

# PIC Wire & Cable

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## Termination Instructions

T-190XXX \*

Approved

TVH

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Distribution : USER

### Termination Instructions for PIC 190XXX Series Coaxial Connectors

\* Excluding 190303, 1908XX, and 1907XX Connectors

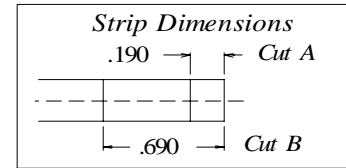
Recommended Hand Tools	X-acto Knife, Cuticle Scissors, Cable Cutter, Heat Gun	
Required Tooling	M22520/5-01 Hex Crimp Tool	
	<i>Connector Series</i>	<i>Die Set</i>
	1901XX	190118
	1902XX	190218
	1903XX	190318
	1904XX	190418
	1905XX	190518A (use .098 hex crimp **)
	1905XXA	190518A (use .095 square crimp **)
	1906XX	190618

\*\* = center contact crimp cavity

- Slide ATUM heat shrink (if provided) onto cable. Cut the cable end square. Install the Crimp Ferrule over the cable Jacket, small end first (if applicable). SCORE the jacket at Cut A and Cut B, using the Strip Dimensions (Fig. 1) without cutting into cable Shields.
- Complete Cut A, through shields and Dielectric, down to Center Conductor (Fig. 2). Do Not nick or cut into the Center Conductor. Remove jacket, shields and dielectric. Clean the face of the exposed dielectric of debris or stray braids.
- 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. Refer to above table for correct Crimp Die set; on 190118, 190218, 190318, 190518A, and 190618 dies, use .098 hex. For 1905XXA series connectors ONLY, use the .095" square crimp on center contacts. On the 190418 die set, use the .132" hex crimp on center contacts. Inspection hole should show center conductor / solder (if soldered).
- Complete Cut B, through the Jacket (Fig. 4). DO NOT nick or cut into the wire braids. Slit lengthwise and remove the jacket.
- Flare out the wire braids, to approximately 45° (Fig. 5). Slit the Foil lengthwise in three or four places, and flare out to expose the Strip Braid. Carefully flare the Strip Braid out, away from the dielectric (w/ X-acto knife), all the way down to the bottom. Avoid disturbing the dielectric. The dielectric must be exposed for full length of the strip dimension (near Cut C).
- Clean the dielectric and center contact as needed. Dry compressed air may be used if necessary (carefully). Inspect and clean Connector Body as needed.
- 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 assure the center contact is centered in the connector. Push until the center contact captivation groove is engaged. Verify captivation with a light tug.
- Smooth all braids down over the rear of the connector body, covering the knurl. Trim off the braids (Fig. 6) at the shoulder (w/ Cuticle Scissors).
- 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).
- 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. Ensure that each step or diameter of the ferrule fits into the corresponding cavity of the hex crimp dies, to achieve a full crimp (Fig. 7).
- Shrink the ATUM dual wall shrink tube onto the connector and cable, starting behind the coupling nut or connector interface (straight connectors) as shown (Fig. 7), or behind cube body (90° connectors).

Note: For ARINC connectors, cover ferrule and cable only.

Figure 1



Dimensions in Inches / NOT TO SCALE

Figure 2

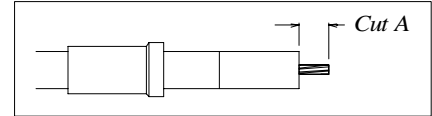


Figure 3

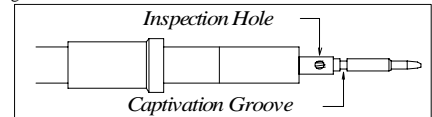


Figure 4

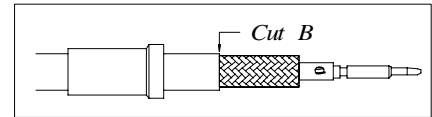


Figure 5

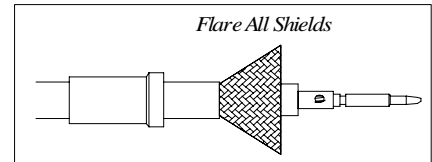


Figure 6

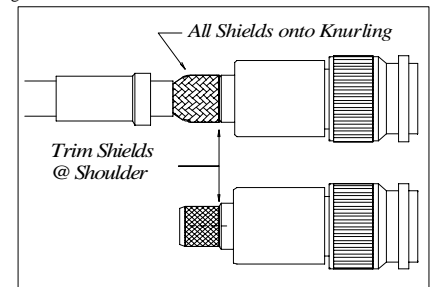


Figure 7

