

A/C components passenger compartment

Notes:

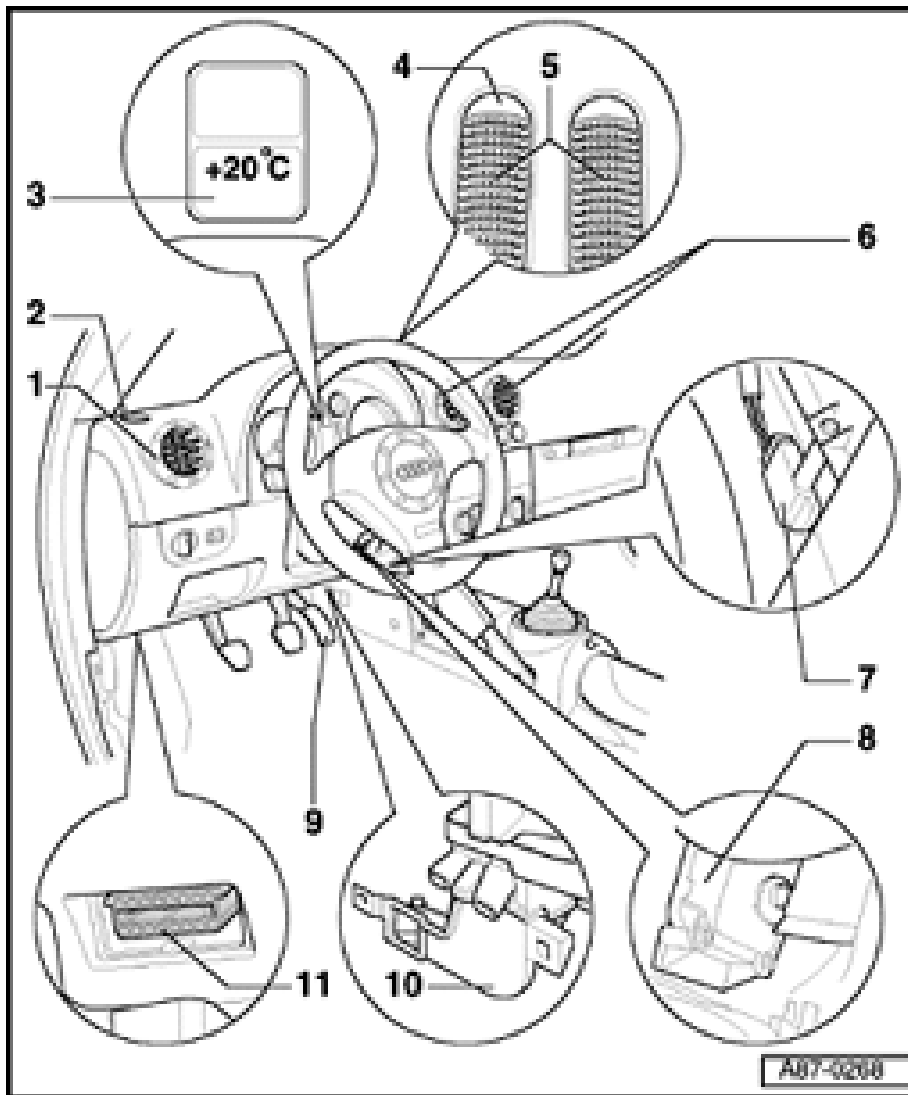
- ◆ Upon completion of any A/C system repairs, always check and erase the Diagnostic Trouble Code (DTC) memory (scan tool function 02), perform basic setting (function 04) and code the A/C control heater-E87- (function 07).
- ◆ Checking cooling efficiency ⇒ [page 87-123](#).
- ◆ Refrigerant circuit ⇒ [page 87-33](#).
- ◆ All components marked with an asterisk (*) are activated during output Diagnost Test Mode (DTM (function 03) ⇒ [page 01-39](#).
- ◆ Note different coding possibilities for A/C control heater-E87- ⇒ [page 01-57](#).
- ◆ Electrical testing can be performed on all components marked with a

*double asterisk
(**) ⇒ [page 01-87](#).*

◆ *Air distribution system ⇒ [page 87-113](#).*

◆ *Removing and installing instrument pane cover ⇒ Repair Manual , Body Interior, Repair Group 70.*

87-69



1 - Instrument panel vent, left

- ◆ Removing and installing
⇒ [page 87-117](#).

2 - Side window defroster vent

- ◆ Removing and installing.

⇒ [Repair Manual, Body Interior, Repair Group 70.](#)

3 Outside air - temperature display - G106-*

- ◆ Outside temperature displayed in °C or in °F depending A/C control head -E87- setting.

Note:

If display shows incorrect temperatures, check measured values for temperature sensors ⇒ [page 01-60](#), read measuring value block

(Scan Tool
function 08).

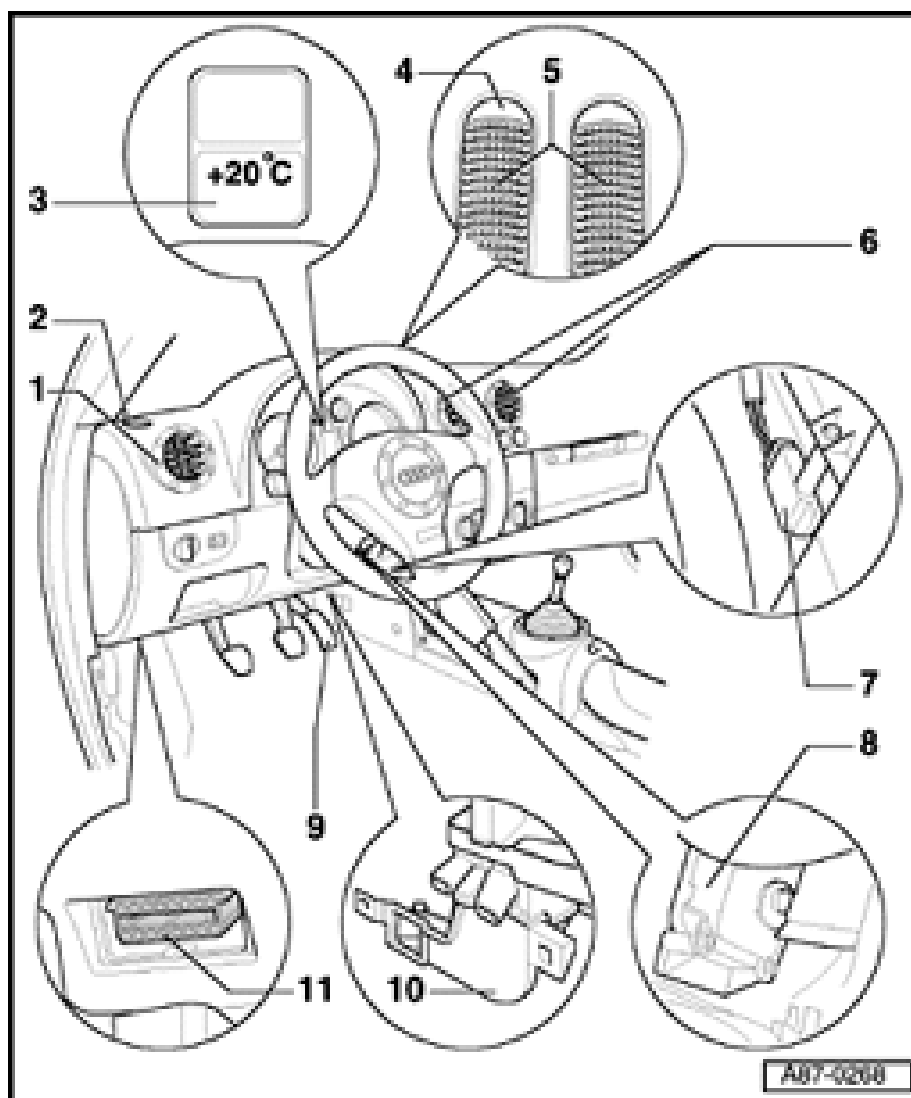
**4 - Sunlight
photo
sensor -
G107- ****

- ◆ Removing
and
installing
⇒ [page
87-83](#) .

**5 Windshield
- defroster
vent**

- ◆ Removing
and
installing
⇒ [page
87-119](#) .

87-70



6 - Instrument panel vent, center

- ◆ Removing and installir ⇒ [page 87: 116](#) .

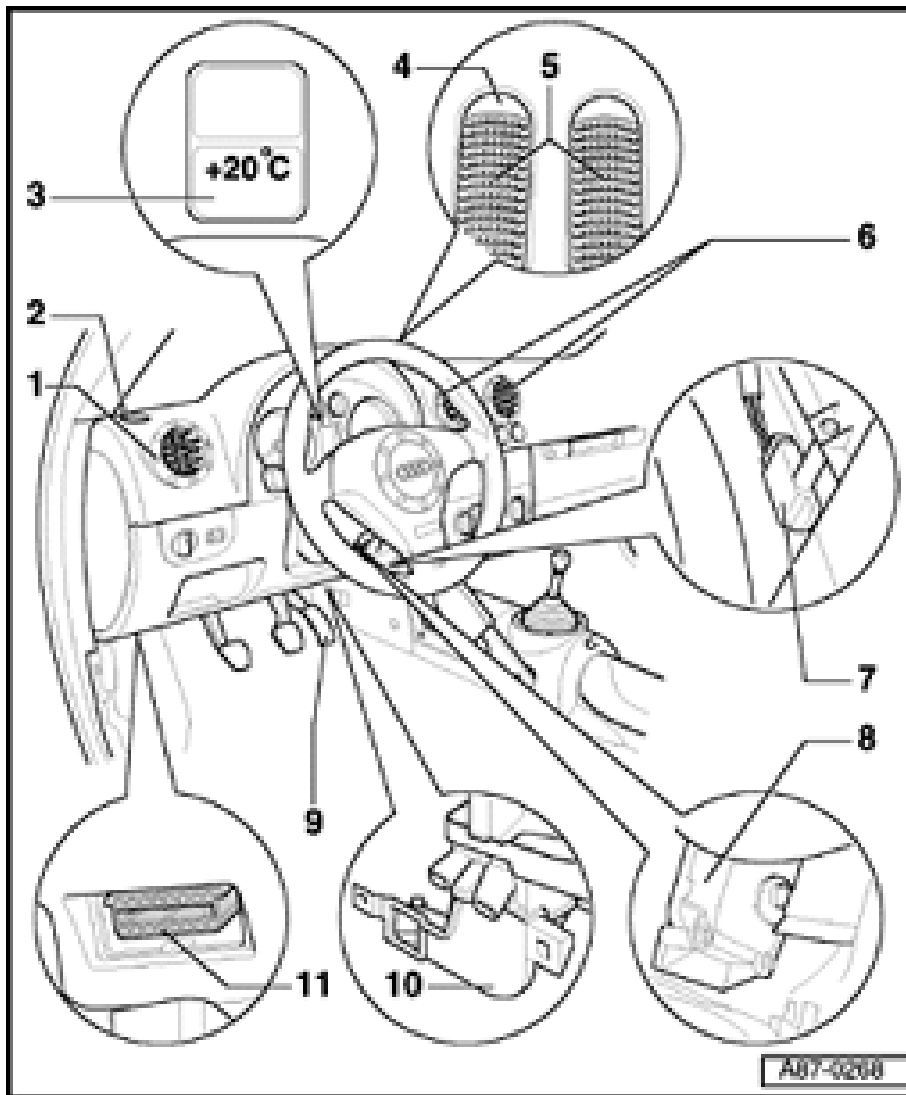
7 - Sender for outlet temperature floor outlet - G192- **

- ◆ Removing and installir ⇒ [page 87: 80](#) .

8 Footwell/defros - flap motor -V85-

- ◆ With motor position sensor - G114-.
- ◆ Removing and installir ⇒ [page 87: 85](#) .
- ◆ Actuating arm: yellow

87-71



9 - Kickdown switch

- ◆ Depending on vehicle equipment and current vehicle speed, A/C clutch -N25- is deactivated either by the ECM or TCM during full throttle acceleration ⇒ [page 01-60](#), read measuring value block (Scan Tool function 08).

10 - Footwell vent

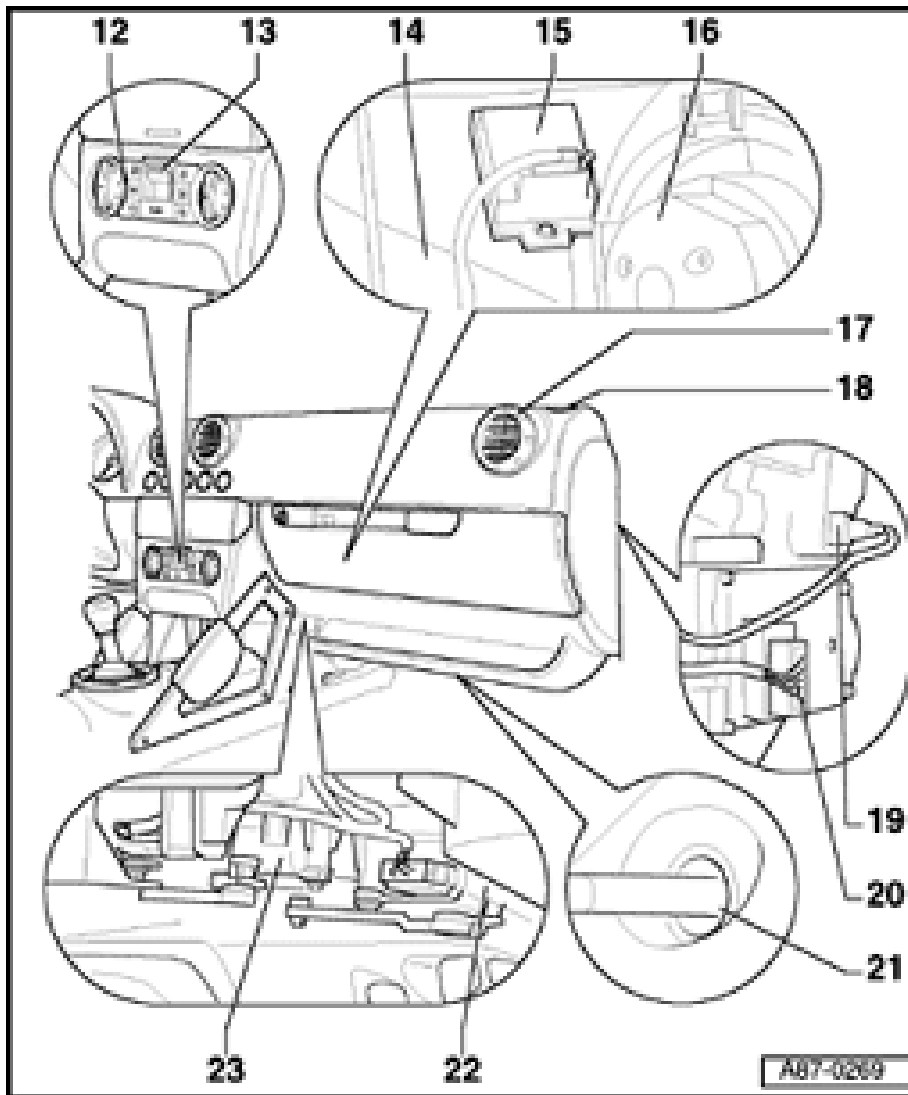
- ◆ Removing and installing ⇒ [page 87-84](#).

11 Data Link - Connector (DLC)

- ◆ Use to connect VAG 1551/1552 or VAS 5051 to perform On Board Diagnostic (OBD) on Automatic Climate Control system ⇒

[page 01-10](#) .

87-72



12 - A/C control head - E87-

- ◆ Removing and installing
⇒ [page 87-76](#).

Notes:

- ◆ -E87- display and operating buttons are illuminated by light emitting diodes (LEDs).
- ◆ Interior temperature sensor fan - V42- * and instrument panel interior temperature sensor - G56- are integrated in -E87-.

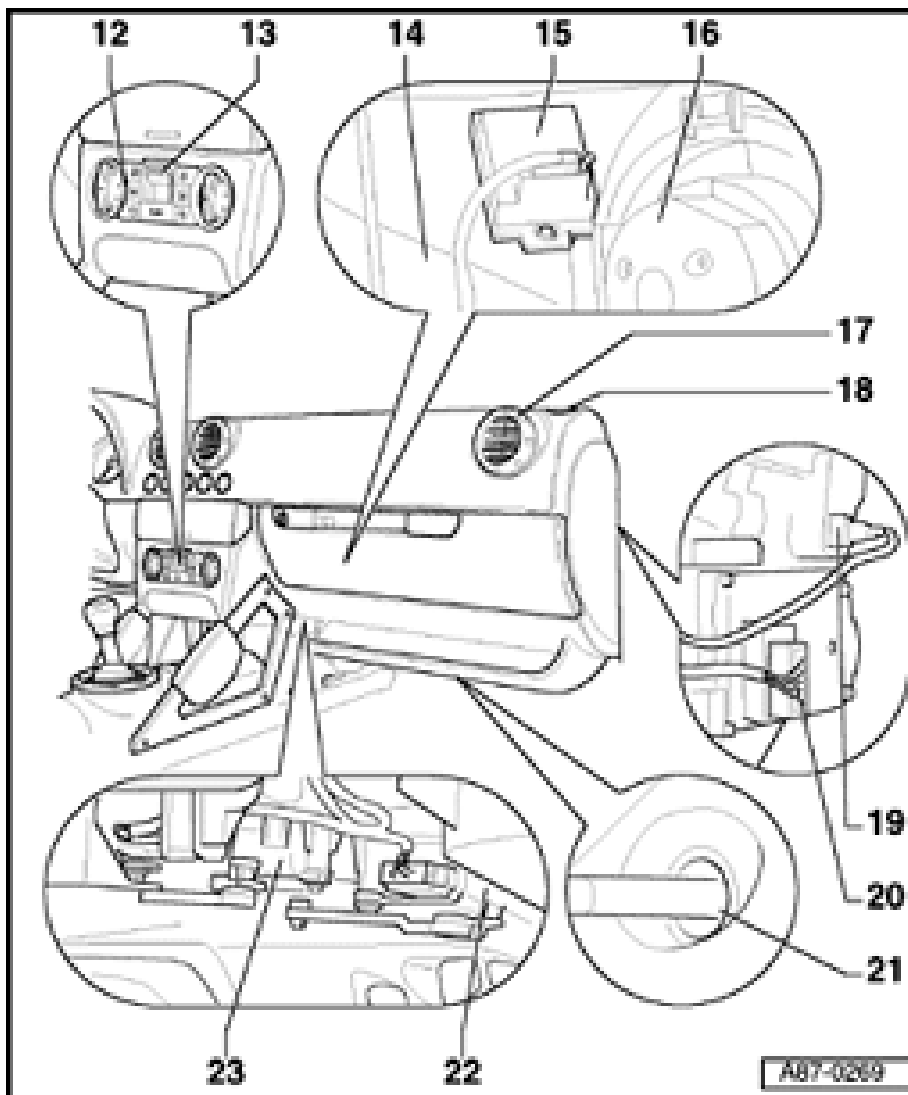
13 Interior - temperature sensor fan - V42- * and instrument panel interior temperature sensor - G56-

Notes:

Intake

- ◆ grille for sensor must not be obstructed.
- ◆ Fan and sensor are integrated in -E87- and cannot be replaced separately.

87-73



14 Heating - and A/C unit (with heater core and evaporator)

- ◆ Removing and installing ⇒ [page 87-91](#) .
- ◆ Overview ⇒ [page 87-99](#) .
- ◆ Disassembly and assembly ⇒ [page 87-107](#) .
- ◆ Removing and installing heater core ⇒ [page 87-98](#) .
- ◆ Evaporator seal, installing ⇒ [page 87-112](#) .

CAUTION!

Heating and A/C unit must only be removed after refrigerant has been discharged.

- 15 - Control module for fresh air

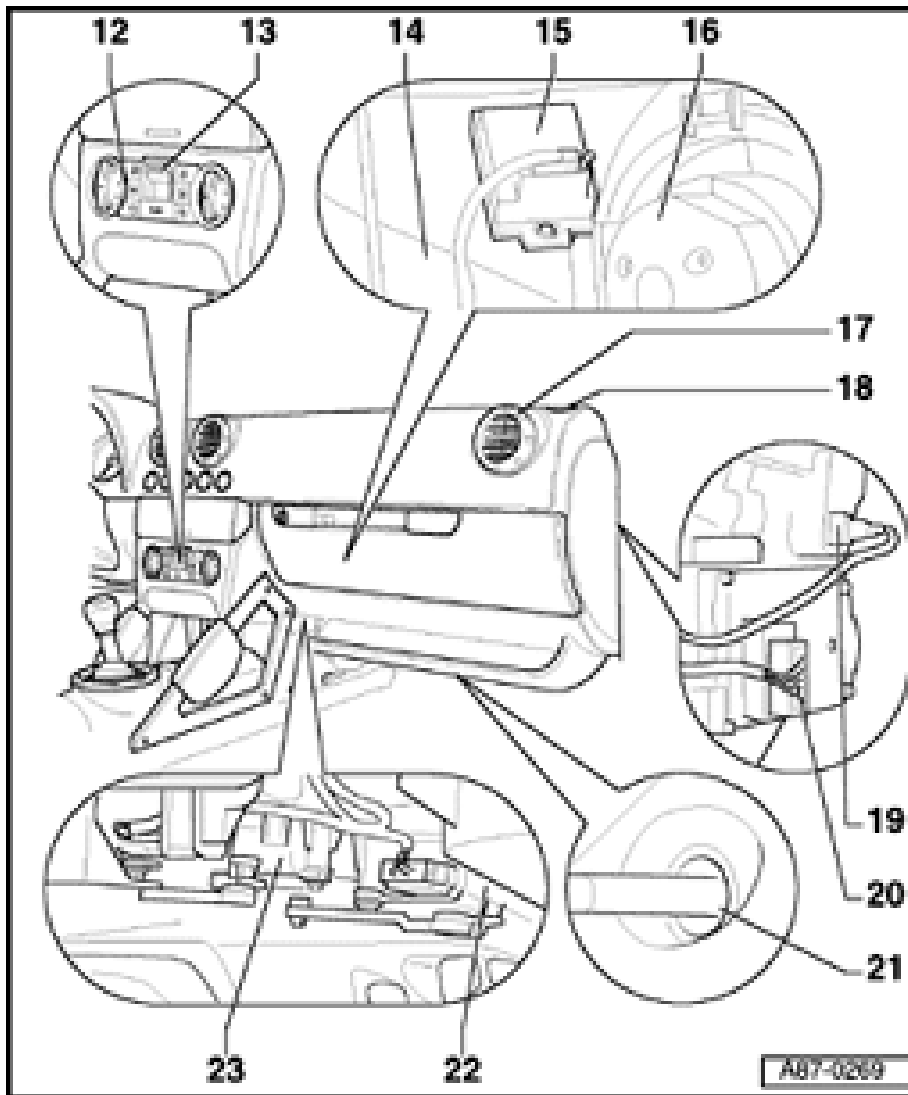
**blower -
J126- ****

- ◆ Removing
and
installing
⇒ [page
87-79](#) .

**16 - Fresh air
blower -
V2 ****

- ◆ Removing
and
installing
⇒ [page
87-81](#) .

87-74



17 - Instrument panel vent, right

- ◆ Removing and installing ⇒ [page 87-117](#) .

18 - Side window defroster vent

- ◆ Removing and installing.

⇒ [Repair Manual, Body Interior, Repair Group 70](#).

19 Fresh air - intake duct temperature sensor - G89- **

- ◆ Removing and installing ⇒ [page 87-88](#) .

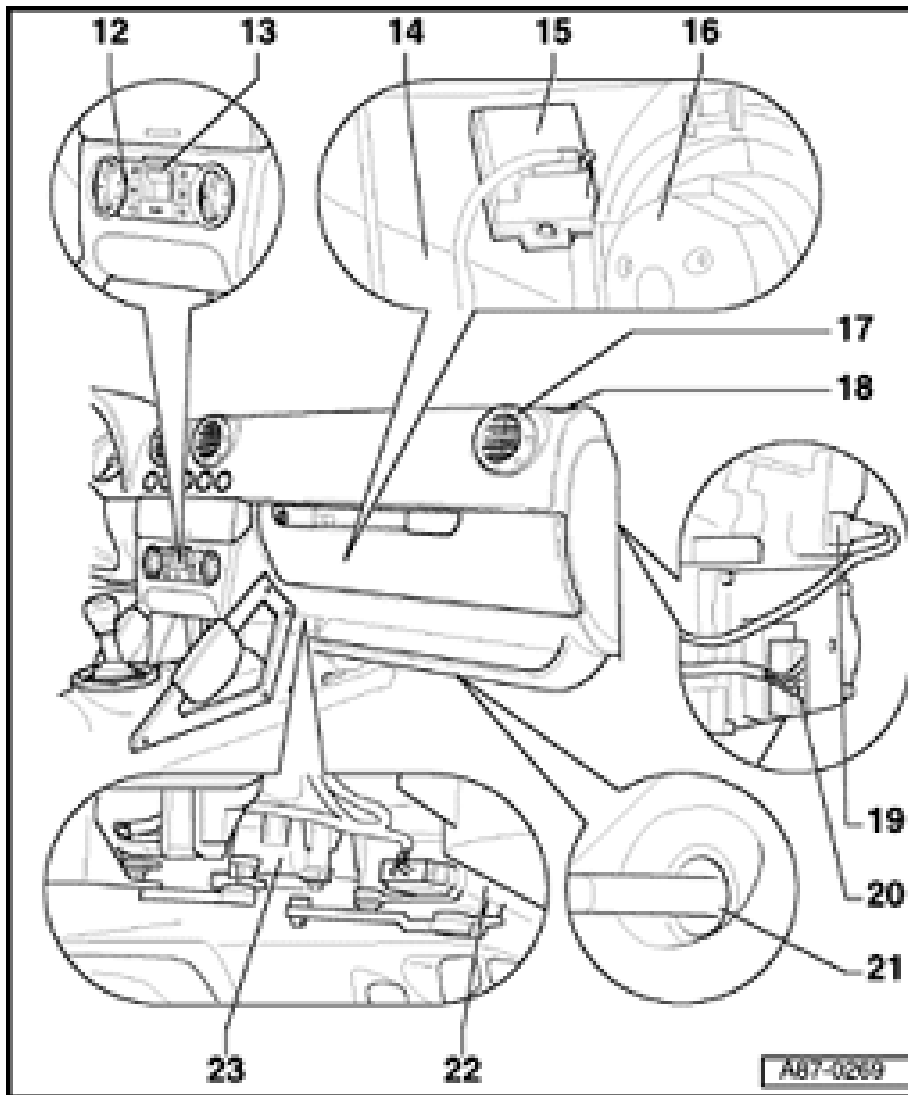
20 - Air flow flap motor - V71- *

- ◆ Actuates air flow flap and fresh air / recirculated air flap.
- ◆ With motor position sensor -

G113-.

- ◆ Removing and installing
⇒ [page 87-89](#) .

87-75



21 - Evaporator housing drain pipe.

- ◆ Checking drain valve ⇒ [page 87-57](#) .

22 Temperature - regulator flap motor - V68- *

- ◆ With motor position sensor - G92-
- ◆ Removing and installing ⇒ [page 87-86](#) .
- ◆ Actuating arm: black or pink.

23 - Central flap motor -V70- *

- ◆ With motor position sensor - G112-
- ◆ Removing and installing ⇒ [page 87-87](#) .
- ◆ Actuating arm: green

A/C control head -E87-, removing and installing

Notes:

- ◆ *Always check Diagnostic Trouble Code (DTC) memory before removing -E87-.*
- ◆ *After replacing -E87-, always: 1) Check coding or enter new coding 2) Perform basic setting 3) Check DTC memory.*
- ◆ *-E87- temperature display can be switched from ° C to ° F and back by pressing and holding the "recirculated air" button and at the same time turning the temperature control knob towards "temperature+".*
- ◆ *If -E87- remains on after the ignition has been switched off, check for short circuit to B+ in the wiring to terminal 1 on connector D (connection for auxiliary heater) according to wiring diagram.*
- ◆ *If a newly installed A/C control head display flashes for about 2 minutes when the ignition is switched on, code the A/C control head (Scan Tool function 07) and perform basic setting (Scan Tool function 04).*
- ◆ *If -E87- display does not light up when ignition is switched on, check the voltage supply from terminal 58d (instrument illumination dimmer) to -E87- according to wiring diagram, and also ⇒ [page 01-87](#) , Electrical testing.*
- ◆ *If -E87- control buttons do not light up when the vehicle lights are switched on, check voltage supply from terminal 58s (switch illumination) to -E87- according to wiring diagram, and also ⇒ [page 01-87](#) , Electrical testing.*
- ◆ *-E87- display and control buttons are illuminated by LEDs and cannot be replaced separately.*

Note:

As a running change in production, A/C control heads -E87- with part numbers including in letters "A" and onward may be installed. The units differ from previous ones (without index letter) as follows:

- ◆ On vehicles equipped with immobilizer, allocation of ignition key is recognized (transmitted by instrument cluster) and is displayed in read measuring value block display group 009 ⇒ [page 01-60](#) (function). Also see ⇒ *Repair Manual , Electrical Equipment, Repair Group 96.*
- ◆ The last four compressor cut-out conditions effect for more than 20 seconds are stored and displayed in read measuring value block display group 011 ⇒ [page 01-60](#) (function).

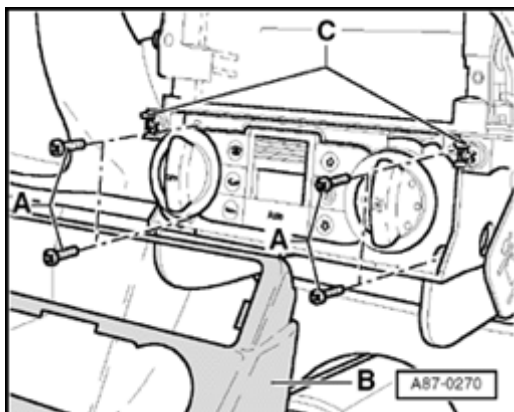
Removing

- Remove radio.

⇒ [Repair Manual , Radio, Telephone, Navigation, Repair Group 91.](#)

- Remove two grips from center console.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)



- Remove ashtray and trim -B- for instrument panel center section.

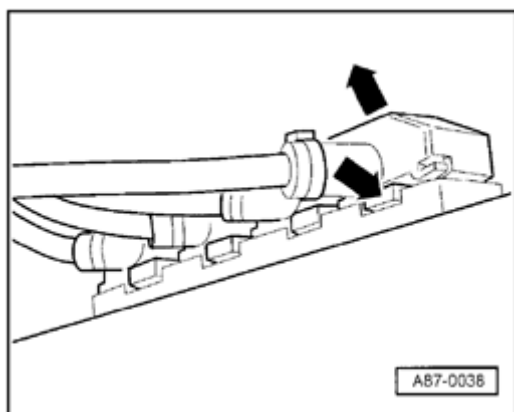
⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

Note:

When re-installing trim -B-, note proper position of spring clips -C-.

- Remove screws -A-.
- Remove A/C control head -E87-.

87-78

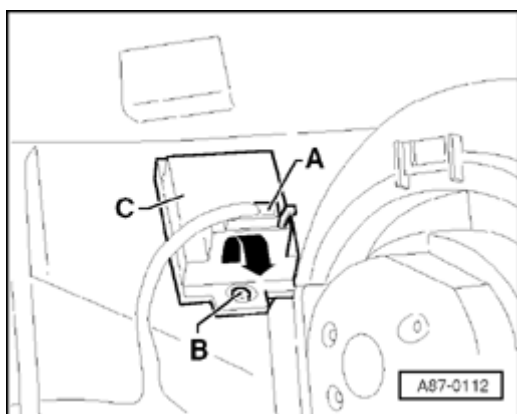


- Press release tabs -arrow- and disconnect electrical connections.
- Installation is in reverse order of removal.

Control module for fresh air blower -J126-, removing and installing

- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

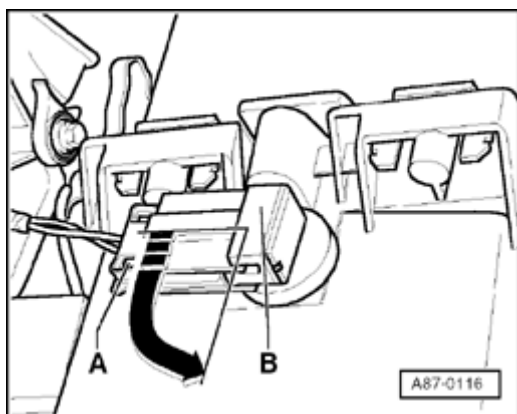


- Disconnect electrical connection - A-.
- Remove screw -B-.
- Remove control unit -C- in direction of arrow.

Sender for outlet temperature, floor outlet -G192-, removing and installing

- Remove storage compartment on driver's side.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)



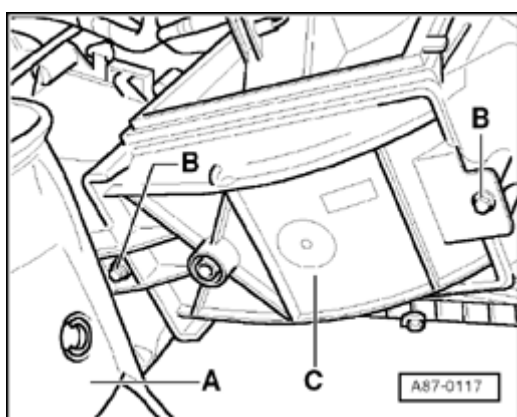
- Disconnect electrical connection - A-.
- Turn sender -B- 90° and pull out from housing.

Fresh air blower -V2-, removing and installing

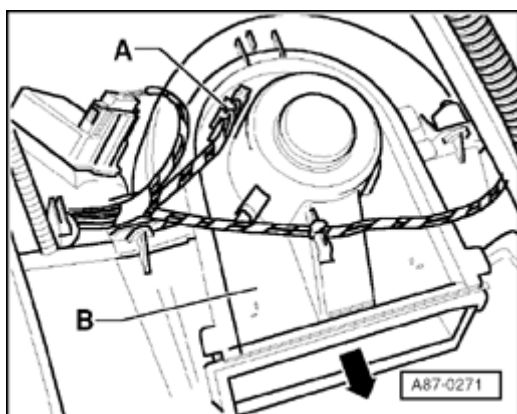
- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

- Remove screw clip for foam covering.



- Fold foam covering -A- away to one side.
- Remove screws -B- and cover -C-

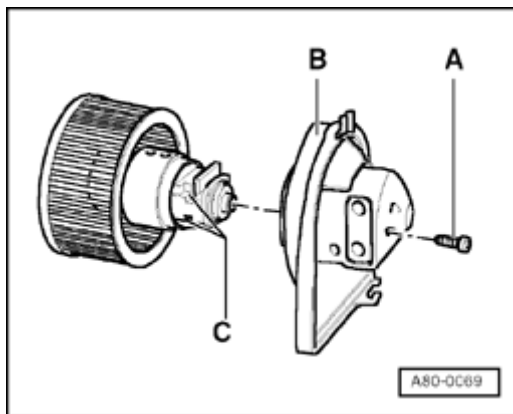


- Disconnect electrical connection - A- from fresh air blower.
- Pull fresh air blower -B- downwards from housing.

Fresh air blower -V2-, separating from from base plate

Note:

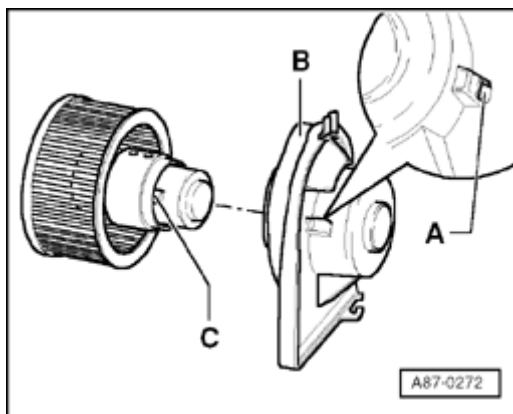
On vehicles from initial production, the fresh air blower is secured to the base plate by a screw. The base plate may also have a special mat to provide noise insulation.



- Remove screw -A-.
- Remove fresh air blower from base plate -B-.

Note:

As a running change in production, the original version will gradually be replaced by one in which the fresh air blower is clipped to the base plate.



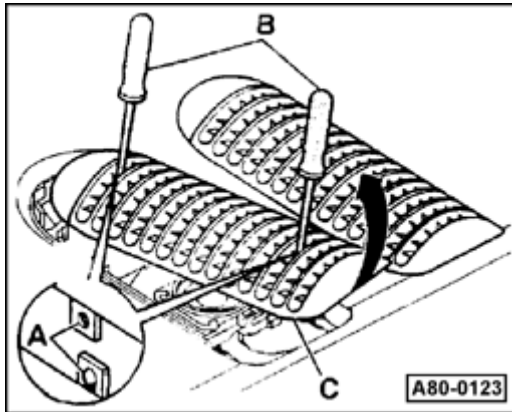
- Depress retainer clips -A-.
- Remove fresh air blower from base plate -B-.

Notes:

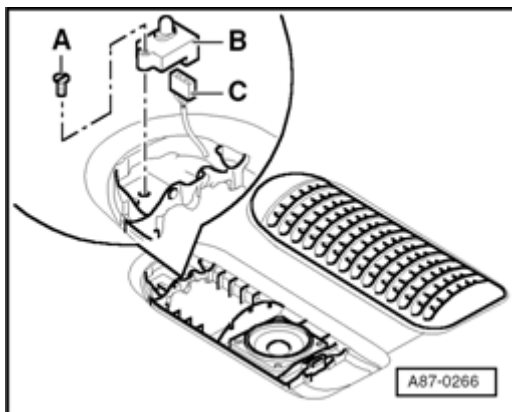
- ◆ When re-installing the blower to the base plate, make sure that mounting lugs -C- are correctly positioned.
- ◆ After installing, make sure that fresh air blower is properly mounted to the base plate.
- ◆ After installing, make sure that fresh air blower is properly seated in the heating and A/C unit housing.

87-83

Sunlight photo sensor -G107-, removing and installing



- ▲ - Carefully disengage catches -A- between instrument panel and vent using a small screwdriver -B- .
- Remove vent -C- in direction of -arrow- as illustrated.

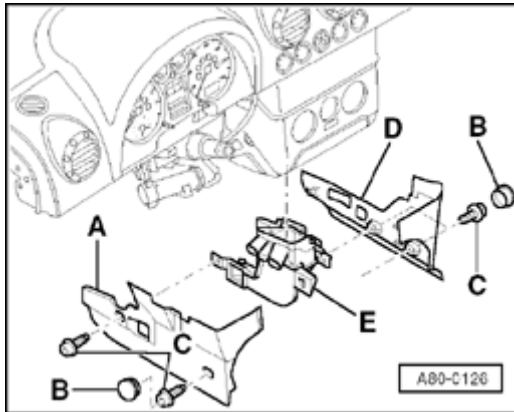


- ▲ - Remove screw -A-.
- Remove photo sensor -B-.
- Disconnect electrical connection -C-.

Note:

If VAG 1551 Scan Tool display shows a constant value of around 90% when reading the measuring value block for A/C control head -E87-, (Display Group 006), check wiring and terminal assignments to -E87- connector -C- according to wiring diagram (wiring may be improperly connected).

Footwell duct/vent, removing and installing



- Remove two grips from center console.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

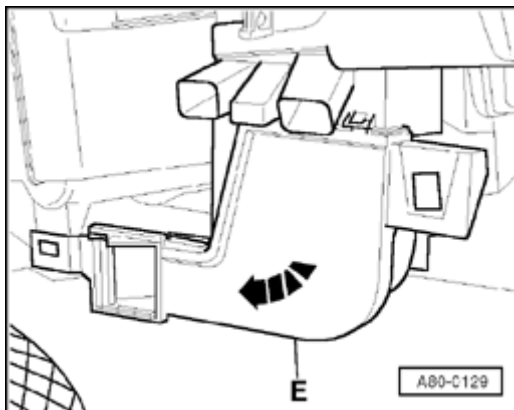
- Remove ashtray and trim -A- for instrument panel center section.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

- Remove caps -B-.
- Remove screws -C-.
- Remove trim panels -A- and -D-.

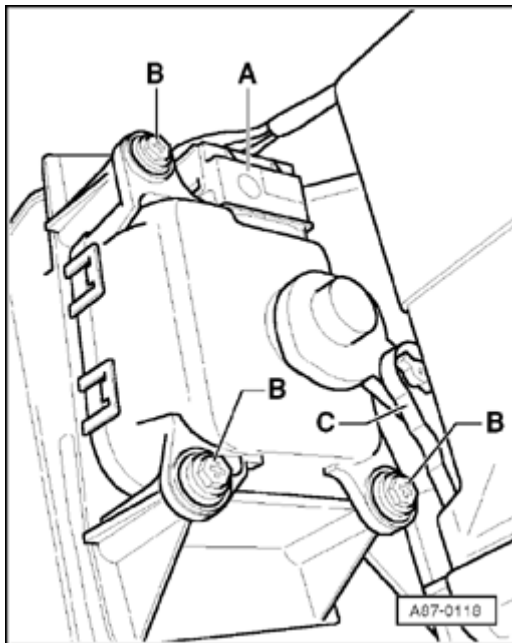


- Remove footwell vent -E- towards driver's side -arrow-.

Footwell/defroster flap motor - V85-, removing and installing

- Remove driver's storage compartment.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)



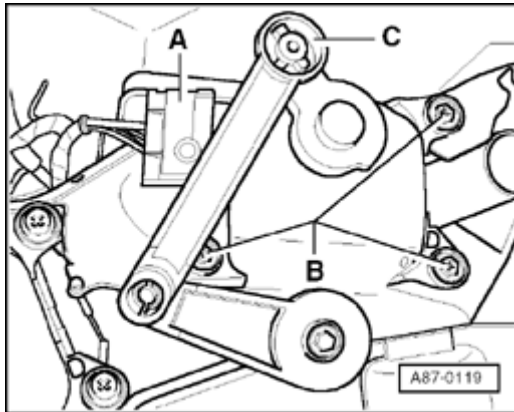
- Disconnect electrical connection - A-.
- Remove screws -B- (3x).
- Disengage actuating arm -C- and remove motor.

Notes on installation:

- ◆ After installing, always carry out On Board Diagnostic (OBD) on Climate control ⇒ [page 01-10](#) .
- ◆ When installing motor, make sure actuating arm -C- is properly aligned and installed.
- ◆ Route electrical wiring harness so that it cannot come into contact with any moving parts like the actuating arm on the motor or other.

Temperature regulator flap motor -V68-, removing and installing

- Remove footwell vent ⇒ [page 87-84](#) .



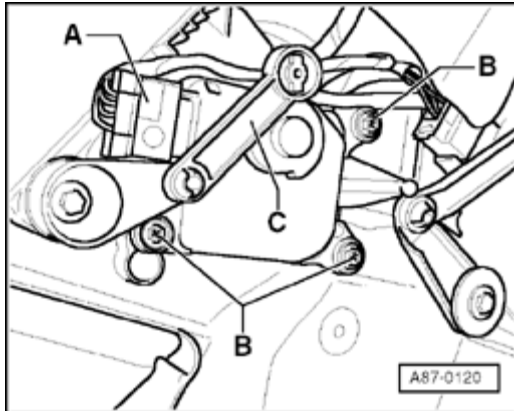
- Disconnect electrical connection - A-.
- Remove bolts -B- (3x).
- Disengage actuating arm -C- and remove motor.

Notes on installation:

- ◆ After installing, always carry out On Board Diagnostic (OBD) on Climate control ⇒ [page 01-10](#) .
- ◆ When installing motor, make sure actuating arm -C- is properly aligned and installed.
- ◆ Route electrical wiring harness so that it cannot come into contact with any moving parts like the actuating arm on the motor or other.

Central air flap motor -V70-, removing and installing

- Remove footwell vent ⇒ [page 87-84](#) .



- Disconnect electrical connection - A-.
- Remove screws -B- (3x).
- Disengage actuating arm -C- and remove motor.

Notes on installation:

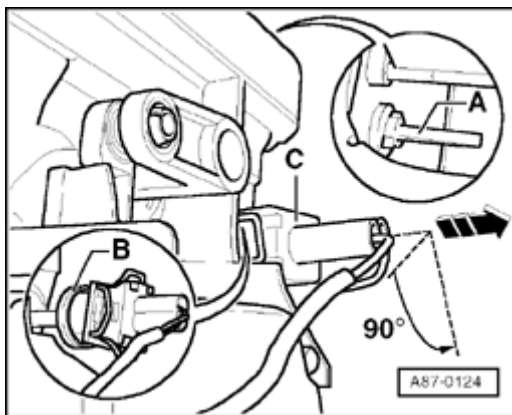
- ◆ After installing, always carry out On Board Diagnostic (OBD) on Climate control ⇒ [page 01-10](#) .
- ◆ When installing motor, make sure actuating arm -C- is properly aligned and installed.
- ◆ Route electrical wiring harness so that it cannot come into contact with any moving parts like the actuating arm on the motor or other.

Fresh air intake duct temperature sensor -G89-, removing and installing

- Remove dust and pollen filter ⇒ [page 87-121](#) .

- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)



- ◀ - Reach into the intake housing and rotate temperature sensor -A- 90° .
- Reach between heating and A/C unit and A-pillar and remove temperature sensor from intake housing -arrow- with electrical connector -C- still attached.

Notes:

- ◆ If the temperature sensor is difficult to rotate, carefully apply silicone spray to the contact surface of rubber grommet -B- on the intake housing.
- ◆ Checking -G89- ⇒ [page 01-87](#) , Electrical testing.

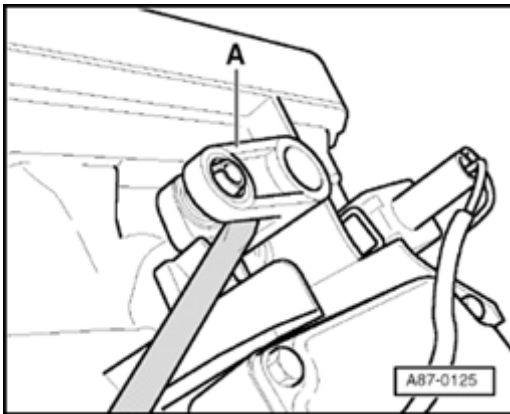
Air flow flap motor -V71-, removing and installing

Note:

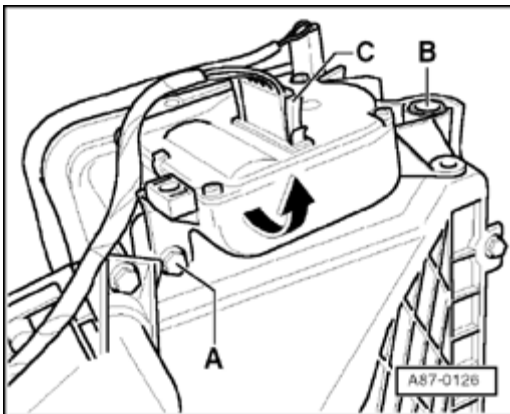
-V71- operates the air flow flap and fresh/recirculated air flap.

- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)



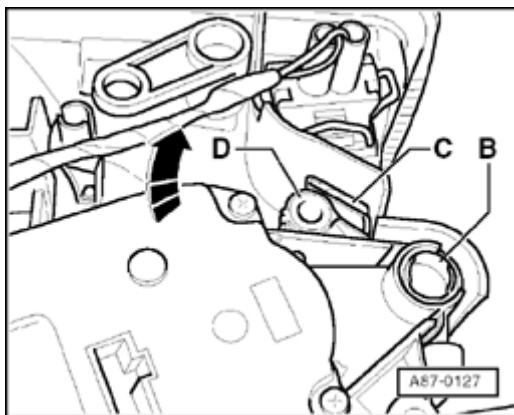
- ✦ - Carefully detach actuating arm - A- (for air flow flap) with screwdriver.



- ✦ - Remove bolt -A-.
- Disconnect electrical connection - C-.
- Rotate motor downwards in direction -arrow- and pull out of shaft for fresh/recirculated air flap -B-.

Notes on installation:

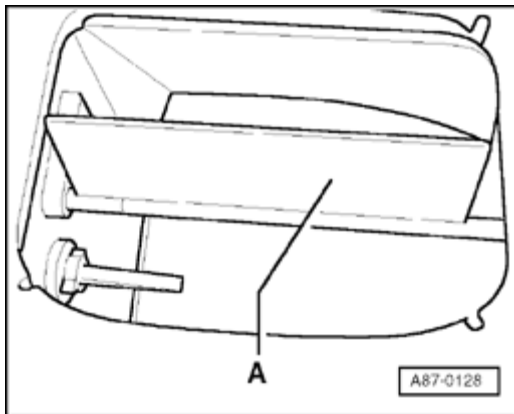
- ◆ Replacement motors are supplied set to "recirculated air" mode. To facilitate installation, first connect motor to vehicle electrical system and centralize actuating arm. This is done by switching on the ignition and pressing the "recirculated air" button on the A/C control panel to change setting of motor. With the actuating arm centralized, the fresh/recirculated air flap does not touch the limit stops, and the motor can be installed more easily.



- ◀ - First insert motor into shaft of fresh/recirculated air flap -B-. Then rotate in direction of arrow making sure that lug -D- fits into slot -C-.
- ◆ After installing, always carry out On Board Diagnostic (OBD) on Climate control ⇒ [01-10](#).
- ◆ Route electrical wiring harness so that it does not come into contact with any moving parts, actuating arm on the motor or other.

Heating and A/C unit (with heater core and evaporator), removing and installing

- Discharge refrigerant circuit ⇒ [page 87-1](#)
- Remove dust and pollen filter ⇒ [Page 87-121](#).
- Switch ignition on.
- Press "recirculated air" button on A/C control head -E87-.
- Wait until air flow flap -A- closes (fresh/recirculated air flap moves to "recirculated air" position).
- Switch off ignition with the air flow flap closed.



CAUTION!

Before beginning repairs on the electrical system:

- ◆ **Obtain the anti-theft radio security code.**
- ◆ **On vehicles with electrically adjustable seats, move seats back as far as possible before disconnecting battery.**
- ◆ **Ignition OFF!**
- ◆ **Disconnect battery Ground (GND strap).**

Notes:

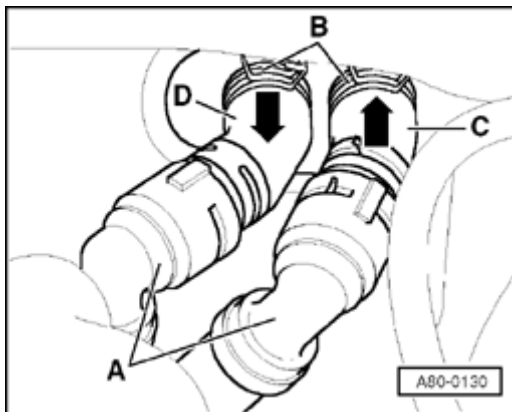
- ◆ *When the battery is reconnected, reset and check operation electrical equipment (radio clock, convenience system if applicable according to the Repair Manual and /or Owner's Manual).*

87-92

- Disconnect battery.
- Release pressure in cooling system by opening cap on coolant expansion tank.

WARNING!

The cooling system is pressurized when engine is warm. Wear gloves, safety glasses and other protection, and carefully release system pressure prior to proceeding with repairs.



- Using tools 3094, clamp off both coolant hoses for heater core at a point between the hoses and connections -A-.
- Remove spring clamps -B- and detach coolant hoses.

Notes:

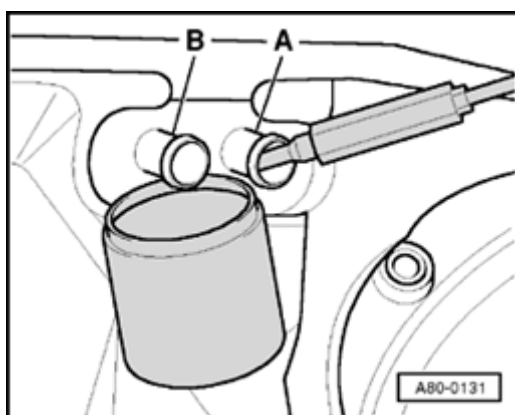
- ◆ Coolant hoses must not be interchanged when installing.

Coolant hose -C- = supply hose from cylinder (marked with letter "V")

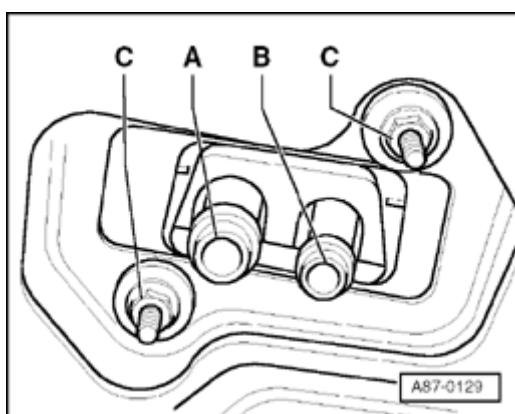
Coolant hose -D- = return hose to water pump (marked with letter "R")

- ◆ Bleeding cooling system ⇒ Repair Manual Liter 4-Cyl. 5V Turbo Engine Mechanical Repair Group 19.

87-93



- ✦ - Place suitable container under connection -B- and carefully expel coolant from heater core (using compressed air) through connection -A-.
- Remove expansion valve ⇒ [page 87-62](#) .

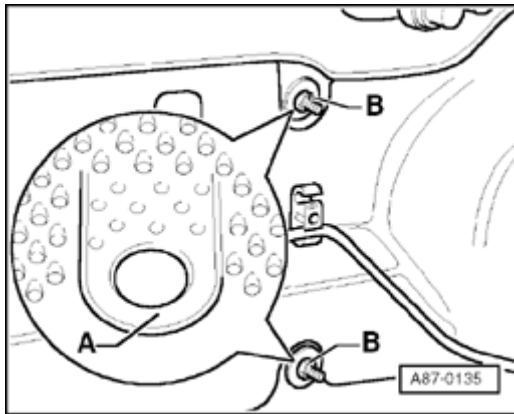


- ✦ - Seal off refrigerant pipes and open connections -A- and -B- on evaporator.
- Remove hex nuts with washers - C-, tightening torque 15Nm (11 ft lb).

Note:

Washers for hex nuts should be fitted with seals.

87-94



- ✦ - Fold back pre-punched flaps -A- on insulation mat and remove hex nuts and washers -B- underneath, tightening torque 15 Nm (11 ft lb).
- Remove glove box.

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

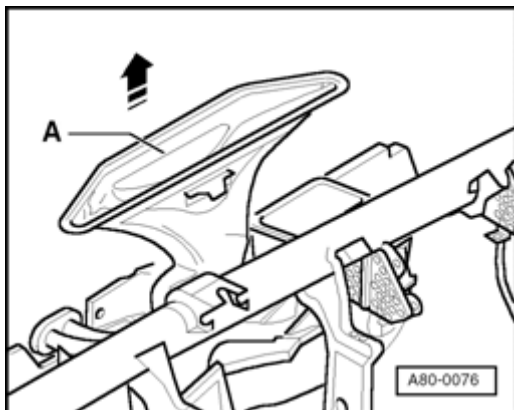
- Remove storage compartment on driver's side, dash panel center section and instrument panel.

⇒ [Repair Manual , Body Interior, Repair Group 70.](#)

- Remove center console (complete).

⇒ [Repair Manual , Body Interior, Repair Group 68.](#)

- Remove footwell vent ⇒ [Page 87-84](#) .



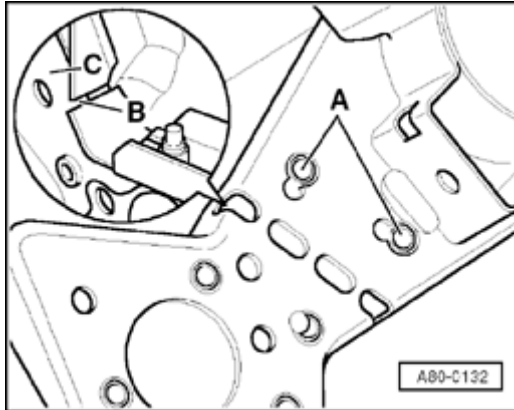
- ✦ - Remove air duct -A- (leading to defroster vent).
- Remove front passenger's airbag unit (complete) together with left-hand bracket for instrument panel cross member.

⇒ [Repair Manual , Body Interior, Repair Group 69.](#)

- Disconnect Ground (GND) connection between heating and A/C unit and ground connection at bottom of right A-pillar.

⇒ [Electrical Wiring Diagrams, Troubleshooting & Component Locations.](#)

87-95

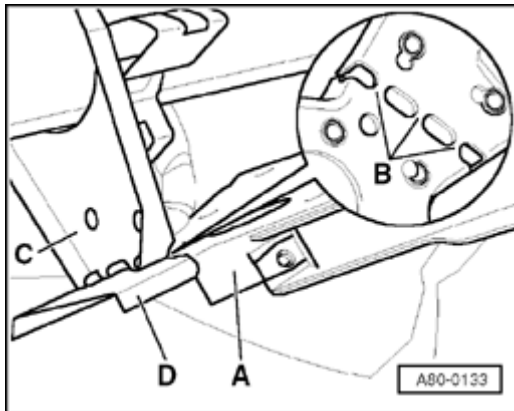


A

- Cover all exposed connectors and the A/ducts (protection from drilling remains).
- Drill two 7 mm holes in instrument panel support, one at each of the welding point marked -A- (drill through both layers).
- Saw through support at -B- (e.g. using bc V.A.G 1523 A or equivalent).

CAUTION!

Do not saw through section -C- (reinforce or the instrument panel support).



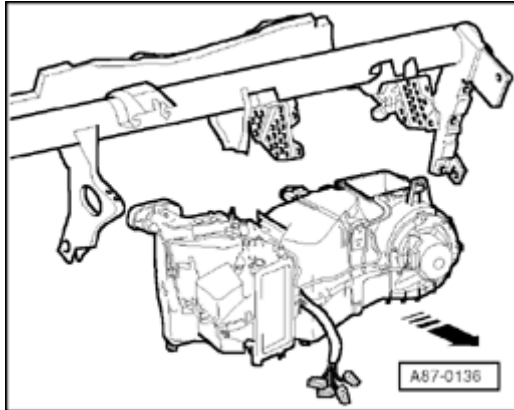
A

- Bend section -A- of support to one side in direction of -arrow- (or break off complete along break line -B-).

WARNING!

- ♦ **Remove any burrs and sharp edges from holes made in section -C- and -D- of the support.**
- ♦ **Cover all resulting sharp edges (e.g. with adhesive tape).**

87-96



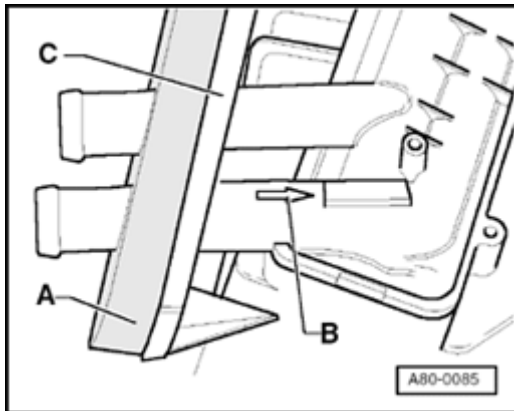
- Unplug all electrical wiring connections between vehicle systems and the heating and A/C



- Remove unit towards passenger side -arrow

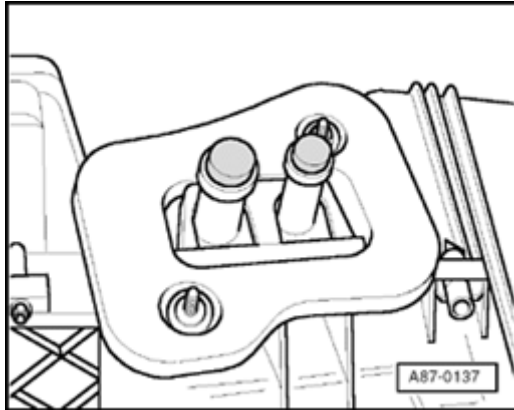
Notes on installation:

- ◆ Before installing, check all gaskets and the heating and A/C unit for damage and replace if necessary.
- ◆ When installing, check seal at intake hose. Seal must face body side.



- ◆ Replace seal -A- and ensure it is properly seated against contact surface -C-.
- ◆ After assembling, all cable ties which were removed in order to take out the air control must be refitted in their original positions.
- ◆ Replace both O-rings for refrigerant pipe expansion valve.
- ◆ Install refrigerant pipes free of stress.

87-97

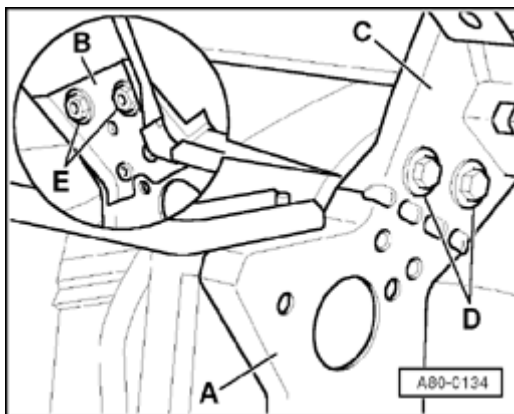


◆ Ensure evaporator drain pipe and valve properly seated.



◆ Replace gasket and ensure it is properly on the evaporator connecting flange.

After installing the heating and A/C unit, pro follows:



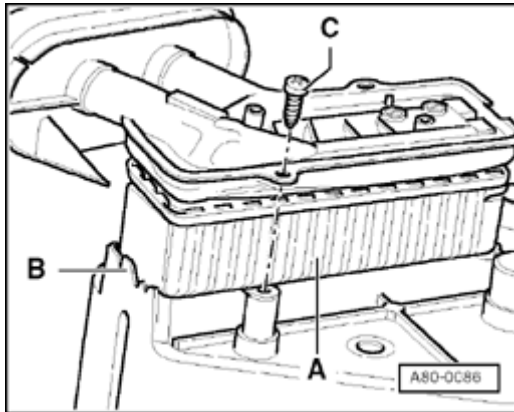
- Bend section -A- of the instrument panel back into position.

- Bolt section -B- (which is welded to section -C- of the support with two bolts (for example, M6 x 10 bolts) and two washers -E-.

Note:

When inserting bolts -D-, make sure they do contact the bracket for the airbag unit.

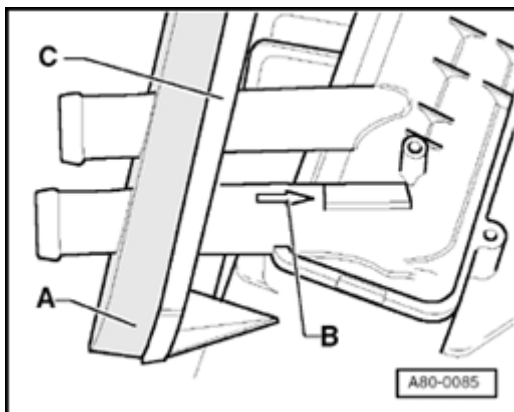
Heater core, removing and installing



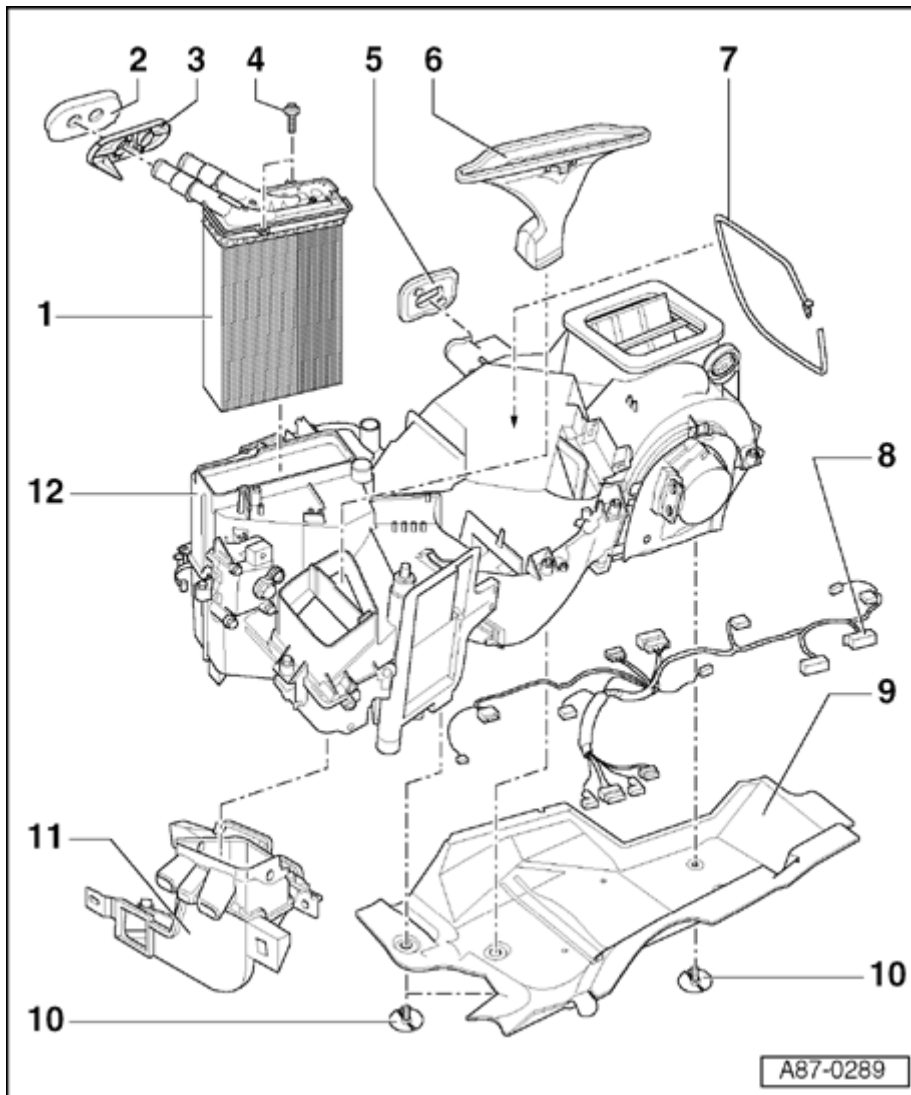
- ▲ - Remove heating and A/C unit ⇒ [page 87-91](#) .
- Remove screws -C-.
- Depress tabs -B- and pull (lift) heater core -A- from housing.

Notes:

- ◆ *When installing heater core, always secure it in the heater flap housing with two suitable screws -C- (e.g. self-tapping screws, 3.2 x 20mm). This also applies even if the heat exchanger was originally only clipped in place.*
- ◆ *The heater core is installed in the heater flap housing without an all-round seal.*



- ▲ ◆ *Replace seal -A- and ensure it is properly seated against contact surface -C-.*
- ◆ *Coolant flow direction is indicated on heater core -arrow B-.*



Heating and A/C unit (with heater core and evaporator) mechanical components, overview

Removing and installing heating and A/C unit ⇒ [page 87-91](#) .

1 - Heater core

- ◆ Removing and installing ⇒ [page 87-98](#) .

2 - Seal

- ◆ Always replace
- ◆ Seals heater core from engine compartment.

3 - Mounting flange

4 - Screw

5 - Evaporator housing seal

- ◆ Always replace
- ◆ Seals refrigerant pipes from engine compartment.

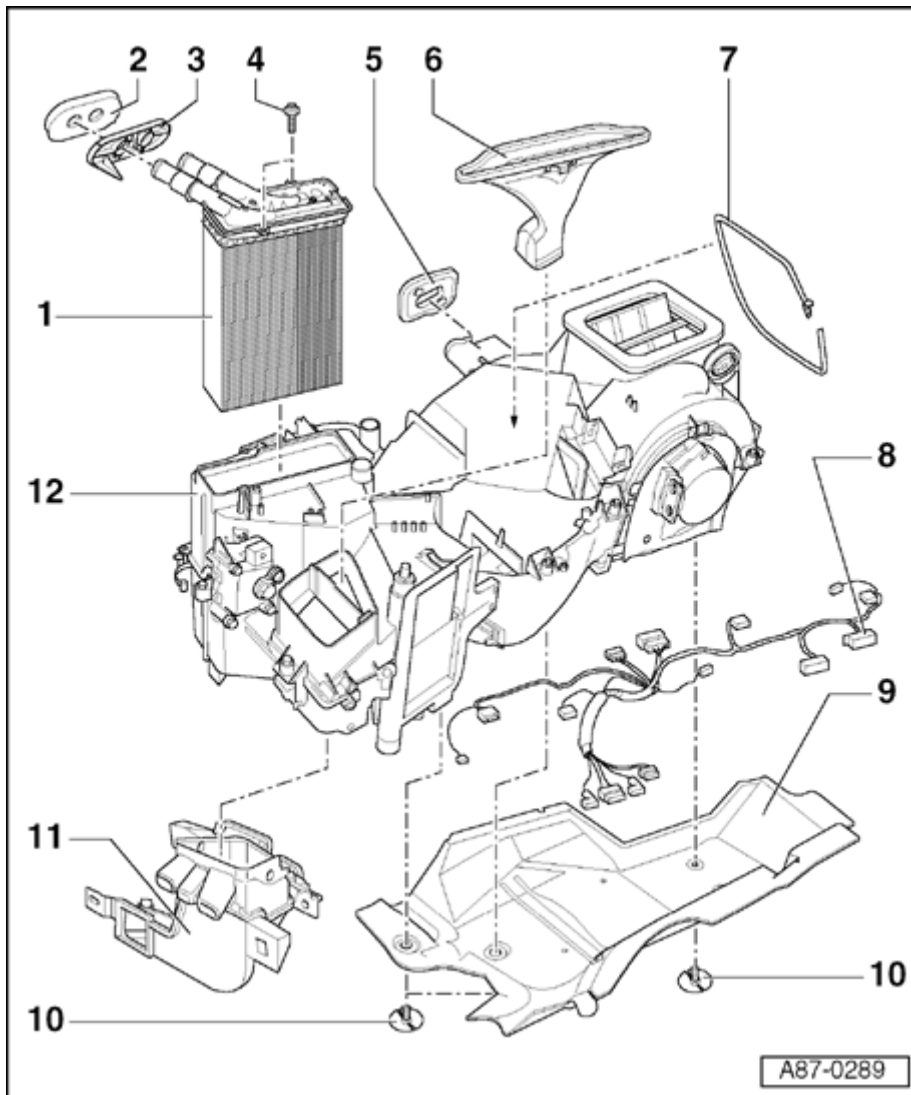
- ◆ Location ⇒ [Fig.](#)

[3](#) .

6 - Defroster duct

- ◆ Removing and installing
⇒ [page 87-120](#) .

87-100



7 - Tensioning strap

- ◆ Must be installed correctly ⇒ [Fig. 1](#).

8 - Climate control system wiring harness

- ◆ When installing, ensure proper clearance to moving parts ⇒ [Fig. 2](#).

9 - Kick panel

- ◆ Secured with tensioning strap and screw clips.

10 - Screw clip

11 - Footwell duct/vent

- ◆ Removing and installing ⇒ [page 87-84](#).

12 - Heating and A/C unit

- ◆ With electrical components

◆ Electrical components, overview ⇒ [page 87-103](#) .

◆ Disassembly and assembly ⇒ [page 87-107](#) .

87-101

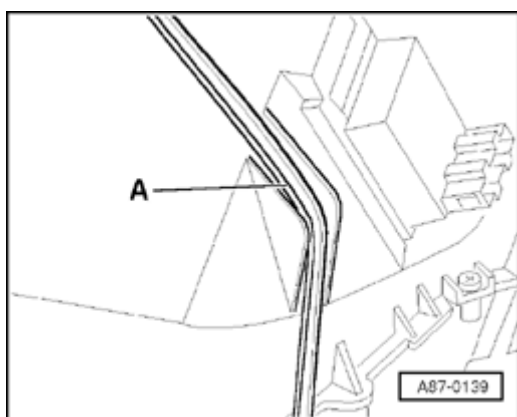


Fig. 1 Tensioning strap, installing

Notes:

- ◆ *Ensure tensioning strap -A- is installed and located in the correct positions around the housing.*
- ◆ *The tensioning strap also holds the cover on the evaporator housing.*

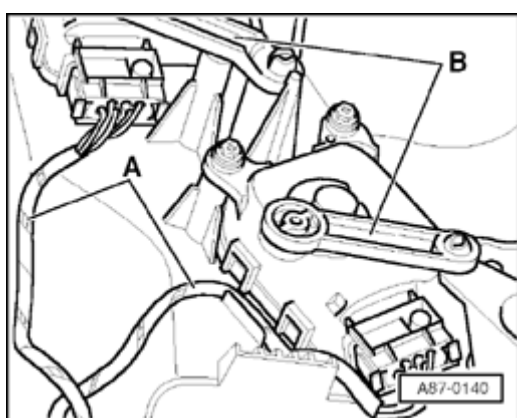


Fig. 2 Installing wiring harness for air conditioner

Notes:

- ◆ *Wiring harness -A- must be positioned so that it cannot come into contact with any moving parts (e.g. actuating arms -B- for positioning motors).*
- ◆ *Secure wiring harness with suitable tie wraps to prevent it from coming loose.*

87-102

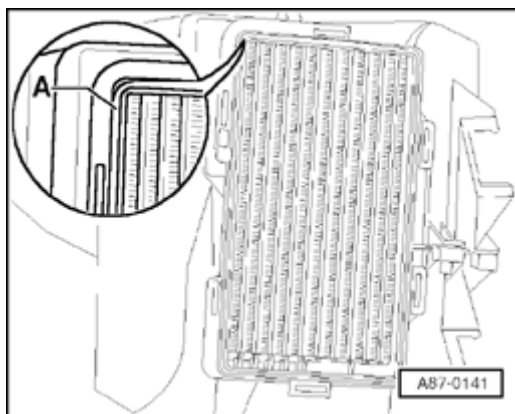
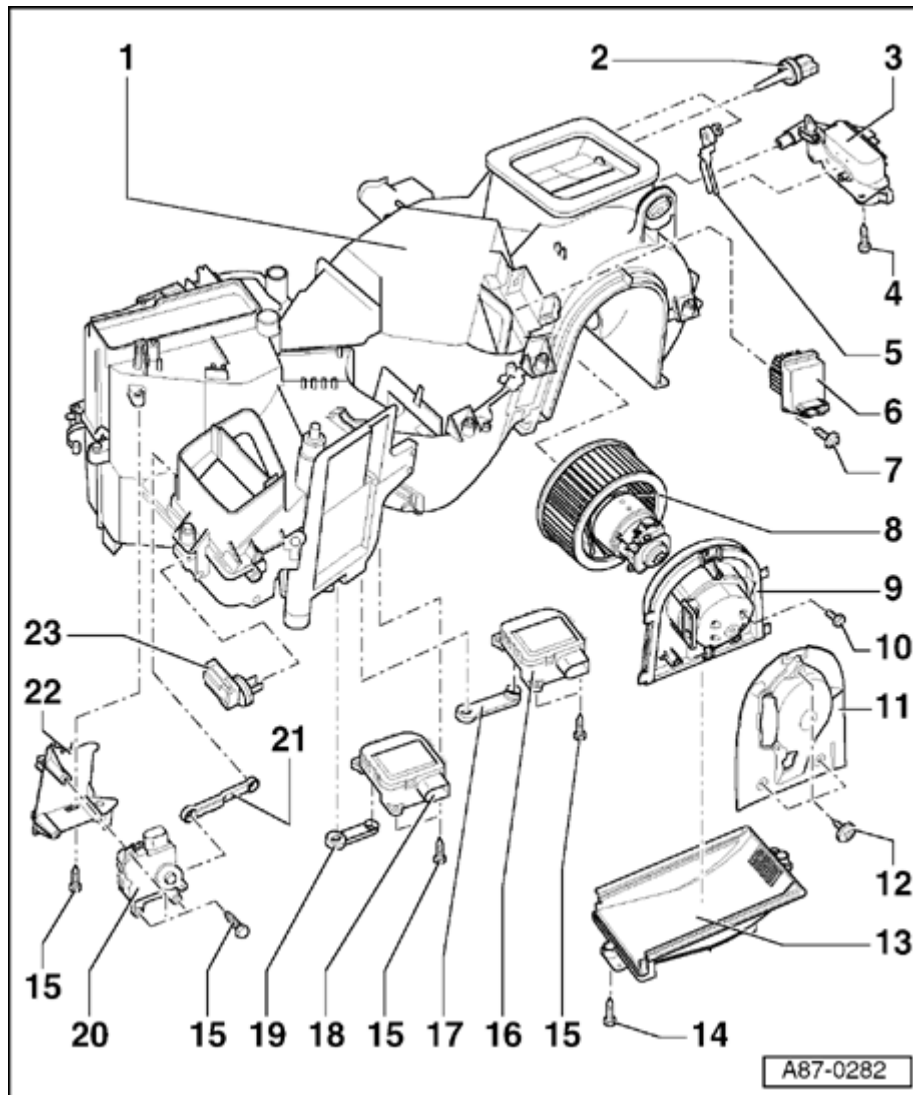


Fig. 3 Evaporator housing seal, location

Note:

Always replace seal -A- , and install securely in recess around the evaporator housing.

87-103



Heating and A/C unit (with heater core and evaporator) electrical components, overview

1 - Heating and A/C unit

- ◆ Disassembly and assembly = [page 87-107](#).

2 - Fresh air intake duct temperature sensor -G89-

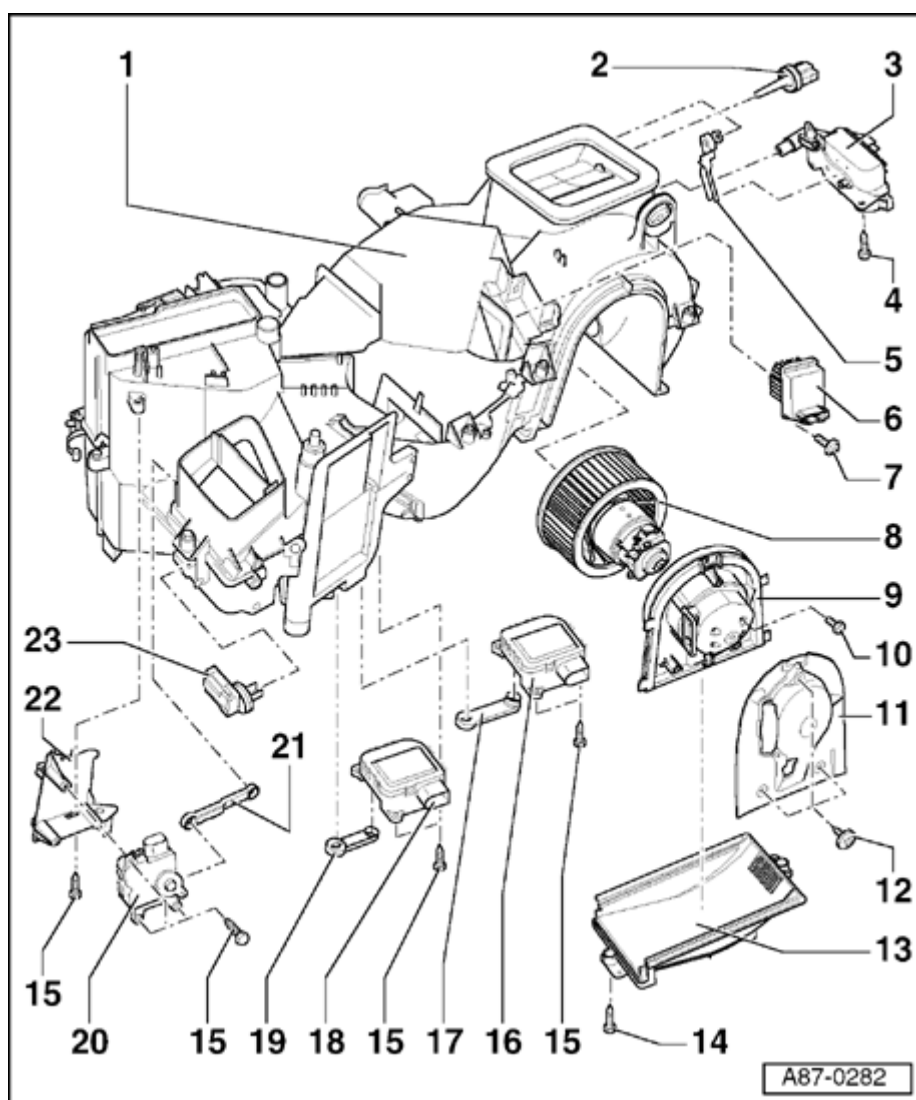
- ◆ Removing and installing = [page 87-88](#).

3 - Air flow flap motor -V71-

- ◆ Operates the air flow flap and fresh/recirculate air flap.
 - ◆ With motor position sensor - G113-
 - ◆ Removing and installing = [page 87-89](#).

4 - Screw

87-104



5 - Actuating arm

- ◆ To air flap

6 - Control module for fresh air blower -J126-

- ◆ Removing and installing ⇒ [page 87-79](#).

7 - Screw

8 - Fresh air blower -V2-

- ◆ Removing and installing ⇒ [page 87-81](#).

9 - Mounting plate

10 - Screw

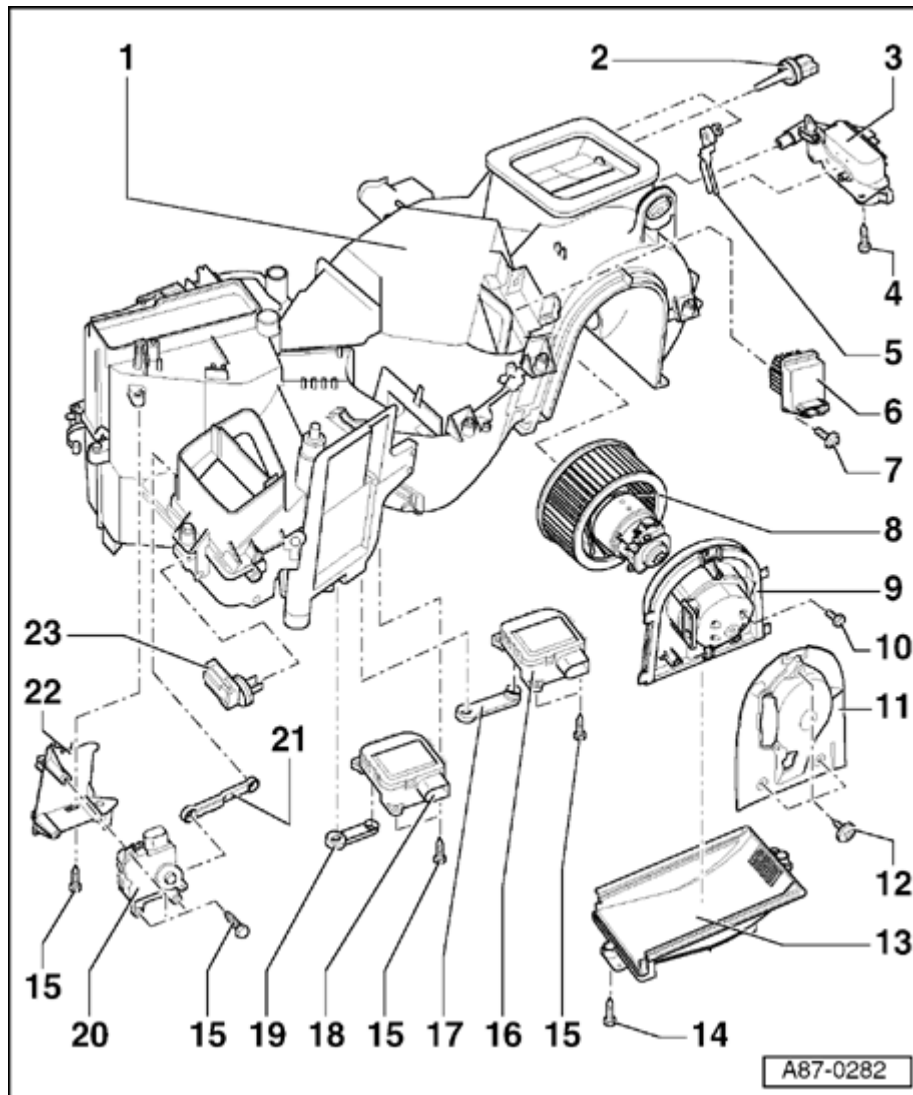
11 Noise - insulation

- ◆ Not installed on all vehicles.

12 - Screw

13 - Cover

87-105

**14 - Screw****15 - Screw****16 Temperature
- regulator
flap motor -
V68-**

- ◆ With motor position sensor - G92-

- ◆ Removing and installing ⇒ [page 87-86](#) .

- ◆ Actuating arm: black or pink.

17 - Actuating arm**18 - Central air flap motor -V70-**

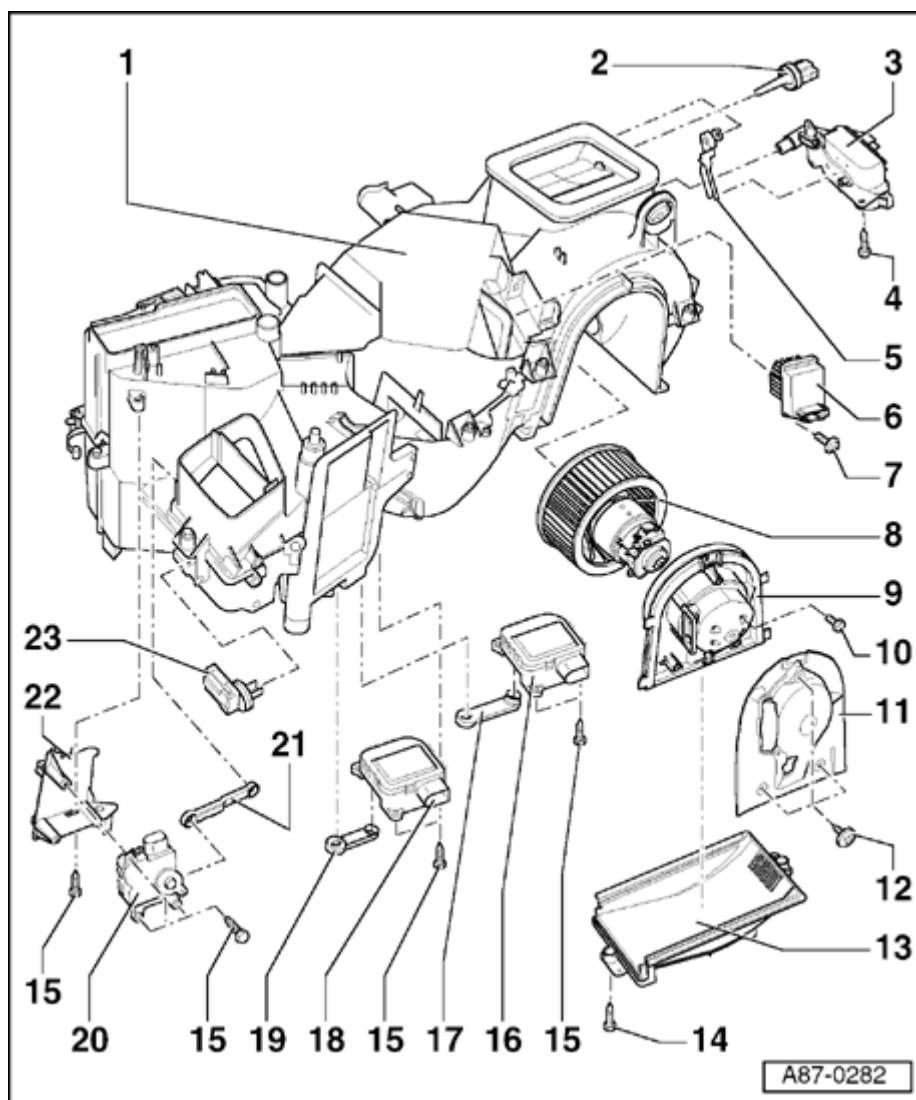
- ◆ With motor position sensor - G112-

- ◆ Removing and installing ⇒ [page 87-87](#) .

- ◆ Actuating arm: green.

19 - Actuating arm

87-106



20 Footwell/defro: - flap motor -V85

- ◆ With motor position sensor -G1

- ◆ Removing ; installing ⇒ [page 87-85](#)

- ◆ Actuating a yellow.

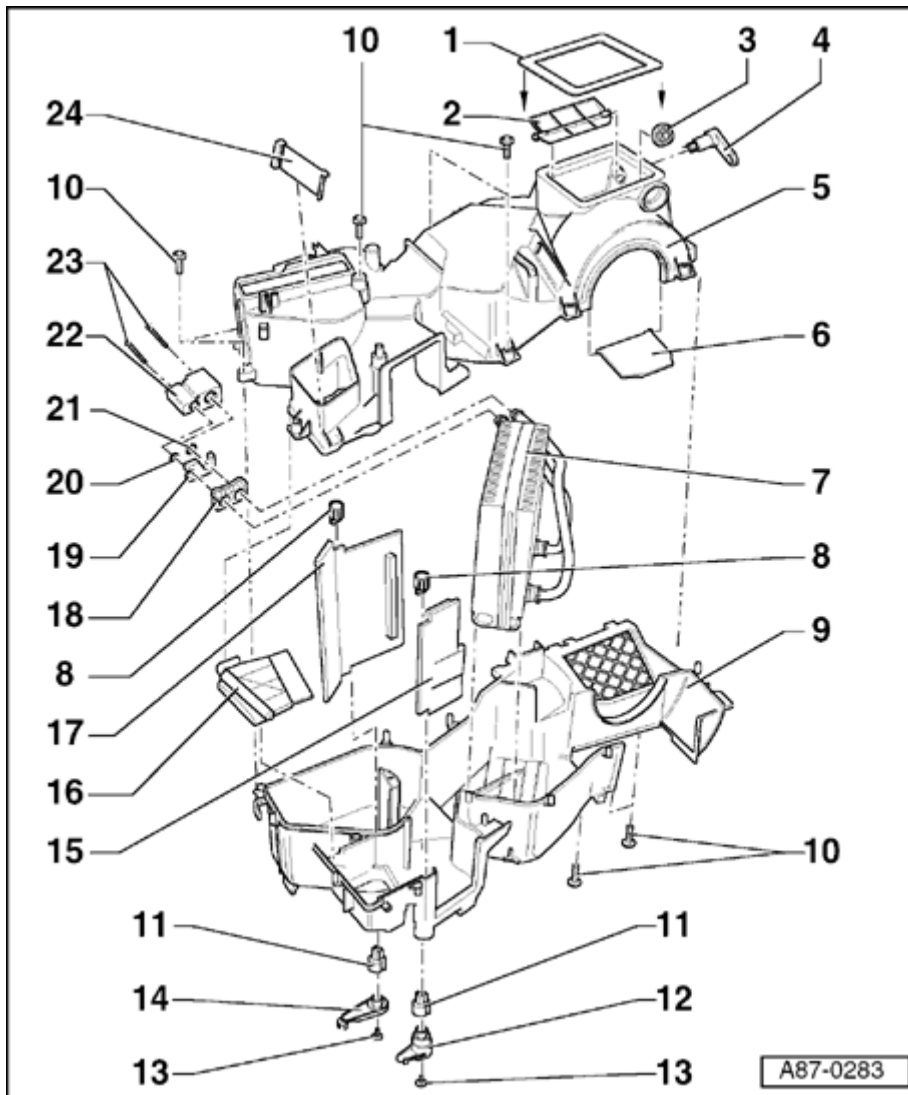
21 - Actuating ar

22 - Mounting bracket for -V85-

23 - Sender for outlet temperature, floor outlet -G192-

- ◆ Removing ; installing ⇒ [page 87-80](#)

87-107



Heating and A/C unit (with heater core and evaporator), disassembly and assembly

1 - Seal

- ◆ Seals intake duct against air intake plenum.

- ◆ Check and replace if damaged.

2 - Air flap

- ◆ Lightly lubricate hinge pivots with grease G 052 745 A3 or equivalent.

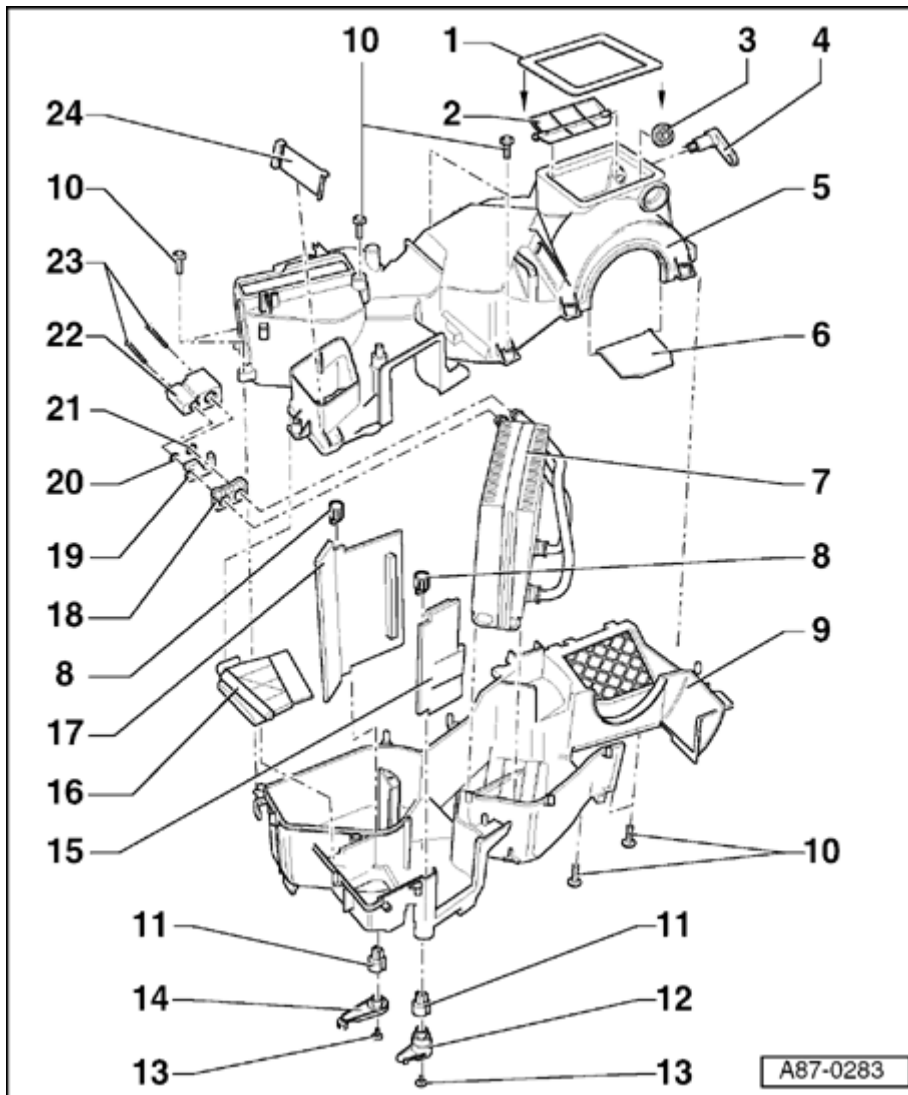
3 - Grommet

4 - Lever

5 Air - distribution housing, upper part

- ◆ Assembly ⇒ [Fig. 1](#) .
- ◆ Installing seal at refrigerant pipes ⇒ [Fig. 2](#) .

87-108



6 Fresh/recirculat - flap

- ◆ Lightly lubricate hinge pivot with grease 052 745 A3 equivalent.

7 - Evaporator

- ◆ Installing set at refrigerant pipes ⇒ [Fig. 2](#).
- ◆ Installing set ⇒ [Fig. 3](#).

8 - Pivot bushin

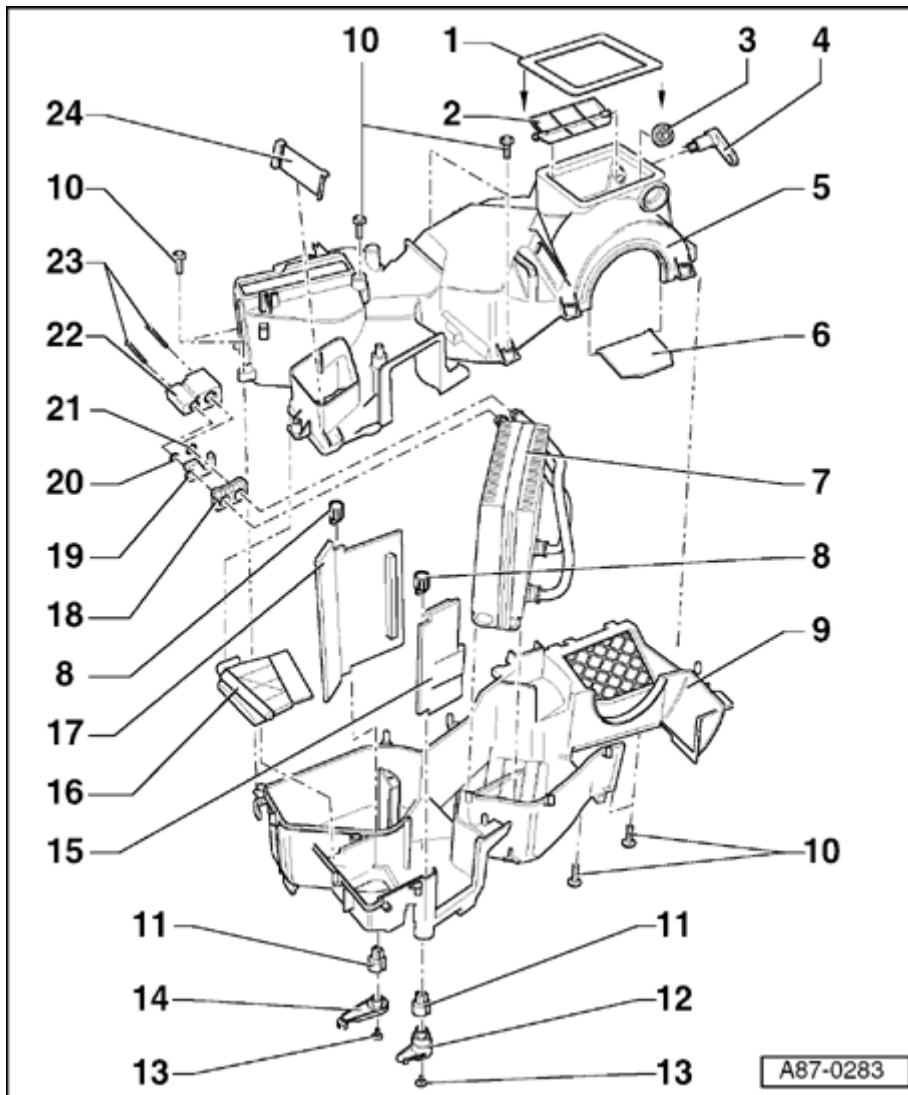
- ◆ Lightly lubricate with grease G 0 745 A3 or equivalent.

9 - Air distributi housing, low part

- ◆ Assembly = [Fig. 1](#).
- ◆ Installing set at refrigerant pipes ⇒ [Fig. 2](#).

10 - Screw

87-109

**11 - Pivot bushin**

- ◆ Lightly lubricate with grease G 0 745 A3 or equivalent.

12 - Central flap lever**13 - Screw****14 - Temperature flap lever****15 - Central flap**

- ◆ Note installation position (shorter section of flaps up).

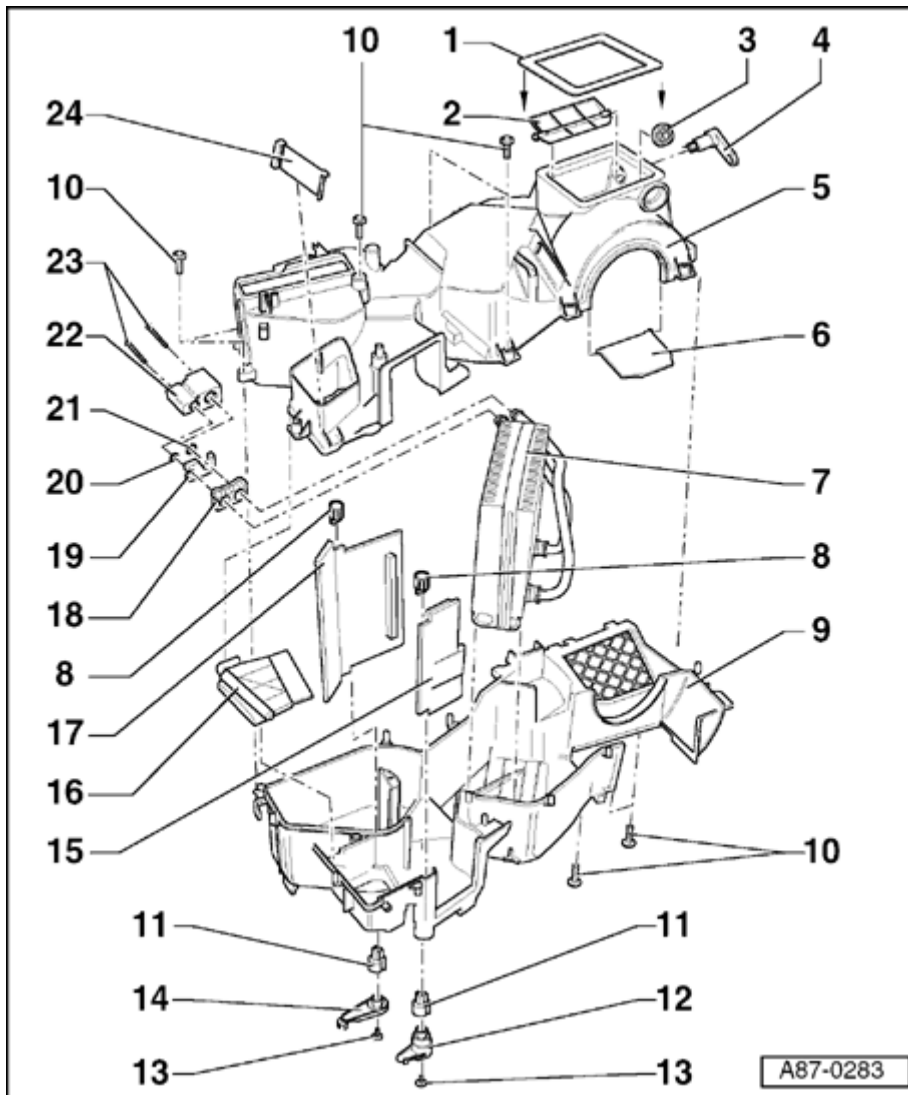
16 Footwell/defrost flap

- ◆ Lightly lubricate hinges with grease G 0 745 A3 or equivalent.

17 - Temperature flap**18 - Seal**

- ◆ Installing seal at refrigerant pipes ⇒ [Fig 2](#).

87-110



19 Threaded - bracket

20 - O-Ring

- ◆ Removing and installing ⇒ [page 87-62](#) .

21 - O-Ring

- ◆ Removing and installing ⇒ [page 87-62](#) .

22 Expansion - valve

- ◆ Removing and installing refrigerant pipes ⇒ [page 87-61](#) .

- ◆ Removing and installing ⇒ [page 87-62](#) .

- ◆ Removing and installing insulation ⇒ [page 87-63](#) .

23 - Bolt

- ◆ Tightening torque: 8 Nm (71 in lb).

24 - Air deflector

87-111

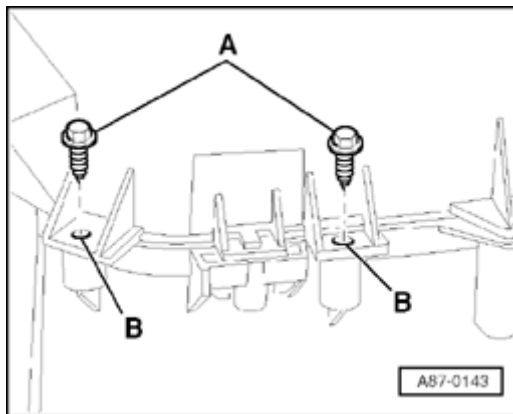


Fig. 1 Air distribution housing, assembly

- Secure both halves of the housing with screws -A- at locations (example) -B-.

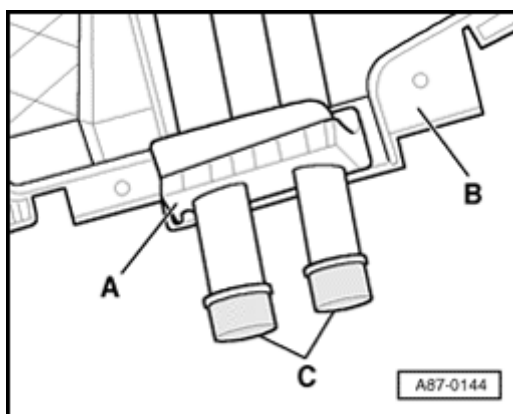


Fig. 2 Refrigerant pipe seal at evaporator, installing

Evaporator refrigerant pipes -C- must be completely encapsulated by seal -A- between both halves of the air distribution housing -B-.

- After securing both halves of the housing, apply silicone seal as necessary at any open locations. Housing must be completely sealed against entry of hot air from the engine compartment or warm air from the passenger compartment, otherwise, cooling efficiency will be affected.

87-112

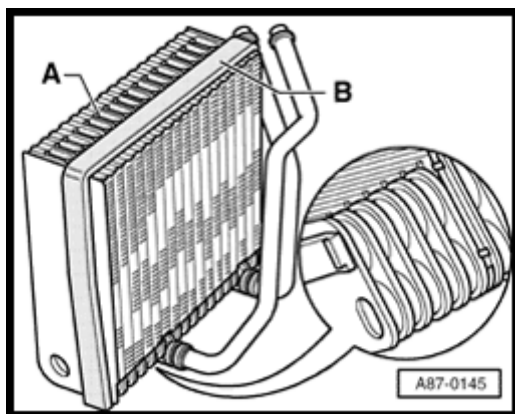


Fig. 3 Evaporator seal, installing

- Evaporator -A- must be sealed (top and sides with gasket -B-) against the air distribution housing

Note:

A gap must remain in the seal on the bottom of the evaporator to allow water to drain.