

PIC Wire & Cable

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Termination Instructions

T-110339

Approved : *MCS*

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Termination Instructions for PIC RJ45 Shielded Plug P/N 110339

(for E50824, E50824-X, G50824 & G53824 Ethernet Cables)

| | |
|-----------------------|---|
| Required Tooling : | PIC P/N 110288 Crimp Tool (Sentinel P/N 900007), Heat Gun |
| Recommended Tooling : | X-acto Knife, Sharp Razor, Wire Cutters, Locking Tab Heat Shield, Eye Loupe / Magnifier |

Dimensions in Inches (NOT to Scale)

- 1) Install ATUM 8/2 shrink tube (0.75"), strain relief boot and ATUM 8/2 (0.38") onto cable (Fig. 1). Make Cut A @ 1.0" from cable end, through the cable jacket (Fig. 1). Remove jacket, braids, foil, and teflon tape. Do Not nick or cut into wire insulation. Inspect wire insulation to verify insulation integrity.
- 2) Fold each pair back, and trim off the center spline as short as possible, using caution to avoid nicking or cutting into the wires (Figs 2a, 2b). Inspect wire insulation to verify insulation integrity.
- 3) Align the wires into the desired pin-out configuration and install wires into the load bar, (Figs 3a, 3b). If necessary, wire ends can be cut slightly shorter (up to 0.05") to facilitate easier entry into the load bar. Position the load bar front edge at 0.85" from Cut A (Fig 3a). Trim off wire ends at Cut B, flush with the end of the load Bar @ 0.85" from Cut A (Fig 3a). Trim off wire ends at Cut B, flush with the end of the load Bar @ 0.85" from Cut A (Fig 3a).
- 4) Make Cut C @ 0.38" from Cut A through the Jacket (Fig. 4). Do Not nick or cut into wire braids. Score the 0.38" section of jacket lengthwise and remove the jacket only.
- 5) Bend the connector body strain relief tab down (Fig. 5a) to allow wires / load bar installation. With the load bar positioned at the end of the wires, install the connector body onto the wires / load bar (Fig. 5a). 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. 5b). Confirm all wires are fully seated per 110339 Inspection Criteria below (Fig. 9) using magnification as needed.
- 6) Return the strain relief tab up into original position (Fig. 6). Verify all wires are still fully seated per 110339 Inspection Criteria (Fig. 9), before crimping. Crimp the connector using 110288 RJ45 Crimp Tool (Fig. 6), keeping wires firmly seated.
- 7) Locate 0.38" piece of shrink tube up to the back end of the RJ45 connector, covering the crimped strain relief tab and exposed shield (Fig. 7). Using heat gun, shrink the ATUM shrink tube, taking care to shield the RJ45 latching tab from excessive heat (Fig. 7). Cover latch tab with a heat shield to prevent melting of the plastic tab.
- 8) Slide the boot up onto the connector making sure the latch tab is inside boot. (Fig. 8) Slide up the 0.75" piece of heat shrink to the back of the boot and shrink, ensuring heat is kept away from boot or it will deform and start to melt with too much heat.
- 9) Verify all wires are fully seated per 110339 Inspection Criteria below (Fig. 9). Use of a contrasting color background (red or black) will aid in the inspection.

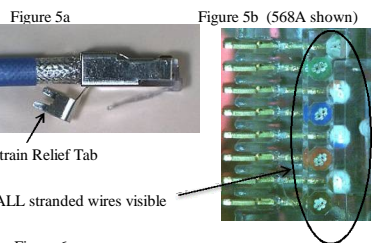
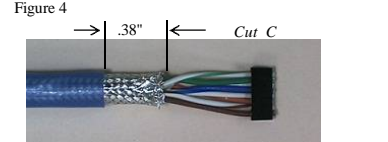
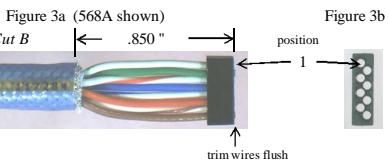
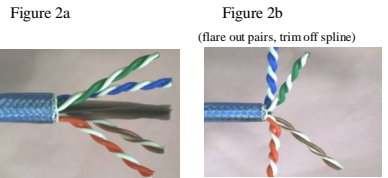
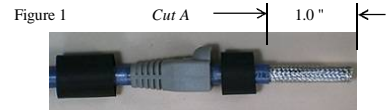
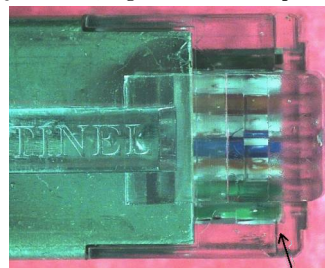
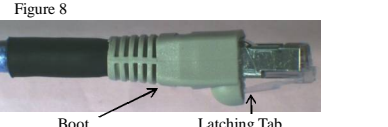


Figure 9 (Magnified 110339 - Inspection Criteria)



ALL wires fully seated



| 110339 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 | |