



How to change ignition  
coil on **BMW 3 Saloon**  
**(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 Saloon (E46) 330xi 3.0, BMW 3 Saloon (E46) 330i 3.0, BMW 3 Saloon (E46) 320i 2.2, BMW 3 Saloon (E46) 325i 2.5, BMW 3 Saloon (E46) 325xi 2.5, BMW 3 Saloon (E46) 318i 2.0, BMW 3 Saloon (E46) 316i 1.8, BMW 3 Saloon (E46) 316i 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 SALOON (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 Saloon (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 SALOON (E46). TAKE THE FOLLOWING STEPS:

1

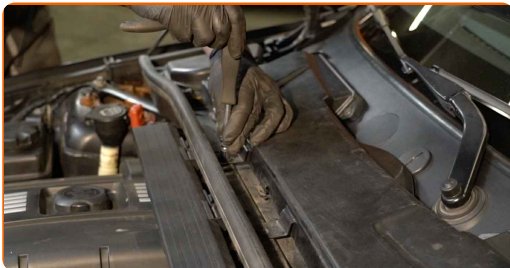
Open the hood.

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 Saloon (E46). Do not use excessive force when removing the part as this may damage it.

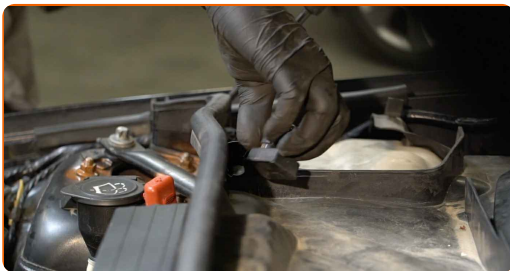
**5**

Remove the wiper arm covers.



**6**

Detach the connectors from the climate control sensors.

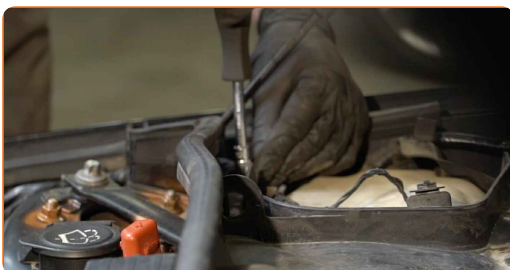


**7**

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

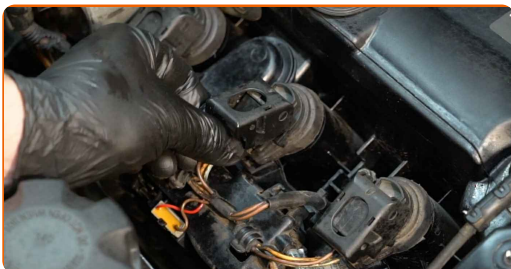
Remove the engine cover.



Replacement: ignition coil – BMW 3 Saloon (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.

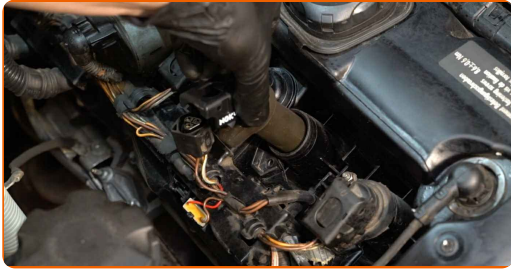


**16** Treat the ignition coil tips. Use high-temperature grease. Use a flat screwdriver.



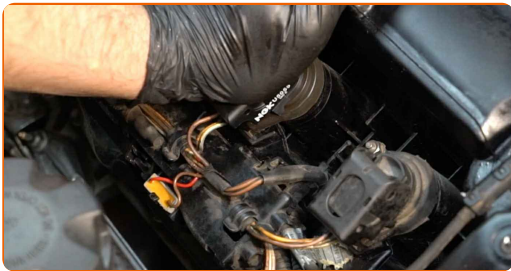
**17**

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.

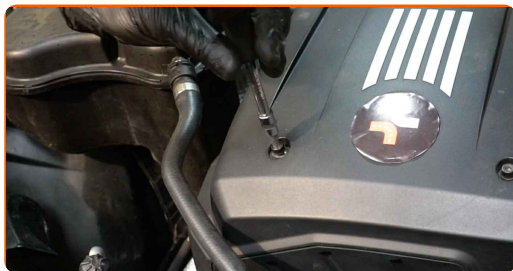


**Replacement: ignition coil – BMW 3 Saloon (E46). AUTODOC experts recommend:**

- 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.



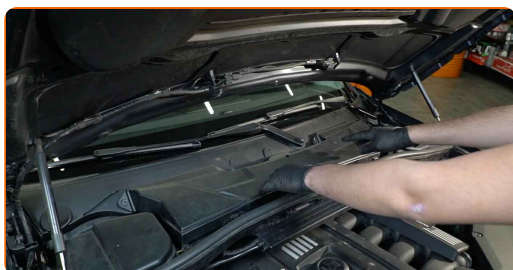
**25** Install the wiper arm covers.



**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 Saloon (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!** 

[VIEW MORE TUTORIALS](#)

# AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

**AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING**



**+ AUTODOC**

GET IT ON  
**Google Play**

 Download on the  
**App Store**

**Download**

**A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR**

**IGNITION COIL: A WIDE SELECTION**

## **DISCLAIMER:**

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AUTODOC shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AUTODOC shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AUTODOC shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AUTODOC strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.

© Copyright 2023 – All the contents of this website, in particular texts, photographs and graphics, are protected by copyright. All rights, including reproduction, publication, editing and translation rights, are reserved by AUTODOC SE.