# **AUTODOC CLUB**

How to change temperature sensor and engine thermostat on MERCEDES-BENZ G-Class Off-Road (W461) – replacement guide







### SIMILAR VIDEO TUTORIAL



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

### i Important!

This replacement procedure can be used for:

MERCEDES-BENZ G-Class Off-Road (W461) 290 GD/G 290 D 2.9 (461.337, 461.338),

MERCEDES-BENZ G-Class Off-Road (W461) G 290 TD (461.335, 461.336),

MERCEDES-BENZ G-Class Off-Road (W461) 250 GD 2.5

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: MERCEDES-BENZ E-Class Saloon (W124) E 250 D (124.126, 124.129)

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### REPLACEMENT: TEMPERATURE SENSOR AND ENGINE THERMOSTAT – MERCEDES-BENZ G-CLASS OFF-ROAD (W461). TOOLS YOU'LL NEED:



- Wire brush
- All-purpose cleaning spray
- Dielectric grease
- Torque wrench
- Combination spanner #10
- Combination spanner #19
- Drive socket # 7

- Drive socket #10
- Drive socket # 22
- Ratchet wrench
- Flat screwdriver
- Funnel
- Fluid container
- Fender cover

**Buy tools** 

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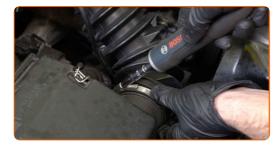


### Replacement: temperature sensor and engine thermostat – MERCEDES-BENZ G-Class Off-Road (W461). AUTODOC experts recommend:

- 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.
- All work should be done with the engine stopped.

# REPLACEMENT: TEMPERATURE SENSOR AND ENGINE THERMOSTAT – MERCEDES-BENZ G-CLASS OFF-ROAD (W461). TAKE THE FOLLOWING STEPS:

- 1 Open the bonnet.
- Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.
- Loosen the air filter hose clamps. Use a drive socket #7. Use a ratchet wrench.



Remove the air intake hose.



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Cover the throttle body with a microfibre towel to prevent dust and dirt from getting into the system.



6 Unscrew the coolant reservoir cap.



- Lift the car using a jack or place it over an inspection pit.
- Prepare a container for fluids.



Open the coolant drain tap. Use a flat screwdriver.



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Drain the coolant from the engine.



Replacement: temperature sensor and engine thermostat – MERCEDES-BENZ G-Class Off-Road (W461). Tip:

- All work should be done with the engine stopped.
- Wait until the coolant has completely flowed out of the drain hole.
- Unscrew the coolant drain plug on the engine block. Use a combination spanner #19.



Drain the coolant from the engine.



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### **AUTODOC** recommends:

- All work should be done with the engine stopped.
- Wait until the coolant has completely flowed out of the drain hole.
- Screw in the coolant drain plug on the engine block. Use a combination spanner #19.



Close the coolant drain tap. Use a flat screwdriver.



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



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Unscrew the thermostat housing fasteners. Use a combination spanner #10. Use a drive socket #10. Use a ratchet wrench.



17 Remove the fastening bolts.



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



Detach the coolant hose.



Replacement: temperature sensor and engine thermostat – MERCEDES-BENZ G-Class Off-Road (W461). AUTODOC recommends:

• Be careful! The coolant may leak.

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Remove the thermostat together with the housing.



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



Remove the thermostat.



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



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25 Install the thermostat together with the housing.



26 Install the fastening bolts.



Tighten the thermostat housing fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 12 Nm torque.



28 Attach the coolant hose.

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Secure the coolant hose clamp. Use a drive socket #7. Use a ratchet wrench.



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Unplug the connector of the coolant temperature sensor. Use a flat screwdriver.



Clean the coolant temperature sensor. Use a wire brush. Use all-purpose cleaning spray.



Unscrew the coolant temperature sensor. Use a drive socket #22. Use a ratchet wrench.



Install a new coolant temperature sensor.

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Replacement: temperature sensor and engine thermostat – MERCEDES-BENZ G-Class Off-Road (W461). Tip from AUTODOC experts:

• Be sure to use a new O-ring when installing the sensor.

Screw in and tighten the coolant temperature sensor. Use a drive socket #22. Use a torque wrench. Tighten it to 25 Nm torque.



Treat the coolant temperature sensor connector. Use dielectric grease.



Plug in the connector of the coolant temperature sensor.



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Remove the microfibre towel from the throttle body.



Install the air intake hose and secure it.



Tighten the air filter hose clamps. Use a drive socket #7. Use a ratchet wrench.



Remove the coolant reservoir cap.



41 Insert the funnel.



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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.
- Run the engine for a few minutes.

Replacement: temperature sensor and engine thermostat – MERCEDES-BENZ G-Class Off-Road (W461). Professionals recommend:

- This should be done in order to remove residual air from the cooling system and to check if the components are operating correctly.
- Shut off the engine.
- Install the coolant reservoir cap.



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Screw on the coolant reservoir cap.



- Remove the fender protection cover.
- Close the hood.



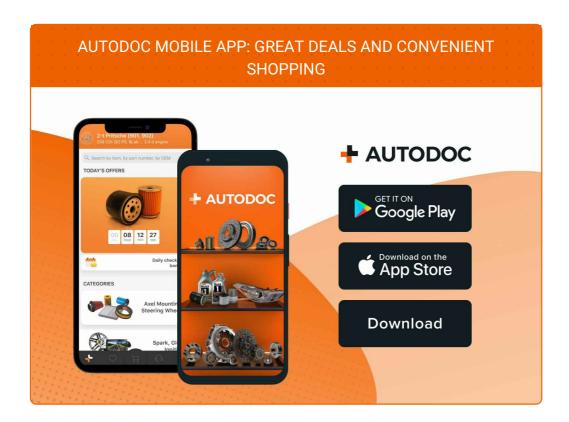
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