



How to change front
wheel bearing on
Mercedes ML W163 –
replacement guide

VIDEO TUTORIAL

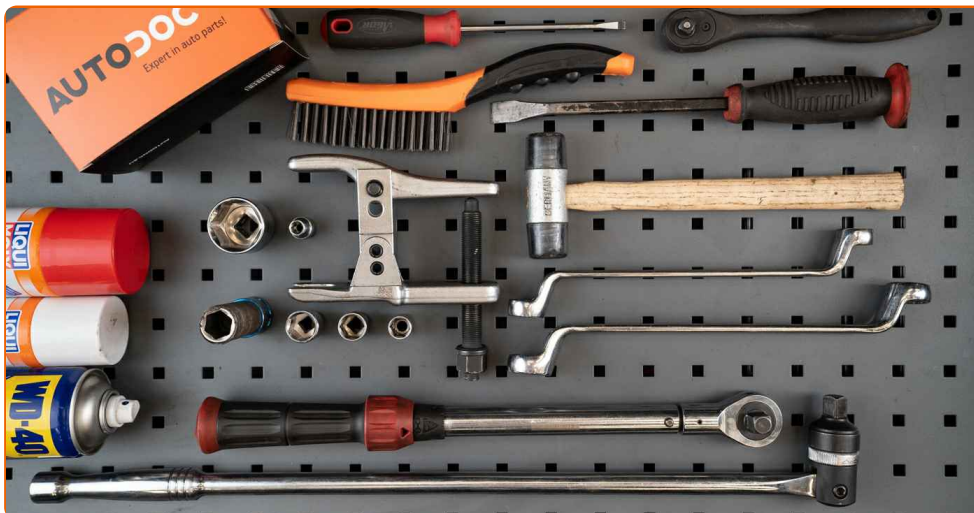
** Important!**

This replacement procedure can be used for:

MERCEDES-BENZ M-Class (W163) ML 320 (163.154), MERCEDES-BENZ M-Class (W163) ML 230 (163.136), MERCEDES-BENZ M-Class (W163) ML 430 (163.172), MERCEDES-BENZ M-Class (W163) ML 55 AMG (163.174), MERCEDES-BENZ M-Class (W163) ML 400 CDI (163.128), MERCEDES-BENZ M-Class (W163) ML 500 (163.175), MERCEDES-BENZ M-Class (W163) ML 350 (163.157), MERCEDES-BENZ M-Class (W163) ML 350

The steps may slightly vary depending on the car design.

REPLACEMENT: WHEEL BEARING – MERCEDES ML W163. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Multipurpose grease
- Copper grease
- Combination spanner #19
- Combination spanner #22
- Impact socket №10
- Impact socket №E10
- Impact socket №21
- Impact socket №22
- Impact socket №36
- Torx bit T30
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Hammer
- Ball joint puller
- Circlip pliers
- Bush and bearing driver set
- Flat Screwdriver
- Crow bar
- Wheel chock

BUY TOOLS

Replacement: wheel bearing – Mercedes ML W163. Tip from AUTODOC:

- Do not re-use the bearing assembly of your Mercedes ML W163 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 – MERCEDES ML W163.
RECOMMENDED SEQUENCE OF 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.



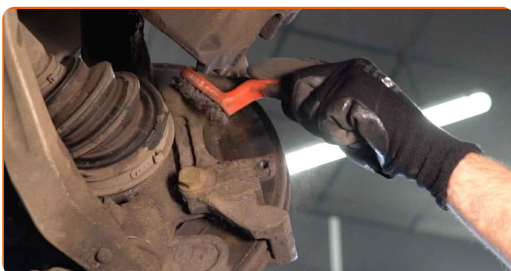
Replacement: wheel bearing – Mercedes ML W163. AUTODOC experts recommend:

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

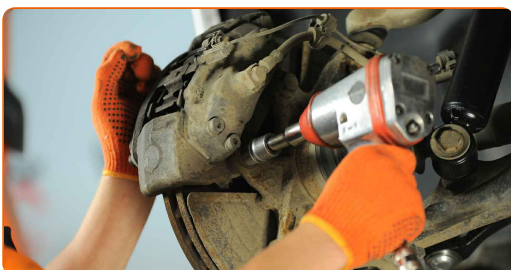
5 Remove the wheel.



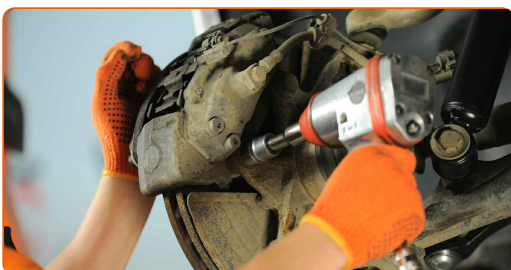
6 Clean the brake caliper bracket fasteners. Use a wire brush. Use WD-40 spray.



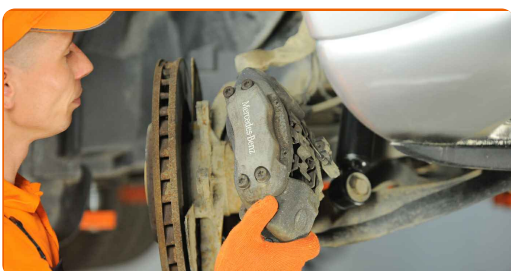
7 Spread the brake pads. Use a crowbar.



8 Unscrew the caliper bracket fastening. Use a drive socket #21. Use a ratchet wrench.



9 Remove the brake caliper together with its bracket. Use a flat screwdriver.



Replacement: wheel bearing – Mercedes ML W163. AUTODOC recommends:

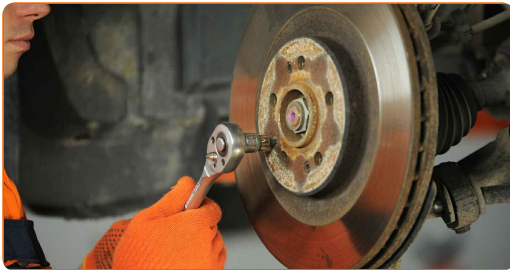
- Tie the caliper to the suspension or to the body with a wire without disconnecting from the brake hose to prevent depressurization of the brake system.
- Make sure that the brake caliper is not hanging on the brake hose.
- Don't press the brake pedal after the brake caliper has been removed. As a result, 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.

10

Clean the brake disc fasteners. Use a wire brush. Use WD-40 spray.

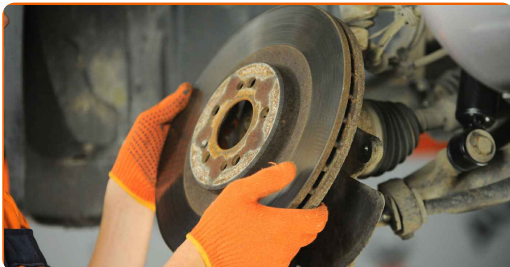
11

Unscrew the brake disc fastening. Use Torx T30. Use a ratchet wrench.

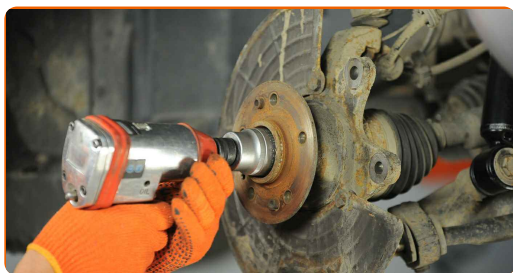


12

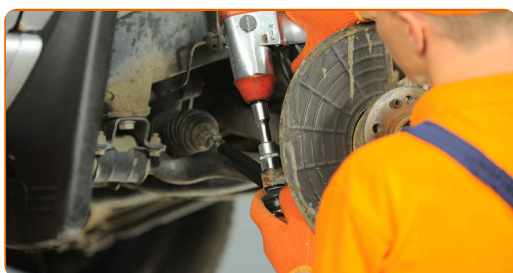
Remove the brake disc. Use a hammer.



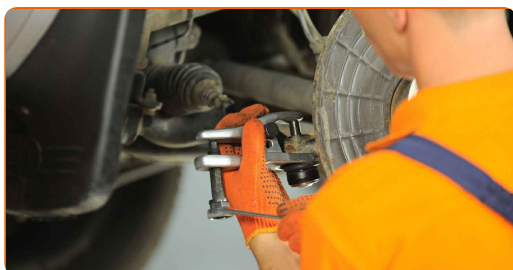
13 Unscrew the wheel hub axle nut. Use a drive socket #36.



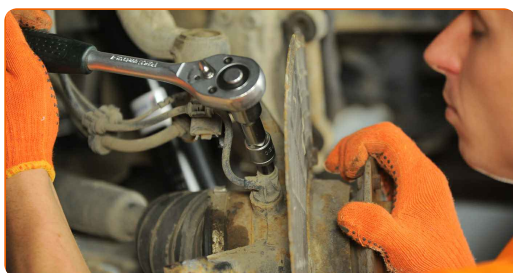
14 Unscrew the end fastening nut to the steering knuckle. Use a drive socket #22. Use a ratchet wrench.



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



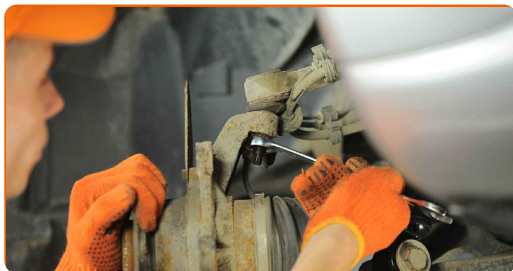
16 Unscrew the ABS sensor fastening from the steering knuckle. Use a drive socket #10. Use a drive socket #E10. Use a ratchet wrench.



17 Remove the ABS sensor from the steering knuckle.

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

19 Unscrew the top fastening of the ball joint. Use a combination spanner #19.



20 Disconnect the ball joint from the steering knuckle. Use a crowbar.



21 Remove the drive shaft.

22 Unscrew the lower ball joint fastening from the steering knuckle. Use a combination spanner #22.

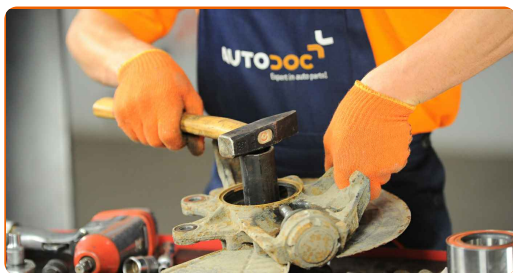


23 Disconnect the ball joint from the steering knuckle.

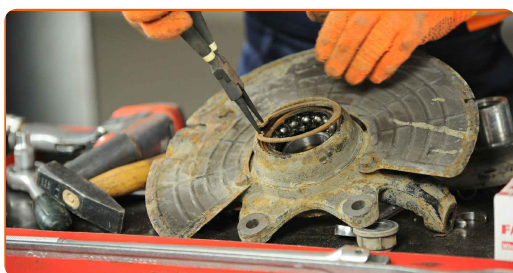
24 Remove the steering knuckle together with the hub.



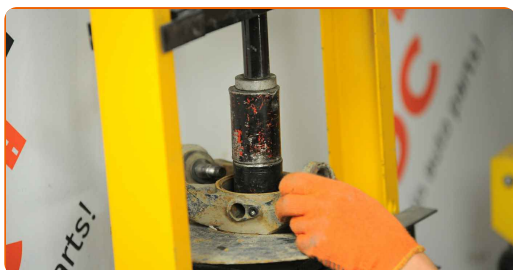
25 Press the wheel hub out from the tapered roller bearing. Use a bush and bearing driver set. Use a hammer.



26 Remove the retaining ring. Use circlip pliers.



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



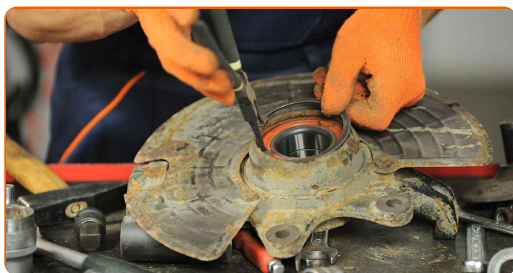
Replacement: wheel bearing – Mercedes ML W163. Tip:

- Apply special grease to the bearing assembly mounting seat.

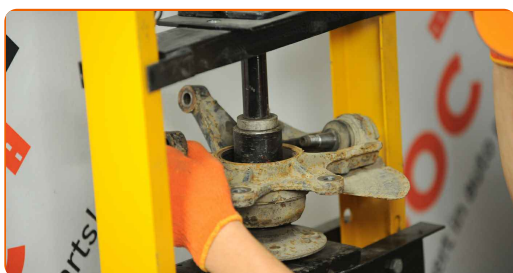
28 Press the new bearing in the steering knuckle.



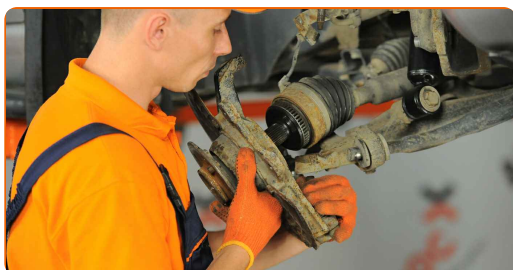
29 Install the retaining ring. Use circlip pliers.



30 Press the wheel hub into the bearing inner race. Use a bush and bearing driver set.

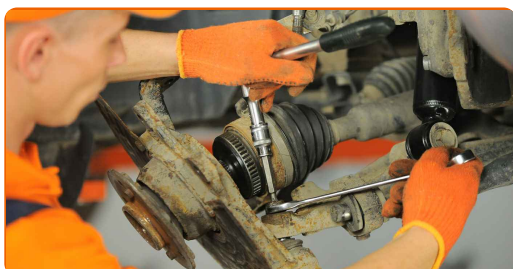


31 Install the steering knuckle with a hub in assembly.



32 Connect the ball joint to the steering knuckle.

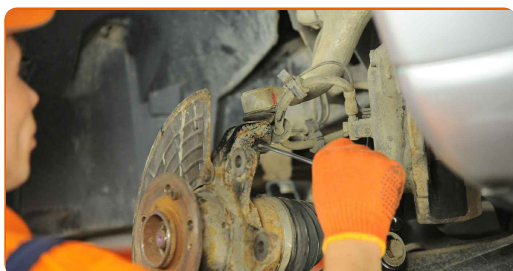
33 Tighten the lower fastening of the ball joint. Use a combination spanner #22. Use Torx T30. Use a torque wrench. Tighten it to 75 Nm torque.



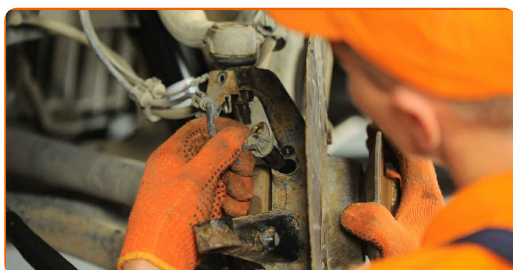
34 Install the drive shaft into the wheel hub.

35 Connect the ball joint to the steering knuckle. Use a crowbar.

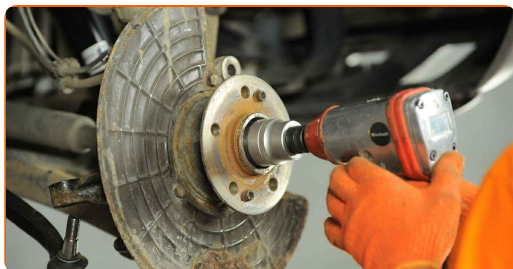
- 36** Tighten the top fastening of the ball joint. Use a combination spanner #19. Use a torque wrench. Tighten it to 50 Nm torque.



- 37** Install the ABS sensor on the steering knuckle and secure it. Use a drive socket #10. Use a drive socket #E10. Use a ratchet wrench.



- 38** Tighten the hub. Use a drive socket #36. Use a torque wrench. Observe the recommended tightening torque.

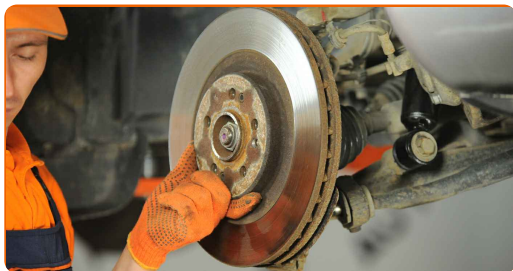


- 39** Connect the tie rod end to the steering knuckle.

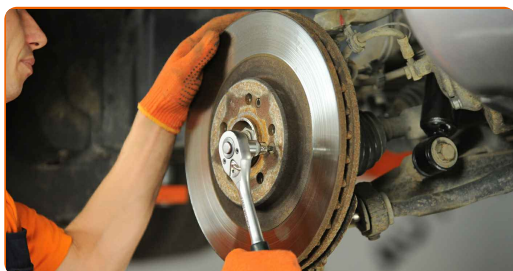
- 40** Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #22. Use a torque wrench. Tighten it to 55 nm torque.



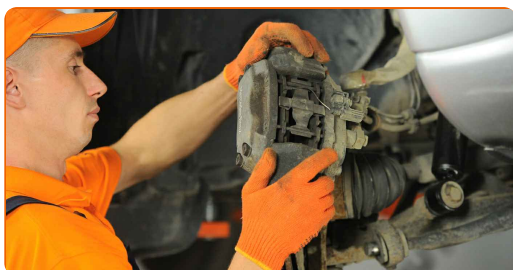
41 Install the brake disc.



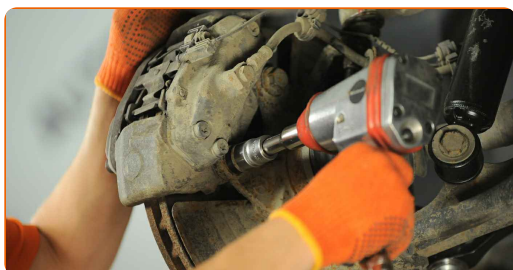
42 Tighten the brake disc fastening. Use Torx T30. Use a torque wrench. Tighten it to 9 nm torque.



43 Install the brake caliper together with its bracket.



44 Tighten the brake caliper bracket. Use a drive socket #21. Use a torque wrench. Tighten it to 180 nm torque.



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

46

Clean the brake disk surface. Use a brake cleaner.



AUTODOC recommends:

- Replacement: wheel bearing – Mercedes ML W163. After applying the spray, wait a few minutes.

47

Install the wheel.



Replacement: wheel bearing – Mercedes ML W163. Professionals recommend:

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

48

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



49 Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 150 Nm torque.

50 Remove the jacks and chocks.

WELL DONE! 

[VIEW MORE TUTORIALS](#)

AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE

AUTODOC MOBILE APP: GREAT DEALS AND CONVENIENT SHOPPING



+ AUTODOC

GET IT ON
Google Play

Download on the
App Store

Download

A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

BUY SPARE PARTS FOR MERCEDES

WHEEL BEARING: A WIDE SELECTION

CHOOSE CAR PARTS FOR MERCEDES ML W163

WHEEL BEARING FOR MERCEDES: BUY NOW

**WHEEL BEARING FOR MERCEDES ML W163: THE BEST
DEALS & OFFERS**

DISCLAIMER:

The document contains only general recommendations that may be useful for you when you perform repair or replacement work. AUTODOC shall not be liable for any loss, injury, damage of property occurring in the repair or replacement process due to incorrect use or misinterpretation of the provided information.

AUTODOC shall not be liable for any possible mistakes and uncertainties in this guide. The information provided is for information purposes only and cannot replace advice from specialists.

AUTODOC shall not be liable for incorrect or hazardous usage of equipment, tools and car parts. AUTODOC strongly recommends to be careful and observe the safety rules when performing repair or replacement works. Remember: usage of low quality auto parts does not guarantee you the appropriate level of road safety.

© Copyright 2022 – All the contents of this website, in particular texts, photographs and graphics, are protected by copyright. All rights, including reproduction, publication, editing and translation rights, are reserved by AUTODOC GmbH.