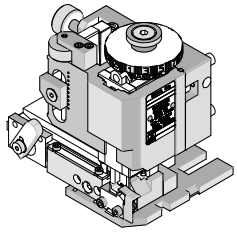
FineAdjust Applicator

Application Tooling Specification Sheet



Order No. 63902-3700

FEATURES

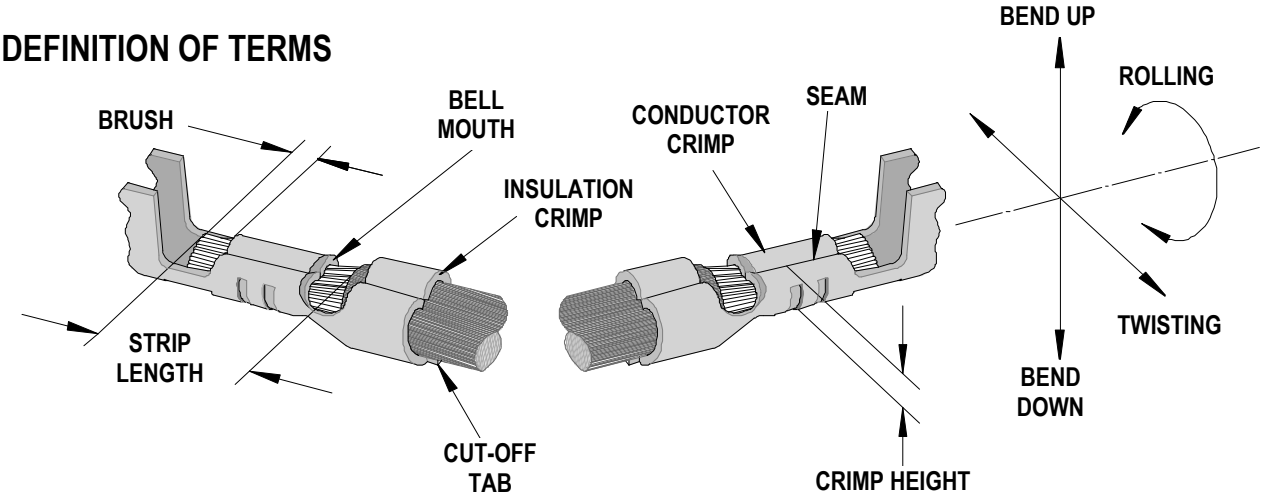
- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can 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: 1.50mm (.059") Pitch CLIK-Mate™ Wire-to-Board Crimp Terminals, 26-30 AWG.

Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter				Strip Length	
				IPC/WHMA-A620 (1)		Terminal (2)			
		AWG	mm²	mm	In.	mm	In.	mm	In.
503429	503429-0000	26	0.136	0.70-1.02	.028-.040	0.70-1.02	.028-.040	1.50 -1.90	.059 -.075
		28	0.080	0.70-1.02	.028-.040	0.70-1.02	.028-.040		
		30	0.049	0.70-1.02	.028-.040	0.70-1.02	.028-.040		
(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range. (2) Overall insulation OD specification for terminal.									

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 SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
503429	0.05-0.40	.002 -.016	0.10	.004	0.10 - 0.60	.004 -.024

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width mm (Ref)				Seam
					Conductor		Insulation		
	Degree (Max)		Degree (Max)		mm	In	mm	In	
503429	3	3	3	8	.90	.035	1.10	.043	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				✦Pull Force Minimum	
			Crimp Height		Crimp Width (Ref.)			
	AWG	mm²	mm	In.	mm	In.	N	Lb.
503429	26	0.136	0.54-0.59	.021-.023	.90	.035	19.6	4.41
	28	0.080	0.50-0.55	.019-.022	.90	.035	9.8	2.20
	30	0.049	0.47-0.52	.018-.021	.90	.035	4.9	1.10

Terminal Series No.	Wire Size		Insulation			
			Crimp Height (Maximum)		Crimp Width (Ref.)	
	AWG	mm²	mm	In.	mm	In.
503429	26	0.136	1.35	.053	1.15	.045
	28	0.080	1.35	.053	1.15	.045
	30	0.049	1.35	.053	1.15	.045

- 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 63902-3700				
Item	**Order No**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63902-3770	63902-3770	Tool Kit (All "Y" Items)	REF
1	63457-0089	63457-0089	Conductor Punch	1 Y
2	63455-0111	63455-0111	Conductor Anvil	1 Y
3	63446-1102	63446-1102	Insulation Punch	1 Y
4	63445-1105	63445-1105	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Front Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Other Components				
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	63443-1720	63443-1720	Height Spacer	1
13	63443-2201	63443-2201	Coarse Spacer (1.00mm)	1
14	63443-2216	63443-2216	Coarse Spacer (16.00mm)	1
15	63443-2303	63443-2303	Fine Spacer (3.15mm)	1
16	63443-2805	63443-2805	Front Plunger Striker	1
17	63443-2905	63443-2905	Wire Hold Down Plunger	1
18	63443-6111	63443-6111	Rear Cover	1
19	63600-0021	63600-0021	Wire Hold Down Spring	1
Frame				
20	63800-4901	63800-4901	Top	1
21	63801-3281	63801-3281	Base	1
22	63801-4650	63801-4650	Track	1
Hardware				
23	N/A	N/A	M3 by 6 Long SHCS	2**
24	N/A	N/A	M3 by 6 Long FHCS	1**
25	N/A	N/A	M4 by 6 Long SHCS	2**
26	N/A	N/A	M4 by 12 Long BHCS	2**
27	N/A	N/A	M4 by 50 Long SHCS	2**
28	N/A	N/A	M5 by 12 Long SHCS	1**
29	N/A	N/A	#10-32 by 3/8"Long Flat Point SSS	1**
30	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

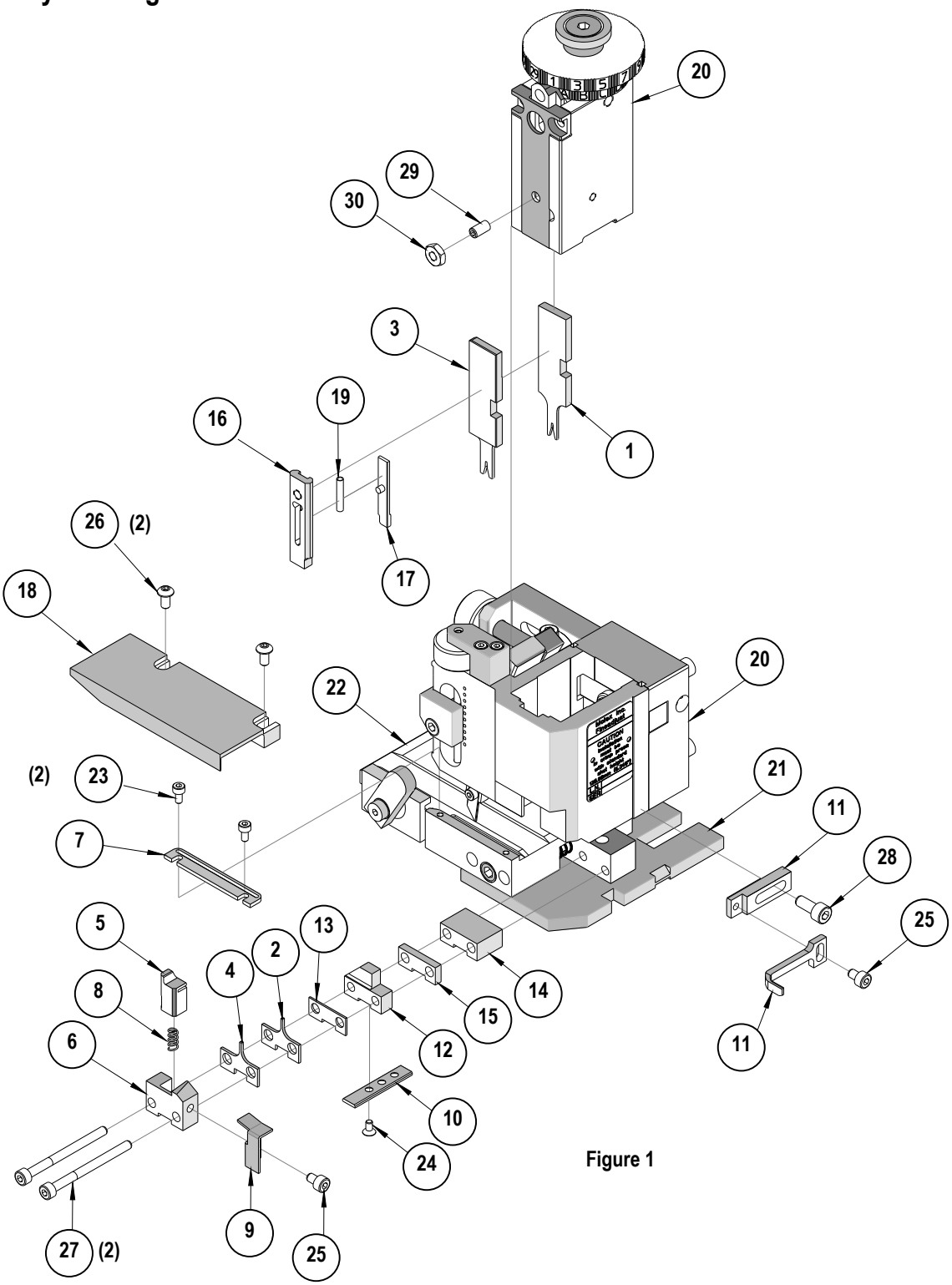


Figure 1

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.

http://www.molex.com