

**Application Tooling Specification Sheet** 

Order No. 63901-1300

### **FEATURES**

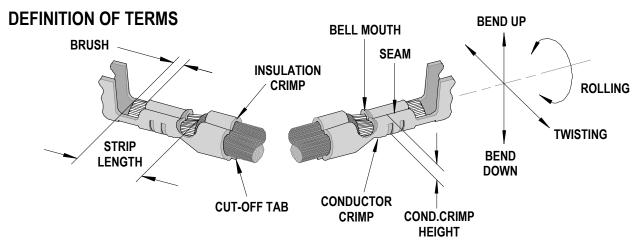
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine 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
- Directly adapts to most automatic wire processing machines

#### SCOPE

Products: 1.20mm (.047") Pitch Pico-EZmate™ Wire-to-Board Crimp Terminal, 28-30 AWG.

Tarminal	Torminal Wire Size			Insulation	Diameter		Strip Langth		
		Wife Size		IPC/WHMA-A620 (1)		Terminal (2)		Strip Length	
Series No.	Order No.	AWG	mm²	mm	ln.	mm	ln.	mm	ln.
<b>×</b> 78172	78172-0410	20.20	0.00.005	0.50.0.70	020 020	0.50-0.70	.020028	0.90-1.30	.035051
	78172-0411	20-30	0.00-0.05	0.50-0.70	.020020				
	Terminal Series No.	Series No. Order No. 78172-0410	Series No. Order No. AWG   78172-0410 28.30	Series No. Order No. AWG mm²   78172-0410 28 30 0.08 0.05	Series No. Order No. AWG mm² mm   78172-0410 38 30 0.08 0.05 0.50 0.70	Terminal Series No. Terminal Order No. Wire Size IPC/WHMA-A620 (1)   AWG mm² mm In.   78172-0410 28 30 0.08 0.05 0.50 0.70 0.000 0.000	Series No. Order No. AWG mm² IPC/WHMA-A620 (1) Termin   AWG mm² mm In. mm	Terminal Series No. Terminal Order No. Wire Size IPC/WHMA-A620 (1) Terminal (2)   AWG mm² mm In. mm In.	Terminal Series No. Terminal Order No. Wire Size IPC/WHMA-A620 (1) Terminal (2) Strip L   AWG mm² mm In. mm In. mm

- × Oiler is required for this applicator due to gold plating on terminal. Oiler order number 63801-7240 (See Part Number 63801-7240 on Molex Web)
- (1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.
- (2) Overall insulation OD specification for terminal.



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

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## **CRIMP SPECIFICATION**

Ī	Terminal Series No.	Bell n	nouth	Cut-off Tak	Maximum (	Conductor Brush		
	reminal Series No.	mm	ln.	mm	ln.	mm	ln.	
I	78172	0.05-0.15	.002006	0.05	.002	0.15-0.70	.006028	

	Bend up Bend down		Twist	Roll	Punch Width mm (Ref)			(Ref)	Seam	
Terminal Series No.			I WIST KOII		Conductor		Insulation		Seam shall not be open	
	Degree	e (Max)	Degree	(Max)	mm	In	mm	ln	and no wire allowed out	
78172	3	3	2	3	0.80	.031	0.80	.031	of the crimping area	

After crimping, the conductor profile should measure the following.

Townings	Wire	Size		Pull Force				
Terminal Series No.	AWG	mm²	Crimp	Height	Crimp Wi	Minimum		
Series No.	AWG	mm	mm	ln.	mm	ln.	N	Lb.
78172	28	0.08	0.44-0.48	.017019	0.85	.033	10.0	2.25
	30	0.05	0.40-0.44	.015017	0.85	.033	5.0	1.12

	Wire	Size	Insulation						
Terminal Ordr No.	AWG	mm²	Crimp	Height		mp Width (Ref.)			
			mm	ln.	mm	ln.			
78172-0410	28	0.08	0.73-0.77	.028030	0.85	.033			
70172-0410	30	0.05	0.71-0.75	.027029	0.85	.033			
78172-0411	28	0.08	0.77-0.81	.030032	0.85	.033			
70172-0411	30	0.05	0.75-0.79	.029031	0.85	.033			

Pull Force should be measured with no influence from the insulation crimp. The above specifications are guidelines to an optimum crimp.

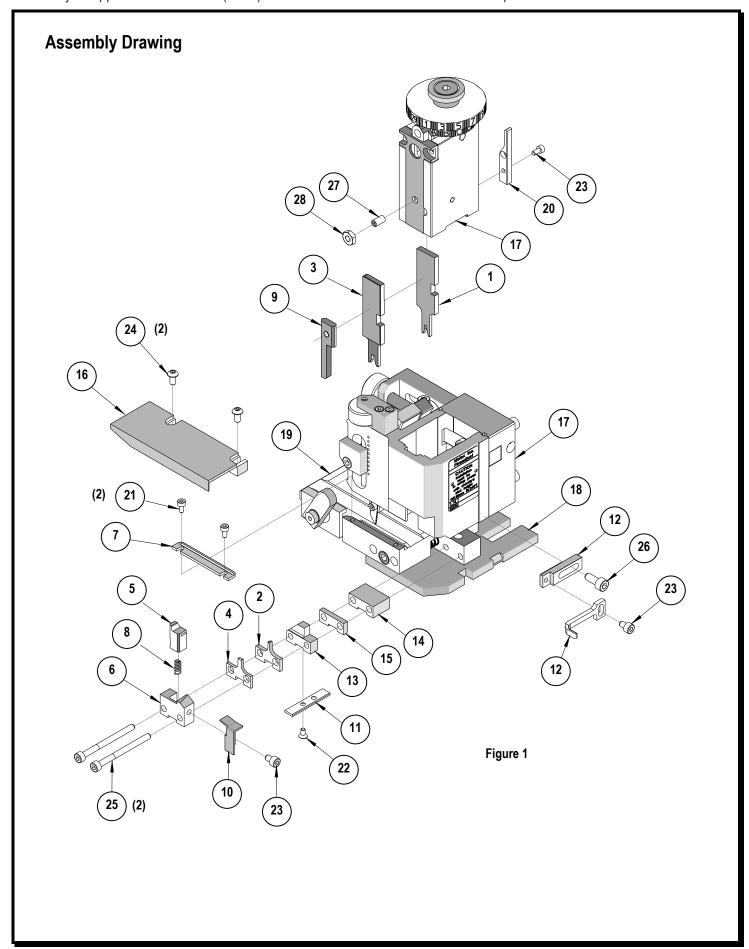
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# **PARTS LIST**

FineAdjust Applicator 63901-1300									
Item	Order No	Engineering No.	Description	Quantity					
Perishable Tooling									
	63901-1370	63901-1370	Tool Kit (All "Y" Items)	REF					
1	63457-0046	63457-0046	Conductor Punch	1 Y					
2	63455-0059	63455-0059	Conductor Anvil	1 Y					
3	63454-0082	63454-0082	Insulation Punch	1 Y					
4	63456-0054	63456-0054	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	63901-1301	63901-1301	Feed Guide	1					
8	11-24-1067	4996-4	Cut-off Plunger Spring	1					
9	11-40-4039	8302-5	Front Plunger Striker	1					
10	63443-0009	63443-0009	Front Scrap Chute	1					
11	63443-0025	63443-0025	Key	1					
12	63443-0090	63443-0090	Wire Stop	1					
13	63890-0058	63890-0058	Height Spacer	1					
14	63443-2217	63443-2217	Coarse Spacer (17.00mm)	1					
15	63443-2314	63443-2314	Fine Spacer (3.70mm)	1					
16	63443-6101	63443-6101	Rear Cover	1					
			Frame						
17	63800-4901	63800-4901	Тор	1					
18	63801-3281	63801-3281	Base	1					
19	63801-4650	63801-4650	Track	1					
20	63820-7820	63820-7820	Feed Cam-Special	1					
		ŀ	lardware						
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	3**					
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	#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).								

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### **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 135.8 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 wireprocessing 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

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