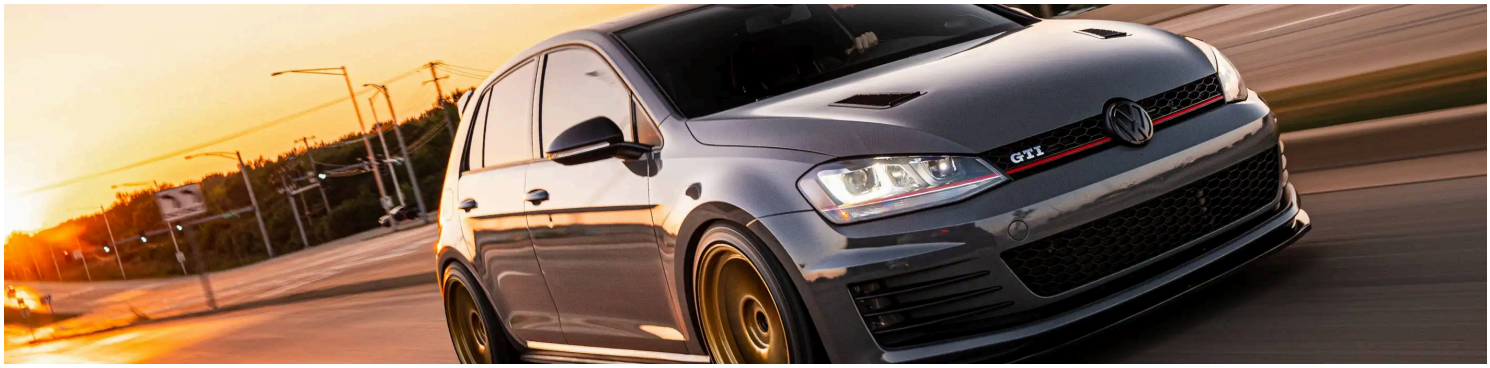

2012 2013 Mk6 Golf R Rear Wheel Bearing DIY

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T **TimS78** Discussion starter
1,515 posts · Joined 2012

#1 · Oct 26, 2020 (Edited)

2012 2013 Mk6 Golf R Rear Wheel Bearing Replacement DIY

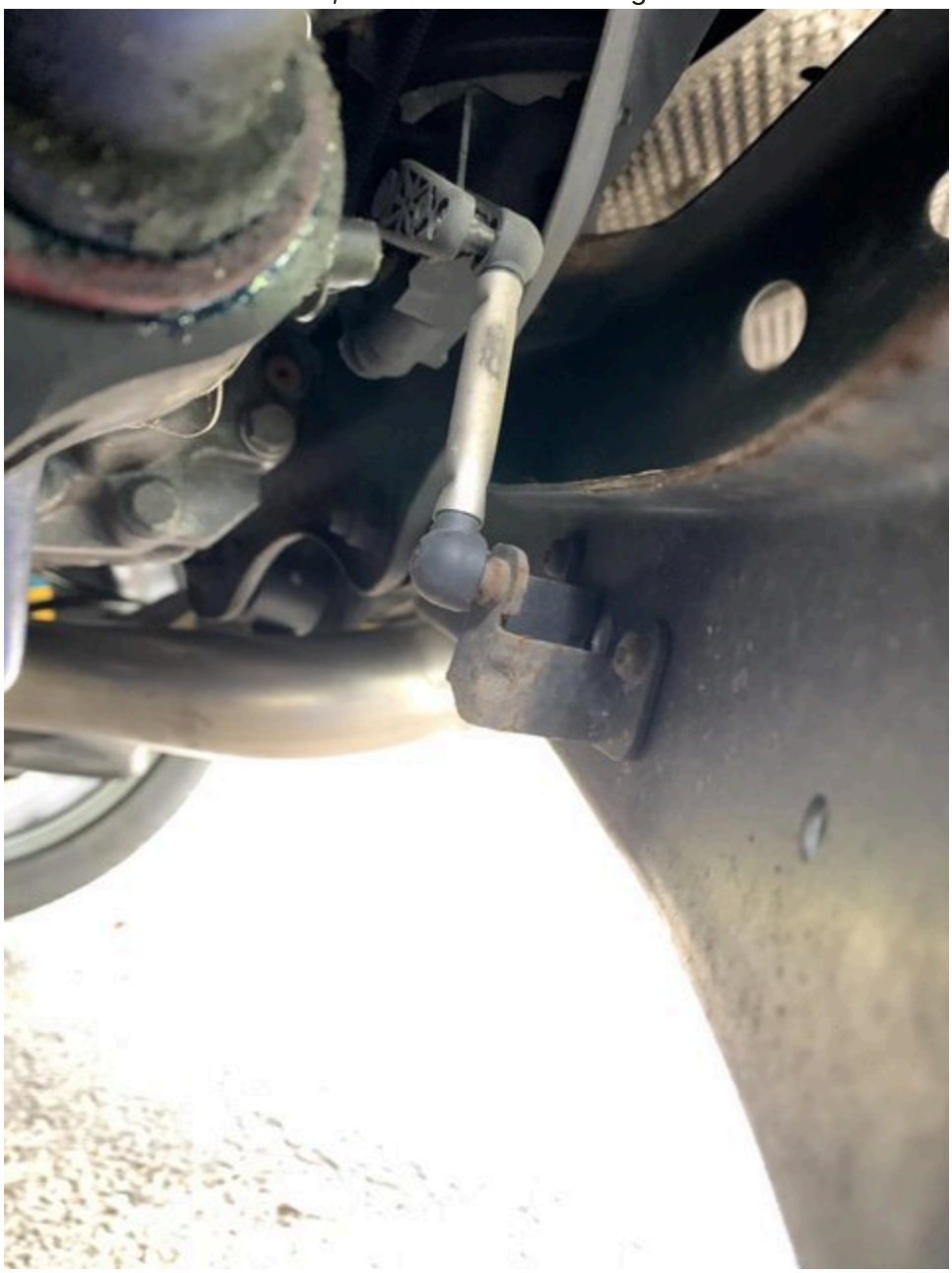
After searching, I couldn't find a good DIY for the Mk6 Golf R's wheel bearings - there are plenty of GTI and Mk7 R links out there, but nothing specific to the Mk6 R - so I put this together to add to the archive and help people who search for it in the future. It's a pretty simple procedure, but I think it'll help some people to be shown the steps so they don't go taking the whole suspension apart to do it. The job took me about an hour and a half working on jack stands in my driveway, taking my time and documenting as I went. It may take more or less time depending on your skill set and the state of your car's undercarriage, but it seems like a good idea to budget 2 hours for the job.

You will need:

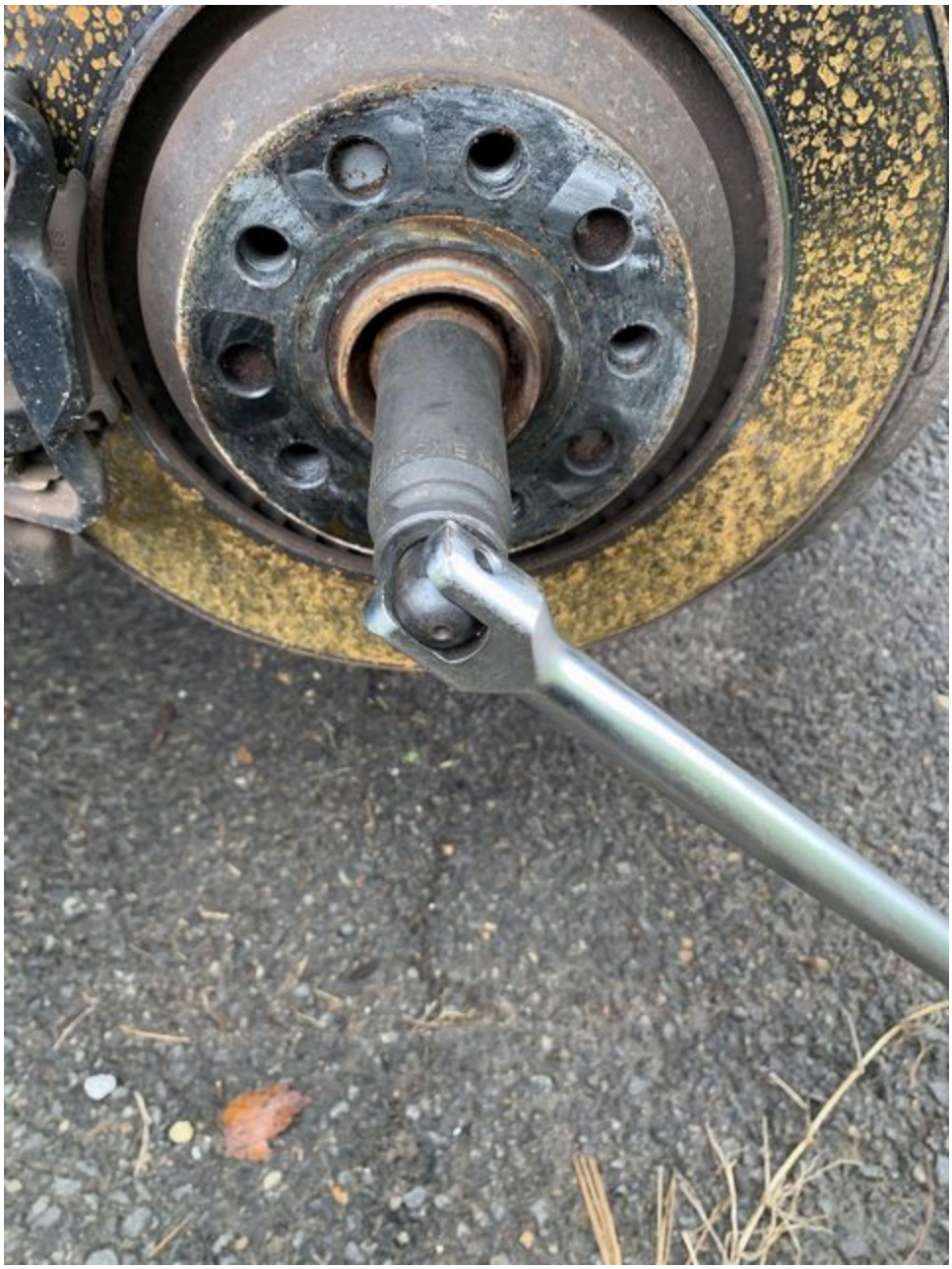
A new wheel hub/bearing kit
New mounting bolts for the wheel bearing (most wheel hub kits include these)
New center axle bolt (also usually included with the hub kit)
24mm 12 point deep socket
14mm triple square internal (looks like a 12-point torx) socket
12mm triple square internal socket
13mm wrench
15mm wrench
18mm wrench
18mm socket
T30 Torx bit
Prybar
A large ball-peen hammer or small sledge (I used a 3lb engineer's hammer)

Raise the corner you're working on and set it securely on a jack stand. Also chock the front wheel - you'll need to release the parking brake and you don't want the car moving at all.
Remove the wheel and pop the center cap out.

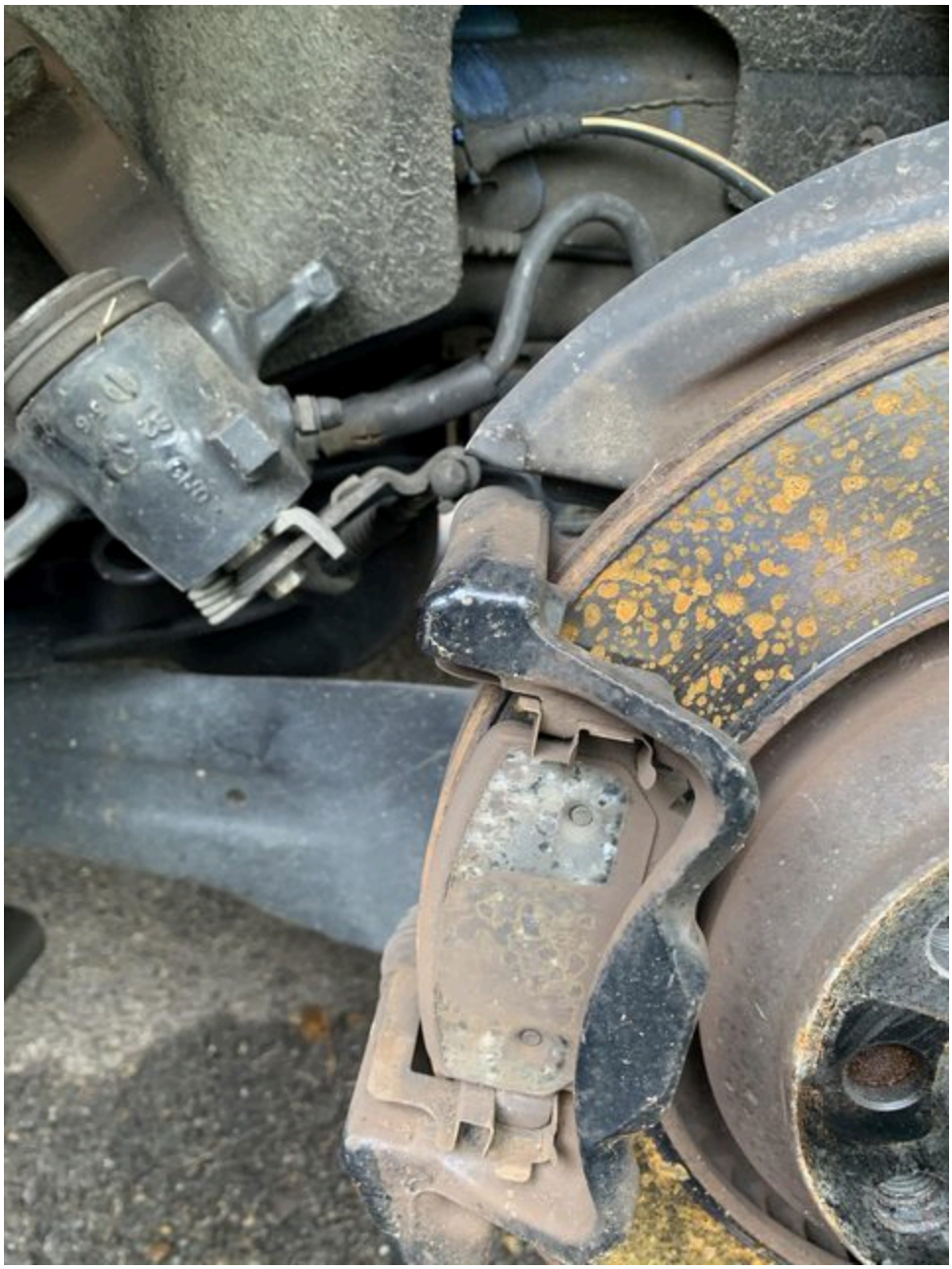
If working on the left side, disconnect the headlight level sensor from the control arm by prying the arm off its ball mount on one end, or remove its mounting bolts from the control arm (I believe they're T15 torx).



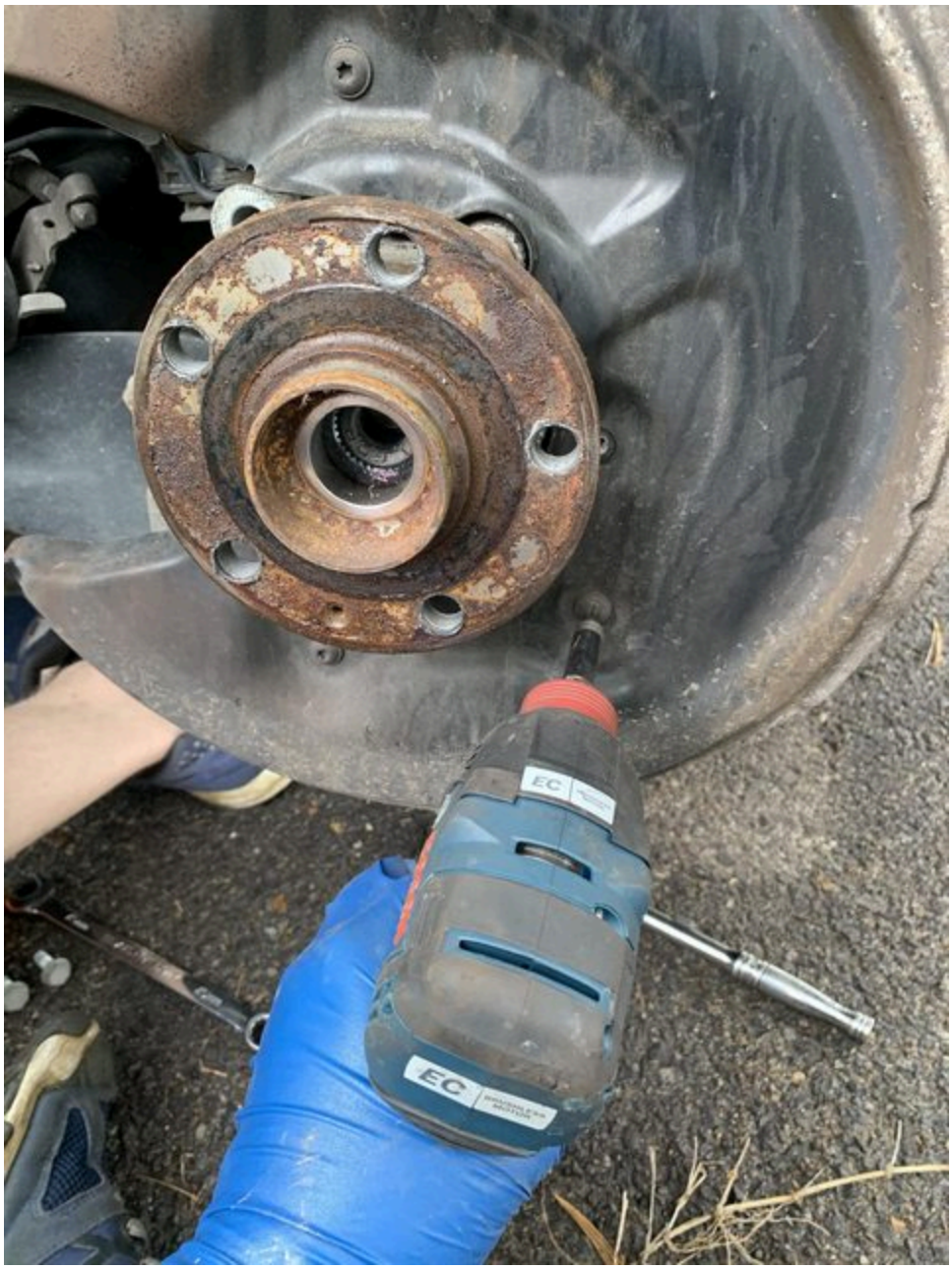
With the parking brake set, Remove the axle bolt using the 24mm 12 point socket and a long breaker bar. You don't need to remove the axle from the car, just the hub bolt. You may want to thread a couple of the lug bolts back in to help manage the force. I didn't have any problems, but I've heard of people shearing off the rotor set screw since that's the only thing holding the rotor to the hub.



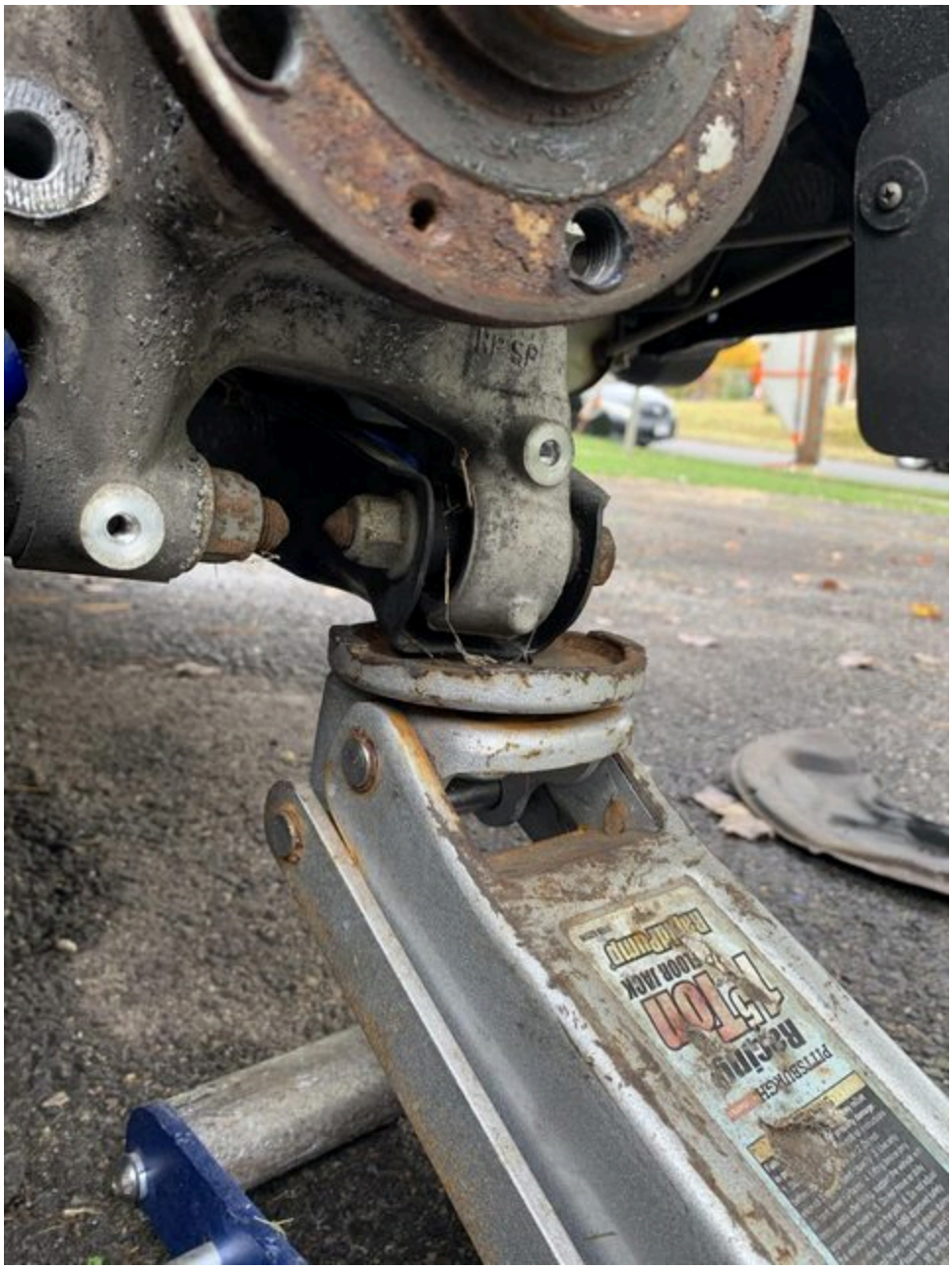
Release the parking brake and remove the brake caliper using the 13mm and 15mm wrenches; tie it off out of the way so that it's not hanging by the brake hose. Remove the caliper mounting bracket bolts using the 14mm triple square socket and set the bracket aside.



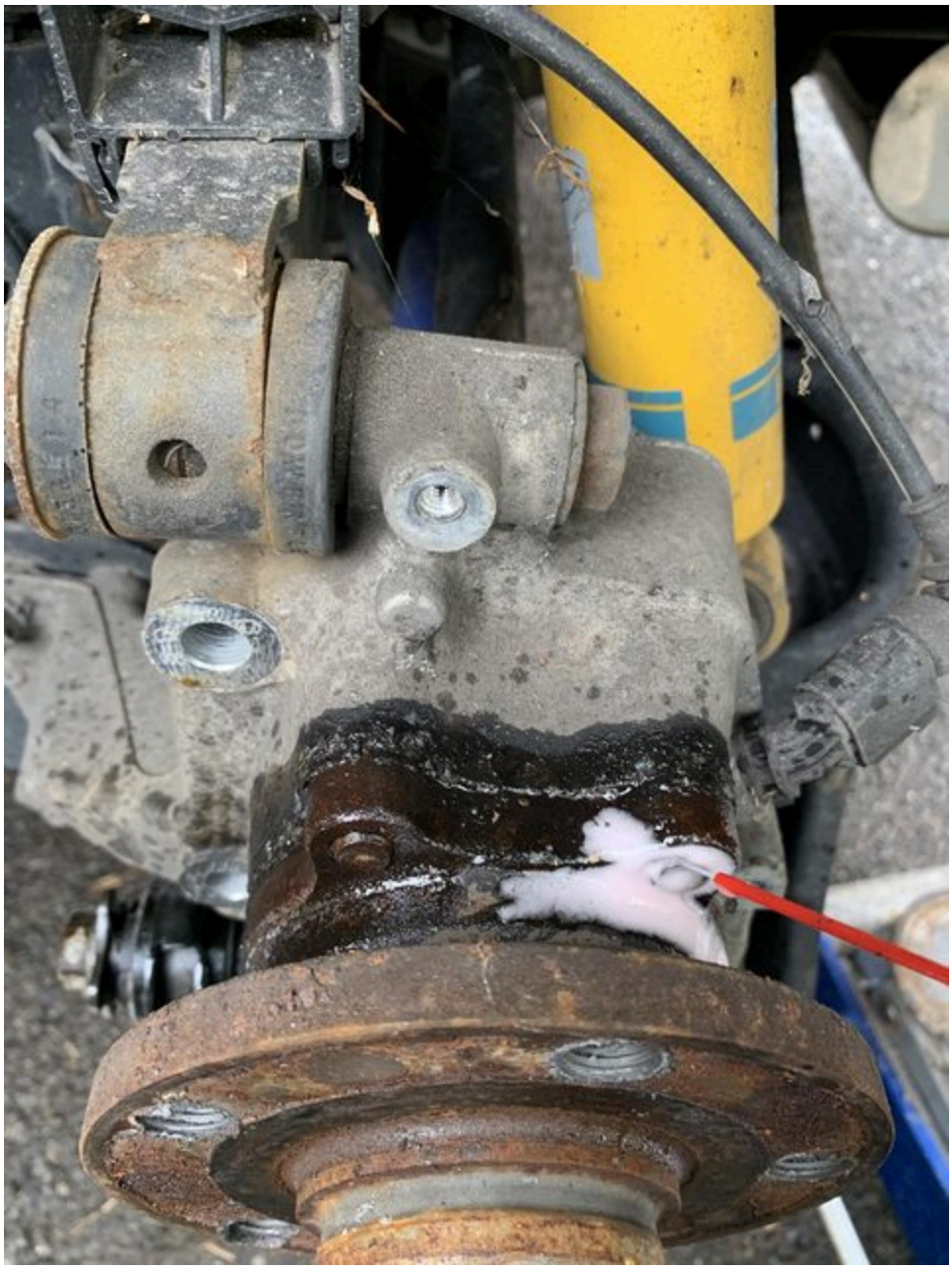
Remove the rotor set screw using the T30 and remove the rotor. You can tap the rotor with a hammer to dislodge it if it doesn't come off the hub easily. Remove the dust shield using the T30. This step isn't absolutely necessary, but it makes access to the back side of the hub a lot easier.



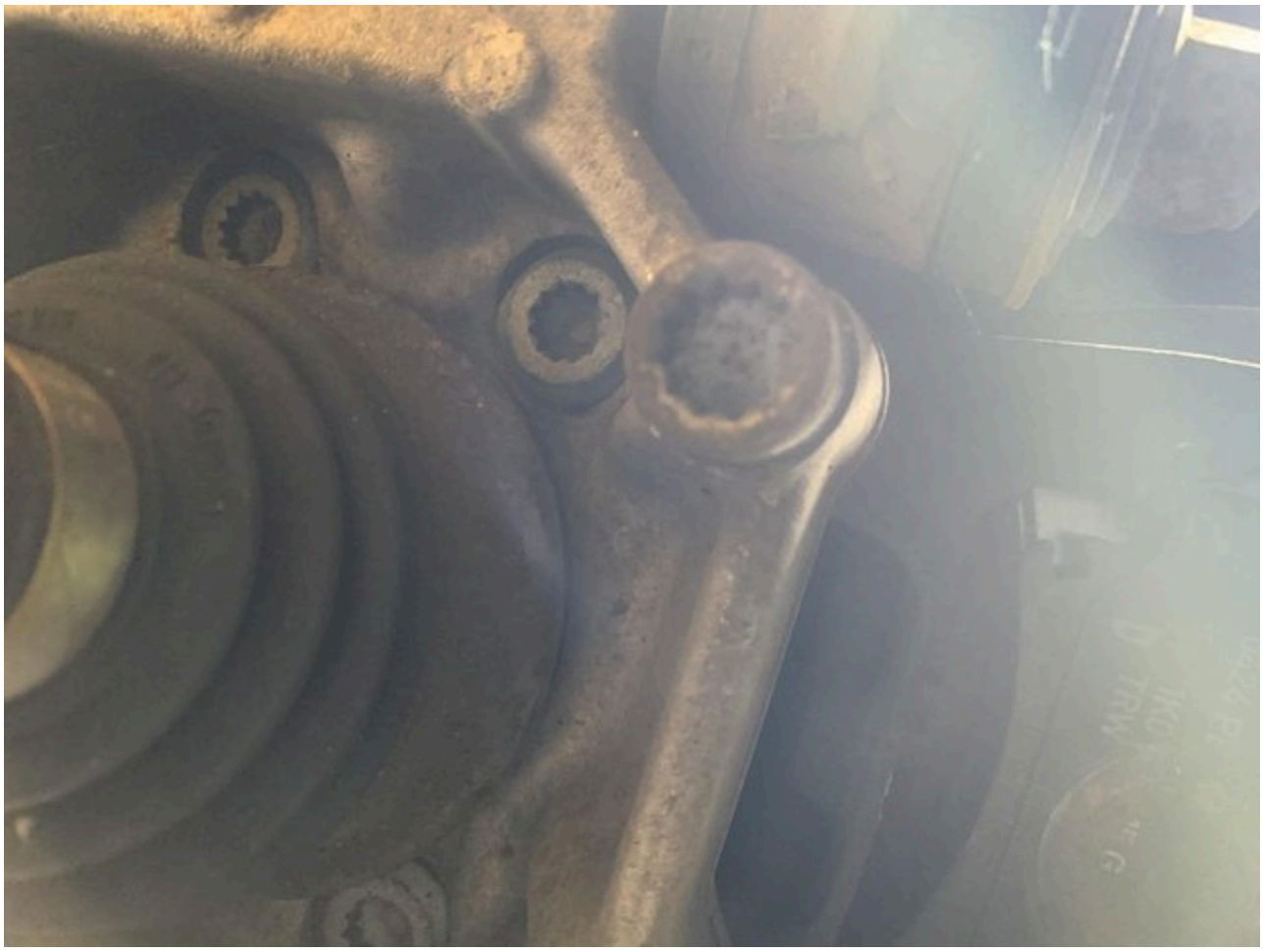
Support the lower control arm at the hub with your jack, and remove the mounting bolt using the 18mm wrench and socket. Let the arm down slowly and remove the spring.



On the outboard side of the hub behind the brake/wheel mounting flange, you'll see the ends of the four mounting bolts. Spray them with your favorite penetrating lube along with the entire area where the hub mounts to the knuckle, and go get some water and a snack while the lube does its thing. You can see that the shock absorber is directly behind one of the mounting bolts - removing it would probably make the job easier, but there's enough clearance to get a socket and ratchet in there with the shock in place, so I didn't bother with it. If you do remove it, you'll need new upper and lower mounting bolts. Upper mount bolts get torqued to 37ft-lb (50nm) plus 90 degrees, lower mounting bolt gets torqued to 133ft-lb (180nm)



On the back side of the knuckle, you'll see the heads of the mounting bolts for the hub around the CV joint; remove them using the 12mm triple square socket. The hub will likely be stuck to the knuckle with years of grime and corrosion, so you'll need to employ your hammer and prybar to get it off.



Clean up the mounting recess with some emery cloth, clean and grease the splines on the axle, push the new bolts through the back side of the knuckle, then slide the new hub in place. Make sure the bolt holes are lined up and tap it in place with the hammer, using a block of wood to protect the new hub and even out the force. You can also use the bolts to draw it up tight, just work in a crisscross pattern (e.g., top left to

E **emike3401**
181 posts · Joined 2015

#2 · Oct 26, 2020

This is great!

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#3 · Oct 26, 2020

How many miles on the bearings ?

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T **TimS78** Discussion starter
1,515 posts · Joined 2012

#5 · Oct 26, 2020

167,000 - they're original to the car. I was getting a nasty howl from the rear at highway speeds, turns out the left side bearing was totally trashed. I did the right side for good measure, since if one failed the other probably isn't far behind.

> How did you end up getting those Lca powerflex bushings in the spindle

I paid a shop. I had the entire rear suspension overhauled at 130k; new LCAs and bushings, new toe arms, Powerflex UCA bushings (new UCAs were crazy $$$), new trailing arm bushings. It was a bigger job than I was willing to take on, and it needed an alignment afterward anyway, so I just had the shop do everything.

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Reinstall the dust shield and rotor. Reinstall the caliper bracket and torque the bolts to 66ft-lb (90nm) plus 90 degrees using the 14mm triple square.

Reinstall the caliper and torque the bolts to 25ft-lb (35nm). Set the parking brake.

Torque the axle bolt to 148ft-lb (200nm). You remembered to pop the center cap out of the wheel, right?

Mount the wheel, torque the lugs to 88ft-lb (120nm), and put the car back on the ground. Remove the

Tighten the axle bolt an additional 180 degrees with the car on the ground (I find it's easier to do 2x 90 degrees - start with the bar at 12 o'clock and push it to horizontal, then repeat for a full 180). Reinstall the

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How did you end up getting those Lca powerflex bushings in the spindle -

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#6 · Oct 28, 2020

167000 not bad at all!!
Yeah the upper control arms are tough on the R, they earned the money for sure

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Thumper3
356 posts · Joined 2016

#7 · Oct 29, 2020

Awesome write up, thanks for doing this!!!!

2012 VW Golf R 2dr | APR Stg 3 | Southbend Stg 3 Endo | Ceika 2-piece rotors | BFI Stg2 Mounts | APR Short Shift kit | TurboSmart plumb back DV | 42DD non-resonated 4" Black tips

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