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How to change front lower arm on **Mazda 3 BK** – replacement guide







#### **VIDEO TUTORIAL**



### (i) Important!

This replacement procedure can be used for:

MAZDA 5 (CW) 1.6 CD, MAZDA 5 (CW) 2.0, MAZDA 3 Hatchback (BK) 1.6, MAZDA 3 Hatchback (BK) 2.0, MAZDA 3 Saloon (BK) 2.0, MAZDA 3 Saloon (BK) 1.6 DI Turbo, MAZDA 3 Hatchback (BK) 1.6 DI Turbo, MAZDA 3 Hatchback (BK) 1.4, MAZDA 5 (CR19) 1.8, MAZDA 5 (CR19) 2.0, MAZDA 5 (CR19) 2.0 CD, MAZDA 3 Hatchback (BK) 2.3 MZR, MAZDA 3 Hatchback (BK) 2.3 DiSi Turbo MPS, MAZDA 3 Saloon (BK) 2.3, MAZDA 3 Hatchback (BK) 2.0 MZR-CD, (+3)

The steps may slightly vary depending on the car design.

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## REPLACEMENT: FRONT LOWER ARM – MAZDA 3 BK. TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Drive socket # 12
- Drive socket # 14
- Drive socket # 17
- Drive socket #18
- Combination spanner #16
- Wheel impact socket #19

- Ratchet wrench
- Torque wrench
- Ball joint puller
- Rubber mallet
- Crow bar
- Hammer
- Pin punch
- Hydraulic transmission jack
- Wheel chock

**BUY TOOLS** 

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#### Replacement: front lower arm – Mazda 3 BK. AUTODOC recommends:

- The replacement procedure is identical for the left and right lower control arms.
- Please note: all work on the car Mazda 3 BK should be done with the engine switched off.

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

1

Secure the wheels with chocks.



Loosen the wheel mounting bolts. Use wheel impact socket #19.



Raise the front of the car and secure on supports.



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4 Unscrew the wheel bolts.



## Replacement: front lower arm – Mazda 3 BK. Tip:

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



- 6 Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.
- Unscrew the end fastening nut to the steering knuckle. Use a drive socket #17. Use a ratchet wrench.



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



- Clean the fastener connecting the ball joint to the steering knuckle. Use a wire brush. Use WD-40 spray.
- Unscrew the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #16. Use a drive socket #14. Use a ratchet wrench.



11 Remove the fastening bolt.

12



Disconnect the lower arm from the steering knuckle. Use a rubber mallet. Use a crowbar.



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

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Unscrew the front arm fastener. Use a drive socket #18. Use a ratchet wrench.



- Remove the front fastener of the control arm.
- Unscrew the rear fastener connecting the control arm to the subframe. Use a drive socket #18. Use a ratchet wrench.



- 17 Remove the rear fastener of the control arm.
- 18 Remove the arm.



Unscrew the fasteners and remove the bump stop from the front independent suspension lower control arm. Use a drive socket #12. Use a ratchet wrench.



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Install and fix the bump stop onto the new control arm. Use a drive socket #12. Use a torque wrench. Tighten it to 19 nm torque.



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



Install a new arm.



#### AUTODOC recommends:

- During the installation process, use only new bolts and nuts.
- Do not damage the ball joint cover.
- 23 Install the front fastener of the arm.
- Install the rear fastener of the control arm.

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25 Screw the front arm fastener. Use a drive socket #18. Use a ratchet wrench.



Tighten the rear fastener of the control arm. Use a drive socket #18. Use a torque wrench. Tighten it to 86 nm torque.



- Connect the ball joint to the steering knuckle. Use a rubber mallet.
- Install the fastening bolt. Use a pin punch. Use a hammer.
- Tighten the ball joint fastener. Use a combination spanner #16. Use a drive socket #14. Use a torque wrench. Tighten it to 55 Nm torque.



- Connect the tie rod end to the steering knuckle.
- 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 40 nm torque.



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32 Support the arm. Use a hydraulic transmission jack.



Tighten the front fastener connecting the control arm to the subframe. Use a drive socket #18. Use a torque wrench. Tighten it to 130 nm torque.



Remove the support from under the arm.



#### **AUTODOC** recommends:

- Replacement: front lower arm Mazda 3 BK. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.
- Treat all joints of the arm. Treat the fastener connecting the tie rod end to the steering knuckle. Use copper grease.

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



Clean the brake disk surface. Use a brake cleaner.



#### **AUTODOC** recommends:

 Replacement: rear lower arm – Mazda 3 BK. After applying the spray, wait a few minutes.

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Install the wheel.



## Replacement: front lower arm – Mazda 3 BK. Tip:

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

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Screw in the wheel bolts. Use wheel impact socket #19.



Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #19. Use a torque wrench. Tighten it to 118 nm torque.



Remove the jacks and chocks.





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