

## Replacing front wheel bearing

**This is intended as information only and I will not assume any responsibility whatsoever for injuries/problems/damage that may occur during work done fully or partially according to this information.**

Time needed: For me, 3 hours and it was the first time I did this and there was no previous info /hints to help me out so should I do it again I'd probably be able to cut at least 1h.

Note that I'm replacing the entire bearing unit (see picture) and not only the bearing itself. It sits with 4 bolts so you might think this job is a breeze, but bolts are loctited and might be really tough to get out, and on top of that, BMW managed to hide 2 bolts behind the shock, which requires additional disassembly.



### Parts needed:

- Bearing unit + bolts (should come with the bearing and be pre-loctited)

### Tools/equipment needed:

- Jack stand
- 2 x floor jacks
- Ratchet, extensions + sockets (10, 16 & 2x18mm, or 18mm wrench, needed)
- Pipe to use as extension of ratchet, if you don't already have a very long handle on it
- Open wrenches won't hurt either
- 5mm Allen bit
- Hammer
- Chisel
- A piece of 2"x4", crowbar or other longer item to bend and/or apply pressure with
- Spring compressors

### Hints:

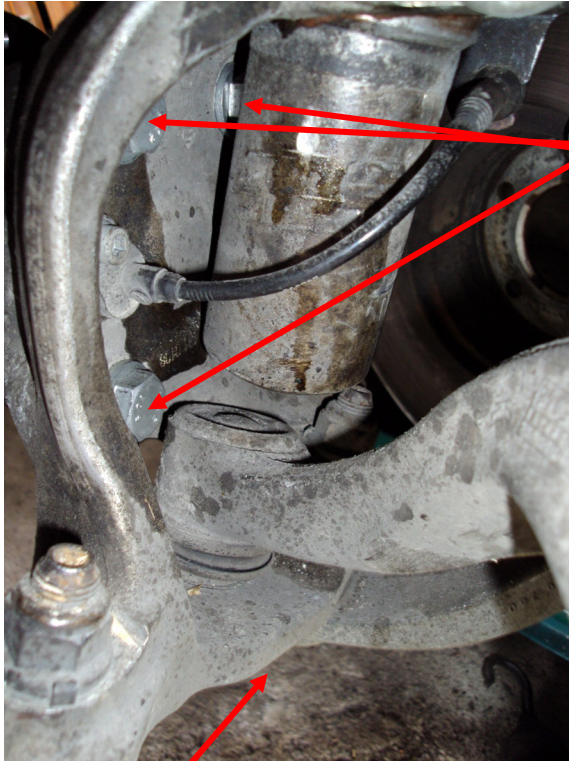
- You might want to get a new allen bolt for the brake disc if you're not sure the old one will surrender without a fight.
- An extra pair of hands could be useful at some point

1. Remove wheel and **place jack stand under the car so you don't get killed or ruin your front end if the jack fails.**

2. Remove brakes. There is a DIY already for this so no pics but the procedure is to remove 2 18mm bolts on back of the caliper, remove the allen screw that's holding the disc and you're done. Of course you can remove the whole thing but I chose to just put it to the side so I don't have to bleed the brakes etc. I also bought a new allen screw for the disc as I read about rusted screws that might need to be drilled out. It was not the case for me but it cost 1 EUR so it was money well spent just in case.

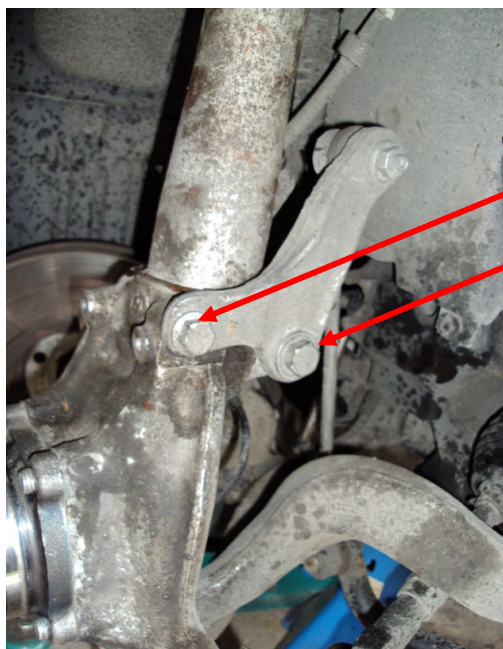
Remove the brake shield as well. Should be 4x10mm bolts.

3. Now we're ready to rock! Take a peek behind the hub/bearing and you'll see this:



I would guess the black wire is the ABS sensor. Use 5mm allen to remove it. In this pic you can also see 3 of the 4 18mm bolts holding the bearing. The 2 to the left you can reach without problem so remove them. The lower one was a real pain to get out due to the loctite and I had to add an extension pipe to get enough torque.

To access the 2 remaining bolts you will have to raise the shock first. Place a floor jack under the lower rod end. Remove the bracket for the sway bar rod by unbolting one 16mm and one 18mm bolt. The 18mm is a long one that also is used to clamp the shock in place so it has a nut on the other side so use wrench to hold the bolt and ratchet on the nut. You may need to use a hammer and a nail, bar or similar to hit the long bolt out once nut is gone.



16mm

18mm



Now use the floor jack to lift the shock assembly and compress the spring. Get the compressors in place and lower the floor jack. As the below right picture shows, there is a slot in the casting to make it possible to clamp the shock in place. Use a chisel or similar to expand the slot a little. Use a crowbar, board or similar to pry a little on control arms and see if the shock releases. If not, try to hit (carefully! It's aluminium!) downwards a little on the holder for example here and here. Eventually it will come loose like in the picture.



Once the shock came up far enough to give you access to the last to bolts, remove them and the bearing will come off. Clean up the whole assembly and assemble the new bearing.



When putting the shock back in place, note that there is a notch on it that needs to go in the clamping slot on the backside. Clamp shock, assemble ABS sensor, sway bar rod bracket and you're done!! Reassemble the brakes and wheel and enjoy the silky smooth drive.