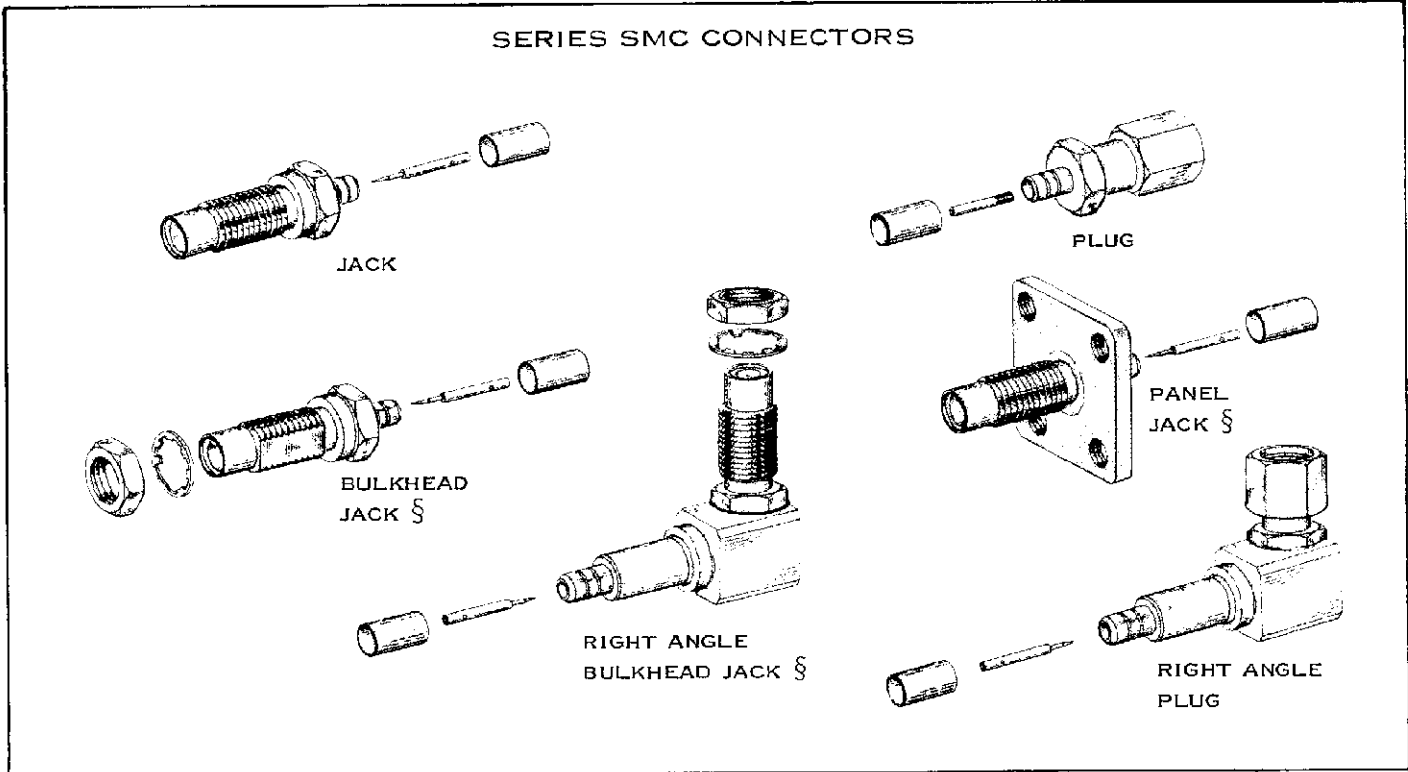




AMP\* SERIES SMC  
DUAL CRIMP TYPE  
COAXICON\* CONNECTORS

<b>IS 2224</b>	
RELEASED	9-3-69
REVISED	6-12-74



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RG/U CABLE	CONNECTOR DESCRIPTION	CONNECTOR ASSEMBLY (Includes Body, Contact & Ferrule)		CONNECTOR BODY NO.	CENTER CONTACT NO.		FERRULE NO.
		AMP PART NUMBER	GOVT. DESIG. M39012		LOOSE PIECE	ON TAPE	
174, 188	PLUG	51749-1	73-0006	51738-1	51746-5	51746-4	1-332056-0
	JACK	51750-1	74-0006	51739-1	51745-4	51745-3	
	BULKHEAD JACK	51751-1	76-0006	51740-1			
	PANEL JACK	51752-1	—	51741-1			
	RT. ANGLE PLUG	51753-1	75-0006	51742-1			
	RT. ANGLE BLKHD. JACK	51754-1	—	51743-1			
178, 196	PLUG	51749-2	73-0005	51738-2	51748-5	51748-4	51744-2
	JACK	51750-2	74-0005	51739-2	51747-4	51747-3	
	BULKHEAD JACK	51751-2	76-0005	51740-2			
	PANEL JACK	51752-2	—	51741-2			
	RT. ANGLE PLUG	51753-2	75-0005	51742-2			
	RT. ANGLE BLKHD. JACK	51754-2	—	51743-2			
179	PLUG	51749-5	73-0007	51738-1	51748-5	51748-4	1-332056-0
	JACK	51750-3	74-0007	51739-1	51747-4	51747-3	
	BULKHEAD JACK	51751-3	76-0007	51740-1			
	RT. ANGLE PLUG	51753-4	75-0007	51742-1			

§ SEE FIGURE 9 FOR PANEL CUT-OUT. FLANGE ON PANEL JACK IS SEPARATE FROM BODY, ASSEMBLE FLANGE AFTER COMPLETING CRIMPS. USE OF A METAL BONDING MATERIAL IS SUGGESTED.

## INTRODUCTION

The following application procedure applied to AMP Series SMC dual crimp COAXICON Connectors. Note that the parts are available under one part number, including Connector Body, Ferrule and Center Contact or as separate components with a part number for each component. Center Contacts ordered singly are mounted on sections of tape and remain affixed to it until crimped.

Three types of Tools are recommended for crimping. See Figure 1. Tool No. 69365 crimps both center contact and ferrule with a single set of dies although each part is crimped separately. Hand Tool 220020-1 with integral Dies, also crimps both parts. Tool No. 69118-1 crimps only the center contact but does it automatically on reels

of tape. The Ferrule is then crimped in either of the other two tools.

After the Cable has been properly prepared, the Center Contact is crimped onto the Center Conductor. The crimped Center Contact is then inserted into the Connector Body. The Braid Ferrule is slipped over the Braid and crimped to complete the assembly.

NOTE: When using RG 178 and 196 cables, SMC Plugs and Jacks, with the exception of right angles, should be crimped with the use of a special gage to locate center contact. For Hand Tool 220020-1 the gage is used when inserting crimped contact into connector but is removed to complete ferrule crimp. For Tool 69365, gage can remain in connector until ferrule is crimped.

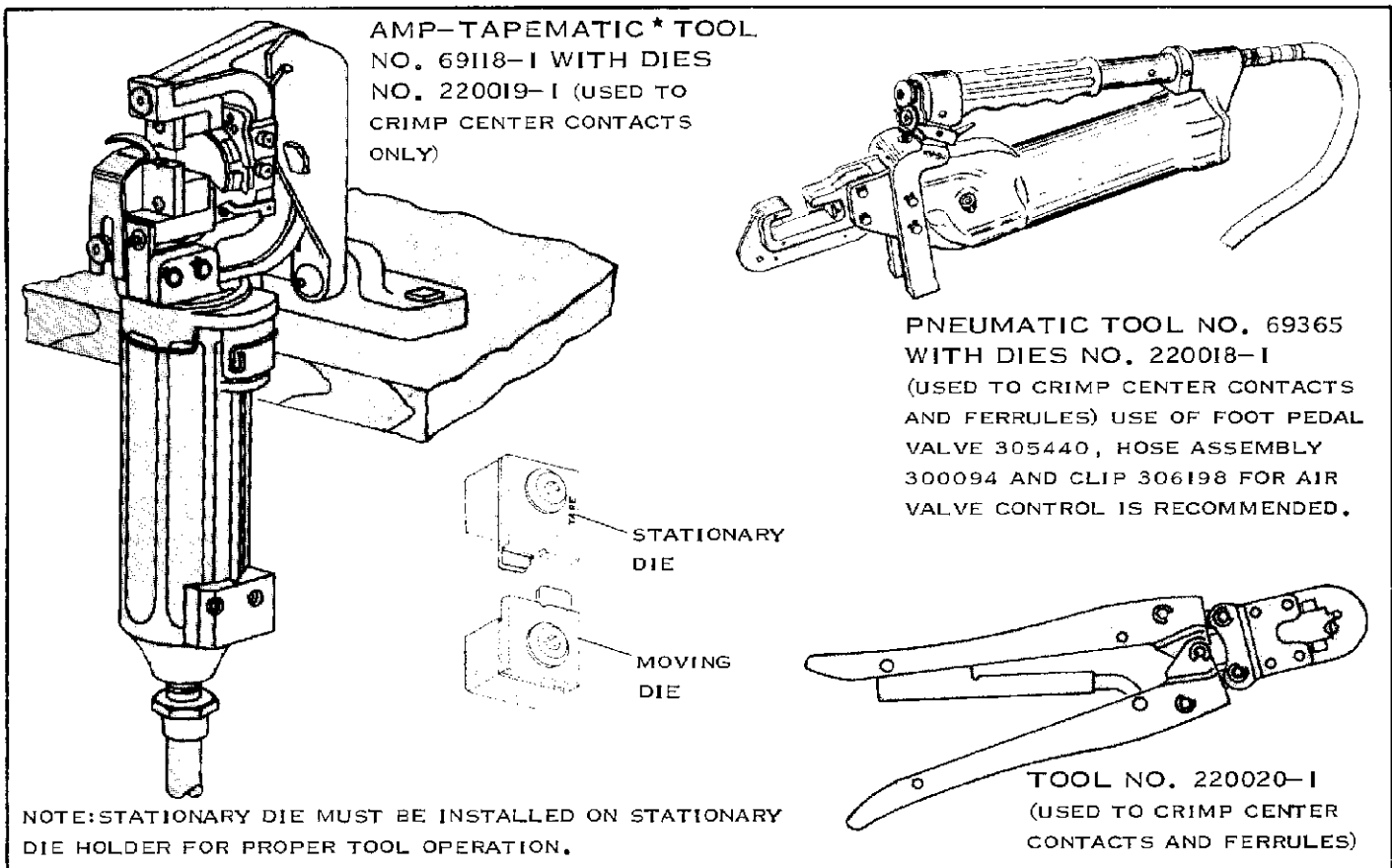


FIG. 1

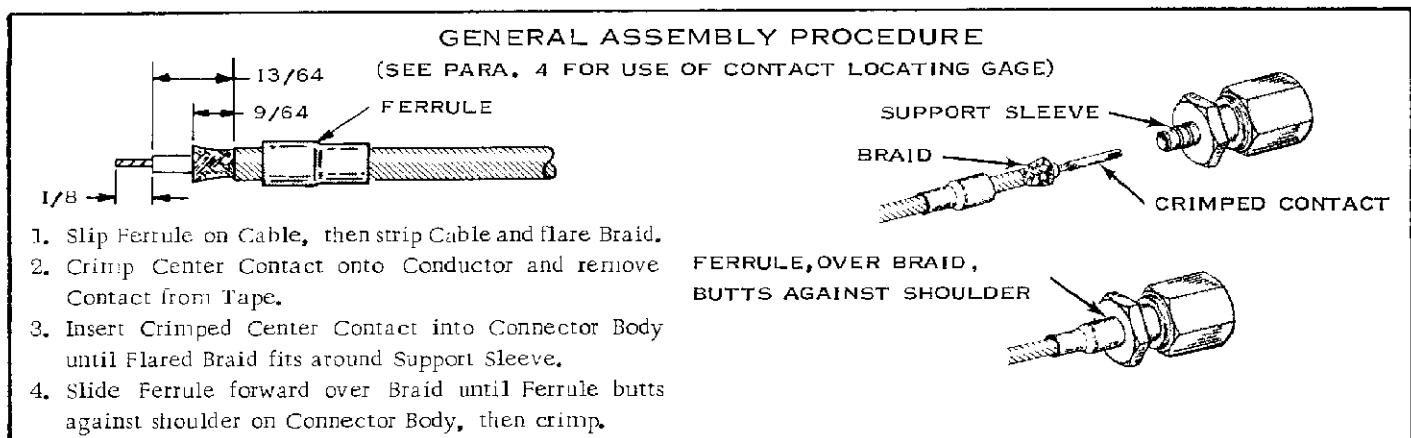


FIG. 2

## 1. CRIMPING PROCEDURE—TOOL NO. 69365

First read instructions shipped with Tool No. 69365 for information concerning Die Insertion and general tool usage. Customer Manual 1983 describes operation of the tool which crimps the center contact and the ferrule with the same dies, although each part is crimped separately.

### 1.1 CENTER CONTACT CRIMPING

- Place Crimping Dies in tool.
- Prepare Cable as shown in Figure 2.
- Slip section of tape containing center contact into slot in Stationary Die. Locate center contact in crimping area. See Figure 3.
- Insert conductor into center contact, then Press Trigger to complete crimp.
- Remove crimped Contact from tape.

SECTION OF TAPE IN DIE,  
FLAT SIDE "UP"

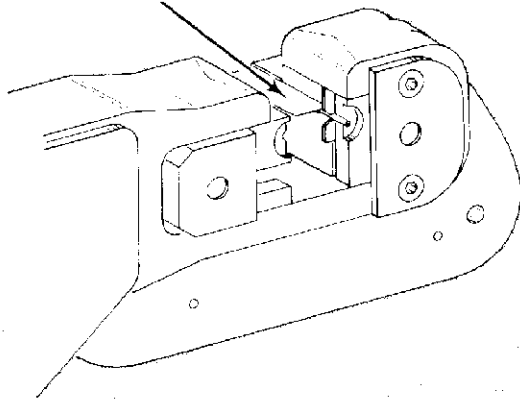


FIG. 3

### 1.2 FERRULE CRIMPING

- Assemble Connector Body and Ferrule as described in steps 3 and 4 of Figure 2.
- Place Ferrule on Stationary Die so that shoulder on Connector Body butts against Die. See Figure 4.
- Hold assembly in place and press Trigger. Release Trigger and remove crimped assembly from Crimping Dies.

SHOULDER ON CONNECTOR  
RESTS AGAINST DIE

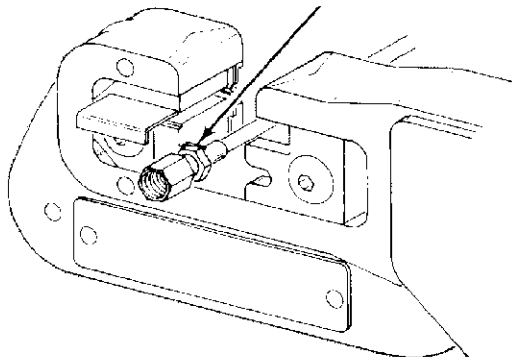
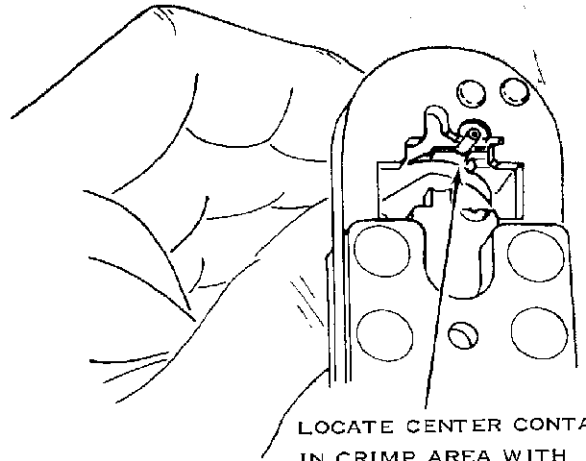


FIG. 4

## 2. CRIMPING PROCEDURE—TOOL NO. 220020-I

### 2.1 CENTER CONTACT CRIMPING

- Prepare Cable as shown in Figure 2.
- Open Crimping Dies by closing Tool Handles until CERTI-CRIMP\* Ratchet on Handles releases. Note that once Ratchet is engaged, Handles cannot be opened until fully closed.
- Slip section of tape containing center contact into slot in stationary die and locate center contact in crimp area. See Figure 5.
- Close Tool Handles just enough to hold Contact in place without deforming Wire Barrel. See Figure 6.
- Insert stripped Conductor in Contact. Dielectric on Cable must butt against end of Contact.
- Hold Cable in place and close Handles until CERTI-CRIMP Ratchet releases.
- Open Handles and remove tape from tool. Remove crimped Contact from tape.



LOCATE CENTER CONTACT  
IN CRIMP AREA WITH  
FLAT SIDE OF TAPE "UP"

FIG. 5

CONTACT HELD IN PLACE  
WITH DIE PARTIALLY  
CLOSED

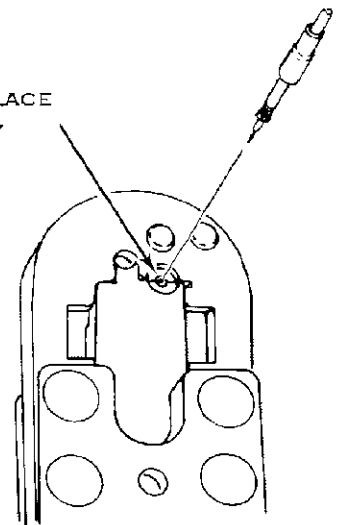


FIG. 6

## 2.2 FERRULE CRIMPING

- (a) Assemble Connector Body and Ferrule as described in steps 3 and 4 of Figure 2.
- (b) Open Crimping Dies all the way.
- (c) Place Ferrule on Crimping Die; Shoulder on Connector Body rests against Die. See Figure 7.
- (d) Close Handles until CERTI-CRIMP Ratchet releases.
- (e) Open Tool Handles and remove crimped assembly.

SHOULDER ON CONNECTOR  
RESTS AGAINST DIE

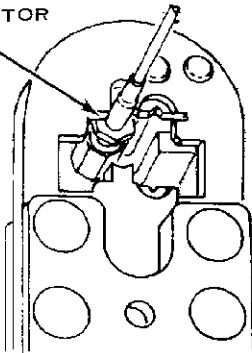


FIG. 7

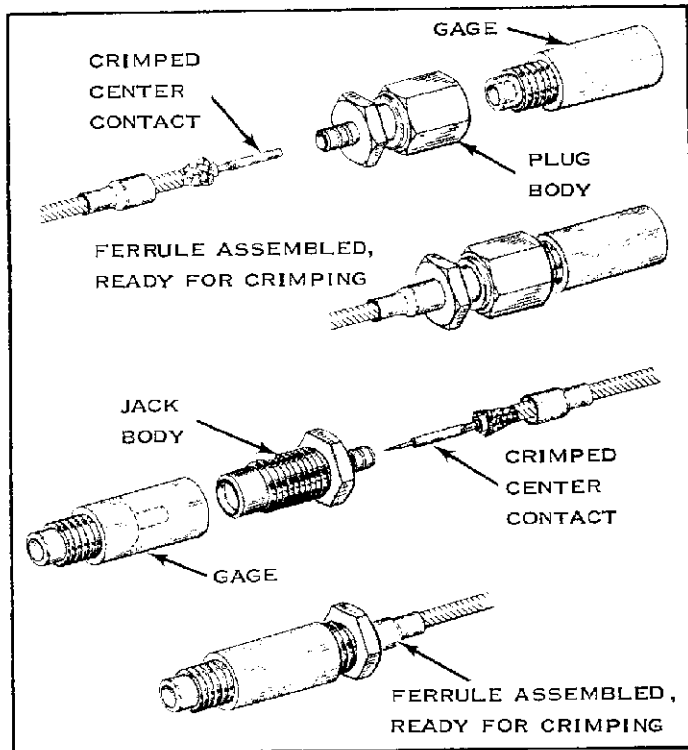


FIG. 8

- ### 3. CRIMPING PROCEDURE-TOOL NO. 69118-1
- First read instructions shipped with Tool for information concerning Die Insertion and general Tool usage. Customer Manual 1773 describes operation of Tool 69118-1, which crimps Contacts on tape strips.

- (a) Place crimping dies in Tool and install tape containing contacts. NOTE: SEE FIGURE 1 FOR PROPER ORIENTATION OF DIES IN TOOL.
  - (b) Prepare cable as shown in Figure 2.
  - (c) Insert conductor into contact.
  - (d) Actuate Tool to complete crimp.
  - (e) Remove crimped contact from tape.
- NOTE: Since Ferrules cannot be crimped in Tool No. 69118-1, proceed as described in Paragraph 1.2 or 2.2, depending upon tool to be used, to crimp Ferrule.

## 4. CENTER CONTACT LOCATING GAGE FOR USE WITH RG-178, 196 CABLES

Center Contact Locating Gage Part No. 225162-1 is used as follows when assembling all SMC Plugs and SMC Jacks, except right angles, on RG 178 and 196 Cable.

- (a) Strip cable and crimp Center Contact as previously described.
  - (b) Screw Gage onto Connector Body. See Figure 8.
  - (c) Insert crimped Contact into Connector Body until end of Contact butts against stop inside Gage.
  - (d) Slide Ferrule over Braid and support Sleeve until it butts against Connector.
  - (e) Remove Gage from Connector and complete Ferrule crimp.
- NOTE: Gage must be removed if assembly is crimped in Hand Tool 220020-1, but can be left on Connectors while crimping in Tool No. 69365.

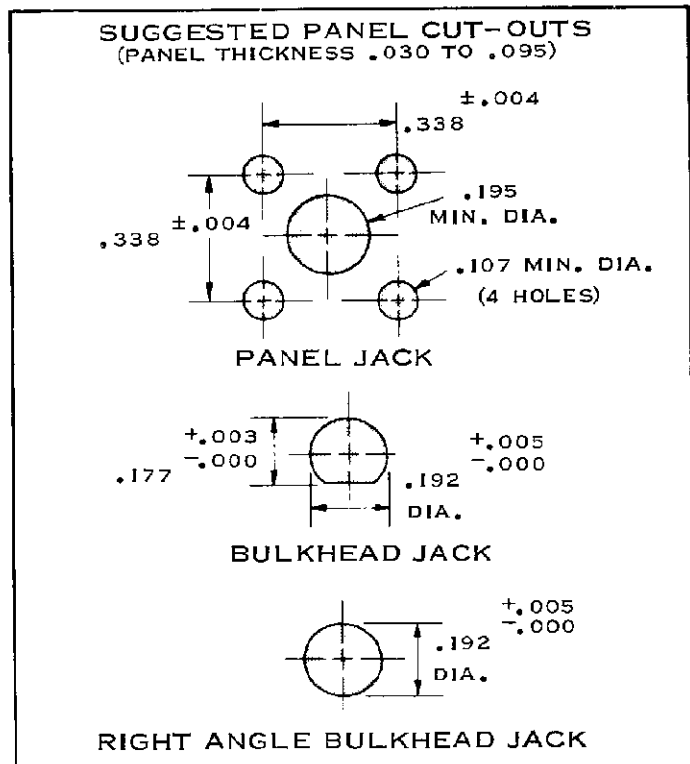


FIG. 9