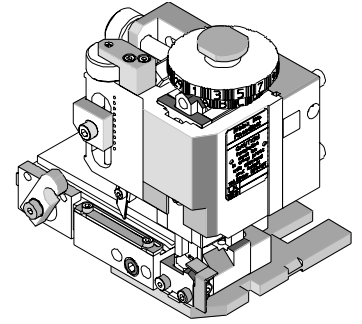




# FineAdjust Applicator Specification Sheet Part No. 63865-6100



## 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 0.15mm (.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

MX150L™ Male Terminal for 18-24 AWG Wire, Metal Strip Carrier.

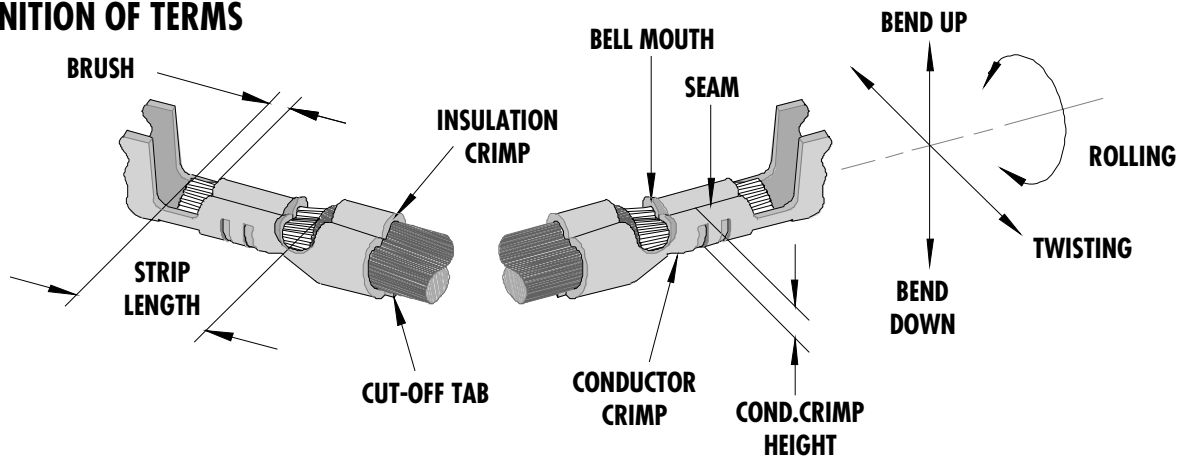
Terminal Order No.		Wire Size		Insulation Diameter		Strip Length	
		AWG	mm <sup>2</sup>	mm	In.	mm	In.
19417-0024	Male (Tin)	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0026	Male (Gold)	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0028	Male (Tin) Long	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0030	Male (Gold) Long	18-22	0.83-0.36	2.36-2.74	.093-.108	4.20-5.00	.165-.197
19417-0024	Male (Tin)	24	0.20	1.00 Nom.	.039 Nom.	4.20-5.00	.165-.197
19417-0026	Male (Gold)	24	0.20	1.00 Nom.	.039 Nom.	4.20-5.00	.165-.197
19417-0028	Male (Tin) Long	24	0.20	1.00 Nom.	.039 Nom.	4.20-5.00	.165-.197
19417-0030	Male (Gold) Long	24	0.20	1.00 Nom.	.039 Nom.	4.20-5.00	.165-.197

**Note: Terminals will accommodate the following wire specification:**

1. (18-22 AWG) UL1015 wires.
2. (24 AWG) UL20251 wire.

For 24 AWG wire, see Tool Qualification Notes, Item 2 on page 2.

## DEFINITION OF TERMS



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

**CRIMP SPECIFICATION**

Terminal Series No.	Bell mouth		Cut-off Tab Max.		Conductor Brush	
	mm	In.	mm	In.	mm	In.
19417	0.25-1.25	.010-.049	0.50	.020	0.15-0.65	.006-.026

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width mm (Ref)				Seam Seam shall not be open and no wire allowed out of the crimping area
					Conductor		Insulation		
	Degree		Degree		mm	In	mm	In	
19417	5	5	4	8	2.10	.082	3.40	.133	

After crimping, the conductor profile should measure the following.

Terminal Order No.	Wire Size		Conductor Crimp Height		Insulation Crimp Height		Pull Force Min.	
	AWG	mm <sup>2</sup>	mm	In.	Mm (Ref)	In. (Ref)	N	Lb.
19417-0024	18	0.83	1.35-1.45	.053-.057	3.00 max.	.118 max.	89.0	20.00
19417-0024	20	0.58	1.25-1.35	.049-.053	3.00 max.	.118 max.	57.9	13.00
19417-0024	22	0.36	1.15-1.25	.045-.049	3.00 max.	.118 max.	35.6	8.00
19417-0024	24	0.20	1.05-1.15	.041-.045	3.00 max.	.118 max.	22.2	5.00
19417-0026	18	0.83	1.35-1.45	.053-.057	3.00 max.	.118 max.	89.0	20.00
19417-0026	20	0.58	1.25-1.35	.049-.053	3.00 max.	.118 max.	57.9	13.00
19417-0026	22	0.36	1.15-1.25	.045-.049	3.00 max.	.118 max.	35.6	8.00
19417-0026	24	0.20	1.05-1.15	.041-.045	3.00 max.	.118 max.	22.2	5.00
19417-0028	18	0.83	1.35-1.45	.053-.057	3.00 max.	.118 max.	89.0	20.00
19417-0028	20	0.58	1.25-1.35	.049-.053	3.00 max.	.118 max.	57.9	13.00
19417-0028	22	0.36	1.15-1.25	.045-.049	3.00 max.	.118 max.	35.6	8.00
19417-0028	24	0.20	1.05-1.15	.041-.045	3.00 max.	.118 max.	22.2	5.00
19417-0030	18	0.83	1.35-1.45	.053-.057	3.00 max.	.118 max.	89.0	20.00
19417-0030	20	0.58	1.25-1.35	.049-.053	3.00 max.	.118 max.	57.9	13.00
19417-0030	22	0.36	1.15-1.25	.045-.049	3.00 max.	.118 max.	35.6	8.00
19417-0030	24	0.20	1.05-1.15	.041-.045	3.00 max.	.118 max.	22.2	5.00

Pull Force should be measured with no influence from the insulation crimp.  
The above specifications are guidelines to an optimum crimp.

 **Tool Qualification Notes:**

1. This Applicator was qualified to the above specifications with UL1015 wires for 18-22 AWG and UL20251 wire for 24 AWG.
2. For the 24 AWG wire, the insulation crimp has clearance around the wire and does not provide strain relief, even at the nominal reference crimp height of 2.11 mm (.083").

**PARTS LIST**

<b>FineAdjust Applicator 63865-6100</b>				
<b>Item</b>	<b>Order No</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63865-6170	63865-6170	Tool Kit (All "Y" Items)	REF
1	63444-2137	63444-2137	Conductor Punch	1 Y
2	63445-2162	63445-2162	Conductor Anvil	1 Y
3	63454-0022	63454-0022	Insulation Punch	1 Y
4	63445-3440	63445-3440	Insulation Anvil	1 Y
5	63443-0035	63443-0035	Cut-Off Plunger	1 Y
6	63443-0036	63443-0036	Front Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-18-4080	60707-5	Wire Stop	1
8	11-18-4083	60707-8	Front Cover	1
9	63443-0009	63443-0009	Scrape Chute	1
10	63443-0021	63443-0021	Lower Tooling Key	1
11	63443-2508	63443-2508	Anvil Mount	1
12	63443-3160	63443-3160	Front Plunger Striker	1
13	63443-6013	63443-6013	Rear Cover	1
14	63700-0539	63700-0539	Cut-off Plunger Spring	1
<b>Frame</b>				
15	63800-4901	63800-4901	Top	1
16	63801-3281	63801-3281	Base	1
17	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
18	N/A	N/A	M3 by 6Lg. SHCS	2**
19	N/A	N/A	M4 by 6Lg. SHCS	1**
20	N/A	N/A	M4 by 12Lg. BHCS	2**
21	N/A	N/A	M4 by 50Lg. SHCS	2**
22	N/A	N/A	M5 by 12Lg SHCS	1**
23	N/A	N/A	3MM by 6Lg. Roll Pin	1**
24	N/A	N/A	#10-32 by 1/4"Lg. BHCS	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

# Assembly Drawing

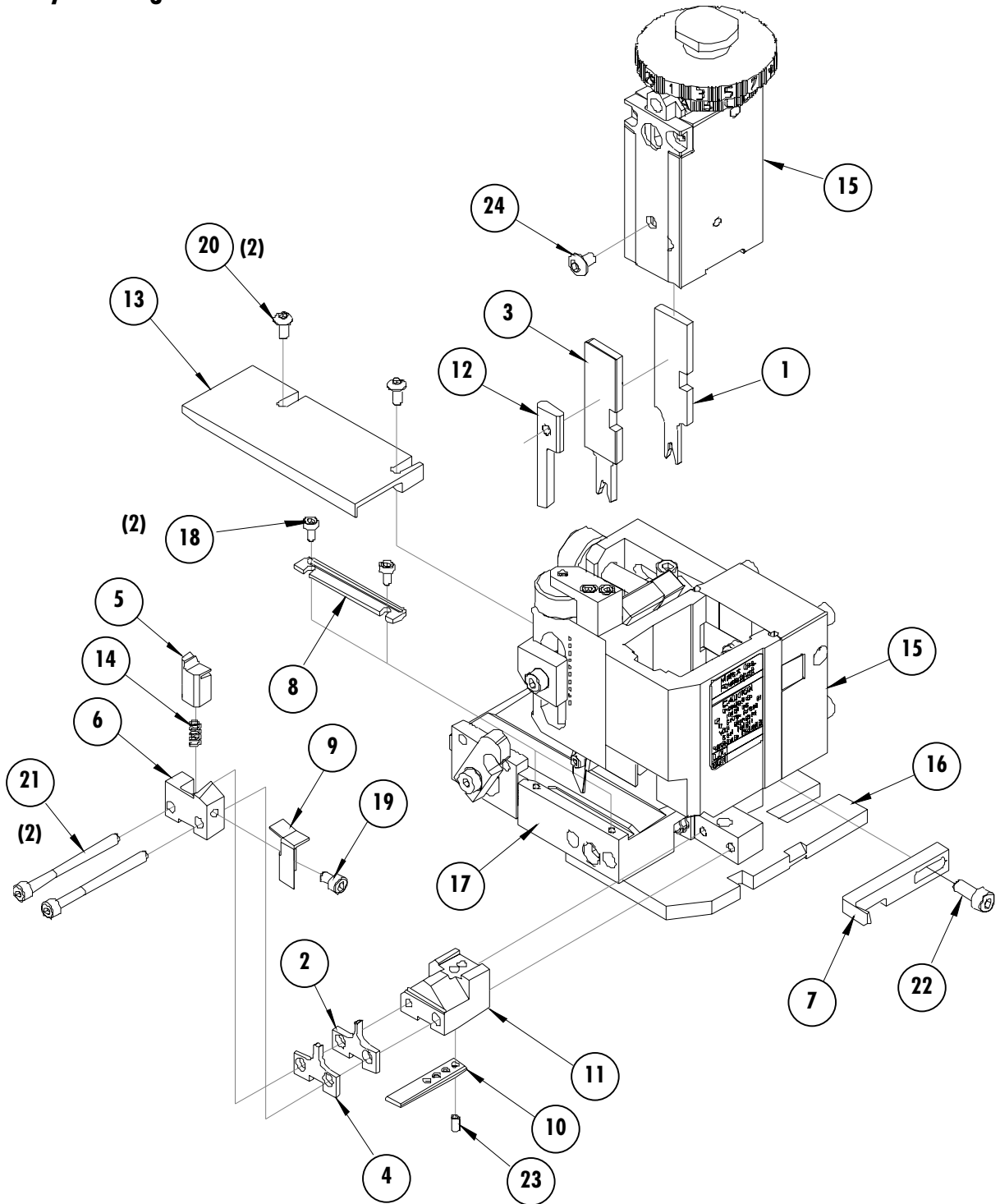


Figure 1

## 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.

**CAUTION:** This applicator should only be used in a press with a shut height of 135.8 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.

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