



BMW 3 Series E46 Front Wheel Bearing Replacement

A step-by-step guide on BMW 3 Series E46 Front Wheel Bearing Replacement.

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INTRODUCTION

Discover BMW 3 Series E46 Front Wheel Bearing Replacement.

Credit: GDA e46fantatics



TOOLS:

- [3/8" Torque Wrench](#) (1)
- [1/2" Drive Torque Wrench](#) (1)
- [1/2" Breaker Bar](#) (1)
- [Impact Gun](#) (1)
- [10mm Deep Socket](#) (1)
- [16mm Deep Socket](#) (1)
- [17mm Deep Socket](#) (1)
- [32mm Axle Nut Socket](#) (1)
- [36mm Axle Nut Socket](#) (1)
- [46MM Axle Nut Socket](#) (1)
- [Dead Blow Hammer](#) (1)
- [Hand Impact Driver](#) (1)
- [Nitrile Disposable Gloves](#) (1)



PARTS:

- [Wheel Bearing](#) (1)

Step 1 — Jack Vehicle and Remove Wheel



- Jack car up and place on jackstands.
- Using impact wrench and 17mm socket remove front wheel.

Step 2 — Remove Caliper Retaining Bolts



- Using 3/8 long ratchet and 16mm short socket remove caliper retaining bolts.

Step 3 — Remove Brake Caliper



- Remove brake caliper and suspend with wire from strut being careful to not bend the brake hose.

Step 4 — Remove Brake Disc Retaining Bolt



- Grab hand impact driver with hex and remove brake disc retaining bolt.

Step 5 — Gently Pry Off Hub Cover



- Use prybar/punch or screwdriver to gently pry off hub cover.

Step 6 — Straighten retaining clip



- Take center punch or screwdriver and use small hammer to tap out the pressed in portion of the hub nut.
- When done pushing out the pressed in portion it should look like this.

Step 7 — Remove the Hub Nut



- Use 1/2 impact and 46mm socket to remove hub nut - alternatively you could use 18 inch or larger 1/2 ratchet or breaker bar and still easily get this nut off.

Step 8 — View the With the Large Hub Nut Off



- Once you get the large hub nut off it looks like this.

Step 9 — Build Your Hub Removal Tool



- Grab a slide hammer or wheel hub press tool and start building your hub removal tool.
- I like to use a slide hammer so it looks like this.
- If you want to use a hub press removal tool with a wrench to press it out it might look something like this.

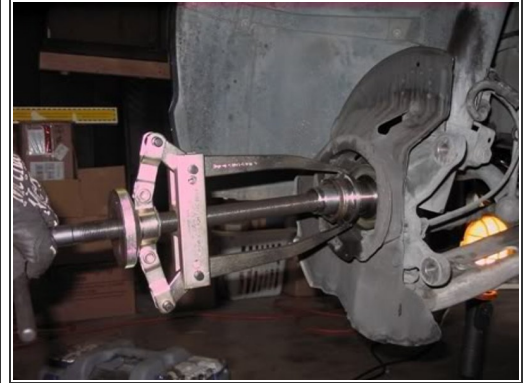
Step 10 — Hub Removal



- One nice whack with the slide hammer and you should get off the hub and bearing which might just

leave the inner race and you will also see this view of the spindle.

Step 11 — Get Off the Inner Race



- Use a dremel or long and thin two jaw puller to get off the inner race. I used a two jaw puller so it looked like this.

Step 12 — Remove Inner seals



- All that's left is the spindle, rear seal cover and brake disc cover so use a punch or something thin to press/gently tap out the inner seal cover to clean it and also the surrounds of the spindle assembly (not required but we all want to do this right).

Step 13 — Use a 10mm Deep Socket to Remove the 3 Bolts



- Use a 10mm deep socket to remove the 3 bolts holding the rear brake cover in order to clean it and remove any accumulated junk that might be held in the assembly near the abs sensor and rear seal cover.

Step 14 — Install New Bearing



- Clean up the spindle and get ready to get on to the install.
- Grab your new front wheel bearing and using a 32 or 36mm socket gently press/tap on the new wheel bearing - I used a 36mm socket and gently tapped it on with a deadblow. You might get lucky and be able to slide on the new bearing by hand.
- Be careful not to separate the front and rear inner races while installing as you might introduce grit into the new bearing and that might cause an early demise.
- After you have it tapped on far enough you should be looking at something like this.

Step 15 — Install and Torque the Hub Nut to Specs



- Now you can install and torque the hub nut to specs - check Bentley for your model. Mine was 214 lb ft.

Step 16 — Bend retaining clip back into place



- Now using a punch or like dent in the outer portion of the hub nut as a safety precaution.

Step 17 — Lightly Coat the Hub



- I like to use anti seize on the hub and surround so that brake discs are easy to remove so I lightly coat the hub.

Step 18 — Reinstall the Brake Disc



- Reinstall the brake disc and torque the retaining bolt to 12 lb ft or per Bentley for your model and then reinstall caliper and torque the caliper to the spindle per Bentley (81 lb ft for my 01 325).

Step 19 — Clean the Hub Cover



- Clean the hub cover and apply light coat of anti seize on the lip and then gently tap it on with a deadblow.

Step 20 — Reinstall the Wheel



- All that's left is to install the wheel and you're good to go. Celebrate success!