

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

Section II provides maintenance and inspection procedures for AMP crimping dies.

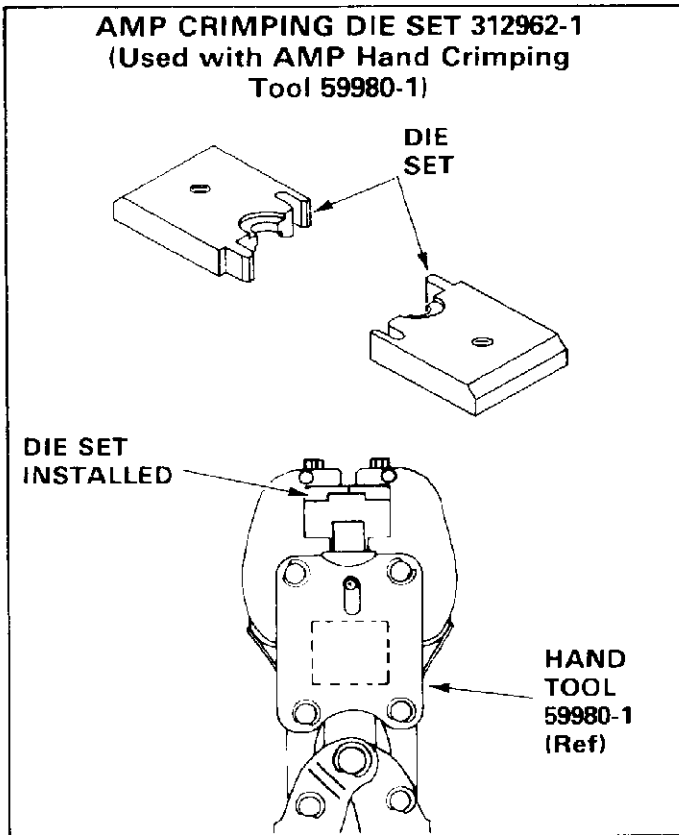


Fig. 1

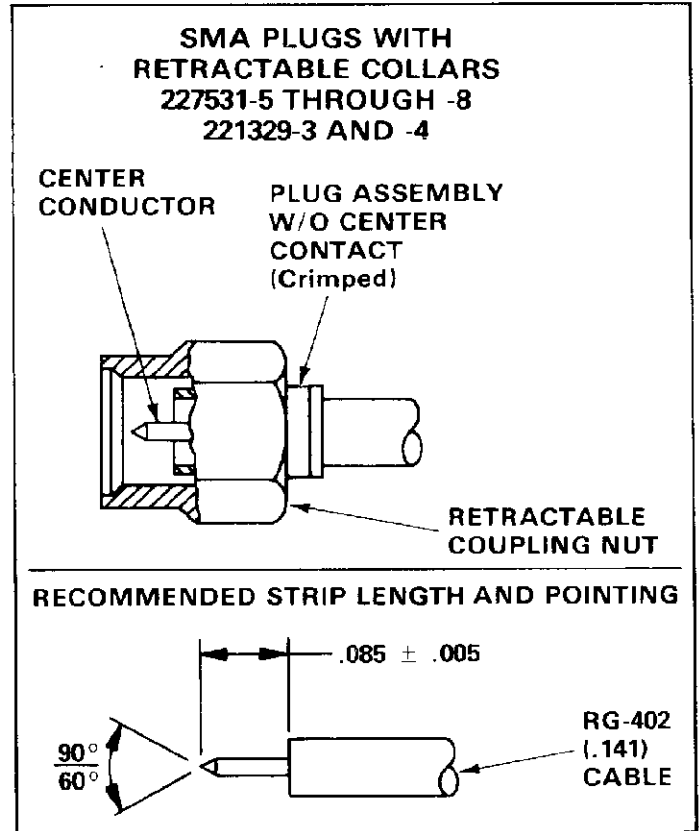


Fig. 2

### I-1. INTRODUCTION

AMP Crimping Die Set 312962-1, shown in Figure I-1, is designed for use in AMP Hand Crimping Tool 59980-1. The assembled tool is used to crimp SMA Series plugs with retractable collars to RG-402 (.141) semi-rigid coaxial cable, as shown in Figure I-2. This instruction sheet (IS) covers recommended procedures for die installation. IS 6788, packaged with the tool, covers application and maintenance procedures for the hand crimping tool which is part of AMP Cable Preparation Kit 59981-1. Read all instructions thoroughly before proceeding.

NOTE

All dimensions on this sheet are in inches.

### I-2. DESCRIPTION

The die set consists of two identical crimping dies (crimp inserts) which are not provided with the tool and which must be ordered separately. The SMA Series plugs with retractable collars listed in Figure I-2

require the use of die set 312962-1 for proper positioning and crimping. Each connector consists of a plug assembly (without the center contact) and a retractable coupling nut. The RG-402 cable being used must be properly stripped and pointed to ensure a sound connection. Refer to Figure I-2 and to IS 6788.

### I-3. TOOL SETUP PROCEDURE (Figure I-3)

Before prepared cable can be crimped to an SMA plug connector with retractable collar, the AMP hand crimping tool must be set up as follows:

1. Loosen locator locking screw and insert jack end of locator 220220-2 (provided with the tool) into cavity of tool head. Re-tighten locking screw.
2. Position each half of die set 312962-1 on tool jaw, making sure that chamfer is oriented as shown in Figure I-3.

**CAUTION**

*An unacceptable crimp will result if die chamfers are not positioned as shown.*

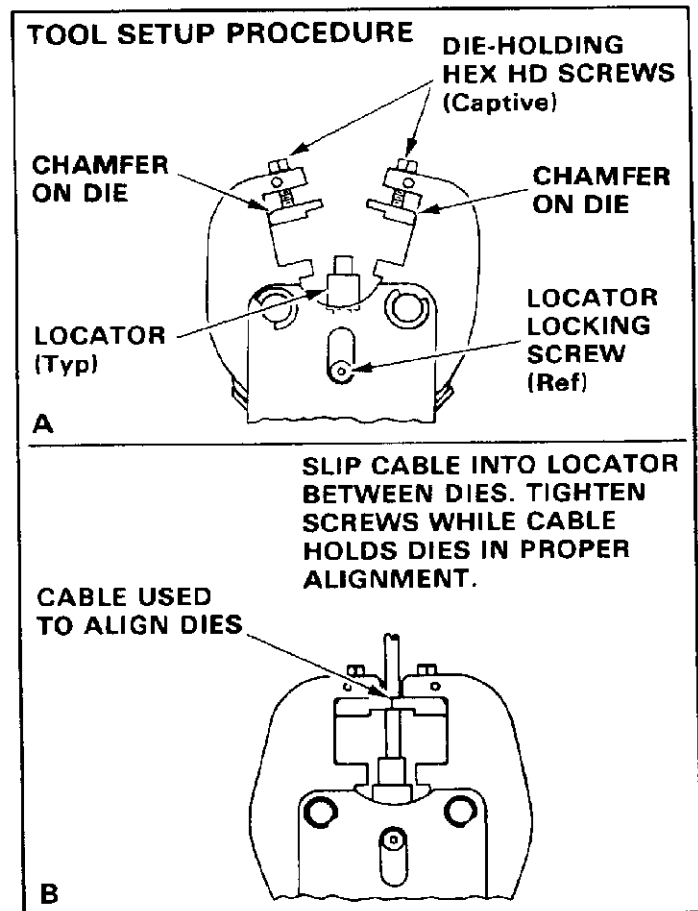
3. Fasten dies to jaws with captive screws, but do not tighten screws until dies are aligned.
4. To align dies, place a .141 semi-rigid cable inside locator and squeeze handles to close tool. Check for even alignment of dies, as shown, and then tighten screws to secure dies.

Follow crimping procedures for connectors with retractable collars, as given in IS 6788.

#### I-4. DAILY MAINTENANCE

Remove all foreign particles with a clean, soft brush, or a clean, soft, lint-free cloth. Make sure the die set screws are in place and retain the die assembly to the tool. If foreign matter cannot be removed easily, return the tool to your supervisor.

While attending to the crimping dies, it is wise to make sure all pivot points and bearing surfaces on the tool are protected by a THIN coat of any good SAE No. 20 motor oil. Do NOT oil excessively. When tool and crimping die set are not in use, keep the tool handles closed to prevent objects from becoming lodged between the dies, and store the tool in a clean, dry area.



**Fig. 3**

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

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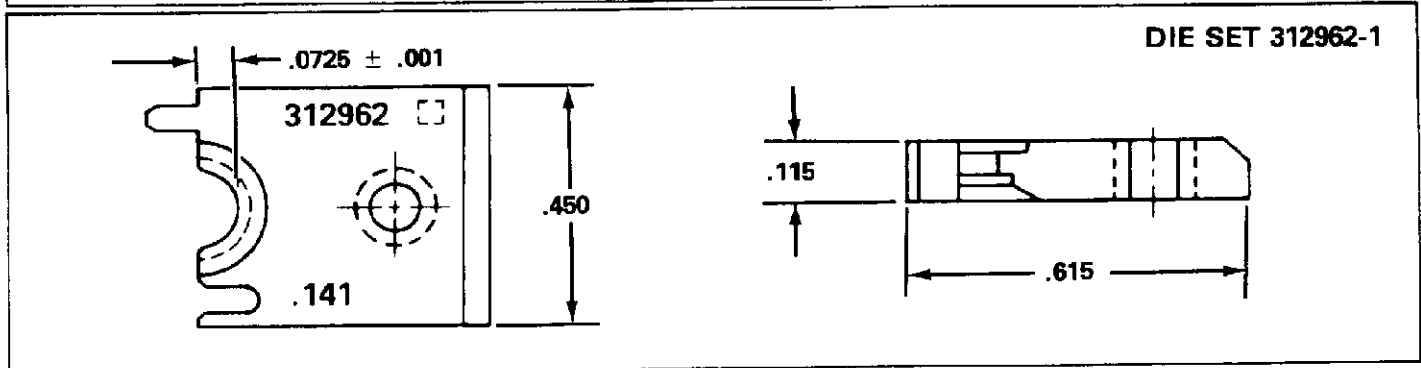


Fig. II-1

## SECTION II MAINTENANCE/INSPECTION

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 3-3. Through AMP Test Laboratories and the inspection of product assembly, the procedures described herein have been established to ensure the quality and reliability of the AMP crimping die set.

The die set components are replaceable parts and are listed in Figure II-1.

### II-1. INSPECTION PROCEDURES

#### A. Daily Maintenance

It is recommended that each operator of the die set (and tool) be made aware of — and responsible for — the following 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. When the die set (or tool) is not in use, store it 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 die set and/or be supplied to supervisory personnel responsible for the equipment. Though recommendations call for at least one inspection a month, their 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 with a suitable commercial degreaser that will not affect paint or plastic material.
2. Make sure all die holding screws are in place.
3. Check all bearing surfaces for wear. Remove and replace worn components.
4. Inspect the crimping area for flattened, chipped, cracked, worn, or broken portions. If damage is evident, the die set must be repaired before returning to service (see Paragraph II-2, REPAIR).

#### B-2. Gaging the Crimping Chamber

This inspection requires the use of a GO NO-GO gage conforming to the dimensions in Figure II-2. AMP does not market or manufacture these gages. To perform this inspection, proceed as follows:

1. Install crimping die set 312962-1 into tool head, as shown in Figure I-3 and described in Paragraph I-3. Do NOT insert the locator into the tool head.
2. Close the tool handles until it is evident that the ram touches the stop surfaces.
3. Align the GO element with the crimping chamber so that the top and bottom of the gage align with surfaces of the die inserts and ram. Push element straight into the crimping chamber without using force. The GO element must pass completely through the chamber as shown in Figure II-2.
4. Now align the NO-GO element and try to insert it into the same crimping chamber. The NO-GO element may start entry but must not pass completely through. Refer to Figure II-2.

If the crimping chamber conforms to the gage inspection, the tool should be considered dimensionally correct and should be lubricated with a THIN coat of any good SAE No. 20 motor oil. If not, the die set must either be repaired or replaced. (see Paragraph II-2, REPAIR AND REPLACEMENT).

For additional information concerning the use of a GO NO-GO gage, refer to AMP Instruction Sheet IS 7424.

**II-2. REPAIR AND REPLACEMENT**

The die set components listed in Figure II-1 are replaceable parts. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. The dies can be returned to AMP for evaluation and repair. Send the dies with a written description of the problem to:

AMP Incorporated  
 Customer Repair  
 1523 North 4th Street  
 Harrisburg, PA 17102-1604

or a wholly owned subsidiary of AMP Incorporated.

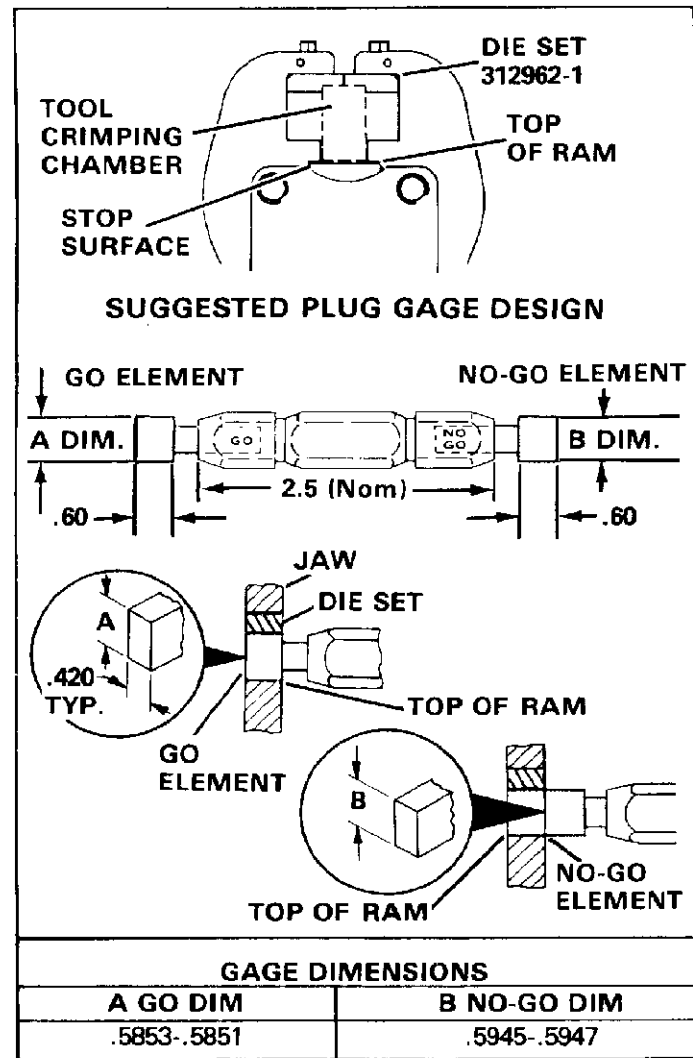


Fig. II-2