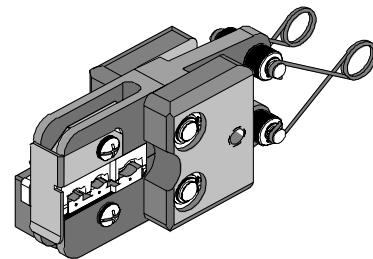




**Air Powered Crimp Tool Head**  
**Operating Instruction Sheet and Specifications**  
**Part No. 64005-0100**  
**Engineering No. AT 1990**  
**(Replaces 19283-0001)**



## FEATURES

- Quick-change tool head for the 19279-0001 (AT-200)
- Tooling kit is interchangeable with other kits in the 64001 and 64003 Series
- A precision user-friendly terminal locator wire stop holds terminals in the proper crimping position for each of the three nests
- Insulation crimp adjustment allows a precise insulation crimp. To meet or exceed the requirements of UL, CSA and Military Class II
- 3-nested tool eliminates the need for additional tools
- Pneumatic powered crimp tools help reduce fatigue and discomfort from repetitive manual crimping

## SCOPE

Avikrimp® and InsulKrimp® Terminals and Splices 10 – 22 AWG, (Rings, Spades, Hooks, Block Spades and Flanged Spades). Also terminates ends of step down butt splice 10-12 to 14 - 16 AWG and 14 - 16 to 18 - 22 AWG. This tool head is intended for use in the 19279-0001 (AT-200) either hand held or with optional bench adapter 19078-0307 (ATBA) and foot switch.

### Testing

#### Mechanical

The tensile test, or pull test, is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL and Government specifications (MIL-T-7928) for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate the terminal from the conductor.

Wire Size (AWG)	*UL - 486 A	*UL - 486 C	**Military Class 2
22	8	8	15
20	13	10	19
18	20	10	38
16	30	15	50
14	50	25	70
12	70	35	110
10	80	40	150

\*UL - 486 A - Terminals (Copper conductors only)

\*UL - 486 C - Butt Splices, Parallel Splices

\*\*Military Class 2— Military Approved Terminals only as listed

The following is a partial list of the product part numbers and their specifications that this tool is designed to run. We will be adding to this list and an up to date copy is available on [www.molex.com](http://www.molex.com).

Wire Size: 18 – 22 AWG 0.80 – 0.35mm <sup>2</sup>					
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Insul. Dia. Max.	
		In	mm	In	mm
19023-0005	AMCT-2X	.312	7.93	.145	3.68
19023-0007	AMMCT-2X	.234	5.95		
19025-0001	AMCT-5	.312	7.93	.140	3.55
19025-0002	AMCT-57	.312	7.93	.140	3.55

Wire Size: 18 – 22 AWG 0.80 – 0.35mm <sup>2</sup>					
Terminal No.	Terminal	Wire Strip Length		Insul. Dia. Max.	
		In	mm	In	mm
19026-0003	AMCT-8	.312	7.93	.140	3.55
19026-0004	AMCT-87	.312	7.93		
19034-0001	A-769	.312	7.94	.145	3.68
19034-0002	A-259X	.312	7.94	.145	3.68























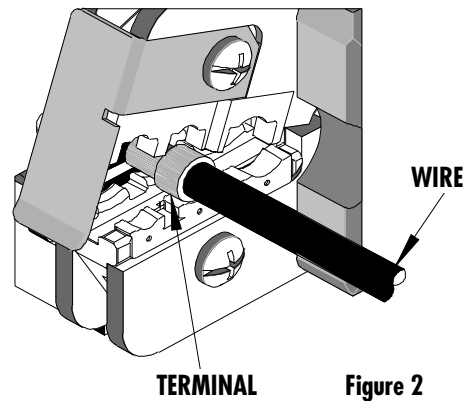
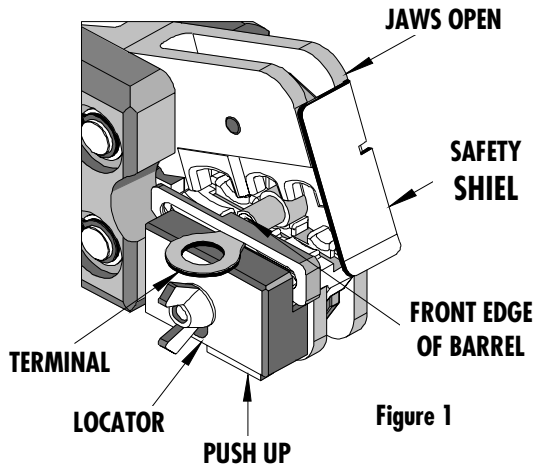


## OPERATION

Refer to the instruction manual for the 19279-0001 (AT-200) for mounting this crimp tool head.

### Crimping Terminals

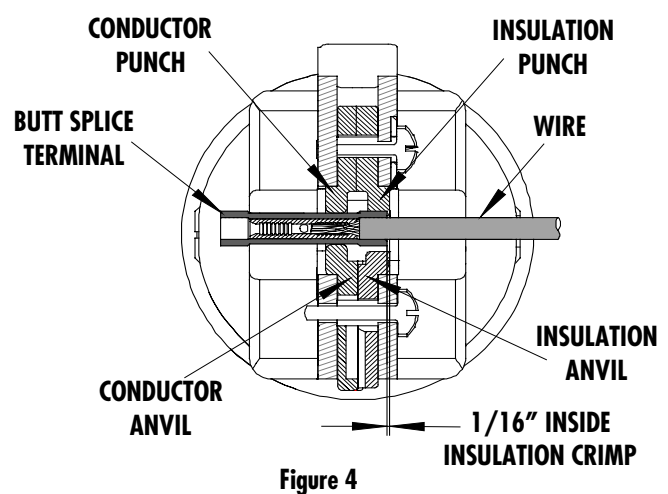
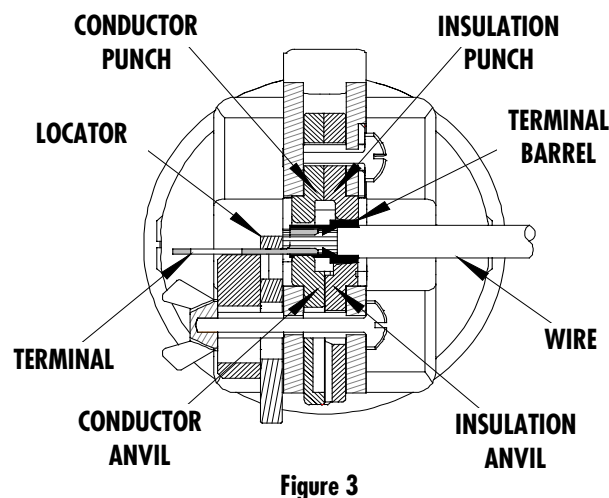
1. Adjust the locator up or down until the terminal being run sits flat and straight in the tool.
2. Insert the wire into the terminal. Push up on the locator blade and push the terminal and wire with the barrel facing up into the proper color-coded nest with front edge of the barrel against the locator (See Figure 1). Release the locator blade to hold the terminal in position.



**Caution:** Never operate this tool without the supplied safety shield in place. Never place fingers in the tool nests.

3. Push on wire to assure it is still fully seated in the terminal. See Figure 2 and 3. Cycle the tool.
4. Lift the locator blade or wire stop and remove the crimped terminal. Inspect for proper crimp location, and check for insulation closure. Locator is adjustable up and down to keep terminals straight after crimping.
5. When crimping butt splices the locator must be removed and the splice visually aligned with the tooling  $1/16$ " inside the insulation crimp. See Figure 4.

**Note:** Whenever crimping without the locator, make sure the seam of the terminal is oriented up or down in the tool if using unbrazed product, as this will provide higher pull force values.



- If the insulation part of the crimp needs to be adjusted, first disconnect air source and loosen the M4 screw on the bottom tool jaw, then insert a 3/32" hex wrench (supplied) into the bottom of the lower die (See Figure 5). A clockwise (CW) rotation decreases insulation crimp while a counter-clockwise (CCW) rotation increases insulation crimp. After adjusting retighten the M4 screw. Reconnect air source.

### Maintenance

It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

- Remove dust, moisture and other contaminants with a clean brush, or soft, lint-free cloth.
- Do not use any abrasive materials that could damage the tool.
- Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. This tool was engineered for durability, but like any fine piece of equipment it needs cleaning and lubrication for a maximum service life of trouble-free crimping. A light oil, such as 30 weight automotive oil, used at the oil points shown in Figure 5, every 5,000 crimps or monthly will significantly enhance the tool life and ensure a stable calibration.
- When tool is not in use store the tool in a clean, dry area.

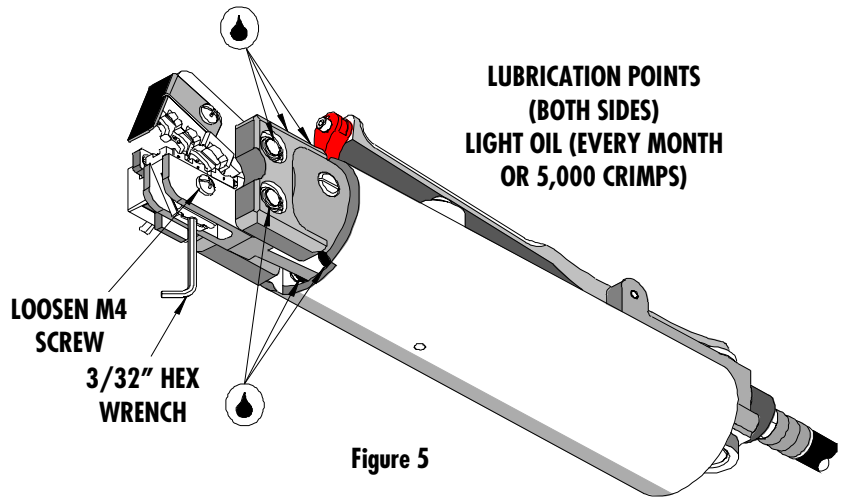
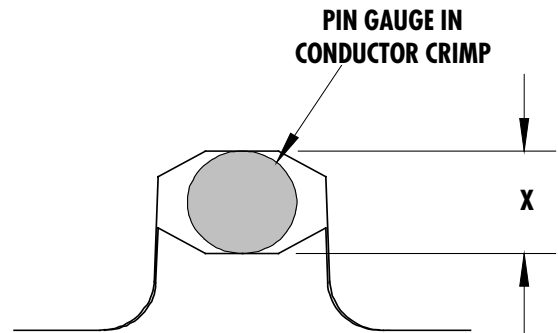


Figure 5

### Tool Calibration

A Certificate of Calibration (see last page) was supplied with the tool. To recalibrate this tool, pin gauge measurements should be taken in each conductor nest and compared to this chart. The tool should be lubricated prior to recalibration to ensure consistent measurements.



"Confining" Crimp

Nest Color Code	Wire Range		"X" Dimension Conductor Crimp			Crimp Inspection Marking
	AWG	mm <sup>2</sup>	Mean	Go	No Go	
Red	18 - 22	0.35 - 0.80	.108	.104	.112	o
Blue	14 - 16	1.30 - 2.00	.117	.112	.122	o o
Yellow	10 - 12	3.30 - 5.00	.147	.143	.152	o

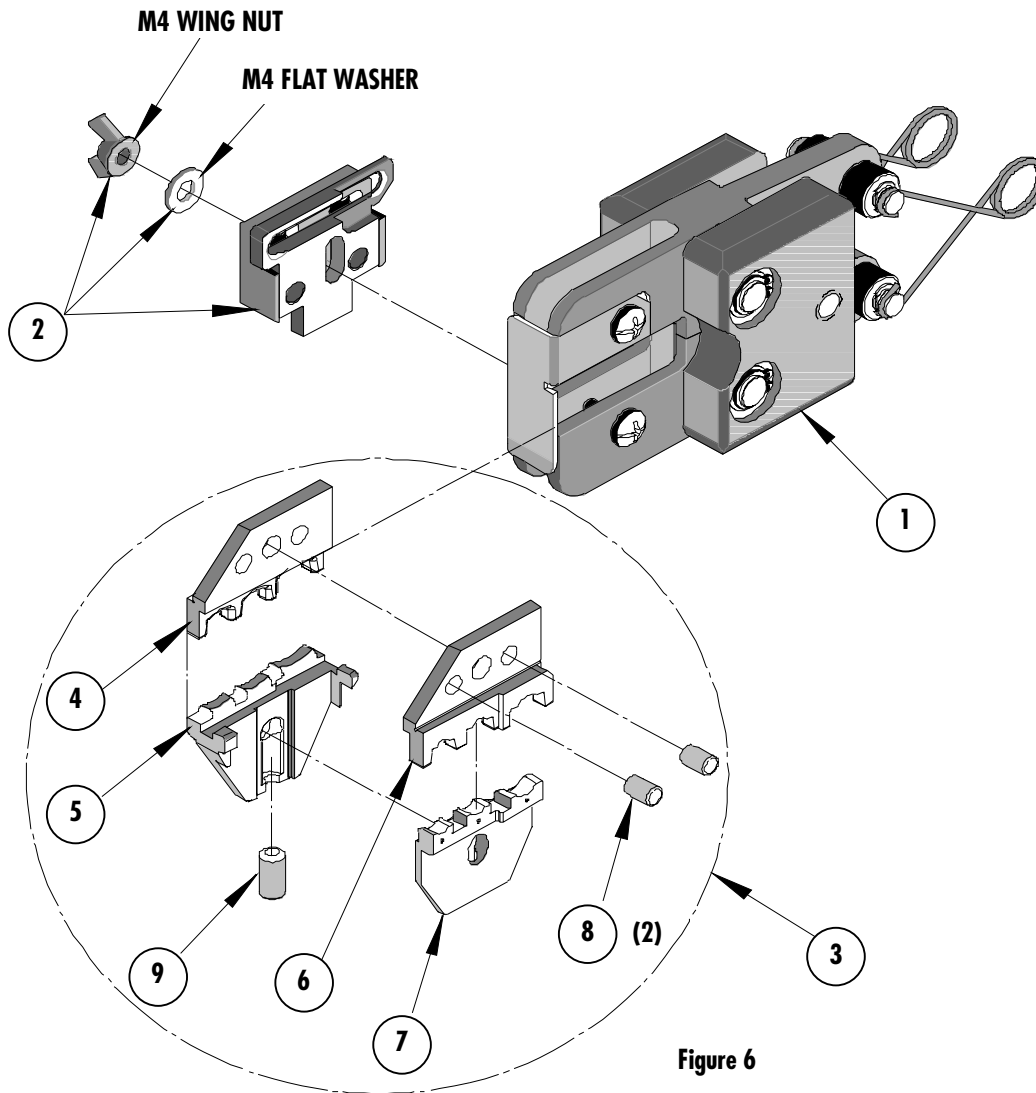
### Warranty

This tool is for electrical terminal crimping purposes only. This tool is made of the best quality materials. All vital components are long-life tested. All tools are warranted to be free of manufacturing defects for a period of **30 days**. Should such a defect occur, we would repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused or damaged tools.

**PARTS LIST**

Item	Order No	Description	Quantity
	<b>64005-0100</b>	<b>Crimp Tool Head</b>	<b>Figure 6</b>
1	64005-0000	Basic Air Tool Head	1
2	64005-0175	Locator Assembly	1
3	64001-0170	Tooling Kit	1
<b>Tooling Kit Only</b>			
4	64001-0114	Conductor Punch	1
5	64001-0112	Conductor Anvil	1
6	64001-0115	Insulation Punch	1
7	64001-0113	Insulation Anvil	1
8	N/A	4 mm Dia. by 5.0mm Long Roll Pins	2**
9	N/A	#10-32 by 5/16" Long Cup Point Set Screw	1**

\*\* The following purchased parts are available from an Industrial supply company such as MSC (1-800-645-7270).



**Parts List (Continued)**

Item	Order No.	Description	Quantity
	<b>64005-0000</b>	<b>Basic Air Tool Head</b>	<b>Figure 7</b>
1	64005-0103	Nose Guard	1
2	64000-0077	Repair Kit (Springs, Rods, Pivots, Rings, and Washers)	1
3	N/A	M4 by 12 Long Freedrive Pan Head Screw	1**
4	N/A	M4 by 30 Long Freedrive Pan Head Screw	1**
5	N/A	3/16" by 3/8" Long Dowel Pin	1**

\*\* The following purchased parts are available from an Industrial supply company such as (MSC 1-800-645-7270).

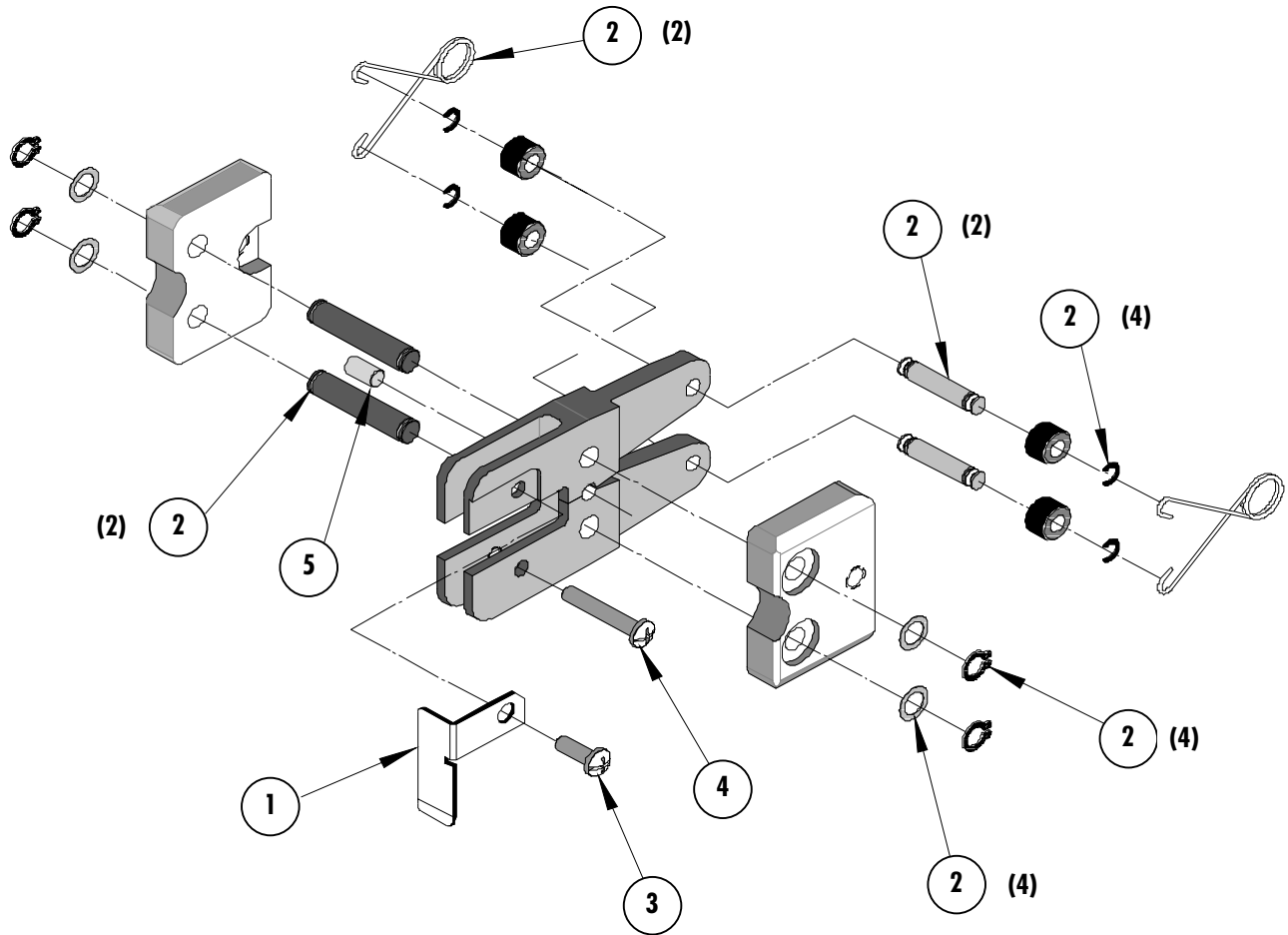
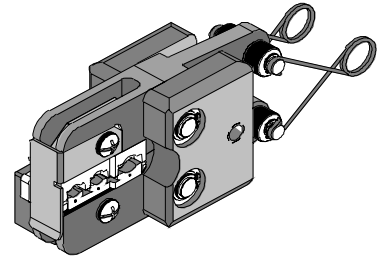


Figure 7





### Certificate of Calibration



Tool Order Number \_\_\_\_\_

Tool Eng. Number \_\_\_\_\_

Tool Revision \_\_\_\_\_

Serial Number \_\_\_\_\_

Date of Manufacture \_\_\_\_\_

Pin Gauge of Conductor Nest/Nests or Slug height if the nest is the "F" Crimp style.

Range Conductor Nest # 1 = \_\_\_\_\_ - Actual = \_\_\_\_\_ -

Range Conductor Nest # 2 = \_\_\_\_\_ - Actual = \_\_\_\_\_ -

Range Conductor Nest # 3 = \_\_\_\_\_ - Actual = \_\_\_\_\_ -

Technician \_\_\_\_\_ -

Date of Calibration \_\_\_\_\_ -

Calibration should be done every 5,000 cycles or 3 months.  
Tools should be lubricated during this operation.

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