Termination Instructions for PIC 1505XX Series Connectors
(for UH67/163 Ultralight Coax Cable)

Recommended Hand Tools: X-acto Knife, Sharp Razor, Cuticle Scissors or Wire Cutters, Tweezers, Heat Gun, Soldering Equipment

Recommended Tooling: M22520/5-01 Hex Crimp Tool, w/ M22520/5-41 Hex Crimp Die Set, cavity A (.290" hex)

Note: When stripping Aluminum conductors (and all conductors as a standard practice) take extra care to avoid nicking or cutting into center conductor or braids during cable stripping. For best results, the use of automatic or laser stripping equipment is recommended.

1) Straighten the end of cable, and re-shape the cut end to concentric, to assist in accurate stripping. Install the ATUM 12/3 dual-wall shrink tubing and crimp ferrule onto cable (Fig. 1). Make Cut A @ .260" from the end of the cable, through cable jacket and all cable shields, down to the dielectric (Fig. 1). Avoid cutting into the dielectric. Remove jacket and shields from Cut A (Fig. 1).

2) Make Cut B @ .830" from the end of the cable, scoring the cable jacket. Use caution: Do Not nick or cut into aluminum wire braid shields (Fig. 1). Do not remove jacket yet, leave in place (Fig. 1).

3) Make Cut C @ .210" from the end of the cable, through the dielectric, down to the center conductor (Fig. 1). Do Not nick or cut into the center conductor. Remove dielectric from Cut C (Fig. 1).

4) Install center contact onto the cable center conductor, until contact is fully seated on the center conductor (Fig. 2). Conductor should be visible in inspection hole. Solder the center contact onto the center conductor (Fig. 2). Center contact must be soldered, not crimped.

5) Remove the cable jacket at Cut B. Flare braids slightly (Fig. 3), maintaining braid weave as much as feasible. Unwrap helical inner shield all the way down to the bottom (Cut B) without twisting it (Fig. 3), tweezers may be used to grip and unwind helical strip. The helical strip can be positioned straight along the inside of the flared braids (Fig. 3). The dielectric must be exposed for the full strip length (to Cut B). Clean dielectric and center contact as needed, using clean, dry, low-pressure compressed air, avoid disturbing flared shields.

6) 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 (Fig. 4). Verify that the center contact is captivated.

7) Smooth all braids and helical strip down over the rear of the connector body covering the knurl, maintain braid weave as much as possible (Fig. 4). Trim off stray braids at the shoulder (Fig. 4).

8) Position crimp ferrule over braids, up to connector body shoulder (Fig. 5). Secure the body while locating ferrule, to avoid shifting the center contact. Trim any stray braids at the shoulder prior to seating the ferrule against the connector body.

9) Verify center contact position prior to crimping. Crimp ferrule with M22520/5-01 hex crimp tool and M22520/5-41 crimp die set, cavity A (.290" hex). Apply secondary crimp (aligned with the first) to achieve a crimp over the full length of the ferrule (Fig. 5).

10) Shrink the ATUM dual-wall shrink tubing (Fig 6) over the connector body and cable, start behind the coupling nut ~ .100" to ensure no interference with coupling nut function (Fig. 6).