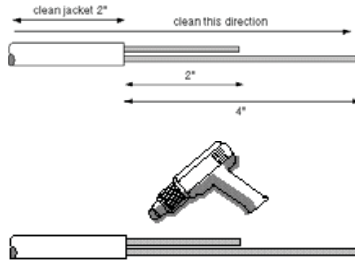


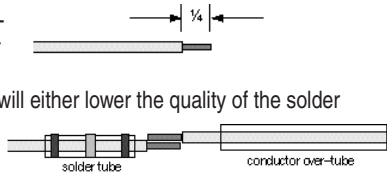
# HydroSplice Instructions

## Installation

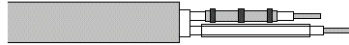
1. Strip back the cable jacket as shown. Heat appropriate surfaces with heat gun. Heating brings contaminants to the surface. Clean the surfaces of the cable jacket and conductor insulation with the solvent wipe (Type HP). Wipe in the direction shown. Then wipe surfaces with dry towel provided. Try not to let the HP solvent air dry. If space is at a premium, see note below.



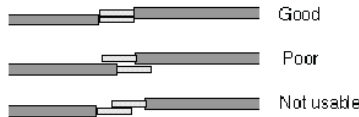
2. Strip the insulation back 1/4". Remove any paper filler in the interstices. Also remove any paper barrier between the conductor and insulation. Paper remaining will either lower the quality of the solder joint, or interfere with the water seal.



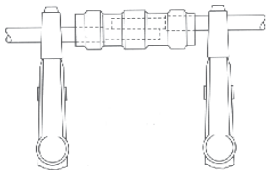
3. First, place the black jacket overtube on cable. Then place the clear conductor overtube on the 4" length conductors. Place the solder tube over the 2" conductors last.



4. Position the conductors as shown. Make sure conductor strands are twisted together and no individual strands point outward. Outward pointing strands may puncture the insulation material. If available, use the conductor holding fixture as shown.

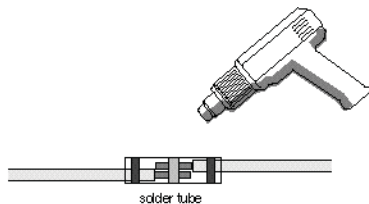


5. Shrink the solder tubes with heat gun. Solder tubes



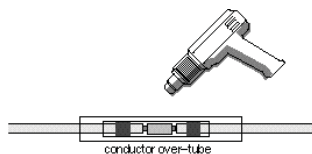
contain a precise solder ring which melts and solders the 2 conductors together. They also contain a bonding agent which seals the sleeves to the conductor insulation.

Begin heating from the center. Continue to heat the solder ring until it is no longer the shape of a ring. Then work toward the ends if necessary. Do not overheat which darkens the sleeve preventing visual inspection. Please see the photos to the right.

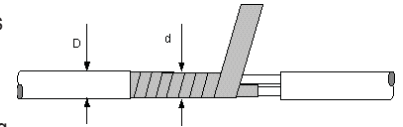


6. Center and shrink the clear conductor overtubes. Start heating from the center and work toward the ends. This allows air to be pushed out. This step is optional. It provides another layer of water sealing, but is not necessary. The solder tube has its own built in sealing capability.

7. Wrap sealant tape over conductors. Use tension while wrapping in order to cause the tape to adhere to itself and reduce its thickness. Try not to trap air under the tape. The tape layer should not have a larger OD than the cable jacket ( $D > d$ ). The tape flows under heat and seals to all surfaces while filling air voids.

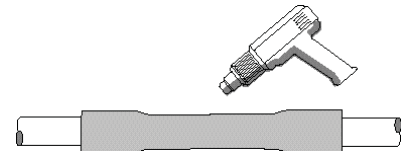


8. Make sure that the jacket overtube overlaps cable jackets at least 2". Center and shrink overtube. The overtube has a thick adhesive layer which melts while the tube is shrinking filling air voids and bonding all surfaces together.

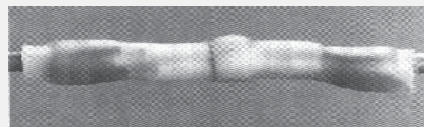


### Note

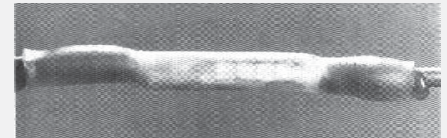
If longitudinal space is severely limited, the clear conductor overtube may be omitted. In such a case, strip conductor lengths in step 1 can be changed from 2" and 4" to 1" and 2" respectively. Then using a knife or scissors, the jacket overtube may be cut down from 12" to 8". It is advisable to have at least 2" overlap on both ends of splice.



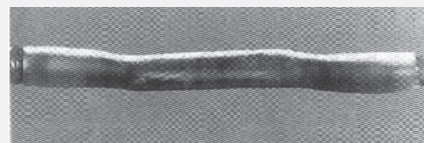
## Heat Shrink the Solder Tube, Detail



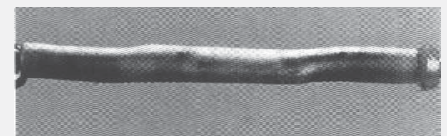
Not usable. The solder ring shape is still visible. The solder did not melt sufficiently.



Very good. The solder has melted and flowed into the conductors.



Acceptable. The solder has melted and flowed. However, there is some discoloration due to over heating.



Not Usable. The sleeve is damaged due to over heating. The splice joint is no longer visible inside sleeve due to excessive discoloration.



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