

# VERUS ENGINEERING

## Master Cylinder Brace – GR86 / GT86 / FRS / BRZ

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### Install Manual



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Approvals: E. Hazen

#### Document Revisions

Rev	Date	Author	Description
01	2022/11/07	T. Lang	Initial release of install manual

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Master Cylinder Brace, Toyota GR86 – 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. Master Cylinder Brace Components.....	<3-4>
2. Master Cylinder Brace Install .....	<4-8>

## Master Cylinder Brace, Toyota GR86 – Install Manual

## 1. Introduction

**1.1. Overview:** Detailed instructions on installing the Verus Engineering Master Cylinder Brace for the Toyota GR86.

**1.2. Difficulty:** Easy

**1.3. Time Required:** 0.5-1 hour

**1.4. Tools Needed:**

- 1.4.1. Ratchet
- 1.4.2. 2.5mm Allen Key or Socket
- 1.4.3. 5mm Allen Key or Socket
- 1.4.4. 10mm Wrench
- 1.4.5. 12mm Wrench
- 1.4.6. 17mm Wrench
- 1.4.7. 19mm socket
- 1.4.8. 1/2" Impact Gun or Breaker bar
- 1.4.9. Torque Wrench

**1.5. Master Cylinder Brace Components**

- 1.5.1. (1) Master Cylinder Brace Base
- 1.5.2. (1) Master Cylinder Brace Adjuster
- 1.5.3. (1) Master Cylinder Brace Foot
- 1.5.4. Hardware Bag
  - 1.5.4.1. (1) M6 x 1.0 SHCS (Socket Head Cap Screw) x 12mm Long, Stainless
  - 1.5.4.2. (1) M10 x 1.5 Hex Jam Nut
  - 1.5.4.3. (1) M4 x .7 x 10mm Long BHCS (Button Head Cap Screw), Stainless
  - 1.5.4.4. (1) M4 Fender Washer, Stainless

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## Master Cylinder Brace, Toyota GR86 – Install Manual



## 2. Toyota GR86 Master Cylinder Brace 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. **NOTE: The install is on our 2022 GR86, but the install is identical to the Gen1 FRS/BRZ/GT86!**
- 2.3. We begin by gaining access to underneath the hood. Pop the hood and open it.
- 2.4. Assemble the brake master cylinder by threading the jam nut onto the adjuster, and the adjuster into the brake master cylinder base. The exploded view is shown below.



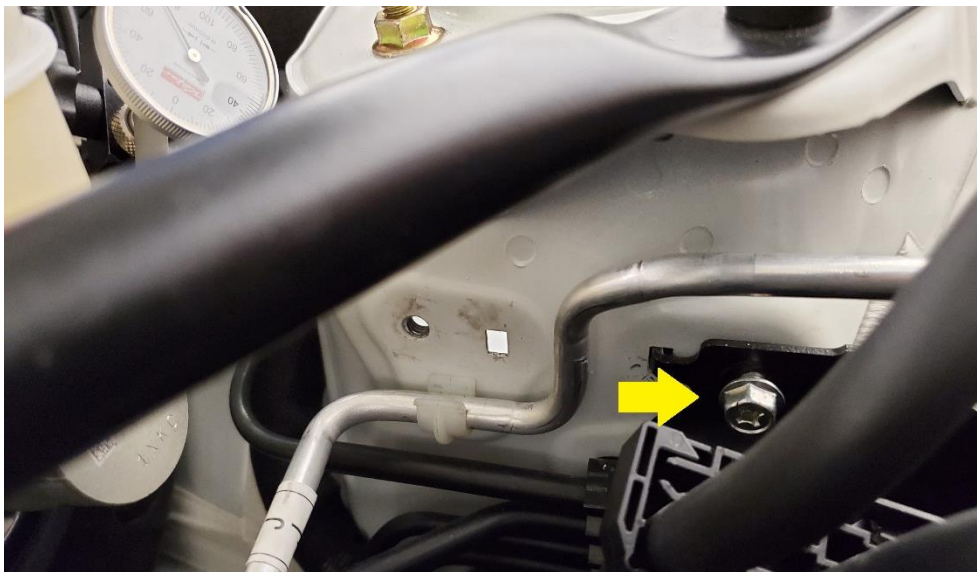
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## Master Cylinder Brace, Toyota GR86 – Install Manual

- 2.5. Next, locate the factory weld nut that we will use for the M6 Socket Head Cap Screw (SHCS). It may be hidden behind a sticker. This is circled in yellow below.

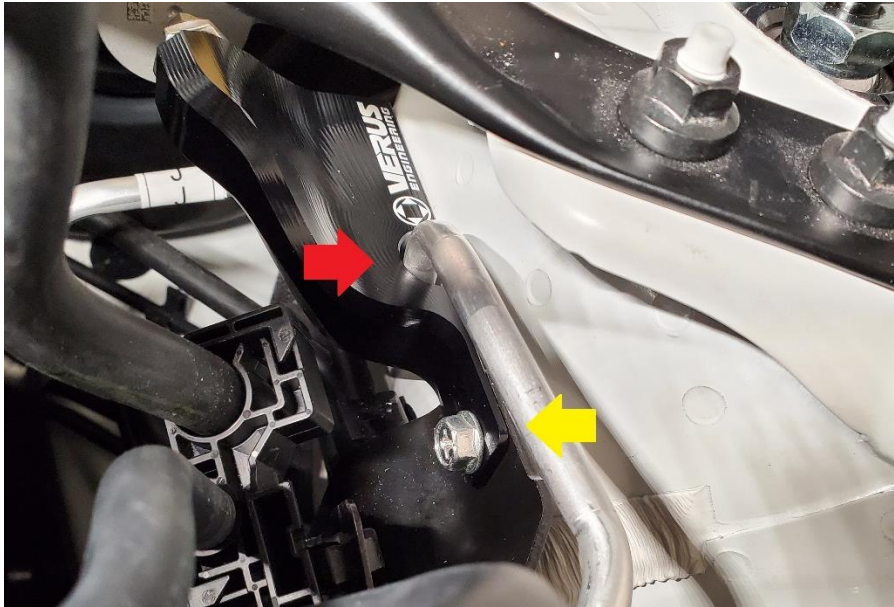


- 2.6. Remove the 10mm head bolt holding the fuel line bracket.



## Master Cylinder Brace, Toyota GR86 – Install Manual

- 2.7. Install the brake master cylinder brace as shown below. Start by partially threading in the 10mm OEM bolt that was just removed in 2.6. The brake master cylinder brace should be sandwiching the fuel line bracket against the strut tower, and should also have sufficient clearance for the A/C line.



- 2.8. Next, install the 12mm long M6 SHCS into the counter-bore as shown. Torque to 6 ft-lbs. Also torque the previously installed 10mm head bolt to 6 ft-lbs.



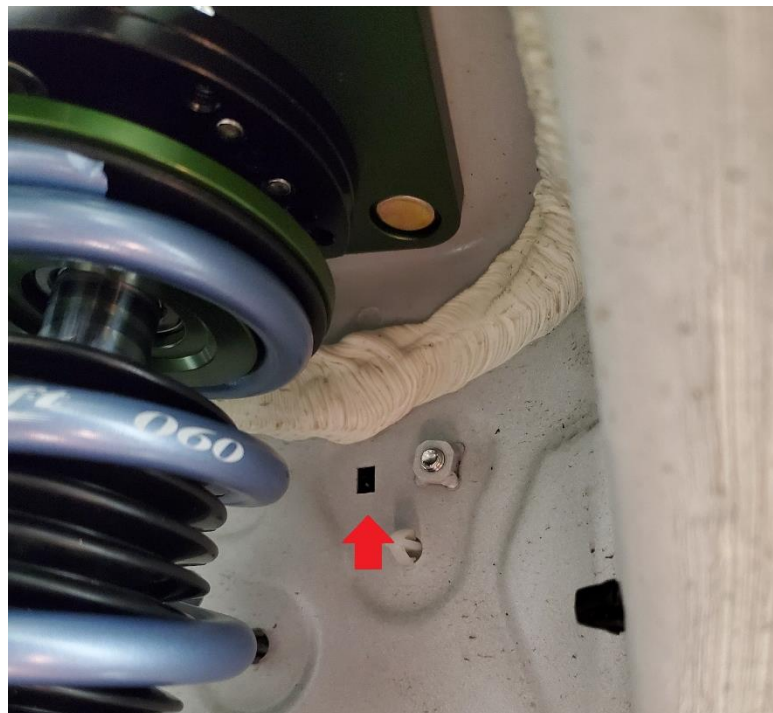
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## Master Cylinder Brace, Toyota GR86 – Install Manual



**2.9.** Safely jack the vehicle up, and remove the driver side front wheel.

**2.10.** We now have access to the final mounting bolt location. It is located behind the strut / spring.

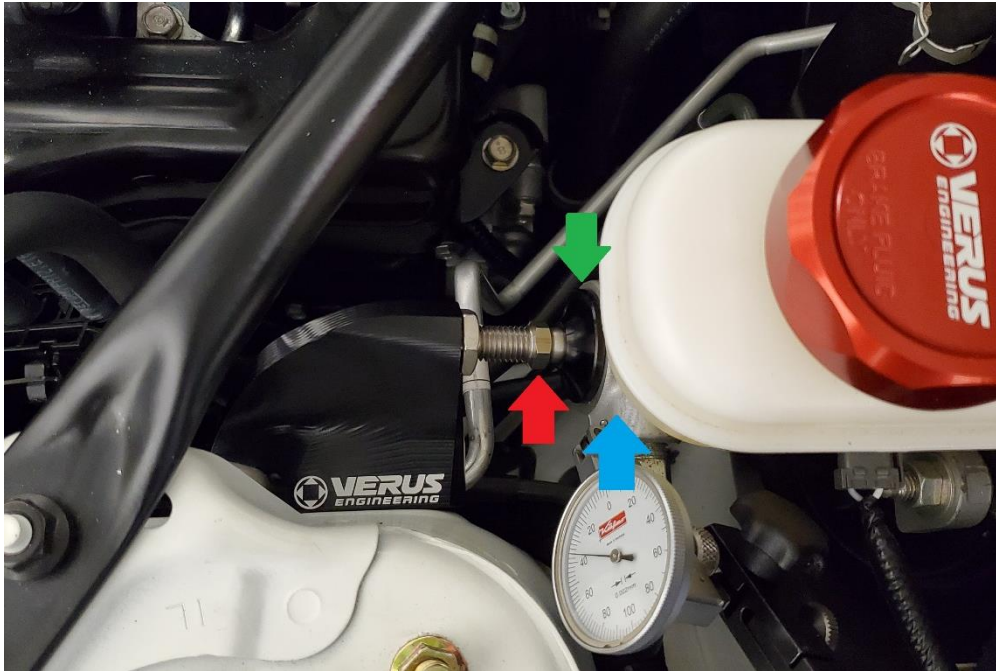


**2.11.** Install the 10 mm long M4x.7 BHCS, and fender washer into the threaded hole. Torque to 3 ft-lbs.

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## Master Cylinder Brace, Toyota GR86 – Install Manual

- 2.12. We can now install the master cylinder brace foot (green arrow), which is ultimately sandwiched between the master cylinder (blue arrow) and the adjuster knob (red arrow). To do this is a two-hand job, with one hand, place the foot down into location and with the other hand, and unthread the adjuster from the brace.



- 2.13. Ensure the foot is centered in the master cylinder brace and then loosen the adjuster to add some compression to the master cylinder. Do not go overboard, a little resistance is good.
- 2.14. Once tightened, ensure the adjuster is still properly tightened to the master cylinder. Using a 12mm wrench and a 17mm wrench, lock the adjuster in place with the jam nut.
- 2.15. Replace the wheel back onto the car, and torque to factory spec, 89 ft-lbs.
- 2.16. Congratulations on installing the Verus Engineering Master Cylinder Brace on the Toyota GR86.
- 2.17. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; [sales@verus-engineering.com](mailto:sales@verus-engineering.com).



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