

**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.

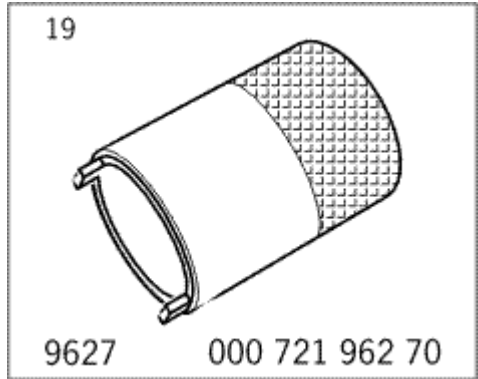
- Por motivos técnicos, por el momento no se puede descartar que, aun siendo correcta la imagen que aparezca en la pantalla, al imprimir se pierda la correlación entre el texto y la figura correspondiente.
- Si este error pasara desapercibido, existe el riesgo de que los trabajos no se ejecuten de forma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

19 58 19 Removing and installing coolant regulator (thermostat) - as of MY 2003

- [Preliminary work](#)
- [Information](#)
- [Removing thermostat](#)
- [Installing thermostat](#)
- [Subsequent work](#)

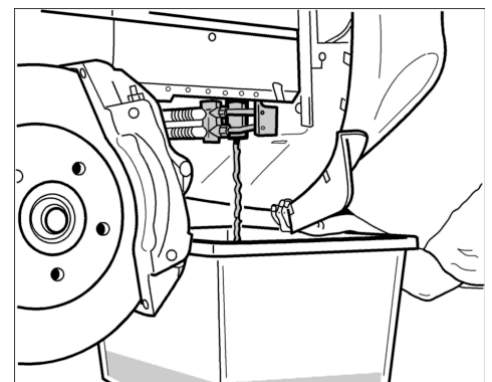
Tools

Designation	Type	Number	Explanation	
assembly aid	special tool	9627		

Preliminary work

Preliminary work

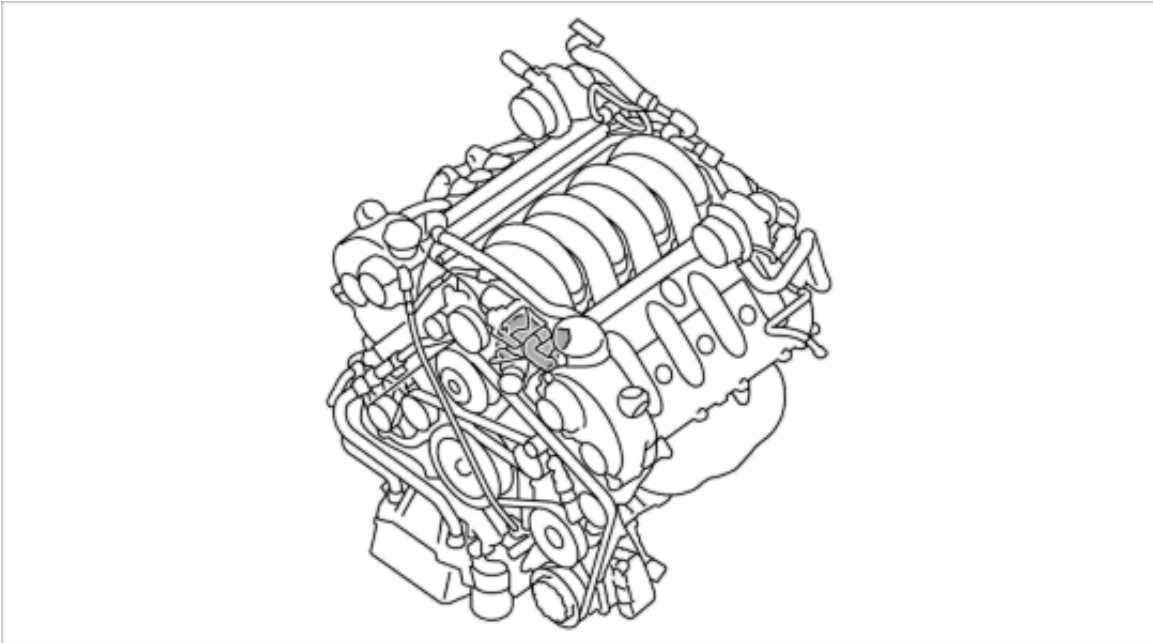
1. Drain cooling system. → 193817 Draining and filling coolant (includes bleeding)
2. Remove intake-air distributor. → 244619 Removing and reinstalling intake-air distributor - chapter on "Removing"



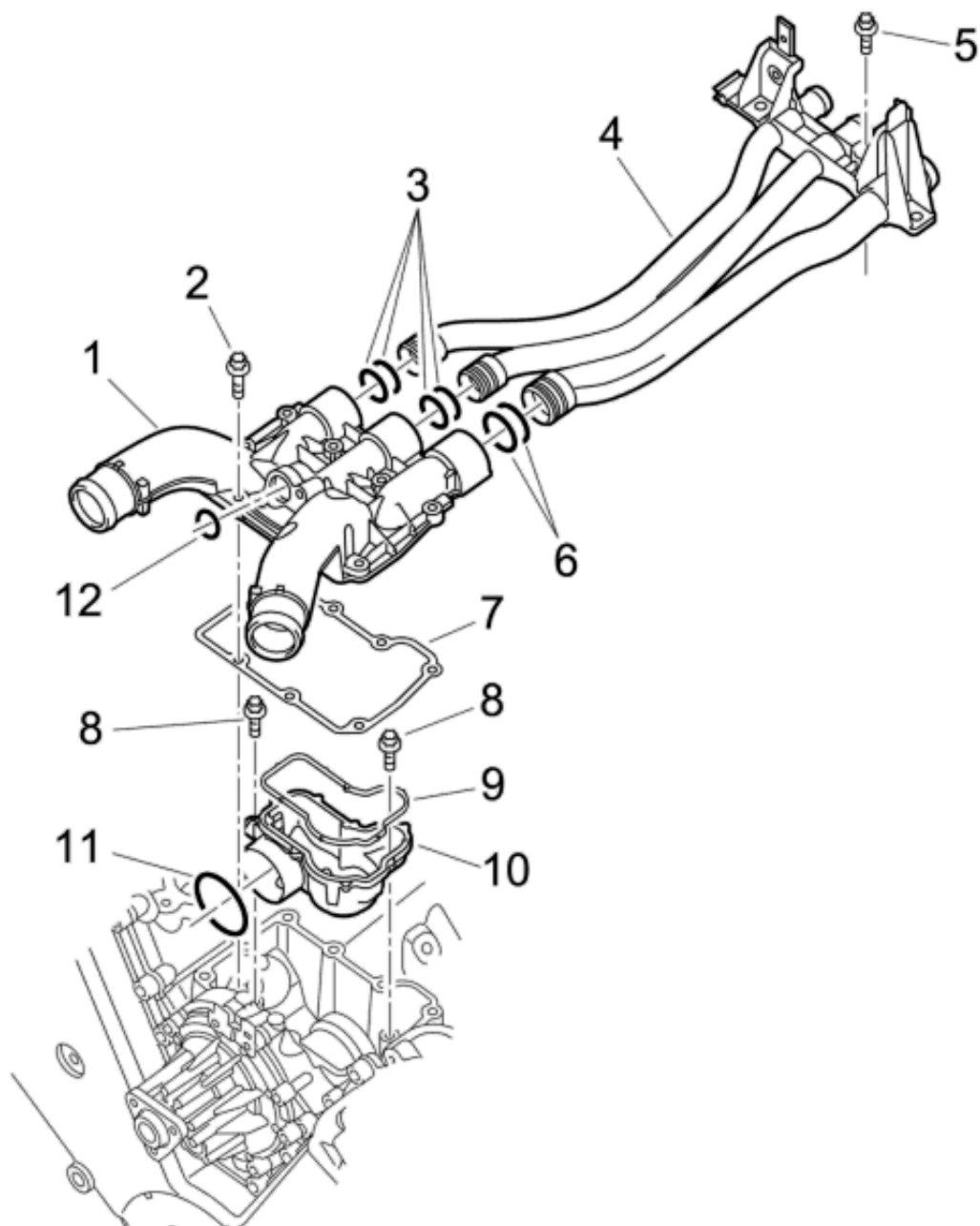
Draining cooling system

Information

Component overview



Install location

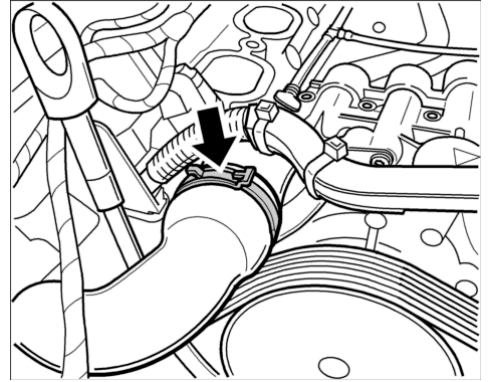


Component overview

- 1 - Thermostat housing (observe loosening and tightening sequence)
- 2 - Fastening screw M6 x 25
- 3 - O-rings, 22 x 3, replacing
- 4 - Coolant pipe for heater
- 5 - Fastening screw M6 x 16
- 6 - O-rings, 28 x 3, replacing
- 7 - Seal for thermostat housing; replacing
- 8 - Fastening screw M6 x 16
- 9 - Moulded seal; replacing
- 10 - Thermostat well
- 11 - O-ring, 50 x 3, replacing
- 12 - O-ring, 20 x 2.65, replacing

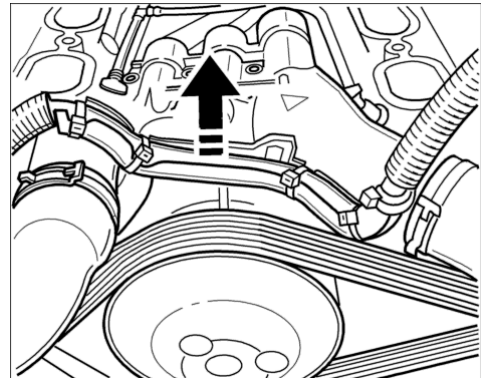
Removing thermostat

1. Remove the two coolant lines on the thermostat housing cover. To do this, remove the spring-band clamps and pull off the hoses.



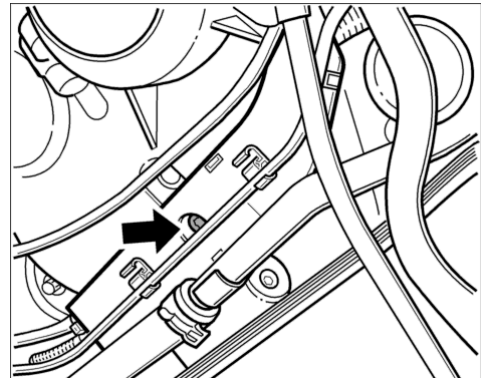
Spring band clamps for coolant lines on thermostat housing

2. Pull off the cable duct upwards over the coolant pump.
3. Release the upper fastening screw of the oil dipstick.



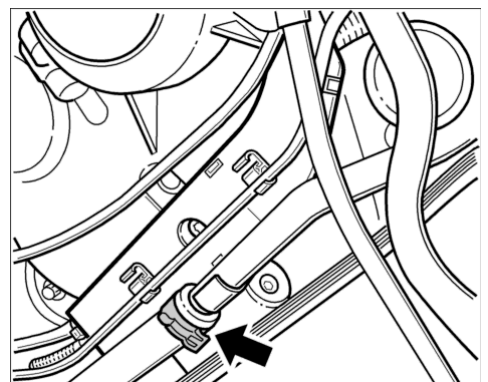
Cable duct over coolant pump

4. Loosen the fastening screw on the cable duct.



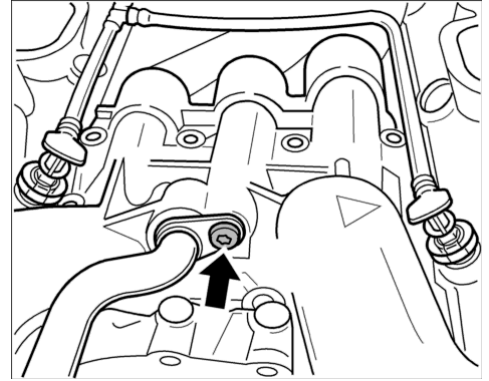
Fastening screw on the cable duct

5. Disconnect the coolant outlet on the generator. To do this, open the spring-band clamps and pull off the hose. Collect the draining coolant.



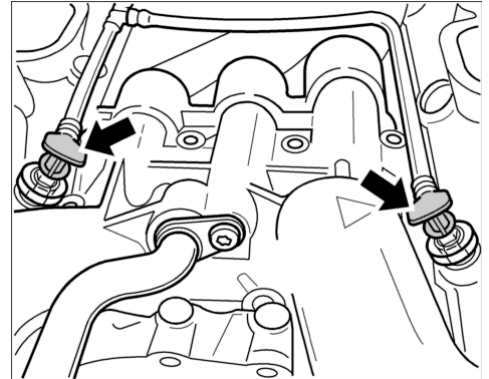
Spring band clamp for coolant return to generator

6. Remove the coolant return line on the thermostat housing. To do this, loosen the fastening screw and pull off the line.



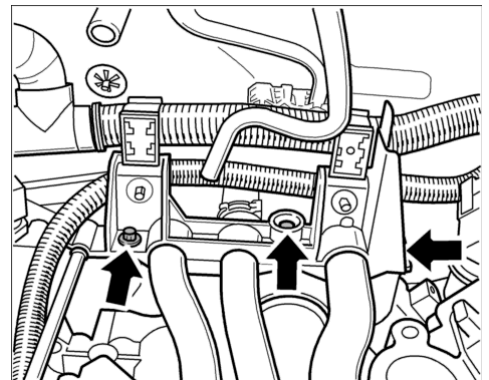
Fastening screw for coolant return line to thermostat housing

7. Disconnect vent line for cylinder heads. To do this, press the ribbed surfaces of the buttons and pull off the plugs.

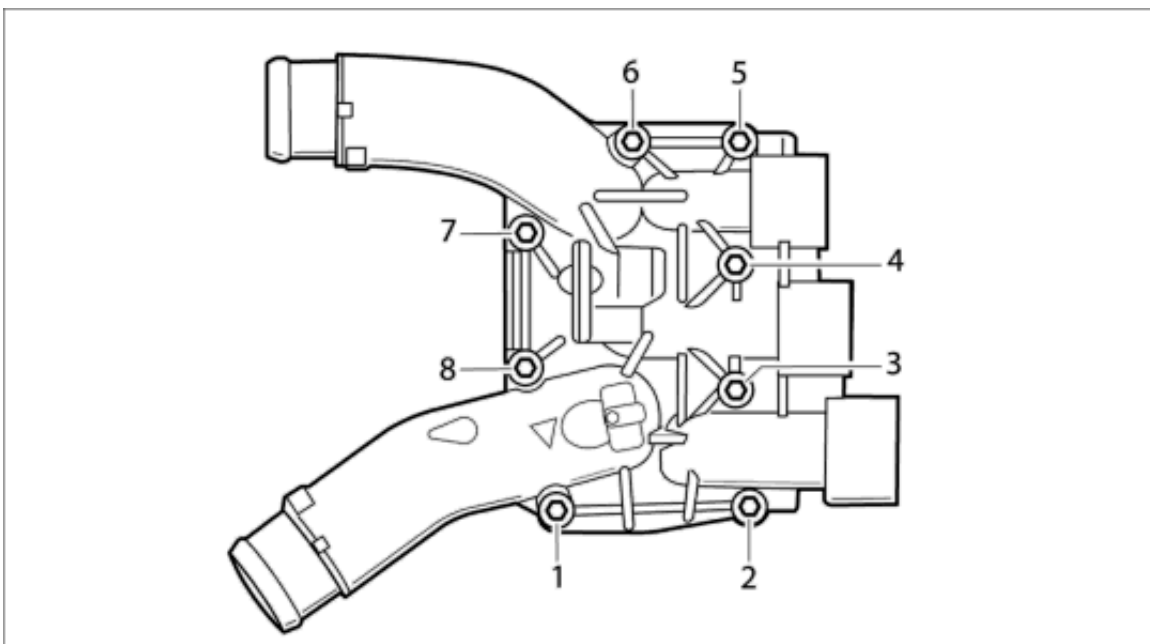


Button on the vent lines of cylinder heads

8. Undo the 3 rear fastening screws of the heater pipes.
 9. Undo the thermostat housing cover. The sequence shown must be observed when doing so.

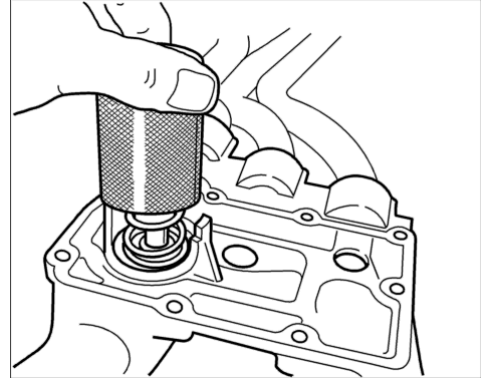


Fastening screws of heater pipes



Loosening sequence for thermostat housing

10. Lift the housing cover. Remove the thermostat using **assembly aid 9627**.



Removing thermostat with assembly aid

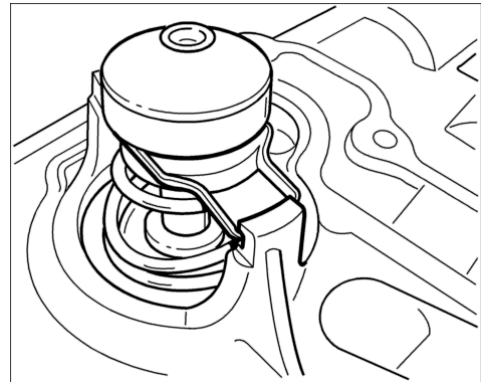
Installing thermostat



Note

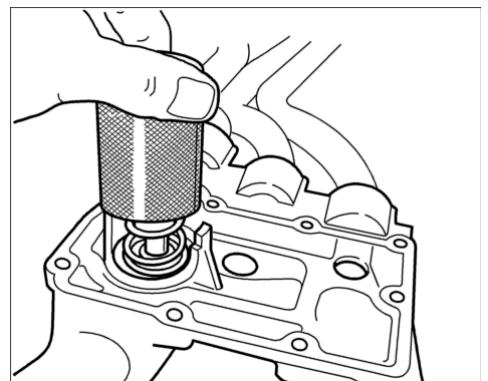
- *All seals between opened sealing surfaces must be replaced.*

1. Insert thermostat in the cover and turn it until the two sheetmetal edges are lying to the left and right of the holder.

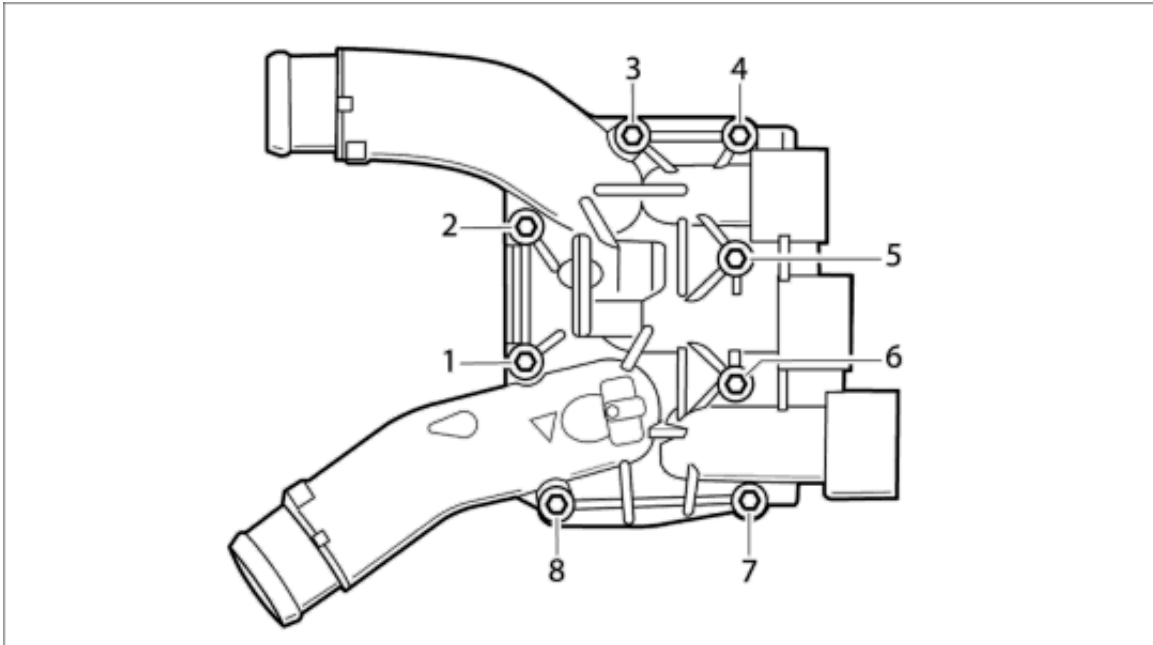


Inserting thermostat into cover and twisting

2. Replace inner and outer seal in thermostat housing cover.
3. Position thermostat housing cover and tighten the fastening screws (M6 x 25) according to the sequence shown. → **Tightening torque: 7.5 ftlb.**

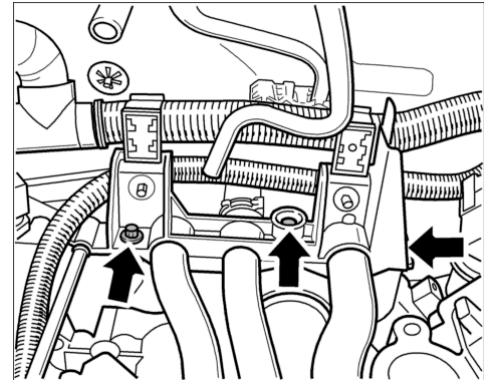


View shows assembly using the special tool



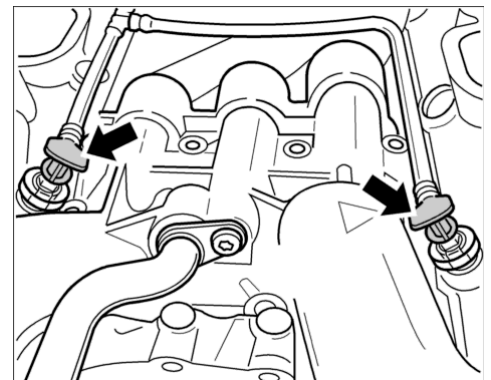
Tightening sequence for thermostat housing fastening screw

4. Tighten the three rear fastening screws (M6 x 16) on the heater pipes. → **Tightening torque: 7.5 ftlb.**



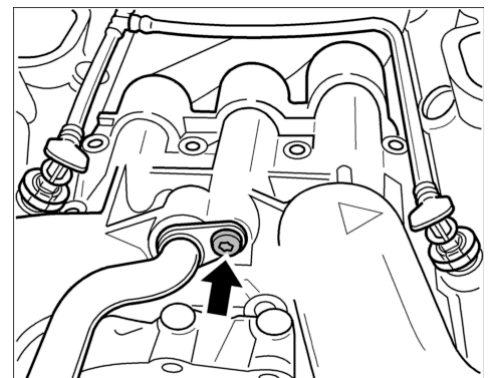
Fastening screws of heater pipes

5. Connect vent lines for cylinder heads. The connectors must engage audibly.



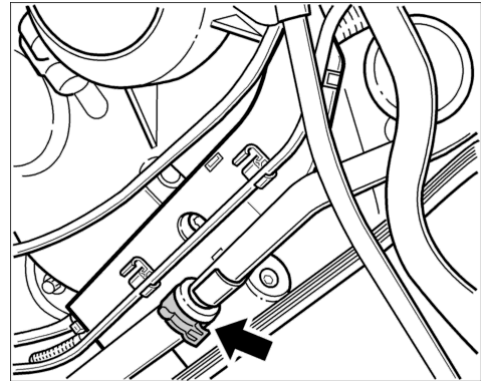
Vent lines for cylinder heads

6. Fit coolant line leading to the generator. Insert the line in the thermostat housing cover and tighten the fastening screw. → **Tightening torque: 7.5 ftlb.**



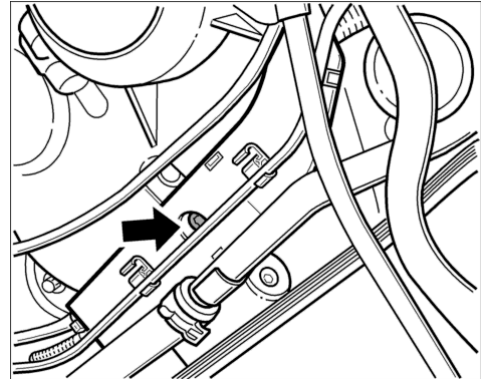
Coolant line to generator

7. Push coolant line onto generator and fit the spring-band clamp.



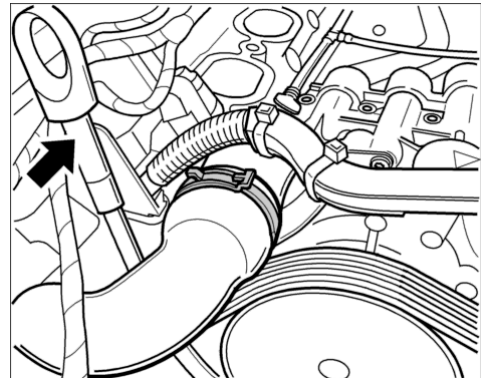
Spring band clamp for coolant line to generator

8. Push the holder onto the timing case cover below the cable duct and tighten the fastening screw. → **Tightening torque: 7.5 ftlb.**



Fastening screw, support to timing-case cover

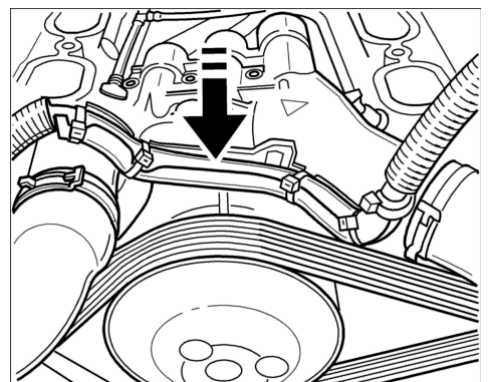
9. Tighten the upper fastening screw of the oil dipstick. → **Tightening torque: 7.5 ftlb.**



Fastening screw for oil dipstick

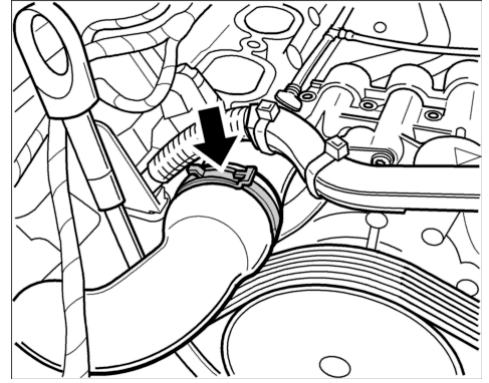
10. Push the cable duct onto the retaining bracket over the coolant pump.

11. Check whether the drive belt is correctly installed.



Push the cable duct onto the retaining bracket over the coolant pump.

12. Fit coolant supply and return hose on thermostat housing cover.



Subsequent work

Subsequent work

1. Install intake distributor. → 244619 Removing and reinstalling intake-air distributor - chapter on "Installing"
2. Fill coolant system and check for leaks. → 193817 Draining and filling coolant (includes bleeding) - chapter on "Filling"

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