



Figure 1

1. INTRODUCTION

This instruction sheet provides application and maintenance and Inspection Procedures for DYNA-CRIMP Crimping Head 69067. The tool is used to crimp SOLISTRAND* Terminals, Flag Terminals, and Splices onto 8-4/0 AWG wire. See Instruction Sheet 408-9785.

The crimping head is designed for DYNA-CRIMP tools:

- Hydraulic Power Unit 69120-[] (409-1950)
- Hydraulic Hand Pump 314979–1 (409–5860)

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



All dimensions on this document are in metric units [with inches in brackets]. Figures and illustrations are for reference only and are not drawn to scale.

Reasons for reissue are provided in Section 8, **REVISION SUMMARY.**

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TOOLING ASSISTANCE CENTER 1-800-722-1111

PRODUCT INFORMATION 1-800-522-6752

2. DESCRIPTION (Figures 1 and 4)

The main components of the crimping head include: a yoke, which houses the stationary die and retains the terminal assembly for crimping; a removable latch pin, which allows pivoting of the yoke on the pivot pin (typically required for splice terminations); a cylinder which contains the head's hydraulic chamber; a piston (ram) which holds and controls the moving die; and a quick-connect/disconnect coupler (cylinder half), which mates with the coupler on the hose or handle control to release or supply pressure.



To avoid personal injury when using DYNA-CRIMP equipment, observe the following precautions:

•Do NOT modify the crimping equipment in any way.

•Use only dies, terminals, and wire specified for the head.

3. CRIMPING HEAD INSTALLATION

Each crimping head is shipped with a coating of lubricating oil to prevent rust and corrosion. Wipe the oil off before installing the crimping head on the power unit. Note that the crimping head is shipped without oil inside the cylinder. To install crimping head, proceed as follows:



MAKE SURE that hydraulic pressure to hose or handle control is released and that power supply is disconnected from electric unit, if applicable.

1. Remove protective dust caps from both auick-connect/disconnect couplers.

2. Hold hose or handle control in vertical position to prevent oil spillage. Attach hose or handle control to coupling section on head. THREAD PROPERLY AND TIGHTEN SECURELY.



Oil flow must be unobstructed between power unit and crimping head. Make sure that all couplers are fully mated and tightened.



If crimping head must be removed after being in production, pressure must be released in the hydraulic system before head is moved. •If using Hydraulic Power Unit 69120-[], DISCONNECT POWER UNIT FROM POWER SUPPLY.

●If using Hydraulic Hand Pump 314979-1, depress pressure release lever.

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1 of 4

LOC B



Figure 2

4. DIE INSERTION AND REMOVAL



To avoid personal injury, exercise caution when using power unit to avoid accidently depressing the foot pedal or the handle control when installing or changing dies.

4.1. Die Insertion

1. Remove latch pin and open yoke on crimping head.

2. Insert stationary die (upper) into yoke by pushing die until the "ball seat" snaps into position. See Figure 2.

3. Advance ram slightly before inserting the indenter (moving die, lower), making sure that moving die is properly oriented to mate with stationary die. See Figure 2.

4. Close yoke and secure with latch pin.

5. Complete the cycle and return the ram to the "DOWN" position.



2 of 4

Ensure that the latch pin is fully inserted or damage may occur to the yoke, dies, or latch pin.

4.2. Die Removal

1. Remove latch pin and open yoke.

2. Insert screwdriver under stationary die and pry die out of yoke. See Figure 2.

- 3. Raise ram to full "UP" position.
- 4. Insert screwdriver under moving die and pry out of ram.



A latch pin kit (part number 69709–4) is available as an accessory item. The latch pin is attached to the pivot pin by a chain to avoid misplacing the latch pin.

5. CRIMPING PROCEDURE



To avoid personal injury when operating the power unit, be sure to exercise caution while holding the terminals, splices, or wire near the crimping area.

The following crimping procedure provides general information. Refer to instructions packaged with individual die sets for specific products, wire sizes, strip dimensions, positioning of terminals and splices in the dies, and crimping procedures.



Keep the power unit in the upright position. Never operate the unit without having a crimping head attached to the handle control or crimping head coupling.

1. Insert terminal or splice in the stationary (upper) die according to instructions with the dies. MAKE SURE THE LATCH PIN IS SECURE before activating the power unit.

2. To advance ram when using handle control, depress RESET switch, then depress RUN switch. See note below. When using foot control, depress and release RESET pedal, then depress RUN pedal.



Activate the control with short, quick strokes until the dies hold the terminal or splice. The ram will not return until the crimping cycle is complete, except by the following methods: •Depress the pressure release button located on the electrical control box. •When using power unit 69120-[] depress DUMP switch or pedal.

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

4. Depress RUN switch or pedal until power unit completes crimping cycle and ram returns to neutral position.



If the terminal or splice sticks in the die after crimping, apply a rocking action to remove it from the die.

Operating Procedure for Hydraulic Foot Pump 69325–3



Hydraulic Hand Pump 69325–3 was superceded by Hydraulic Hand Pump 314979–1.

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Keep the foot pump in a vertical position. Never operate the unit without having a crimping head attached to the crimping head coupling.

1. Insert the terminal or splice in the stationary die according to the instruction sheet for the dies being used. MAKE SURE THE LATCH PIN IS SECURE before activating the power unit.

2. Pump the upper foot pedal to activate the unit. Continue pumping until the movable die contact the terminal or splice and holds it firmly in place. A sudden decrease in effort required to push the pedal down will be observed during the initial build–up of pressure.

3. Insert the stripped wire.

4. Continue pumping until the pressure relief valve is activated. A slight decrease in effort required to push the pedal down, accompanied by a snapping sound, indicates maximum required crimping pressure has been reached.

5. Press and hold the return pedal until the ram withdraws from the closed position just enough to remove the crimped terminal or splice.



If a terminal or splice sticks in the die after crimping, apply a rocking action to remove it from the die.

6. INSPECTION/MAINTENANCE



To avoid personal injury, be 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. Tyco Electronics recommends that the crimping head be inspected immediately upon arrival, and at regularly scheduled intervals, to ensure that the crimping head has not been damaged during handling and use. 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.

6.1. 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.

6.2. Visual Inspection

Refer to Figure 3 and proceed as follows:

1. With hydraulic pressure released, inspect the assembled head for nicks, scratches, and cracks. Inspect for cracks especially at the corners of the yoke and around the top of the cylinder.



Figure 3

2. Inspect pivot pin holes and latch pin holes for wear. Replace parts as needed.

3. Activate power unit. Raise ram to "UP" position. Inspect flat and round surfaces of ram for galling (fretting or wear by friction), cracks, or oil leakage. Release pressure and make sure that ram retracts smoothly.

4. If head shows evidence of galling, cracks, oil leakage, or rough cycling, return the crimping head to Tyco Electronics for repairs. (Refer to Section 7, REPLACEMENT PARTS AND REPAIR).

6.3. Crimping Head Inspection Procedure

A. With Hydraulic Power Unit 69120-[]

If the ram fails to return to the "DOWN" position 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, press the pressure release button on the electrical control box or, if the unit has the dump feature, move the trigger to the dump position and hold it for several seconds. This will release any pressure in the hydraulic system. If the ram returns, the trouble is not in the crimping head. If it does not return, return the crimping head for repairs.

B. With Hydraulic Foot Pump 69325-3



Hydraulic Foot Pump 69325–3 was superceded by Hydraulic Hand Pump 314979–1.

If the ram fails to return after the return pedal is pressed, refer to the crimping head disassembly procedure, beginning with Step 2.

7. REPLACEMENT PARTS AND REPAIR

The parts listed in Figure 4 are customer– replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. 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 P. O. BOX 3608 HARRISBURG, PA 17105–3608

Tools may be returned to Tyco Electronics for evaluation and repair. For tool repair service, contact a Tyco Electronics Representative at 1–800–526–5136.

8. REVISION SUMMARY

The following changes were made since the previous release of this sheet:

- Updated document to corporate requirements
- Deleted text in Section 1, Paragraph 3.2.NOTE, Section 6, and Paragraph 6.3.A
- Changed Foot Pump 314979–1 to Hand Pump 314979–1 in all instances
- Deleted Paragraph 6.4
- Deleted parts information in Figure 4



ITEM NUMBER	PART NUMBER	DESCRIPTION	QTY PER HEAD
1	311471-1	COUPLER, Quick-Disconnect, Cylinder Half	1
9a	306209-2	PIN, Latch	1
9b	301516	PIN, Pivot	2
9c	21045-9	RING, Retaining	2
9d	301556	SPRING	2
9e	301555	SPACER	2
9f	23057-6	BALL PLUNGER	1
12	1-22667-4	SETSCREW, Socket, Self-locking, 1/4-20 x .250 in. Lg.	1
13	23057-4	BALL PLUNGER	1

Figure 4