







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



**VIDEO TUTORIAL** 

#### ① Important!

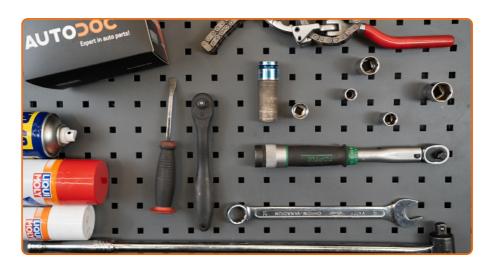
This replacement procedure can be used for: LEXUS RX (\_U3\_) 400h (MHU38\_)

The steps may slightly vary depending on the car design.

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### 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

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### 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.

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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.

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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.

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Secure the wheels with chocks.

7



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

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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.

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Remove the wheel.

11



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

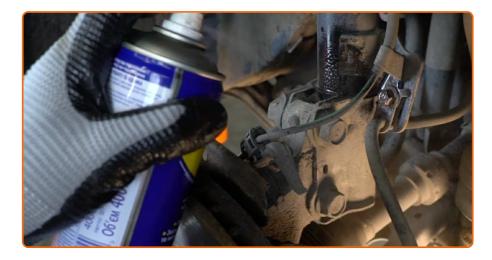
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Detach the fastener connecting the ABS sensor cable to the shock strut.

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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.

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

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

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Remove the stabilizer rod.

1/



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

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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.

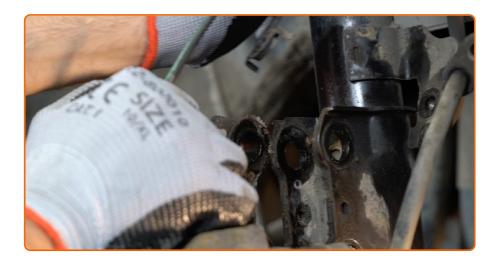
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Remove the fastening bolts.

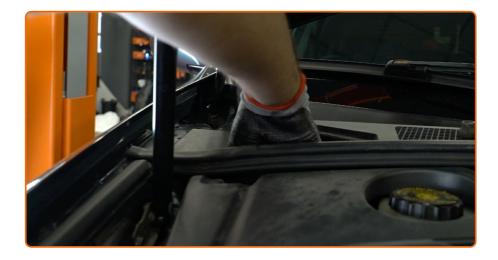
21



Disconnect the steering knuckle from the shock absorber strut.

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Unscrew the top fastening of the shock strut mount.

#### **AUTODOC** recommends:

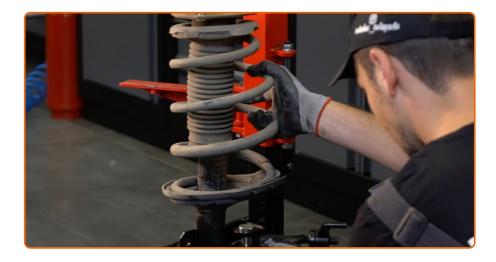
 Important! Hold the suspension strut while unscrewing the fastening bolts. Lexus RX XU30

23



Remove the suspension strut.

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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.

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Compress the spring.

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

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

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Remove the top strut mount. Use a crowbar.

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Release the coil spring.

30



Remove the shock absorber dust cap and the bump stop.

#### AUTODOC recommends:

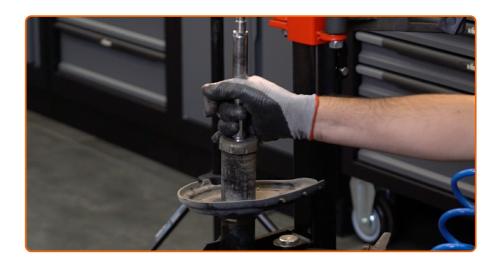
 Replacement: suspension strut – Lexus RX XU30. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

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Remove the spring.

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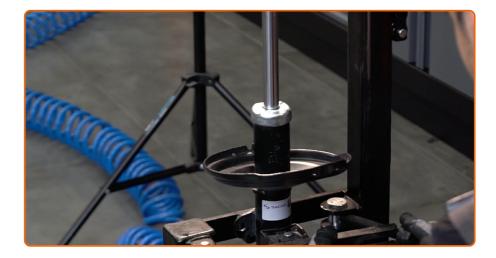
Remove the old shock absorber from the hydraulic coil spring compressor.

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

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

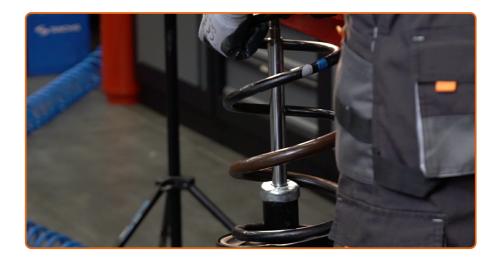
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Install the new shock absorber on the hydraulic coil spring compressor.

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Install the spring on the shock absorber.

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Compress the spring.

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

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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.

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Decompress the spring.

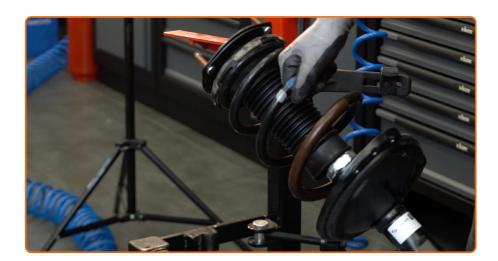
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Treat the shock strut rod. Use copper grease.

40



Remove the assembled shock strut.

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Install the shock strut into the wheel arch.

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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

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

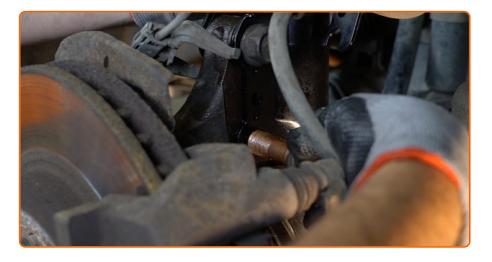
44



Fix the shock absorber strut on the steering knuckle.

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Install the fastening bolts.

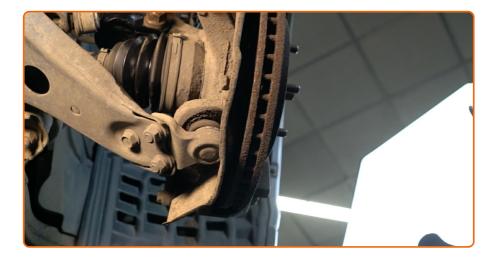
46



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

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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 90 Nm torque.

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

50

Install the transverse stabilizer link.

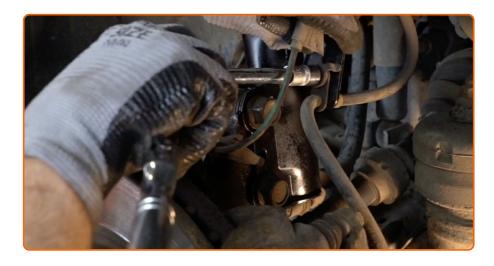
51



Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 50 Nm torque.

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

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

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Treat the shock strut fasteners. Use copper grease.

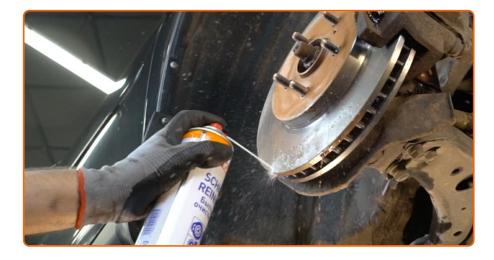
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Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

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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.

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#### AUTODOC recommends:

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

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

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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 120 nm torque.

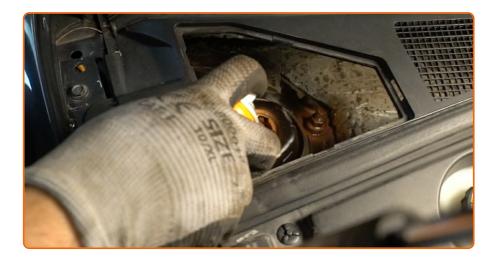
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Tighten the upper fastener of the shock absorber strut mount. Use a drive socket #14. Use a torque wrench. Tighten it to 50 Nm torque.

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

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Install the suspesion strut mount cap.

63



Remove the fender protection cover.

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Close the hood.

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Remove the jacks and chocks.

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## DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

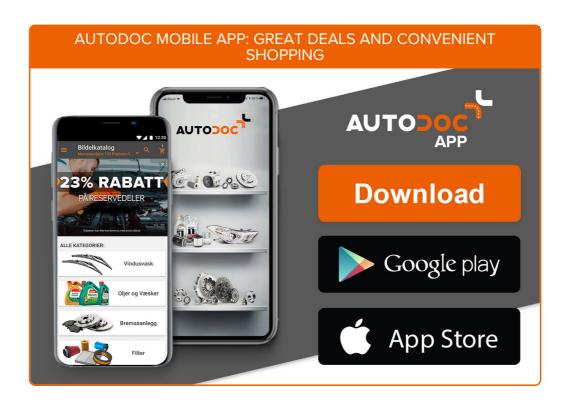


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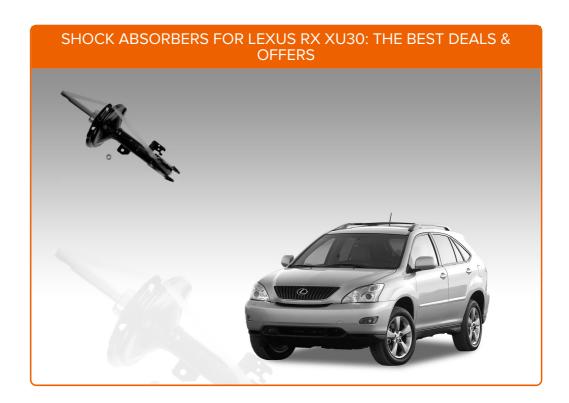






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