

1. INTRODUCTION

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

SOLISTRAND★ AND STRATO-THERM★ HIGH TEMPERATURE TERMINAL CRIMPING DIES (USED IN AMP-TAPEMATIC★ MACHINE NO. 68075)

Dies for SOLISTRAND Terminals		
68096-1	68098-1	68119-1
68097-1	68108-1	68220-1
Dies for High Temperature STRATO-THERM Terminals		
68210-1 Mod. B	68211-1 Mod. B	68212-1 Mod. B

These dies are used to crimp:

- SOLISTRAND terminals on wire range 26 thru 10.
- High Temperature STRATO-THERM terminals on wire range 22 thru 10.

Basic instructions on 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.

Refer to customer manual CM 2427 for further instructions relative to the machine.

2. INSTRUCTIONS

WARNING: AVOID PERSONAL INJURY. ALWAYS KEEP GUARD AND COVER IN PLACE WHEN ACTIVATING MACHINE.

2.1 DIE INSERTION

- TURN OFF MAIN POWER SWITCH, disconnect electrical and air supply, loosen mounting screws and remove guard. Raise tape release lever. See Figure 1.
- Mate dies by hand to ensure proper match in die closure surfaces.
- Loosen wire funnel and move aside.
- Insert moving die in ram and stationary die in die holder, then tighten mounting screws.
- Load tape. Refer to manual packaged with the machine (CM 2427) for reel or magazine tape loading instructions. Lower tape release lever and install guard. When installing guard, do not allow it to bottom against moving die. Die guard also acts as a stripper (removes crimped product from moving die). Use washers under guard or mounting screws to maintain clearance between bottom edge of guard and tops of terminals. See Figure 1.
- With tape release lever lowered, align opening of wire funnel with center of die closure and tighten mounting screw. See CM 2427 for proper wire funnel alignment procedure. Machine is now ready for crimping operation.

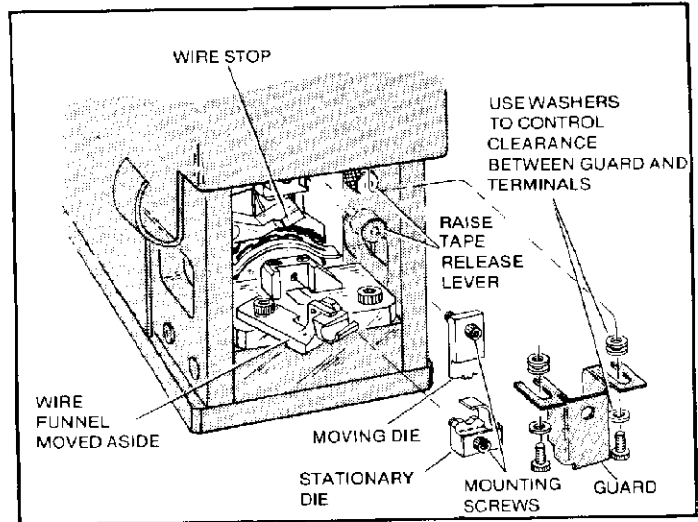


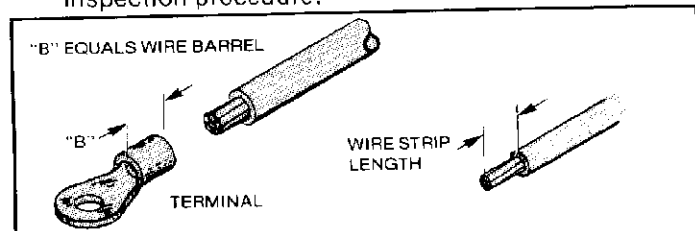
Figure 1

2.2 DIE REMOVAL

- TURN OFF MAIN POWER SWITCH, disconnect electrical and air supply, remove guard and raise tape release lever.
- Loosen wire funnel and move aside.
- Unload tape.
- Loosen mounting screws of moving and stationary dies and remove dies from their holders.

2.3 WIRE PREPARATION AND CRIMPING PROCEDURE

- Strip wires to length specified in Figure 2. NOTE: Do not use wires with nicked or missing strands.
- Insert stripped wire into terminal wire barrel until bottomed against the wire stop indicated in Figure 1.
- Activate machine to complete the crimp. Pull crimped terminal from tape.
- Refer to Section 3 and Figure 3 for terminal crimp inspection procedure.



WIRE RANGE	DIE NUMBER	WIRE STRIP LENGTH	
		Min.	Max.
26-22	68108-1		
24-20	68119-1		
22-16	68096-1	11/64"	13/64"
	68210-1 Mod. B		
16-14	68097-1		
	68211-1 Mod. B		
14-12	68220-1	11/64"	13/64"
12-10	68098-1	1/4"	9/32"
	68212-1 Mod. B		

Figure 2

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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3. CRIMP INSPECTION

Inspect crimped terminals by checking the features described in Figure 3.

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.

If terminals are crimped off center, indexing unit needs adjustment. Refer to CM 2427 for crimp location adjustment.

4. MAINTENANCE/INSPECTION PROCEDURE

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

1. Care, amount of use, and handling of dies.
2. Degree of operator skill.
3. Presence of abnormal amounts of dust and dirt.
4. 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 die closure surfaces and bottoming surfaces of dies. These deposits may prevent dies from bottoming fully and may also cause excessive wear in the 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 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 4.

4.3 DIE CLOSURE INSPECTION

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. A suggested plug gage design and GO/NO-GO dimensions of plug gage members are listed in Figure 5.

The following procedure is recommended for inspecting die closures.

- (a) Clean oil or dirt from die closure surfaces, bottoming surfaces, and plug gage members.
- (b) Assemble dies so they are bottomed but not under pressure. See Figure 6A.

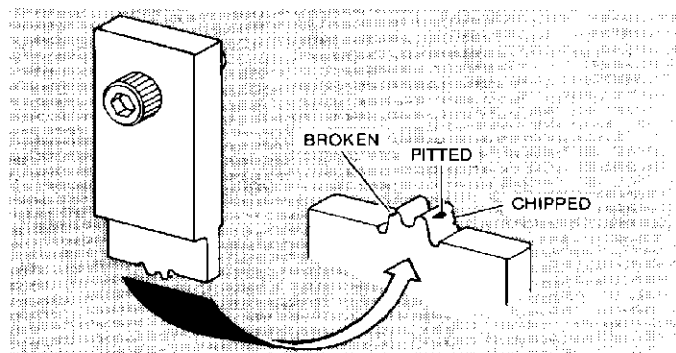


Figure 4

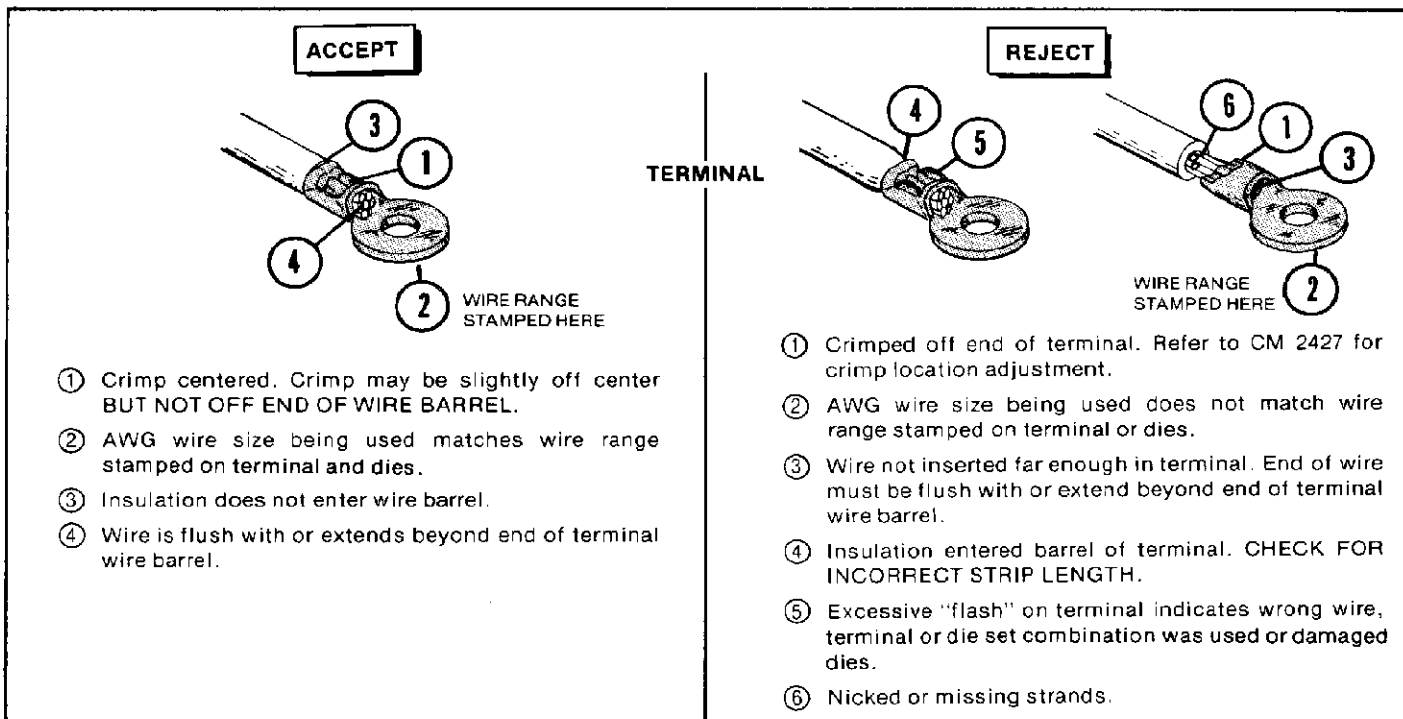


Figure 3

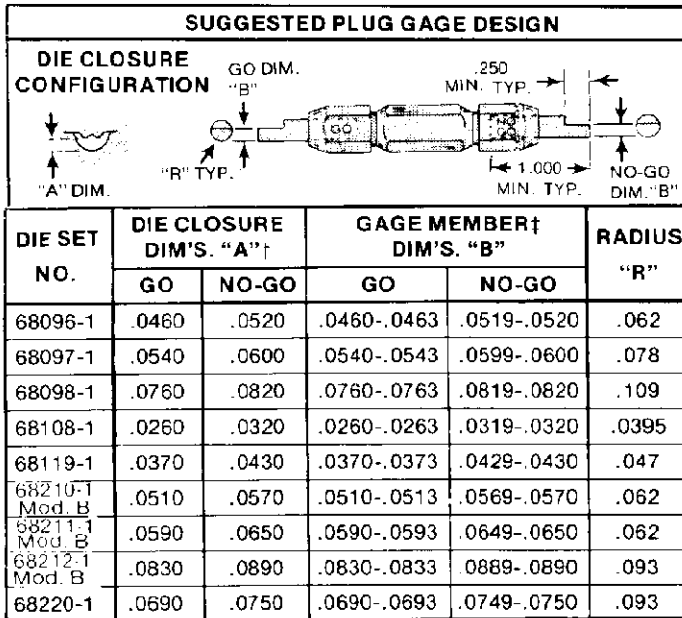
- (c) With dies bottomed, inspect die closure using the proper plug gage. Hold gage in straight alignment with die closure and carefully try to insert without forcing, the GO member. See Figure 6B. The GO member must pass completely through the die closure. Try to insert the NO-GO member. The NO-

GO member may enter partially, but must not pass completely through die closure.

- (d) If dies meet GO/NO-GO gage conditions, the dies are dimensionally correct.
- (e) If dies do not meet the GO/NO-GO gage conditions, contact your local AMP field representative.

4.4 REPLACEMENT PARTS

Die sets and die replacement parts, see Figure 7, can be purchased from AMP Incorporated, Harrisburg, PA, 17105, or a wholly owned subsidiary of AMP Incorporated.



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

Figure 5

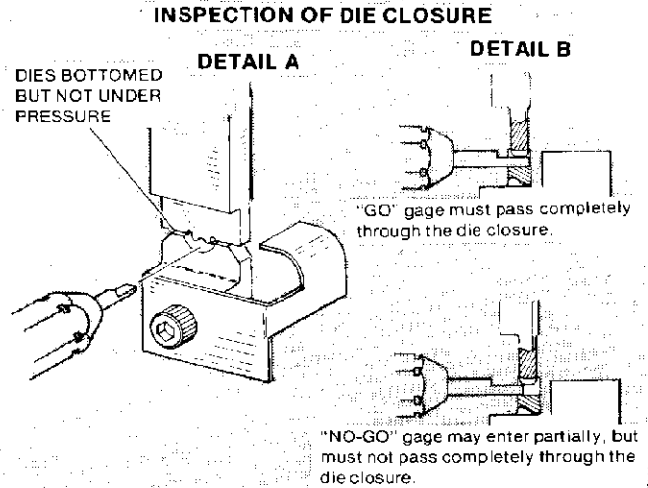
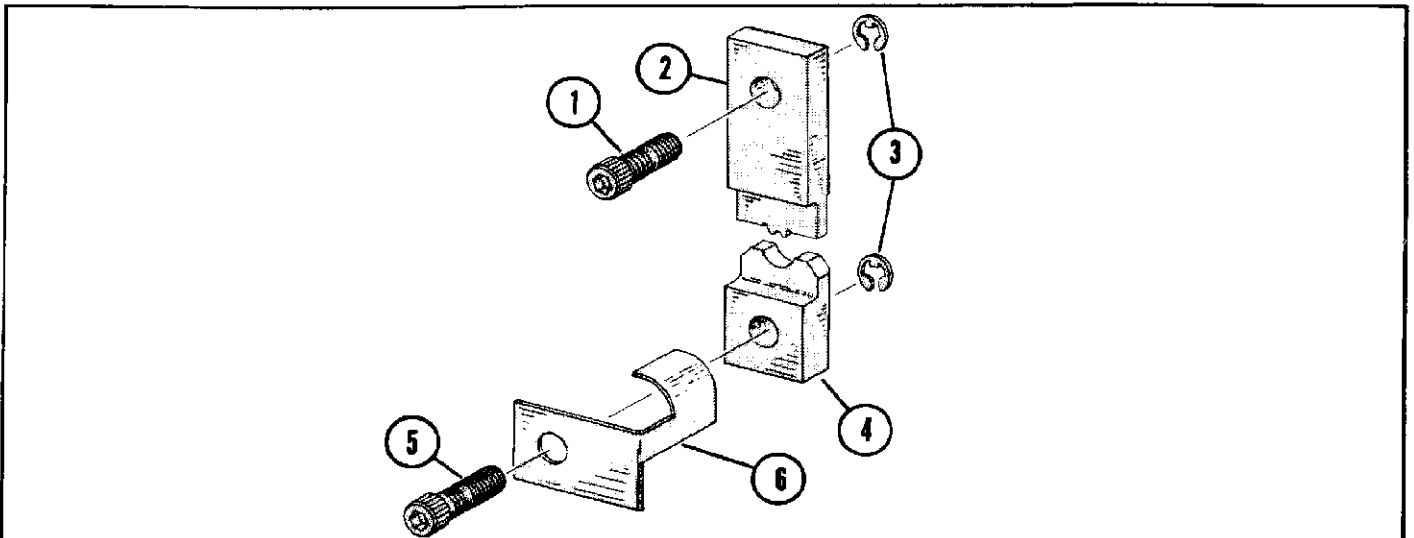


Figure 6



ITEM NUMBER	DESCRIPTION	QUANTITY	DIE SET NUMBERS AND COMPONENT PART NUMBERS								
			68096-1	68097-1	68098-1	68108-1	68119-1	68210-1 Mod. B	68211-1 Mod. B	68212-1 Mod. B	68220-1
1	SCREW	1	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3	1- 59781-3
2	MOVING DIE	1	307161-9	1-307161-0	307161-8	1-307161-2	1-307161-1	2 307161-0	2-307161-1	2-307161-2	1-307161-6
3	RING, RETAINING	2	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3	1- 21046-3
4	STATIONARY DIE	1	307866-2	307866-3	307866-1	307866-5	307866-4	1 307866-0	1 307866-1	1 307866-2	307866-9
5	SCREW	1	59781-9	59781-9	59781-9	59781-9	59781-9	59781-9	59781-9	1- 59781-6	59781-9
6	GUIDE, TAPE	1	307867-1	307867-1	---	307867-1	307867-1	307867-1	307867-1	307867-1	307867-1

Figure 7

REL. DATE	REV. DATE	APPROVALS	
1-28-74	7-24-81	ENG. <i>Dallas Schaefer</i>	PUB. <i>Paul Felty</i>