

CorkSport
MAZDA PERFORMANCE

INSTALLATION INSTRUCTIONS



CORKSPORT **51R Battery Tray** *2006-2007 Mazdaspeed 6*

PART #: ATE-6-602-10

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



*We absolutely, positively,
deliver - every time.*

CORKSPORT.COM

PAGE 1




CORKSPORT **51R Battery Tray** *2006-2007 Mazdaspeed 6*

PRODUCT DESCRIPTION:


We're happy to introduce the 51R Battery Tray for Mazdaspeed 6. Once you begin shooting for bigger power levels, the OEM intake size soon becomes a restriction. Going to a bigger intake unfortunately will put your intake tube in contact with your OEM battery. Enter the CS 51R battery tray! The CorkSport battery tray allows for 4" intake fitments and a 51R size battery with no hole drilling or vehicle modification. Its an easy 30 minute install that ensures your intake is fitting great and your engine bay is looking great as well!

Please let us know your feedback of the by submitting a review at: <https://corksport.com>

PRE-INSTALLATION NOTES:

 **Make sure your vehicle is completely cooled down prior to starting installation. If you are going to work on you 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.**

 **How our instructions work: To best cover all of our customers experience levels, we have included a table of contents/order of operations along with step-by-step instructions.**

 **51R Battery is not included with the battery tray kit. Almost all 51R sized batteries will fit perfectly with the CS 51R Battery Tray.**

 **Take care when handling batteries as it can be easy to shock and injury yourself.**

MATERIALS & TIME:

GENERAL INFO:



Time Est:
30min



Difficulty:
2/5



CEL:
No



Warranty:
2-Year

PARTS LIST:

- One (1) CorkSport MS6 51R Battery Tray
- One (1) CorkSport MS6 51R Battery Spacer
- Two (2) CorkSport MS6 Battery Tray Rear Mounting Spacers
- One (1) CorkSport MS6 Battery Tray Front Mounting Spacer
- One (1) CorkSport MS6 51R Battery Tie Down
- Five (5) M6x1.0x22mm SS Flanged Button Head Screws

TOOLING LIST:

- 10mm Wrench
- 10mm Socket
- 1/4" or 3/8" drive Ratchet
- 4mm Allen Wrench or Socket
- Flathead Screwdriver



ORDER OF OPERATIONS & TABLE OF CONTENTS:

 **VEHICLE DISASSEMBLY**
Section 1: Removing the OEM Battery & Tray Pg. 4-5

 **CORKSPORT BATTERY TRAY INSTALL**
Section 2: Installing CorkSport 51R Battery Tray & Battery Pg. 9-12

DETAILED INSTRUCTIONS:

1. Removing the OEM Battery & Tray



The vehicle shown had the intake and turbo inlet pipe removed for clarity. Installation is identical without intake removal, however, some vehicles may need to remove the intake and/or turbo inlet pipe for easier access.

- a) Locate your battery in the rear right of the engine bay and disconnect the battery terminals with a 10mm wrench. Disconnect negative first, shown circled in blue in Figure 1a, then disconnect the positive, shown circled in red in Figure 1a. Move the terminals out of the way.



Aftermarket battery terminals may require a different wrench size.

- a) Remove the 10mm nut and 10mm bolt from the battery tie down bracket. Shown circled in green in Figure 1a. Remove the OEM tie down bracket and long "j" shaped bolt.
- b) Remove the OEM battery from the vehicle.



We recommend taking your OEM battery to the auto parts store you purchased your 51R battery from for a core charge refund.

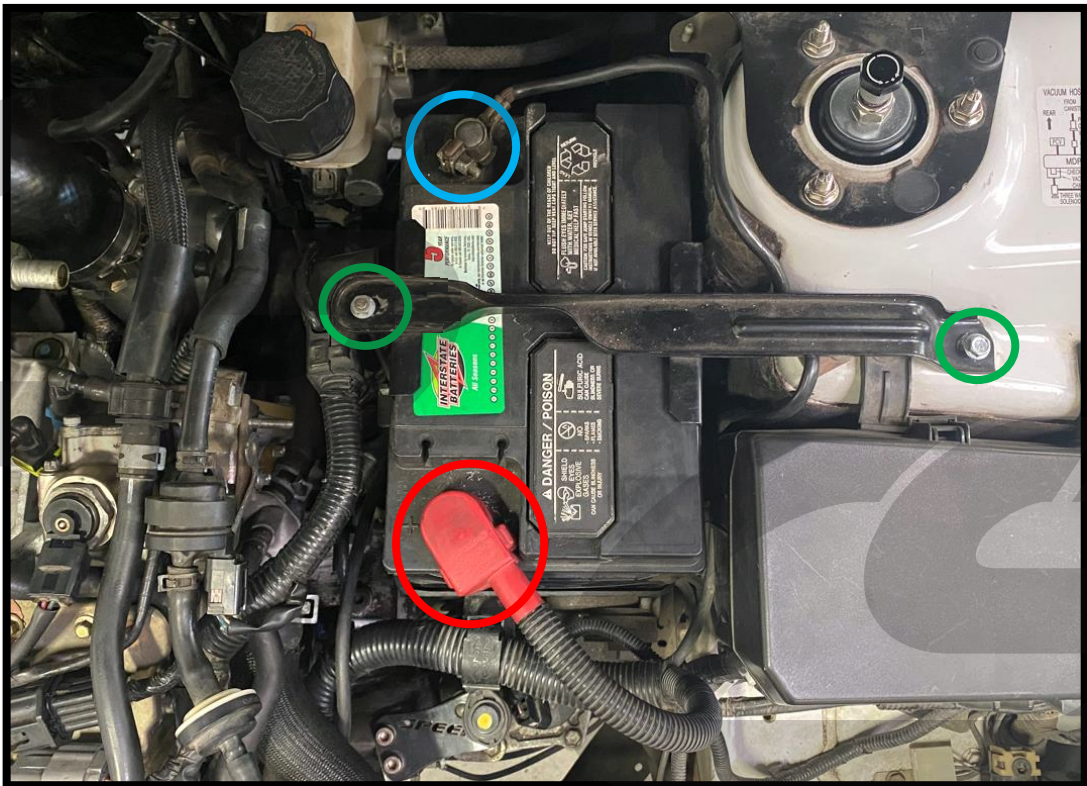


Figure 1a

DETAILED INSTRUCTIONS:

1. Removing the OEM Battery & Tray (continued)

- d) Free the wiring harness clip from the front of your battery tray with a flathead screwdriver. Pry with a flathead screwdriver like shown in **Figure 1b**.



Figure 1b

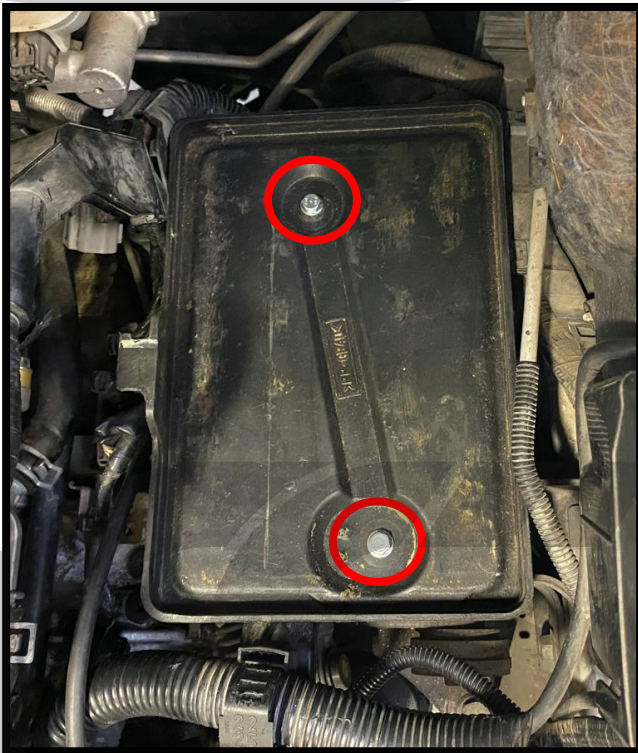


Figure 1c

- e) Remove the two 10mm bolts from the bottom of your battery tray. Shown **circled in red** in **Figure 1c**. Lift the wiring harness free from the clip released earlier, then remove your OEM battery tray from the vehicle

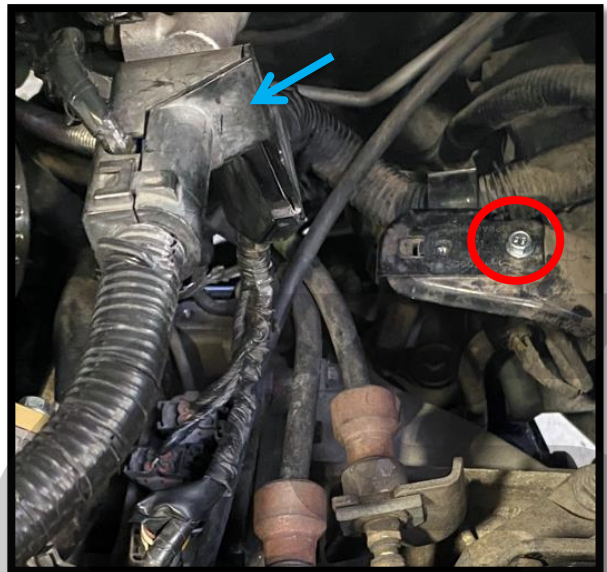


Figure 1d

- f) Remove the final 10mm bolt from the rear battery tray mounting bracket. Shown **circled in red** in **Figure 1d**.



Some intake setups will require removing the plastic cover shown with **blue arrow** in **Figure 1d** for proper clearance. This can also help clean up your engine bay as you can nicely re-wrap the wires in electrical tape and tuck them more out of the way.

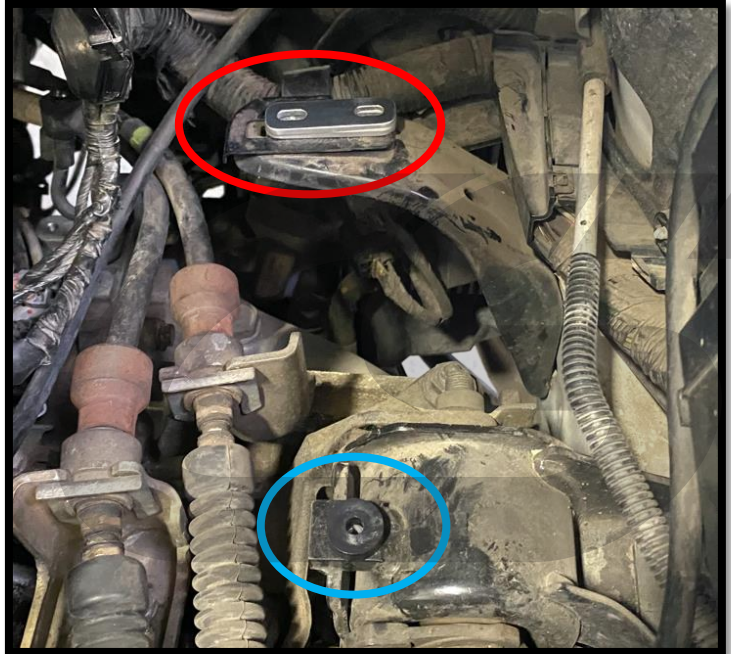
DETAILED INSTRUCTIONS:**2. Installing CorkSport 51R Battery Tray & Battery**

- a) Place the two CS rear battery tray mounting spacers on top of the OEM battery tray mounting bracket as shown with **red circle** in **Figure 2a**.



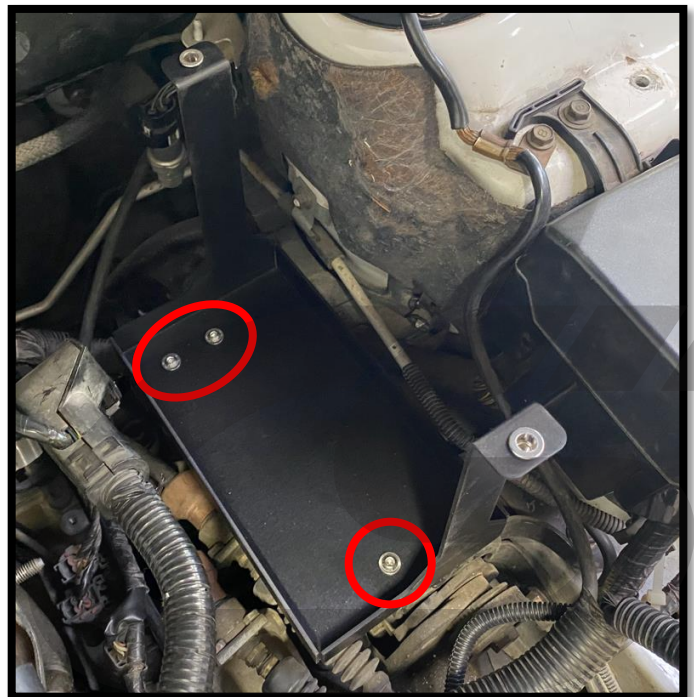
If desired, you can secure the two rear mounting spacers together and to the bottom of the battery tray with super glue or tape.

- b) Place the front battery tray mounting spacer on top of the front battery tray mounting location on the transmission motor mount. Shown with **blue circle** in **Figure 2a**. OEM mount shown, procedure is the same with aftermarket TMM.

**Figure 2a**

- c) Place the CorkSport 51R battery tray into position and loosely secure with 3 of the supplied button head screws. Shown with **red circles** in **Figure 2b**. Ensure both rear and the front battery tray spacers are in position to ensure correct mounting.

- d) Adjust the CS battery tray as needed until it is straight in the engine bay, then tighten until snug with a 4mm Allen wrench or socket.

**Figure 2b**

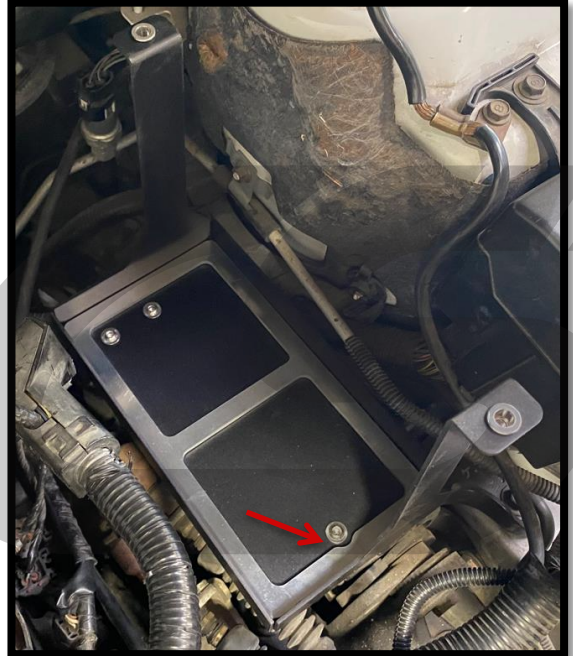
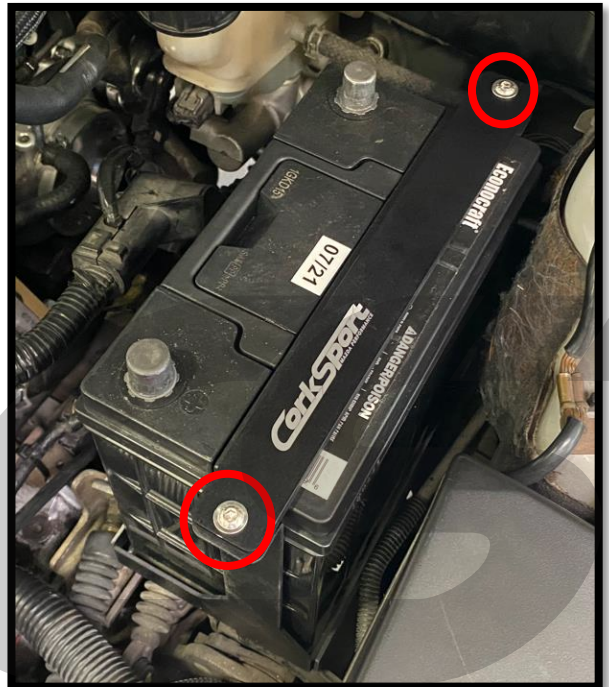
DETAILED INSTRUCTIONS:**2. Installing CorkSport 51R Battery Tray & Battery (continued)**

- e) Place the CorkSport battery spacer into the battery tray as shown in **Figure 2c**. Ensure the relief cut is positioned at the forward bolt as shown.
- f) Place your 51R battery into the CS battery tray as shown in **Figure 2d**. Positive terminal will sit towards the front of the vehicle.

**Figure 2d**

Be very careful to not touch the battery tie down to the battery terminals during the next step.

- g) Install the CorkSport battery tie down and secure using the two remaining button head screws. Shown **circled in red** in **Figure 2e**.
- h) Adjust your 51R battery as needed until it is straight in the engine bay and battery tray. Then tighten the two bolts until snug with a 4mm Allen wrench or socket. Battery should not move after tightening.

**Figure 2c****Figure 2e**

DETAILED INSTRUCTIONS:

2. Installing CorkSport 51R Battery Tray & Battery (continued)

- i) Install the positive terminal onto your new 51R battery. Tighten until snug using a 10mm wrench. Shown completed in **Figure 2f** with a **red circle**.
- j) Install the negative terminal onto your new 51R battery. Tighten until snug using a 10mm wrench. Shown completed in **Figure 2f** with a **blue circle**.

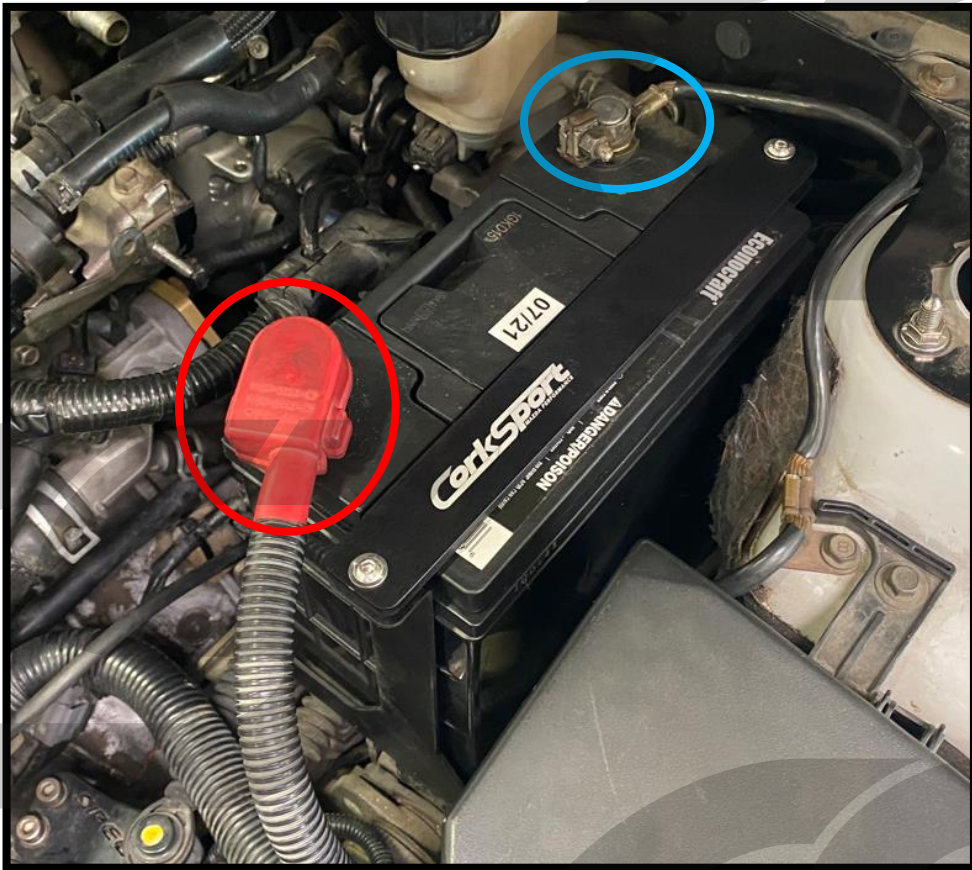


Figure 2f



**This completes the installation of your CorkSport 51R Battery Tray!
Enjoy the added space and clean new look!**

WHAT'S NEXT?

CorkSport 3.5 Inch Intake

Ready to take your Mazdaspeed 6 to the next level and remove any upstream turbo restrictions then you have found one of the best options, our 3.5 Inch Intake. When aiming for higher power levels you will exceed the MAF sensor flow with smaller air intakes and need a larger intake to feed your speed engine all the air it wants. The CorkSport 3.5" Intake combines the ease of use of smaller intakes with enough flow to support ~700 WHP. Also available in 3 Inch and 4 Inch sizes!



CorkSport Camshafts

The CorkSport Mazdaspeed Performance Camshafts are developed with the latest design, manufacturing, and casting technologies and ground to CNC precision for the best performance for your Mazdaspeed. Near factory idling cams for the daily driver and even the aggressive track driver bringing improvement in throttle response and torque to your Mazdaspeed.

CorkSport CST5 Turbocharger

Not too big, not too small. ITS JUST RIGHT for YOUR SPEED. Capable of built block power and extremely fast spool times, this turbo can make 500+whp and hit 20psi by 3500-3600rpm. The CorkSport CST5 turbo can be tuned for a more laid-back curve that is stock block safe or pushed to 30+ psi for built blocks and auxiliary fueling. No matter what build you have this turbo will be sure to impress. The CST5 features a MHI Journal Bearing CHRA, 0.82 Turbine A/R and 4" Anti-Surge Compressor Cover

The CST5 turbo is available in two boost control setups: Internally Wastegated (IWG) & 44mm Externally Wastegated (EWG) w/included EWG elbow pipe & V-band clamp. Ball bearing option coming soon as well!

Includes a FREE CorkSport 3.5 bar MAP sensor for accurate boost pressure up to 37psi.

