



How to change front  
wheel bearing on  
**TOYOTA Yaris III Van**  
**(XP13)** – 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 Yaris III Van (XP13) 1.3 VVTi (NSP130)

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 Yaris II Hatchback (XP9) 1.3 VVT-i (SCP90\_)

**REPLACEMENT: WHEEL BEARING – TOYOTA YARIS III  
VAN (XP13). TOOLS YOU'LL NEED:**



- Wire brush
- WD-40 spray
- Brake cleaner
- Ceramic grease
- Copper grease
- Torque wrench
- Combination spanner #19
- Drive socket # 10
- Drive socket # 17
- Drive socket # 19
- 12-point socket # 30
- Torx bit T30
- Wheel impact socket #21
- Ball joint puller
- Bearing separator
- Ratchet wrench
- Flat chisel
- Circlip pliers
- Tap wrench
- Hammer
- Bush and bearing driver set
- Crow bar

**Buy tools**

**AUTODOC recommends:**

- Do not re-use the bearing assembly of your TOYOTA Yaris III Van (XP13) car.
- The wheel hub bearing replacement procedure is identical for both wheels on the same axle.
- Please note: all work on the car – TOYOTA Yaris III Van (XP13) – should be done with the engine switched off.

**CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:**

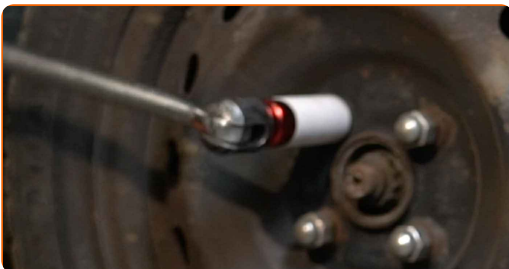
**1** Open the bonnet. Unscrew the brake fluid reservoir cap.

**2** Secure the wheels with chocks.

**3** Loosen the fastener of the driveshaft. Use 12-point socket No.30. Use a tap wrench.



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



**5** Raise the car.

Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). Professionals recommend:

- If you are using a jack, make sure it rests on a flat surface without any unevenness.
- Be sure to additionally secure the car with jack stands.

**6** Unscrew the wheel bolts.



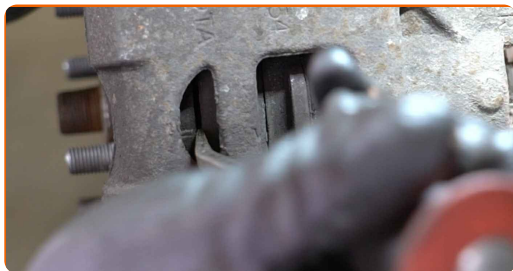
**AUTODOC recommends:**

- Important! Hold the wheel while unscrewing the fastening bolts. TOYOTA Yaris III Van (XP13)

**7** Remove the wheel.



**8** Spread the brake pads. Use a crowbar.



**9** Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.



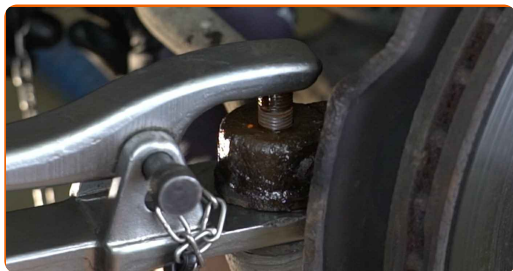
**10** Remove the cotter pin that secures the fastener connecting the tie rod end to the steering knuckle. Use a crowbar.



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



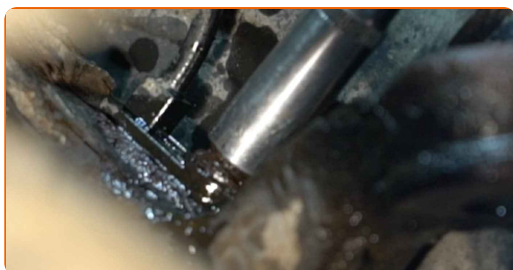
**12** Disconnect the tie rod end from the steering knuckle. Use a ball joint puller.



**13** Clean the ABS sensor fastener. Use a wire brush. Use WD-40 spray.



**14** Unscrew the ABS sensor fastener. Use a drive socket #10. Use a ratchet wrench.

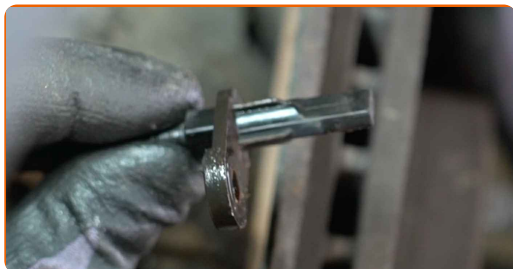


**15** Remove the fastening bolt.





**16** Disconnect the ABS sensor. Use a crowbar.



**17** Unscrew the fastener connecting the drive shaft to the wheel hub. Use 12-point socket No.30. Use a ratchet wrench.



**18** Clean the fastener connecting the ball joint to the steering knuckle. Use a wire brush. Use WD-40 spray.



**19** Remove the cotter pin that secures the fastener connecting the ball joint to the steering knuckle. Use a crowbar.

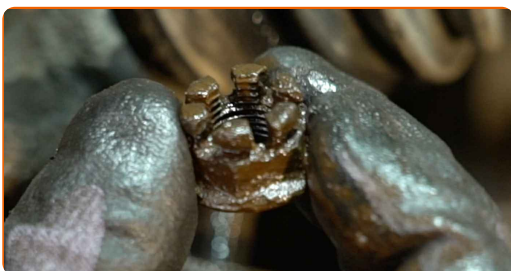




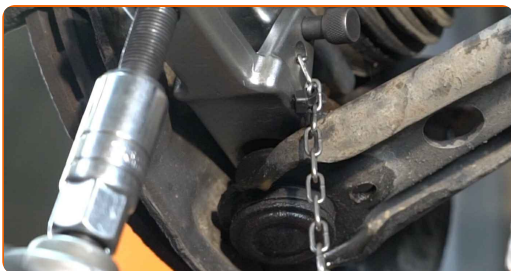
**20** Unscrew the ball joint fastening to the steering knuckle. Use a combination spanner #19.



**21** Remove the fastening nut.



**22** Disconnect the ball joint from the steering knuckle. Use a ball joint puller.



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



**24**

Unscrew the brake caliper bracket fasteners. Use a drive socket #17. Use a ratchet wrench.



**25**

Remove the fastening bolts.

**26**

Remove the brake caliper together with its bracket.



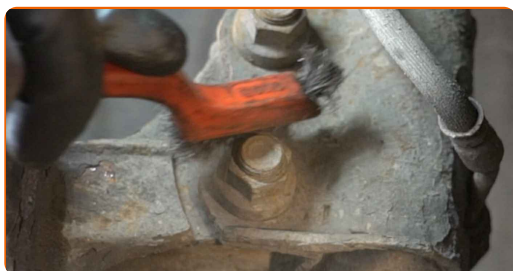
**Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). Tip from AUTODOC experts:**

- 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.

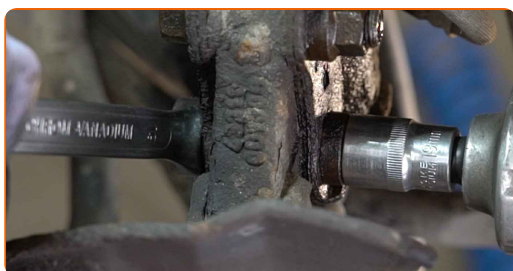
**27** Remove the brake disc.



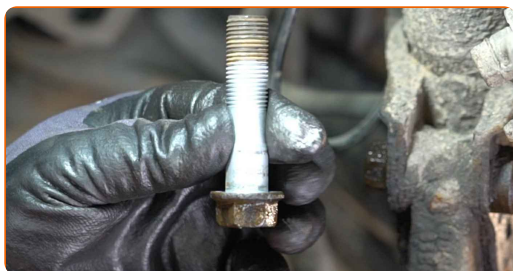
**28** Clean the fasteners connecting the shock strut to the steering knuckle. Use a wire brush. Use WD-40 spray.



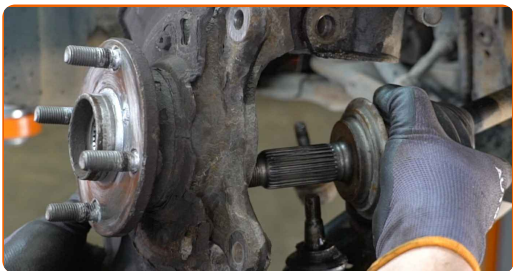
**29** Unscrew the fasteners connecting the suspension strut to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a ratchet wrench.



**30** Remove the fastening bolts.



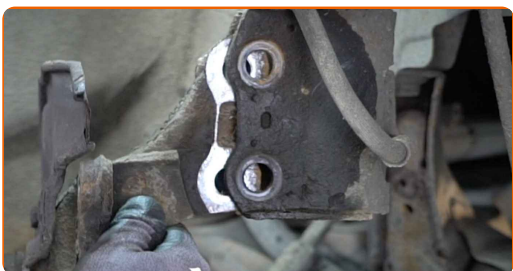
**31** Detach the driveshaft from the steering knuckle.



**AUTODOC recommends:**

- Make sure that the drive shaft is not unloaded (when the car is jacked).

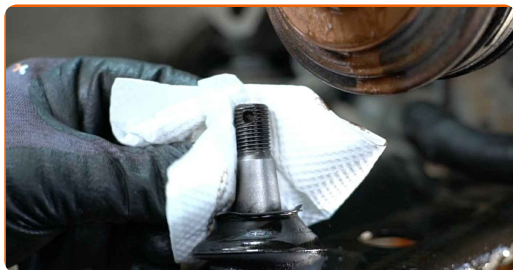
**32** Disconnect the steering knuckle from the shock absorber strut.



**33** Remove the steering knuckle together with the wheel hub.



- 34 Clean the mounting seats of the shock strut. Clean the splines of the drive shaft CV joint. Clean the fastener connecting the ball joint to the steering knuckle. Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.



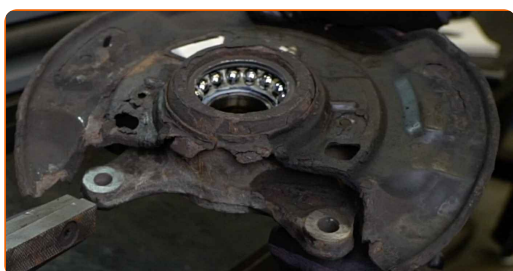
- 35 Unscrew the fasteners of the brake disc cover. Use Torx T30.



- 36 Remove the hub from the steering knuckle. Use a bush and bearing driver set.

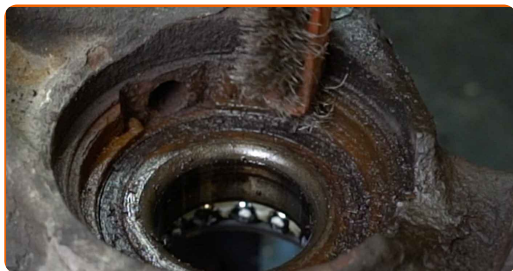


- 37 Remove the brake disc cover.

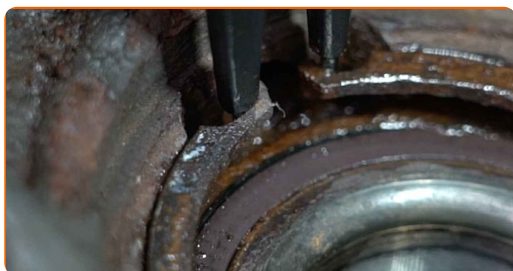




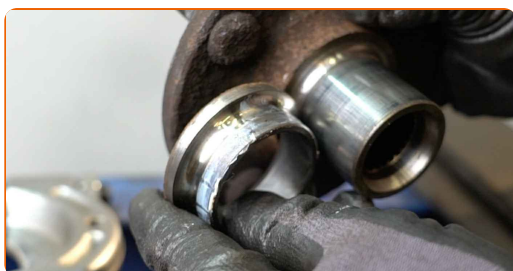
**38** Clean the wheel hub bearing retaining ring. Use a wire brush. Use WD-40 spray.



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



**40** Dismantle the inner bearing race that is remaining on the hub. Use a bush and bearing driver set. Use a bearing separator.



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



**42**

Clean the hub bearing mounting seat. Use a wire brush. Use WD-40 spray.



**43**

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



**Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). 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.

**44**

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



**45**

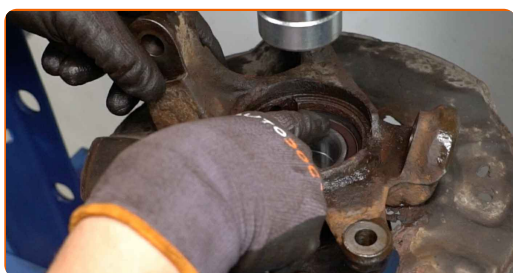
Install the brake disc cover.



**46** Screw in the fasteners of the brake disc cover. Use Torx T30.



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

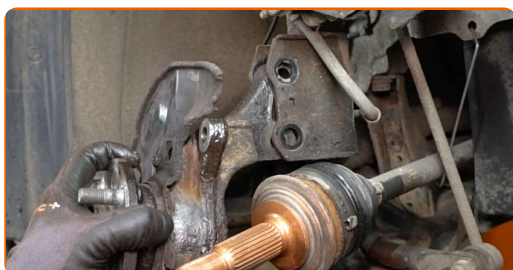


Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). AUTODOC experts recommend:

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

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

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



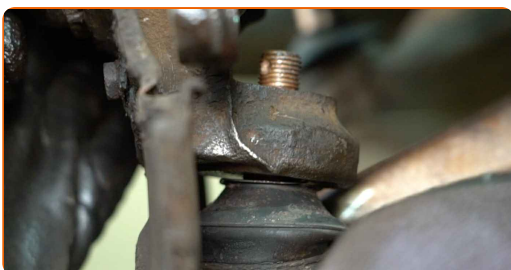
**50** Install the fastening bolts.



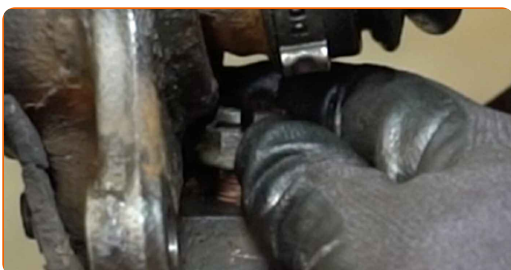
**51** Install the steering knuckle on the CV axle.



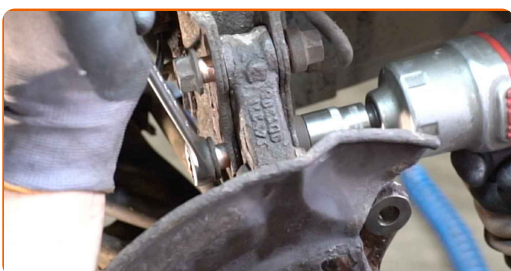
**52** Connect the ball joint to the steering knuckle.



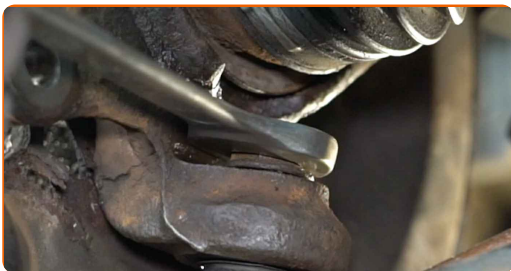
**53** Install the fastening nut.



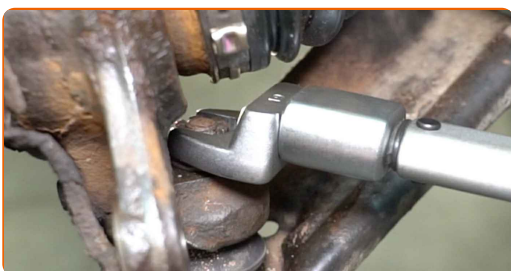
**54** Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a ratchet wrench.



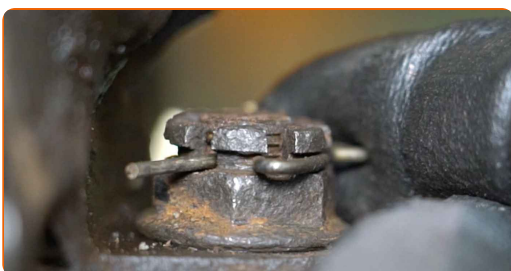
**55** Screw the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19.



**56** Tighten the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19. Use a torque wrench. Tighten it to 65 Nm torque.

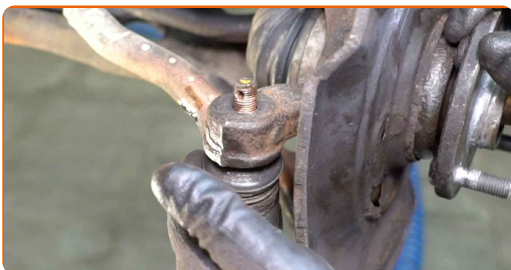


**57** Install the cotter pin that secures the fastener connecting the ball joint to the steering knuckle.



**58** Treat the ball joint fastener. Use copper grease.

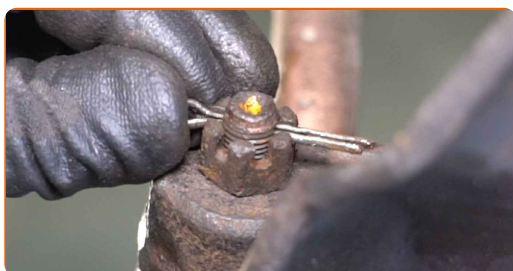
**59** Connect the tie rod end to the steering knuckle.



**60** 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 49 Nm torque.

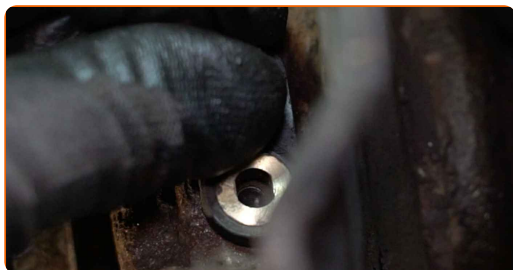


**61** Install the cotter pin that secures the fastener connecting the tie rod end to the steering knuckle. Use a crowbar.

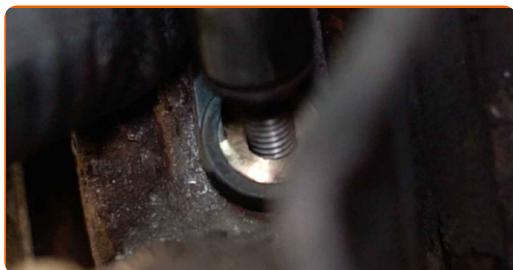


**62** Treat the fastener connecting the tie rod end to the steering knuckle. Use copper grease.

**63** Connect the ABS sensor.



**64** Install the fastening bolt.



**65** Tighten the fastener that connects the ABS sensor to the steering knuckle. Use a drive socket #10. Use a torque wrench. Tighten it to 8 Nm torque.

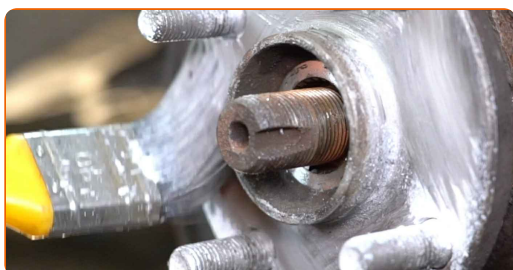


**66** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a combination spanner #19. Use a drive socket #19. Use a torque wrench. Tighten it to 164 Nm torque.

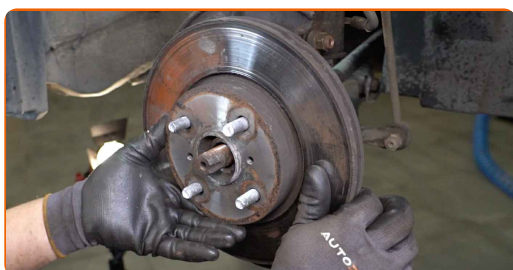


**67** Clean the hub. Use a wire brush.

**68** Treat the contacting surface. Use ceramic grease.

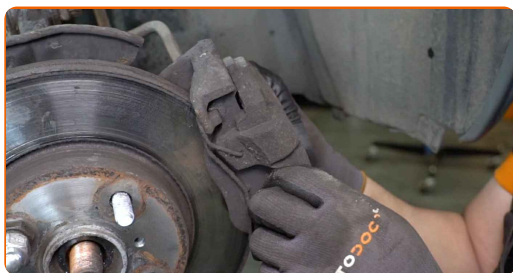


**69** Install the brake disc.

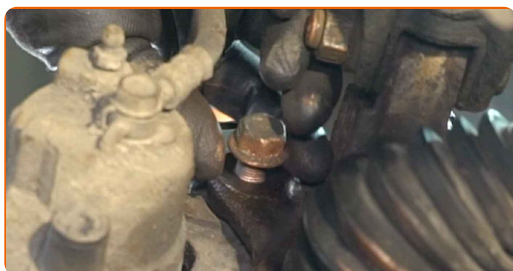




**70** Install the brake caliper together with its bracket.



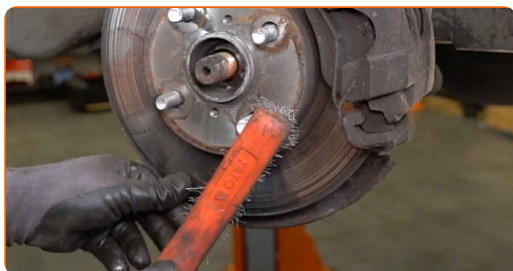
**71** Install the fastening bolts.



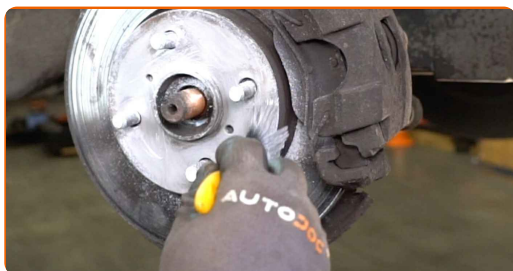
**72** Tighten the brake caliper bracket fasteners. Use a drive socket #17. Use a torque wrench. Tighten it to 107 nm torque.



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



**74** Treat the surface where the brake disc contacts the wheel rim. Use ceramic grease.



75

Clean the brake disk surface. Use a brake cleaner.

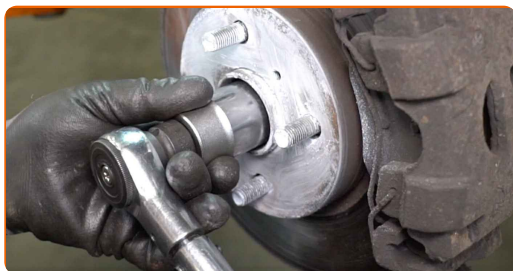


**AUTODOC recommends:**

- Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). After applying the spray, wait a few minutes.

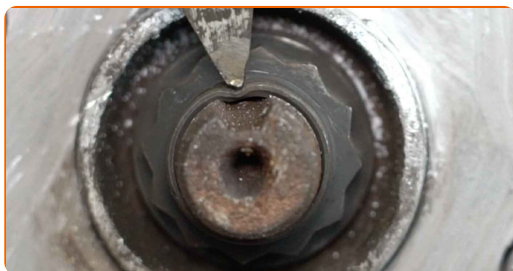
76

Tighten the drive shaft nut. Use 12-point socket No.30. Use a torque wrench. Tighten it to 216 Nm torque.



77

Restake the fastener of the driveshaft. Use a flat metal-working chisel. Use a hammer.





**78** Install the wheel.



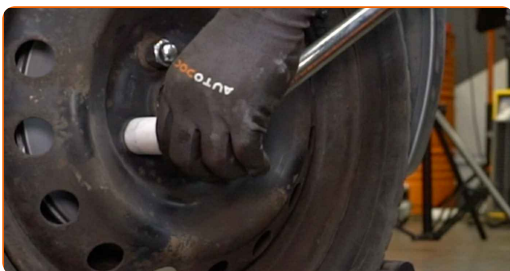
Replacement: wheel bearing – TOYOTA Yaris III Van (XP13). Tip from AUTODOC experts:

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

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



**80** 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.



81

Remove the jacks and chocks.



**AUTODOC recommends:**

- Without starting the engine, press the brake pedal several times until you feel significant resistance.
- Check the brake fluid level in the expansion tank and refill if necessary.

82

Tighten the brake fluid reservoir cap. Close the hood.



**WELL DONE!** 

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