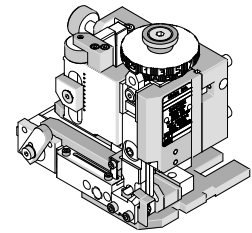


**Mini-Mac  
Applicator**



**Application Tooling  
Specification Sheet**



**Order No. 63891-4100**

**FEATURES**

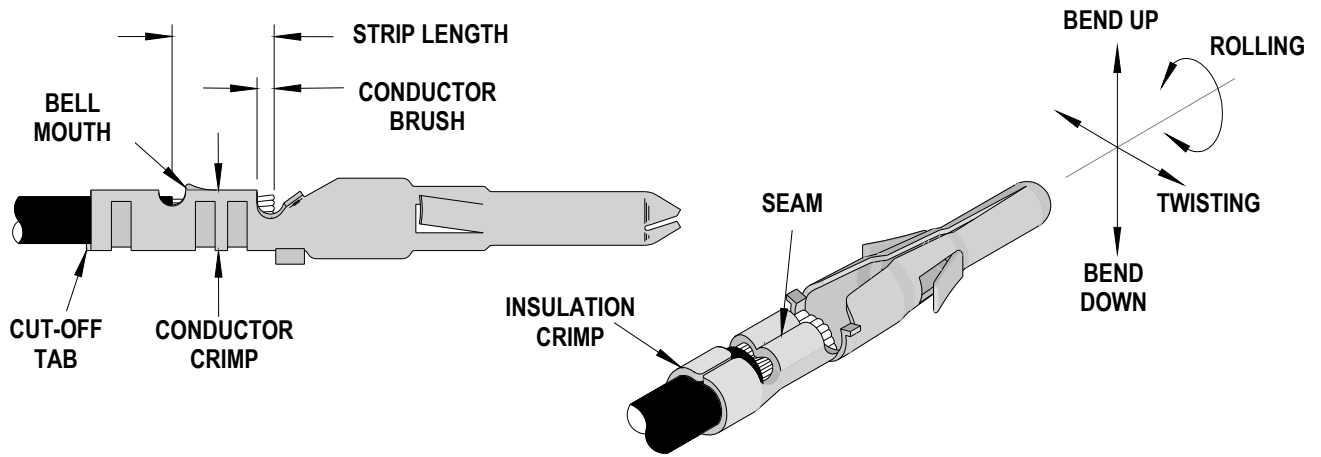
- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows 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

**SCOPE**

Products: 1.57mm (.062") Diameter, Standard .062" Pin and Socket Crimp Terminal 24-30 AWG.

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
				AWG	mm <sup>2</sup>	mm	In.	mm	In.
1854	02-06-2131	02-06-6138	39-00-0280	24-30	0.20-0.05	1.78 Max.	.070 Max.	3.18-3.96	.125-.156
	02-06-2134	02-06-6143	39-00-0336						
	02-06-6130	02-06-6145							
	02-06-6137	04-01-0809							
1855	02-06-1131	02-06-5137	39-00-0338	24-30	0.20-0.05	1.78 Max.	.070 Max.	3.18-3.96	.125-.156
	02-06-1141	02-06-5138	39-00-0340						
	02-06-1143	02-06-5147							
	02-06-5130	04-01-0810							
2189	02-06-1231	02-06-5203		24-30	0.20-0.05	1.78 Max.	.070 Max.	3.18-3.96	.125-.156
	02-06-3202	02-06-5212							
2190	02-06-2231	02-06-4202	02-06-6207	24-30	0.20-0.05	1.78 Max.	.070 Max.	3.18-3.96	.125-.156
4559	02-06-1109	02-06-5211		24-30	0.20-0.05	1.78 Max.	.070 Max.	3.18-3.96	.125-.156

### DEFINITION OF TERMS



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

### CRIMP SPECIFICATIONS

Terminal Series No.	Wire Size		Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.
1854	24-30	0.20-0.05	0.10-0.60	.004-.024	0.13	.005	.25-1.00	.010-.039
1855	24-30	0.20-0.05	0.10-0.60	.004-.024	0.13	.005	.25-1.00	.010-.039
2189	24-30	0.20-0.05	0.10-0.60	.004-.024	0.13	.005	.25-1.00	.010-.039
2190	24-30	0.20-0.05	0.10-0.60	.004-.024	0.13	.005	.25-1.00	.010-.039
4559	24-30	0.20-0.05	0.10-0.60	.004-.024	0.13	.005	.25-1.00	.010-.039

Terminal Series No.	Wire Size		Punch Width mm (Ref)				Seam Seam shall not be open and no wire allowed out of the crimping area.
	AWG	mm <sup>2</sup>	Conductor		Insulation		
			mm	In	mm	In	
1854	24-30	0.20-0.05	1.65	.065	1.65	.065	
1855	24-30	0.20-0.05	1.65	.065	1.65	.065	
2189	24-30	0.20-0.05	1.65	.065	1.65	.065	
2190	24-30	0.20-0.05	1.65	.065	1.65	.065	
4559	24-30	0.20-0.05	1.65	.065	1.65	.065	

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.
1854	24	0.20	0.79-0.84	.031-.033	1.65-1.73	.065-.068	22.3	5.00
	26	0.12	0.74-0.79	.029-.031	1.65-1.73	.065-.068	13.4	3.00
	28	0.08	0.68-0.76	.027-.030	1.65-1.73	.065-.068	8.9	2.00
	30	0.05	0.63-0.68	.025-.027	1.65-1.73	.065-.068	6.7	1.50
1855	24	0.20	0.79-0.84	.031-.033	1.65-1.73	.065-.068	22.3	5.00
	26	0.12	0.74-0.79	.029-.031	1.65-1.73	.065-.068	13.4	3.00
	28	0.08	0.68-0.76	.027-.030	1.65-1.73	.065-.068	8.9	2.00
	30	0.05	0.63-0.68	.025-.027	1.65-1.73	.065-.068	6.7	1.50
2189	24	0.20	0.79-0.84	.031-.033	1.65-1.73	.065-.068	22.3	5.00
	26	0.12	0.74-0.79	.029-.031	1.65-1.73	.065-.068	13.4	3.00
	28	0.08	0.68-0.76	.027-.030	1.65-1.73	.065-.068	8.9	2.00
	30	0.05	0.63-0.68	.025-.027	1.65-1.73	.065-.068	6.7	1.50
2190	24	0.20	0.79-0.84	.031-.033	1.65-1.73	.065-.068	22.3	5.00
	26	0.12	0.74-0.79	.029-.031	1.65-1.73	.065-.068	13.4	3.00
	28	0.08	0.68-0.76	.027-.030	1.65-1.73	.065-.068	8.9	2.00
	30	0.05	0.63-0.68	.025-.027	1.65-1.73	.065-.068	6.7	1.50
4559	24	0.20	0.64-0.69	.025-.027	1.65-1.73	.065-.068	22.3	5.00
	26	0.12	0.56-0.61	.022-.024	1.65-1.73	.065-.068	13.4	3.00
	28	0.08	0.53-0.58	.021-.023	1.65-1.73	.065-.068	8.9	2.00
	30	0.05	0.51-0.56	.020-.022	1.65-1.73	.065-.068	6.7	1.50

Tool Qualification Notes:

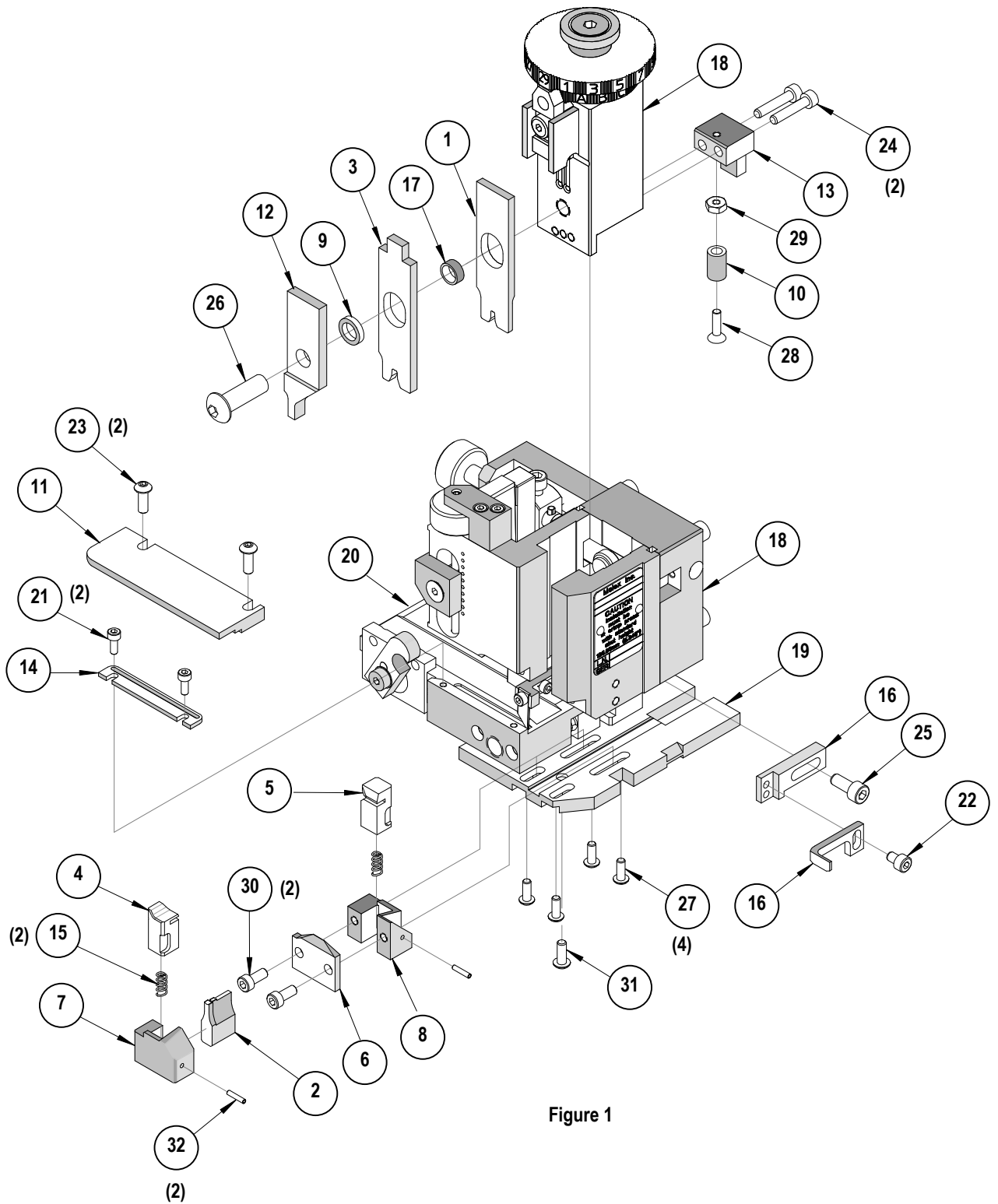
1. Pull Force should be measured with no influence from the insulation crimp.
2. The above specifications are guidelines to an optimum crimp.

**PARTS LIST**

<b>Mini-Mac Applicator 63891-4100</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63891-4170	63891-4170	Tool Kit (All "Y" Items)	REF
1	11-18-4120	60707-9	Conductor Punch	1 Y
2	11-18-4122	60707-11	Combination Anvil	1 Y
3	11-18-4121	60707-10	Insulation Punch	1 Y
4	11-17-3076	7163-30	Front Cut-Off Plunger	1 Y
5	11-17-3079	7163-33	Rear Cut-Off Plunger	1 Y
6	11-17-2136	7163-4	Rear Cut-Off Die Blade	1 Y
7	11-18-4246	60707-18	Front Cut-off Plunger Retainer	1 Y
8	11-18-4247	60707-19	Rear Cut-off Plunger Retainer	1 Y
<b>Other Components</b>				
9	11-17-2140	7163-8	Insulation Punch Spacer	1
10	11-17-2152	7163-14	Hold Down Pad	1
11	11-18-4079	60707-4	Cover Plate	1
12	11-18-4081	60707-6	Front Plunger Striker	1
13	11-18-4082	60707-7	Rear Plunger Striker	1
14	11-18-4083	60707-8	Feed Guide	1
15	11-18-5060	60707-21	Cut-off Plunger Spring	2
16	63443-0090	63443-0090	Wire Stop	1
17	63803-5127	63803-5127	Conductor Bushing	1
<b>Frame</b>				
18	63801-3201	63801-3201	Top	1
19	63801-3282	63801-3282	Base	1
20	63801-6550	63801-6550	Track	1
<b>Hardware</b>				
21	N/A	N/A	M3 by 8 Long SHCS	2**
22	N/A	N/A	M4 by 6 Long SHCS	1**
23	N/A	N/A	M4 by 12 Long BHCS	2**
24	N/A	N/A	M4 by 20 Long SHCS	2**
25	N/A	N/A	M5 by 14 Long SHCS	1**
26	N/A	N/A	M8 by 20 Long BHCS	1**
27	N/A	N/A	#6-32 by 3/8" Long BHCS	4**
28	N/A	N/A	#6-32 by 1/2" Long FHCS	1**
29	N/A	N/A	#6-32 Hex Jam Nut	1**
30	N/A	N/A	#8-32 by 3/8" Long SHCS	2**
31	N/A	N/A	#8-32 by 3/8" Long BHCS	1**
32	N/A	N/A	5/64 by 3/8" Long Roll Pin	2**

\*\* Available from an industrial supply company such as MSC (1-800-645-7270).

### Assembly Drawing



## 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 MiniMac Manual.

**CAUTION:** This applicator should only be used in a press with a shut height of 135.8 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.

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