

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 provides "Instructions" on product application and a "Maintenance and Inspection Procedure" for:

PRE-INSULATED STRATO-THERM[★] SPLICE CRIMPING DIES
 (Used in Tool Nos. 69319-1, 69365 & 69710)
69327 Mod. E 69328 Mod. H 69329 Mod. E

These dies are used to crimp:

- Pre-insulated STRATO-THERM splices on wire size 22 thru 12.

Basic instructions on the use of the dies, die insertion and removal, etc., are provided in Section 2 "Instructions". Section 3 features a splice "Crimp Inspection" procedure. Section 4 contains a "Maintenance and Inspection Procedure" which will enable you to establish and maintain a *die certification program*.

Dies are coated with preservative to prevent rust and corrosion. Wipe preservative from dies, particularly from crimping surfaces.

For instructions relative to the pneumatic and hand tools listed in Figure 2, refer to the instructions packaged with these tools.

2. INSTRUCTIONS

WARNING: AVOID PERSONAL INJURY. ALWAYS KEEP FINGERS CLEAR OF DIES WHEN ACTIVATING AIR POWERED TOOLS.

2.1 DIE INSERTION

- (a) **DISCONNECT PNEUMATIC TOOL FROM AIR SUPPLY.**

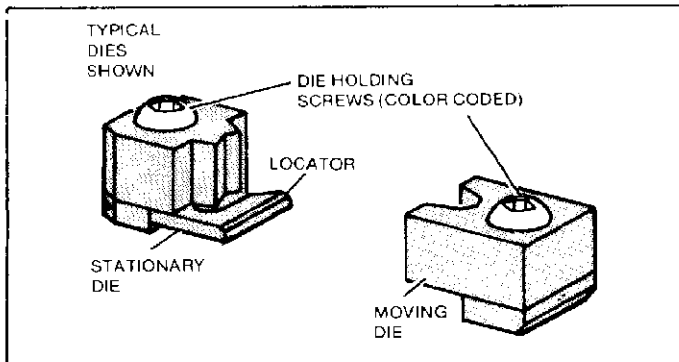


Figure 1

- (b) Each set of dies consists of a moving die and a stationary die. See Figure 1.
- (c) Position stationary die in stationary die holder. Take up on die holding screw enough to hold die in place. Do not tighten screw.
- (d) Position moving die in moving die holder. Take up on die holding screw enough to hold die in place. Do not tighten screw.
- (e) Connect air supply.
- (f) Insert stripped wire into splice wire barrel. Place splice in stationary die as shown in Figure 3. See Figure 2 for wire strip length.
- (g) Actuate tool until dies bottom.
- (h) Tighten both die holding screws while dies are bottomed.

NOTE: Prevent locator from binding. Do not over tighten screws.

- (i) Tool is now ready for operation.

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

2.2 DIE REMOVAL

- (a) **DISCONNECT PNEUMATIC TOOL FROM AIR SUPPLY.**
- (b) Loosen die holding screws and remove dies.

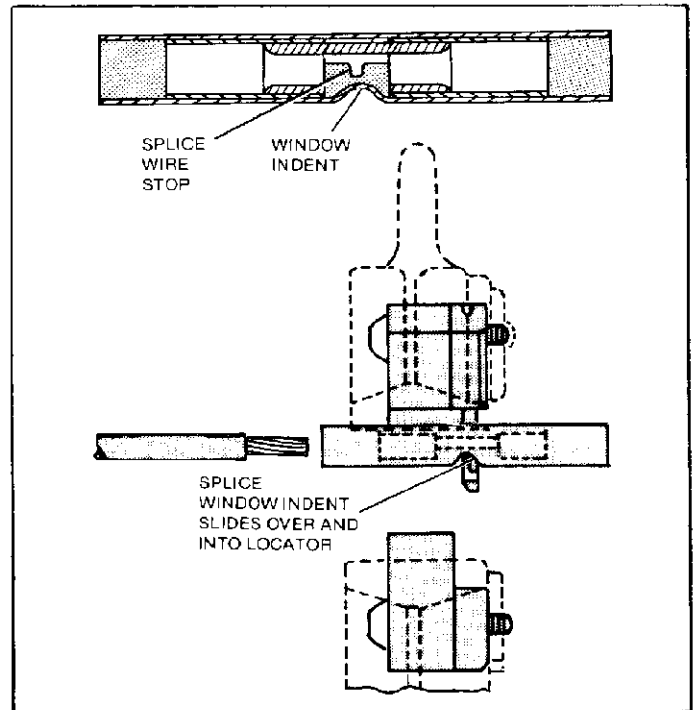


Figure 3

TOOLS	DIE SET NUMBER	WIRE SIZE	DIE & SPLICE SLEEVE COLOR CODE	WIRE STRIP LENGTH	
				MIN.	MAX.
69365	69327 MOD. E	22-20	WHITE	1/4"	9/32"
69319-1 (wire size 22-14 only)	69328 MOD. H (No insulation grip)	18-16	RED	9/32"	5/16"
69710	69329 MOD. E (No insulation grip)	14-12	BLUE	5/16"	11/32"

Figure 2

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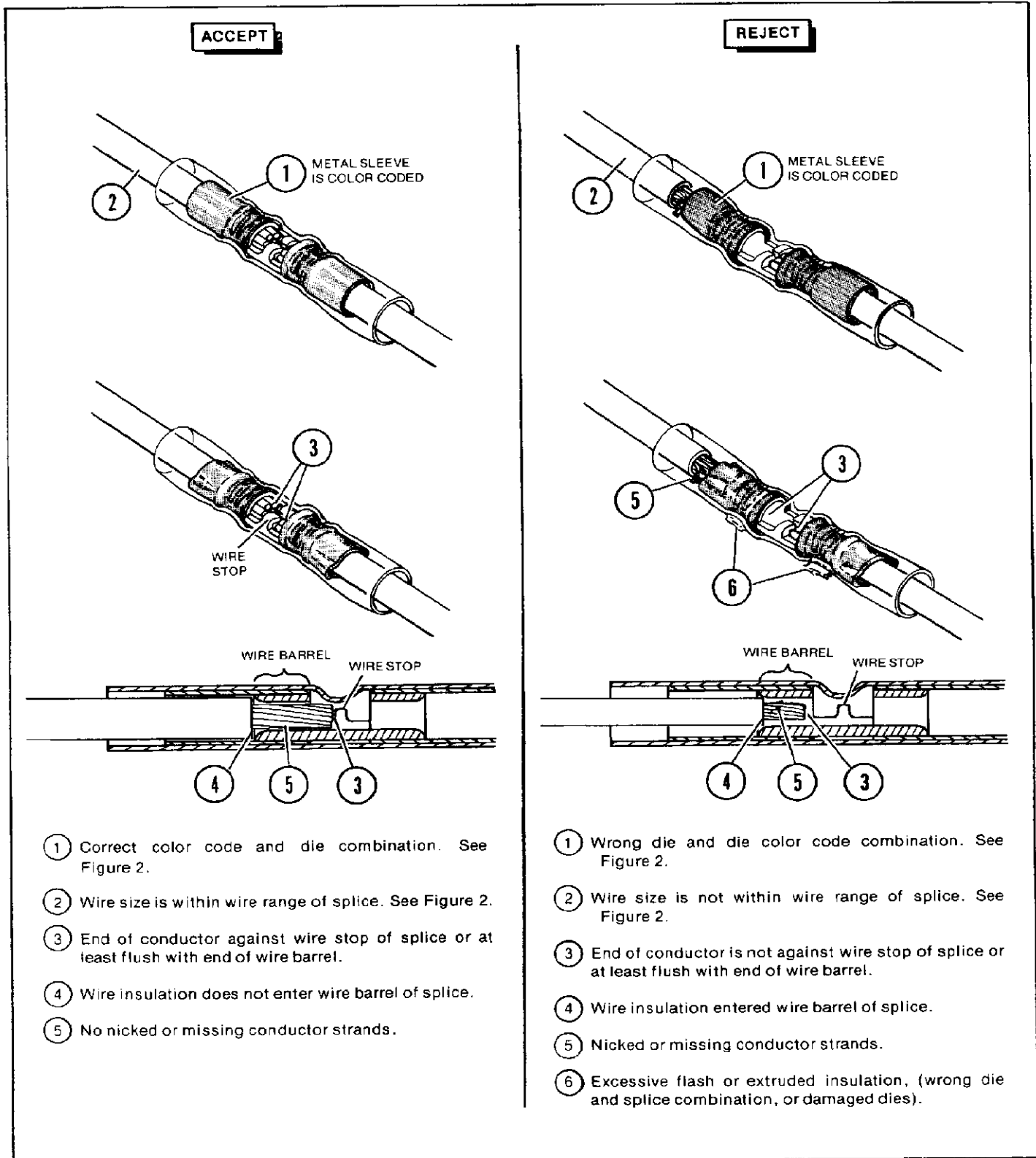


Figure 4

2.3 COLOR CODE

Note that dies and metal sleeves of splice are color coded according to wire size for easy identification. See Figures 1 and 2.

2.4 WIRE STRIPPING AND CRIMPING PROCEDURES

2.4.1 Pneumatic Tools

- Strip wire to dimensions listed in Figure 2.
- Connect air supply.
- Place splice in stationary die as shown in Figure 3.
- Activate die take-up feature to hold splice firmly in place. Do not deform splice wire barrel.
- Insert stripped wire into splice wire barrel until end of wire butts against splice wire stop.
- Activate tool to complete the crimp.
- To crimp other half of splice, remove it and reposition uncrimped half in dies. Follow same procedure used to crimp first half of splice. If splice cannot be turned, turn tool around.
- Refer to Section 3 and Figure 4 for splice "Crimp Inspection" procedure.

2.4.2 Hand Tool

- Strip wire to dimensions listed in Figure 2.
- Place splice in stationary die as shown in Figure 3.
- Close handles until splice is held firmly in place. Do not deform splice wire barrel.
- Insert stripped wire into splice wire barrel until end of wire butts against splice wire stop.
- Complete crimp by closing handles until ratchet releases.
- To crimp other half of splice, remove it and reposition uncrimped half in dies. Follow same procedure used to crimp first half of splice. If splice cannot be turned, turn tool around.
- Refer to Section 3 and Figure 4 for splice "Crimp Inspection" procedure.

3. CRIMP INSPECTION

Inspect crimped splices by checking the features described in Figure 4.

Use only the splices that meet the conditions shown in the "ACCEPT" column.

"REJECT" splices can be avoided through careful use of instructions in Section 2, and by performing regular die maintenance as instructed in Section 4.

4. MAINTENANCE/INSPECTION PROCEDURE

AMP recommends that a maintenance/inspection program be performed periodically to ensure dependable and uniform terminations. Dies should be inspected at least once a month. Frequency of inspection may be adjusted to suit your requirements through experience. Frequency of inspection is dependent upon:

- The care, amount of use, and handling of the dies.
- The degree of operator skill.

3. The presence of abnormal amounts of dust and dirt.

4. Your own established standards.

Since there is a possibility of die damage in shipment, new dies should be inspected in accordance with Section 4 when received in your plant.

4.1 CLEANING

Do not allow deposits of dirt, grease and foreign matter to accumulate on the die closure surfaces 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.

4.2 VISUAL INSPECTION

Visually inspect the die closure surfaces for broken, chipped 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 5.

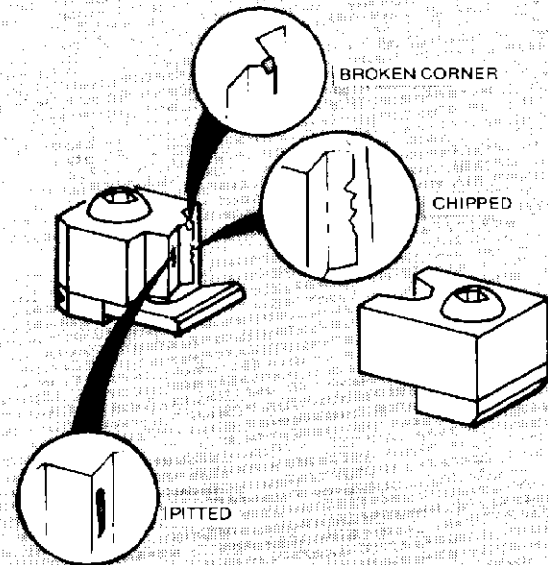


Figure 5

4.3 DIE CLOSURE INSPECTION

Every die set is inspected for proper die closure dimensions before packaging. An inspection should be performed periodically to inspect the die closure for excessive wear.

Die closure inspection is accomplished using GO/NO-GO plug gages. AMP neither manufactures nor sells plug gages. A suggested plug gage design and the GO/NO-GO dimensions of the plug gage members are listed in Figures 6 and 7.

The following procedure is recommended for inspecting the die closure.

- (a) Clean oil or dirt from the die closure surfaces, bottoming surfaces, and plug gage members.
- (b) Install both dies in tool die holders.
- (c) Reduce air supply pressure on pneumatic tool to a range between 15 and 20 PSI. Actuate tool to bottom dies.

When using hand tool, close handles of tool until dies bottom. Do not apply additional pressure to tool handles.

- (d) With wire barrel dies bottomed, check the wire barrel crimp die closure using the proper plug gage.

NOTE: In die No. 69327 Mod. E, the gage member must pass through the insulation crimp closure to enter the wire barrel crimp closure. See Figure 8, Detail A.

- (e) Hold gage in straight alignment with the die closure and carefully insert, without forcing, the GO member. See Figure 8, Detail A and C. The GO member must pass completely through the wire barrel crimp die closure.

- (f) Try to insert the NO-GO member. The NO-GO member may enter partially, but must not pass completely through the wire barrel crimp die closure. See Figure 8, Detail A and C.

- (g) With wire barrel crimp dies bottomed, check the insulation crimp die closure (die No. 69327 Mod. E only) using the proper plug gage in the same manner as steps (e) and (f). See Figure 8, Detail B.

- (h) If both wire barrel and insulation crimp die closures meet the GO/NO-GO gage conditions, the dies may be considered dimensionally correct.

If you find that the crimp die closures do not conform with the GO/NO-GO gage conditions, contact your local AMP field representative.

4.4 REPLACEMENT PARTS

It may be advantageous to stock certain replaceable parts to prevent loss of production time. Figure 9 lists the customer replaceable parts that can be purchased from AMP Incorporated, Harrisburg, PA 17105, or a wholly owned subsidiary of AMP Incorporated.

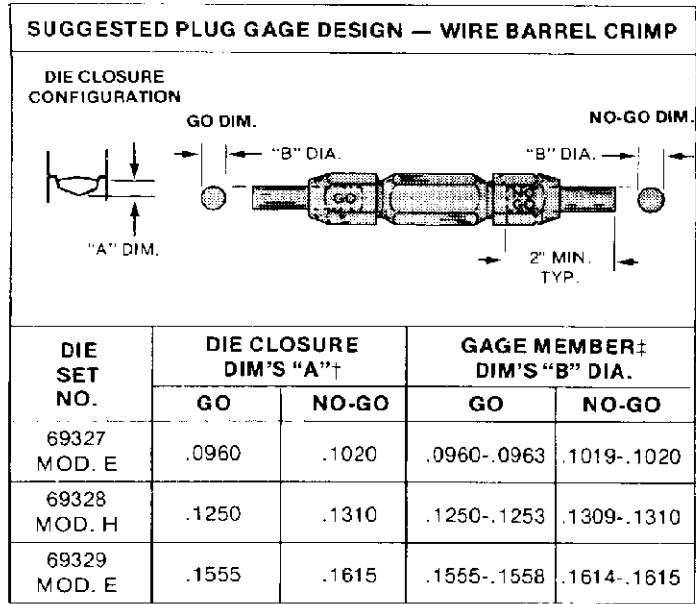
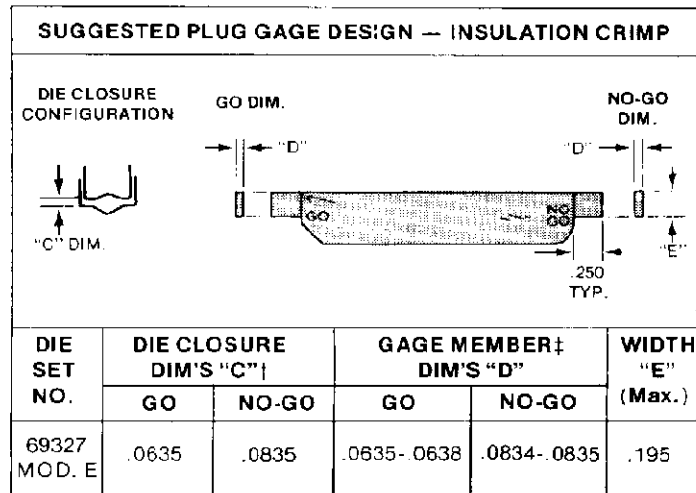


Figure 6



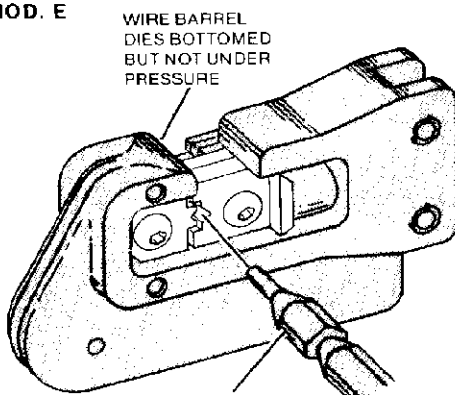
†Die closure dimensions apply when dies are bottomed but not under pressure.

‡Material — Tool Steel

Figure 7

INSPECTION OF WIRE BARREL CRIMPING DIES

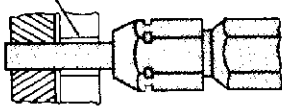
DETAIL A
DIE NO.
69327 MOD. E



WIRE BARREL
 DIES BOTTOMED
 BUT NOT UNDER
 PRESSURE

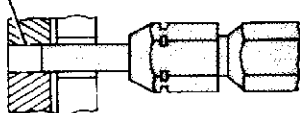
GAGE MUST PASS THROUGH THE
 INSULATION CRIMP DIE CLOSURE TO
 ENTER WIRE BARREL CRIMP DIE CLOSURE.

INSULATION
 CRIMP CLOSURE



"GO" gage must pass completely through
 the insulation and wire barrel die closures.

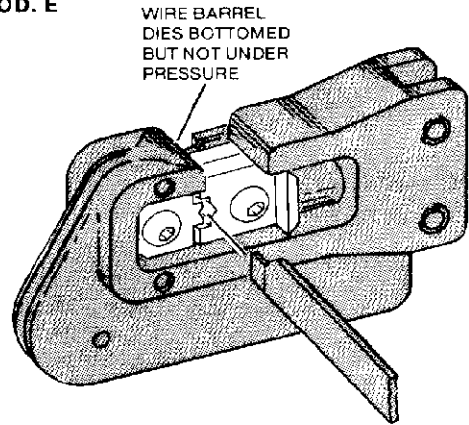
WIRE BARREL
 CRIMP CLOSURE



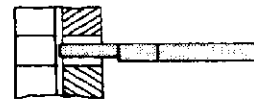
"NO-GO" gage may enter partially, but
 must not pass completely through the
 wire barrel die closure.

INSPECTION OF INSULATION CRIMPING DIES

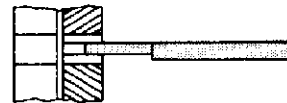
DETAIL B
DIE NO.
69327 MOD. E



WIRE BARREL
 DIES BOTTOMED
 BUT NOT UNDER
 PRESSURE



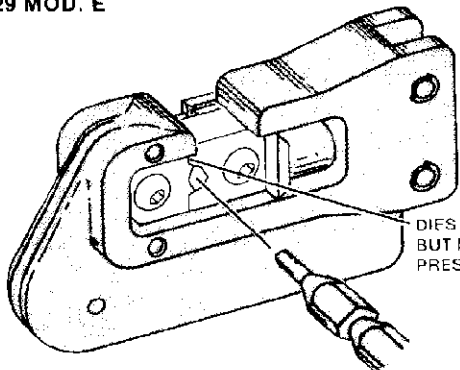
"GO" gage must pass completely
 through the die closure.



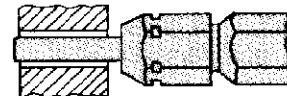
"NO-GO" gage may enter partially, but
 must not pass completely through the
 die closure.

INSPECTION OF WIRE BARREL CRIMPING DIES

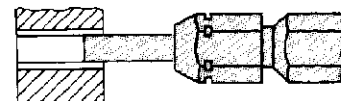
DETAIL C
DIE NOS.
69328 MOD. H
69329 MOD. E



DIES BOTTOMED
 BUT NOT UNDER
 PRESSURE

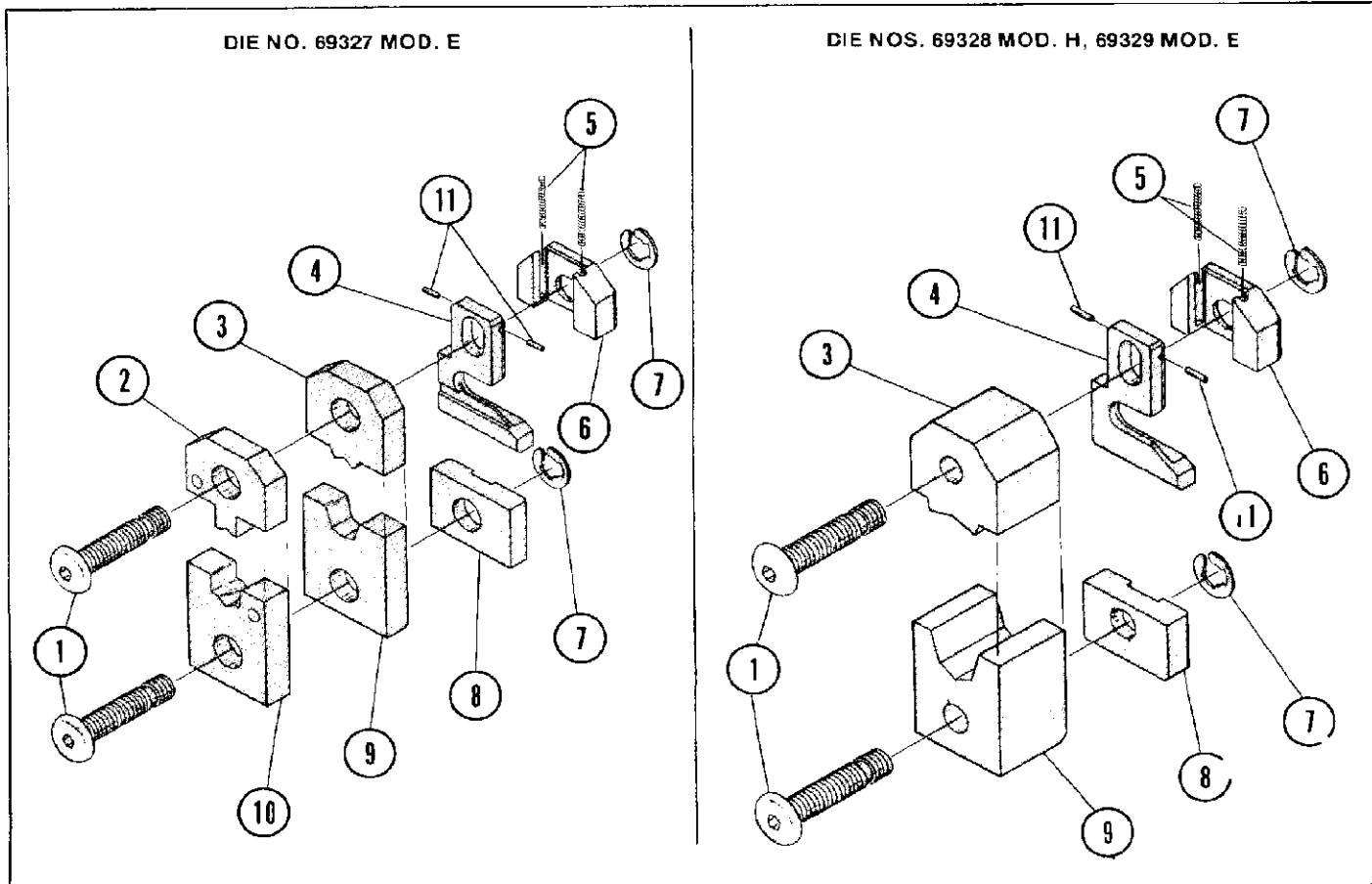


"GO" gage must pass completely
 through the die closure.



"NO-GO" gage may enter partially, but
 must not pass completely through the
 die closure.

Figure 8



ITEM	DESCRIPTION	QTY.	TOOL NUMBERS		
			69327 MOD. E	69328 MOD. H	69329 MOD. E
1	SCREW, SPECIAL	2	4-306131-8	306105-9	4-306131-3
2	INSULATION INSERT, STATIONARY DIE	1	306342	---	---
3	WIRE BARREL INSERT, STATIONARY DIE	1	306256-2	306256	306256-1
4	LOCATOR	1	5-304052-1	4-304052-0	5-304052-0
5	SPRING	2	7-59683-4	7-59683-4	7-59683-4
6	HOUSING, LOCATOR	1	2-305832-9	2-305832-9	2-305832-9
7	RING, RETAINING	2	1-21046-3	1-21046-3	1-21046-3
8	SPACER	1	2-305832-8	2-305832-8	2-305832-8
9	WIRE BARREL INSERT, MOVING DIE	1	306255-4	306255-3	306255-1
10	INSULATION INSERT, MOVING DIE	1	306343	---	---
11	PIN, SPIRAL	2	21949-1	21949-1	21949-1

Figure 9

REL. DATE	REV. DATE	APPROVALS	
12-29-64	7-31-81	ENG. <i>Dallas Scheyer</i>	PUB. <i>Paul Felty</i>