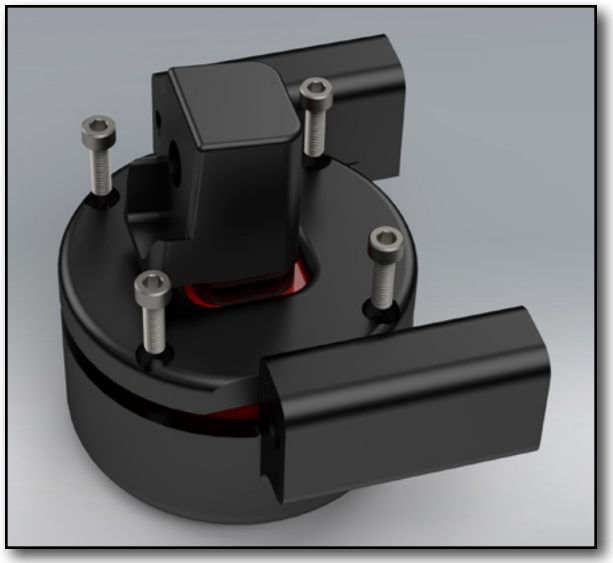
Audi B8/B8.5 Poly Engine Mount Set Installation Instructions - ES4315393

Skill Level
2 - Moderate

Some Experience Recommended



Note: Sandwich plate removed for visibility

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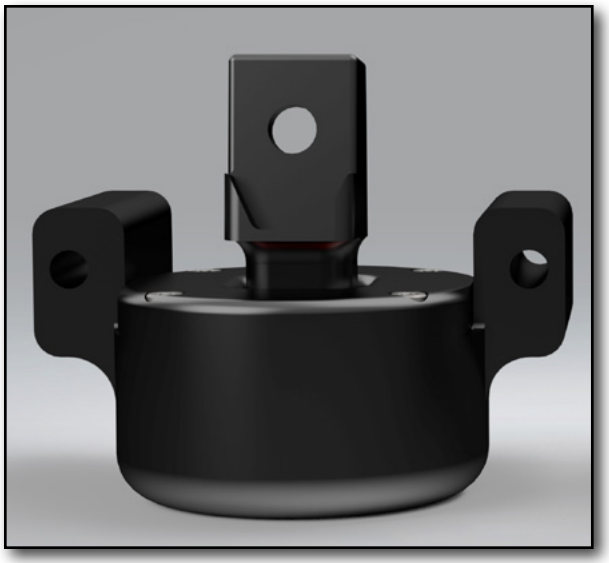
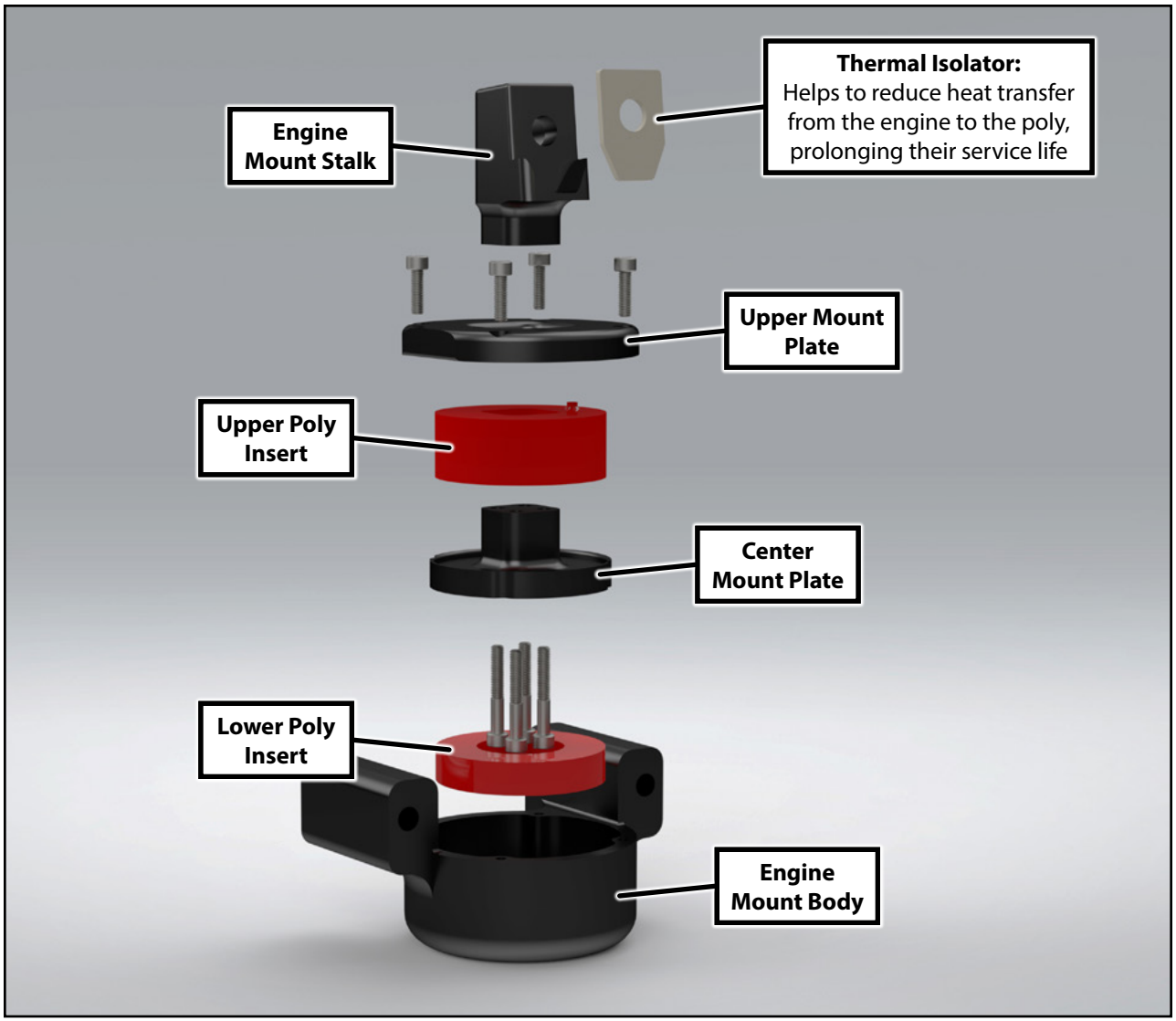


INTRODUCTION

ECS Tuning B8/B8.5 Poly Engine Mount Set

The factory engine mounts on your car keep things smooth and quiet, but they are designed with voids or open cavities inside which soak up noise, vibration, and harshness (NVH). The downside is that these voids or open cavities can leave the connection between you and the engine feeling a bit vague. Our new solid **polyurethane** engine mounts were engineered in-house with the opposite in mind; we wanted our engine mounts to hold the engine firmly in place for better stability and power transfer, but without excessive NVH. After extensive real world testing we can tell you that these mounts did not disappoint!

These instructions will outline the procedure on a B8.5 S4 3.0T, but the process should be the same on any B8/B8.5 vehicle. This install is a bit challenging due to the amount of work required to access the mounts. We've found that you can remove and install the mounts without unbolting the subframe, so be sure to read these instructions ***BEFORE*** you start working. Thank you for looking to ECS Tuning for all your performance and repair needs, we appreciate your business!



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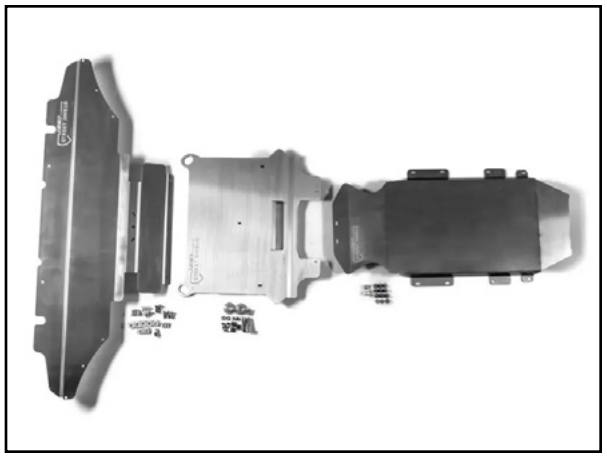
RELATED UPGRADES

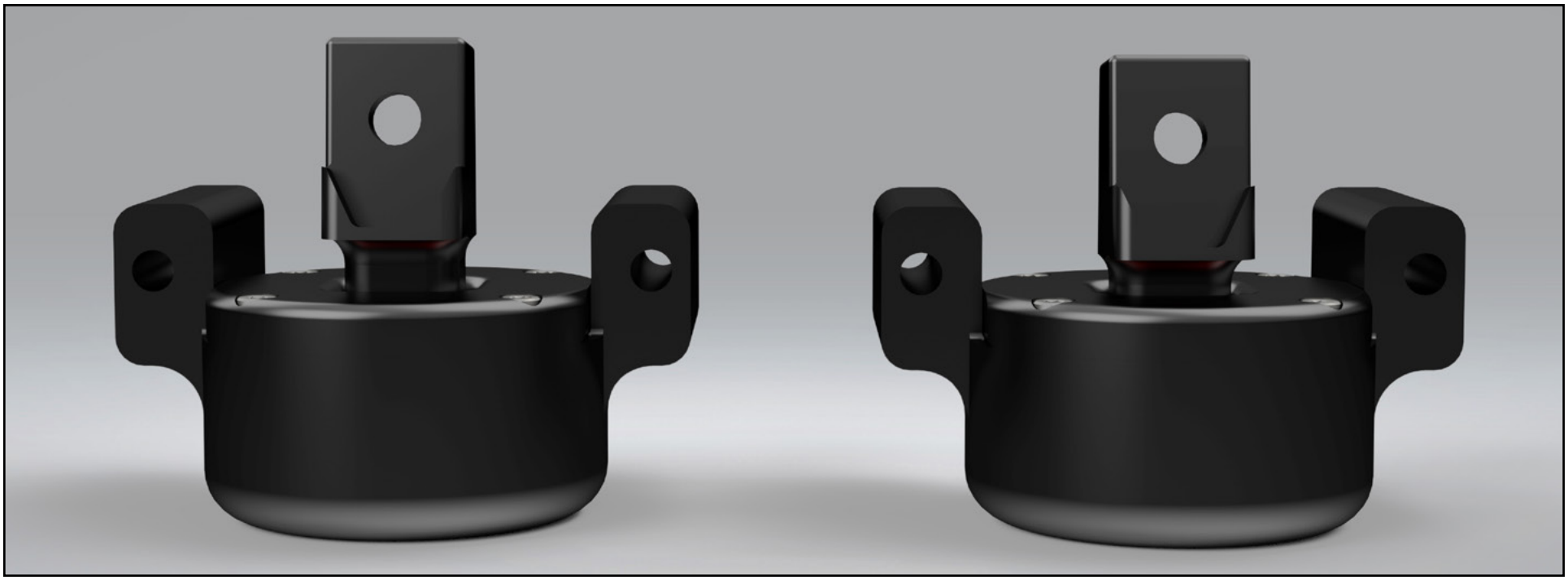
Audi B8 Poly Transmission Mount Insert Kit
ES#3023205

Audi B8 Poly Rear Diff Mount Insert Kit
ES#2992521



Audi B8 S4 Street Shields
Click HERE to Shop

KIT CONTENTS

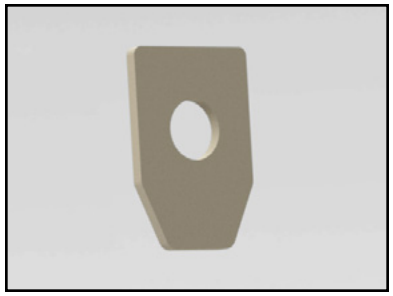


LH (Driver's Side) Poly Engine Mount **(QTY 1)**

RH (Passenger's Side) Poly Engine Mount **(QTY 1)**

Engine Mount Resistor
(QTY 2)

Engine Mount Bolt
(QTY 2)



Thermal Isolator
(QTY 2)

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
- **⅜" Drive Ratchet** ..... ES#2765902
- **⅜" Drive Torque Wrench** ..... ES#2221245
- **⅜" Drive Deep and Shallow Sockets** ..... ES#2763772
- **⅜" Drive Extensions** ..... ES#2804822
- **Hydraulic Floor Jack** ..... ES#2834951
- **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
- Bench Mounted Vise
- Crows Foot Wrenches
- **Hook and Pick Tool Set** ..... ES#2778980
- ¼" Drive Ratchet ..... ES#2823235
- ¼" Drive Deep and Shallow Sockets ..... ES#2823235
- ¼" Drive Extensions ..... ES#2823235
- Plier and Cutter Set ..... ES#2804496
- **Flat and Phillips Screwdrivers** ..... ES#2225921
- **Jack Stands** ..... ES#2763355
- Ball Pein Hammers
- **Pry Bar Set** ..... ES#1899378
- Electric/Cordless Drill
- Wire Strippers/Crimpers
- Drill Bits
- Punch and Chisel Set
- **Hex Bit (Allen) Wrenches and Sockets** ..... ES#11420
- Thread Repair Tools ..... ES#1306824
- **Open/Boxed End Wrench Set** ..... ES#2765907

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.
- Whether lifting a vehicle using an automotive lift or a hydraulic jack, be sure and 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, and ALWAYS make sure that the vehicle is securely supported on jack stands.

Please read this entire page before proceeding

DISASSEMBLY PROCEDURE

Step 1: 10mm Socket & Ratchet, Engine Support Bar

Disconnect the Negative (–) battery cable (**Photo #1**).

Support the engine from above (**Photo #2**). Our Schwaben Engine Support Bar works very well here.

TECH TIP

Click anywhere on **Photo #2** to view a video we shot of an engine mount install on one of our giveaway cars. The mounts are different, but there are a few tips and tricks in the video which may not be covered during these instructions.

#1:

#2

DISASSEMBLY PROCEDURE

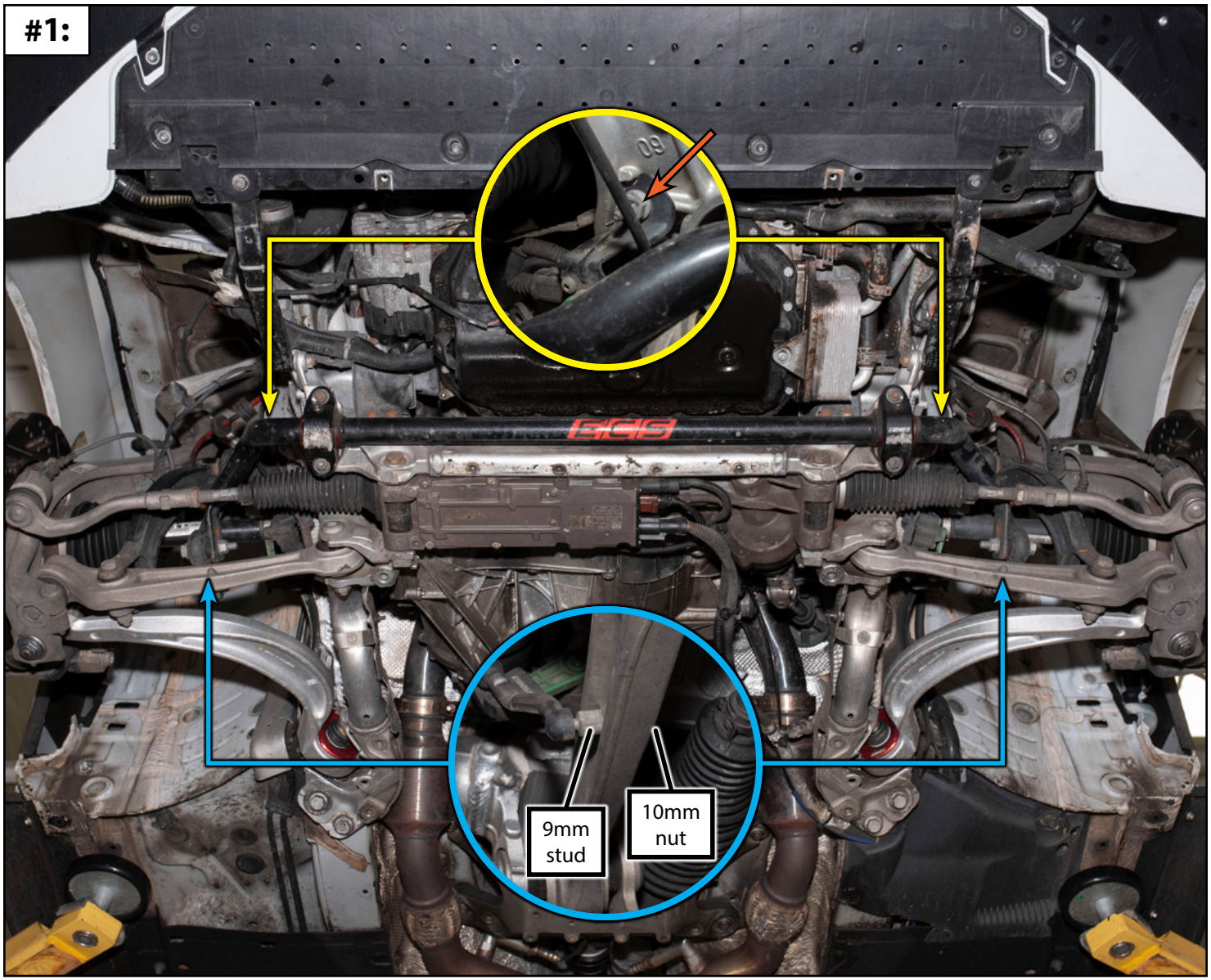
Step 2:

Remove the belly pans and X-brace (**Photo #1**).

Remove the 13mm nut which secures each headlight leveling sensor to the subframe (**YELLOW inset photo**).

Disconnect the headlight leveling sensor arms from the lower control arms. Counter-hold the stud with a 9mm wrench while loosening the 10mm locking nut (**BLUE** inset photo).

#1:



DISASSEMBLY PROCEDURE

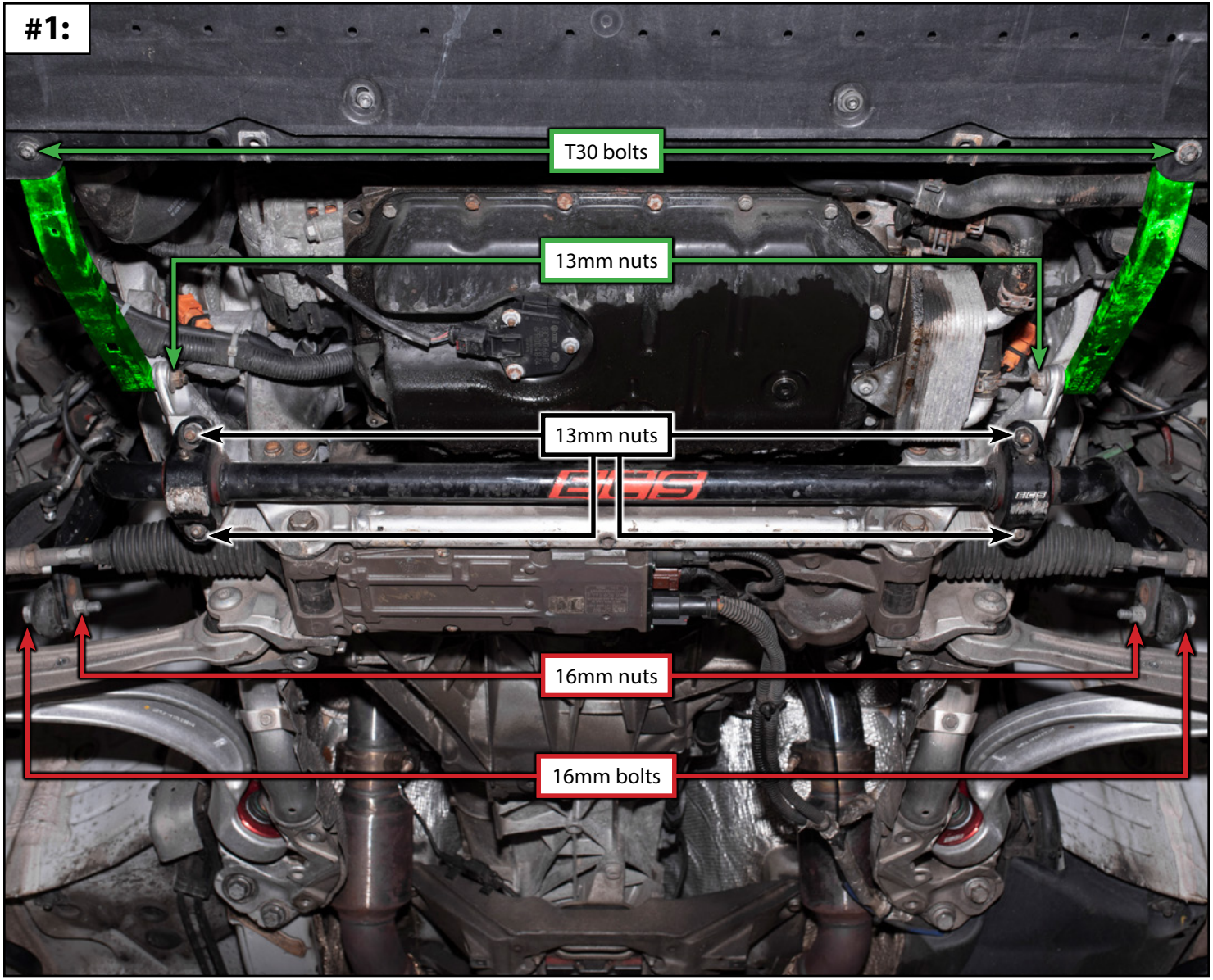
Step 3:

Remove the core support braces (highlighted in **GREEN** in **Photo #1**).

Remove the four 13mm locking nuts from the sway bar mounting brackets (**BLACK** text boxes in **Photo #1**).

Disconnect the sway bar end links and remove the sway bar from the vehicle (**RED** text boxes in **Photo #1**).

#1:



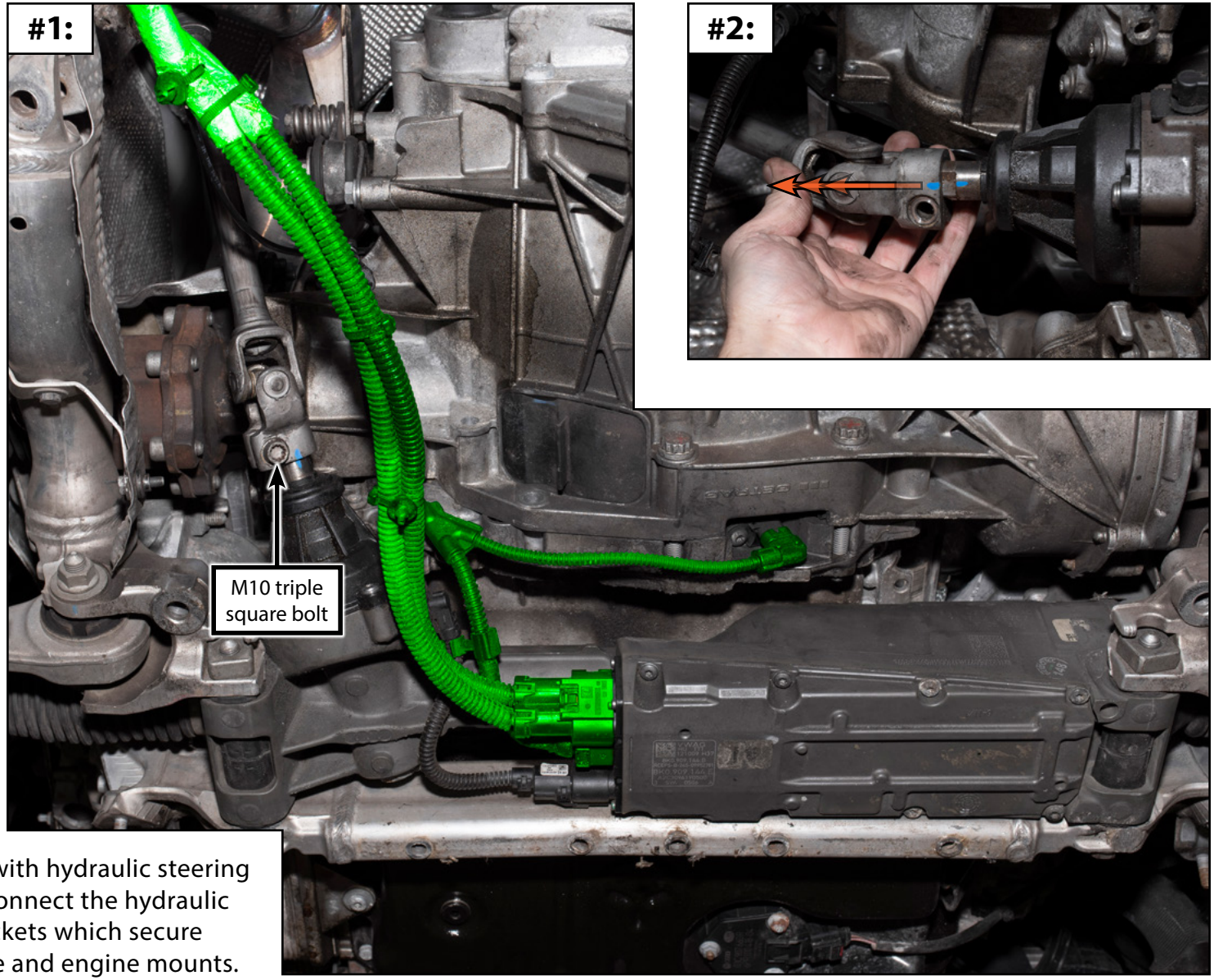
DISASSEMBLY PROCEDURE

Step 4:

Disconnect the wiring harnesses (highlighted in **GREEN** in **Photo #1**) or P/S fluid lines from the steering rack (not shown). Remove the M10 triple square bolt which secures the u-joint onto the steering rack (**Photo #1**).

Pull the steering shaft off of the steering rack and support it out of the way (arrows in **Photo #2**).

#1:



#2:

NOTE

Pre-Facelift vehicles with hydraulic steering will also need to disconnect the hydraulic lines any clips or brackets which secure them to the subframe and engine mounts.

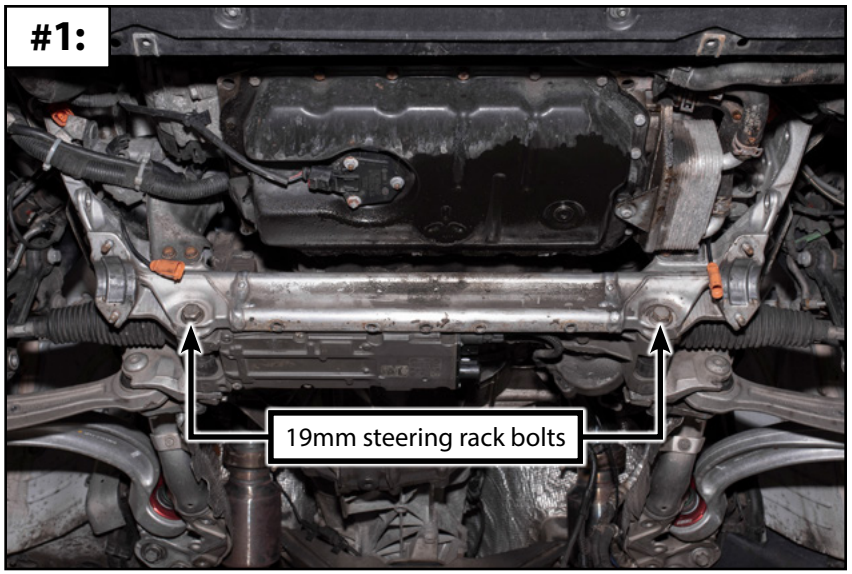
DISASSEMBLY PROCEDURE

Step 5: 19mm Socket & Ratchet, Mechanic's Wire

Remove the steering rack bolts (**Photo #1**).

Lower the steering rack out of the subframe and safely support it (**Photo #2**), we used mechanic's wire for this.

#1:



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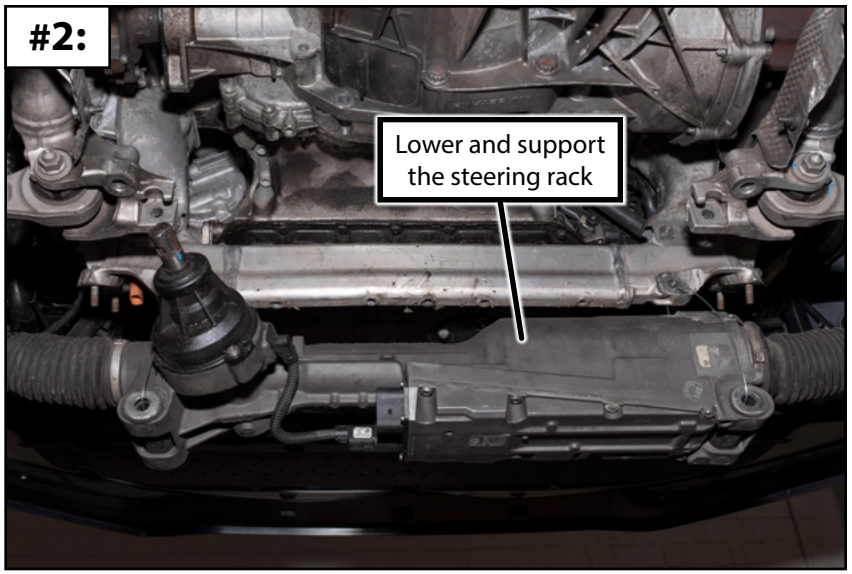


INSTALLING THE NEW POLY ENGINE MOUNTS

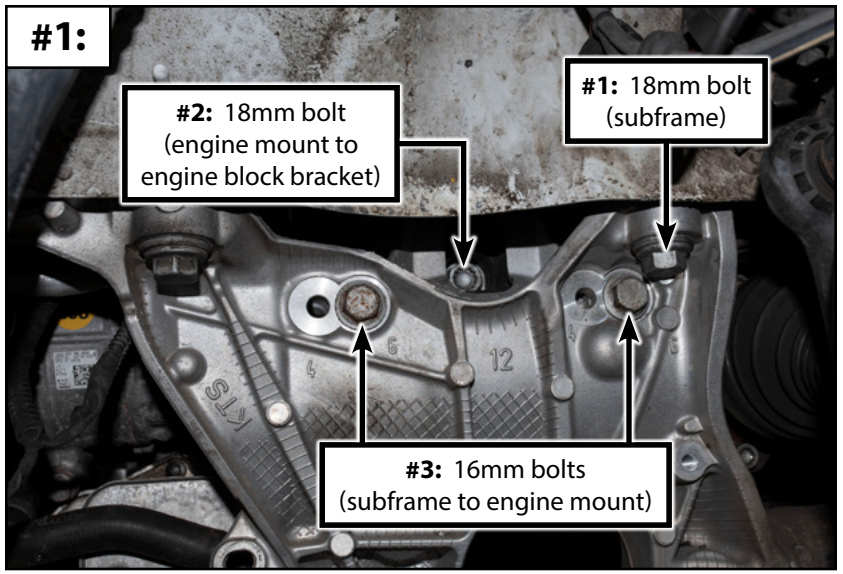
Step 1:

Working on the LH side, remove the 18mm subframe bolt (**Photo #1**). This bolt is in the way of the one of the engine mount bolts. Next, remove the 18mm bolt which secures the engine mount to the engine block bracket (**Photo #1**), then remove the two 16mm bolts which secure the engine mount to the subframe (**Photo #1**).

Space is tight between the oil cooler and the or access to the engine mount sandwich plate. You'll need to lift the engine up 20-25mm on the LH side to get access to the two M10 triple square bolts (**Photo #2**). You could remove the cooler from the engine, but it makes a big mess and it's more difficult than simply lifting the engine slightly. Our Schwaben Low Profile Socket Set is very handy to have for this job!

Pull the sandwich bolts out past the oil cooler, being careful not to damage it (**Photo #3**).

#1:



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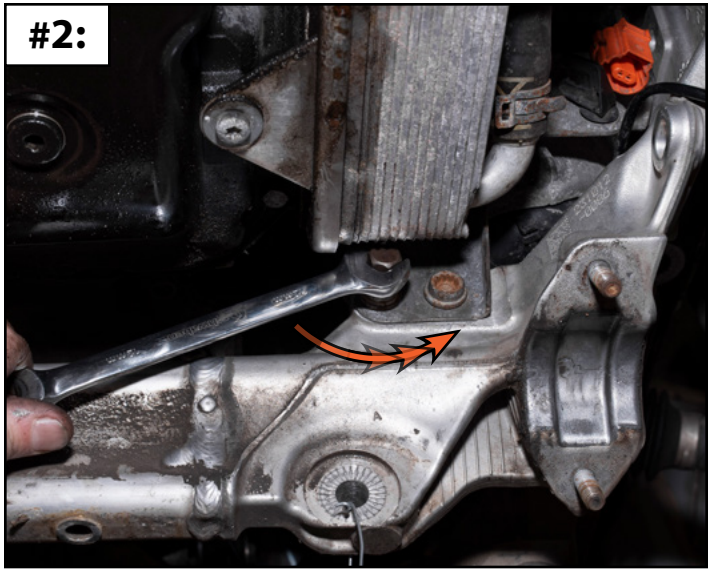
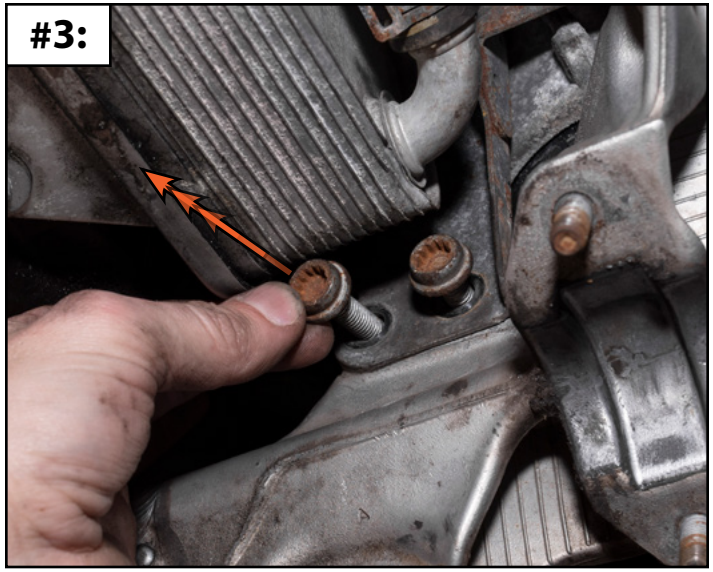


#3:



INSTALLING THE NEW POLY ENGINE MOUNTS

Step 2:

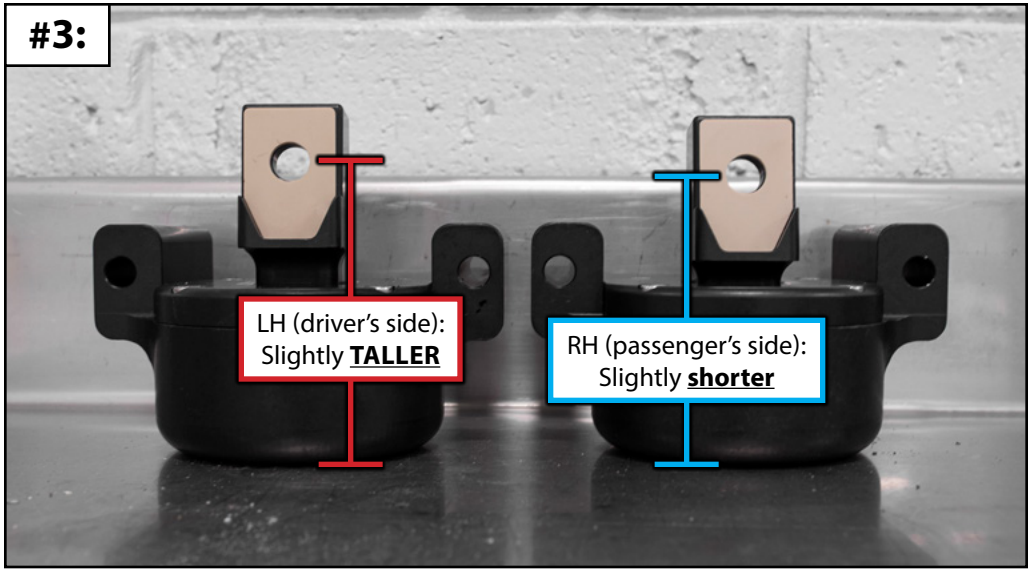
With the LH side of the engine still lifted 20-25mm, remove the LH sandwich plate (**Photo #1**) and the LH engine mount (**Photo #2**). There should be more than enough space to get these two components between the engine and the subframe and out through the open cavity where the steering rack was mounted.

The LH and RH poly engine mounts ***are side specific***, so you need to confirm that you are installing them onto the correct sides of the engine. If you set the engines side-by-side you will see that the LH mount is slightly taller than the RH mount (**Photo #3**).

#1:

#2:

#3:



INSTALLING THE NEW POLY ENGINE MOUNTS

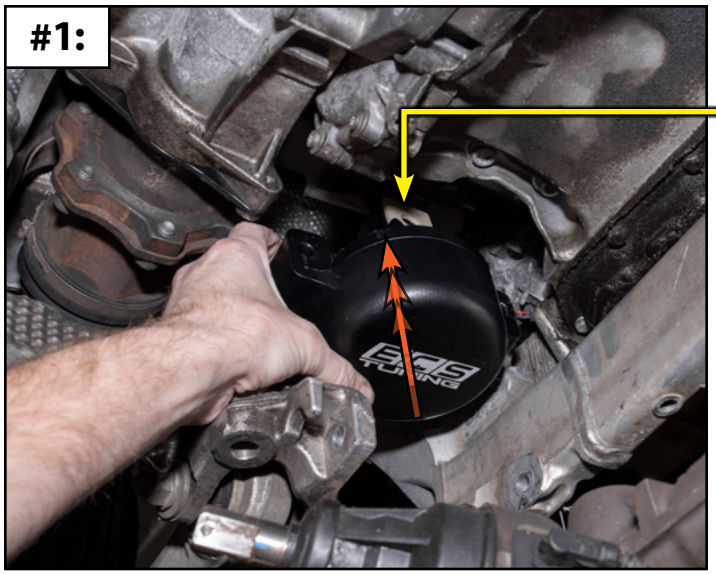
Step 3:

Lift the LH engine mount up into position (**Photo #1**), then loosely install the sandwich plate into place (**Photo #2 & Photo #3**). Be sure to place the thermal isolator between the mount and the bracket (**YELLOW** inset photo). This helps to reduce heat transfer from the engine into the poly. ***Do not install the bolt which secures the engine mount to the engine block bracket at this time***.

Don't forget to install the M10 triple square bolts which secure the sandwich plate to the subframe (**Photo #4**). Now is a good time to torque these bolts to 20 Nm (15 ft. lbs), since they'll be too difficult to reach once the engine is lowered back down.

Lower the LH side of the engine until the engine is resting on the new poly mount (not shown).

#1:



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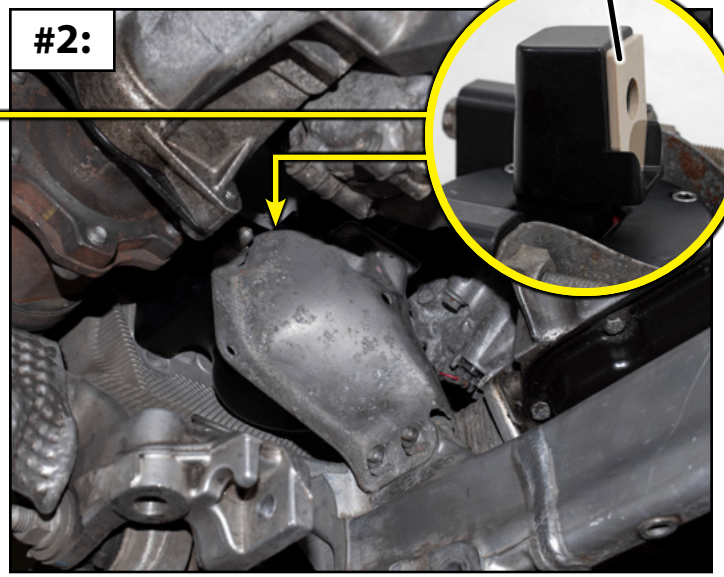

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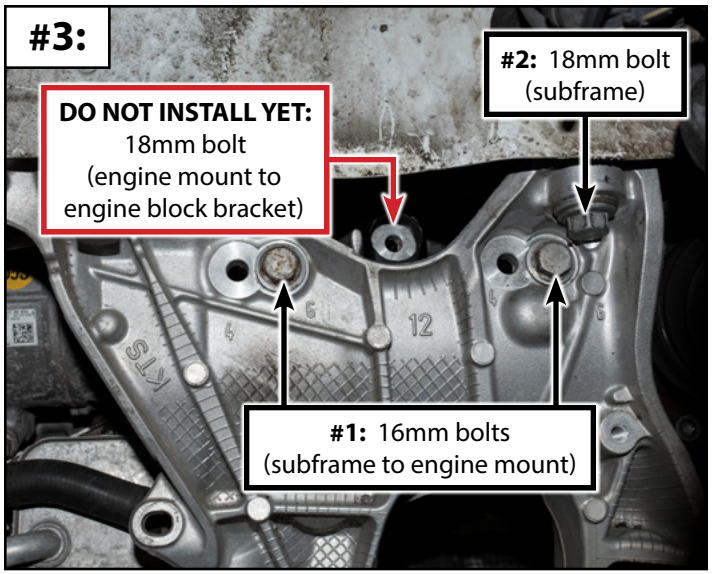
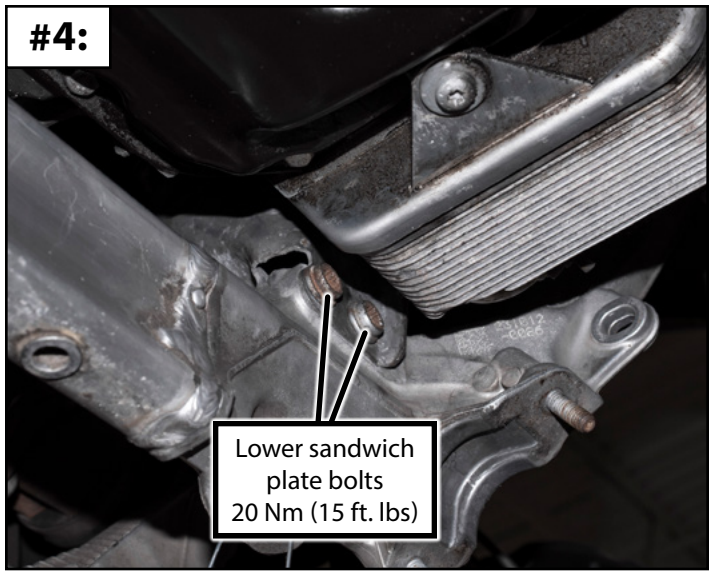


#4:



INSTALLING THE NEW POLY ENGINE MOUNTS

Step 4:

Lift up the RH side of the engine 20-25mm, remove the RH sandwich plate (**Photo #1**) and the RH engine mount (**Photo #2**).

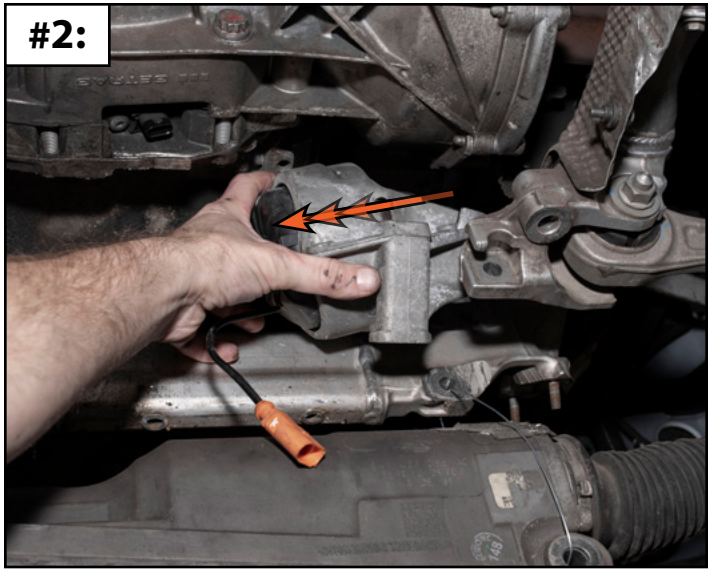
Loosely install the RH engine mount and the sandwich plate into place (**Photo #3 & Photo #4**). Be sure to place the thermal isolator between the mount and the bracket (**YELLOW** inset photo). ***Do not install the bolt which secures the engine mount to the engine block bracket at this time***.

Torque the M10 triple square sandwich plate bolts to 20 Nm (15 ft. lbs) (**Photo #3**).

Lower the RH side of the engine until the engine is resting on the new poly mount (not shown).

#1:

#2:



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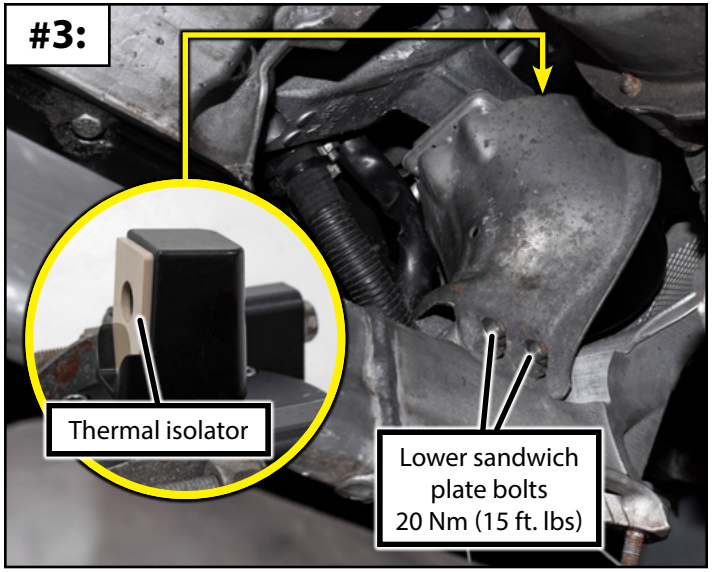

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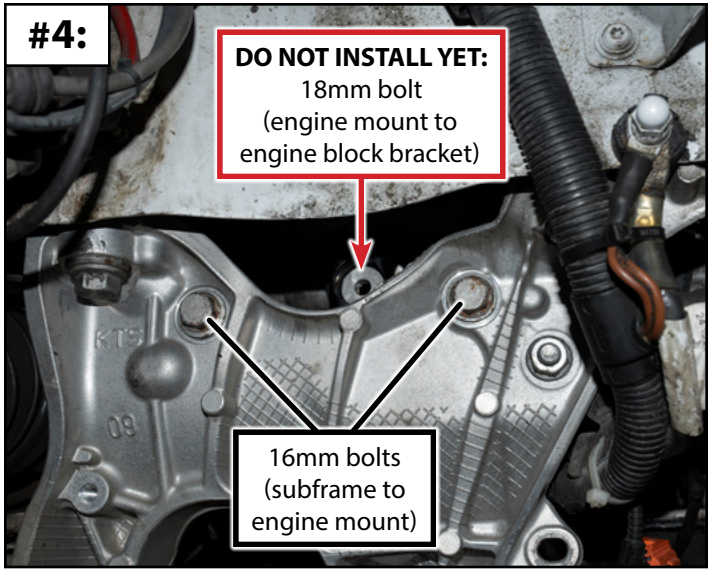
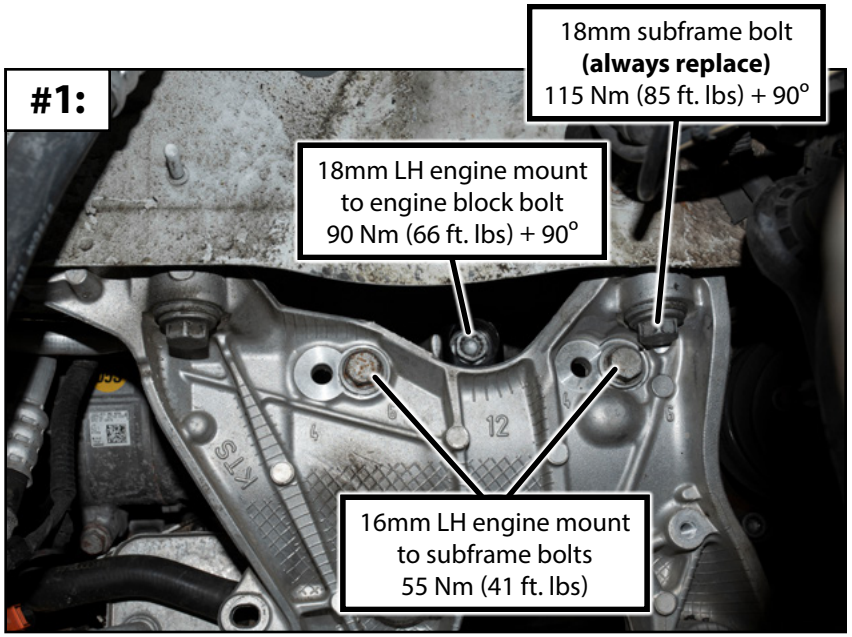


REASSEMBLY PROCEDURE

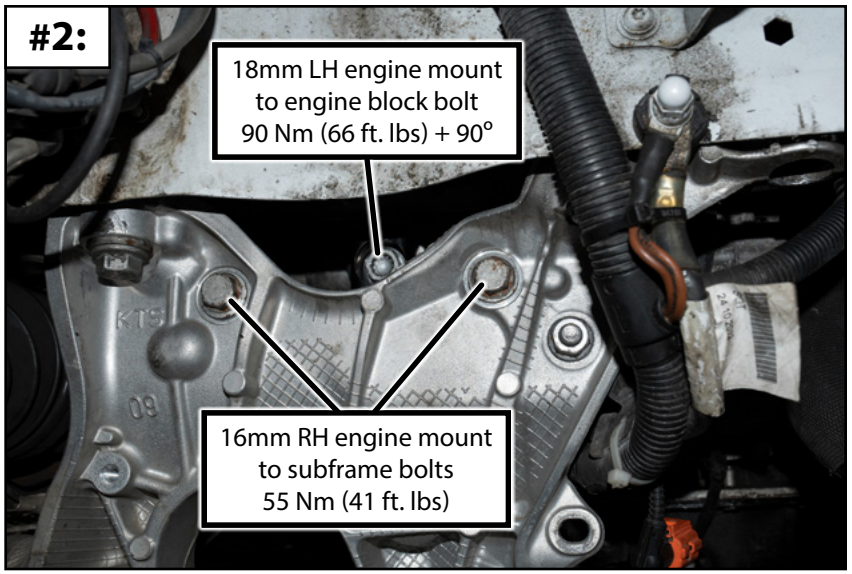
Step 1:

Lower the engine down until it rests on both mounts. Thread in the supplied engine mount bolts by hand, then torque them to 90 Nm (66 ft. lbs) + 90°. Torque the remaining bolts to specification (**Photo #1 & Photo #2**).

#1:



#2:



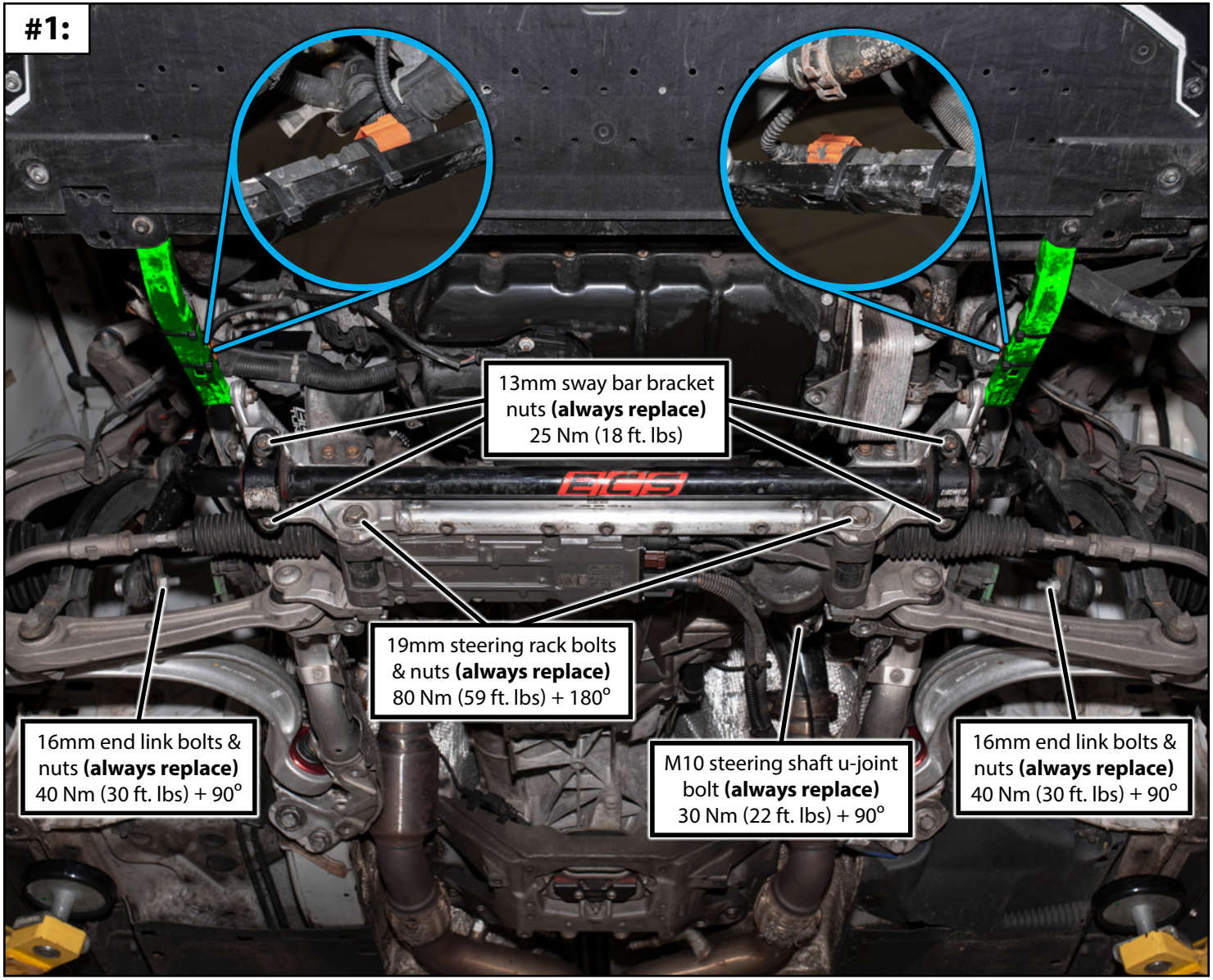
REASSEMBLY PROCEDURE

Step 2:

Reinstall the core support braces (highlighted in **GREEN** in **photo #1**). Connect the supplied engine mount resistors to the engine mount harness connectors, then secure them out of the way (**BLUE** inset photos).

Reinstall the steering rack and steering shaft u-joint. Reinstall the sway bar and end links.

#1:



REASSEMBLY PROCEDURE

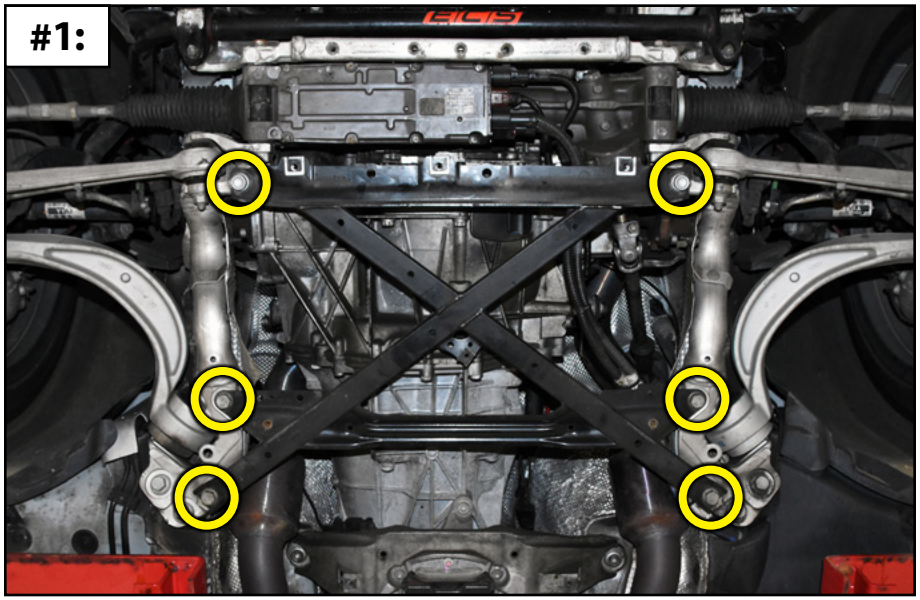
Step 3:

Lift the X-brace into place and loosely install the six bolts (circled in **YELLOW** in **Photo #1**).

- **Facelift B8:** Torque the four hex bolts to 90 Nm (66 Ft lbs) + 135°.
  Torque the two triple-square bolts to 90 Nm (66 Ft lbs) + 90°.
- **Pre-Facelift B8:** Torque the six hex bolts to 90 Nm (66 Ft lbs) + 135°.

Reinstall the engine and transmission belly pans (**Photo #2**).

#1:



#2:

Your Poly Engine Mount Set installation is complete!

Note: Sandwich plates removed for visibility

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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