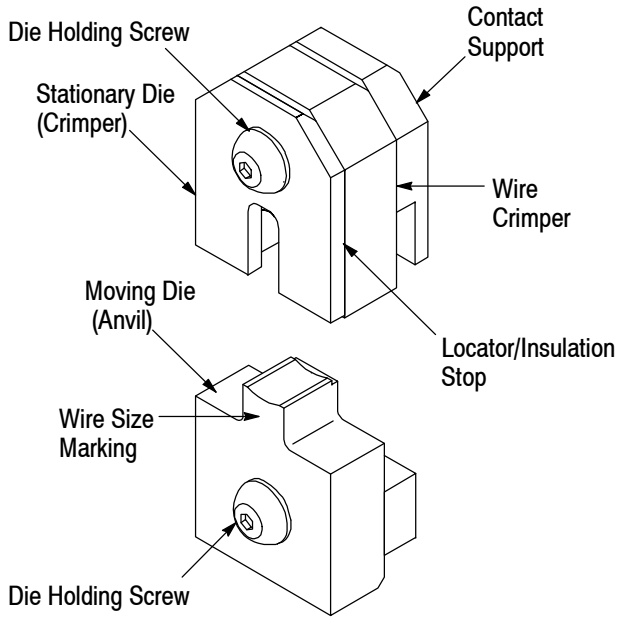


Figure 1

1. INTRODUCTION

Crimping Dies 58492-1 and 58493-1 are designed for use in either Straight Action Adapter 217200-1 (408-4105) or Pneumatic C-Head Adapter 318161-1 (408-4190) installed in 626 Pneumatic Tooling or Hand Crimping Tool 69710-1 (408-2095). The die assembly, when installed in a tool, will crimp AMPINNERGY* contacts listed in Figure 2 onto *stranded* wire.

These instructions provide specific information regarding the die assemblies and applicable contacts. Refer to the instruction sheet (408-series) packaged with the tool for information regarding die installation and general performance of the tool.

NOTE

Dimensions are in millimeters [with inch equivalents in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 6, REVISION SUMMARY.

2. DESCRIPTION

Each die assembly features a stationary die (crimper), a movable die (anvil), a locator/insulation stop, and a contact support. Refer to Figure 1.

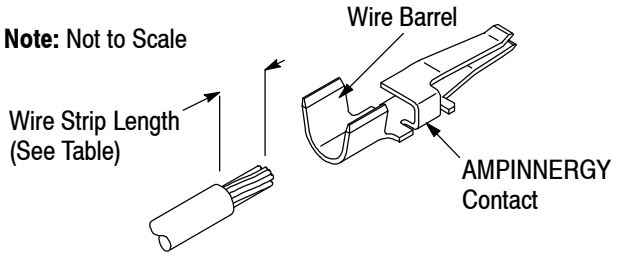
The stationary die has chamfered corners and has the wire size range (18-14 AWG) marked on it. The moving die has square corners and has a specific wire size marked on it: 18-16 AWG for Die Assembly 58493-1 and 14 AWG for Die Assembly 58492-1.

The locator/insulation stop has two functions: it positions the contact in the crimping dies, and it aids in locating the wire in the contact. In use, the locator/insulation stop rests against the end of the wire barrel. The contact support prevents the contact from bending during the crimping operation.

When mated, the dies create a crimping chamber.

3. CRIMPING PROCEDURE

Install the dies according to the instructions packaged with the tool. Refer to Figure 2 and select wire (stranded only) of the specified size. Strip the wire to the length indicated, taking care not to cut or nick the wire strands.



WIRE SIZE (AWG)	STRIP LENGTH RANGE	CONTACT PART NUMBERS	CRIMPING DIE ASSEMBLY
18-16	6.98-7.87 [.275-.310]	556135-[ ], 556883-[ ]	58493-1
14			58492-1

Figure 2

Refer to Figure 3 and proceed as follows:

1. Looking straight into the *front* of the crimping chamber, insert the contact (wire barrel first) into the *back* of the locator/insulation stop. Position the contact in the stationary die (crimper) so that the contact butts against the locator/insulation stop.

2. Hold the contact in position and close the dies *just enough* to hold the contact in place; do *not* deform the wire barrel.

3. Insert a properly stripped wire through the wire slot in the locator/insulation stop and into the wire barrel of the contact until the insulation butts against the locator/insulation stop.

4. Hold the wire in place, and actuate the tool through a complete cycle.

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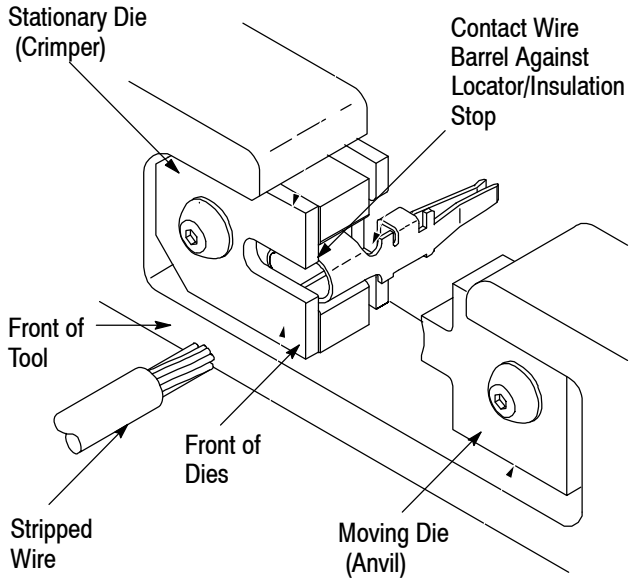


Figure 3

5. Allow the tool to open fully, then remove the crimped contact.

4. MAINTENANCE AND INSPECTION

4.1. 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 sure that dies are properly aligned and that die holding screws are in place and secured.

3. Make certain that all surfaces are protected with a thin coat of any good SAE 20 motor oil. Do not oil excessively.

4. When dies are not in use, store in a clean, dry area.

4.2. Inspection

Regular inspections should be performed with a record of inspections remaining with the dies and/or supervisory personnel responsible for them. One inspection per month is recommended; however, amount of use, working conditions, operator training and skill, and established company standards should determine frequency of inspection. The inspection should be performed in the following sequence:

A. 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.

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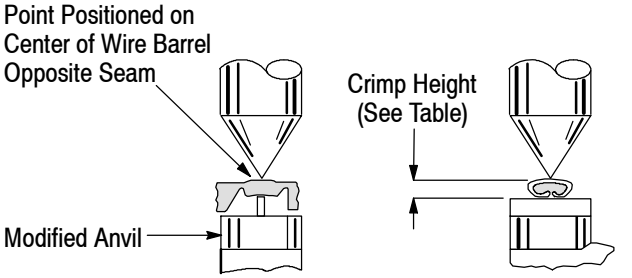
2. Make sure all die holding screws are in place and secured.

3. Check all bearing surfaces for wear. Replace worn components.

4. Inspect the crimp area for flattened, chipped, cracked, worn, or broken areas. If damage is evident, the dies must be repaired before returning them to service.

B. Crimp Height Inspection

This inspection incorporates the use of a crimp height comparator (micrometer with a modified anvil) as shown in Figure 4. Detailed information on obtaining and using a crimp height comparator can be found in instruction sheet 408–7424.



DIE ASSEMBLY	MAXIMUM WIRE SIZE (AWG)	CRIMP HEIGHT
58492-1	14	2.44 [.096]
58493-1	16	2.21 [.087]

Figure 4

Proceed as follows:

1. Refer to Figure 4 and select a contact and maximum size wire for the dies.

2. Refer to Section 3, CRIMPING PROCEDURE, and crimp the contact accordingly.

3. Using the crimp height comparator, measure the wire barrel crimp height as shown in Figure 4.

If the crimp height conforms to that shown in Figure 4, the dies are considered dimensionally correct and should be lubricated with a thin coat of any good SAE 20 motor oil. If not, the dies must be repaired or replaced. Refer to Section 5, REPLACEMENT AND REPAIR.

5. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 5. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. Parts other than those listed should be replaced by Tyco Electronics to ensure quality and reliability. Order replacement parts

through your representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605, or write to:

CUSTOMER SERVICE (038-035)
TYCO ELECTRONICS CORPORATION
PO BOX 3608
HARRISBURG PA 17105-3608

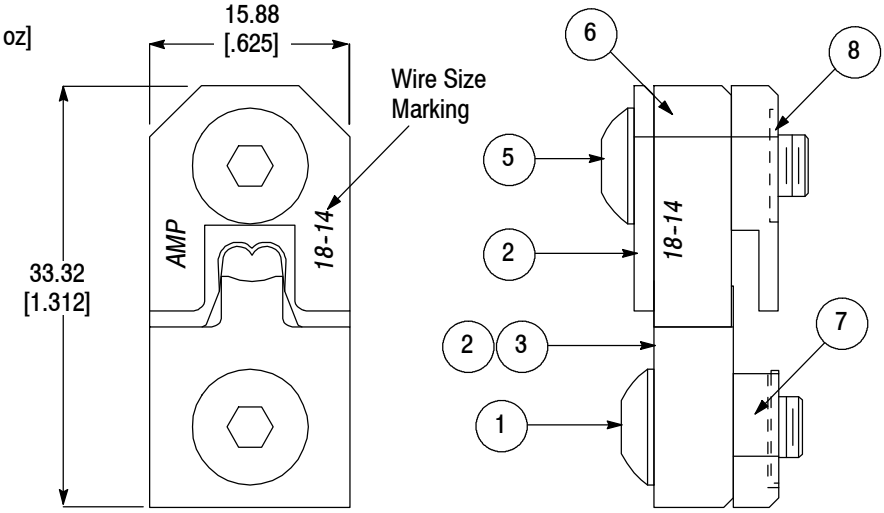
For customer repair service, call 1-800-526-5136.

6. REVISION SUMMARY

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements
- Removed part number for crimp height comparator and companies that sell them from Paragraph 4.2.C

Weight: Approx 85 g [3 oz]



REPLACEMENT PARTS

ITEM	PART NUMBER FOR DIE ASSEMBLY		DESCRIPTION	QTY PER ASSEMBLY
	58492-1	58493-1		
1	1-305927-9	1-305927-9	SCREW, Die Holding	1
2	1-306593-4	1-306593-4	SCREW	1
3	768651-2	768651-2	LOCATOR	1
4	125155-2	125155-2	SPACER	1
5	314879-1	—	ANVIL, Wire (Wire Size Marking 14)	1
6	—	314880-1	ANVIL, Wire (Wire Size Marking 18-16)	1
7	768653-2	768653-2	CRIMPER, Wire (Wire Size Marking 18-14)	1
8	1-21046-3	1-21046-3	RING, Retaining	2

Figure 5