

VW MK5 R32/Audi 8P A3 3.2L Performance Engine Mount Install













### INTRODUCTION

Performance, Class, Comfort. That's the best way to describe our new VW MK5 R32/Audi 8P A3 3.2L Engine Mounts. The performance comes from the polyurethane bushings that reduce flex and power loss, and put your power to the ground. The class comes from the high quality machined aluminum and the look of distinction that you'll show off any chance you get. The comfort comes from the formulated 70A polyurethane to minimize the drivetrain vibrations associated with performance mounts.

### **ECS Difficulty Gauge**



These new mounts utilize our accumulated knowledge from the research and testing that we've done on a continuously expanding line of polyurethane engine and transmission mounts. This time we've designed them to fit the VW MK5 R32 and the Audi 8P A3 3.2L.

Installation is a fairly routine procedure, and you can install this engine mount in about an hour. To make it easy, we'll take you step by step through the installation of each one. We'll also touch on any specific procedures or difficulties you may encounter, and provide torque specifications and tips along the way.

Thank you for looking to ECS Tuning for all of your performance and maintenance needs, we appreciate your business!



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# KIT CONTENTS



Performance Engine Mount



Installation Hardware



## **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)	ES#2221243
• 3/8" Drive Ratchet	ES#2765902
• 3/8" Drive Torque Wrench	ES#2221245
• 3/8" Drive Deep and Shallow Sockets	ES#2763772
• <sup>3</sup> / <sub>8</sub> " Drive Extensions	ES#2804822
Hydraulic Floor Jack	ES#240941
Torx Drivers and Sockets	ES#11417/8
• ½" Drive Deep and Shallow Sockets	ES#2839106
• ½" Drive Ratchet	
• ½" Drive Extensions	
• ½" Drive Torque Wrench	ES#2221244
• ½" Drive Breaker Bar	ES#2776653
• File Set	
Air Nozzle/Blow Gun	
Bench Mounted Vise	
• Crows Foot Wrenches	
Hook and Pick Tool Set	ES#2778980

• <sup>1</sup> ⁄ <sub>4</sub> " Drive Ratchet	<u>ES#2823235</u>
• ¼" Drive Deep and Shallow Sockets	<u>ES#2823235</u>
• ¼" Drive Extensions	<u>ES#2823235</u>
• ½" Drive Torque Wrench	
Plier and Cutter Set	<u>ES#2804496</u>
Flat and Phillips Screwdrivers	<u>ES#2225921</u>
Jack Stands	
Ball Pein Hammers	
• Pry Bar Set	<u>ES#1899378</u>
Electric/Cordless Drill	
<ul> <li>Wire Strippers/Crimpers</li> </ul>	
<ul> <li>Adjustable (Crescent) Type Wrenches</li> </ul>	
• Drill Bits	
<ul> <li>Punch and Chisel Set</li> </ul>	
Hex Bit (Allen) Wrenches and Sockets	<u>ES#11420</u>
Thread Repair Tools	<u>ES#1306824</u>
Open/Boxed End Wrench Set	



## 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.

## GENERAL 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.

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- 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.

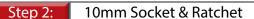


#### Step 1:

Let's begin with a quick overview. The engine mount (arrow) is located on the RH (Passenger) side between the front of the engine and the body frame rail. It's actually pretty easy to get to, you'll just have to move the coolant reservoir and washer fluid fill spout off to the side. If you have our Catch Can system installed as we do here on our MK5, you'll have to move it off to the side as well since we utilize the stud on one of the engine mount to body bolts for its mounting bracket.



Many of the photos in these instructions were taken during an install on a 2.0T equipped MK5 GTI, but the procedure is identical.



If you have one installed, unbolt our Catch Can bracket and move it off to the side. Now you'll need to remove the washer fluid fill spout mounting bolt (arrow).







#### Step 3:

Pull the washer fluid fill spout forward so it clears the engine mount. It's helpful if you secure it out of the way using a nylon wire tie.



#### Step 4:

Unplug the coolant reservoir level sensor.





#### Step 5:

Pull the wiring harness up off the back side of the coolant reservoir to access the two reservoir hold down screws.



Step 6:

T25 Torx - or - Phillips Screwdriver

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Remove the two screws holding the coolant reservoir in place.





Step 7: 13mm Socket, Ratchet & Extension,

Hold the coolant reservoir off to the side and remove the two engine mount side brace bolts, then lift off the side brace.



T25 & T30 Torx Step 8:

Safely raise and support the vehicle and remove the lower insulation panel or skid plate, depending on how your vehicle is equipped.





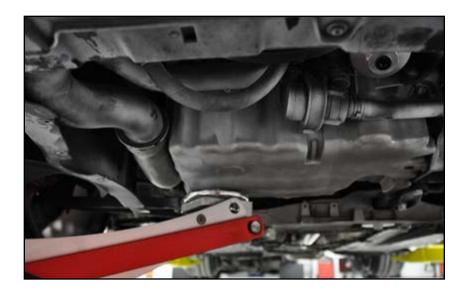
#### Step 9:

Floor Jack

With the skid plate removed, use a floor jack to support the engine underneath, on the **END** of the oil pan as shown. **DO NOT** place the jack in the middle of the oil pan.



**CAUTION:** Make sure your jack has a very good rubber pad installed, or use a piece of 2x4 between the jack pad and oil pan. **DO NOT** jack up the engine, only raise the jack just until it contacts the oil pan in order to support the engine and keep it from dropping when you remove the mount.



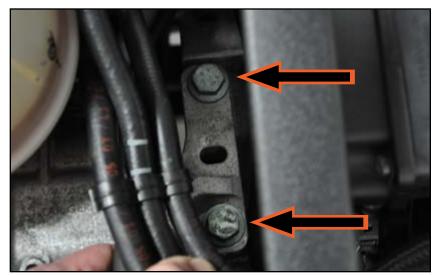
#### Step 10:

18mm Socket, Breaker Bar & Extension,

Gently move the fuel lines off to the side and remove the two engine mount to engine bracket bolts.



If the engine drops down as you begin to loosen the bolts, raise the jack slightly. When the jack is properly supporting the weight of the engine, the bolts should unthread easily.





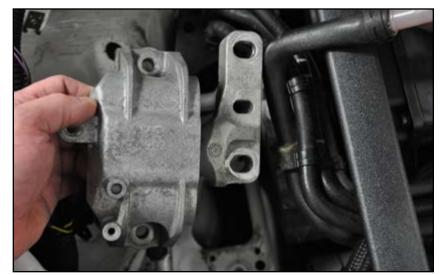
Step 11: 16mm Socket, Ratchet & Extension

Remove the two engine mount to body bolts.



#### Step 12:

Lift the original mount out of the car.





## INSTALLING THE NEW ENGINE MOUNT

#### Step 1:

Before you install the new mount, take a look down into the frame channel, there's a good chance it's full of dirt and gravel. It's a good idea to clean these out when you have the chance.



#### Step 2:

Set the new ECS Tuning engine mount into place.





## INSTALLING THE NEW ENGINE MOUNT

#### Step 3:

**FIRST:** Start the two new engine mount to engine bracket bolts by threading them in by hand just a few turns.

**SECOND:** Start the two new engine mount to body bolts by threading them in by hand just a few turns.



Please note the location of the bolt with the M6 mounting stud on top.



#### Step 4:

16mm & 18mm Sockets, Ratchet & Extension

**FIRST:** Completely thread in the engine mount to body bolts until they are hand tight.

**SECOND:** Completely thread in the engine mount to engine bracket bolts until they are hand tight.



**CAUTION:** The new engine mount may sit slightly lower than the original to compensate for compressed height. Lower the jack slightly as necessary so you are not forcing the mount against the engine bracket during installation. Allow the mount to bracket bolts to draw the engine bracket up into place.





## INSTALLING THE NEW ENGINE MOUNT

Step 5: 16mm & 18mm Sockets, Torque Wrench & Extension

Torque the engine mount to engine bracket bolts to 60 Nm (44 Ft-lbs) + 90 degrees.

Torque the engine mount to body bolts to 40 Nm (29 Ft-lbs) + 90 degrees.



See Page 18 for additional torquing tips and information.



Install the engine mount side brace and torque the bolts to 20 Nm (15 Ft-lbs) + 90 degrees.

Reinstall the coolant reservoir and wiring harness.

Reinstall the washer fluid reservoir spout.

Reinstall the Catch Can bracket (if equipped).

Remove the floor jack and install the skid plate. If you are installing a new transmission mount and pendulum mount, leave the skid plate off until you have installed these mounts as well.

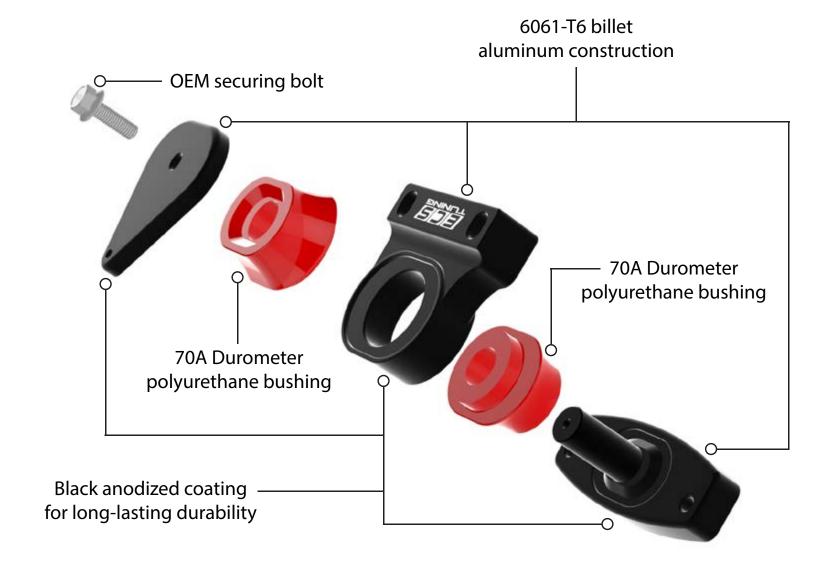






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## **ENGINE MOUNT - EXPLODED VIEW**





### **TORQUING TIPS**

#### Torque to Yield or "Stretch" Bolts

Many bolts will have a torque specification listed in the format - xx Nm (xx Ft-lbs) + xx degrees. These bolts are torque to yield bolts, commonly referred to as "stretch" bolts. The correct procedure for torquing these bolts is:

Stage One - Torque the bolt(s) to the initial Nm or Ft-lb specification. If there is more than one, be sure to torque them in the correct sequence.

Stage Two - Tighten or "stretch" the bolt(s) the additional specified number of degrees. If there is more than one, be sure to follow the correct sequence.

Note - Some bolts may have two or more stages of torquing before the final stage of "stretching" the bolts.

When tightening more than one bolt in a specified sequence, be sure to mark each fastener with paint *immediately* after performing the final stage or "stretching" of the bolts. This will ensure that you keep track of which bolts have already been "stretched".

All Torque to Yield bolts should only be used once and should be replaced each time they are removed. If they are reused, they will not be able to achieve the proper clamping force with the specified torque.

#### Lubrication

Torque specifications are always listed for a dry fastener (no lubrication) unless specified otherwise.

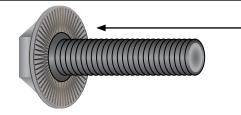
Some fasteners require lubrication on the threads -or- on the contact surface while torquing. These fasteners will be listed with the specific location and type of lubrication required. Always follow manufacturers recommendations exactly.

Lubricating a fastener that is intended to be installed dry and then torquing it to factory specifications will increase the clamping force and stress on the fastener and components, which can result in damage or failure.

Do not lubricate the threads of any fastener unless it is specifically recommended by the manufacturer.

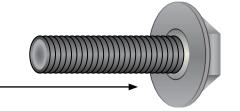
#### **Ribbed vs. Non-Ribbed Bolts**

Ribbed and Non-Ribbed bolts in the same location generally require a different torque specification.



A ribbed bolt is identified by the ribs on the contact surface

A non-ribbed bolt is identified by the smooth contact surface





# TORQUE SPECIFICATIONS

Engine Mount to Body Bolts M10	
Engine Mount to Engine Bracket M12	
Engine Mount Side Brace M8	20 Nm (15 Ft-lbs) + 90 degrees



## **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 Performance Engine Mount 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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