

PIC Wire & Cable

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Termination Instructions

T-190061

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Termination Instructions for PIC RJ45 Ethernet Connector P/N 190061(-*)

(* See PIC Spec Sheet - For PIC Ethernet Cable P/N's E10424, E12424, E13424, E40424, & E61424)

Recommended Hand Tools :	X-acto Knife, Sharp Razor, Magnifier (for RJ45 inspection)
Required Tooling	PIC 110340 RJ45 Crimp Tool (110274, Alternate) , Wire Cutters, Heat gun

All Dimensions in Inches - Not to Scale

- 1) In order, Install ATUM Heat shrink, RJ45 boot, then metal rear shield onto the cable. (Fig. 1)
- 2) Make Cut A @ .600" from cable end, through the cable jacket (Fig. 1). Do Not nick or cut into wire insulation. Remove jacket, braids, and foil (Fig. 1). Inspect wire insulation to verify integrity.
- 3) Make Cut B @ .375" from Cut A, through the jacket (Fig. 2). Do Not cut into or nick wire braids. Remove jacket, and moderately flare the ends of the braids, to allow for installation of the inner ferrule (Fig. 3). Leave the foil intact.
- 4) Install the inner ferrule, over the wires, over the foil, under the wire braids. Seat firmly down to Cut B, under the braids (Fig. 4).
- 5) Form wires into the desired configuration (ex. Fig. 5), per assembly dwg, in preparation for insertion into the connector (reference Fig. 10 for typical wiring configuration). Trim off the ends of the wires square and even using sharp wire cutters (to avoid flattening foam FEP insulation). Trim off .050" Max (Fig. 5).
- 6) Prior to installation of the connector body, form wire # 2 upwards, offset from wires 1 and 3 (Fig. 6a). This will conform with the cavity pattern inside the RJ45 (Fig. 6b) which will aid in wire insertion. Install connector body onto wires until all wires are fully seated (Fig. 7a). To complete full insertion, push while gripping braids over the ferrule. Confirm wires are fully seated by viewing stranded wire conductors through the front end of the connector body (Fig. 7b). The inner ferrule may contact the connector body when wires are fully inserted.
- 7) Slide the rear shield into place over the braids/ferrule and onto the back of the RJ45 while keeping the wires in correct position in the connector body, until the shield is fully seated (Fig. 8a). The end of the jacket should be visible outside the rear of the shield (Fig. 8a).
- 8) Confirm all wires are fully seated. Crimp the connector using 110340 RJ45 Crimp Tool (Fig. 8b) or 110274 Tool (alternate).
- 9) Slide boot up over the rear shield until seated (Fig. 9). The RJ45 latching tab should be inside of the tab cover (Fig. 9). Slide ATUM heat shrink onto back of boot and shrink. Be careful not to over heat (damage) the boot.

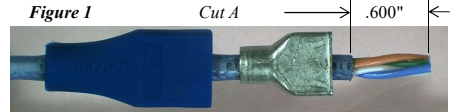


Figure 1

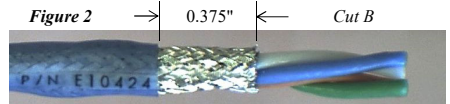


Figure 2

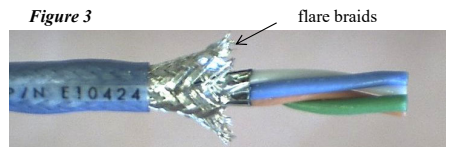


Figure 3

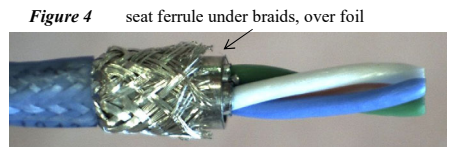


Figure 4

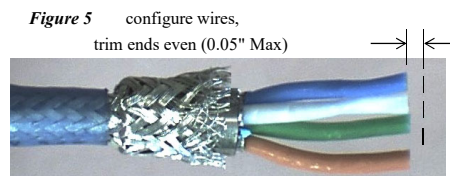


Figure 5

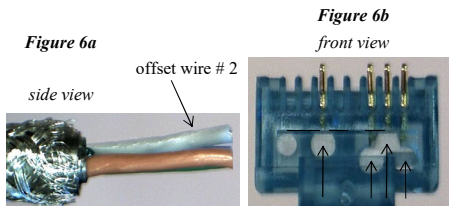


Figure 6a

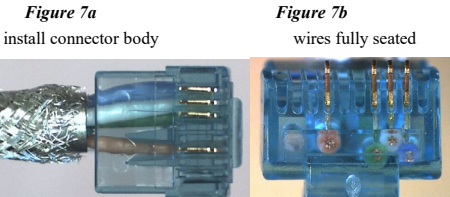


Figure 7a

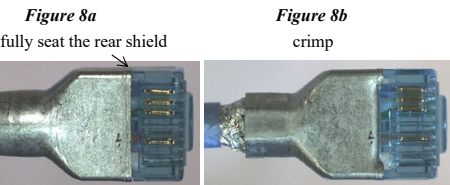


Figure 7b

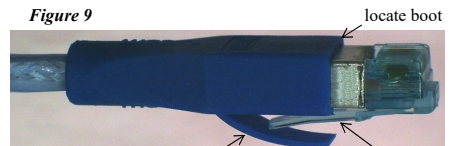


Figure 8a



Figure 8b

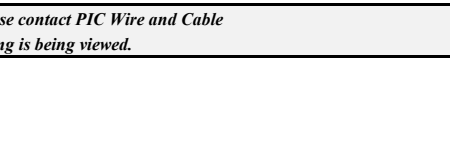


Figure 9

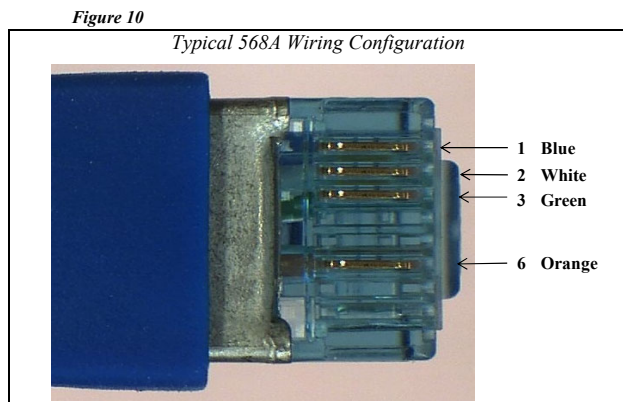


Figure 10

Typical 568A Wiring Configuration

- 1 Blue
- 2 White
- 3 Green
- 6 Orange