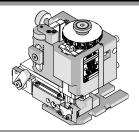


# Application Tooling Specification Sheet



Order No. 63904-2100

### FEATURES THIS APPLICATOR IS FOR AUTOMATIC WIRE PROCESSOR USE ONLY.

- 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

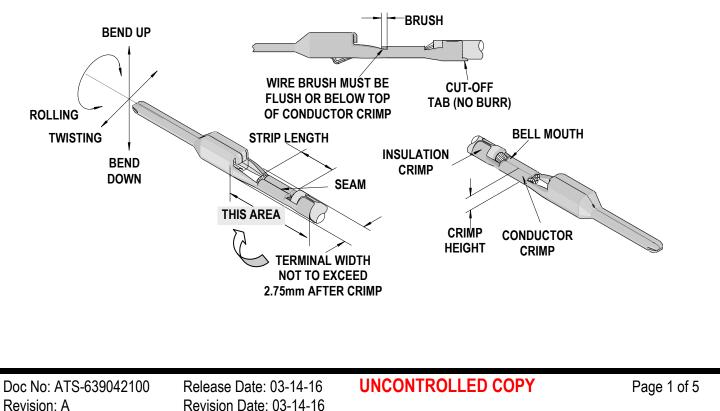
### SCOPE

FineAdjust Applicator

Products: SRC Connector using MX150 Blade Terminals, 0.50mm<sup>2</sup> CHEMINAX 2021D0309 wire.

Terminal Terminal Order No.			Wire Size	Insulation	Diameter	Strip Length			
Series No.	lo.		Wire Type	mm²	mm	In.	mm	In.	
33000	33000-1003		CHEMINAX 2021D0309	0.50	2.30-2.38	.091094	4.70-5.60	.185220	
33011	33011-0006	33011-3001	CHEMINAX 2021D0309	0.50	2.30-2.38	.091094	4.70-5.60	.185220	
Terminals were validated using the following wire specifications: SAE-J1939									

### **DEFINITION OF TERMS**



### **CRIMP SPECIFICATION**

Terminal Series No.	Bell n	nouth	Cut-off T	ab (Max)	Conductor Brush (Max)		
Terminal Series No.	mm	In.	mm	In.	mm	ln.	
33000	0.30-0.70	.012028	0.50	.020	0.40	.016	
33011	0.30-0.70	.012028	0.50	.020	0.40	.016	

Wire brush must be flush or below top of Conductor Crimp.

THIS APPLICATOR IS INTENDED FOR AUTOMATIC WIRE PROCESSOR USE ONLY. It is very important that the brush length is consistently within specification for this sealed connector system to work properly. This applicator should only be run in a properly setup automatic wire processor in order to consistently achieve the brush length. Any attempt to use this applicator outside a properly setup automatic wire processor will likely not meet the brush specification and cause this sealed connector system to not work properly.

Terminal	Bend up Bend down		Twist Roll Degree		Ρι	unch W	idth (Re	ef)	Conductor Scom		
Series No.					Conductor		Insulation		Conductor Seam		
Series NO.	Degree				mm	In	mm	In	Seam shall not be open and no wire allowed		
33000	3	3	3	3	1.50	.059	1.86	.073	out of the crimping area		
33011	3	3	3	3	1.50	.059	1.86	.073	out of the chimping area		

After crimping, the crimp profiles should measure the following:

Terminal	Wire Size		Conductor				Insulation					Pull Force	
Terminal Series No.			Crimp Height		Crimp Width		Crimp Height (Ref)		Crimp Width (Ref)		Minimum		
Series NO.	Wire Type	mm <sup>2</sup>	mm	ln.	mm	In.	mm	In.	mm	In.	Ν	Lb.	
33000	CHEMINAX 2021D0309	0.50	1.05-1.15	.041045	1.50-1.70	.059067	2.00	.079	1.95	.077	75	16.9	
33011	CHEMINAX 2021D0309	0.50	1.05-1.15	.041045	1.50-1.70	.059067	2.00	.079	1.95	.077	75	16.9	

#### **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.

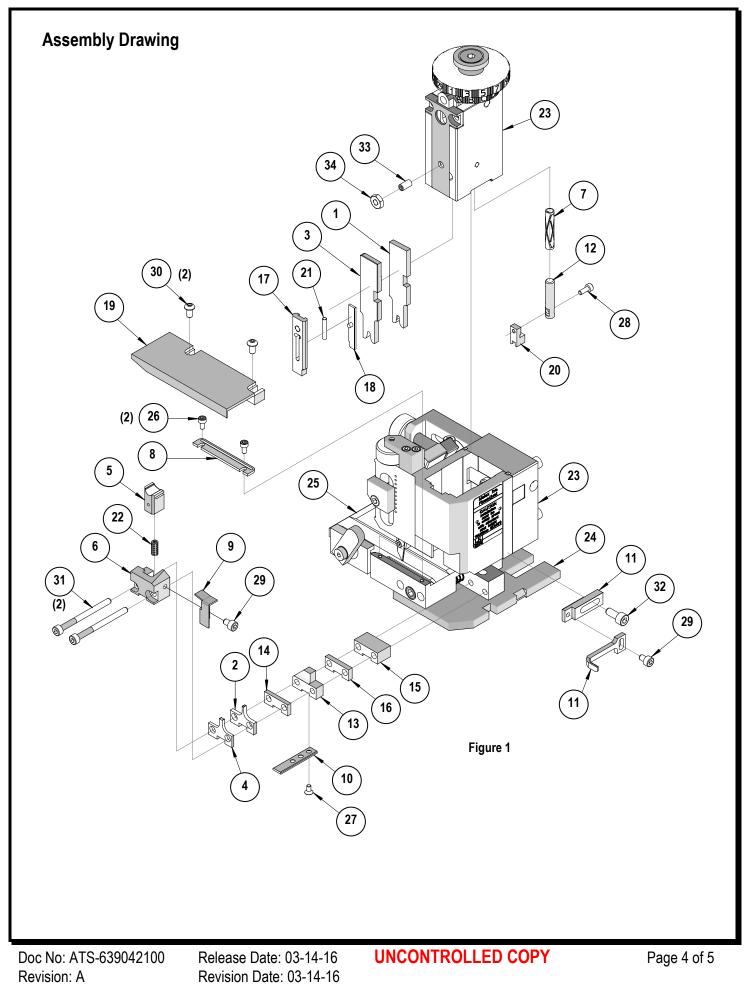
#### Adjusting the Wire Brush Length

(See Item11 in parts list and assembly drawing.)

- 1. If the wire brush is too long or extends above the top of the conductor crimp, adjust the Wire Stop, Item 11, closer to the conductor punch.
- 2. If the wire brush is too short, adjust the Wire Stop further away from the conductor punch.

## PARTS LIST

FineAdjust Applicator 63904-2100											
ltem	Order No	Description	Quantity								
		Perish	nable Tooling								
	63904-2170	63904-2170	Tool Kit (All "Y" Items)	REF							
1	63444-1548	63444-1548	Conductor Punch	1 Y							
2	63455-0044	63455-0044	Conductor Anvil	1 Y							
3	63454-0050	63454-0050	Insulation Punch	1 Y							
4	63456-0045	63456-0045	Insulation Anvil	1 Y							
5	63443-0037	63443-0037	Cut-Off Plunger	1 Y							
6	63443-0038	63443-0038	Front Plunger Retainer	1 Y							
Other Components											
7	11-17-0022	1739-21	Hold Down Spring	1							
8	11-18-4094	60709A111	Feed Guide	1							
9	63443-0009	63443-0009	Scrap Chute	1							
10	63443-0024	63443-0024	Key	1							
11	63443-0090	63443-0090	Wire Stop	1							
12	63443-0093	63443-0093	Shank	1							
13	63443-1719	63443-1719	Height Spacer (18.90mm)	1							
14	63443-2205	63443-2205	Coarse Spacer (5.00mm)	1							
15	63443-2209			1							
16	63443-2306			1							
17	63443-2804	63443-2804	Front Plunger Striker	1							
18	63443-2915	63443-2915	Wire Hold Down Plunger	1							
19	63443-6115	63443-6115	Rear Cover	1							
20	63443-7102	63443-7102	Terminal Hold Down	1							
21	63600-0021	63600-0021	Striker Plunger Spring	1							
22	63700-0539	63700-0539	Cut-off Plunger Spring	1							
			Frame								
23	63800-4901	63800-4901	Тор	1							
24	63801-3281	63801-3281	Base	1							
25	63801-4650	63801-4650	Track	1							
25A	63459-0001	63459-0001	Terminal Track	1							
		Н	ardware								
26	N/A	N/A	M3 by 6 Long SHCS	2**							
27	N/A	N/A	M3 by 6 Long FHCS	1**							
28	N/A	N/A	M3 by 8 Long SHCS	1**							
29	N/A	N/A	M4 by 6 Long SHCS								
30	N/A	N/A M4 by 12 Long BHCS		2**							
31	N/A	N/A	M4 by 50 Long SHCS	2**							
32	N/A	N/A	M5 by 12 Long SHCS	1**							
33	N/A			1**							
34	N/A N/A #10-32 Hex Jam Nut										
*			y company such as MSC (1-800-645-7	270).							

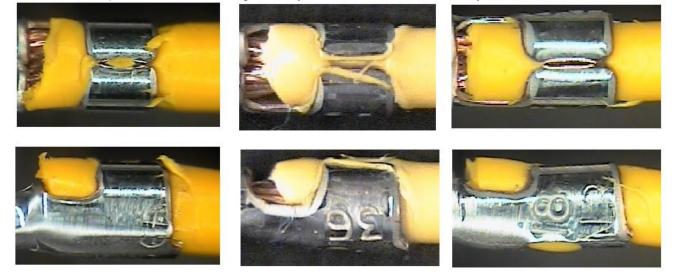


### NOTES

- 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.

#### Insulation Attribute Notes:

In order to help ensure the integrity of the connector seal, the design intent is to partially bury the insulation grips into the wire insulation. Due to this, skiving of the insulation may occur. This skiving attribute is acceptable. Below are examples of insulation skiving that may be seen with this connector system.



**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 wireprocessing machine in place. Reference the press or wire processing manufacturer's instruction manual.

**CAUTION**: These Molex crimp specifications are valid only when used with Molex terminals, applicators and tooling qualified by Molex. When using non-Molex tooling with this specific connector system listed in this document, the Molex qualification does not apply and the responsibility for full qualification of the connector system is that of the customer. Molex accepts no liability for tooling support where non-Molex tooling is used.

Visit our Web site at http://www.molex.com

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