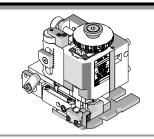


FineAdjust Applicator

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.

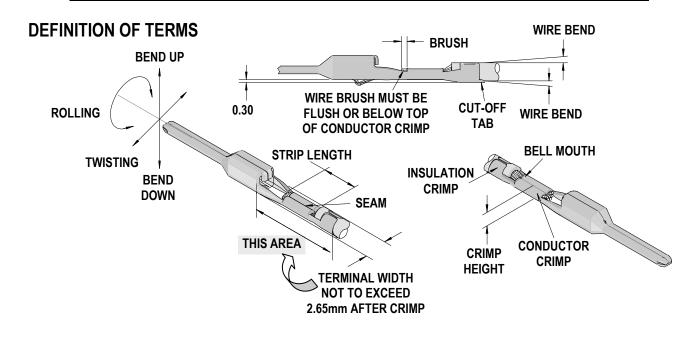
Terminal Series No.	Torminal	Wire Size		Insulation	Diameter	Strip Length		
Terminal Series No.	Terminal Order No.		AWG	mm²	mm	ln.	mm	ln.
33000	33000-1002 Male (Tin)		18	0.80	1.91-2.06	.075081	4.70-5.60	.185220
33011	33011-0004	Male (Gold)	18	0.80	1.91-2.06	.075081	4.70-5.60	105 220
33011	33011-3002	Male (Silver)	10					.185220

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.



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CRIMP SPECIFICATION

Terminal Series No.	Bell n	nouth	Cut-off Tak	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	.012028	0.50	.020	0.15-0.40	.006016				
★ Wire brush must be flush or below top of Conductor Crimp.									

	Bend up E	Bend up Bend down		Roll	Punch Width mm (Ref)				0	
Terminal Series No.	Degree		Degree		Conductor		Insulation		Seam	
					mm	In	mm	ln	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 chimping area	

After crimping, the conductor profile should measure the following.

Townsiand	\A/iwa	C:	Conductor				Insulation				Pull Force	
Terminal	-		Crimp Height		Crimp Width		Crimp Height		Crimp Width		Minimum	
Series No.	AWG	mm ²	mm	ln.	mm	ln.	mm	ln.	mm	ln.	N	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.

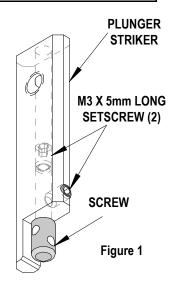
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Adjusting the Wire Bend Angle

(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.
- 3. 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.
- 5. 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.

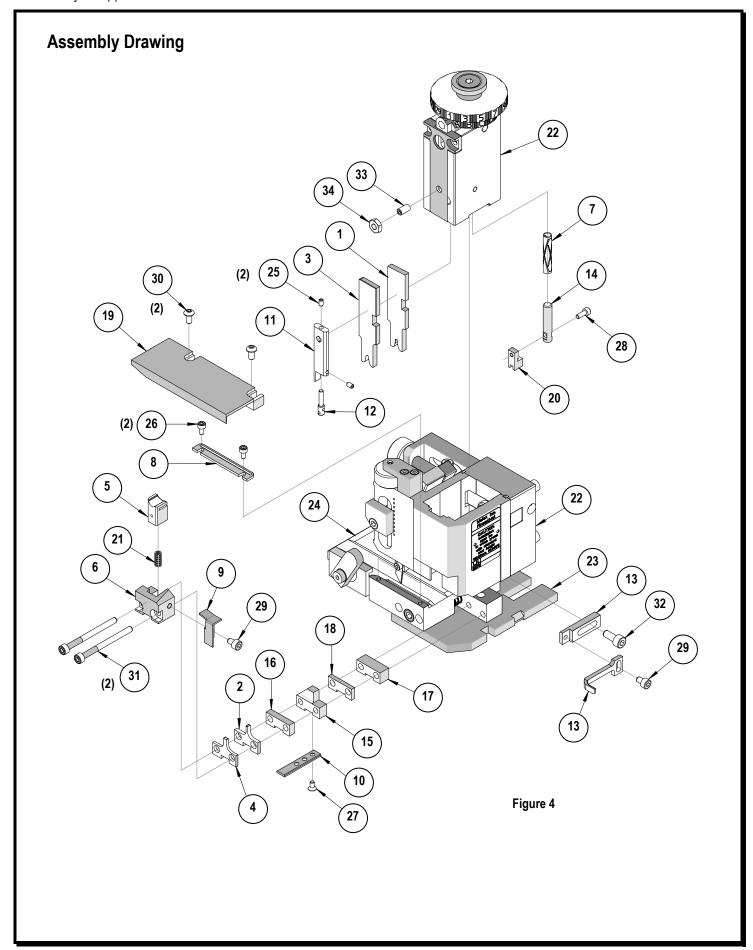
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PARTS LIST

FineAdjust Applicator 63900-0400										
Item	Order No	Engineering No.	Description	Quantity						
		Perisl	hable 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						
Other 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	Key	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	63443-1719	Height Spacer (18.90mm)	1						
16	63443-2205	63443-2205	Coarse Spacer (5.00mm)	1						
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	lardware	l e						
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 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 135.80 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

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