



How to change engine  
thermostat on **AUDI A4**  
**Avant (8E5, B6)** –  
replacement guide

## SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

### Important!

This replacement procedure can be used for:

AUDI A4 Avant (8E5, B6) 1.6

The steps may slightly vary depending on the car design.

This tutorial was created based on the replacement procedure for a similar car part on: AUDI A4 Saloon (8D2, B5) 1.6

**REPLACEMENT: ENGINE THERMOSTAT – AUDI A4 AVANT (8E5, B6). TOOLS YOU MIGHT NEED:**



- Wire brush
- All-purpose cleaning spray
- Electronic spray
- Sealant
- Torque wrench
- Combination spanner #10
- Combination spanner #13
- Combination spanner #17
- Combination spanner #46
- Drive socket # 10
- Drive socket # 13
- HEX bit No.H5
- HEX bit No.H8
- Ratchet wrench
- Funnel
- Fluid container
- Pincers
- Fender cover

**Buy tools**

Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). AUTODOC experts recommend:

- Check the condition of the coolant every time you replace the thermostat. Change the coolant if necessary.
- All work should be done with the engine stopped.

## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

**1**

Open the hood.

**2**

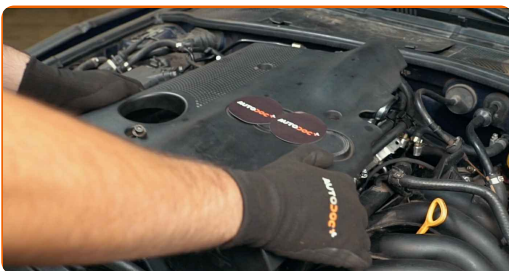
Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.

**3**

Unscrew the engine cover fastener. Use HEX No.H5. Use a ratchet wrench.

**4**

Remove the engine cover.

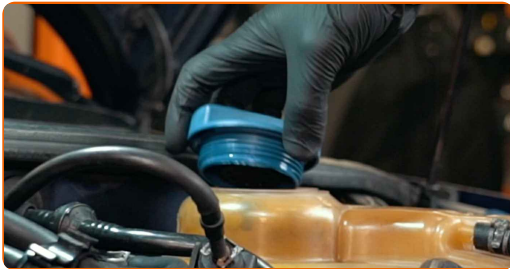


**AUTODOC recommends:**

- Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Do not use excessive force when removing the part as this may damage it.

**5**

Unscrew the coolant reservoir cap.



**6**

Prepare a container for fluids.



**7**

Clean the coolant hose. Use all-purpose cleaning spray.



**8**

Disconnect the coolant pipe retaining clip.



9

Detach the coolant hose.



Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Professionals recommend:

- Caution! Coolant may leak out of the coolant lines and thermostat housing.

10

Drain the coolant from the engine.



Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Tip:

- Caution! The coolant can be very hot.
- Wear gloves to prevent contact with hot liquid.
- All work should be done with the engine stopped.
- Wait until the coolant has completely flowed out of the drain hole.

**11** Clean the coolant hose. Use all-purpose cleaning spray.



**12** Attach the coolant hose.

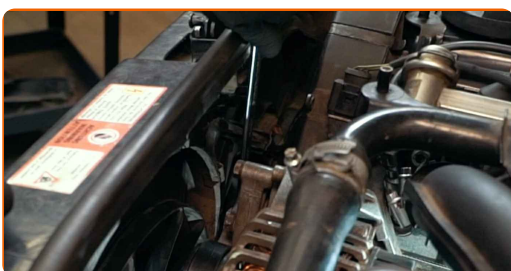


**13** Connect the coolant pipe retaining clip.

**14** Clean the coolant hose. Use all-purpose cleaning spray.

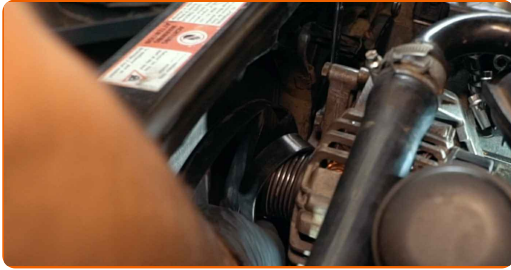


**15** Pull aside the V-ribbed belt tensioner pulley. Use a combination spanner #17.



**16**

Remove the V-ribbed belt.

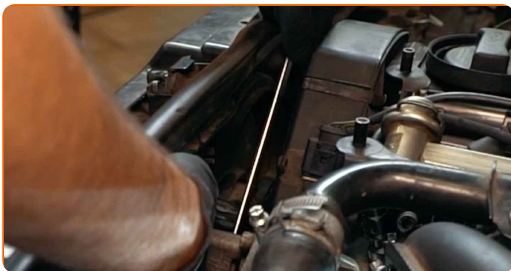


Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Tip from AUTODOC:

- Check the condition of the tensioner pulley and idler pulley. Replace them if necessary.

**17**

Return the tensioner pulley to its initial position.



**18**

Remove the battery cover.



**19**

Unscrew the fasteners of the car battery terminals. Use a combination spanner #10.





**20** Remove the battery terminals.



**21** Loosen the alternator fasteners. Use HEX No.H8.



**22** Unscrew the fastener of the viscous fan clutch. Use a combination spanner #46. Use HEX No.H8.



**23** Loosen the alternator fasteners. Use HEX No.H8.



**24** Remove the alternator.



**25** Disconnect the alternator connector.



**26** Unscrew the alternator power cable fastener. Use a combination spanner #13.



**27** Clean the thermostat housing. Use all-purpose cleaning spray.



**28** Unscrew the thermostat housing fasteners. Use a drive socket #10. Use a ratchet wrench.



**29** Remove the thermostat housing.



**AUTODOC recommends:**

- Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Do not use excessive force when removing the part as this may damage it.

**30**

Remove the thermostat. Use pincers.



**Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Tip:**

- Do not apply excessive force when removing the part. Otherwise you may damage it.
- Caution! Coolant may leak out of the coolant lines and thermostat housing.

**31**

Clean the thermostat housing mounting seat. Use a wire brush. Use all-purpose cleaning spray.



**32**

Install a new thermostat.

**AUTODOC recommends:**

- Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Do not use excessive force during installation. This may damage the part.

**33**

Treat the thermostat housing. Use a sealant.



**34**

Install the thermostat housing.

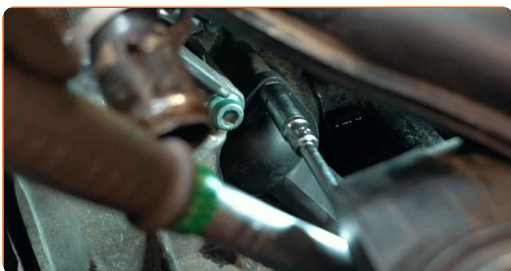


**Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Tip from AUTODOC:**

- When installing, do not use excessive force to avoid damage to the part.

**35**

Tighten the thermostat housing fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 6 nm torque.



- 36** Tighten the alternator power cable fastener. Use a drive socket #13. Use a torque wrench. Tighten it to 5 nm torque.



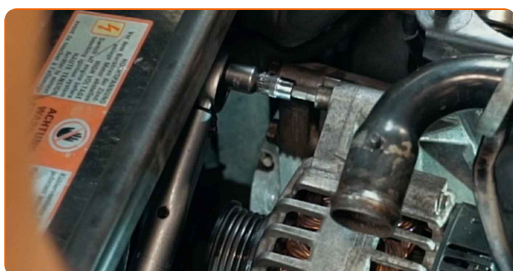
- 37** Connect the alternator connector.



- 38** Install the alternator.



- 39** Tighten the alternator fasteners. Use HEX No.H8. Use a torque wrench. Tighten it to 8 nm torque.



- 40** Tighten the fastener of the viscous fan clutch. Use a combination spanner #46. Use HEX No.H8. Use a torque wrench. Tighten it to 24 nm torque.



- 41** Pull aside the V-ribbed belt tensioner pulley. Use a combination spanner #17.



- 42** Install the V-ribbed belt.

Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). AUTODOC experts recommend:

- Check the condition of the tensioner pulley and idler pulley. Replace them if necessary.

- 43** Return the tensioner pulley to its initial position.



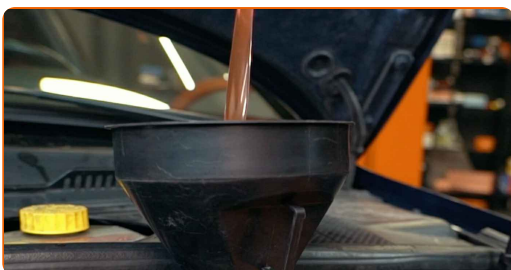
**44** Remove the coolant reservoir cap.



**45** Insert the funnel.



**46** Pour coolant in the coolant reservoir.



Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). AUTODOC recommends:

- Only use the coolant recommended by the manufacturer.
- The coolant level should be at the MAX mark.
- Wait until the air goes out of the system.

**47** Attach the terminals to the battery.



Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Tip from AUTODOC:

- Be careful! Do not mix up the positive and the negative terminals of the car battery.

**48** Screw in the fasteners of the battery terminals. Use a combination spanner #10.



**49** Treat the battery terminals. Use dielectric grease.





**50** Install the battery cover.



**51** Run the engine for a few minutes. This should be done in order to remove residual air from the cooling system and to check if the components are operating correctly.

**52** Shut off the engine.

**53** Install the coolant reservoir cap.



**54** Screw on the coolant reservoir cap.



**55** Install the engine cover and secure it.



**AUTODOC recommends:**

- Replacement: engine thermostat – AUDI A4 Avant (8E5, B6). Do not use excessive force during installation. This may damage the part.

**56**

Screw in the engine cover fasteners. Use HEX No.H5. Use a ratchet wrench.



**57**

Check the coolant level. If necessary, top up to the required level.

**58**

Remove the fender protection cover.

**59**

Close the hood.

**WELL DONE!** 

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