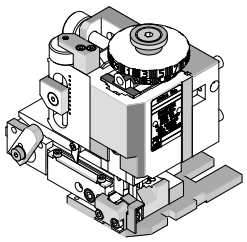
FineAdjust Applicator

molex

Application Tooling Specification Sheet



Order No. 63902-1900

FEATURES

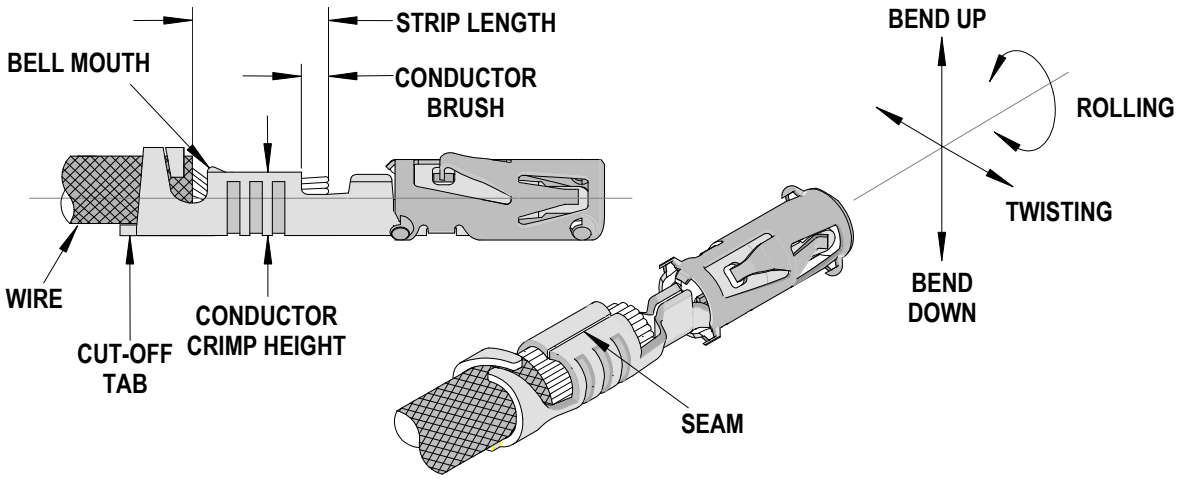
- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can 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

SCOPE

Products: 0.60mm (.024") CP Crimp Terminal for CMC connector, 0.22, 0.35, 0.50mm².

Terminal Series No.	Terminal Order No.			Wire Size		Insulation Type	Insulation Diameter		Strip Length	
				AWG	mm²		mm	In.	mm	In.
98913 64322	98913-1019 98913-1229 98913-1329	98913-1349 98913-3019	64322-1019 64322-1229 64322-1329 64322-1349	---	0.35	ID and IR	1.25-1.40	.049-.055	3.40-3.60	.134-.142
				---	0.22	ID and IR	1.15-1.25	.045-.049	3.40-3.60	.134-.142
	98913-1039	98913-1419	64322-1039	---	0.50	ID and IR	1.40-1.70	.055-.067	3.40-3.60	.134-.142
	98913-1239	98913-3039	64322-1239							
	98913-1359		64322-1359							

DEFINITION OF TERMS



CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
98913	0.20-0.40	.008-.016	0.30	.012	0.20-0.60	.008-.024
64322	0.20-0.40	.008-.016	0.30	.012	0.20-0.60	.008-.024

Terminal Series No.	Bend up Bend down		Twist Roll		Punch Width (Ref)				Seam
					Conductor		Insulation		
	Degree (Max)		Degree (Max)		mm	In	mm	In	Seam shall not be open and no wire allowed out of the crimping area
98913	1	1	1	2	1.40	.055	1.85	.073	
64322	1	1	1	2	1.40	.055	1.85	.073	

After crimping, the conductor profile should measure the following.

Terminal Order No.			Wire Size		Conductor				Pull Force Minimum	
					Crimp Height		Crimp Width (Ref.)			
			AWG	mm²	mm	In.	mm	In.	N	Lb.
98913-1019 98913-1229 98913-1329	98913-1349 98913-3019	64322-1019 64322-1229 64322-1329 64322-1349	---	0.35	0.80-0.86	.031-.034	1.43	.056	55.0	12.38
			---	0.22	0.72-0.78	.028-.031	1.42	.056	40.0	9.00
98913-1039	98913-1419	64322-1039	---	0.50	0.87-0.93	.034-.037	1.44	.057	70.0	15.75
98913-1239	98913-3039	64322-1239								
98913-1359		64322-1359								

Terminal Order No.			Wire Size		Insulation			
					Crimp Height		Crimp Width (Ref.)	
			AWG	mm²	mm	In.	mm	In.
98913-1019 98913-1229 98913-1329	98913-1349 98913-3019	64322-1019 64322-1229 64322-1329 64322-1349	---	0.35	1.50-1.65	.059-.065	1.86	.073
			---	0.22	1.35-1.50	.053-.059	1.85	.073
98913-1039	98913-1419	64322-1039	---	0.50	1.60-1.75	.063-.069	1.87	.074
98913-1239	98913-3039	64322-1239						
98913-1359		64322-1359						

✳ 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 63902-1900				
Item	**Order No**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63902-1970	63902-1970	Tool Kit (All "Y" Items)	REF
1	63457-0035	63457-0035	Conductor Punch	1 Y
2	63455-0040	63455-0040	Conductor Anvil	1 Y
3	63454-0060	63454-0060	Insulation Punch	1 Y
4	63456-0040	63456-0040	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Front Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Other Components				
7	11-17-0022	1739-21	Hold Down Spring	1
8	11-18-4083	60707-8	Feed Guide	1
9	11-24-1149	4996-37	Shank	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	63443-1713	63443-1713	Height Spacer	1
14	63443-2215	63443-2215	Coarse Spacer (15.0mm)	1
15	63443-2312	63443-2312	Fine Spacer (3.60mm)	1
16	63443-3101	63443-3101	Plunger Striker	1
17	63443-6111	63443-6111	Rear Cover	1
18	63443-7003	63443-7003	Terminal Hold Down	1
19	63700-0539	63700-0539	Cut-Off Plunger Spring	1
Frame				
20	63800-4901	63800-4901	Top	1
21	63801-3281	63801-3281	Base	1
22	63801-4650	63801-4650	Track	1
Hardware				
23	N/A	N/A	M3 by 6 Long SHCS	2**
24	N/A	N/A	M3 by 6 Long FHCS	1**
25	N/A	N/A	M4 by 6 Long SHCS	2**
26	N/A	N/A	M4 by 12 Long BHCS	2**
27	N/A	N/A	M4 by 50 Long SHCS	2**
28	N/A	N/A	M5 by 12 Lg SHCS	1**
29	N/A	N/A	#5-40 by 3/8"Long SHCS	1**
30	N/A	N/A	#10-32 by 3/8"Long Flat Point SSS	1**
31	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

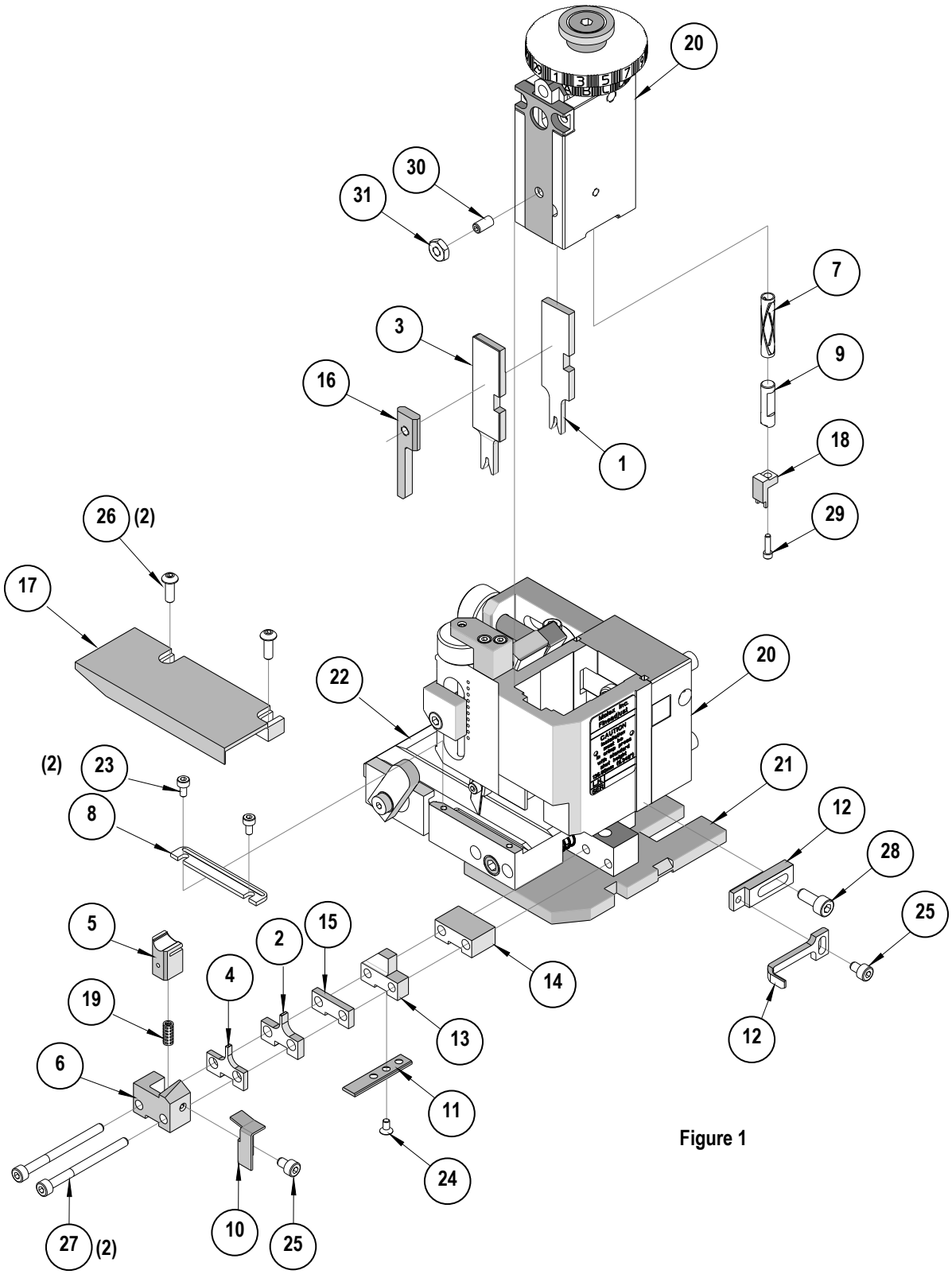


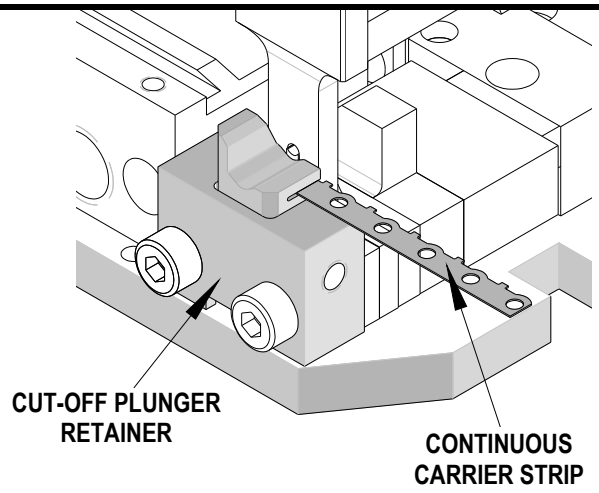
Figure 1

Optional Applicator Parts:

The following parts are *not included* with this Applicator and may be purchased separately.

63443-0017 Cut-Off Plunger Retainer

For wire processing applications:
It is recommended for fully automatic, high speed operations, where the press and the applicator are mounted to a wire processing machine.



Applicator down time for scrap clean-up may be reduced.

This cut-off plunger retainer leaves the scrap terminal carrier intact.

Not recommended for bench operation, where a continuous scrap strip can tangle or build up inside of the safety guards resulting in jams or tooling damage.

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 135.8mm (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.

http://www.molex.com