

BRASCO INTERNATIONAL, INC.

START-UP & TROUBLESHOOTING

Solar-Powered Lighting Systems

Thank you for purchasing your solar-powered lighting system from Brasco International, Inc. Enclosed are start-up and troubleshooting instructions that need to be reviewed prior to installation or maintenance. Please use caution and follow standard safety procedures while handling your solar lighting system.

With questions, please contact us:

(313) 393-0393

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TOOLS NEEDED ☐ Digital Volt Meter ☐ Phillips Screw Driver ☐ Wire Strippers / Crimpers

IMPORTANT NOTICES

- Be cautious when handling batteries as they are capable of generating hazardous short-circuit currents. Remove all jewelry (bracelets, metal watches, rings) before attempting to handle or disassemble batteries.
- Batteries should be installed no later than 3 months of delivery or battery warranties will be VOID.
- . Batteries should be stored indoors at a recommended 68 degrees Fahrenheit for maximum shelf life.

Start-up Instructions

Step 1: Install the system following the proper order listed below.

- If the Brasco solar lighting system that you received is not completely wired before shipping then
 make the appropriate connections. If the system is pre-wired the skip to Step 2.
- 1. Attach the (-) and then (+) wires to the battery/batteries and to the proper terminals on the controller.
- 2. Attach the (-) and then (+) wires from the solar panel to the controller.
- 3. Attach the (-) and then (+) wires from the light fixture to the controller.

Step 2: Install the fuses following the proper order listed below.

- Remove the fuses that are taped to the inside of the lid or box.
- 2. Install a 10A fuse into the fuse holder for the battery.
- 3. Install a 10A fuse into the fuse holder for the solar panel.
- Install a 3A fuse into the fuse holder for the light fixture.
- Once the fuses are installed the indicator lights on the controller should run through the start-up sequence.

The green led should be lit if it's daytime indicating that the system is charging. You can push the test button on the controller to see if the light is working properly. If the indicator led doesn't light up or the light fixture doesn't light up then proceed to the troubleshooting steps to resolve the issue.

Solar Controller



Fuse and Fuse Holder





Troubleshooting Instructions

Step 1: Check for a test button on the controller.

Some controllers are equipped with a test button. If you push the test button on the controller the lights should come on. If the lights come on, the unit is wired correctly. If the lights don't come on, then proceed to troubleshooting the wiring of the system further.

Step 2: Verify that the controller lighting setting (if equipped on your controller) is set correctly.

- 1. Some controllers are equipped with a switch or knob to control the lighting setting.
- 2. The controller should be factory pre-set to your requirements.
- The controller lighting setting should never be turned to off.

Step 3: Check the surrounding area conditions.

Your solar lighting system needs sun. Sometimes trees, buildings, snow, streetlights or other objects interfere with solar lighting systems.

Step 4: Verify that the batteries are being charged and have enough power.

The battery should measure around 12.6 volts while charged and may read as much as 14 volts while it is charging. If the battery is not reading the correct voltage, the battery may need to be charged or replaced.

Step 5: Verify that the solar panel is sending power to the controller during the day.

The solar panel should measure around 19 volts or 20 volts while charging. If the solar panel is not reading the correct voltage, the solar panel may need to be repaired or replaced. There may also be area conditions contributing to the issue (see above Step 3). Additional troubleshooting of the wiring may be required.

Step 6: Verify that the light is working.

Remove the positive (+) light wire from the terminal strip and touch it to the positive (+) terminal for the battery. The light should turn on. If it doesn't turn on then the light may need to be repaired or replaced.

If these troubleshooting steps do not resolve the issue, then the issue may be due to the controller. A Brasco Representative can assist you further in troubleshooting your solar issues; please call (313) 393-0393 and ask for the Project Manager.