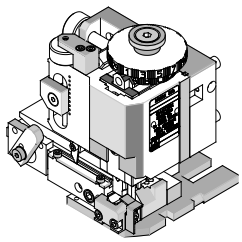
FineAdjust Applicator

molex

Application Tooling Specification Sheet



Order No. 63904-1400

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

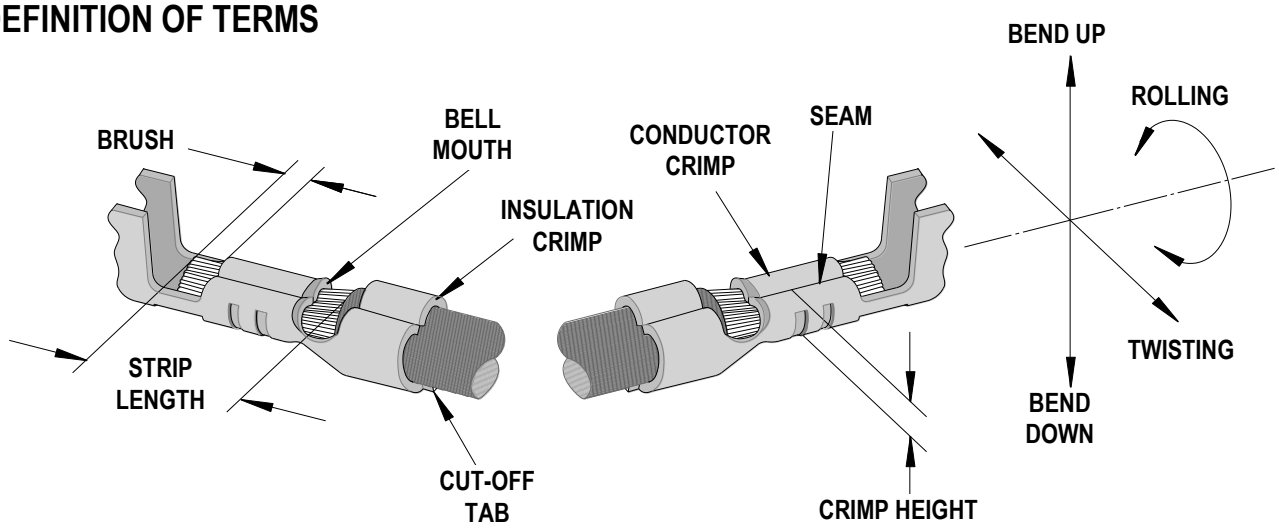
Products: Mini-Fit Jr.™ Mini-Fit HCS™, and Mini-Fit Plus HCS™ Crimp Terminal 16 AWG with large insulation OD's.

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter				Strip Length	
						IPC/WHMA-A620 (1)		Terminal (2)			
				AWG	mm²	mm	In.	mm	In.	mm	In.
5556	39-00-0077	39-00-0079	39-00-0089	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
	39-00-0093	39-00-0112	39-00-0118								
	39-00-0141	39-00-0157	39-00-0167								
	39-00-0173	39-00-0179	39-00-0185								
	39-00-0198	39-00-0204	39-00-0211								
	39-00-0217	39-00-0447									
5558	39-00-0081	39-00-0083	39-00-0095	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
	39-00-0099	39-00-0124	39-00-0130								
	39-00-0147	39-00-0223	39-00-0449								
	98-00-0176	40-01-0855									
44476	44476-3111	44476-3211		16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
44478	44478-3111	44478-3211		16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
44485	44485-3211	44485-3311	44485-3411	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
45750	45750-3111	45750-3211		16	1.31	2.60-3.15	.102-.122	1.80-3.15	.071-.124	3.00-3.50	.118-.138
46012	46012-3111	46012-3141	46012-3151	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
	46012-3211	46012-3241	46012-3251								
46018	46018-3541			16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
46083	46083-3111	46083-3121	46083-3211	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
	46083-3221										
46098	46098-3541			16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Diameter				Strip Length	
						IPC/WHMA-A620 (1)		Terminal (2)			
				AWG	mm²	mm	In.	mm	In.	mm	In.
46134	46134-3111	46134-3121	46134-3211	16	1.31	2.60-3.10	.102-.122	1.80-3.10	.071-.122	3.00-3.50	.118-.138
	46134-3221										

(1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.
(2) Overall insulation OD specification for terminal.
Applicator 63903-9400 should be used for insulation O.D. 2.20-2.45mm (example UL1007).
Applicator 63904-1500 should be used for insulation O.D. 1.80-2.20mm (example UL1429).

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 Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
5556	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
5558	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
44476	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
44478	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
44485	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
45750	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
46012	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
46018	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
46083	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
46098	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039
46134	0.20-0.50	.008-.020	0.30	.012	0.00-1.00	.000-.039

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width (Ref)				Seam
					Conductor		Insulation		
	Degree		Degree		mm	In.	mm	In.	
5556	5	2	5	15	1.90	.075	3.20	.126	Seam shall not be open And no wire allowed out of the crimping area
5558	5	2	5	15	1.90	.075	3.20	.126	
44476	5	2	5	15	1.90	.075	3.20	.126	
44478	5	2	5	15	1.90	.075	3.20	.126	
44485	5	2	5	15	1.90	.075	3.20	.126	
45750	5	2	5	15	1.90	.075	3.20	.126	
46012	5	2	5	15	1.90	.075	3.20	.126	
46018	5	2	5	15	1.90	.075	3.20	.126	
46083	5	2	5	15	1.90	.075	3.20	.126	
46098	5	2	5	15	1.90	.075	3.20	.126	
46134	5	2	5	15	1.90	.075	3.20	.126	

After crimping, the crimp profiles should measure the following:

Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
			Crimp Height		Crimp Width (Ref)			
	AWG	mm^2	mm	In.	mm	In.	N	Lb.
5556	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
5558	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
44476	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
44478	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
44485	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
45750	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
46012	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
46018	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
46083	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
46098	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4
46134	16	1.31	1.14-1.24	.045-.049	1.97	.078	68.4	15.4

✳ 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 63904-1400				
Item	**Order No**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63904-1470	63904-1470	Tool Kit (All "Y" Items)	REF
1	63444-1909	63444-1909	Conductor Punch	1 Y
2	63455-0147	63455-0147	Conductor Anvil	1 Y
3	63446-3208	63446-3208	Insulation Punch	1 Y
4	63445-3217	63445-3217	Insulation Anvil	1 Y
5	63443-0002	63443-0002	Cut-Off Plunger Front	1 Y
6	63443-0012	63443-0012	Plunger Retainer Front	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	63443-1720	63443-1720	Height Spacer (19.00mm)	1
15	63443-2215	63443-2215	Coarse Spacer (15.00mm)	1
16	63443-2310	63443-2310	Fine Spacer (3.50mm)	1
17	63443-2802	63443-2802	Plunger Striker	1
18	63443-2907	63443-2907	Wire Hold Down Plunger	1
19	63443-6111	63443-6111	Rear Cover	1
20	63443-7132	63443-7132	Terminal Hold Down	1
21	63600-1057	63600-1057	Compression Spring	1
Frame				
22	63800-4901	63800-4901	Top	1
23	63801-3281	63801-3281	Base	1
24	63801-4650	63801-4650	Track	1
Hardware				
25	N/A	N/A	M3 by 6 Long SHCS	2**
26	N/A	N/A	M3 by 6 Long FHCS	1**
27	N/A	N/A	M3 by 8 Long SHCS	1**
28	N/A	N/A	M4 by 6 Long SHCS	2**
29	N/A	N/A	M4 by 12 Long BHCS	2**
30	N/A	N/A	M4 by 50 Long SHCS	2**
31	N/A	N/A	M5 by 12 Long SHCS	1**
32	N/A	N/A	#10-32 by 3/8"Long Flat Point SSS	1**
33	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

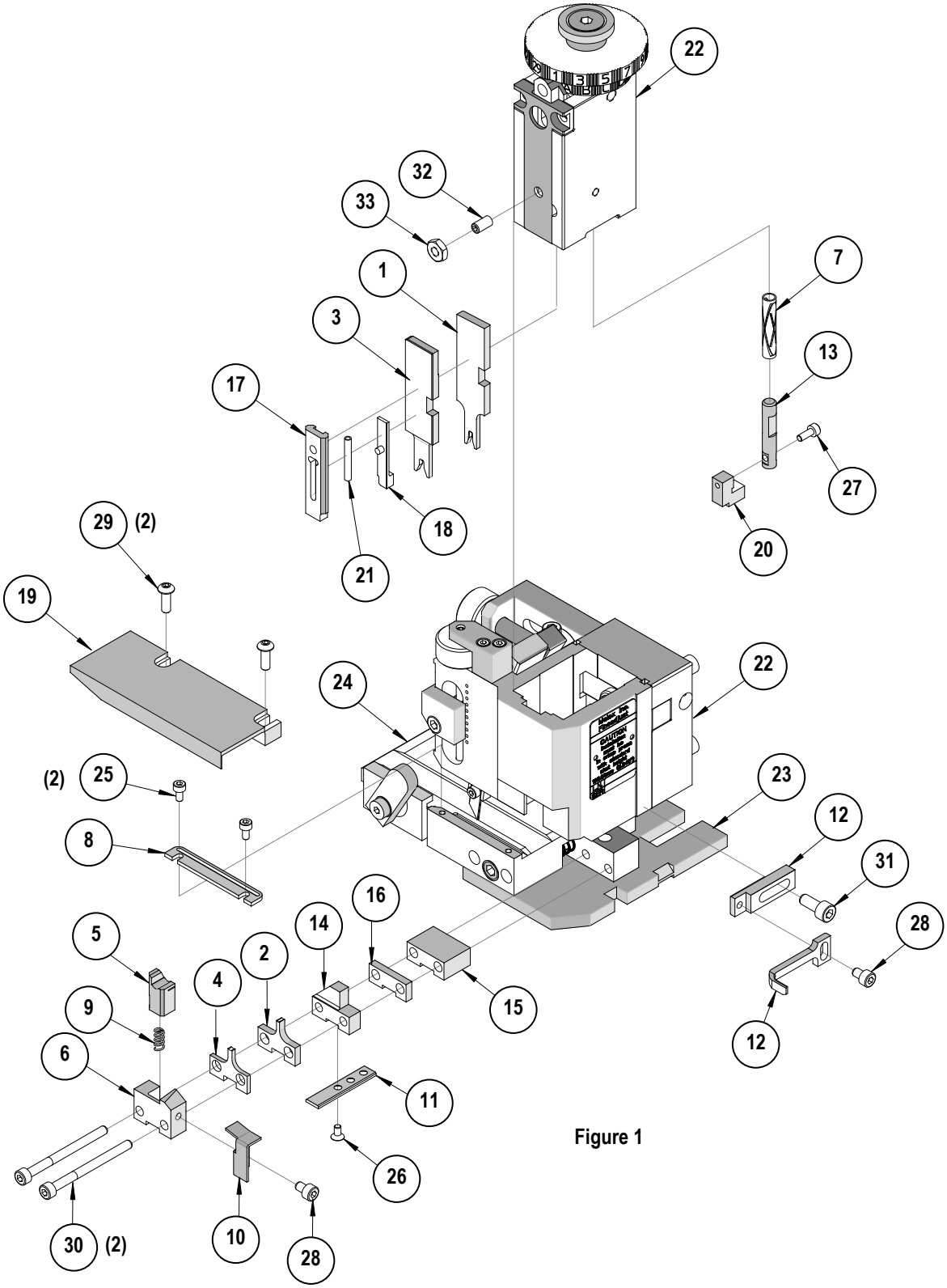


Figure 1

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 135.80 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.

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