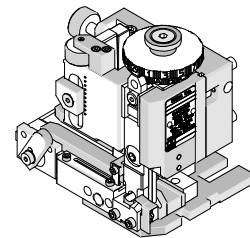


Mini-Mac Applicator Mechanical Feed Metal Strip

molex

Application Tooling Specification Sheet


Order No. 63895-4000

FEATURES

- Directly adapts to most automatic wire processing machines. This applicator ships from the factory set-up in the up-stroke condition for bench-top operation; however it will directly adapt to most automatic wire processing machines. Please review the applicator manual that shipped with your tool and is linked on the Molex website.
- 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.
- Easy change-over for terminal feeding (up-stroke or down-stroke). Applicator shipped as up-stroke.

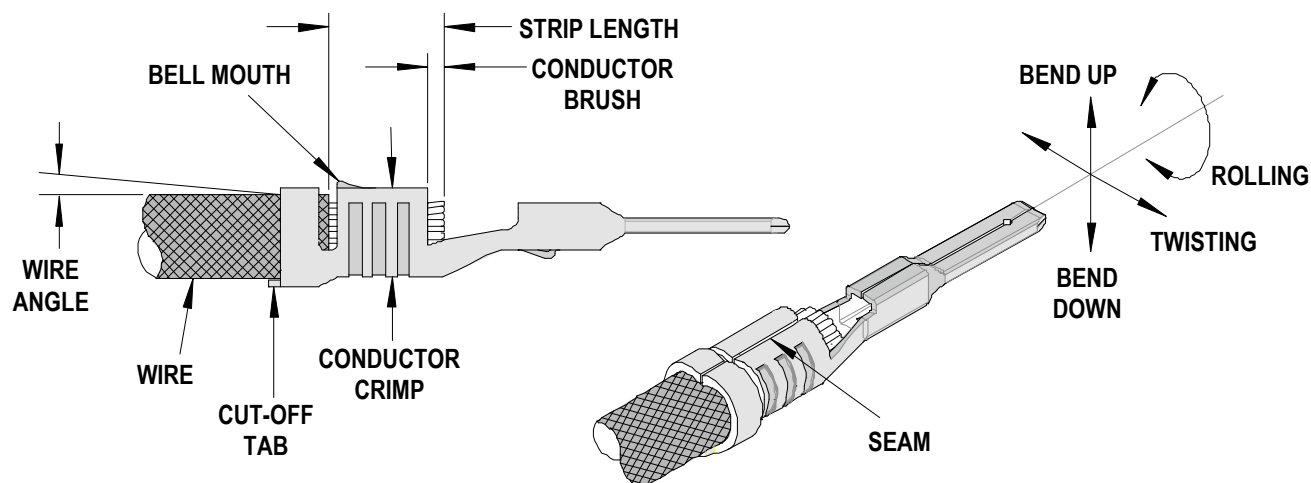
SCOPE

Products: SRC Connector using MX150L Male and Female Crimp Terminals, 4.0mm² FLRY-B wire.

Terminal Series No.	Terminal Order No.	Wire Size		Insulation Diameter		Strip Length	
		Wire Type	mm ²	mm	In.	mm	In.
19431	19431-0064	FLRY-B	4.0	3.40-3.70	.134-.146	5.50-6.20	.217-.244
19434	19434-0013	FLRY-B	4.0	3.40-3.70	.134-.146	5.50-6.20	.217-.244

1. Terminals were validated using the following wire specifications: ISO 6722-1, Class B
2. Crimp terminals to stranded copper wire only.
3. Lubricate terminals plated in precious metals using Molex Oiler 63801-7240.

DEFINITION OF TERMS



CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
19431	0.25-1.25	.010-.049	0.50	.020	0.10-0.50	.004-.020
19434	0.25-1.25	.010-.049	0.50	.020	0.10-0.50	.004-.020

Terminal Series No.	Bend up Bend down		Twist Roll		Punch Width (Ref)				Wire Angle	Conductor Seam Seam shall not be open and no wire allowed out of the crimping area
	Degree		Degree		Conductor		Insulation		Degree	
					mm	In	mm	In		
19431	2	3	4	8	3.80	.150	4.00	.157	5° Maximum	
19434	2	3	4	8	3.80	.150	4.00	.157	5° Maximum	

After crimping, the crimp profiles should measure the following:

Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
			Crimp Height		Crimp Width			
	Wire Type	mm ²	mm	In.	mm	In.	N	Lb.
19431	FLRY-B	4.0	2.10-2.30	.082-.091	3.70-3.90	.146-.154	361	81.2
19434	FLRY-B	4.0	2.10-2.30	.082-.091	3.70-3.90	.146-.154	361	81.2

Terminal Series No.	Wire Size		Insulation			
	AWG	mm ²	Crimp Height (Ref)		Crimp Width (Ref.)	
			mm	In.	mm	In.
19431	FLRY-B	4.0	3.45	.136	4.15	.163
19434	FLRY-B	4.0	3.45	.136	4.15	.163

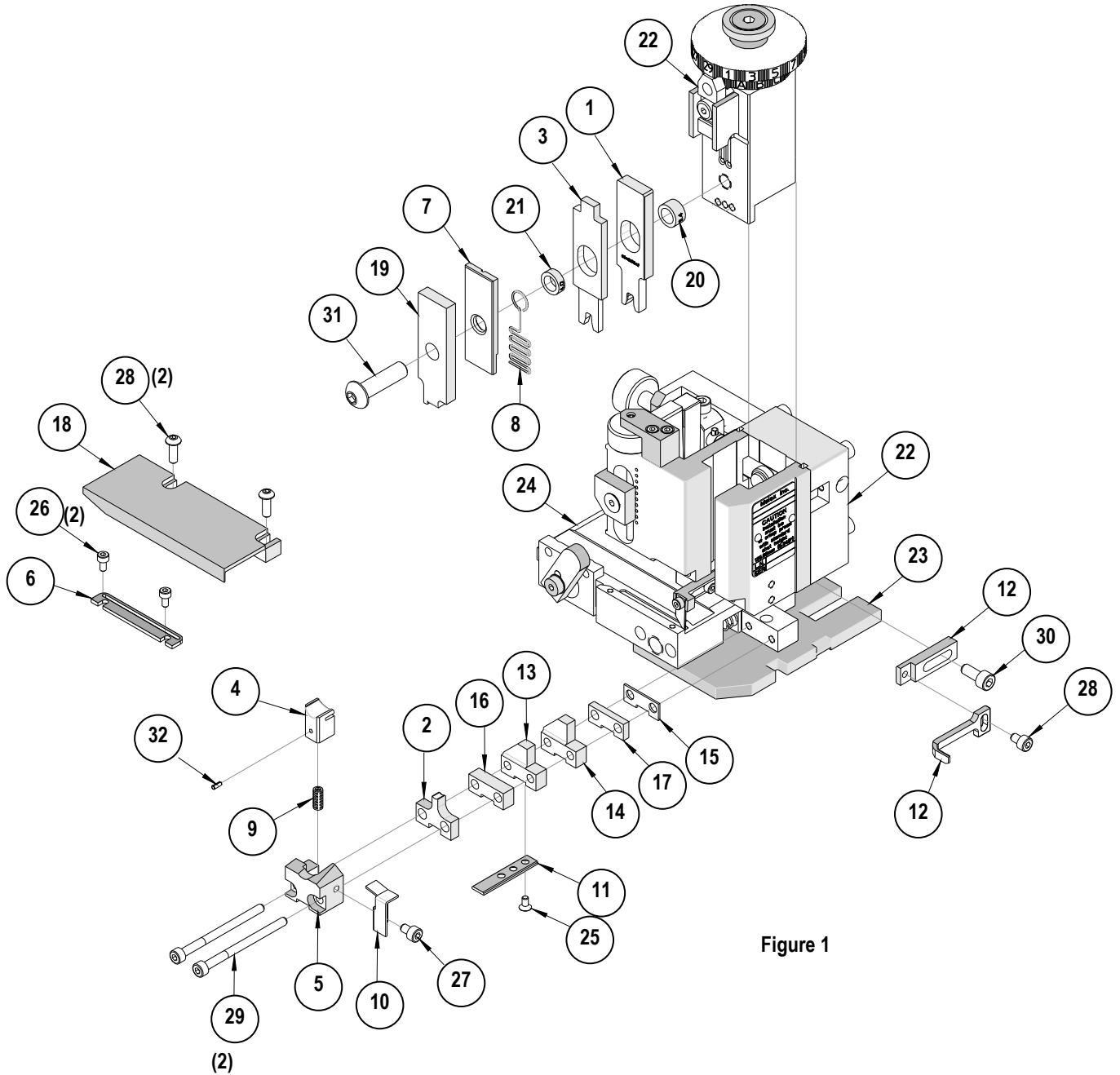
Tool Qualification Notes:

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

Mini-Mac Applicator 63895-4000				
Item	Order No	Engineering No.	Description	Quantity
Perishable Tooling				
	63895-4070	63895-4070	Tool Kit (All "Y" Items)	REF
1	63465-0042	63465-0042	Conductor Punch	1 Y
2	63455-3801	63455-3801	Conductor Anvil	1 Y
3	63471-0017	63471-0017	Insulation Punch	1 Y
4	63443-0039	63443-0039	Cut-off Plunger Front	1 Y
5	63443-0040	63443-0040	Plunger Retainer Front	1 Y
Other Components				
6	11-18-4083	60707-8	Feed Guide	1
7	11-18-4848	60800A123	Spring Retainer	1
8	11-18-4849	60800A124	Wire Hold Down Spring	1
9	11-24-1067	4996-4	Cut-Off Plunger Spring	1
10	63443-0009	63443-0009	Scrap Chute Front	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-1728	63443-1726	Height Spacer (19.60mm)	1
14	63443-1738	63443-1738	Height Spacer (20.80mm)	1
15	63443-2201	63443-2201	Course Spacer (1.00mm)	1
16	63443-2207	63443-2207	Course Spacer (7.00mm)	1
17	63443-2314	63443-2314	Fine Spacer (3.70mm)	1
18	63443-6125	63443-6125	Rear Cover	1
19	63466-0505	63466-0505	Cut-off Plunger Striker Front	1
20	63890-0866	63890-0866	Collar-6.40 Long	1
21	63890-0995	63890-0995	Collar-4.05 Long	1
Frame				
22	63801-3201	63801-3201	Top	1
23	63801-3281	63801-3281	Base	1
24	63801-4650	63801-4650	Track	1
Hardware				
25	N/A	N/A	M3 by 6 Long FHCS	1**
26	N/A	N/A	M3 by 6 Long SHCS	2**
27	N/A	N/A	M4 by 6 Long SHCS	2**
28	N/A	N/A	M4 by 12 Long BHCS	2**
29	N/A	N/A	M4 by 50 Long SHCS	2**
30	N/A	N/A	M5 by 12 Long SHCS	1**
31	N/A	N/A	M8 by 30 Long BHCS	1**
32	N/A	N/A	2mm by 5 Long Roll Pin	1**
<p>** Fastener parts can be obtained through most industrial supply houses by using the generic descriptions listed above in the parts list table.</p> <p>Abbreviation descriptions: SHCS = Socked Head Cap Screw, FHCS = Flat Head Cap Screw, SSS = Socket Set Screw, BHCP = Button Head Cap Screw, Roll Pin = Spiral Pin.</p>				

Assembly Drawing

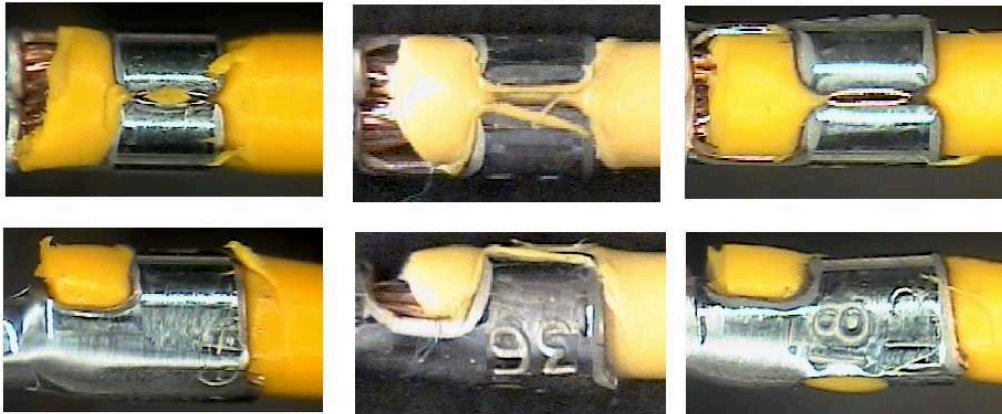





NOTES

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 Mini-Mac Applicator Manual (Document no. 63880-0000).

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	<p>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</p> <p>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.</p>
 CAUTION	<p>Molex tooling crimp specifications are valid only when used with Molex terminals and tooling manufactured by Molex or authorized distributors ("Molex Tooling"). When using tooling other than Molex Tooling with specific 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.</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>A-620 and other industry standards do not supersede the manufacturer's specifications. 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 the qualification testing and years of successful performance in the field.</p>

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