

PIC Wire & Cable

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Termination Instructions

T-110649

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 Uncontrolled if Printed

Termination Instructions for PIC P/N 110649, RJ45 Cat 6a Shielded Plug (568B configuration Only)

(for E50824, E6A0824, E6A2824, E6A3824, E6A5824, E6A5826 & E6A6824 Ethernet Cables)

Required Tooling : X-acto Knife, Sharp Razor, Wire Cutters
 PIC 110701 Soft Jaw Clamping Pliers
 (Note : Similar Pliers are acceptable)
 Heat Gun



- 1) Make Cut A @ .750" from cable end, through cable jacket (Fig. 1). Remove jacket and braids. Make Cut B @ 1.50" from cable end, scoring the cable jacket (Fig. 1). Do Not nick or cut into wire braids.
- 2) Remove cable jacket @ Cut B. Fold braids back over the cable jacket, partially combing the braids out (Fig. 2). Make Cut C, trimming off the braids @ .500" from exposed foil (Fig. 2).
- 3) Install ATUM 12/3 dual wall shrink x 1.0" lg. over the braids, and shrink onto braids and cable using heat gun, starting @ .250" from exposed foil (Fig 3), to secure all wire braid ends.
- 4) Carefully score and remove foil @ .250" from end of braids (Fig. 4), for individually shielded pairs, remove foil @ .250" from each shielded pair from end of braids. Trim off teflon tape just past the end of foil if applicable. Do Not nick or cut into wire insulation if applicable. Inspect to verify insulation integrity on all wires.
- 5) Fold out wire pairs, and trim off cable spline (if applicable), as short as possible (Fig 5). Do Not nick or cut into wire insulation. Inspect to verify insulation integrity on wires. Separate and straighten pairs for installation into the wire carrier, while maintaining pair twist where the wires exit the foil/tape section.
- 6) Install the pairs into the wire carrier per the color code on the load bar (Fig. 6). Install the wires firmly, maintaining the pairs' twist between cable exit and wire carrier entry (Fig. 6).
- 7) Adjust the soft jaw clamping pliers height to crimp squarely on the wire carriers (Fig. 7). Keeping wire pairs firmly in the wire carrier (wire transition as short as possible), crimp the wire carriers onto the circuit board until seated flat on the circuit board (Fig. 7).
- 8) Trim off wire ends flush with the end of the wire carrier (Fig. 8). Remove the black protective cover from the circuit board (Fig. 9).
- 9) Install the circuit board / wire carriers / cable into the RJ45 connector body, until fully seated (Fig. 10a). The wire carrier is keyed to align correctly with the connector body.
- 10) With the circuit board / wire carriers / cable fully seated into the RJ45 connector body, push the cable firmly into the connector until the shields / foil are aligned with the clamp sections of the connector (Fig. 10b). Close the clamp section, ratchet the clamp latch until secure, using the soft jaw clamping tool (Fig. 10c). Remove the RJ45 Plug interface cover as needed (Fig. 10c).

Dimensions in Inches (NOT to Scale)

Figure 1 Cut A → .750" ←



Figure 2 Cut B → 1.50" ←

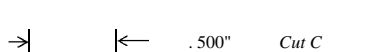


Figure 3 → .500" ← Cut C



Figure 4 → .250" ← start shrink



Figure 5 → .250" ← trim foil / teflon tape



Figure 6 trim spline

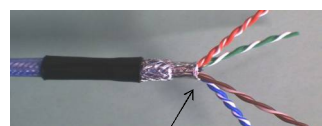


Figure 7 install wires firmly

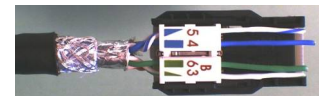


Figure 8 Crimp load bar & wires onto circuit board



Figure 8



trim wires flush

Figure 9



remove circuit board cover

Figure 10a



insert circuit board / load bar / wires fully

Figure 10b



align shields / foil under clamp

Figure 10c



ratchet clamp latch until snug

remove RJ45 cover