

Below are some helpful troubleshooting tips for pinpointing possible wiring issues (\*Not applicable to ISD or ICE units).  
NOTE: Before servicing verify that all power sources are turned off. Servicing should be conducted by qualified personnel.

### **The fixture does not function in normal or emergency operation and the charge indicator light is not on.**

- Verify that the emergency ballast is receiving unswitched power on the unswitched input line. This is the solid black wire if using 120V or the solid orange wire if using 277V.
- Verify that the charge indicator light is connected properly. The two leads are polarized with one being the positive lead (Red stranded wire) and the other the negative lead (White/Red stranded wire). The indicator light must be connected for the emergency ballast to function correctly.
- The emergency ballast must be sufficiently charged for a quick test and must have a full 24-hour charge for a 90 minute test.
- Verify that the HOT lead is properly connected to the AC ballast.

### **The fixture does not function in normal operation. It does function in emergency operation and the charge indicator light is on.**

- Verify power to switched/unswitched leads to the AC ballast.
- Bypass the emergency ballast to verify that the AC ballast is functioning correctly. For assistance contact IOTA Engineering Technical Services.
- If the AC ballast is remote mounted, check the remote mounting distance of the AC ballast.
- Verify all connections between the AC ballast and emergency ballast are well-connected.

### **The fixture does not function in emergency operation. All lamps do function in normal operation.**

*(Note: when you press the test switch in a one lamp fixture the only noticeable difference is that the lamp will be dimmer. When you release the test switch the lamp will go out for several seconds and then come back on at full brightness.)*

- Verify that the two white leads with black stripes that have the male and female connectors are connected. These are the unit connectors that engage the battery.
- Verify that the charge indicator light is on. If not, then refer to the first wiring scenario at the top of the page.
- Verify that the yellow wire(s) on the emergency ballast are connected in accordance with the wiring diagram.

### **The designated emergency lamp does not function in normal or emergency operation. The rest of the fixture functions normally.**

- Verify the emergency ballast to lamp wiring. Verify that the yellow wire is connected to the opposite side of the same lamp as the red and red/white wires from the emergency ballast, and that the connections are good (refer to the wiring diagram).

### **The fixture functions correctly in emergency operation but does not return to normal operation after releasing the test switch.** *(Note: It is important to press and hold the test switch for a minimum of 10 seconds to enable the emergency system to function properly.)*

- Refer to the wiring diagram and verify that the white wire of the AC ballast has an isolated connection to the white/black wire of the emergency ballast (black wire on the AC ballast to black/orange wire on the emergency ballast for compact fluorescent units)
- Remove the lamps and then reinstall. If the fixture returns to normal operation, then the end-of-life circuitry is most likely being triggered in the AC ballast. Consult the factory for more information.

*When replacing emergency ballasts, it is important to use the LED charge indicator light supplied with the new unit. IOTA LEDs are unit specific and do not interchange with other brands, nor do they necessarily work from one IOTA emergency ballast to another due to model differences and revisions.*