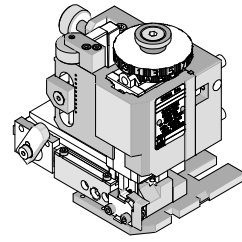




**FineAdjust  
Applicator**

**Application Tooling  
Specification Sheet**



**Order No. 63900-9900**

**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: MLX™ Crimp Terminals, 14-20 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter				Strip Length	
					IPC/WHMA-A620 (1)		Terminal (2)			
					AWG	mm <sup>2</sup>	mm	In.	mm	In.
42023	02-08-2003	02-08-2009	14-20	2.00-0.50	2.41-2.95	.095-.116	1.52-3.30	.060-.130	3.96-5.54	.156-.218
	02-08-2005	02-08-2011								
	02-08-2007	02-08-2012								
42024	02-08-1001	02-08-1005	14-20	2.00-0.50	2.41-2.95	.095-.116	1.52-3.30	.060-.130	3.96-5.54	.156-.218
	02-08-1003	02-08-1007								

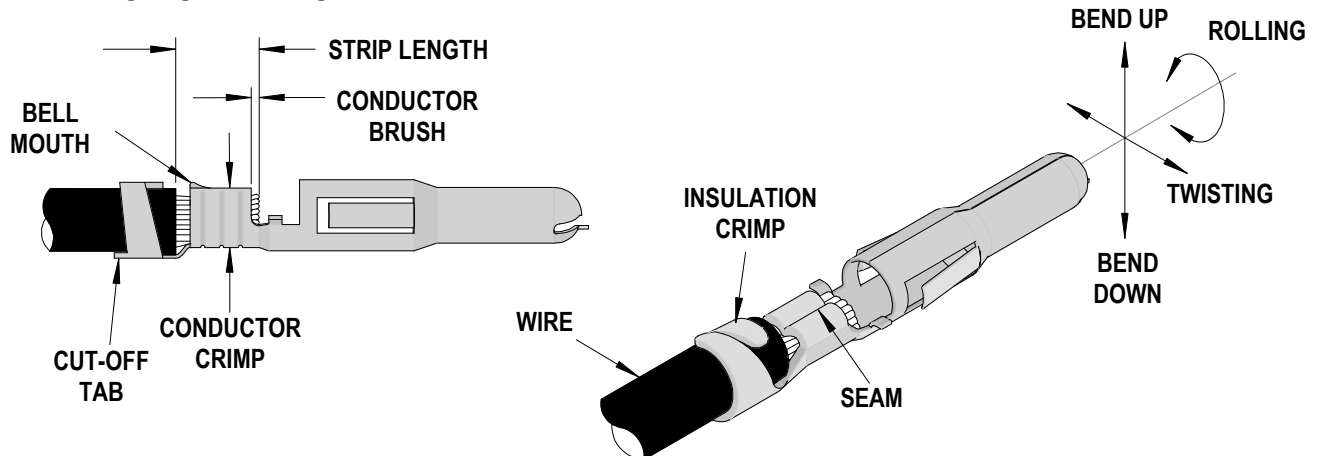
(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.

(2) Overall insulation OD specification for terminal.

To achieve optimum IPC-A620 insulation crimps for 2.08-2.50mm (.082-.098") diameter, use Applicator 63900-7500.

To achieve optimum IPC-A620 insulation crimps for 2.65-3.30mm (.104-.130") diameter, use Applicator 63900-9800.

**DEFINITION OF TERMS**



## CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
42023	0.25-0.51	.010-.020	0.13	.005	0.38-.70	.015-.027
42024	0.25-0.51	.010-.020	0.13	.005	0.38-.70	.015-.027

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width mm (Ref)				Seam Seam shall not be open and no wire allowed out of the crimping area
	Degree		Degree		Conductor		Insulation		
					mm	In	mm	In	
42023	3	3	4	8	2.30	.090	3.20	.126	
42024	3	3	4	8	2.30	.090	3.20	.126	

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Conductor Crimp				Pull Force Minimum	
	AWG	mm <sup>2</sup>	Height		Width		N	Lb.
			mm	In	mm	In		
42023	14	2.00	1.70-1.80	.067-.071	2.33-2.53	.092-.100	222.4	50.0
	16	1.30	1.45-1.55	.057-.061	2.31-2.51	.091-.099	200.2	45.0
	18	0.80	1.27-1.37	.050-.054	2.28-2.48	.090-.098	133.4	30.0
	20	0.50	1.14-1.24	.045-.049	2.24-2.44	.088-.096	62.3	14.0
42024	14	2.00	1.70-1.80	.067-.071	2.33-2.53	.092-.100	222.4	50.0
	16	1.30	1.45-1.55	.057-.061	2.31-2.51	.091-.099	200.2	45.0
	18	0.80	1.27-1.37	.050-.054	2.28-2.48	.090-.098	133.4	30.0
	20	0.50	1.14-1.24	.045-.049	2.24-2.44	.088-.096	62.3	14.0

### 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>FineAdjust Applicator 63900-9900</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63900-9970	63900-9970	Tool Kit (All "Y" Items)	REF
1	63444-2313	63444-2313	Conductor Punch	1 Y
2	63445-2343	63445-2343	Conductor Anvil	1 Y
3	63446-3212	63446-3212	Insulation Punch	1 Y
4	63445-3216	63445-3216	Insulation Anvil	1 Y
5	63443-0002	63443-0002	Front Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-18-4083	60707-8	Feed Guide	1
8	11-24-1067	4996-4	Cut-Off Plunger Spring	1
9	63443-0009	63443-0009	Front Scrap Chute	1
10	63443-0024	63443-0024	Key	1
11	63443-0090	63443-0090	Wire Stop	1
12	63443-1716	63443-1716	Height Spacer (18.60mm)	1
13	63443-2214	63443-2214	Coarse Spacer (14.00mm)	1
14	63443-2318	63443-2318	Fine Spacer (3.90mm)	1
15	63443-2801	63443-2801	Front Plunger Striker	1
16	63443-2908	63443-2908	Wire Hold Down Plunger	1
17	63443-6119	63443-6119	Rear Cover	1
18	63600-1057	63600-1057	Wire Hold Down Spring	1
<b>Frame</b>				
19	63800-4901	63800-4901	Top	1
20	63801-3281	63801-3281	Base	1
21	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
22	N/A	N/A	M3 by 6 Long SHCS	2**
23	N/A	N/A	M3 by 6 Long FHCS	1**
24	N/A	N/A	M4 by 6 Long SHCS	2**
25	N/A	N/A	M4 by 12 Long BHCS	2**
26	N/A	N/A	M4 by 50 Long SHCS	2**
27	N/A	N/A	M5 by 12 Long SHCS	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

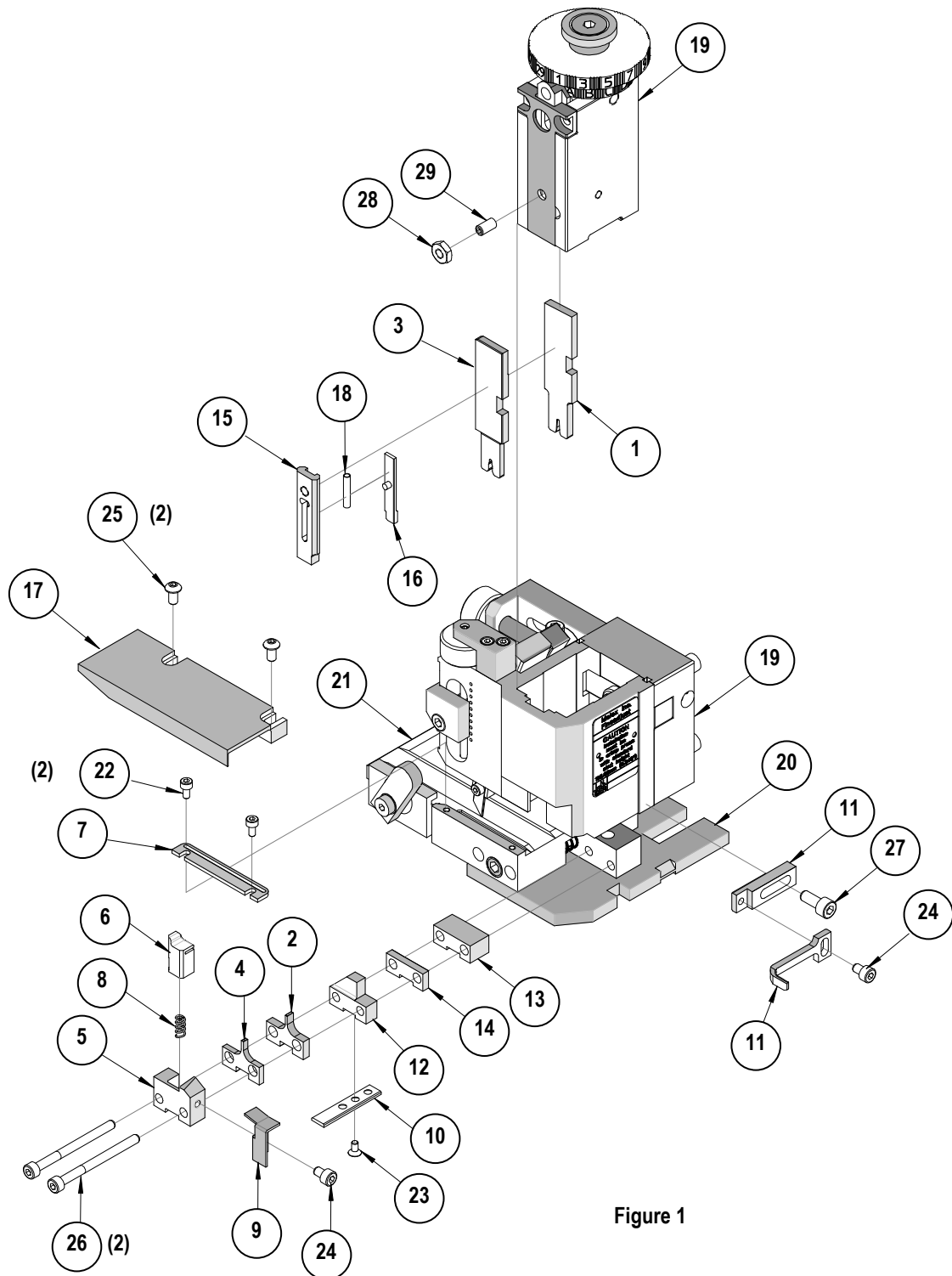


Figure 1

## 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 135.8mm (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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