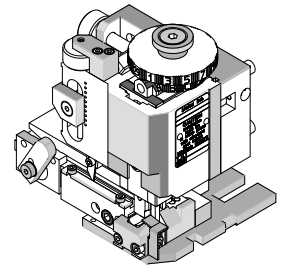


Order Number
63900-4500



Application Tooling Specification



FEATURES

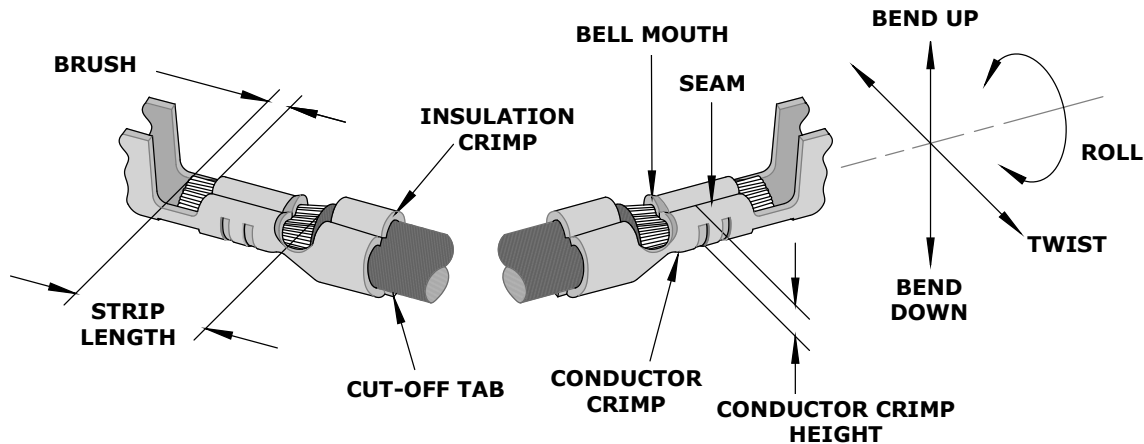
- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and 135.80mm (5.346") shut height
- Quick setup time; plus, the crimp height, track and feed adjustments can 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: Micro-Fit 3.0 Crimp Terminal, Male and Female, 20-24 AWG.

Terminal Series No.	Terminal Order No.		Wire Size		Insulation Diameter				Strip Length	
					IPC/WHMA-A-620 (1)		Terminal (2)			
			AWG	mm ²	mm	In.	mm	In.	mm	In.
43030	43030-0001	43030-0051	20-24	0.50-0.20	1.30-1.85	.051-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
	43030-0002	43030-0052								
	43030-0003	43030-0053								
	43030-1001									
43031	43031-0001	43031-0053	20-24	0.50-0.20	1.30-1.85	.051-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
	43031-0002	43031-0102								
	43031-0003	43031-0103								
	43031-0017	43031-5003								
	43031-0018	43031-5004								
	43031-0051	43031-5005								
	43031-0052	43031-5006								
44372	44372-0002	44372-3606	20-24	0.50-0.20	1.30-1.85	.051-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
45773	45773-0001	45773-0002	20-24	0.50-0.20	1.30-1.85	.051-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
	45773-0003	45773-0053								
45807	45807-0004		20-24	0.50-0.20	1.30-1.85	.051-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
(1) To achieve optimum IPC/WHMA-A-620 Class 2 insulation crimps, use this insulation OD range (2) Overall insulation OD specification for terminal Applicator 63901-8900 should be used for insulation OD 0.91-1.09mm (.036-.043") Applicator 63901-8800 should be used for insulation OD 1.10-1.30mm (.043-.051")										

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.
43030	43031	44372	0.05-0.40	.002-.016	0.15	.006	0.20-0.80	.008-.031
45773	45807							

Terminal Series No.			Bend Up	Bend Down	Twist	Roll	Punch Width mm (Ref)				Seam
			Degree		Degree		Conductor	Insulation	mm	In.	
43030	43031	44372	3	3	4	8	1.40	.055	1.90	.075	Seam shall not be open and no wire allowed out of the crimping area
45773	45807										

After crimping, the conductor profile should measure the following:

Terminal Series No.	Wire Size		Conductor Crimp Height		Insulation Crimp Height		Pull Force Minimum	
	AWG	mm ²	mm	In.	mm	In.	N	Lb.
43030	20	0.50	0.91-0.99	.036-.039	2.30 max	.090 max	57.9	13.0
	22	0.35	0.84-0.91	.033-.036	2.30 max	.090 max	35.6	8.0
	24	0.20	0.79-0.84	.031-.033	2.30 max	.090 max	22.3	5.0
43031	20	0.50	0.91-0.99	.036-.039	2.30 max	.090 max	57.9	13.0
	22	0.35	0.84-0.91	.033-.036	2.30 max	.090 max	35.6	8.0
	24	0.20	0.79-0.84	.031-.033	2.30 max	.090 max	22.3	5.0
44372	20	0.50	0.91-0.99	.036-.039	2.30 max	.090 max	57.9	13.0
	22	0.35	0.84-0.91	.033-.036	2.30 max	.090 max	35.6	8.0
	24	0.20	0.79-0.84	.031-.033	2.30 max	.090 max	22.3	5.0
45773	20	0.50	0.91-0.99	.036-.039	2.30 max	.090 max	57.9	13.0
	22	0.35	0.84-0.91	.033-.036	2.30 max	.090 max	35.6	8.0
	24	0.20	0.79-0.84	.031-.033	2.30 max	.090 max	22.3	5.0
45807	20	0.50	0.91-0.99	.036-.039	2.30 max	.090 max	57.9	13.0
	22	0.35	0.84-0.91	.033-.036	2.30 max	.090 max	35.6	8.0
	24	0.20	0.79-0.84	.031-.033	2.30 max	.090 max	22.3	5.0

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 63900-4500				
Item	Order No.	Engineering No.	Description	Quantity
Perishable Tooling				
	63900-4570	63900-4570	Tool Kit (All "Y" Items)	REF
1	63444-1421	63444-1421	Conductor Punch	1 Y
2	63445-1436	63445-1436	Conductor Anvil	1 Y
3	63446-1902	63446-1902	Insulation Punch	1 Y
4	63445-1905	63445-1905	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Other Components				
7	11-18-4083	60707-8	Feed Guide	1
8	11-24-1067	4996-4	Cut-off Plunger Spring	1
9	63443-0009	63443-0009	Front Scrap Chute	1
10	63443-0024	63443-0024	Key	1
11	63443-0090	63443-0090	Wire Stop	1
12	63443-1703	63443-1703	Height Spacer (17.30mm)	1
13	63443-2216	63443-2216	Coarse Spacer (16.00mm)	1
14	63443-2302	63443-2302	Fine Spacer (3.10mm)	1
15	63443-2802	63443-2802	Front Plunger Striker	1
16	63443-2905	63443-2905	Wire Hold Down Plunger	1
17	63443-6016	63443-6016	Rear Cover	1
18	63600-0021	63600-0021	Compression Spring	1
Frame				
19	63800-4901	63800-4901	Top	1
20	63801-3281	63801-3281	Base	1
21	63801-4650	63801-4650	Track	1
Hardware				
22	—	—	M3 by 6 Long SHCS	2*
23	—	—	M3 by 6 Long FHCS	1*
24	—	—	M4 by 6 Long SHCS	2*
25	—	—	M4 by 12 Long BHCS	2*
26	—	—	M4 by 50 Long SHCS	2*
27	—	—	M5 by 12 Long SHCS	1*
28	—	—	#10-32 by 3/8" Long Flat Point SSS	1*
29	—	—	#10-32 Hex Jam Nut	1*

* Available from an industrial supply company.

ASSEMBLY DRAWING

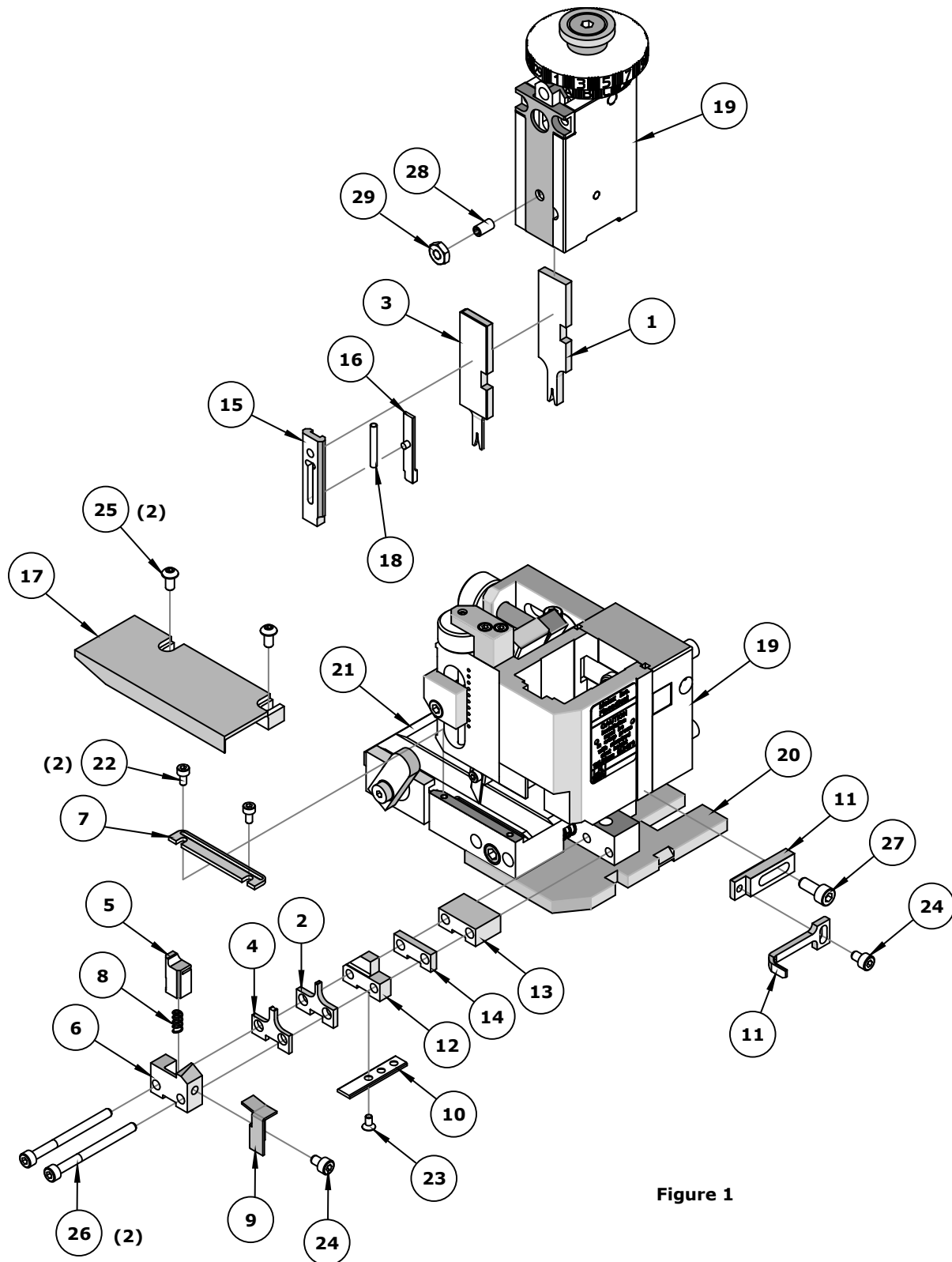


Figure 1



NOTES

- 1. Molex recommends that 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 the 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.

 CAUTION	<p>CAUTION:</p> <p>Molex tooling crimp specifications are valid only when used with Molex terminals and tooling manufactured by Molex and sold by Molex or authorized distributors (“Molex Tooling”).</p> <p>When using tooling other than Molex Tooling with Molex-specific connector systems listed in the ATS documents, the Molex Tooling qualification does not apply, and the responsibility for full qualification of the connector system is that of the customer.</p> <p>Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used or where Molex Tooling is modified.</p>
 CAUTION	<p>CAUTION:</p> <p>A-620 and other industry standards do not supersede the manufacturer’s specifications.</p> <p>Some terminals designed over 20 years ago may not meet the desired physical attributes for some of today’s standards; however, these terminals will still perform electrically at an acceptable quality level based on qualification testing and years of successful performance in the field.</p>

Application Tooling Support

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