

DIE ASSEMBLY	CONNECTOR			NO. OF CABLE CONDUCTORS
	PART NO.	KEY LETTER CODE	NO. OF CONTACT POSITIONS	
58261-1	4-520423-1	D	4	4
	5-520423-1	E		
58261-3	1-520423-3	A	8	8
	3-520423-3	C		
	5-520423-3	E		
58261-6	1-520423-6	A	16	16
	5-520423-6	E		

Figure 1

1. INTRODUCTION

AMP* Crimping Die Assemblies 58261-1, 58261-3, and 58261-6 are used to crimp the SDL (Shielded Data Link) plug connectors, listed in Figure 1, onto flat cable size 24 AWG. The die assemblies are used with CERTI-LOK* Hand Crimping Tool 58194-1, or Pneumatic Power Unit 312522-1 fitted with Die Holder 58201-1. For additional information regarding the hand tool, refer to Instruction Sheet 408-9113, to 408-9164 regarding the tool holder, and to Customer Manual 409-5843 for information relating to the power unit.

Read these instructions carefully before crimping any connectors and before installing or removing the die assemblies.

NOTE

All dimensions are in millimeters [with inches in brackets].

Reasons for reissue of this instruction sheet are provided in Section 8, REVISION SUMMARY.

2. EUROPEAN REGULATORY INFORMATION

A technical file document, as required by the Supply of Machinery (Safety) Regulations 1992, has been prepared for Crimping Die Assemblies 58261-1, 58261-3, and 58261-6, Die Holder 58201-1, and Pneumatic Power Unit 312522-1. These components are CE approved only if used with each other and only if Back Cover 313022-1 for Die Holder 58201-1 has been replaced with Back Cover 662802-1 (refer to 408-9164). The components are *not* approved separately. Refer to Drawing 662592 for Declaration of Conformity.

Noise levels generated when using this combination of tooling averages 89 dB.

3. DESCRIPTION

Each die assembly consists of an upper insert and a base plate joined by two spring-loaded pins.

The upper insert features three crimpers which enter corresponding slots in the plug connector housing and crimp the cable strain reliefs and contacts.

The base plate acts as a base for the connector and features keyed guides which provide secure positioning for the connector during the crimping procedure.

The die pins and their compression springs provide alignment for the dies and aid in die disengagement when the tool is re-opened after crimping.

4. CRIMPING PROCEDURE

Determine the application requirements by selecting correct cable, SDL plug connector, and die assembly from Figure 1. Ensure that the desired plug keying letter code has been selected.

NOTE

Refer to Application Specification 114-2086 for additional information regarding SDL plug connectors using flat cable.

Strip flat cable to the length indicated in Figure 2 and proceed as follows:

1. Install die assembly in tool according to instructions packaged with tool after closing tool handles until ratchet releases and allowing handles to open FULLY.
2. Fold back foil and drain wires on both sides of cable. See Figure 2.
3. Slide cable into connector until cable conductors bottom inside connector. See Figure 2.
4. Slide connector and cable between guides of base plate on die assembly.

NOTE

Connector must be oriented so that locking latches and keying slots are faced down on base plate.

5. Ensure that connector and cable are seated properly; then close tool handles slowly to ensure that strain relief crimpers enter the shield windows of connector.
6. Complete crimp by closing tool handles until ratchet releases.
7. Allow tool handles to open FULLY, and remove crimped connector.

5. CRIMP HEIGHT ADJUSTMENT

In order to compensate for different wire sizes used with the SDL plug connectors, a crimp height adjustment screw has been incorporated into the die assembly. With the die assembly installed in the tool, crimp a test connector onto a scrap piece of the desired cable, and measure the contact crimp height (using an appropriate gaging device) according to Figure 3.

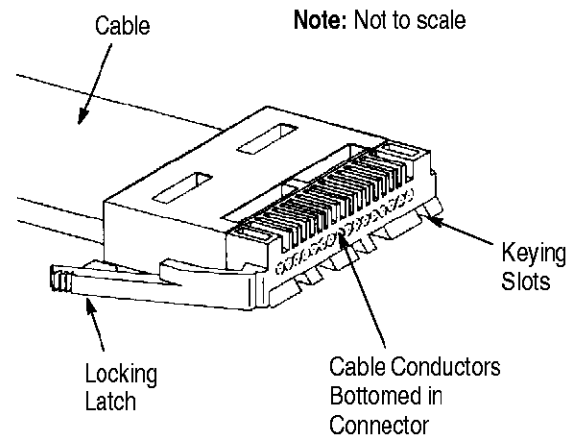
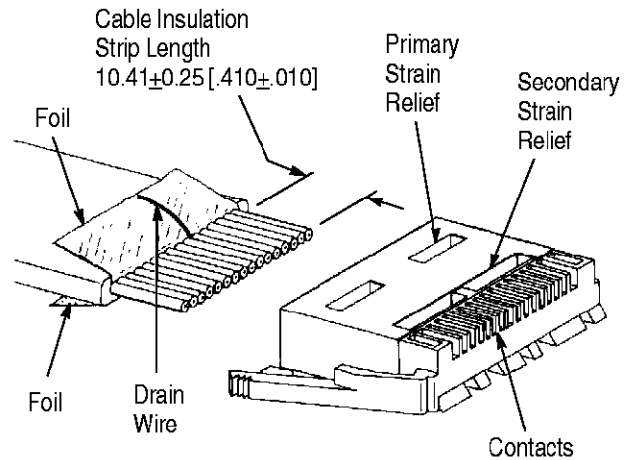


Figure 2

If the contact crimp height is incorrect, adjust it as follows:

1. Loosen the setscrew on the side of the upper insert (see Figure 1), using an appropriate hex wrench.
2. Turn the contact crimp height adjustment screw, using an appropriate hex wrench, *clockwise* to decrease the crimp height, and *counterclockwise* to increase the crimp height.

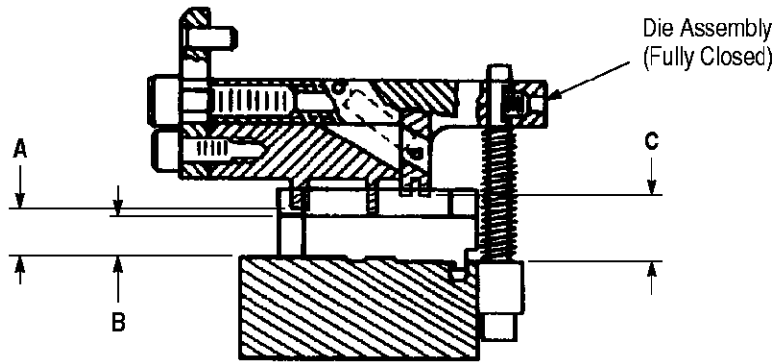
NOTE

Each complete revolution of the crimp height adjustment screw will either increase or decrease (depending on direction turned) the height of the "C" dimension shown in Figure 3 by 0.08 [.003].

NOTE

The die holder clamp on Hand Crimping Tool 58194-1 has "CRIMP HEIGHT", "inc.", and "dec." engraved upon it. The notch on the crimp height adjustment screw provides orientation with the white dot on the die holder clamp. See Figure 4.

3. Crimp another test connector onto a piece of scrap cable, and measure the actual crimp height to determine that it is correct.



CRIMPER TYPE	CRIMP HEIGHT DIMENSION	DIE ASSEMBLY		
		58261-1	58261-3	58261-6
Strain Relief	A	4.85±0.13 [.191±.005]	4.85±0.13 [.191±.005]	4.60±0.13 [.181±.005]
Strain Relief	B	4.27±0.08 [.168±.003]	4.09±0.08 [.161±.003]	4.09±0.08 [.161±.003]
Contact	C	6.73±0.13 [.265±.005]	6.63±0.13 [.261±.005]	6.60±0.13 [.260±.005]

Figure 3

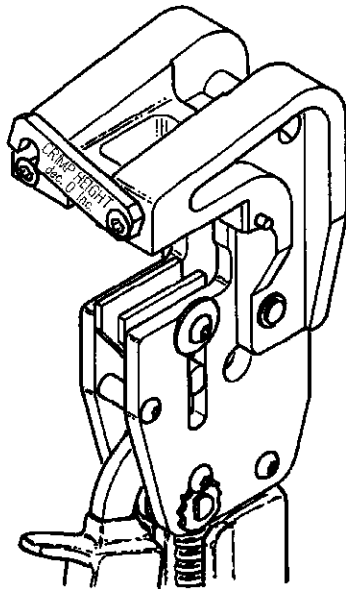


Figure 4

6. MAINTENANCE AND INSPECTION

6.1. Daily Maintenance

Remove all foreign particles with a clean, soft brush, or a clean, soft, lint-free cloth. If foreign matter cannot be removed easily, or if the die assembly appears to be damaged or out of alignment, return the die assembly to your supervisor.

6.2. Visual Inspection

The die assemblies are inspected before shipment. It is recommended that the die assembly be inspected immediately upon its arrival at your facility to ensure that it has not been damaged during transit and that it conforms to the dimensions provided in Figure 5.

Regular inspections should be performed by quality control personnel. A record of scheduled inspections should remain with the die assembly or be supplied to supervisory personnel responsible for the die assembly. Though recommendations call for at least one inspection per month, the inspection frequency should be based upon the amount of use, working conditions, operator training and skill, and established company standards. These inspections should be performed in the following sequence:

1. Remove all lubrication and accumulated film by immersing the die assembly in a suitable commercial degreaser.
2. Make sure that the two guide pins and their compression springs are in place and are secured. If replacements are necessary, refer to Section 7, REPLACEMENT AND REPAIR.
3. Inspect the die assembly for worn, cracked, or broken areas. If damage to any part of the die assembly is evident, replace the damaged component, or return the die assembly for evaluation and repair (see Section 7, REPLACEMENT AND REPAIR).

6.3. Measurement of Strain Relief Crimp Height

1. Remove die assembly from tool.
2. Compress insert and base plate until insert has bottomed on guides.

3. Inspect the die closure for the dimensions provided in Figure 3.

If the crimping areas conform to the inspection dimensions provided in Figure 3, the die closure is considered dimensionally correct. If crimping areas do not conform, and cannot be adjusted to do so, the die assembly must be repaired before returning it to service. Either replace damaged or worn parts, or return the die assembly for evaluation and repair. See Section 7.

7. REPLACEMENT AND REPAIR

Customer-replaceable parts are listed in Figure 5. A complete inventory should be stocked and controlled to prevent lost time when replacement of parts is necessary.

Although all parts for the die assembly are considered customer-replaceable, it may be necessary to return

it for evaluation and repair. 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, or write to:

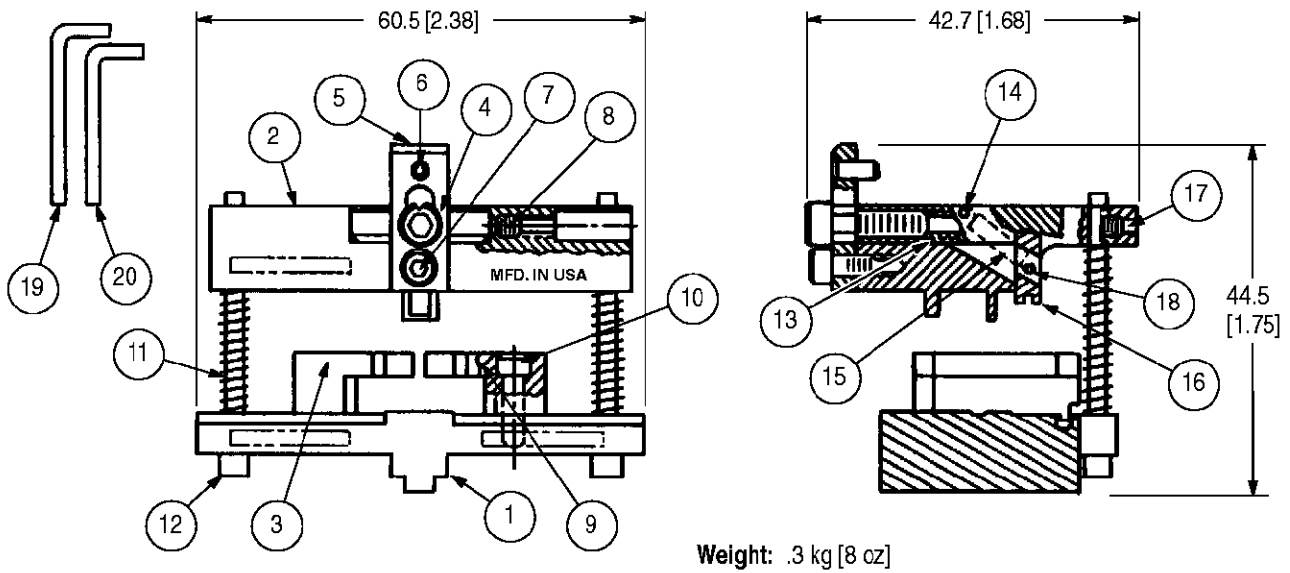
CUSTOMER SERVICE (38-35)
TYCO ELECTRONICS CORPORATION
P.O. BOX 3608
HARRISBURG, PA 17105-3608

For die repair service, contact an representative at 1-800-526-5136.

8. REVISION SUMMARY

Revisions to this instruction sheet per EC 0990-0061-00 include:

- Updated document to corporate requirements
- Corrected tool repair service information in Section 7, REPLACEMENT AND REPAIR



Weight: .3 kg [8 oz]

REPLACEMENT PARTS

ITEM	PART NUMBER FOR DIE ASSEMBLY			DESCRIPTION	QTY PER ASSEMBLY
	58261-1	58261-3	58261-6		
1	312812-1	312812-3	312812-4	PLATE, Flat Base	1
2	312814-1	312814-3	312834-1	INSERT, Upper	1
3	312815-1	312815-1	312815-1	GUIDE, Left Product	1
4	312817-1	312817-1	312817-1	SCREW, Cam Adjustment	1
5	312820-1	312820-1	312820-1	PLATE, Die Holder	1
6	3-21028-2	3-21028-2	3-21028-2	PIN, Slotted Spring, .094 D x.25 L	1
7	1-21000-3	1-21000-3	1-21000-3	SCREW, Socket Head Cap, 4-40 x.25 L	1
8	22736-2	22736-2	22736-2	SETSCREW, Socket 4-40 x.38 L	2
9	312816-1	312816-1	312816-1	GUIDE, Right Product	1
10	1-21000-4	1-21000-4	1-21000-4	SCREW, Socket Head Cap, 4-40 x.38 L	4
11	2-28922-3	2-28922-3	2-28922-3	SPRING, Compression	2
12	312824-1	312824-1	312824-1	PIN, Die Shoe	2
13	312822-1	312822-1	312822-1	CAM, Crimp Adjusting	1
14	21028-3	21028-3	21028-3	PIN, Slotted Spring, .062 D x.31 L	1
15	3-22487-2	3-22487-2	3-22487-2	SPRING, Extension	1
16	313276-1	313277-1	313278-1	CRIMPER, SDL Contact	1
17	1-21006-9	1-21006-9	1-21006-9	SETSCREW, Socket 4-40 x.12 L	2
18	21028-2	21028-2	21028-2	PIN, Slotted Spring .062 D x.25 L	1
19	2-21027-7	2-21027-7	2-21027-7	KEY, Hex Socket, .109 (Short)	1
20	21027-3	21027-3	21027-3	KEY, Hex Socket, .050 (Short)	1

Figure 5