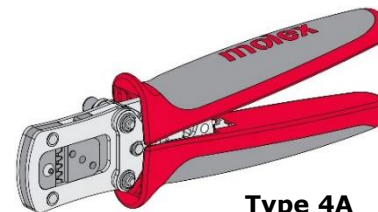


Order Number
200218-3300



Application Tooling Specification



Type 4A

FEATURES

- A full cycle ratcheting hand tool ensures complete crimps
- Ergonomically designed soft handles
- Precisely designed crimping profiles with simple contact positioning
- Easy handling due to outstanding force ratio
- Modular crimp head is removable and can be used in the Electric Crimp Machine (Order No. 63816-1900), accompanied by Battery Powered Crimp Adapter (Order No. 63816-1950)
- Can also be used in the Battery Powered Tool Order No. 63816-0270 (110 V) or 63816-0280 (220 V), accompanied by Battery Powered Crimp Adapter (Order No. 63816-1950)

SCOPE

Products: Sealed FAKRA RG58 Pin and Receptacle Crimp Terminals. LEONI and CONDUMEX RG58 Cables.

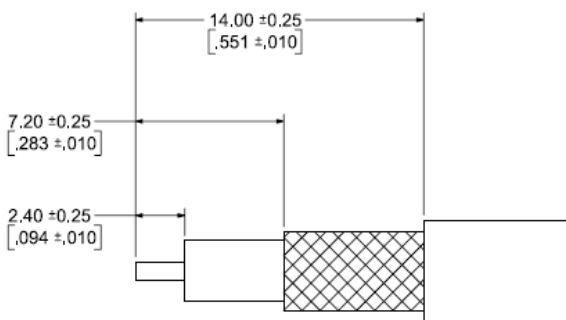
Terminal Series No.	Terminal Order No.		Cable Type	Cable		Strip Length
	Reel (1)	Loose Piece		Manufacturer	Part Number	
89556	89556-2511	—	RG58	LEONI	DACAR 037	See Figure 1
				CONDUMEX	800315-49	
89559	89559-1031	—	RG58	LEONI	DACAR 037	
				CONDUMEX	800315-49	

(1) Customer to cut off terminal from carrier: 0.10mm (.004") maximum cut-off tab.

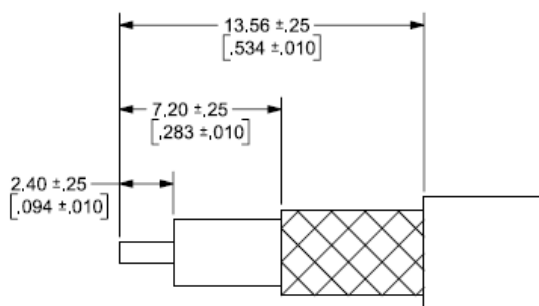
CABLE PREPARATION

The FAKRA connector's end cap, cable seal and crimp tube should be loaded on the RG58 cable before preparing the cable.

Before crimping, the RG58 cable must be prepared by stripping the dielectric, braid and outer jacket as shown in Figure 1. Use tool 200218-3500 for preparing the cable.



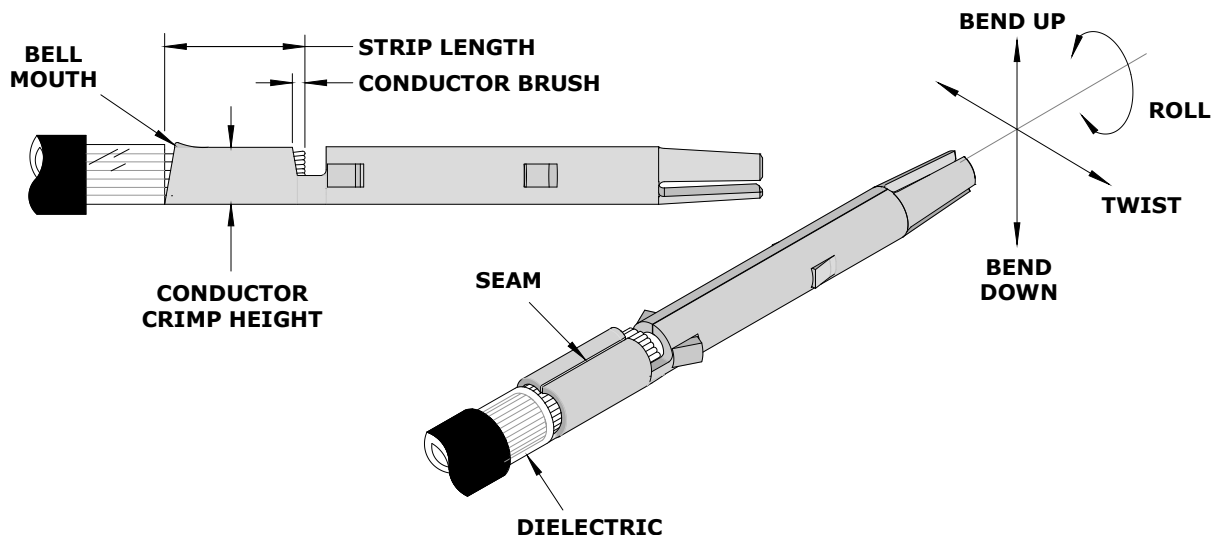
89556-2511 Cable Prep



89559-1031 Cable Prep

Figure 1

DEFINITION OF TERMS



CRIMP SPECIFICATION

After crimping, the crimped terminals should measure as follows:

Terminal Series No.	Bell Mouth				Conductor Brush	
	Dielectric Side		Brush Side		mm	In.
	mm	In.	mm	In.		
89556	0.10-0.25	.004-.010	0.00-0.20	.000-.008	0.00-0.80	.000-.031
89559						

Terminal Series No.	Bend Up	Bend Down	Twist	Roll	Seam
	Degree Max.	Degree Max.	Degree Max.	Degree Max.	
89556	3	3	5	8	Seam shall not be open and no wire allowed out of the crimping area
89559					

Terminal Order No.	RG58 Cable	Conductor				Pull Force Minimum		Profile			
		Crimp Height		Crimp Width (Ref)		N	Lb.	A	B	C	D
		mm	In.	mm	In.						
89556-2511	LEONI DACAR 037	1.01-1.09	.040-.043	1.49	.059	22.2	5.0	X			
	CONDUMEX 800315-49	1.12-1.18	.044-.046						X		
89559-1031	LEONI DACAR 037	1.01-1.09	.040-.043							X	
	CONDUMEX 800315-49	1.12-1.18	.044-.046								X

Tool Qualification Notes

1. Conductor crimp width is only a reference because the range of conductor hardness and terminal dimensions may have a slight influence on this dimension.
2. An occasional conductor crimp height measurement should be performed. It must lie between the minimum and maximum crimp height specification.

Notes

1. This tool should only be used for the terminals and cable types specified on this sheet.
2. Variations in tools, terminals and cable construction may slightly affect crimp height.
3. Molex does not repair hand tools. See warranty on page 5. The replacement parts listed are the only parts available for repair. If the handles or crimp tooling become damaged or worn, a new tool must be purchased.
4. Conductor crimp height should be used as the final criterion for an acceptable crimp. Refer to Molex Quality Crimping Handbook 63800-0029 for additional information on crimping and crimp testing.
5. Molex does not certify crimp hand tools.

OPERATION

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.

1. Select the desired terminal listed in the preceding chart.
2. Swing the terminal locator away from the crimp tool.
3. Press down on the wire stop on the locator. Insert the terminal into the nest opening as shown in Figure 2.

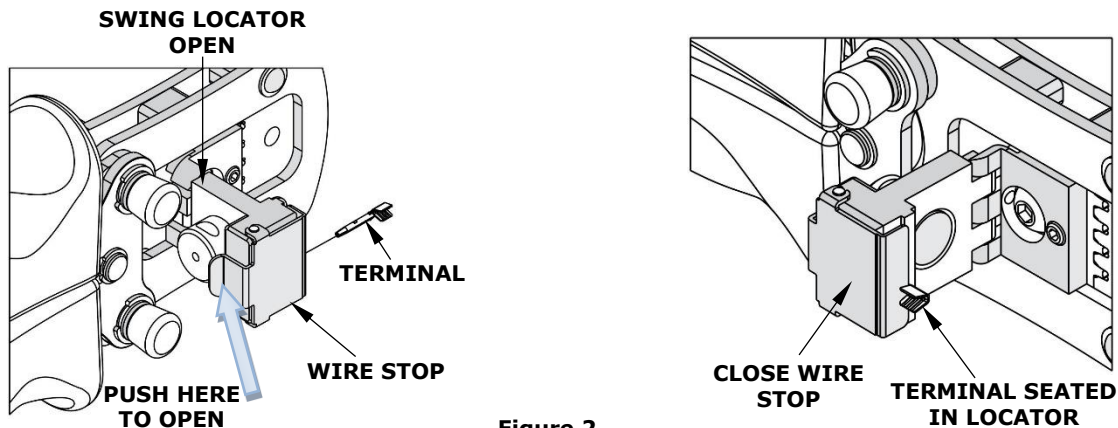
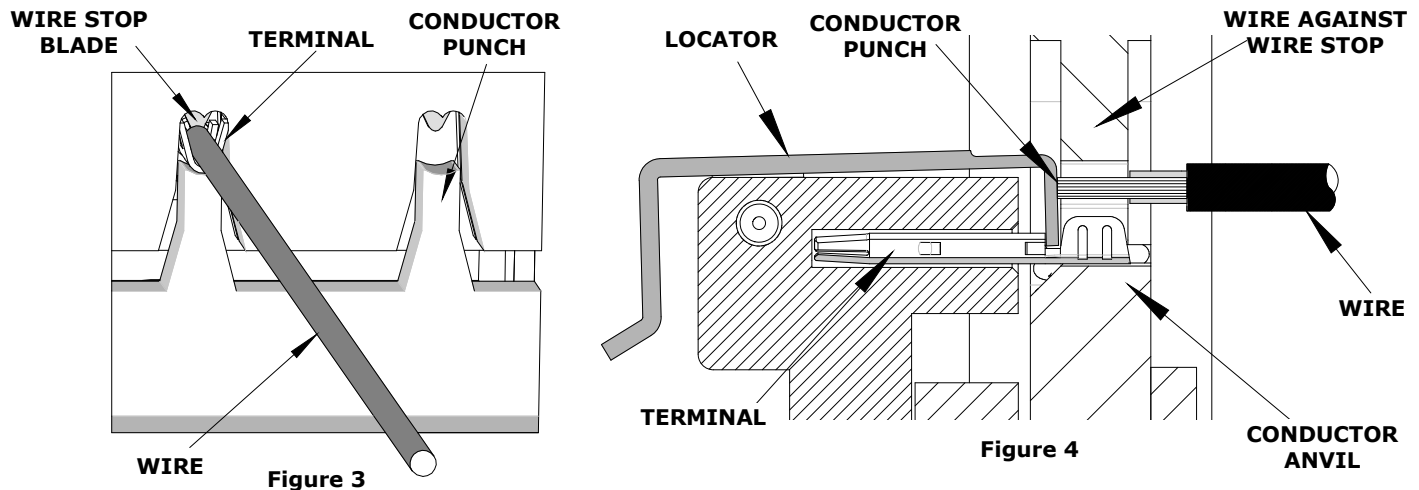


Figure 2

4. Return the locator to its original position.
5. While holding the locator against the hand tool, insert a wire of the proper wire size into the terminal. See Figure 3.



6. Push the wire until it stops. See Figure 4.
Note: Do not push the wire too far. This will result in the locator being rotated out of position, and the crimp will be damaged.
7. Close the tool until the ratchet releases. The tool handles will then spring open.
8. While holding the locator open, carefully remove the crimped terminal from the tool.

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

Note: To maintain good brush control and a consistent bell mouth, the crimping instructions must be followed.

TERMINAL LOCATOR REPLACEMENT

This section describes the procedure for changing locators:

Removal

1. With the tool in the open position, pivot the terminal locator outward.
2. Remove the M4 BHCS. See Figure 6.

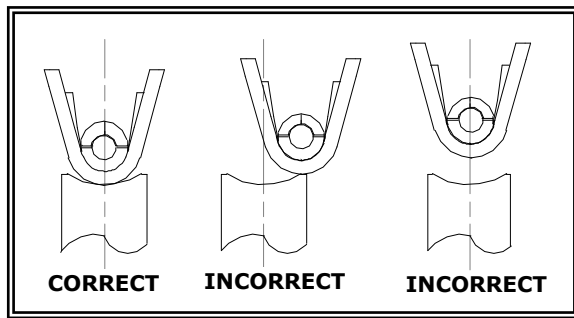
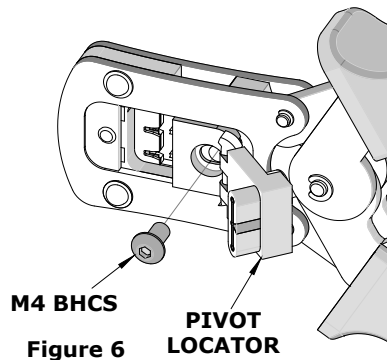


Figure 7

Installation

1. Place the locator on the hand tool. Install the M4 BHCS. See Figure 6.
2. Tighten the screw just enough to hold the locator. Make sure the locator can still float freely with hand pressure.
3. Insert the proper terminal fully into the correct profile slot until the terminal is fully seated and stops. Then, gently pivot the locator closed.
4. With hand pressure, slowly slide the locator to the correct position. See Figure 7.
5. Gently pivot the locator open without disturbing its location.
6. Hold the locator firmly in place, and slowly tighten the M4 BHCS.

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 a 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 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 crimps or 3 months will significantly enhance the tool life.
4. Wipe excess oil from the hand tool, particularly from the crimping area. Oil transferred from the crimping area onto certain terminations may affect the electrical characteristics of an application.
5. When the tool is not in use, keep the handles closed to prevent objects from becoming lodged in the crimping dies, 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 11.

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, Molex 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

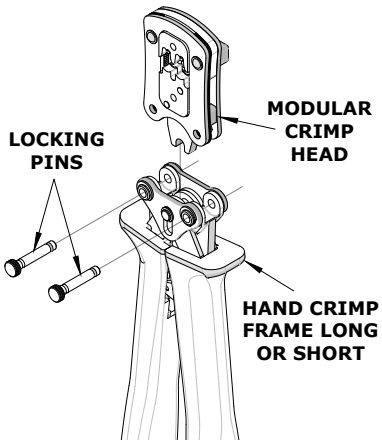
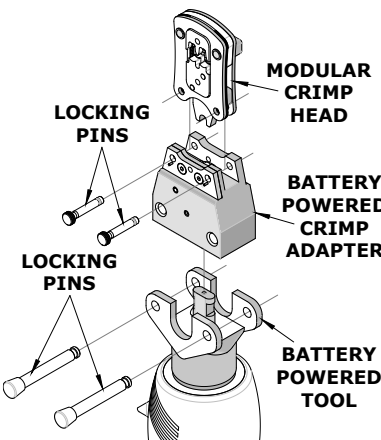
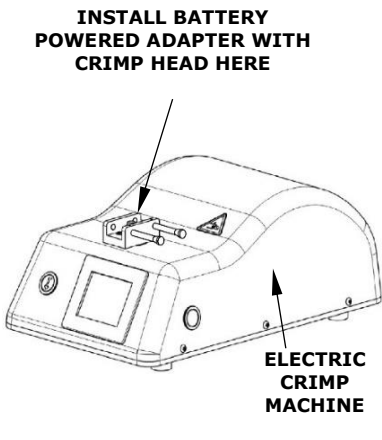
1. Manually powered hand tools are intended for low-volume use or field repair. This tool is **NOT** intended for production use. Repetitive use of this tool should be avoided.
2. Insulated rubber handles are not protection against electrical shock.
3. Wear eye protection at all times.
4. Use only the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

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

APPLICATIONS FOR THE MODULAR CRIMP HEAD

The chart below shows all applications for this modular crimp head:

Tool Order No.	Tool Description	Adapter Order No.	Adapter Description	Figure No.
63816-0270	Battery Power Tool (110 V)	63816-1950	Battery Power Crimp Adapter	9
63816-0280	Battery Power Tool (220 V)	63816-1950	Battery Power Crimp Adapter	9
63816-1900	Electric Crimp Machine	63816-1950	Battery Power Crimp Adapter	10

Applications for the Modular Crimp Head		
Hand Crimp Tool	Battery Powered Tool	Electric Crimp Machine
 Diagram showing the assembly of the modular crimp head onto a hand crimp tool. The modular crimp head is being attached to a hand crimp frame. Locking pins are used to secure the assembly. Labels include: LOCKING PINS, MODULAR CRIMP HEAD, and HAND CRIMP FRAME LONG OR SHORT.	 Diagram showing the assembly of the modular crimp head onto a battery powered tool. The modular crimp head is being attached to a battery powered crimp adapter, which is then attached to a battery powered tool. Locking pins are used to secure the assembly. Labels include: LOCKING PINS, MODULAR CRIMP HEAD, BATTERY POWERED CRIMP ADAPTER, and BATTERY POWERED TOOL.	 Diagram showing the assembly of the modular crimp head onto an electric crimp machine. The modular crimp head is being attached to a battery powered adapter, which is then attached to the electric crimp machine. Labels include: INSTALL BATTERY POWERED ADAPTER WITH CRIMP HEAD HERE and ELECTRIC CRIMP MACHINE.
Figure 8	Figure 9	Figure 10

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 connected to any power source. Disconnect the power by unplugging or by removing the battery.

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

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

PARTS LIST

Item	Order Number	Description	Quantity
1	---	Hand Crimp Frame	1
2	200218-3375	Terminal Locator	1
3	63816-0001	Locking Pin	2
4	63600-0525	Handle Spring	1
5	63600-0520	Crimping Spring	2

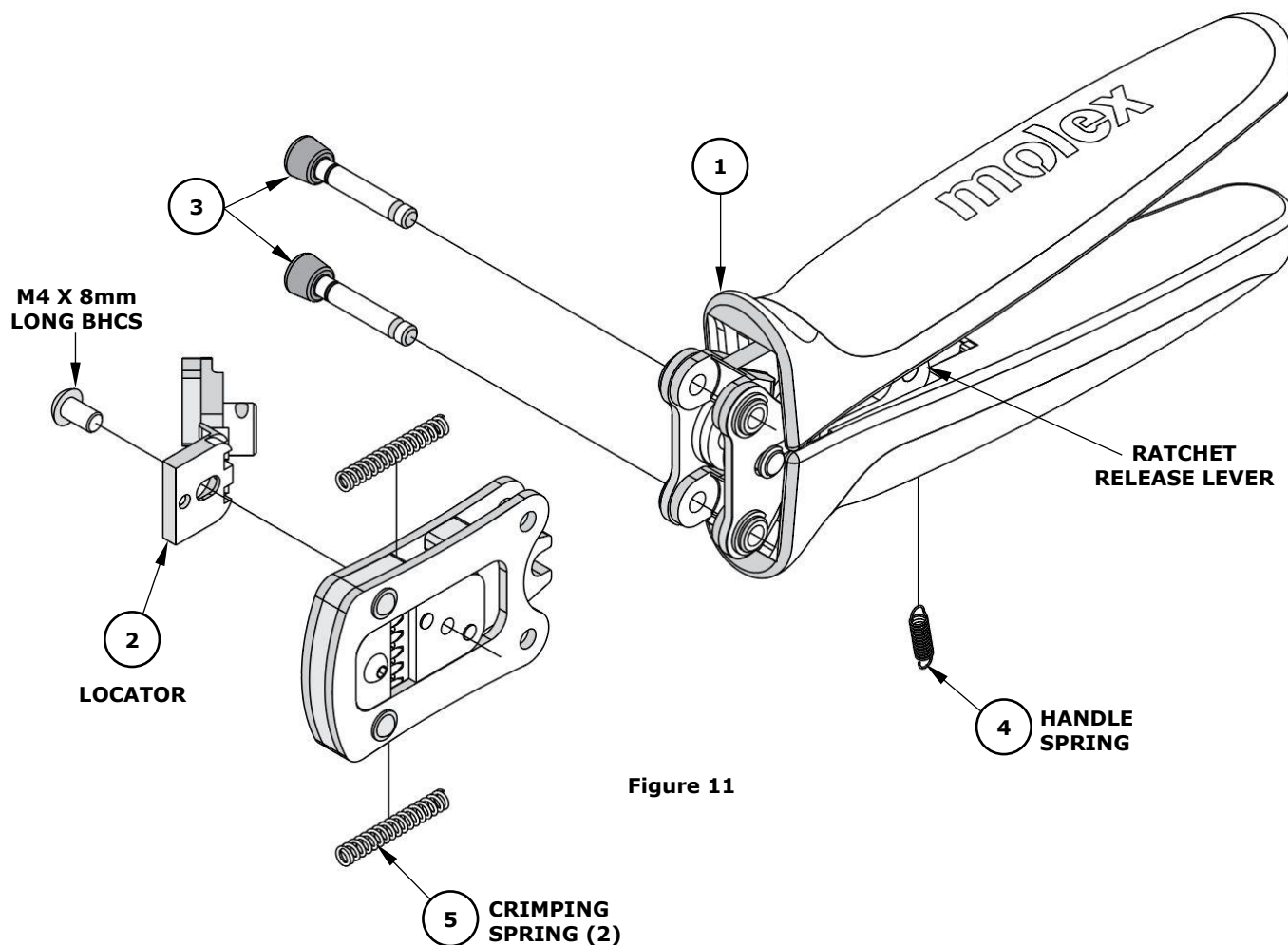


Figure 11

Application Tooling Support

E-Mail: applicationtooling@molex.com
Website: www.molex.com/applicationtooling

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