

Section 1 of this Instruction Sheet covers the terminal and application procedures recommended for the AMP hand crimping tool 674655. Section 2 covers maintenance and inspection recommended by AMP to assure reliability of AMP hand crimping tools.

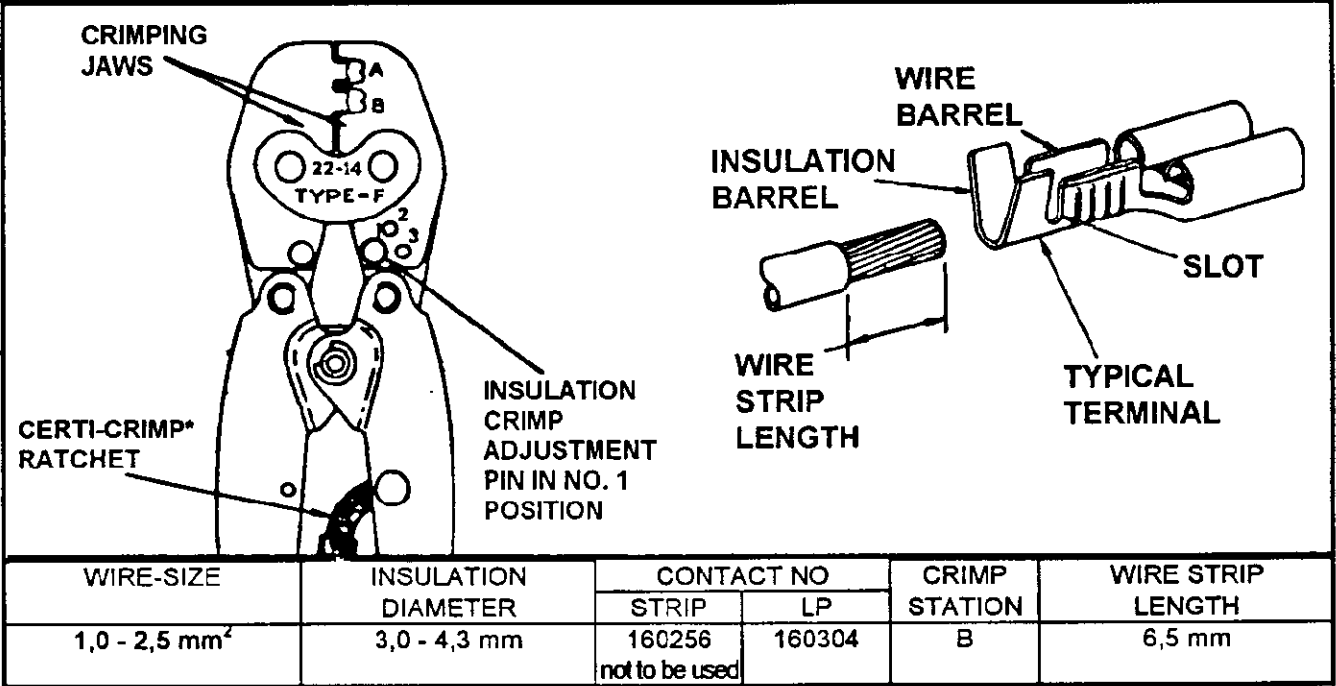


FIGURE 1

1-3. CRIMPING PROCEDURE.

SECTION 1. APPLICATION.

1-1. INTRODUCTION.

The AMP hand crimping tool 674655 is used to crimp the AMP Loose Piece Faston* contact 160304 to 1-2,5 mm² wires.

1-2. DESCRIPTION.

This tool features two crimp stations, an insulation crimp adjustment pin and a CERTI-CRIMP ratchet.

The insulation crimp adjustment pin is used to regulate the crimp height of the contact insulation barrel. See paragraph 1-4.

The CERTI-CRIMP ratchet assures that a full crimp is applied to the contact. Once engaged, the ratchet will not release until the tool handles have been fully closed.

CAUTION The crimping dies bottom before the CERTI-CRIMP ratchet releases. This is a design feature that assures maximum electrical en tensile performance of the crimp. Do NOT re-adjust the ratchet, otherwise, an improperly crimped contact will result.

Select 1 - 2,5 mm² wire with an insulation diameter within the range specified in Figure 1. Strip the wire to the length shown. Do **NOT** cut or nick the wire strands.

Next take the loose piece (LP) contact. Do not cut strip form contacts into loose piece form.

Proceed as follows:

1. Hold the tool so that the front of it is facing you. See Figures 2 and 3.
2. Squeeze the tool handles and allow them to open fully.
3. Insert the contact into the tool. Center the contact wire barrel on the wire barrel crimping die. See Figures 2 and 3.
4. Hold the terminal in this position and squeeze the tool handles just enough to hold the contact in place. Do **NOT** deform the wire barrel or insulation barrel.
5. Insert a properly stripped wire into the terminal.
6. Hold the wire in place and squeeze the tool handles until the ratchet releases.
7. Allow the handles to open fully, and remove the crimped terminal.

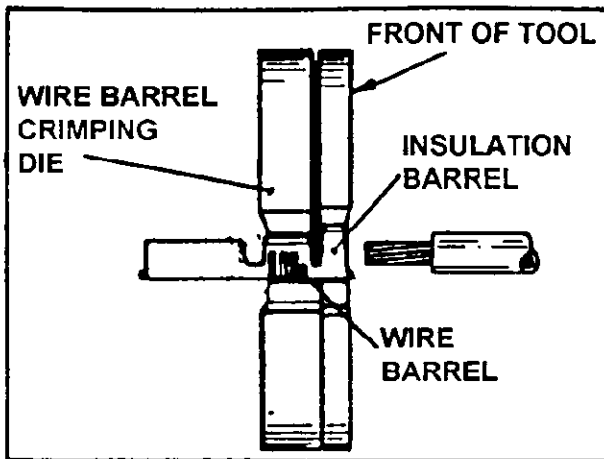


Figure 2

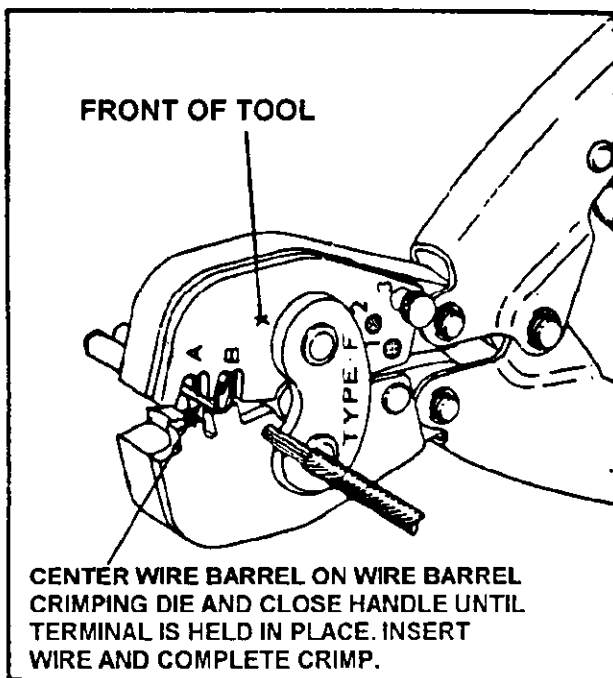


Figure 3

1-4. INSULATION CRIMP ADJUSTMENT.

The insulation barrel crimp height is controlled by the insulation adjustment pin. To determine the right settings, crimp a few contacts using each of the three settings:

- 1- small
- 2- medium
- 3- large.

Check the insulation crimp after each crimp is made. The crimp should be tight enough to hold the insulation firmly without cutting into it.

SECTION 2. MAINTENANCE / INSPECTION.

AMP 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 handtool.
2. The presence of abnormal amounts of dust and dirt.
3. The degree of operator skill.
4. Your own established standards

The handtool is inspected before being shipped; however, AMP recommends that the tool be inspected immediately upon arrival to ensure that the tool has not been damaged during shipment.

2-1. DAILY MAINTENANCE.

1. Handtool should be immersed (handles partially closed) in a reliable commercial degreasing compound to remove accumulated dirt, grease and foreign matter. When degreasing compound is not available, tool may be wiped clean with a soft lint-free cloth. Do NOT use hard or abrasive objects that could damage the tool.
2. Make certain that the retaining pins are in place and that they are secured with retaining rings.

CAUTION

Do NOT remove retaining pins as permanent damage to the tool may result. See section 2-3 REPLACEMENT AND REPAIR.

3. All pins, pivot points, and bearing surfaces should be protected with a THIN coat of any good SAE20 motor oil. Do not oil excessively.
4. When the tool is not in use, keep handles closed to prevent objects from becoming lodged in the crimping dies. Store the tool in a clean, dry area.

2-2. PERIODIC INSPECTION.

A. LUBRICATION.

Lubricate all pins, pivot points, and bearing surfaces with SAE20 motor oil as follows:

- Tool used in daily production - lubricate daily
- Tool used daily (occasional) - lubricate weekly
- Tool used weekly - lubricate monthly

Wipe excess oil from tool, particularly from crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.

B. VISUAL INSPECTION.

1. Close tool handles until ratchet releases and then allow them to open freely. If they do not open quickly and fully, the spring is defective and must be replaced. See section 2-3, REPLACEMENT AND REPAIR.
2. Inspect the head for worn, cracked or broken areas. If damage is evident, return the tool to AMP for evaluation and repair. See section 2-3 REPLACEMENT AND REPAIR.

C. CRIMP HEIGHT INSPECTION.

This inspection requires the use of a modified micrometer with a modified anvil as shown in Figure 4.

Proceed as follows:

1. Select a contact and maximum size wire for the crimping chamber.
2. Refer to Section 1-3 CRIMPING PROCEDURE and crimp contact accordingly.
3. Using a crimp height comparator, measure the wire barrel crimp height as shown in Figure 4. If the crimp height conforms to that height, the tool is considered dimensionally correct. If not, the tool must be returned to AMP for evaluation and repair. See Section 2-3, REPLACEMENT AND REPAIR.

For additional information concerning the use of the crimp height comparator, refer to AMP Instruction Sheet 408-7424 .

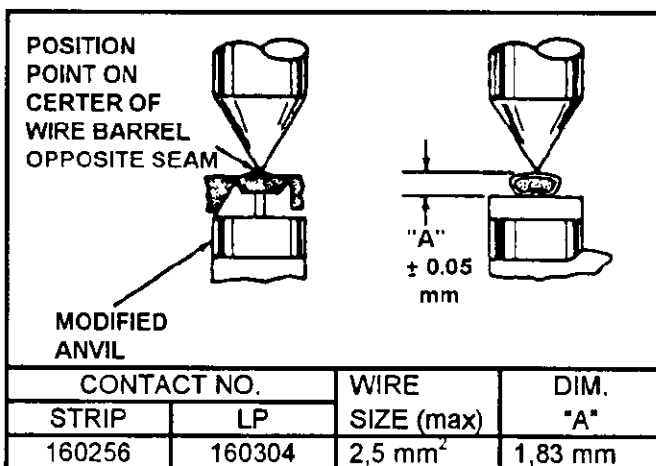


FIGURE 4

D. CERTI-CRIMP RATCHET INSPECTION.

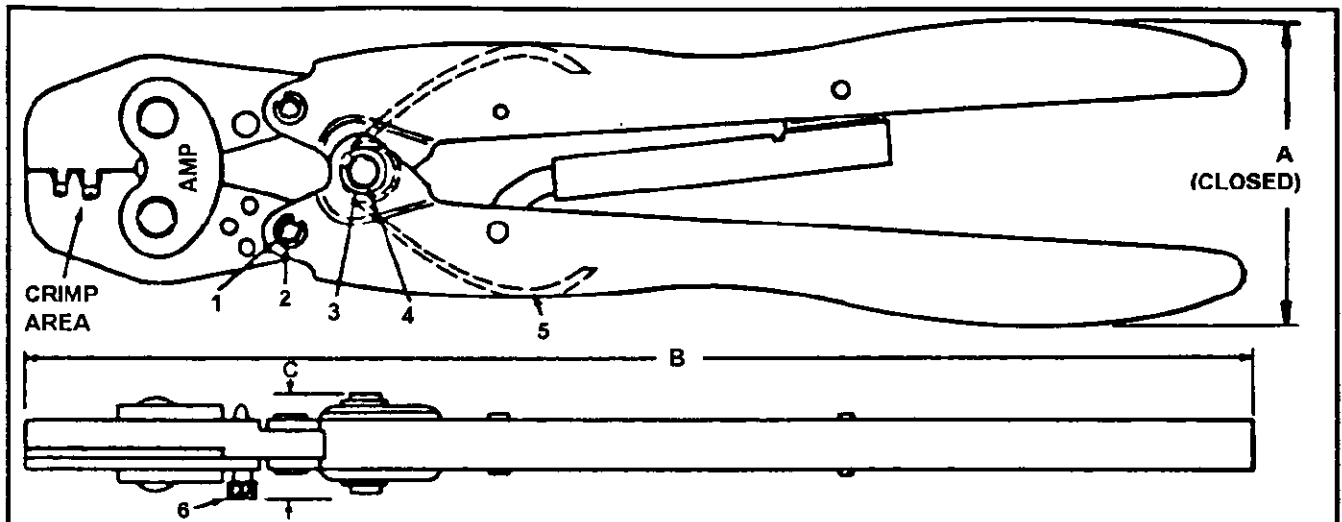
The CERTI-CRIMP ratchet feature on AMP hand tools should be checked to ensure that the ratchet does not release prematurely, allowing the dies to open before they are fully bottomed. Obtain a 0,025 mm [.001 inch] shim that is suitable for checking the clearance between the bottoming surfaces of the crimping dies and proceed as follows:

1. Select a contact and maximum size wire for the hand tool.
2. Position the contact and wire between the crimping dies as described in Section 1-3. CRIMPING PROCEDURE.
3. Holding the wire in place, squeeze the handles until the CERTI-CRIMP ratchet releases. Hold the handles in this position, maintaining just enough tension to keep the dies closed.
4. Check the clearance between the bottoming surfaces of the crimping dies. If the clearance is 0,025 mm [.001 inch] or less, the ratchet is satisfactory. If clearance exceeds 0,025 mm [.001 inch], the ratches is out of adjustment and must be repaired. See Section 2-3 REPLACEMENT AND REPAIR.

2-3. 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 AMP representative.

Parts other than those specified in Figure 5 must be replaced by AMP to ensure reliability of the tool. Tools must be returned to AMP for evaluation and repair.



TOOL SPECIFICATIONS		REPLACEMENT PARTS		
DIMENSION (max)	ITEM	DESCRIPTION	PARTNUMBER	
A 8,5 cm	1	RING - RETAINING	21045-3	
B 28,5 cm	2	PIN - RETAINING	1-23619-6	
C 2,3 cm	3	RING - RETAINING	21045-6	
	4	PIN - RETAINING	2-23620-9	
	5	SPRING - HANDLE	39364	
	6	INSULATION ADJ. PIN	39207	

FIGURE 5