

# **Air Powered Crimp Tool Head Operating Instruction Sheet and Specifications**

Part No. 64005-4100 Eng. No. AT FIFG (Replaces 19283-0056)

#### **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**

Fully Insulated Flag Quick Disconnects (Standard Flare) Terminals 14-22 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

\*UL – 310 – Quick Disconnects, Flags and Couplers

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 – 0.35 mm <sup>2</sup>						Wire Size: 14 – 16 AWG 2.00 – 1.30 mm <sup>2</sup>					
T	rminal No.	nal No. Terminal Eng No. (REF) Wire Strip Length Insul. Dia. Max.		Terminal No.	Terminal Eng No. (REF)	Wire Strip Length Insu		Insul. D	l. Dia. Max.			
1,	i ililiai 140.	Terminal Eng No. (REF)	In.	mm	In.	mm			In.	mm	In.	mn
1	9007-0001	AA-2220	.344	8.73	.176	4.47	19007-0021	BB-2221	.313	7.94	.200	5.0
1	9007-0005	AA-2220X	.344	8.73	.240	6.10	19007-0025	BB-2221X	.313	7.94	.265	6.7
1	9007-0009	AA-2222	.344	8.73	.176	4.47	19007-0029	BB-2224	.313	7.94	.200	5.0
1	9007-0011	AA-2222X	.344	8.73	.240	6.10	19007-0031	BB-2224X	.313	7.94	.265	6.7
1	9007-0015	AA-2223	.344	8.73	.176	4.47	19007-0035	BB-2225	.313	7.94	.200	5.0
1	9007-0017	AA-2223X	.344	8.73	.240	6.10	19007-0037	BB-2225X	.313	7.94	.265	6.7

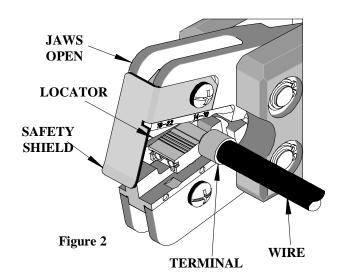
Doc No. 64005-4100 Release Date: 09-22-03 UNCONTROLLED COPY Page 1 of 6 Revision: A

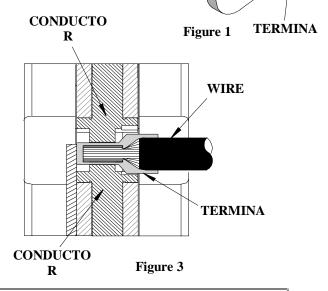
### **Operation**

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

### **Crimping Terminals**

1. Place the flag terminal barrel into the conductor anvil of the lower jaw. Make sure the closed end of the barrel is touching the locator. (See Figure 1).





**LOCATO** 

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

- 2. Insert the properly stripped wire into the terminal barrel, (See figure 3).
- 3. Push on the wire to assure it is fully seated in the terminal (See Figure 2 and 3). Cycle the tool.
- 4. Remove the crimped terminal. Inspect for proper crimp.

#### Maintenance

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

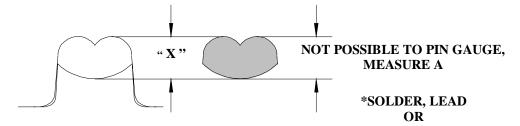
- 1. Remove dust, moisture and other contaminants with a clean brush, or soft, lint-free cloth.
- 2. Do not use any abrasive materials that could damage the tool.
- 3. Make certain all pins; pivot points and bearing surfaces are protected with a thin coat of high quality machine oil. Do not oil excessively. The 64005-4100 (AT-FIFG) 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 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.

LUBRICATION
POINTS
(BOTH SIDES)
LIGHT OIL
Figure 4

Doc No. 64005-4100 Release Date: 09-22-03 Revision: A Revision Date: 09-22-03

#### **Tool Calibration**

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



Nest Color Code	Wir	e Range	"X" Dimen	sion Cond	uctor Crimp	Crimp Inspection Marking	
Nest Color Code	AWG	mm <sup>2</sup>	Mean	Go	No Go	Crimp inspection warking	
Blue	14 - 16	2.00 - 1.30	.078	.076	.088		
Red	18 - 22	0.80 - 0.35	.068	.066	.070		

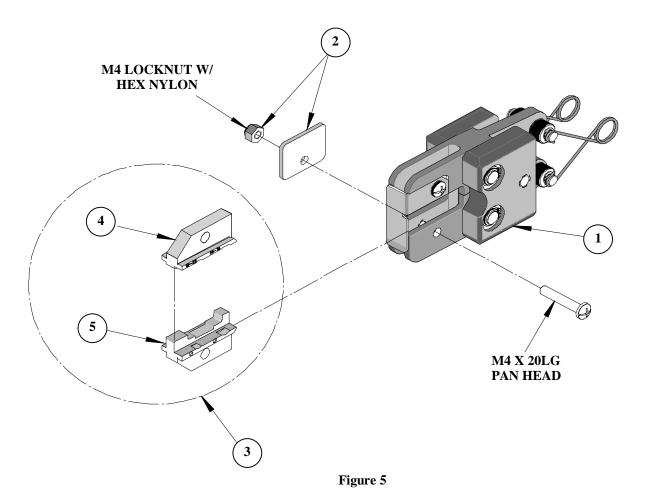
### Warranty

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.

Doc No. 64005-4100 Release Date: 09-22-03 **UNCONTROLLED COPY** Page 3 of 6 Revision: A Revision Date: 09-22-03

## **PARTS LIST**

Item	Order No	Description	Quantity
	64005-4100	Crimp Tool Head	(Fig. 5)
1	64005-0000	Basic Air Tool Head	1
2	64001-4175	Locator Assembly	1
3	64001-4170	Tooling Kit	1
	To	ooling Kit Only	
4	64001-4102	Conductor Punch	1
5	64001-4101	Conductor Anvil	1



Doc No. 64005-4100 Release Date: 09-22-03

Revision: A Revision Date: 09-22-03

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## **Parts List (Continued)**

Item	Order No.	Description	Quantity
	64005-0000	Basic Air Tool Head	(Fig. 6)
1	64005-0103	Nose Guard	1
2	64000-0077	Repair Kit (Springs, Rods Pivots, Rings, and Washers)	1
3	N/A	M4 by 12LG. Freedrive Pan Head Screw	1**
4	N/A	M4 by 30LG. Freedrive Pan Head Screw	1**
5	N/A	3/16" by 3/8" Long Dowel Pin	1**

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

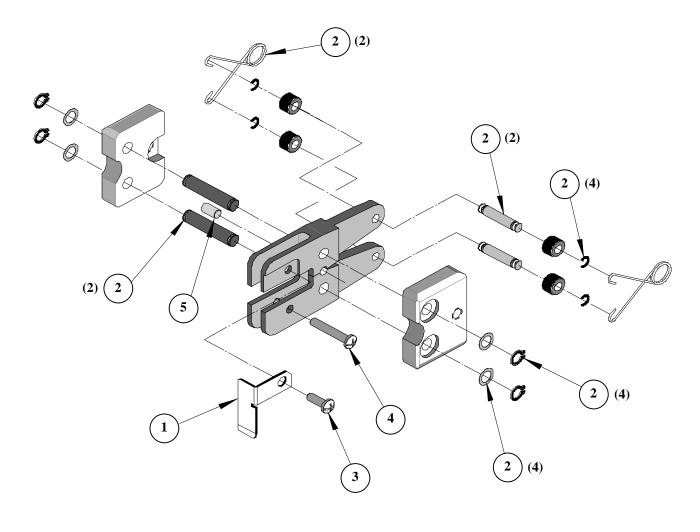
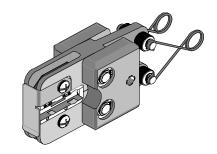


Figure 6

**UNCONTROLLED COPY** Page 5 of 6 Doc No. 64005-4100 Release Date: 09-22-03





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

**Molex Application Tooling Group** 

1150 E. Diehl Road Naperville, IL 60563 Tel: (630) 969-4550 Fax: (630) 505-0049

Page 6 of 6 Doc No. 64005-4100 Release Date: 09-22-03 Revision: A Revision Date: 09-22-03