

For Technical Support visit us at support.sunsetter.com, e-mail contactus@sunsetter.com, or Call Toll Free 800-670-7071

Solar Panel Assembly Replacement

For Solar-Powered EasyShades (Manufactured June 3, 2024 - Present)

<u>MARNING!</u> FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN PERSONAL INJURY! PLEASE READ THESE INSTRUCTIONS COMPLETELY BEFORE PERFORMING THIS PROCEDURE.

Tools Needed:

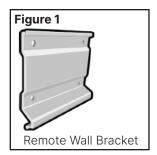
- Helper
- Ladder
- 5/64" Allen Wrench
- 3mm Allen Wrench
- 4mm Allen Wrench
- Masking Tape
- Flat Blade Screwdriver
- 7/16" Open-End Wrench

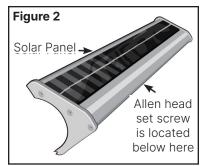
Parts Supplied:

Replacement Solar Panel/Battery Assembly

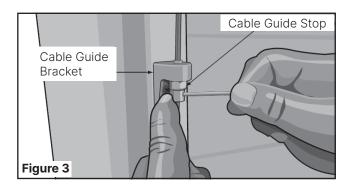
- Close your EasyShade completely, if possible
- 2. Disconnect the power cord from the solar panel.

Note: If a Remote Wall Bracket (see Figure 1) is used to mount the solar panel directly to the wall (see Figure 2) instead of mounting directly on the EasyShade housing, skip ahead to Appendix A.

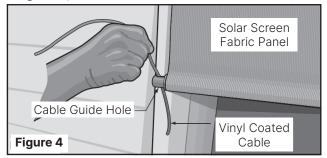




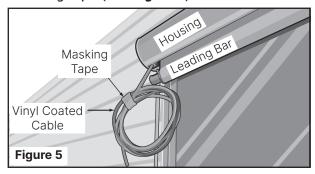
 Remove the cable guide stops from the bottom of the vinyl coated cables, on each side of the EasyShade, using a 5/64" Allen wrench (see Figure 3).



 Pull the cables out of the cable guide holes on each end of the solar screen fabric panel (see Figure 4).

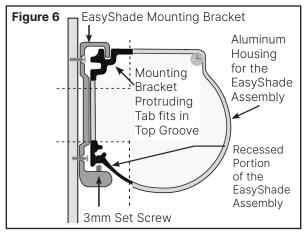


5. Coil the cables and secure with a piece of masking tape (see **Figure 5**).



Note: Step 6 requires access to the mounting brackets for removal of the EasyShade from the house. If the fabric panel can not be retracted out of the way, have a helper assist you in rolling the fabric panel around the bottom leading bar until the rolled up fabric and leading bar meet the housing, then secure it safely in place.

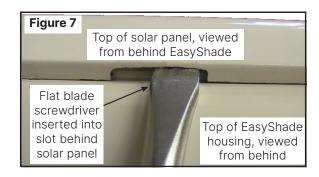
6. While your helper supports the EasyShade, loosen the 3mm Allen head set screws on each mounting bracket (see **Figure 6**). With the aid of your helper, carefully remove the EasyShade from mounting brackets and place it in your work area.



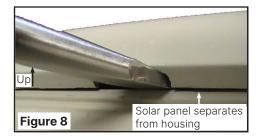
7. Remove the 4mm Allen head set screw securing the solar panel to the EasyShade housing (see Figure 2).

⚠ WARNING: HAVE A HELPER HOLD THE EASYSHADE STILL WHILE REMOVING THE SOLAR PANEL. FAILURE TO DO SO CAN RESULT IN DAMAGE TO THE EASYSHADE AND/OR PERSONAL INJURY.

8. Insert a flat blade screwdriver into the slot behind the top of the solar panel, where it snaps onto the top of the EasyShade housing (see **Figure 7**).



9. With the screwdriver inserted into the slot, pry the solar panel up and away from the EasyShade housing until the solar panel separates from the EasyShade housing (see **Figure 8**).

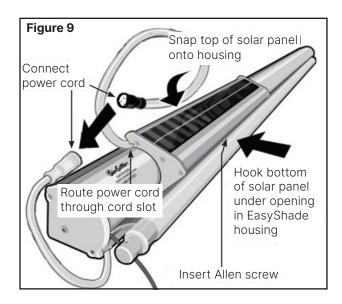


- 10. Set the solar panel aside for return to SunSetter.
- 11. Remove the replacement panel from packaging.
- 12. Reattach the solar panel to the EasyShade housing.
 - a. Before attaching the solar panel to the housing, make sure the solar panel cord is tucked into the cord slot so that it does not interfere with attachment (see **Figure 9**).
 - b. Hook the bottom edge of the solar panel under the front of the fabric panel opening of the EasyShade housing (see **Figure 9**).
 - c. Press the top of the solar panel firmly over the top front edge of the housing until it snaps into place (see **Figure 9**).
- 13. Connect the motor power cord to the solar panel cord.

Note: Connectors are keyed to ensure proper alignment of pins in cable connectors.

Secure ends together using the screw locking mechanism the on connectors.

Note: When positioning the solar panel on the housing, route the connected power cord behind the housing. Move the solar panel far enough away to remove slack in the power cord. The total length of the combined cord is about 4'. For narrow EasyShades, excess cord can be tucked behind the housing.



15. Secure the solar panel to the EasyShade housing by inserting and tightening the provided Allen set screw into the threaded opening under the bottom edge of the solar panel.



16. With your helper, lift the EasyShade up to the installed mounting brackets and insert the top groove of the EasyShade housing onto the mounting bracket protuding tab (see **Figure 6**).

- 17. While maintaining upward pressure to keep the top groove of the EasyShade on the tab of the mounting brackets, press the EasyShade toward the mounting brackets and be sure that the set screw is aligned in the recessed portion of the shade assembly (see **Figure 6**).
- 18. Tighten the set screw in each mounting bracket until the EasyShade is secure.
- 19. Uncoil the vinyl coated cables at each end of the EasyShade assembly. Allow the coiled cables to hang flat against the mounting surface.
- 20. Insert the cables through the cable guide holes at each end of the solar screen fabric panel (see **Figure 3**).
- 21. Place the lower end of one cable through the hole in the cable guide bracket, and from the bottom, slide a cable guide stop onto the cable and secure it in place using a 5/64" Allen wrench. Repeat for the other side (see **Figure 3**).
- 22. Ensure the cables are tight. Adjust tension using a 7/16" open-end wrench as follows. On each cable guide stop, tighten the cable by turning the 7/16" nut counter clockwise.

Note: DO NOT OVERTIGHTEN THE CABLES.

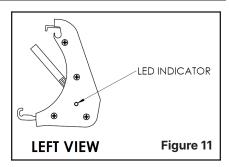
23. Test for proper operation. Enjoy.

LED Indicator Blink Codes

Your replacement solar panel will have an LED indicator light on the left end (see **Figure 11**). This light will blink at different intervals to communicate what the system is experiencing.

See chart below for specific blink codes.

<u>Note</u>: The LED indicator light reacts to solar charging only. If using the optional Solar Battery Charger accessory (sold separately), the light will not respond.

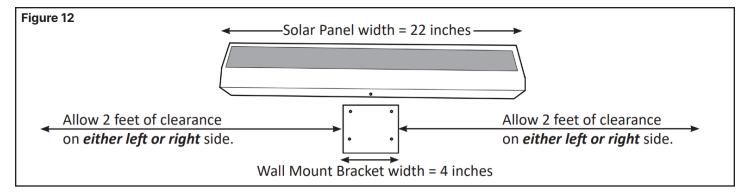


Notes:

- 1. The following blink sequences will occur about once per minute.
- 2. If multiple states are sensed at the same time, blink codes will display in sequence. For example:
 - Scenario 1: Temperature is within charging range and panel is charging via sunlight exposure.
 - --- 1 blink (heartbeat) --- 2 sec. gap --- 2 blinks (charging) --- 1 min. gap --- 1 blink (heartbeat) --- etc.
 - Scenario 2: Battery is running a bit low and temperature is outside charging range.
 - --- 1 blink (heartbeat) --- 2 sec. gap --- 3 blinks (battery low) --- 2 sec. gap --- 4 blinks (outside charging temp. range) --- 1 min. gap --- 1 blink (heartbeat) --- etc.

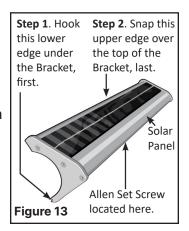
Description	Blink Count	Gap Time (Sec.)
Heartbeat (Baseline - system has enough charge for operation)	1	2
Battery is charging (Shade can be operated while solar charging)	2	2
Battery Low (Motor drive disabled)	3	2
Outside of Charging Temperature Range – Charging disabled (Charging temp. range: 32°F to 158°F)	4	2
Outside of Running Temperature Range – Motor disabled (Running temp. range: -4°F to 158°F)	5	2
Unknown Fault	6	2
No Blink or Solid on = system fault or extremely low battery		

APPENDIX A



INSTALLATION OF SOLAR PANEL TO WALL MOUNT BRACKET

- Center the solar panel in front of the mounting bracket.
- Set the bottom of the solar panel against the house, so the Allen set screw (see Figure 13) points up toward the bottom of the mounting bracket.



- 3. Hook the lower edge of the solar panel under the lower edge of the mounting bracket (see step 1 in **Figure 13**).
- 4. Press the top of the solar panel over the top of the mounting bracket, so the top lip of the panel snaps onto the top groove of the bracket (see step 2 in **Figure 13**).
- 5. Tighten the Allen set screw, under the solar panel, ensuring the solar panel is secured to the bracket and will not slide either left or right.

REMOVAL OF SOLAR PANEL FROM WALL MOUNT BRACKET

- 1. Disconnect the power cord between the solar panel and the EasyShade motor.
- 2. Loosen the Allen set screw (see **Figure 13**) under the solar panel.
- 3. Carefully slide the solar panel to the left or right side, until it separates from the bracket.

<u>CAUTION</u>: If the solar panel does not easily slide off the Wall Mount Bracket, nudge it gently. Do not use a hammer to bang the solar panel assembly, as permanent damage may occur.

WARNING: WHEN USING A LADDER OR ANY OTHER CLIMBING DEVICE, YOU MUST USE EXTRA CAUTION WHEN SLIDING THE PANEL OFF THE BRACKET.

WE RECOMMEND TO POSITION THE
CLIMBING DEVICE TO THE SIDE TOWARD
WHICH YOU WILL BE REMOVING THE
PANEL. IT IS HIGHLY RECOMMENDED TO
HAVE A HELPER SECURE THE CLIMBING
DEVICE. FAILURE TO DO SO COULD RESULT
IN A FALL AND IN PERSONAL INJURY!