



How to change front coil
springs on **TOYOTA**
Corolla IX Station
Wagon (E120) –
replacement guide

SIMILAR VIDEO TUTORIAL



This video shows the replacement procedure of a similar car part on another vehicle

Important!

This replacement procedure can be used for:

TOYOTA Corolla IX Station Wagon (E120) 1.6 VVT-i (ZZE121_), TOYOTA Corolla IX Station Wagon (E120) 1.4 D4-D (NDE120_)

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: TOYOTA Prius II Liftback (XW20) 1.5 Hybrid (NHW2_)

REPLACEMENT: COIL SPRINGS – TOYOTA COROLLA IX STATION WAGON (E120). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #17
- Combination spanner #19
- Drive socket # 10
- Drive socket # 12
- Drive socket # 14
- Drive socket # 17
- Drive socket # 19
- HEX bit no.H6.
- Wheel impact socket #21
- Ratchet wrench
- Torque wrench
- Tap wrench
- Crow bar
- Chain wrench
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

Buy tools

Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120).
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 – TOYOTA COROLLA IX STATION WAGON (E120). USE THE FOLLOWING PROCEDURE:

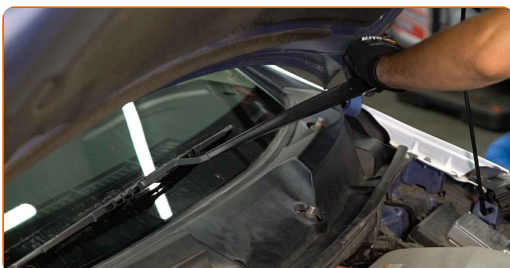
1 Open the bonnet.

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

3 Unscrew the fasteners of the windscreen wiper arms. Use a drive socket #14. Use a ratchet wrench.



4 Remove the wiper arms.



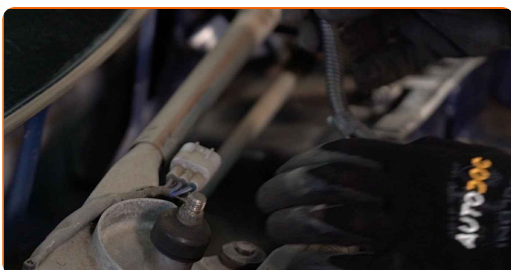
5 Remove the wiper arm covers.



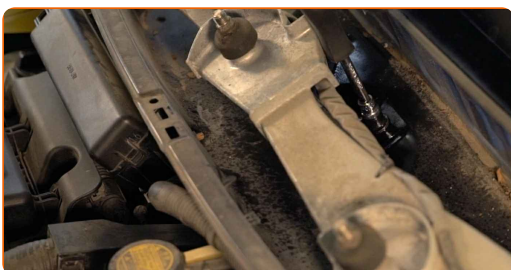
6 Treat the fasteners of the windscreen wiper linkage. Use WD-40 spray.



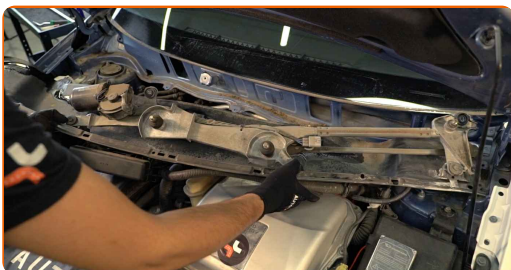
7 Detach the windscreen wiper connector.



8 Unscrew the fasteners of the windscreen wiper linkage panel. Use a drive socket #10. Use a ratchet wrench.

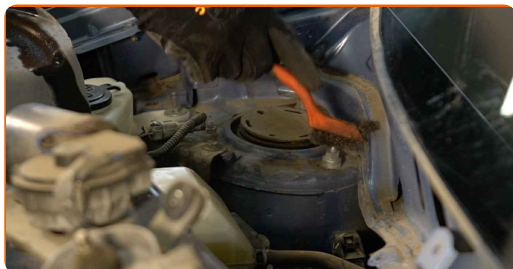


9 Remove the panel assembled with the windscreen wiper linkage.



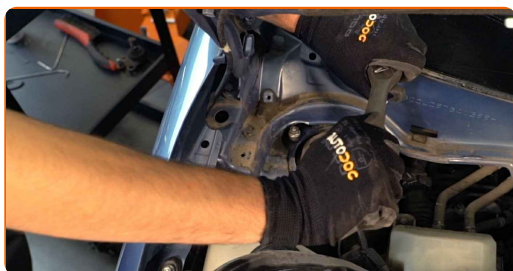
10

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



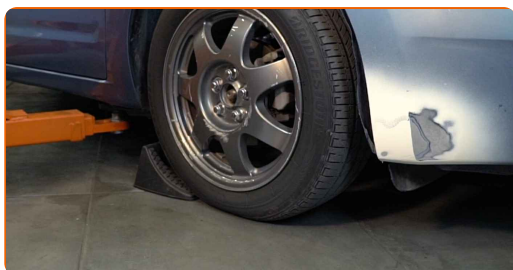
11

Loosen the upper fastener of the shock strut mount. Use a drive socket #12. Use a ratchet wrench.



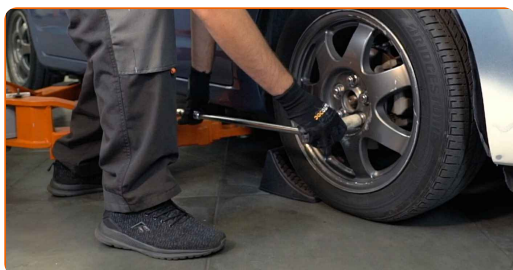
12

Secure the wheels with chocks.



13

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



14

Raise the front of the car and secure on supports.

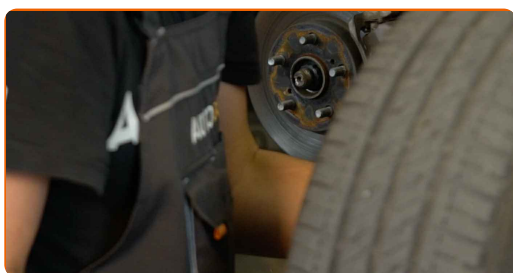
15 Unscrew the wheel bolts.



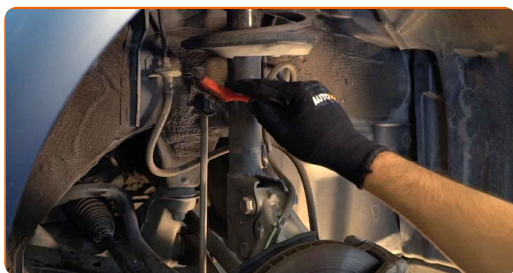
AUTODOC recommends:

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

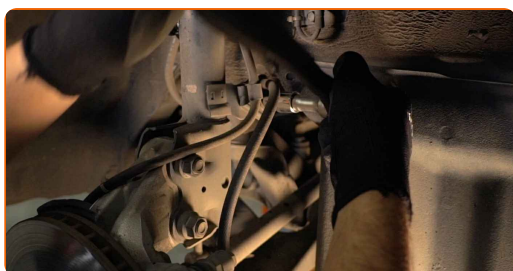
16 Remove the wheel.



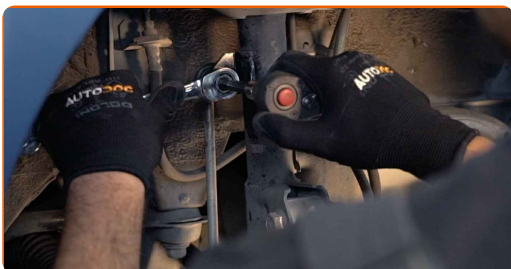
17 Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



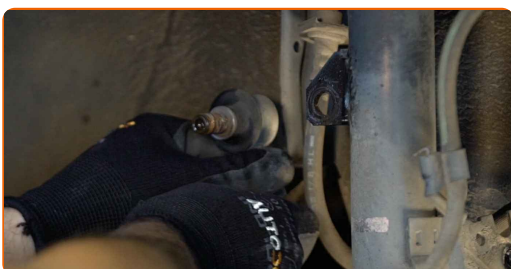
18 Disconnect the wiring and the brake hose from the bracket on the shock strut. Use a drive socket #12. Use a ratchet wrench.



- 19** Unscrew the fastener connecting the stabilizer link to the shock strut. Use a combination spanner #17. Use HEX No.H6. Use a ratchet wrench.



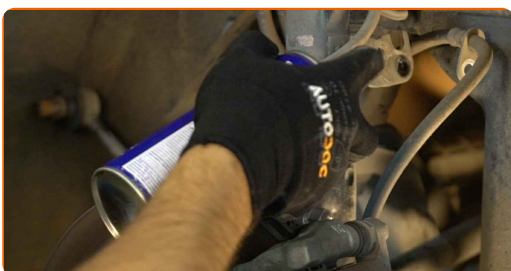
- 20** Remove the stabilizer rod.



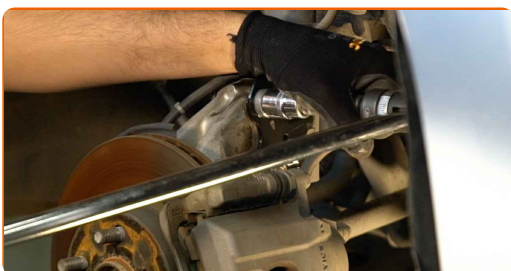
Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120). Tip:

- Examine stabiliser bushes. Replace them if needed.

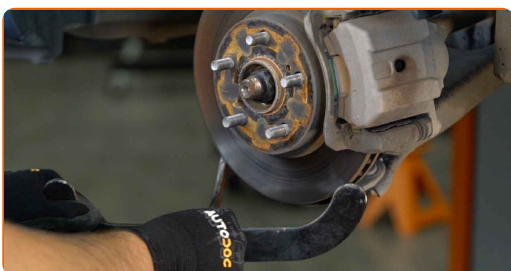
- 21** Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



- 22** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a tap wrench.



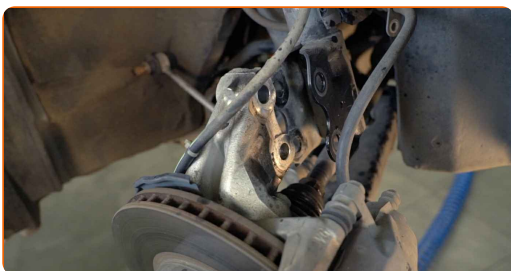
- 23** Prop up the steering knuckle. Use a hydraulic transmission jack.



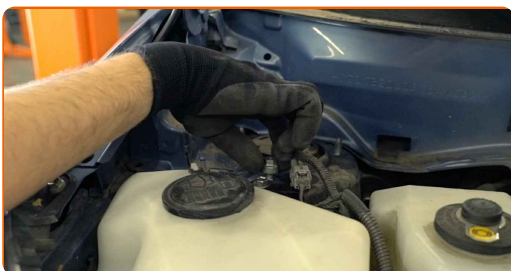
- 24** Remove the fastening bolts.



- 25** Disconnect the steering knuckle from the shock absorber strut.



- 26** Unscrew the top fastening of the shock strut mount.

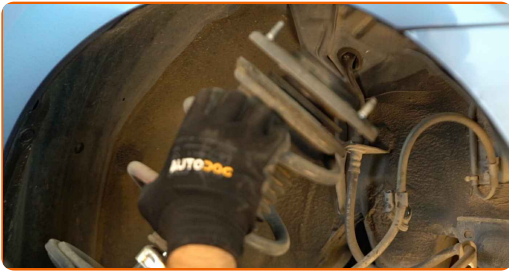


AUTODOC recommends:

- Important! Hold the suspension strut while unscrewing the fastening bolts.
TOYOTA Corolla IX Station Wagon (E120)

27

Remove the suspension strut.



28

Set the shock absorber strut on the spring compressor tool.



**Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120).
Professionals 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.

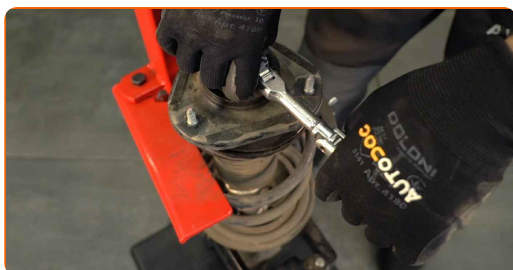
29 Compress the spring.



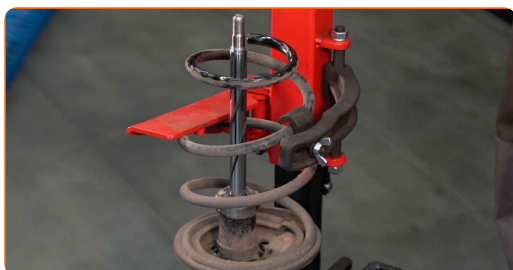
30 Remove the shock strut mount cap. Use a crowbar.



31 Remove the strut piston rod nut. Use a drive socket #19. Use a ratchet wrench.



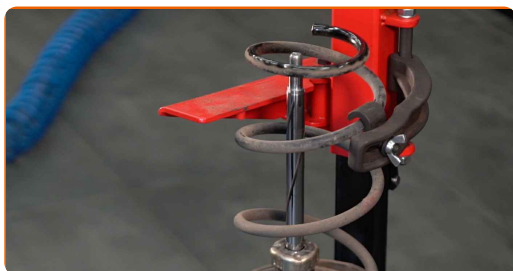
32 Remove the shock absorber mount, boot and bump stop. Use a crowbar.



AUTODOC recommends:

- Thoroughly examine the shock absorber mount, dust boot, bump stop. Replace them if necessary.

33 Release the coil spring.



34 Remove the spring.



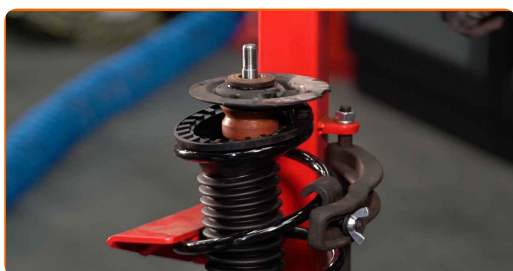
35 Install the spring on the shock absorber.



36 Compress the spring.



37 Install the mount, the boot and the bump stop on the shock absorber.



- 38** Tighten the shock strut piston rod nut. Use a drive socket #19. Use a chain wrench. Use a torque wrench. Tighten it to 47 Nm torque.



Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120).
AUTODOC experts recommend:

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

- 39** Treat the shock strut rod. Use copper grease.



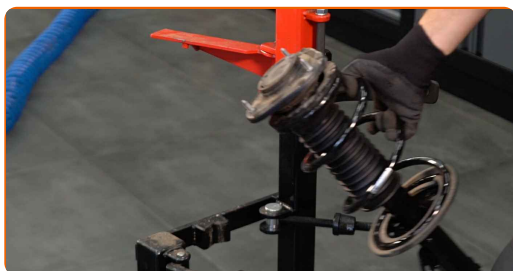
- 40** Install the shock strut mount cap.



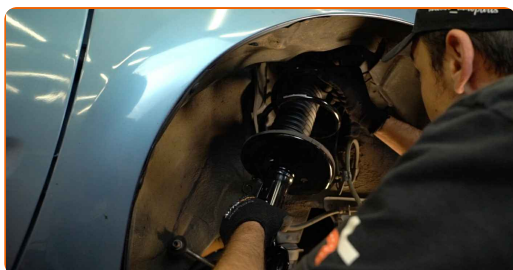
41 Decompress the spring.



42 Remove the assembled shock strut.



43 Install the shock strut into the wheel arch.



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



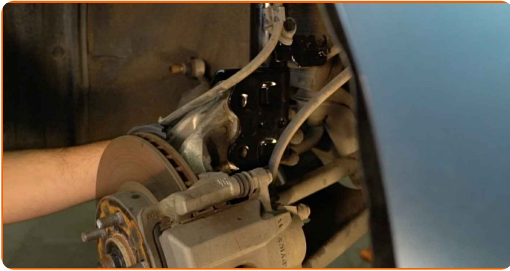
AUTODOC recommends:

- TOYOTA Corolla IX Station Wagon (E120) – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

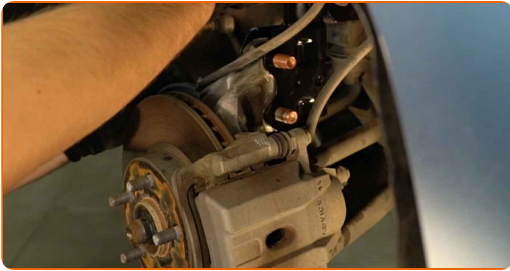
45 Clean the mounting seats of the shock strut. Use a wire brush. Use WD-40 spray.



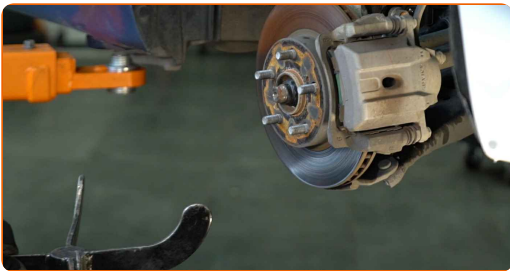
46 Fix the shock absorber strut on the steering knuckle.



47 Install the fastening bolts.



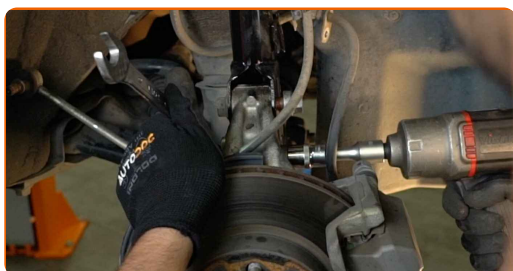
48 Remove the support from under the steering knuckle.



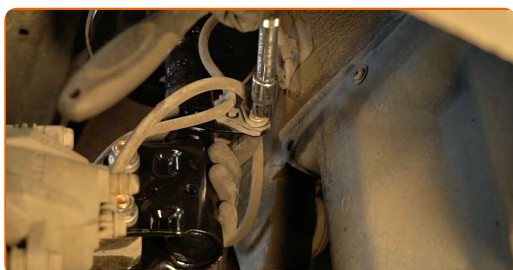
AUTODOC recommends:

- Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

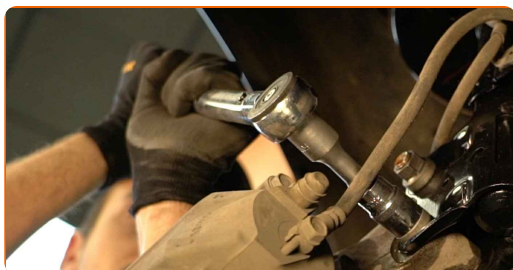
- 49** Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #19. Use a drive socket #19.



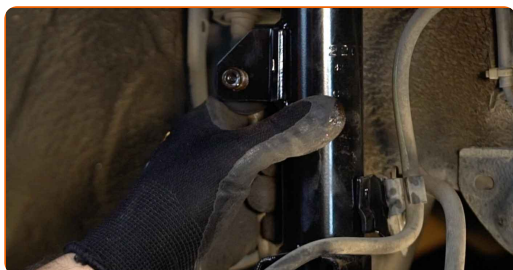
- 50** Fasten the brake hose on the strut. Connect the fastener of the ABS sensor cable to the shock absorber strut. Use a drive socket #12. Use a ratchet wrench.



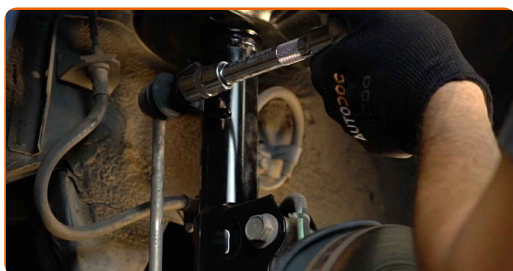
- 51** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #19. Use a torque wrench. Tighten it to 153 Nm torque.



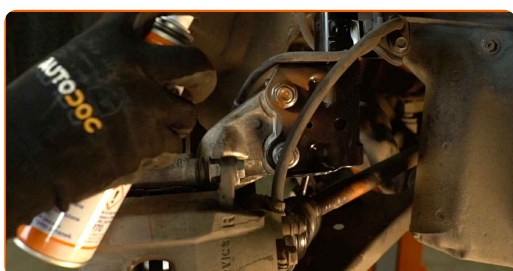
- 52** Install the transverse stabilizer link.



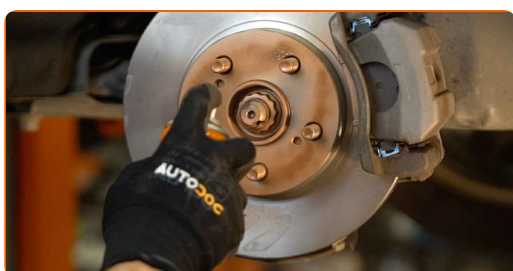
- 53** Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 74 Nm torque.



- 54** Treat the shock strut fasteners. Use copper grease.



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



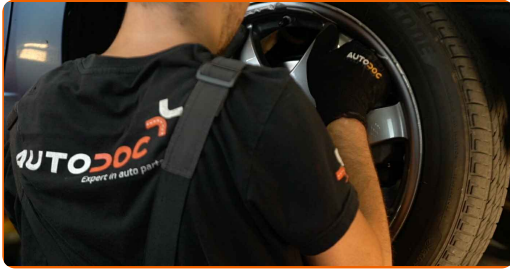
- 56** Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- After applying the spray, wait a few minutes.

57 Install the wheel.



AUTODOC recommends:

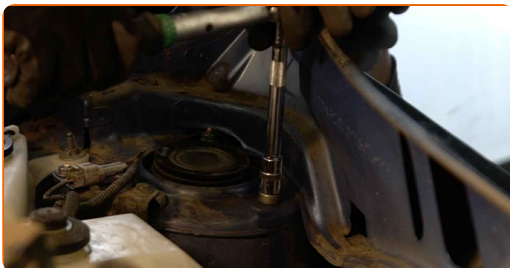
- Important! Hold the wheel while screwing in the fastening bolts. TOYOTA Corolla IX Station Wagon (E120)

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

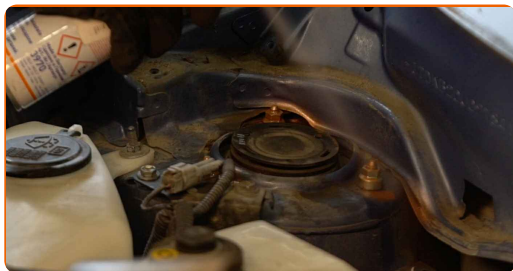


59 Lower the car.

60 Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #12. Use a torque wrench. Tighten it to 39 Nm torque.



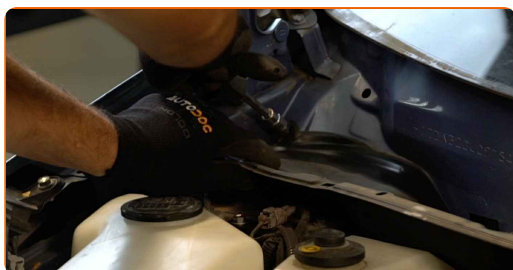
61 Treat the fasteners of the shock strut mount. Use copper grease.



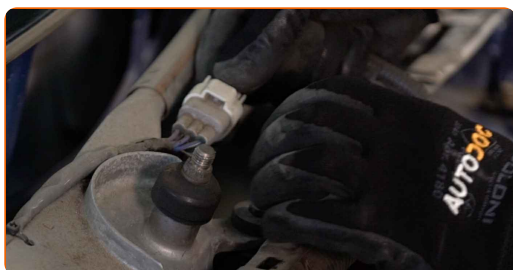
62 Install the panel assembled with the windscreen wiper linkage.



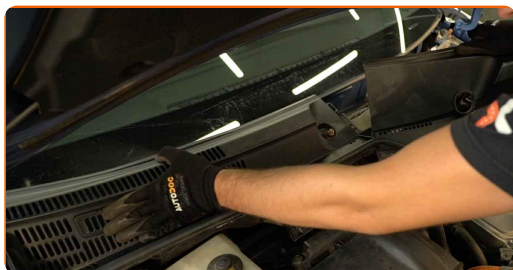
63 Screw in the fasteners of the windscreen wiper linkage panel. Use a drive socket #10. Use a ratchet wrench.



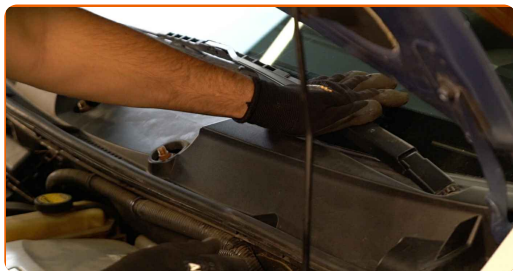
64 Attach the windscreen wiper connector.



65 Install the wiper arm covers.



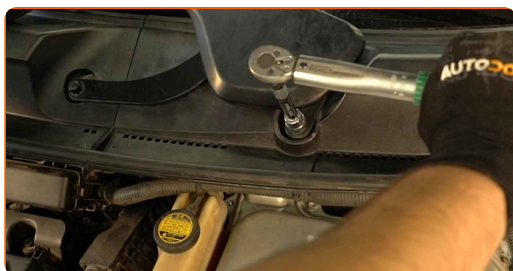
66 Reinstall the wiper arms.



Replacement: coil springs – TOYOTA Corolla IX Station Wagon (E120).
AUTODOC recommends:

- Make sure not to mix up the wiper arms on the driver's and passenger's sides.

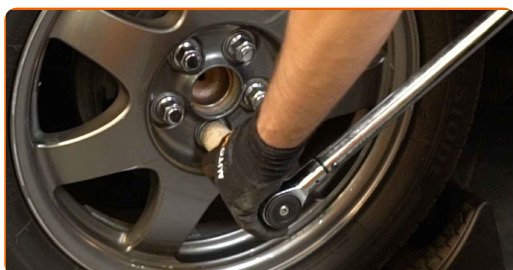
67 Tighten the fasteners of the wiper arms. Use a drive socket #14. Use a torque wrench. Tighten it to 21 Nm torque.



68 Remove the fender protection cover.

69 Close the hood.

70 Tighten the wheel bolts using a criss-cross pattern. Use a torque wrench. Tighten it to 103 Nm torque.



71

Remove the jacks and chocks.



WELL DONE! 

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