

## CorkSport Mazdaspeed 3 ECU Relocation Box for 51R Battery

2007-2013 Mazdaspeed 3



**Thank you for purchasing the CorkSport ECU Relocation 51R Battery Box for the Mazdaspeed 3.**

With the install of this battery box, you now have a full solution for housing an 51R sized battery and up to 4" intake, all while having a factory appearing cover. By using a complete cover you are also moving your ECU out of the elements giving you one less thing to worry about. Please let us know what you think about this box by leaving a review here:

<https://corksport.com/mazdaspeed-3-51r-battery-box.html>

### Pre-Installation Notes:



**Make sure your vehicle is completely cooled down** prior to starting installation. If you are going to work on your car within an hour or two of having driven it, use a fan to cool off the car.



**These instructions were written for reference only** and the use of a factory service manual is recommended. Please read these instructions thoroughly prior to starting installation



**How our instructions work:** To best cover all of our customers experience levels, we have included an overview checklist for the more technically advanced users along with step-by-step instructions for customers that require additional detail.



**These installation instructions were written using a 2013 Mazdaspeed 3.** Other year Mazdaspeed3 models will be similar.

### Materials and Time:



#### General Info.

Part #: AXL-6-602-10  
Time Est: 1 hour  
Wrench Rating: 2/5



#### Tooling List

10mm Wrench  
10mm Socket  
3/8" Drive Ratchet  
12" Extension  
Needle Nose Pliers  
2x Small Flat Head Screw Driver  
Philips Head Screw Driver  
Electrical Tape  
3/8" Torque Wrench



#### Parts List

One (1) CorkSport Assembled 51R Battery Box  
One (1) Battery Tie Down Bracket  
Four (4) M6X1.0X16mm Flange Bolts  
Six(6) M6x1.0 Flange Nuts

Need Help With Your Installation?  
Call (360) 260-CORK

## Order of Operations & Table of Contents



### Disassembly

Section 1: OEM Battery Box & ECU Removal

Section 2: Preparing the Wiring Harness

Pg. 2-3

Pg. 4-5



### Assembly

Section 3: Relocating the ECU

Section 4: CorkSport Battery Box Installation

Pg. 6

Pg. 7-9

## Detailed Instructions

### 1. OEM Battery Box & ECU Removal

- a) **Remove the top mount intercooler shroud.** Remove the two (2) 10mm bolts then push the shroud toward the firewall, and remove. (Red Circles in Figure 1a)
- b) **Remove the battery cover by pulling the two locking tabs and lifting the lid upward and forward at the same time.** (Red Arrows in Figure 1b)
- c) **Remove the ECU cover by pulling upward on the side closest to the air filter, and then forward.** (Green Circle in Figure 1b)

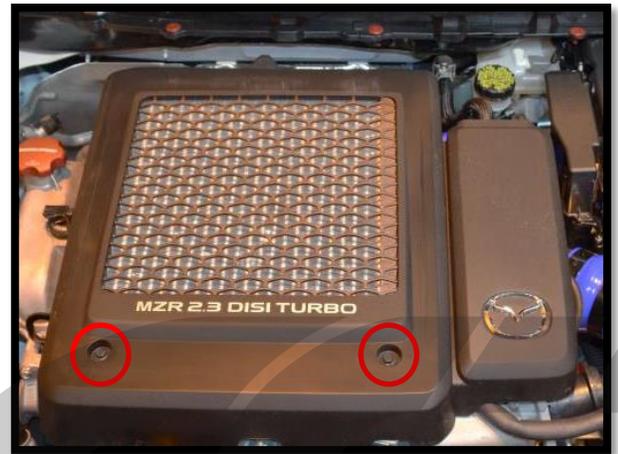


Figure 1a

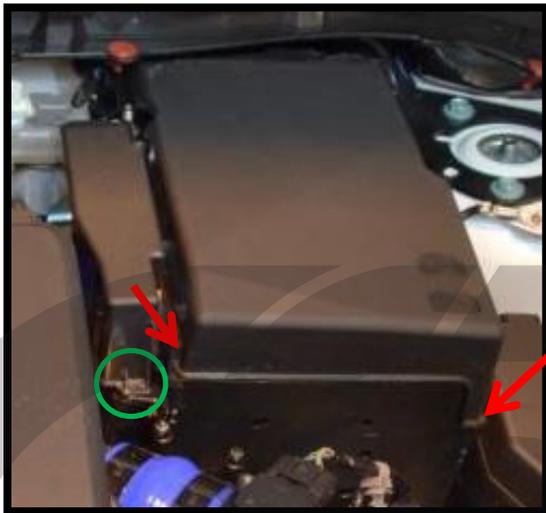


Figure 1b

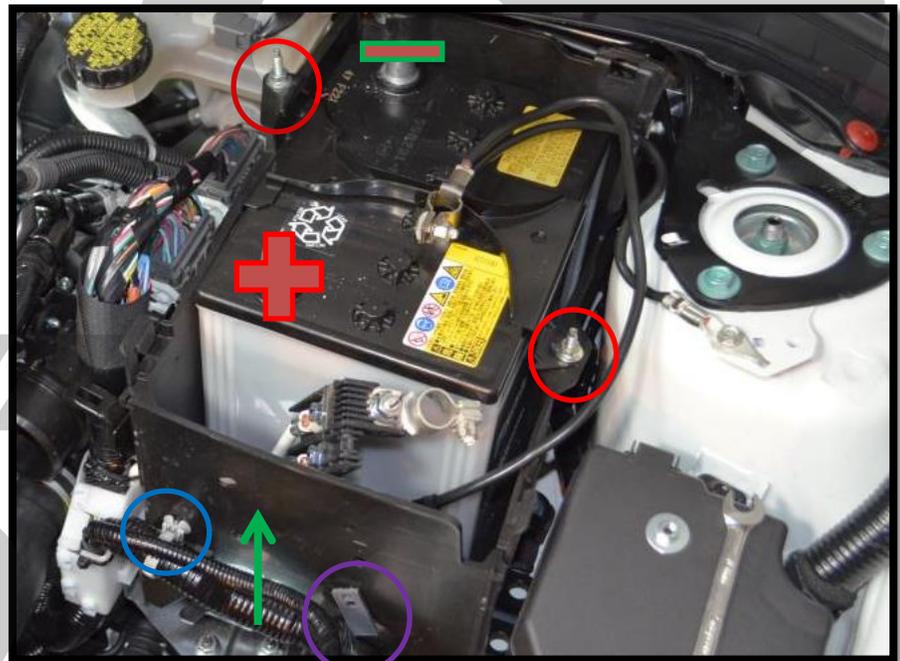


Figure 1c

- d) **Disconnect the battery terminals,** use a 10mm wrench starting with negative first, then Positive. Positive and Negative shown. (Figure 1c)
- e) **Remove the factory battery tie down bracket.** Remove the two 10mm nuts, and pull the bracket off the battery. (Red Circles Figure 1c)
- f) **Remove the front battery box panel.** Remove the MAF wiring harness clip (Blue Circle Figure 1c), and negative battery cable clip (Purple Circle Figure 1c), from the front battery box panel using needle nose pliers to compress the clips on the inside of the battery box.. Then slide the panel upwards and remove it. (Green Arrow in Figure 1c)

## Detailed Instructions

### 1. OEM Battery Box & ECU Removal (continued)

- g) Disconnect the ECU plugs by pushing on the tab (Red Arrow in Figure 1d) and pulling the white lock upward simultaneously. (Green Arrow in Figure 1d)

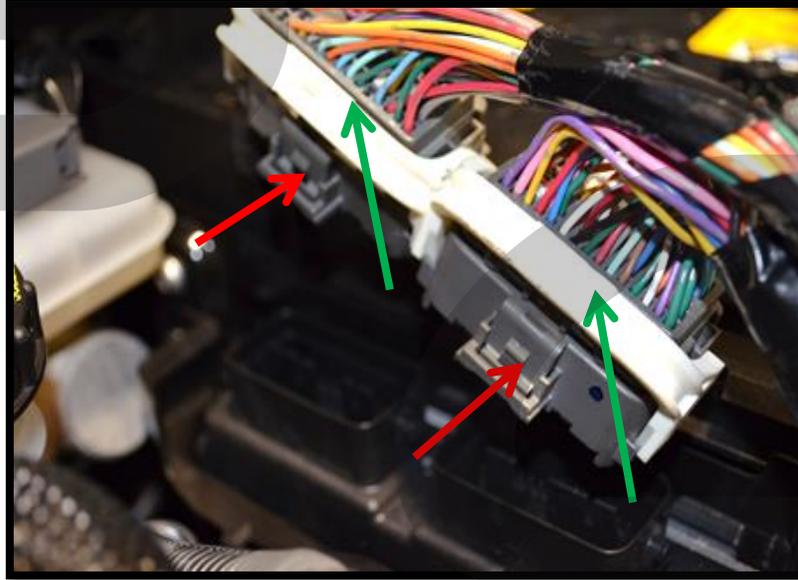


Figure 1d

- h) Remove the battery from the battery box.
- i) Remove the battery box. Remove the three 10mm bolts in the bottom of the box, and remove the battery box and ECU. (Red Circles Figure 1e)

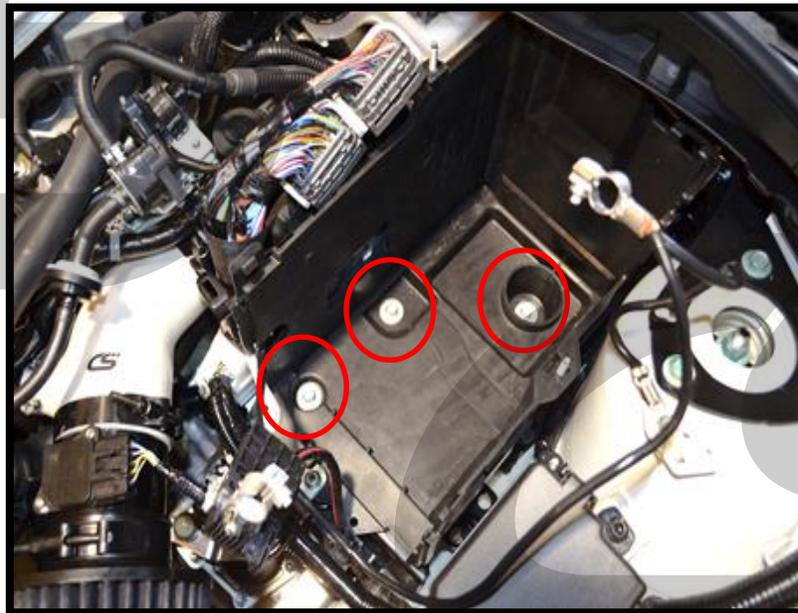


Figure 1e

## Detailed Instructions

### 2. Preparing the Wiring Harness

- a) **Remove the ECU wiring harness bracket.** Use a flat head screwdriver to pry the locking tab up, and pull the harness towards the front of the car. (Green Arrow in Figure 2a) Then remove the two 10mm nuts holding the bracket and remove it. Nuts shown removed. (Red Arrows in Figure 2a)

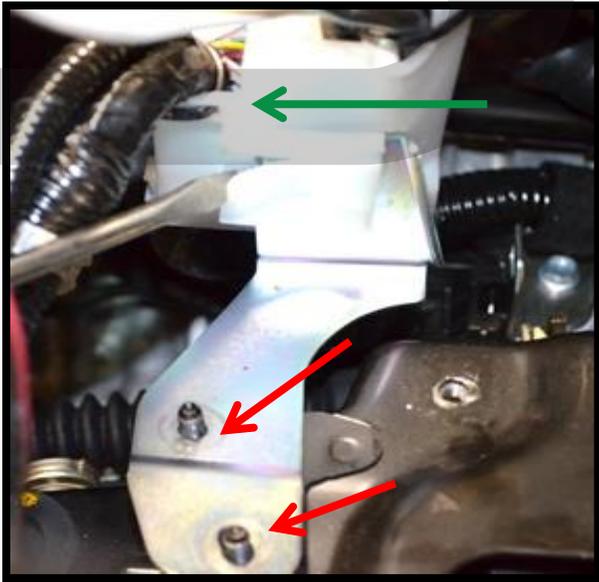


Figure 2a

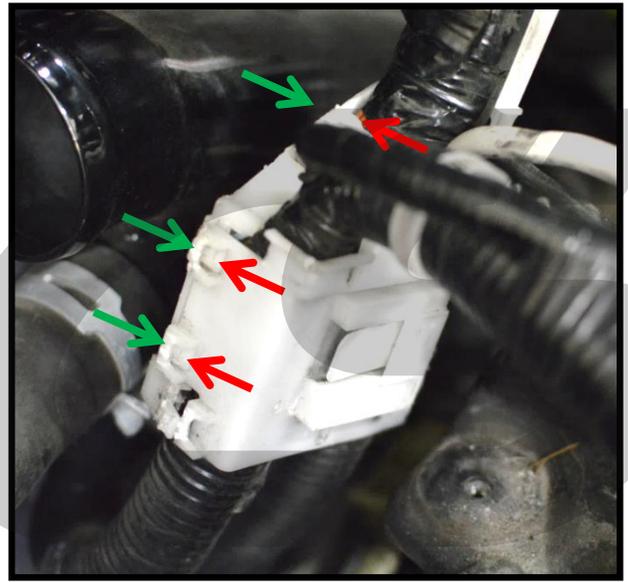


Figure 2b

- b) **Open the white plastic cover on the wiring harness.** Use a small flathead screwdriver to press down on the tabs shown with the red arrows in Figure 2a. Use another small flathead screwdriver to pry up on the plastic over the tabs shown with the green arrows in Figure 2a. Work your way around for all four tabs .

- c) **Remove the white plastic cover on the wiring harness.** With the upper cover open you have access to the lower cover. The lower cover has a secondary snap clip between the wire bundles, shown with the red arrow in Figure 2c. Just pull this cover open with shear force. Then remove the white plastic completely.

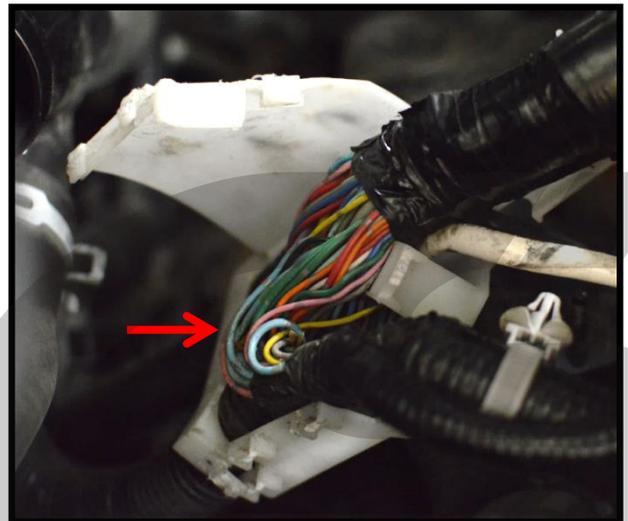


Figure 2c

## Detailed Instructions

### 2. Preparing the Wiring Harness (continued)

- d) Cut the tape holding the MAF wire to the wiring harness. Shown with the red line in Figure 2d.

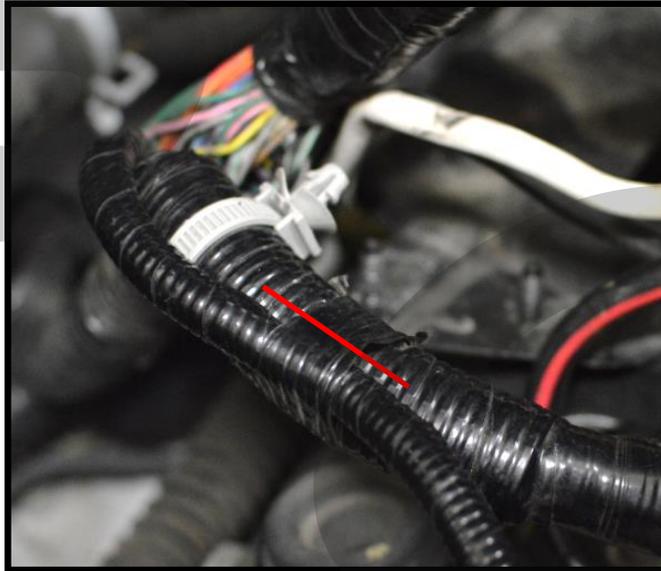


Figure 2d

- e) Wrap the exposed wires with electrical tape with at least 2 layers. Make sure to wrap well into the Y-section to thoroughly protect the wires. Shown in Figure 2f.



Figure 2e

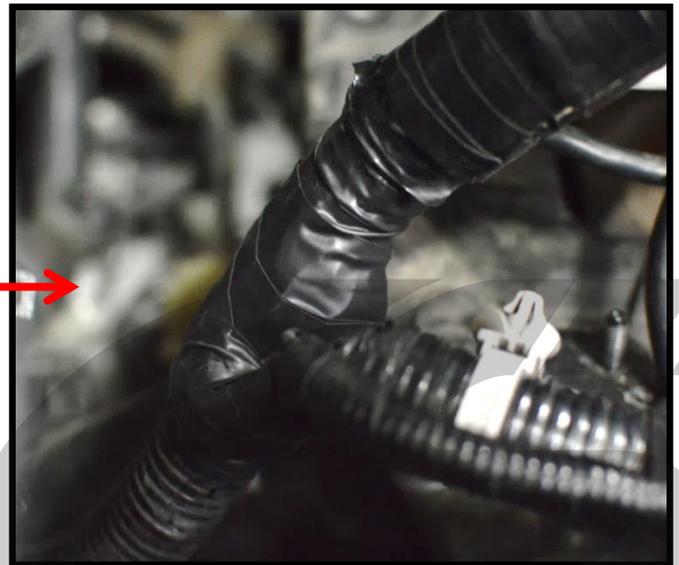


Figure 2f

## Detailed Instructions

### 3. ECU Relocating

- a) **Remove the ECU** from the factory battery box. Remove the ECU cover screws with a Phillips Head screwdriver. Remove the four 10mm nuts and set the ECU aside, shown with the **red circles in Figure 3a**.

- b) **Install the ECU into the battery box** as shown in **Figure 3b**. Use the provided M6 hardware and torque to 8-10 ft-lbs.



Figure 3a



Figure 3b

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## Detailed Instructions

### 4. CorkSport Battery Box Installation

- a) **Locate the positive terminal lead.** Remove the 10mm nut holding the black w/red strip wire. Shown with the **red circle** in **Figure 4a**.
- b) **Install the box into the engine bay.** While doing so, route the black w/red stripe wire through the corner of the box with a small opening. Shown with the **red arrow** in **Figure 4b**.
- c) **Install the three OEM mounting bolts** in the locations show with **the green arrows** in **Figure 4b**.  
**Torque to 12-15 ft-lbs.**

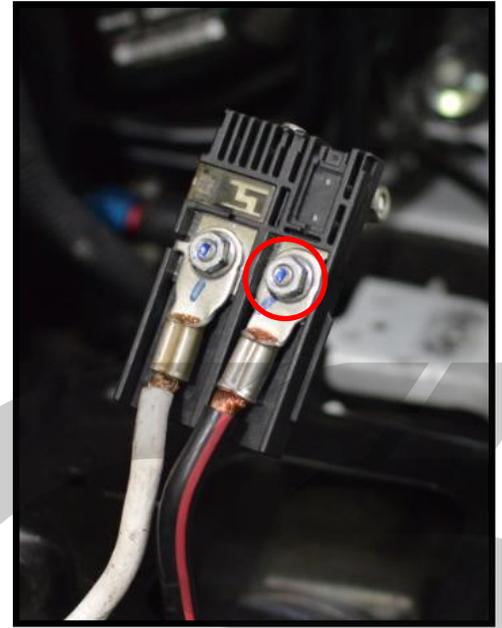


Figure 4a

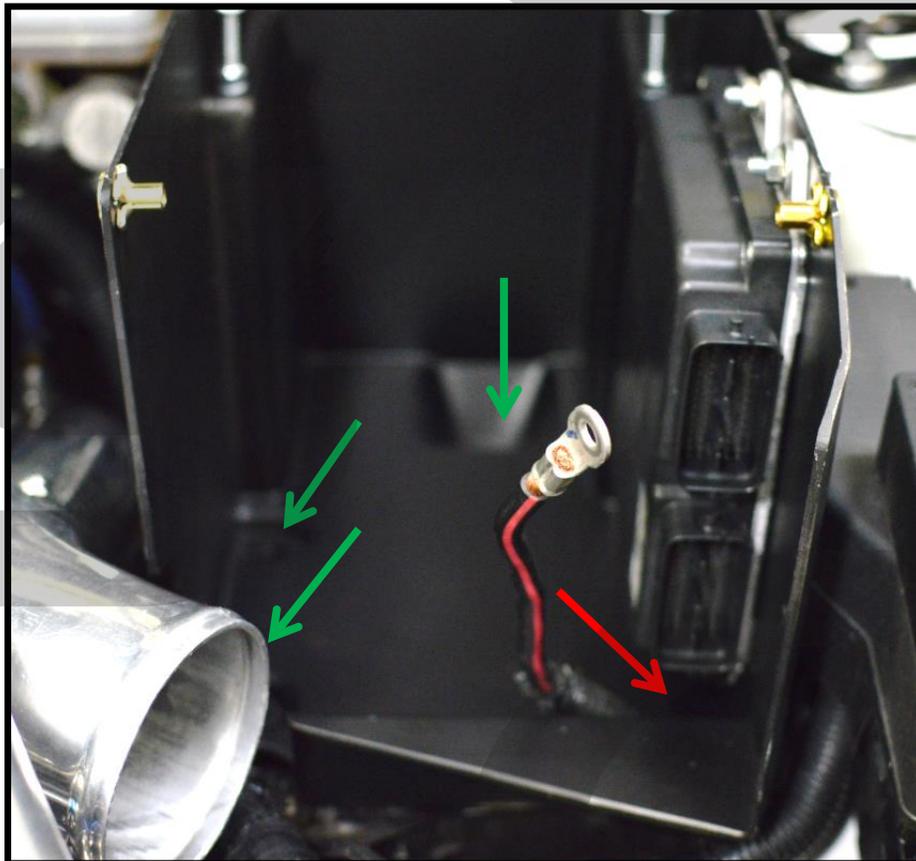


Figure 4b

## Detailed Instructions

### 4. CorkSport Battery Box Installation (continued)

d) Install the 51R battery as shown.

e) Install the battery tie-down over the battery and the studs. Install the provided M6x1.0 flange nuts and tighten till snug. As shown in **Figure 4c**.

f) Reconnect the black w/red strip wire to the positive lead. **Torque nut to 6-8 ft-lbs.**

g) Install the positive lead to the positive battery terminal. **Torque the terminal clamp to 6-8 ft-lbs.**

h) Route the ECU wiring harness as shown in **Figure 4c**. Connect wiring harness to the ECU.

i) Install the negative battery terminal lead with the wire located in the slot on the side of the battery box. **Toque the terminal clamp to 6-8 ft-lbs.**

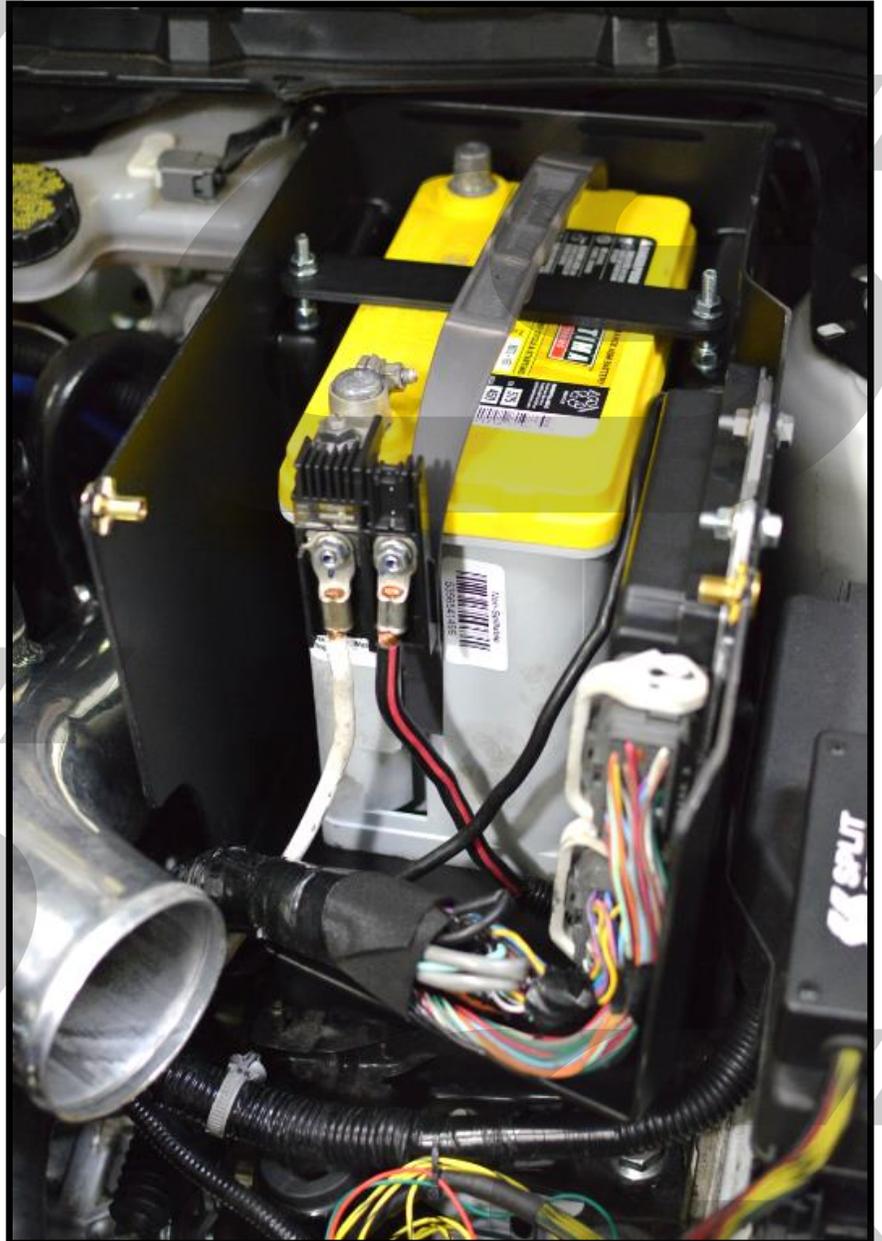


Figure 4c

## Detailed Instructions

### 4. CorkSport Battery Box Installation (continued)

- j) **Install the lid onto the battery box.** Slide the tabs on the back of the lid into the slots in the battery box. Shown with the red arrows in **Figure 4d**.
- k) **Fit the lid down and over the battery box,** be sure to not pinch any wires. Install the provided thumb screws as shown in **Figure 4d**.



Figure 4d



**This completes the installation of your CorkSport ECU Relocation & 51R Battery Box. Enjoy the new clearance and look of your new engine bay!**

Part # AXL-6-602-10

**CorkSport**  
MAZDA PERFORMANCE

What's Next:

## CorkSport VTA BPV

The CorkSport Binary VTA BPV provides features and performance to suit stock cars and on up to big turbo high power setups. The CorkSport Binary VTA BPV holds 50psi, responds in 50 milli-sec, and won't stall your car every shift. All this comes in a compact design with nozzle adjustability to allow for easy installation in even the most cramped engine bay or with custom piping.



## CorkSport DISI MZR Fuel Injector Seals

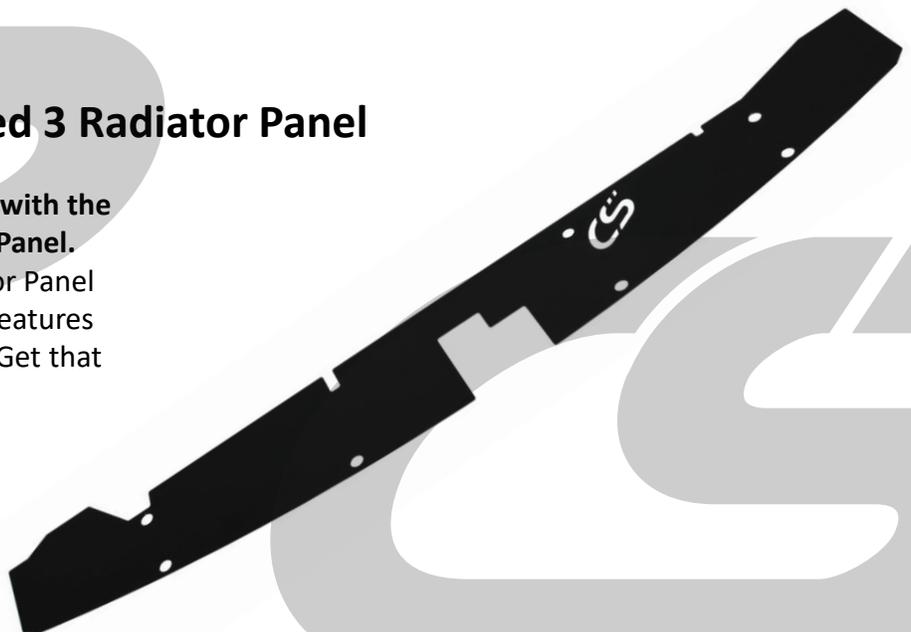
CorkSport DISI MZR Fuel Injector Seals for the 2007-2013 Mazdaspeed 3 & 2006-2007 Mazdaspeed 6. Constructed from beryllium copper; the CorkSport fuel injector seals will lock in every PSI of boost so that every bit of your hard earned horsepower keeps you moving forward.



## CORKSPORT Mazdaspeed 3 Radiator Panel

Add some style to your engine bay with the CorkSport Mazdaspeed 3 Radiator Panel.

The CorkSport Mazdaspeed Radiator Panel is made from 5052 aluminum and features a textured powder coated surface. Get that clean look you have always wanted.



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