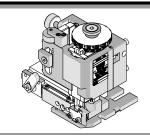




# **Application Tooling Specification Sheet**



Order No. 63904-2600

### **FEATURES**

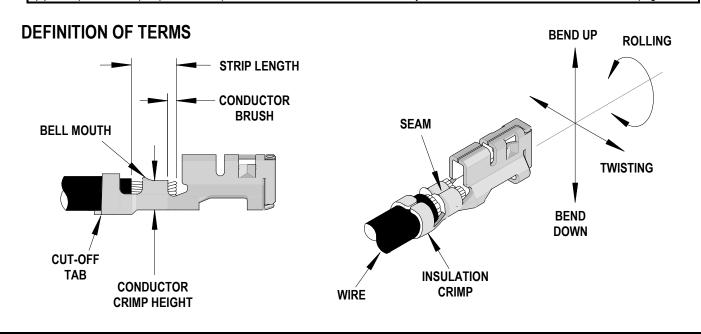
- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine 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**

<u>Products:</u> 2.00mm W/B DuraClik TPA Series Receptacle Terminals.

Terminal	Terminal Order No.	\A/:	ro			Insulation	Ctrin I anath				
Series		Wire			IPC/WHMA	A-A620 (1)	Termi	nal (2)	Strip Length		
No.		Wire Type (3)	AWG	mm²	mm	ln.	mm	ln.	mm	ln.	
	505153- 8000	AVSS	NA	0.30	1.15-1.40	.045055	1.40 Max	.055 Max	1.30-1.80	.051071	
505153		UL1061	22-24	NA	1.15-1.40	.045055	1.15-1.40	.045055	1.30-1.80	.051071	
		Mocar150C	NA	0.35	NA	NA	1.20-1.30	.047051	1.30	.051	

- (1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.
- (2) Overall insulation OD specification for terminal.
- (3) The Mocar150C 0.35 mm<sup>2</sup> wire qualified per USCAR21 Rev3.
- (4) Oiler (63801-7240) required to crimp all terminals. See 63800-4900 FineAdjust Manual. See Tool Qualification Notes on page 2.



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# **CRIMP SPECIFICATION**

Terminal Series No.	Bell n	nouth	Cut-off Tab	Maximum	Conductor Brush		
Terminal Series No.	mm	ln.	mm	ln.	mm	ln.	
505153	0.05-0.35	.002014	0.15	.006	0.10-0.50	.004020	

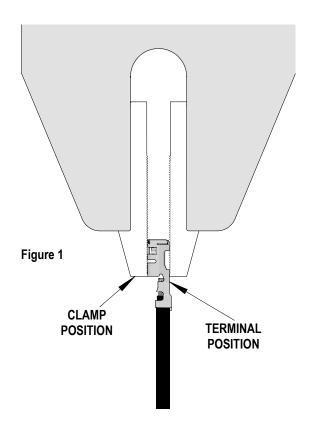
	Bend up Bend down		Twist Roll		Punch Width (Ref)				0		
Terminal Series No.					Conductor		Insulation		Seam		
	Degree Max.		Degree Max.		mm	ln	mm In		Seam shall not be		
505153	4	3	3	4	1.20	.047	1.40	.055	open and no wire allowed out of the crimping area		

After crimping, the crimp profiles should measure the following:

	Wire			Conductor				Insulation				Pull Force	
Terminal Series No.				Crimp Height		Crimp Width (Ref)		Crimp Height		Crimp Width (Ref)		Minimum	
	Wire Type	AWG	mm <sup>2</sup>	mm	ln.	mm	ln.	mm	ln.	mm	ln.	N	Lb.
	AVSS	NA	0.30	0.69-0.74	.027029	1.25	.049	1.60 Max.	.063 Max.	1.47	.058	50.0	11.2
505153	UL1061	22	NA	0.65-0.70	.026028	1.25	.049	1.58 Max.	.062 Max.	1.47	.058	39.2	8.8
303133	UL1061	24	NA	0.59-0.64	.023025	1.25	.049	1.45	.057	1.47	.058	29.4	6.6
	Mocar150C	NA	0.35	0.65-0.71	.026028	1.25	.049	1.28-1.38	.050054	1.47	.058	50.0	11.2

# **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 extrusion. See 63800-4900 FineAdjust Manual.
- 4. Use the recommended pull force clamping technique to achieve the maximum pull force result. See Figure 1.



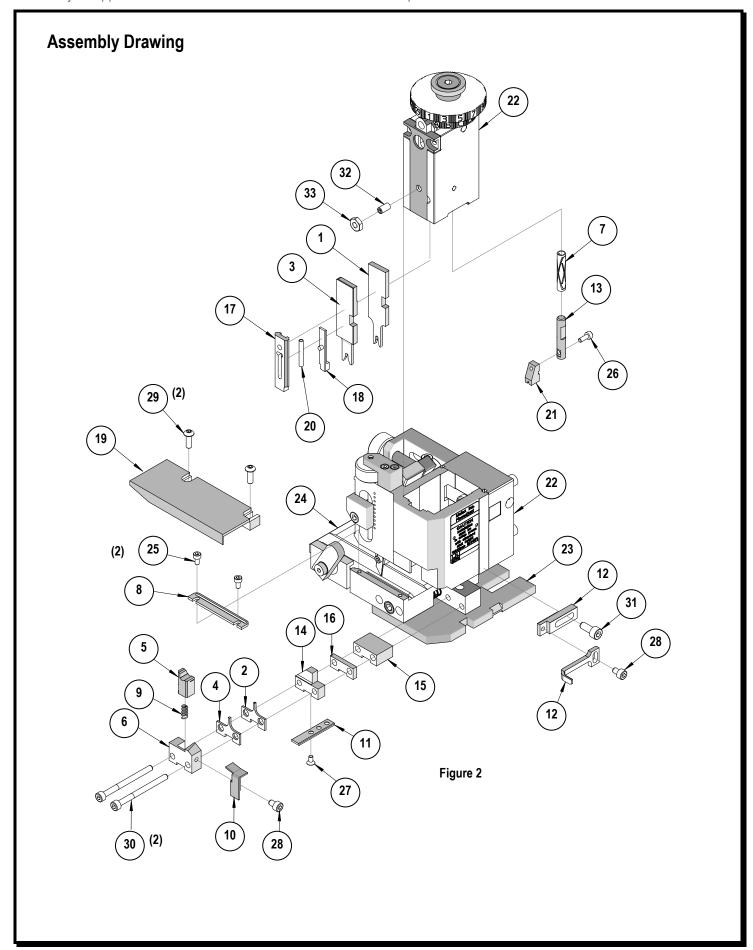
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# **PARTS LIST**

FineAdjust Applicator 63904-2600											
Item	Order No	Engineering No.	Description	Quantity							
Perishable Tooling											
	63904-2670	63904-2670	Tool Kit (All "Y" Items)	REF							
1	63457-1212	63457-1212	Conductor Punch	1 Y							
2	63455-0132	63455-0132	Conductor Anvil	1 Y							
ფ	63454-0169	63454-0169	Insulation Punch	1 Y							
4	63456-0105	63456-0105	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	11-17-0022	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	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	63443-1721	63443-1721	Height Spacer	1							
15	63443-2217	63443-2217	Coarse Spacer	1							
16	63443-2302	63443-2302	Fine Spacer	1							
17	63443-2806	63443-2806	Front Plunger Striker	1							
18	63443-2904	63443-2904	Wire Hold-Down Plunger	1							
19	63443-6109	63443-6109	Rear Cover	1							
20	63600-1057	63600-1057	Striker Plunger Spring	1							
21	63903-7407	63903-7407	Terminal Hold Down	1							
			Frame								
22	63800-4901	63800-4901	Тор	1							
23	63801-3281	63801-3281	Base	1							
24	63801-4650	63801-4650	Track	1							
		Н	lardware								
25	N/A	N/A	M3 by 6 Long SHCS	2**							
26	N/A	N/A	M3 by 8 Long SHCS	1**							
27	N/A	N/A	M3 by 6 Long FHCS	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	n an industrial suppl	y company such as MSC (1-800-645-7	<b>'</b> 270).							

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### **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.

## 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.

# **Application Tooling Support**

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