Termination Instructions for PIC PN 150539 - M39029 Size 8 Socket Contact
(for UH67163 Ultralight Coax Cable)

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

Required 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 crimp ferrule onto cable (Fig. 1). Make Cut A @ .260" from the end of the cable 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). Remove plastic layer on center conductor, if remaining (if not already stripped off along with the dielectric, Fig. 2); for safe removal, it can be scraped off with opposing fingernails, to avoid damage to plating (Fig. 2).

4) Install center contact onto the cable center conductor, until contact is fully seated on the center conductor (Fig. 3). Conductor should be visible in inspection hole. Solder the center contact onto the center conductor (Fig. 3). Center contact must be soldered, not crimped.

5) Remove the cable jacket at Cut B. Flare braid slightly (Fig. 4), maintaining braid weave as much as feasible. Unwrap helical inner shield all the way down to the bottom (Cut B) without twisting it (Fig. 4), tweezers may be used to grip and unwind helical strip. The helical strip can be positioned straight along the inside of the flared braid shields (Fig. 4). 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. 5). Verify the center contact is fully seated; the end of the center contact should be .186" ± .015" from the front end of the connector body (Fig. 5).

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. 5). Trim off stray braids at the shoulder (Fig. 5).

8) Position crimp ferrule over braids, up to connector body shoulder. Secure the body while locating the 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 (Fig. 5). Crimp ferrule with M22520/5 - 01 hex crimp tool, and M22520/5-41 crimp die set, cavity A (.290" hex). Do Not crimp on connector shoulder. Apply secondary crimp (aligned with the first) to achieve a crimp over the full length of the ferrule (Fig. 6).

10) Remove the self-extraction sleeve from the connector prior to installing ATUM dual-wall heat shrink tubing provided. Shrink the tubing, at least partially onto the shoulder (Fig. 7), 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. 7).

Note: Connector Length added to cable = + 1.25" nominal

Dimensions in Inches (Not To Scale)

Figure 1
Cut A .260"

Figure 2
Cut B .830"
Cut C .210"

Figure 3
inspection hole
solder the center contact on

Figure 4
flare braids minimally
maintain braid weave
unwrap inner shield

Figure 5
lay braids flat, trim behind shoulder

Figure 6
remove sleeve

Figure 7
hex crimp full length of ferrule
No shrink beyond front of shoulder

Re-install sleeve