GENERAL TEST PROCEDURE

1. INSPECT THE BATTERY UNIT FOR ANY SIGNS OF PHYSICAL DAMAGE

- Are there dents or signs of damage on the enclosure, indicating drop damage?
- Damage from shipping or handling would not be covered by warranty.[1]
- Has the charger broken free from its mounts and sustained damage?
- Have the batteries come loose and been damaged or caused damage?

2. IF UNIT IS MALFUNCTIONING

- Is the test switch intact, or broken?
- Does the green LED indicator light when the AC power is on and the battery is connected?
- Are there any signs that the transformer or charger have overheated?
- Has the lamp load been connected to the DC output correctly? One side of the load should be connected to the positive (L+), and one side to the negative (L-) output.
- Check for any blown output fuses.
- With AC power to the charger on, and the battery connected, does the relay click (if applicable), when the test switch is activated? If not, there may be a problem with the relay or the relay control portion of the charger.
- Are both leads from the charger connected to the battery? If the leads have been connected to the battery backwards, components on the charger may be damaged and the charger may have overheated in some cases. This will not be covered by the warranty.
- Are the battery terminals free of any corrosion?

3. IF CHANGING THE CHARGER IS REQUIRED

- Disconnect the AC power and the battery from the charger.
- Disconnect the wiring going to the DC output connectors.
- Disconnect any transformer wires that are plugged into the circuit board (if applicable).
- Remove the #8 self-tapping screws holding the circuit in place. If the transformer appears to be faulty (confirmed by testing for continuity on the primary and secondary windings) then remove it also by undoing the two #8- 32 nuts. If the transformer appears to be ok, then try replacing only the charge circuit first.
- Average time to remove and replace a charger is 10 minutes.

4. INSPECTING AND TESTING THE BATTERY(IES)

- Check the date stamped on the battery type sticker.
- If the date is more than one year from the current date, the battery will not be under warranty unless the unit has the extended battery warranty. Contact Stanpro for the pro-rata cost of replacement batteries. You will require our serial number to calculate this.

1 Damage from shipping or handling will not be covered by warranty.

- With AC power on, and the battery(ies) connected to the charger, measure the voltage across the battery terminals with a digital voltmeter. The charge indicator should be out, not on steady during this measurement. Check to see if the voltage is within specs. Note: The charger output voltage can be only measured with the charger connected to a battery. Placing the voltmeter leads across the charger leads only, will result in false readings.
- With the voltmeter still across the battery, and a lamp load connected to the DC output, press the test switch or disconnect the AC supply and monitor the voltage on the battery.
- Does the voltage drop rapidly until the lights shut off (LVD point)?
- Or, does the voltage drop initially and then level off and continue dropping slowly?
- A rapid voltage drop will indicate weak batteries from age, sulfation from lack if charge, or a misadjusted charger causing the batteries to be under or over charged.
- Are the battery terminals showing any signs of corrosion? Acid leakage from overcharging or excessive battery age will cause terminal and connector corrosion, resulting in poor battery/charger performance. Replacement of the battery may be required if this is the case.
- Average time to test the batteries is 5 minutes.

5. IF THE REPLACEMENT OF THE BATTERY(IES) IS REQUIRED

- Disconnect the RED and BLACK leads going to the battery from the charger, making sure they don't touch anything.
- Disconnect the AC supply to the unit by unplugging the cord, or turning off the breaker if the unit is hardwired on the AC input.
- Remove the battery(ies) from the unit.
- If unsure as to which replacement battery is required, contact the unit manufacturer with the model number and serial number of the unit.
- Always replace any corroded connectors on the charger before installing new batteries.
- If sending batteries back to the supplier for inspection or warranty, make sure they are packaged securely, to prevent any short-circuiting of the terminals. Batteries used in most emergency light units are not classified as dangerous goods, and do not require any special documentation for shipping.
- If you are sending the battery(ies) back for warranty, make sure they are properly disposed of at your nearest battery recycler. The batteries used are either of the lead-acid type or nicad (nickel-cadmium) type.
- Average time to replace batteries is 5 minutes.