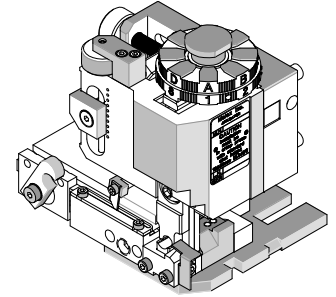




# Mini-Mac Applicator Specification Sheet Order No. 63830-1000



## FEATURES

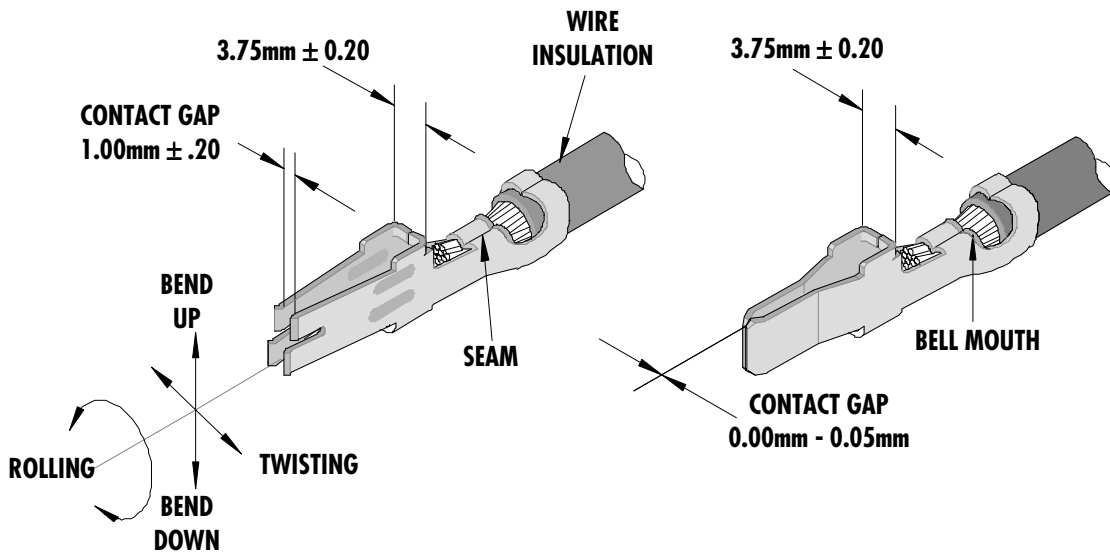
- Quick set-up time; plus the crimp height, track and feed adjustments can be preset in applicator
- Conductor and insulation rings allow quick adjustment for conductor and insulation diameter change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Directly adapts to most automatic wire processing machines. Optimum terminal feed/indexing can be obtained with the optional terminal guide assembly, Order No. 63830-0120. See page 5.

## SCOPE

Mini-Fit Sr.™ Male and Female Crimp Terminals, 14 to 16 AWG

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
			AWG	mm <sup>2</sup>	mm	In.	mm	In.
42815	42815-0040	42815-0042	14-16	2.00-1.30	3.33 max.	0.131 max.	4.25-4.75	.167-.187
	42815-0041	42815-0049						
42817	42817-0040	42817-0140	14-16	2.00-1.30	3.33 max.	0.131 max.	4.25-4.75	.167-.187
	42817-0041	42817-0141						
	42817-0042	42817-0142						
	42817-0049	42817-0149						

## DEFINITION OF TERMS



**CRIMP SPECIFICATIONS**

Terminal Series No.	Wire Size		Bell mouth		Cut-off Tab Max.		Conductor Brush	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.
42815	14-16	2.00-1.30	0.20-0.50	.008-.020	0.50 max.	.020 max.	0.25-0.75	.010-.030
42817	14-16	2.00-1.30	0.20-0.50	.008-.020	0.50 max.	.020 max.	0.25-0.75	.010-.030

Terminal Series No.	Wire Size		Bend up	Bend down	Twist	Roll	Seam Seam shall not be open and no wire allowed out of the crimping area.
	AWG	mm <sup>2</sup>	Degree		Degree		
42815	14-16	2.00-1.30	3	3	4	8	
42817	14-16	2.00-1.30	3	3	4	8	

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Conductor				Pull Force Min.	
			Crimp Height		Crimp Width			
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.
42815	14	2.00	1.89-1.99	.074-.078	3.20	.126	222.4	50.00
42815	16	1.30	1.82-1.92	.072-.075	3.20	.126	133.4	30.00
42817	14	2.00	1.89-1.99	.074-.078	3.20	.126	222.4	50.00
42817	16	1.30	1.82-1.92	.072-.075	3.20	.126	133.4	30.00

Pull Force should be measured with no influence from the insulation crimp.  
The above specifications are guidelines to an optimum crimp.

**PARTS LIST**

<b>Mini-Mac Applicator 63830-1000</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63830-1070	63830-1070	Tool Kit (All "Y" Items)	REF
1	63830-0301	63830-0301	Conductor Punch	1 Y
2	63830-0302	63830-0302	Conductor Anvil	1 Y
3	63830-0305	63830-0305	Insulation Punch	1 Y
4	63445-4502	63445-4502	Insulation Anvil	1 Y
5	63443-0045	63443-0045	Front Cut-off Plunger	1 Y
6	63443-0046	63443-0046	Front Cut-off Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-18-4165	60718-4	Wire Stop	1
8	63443-0009	63443-0009	Scrap Chute Front	1
9	63443-0021	63443-0021	Lower Tooling Key	1
10	63443-0050	63443-0050	Tooling Washer	1
11	63443-2417	63443-2417	Anvil Mount	1
12	63700-0539	63700-0539	Cut-Off Plunger Spring	1
13	63821-0012	63821-0012	Front Cover	1
14	63830-0113	63830-0113	Rear Cover	1
14A	63830-0120	63830-0120	Optional Terminal Guide Assembly	0
15	63830-3001	63830-3001	Front Plunger Striker	1
<b>Frame</b>				
16	63800-4300	63800-4300	Mini-Mac Applicator Frame	1
17	69028-0806	69028-0806	Conductor Adjusting Cam	1
<b>Hardware</b>				
18	N/A	N/A	M3 by 6 Long SHCS	2**
19	N/A	N/A	M4 by 6 Long SHCS	1**
20	N/A	N/A	M4 by 12 Long BHCS	2**
21	N/A	N/A	M4 by 30 Long SHCS	1**
22	N/A	N/A	M4 by 50 Long SHCS	1**
23	N/A	N/A	M5 by 12 Long SHCS	1**
24	N/A	N/A	M8 by 20 Long BHCS	1**
25	N/A	N/A	2mm by 8 Long Roll Pin	1**
26	N/A	N/A	3mm by 6 Long Roll Pin	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

### Assembly Drawing

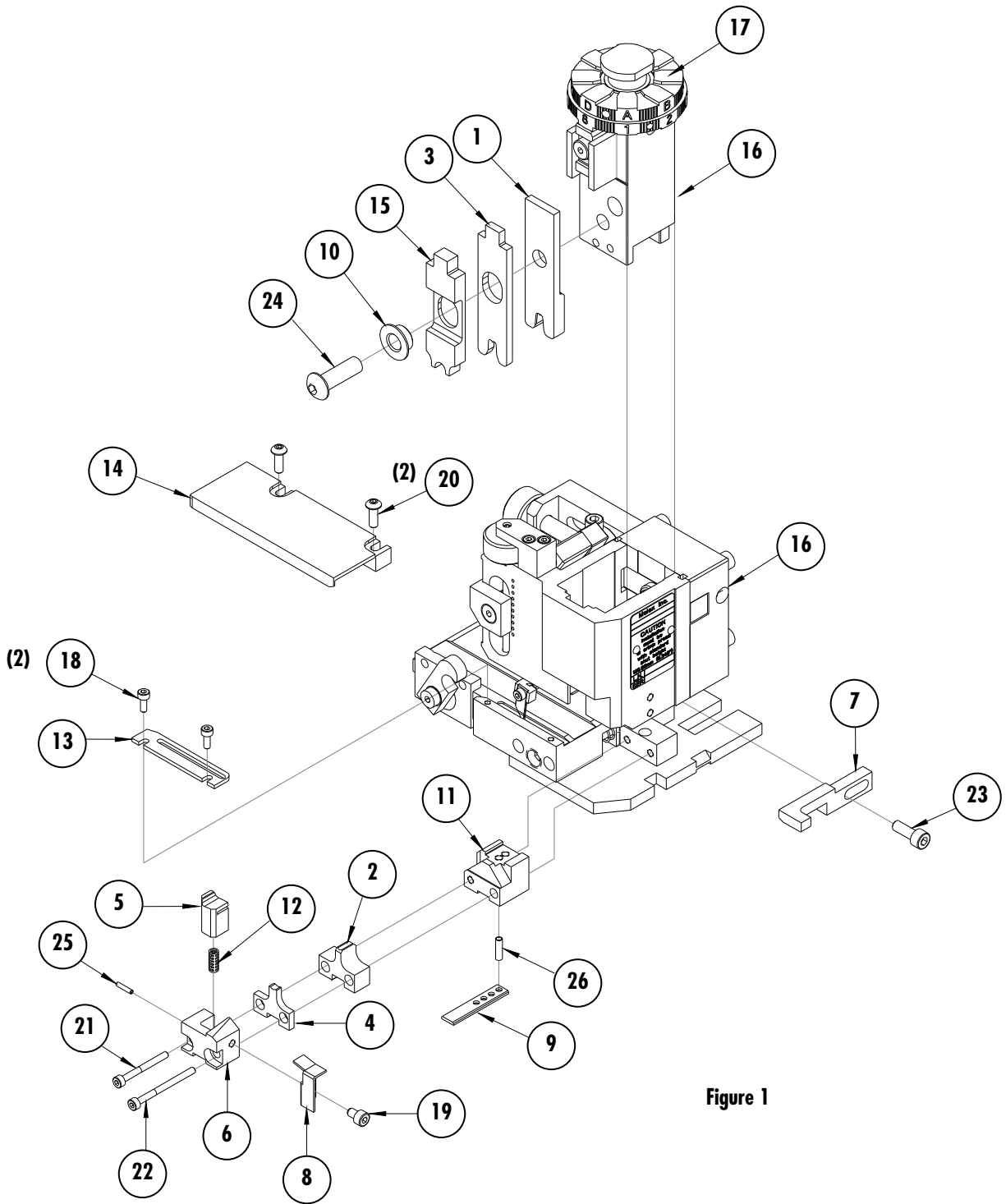
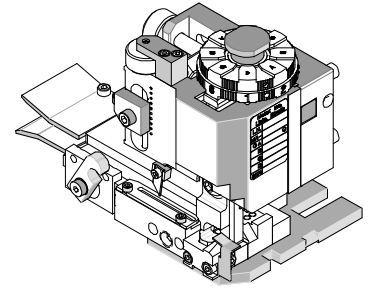


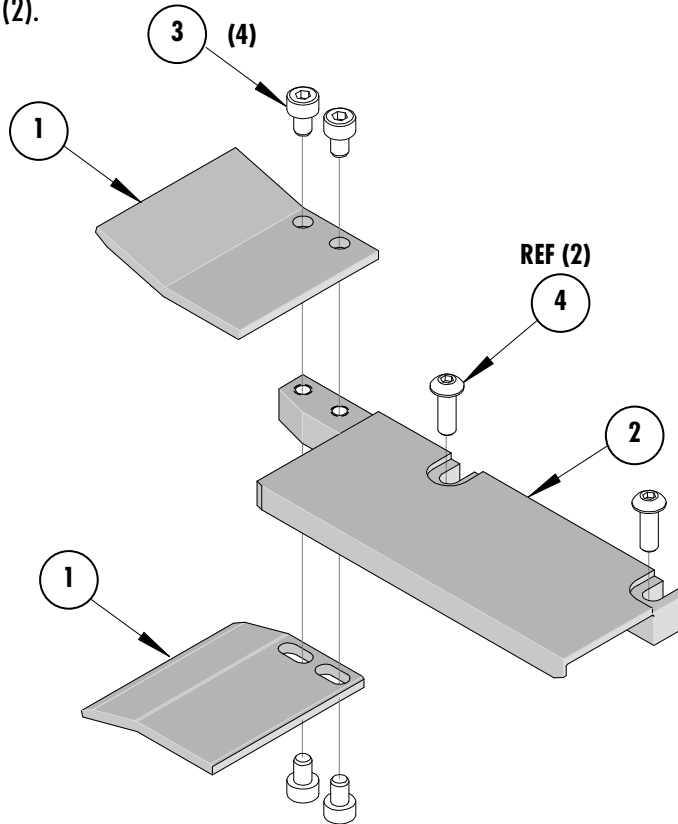
Figure 1

**OPERATION:**

The Optional Terminal Guide Assembly helps to align slightly bent up or down terminals, entering the track. Recommended for use with wire processing equipment, or roughly handled terminal reels. To install the Optional Terminal Guide assembly follow the steps below.



- 1 Remove the M4 X 12 BHCS (2) from the existing rear cover (Part No. 63830-0113) on the applicator.
- 2 Remove the 63830-0113 rear cover.
- 3 Replace it with the 63830-0120 Optional Terminal Guide Assembly.
- 4 Replace the M4 X 12 BHCS (2).



Optional Terminal Guide Assembly 63830-0120				
Item	Order No	Engineering No.	Description	Quantity
1	63830-0117	63830-0117	Terminal Lead-In	2
2	63830-0118	63830-0118	Rear Cover	1
Hardware				
3	N/A	N/A	M3 by 6 Long SHCS	4**
4	N/A	N/A	M4 by 12 Long BHCS	REF**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

## NOTES

1. Molex recommends an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by manually cycling the press and applicator before crimping under power. Check that all screws are tight.
3. Slugs, terminals, dirt, and oil should be kept clear of work area.
4. Wear safety glasses at all times.
5. For recommended maintenance refer to the Mini-Mac Manual.

**CAUTION:** This applicator should only be used in a press with a shut height of 135.80 mm (5.346"). Tooling damage could result at a lower setting

**CAUTION:** To prevent injury, never operate this applicator without the guards supplied with the press or wire-processing machine in place. Reference the press or wire processing manufacturer's instruction manual.

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

## Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

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