

VERUS ENGINEERING

Toyota GR86/Subaru BRZ Rear Suspension Covers

Install Manual



Author: Tom Lang

Release Date: 2023/04/12

Approvals: C. Warner

Document Revisions

Rev	Date	Author	Description
01	2022/04/12	T. Lang	Initial release of install manual.

Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

CONTENTS

1. Introduction.....	<3>
1.1. Overview.....	<3>
1.2. Difficulty.....	<3>
1.3. Time Required.....	<3>
1.4. Tools Needed	<3>
1.5. Rear Suspension Covers Components.....	<4>
2. Rear Suspension Covers Install.....	<5-10>

Toyota GR86 Rear Suspension Covers

1. Introduction

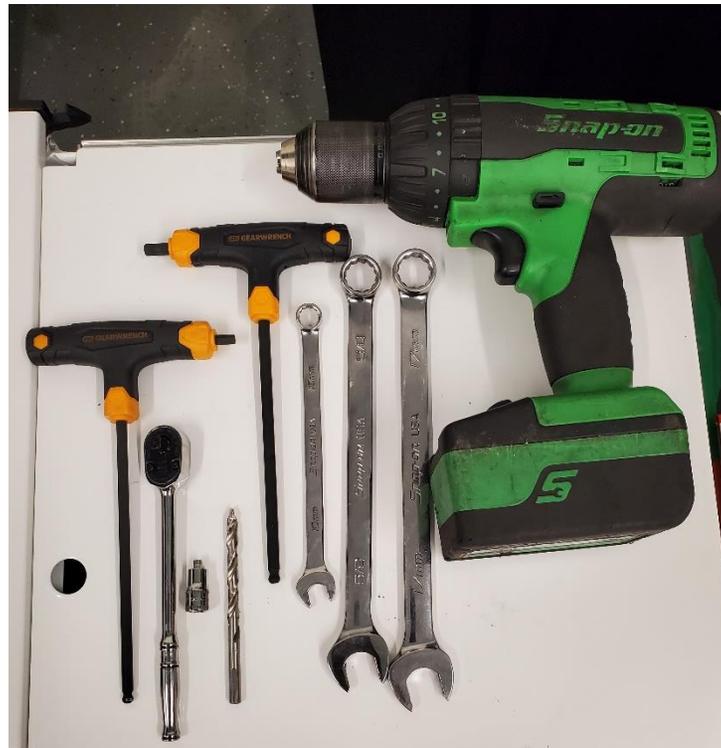
1.1. Overview: Detailed instructions on installing the Verus Engineering Rear Suspension Covers on the Toyota GR86

1.2. Difficulty: Beginner

1.3. Time Required: .5 - 1 hours

1.4. Tools Needed:

- 1.4.1. Jack and Jack Stands (or a lift)
- 1.4.2. 10mm Wrench
- 1.4.3. Ratchet
- 1.4.4. Center Punch
- 1.4.5. 4mm Allen wrench or socket
- 1.4.6. 1/4" Drill Bit
- 1.4.7. Marker
- 1.4.8. 9/16" wrench
- 1.4.9. 17mm wrench
- 1.4.10. 6mm Allen wrench or socket
- 1.4.11. 5mm Allen wrench or socket



Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

1.5. Rear Suspension Cover Components:

- 1.5.1. Rear Suspension Cover (Driver Side)
- 1.5.2. Rear Suspension Cover (Passenger Side)
- 1.5.3. (1) Outer Bracket (Driver Side)
- 1.5.4. (1) Outer Bracket (Passenger Side)
- 1.5.5. (1) Inner Bracket (Driver Side)
- 1.5.6. (1) Inner Bracket (Passenger Side)

1.5.7. (1) Hardware Bag

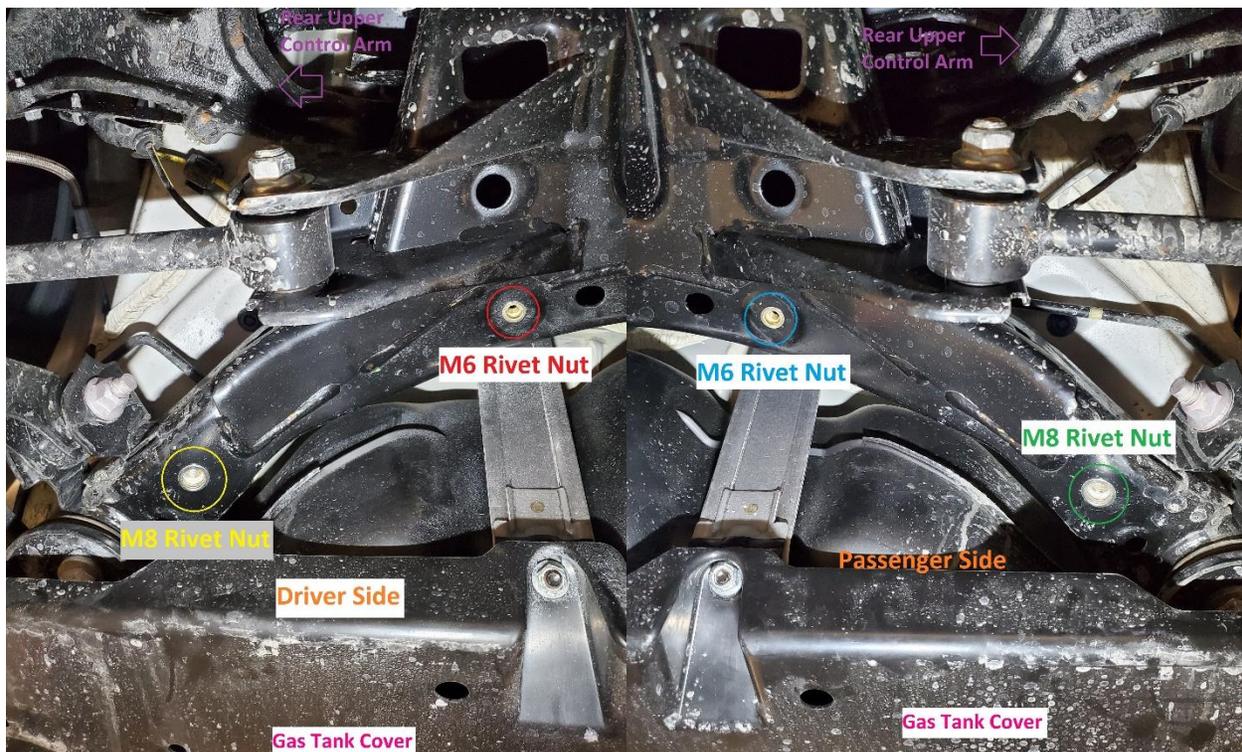
- 1.5.7.1. (12) M6x1.0 Button Head Cap Screw (BHCS) x 16mm Long, SS
- 1.5.7.2. (14) M6 18mm O.D. Washers, SS
- 1.5.7.3. (2) M6x1.0 BHCS x 20mm Long, SS
- 1.5.7.4. (12) M6x1.0 Serrated Flanged Nuts, SS
- 1.5.7.5. (1) M6x1.0 Rivet Nut Installer
- 1.5.7.6. (1) M8x1.0 Rivet Nut Installer
- 1.5.7.7. (2) Heavy Duty M6 Rivet Nut
- 1.5.7.8. (2) Heavy Duty M8 Rivet Nut
- 1.5.7.9. (2) M8x1.25 BHCS x 20mm Long, SS
- 1.5.7.10. (2) M8 16mm O.D. Washer, SS
- 1.5.7.11. (3) M6 5mm Long Nylon Spacer

**2. Rear Diffuser Install**

Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

- 2.1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus-Engineering products on your vehicle.
- 2.2. We begin by jacking the car up on a level surface. Use of wheel chocks is suggested to keep the front wheels from rolling. Using a lift is also a possibility.
- 2.3. With the car up in the air, we can have a good look at what we're working with. Circled in the picture below are the locations of the rivet nuts we'll need to install. M8, and M6 rivet nuts are provided with the hardware kit.
 - 2.3.1. The holes for the rivet nuts already exist in the rear sub-frame. Install them now as shown below.



- 2.3.2. Assemble the tool as shown below. Note: The rivet nut shown below is not the rivet nut supplied.

Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers



2.3.3. Place the rivet nut into the hole.

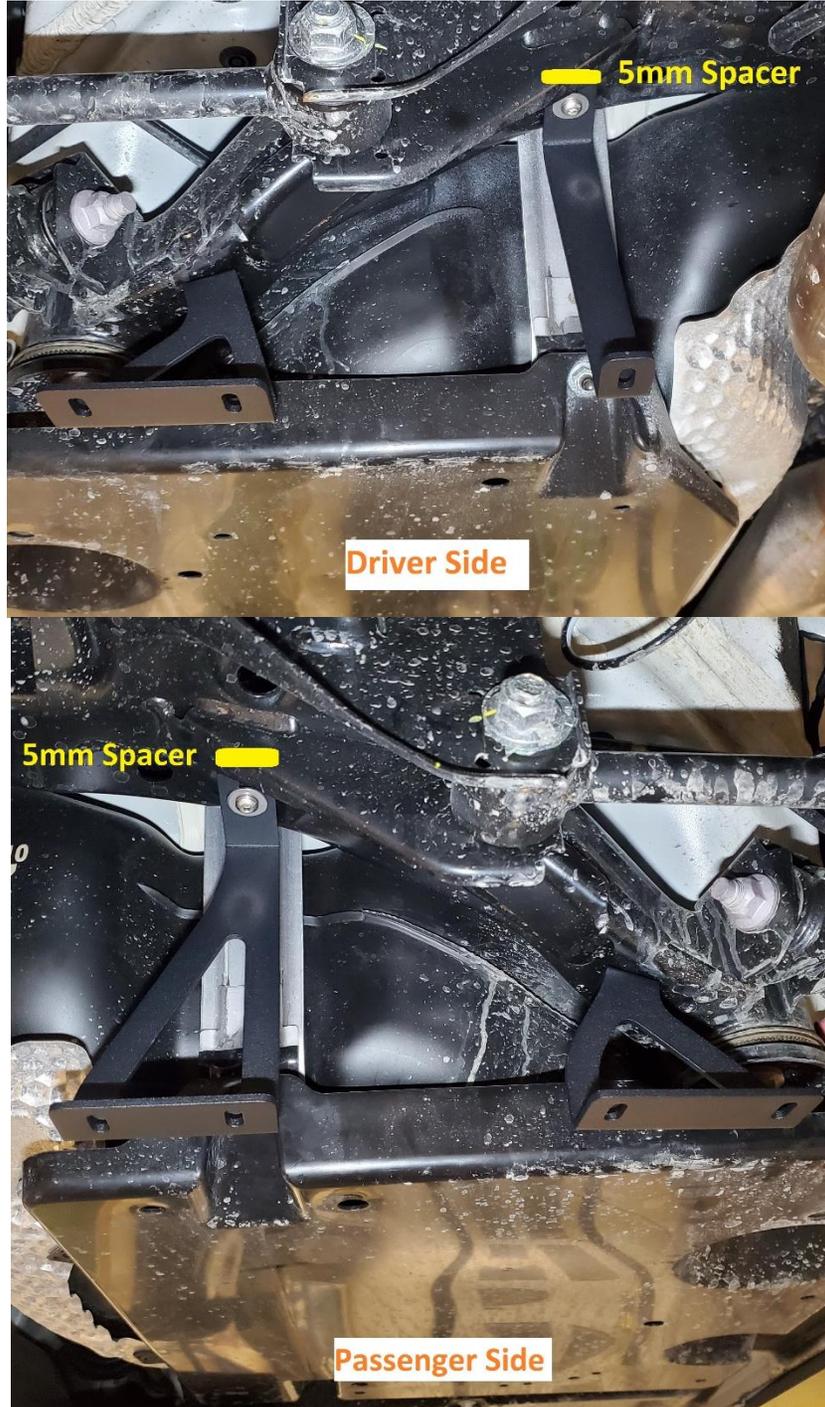
2.3.4. Using the 9/16" wrench (17mm for M8), and the 5mm allen wrench (6mm for M8), hold the nut steady and tighten the allen bolt. You will have some initial resistance, then the rivet nut will begin to pull tighter on the material.

2.3.5. When resistance is felt again; the rivet nut is likely fully installed. Loosen the allen bolt and remove the install tool. Re-use the tool for the remaining rivet nut. The rivet nut should resemble the pictures below after they are fully installed.



2.4. Install the brackets as shown by using two 20mm long M6 BHCS and 18mm washers for the M6 rivet nuts, and 20mm long M8 BHCS with M8 washers for the M8 rivet nuts. A 5mm nylon spacer should be placed between the inner brackets and the sub-frame. Torque the M6 BHCS to 6 ft-lbs, and the M8 BHCS to 12 ft-lbs.

Toyota GR86 Rear Suspension Covers

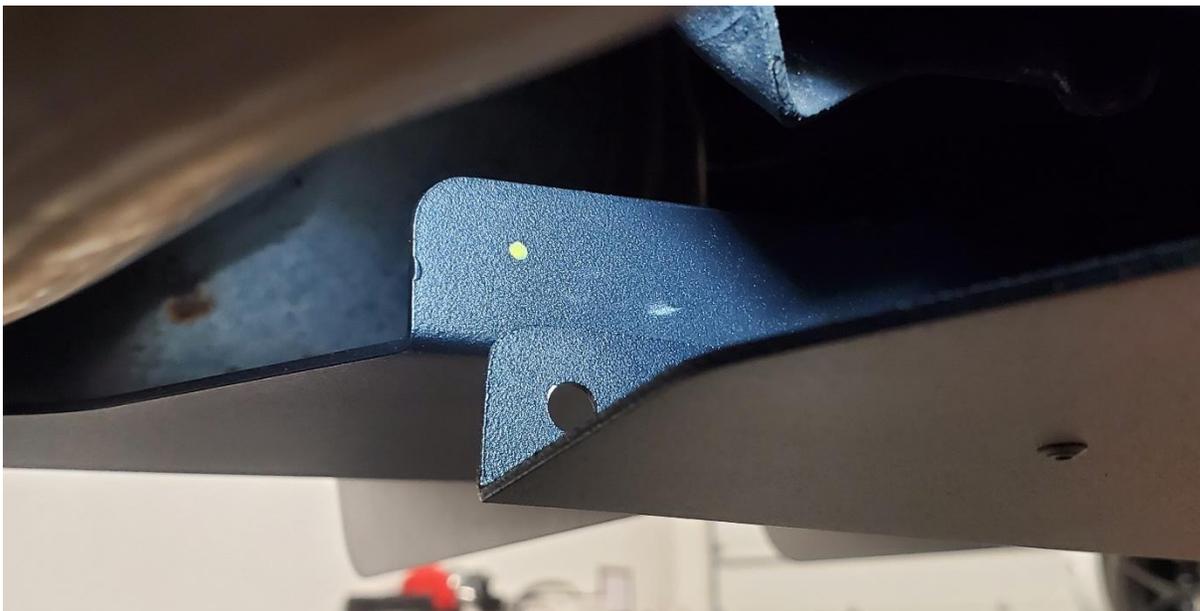
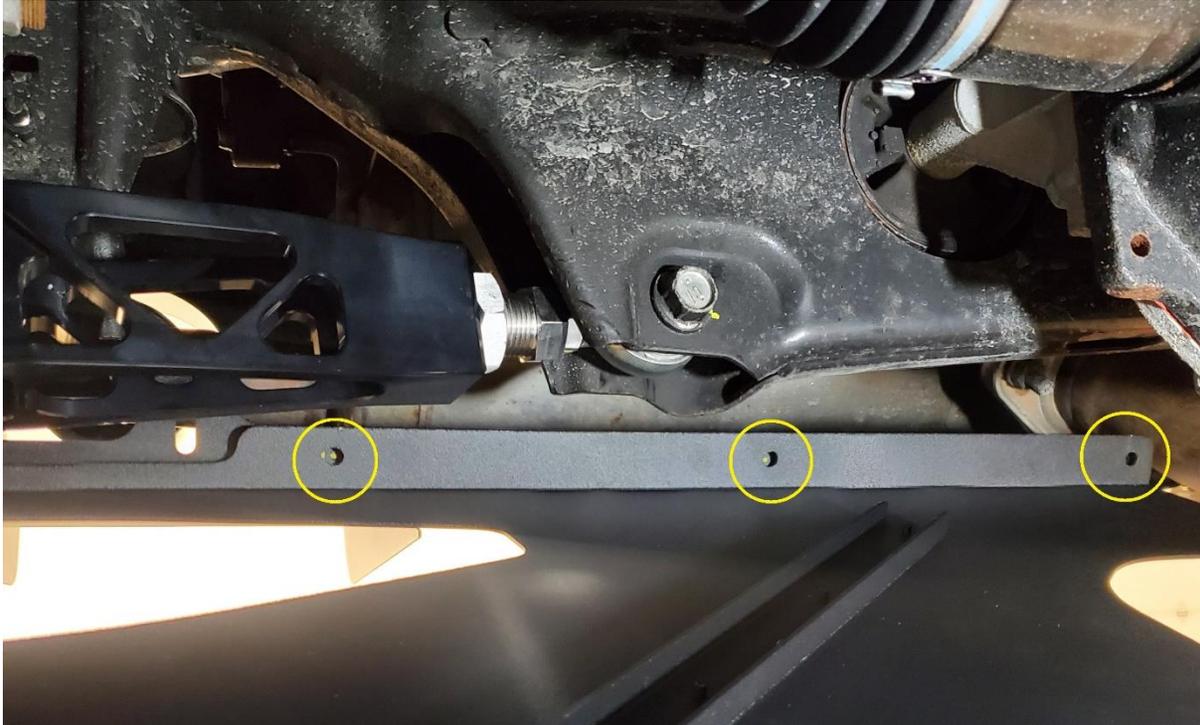


- 2.5. Next, we will need to drill holes in the rear diffuser so that we can bolt the suspension covers to it. Using 16mm long M6 BHCS, and serrated flange nuts, temporarily bolt one suspension cover to one set of brackets just installed (driver side or passenger side).

Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

- 2.5.1.** Line up the rear section of the suspension cover so that it's flush with the rear diffuser and mark the holes that need to be drilled.



- 2.5.2.** Remove the suspension cover, drill the marked locations on the rear diffuser to 1/4", and repeat the process for the other suspension cover.

Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

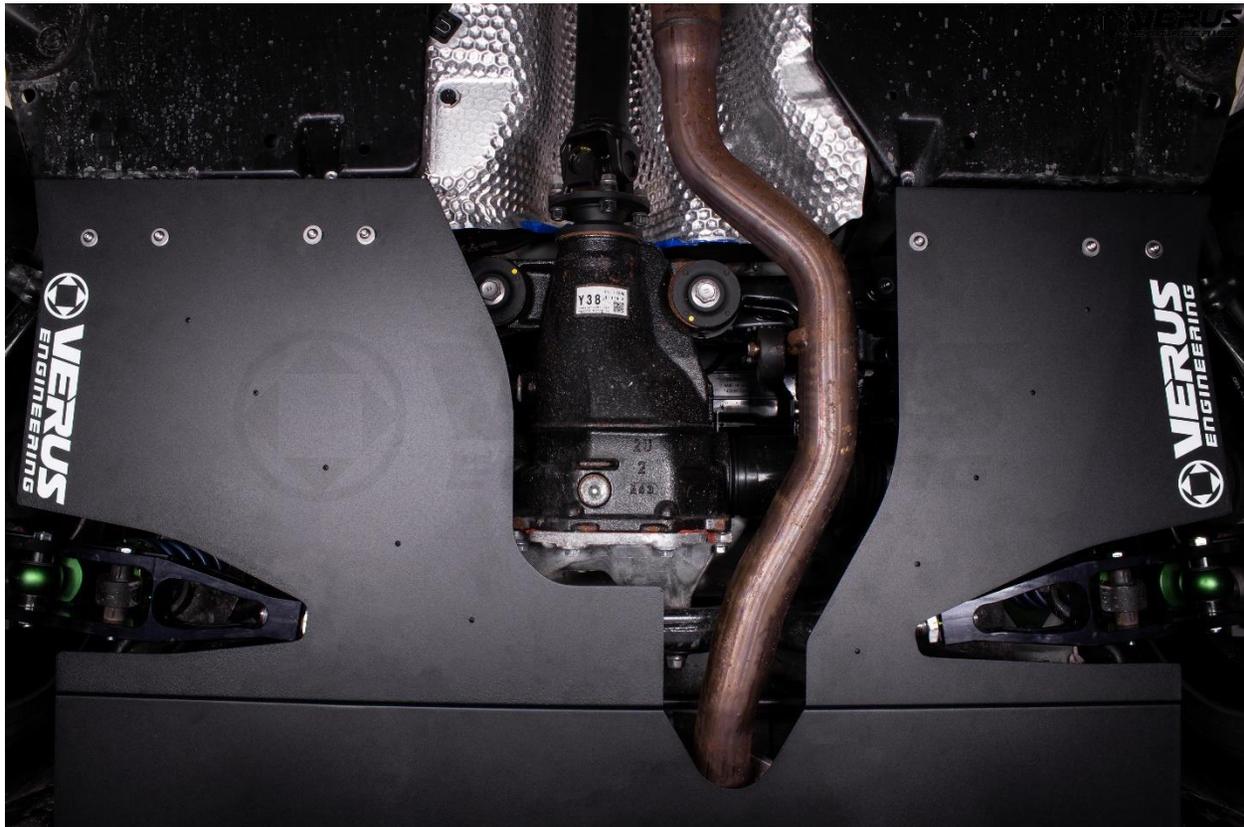
- 2.6. With the holes in the rear diffuser drilled out, begin final installation by starting 16mm long M6 BHCS, 18mm washers, and M6 serrated flange nuts in all the mounting locations. For the bolts going into the brackets, make sure the button head and washer is facing the ground. The orientation of the bolts for the rear diffuser is not critical, however the washer should always be under the bolt head.



Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.

Toyota GR86 Rear Suspension Covers

- 2.7. Once all the bolts are started, torque them to 6 ft-lbs.
- 2.8. Congratulations, you have successfully installed the Verus Engineering Rear Suspension Covers! You can now benefit from a reduction in vehicle drag.
- 2.9. Please contact Verus Engineering with any feedback, concerns, and questions via e-mail, sales@verus-engineering.com.



Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.