

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:

**CLOSED END SPLICE CRIMPING JAWS**  
**68245-1      68268-1      68290-1**  
 (Used in Pneumatic Tool No. 68068-□)

These crimping jaws are used to crimp:

- Pre-insulated vinyl (ECV) closed end splices.

Basic instructions on the use of these jaws, wire preparation, 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 *tool certification program*.

Crimping jaws are coated with preservative to prevent rust and corrosion. Wipe this preservative from jaws, particularly from crimping surfaces.

For further instructions relative to the 68068-□ air tools, refer to instructions packaged with the tools.

**2. INSTRUCTIONS**

**WARNING: AVOID PERSONAL INJURY. KEEP FINGERS CLEAR OF CRIMPING JAWS WHEN ACTIVATING TOOL.**

**2.1 INSTALL CRIMPING JAWS**

- Select the proper size splice and crimping jaw combination for the wire size being used. See Figure 1.
- Inspect the die closure surfaces, bottoming surfaces and cam rollers for deposits of dirt or other foreign particles and wipe with a clean cloth. See Figure 2. Relubricate cam rollers as instructed in paragraph 4.3.

NOTE: *Be sure cam rollers are not binding.*

- DISCONNECT TOOL FROM AIR SUPPLY.
  - Pull one cowling pin and remove retaining pin from lower housing cover. Cover will swing open. See Figure 2.
  - Remove pivot pins as shown in Figure 2.
  - Orient jaws so that jaw with locator is on bottom as shown in Figure 2.
  - Position crimping jaws in tool housing ensuring that cam rollers are properly mated with cam, and pivot pin holes of jaws and tool housing are aligned.
  - Insert pivot pins.
- NOTE: *Be sure pivot pins are fully inserted or damage will occur to tool or pins.*
- Pivot lower housing cover into closed position and replace retaining pin and cowling pin.
  - Connect air supply (80 to 100 PSI) and tool is ready for use.

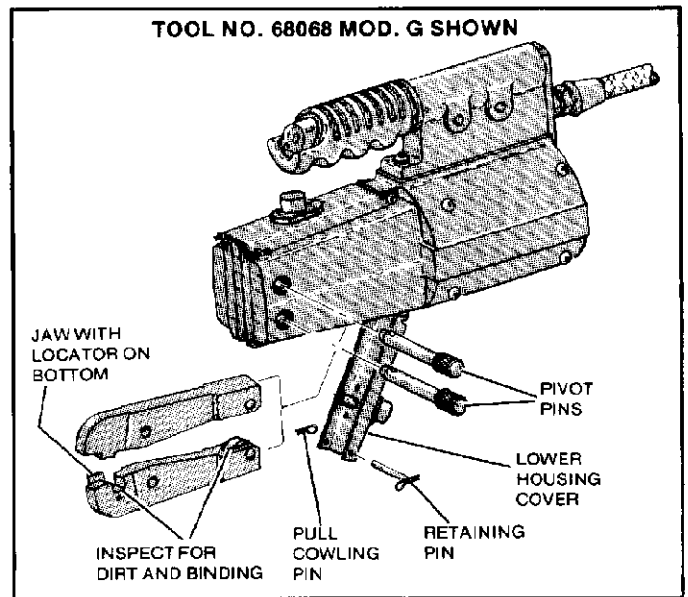


Figure 2

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		CRIMPING JAWS		CLOSED END SPLICE			
		SIDE LOADING	FRONT LOADING				
		68245-1 68268-1	68290-1				
JAW SET NUMBER	SPLICE NUMBER	AMP WIRE RANGE	MINIMUM INSULATION OPENING DIAMETER	SPLICE COLOR CODE & INSULATION MATERIAL	WIRE COMBINATION CHART NUMBER	WIRE STRIP LENGTH	
						Min.	Max.
68245-1	320788	18-8	.500	GREEN (VINYL)	GP 1008	23/32"	25/32"
68268-1 68290-1	53891-1	18-6	.500	BLUE (VINYL)	GP 2605		

Figure 1

## 2.2 REMOVE CRIMPING JAWS

- DISCONNECT TOOL FROM AIR SUPPLY.
- Pull cowling pin and remove retaining pin from lower housing cover. Cover will swing open.
- Remove pivot pins and remove crimping jaws.

## 2.3 WIRE PREPARATION

For maximum and minimum wire sizes and wire combinations that can be crimped in splices listed in Figure 2, refer to the wire combination charts packaged with the splices. Wire combination chart numbers are listed in Figure 2.

Strip wires to length specified in Figure 2.

NOTE: Do not use wires with nicked or missing strands.

## 2.4 CRIMPING PROCEDURE

WARNING: AVOID PERSONAL INJURY. WHEN OPERATING AIR TOOL, EXERCISE CAUTION WHILE HOLDING SPLICES OR WIRE NEAR CRIMPING AREA.

- Insert stripped wires into splice wire barrel until bottomed.
- IF TOOL HAS "HOLD" FEATURE:
- Activate tool to move the jaws into "hold" position.
  - Insert wire loaded splice into lower jaw die as shown in Figure 3.
  - Activate tool to complete the crimp.
- IF TOOL DOES NOT HAVE "HOLD" FEATURE:
- Perform steps (a), (c) and (d).
  - Refer to Section 3 and Figure 4 for crimp inspection.

## 3. CRIMP INSPECTION

Inspect crimped splices by checking for the features described in Figure 4. Use only the splices that meet conditions shown in the "ACCEPT" column of Figure 4. "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. Crimping jaws 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 jaws.
- The type and size of the products crimped.
- The degree of operator skill.
- The presence of abnormal amounts of dust and dirt.
- Your own established standards.

Since there is a possibility of damage in shipment, new jaws should be inspected in accordance with the following instructions when received in your plant.

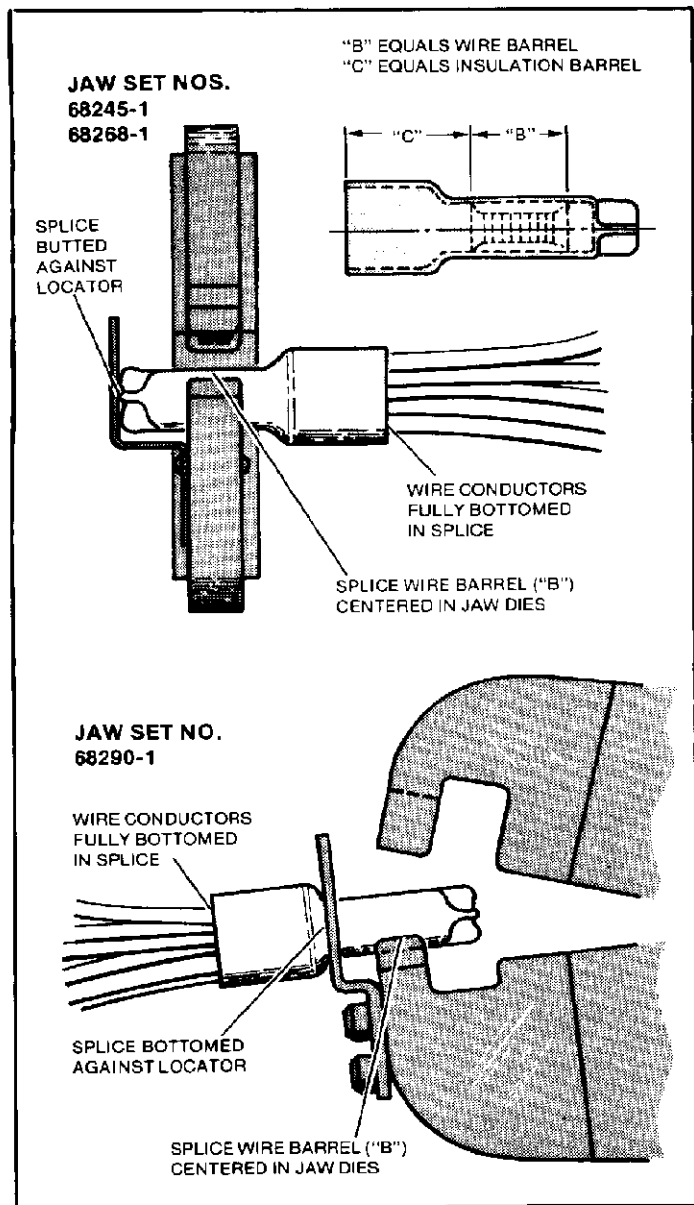


Figure 3

## 4.1 CLEANING

Do not allow deposits of dirt, grease and foreign matter to accumulate on the jaw bottoming surfaces and die closure surfaces. These deposits may cause excessive wear, thereby affecting the quality of the crimp.

The crimping jaws should be immersed in a reliable commercial degreasing compound to remove accumulated dirt, grease and foreign matter. Remove remaining degreasing compound with a lint, free cloth. When degreasing compounds are not available, jaws may be wiped clean with a lint free cloth. Relubricate jaws as instructed in paragraph 4.3 before placing them back in service.

## 4.2 VISUAL INSPECTION

- Inspect the cam rollers for binding and worn or pitted conditions.

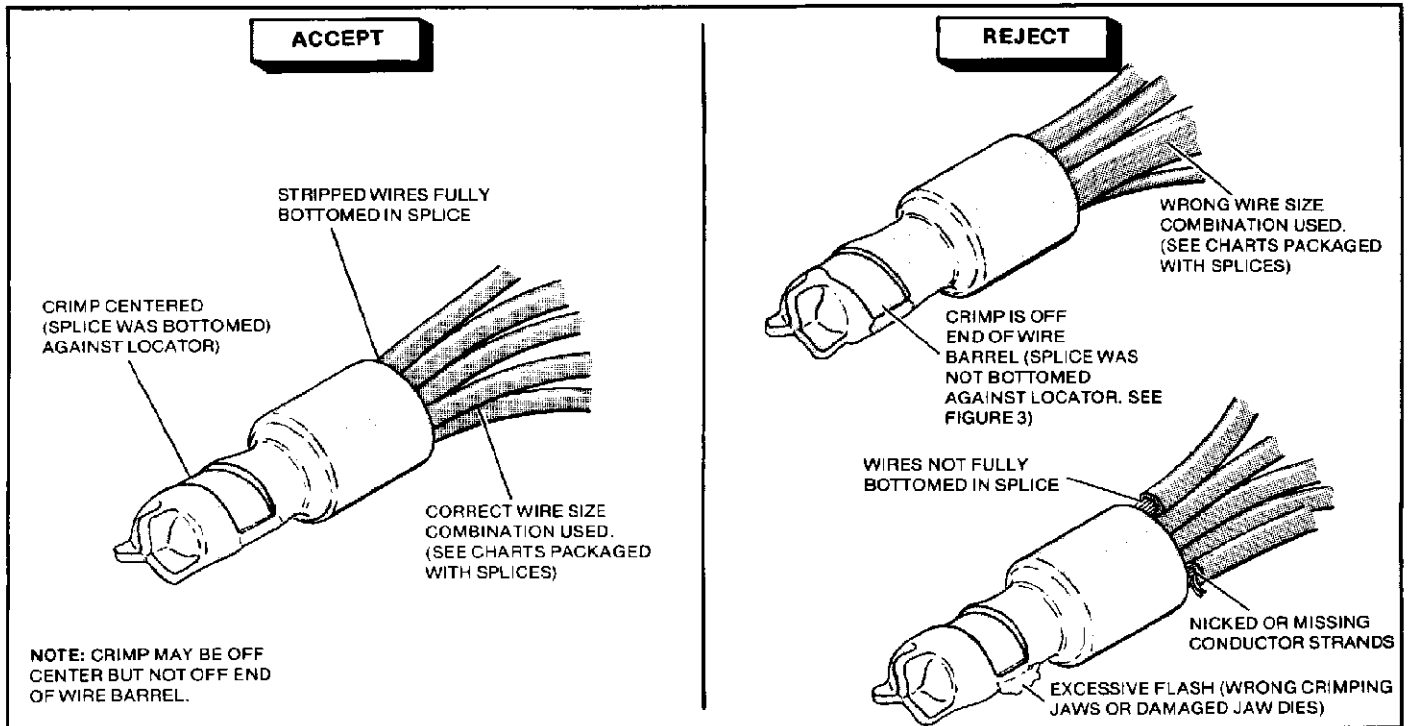


Figure 4

- (b) Inspect the pivot pin holes for excessive wear.
- (c) Inspect the die closure surfaces of the jaws for worn, pitted or chipped conditions. Although dies may gage within permissible limits, worn or damaged die closure surfaces are objectionable and can affect the quality of the crimp.
- (d) Examples of possible worn or damaged jaw or cam roller surfaces are shown in Figure 5. If jaws are defective, refer to Figure 8 for customer replacement part numbers.

#### 4.3 LUBRICATION

Lubricate cam rollers, pivot pins and pivot pin holes with CMD Anti-Scouring Extreme Pressure Lubricant No. 3<sup>®</sup> or equivalent.

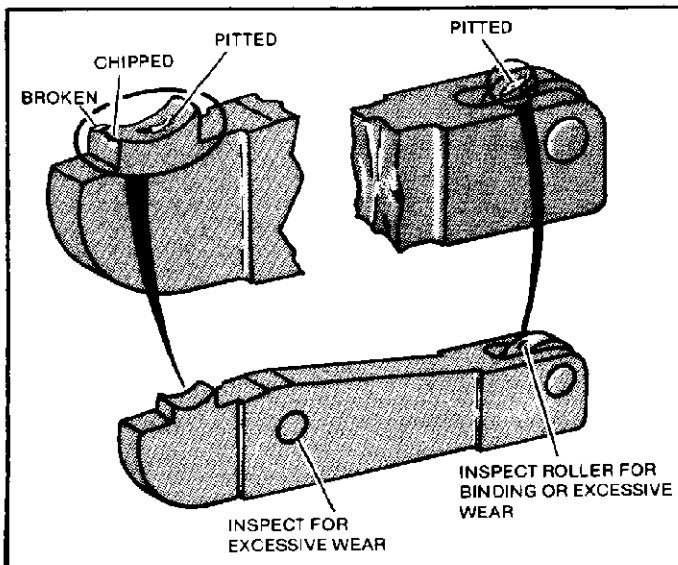


Figure 5

Lubricate cam roller pins with SAE #20 non-detergent motor oil.

Lubricate as follows:

- Jaws used in daily production — Lubricate daily
- Jaws used daily (occasional) — Lubricate weekly
- Jaws used weekly — Lubricate monthly

Wipe excess lubricant from jaws, particularly from crimping surfaces. Lubricant transferred from the crimping surfaces onto certain terminations may affect the electrical characteristics of an application.

#### 4.4 DIE CLOSURE INSPECTION

All crimping jaws are inspected for proper die closure before packaging. An inspection should be performed periodically to check the die closure for excessive wear. The die closure inspection is accomplished using the 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 6. The following procedure is recommended for inspecting the die closures.

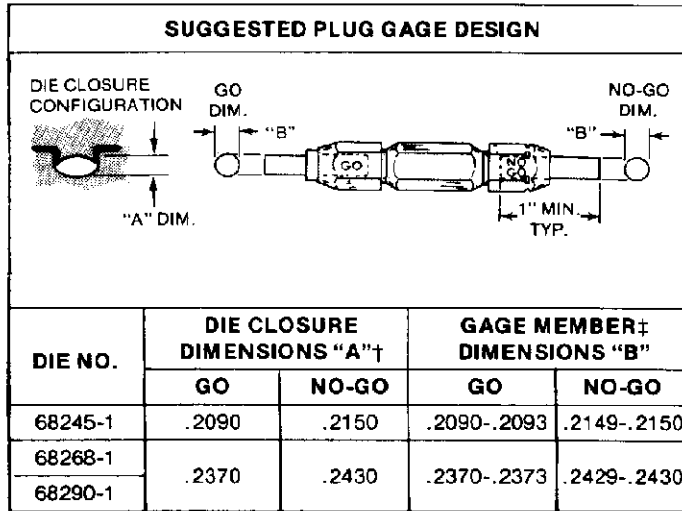
- (a) Clean oil or dirt from die closure surfaces, bottoming surfaces, and plug gage members.
- (b) Mate the crimping jaws so that they are bottomed but not under pressure.
- (c) With crimping jaws bottomed, inspect the die closure using the proper plug gage. Hold gage in straight alignment with the die closure and carefully insert, without forcing, the GO member. See Figure 7. 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.

If the die closure meets the GO NO-GO gage conditions, the jaws may be considered dimensionally correct.

If you find that the die closure does not conform with the GO NO-GO gage conditions, contact your local AMP field representative.

#### 4.5 REPLACEMENT PARTS

Refer to Figure 8 for crimping jaw replacement part numbers. Replacement crimping jaw parts can be purchased from AMP Incorporated, Harrisburg, Pa. 17105, or a wholly owned subsidiary of AMP Incorporated.



†DIE CLOSURE DIMENSIONS APPLY WHEN JAWS ARE BOTTOMED, BUT NOT UNDER PRESSURE.  
‡MATERIAL — TOOL STEEL. **Figure 6**

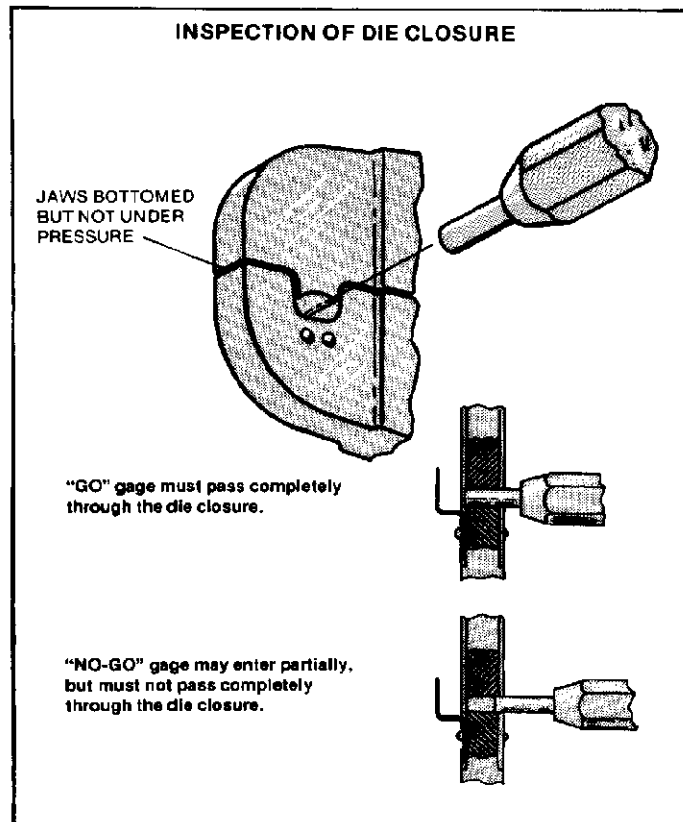
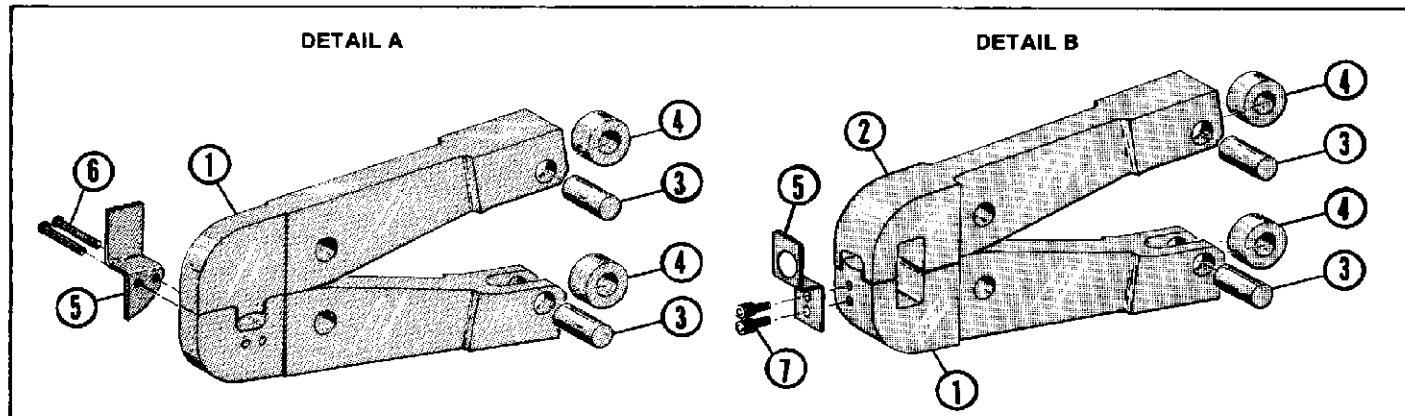


Figure 7



ITEM NO.	DESCRIPTION	QTY.	JAW SET NUMBERS AND COMPONENT PART NUMBERS		
			68245-1 DETAIL A	68268-1 DETAIL A	68290-1 DETAIL B
1	JAW, INDENTER	1	308216-1	308216-2	308531-1
2	JAW, NEST	1	308217-1	308217-2	308530-1
3	PIN, DOWEL	2	4-21030-6	4-21030-6	4-21030-6
4	ROLLER, CAM	2	5-59591-5	5-59591-5	5-59591-5
5	LOCATOR	1	306019	306019	308529-1
6	RIVET	2	4-305678-8	4-305678-8	---
7	SCREW, 6-32 x .375 LG.	2	---	---	1-21000-9

Figure 8

REL. DATE	REV. DATE	APPROVALS	
8-13-79		ENG. <i>Lloyd H. Brosław</i>	PUB. <i>Paul Felty</i>