

Figure 1

## 1. INTRODUCTION

AMP\* Crimping Die Assemblies 356611-1, 356611-2, and 356612-1 (shown in Figure 1), are used in conjunction with Hand Crimping Tool 69710-1 or AMPOMATOR\* CLS IV Lead-Making Machine 217500-[ ] to crimp the POWERBAND contacts listed in Figure 2 onto wire sizes 8 through 14 AWG.

For specific information concerning the hand tool, refer to Instruction Sheet 408-2095; and for the power unit, refer to Customer Manual 409-5866.

**NOTE**

*Dimensions on this sheet are in millimeters [with inches in brackets]. Figures and illustrations are for identification only and are not drawn to scale.*

## 2. DESCRIPTION

The die assembly consists of a stationary die (crimper), a movable die (anvil), a locator/wire stop, and a contact support. Each die is held in the tooling by a die holding screw. When mated, the die assembly forms a crimping chamber.

The stationary die has chamfered corners and features a wire size marking above the crimping chamber. The moving die has square corners.

The locator/wire stop positions the contact in the crimping chamber and aids in locating the wire in the contact. In use, it rests in the contact locator slot.

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

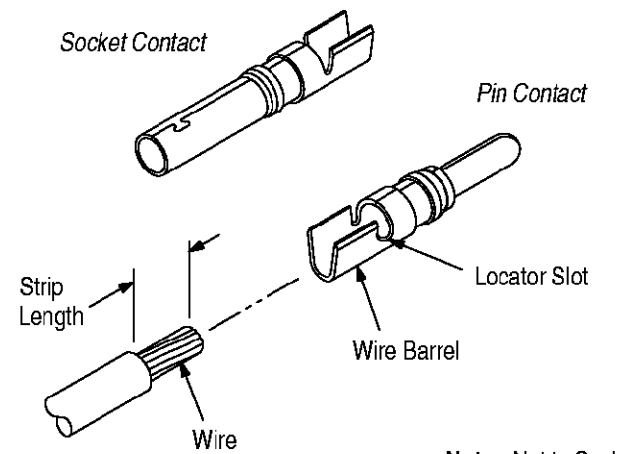
## 3. CRIMPING PROCEDURE

Install the die assembly in the tooling according to the instructions packaged with the tooling.

Select wire of specified size and applicable contact. Strip the insulation from the wire to the length indicated in Figure 2. Be careful not to nick or cut the wire strands.

Proceed as follows:

1. Looking straight into the FRONT of the crimping chamber, insert the contact (wire barrel first) into the BACK of the crimping chamber. Position the contact in the crimper so that the locator/wire stop enters the contact locator slot. See Figure 3.
2. Hold the contact in position and close the dies just enough to hold the contact in place without deforming the wire barrel.



Note: Not to Scale

WIRE		CONTACT		DIE ASSEMBLY
SIZE (AWG)	STRIP LENGTH	TYPE	BASE PART NUMBER*	
8	6.73-7.49 [.265-.295]	Pin	213841	356611-1
10		Socket	213843	356611-2
12-14		Pin	213845	356612-1
		Socket	213847	

\*For contact part numbers not listed, refer to Catalog 82021, or call Product Information at the number listed at the bottom of this page.

Figure 2

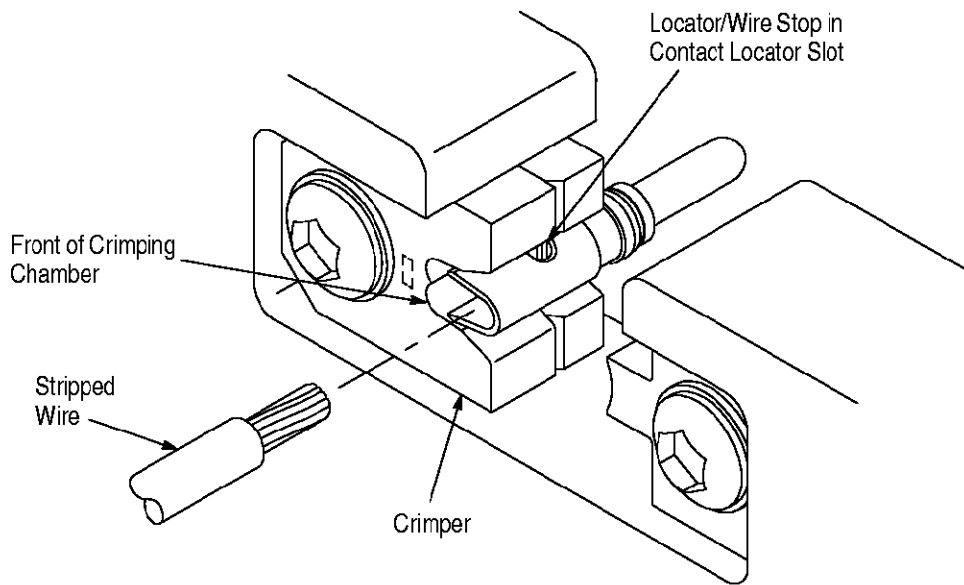


Figure 3

3. Insert a properly stripped wire into the contact wire barrel until it butts against the locator/wire stop.
4. Hold the wire in place and actuate the tooling through a complete cycle.
5. Allow the dies to open FULLY, then remove the crimped contact.

## 4. MAINTENANCE AND INSPECTION

### 4.1. Daily Maintenance

It is recommended that each operator of the die assemblies be made aware of, and responsible for, the following four steps of daily maintenance:

1. Remove all foreign particles from the dies with a clean, soft brush, or a clean, soft, lint-free cloth. Do not use objects that could damage the dies.
2. Make sure that the proper die holding screws are in place and are secured with the proper washers and retaining rings. Check die alignment and tighten die holding screws (twice daily is recommended for production use).
3. Make certain that the dies 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 them in a clean, dry area.

### 4.2. Periodic Inspection

Regular inspections should be performed by quality control personnel with a record of scheduled

inspection remaining with the dies or supplied to personnel responsible for them. Though recommendations call for at least one inspection per month, inspection frequency should be based upon amount of use, working conditions, operator training and skill, and established company standards. The inspections should be performed in the following sequence:

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 that all die holding screws, washers, retaining rings, and die components are in place.
3. Check all bearing surfaces for wear. Replace worn components (refer to Section 5, REPLACEMENT AND REPAIR).
4. Inspect the crimping chamber 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.

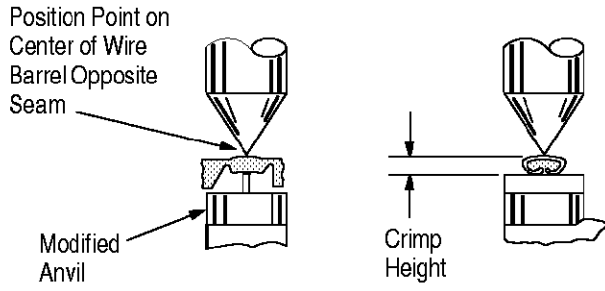
### 4.3. Crimp Height Inspection

This inspection requires the use of a micrometer with a modified anvil, as shown in Figure 4. It is recommended using 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



WIRE SIZE (AWG) (Max)	CRIMP HEIGHT DIMENSION (±0.05 [±.002])
8	2.79 [.110]
10	2.54 [.100]
14	2.11 [.083]

Figure 4

Proceed as follows:

1. Select a contact and a wire for the crimping die to be inspected.
2. Crimp the contact according to Section 3, CRIMPING PROCEDURE.
3. Using the crimp height comparator, measure the wire barrel crimp height as shown in Figure 4. If the crimp height conforms to the dimension indicated, the die assembly is considered dimensionally correct. If not, return the die assembly for

evaluation and repair (refer to Section 5, REPLACEMENT AND REPAIR).

For additional information concerning the use of the crimp height comparator, refer to 408-7424.

**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. Order replacement parts or additional die assemblies through your Tyco representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 717-986-7605 or write to:

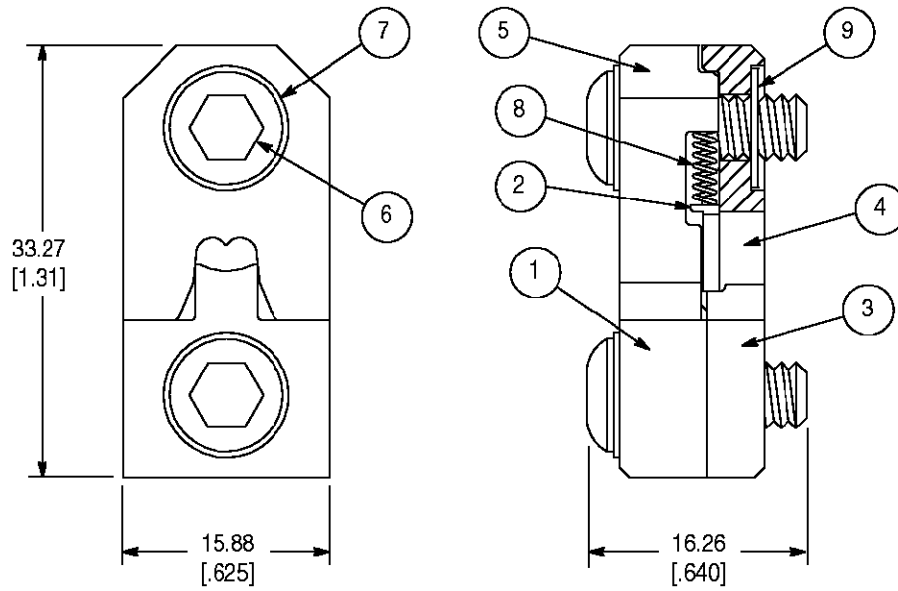
CUSTOMER SERVICE (038-035)  
 TYCO ELECTRONICS CORPORATION  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

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

**6. REVISION SUMMARY**

Per EC: 0990-0059-00

- Updated document to corporate requirements
- Changed repair service information in Section 5
- Added new Section 6, REVISION SUMMARY



Weight: 113.4 g [4 oz] (Approx)

**CUSTOMER REPLACEMENT PARTS**

ITEM	PART NUMBER FOR DIE ASSEMBLY			DESCRIPTION	QTY PER ASSEMBLY
	356611-1	356611-2	356612-1		
1	662369-1	662369-2	662367-1	ANVIL, Wire	1
2	662370-1	662370-1	662364-1	LOCATOR/WIRE STOP	1
3	662371-1	662371-1	662368-1	SUPPORT, Wire Anvil	1
4	662372-1	662372-1	662365-1	SUPPORT, Upper	1
5	662373-1	662373-2	662366-1	CRIMPER, Wire	1
6	1-306593-4			SCREW, Die Holding	2
7	24088-7			WASHER, Curved	2
8	305182			SPRING	2
9	1-21046-3			RING, Retaining	2

Figure 5