

1. INTRODUCTION

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

AMP-TAPEMATIC ★ CRIMPING DIES
68094 Mod. A 68259-1 68260-1 68339-1
 (These dies are used in AMP-TAPEMATIC Machine
 No. 68075, AMP-TAPETRONIC ★ Machine No. 69875-□
 and AMPOMATOR ★ Mod. IV B)

These dies are used to crimp:

- Budget terminals on copper wire sizes 22 thru 10.

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

Die insertion and removal and crimping instructions are provided in the manuals packaged with the machines.

Section 2 of this publication "Instructions" provides information on wire preparation. 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*.

For further instructions relative to the machines, tooling adjustments, tape loading, etc., refer to instructions packaged with the machines.

2. INSTRUCTIONS

WARNING: AVOID PERSONAL INJURY. ALWAYS DISCONNECT MACHINE FROM POWER SUPPLY WHEN PERFORMING ADJUSTMENTS, DIE INSTALLATION OR REMOVAL, AND MACHINE MAINTENANCE. ALWAYS KEEP GUARDS AND COVERS IN PLACE DURING NORMAL MACHINE OPERATION.

2.1 WIRE PREPARATION AND CRIMP INSTRUCTIONS

Select the correct wire strip length from Figure 1. Do not use wires with nicked or missing conductor strands.

Refer to machine manual for crimp instructions.

DIE NO.	WIRE RANGE (AWG)	WIRE STRIP LENGTH*	
		Min.	Max.
68259-1	22-16	11/64"	13/64"
68094 MOD A	16-14		
68260-1	12-10		
68339-1 ■	12-10		

* Add 1/16" to strip length when using probe in machine No. 69875.
 ■ Knife disconnect terminals only.

Figure 1

3. CRIMP INSPECTION

Inspect crimped terminals by checking the features described in Figure 2.

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

"REJECT" terminals can be avoided through careful use of instructions provided in the machine manual and by performing regular die maintenance as instructed in Section 4 of this instruction sheet.

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:

1. The care, amount of use and handling of the dies.
2. 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 damage to die surfaces are shown in Figure 3.

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 Figure 4.

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.

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

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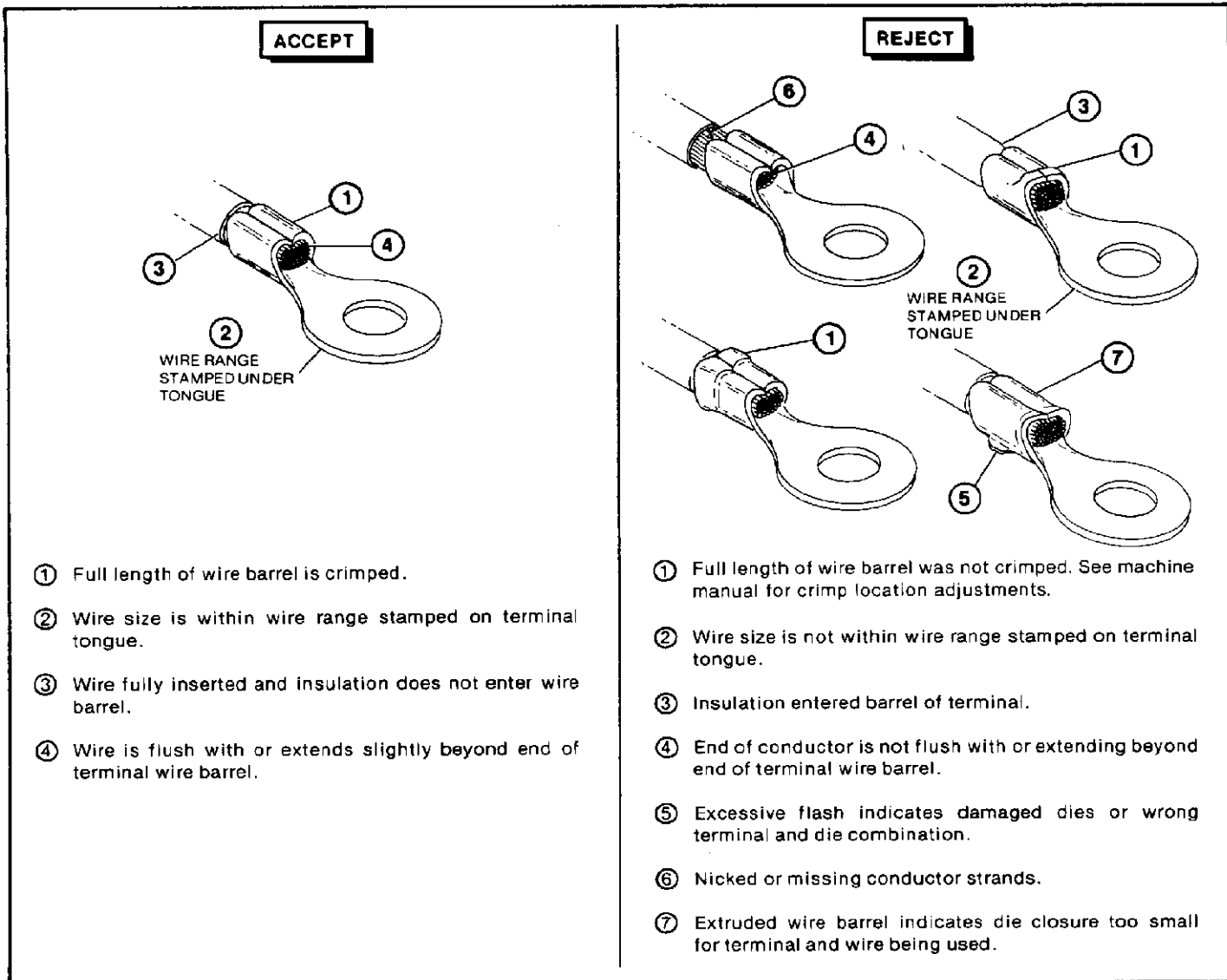


Figure 2

- (b) Assemble dies so they are bottomed but not under pressure.
- (c) With dies bottomed, inspect the die closure using the proper plug gage. Hold gage in straight alignment with the die closure and carefully insert, without forcing, the GO member. See Figure 5A. The GO member must pass completely through the die closure.
- (d) Try to insert the NO-GO member. The NO-GO member may enter partially, but must not pass completely through the die closure. See Figure 5B. If the die closure meets the GO NO-GO gage conditions, the dies may be considered dimensionally correct. If you find the 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 6

lists the customer replaceable parts that can be purchased from AMP Incorporated, Harrisburg, Pa. 17105, or a wholly owned subsidiary of AMP Incorporated.

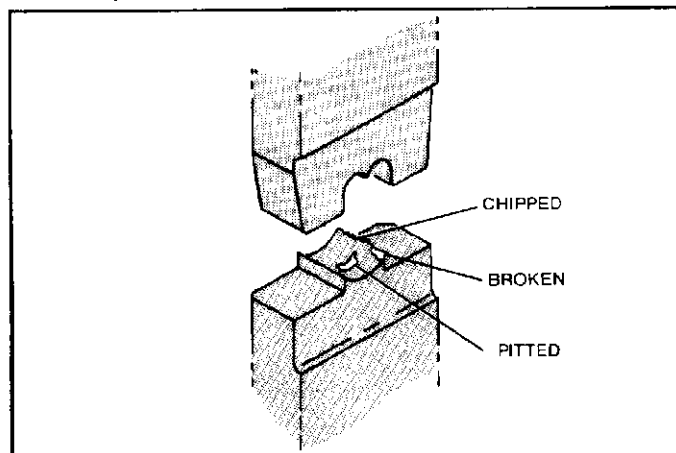
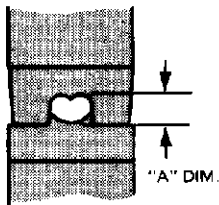


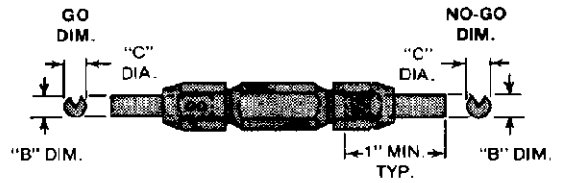
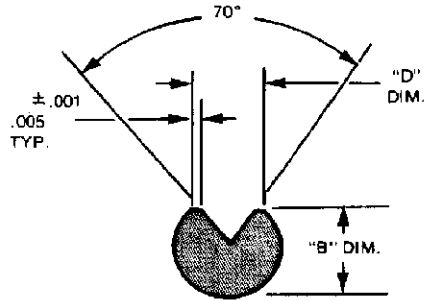
Figure 3

SUGGESTED PLUG GAGE DESIGN

DIE CLOSURE CONFIGURATION



ENLARGED END VIEW OF GAGE MEMBER

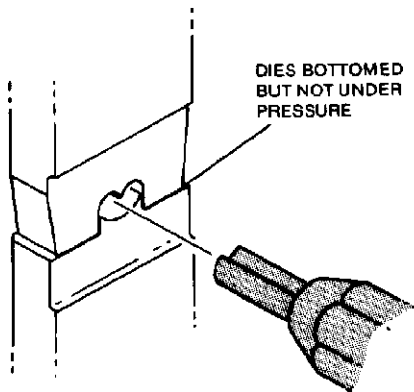


DIE SET NO.	WIRE RANGE	DIE CLOSURE DIM'S "A" †		GAGE MEMBER ‡ DIM'S. "B"		"C" DIAMETER		"D" DIM.
		GO	NO-GO	GO	NO-GO	GO	NO-GO	
68259-1	22-16	.0740	.0800	.0740-.0743	.0799-.0800	.0795-.0797	.0833-.0835	.0369
68094 MOD A	16-14	.0900	.0960	.0900-.0903	.0959-.0960	.1018-.1020	.1054-.1056	.0634
68260-1	12-10	.1430	.1490	.1430-.1433	.1489-.1490	.1631-.1633	.1666-.1668	.1055
68339-1	12-10	.1440	.1480	.1440-.1443	.1479-.1480			

† Die closure dimensions apply when dies are bottomed, but not under pressure.
 ‡ Material — Tool steel.

Figure 4

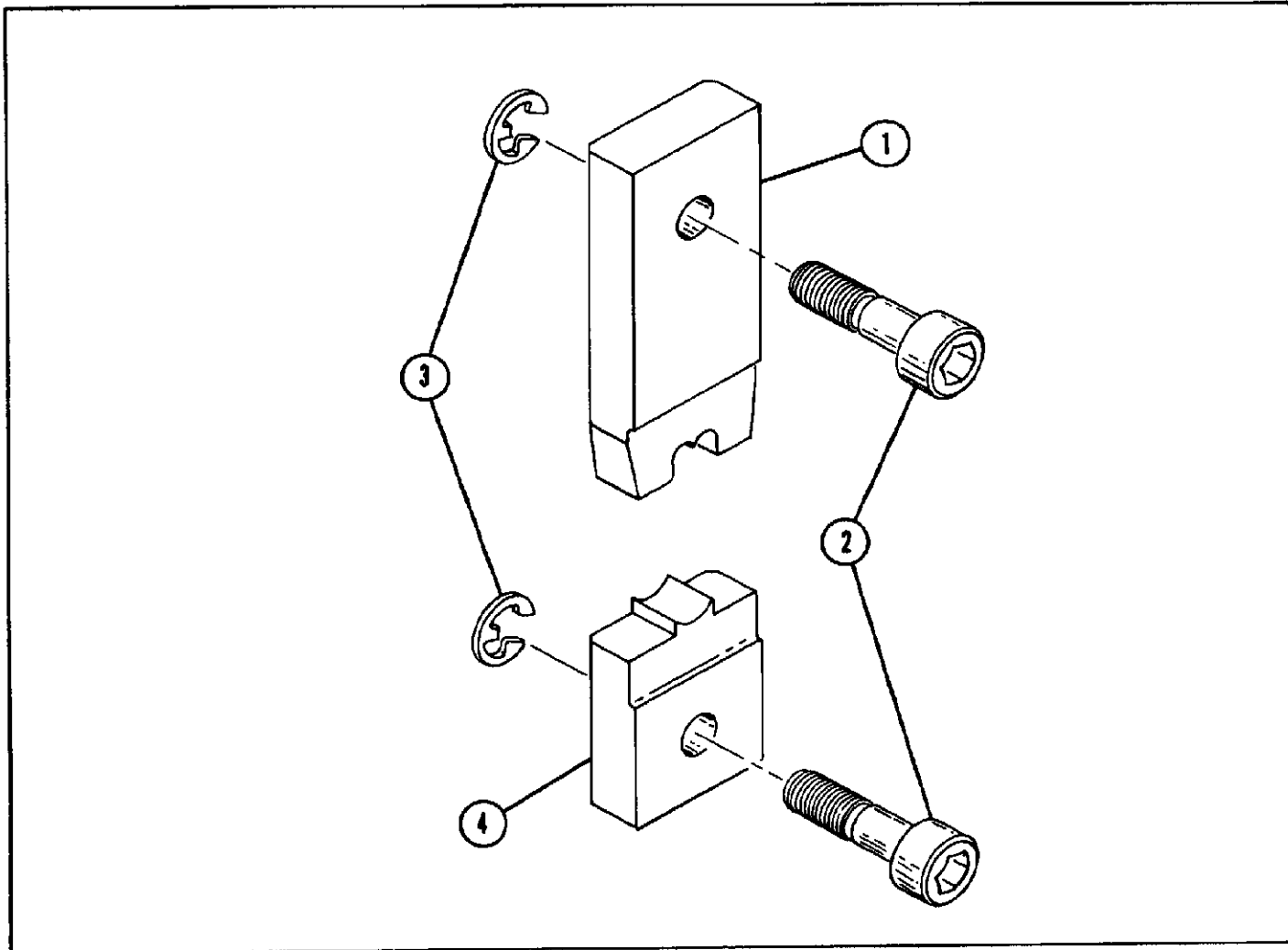
INSPECTION OF WIRE BARREL CRIMPING DIES



"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 5



ITEM	DESCRIPTION	QTY.	DIE NUMBERS AND COMPONENT PART NUMBERS			
			68094 MOD. A	68259-1	68260-1	68339-1
1	DIE, MOVING	1	307860-2	307860-3	307860-4	310032-1
2	SCREW	2	1-59781-3	1-59781-3	1-59781-3	1-59781-0
3	RING, RETAINING	2	1-21046-3	1-21046-3	1-21046-3	1-21046-3
4	DIE, STATIONARY	1	307859-2	307859-3	307859-4	310033-1

Figure 6

REL. DATE	REV. DATE	APPROVALS	
3-8-76	6-25-82	ENG. <i>James J. Bell</i>	PUB. <i>Paul Felty</i>