

COIN MECHANISMS INC.

Innovation Through Technology

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## \*\*\* Important \*\*\* Proper handling of CCFL lamps

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CCFLs are extremely small Fluorescent lamps made of "Pyrex" glass, which is easily broken. **Please handle with care as you would handle any fluorescent lamp.** 

- Avoid shock, bending, twisting, and other stress to the lamp's outer tube otherwise this may result in damage and internal electrode deformation.
- Do not impose pressure of any kind beyond 1kg on lamp wire end directly. Do not twist the lamp wire end in a radial direction. Do not wind the lamp wire end at the joint ends.
- Do not cut or splice CCFL lamp high voltage wires.
- Do not allow these wires to come into contact with sharp edges that may cut into the insulation. Alteration of the CCFL wires can lead to degradation of lamp performance, fire hazard, and failure.
- Make sure the polarized CCFL lamp connector is properly orientated into its inverter receptacle. An improperly seated lamp connector can result in arcing.
- <u>Never</u> unplug the CCFL connector while the lamp is on.
- Keep dust and debris away from the receptacle and connector for this can act as a hazardous load to the high voltage present at these terminals.
- Do not mix lamp sizes with other inverters not designed for the lamp length.
- The inverter housing is vented with several small holes in its cover. Do not block these holes.
- Inverters operate from 12VDC or 24VDC. Reversing polarity will instantly blow internal fuse. Excess voltage and/or spikes and power surges above normal operating voltage can blow fuse.
- All CCFL returns must be packaged in their original packing or equivalent to prevent shipping damage. Returns without proper packaging will void warranty.

The CCFL lamp is a drawn glass tube, phosphorous coated on the inside and charged with an inert gas. The glass tube is hermetically sealed and enclosed within a protective Polycarbonate flame retardant cover/diffuser. The fragile glass of the CCFL tube is suspended and protected within the cover/diffuser with clear silicon "o" rings. In the unlikely event of glass breakage, the broken glass will be contained within the cover/diffuser and not present a hazard to operators or service personnel.

If the lamp is stressed at the sealed ends, though invisible from outside, it may produce slow leakage and therefore low light output. This destroys the vacuum state inside and leads to lamp failure.

The CCFL wires are made from special high voltage insulated material. The CCFL connector is a special insulated, polarized, high voltage connector. The inverter driving the CCFL is a matched set.

CCFL lamps will reach maximum brightness within a three minute period from an initial off state at room temperature. Longer as temperature extends below room temperature.