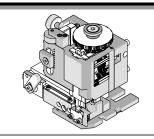




# **Application Tooling Specification Sheet**



Order No. 63902-4400

#### **FEATURES**

- Directly adapts to most automatic wire processing machines
- 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

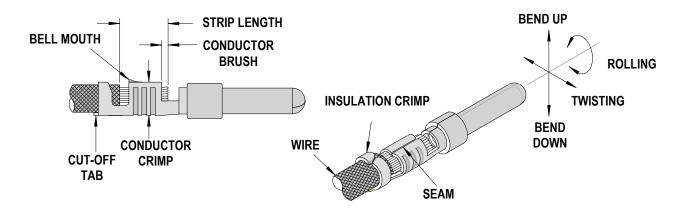
#### **SCOPE**

<u>Products</u>: 2.80mm (.110") Crimp Terminal, Male and Female, 0.50-1.00mm<sup>2</sup> wire.

| Terminal   |                    | Wire Size |           |                   | Insulation | Strip Length |         |              |         |
|------------|--------------------|-----------|-----------|-------------------|------------|--------------|---------|--------------|---------|
| Series No. | Terminal Order No. |           |           | IPC/WHMA-A620 (1) |            |              |         | Terminal (2) |         |
|            |                    | AWG       | mm²       | mm                | ln.        | mm           | ln.     | mm           | ln.     |
| 98012      | 98012-1102         | -         | 0.50-1.00 | 2.40-3.30         | .095130    | 1.40-3.30    | .055130 | 4.70-6.00    | .185236 |
| 98014      | 98014-0100         | -         | 0.50-1.00 | 2.40-3.30         | .095130    | 1.40-3.30    | .055130 | 4.70-6.00    | .185236 |

<sup>(1)</sup> To achieve optimum IPC-A620 Class 2 insulation crimps, use this insulation OD range

### **DEFINITION OF TERMS**



**UNCONTROLLED COPY** Doc No: ATS-639024400 Release Date: 10-11-11 Page 1 of 5

Revision Date: 10-11-11 Revision: A

<sup>(2)</sup> Overall insulation OD specification for terminal

### **CRIMP SPECIFICATION**

| Terminal Series No. | Bell n    | nouth   | Cut-off Tab | Maximum | Conductor Brush |         |  |
|---------------------|-----------|---------|-------------|---------|-----------------|---------|--|
| Terminal Series No. | mm        | ln.     | mm          | ln.     | mm              | ln.     |  |
| 98012               | 0.35-0.70 | .013028 | 0.35        | .013    | 0.20-1.00       | .008039 |  |
| 98014               | 0.35-0.70 | .013028 | 0.35        | .013    | 0.20-1.00       | .008039 |  |

|                     | Bond up [ | Twist Roll |        | Punch Width mm (Ref) |      |            |      | Seam |                         |
|---------------------|-----------|------------|--------|----------------------|------|------------|------|------|-------------------------|
| Terminal Series No. | Della up  |            |        | Conductor            |      | Insulation |      |      |                         |
|                     | Degree    |            | Degree |                      | mm   | ln         | mm   | ln   | Seam shall not be open  |
| 98012               | 3         | 3          | 4      | 8                    | 2.10 | .083       | 3.15 | .124 | and no wire allowed out |
| 98014               | 3         | 3          | 4      | 8                    | 2.10 | .083       | 3.15 | .124 | of the crimping area    |

After crimping, the conductor profile should measure the following.

| Terminal Series No. | Wire Size |                 | Conductor C | Crimp Height | Insulation C<br>Max | rimp Height<br>(Ref) | Pull Force Minimum |       |
|---------------------|-----------|-----------------|-------------|--------------|---------------------|----------------------|--------------------|-------|
|                     | AWG       | mm <sup>2</sup> | mm          | ln.          | mm                  | ln.                  | N                  | Lb.   |
|                     | -         | 0.50            | 1.25-1.35   | .049053      | 4.00                | .157                 | 75.0               | 16.86 |
| 98012               | -         | 0.75            | 1.35-1.45   | .053057      | 4.00                | .157                 | 90.0               | 20.23 |
|                     | -         | 1.00            | 1.40-1.50   | .055059      | 4.00                | .157                 | 120.0              | 26.98 |
|                     | -         | 0.50            | 1.25-1.35   | .049053      | 4.00                | .157                 | 75.0               | 16.86 |
| 98014               | -         | 0.75            | 1.35-1.45   | .053057      | 4.00                | .157                 | 90.0               | 20.23 |
|                     | -         | 1.00            | 1.40-1.50   | .055059      | 4.00                | .157                 | 120.0              | 26.98 |

### **Tool Qualification Notes:**

The above specifications are guidelines to an optimum crimp. 1.

**UNCONTROLLED COPY** Doc No: ATS-639024400 Page 2 of 5 Release Date: 10-11-11 Revision: A

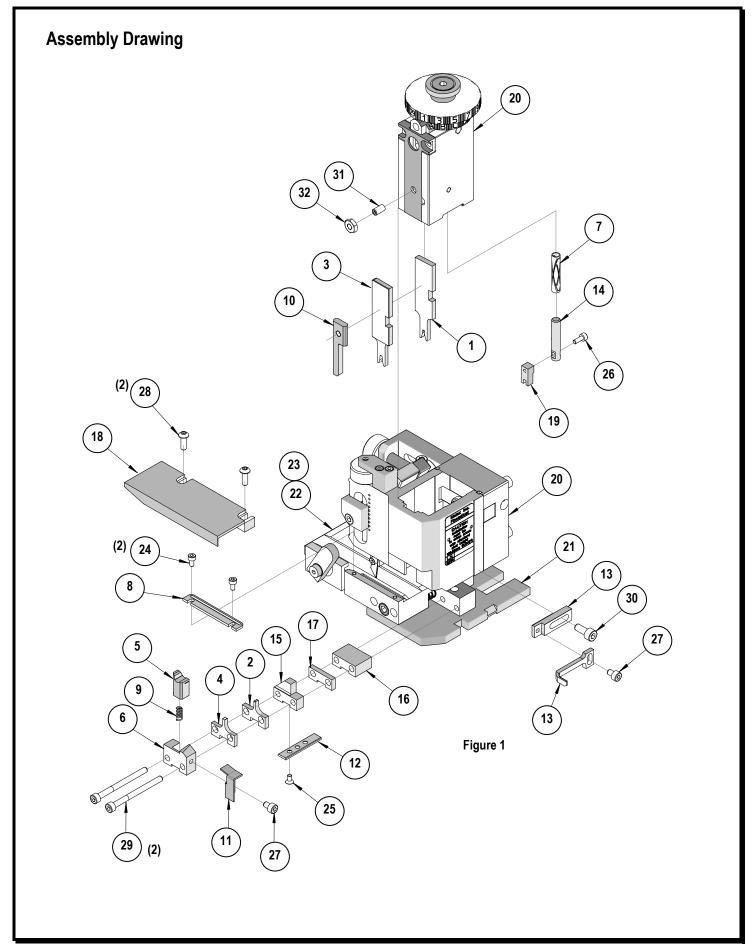
Revision Date: 10-11-11

## **PARTS LIST**

| FineAdjust Applicator 63902-4400 |  |            |                                   |     |  |  |  |  |  |  |
|----------------------------------|--|------------|-----------------------------------|-----|--|--|--|--|--|--|
| Item                             | Order No Engineering No. Description   |            |                                   |     |  |  |  |  |  |  |
| Perishable Tooling               |  |            |                                   |     |  |  |  |  |  |  |
|                                  | 63902-4470   | 63902-4470 | Tool Kit (All "Y" Items)          | REF |  |  |  |  |  |  |
| 1                                | 63457-0092   | 63457-0092 | Conductor Punch                   | 1 Y |  |  |  |  |  |  |
| 2                                | 63455-0115   | 63455-0115 | Conductor Anvil                   | 1 Y |  |  |  |  |  |  |
| 3                                | 63454-0136   | 63454-0136 | Insulation Punch                  | 1 Y |  |  |  |  |  |  |
| 4                                | 63456-0094   | 63456-0094 | Insulation Anvil                  | 1 Y |  |  |  |  |  |  |
| 5                                | 63443-0002   | 63443-0002 | 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                               | 11-40-4039   | 8302-5     | Front Plunger Striker             | 1   |  |  |  |  |  |  |
| 11                               | 63443-0009   | 63443-0009 | Front Scrap Chute                 | 1   |  |  |  |  |  |  |
| 12                               | 63443-0024   | 63443-0024 | Key                               | 1   |  |  |  |  |  |  |
| 13                               | 63443-0091   | 63443-0091 | Wire Stop                         | 1   |  |  |  |  |  |  |
| 14                               | 63443-0093   | 63443-0093 | Shank                             | 1   |  |  |  |  |  |  |
| 15                               | 63443-1709   | 63443-1709 | Height Spacer                     | 1   |  |  |  |  |  |  |
| 16                               | 63443-2213   | 63443-2213 | Coarse Spacer (13.00mm)           | 1   |  |  |  |  |  |  |
| 17                               | 63443-2311   | 63443-2311 | Fine Spacer (3.55mm)              | 1   |  |  |  |  |  |  |
| 18                               | 63443-6130   | 63443-6130 | Rear Cover                        | 1   |  |  |  |  |  |  |
| 19                               | 63443-7117   | 63443-7117 | Terminal Hold Down                | 1   |  |  |  |  |  |  |
|                                  |  |            | Frame                             |     |  |  |  |  |  |  |
| 20                               | 63800-4901   | 63800-4901 | Тор                               | 1   |  |  |  |  |  |  |
| 21                               | 63801-3281   | 63801-3281 | Base                              | 1   |  |  |  |  |  |  |
| 22                               | 63801-4650   | 63801-4650 | Track                             | 1   |  |  |  |  |  |  |
| 23                               | 63459-0001   | 63459-0001 | Track                             | 1   |  |  |  |  |  |  |
|                                  |  | Н          | lardware                          |     |  |  |  |  |  |  |
| 24                               | N/A  | N/A        | M3 by 6 Long SHCS                 | 2** |  |  |  |  |  |  |
| 25                               | N/A  | N/A        | M3 by 6 Long FHCS                 | 1** |  |  |  |  |  |  |
| 26                               | N/A  | N/A        | M3 by 8 Long SHCS                 | 1** |  |  |  |  |  |  |
| 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        | #10-32 by 3/8"Long Flat Point SSS | 1** |  |  |  |  |  |  |
| 32                               | N/A  | N/A        | #10-32 Hex Jam Nut                | 1** |  |  |  |  |  |  |
| *                                | ** Available from an industrial supply company such as MSC (1-800-645-7270). |            |                                   |     |  |  |  |  |  |  |

**UNCONTROLLED COPY** Doc No: ATS-639024400 Page 3 of 5 Release Date: 10-11-11

Revision Date: 10-11-11 Revision: A



Doc No: ATS-639024400 Revision: A Release Date: 10-11-11 Revision Date: 10-11-11

#### **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 135.8mm (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.

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

Doc No: ATS-639024400 Release Date: 10-11-11 **UNCONTROLLED COPY** Page 5 of 5 Revision: A Revision Date: 10-11-11