

FineAdjust Applicator

Application Tooling Specification Sheet



Order No. 63900-0400

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: MX150[™] Blade Terminals 18 AWG.

	Terminal Series No.	Terminal Order No.		Wire Size		Insulation	Diameter	Strip Length		
	Terminal Series NO.			AWG	mm²	mm	ln.	mm	In.	
	33000	33000-1002	Male (Tin)	18	0.80	1.91-2.06	.075081	4.70-5.60	.185220	
Ĩ	33011	33011-0004	Male (Gold)	18	0.80	1.91-2.06	.075081	4.70-5.60	.185220	
		33011-3002	Male (Silver)						.100220	
Ĩ	Terminals were validated per USCAR-21 using the following wire specifications:									
	M1L-123A (TXL), M1L-135A1 (UTX), and M1L-126A1(metric-TXL)									
	Customers are required to complete validation testing if tooling purchased outside Molex Inc.									
	and/or wire specifications are different than above.									



CRIMP SPECIFICATION

Terminal Series No.	Bell n	nouth	Cut-off Tab	Maximum	*Conductor Brush				
Terminal Series NO.	mm In.		mm	ln.	mm	ln.			
33000	0.30-0.70	.012028	0.50	.020	0.15-0.40	.006016			
33011	0.30-0.70	.012028	0.50	.020	0.15-0.40	.006016			
Wire brush must be flush or below top of Conductor Crimp.									

	Bend up Bend down		Twist	Roll	Punch Width mm (Ref)				0	
Terminal Series No.	Degree		Degree		Conductor		Insulation		Seam	
					mm	In	mm	In	Seam shall not be open and no wire allowed out	
33000	3	3	3	3	2.10	.082	2.26	.089	of the crimping area	
33011	3	3	3	3	2.10	.082	2.26	.089	or the onlinping area	

After crimping, the conductor profile should measure the following.

Terminal	Wire	Size	Conductor				Insulation					Pull Force	
Terminal Series No.	wire	Size	Crimp	Height	Crimp	Width	Crimp Height		Crimp Width		Minimum		
Series No.	AWG	mm ²	mm	In.	mm	In.	mm	In.	mm	In.	Ν	Lb.	
33000	18	0.80	1.20-1.30	.047051	2.05-2.25	.081089	.190-2.10	.075083	2.20-2.40	.087094	90	20.2	
33011	18	0.80	1.20-1.30	.047051	2.05-2.25	.081089	.190-2.10	.075083	2.20-2.40	.087094	90	20.2	

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.

Adjusting the Wire Bend Angle

(See Item11 in parts list and assembly drawing.)

Note: If the <u>Wire Bend</u> is present after crimping use the following method to remove the bend. This tooling may not be necessary for all wire gauges.

- 1. The screw is provided for wire straightening. See Figure 1.
- 2. Loosen the (2) M3 x 5mm long setscrews; see Figure 1, before turning the screw.
- Start by adjusting the screw so it just touches the insulation outside diameter of the wire being crimped. If wire <u>Bend Up</u> exists, turn the screw a quarter turn clockwise (CW) to lengthen it.
- 4. Continue to adjust the length of the screw until the wire appears to be straight after crimping. If wire <u>Bend Down</u> exists, turn the screw a quarter turn counter clockwise (CCW) to shorten it. Continue to adjust the length of the screw until the wire appears to be straight after crimping.
- Tighten the M3 x 5mm long setscrews, when finished adjusting the screw. Two M3 x 5mm long setscrews are provided; the top setscrew is to lock the screw after adjustments. The M3 x 5mm long setscrew on the side of plunger striker is used when making adjustments.

Adjusting the Wire Brush Length

(See Item13 in parts list and assembly drawing.)

- 1. If the wire brush is too long or extends above the top of the conductor crimp, adjust the Wire Stop, Item 13, closer to the conductor punch.
- 2. If the wire brush is too short, adjust the Wire Stop further away from the conductor punch.



PARTS LIST

		FineAdjust A	pplicator 63900-0400	
ltem	Order No	Engineering No.	Description	Quantity
			nable Tooling	
	63900-0470	63900-0470	Tool Kit (All "Y" Items)	REF
1	63444-2137	63444-2137	Conductor Punch	1 Y
2	63445-2168	63445-2168	Conductor Anvil	1 Y
3	63454-0048	63454-0048	Insulation Punch	1 Y
4	63456-0041	63456-0041	Insulation Anvil	1 Y
5	63443-0037	63443-0037	Cut-Off Plunger	1 Y
6	63443-0038	63443-0038	Front Plunger Retainer	1 Y
			Components	
7	11-17-0022	1739-21	Hold Down Spring	1
8	11-18-4094	60709A111	Feed Guide	1
9	63443-0009	63443-0009	Scrap Chute	1
10	63443-0024	63443-0024	Кеу	1
11	63443-0082	63443-0082	Front Plunger Striker	1
12	63443-0083	63443-0083	Striker Screw	1
13	63443-0090	63443-0090	Wire Stop	1
14	63443-0093	63443-0093	Shank	1
15	63443-1719	B-1719 63443-1719 Height Spacer (18.90mm)		1
16	63443-2205	63443-2205		
17	63443-2209	63443-2209	Coarse Spacer (9.00mm)	1
18	63443-2306	63443-2306	Fine Spacer (3.30mm)	1
19	63443-6122	63443-6122	Rear Cover	1
20	63443-7102	63443-7102	Terminal Hold Down	1
21	63700-0539	63700-0539	Cut-off Plunger Spring	1
			Frame	
22	63800-4901	63800-4901	Тор	1
23	63801-3281	63801-3281	Base	1
24	63801-4650	63801-4650	Track	1
24A	63459-0001	63459-0001	Terminal Track	1
		Н	ardware	
25	N/A	N/A	M3 by 5Lg. SHSS-Brass Tip	2**
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 Long 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	n an industrial supply	y company such as MSC (1-800-645-7	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 135.80 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 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.

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

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