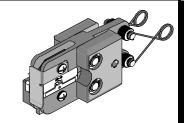


Air Powered Crimp Tool Head Operating Instruction Sheet And Specifications Part No. 64005-1500 Eng. No. AT 2200 (Replaces 19283-0012)



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

AviKrimp®/InsulKrimp® Terminals 10 - 12 AWG, (Rings, Spades, Splices, Hooks, Snap Spades, Flanged Spades, Wire Pin Terminals and also 3 to 4 Way Connectors). Also terminates ends of step down butt splice 10 - 12 to 14 - 16 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.

1	Wire Size (AWG)	*UL - 486 A	*UL – 486 C
	16	N/A	15
	14	N/A	25
	12	70	35
	10	80	40

*UL - 486 A - Terminals (Copper conductors only)
*UL - 486 C - Butt Splices.

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 - 3.00 mm ²					
Terminal No.	Terminal	Wire Strip Length		Insul. Dia. Max.	
reminu ivo.	Eng No. (REF)	ln	mm	ln	mm
19070-0119	C-228-06X	.375	9.53	.250	6.35
19070-0121	C-228-08X	.375	9.53	.250	6.35
19070-0123	C-228-10X	.375	9.53	.250	6.35
19070-0130	C-230-10X	.375	9.53	.250	6.35
19070-0132	C-230-14X	.375	9.53	.250	6.35
19070-0136	C-230-56X	.375	9.53	.250	6.35
19070-0143	C-236-06X	.375	9.53	.250	6.35
19070-0145	C-236-08X	.375	9.53	.250	6.35
19070-0150	C-240-14X	.375	9.53	.250	6.35
19070-0153	C-240-38X	.375	9.53	.250	6.35

Wire Size: 10 - 12 AWG 5.00 - 3.00 mm ²						
Terminal No.	Terminal	Wire Strip Length		Insul. Dia. Max.		
	Eng No. (REF)	ln	mm	ln	mm	
19070-0155	C-240-56X	.375	9.53	.250	6.35	
19073-0145	C-801-12	.375	9.53	.225	5.72	
19073-0147	C-801-12X	.375	9.53	.250	6.35	
19073-0160	C-828-06	.375	9.53	.225	5.72	
19073-0163	C-828-06X	.375	9.53	.250	6.35	
19073-0165	C-828-08	.375	9.53	.225	5.72	
19073-0168	C-828-08X	.375	9.53	.250	6.35	
19073-0170	C-828-10	.375	9.53	.225	5.72	
19073-0173	C-828-10X	.375	9.53	.250	6.35	
19073-0179	C-830-10	.375	9.53	.225	5.72	

Doc. No. 64005-1500 Release Date: 01-16-03 UNCONTROLLED COPY Page 1 of 7

Revision: C Revision Date: 01-10-06

Wire Size: 10 – 12 AWG 5.00 – 3.00 mm ²					
Terminal No.	Terminal	Wire Str	ip Length	Insul. Di	ia. Max.
rerminai No.	Eng No. (REF)	ln	mm	In	mm
19073-0181	C-830-10X	.375	9.53	.250	6.35
19073-0182	C-830-10XLBK	.375	9.53	.225	5.92
19073-0185	C-830-10XX	.375	9.53	.326	8.13
19073-0188	C-830-14	.375	9.53	.225	5.72
19073-0191	C-830-14X	.375	9.53	.250	6.35
19073-0192	C-830-14XLBK	.375	9.53	.225	5.92
19073-0195	C-830-14XX	.375	9.53	.326	8.13
19073-0200	C-830-56	.375	9.53	.225	5.72
19073-0202	C-830-56X	.375	9.53	.250	6.35
19073-0203	C-830-56XLBK	.375	9.53	.225	5.92
19073-0206	C-830-56XX	.375	9.53	.326	8.13
19073-0216	C-836-06	.375	9.53	.225	5.72
19073-0220	C-836-06X	.375	9.53	.250	6.35
19073-0222	C-836-08	.375	9.53	.225	5.72
19073-0225	C-836-08X	.375	9.53	.250	6.35
19073-0227	C-840-10	.375	9.53	.225	5.72
19073-0229	C-840-10X	.375	9.53	.250	6.35
19073-0231	C-840-14	.375	9.53	.225	5.72
19073-0233	C-840-14X	.375	9.53	.250	6.35
19073-0236	C-840-38	.375	9.53	.225	5.72
19073-0238	C-840-38X	.375	9.53	.250	6.35
19073-0242	C-840-56	.375	9.53	.225	5.72
19073-0244	C-840-56X	.375	9.53	.250	6.35
19073-0272	C-830-10XXBK	.375	9.53	.326	8.13
19073-0273	C-830-14XXBK	.375	9.53	.326	8.13
19073-0274	C-830-56XXBK	.375	9.53	.326	8.13
19081-0005	C-5006-MS	.375	9.53	.225	5.72
19090-0083	C-212-08X	.375	9.53	.250	6.35
19090-0085	C-212-10X	.375	9.53	.250	6.35
19099-0044	C-2710-06X	.375	9.53	.225	5.72
19099-0048	C-2718-08X	.375	9.53	.225	5.72
19099-0050	C-2719-10X	.375	9.53	.225	5.72
19115-0033	C-8196-06	.375	9.53	.225	5.72
19115-0035	C-8197-08	.375	9.53	.225	5.72
19115-0037	C-8198-10	.375	9.53	.225	5.72
19115-0039	C-8199-14	.375	9.53	.225	5.72

Terminal No.	Terminal	Wire Strip Length		Insul. D	ia. Max
	Eng No. (REF)	ln	mm	In	mm
19115-0041	C-8710-05	.375	9.53	.225	5.72
19115-0042	C-8710-06	.375	9.53	.225	5.72
19115-0046	C-8718-08	.375	9.53	.225	5.72
19115-0048	C-8719-10	.375	9.53	.225	5.72
19127-0086	C-817-08	.375	9.53	.225	5.72
19127-0089	C-817-10	.375	9.53	.225	5.72
19139-0060	C-8105-08	.375	9.53	.225	5.72
19144-0037	C-241-06X	.375	9.53	.250	6.35
19144-0039	C-241-08X	.375	9.53	.250	6.35
19144-0042	C-241-10X	.375	9.53	.250	6.35
19144-0046	C-268-14X	.375	9.53	.250	6.35
19154-0028	C-246X	.225	5.95	.225	5.72
19154-0037	CS-V-346X	.281	7.14	.225	5.72
19183-0019	C-811-10	.375	9.53	.225	5.72
19198-0039	C-8105-06	.375	9.53	.225	5.72
19198-0044	C-841-06	.375	9.53	.225	5.72
19198-0047	C-841-08	.375	9.53	.225	5.72
19198-0050	C-841-10	.375	9.53	.225	5.72
19198-0056	C-868-14	.375	9.53	.225	5.72
19198-0057	C-868-14X	.281	7.14	.250	6.35
19204-0025	C-2XCX	.375	9.53	.225	5.72
19204-0026	C-2YCX	.375	9.53	.225	5.72
19204-0029	C-5XC	.375	9.53	.225	5.72
19204-0030	C-5YC	.375	9.53	.225	5.72
19206-0010	CS-V-303X	.281	7.14	260	6.60
19212-0001	WP-2210X	.281	7.14	.250	6.35
19213-0007	WP-8210	.281	7.14	.225	5.72

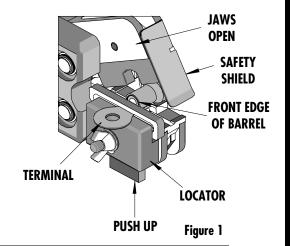
STEP DOWN BUTT SPLICE						
V	Wire Size: 10 - 12 AWG 5.00 - 3.00 mm ²					
	to 14 -16 AWG 2.00-1.30 mm ²					
Terminal No. Terminal Wire Strip Length Insul. Dia. M						
Termina No.	Eng No. (REF)	ln	mm	ln	mm	
19154-0035	CB-646X	.281	7.14	.260	6.60	

OPERATION

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

Crimping Terminals

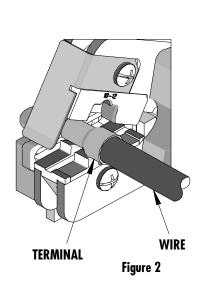
- 1. Adjust the locator up or down until the terminal being run sits flat and straight in the tool.
- 2. Insert the wire into the terminal. Push up on the locator blade and push the terminal and wire with the barrel facing up into the color-coded nest with front edge of the barrel against the locator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

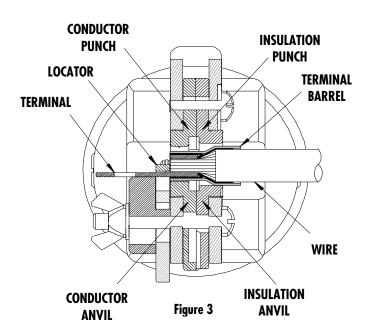


Caution: Never operate this tool without the supplied safety shield in place. Never place fingers in the tool nests.

Doc. No. 64005-1500 Release Date: 01-16-03 Revision: C Revision Date: 01-10-06

3. Push on wire to assure it is still fully seated in the terminal. (See Figure 2 and 3). Cycle the tool.

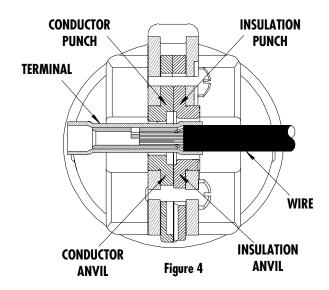




- 4. Lift the locator blade or wire stop and remove the crimped terminal. Inspect for proper crimp location, and check for insulation closure. Locator is adjustable up and down to keep terminals straight after crimping.
- 5. When crimping butt splices, or 3-way and 4-way terminals the locator must be removed. Splices must be visually aligned with the tooling 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.

6. 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.

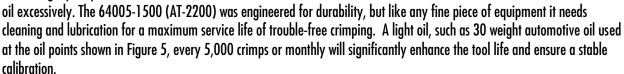


Doc. No. 64005-1500 Release Date: 01-16-03 UNCONTROLLED COPY Page 3 of 7
Revision: C Revision Date: 01-10-06

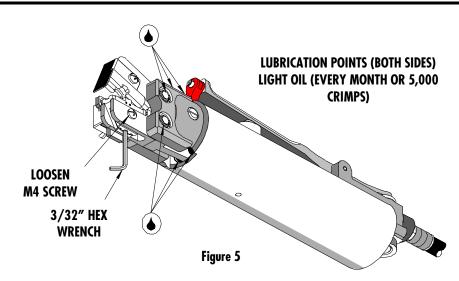
Maintenance

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.
- 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

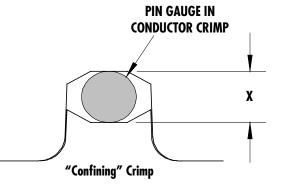


4. When tool is not in use store the tool in a clean, dry area.



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	Wire Range		" Dimei ductor (Crimp Inspection Marking	
	AWG	mm²	Mean	Go	No Go	Murking
Yellow	10 – 12	5.00 - 3.00	.160	.156	.168	0
Tellow	14 – 16*	1.30 - 2.00	.160	.156	.168	0

* 14 - 16 End of step down butt splice only.

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. 64005-1500 Release Date: 01-16-03 **UNCONTROLLED COPY** Page 4 of 7

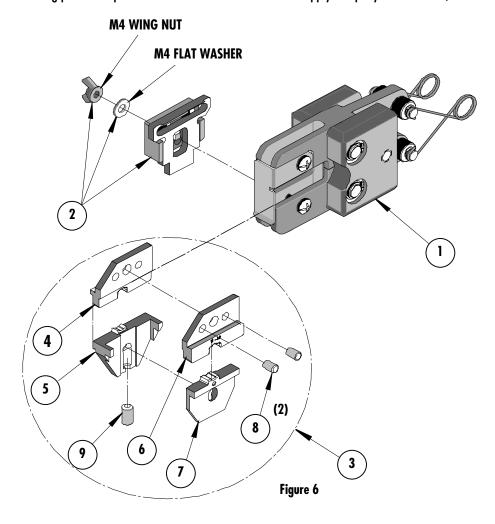
Revision: C

Revision Date: 01-10-06

PARTS LIST

Item	Order No	Description	Quantity			
	64005-1500	Crimp Tool Head	(Fig. 6)			
1	64005-0000	Basic Air Tool Head	1			
2	64001-1575	Locator Assembly	1			
3	64001-1570	Tooling Kit	1			
	Tooling Kit Only					
4	64001-1502	Conductor Punch	1			
5	64001-1501	Conductor Anvil	1			
6	64001-1504	Insulation Punch	1			
7	64001-1503	Insulation Anvil	1			
8	N/A	4 mm Dia. by 5.0 mm Lg.Roll Pins	2**			
9	N/A	#10-32 by 5/16" Lg. Cup Pt. Set Screw	1**			

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



Doc. No. 64005-1500 Revision: C Release Date: 01-16-03 Revision Date: 01-10-06

Parts List (Continued)

Item	Order No.	Description	Quantity
	64005-0000	Basic Air Tool Head	(Fig. 7)
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]**
4	N/A	M4 by 30LG. Freedrive Pan Head Screw]**
5	N/A	3/16" by 3/8" Long Dowel Pin]**

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

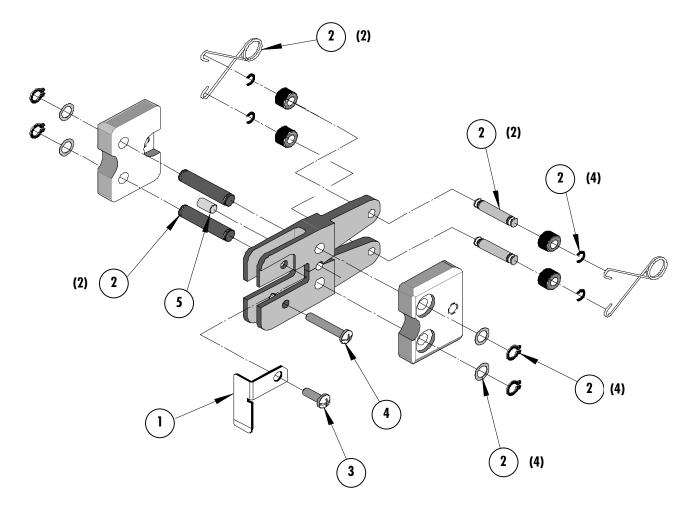
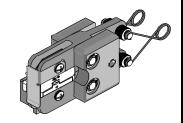


Figure 7

Doc. No. 64005-1500 Revision: C Release Date: 01-16-03 Revision Date: 01-10-06





Certificate of Calibration

Tool Order Number	-
Tool Eng. Number	
Tool Revision	-
Serial Number	
Date of Manufacture	
Pin Gauge of Conductor Nest/Nests or Slug heigh	t 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 Tools should be lubricated during this operation.	3 months.

Molex Application Tooling Group

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

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

Release Date: 01-16-03 **UNCONTROLLED COPY** Page 7 of 7 Doc. No. 64005-1500 **Revision:** C Revision Date: 01-10-06