



# **MMB200**

# **Mighty Mule® Battery Enclosure Kit**



Installation Instructions

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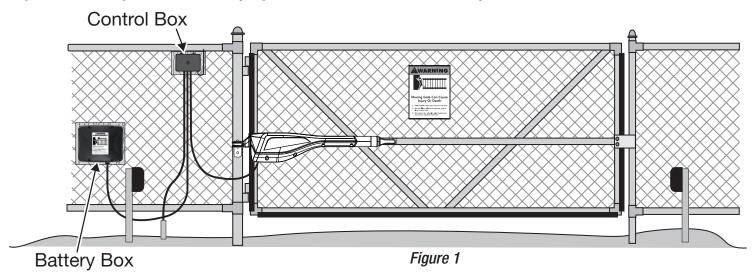
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### **ENCLOSURE KIT INSTALLATION OPTIONS**

There are two available choices for Battery Enclosure Kit installations.

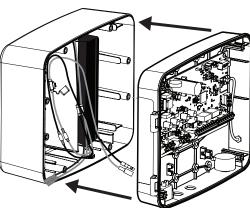
For MM271 and MM272 installations, the Battery Enclosure Kit will need to be installed separately from the Control Box (*see Figure 1*). This method is NOT required for MM371W, MM372W and TS571W installations, but it may be used.

#### **Separate Battery Enclosure Kit (required for MM271 and MM272)**

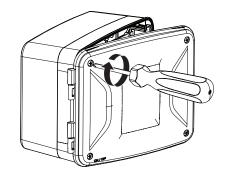


#### Battery Enclosure Kit Combined with Control Box (available for MM371W, MM372W and TS571W)

This option allows MM371W, MM372W and TS571W owners to mount the Battery Enclosure Kit behind the Control Box and cover.

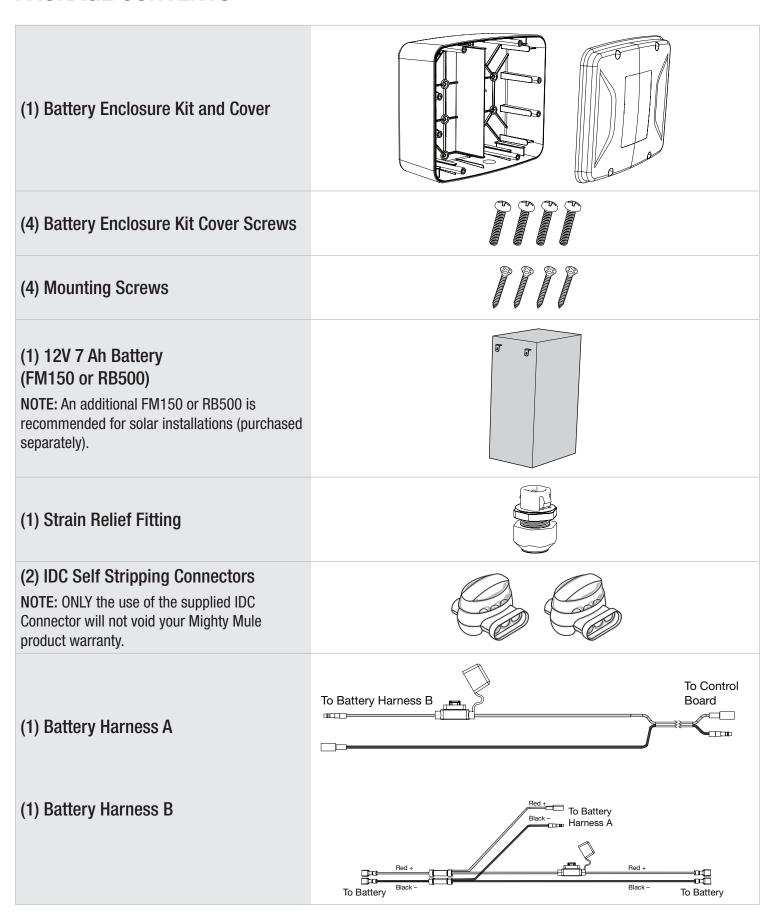


1. Once the Battery Enclosure Kit is mounted, the Control Box will mount onto the Battery Enclosure Kit.



2. The Control Box Cover is then attached to the to the Control Box. The provided Battery Enclosure Kit Cover may be discarded.

See Mount the Battery Enclosure Kit on page 7.

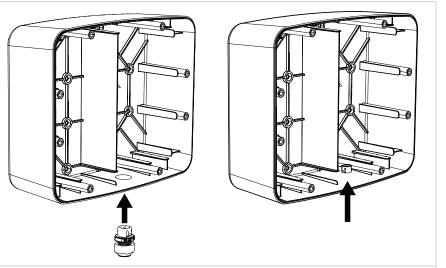


## **TOOLS REQUIRED**



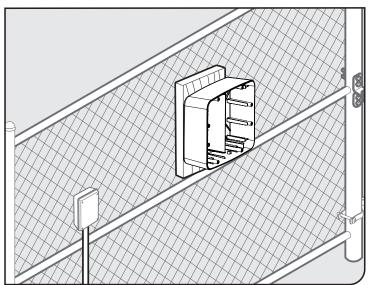
## **MOUNT THE BATTERY ENCLOSURE KIT**

**1.** Insert the Strain Relief fitting into the access hole on the bottom of the Battery Enclosure Kit, then snap it into place.



**2.** Identify a suitable mounting location for the Battery Box, within 6' of the control box.

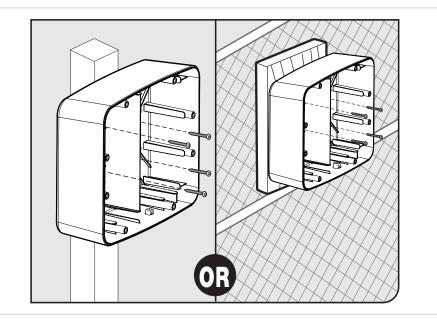
**NOTE:** For MM371W, MM372W and TS571W systems, the Battery Box may be placed where the Control Box is currently located. The Control Box will be attached to the Battery Box at the end of the process.



**NOTE:** If the mounting surface is not wood (such as a metal post), you must use a wood panel between the box and the metal post which requires additional hardware (not supplied).

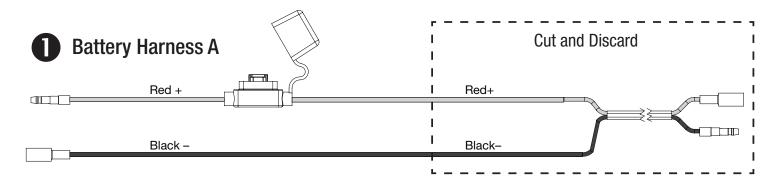
**3.** Once you've identified a suitable mounting location, mount the Battery Enclosure Kit using the provided mounting screws.

**NOTE:** Orient the Battery Enclosure Kit with the arrow on the inside of the box pointed up.

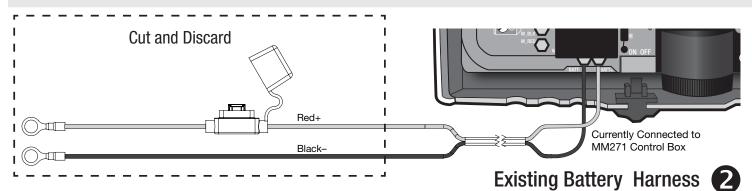


#### MM271 INSTALLATION PREPARATION

In order to install the Battery Kit to your existing MM271 gate arm system, the wiring harness currently connected to the MM271 Control Box will need to be modified using a section of a newly provided wiring harness. **NOTE:** DO NOT attempt to disconnect the wiring harness from the MM271 Control Box.

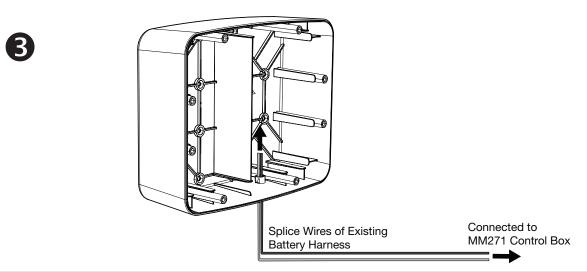


**1.** Cut the section of the provided Battery Harness A.



- 2. POWER OFF THE MM271 CONTROL BOX.
- **3.** Cut the indicated section from the existing wiring harness currently connected to the MM271 Control Box.

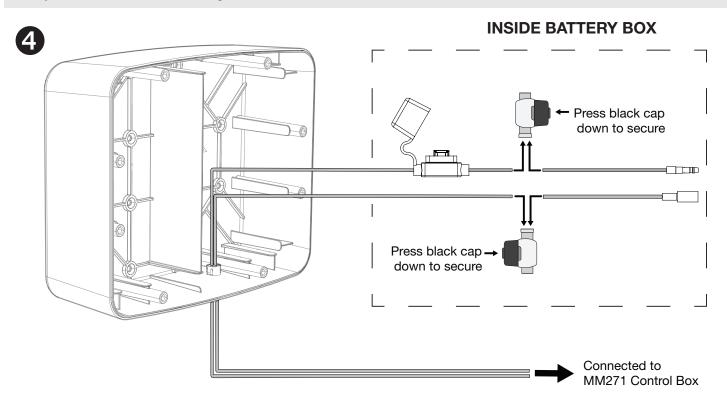
NOTE: DO NOT attempt to disconnect the existing MM271 wiring harness from the Control Box.



**4.** Feed the spliced end of Battery Harness A (connected to the MM271 Control Box) through the Strain Relief fitting from underneath the Battery Enclosure Kit. The wiring harness will then need to be constructed and sealed inside the Battery Enclosure Kit.

#### NOTE: DO NOT PERFORM THIS STEP BEFORE FOLLOWING STEP 3!

The IDC Self Stripping Connectors will not fit through the Strain Relief Fitting and must be connected after the existing battery harness has been fed through.



**5.** Splice the two harness sections together using the two provided *IDC Self Stripping Connectors*, ensuring that the new harness will rest within the Battery Enclosure Kit.

Insert alike wires (Black-to-Black and Red-to-Red) into one connector, then use press firmly with your thumb (or use pliers) to press down on the black cap to snap and secure the connection.

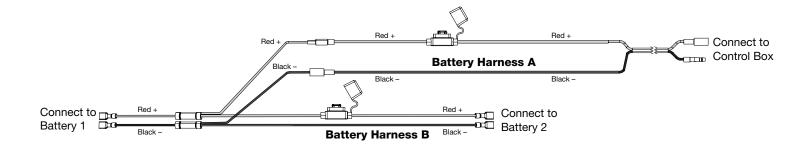
**NOTE:** Once an IDC Self Stripping Connector is snapped and secured, it cannot be removed without damage.

## **MM271 BATTERY INSTALLATION**

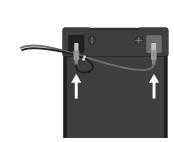
This section covers battery installation for the MM271. However, this set of instructions for a separate Control Box installation can also be used for MM371W, MM372W and TS571W installations. See MM371W, MM372W, TS571W Battery Enclosure Kit Setup, page 17, for instructions on the preferred method for MM371W, MM372W and TS571W installations.

To complete construction of the required harness, connect Battery Harness A to Battery Harness B (refer to the diagrams on this page).

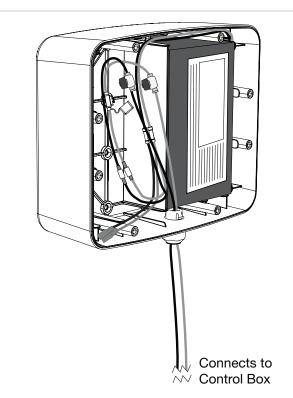
**NOTE**: Either end of the newly constructed Battery Harness may be connected to the first battery. The opposite battery connection is available for a second battery.



1. Connect the battery harness to the battery as shown - red to positive, black to negative terminals.



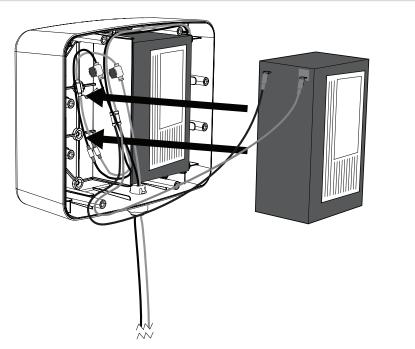
2. Place the first installed battery into the right side of the Battery Enclosure Kit with the terminals facing to the right and towards the top of the Battery Enclosure Kit.



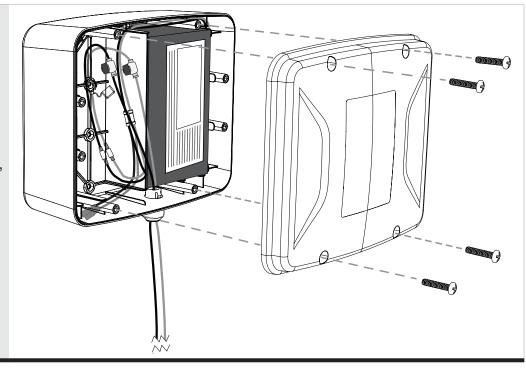
#### **OPTIONAL SECOND BATTERY**

- If you'll be installing a second battery, connect the second set of harness connectors to the battery.
- Insert the battery into the left side of the Battery Enclosure Kit with the terminals facing outward.

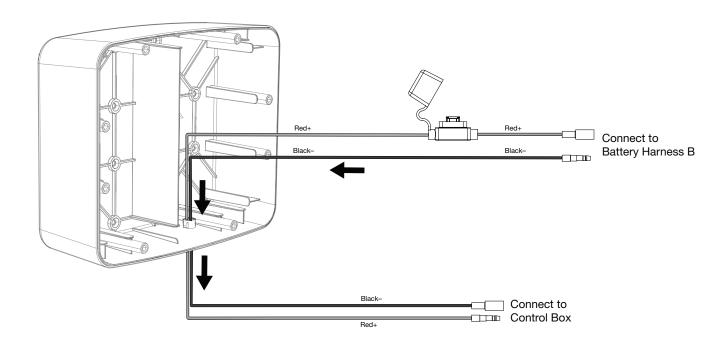
**NOTE:** If no second battery is to be installed, leave the second battery set of connectors not connected.



**3.** With the battery(s) in place and connected to the wiring harness, use the four provided screws to secure the Battery Enclosure Kit cover.



## **MM272 INSTALLATION PREPARATION**



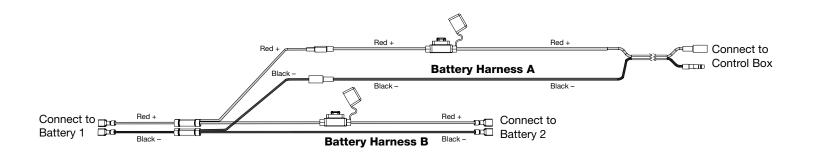
Feed the Control Box end of Battery Harness A through the Strain Relief fitting as displayed above.

## **MM272 BATTERY INSTALLATION**

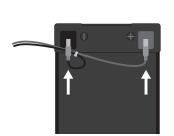
This section covers battery installation for the MM272. However, this set of instructions for a separate Control Box installation can also be used for MM371W, MM372W and TS571W installations. See MM371W, MM372W, TS571W Battery Enclosure Kit Setup, page 17, for instructions on the preferred method for MM371W, MM372W and TS571W installations.

To complete construction of the required harness, connect Battery Harness A to Battery Harness B (refer to the diagrams on this page).

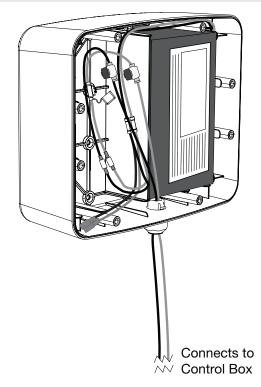
**NOTE**: Either end of the newly constructed Battery Harness may be connected to the first battery. The opposite battery connection is available for a second battery.



1. Connect the battery harness to the battery as shown: red to positive, black to negative terminals.



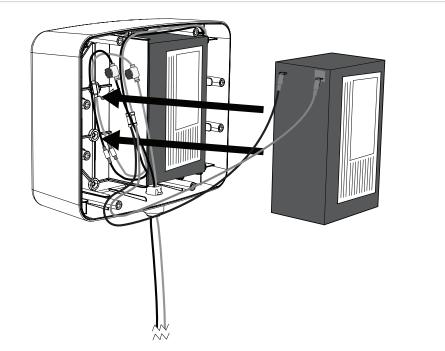
2. Place the first installed battery into the right side of the Battery Enclosure Kit with the terminals facing to the right and towards the top of the Battery Enclosure Kit.



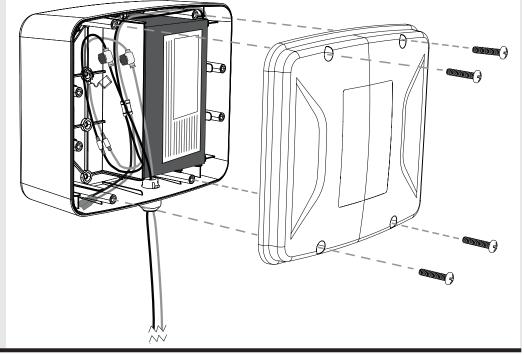
#### **OPTIONAL SECOND BATTERY**

- If you'll be installing a second battery, connect the second set of harness connectors to the battery.
- Insert the battery into the left side of the Battery Enclosure Kit with the terminals facing outward.

**NOTE:** If no second battery is to be installed, leave the second battery set of connectors not connected.

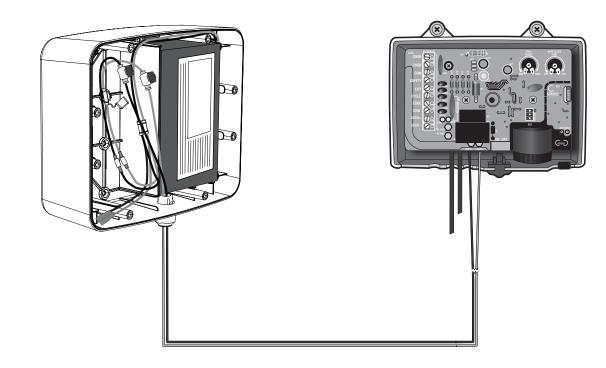


**3.** With the battery(s) in place and connected to the wiring harness, use the four provided screws to secure the Battery Enclosure Kit cover.



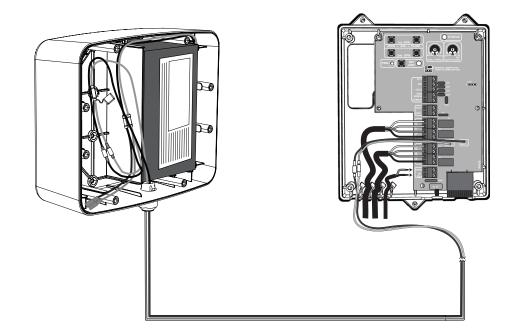
## FINAL MM271 BATTERY ENCLOSURE KIT SETUP

**MM271 Control Box – Battery Enclosure Kit Connection** 



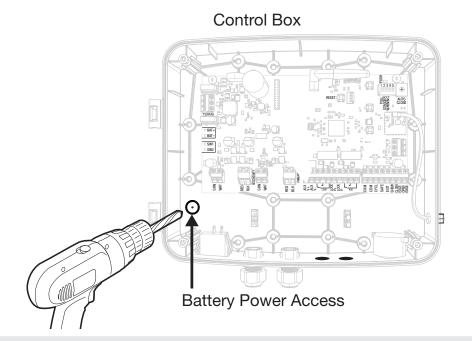
# FINAL MM272 BATTERY ENCLOSURE KIT SETUP

**MM272 Control Box – Battery Enclosure Kit connection** 

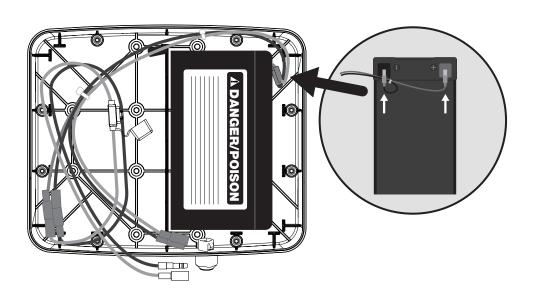


## MM371W, MM372W, TS571W BATTERY ENCLOSURE KIT SETUP

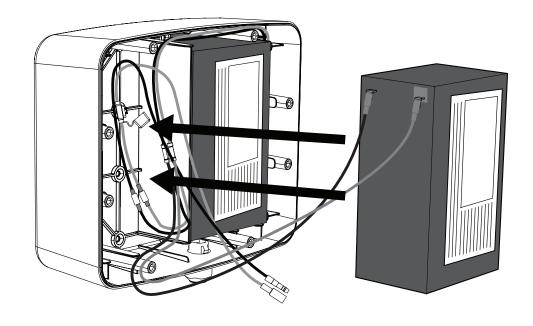
**Control Box – Battery Enclosure Kit Connection** 



1. In order to install the Battery Kit, you'll need to provide wiring access from the Control Box to the Battery Enclosure Kit. With a drill and 1/2" drill bit, drill out the plug designated for Battery Power Access.



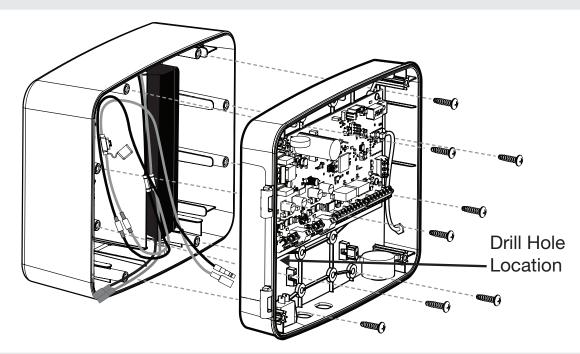
- **2.** Connect the battery harness to the battery as shown: red to positive, black to negative terminals.
- **3.** Place the battery into the right side of the Battery Enclosure Kit with the terminals facing to the right and towards the top of the Battery Enclosure Kit.



#### **OPTIONAL SECOND BATTERY** (Recommended for Solar installations)

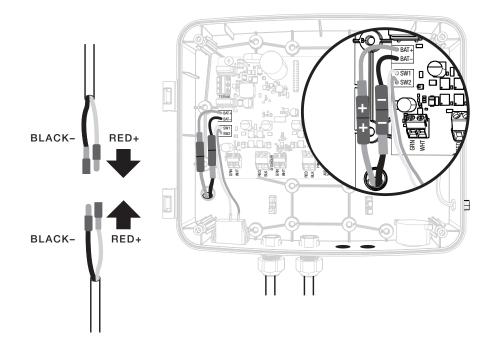
- If you'll be installing a second battery, connect the second set of harness connectors to the battery.
- Insert the battery into the left side of the Battery Enclosure Kit with the terminals facing outward.

**NOTE:** If no second battery is to be installed, leave the second battery set of connectors not connected.

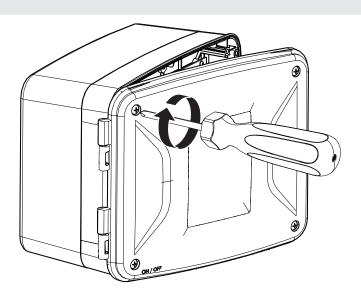


- **4.** With the 1/2" hole drilled, feed the Battery Harness connectors from the Battery Enclosure Kit through the Control Box's newly drilled access hole.
- **5.** Use a 7/32" drill bit to drill out the holes required to secure the Control Box to the Battery Enclosure Kit. Use #10-14 x 3/4" Screws to attach the Control Panel to the Battery Enclosure Kit.

NOTE: Control Box mounting screws are not included with MM371W and MM372W.



**6.** Connect the harness (Red+ to Red+) and (Black- to Black-).



**7.** Align the hinges of the Control Box cover, then close the cover.

**NOTE:** For **MM371W**, **MM372W** and **TS571W**, the Control Box and Cover can be attached to the Battery Enclosure Kit. In this situation, the provided Battery Enclosure Kit Cover may be discarded.

**8.** Secure the cover with the four provided screws.

If desired, the battery enclosure can also be installed separately from the control box. To do so, simply follow steps outlined for the MM272.



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