

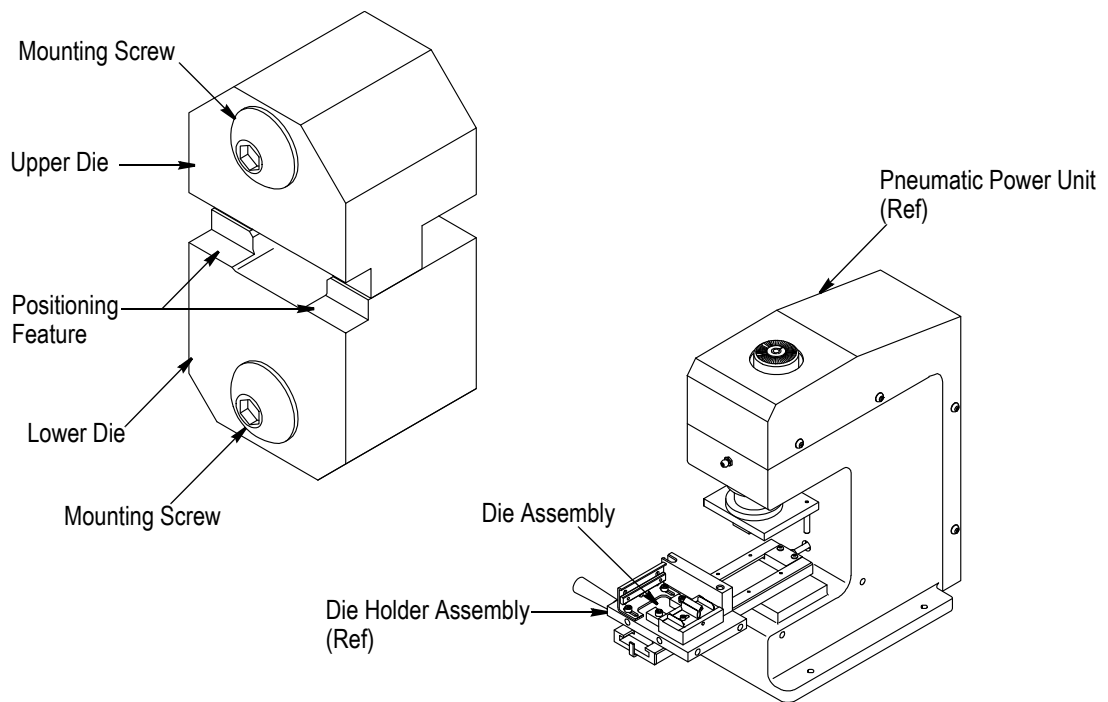
**Die Assembly 90437-1**


Figure 1

**1. INTRODUCTION**

Die Assembly 90437-1 is designed to crimp the backshell components of an AMPLIMITE\* .050 Slimline connector when used with Die Holder Assembly 58449-1 installed in 2700-lb Pneumatic Power Unit 312522-3. Refer to Figure 1.

**NOTE**


*Dimensions in this instruction sheet are in metric units [with U.S. customary units in brackets]. Figures are not drawn to scale.*

For information on installing the die assembly and using the die holder assembly, refer to Instruction Sheet 408-9721 packaged with the die holder assembly. For information on using the power unit, refer to Customer Manual 409-5843 packaged with the power unit.

For connector assembly procedure, refer to the instructions supplied with the connector or Application Specification 114-40036.

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

**2. DESCRIPTION**

The die assembly consists of an upper die and a lower die, each having a captive mounting screw. The lower die includes a positioning feature used to locate the back of the connector backshell in the crimping area.

**3. CRIMPING PROCEDURE**

Before starting, make sure that the die assembly has been installed in the die holder assembly, that the tooling is properly adjusted, and that the connector assembly has been properly prepared.

1. Grasp the handle of the lower die holder and slide it out from under the ram of the power unit.
2. Position the front of the connector assembly into the connector support bracket, then lower the back of the connector onto the lower die and push the cable into the cable clamp. Make sure that the back of the connector backshell butts against the positioning feature of the lower die. Refer to Figure 2.

**NOTE**


*Adjust the die holder assembly according to 408-9721.*

3. Slide the lower die holder under the ram. When the holder is in the correct position, the ram will automatically cycle to crimp the backshell.
4. After the ram has retracted, slide the lower die holder out from under the ram, and remove the crimped connector assembly.

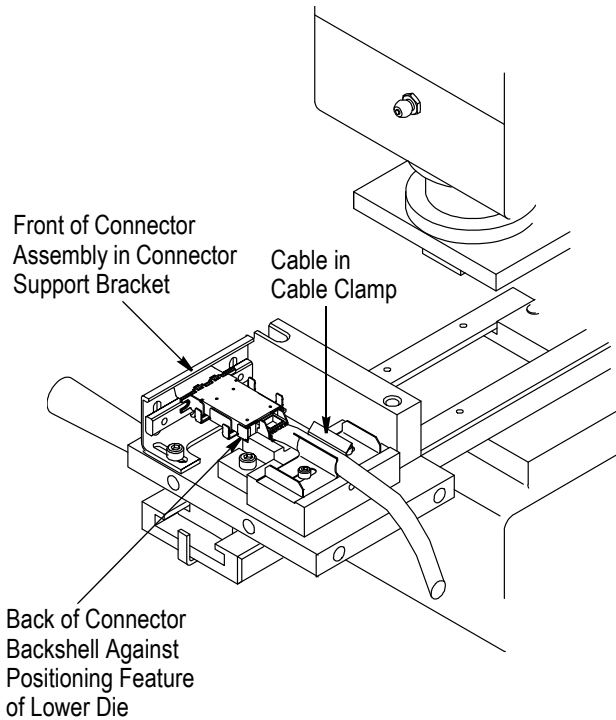
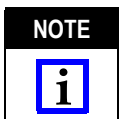


Figure 2



If the connector assembly is damaged during the crimping operation, it must be replaced with a new one.

## 4. MAINTENANCE AND INSPECTION

### 4.1. Initial Inspection

The die assembly is inspected before shipment. It is recommended that the die assembly be inspected immediately upon arrival to ensure that they have not been damaged during shipment.



Disconnect the air supply from the pneumatic power unit before performing maintenance, inspection, or repair.

### 4.2. Daily Maintenance

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

1. Remove dust, dirt, or other contaminants with a clean brush, or a soft, lint-free cloth. Do NOT use objects that could damage the dies.
2. Make certain that the dies are protected with a THIN coat of any good SAE 20 motor oil. Do NOT oil excessively.

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

## 4.3. Periodic Inspection

### A. Visual Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the dies or be supplied to 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. Inspection 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. Check all bearing surfaces for wear.
3. Inspect the crimp area for flattened, chipped, cracked, worn, or broken areas. If damage is evident, the dies must be replaced.

### B. Crimp Height Inspection

This inspection requires the use of a vernier caliper to measure the crimp height of the backshell. To check the crimp height, proceed as follows:

1. Refer to Section 3, CRIMPING PROCEDURE, and crimp the backshell.
2. Using the vernier caliper, measure the crimp height as shown in Figure 3.

If the crimp height conforms to the dimension provided in Figure 3, the dies are considered dimensionally correct.

If the crimp height does not conform, the dies should be returned to for evaluation and repair. Refer to Section 6, REPLACEMENT AND REPAIR.

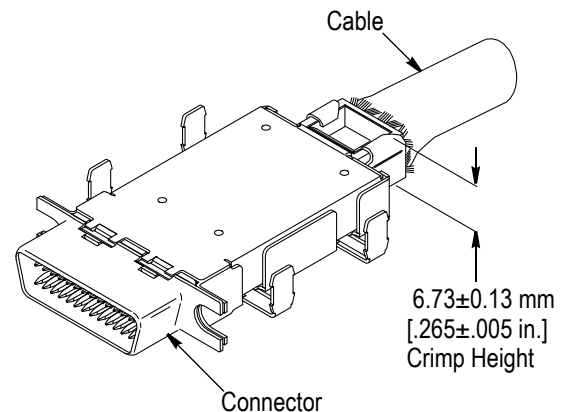


Figure 3

SAE is a trademark.

**5. REPLACEMENT AND REPAIR**

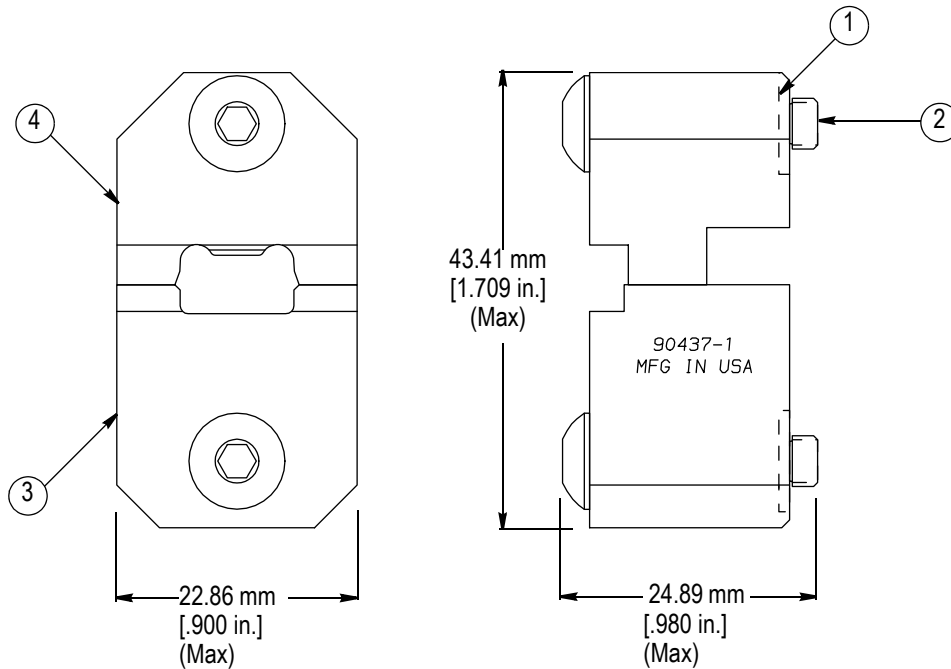
Replaceable parts are listed in Figure 4. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary. If the dies are damaged or worn excessively, they must be replaced. Order replacement dies through your Representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605, or write to:

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

**6. REVISION SUMMARY**

Revisions to this instruction sheet include:

- Updated instruction sheet to corporate requirements



ITEM	PART NUMBER	DESCRIPTION	QTY PER DIE ASSEMBLY
1	1-21046-3	RING, Retaining	2
2	306105-7	SCREW, Mounting	2
3	768457-1	DIE, Lower	1
4	768458-1	DIE, Upper	1

Figure 4