

ELECTRIQ POWER™

*The Smart Home Battery Solution*



# Quick Install Guide

## for the Electriq Power

### Power Shutdown

### Switch

*Model Number:  
EPP-600-1011*

V. 050620

## 1. Purpose

The purpose of this document is to provide the requirements and instructions to attach an external emergency power shutdown switch to the PowerPod energy storage system. The switch shut down the inverter so a) no power is supplied to the essential load when the breaker labeled “from inverter” is in the up (ON) position. b) No energy is taking from the batteries or PV modules.

Material listed in the document is supplied in the kit with the exception of two 14 AWG wires from the external switch. One wire to the fuse and one wire to the relay. It is the installer responsibility to be informed and meet the AHJ requirements for installation.

## 2. Scope

This procedure applies to the PowerPod Energy Storage System.

## 3. Equipment

3.1. **Fluke 117 Multimeter with Non-Contact Voltage LoZ Auto Volts True RMS voltmeter**

## 4. References

4.1. Electriq Power document # EPP (AC-DC Installation Manual, Service & Users Guide for the AC- & DC-Coupled Electriq PowerPod

## 5. Material BOM

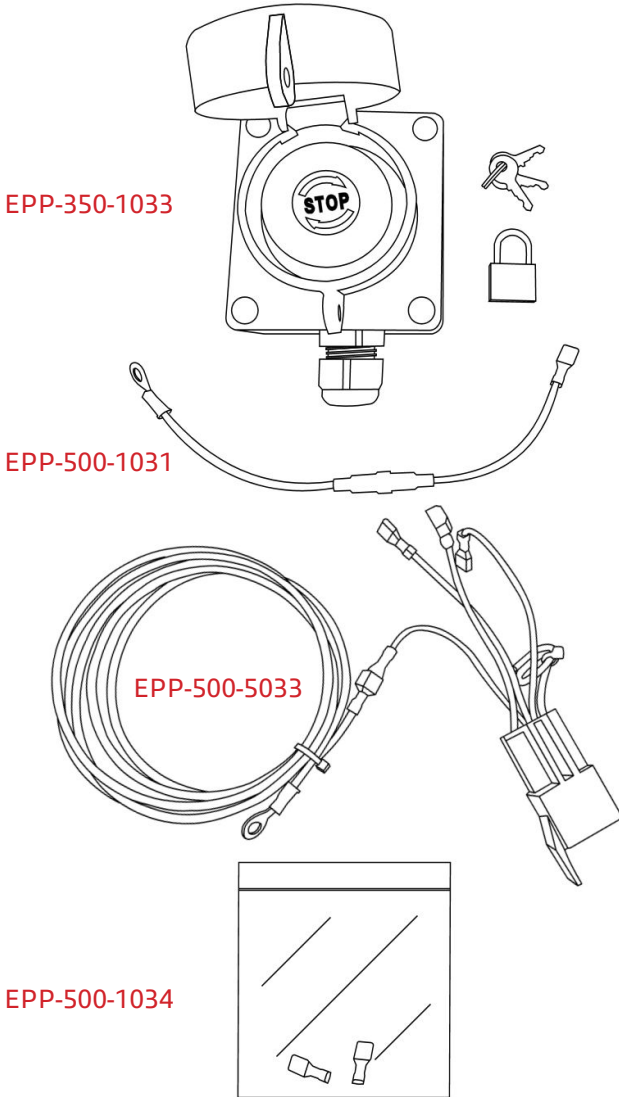
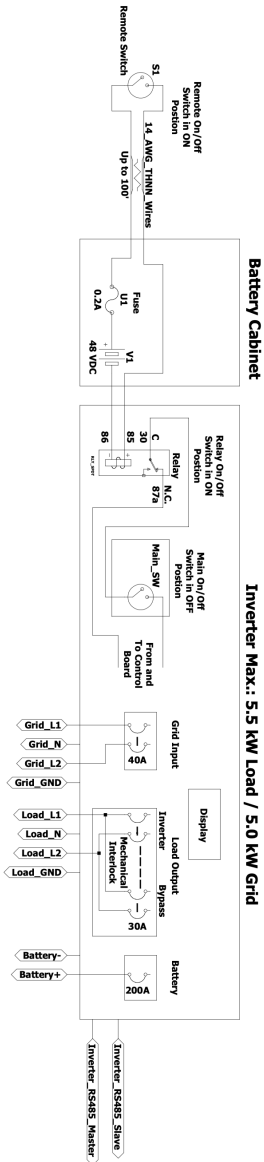


Figure 1. Emergency Shutdown Switch Kit

## 6. Schematic



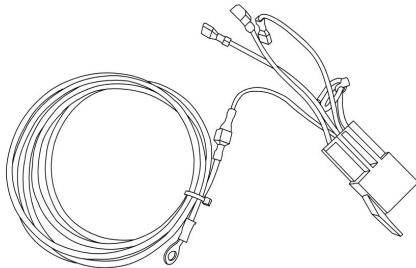
Note 1, the remove switch is “open” to operate (turn on) the inverter.

Note 2, the Relay “Common” and N.C. leads to the Inverter Main switch must be no longer than six inches.

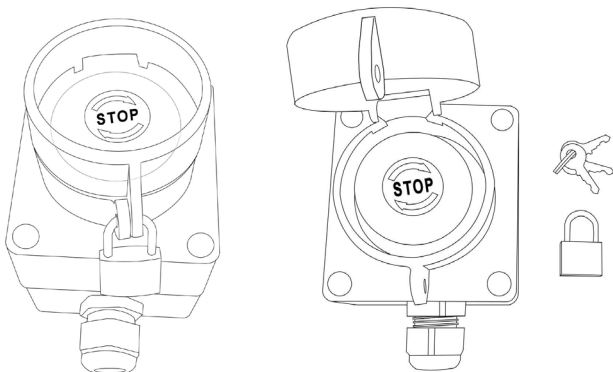
Note 3, the Relay must be located inside the inverter enclosure right behind to the existing Main Switch to avoid switching RFI parasites from causing the switch not to operate.

## 7. Installation

### 7.1. Rough wiring the Emergency Stop Switch.



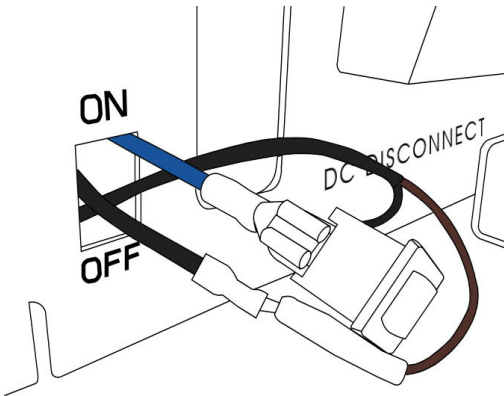
- 7.1.1. Open the inverter communication enclosure cover by removing two Philips screws.
- 7.1.2. Mount the Emergency Stop Switch to its desired location.
- 7.1.3. Route two 14 AWG THNN wires from the inverter and battery location to the Emergency stop Switch location.
- 7.1.4. Disassemble the Emergency Stop Switch from its housing.



- 7.1.5. Connect each wire to the N.O. contact and reassemble Emergency Stop Switch.
- 7.1.6. Route one of the 14 AWG wires to the battery cabinet and the other one to the communication enclosure.

## 7.2. Wiring the inverter Main Switch and one side of the Emergency Stop Switch to the relay.

- 7.2.1. Use a medium size flat blade screwdriver to push the Main Switch locking detent so the switch comes partially out on one side approximately 1 mm.
- 7.2.2. Gently pry out the inverter Main Switch. See below:



- 7.2.3. Crimp one of the male lugs in the parts bag to the 14 AWG wire from the Emergency Stop Switch.

- 7.2.4. Remove the female connector from the switch center contact on the Main Switch.
- 7.2.5. Slide the relay into the relay into the communication enclosure so the two-heaver gauge, 1.5 mm, wires stick out the hole the Main switch was in.
- 7.2.6. Attached the female lug from the relay to the Main Switch center connector and the male lug from the relay to the loose wire that was removed from the Main Switch. The N.C. relay contacts (Pin 30 and Pin 87a) goes in series with the existing inverter Main Switch.

Note, locate the relay as close as possible to the inverter's Main Switch inside the inverter Communication enclosure.

- 7.2.7. Reinstall the Main Switch.

### 7.3. **Wiring the Fuse, Battery and other side of the Emergency Stop Switch.**

- 7.3.1. Connect the ring terminal from the relay coil Negative (Pin 86, EPP-500-1033, long wire) to any negative battery terminal.
- 7.3.2. Connect the fuse ring terminal to the positive battery terminal.



- 7.3.3. Crimp one of the male lugs in the parts bag to the 14 AWG wire from the Emergency Stop Switch.
- 7.3.4. Connect the male 14 AWG wire lug to the female fuse lug.

Note, The above connections operate the relay via the remote switch. And the relay, in series with the exiting main switch will turn off Disable the inverter and essential loads.

- 7.4. **Check to see if the wiring is correct by comparing it to the schematic is section 6 above.**

## 8. Operation

- 8.1. The remote switch is open to operate (turn on) the inverter.
- 8.2. The remote switch is close to disable (turn off) the inverter. Note, essential loads are OFF unless the interlocking inverter bypass "FROM GRID" is switched ON.