PIC Wire & Cable Termination Instructions T-1905XXA A Division of the Angelus Corporation Approved: Date: 12/01/03 PH (262) 246-0500 FAX (262) 246-0450 www.picwire.com Rev: 2 (06/26/14) PO Box 330 Sussex, WI 53089 Distribution: USER Uncontrolled if Printed

Termination Instructions for PIC 1905XXA Series Coaxial Connectors

Note: PIC Die set or M22520 Die set can be used. Only PIC Die set 190518A (not M22520 die set) will crimp weather-proofing seal/s on end/s of ferrule.

(Using the ATUM adhesive heat shrink provided will also weather-proof connector and provide strain relief)

Recommended Tooling:	X-acto Knife, Cuticle Scissors, Cable Cutter, Heat Gun	
Required Tooling:	M22520/5-01 Hex Crimp Tool (Daniels HX4)	
Connector Series	PIC Die Set	Alternate (M22520/5-xx) Die Sets Ferrule / Contact
1905XXA	190518A*	5-43 (A Hex) / 5-57 (B Hex)

^{*} Use 0.98 dia Hex for center contact.

- 1) Cut the cable end square. Install the crimp ferrule over the jacket, small end first. Score the outer jacket at Cut A and Cut B, using the Strip dimensions (Fig. 1) without cutting into cable shielding.
- 2) Complete Cut A, through shields and dielectric, down to Center Conductor (Fig. 2). DO NOT nick or cut into the Center Conductor. Ensure to remove clear film covering conductor. Remove Jacket, Shields and dielectric. Clean the area of any debris and any stray braids.
- 3) Install Center Contact onto the cable Center Conductor, until end of Contact is flush with Dielectric (Fig. 3). Do Not force the Center Contact into the dielectric. Solder or Crimp the Center Contact to the Center Conductor. For 190518A die set, use the .098 hex crimp cavity. Inspection hole should show Center Conductor / Solder (if soldered).
- Complete Cut B, through the Jacket (Fig. 4). DO NOT nick or cut into the Shield or Braids. Slit lengthwise and remove the Jacket.
- 5) Flare out the Wire Braids, less than 45° (Fig. 5). Score the Inner Shield (Spiral Shield) lengthwise (with X-acto knife), until the spiral begins to unwrap. Once the end has shifted out past the end of the dielectric, begin to unwind the spiral from the end. Unwind the spiral shield without twisting, down to Cut B, leaving it positioned straight out, with the flared Wire Braids.
 Avoid disturbing the dielectric. The dielectric must be exposed for full length of the Strip Dimension.
- 6) Clean Dielectric and Center Contact as needed. Dry compressed air may be used if necessary (carefully). Inspect and clean Connector Body as needed.
- 7) Install the Connector Body over the Dielectric and under the shields (Fig. 6), until the Center Contact captivation groove is engaged. Avoid disturbing or deforming the Dielectric. For 90° Connectors, use caution to avoid damage to female Center Contact. Rotating the connector back and forth while installing the body can help ensure the Center Contact is centered in the connector. Push until the Center Contact captivation groove is engaged. Verify captivation with a light tug.
- 8) Smooth Wire Braids down over the rear of the connector body, covering the knurl. The Spiral Shield should lay flat under the Wire Braids. Trim off braids (Fig. 6) and spiral at the shoulder (*Cuticle Scissors*).
- 9) Pull the Crimp Ferrule up onto the connector body. Secure the body while positioning the ferrule, to avoid shifting the captivated Center Contact. Trim any stray braids at the shoulder prior to seating the ferrule against the connector body (Fig. 6).
- 10) Verify Center Contact position; visually on straight connectors, and by verifying captivation on 90° connectors. Crimp the ferrule with M22520/5-01 Crimp Tool and crimp die set as specified in table above. When using PIC die set, ensure that each step or diameter of the ferrule fits into the corresponding cavity of the hex crimp die before crimping. When using a MIL spec die set, crimp only the smaller diameter part of the ferrule, not the larger bell on the end.
- 11) Apply adhesive Heat Shrink tubing, covering part of the rear body (if applicable) behind the coupling nut, over the ferrule an onto the cable jacket.

Dimensions in Inches / NOT TO SCALE













