

Figure 1

## 1. INTRODUCTION (Figure 1)

Closed-Head Assembly 2031460-1 is designed to accept any Tyco Electronics SDE (Standard Die Envelope) crimp die set.

The Electro-Hydraulic Hand Tool and crimping dies must be ordered separately.

For specific die set information (including installation, wire preparation, crimping procedures, maintenance and inspection procedures, as well as repair and replacement procedures) refer to the instruction sheet supplied with the dies. For information concerning the Electro-Hydraulic Hand Tool, refer to Customer Manual 409-10095.

**NOTE**



All dimensions on this instruction sheet are in metric units [with inches in brackets]. Figures and illustrations are for identification only, and are not drawn to scale.

## 2. RECEIVING/INSPECTION

The Electro-Hydraulic Hand Tool Kit 2031400-[ ] and Closed-Head Assembly 2031460-1 are thoroughly inspected during and after assembly. Prior to packaging and shipping, a final series of tests and inspections is made to ensure proper function of the tooling. The following inspection should be performed as a safeguard against potential problems generated in transit.

1. In a well-lighted area, carefully unpack the tool and inspect each component as it is removed from the packaging.
2. Thoroughly inspect each component for evidence of damage that may have occurred in transit. If any of the components are damaged, file a claim against the carrier and notify Tyco Electronics immediately.

**NOTE**



Keep this instruction sheet, the manual for the Electro-Hydraulic Hand Tool, and all drawings with the tool for the benefit of operation and maintenance personnel.

The Electro-Hydraulic tool and Closed-Head Assembly should be inspected at regularly scheduled intervals, depending on care, degree of operator skill, the type and size of product being crimped, and environmental conditions.

**3. INSTALLATION/REMOVAL**

**CAUTION** Do not operate the Electro-Hydraulic Hand Tool without the head and dies installed. Repeated operation in this manner may result in damage to the Electro-Hydraulic Hand Tool.

**DANGER** To avoid personal injury, be sure to exercise extreme caution when handling the Electro-Hydraulic Hand Tool. Remove the power source (and release the hydraulic pressure, if applicable -- see Customer Manual 409-10095) before installing or removing the the SDE dies.

**CAUTION** Be sure to use ONLY Tyco Electronics SDE crimping dies.

**3.1. Installation/Removal of the Closed-Head Assembly**

**DANGER** To avoid personal injury, be sure to exercise extreme caution when handling the Electro-Hydraulic Hand Tool. Remove the power source (and release hydraulic pressure, if applicable -- see Customer Manual 409-10095) before installing or removing the Closed-Head Assembly.

**A. Installation of Pin- Type Dies**

**CAUTION** Only use die mounting pins that were made to Revision C or later. Pins made to Revision C or later will have a drill point on the smaller diameter end of the pin. Die mounting pins should be replaced every 10,000 crimping cycles. See Figure 4 for pin part numbers.

Refer to the Electro-Hydraulic Hand Tool Customer Manual (409-10095) for instructions on installing and removing the crimping head assembly.

**3.2. Installation/Removal of the SDE Dies (Figure 2)**

**CAUTION** These instructions are meant to be used as an example only. For specific instructions, refer to the instructions packaged with the dies.

1. Remove the two die retaining screws from the crimp head.
2. Place the upper die in the upper jaw of the tool head and the lower die in the lower jaw so that the largest indenter or terminal cavity is facing **away** from the quick-release jaw pin of the closed head (see Figure 2).
3. Secure the dies with the pins (not shown).

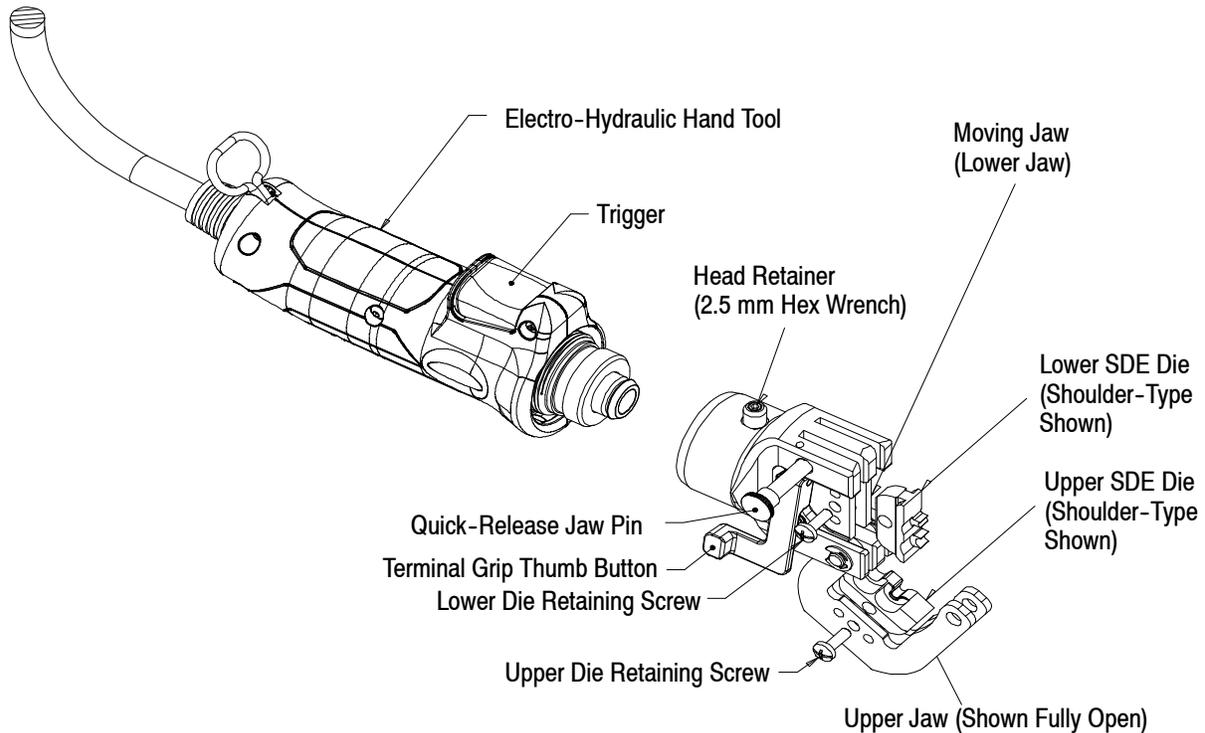


Figure 2

4. Insert and tighten the die retaining screws.
5. If the jaws are open, fully close the jaws and latch the quick-release pin.

**NOTE**

*Dies are aligned when pinned.*

**B. Installation of Shoulder-Type Dies**

1. Remove the two die retaining screws from the crimp head.
2. Place the upper die in the upper jaw of the tool head so that the largest indenter or terminal cavity is facing **away** from the quick-release jaw pin of the closed-head assembly (see Figure 2).
3. Insert the die retaining screw through the upper jaw and through the die. Tighten the screw *just enough* to hold the die in place. Do **NOT** tighten the screw completely at this time. See Figure 2
4. Place the lower die in the moving jaw of the crimp head so that the largest anvil is facing **away** from the quick-release jaw pin of the closed-head assembly
5. Insert the die retaining screw through the lower jaw and through the die. Tighten the screw *just enough* to hold the die in place. Do **NOT** tighten the screw completely at this time.
6. If the upper jaw is open, fully close the jaw and latch the quick-release pin.
7. Release the lower jaw by pressing the terminal grip thumb-button to close the crimp jaws and fully seat the dies together. See Figure 2.
8. When the anvils and indenters are aligned, tighten the retaining screws. The dies should be secure and not able to float side-to-side.

**C. Removal of Crimp Dies**

1. Remove the die retaining screws and the quick-release jaw pins.
2. Remove the dies.

**4. OPERATION**

The following procedure provides only general information concerning crimping. Refer to the instructions packaged with the dies for detailed information, including wire stripping dimensions and instructions for positioning terminals and splices in the dies.

**DANGER**

*To avoid personal injury, keep fingers clear of the crimping area.*

To produce a crimp with SDE dies in a Closed-Head Assembly using the Electro-Hydraulic Hand Tool:

1. Insert the contact into the appropriate die cavity.
2. Press the terminal grip thumb button (Figure 2) to advance the lower tooling and hold the contact in place. Do not deform the terminal insulation or wire barrel.
3. Place a pre-stripped wire in the barrel of the contact.
4. Squeeze the trigger until the jaws release - indicating the crimp is complete.

**NOTE**

*It is not necessary to continue to hold the tool trigger in order to retract the tooling. The tooling will retract automatically.*

5. Remove the terminated wire. (If necessary pull the quick-release pin and open the jaw.)
6. Be sure to close the upper jaw and snap the quick-release jaw pin in place prior to initiating the next crimp.

**NOTE**

*To abort a crimp, press the pressure release device on the power tool. Information on the pressure release device is contained in Customer Manual 409-10095, Section 6, PRESSURE RELEASE/RESET TOOL.*

**5. PREVENTIVE MAINTENANCE****DANGER**

*To avoid personal injury, ALWAYS remove the power source (and relieve hydraulic pressure if applicable -- see Customer Manual 409-10095) from the tool BEFORE performing any maintenance on repair to the tool.*

**5.1. Daily Maintenance**

Perform the following maintenance on a daily basis:

- Inspect the dies for wear or damage such as cracks, gouges or chips. If damage is found, replace the die set.
- Clean the tooling, removing accumulations of dirt and grease - particularly in areas where contacts are crimped. Wipe clean with a lint-free cloth.
- Be sure the die mounting screws are tight.

**5.2. Yearly Maintenance**

Once a year or every 10,000 cycles (whichever comes first) return the Closed-Head Assembly Crimp Head to Tyco Electronics for inspection.

**6. RETURN/REPAIR**



To avoid personal injury, ALWAYS remove the power source (and release the hydraulic pressure if applicable -- see Customer Manual 409-10095) from the tool BEFORE performing any maintenance on the tool.

Order replacement parts through your Tyco Electronics 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  
 PO BOX 3608  
 HARRISBURG PA 17105-3608

For repair services, call the Tooling Assistance Center at 1.800.722.1111.

For spare parts, refer to Figure 3:

Spare Parts		
TE Part Number	Description	Qty.
986964-1	Die Screw	2
2031486-1	Head Retainer	1
2063861-1	Friction Ring	1
986963-1	E-Ring	1

Figure 3

Die Retaining Pins

TE Part Number	Pin Length
679231-1	13 [.512]
679231-2	18.97 [.747]
679231-3	15.16 [.597]
679231-4	13.64 [.537]

Figure 4

**7. RoHS INFORMATION**

Information on the presence and location of any substances subject to RoHS (Restriction on Hazardous Substances) can be found at the following website:

<http://www.tycoelectronics.com/customer-support/rohs-supportcenter/>

Click on “Find Compliance Status” and enter equipment part number.

**8. REVISION SUMMARY**

- Added “ORIGINAL INSTRUCTIONS” to document