| FineAdjust Applicator	molex	Application Tooling Specification Sheet	
		Order No. 63904-1600	
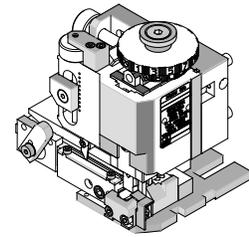
FEATURES

- 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
- Applicator is equipped with a specialized track that accommodates the Ultra Fit terminal's carrier strip. See notes on page 5 of this document for more information.

SCOPE

Products: ULTRA-FIT Crimp Terminals, 16-18 AWG (UL1061) wires.

Terminal Series No.	Terminal Order No.		Wire Size			Insulation Diameter UL1061 Wire is Recommended		Strip Length	
			AWG	mm²	Type	mm	In.	mm	In.
172253	172253-3011	172253-3012	16-18	---	UL1061	1.68-2.00	.066-.078	3.50-4.00	.138-.158
	172253-3023								
Note: Oiler (Order No. 63801-7240) is required to crimp these terminals. See Fine Adjust Manual (Order no. 63800-4900).									

DEFINITION OF TERMS
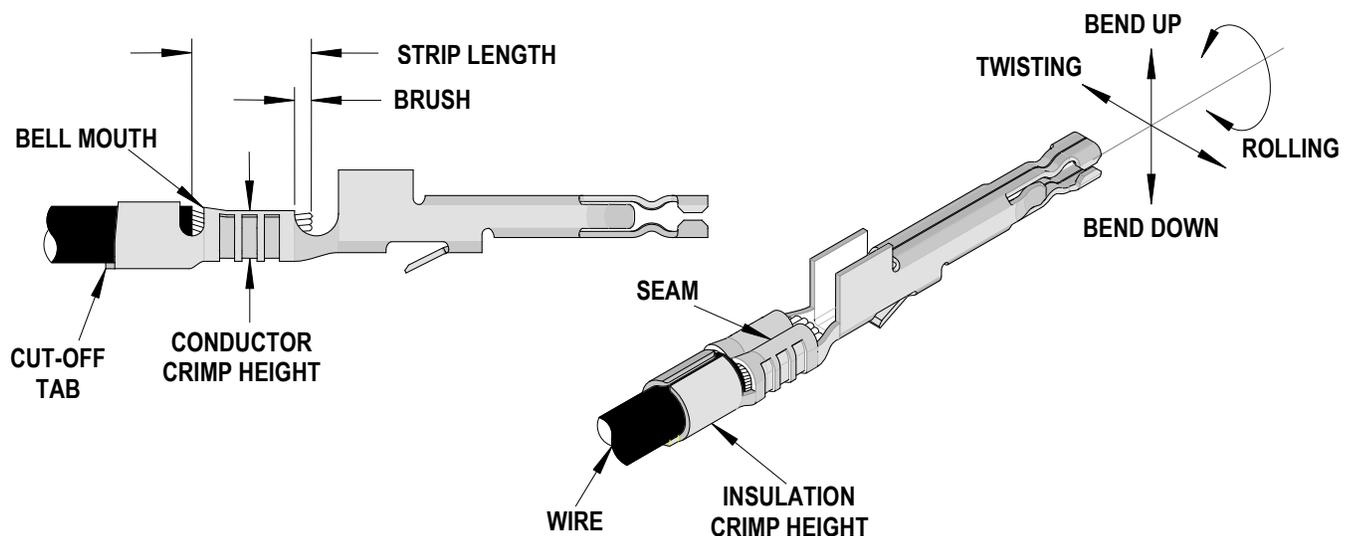
CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
172253	0.30-0.80	.012-.031	0.20	.008	0.00-1.00	.000-.039

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width (Ref)				Seam
					Conductor		Insulation		Seam shall not be open and no wire allowed out of the crimping area
	Degree (Max)		Degree (Max)		mm	In	mm	In	
172253	3	3	3	5	2.00	.079	2.40	.094	

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
			Crimp Height		Crimp Width (Max)			
	AWG	mm²	mm	In.	mm	In.	N	Lb.
172253	16	---	1.28-1.18	.050-.046	2.00-2.12	.079-.081	68.4	15.0
	18	---	1.05-0.95	.041-.037	2.00-2.12	.079-.081	68.4	15.0

| Terminal Series No.	Wire Size		Insulation			
			Crimp Height (Max)		Crimp Width (Max)	
	AWG	mm²	mm	In.	mm	In.
172253	16	---	2.40	.094	2.55	.100
	18	---	2.10	.083	2.55	.100

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

Item	Order No	Engineering No.	Description	Quantity
FineAdjust Applicator 63904-1600				
Perishable Tooling				
	63903-1670	63903-1670	Tool Kit (All "Y" Items)	REF
1	63457-2002	63457-2002	Conductor Punch	1 Y
2	63455-2001	63455-2001	Conductor Anvil	1 Y
3	63454-2404	63454-2404	Insulation Punch	1 Y
4	63445-2411	63445-2411	Insulation Anvil	1 Y
5	63443-0052	63443-0052	Front Cut-Off Plunger	1 Y
6	63443-0051	63443-0051	Front Plunger Retainer	1 Y
Other Components				
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 (19.10mm)	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	63443-2801	63443-2801	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
Frame				
23	63800-4901	63800-4901	Top	1
24	63801-3281	63801-3281	Base	1
25	63801-4750	63801-4750	Track	1
Hardware				
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).				

Assembly Drawing

Figure 1
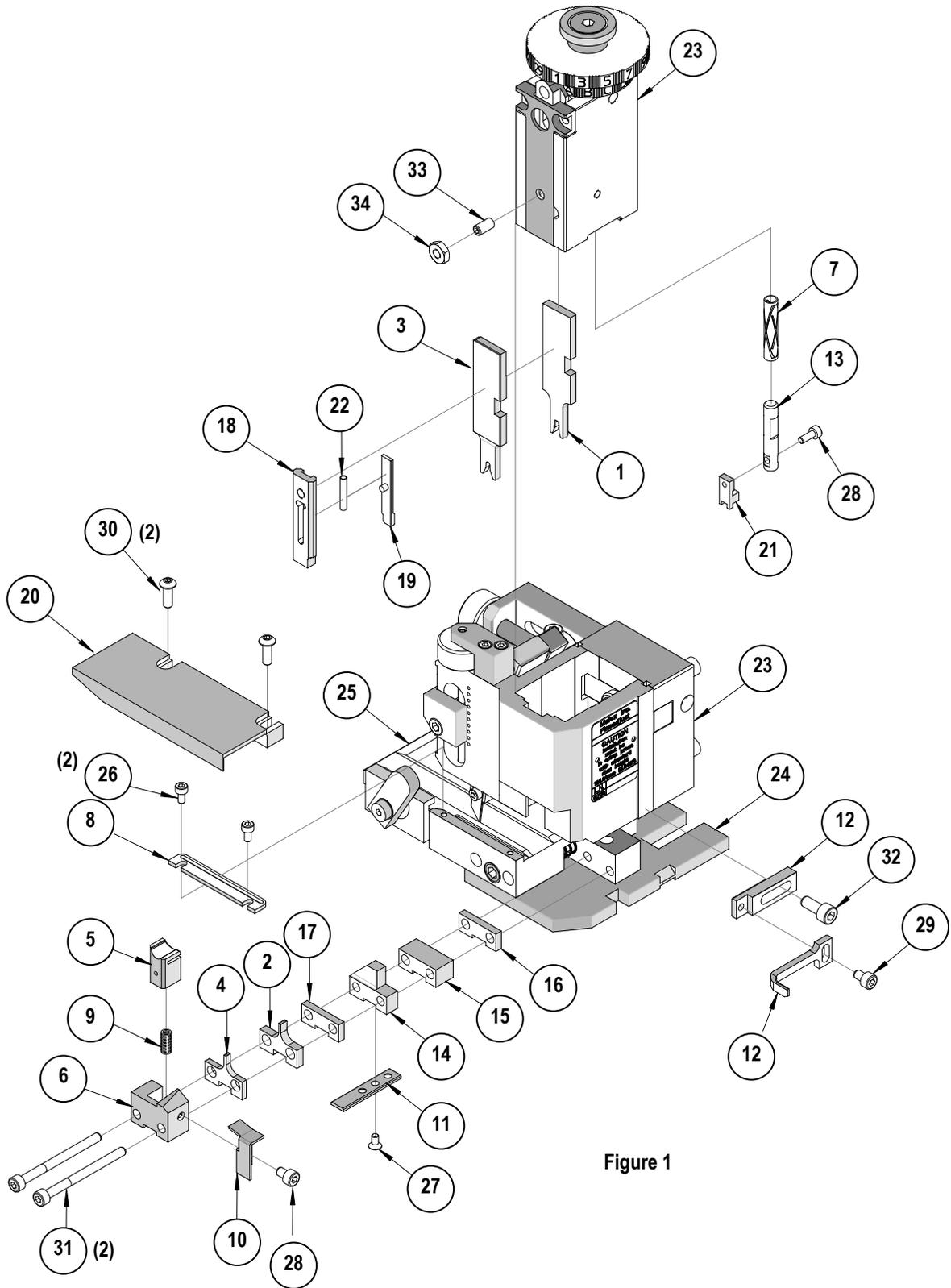
NOTES

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.
6. The Ultra Fit terminal has a special "stand-off" feature located on the carrier strip. This feature is designed to help reduce damage to the terminals, as the terminal reel is being handled. In the event of severe mishandling of the terminal reel, a portion of the stand-off features may become bent, and not allow the terminals to feed thru the applicator track. This portion of terminals should be cut free from the terminal reel, and discarded.
7. This applicator is not equipped with a carrier strip scrap cutter, due to the irregular shape of the stand-off feature.

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.

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