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How to change rear shock absorbers on **BMW E92** – replacement guide







#### **VIDEO TUTORIAL**



### (i) Important!

This replacement procedure can be used for:

BMW 3 Touring (E91) 325i 3.0, BMW 3 Touring (E91) 318d 2.0, BMW 3 Saloon (E90) 318d 2.0, BMW 3 Touring (E91) 318i 2.0, BMW 3 Touring (E91) 316d 2.0, BMW 1 Coupe (E82) 118d 2.0, BMW 3 Coupe (E92) 318i 2.0, BMW 3 Convertible (E93) 318i 2.0, BMW 3 Convertible (E93) 325d 3.0, BMW 1 Hatchback (E81) 116i 1.6, BMW 1 Hatchback (E81) 120d 2.0, BMW 3 Saloon (E90) 320i 2.0, BMW 3 Saloon (E90) 325i 2.5, BMW 3 Saloon (E90) 330i 3.0, BMW 3 Saloon (E90) 320d 2.0, (+ 67)

The steps may slightly vary depending on the car design.

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## REPLACEMENT: SHOCK ABSORBERS – BMW E92. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #15
- Torx bit T30
- Drive socket # 6
- Drive socket # 17

- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Phillips screwdriver
- Clip removal tool
- Crow bar
- Hydraulic transmission jack
- Wheel chock

**BUY TOOLS** 

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#### Replacement: shock absorbers – BMW E92. Tip from AUTODOC experts:

- Both shock absorbers of the rear suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock absorbers of the rear suspension.
- All work should be done with the engine stopped.

## REPLACEMENT: SHOCK ABSORBERS – BMW E92. USE THE FOLLOWING PROCEDURE:

1

Open the boot lid.



Unscrew the fasteners of the side plastic trim panel.



Remove the side plastic cover.



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Fold down the backrests of the rear seats.



Unscrew the fastener of the central protective plastic panel. Use a clip removal tool. Use a Phillips screwdriver.



6 Remove the rubber strip.

8



Remove the central protective plastic panel.



Remove the clips of the boot side lining. Use a clip removal tool.



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9 Unscrew the fastener of the boot side lining. Use Torx T30. Use a ratchet wrench.



Raise the lower lining of the boot.



11 Remove the rubber strip.



Detach the boot side lining.

13



Remove the mount cap from the shock absorber upper fastener.



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Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



Loosen the upper fastener of the shock absorber. Use a combination spanner #15. Use a drive socket #6. Use a ratchet wrench.



Secure the wheels with chocks.

18

Loosen the wheel mounting bolts. Use wheel impact socket #17.



Raise the rear of the car and secure on supports.



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19 Unscrew the wheel bolts.



### Replacement: shock absorbers – BMW E92. AUTODOC recommends:

• To avoid injury, hold up the wheel when unscrewing the bolts.

Remove the wheel.

22



Clean the shock absorber fasteners. Use a wire brush. Use WD-40 spray.



Support the arm. Use a hydraulic transmission jack.



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Unscrew the lower fastener of the shock absorber. Use a drive socket #17.



Remove the support from under the arm.



#### **AUTODOC** recommends:

- Replacement: shock absorbers BMW E92. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.
- Detach the lower part of the shock absorber. Use a crowbar.



Unscrew the upper fastener of the shock absorber. Use a combination spanner #15. Use a drive socket #6. Use a ratchet wrench.



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#### Replacement: shock absorbers – BMW E92. Tip:

• To avoid injuries, hold the shock absorber when undoing the fastening bolts.

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Remove the shock absorber.



Remove the shock absorber dust cap and the bump stop.



## Replacement: shock absorbers – BMW E92. Tip from AUTODOC experts:

 Examine the shock absorber dust cap and the bump stop. Replace them if necessary.

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Treat the shock absorber mounting seats. Use a wire brush. Use WD-40 spray.



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30







Install the dust sleeve and the bump stop on the new shock absorber.



### Replacement: shock absorbers – BMW E92. Professionals recommend:

• Before installing a new shock absorber you should pump it manually 3-5 times.

Place the shock absorber in the wheel arch and secure it.



#### **AUTODOC** recommends:

- Important! Hold the shock absorber while screwing in the fastening bolts. BMW E92
- 32 Support the arm. Use a hydraulic transmission jack.



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Screw the upper fastener of the shock absorber. Use a combination spanner #15. Use a drive socket #6. Use a ratchet wrench.



Tighten the lower fastener of the shock absorber. Use a drive socket #17. Use a torque wrench. Tighten it to 60 Nm torque.



Remove the support from under the arm.



#### **AUTODOC** recommends:

 BMW E92 – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

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Treat the surface where the brake disc contacts the wheel rim. Use copper grease.



Clean the brake disk surface. Use a brake cleaner.



## Replacement: shock absorbers – BMW E92. AUTODOC recommends:

• After applying the spray, wait a few minutes.

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Install the wheel.



#### **AUTODOC** recommends:

 Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW E92

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Screw in the wheel bolts. Use wheel impact socket #17.



Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 120 nm torque.



Remove the jacks and chocks.



Tighten the top shock absorber fastening. Use a combination spanner #15. Use a drive socket #6. Use a ratchet wrench. Use a torque wrench. Tighten it to 27 Nm torque.



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Treat the shock absorber fasteners. Use copper grease.



Install the mount cap on the shock absorber upper fastener.



Attach the side lining of the boot.



Install the central protective plastic panel.

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Screw in the fastener of the central protective plastic panel. Use a Phillips screwdriver.



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48 Install the rubber strip.



Put down the lower lining of the boot.



Screw in the fastener of the boot side lining. Use Torx T30. Use a ratchet wrench.



51 Install the clips of the boot side lining.



Install the side plastic panel.



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Screw the fasteners of the side plastic trim panel.



Return the seat to its original position.



Close the lid of the luggage compartment.



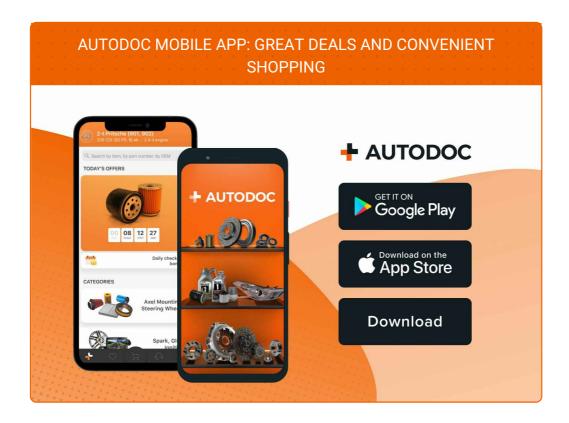
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