

# VERUS ENGINEERING

## Brake Master Cylinder Brace – FL5 Honda Civic Type R Install Manual



Author: Parker Landolt  
Release Date: 2024/09/24  
Approvals: E. Hazen

### Document Revisions

| Rev | Date       | Author     | Description                       |
|-----|------------|------------|-----------------------------------|
| 01  | 2024/09/24 | P. Landolt | Initial release of install manual |
|     |            |            |                                   |
|     |            |            |                                   |

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

## Master Cylinder Brace, FL5 Honda CTR – 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.....      | <4-10> |

## Master Cylinder Brace, FL5 Honda CTR – Install Manual

## 1. Introduction

**1.1. Overview:** Detailed instructions on installing the Verus Engineering Master Cylinder Brace for the FL5 Honda Civic Type R.

**1.2. Difficulty:** Easy

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

**1.4. Tools Needed:**

- 1.4.1. Ratchet
- 1.4.2. 10mm Socket or Wrench
- 1.4.3. 10mm Deep Socket
- 1.4.4. 3mm Allen Key or Socket
- 1.4.5. 5mm Allen Key or Socket
- 1.4.6. 9/16" Wrench
- 1.4.7. 12mm Wrench
- 1.4.8. 17mm Wrench
- 1.4.9. 17/64 Drill Bit
- 1.4.10. Drill
- 1.4.11. Scissors

**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

## Master Cylinder Brace, FL5 Honda CTR – Install Manual

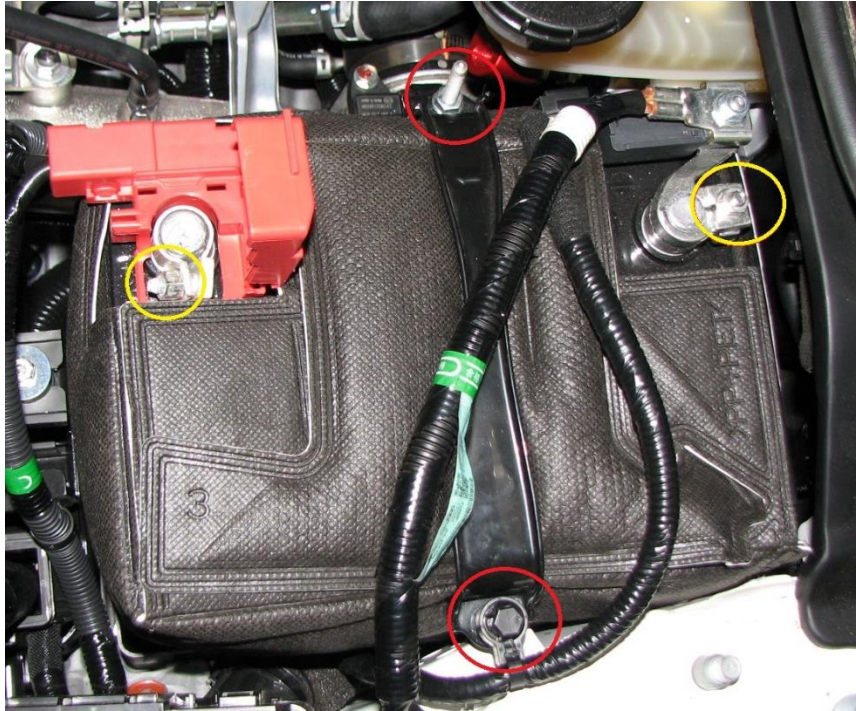
- 1.5.4.1. (1) M4x0.7 Rivet Nut, Zinc Coated Steel
- 1.5.4.2. (1) M4 Rivet Nut Install Tool
- 1.5.4.3. (1) M6x1.0 x 16mm Long SHCS (Socket Head Cap Screw), Stainless
- 1.5.4.4. (1) M6 12mm Washer, Stainless
- 1.5.4.5. (1) M10 x 1.5 Hex Jam Nut
- 1.5.4.6. (1) M4x0.7 x 18mm Long SHCS (Socket Head Cap Screw), Stainless
- 1.5.4.7. (1) M4 Fender Washer, Stainless
- 1.5.4.8. (2) 7.5" Zip Ties



## 2. FL5 Honda CTR 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 battery. Do so by uncapping the positive battery terminal cover and using a 10mm socket (yellow circles) and ratchet to remove the battery terminal connectors. Use a 10mm deep socket (red circles) to remove the threaded wire holder and the battery hold down brace. Remove the battery tray as well that sits underneath the battery.

## Master Cylinder Brace, FL5 Honda CTR – Install Manual



- 2.4. After the battery is removed, we need to install a zip tie or two to hold back a factory hose line from in front of the brake master cylinder. This hose can be seen in the below image.



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

## Master Cylinder Brace, FL5 Honda CTR – Install Manual

- 2.5.** Remove the firewall insulation from the firewall by removing the two plastic nuts on either side of the engine bay.



- 2.6.** Using scissors, cut out the area in which the rivet nut will be installed and the BMC Brace will sit. We recommend leaving around an inch on either side.



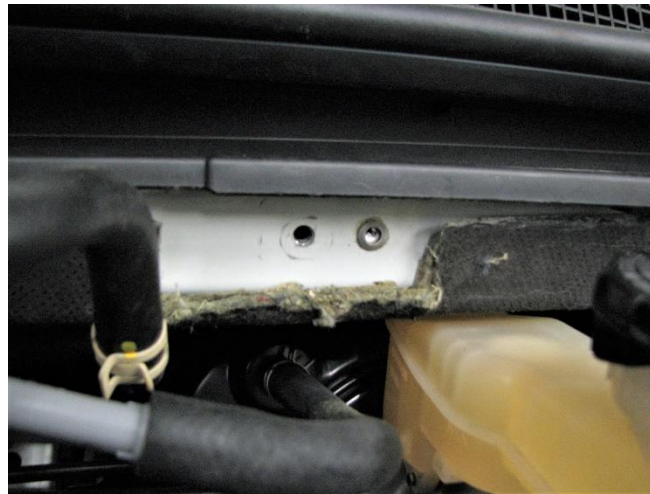
- 2.7.** Install the plastic nuts back onto the firewall insulation.
- 2.8.** Next, we need to install the M4 rivet nut into the firewall. Start by using your 17/64 drill bit and drill out a hole to the right of the existing hole.
- 2.9.** To properly install the rivet nut, you will want to thread the rivet nut onto the tool as shown below.

## Master Cylinder Brace, FL5 Honda CTR – Install Manual



**2.10.** Using the 9/16” wrench and the 3mm allen wrench, 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. Once you feel resistance again, the rivet nut is installed. Backout the SHCS to remove the tool from the rivet nut.

**2.11.** Once the rivet nuts are installed, it should look like the image below.



**2.12.** Next, we need to assemble the BMC brace. To do this, thread the M10 jam nut all the way onto the adjuster bolt and then fully thread the adjuster bolt into the BMC brace as shown below. **Do not tighten the jam nut yet as we will need to adjust later on in the install.**

## Master Cylinder Brace, FL5 Honda CTR – Install Manual



- 2.13.** Install the brake master cylinder brace as shown below. Start by hand threading in the 18mm long M4 SHCS and M4 washer then fully tighten to 4 ft-lbs with a 3mm allen wrench. Do the same with the M6 SHCS and M6 12mm Washer using a 5mm allen wrench.

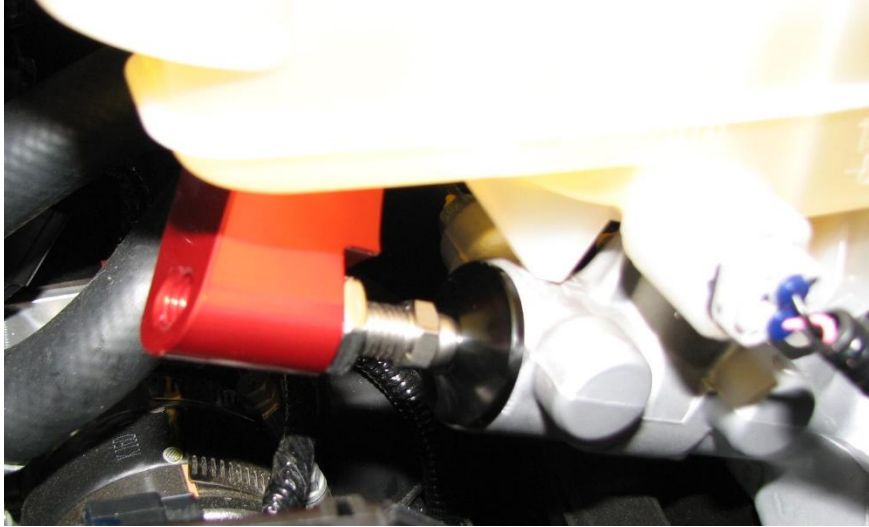


Confidential: Property of Verus Engineering. Not for Distribution outside intended recipient list.



## Master Cylinder Brace, FL5 Honda CTR – Install Manual

- 2.14.** Now it is time to adjust the adjuster bolt and install the foot. To do so, unthread the adjuster bolt until it is nearly touching the BMC and then slide the foot between the BMC and the adjuster bolt. Tighten by hand until the foot stays in place. Ensure the foot is centered on 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.



- 2.15.** 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.
- 2.16.** If you are having trouble getting your 17mm wrench onto the jam nut, remove the lower 10mm bolt on the wire bracket that is attached to the battery mount panel. Reinstall once your final jam nut adjustment has been made.



## Master Cylinder Brace, FL5 Honda CTR – Install Manual

- 2.17. Reinstall the battery tray, battery, and battery hold down brace. Push the threaded wire holder down onto the outside hold down screw.
- 2.18. Congratulations on installing the Verus Engineering Master Cylinder Brace on the FL5 Honda CTR!
- 2.19. Please send any questions, comments, concerns, or photos to Verus Engineering via e-mail: [sales@verus-engineering.com](mailto:sales@verus-engineering.com).



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