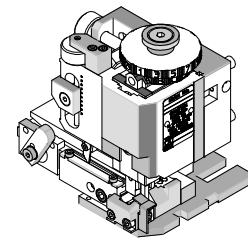**molex®**

FineAdjust Applicator

Application Tooling Specification Sheet

Order No. 63862-9000

FEATURES

- 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 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 0.15mm (.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
- Directly adapts to most automatic wire processing machines

SCOPE

Products: Male and Female Crimp Terminals, 20-22AWG.

Terminal Series No.	Terminal Order No.		Wire Size	Insulation Diameter				Strip Length	
				IPC/WHMA-A620 (1)		Terminal (2) Maximum			
			AWG	mm	In.	mm	In.	mm	In.
35745	35745-0110		20-22	2.40-2.55	.094-.100	2.60	.102	4.00-4.80	.157-.189
35746	35746-0110	35746-0111	20-22	2.40-2.55	.094-.100	2.60	.102	4.00-4.80	.157-.189
35747	35747-0110		20-22	2.40-2.55	.094-.100	2.60	.102	4.00-4.80	.157-.189
35748	35748-0110	35748-0111	20-22	2.40-2.55	.094-.100	2.60	.102	4.00-4.80	.157-.189
(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.									
(2) Overall insulation OD specification for terminal.									

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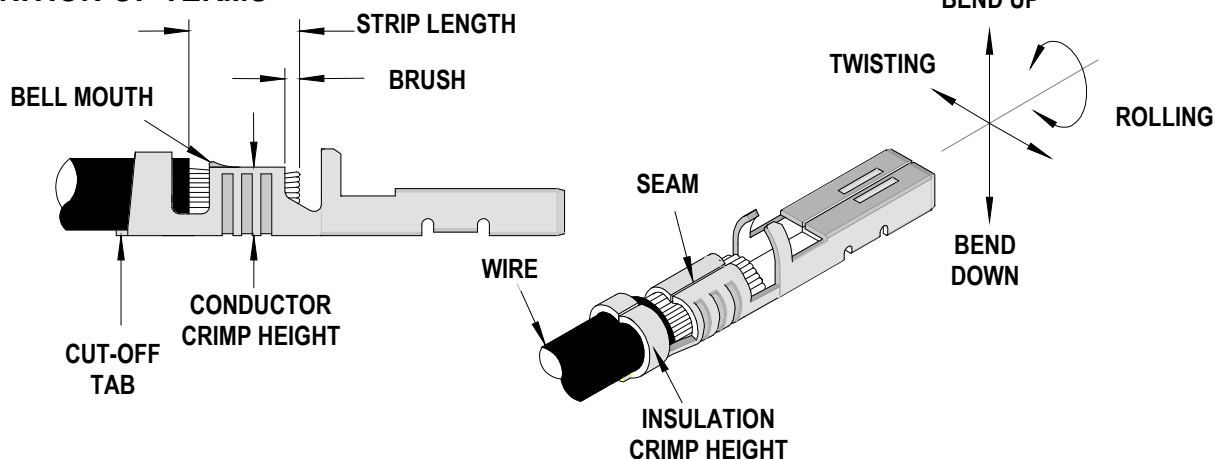
The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

CRIMP SPECIFICATION

Terminal Series No.	Bell Mouth		Cut-Off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
35745	0.30-0.80	.012-.031	0.50	.020	0.30-1.20	.012-.047
35746	0.30-0.80	.012-.031	0.50	.020	0.30-1.20	.012-.047
35747	0.30-0.80	.012-.031	0.50	.020	0.30-1.20	.012-.047
35748	0.30-0.80	.012-.031	0.50	.020	0.30-1.20	.012-.047

Terminal Series No.	Bend Up	Bend Down	Twist	Roll	Punch Width (Ref) Conductor		Insulation		Seam
	Degree		Degree		mm	In.	mm	In.	
35745	3	3	3	5	1.80	.070	3.00	.118	Seam shall not be open and no wire allowed out of the crimping area
35746	3	3	3	5	1.80	.070	3.00	.118	
35747	3	3	3	5	1.80	.070	3.00	.118	
35748	3	3	3	5	1.80	.070	3.00	.118	

After crimping, the conductor profile should measure the following:

Terminal Series No.	Wire Size	Conductor Crimp Height		Crimp Width		Pull Force Minimum	
	AWG	mm	In.	mm	In.	N	Lb.
35745	20	1.08-1.18	.043-.046	1.70-1.90	.067-.070	58.8	13.2
	22	1.00-1.10	.039-.043	1.70-1.90	.067-.070	39.2	8.8
35746	20	1.08-1.18	.043-.046	1.70-1.90	.067-.070	58.8	13.2
	22	1.00-1.10	.039-.043	1.70-1.90	.067-.070	39.2	8.8
35747	20	1.08-1.18	.043-.046	1.70-1.90	.067-.070	58.8	13.2
	22	1.00-1.10	.039-.043	1.70-1.90	.067-.070	39.2	8.8
35748	20	1.08-1.18	.043-.046	1.70-1.90	.067-.070	58.8	13.2
	22	1.00-1.10	.039-.043	1.70-1.90	.067-.070	39.2	8.8

Terminal Series No.	Wire Size	Insulation Crimp Height		Crimp Width	
	AWG	mm	In.	mm	In.
35745	20	2.95-3.15	.116-.124	3.00-3.20	.118-.126
	22	2.75-2.95	.108-.116	3.00-3.20	.118-.126
35746	20	2.95-3.15	.116-.124	3.00-3.20	.118-.126
	22	2.75-2.95	.108-.116	3.00-3.20	.118-.126
35747	20	2.95-3.15	.116-.124	3.00-3.20	.118-.126
	22	2.75-2.95	.108-.116	3.00-3.20	.118-.126
35748	20	2.95-3.15	.116-.124	3.00-3.20	.118-.126
	22	2.75-2.95	.108-.116	3.00-3.20	.118-.126

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.
3. Oiler (63801-7240) required to crimp terminals to improve tooling life and also to minimize the crimp extrusions. See 63800-4900 FineAdjust manual.

PARTS LIST

|			FineAdjust Applicator 63862-9000	
Item	Order No.	Engineering No.	Description	Quantity
			Perishable Tooling	
	63862-9070	63862-9070	Tool Kit (All "Y" Items)	REF
1	63444-1836	63444-1836	Conductor Punch	1 Y
2	63455-1803	63455-1803	Conductor Anvil	1 Y
3	63446-3028	63446-3028	Insulation Punch	1 Y
4	63456-0069	63456-0069	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
			Other Components	
7	11-17-0022	1739-21	Terminal Hold Down Spring	1
8	11-18-4083	60707-8	Front Cover	1
9	11-24-1067	4996-4	Cut-off Plunger Spring	1
10	63443-0009	63443-0009	Scrap Chute Front	1
11	63443-0024	63443-0024	Lower Tooling Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-0093	63443-0093	Terminal Hold Down Shank	1
14	63443-1719	63443-1719	Height Spacer (18.90mm)	1
15	63443-2202	63443-2202	Spacer (2.00mm)	1
16	63443-2316	63443-2316	Coarse Spacer (3.80mm)	1
17	63443-2212	63443-2212	Spacer (12.00mm)	1
18	63443-3160	63443-3160	Front Plunger Striker	1
19	63443-6119	63443-6119	Rear Cover	1
20	63443-7131	63443-7131	Terminal Hold Down	1
			Frame	
21	63800-4901	63800-4901	Top	1
22	63801-3281	63801-3281	Base	1
23	63801-4650	63801-4650	Track	1
			Hardware	
24	N/A	N/A	M3 by 6 Long SHCS	2**
25	N/A	N/A	M3 by 6 Long FHCS	1**
26	N/A	N/A	M3 by 8 Long SHCS	1**
27	N/A	N/A	M4 by 6 Long SHCS	2**
28	N/A	N/A	M4 by 12 Long BHCS	2**
29	N/A	N/A	M4 by 50 Long SHCS	2**
30	N/A	N/A	M5 by 12 Long SHCS	1**
31	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
32	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
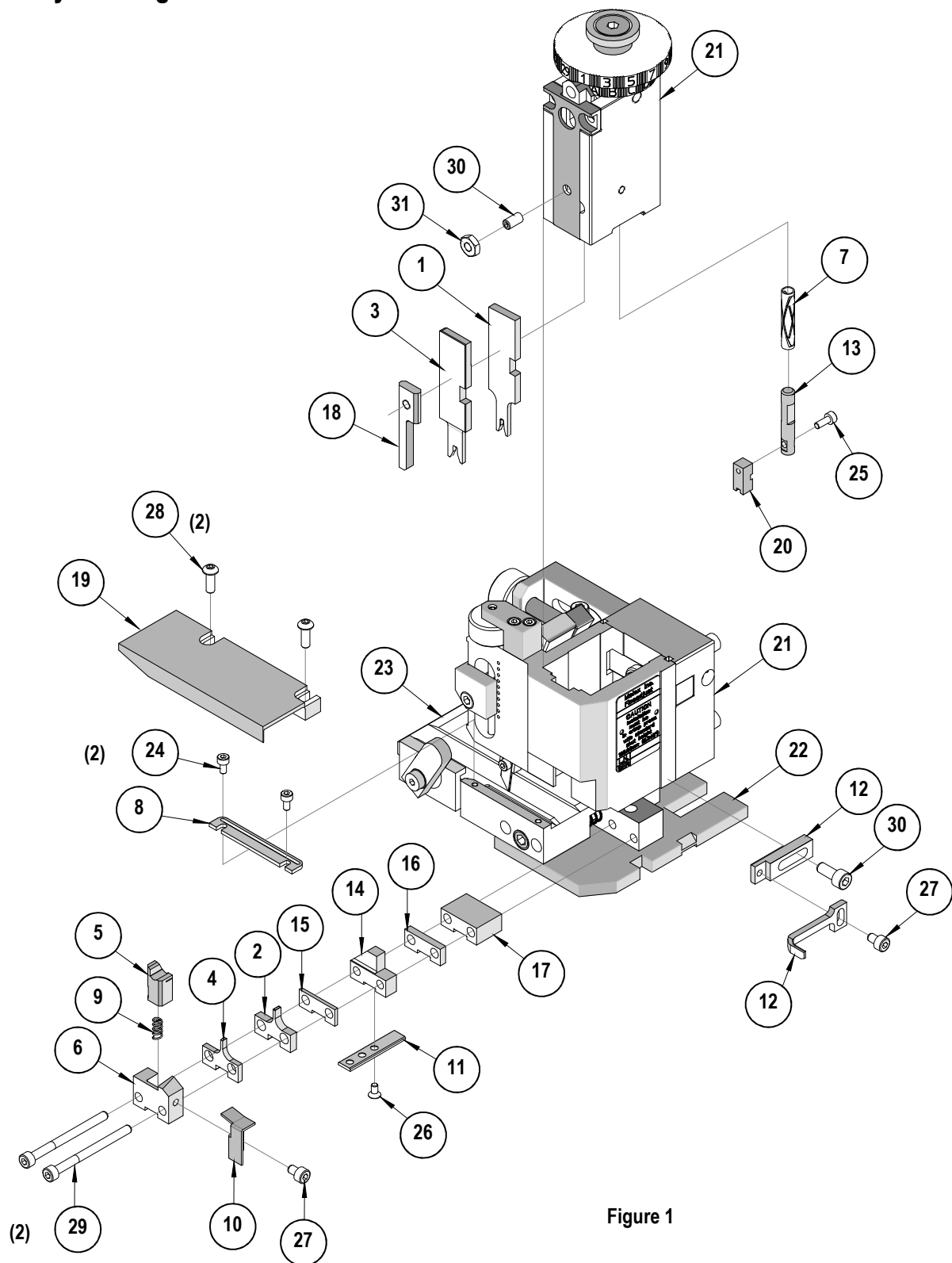
Figure 1

NOTES

1. Molex recommends 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 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 135.8 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.

Application Tooling Support

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Mouser Electronics

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