



How to change front  
wheel bearing on  
**CITROËN DS3**  
**Convertible** –  
replacement guide

## SIMILAR VIDEO TUTORIAL



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

### Important!

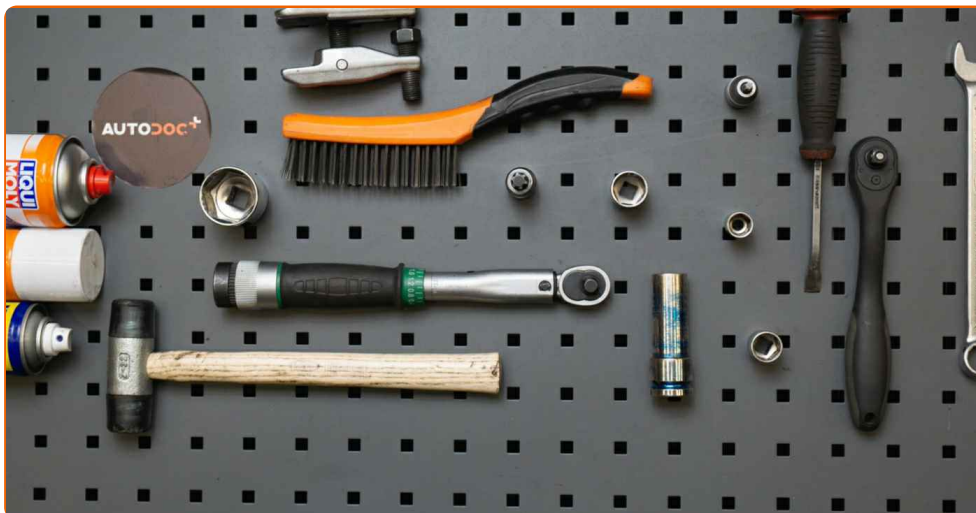
This replacement procedure can be used for:

CITROËN DS3 Convertible 1.2 VTi 82, CITROËN DS3 Convertible 1.6 VTi 120, CITROËN DS3 Convertible 1.6 THP 155, CITROËN DS3 Convertible 1.6 HDi 90, CITROËN DS3 Convertible 1.6 THP 150, CITROËN DS3 Convertible 1.6 BlueHDi 120, CITROËN DS3 Convertible 1.6 BlueHDi 100, CITROËN DS3 Convertible 1.2 THP 110, CITROËN DS3 Convertible 1.6 Racing, CITROËN DS3 Convertible 1.6 THP 165, CITROËN DS3 Convertible 1.6 BlueHDi 115

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: PEUGEOT 207 Hatchback 1.6 16V VTi

REPLACEMENT: WHEEL BEARING – CITROËN DS3 CONVERTIBLE. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- All-purpose cleaning spray
- Brake cleaner
- Electronic spray
- Multipurpose grease
- Copper grease
- Torque wrench
- Combination spanner #13
- Combination spanner #17
- Drive socket # 13
- Drive socket # 16
- Drive socket # 17
- Drive socket # 35
- Torx bit T30
- Torx bit T55
- Wheel impact socket #17
- Bush and bearing driver set
- Ratchet wrench
- Tap wrench
- Hammer
- Clip removal tool
- Circlip pliers
- Impact screwdriver
- Flat Screwdriver
- Crow bar
- Hydraulic transmission jack
- Bearing separator
- Vice
- Ball joint puller
- Wheel chock

**Buy tools**

Replacement: wheel bearing – CITROËN DS3 Convertible. Tip from AUTODOC experts:

- Do not re-use the bearing assembly of your CITROËN DS3 Convertible car.
- The wheel hub bearing replacement procedure is identical for both wheels on the same axle.
- All work should be done with the engine stopped.

## REPLACEMENT: WHEEL BEARING – CITROËN DS3 CONVERTIBLE. TAKE THE FOLLOWING STEPS:

1

Secure the wheels with chocks.



2

Loosen the wheel mounting bolts. Use wheel impact socket #17.



3

Raise the front of the car and secure on supports.

4

Unscrew the wheel bolts.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
CITROËN DS3 Convertible

5

Remove the wheel.



6

Remove the CV axle nut cotter pin. Use a crowbar.

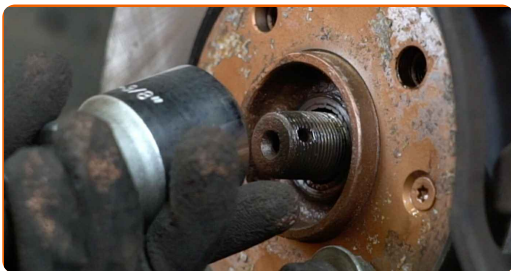


7

Loosen the fastener of the driveshaft. Use a drive socket #35. Use a tap wrench.



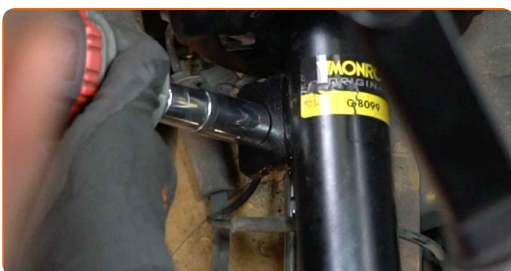
**8** Remove the fastening nut.



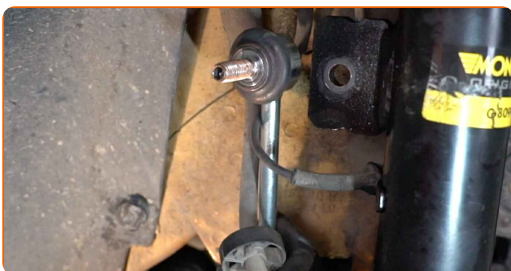
**9** Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



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



**11** Remove the stabilizer rod.



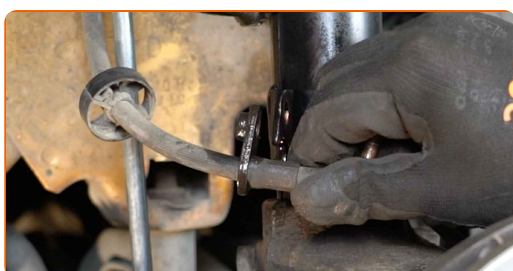
- 12 Clean the fastener of the bracket that connects the brake hose to the shock strut. Use a wire brush. Use WD-40 spray.



- 13 Unscrew the brake hose fastening bracket from the shock strut. Use a combination spanner #13.



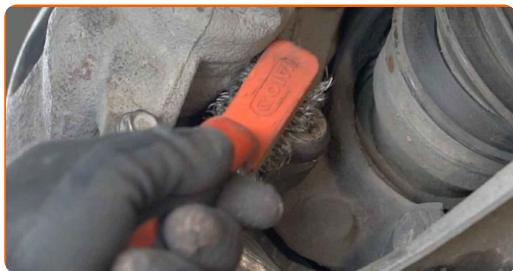
- 14 Disconnect the brake hose mounting bracket.



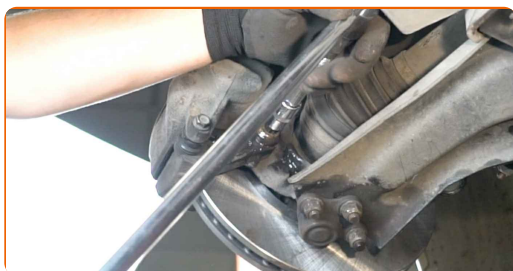
- 15 Spread the brake pads. Use a crowbar.



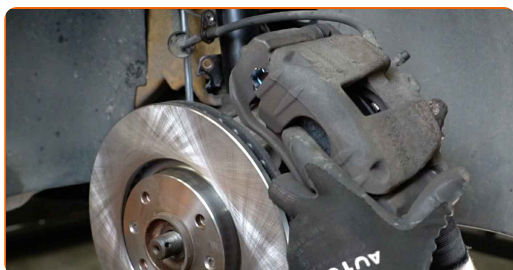
**16** Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



**17** Unscrew the caliper bracket fastening. Use Torx T55. Use a tap wrench. Use a ratchet wrench.



**18** Remove the brake caliper together with its bracket.



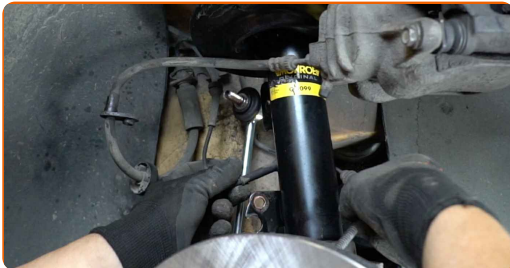


Replacement: wheel bearing – CITROËN DS3 Convertible. Professionals recommend:

- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, the piston can fall out from the brake cylinder, and brake fluid leakage and depressurization of the system may occur.
- Check the brake caliper bracket, brake caliper guide pins and boots. Clean them. Replace, if necessary.

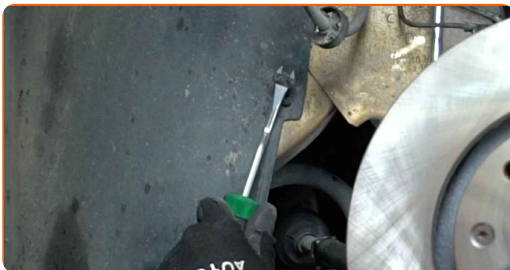
19

Disconnect the ABS sensor wiring.

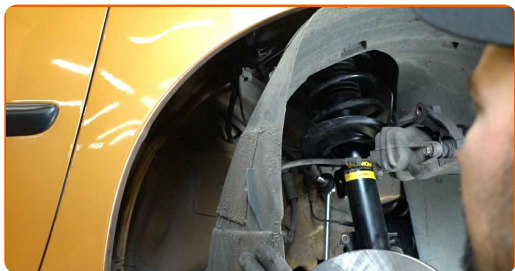


20

Remove the plastic clips of the wheel arch liner. Use a clip removal tool.



21 Remove the wheel arch cover.



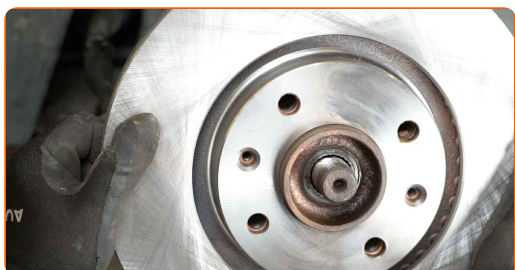
22 Detach the ABS sensor connector.



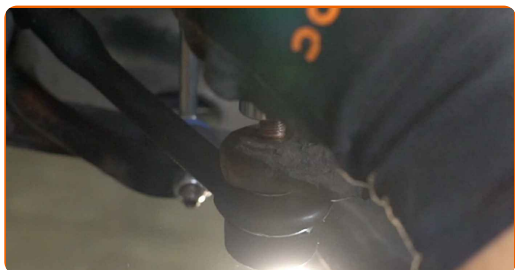
23 Unscrew the brake disc fastening. Use Torx T30. Use an impact screwdriver.



24 Remove the brake disc.



25 Unscrew the end fastening nut to the steering knuckle. Use a drive socket #17. Use a ratchet wrench.



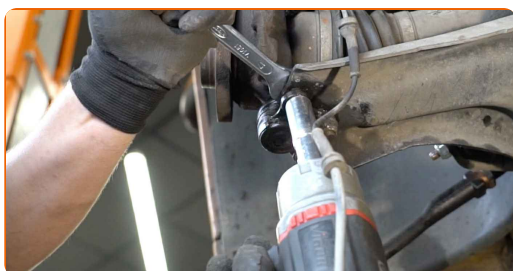
**26** Disconnect the tie rod end from the steering knuckle. Use a ball joint puller.



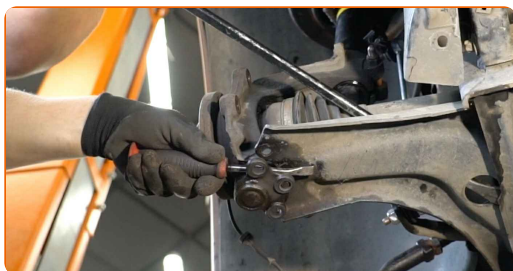
**27** Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



**28** Unscrew the fasteners connecting the ball joint to the control arm. Use a combination spanner #17. Use a drive socket #16. Use a ratchet wrench.



**29** Disconnect the ball joint from the arm. Use a crowbar.



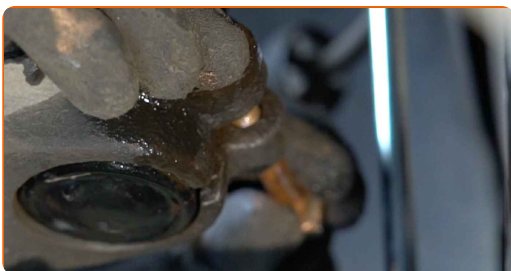
**30** Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



**31** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a drive socket #16. Use a ratchet wrench.



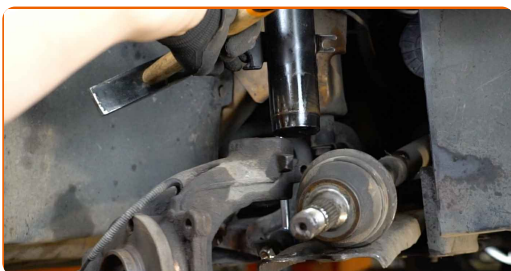
**32** Remove the fastening bolt.



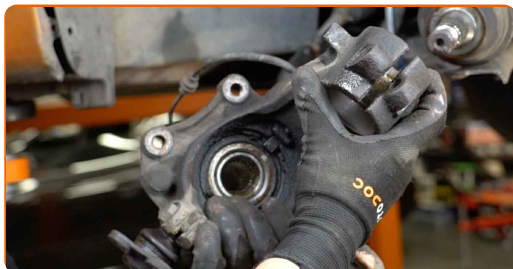
**33** Detach the driveshaft from the steering knuckle.



**34** Disconnect the steering knuckle from the shock absorber strut. Use a hammer.



**35** Remove the steering knuckle together with the hub.



**36** Place the steering knuckle assembled with the wheel hub in a vice.



**37** Clean the ABS sensor mounting seat. Use a wire brush. Use WD-40 spray.



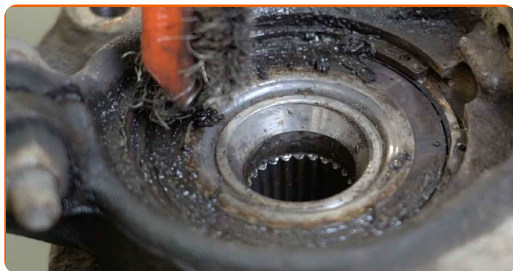
**38** Unscrew the ABS sensor fastener. Use a drive socket #13. Use a ratchet wrench.



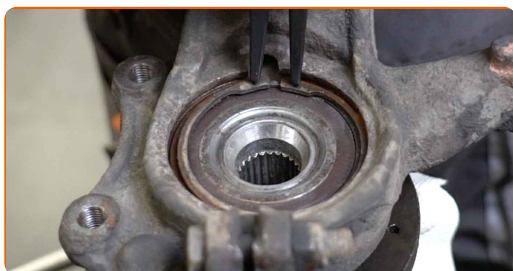
**39** Disconnect the ABS sensor. Use a flat screwdriver.



**40** Clean the wheel hub bearing retaining ring. Use a wire brush. Use WD-40 spray.

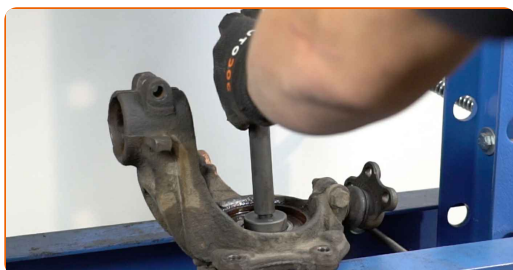


**41** Remove the wheel hub bearing retaining ring. Use circlip pliers.



**42** Release the vice and remove the steering knuckle assembled with the wheel hub.

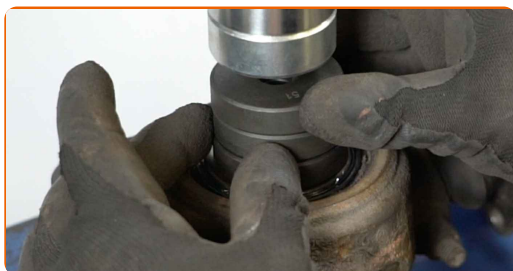
**43** Remove the wheel hub from the steering knuckle. Use a bush and bearing driver set.



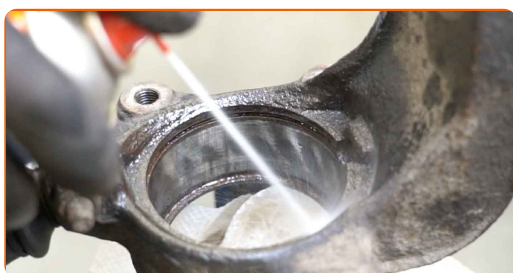
**44** Pull the bearing inner race out of the wheel hub. Use a bush and bearing driver set. Use a bearing separator.



**45** Press out the wheel hub bearing. Use a bush and bearing driver set.



**46** Clean the hub bearing mounting seat. Use all-purpose cleaning spray. Use WD-40 spray.



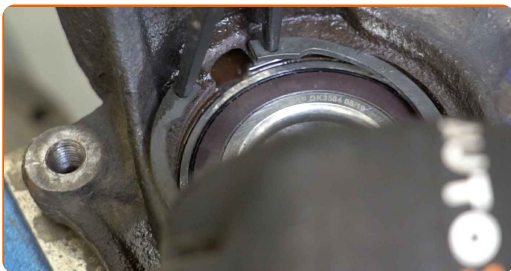
**47** Press the new bearing in the steering knuckle. Use a bush and bearing driver set.



**Replacement: wheel bearing – CITROËN DS3 Convertible. AUTODOC recommends:**

- Check to make sure the wheel hub bearing is positioned correctly. Avoid its misalignment.
- Stop pressing on the surface of the bearing immediately after it has been fitted into its mounting seat.

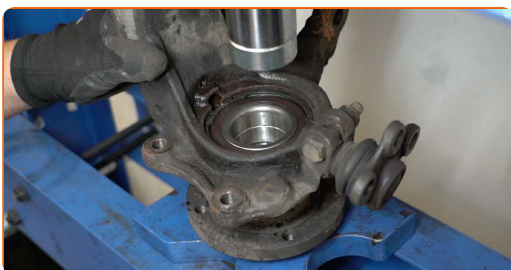
**48** Install the wheel hub bearing retaining ring. Use circlip pliers.



**49** Clean the hub. Use WD-40 spray.



**50** Install the wheel hub on the steering knuckle. Use a bush and bearing driver set.



**AUTODOC recommends:**

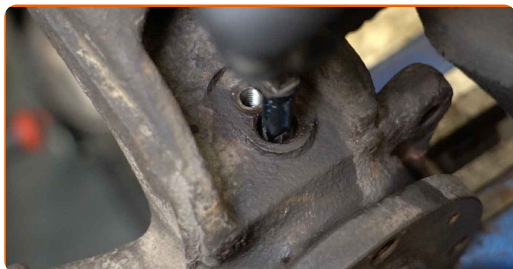
- Make sure that the wheel hub is positioned correctly. Avoid any misalignment.

**51** Treat the ABS sensor fastener. Use all-purpose cleaning spray. Use a multipurpose grease.





**52** Connect the ABS sensor.



**53** Tighten the fastener that connects the ABS sensor to the steering knuckle. Use a drive socket #13. Use a torque wrench. Tighten it to 10 nm torque.



**54** Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.



**55** Install the steering knuckle assembled with the wheel hub.



**56** Fix the shock absorber strut on the steering knuckle.



57

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



58

Install the fastening bolt.



59

Screw in the fastener that connects the shock strut to the steering knuckle. Use a drive socket #16. Use a ratchet wrench.



60

Remove the support from under the steering knuckle.

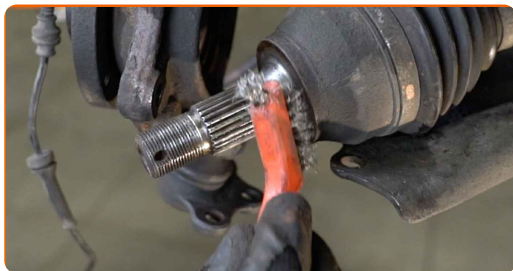


**AUTODOC recommends:**

- CITROËN DS3 Convertible – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

61

Clean the splines of the drive shaft CV joint. Use a wire brush. Use WD-40 spray.



62

Install the drive shaft.



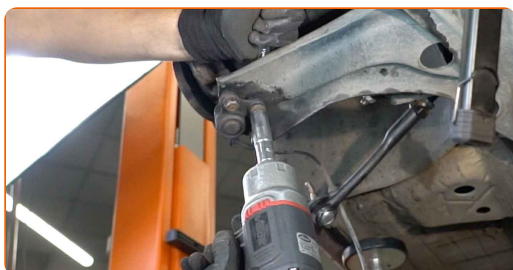
63

Attach the ball joint to the control arm.



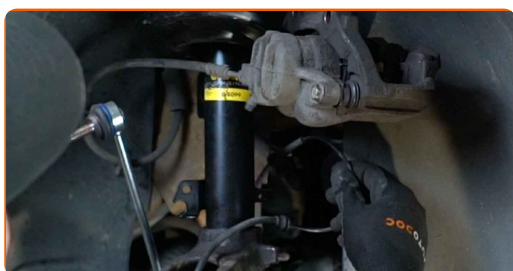
64

Screw the fasteners of the ball joint. Use a drive socket #16. Use a ratchet wrench.



65

Connect the ABS sensor wiring.



**66** Treat the ABS sensor connector. Use dielectric grease.



**67** Attach the ABS sensor connector.



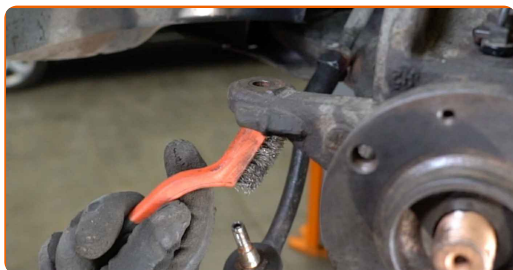
**68** Install the wheel arch cover to its mounting seat.



**69** Reinstall the plastic clips of the wheel arch liner.

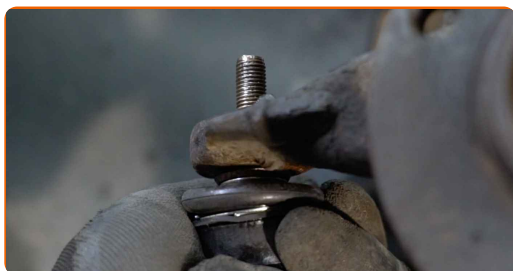


**70** Clean the mounting seats of the tie rod end. Use a wire brush. Use WD-40 spray.



71

Connect the tie rod end to the steering knuckle.



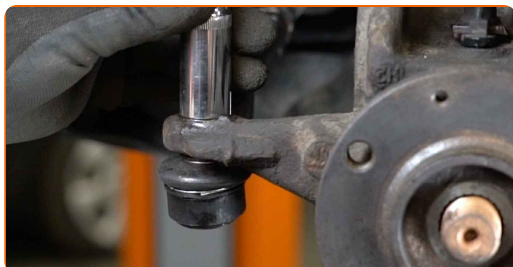
72

Screw on the fastening nut that connects the tie rod end to the steering knuckle. Use a drive socket #17. Use a ratchet wrench.



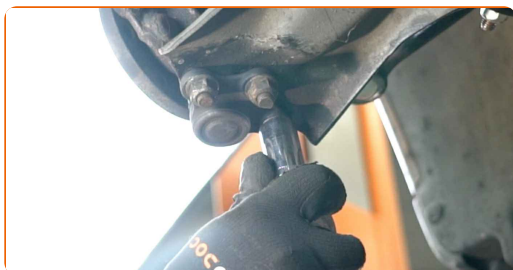
73

Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #17. Use a torque wrench. Tighten it to 35 nm torque.



74

Tighten the fasteners connecting the ball joint to the control arm. Use a drive socket #16. Use a torque wrench. Tighten it to 60 Nm torque.



- 75** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #16. Use a torque wrench. Tighten it to 55 Nm torque.



- 76** Clean the hub. Use a wire brush. Treat the contacting surface. Use copper grease.



- 77** Install the brake disc.



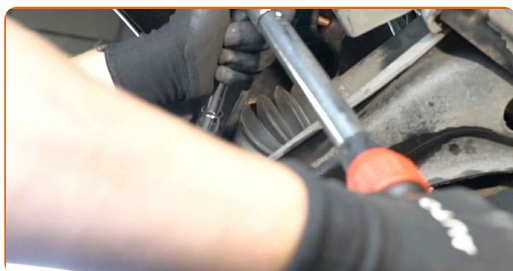
- 78** Tighten the brake disc fastening. Use Torx T30. Use a torque wrench. Tighten it to 9 Nm torque.



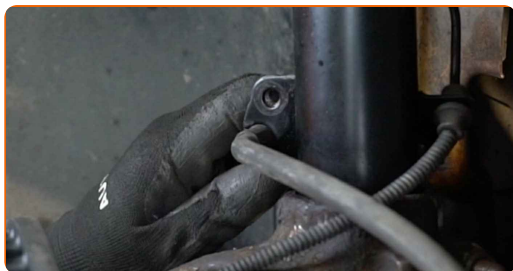
**79** Install the brake caliper together with its bracket.



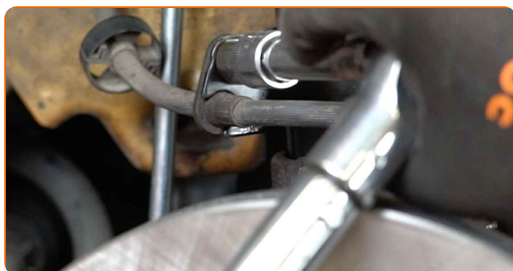
**80** Tighten the brake caliper bracket. Use Torx T55. Use a torque wrench. Tighten it to 105 Nm torque.



**81** Secure the brake hose bracket.

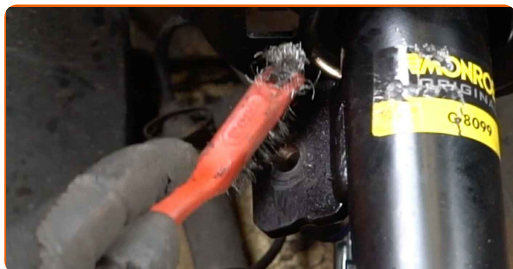


**82** Tighten the fastener connecting the brake hose bracket to the suspension strut. Use a drive socket #13. Use a torque wrench. Tighten it to 10 nm torque.



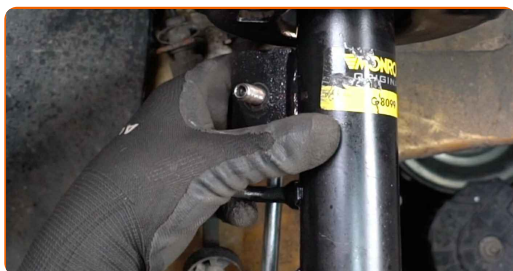
83

Clean the mounting seats of the stabiliser link. Use a wire brush. Use WD-40 spray.



84

Install the transverse stabilizer link.



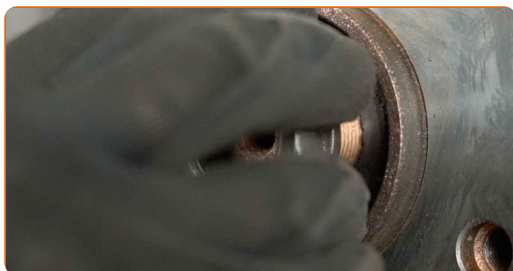
85

Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #17. Use a torque wrench. Tighten it to 43 Nm torque.



86

Install the fastening nut.





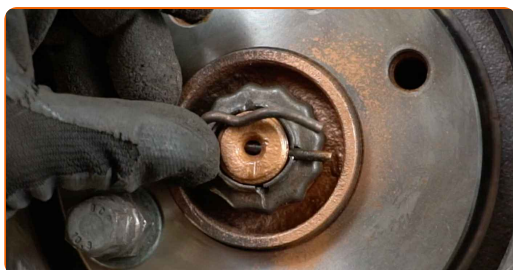
**87** Tighten the drive shaft nut. Use a drive socket #35. Use a torque wrench. Tighten it to 245 Nm torque.



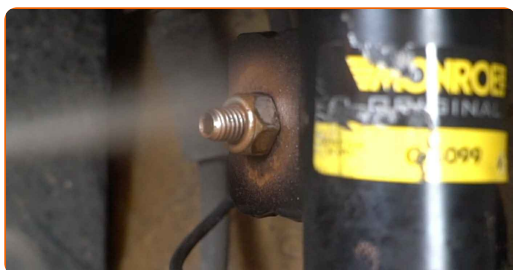
**88** Treat the CV axle fastener. Use copper grease.



**89** Install the CV axle nut cotter pin. Use a crowbar.



**90** Treat all joints of the stabiliser link. Treat all joints of the arm. Use copper grease.



**91** Clean the wheel rim mounting seat. Use a wire brush.



**92**

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



**93**

Clean the brake disk surface. Use a brake cleaner.



**AUTODOC recommends:**

- Replacement: wheel bearing – CITROËN DS3 Convertible. After applying the spray, wait a few minutes.

**94**

Install the wheel.



**Replacement: wheel bearing – CITROËN DS3 Convertible. AUTODOC experts recommend:**

- To avoid injury, hold up the wheel when screwing in the fastening bolts.

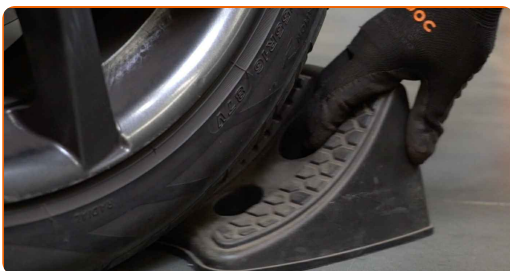
**95** Screw in the wheel bolts. Use wheel impact socket #17.



**96** Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 100 Nm torque.



**97** Remove the jacks and chocks.



**WELL DONE!** 

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