Installation Instructions

RMHFT Connection Type Perpendicular Cable to Foot of Rail

⚠ PRECAUTIONS

Follow General Safety & Preparation of Cable instructions on the backside of this sheet.

WELDING PROCEDURE

1. Check mold tag for conductors to be welded and proper weld metal cartridge size to use.
2. Make sure all surfaces and conductors are clean, dry and are the proper sizes for the mold's application per mold tag.
3. Molds can be dried by heating to approximately 250F. Molds may be dried with a hand operated propane torch.
4. Position mold onto conductor(s). Lock mold with handle clamps or frame, whichever is the case.

5A. For UltraShot Drop-In Process

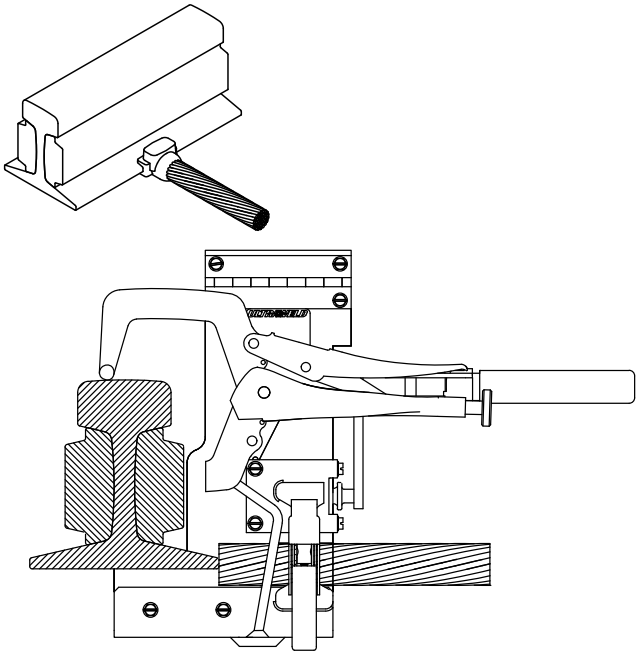
- Insert UltraShot cartridge into mold.
- Close lid and attach Drone cord to UltraShot igniter.
- Before igniting, verify conductor positioning andFthat mold is closed completely.
- Push and hold both ignitor buttons at the same time until audible alert is heard.

5B. For NUWTube Pour & Shoot Process

- Insert steel disk being sure it is directly centered over the tap hole. Failure to insert disk into mold will create improper welds and spewing of weld metal.
- Pour cartridge or cartridges into the crucible being careful not to upset the steel disk. Tap bottom of cartridge to loosen all starting powder and spread 2/3 of the powder evenly over the top of the welding powder. Close the mold lid and pour the remaining starting powder into the ignition pocket on top of mold lid.
- Before igniting, verify conductor positioning and that mold is closed completely.
- Close cover and ignite starting powder with flint gun.
- Pull flint gun away quickly to prevent fouling flint. When necessary to hold down on mold cover use a long tool to keep hand away from flash of igniting powder.

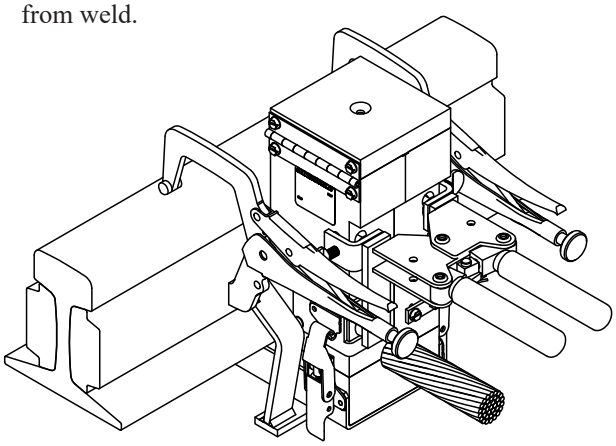
6.. Wait approximately 30 seconds before opening mold to permit metal to solidify.

RMHFT



PERP. CABLE TO RAIL FOOT CONNECTION (RMHFT)

1. Open mold, then place cable in mold.
2. Close mold.
3. Place mold on foot of rail and clamp frame to rail.
4. Butt end of cable against rail foot.
5. Ensure there are no gaps between the mold and rail foot.
6. Adjust mold position if necessary while ensuring the cable is still in contact with the rail foot.
7. After welding, unlatch all clamps and remove mold bottom from rail.
8. Open handle clamp on the mold top and remove mold top from weld.



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RMHFT - Perpendicular Cable to Foot of Rail Continued

WARNING

Do not attempt to make an exothermic connection until you have thoroughly read and understood the instructions that accompany all of the various components of the system and have been factory trained and certified by an authorized trainer.

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.

PREPARATION OF CABLE

1. Cable must be bright, clean and dry.
2. Cable that is saturated with oil or grease must be cleaned.
3. Cable may be cleaned by burning off contaminants with a torch (gasoline blow torch, butane torch, acetylene torch). After burning off oil or grease, a wire brush should be used to remove residue from the cable. Cable with moisture must be dried out. Use a hand torch.
4. Cable must be clean and free of corrosion. Use #CCBRSH1, Card Cloth Brush or #CCBRSH2, Cable Cleaning 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.
5. Remove insulation from insulated cable before cutting with saw. Otherwise, ends of strands will become coated with insulating material which may cause defective welds.

PREPARATION OF RAIL

1. Surface to be welded must be bright clean and dry.
2. Remove all oil, grease or pitch coatings with a solvent or torch.
3. Remove rust and mill scale with Grinder / Harger grinding wheel, #GRDWL
4. Heat the rail with a torch to drive off moisture.

SAFETY AND PRECAUTIONS

CAUTION: Grinding and cleaning must not be performed more than 2 hours prior to bonding. If the time lapse exceeds this requirement, sufficient contaminating oxidation may develop requiring additional preparation. Failure to observe this may result in a less than optimal bond.

WARNING: The rail and mold must be warmed to drive off moisture. Failure to observe this may result in molten weld metal spewing with the potential for serious burn injury, and a less than optimal bond with excessive porosity.

WARNING: Re-welding near an earlier bond is strictly forbidden unless within the confines of a joint or splice bar! Failure to observe this may result in a rail break leading to property damage, injury, or death.

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