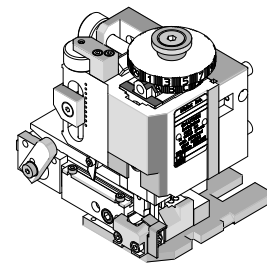


**Order Number  
63902-5800**



**Application Tooling Specification**

**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 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 0.015mm (.0006") for conductor crimp height and 0.063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other
- This tool is IPC/WHMA-A-620 Class 2 Compliant, as indicated below
- Directly adapts to most automatic wire processing machines

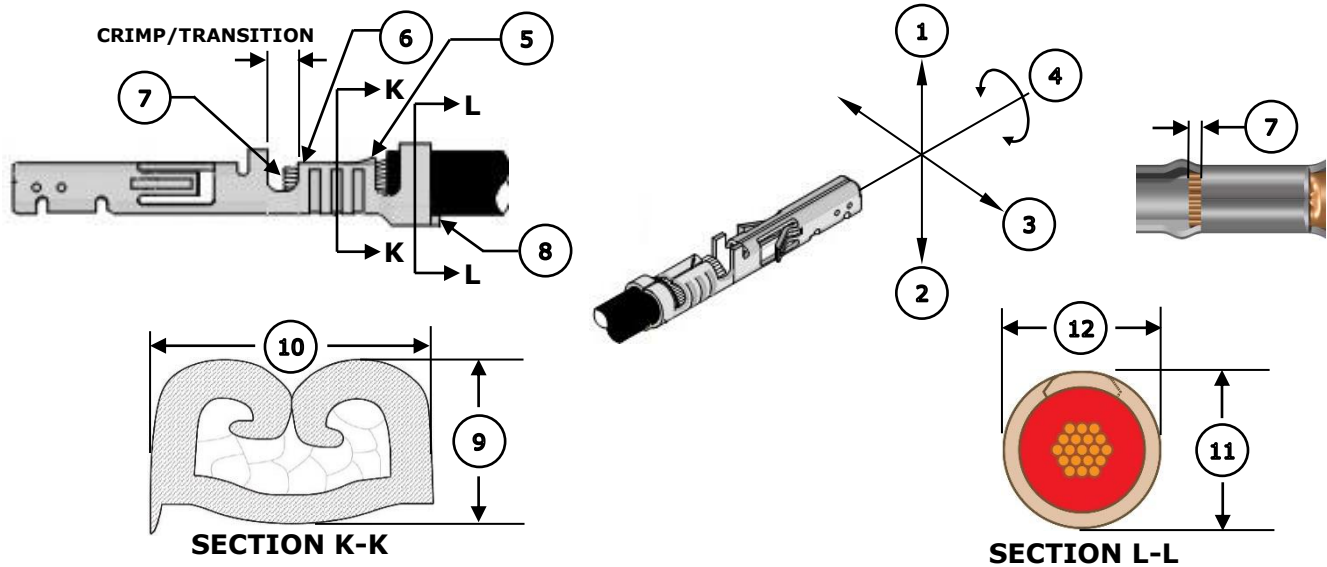
**SCOPE**

**Products:** Micro-Fit 3.0 Male and Female Crimp Terminals, 18 AWG (UL1061) wires.

Terminal Series No.	Terminal Order No.	Wire Size AWG	Insulation Diameter				Strip Length	
			IPC/WHMA-A-620 (1)		Terminal (2)		mm	In.
			mm	In.	mm	In.		
45807	45807-0003	18	1.40-1.85	.055-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
43030	43030-0038 43030-0039 43030-0040	18	1.40-1.85	.055-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
43031	43031-0021 43031-0022 43031-0023	18	1.40-1.85	.055-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115
203951	203951-0001	18	1.40-1.85	.055-.073	0.90-1.85	.035-.073	2.54-2.92	.100-.115

**(1)** To achieve optimum IPC/WHMA-A-620 insulation crimps, use this insulation OD range.  
**(2)** Overall insulation OD specification for terminal.

**DEFINITION OF TERMS**



**CRIMP SPECIFICATION**

Feature	Requirement					
1. Bend Up	3° Max					
2. Bend Down	3° Max					
3. Twist	4° Max					
4. Roll	8° Max					
5. Bell Mouth Rear	0.05-0.40mm (.002-.016")					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.20-0.80mm (.008-.031")					
8. Cut-Off Tab	0.30mm (.012") Max					
<b>Conductor Crimp</b>	<b>Terminal Order No.</b>	<b>Wire Size</b>	<b>9. Crimp Height</b>		<b>10. Crimp Width (Ref)</b>	
	45807	18 AWG	1.00-1.10mm	.039-.043 In.	1.60mm	.063 In.
	43030	18 AWG	1.00-1.10mm	.039-.043 In.	1.60mm	.063 In.
	43031	18 AWG	1.00-1.10mm	.039-.043 In.	1.60mm	.063 In.
	203951	18 AWG	1.00-1.10mm	.039-.043 In.	1.60mm	.063 In.
<b>Insulation Crimp</b>	<b>Terminal Order No.</b>	<b>Wire Size</b>	<b>11. Crimp Height (Ref)</b>		<b>12. Crimp Width (Ref)</b>	
	45807	18 AWG	1.90mm	.075 In.	1.80mm	.071 In.
	43030	18 AWG	1.90mm	.075 In.	1.80mm	.071 In.
	43031	18 AWG	1.90mm	.075 In.	1.80mm	.071 In.
	203951	18 AWG	1.90mm	.075 In.	1.80mm	.071 In.
<b>Pull Force</b>	<b>Terminal Order No.</b>	<b>Wire Size</b>	<b>Minimum Pull Force</b>		To be measured with no influence from the insulation crimp.	
	45807	18 AWG	89.0 N	20.0 lb.		
	43030	18 AWG	63.0 N	14.1 lb.		
	43031	18 AWG	63.0 N	14.1 lb.		
	203951	18 AWG	89.0 N	20.0 lb.		

**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.
3. Oiler (63801-7240) required to crimp terminals to improve tooling life and also to minimize the crimp extrusions. See 63800-4900 FineAdjust manual.

**PARTS LIST**

<b>FineAdjust Applicator 63902-5800</b>				
<b>Item</b>	<b>Order No.</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63902-5870	63902-5870	Tool Kit (All "Y" Items)	REF
1	200216-1608	200216-1608	Conductor Punch	1 Y
2	63455-0128	63455-0128	Conductor Anvil	1 Y
3	63446-1802	63446-1802	Insulation Punch	1 Y
4	200221-1805	200221-1805	Insulation Anvil	1 Y
5	63443-0005	63443-0005	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
<b>Other Components</b>				
7	11-17-0022	1739-21	Compression 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	200213-7553	200213-7553	Anvil Mount	1
15	63443-2802	63443-2802	Front Plunger Striker	1
16	63443-2903	63443-2903	Wire Hold Down Plunger	1
17	63443-7137	63443-7137	Terminal Hold Down	1
18	63443-6016	63443-6016	Rear Cover	1
19	63600-1057	63600-1057	Compression Spring	1
<b>Frame</b>				
20	63800-4901	63800-4901	Top	1
21	63801-3281	63801-3281	Base	1
22	63801-4650	63801-4650	Track	1
<b>Hardware</b>				
23	—	—	M3 by 6 Long SHCS	2*
24	—	—	M3 by 6 Long FHCS	1*
25	—	—	M3 by 8 Long SHCS	1*
26	—	—	M4 by 6 Long SHCS	2*
27	—	—	M4 by 12 Long BHCS	2*
28	—	—	M4 by 50 Long SHCS	2*
29	—	—	M5 by 12 Long SHCS	1*
30	—	—	#10-32 by 3/8" Long Flat Point SSS	1*
31	—	—	#10-32 Hex Jam Nut	1*

\* Available from an industrial supply company.

**ASSEMBLY DRAWING**

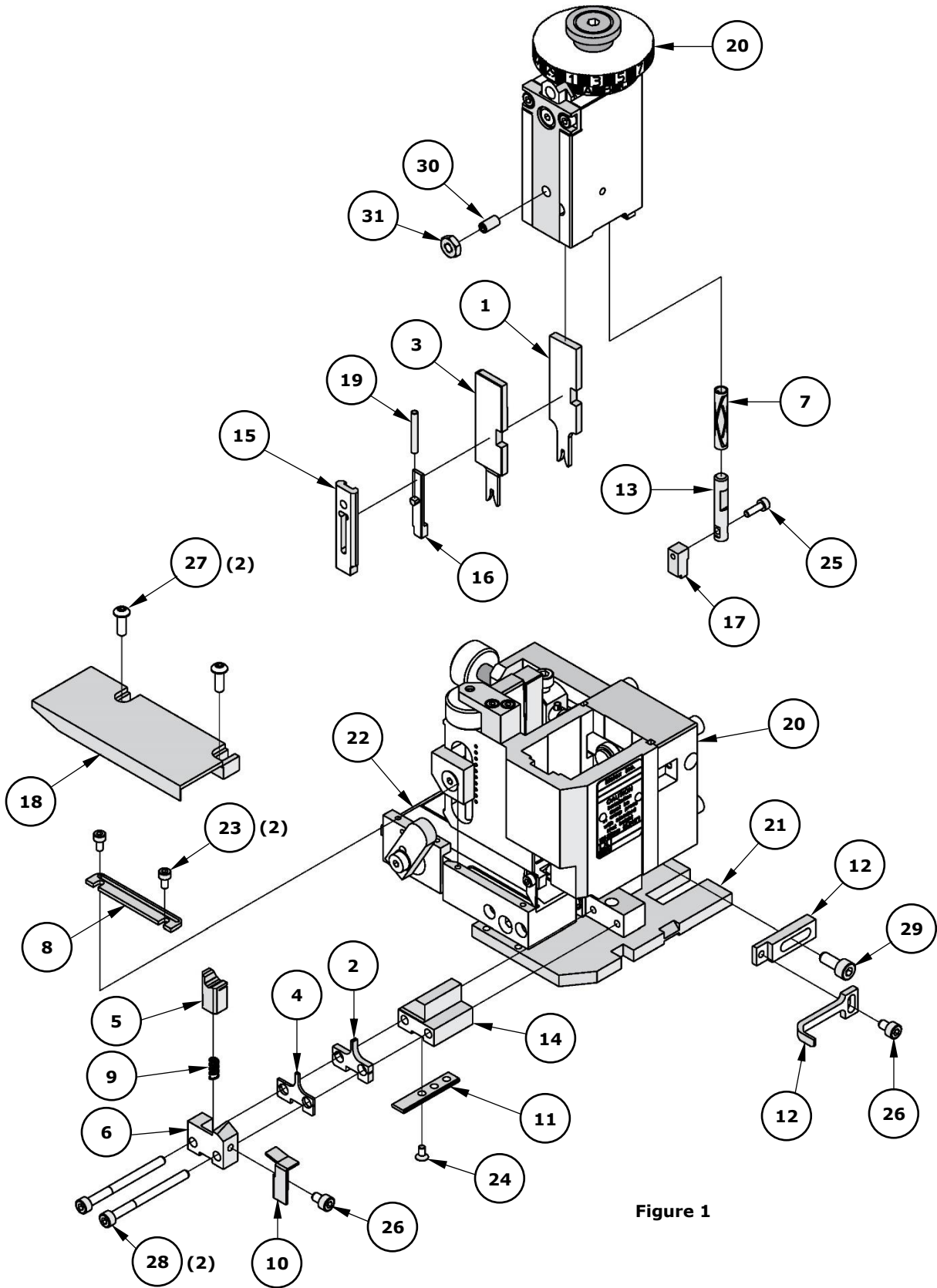


Figure 1

## 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.

### Application Tooling Support

**Phone:** (402) 458-TOOL (8665)  
**E-Mail:** [applicationtooling@molex.com](mailto:applicationtooling@molex.com)  
**Website:** [www.molex.com/applicationtooling](http://www.molex.com/applicationtooling)

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.