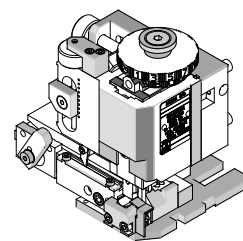


**FineAdjust
Applicator****molex****Application Tooling
Specification Sheet****Order No. 63901-8800****FEATURES**

- 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

Products: Micro-Fit 3.0™ Crimp Terminal, Male and Female, 20-24 AWG.

| Terminal Series No. | Terminal Order No. | | Wire Size | | Insulation Diameter | | | | Strip Length | |
|---------------------|--------------------|------------|-----------|-----------|---------------------|-----------|--------------|-----------|--------------|-----------|
| | | | | | IPC/WHMA-A620 (1) | | Terminal (2) | | | |
| | | | AWG | mm² | mm | In. | mm | In. | mm | In. |
| 43030 | 43030-0001 | 43030-0051 | 20-24 | 0.50-0.20 | 1.10-1.30 | .043-.051 | 0.90-1.85 | .035-.073 | 2.54-2.92 | .100-.115 |
| | 43030-0002 | 43030-0052 | | | | | | | | |
| | 43030-0003 | 43030-0053 | | | | | | | | |
| | 43030-1001 | | | | | | | | | |
| 43031 | 43031-0001 | 43031-0051 | 20-24 | 0.50-0.20 | 1.10-1.30 | .043-.051 | 0.90-1.85 | .035-.073 | 2.54-2.92 | .100-.115 |
| | 43031-0002 | 43031-0052 | | | | | | | | |
| | 43031-0003 | 43031-0053 | | | | | | | | |
| | 43031-0017 | 43031-0102 | | | | | | | | |
| | 43031-0018 | 43031-0103 | | | | | | | | |
| 44372 | 44372-0002 | 44372-3606 | 20-24 | 0.50-0.20 | 1.10-1.30 | .043-.051 | 0.90-1.85 | .035-.073 | 2.54-2.92 | .100-.115 |
| 45773 | 45773-0001 | 45773-0002 | 20-24 | 0.50-0.20 | 1.10-1.30 | .043-.051 | 0.90-1.85 | .035-.073 | 2.54-2.92 | .100-.115 |
| | 45773-0003 | 45773-0053 | | | | | | | | |
| 45807 | 45807-0004 | | 20-24 | 0.50-0.20 | 1.10-1.30 | .043-.051 | 0.90-1.85 | .035-.073 | 2.54-2.92 | .100-.115 |

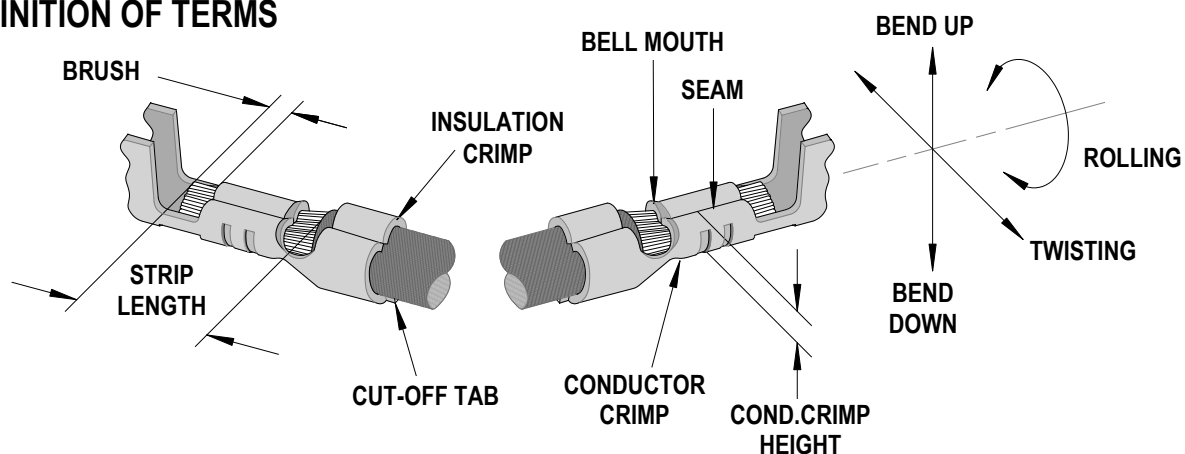
(1) To achieve optimum IPC-A620 Class 2 insulation crimps, use this insulation OD range

(2) Overall insulation OD specification for terminal

Applicator 63901-8900 should be used for insulation OD 0.91-1.09mm (.036-.043 inch)

Applicator 63900-4500 should be used for insulation OD 1.30-1.85mm (.051-.073 inch)

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 | |
|---------------------|-------|-------|------------|-----------|---------------------|------|-----------------|-----------|
| | | | mm | In. | mm | In. | mm | In. |
| 43030 | 43031 | 44372 | 0.05-0.40 | .002-.016 | 0.15 | .006 | 0.20-0.80 | .008-.031 |
| 45773 | 45807 | | | | | | | |

| Terminal Series No. | | | Bend up Bend down | | Twist Roll | | Punch Width mm (Ref) | | | | Seam |
|---------------------|-------|-------|---------------------|--------|--------------|----|----------------------|------|------|------|---|
| | | | Degree | Degree | Conductor | | Insulation | | | | |
| | | | | | mm | In | mm | In | | | |
| 43030 | 43031 | 44372 | 3 | 3 | 4 | 8 | 1.40 | .055 | 1.60 | .063 | Seam shall not be open and no wire allowed out of the crimping area |
| 45773 | 45807 | | 3 | 3 | 4 | 8 | 1.40 | .055 | 1.60 | .063 | |

After crimping, the conductor profile should measure the following.

| Terminal Series No. | Wire Size | | Conductor Crimp Height | | Insulation Crimp Height | | Pull Force Minimum | |
|---------------------|-----------|-----------------|------------------------|-----------|-------------------------|----------|--------------------|------|
| | AWG | mm ² | mm | In. | mm | In. | N | Lb. |
| 43030 | 20 | 0.50 | 0.91-0.99 | .036-.039 | 2.30 max | .090 max | 57.9 | 13.0 |
| | 22 | 0.35 | 0.84-0.91 | .033-.036 | 2.30 max | .090 max | 35.6 | 8.0 |
| | 24 | 0.20 | 0.79-0.84 | .031-.033 | 2.30 max | .090 max | 22.3 | 5.0 |
| 43031 | 20 | 0.50 | 0.91-0.99 | .036-.039 | 2.30 max | .090 max | 57.9 | 13.0 |
| | 22 | 0.35 | 0.84-0.91 | .033-.036 | 2.30 max | .090 max | 35.6 | 8.0 |
| | 24 | 0.20 | 0.79-0.84 | .031-.033 | 2.30 max | .090 max | 22.3 | 5.0 |
| 44372 | 20 | 0.50 | 0.91-0.99 | .036-.039 | 2.30 max | .090 max | 57.9 | 13.0 |
| | 22 | 0.35 | 0.84-0.91 | .033-.036 | 2.30 max | .090 max | 35.6 | 8.0 |
| | 24 | 0.20 | 0.79-0.84 | .031-.033 | 2.30 max | .090 max | 22.3 | 5.0 |
| 45773 | 20 | 0.50 | 0.91-0.99 | .036-.039 | 2.30 max | .090 max | 57.9 | 13.0 |
| | 22 | 0.35 | 0.84-0.91 | .033-.036 | 2.30 max | .090 max | 35.6 | 8.0 |
| | 24 | 0.20 | 0.79-0.84 | .031-.033 | 2.30 max | .090 max | 22.3 | 5.0 |
| 45807 | 20 | 0.50 | 0.91-0.99 | .036-.039 | 2.30 max | .090 max | 57.9 | 13.0 |
| | 22 | 0.35 | 0.84-0.91 | .033-.036 | 2.30 max | .090 max | 35.6 | 8.0 |
| | 24 | 0.20 | 0.79-0.84 | .031-.033 | 2.30 max | .090 max | 22.3 | 5.0 |

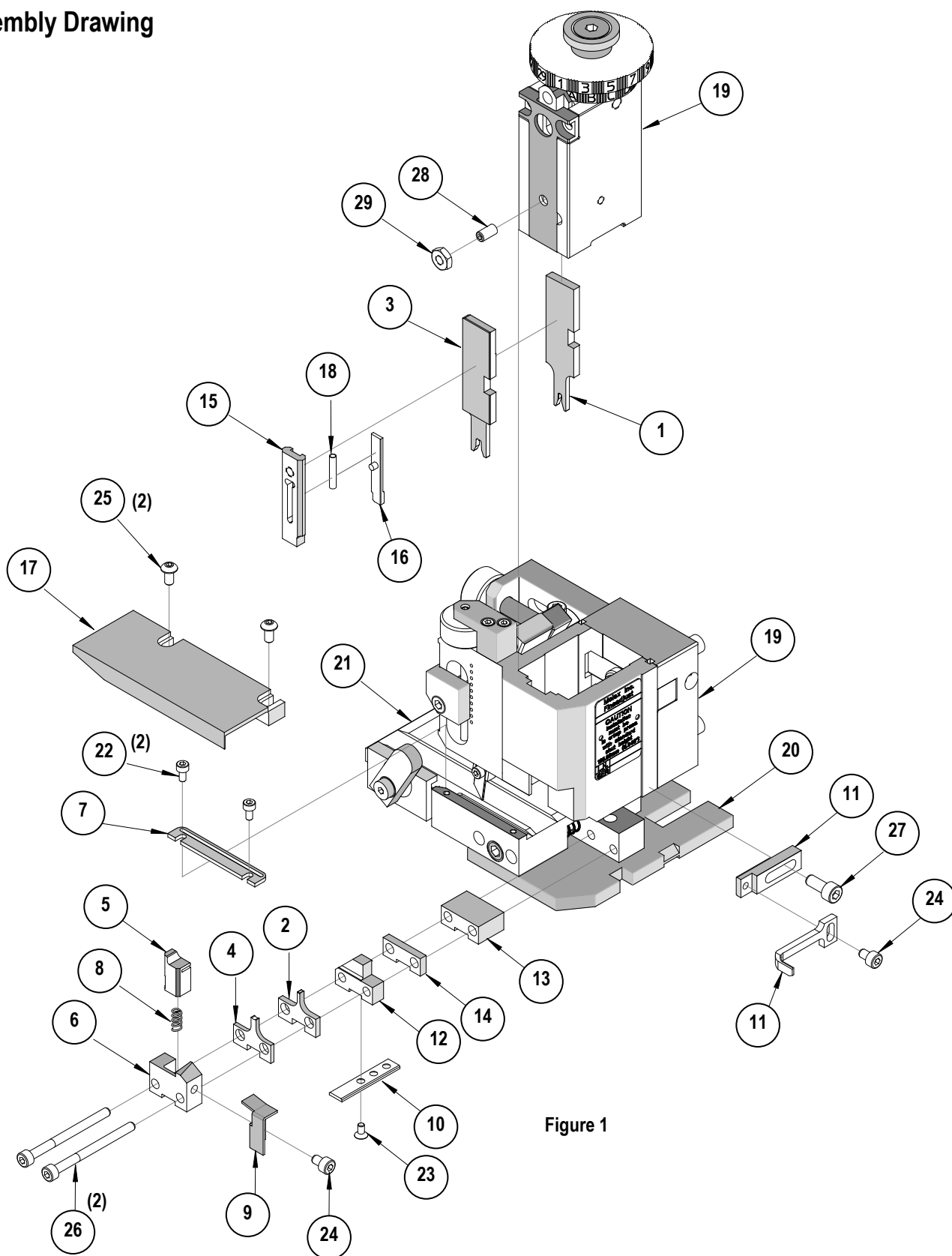
Tool Qualification Notes:

1. Pull Force should be measured with no influence from the insulation crimp.
2. The above specifications are guidelines to an optimum crimp.

PARTS LIST

| FineAdjust Applicator 63901-8800 | | | | |
|--|-----------------|------------------------|------------------------------------|-----------------|
| Item | Order No | Engineering No. | Description | Quantity |
| Perishable Tooling | | | | |
| | 63901-8870 | 63901-8870 | Tool Kit (All "Y" Items) | REF |
| 1 | 63444-1421 | 63444-1421 | Conductor Punch | 1 Y |
| 2 | 63445-1436 | 63445-1436 | Conductor Anvil | 1 Y |
| 3 | 63446-1610 | 63446-1610 | Insulation Punch | 1 Y |
| 4 | 63445-1614 | 63445-1614 | 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 | 11-18-4083 | 60707-8 | Feed Guide | 1 |
| 8 | 11-24-1067 | 4996-4 | Cut-off Plunger Spring | 1 |
| 9 | 63443-0009 | 63443-0009 | Front Scrap Chute | 1 |
| 10 | 63443-0024 | 63443-0024 | Key | 1 |
| 11 | 63443-0090 | 63443-0090 | Wire Stop | 1 |
| 12 | 63443-1703 | 63443-1703 | Height Spacer (17.30mm) | 1 |
| 13 | 63443-2216 | 63443-2216 | Coarse Spacer (16.00mm) | 1 |
| 14 | 63443-2302 | 63443-2302 | Fine Spacer (3.10mm) | 1 |
| 15 | 63443-2802 | 63443-2802 | Front Plunger Striker | 1 |
| 16 | 63443-2904 | 63443-2904 | Wire Hold Down Plunger | 1 |
| 17 | 63443-6111 | 63443-6111 | Rear Cover | 1 |
| 18 | 63600-1057 | 63600-1057 | Compression Spring | 1 |
| Frame | | | | |
| 19 | 63800-4901 | 63800-4901 | Top | 1 |
| 20 | 63801-3281 | 63801-3281 | Base | 1 |
| 21 | 63801-4650 | 63801-4650 | Track | 1 |
| Hardware | | | | |
| 22 | N/A | N/A | M3 by 6 Long SHCS | 2** |
| 23 | N/A | N/A | M3 by 6 Long FHCS | 1** |
| 24 | N/A | N/A | M4 by 6 Long SHCS | 2** |
| 25 | N/A | N/A | M4 by 12 Long BHCS | 2** |
| 26 | N/A | N/A | M4 by 50 Long SHCS | 2** |
| 27 | N/A | N/A | M5 by 12 Long SHCS | 1** |
| 28 | N/A | N/A | #10-32 by 3/8" Long Flat Point SSS | 1** |
| 29 | 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 135.8mm (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.

| | |
|---|---|
|  CAUTION | <p>CAUTION:</p> <p>Molex tooling crimp specifications are valid only when used with Molex terminals and tooling manufactured by Molex and sold by Molex or authorized distributors ("Molex Tooling"). When using tooling other than Molex Tooling with Molex specific connector systems listed in our ATS documents, the Molex tooling qualification does not apply and the responsibility for full qualification of the connector system is that of the customer.</p> <p>Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used or where Molex Tooling is modified.</p> |
|  CAUTION | <p>CAUTION:</p> <p>"A-620 and other industry standards do not supersede the manufacturer's specifications. Some terminals designed over 20 years ago may not meet the desired physical attributes for some of today's standards. However, these terminals will still perform electrically at an acceptable quality level based on qualification testing and years of successful performance in the field.</p> |

Application Tooling Support

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