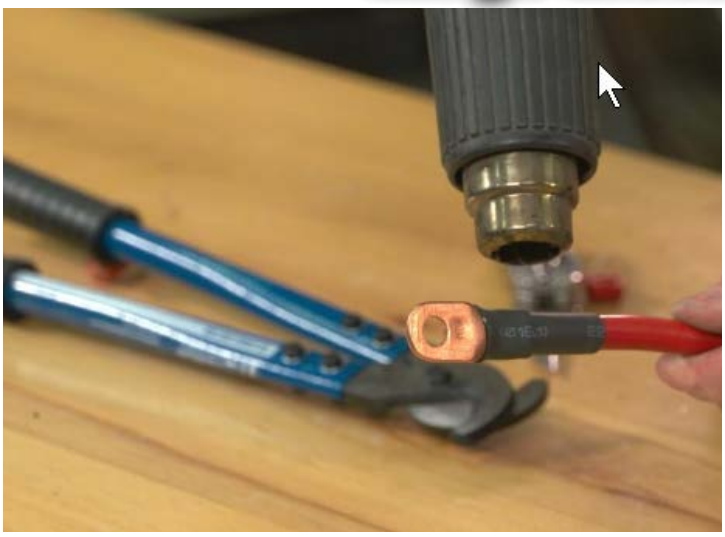
Tools for Cutting and Crimping Ends on Large Electrical Cable



By Jerry Work

Editor Note: In Jerry's article, The Best of Both Worlds, Jerry showed us how to make a house battery bank with both lead-acid and lithium batteries. This month he shows you the proper way to make up battery cables for your bus.

One of the most important things you need to do well when working on your bus electrical systems is to properly cut and crimp ends on large diameter electrical cables. You will normally be working with cables from 4/0 to #10 with 2/0 a common size for high amp circuits like powering your 120VAC appliances and wall plugs through an inverter.

Wire with two types of lugs.
Solid Copper vs. Tin-plated Copper.

These 2/0 cables are nearly a half inch of fine stranded copper wire covered by a heavy insulation layer. The crimp ends are commonly formed solid copper or tin-plated copper. Be sure to buy the correct size to fit the mounting stud where they will be installed.

The crimp must be "gas tight", basically mechanically fusing the solid copper crimped lug to these fine strands of copper in the wire. Anything less than gas tight and over time you will experience corrosion and high resistance at these points.

Resistance is the killer of good house electrical performance. Often you won't see it, but your batteries just won't produce all the power they could to do useful work for you running everything from your lights, fans, pumps, motors, kitchen appli-