

PROPER USE GUIDELINES

Cumulative Trauma Disorders can result from the prolonged use of manually powered hand tools. Hand tools are intended for occasional use and low volume applications. A wide selection of powered application equipment for extended-use, production operations is available.

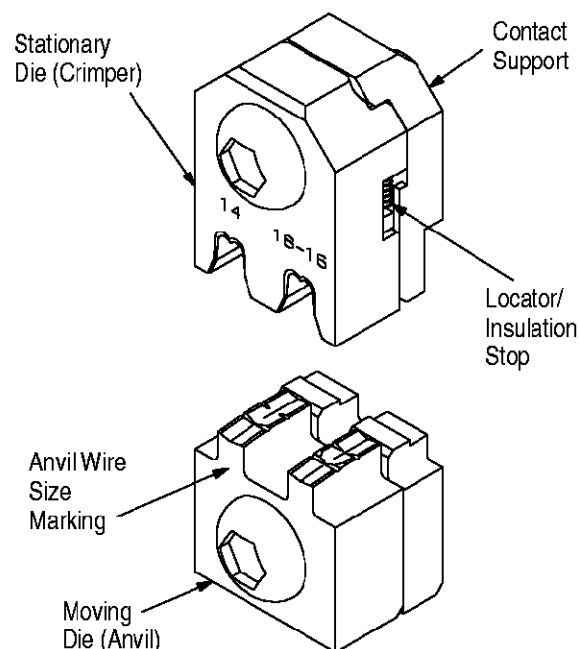
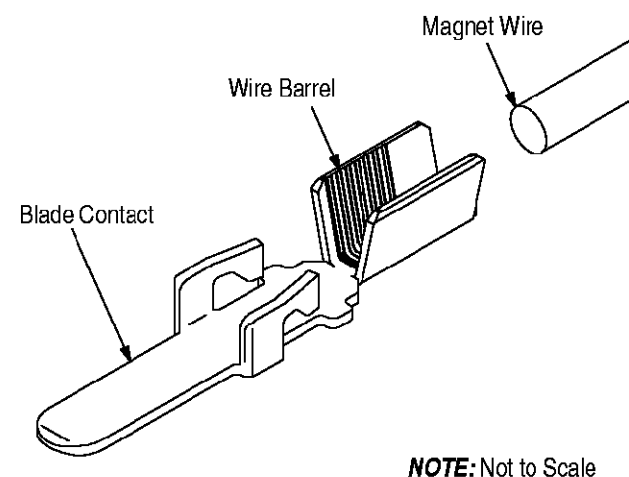


Figure 1



NOTE: Not to Scale

WIRE SIZE, AWG	CONTACT PART NUMBER	CRIMPING DIE ASSEMBLY PART NUMBER
18-16	1217073-1	1583298-1
14		

Figure 2

1. INTRODUCTION

Crimping Die Assembly 1583298-1 is designed for use in Hand Crimping Tool 69710-1. The die assembly, when installed in a tool, crimps the AMPLIVAR* 3.18 [.125] blade contact listed in Figure 2 onto magnet wire.

These instructions provide specific information regarding the die assemblies and applicable contacts. Refer to instruction sheet 408-2095 packaged with the hand tool, for information regarding die insertion, contact crimping, and general performance of the tool.

NOTE

Dimensions are in millimeters [with inch equivalents in brackets]. Figures and illustrations are for identification only and are not drawn to scale.

2. DESCRIPTION (Figures 1 and 3)

Each die assembly features a stationary die (crimper), a moving die (anvil), a locator/wire stop, and a contact support. See Figure 1.

The stationary die has chamfered corners and has the wire size range (14 and 18-16 AWG) marked on it. The moving die has square corners.

The locator/wire stop has two functions: it positions the contact in the crimping dies, and it aids in locating the wire in the contact. In use, the locator/wire stop rests against the end of the wire barrel (see Figures 2 and 3).

The contact support prevents the contact from bending during the crimping procedure.

3. CRIMPING PROCEDURE

Install the dies according to the instructions packaged with the tool. Refer to Figure 2 and select wire (magnet only) of the specified size.

Refer to Figure 3 and proceed as follows:

1. Looking straight into the *front* of the crimp section, insert the contact (wire barrel first) into the *back* of the locator. Position the contact in the crimper so that the contact butts against the locator.
2. Hold the contact in position and close the dies *just enough* to hold the contact in place; do *not* deform the wire barrel.

3. Insert the magnet wire through the wire slot in the locator and into the wire barrel of the contact until the wire butts against the locator/wire stop.
4. Hold the wire in place and actuate the tool through a complete cycle. Refer to the instructions packaged with the tool.
5. Allow the tool to open fully and remove the crimped contact.

CAUTION Damaged contacts may not be used. If a damaged contact is evident, it must be cut from the wire and replaced with a new one.

Typical Installation

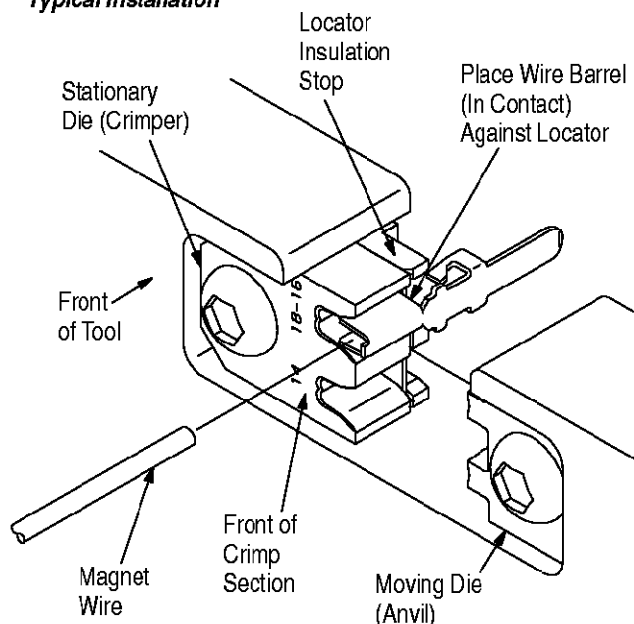


Figure 3

4. MAINTENANCE AND INSPECTION PROCEDURE

4.1. Maintenance

1. Remove dust, moisture and other contaminants with a clean brush, or a soft, lint-free cloth. Do not use objects that could damage the dies.
2. Make sure that dies are properly aligned and that die holding screws are in place and secured.
3. Make certain that all surfaces are protected with a thin coat of any good SAE 20 motor oil. Do not oil excessively.
4. When dies are not in use, store in a clean, dry area.

4.2. Inspection

Regular inspections should be performed with a record of inspections remaining with the dies and/or supervisory personnel responsible for them. It is

recommended one inspection per month; however, amount of use, working conditions, operator training and skill, and established company standards should determine frequency of inspection. The inspection should be performed in the following sequence:

A. Visual Inspection

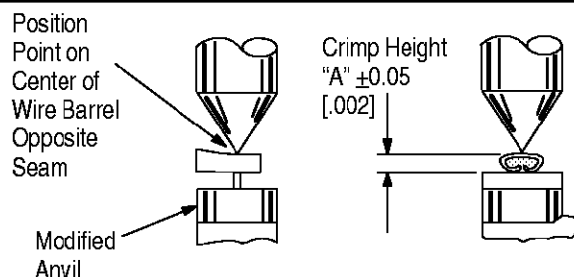
1. Remove all lubrication and accumulated film by immersing the dies in a suitable commercial degreaser that will not affect paint or plastic material.
2. Make sure all die holding screws are in place and secured.
3. Check all bearing surfaces for wear. Replace worn components.
4. Inspect the crimp section for flattened, chipped, cracked, worn, or broken areas. If damage is evident, the dies must be repaired before returning them to service. See Section 5, REPLACEMENT AND REPAIR.

B. Crimp Height Inspection

This inspection incorporates the use of a micrometer with a modified anvil as shown in Figure 4. It is recommended the modified micrometer (Crimp Height Comparator RS-1019-5LP) which may be purchased from:

Shearer Industrial Supply Co.
717-767-7575

or VALCO
610-691-3205



DIE ASSY PART NUMBER	CONTACT PART NUMBER	WIRE SIZE, AWG	CRIMP SECT WIRE SIZE MARKING	CRIMP HGT DIM. "A"
1583298-1	1217073-1	18-16	18-16	1.70 [.067]
		14	14	1.96 [.077]

Figure 4

Proceed as follows:

1. Refer to Figure 4 and select a contact and **maximum** size wire for the die assembly.
2. Refer to Section 3, CRIMPING PROCEDURE, and crimp the contact accordingly.
3. Using the crimp height comparator, measure the wire barrel crimp height as shown in Figure 4.

If the crimp height conforms to that shown in Figure 4, the dies are considered dimensionally correct and should be lubricated with a thin coat of any good SAE 20 motor oil. If not, the dies must be repaired or replaced. Refer to Section 5, REPLACEMENT AND REPAIR.

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 also be returned for evaluation and repair. For repair service, contact a representative at 1-800-526-5136.

5. REPLACEMENT AND REPAIR

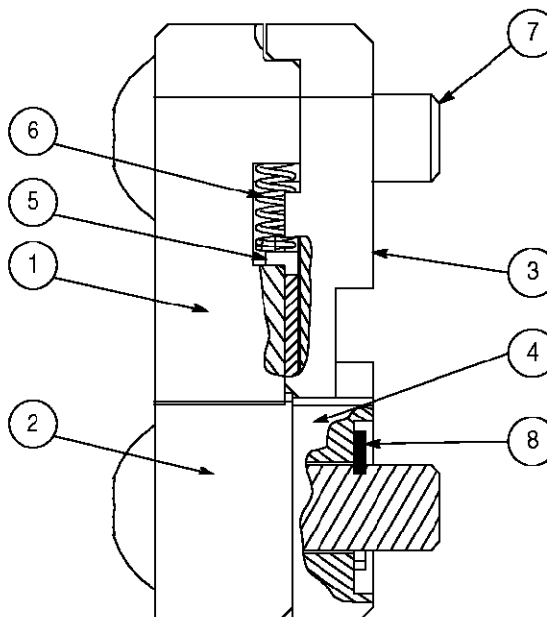
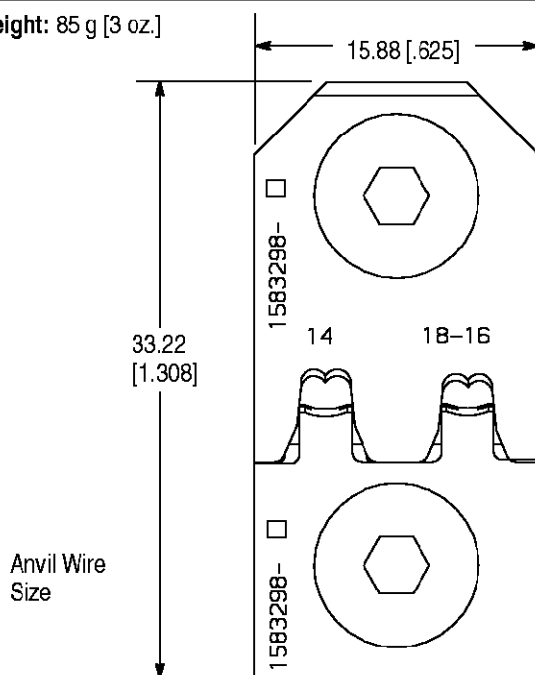
The parts listed in Figure 5 are customer-replaceable. A complete inventory can be stocked and controlled to prevent lost time when replacement of parts is necessary. Order replacement parts through your Tyco Electronics Representative, or call

6. REVISION SUMMARY

Per EC 0990-1335-02

- Initial release of document

Weight: 85 g [3 oz.]



REPLACEMENT PARTS

ITEM	PART NUMBER	DESCRIPTION	QTY PER ASSY
1	1583394-1	WIRE CRIMPER, AMPLIVAR	1
2	1583299-1	WIRE ANVIL, AMPLIVAR, Special	1
3	1583396-1	SUPPORT, Upper Terminal	1
4	1583397-1	SUPPORT, Anvil	1
5	1583501-1	LOCATOR, Wire Stop	1
6	4-23147-7	SPRING, Compression	2
7	2-21002-8	SCREW, Btn Skt Hd Cap 10-32 x .625	2
8	1-21046-3	RING, Retain, Extern, 3/16 E-Ring	2

Figure 5