

# Application Tooling Specification Sheet



Order No. 63895-3200

## FEATURES

Mini-Mac Applicator

- Directly adapts to most automatic wire processing machines
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick setup 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: Super Sabre Receptacle Terminal.

Terminal Series No.	Terminal Order No.			Wire Size	Insulation Diameter (Reference)		Strip Length	
NO.		AWG	mm <sup>2</sup>	Stranding	mm	In.	mm	In.
171825	171825-0100	10-12	-	-		.157181	7.90-8.30	.311327
		-	4.0	19 ST. at 0.51mm DIA.	4.00-4.60			
		-	5.0	65 ST. at 0.30mm DIA.				

#### SETUP

- 1. The crimp press must be set to 135.80mm (5.346").
- 2. Before crimping, a light vanishing lubricant must be applied to the exterior surface of the terminal's crimp barrel. See Molex Oiler Assembly, part number 63801-7240. (Not included with the crimp applicator.)
- 3. Verify that the applicator is properly secured in the press and that the upper crimp tooling does not touch the lower crimp tooling by manually cycling the press before crimping under power.



### **CRIMP SPECIFICATIONS**

	Terminal Series No.	Bell Mouth		Cut-Off Tak	o Maximum	Conductor Brush		
Terri	reminal Series No.	mm	ln.	mm	ln.	mm	ln.	
	171825	0.60-1.20	.024047	0.14	.005	0.50-2.00	.020079	

Terminal Series No.	Bend Up Bend Down		Twist	Roll	Punch Width (Ref) Conductor		Seam	
	Degree (Max)		Degree (Max)		mm	ln.		
171825	171825 3 3		4	8	3.60	.142	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 Crimp Height		<b>Conductor Crimp Width</b>		Pull Force Minimum	
Terminal Series NO.	AWG	mm <sup>2</sup>	mm	ln.	mm	ln.	N	Lb.
	10	-	2.33-2.43	.092096	3.60-3.80	.142150	356.0	80.0
171825	12	-	1.94-2.04	.076080	3.60-3.80	.142150	311.5	70.0
17 1020	-	4.0	2.06-2.22	.081087	3.60-3.80	.142150	*320.0	*71.9
	-	5.0	2.10-2.26	.082089	3.60-3.80	.142150	*320.0	*71.9

#### Note

\* **Metric wire pull force:** For all 4.0mm<sup>2</sup> and 5.0mm<sup>2</sup> crimps that were pull tested as part of the original validation, the contact portion of the terminal broke off before the crimp failed.

## PARTS LIST

Mini-Mac Applicator 63895-3200									
Item	Order No. Engineering No. Description								
Perishable Tooling									
	63895-3270	63895-3270	Tool Kit (All "Y" Items)	REF					
1	63801-5521	63801-5521	Conductor Punch	1 Y					
2	63455-3601	63455-3601	Conductor Anvil	1 Y					
3	63443-0037	63443-0037	Front Cut-Off Plunger	1 Y					
4	63443-0038	63443-0038	Cut-Off Plunger Retainer	1 Y					
Other Components									
5	11-18-4083	60707-8	Front Cover	1					
6	63443-0009	63443-0009	Scrap Chute	1					
7	63443-0024	63443-0024	Lower Tooling Key	1					
8	63443-0090	63443-0090	Wire Stop	1					
9	63443-1720	63443-1720	19.00mm-Height Spacer	1					
10	63443-2207	63443-2207	Course Spacer (7.00mm)	2					
11	63443-2301	63443-2301	Fine Spacer (3.05mm)	1					
12	63443-6121	63443-6121	Rear Cover	1					
13	63466-0504	63466-0504	Plunger Striker	1					
14	63600-1290	63600-1290	Washer	1					
15	63700-0539	63700-0539	Cut-Off Plunger Spring	1					
16	63803-5133	63803-5133	Conductor Bushing	1					
		Fram	e						
17	63801-3201	63801-3201	Тор	1					
18	63801-3281	63801-3281	Base	1					
19	63801-4650	63801-4650	Track	1					
		Hardwa	are						
20	N/A	N/A	M3 by 6 Long SHCS	2**					
21	N/A	N/A	M3 by 6 Long FHCS	1**					
22	N/A	N/A	M4 by 6 Long SHCS	2**					
23	N/A	N/A	M4 by 12 Long BHCS	2**					
24	N/A	N/A	M4 by 50 Long SHCS	2**					
25	N/A	N/A	M5 by 12 Long SHCS	1**					
26	N/A	N/A	M8 by 30 Long BHCS	1**					
27	N/A	N/A	2mm by 5 Long Dowel Pin	1**					
** A	** Available from an industrial supply company such as MSC (1-800-645-7270).								



Revision: B

Revision Date: 08-21-17

### NOTES

- 1. Molex recommends that 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 the work area.
- 4. Wear safety glasses at all times.
- 5. For recommended maintenance, refer to the Mini-Mac manual.

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

**CAUTION:** To prevent injury, never operate this applicator without the guards supplied with the press or wireprocessing 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.

#### **Application Tooling Support**

Phone: (402) 458-TOOL (8665) E-Mail: applicationtooling@molex.com Website: www.molex.com/applicationtooling

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.

UNCONTROLLED COPY