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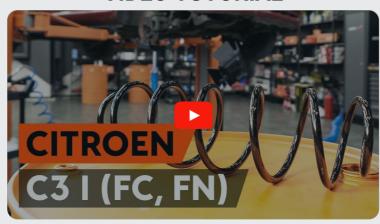
How to change front coil springs on **Citroen C3 1** – replacement guide







VIDEO TUTORIAL



i Important!

This replacement procedure can be used for: CITROËN C3 I Hatchback (FC_, FN_) 1.4 HDi

The steps may slightly vary depending on the car design.

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REPLACEMENT: COIL SPRINGS – CITROEN C3 1. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #16
- Combination spanner #17
- Combination spanner #22
- Drive socket #16
- Drive socket # 17
- Drive socket # 19
- Drive socket # 22
- Drive socket # 30
- HEX bit No.H7.
- Torx bit T30

- Wheel impact socket #17
- Shock absorber socket
- Ratchet wrench
- Torque wrench
- Flat chisel
- Pin punch
- Tap wrench
- Hammer
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

BUY TOOLS

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Replacement: coil springs – Citroen C3 1. AUTODOC experts recommend:

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

REPLACEMENT: COIL SPRINGS – CITROEN C3 1. USE THE FOLLOWING PROCEDURE:

1

Open the bonnet.



2

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



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Clean the fasteners of the shock strut upper mount. Use a wire brush. Use WD-40 spray.



Loosen the upper fastener of the shock strut mount. Use HEX No.H7. Use a combination spanner #22. Use a ratchet wrench.



Secure the wheels with chocks.



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



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Clean the fastener of the driveshaft. Use a wire brush. Use WD-40 spray.



Unstake the fastener of the driveshaft. Use a flat metal-working chisel. Use a hammer.



Loosen the fastener of the driveshaft. Use a drive socket #30. Use a tap wrench.



Raise the front of the car and secure on supports.

10



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11 Unscrew the wheel bolts.



AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.
 Citroen C3 1
- Remove the wheel.

14



Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



Disconnect the wiring and the brake hose from the bracket on the shock strut. Use a crowbar.



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Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #17. Use Torx T30. Use a ratchet wrench.



16 Remove the stabilizer rod.

18



Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



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Unscrew the fastener connecting the ball joint to the suspension control arm. Use a drive socket #16. Use a combination spanner #16. Use a tap wrench.



Disconnect the spherical joint from the arm.



Unscrew the fastener connecting the drive shaft to the wheel hub. Use a drive socket #30.



Remove the drive shaft. Use a pin punch. Use a hammer.

22



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Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #16. Use a tap wrench.



Remove the fastening bolt.



Prop up the steering knuckle. Use a hydraulic transmission jack.



Release the lower fastener connecting the shock strut to the steering knuckle. Use a special drive socket to remove the shock absorber. Use a ratchet wrench.



Disconnect the steering knuckle from the shock absorber strut. Use a hammer.



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Unscrew the top fastening of the shock strut mount. Use a drive socket #22.



AUTODOC recommends:

 Citroen C3 1 – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

Remove the suspension strut.

30



Set the shock absorber strut on the spring compressor tool.



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Replacement: coil springs – Citroen C3 1. AUTODOC experts recommend:

- Note that when using a spring compressor, spring coils need to be securely gripped, compressing the spring on the opposite sides.
- Ensure the correct position of the spring in the retainer.
- Make sure that the spring coils tightly entered the lock handles.
- Compress the spring.



Remove the strut piston rod nut. Use a drive socket #19. Use HEX No.H7. Use a ratchet wrench.



Remove the top strut mount.



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Release the coil spring.



Remove the spring.



AUTODOC recommends:

- Replacement: coil springs Citroen C3 1. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.
- Install the spring on the shock absorber.



Compress the spring.



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Install the upper strut mount and the strut mount bearing.



Tighten the shock strut piston rod nut. Use HEX No.H7. Use a drive socket #19. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: coil springs – Citroen C3 1. AUTODOC recommends:

• Check to make sure the spring is positioned correctly. Avoid its misalignment.

Decompress the spring.



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Remove the assembled shock strut.



Install the shock strut into the wheel arch.



Screw the top fastening of the shock strut mount. Do not tighten it.



AUTODOC recommends:

- Citroen C3 1 To avoid injury, hold the suspension strut while screwing in the fastening bolts.
- Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.



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Fix the shock absorber strut on the steering knuckle.



46 Install the fastening bolt.

48



Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #16.



Remove the support from under the steering knuckle.



AUTODOC recommends:

 Replacement: coil springs – Citroen C3 1. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

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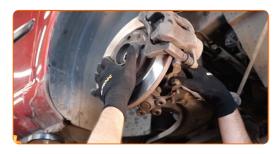




Clean the splines of the drive shaft CV joint. Use a wire brush. Use WD-40 spray.



Install the drive shaft.



Attach the ball joint to the control arm.



Screw the fasteners of the ball joint. Use a drive socket #16.



53 Install the transverse stabilizer link.



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Tighten the stabiliser link fastener. Use a drive socket #17.



Fasten the brake hose on the strut. Connect the fastener of the ABS sensor cable to the shock absorber strut.



Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #16. Use a torque wrench. Tighten it to 59 Nm torque.



Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 35 Nm torque.



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Tighten the ball joint fastener. Use a drive socket #16. Use a combination spanner #16. Use a torque wrench. Tighten it to 52 Nm torque.



Screw the nut of the drive shaft. Use a drive socket #30.



Treat all joints of the arm. Treat the shock strut fasteners. Use copper grease.



Treat all joints of the stabiliser link. Use copper grease.



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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.



AUTODOC recommends:

• After applying the spray, wait a few minutes.

64

Install the wheel.



AUTODOC recommends:

 Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. Citroen C3 1

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



Lower the car.

68



Tighten the drive shaft nut. Use a drive socket #30. Use a torque wrench. Tighten it to 245 Nm torque.



Tighten the wheel bolts using a criss-cross pattern. Use a torque wrench. Tighten it to 90 Nm torque.



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Restake the fastener of the driveshaft. Use a flat metal-working chisel. Use a hammer.



Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #22. Use HEX No.H7. Use a torque wrench. Tighten it to 60 nm torque.



71 Treat the shock strut fasteners. Use copper grease.



Remove the jacks and chocks.



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Remove the fender protection cover.



74 Close the hood.





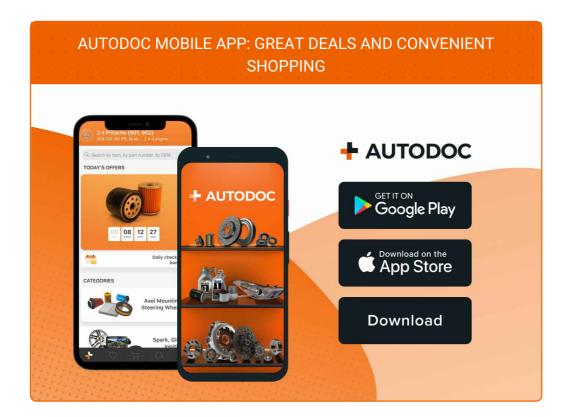
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