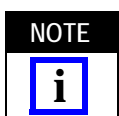


Figure 1

## 1. INTRODUCTION

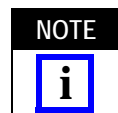
Straight Action Die Set Assembly 1490777-2, shown in Figure 1, consists of Straight Action Crimp Head Adapter 217201-1, Matched Die Set 1490772-1, and the Tool Guard 1490778-1. Straight Action Die Set Assembly 1490777-2 was designed to be used with 626 Pneumatic Tooling Assemblies to crimp the center contact of FAKRA<sup>†</sup> connectors to coaxial cable. For information concerning the setup and operation of the 626 pneumatic tools, refer to Customer Manual 409-5862. Information on FAKRA product can be found in Application Specification 114-13064.

For detailed information concerning Straight Action Crimp Head Adapter 217201-1, refer to Instruction Sheet 408-4106.



*This die set assembly was designed for use with 626 Pneumatic Tooling Assemblies. Note that Straight Action Die Set Assembly 1490777-1 is a straight action hand tool assembly (containing Hand Tool Frame 127038-1) for crimping the center contacts of FAKRA connectors.*

Refer to the appropriate catalog for a wire-to-contact selection guide. Contact your TE Connectivity representative for information concerning wire sizes and contacts not referenced in the catalog.



*Dimensions on this sheet are in metric units [with U.S. customary equivalents in brackets], unless otherwise indicated.*

## 2. DESCRIPTION

Die Set Assembly 1490777-2 consists of the crimp head adapter (217201-1), the matched die set (1490772-1), and the guard (1490778-1) used to cover the die set.

Each die set features a head with a crimper (fixed die) and an anvil (movable die). There are two crimp nests for two wire sizes.

<sup>†</sup> DIN Standardization Committee of Motor Vehicles (FAKRA) 70010

### 3. INSTALLATION OF STRAIGHT ACTION DIE SET ASSEMBLY (Figure 1)

Before installing the straight action die set assembly, refer to Customer Manual 409-5862 for instructions on installing the appropriate tool holder assembly (including cam) on the pneumatic tool. After the appropriate tool holder assembly has been installed, proceed as follows:



*To prevent personal injury, ALWAYS disconnect the main air supply and electrical supply (if applicable) of the pneumatic tool before installing or removing the straight action crimper.*



*DO NOT operate pneumatic tool without the straight action crimper and the proper die assembly installed. After straight action crimper is installed, make sure that the quick pins are FULLY tightened to avoid personal injury and damage to the tool.*

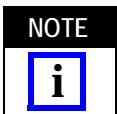
1. Remove quick pins from tool holder assembly.
2. Slide the straight action crimp head adapter and die set assembly into tool holder assembly.
3. Install the guard over the adapter and die set assembly, aligning the holes on the guard with the threaded quick pin holes on the holder.
4. After the adapter, die set, and guard are properly aligned in the tool holder assembly, insert and tighten the shoulder bolts supplied with the die set assembly.



*Do NOT overtighten the shoulder bolts.*



*It is recommended that Loctite<sup>†</sup> No. 242 removable threadlock, or equivalent, be used to prevent the guard shoulder bolts from loosening.*



*Removal is the reverse of installation.*

### 4. CRIMPING PROCEDURE

Refer to the product catalog to determine the wire size, FAKRA connector, and wire size to be used with the die set.

1. Strip the wire to the length indicated in Application Specification 114-13064 - do NOT cut or nick the wire strands.
2. Install the die set assembly as described in Section 3, INSTALLATION OF STRAIGHT ACTION DIE SET ASSEMBLY.
3. Place the appropriate center contact (pin or socket) on the center conductor of the prestripped wire.

<sup>†</sup> Trademark of Loctite Corporation

4. Insert the wire with the end contact into the crimp nest for that size wire until the center contact is in the contact support plate.

5. Slide the contact down into the support plate until it is supported and cannot fall out.



*Do NOT allow the wire center conductor to slip out of the center contact.*

6. Perform the crimping procedure as described in Customer Manual 409-5862, packaged with 626 Pneumatic Tool.

Make certain all surfaces of the dies are protected with a THIN coat of any good SAE 20 motor oil. Do NOT oil excessively.

### 5. MAINTENANCE AND INSPECTION



*To avoid personal injury, ALWAYS disconnect air supply from pneumatic tool before performing maintenance or inspection.*

It is recommended that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations.

Frequency of inspection should be adjusted to suit your requirements. Frequency of inspection depends on:

- The care, amount of use, and handling of the crimping head.
- The type and size of the product crimped.
- The degree of operator skill.
- The presence of abnormal amounts of dust and dirt.
- Your own established standards.

Each die set assembly is thoroughly inspected before packaging. Since there is a possibility of damage during shipment, new die assemblies should be inspected immediately upon arrival at your facility.

#### 5.1. Daily Maintenance

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

1. Remove dust, dirt, and other contaminants with a clean brush, or a soft, lint-free cloth. Do NOT use objects that could damage the dies.
2. Make certain 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 them and store in a clean, dry area.

## 5.2. Periodic Inspection

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the dies and/or be supplied to supervisory 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. These inspections 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, retaining rings, and die components are in place. Refer to the drawings shipped with the tool if replacement parts are required.
3. Check components for wear. Remove and 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 (see Section 6, REPLACEMENT AND REPAIR).

### B. Crimp Height Inspection (Figure 2)

This inspection requires the use of micrometer with a modified anvil as shown in Figure 2.

Crimp height inspection is performed through the use of a micrometer with a modified anvil, commonly referred to as a crimp height comparator. TE does not market crimp height comparators. Refer to Instruction Sheet 408-7424 for detailed information on obtaining and using a crimp height comparator.

Crimp Height Comparator 3-576692-6 is recommended in Great Britain; Crimp Height Comparator 675836-0 and -1 are recommended in Germany.

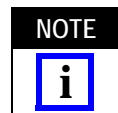
Part Number	Description	Manufacturer	Ref Number
3-576692-6	Digital Readout Imperial/Metric 0-1in./0-25.4mm	Mitutoyo Corp, Japan	342-431-30
675836-0, -1	675836-0, -1 Mech Readout Metric 0-25mm		112-401

Proceed as follows:

1. Select a contact and a wire size for the crimping chamber.

Refer to Section 4, CRIMPING PROCEDURE, and crimp the contact accordingly.

Using a crimp height comparator, measure crimp height as shown in Figure 2. If the crimp height conforms to that marked on the tool, the tool is considered dimensionally correct. If not, return the tool to TE for evaluation and repair (refer to Section 6).



Refer to Application Specification 114-13064 for crimp conformity information.

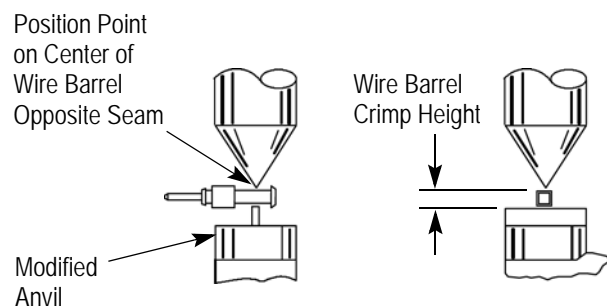


Figure 2

## 6. REPLACEMENT AND REPAIR

Parts should be replaced by TE to ensure quality and reliability of the tool. Order replacement parts through your TE 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

Tools may also be returned for evaluation. For tool evaluation/repair service, contact a TE representative at: 1-800-526-5136, or reference the appropriate website below:

- [toolrepair@tycoelectronics.com](mailto:toolrepair@tycoelectronics.com)
- [asia.tool@tycoelectronics.com](mailto:asia.tool@tycoelectronics.com)
- [jp\\_tool@tycoelectronics.com](mailto:jp_tool@tycoelectronics.com)
- [uktoolingservicecentre@tycoelectronics.com](mailto:uktoolingservicecentre@tycoelectronics.com)

## 7. REVISION SUMMARY

Since the previous version of this document, the following changes were made:

- Updated crimp height comparator sourcing information in Paragraph 5.2.B.
- Updated document to incorporate requirements.