

**21-033496-061 (PIN)**

**21-033497-061 (SOCKET)**

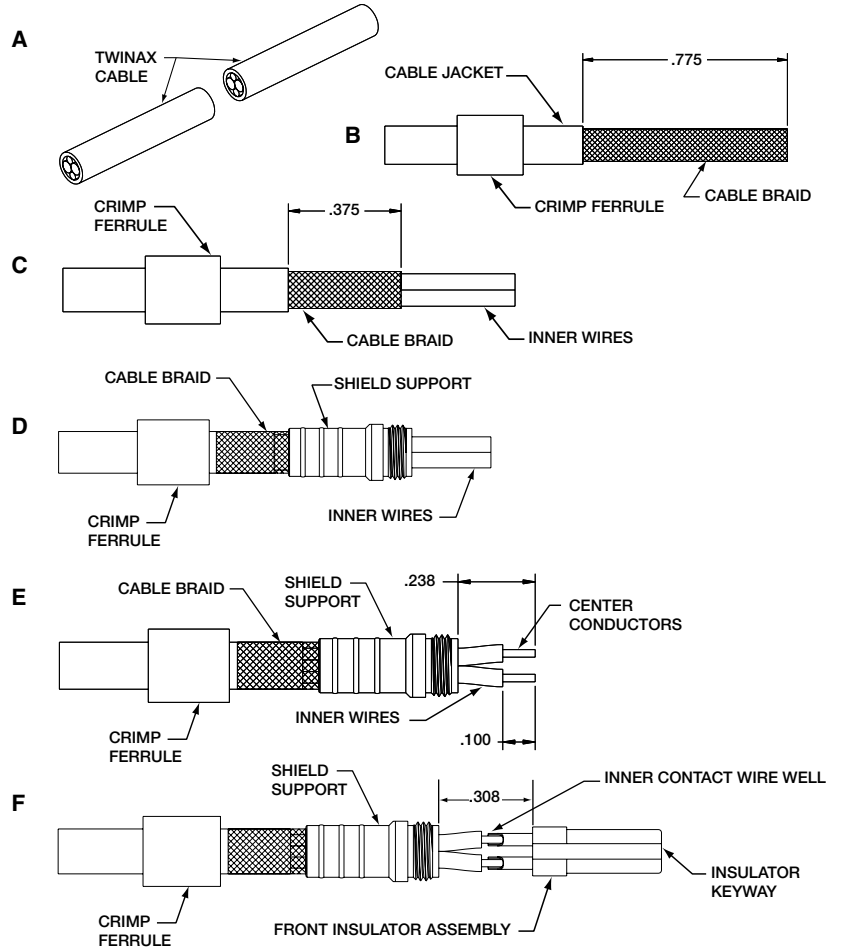
Contact, Pin and Socket, Differential Twinax  
Type M38999 Series I & III Special, Size 10D  
Installation Instructions

See table on reverse side for twinax cable recommended, tool selector settings, crimping tool, positioner and insertion/removal tool information.

- A 1. Cut cable for assembly of differential twinax contacts.
- B 1. Slide heat shrink boot back over cable jacket (not illustrated).  
2. Slide ferrule back over cable jacket.
- 3. Strip cable jacket to expose cable outer braid as illustrated. Ends must be cut cleanly and at right angles to the axial plane of the cable. Cable must not be deformed while making cuts.
- C 1. Cut braid to length as illustrated to expose inner wires.
- D 1. Flair cable braid back over jacket as illustrated.  
2. Cut off any inner braids, wraps or cable fillers as close to cable braid as possible.  
3. Slide shield support, ribbed end first, over cable inner wires until shield support butts against cable braid.
- E 1. Cut inner wires to dimension shown. All wires must be cut to equal length. It may be helpful to cut one wire to length. Then cut remaining wire to equal length as the first wire.  
2. Strip inner wires to expose center conductors as illustrated. All wires must be stripped to equal length.
- F 1. Observe the front insulator's keyway. When the inner pin assembly is held in the vertical position (with inner pin contacts on top), the inner pin contact with the insulator keyway to its left will be positioned at the "9 o'clock" orientation position, when viewing the pin assembly from the mating end (for inner socket contacts, the insulator keyway should be positioned to the right of the inner socket desired at the mating "3 o'clock" orientation position, when viewing the socket assembly from the mating end).  
2. Carefully insert cable center conductors into solder wells, taking care to maintain indicated length.  
3. Solder inner contact to cable center conductor. It may be helpful to pre-tin the wire and solder well.

**21-033496-061 (PIN)**

**21-033497-061 (SOCKET)**



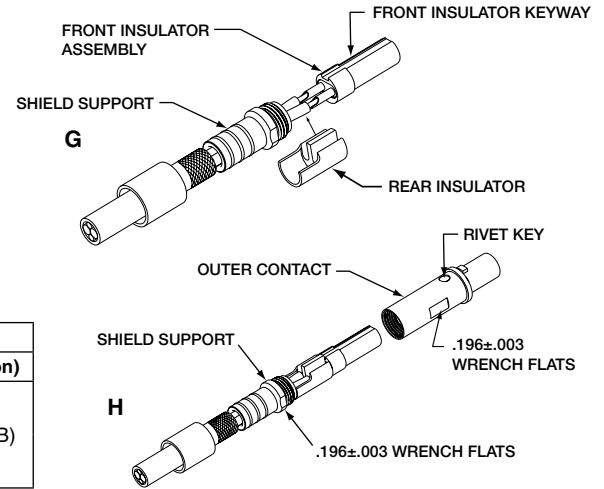
L-2119-ES  
November 2014

FSCM77820

**21-033496-061 (PIN)**

**21-033497-061 (SOCKET)**

- G 1. Slide rear insulator into gap between front insulator assembly and shield support as illustrated. Make certain insulator slots are aligned with inner contacts.
- H 1. Align front insulator keyway with the outer contact's rivet key. Slide the inner contact assembly inside the outer contact body until threads begin to engage. Observe the mating end of the assembly to make certain the inner contacts are at the "3 o'clock" and "9 o'clock" orientation positions when the outer contact's orientation key is held at the "12 o'clock" position. Rotate shield support while maintaining orientation of outer body to front insulator until hand tight. Using wrench flats provided, tighten to 30-36 inch ounces.
- I 1. Flair cable braid back over outer contact body then slide crimp ferrule over braid as illustrated. Trim excess cable braid.
- 2. Crimp outer contact body in the area indicated using crimp tools listed in table below.
- J 1. Slide heat shrink boot over rear of contact assembly to indicated length then shrink in place. If contact assembly has an undercut provided at rear of wrench flats of outer body, front edge of heat-shrink should fall within boundary of undercut



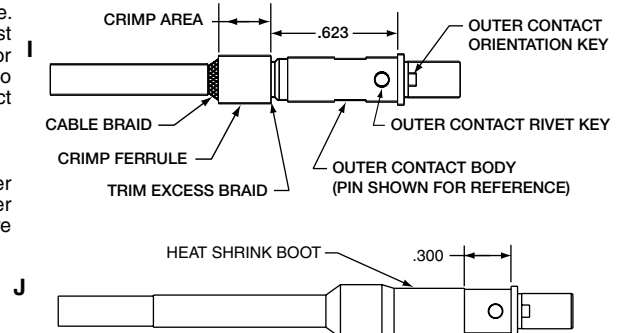
Amphenol Part Number	Description	Twinax Cable Recommended	Outer Crimp Tools	
			Tool	Die Set (Location)
21-033496-061	Differential Twinax Pin	Tensolite 26483/03071X-2 (LD) (150 Ohm)	M22520/5-01	M22520/5-43 (B)
21-033497-061	Differential Twinax Socket			

**Contact Insertion into Connector:**

Contacts are inserted by hand. Insert the contact assembly into the proper rear grommet hole. Contact must be aligned with hole and not inserted at an angle. The contact's orientation key must be in vertical alignment with the connector's main key or keyway (holding contact key and connector key/keyway at "12 o'clock" orientation position is recommended). Push forward until contact is felt to snap into position within the insert. Contact may need to be slightly rotated to properly align contact orientation key with connector insert keyway. Gently tug on cable to assure retention.

**Contact Removal from Connector:**

Remove piggyback grommet seal from the connector grommet. Position removal tool part number M81969/14-05 or M81969/8-12, around cable and slide tool toward connector until tool tips enter rear grommet and comes to a positive stop on the contact. Grip cable and simultaneously remove tool, contact and cable.



**Amphenol**

Amphenol Aerospace  
40-60 Delaware Avenue  
Sidney, New York 13838-1395  
Website: www.amphenol-aerospace.com