



How to change engine  
thermostat on **BMW Z3**  
**Coupe (E36)** –  
replacement guide

## SIMILAR VIDEO TUTORIAL



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

### Important!

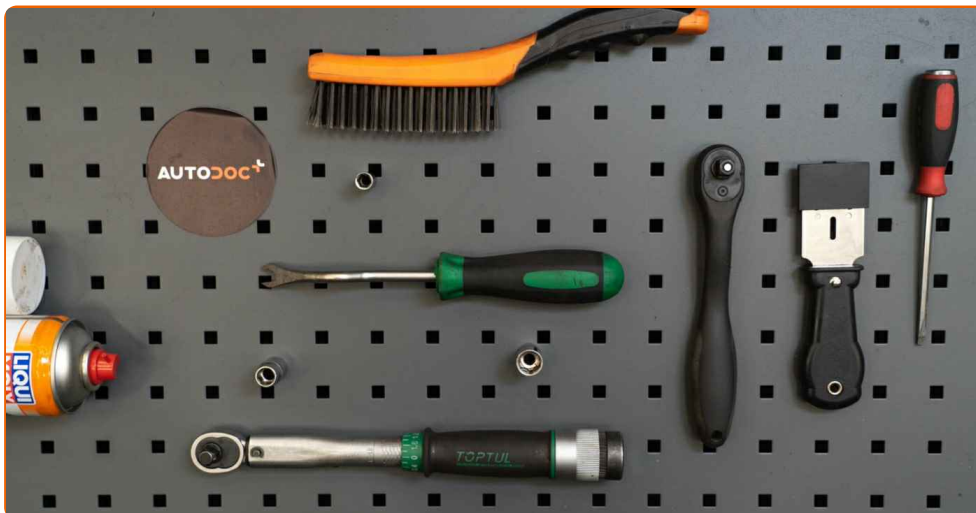
This replacement procedure can be used for:

BMW Z3 Coupe (E36) 2.8 i

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: BMW 3 Saloon (E36) 323i 2.5

REPLACEMENT: ENGINE THERMOSTAT – BMW Z3  
COUPE (E36). AUTODOC RECOMMENDS:



- All-purpose cleaning spray
- Sealant
- Torque wrench
- Drive socket # 7
- Drive socket # 10
- Drive socket # 13
- Ratchet wrench
- Clip removal tool
- Seal scraper
- Flat screwdriver
- Funnel
- Fluid container
- Fender cover

**Buy tools**

Replacement: engine thermostat – BMW Z3 Coupe (E36). Tip from AUTODOC:

- Check the condition of the coolant every time you replace the thermostat. Change the coolant if necessary.
- Please note: all work on the car – BMW Z3 Coupe (E36) – should be done with the engine switched off.

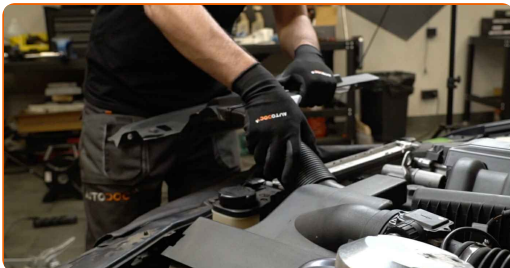
**CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:**

**1** Open the hood.

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

**3** Remove the fasteners of the air duct housing. Use a clip removal tool.

**4** Remove the air distribution housing assembly.



**5** Unscrew the coolant reservoir cap.



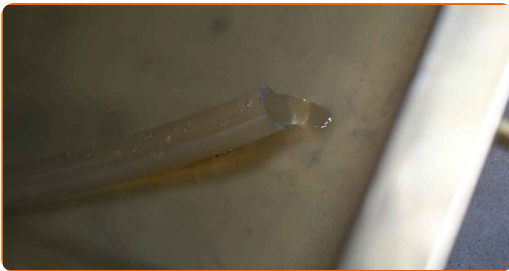
**6** Prepare a container for fluids.



**7** Open the coolant drain tap.



**8** Drain the coolant from the engine.



Replacement: engine thermostat – BMW Z3 Coupe (E36). AUTODOC experts recommend:

- 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.

**9** Close the coolant drain tap.



**10** Loosen the clamps of the coolant hoses. Use a drive socket #7. Use a ratchet wrench.



**11** Detach the coolant hose.



**12** Loosen the coolant hose clamp. Use a drive socket #7. Use a ratchet wrench.



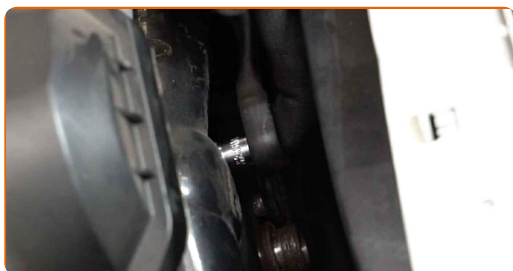
**13** Detach the coolant hose.



**14** Detach the coolant pipe bracket. Use a drive socket #13. Use a ratchet wrench.



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



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



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



18

Remove the thermostat housing.



**AUTODOC recommends:**

- Replacement: engine thermostat – BMW Z3 Coupe (E36). To avoid damaging the part when removing it, do not use excessive force.
- Caution! Coolant may leak out of the coolant lines and thermostat housing.

19

Remove the thermostat.



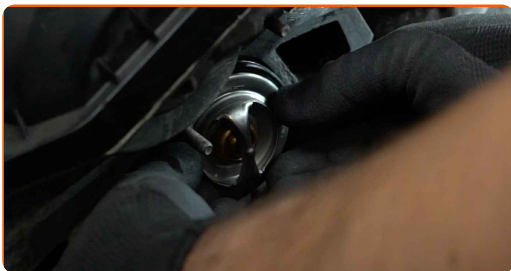
20

Clean the thermostat housing mounting seat. Use a flat screwdriver. Use a seal scraper. Use all-purpose cleaning spray.

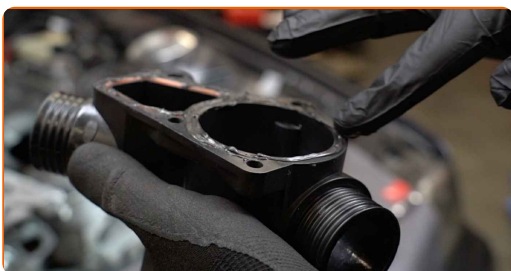




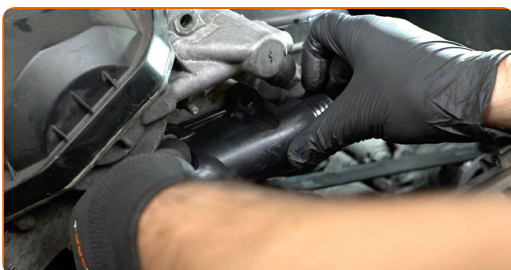
**21** Install a new thermostat.



**22** Treat the thermostat housing mounting seat. Use a sealant.



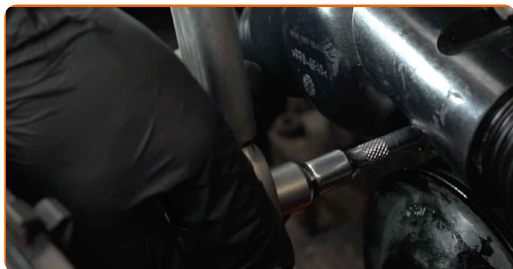
**23** Install the new thermostat housing.



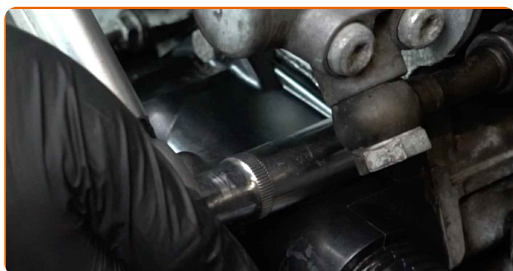
**AUTODOC recommends:**

- Replacement: engine thermostat – BMW Z3 Coupe (E36). Do not use excessive force during installation. This may damage the part.

**24** Tighten the thermostat housing fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 7 nm torque.



**25** Attach the coolant pipe bracket. Use a drive socket #13. Use a torque wrench. Tighten it to 11 nm torque.



**26** Tighten the thermostat housing fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 7 nm torque.

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



**28** Connect the coolant hoses to the thermostat housing.



**29**

Fasten the clamps of the coolant hoses. Use a drive socket #7. Use a ratchet wrench.

**30**

Remove the coolant reservoir cap.

**31**

Insert the funnel.

**32**

Pour coolant in the coolant reservoir.



**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.

**33**

Open the coolant system bleed screw. Use a flat screwdriver.



**Replacement: engine thermostat – BMW Z3 Coupe (E36). AUTODOC experts recommend:**

- This should be done in order to remove residual air from the cooling system and to check if the components are operating correctly.

**34**

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.

**35**

Close the coolant system bleed screw. Use a flat screwdriver.

**36**

Shut off the engine.

**37**

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



**38**

Install the coolant reservoir cap.

**39**

Screw on the coolant reservoir cap.

**40**

Reinstall the air distribution housing assembly.

**41**

Install the air duct housing fasteners.

**42**

Remove the fender protection cover.

**43**

Close the hood.

**WELL DONE!** [VIEW MORE TUTORIALS](#)

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