

# VERUS ENGINEERING

## Brake Master Cylinder Brace – Toyota GR Corolla Install Manual

---



Author: Clay Warner  
Release Date: 2024/06/10  
Approvals: E. Hazen

### Document Revisions

Rev	Date	Author	Description
01	2024/06/10	C. Warner	Initial release of install manual

---

Master Cylinder Brace, Toyota GR Corolla – 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 .....	<4-9>

## Master Cylinder Brace, Toyota GR Corolla – Install Manual

### 1. Introduction

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

**1.2. Difficulty:** Easy

**1.3. Time Required:** 1-2 hour

**1.4. Tools Needed:**

- 1.4.1. Ratchet
- 1.4.2. Ratchet Extension
- 1.4.3. 6mm Wobble Hex Socket
- 1.4.4. 10mm Socket
- 1.4.5. 12mm Socket
- 1.4.6. 12mm Wrench
- 1.4.7. 17mm Wrench
- 1.4.8. Phillips Head Screwdriver



### 1.5. Master Cylinder Brace Components

- 1.5.1. (1) Master Cylinder Brace
- 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) M10 x 1.5 Hex Jam Nut
  - 1.5.4.2. (3) M8 x 1.25 x 20mm Long Socket Head Cap Screw (SHCS), Stainless

## Master Cylinder Brace, Toyota GR Corolla – Install Manual



## 2. Toyota GR Corolla Master Cylinder Brace Install

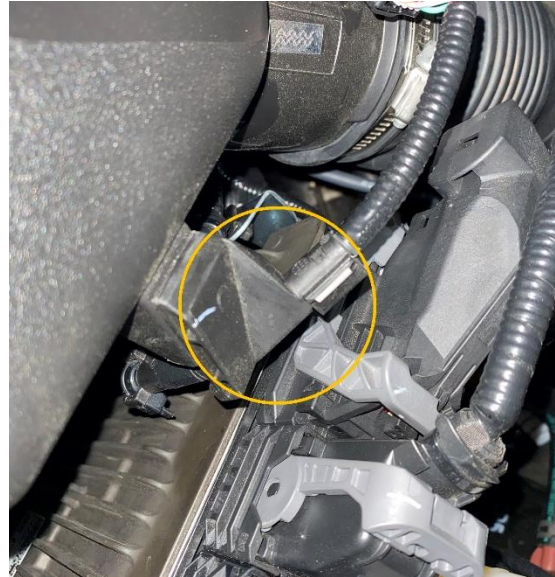
- 2.1. Verus Engineering is not responsible for damage to you or your vehicle by following this manual and/or installing Verus Engineering products.
- 2.2. We begin by gaining access to underneath the hood. Pop the hood and open it.



- 2.3. In order to gain better access to the installation area, we need to remove the top of the air box. Do so by using a Phillips Head Screwdriver or a 10mm socket to loosen the worm drive clamp (yellow circle) and then remove the electrical connectors to the airbox (orange circles). **Note: The second photo is not an actual connector, it is just a mounting point for the wiring loom, but it still needs to be removed to remove the top of the airbox.**



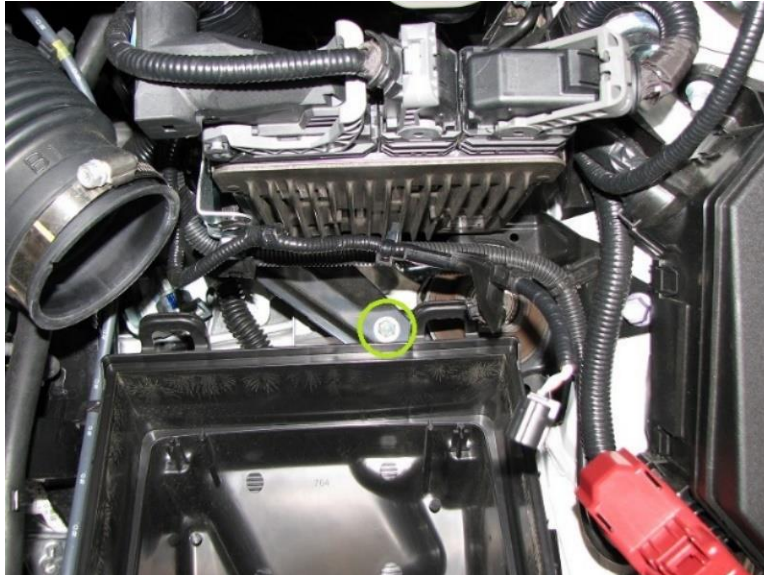
## Master Cylinder Brace, Toyota GR Corolla – Install Manual



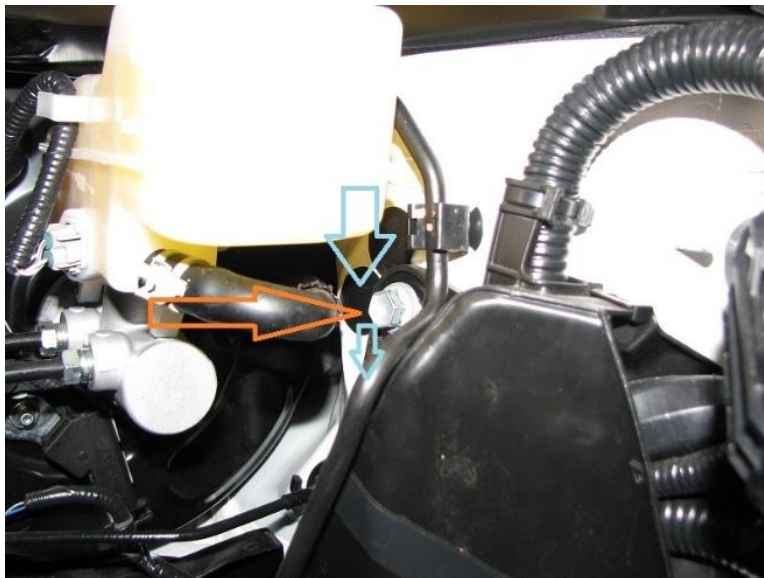
- 2.4. After the top of the airbox is removed, you can now remove the air filter if you would like. This is not required, but we chose to remove it as well for this install.
- 2.5. Next, we need to remove the ECU. Do so, by removing the three electrical connectors (blue arrows), three wiring loom connectors (pink circles), and the 10mm nut and bolt (green circles) holding the ECU to the car. Set aside for the time being.



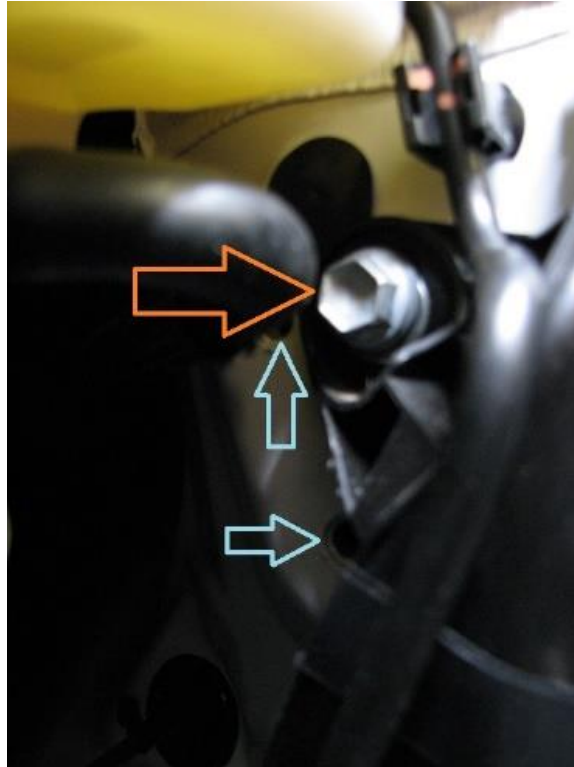
## Master Cylinder Brace, Toyota GR Corolla – Install Manual



- 2.6. Now that we have more area to work with, remove the 12mm bolt shown below (orange arrow) and the two black stickers (light blue arrows). One sticker is to the left of the bolt and the other is below the bolt. There will be M8 threads behind the stickers we will be utilizing.



## Master Cylinder Brace, Toyota GR Corolla – Install Manual



- 2.7. Before we install the BMC Brace to the car, we need to preinstall the brace adjuster into the BMC Brace as shown below. Ensure the jam nut is installed on the brace adjuster before threading it into the BMC Brace. (Brace adjuster > jam nut > BMC Brace) **Do not tighten the jam nut yet as we will need to adjust later on in the install.**



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



## Master Cylinder Brace, Toyota GR Corolla – Install Manual

- 2.8.** Once the adjuster and jam nut are fully threaded into the BMC Brace, loosely install the three M10 bolts that hold the brace to the car as shown below. One bolt will install where we removed the 12mm bolt from and the other two will install in the areas where we removed the black stickers from.



- 2.9.** Once the BMC Brace is loosely bolted on the car, we need to place the foot adapter in its location. Do so, by unthreading the brace adjuster until it secures the foot in place against the master cylinder as shown below. Do not fully tighten the brace adjuster or jam nut yet as we will make final adjustments later on. You just want to make sure the foot is held in place for the time being.



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



---

## Master Cylinder Brace, Toyota GR Corolla – Install Manual

- 2.10. Once the foot is in place, torque the three M8 SHCS to 12 ft-lbs using your 6mm wobble hex socket.
- 2.11. Using a 12mm wrench and a 17mm wrench, preload the brace adjuster until the foot can no longer spin freely and then lock the adjuster in place with the jam nut. **Do not over tighten the brace adjuster!** Once the foot cannot spin freely, it is tight enough.
- 2.12. Reinstall the ECU and air box in reverse order from before.
- 2.13. Congratulations on installing the Verus Engineering Brake Master Cylinder Brace on the Toyota GR Corolla.
- 2.14. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail; [sales@verus-engineering.com](mailto:sales@verus-engineering.com).

