

## 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 Z4 Roadster (E89) sDrive 23 i, BMW Z4 Roadster (E89) sDrive 30 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 Coupe (E92) 330i 3.0

## REPLACEMENT: SPARK PLUGS – BMW Z4 ROADSTER (E89). LIST OF THE TOOLS YOU'LL NEED:



- Electronic spray
- High-temperature anti-seize lubricant
- Drive socket # 8
- HEX bit No.H5.
- Spark plug socket # 16
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Fender cover

**Buy tools**

Replacement: spark plugs – BMW Z4 Roadster (E89). Tip from AUTODOC experts:

- The replacement procedure is the same for all spark plugs.
- Please note: all work on the car – BMW Z4 Roadster (E89) – 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.

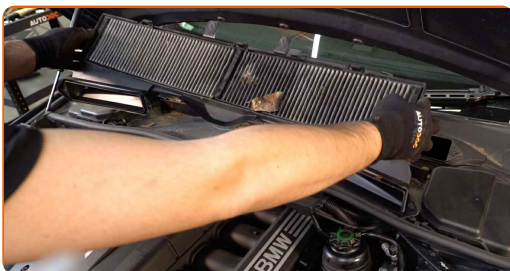
3

Unscrew the fasteners of the cabin filter housing cover. Use a drive socket #8. Use a ratchet wrench.

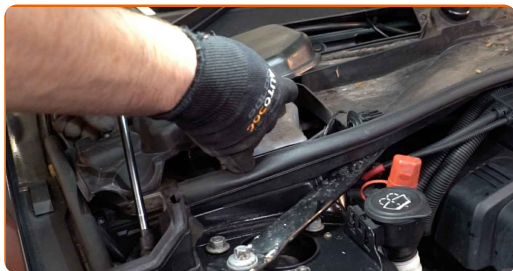


4

Remove the cabin filter housing cover.



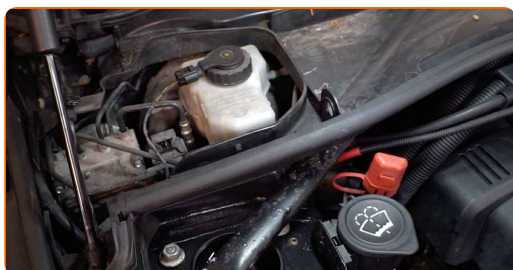
5 Remove the wiper arm covers.



6 Detach the connectors from the climate control sensors.



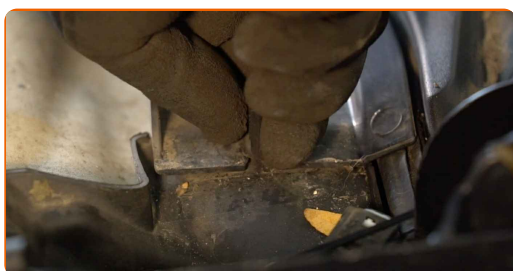
7 Remove the climate control sensors.



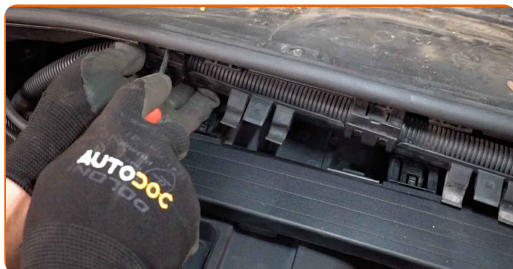
8 Detach the electrical wiring from the upper part of the microfilter housing.



9 Detach the retainers of the upper part of the microfilter housing.



- 10 Detach the cable duct from the upper part of the microfilter housing. Use a flat screwdriver.



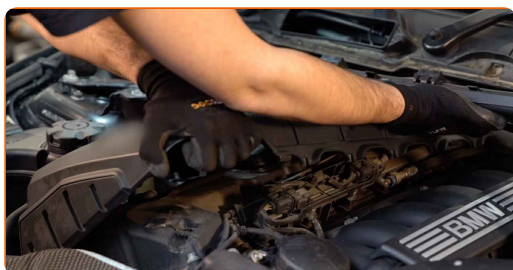
- 11 Remove the protective cover.



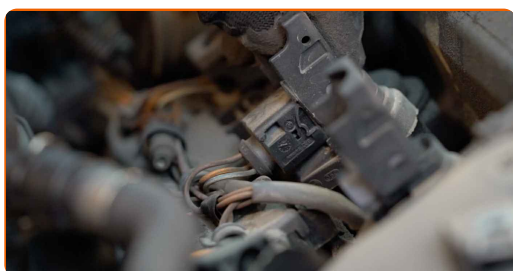
- 12 Unscrew the engine cover fastener. Use HEX No.H5. Use a ratchet wrench.



- 13 Remove the engine cover.

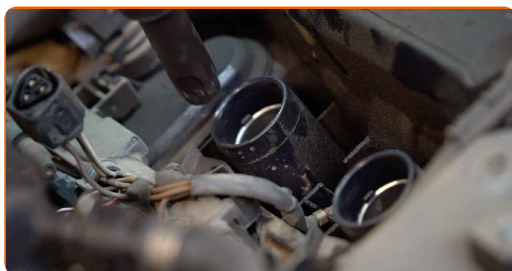


- 14 Unplug the connectors from the ignition coils.





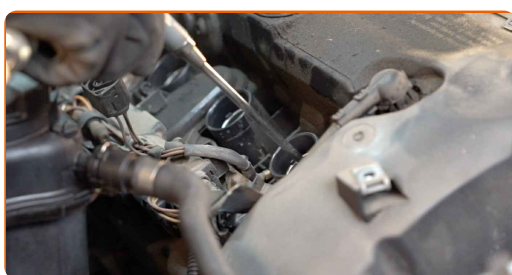
- 15 Take out the ignition coils from the spark plug wells.



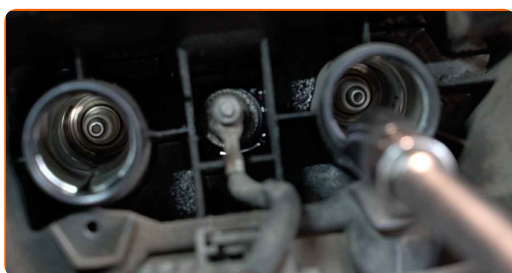
Replacement: spark plugs – BMW Z4 Roadster (E89). AUTODOC recommends:

- Remember the sequence of steps for ignition coil demounting.

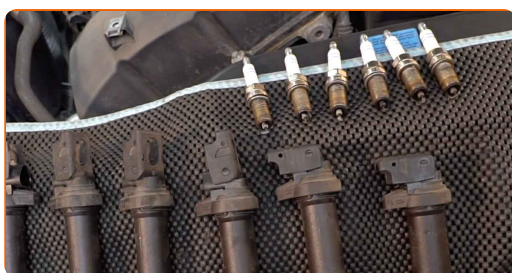
- 16 Clean dirt, dust and debris from inside the spark plug wells.



- 17 Unscrew the spark plugs. Use the spark plug socket #16. Use a ratchet wrench.

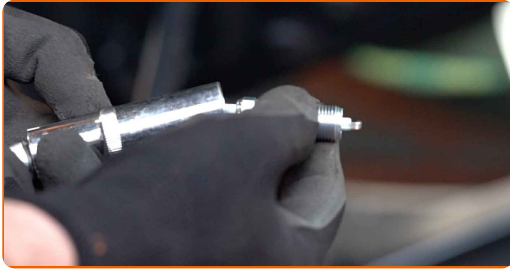


- 18 Take out the spark plugs.



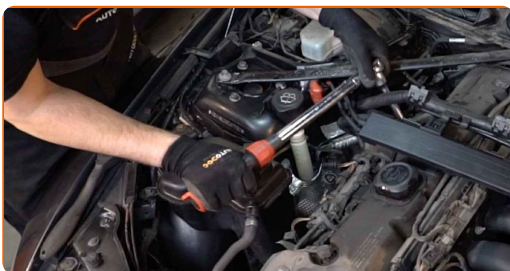
19

Install the new spark plugs into their mounting seats.



20

Screw new spark plugs and tighten them. Use the spark plug socket #16. Use a torque wrench. Tighten it to 27 nm torque.

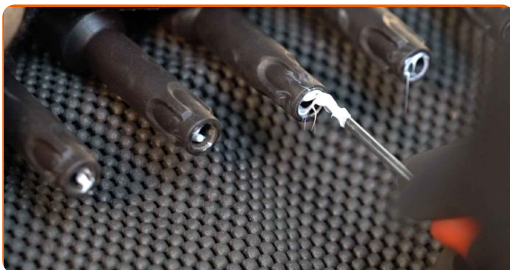


Replacement: spark plugs – BMW Z4 Roadster (E89). AUTODOC experts recommend:

- Don't tighten the plugs with excessive force. Exceeding tightening torque can damage the thread connection.
- Be careful when working with a spark plug wrench. Its skewing can cause damage to the threaded connection.

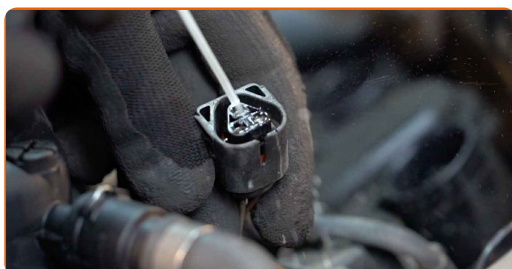
21

Treat the ignition coil tips. Use high-temperature grease. Use a flat screwdriver.



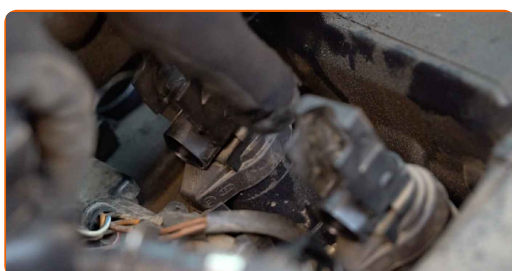
22

Treat the ignition coil connector with electronic spray. The spray will protect the electrical contacts from corrosion, oxidation, and will reduce the contact resistance.



23

Install the ignition coils to the spark plug wells. Make sure you hear a click indicating that it is locked in place.

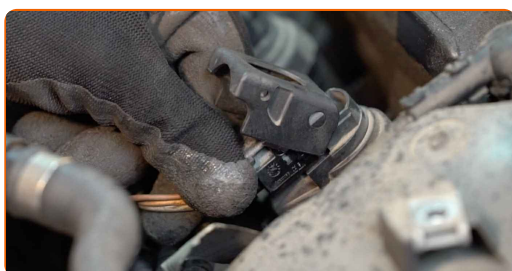


### AUTODOC recommends:

- Replacement: spark plugs – BMW Z4 Roadster (E89). Follow the installation steps.

24

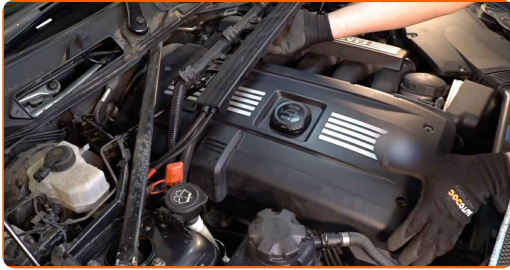
Plug in the connectors of the ignition coils.





25

Install the engine cover and secure it.



Replacement: spark plugs – BMW Z4 Roadster (E89). Tip:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- Do not apply excessive force when installing the part. Otherwise you may damage the fasteners.

26

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



27

Install the protective cover.



**28** Attach the cable duct to the upper part of the microfilter housing.



**29** Attach the electrical wiring to the upper part of the microfilter housing.

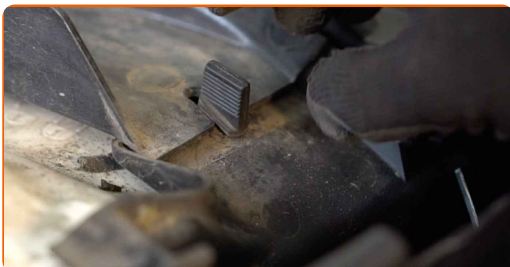


**30** Install the climate control sensors.

**31** Attach the connectors of the climate control sensors.



**32** Attach the retainers of the upper part of the microfilter housing.



**33** Install the wiper arm covers.

