



How to change ignition  
coil on **BMW 3 Compact**  
**(E46)** – 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 3 Compact (E46) 316ti 1.8, BMW 3 Compact (E46) 325ti 2.5, BMW 3 Compact (E46) 318ti 2.0, BMW 3 Compact (E46) 316ti 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: BMW 1 Coupe (E82) 125i 3.0

REPLACEMENT: IGNITION COIL – BMW 3 COMPACT (E46). TOOLS YOU MIGHT NEED:



- Electronic spray
- High-temperature anti-seize lubricant
- HEX bit no.H5.
- Drive socket # 8
- Ratchet wrench
- Flat Screwdriver
- Fender cover

**Buy tools**

Replacement: ignition coil – BMW 3 Compact (E46). AUTODOC recommends:

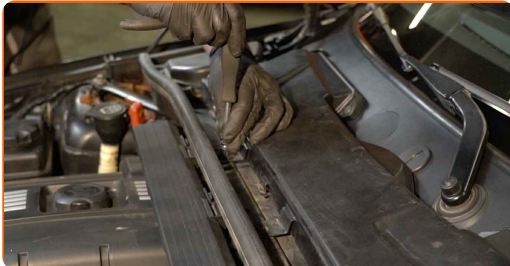
- The replacement procedure is the same for the ignition coils of all cylinders.
- All work should be done with the engine stopped.

## REPLACEMENT: IGNITION COIL – BMW 3 COMPACT (E46). TAKE THE FOLLOWING STEPS:

**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.



**AUTODOC recommends:**

- Replacement: ignition coil – BMW 3 Compact (E46). Do not use excessive force when removing the part as this may damage it.

**5**

Remove the wiper arm covers.



**6**

Detach the connectors from the climate control sensors.



**7**

Remove the climate control sensors.

**8**

Unscrew the fasteners of the lower part of the scuttle panel. Use a drive socket #8. Use a ratchet wrench.



9

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



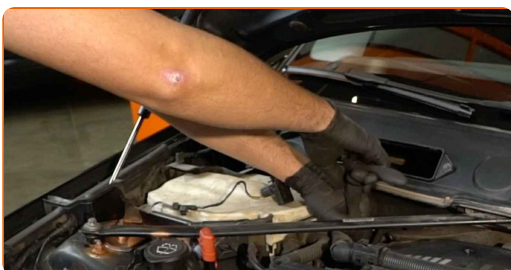
10

Remove the lower part of the scuttle panel.



11

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



12

Remove the engine cover.



**Replacement: ignition coil – BMW 3 Compact (E46). Tip:**

- Do not apply excessive force when removing the part. Otherwise you may damage it.

**13** Detach the connector from the ignition coil.



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



**15** Take out the ignition coil from the spark plug well.

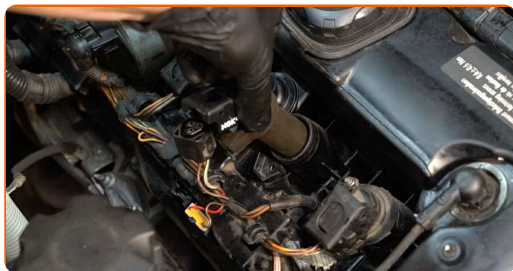


**16** Treat the ignition coil tips. Use high-temperature grease. Use a flat screwdriver.

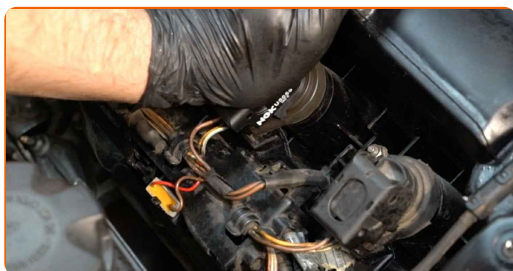




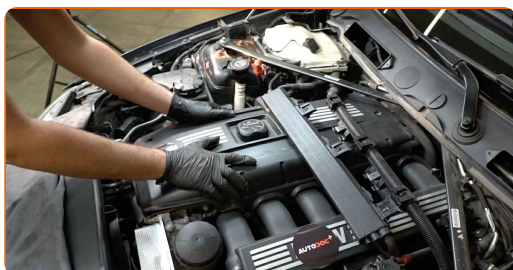
**17** Install the new ignition coil to the spark plug well. Make sure you hear a click indicating that it is locked in place.



**18** Plug in the ignition coil connector.



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

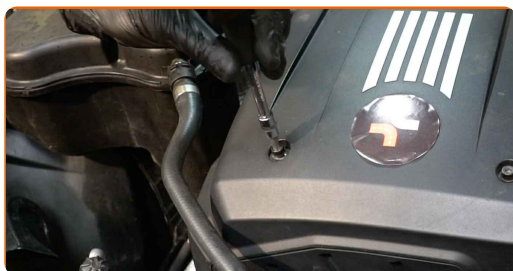


Replacement: ignition coil – BMW 3 Compact (E46). AUTODOC experts recommend:

- 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.



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



**21** Reinstall the lower part of the scuttle panel.



**22** Screw in the fasteners of the lower part of the scuttle panel. Use a drive socket #8. Use a ratchet wrench.



**23** Install the climate control sensors.



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



**25** Install the wiper arm covers.



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



**27** Reinstall the cabin filter housing cover. Make sure you hear a click indicating that it is locked in place.



**AUTODOC recommends:**

- Warning! To avoid damaging the fasteners of the car during installation, do not use excessive force. BMW 3 Compact (E46)

28

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



29

Remove the fender protection cover.

30

Close the hood.

31

Run the engine for a few minutes. This is necessary in order to make sure that the component operates properly.

32

Shut off the engine.

**WELL DONE!** 

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