

**Air Powered
Crimp Tool Head
AviKrimp™**

**Application Tooling
Specification Sheet**

**Order No. 64005-7300
Engineering No. AT 2210**

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.
- Insulation crimp adjustment allows a precise insulation crimp. To meet or exceed the requirements of UL, CSA and Military Class II
- Pneumatic powered crimp tools help reduce fatigue and discomfort from repetitive manual crimping.
- Single color-coded crimp pocket eliminates the possibility of using the wrong pocket

SCOPE

Products: AviKrimp™ Female Quick Disconnect 10-12 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 specifications 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 - 310
12	70
10	80

*UL – 310 – Quick Disconnects

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.

Wire Size: 10 – 12 AWG 5.00 – 3.30mm ²					
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Insulation Diameter Max.	
	▶ Available in Reel form only	In	mm	In	mm
19019-0037	C-8143	.375	9.53	.150	3.81
▶ 19019-0038	C-8143T	.375	9.53	.150	3.81

OPERATION

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

Crimping Terminals

1. There are 2 tab locator blades supplied with the tool. One is for .187 and .250 tabs; the other is for .205 tabs and .110 tabs. Make sure the proper blade is installed on the top of the locator and the other is stored on the bottom of the locator.
2. Insert the wire into the terminal. Push the terminal and wire onto the tab locator all the way to the stop in the proper color-coded nest. The barrel of the terminal should be up. See Figure 1.

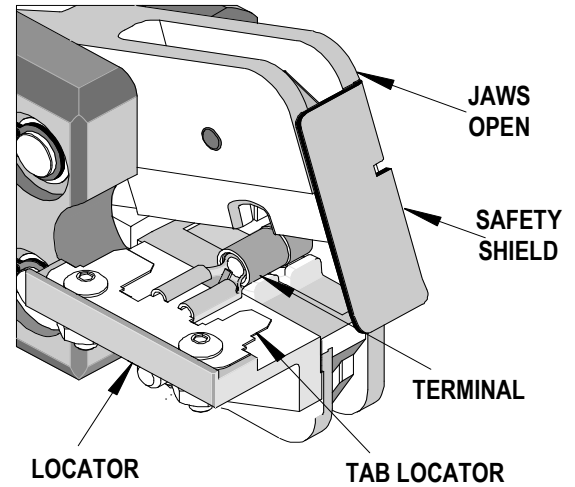


Figure 1

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

3. Push on the wire to assure it is still fully seated in the terminal. The wires end should butt against the wire stop stamped into each terminal. See Figure 2 and 3. Cycle the tool.

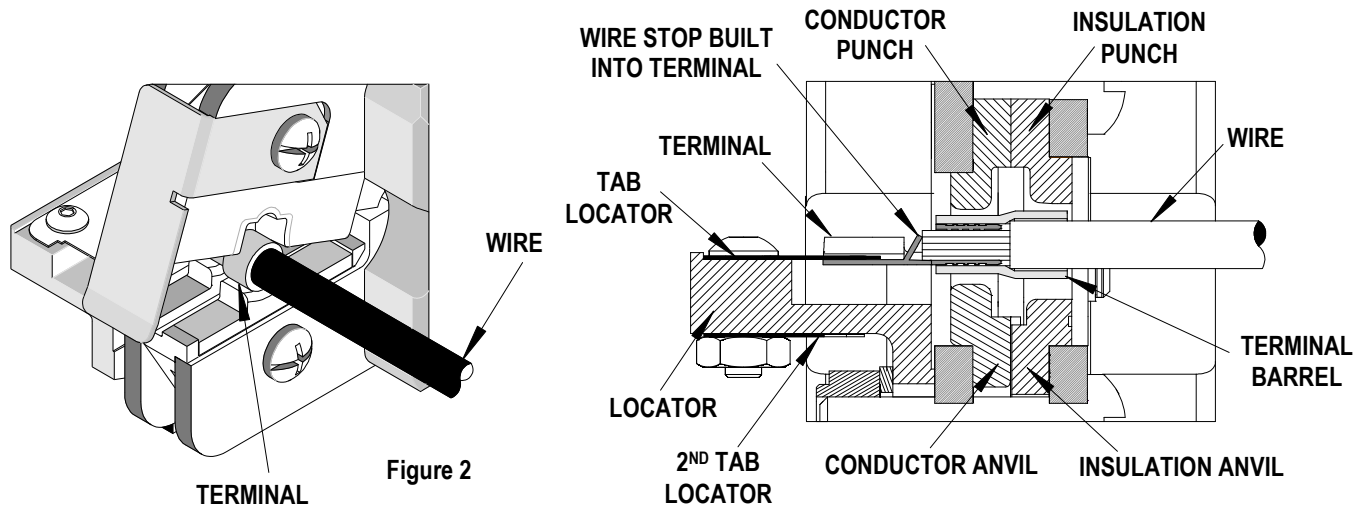


Figure 3

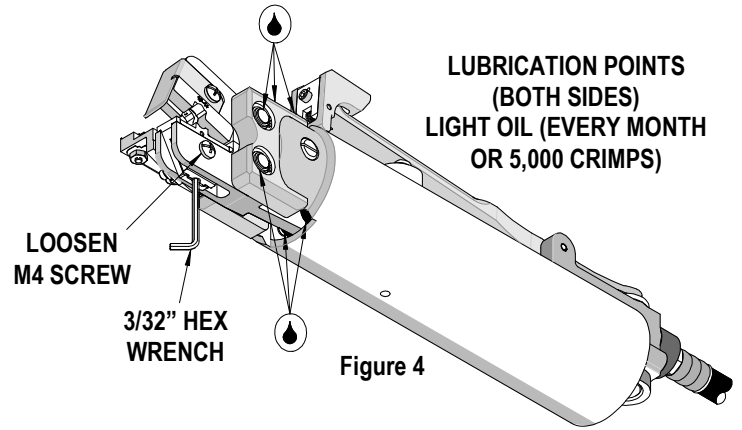
4. Remove the crimp and inspect for proper crimp location, and check for insulation closure. Molex offers a Crimp Inspection Handbook for closed barrel industrial product. See our website or contact your sales engineer.
5. If the insulation part of the crimp needs to be adjusted, first disconnect the air source and loosen the M4 screw on the bottom tool jaw and insert a 3/32 hex wrench (supplied) into the bottom of the lower die (See Figure 4). A clockwise (CW) rotation decreases insulation crimp while a counter-clockwise (CCW) rotation increases insulation crimp. After adjusting retighten the M4 screw. Reconnect the air source.

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.

Maintenance

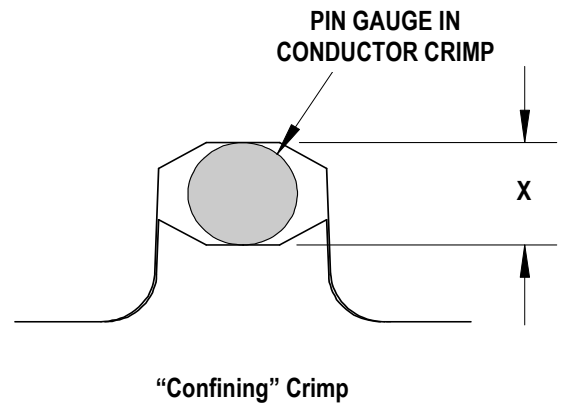
It is recommended that each operator of the tool be made aware of, and responsible for, the following maintenance steps:

1. Remove dust, moisture and other contaminants with a clean brush, or soft, lint-free cloth.
2. Do not use any abrasive materials that could damage the tool.
3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. The 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. Use a light oil such as 30 weight automotive oil is at the oil points shown in Figure 4, every 5,000 crimps or monthly will significantly enhance the tool life and ensure a stable calibration.
4. When tool is not in use store the tool in a clean, dry area.



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.



Nest Color Code	Wire Range		"X" Dimension Conductor Crimp			Crimp Inspection Marking
	AWG	mm ²	Mean	Go	No Go	
Yellow	10 - 12	5.00-3.30	.145	.140	.148	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.

CAUTION: Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling.

PARTS LIST

Item	Order No	Description	Quantity
	64005-7300	Crimp Tool Head	Figure 5
1	64005-0000	Basic Air Tool Head	1
2	64001-0275	Locator Assembly	1
3	64001-7370	Tooling Kit	1
Tooling Kit Only			
4	64001-7301	Conductor Punch	1
5	64001-7302	Conductor Anvil	1
6	64001-7304	Insulation Punch	1
7	64001-7303	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**
** Available from an Industrial supply company such as MSC (1-800-645-7270).			

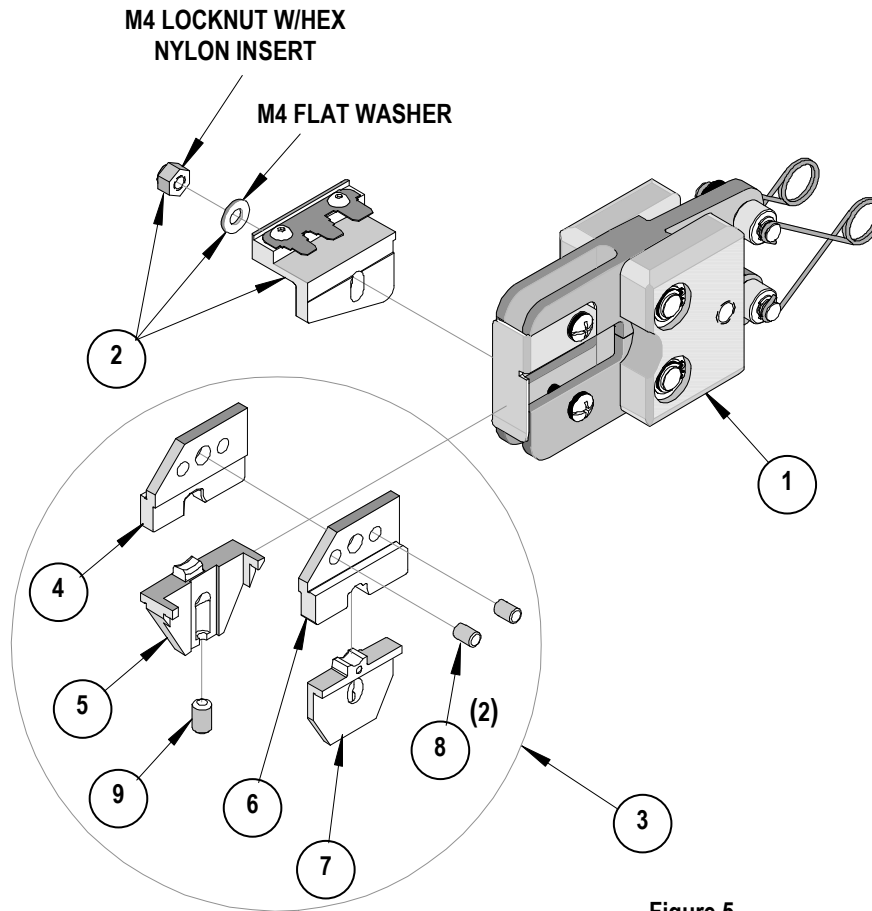


Figure 5

Parts List (Continued)

Item	Order No.	Description	Quantity
	64005-0000	Basic Air Tool Head	Figure 6
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**

** Available from an Industrial supply company such as MSC (1-800-645-7270).

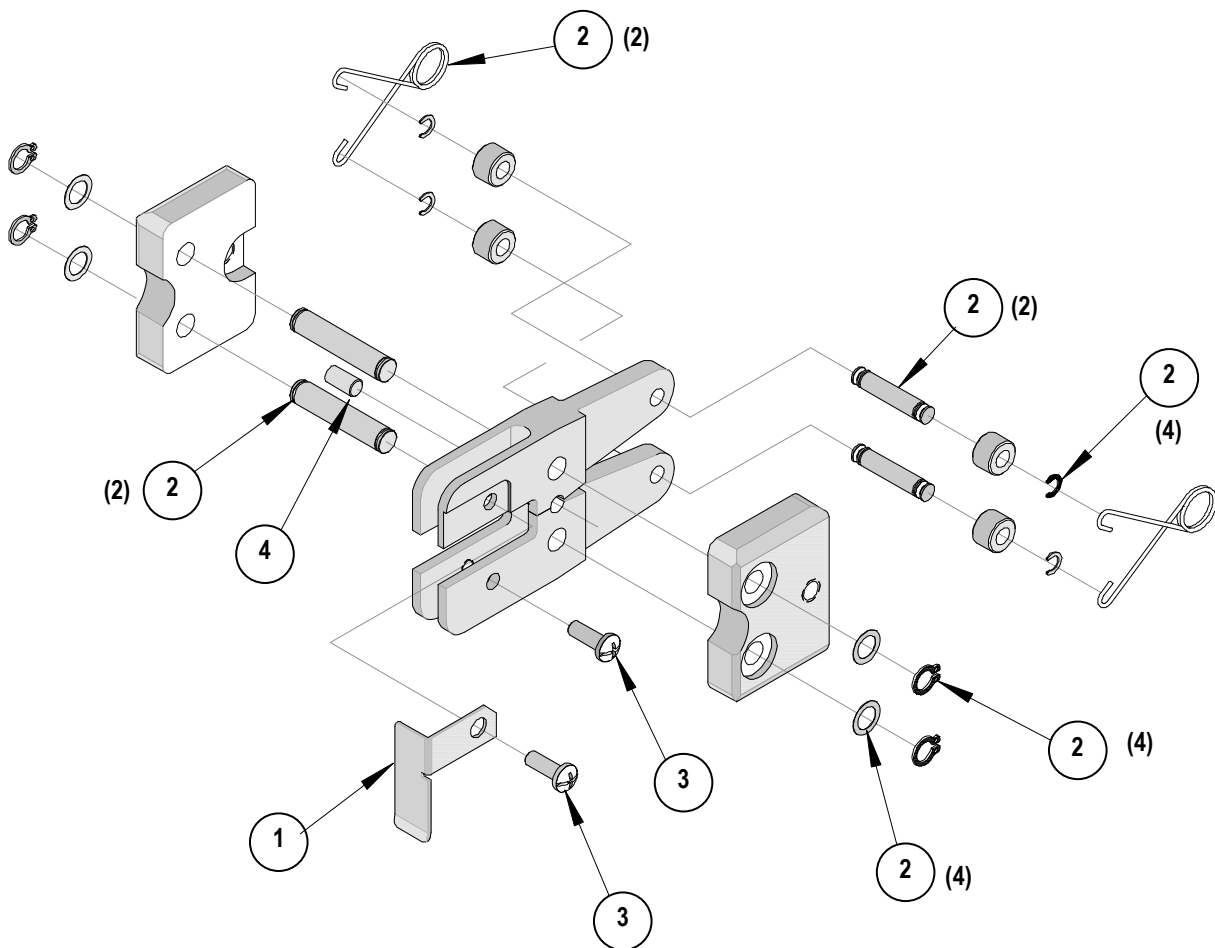
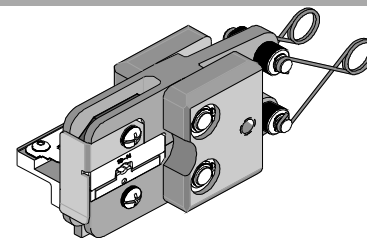


Figure 6



**Air Powered
Crimp Tool Head
Avikrimp™**

Certificate of Calibration

**Order No. 64005-7300
Engineering No. AT 2210**

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 = _____ -

Technician _____ -

Date of Calibration _____ -

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

Visit our Web site at <http://www.molex.com>