

TYPE 4A

**Modular Crimp Head
Order No. 63827-6270**

Application Tooling Specification Sheet

**Hand Crimp Tool
Order No. 63827-6200**

FEATURES

- % A full cycle ratcheting hand tool ensures complete terminations
- % Ergonomically designed soft handles
- % Wire gripping comb holds wires in place before termination
- % Easy handling due to outstanding force ratio
- % Modular Crimp Head is removable and can be used in the Air Powered Tool Order No.63816-0100, accompanied by Air Powered Crimp Adapter (Order No. 63816-0700)
- % Modular Crimp Head can also be used in the Battery Powered Tool Order No.63816-0200 (110 V) or 63816-0250 (220 V), accompanied by Battery Powered Crimp Adapter (Order No. 63816-0600)

SCOPE

Products: Appli-Mate RAST Power connectors, 2 – 12 circuits, 0.5mm² and 0.75mm² H05V-K wires.

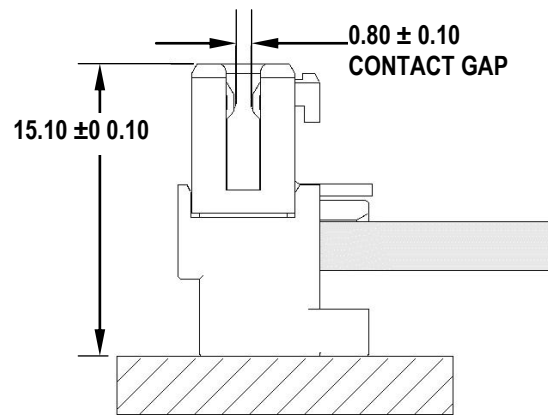
Connector Series	Connector Order No.	Wire Size		
		mm ²	mm	In.
91627 and 93211	See table below	0.5	2.1 – 2.3	0.083 – 0.091
91791 and 93322	See table below	0.75	2.3 – 2.5	0.091 – 0.098
* Customer to cut off connector from molded chain				
Contact Molex about approved AWG wires for these products				

Connector Series No.	Circuit Size	Connector Assembly Order No.						
91627	2	91627-0001	91627-0002	91627-0003	91627-0004	91627-0005	91627-0006	91627-0008
		91627-0009	91627-0010	91627-0011	91627-0012	91627-0013	91627-0014	91627-0015
		91627-0016	91627-0501	91627-0502	91627-0503	91627-0504	91627-0505	91627-0506
		91627-0507	91627-0508					
	3	91627-1001	91627-1002	91627-1004	91627-1005	91627-1006	91627-1007	91627-1008
		91627-1009	91627-1010	91627-1011	91627-1012	91627-1013	91627-1014	91627-1015
		91627-1016	91627-1017	91627-1501	91627-1502	91627-1503	91627-1504	91627-1506
		91627-1507	91627-1508					
	4	91627-2001	91627-2002	91627-2003	91627-2004	91627-2005	91627-2006	91627-2007
		91627-2008	91627-2009	91627-2010	91627-2011	91627-2501	91627-2503	
	5	91627-3001	91627-3002	91627-3003	91627-3004	91627-3005	91627-3006	91627-3501
		91627-3502	91627-3503	91627-3504				
	6	91627-4001	91627-4002	91627-4003	91627-4004	91627-4005	91627-4006	91627-4007
		91627-4501	91627-4502	91627-4503				
	7	91627-5001	91627-5002	91627-5003	91627-5004	91627-5005	91627-5006	91627-5501
		91627-5502	91627-5503	91627-5504	91627-5505			
	8	91627-6001	91627-6002	91627-6501	91627-6502			
	9	91627-7001	91627-7002	91627-7003	91627-7501	91627-7502	91627-7503	91627-7504
	10	91627-8001	91627-8501					
	11	91627-9001	91627-9251					
	12	91627-9501	91627-9751					

Connector Series No.	Circuit Size	Connector Assembly Order No.						
91791	2	91791-0001						
	3	91791-1001	91791-1002	91791-1004	91791-1504			
	4	91791-2001	91791-2004					
	5	91791-3001						
	6	91791-4001						
	7	91791-5001						
	8	91791-6001						
	9	91791-7001						
	10	91791-8001						
	11	91791-9001						
	12	91791-9501						
	93211	2	93211-0001	93211-0002	93211-0003	93211-0004	93211-0501	
3		93211-1001	93211-1002	93211-1003	93211-1004	93211-1501	93211-1503	
4		93211-2001	93211-2501	93211-2502				
5		93211-3001	93211-3501					
6		93211-4001	93211-4501	93211-4502	93211-4503			
7		93211-5001	93211-5501	93211-5502				
8		93211-6001	93211-6501					
9		93211-7001	93211-7501	93211-7502				
10		93211-8001	93211-8501					
11		93211-9001	93211-9251					
12		93211-9501	93211-9751					
93322		2	93322-0001	93322-0501				
	3	93322-1001	93322-1002	93322-1501				
	4	93322-2001	93322-2501					
	5	93322-3001	93322-3501					
	6	93322-4001	93322-4501					
	7	93322-5001	93322-5501					
	8	93322-6001	93322-6501					
	9	93322-7001	93322-7501					
	10	93322-8001	93322-8501					

DEFINITION OF TERMS

Terminated Height:



Reference:
Application Specification AS-91627-001

TERMINATION SPECIFICATION

Wire Size	Terminated Height		Pull Force Minimum*	
	mm	In.	N	Lbf
0.50mm ²	15.00 – 15.20	0.591 – 0.598	50	11
0.75mm ²				
Customer to cut off connector from molded chain			*Parallel or 90° to the wire axis	

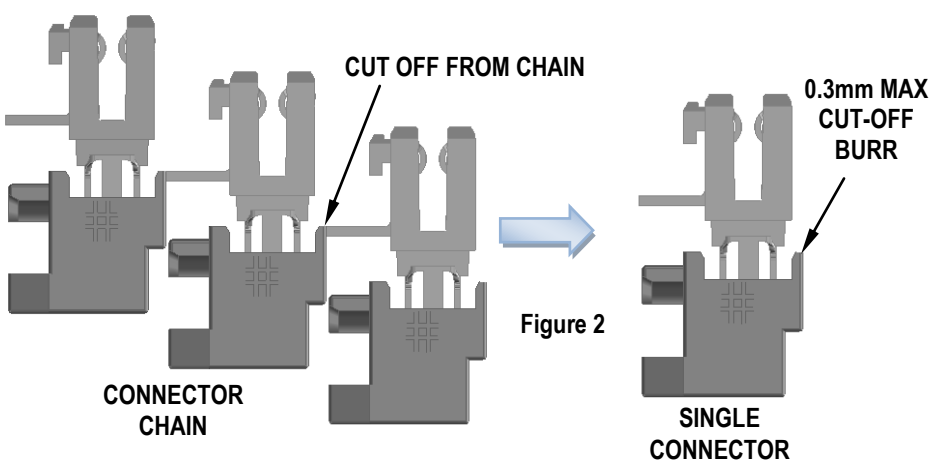
Notes:

1. This tool should only be used for the connectors and wire sizes specified on this sheet.
2. Variations in tools, connectors, wire stranding, and insulation types may affect termination height.
3. Molex does not repair hand tools (see warranty above). The replacement parts listed are the only parts available for repair. If the handles or crimp tooling is damaged or worn, a new tool must be purchased.
4. Terminated height should be used as the final criteria for an acceptable crimp. Pull force is a reference only.
5. Molex does not certify crimp hand tools.

SETUP

Connector Preparation

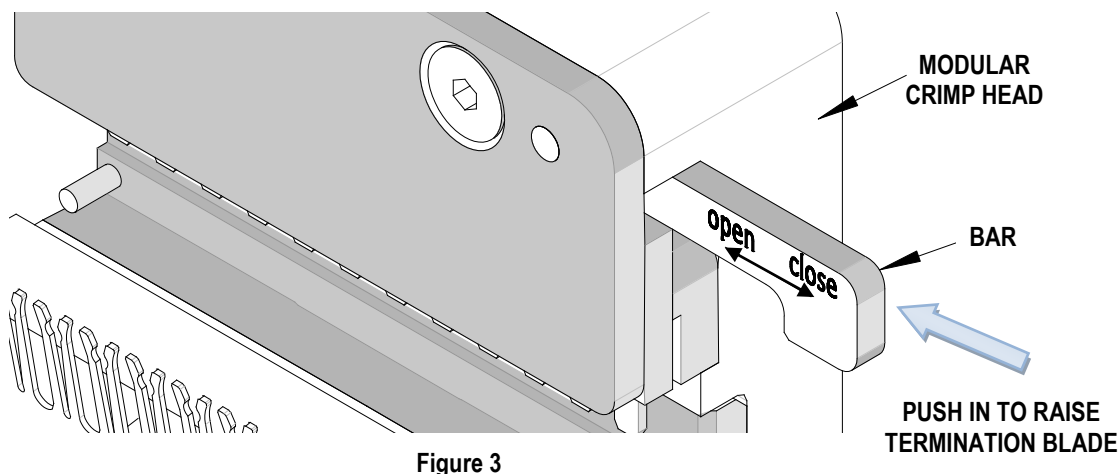
Trim one connector off the molded chain using a razor blade, as shown below. See Figure 2.



When trimming the connector off the molded chain, be careful to not accidentally close the connector partway. If the connector is closed too far, wires will be unable to fit into it.

Termination Blade Position

To allow the un-terminated connector to fit in the tool, the termination blade must be raised. To raise the termination blade, push the bar on the top of the tool in the “open” direction until it stops. See Figure 3.



OPERATION

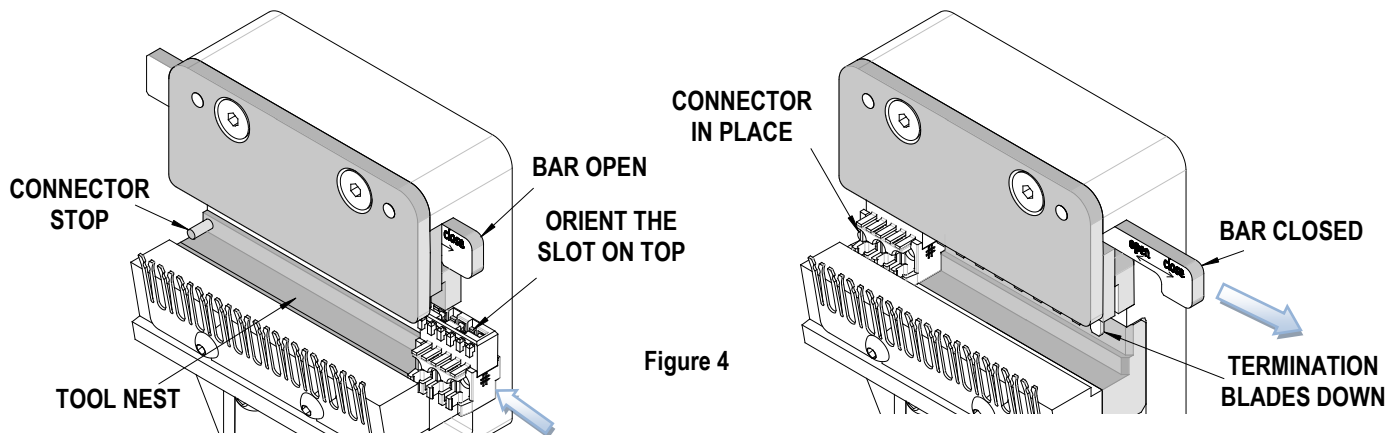


Figure 4

1. Open the tool by squeezing the handles together, at the end of the closing stroke, the ratchet mechanism will release the handles, and the hand tool will spring open.
2. Before loading the connector in the tool, make sure the termination blade is raised (see Termination Blade Position).
3. With the hand tool in the open position, load the connector in the tool. The tool nest is polarized to accept the connector in only one orientation (tabs facing outward) See Figure 4.
4. Push the connector all the way to the left until it stops.
5. Lower the termination blade by pulling the bar away from the tool.

NOTE: If the termination blade is not lowered, the connector will not be completely terminated.

6. Place the wire into the connector, pushing it in until it stops against the back of the connector housing.
7. To keep the wire in place, press it into the retaining comb on the front of the tool. See Figure 5.
8. Repeat steps 6 and 7 until all wires are loaded into the connector.
9. To terminate the connector, squeeze the tool handles together until the anti-backup ratchet releases. Release the handles and they will spring open.
10. Push in the bar to raise the termination blade.

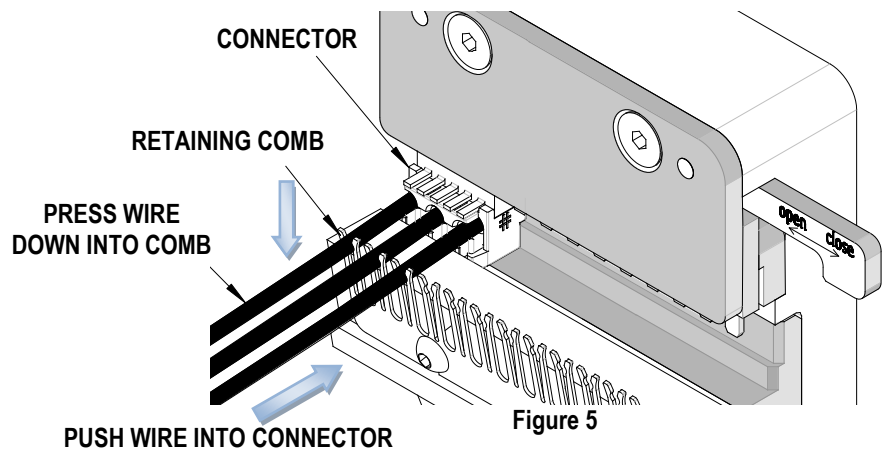


Figure 5

NOTE: If the termination blade is not raised, it will be difficult to remove the connector from the tool.

11. Lift all wires out of the retaining comb and pull the finished connector out of the tool.

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

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 other equipment it needs cleaning and lubrication for a maximum service life of trouble free crimping. Light oil (such as 30 weight automotive oil) used at the oil points, every 5,000 connectors or 3 months, will significantly enhance the tool life.
4. Wipe excess oil from hand tool, particularly from the connector nest area. Any oil transferred from the termination area onto the contacts may affect its electrical characteristics.
5. When tool is not in use, keep the handles closed to prevent objects from becoming lodged in the nest and store the tool in a clean, dry area.

Miscrimps or Jams

Should this tool ever become stuck or jammed in a partially closed position, **Do Not force the handles open or closed**. The tool will open easily by lifting the ratchet release lever. See Figure 8.

Warranty

This tool is for electrical connector termination 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 will repair or exchange the tool free of charge. This repair or exchange will not be applicable to altered, misused, or damaged tools. This tool is designed for hand use only. Any clamping, fixturing, or use of handle extensions voids this warranty.

CAUTION: Repetitive use of this tool should be avoided.

CAUTIONS:

1. Manually powered hand tools are intended for low volume or field repair. This tool is **NOT** intended for production use. Repetitive use of this tool should be avoided.
2. Insulated rubber handles are not protection against electrical shock.
3. Wear eye protection at all times.
4. Use only the Molex connectors specified for this tool.

CAUTION: Molex specifications are valid only when used with Molex connectors and tooling.

Applications for the Modular Crimp Head

WARNING: NEVER operate, service, install, or adjust this Modular Crimp Head without proper instruction and without first reading and understanding the instructions in the proper Manual or Specification Sheet. See Chart below for the correct Manual or Specification Sheet.

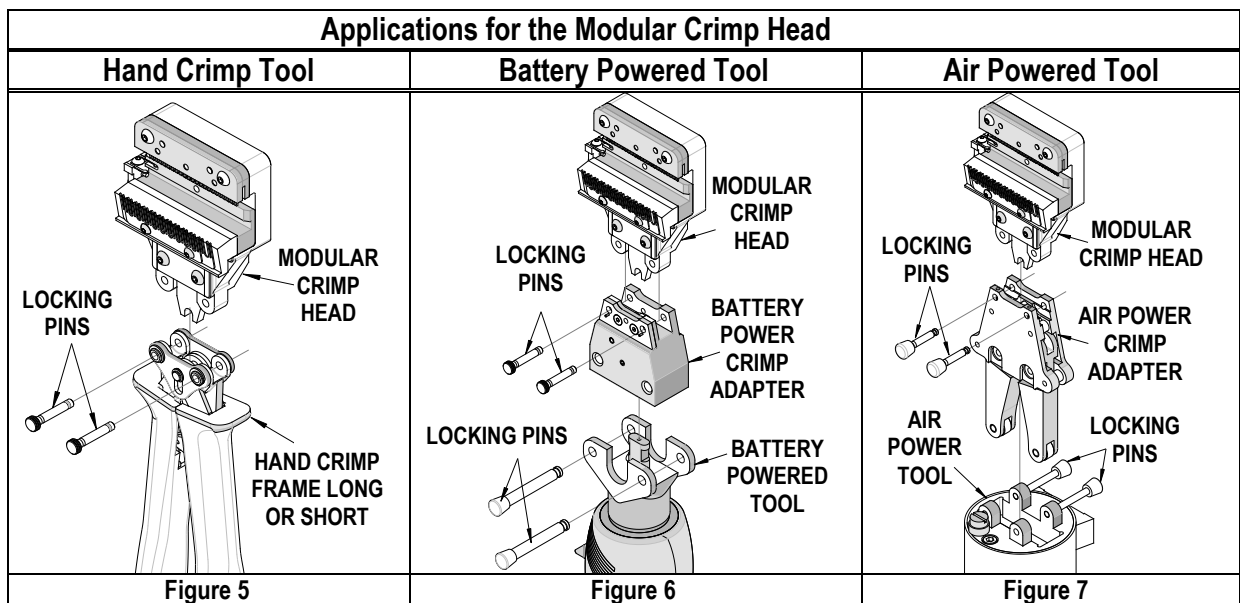
WARNING: NEVER install tooling or service this tool while it is into any power source. Disconnect the power by unplugging or turn off the Actuator from its power source.

CAUTION: Keep fingers away from the termination area when operating this tool. It may cause severe injury.

CAUTION: Wear safety glasses when operating or servicing this tool.

The chart below shows all applications for this Modular Crimp Head.

Modular Crimp Head Order No.	Tool Order no.	Tool Description	Adapter Order No.	Adapter Description	Figure No.
63827-6270	63816-0000	Hand Crimp Frame (Short)	N/A	N/A	5
	63816-0050	Hand Crimp Frame (Long)	N/A	N/A	5
	63816-0200	Battery Power Tool (110 V)	63816-0600	Battery Power Crimp Adapter	6
	63816-0250	Battery Power Tool (220 V)	63816-0600	Battery Power Crimp Adapter	6
	63816-0100	Air Power Tool	63816-0700	Air Power Crimp Adapter	7



PARTS LIST

Item	Order Number	Description	Quantity
1	63827-6270	Modular Crimp Head	1
2	63816-0050	Hand Crimp Frame (Long)	1
3	63816-0001	Locking Pin	2
4	63600-0520	Tool Head Spring	2
5	63600-0525	Handle Spring	1

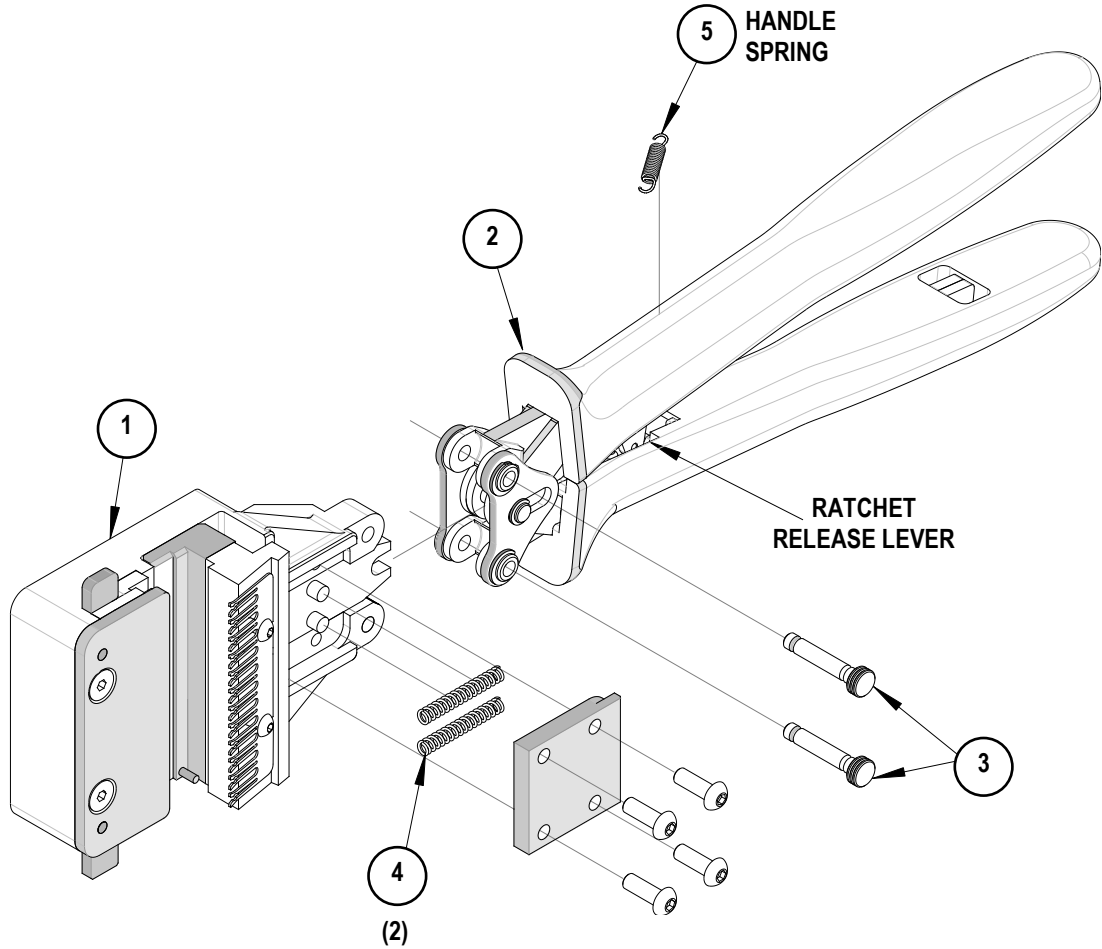


Figure 8

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