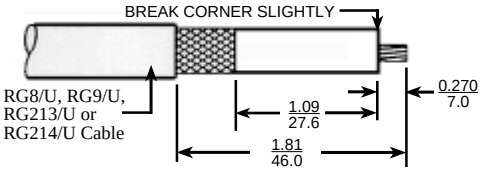
Cable Preparation and Assembly Instructions
Series: 521Cable Assemblies
HVIC Inline Disconnect Kits

Series 521 (Sea level version P/N 167-3516 and 167-3516-1)

Series 521 (Reduced pressure version P/N 167-4534 & 167-4534-1)

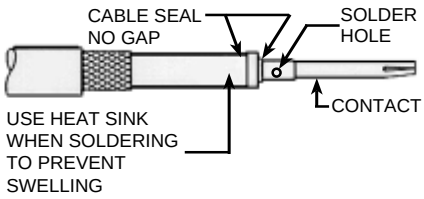
Step 1

Cut cable to length, clean and square. Strip outer jacket to dimension shown. Trim exposed braid to dimension. Strip inner insulation to dimension and hot tin dip core. No nicked or severed strands allowed during stripping.



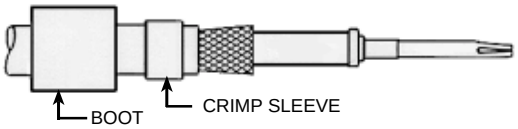
Step 2

Slip cable seal over center conductor. Slide contact over inner conductor. Place in fixture to apply compression to the cable seal and maintain pressure until completion of the soldering process. Solder contact into place through hole using SN60 solder in accordance with J-STD- 006. Completed solder joint must have a continuous fillet of solder between the inner conductor and the contact. The solder in the feed hole must be flush or below flush and free of pinholes.



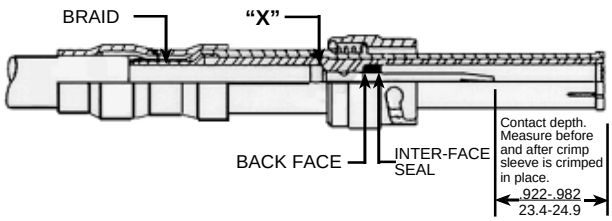
Step 3

Slip boot and crimp sleeve over cable. Flair braid slightly by moving inner insulation in a circular motion. Coat inner insulation and cable seal liberally with fluorsilicone grease.



Step 4

Insert prepared cable into the connector carefully. Do not pinch or otherwise damage the cable seal. Guide braid smoothly over the crimp area of the connector until the contact shoulder butts against the insulator (see "X"). Slide the crimp sleeve into position, trim excess braid, and crimp using Thomas & Betts crimp tool No. WT-540 with Die No. 5456. Measure contact depth before and after crimping. Make sure braid does not extend beyond the end of the crimp sleeve. Install interface seal with fluorosilicone grease applied on the back face of the seal. A 521 series receptacle can be used to guide and push the interface seal in place by mating the connectors.



HVIC — Plug (p. 14) and Receptacle (p. 15) Kit Assembly Instructions

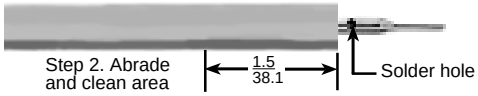
Note: Assembly procedures apply to both plug and receptacle. Only receptacle assembly is shown.

Step 1

Cut cable to length, clean and square. Strip cable to dimension shown. No nicked or severed strands allowed during stripping. Hot tin dip exposed wire and remove rosin residue. Solder contact into pace through solder hole. Remove rosin residue.

Step 2

Lightly abrade wire insulation in area shown using fine non-metallic abrasive silica paper. Clean with acetone using a lint free tissue or cloth. Air dry for five minutes.

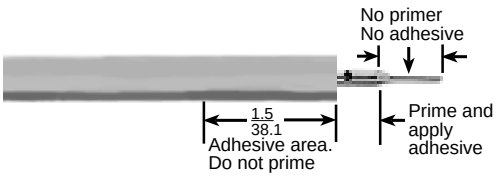


Step 3

Apply a light coat of Dow #1204 primer to the surface of the contact in the area shown. Take care to avoid gettting primer on the mating surface of the contact.

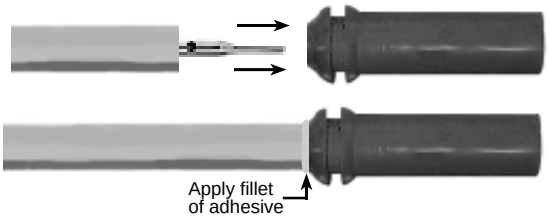
Step 4

Apply a light coat of Dow # 93076-2 adhesive to the primed surface of the contact and the abraded surface of the silicone cable. Note: The adhesive is a two-part adhesive and must be mixed according to the manufacturer's instructions.



Step 5

Clean molded connector body cavity using cleaning procedure of Step 2. Let air dry for five minutes. Insert the cable/contact into the connector body until the contact bottoms out. Remove any adhesive that may have gotten on the conductive surface of the contact. Apply a fillet of adhesive to the cable where it enters the molded cavity.



Step 6

Allow assembly to cure undisturbed for at least 24 hours.