

TORKLIFT **INTERNATIONAL**

OVER 35 YEARS OF INNOVATION, QUALITY, SAFETY.
IMPORTANT OWNER-OPERATOR INSTALLATION
INSTRUCTIONS

A7710R / A7710RS

Warning!!

This [battery box](#) is made of aluminum and is Conductive! Do not allow the battery terminals to touch the aluminum Battery Box. Be careful not to touch the battery box with a wrench while tightening the battery terminals, as this could cause a short!

! DANGER / POISON			
 SHIELD EYES EXPLOSIVE GASES CAN CAUSE BLINDNESS OR INJURY	 NO <ul style="list-style-type: none">• SPARKS• FLAMES• SMOKING	 SULFURIC ACID CAN CAUSE BLINDNESS OR SEVERE BURNS	FLUSH EYES IMMEDIATELY WITH WATER  GET MEDICAL HELP FAST
KEEP OUT OF THE REACH OF CHILDREN. DO NOT TIP. KEEP VENT CAPS TIGHT AND LEVEL.			

Warning!! Improper installation of Solar Equipped Power Armors may result in battery over-charging!

Single Solar Panel Option 1:

If you plan to use two or more batteries with a single 10-Watt Solar Panel, you will NOT need to purchase any additional parts.

Single Solar Panel Option 2:

If you plan to use one battery with a single 10-Watt Solar Panel, it is required that you use a 6 Amp Regulator (PN A7715) to prevent your battery from gassing and over charging.

Double Solar Panel Option 1:

If you plan to use 4 or more batteries with two 10-Watt Solar Panels, you will need to purchase a second solar panel (A7713) and either the Y-Harness adapter (A7714) or optionally a 6-amp regulator (A7715)

Double Solar Panel Option 2:

If you plan to use less than 4 batteries with two 10-Watt Solar Panels, you will need to purchase a second solar panel (A7713) and a 6-amp regulator (A7715)

Optional Solar Parts

PN - A7713 - Additional 10-Watt Solar Panel (Requires the use of **A7714** or **A7715** when installed as a second solar panel)

PN - A7714 - Y-Harness Adapter (Connects Two 10-Watt solar panels, not needed if using **A7715**)

PN - A7715 - 6-amp regulator **required when using less than two batteries per solar panel** (Regulates amperage to prevent gassing and over charging, will work with **one** or **two** 10-Watt Solar Panels, **A7714** not required)

Replacement Battery Mats

The battery mat included with the Power Armor Battery Box is acid neutralizing, and will help reduce any corrosion from spilled battery acid. It is a “wear” item and may eventually need to be replaced. New battery mats are available through Torklift International. Part numbers below.

PN: A7717- A7710RS/A7710RS Battery Mat

Inventory List

A7710R / A7710RS

Item:	Quantity:
Power Armor Max Battery Box	1
Power Armor Max Lid	1
Two Piece Divider Half	2
Drop In Stiffener	1
Battery Mat 58"	1
Battery Strap	5
1/4" x 1" SS Self-Drilling Screw	8
7/16" Square Profile O-ring	8
1/4"-20 x 1" SS Hex Bolt	6
1/4" SS SAE Flat Washer	12
1/4"-20 SS Hex Nut	6
1/4" Lock Washer	6
1/4"-20 SS Wing Nut	2
1/4"-20 x SS 3/4" Carriage Bolt	2
10 Watt Solar Panel (<i>A7710RS Only</i>)	1
15A Fuse Holder (<i>A7710RS Only</i>)	1
Positive Wire Female to Male Extension (<i>A7710RS Only</i>)	1

Step 1:

Remove the **Power Armor Max Lid** by sliding the lid away from the side of the box with the lock; then lifting the front edge and unhooking the lid from the tabs on the rear of the box.

Step 2:

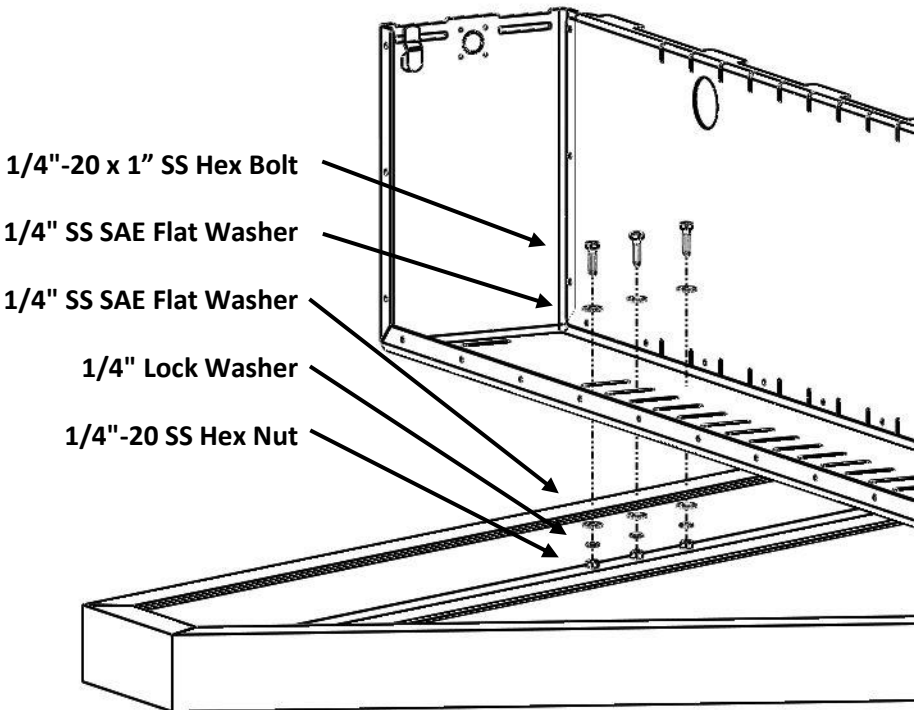
Test fit your batteries in the **Power Armor Max Battery Box**. If you plan on using the **Two Piece Divider**, all of the batteries will need to be on the same side of the box. The battery terminals should face the side of the box with the 2" holes. For solar models, the batteries should be closest to the side of the box with the lock. There are a series of slots cut into the bottom of the **Power Armor Battery Box** for the included **Battery Straps**. Make an incision in the **Battery Mat** over each of the slots you will need for the **Battery Straps**. Install the non-buckled end of the **Battery Straps** down through one of the slots and back up through the bottom of the **Power Armor Max Battery Box**. Use the straps to secure the batteries and ensure that they are situated correctly for your application. Once the battery box is installed, the straps will be difficult to adjust. Remove the batteries and **Battery Mat** before proceeding.

Step 3:

The two 2" holes in the front/back panel of the **Power Armor Max Battery Box** are used to allow the battery cables to enter the battery box. They can be mounted to either the front or rear of the trailer as long as there is sufficient room to open and remove the **Power Armor Max Lid**.

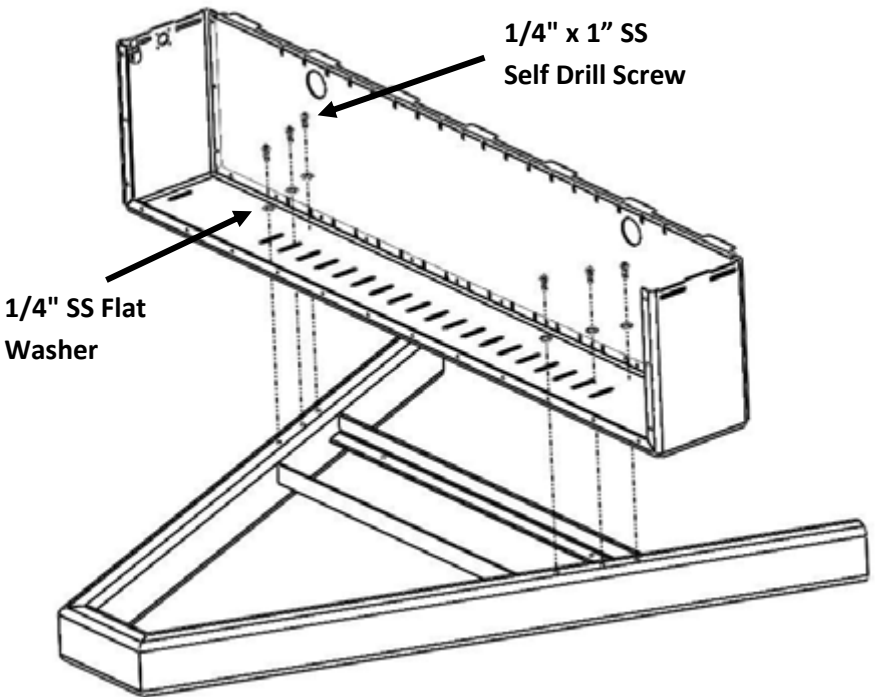
Place the **Power Armor Max Battery Box** where it is to be mounted. If the battery box is being installed on an open frame trailer, drill three 1/4" holes per side through the bottom of the battery box and into the trailer. Secure the battery box as seen in figure 3.1

Figure 3.1



If the battery box is being installed on a boxed frame trailer, install three **1/4" x 1" SS Self-Drilling Screws** per side through the bottom of the battery box and into the trailer frame. Place a **7/16" square profile O-ring** around the head of each screw/bolt to protect the battery mat from abrasion. See figure 3.2

Figure 3.2



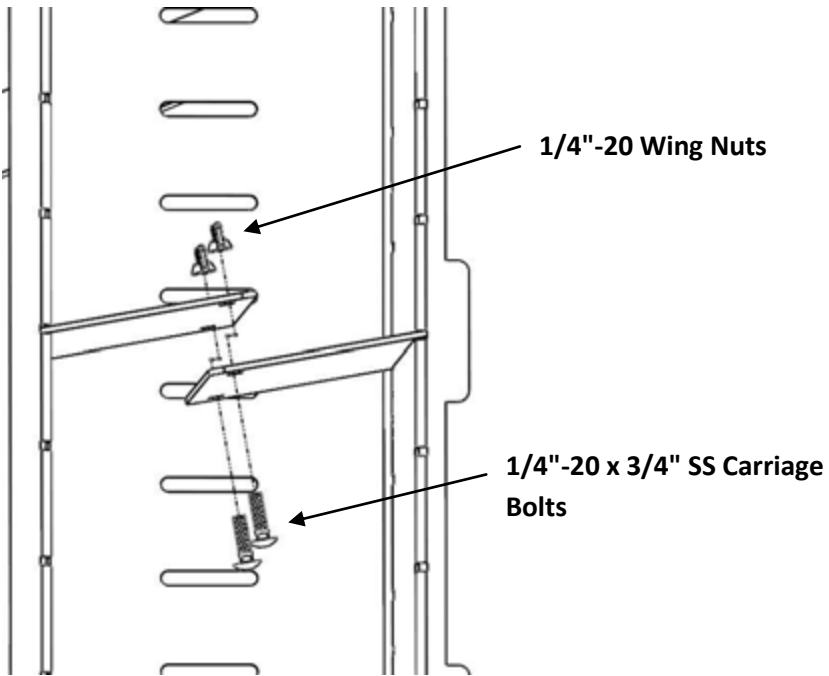
Step 4

Reinstall the **Battery Mat** and Batteries. To prevent any possible contact between the battery terminals and lock, the battery terminals should be oriented towards the side of the box with the 2" holes. Tightly secure the batteries with the battery straps.

Step 5:

If desired, a **Two Piece Divider** can be installed into the battery box. To install the **Two Piece Divider**, place the tabbed end of one of the **Two Piece Divider Halves** into the slots in the side of the battery box. Use the other **Two Piece Divider Half** to tab into the opposite side of the box. Bolt the two divider halves together using the supplied **1/4"-20 x 3/4" SS Carriage Bolts** and **1/4"-20 SS Wing Nuts**. The wing nuts should be on the opposite side of the divider from the batteries to avoid abrasion. See figure 5.1

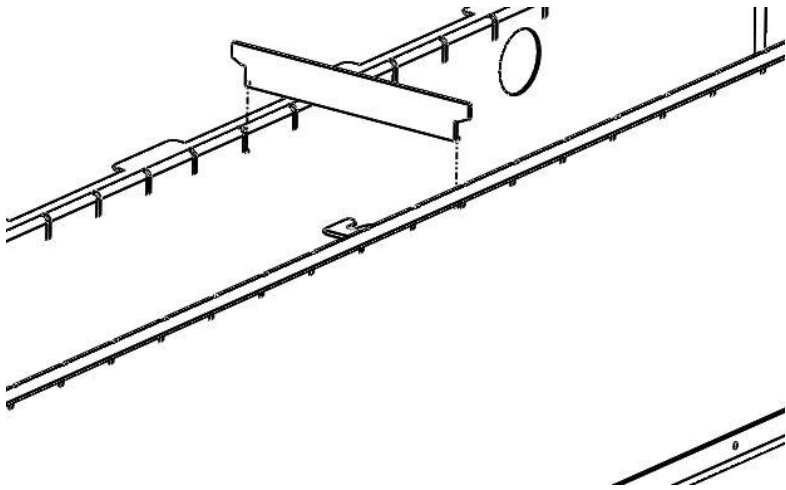
Figure 5.1



Step 6:

While flexing the front and back side of the battery box slightly apart, install the **Drop in Stiffener** into one of the four middle upper slots in the battery box as shown in figure 6.1. If the **Two Piece Divider** is already installed in one of these slots, the battery box stiffener will not be needed.

Figure 6.1



Step 7:

The **Power Armor Max** and **Power Armor Max Solar** battery boxes are capable of supporting multiple battery configurations. Depending on the configuration, additional battery cables may be required but are not included.

----- 12-VOLT BATTERIES -----

Wiring for **ONE** 12v battery: _____ **Figure 7.1**

Wiring for **TWO** 12v batteries: _____ **Figure 7.2**

Wiring for **THREE** 12v batteries: _____ **Figure 7.3**

Wiring for **FOUR** 12v batteries: _____ **Figure 7.4**

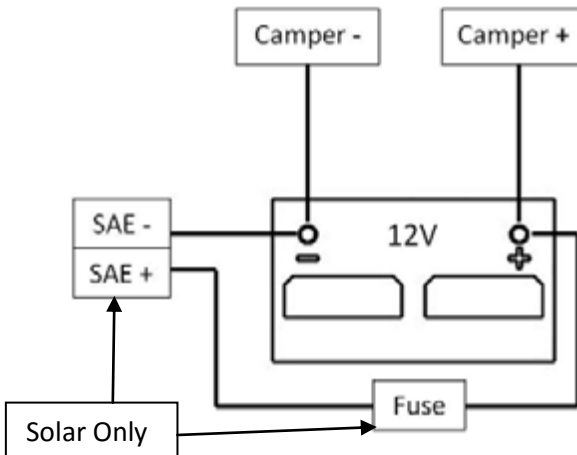
Wiring for **FIVE** 12v batteries: _____ **Figure 7.5**

----- 6-VOLT BATTERIES -----

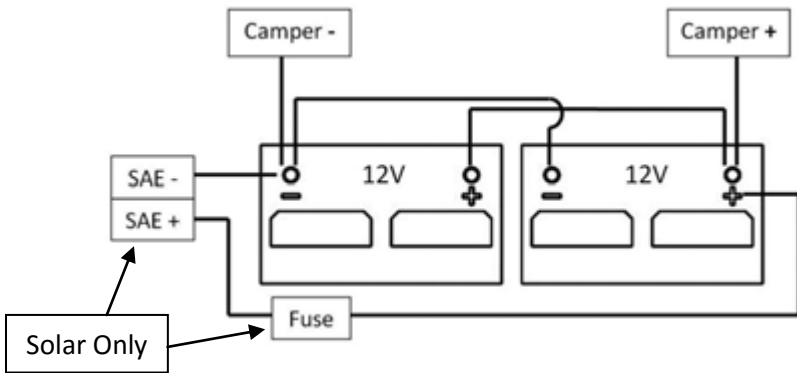
Wiring for **TWO** 6v batteries: _____ **Figure 7.6**

Wiring for **FOUR** 6v batteries: _____ **Figure 7.7**

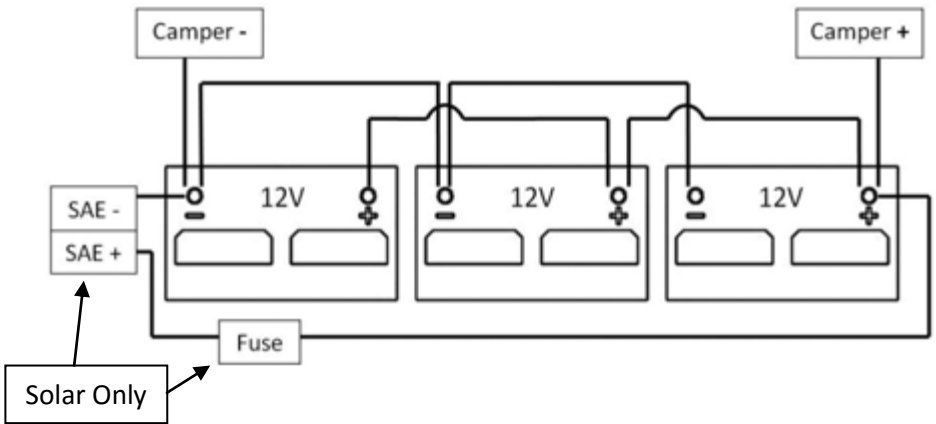
ONE 12v Battery Wiring Diagram (Figure 7.1)



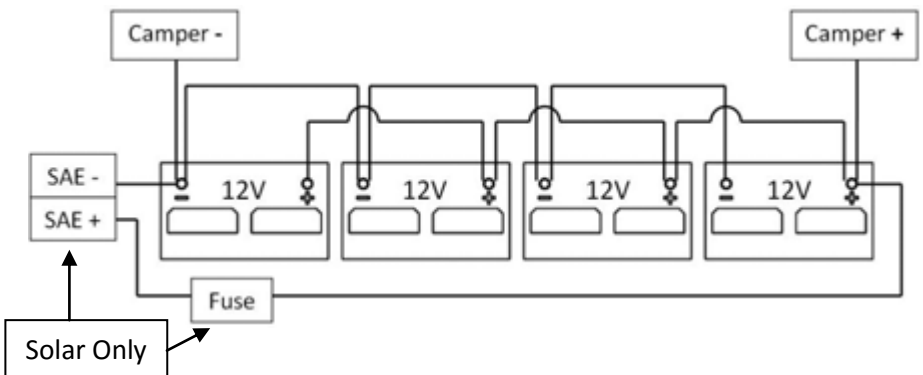
TWO 12v Batteries Wiring Diagram (Figure 7.2)



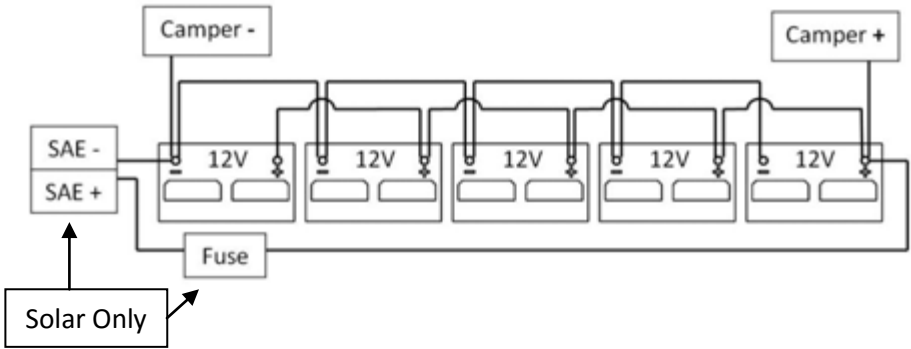
THREE 12v Batteries Wiring Diagram (Figure 7.3)



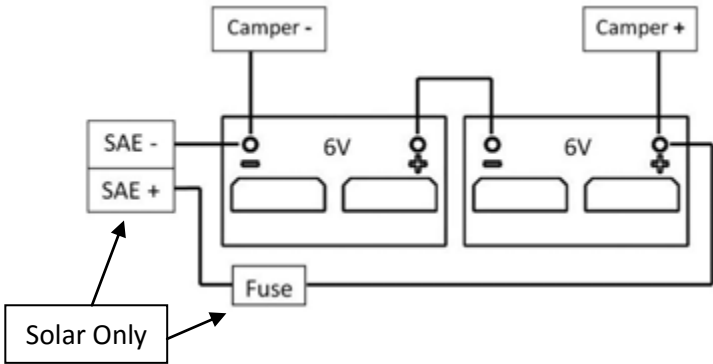
FOUR 12v Batteries Wiring Diagram (Figure 7.4)



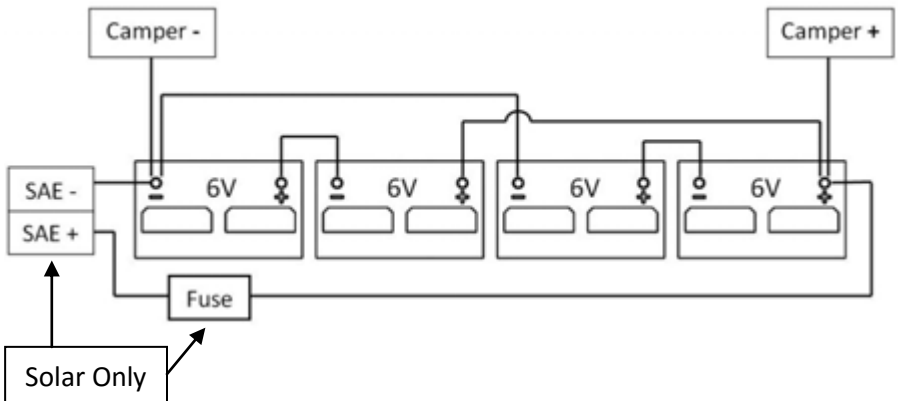
FIVE 12v Batteries Wiring Diagram (Figure 7.5)



TWO 6v Batteries Wiring Diagram (Figure 7.6)



FOUR 6v Batteries Wiring Diagram (Figure 7.7)



Step 8

To attach the **Power Armor Max Lid** to the **Power Armor Max Battery Box**, place it over the **Power Armor Max Battery Box**, and align it so the tabs on the **Power Armor Max Battery Box** fit through the slotted holes in the **Power Armor Max Lid** as seen in Figure 8.1

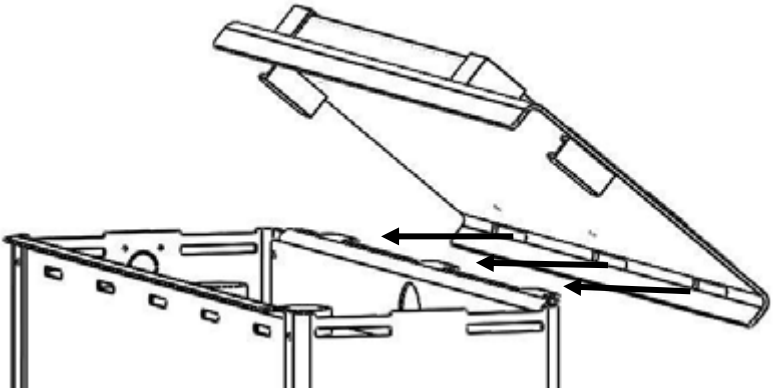


Figure 8.1

Step 9

Slide the **Power Armor Max Lid** away from the lock and lower it down over the front of the **Power Armor Max Battery Box**. Once the **Power Armor Max Lid** is sitting flat, slide it towards the lock so the Locking tabs on the lid slide into the **Power Armor Max Battery Box** as seen in figure 9.1

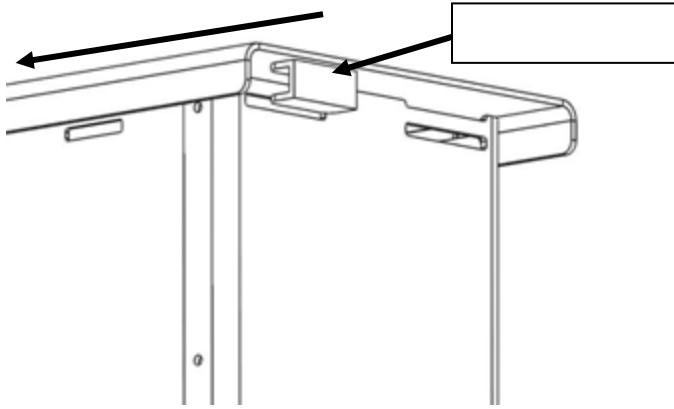


Figure 9.1

After the **Power Armor Max Lid** has slid into place, lock the key cylinder as seen in figure 9.2.

Solar Models Only: Connect the SAE connector from the Solar Panel into the SAE connector on the side of the Power Armor Solar Battery Box.

Figure 9.2

