



How to change front
lower arm on **BMW 6**
Coupe (E63) –
replacement guide

SIMILAR VIDEO TUTORIAL



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

Important!

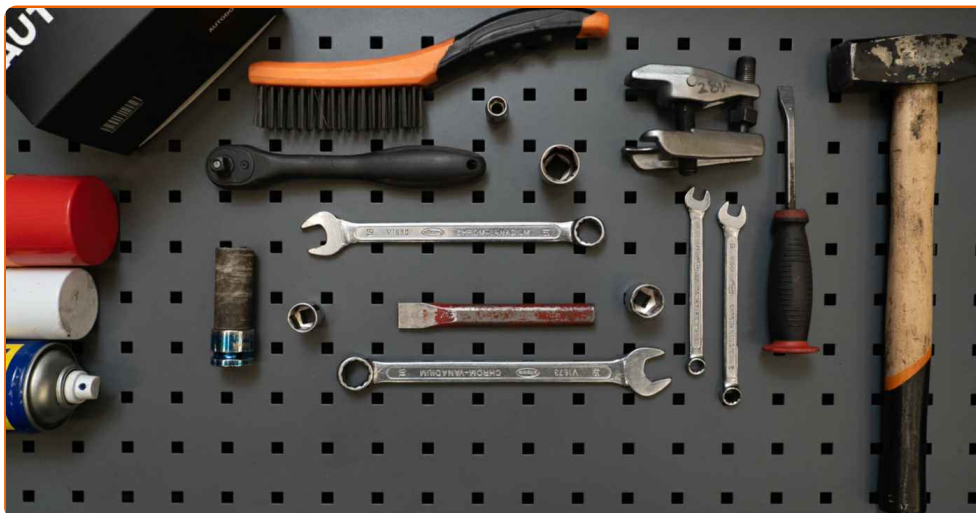
This replacement procedure can be used for:

BMW 6 Coupe (E63) 645Ci 4.4, BMW 6 Coupe (E63) 630i 3.0, BMW 6 Coupe (E63) 650i 4.8, BMW 6 Coupe (E63) M, BMW 6 Coupe (E63) 635d 3.0, BMW 6 Coupe (E63) 630i 3.0 (N52B30A, N52B30B, N52B30BF)

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 5 Saloon (E60) 525d 2.5

REPLACEMENT: FRONT LOWER ARM – BMW 6 COUPE (E63). TOOLS YOU MIGHT NEED:



- Wire brush
- WD-40 spray
- Brake cleaner
- Copper grease
- Combination spanner #9
- Combination spanner #10
- Combination spanner #16
- Combination spanner #18
- Drive socket # 10
- Drive socket # 16
- Drive socket # 18
- Drive socket # 21
- Wheel impact socket #17
- Ratchet wrench
- Torque wrench
- Flat chisel
- Hammer
- Ball joint puller
- Hydraulic transmission jack
- Wheel chock

Buy tools

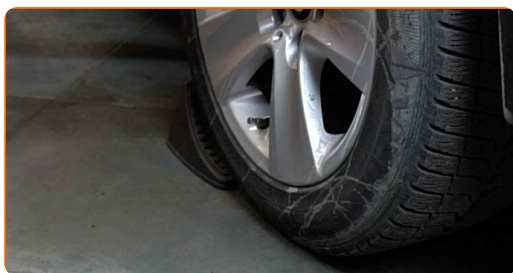
Replacement: front lower arm – BMW 6 Coupe (E63). AUTODOC recommends:

- The replacement procedure is identical for the left and right lower control arms.
- All work should be done with the engine stopped.

REPLACEMENT: FRONT LOWER ARM – BMW 6 COUPE (E63). RECOMMENDED SEQUENCE OF STEPS:

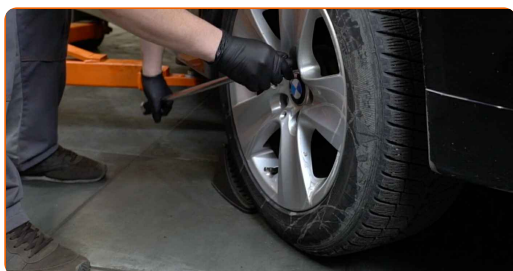
1

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.

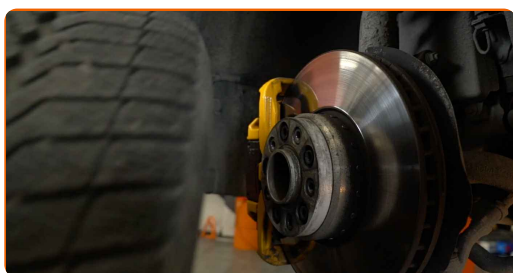


Replacement: front lower arm – BMW 6 Coupe (E63). Tip:

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

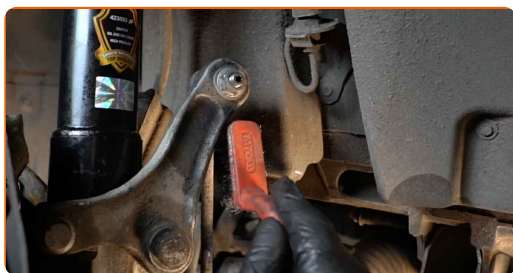
5

Remove the wheel.

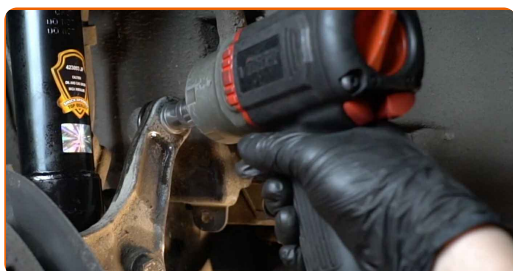


6

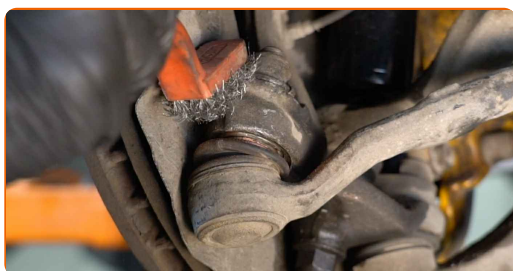
Clean the stabiliser link fasteners. Use a wire brush. Use WD-40 spray.



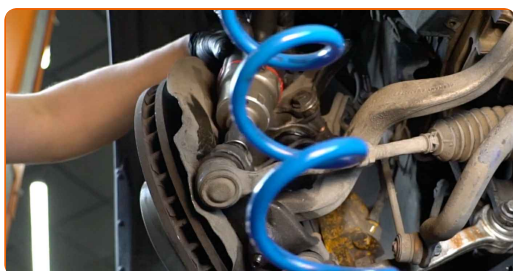
7 Unscrew the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a ratchet wrench.



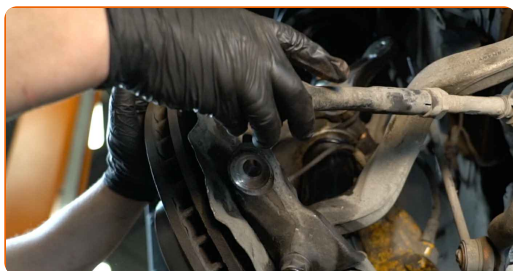
8 Clean the fastener connecting the tie rod end to the steering knuckle. Use a wire brush. Use WD-40 spray.



9 Unscrew the end fastening nut to the steering knuckle. Use a drive socket #21. Use a ratchet wrench.

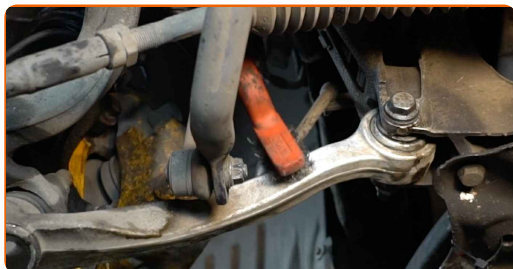


10 Disconnect the tie rod end from the steering knuckle.



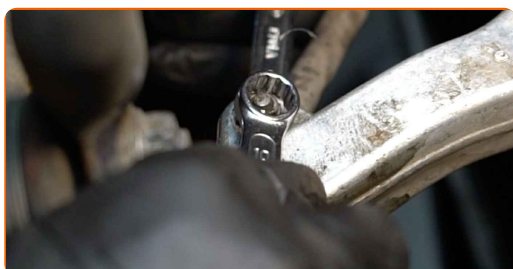
11

Clean the fasteners of the headlight levelling sensor. Use a wire brush. Use WD-40 spray.



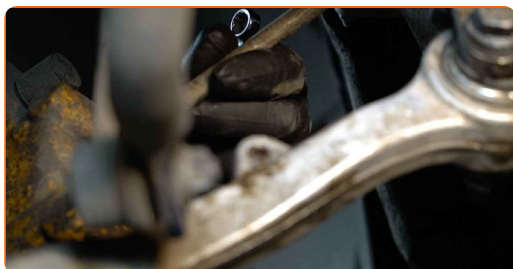
12

Unscrew the fasteners of the headlight levelling sensor. Use a combination spanner #9. Use a combination spanner #10.



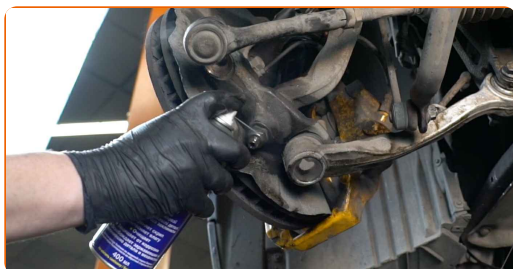
13

Disconnect the headlight levelling sensor.

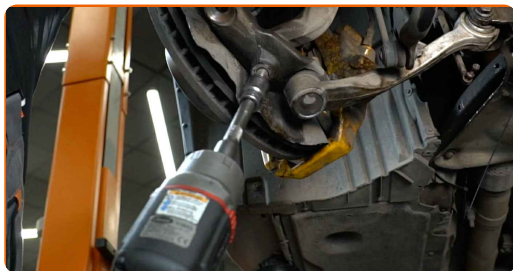


14

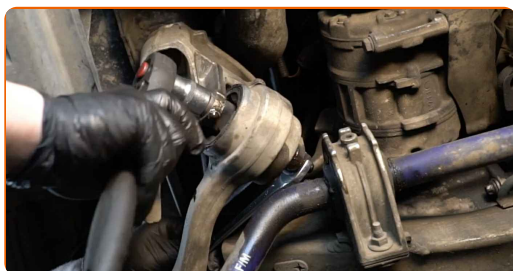
Clean all joints of the arm. Use a wire brush. Use WD-40 spray.



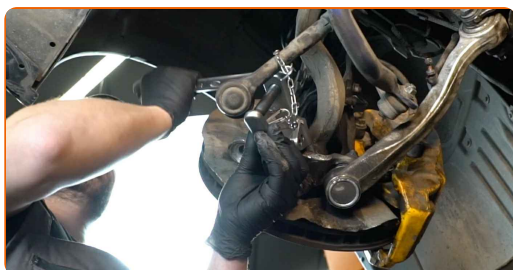
15 Unscrew the ball joint fastening to the steering knuckle. Use a drive socket #21. Use a ratchet wrench.



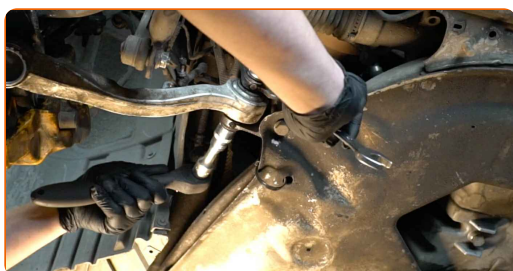
16 Unscrew the front arm fastener. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



17 Disconnect the ball joint from the steering knuckle. Use a ball joint puller.



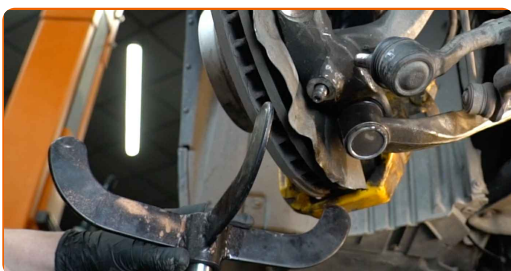
18 Unscrew the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



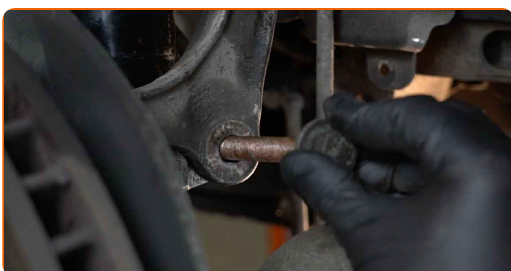
- 19** Unscrew the lower fastener connecting the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



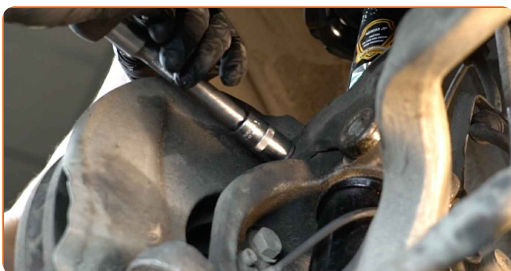
- 20** Prop up the steering knuckle. Use a hydraulic transmission jack.



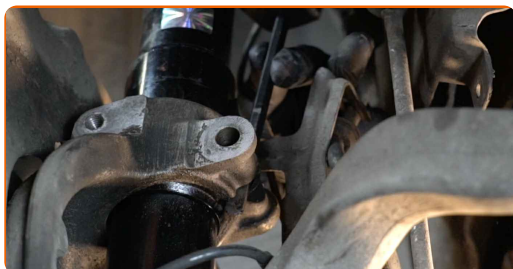
- 21** Remove the fastening bolt.



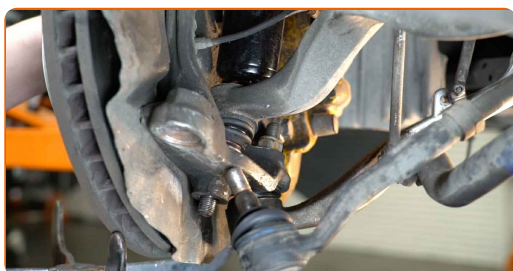
- 22** Unscrew the fastener of the stabiliser link bracket. Use a drive socket #16. Use a ratchet wrench.



- 23** Release the lower fastener connecting the shock strut to the steering knuckle. Use a flat metal-working chisel. Use a hammer.



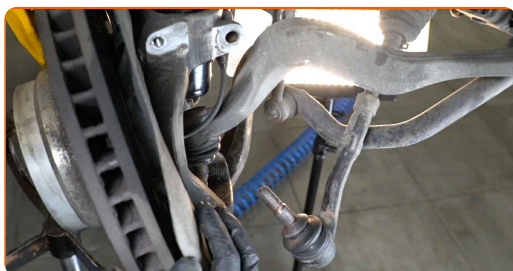
- 24** Lower the hydraulic transmission jack by 10-15 cm.



AUTODOC recommends:

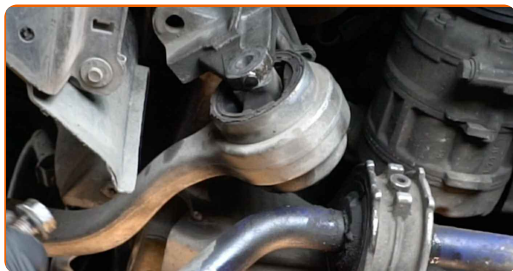
- Replacement: front lower arm – BMW 6 Coupe (E63). Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

- 25** Disconnect the lower arm from the steering knuckle.



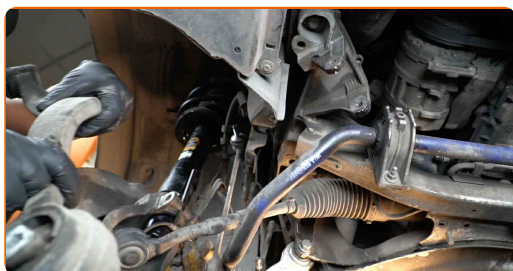
26

Remove the fastening bolt.



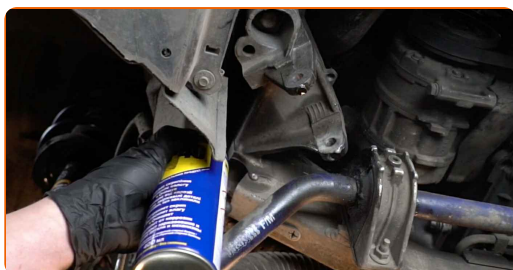
27

Remove the arm.



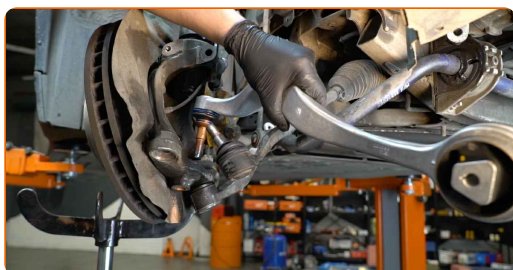
28

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



29

Install a new arm.

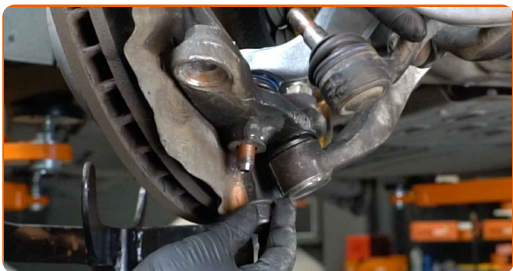


AUTODOC recommends:

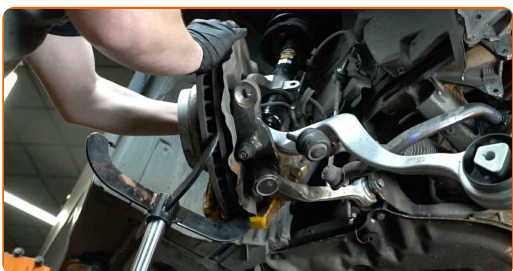
- During the installation process, use only new bolts and nuts.
- Do not damage the ball joint cover.

30

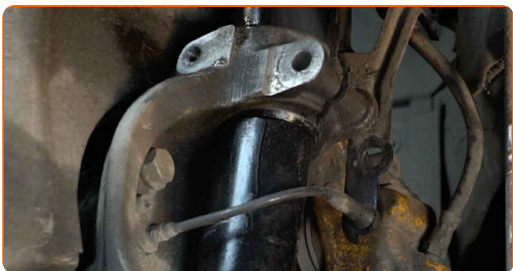
Connect the lower arm to the steering knuckle.

**31**

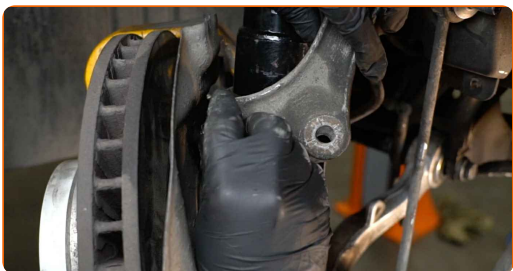
Raise the hydraulic transmission jack by 10-15 cm.

**32**

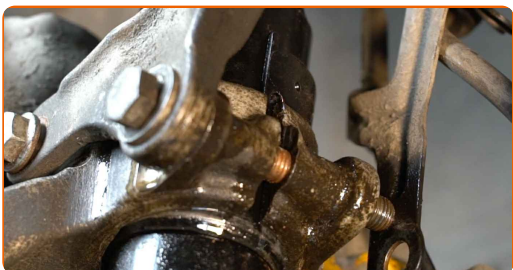
Treat the shock strut mounting seat on the steering knuckle. Use a wire brush. Use WD-40 spray.

**33**

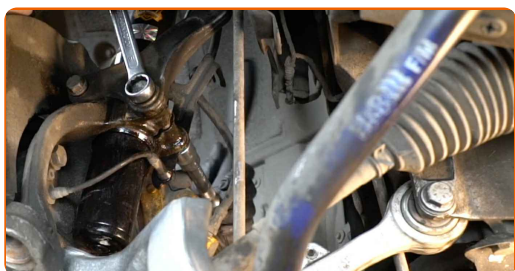
Screw in the fastener of the stabiliser link bracket. Use a drive socket #16. Use a ratchet wrench.

**34**

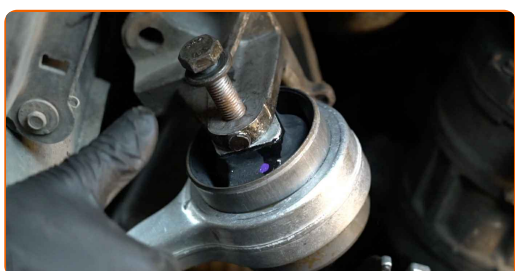
Install the fastening bolt.



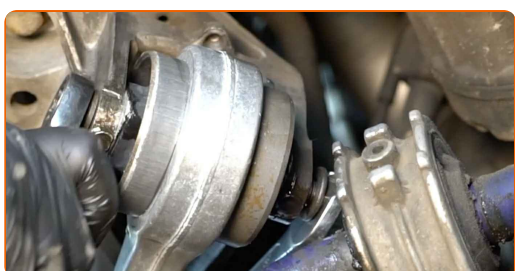
- 35** Screw in the fastener that connects the shock strut to the steering knuckle. Use a combination spanner #18. Use a drive socket #18. Use a ratchet wrench.



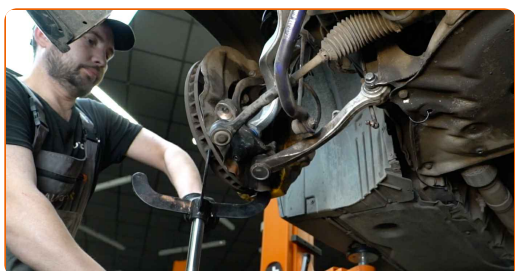
- 36** Install the fastening bolt.



- 37** Screw the front arm fastener. Use a combination spanner #18.



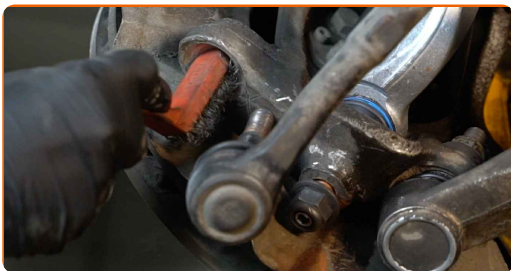
- 38** Remove the support from under the steering knuckle.



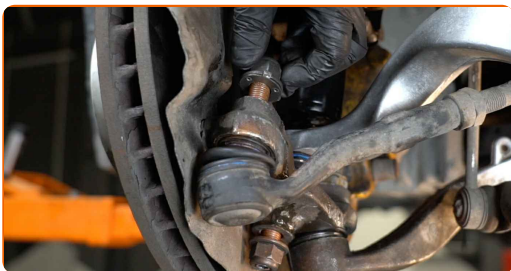
AUTODOC recommends:

- Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

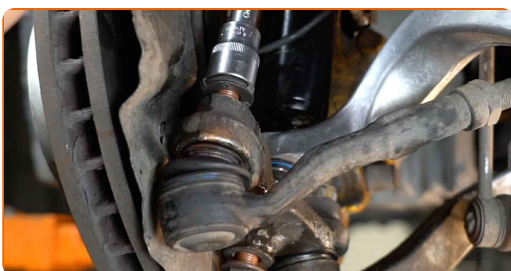
39 Clean the mounting seats of the tie rod end. Use a wire brush. Use WD-40 spray.



40 Connect the tie rod end to the steering knuckle.

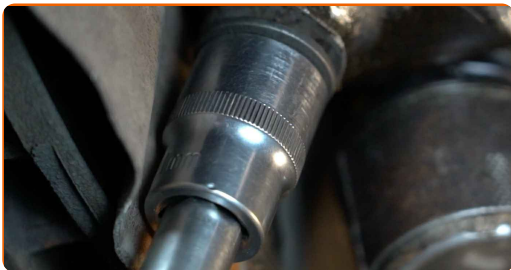


41 Screw on the fastening nut that connects the tie rod end to the steering knuckle. Use a drive socket #21. Use a ratchet wrench.



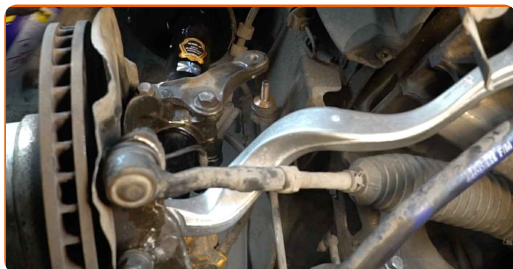
42 Connect the ball joint to the steering knuckle.

43 Screw the fasteners of the ball joint. Use a drive socket #21. Use a ratchet wrench.



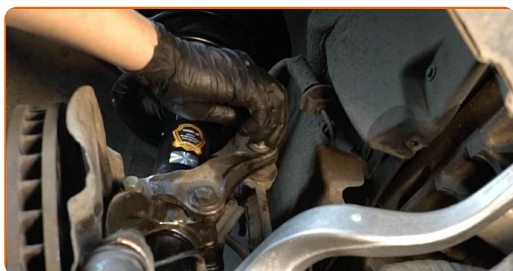
44

Clean the mounting seats of the stabiliser link. Use a wire brush. Use WD-40 spray.



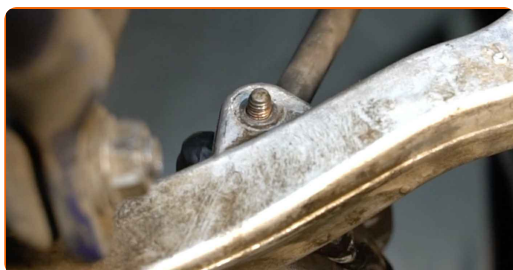
45

Tighten the stabiliser link fastener. Use a combination spanner #16.



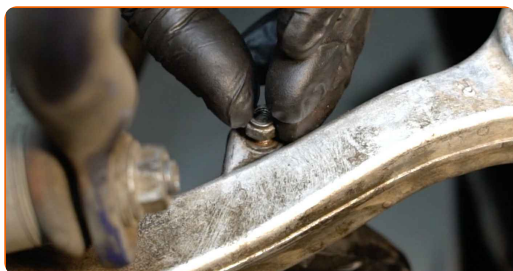
46

Reconnect the headlight levelling sensor.

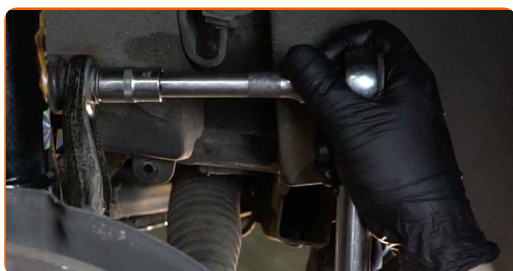


47

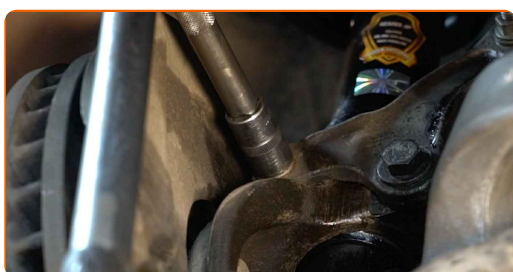
Screw in the fasteners of the headlight levelling sensor. Use a combination spanner #9. Use a combination spanner #10.



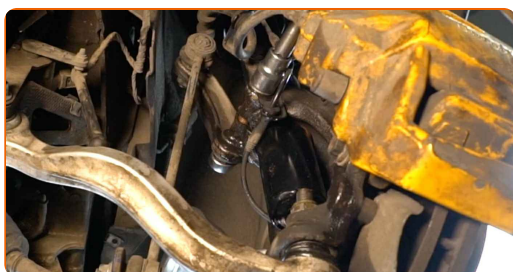
- 48** Tighten the fastener connecting the stabilizer link to the shock strut. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.



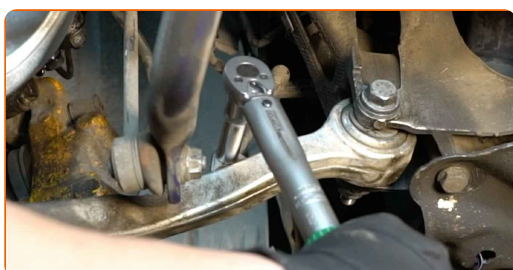
- 49** Tighten the fastener of the stabiliser link bracket. Use a drive socket #16. Use a torque wrench. Tighten it to 65 Nm torque.



- 50** Tighten the lower fasteners connecting the shock strut to the steering knuckle. Use a drive socket #18. Use a torque wrench. Tighten it to 81 Nm torque.

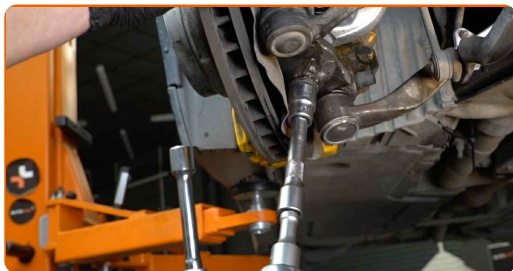


- 51** Tighten the fasteners of the headlight levelling sensor. Use a drive socket #10. Use a torque wrench. Tighten it to 7 Nm torque.



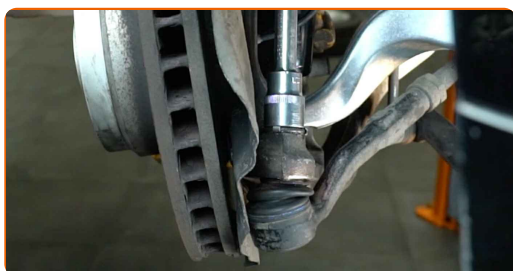
52

Tighten the ball joint fastener. Use a drive socket #21. Use a torque wrench. Tighten it to 165 Nm torque.



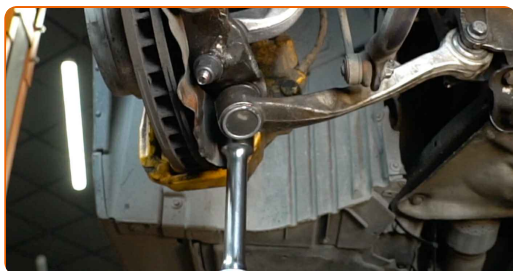
53

Tighten the fastening nut connecting the tie rod end to the steering knuckle. Use a drive socket #21. Use a torque wrench. Tighten it to 165 nm torque.



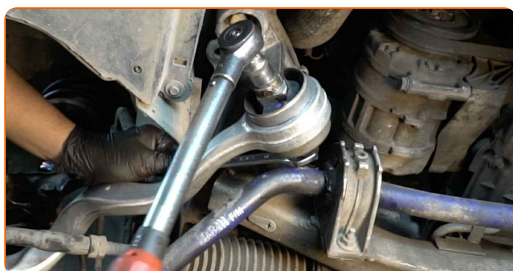
54

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



55

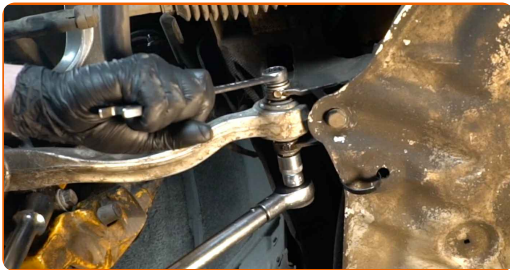
Tighten the front fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

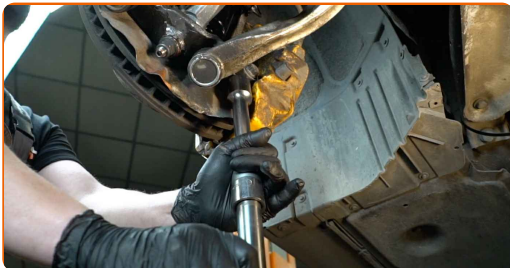
56 Tighten the rear fastener connecting the control arm to the subframe. Use a combination spanner #18. Use a drive socket #18. Use a torque wrench. Tighten it to 100 Nm torque.+90°



AUTODOC recommends:

- Important! Be sure to use new fasteners.

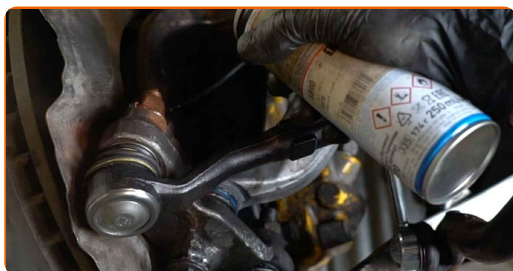
57 Remove the support from under the steering knuckle.



AUTODOC recommends:

- BMW 6 Coupe (E63) – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

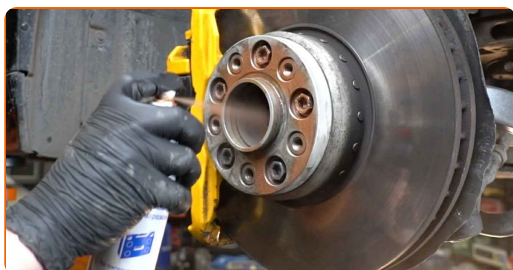
58 Treat all joints of the arm. Use copper grease.



59 Clean the wheel rim mounting seat. Use a wire brush.



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



61 Clean the brake disk surface. Use a brake cleaner.



Replacement: front lower arm – BMW 6 Coupe (E63). Tip from AUTODOC experts:

- After applying the spray, wait a few minutes.

62 Install the wheel.



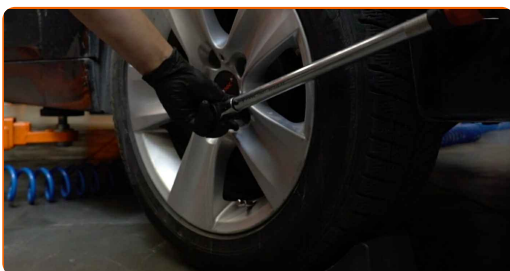
AUTODOC recommends:

- Important! Hold the wheel while screwing in the fastening bolts. BMW 6 Coupe (E63)

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

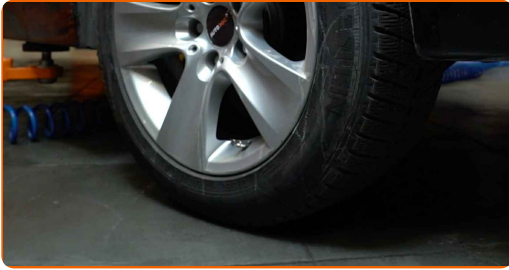


64 Lower the car and working in a cross order, tighten the wheel bolts. Use wheel impact socket #17. Use a torque wrench. Tighten it to 120 nm torque.



65

Remove the jacks and chocks.



WELL DONE! 

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