

VERUS ENGINEERING

Master Cylinder Brace – GR86 / GT86 / FRS / BRZ

Install Manual



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Document Revisions

Rev	Date	Author	Description
01	2022/11/07	T. Lang	Initial release of install manual
02	2023/04/19	T. Lang	Added foam tape to A/C line

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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
 - 1.5.4.5. (1) 1" Long Piece of Foam Tape

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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.



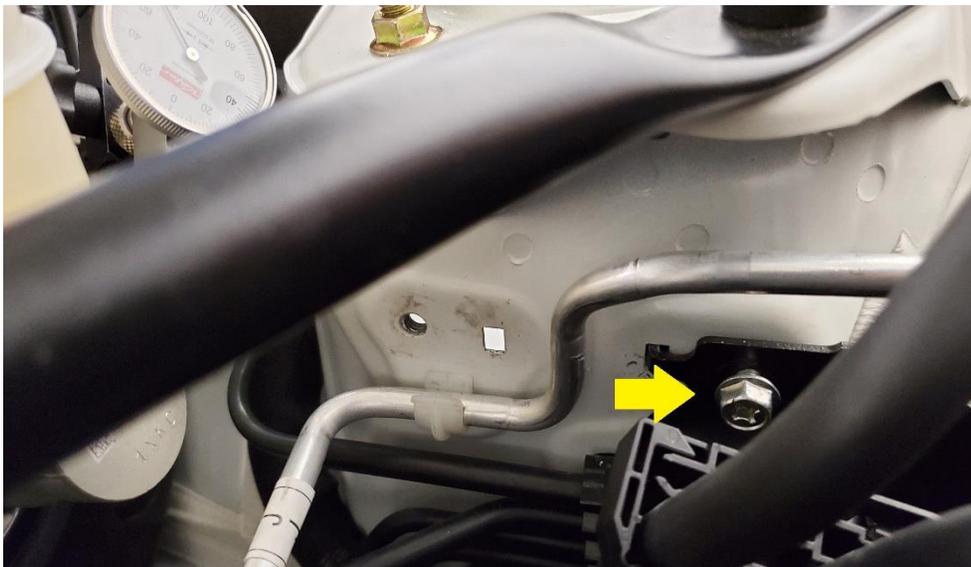
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- 2.5. Next, locate the factory weld nut that we will use for the M6 Socket Head Cap Screw (SHCS). It may be hidden behind a sticker. This is circled in yellow below.



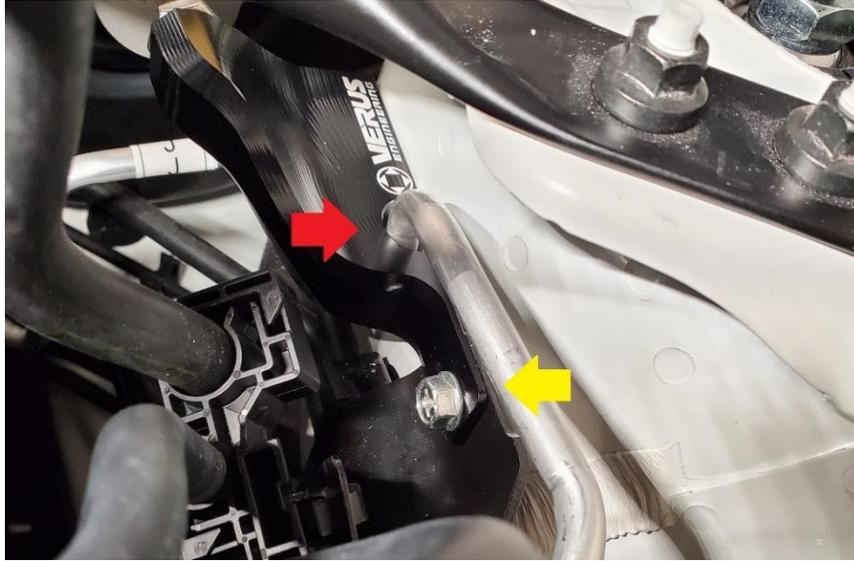
- 2.6. Remove the 10mm head bolt holding the fuel line bracket.



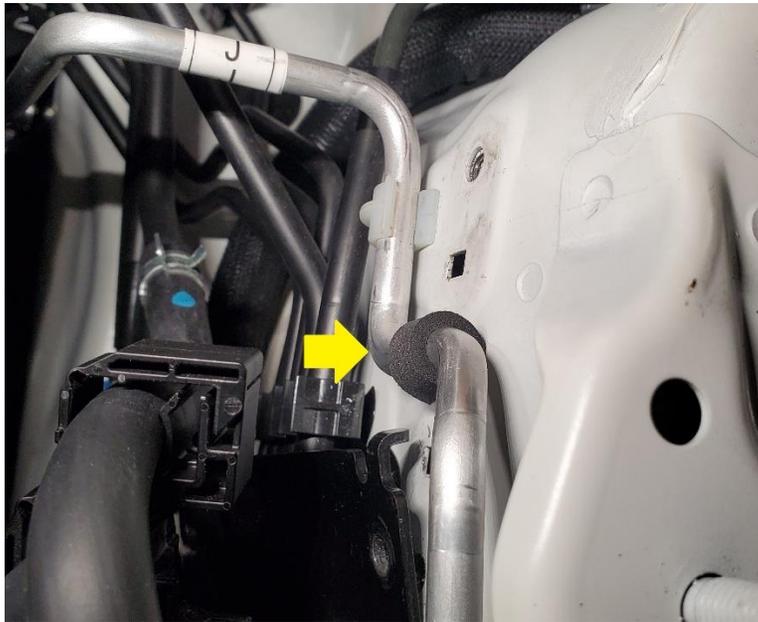
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- 2.7.** Install the brake master cylinder brace as shown below. Start by partially threading in the 10mm OEM bolt that was just removed in **2.6**. The brake master cylinder brace should be sandwiching the fuel line bracket against the strut tower,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



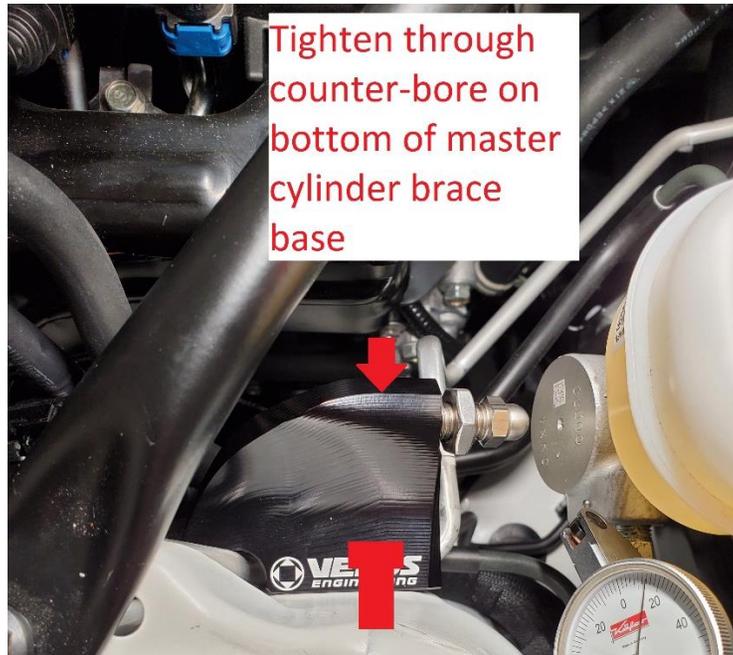
- 2.7.1.** Temporarily unbolt the Brake Master Cylinder Brace, and install the supplied foam tape to the A/C line so that it prevents contact with the Brake Master Cylinder Brace. Reinstall the Brake Master Cylinder Brace as in **2.7**.



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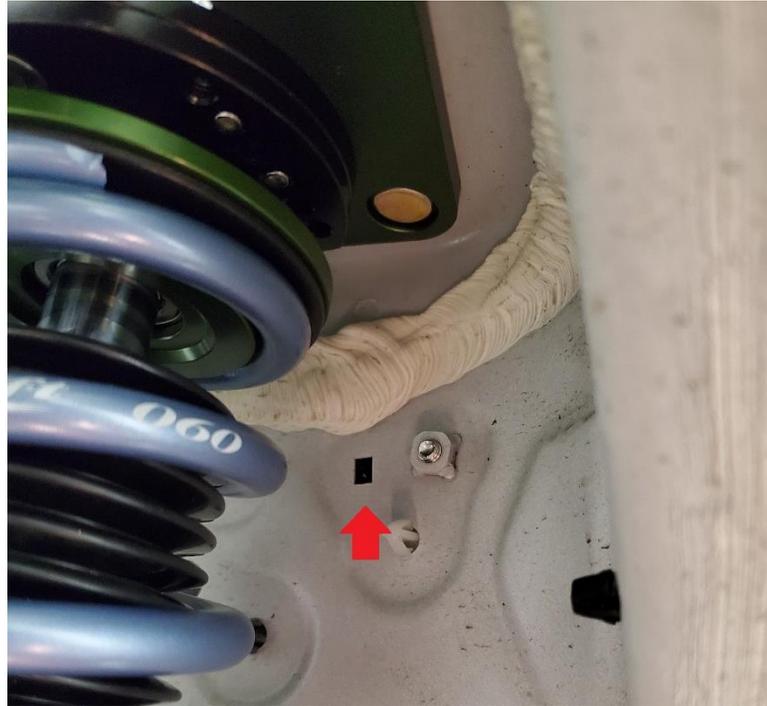
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- 2.8.** Next, install the 12mm long M6 SHCS into the counter-bore as shown. Torque to 6 ft-lbs. Also torque the previously installed 10mm head bolt to 6 ft-lbs.



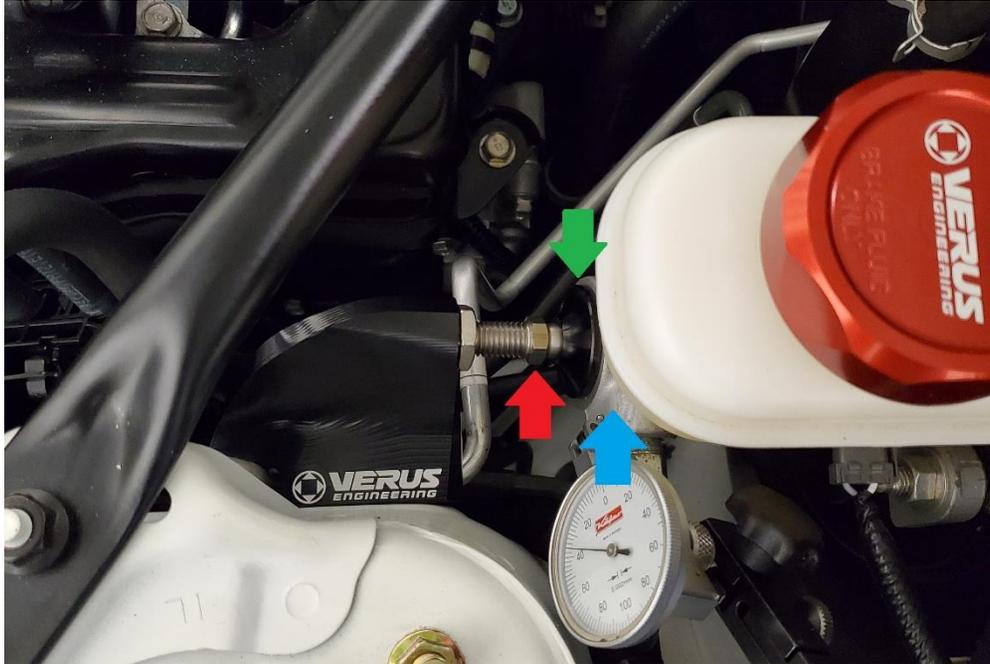
- 2.9.** Safely jack the vehicle up, and remove the driver side front wheel.
- 2.10.** We now have access to the final mounting bolt location. It is located behind the strut / spring.

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

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- 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.

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