

# PIC Wire & Cable

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## Termination Instructions

T-1908XX

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### Termination Instructions for PIC 1908XX Series RF Coaxial Connectors

for PIC S86208 / S88207 / S83204 50 Ohm RF Cables

Note: If using PIC weather-proofing ferrule, crimp w/190818 die set. If using Optional Ferrule, use M22520/5-XX die set. Only PIC ferrule will weatherproof connector w/o ATUM. (Using the ATUM adhesive heat shrink provided (if applicable) will also weather-proof connector and provide strain relief)

#### Recommended Hand Tools : X-acto knife, Sharp Razor, Cuticle Scissors

| Connector P/N | Connector Type              | Contact Crimp Tool - M22520/ 2-01 |             |        | Ferrule Crimp Tool - M22520/ 5-01 |           |                                      |          |
|---------------|-----------------------------|-----------------------------------|-------------|--------|-----------------------------------|-----------|--------------------------------------|----------|
|               |                             | Positioner                        |             |        | Die Sets                          |           |                                      |          |
|               |                             | PIC P/N                           | Daniels P/N | Dial # | PIC Die Set P/N                   | Hex Size  | M22520/5- Die Set P/N                | Hex Size |
| 190801        | ARINC 600 Size 1 Socket     | 110201                            | K1300       | 8      | PIC 190818                        | .186/.222 | M22520/5-09 (A Hex) or /5-41 (B Hex) | .178     |
| 190802        | ARINC 600 Mod Size 1 Socket |                                   |             |        |                                   |           |                                      |          |
| 190803        | ARINC Sz 5 Socket           | 110256                            | K1447       | 6      |                                   |           |                                      |          |
| 190805        | HN 90° Plug                 | 110205                            | K224/K224-1 | 8      |                                   |           |                                      |          |
| 190806        | C Str Plug                  |                                   |             |        |                                   |           |                                      |          |
| 190807        | C 90° Plug                  |                                   |             |        |                                   |           |                                      |          |
| 190808        | TNC Str Plug                |                                   |             |        |                                   |           |                                      |          |
| 190809        | TNC 90° Plug                |                                   |             |        |                                   |           |                                      |          |
| 190810        | N Str Plug                  |                                   |             |        |                                   |           |                                      |          |
| 190811        | N 90° Plug                  |                                   |             |        |                                   |           |                                      |          |
| 190812        | BNC Str Plug                | 110202                            | K1301       | 8      |                                   |           |                                      |          |
| 190813        | BNC 90° Plug                | 110205                            | K224/K224-1 | 8      |                                   |           |                                      |          |
| 190814        | SMA Str Plug                | 110205                            | K224/K224-1 | 6      |                                   |           |                                      |          |
| 190815        | SMA 90° Plug                |                                   |             |        |                                   |           |                                      |          |
| 190819        | ARINC 404 Size 1 Socket     | 110201                            | K1300       | 8      |                                   |           |                                      |          |
| 190821        | TNC Blkhd Jack              | 110203                            | K1302       | 8      |                                   |           |                                      |          |
| 190822        | N Blkhd Jack                | 110205                            | K224/K224-1 | 8      |                                   |           |                                      |          |
| 190825        | SMA Str Jack                | 111042                            | K2004       | 6      |                                   |           |                                      |          |
| 190829        | ARINC Sz 8 Socket           | 110257                            | K1448       | 6      |                                   |           |                                      |          |
| 190837        | ARINC Sz 8 Pin              | 110441                            | -           | 8      |                                   |           |                                      |          |
| 190838*       | M39029 Sz 8 Pin             | 110369                            | K1667       | 8      |                                   |           |                                      |          |
| 190839*       | M39029 Sz 8 Skt             | 110407                            | K1682       | 8      |                                   |           |                                      |          |

\* P/N's with -01 suffix designates Environmental Seal included

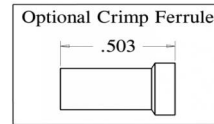


Figure 1a

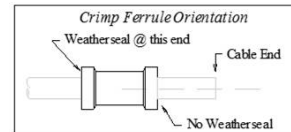


Figure 1b

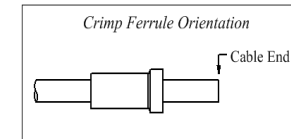


Figure 1c



Figure 2

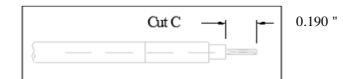


Figure 3

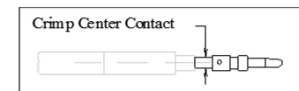


Figure 4

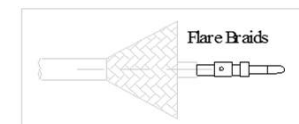


Figure 5

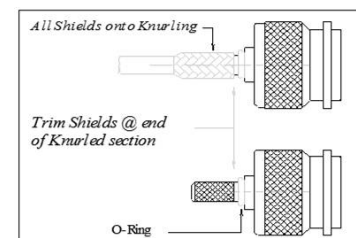
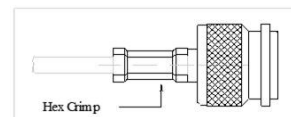


Figure 6



- Cut the cable end square. Install Environmental Seal/Heat Shrink (if applicable). Install the selected crimp ferrule over jacket. If using the PIC weatherproofing ferrule, install it on the cable per figure 1a. If using the optional ferrule, install it per figure 1b. Score the jacket at Cut A. DO NOT nick or cut into the braids. Score the jacket at cut B. Complete Cut B by removing the jacket, then trim off all braids.
- Cut through dielectric at Cut C, down to Center Conductor. DO NOT nick or cut into the Center Conductor. Remove the dielectric; use caution to keep the small stranded Center Conductor intact (S86208 and S83204).
- Install Center Contact onto the cable Center Conductor, until the Contact is fully seated against the Dielectric. Solder or crimp the Center Contact to the Center Conductor. See fig 3. Refer to above chart for Positioner and Dial Setting. Inspection hole should show Center Conductor / Solder (if soldered).
- Complete Cut A, through the Jacket. DO NOT nick or cut into the Braids. Slit lengthwise and remove the Jacket.
- Flare out the Braids, less than 45° (X-acto knife). For S86208 / S88207 cables, avoid disturbing the wrapped-tape dielectric, while flaring the braids out to expose the dielectric all the way down to the full length of the strip dimension. For S83204 cable only, slit the Foil inner shield lengthwise at two places, approximately 180° apart. Flare out the foil with the wire braids. Clean 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, until the Center Contact is fully seated. Use care to ensure proper fit of the dielectric into the entry of the connector body. Verify that the Center Contacts are captivated. PIC 190803, 190829, 190838, and 190839 are un-captivated; seat Center Contacts fully.
- Smooth all braids down over the rear of the connector body, covering the knurl. Trim off braids at the end of the knurled section as shown (Cuticle Scissors), just short of the O-Ring (braids should not cover O-Ring). See fig. 5.
- Position Crimp Ferrule on the connector body. Secure the body while positioning the ferrule to avoid shifting the Center Contact. Trim any stray braids just short of the O-Ring prior to seating the ferrule against the connector body.
- Verify Center Contact is seated prior to crimping. Crimp the ferrule with M22520/5-01 Crimp Tool and Crimp Die Set as specified in chart above. Note : If crimping the optional crimp ferrule, crimp only the smaller diameter area of the ferrule, not the larger bell area on the front end of the ferrule. See fig. 6. - view of PIC weatherproofing ferrule.
- Apply adhesive Heat Shrink tubing (if applicable) over the ferrule and onto the cable jacket for strain relief and moisture protection.