

Hydraulic Crimping Head 1752868-1 Instruction Sheet 408-8959 22 MAR 10 Rev B



Figure 1

1. INTRODUCTION

Hydraulic Crimping Head 1752868–1 shown in Figure 1 accepts interchangeable die sets for a variety of terminals and splices that accept wire sizes 12 through 350 MCM. Refer to the instructions packaged with the specific die set for compatible products, wire ranges, strip dimensions, and application procedures.

The crimping head is designed and recommended for use with the Foot Hydraulic Pump 1583659–1, Hand Hydraulic Pump 1583661–1, or Electric Hydraulic Pump 1804700–1 (115 Vac) or 1804700–2 (220 Vac).

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

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

2. DESCRIPTION (Figure 1)

The main components of the crimping head include a "C"-head which houses the stationary die, a cylinder which contains the crimping head hydraulic chamber,

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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 AND REMOVAL

3.1. Crimping Head



Prior to installing the crimping head, ensure that the pump and hose being used are working properly, and are adjusted to and rated at 10,000 psi. 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 the electric power unit from the power supply.

2. Remove the protective dust caps.

3. Thoroughly clean the coupling on the pump/hose and the coupling on the crimping head.

4. Mate both the quick-disconnect couplings and tighten the collar of the coupler assembly on the hose.



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



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 1804700-[], DISCONNECT THE POWER UNIT FROM THE POWER SUPPLY. When using Hydraulic Foot Pump 1583659-1 or Hydraulic Hand Tool 1583661-1, depress the pressure release pedal to release pressure.

3.2. Die Set

A. Installation



To avoid personal injury, DO NOT accidentally depress the footswitch or handle control when installing or removing dies.



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

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1. Back off the self-locking screw in the "C"-head and set screw in the ram (ram must be advanced to gain access to the set screw). Refer to Figure 2.

2. Insert the dies in the "C"-head and ram, ensuring that the flat on each die shank faces the screw. See Figure 2.



Figure 2

3. Tighten the 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



To avoid personal injury, DO NOT accidentally depress the footswitch or handle control when installing or removing dies.



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

1. Back off the self-locking screw in the "C"-head, and remove the stationary die.

2. Raise the ram slightly to gain access to the set screw in the ram.

3. Back off the set screw in the 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 die set and power unit for detailed information.

1. Insert the terminal or splice in the stationary die according to the instructions packaged with the die set.

2. Activate the power unit to advance the dies and hold the terminal or splice in place.

3. Insert the stripped wire into the terminal or splice.

4. Activate the power unit to complete the crimp.

5. MAINTENANCE AND INSPECTION



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

5.1. Inspection

The crimping head is assembled and inspected before shipment. It is recommended that the crimping head be inspected immediately upon 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
- environmental conditions

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

Additionally, inspect and service the crimping 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. Inspect for cracks especially at the corners of the "C"-head and around the top of the cylinder. Refer to Figure 3.





5.2. Cleaning

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

5.3. 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 the ram does NOT retract, refer to Section 6, REPLACEMENT AND REPAIR.

6. REPLACEMENT AND REPAIR

Replacement parts are listed in Figure 4. Order replacement parts through your Representative, or call 1-800-526-5142, or send a facsimile of your purchase order to 1-717-986-7605.

The crimping head may also be returned for evaluation and repair. For customer repair service, call 1-800-526-5136.

7. REVISION SUMMARY

Revisions to this instruction sheet include:

- Added "Original Instructions" to page 1
- Changed ram "lock screw" to ram "set screw" in Figure 2



ITEM	PART NUMBER	DESCRIPTION	QTY PER CRIMPING HEAD
1	21013-4	SCREW, Socket, Self-Locking	1
2	21013-2	SET-SCREW, Socket, $^{1}/_{4}$ -20-UNC \times .25 in. Long	1
3	311470-1	QUICK-COUPLER, Male	1

Figure 4