

Figure 1

## 1. INTRODUCTION

This instruction sheet provides operation and maintenance instructions for Hydraulic Crimping Head 69082. See Figure 1.

The crimping head accepts interchangeable die sets for a variety of terminals and splices for large wire sizes -4/0 through 1000 MCM range. Refer to the instructions packaged with the specific die sets for compatible products, wire ranges, strip dimensions, and application procedures.

The crimping head is designed and recommended for use with the Hand Hydraulic Pump 314979-1; Electric Hydraulic Pump 69120-1 (110 Vac) or 69120-2 (220 Vac).

Read these instructions and all applicable references before inserting any die set assemblies and crimping any terminals or splices.

### NOTE



Dimensions on this sheet are in metric units [with U.S. customary units in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

Reasons for reissue of this instruction sheet are provided in Section 7, REVISION SUMMARY.

## 2. DESCRIPTION (Figure 1)

Main components of Hydraulic Crimping Head 69082 include a "C"-head, which houses the stationary die, a cylinder which contains the head's hydraulic chamber, a piston (ram) which holds and controls the moving die, and a quick-disconnect coupling (cylinder half) which mates with the coupling on the hose to release or supply pressure. A dust cap covers the quick-disconnect coupling.

## 3. INSTALLATION

### 3.1. Head Installation

#### CAUTION



Prior to installing the head, ensure that the pump and hose being used are working properly, and are adjusted to and rated at 56.54 mPa [8,200 psij]. An incorrectly adjusted or rated pump/hose could result in severe tooling damage, as well as personal injury.

1. Release the hydraulic pressure to the hose. Disconnect electric power unit from power supply.
2. Remove protective dust caps.
3. Thoroughly clean the coupling on the pump/hose and the coupling on the crimping head.
4. Mate both quick-disconnect couplings and tighten the collar of the coupler assembly on the hose.

#### CAUTION



Oil flow must be unobstructed between the power unit and the crimping head. Ensure that all couplings are fully mated and tightened.

#### DANGER



If a crimping head must be removed after the power unit was in operation, be sure to release the pressure in the hydraulic system. When using Hydraulic Power Unit 69120-[ ], DISCONNECT THE POWER UNIT FROM THE POWER SUPPLY. When using Hydraulic Hand Pump 314979-1, depress the pressure release handle to release pressure.

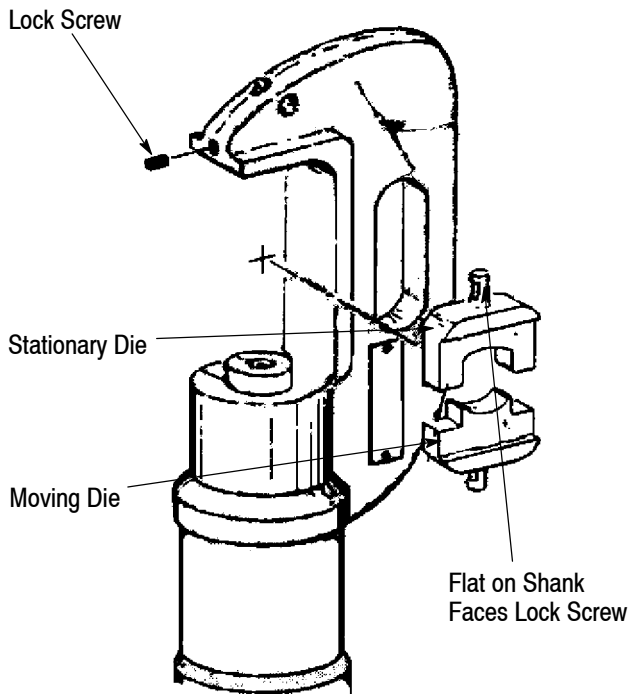




Figure 2

### 3.2. Die Installation/Removal


#### A. Die Installation


**DANGER**  To avoid personal injury, do NOT accidentally depress the handle control when installing or removing dies.

**CAUTION**  Operating the head WITHOUT the crimping dies installed will damage the "C"-Head or ram.

1. Back off the set-screws in the head and ram (ram must be advanced to gain access to the set-screw). Refer to Figure 2.
2. Insert dies in the head and ram, ensuring that the "flats" on the die shanks are facing the set-screws (see Figure 2).
3. Tighten the set-screws.
4. Slowly close the dies to ensure proper alignment.
5. Complete the cycle and return the ram to the "down" position.

#### B. Die Removal

**DANGER**  To avoid personal injury, do NOT accidentally depress the handle control when installing or removing dies.

**CAUTION**  Operating the head WITHOUT the crimping dies installed will damage the "C"-Head or ram.


1. Back off the lock screw in the C-Head and remove the stationary die.
2. Raise the ram slightly to gain access to the set-screw in the piston (ram).
3. Back off the lock screw in the piston (ram) and remove the moving die.

### 4. CRIMPING PROCEDURE

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

1. Insert terminal or splice in the stationary die according to the instructions packaged with the dies.
2. Activate the power unit to advance the dies and hold the terminal or splice in place.
3. Insert stripped wire into the terminal or splice.
4. Activate the power unit to complete the crimp.

### 5. INSPECTION/MAINTENANCE

**DANGER**  Make sure hydraulic pressure is released and power supply is disconnected before following inspection and maintenance procedures, unless otherwise specified in the procedure.

Each crimping head is assembled and inspected before shipment. It is recommended that the crimping head be inspected immediately upon its arrival at your facility, and at regularly scheduled intervals, to ensure that the crimping head has not been damaged during handling. Frequency of inspection depends upon the following:

- Care, amount of use, and handling of the head;
- Type and size of products crimped;
- Degree of operator skill; and
- Environmental conditions.

Once a year, or every 7,500 cycles (whichever comes first), the hydraulic head should be returned to Tyco Electronics for magnetic particle inspection.

Additionally, inspect and service the head every month or 1,000 cycles, whichever comes first.

Inspect the metal surfaces for nicks, cracks, scratches, and excessive wear, especially where sliding contact occurs. Refer to Figure 3. Inspect for cracks especially at the corners of the “C”-head and around the top of the cylinder.

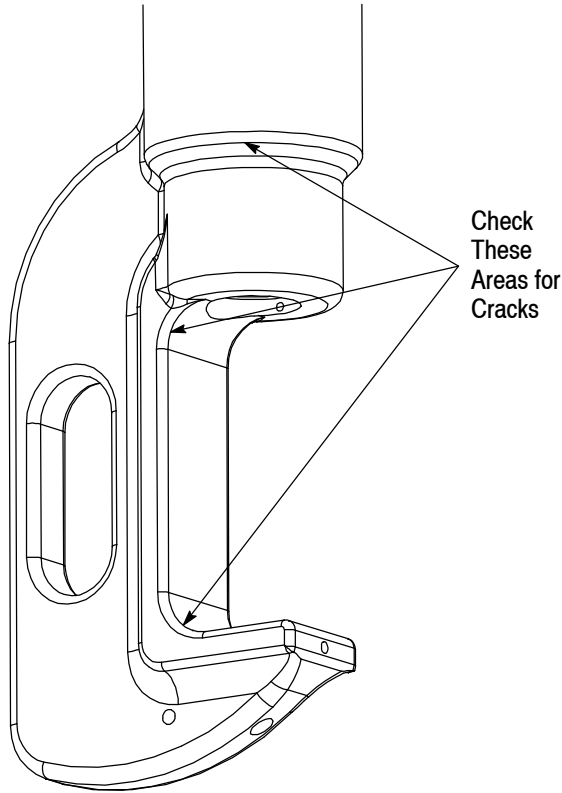


Figure 3

**5.1. Cleaning**

Remove accumulations of dirt and grease on the crimping head, especially in areas where dies are installed and terminals are crimped. Clean the entire head frequently with a clean, lint-free cloth.

**5.2. Crimping Head Check-Out Procedure**

If the ram fails to retract after completion of a crimping cycle, the cause may be in the crimping head. To determine whether or not the trouble is in the crimping head, release pressure in the power unit. If the ram retracts, the trouble is not in the crimping head. If ram does NOT retract, refer to Section 6, RETURN/REPAIR.

Replacement parts are listed in Figure 4.

**6. RETURN/REPAIR**

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

Crimping heads may also be returned for evaluation and repair. For tool repair service, contact a Tyco Electronics Representative at 1-800-526-5136.

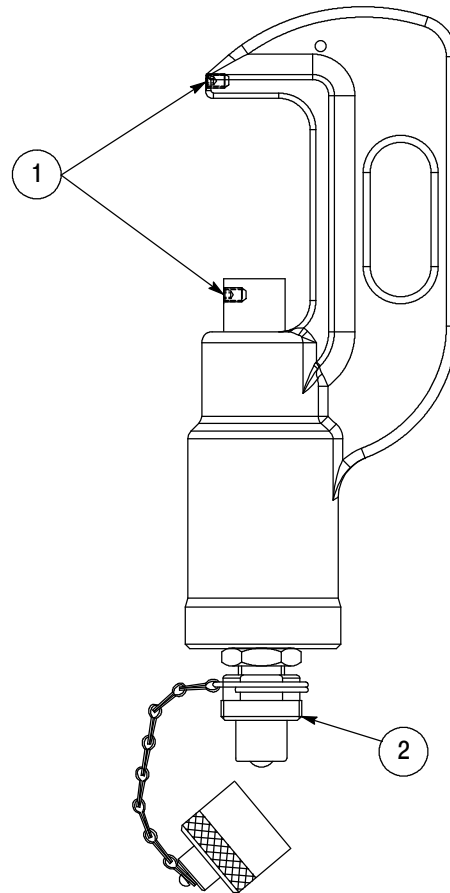


Figure 4

ITEM NO.	PART NO.	DESCRIPTION	QTY
1	21013-4	SCREW, Socket, Self-Locking	2
2	311471-1	QUICK-COUPLER, Female	1

**7. REVISION SUMMARY**

- Added “ORIGINAL INSTRUCTIONS” statement
- Updated to current corporate requirements.