# OPERATION MANUAL

## SOLAR POWER GENERATOR WITH LIGHT TOWER MAST

### Part# SPG366A-600

IMPORTANT

Please read and follow all of the instructions and safety messages listed below and labeled on the trailer before operation. Death or serious injury to you, your passengers, and others on the road may result if these instructions are not followed. Make sure all operators understand these instructions prior to using the equipment.

## CONNECTING THE TRAILER

1. Lower the coupler onto the ball hitch on the vehicle. Make sure it is properly secured.
2. Push down on the handle located on top of the coupler to lock the coupler in place.
3. Connect the safety chains. **Do NOT tow the trailer without the safety chains securely attached to the tow vehicle. Do NOT tow the trailer by the safety chains alone.** The left chain crosses underneath the trailer's tongue and hooks to the right side of the tow vehicles permanent hitch frame or structure. The right chain hooks to the left side in the same manner. The chains need slack to allow your vehicle to make turns. Make sure these chains attach securely to your vehicle and do not drag on the roadway.
4. Connect the trailer's plug to the vehicle. This trailer is equipped with a 7-pin flat plug. The wire harness needs slack to allow your vehicle to make turns. **Do NOT allow these wires to drag on the roadway.**
5. Make sure all lights on the tow vehicle and trailer lights function properly.
6. Ensure all trailer jacks are turned for transport.
7. Ensure all outriggers are secured before transport.

## TOWING

1. Do not exceed 55 mph on highways. Do not exceed any posted speed limits.
2. Slow Down for curves, adverse weather, hazardous road conditions, constructions zones, emergency vehicles and expressway exits.
3. Larson Electronics does not recommend using cruise control or overdrive when towing.
4. Allow at least 4 seconds between you and the vehicle in front of you.
5. Persistent side to side motion is not norm. If this occurs at a certain speed, it is a signal that whipping will likely occur if speed is increased. If you notice this behavior, immediately slow down and maintain at least 10 mph below the speed when the sway was first noticed.

## TRAILER PREPARATION

Prepare the trailer for mast deployment.



1. Position the trailer in a location as close to level as possible. Pay attention to place the solar panels in a location where it can receive adequate sun throughout the day. This keeps the batteries charged in order to maintain proper operation.

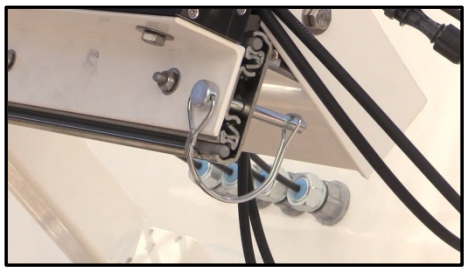


2. Extend all four (4) outriggers located at each corner of the trailer. This is done by loosening the “T” Handles on top of each outrigger and pulling them out. Rotate each jack perpendicular with the ground and lock in place.

3. Using the jacks on the outriggers, level the trailer before using. Adjust each jack to achieve proper leveling. Turning the handles clockwise raises the jacks and counterclockwise lowers the jacks.



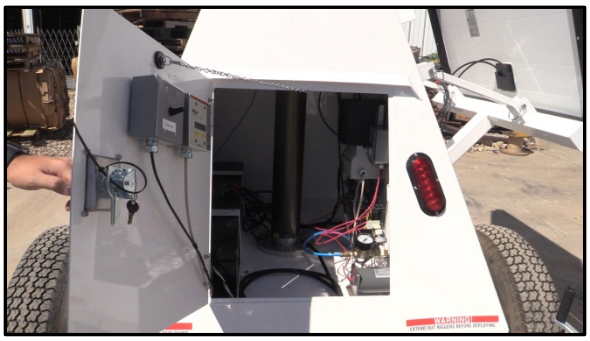
4. There are 2 pins on the back of the solar panels, attached to 2 arms, stabilizing the solar panels for transport. These pins can be removed to achieve a greater angle for the solar panels. After removing these 2 pins, pull the spring loaded pin located on the other stabilizing arm. Have a **2nd person** pull the solar panels outward, until the pin locks into place. **IMPORTANT: Make sure these pins are put into the original position before transport. Failure to use 2 people could cause serious injury.**



5. Located on the lower edge of the solar panels, is a retaining pin, to prevent the solar panels from sliding during transport. Remove the pin and slide the solar panels horizontally, and re-insert the pin. **IMPORTANT: Make sure the solar panels and pin are in the original position before transport.**

## MAST DEPLOYMENT

*IMPORTANT:* Ensure the trailer has been properly leveled before proceeding with extending the mast.





1. Unlock the compartment door at the back of the trailer to access the internal controls. The system controls switch is located on the door of the unit.
2. Turn on the system controls only, until you are ready to extend the mast.
3. Before extending the mast, locate the valve labeled **MAST DRAIN VALVE** at the bottom of the mast. Ensure this is **CLOSED** by turning it fully ***Clockwise*** until it is hand tight. Do not over tighten as this could damage the valve and cause the mast to malfunction. *If this is not closed, the mast will not elevate.*




4. Locate the air compressor switch on your right hand side, inside the pyramid labeled **PUMP**.




5. Once the **MAST DRAIN VALVE** is closed, you are now ready to raise the mast. Flip the air compressor switch to the upwards **ON** position and allow the mast to fully elevate.
6. Once the mast is full, the air compressor will automatically shut off. This typically takes 30 seconds to 1 minute after the mast has fully extended. Keeping the air compressor switched on will keep the mast elevated during long term deployment.

## LOWERING THE MAST

Lower the mast to its lowest position.

1. Open the compartment door and ensure the air compressor switch is turned **OFF**. *Please verify the compressor switch is turned off or the mast will not lower.*
2. Turn the mast drain valve fully ***Counter-Clockwise*** to release the air and bring the mast down. This can take a few minutes. *Note: The drain valve may have a small amount of mast oil that comes out at the time of draining the mast. This is normal.*
3. Once fully lowered, turn the mast drain valve ***Clockwise*** to close it.
4. All power may be turned off.

## TOUNGUE REMOVAL

If necessary, the tongue can be removed for secure, long term installations.

1. Once the trailer has been fully deployed with outriggers extended, raise the trailer hitch outrigger and fold it up.
2. Remove the two bolts holding the tongue in place including any clamps holding the tow cable.
3. Slide the tongue out and place it in a secure area to prevent unauthorized movement of the trailer.

## TRANSPORTING

Prepare the trailer for transportation.

4. Replace the tongue and tow cables *(If Removed) Ensure the tongue is secured in position before attempting to tow the trailer.*
5. Extend the tongue jack to hold the trailer in position.
6. Disengage the outriggers and return all pieces to their original positions.
7. The unit is now ready for transport.