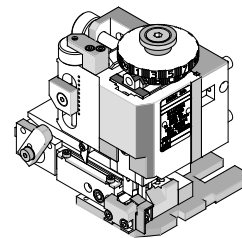


**FineAdjust  
Applicator**



**Application Tooling  
Specification Sheet**



**Order No. 63901-8700**

**FEATURES THIS APPLICATOR IS FOR AUTOMATIC WIRE PROCESSOR USE ONLY.**

- 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

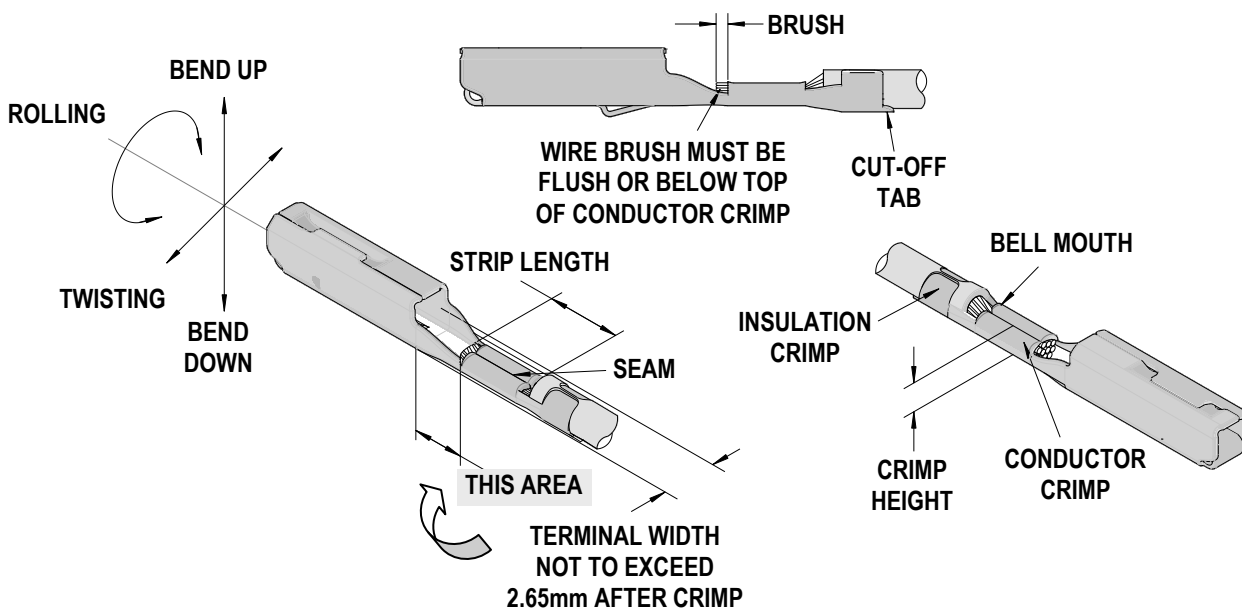
**SCOPE**

Products: MX150 ISO (M3) Receptacle Terminals: 0.35, 0.50 metric, type ISO wire.

Terminal Series No.	Terminal Order No.		Wire Size and Type		Insulation Diameter		Strip Length	
			mm <sup>2</sup>	Type	mm	In.	mm	In.
33001	33001-3006	33001-5005	0.35	ISO	1.20-1.40	.047-.055	4.70-5.60	.185-.220
			0.50	ISO	1.40-1.70	.055-.067	4.70-5.60	.185-.220
33012	33012-3004		0.35	ISO	1.20-1.40	.047-.055	4.70-5.60	.185-.220
			0.50	ISO	1.40-1.70	.055-.067	4.70-5.60	.185-.220
34750	34750-1004		0.35	ISO	1.20-1.40	.047-.055	4.70-5.60	.185-.220
			0.50	ISO	1.40-1.70	.055-.067	4.70-5.60	.185-.220
34780	34780-1004		0.35	ISO	1.20-1.40	.047-.055	4.70-5.60	.185-.220
			0.50	ISO	1.40-1.70	.055-.067	4.70-5.60	.185-.220

Terminals were validated per USCAR-21 using the ISO 6722 wire specifications.  
 Customers are required to complete validation testing if tooling purchased outside Molex Inc.  
 And/or wire specifications are different than above.

### DEFINITION OF TERMS



### CRIMP SPECIFICATION

Terminal Series No.		Bell mouth		Cut-off Tab Maximum		▶ Conductor Brush (Maximum)	
		mm	In.	mm	In.	mm	In.
33001	33012	0.30-0.70	.012-.028	0.50	.020	0.40	.016
34750	34780	0.30-0.70	.012-.028	0.50	.020	0.40	.016

▶ Wire brush must be flush or below top of Conductor Crimp.

**▶ THIS APPLICATOR IS INTENDED FOR AUTOMATIC WIRE PROCESSOR USE ONLY.**

It is very important that the brush length is consistently within specification for this sealed connector system to work properly. This applicator should only be run in a properly setup automatic wire processor in order to consistently achieve the brush length. Any attempt to use this applicator outside a properly setup automatic wire processor will likely not meet the brush specification and cause this sealed connector system to not work properly.

Terminal Series No.		Bend up	Bend down	Twist Roll		Punch Width (Ref)				Seam Seam shall not be open and no wire allowed out of the crimping area
						Conductor		Insulation		
		Degree		Degree		mm	In	mm	In	
33001	33012	1.5	1.5	3	3	1.56	.061	2.00	.079	
34750	34780	1.5	1.5	3	3	1.56	.061	2.00	.079	

After crimping, the crimp profiles should measure the following:

Terminal Series No.	Wire Size mm <sup>2</sup>	Conductor				Insulation				Pull Force Minimum	
		Crimp Height		Crimp Width		Crimp Height		Crimp Width		N	Lb.
		mm	In.	mm	In.	mm	In.	mm	In.		
33001	0.35	1.02-1.08	.040-.042	1.50-1.70	.059-.067	1.65-1.85	.065-.073	1.90-2.10	.075-.083	50	11.3
	0.50	1.05-1.15	.041-.045	1.50-1.70	.059-.067	1.80-2.00	.071-.079	1.90-2.10	.075-.083	75	16.9
33012	0.35	1.02-1.08	.040-.042	1.50-1.70	.059-.067	1.65-1.85	.065-.073	1.90-2.10	.075-.083	50	11.3
	0.50	1.05-1.15	.041-.045	1.50-1.70	.059-.067	1.80-2.00	.071-.079	1.90-2.10	.075-.083	75	16.9
34750	0.35	1.02-1.08	.040-.042	1.50-1.70	.059-.067	1.65-1.85	.065-.073	1.90-2.10	.075-.083	50	11.3
	0.50	1.05-1.15	.041-.045	1.50-1.70	.059-.067	1.80-2.00	.071-.079	1.90-2.10	.075-.083	75	16.9
34780	0.35	1.02-1.08	.040-.042	1.50-1.70	.059-.067	1.65-1.85	.065-.073	1.90-2.10	.075-.083	50	11.3
	0.50	1.05-1.15	.041-.045	1.50-1.70	.059-.067	1.80-2.00	.071-.079	1.90-2.10	.075-.083	75	16.9

**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 63901-8700				
Item	Order No	Engineering No.	Description	Quantity
<b>Perishable Tooling</b>				
	63901-8770	63901-8770	Tool Kit (All "Y" Items)	REF
1	63457-0070	63457-0070	Conductor Punch	1 Y
2	63455-0098	63455-0098	Conductor Anvil	1 Y
3	63454-0114	63454-0114	Insulation Punch	1 Y
4	63456-0078	63456-0078	Insulation Anvil	1 Y
5	63443-0037	63443-0037	Cut-Off Plunger	1 Y
6	63443-0038	63443-0038	Front Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-18-4094	60709A111	Feed Guide	1
8	63443-0009	63443-0009	Scrap Chute	1
9	63443-0024	63443-0024	Key	1
10	63443-0090	63443-0090	Wire Stop	1
11	63443-1714	63443-1714	Height Spacer (18.40mm)	1
12	63443-2202	63443-2202	Coarse Spacer (2.00mm)	1
13	63443-2209	63443-2209	Coarse Spacer (9.00mm)	1
14	63443-2301	63443-2301	Fine Spacer (3.05mm)	1
15	63443-2804	63443-2804	Front Plunger Striker	1
16	63443-2915	63443-2915	Striker Plunger	1
17	63443-6115	63443-6115	Rear Cover	1
18	63600-0021	63600-0021	Striker Plunger Spring	1
19	63700-0539	63700-0539	Cut-off Plunger Spring	1
20	63867-3007	63867-3007	Bottom Cap	1
<b>Frame</b>				
21	63800-4901	63800-4901	Top	1
22	63801-3281	63801-3281	Base	1
23	63801-4650	63801-4650	Track	1
24	63459-0001	63459-0001	Terminal Track	1
<b>Hardware</b>				
25	N/A	N/A	M3 by 6 Long SHCS	2**
26	N/A	N/A	M3 by 6 Long FHCS	1**
27	N/A	N/A	M4 by 6 Long SHCS	2**
28	N/A	N/A	M4 by 8 Long Flat Point SSS	1**
29	N/A	N/A	M4 by 12 Long SHCS	2**
30	N/A	N/A	M4 by 12 Long BHCS	2**
31	N/A	N/A	M4 by 16 Long SHCS	1**
32	N/A	N/A	M4 by 50 Long SHCS	2**
33	N/A	N/A	M5 by 12 Long SHCS	1**
34	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
35	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

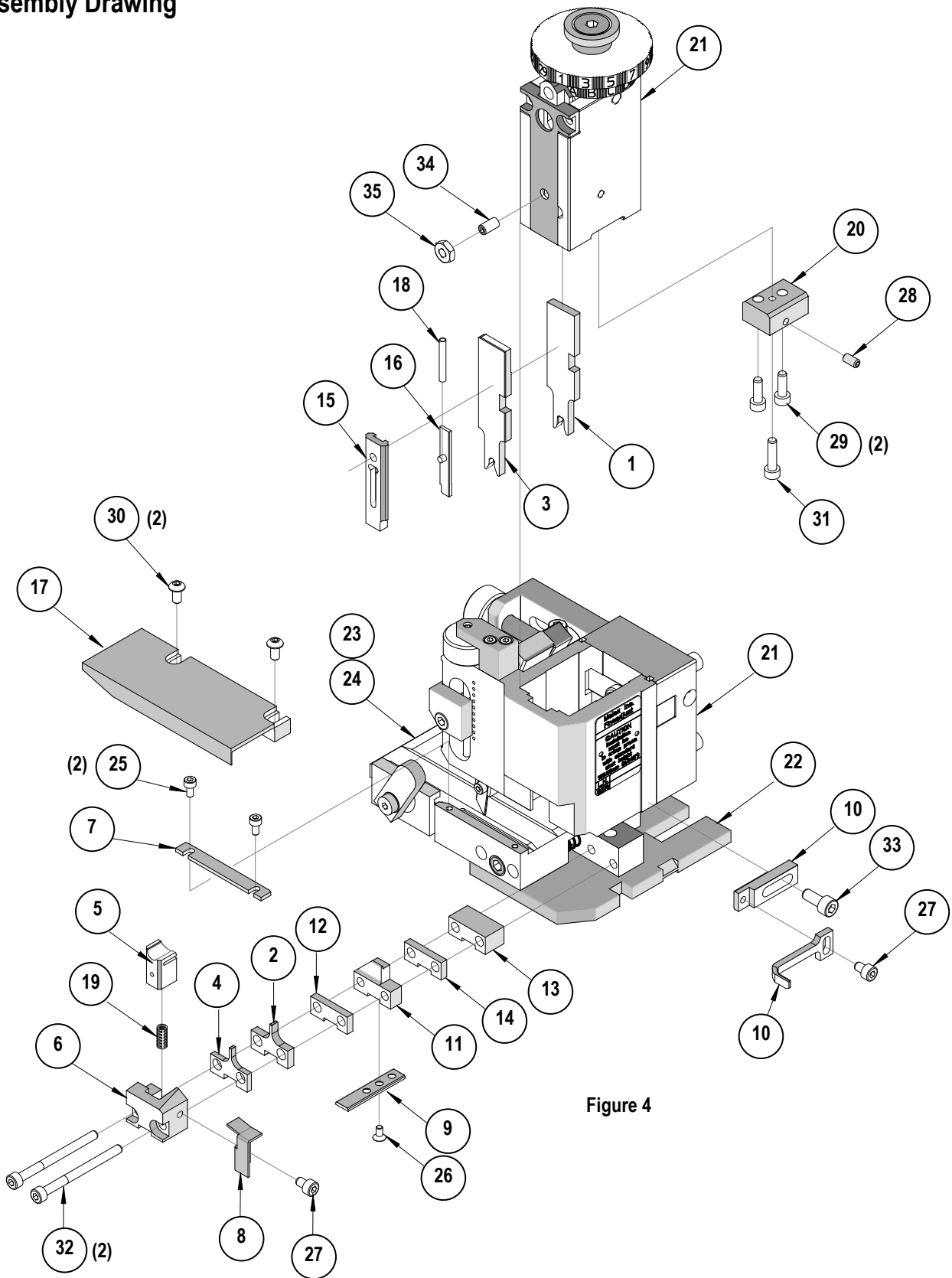


Figure 4

## 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.

Visit our Web site at <http://www.molex.com>