

Figure 1

## 1. INTRODUCTION

Post-Insulated STRATO-THERM Terminal and Splice Die Assemblies 69211-[ ], 69212-[ ], 69213-[ ], 69214-[ ], 69215-[ ], and 69254-[ ] are used in conjunction with DYNA-CRIMP\* Crimping Head 69099 or 1752868-1 and Hydraulic Power Unit 69120-[ ] or 1804700-[ ] to crimp the insulating sleeve of Post-Insulated STRATO-THERM Terminals and Splices. The die assembly is selected according to the wire size being used.

Refer to Instruction Sheets 408-2458 or 408-8959 (supplied with crimping head) and Customer Manuals 409-1950 or 409-10081 (supplied with power unit) for tooling information. Product part number information is available in Catalog 82011.

### NOTE



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

Reasons for reissue are given in Section 7, REVISION SUMMARY.

## 2. DESCRIPTION (Figure 1)

Each die assembly consists of an upper die (stationary) and a lower die (moving), each marked with the wire size. When mated, the dies form the crimping chamber. Each die is held in the crimping head by a single screw.

## 3. DIE ASSEMBLY INSTALLATION AND REMOVAL

### 3.1. Installation

Before installing the die assembly, install the crimping head onto the power unit as described in Instruction Sheets 408-2458 or 408-8959, and Customer Manuals 409-1950 or 409-10081.

### DANGER



To avoid personal injury, exercise extreme caution when using the power unit. Avoid depressing the foot switch or trigger control when installing or removing die assembly.

1. Loosen the setscrew in the top of the crimping head and insert shank on upper die, making sure that the shank is facing the setscrew. Refer to Figure 2. Tighten setscrew just enough to hold die in place.

2. Activate the power unit by depressing the foot switch or trigger control with short, quick strokes. Advance the ram until the setscrew in the ram is visible.

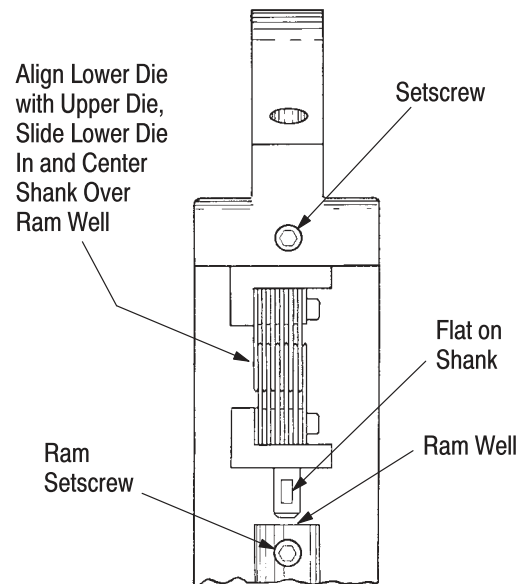




Figure 2

3. Engage the holding device on the power unit so that the ram stays in position.
4. Loosen the ram setscrew.
5. Align the lower die with the upper die as shown in Figure 2. Insert the shank on the lower die partially into the ram well, making sure the shank is facing the setscrew. Do NOT allow the dies to become disengaged.
6. Activate the power unit and advance the ram just enough to move the lower die to its topmost position before completing a cycle.
7. Engage the holding device. Tighten both setscrews.

**NOTE**  
 Ensure that the dies are properly aligned to each other and are firmly seated in the crimping head.

8. Activate power unit and allow the ram to return to the "DOWN" position.


**DANGER**  
 To avoid personal injury or damage to the tool, check setscrews occasionally to ensure that they are fully tightened when tool is in use.

**3.2. Removal**


Loosen setscrew in top of crimping head and remove upper die. Raise the ram until the ram setscrew is visible. Loosen ram setscrew and remove lower die.

**4. CRIMPING PROCEDURE**

1. Assemble the insulating sleeve over the crimped wire barrel of the terminal or splice as shown in Figure 3. Make sure the bushing butts against, but does not slide over, the crimped cartridge.
2. Check that the insulating sleeve extends approximately 0.80 mm [.031 in.] from the ring and that the bushing extends approximately 0.80 mm [.031 in.] from the insulating sleeve. Refer to Figure 3.

**NOTE**  
 If terminal or splice does not contain a cartridge, the bushing must butt against the wire barrel. For an insulating sleeve without a bushing, allow insulating sleeve to extend 0.80 mm [.031 in.] beyond the wire barrel.

3. Center the ring on the insulating sleeve in the crimping chamber of the stationary die. See Figure 4.

**DANGER**  
 To avoid personal injury or damage to the tool, always keep fingers clear of dies.

4. Activate power unit to complete the crimp.
5. To crimp the other half of a splice, reposition the uncrimped side in the crimping chamber.
6. Remove crimped terminal or splice from die and inspect the crimp.

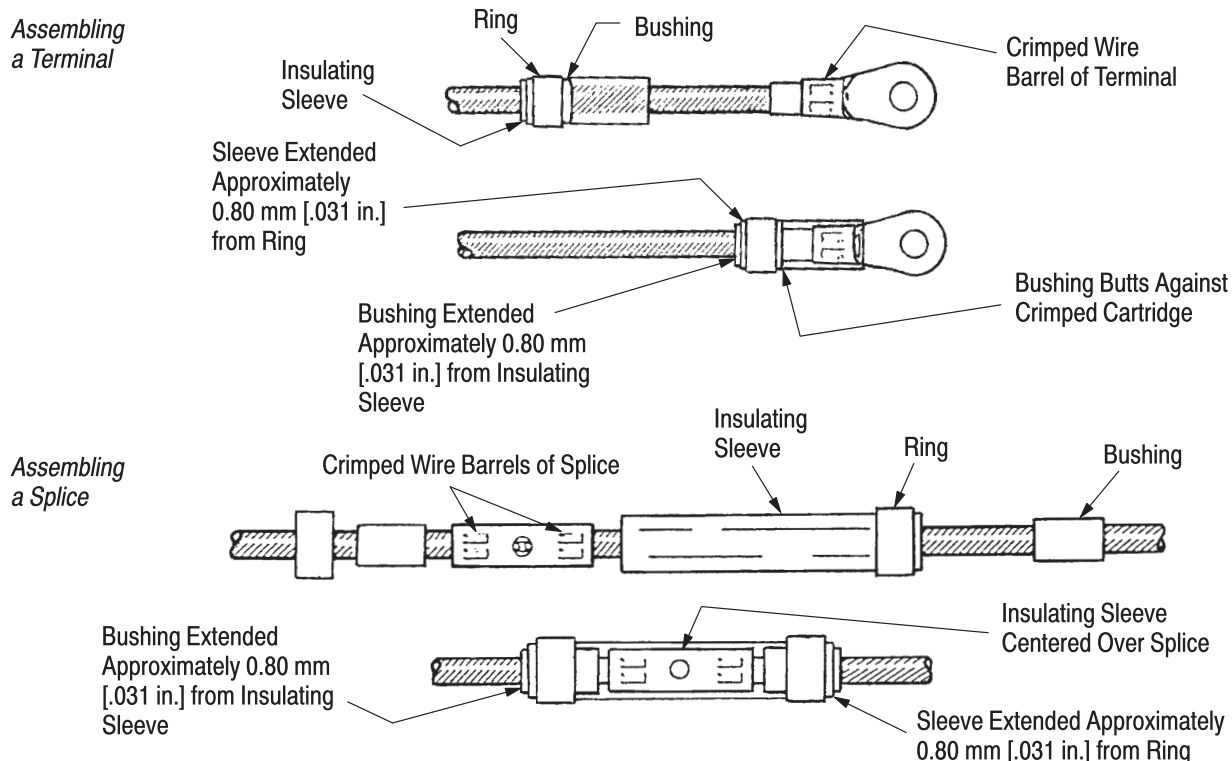


Figure 3

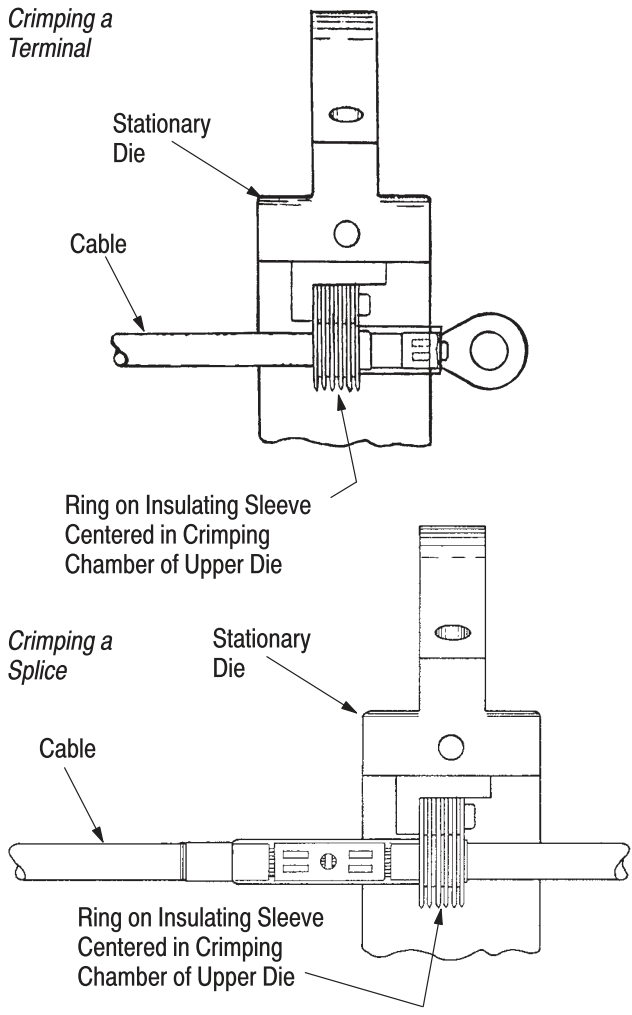


Figure 4

**5. MAINTENANCE AND INSPECTION PROCEDURE**

Tyco Electronics recommends that a maintenance and inspection program be performed periodically to ensure dependable and uniform terminations. Though recommendations call for at least one inspection a month, frequency of inspection depends on:

1. The care, amount of use, and handling of the die assembly.
2. The presence of abnormal amounts of dust and dirt.
3. The degree of operator skill.
4. Your own established standards.

The die assembly is inspected before being shipped; however, Tyco Electronics recommends that the die assembly be inspected in accordance with Paragraph 5.2.B, Gaging the Crimping Chamber, immediately upon arrival at your facility to ensure that the dies have not been damaged during shipment.

**5.1. Cleaning**

1. Remove accumulated dirt, grease, and foreign matter from die closure surfaces of the dies. Wipe dies frequently with a soft, lint-free cloth. Do NOT use hard or abrasive objects that could damage the dies.
2. When die assembly is not in use, mate and store the dies in a clean, dry area.

**5.2. Periodic Inspection**

**A. Visual Inspection**

Inspect die closure surfaces of the dies for worn, cracked, or broken areas. If damage is evident, return the die assembly to Tyco Electronics for evaluation and repair. See Section 6, REPLACEMENT.

**B. Gaging the Crimping Chamber**

This inspection requires the use of a plug gage conforming to the dimensions shown in Figure 5. Tyco Electronics does not manufacture or market these gages. To gage the crimping chamber, proceed as follows:

1. Remove traces of oil or dirt from the crimping chamber and plug gage.
2. Mate and adjust dies to meet the gage dimension shown in Figure 6.
3. With dies positioned at the gage dimension, align the GO element with the crimping chamber (opposite side of part number markings). Push the element (without forcing it) straight into the chamber. The GO element must pass completely through the first three laminations.
4. Align and try to insert the NO-GO element with the same crimping chamber. The NO-GO element may start entry but must not pass completely through the crimping chamber.

If the crimping chamber conforms to the gage inspection, the die assembly is considered dimensionally correct. If not, the die assembly must be replaced before returning it to service. See Section 6, REPLACEMENT.

**6. REPLACEMENT**

If the die assembly is damaged or worn, it must be replaced. Order replacement die assemblies 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

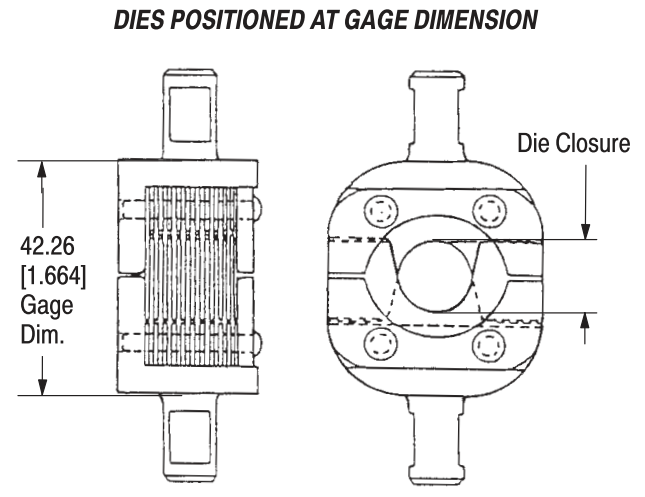
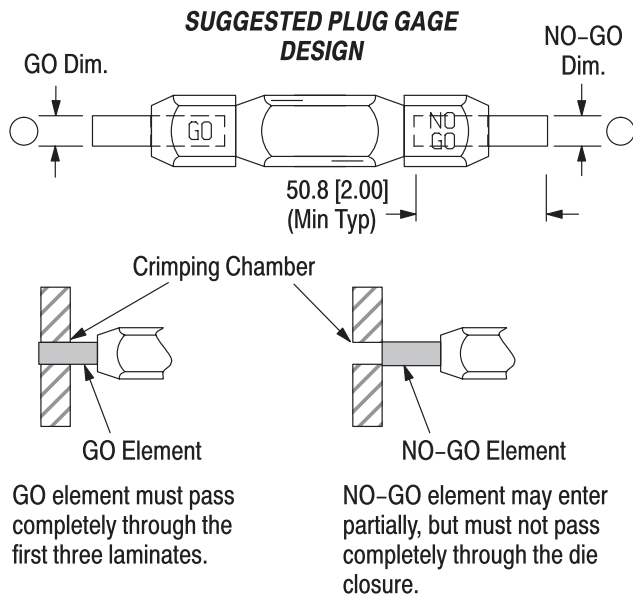


Figure 6

DIE ASSEMBLY PART NUMBER	GAGE ELEMENT DIMENSIONS	
	GO	NO-GO
69211-[]	7.950-7.958 [.3130-.3133]	8.151-8.153 [.3209-.3210]
69212-[]	9.677-9.685 [.3810-.3813]	9.878-9.881 [.3889-.3890]
69213-[]	11.252-11.260 [.4430-.4433]	11.453-11.455 [.4509-.4510]
69214-[]	12.979-12.987 [.5110-.5113]	13.180-13.183 [.5189-.5190]
69215-[]	15.316-15.324 [.6030-.6033]	15.517-15.519 [.6109-.6110]
69254-[]	21.082-21.090 [.8300-.8303]	21.283-21.285 [.8379-.8380]

Figure 5

**7. REVISION SUMMARY**

Revisions to this document include:

- Updated document to corporate requirements
- Changed dimensions in Figure 6