

## BMW Polyurethane Transmission Mount Kit Installation















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.

# INTRODUCTION

### ECS Tuning Polyurethane Transmission Mount Kit: ES#2859359 / ES#2718367

This ECS Tuning Polyurethane Transmission Mount Kit offers the following features:

- High quality polyurethane bushings which mate the transmission more positively to the chassis
- Stronger resistance to wear, which means a longer service life than the OEM rubber transmission mounts
- Increased resistance to water, oil, and grease
- More accurate gear shifting when replacing your worn out rubber transmission mounts
- Eliminated fears of broken OEM mounts which can cause over revving, mis-shifts, and even chassis damage
- Two separate applications to fit your needs from street use to track use



Replacing the transmission mounts on your BMW is a rewarding project that an experienced technician will be able to complete in a weekend. Plan accordingly based on your experience level. Before you begin, read and familiarize yourself with these instructions and make sure you have all the required tools on hand. Thank you for purchasing our polyurethane transmission mount kit, we appreciate your business!



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# **KIT CONTENTS**



ECS Tuning Polyurethane Transmission Mount Kit



## **REQUIRED TOOLS**

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

We recommend that you have a complete selection of tools and equipment necessary for automotive repair. Below is a list of the tools we used to install the ECS Tuning Polyurethane Transmission Mounts. Additional tools may be required for any issues that arise during installation such as rust, corrosion, or broken and stripped fasteners.

• 3/8" Drive Ratchet	Available at ecstuning.com	<u>ES#2765902</u>
• 3/8" Drive Torque Wrench	Available at ecstuning.com	<u>ES#2221245</u>
• 3/8" Socket - 13mm	Available at ecstuning.com	<u>ES#2763772</u>
• 13mm Wrench	Available at ecstuning.com	<u>ES#2765907</u>
• Floor Jack	Available at ecstuning.com	<u>ES#240941</u>
Jack Stands	Available at ecstuning.com	<u>ES#2763355</u>
Wheel Chocks	Available at ecstuning.com	<u>ES#2748980</u>
Wheel Stands	Available at ecstuning.com	<u>ES#2748979</u>
• Car Ramp - Pair	Available at ecstuning.com	<u>ES#2748949</u>
Padded Creeper With Adjustable Headrest	Available at ecstuning.com	<u>ES#2763705</u>
Padded Creeper Seat With Tool Tray	Available at ecstuning.com	<u>ES#2763679</u>
Two-Shelf Service Cart	Available at ecstuning.com	<u>ES#2763360</u>

## SHOP SUPPLIES AND MATERIALS

Hand Cleaner/Degreaser	Available at ecstuning.com <u>ES#2167336</u>
Aerosol Brake Cleaner	Available at your local auto parts store
• Shop Rags	Available at your local auto parts store
Aerosol Spray Lubricant/Penetrating Oil	



## **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.
- 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 lift and support the vehicle. Remove the belly pan (if equipped) so that the transmission is completely visible. Support the transmission from underneath with a jack or jackstand, be sure to place the support so that the contact point is squarely aligned with the area highlighted in BLUE. The jack or jackstand needs to support the full weight of the transmission without raising it towards the chassis.

### CAUTION

Do not raise or lower the transmission more than 5-10cm during this installation. Doing so can damage a number of couplings and linkages throughout the driveline.

#### Step 2: 3/8" Ratchet, 13mm Socket

Loosen the crossmember bolts to hand-tightness in the order shown in the photo. DO NOT remove the bolts in this step.

### CAUTION

During the following steps, it is possible the transmission may shift. Use extreme caution to ensure the transmission does not shift off of the jack or jackstand.





Step 3: 3/8" Ratchet, 13mm Socket

Loosen and remove the nuts securing the OEM transmission mounts to the crossmember.



### Step 4:

Raise the transmission so the mounts are clear of the crossmember, remember to not raise the transmission more than 5-10cm.



Step 5: 3/8" Ratchet, 13mm Socket, 13mm Wrench

Remove the four bolts securing the transmission crossmember to the chassis and set it aside. The transmission is now completely supported by the jack or jackstand.

Remove the two upper nuts securing the OEM transmission mounts to the transmission, and remove the mounts.





#### Step 6:

You will notice that the OEM transmission mounts each have a notch cut out on the bottom side. This notch aligns with a protrusion on the crossmember, preventing the mount from rotating and further eliminating driveline vibrations from entering the cabin. It is extremely important when installing your new polyurethane mounts that you observe the orientation of the bushing against the crossmember and align the notch in the mount to the protrusion on the crossmember as shown in the photos.

Insert the new mounts into the crossmember and hand-tighten the mounts to the crossmember with the supplied hardware.

### Step 7:

Slide the crossmember into position and hand-tighten the upper transmission mount nuts to the transmission, lowering the transmission jack as necessary in order to line up the mounts.



### Step 8: 3/8" Torque Wrench, 13mm Socket

Install the four bolts securing the crossmember to the chassis, and tighten the bolts to 20.4 Nm (15 Ft/lbs).



Step 9: 3/8" Torque Wrench, 13mm Socket

Lower the weight of the transmission onto the mounts and the crossmember, and torque the upper transmission mount nuts to 21.6 Nm (16 Ft/lbs).



### Step 10: 3/8" Torque Wrench, 13mm Socket

Torque the lower transmission mount nuts to 21.6 Nm (16 Ft/lbs). This is a good time to double check that each nut and bolt is accurately torqued.



### Your Polyurethane Transmission Mount Kit installation is complete!



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

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