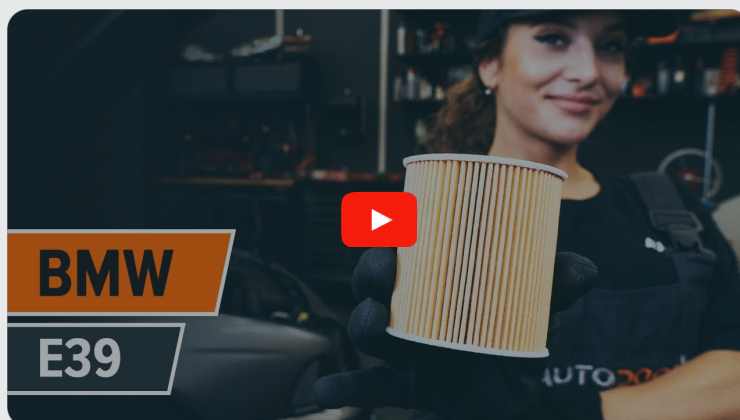




How to change engine oil  
and filter on **BMW 3**  
**Compact (E46)** –  
replacement guide

## 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) 325ti 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: BMW 5 Saloon (E39) 530i 3.0

## REPLACEMENT: ENGINE OIL AND FILTER – BMW 3 COMPACT (E46). TOOLS YOU MIGHT NEED:



- Wire brush
- All-purpose cleaning spray
- Torque wrench
- Drive socket # 19
- Drive socket # 36
- Flat screwdriver
- Ratchet wrench
- Oil drain pan
- Funnel
- Fender cover

**Buy tools**

Replacement: engine oil and filter – BMW 3 Compact (E46). AUTODOC experts recommend:

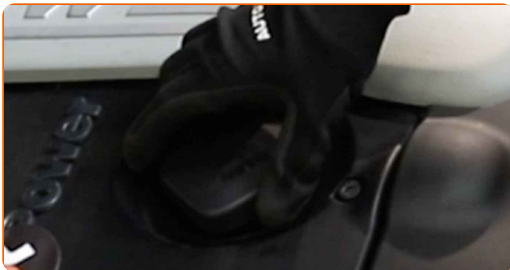
- Replace the oil filter every time when changing motor oil.
- Wear gloves to prevent contact with hot liquid.
- Please note: all work on the car – BMW 3 Compact (E46) – should be done with the engine switched off.

## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

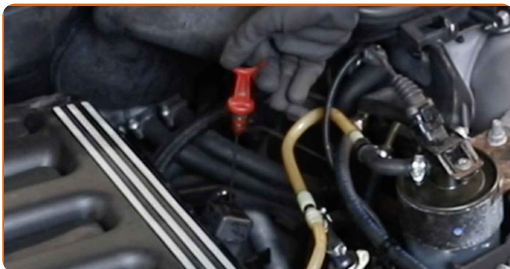
**1** Open the hood.

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

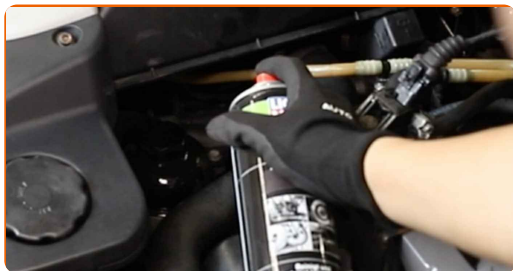
**3** Unscrew the oil filler plug.



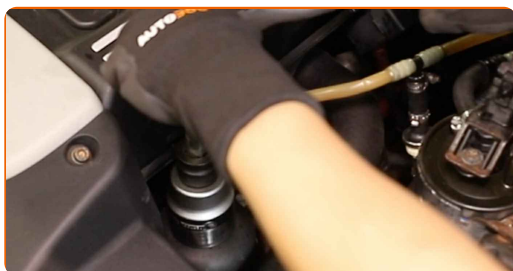
**4** Pull up the oil dipstick.



- 5 Clean the oil filter housing cap. Use all-purpose cleaning spray.



- 6 Unscrew the filter housing cap together with the old filter element. Use a drive socket #36. Use a ratchet wrench.



- 7 Put the old oil filter in the container.



- 8 Lift the car using a jack or place it over an inspection pit.

- 9 Put a waste oil container with at least 7 l capacity under the drainage hole.



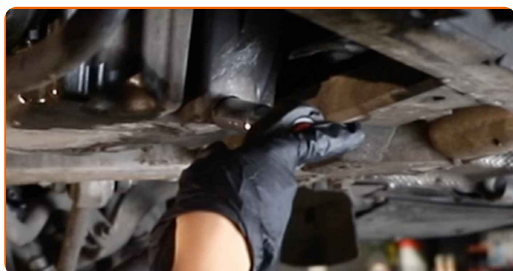
10

Clean the area of the oil pan drainage hole. Use a wire brush. Use all-purpose cleaning spray.



11

Unscrew the drain plug. Use a drive socket #19. Use a ratchet wrench.



12

Drain the used oil.

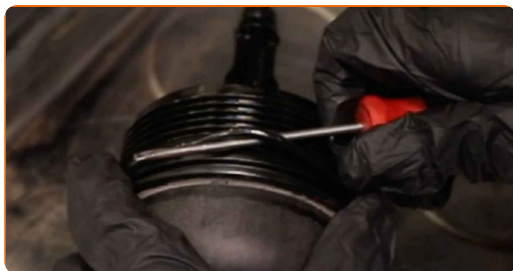


Replacement: engine oil and filter – BMW 3 Compact (E46). Tip:

- Caution! The oil may be hot.

13

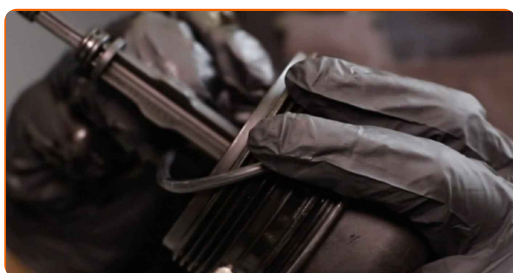
Remove the oil filter cover O-ring. Use a flat screwdriver.



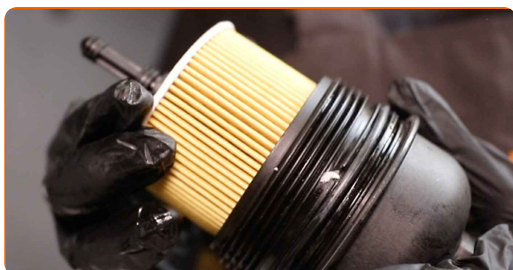
- 14** Clean the oil filter housing cap. Use all-purpose cleaning spray.



- 15** Install a new O-ring to its mounting seat on the filter cover.



- 16** Install the new oil filter to the mounting seat on the filter cover.



- 17** Clean the area of the oil pan drainage hole. Use all-purpose cleaning spray.





- 18** Screw in the new drainage plug and tighten it. Use a drive socket #19. Use a torque wrench. Tighten it to 25 Nm torque.

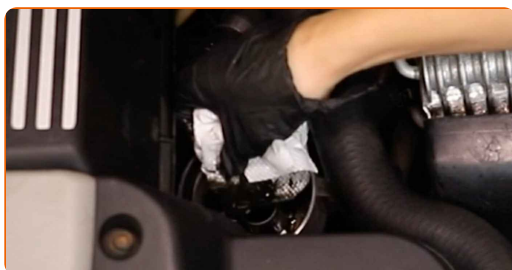


- 19** Clean the area of the oil pan drainage hole. Use all-purpose cleaning spray.

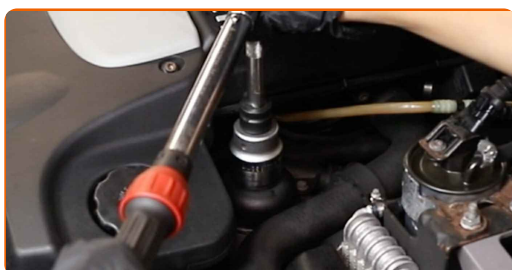


- 20** Lower the car.

- 21** Clean the oil filter seat.



- 22** Install the cover of the oil filter housing and screw it on. Use a drive socket #36. Use a torque wrench. Tighten it to 25 Nm torque.





23 Remove the oil filler cap.



24 Insert the funnel.



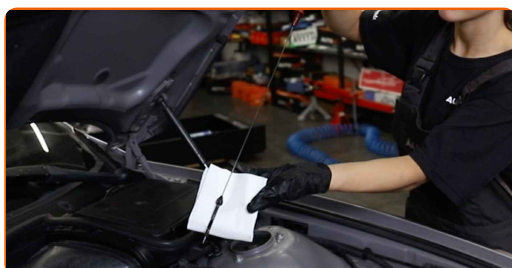
25 Pour new oil into the engine in the amount recommended by the car manufacturer.



Replacement: engine oil and filter – BMW 3 Compact (E46). Professionals recommend:

- Use the oil recommended by the manufacturer.

26 Check the oil level using the dipstick. Top up oil if necessary.

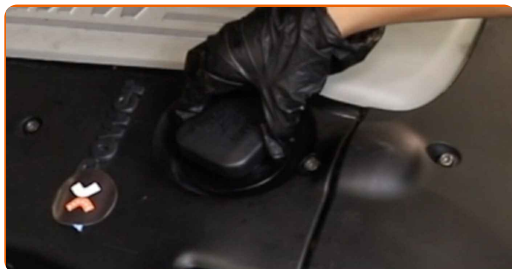


Please note!

- The oil level should be between the Min and Max marks.

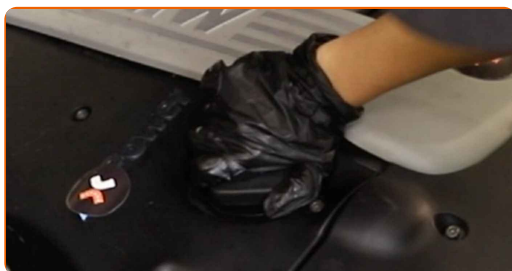
27

Install the oil filler cap.



28

Tighten the oil filler cap.



29

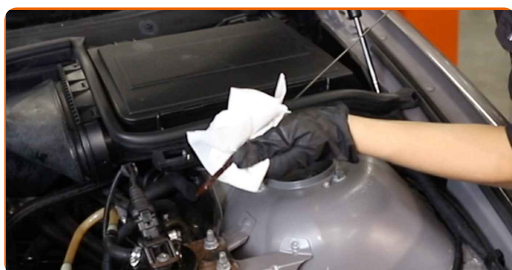
Run the engine for a few minutes.

30

After the oil pressure warning light goes out, stop the engine.

31

Check the oil level 5 minutes after the stop of the engine operation using a dipstick and add oil if necessary.



### Please note!

- The oil level should be between the Min and Max marks.
- Make sure that the oil filler cap is properly tightened.
- Check the threaded plug of the drainage hole and the oil filter seal for tightness. If necessary, carefully tighten them up.

32

Remove the fender protection cover.

33

Close the hood.

### Replacement: engine oil and filter – BMW 3 Compact (E46). Tip from AUTODOC:

- Note that oil pressure warning light, which indicates insufficient pressure in the lubrication system, may be on for a longer time than usual. After a few seconds, the oil will fill all the channels, and the light will go out.
- To protect the environment from pollution, be sure to dispose of the used filters at special collection points.

**WELL DONE!** 

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**OIL FILTER: A WIDE SELECTION**

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