

**PROPER USE GUIDELINES**

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. Hand tools are intended for occasional use and low volume applications. A wide selection of powered application equipment for extended-use, production operations is available.

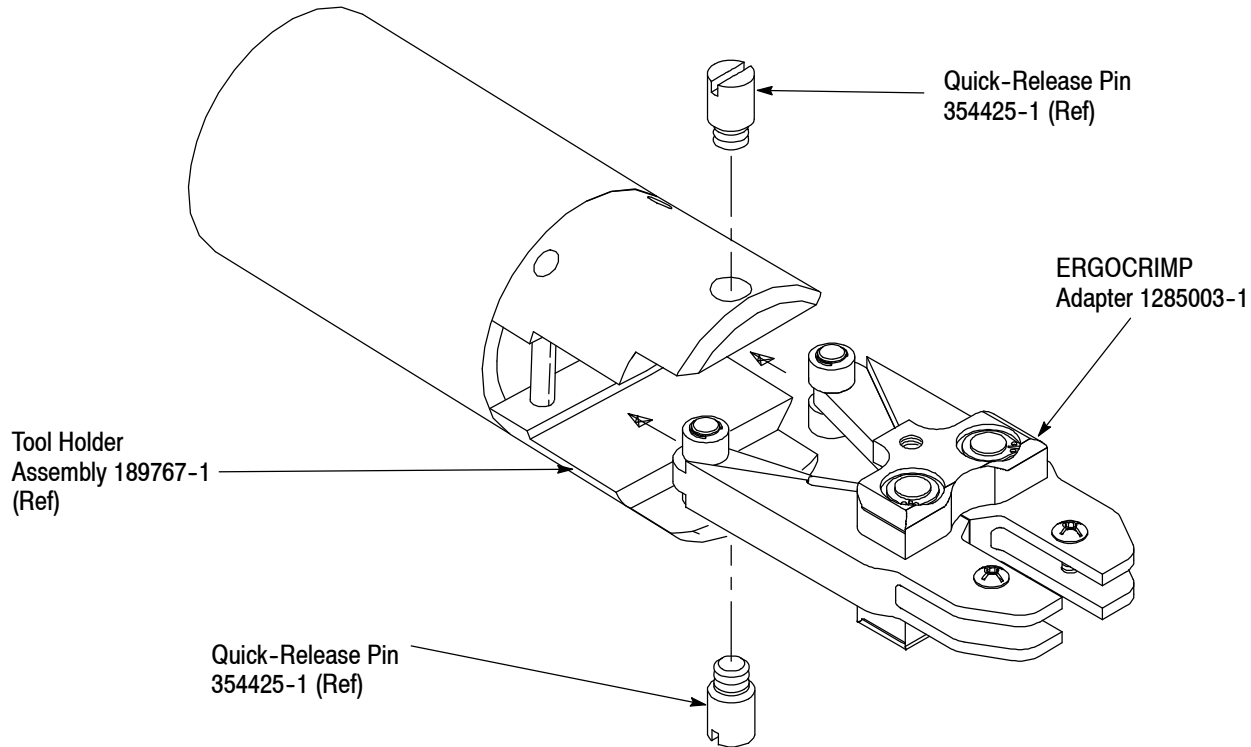


Figure 1

**1. INTRODUCTION**

This instruction sheet provides the basic die and adapter installation procedures, as well as maintenance, inspection and repair information for ERGOCRIMP Adapter 1285003-1 (Figure 1).

Pneumatic Adapter 1285003-1 is designed to accept interchangeable ERGOCRIMP Die Assemblies for various types of connectors. The adapter is used in 626 Pneumatic Tooling Assemblies 189721-1 and 189722-1. For more information concerning the setup and operation of the pneumatic tools, refer to Customer Manual 409-5862.

For crimp head information concerning wire preparation, crimping procedures, maintenance, inspection and repair, refer to the associated instruction sheet supplied with the hand tool or crimp head.

Read these instructions thoroughly before proceeding. Information for revision may be found in Section 8, REVISION SUMMARY.

**NOTE**



*Dimensions are in metric units [with U.S. customary units in brackets], unless otherwise specified.*

**2. DESCRIPTION** (Figure 1)

The adapter accepts ERGOCRIMP die sets and provides the necessary motion for crimping when the tool is actuated. When the cam retracts, the force is removed from the jaws and they return to the “starting” position.

ERGOCRIMP Adapter 1285003-1 is secured in the tool holder assembly by two quick-release pins.

Dies may also be opened and closed manually by squeezing the rollers. This action also permits opening and closing of the dies for insertion and removal of the terminals.

**NOTE**



*Remove any protective coating, by immersing the adapter in a suitable commercial degreaser that will not affect paint or plastic. Before use, follow the lubrication instructions in the Section 6 (MAINTENANCE AND INSPECTION) of this instruction sheet.*

### 3. ADAPTER INSTALLATION AND REMOVAL

#### 3.1. Adapter Installation (Figure 1)

**DANGER**  
 To avoid personal injury, ALWAYS disconnect the main air supply of the pneumatic tool before installing or removing the pneumatic adapter.

1. Insert the adapter into the tool holder assembly of the pneumatic tooling assembly.
2. After the adapter is properly aligned, insert and tighten the quick-release pins provided with the pneumatic tooling assembly.

**DANGER**  
 DO NOT operate the pneumatic tool with the improper adapter and crimp head installed. Make sure sure sure that the quick-release pins are FULLY tightened to avoid personal injury and damage to the tool.

**NOTE**  
 It is recommended that medium-strength liquid removable threadlocker or equivalent, be used to prevent the quick-release pins from loosening.

3. Connect the pneumatic tool to an adequate air supply -- between 620–690 kPa [90–100 psi]. For specific information on air line requirements and air hose installation, refer to the instructions packaged with the pneumatic tooling assembly.

The pneumatic tooling assembly is now ready to be used.

#### 3.2. Adapter Removal (Figure 1)

**DANGER**  
 To avoid personal injury, ALWAYS disconnect the main air supply of the pneumatic tool before installing or removing the pneumatic adapter.

1. Remove the quick-release pins.
2. Remove the adapter from the tool holder the pneumatic tooling assembly.

### 4. DIE INSTALLATION AND REMOVAL (Figure 2)

Remove the adapter from the tool holder assembly, as described in Section 3. Remove the two pan-head screws (Figure 2) from the jaws of the adapter.

#### 4.1. Die Installation and Removal From an Existing Hand Tool

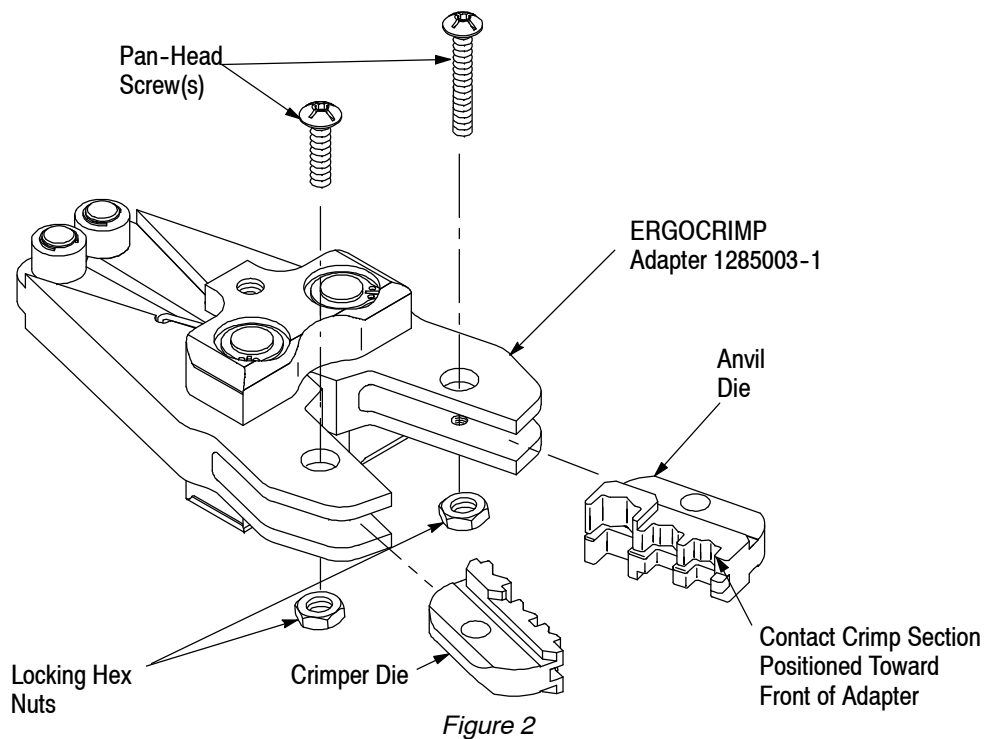
Remove the dies as described in the instructions supplied with the hand tool. Insert the dies in the adapter and insert the two pan-head screws (Figure 2).

#### 4.2. Die Installation and Removal of All Dies

Fit the dies and locator (if applicable) into the adapter as described in the instruction sheet packaged with the tool or dies.

### 5. CRIMPING PROCEDURES

The crimping procedures that follow are basic. Refer to the instruction sheet packaged with the die assembly for specific details.





*To avoid personal injury, always keep fingers clear of the adapter jaws when operating the pneumatic tooling assembly.*

1. Strip the wire using the recommended strip-length dimensions on the applicable die assembly instructions.
2. Open the crimping jaws by squeezing the rollers together; position the connector into the appropriate crimping chamber.
3. After the connector is properly position in the dies, release the rollers to allow the jaws to spring shut, securing the connector within the dies.
4. Insert the stripped wire into the connector.
5. Activate the pneumatic tooling assembly to complete the crimp.
6. Open the dies by squeezing the rollers together.
7. Remove the crimped connector.

## 6. MAINTENANCE AND INSPECTION

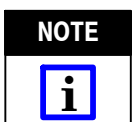


*Always disconnect pneumatic tooling assembly from air supply before performing any maintenance or inspection.*

TE Connectivity recommends that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations. The assembly should be inspected once a month. Frequency of inspection should be adjusted to suit your requirements through experience. Frequency of inspection depends on:

1. The care, amount of use, and handling of the head.
2. The type and size of the product crimped.
3. The degree of operator skill.
4. The presence of abnormal amounts of dust and dirt.
5. Your own established standards.

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



*For die closure inspections and plug gage dimensions, refer to the instruction sheet supplied with the appropriate die assembly.*

Molykote is a trademark.

## 6.1. Cleaning

Remove dust, moisture, and other contaminants with a clean, soft brush, or a soft, lint-free cloth. Do NOT use objects or cleaning materials that could damage the adapter assembly. Relubricate the head assembly, as instructed in Paragraph 6.3, Lubrication, before placing it back into service.

## 6.2. Visual Inspection

1. Inspect the head assembly for missing pins and retaining rings. If parts are missing or defective, replace them.
2. Check all bearing surfaces for wear. Make sure the rollers turn freely with minimal resistance. Replace any worn parts.
3. Inspect the crimp areas in the die assembly for flattened, chipped, or broken areas. Although the dies may gage within permissible limits, worn or damaged die closure surfaces may affect the quality of the crimp.

## 6.3. Lubrication

Lubricate all pins, pivot points, and bearing surfaces with a high quality grease. TE recommends the use of Molykote paste, which is a commercially available lubricant. Lubricate according to the following schedule:

- Die-set adapter assembly used in daily production
  - lubricate daily
- Die-set adapter assembly used daily (occasional)
  - lubricate weekly
- Die-set adapter assembly used weekly
  - lubricate monthly

Wipe excess grease from the die-set adapter assembly, particularly in the die closure areas. Grease transferred from the die closure area onto certain terminations may affect the electrical characteristics of a termination.

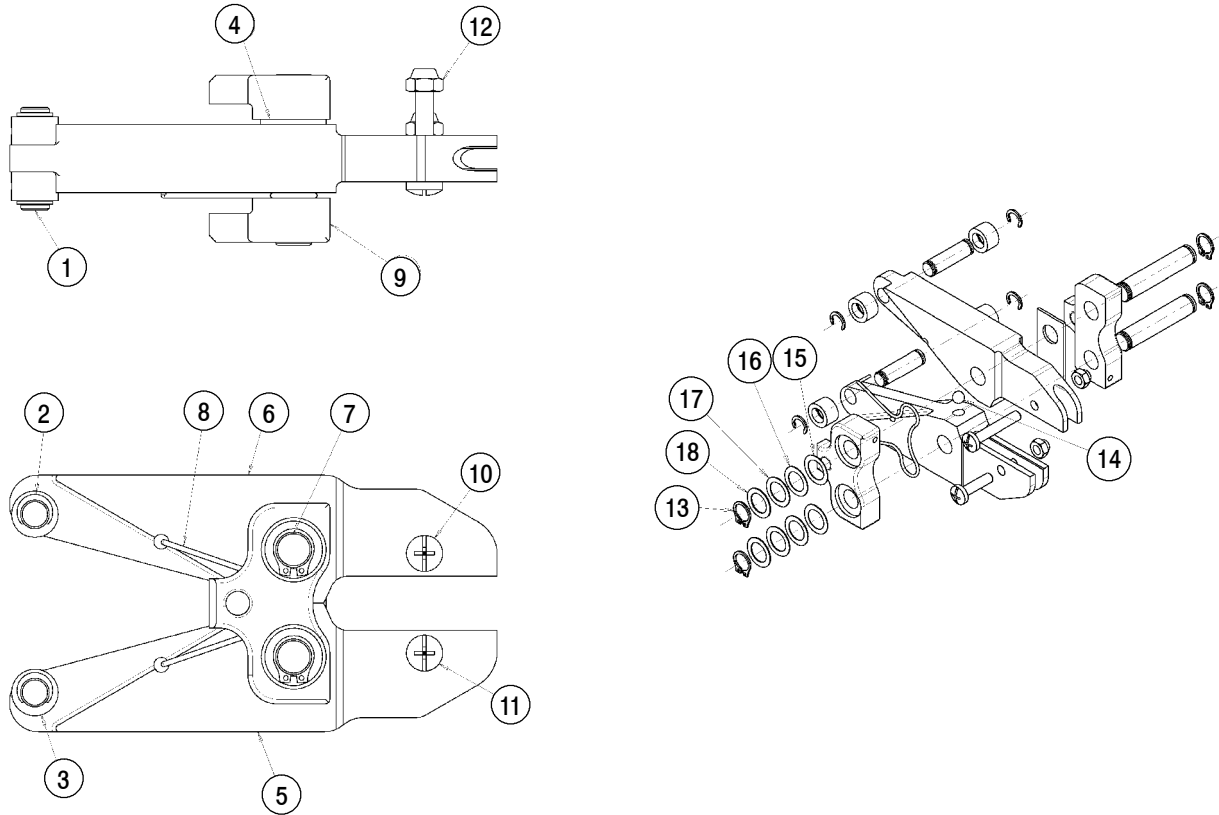
## 7. REPLACEMENT AND REPAIR

The recommended customer spare parts and replacements are listed in Figure 3. Parts other than the recommended customer spares should be replaced by TE to ensure quality and reliability of the die-set adapter assembly. Order recommended customer spares 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 (38-35)  
 TYCO ELECTRONICS CORPORATION  
 P.O. BOX 3608  
 HARRISBURG, PA 17105-3608

**8. REVISION SUMMARY**

- Corrected part number in Figure 1



ITEM NUMBER	TE PART NUMBER	DESCRIPTION	QTY
1	3-23620-3	Retaining Pin, Grooved, 1/4 X .894 In. <i>(Recommended Customer Spare)</i>	2
2	21045-6	Retaining Ring, External, 1/4 In. Crescent <i>(Recommended Customer Spare)</i>	4
3	314479-2	Roller <i>(Recommended Customer Spare)</i>	4
4	314655-3	Shim	1
5	525377-6	Anvil Arm	1
6	525377-7	Crimper Arm	1
7	6-23629-0	Retaining Pin, Grooved, 5/16 X 1.488 In.	2
8	679942-1	Spring <i>(Recommended Customer Spare)</i>	1
9	768521-3	Finished Link	2
10	986964-3	Pan-Head Machine Screw, M4 X 25.0	1
11	986964-5	Pan-Head Machine Screw, M4 X 16.0	1
12	986965-1	Locking Hex Nut, Torque (M4)	2
13	1-21048-0	Retaining Ring, External,, 5/16 In., Basic	4
14	23241-2	Steel Ball	1
15	301185-6	Shim Spacer, .0080 In. Thick	†
16	301185-7	Shim Spacer, .0100 In. Thick	†
17	301185-8	Shim Spacer, .0120 In. Thick	†
18	301185-9	Shim Spacer, .0150 In. Thick	†

† = As Required

Figure 3