How to change front coil springs on **Toyota RAV4** III – replacement guide



VIDEO TUTORIAL



(i) Important!

This replacement procedure can be used for: TOYOTA RAV4 III Off-Road (XA30) 2.0 4WD (ACA30_), TOYOTA RAV4 III Off-Road (XA30) 2.0 4WD

The steps may slightly vary depending on the car design.



REPLACEMENT: COIL SPRINGS – TOYOTA RAV4 III. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #22
- Drive socket # 14
- Drive socket # 17
- Drive socket # 19
- Drive socket # 22

- Wheel impact socket #21
- Ratchet wrench
- Torque wrench
- Tap wrench
- Universal pulley holder
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

BUY TOOLS



Replacement: coil springs – Toyota RAV4 III. Professionals 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.
- Warning! Shut down the engine before starting any work Toyota RAV4 III.

CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:



Open the bonnet.





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





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



4

Loosen the upper fastener of the shock strut mount. Use a drive socket #14. Use a ratchet wrench.



5

Secure the wheels with chocks.



6

Loosen the wheel mounting bolts. Use wheel impact socket #21.





7

Raise the front of the car and secure on supports.



8

Unscrew the wheel bolts.



AUTODOC recommends:

• Important! Hold the wheel while unscrewing the fastening bolts. Toyota RAV4 III



Remove the wheel.



10

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





Unscrew the nut and remove the stabilizer rod from the shock strut. Use a drive socket #17. Use a ratchet wrench.



12

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



13

Unscrew the brake hose fastening bracket from the shock strut. Use a drive socket #14.



14

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





Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #22. Use a drive socket #22. Use a ratchet wrench. Use a tap wrench.



16

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



17

Disconnect the steering knuckle from the shock absorber strut.



18

Unscrew the top fastening of the shock strut mount.



AUTODOC recommends:

• Toyota RAV4 III – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.



19

Remove the suspension strut.



20

Set the shock absorber strut on the spring compressor tool.



Replacement: coil springs – Toyota RAV4 III. 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.
- 21

Compress the spring.







Remove the shock strut mount cap.



23

Treat the shock strut rod. Use a wire brush. Use WD-40 spray.



24

Remove the strut piston rod nut. Use a universal pulley holder. Use a drive socket #19. Use a ratchet wrench.



25

Remove the top strut mount.





Remove the shock absorber dust cap and the bump stop.



AUTODOC recommends:

• Replacement: coil springs – Toyota RAV4 III. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

27

Release the coil spring.



28

Remove the spring.



29

Install the spring on the shock absorber.





Compress the spring.

31

Install the boot and a bump stop onto the shock absorber.



32

Install the upper strut mount and the strut mount bearing.



33

Tighten the shock strut piston rod nut. Use a universal pulley holder. Use a drive socket #19. Use a torque wrench. Tighten it to 47 Nm torque.



Replacement: coil springs – Toyota RAV4 III. AUTODOC recommends:

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



34

Decompress the spring.



35

Treat the shock strut rod. Use copper grease.



36

Install the shock strut mount cap.



37

Remove the assembled shock strut.



38

Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.





Treat the mounting seats of the shock strut. Use copper grease.



40

Install the shock strut into the wheel arch.



41

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



AUTODOC recommends:

 Important! Hold the suspension strut while screwing in the fastening bolts. Toyota RAV4 III

42

Treat the steering knuckle fasteners. Use a wire brush. Use WD-40 spray.





43

Fix the shock absorber strut on the steering knuckle.



44

Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #22. Use a combination spanner #22.



45

Remove the support from under the steering knuckle.



AUTODOC recommends:

• Replacement: coil springs – Toyota RAV4 III. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.



Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #22. Use a combination spanner #22. Use a torque wrench. Tighten it to 240 Nm torque.



47

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



48

Tighten the brake hose fastening bracket to the shock strut. Use a drive socket #14. Use a ratchet wrench.

49

Install the transverse stabilizer link.

50

Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 74 Nm torque.



51

Treat the shock strut fasteners. Use copper grease.





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



53

Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

• Replacement: coil springs – Toyota RAV4 III. After applying the spray, wait a few minutes.

54

Install the wheel.



AUTODOC recommends:

• Important! Hold the wheel while screwing in the fastening bolts. Toyota RAV4 III



55

Screw in the wheel bolts. Use wheel impact socket #21.



56

57

Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #14. Use a torque wrench. Tighten it to 50 Nm torque.



Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 103 Nm torque.



58

Remove the jacks and chocks.



59

Remove the fender protection cover.





Close the hood.





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