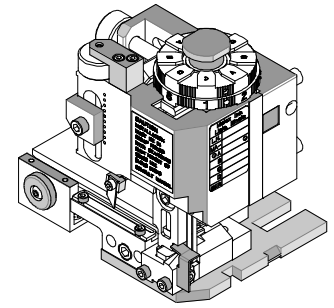




Mini-Mac Applicator Application Tooling Specification Mechanical Feed-Front Metal Strip Order No. 63830-0500



FEATURES

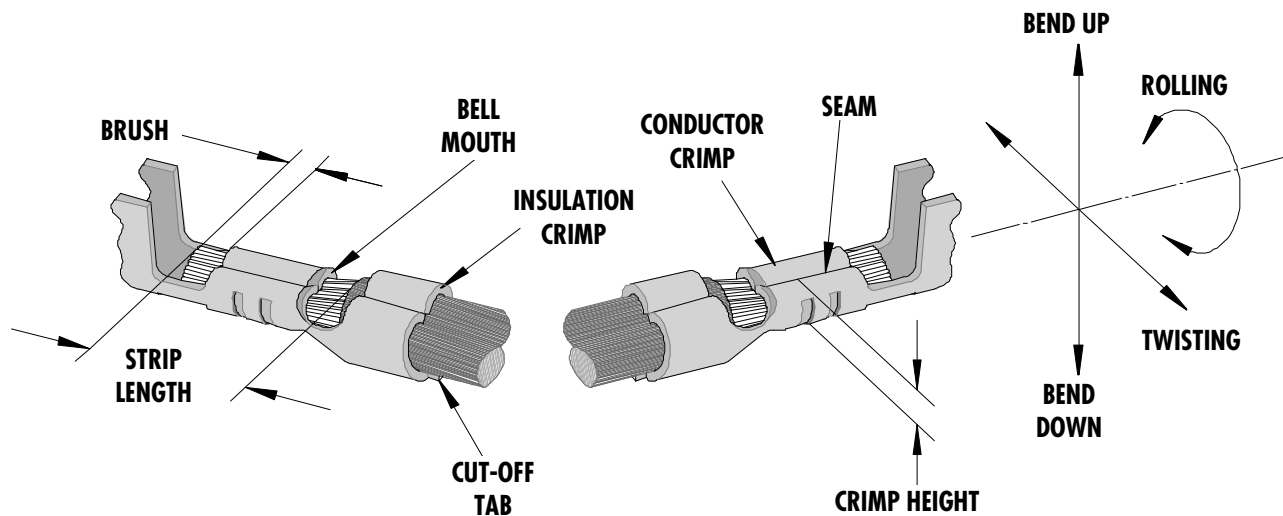
- Directly adapts to most crimp press and automatic wire processing machines
- Applicator designed to industry standard mounting and shut height of 135.80mm (5.346")
- Conductor and insulation rings allow quick adjustment for conductor and insulation crimp height change
- Quick set-up time; plus the 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 | mm ² | 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 |

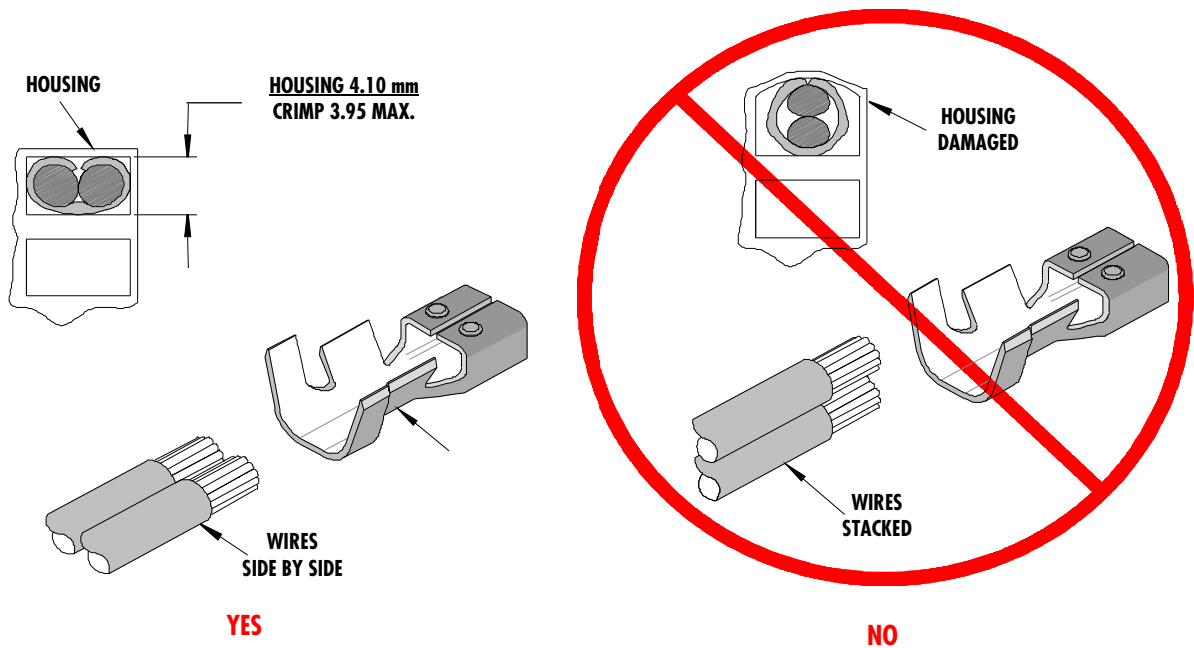
DEFINITION OF TERMS

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.



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 Seam shall not be open and no wire allowed out of the crimping area |
|---------------------|-------------------|-----|-------|------|-------------------|------|-----------|------|---|
| | Degree | | | | Degree | | Conductor | | |
| | mm | In. | mm | In. | 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

| Mini-Mac Applicator 63830-0500 | | | | |
|--|-----------------|------------------------|-------------------------------|-----------------|
| Item | Order No | Engineering No. | Description | Quantity |
| 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

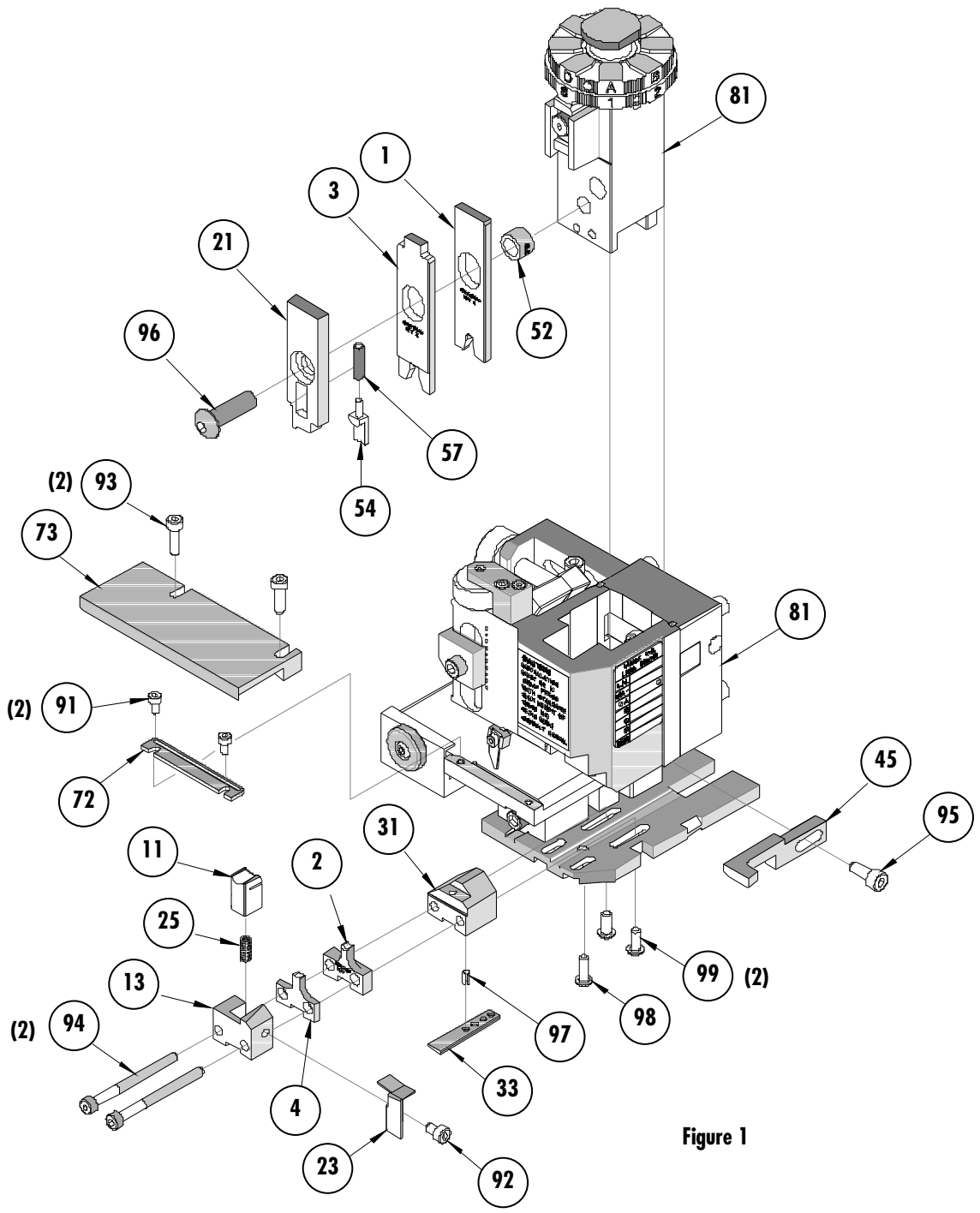


Figure 1

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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