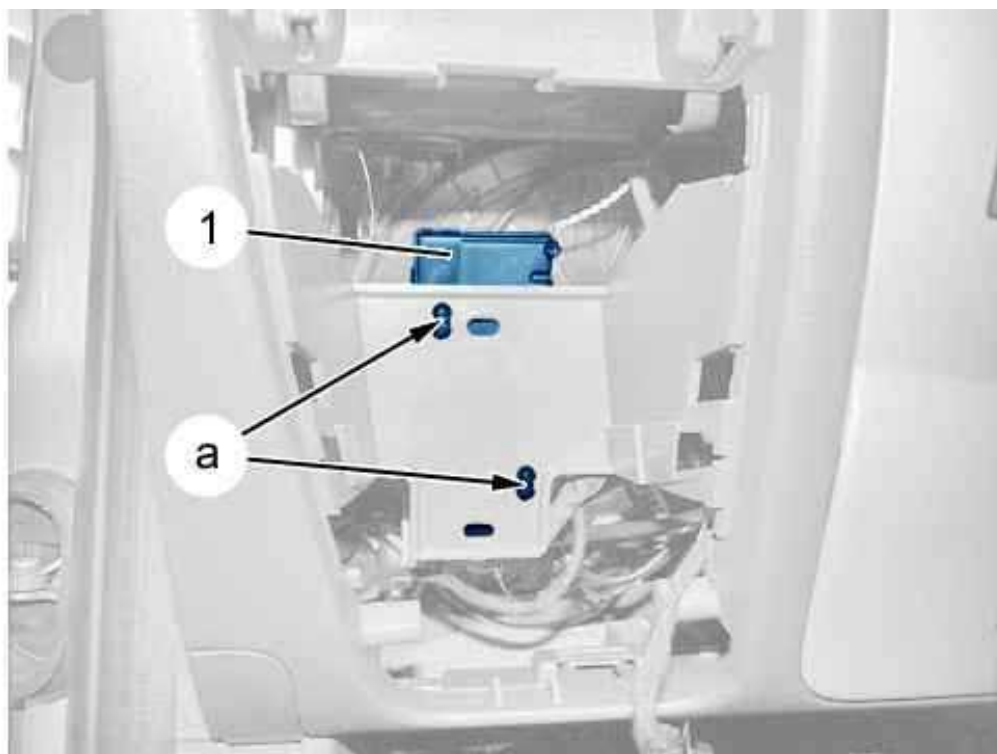


Figure : C5FG1N2D

Unclip : The deflation detection control unit (1) (at "a") ; Using tool [1350-ZZ].

Detach : The deflation detection control unit (1).

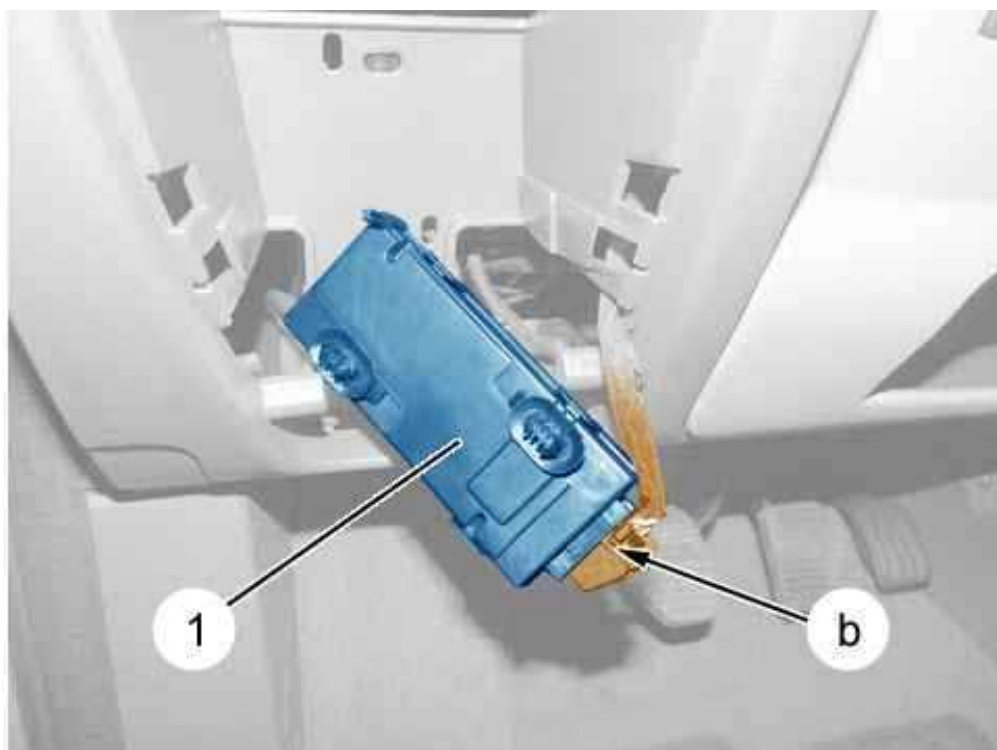


Figure : C5FG1N3D

Disconnect the connector (at "b").

Remove : The deflation detection control unit (1).

4. Refitting

Proceed in the reverse order to removal.

ESSENTIAL : If replacing the deflation detection control unit (1), perform an initialisation of the wheel transmitter modules ; Using the diagnostic tool.

Reconnect the battery.

Check the operation of the equipment.

REMOVING - REFITTING : DASHBOARD AIR CONDITIONING CONTROL PANEL

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Recommended tools

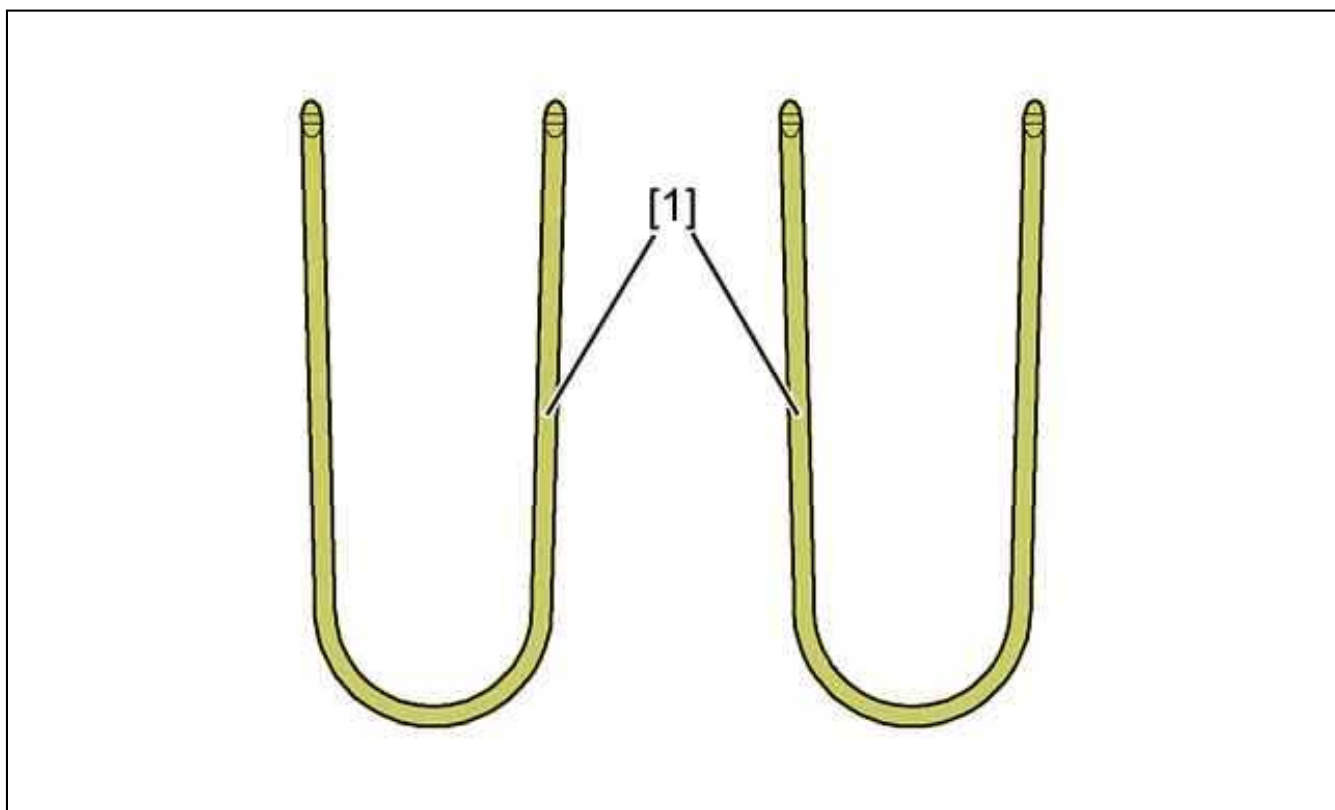


Figure : E5AP2W9D

[1] clips for removing the audio systems .

2. Removing

Disconnect the battery.

2.1. Manual air conditioning

Remove :

- The multifunction display ⓘ (according to equipment)
- The dashboard central storage compartment ⓘ (according to equipment)
- The fascia panel central panel ⓘ

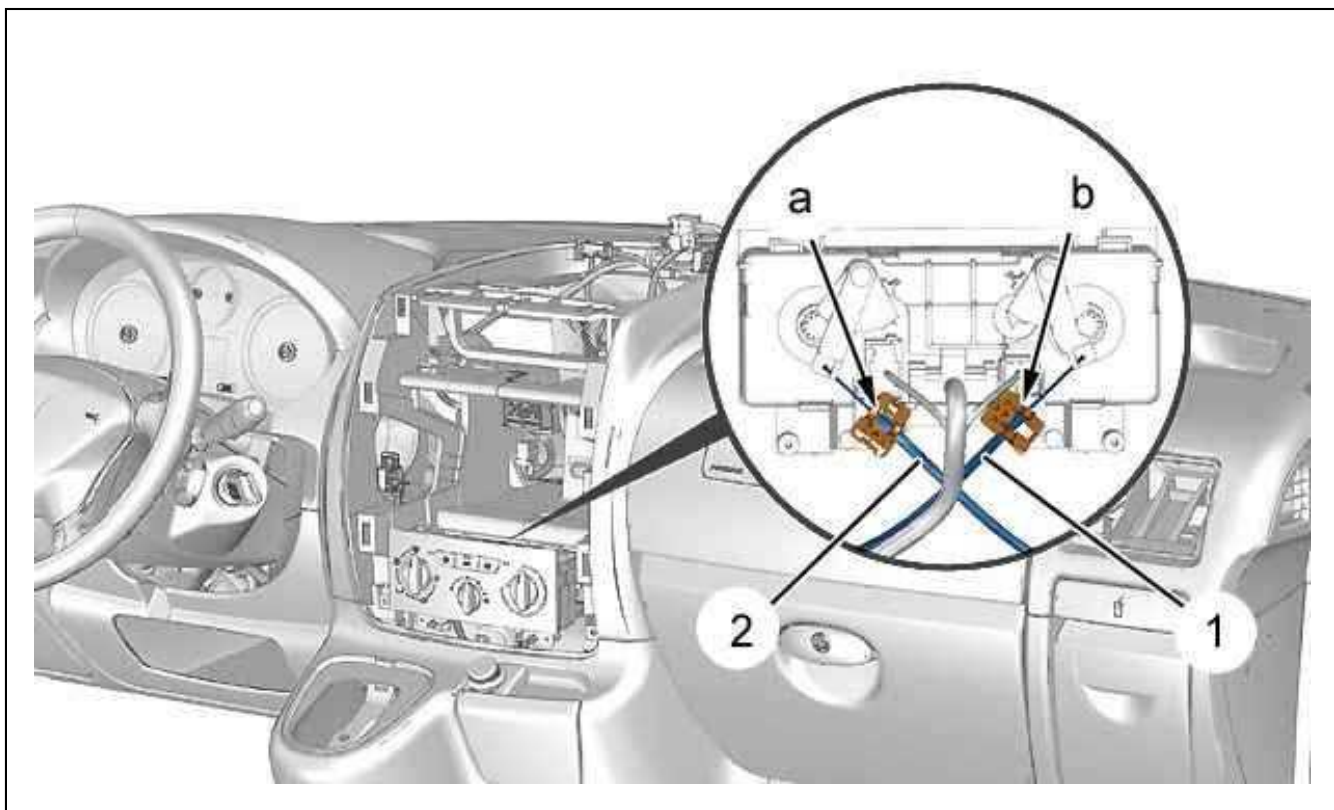


Figure : C5FP1E5D

Remove the lock clips "a", "b" to release the cables (1), (2).

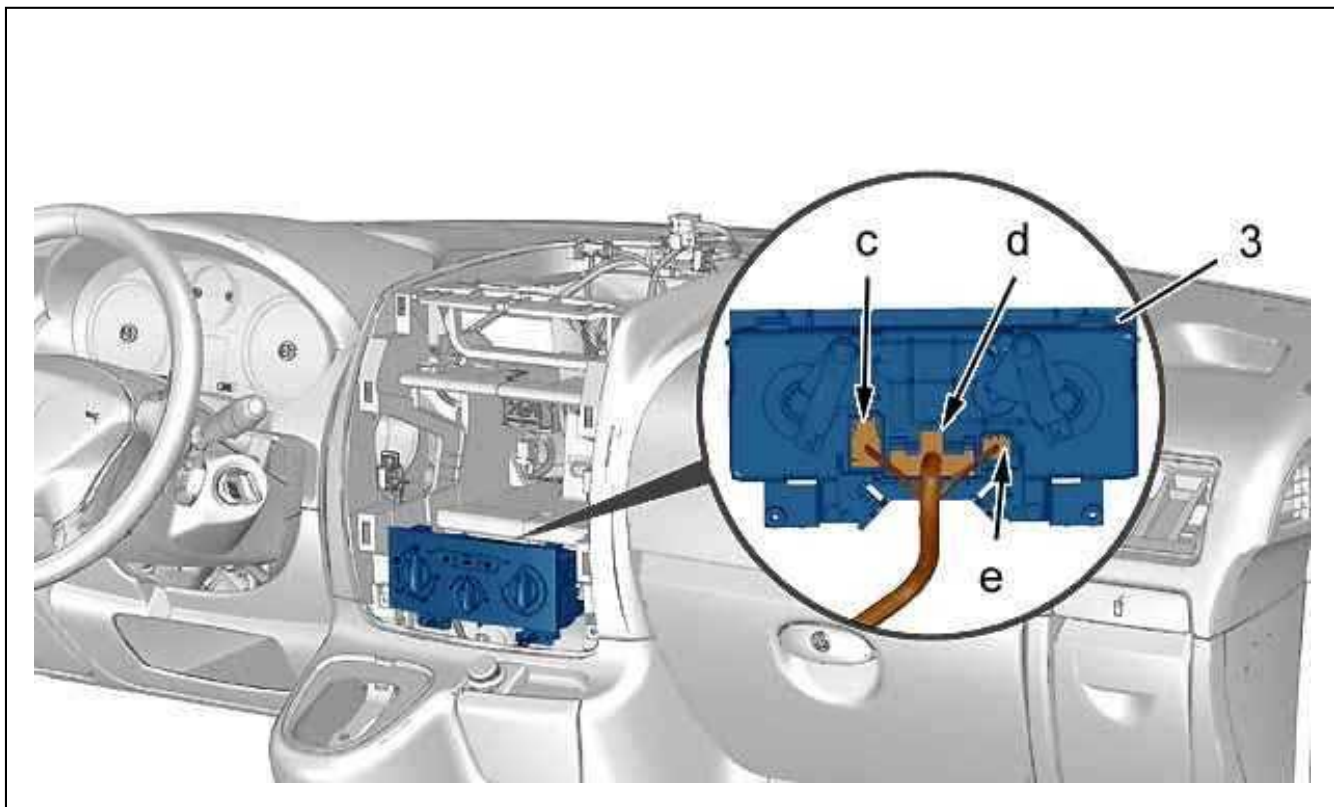


Figure : C5FP1E6D

Disconnect the connectors (at "c", "d", "e").
Remove the dashboard air conditioning control panel (3).

2.2. Automatic air conditioning (Dual zone)

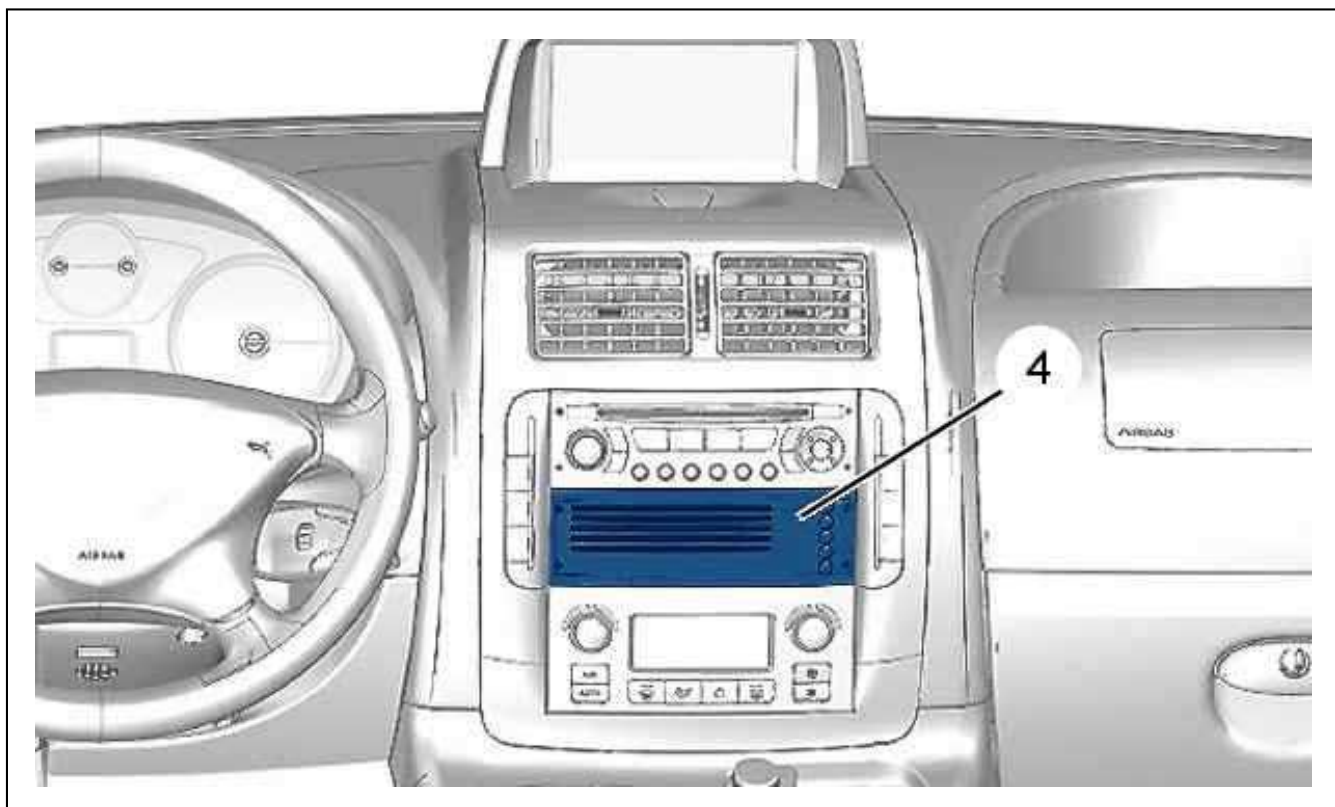


Figure : C5FP1E7D

Remove the CD changer (4) ; Using tool [1] (according to equipment).

Remove the lower dashboard central panel .

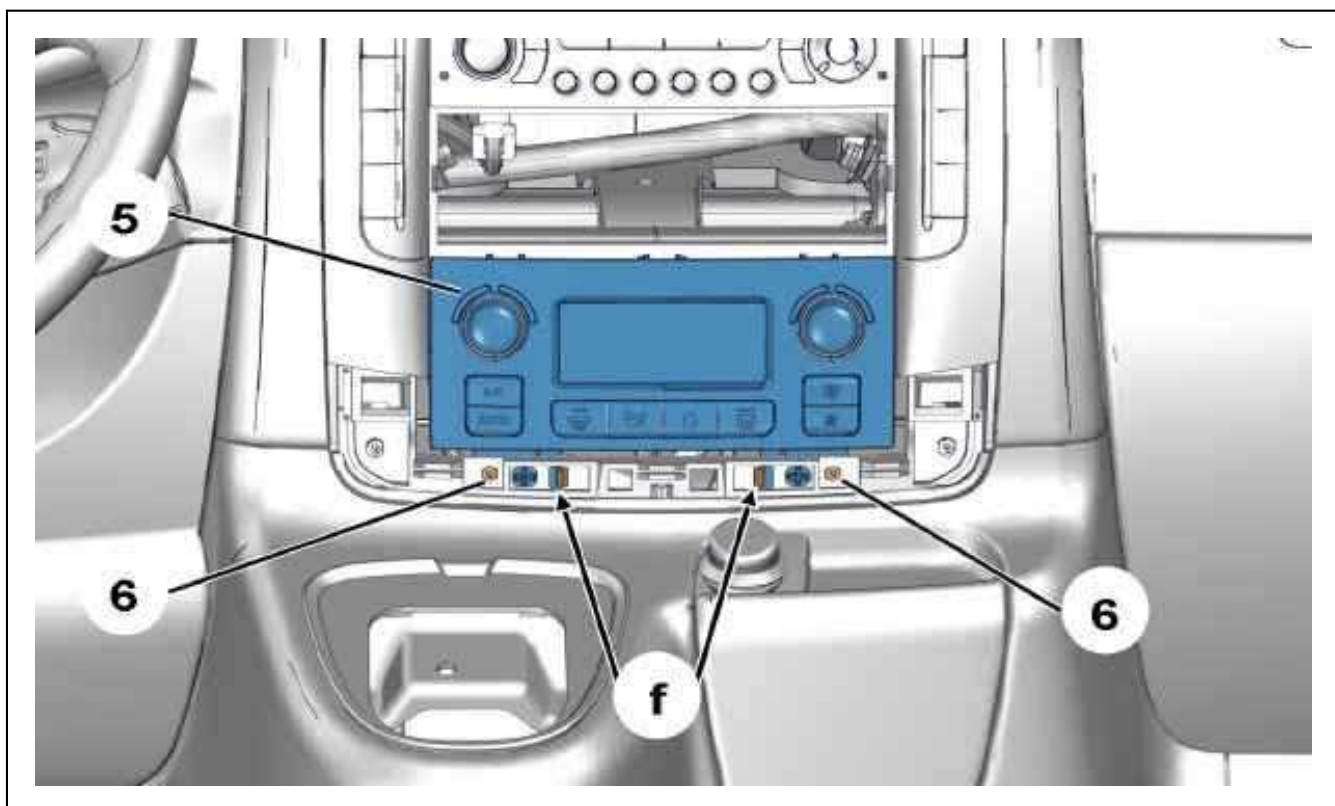


Figure : C5FP1E8D

Remove the bolts (6).

Detach :

- The securing lugs (as "f")
- The dashboard air conditioning control panel (5)

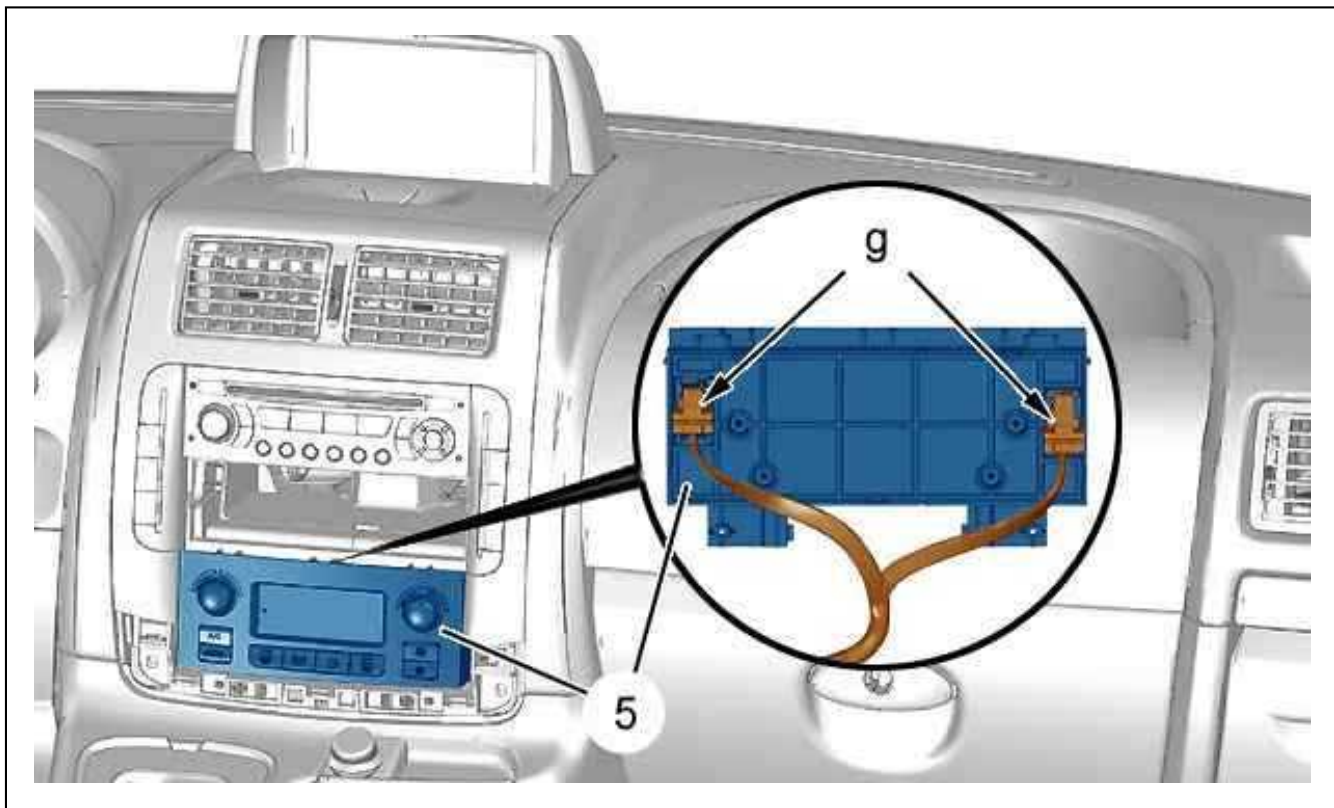


Figure : C5FP1E9D

Tilt the dashboard air conditioning control panel (5).

Disconnect the connectors (at "g").

Remove the dashboard air conditioning control panel (5).

3. Refitting

Proceed in the reverse order to removal.

Tighten the bolts (6) to $0,2 \pm 0,1$ daN.m.

CAUTION : Perform the operations to be carried out following reconnection of the battery ⓘ.

Reconnect the battery.

Check that the electrical equipment is working correctly.

CHECKING : AIR CONDITIONING COMPRESSOR

ESSENTIAL : Prior to any repair on the air conditioning circuit ⓘ ; Observe the precautions to be taken.

1. Tooling

Equipment : Recovery/filtering/vacuum extraction/charging equipment.

tool	Reference	Designation
[EXXO-CLIM]  Figure : E5AB0N9T	[EXXO-CLIM]	Air conditioning circuit pressure checking kit
[1701-HZ]  Figure : E5AD00ZT	[1701-HZ]	Set of plugs

2. Air conditioning compressor check

CAUTION : Before carrying out any work on the air conditioning compressor, top up the air conditioning circuit charge
If the air conditioning circuit failure persists : Make the following checks.

2.1. Preliminary check

Visual check - Air conditioning compressor :

- Check that the frame has not suffered any knocks and that it is not distorted
- Check that the pulley has not suffered any knocks or bangs
- Check that the clutch engages when the coil is supplied with 12V
- Verify the condition of : Supply cable- connector
- Check that the body of the air conditioning compressor is not cracked (at the air conditioning compressor fixing points)
- Check that the air conditioning compressor intake and discharge ports are not damaged

Fault : Noise		
Symptoms	Possible causes	Solutions
Air conditioning compressor noise	Pulley ball bearing damaged	Replacement of the pulley
	Knock to the drive plate (Contact between drive plate and pulley)	Replacement of the drive plate and if necessary of the pulley
Considerable operating noise (Clutch engaged)	Gas charge too high	Observance of the specification when filling the air conditioning circuit
Operating noise and vibration in the passenger compartment	Air conditioning loop pipes in contact with other components of the vehicle	Check that there is no fouling of the pipes
Noise generated by the slipping of the air conditioning clutch	Presence of oil or grease at the clutch	Check : The cleanness of the air conditioning compressor drive plate and pulley
Intermittent or permanent prolonged knocking	Presence of foreign particles under the intake or discharge valves	Check the cleanliness of the pipes before and after the components of the air conditioning circuit

Operating fault		
Symptoms	Possible causes	Solutions
The clutch does not engage when the air conditioning is activated	Bad contact at the connectors	Check the electrical connections
	Incorrect supply	Check whether the supply on the engine harness side is 12V ; No over-voltage, no excess current
The clutch engages, but no cold air is produced	Abnormal air conditioning circuit charge	Check : Refrigerant gas charge

2.2. Check using the [EXXO-CLIM] kit

Check the air conditioning compressor ; Using the tool [EXXO-CLIM].

N.B. : See instructions for use.

2.3. Checking the oil level

CAUTION : The air conditioning compressor lubricant is extremely hygroscopic, use new doses when carrying out work.

2 cases to be distinguished :

- If the residual pressure in the circuit is greater than 0, then it's a matter of operating on the air conditioning circuit without moisture ingress (No leak or slow leak)
- If the residual pressure in the circuit is zero, then it's a matter of operating on the air conditioning circuit with moisture ingress (Long opening of the air conditioning circuit)

2.4. Operation on the air conditioning circuit without moisture ingress

Use of filling and recycling equipment not fitted with an oil trap :

- Drain the refrigerant via the low pressure circuit and as slowly as possible to avoid drawing oil out of the circuit
- The circuit is filled with refrigerant without the addition of oil

Use of filling and recycling equipment fitted with an oil trap :

- Drain the refrigerant circuit conforming to the instructions in the equipment's manual
- Measure the quantity of oil recovered
- Add the same quantity of oil as that recovered

2.5. Operation on an air conditioning circuit with moisture ingress

This type of incident causes a loss of oil as well as allowing air into the system.

Perform the following operations :

- Replace the filtering and drying cartridge, or the condenser if the filtering cartridge is integral to it
- Evacuate the maximum amount of oil possible (when replacing the faulty component)

Before or during the filling of the air conditioning circuit with refrigerant, add 80 cm³ of new oil to the air conditioning circuit.

3. Replacement of the components of the air conditioning circuit

3.1. Air conditioning compressor

Remove the air conditioning compressor .

Drain the air conditioning compressor .

Measure the quantity of oil recovered.

Drain the new air conditioning compressor (supplied with oil), to leave the same quantity of new oil as that contained in the old compressor.

The circuit is filled with refrigerant without the addition of oil.

3.2. Components of the air conditioning circuit (Except air conditioning compressor)

When filling the circuit with refrigerant, add the quantity of oil which corresponds to that contained by the replaced component.

Component replaced	Add the exact quantity of oil
Cooling condensor	20 cc
Air conditioning evaporator	20 cc
Low pressure pipe	5 cc
High pressure pipe	5 cc
Filtring and drying cartridge	15 cc

4. Drain and refill - Refilling : Air conditioning compressor

4.1. Case of an air conditioning compressor with drain plug

N.B. : Operations to be carried out (After removing the air conditioning compressor).

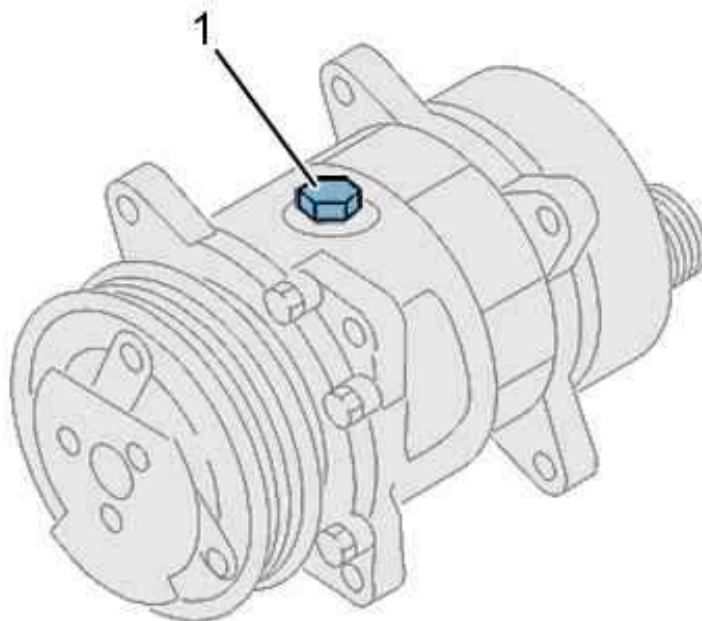


Figure : C5HP1G9D

Remove the drain plug (1).

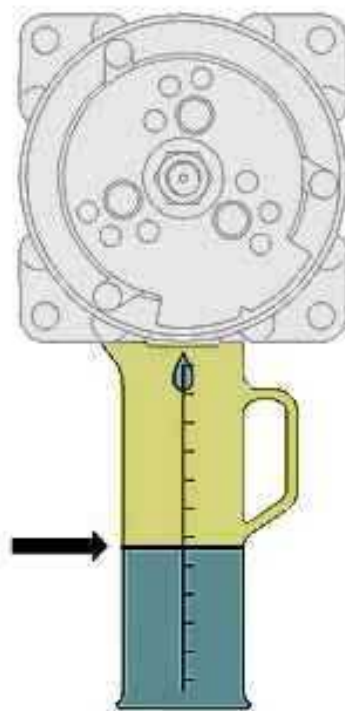


Figure : C5HP1GAD

Turn the air conditioning compressor upside down.
Allow the oil to run out of the air conditioning compressor.

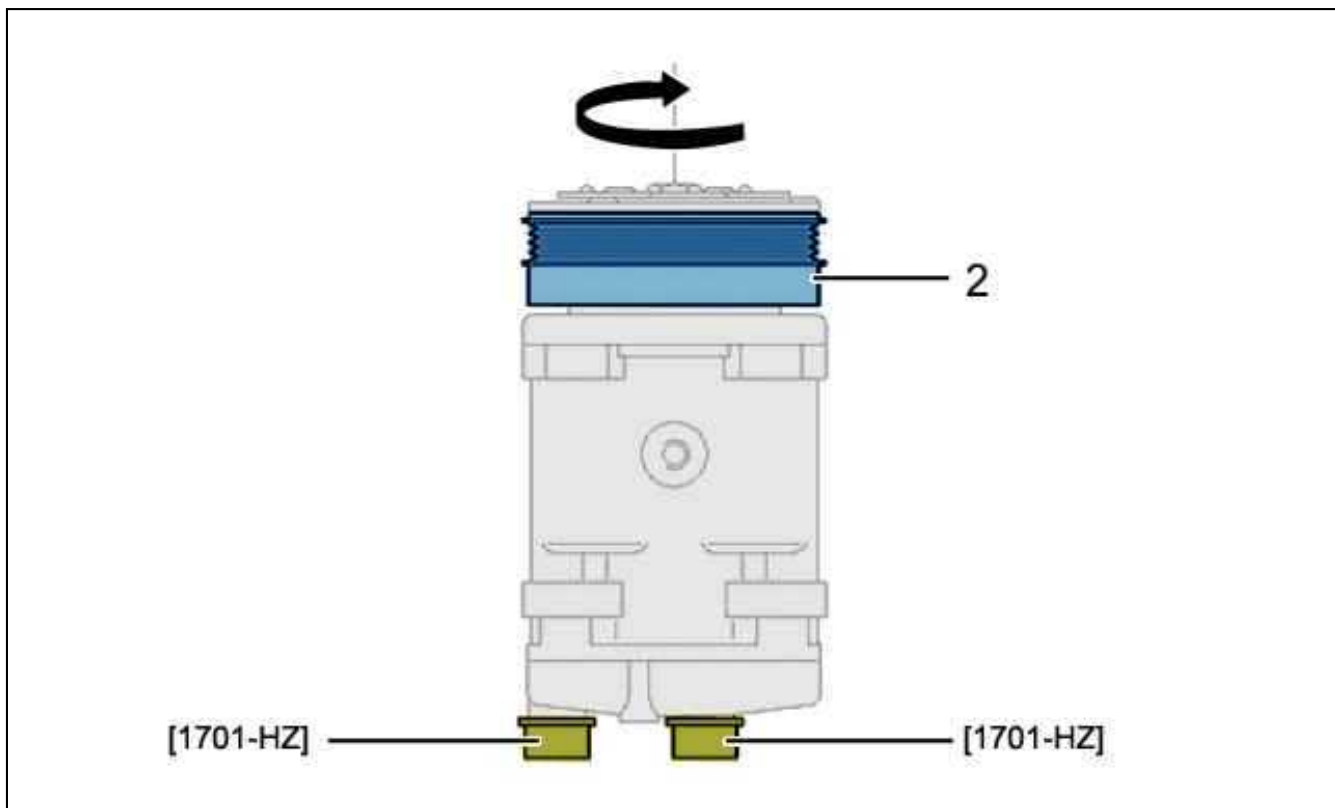


Figure : C5HD00DD

Fit plugs [1701-HZ] on the air conditioning compressor inlet and outlet.
 Place the air conditioning compressor in a vertical position (Air conditioning compressor clutch uppermost).
 Turn the assembly (2) through ten turns (oil flows into the cylinder head).

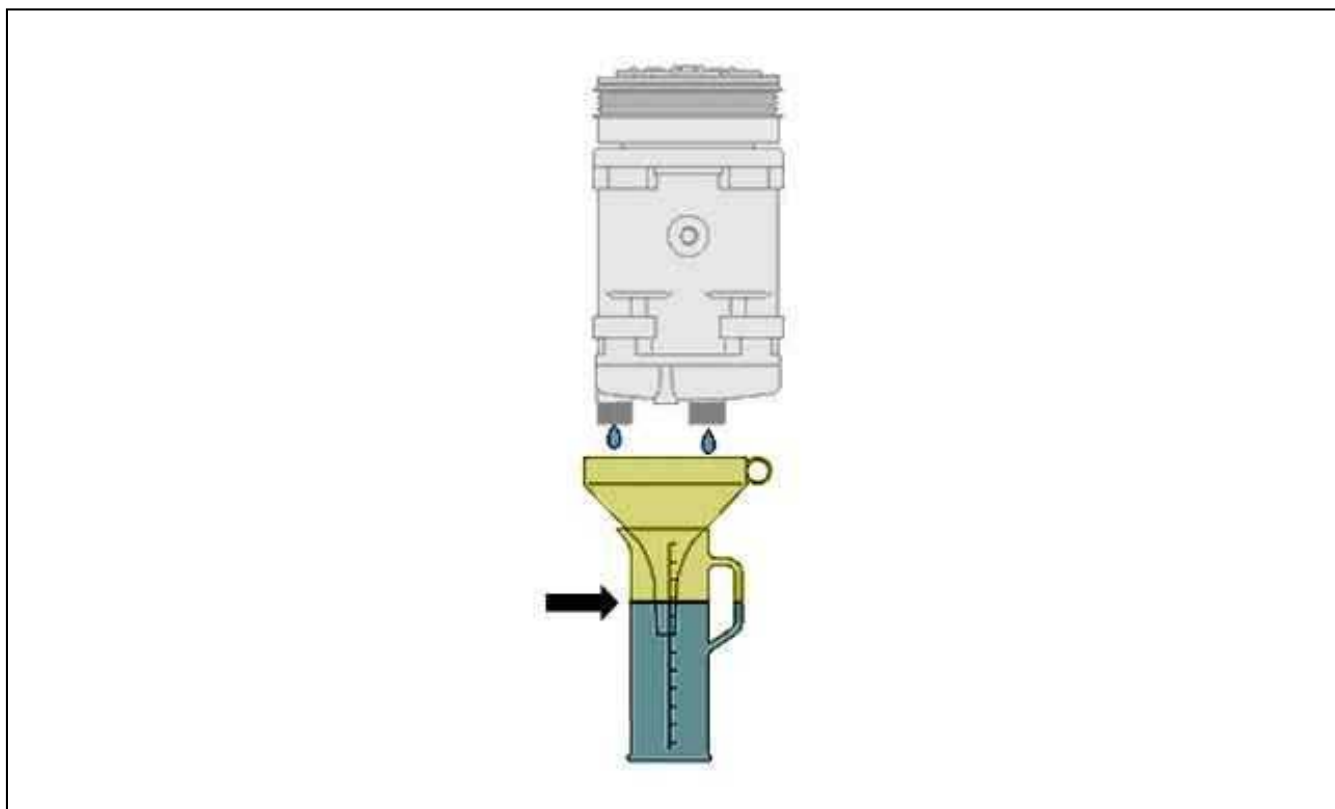


Figure : C5HP1GCD

Remove the plugs [1701-HZ].

Allow oil to flow out.

Measure the quantity of oil recovered.

Compare the total of oil recovered with the quantity recommended by the manufacturer.

N.B. : A variable quantity of oil remains in the air conditioning compressor (depending on compressor type).

Add the same quantity of oil as that recovered (filler neck).

Refit the drain plug (1) (new oiled seal and clean surfaces).

Tighten the drain plug (1) to 2 daN.m.

Refit the air conditioning compressor inlet and outlet plugs [1701-HZ] (if working on the cold loop).

4.2. For a compressor without drain plug

N.B. : Operations to be carried out (After removing the air conditioning compressor).

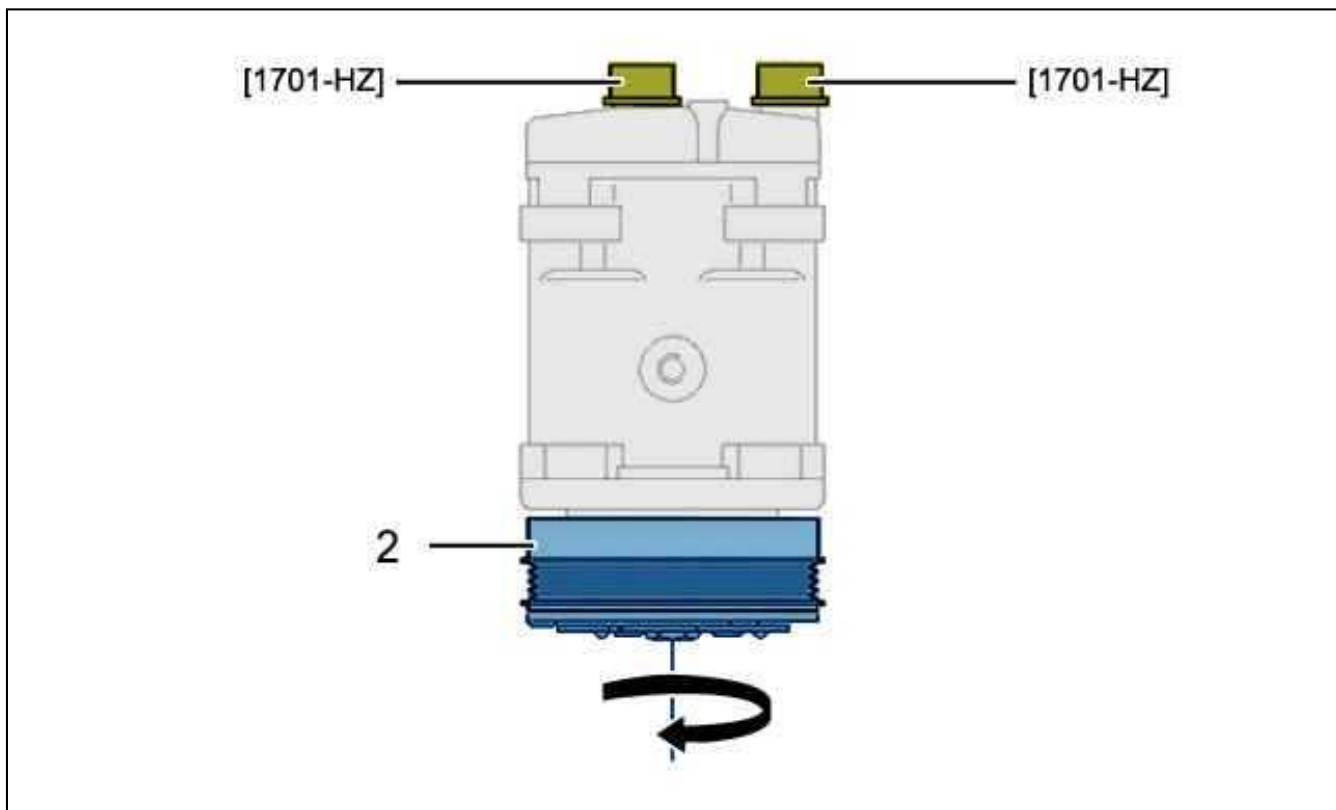


Figure : C5HD010D

Fit plugs [1701-HZ] on the air conditioning compressor inlet and outlet.

Position the compressor vertically (Pulley downwards).

Rotate the pulley of the compressor (2) by 10 turns.



Figure : C5HD011D

Remove the plugs [1701-HZ].

Turn the air conditioning compressor upside down (Pulley of the compressor upwards).

Allow the oil to flow out by rotating the pulley of the compressor.

Measure the quantity of oil recovered.

Compare the total of oil recovered with the quantity recommended by the manufacturer.

N.B. : A variable amount of oil remains trapped in the compressor (depending on compressor type).

Add the same quantity of oil as that recovered (Through the compressor entry and exit).

Refit the air conditioning compressor inlet and outlet plugs [1701-HZ] (if working on the cold loop).

DISPATCH III - C5HD1QP0 - Check : Air conditioning circuit

CHECK : AIR CONDITIONING CIRCUIT

ESSENTIAL : Observe the safety and cleanliness recommendations.

1. Recommended tools

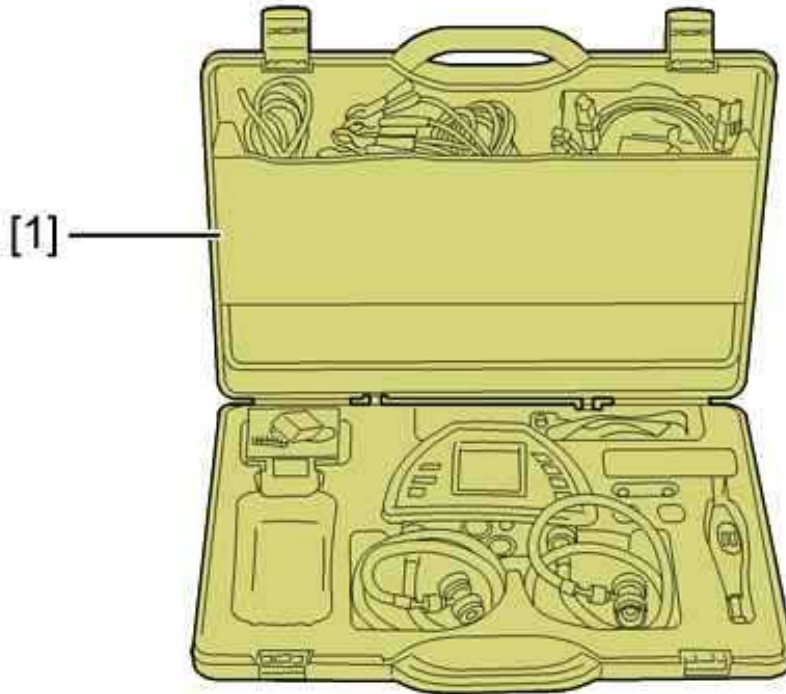


Figure : E5AP34LD

[1] EXXOCLIM kit.

[2]

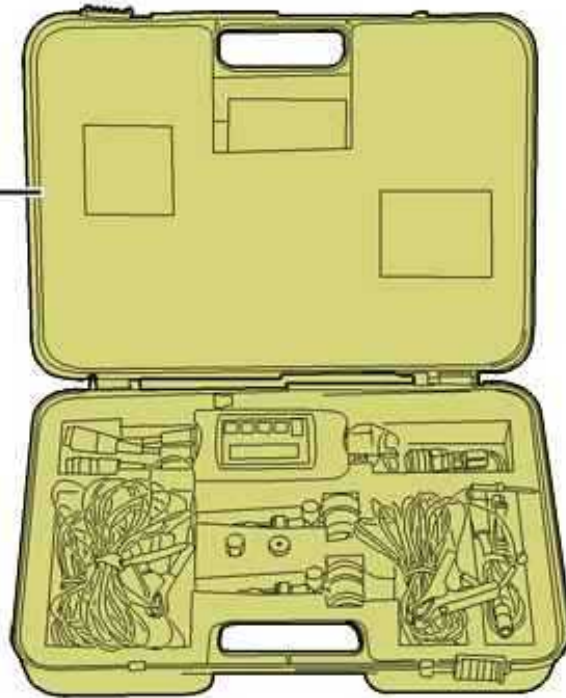


Figure : E5AP34MD

[2] CLIM test 2 VALEO 4372-T.

[3]

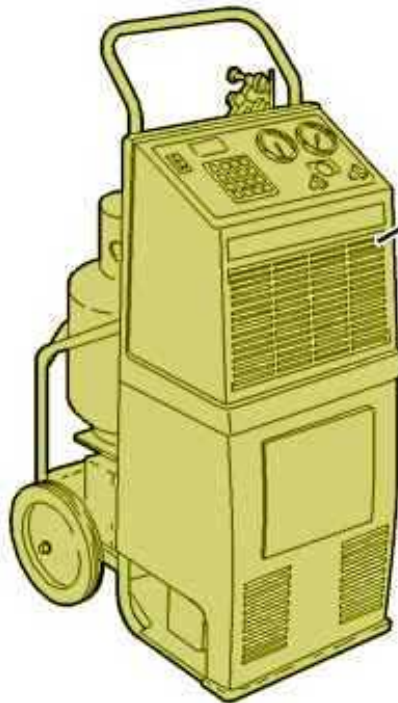


Figure : E5AP34ND

[3] recharging and recycling station.

2. Checking procedure

Fit tool [1] or [2].

Perform the following operations :

- Close all the front vents
- Start the engine
- Open the front left vent

2.1. Manual air conditioning

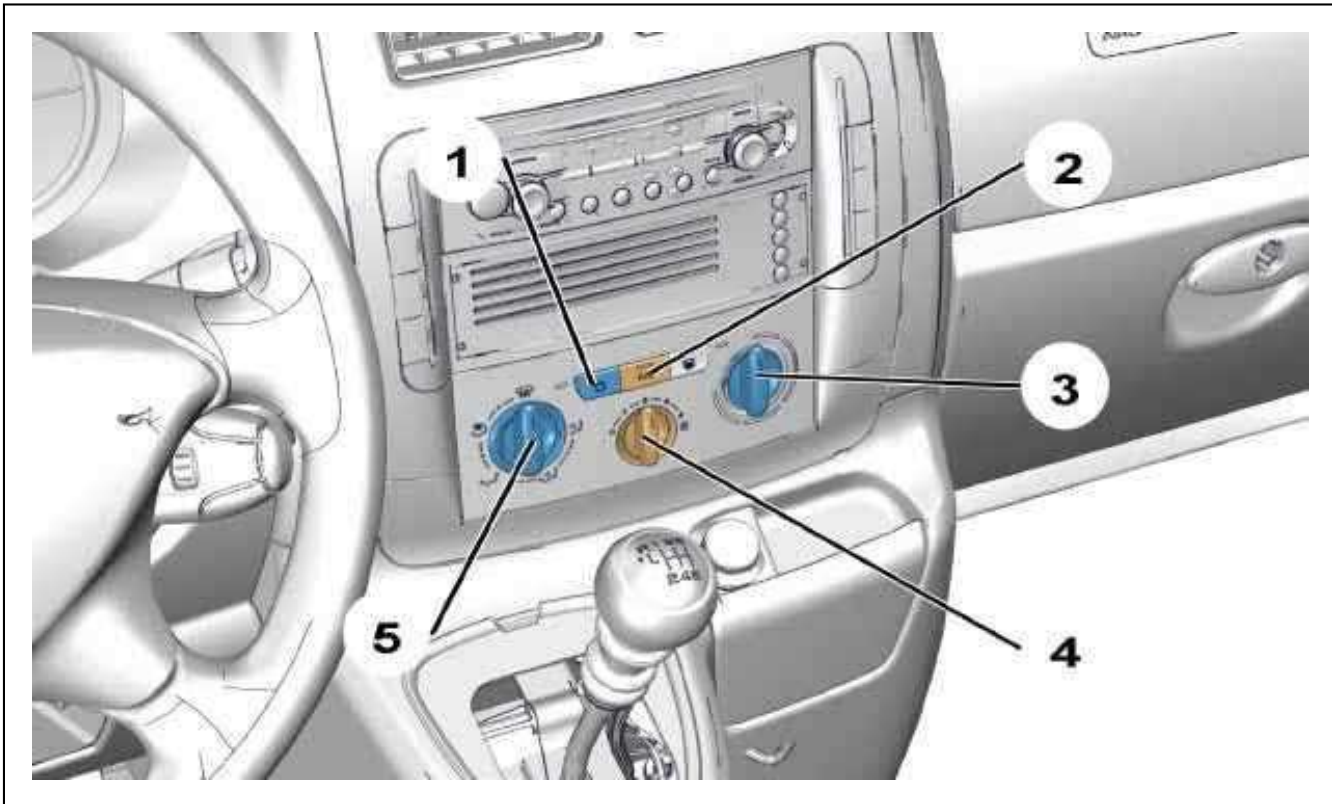


Figure : C5FP1C1D

To start the air distribution function :

- Turn the distribution control (5)
- Select the centre and side vents

To start the outside air circulation function : Press switch (1) (warning lamp off).

To start the air conditioning function : Press switch (2) (warning lamp lit).

To start the air flow function : Turn the air flow control (4) to increase the air flow to maximum.

To start the passenger compartment temperature function : Turn the temperature control (3) to decrease the temperature to minimum.

Operate the air conditioning for 5 minutes.

2.2. Automatic air conditioning

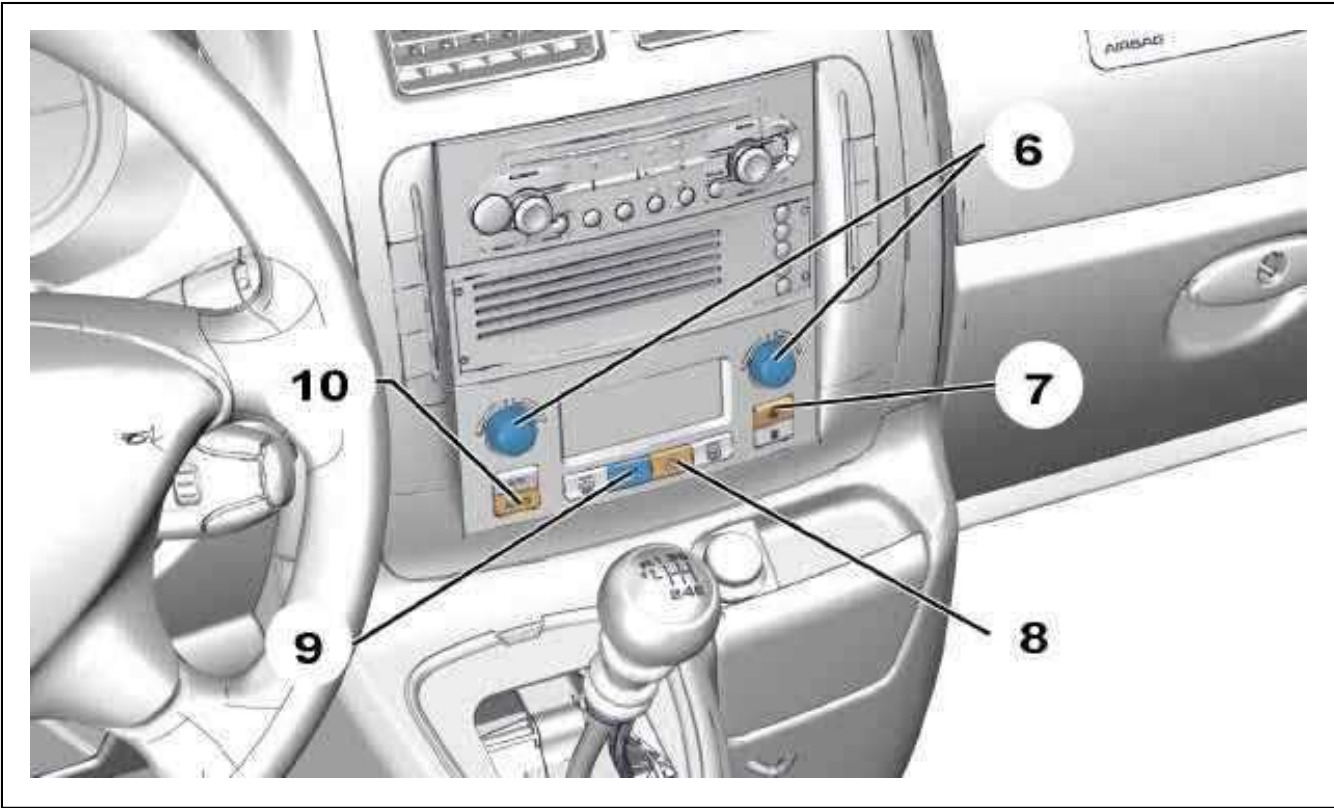


Figure : C5FP1C2D

To start the air distribution function :

- Press switch (9)
- Select the centre and side vents

To start the outside air circulation function : Press switch (8) (Warning lamp off).

To start the air conditioning function : Press switch (10) .

To start the air flow function :

- Press control (7) to increase the air flow to maximum
- The air flow level is indicated on the display by the filling in of the fan blades

To start the passenger compartment temperature function :

- Turn the controls (6) to decrease the temperature to minimum
- The display LO "Low" appears on the display

Operate the air conditioning for 5 minutes.

3. Interpretation of the values (reminder)

Linked with use of the VALEO CLIM Test 2 tool.
These same values are incorporated in the EXXOCLIM tool.

3.1. Undercooling (SR)

The under-cooling represents the difference between the condensation temperature and the refrigerant temperature at the air conditioning condenser outlet.
The under-cooling indicates the quantity of refrigerant (in liquid state) in the air conditioning circuit.

Undercooling (SR)	Causes	Solutions
Less than 2°C	Lack of refrigerant in the air conditioning condenser : Greater than 150 grammes	Add refrigerant using the tool [3]

Between 2°C and 4°C	Lack of refrigerant in the air conditioning condenser : Between approximately 100 and 150 grammes	
Between 4°C and 12°C	Correct charge	-
Higher than 12°C	Excess of refrigerant in the air conditioning condenser	Remove some refrigerant using the tool [3]

3.2. Over-heating

The over-heating represents the difference between the refrigerant temperature at the evaporator outlet and the evaporation temperature.

The over-heating indicates the quantity of refrigerant (in gaseous state) in the air conditioning circuit.

Over-heating	Causes	Solutions
Less than 2°C	Excess refrigerant in the air conditioning circuit	Remove some refrigerant using the tool [3]
Between 2°C and 15°C	Correct charge	-
Higher than 15°C	Lack of refrigerant in the air conditioning circuit	Add refrigerant using the tool [3]

3.3. Blown air temperature "U"

The temperature of the blown air should be between 2°C and 10°C.

4. Air conditioning circuit diagnostics table (as a guide)

Main failure	Symptom	Possible causes
The air conditioning compressor does not operate or stops quickly	The air conditioning compressor clutch does not engage or disengages quickly	Refrigeration compressor clutch Lack of refrigerant in the air conditioning circuit Air conditioning pressure switch Air conditioning evaporator sensor Electrical circuit (connectors, fuses,....)
	The air conditioning compressor clutch remains engaged and stops quickly	Ancillary drive belt air conditioning compressor Filtring and drying cartridge Cooling pressure relief valve Refrigerant leak Refrigeration compressor clutch
The air conditioning compressor makes an abnormal noise	The air conditioning compressor clutch remains engaged	Air conditioning compressor clutch setting incorrect Refrigerant fluid load Air conditioning compressor faulty Lack of refrigerant in the air conditioning circuit Air conditioning compressor

		valves faulty
	The air conditioning compressor clutch remains engaged and slips	Air conditioning compressor clutch Ancillary drive belt
Abnormal pressure values	Low pressure and high pressure too high	Air conditioning pressure relief valve faulty
		Pipe clogged
	Low pressure too high and high pressure too low	Air conditioning compressor seal faulty
	Low pressure too low and high pressure too high	Air conditioning evaporator sensor faulty
		Air conditioning pressure relief valve jammed
		Filtering and drying cartridge blocked
		Pipe clogged
	Low pressure and high pressure too low	Pipe clogged
		Air conditioning pressure relief valve jammed
		Lack of refrigerant in the air conditioning circuit
		Air conditioning compressor faulty
	Low pressure normal and high pressure too high	Presence of air in the air conditioning circuit
	Low pressure normal and high pressure too low	Air conditioning pressure switch faulty
		Faulty evaporator sensor
Operation of the air conditioning in down-grade mode	Low pressure too high and high pressure normal	Air conditioning pressure relief valve jammed open
	Low pressure too low and high pressure normal	Filtering and drying cartridge saturated or clogged
		Air conditioning pressure relief valve iced up
	Under-cooling too low	Lack of refrigerant
	Under-cooling too high	Excess of refrigerant
		Presence of air in the air conditioning circuit
		Filtering and drying cartridge clogged

N.B. : In all cases, measure the over-heating and the blown air temperature.

MAINTENANCE : PASSENGER COMPARTMENT AIR TREATMENT

1. Equipment

Passenger compartment Purifying treatment.

2. Method of treatment

2.1. Preliminary operation

Remove the pollen filter .

2.2. Vehicle configuration

Vehicle configuration :

- Place the vehicle in a protected area (out of wind, sun, etc.)
- With the engine running
- Doors and windows closed

Configuration of the air conditioning controls :

- heating/ventilation: Button A/C in stop position
- Blower : Maximum position (repeat on the control panel)
- Air distribution : All flaps open
- Mixing : Maximum cooling position
- Air entry : Recycling

2.3. Injection of the product into the passenger compartment air intake

Refer to the instructions for use of the product used.

Inform the customer of the olfactory result of the treatment.

2.4. Additional operation

Refit the pollen filter.

N.B. : If replacement of the pollen filter proves necessary, suggest this to the customer.

3. Result to be achieved

The passenger compartment should have a scent conforming to that indicated on the product (E.g. : Vanilla scent).

MAINTENANCE : AIR CONDITIONING SYSTEM CHECK

1. Equipment

Equipment necessary for the check :

- Air conditioning circuit filling and recycling station
- Thermometer
- Hygrometer
- Diagbox (automatic procedure) or Citroën Service (manual procedure)

2. Method of checking

2.1. Preliminary checks

Make the following checks :

- Operation of the aircon compressor clutch (according to equipment)
- Condition of the aircon compressor drive belt
- General condition of the air conditioning pipes
- Condition of the front face of the vehicle (fan assembly, condenser, etc.)
- Check of the pollen filter

2.2. Dynamic pressures check

Place the vehicle in a protected area (out of wind, sun, etc.).

Vehicle configuration :

- Connect a charging and recycling station to the air conditioning circuit
- Doors and windows closed
- Bonnet closed
- Engine running and warm
- Engine speed at idle
- Wait for the fan to switch on at the first speed (Air conditioning out of action)

Position of the air conditioning controls (Automatic air conditioning) :

- Set the temperature to all cold mode
- Activate the windscreen demisting mode (visibility mode)
- Close all the air vents

For information : The "windscreen demisting (visibility mode)" mode results in the following settings :

- Air conditioning in the on position
- Air blower on the maximum position
- Distribution in the de-icing position
- Air inlet in the exterior air position

Position of the air conditioning controls (Manual air conditioning) :

- Set the temperature to all cold mode
- Move the air distribution control to the deicing position
- Place the air blower control on maximum
- Activate the air conditioning function (warning lamp lit)
- Place the air intake in the exterior air position
- Close all the air vents

Measure the ambient humidity and temperature of the workshop.

CAUTION : Position the thermometer at the windscreen demisting vent.

Note the following values after the air conditioning has been operating for 3 minutes :

- Air temperature at the outlet of the windscreen demisting vents
- Air conditioning circuit high pressure
- Air conditioning circuit low pressure

3. Interpretation of the values

3.1. Vehicles listed in Diagbox

Refer to the tool Diagbox in the Maintenance menu.

The tool Diagbox evaluates the efficiency of the cold loop with reference to the conformity graphs.

3.2. Vehicles not listed in DiagBox

N.B. : Remove and visually check the pollen filter before suggesting replacement of the pollen filter to the customer.

N.B. : If the customer complains of an unpleasant odour in his air conditioning, carry out an olfactory test of the air conditioning and suggest antibacterial treatment of the air conditioning to the customer.

Print the assessment available at the following (URL) address depending on language.

Follow the efficiency test procedure.

Access by intranet network	
German	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_DE.pdf
English	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_EN.pdf
Spanish	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_ES.pdf
French	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_FR.pdf
Italian	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_IT.pdf
Dutch	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_NL.pdf
Portuguese	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_PT.pdf
Czech	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_CS.pdf
Danish	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AP_Bilan_Clim_DA.pdf
Greek	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_EL.pdf
Croatian	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_HR.pdf
Hungarian	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_HU.pdf
Polish	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_PL.pdf
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Slovene	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_SL.pdf
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Chinese	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_ZH.pdf
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Japanese	Http://staticedocapvpr.citroen.inetpsa.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_JP.pdf

Access by internet network	

German	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_DE.pdf
English	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_EN.pdf
Spanish	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_ES.pdf
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Dutch	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_NL.pdf
Portuguese	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_PT.pdf
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Chinese	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_ZH.pdf
Finnish	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_FI.pdf
Japanese	https://staticedocapvpr.citroen.com/AC/IFD/AC/documents/clim/AC_Bilan_Clim_JP.pdf

Print the whole air conditioning assessment dossier.

Complete the air conditioning assessment manually.

Use the generic graph.

3.3. Using the graph

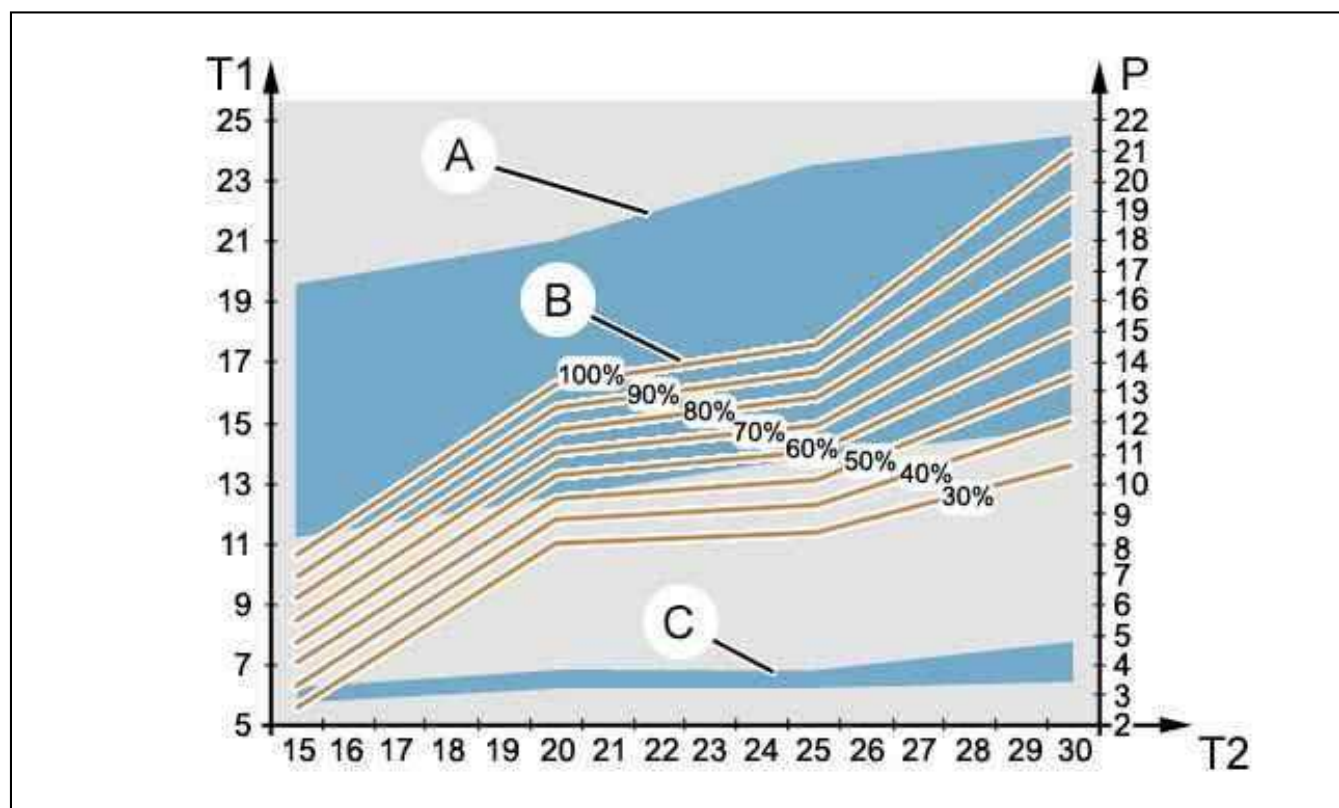


Figure : C5HD00UD

"T1" : Deicing vent temperature (in °C).

"T2" : Workshop ambient temperature (in °C).

"P" : Pressure in the air conditioning circuit (in bars).

"A" : Air conditioning circuit high pressure reference zone.

"B" : Reference graph for deicing vent temperature ($\pm 5^{\circ}\text{C}$) depending on the workshop ambient humidity (From 30 to 100%).

"C" : Air conditioning circuit low pressure reference zone.

Operations to be performed :

- Find the workshop temperature on the graph : This temperature is represented on the horizontal axis
- Indicate the low pressure opposite the ambient temperature and with reference to the scale on the right
- Indicate the high pressure opposite the ambient temperature and with reference to the scale on the right
- Indicate the vent temperature measured opposite the ambient temperature and with reference to the scale on the left
- Check the position of each value in relation to the corresponding graph and note their position: below, conforming to or above the reference

4. Using the formula matrix and interpreting the results

CAUTION : The formula matrix is an employee's work tool and must not be given to the customer.

N.B. : The formula matrix contains confidential PSA information.

In accordance with the 3 measurements taken (low pressure, high pressure and vent temperature), determine the effectiveness of the air conditioning from among the 27 cases presented in the formula matrix (Tick, on the air conditioning assessment, in the sections "effectiveness of the air conditioning" and "recommendations").

4.1. Detail of the air vent temperature graph

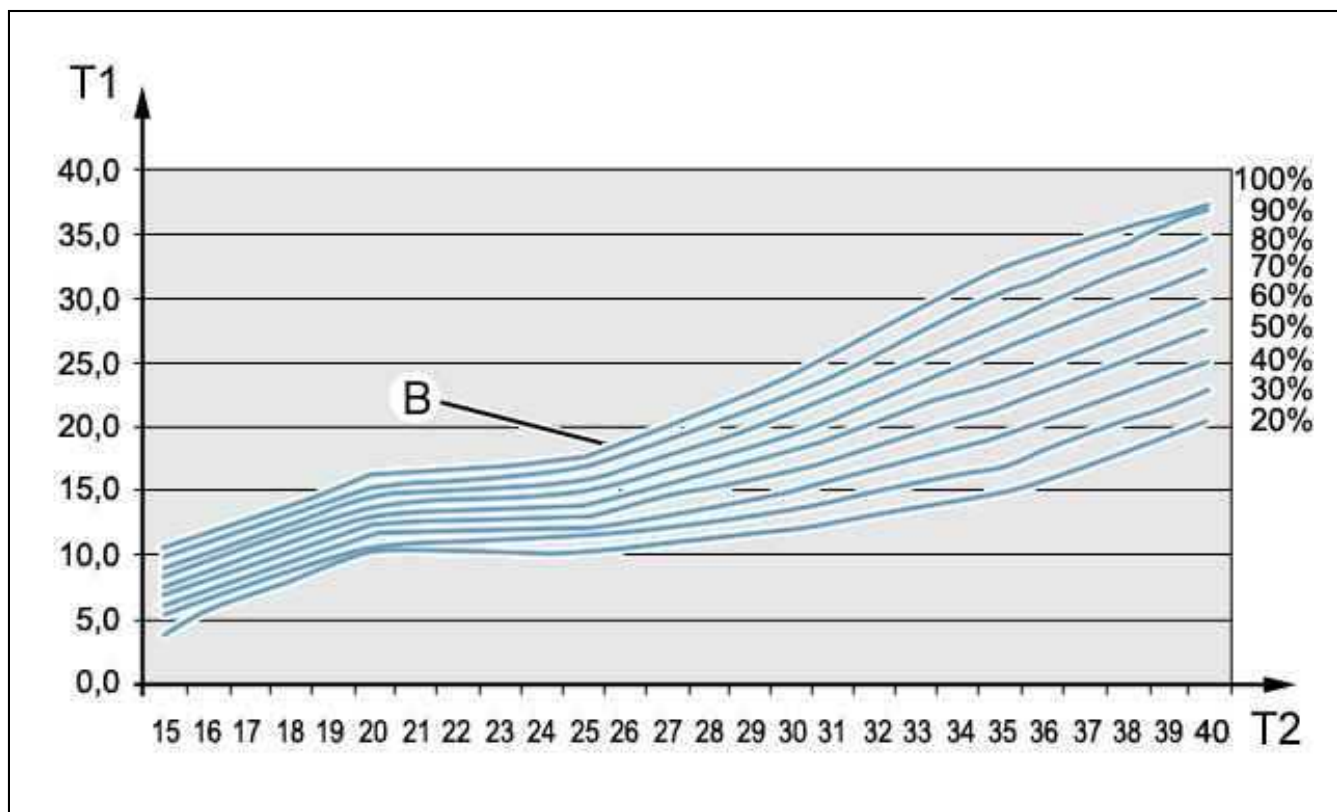


Figure : C5HD018D

"T1" : Deicing vent temperature (in °C).

"T2" : Workshop ambient temperature (in °C).

"B" : Reference graph for deicing vent temperature ($\pm 5^{\circ}\text{C}$) depending on the workshop ambient humidity (From 30 to 100%).

4.2. Detail of the low pressure graph

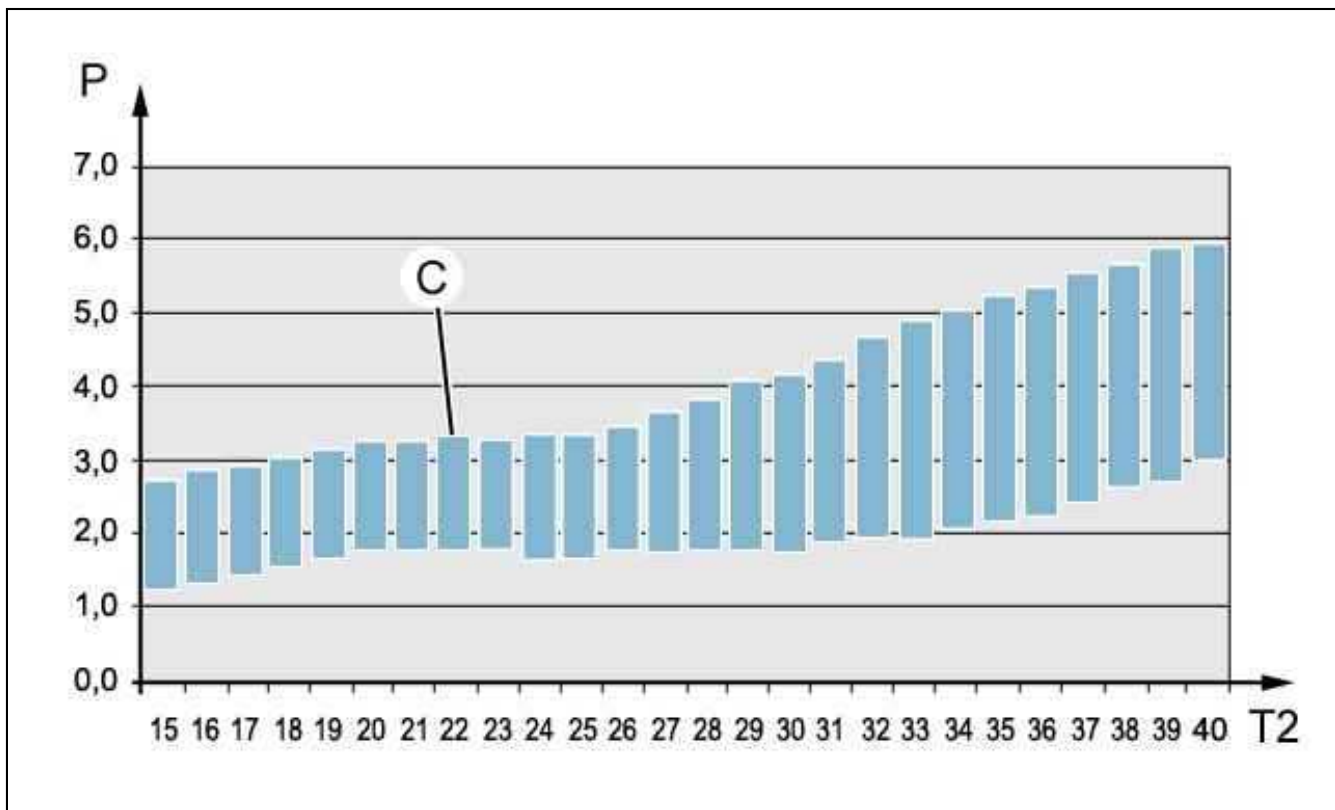


Figure : C5HD019D

"T2" : Workshop ambient temperature (in °C).

"P" : Pressure in the air conditioning circuit (in bars).

"C" : Air conditioning circuit low pressure reference zone.

4.3. Detail of the high pressure graph

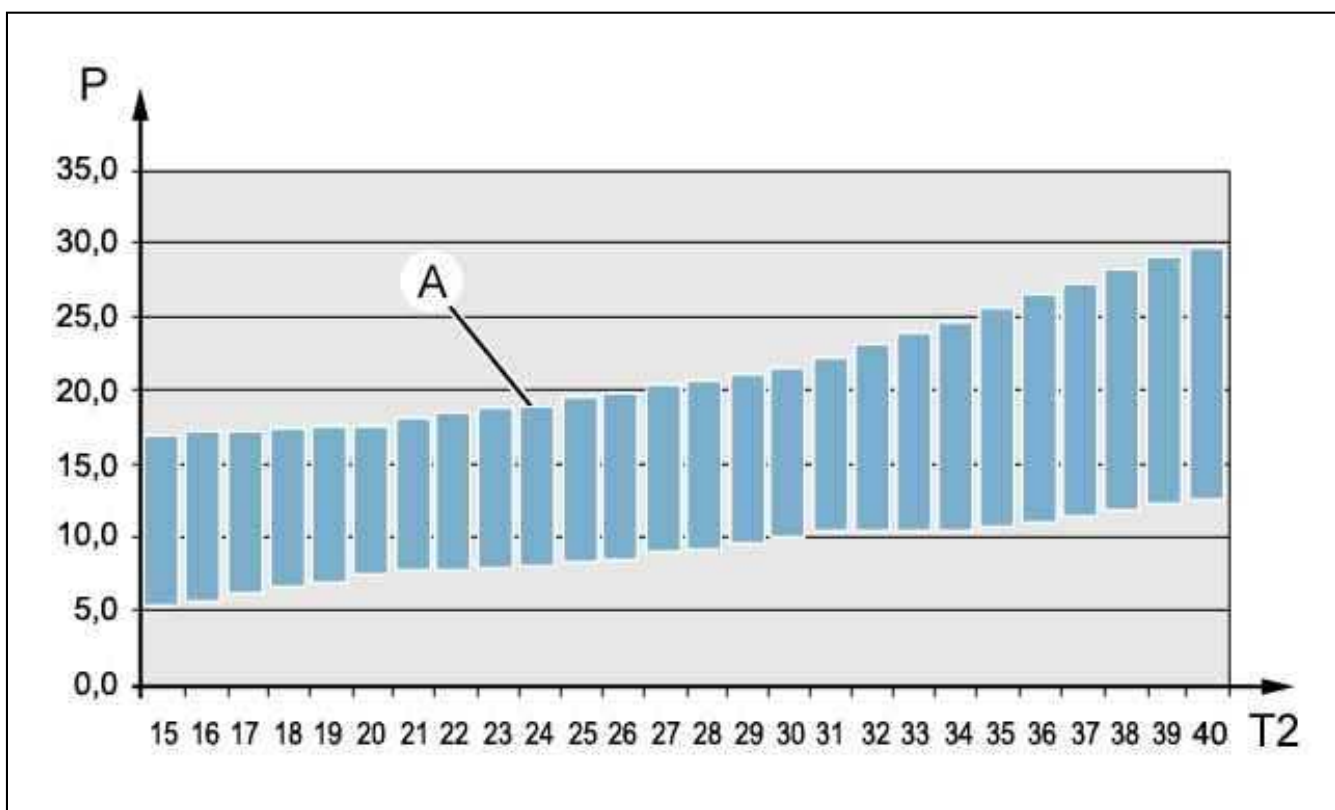


Figure : C5HD01AD

"T2" : Workshop ambient temperature (in °C).

"P" : Pressure in the air conditioning circuit (in bars).

"A" : Air conditioning circuit high pressure reference zone.

4.4. Table of interpretation of results

Case n°	Low pressure measured	High pressure measured	Vent temperature measured	Result of the check (*)	(**) recommendations
1	< C	< A	< B	Air conditioning operating	2 - 4
2	< C	< A	= B	Air conditioning operating	2 - 4
3	< C	< A	> B	Maintenance recommendation	1 - 4
4	< C	= A	< B	Air conditioning operating	2 - 4
5	< C	= A	= B	Air conditioning operating	2 - 4
6	< C	= A	> B	Maintenance recommendation	1 - 4
7	< C	> A	< B	Air conditioning operating	2 - 4
8	< C	> A	= B	Air conditioning operating	2 - 4
9	< C	> A	> B	Repair recommendation	3
10	= C	< A	< B	Air conditioning operating	2 - 4
11	= C	< A	= B	Air conditioning operating	2 - 4
12	= C	< A	> B	Maintenance recommendation	1 - 4
13	= C	= A	< B	Air conditioning operating	2 - 4
14	= C	= A	= B	Air conditioning operating	2 - 4
15	= C	= A	> B	Maintenance recommendation	1 - 4
16	= C	> A	< B	Air conditioning operating	2 - 4
17	= C	> A	= B	Air conditioning operating	2 - 4
18	= C	> A	> B	Repair recommendation	3
19	> C	< A	< B	Air conditioning operating	2 - 4
20	> C	< A	= B	Maintenance recommendation	1 - 4
21	> C	< A	> B	Repair recommendation	3
22	> C	= A	< B	Air conditioning operating	2 - 4
23	> C	= A	= B	Air conditioning operating	2 - 4
24	> C	= A	> B	Repair recommendation	3
25	> C	> A	< B	Air conditioning operating	2 - 4
26	> C	> A	= B	Air conditioning operating	2 - 4
27	> C	> A	> B	Repair recommendation	3

N.B. : (*) Option to be ticked on the assessment (Effectiveness of the air conditioning section).

N.B. : (**) Option to be ticked on the assessment (Recommendations section).

Options to be ticked

1	Recharging the air conditioning circuit
2	No recharging of the air conditioning circuit
3	Complete diagnostics required
4	No complete diagnostics required

5. Result to be achieved

Finish filling in the air conditioning assessment in paper format and give it to the customer.

MAINTENANCE : REGAS

1. Equipment

Filling and recycling equipment .

2. Filling procedure

Place the vehicle in a protected area (out of wind, sun, etc.).

Connect a charging and recycling station to the air conditioning circuit.

Refer to the user manual for the air conditioning station.

Inject the quantity of refrigerant necessary.

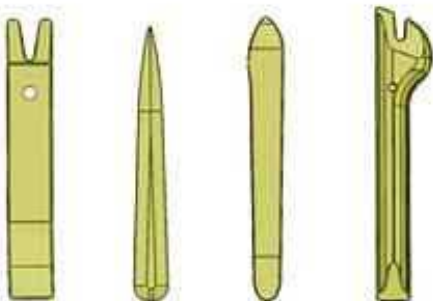
3. Result to be achieved

The air conditioning should regain its efficiency and reach pressure values that conform to those indicated in the air conditioning checking procedure ⓘ .

REMOVING - REFITTING : EXTERNAL TEMPERATURE SENSOR

ESSENTIAL : Observe the safety and cleanliness recommendations ⓘ .

1. Tooling

Tool	Reference	Designation
[1350-ZZ]  Figure : E5AG02MT	[1350-ZZ]	Stripping tools

2. Removing

Disconnect the battery ⓘ .

Remove the exterior rear view mirror glass ⓘ .

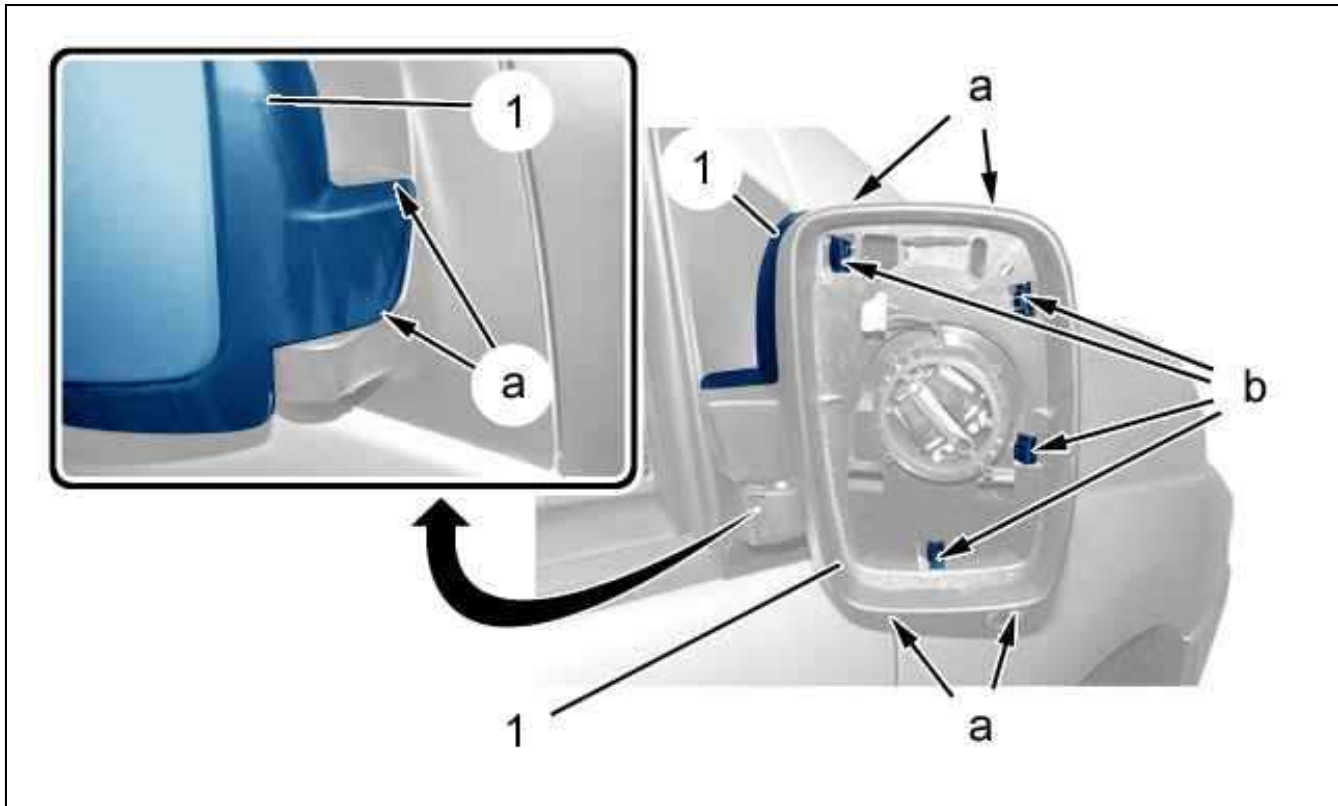


Figure : C5HG1C2D

Unclip : The rear view mirror external shell (1) (at "a", "b") ; Using the tools [1350-ZZ].

Remove : The rear view mirror external shell (1).

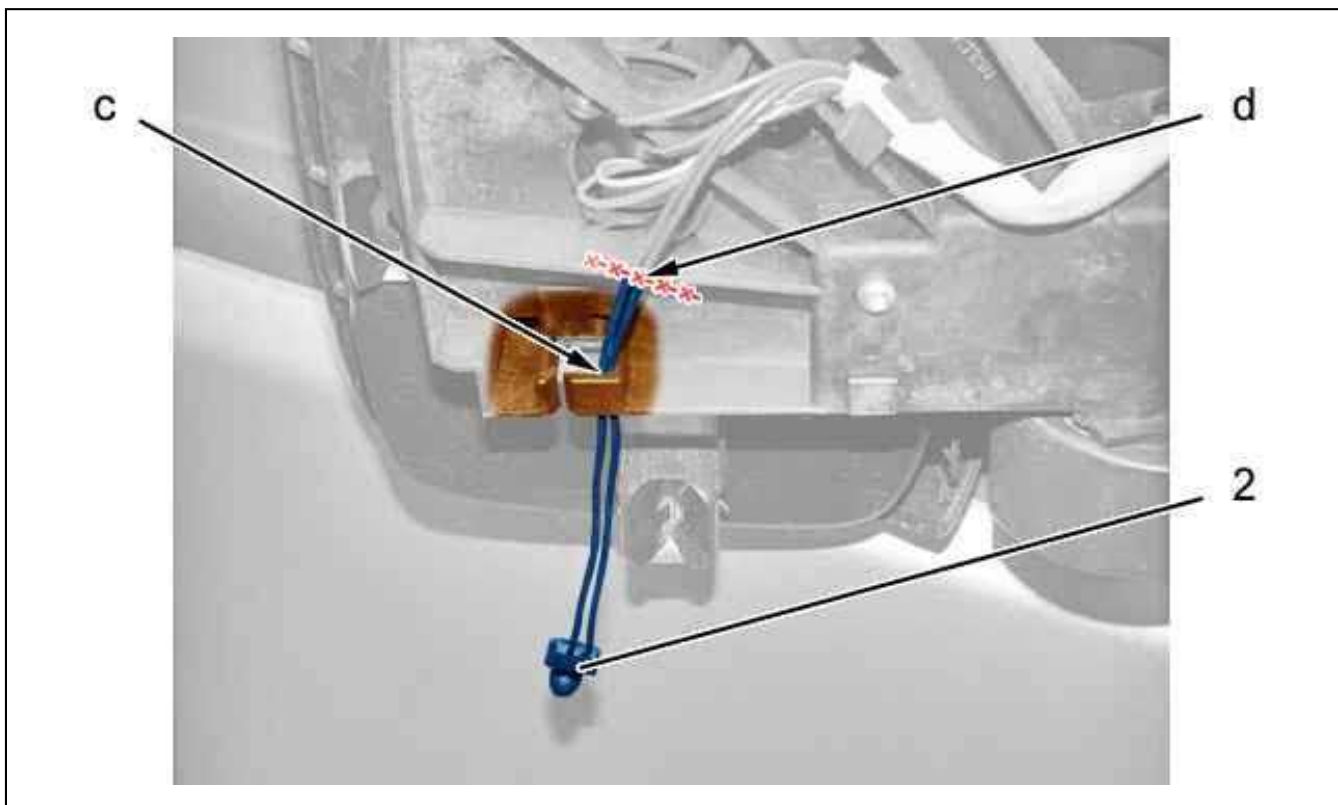


Figure : C5HG1C3D

Detach the exterior temperature sensor (2) (at "c").

CAUTION : Leave a length of 40 mm to restore the electrical connection of the external temperature sensor (2) (at "d").

Cut the 2 black wires of the exterior temperature sensor (2) (at "d").

Remove the external temperature sensor (2).

3. Refitting

Restore the electrical connection of the exterior temperature sensor (2) using the welding sleeves (type RAYCHEM) then insulate using the heat-shrink sleeve .

Proceed in the reverse order to removal.

CAUTION : Perform the operations to be carried out following reconnection of the battery.

Reconnect the battery.

Check that the external temperature sensor (2) is working.

Check the operation of the equipment.

UNCOUPLING - COUPLING : CLICK-ON CONNECTOR

1. Recommended tools

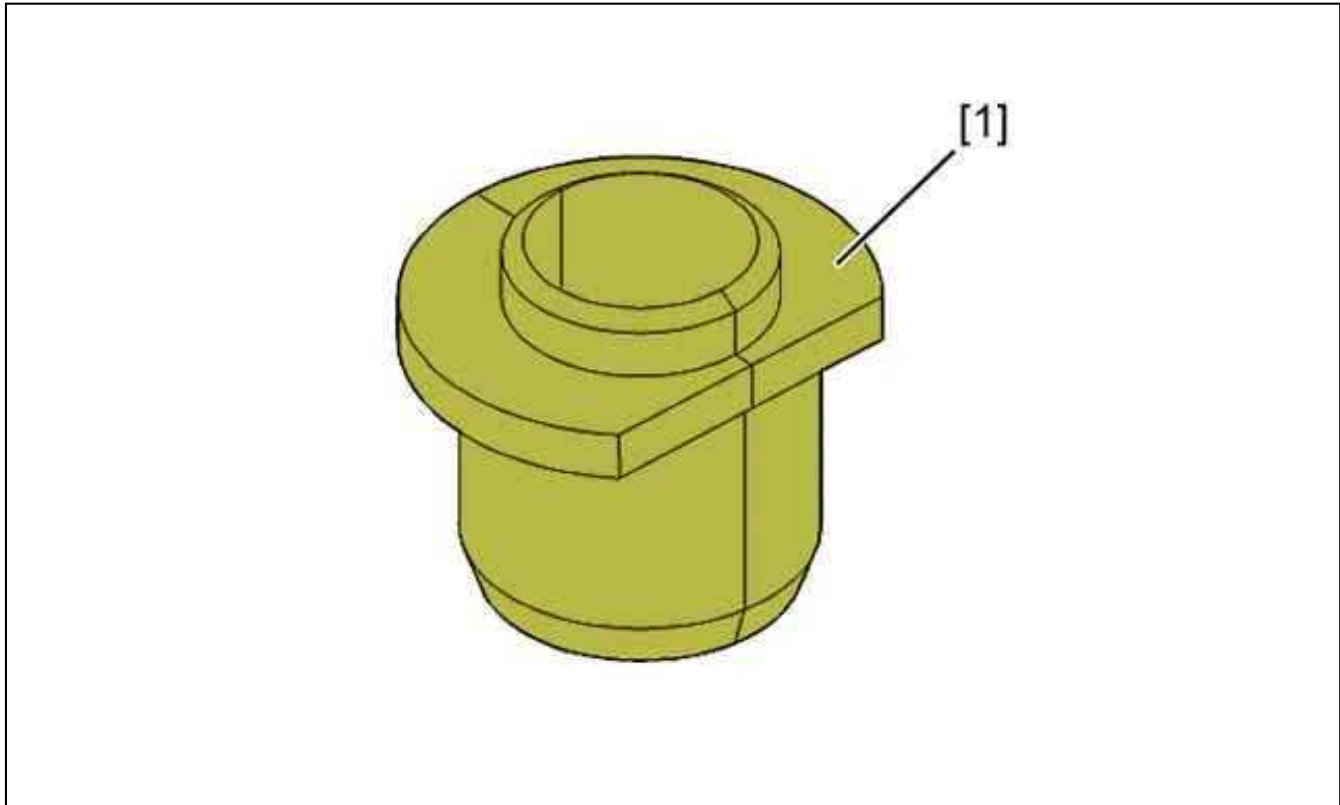


Figure : E5AP3RVD

[1] ring for uncoupling click-fit connections .

Designation	Reference	Reference
ring for uncoupling click-fit connections	8005-T.B	(-).1521.G1

N.B. : Colour of the uncoupling ring of snap-in unions : Blue (Ring of 1/2" diameter).

Uncoupling.

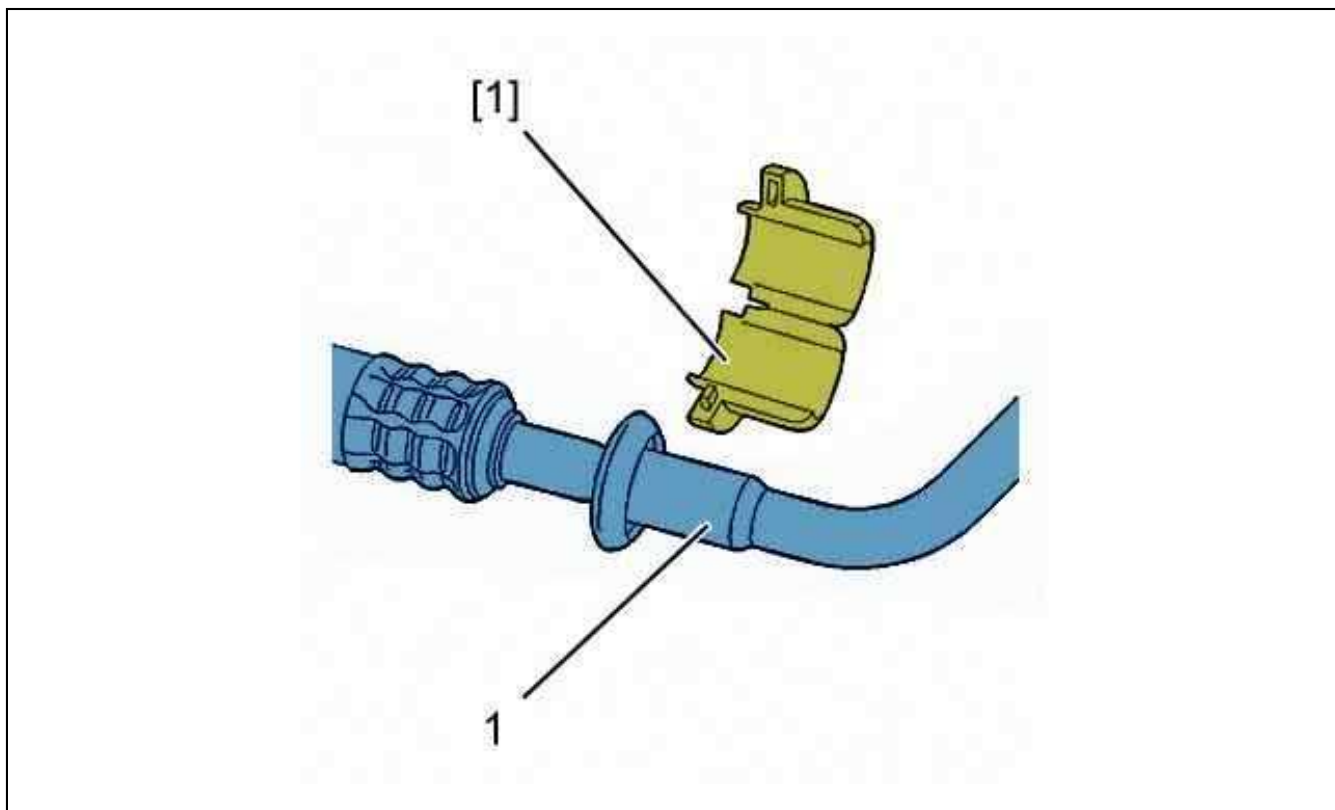


Figure : C5HP1LZD

(1) Click-on connector .
Fit the tool [1].

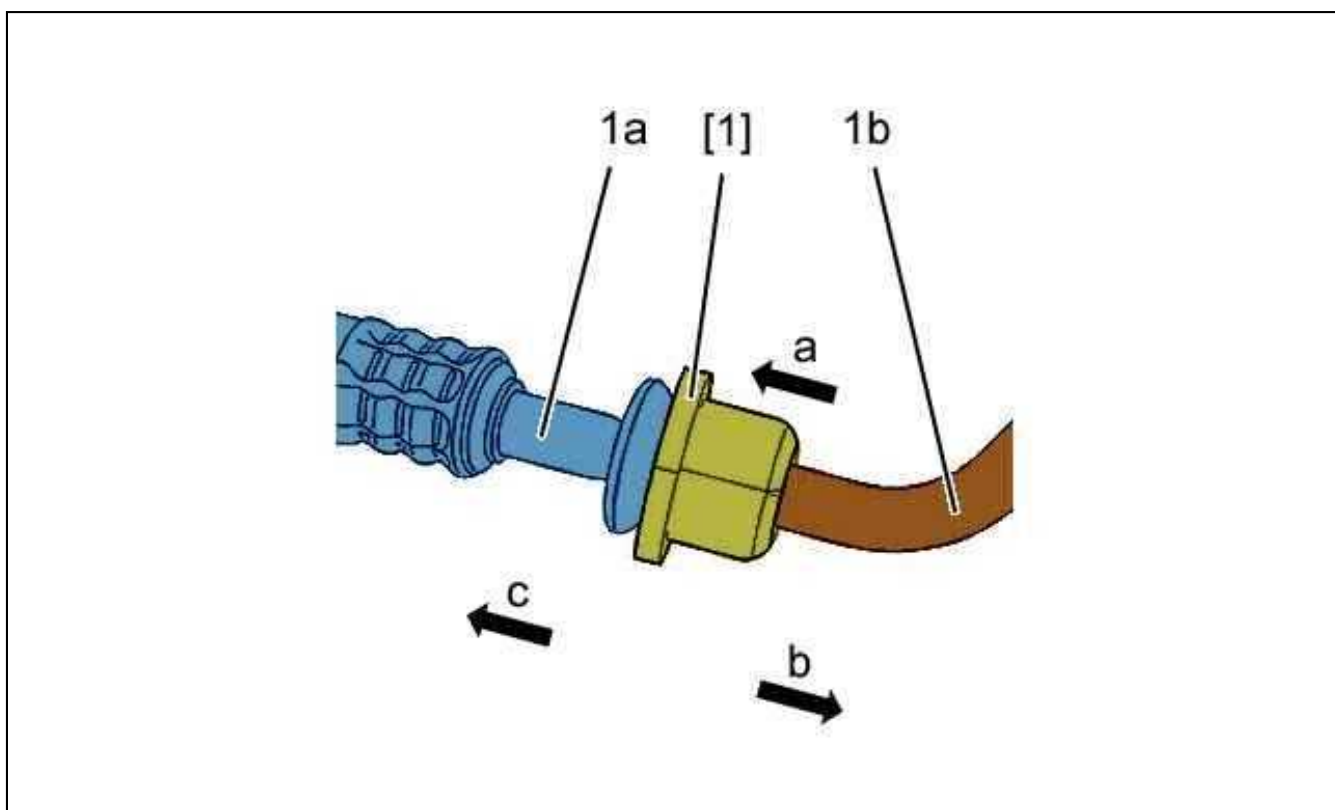


Figure : C5HP1M0D

Press on tool [1] ; In the direction of the arrow "a".

Support the tool [1].

Pull the 2 parts (1a), (1b) of the snap-in union (1) in the direction of the arrows "b", "c".

Remove the tool [1].

Uncouple the snap-in union (1).

2. Coupling

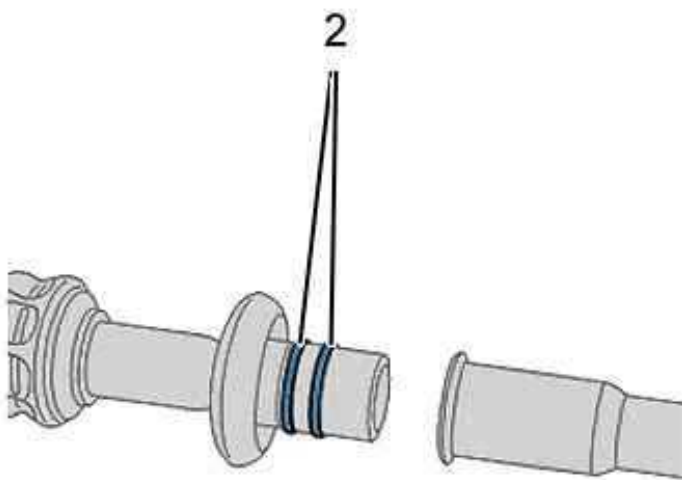


Figure : C5HP1M1D

Replace the seals (2).

ESSENTIAL : Lubricate the seals with compressor oil.

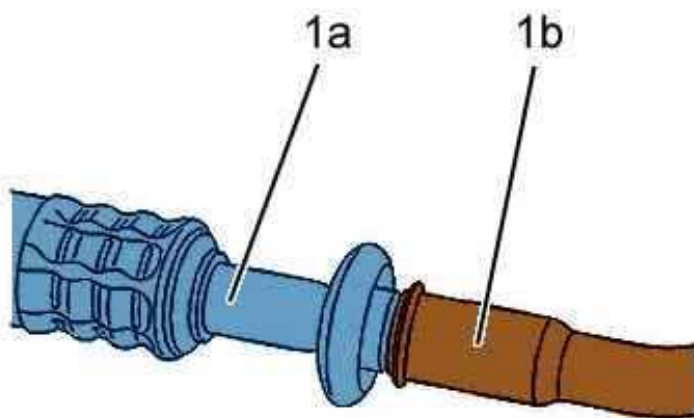


Figure : C5HP1M2D

Fit the 2 parts (1a), (1b) of the snap-in union (1) together.

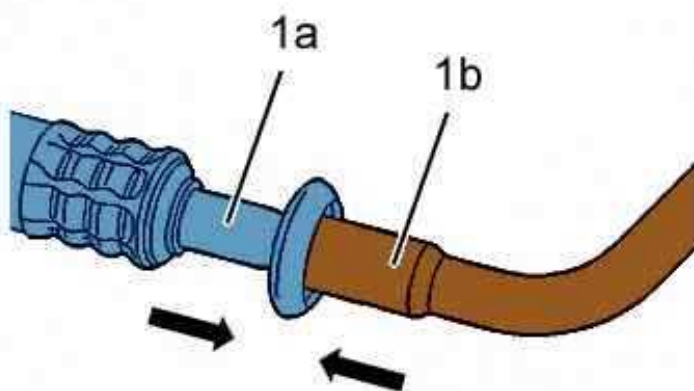


Figure : C5HP1M3D

Press on the 2 parts (1a), (1b) of the snap-in union until they snap together.

REMOVING - REFITTING : AIR CONDITIONING FLUID PIPING

ESSENTIAL : Before carrying out any work on the air conditioning circuit, take the necessary precautions.

CAUTION : Do not remove the pipe plugs, clamps or unions until carrying out the connection to vehicle.

1. Recommended tools

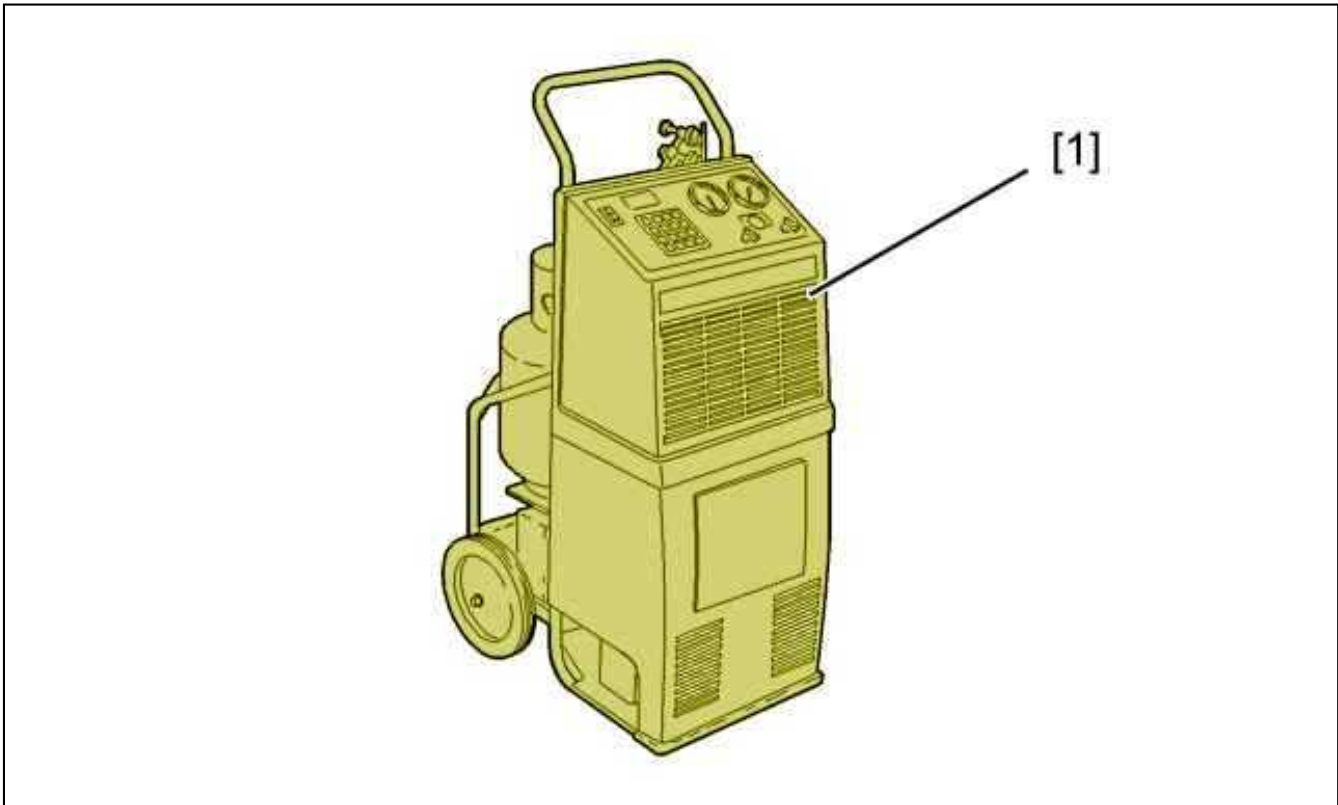


Figure : E5AP2WWD

[1] Filling and recycling equipment .

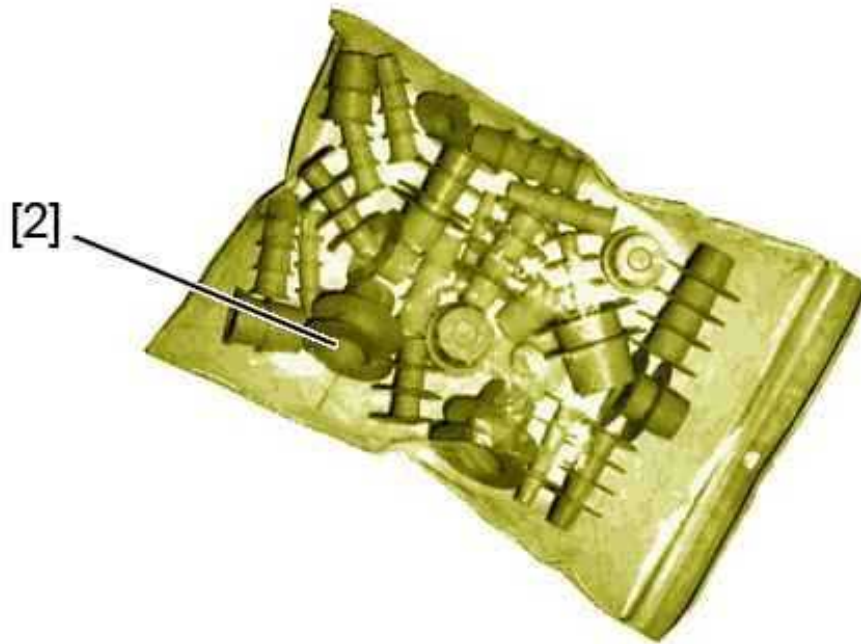


Figure : E5AP2PBD

[2] set of air conditioning circuit protective plugs (-).1701.HZ.

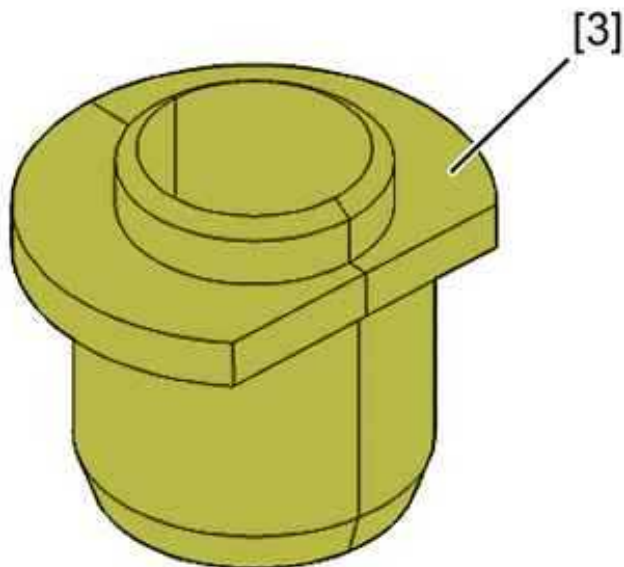


Figure : E5AP3RWD

[3] ring for uncoupling click-fit connections R134a.
Ring colour : Blue (ring 1/2" in Ø).

2. Preliminary operation

Drain the air conditioning circuit (R134a) ; Using the charging station [1].

3. Removing

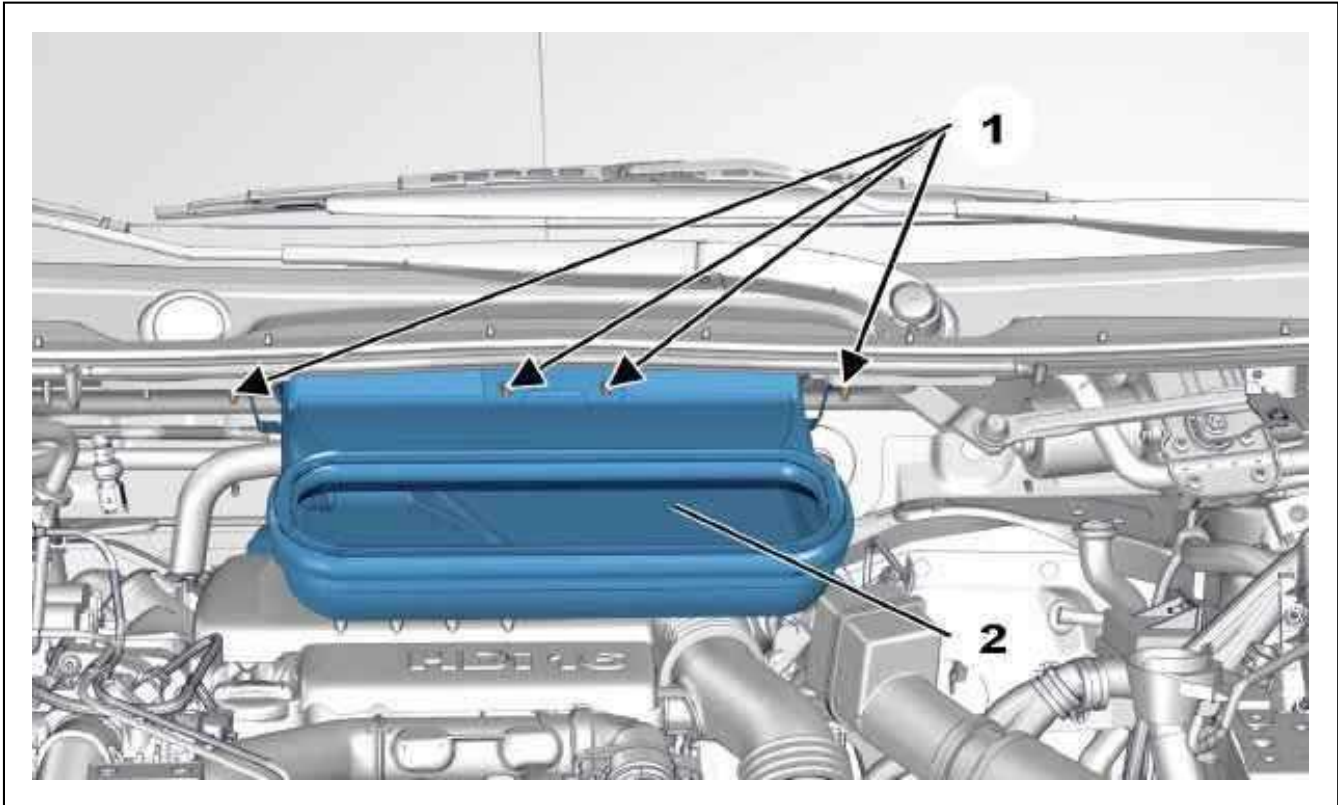


Figure : B1BPSP9D

Remove :

- The nuts (1)
- The air intake duct at the air filter (2)

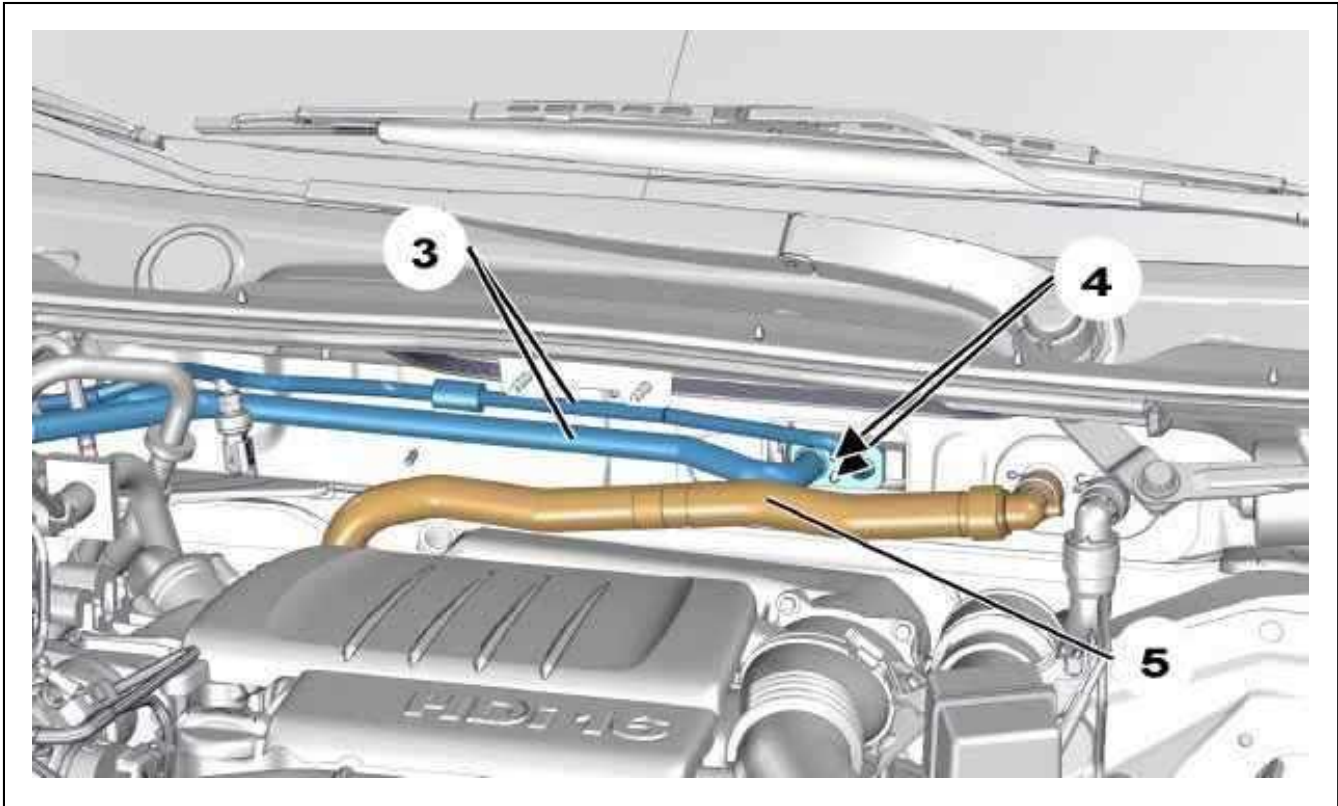


Figure : B1BPSPAD

CAUTION : Plug all of the pipes and the pressure reducer quickly to prevent the entry of humidity ; Using the tools [2].

Move aside the heater matrix pipe (5).

Remove the nuts (4).

Uncouple the air conditioning pipes (3) perpendicular to the air conditioning pressure reducer .

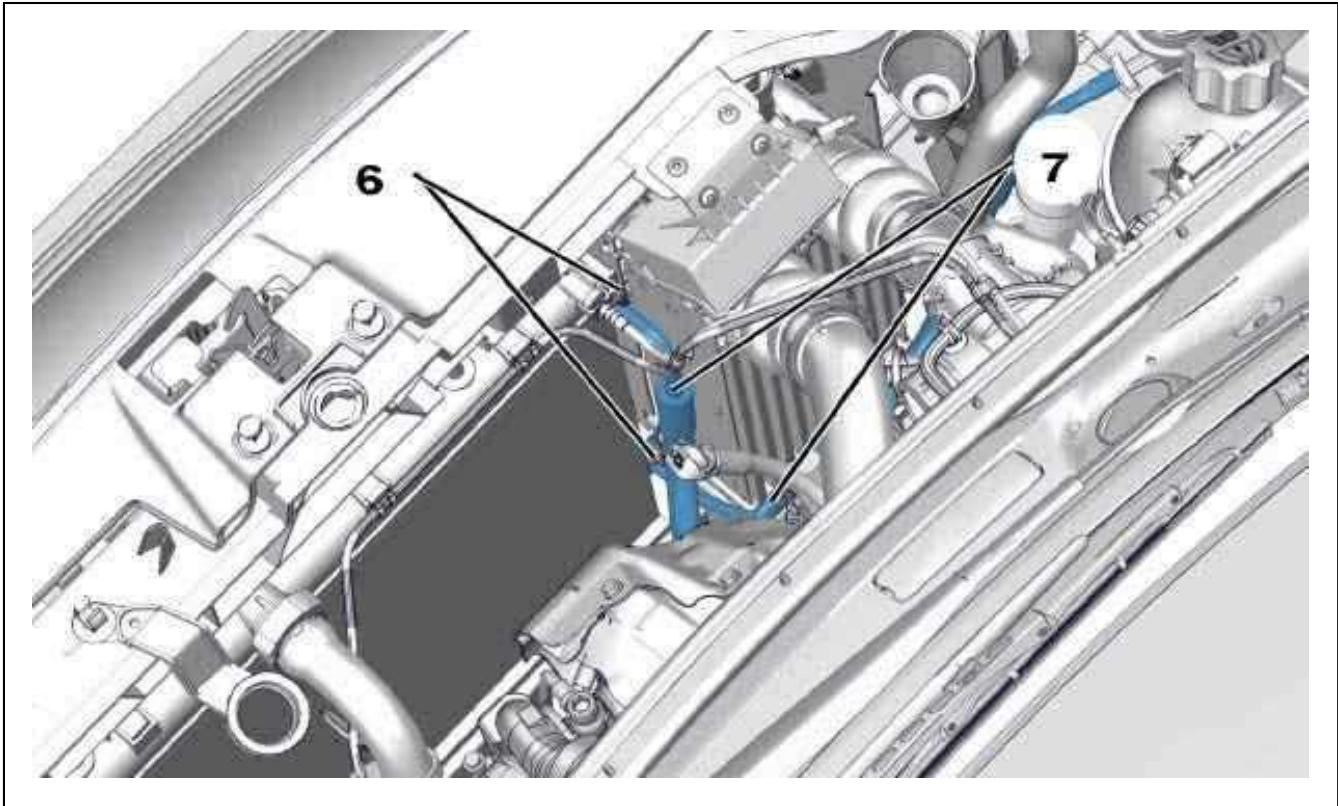


Figure : B1BPSPHD

CAUTION : Quickly plug all the pipes and the condenser to prevent the introduction of humidity ; Using the tools [2].

Remove the nuts (6).

Uncouple the air conditioning pipes (7) perpendicular to the air conditioning condenser.

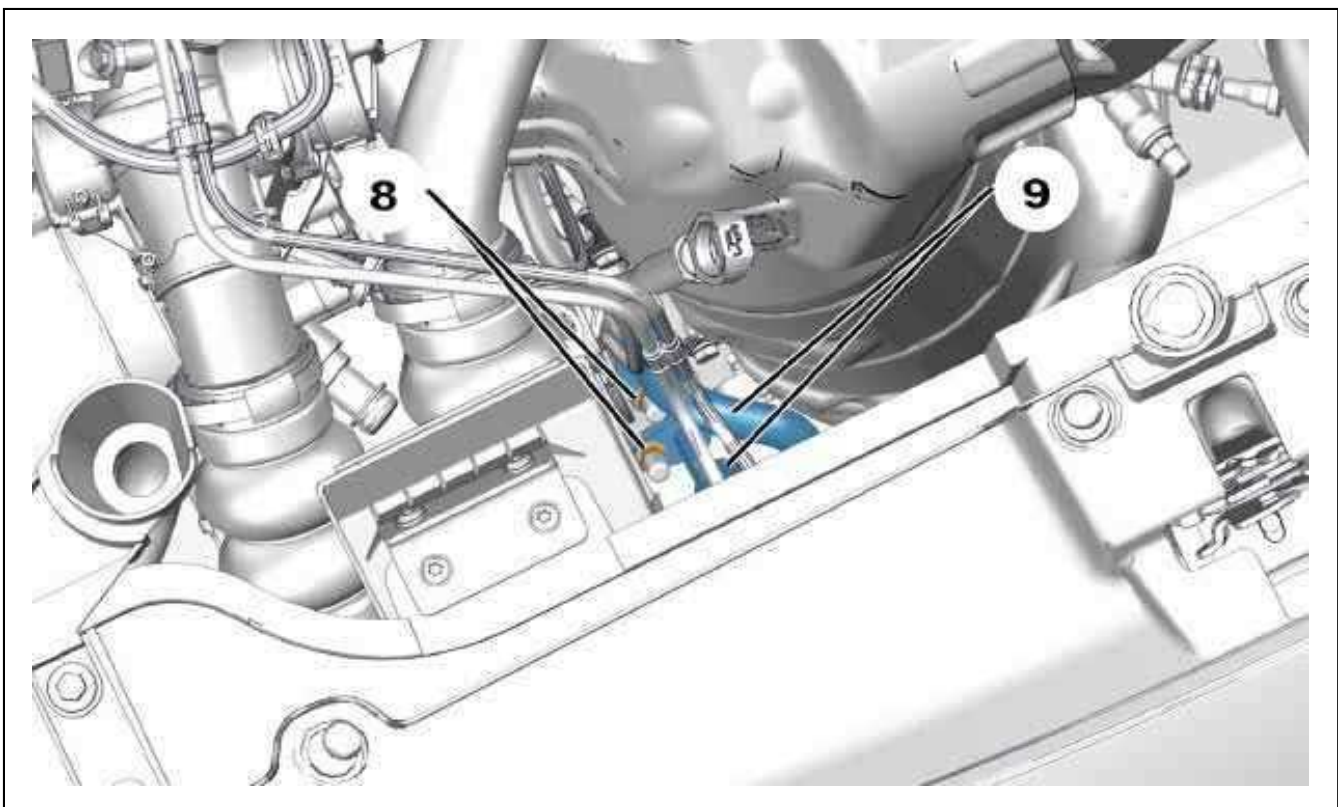


Figure : B1BPSPJD

CAUTION : Plug all of the pipes and the compressor quickly to prevent the entry of humidity ; Using the tools [2].

Remove the nuts (8).

Uncouple the air conditioning pipes (9) perpendicular to the air conditioning compressor.

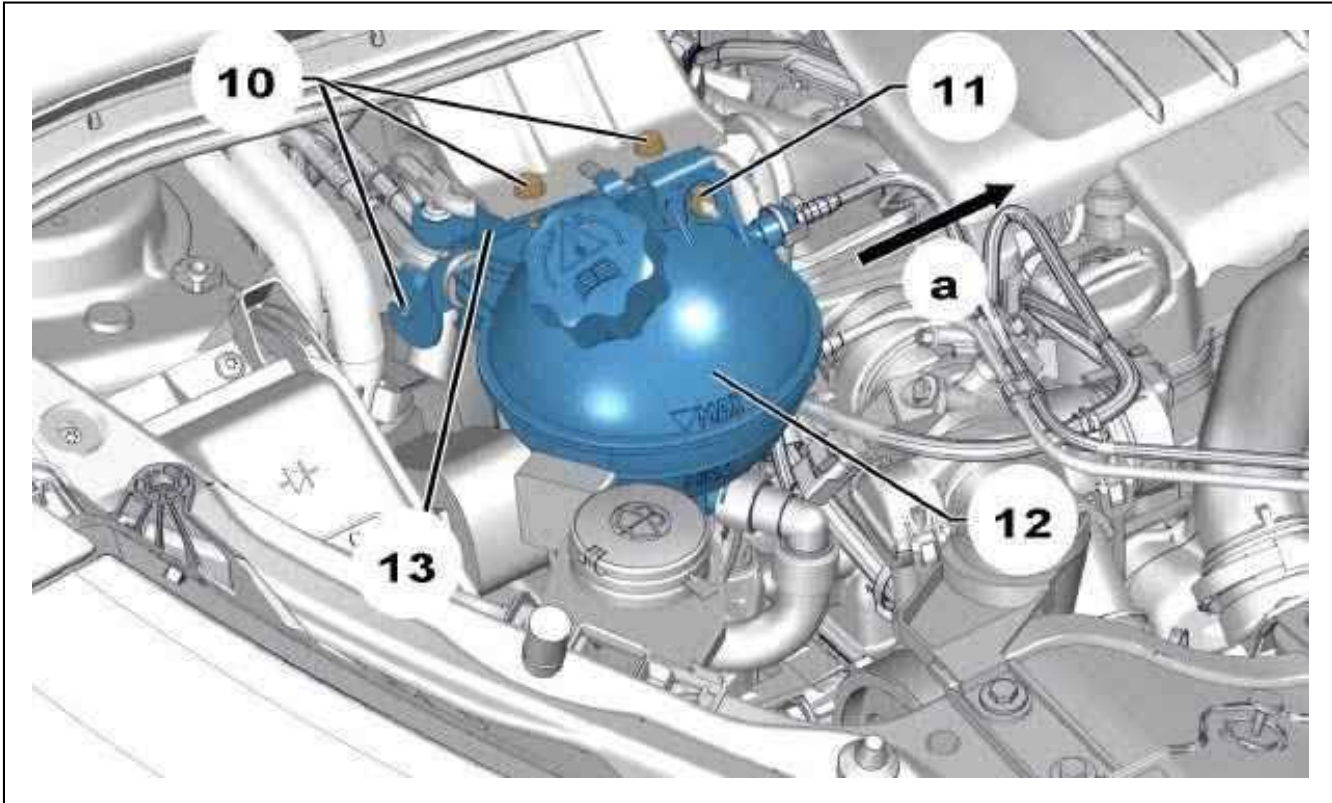


Figure : B1BPSPKD

Remove bolts (11).

Release the expansion chamber (12) (following "a").

Remove :

- The bolts (10)
- The expansion chamber support (13)

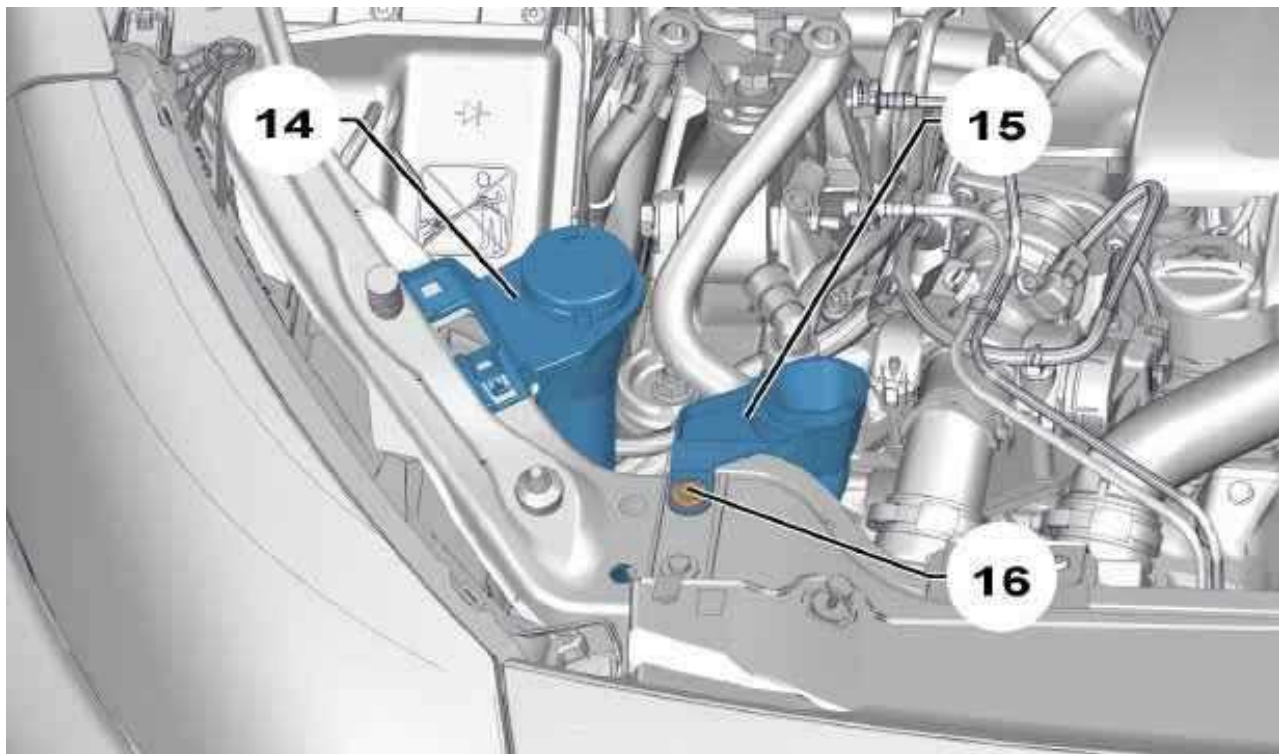


Figure : B1BPSPLD

Remove :

- The (16) bolt
- The water evacuation pipe (15)
- The screenwash filler pipe (14)

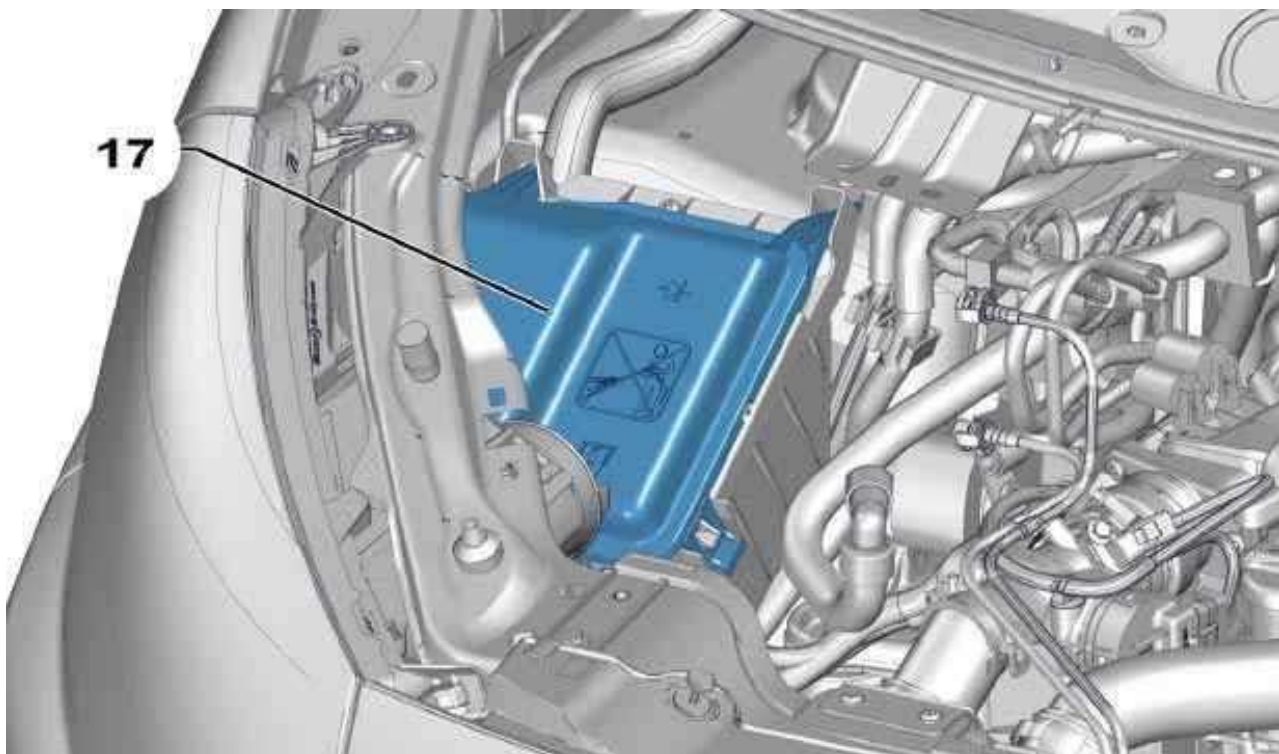


Figure : B1BPSPMD

Unclip and remove the engine fuse box cover (17).

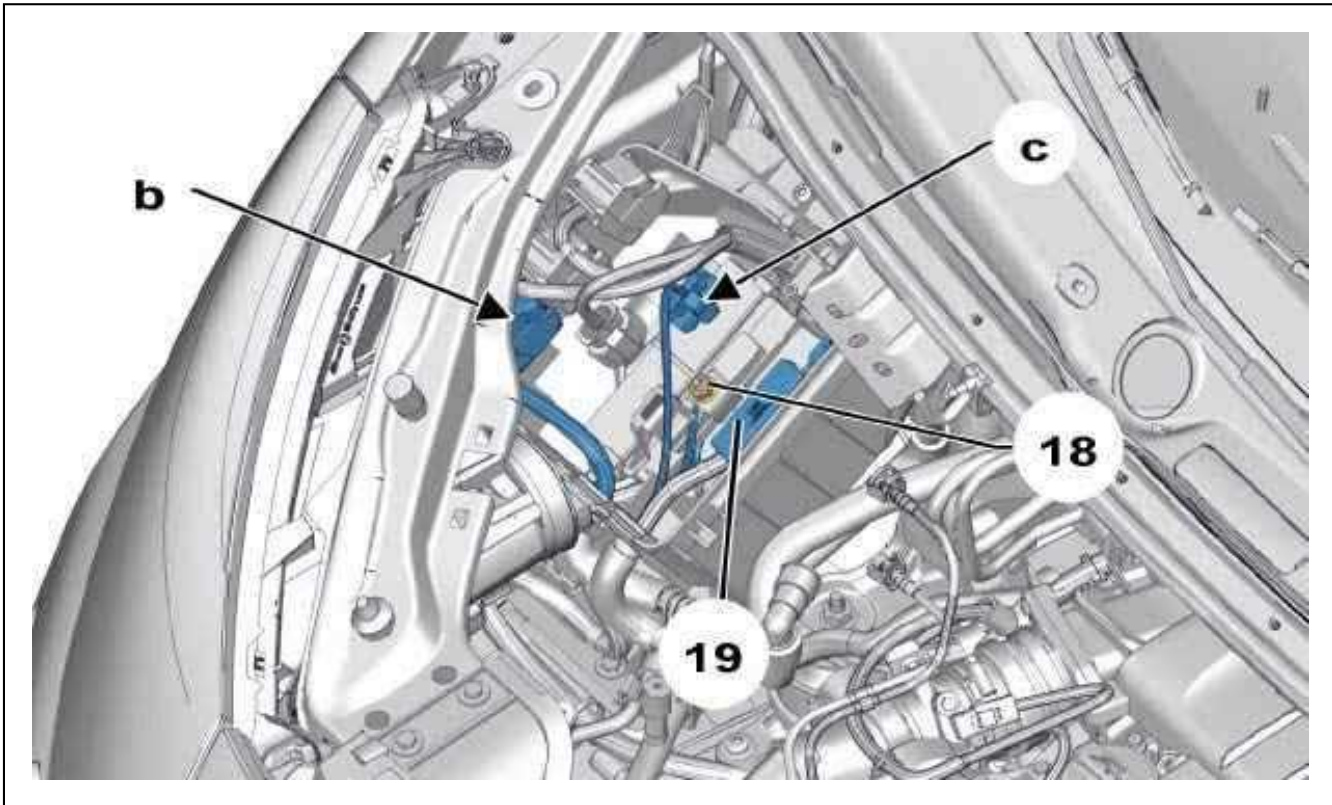


Figure : B1BPSPND

Disconnect the connectors (at "b", "c").

Remove :

- The nut (18)
- The cover (19)

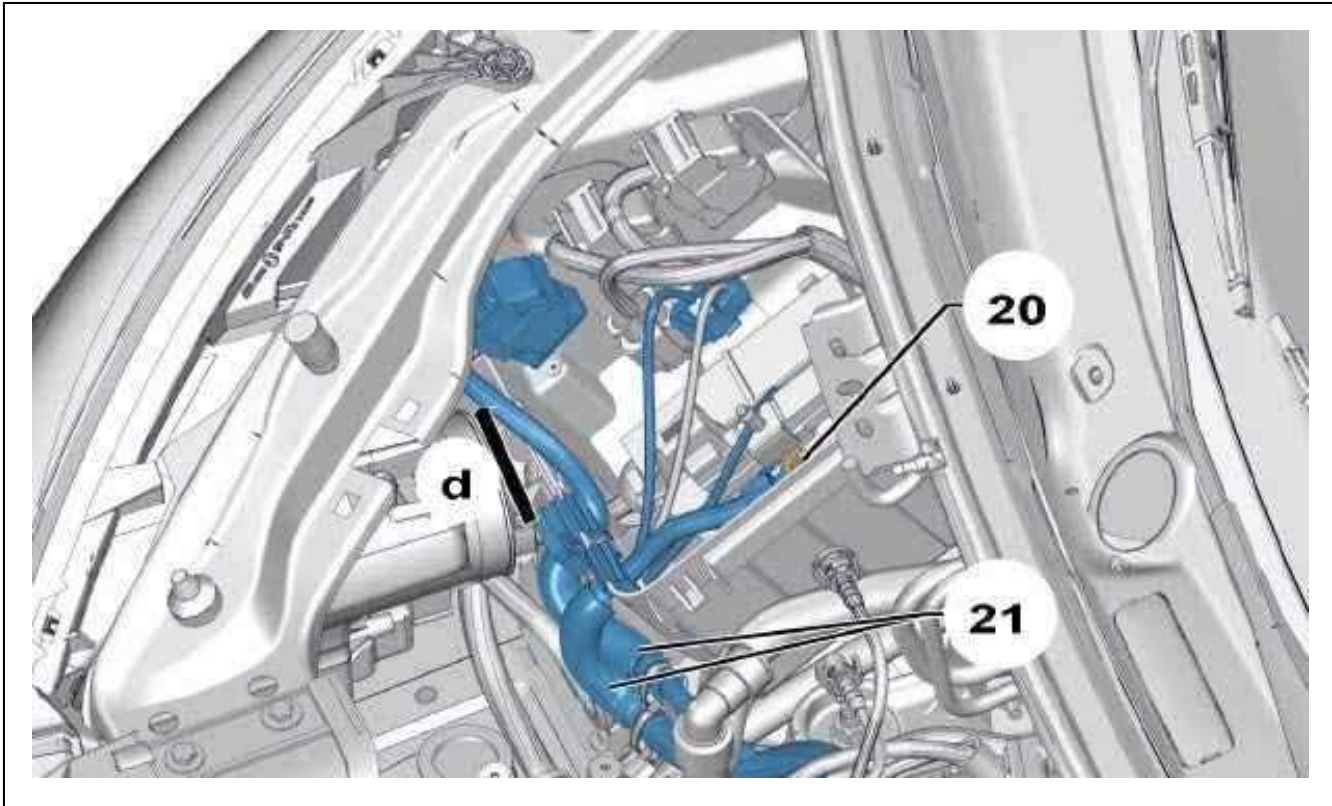


Figure : B1BPSPPD

Remove the nut (20).

Move aside the electrical harnesses (21) (following "d").

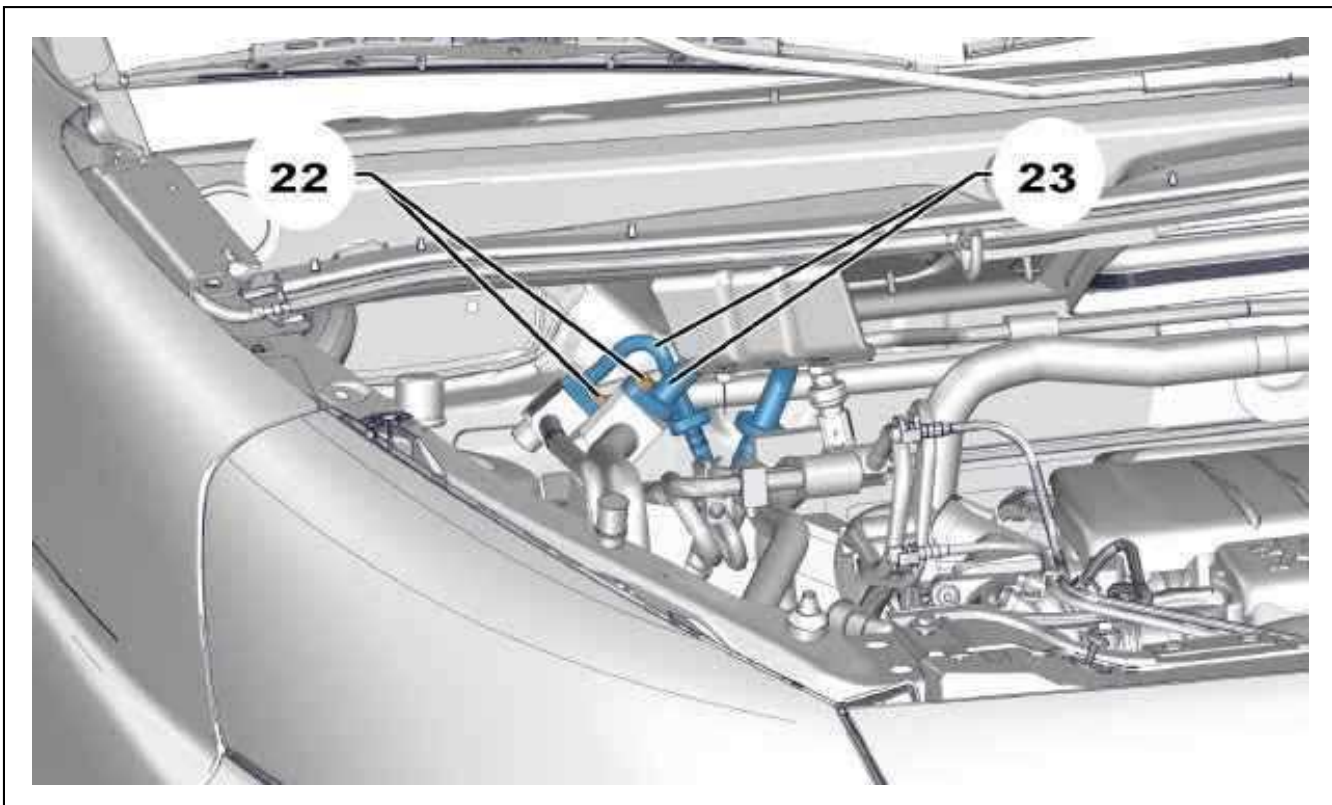


Figure : B1BPSPQD

CAUTION : Plug all the conduits quickly to prevent the entry of humidity ; Using the tools [2].

Remove the nuts (22) (if necessary).

Uncouple the additional air conditioning pipes (23) perpendicular to the main air conditioning pipes (if necessary).

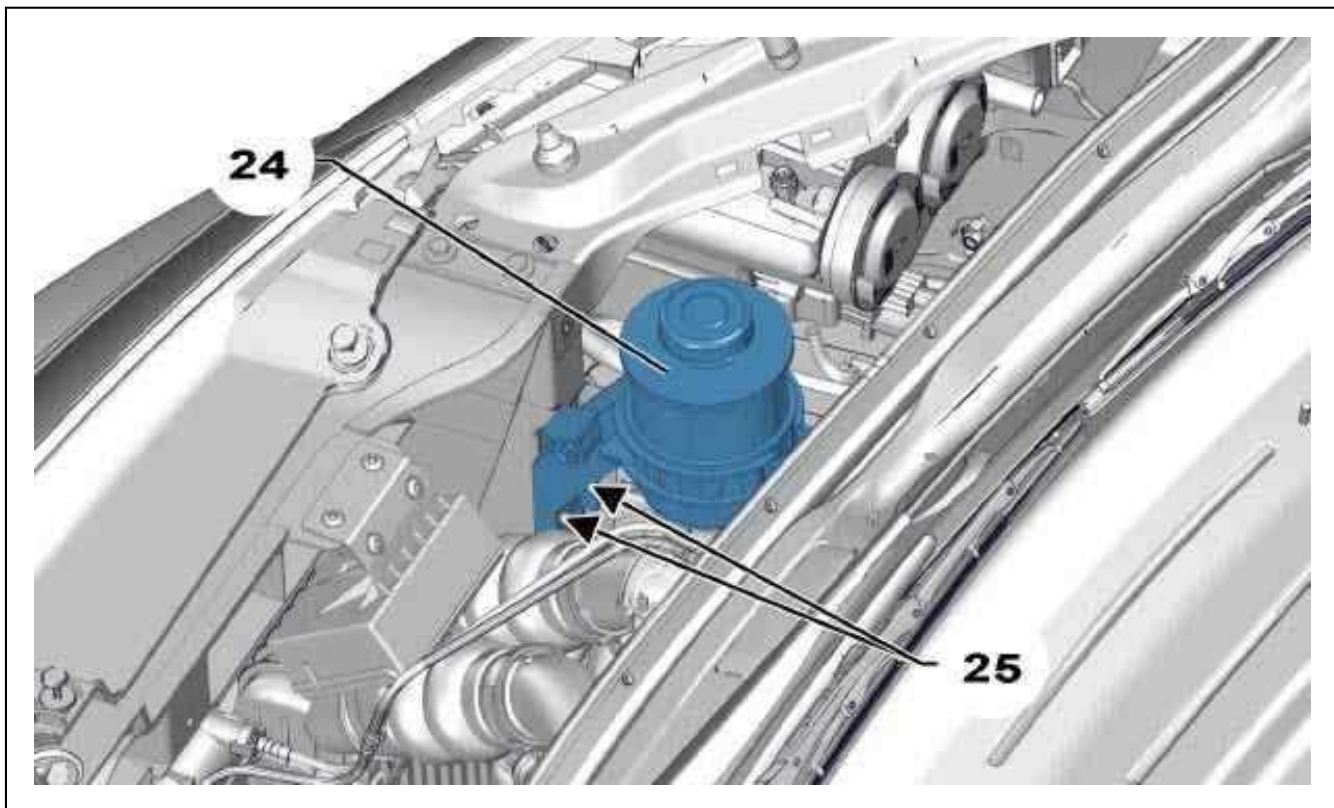


Figure : B1BPSPRD

Remove the 2 bolts (25).

Move aside the power steering fluid reservoir (24).

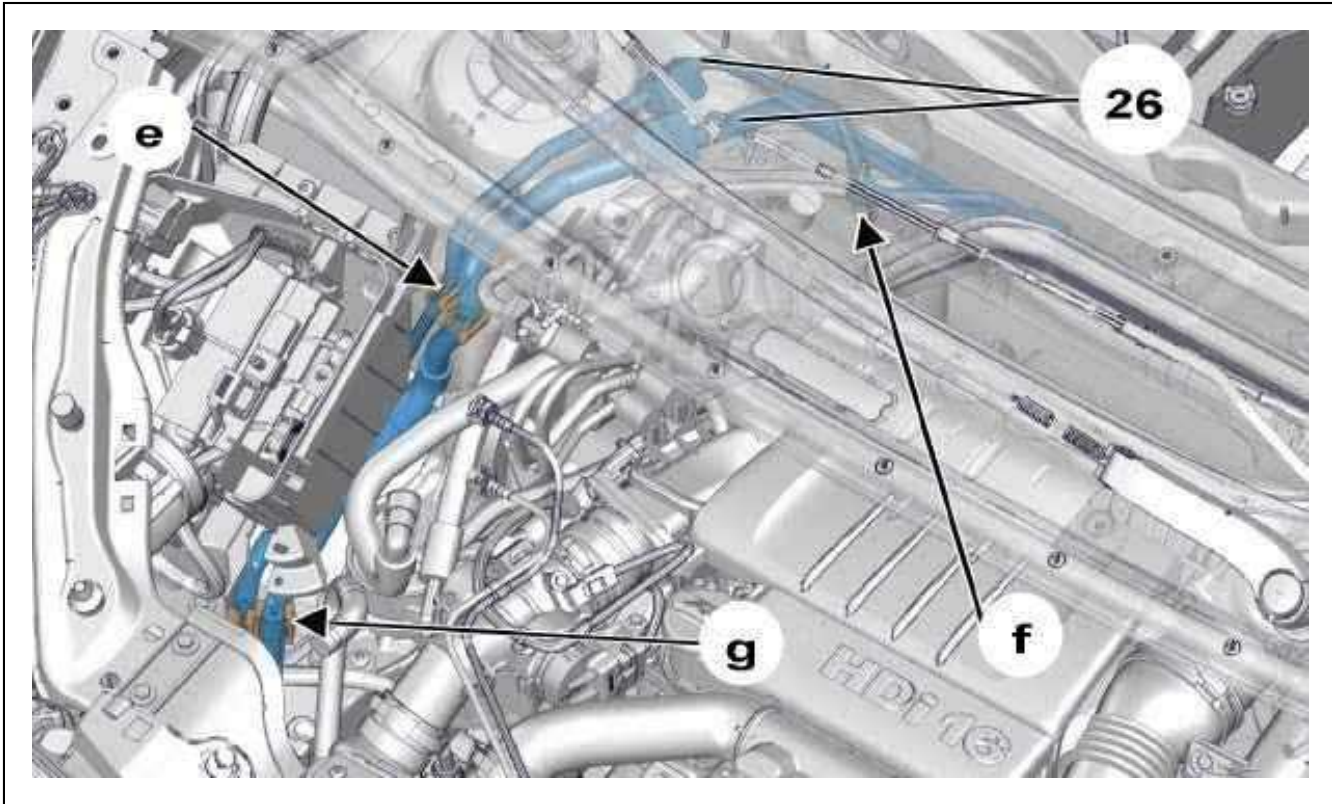


Figure : B1BPSPSD

Disconnect the pressure switch (at "f").
 Move aside the additional air conditioning circuit (if necessary).
 Unclip the 4 air conditioning pipe retaining clips (26) (at "g", "e").

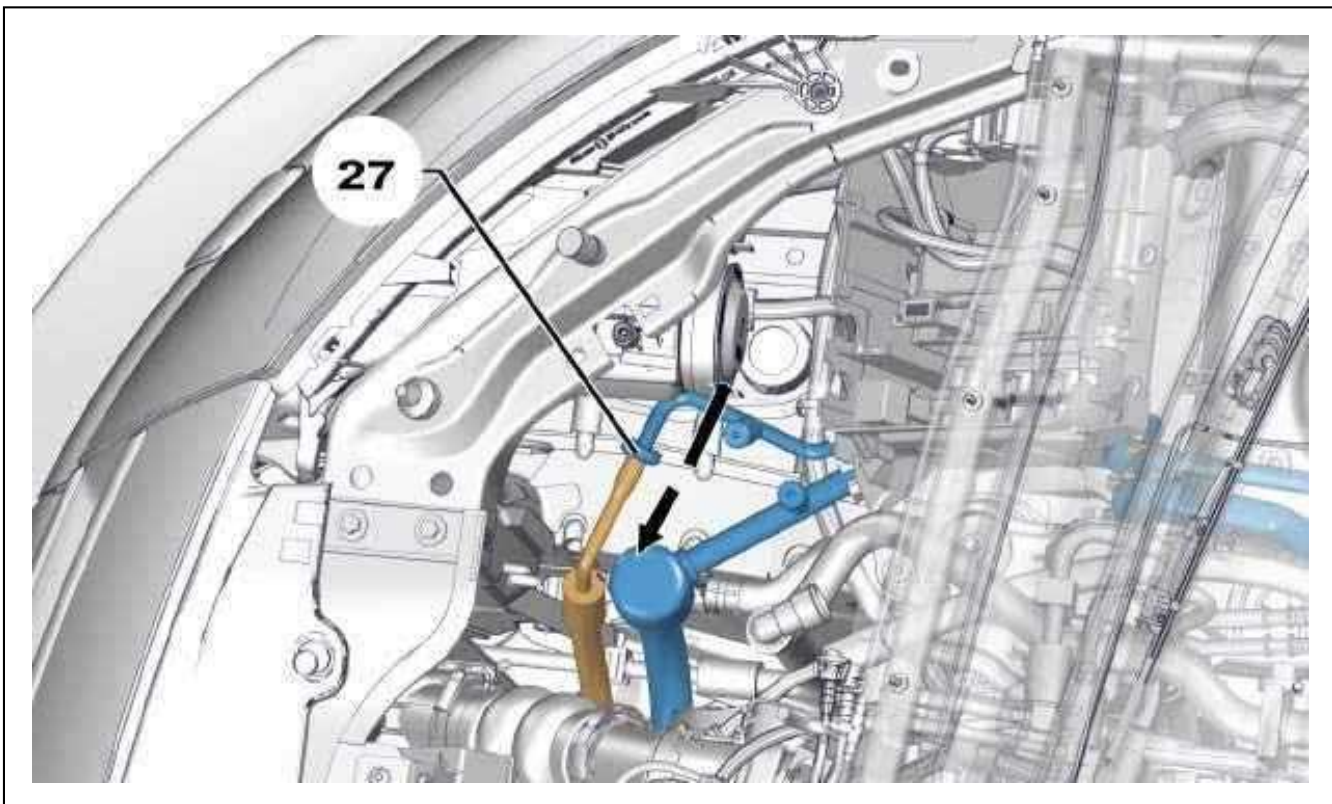


Figure : B1BPSPTD

Disconnect the click-fit union (27) ; Using tool [3].

Remove :

- The compressor / condenser air conditioning pipe
- The condenser / pressure reducer high pressure air conditioning pipe
- The pressure reducer / compressor low pressure air conditioning pipe

4. Refitting

CAUTION : Fit new O-ring seals . Lubricate the new seals with compressor oil.

Check that the air conditioning pipes are clean.

Refit :

- The pressure reducer / compressor low pressure air conditioning pipe
- The condenser / pressure reducer high pressure air conditioning pipe
- The compressor / condenser air conditioning pipe

Connect and clip the click-fit union (27).

CAUTION : The air conditioning pipes clamp must be in contact with its interface before the nuts are tightened.

Refit :

- The air conditioning circuit ducts (3), (7), (9)
- The nuts (4), (6), (8)
- The additional air conditioning circuit pipes (23) (if necessary)
- The nuts (22) (if necessary)

Clip the air conditioning pipes 26 (at "e", "g").

Reconnect the pressure switch (at "f").

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 15 minutes)
- Sealing test of the air conditioning circuit

Refit :

- The power-assisted steering fluid reservoir (24)
- The 2 bolts (25)
- The harnesses (21)
- The nut (20)
- The cover (19)
- The nut (18)

Reconnect the connectors (at "b", "c").

Refit :

- The engine fuse box cover (17)
- The screenwash filler pipe (14)
- The water evacuation pipe (15)
- The (16) bolt
- The expansion chamber support (13)
- The bolts (10)
- The expansion bottle (12)
- The (11) bolt
- The air intake duct at the air filter (2)
- The nuts (1)

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 35 minutes)
- Charging of the air conditioning circuit

CAUTION : When replacing air conditioning pipes, add 5 cm³ of air conditioning compressor oil per pipe replaced.

Check the functioning of the air conditioning.

REMOVING - REFITTING : POLLEN FILTER

1. Removing

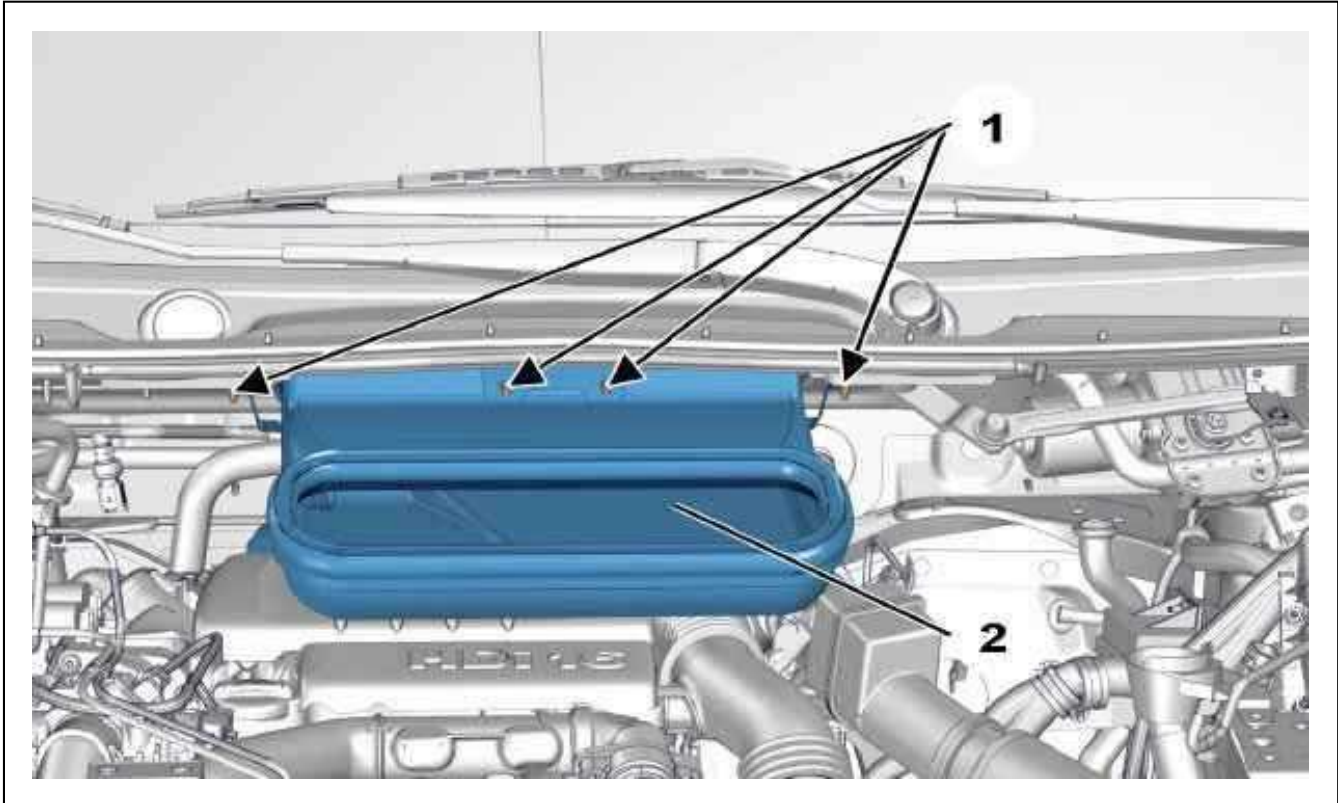


Figure : B1BPSP9D

Remove :

- The 4 nuts (1)
- The air inlet manifold (2)

Pull out the pollen filter (Located in the air inlet manifold).

2. Refitting

Clean the pollen filter housing.

CAUTION : Check the direction of fitting when putting back the pollen filter.

Fit a new pollen filter.

Refit :

- The air inlet manifold (2)
- The 4 nuts (1)

Check the air flow of the air blower by operating it at different speeds.

REMOVING - REFITTING : COOLING CONDENSOR

ESSENTIAL : Before carrying out any work on the air conditioning circuit, take the necessary precautions.

N.B. : Do not remove the pipe plugs, clamps or unions until carrying out the connection to vehicle.

1. Recommended tools

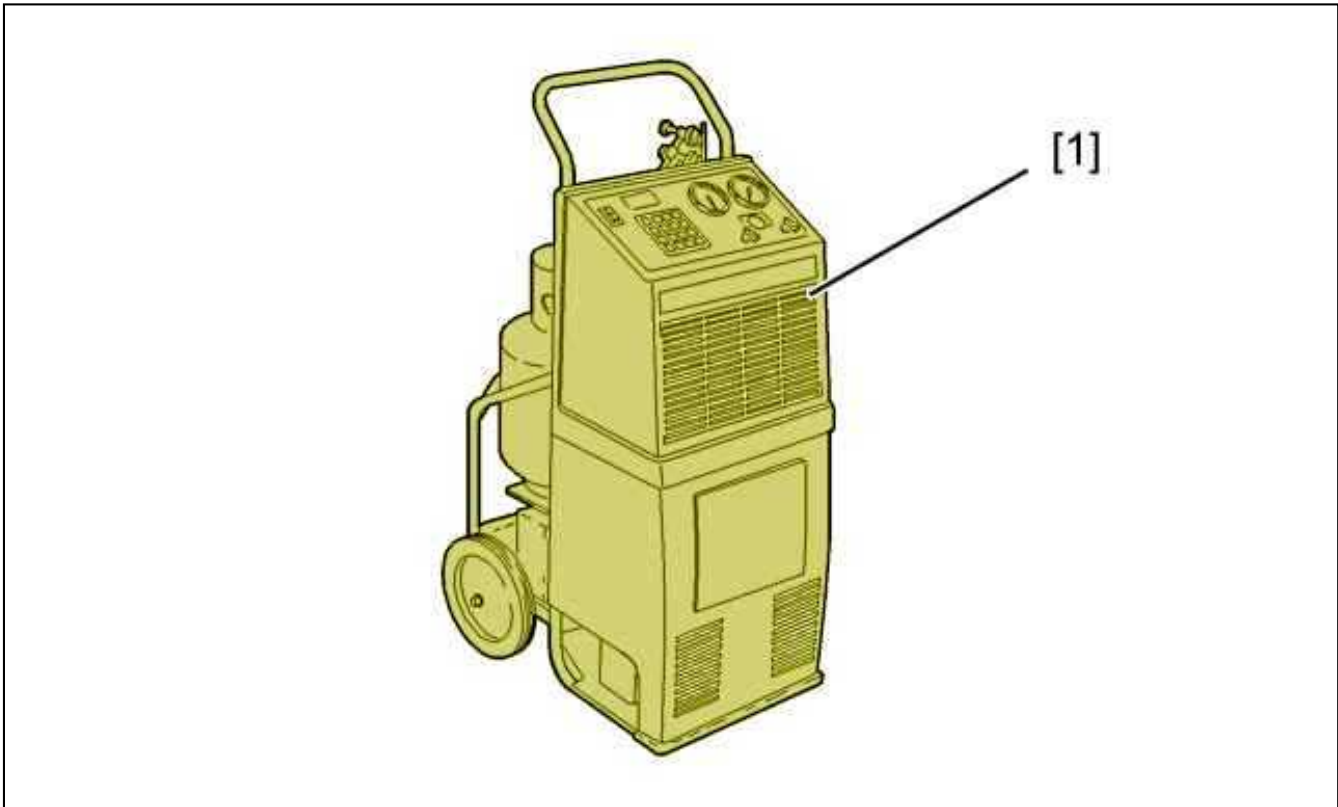


Figure : E5AP2WWD

[1] Filling and recycling equipment .

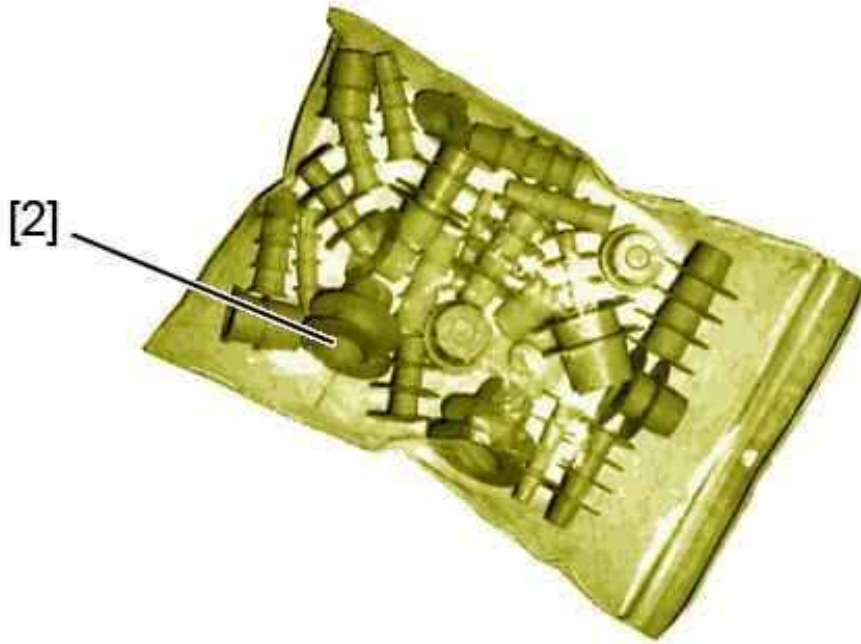


Figure : E5AP2PBD

[2] air conditioning protection blanks (-).1701.HZ.

2. Removing

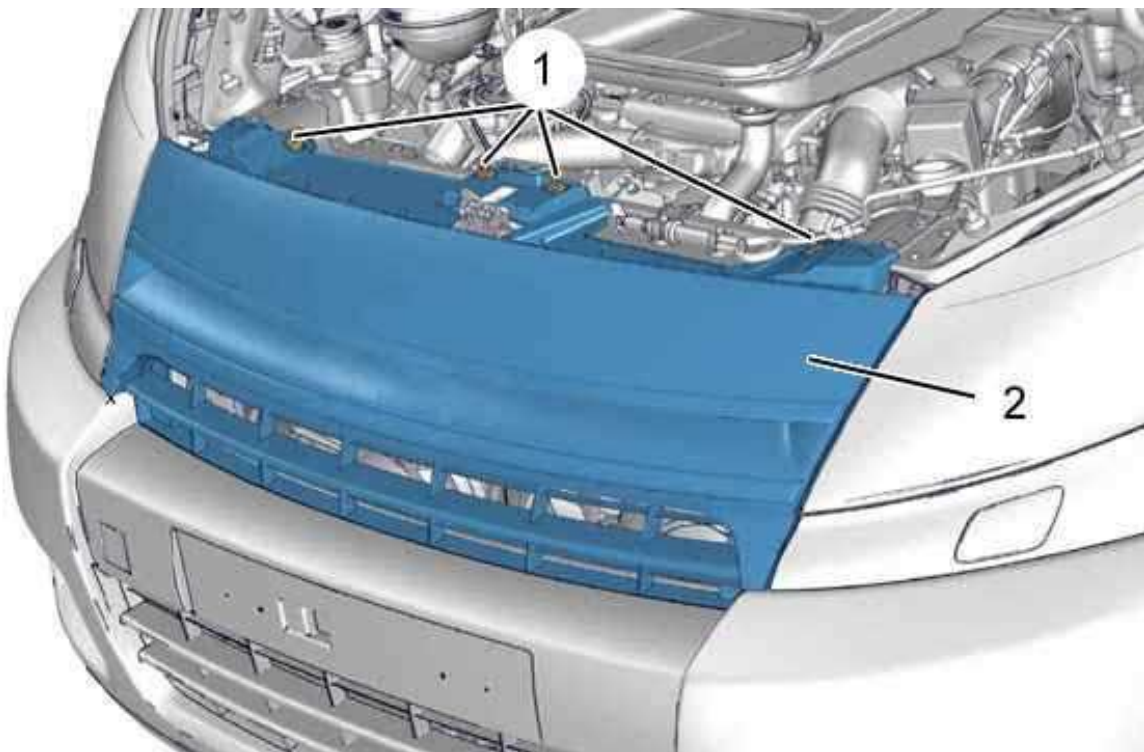


Figure : C4AP1VVD

Remove :

- The mounting pins (1)
- The grille (2)

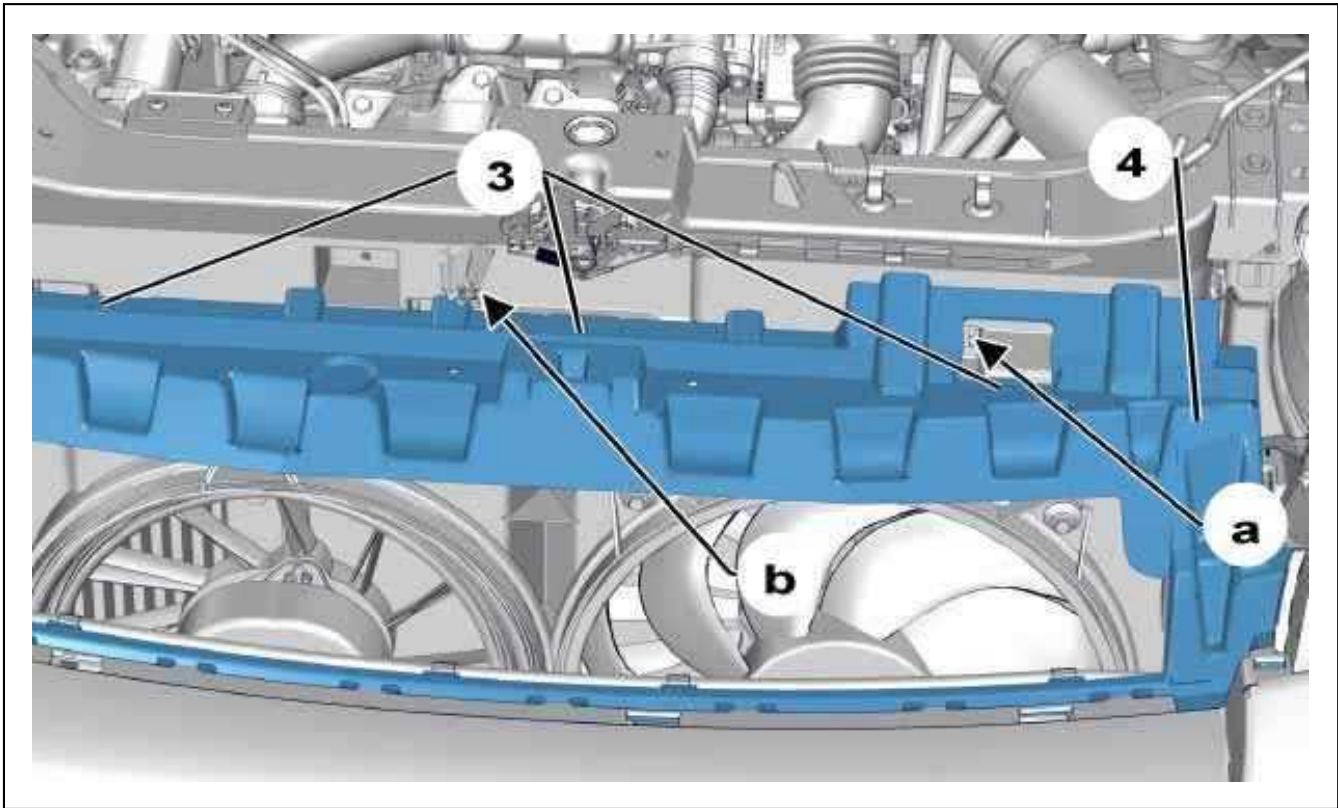


Figure : B1GP0KXD

Remove the fixing pins (3).

Move aside the partition (4).

Unclip the radiator clips (at "a", "b").

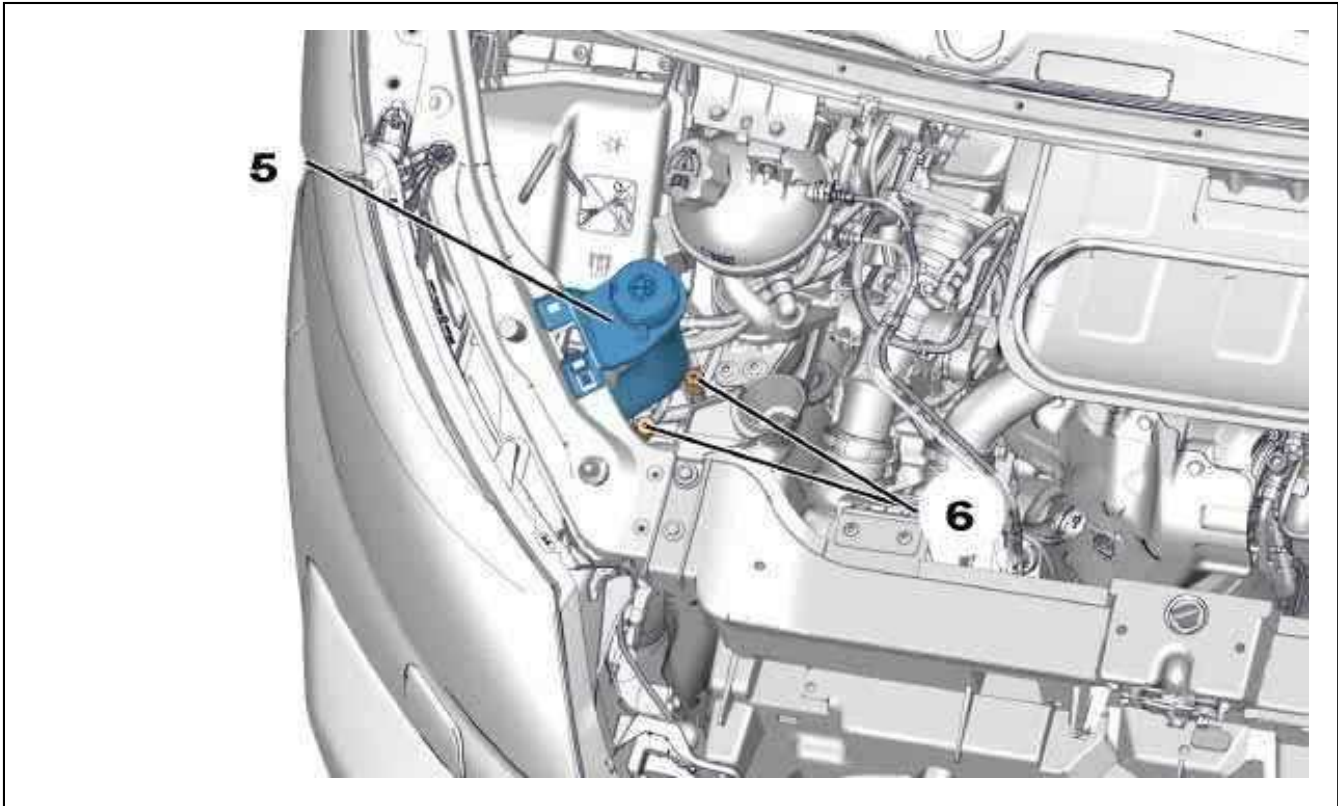


Figure : B1BPSPCD

Remove :

- The screenwash filler pipe (5)
- The filler caps (6)

Drain the air conditioning circuit (R134a) ; Using the charging station [1].

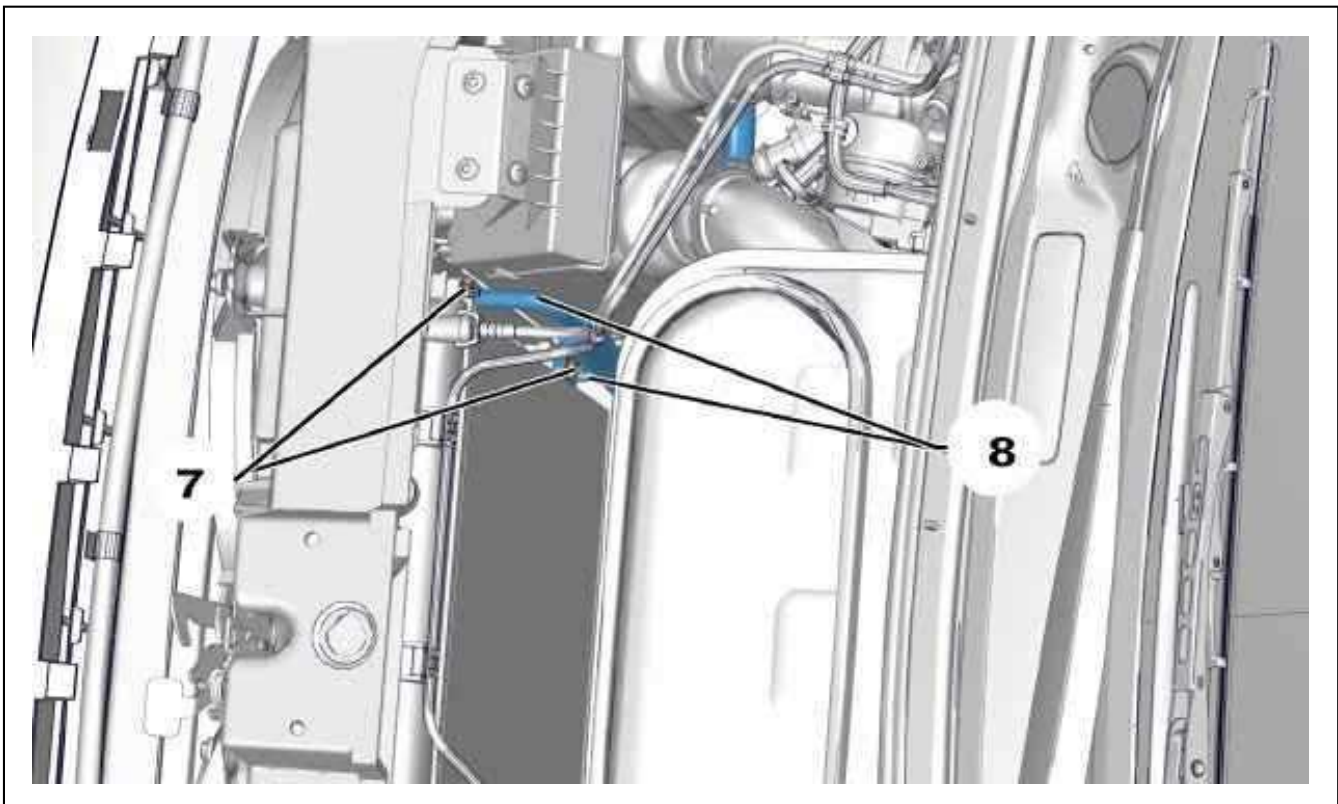


Figure : C5HP1M5D

Remove the nuts (7).

Move aside the refrigerant pipes (8).

ESSENTIAL : Quickly plug all the pipes and the condenser to prevent the introduction of humidity ; Using the tools [2].

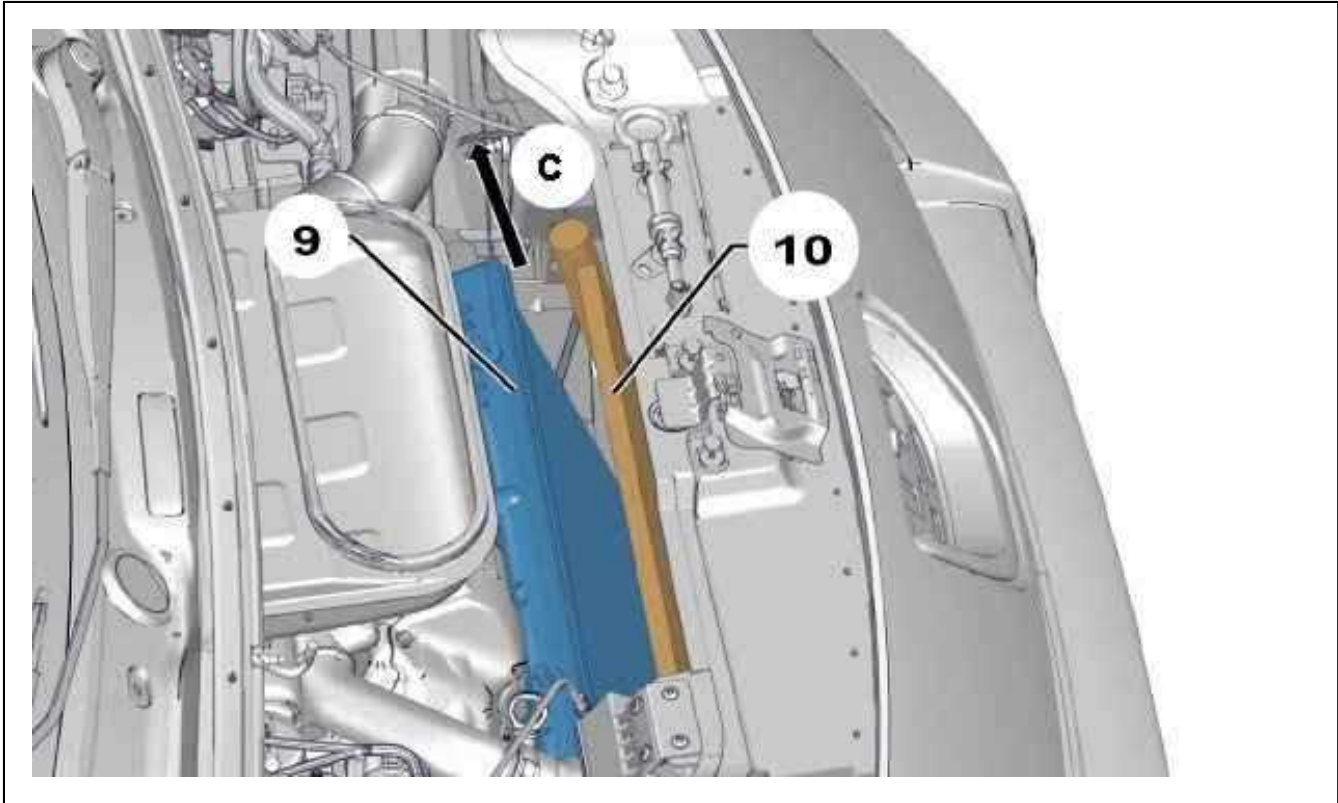


Figure : B1GP0KYD

Move aside the engine cooling radiator (9).

Move aside and remove the air conditioning condenser (10) (following the arrow "c").

3. Refitting

Refit :

- The air conditioning capacitor (10)
- The engine cooling radiator (9)

Check that the air conditioning pipes (8) and the air conditioning condenser (10) are clean.

CAUTION : Fit new O-ring seals . Lubricate the new seals with compressor oil.

Refit the air conditioning pipes (8) perpendicular to the air conditioning condenser (10).

CAUTION : The air conditioning pipes clamp must be in contact with its interface before the nuts (7) are tightened.

CAUTION : Observe the tightening torque.

Fit the nuts (7) ; Tighten to 0,6 daN.m.

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 15 minutes)

- Sealing test of the air conditioning circuit

Refit :

- The radiator clips
- The partition (4)
- The mounting pins (3)
- The grille (2)
- The mounting pins (1)

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 35 minutes)
- Charging of the air conditioning circuit

N.B. : If you are replacing the air conditioning condenser, when you refill the air conditioning circuit, using tool [1] add 20cc of air conditioning compressor oil.

Refit :

- The filler caps (6)
- The screenwash filler pipe (5)

Check the functioning of the air conditioning.

REMOVING - REFITTING : COOLING PRESSURE RELIEF VALVE

ESSENTIAL : Before carrying out any work on the air conditioning circuit, take the necessary precautions.

N.B. : Do not remove the pipe plugs, clamps or unions until carrying out the connection to vehicle.

1. Recommended tools

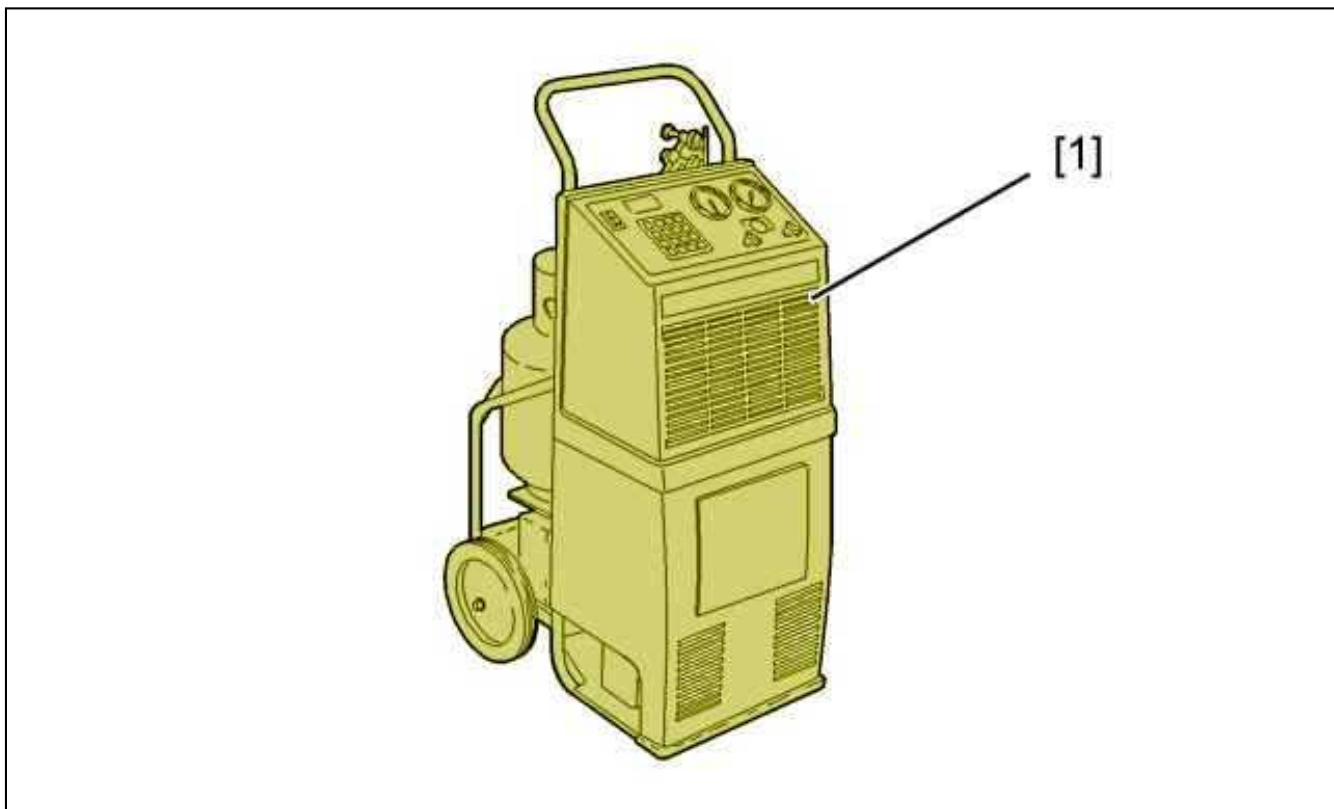


Figure : E5AP2WWD

[1] Filling and recycling equipment .

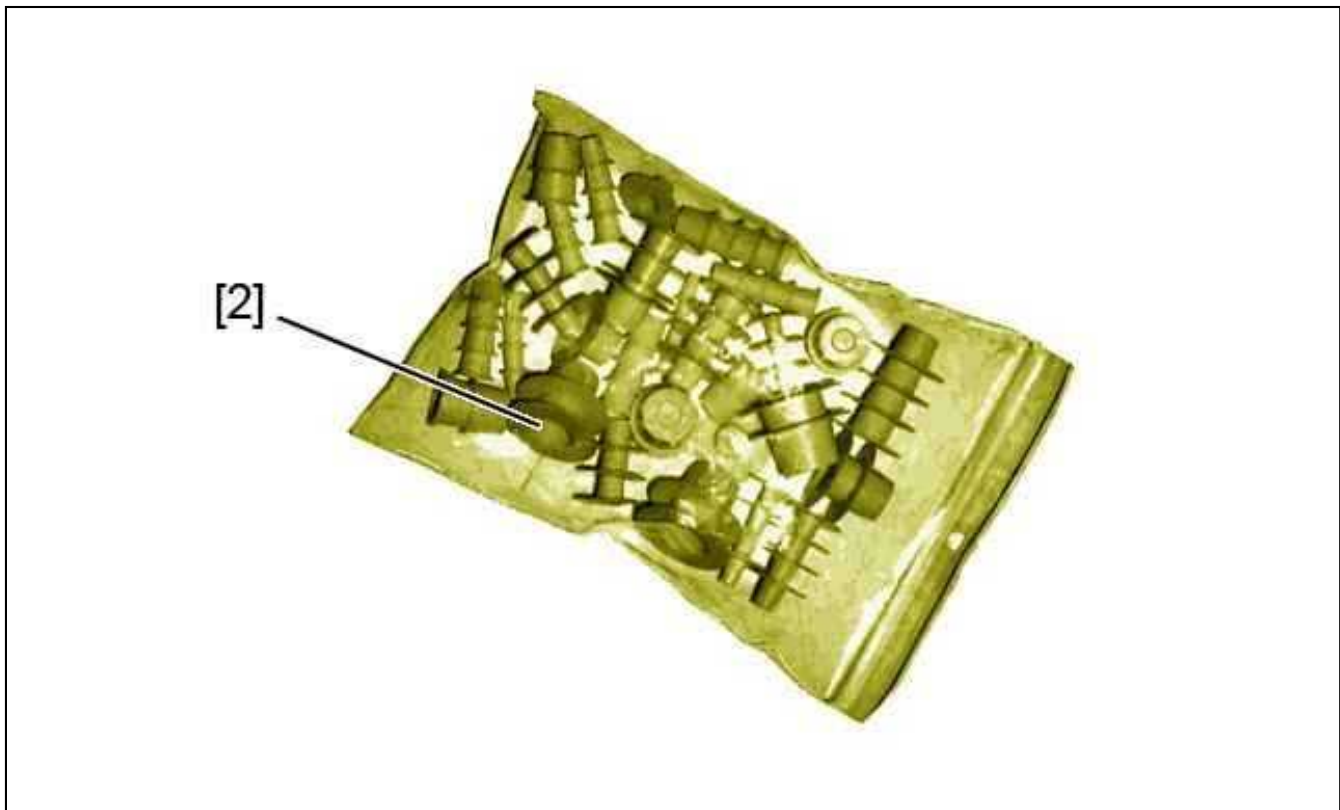


Figure : E5AP2PBD

[2] air conditioning protection blanks (-).1701.HZ.

2. Preliminary operation

Drain the air conditioning circuit (R134a) ; Using the charging station [1].

3. Removing

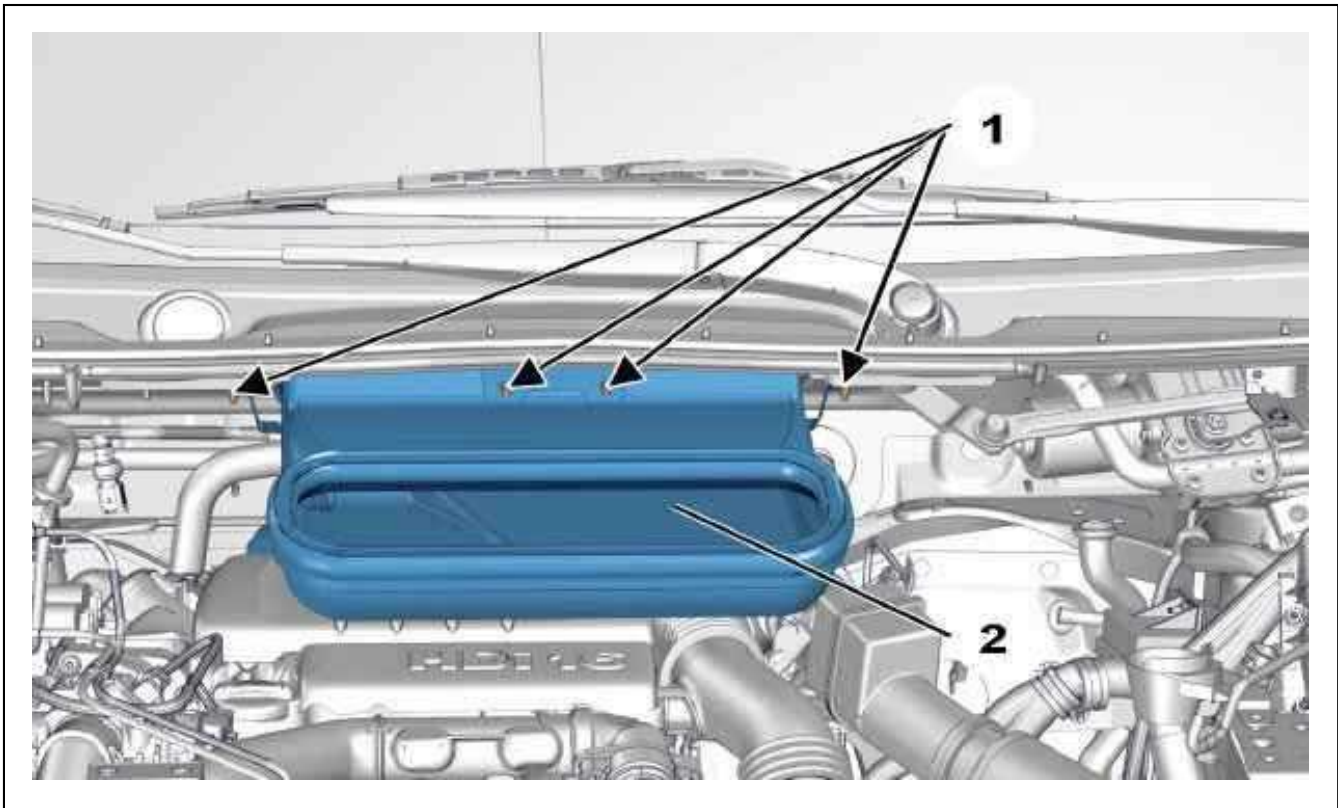


Figure : B1BPSP9D

Remove :

- The 4 nuts (1)
- The air inlet manifold (2)

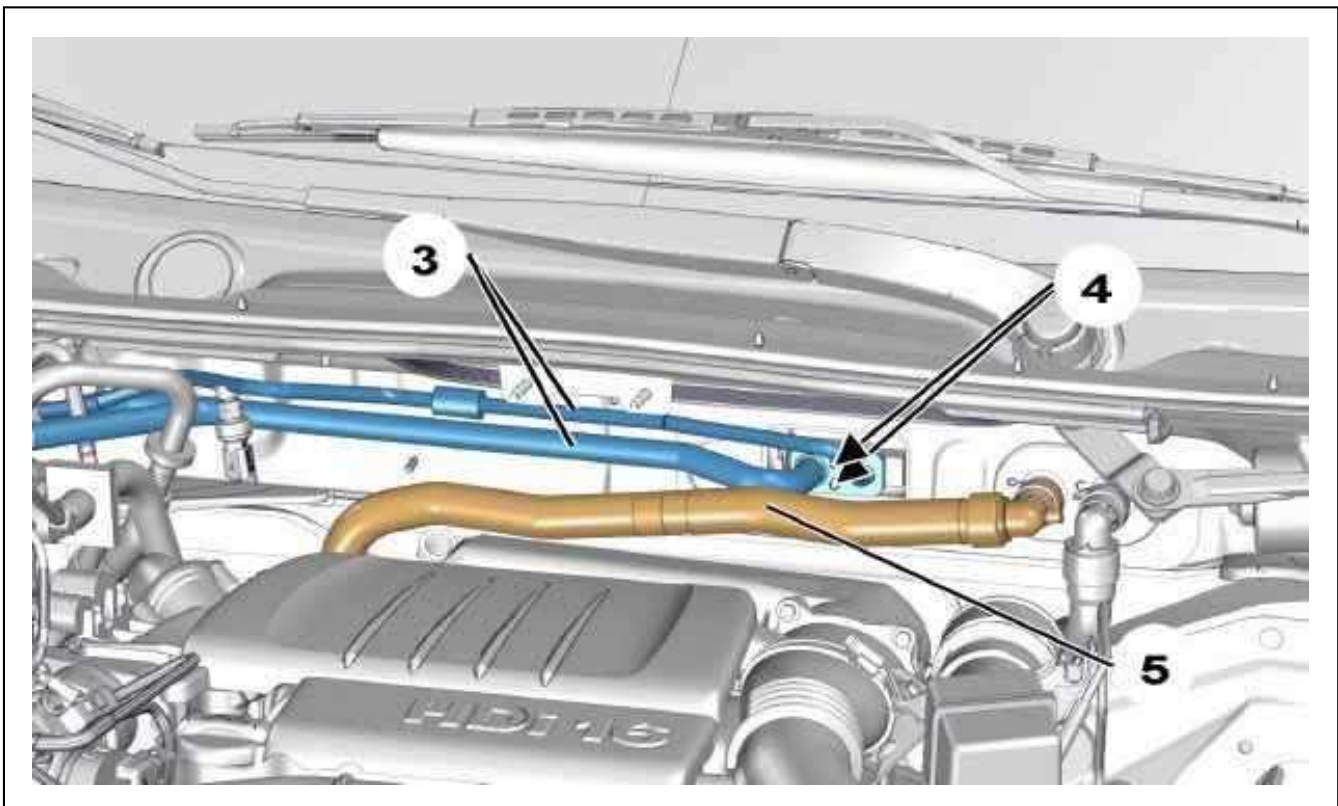


Figure : B1BPSPAD

Detach and move aside the heater matrix pipe (5).
Remove the 2 nuts (4).

CAUTION : Plug all the conduits quickly to prevent the entry of humidity ; Using the tools [2].

Move aside the air conditioning pipes (3).
Remove the O-ring seals from the air conditioning pipes .

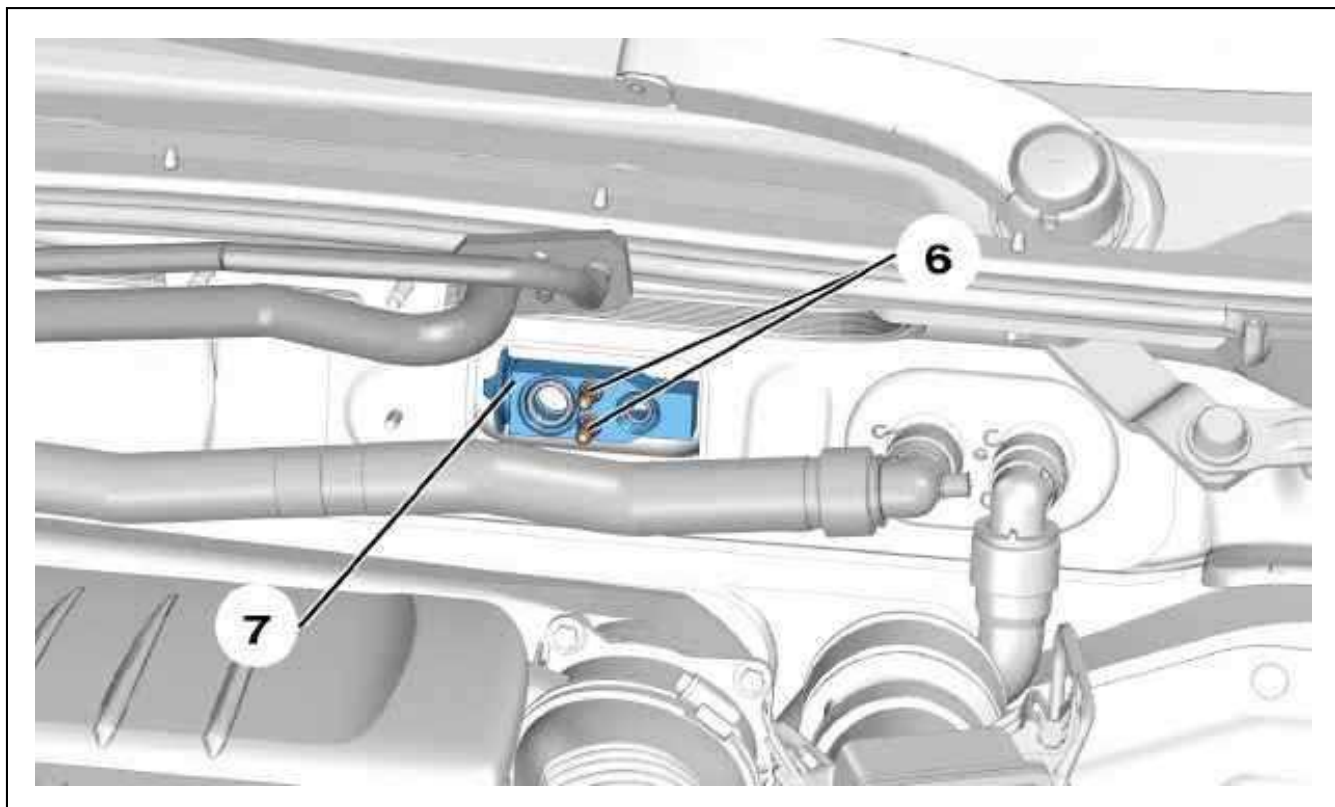


Figure : C5HP1M4D

CAUTION : Plug all the conduits quickly to prevent the entry of humidity ; Using the tools [2].

Remove :

- The 2 bolts (6)
- The air conditioning pressure reducer (7)

Remove the O-rings .

4. Refitting

Check that the pipes upstream and downstream of the air conditioning pressure reducer are clean.

CAUTION : Fit new O-ring seals ; Lubricate the new seals with air conditioning compressor oil.

Fit the O-rings.

Refit the air conditioning pressure reducer (7).

CAUTION : Adhere to the tightening torques.

Refit the bolts (6) ; Tighten to 0,6 daN.m.

Fit O-rings on the air conditioning pipes .

ESSENTIAL : The air conditioning pipes clamp must be in contact with its interface before the nuts (4) are tightened.

Refit :

- The air conditioning pipes (3) perpendicular to the air conditioning pressure reducer (7)
- The 2 nuts (4) ; Tighten to 0,6 daN.m

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 15 minutes)
- Sealing test of the air conditioning circuit

Position and secure the heater matrix pipe (5).

Refit :

- The air inlet manifold (2)
- The 4 nuts (1)

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 35 minutes)
- Charging of the air conditioning circuit

Check the functioning of the air conditioning.

REMOVING - REFITTING : BLOWER

1. Removing

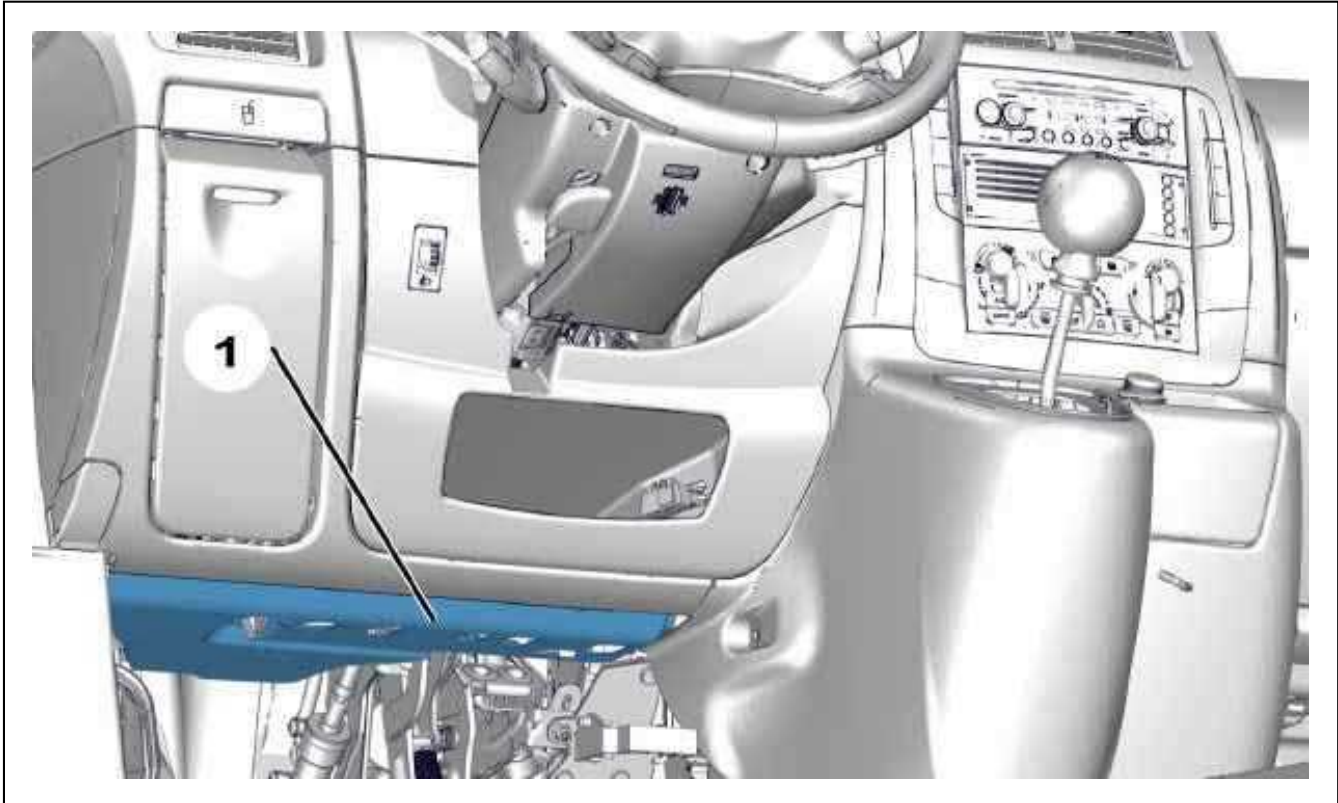


Figure : C5FP1BJD

Unclip the trim under the fascia (1).

Remove the trim under the dashboard (1).

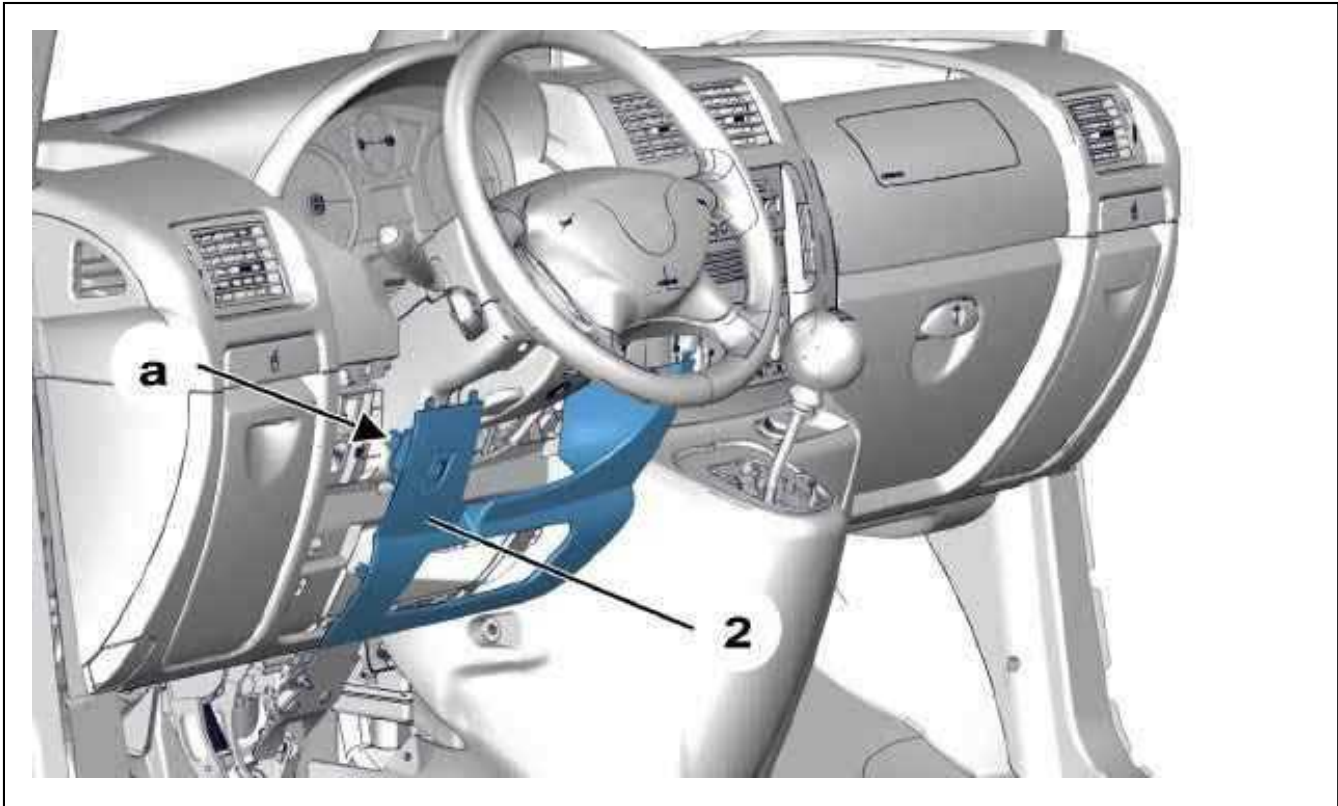


Figure : C5FP1BKD

Unclip the lower fascia trim (2) and move it aside.
Disconnect the headlamp height adjuster control (as "a").

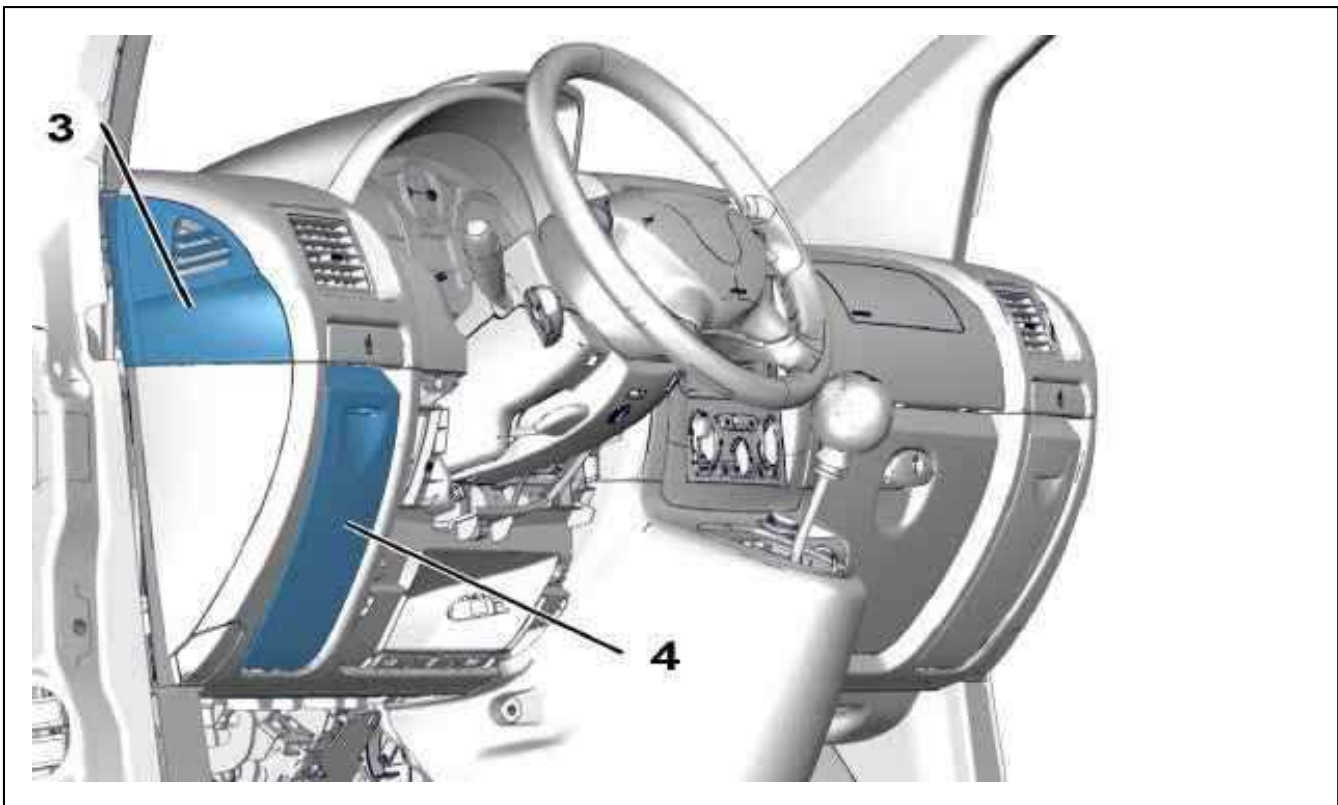


Figure : C5FP1BLD

Remove :

- The fascia (3) left-hand side cover
- The driver's side storage compartment (4)

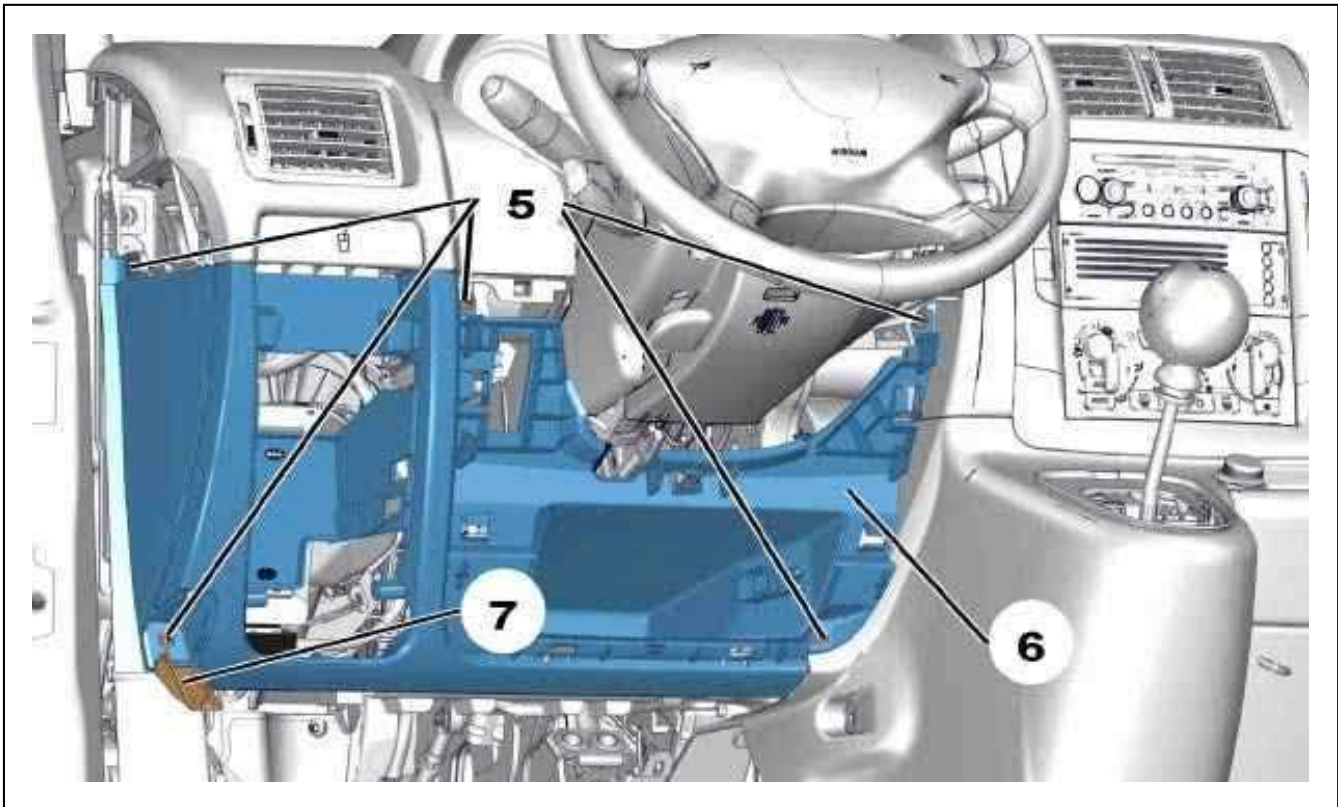


Figure : C5FP1BMD

Move aside the cover (7).

Remove the bolts (5).

Move aside the lower fascia (6).

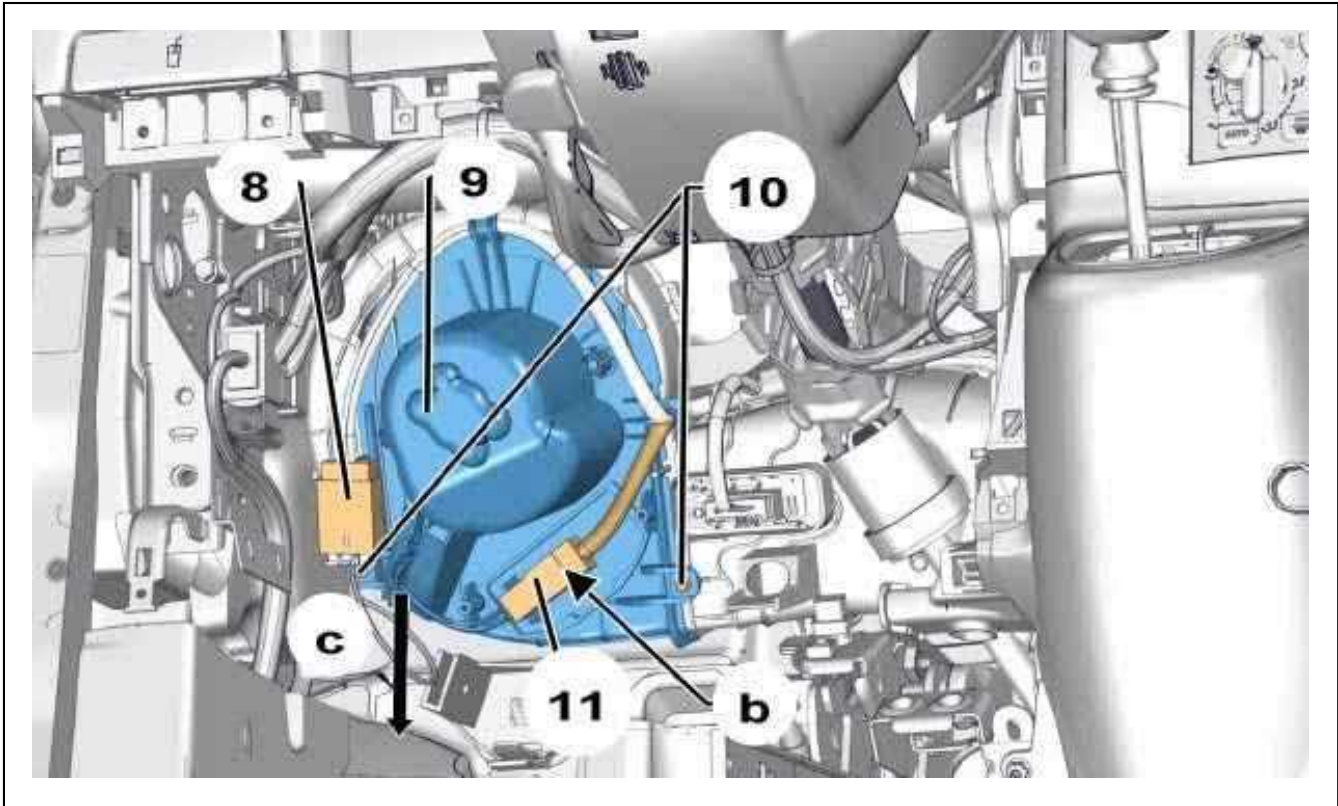


Figure : C5FP1BND

Unclip the connectors (8), (11).
 Remove the bolts from the blower (10).
 Disconnect the connector (as "b").
 Remove the blower (9) (towards "c").

2. Refitting

Refit :

- The blower unit (9)
- The bolts of the blower (10)

Reconnect the connector (as "b").

Clip the connectors (8), (11).

Refit :

- The lower fascia (6)
- The bolts (5)
- The cover (7)
- The driver's side storage compartment (4)
- The fascia (3) left-hand side cover

Reconnect the headlamp height adjuster control (as "a").

Reclip the fascia lower trim (2).

Refit the trim under the fascia (1).

Check the operation of the air blower.

REMOVING - REFITTING : RECYCLING MICROMOTOR

1. Removing

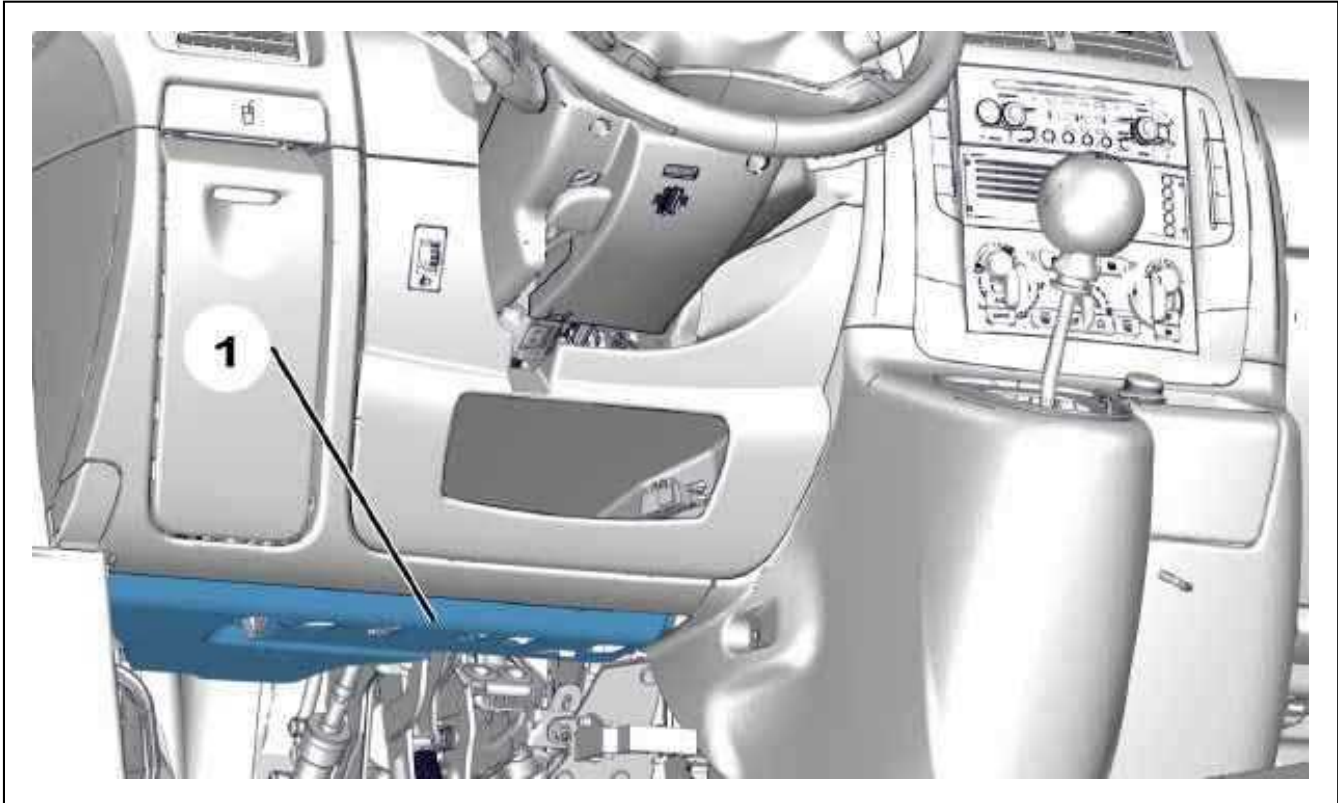


Figure : C5FP1BJD

Unclip the trim under the fascia (1).

Remove the trim under the dashboard (1).

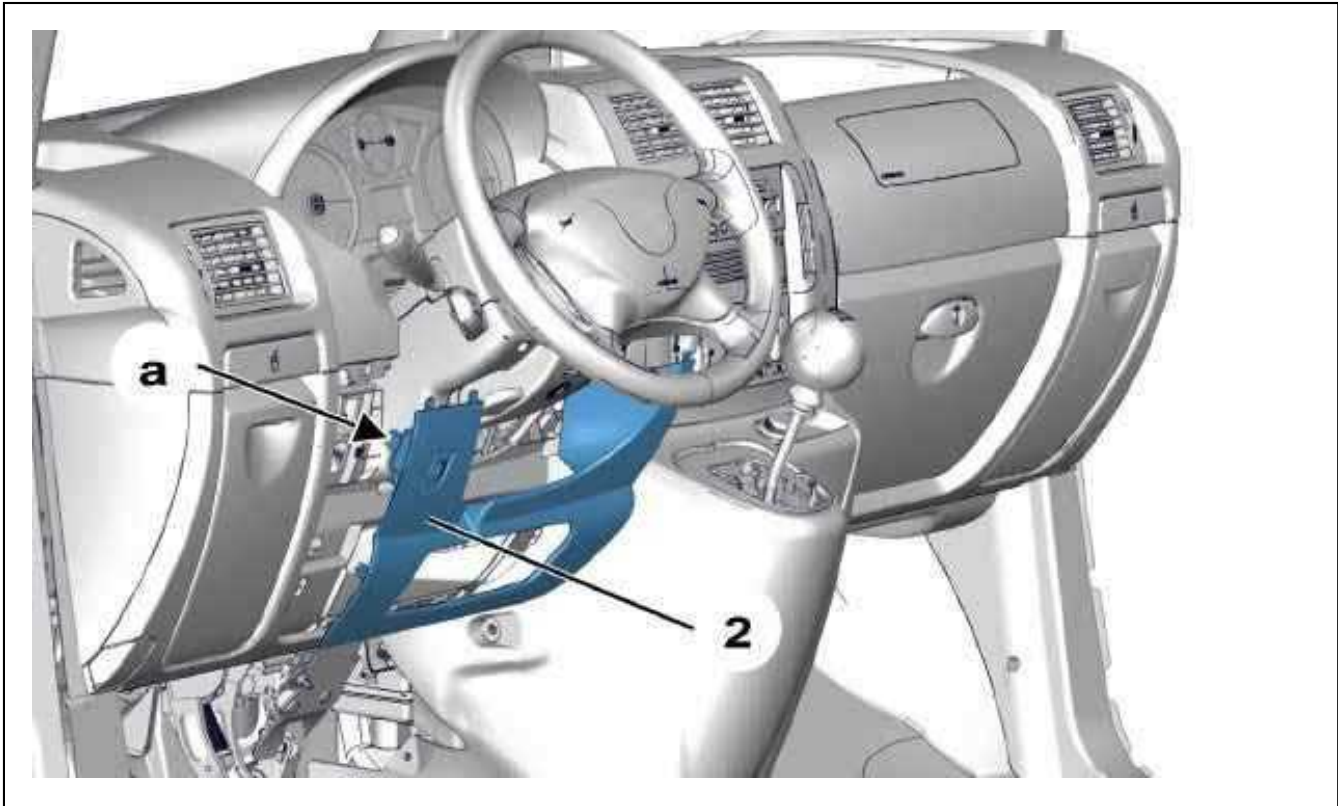


Figure : C5FP1BKD

Unclip and move aside the fascia lower trim (2).
Disconnect the headlamp height adjuster control (as "a").

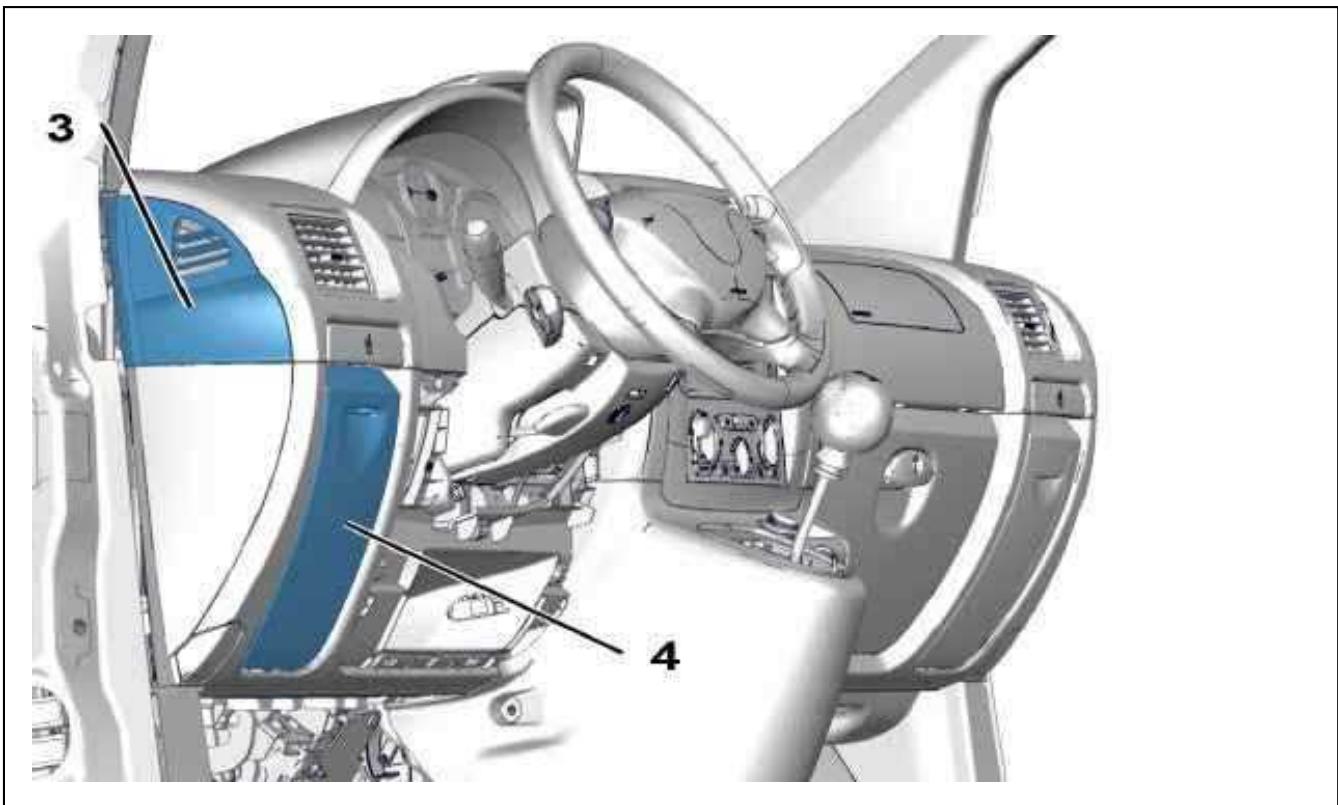


Figure : C5FP1BLD

Remove :

- The fascia (3) left-hand side cover
- The driver's side storage compartment (4)

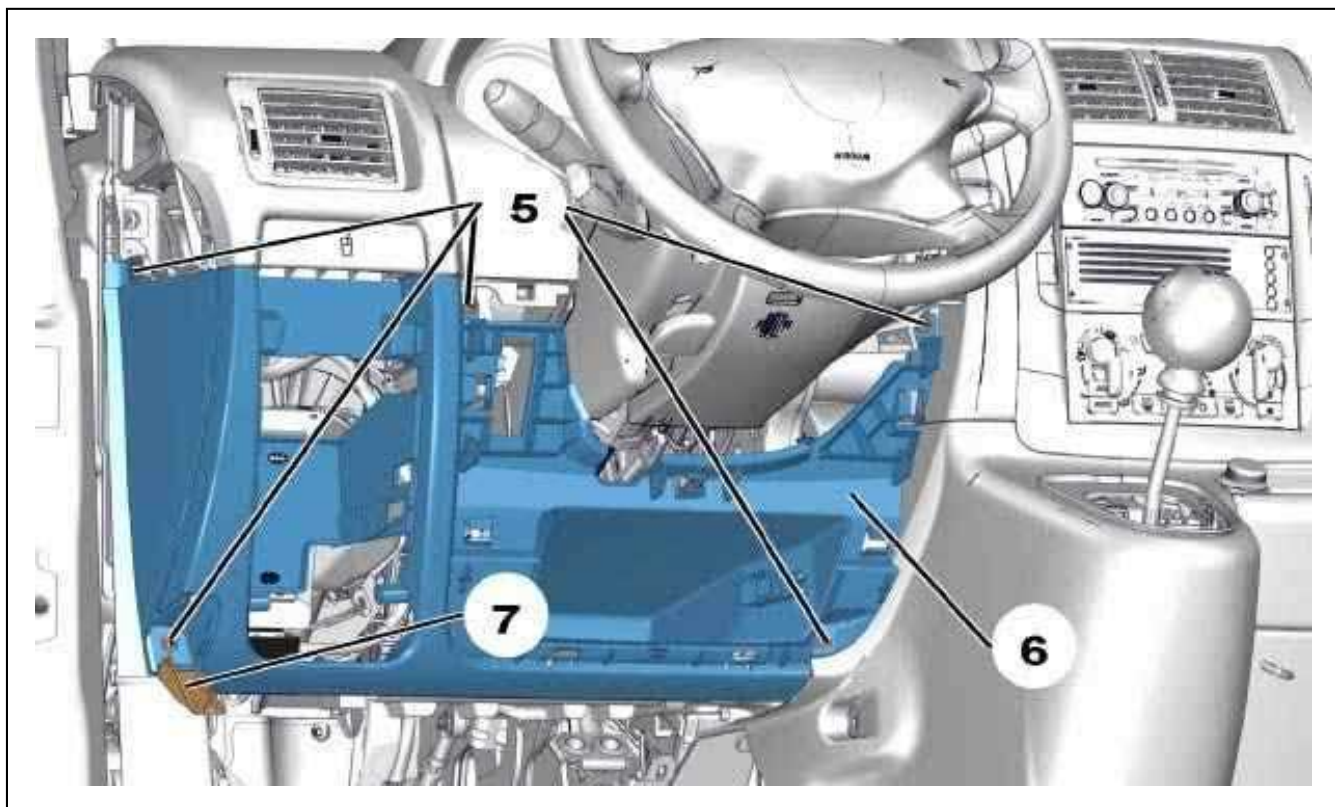


Figure : C5FP1BMD

Move aside the cover (7).

Remove the bolts (5).

Move aside the lower right-hand fascia (6).

1.1. Manual air conditioning

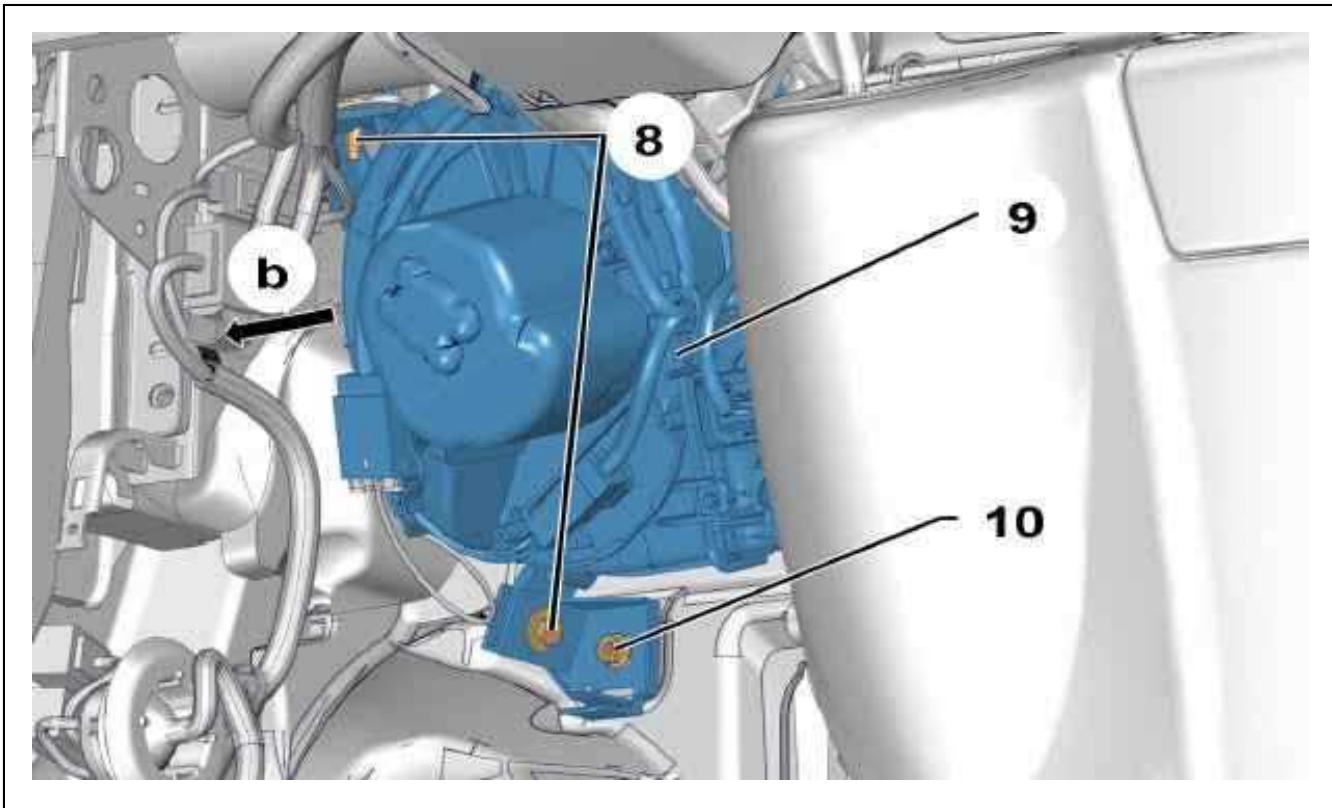


Figure : C5HP1MCD

Remove :

- The bolts (8)
- The nut (10)

Move aside the blower unit (9) (At "b").

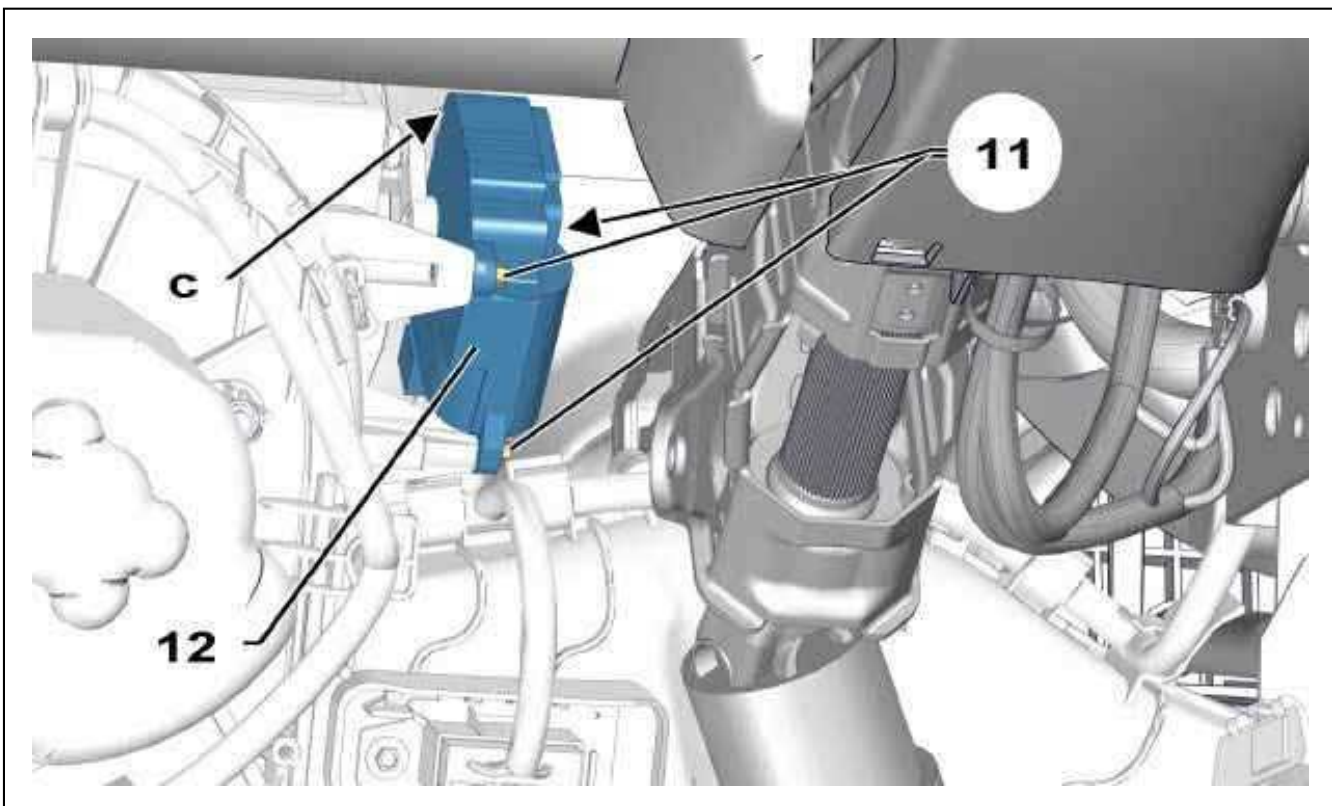


Figure : C5HP1MDD

Remove :

- The 3 bolts (11)
- The air inlet flap reduction motor (12)

Disconnect the connector (as "c").

1.2. Automatic air conditioning

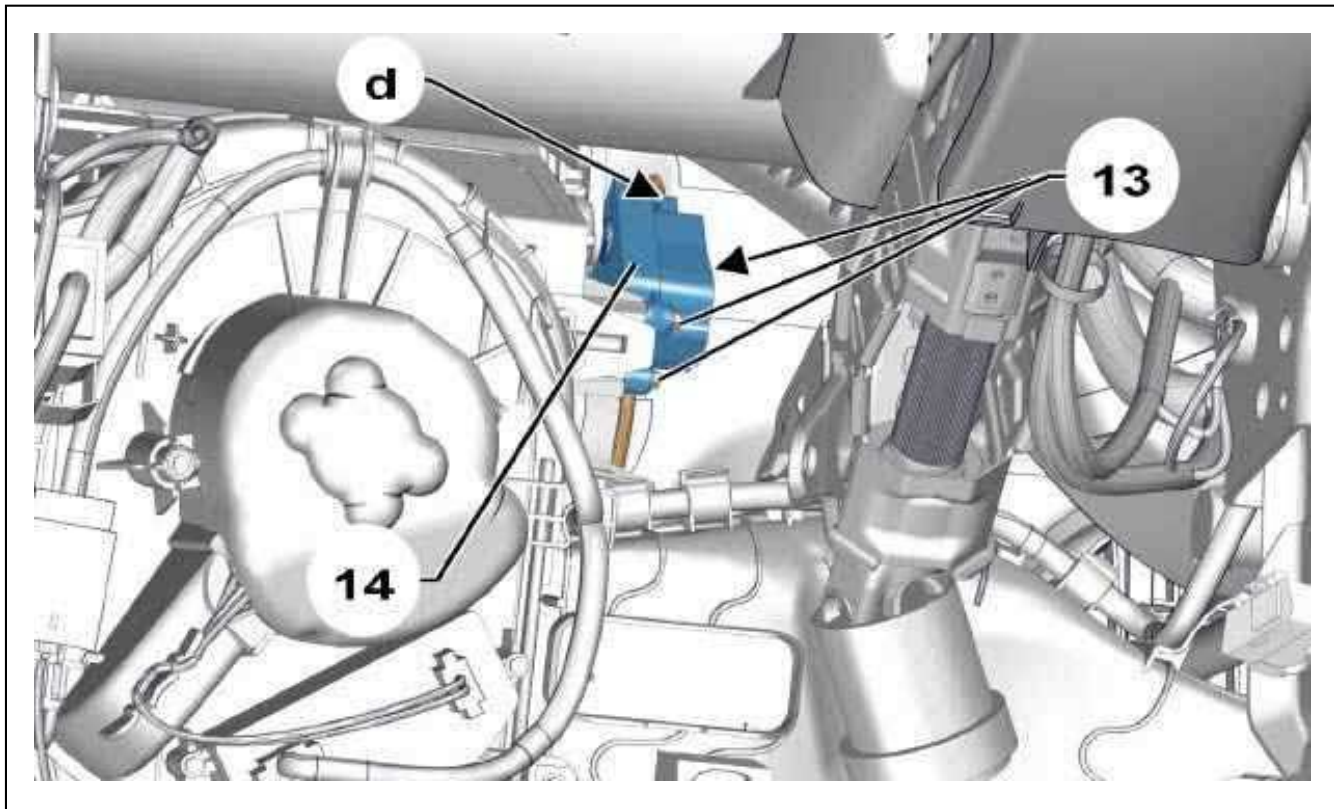


Figure : C5HP1MED

Remove :

- The 3 bolts (13)
- The air inlet flap reduction motor (14)

Disconnect the connector (as "d").

2. Refitting

2.1. Manual air conditioning

Reconnect the connector (as "c").

Refit :

- The air inlet flap reduction motor (12)
- The 3 bolts (11)
- The blower unit (9)
- The nut (10)
- The bolts (8)

2.2. Automatic air conditioning

Reconnect the connector (as "d").

Refit :

- The air inlet flap reduction motor (14)
- The 3 bolts (13)

2.3. Common operations

Refit :

- The lower fascia (6)
- The bolts (5)
- The cover (7)
- The driver's side storage compartment (4)
- The fascia (3) left-hand side cover

Reconnect the headlamp height adjuster control (as "a").

Reclip the fascia lower trim (2).

Refit the trim under the fascia (1).

Check the functioning of the recycling micromotor .

REMOVING - REFITTING : EVAPORATOR SENSOR

1. Removing

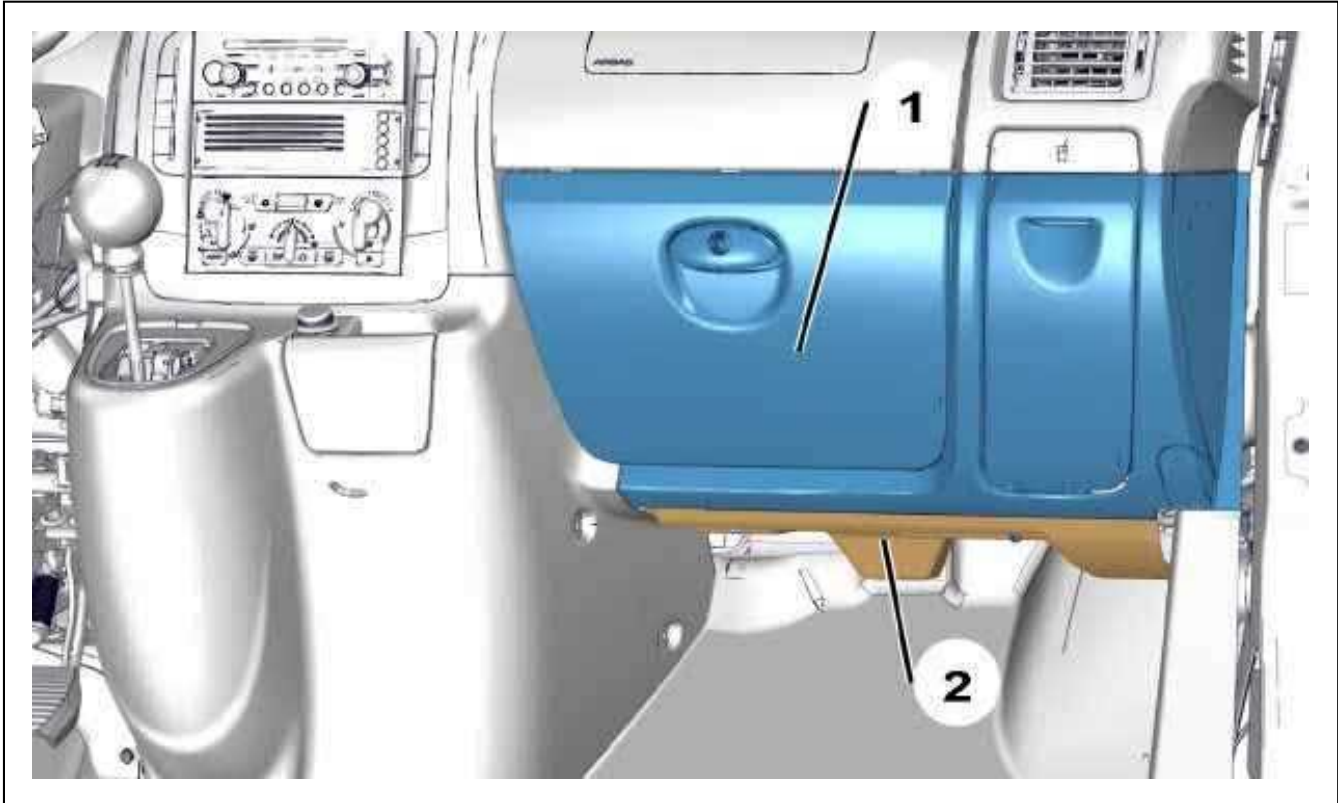


Figure : C5FP1BSD

Remove :

- The trim under the fascia (2) (right hand side)
- The dashboard oddments tray (1) ⓘ

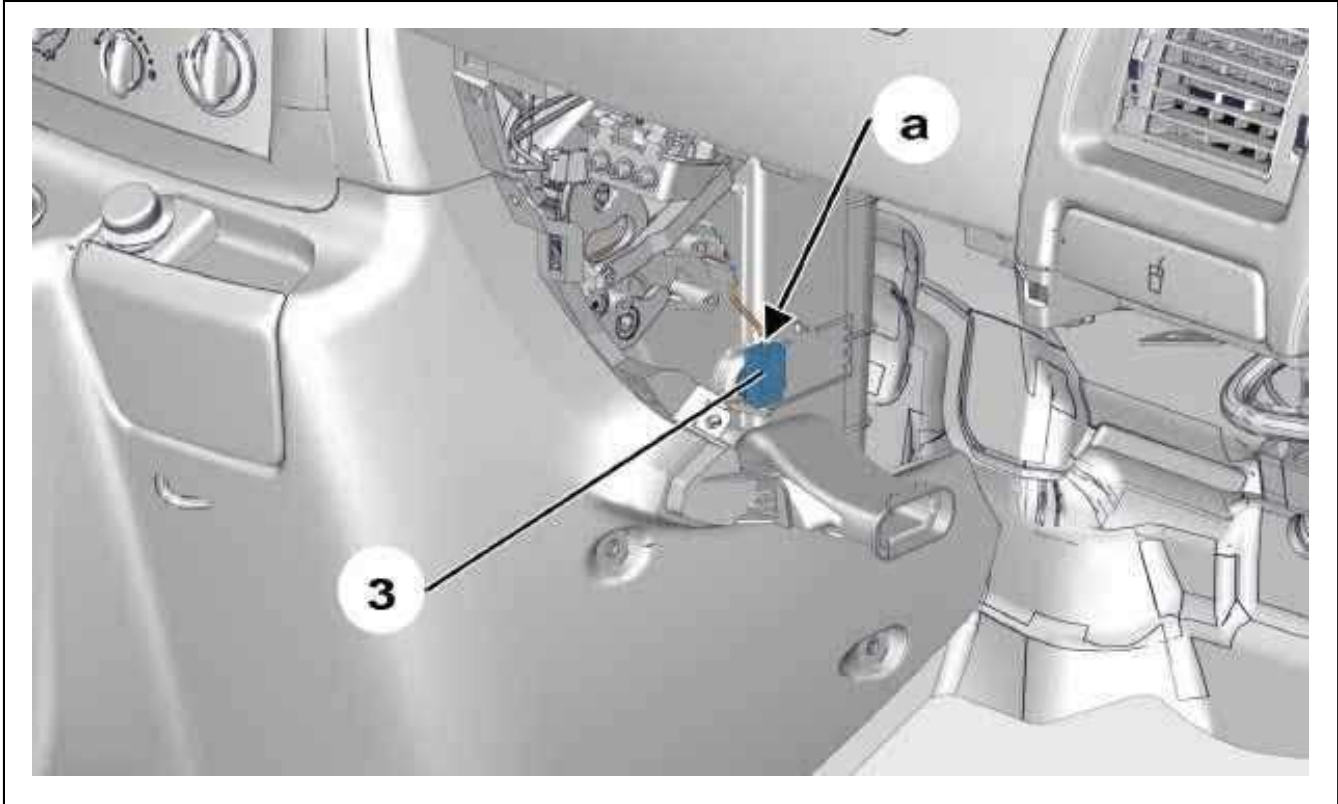


Figure : C5FP1BTD

Unclip the evaporator sensor (3).
Disconnect the connector (at "a").

2. Refitting

Reconnect the connector (at "a").
Reclip the evaporator sensor (3).

Refit :

- The dashboard oddments tray (1) 
- The trim under the fascia (2) (right hand side)

REMOVING - REFITTING : AIR BLOWER SPEED CONTROL COMPONENTS

1. Removing

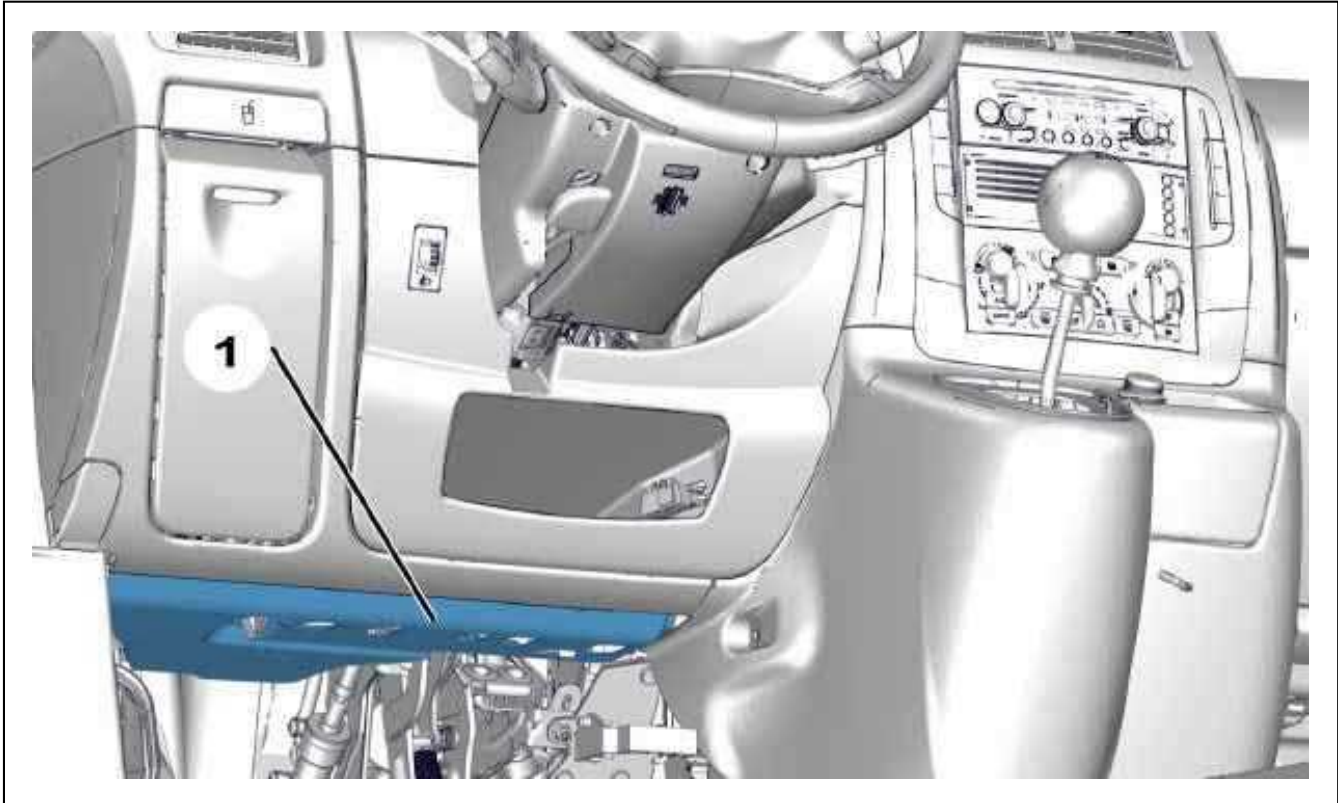


Figure : C5FP1BJD

Unclip and remove the trim (1) under the fascia .

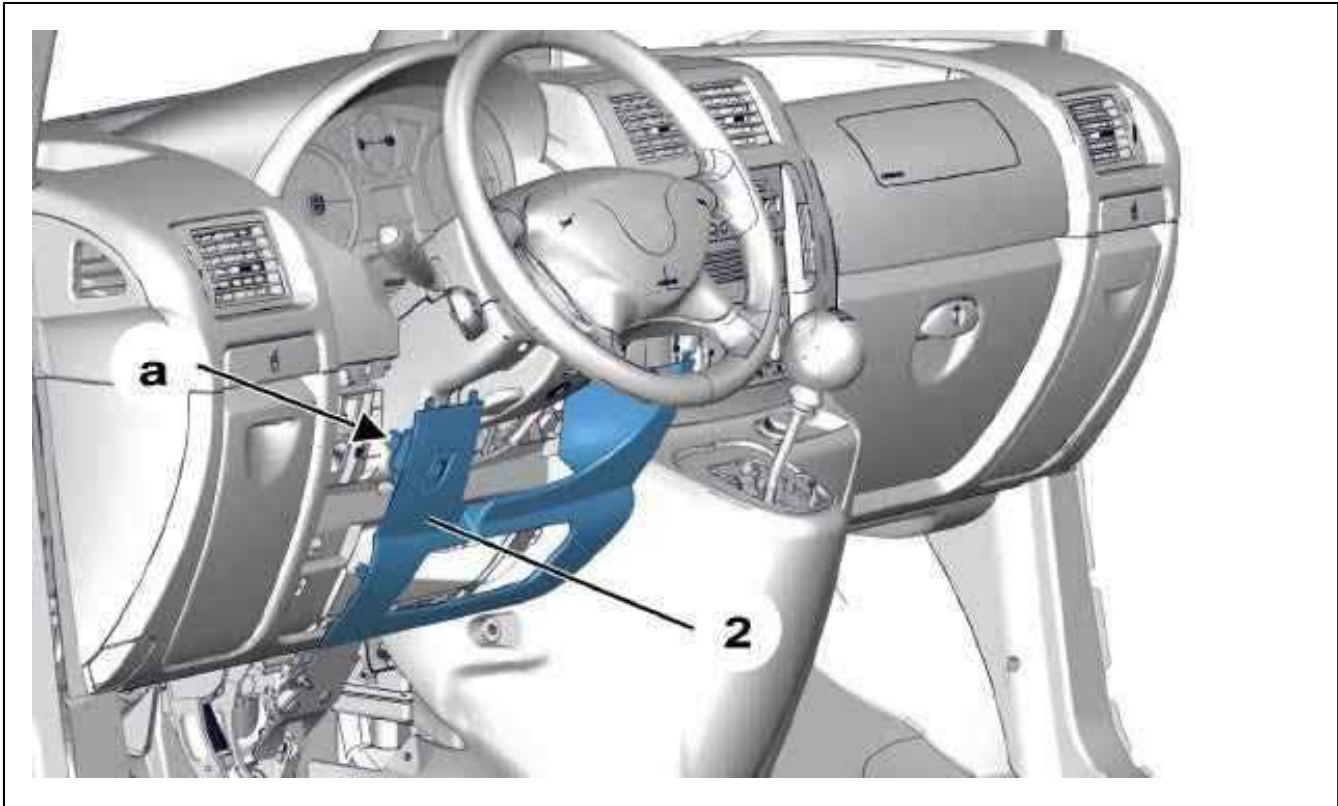


Figure : C5FP1BKD

Unclip and move aside the fascia lower trim (2).
Disconnect the headlamp height adjuster control (as "a").

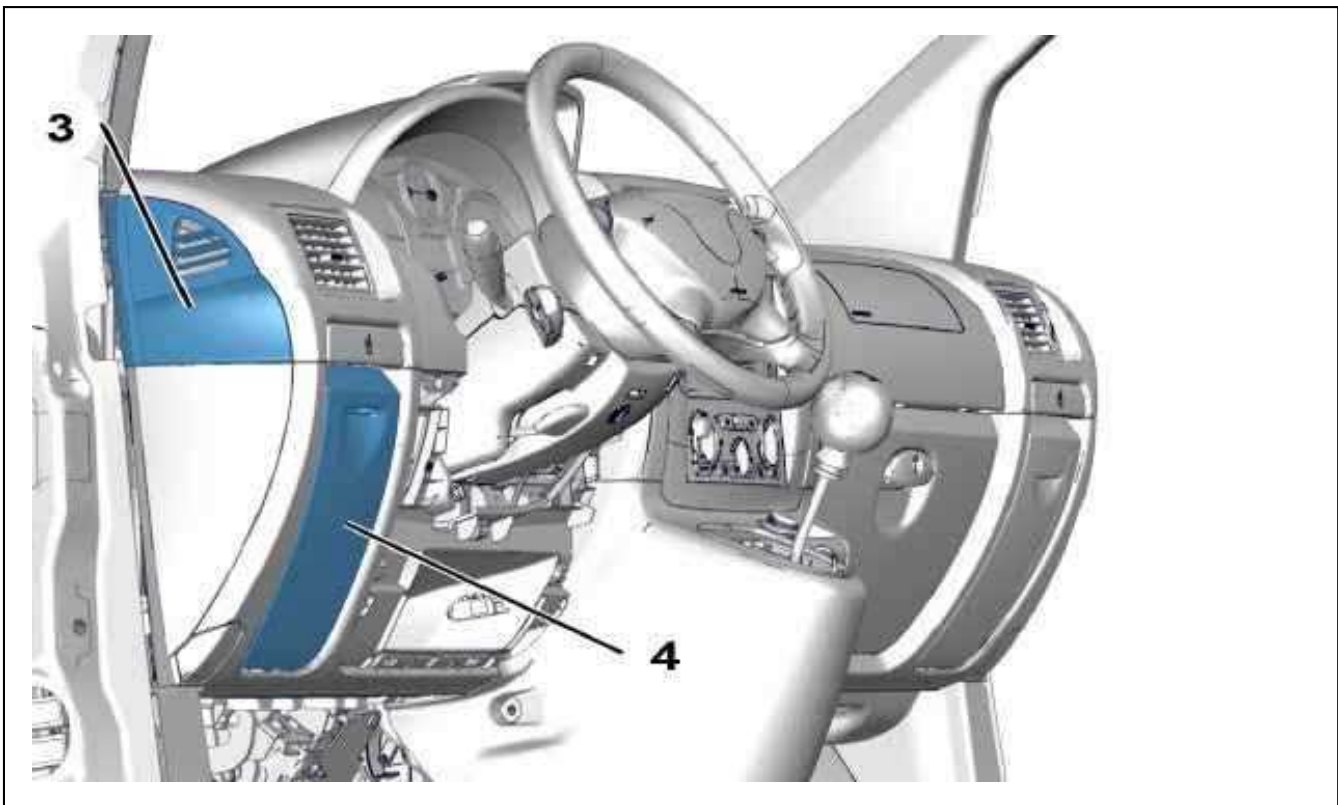


Figure : C5FP1BLD

Remove :

- The fascia left-hand side cover (3)
- The driver's side storage compartment (4)

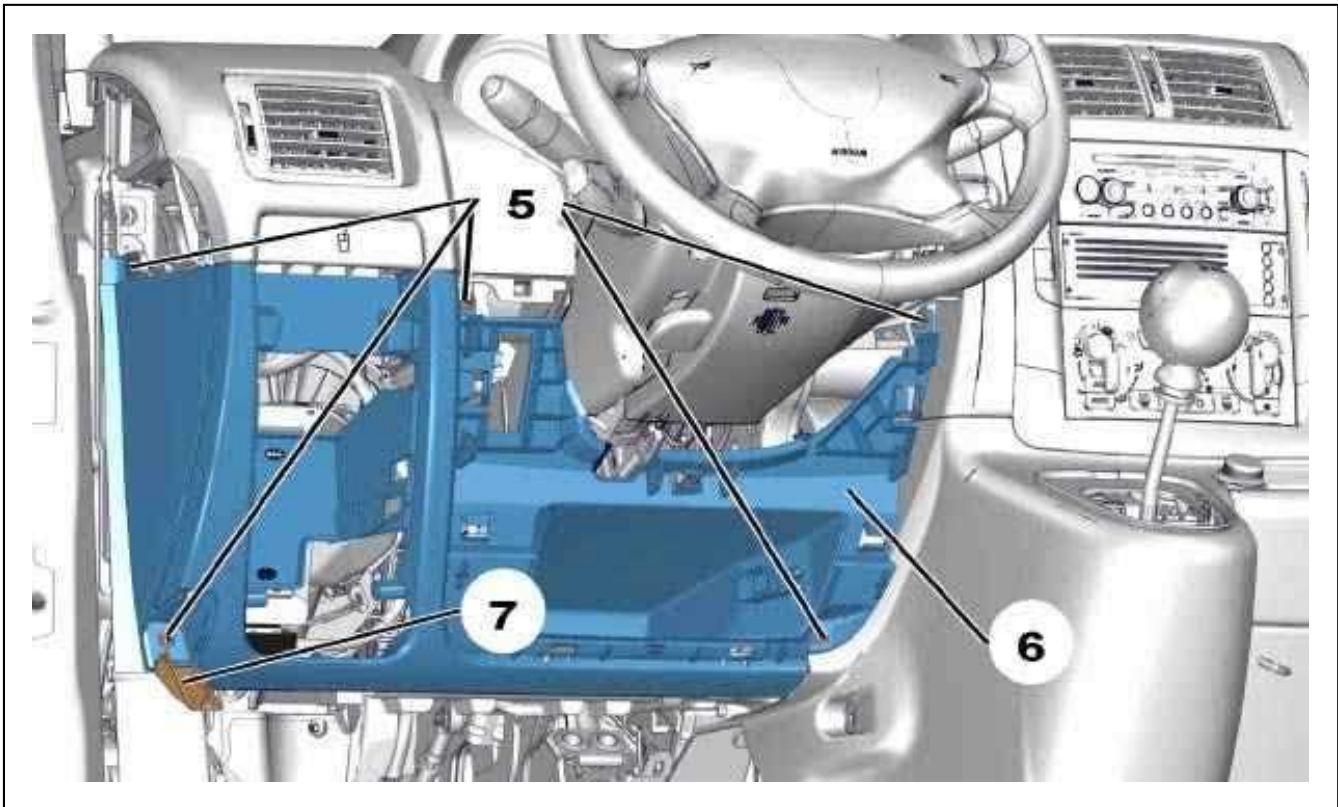


Figure : C5FP1BMD

Move aside the cover (7).

Remove the bolts (5).

Move aside the lower fascia (6).

1.1. Manual air conditioning

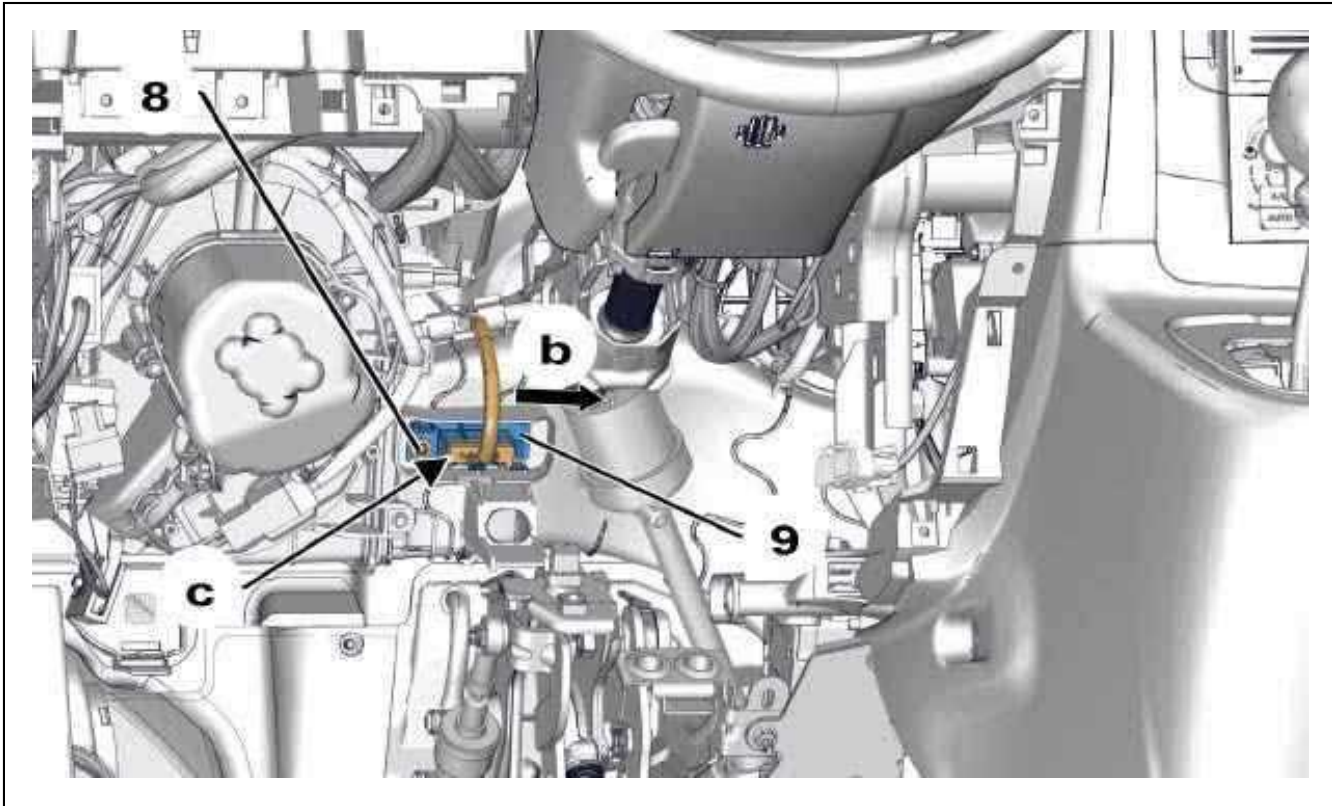


Figure : C5FP1BQD

Disconnect the connector (as "c").

Remove bolts (8).

Unclip the air blower speed resistor (9) (in direction "b").

1.2. Automatic air conditioning

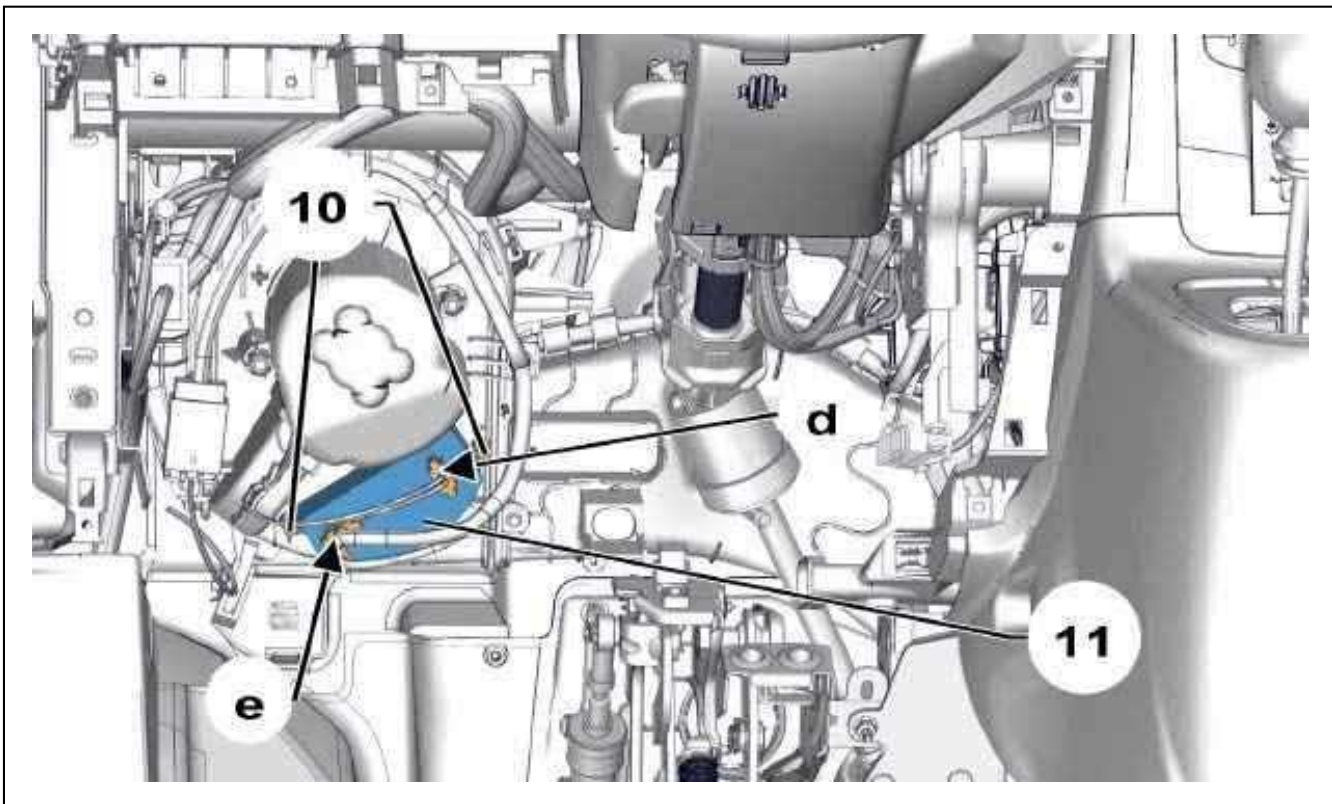


Figure : C5FP1BRD

Disconnect the connectors (as "d", "e").

Remove :

- The bolts (10)
- The blower control module (11)

2. Refitting

2.1. Manual air conditioning

Refit :

- The air blower speed resistor (9)
- The (8) bolt

Reconnect the connector (as "c").

2.2. Automatic air conditioning

Refit :

- The air blower control module (11)
- The bolts (10)

Reconnect the connectors (as "d", "e").

2.3. Common operations

Refit :

- The lower fascia (6)
- The bolts (5)
- The cover (7)
- The driver's side storage compartment (4)
- The fascia left-hand side cover (3)

Reconnect the headlamp height adjuster control (as "a").

Reclip the fascia lower trim (2).

Refit the trim (1) under the fascia .

Check the operation of the air blower.

REMOVING - REFITTING : BLOWN AIR SENSOR

1. Removing



Figure : C5FP1BYD

Remove the central console (1) .

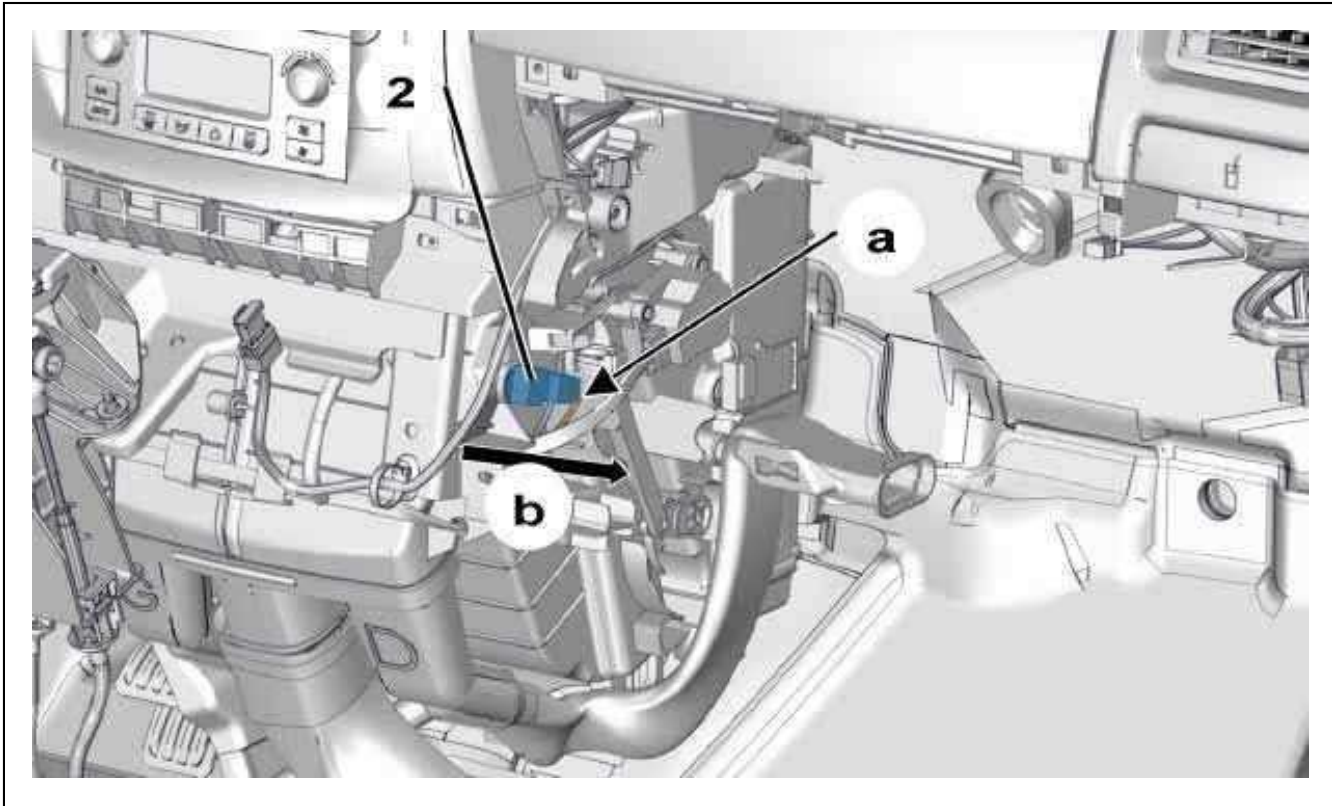


Figure : C5FP1BZD

Unclip the right-hand blown air sensor (2) (following "b").
Disconnect the connector (at "a").

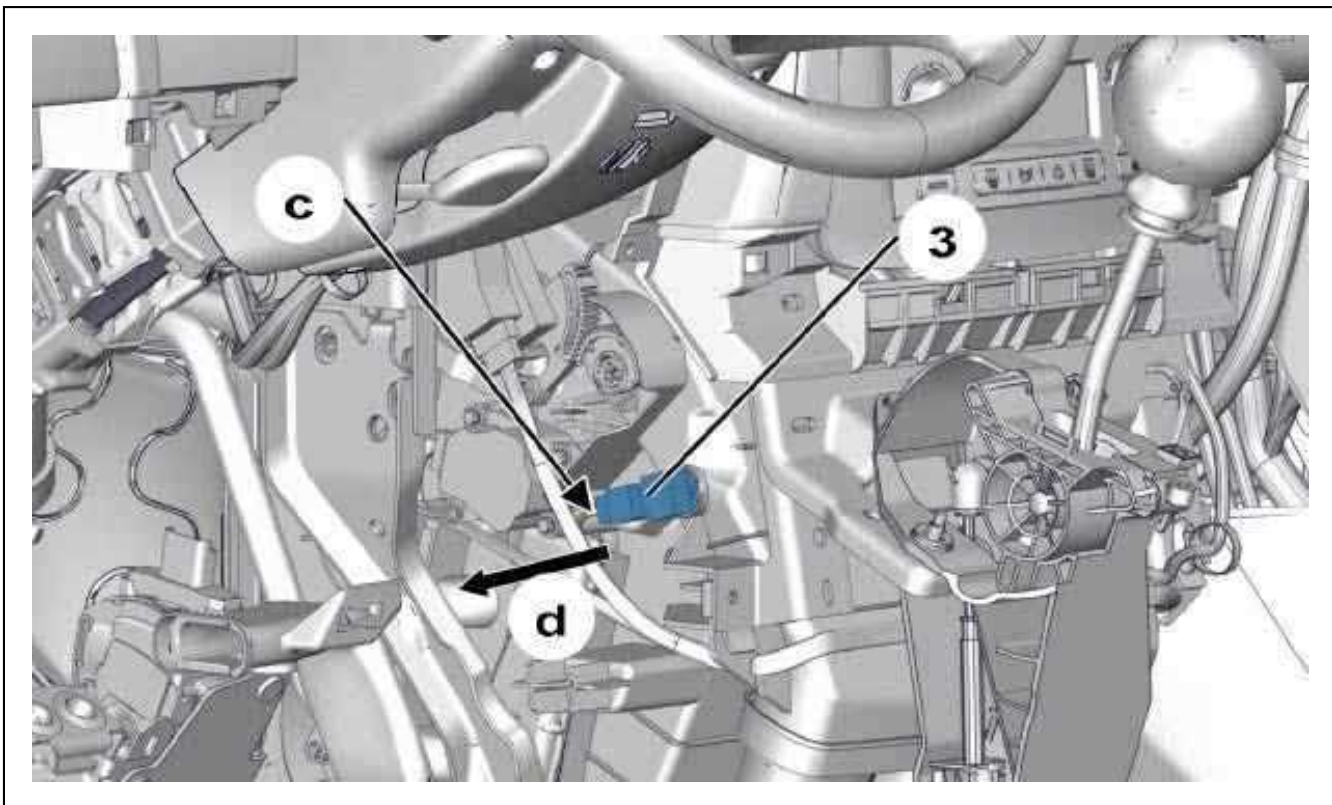


Figure : C5FP1C0D

Unclip the left-hand blown air sensor (3) (following "d").

Disconnect the connector (at "c").

2. Refitting

Refit :

- The left-hand blown air sensor (3)
- The right-hand blown air sensor (2)

Reconnect the connectors (at "a" and "c").

Refit the central console (1)  .

Check the operation of the blown air sensors .

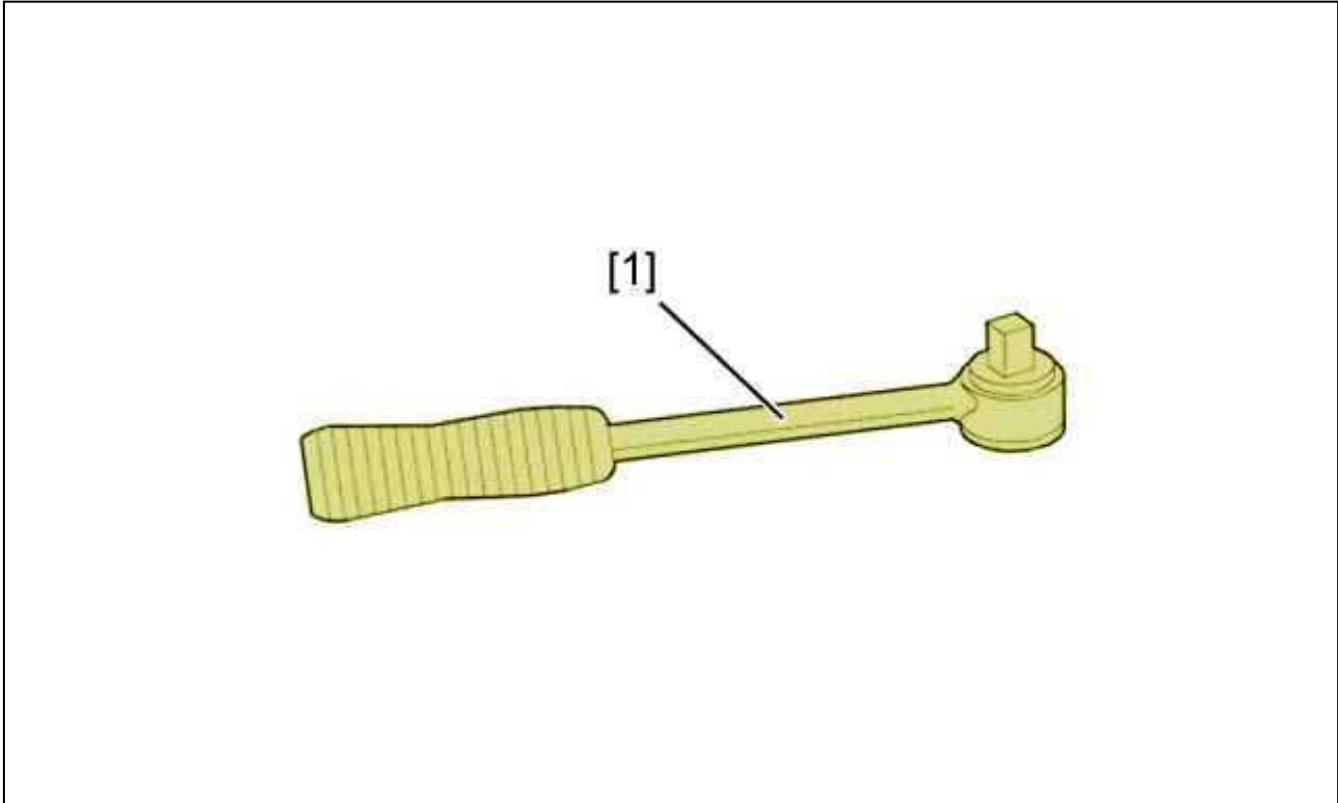
REMOVING - REFITTING : MIXING AND DISTRIBUTION MICROMOTOR**1. Recommended tools**

Figure : E5AP3T9D

Reference	Designation	Reference
[1]	Ratchet spanner FACOM	FACOM S.171

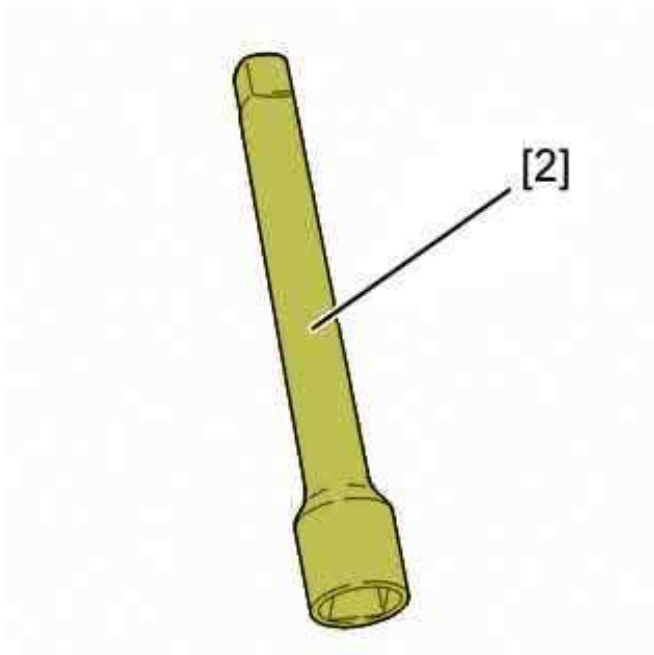


Figure : E5AP3P3D

Reference	Designation	Reference
[2]	Extension for FACOM ratchet spanner	(-).1603-E

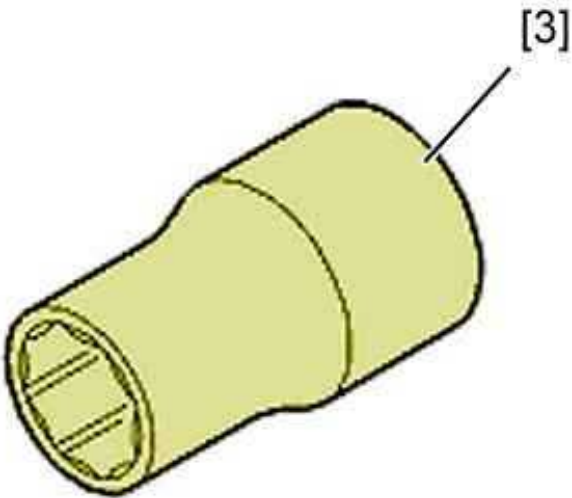


Figure : E5AP3SHD

Reference	Designation	Reference
[3]	FACOM 5.5 socket for ratchet spanner	FACOM STX 14

2. Removing

2.1. On the left-hand side

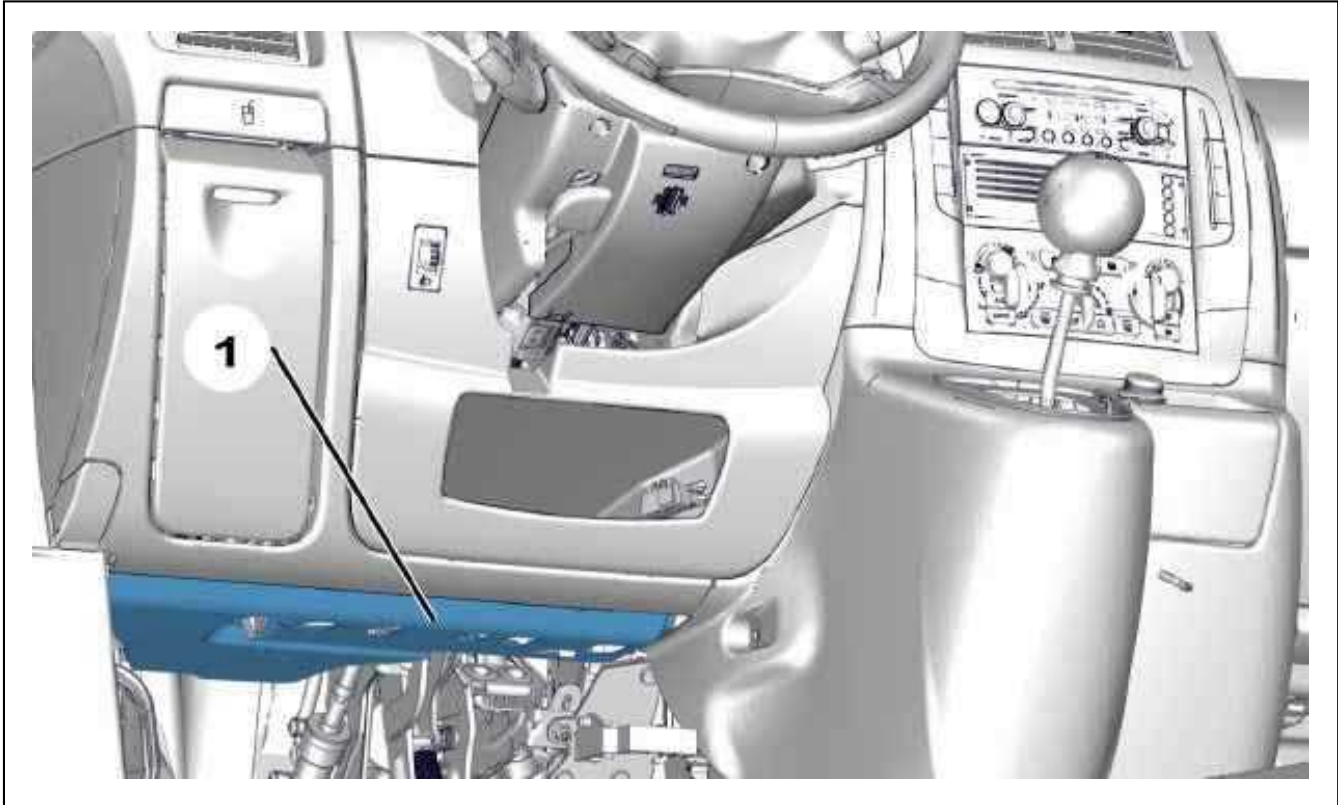


Figure : C5FP1BJD

Unclip the trim under the fascia (1).

Remove the trim under the dashboard (1).

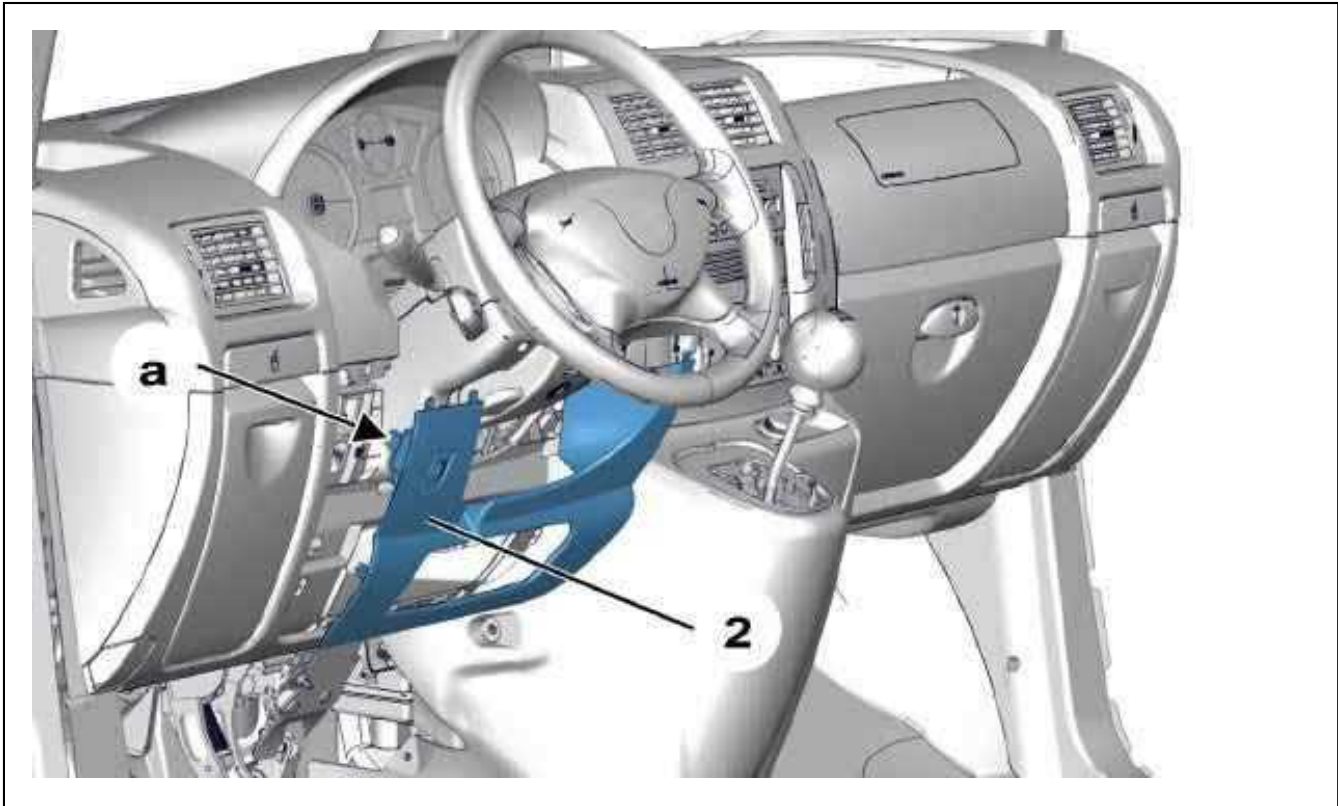


Figure : C5FP1BKD

Unclip and move aside the fascia lower trim (2).
Disconnect the headlamp height adjuster control (as "a").

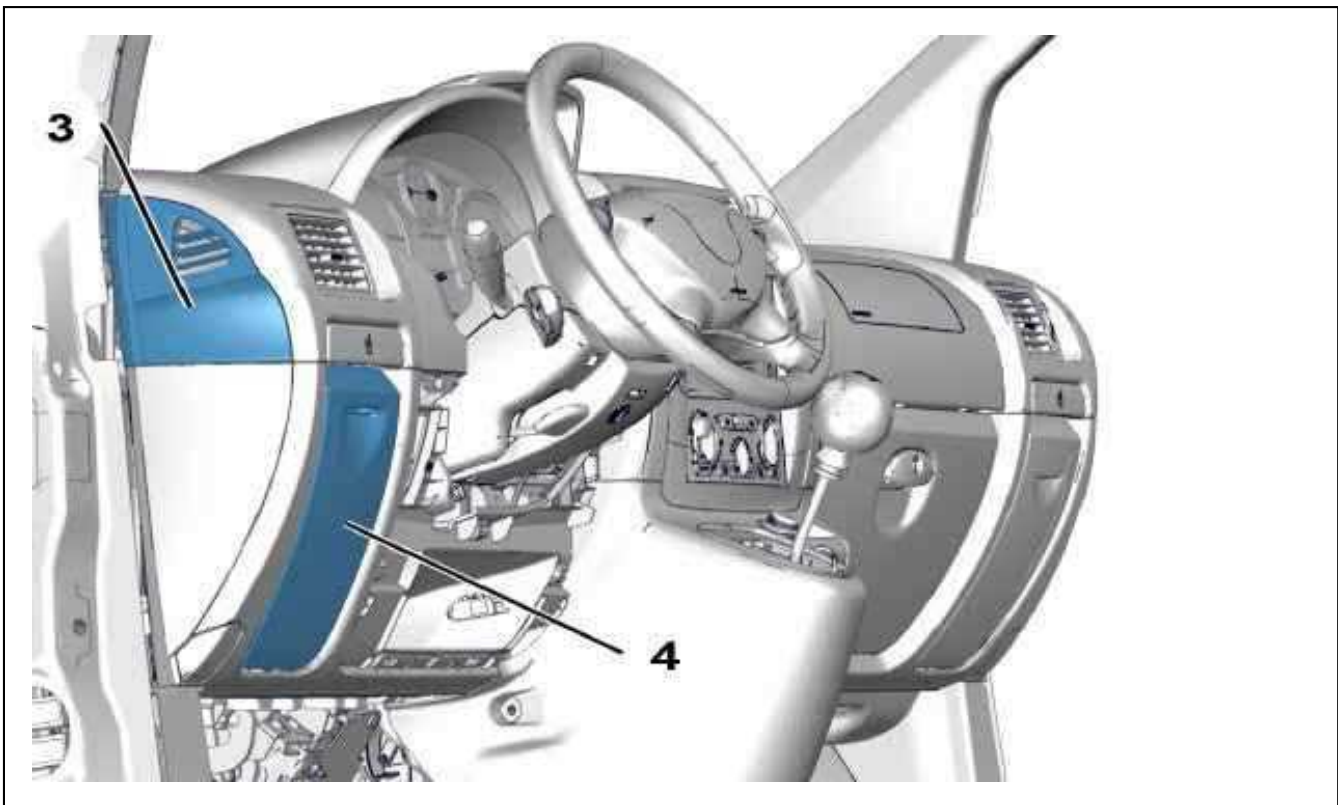


Figure : C5FP1BLD

Remove :

- The fascia (3) left-hand side cover
- The driver's side storage compartment (4)

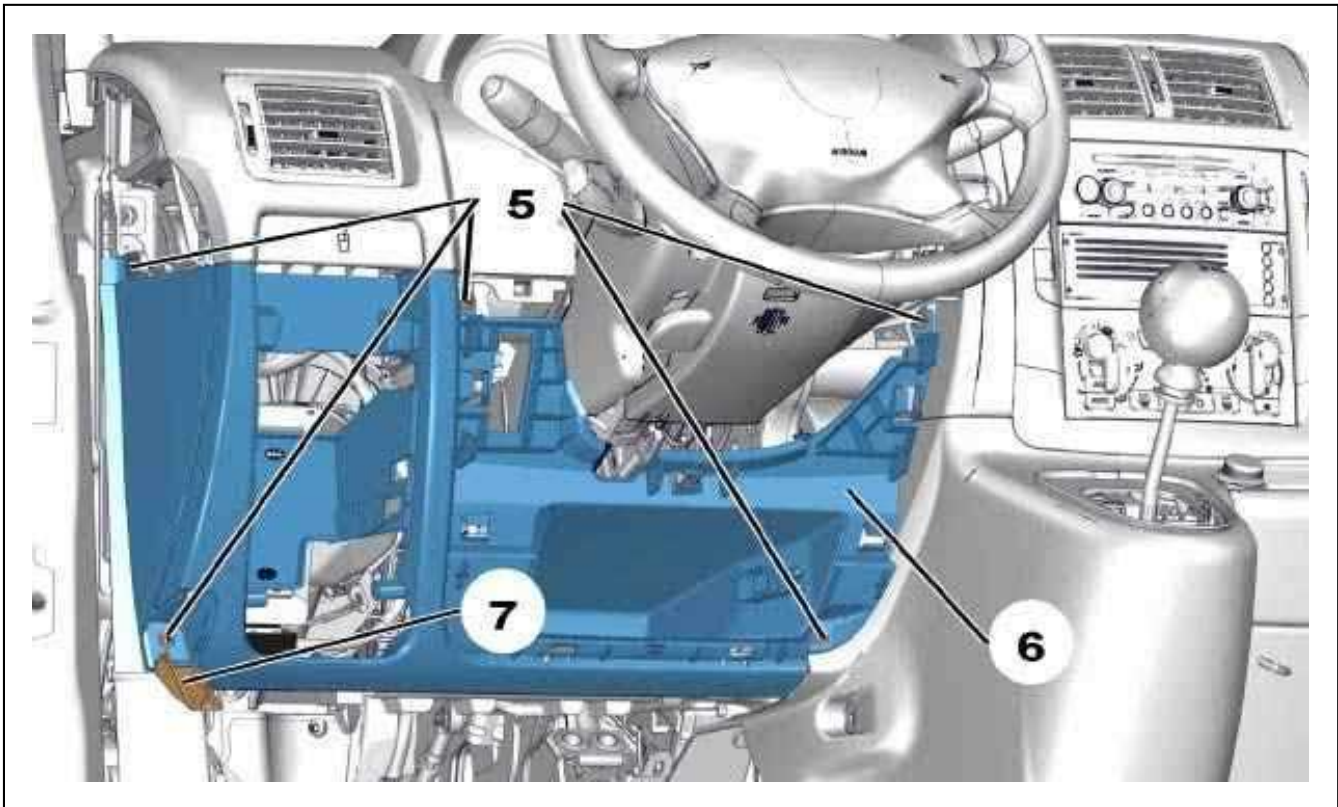


Figure : C5FP1BMD

Move aside the cover (7).

Remove the bolts (5).

Move aside the lower fascia (6).

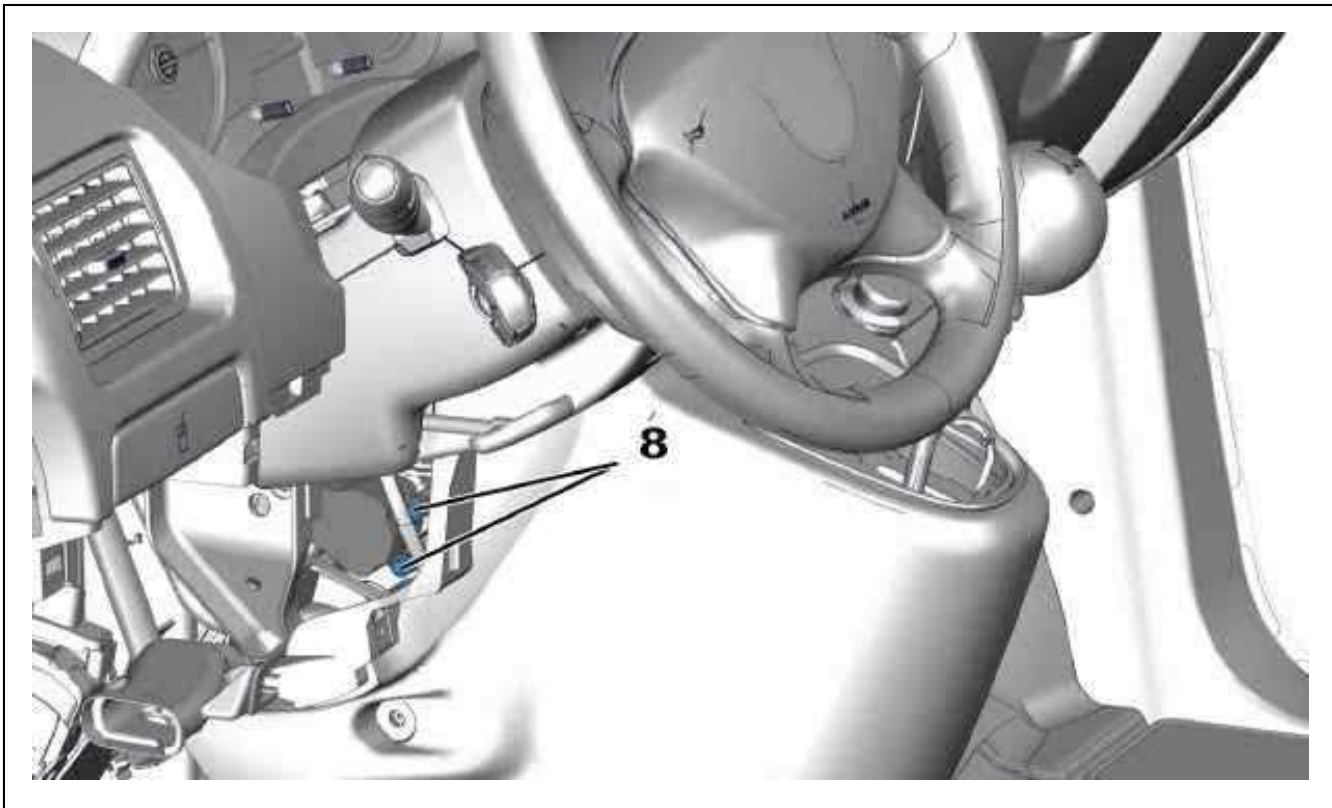


Figure : C5FP1BUD

Remove the 2 bolts (8).

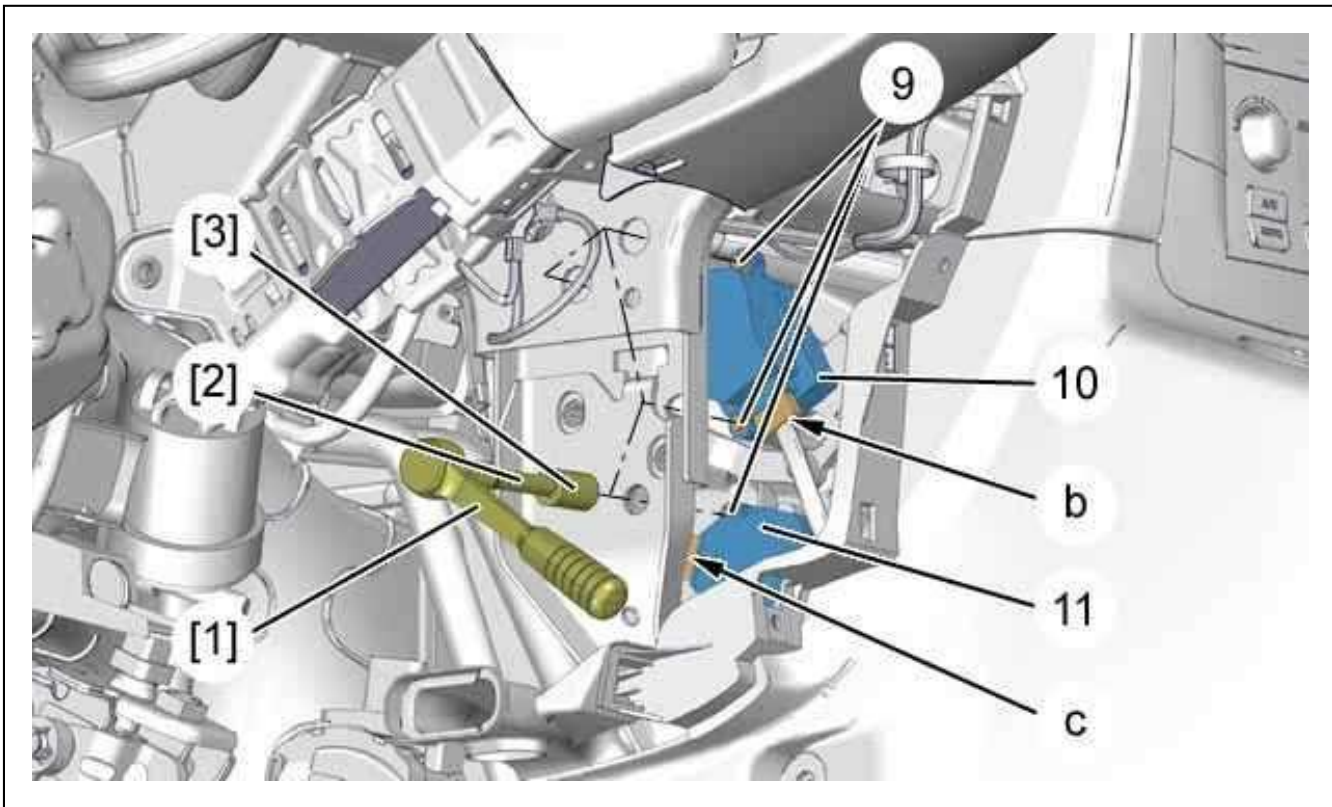


Figure : C5FP1BVD

Remove :

- The 4 bolts (9) ; By means of tools [1], [2] and [3]

- The distribution micromotor (10)
- The mixing micromotor (11)

Disconnect the connectors (as "b", "c").

2.2. On the right-hand side

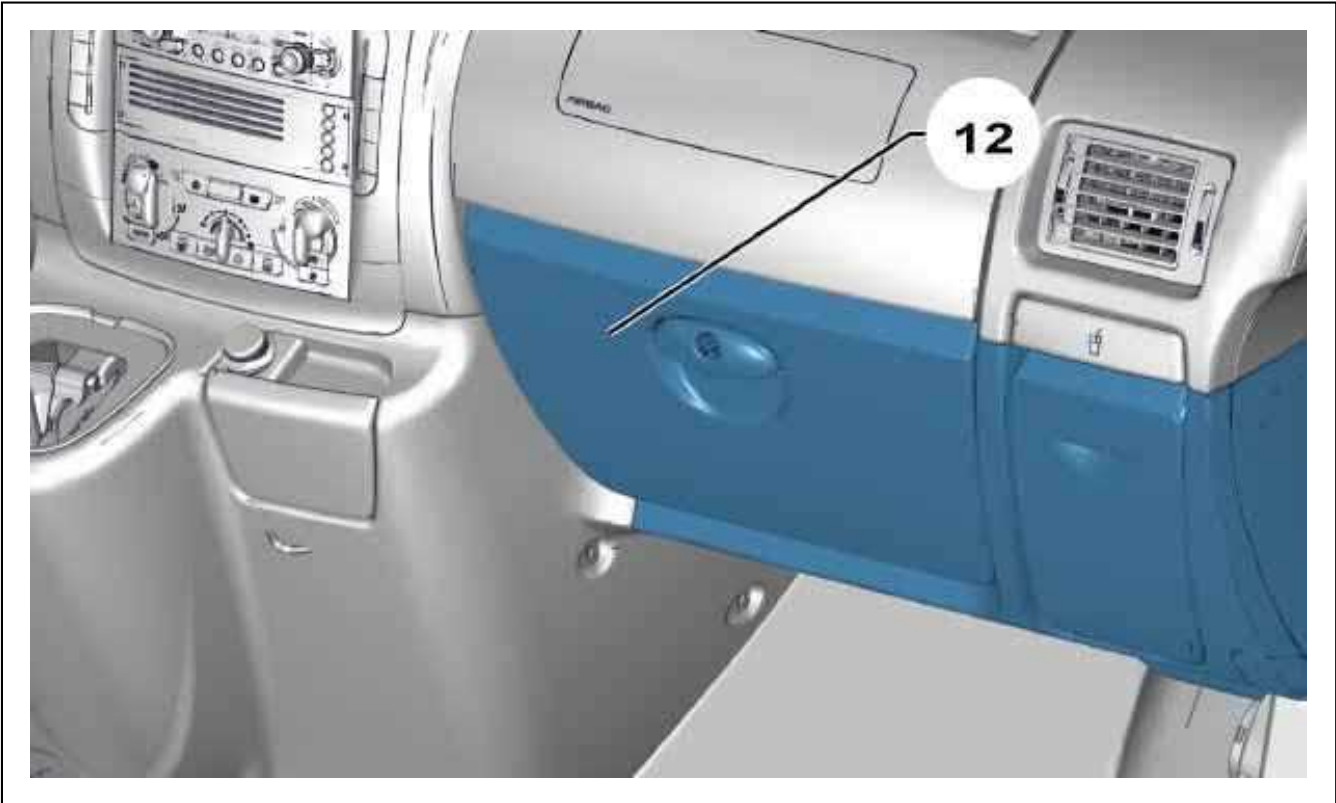


Figure : C5FP1BWD

Remove the passenger's oddments tray ⓘ (12).

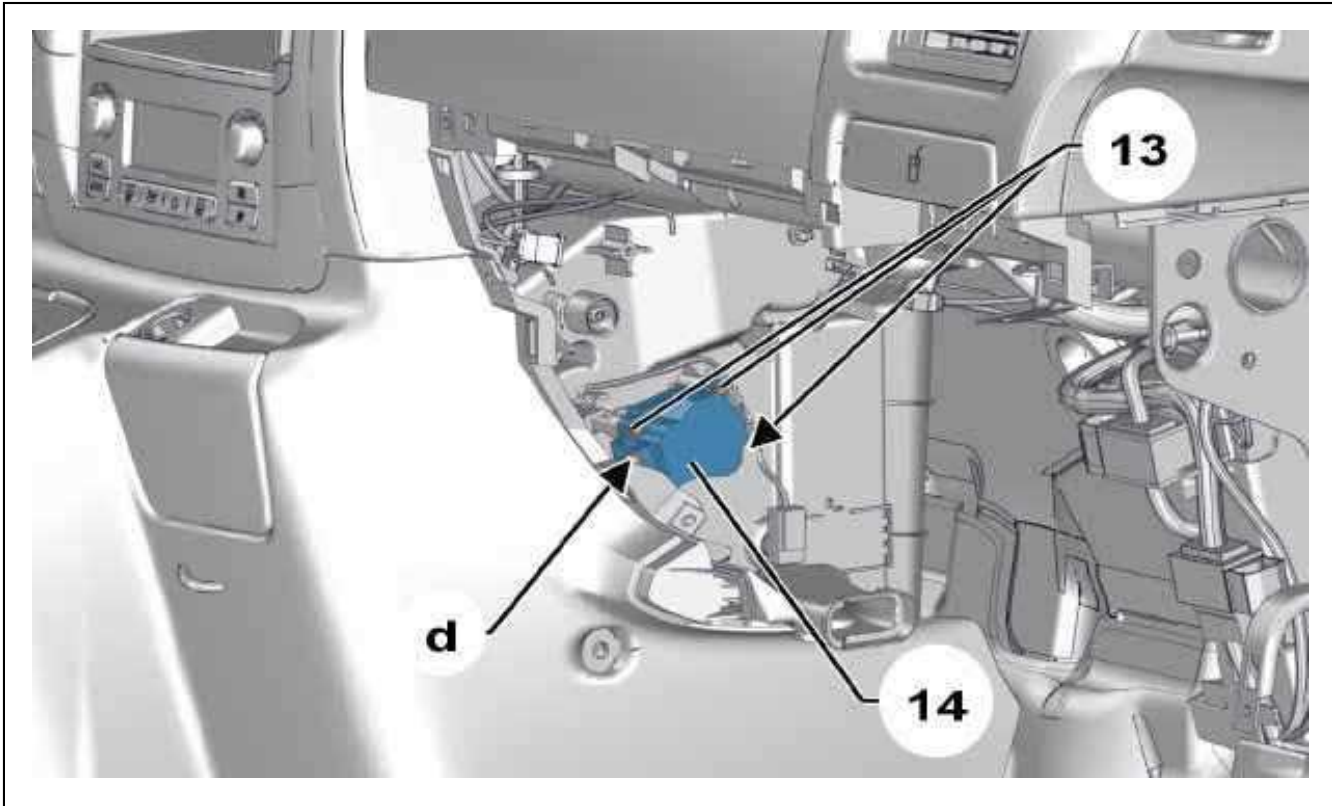


Figure : C5FP1BXD

Remove :

- The 3 bolts (13)
- The mixing micromotor (14)

Disconnect the connector (as "d").

3. Refitting

3.1. On the left-hand side

Reconnect the connectors (as "b", "c").

Refit :

- The mixing micromotor (11)
- The distribution micromotor (10)
- The 4 bolts (9) ; By means of tools [1], [2] and [3]
- The 2 bolts (8)
- The lower fascia (6)
- The bolts (5)
- The cover (7)
- The driver's side storage compartment (4)
- The fascia (3) left-hand side cover

Reconnect the headlamp height adjuster control (as "a").

Reclip the fascia lower trim (2).

Refit the trim under the fascia (1).

Check the operation of the distribution and mixing micromotors.

3.2. On the right-hand side

Reconnect the connector (as "d").

Refit :

- The mixing micromotor (14)
- The 3 bolts (13)

Refit the passenger's storage compartment (12)  .

Check the operation of the mixing micromotor .

REMOVING - REFITTING : HEATER MATRIX

ESSENTIAL : Observe the safety and cleanliness recommendations.

1. Recommended tools

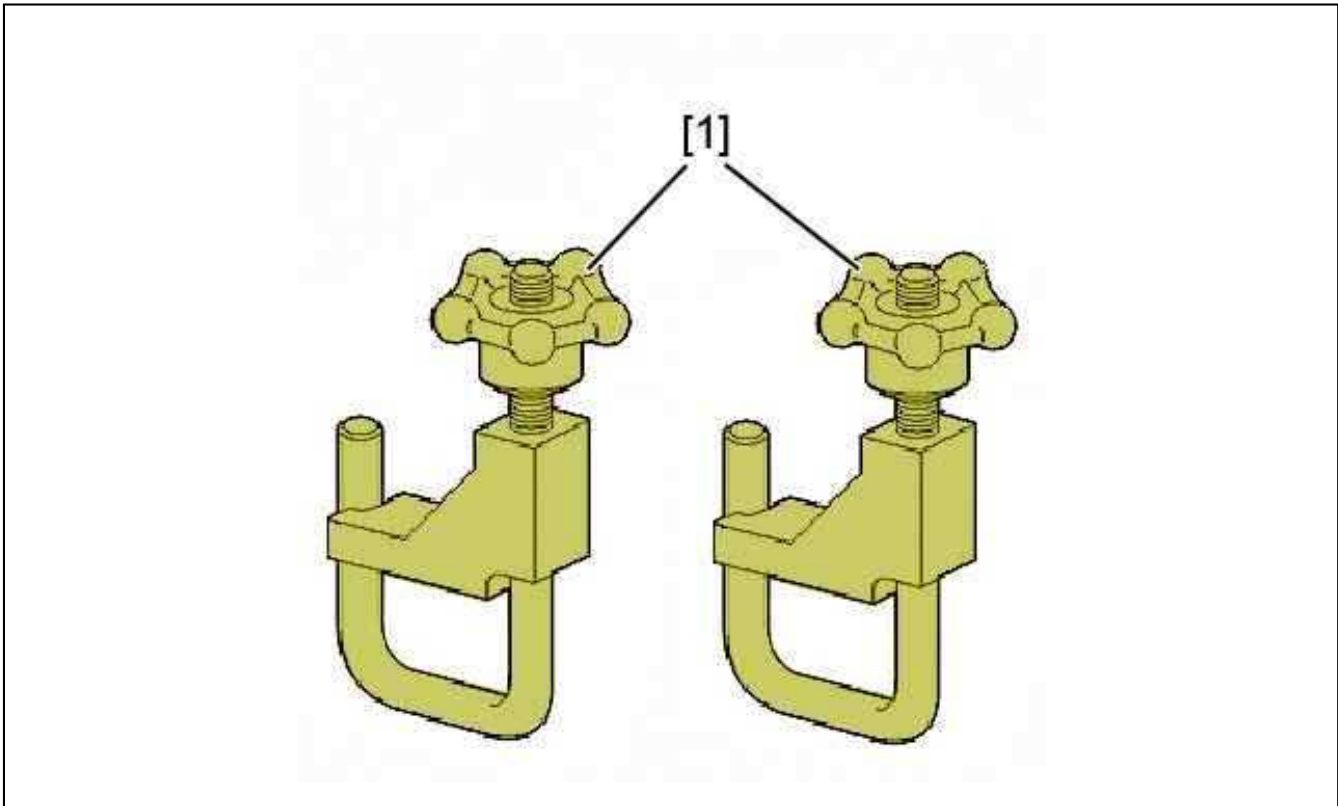


Figure : E5AP2XND

[1] hose clamp 4153-T.

2. Preliminary operations

Disconnect the battery.

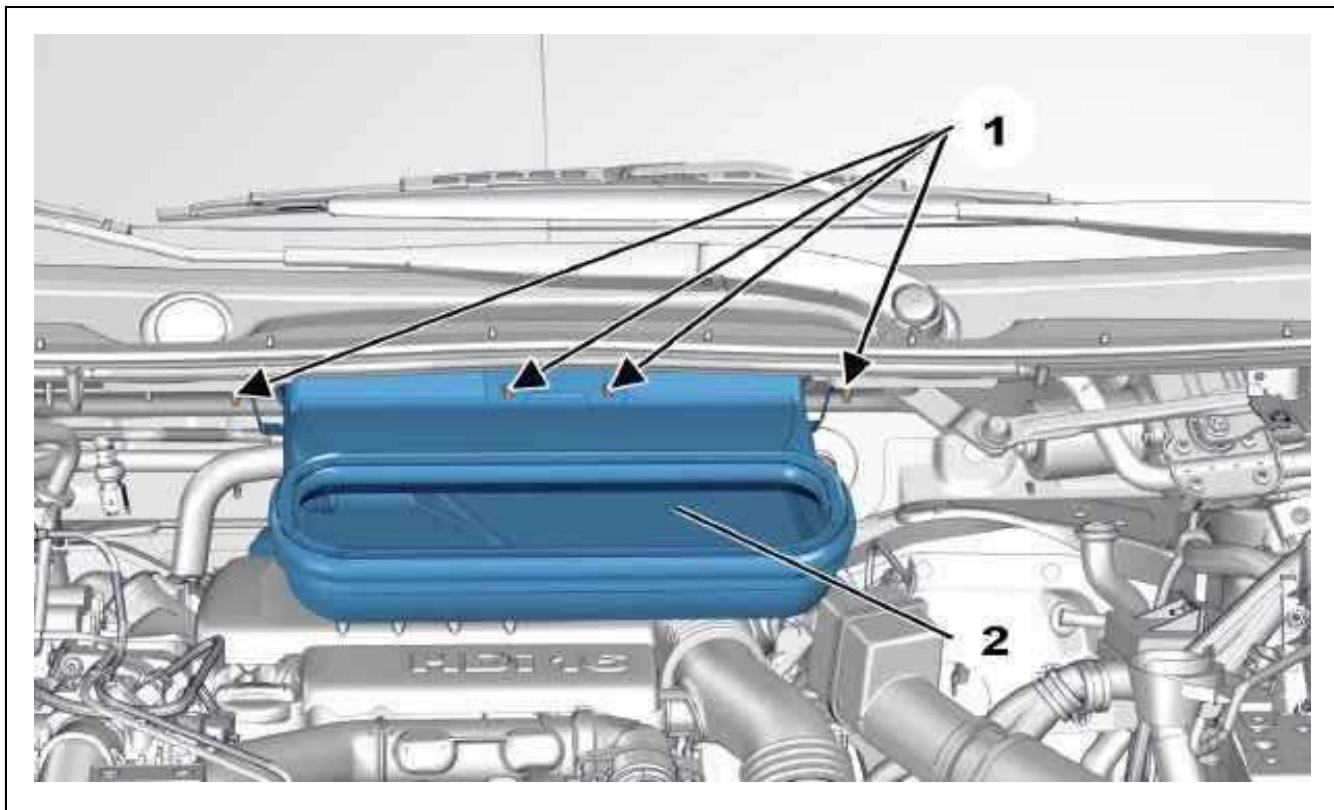


Figure : B1BPSP9D

Remove :

- The 4 nuts (1)
- The air inlet manifold (2)

3. Removing

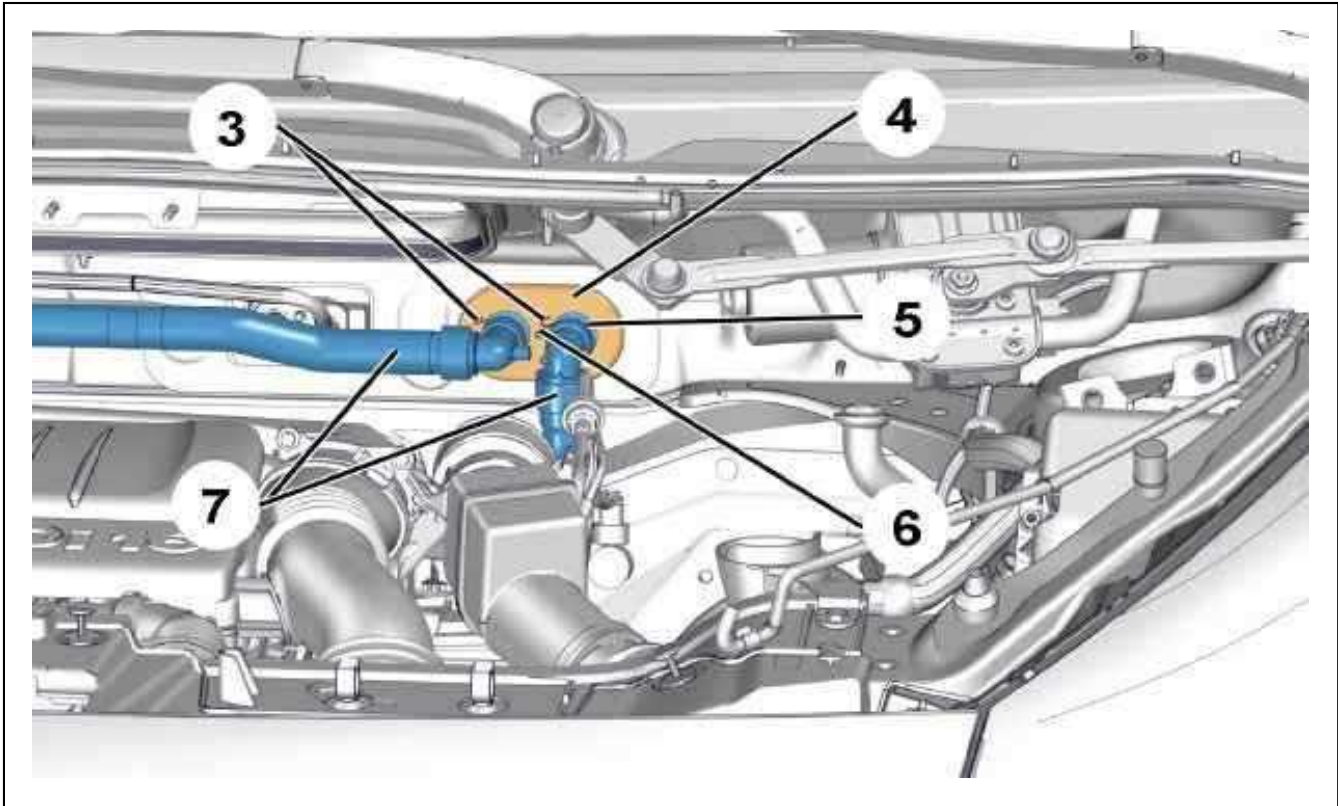


Figure : C5HP1N5D

Depressurise the cooling system.
 Position the tools [1] on the hoses (7).
 Remove the locking clips (3).
 Disconnect the pipes (7).

N.B. : Extract as much coolant as possible from the heater matrix using a blow gun placed at the inlet . Position a receptacle to recover the coolant.

Remove :

- The (6) bolt
- The retaining plate (4)
- The rubber seal (5)
- The centre console 

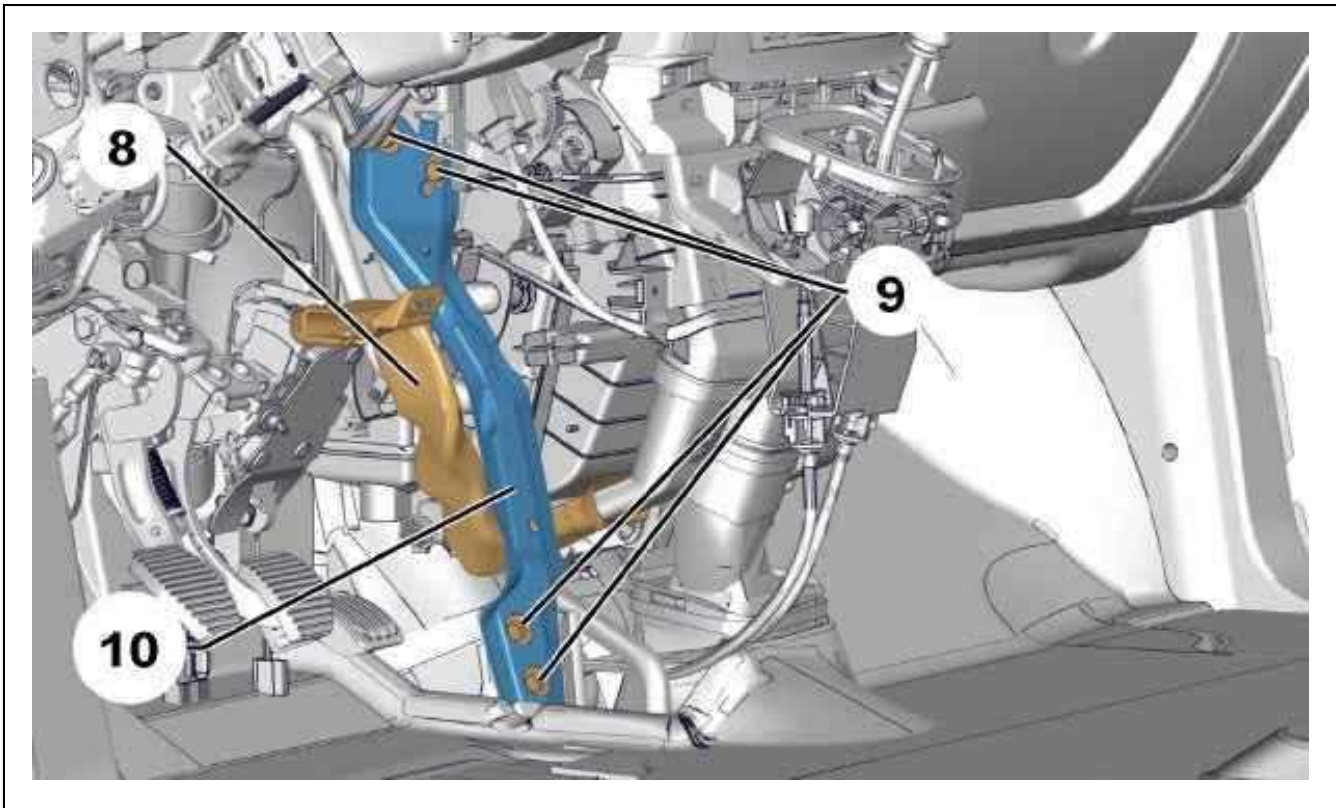


Figure : C5HP1N6D

Uncouple the air duct (8).

Remove :

- The 4 bolts (9)
- The fascia crossmember strengthening strut (10)

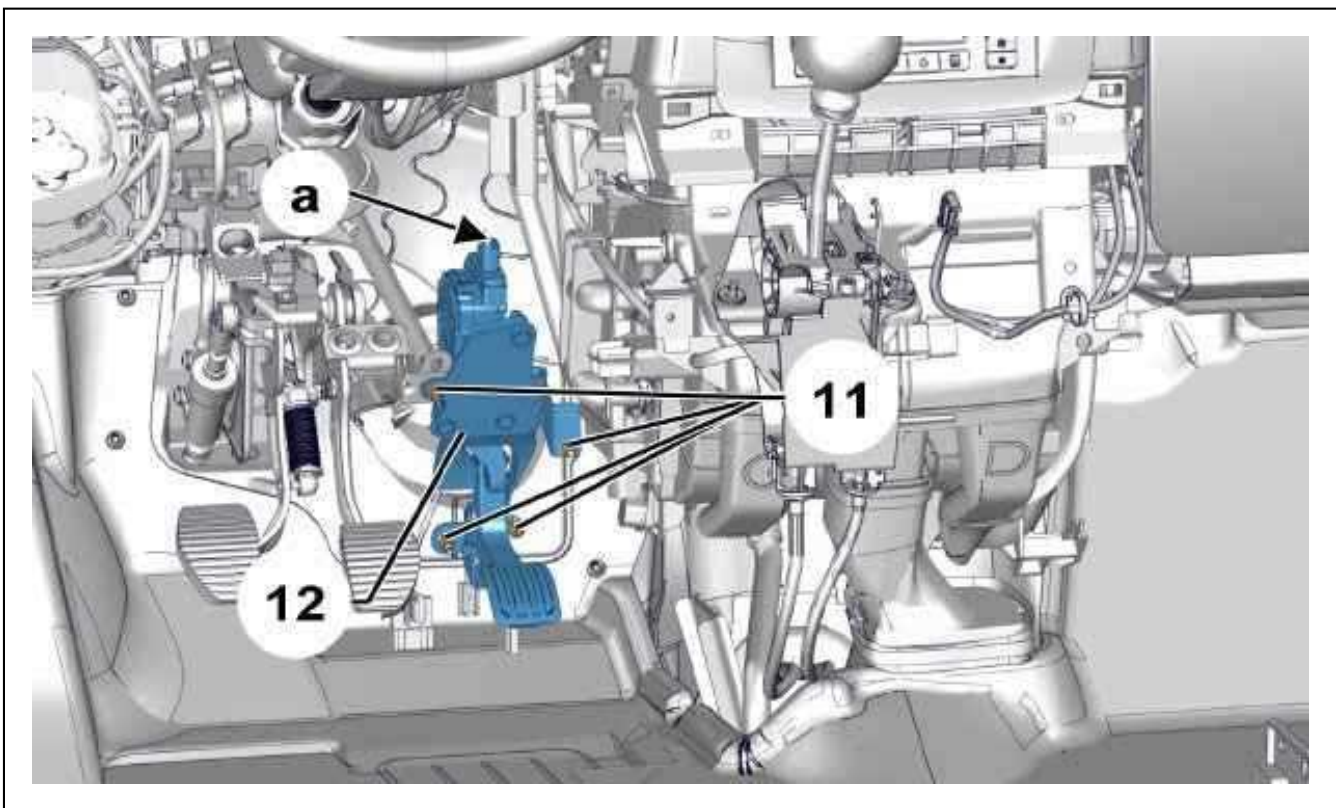


Figure : C5HP1N7D

Disconnect the connector (at "a").

Remove :

- The nuts (11)
- The accelerator pedal (12)

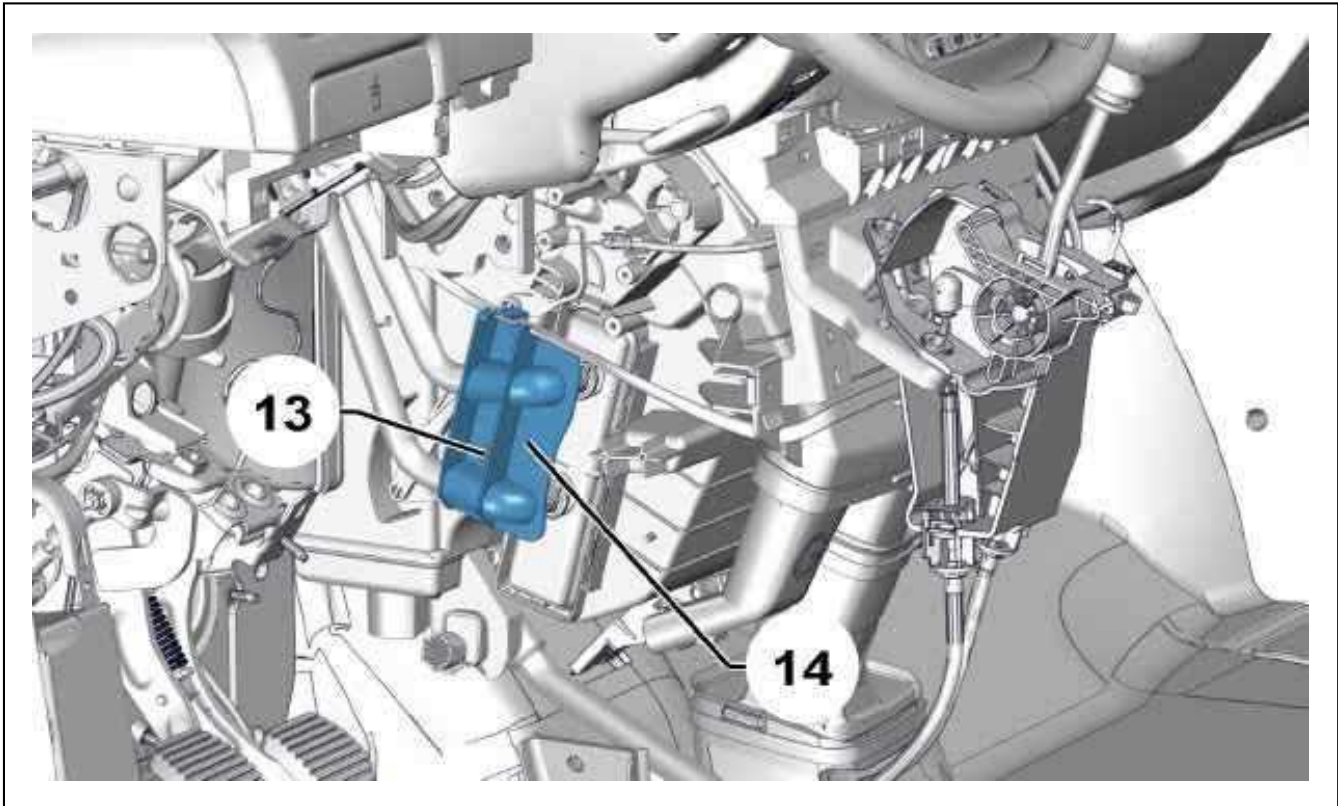


Figure : C5HP1N8D

Remove :

- The (13) bolt
- Retaining clamp (14)

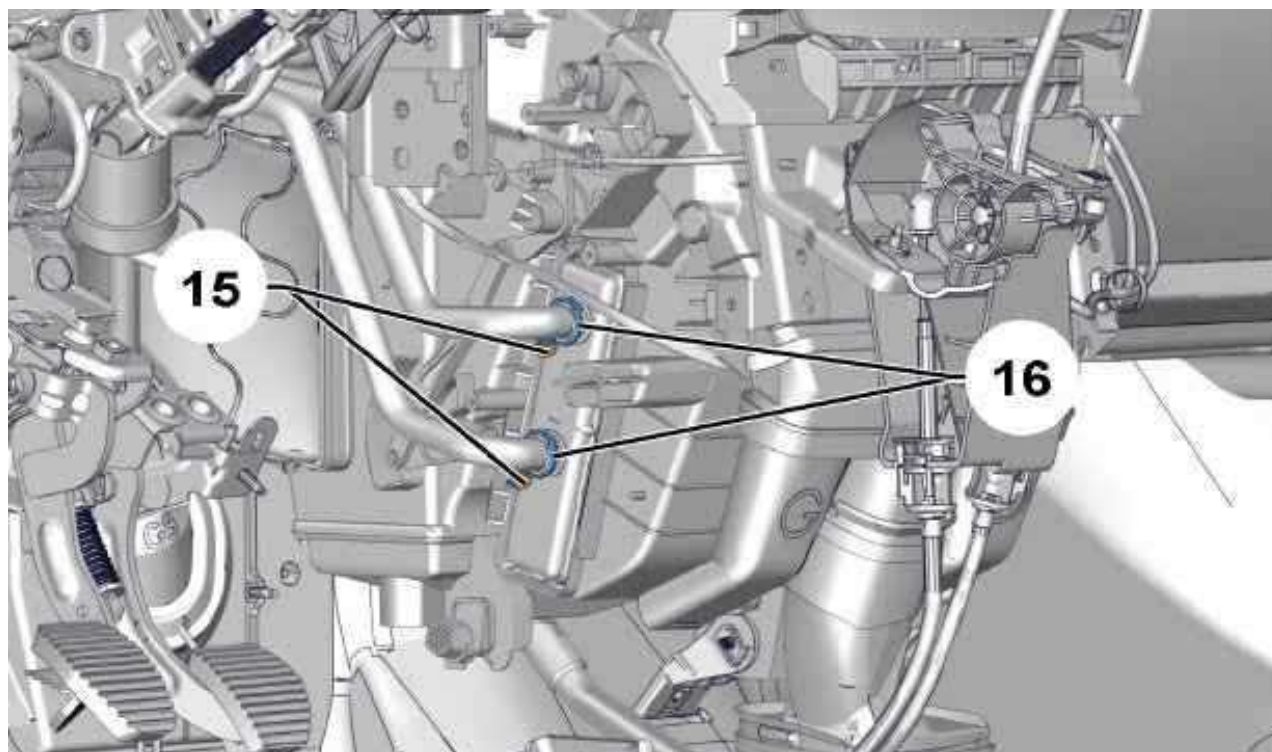


Figure : C5HP1N9D

Remove :

- The bolts (15)
- The retaining clips (16)

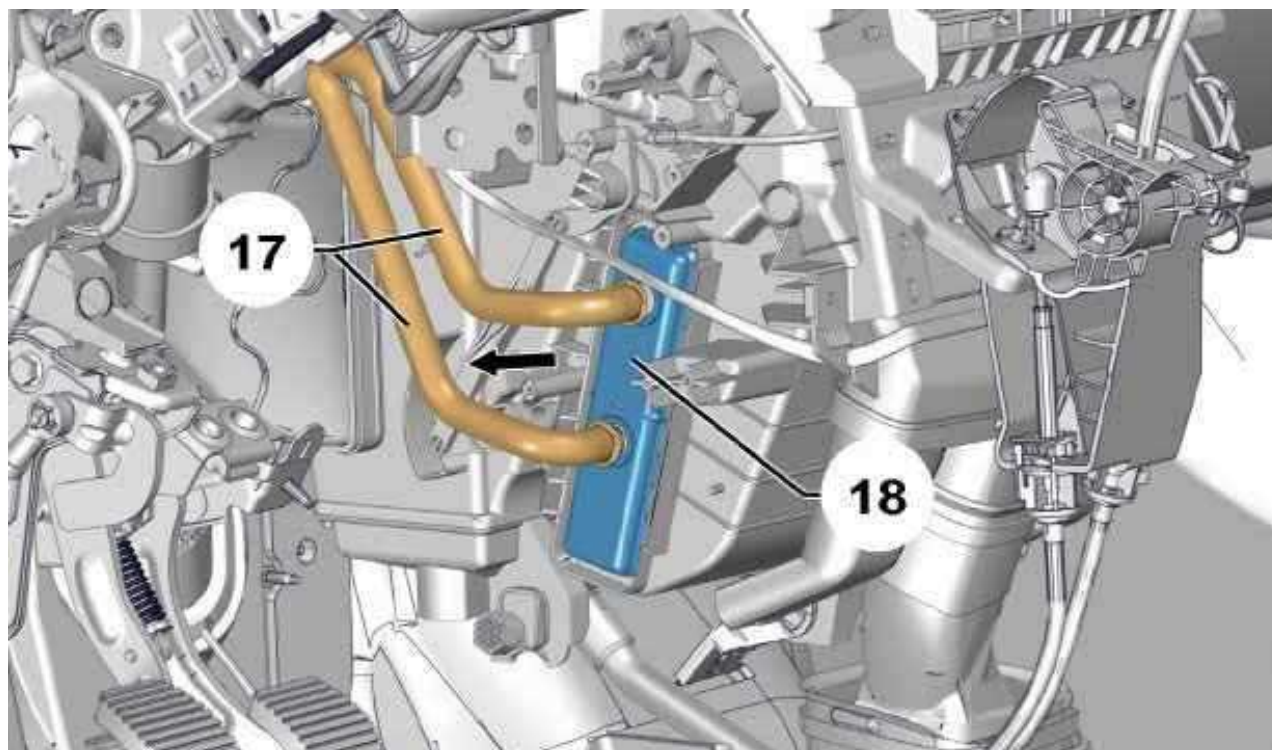


Figure : C5HP1NAD

N.B. : Protect the carpet against coolant leaks.

Move aside the heating pipes (17).

Disengage the heater matrix (18)(In the direction of the arrow).

4. Refitting

Engage simultaneously :

- The pipes (17)
- The matrix (18)

Couple the pipes (17) to the heater matrix (18).

Refit :

- The retaining clips (16)
- The bolts (15)
- Retaining clamp (14)
- The (13) bolt
- The accelerator pedal (12)
- The nuts (11)

Reconnect the connector (at "a").

Refit :

- The fascia crossmember strengthening strut (10)
- The 4 bolts (9)

Couple up the air duct (8).

Refit :

- The centre console 
- The rubber seal (5)
- The retaining plate (4)
- The (6) bolt

Join the hoses (7).

Refit the locking clips (3).

Remove the tools [1].

Fill and bleed the cooling system.

Refit :

- The air inlet manifold (2)
- The 4 nuts (1)

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery.

Check the operation of the heat exchanger.

ESSENTIAL : Observe the safety and cleanliness recommendations.

1. Recommended tools

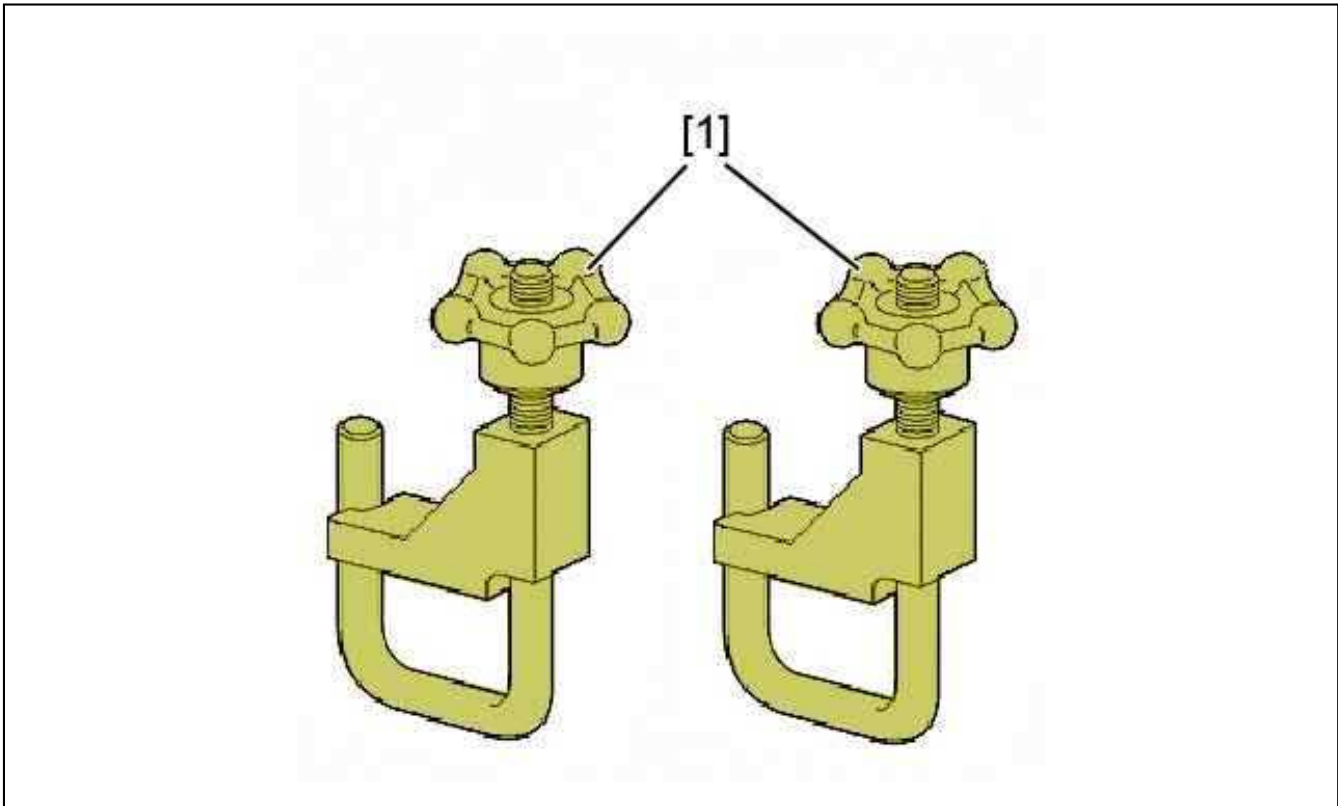


Figure : E5AP2XND

[1] hose clamp 4153-T.

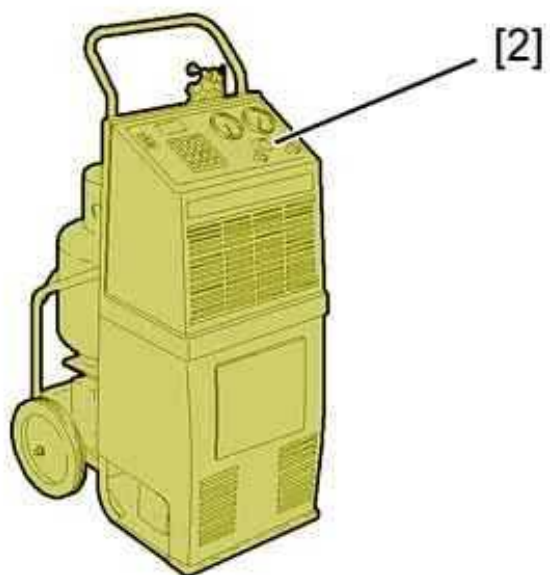


Figure : E5AP2WVD

[2] Filling and recycling equipment .



Figure : E5AP2ZKD

[3] air conditioning protection blanks (-).1701.HZ.

2. Preliminary operations

Disconnect the battery.

Remove the fascia .

Drain the air conditioning circuit.

3. Removing

3.1. Engine side

Remove the air conditioning pressure reducer .

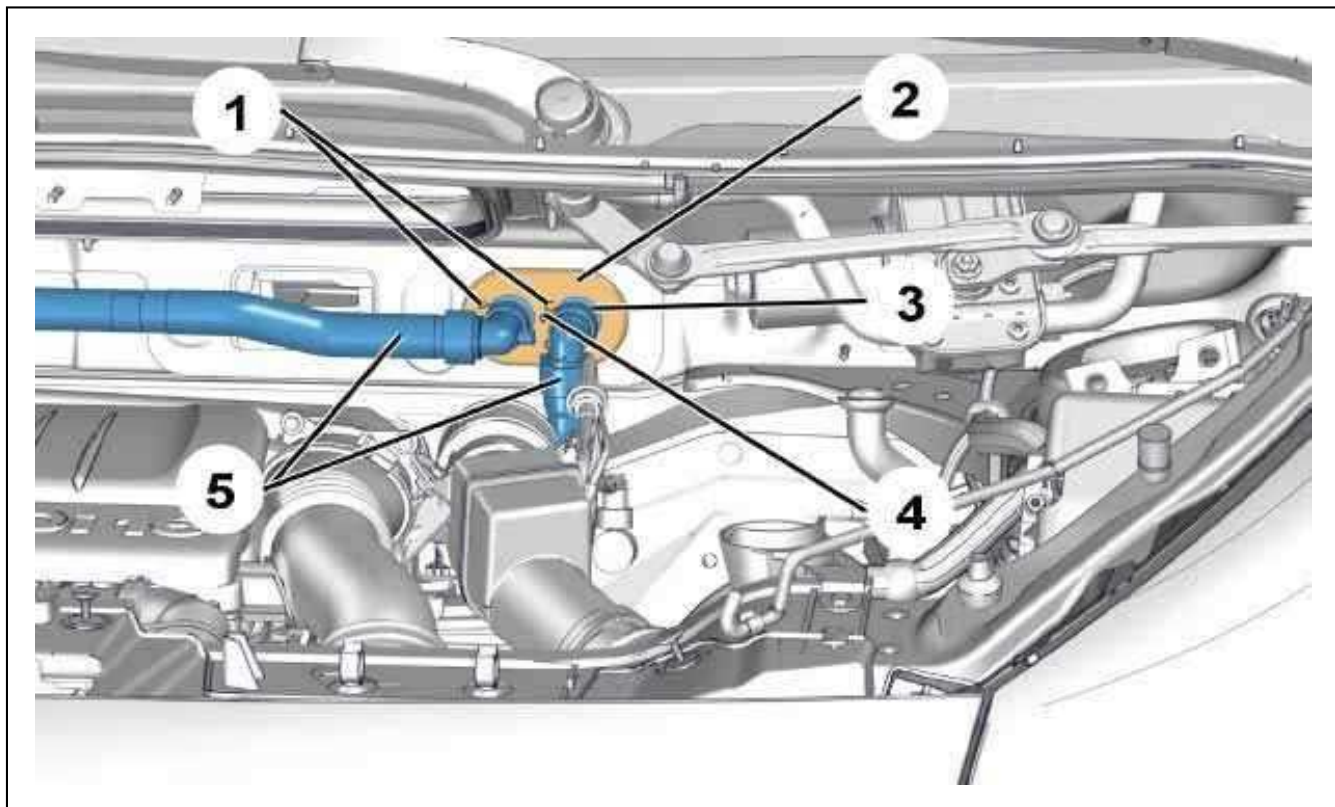


Figure : C5HP1NBD

Depressurise the cooling system.

Position the tools [1] on the hoses (5).

Remove the locking clips (1).

Disconnect the pipes (5).

N.B. : Extract as much coolant as possible from the heater matrix using a blow gun placed at the inlet . Position a receptacle to recover the coolant.

Remove :

- The (4) bolt
- The retaining plate (2)
- The rubber seal (3)

3.2. Passenger compartment side

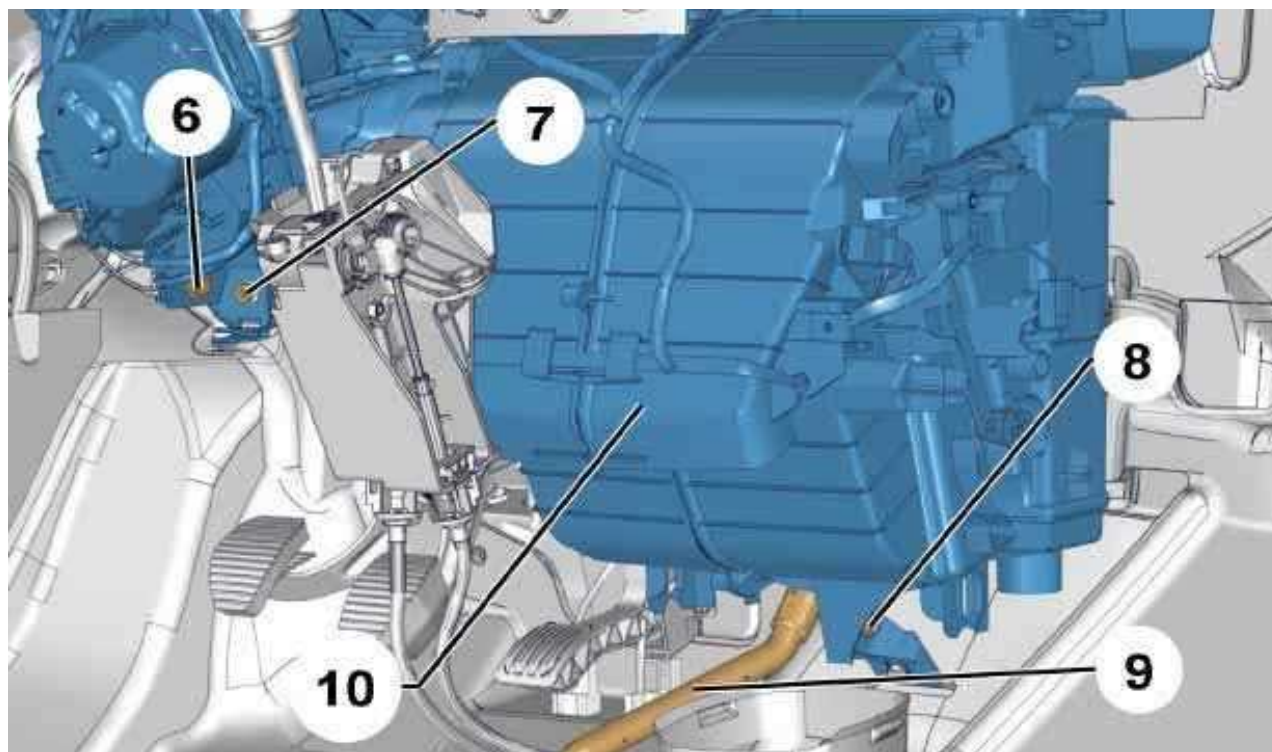


Figure : C5HP1NCD

Remove :

- The (6) bolt
- The (7) bolt
- The (8) bolt

Uncouple the condensation evacuation pipe (9).

Remove the heater unit (10).

4. Refitting

Refit the heater unit (10).

Couple the condensation evacuation pipe (9).

Refit :

- The (8) bolt
- The (7) bolt
- The (6) bolt
- The rubber seal (3)
- The retaining plate (2)
- The (4) bolt

Join the hoses (5).

Refit the locking clips (1).

Remove tools [1].

4.1. Cooling system

Fill and bleed the cooling system.

4.2. Air conditioning system

Refit the air conditioning pressure reducer  .

Carry out :

- Vacuum extraction of the air conditioning circuit (for a maximum of 15 minutes)
- Sealing test of the air conditioning circuit
- Vacuum extraction of the air conditioning circuit (for a maximum of 35 minutes)
- Charging of the air conditioning circuit

4.3. Additional operations

Refit the dashboard .

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery.

Check the functioning of the air conditioning.

ESSENTIAL : Observe the safety and cleanliness recommendations.

1. Recommended tools

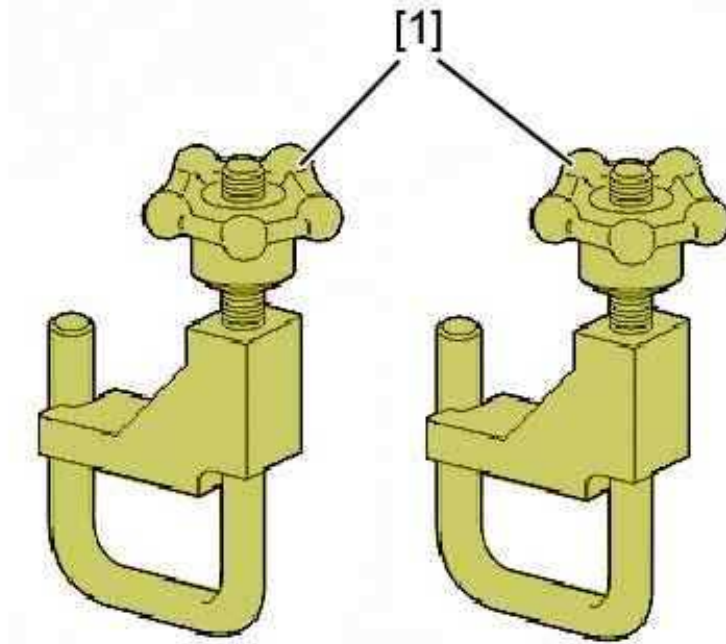


Figure : E5AP2XND

[1]Hose clamp 4153-T.

2. Removing

Put the vehicle on a hoist.

Disconnect the battery.

Remove the rear right seat ⓘ (Row 3) (If necessary).

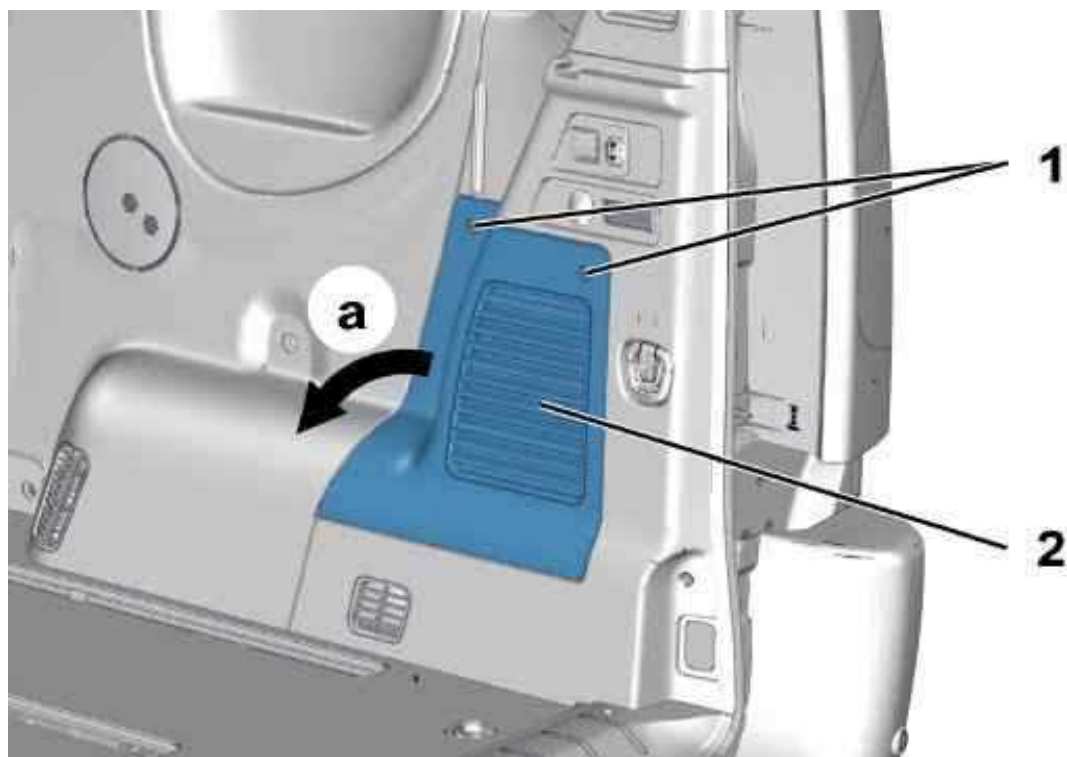


Figure : C5GM013D

Remove :

- The fixing clips (1) (quarter-turn)
- The plastic casing (2)(At "a")

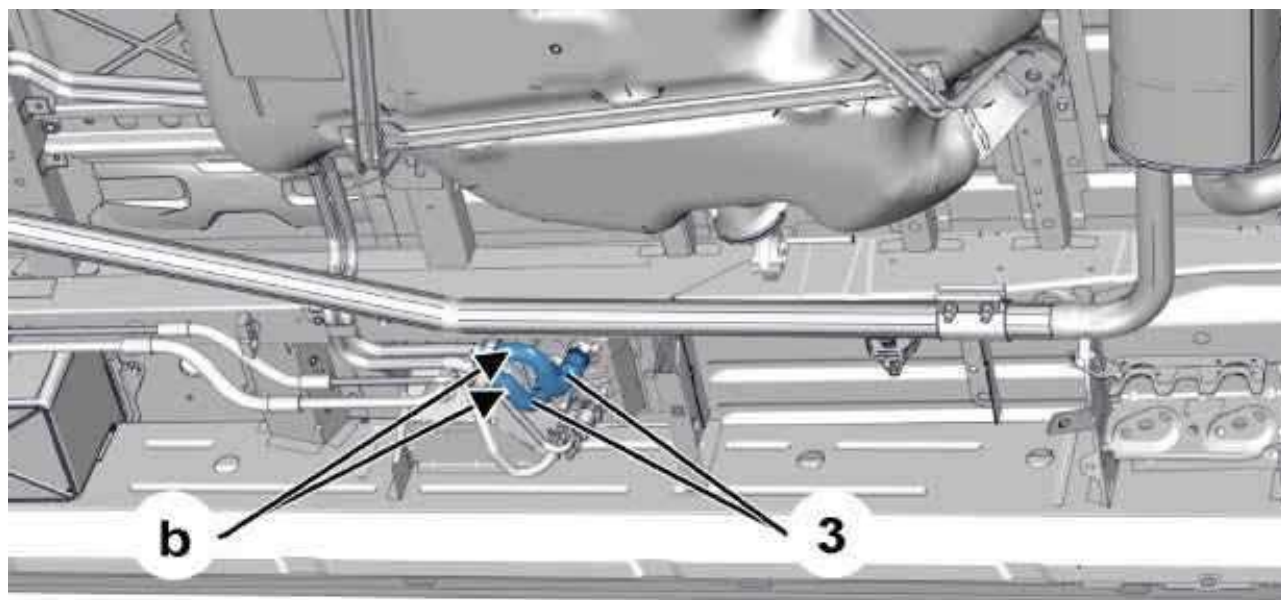


Figure : C5HM001D

Depressurise the cooling system.

Lift and support the vehicle.

Position the tools (1) on the bases (2) / on "b"

Rem...

Disconnect the pipes (3).

N.B. : Position a receptacle to recover the coolant.

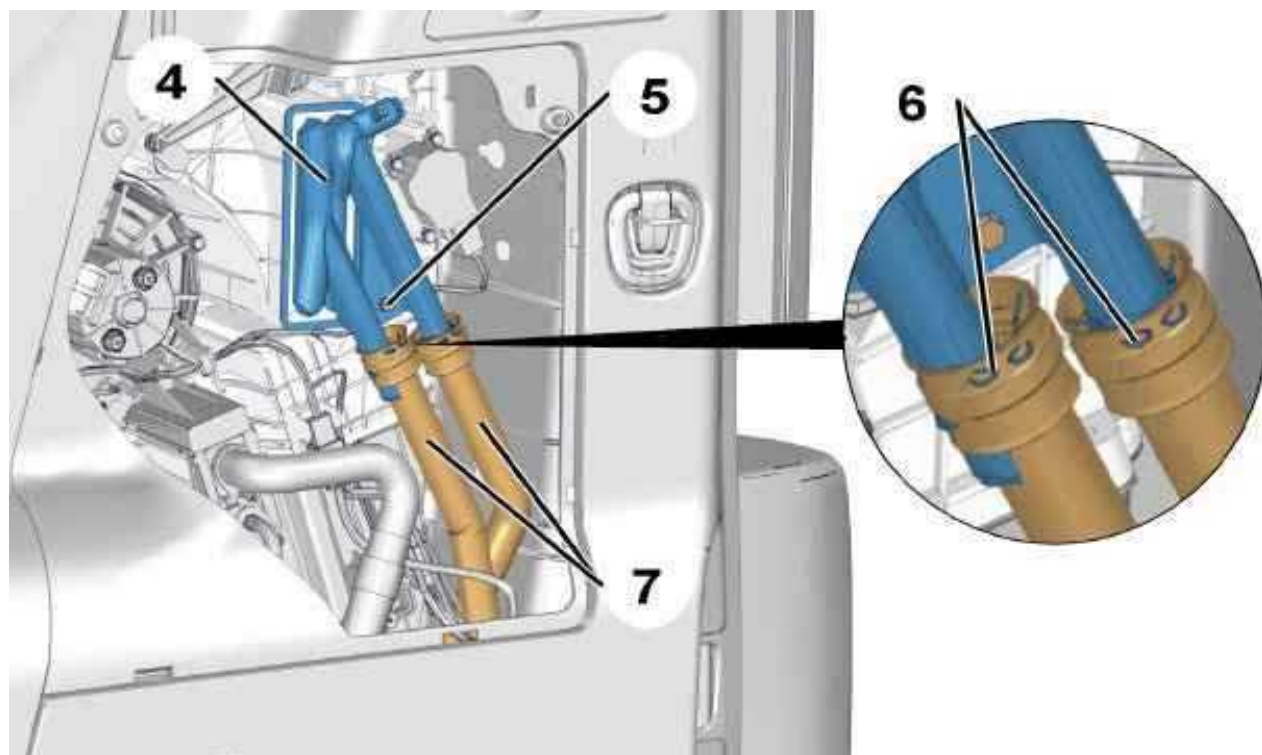


Figure : C5HM002D

Remove the locking clips (6).

Disconnect the pipes (7).

Remove :

- The (5) bolt
- The additional heat exchanger (4)

3. Refitting

Refit :

- The additional heat exchanger (4)
- The (5) bolt

Join the hoses (7).

Refit the locking clips (6).

Join the hoses (3).

Refit the locking clips .

Remove the tools [1].

Fill and bleed the cooling system ⓘ .

Refit :

- The plastic casing (2)
- The fixing clips (1)

Refit the rear right seat ⓘ (Row 3) (if necessary).

Reconnect the battery.

CAUTION : Perform the operations to be carried out following reconnection of the battery.