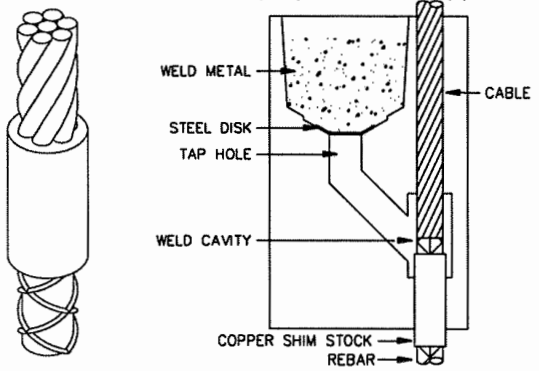
HARGER

ULTRAWELD®

INSTRUCTIONS FOR ULTRAWELD® GROUNDING CONNECTIONS - CABLE TO REBAR

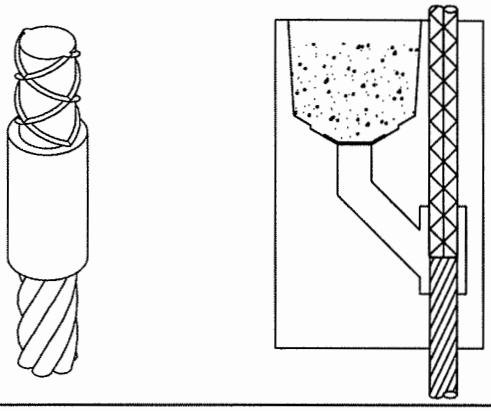
RCU

Butt end of cable and rebar under center of tap hole. Follow instructions on reverse side for proper use of copper shim stock.



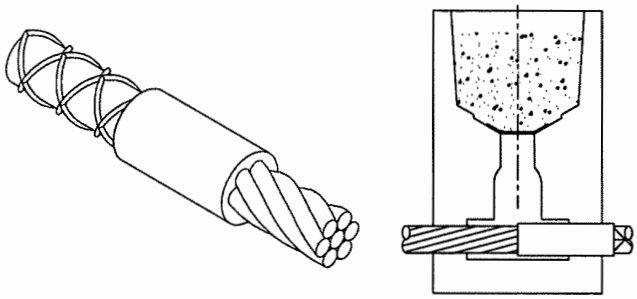
RCD

Butt end of cable and rebar under center of tap hole.



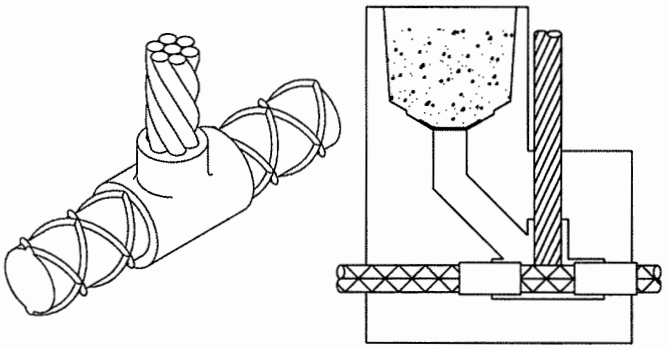
RCB

Butt end of cable and rebar together under center of tap hole. Follow instructions on reverse side for proper use of copper shim stock.



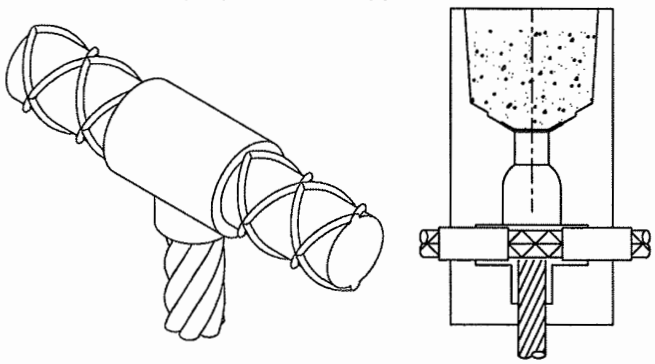
RUC

Butt cable against rebar as shown. Follow instructions on reverse side for proper use of copper shim stock.



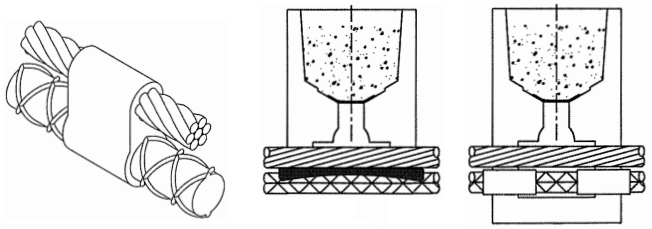
ROC

Butt cable against rebar as shown. Follow instructions on reverse side for proper use of copper shim stock.



HRCT

Place cable and rebar into mold as shown. Follow the instructions on the reverse side for proper use of wrap sleeve or packing pad.



GENERAL SAFETY INSTRUCTIONS:

1. Always wear proper clothing, safety glasses and gloves when exothermic welding.
2. Only weld items that the mold is designed for.
3. Do not use worn or broken molds which could cause leakage of molten weld metal.
4. Make sure that the conductors being welded fits in the mold properly and that the mold will close tightly around them.
5. Do not alter molds or accessories without factory authorization.
6. Avoid breathing concentrations of smoke, as it may be hazardous to your health.
7. Avoid contact with hot materials.
8. Remove or protect fire hazards in the welding area.
9. Avoid moisture and contaminants in the mold and conductors being welded. Contact of molten weld metal with moisture or contaminants may cause weld metal to spew out of mold.
10. Failure to abide by the above and follow welding procedures may result in improper welds, damage to the material being welded or create hazardous situations for the individual.

MOLD CARE:

-Do not use a wire brush to clean mold.

-Do not use a screwdriver to clean the mold.

-Clean mold with soft bristle mold cleaning brush to remove slag and residue.

-Do not push conductor into a closed mold.

-Store molds in a dry environment.

PREPARATION OF CABLE:

1. Cable must be bright, clean and dry.
2. Cable that is saturated with oil or grease must be cleaned. Cable may be cleaned by burning it off with a propane or oxy-acetylene torch. After burning off oil or grease, a wire brush should be used to remove residue. Wet cable must be dried out. Use a hand propane torch.
3. Corroded cable must be cleaned. Use the CCBRSH2 cable cleaning brush or CCBRSH1 card cloth brush. It is important that the ends of the individual strands are clean. This can best be accomplished by making a fresh cut on the end of the cable.
4. Cable should be straightened before clamping mold in place. Bent or out of round cable will hold mold open and cause leaks.
5. Remove insulation from insulated cable before cutting with hack saw. Otherwise ends of strands will become coated with insulating material which may cause defective welds.
6. FLEXIBLE CABLE: A sleeve must be used when welding flexible cable. WRPSLV wrap sleeves are recommended for 300 MCM and smaller cable.

PREPARATION OF REINFORCING BAR:

NOTE: The use of Ultraweld exothermic connections on reinforcing bar can have an effect on the reinforcing bar's structural strength. Consideration as to weld location should be made prior to welding. Areas under minimum stress is preferred.

1. Surface to be welded must be bright, clean, and dry.
2. Remove rust and mill scale with coarse file or grinder.
3. Remove oil, grease, or pitch coatings with solvent or propane torch.

USING WRAP SLEEVES & PACKING PAD:

1. For molds requiring wrap sleeves, wrap the sleeve all the way around the bar. Wrap sleeve must encapsulate the bar to ensure a tight seal between mold and bar. Too many wraps will hold the mold open and cause leakage. #8 reinforcing bar and larger require more than one wrap sleeve to complete a full wrap; additional clamping may be provided with a locking c-clamp if the mold is not completely closing using only a mold handle clamp.

2. For molds requiring packing pad, align slot in pad to slot in mold. Align edge of pad with edges of the mold. Secure backing plate when required.