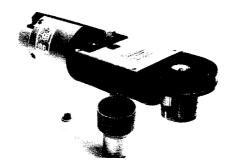
### Tooling, Crimp



M22520/1-01 CRIMP TOOL M22520/1-02 Turret



CBT-520/530

### Tooling, Insertion/Extraction



**KPSE Insertion** 



**KPSE Extraction** 

Contact Size		Contact Size	
20	MS24256A20	20	MS24256R20
	MS24256A16	16	MS24256R16

## Contacts



Contact	Military		Color Bands	•	ITT Cannon
Size/Type	Part Number	1st	2nd	3rd	Part Number
20 Socket	M39029/32-259	Red	Green	White	031-9074-002
20 Pin	M39029/31-240	Red	Yellow	Black	030-9036-000
16 Socket	M39029/32-247	Red	Yellow	Violet	031-9095-003
16 Pin	M39029/31-228	Red	Red	Grey	030-9032-003

Contacts for printed circuit applications also available

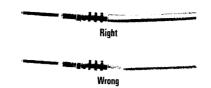
## Wire Hole Fillers/Grommet Sealing Plugs



Contact	Part Number		Color
Size	Cannon	Military	Code
20	225-1012-000	MS3187A20	Red
16	225-1011-000	MS3187-16	Blue

### **KPSE** Assembly Instructions

Contact Size	Wire Size AWG	Strip Insulation
20	#20-#24	3/16"
16	#16-#20	1/4"





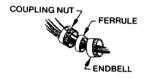
#### **CRIMPING CONTACTS**

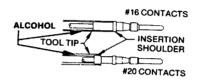
1. Strip wires according to the table above taking care not to cut or nick strands.

2. Insert stripped wire into contact crimp pot. Wire must be visible thru inspection hole.

3. Using correct crimp tool and locator select proper crimp setting for wire sizer to be crimped; cycle the tool once to be sure the indentors are open. Insert contact and wire into locator. Squeeze tool handles firmly and completely to insure a proper crimp. The tool will not release unless the crimp indentors in the tool head have been fully actuated. Release crimped contact and wire from tool. Be certain the wire is visible thru inspection hole in contact.

CAUTION: Check that none of the contacts are bent or damaged in any way after crimping.







#### **CONTACT INSERTION**

 Remove hardware from plug and receptacle. Slide hardware over wire bundle in proper order for reassembly.

2. Use the proper contact insertion tool and slide the tool over the terminal end of the contact. The size 16 contact lies in the tool and the tool tip butts against the contact shoulder. The rear, or insulation support of the size 20 contact butts against an internal shoulder in the tool tip.

NOTE: Apply a small amount of isopropyl alcohol to the insertion tool tip while installing contacts.

3. Beginning from center cavity and working outwards in a circular pattern, insert wired contacts into rear of connector by hand until the front of the contact shoulder is no more than 1/8" from the grommet. Holding the connector horizontally, position tool behind contact. Push tool straight into contact cavity until contact snaps into position. A light pull on wire will assure that contact is locked securely. Repeat for remaining contacts.



4. Use contacts and grommet sealing plugs to fill any empty cavities.



#### COMPLETION

1. Check face of plug or receptacle for proper contact installation.

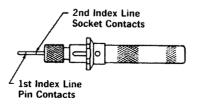
Size	Torque in/lbs
8,10,12 and 14	10-15
16 and 18	15-25
20,22 and 24	25-35

- 2. Using mating connector with contacts installed, mate both connector halves together.
- 3. Assemble ferrule over the grommet by hand as far as possible.
- 4. Assemble endbell over ferrule and loosely tighten endbell. Partially loosen (1/4 turn) and retighten to recommended torque limits.



#### **CONTACT EXTRACTION**

 Slide hardware back over wire bundle. Using proper extraction tool or extraction end of proper insertion/extraction tool, proceed as follows:



KPSE: There are two lines on the clip sleeve which are vital to the contact removal process. The first index line is used for removing pin contacts while the second index line is for removing socket contacts.



Carefully place the tool tip over the contact to be extracted until the tool tip touches the insulator face. Carefully rotate the tool until the index line is slightly below the insulator face. Keep an even pressur against tool body; push plunger forward with thumb and index finger, and push the contact out through the clip. Carefully remove extraction tool from connector. Pull the wire by hand to complete the removal of the contact.

# **ITT**Cannon