Troubleshooting guide for LED system: (only good for a unit with the

SunSaver) [see attached document OASIS-SP13.pdfl

Most test needs to roof to be open to have access to the LED system inside the roof

1) Test the battery.

1.1) You should have a ready of around 12.6 volts on the battery. Under 11.5 volt the battery is drained and need to be recharged. This may be the result of another problem and not be the trouble itself, so we need to be sure that we don't only patch a trouble, but we fix it for real. At this point use a fully charge battery or take time to recharge the battery before going further.

1.2) Dead batteries can come from:

- Customer forgetting the light on
- Customers used the light system long enough to have drain the battery
- Solar Panel don't recharge the Battery
- SunSaver could be faulty (since we start using them we don't have cases of SunSaver faulty but still don't mean it can't happen)

2) Be sure the solar panel can receive sun, no tree or north positioned.

3) Test the Solar Panel.

3.1) With a Voltmeter, test the output of the Solar panel at the B2 connecter. (see OASIS-SP13.pdf) You should have a reading over 17 volts. If you are under that this could be parts of the reason. If the reading _gives_ you nothing, in this case the solar panel is faulty and should need to be replaced.

3.2) If the reading is _over_ 17 volts on the B2 connecter we need to check the reading at the wires 1 and 2

show on Detail B (OASIS-SP13.pdf) You should have the same reading as 2.1 reading. If you have something else, unplug the 2 wires, test them without them connected to the SunSaver. If you still have a different reading, there is a good chance the wiring between the Connecter A2 (0ASIS-SP13.pdf) and the SunSaver is faulty.

4) Knowing the Solar Panel should not be faulty, we go for the SunSaver.

4.1) Be sure the 6 connection wires are in order.

4.2) LED reading on the SunSaver.

- Left LED (under SunSaver name) is the status LED.
- LED is Solid red it heartbeat (flickers off each 5 sec): Critical error (SunSaver may need to be changed)
- LED is Flashing red: Error (Take note of Battery Status LED sequencing and contact us)

> _If Status LED is flashing Red and the Battery status LEDs are sequencing Red&Green then Yel/ow then Red&Green... You can try a reset of the SunSaver. To do it, you need to unplug the Solar Panel and the Battery for a minute and plug them bock. This shou/d reset the SunSaver and after waiting some time, over another minute, do the reading again. If the SunSaver return into to same Error Status. Recharge the Battery before anything else_
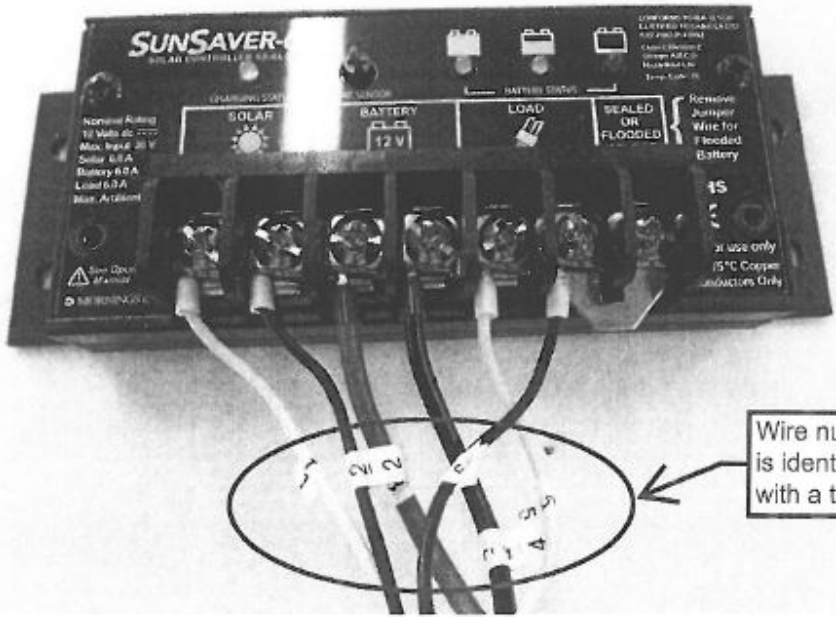
Charging Status light will glow (and blink) if there is enough sun light available.

Battery Status light will glow (green, yellow or red) to show the battery status.

Connector number : 1 2 3 4 5 6

Jumper between connectors 6 & 7

Wire number is identified with a tag.