

Volkswagen Golf 5 2004-> VW Rabbit GTI 2006-> (A5)

Heating and Ventilation System

General information

Rabbit and GTI models from model year 2006 are equipped with either the semi-automatic "Climatic" A/C system, or the automatic "Climatronic" A/C system. The information contained in the following section specifically pertains to a non-A/C heating and ventilation system offered in other markets. However, the removal and installation procedures of air vents, air ducts and other components described here may also apply to both the "Climatic" and "Climatronic" systems.

Before troubleshooting or servicing, technicians must be familiar with the functions and operation specifics of the standard or optional heating and ventilation system or A/C system. Always read the owners manual and review applicable system functions.

Note:

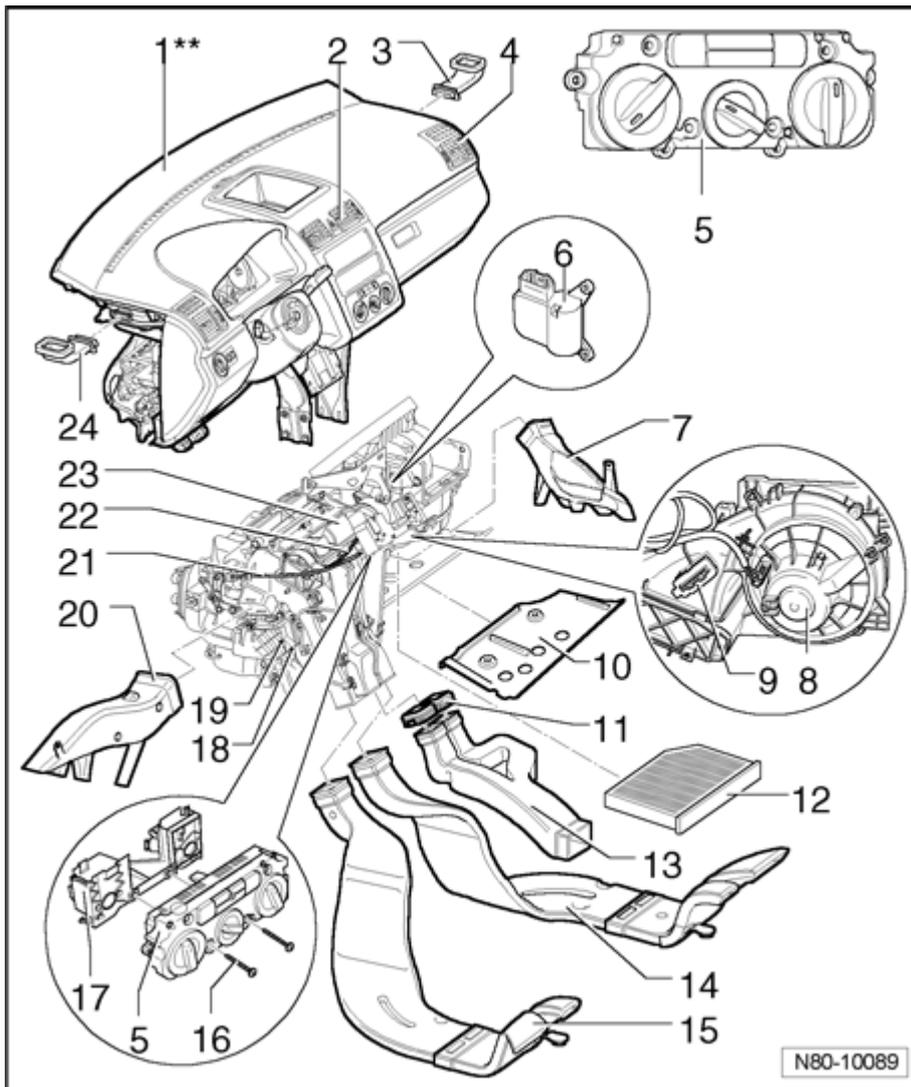
- *Additional information:*

⇒ *Owners Manual*

⇒ *Self Study Program - Course Number 892503 "VW 2006 GTI Introduction"*

⇒ *Wiring Diagrams and Component Locations*

Heating and ventilation system components in passenger compartment, servicing



Disconnect battery before removing components marked with **

⇒ *Repair Manual, Electrical Equipment, Repair Group 27,*

- **Instrument panel ****
- **Center air vents**
 - Removing and installing ⇒ [80-1, Center air vents, removing and installing](#)
- **Right side window defroster air duct**
 - In right A-pillar

- **Right air vent**
 - Removing and installing ⇒ [80-1, Right / left air vent, removing and installing](#)

- **Heating and ventilation controls**
 - With Fresh Air/Recirculating Flap Switch E159
 - With Immediate Heating Button E537 where applicable
 - Removing and installing ⇒ [80-1, Heating and ventilation controls, removing and installing](#)

- **Fresh/Recirculating Air Door Motor V154**
 - Removing and installing ⇒ [80-1, Fresh/Recirculating Air Door Motor V154 , removing and installing](#)

- **Right footwell air vent**
 - Removing and installing ⇒ [80-1, Right footwell air vent, removing and installing](#)

- **Fresh Air Blower V2**
 - Depending on unit configuration, blower on vehicle may not be exactly as shown here
 - Removing and installing ⇒ [80-1, Fresh Air Blower V2 , removing and installing](#)

- **Fresh Air Blower Series Resistor With Fuse N24**
 - Removing and installing ⇒ [80-1, Fresh Air Blower](#)

[Series Resistor With Fuse N24 , removing and installing](#)

- **Heating and ventilation unit partition**
 - Removing ⇒ [80-1, Heating and ventilation unit partition, removing](#)

- **Sealing caps**
 - Only in vehicles without air guide to vent installed in center console at rear

- **Dust and pollen filter**
 - With activated charcoal filter
 - Removing and installing ⇒ [80-1, Dust and pollen filter, removing and installing](#)

- **Center console air duct**
 - Connection to center console air guide
 - To remove, center console must be removed

⇒ *Repair Manual, Body Interior, Repair Group 68,*

- **Right rear footwell air duct**
 - Removing and installing ⇒ [80-1, Rear footwell air ducts, removing and installing](#)

- **Left rear footwell air duct**
 - Removing and installing ⇒ [80-1, Rear footwell air ducts, removing and installing](#)

- **Screws**
 - Qty. 8
 - Observe varying lengths

- **Heating and ventilation control adapter**
 - Removing and installing ⇒ [80-1, Temperature flap - bowden cable, removing and installing](#)

- **Auxiliary Heater Heating Element Z35**
 - Only on models with Diesel engine
 - Removing and installing ⇒ [80-1, Auxiliary Heater Heating Element Z35 , removing and installing](#)

- **Heater core**
 - After replacing heater core, coolant must be replaced completely.
 - Removing and installing ⇒ [80-1, Heater core, removing and installing](#)

- **Left footwell air vent**
 - Removing and installing ⇒ [80-1, Left footwell air vent, removing and installing](#)

- **Temperature flap bowden cable**
 - Removing and installing ⇒ [80-1, Temperature flap - bowden cable, removing and installing](#)

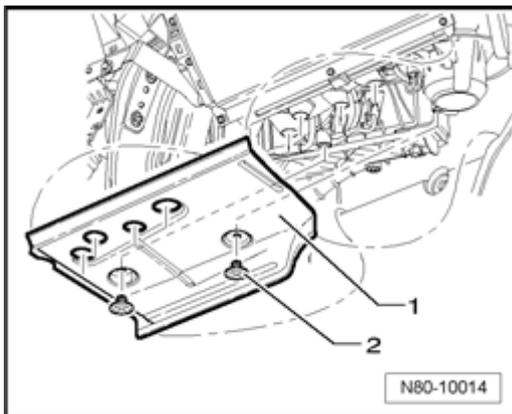
- **Air distribution control - flexible**

cab

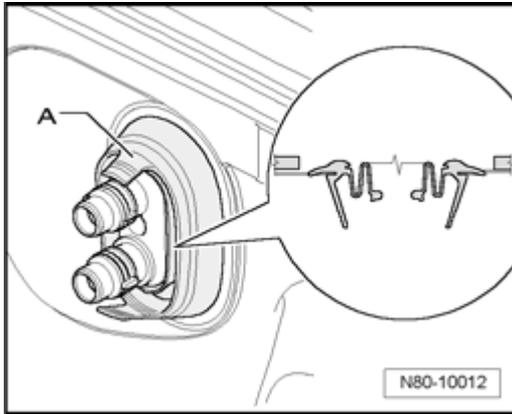
- Removing and installing ⇒ [80-1, Air distribution control - flexible cable, removing and installing](#)

- **Heating and ventilation unit**
 - Removing and installing ⇒ [80-1, Heating and ventilation unit, removing and installing](#)
 - Disassembly and assembly ⇒ [80-1, Heating and ventilation unit, disassembly and assembly](#)

- **Left side window defroster air duct**
 - In left A-pillar

**Heating and ventilation unit partition, removing**

- Remove screws - 2 - and partition - 1 - .



Heating and ventilation unit seal at bulkhead, installation position

- First install seal - **A** - on bulkhead , then engage on heater core.

Note:

- *To prevent ingress of water into vehicle interior, note installation position.*

Fresh Air Blower V2 , removing and installing

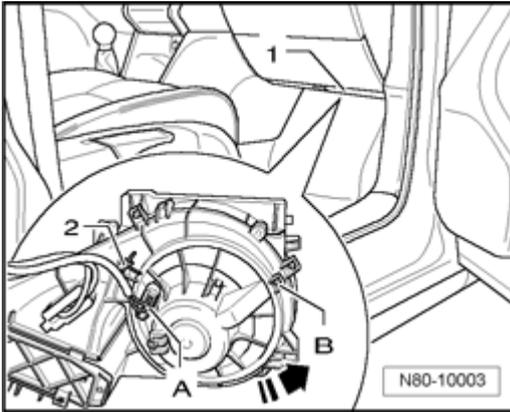
Removing:

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Fresh Air Blower V2 is accessible from footwell on front passenger side.

- Remove partition ⇒ [80-1, Heating and ventilation unit partition, removing](#)



- Disconnect electrical connection - **A** - from Fresh Air Blower V2 .
- Remove screw - **B** - (1 Nm).
- Release locking mechanism - **2** - and rotate Fresh Air Blower V2 in direction of - **arrow** - and remove.

Installing

- Install in reverse order of removal.

Fresh Air Blower Series Resistor With Fuse N24 , removing and installing

Removing:

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

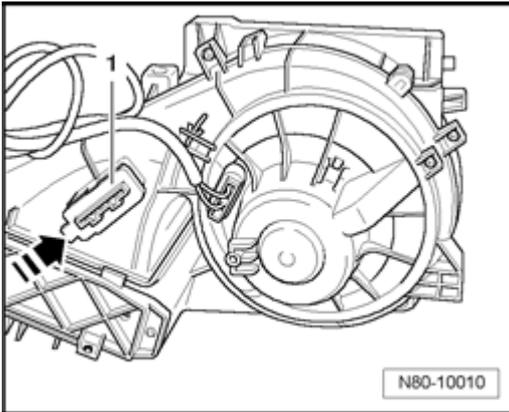
Warning!

Burn danger!

Fresh Air Blower Series Resistor With Fuse N24 may be hot.

Let Fresh Air Blower Series Resistor With Fuse N24 cool off before removing.

- First remove partition ⇒ [80-1, Heating and ventilation unit partition, removing](#)



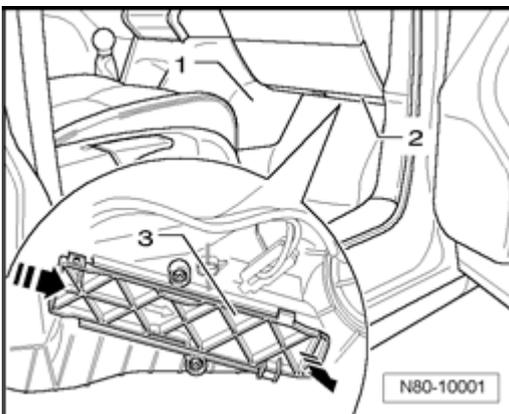
- Disconnect electrical connection - **1** - .
- Press locking mechanism in direction of - **arrow** - and remove Fresh Air Blower Series Resistor With Fuse N24 from heating and ventilation unit.

Installing

Install in reverse order of removal.

Dust and pollen filter, removing and installing

Removing:



- Remove front passenger footwell trim - **1** - .
- Remove partition - **2** - ⇒ [80-1, Heating and ventilation unit partition, removing](#)
- Release cover - **3** - in direction of - **arrows** - .
- Pull dust and pollen filter downward from heating and ventilation unit.

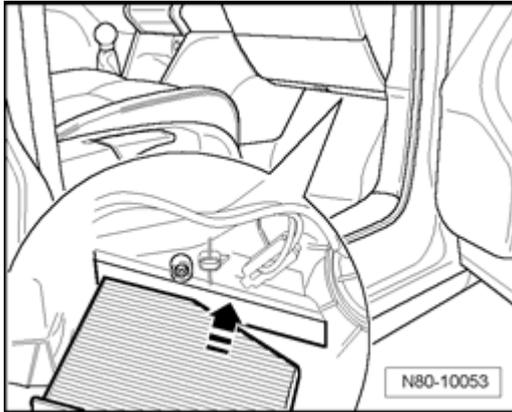
Note:

-

Observe installation orientation of dust and pollen filter.

Installing:

Install in reverse order of removal, noting the following.



- Insert filter element into heating and ventilation unit in direction of - **arrow** - .

Instrument panel air vents, removing and installing

Center air vents ⇒ [80-1, Center air vents, removing and installing](#)

Right or left air vent ⇒ [80-1, Right / left air vent, removing and installing](#)

Rear footwell air ducts ⇒ [80-1, Rear footwell air ducts, removing and installing](#)

Right footwell air vent ⇒ [80-1, Right footwell air vent, removing and installing](#)

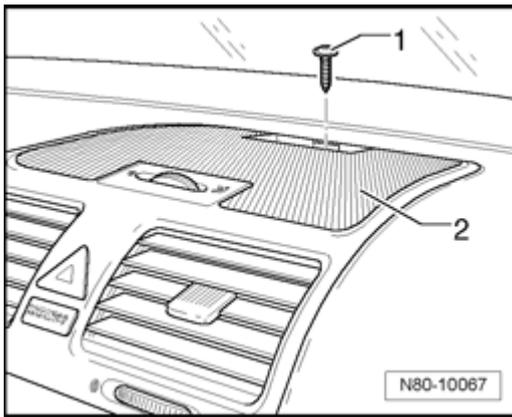
Left footwell air vent ⇒ [80-1, Left footwell air vent, removing and installing](#)

Side window defroster air vents ⇒ [80-1, Side window defroster air vents, removing and installing](#)

Center air vents, removing and installing

Removing:

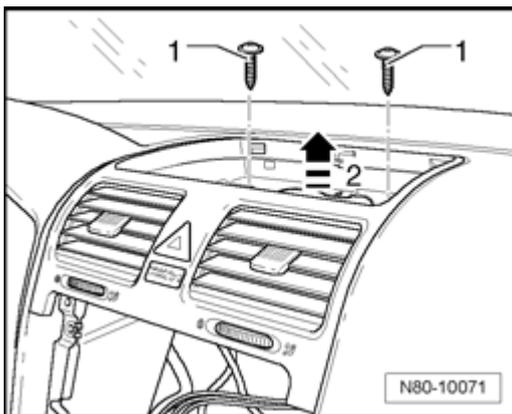
- In vehicles with Climatronic, first remove sunlight photo sensor ⇒ [87-3, Sunlight Photo Sensor G107 / Sunlight Photo Sensor 2 G134](#) , removing and installing .



- Remove screw - 1 - .
- Remove cover (only in vehicles with Climatronic) - 2 - .

Note:

- *In vehicles without Climatronic, screws are under trim.*



- Remove screws - 1 - .
- Remove storage compartment from instrument panel.
- Remove center air vent - 2 - upward in direction of - **arrow** - .
- Disconnect electrical connections from center air vents.

Installing

Install in reverse order of removal.

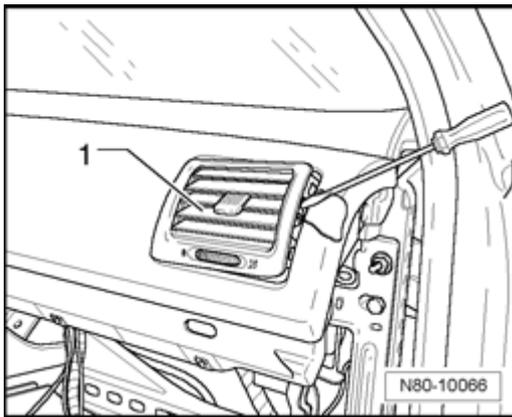
Right / left air vent, removing and installing

Note:

- *Vent removal on both sides is identical, only the sides are reversed.*

- *To prevent damage to instrument panel, protect contact area with adhesive tape prior to removing vent.*

Removing:



- Pry out air vent - **1** - using appropriate tool.
- Disconnect electrical connection.

Installing

Install in reverse order of removal.

Rear footwell air ducts, removing and installing

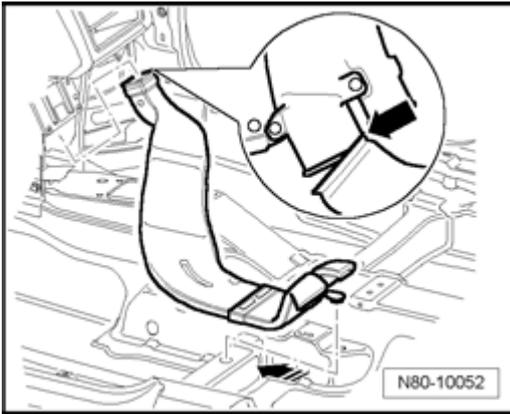
Note:

- *Removal of rear channels on both sides is identical, only the sides are reversed.*

Removing:

- Remove driver or front passenger seat

⇒ *Repair Manual, Body Interior, Repair Group 72,*



- Remove center console

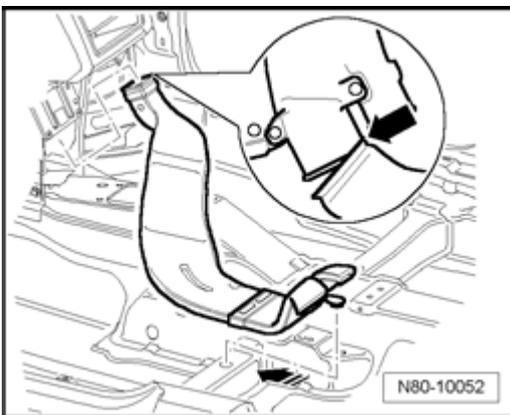
⇒ *Repair Manual, Body Interior, Repair Group 68,*

- Lift floor carpet, unclip rear channel from floor and pull off from heating and ventilation unit - **arrow** - .

Installing

- Install in reverse order of removal, noting the following:

Note:



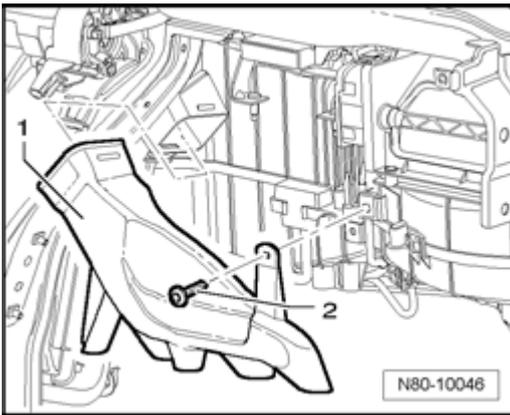
- *When installing rear channel, ensure channel is first slid onto heating and ventilation unit - **arrow** - and then clipped into floor.*

Right footwell air vent, removing and installing

Removing:

- Remove glove compartment

⇒ *Repair Manual, Body Interior, Repair Group 68,*



- Remove screw - **2** - and remove right footwell air vent - **1** - .

Installing

Install in reverse order of removal.

Note:

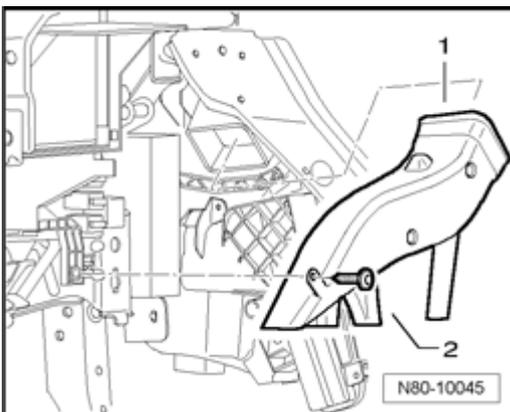
- *In vehicles with glove compartment cooling, ensure cooling hose is correctly seated.*

Left footwell air vent, removing and installing

Removing:

- Remove driver side storage compartment

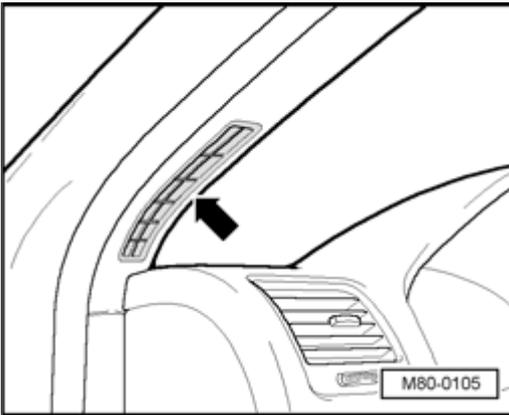
⇒ *Repair Manual, Body Interior, Repair Group 68,*



- Remove screw - **2** - and remove left footwell air vent - **1** - .

Installing

Install in reverse order of removal.

Side window defroster air vents, removing and installing

Side window air vents - **arrow** - are installed in A-pillar trim.

- Remove A-pillar trim on right or left

⇒ *Repair Manual, Body Interior, Repair Group 70,*

Heating and ventilation controls, removing and installing**Removing:****Caution!**

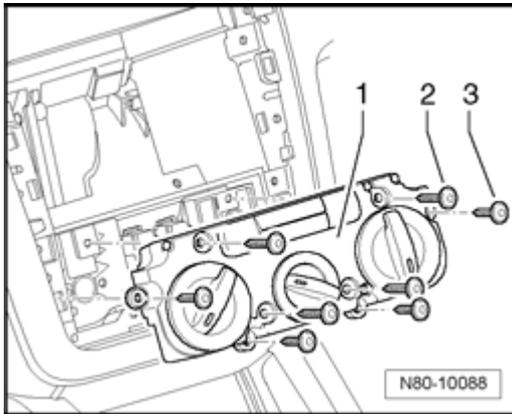
- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Note:

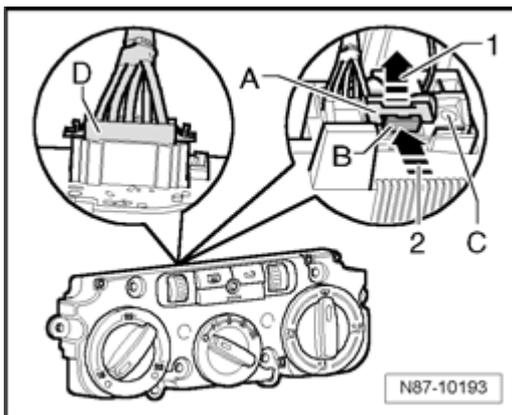
- *Heating and ventilation controls consist of two separable housings. Before removing controls, set rotary control knobs to the following positions:*
- *Heater control to "cold"*
- *Blower control to "0"*
- *Air flow direction control to "footwell"*

- Remove radio

⇒ *Repair Manual, Communication, Repair Group 91,*



- Remove long screws - **2** - and short screws - **3** - and remove controls - **1** - from center console.



- Disengage electrical connection retainer - **A** - by pulling in direction of arrow - **1** - .

- Disengage electrical connection retainer - **B** - to connector - **arrow 2** - and Disconnect electrical connection - **C** - .

- Disengage electrical connection retainer - **D** - and Disconnect electrical connection - **D** - .

Installing

Install in reverse order of removal, ensuring rotary control knobs have not been moved from the positions as specified for removal.

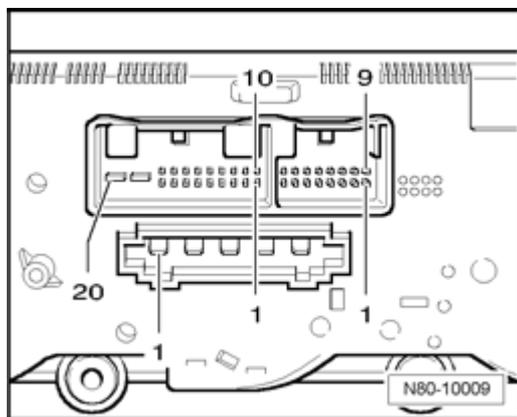
Heating and ventilation controls, multi-pin connector assignments

Special tools, testers and auxiliary items required



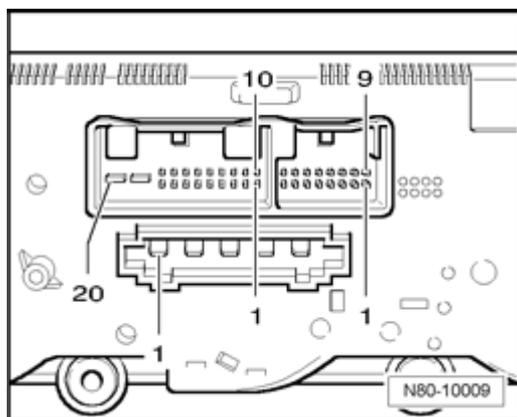
- Connector test set VAG 1594 C

16-pin electrical connection is not assigned.



5-pin electrical connection -T5-

- 1 - 3rd blower speed
- 2 - 2nd blower speed
- 3 - 1st blower speed
- 4 - 4th blower speed
- 5 - Terminal X



20-pin electrical connection -T20c-

- 3 - Fresh/Recirculating Air Door Motor V154
- 6 - Fresh/Recirculating Air Door Motor V154
- 7 - Auxiliary Air Heater Control Module J604
- 8 - Rear window
- 11 - Drivers Heated Seat Control Module J131
- 15 - Front Passengers Heated Seat Control Module J132
- 16 - Terminal 75 seat heater (optional)
- 18 - Terminal 30
- 19 - Terminal 15
- 20 - Ground (GND) - Terminal 31

Air distribution control - flexible cable, removing and installing

Removing:

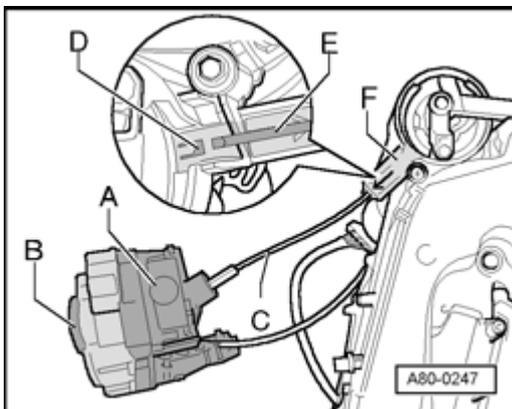
Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

- Remove glove compartment

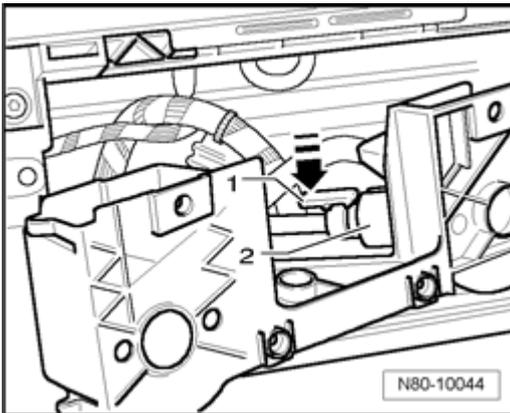
⇒ *Repair Manual, Body Interior, Repair Group 68,*

- Bring flexible cable into the following position:



- Rotate air distribution rotary control knob - **B** - far enough until locking mechanism of shaft - **D** - is visible in gear drive - **F** - .

- Remove heating and ventilation controls ⇒ [80-1, Heating and ventilation controls, removing and installing](#)



- Reach into center console and release retaining tab - **1** - by pressing in direction of - **arrow** - .
- Pull cable from adapter - **2** - .

Installing:

Install in reverse order of removal, ensuring air distribution rotary control knob has not been moved from the positions as specified for removal.

Note:

- *When installing flexible cable, adapter and rotary switches on heating and ventilation controls must be oriented in a specific manner. Checking ⇒ [80-1, Air distribution control - flexible cable operation, checking](#)*

Air distribution control - flexible cable operation, checking

Check function of air distribution control flexible cable as follows:

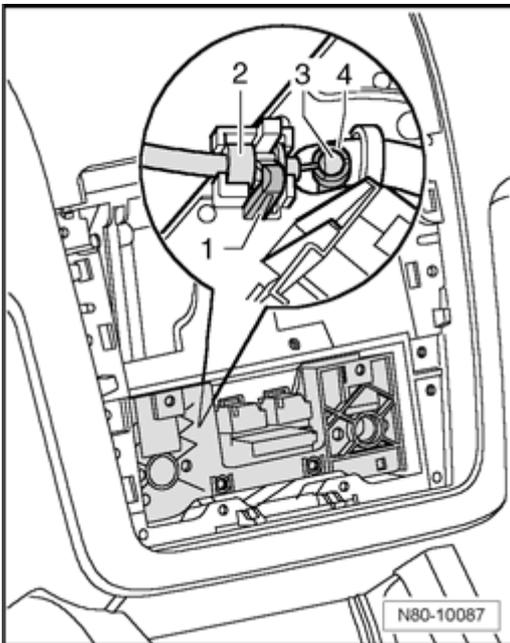
- Set fresh air blower to maximum speed. If air flow flows from defroster air vents in the "Defrost" position and no air flows from footwell air vents, installation of flexible cable is correct. If this is not the case, remove flexible cable from adapter. Place Heating and ventilation controls onto adapter and rotate rotary knob for air distribution 1 2 rotation (180 °). Then reconnect flexible cable. Repeat test.

Temperature flap - bowden cable, removing and installing

Removing:**Caution!**

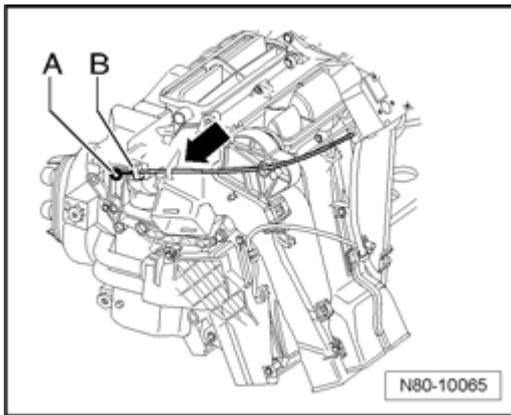
- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

- Remove heating and ventilation controls ⇒ [80-1, Heating and ventilation controls, removing and installing](#)



- Reach into center console and disengage locking mechanism - **1** - of Bowden cable sheath - **2** - and remove Bowden cable sheath from mount.
- Disengage ball on bowden cable - **3** - from operating lever.
- Remove driver side footwell trim

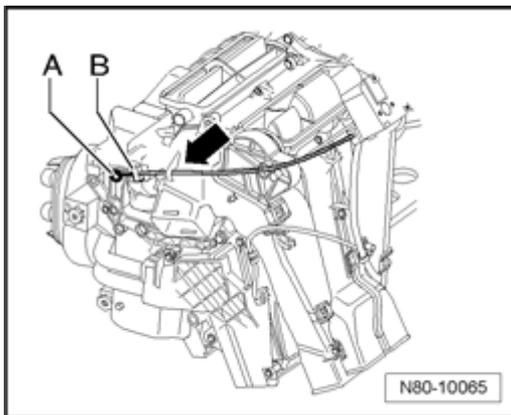
⇒ *Repair Manual, Body Interior, Repair Group 68,*



- Unclip bowden cable at adjusting unit of temperature flaps - **A** - and unclip heating and ventilation unit - **B** - .

Installing

Install in reverse order of removal, noting the following:



- Ensure bowden cable is routed under hook - **arrow** - .
- Check whether temperature knob can be moved easily from "cold" to "warm" .

Fresh/Recirculating Air Door Motor V154 , removing and installing

Removing:

Caution!

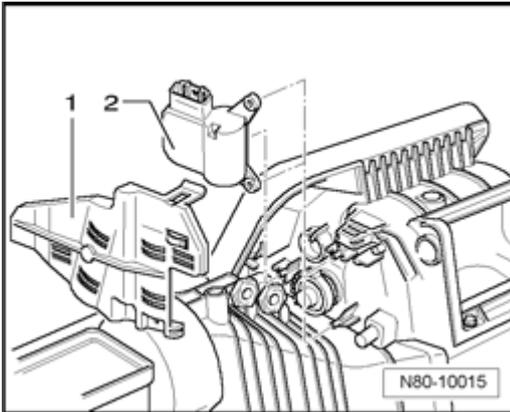
- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Note:

- *Position of recirculating air door must not be changed.*

- Remove glove compartment

⇒ *Repair Manual, Body Interior, Repair Group 68,*



- Remove cover - **1** - .
- Disconnect electrical connection from Fresh/Recirculating Air Door Motor V154 - **2** - .
- Remove Fresh/Recirculating Air Door Motor V154 - **2** - from mounting.

Installing

Install in reverse order of removal, noting the following:

Note:

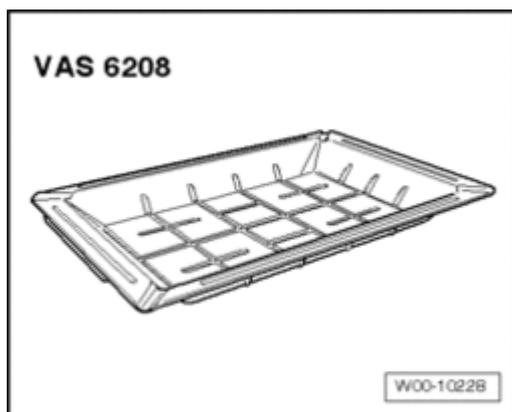
- *Always check Fresh/Recirculating Air Door Motor V154 and recirculating air door function after replacing motor.*

- Checking: Use Vehicle Diagnostic, Testing and Information System VAS 5051/5052 in operating mode "Guided Fault Finding"
- Replacing: Initiate Basic Setting using Vehicle Diagnostic, Testing and Information System VAS 5051/5052 in operating mode "Guided Fault Finding" .

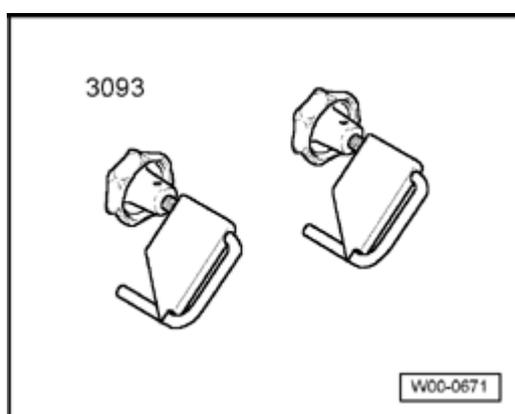
Heater core, removing and installing

Removing:

Special tools, testers and auxiliary items required



- Drip tray for VAS6100 VAS 6208



- Hose clamps, up to 40 mm. 3093
- Compressed air gun, commercially available

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

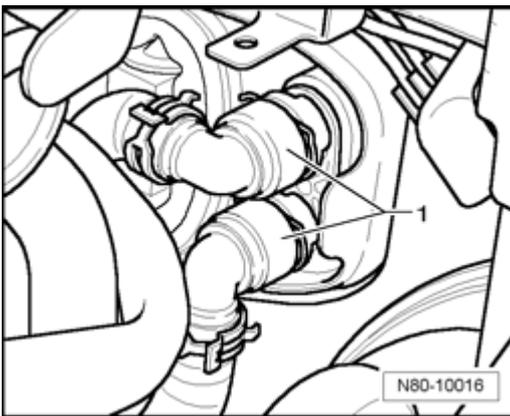
- Remove facing wall in plenum chamber

⇒ *Repair Manual, Body Exterior, Repair Group 50,*

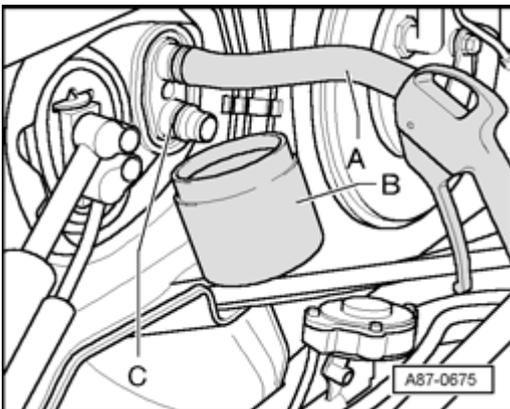
- Place Drip tray for VAS6100 VAS 6208 under the engine.

Warning!

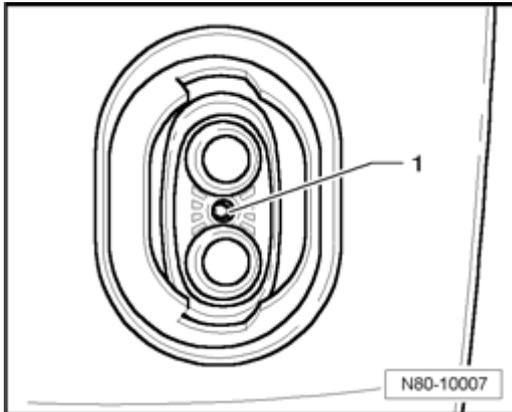
- **Scalding danger!**
- **The cooling system is pressurized when the engine is warm. Wear gloves and other protection and carefully release system pressure if necessary before performing repairs.**



- Clamp off coolant hoses - **1** - using Hose clamps, up to 40 mm. 3093 and disconnect coolant hoses to heater core.



- Connect a section of hose - **A** - onto upper connection of heater core.
- Hold suitable container - **B** - under the lower connection
- **C** - .
- Using a compressed air gun, carefully blow coolant from heater core into container - **B** - .



- Remove bolt (6 mm socket head) - **1** - from connection flange between heater core connections.

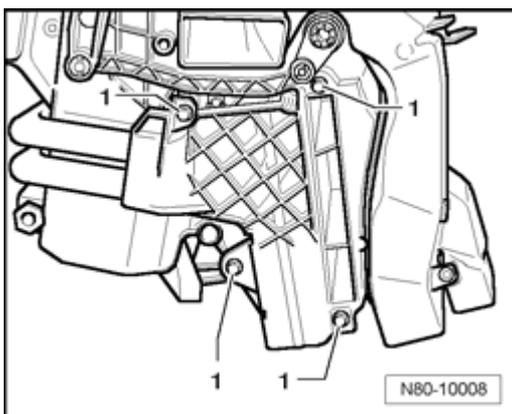
Note:

- *This allows the coolant pipes to move for removing the heater core.*

- Remove driver side footwell trim

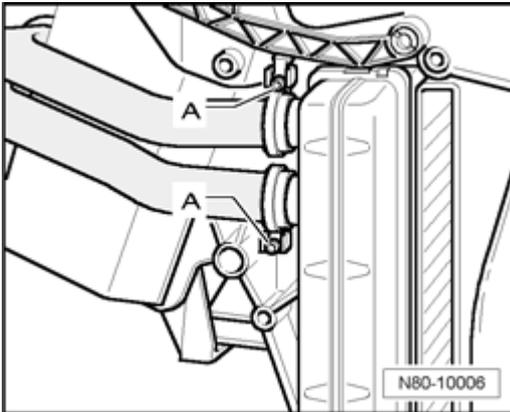
⇒ *Repair Manual, Body Interior, Repair Group 68,*

- Remove left footwell air vent ⇒ [80-1, Left footwell air vent, removing and installing](#)



- Remove screws - **1** - and remove heater core trim.

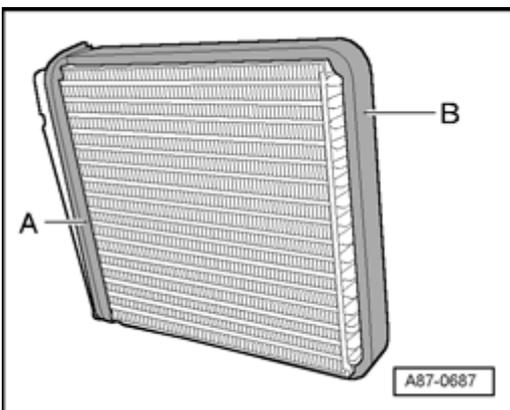
- Cover floor carpet in area below heater core with leak-proof foil and absorbent paper.



- Open hose clamps - **A** - and disconnect coolant pipes from heater core.
- Remove heater core from heating and ventilation unit.

Installing:

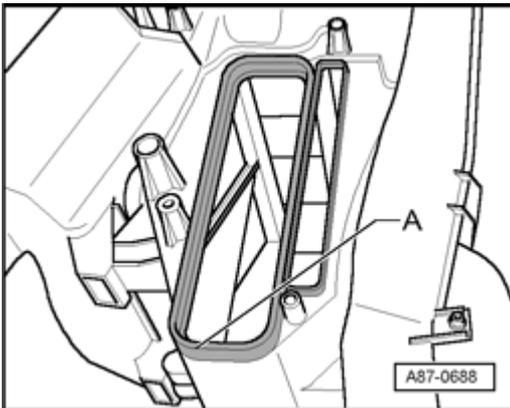
Install in reverse order of removal, noting the following:



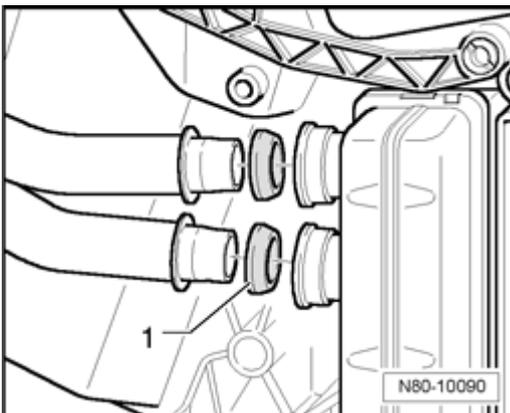
- Check seals - **A** - and - **B** - installed on heater core, only install a heater core with undamaged seals.

Note:

- *An incorrectly glued seal can roll up into heating and ventilation unit when sliding in the heater core.*
- *If seal is damaged or installed incorrectly, cold air can flow past the heater core.*



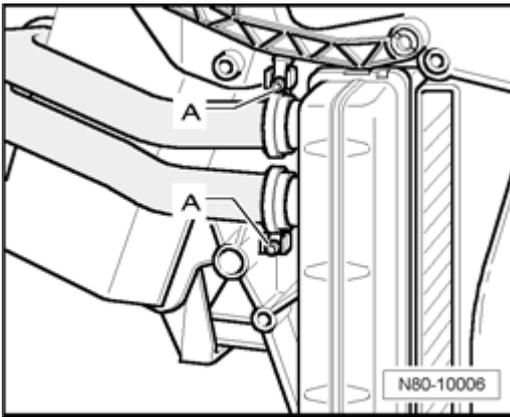
- With the heater core removed, check heating and ventilation unit for soiling (via heater core opening - **A** -).
- If necessary remove dirt or coolant from heating and ventilation unit, for example after removing leaky heater core.
- Push heater core into the heating and ventilation unit.



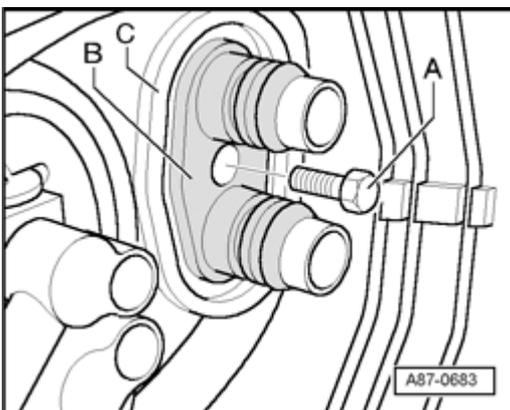
- Coat sealing rings - **1** - with coolant before installing.
- Insert sealing rings - **1** - into connection on heater core.

Note:

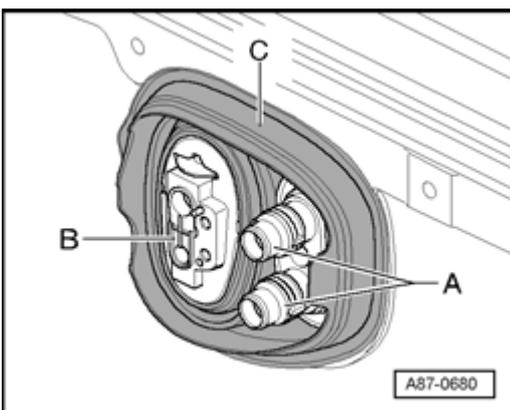
- *Ensure sealing rings are installed on the proper side, as shown in the illustration.*
 - *If hose clamps are deformed, replace them.*
- Connect coolant pipes to heater core.



- Hose clamps - **A** - must be able to be twisted slightly when installing onto the coolant pipes.
- Hose clamps - **A** - must be installed as shown in the illustration.
- Tighten hose clamps - **A** - to 2.0 Nm.
- Check seating of both clamps - **A** - after tightening screws, clamps must enclose the flange on heater core and coolant pipe completely and must not touch other components.



- Thread bolt - **A** - into connection flange - **B** - and while doing this ensure bolt is actually threaded into the mounting point intended for it.



- Check position of grommet - **C** - in bulkhead for proper seating.
- Seal flange for coolant pipes to heater core - **A** - and for expansion valve (to evaporator, only in vehicles with A/C system) - **B** - at grommet pass-through - **C** - with silicon adhesive sealant if necessary (to prevent water from penetrating).

Note:

- *Sealing rings must always be replaced.*
- *If hose clamps are deformed, replace them.*
- *After replacing heater core, coolant must be replaced completely (refer to applicable engine repair manual Rep. Gr. 19).*
- *Check coolant circuit for leaks, pay particular attention between coolant hoses and heater core.*

Auxiliary Heater Heating Element Z35 , removing and installing

Note:

- *Heating element only installed on models with Diesel engine.*

Removing:

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Warning!

Burn danger!

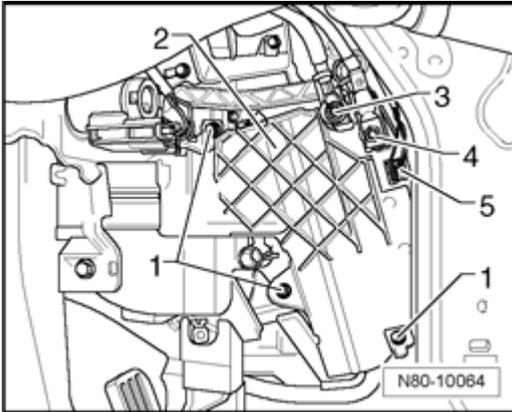
Auxiliary Heater Heating Element Z35 may be hot.

Before removing Auxiliary Heater Heating Element Z35 let it cool off.

- Remove driver side footwell trim

⇒ *Repair Manual, Body Interior, Repair Group 68,*

- Remove left footwell air vent ⇒ [80-1, Left footwell air vent, removing and installing](#)



- Remove screws - **1** - from cover - **2** - .
- Remove mounting nut for voltage supply - **3** - and for Ground (GND) connection - **4** - .
- Disconnect electrical connections - **5** - from Auxiliary Heater Heating Element Z35 .
- Remove element from heating and ventilation unit.

Removing:

Install in reverse order of removal.

Ventilation system, checking

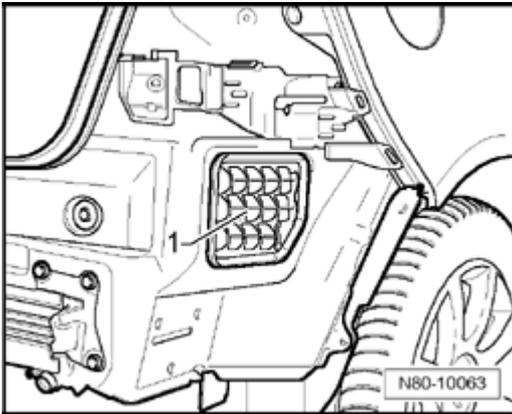
Note:

- *Stale interior air escapes via ventilation openings in the luggage compartment trim.*
- *If the ventilation is to function properly the ventilation openings must not be covered.*
- *Ventilation frames are located in rear side panels, behind bumper.*

Checking

- Remove rear bumper

⇒ *Repair Manual, Body Exterior, Repair Group 63,*



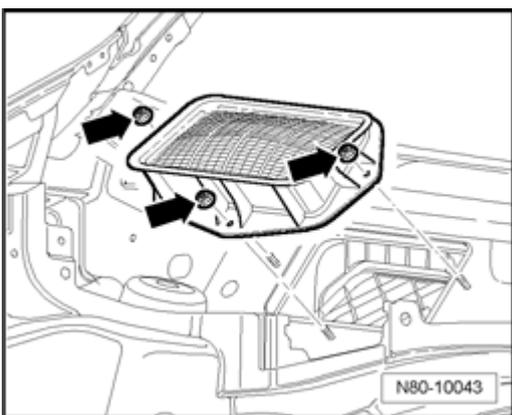
- The sealing lips - **1** - in the ventilation frame on both sides of vehicle must be free to move and close automatically.
- Note installation position.

Intake air grille, removing and installing

Removing:

- Remove plenum chamber cover

⇒ *Repair Manual, Body Exterior, Repair Group 64,*



- Remove nuts - **arrows** - and remove intake air grille upward.

Installing

Install in reverse order of removal, noting the following.

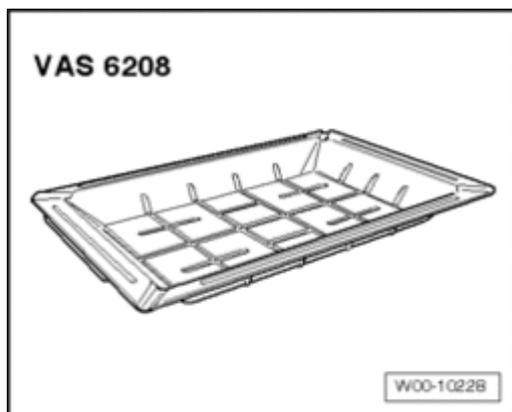
Note:

- *Seal must be seated correctly on intake air grille.*

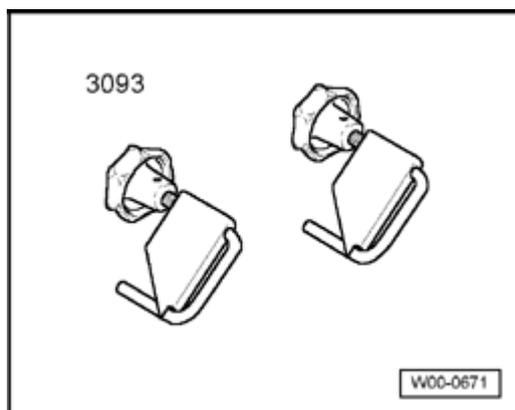
Heating and ventilation unit, removing and installing

Preparation:

Special tools, testers and auxiliary items required



- Drip tray for VAS6100 VAS 6208



- Hose clamps, up to 40 mm. 3093
- Compressed air gun, commercially available

Caution!

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

Note:

- *To improve accessibility, additional components e.g.*

engine cover must be removed (depending on engine version).

- Remove instrument panel

⇒ *Repair Manual, Body Interior, Repair Group 70,*

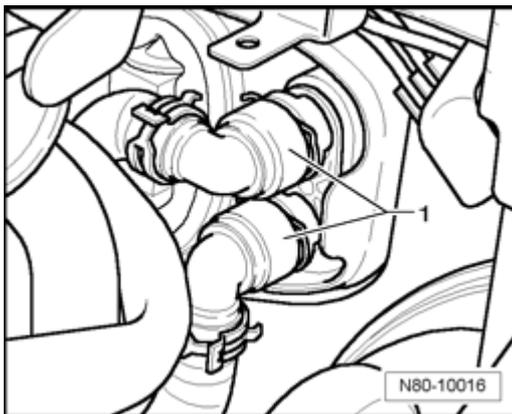
- Remove facing wall in plenum chamber

⇒ *Repair Manual, Body Exterior, Repair Group 50,*

.

- Remove left and right rear footwell channels ⇒ [80-1, Rear footwell air ducts, removing and installing](#)

- Place Drip tray for VAS6100 VAS 6208 under the engine.



- Mark coolant hoses - **1** -

Warning!

- **Scalding danger!**
- **The cooling system is pressurized when the engine is warm. Wear gloves and other protection and carefully release system pressure if necessary before performing repairs.**

- Clamp off coolant hoses - **1** - using Hose clamps, up to 40 mm. 3093 and disconnect coolant hoses to heater core.

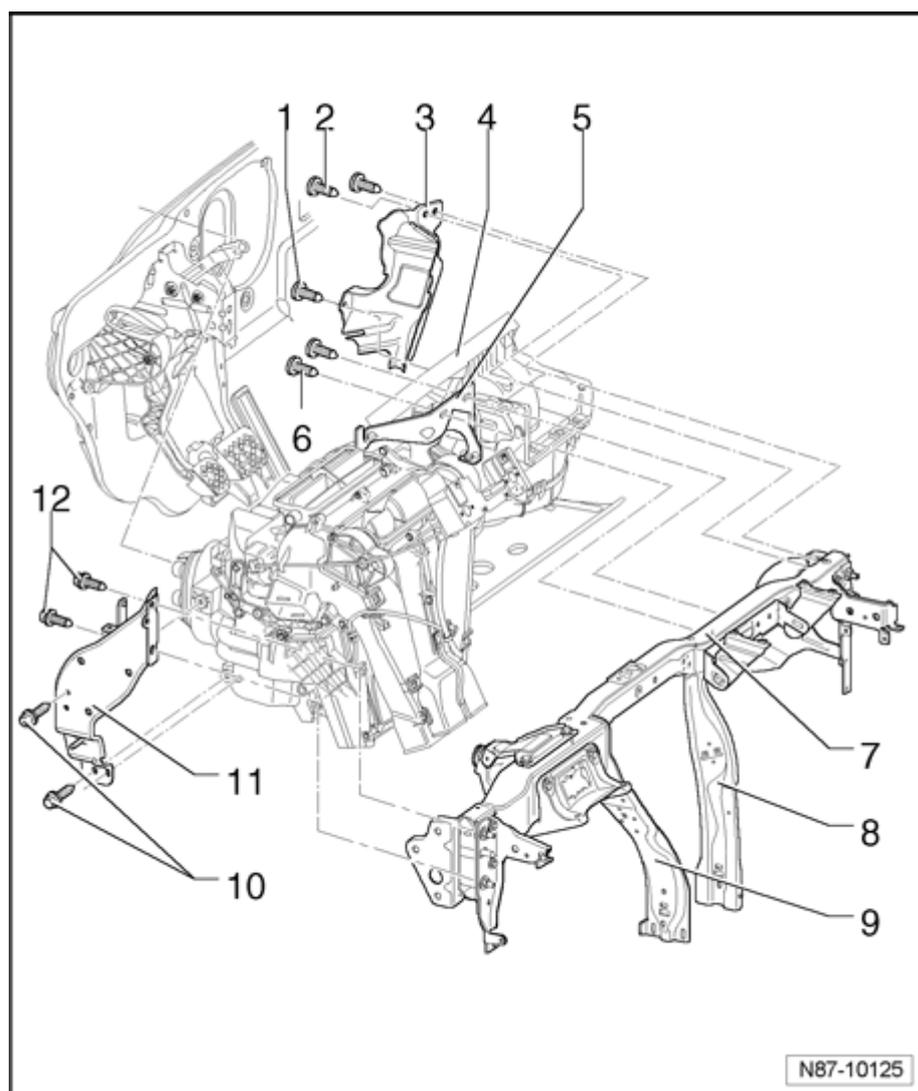
- Using a compressed air gun, carefully blow residual

coolant from heater core at heater core connection.

- Cover floor carpet in vehicle interior with leak-proof foil and absorbent paper.

Note :

- *Take note during removal of the length and assignment of screws for re-installation*



- **Bolt**

- 4 Nm

- **Screws**

- Qty. 2
- 4 Nm

- **Cable bracket**
- **Heating and ventilation unit**

Removing:

- Disconnect electrical connections from heating and ventilation unit.

Note :

- *All cable ties opened or cut during removal must be reinstalled at the same locations during installation.*

- Remove screws ⇒ [Item - 6 -](#) from bracket ⇒ [Item - 5 -](#) .

- Remove supports ⇒ [Item - 8 -](#) and ⇒ [Item - 9 -](#) .

- Remove screws ⇒ [Item - 10 -](#) and ⇒ [Item - 12 -](#) and remove bracket ⇒ [Item - 11 -](#) .

- Remove screws ⇒ [Item - 1 -](#) and ⇒ [Item - 2 -](#) from cable bracket ⇒ [Item - 3 -](#) .

Note :

- *To be able to reach the bolt ⇒ [Item - 1 -](#) , heating and ventilation unit on driver side must be pulled out slightly from facing wall.*
- *When removing heat unit, ensure the two coolant pipes of the heater core do not get caught and bent or damaged on plenum chamber or sound insulation pan.*
- *Also pay attention to wiring harness, individual wiring connections may get damaged when pulling too forcefully on wiring harness.*

- Remove heating and ventilation unit.

Installing:

Install in reverse order of removal, noting the following:

Note :

- *Assistance of a second mechanic is necessary to install heating and ventilation unit.*

- When inserting heating and ventilation unit, have second mechanic guide both coolant pipes to heater core through the seal (from engine compartment) ⇒ [80-1, Heating and ventilation unit seal at bulkhead, installation position](#) .

- Fill with coolant.

- **Bracket**

- **Screws**

- 8 Nm

- **Assembly carrier**

- **Right support**

- **Left support**

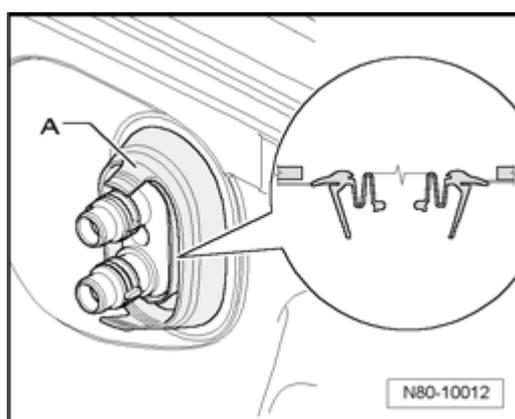
- **Screws**

- Qty. 2
- 8 Nm

- **Bracket**

- **Screws**

- Qty. 2
- 8 Nm



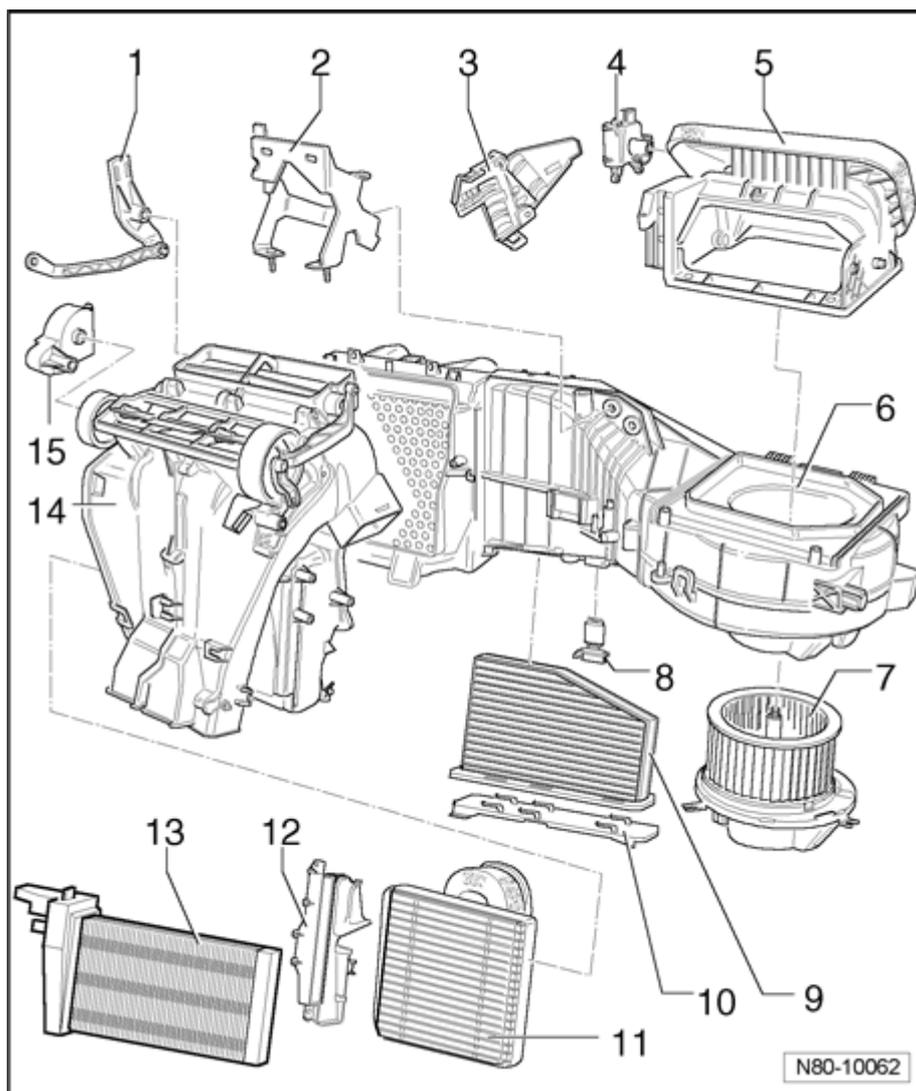
Heating and ventilation unit seal at bulkhead, installation position

- First install seal - **A** - on bulkhead , then engage on heater core.

Note:

- *To prevent ingress of water into vehicle interior, note installation position.*

Heating and ventilation unit, disassembly and assembly



- **Temperature flap adjusting unit**

- Removing and installing ⇒ [80-1, Temperature flap adjustment unit, removing and installing](#)

- **Bracket**

- **Cover**

- **Fresh/Recirculating Air Door Motor V154**

- Checking: Vehicle Diagnostic, Testing and Information System VAS 5051/5052
 - Removing and installing ⇒ [80-1, Fresh/Recirculating Air Door Motor V154 , removing](#)

[and installing](#)

- Replacing: Initiate Basic Setting using Vehicle Diagnostic, Testing and Information System VAS 5051/5052 in operating mode "Guided Fault Finding" .

- **Air intake housing**
 - With recirculating air flap

- **Heating and ventilation unit**

- **Fresh Air Blower V2**
 - Removing and installing ⇒ [80-1, Fresh Air Blower V2 , removing and installing](#)

- **Fresh Air Blower Series Resistor With Fuse N24**
 - Removing and installing ⇒ [80-1, Fresh Air Blower Series Resistor With Fuse N24 , removing and installing](#)

- **Dust and pollen filter**
 - Removing and installing ⇒ [80-1, Dust and pollen filter, removing and installing](#)

- **Cover**
 - For dust and pollen filter

- **Heater core**
 - Removing and installing ⇒ [80-1, Heater core, removing and installing](#)

- **Heater core trim**

- **Auxiliary Heater Heating Element**

Z35

- With Auxiliary Air Heater Control Module J604
 - Only installed on vehicles with Diesel engine
 - Removing and installing ⇒ [80-1, Auxiliary Heater Heating Element Z35, removing and installing](#)
-
- **Air distribution housing**
 - **Air distribution flap adjustment unit**
 - Removing and installing ⇒ [80-1, Air distribution flap adjustment unit, removing and installing](#)

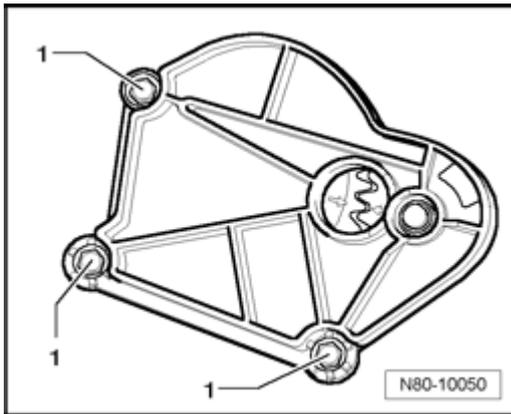
Air distribution flap adjustment unit, removing and installing**Removing:****Caution!**

- **Switch off all electrical consumers.**
- **Switch ignition off and remove ignition key.**

- Remove instrument panel

⇒ *Repair Manual, Body Interior, Repair Group 70,*

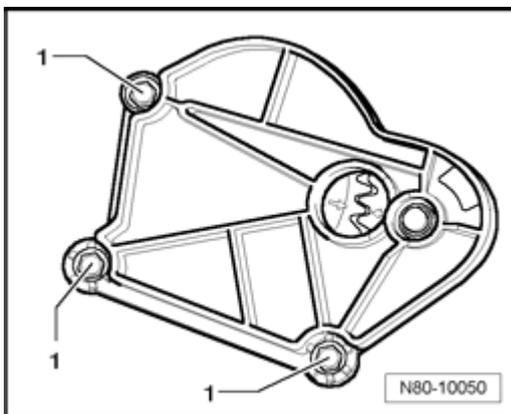
- Unclip flex cable ⇒ [80-1, Air distribution control - flexible cable, removing and installing](#)



- Remove screws - 1 - and remove adjustment unit.

Installing

- Arrows on toothed gears must align with each other.



- Position adjustment unit and tighten screws - 1 - .

Note:

- After installing, check air distribution flap function ⇒ [80-1, Air distribution control - flexible cable, removing and installing](#)

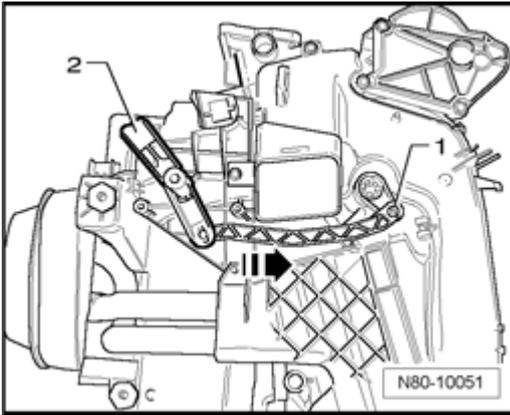
Temperature flap adjustment unit, removing and installing

Removing:

- Remove driver side footwell trim

⇒ *Repair Manual, Body Interior, Repair Group 68,*

- Remove left footwell air vent ⇒ [80-1, Left footwell air vent, removing and installing](#)



- Unclip cable at adjusting unit for temperature flap - **2** - .
- Disengage locking mechanism - **1** - and press adjusting unit for temperature flap in direction of - **arrow** - until it reaches stop.
- Remove adjustment unit.

Installing

Install in reverse order of removal.

Note:

- *After installing, check temperature flap function as follows: Temperature rotary control knob must be able to move easily and without catching from "cold" to "warm" position.*