

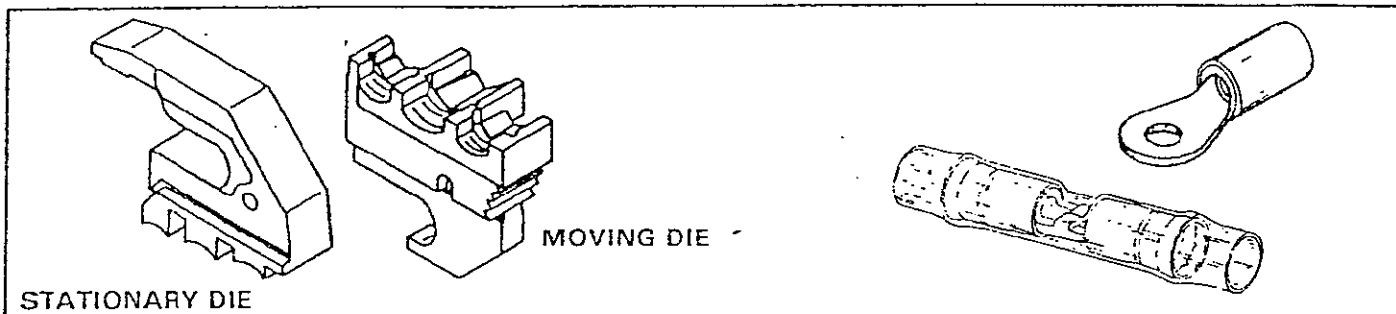


APPLICATION AND MAINTENANCE
FOR
AMP * CRIMPING DIES 169490

Instruction Sheet
1113GB
RELEASED 24.5.84

Section I of this instruction sheet provides application procedures for AMP crimping die assemblies.

Section II provides maintenance and inspection procedures for AMP crimping die assemblies.



SIZE (AWG)	WIRE		STRIP LENGTH				PRODUCT
	DIA (Max)	INSULATION COLOR	TERMINAL		SPLICE		
			MIN	MAX	MIN	MAX	
22-16	.140	Red	13/64	15/64	1/4	9/32	PIDG Terminals and Splices; PLASTI-GRIP Terminals
22-18	.140	Red	19/64	21/64	--	--	PIDG and PLASTI-GRIP Receptacles
15-14 20-16 HD	.170	Blue	13/64	15/64	1/4	9/32	PIDG Terminals and Splices; PLASTI-GRIP Terminals
16-14	.170	Blue	19/64	21/64	--	--	PIDG and PLASTI-GRIP Receptacles
12-10 16-14 HD	.250	Yellow Yellow W/Black Stripe	5/16	11/32	11/32	3/8	PIDG Terminals and Splices; PLASTI-GRIP Terminals
12-10	.250	Yellow	5/16	3/8	--	--	PIDG and PLASTI-GRIP Receptacles
22	.038-.110	Red W/Green Stripe	1/4	9/32	--	--	PIDG Insulation-Restricting Terminals
20	.046-.110	Red W/Red Stripe	↓	↓	↓	↓	
18	.055-.110	Red W/White Stripe	↓	↓	↓	↓	
16	.063-.130	Blue W/Blue Stripe	↓	↓	↓	↓	
14	.078-.130	Blue W/Green Stripe	↓	↓	↓	↓	
12	.095-.200	Yellow W/Brown Stripe	3/8	13/32	↓	↓	
10	.119-.200	Yellow W/Yellow Stripe			↓	↓	

Fig. I-1

SECTION I APPLICATION

I-2. DESCRIPTION

I-1. INTRODUCTION

AMP Crimping Dies 169490, used in CERTI-LOK * Hand Crimping Tool 169400, are designed to crimp PIDG * and PLASTI-GRIP * terminals, and PIDG "window" splices.

Each die assembly consists of a stationary die and a moving die. Each die assembly is also divided into three separate crimping closures that are color-coded to match the color-coded terminal/splice for a given wire range.

Read this instruction sheet for specific information concerning the dies, applicable terminals, and wire specifications. Read the instructions packaged with the tool (IS 6764) for information concerning die installation, crimp adjustments, crimping procedures, and general information.

I-3. CRIMPING PROCEDURE

Determine your application requirements. Then, using the chart in Figure I-1, make your selection according to the following instructions:

Wire Size and Insulation Diameter -- Make certain the wire and insulation are within the specified range.

Wire Type and Strip Length -- Using stranded wire, strip it to the length shown. Do NOT crimp wire that has cut or nicked strands.



All dimensions on this instruction sheet are in inches.

and Foreign Patents and/or patents pending.

TYPICAL PIDG AND PLASTI-GRIP TERMINALS
(Ring or Spade Receptacles)

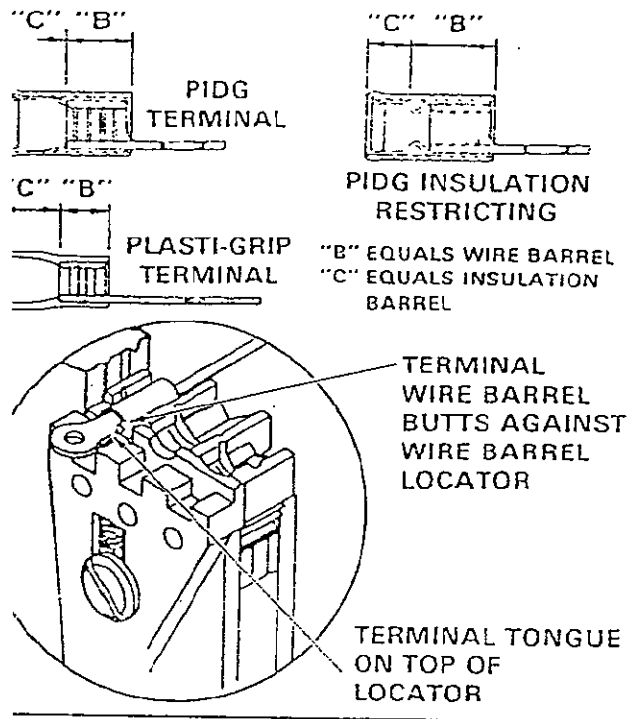


Fig. I-2

up terminal (or splice) as follows:

1. If necessary, install the dies according to the instructions packaged with the tool.
2. Place terminal (or splice) in dies as shown in Figure I-2 (or Figure I-3).
3. Close tool handles until terminal or splice is held firmly in place.
4. Insert properly stripped wire into terminal (or splice) wire barrel "B" as shown in Figure I-2 (or Figure I-3).
5. Complete crimp by closing handles until ratchet releases handles. Handles will open automatically and crimped item may be removed.
6. To crimp other half of splice, remove it and reposition uncrimped half in dies as shown in Figure I-3. Follow same procedure used to crimp first half of splice. (If splice cannot be turned, turn tool around.)
7. Inspect crimped terminal/splice.

PIDG BUTT SPLICES

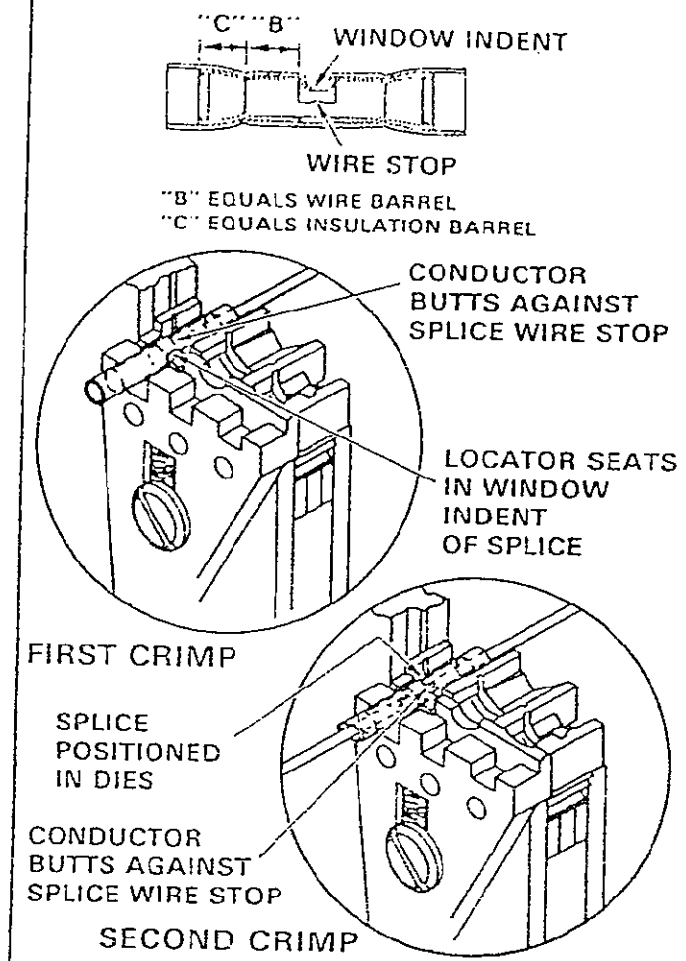


Fig. I-3

For a more detailed crimp inspection procedure, refer to the "Crimp Inspection" (CI) sheet for the kind of terminal or splice being crimped, as follows:

- PIDG Terminals — CI 8050-23.
- PLASTI-GRIP Terminals — CI 8050-32.

I-4. DAILY MAINTENANCE

Remove all foreign particles with a clean, soft brush or clean, soft, lint-free cloth. If foreign matter cannot be removed easily, or if the proper replacement parts are not available, return the dies to your supervisor.

Make certain the dies are protected with a THIN coat of any good SAE No. 20 motor oil. DO NOT OIL EXCESSIVELY. When the dies are not in use, store them in a clean, dry area.

AMP CRIMPING DIES 169490

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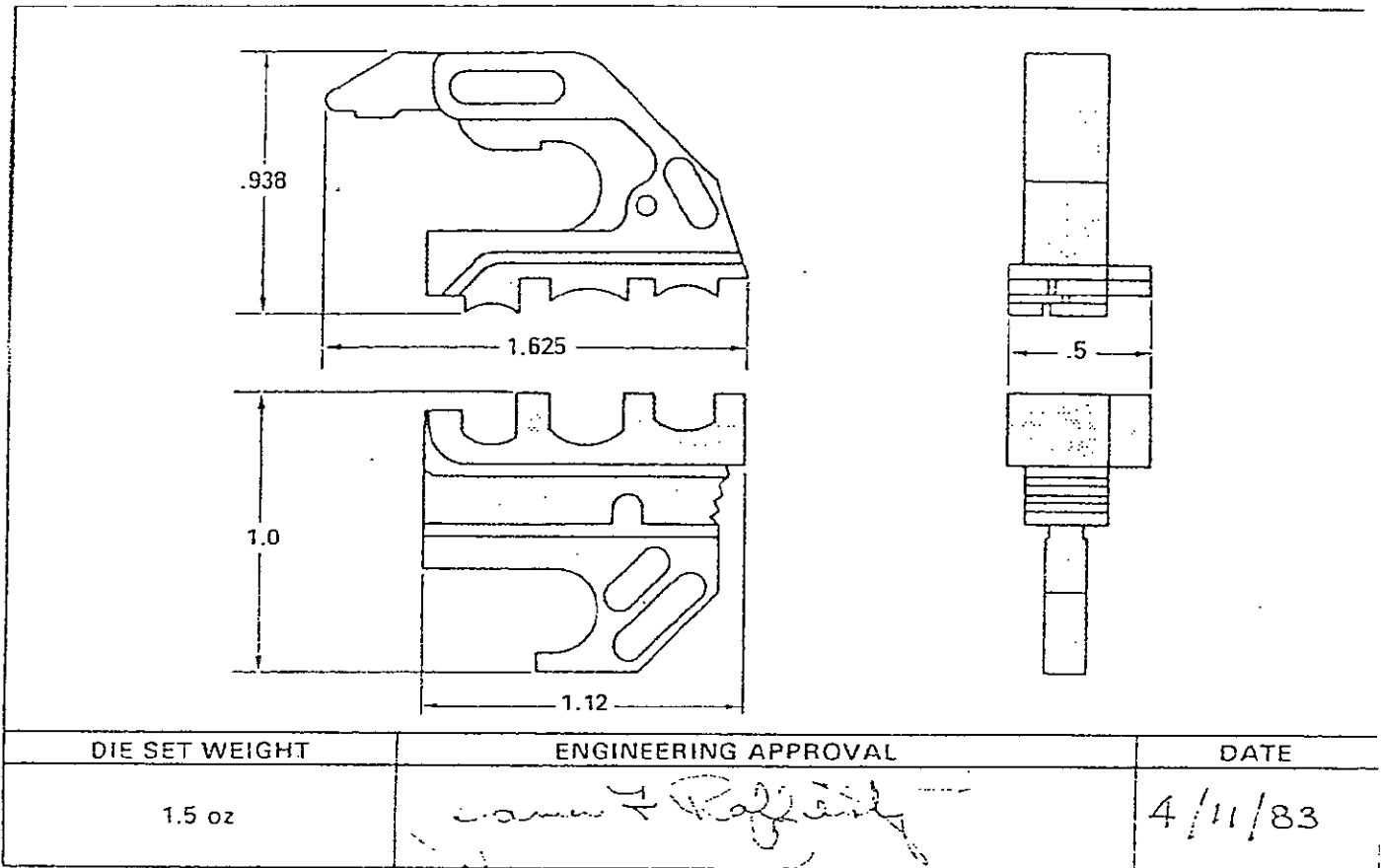


Fig. II-1

SECTION II MAINTENANCE/INSPECTION

II-1. DIE CERTIFICATION

These instructions have been approved by AMP Design, Production, and Quality Control Engineers to provide documented maintenance and inspection procedures in accordance with AMP Corporate Policy No. 3-3. Through AMP test laboratories and the inspection of production assembly, the procedures described herein have been established to ensure quality and reliability of AMP crimping dies.

II-2. INSPECTION PROCEDURES

A. Daily Maintenance

It is recommended that each operator of the dies be made aware of — and responsible for — the following three steps of daily maintenance:

1. Remove dust, moisture, and other contaminants with a clean brush, or a soft, lint-free cloth. Do NOT use objects that could damage the dies.
2. Make certain the dies are protected with a THIN coat of any good SAE No. 20 motor oil. DO NOT OIL EXCESSIVELY.

3. When the dies are not in use, store them in a clean, dry area.

B. Periodic Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the dies and/or be supplied to supervisory personnel responsible for the dies. Though recommendations call for at least one inspection a month, the inspection frequency should be based on the amount of use, ambient working conditions, operator training and skill, and established company standards. These inspections should be performed in the following sequence:

B-1. Visual Inspection

1. Remove all lubrication and accumulated film by immersing the dies in a suitable commercial degreaser that will not affect paint or plastic material.
2. Check all bearing surfaces for wear.
3. Inspect the crimp area for flattened, clipped, cracked, worn or broken areas. If damage is evident, the dies must be replaced.

2. Gaging the Crimping Chamber

This inspection requires the use of a GO NO-GO Gage conforming to the diameters in Figure II-2. AMP does not manufacture or market these gages.

Select die crimping chamber according to wire size and proceed as follows:

1. Mate the dies until it is evident that they have bottomed.
2. Align the GO element with the wire barrel crimping chamber. Push element straight into the crimping chamber without using force. The GO element must pass completely through the crimping chamber as shown in Figure II-2.
3. Now align the NO-GO element and try to insert it straight into the same crimping chamber. The NO-GO element may start entry but must not pass completely through as shown in Figure II-2.

If the crimping chamber conforms to the gage inspection, the dies are considered dimensionally correct and should be lubricated with a THIN coat of SAE No. 20 motor oil. If not, the dies must be replaced.

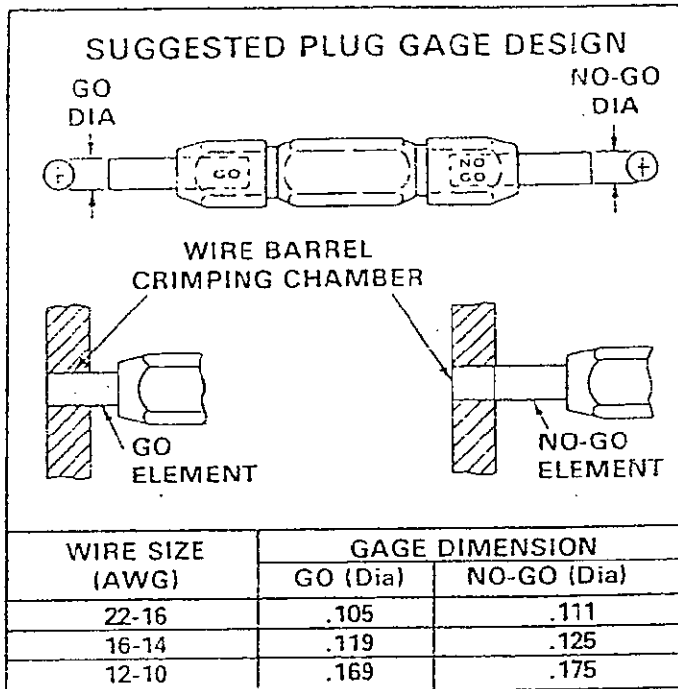


Fig. II-2