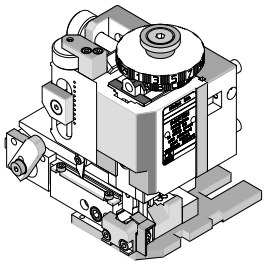
Order Number
203702-3500

molex

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 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 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
- Directly adapts to most automatic wire processing machines
- This tool is IPC/WHMA-A-620 compliant

SCOPE

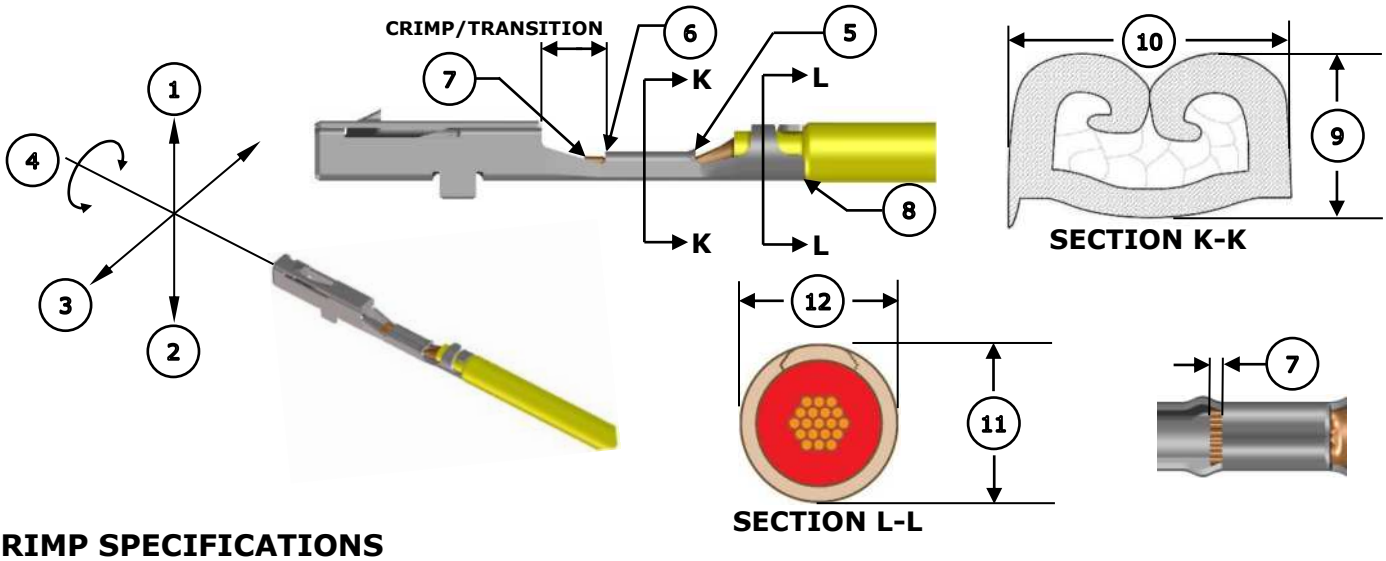
Products: Micro-Fit Plus, 20-24 AWG Wire.

Terminal Series No.	Terminal Order No.	Wire Size	Insulation Diameter						Strip Length	
			Applicator Range (1)		Terminal (2)		IPC/WHMA-A-620 (3)			
		AWG	mm	In.	mm	In.	mm	In.	mm	In.
206460	206460-0021 206460-0022* 206460-0023*	20-24	0.90-1.10	.035-.043	0.90-1.85	.035-.073	1.00-1.10	.039-.043	2.54-2.92	.100-.115
215953	215953-0021 215953-0022* 215953-0023*	20-24	0.90-1.10	.035-.043	0.90-1.85	.035-.073	1.00-1.10	.039-.043	2.54-2.92	.100-.115

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

*Terminal oiler 63801-7240 recommended when crimping gold-plated terminals.

DEFINITION OF TERMS



CRIMP SPECIFICATIONS

Feature	Requirement					
1. Bend Up	3° Max					
2. Bend Down	3° Max					
3. Twist	4° Max					
4. Roll	8° Max					
5. Bell Mouth Rear	0.05-0.35mm (.002-.014”)					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.80mm (.031”)					
8. Cut-Off Tab	0.20mm (.008”) Max					
Conductor Crimp	**Terminal Order No.**	**Wire Size**	**9. Crimp Height**		**10. Crimp Width (Ref)**	
	206460 215953	20 AWG	0.91-0.99mm	.036-.039 In.	1.40-1.50mm	.055-.059 In.
		22 AWG	0.84-0.91mm	.033-.036 In.	1.40-1.50mm	.055-.059 In.
		24 AWG	0.79-0.84mm	.031-.033 In.	1.40-1.50mm	.055-.059 In.
Insulation Crimp	**Terminal Order No.**	**Wire Size**	**11. Crimp Height (Ref)**		**12. Crimp Width (Ref)**	
	206460 215953	20 AWG	2.30mm	.090 In.	1.40-1.50mm	.055-.059 In.
		22 AWG	2.30mm	.090 In.	1.40-1.50mm	.055-.059 In.
		24 AWG	2.30mm	.090 In.	1.40-1.50mm	.055-.059 In.
Pull Force	**Terminal Order No.**	**Wire Size**	**Minimum Pull Force**			
	206460 215953	20 AWG	71.1 N	16.0 lb.	To be measured with no influence from the insulation crimp.	
		22 AWG	44.4 N	10.0 lb.		
		24 AWG	28.5 N	6.4 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. Terminal Oiler (63801-7240) will improve tooling life and minimize crimp extrusions. See 63800-4900 FineAdjust manual.

NOTES

General 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.

WARNINGS

CAUTION: This applicator must be installed in a press with a standard shut height of 135.80mm (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 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”). When using tooling other than Molex Tooling with Molex-specific connector systems listed in our ATS documents, the Molex Tooling qualification does not apply, and the responsibility for full qualification of the connector system is that of the customer. Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used or where Molex Tooling is modified.

PARTS LIST

FineAdjust Applicator 203702-3500				
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	203702-3570	203702-3570	Tool Kit (All "Y" Items)	Ref
1	63446-1406	63446-1406	Insulation Punch	1 Y
2	63444-1421	63444-1421	Conductor Punch	1 Y
3	63445-1409	63445-1409	Insulation Anvil	1 Y
4	63445-1451	63445-1451	Conductor Anvil	1 Y
5	63443-0005	63443-0005	Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
Non-Perishable Components				
7	63443-0024	63443-0024	Key	1
8	01124-1067	4996-4	Cut-Off Plunger Spring	1
9	63443-0009	63443-0009	Front Scrap Chute	1
10	63443-0090	63443-0090	Wire Stop Assembly	1
11	200213-7552	200213-7552	Anvil Mount	1
12	63443-2806	63443-2806	Front Plunger Striker	1
13	63443-2905	63443-2905	Wire Hold Down Plunger	1
14	63600-0021	63600-0021	Wire Hold Down Spring	1
15	01118-4083	60707-8	Terminal Guide	1
16	63443-7137	63443-7137	Nose Hold Down	1
17	63443-0093	63443-0093	Nose Hold Down Shank	1
18	01117-0022	1736-21	Hold Down Spring	1
19	63443-6113	63443-6113	Rear Track Cover	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	—	—	M3 x 6 SHCS	2*
24	—	—	M3 x 6 FHCS	1*
25	—	—	M3 x 10 SHCS	1*
26	—	—	M4 x 6 SHCS	2*
27	—	—	M4 x 12 BHCS	2*
28	—	—	M4 x 50 SHCS	2*
29	—	—	M5 x 12 SHCS	1*
30	—	—	#10-32 x 3/8” Flat Point SSS	1*
31	—	—	#10-32 Hex Jam Nut	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

ASSEMBLY DRAWING

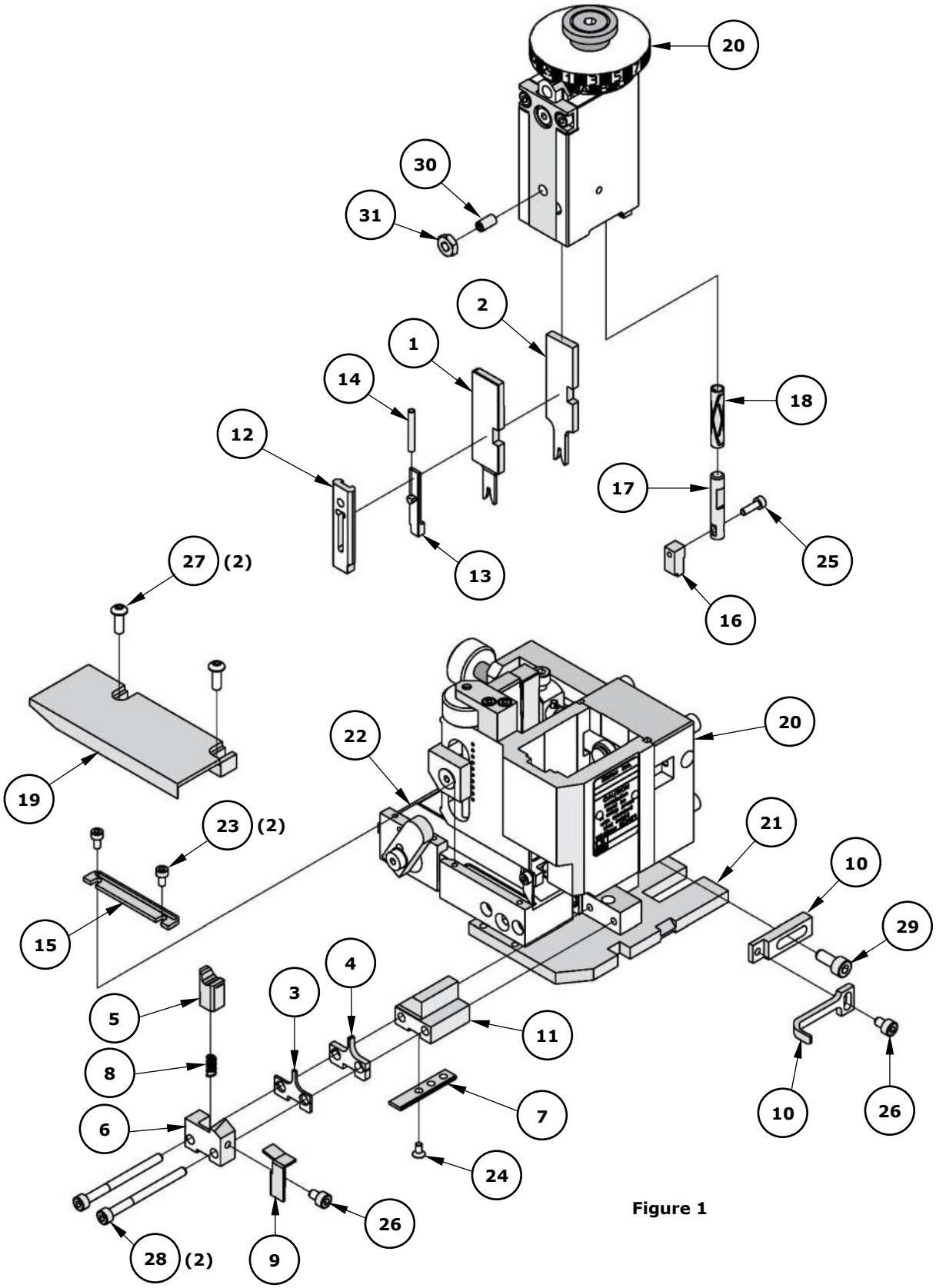


Figure 1

Application Tooling Support

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Website: www.molex.com/applicationtooling

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