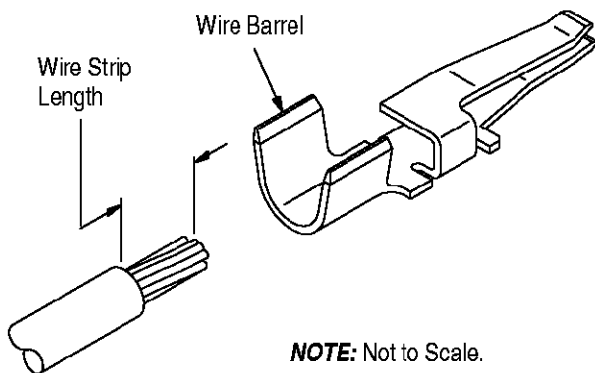


Figure 1



NOTE: Not to Scale.

WIRE SIZE (AWG)	STRIP LENGTH	CONTACT PART NUMBER	CRIMPING DIE ASSY PART NUMBER
12	7.87-8.66	556136-2	58490-1
10	[.310-.341]	556880-1	58491-1

Figure 2

1. INTRODUCTION

AMP* Crimping Dies 58490-1 and 58491-1 are designed for use in either 626 Pneumatic Tooling Systems Straight Action Adapter 217200-1 or Pneumatic C-Head Adapter 318161-1 or in Hand Crimping Tool 69710-1. Each die assembly, when installed in a tool, will crimp the AMPINNERGY* contacts listed in Figure 2 onto *stranded* wire.

These instructions provide specific information regarding the die assemblies and applicable contacts. Refer to instruction sheets 408-4105 and 408-4190, packaged with the pneumatic tools, or instruction sheet 408-2095, packaged with the hand tool, for information regarding die insertion, contact crimping, 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 are provided in Section 6, REVISION SUMMARY.

2. DESCRIPTION (Figures 1 and 3)

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

The stationary die has chamfered corners and has the wire size range (12-10 AWG) marked on it. The moving die has square corners and has a specific wire size marked upon it: 12 AWG for Die Assembly 58490-1; 10 AWG for Die Assembly 58491-1.

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 (see Figures 2 and 3).

The contact support prevents the contact from bending during the crimping procedure.

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.

Refer to Figure 3 and proceed as follows:

- Looking straight into the *front* of the crimp section, insert the contact (wire barrel first) into the *back* of the locator. Position the contact in the crimper so that the contact butts against the locator.

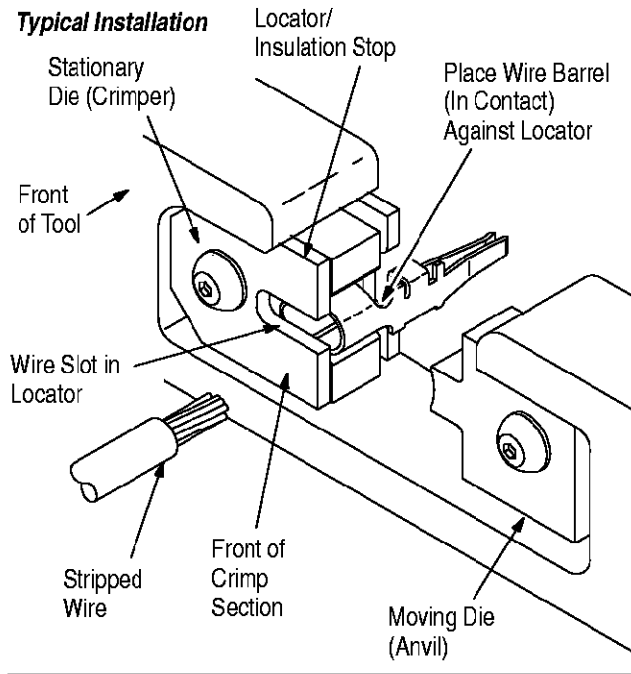


Figure 3

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 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. Refer to the instructions packaged with the tool.
5. Allow the tool to open fully and remove the crimped contact.

4. MAINTENANCE AND INSPECTION PROCEDURE

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. It is recommended one inspection per month; 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:

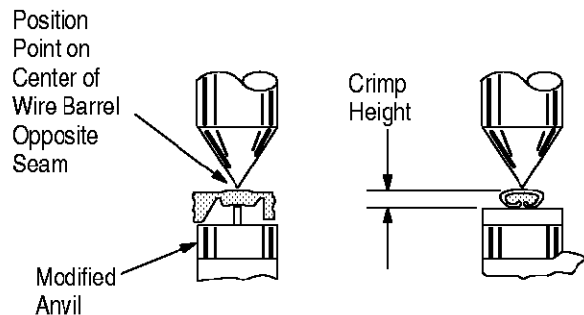
A. Visual Inspection

1. Remove all lubrication and accumulated film by immersing the dies in a suitable commercial degreaser that will not affect paint or plastic material.
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 section for flattened, chipped, cracked, worn, or broken areas. If damage is evident, the dies must be repaired before returning them to service. See Section 5, REPLACEMENT AND REPAIR.

B. Crimp Height Inspection

This inspection incorporates the use of a micrometer with a modified anvil as shown in Figure 4. It is recommended the modified micrometer (Crimp Height Comparator RS-1019-5LP) which may be purchased from:

Shearer Industrial Supply Co. 20 North Penn Street York, PA 17401-1014 or VALCO 1410 Stonewood Drive Bethlehem, PA 18017-3527



DIE PART NUMBER	WIRE SIZE (AWG) (Max)	CRIMP HEIGHT DIM. ±.05 [±.002]
58490-1	12	2.84 [.112]
58491-1	10	3.20 [.126]

Figure 4

Proceed as follows:

1. Refer to Figure 4 and select a contact and **maximum** size wire for the die assembly.
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

The parts listed in Figure 5 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your Tyco representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605, or write to:

CUSTOMER SERVICE (38-35)
 TYCO ELECTRONICS CORPORATION
 P.O. BOX 3608
 HARRISBURG, PA 17105-3608

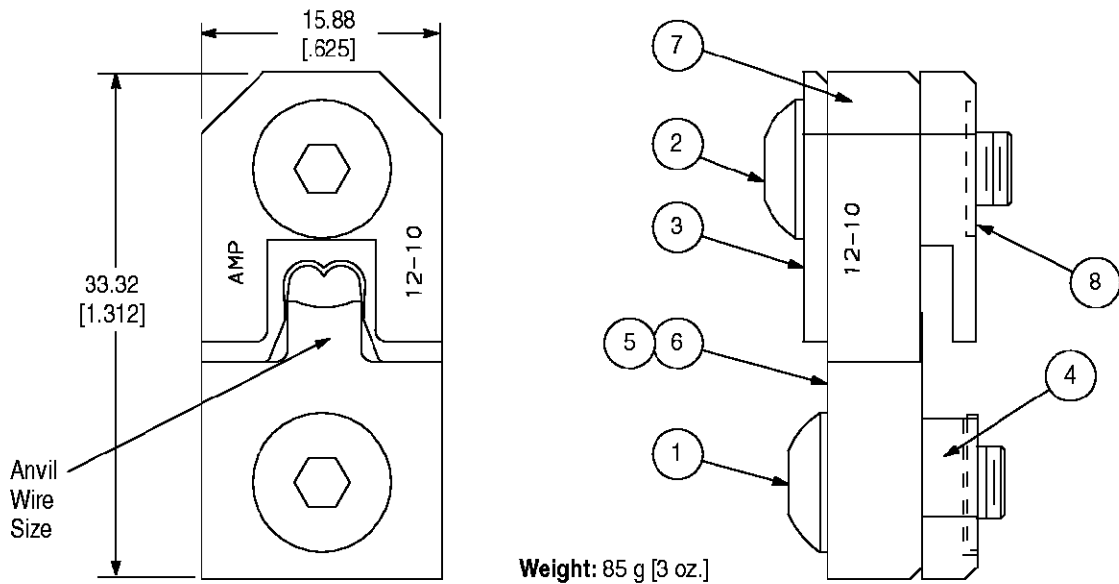
Tools may also be returned for evaluation and repair. For repair service, contact a representative at 1-800-526-5136.

6. REVISION SUMMARY

Since the previous release of this sheet, the following changes were made:

Per EC 0990-0062-00

- Updated per corporate requirements
- Changed table layout in Figure 2
- Changed repair service information in Section 5



REPLACEMENT PARTS

ITEM	DIE ASSY 58490-1	DIE ASSY 58491-1	DESCRIPTION	QTY PER ASSY
1	7-306131-2	7-306131-2	SCREW, Die Holding	1
2	1-306593-4	1-306593-4	SCREW	1
3	768651-1	768651-1	LOCATOR	1
4	125155-2	125155-2	SPACER	1
5	314878-1	—	ANVIL, Wire (12)	1
6	—	314877-1	ANVIL, Wire (10)	1
7	768653-1	768653-1	CRIMPER, Wire	1
8	1-21046-3	1-21046-3	RING, Retaining	2

Figure 5