



How to change front coil  
springs on **KIA Sorento**  
**JC** – replacement guide

## VIDEO TUTORIAL



### **ⓘ Important!**

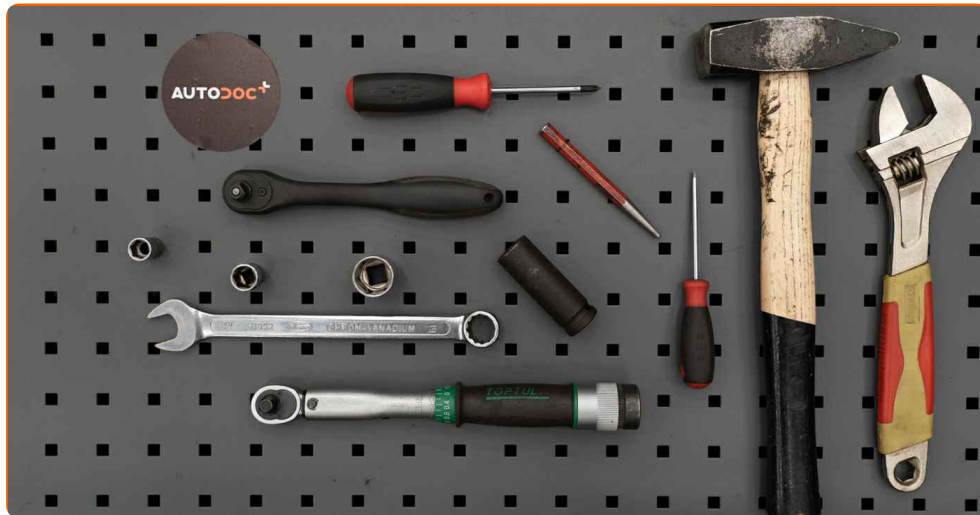
This replacement procedure can be used for:

KIA SORENTO I (JC) 2.4, KIA SORENTO I (JC) 3.5 V6, KIA SORENTO I (JC) 2.5 CRDi

The steps may slightly vary depending on the car design.

## REPLACEMENT: COIL SPRINGS – KIA SORENTO JC.

### TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #14
- Combination spanner #19
- Drive socket # 12
- Drive socket # 14
- Drive socket # 22
- Wheel impact socket #21
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Phillips screwdriver
- Pin punch
- Hammer
- Adjustable wrench
- Crow bar
- Hydraulic strut spring compressor
- Hydraulic transmission jack
- Fender cover
- Wheel chock

[BUY TOOLS](#)

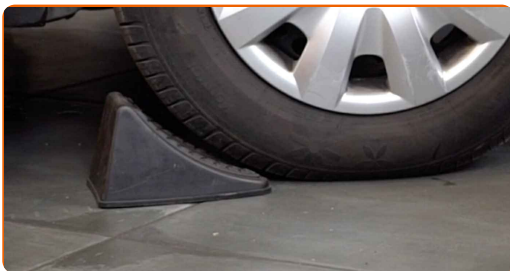
### Replacement: coil springs – KIA Sorento JC. AUTODOC experts recommend:

- 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.
- Please note: all work on the car – KIA Sorento JC – should be done with the engine switched off.

## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

1

Secure the wheels with chocks.



2

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



3

Raise the front of the car and secure on supports.

4

Unscrew the wheel bolts.



AUTODOC recommends:

- Important! Hold the wheel while unscrewing the fastening bolts. KIA Sorento JC

5

Remove the wheel.



6

Unscrew the upper control arm fasteners. Use a combination spanner #14. Use a drive socket #14. Use a ratchet wrench.



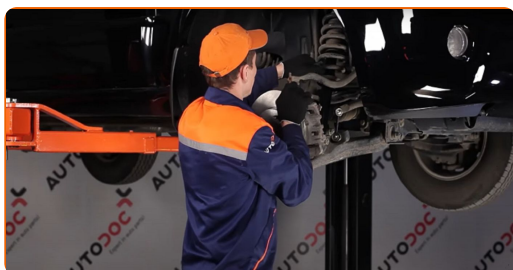
**7** Disconnect the ABS sensor wiring.



**8** Remove the fastening bolt. Use a pin punch. Use a hammer.

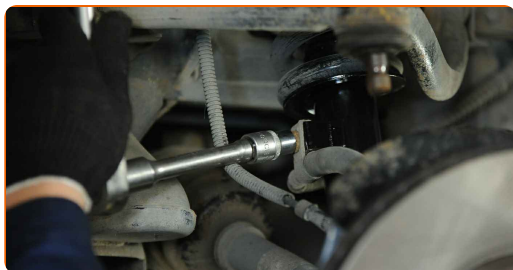


**9** Detach the upper control arm from the steering knuckle.



**10** Clean the fastener of the bracket that connects the brake hose to the shock strut. Use a wire brush. Use WD-40 spray.

**11** Unscrew the brake hose fastening bracket from the shock strut. Use a drive socket #12. Use a ratchet wrench.

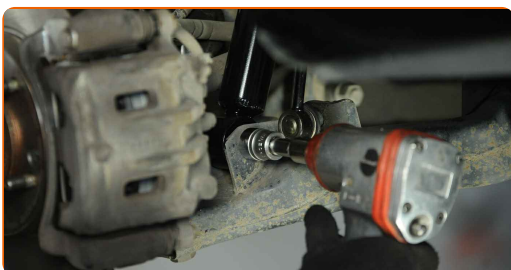


- 12** Disconnect the brake hose mounting bracket.



- 13** Clean the shock strut fasteners. Use a wire brush. Use WD-40 spray.

- 14** Unscrew the lower fastener of the shock absorber strut. Use a combination spanner #19. Use a drive socket #22. Use a ratchet wrench.



- 15** Remove the fastening bolt. Use a pin punch. Use a hammer.



- 16** Detach the bottom part of the shock strut.

- 17** Lower the car.





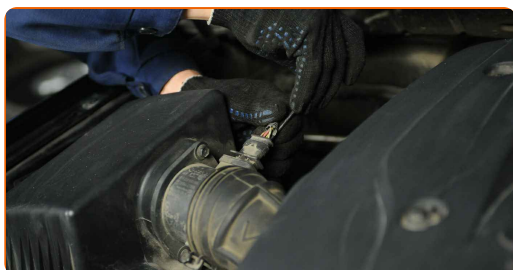
**18** Open the bonnet.



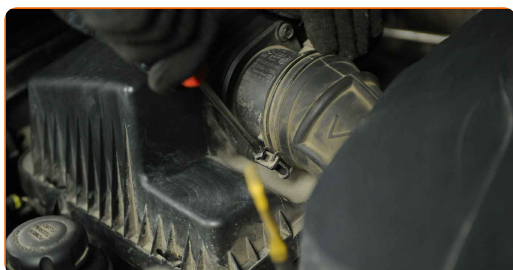
**19** Use a fender protection cover to prevent damaging paintwork and plastic parts of the car.



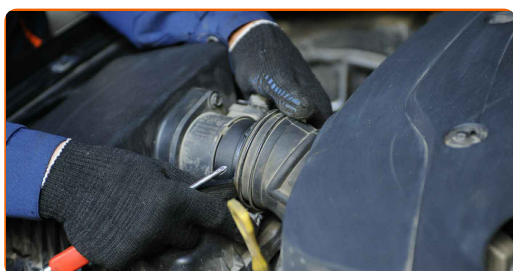
**20** Unplug the mass air flow sensor connector. Use a flat screwdriver.



**21** Loosen the fastening clamp connecting the air duct to the air filter housing. Use a Phillips screwdriver.

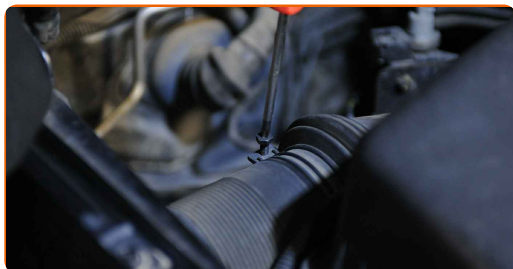


**22** Disconnect the charger intake hose from the air filter housing.

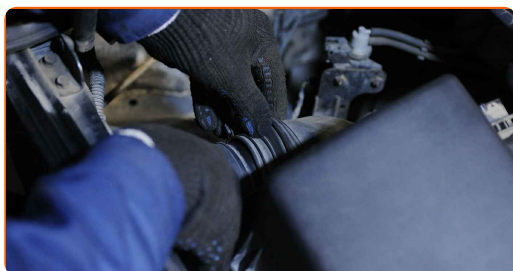




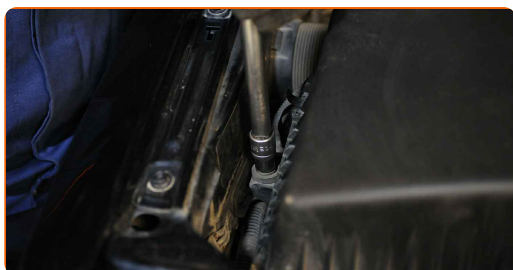
**23** Detach the air intake hose clamp. Use a Phillips screwdriver.



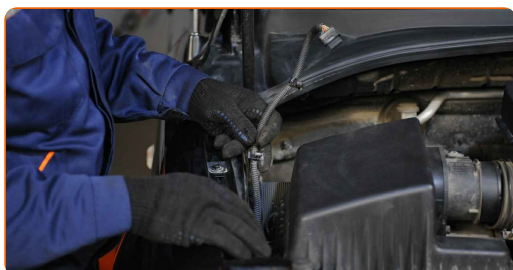
**24** Disconnect the air intake pipe from the air filter housing.



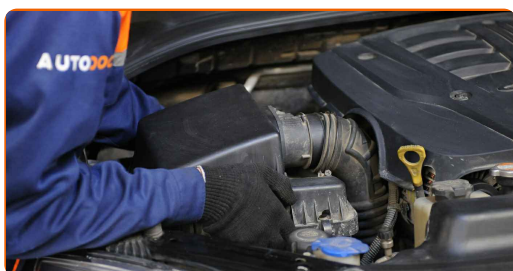
**25** Unscrew the air filter housing fastener. Use a drive socket #12. Use a ratchet wrench.



**26** Detach the retainers of the ignition cables. Use a flat screwdriver.



**27** Remove the air filter housing.



28

Unscrew the top fastening of the shock strut mount. Use a drive socket #14. Use a ratchet wrench.



### AUTODOC recommends:

- KIA Sorento JC – To avoid injury, hold the suspension strut while unscrewing the fastening bolts.

29

Remove the suspension strut.



30

Set the shock absorber strut on the spring compressor tool.

### Replacement: coil springs – KIA Sorento JC. Tip from AUTODOC:

- 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.

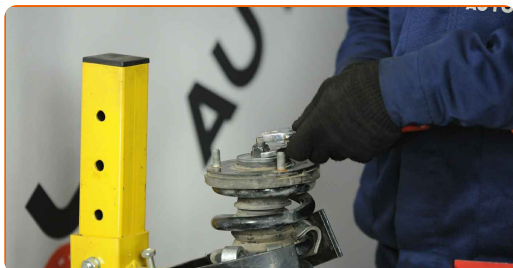
**31** Compress the spring.



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



**33** Remove the strut piston rod nut. Use a combination spanner #19. Use an adjustable wrench.



**34** Release the coil spring.

**35** Remove the top strut mount.



### AUTODOC recommends:

- Replacement: coil springs – KIA Sorento JC. Carefully inspect the mount, the boot, and the bump stop of the shock absorber. Replace if necessary.

36

Remove the spring.



37

Remove the shock absorber dust cap and the bump stop.

38

Install the spring on the shock absorber.



39

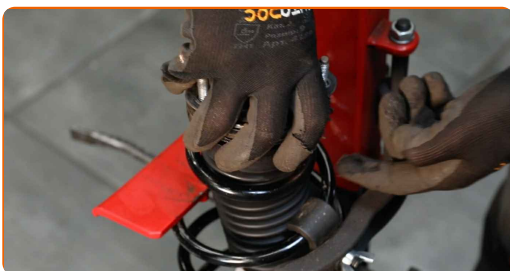
Install the boot and a bump stop onto the shock absorber.

40

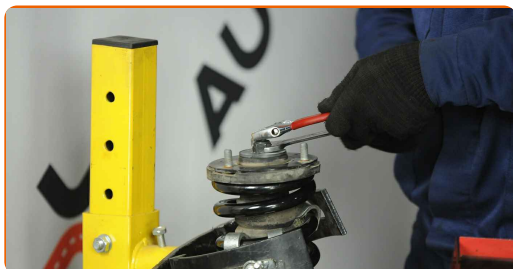
Compress the spring.

41

Install the top shock strut mount.



- 42** Tighten the shock strut piston rod nut. Use a combination spanner #19. Use an adjustable wrench. Use a torque wrench. Tighten it to 65 Nm torque.

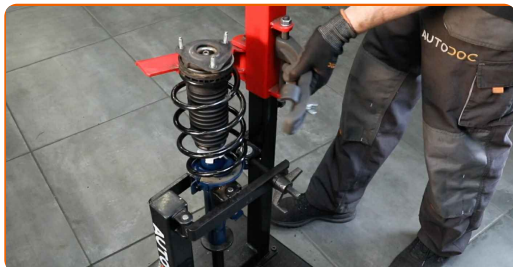


Replacement: coil springs – KIA Sorento JC. AUTODOC experts recommend:

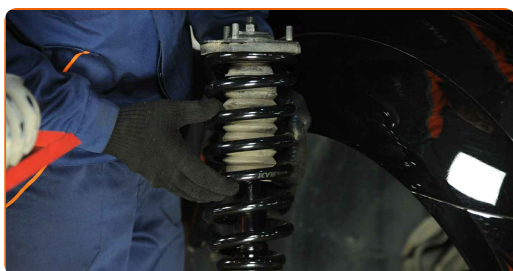
- Check to make sure the spring is positioned correctly. Avoid its misalignment.

- 43** Decompress the spring.

- 44** Remove the assembled shock strut.



- 45** Install the shock strut into the wheel arch.



- 46** Screw the top fastening of the shock strut mount.

### AUTODOC recommends:

- KIA Sorento JC – To avoid injury, hold the suspension strut while screwing in the fastening bolts.

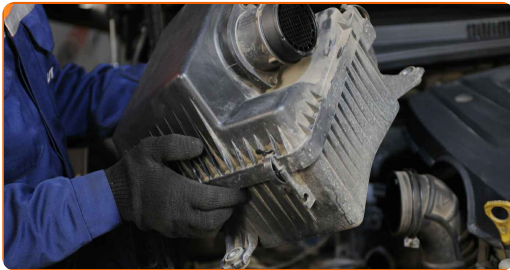
47

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.



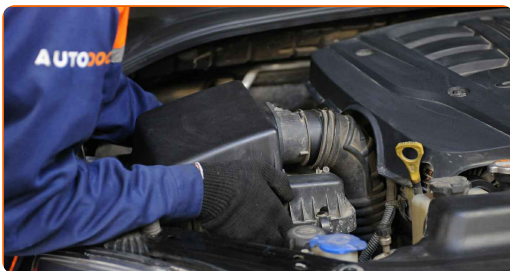
48

Reinstall the air filter housing.



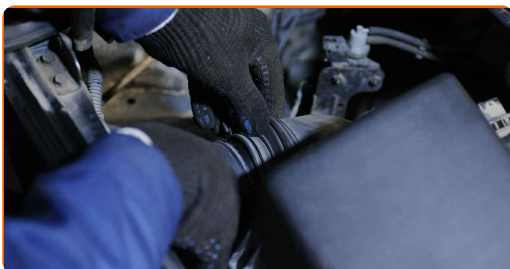
49

Connect the charger intake hose to the air filter housing.



50

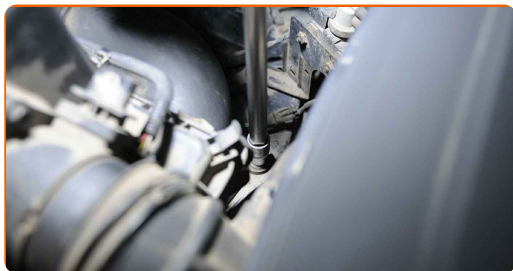
Connect the air intake pipe to the air filter housing.





51

Screw the filter housing fastening bolts. Use a drive socket #12. Use a ratchet wrench.



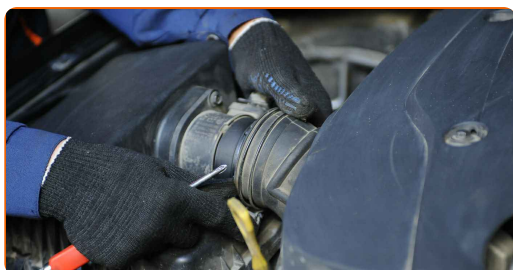
52

Screw the fastening clamp connecting the air duct to the air filter housing. Use a Phillips screwdriver.



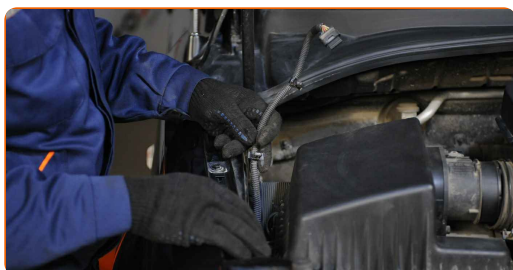
53

Fasten the clamp on the air intake hose. Use a Phillips screwdriver.



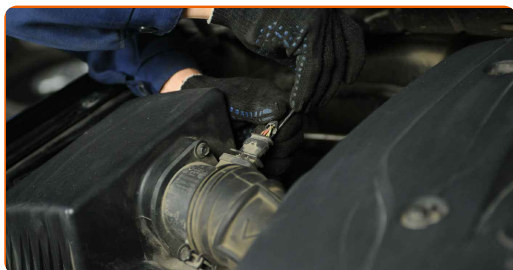
54

Attach the retainers of the ignition cables.



55

Plug in the mass air flow sensor connector.





- 56** Remove the fender protection cover. Close the hood.



- 57** Raise the front of the car and secure on supports.



- 58** Attach the bottom part of the shock strut. Use a Phillips screwdriver.



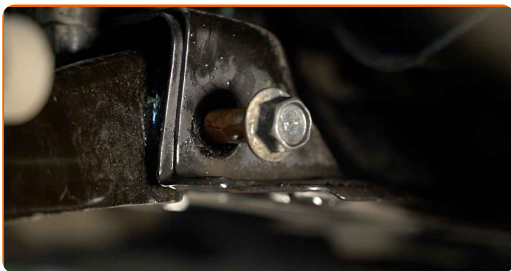
- 59** Install the fastening bolt. Use a pin punch. Use a hammer.

- 60** Screw in the lower fastener of the shock strut. Use a combination spanner #19. Use a drive socket #22. Use a ratchet wrench.



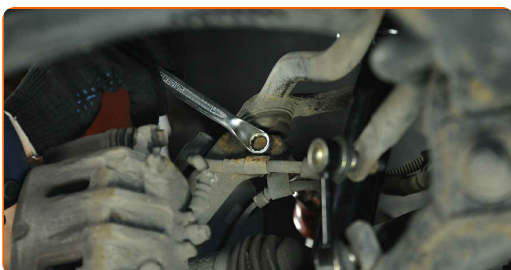
- 61** Attach the upper control arm to the steering knuckle. Use a crowbar.

62 Install the fastening bolt. Use a hammer.

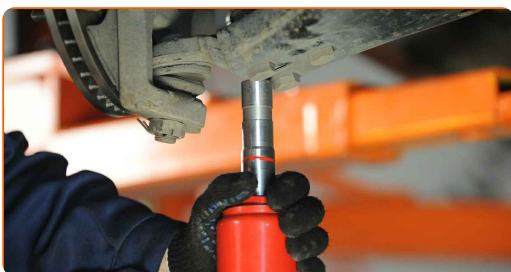


63 Connect the ABS sensor wiring.

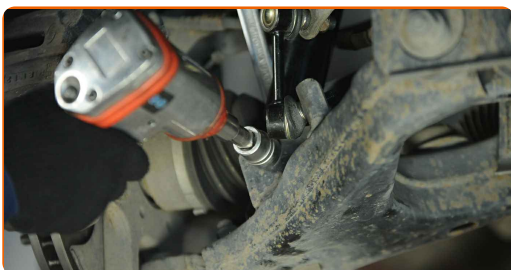
64 Tighten the upper control arm fasteners. Use a combination spanner #14. Use a drive socket #14. Use a torque wrench. Tighten it to 55 Nm torque.



65 Support the arm. Use a hydraulic transmission jack.

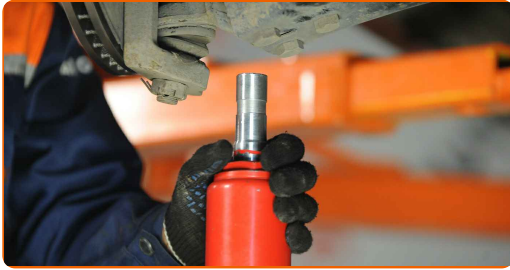


66 Tighten the lower fastening of the shock absorber. Use a combination spanner #19. Use a drive socket #22. Use a torque wrench. Tighten it to 125 Nm torque.



67

Remove the support from under the arm.



### AUTODOC recommends:

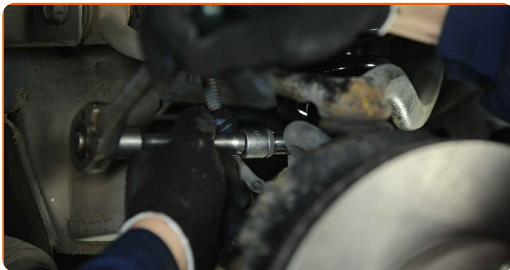
- KIA Sorento JC – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

68

Secure the brake hose fastening bracket.

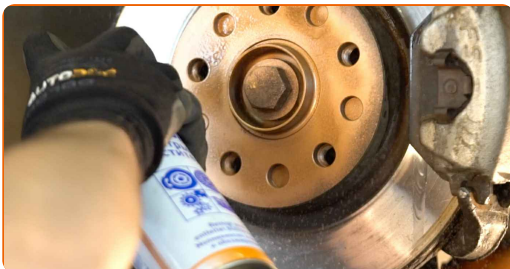
69

Tighten the brake hose fastening bracket to the shock strut. Use a drive socket #12. Use a ratchet wrench.



70

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



71

Clean the brake disk surface. Use a brake cleaner.



### AUTODOC recommends:

- Replacement: coil springs – KIA Sorento JC. After applying the spray, wait a few minutes.

72

Install the wheel.



### AUTODOC recommends:

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. KIA Sorento JC

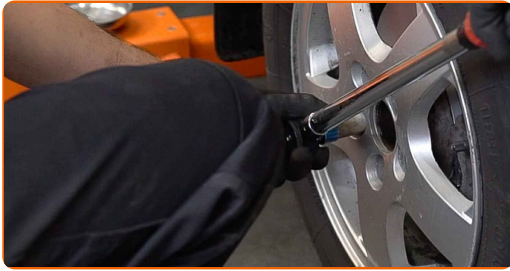
73

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

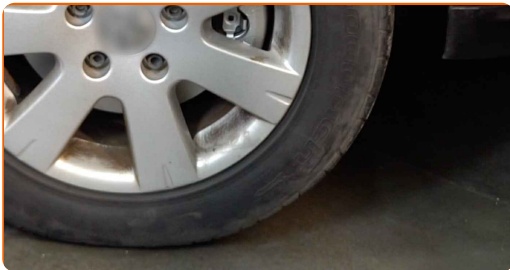


**74**

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.

**75**

Remove the jacks and chocks.



**WELL DONE!** 

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