

PIC Wire & Cable

Termination Instructions

T-110725

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Termination Instructions for PIC Shielded RJ45 Plug Connector P/N 110725

(for Ethernet Cables P/N E6A3826 & E6A6826)

Recommended Hand Tools :	X-acto Knife, Sharp Razor
Required Tooling :	PIC 110729 RJ45 Crimp Tool , Heat Gun, Wire Cutters

Dimensions in Inches (NOT to Scale)

- 1) Install ATUM 8/2 x .750" dual wall shrink tube, connector boot, and ATUM 8/2 x 1.0" dual wall shrink tube onto cable, in that order (Fig. 1). Make Cut A @ .850" from cable end, through the cable jacket (Fig. 2). Do Not nick or cut into braids. Remove jacket.
- 2) Fold braids back over jacket, and trim off foil (if applicable) and inner tape layer @ Cut A (Fig. 3). Do not nick or cut into the wire insulation; inspect wires to verify insulation integrity.
- 3) Fold each pair out, and trim off the center spline as short as possible, using caution to avoid nicking or cutting into the wires (Figs. 4a, 4b). Inspect wires to verify insulation integrity.
- 4) Untwist each pair, for approximately half of the stripped length, carefully straighten each wire. Align wires into desired wire configuration per work print, and install wires into the load bar (Fig. 5). If necessary, wire ends can be cut slightly shorter (up to .050") to aid entry into load bar. Use installed load bar to comb or work the wires into shape, until thoroughly straight (for approximately .500" length) while maintaining pairs' twist approximately .250" from Cut A (Fig. 5).
- 5) Position the load bar front edge at .675" from Cut A (Fig 6). Trim off wire ends at Cut B, flush with the end of the load bar @ .675" from Cut A (Fig. 6).
- 6) Bend the RJ45 connector strain relief tab down to allow wires / load bar installation (Fig. 7a). With the load bar positioned at the end of the wires, install the connector body onto the wires / load bar. Seat all wires fully into the connector, until the stranded conductors of each wire are visible through the front end of the connector body (Fig. 7b).
- 7) Return the strain relief tab up into original position. Verify all wires are fully seated per 110725 Inspection Criteria (Fig. 11) before crimping. Crimp the connector using 110729 RJ45 crimp tool, keeping wires fully seated. Trim off excess braids past strain relief tab (Fig. 8).
- 8) Locate the ATUM 8/2 x 1.0" shrink tube up to the back end of the RJ45 connector, to cover the crimped strain relief tab and braids, shrink onto connector & cable (Fig. 9), while taking care to shield the RJ45 latching tab from excessive heat.
- 9) Position the boot onto the connector until fully seated (Fig. 10). Take care to locate the RJ45 latching tab inside boot. Position the ATUM 8/2 x .750" up to, and over the back end of the boot, and shrink onto the boot & cable.
- 10) Verify all wires are fully seated per 110725 Inspection Criteria (Fig. 11).

Figure 1



Figure 2 Cut A → .850" ←

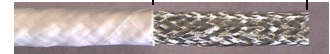


Figure 3 fold braids back, remove inner tape

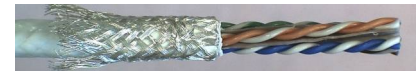


Figure 4a

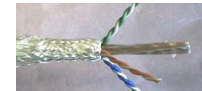


Figure 4a



flare out pairs, trim off spline

Figure 5

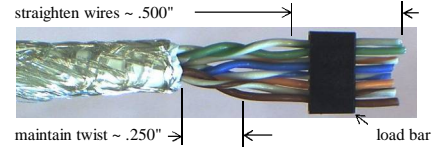
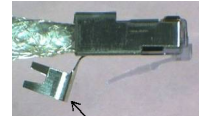


Figure 6 Cut B ← .675" →



Figure 7a



strain relief tab

Figure 7b



wires fully seated

Figure 8



trim off excess braids

Figure 9



shrink ATUM 8/2 x 1.0"

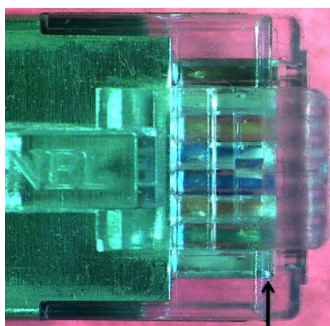
Figure 10



shrink ATUM 8/2 x .750"

Figure 11

110725 Inspection Criteria



all wires fully seated

RJ45 Wiring Configuration for 568A or 568B		Pin	568A Configuration	568B Configuration
	1	White / Green	White / Orange	
	2	Green	Orange	
	3	White / Orange	White / Green	
	4	Blue	Blue	
	5	White / Blue	White / Blue	
	6	Orange	Green	
	7	White / Brown	White / Brown	
	8	Brown	Brown	