

Power Plus Lithium Battery Upgrade



Airstream now has a new lithium battery upgrade kit available. Depending on the model year, and options, other items may need to be changed, like the converter and/or solar charger.

Battle Born battery model # BBGC2H, **Airstream part number 513862**, has a Bulk/Absorption rating of 14.2 to 14.6 volts. The Float rating is 13.4 to 13.8 volts. Each battery has a 100 amp hour rating. The battery has a max voltage of 14.7 and will stop charging if this is exceeded and a low voltage shut off of 10 volts, at which point it will stop discharging. The battery has a high temperature rating of 135 degrees and will not charge or discharge above this rating. The battery has a low voltage of 25 degrees and will not charge below this temperature, but does have an internal heater if using in cold conditions. Details on wiring the heater and its parameters are included in these Instructions.

Notice:

This charging system has been optimized for Lithium batteries.
 Lithium Iron Phosphate (LiFePO₄) batteries accept a higher charge rate than Lead acid.
 Lead Acid batteries including GEL +AGM will be damaged by this higher charge rate.
DO NOT REPLACE WITH LEAD ACID BATTERIES OF ANY TYPE.
NO SERVICEABLE COMPONENT IN THIS LITHIUM BATTERY
 For assistance or questions call: Battle Born customer service at 855-292-2831,
 Airstream customer service at 937-596-6111, or the nearest Airstream Dealer.

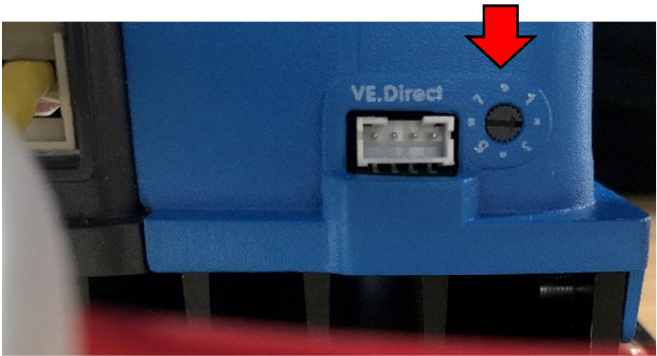


You will need a Notice sticker, Airstream part number 386433, to be installed on the top of each battery. This is very important, once you change the converter for lithium you can no longer use AGM or lead acid batteries with the trailer, unless you reinstall the original converter and change the solar controller.

Solar Controllers:

All 2021 models and Classic's 2019 and newer:

For the 2021 model year, we changed our solar charging system to the Victron charger and display. If the unit has a factory installed solar charging system, you will need to change the settings on the solar controller from 3 (AGM) to 7 (Lithium). This solar charger is a three stage charger and is optimized for the new lithium batteries.



All 2017-2020 units and Classic's 2017-2018:

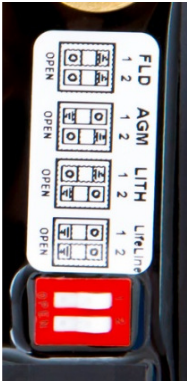
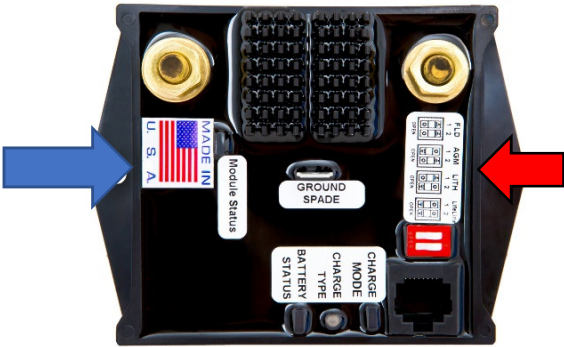
The Sun Explorer II Solar Controller 40 AMP was an optional package from 2017 through 2020. This solar controller will need to be changed to one that has an option to pick the battery type, but the display can be used. In January of 2018 we changed from 10 gauge wire for the solar.

Sun Explorer II 40 amp kit Airstream
part number 513247

40 amp controller with switchable
battery choices, Airstream part number
511846-102

Display: Airstream part
number 513247-100

Controller: Airstream part
number 513247-105



All 2016 and older units:

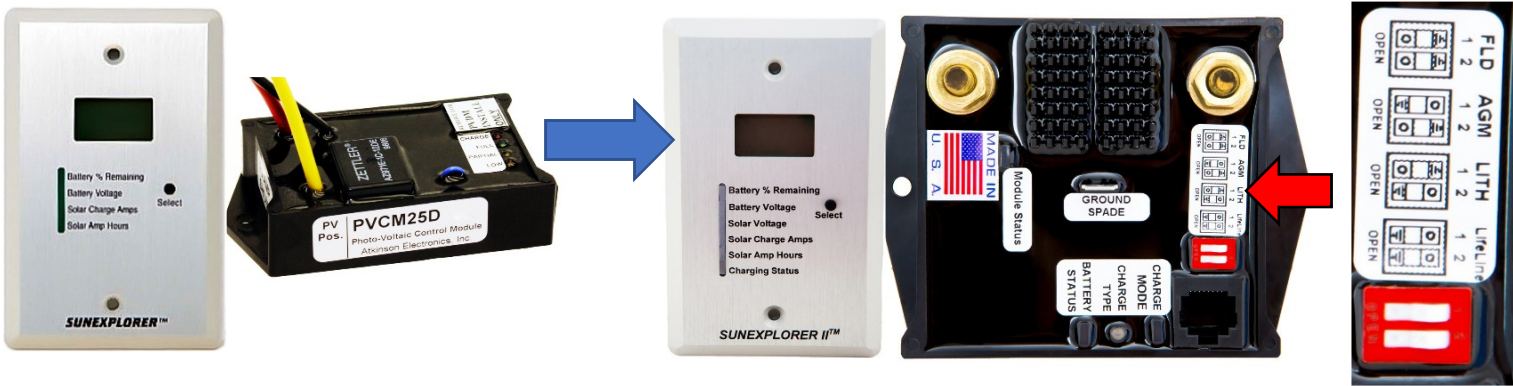
If a 2016 or older unit had factory solar installed, it will have the 25 amp solar controller and display. Both the display and controller will need to be changed for lithium batteries to be installed.

25 amp controller and display

40 amp controller with switchable battery choices

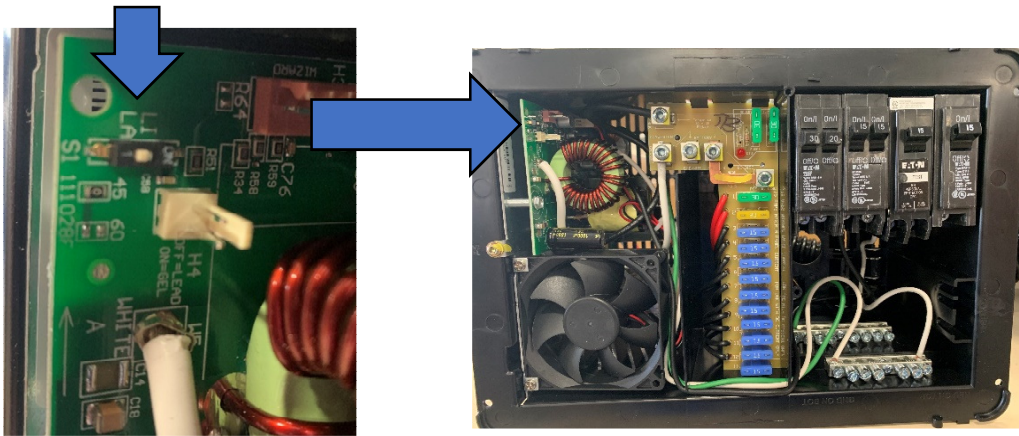
Display: Airstream part number 513247-100

Controller: Airstream part number 511846-102



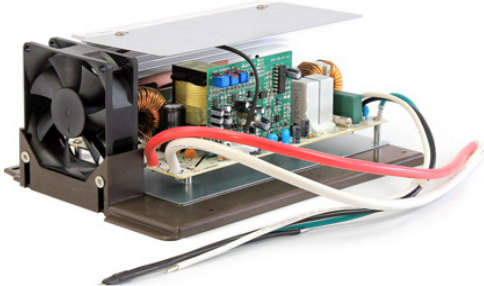
Converters:

The new 2021 Basecamp 20 has a new Progressive Dynamics power center with a switchable converter. This power center has a Lithium option and will only need the lithium batteries installed. The switch will need to be moved to the LI position for lithium. Airstream part number 513802



All other 2021 and older trailers will need the converter changed when adding the new lithium batteries.

For 30 amp units, you will need to replace the converter with a new WFCO WF-8950L2-MBA. **Airstream part number 513889.** This converter will have the charging parameters for lithium



For 50 amp units, you will need to replace the converter with a new WFCO WF-9850L2. **Airstream part number 513890.** This converter will have the charging parameters for lithium



Battery Box:

The Battle Born lithium batteries will fit in the current battery box. The battery dimensions are L 10.32" x W 7.19" x H 11", and each battery weighs 31 Lbs. All 2016 and older units will need to have the battery box replaced with this new larger battery box, or a 3" collar added to the box under the lid. The older box fits two group 24 batteries, whereas the current battery box can fit two 6-volt batteries, which is the size of the Battle Born batteries. The Airstream part number for the battery box is 916044.

Before 2016 the box was 8-1/4" deep

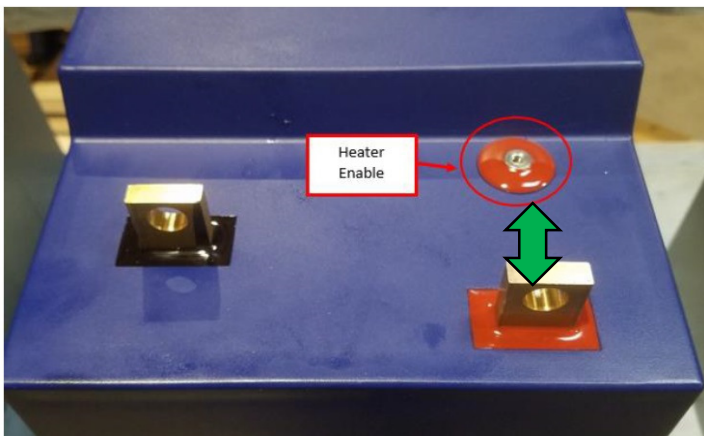


2016 and newer units will have a 12" deep box



Battery Heater:

Each Battle Born battery has an internal heater that should be wired if the guest plans on using their trailer in temperatures below 35 degrees. The wiring kit included with the battery will connect the positive terminal and the heater screw connector. When storing the unit in temperatures below 35 degrees it is best to disconnect the heater or install a switch to turn the heater off, as the heating element will have a draw of 250 milliamps.



Storage and Maintenance:

Storage:

When storing the batteries, charge the batteries to at least a 50% state of charge. It is best to charge them to 100% and disconnect them from anything that would discharge the battery, including the battery heater.

Maintenance:

The only maintenance needed is to make sure the terminals are clean and that the cables are tight.