# AUTODOC

How to change spark plugs on **BMW 1 Hatchback (E87)** – 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: BMW 1 Hatchback (E87) 116i 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 3 Saloon (E36) 323i 2.5

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# REPLACEMENT: SPARK PLUGS – BMW 1 HATCHBACK (E87). TOOLS YOU MIGHT NEED:



- Electronic spray
- High-temperature anti-seize lubricant
- Torque wrench
- Drive socket # 10
- Spark plug socket # 16

- Ratchet wrench
- Flat screwdriver
- Crow bar
- Fender cover

**Buy tools** 

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# Replacement: spark plugs – BMW 1 Hatchback (E87). AUTODOC experts recommend:

- The replacement procedure is the same for all spark plugs.
- Please note: all work on the car BMW 1 Hatchback (E87) should be done with the engine switched off.

### CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

- Open the hood.
- Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.
- Unscrew the engine cover fastener. Use a drive socket #10. Use a ratchet wrench.



Remove the engine cover.



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#### **AUTODOC** recommends:

• Replacement: spark plugs – BMW 1 Hatchback (E87). To avoid damaging the part when removing it, do not use excessive force.





- 6 Unscrew the oil filler plug.
- Remove the oil filler cap.



Remove the engine cover.



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#### **AUTODOC** recommends:

- Replacement: spark plugs BMW 1 Hatchback (E87). Do not use excessive force when removing the part as this may damage it.
- 9 Install the oil filler cap.
- Tighten the oil filler cap.

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



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



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Take out the ignition coils from the spark plug wells.



Replacement: spark plugs – BMW 1 Hatchback (E87). Tip from AUTODOC experts:

- Remember the sequence of steps for ignition coil demounting.
- Clean dirt, dust and debris from inside the spark plug wells.



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



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Take out the spark plugs.



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



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



Screw new spark plugs and tighten them. Use the spark plug socket #16. Use a torque wrench. Tighten it to 24 nm torque.



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# Replacement: spark plugs – BMW 1 Hatchback (E87). AUTODOC recommends:

- 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.

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



Replacement: spark plugs – BMW 1 Hatchback (E87). AUTODOC experts recommend:

• Follow the installation sequence.

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Tighten the ignition coil fasteners. Use a drive socket #10. Use a torque wrench. Tighten it to 7 nm torque.



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Treat the ignition coil connector with electronic spray.



Plug in the connectors of the ignition coils.



Unscrew the oil filler plug.



- Remove the oil filler cap.
- Install the engine cover and secure it.



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#### **AUTODOC** recommends:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- Replacement: spark plugs BMW 1 Hatchback (E87). To avoid damaging the part during installation, do not use excessive force.
- 27 Install the oil filler cap.
- Tighten the oil filler cap.



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



Install the engine cover and secure it.



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# Replacement: spark plugs – BMW 1 Hatchback (E87). AUTODOC experts recommend:

- Make sure the engine cover is properly seated. It should not be displaced with respect to the guiding fasteners.
- When installing, do not use excessive force to avoid damage to the part.
- Screw in the engine cover fasteners. Use a drive socket #10. Use a ratchet wrench.



- Run the engine for a few minutes. This is necessary in order to make sure that the component operates properly.
- 33 Shut off the engine.
- Remove the fender protection cover.
- Close the hood.



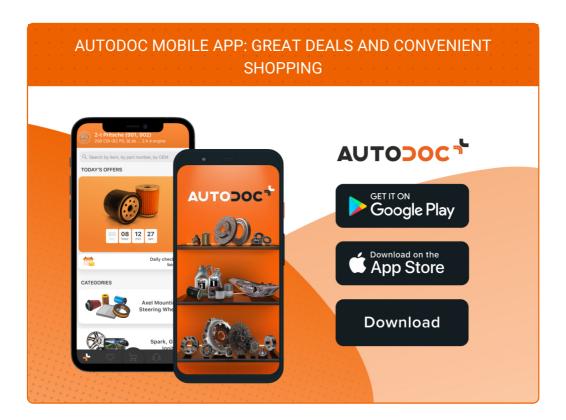
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