



How to change front  
suspension strut on  
**Lexus RX XU30** –  
replacement guide

## VIDEO TUTORIAL

** Important!**

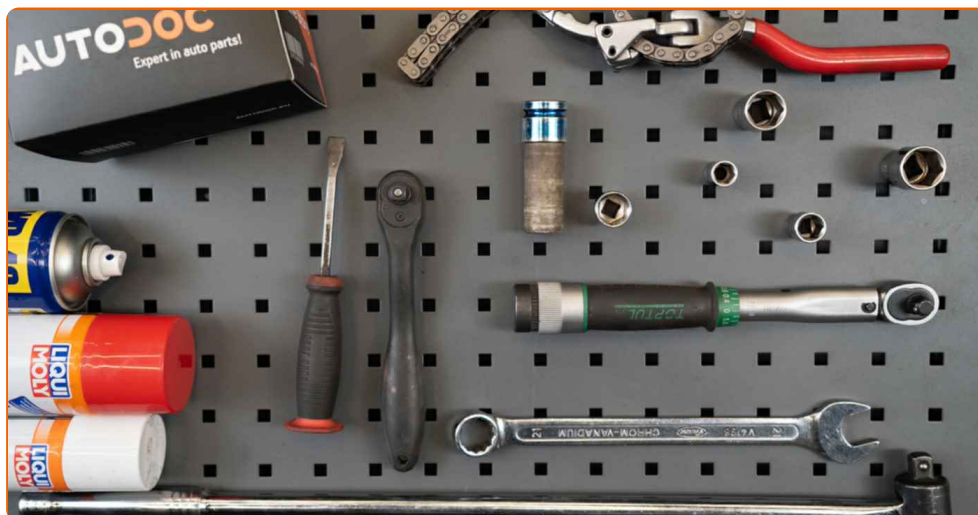
This replacement procedure can be used for:

LEXUS RX II (XU30) 3.0, LEXUS RX II (XU30) 3.5 AWD, LEXUS RX II (XU30) 330 AWD (MCU38)

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The steps may slightly vary depending on the car design.

REPLACEMENT: SUSPENSION STRUT – LEXUS RX  
XU30. TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #21
- Drive socket # 12
- Drive socket # 14
- Drive socket # 17
- Drive socket # 19
- Drive socket # 21
- 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: suspension strut – Lexus RX XU30. Tip from AUTODOC experts:

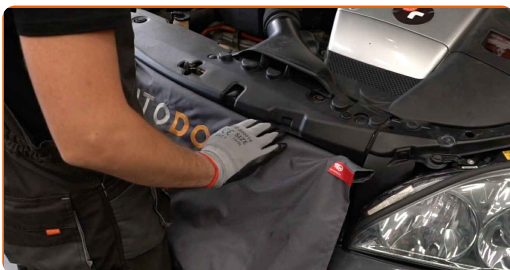
- Both shock struts of the front suspension should be replaced simultaneously.
- The replacement procedure is identical for the left and right shock struts of the front suspension.
- All work should be done with the engine stopped.

**REPLACEMENT: SUSPENSION STRUT – LEXUS RX XU30. TAKE THE FOLLOWING STEPS:**

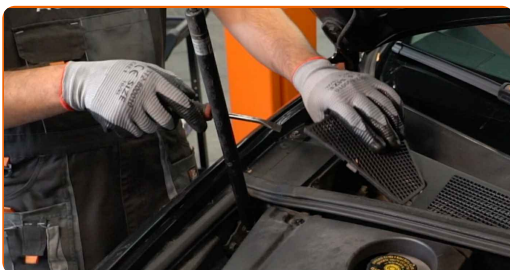
**1** Open the bonnet.



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



**3** Remove the suspension strut mount cap. Use a crowbar.



4

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



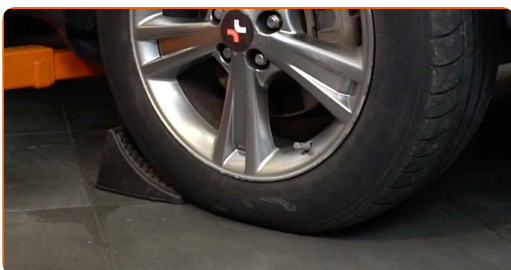
5

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



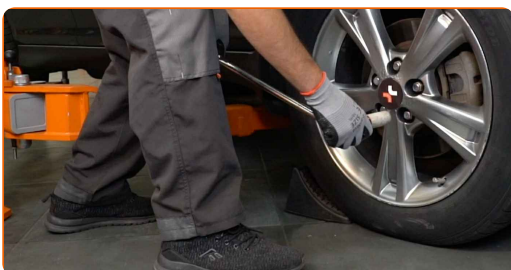
6

Secure the wheels with chocks.



7

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



**8** Raise the front of the car and secure on supports.



**9** Unscrew the wheel bolts.



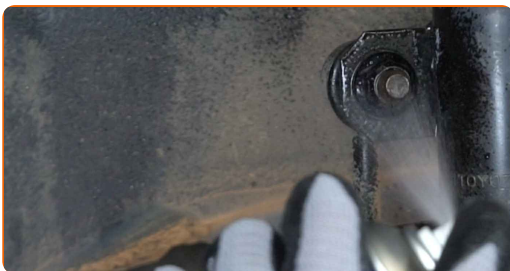
Replacement: suspension strut – Lexus RX XU30. AUTODOC recommends:

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

**10** Remove the wheel.

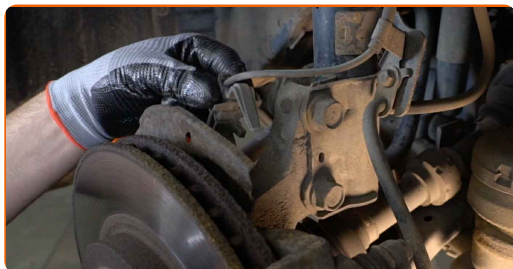


**11** Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.

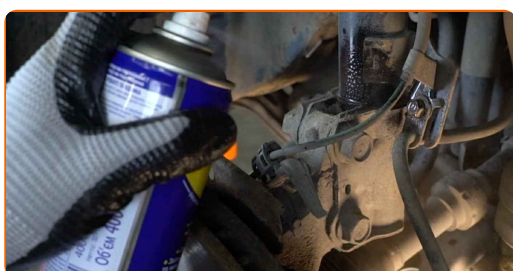




**12** Detach the fastener connecting the ABS sensor cable to the shock strut.



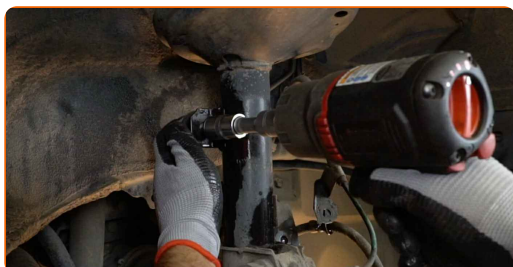
**13** Clean the fasteners of the ABS sensor and of the brake hose which connect them to the shock strut. Use a wire brush. Use WD-40 spray.



**14** Disconnect the brake hose holder from the shock absorber strut. Unscrew the ABS sensor fastener. Use a drive socket #12. Use a ratchet wrench.



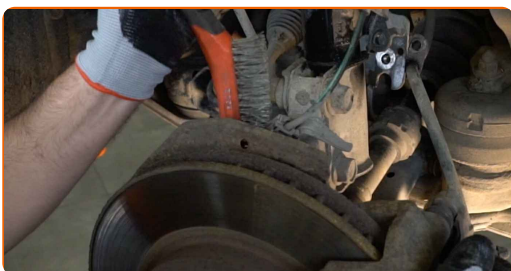
**15** Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a ratchet wrench.



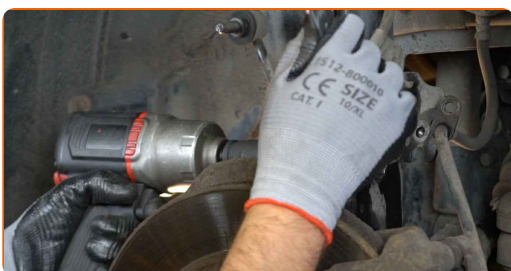
**16** Remove the stabilizer rod.



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



**18** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21. Use a tap wrench.

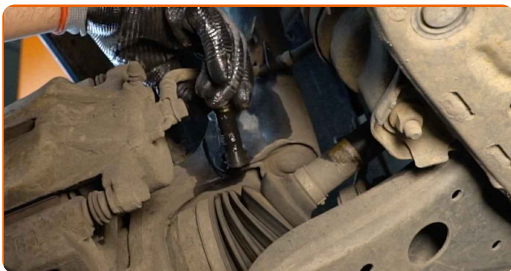


**19** Prop up the steering knuckle. Use a hydraulic transmission jack.

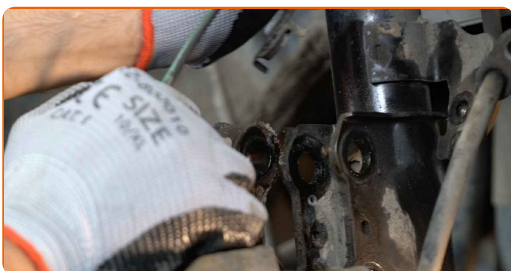




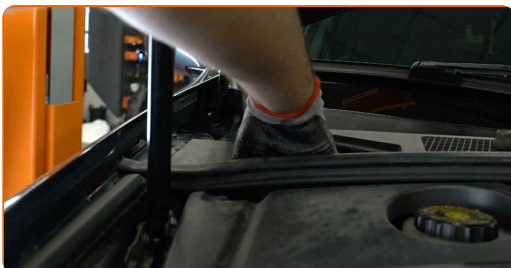
**20** Remove the fastening bolts.



**21** Disconnect the steering knuckle from the shock absorber strut.



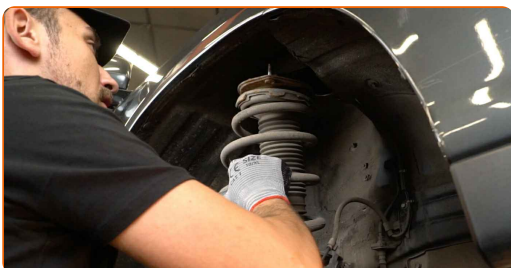
**22** Unscrew the top fastening of the shock strut mount.



**AUTODOC recommends:**

- Important! Hold the suspension strut while unscrewing the fastening bolts. Lexus RX XU30

**23** Remove the suspension strut.



**24**

Set the shock absorber strut on the spring compressor tool.



**Replacement: suspension strut – Lexus RX XU30. 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.

**25**

Compress the spring.



**26**

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



27

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



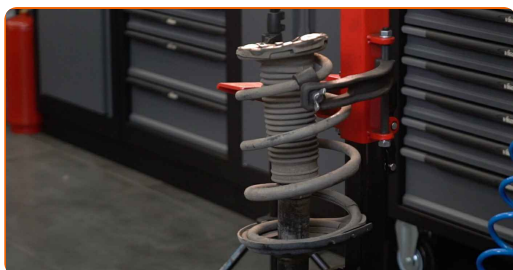
28

Remove the top strut mount. Use a crowbar.



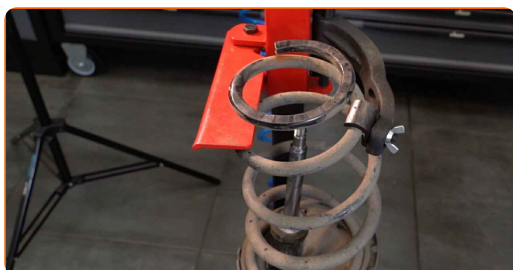
29

Release the coil spring.



30

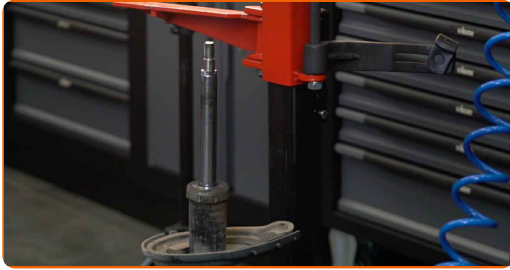
Remove the shock absorber dust cap and the bump stop.



**AUTODOC recommends:**

- Replacement: suspension strut – Lexus RX XU30. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

**31** Remove the spring.



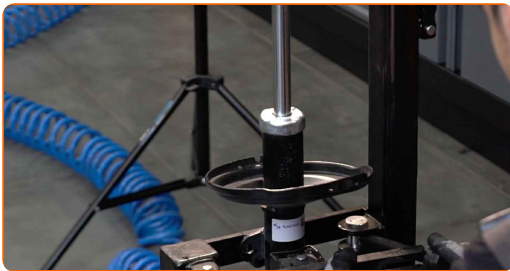
**32** Remove the old shock absorber from the hydraulic coil spring compressor.



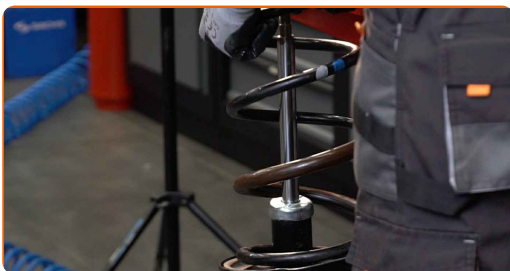
Replacement: suspension strut – Lexus RX XU30. AUTODOC experts recommend:

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

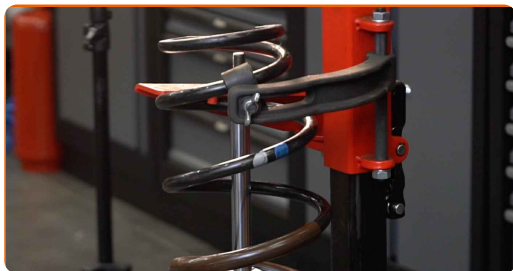
**33** Install the new shock absorber on the hydraulic coil spring compressor.



**34** Install the spring on the shock absorber.



**35** Compress the spring.



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



**37** Tighten the shock strut piston rod nut. Use a drive socket #21. Use a chain wrench. Use a torque wrench. Tighten it to 60 Nm torque.



Replacement: suspension strut – Lexus RX XU30. Tip from AUTODOC experts:

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

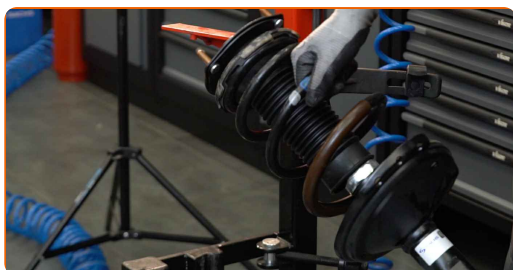
**38** Decompress the spring.



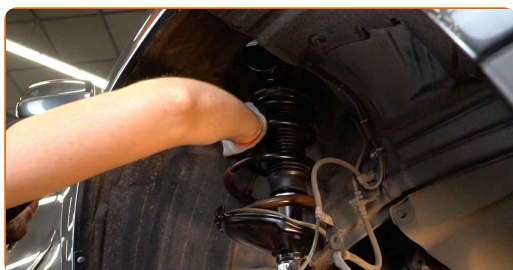
**39** Treat the shock strut rod. Use copper grease.



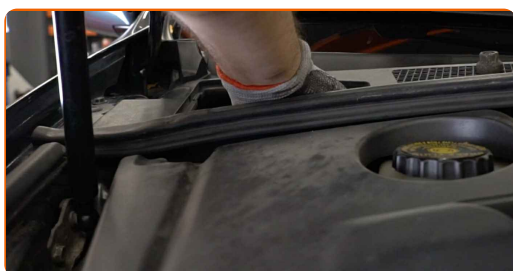
**40** Remove the assembled shock strut.



**41** Install the shock strut into the wheel arch.



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



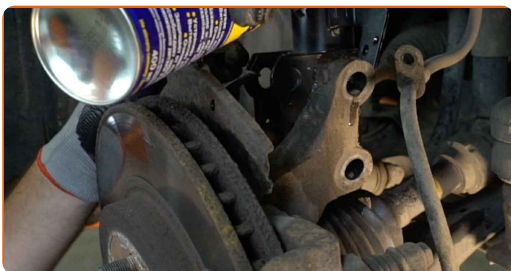


**AUTODOC recommends:**

- Important! Hold the suspension strut while screwing in the fastening bolts. Lexus RX XU30

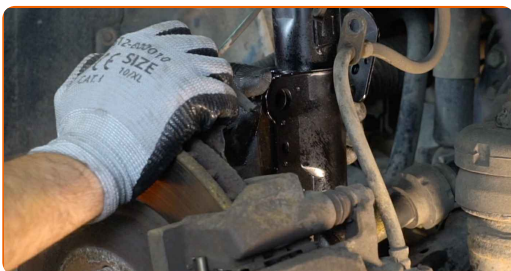
**43**

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



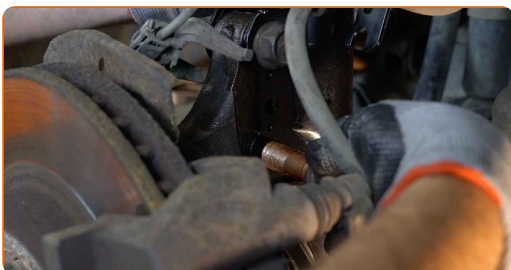
**44**

Fix the shock absorber strut on the steering knuckle.



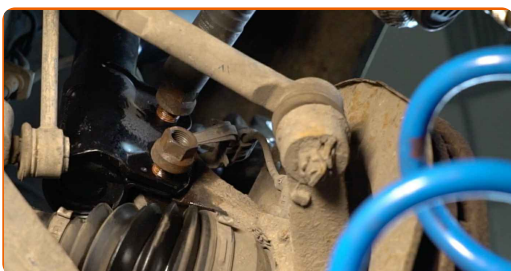
**45**

Install the fastening bolts.

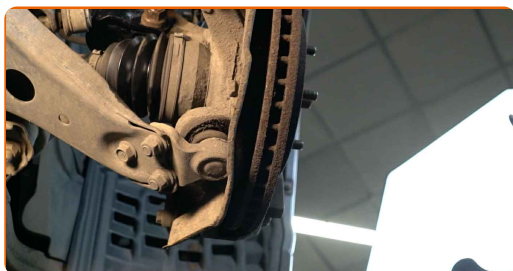


**46**

Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #21. Use a drive socket #21.



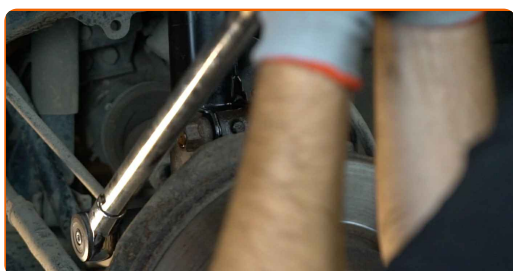
**47** Remove the support from under the steering knuckle.



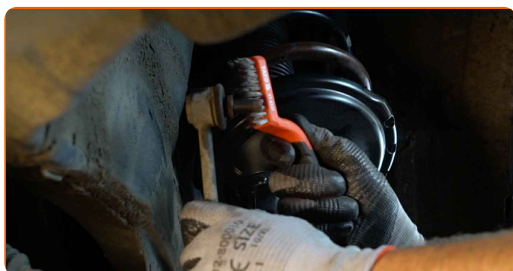
**AUTODOC recommends:**

- Lexus RX XU30 – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

**48** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #21. Use a torque wrench. Tighten it to 230 Nm torque.

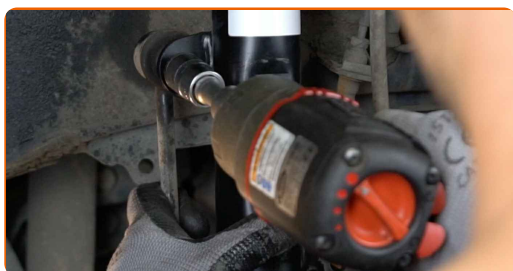


**49** Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.

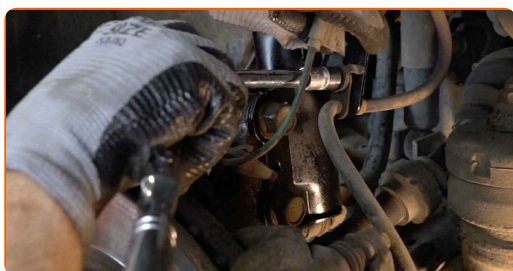


**50** Install the transverse stabilizer link.

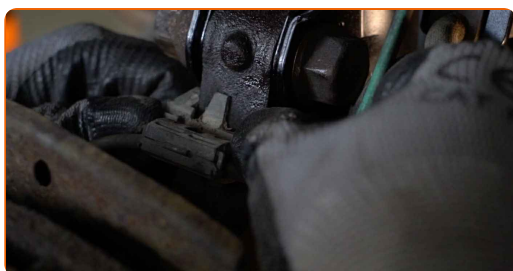
- 51 Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 74 Nm torque.



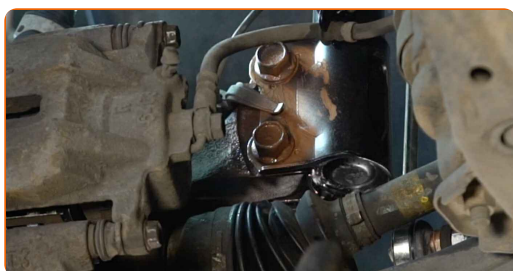
- 52 Tighten the brake hose fastener. Screw in the ABS sensor fastener. Use a drive socket #12. Use a ratchet wrench.



- 53 Connect the fastener of the ABS sensor cable to the shock absorber strut.



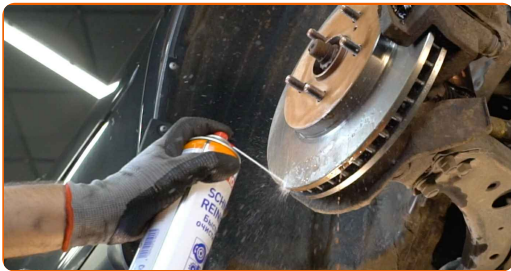
- 54 Treat the shock strut fasteners. Use copper grease.



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



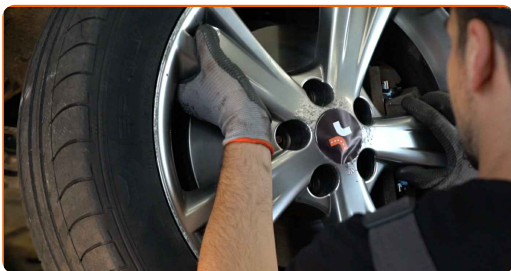
**56** Clean the brake disk surface. Use a brake cleaner.



Replacement: suspension strut – Lexus RX XU30. Tip from AUTODOC:

- After applying the spray, wait a few minutes.

**57** Install the wheel.



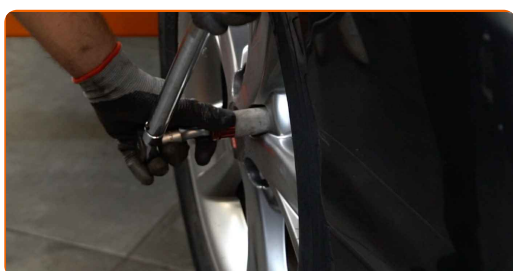
AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. Lexus RX XU30

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



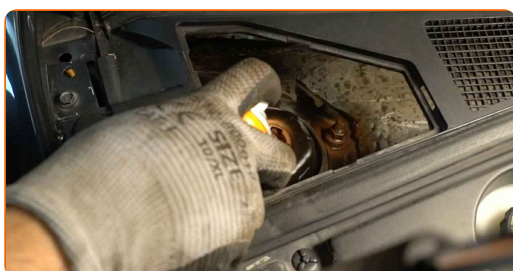
**59** Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #21. Use a torque wrench. Tighten it to 103 nm torque.



**60** Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #14. Use a torque wrench. Tighten it to 55 Nm torque.



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





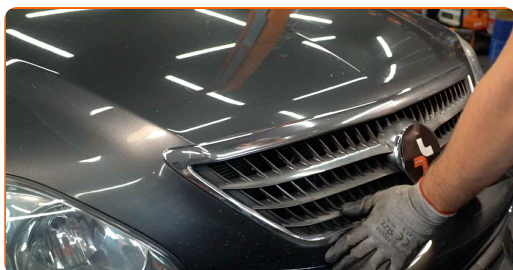
**62** Install the suspension strut mount cap.



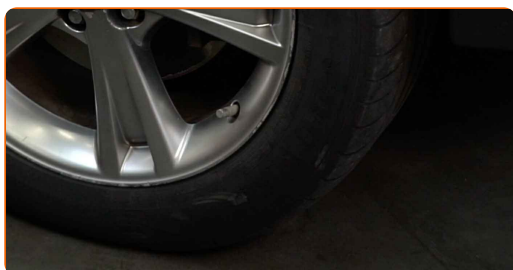
**63** Remove the fender protection cover.



**64** Close the hood.



**65** Remove the jacks and chocks.



**WELL DONE!** 

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