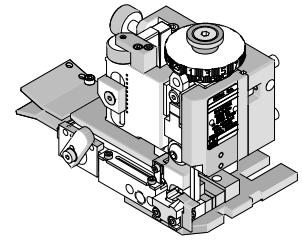




**Mini-Mac  
Applicator**

**Application Tooling  
Specification Sheet**



**Order No. 63891-2000**

**FEATURES**

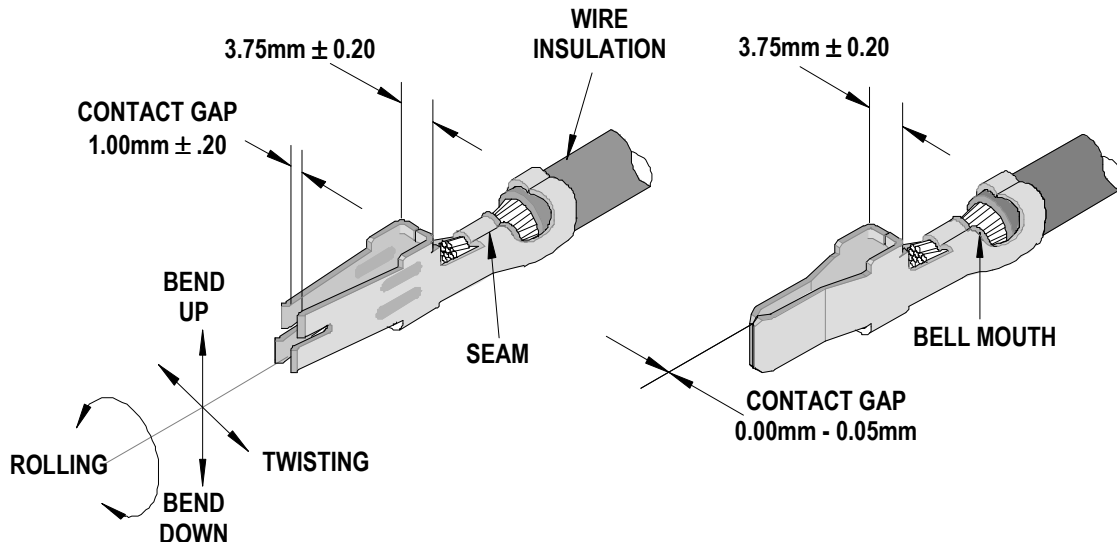
- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of .015mm (.0006") for conductor crimp height and .063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other.
- Optimum terminal feed/indexing can be obtained with the optional terminal guide assembly, Order No. 63830-0120. See page 5.

**SCOPE**

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

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

**DEFINITION OF TERMS**



## CRIMP SPECIFICATIONS

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
42815	0.20-0.50	.008-.020	0.50	.020	0.25-0.75	.010-.030
42817	0.20-0.50	.008-.020	0.50	.020	0.25-0.75	.010-.030

Terminal Series No.	Bend up Bend down		Twist Roll		Punch Width (Ref)			
	Degree		Degree		Conductor		Insulation	
	mm	In	mm	In	mm	In	mm	In
42815	3	3	4	8	3.20	.126	4.50	.177
42817	3	3	4	8	3.20	.126	4.50	.177
<b>Seam</b>								
Seam shall not be open and no wire allowed out of the crimping area.								

After crimping, the conductor profile should measure the following.

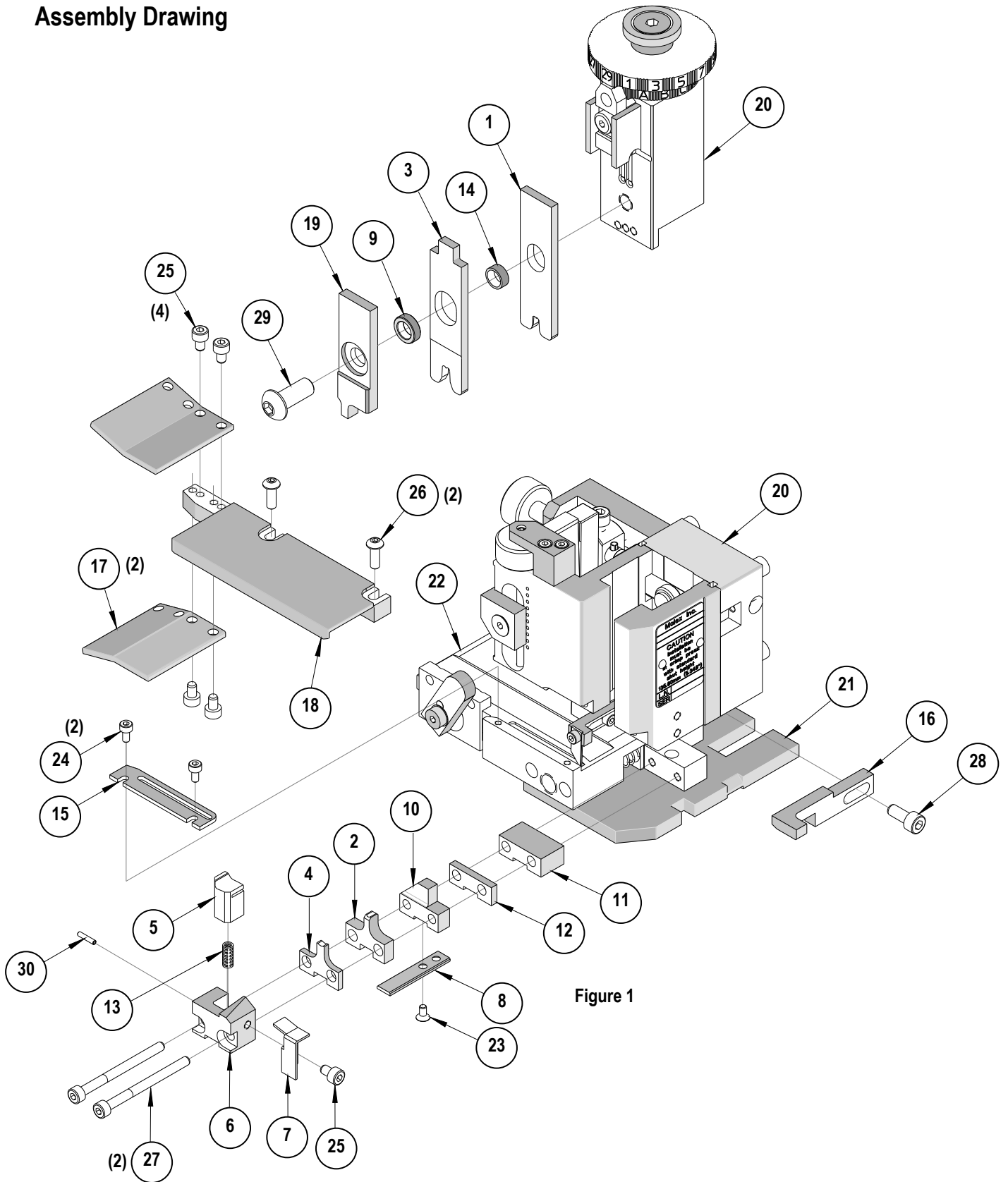
Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
			Crimp Height		Crimp Width			
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.
42815	14	2.00	1.89-1.99	.074-.078	3.20	.126	222.4	50.00
	16	1.30	1.82-1.92	.072-.075	3.20	.126	133.4	30.00
42817	14	2.00	1.89-1.99	.074-.078	3.20	.126	222.4	50.00
	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 63891-2000</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63891-2070	63891-2070	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	63443-0009	63443-0009	Scrap Chute Front	1
8	63443-0024	63443-0024	Lower Tooling Key	1
9	63443-0050	63443-0050	Tooling Washer	1
10	63443-1703	63443-1703	Height Spacer	1
11	63443-2214	63443-2214	Course Spacer (14.00mm)	1
12	63443-2308	63443-2308	Fine Spacer (3.40mm)	1
13	63700-0539	63700-0539	Cut-Off Plunger Spring	1
14	63803-5105	63803-5105	Conductor Bushing	1
15	63821-0012	63821-0012	Front Cover	1
16	63821-0015	63821-0015	Wire Stop	1
17	63830-0117	63830-0117	Terminal Lead In	2
18	63830-0118	63830-0118	Rear Cover	1
19	63830-3001	63830-3001	Front Plunger Striker	1
<b>Frame</b>				
20	63801-3201	63801-3201	Top	1
21	63801-3281	63801-3281	Base	1
22	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
23	N/A	N/A	M3 by 6 Long FHCS	1**
24	N/A	N/A	M3 by 6 Long SHCS	2**
25	N/A	N/A	M4 by 6 Long SHCS	5**
26	N/A	N/A	M4 by 12 Long BHCS	2**
27	N/A	N/A	M4 by 50 Long SHCS	2**
28	N/A	N/A	M5 by 12 Long SHCS	1**
29	N/A	N/A	M8 by 20 Long BHCS	1**
30	N/A	N/A	2mm by 8 Long Roll Pin	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

### Assembly Drawing

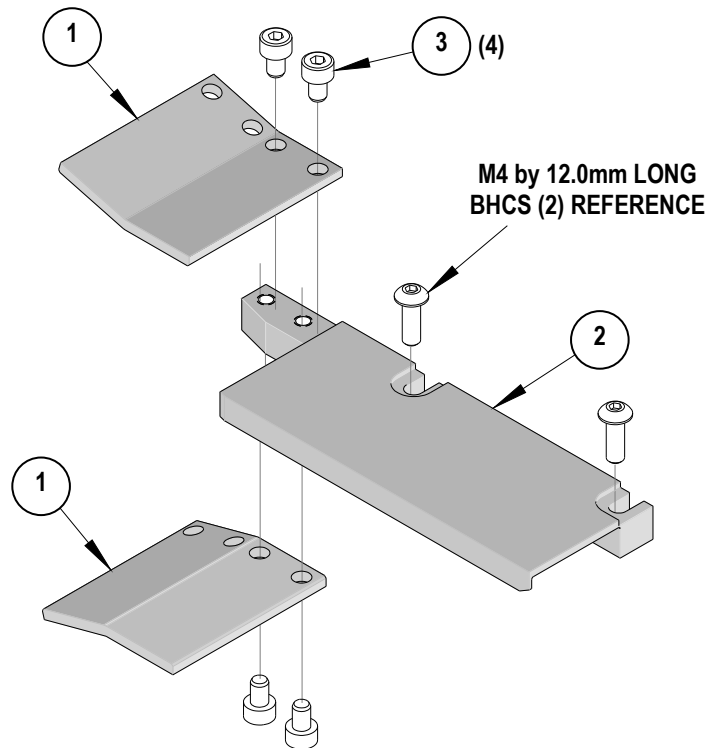


## Older Version Applicators

Older versions of this applicator can be updated with the Terminal Guide Assembly please order the parts below.

The 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 Terminal Guide assembly follow the steps below.

1. Remove the (2) M4 by 12 BHCS from the existing rear cover.
2. Remove the rear cover
3. Replace it with the 63830-0120 Terminal Guide Assembly.
4. Replace the (2) M4 by 12 BHCS.



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	M4 by 6 Long SHCS	4**
** 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.

<http://www.molex.com>