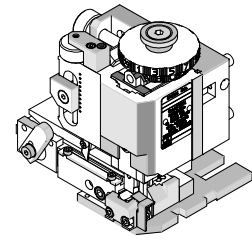


**FineAdjust
Applicator**



**Application Tooling
Specification Sheet**



Order No. 63901-3100

FEATURES

- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- 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

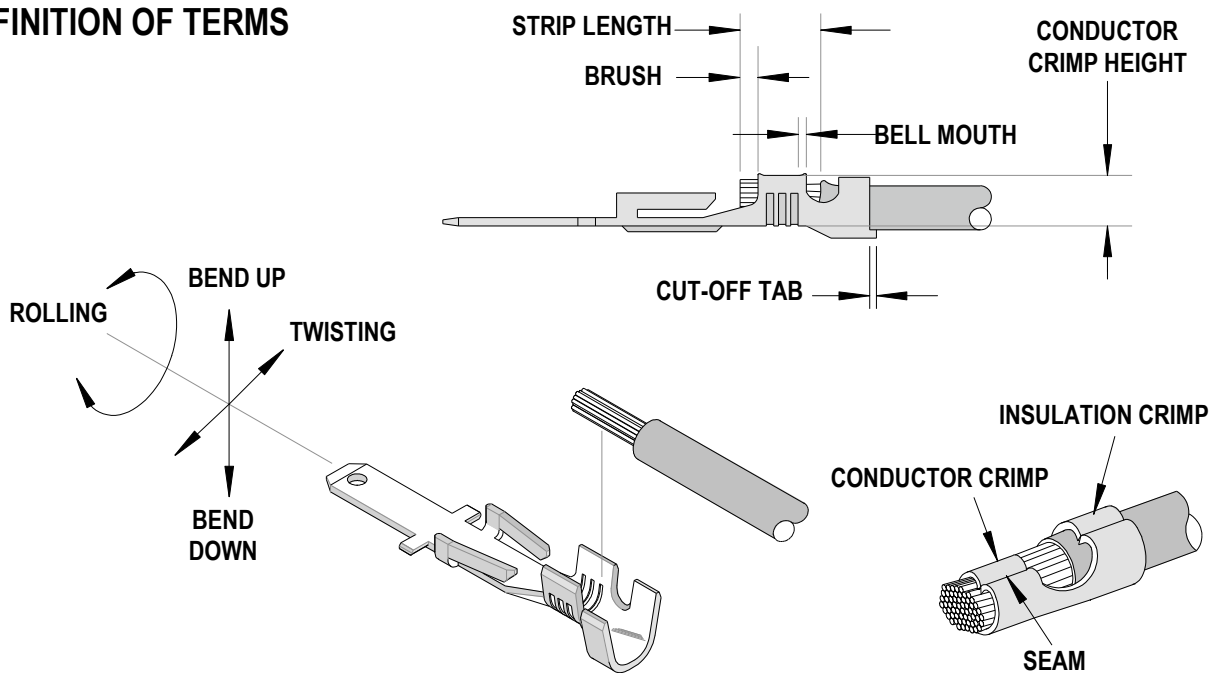
SCOPE

Products: Sabre™ Male Flat Blade Crimp Terminal, (2) 18 AWG (UL1015), and (2) 20 AWG (UL1015) wire stacked vertically.

Terminal Series No.	Terminal Order No.	Wire Size and Type			Insulation Diameter				Strip Length	
					IPC/WHMA-A620 (1)		Terminal (2)			
		AWG	mm ²	Type	mm	In.	mm	In.	mm	In.
43178	43178-2001	(2) 18	(2) 0.80	UL1015	2.85	.112	2.85	.112	3.96-5.54	.156-.218
	43178-2002	(2) 20	(2) 0.50	UL1015	2.54	.100	2.54	.100		
	43178-6001	(1) 18	(1) 0.80	UL1015	2.85	.112	2.85	.112		
	43178-6002	+	+		+	+				
		(1) 20	(1) 0.50		2.54	.100	2.54	.100		

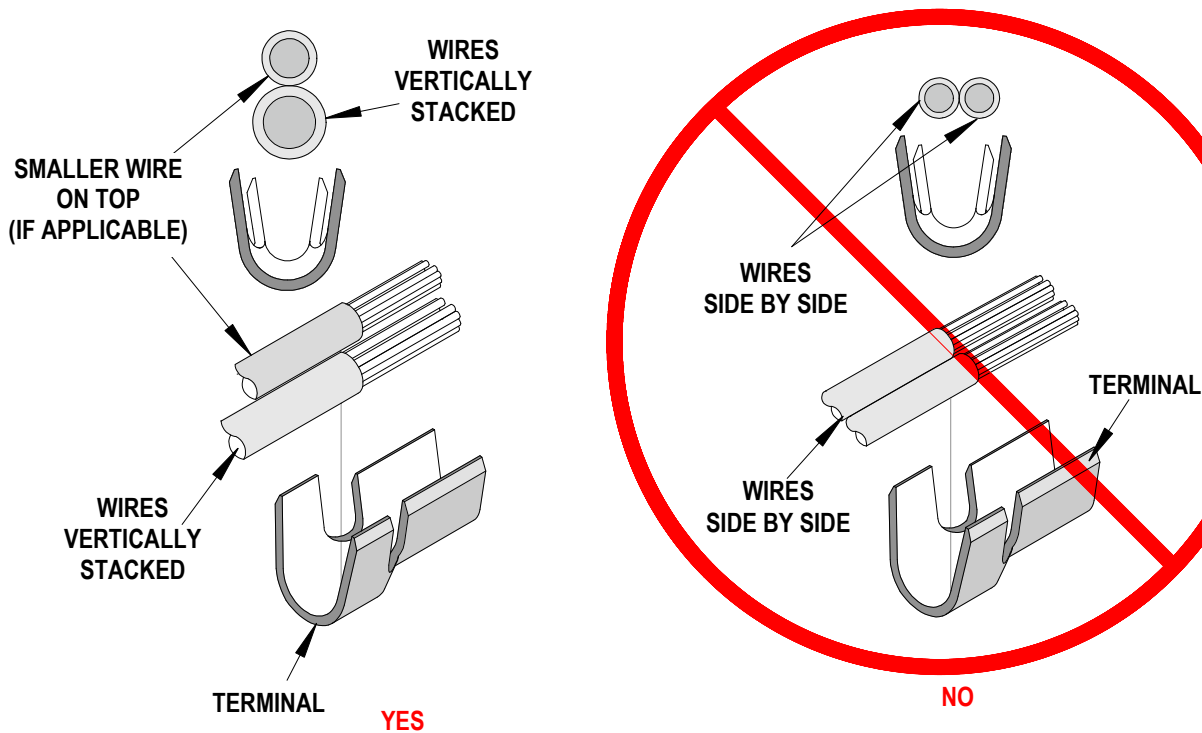
(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.
 (2) Overall insulation OD specification for terminal.

DEFINITION OF TERMS



Wire Feeding Orientation

This Applicator and crimp was developed for (2) 18 AWG UL 1015 or (2) 20 AWG UL 1015 wires in a **vertically stacked** orientation. See the following illustrations below.



CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
43178	0.25-1.00	.010-.039	0.50	.019	1.50	.059

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width (Ref)				Seam
	Degree		Degree		Conductor		Insulation		
	mm	In	mm	In	mm	In	mm	In	
43178	3	3	4	8	3.40	.133	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		Crimp Height		Pull Force Minimum	
	AWG	mm ²	mm	In.	N	Lb.
43178	(2) 18	(2) 0.80	1.75-1.85	.069-.073	88.9	20.0
	(2) 20	(2) 0.50	1.65-1.75	.065-.069	57.9	13.0
	(1) 18 +	(1) 0.80 +	1.70-1.80	.067-.071	●57.9	●13.0
	(1) 20	(1) 0.50				
● Pull testing is performed on the smaller wire (If applicable)						

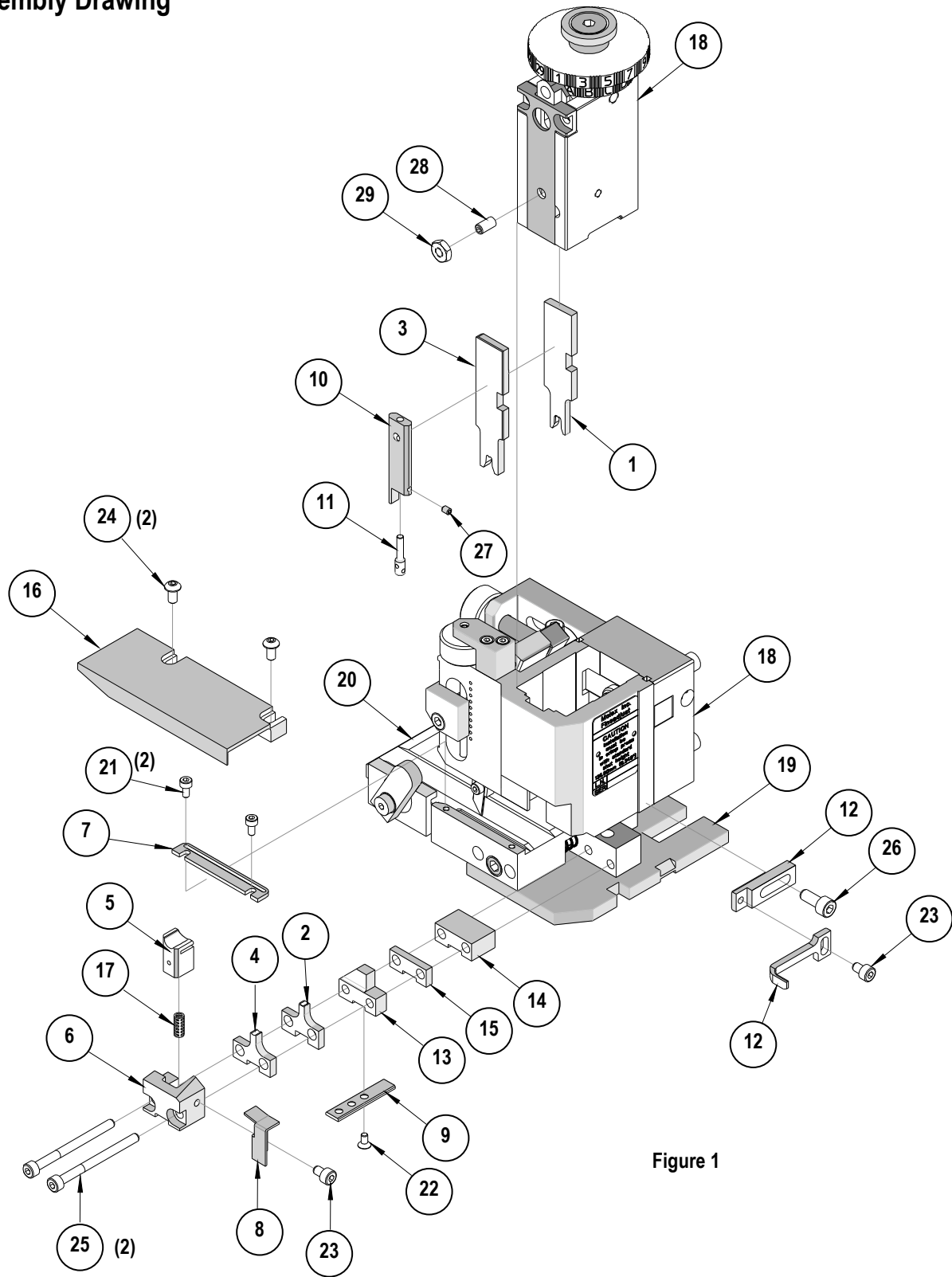
Tool Qualification Notes:

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

FineAdjust Applicator 63901-3100				
Item	Order No	Engineering No.	Description	Quantity
Perishable Tooling				
	63901-3170	63901-3170	Tool Kit (All "Y" Items)	REF
1	63457-3401	63457-3401	Conductor Punch	1 Y
2	63445-3443	63445-3443	Conductor Anvil	1 Y
3	63446-3623	63446-3623	Insulation Punch	1 Y
4	63445-3622	63445-3622	Insulation Anvil	1 Y
5	63443-0037	63443-0037	Front Cut-Off Plunger	1 Y
6	63443-0038	63443-0038	Front Plunger Retainer	1 Y
Other Components				
7	11-18-4083	60707-8	Feed Guide	1
8	63443-0009	63443-0009	Front Scrap Chute	1
9	63443-0024	63443-0024	Key	1
10	63443-0082	63443-0082	Striker	1
11	63443-0083	63443-0083	Striker Screw	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-1712	63443-1712	18.20mm Height Spacer	1
14	63443-2215	63443-2215	15.00mm Spacer	1
15	63443-2301	63443-2301	3.05mm Spacer	1
16	63443-6121	63443-6121	Rear Cover	1
17	63700-0539	63700-0539	Compression Spring	1
Frame				
18	63800-4901	63800-4901	Top	1
19	63801-3281	63801-3281	Base	1
20	63801-4650	63801-4650	Track	1
Hardware				
21	N/A	N/A	M3 by 6 Long SHCS	2**
22	N/A	N/A	M3 by 6 Long FHCS	1**
23	N/A	N/A	M4 by 6 Long SHCS	2**
24	N/A	N/A	M4 by 12 Long BHCS	2**
25	N/A	N/A	M4 by 50 Long SHCS	2**
26	N/A	N/A	M5 by 12 Long SHCS	1**
27	N/A	N/A	M3 by 4 Long Set Screw	1**
28	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
29	N/A	N/A	#10-32 Hex Jam Nut	1**
** 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 FineAdjust Manual.

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

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