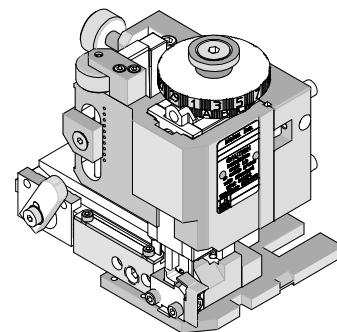




## FineAdjust Applicator Specification Sheet Order No. 63901-4600



### FEATURES

- 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

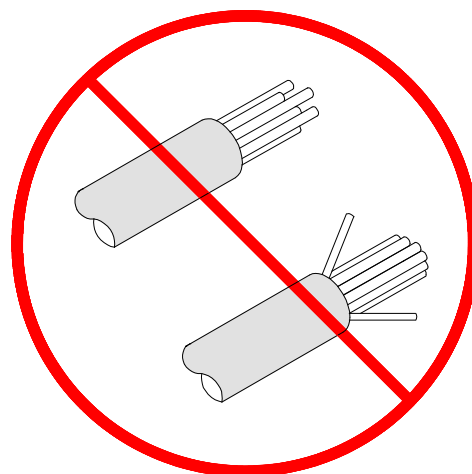
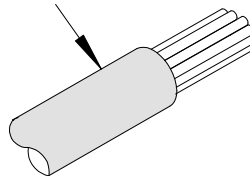
### SCOPE

Products: SL™ Crimp Terminal, Male, 22 AWG. Special Fine Stranded Wire Application.

| Terminal Series No.  | Terminal Order No. |            |            | Wire Size |                 | Insulation Diameter |           | Strip Length |           |
|--|--------------------|------------|------------|-----------|-----------------|---------------------|-----------|--------------|-----------|
|  |                    |            |            | AWG       | mm <sup>2</sup> | mm                  | In.       | mm           | In.       |
| 70021  | 16-02-0081         | 16-02-0116 | 70021-0021 | 22        | 0.35            | 1.40-1.63           | .055-.064 | 3.17-3.56    | .125-.140 |
|  | 16-02-0093         | 40-08-0874 | 70021-0023 |           |                 |                     |           |              |           |
|  | 16-02-0107         | 70021-0019 | 70021-0081 |           |                 |                     |           |              |           |
| Use applicator Order No. 63900-3500 for 22-24 AWG crimping with more commonly used wire types/stranding. |                    |            |            |           |                 |                     |           |              |           |

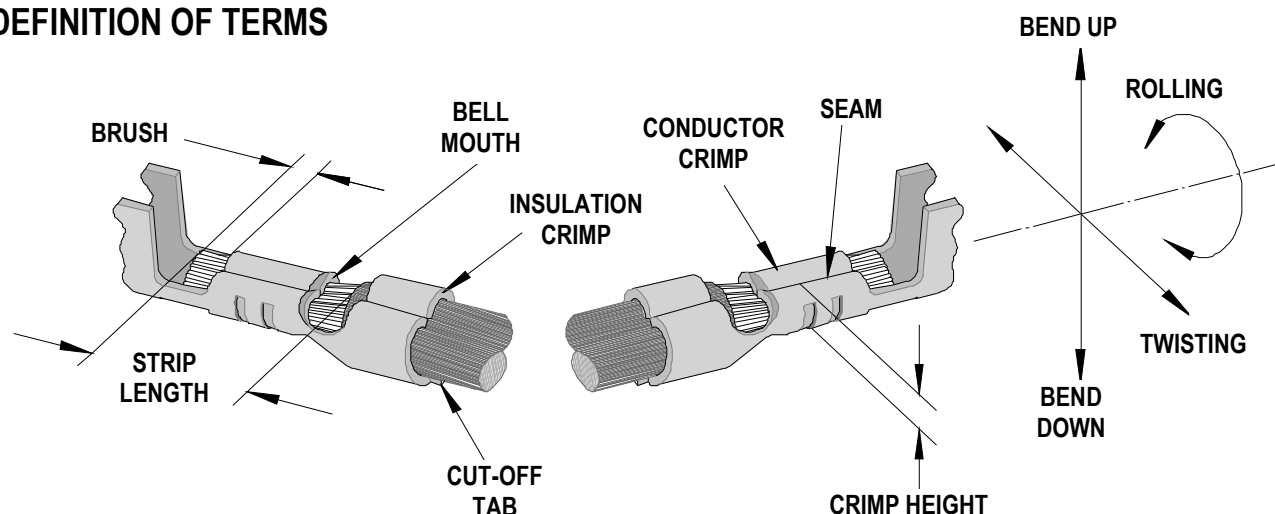
This applicator will produce satisfactory crimps, when used correctly with the properly prepared wire. Incorrectly prepared wire will produce strand out of the crimp.

PROPERLY  
PREPARED WIRE



**Note:** Due to the delicate nature of this wire, care must be taken to gently touch the wire to the wire stop when crimping. The wire must be positioned directly above the terminal. Pushing the wire against the wire stop will result in strands out of the crimp. For semi-automatic crimping the operator may choose to lay the wire into the terminal for crimping.

## DEFINITION OF TERMS



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

## CRIMP SPECIFICATION

| Terminal Series No. | Bell mouth |           | Cut-off Tab Maximum |      |      |      | Conductor Brush |           |
|---------------------|------------|-----------|---------------------|------|------|------|-----------------|-----------|
|                     |            |           | Front               |      | Rear |      |                 |           |
|                     | mm         | In.       | mm                  | In.  | mm   | In.  | mm              | In.       |
| 70021               | 0.20-0.50  | .008-.020 | 0.13                | .005 | 0.13 | .005 | 0.00-1.00       | .000-.039 |

| Terminal Series No. | Bend up   Bend down |   | Twist   Roll |   | Punch Width mm (Ref) |      |            |      | Seam<br>Seam shall not be open<br>and no wire allowed out<br>of the crimping area |
|---------------------|---------------------|---|--------------|---|----------------------|------|------------|------|---|
|                     | Degree              |   | Degree       |   | Conductor            |      | Insulation |      |   |
|                     |                     |   |              |   | mm                   | In   | mm         | In   |   |
| 70021               | 3                   | 3 | 3            | 8 | 1.40                 | .055 | 1.60       | .063 |   |

After crimping, the conductor profile should measure the following.

| Terminal Series No.   | Wire Size |                 | ●Crimp Height |           | Pull Force Minimum |     |
|---|-----------|-----------------|---------------|-----------|--------------------|-----|
|   | AWG       | mm <sup>2</sup> | mm            | In.       | N                  | Lb. |
| 70021   | 22        | 0.35            | 0.83-0.89     | .032-.035 | 35.6               | 8.0 |
| ●Special set-up for 41 strands / 44 AWG fine stranded wire. |           |                 |               |           |                    |     |

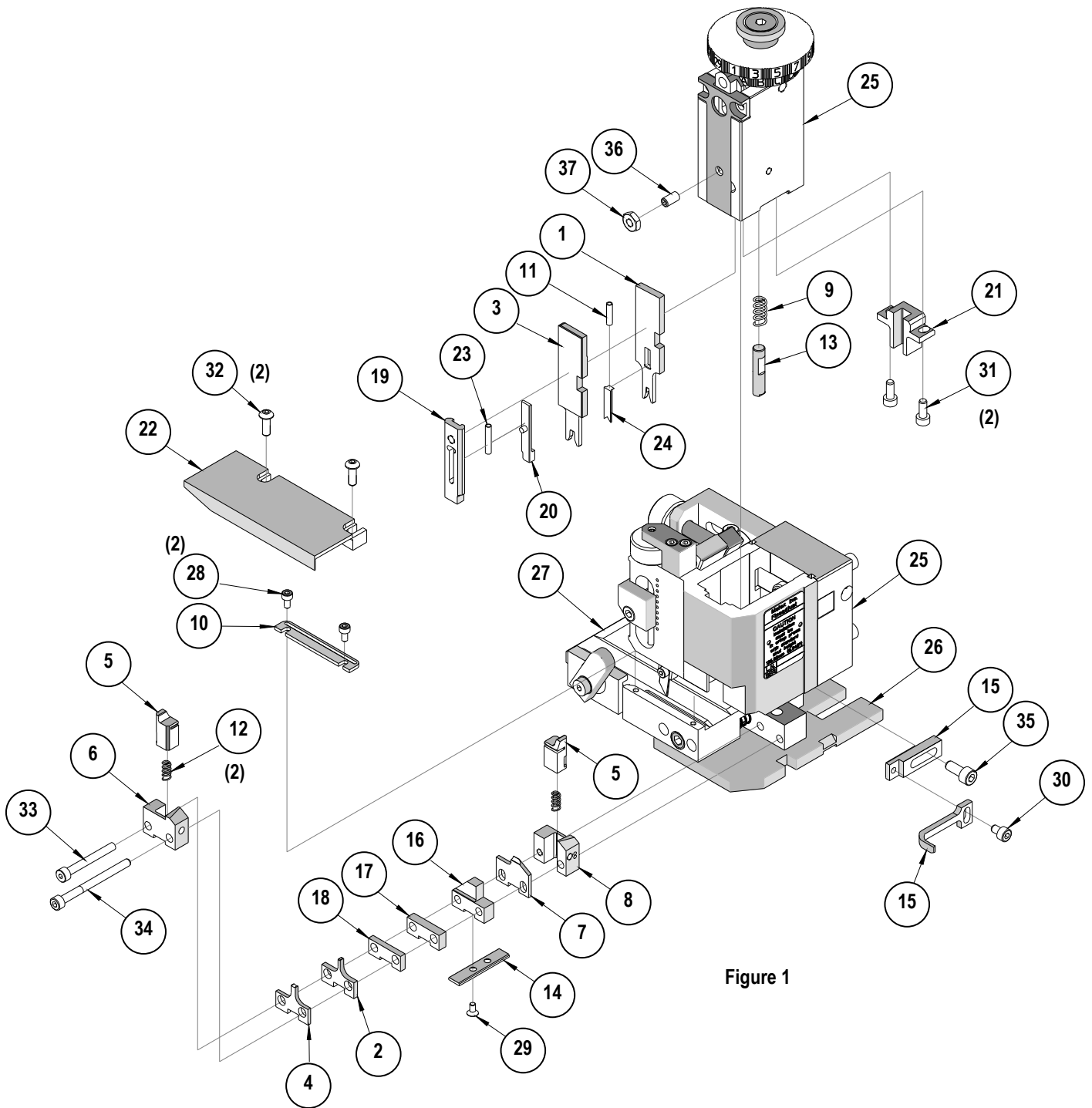
Pull Force should be measured with no influence from the insulation crimp.

The above specifications are guidelines to an optimum crimp.

**PARTS LIST**

| <b>FineAdjust Applicator 63901-4600</b>                                      |                 |                        |                                    |                 |
|--|-----------------|------------------------|------------------------------------|-----------------|
| <b>Item</b>  | <b>Order No</b> | <b>Engineering No.</b> | <b>Description</b>                 | <b>Quantity</b> |
| <b>Perishable Tooling</b>  |                 |                        |                                    |                 |
|  | 63901-4670      | 63901-4670             | Tool Kit (All "Y" Items)           | REF             |
| 1  | 639014672       | 63901-4672             | Conductor Punch                    | 1 Y             |
| 2  | 63445-1446      | 63445-1446             | Conductor Anvil                    | 1 Y             |
| 3  | 63901-4671      | 63901-4671             | Insulation Punch                   | 1 Y             |
| 4  | 63445-1630      | 63445-1630             | Insulation Anvil                   | 1 Y             |
| 5  | 63443-0003      | 63443-0003             | Cut-Off Plunger                    | 2 Y             |
| 6  | 63443-0012      | 63443-0012             | Front Plunger Retainer             | 1 Y             |
| 7  | 63443-1402      | 63443-1402             | Cut-off Die Blade                  | 1 Y             |
| 8  | 63443-1002      | 63443-1002             | Rear Plunger Retainer              | 1 Y             |
| <b>Other Components (REF 014650)</b>   |                 |                        |                                    |                 |
| 9  | 11-17-0022      | 1739-21                | Hold Down Spring                   | 1               |
| 10   | 11-18-4083      | 60707-8                | Feed Guide                         | 1               |
| 11   | 11-18-5116      | 60804A141              | Compression Spring                 | 1               |
| 12   | 11-24-1067      | 4996-4                 | Cut-Off Plunger Spring             | 2               |
| 13   | 11-40-4382      | 8341-8                 | Shank                              | 1               |
| 14   | 63443-0025      | 63443-0025             | Dual Carrier Key                   | 1               |
| 15   | 63443-0090      | 63443-0090             | Wire Stop                          | 1               |
| 16   | 63443-1718      | 63443-1718             | 18.80mm Height Spacer              | 1               |
| 17   | 63443-2204      | 63443-2204             | 4.00mm Coarse Spacer               | 1               |
| 18   | 63443-2310      | 63443-2310             | 3.50mm Fine Spacer                 | 1               |
| 19   | 63443-2802      | 63443-2802             | Front Plunger Striker              | 1               |
| 20   | 63443-2908      | 63443-2908             | Wire Hold Down Plunger             | 1               |
| 21   | 63443-3060      | 63443-3060             | Rear Plunger Striker               | 1               |
| 22   | 63443-6111      | 63443-6111             | Rear Cover                         | 1               |
| 23   | 63600-0021      | 63600-0021             | Wire Hold Down Spring              | 1               |
| 24   | 63901-4603      | 63901-4603             | Wire Hold Down Blade               | 1               |
| <b>Frame</b>   |                 |                        |                                    |                 |
| 25   | 63800-4901      | 63800-4901             | Top                                | 1               |
| 26   | 63801-3281      | 63801-3281             | Base                               | 1               |
| 27   | 63801-4650      | 63801-4650             | Track                              | 1               |
| <b>Hardware</b>  |                 |                        |                                    |                 |
| 28   | N/A             | N/A                    | M3 by 6 Long SHCS                  | 2**             |
| 29   | N/A             | N/A                    | M3 by 6 Long FHCS                  | 1**             |
| 30   | N/A             | N/A                    | M4 by 6 Long SHCS                  | 1**             |
| 31   | N/A             | N/A                    | M4 by 10 Long SHCS                 | 2**             |
| 32   | N/A             | N/A                    | M4 by 12 Long BHCS                 | 2**             |
| 33   | N/A             | N/A                    | M4 by 35 Long SHCS                 | 1**             |
| 34   | N/A             | N/A                    | M4 by 50 Long SHCS                 | 1**             |
| 35   | N/A             | N/A                    | M5 by 12 Long SHCS                 | 1**             |
| 36   | N/A             | N/A                    | #10-32 by 3/8" Long Flat Point SSS | 1**             |
| 37   | N/A             | N/A                    | #10-32 Hex Jam Nut                 | 1**             |
| ** Available from an industrial supply company such as MSC (1-800-645-7270). |                 |                        |                                    |                 |

# 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 FineAdjust Manual.

**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.

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