



How to change track rod  
end on **BMW 1**  
**Hatchback (E87)** –  
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:

BMW 1 Hatchback (E87) 116i 1.6, BMW 1 Hatchback (E87) 116i 2.0, BMW 1 Hatchback (E87) 118i 2.0, BMW 1 Hatchback (E87) 120i 2.0, BMW 1 Hatchback (E87) 130i 3.0, BMW 1 Hatchback (E87) 116d 2.0, BMW 1 Hatchback (E87) 118d 2.0, BMW 1 Hatchback (E87) 120d 2.0, BMW 1 Hatchback (E87) 123d 2.0

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: BMW 3 Saloon (E90) 318i 2.0

REPLACEMENT: TRACK ROD END – BMW 1 HATCHBACK (E87). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #21
- Drive socket # 16
- Torx bit T40
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat Screwdriver
- Vernier caliper
- Hammer
- Wheel chock

**Buy tools**

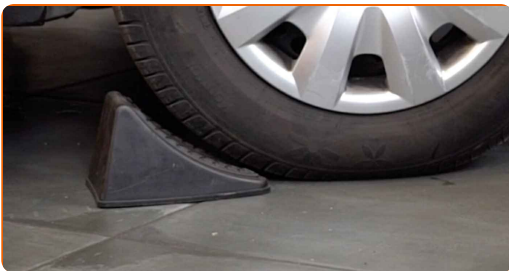
Replacement: track rod end – BMW 1 Hatchback (E87). AUTODOC experts recommend:

- Replace tie rod ends in pairs.
- The replacement procedure is identical for the right and left tie rod ends.
- During the installation process, use only new bolts and nuts.
- Please note: all work on the car – BMW 1 Hatchback (E87) – should be done with the engine switched off.

## CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:

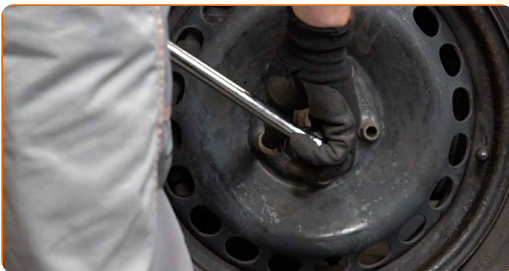
1

Secure the wheels with chocks.



2

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



3

Raise the front of the car and secure on supports.

**4** Unscrew the wheel bolts.



**AUTODOC recommends:**

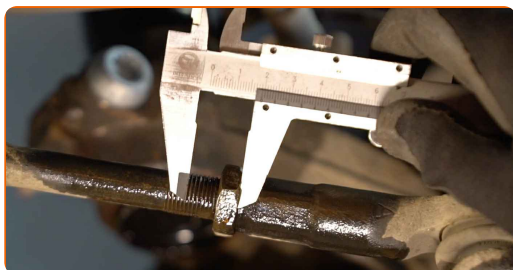
- Warning! To avoid injury, hold the wheel while unscrewing the fastening bolts.  
BMW 1 Hatchback (E87)

**5** Remove the wheel.



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

**7** When deinstalling, mark or measure the precise position of the ball joint on the track rod, or count the number of turns in order to prevent misalignment afterward. Use a vernier caliper.



- 8 Unscrew the end fastening nut to the steering knuckle. Use a combination spanner #21. Use Torx T40. Use a ratchet wrench.

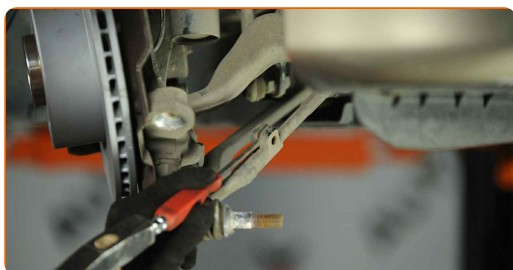


- 9 Unscrew the rod end fastening. Use a drive socket #16. Use a ratchet wrench.

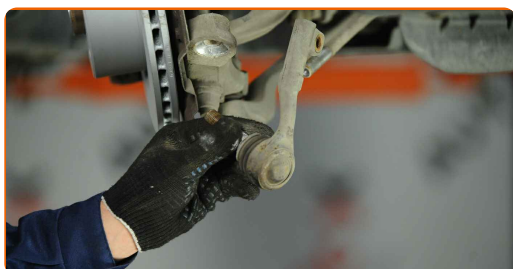


- 10 Disconnect the tie rod end from the steering knuckle. Use a hammer.

- 11 Spread the ears for the pinch bolt on the tie rod end. Use a flat screwdriver. Use a hammer.



- 12 Screw the end out of the tie rod.



13

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



14

Screw on a new tie rod end.



Replacement: track rod end – BMW 1 Hatchback (E87). Tip from AUTODOC experts:

- While installing the steering rod end remember to make the same number of turns or to leave the same length of thread showing as per your measurements.

15

Connect the tie rod end to the steering knuckle.



- 16** Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a combination spanner #21. Use Torx T40. Use a torque wrench. Tighten it to 165 nm torque.



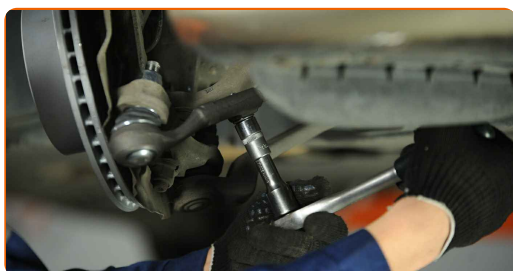
**AUTODOC recommends:**

- Important! Be sure to use new fasteners.

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



- 18** Tighten the rod end fastening. Use a drive socket #16. Use a torque wrench. Tighten it to 40 nm torque.





**19**

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



**20**

Clean the brake disk surface. Use a brake cleaner.

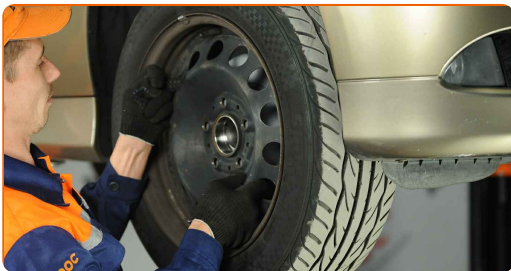


**AUTODOC recommends:**

- Replacement: track rod end – BMW 1 Hatchback (E87). After applying the spray, wait a few minutes.

**21**

Install the wheel.



**AUTODOC recommends:**

- Warning! To avoid injury, hold the wheel while screwing in the fastening bolts on the car. BMW 1 Hatchback (E87)

**22**

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



**23**

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 120 nm torque.



Replacement: track rod end – BMW 1 Hatchback (E87). AUTODOC experts recommend:

- Check and adjust wheel alignment if necessary.

**24**

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**

**TRACK ROD END: A WIDE SELECTION**

## **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 2023 – 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 SE.