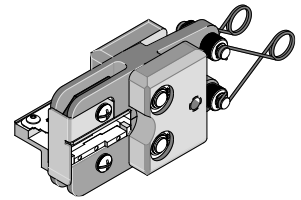


Air Powered
Crimp Tool Head
Insulkrimp™



Type AT

Application Tooling Specification Sheet

Order No. 64005-0400
Engineering No. AT 1994

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
- 3-nested tool eliminates the need for additional tools
- Pneumatic powered crimp tools help reduce fatigue and discomfort from repetitive manual crimping

SCOPE

Products: Insulkrimp™ Quick Disconnects Terminals 10–22 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 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
22	8
20	13
18	20
16	30
14	50
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: 18 – 22 AWG 0.80 – 0.35mm ²					
Terminal No.	Terminal Eng. No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In	mm	In	mm
19003-0001	AA-2201	.234	5.94	.135	3.43
19003-0005	AA-2201VN	.234	5.94	.135	3.43
19003-0008	AA-2201X	.234	5.94	.230	5.84

Wire Size: 18 – 22 AWG 0.80 – 0.35mm ²					
Terminal No.	Terminal Eng. No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In	mm	In	mm
19003-0011	AA-2202	.234	5.94	.135	3.43
19003-0014	AA-2202X	.234	5.94	.230	5.84
19003-0017	AA-2203	.234	5.94	.135	3.43

Wire Size: 18 – 22 AWG 0.80 – 0.35mm ²					
Terminal No.	Terminal Eng. No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In	mm	In	mm
19003-0018	AA-2203-BK	.234	5.94	.135	3.43
19003-0021	AA-2203X	.234	5.94	.230	5.84
19003-0024	AA-2204	.234	5.94	.135	3.43
19003-0027	AA-2204X	.234	5.94	.230	5.84
19003-0030	AA-2205	.234	5.94	.135	3.43
19003-0033	AA-2205X	.234	5.94	.230	5.84
19003-0036	AA-2213	.234	5.94	.135	3.43
19003-0038	AA-2214	.234	5.94	.135	3.43
19023-0053	190230053	.234	5.94	.135	3.43
19023-0062	190230062	.234	5.94	.135	3.43
19164-0012	SAA-2140	.203	5.16	.215	5.46
19276-0002	AA-2201-LIF	.234	5.94	.135	3.43

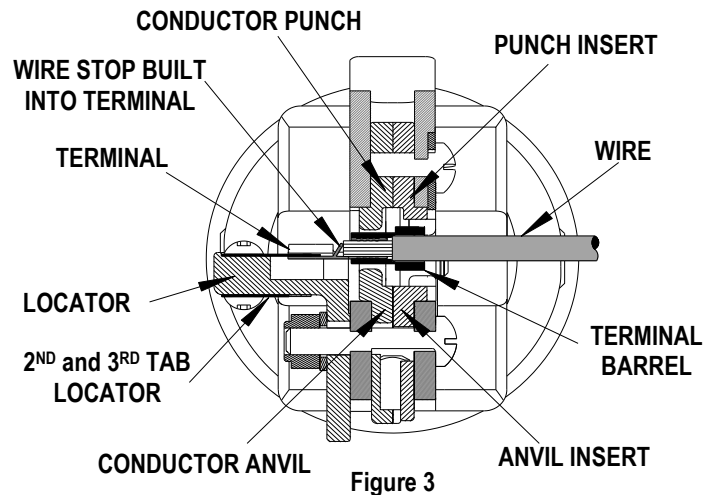
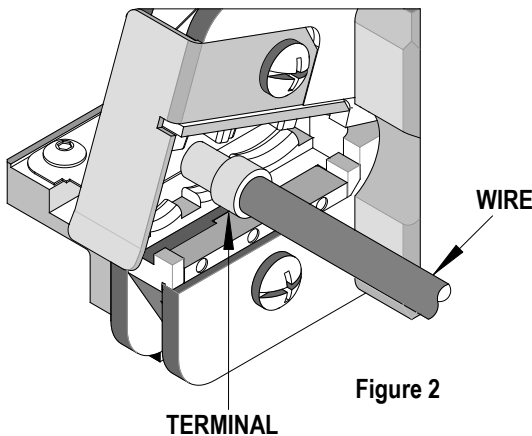
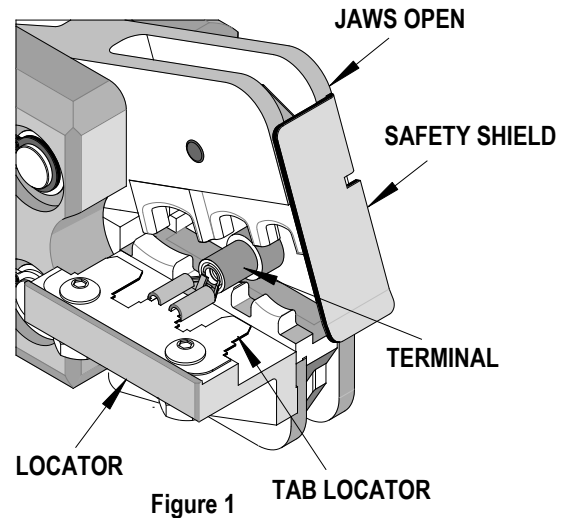
Wire Size: 14 – 16 AWG 2.00 – 1.30mm ²					
Terminal No.	Terminal Eng. No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In	mm	In	mm
19003-0040	BB-2206	.250	6.35	.160	4.06
19003-0044	BB-2206VB	.250	6.35	.160	4.06
19003-0047	BB-2206X	.250	6.35	.260	6.60
19003-0050	BB-2207	.250	6.35	.160	4.06
19003-0053	BB-2207X	.250	6.35	.260	6.60
19003-0056	BB-2208	.250	6.35	.160	4.06
19003-0059	BB-2208X	.250	6.35	.260	6.60
19003-0062	BB-2215	.250	6.35	.160	4.06
19003-0063	BB-2216	.250	6.35	.160	4.06
19040-0166	19040-0166	.250	6.35	.160	4.06
19164-0047	SBB-2141	.203	5.16	.240	6.09
19276-0005	BB-2206-LIF	.250	6.35	.160	4.06

OPERATION

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

Crimping Terminals

1. There are 3 Tab Locator Blades supplied with the tool. One is for .187 and .250 Tabs; one is for .205 Tabs and .110 Tabs and a third is for LIF connectors. 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. Push the terminal and the 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.



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 wire's end should butt against the wire stop stamped into each terminal. See Figure 2 and 3. Cycle the tool.
4. Remove the crimp and inspect for proper crimp location. 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 righten 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. 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. Use a light oil such as 30 weight automotive oil 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.

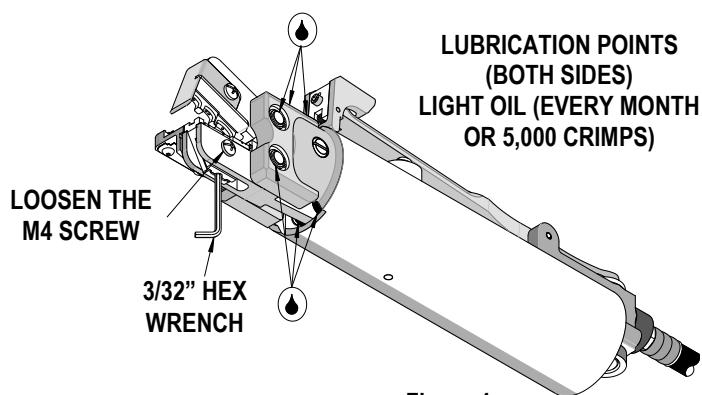
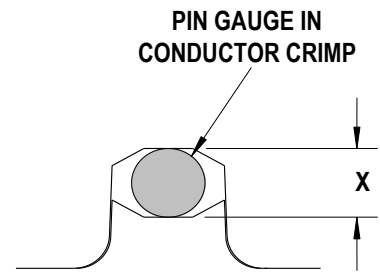


Figure 4

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 ²	Mean	Go	No Go	
Red	18 - 22	0.35 - 0.80	.069	.066	.072	OO
Blue	14 - 16	1.30 - 2.00	.092	.089	.095	O
Yellow	10 - 12	3.30 - 5.00	.100	.097	.103	OO

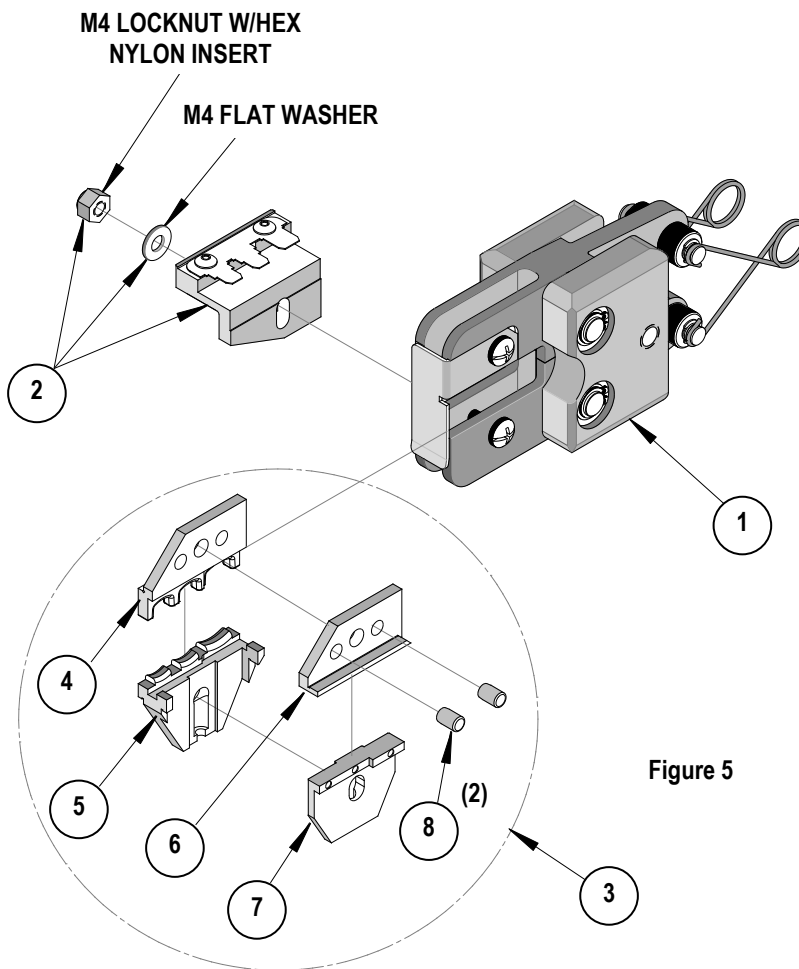
Warranty

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
	64005-0400	Crimp Tool Head	Figure 5
1	64005-0000	Basic Air Tool Head	1
2	64001-0475	Locator Assembly	1
3	64001-0470	Tooling Kit	1
Tooling Kit Only			
4	64001-0214	Conductor Punch	1
5	64001-0212	Conductor Anvil	1
6	64001-0312	Insert Punch	1
7	64001-0311	Insert Anvil	1
8	N/A	4mm Diameter. by 5.0mm Long.Roll Pins	2**
** Available from an Industrial supply company such as (MSC 1-800-645-7270).			



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).

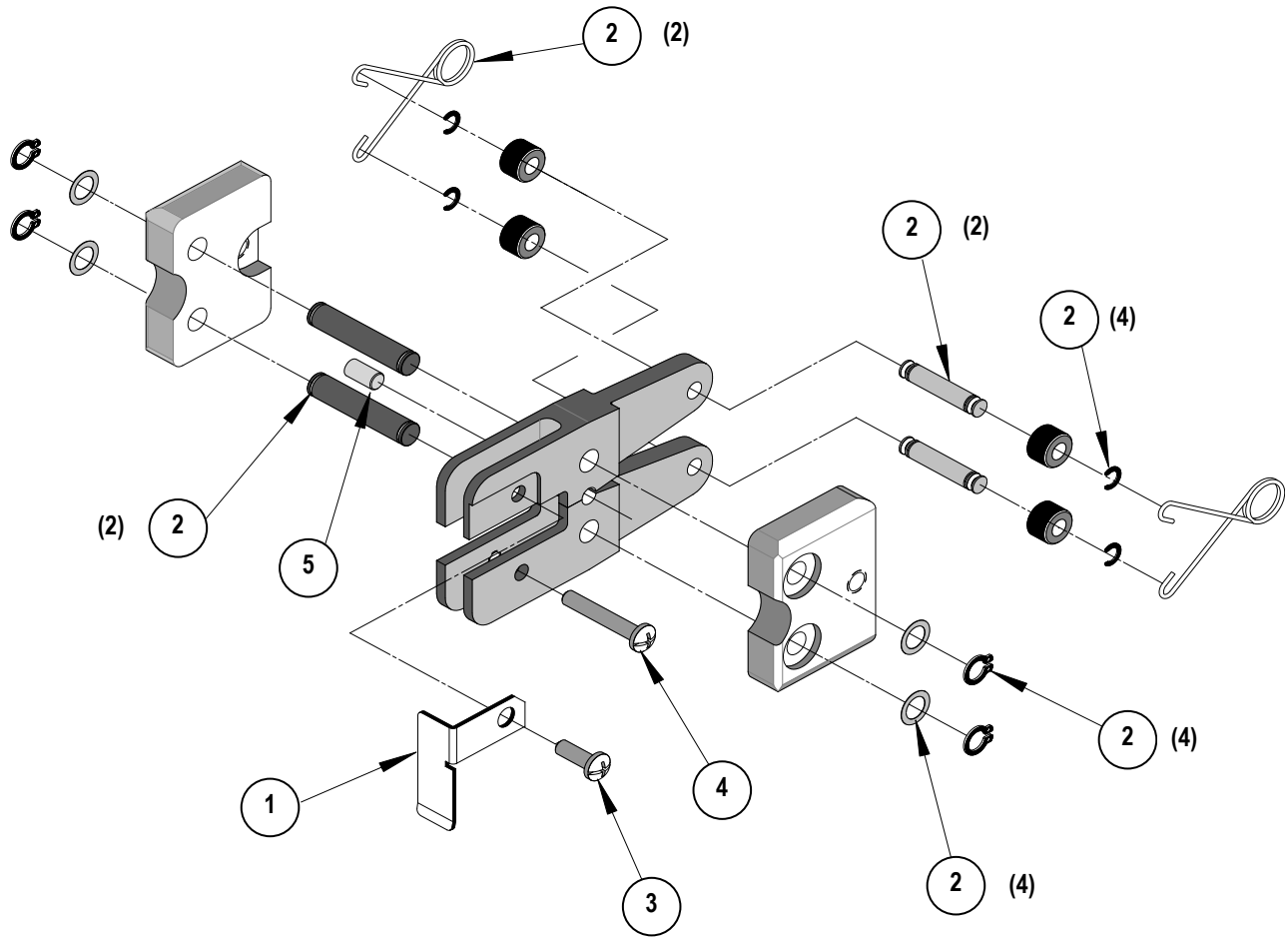
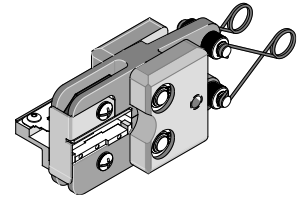


Figure 6

**Air Powered
Crimp Tool Head
Insulkrimp™**



Certificate of Calibration

**Order No. 64005-0400
Engineering No. AT 1994**

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.

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