

CorkSport Mazdaspeed 3 ECU Relocation Box

2010-2013 Mazdaspeed 3



Thank you for purchasing the CorkSport ECU Relocation Battery Box for the Mazdaspeed 3. With the install of this battery box, you now have a full solution for housing an OEM sized battery and up to 3.5" 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:

<http://www.corksport.com/corksport-2010-mazdaspeed-3-ecu-relocation-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-6-601-10

Time Est: 1 hours

Wrench Rating: 2/5



Tooling List

10mm Wrench

10mm Socket

12mm Socket

3/8" Drive Ratchet

1/2" Drive Ratchet

Swivel Socket

12" Extension

Needle Nose Pliers

Flat Head Screw Driver

Philips Head Screw Driver

5mm Hex Socket



Parts List

One (1) CorkSport ECU Relocation Box

One (1) Battery Tie Down Bracket

Two (2) Threaded Tie Down "L" Hooks

Two (2) Washers

Two (2) Wing Nuts

Four (4) M6X1.0X15 Flange Bolts

Need Help With Your Installation?

Call (360) 260-CORK

Checklist

This is an overview of each step in the build. You can use this as a reference and a checklist as you button up the work on your car

1. Remove the Factory Battery Box and ECU

- a) Remove the top mount intercooler shroud. (Figure 1a)
- b) Remove the battery cover. (Figure 1b)
- c) Remove the ECU cover. (Figure 1b)
- d) Disconnect the battery terminals. (Figure 1c)
- e) Remove the ground wire on the strut tower. (Green Circle Figure 1c in blow up)
- f) Remove the factory battery tie down bracket. (Figure 1c)
- g) Remove the front battery box panel. (Figure 1c)
- h) Disconnect the ECU plugs. (Figure 1d)
- i) Remove the battery from the battery box.
- j) Remove the battery box. (Figure 1e)

2. Preparing to install the CorkSport ECU Relocation Box

- a) Remove the ECU wiring harness bracket. (Figure 2a)
-  It is possible to remove the white plastic sheathing on the ECU wiring harness, if more room is needed for larger turbo inlet pipes.
- b) Next, remove the ECU from the factory battery box. (Figure 2b)
- c) Remove the two large power wires from the positive battery terminal connector and set it aside. (Figure 2c)

3. Install the CorkSport ECU Relocation Box

- a) Start by inserting the black with red power wire (Green Circle in Figure 3a) through the hole in the side of the box.
- b) Push the ECU connectors, the white positive wire and black negative battery terminal wire, removed in step 2c, into the box while moving the box down into position. (Figure 3a)
- c) Insert the battery tie down L-Bolts into the holes. (Figure 3b)
-  A rubber band, or zip tie on the tie down bolt will keep the bolt from dropping down through the box.
- d) Line the box up with the three mounting holes, and fasten the box to the car with the three (3) 10mm bolts you removed the factory box. (Figure 3a)

Checklist

3. Install the CorkSport ECU Relocation Box Continued...

- e) Place the ECU in the front of the box (as shown in **Figure 3c**), and line up the four mounting holes. Use the four 10mm bolts provided with the box and the four factory 10mm nuts that held the ECU to the factory box.
-  Over tightening these bolts could result in cracking the fiberglass box, only tighten until snug, or 5ft lbs.
- f) Re-attach the large power wires to the positive battery terminal connector. (**Red Arrows Figure 2c and 3c**)
- g) Plug the ECU wiring harness connectors into the ECU, and lock them into place. (**Figure 3c**)
- h) Run the black ground wire underneath the ECU and place the cable end aside so the battery will not crush it in the next step.
- i) Carefully place the battery down inside of the box.
- j) Pull the two threaded battery tie down bolts upward to a vertical position. Place the aluminum tie down bracket on the battery. Use the supplied wing nuts and washers to clamp the battery down. (**Red Circles in Figure 3d**)
- k) Attach the positive battery cable to the batter. (**Figure 3d**)
- l) Locate the "Eyelet" connector on the end of the ground cable, and fasten it to the top of the strut tower. (**Green Circle in Figure 3e**)
- m) Attach the ground wire to the negative post on the battery. (**Figure 3d**)
- n) Run the black ground wire from the strut tower through the groove in the upper lip of the box, and place the lid on top of the box. (**Green Arrow in Figure 3e**)
- o) Use the installed 5mm hex bolts to fasten the top to the box. (**Red Arrows in Figure 3e**)

 This completes the installation of your CorkSport ECU Relocation Box. Check to make sure that the battery is held down firmly in place and that all electrical connections are tight and secure. Enjoy a better looking engine bay, better ECU protection, and the ability to fit up to a 3.5" intake!

Detailed Instructions

 These instructions are made for 2010-2013 Mazdaspeed 3

1. Remove the Factory Battery Box and ECU

- 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 foreword 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 foreword. (Green Circle in Figure 1b)

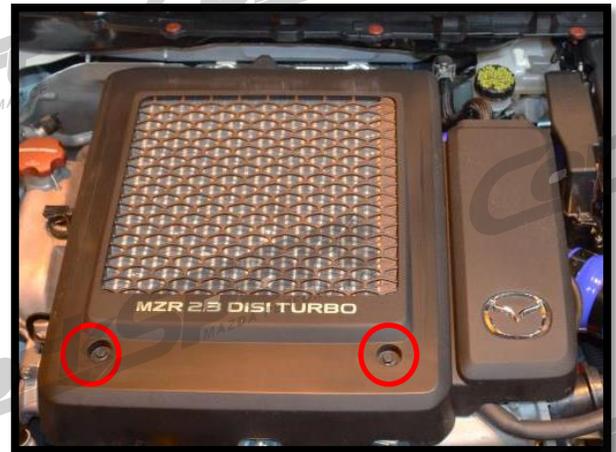


Figure 1a



Figure 1b

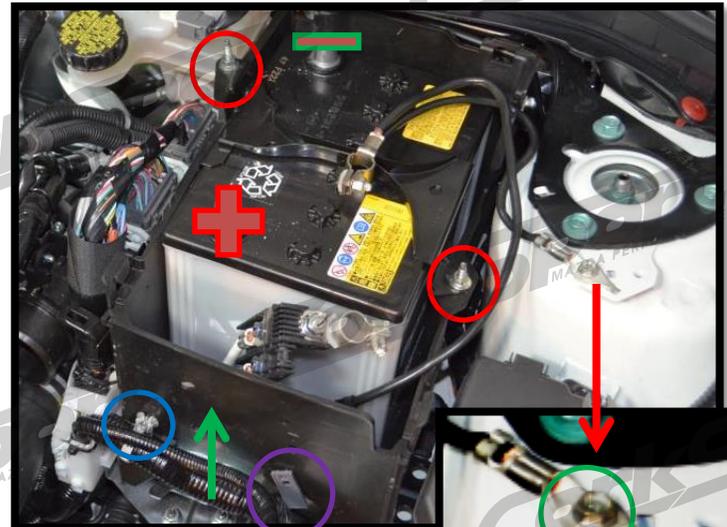


Figure 1c

- d) Disconnect the battery terminals, use a 10mm wrench starting with negative first, then Positive. Positive and Negative shown. (Figure 1c)
- e) Remove the ground wire on the strut tower with a 10mm socket wrench. (Green Circle Figure 1c in blow up)
- f) Remove the factory battery tie down bracket. Remove the two 10mm nuts, and pull the bracket off the battery. (Red Circles Figure 1c)
- g) 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. Remove the Factory Battery Box and ECU

- h) **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)
- i) **Remove the battery** from the battery box.
- j) **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)

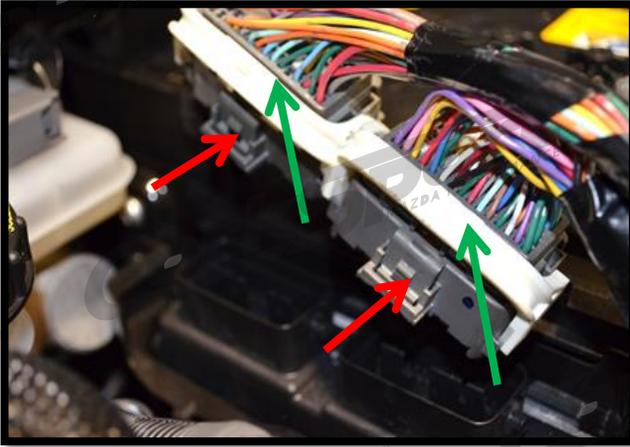


Figure 1d

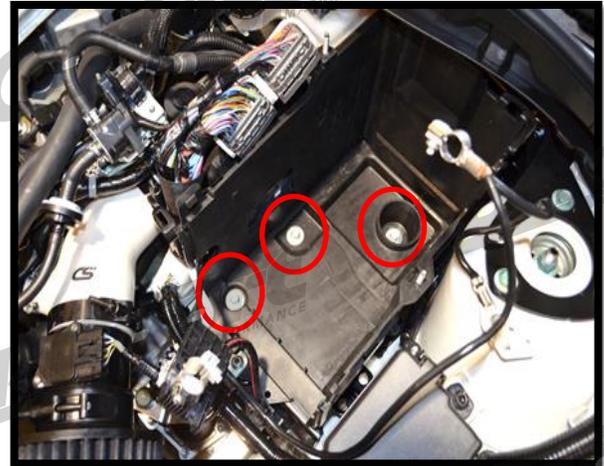


Figure 1e

2. Preparing to Install the CorkSport ECU Relocation Box

- 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)

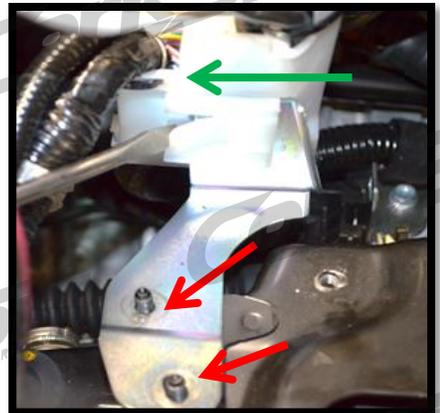


Figure 2a



It is possible to remove the white plastic sheathing on the ECU wiring harness, if more room is needed for larger turbo inlet pipes.

- b) **Next, 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 and four (4) 10mm nuts aside for later. (Figure 2b)



Figure 2b

Detailed Instructions

2. Preparing to Install the CorkSport ECU Relocation Box Continued...

- c) Using a 10mm socket wrench, remove the two large power wires from the positive battery terminal connector and set it aside. (Red Arrows in Figure 2c)

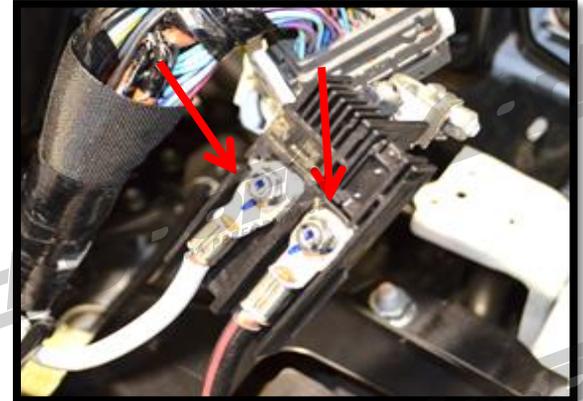


Figure 2c

3. Install the CorkSport ECU Relocation Box

- a) Start by inserting the black with red power wire (Green Circle in Figure 3a) through the hole in the side of the box.
- b) Push the ECU connectors, the white positive wire and black negative battery terminal wire, removed in step 2c, into the box while moving the box down into position. (Figure 3a)
- c) Locate the two small offset holes in the bottom of the box and insert the battery tie down L-Bolts into the holes (Red Arrows in Figure 3b)

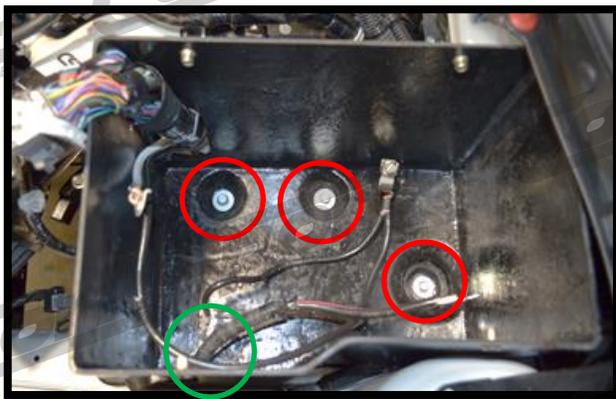


Figure 3a

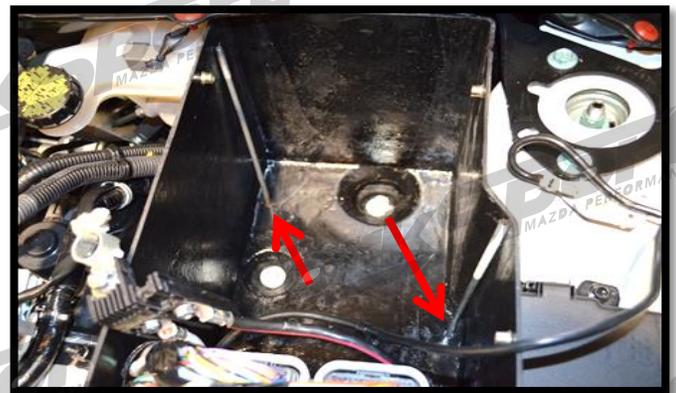


Figure 3b

- A rubber band, or zip tie on the tie down bolt will keep the bolt from dropping down through the box.

- d) Line the box up with the three mounting holes, and fasten the box to the car with the three (3) 10mm bolts you removed the factory box. (Red Circles in Figure 3a)
- e) Place the ECU in the front of the box (as shown in Figure 3c), and line up the four mounting holes. Use the four 10mm bolts provided with the box and the four factory 10mm nuts that held the ECU to the factory box.

- Over tightening these bolts could result in cracking the fiberglass box, only tighten until snug, or 5ft lbs.

- f) Re-attach the large power wires to the positive battery terminal connector as shown. White attaches on the passenger side of the connector, and Black w/ Red on the drivers side. (Red Arrows Figure 2c and 3c)
- g) Plug the ECU wiring harness connectors into the ECU, and lock them into place. You will hear them “click” into place when done correctly. (Figure 3c)

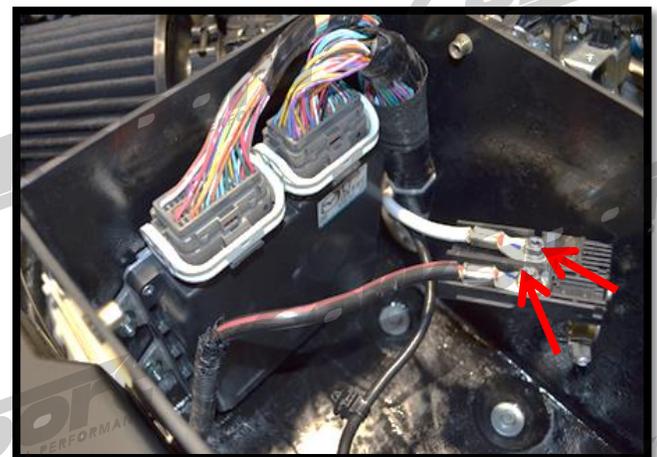


Figure 3c

Detailed Instructions

3. Install the CorkSport ECU Relocation Box Continued....

- h. Run the black ground wire underneath the ECU and place the cable end aside so the battery will not crush it in the next step.
- i. Carefully place the battery down inside of the box. Be careful not to place the battery on top of the ground wire.
- j. Pull the two threaded battery tie down bolts upward to a vertical position. Place the aluminum tie down bracket on the battery. Use the supplied wing nuts and washers to clamp the battery down. (Red Circles in Figure 3d)
- k. Attach the positive battery cable to the battery and tighten with a 10mm wrench. (Figure 3d)
- l. Locate the "Eyelet" connector on the end of the ground cable, and fasten it to the top of the strut tower with the original 10mm bolt. (Green Circle in Figure 3e)
- m. Attach the ground wire to the negative post on the battery and tighten with 10mm wrench. (Figure 3d)
- n. Run the black ground wire from the strut tower through the groove in the upper lip of the box, and place the lid on top of the box. (Green Arrow in Figure 3e)
- o. Use the installed 5mm hex bolts to fasten the top to the box. (Red Arrows in Figure 3e)

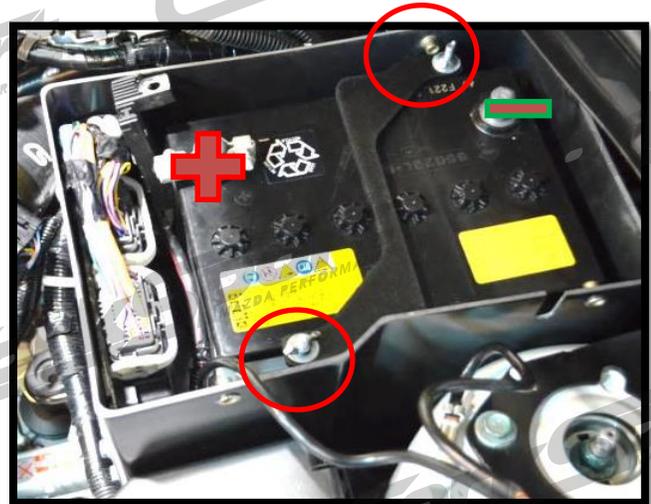


Figure 3d



Figure 3e

! This completes the installation of your CorkSport ECU Relocation Box. Check to make sure that the battery is held down firmly in place and that all electrical connections are tight and secure. Enjoy a better looking engine bay, better ECU protection, and the ability to fit up to a 3.5" intake!

What's Next:

[CorkSport Mazdaspeed 3 Big Brake Caliper Kit](#)



CorkSport Big Brake Calipers provide the ultimate in stopping power for your Mazda. Crafted from extremely lightweight billet aluminum, the CorkSport calipers use an opposed piston design that is fixed to provide greatly improved pad wear and caliper rigidity over the OEM design.