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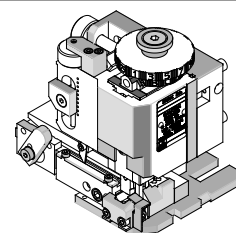
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Fine Adjust Applicator for ULTRA-FIT Terminals

**FineAdjust  
Applicator**

**molex**

**Application Tooling  
Specification Sheet**



**Order No. 63903-2900**

**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

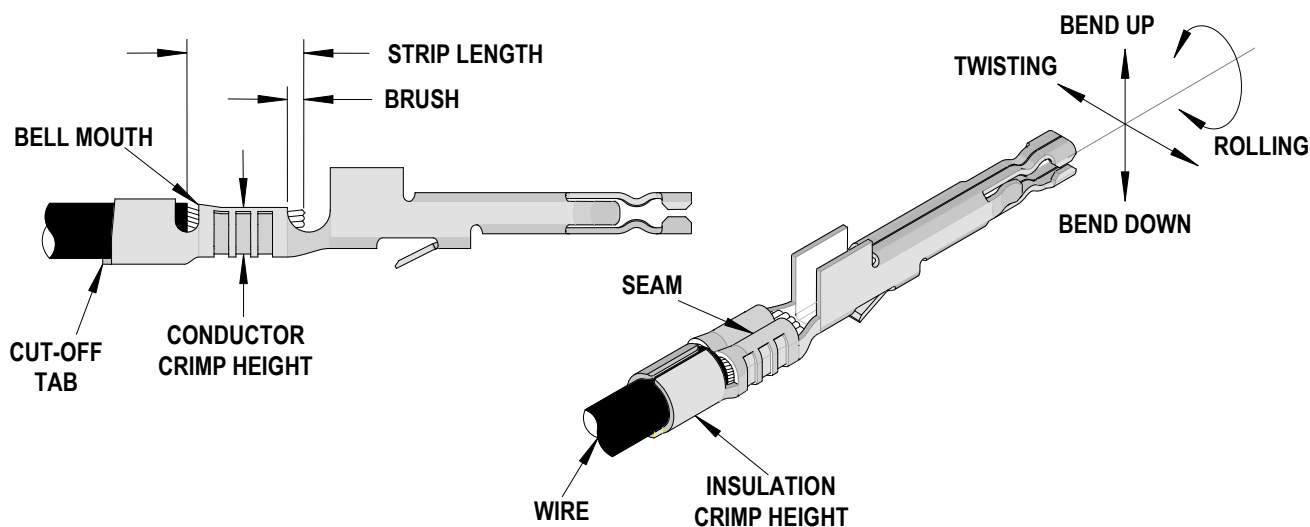
**SCOPE**

Products: ULTRA-FIT Crimp Terminals, 20-22 AWG (UL1061) wires.

Terminal Series No.	Terminal Order No.		Wire Size			Insulation Diameter UL1061 Wire is Recommended		Strip Length	
			AWG	mm <sup>2</sup>	Type	mm	In.	mm	In.
172253	172253-3111	172253-3112	20-22	---	UL1061	1.22-1.42	.048-.056	3.50-4.00	.138-.158
	172253-3123								

**Note:** Oiler (Order No. 63801-7240) is required to crimp these terminals. See Fine Adjust Manual (Order no. 63800-4900).

**DEFINITION OF TERMS**



## Fine Adjust Applicator for ULTRA-FIT Terminals

### CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
172253	0.30-0.50	.012-.020	0.20	.008	0.00-1.00	.000-.039

Terminal Series No.	Bend up    Bend down		Twist    Roll		Punch Width (Ref)				Seam
					Conductor		Insulation		
	Degree (Max)		Degree (Max)		mm	In	mm	In	
172253	3	3	3	5	1.60	.063	1.80	.071	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				Pull Force Minimum	
			Crimp Height		Crimp Width (Max)			
	AWG	mm <sup>2</sup>	mm	In.	mm	In.	N	Lb.
172253	20	---	0.92-0.82	.036-.032	1.60-1.70	.063-.067	57.9	13.0
	22	---	0.83-0.73	.033-.029	1.60-1.70	.063-.067	35.6	8.0

Terminal Series No.	Wire Size		Insulation			
			Crimp Height (Max)		Crimp Width (Max)	
	AWG	mm <sup>2</sup>	mm	In.	mm	In.
172253	20	---	1.80	.071	1.95	.077
	22	---	1.60	.063	1.95	.077

#### 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.

## Fine Adjust Applicator for ULTRA-FIT Terminals

**PARTS LIST**

FineAdjust Applicator 63903-2900				
Item	Order No	Engineering No.	Description	Quantity
<b>Perishable Tooling</b>				
	63903-2970	63903-2970	Tool Kit (All "Y" Items)	REF
1	63444-1639	63444-1639	Conductor Punch	1 Y
2	63445-1673	63445-1673	Conductor Anvil	1 Y
3	63454-1802	63454-1802	Insulation Punch	1 Y
4	63445-1839	63445-1839	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	11-17-0022	1739-21	Hold Down Spring	1
8	11-18-4083	60707-8	Feed Guide	1
9	11-24-1067	4996-4	Cut-Off Plunger Spring	1
10	63443-0009	63443-0009	Front Scrap Chute	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-0093	63443-0093	Shank	1
14	63443-1721	63443-1721	Height Spacer (19.30mm)	1
15	63443-2211	63443-2211	Spacer (11.0mm)	1
16	63443-2309	63443-2309	Spacer (3.45mm)	1
17	63443-2310	63443-2310	Spacer (3.50mm)	1
18	63443-2802	63443-2802	Front Plunger Striker	1
19	63443-2911	63443-2911	Striker Plunger	1
20	63443-6115	63443-6115	Rear Cover	1
21	63443-7125	63443-7125	Terminal Hold Down	1
22	63600-0021	63600-0021	Striker Plunger Spring	1
<b>Frame</b>				
23	63800-4901	63800-4901	Top	1
24	63801-3281	63801-3281	Base	1
25	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
26	N/A	N/A	M3 by 6 Long SHCS	2**
27	N/A	N/A	M3 by 6 Long FHCS	1**
28	N/A	N/A	M3 by 8 Long SHCS	1**
29	N/A	N/A	M4 by 6 Long SHCS	2**
30	N/A	N/A	M4 by 12 Long BHCS	2**
31	N/A	N/A	M4 by 50 Long SHCS	2**
32	N/A	N/A	M5 by 12 Lg SHCS	1**
33	N/A	N/A	#10-32 by 3/8" Long Flat Point SSS	1**
34	N/A	N/A	#10-32 Hex Jam Nut	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

Fine Adjust Applicator for ULTRA-FIT Terminals

**Assembly Drawing**

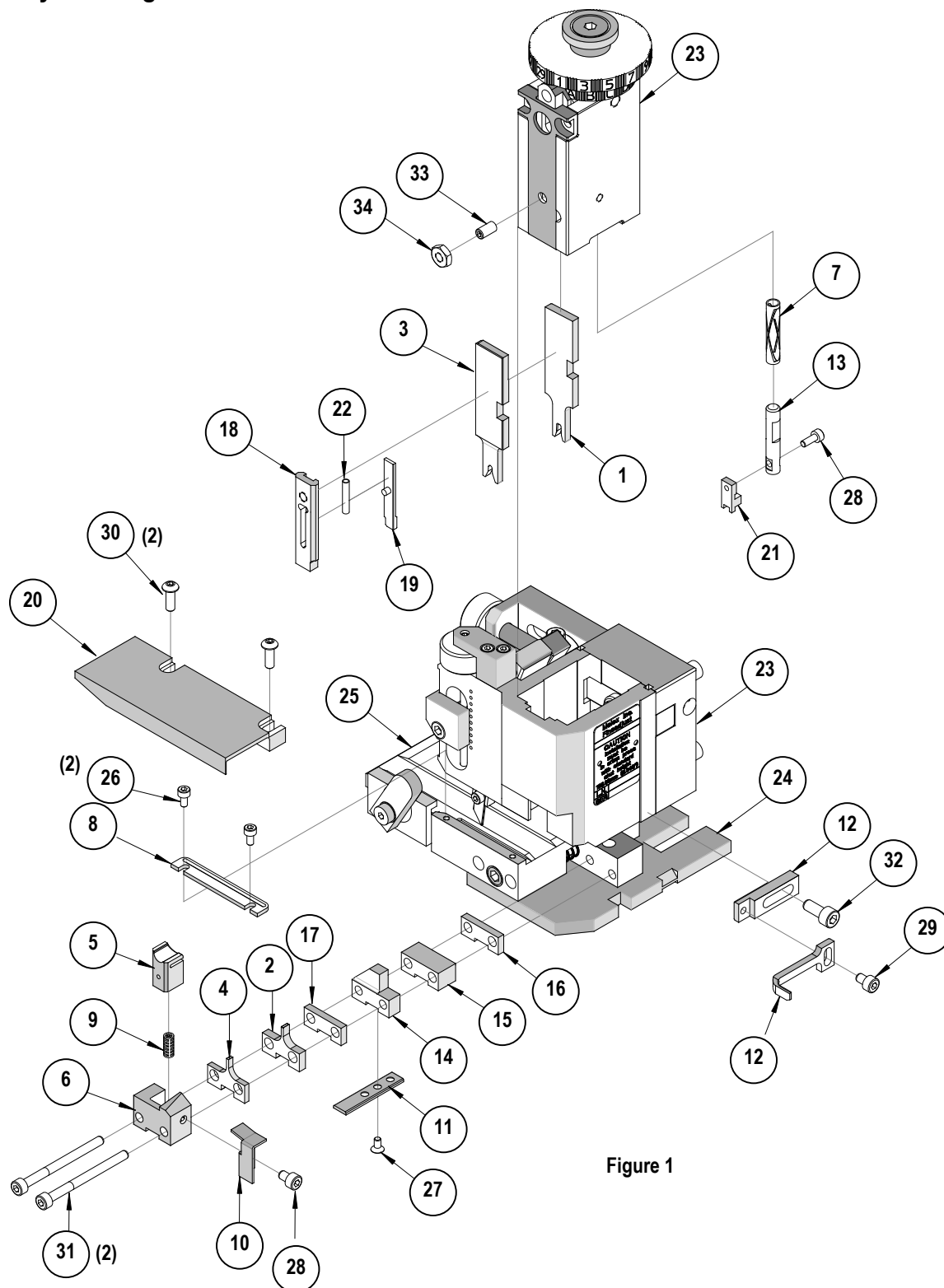


Figure 1

## Fine Adjust Applicator for ULTRA-FIT Terminals

### 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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