

## VIDEO TUTORIAL



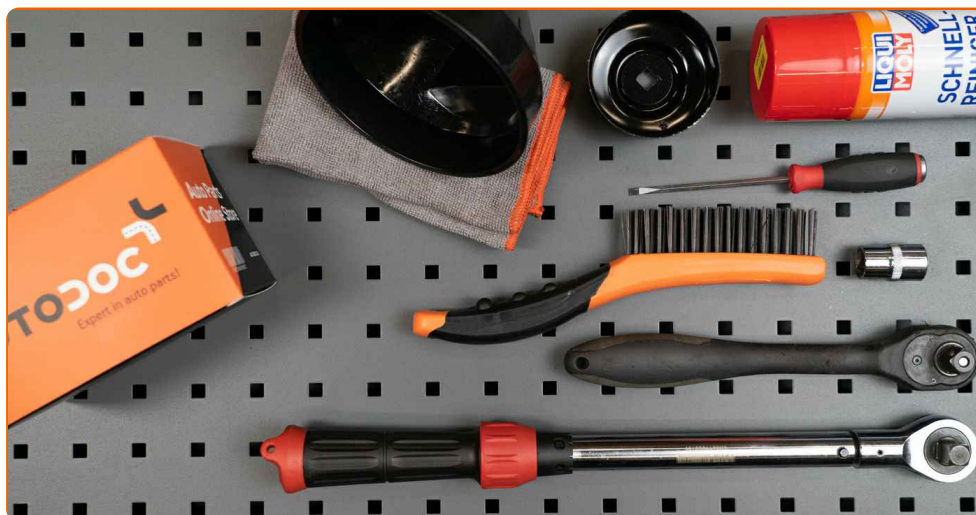
### ⓘ Important!

This replacement procedure can be used for:

BMW 3 Touring (E91) 318i 2.0, BMW 3 Coupe (E92) 318i 2.0, BMW 3 Convertible (E93) 318i 2.0, BMW 3 Compact (E46) 316ti 1.8, BMW 3 Compact (E46) 318ti 2.0, BMW 3 Saloon (E46) 318i 2.0, BMW 3 Coupe (E46) 318Ci 2.0, BMW 3 Saloon (E46) 316i 1.8, BMW 3 Touring (E46) 318i 2.0, BMW 3 Touring (E46) 316i 1.8, BMW 1 Hatchback (E81) 116i 1.6, BMW 3 Saloon (E90) 320i 2.0, BMW Z4 Roadster (E85) 2.0 i, BMW 3 Touring (E91) 320i 2.0, BMW 3 Saloon (E46) 316i 1.6, (+ 27)

The steps may slightly vary depending on the car design.

## REPLACEMENT: ENGINE OIL AND FILTER – BMW E46 CONVERTIBLE. TOOLS YOU MIGHT NEED:



- All-purpose cleaning spray
- Oil filter cup socket 86/16 F
- Drive socket # 17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Funnel
- Oil drain pan
- Microfibre towel
- Fender cover

**BUY TOOLS**

### AUTODOC recommends:

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

## 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

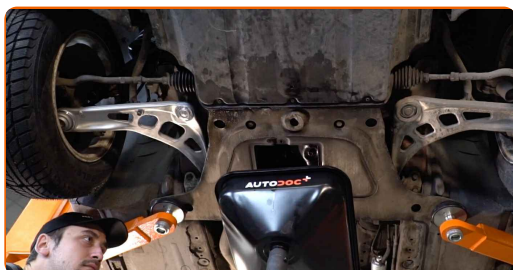
Lift the car using a jack or place it over an inspection pit.

### Replacement: engine oil and filter – BMW E46 convertible. Tip:

- The vehicle must be on even keel, and if it is at an angle, the drain plug must be at the lowest point.

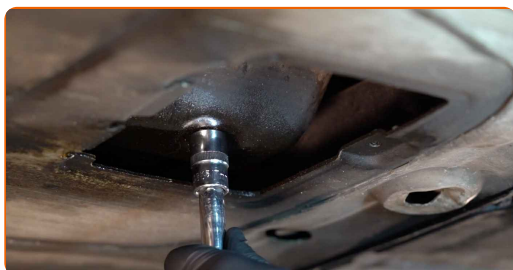
5

Put a waste oil container with at least 6 l capacity under the drainage hole.



6

Unscrew the drain plug. Use a drive socket #17. Use a ratchet wrench.



7

Drain the used oil.



## Replacement: engine oil and filter – BMW E46 convertible. Tip from AUTODOC:

- Caution! The oil may be hot.

8

Unscrew the oil filter. Use the 86/16 F socket.



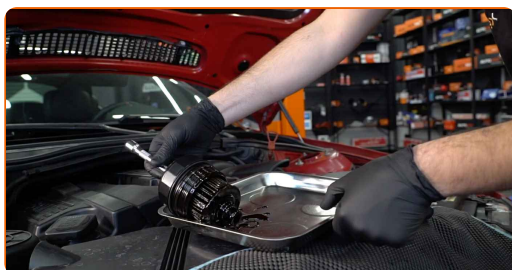
9

Remove the oil filter.



10

Prepare a container for the old oil filter. Put the old oil filter in the container.

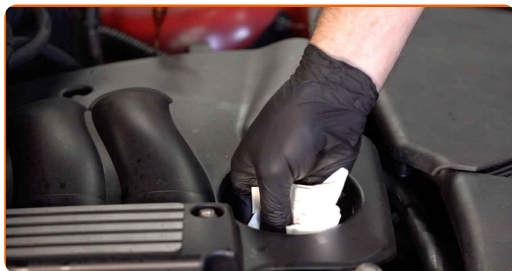


## Replacement: engine oil and filter – BMW E46 convertible. AUTODOC experts recommend:

- Move up the container. The oil starts to drain out of the drainage hole immediately after you have removed the oil filter.



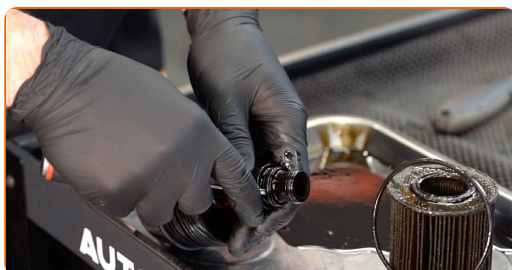
- 11 Cover the oil filter housing with a microfibre towel to prevent dirt and foreign objects from getting into the system.



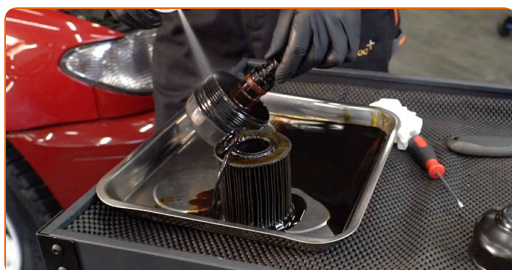
- 12 Detach the oil filter from the filter cover.



- 13 Remove old o-rings from the oil filter cover. Use a flat screwdriver.

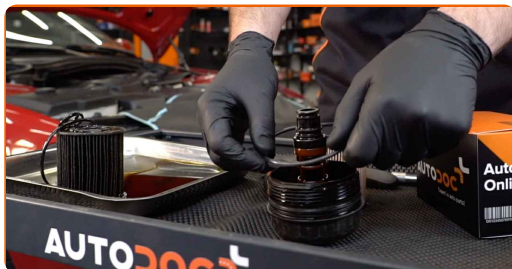


- 14 Clean the oil filter housing cap. Use all-purpose cleaning spray.



15

Install new O-rings and a new oil filter to their mounting seats on the filter cover.

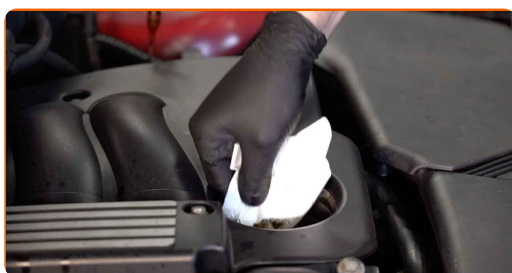


Please note!

- Make sure to install the filter correctly. Don't mix up the sides of the part.

16

Remove the microfibre towel from the oil filter housing.



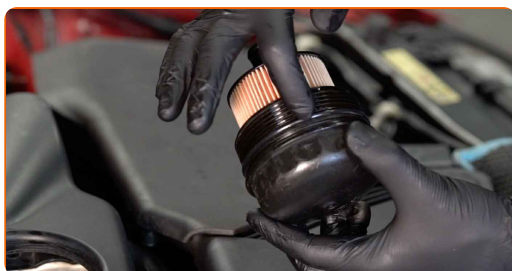
17

Clean the oil filter seat.



18

Lubricate the rubber seal of the new filter with a little amount of fresh oil.



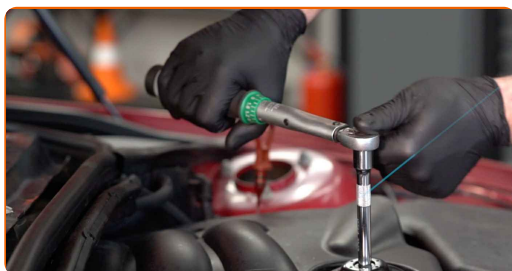
19

Screw the new filter into its place.



20

Screw the cap. Use the 86/16 F socket. Use a torque wrench. Tighten it to 25 Nm torque.



Replacement: engine oil and filter – BMW E46 convertible. Tip from AUTODOC experts:

- Wait until the oil has completely drained from the drainage hole.

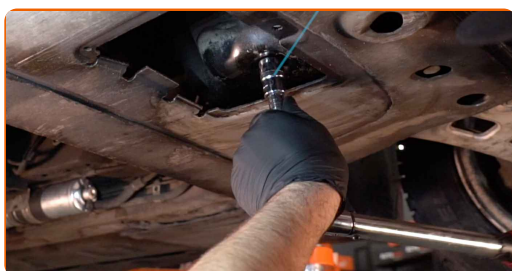
21

Clean the area of the oil pan drainage hole.



22

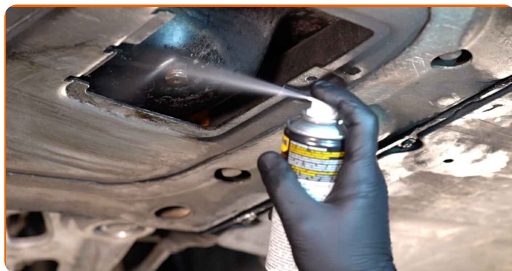
Screw in the new drainage plug and tighten it. Use a drive socket #17. Use a torque wrench. Tighten it to 25 Nm torque.





23

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



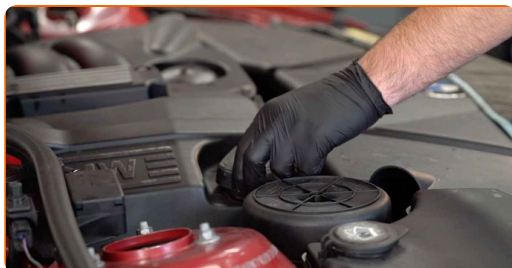
24

Lower the car.



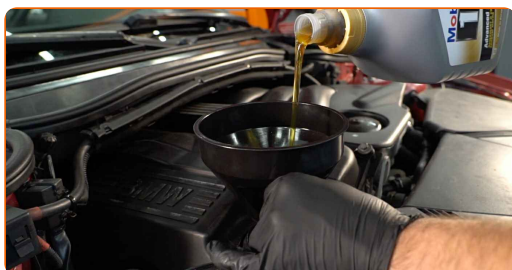
25

Remove the oil filler cap. Insert the funnel.



26

Pour oil into the engine through the filler. Required amount of oil: 5.5 L.

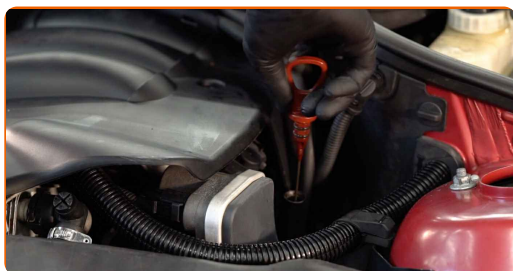


Replacement: engine oil and filter – BMW E46 convertible. Professionals recommend:

- Use the oil recommended by the manufacturer.

27

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.

28

Tighten the oil filler cap.



29

Run the engine for a few minutes. After the oil pressure warning light goes out, stop the engine.

