

# PIC Wire & Cable

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## Termination Instructions

T-190503

Approved : PFT

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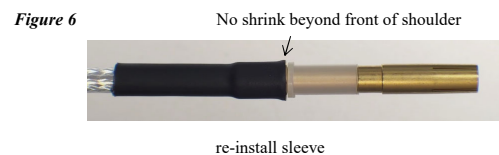
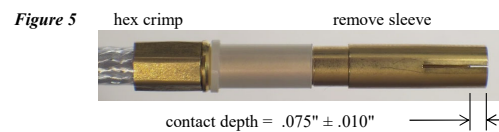
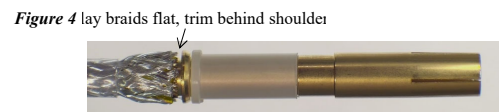
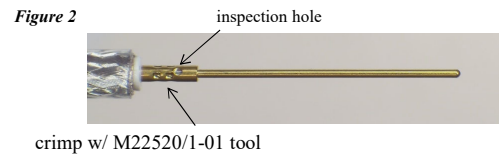
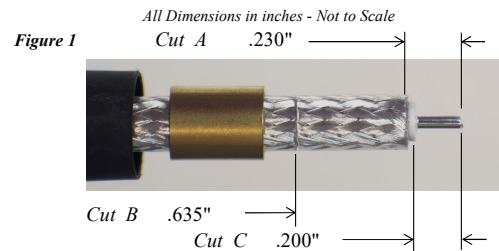
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### Termination Instructions for PIC 190503 ARINC Size 5 Socket Connectors (for S67163 & S65161-A Coax Cable)

Required Tooling :	M22520/5 - 01 Hex Crimp Tool, M22520/5 - 43 Hex Crimp Die Set Cavity A (.268" Hex), Heat Gun Soldering Equipment OR M22520/1 -01 Contact Crimp Tool w/ Dial @ #6 recommended positioner: PIC 110778 (DMC # TH735), selector @ Blue
Recommended Hand Tools :	X-acto Knife, Sharp Razor, Wire Cutters, Side Snips

- 1) Install ATUM 12/3 x 1.5" dual wall shrink tubing onto the cable. Install the crimp ferrule onto the cable (Fig 1). Make Cut A @ .230" from cable end, through the jacket, braids, and foil (Fig. 1). Do not cut into dielectric. Remove jacket, wire braids, and foil.
- 2) Make Cut B @ .635" from the cable end, through the jacket only (Fig. 1). Do Not nick or cut into the wire braids. Leave this section of jacket on. Clean the exposed dielectric of debris or stray braids.
- 3) Make Cut C @ .200" from the cable end, through the dielectric (Fig 1). Do Not nick or cut into the center conductor. Remove dielectric, verify center conductor integrity.
- 4) Verify proper fit of the center contact onto the center conductor. Solder or crimp the center contact onto cable center conductor (Fig. 2). If crimping, use M22520/1-01 crimp tool, dial setting @ # 6 , with PIC 110778 positioner, selector @ Blue.
- 5) Remove jacket at Cut B. Flare the wire braids away from the cable.
  - 5a) For S65161-A cable, unwrap the helical shield all the way down to Cut B, and trim flush with the flaired braids (Fig. 3). The dielectric must be exposed for the full length of the strip dimension (to Cut B).
  - 5b) For S67163, slit the foil shield lengthwise in three or four places around the cable and flare out the foil. Flare out the inner strip braids to expose the dielectric (Fig. 3). The dielectric must be exposed for the full length of the strip dimension (to Cut B).
- 6) Inspect and clean dielectric and center contact as needed, using clean, dry compressed air if necessary (carefully). Inspect and clean connector body as needed.
- 7) Install the connector body over the dielectric and under the shields, until the center contact is fully seated. Avoid disturbing or deforming the dielectric.
- 8) Smooth all braids down over the rear of the connector body, covering the knurl. Trim off any excess braids past the knurled rear body, trim behind the shoulder (Fig. 4).
- 9) Pull the crimp ferrule up over the braids. Secure the body while positioning the ferrule, to avoid shifting the center conductor. Trim any stray braids at the shoulder prior to seating the ferrule against the connector body.
- 10) Verify that the connector is fully seated onto the cable. Confirm the center contact position; the end of the center contact should be .075 ± .010" from the front end of the connector body (Fig. 5). Crimp the ferrule with M22520/5-01 crimp tool and M22520 / 5 - 43 hex die set, cavity A, .268" hex (Fig. 5).
- 11) Remove the self-extraction sleeve from the connector prior to positioning the dual-wall ATUM heat shrink tubing over the connector (Fig. 6). Shrink the tubing, at least partially onto the shoulder (Fig. 6) to effect a seal. Trim off excess heat shrink beyond the front side of shoulder as needed, and re-install the extraction sleeve as shown (Fig. 6).



Note: Connector Length added to cable = + 1.32" nominal

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