

How to change front lower arm on **BMW 1 Hatchback (E81)** – replacement guide





## SIMILAR VIDEO TUTORIAL



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

## (i) Important!

This replacement procedure can be used for: BMW 1 Hatchback (E81) 116i 1.6, BMW 1 Hatchback (E81) 120d 2.0, BMW 1 Hatchback (E81) 130i 3.0, BMW 1 Hatchback (E81) 118i 2.0, BMW 1 Hatchback (E81) 120i 2.0, BMW 1 Hatchback (E81) 118d 2.0, BMW 1 Hatchback (E81) 123d 2.0, BMW 1 Hatchback (E81) 116i 2.0, BMW 1 Hatchback (E81) 116d 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: FRONT LOWER ARM – BMW 1 HATCHBACK (E81). TOOLS YOU NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #18
- Combination spanner #21
- Torx bit T30

- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Hammer
- Hydraulic transmission jack
- Wheel chock

**Buy tools** 





# Replacement: front lower arm – BMW 1 Hatchback (E81). AUTODOC recommends:

• The replacement procedure is identical for the left and right lower control arms.

 Please note: all work on the car – BMW 1 Hatchback (E81) – should be done with the engine switched off.

# CARRY OUT REPLACEMENT IN THE FOLLOWING ORDER:



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 (E81)
- Remove the wheel.



6

5

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



7

Unscrew the fastener connecting the ball joint of the front control arm to the steering knuckle. Use a combination spanner #21. Use Torx T30. Use a ratchet wrench.



8

Clean the fasteners connecting the control arm to the subframe. Use a wire brush. Use WD-40 spray.





Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces).



10

Remove the rear fastener of the control arm. Use a hammer.



Disconnect the lower arm from the steering knuckle. Use a hammer.



12

#### Remove the arm.



13

Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.







Install a new arm.



Replacement: front lower arm – BMW 1 Hatchback (E81). Professionals recommend:

- During the installation process, use only new bolts and nuts.
- Do not damage the ball joint cover.

15

Connect the lower arm to the steering knuckle.

16

Screw in the fastener connecting the ball joint of the front control arm to the steering knuckle. Use a combination spanner #21. Use Torx T30. Use a torque wrench. Tighten it to 165 Nm torque.





Treat the fasteners of the ball joint. Use copper grease.





Install the rear fastener of the control arm.





Screw the rear fastener connecting the control arm to the subframe. Use a combination spanner #18 (2 pieces).



20

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



21

Tighten the rear fastener of the control arm. Use a combination spanner #18 (2 pieces). Use a torque wrench. Tighten it to 68 Nm torque.+90°



#### AUTODOC recommends:

• Important! Be sure to use new fasteners.



Treat all joints of the arm. Use copper grease.







Remove the support from under the steering knuckle.



## AUTODOC recommends:

 Replacement: front lower arm – BMW 1 Hatchback (E81). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

24

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



25

Clean the brake disk surface. Use a brake cleaner.



#### AUTODOC recommends:

 Replacement: front lower arm – BMW 1 Hatchback (E81). After applying the spray, wait a few minutes.





Install the wheel.



## AUTODOC recommends:

 Important! Hold the wheel while screwing in the fastening bolts. BMW 1 Hatchback (E81)

27

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



28

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.









Remove the jacks and chocks.





**VIEW MORE TUTORIALS** 





# AUTODOC – TOP QUALITY AND AFFORDABLE CAR PARTS ONLINE



### A GREAT SELECTION OF SPARE PARTS FOR YOUR CAR

#### **CONTROL ARM: A WIDE SELECTION**

# (i) **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.