# MAZDA MOTORSPORTS

# Installation Instructions

Mazda Miata Battery Cable Installation 2006-2015

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#### Battery Cable Kit — 0000-10-9222

The battery cable kit is comprised of three cables.

- Cable 1 Goes from the battery disconnect switch that runs up the passenger side of the car through the firewall, across the front cross member down to the starter. This cable is two cables in one. Once you install the cable on the starter, there is an additional lead off of that cable that goes up to the fuse box.
- Cable 2 This is the positive battery cable that goes from the battery disconnect switch over to the positive side of the battery.
- Cable 3 This is the Ground cable that will go from the negative side of the battery to the chassis.

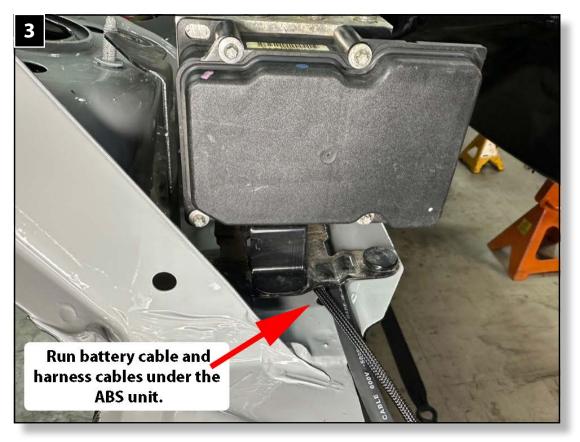


- 1. Disconnect the following.
  - a. OEM positive battery cable from 12V battery located under the hood.
  - b. Remove negative battery cable from battery. Disconnect the other ends from the engine ground strap and chassis ground.
  - c. Positive cable going to the starter.
- 2. It is recommended that you remove the OEM positive battery cable which runs from the positive battery terminal to the fuse box and starter. This can done by removing it from the factory loom without cutting any wires.
- 3. Locate the hole in the firewall that you will be running the battery cable through. (Pic 1)
- 4. Enlarge that hole to 1 1/8" using a uni-bit. Clean up as necessary.
- 5. Start in the passenger footwell and feed the battery cable through the firewall.
- 6. Run the battery cable along the frame rail. (Pic 2)

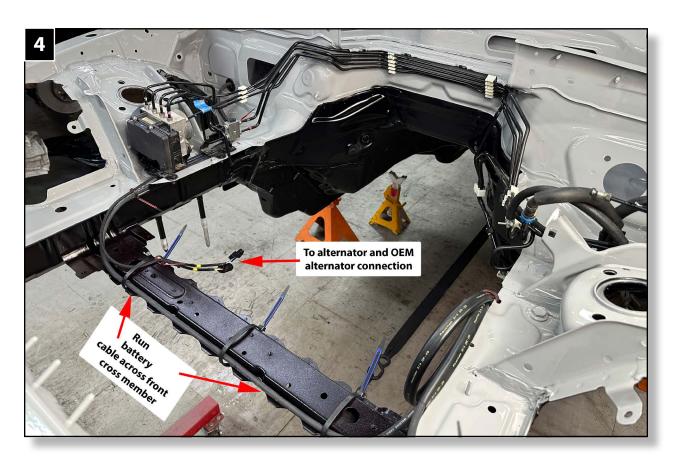




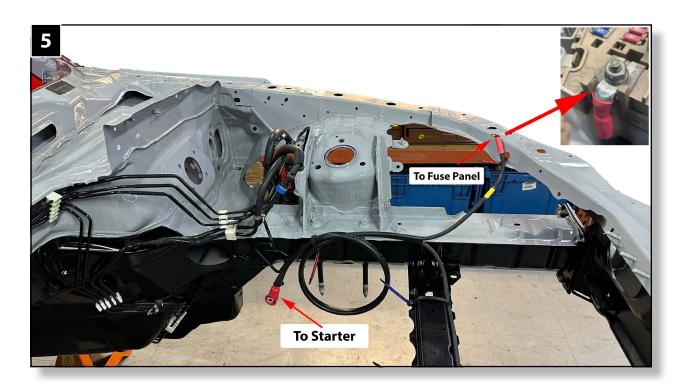
7. Un-bolt the ABS unit so that you can run the battery cable underneath it. There is a small channel beneath the ABS unit that will not pinch the cables. Once the battery cable (and battery disconnect harness) are run underneath the ABS unit you can bolt it back in to place. (Pic 3)



8. Continue running the battery cable forward to the factory cross member.



9. Run the battery cable across the front cross member to the driver side of the car. (Pic 4)



10. Continue running the battery cable rearward towards the firewall along the frame rail and down to the starter. (Pic 5)

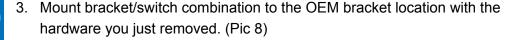
- 10. Connect the cable to the positive terminal post on the starter.
- 11. The other end of the cable (labeled fuse block) should be routed up to the fuse block.
- 12. Remove the factory positive battery connection from the fuse box.
- 13. Connect the lead to the rear M6x1 post under the cover. (Pic 5)
- 14. Go back to the passenger footwell and run the battery cable rearward along the rocker up to the passenger side trunk. (Pic 6)



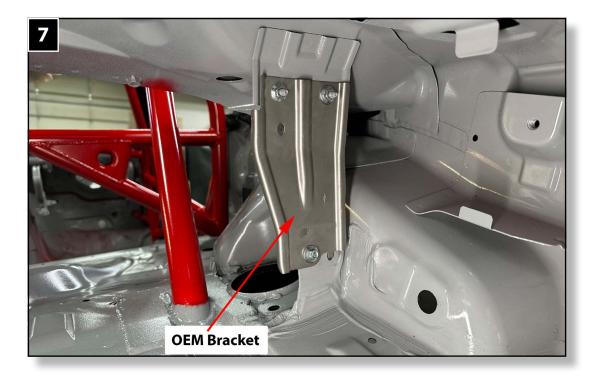
15. The rest of the cabling instructions are located in the Battery Disconnect Switch section

### **Battery Disconnect Switch — 0000-10-9220**

- 1. Start by removing the OEM bracket from the passenger side trunk area. This will be (2) m6x1 nuts on the top and (1) M6x1 bolt on the bottom. Remove the wire loom from the bracket. You will re-use this hardware. (Pic 7)
- 2. Install the battery disconnect switch to the battery disconnect bracket with the supplied hardware. Tools needed 1/8" Hex key and 3/8" socket.



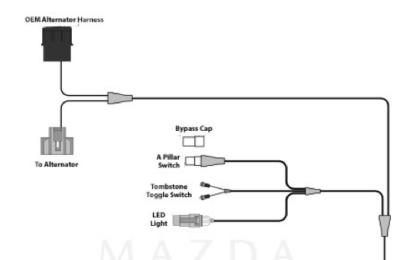




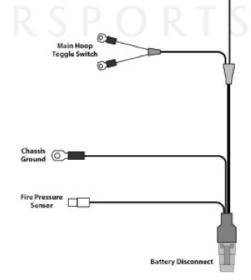


### **Battery Disconnect Switch Harness**

- Start by locating the hole in the firewall you are going to run the cables through. (Pic 10)
- 2. Enlarge that hole to 1 1/8" using a uni-bit. Clean up as necessary.
- 3. Start in the passenger footwell and run the battery disconnect harness through the firewall



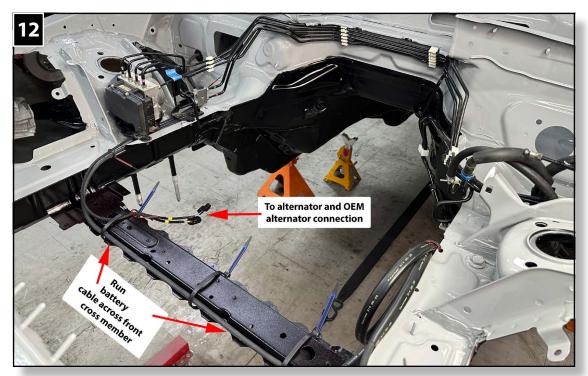








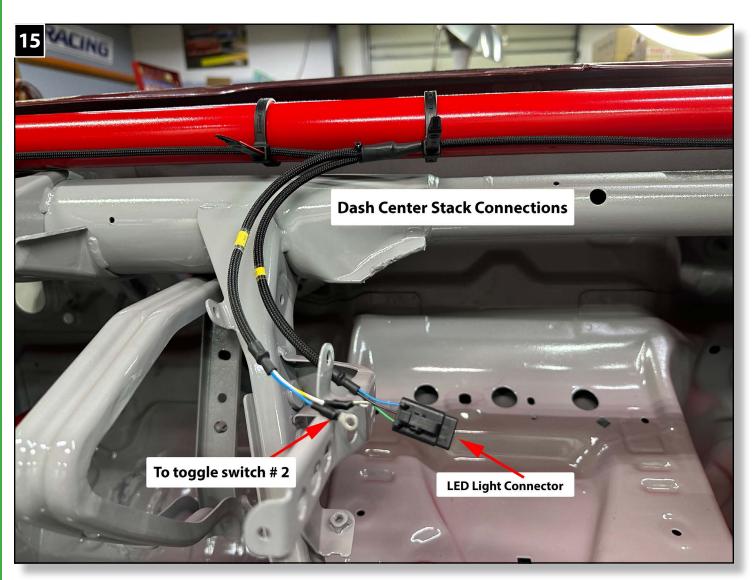
- 4. Run the battery disconnect harness along the frame rail. (Pic 9)
- 5. Un-bolt the ABS unit so that you can run the battery disconnect harness underneath it. There is a small channel beneath the ABS unit that will not pinch the cables. Once the battery disconnect harness cable (and battery cable) are run underneath the ABS unit you can bolt it back in to place. (Pic 11)
- 6. Continue running the battery disconnect harness forward to the factory cross member. (Pic 12)
- 7. Un-plug the OEM harness from the alternator.
- 8. Plug in the male end of the battery disconnect harness to the OEM alternator harness.
- 9. Plug the female end of the battery disconnect harness into the alternator.



10. Return to the passenger footwell and run the A-pillar and toggle switch leads off the main harness to the driver side of the car. The lead that goes to the drivers side A-pillar is for an optional 3rd toggle switch to activate the battery disconnect off of the A-pillar or cowl. (Pic 14)



11. Route the LED and Toggle Switch leads from the harness above to the center of the dash. These leads consist of the LED light connection as well as a toggle switch connection for the center stack (tombstone). (Pic 15)

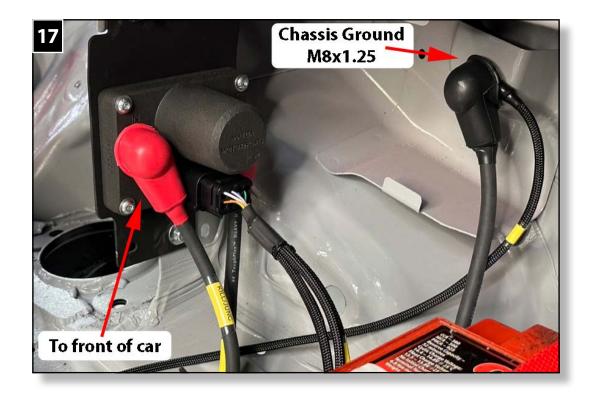


- 12. Return to the passenger footwell and run the battery disconnect harness rearward along the rocker up to the B-pillar. There is a lead here for a toggle switch to activate the battery disconnect.
- 13. Continue running the battery disconnect harness from the B-pillar rearward to the passenger side trunk.
- 14. Secure all cabling appropriately inside the car.
- 15. Once all cabling is sacred properly, connect the female battery disconnect harness connector in to the male plug on the battery disconnect switch. (Pic 16)

16. Install the long main battery cable that is routed to the front of the car to the drivers side kill switch post (IN). (Pic 17)



- 17. Install the short Red battery cable to the battery passenger side disconnect switch post (OUT). Route the other end towards the positive side of the battery. **DO NOT** connect the positive side of the battery at this time.
- 18. Install the ground cable from the M8 chassis mount in the trunk to the negative side of the battery. (Pic 17)



#### **Toggle Switches**

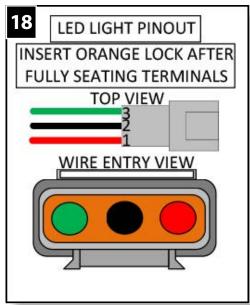
- 1. Start with center stack toggle switch.
- 2. Remove bulkhead nut on toggle switch.
- Drill a .468 hole in dash using a 15/32" drill bit where you want the toggle switch to reside.
- 4. Install toggle switch in hole.
- 5. Install washers and nut.
- 6. Tighten nut on toggle switch.
- 7. Remove eyelet screws on toggle switch
- 8. Install toggle switch connection eyelet from disconnect harness to toggle switch

#### **LED Light for Dash**

- Decide on location on the dash you want your light to be placed.
- 2. Drill hole for LED light wire leads to pass through.
- Remove threaded bulkhead nut on LED light.
- 4. Thread light through hole in the dash.
- 5. Thread bulkhead nut back onto the LED light housing and tighten.
- 6. Once the light is installed in the dash you can attach the plastic connector to the pins. (Pic 18)
- 7. Connect female connector on LED light to male connector on the disconnect harness.







## Fire Suppression Trigger Switch (optional) — 0000-10-9223

- 1. The battery disconnect switch has circuity in it that can automatically shut off the kill switch if the fire bottle is activated. This kit consists of a T-Fitting and pressure switch. The battery disconnect harness already has a connector on it for this pressure switch.
- 2. Install T-fitting inline into the aluminum tubing of your fire system.
- 3. Thread pressure switch into T-fitting.
- Plug the male connector from the fire suppression trigger switch into the female lead labeled Fire on the battery disconnect harness.

Once all components of the battery disconnect system have been installed per the instructions, you may proceed with connecting the positive cables to the battery.



#### Battery Relocation Tray Kit — 0000-10-5801

- 1. The battery tray will be installed on the passenger side of the vehicle at the top edge of the spare tire well.
- 2. Center battery tray front to back between vertical ribs in spare tire well. The side of the battery tray with the strap sewn to it should be facing the passenger rear quarter panel. (Pic 21)
- Align vertical edge of battery tray to the vertical edge of the spare tire well. This step is important in order to get the bolts to go through the doubled material from the frame rail beneath. (Pic 21)
- 4. Use a center punch 5/16" to mark the center of the bolt hole in the battery tray on the unibody.
- 5. Once all four hole locations are marked, drill the holes.
- 6. Bolt the battery tray to the unibody using supplied bolts and nylock nuts. (Pic 19)
- 7. Drop in rubber gasket to battery tray and align the holes. (Pic 19)
- 8. Install the battery tie down guides into the hand holds on the battery. Make sure that the guide with the pin hole in it is on the side of the battery tray that the strap is sewn.
- Balance the battery on the edge of the tray so you can get the strap started over the battery and through the slot in the battery tray closest to you. (Pic 20)
- 10. Once the strap is started through the slot on the battery tray facing the middle of the spare tire well, set the battery down into the battery tray.
- 11. Align the strap into the strap guides.
- 12. Pull strap as tight as possible removing all slack and engage the velcro on the vertical and horizontal surface.
- 13. Install pin through the loop in the strap and corresponding holes in the strap guides.
- 14. Drill 1/8" hole in metal tab on the car to secure the battery pin lanyard. (Pic 22)
- 15. Bolt lanyard to tab on unibody. .





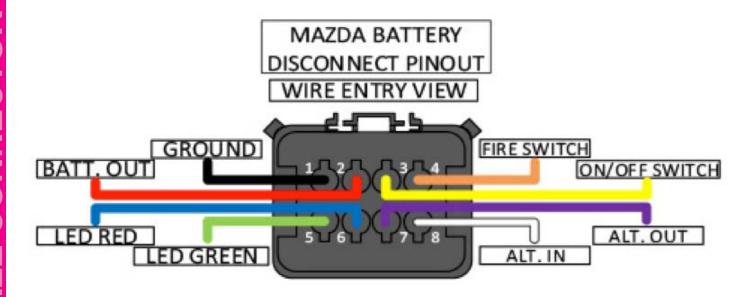




## Female Connector for Battery Disconnect Switch - 0000-10-9224



Mazda Motorsports Battery Disconnect Switch Connection Kit



# **Battery Disconnect Switch Mounting Plate —** 0000-10-9225

