LED N2LPS LIGHT-PAK™
EMERGENCY LIGHTING SYSTEM

Installation & Maintenance Information for
N2LPS K57 - Replacement Charger Board and Battery Kit

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

REPLACEMENT CIRCUIT BOARD & BATTERY KIT

N2LPS K57 KIT CONSISTS OF:
(1) Circuit Board and Battery Assembly with Mounting Plate
(1) IF1595A Instructions
(1) Sealed Ni-Cad Battery (A high temp. rated battery for N2LPS K57 S904 kit included)
(1) 2 Volt LED for Pilot Light
(1) CID101 Corrosion Inhibitor Device

This kit includes a new LED indicating lamp that gives a visual status of the unit. Details indicating LED logic is given below:

<table>
<thead>
<tr>
<th>Status Indication</th>
<th>Status Description</th>
<th>Status Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>*</td>
<td>Steady Light (No blinks)</td>
<td>AC Power Removed From Circuit</td>
</tr>
<tr>
<td>**</td>
<td>Light Blinks Once</td>
<td>Battery Charging</td>
</tr>
<tr>
<td><strong>,</strong></td>
<td>Light Blinks Twice</td>
<td>Battery Failure</td>
</tr>
<tr>
<td>*<strong>,</strong></td>
<td>Light Blinks Three Times</td>
<td>Circuit Failure</td>
</tr>
</tbody>
</table>

Table 1. Detail Indication Logic

Immediately after supply power is initiated, the indicating lamp will blink/pulse to indicate that the unit is charging. Once the unit has completed charging, the indication light will stop blinking and go to steady. Every six months, the unit will automatically perform a 90 minute battery discharge test. Every 30 days, the unit will automatically perform a 30 second self-test. If the battery or board has been compromised, the indicator light will blink accordingly.

At the completion of the test, if it is determined not to have met the 90 minute requirement, the indicating lamp will display circuit failure (3 blinks). At any time, if the battery connection is not adequate, the indicating lamp will display a battery failure (2 blinks).

![Figure 1. Wiring Diagram](Image)

**WARNING**
To prevent injury from electric shock, all power must be removed from the fixture during maintenance.

**WARNING**
Even after disconnect, batteries will still be live. To prevent electrical shock and explosion, take extra care not to touch leads together or to ground.

![Figure 2.](Image)

1. Disconnect branch AC power at circuit breaker and lock out.
2. Disconnect DC power by turning designated disconnect selector switch to "OFF."
3. Loosen (do not remove) the captive cover screws (6) of the N2LPS power supply housing and carefully place the cover aside for reassembly later.
4. Remove four (4) 1/4-20 screws and lock washers, and disconnect wire leads at the pilot light, DC disconnect switch, pushbuttons, and lamp heads.
5. Disconnect all incoming connections from terminals.
6. Remove old interior assembly and set aside.
7. Install the new interior assembly inside the existing enclosure using the same four (4) 1/4-20 screws and lock washers removed in Step 4.
8. Make all wiring connections following the wiring diagram located in the new assembly (see Figure 1).
9. Connect the pilot light, DC disconnect switch, pushbuttons, and lamp heads (see Figure 2).
10. Connect 120 VAC primary (through designated disconnect) to terminal 120. Connect 230 VAC primary (through designated disconnect) to terminal 230. Connect 277 VAC primary (through designated disconnect) to terminal 277. Connect common to terminal COM. Connect all equipment grounding conductors to terminal GRD.
11. Verify that battery connector and transformer connector are connected to circuit board. If not, execute the connections (see Figure 2).
12. Test wiring for correctness with continuity checks and also for unwanted grounds with insulation resistance tester.

COMPLETE INSTALLATION

1. Install CID101 corrosion inhibitor device (supplied in plastic envelope with instruction sheet). Recommended location is on the inside surface of the top of the enclosure near the right side fixture stem. Refer to CID101 instruction for installation.
2. Close cover and torque all cover (6) screws to 21-25 in.-lbs.
3. Test emergency lighting system for proper operation (see Table 1 for detail indication logic):
   - Turn on the AC power and observe:
     • Indicating light marked “ON” should be operating
     • Momentarily press the push-to-test button and observe - emergency lights should be operating
   NOTE: If emergency lights do not operate initially, allow battery to charge for at least 15 minutes or more, then repeat the test procedure.
4. Allow 72 hours charge time before depending on battery to operate at full capacity.

NOTE: Lock in ON position to prevent unauthorized persons from turning system OFF.

TROUBLESHOOTING GUIDE

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LED does not light</td>
<td>1a. Verify power to fixture</td>
</tr>
<tr>
<td></td>
<td>1b. Verify LED is fully seated in socket</td>
</tr>
<tr>
<td></td>
<td>1c. Verify bulb is good</td>
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<tr>
<td></td>
<td>1d. Verify transformer is properly connected to circuit board</td>
</tr>
<tr>
<td>2. LED is blinking twice</td>
<td>2. Verify battery is properly connected to circuit board</td>
</tr>
<tr>
<td>3. After 72 hours, unit is not fully charged (LED steady) and lamp heads flash</td>
<td>3. Remove leads from pushbutton N/C contacts and terminate the leads on the N/O contacts</td>
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<tr>
<td>4. LED is blinking three times</td>
<td>4. Verify battery voltage under no load is 13.0V or higher after 72 hour charge; if less than 13.0V, consult factory for battery replacement; if more than 13.0V, consult factory for complete interior replacement, as transformer and/or circuit board could be responsible</td>
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