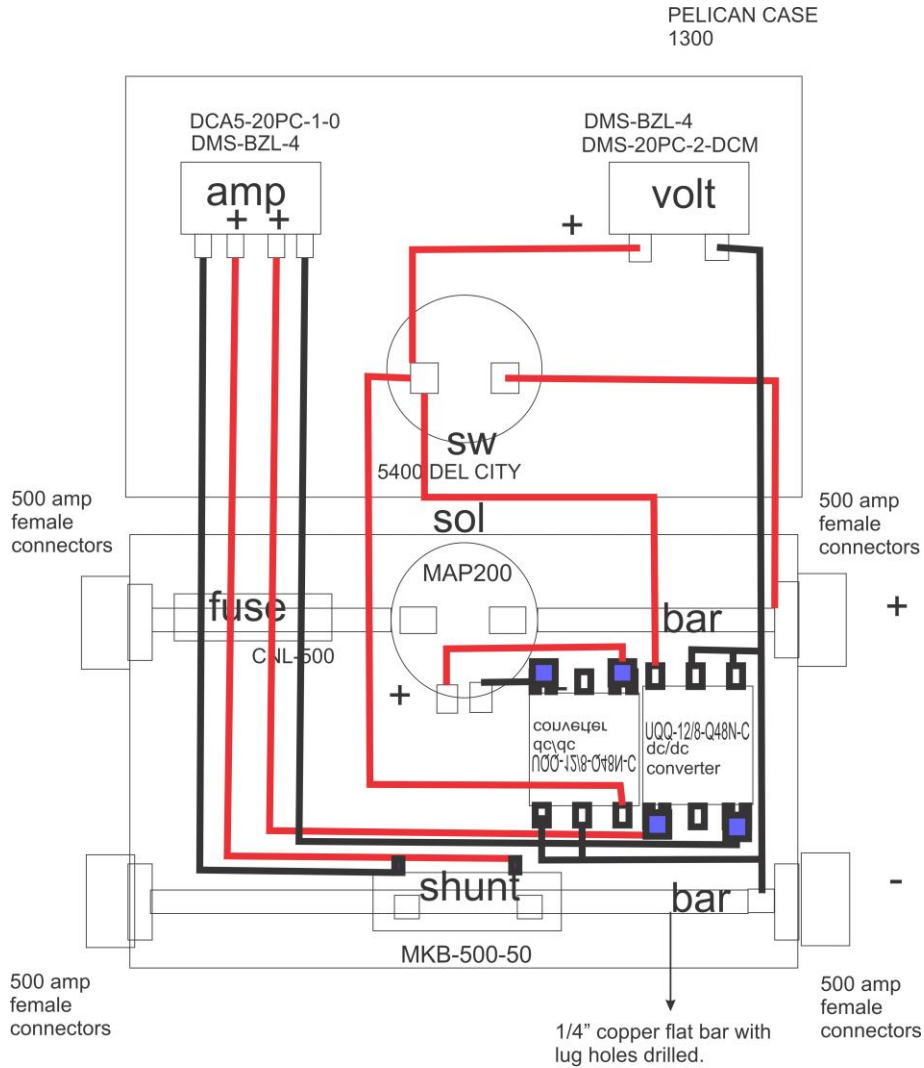



## UCB

The UCB works automatically when connecting the cables from a DC welder.

1. The positive cable from the welder connects to the + positive input connector on the UCB (top right) in this photo.
2. The negative cable from the welder connects to the - negative input connector on the UCB (bottom right in this photo).
3. The + positive cable from the umbilical connects to the output connector on the UCB (top left in photo where the fuse resides). For reference, the + positive umbilical cable goes to the ground clamp (straight polarity). Straight polarity is customary in underwater cutting because it places the heat in the parent metal, and not in the torch handle. This allows the torch handle to run cooler and last longer.
4. The - negative cable from the umbilical connects to the output connector on the UCB (bottom left in the photo). For reference, the - negative umbilical cable goes to the torch (straight polarity).
5. The switch is wired to the + positive solenoid. Turning the switch "on" closes the solenoid and allows + positive current to flow from the welder to the ground clamp at the end of the umbilical.

6. The two electronic boards are split. One electronic board is wired to the volt meter. The other electronic board is wired to the ammeter.
7. A voltage reducer is shown at the bottom center of the photo and is wired to the ammeter.
8. When the switch is turned "on" the boards become live and show the volts and subsequently amps during ignition or welding.



9.  + and + sensor soldered together to one wire.