



A multi-spot cascade welder, with the "Dummy Gun" closed for the connection to the lowers, and gun #2 closed for welding. This illustration shows two sheet metal layers being welded.

Typically this is used with one transformer, and multiple schedules in one controller, and fired one gun at a time, to produce multiple welds economically, but at a slower rate than with multiple transformers and multiple controllers.

Usually the cables are the same length to each welding gun, and they must be checked at least once a month with a Micro-Ohmmeter to catch deterioration which will cause low heat on the associated gun. The Micro-Ohmmeter probes are attached to each end, without unbolting the cable, and with the gun open. Typical readings are 2 MicroOhms per inch of cable length.

Each shank adapter must be insulated from the cylinder rod with a phenolic tube and a disk-shaped end piece to prevent the current from shunting into the cylinder. See the illustration next to gun 4. Often the disk-shaped piece is misplaced, causing strange shunting effects. Each shank adaptor must have its welding cable removed to allow checking for isolation from the cylinder, and it is best to check when closed, if that can be done safely. A regular Ohmmeter is applied between the shank adapter and the cylinder rod. Any reading larger than 10 Ohms is fine, but usually it is >5000.