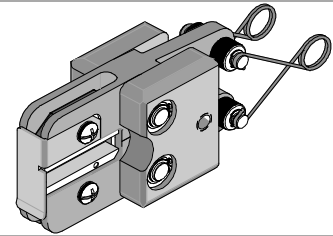


**molex****Air Powered  
Crimp Tool Head****Application Tooling  
Specification Sheet****Order No. 64005-2500  
Engineering No. AT 2080****FEATURES**

- 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
- Pneumatic powered crimp tools help reduce fatigue and discomfort from repetitive manual crimping

**SCOPE**

Products: Nylon closed end connectors 8 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 – 486 C
8	45

\* UL – 486 C – Closed end connectors and Wire Nuts

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).

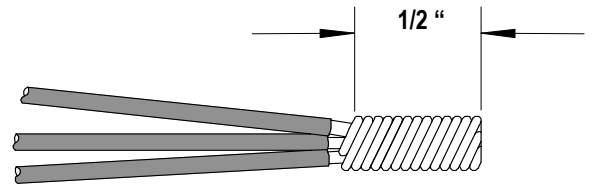
Wire Size: 8 AWG 8.50 mm <sup>2</sup>				
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length		Wire Combinations
		In	mm	
19160-0024	NC-8	Varies	Varies	See Chart 1

## OPERATION

Refer to the instruction manual for the 19279-0001 (AT200) for mounting this crimp tool head.

## Wire Preparation

For stranded wire strip leads to approximately 7/8 of an inch. Twist the wire combination even and tight. Trim stripped pre-twisted area to 1/2 of an inch and insert into connector and crimp. For more information follow the Quality Crimping Handbook.



## CHART 1

Wire Combinations for Nylon- Insulated Closed End Connectors Part No. 191600024 (NC-8)							
Wire Type	Wire Gauge (AWG)						Rating
	8	10	12	14	16	18	
Stranded only	1			1			UL & CSA
Stranded only	1				1		UL & CSA
Stranded only	1					1	UL & CSA
Stranded only	1					2	UL & CSA
Stranded only		2					UL & CSA
Stranded only		1	1				UL & CSA
Stranded only		1	1				UL & CSA
Stranded only		1		2			UL & CSA
Stranded only		1			4		UL & CSA
Stranded only		1			2		UL & CSA
Stranded only		1			1		UL & CSA
Stranded only		1				6	UL & CSA
Stranded only		1				5	UL & CSA
Stranded only		1				4	UL & CSA
Stranded only		1				3	UL & CSA
Stranded only		1				2	UL & CSA
Stranded only		1				1	UL & CSA
Stranded only			3				UL & CSA
Stranded only			2				UL & CSA
Stranded only			2	2			UL & CSA
Stranded only			2		3		UL & CSA
Stranded only			2		2		UL & CSA
Stranded only			2		1		UL & CSA
Stranded only			2			4	UL & CSA
Stranded only			2			3	UL & CSA
Stranded only			2			2	UL & CSA
Stranded only			2			1	UL & CSA
**Stranded only			1	4			UL & CSA
Stranded only			1	3			UL & CSA
Stranded only			1	2			UL & CSA
Stranded only			1	1			UL & CSA
Stranded only			1		5		UL & CSA
Stranded only			1		4		UL & CSA
Stranded only			1		3		UL & CSA
Stranded only			1		2		UL & CSA

Wire Combinations for Nylon- Insulated Closed End Connectors Part No. 191600024 (NC-8)							
Wire Type	Wire Gauge (AWG)						Rating
	8	10	12	14	16	18	
Stranded only			1			8	UL & CSA
Stranded only			1			7	UL & CSA
Stranded only			1			6	UL & CSA
Stranded only			1			5	UL & CSA
Stranded only			1			4	UL & CSA
Stranded only			1			3	UL & CSA
Stranded only				5			UL & CSA
Stranded only				4			UL & CSA
Stranded only				4		2	UL & CSA
Stranded only				4		1	UL & CSA
Stranded only				3			UL & CSA
Stranded only				3	3		UL & CSA
Stranded only				3	2		UL & CSA
Stranded Only				3	1		UL only
Stranded only				3		5	UL & CSA
Stranded only				3		4	UL & CSA
Stranded only				3		3	UL & CSA
Stranded only				3		2	UL & CSA
Stranded only				3		1	UL & CSA
Stranded only				2	4		UL & CSA
Stranded only				2	3		UL & CSA
Stranded only				2	2		UL & CSA
Stranded only				2	1		UL & CSA
Stranded only				2		7	UL & CSA
Stranded only				2		6	UL & CSA
Stranded only				2		5	UL & CSA
Stranded only				2		4	UL & CSA
Stranded only				2		3	UL & CSA
Stranded only				2		2	UL & CSA
Stranded only				1	6		UL & CSA
Stranded only				1	5		UL & CSA
Stranded only				1	4		UL & CSA
Stranded only				1	3		UL & CSA
Stranded only				1		10	UL & CSA
Stranded only				1		9	UL & CSA
Stranded only				1		8	UL & CSA
Stranded only				1		7	UL & CSA

Wire Combinations for Nylon- Insulated Closed End Connectors Part No. 191600024 (NC-8)							
Wire Type	Wire Gauge (AWG)						Rating
	8	10	12	14	16	18	
Stranded only				1		6	UL & CSA
Stranded only				1		5	UL & CSA
Stranded only				1		4	UL & CSA
Stranded only					7		UL & CSA
Stranded only					7	1	UL & CSA
Stranded only					6		UL & CSA
Stranded only					6	3	UL & CSA
Stranded only					6	2	UL & CSA
Stranded only					6	1	UL & CSA
Stranded only					5		UL & CSA
Stranded only					5	4	UL & CSA
Stranded only					5	3	UL & CSA
Stranded only					5	2	UL & CSA
Stranded only					5	1	UL & CSA
Stranded only					4		UL & CSA
Stranded only					4	6	UL & CSA
Stranded only					4	5	UL & CSA
Stranded only					4	4	UL & CSA
Stranded only					4	3	UL & CSA
Stranded only					4	2	UL & CSA
Stranded only					4	1	UL & CSA
Stranded only					3	8	UL & CSA
Stranded only					3	7	UL & CSA
Stranded only					3	6	UL & CSA
Stranded only					3	5	UL & CSA

Wire Combinations for Nylon- Insulated Closed End Connectors Part No. 191600024 (NC-8)							
Wire Type	Wire Gauge (AWG)						Rating
	8	10	12	14	16	18	
Stranded only					3	4	UL & CSA
Stranded only					3	3	UL & CSA
Stranded only					3	2	UL & CSA
Stranded only					2	9	UL & CSA
Stranded only					2	8	UL & CSA
Stranded only					2	7	UL & CSA
Stranded only					2	6	UL & CSA
Stranded only					2	5	UL & CSA
Stranded only					2	4	UL & CSA
Stranded only					1	11	UL & CSA
Stranded only					1	10	UL & CSA
Stranded only					1	9	UL & CSA
Stranded only					1	8	UL & CSA
Stranded only					1	7	UL & CSA
Stranded only					1	6	UL & CSA
Stranded only					1	5	UL & CSA
Stranded only						12	UL & CSA
Stranded only						11	UL & CSA
Stranded only						10	UL & CSA
Stranded only						9	UL & CSA
Stranded only						8	UL & CSA
Stranded only						7	UL & CSA

\*\* - Rated 300 Volts all others 600 Volts

### Crimping Terminals

1. Hold airhead crimp tool with the locator facing up. Insert the closed end connector in the slot (8). Make sure that the shoulder of the connector is resting on the locator plate. See Figure 1.

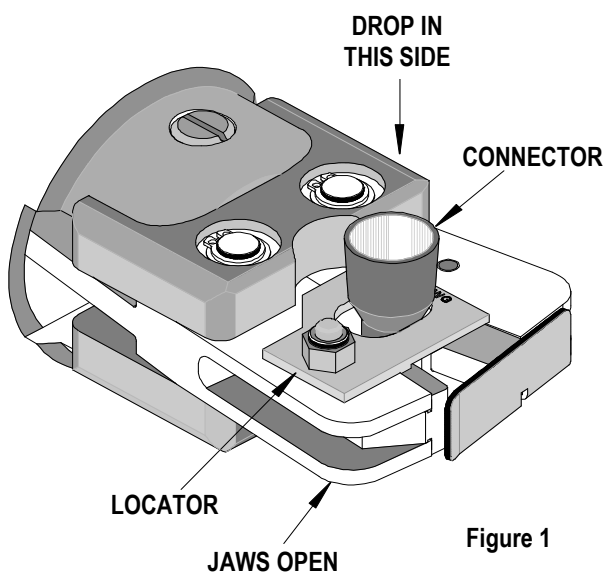


Figure 1

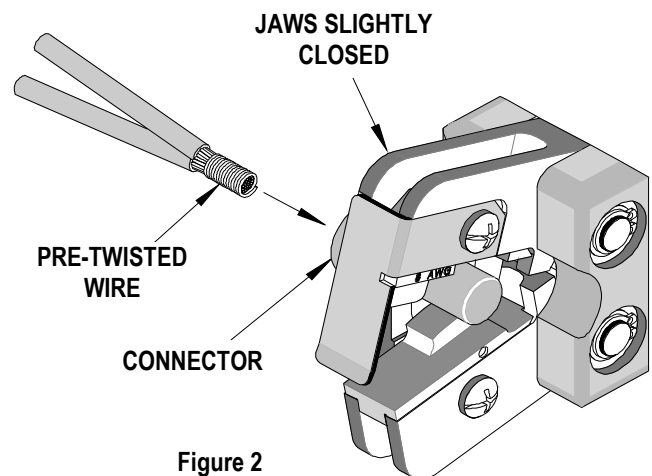


Figure 2

2. Place pre-twisted wire into closed-end connector, and then press lever on air tool. See Figure 2 and 3. Release the lever after jaws have closed.

**Note:** The tamper proof ratchet action will not release the tool until it has been fully closed.

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

**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.

3. 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.

## 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.

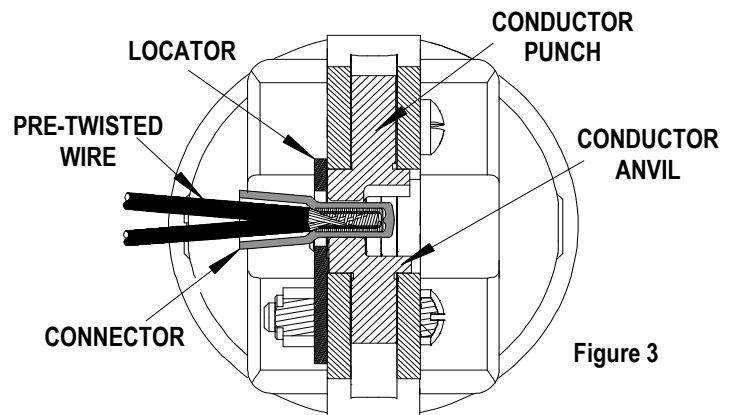


Figure 3

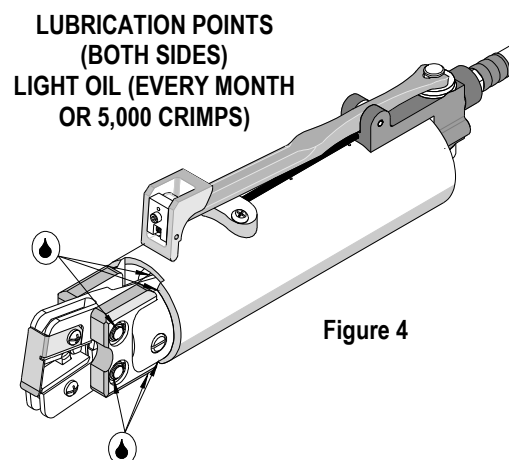
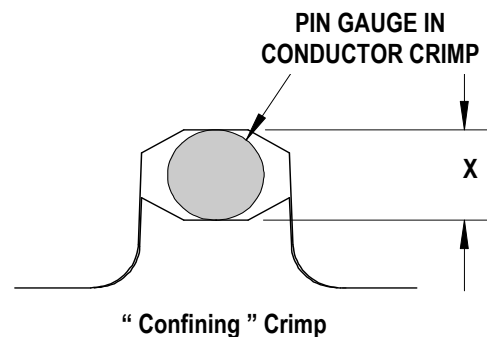


Figure 4

## 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.



Wire Range		"X" Dimension Conductor Crimp		
Awg	mm <sup>2</sup>	Mean	Go	No Go
8	8.50	.140	.136	.146

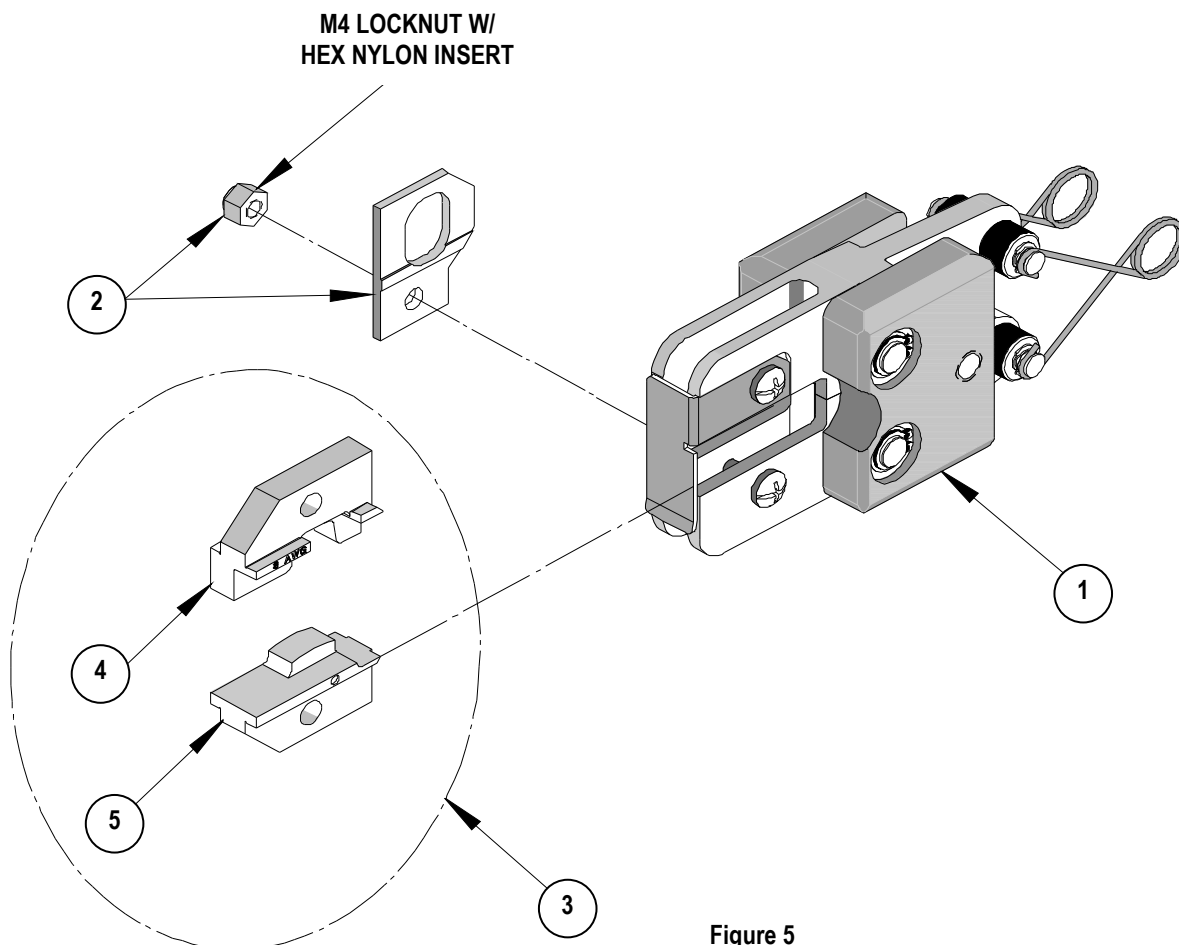
## Warranty

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 alter, 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
	<b>64005-2500</b>	<b>Crimp Tool Head</b>	<b>Figure 5</b>
1	64005-0000	Basic Air Tool Head	1
2	64001-2575	Locator Assembly	1
3	64001-2570	Tooling Kit	1
<b>Tooling Kit Only</b>			
4	64001-2501	Conductor Punch	1
5	64001-2502	Conductor Anvil	1

**Figure 5**

## Parts List (Continued)

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

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

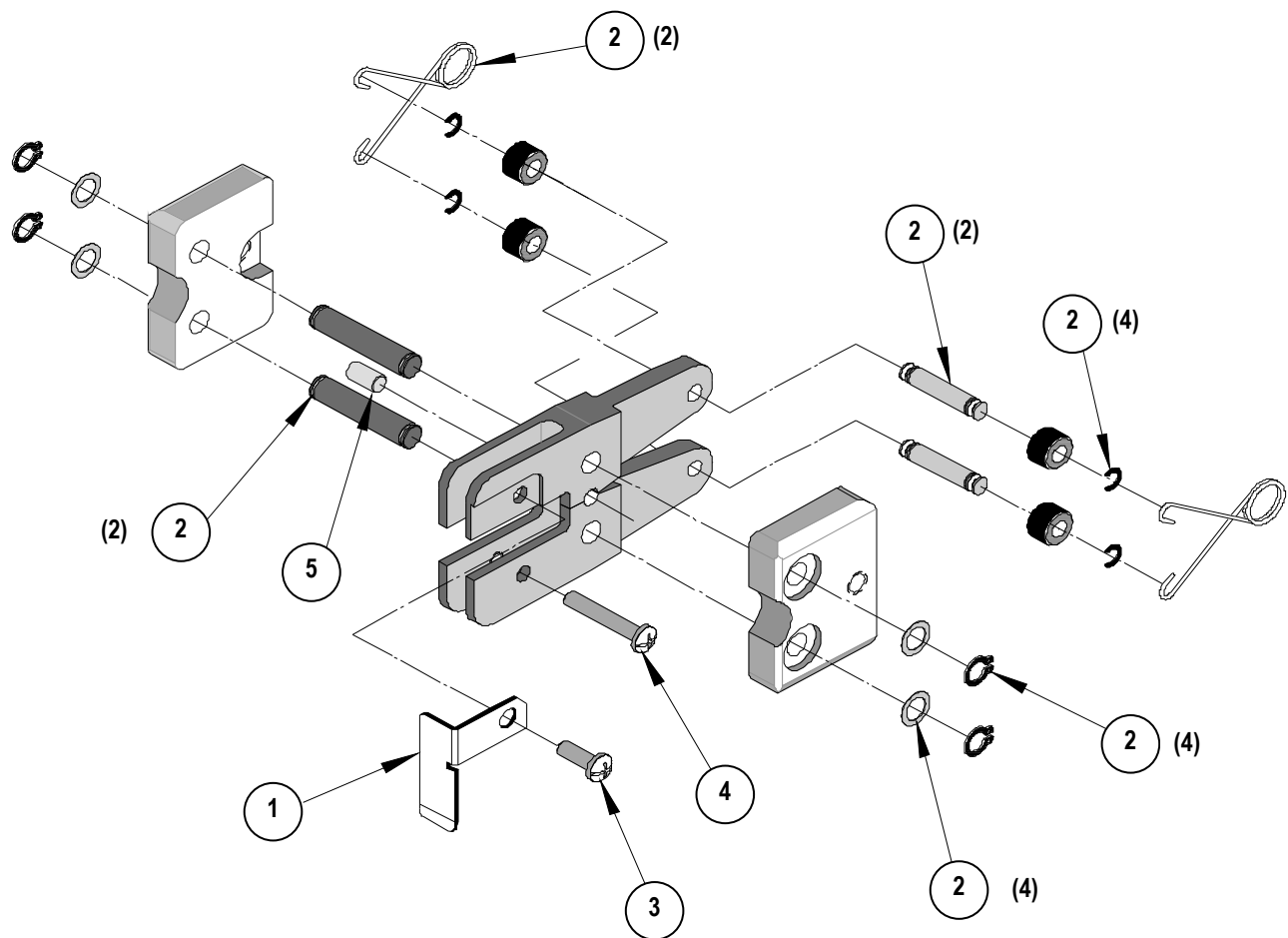
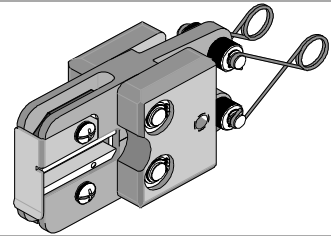


Figure 6

**Air Powered  
Crimp  
Tool Head**

**molex**

**Certificate of Calibration**



**Order No. 64005-2500  
Engineering No. AT 2080**

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>