

All illustrations and information contained in this instruction sheet are based on the latest product information available at the time of publication.

## 1. INTRODUCTION

This instruction sheet is intended to provide you with "Instructions" on product application and a "Maintenance and Inspection Procedure" for:

TERMASPLICE* SPLICE CRIMPING DIES (USED IN TOOL NOS. 69319-1, 69365, 69710)		
69149-2	69266-1	69361-1

These dies are used to crimp:

- TERMASPLICE splices on coaxial or shielded cables within a primary insulation diameter range of .033 max. thru .095. Splice lead and ground wire sizes 24 thru 20 are simultaneously crimped in the splice with the shielded or coaxial cables.

Before attempting to crimp splices, refer to instructions shipped with the tools for die insertion and tool operation. Basic instructions on the use of these dies, wire preparation, splice assembly, etc. are provided in Section 2, "Instructions." Section 3 contains a "Maintenance and Inspection Procedure" which will enable you to establish and maintain a *tool certification program*.

Dies are coated with oil to prevent rust and corrosion. Wipe this oil from dies, particularly from crimp closure.

## 2. INSTRUCTIONS

### 2.1 WIRE STRIPPING

Strip cable, splice lead, and ground wire to dimensions listed in Figure 1.

### 2.2 PREPARE SPLICE

#### 2.2.1 Cable Insertion (Refer to Figure 2)

- Twist conductor strands slightly.
- Conductor insulation passes through support sleeve and braid passes over and around support sleeve.
- Stripped conductor of cable must enter parallel splice as shown in Figure 2.

#### 2.2.2 Splice Lead and Ground Wire Insertion

(Refer to Figure 2)

- Insert ground wire under TERMASPLICE skirt. Note that one side of skirt has been "stretched" to make more room for the ground wire. Insert ground wire into this section of splice between skirt and braid.
- Hold ground wire securely inside splice and insert splice lead into parallel splice. Make certain splice lead, when inserted, does not move cable conductor. Parallel splice will accept solid or stranded wire sizes 24 thru 20 AWG.
- Assembly is now ready to be crimped.

### 2.3 CRIMPING PROCEDURE

The crimping dies have two crimp closures. One closure crimps the braid section of the TERMASPLICE splice and the other closure crimps the 24-20 special splice. Both crimps are made at the same time.

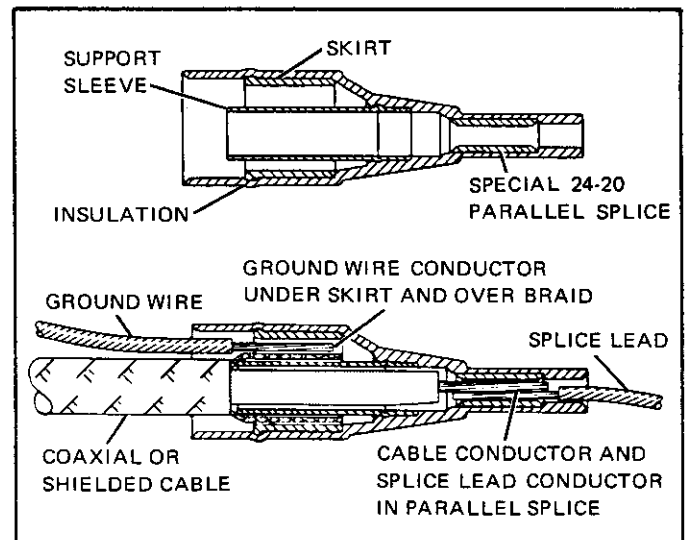


Figure 2

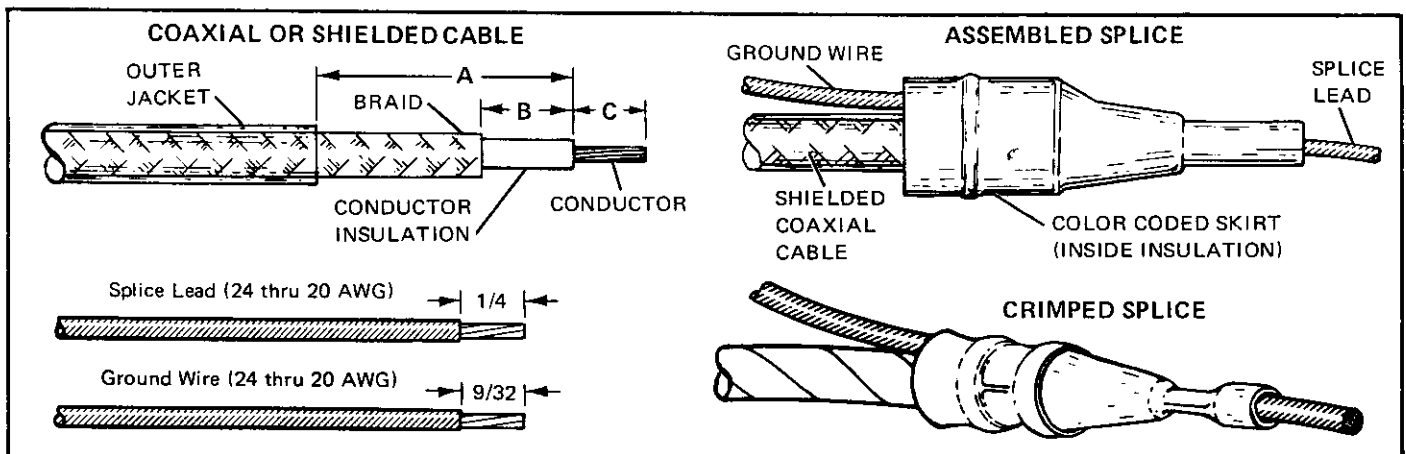


Figure 1

SPLICE NO.	STRIP LENGTHS			COLOR CODE	RECOMMENDED COAXIAL CABLE	PRIMARY INSULATION DIA. RANGE	DIE NO.
	A	B	C				
330592	9/16"	3/16"	1/4"	GREEN	RG-178-U, RG-196-U	.033-Max.	69361-1
329413				VIOLET	RG-174-U, RG-187-U	.033-.059	69266-1
1-219413-0				BLUE	—	.059-.085	69266-1
328812		5/32"	9/32"	TIN	RG-180-U, RG-195-U	.085-.095	69149-2

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### 2.3.1 Color Code

Select the correct ferrule and die combination. Ferrule skirts and die holding screw heads are color coded for a given primary insulation diameter range. See Figure 1.

### 2.3.2 Pneumatic Tools

- (a) Insert dies in tool.

NOTE: Before attempting to crimp splices, refer to instructions shipped with tools for information concerning die insertion and tool operation.

- (b) Connect air supply.

- (c) Place splice, with stripped wires inserted, in crimping dies as shown in Figure 3. Small shoulder on tapered end of splice butts against splice crimping die.

NOTE: Make certain that section of splice containing ground wire faces moving die. See Figure 3.

- (d) Push or squeeze take-up lever or trigger until splice is held firmly in place.

- (e) Make certain splice is properly positioned and stripped wires are fully inserted. Then, simultaneously release take-up lever or trigger and depress crimping button or trigger to complete crimp.

- (f) Release crimping button or trigger and remove crimped splice.

IMPORTANT: CHECK DIE ALIGNMENT AND TIGHTEN DIE HOLDING SCREWS AT LEAST TWICE DAILY.

### 2.3.3 Hand Tool

- (a) Insert dies in tool.

NOTE: Before attempting to crimp splices, refer to instructions shipped with tools for information concerning die insertion and tool operation.

- (b) Place splice, with stripped wires inserted, in crimping dies as shown in Figure 3. Small shoulder on tapered end of splice butts against splice crimping die.

NOTE: Make certain that section of splice containing ground wire faces moving die. See Figure 3.

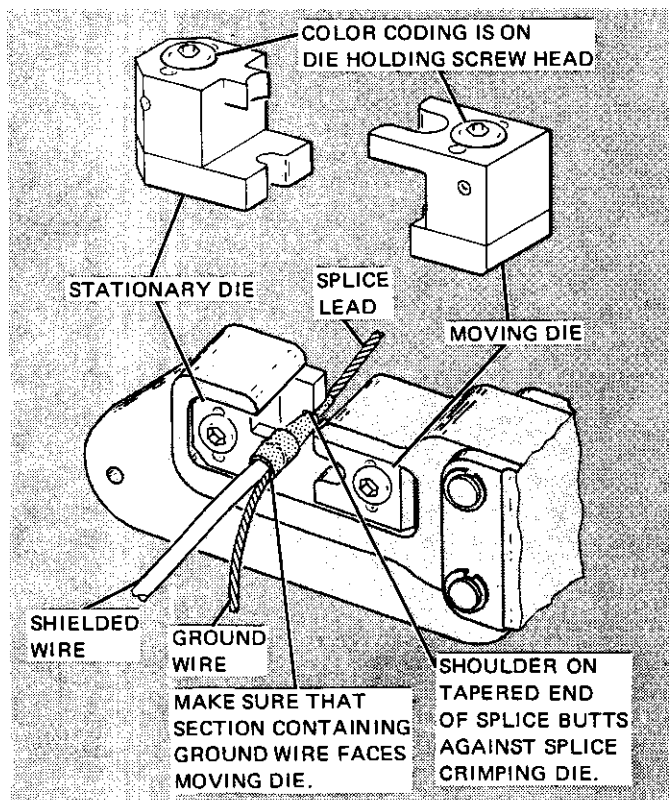


Figure 3

- (c) Hold splice in position and complete crimp by closing handles until CERTI-CRIMP\* ratchet releases. Handles will open automatically and crimped splice may be removed.

IMPORTANT: CHECK DIE ALIGNMENT AND TIGHTEN DIE HOLDING SCREWS AT LEAST TWICE DAILY.

## 3. MAINTENANCE/INSPECTION PROCEDURE

AMP recommends that a maintenance/inspection program be performed periodically. This is necessary to assure that continued use of the dies will result in the same dependable and uniform terminations for which the dies were designed. We recommend an initial frequency of inspection of once a month. This frequency may be adjusted to suit your requirements through experience. The frequency of an inspection is dependent upon:

1. The care, amount of use, and handling of the dies.
2. The type and size of the products crimped.
3. The degree of operator skill.
4. The presence of abnormal amounts of dust and dirt.
5. Your own established standards.

With proper maintenance and inspection, these dies will give years of satisfactory service.

All AMP\* dies are thoroughly inspected before being shipped from the factory, however, since there is a possibility of die damage in shipment, AMP recommends that new dies be inspected in accordance with Section 3 when received in your plant.

### 3.1 CLEANING

Do not allow deposits of dirt, grease and foreign matter to accumulate in the die closure area and on the bottoming surfaces of the dies. These deposits may prevent the dies from bottoming fully and may also cause excessive wear in the die closure surfaces, thereby affecting the quality of the crimp. The dies should be wiped clean frequently with a clean cloth.

### 3.2 VISUAL INSPECTION

Visually inspect the die closure surfaces for broken or pitted conditions. Although dies may gage within permissible limits, worn or damaged die closure surfaces are objectionable and can affect the quality of the crimp. Examples of possible damaged die surfaces are shown in Figure 4.

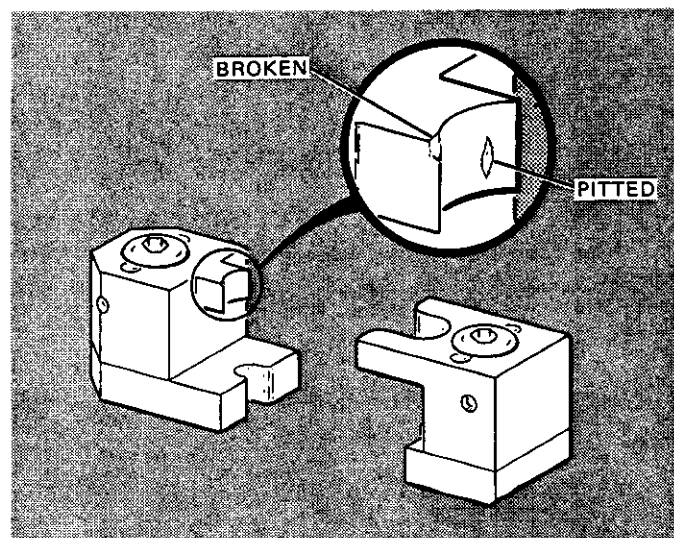


Figure 4

### 3.3 DIE CLOSURE INSPECTION

Every AMP die set is inspected and tested for proper die closure before being shipped from the factory. An inspection should, however, be performed periodically to measure the die closure.

The die closure inspection is accomplished using GO NO-GO plug gages. AMP neither manufactures nor sells plug gages, however, a suggested plug gage design and the GO NO-GO dimensions of the plug gage members are listed in

Figures 5 and 6. The following procedure is recommended for measuring the die closures.

- (a) Remove traces of oil or dirt from die crimp closures and plug gage members.
- (b) Insert dies in tool.
- (c) When using hand tool, close handles of tool until dies bottom. Do not apply additional pressure to tool handles. Refer to instruction material packaged with the hand tool for CERTI-CRIMP ratchet inspection.

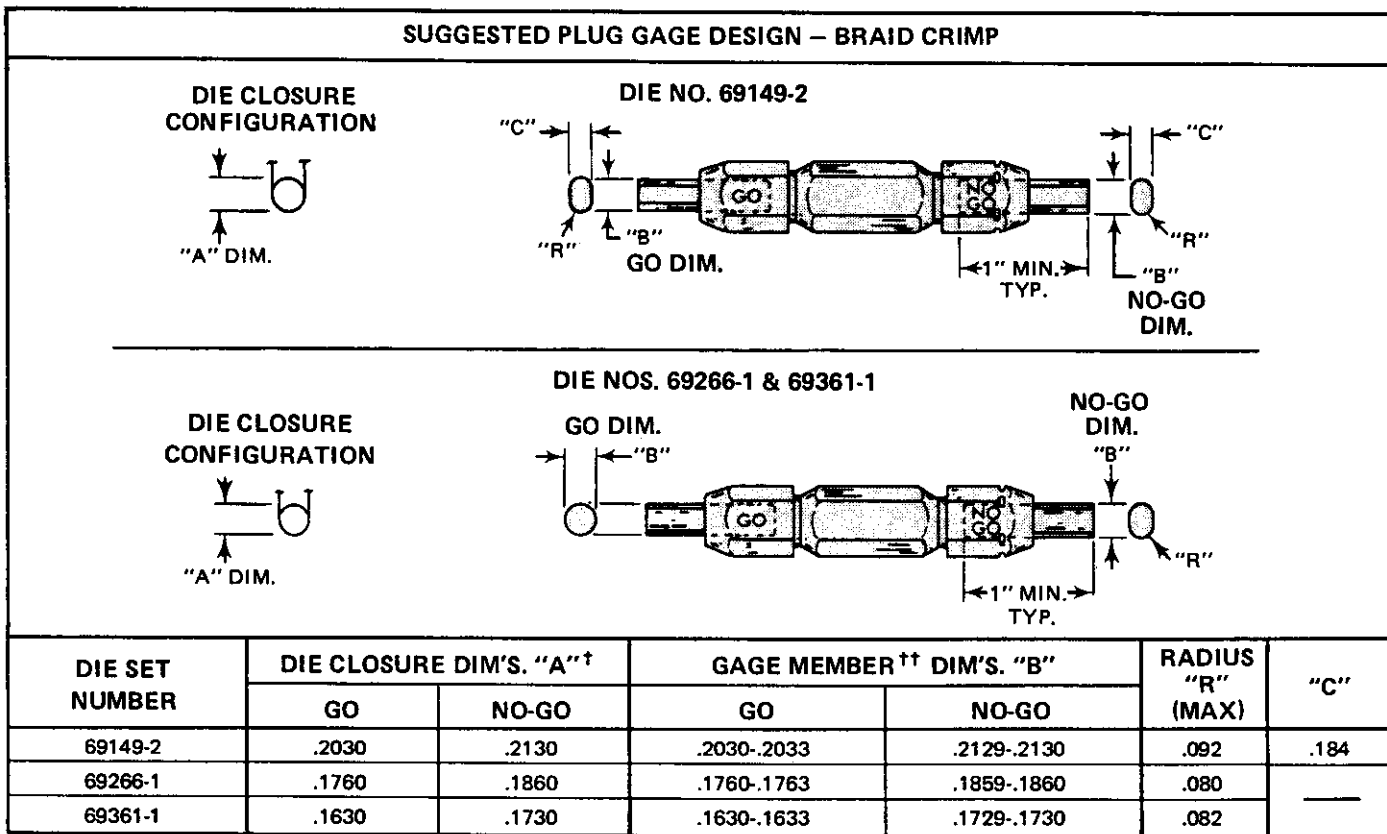


Figure 5

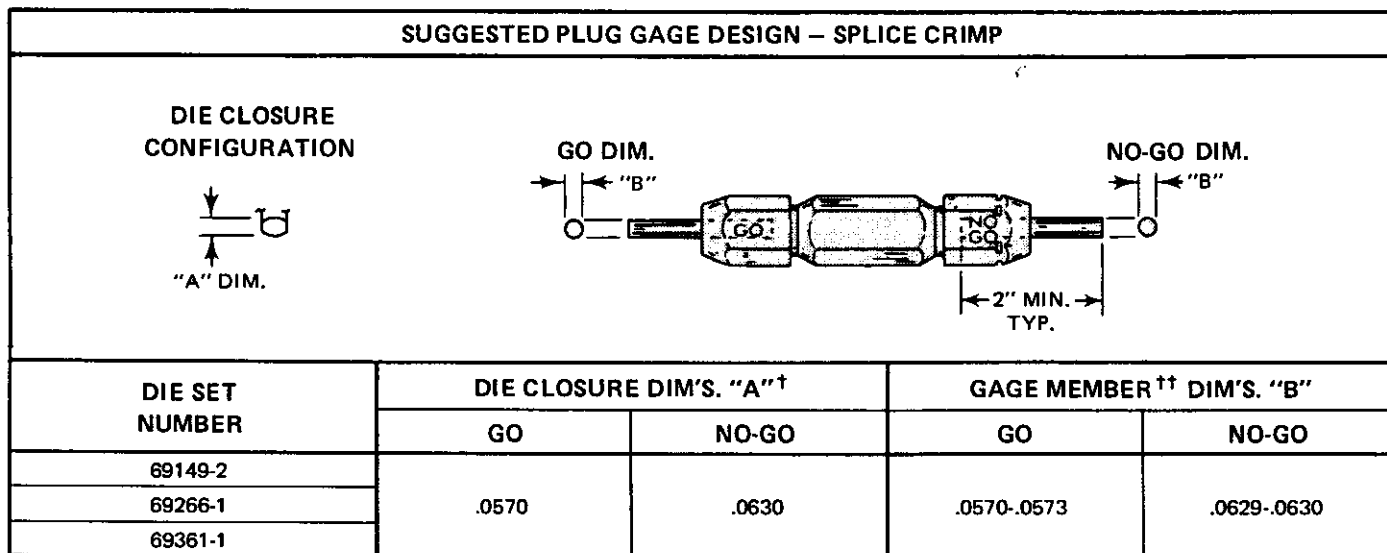


Figure 6

† Plug gage dimensions apply when dies are bottomed, but not under pressure.  
 †† Material – Tool steel

- (d) When using pneumatic tool, reduce air supply pressure to a range between 15-20 P.S.I. Depress trigger to bottom dies.
- (e) With crimping dies bottomed, check the braid crimp and splice crimp die closures using the proper plug gage. Hold gage in straight alignment with the die closure and carefully try to insert without forcing, the GO member, and then the NO-GO member. See Figure 7. The GO member must

- pass completely through the die closure.
- (f) The NO-GO member may enter partially, but must not pass completely through the die closure.
- (g) If the die closures meet the GO NO-GO gage conditions, the dies may be considered dimensionally correct. If you find that the die closures do not conform with the GO NO-GO gage conditions, contact your local AMP field representative.

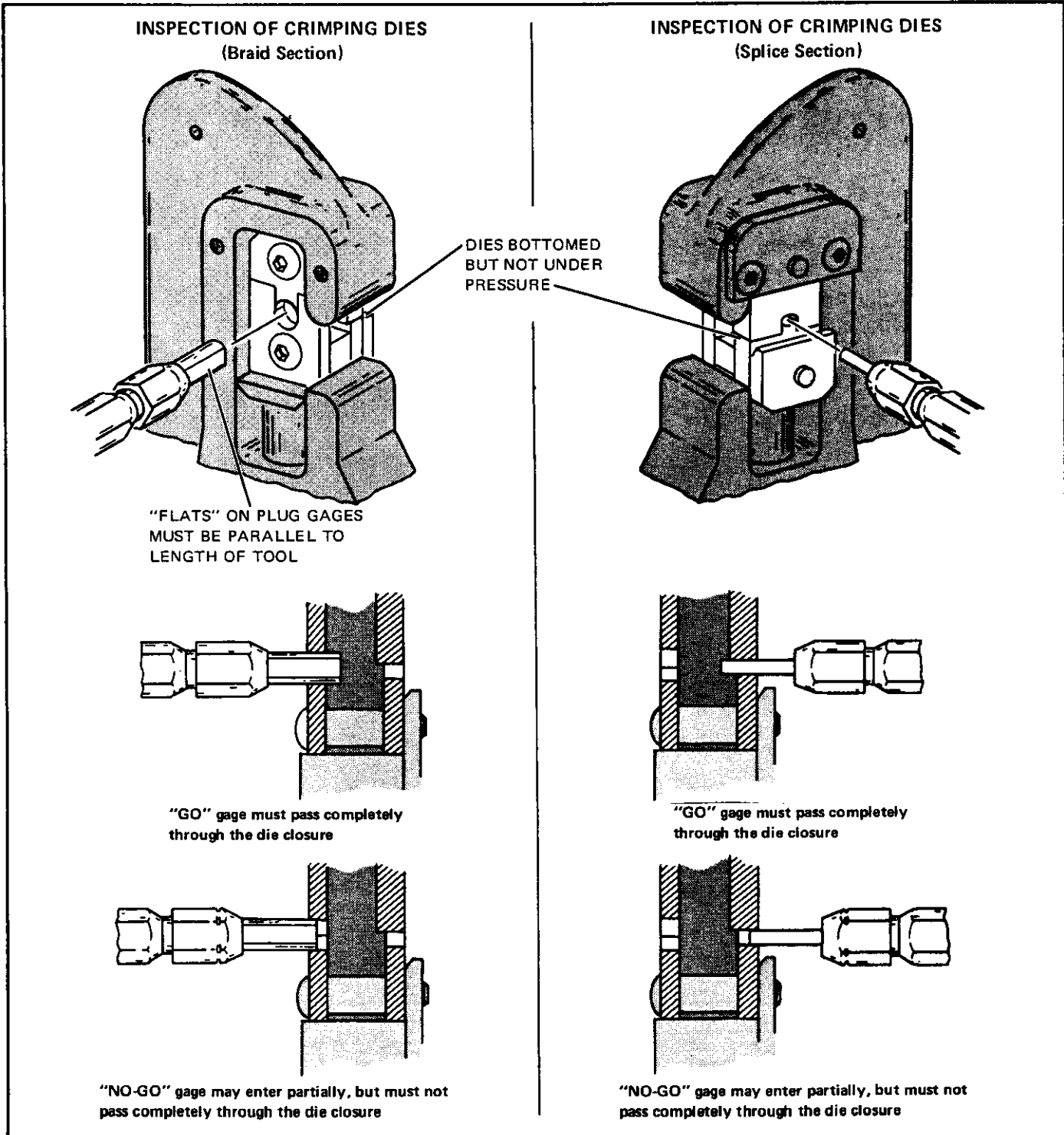
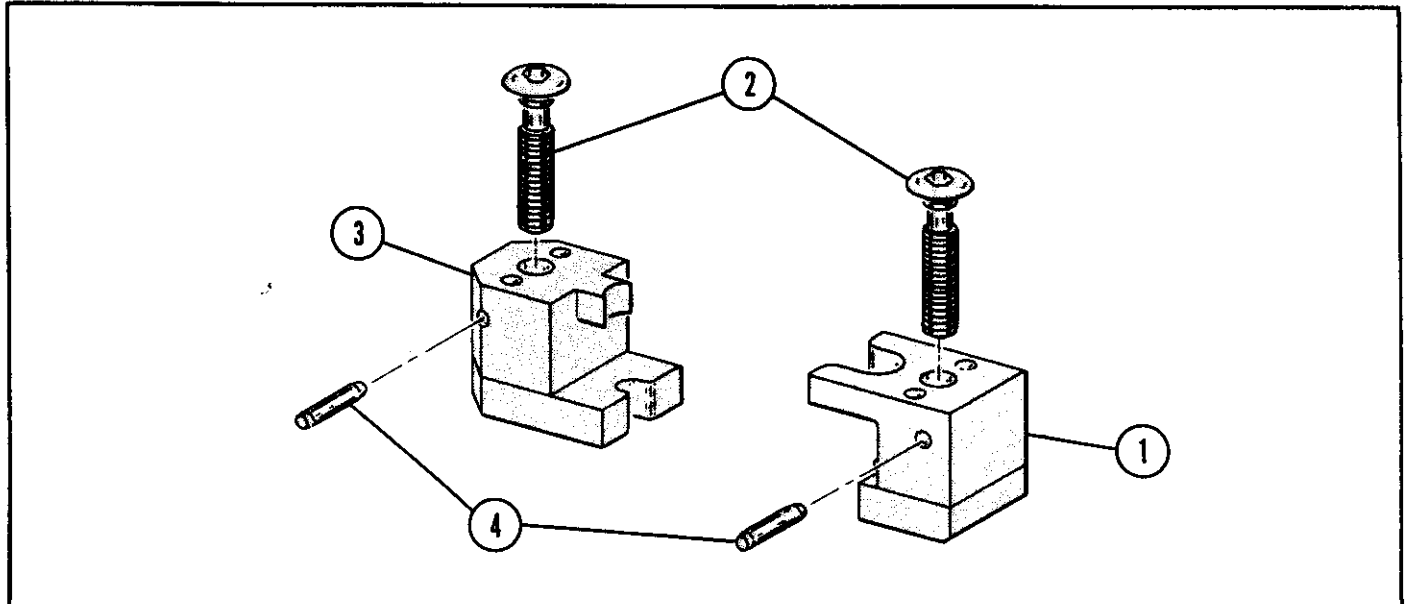


Figure 7

**3.4 REPLACEMENT PARTS**

Parts other than those listed on Figure 8 should be replaced by AMP Incorporated. For tool repair service, the

tools should be returned to AMP Incorporated, Harrisburg, Pa. 17105, or a wholly owned subsidiary of AMP Incorporated.



ITEM	DESCRIPTION	QTY.	DIE NO. AND COMPONENT PART NUMBERS		
			69149-2	69266-1	69361-1
1	NEST AND ANVIL ASS'Y., LOWER	1	305606-4	305606-5	305606-6
2	SCREW	2	306592-6	306592-6	306592-6
3	ANVIL AND NEST ASS'Y., UPPER	1	305607-4	305607-5	305607-6
4	PIN, SPIROL	2	21028-6	21028-6	21028-6

Figure 8

REL. DATE	REV. DATE	APPROVALS	
8-16-61	6-9-75	ENG. <i>James J. Bell</i>	PUB. <i>Paul Felty</i>