

## TECHNICAL SUPPORT BULLETIN #2

### **WIRING Heavy Duty 10 or 12 ga wire**

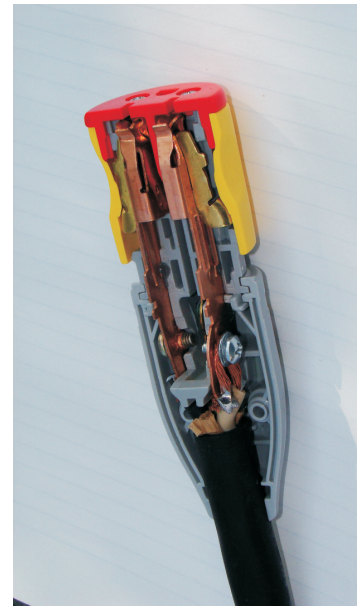
The Qwik-Lok connector is designed to accept extension cords ranging from 16 ga to 10ga.

For cables of 5/8" diameter, typically SEOW rubber, industrial size, the whip is no longer needed, nor is the wire clamp on the inside. The cable nests perfectly in wiring cover recess. The strength of the 10 or 12 ga. outside wire insulation alone acts as the cable restraint. This is unusual for most veterans as it is a departure from the norms.

**Why is the wiring clamp no longer required?** The design is such that the high strength of the copper wires and the inner strength of the Qwik-Lok mechanism alone are far stronger than what a clamp could provide on a plastic housing. Therefore the tensile strength is based upon an effective terminal clamping system.

In order to ensure that the wires will not pull out under any circumstances whatsoever, **the wires are wrapped 180 deg. around the terminal screw post** (a first in the industry) and then led off to the soldering slots. Our unique terminal screw system is well designed to hold the wire from loosening even under great loads of say, 300 pounds. This is accomplished through the terminal screw **CLAMP** design.

The **CLAMP** is a unique square cone washer that acts like a vise-grip. When the wire is wrapped around the screw terminal and back to the soldering slot and the screw tightened, the clamp bites down very effectively on the wires. The design of the clamp actually draws the wires in toward the screw threads and not spread outwards as is customary. By biting down on the wire at the edge of the terminal screw clamp, the wires are locked in place more effectively than any device available anywhere. There is no need for a cable clamp as this is more effective.



### **SOLDERING:**

Now that you have wired it up, there is an option to solder the wires and for the few minutes it takes, this makes good sense. Soldering achieves a lasting and permanent union. Even if the terminal screws are loosened or the wires come loose over time, the solder will hold and you get perfect electrical conductivity every time. Soldering makes this product certifiable to the Hospitals, Military and the Motion Picture industry as well as companies that insist on zero failure tolerances. For the best in connections, this is recommended, not required.

