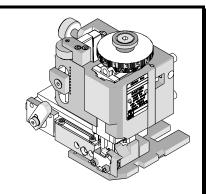


# FineAdjust Applicator Specification Sheet Part No. 63900-5600 (Overlap Insulation Crimp)



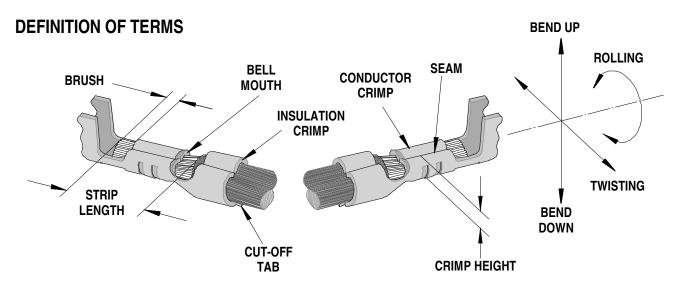
### **FEATURES**

- 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: Standard .093" (2.63mm) Pin and Socket Crimp Terminal

| Terminal Series No.  | Terminal Order No. | Wi    | re Size   | Insulation | Diameter | Strip Length |         |
|--|--------------------|-------|-----------|------------|----------|--------------|---------|
| Terminal Series No.  |                    | AWG   | mm²       | mm         | ln.      | mm           | ln.     |
| 42477  | 02-09-1615         | 16-18 | 0.81-1.30 | 2.36-3.20  | .093126  | 3.96-5.33    | .156218 |
| 42478  | 02-09-2611         | 16-18 | 0.81-1.30 | 2.36-3.20  | .093126  | 3.96-5.33    | .156218 |
| 42470  | 02-09-2612         |       |           |            |          |              |         |
| For 14AWG 2.79mm (.110") -3.56mm (.140") insulation diameter, use 63900-6200 applicator. |                    |       |           |            |          |              |         |



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

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## **CRIMP SPECIFICATION**

| Terminal So | Terminal Series No. | Bell r    | nouth   | Cut-off Tab | Maximum | Conductor Brush |         |  |
|-------------|---------------------|-----------|---------|-------------|---------|-----------------|---------|--|
|             | reminiai Senes No.  | mm        | ln.     | mm          | ln.     | mm              | ln.     |  |
|             | 42477               | 0.25-0.58 | .010023 | 0.25        | .010    | 0.13-0.55       | .005022 |  |
|             | 42478               | 0.25-0.58 | .010023 | 0.25        | .010    | 0.13-0.55       | .005022 |  |

|                     | Bend up Bend down |   | Twist  | Roll | Punch Width mm (Ref) |      |            | (Ref) | Coom   |  |
|---------------------|-------------------|---|--------|------|----------------------|------|------------|-------|--|--|
| Terminal Series No. | Degree            |   | Degree |      | Conductor            |      | Insulation |       | Seam   |  |
|                     |                   |   |        |      | mm                   | In   | mm         | In    | Seam shall not be open and no wire allowed out |  |
| 42477               | 3                 | 3 | 4      | 8    | 2.30                 | .090 | 3.60       | .141  | of the crimping area                           |  |
| 42478               | 3                 | 3 | 4      | 8    | 2.30                 | .090 | 3.60       | .141  | of the chiliping area                          |  |

After crimping, the conductor profile should measure the following.

| Terminal Series No. | Wire Size |                 | Crimp     | Height  | Pull Force Minimum |       |  |
|---------------------|-----------|-----------------|-----------|---------|--------------------|-------|--|
| Terminal Series No. | AWG       | mm <sup>2</sup> | mm        | ln.     | N                  | Lb.   |  |
| 42477               | 16        | 1.31            | 1.70-1.60 | .067063 | 177.9              | 40.00 |  |
| 42411               | 18        | 0.81            | 1.55-1.47 | .061058 | 115.6              | 26.00 |  |
| 42478               | 16        | 1.31            | 1.70-1.60 | .067063 | 177.9              | 40.00 |  |
| 42470               | 18        | 0.81            | 1.55-1.47 | .061058 | 115.6              | 26.00 |  |

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

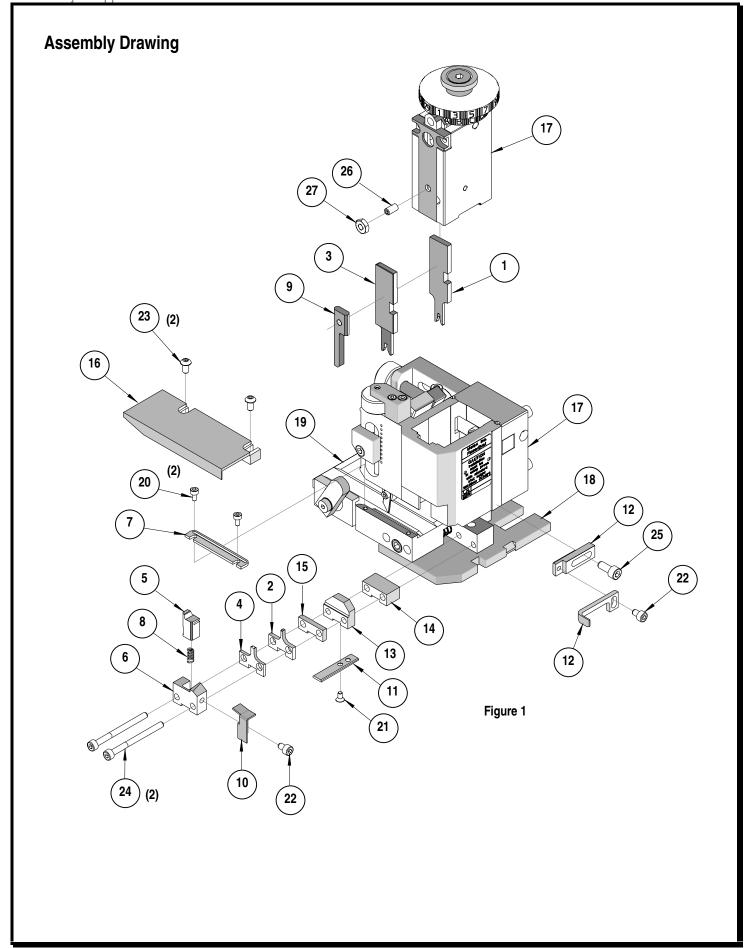
The above specifications are guidelines to an optimum crimp.

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## **PARTS LIST**

| FineAdjust Applicator 63900-5600 |  |             |                                   |     |  |  |  |  |
|----------------------------------|--|-------------|-----------------------------------|-----|--|--|--|--|
| Item                             | Order No Engineering No. Description   |             |                                   |     |  |  |  |  |
| Perishable Tooling               |  |             |                                   |     |  |  |  |  |
|                                  | 63900-5670   | 63900-5670  | Tool Kit (All "Y" Items)          | REF |  |  |  |  |
| 1                                | 63444-2325   | 63444-2325  | Conductor Punch                   | 1 Y |  |  |  |  |
| 2                                | 63445-2348   | 63445-2348  | Conductor Anvil                   | 1 Y |  |  |  |  |
| 3                                | 63454-0066   | 63454-0066  | Insulation Punch-Overlap          | 1 Y |  |  |  |  |
| 4                                | 63445-3614   | 63445-3614  | Insulation Anvil                  | 1 Y |  |  |  |  |
| 5                                | 63443-0002   | 63443-0002  | Cut-Off Plunger Front             | 1 Y |  |  |  |  |
| 6                                | 63443-0012   | 63443-0012  | Plunger Retainer Front            | 1 Y |  |  |  |  |
|                                  |  | Other Compo | onents (REF 005650)               |     |  |  |  |  |
| 7                                | 11-18-4083   | 60707-8     | Feed Guide                        | 1   |  |  |  |  |
| 8                                | 11-24-1067   | 4996-4      | Cut-Off Plunger Spring            | 1   |  |  |  |  |
| 9                                | 63443-3160   | 63443-3160  | Plunger Striker                   | 1   |  |  |  |  |
| 10                               | 63443-0009   | 63443-0009  | Front Scrap Chute                 | 1   |  |  |  |  |
| 11                               | 63443-0024   | 63443-0024  | Key                               | 1   |  |  |  |  |
| 12                               | 63443-0090   | 63443-0090  | Wire Stop                         | 1   |  |  |  |  |
| 13                               | 63443-1719   | 63443-1719  | 18.90mm Height Spacer             | 1   |  |  |  |  |
| 14                               | 63443-2214   | 63443-2214  | 14.00mm Coarse Spacer             | 1   |  |  |  |  |
| 15                               | 63443-2308   | 63443-2308  | 3.40mm Fine Spacer                | 1   |  |  |  |  |
| 16                               | 63443-6011   | 63443-6011  | Rear Cover                        | 1   |  |  |  |  |
| Frame                            |  |             |                                   |     |  |  |  |  |
| 17                               | 63800-4901   | 63800-4901  | Тор                               | 1   |  |  |  |  |
| 18                               | 63801-3281   | 63801-3281  | Base                              | 1   |  |  |  |  |
| 19                               | 63801-4650   | 63801-4650  | Track                             | 1   |  |  |  |  |
|                                  |  |             | lardware                          |     |  |  |  |  |
| 20                               | N/A  | N/A         | M3 by 6 Long SHCS                 | 2** |  |  |  |  |
| 21                               | N/A  | N/A         | M3 by 6 Long FHCS                 | 1** |  |  |  |  |
| 22                               | N/A  | N/A         | M4 by 6 Long SHCS                 | 2** |  |  |  |  |
| 23                               | N/A  | N/A         | M4 by 12 Long BHCS                | 2** |  |  |  |  |
| 24                               | N/A  | N/A         | M4 by 50 Long SHCS                | 2** |  |  |  |  |
| 25                               | N/A  | N/A         | M5 by 12 Long SHCS                | 1** |  |  |  |  |
| 26                               | N/A  | N/A         | #10-32 by 3/8"Long Flat Point SSS | 1** |  |  |  |  |
| 27                               | N/A  | N/A         | #10-32 Hex Jam Nut                | 1** |  |  |  |  |
| *:                               | ** Available from an industrial supply company such as MSC (1-800-645-7270). |             |                                   |     |  |  |  |  |

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### **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 135.8 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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