

# **Service Information Bulletin #18**

## **Nylite Elevator Downlight Systems**

### **Installation and Service Recommendation**

#### **DISCUSSION**

Electrical codes and their interpretations vary a great deal across the country, standard Nylite systems are considered in compliance if a neat and orderly installation is provided.

Nylite primary wiring (120 volts AC) enters the transformer housing above the cab ceiling and should be wired in accordance with electrical code for exposed wiring. However, secondary wiring is a low voltage (approximately 10.5 volts AC, 5 amp fusing) and is normally within the plenum area. If provision to limit access to this area and the exit door opening is screened from the occupant, the plenum will usually comply with the definition of a raceway of a confined area. Further fixture and wiring protection should not be needed.

#### **PLANNING FOR A GOOD INSTALLATION**

In some circumstances, provision for a wiring raceway to enclose the fixtures and wiring may be required. Suggestions for a design and system arrangement are provided in figures 1 and 2.

Raceways (when required) should be planned during the design phase and details sent with the original order. Harness wiring must be planned for fixture spacing, exit door location, the number of fixtures in the door, and the wiring routing through the raceways.

#### **RECOMMENDATIONS**

If socket or harness relocation is required, the entire fixture should be relocated to prevent damage to the bulb socket. **WARNING!** ...Once the sockets are in place, removal of the fixture will fatigue the spring tabs, causing future lamping problems in the field. Socket and harness positioning should be determined before the sockets are snapped into the mounted fixtures.

### **CAUTION...POLARITIES OF POWER SUPPLIES MUST BE MATCHED**

Any system supplied with more than 24 fixtures has a double power supply. The source wiring (120 volts AC) to each power supply must be observed for polarity and wired in parallel (white to white, black to black) and properly grounded.

Secondary wiring polarity must also be maintained in our design. Any tampering with the wiring within a power supply may cause shorts. Any internal wiring or rewiring should be done only by our factory.

### **TROUBLESHOOTING**

There are four levels of failure that can possibly be encountered in a Nylite system:

1. If a single lamp is out, it is probably a burned out filament. Only the lamp needs to be replaced. (See Service Information Bulletin #1, Nylite Lamp Replacement Procedure).
2. If two or three lamps are out, it is probably a fuse, as fixtures are typically fused in sets of two or three. First check for a short in the circuit. Repair the short if one is found, then replace the fuse (5 amps).
3. If 5 or 6 lights fail, it is an indication of a transformer failure. First check for shorts and repair them, replace any blown fuses; then, if necessary, replace the transformer.

4. If all of the lights in a system fail, it is probably because the dimmer has failed. Before replacing the dimmer, the following checks and repairs must be made:

- a. Check for and repair any shorts in the system
- b. Replace any blown fuse
- c. Check the transformers
- d. Replace the dimmer

When a light failure cannot be corrected by replacing a lamp or a fuse, it is recommended that the power unit be returned to Nylube for factory servicing, rather than fixing the unit in the field.

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