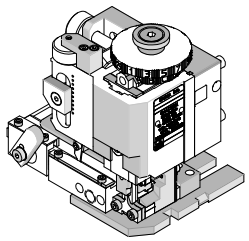
FineAdjust Applicator

molex

Application Tooling Specification Sheet



Order No. 63900-7200

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

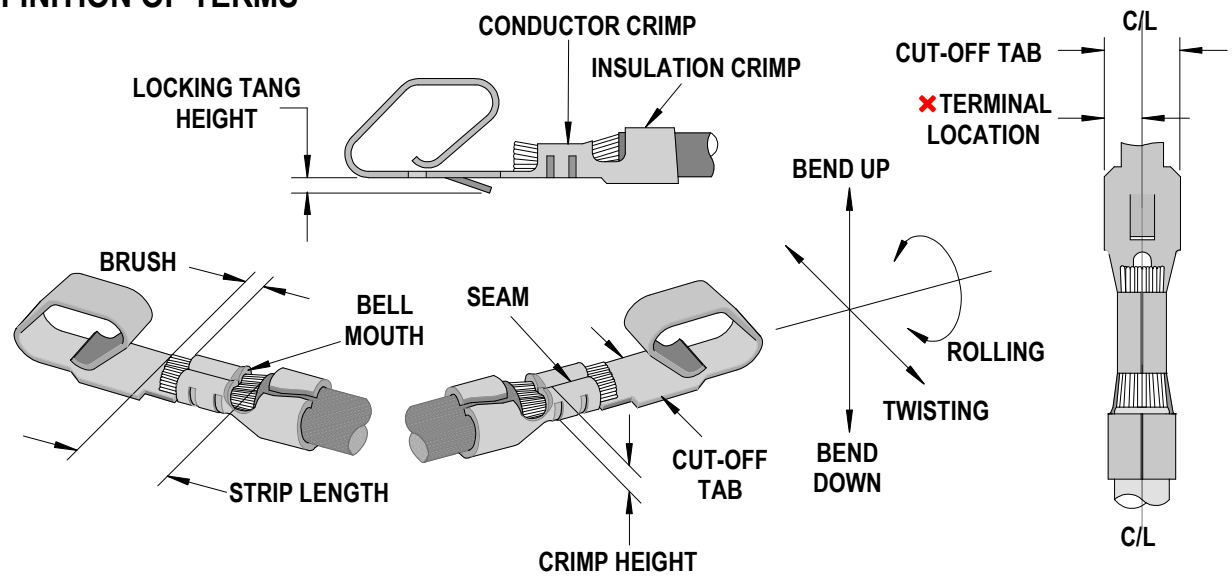
SCOPE

Products: KK® and Trifurcon™, 3.96mm (.156") Pitch Crimp Terminal, 18-24 AWG.

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
				AWG	mm²	mm	In.	mm	In.
2477	08-50-0109	08-56-0113	40-01-1179	18 - 24	0.80-0.20	✳2.79	✳.110	2.54-3.18	.100-.125
2478	08-50-0001	08-52-0027	08-58-0114	18 - 24	0.80-0.20	✳2.79	✳.110	2.54-3.18	.100-.125
	08-50-0014	08-52-0044	08-58-0121						
	08-50-0015	08-52-0046	08-65-0114						
	08-50-0047	08-52-0071	39-00-0103						
	08-50-0063	08-52-0073	39-00-0133						
	08-50-0073	08-52-0114	39-00-0286						
	08-50-0091	08-52-0811	39-00-0343						
	08-50-0105	08-53-0004	39-00-0345						
	08-50-0119	08-53-0811	39-00-0347						
	08-50-0146	08-55-0103	39-00-0349						
	08-50-0271	08-55-0133	40-01-1118						
	08-50-0281	08-56-0105	50-29-1689						
	08-51-0001	08-56-0153	50-29-1768						
	08-52-0023	08-58-0103							
2878	08-50-0115	08-53-0814	08-65-0118	18 - 20	0.80-0.50	✳2.79	✳.110	2.54-3.18	.100-.125
	08-51-0109	08-55-0138							
	08-52-0126	08-58-0127							
4838	08-50-0131	08-55-0142	08-55-0147	18 - 22	0.80-0.35	2.41	.095	2.54-3.18	.100-.125
	08-55-0125	08-55-0144	08-55-0149						
	08-55-0139	08-55-0145							
6438	08-50-0164	08-52-0813	08-56-0135	18 - 24	0.80-0.20	2.41	.095	2.54-3.18	.100-.125
	08-51-0801	05-53-0813	08-56-0137						
8993	08-50-0011	08-50-0277		18 - 24	0.80-0.20	✳2.79	✳.110	2.54-3.18	.100-.125

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter		Strip Length	
				AWG	mm²	mm	In.	mm	In.
6838	08-50-0024	08-52-0112	08-58-0118	18 - 20	0.80-0.50	✳2.79	✳.110	2.54-3.18	.100-.125
	08-50-0026	08-53-1101	08-58-0131						
	08-50-0028	08-58-0102	08-58-0187						
	08-50-0187	08-58-0105	08-60-0001						
	08-50-0275	08-58-0108							
	08-51-0106	08-58-0110							
✳Insulation below 1.65mm (.065 inch) diameter may produce loose insulation crimps.									

DEFINITION OF TERMS



✖Terminal is to be centrally located between the two (2) cut-off edges, within +/- 0.08mm (+/-.003").

CRIMP SPECIFICATIONS

Terminal Series No.	Bell mouth		✖Cut-off Tab		Conductor Brush	
	mm	In.	mm	In.	mm	In.
2477	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
2478	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
2878	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
4838	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
6438	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
8993	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025
6838	0.20-0.50	.008-.020	2.72±.08	.107±.003	0.13-0.64	.005-.025

Terminal Series No.	Locking Tang Height		Bend up Bend down		Twist Roll		Punch Width (Ref)				Seam
	mm	In	Degree		Degree		Conductor		Insulation		
							mm	In	mm	In	
2477	0.64-0.76	.025-.030	3	3	4	8	2.00	.079	2.50	.098	Seam shall not be open and no wire allowed out of the crimping area
2478	0.64-0.76	.025-.030	3	3	4	8	2.00	.079	2.50	.098	
2878	0.63-0.79	.025-.031	3	3	4	8	2.00	.079	2.50	.098	
4838	0.64-0.76	.025-.030	3	3	4	8	2.00	.079	2.50	.098	
6438	0.63-0.79	.025-.031	3	3	4	8	2.00	.079	2.50	.098	
8993	0.38-0.51	.015-.020	3	3	4	8	2.00	.079	2.50	.098	
6838	0.63-0.79	.025-.031	3	3	4	8	2.00	.079	2.50	.098	

After crimping, the conductor profile should measure the following.

Terminal Series No.	Wire Size		Crimp Height		Pull Force Minimum	
	AWG	mm²	mm	In.	N	Lb.
2477	18	0.80	1.09-1.14	.043-.045	110	25
2477	20	0.50	1.02-1.09	.040-.043	66	15
2477	22	0.35	0.97-1.02	.038-.040	44	10
2477	24	0.20	0.91-0.97	.036-.038	35	8
2478	18	0.80	1.09-1.14	.043-.045	110	25
✳ 08-52-0071	18	0.81	1.07-1.17	.042-.046	110	25
2478	20	0.50	1.02-1.09	.040-.043	66	15
2478	22	0.35	0.97-1.02	.038-.040	44	10
2478	24	0.20	0.91-0.97	.036-.038	35	8
2878	18	0.80	1.09-1.14	.043-.045	110	25
2878	20	0.50	1.02-1.09	.040-.043	66	15
4838	18	0.80	1.09-1.14	.043-.045	110	25
4838	20	0.50	1.02-1.09	.040-.043	66	15
4838	22	0.35	0.97-1.02	.038-.040	44	10
6438	18	0.80	1.09-1.14	.043-.045	110	25
6438	20	0.50	1.02-1.09	.040-.043	66	15
6438	22	0.35	0.97-1.02	.038-.040	44	10
6438	24	0.20	0.91-0.97	.036-.038	35	8
6838	18	0.80	1.09-1.14	.043-.045	110	25
6838	20	0.50	1.02-1.09	.040-.043	66	15
8993	18	0.80	1.09-1.14	.043-.045	110	25
8993	20	0.50	1.02-1.09	.040-.043	66	15
8993	22	0.35	0.97-1.02	.038-.040	44	10
8993	24	0.20	0.91-0.97	.036-.038	35	8
✳ Special for use with 18 AWG UL1015, 16 strand (.010") diameter wire only. 0.81mm² .254mm						

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

FineAdjust Applicator 63900-7200				
Item No.	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63900-7270	63900-7270	Tool Kit (All "Y" Items)	REF
1	63444-2013	63444-2013	Conductor Punch	1 Y
2	63445-2043	63445-2043	Conductor Anvil	1 Y
3	63454-0005	63454-0005	Insulation Punch	1 Y
4	63445-2566	63445-2566	Insulation Anvil	1 Y
5	63443-3310	63443-3310	Cut-Off Die	1 Y
6	63443-3410	63443-3410	Cut-Off Punch	1 Y
Other Components				
7	11-18-4103	60712-3	Cover Plate	1
8	11-18-5015	60805A122	Front Cover	1
9	63443-0025	63443-0025	Key (Dual Carrier)	1
10	63443-1214	63443-1214	Cut-Off Plunger Retainer	1
11	63443-1202	63443-1202	Guide Block	1
12	63443-1203	63443-1203	Rear Cover Retainer	1
13	63443-1204	63443-1204	Wire Stop	1
14	63443-1210	63443-1210	Wire Stop Mounting Bracket	1
15	63443-2310	63443-2310	Spacer (3.50mm)	1
16	63443-2801	63443-2801	Front Plunger Striker	1
17	63443-2912	63443-2912	Wire Hold-Down Plunger	1
18	63443-3513	63443-3513	Terminal Lifter	1
19	63600-0021	63600-0021	Compression Spring	1
20	63600-2995	63600-2995	Spring Lifter	1
21	63700-0539	63700-0539	Compression Spring	1
22	63820-0012	63820-0012	Terminal Drag Cover	1
Frame				
23	63800-4901	63800-4901	Top	1
24	63801-3285	63801-3285	Base	1
25	63801-6550	63801-6550	Track	1
Hardware				
26	N/A	N/A	M2.5 by 5 Long SHCS	2**
27	N/A	N/A	M3 by 5 Long SHCS	3**
28	N/A	N/A	M3 by 6 Long FHCS	1**
29	N/A	N/A	M3 by 6 Long SHCS	4**
30	N/A	N/A	M3 by 12 Long SHCS	1**
31	N/A	N/A	M4 by 6 Long SHCS	2**
32	N/A	N/A	M4 by 12 Long BHCS	2**
33	N/A	N/A	M4 by 45 Long SHCS	2**
34	N/A	N/A	#10-32 by 3/8"Long SSS (Flat Point)	1**
35	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

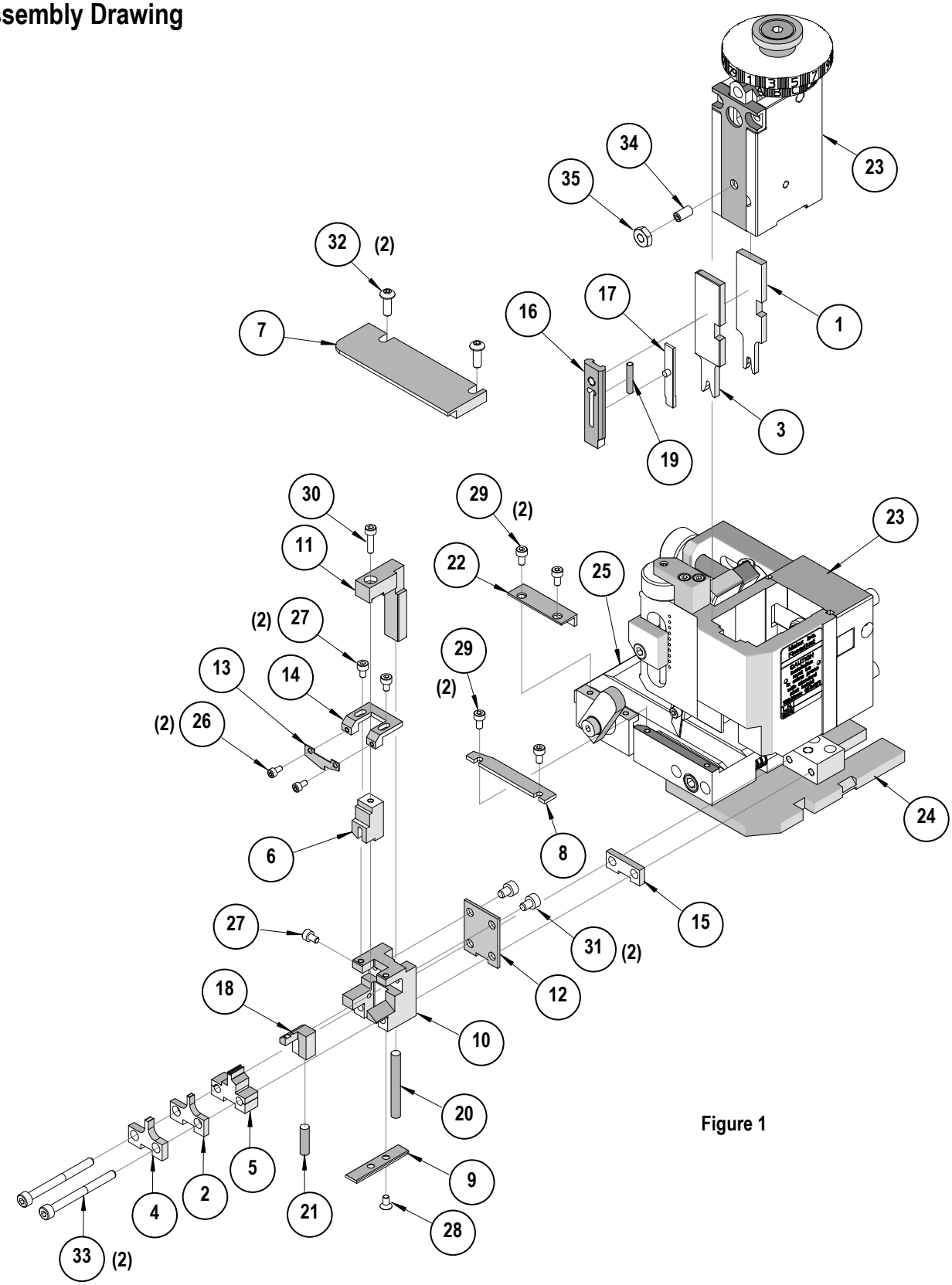


Figure 1

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.

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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