OPERATION MANUAL

Portable Solar Power Generator

SPG530-500AH-24V-TLR10

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SPG530-500AH-24V-TLR10 SERIES OPERATION MANUAL

DEPLOYING THE UNIT

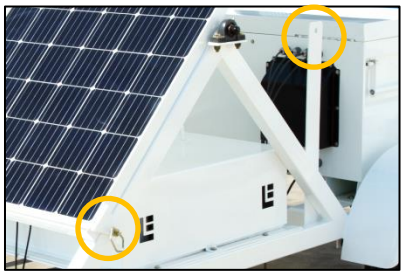
1. Choose a location that is close to level as possible to position the trailer. Drop the trailer from the tow vehicle using the single hand jack located on the front of the trailer. Ensure that the safety chains, trailer cable, and breakaway lanyard have been disconnected from the tow vehicle.

2. Once the trailer has been disconnected from the hitch of the tow vehicle, extend the remaining jacks. There are (2) leveling jacks located on the back and (2) jacks located on the front of the trailer. Pull the pin on the side of the jack to rotate it 90° toward the ground and hand crank the jack clockwise to extend it. **Models with light mast, use a bubble level to ensure the mast is level before extending!**





3. To position the solar panels 45°, there is a pin located on each side of the solar panel. Remove each pin to free the panel assembly and pivot the solar panels down against the frame at a 45° angle. Insert each pin to secure the panels in the new position.



4. Unlatch the solar panel and reposition it 45°. There is a hand screw located on each side of the solar panel. With help, remove each hand screw to free the panels and pivot the solar panels down against the frame at a 45° angle. Insert each hand screw to secure the panels.



5. Open the job box located on back of trailer. If included with a padlock, locate the keys to both padlocks if it is locked. The job box will open once unlocked and there is no need to remove the padlocks.



6. See Solar Controls section. Move the power switch to its **ON** position to power the internals. Make sure all breakers and switches are moved to the **ON** position at this time. This will enable power to your attached devices and allow the solar panels to begin charging the batteries. A built in cooling system will circulate air when the job box exceeds 90° F (32° C) to help keep the internals cool.

SOLAR CONTROLS

The job box consists of all the solar controls and electronics.
The following switches should be turned ON for proper function.

- **Yellow Breaker ON** – Solar Controller cutoff switch. Enables battery charging.
- **Black Toggle Switch ON and Breakers ON** – Enables power to all electronics separate from the solar controller and solar panels.

ENABLING SOLAR CHARGING

Turn all switches ON to enable the solar charger and power supply.

1. Breaker ON
2. Power Switch ON

Once these switches are turned ON, the controller display will turn on indicating the unit is active. Clean and adjust the solar panels towards the sun to receive the best possible charge throughout the day.

Turn on the Power Switch

Make sure the inverter is switched ON.

The main power switch controls everything connected to the terminal blocks.



80A BREAKER


BREAKERS



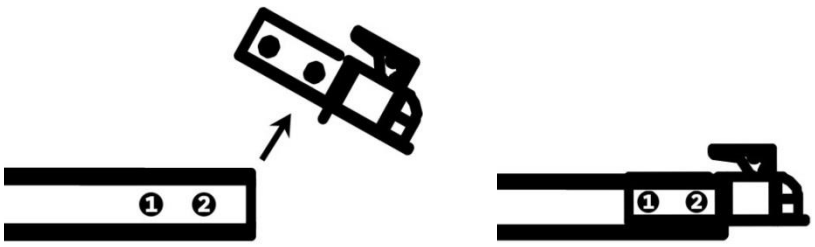
POWER SWITCH

THERMOSTAT

Adjusted from factory to keep the unit cool in warm temperatures. The thermostat will automatically enable a fan when temperatures exceed the set point and turn off once cooled.

REMOVING THE HITCH

The trailer hitch can be removed preventing the trailer from unauthorized towing. Remove the two bolts ❶ & ❷ from the graphic below holding it in place and lift the hitch off. This can be stored inside the job box when not in use. To install the hitch, place it back on the trailer tongue and replace the two bolts. Be sure both safety chains are attached.



PREPARING FOR TRANSPORT

1. Power off all equipment. Open the job box and position the main power switch **OFF**. If you wish to turn off the solar controller and charger during extended periods of storage time. Switch the main disconnect and breakers off.



2. Lock the job box and take the keys to prevent unauthorized access.



3. Slide the outer solar panels back inwards and latch in place. Position the solar panels horizontal and secure them with the two hand screws.



4. Lift the (4) jacks on each corner of the trailer by rotating the hand crank counter-clockwise. Pull the pin and rotate each jack 90°.



5. When the unit is powered off, and the (4) main jacks are raised, you are ready to attach a tow vehicle. Once tied to a tow vehicle, raise the tow jack and ensure all other outriggers are raised. Ensure the trailer hookup, breakaway cable, and safety chains are connected. Test the trailer lights to ensure stop/tail/brake lights work before operating on public roadways.