



How to change spark
plugs on **ALPINA B3
(E46)** – replacement
guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

i Important!

This replacement procedure can be used for:

ALPINA B3 (E46) 3.3, ALPINA B3 (E46) 3.3 All-wheel Drive, ALPINA B3 (E46) 3.4 S

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) 520i 2.0

REPLACEMENT: SPARK PLUGS – ALPINA B3 (E46). LIST OF THE TOOLS YOU'LL NEED:



- High-temperature anti-seize lubricant
- Drive socket # 10
- Spark plug socket # 16
- Ratchet wrench
- Torque wrench
- Telescoping magnet
- Crow bar
- Fender cover

[Buy tools](#)

Replacement: spark plugs – ALPINA B3 (E46). Tip from AUTODOC experts:

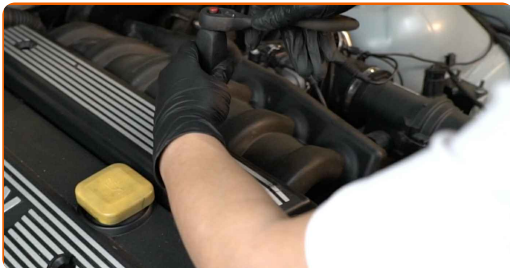
- The replacement procedure is the same for all spark plugs.
- All work should be done with the engine stopped.

REPLACEMENT: SPARK PLUGS – ALPINA B3 (E46). USE THE FOLLOWING PROCEDURE:

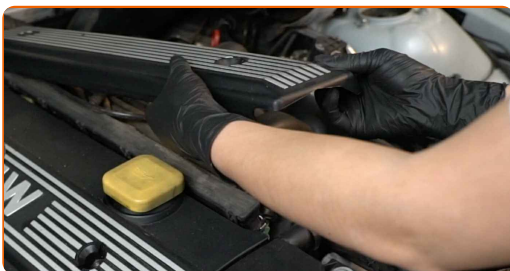
1 Open the bonnet.

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

3 Unscrew the engine cover fastener. Use a drive socket #10. Use a ratchet wrench.



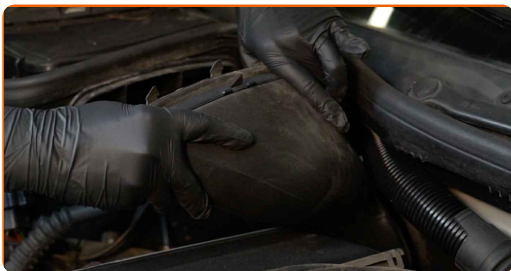
4 Remove the engine cover.



Replacement: spark plugs – ALPINA B3 (E46). Tip:

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

- 5 Detach the air duct housing from the air filter housing.



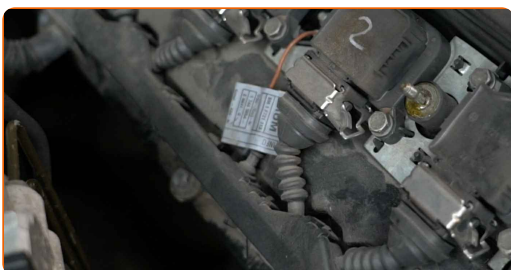
- 6 Unscrew the engine cover fastener. Use a drive socket #10. Use a ratchet wrench.



- 7 Unscrew the oil filler plug.



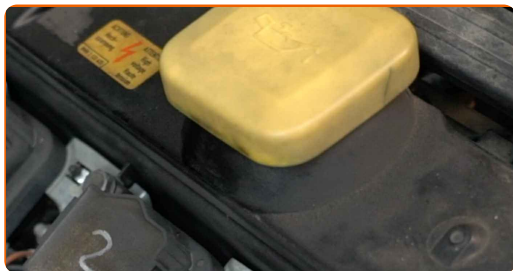
- 8 Remove the engine cover.



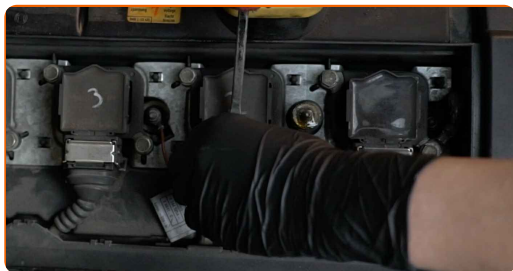
AUTODOC recommends:

- Replacement: spark plugs – ALPINA B3 (E46). To avoid damaging the part when removing it, do not use excessive force.

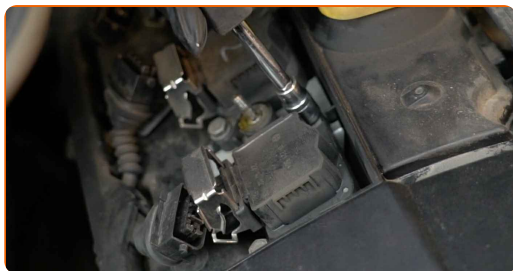
9 Tighten the oil filler cap.



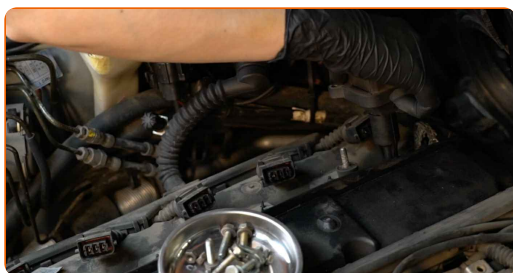
10 Unplug the connectors from the ignition coils. Use a crowbar.



11 Unscrew the fasteners of the ignition coils. Use a drive socket #10. Use a ratchet wrench.



12 Take out the ignition coils from the spark plug wells.



Replacement: spark plugs – ALPINA B3 (E46). AUTODOC recommends:

- Remember the sequence of steps for ignition coil demounting.

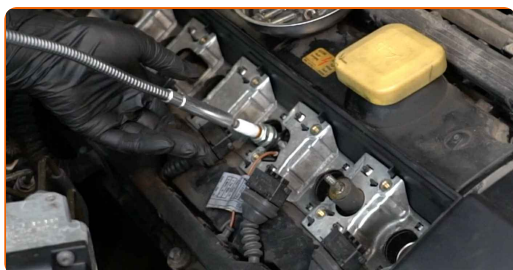
- 13** Clean dirt, dust and debris from inside the spark plug wells.



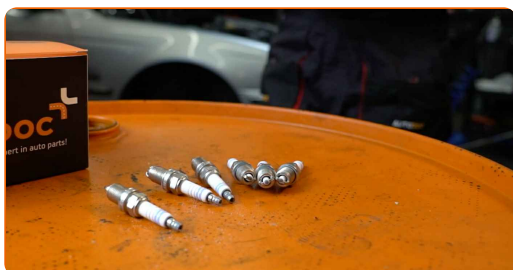
- 14** Unscrew the spark plugs. Use the spark plug socket #16. Use a ratchet wrench.



- 15** Take out the spark plugs. Use a telescoping magnet.

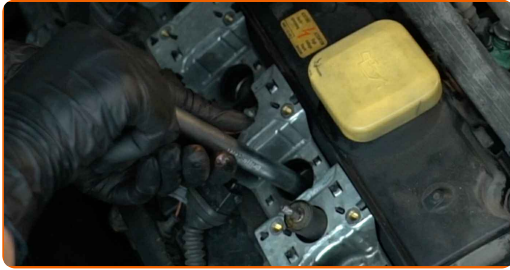


- 16** Apply a thin layer of a special high temperature anti-seize lubricant to the threads of the new spark plugs.



17

Install the new spark plugs into their mounting seats. Use the spark plug socket #16.



18

Screw new spark plugs and tighten them. Use the spark plug socket #16. Use a torque wrench. Tighten it to 26 nm torque.

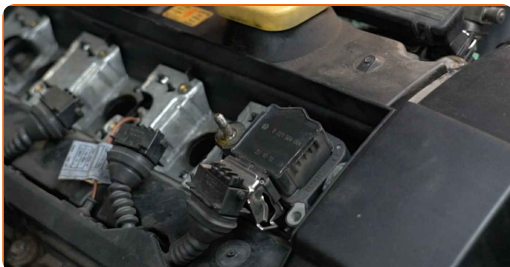


Replacement: spark plugs – ALPINA B3 (E46). Tip from AUTODOC experts:

- 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.

19

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

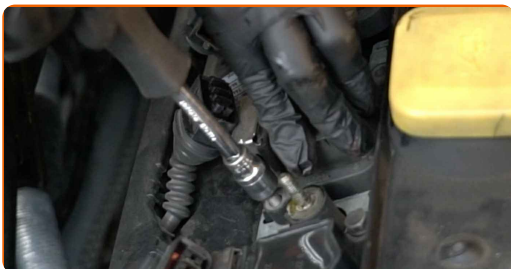


AUTODOC recommends:

- Replacement: spark plugs – ALPINA B3 (E46). Follow the installation steps.

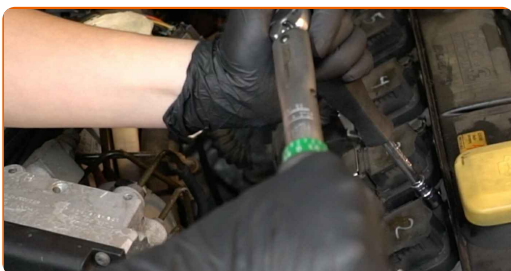
20

Tighten the fasteners of the ignition coils. Use a drive socket #10. Use a ratchet wrench.



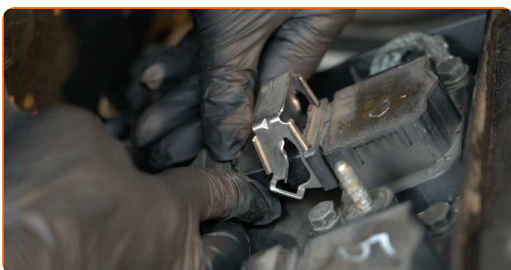
21

Tighten the ignition coil fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 11 nm torque.



22

Plug in the connectors of the ignition coils.

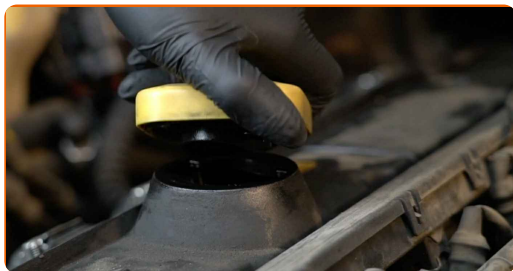


23

Unscrew the oil filler plug.

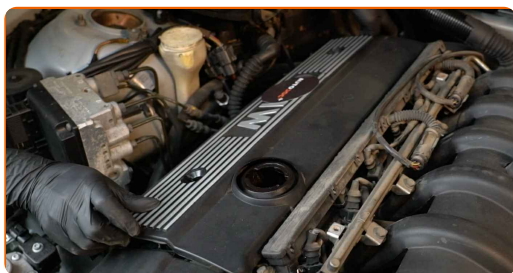
24

Remove the oil filler cap.



25

Install the engine cover and secure it.



Replacement: spark plugs – ALPINA B3 (E46). Tip:

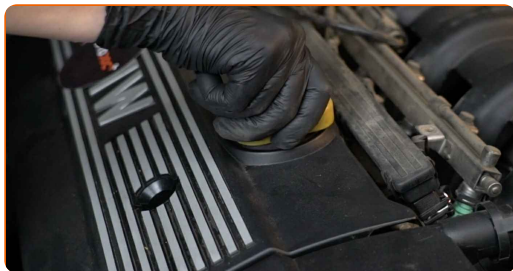
- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- Do not apply excessive force when installing the part. Otherwise you may damage the fasteners.

26

Install the oil filler cap.

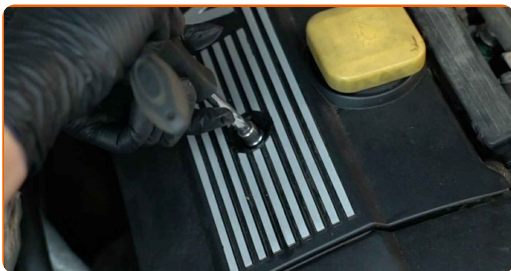
27

Tighten the oil filler cap.



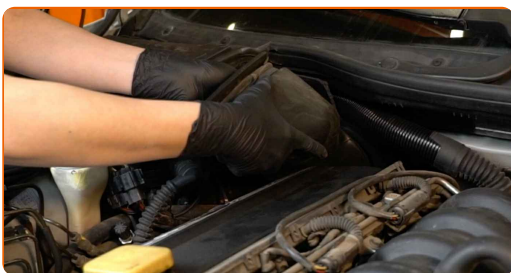
28

Screw in the engine cover fasteners. Use a drive socket #10. Use a ratchet wrench.



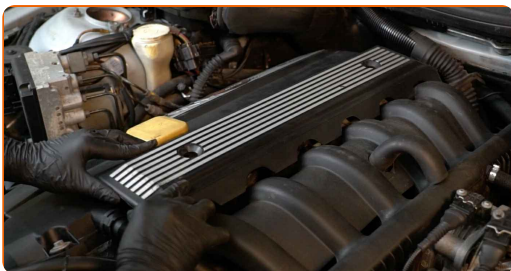
29

Install the air duct housing.



30

Install the engine cover and secure it.

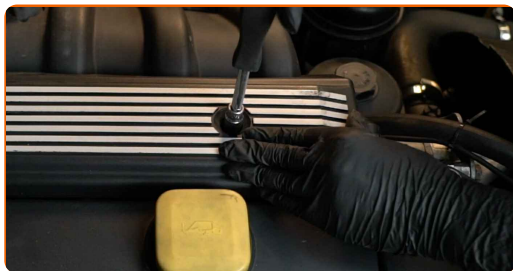


Replacement: spark plugs – ALPINA B3 (E46). AUTODOC experts recommend:

- 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.

31

Screw in the engine cover fasteners. Use a drive socket #10. Use a ratchet wrench.



32

Remove the fender protection cover.

33

Close the hood.

34

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

35

Shut off the engine.

WELL DONE! 

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SPARK PLUGS: A WIDE SELECTION

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