



How to change rear coil  
springs on **Mazda 3 BK** –  
replacement guide

## VIDEO TUTORIAL

** Important!**

This replacement procedure can be used for:

MAZDA 3 Hatchback (BK) 1.6, MAZDA 3 Hatchback (BK) 2.0, MAZDA 3 Saloon (BK) 2.0, MAZDA 3 Saloon (BK) 1.6 DI Turbo, MAZDA 3 Hatchback (BK) 1.6 DI Turbo, MAZDA 3 Hatchback (BK) 1.4

The steps may slightly vary depending on the car design.

**REPLACEMENT: COIL SPRINGS – MAZDA 3 BK. TOOLS YOU MIGHT NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #17
- Drive socket # 17
- HEX bit no.H6.
- Wheel impact socket #19
- Ratchet wrench
- Torque wrench
- Crow bar
- Hydraulic transmission jack
- Wheel chock

**BUY TOOLS**

Replacement: coil springs – Mazda 3 BK. Tip from AUTODOC:

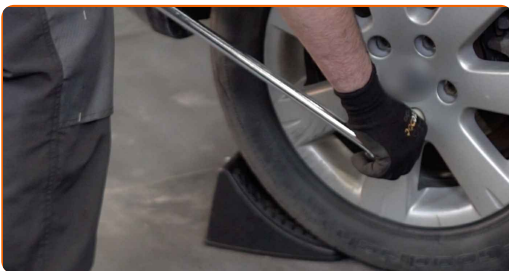
- Both coil springs of the rear suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right coil springs of the rear suspension.
- Please note: all work on the car – Mazda 3 BK – should be done with the engine switched off.

**CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:**

**1** Secure the wheels with chocks.



**2** Loosen the wheel mounting bolts. Use wheel impact socket #19.



**3** Raise the rear of the car and secure on supports.



4

Unscrew the wheel bolts.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
Mazda 3 BK

5

Remove the wheel.



6

Clean the control arm fasteners. Use a wire brush. Use WD-40 spray.

7

Unscrew the fastener connecting the control arm to the rear knuckle. Use a drive socket #17. Use a ratchet wrench.



**8** Support the arm. Use a hydraulic transmission jack.



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

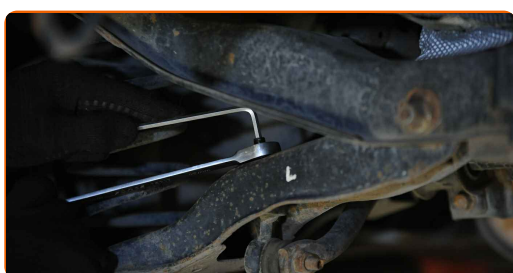
**10** Unscrew the lower fastener of the shock absorber. Use a drive socket #17. Use a ratchet wrench.



**11** Remove the fastening bolts (2 pieces).

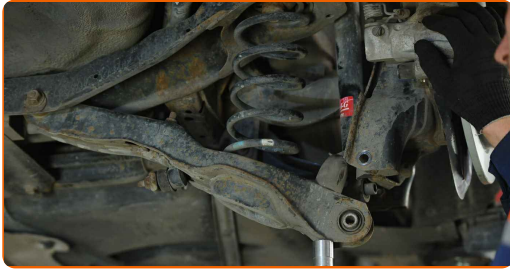
**12** Detach the lower part of the shock absorber.

**13** Unscrew the fastener connecting the stabilizer link to the control arm. Use a combination spanner #17. Use HEX No.H6. Use a ratchet wrench.



**14** Remove the fastening bolt.

**15** Remove the support from under the arm.

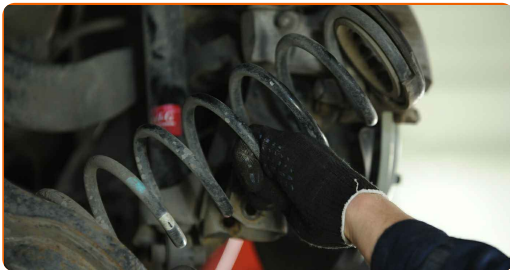


**AUTODOC recommends:**

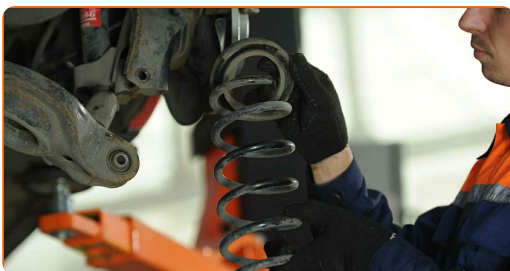
- Replacement: shock absorbers – Mazda 3 BK. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

**16** Pull down the suspension control arm. Use a crowbar.

**17** Remove the spring.



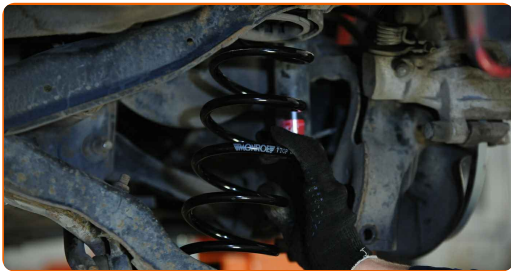
**18** Remove the rubber spring spacer.



**19** Install the rubber spacer on the new coil spring.



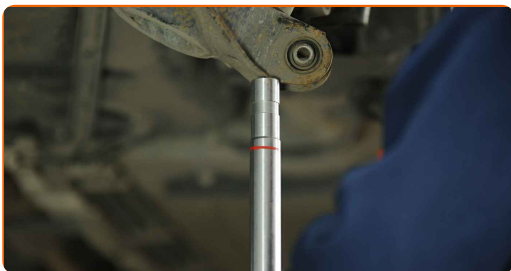
**20** Install the spring.



Replacement: coil springs – Mazda 3 BK. Professionals recommend:

- Make sure that the coil spring is correctly positioned in its mounting seats.

**21** Support the arm. Use a hydraulic transmission jack.



**22** Install the fastening bolt. Use a crowbar.



- 23** Tighten the fastener connecting the suspension arm to the rear knuckle. Use a drive socket #17. Use a torque wrench. Tighten it to 75 Nm torque.



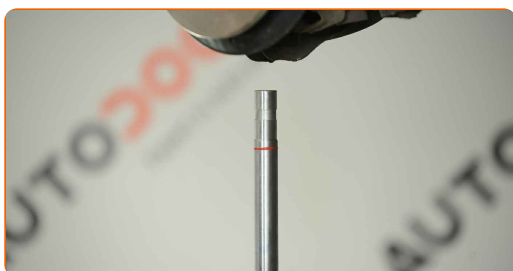
- 24** Attach the lower part of the shock absorber.

- 25** Install the fastening bolt.

- 26** Tighten the lower fastener of the shock absorber. Use a drive socket #17. Use a torque wrench. Tighten it to 76 Nm torque.



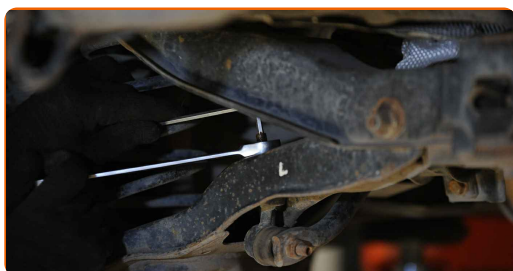
- 27** Remove the support from under the arm.



**AUTODOC recommends:**

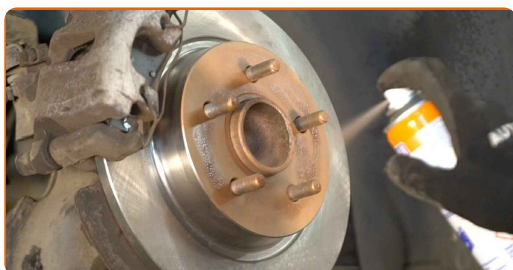
- Replacement: shock absorbers – Mazda 3 BK. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

- 28** Install the fastener connecting the stabiliser link to the control arm and tighten it. Use a combination spanner #17. Use HEX No.H6. Use a torque wrench. Tighten it to 52 Nm torque.

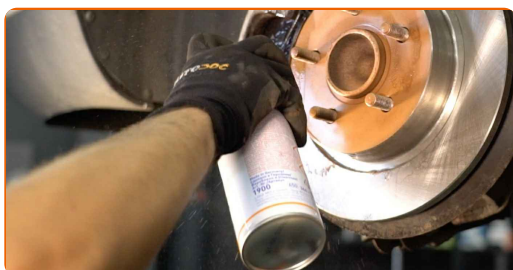


- 29** Treat the shock absorber fasteners. Treat all joints of the arm. Treat all joints of the stabiliser link. Use copper grease.

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



- 31** Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: coil springs – Mazda 3 BK. After applying the spray, wait a few minutes.

**32** Install the wheel.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. Mazda 3 BK

**33** Screw in the wheel bolts. Use wheel impact socket #19.



**34** Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #19. Use a torque wrench. Tighten it to 118 nm torque.



35

Remove the jacks and chocks.



**WELL DONE!** 

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