

Tyco Electronics Corporation	Raychem	No:	RPIP-600-12	
Menlo Park, CA 94025 USA	-	Rev:	А	
		Date:	Dec. 16, 2003	
		Page:	1 of 4	

Installation Procedure for Flexible Splices MIL-STD-1553B DataBus Cables

1.0 Splice Kits Applicable To This Procedure D-150-9133, D-150-0708-5, D-150-9708-5, D-150-L708-F1

2.0 Twinaxial Cable Accommodation

Splice Vit	Jacket O.D.		Shield O.D.		Primary wire
Splice Kit	max	min	max	min	Gauge (AWG)
D-150-9133 D-150-0708-5 D-150-9708-5	4.50 [.177]	2.92 [.115]	4.50 [.177]	2.41 [.095]	20, 22, 24, 26
D-150-L708-F1	4.50 [.177]	2.84 [.112]	4.50 [.177]	2.03 [.080]	

3.0 Recommended Tools and Equipment

Heating gun CV-1981 1460W with PR25D reflector, or Steinel HL-1802E with 5/8" SolderSleeve reflector. Holding tool AD-1319. Crimping tools AD-1377.

4.0 Termination Procedure

WARNING

Follow installation instructions carefully. Use adequate ventilation and avoid charring or burning during installation. Charring or burning the product will produce fumes that may cause eye, skin, nose and throat irritation. Consult Material Safety Data Sheets **RAY5104** for further information.

- 4.1 Slide overall sealing or insulating tubing over one of the cables to be joined.
- 4.2 Slide the inner sealing or insulating tubing over the same cable end.
- 4.3 Slide the Flexible SolderShield joint over same cable or the other cable according to available space.





Tyco Electronics Corporation 300 Constitutional Drive Menlo Park, CA 94025 USA	Raychem	No: Rev:	RPIP-600-12 A
		Date: Page:	Dec. 16, 2003 2 of 4

- 4.4. Cable Preparation
- 4.4.1 Strip outer jacket, braid(s) and when applicable the mu-metal screen.
- 4.4.2 Cut fillers.



4.4.3 Strip outer jacket.



4.4.4. Cut wires as shown.



4.4.5 Strip conductors of both cables. Do not pre-tin.



- 4.5 Crimp one ferrule on shorter wire of each end as shown using Raychem AD 1377 crimp tool or equivalent.
- 4.5.1 Strands of the wires should be visible in the inspection window of the ferrule.
- 4.5.2 Slide the crimp insulation tubing onto the other wire.





Tyco Electronics Corporation	Raychem	No:	RPIP-600-12
Menlo Park, CA 94025 USA	-	Rev:	А
		Date:	Dec. 16, 2003
		Page:	3 of 4

- 4.5.3 Crimp the ferrules with the tool mentioned above. Before crimping, ensure that the wire strands are visible in the inspection window of the ferrule.
- 4.5.4 Inspect before installing crimp insulation tubings.



4.6 Slide on and position the crimp insulation tubings over the crimps and shrink them using CV-1981 Hot-air Gun with PR25A Reflector (setting 6, vane open) or Steinel HL-1802E with 5/8" SolderSleeve Reflector (setting 11, high fan speed).



WARNING

The heating tool and the assembly become hot during the installation of the splices. To prevent burns, allow tool and the assembly to cool down before handling.

4.7 Slide on the inner insulating or Sealing Sleeve and center between stripped braids.

4.7.1 Heat using CV-1981 with PR25A Reflector (setting 8, vane open) or Steinel HL-1802E with 5/8" SolderSleeve Reflector (setting 11, high fan speed) beginning at the center.

4.7.2 Move slowly out to each end ensuring sealing inserts melt and appear at both ends, if sealing inserts are present.





Tyco Electronics Corporation 300 Constitutional Drive Menlo Park, CA 94025 USA	Raychem	No: Rev:	RPIP-600-12 A
		Date: Page:	Dec. 16, 2003 4 of 4

- 4.8 Slide on the flexible SolderShield and center it over the splice area.
- 4.8.1 Pull on each end of the braid, so it is fully extended.
- 4.8.2 Heat each of the pre-tinned ends using CV-1981 with PR25A Reflector (setting 8, vane open) or Steinel HL-1802E with 5/8" SolderSleeve Reflector (setting 11, high fan speed) until the solder rings melt and flow onto the cable braid.
- 4.8.3 Inspect.



- 4.9 Slide the outer insulating or Sealing Sleeve and position it on center of the splice.
- 4.9.1 Heat using CV-1981 with PR25A reflector (setting 6, vane open) or Steinel HL-1802E with 5/8" SolderSleeve reflector (setting 11, high fan speed).
- 4.9.2 Heat beginning at the center until the tubing shrinks then move slowly towards the ends.
- 4.9.3 Heat ends until the sealing inserts are seen to melt and appear at both ends, if sealing inserts are present.



All of the above information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application. Tyco Electronics makes no warranties as to the accuracy or completeness of the information, and disclaims any liability regarding its use. Tyco Electronics' only obligations are those in the Standard Terms and Conditions of Sale for this product, and in no case will Tyco Electronics be liable for any incidental, indirect, or consequential damages arising from the sale, resale, use or misuse of the product