OPERATION MANUAL

Solar Power Generator with Pneumatic Light Tower Mast
Part# SPLT-1.8K-400A-30-4X160W-LED

READ BEFORE OPERATING OR DEPLOYING!

Read these instructions carefully **BEFORE** attempting to operate or deploy the solar powered trailer. Failure to comply with instructions and guidelines could result in serious or fatal injury, as well as void any warranty. Retain these instructions for future reference.

DEPLOYING TRAILER

1. Choose a location that is close to level as possible to position the trailer. When picking a location, ensure the mast is free and clear from any overhead obstructions.

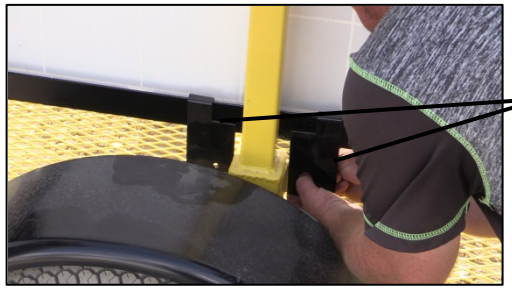
Drop the trailer from the tow vehicle using the single jack located on the front of the trailer. Ensure the safety chains and cable have been disconnected from the tow vehicle.

LEVELING JACK

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.

Use a bubble level to ensure the trailer is level. Ensure that the unit is **completely level** before deploying!

3. There (4) support plates holding each solar panel in place for transport. **Be sure to remove these before adjusting each solar panel!**



4. You are now ready to deploy the non-elevated solar panels. Start with the panels that do not elevate **(no winches)**.

The panels are held in place by a spring loaded pin, on a dial. The dial is located on the back end of the trailer, at the pivot point of the solar panels.

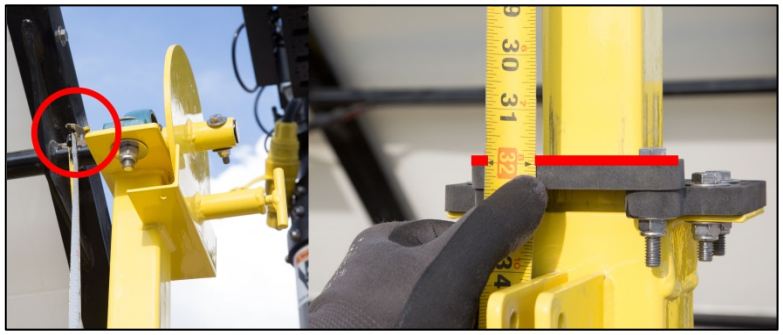
5. Once you pull the spring loaded pin, use 2 people to rotate the panels facing outward.

6. There are 2 slots in the dial that provides the option for 2 different angles.

7. If you are using the 45° angle, lock the panels in place using the support legs. The other angle will not require use of the support legs.

The support legs are on a hinge and located on the bed of the trailer for transport. These legs simply unlatch and pin to the bottom of the solar panels.

8. You are now ready to deploy the elevated solar panels. Start by cranking the winch clockwise to extend the solar panels to a height of 32”. This is enough to place the support bar for the 45° angle.



WARNING: DO NOT OVER EXTEND THE PANELS PAST 32 INCHES. OVER EXTENDING THE ELEVATED PANELS CAN CAUSE THE PANELS TO FALL AND BECOME DAMAGED!!

9. Once the panels are elevated, follow the process described in **STEPS 3-6**.

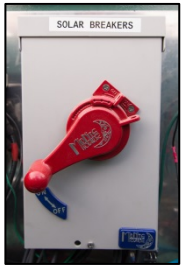
10. The trailer is now ready to be powered on.

POWERING THE UNIT

The job box, located on the front of the trailer contains all of the electrical controls.

1. Open the job box and locate the **POWER** switch on the right. Turn this switch **ON**.

2. Turn the black and yellow **DISCONNECT** to the **ON** position.



3. Turn the **SOLAR BREAKER** to the **ON** position.

The unit is now ready for charging. This unit is built to protect itself in order to prolong battery life. The unit will not come on until voltage has reached **24.7V**. **The unit will shut off at 24V**.

EXTENDING MAST

Once the unit reaches the correct voltage of 24.7V, the mast can be extended.

1. Before extending the mast, ensure the ball valve is in the **UP** position.

2. To extend the mast, simply turn **ON** the **PUMP** switch located next to the power switch on the right hand side.

3. Once the mast reaches **25 PSI**, the pump will automatically shut off. The pump may cycle multiple times to reach this PSI, depending on the environment.

4. Once the pump shuts off, the lights are ready to be powered on. To turn the lights on, simply turn on the **(2)** light switches located inside the job box, on the left.

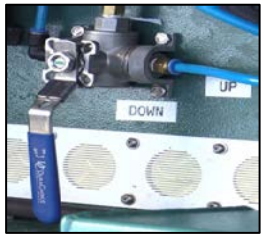
   NOTE: Leaving the lights on during charge will greatly diminish run time of the lights.

   The unit is now deployed!

LOWERING MAST FOR TRANSPORT

Follow the steps below for lowering the mast and preparing the unit for transportation or storage.

1. To lower the mast, switch the pump **OFF** inside the job box.



2. Move the ball valve to the **DOWN** position and allow the mast to fully descend.

3. Once the mast has been lowered make sure both light switches are **OFF**, as well as:
   a. Turn the **SOLAR BREAKER OFF**
   b. Turn the black and yellow **DISCONNECT OFF**
   c. Turn the **POWER** switch **OFF**

NOTE: If you aren't transporting, leave **A,B,C** ON for charging.

4. Un-pin and fold down the support legs for the solar panels that do not elevate **(no winch)**. Secure them with the latch.

5. Unlatch the spring loaded pin and use 2 people to rotate the solar panels facing the inside. The pin will latch to the appropriate hole in the dial.

6. Un-pin and fold down the support legs for the solar panels that elevate **(with winch)**. Secure them with the latch.

7. Unlatch the spring loaded pin and use 2 people to rotate the solar panels facing the inside. The pin will latch to the appropriate hole in the dial.

8. Install the (4) support plates that hold each solar panel in place for transport. There is a long pair of plates for the winch solar panel side and a short pair of plates for the fixed solar panel side.
9. Extend the trailer hitch jack located at the front of the trailer.

10. Retract the remaining **(4)** jacks located on the front and back of the trailer by rotating the hand crank counter-clockwise. Pull the pin and rotate each jack 90° upward, horizontal with the trailer.

11. Connect the trailer hitch to your tow vehicle. *Ensure the safety chains and cable have been connected!* Make sure everything is properly latched and secure before towing.

    The unit is ready for transport.

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