

Audi B6/B7
Rear Differential Mount Plate
Bushing Insert Installation



















### INTRODUCTION

### Audi B6/B7 Rear Differential Mount Plate Bushing Inserts

When you put the pedal to the metal, you're looking for one thing to happen: Response. We're not talking slow, mushy, eventually get there with RPM's response, we're talking crisp, immediate, horsepower to the wheels, rubber on the ground, put you back in the seat, instant response. You know what we mean. What's one of the biggest things to steal this response time right out from underneath you? Your drivetrain mounts. Soft, cushy, original mounts will absorb the power that you're putting out and keep it from where you want it - on the asphalt. At ECS Tuning, we've engineered the perfect solution with rear differential mount plate bushing inserts for your Audi B6/B7 Quattro.

### **ECS Difficulty Gauge**



The **mount plate bushings** that support the back of the rear differential have a pretty tough job - absorbing relentless punishment during acceleration and deceleration, and keeping unwanted noise and vibration out of the chassis. Our new inserts give the OE bushings a "split personality". It allows them to retain their smooth and comfortable side, but flex their muscle when the game is on. We first designed a polyurethane insert to fit perfectly into the voids of the OE bushing, providing instant performance. We finished it off with a black anodized, billet 6061-T6 aluminum washer plate to protect the poly and tighten up the response. These are more than just inserts, these are serious equipment, and with their unmatched durability and steely cool looks, they'll take everything you can throw at them.

Installation is quick and easy, and doesn't require too many tools. You'll be working under the car, so be sure you have the means to properly lift and support it. We've included all the necessary hardware you need for installation, so it'll be an easy one that you can enjoy. Thank you for looking to ECS Tuning for all your performance and repair needs. We appreciate your business!



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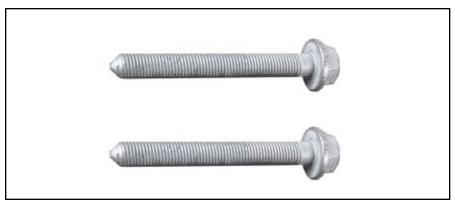
# KIT CONTENTS



Polyurethane Bushing inserts (2)



Washer Plates (2)



M12 x 1.5 x 100 Bolts (2)



Polyurethane Bushing Lubricant



## REQUIRED TOOLS

Note: The tools required for each step will be listed by the step number throughout these instructions.

### **Standard Automotive Tools**

### **Required For This Install**

### **Available On Our Website**

Protecta-Sockets (for lug nuts) <u>ES#2221243</u>	• 1/4" Drive Ratchet <u>ES#2823235</u>
• 3/8" Drive Ratchet <u>ES#2765902</u>	• 1/4" Drive Deep and Shallow Sockets <u>ES#2823235</u>
• 3/8" Drive Torque Wrench <u>ES#2221245</u>	• 1/4" Drive Extensions <u>ES#2823235</u>
• 3/8" Drive Deep and Shallow Sockets <u>ES#2763772</u>	• 1/4" Drive Torque Wrench
• 3/8" Drive Extensions <u>ES#2804822</u>	• Plier and Cutter Set <u>ES#2804496</u>
Hydraulic Floor Jack <u>ES#240941</u>	Flat and Phillips Screwdrivers <u>ES#2225921</u>
• Torx Drivers and Sockets <u>ES#11417/8</u>	• Jack Stands <u>ES#2763355</u>
• 1/2" Drive Deep and Shallow Sockets ES#2839106	Ball Pein Hammers
• 1/2" Drive Ratchet	• Pry Bar Set <u>ES#1899378</u>
• 1/2" Drive Extensions	<ul> <li>Electric/Cordless Drill</li> </ul>
• 1/2" Drive Torque Wrench <u>ES#2221244</u>	Wire Strippers/Crimpers
• 1/2" Drive Breaker Bar <u>ES#2776653</u>	<ul> <li>Adjustable (Crescent) Type Wrenches</li> </ul>
• File Set	• Drill Bits
· Air Nozzle/Blow Gun	<ul> <li>Punch and Chisel Set</li> </ul>
Bench Mounted Vise	Hex Bit (Allen) Wrenches and Sockets <u>ES#11420</u>
Crows Foot Wrenches	• Thread Repair Tools <u>ES#1306824</u>
Hook and Pick Tool Set      ES#2778980	Open/Boxed End Wrench Set ES#2765907



# SHOP SUPPLIES AND MATERIALS

**Standard Shop Supply Recommendations:** We recommend that you have a standard inventory of automotive shop supplies before beginning this or any automotive repair procedure. The following list outlines the basic shop supplies that we like to keep on hand. Shop supplies with a hyperlink are available on our website.

- Hand Cleaner/Degreaser Click Here
- Pig Mats for protecting your garage floor and work area from spills and stains Click Here
- Spray detailer for rapid cleaning of anything that comes into contact with your paint such as brake fluid Click Here
- Micro Fiber Towels for cleaning the paint on your car Click Here
- Latex Gloves for the extra oily and dirty jobs Click Here
- Medium and High Strength Loctite Thread lock compound to prevent bolts from backing out Click Here
- Anti-Seize Compound to prevent seizing, galling, and corrosion of fasteners Click Here
- Aerosol Brake/Parts Cleaner for cleaning and degreasing parts
- Shop Rags used for wiping hands, tools, and parts
- Penetrating oil for helping to free rusted or stuck bolts and nuts
- Mechanics wire for securing components out of the way
- Silicone spray lube for rubber components such as exhaust hangers
- Paint Marker for marking installation positions or bolts during a torquing sequence
- Plastic Wire Ties/Zip Ties for routing and securing wiring harnesses or vacuum hoses
- · Electrical tape for wrapping wiring harnesses or temporary securing of small components



### **INSTALLATION NOTES**

- **RH** refers to the *passenger side* of the vehicle.
- **LH** refers to the *driver side* of the vehicle.
- Always use the proper torque specifications.
- If applicable to this installation, torque specifications will be listed throughout the document and at the end as well.
- Please read all of these instructions and familiarize yourself with the complete process **BEFORE** you begin.

### PREPARATION AND SAFETY INFORMATION

ECS Tuning cares about your health and safety. Please read the following safety information. This information pertains to automotive service in general, and while it may not pertain to every job you do, please remember and share these important safety tips.

- Park your car in a safe, well lit, level area.
- Shut the engine off and remove the key from the ignition switch.
- Make sure any remote start devices are properly disabled.
- ALWAYS wear safety glasses.
- Make sure the parking brake is applied until the vehicle is safely lifted and supported.
- If using an automotive lift, be sure and utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear.
- When lifting a vehicle using a jack, always utilize the factory specified lift points. Lifting a vehicle in an incorrect location can cause damage to the suspension/running gear. **ALWAYS** support the vehicle with jack stands.
- ALWAYS read and follow all safety information and warnings for the equipment you are using.

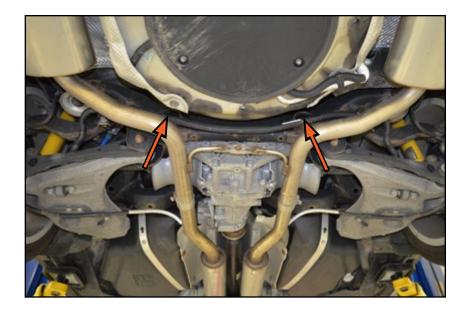


Never get underneath a vehicle that is supported only by a jack. Always make sure that the vehicle is securely supported on jack stands.



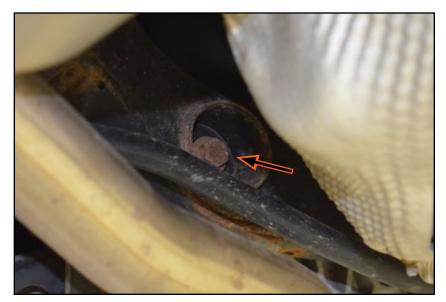
### Step 1:

Safely raise and support the vehicle so you can access the rear differential. The mount plate bushings (arrows) are pressed into the rear subframe just forward of the spare tire well. Working room seems tight at first, but there's plenty of it so you shouldn't have any trouble.



#### Step 2:

Take a closer look and you'll see the bolts that pass through each bushing and into the rear differential mount plate.





### Step 3:

Now look at the other side and you'll see where the bolts goes through the mount plate and are secured by a nut.



### Step 4: Jack Post-or-Hydraulic Jack

Place a jack post or floor jack underneath the mount plate to support the weight of the differential when you remove the bolts.





Step 5: 18mm Socket, Ratchet, 18mm Wrench

Loosen one of the mount plate bolts using a socket and breaker bar while holding the nut with a wrench. Completely remove the nut (and the washer under each) then slide the bolt out of the bushing, toward the spare tire well.

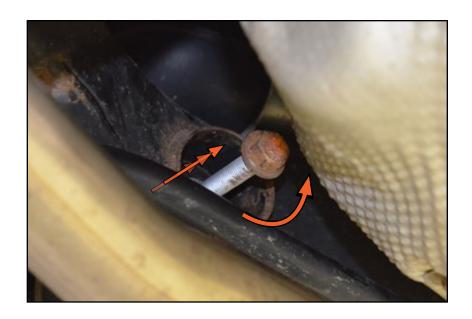
Completely remove the bolt. If it seems like there isn't enough room, spin it counter clockwise when it hits the spare tire well and it will "walk" right out.

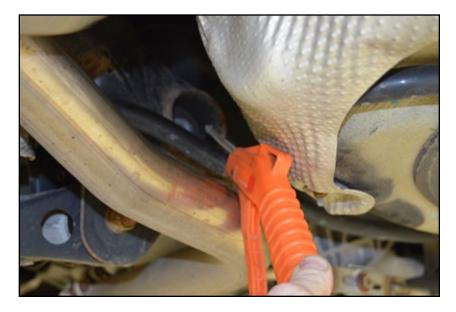


Raise or lower the jack slightly as required for the bolt to easily slide out of the bushing.



Use an air nozzle or blow gun to clean any dirt or debris out of the voids in the original bushing.







#### Step 7:

Before you install the new insert, we'll give you a quick overview of how the insert fits. Inspect the photo on the right. The original bushing has four "voids" in it, highlighted in green. These voids are simply air gaps that allow the center sleeve to move around when the drivetrain is loaded, preventing noise and vibration transfer into the chassis.

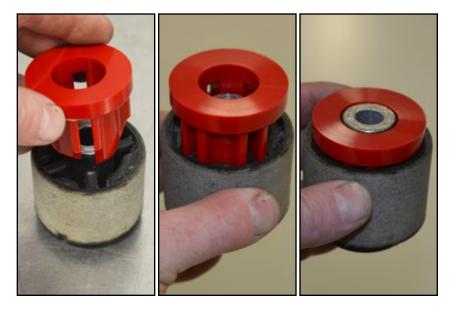


Note that the top-to-bottom and side-to-side voids are different.



#### Step 8:

Our new bushing insert is designed to fit perfectly into the voids in the original bushing by lining up the fingers of the insert with the corresponding voids in the bushing, then pushing it in until it is fully seated.





#### Step 9:

Now back to the actual installation. Using the grease supplied with the kit, liberally coat the inside and outside of the insert fingers.



#### Step 10:

Line up the fingers of the insert with the voids in the bushing, then push it in as far as you can by hand.



Most of the time you will not be able to push the insert all the way in by hand. It takes a little pressure to make it happen, not actually all that much, just more than you can do by hand. Continue with the next step, then we'll show you how to get it fully seated in just a little bit.





### Step 11:

Slide a washer plate onto one of the M12 x 100 bolts. Make sure it is installed so the head of the bolt fits into the recess on the face of the washer plate, as shown in the picture.



### Step 12:

Insert the bolt (with the washer plate installed) back into the bushing.





### Step 13: 18mm Socket, Pry Bar

Now, to fully seat the insert, place an 18mm socket onto the head of the bolt, then a pry bar (highlighted in green here) onto the end of the socket. Pull out gently on the end of the pry bar in order to put pressure on the socket. Hold a steady, constant, pressure on the pry bar and the insert will slide all the way into the bushing. It doesn't require too much force, just a constant pressure.

As long as the insert is seated enough where you can install the washer and nut onto the back side, torquing the bolt will draw it in the rest of the way.



### Step 14: 18mm Socket, 18mm Wrench, Torque Wrench

Install the nut and washer, then torque the bolt to 55 Nm (41 Ft-lbs).

Repeat these steps for the other side, remove the jack post, and your bushing insert installation is complete!





## **SCHWABEN - BUILD THE ULTIMATE TOOL COLLECTION**

At ECS Tuning, we carry a line of high quality Schwaben tools and equipment to help you build your ultimate tool collection. Never before has affordability and quality been so closely related. Our entire Schwaben line is subjected to strict in house testing for strength and durability. See what we have to offer and equip your garage without breaking the bank.



## Your Rear Differential Mount Plate Bushing Insert Installation is complete!









#### These instructions are provided as a courtesy by ECS Tuning

Proper service and repair procedures are vital to the safe, reliable operation of all motor vehicles as well as the personal safety of those performing the repairs. Standard safety procedures and precautions (including use of safety goggles and proper tools and equipment) should be followed at all times to eliminate the possibility of personal injury or improper service which could damage the vehicle or compromise its safety.

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