

VERUS ENGINEERING

Motor Mount Assembly – 2022 Subaru WRX (VB) Install Manual



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Approvals: C. Warner

Document Revisions

Rev	Date	Author	Description
01	2023/4/26	T. Lang	Initial release of install manual

Motor Mount, 2022 Subaru WRX – Install Manual

CONTENTS

1. Introduction.....	<3>
1.1. Overview.....	<3>
1.2. Difficulty.....	<3>
1.3. Time Required.....	<3>
1.4. Tools Needed	<3>
1.5. Motor Mount Components.....	<4>
2. Motor Mount Install.....	<4-17>

Motor Mount, 2022 Subaru WRX – Install Manual

1. Introduction

1.1. Overview: Detailed instructions on installing the Verus Engineering Engine Mount for the Toyota GR86.

1.2. Difficulty: Moderate - Difficult

1.3. Time Required: 3 -4 hours

1.4. Tools Needed:

- 1.4.1. Ratchet
- 1.4.2. 5mm Allen Key or Socket
- 1.4.3. 10mm Socket
- 1.4.4. 12mm Socket
- 1.4.5. 13mm Socket
- 1.4.6. 14mm Socket, and Wrench
- 1.4.7. 16mm Socket or Wrench
- 1.4.8. 18mm Socket or Wrench
- 1.4.9. Extension
- 1.4.10. Clip Removal Tool or Flat tip screwdriver
- 1.4.11. Flashlight



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1.5. Motor Mount Components

- 1.5.1. (2) Engine Mount Bracket
- 1.5.2. (2) Bushing Retainer Bracket
- 1.5.3. (2) Bushing Retainer
- 1.5.4. Hardware Bag
 - 1.5.4.1. (4) M12 x 1.75 x 80mm Long HHCS (Hex Head Cap Screw)
 - 1.5.4.2. (4) M12 x 1.75 Nyloc Nut
 - 1.5.4.3. (2) M12 x 1.75 x 20mm Long HHCS
 - 1.5.4.4. (4) M8 x 1.25 x 20mm Long FHCS (Flat Head Cap Screw)
 - 1.5.4.5. (4) M8 x 1.25 Serrated Flange Nut
 - 1.5.4.6. (4) Inner Bushing Sleeve
 - 1.5.4.7. (8) 70A Durometer Bushing (Black)
 - 1.5.4.8. (8) 80A Durometer Bushing (Grey)
 - 1.5.4.9. (8) 90A Durometer Bushing (Blue)

**2. Subaru VB WRX Motor Mount Install**

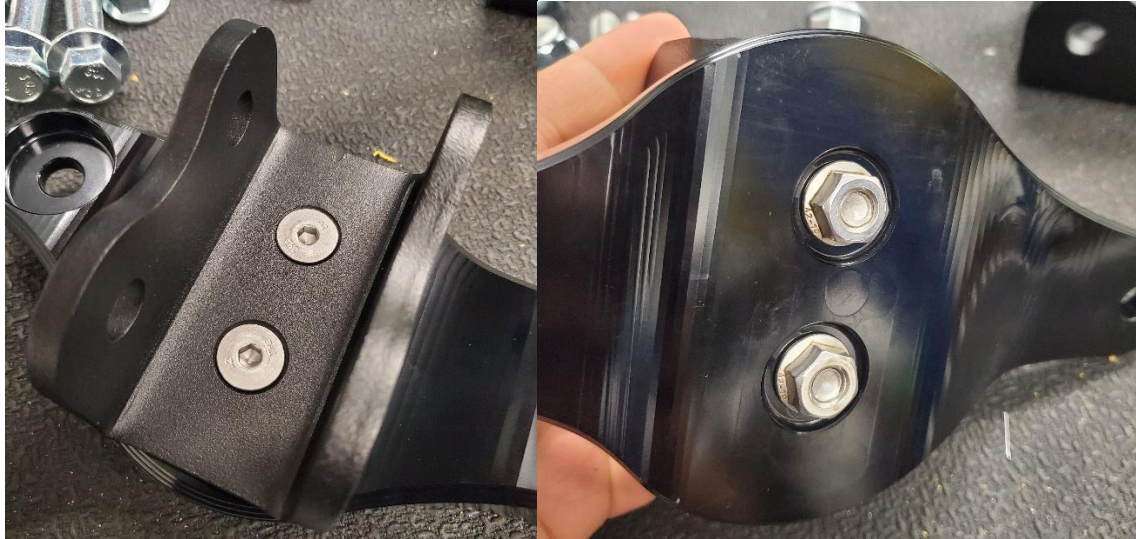
- 2.1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.
- 2.2. We begin by gaining access to underneath the hood. Pop the hood and open it.
- 2.3. Jack the car up, and support it safely.

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2.4. Assemble the engine mounts.

2.4.1. Using the four supplied 20mm M8x1.25 FHCS bolt the bushing retainer brackets to the engine mount bracket. Torque to 13 ft-lbs.



2.4.2. Three different durometer bushings are supplied. Which durometer you install is ultimately up to you, however we installed the black bushings. **Black – Soft, Grey – Medium, Blue – Hard.**

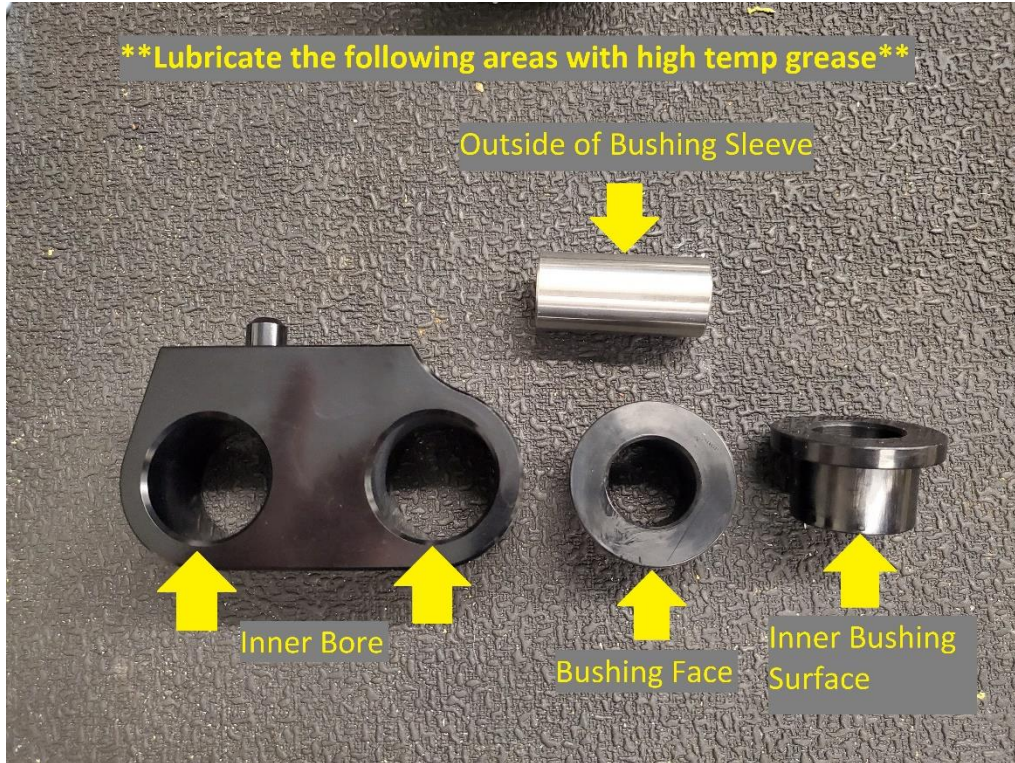


Durometer

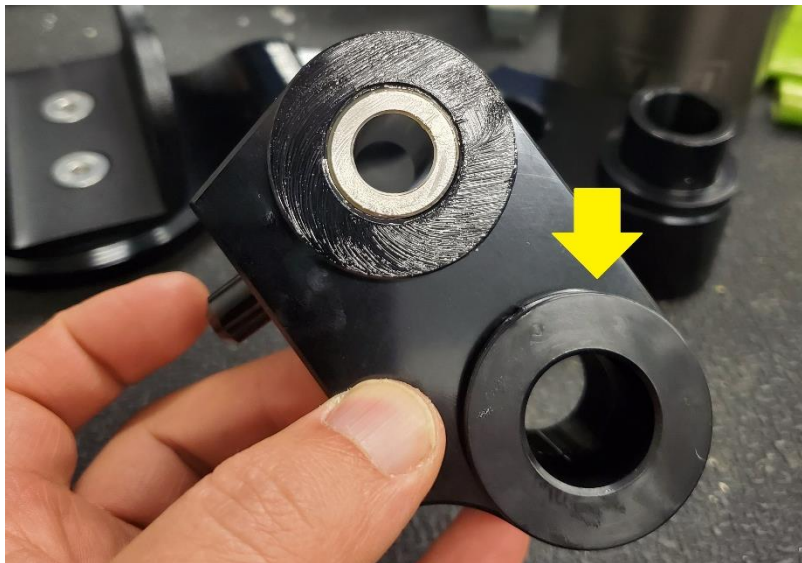


Motor Mount, 2022 Subaru WRX – Install Manual

2.4.3. Lubricate the bushing half surfaces, and center sleeves with a high temperature automotive grade grease.



2.4.4. Insert the bushing halves (8) into the bushing retainers.



Motor Mount, 2022 Subaru WRX – Install Manual

2.4.5. Insert the center sleeves into the bushing halves.



2.4.6. Insert the Bushing Retainer into the Bushing Retainer Bracket. **Note: The bushing retainers should be installed so that the locating dowel will be closer to the body work NOT the engine. Use the photo below for reference.**



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2.5. Next, we'll begin the installation process.

2.6. Remove the intercooler.

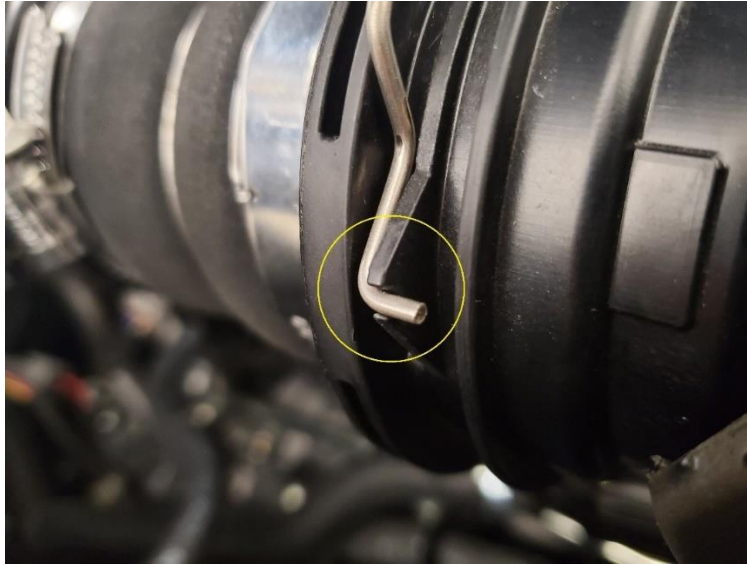
2.6.1. Remove the 12mm bolts circled below.



2.6.2. Disengage the retaining ring on the charge pipe. Do this by pulling up on the retaining ring. It is seated in the disengaged position in the below images.



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2.6.3. Remove the intercooler, and charge-pipe assembly.

2.7. Remove the engine under panel. This is held on by numerous clips, and 12mm bolts.



2.8. Remove the turbo cover plate. This is held on with 12mm bolts.

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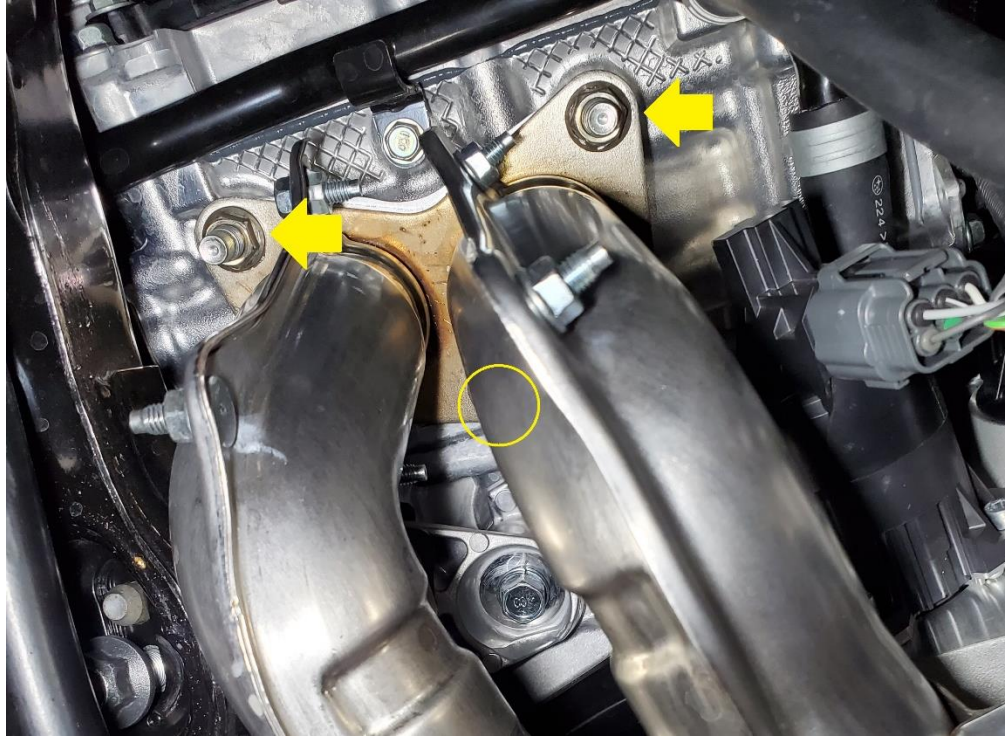
2.9. Begin by removing the front exhaust pipe.



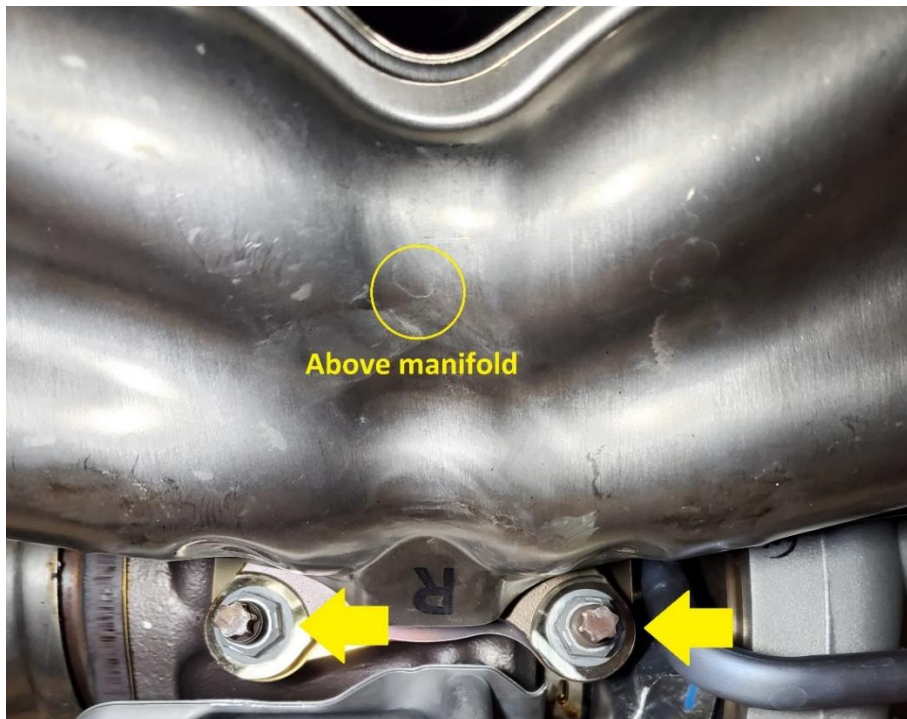
2.10. Remove the exhaust manifold.

2.10.1. Remove the six 14mm nuts holding it to the cylinder heads first.

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2.10.2. Next, remove the three 14mm nuts at the turbo flange connection. You may need a swivel socket / adapter for this.

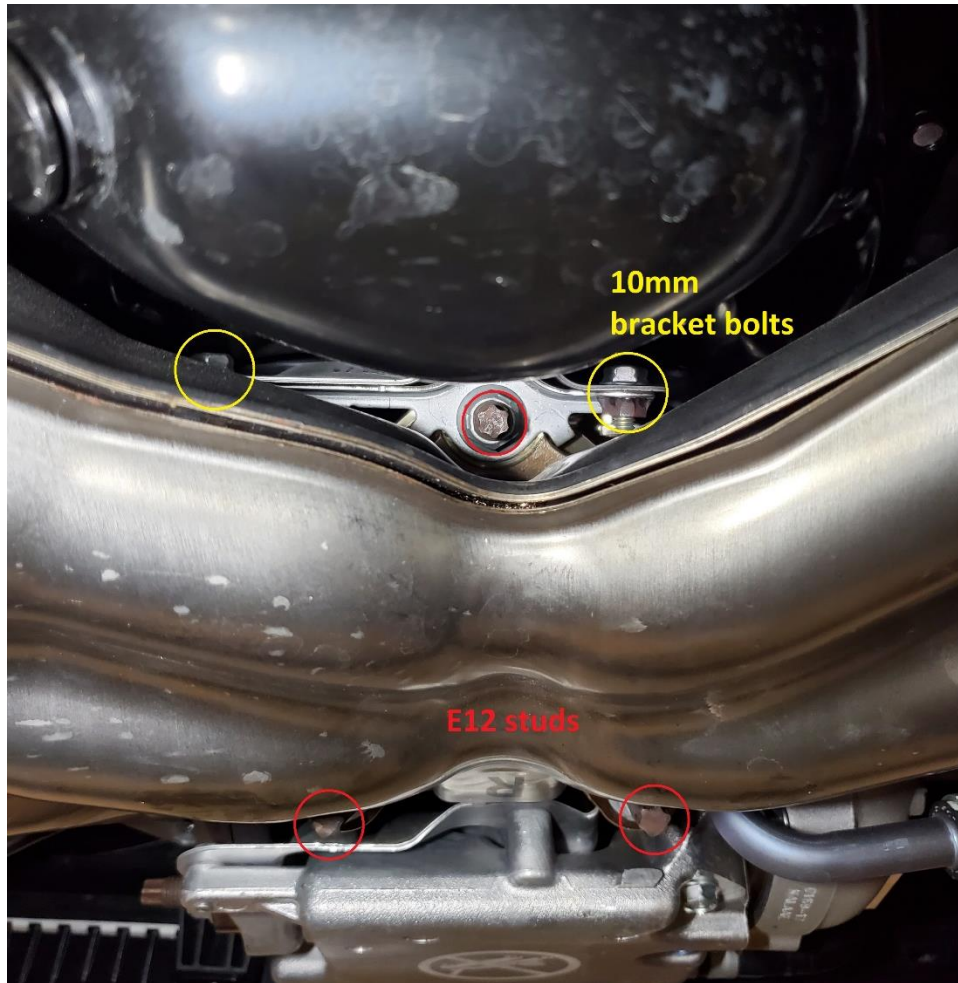


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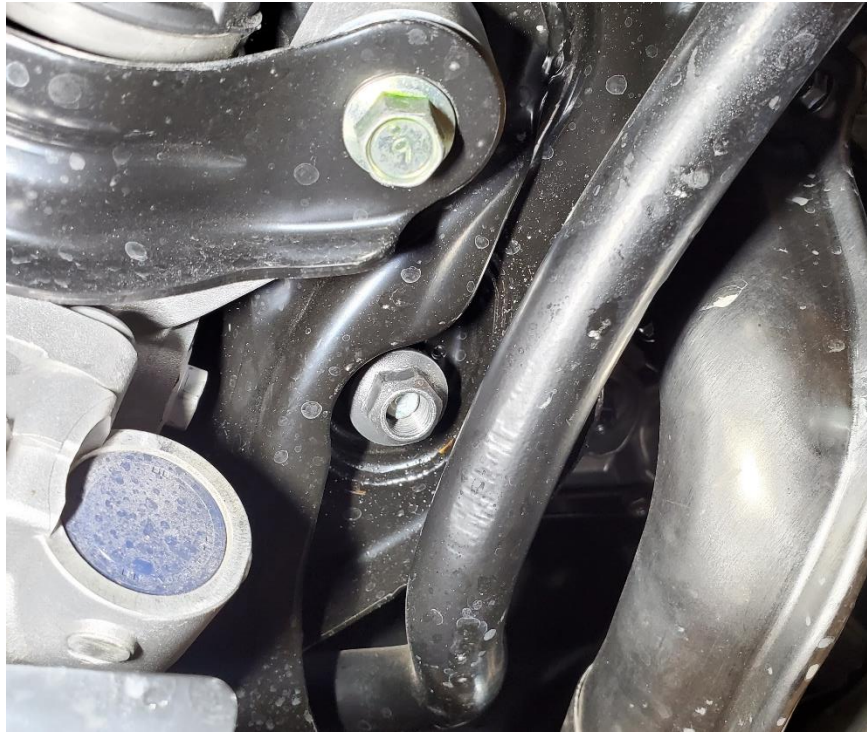
2.10.3. From there, remove the three E12 (External Torx) studs, and the small bracket held in with two 10mm bolts.

Note: These instructions cover just one way to install the motor mounts. If you think the studs won't come out, we advise that you remove the entire turbo assembly with the exhaust manifold. This will require draining the oil and coolant from the vehicle as well.

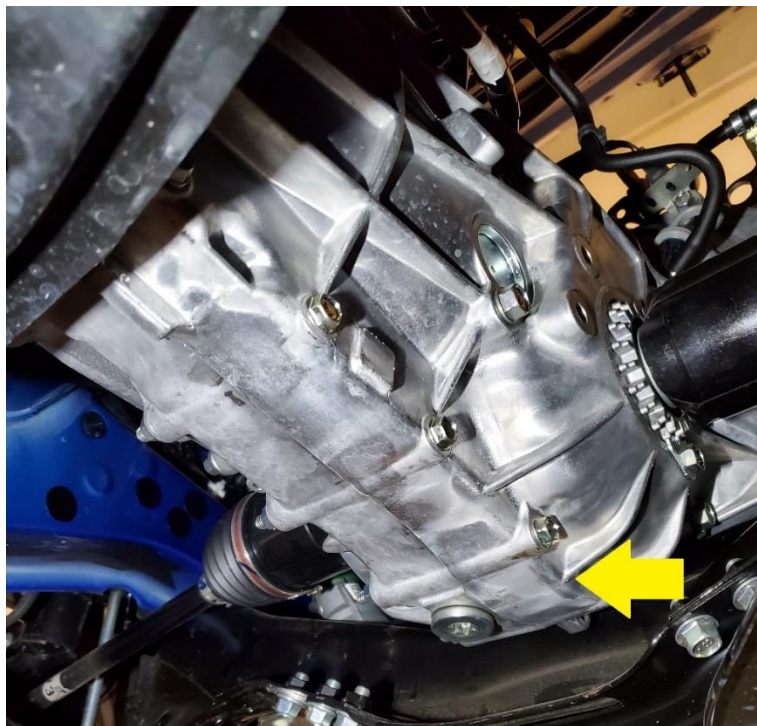


2.11. Remove the 17mm nuts holding the motor mount to the crossmember.

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- 2.12.** Using a block of wood, jack the engine up by the transmission just behind the bellhousing.



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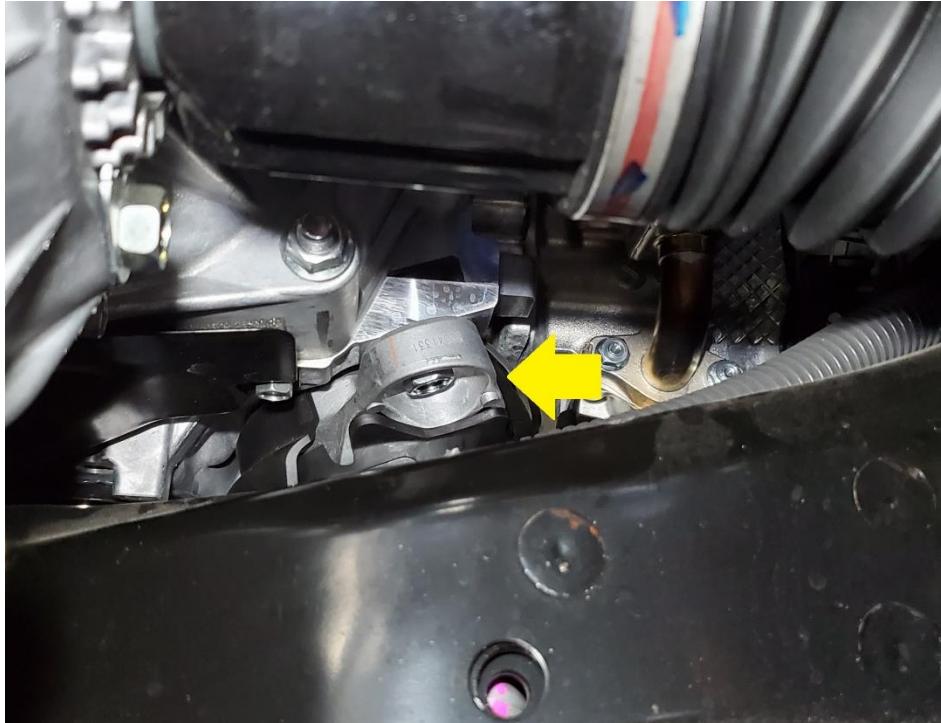
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- 2.13.** Jack up the engine. While there shouldn't be any issues, jack the engine up slowly and make sure nothing (wires, hoses, etc.) gets snagged.
- 2.14.** Unbolt the front engine mount bracket bolt with a 14mm socket.



- 2.15.** Unbolt the rear motor mount bolt. For this bolt you may need to feel around for it as it is hidden above the crossmember.

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- 2.16.** Install the Verus Engineering motor mount using the OEM 14mm head bolts. Torque to 26 ft-lbs. Make sure the locating dowels are facing the outside of the car.



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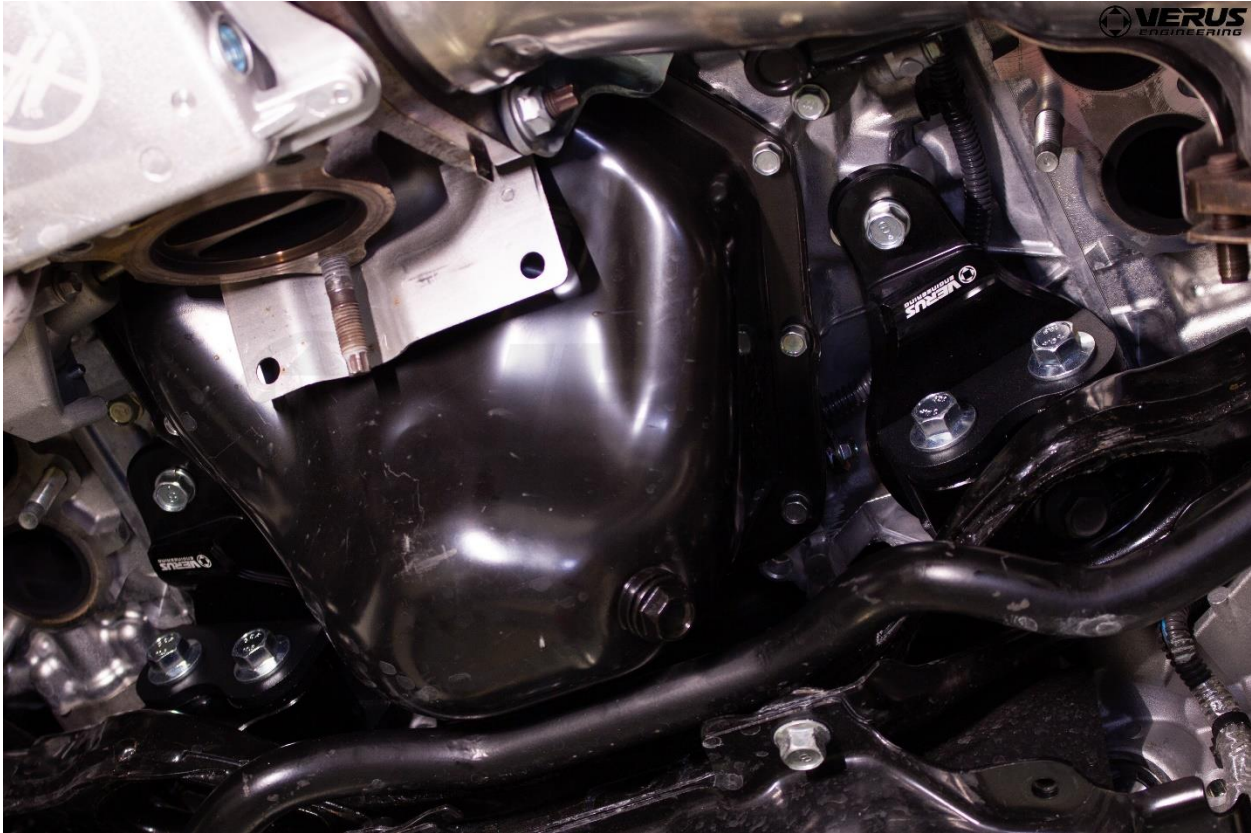
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- 2.17. Repeat the process for the opposite side.
- 2.18. Begin lowering the engine slowly so that you can ensure the locating dowels are correctly seating into the slot in the subframe. Just before the engine mounts make contact with the subframe, start the M12 x 1.75 bolts into the threaded hole on the engine mounts. This way you can shimmy the engine around to get the bolts started properly before you lower the engine completely and torque the M12 bolts to 30 ft-lbs.



- 2.19. Reassemble remaining components in reverse order.
- 2.20. Congratulations on installing the Verus Engineering Motor Mounts for the Subaru VB WRX.
- 2.21. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; sales@verus-engineering.com.

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