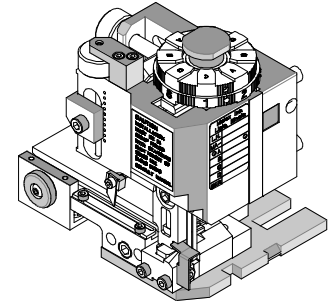# Mini-Mac Applicator
Application Tooling Specification
Mechanical Feed-Front Metal Strip
## Order No. 63830-0500

FEATURES

- Directly adapts to most crimp press and automatic wire processing machines
- Applicator designed to industry standard mounting and shut height of 135.80mm (5.346")
- Conductor and insulation rings allow quick adjustment for conductor and insulation crimp height change
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the crimp press

SCOPE

| Terminal Series No.	Wire Size		Insulation Diameter		Strip Length	
	AWG	mm²	mm	In.	mm	In.
94518-040X	16+16	1.5+1.5	3.14 Max.	.123 Max.	5.00-5.50	.197-.216
94518-040X	18+16	0.75+1.5	3.14 Max.	.123 Max.	5.00-5.50	.197-.216
94518-040X	18+18	0.75+0.75	3.14 Max.	.123 Max.	5.00-5.50	.197-.216
94518-040X	20+16	0.5+1.5	3.14 Max.	.123 Max.	5.00-5.50	.197-.216
94518-040X	20+18	0.5+0.75	3.14 Max.	.123 Max.	5.00-5.50	.197-.216
94518-040X	20+20	0.5+0.5	3.14 Max.	.123 Max.	5.00-5.50	.197-.216

DEFINITION OF TERMS

The following illustration is a generic terminal representation and not an exact image of any terminal listed in the scope.
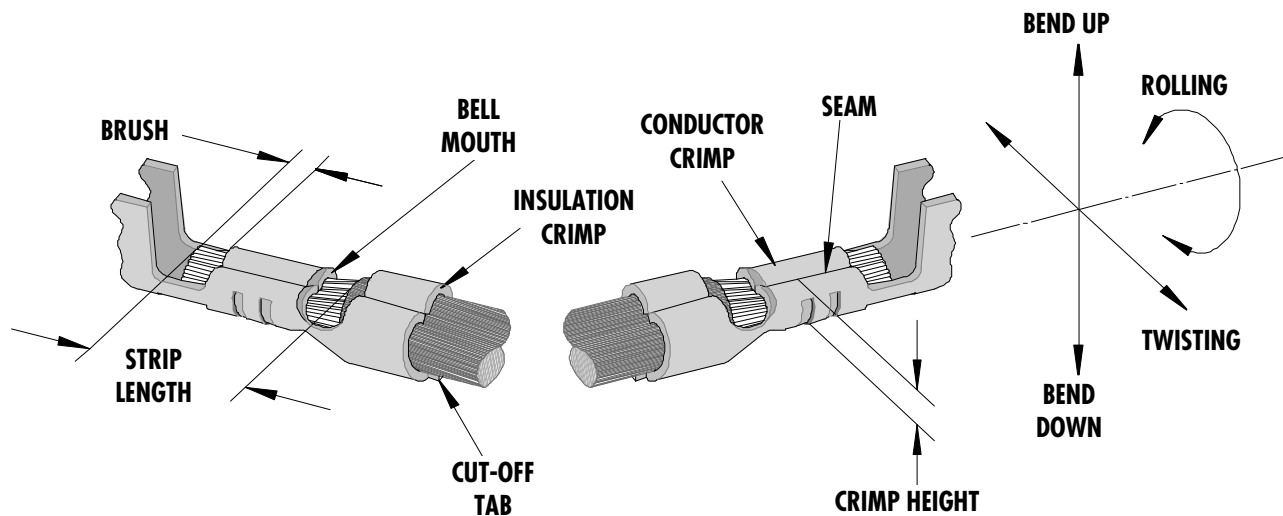
Wire Feeding Orientation

This Terminal and Connector Housing requires that the wires be crimped side by side to function properly, otherwise the housing and the latch may be damaged. It also may cause high insertion force to the header. See the following illustrations below.

HOUSING

HOUSING 4.10 mm
CRIMP 3.95 MAX.

HOUSING
DAMAGED

WIRES
SIDE BY SIDE

WIRES
STACKED

YES

NO
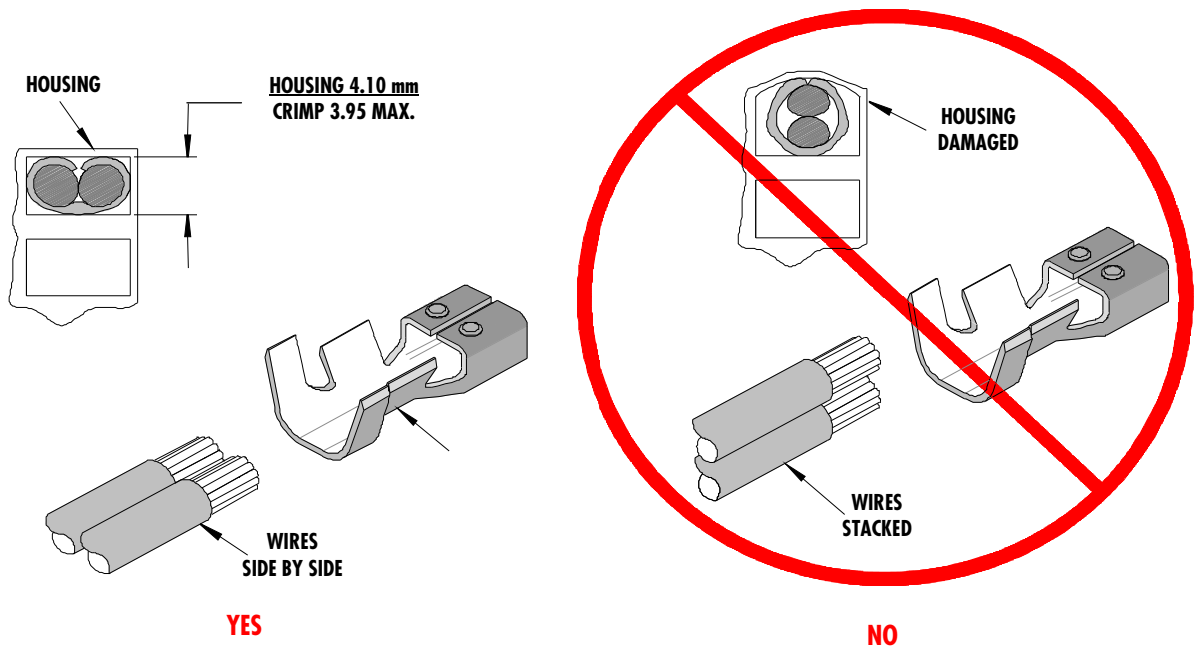
CRIMP SPECIFICATION

Terminal Series No.	Bell mouth		Cut-off Tab Max.		Conductor Brush	
	mm	In.	mm	In.	mm	In.
94518-040X	0.20-0.40	.008-.016	0.60	.024	0.50-1.50	.020-.059

Terminal Series No.	Bend up	Bend down	Twist	Roll	Punch Width (Ref)				Seam
	Degree		Degree		Conductor		Insulation		Seam shall not be open and no wire allowed out of the crimping area
					mm	In	mm	In	
94518-040X	3	3	4	8	2.75	.108	5.50	.216	

After crimping, the crimp profiles should measure the following.

Terminal Series No.	Wire Size		Crimp Height				Crimp Width (Ref.)				Pull Force Min.	
			Conductor		Insulation (Ref.)		Conductor (Ref.)		Insulation (Ref.)			
	AWG	mm^2	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.
94518-040X	16+16	1.5+1.5	1.95-2.05	.077-.081	3.70-3.80	.146-.150	2.80-2.90	.110-.114	5.50-5.70	.216-.224	176.4	39.7
94518-040X	18+16	0.75+1.5	1.95-2.05	.077-.081	3.70-3.80	.146-.150	2.80-2.90	.110-.114	5.50-5.70	.216-.224	176.4	39.7
94518-040X	18+18	0.75+0.75	1.85-1.95	.073-.077	3.45-3.55	.136-.140	2.80-2.90	.110-.114	5.50-5.70	.216-.224	176.4	39.7
94518-040X	20+16	0.5+1.5	1.85-1.95	.073-.077	3.45-3.55	.136-.140	2.80-2.90	.110-.114	5.50-5.70	.216-.224	78.2	17.6
94518-040X	20+18	0.5+0.75	1.80-1.90	.070-.075	3.40-3.50	.134-.138	2.80-2.90	.110-.114	5.50-5.70	.216-.224	78.2	17.6
94518-040X	20+20	0.5+0.5	1.75-1.85	.068-.073	3.35-3.45	.132-.136	2.80-2.90	.110-.114	5.50-5.70	.216-.224	78.2	17.6

Pull Force should be measured with no influence from the insulation crimp.

Pull force listed is for the smaller AWG wire, one wire only.

The above specifications are guidelines to an optimum crimp.

PARTS LIST

| Item	Order No	Engineering No.	Description	Quantity
Mini-Mac Applicator 63830-0500				
Perishable Tooling				
	63830-0570	63830-0570	Tool Kit (All "Y" Items)	REF
1	63470-0004	63470-0004	Conductor Punch	1 Y
2	63832-0402	63832-0402	Conductor Anvil	1 Y
3	63471-0006	63471-0006	Insulation Punch	1 Y
4	63832-0408	63832-0408	Insulation Anvil	1 Y
11	63832-0406	63832-0406	Cut-off Plunger Front	1 Y
13	63443-0036	63443-0036	Plunger Retainer Front	1 Y
Other Components				
21	63830-0505	63830-0505	Cut-off Plunger Striker Front	1
23	63443-0009	63443-0009	Scrap Chute Front	1
25	63700-0539	63700-0539	Cut-Off Plunger Spring	1
31	63443-2126	63443-2126	Anvil Mount	1
33	63443-0021	63443-0021	Lower Tooling Key	1
45	11-18-4080	60707-5	Wire Stop	1
52	63443-0062	63443-0062	Collar-8.00 Lg.	1
54	63832-0407	63832-0407	Wire Locator	1
57	63700-3597	63700-3597	Wire Locator Spring	1
72	11-18-4083	60707-8	Feed Guide	1
73	63443-6015	63443-6015	Rear Cover	1
Frame				
81	63800-4300	63800-4300	Mini-Mac Applicator Frame	REF
Hardware				
91	N/A	N/A	M3 by 6 Lg. SHCS	2**
92	N/A	N/A	M4 by 6 Lg SHCS	1**
93	N/A	N/A	M4 by 12 Lg SHCS	2**
94	N/A	N/A	M4 by 50 Lg. SHCS	2**
95	N/A	N/A	M5 by 12 Lg. SHCS	1**
96	N/A	N/A	M8 by 30 Lg. BHCS	1**
97	N/A	N/A	3mm by 6 Lg. Roll Pin	1**
98	N/A	N/A	M5 by 10 Lg. BHCS	1**
99	N/A	N/A	M6 by 10 Lg. BHCS	2**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

Assembly Drawing
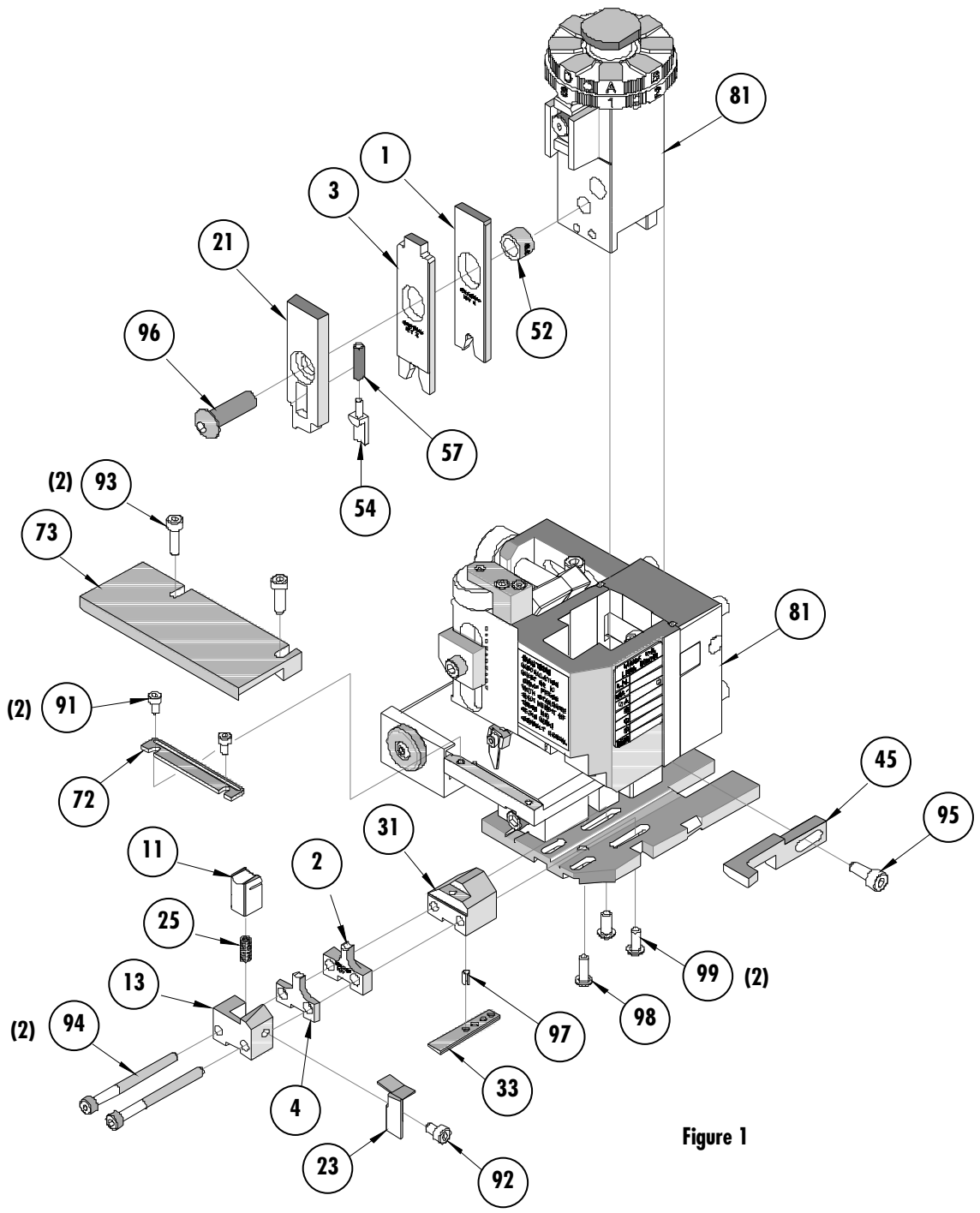
Figure 1

NOTES

1. Molex recommends an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by manually cycling the press with 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).

> **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.

Contact Information

For more information on Molex Application Tooling please contact Molex at 1-800-786-6539.

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