

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:

PREINSULATED NYLON HEAVY DUTY TERMINAL CRIMPING DIES (Used in Crimping Head Nos. 69066 & 69993)		
69462	69464	69603
69463	69465	

These dies are used to crimp:

- Preinsulated Nylon H.D. terminals on stranded copper wire sizes 8 thru 1/0 AWG.

Basic instructions on the use of the dies, die insertion and removal, etc., are provided in Section 2, "Instructions." Section 3 features a terminal "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 areas.

For further instructions relative to the hydraulic power unit and hydraulic crimping head, refer to the instructions packaged with these tools.

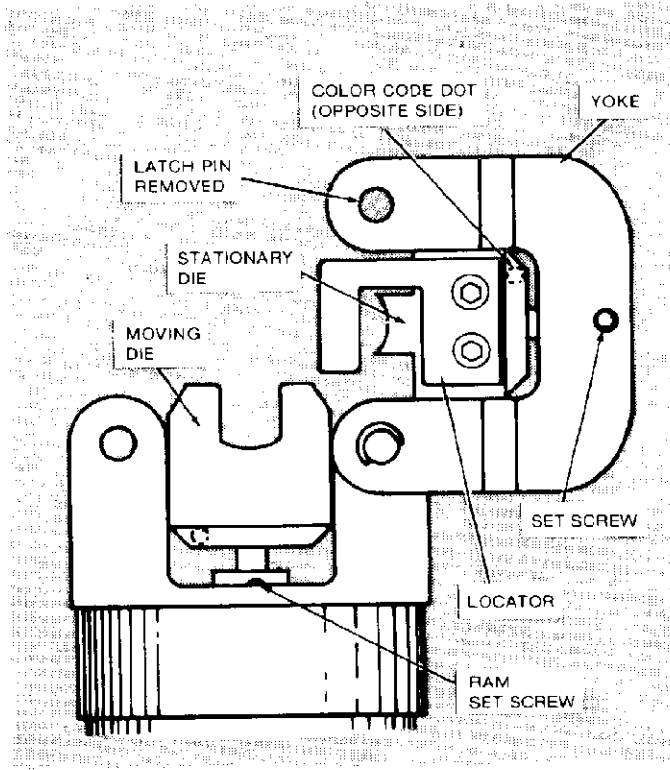


Figure 2

2. INSTRUCTIONS

WARNING: AVOID PERSONAL INJURY. WHEN CHANGING DIES, EXERCISE CAUTION TO AVOID ACCIDENTALLY DEPRESSING FOOT PEDALS OR TRIGGER CONTROL.

2.1 DIE INSERTION

- Refer to the chart, Figure 1, and select the proper die for the terminal and wire size being used.
 - Remove latch pin on head, then open yoke. See Figure 2.
 - Loosen set screw in yoke.
 - Insert stationary die into well of yoke as shown in Figure 2. Tighten set screw.
 - Activate power unit to advance ram until set screw is visible.
 - Loosen set screw in ram and insert moving die into ram well as shown in Figure 2. Tighten set screw.
- NOTE: *Moving die must be properly oriented to mate with stationary die.*
- Activate power unit to allow ram to return to the "DOWN" position.
 - Close yoke and insert latch pin.

CAUTION: ENSURE THAT LATCH PIN IS FULLY INSERTED OR DAMAGE MAY OCCUR TO YOKE, DIES OR LATCH PIN.

PREINSULATED NYLON H.D. TERMINAL				
WIRE SIZE	DIE NO.	TERMINAL & DIE COLOR CODE	WIRE STRIP LENGTH	
			MIN.	MAX.
8	69465	RED	21/64"	23/64"
6	69464	BLUE	25/64"	27/64"
4	69463	YELLOW	29/64"	31/64"
2	69462	RED	33/64"	35/64"
1/0	69603	BLUE	47/64"	49/64"

Figure 1

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2.2 DIE REMOVAL

- Remove latch pin and open yoke.
- Loosen set screw in yoke and remove stationary die.
- Raise ram to "full-up" position. Loosen set screw and remove moving die.

2.3 WIRE STRIPPING AND CRIMPING PROCEDURES

WARNING: AVOID PERSONAL INJURY. WHEN OPERATING POWER UNIT, EXERCISE CAUTION WHILE HOLDING TERMINALS OR WIRE NEAR CRIMPING AREA.

NOTE: Be sure wire size stamped on terminal corresponds with the wire size stamped on the moving die.

- Strip wire to dimensions listed in Figure 1. **DO NOT NICK OR CUT CONDUCTOR STRANDS.**
- Place terminal in stationary die with bottom of terminal tongue facing top die and edge of terminal wire barrel resting against locator as shown in Figure 3.
NOTE: When crimping with die set No. 69603, place terminal in "moving" die with terminal tongue on top of locator, see Figure 3, and edge of terminal wire barrel resting against locator.
- Insert stripped wire into terminal until it butts against locator.
- Hold wire and terminal in place and activate power unit to complete crimp.
- Remove crimped terminal.

NOTE: If terminal sticks in die after crimping, apply a rocking action to remove from die.

2.4 COLOR CODE

Terminals and dies are color coded as listed in Figure 1.

The wire size is engraved on the crimp surface of moving die. When crimped, the wire size will appear on the top side of terminal wire barrel. The wire size appearing on crimped wire barrel should always agree with the wire size stamped on terminal tongue.

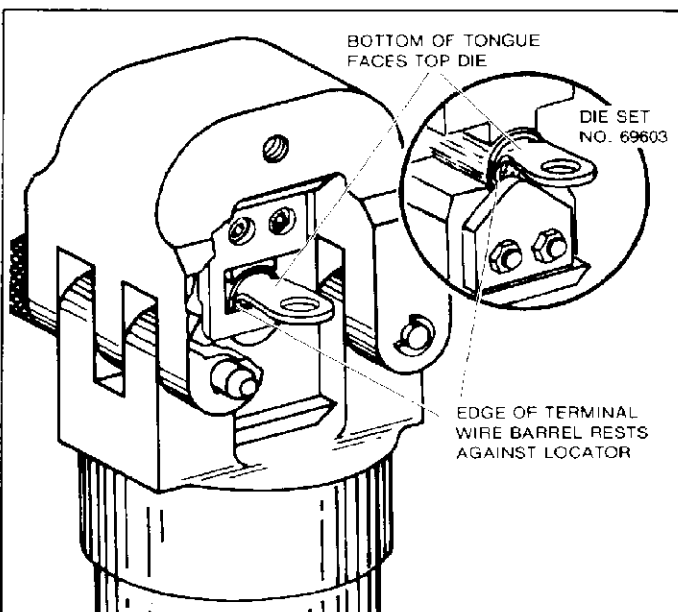


Figure 3

3. CRIMP INSPECTION

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

Use only terminals meeting conditions shown in the "ACCEPT" column.

"REJECT" terminals 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 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:

- Care, amount of use, and handling of the dies.
- Degree of operator skill.
- Presence of abnormal amounts of dust and dirt.
- Your own established standards.

All dies are thoroughly inspected before packaging. 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 in the die closure area and on bottoming surfaces of the dies. These deposits may prevent dies from bottoming fully and may also cause excessive wear in die closure surfaces, thereby affecting quality of the crimp. Dies should be wiped clean frequently with a clean cloth.

4.2 VISUAL INSPECTION

Visually inspect die closure surfaces for broken, pitted or chipped conditions. Although dies may gage within permissible limits, worn or damaged die closure surfaces are objectionable and can affect quality of the crimp. Examples of possible damaged die surfaces are shown in Figure 5.

4.3 DIE CLOSURE INSPECTION

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

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 GO/NO-GO dimensions of the plug gage members are listed in Figure 6. The following procedure is recommended for inspecting the die closure.

- Clean oil or dirt from bottoming surfaces, die closure surfaces and plug gage members.
- Assemble dies so they are bottomed but not under pressure. See Figure 7.

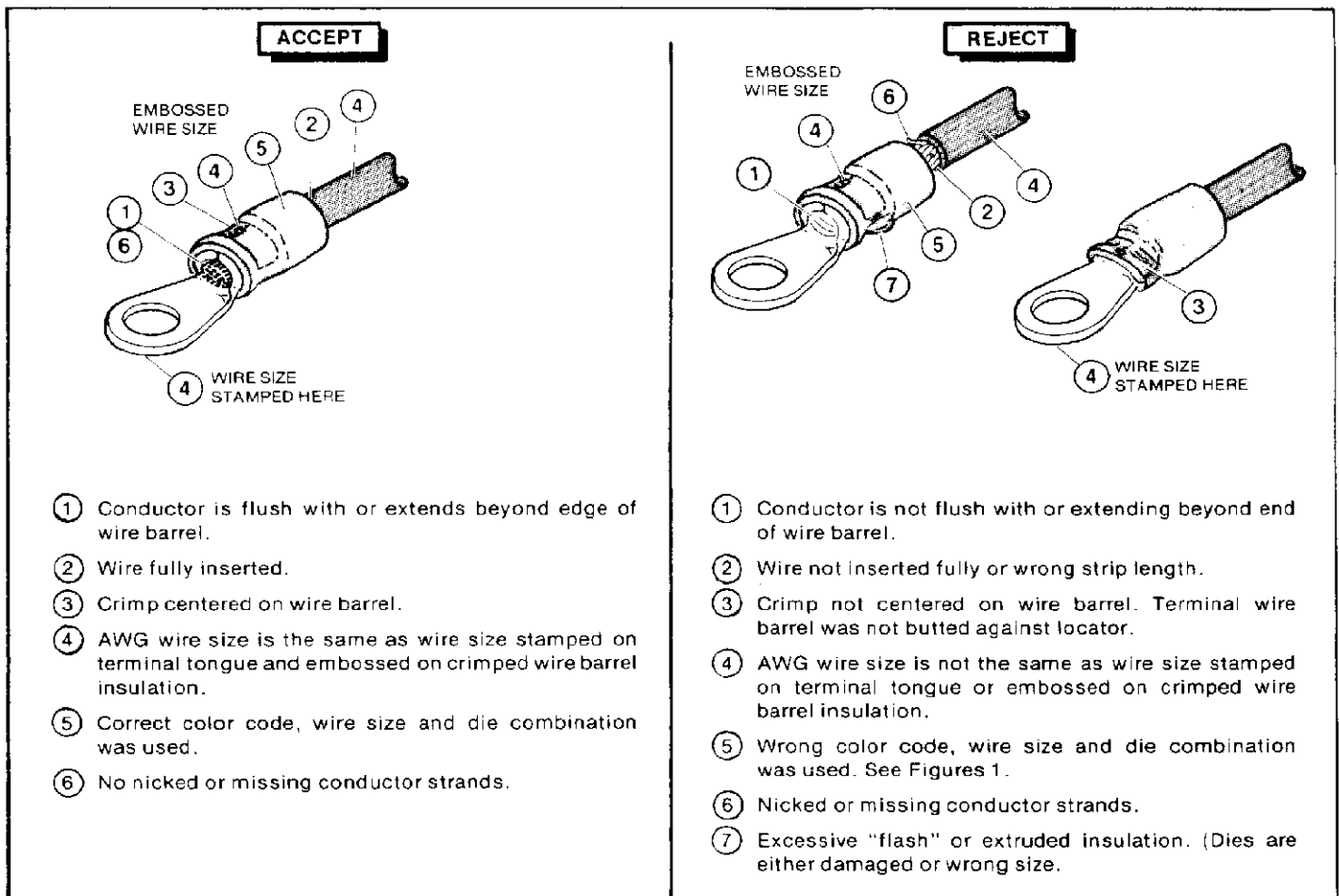


Figure 4

- (c) With dies bottomed, inspect die closure using the proper plug gage. Hold gage in straight alignment with die closure and carefully try to insert, without forcing, the GO member. See Figure 7. The GO member must pass completely through wire barrel crimp die closure.
- (d) Try to insert the NO-GO member. The NO-GO member may enter partially, but must not pass completely through wire barrel crimp die closure.
- (e) If die closure meets the GO/NO-GO gage conditions, dies may be considered dimensionally correct. If you find die closure does 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 8 lists customer replaceable parts available from AMP Incorporated, Harrisburg, PA 17105, or a wholly owned subsidiary of AMP Incorporated.

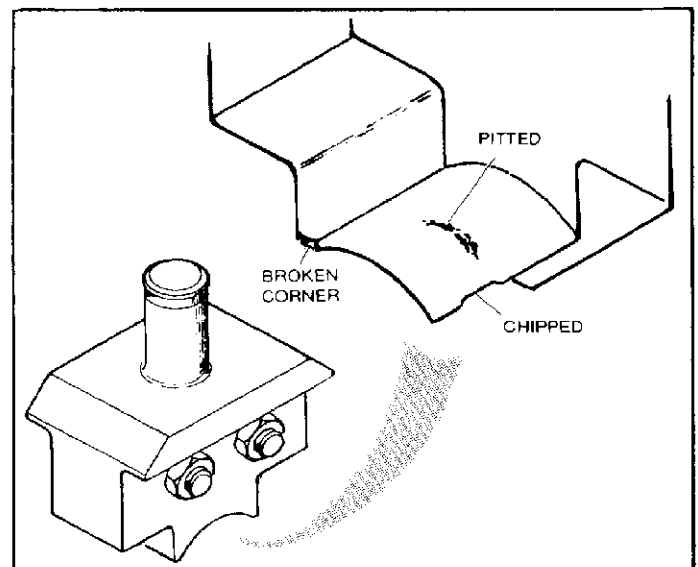
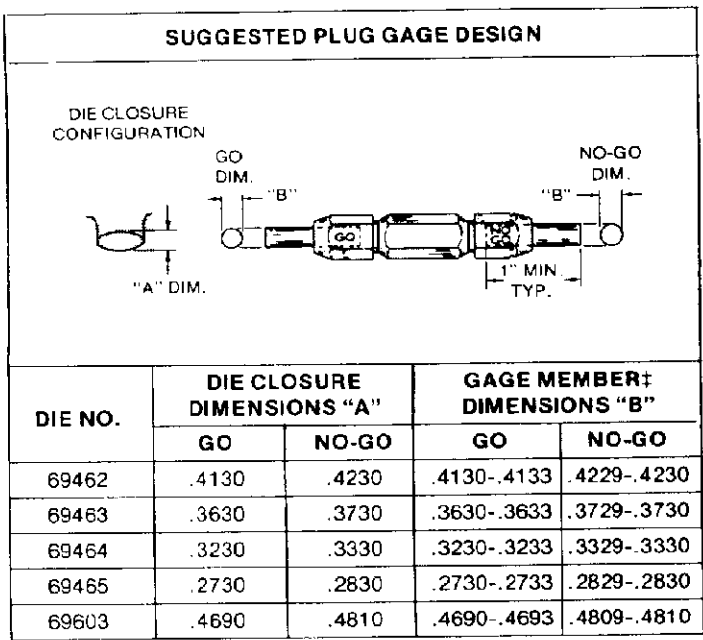


Figure 5



† DIE CLOSURE DIMENSIONS APPLY WHEN DIES ARE BOTTOMED BUT NOT UNDER PRESSURE.
 ‡ MATERIAL — TOOL STEEL.

Figure 6

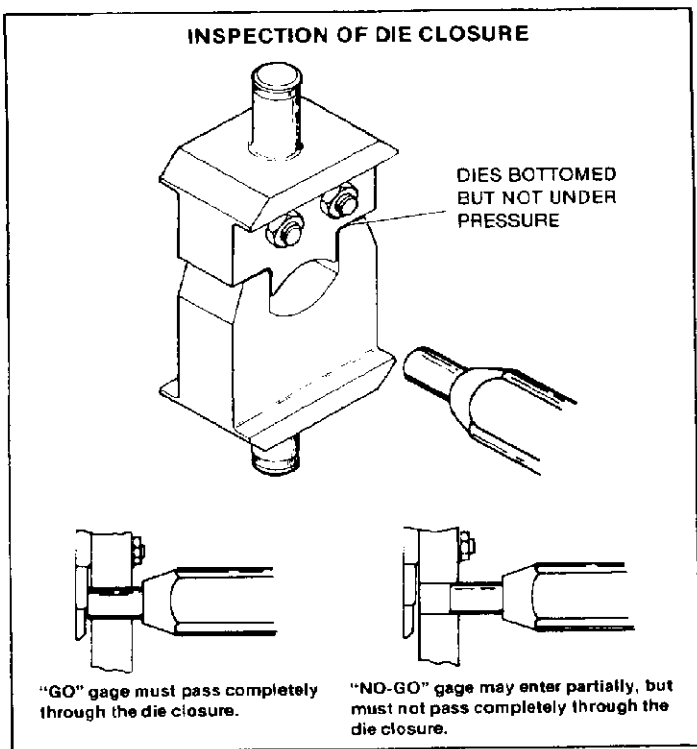


Figure 7

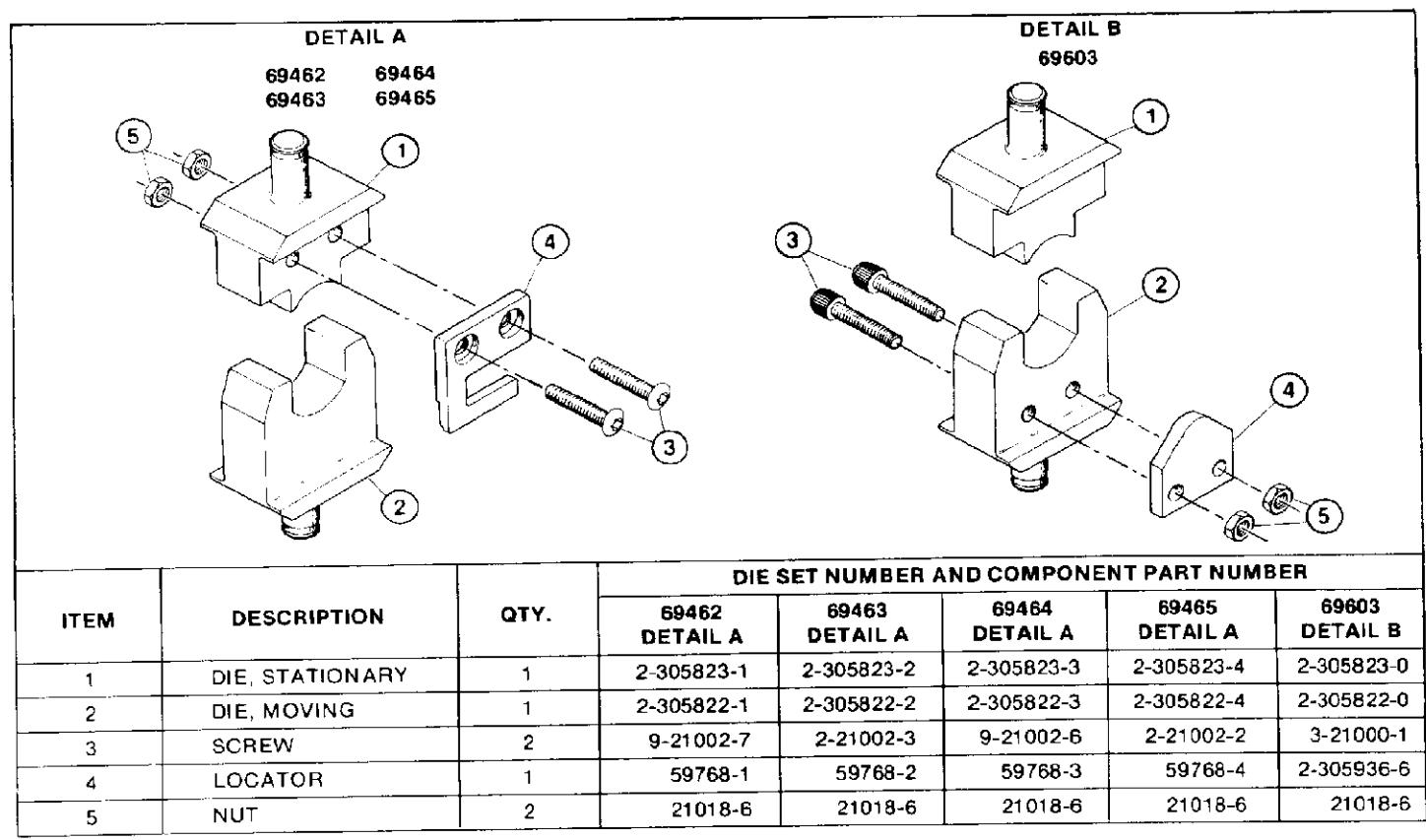


Figure 8

REL. DATE	REV. DATE	APPROVALS	
1-12-65	7-10-81	ENG. <i>Dallas Schaefer</i>	PUB. <i>Paul Felty</i>