



WARNUNG

Gefahr des Verlusts der Text-Bild-Zuordnung beim Ausdruck.

- **Aus technischen Gründen kann derzeit nicht ausgeschlossen werden, dass trotz einwandfreier Darstellung auf dem Bildschirm beim Ausdruck der Zusammenhang von Text und zugehörigem Bild verloren geht.**
- **Wird der Fehler nicht bemerkt, besteht die Gefahr, daß Arbeiten nicht korrekt durchgeführt werden und es dadurch zu Personen- und Sachschäden kommt.**

→ Vergleichen Sie deshalb nach dem Druckvorgang unbedingt die Ausdrücke mit der Bildschirmdarstellung. Korrigieren Sie die Ausdrücke im Fehlerfall so, daß der Inhalt der Bildschirmdarstellung zutreffend wiedergegeben wird.



WARNING

Danger of losing text-figure correspondence when printing out.

- **For technical reasons, it can currently not be ruled out that the correspondence between text and associated figure can be lost when it is printed out, even though the display on the screen is correct.**
- **If the fault is not noticed, there is the danger that work will not be performed correctly which can cause injury and damage.**

→ Therefore, always compare printouts with the screen display after printing them out. Correct the printouts if they are faulty so that the content of the screen display matches that on the printouts.



AVERTISSEMENT

Risque de perte de la correspondance texte-illustration lors de l'impression papier.

- **Pour des raisons techniques, il ne peut pas être exclu à l'heure actuelle que, même en cas d'affichage correct à l'écran, la correspondance entre le texte et l'illustration puisse être erronée sur l'impression papier.**
- **Si l'erreur passe inaperçue, on court le risque d'exécuter certaines opérations de manière incorrecte pouvant conduire à des dommages corporels et matériels.**

→ Comparez impérativement pour cette raison les impressions papier avec l'affichage à l'écran. Corrigez-les en cas d'erreur de manière à reproduire correctement l'affichage à l'écran.



ATTENZIONE

Pericolo di perdita dell'abbinamento testo-immagine nella stampa.

- **Per motivi tecnici non è escluso che, nonostante la rappresentazione sullo schermo risulti perfetta, durante la stampa venga persa la corrispondenza fra testo e relativa immagine.**
- **Se tale difetto non viene rilevato vi è il pericolo che i lavori non siano eseguiti correttamente; ciò può avere come conseguenza lesioni e danneggiamenti.**

→ Per questo motivo, dopo la stampa è assolutamente necessario confrontare le stampe con la rappresentazione sullo schermo. In caso di errore si prega di correggere le stampe, così da garantire la riproduzione esatta della rappresentazione sullo schermo.



ADVERTENCIA

Al imprimir se corre el riesgo de perder la correcta asignación de las figuras al texto.

- **Por motivos técnicos, por el momento no se puede descartar que, aun siendo correcta la imagen que aparezca en la pantalla, al imprimir se pierda la correlación entre el texto y la figura correspondiente.**
- **Si este error pasara desapercibido, existe el riesgo de que los trabajos no se ejecuten de forma correcta y, por tanto, se produzcan daños personales y materiales.**

→ Por ello le rogamos que tras el proceso de impresión compare siempre las copias impresas con la imagen de la pantalla. En caso de error, corrija las copias impresas de forma que se correspondan con el contenido de la imagen de la pantalla.

85 15 19 Removing and installing heater/air-conditioning unit - as of MY 2003

- [Preliminary work](#)
- [Removing heater/air-conditioning unit](#)
- [Installing heater/air-conditioning unit](#)
- [Subsequent work](#)

Preliminary work

Preliminary work

1. Drain engine coolant. → 193817 Draining and topping up with coolant (includes bleeding) - chapter on "draining"
2. Remove the carrier for the instrument panel. → 701219 Removing and installing carrier for instrument panel - chapter on "Removing"
3. Remove the condenser-evaporator line and compressor-evaporator line at the expansion valve and close the connections. → 877019 Removing and installing expansion valve - chapter on "Removing"

Removing heater/air-conditioning unit

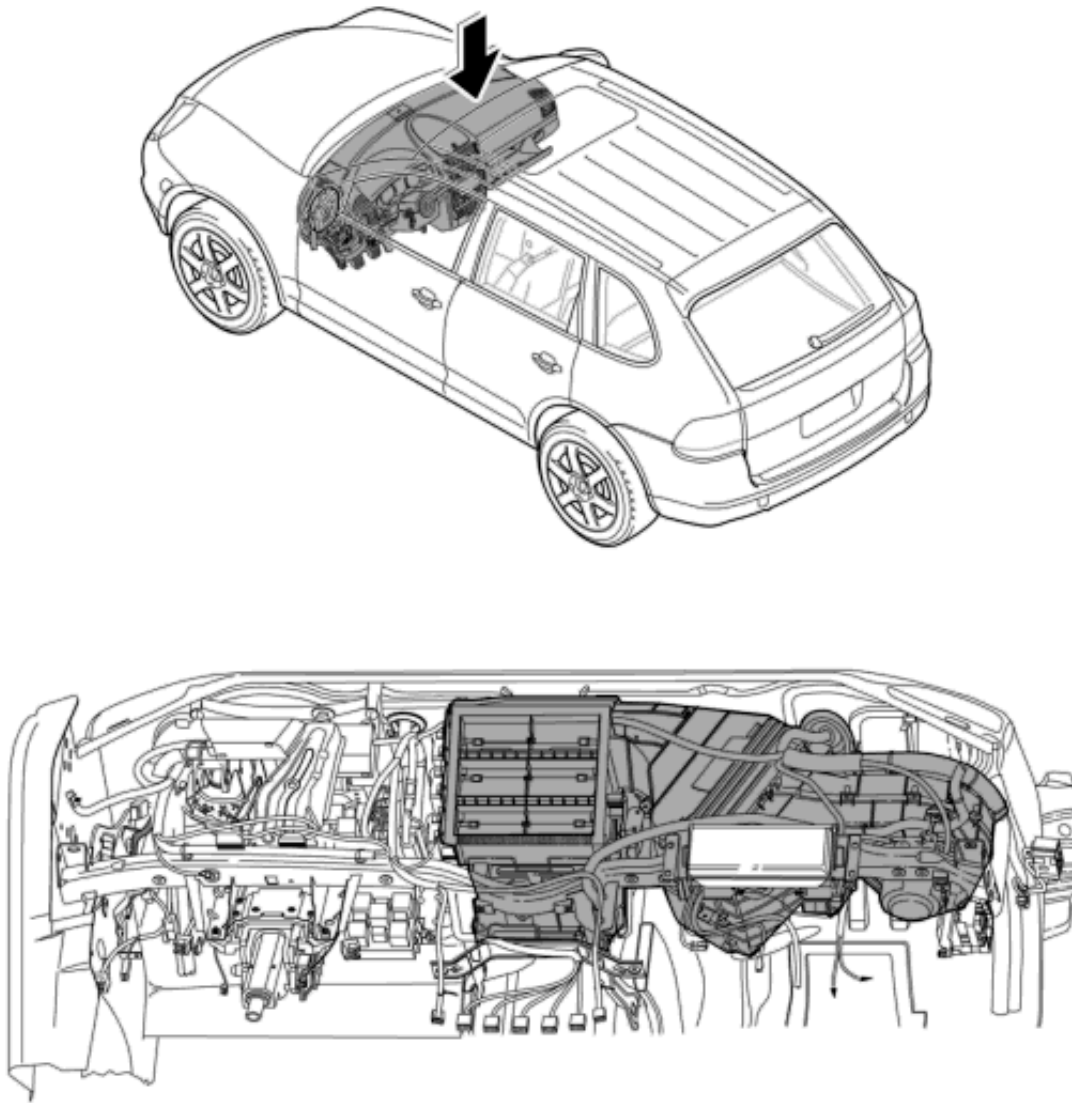


ATTENTION

Risk of material damage

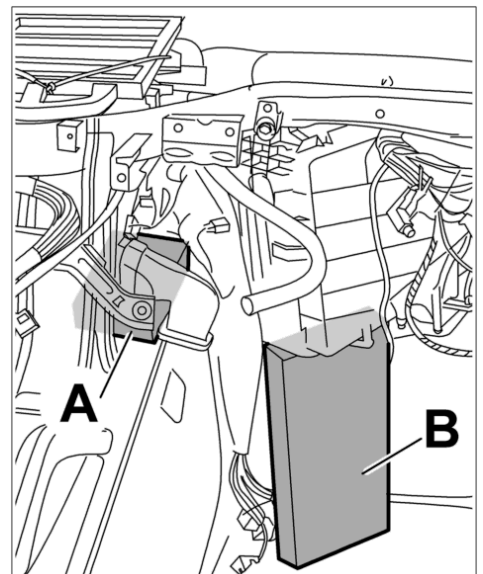
- Remove ignition key. Disconnect battery. Route or isolate the ground strap so that all contact with a ground carrier (e.g. body, seat frame) is avoided. → *90 Work instructions after disconnecting the battery*

Installation Location:



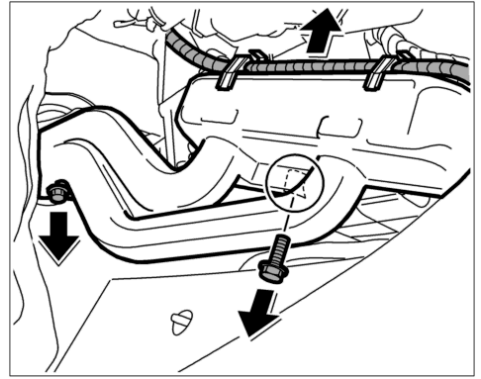
Overview of heater/air-conditioning unit

1. Support the heater/air-conditioning unit under the centre section **-A-** and under the evaporator **-B-** with a plastic or wooden board.



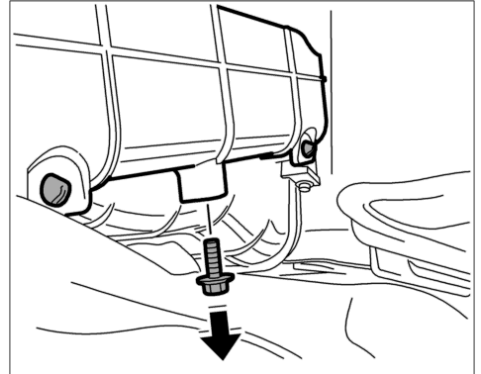
Supporting heater/air-conditioning unit

2. Unclip wiring harness on the left heat exchanger cover.
3. Unscrew both fastening screws on the left heat exchanger cover and unclip the cover.



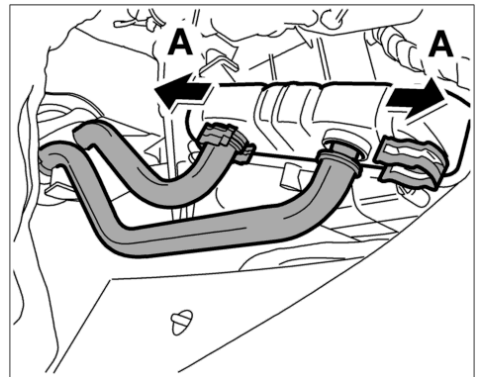
Unclipping wiring harness on the left heat exchanger cover

4. Unscrew the fastening screw of the right heat exchanger cover and unclip the cover.



Unscrewing fastening screw of the right heat exchanger cover

5. Pull the retaining clips **-arrows A-** off the coolant supply line and return line.



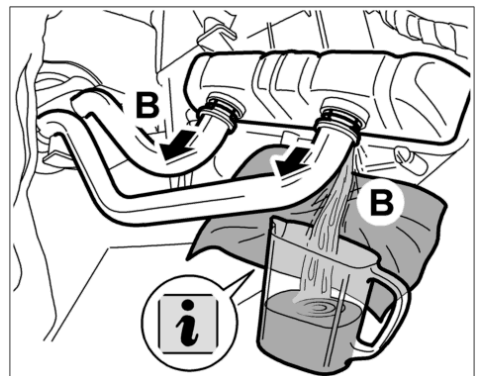
Pulling off retaining clips on coolant lines



Note

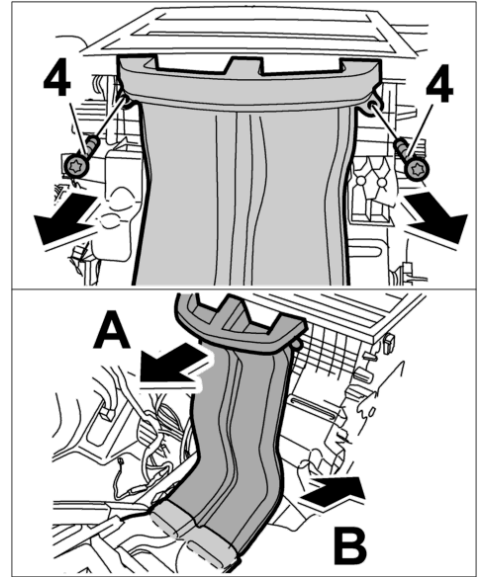
- Line the driver's footwell with very absorbent material.

6. Pull the interior carpet away from the coolant lines and place a suitable collecting container in position.
7. **-arrows B-** Slowly pull out the lines from the heat exchanger and drain the coolant into the collecting container.



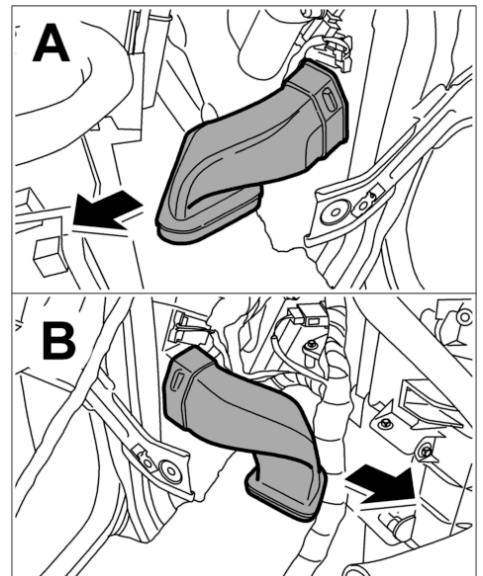
Pulling interior carpet away from the coolant lines

8. Unscrew both centre air guide fastening screws **-4-** for the back seat area and pull out the upper air guide toward the rear **-arrow A-** and the lower one toward the front **-arrow B-**.



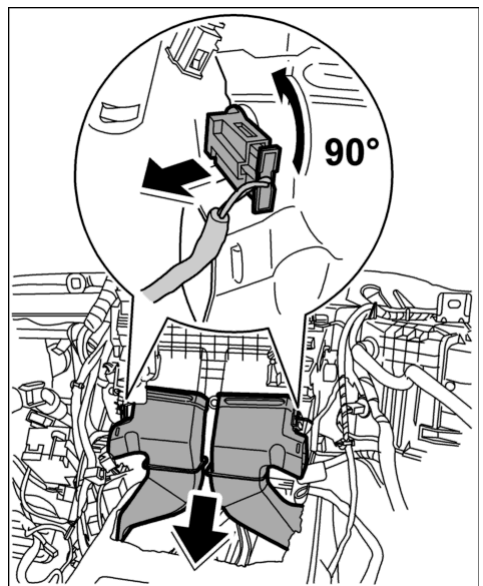
Releasing and removing centre air guide

9. Pull out centre air vents on the left **-A-** and right **-B-**.

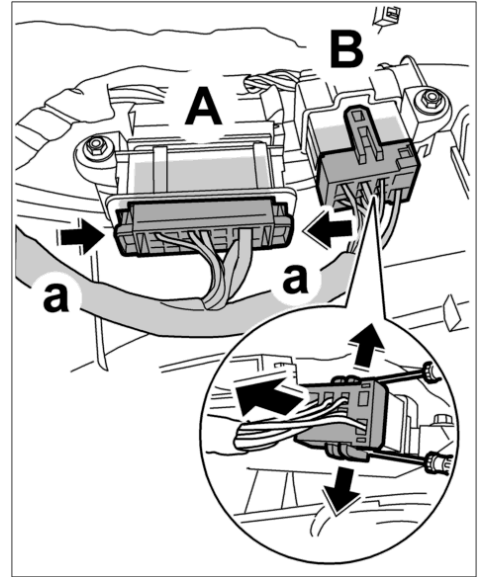


Removing left and right air vents

10. Turn the left and right temperature sensor **-90°-** and pull out of the heater/air-conditioning unit.
11. Pull the centre air vents for the footwell downwards from the heater/air-conditioning unit, lift it toward the rear, and pull it out of the air vents for the footwell.



Releasing and removing temperature sensor



Pulling off electric central connector

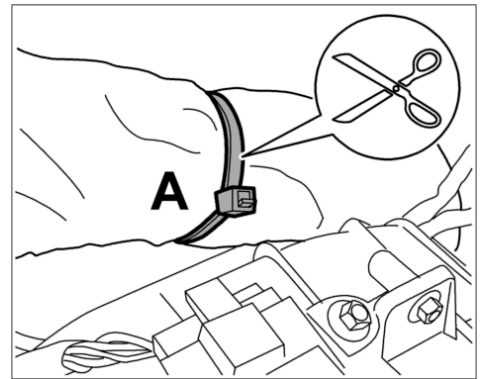
12. Release the electric central connector **-A-** (**-arrows a-**), lever apart the connector lock **-B-** with two screwdrivers and pull off.



Note

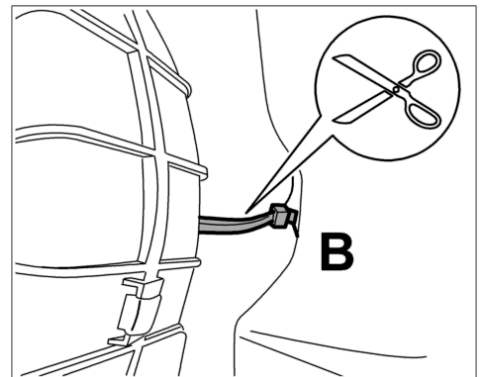
- *Make sure not to damage the insulation of the main wiring harness.*

13. The main wiring harness is secured to the heater/air-conditioning unit with tie-wraps. Separate the tie wraps carefully with side cutters.



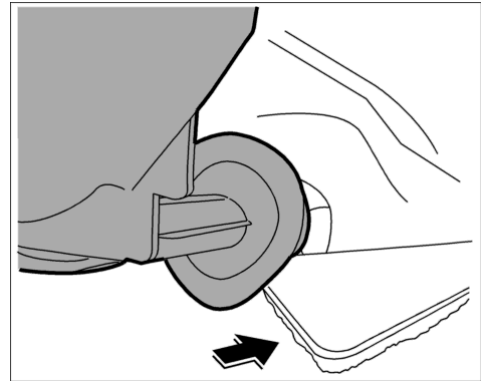
Cutting through main wiring harness tie-wraps on the heater/air-conditioning unit

14. The main wiring harness runs along the right A-pillar and is secured to the heater/air-conditioning unit in the fan area with a tie-wrap. Separate the tie wrap carefully with side cutters.



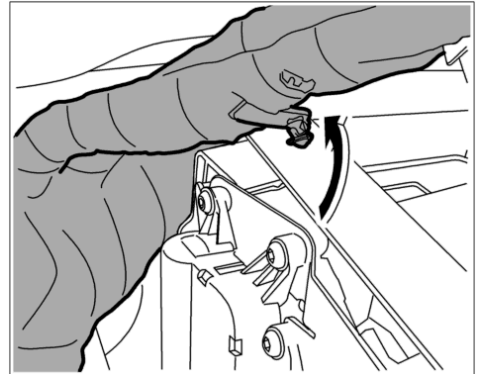
Cutting through tie-wrap in fan area

15. Disconnect the water drainage hose from the air-conditioning unit.



Disconnecting water drainage hose from air-conditioning unit

16. Detach the main wiring harness on the heater/air-conditioning unit.
17. Grasp the heater/air-conditioning unit on the left and right, pull backwards about 5 cm and remove completely.



Detaching main wiring harness on heater/air-conditioning unit

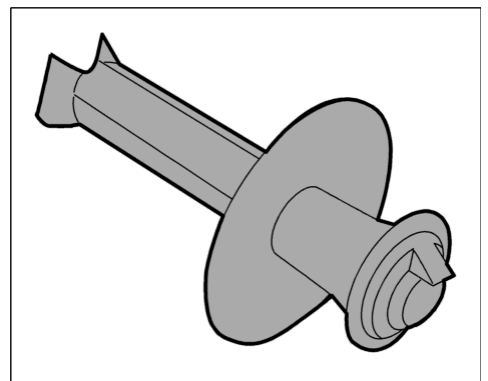
Installing heater/air-conditioning unit



Note

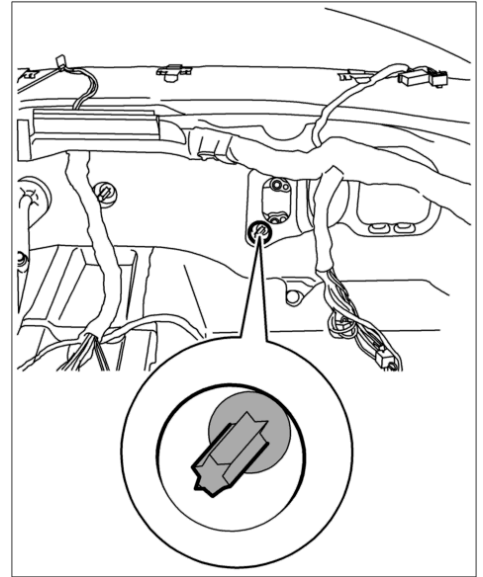
Before the heater/air-conditioning unit is installed again, the following points must be checked:

- *Check the water drainage hose for any cracks, deformities and other damage.*



Water drainage hose

- *Check on the body for damage to both mounts (stars) for the heater/air-conditioning unit. The stars must be able to turn for installation.*



Checking the mounts (stars) for the heater/air-conditioning unit

- Both mounts for the stars on the heater/air-conditioning unit must not be damaged.

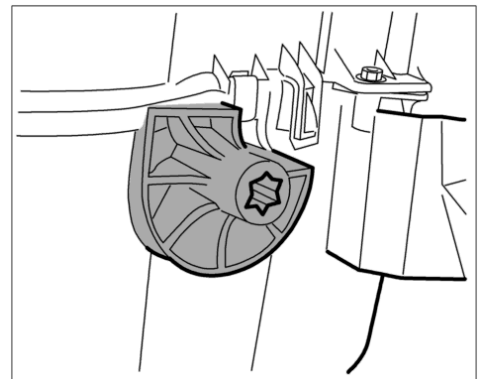
1. Position the plastic or wooden boards used for removal in the vehicle. Position the heater/air-conditioning unit in the vehicle. Get a second person to check the position of the stars - twist them if necessary.



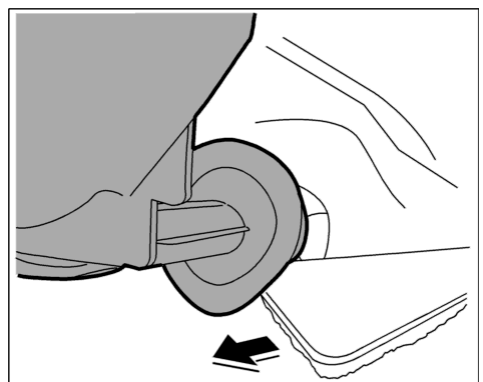
WARNING

Risk of damage to the mounts (stars)!

- The heater/air-conditioning unit must be supported
2. Slide the heater/air-conditioning unit onto both mounts (stars) and support it.
 3. Push the water drainage hose onto the air-conditioning unit and make sure it is seated correctly.

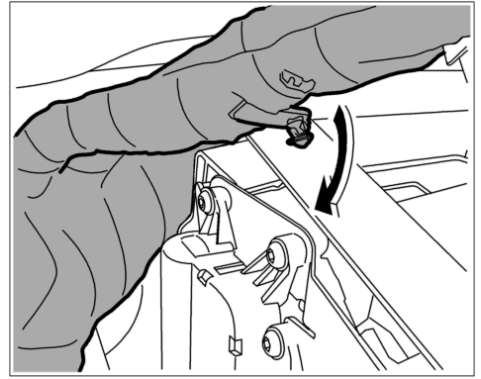


Checking the mounts for the stars on the heater/air-conditioning unit



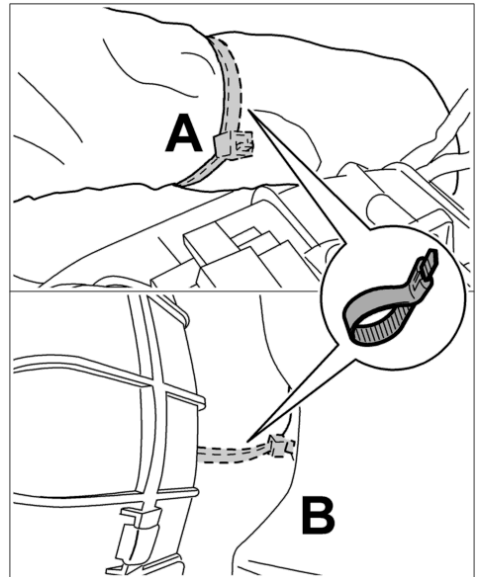
Pushing the water drainage hose onto the air-conditioning unit

4. Engage the main wiring harness on the heater/air-conditioning unit.



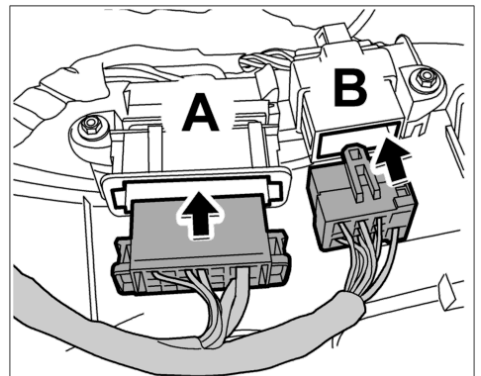
Engaging main wiring harness on heater/air-conditioning unit

5. Lay the main wiring harness on the heater/air-conditioning unit and position it on the heater/air-conditioning unit **-A-** and **-B-** using one tie-wrap each.



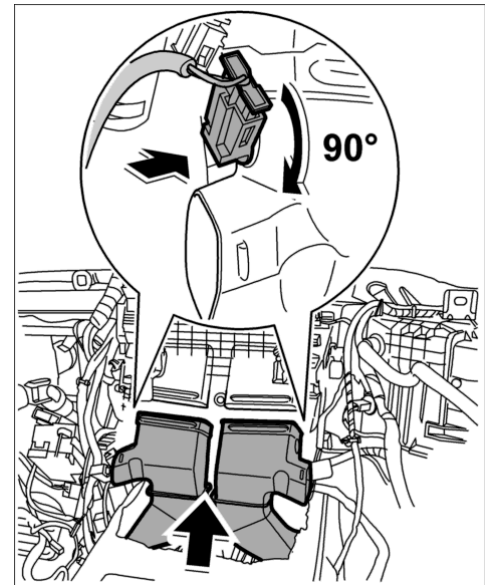
Laying and positioning main wiring harness on heater/air-conditioning unit

6. Insert the electric central connectors **-A-** and **-B-** into the plug connections until they click into place.



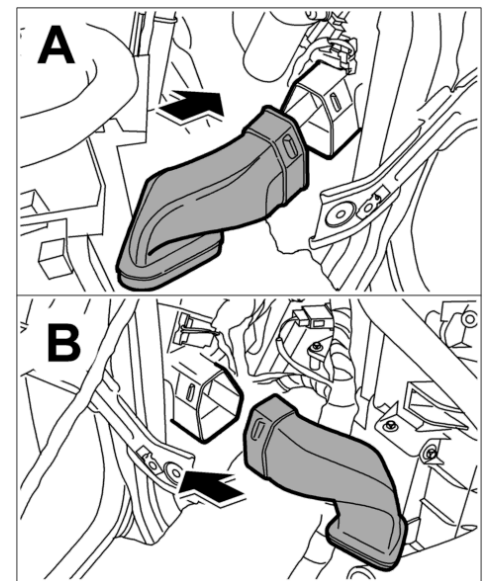
Inserting central connectors

7. Plug the centre temperature sensor on the left and right into the heater/air-conditioning unit and turn **-90°-**.
8. Insert the centre air vents for the footwell into the air guides for the footwell and push onto the heater/air-conditioning unit.



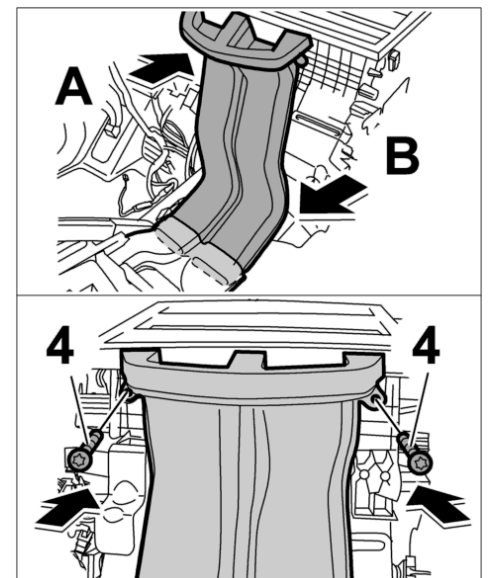
Installing temperature sensor

9. Connect the centre air vents on the left **-A-** and right **-B-**.



Connecting centre air vents on the left and right

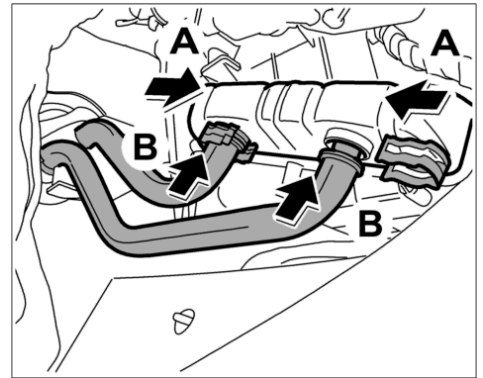
10. Slide the lower centre air guide into the rear air guide **-arrow B-**, press the upper centre air guide onto the heater/air-conditioning unit **-arrow A-**, and screw down with the two fastening screws **-4-**. → **Tightening torque: 1 ftlb.**
11. Position the carrier for the instrument panel. → 701219 Removing and installing the carrier for the instrument panel - chapter on "Installing"
12. Tighten the fastening screws **-1-** and **-2-**. → **Tightening torque: 7.5 ftlb.**
13. Remove the support for the heater/air-conditioning unit.



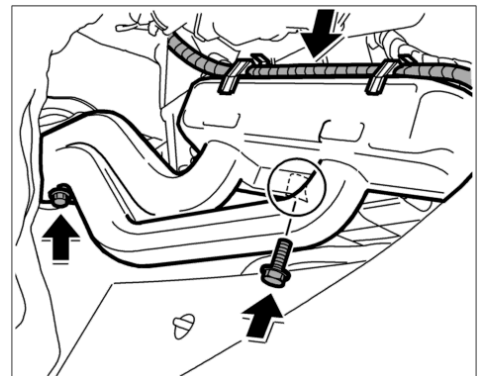
Sliding lower centre air guide into rear air guide and securing

**Note**

- Always replace O-rings.
14. Insert the coolant supply line and return line -B- into the heat exchanger.
 15. Push on the retaining clips -A- until the clips click into place.
 16. Top up engine coolant. → 193817 Draining and topping up with coolant (includes bleeding) - chapter on "Topping up".
 17. Check the heating system for leaks.
-
18. Clip in left cover and secure with the fastening screws. → **Tightening torque: 1 ftlb.**
 19. Clip in wiring harness on the left heat exchanger cover.
 20. Install the condenser-evaporator line and the compressor-evaporator line on the expansion valve. → 877019 Removing and installing expansion valve - chapter on "Installing"



Inserting coolant lines into the heat exchanger



Securing left cover

Subsequent work

Subsequent work

1. Install the carrier for the instrument panel. → 701219 Removing and installing the carrier for the instrument panel - chapter on "Installing"
2. Carry out work instruction after disconnecting the battery. → 90 *Work instructions after disconnecting the battery.*

9PAAD1, 9PAAD7, 9PAAE1, 9PAAE7, 9PAAF1, 9PAAJ1

as of MY 2003

Country C00, C02, C05, C07, C08, C09, C10, C11, C12, C13, C14, C15, C16, C18, C19, C20, C21, C22, C23, C24, C25, C26, C27, C28, C32, C33, C34, C35, C36, C37, C38, C39, C45, C46, C98, C99