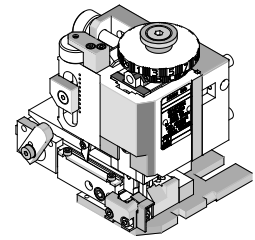




**FineAdjust
Applicator**

Application Tooling Specification Sheet



Order No. 63903-1800

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

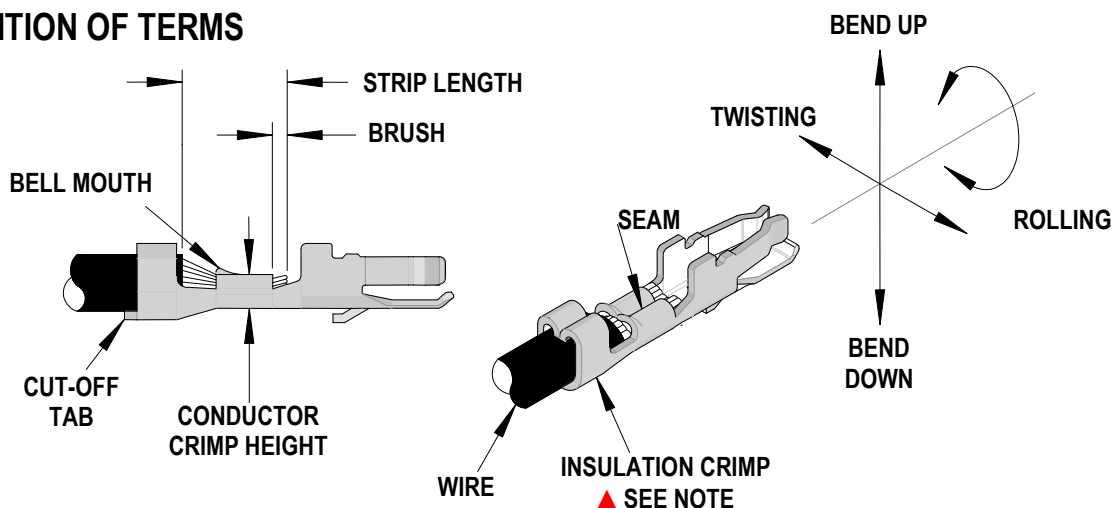
SCOPE

Products: 1.25mm (.049") Wire to Wire Crimp Terminal, 26-30 AWG.

Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter				Strip Length	
				IPC/WHMA-A620 ♦		Terminal ♦♦			
		AWG	mm ²	mm	In.	mm	In.	mm	In.
504185	504185-1000	26-30	0.12-0.05	0.78-0.90	.031-.035	0.78-1.02	.031-.040	1.40-1.60	.055-.063
505263	505263-1000	26-30	0.12-0.05	0.78-0.90	.031-.035	0.78-1.02	.031-.040	1.40-1.60	.055-.063

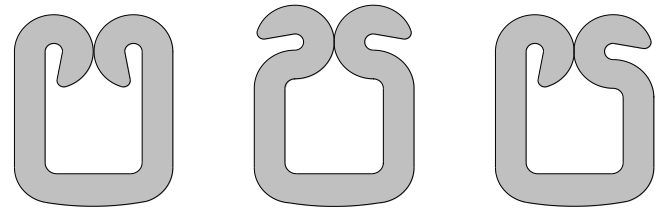
♦ To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.
 ♦♦ Overall insulation OD specification for terminal.

DEFINITION OF TERMS



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

INSULATION CRIMP FORM



This crimp terminal is designed for miniaturization; therefore, each dimension of insulation crimp portion appears small as compared to the terminal material thickness. In order to avoid insulation piercing the crimp forms by the insulation barrel, coining is provided inside of the insulation barrel. For this reason, various crimp forms will occur at the tip of the insulation crimp barrel shown in the figure below.

These crimp forms maybe changed completely by a small change in the wire, insulation punch, or terminal.

These crimp forms are satisfactory for original function of the insulation crimp portion and it is confirmed that all of these forms below are acceptable insulation crimps.

CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
504185	0.10-0.30	.004-.012	0.10	.004	0.10-0.30	.004-.012
505263	0.10-0.50	.004-.020	0.10	.004	0.10-0.50	.004-.020

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width mm (Ref)				Seam
					Conductor		Insulation		
	Degree	Degree	mm	In	mm	In			
504185	2	3	4	6	0.85	.034	0.90	.035	Seam shall not be open and no wire allowed out of the crimping area
505263	3	3	4	8	0.85	.034	0.90	.035	

After crimping, the conductor profile should measure the following.

Terminal Series No.		Wire Size		Conductor Crimp Height		Pull Force Minimum	
		AWG	mm ²	mm	In.	N	Lb.
504185	505263	26	0.12	0.54-0.59	.021-.023	9.8	2.20
		28	0.08	0.49-0.54	.019-.021	9.8	2.20
		30	0.05	0.46-0.51	.018-.020	4.9	1.10

Terminal Series No.		Wire Size		Insulation			
		AWG	mm ²	Crimp Height (Ref.)		Crimp Width (Ref.)	
				mm	In.	mm	In.
504185	505263	26	0.12	1.19-1.29	.047-.051	0.97	.038
		28	0.08	1.18-1.28	.046-.050	0.97	.038
		30	0.05	1.08-1.18	.042-.046	0.97	.038

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 63903-1800				
Item	Order No	Engineering No.	Description	Quantity
Perishable Tooling				
	63903-1870	63903-1870	Tool Kit (All "Y" Items)	REF
1	63457-0103	63457-0103	Conductor Punch	1 Y
2	63455-0135	63455-0135	Conductor Anvil	1 Y
3	63446-0905	63446-0905	Insulation Punch	1Y
4	63443-0005	63443-0005	Cut-Off Plunger	1 Y
5	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Other Components				
6	11-18-4083	60707-8	Feed Guide	1
7	11-24-1067	4996-4	Cut-Off Plunger Spring	1
8	63443-0009	63443-0009	Front Scrap Chute	1
9	63443-0024	63443-0024	Key	1
10	63443-0090	63443-0090	Wire Stop	1
11	63443-2217	63443-2217	Coarse Spacer (17.00mm)	1
12	63443-2310	63443-2310	Fine Spacer (3.50mm)	1
13	63443-2806	63443-2806	Front Plunger Striker	1
14	63443-2904	63443-2904	Wire Hold Down Plunger	1
15	63443-6108	63443-6108	Rear Cover	1
16	63600-0021	63600-0021	Compression Spring	1
17	63903-1811	63903-1811	Height Spacer (19.00mm)	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 45 Long SHCS	2**
26	N/A	N/A	M5 by 12 Long SHCS	1**
27	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
28	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

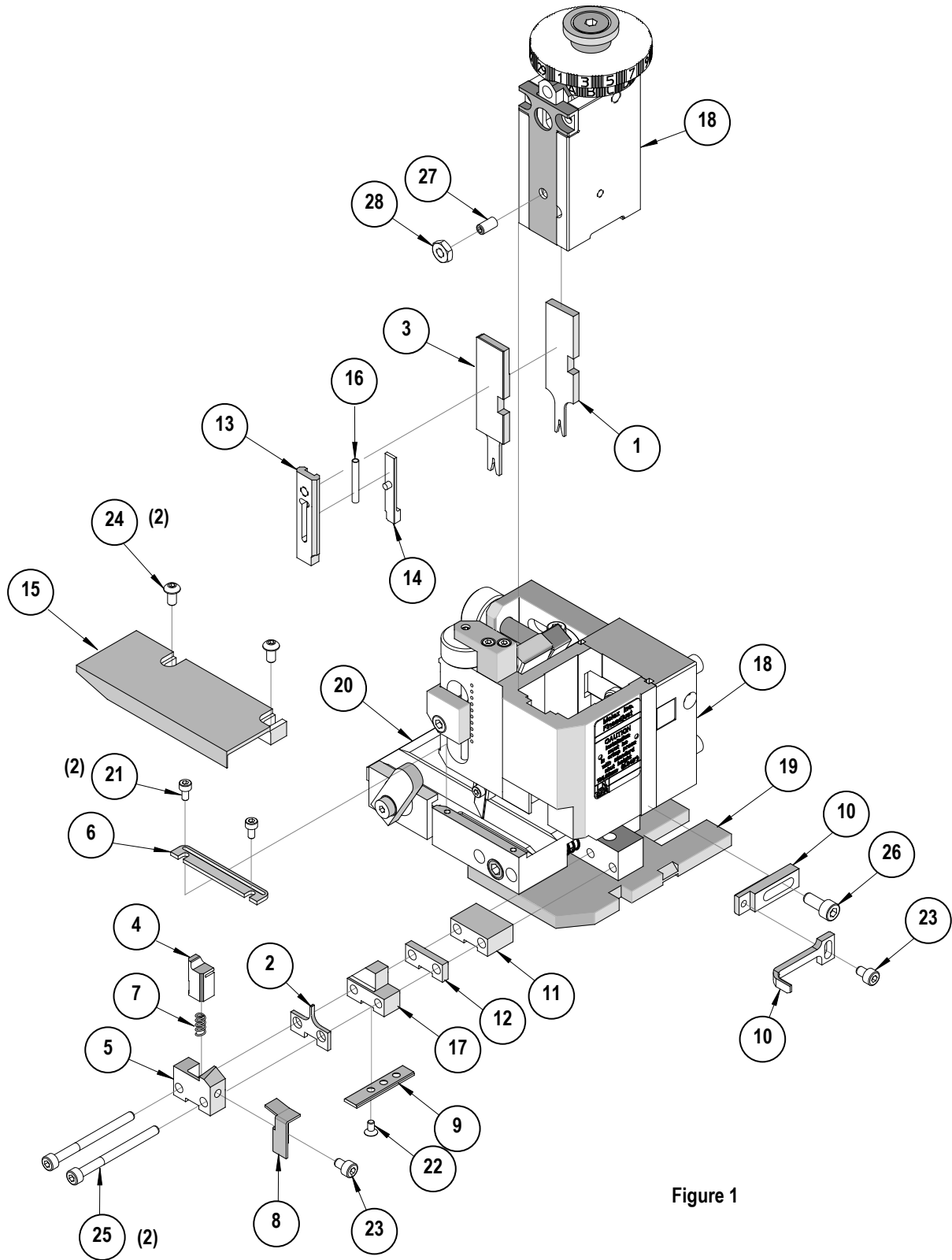


Figure 1

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 135.80 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.

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