

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.

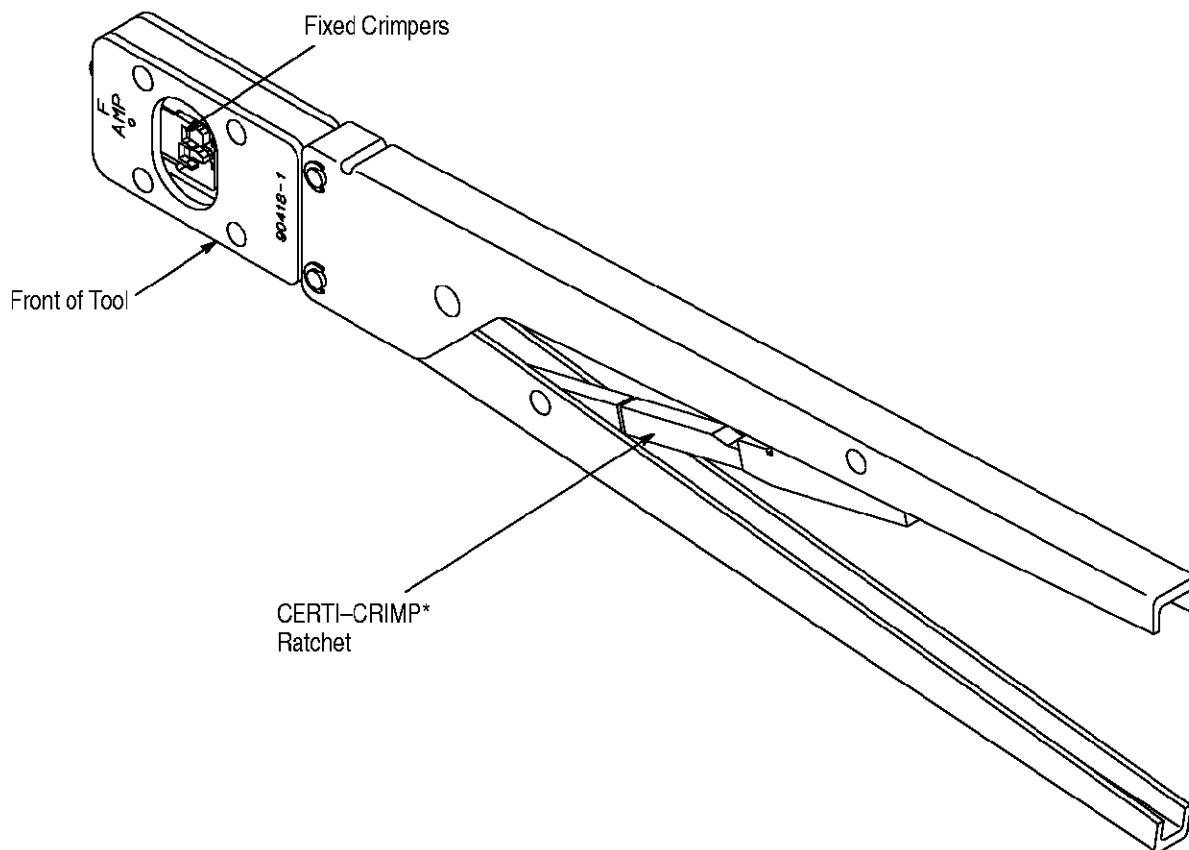


Figure 1

1. INTRODUCTION

This instruction sheet covers the use of Hand Crimping Tool 90418-1 which is designed to crimp AMPMODU MOD IV Pin and Receptacle Contacts with an insulation diameter of 1.02-1.52 mm [.040-.060 in.] onto wire sizes 26-22 AWG. Read these instructions thoroughly before crimping the contacts.

NOTE *Measurements are in millimeters [followed by inch equivalents in brackets]. Figures and illustrations are for identification only and are not drawn to scale.*

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

2. DESCRIPTION (Figures 1 and 3)

The FRONT OF TOOL is marked with the tool number. The BACK OF TOOL (wire side), into which

the wire is inserted, has the wire size marked above each crimping chamber.

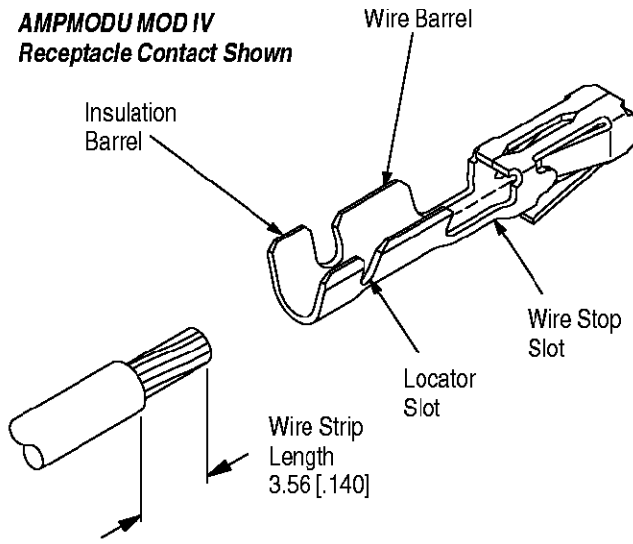
This tool features two fixed dies (crimpers), two movable dies (anvils), an insulation crimp adjustment lever, a locator/insulation stop, a contact support, an ejector, and a CERTI-CRIMP ratchet.

The insulation crimp adjustment lever is used to control the crimp height of the contact insulation barrel. Refer to Section 4, INSULATION CRIMP ADJUSTMENT.

The locator/insulation stop has two functions. First, it positions the contact between the crimping dies, and second, it aids in locating the wire in the contact. In use, it rests in the locator slot. See Figures 2 and 3.

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

**AMP MODU MOD IV
Receptacle Contact Shown**



NOTE: Not to Scale

Figure 2

The ejector pulls the locator down, and ejects the crimped contact when the tool handles are FULLY opened.

The CERTI-CRIMP ratchet ensures full crimping of the contact. Once engaged, the ratchet will not release until the handles have been FULLY closed.

CAUTION

The crimping dies bottom before the CERTI-CRIMP ratchet releases. This design feature ensures maximum electrical and tensile performance of the crimp. Do NOT re-adjust the ratchet.

3. CRIMPING PROCEDURE

Select wire of specified size and insulation diameter. Strip the wire to the length indicated in Figure 2. Do NOT cut or nick the wire strands. Select a contact, and identify the appropriate crimping chamber (according to the wire size markings on the BACK of the tool). Refer to Figure 3 and proceed as follows:

1. Hold tool so BACK (wire side) faces you.
2. Make sure ratchet is released. Squeeze tool handles together and allow them to open FULLY.
3. Looking straight into BACK of appropriate crimping chamber, insert contact (insulation barrel first) into FRONT of crimping chamber. Position the contact in the dies so that the locator enters locator slot in the contact.
4. Hold contact in locator slot and squeeze tool handles together until anvil starts entry into crimper. Do NOT deform insulation barrel or wire barrel.
5. Insert a properly stripped wire through the wire slot in locator and into wire barrel of contact until insulation butts against locator/insulation stop.

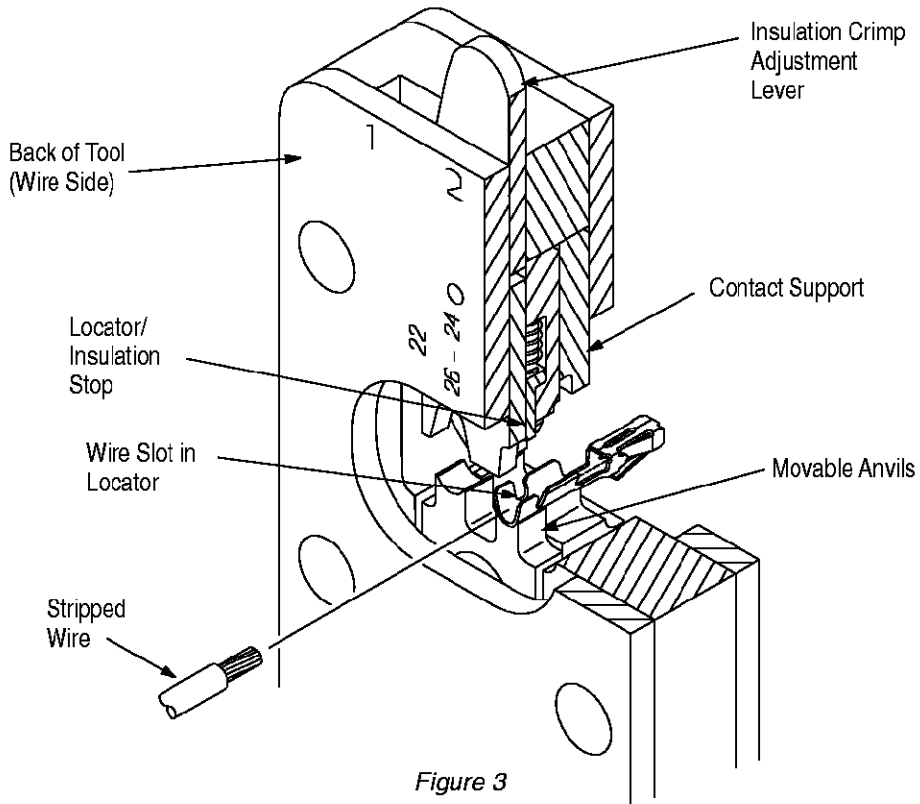
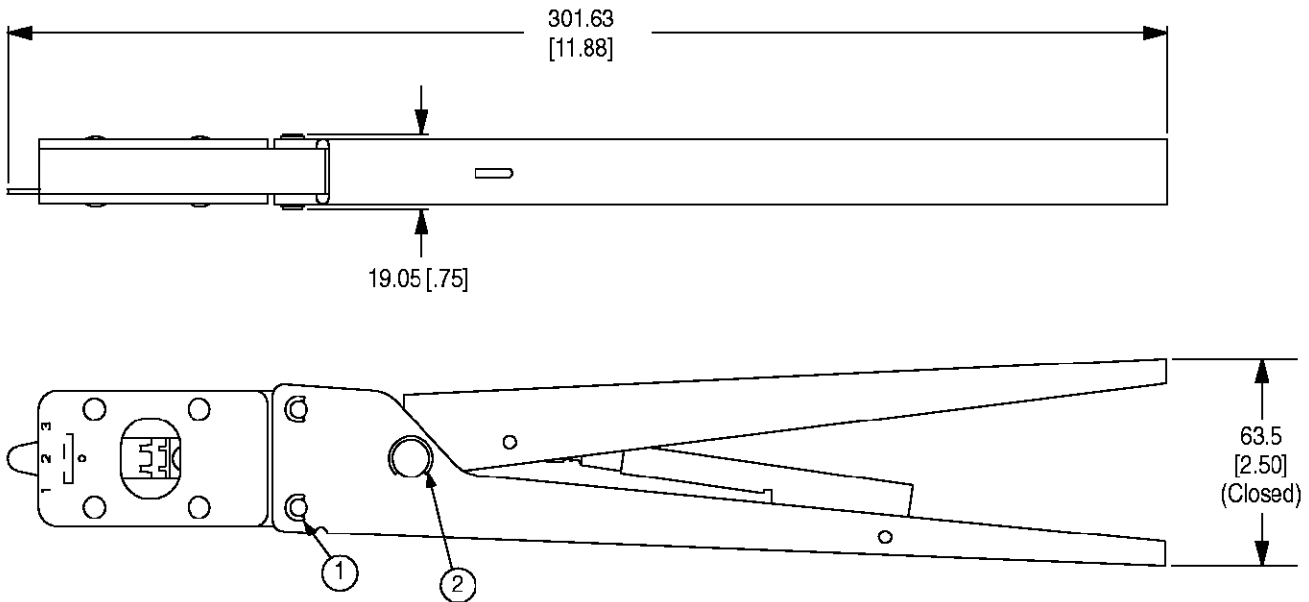


Figure 3



WEIGHT: 539 g [1 lb, 4 oz]

CAUTION: Do not remove the retaining pins as permanent damage to the tool could result (see Section 6, REPLACEMENT AND REPAIR).

REPLACEMENT PARTS			
ITEM	PART NUMBER	DESCRIPTION	QTY PER TOOL
1	21045-3	RING, Retaining	4
2	21045-9	RING, Retaining	2

Figure 5

5.4. CERTI-CRIMP Ratchet Inspection

Obtain a 0.025 mm [.001 in.] shim that is suitable for checking the clearance between the bottoming surfaces of the crimping dies.

Proceed as follows:

1. Select a contact, maximum size wire, and the designated crimping chamber for the wire being used (see Figure 4).
2. Position the contact and wire between the crimping dies, according to Section 3, CRIMPING PROCEDURE (Steps 1 through 5). Holding the wire in place, squeeze the tool handles together until the CERTI-CRIMP ratchet releases. Hold the tool handles in this position, maintaining just enough pressure to keep the dies closed.
3. Check the clearance between the bottoming surfaces of the crimping dies. If the clearance is 0.025 mm [.001 in.] or less, the ratchet is satisfactory. If clearance exceeds 0.025 mm [.001 in.], the ratchet is out of adjustment and must be repaired (see Section 6, REPLACEMENT AND REPAIR).

If the tool conforms to these inspection procedures, lubricate it with a THIN coat of any good SAE 20 motor oil and return it to service.

6. REPLACEMENT AND REPAIR

Replacement parts are listed in Figure 5. Parts other than those listed in Figure 5 should be replaced by Tyco Electronics to ensure quality and reliability of the tool. 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

For tool repair service, please contact a Tyco Electronics Representative at 1-800-526-5136.

7. REVISION SUMMARY

Per EC 0990-0704-02:

- Updated document to corporate requirements
- Added caution to Section 3
- Added phone number to crimp comparator supplier in Paragraph 5.3
- Added wire size 26 to table in Figure 4