Solar Lighting Troubleshooting and Cleaning

Replacement Battery Specs

- IFR14500 (AA size)
- LiFePO4 3.2V
- 600mAh or higher

Solar Lighting Tips

- Solar lights require sunlight to charge. Reduced performance may result from placing in a shaded area. Upon installation, lights may need to charge for a day in ample sunlight before regular use.
- To ensure best results, install lights away from outdoor lights, large windows, and night-vision (infrared) cameras.

General Instructions

Testing Battery and Connection

1.1 Ensure battery tab is pulled. Remove and re-insert battery, ensuring spring is compressed, not crushed under battery. Light should function properly when upside-down on a tabletop or placed in darkness. If not, battery may not be sufficiently charged or require replacement. Continue to 1.2.

1.2 Remove the battery from a known working light and replace the battery in the light in question with it. Light should function properly when upside-down on a tabletop or placed in darkness. If the light works, the original battery may not be sufficiently charged or require replacement. Continue to advanced steps for further troubleshooting or contact original retailer for additional guidance.

Advanced Instructions

Testing Battery and Solar Module (Multimeter required)

2.1 Follow General Instructions for initial troubleshooting. To verify battery is charged, use a multimeter to test DC Voltage. Test probes should touch both the negative and positive battery contacts. Reading of a charged battery (able to provide power to light) is approximately 3.2V. If battery reads under 3.2V, place battery back in light and allow light to sit in sunlight for a few hours. Verify battery is charging by checking for higher output voltage. If battery is not charging, light may be in too shaded of an area, or there may be a poor battery connection.

2.2 If battery is not charging OR battery is charged and light is not coming on while in complete darkness, perform the following steps: Turn light upside down and remove battery. Using a multimeter, place the negative (black) probe on the spring contact and the positive (red) probe on the flat contact. Test for resistance (Ω). The light should read approximately 8 MΩ or higher. If significantly lower, the solar module may be faulty. Contact original retailer for further guidance or replacement.

Solar Terminal Cleaning and Protection

For Already Corroded Terminals

3.1 Remove battery from solar module. Mix 1 tbsp. baking soda with 1 cup of water. Use a toothbrush or small brush to scrub terminals, removing buildup. Wipe cleaned terminals with damp cloth and dry. Follow below steps to prevent future corrosion.

Protection for Cleaned Terminals and New Installs

3.2 Remove battery from solar module. Using a cotton swab or finger, dab a bit of petroleum jelly or di-electric grease on both battery terminals and rub around. This will help prevent corrosion and enhance the connection between battery and light.