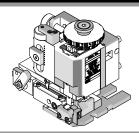


Application Tooling Specification Sheet



Order No. 63901-3300

FEATURES

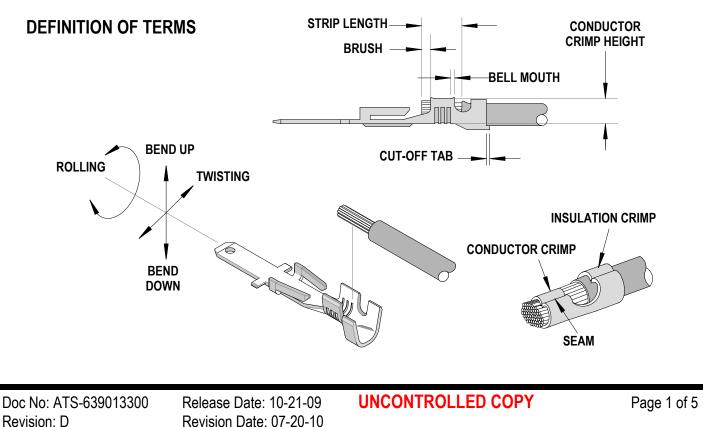
FineAdjust Applicator

- 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: Sabre™ Male Flat Blade Crimp Terminal, 18-20 AWG, UL1015 wire.

| Terminal Series No. | Terminal Order No. | | Wire Size | | | Insulation | Strip Length | | | |
|---|-----------------------|--|-----------|-----------|----------------|------------|--------------|---------|--------------|---------|
| | | | | | IPC/WHMA-A620+ | | | | Terminal 🔶 🔶 | |
| Series NO. | | | AWG | mm² | mm | In. | mm | ln. | mm | In. |
| 43178 | 43178-4001 43178-4002 | | 18-20 | 0.50-0.80 | 2.54-2.85 | .100112 | 2.54-2.85 | .100112 | 3.96-5.54 | .156218 |
| To achieve optimum IPC-A620 insulation crimps, use this insulation OD range. Overall insulation OD specification for terminal. | | | | | | | | | | |



CRIMP SPECIFICATION

| Terminal Series No. | Bell n | nouth | Cut-off Tak | Maximum | Conductor Brush | |
|---------------------|-----------|---------|-------------|---------|------------------------|------|
| Terminal Series NO. | mm | ln. | mm | ln. | mm | In. |
| 43178 | 0.25-1.00 | .010039 | 0.50 | .019 | 1.50 | .059 |

| | Bend up Bend down | | Twist Roll | | Punch Width (Ref) | | | | Seam |
|---------------------|-------------------|---|------------|---|-------------------|------|------------|------|---|
| Terminal Series No. | | | | | Conductor | | Insulation | | |
| | Degree | | Degree | | mm | In | mm | In | Seam shall not be open |
| 43178 | 3 | 3 | 4 | 8 | 2.30 | .090 | 3.60 | .142 | and no wire allowed out of the crimping 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 ² | mm | ln. | Ν | Lb. | |
| 43178 | 18 | 0.80 | 1.52-1.60 | .060063 | 88.9 | 20.0 | |
| 43170 | 20 | 0.50 | 1.42-1.50 | .056059 | 57.9 | 13.0 | |

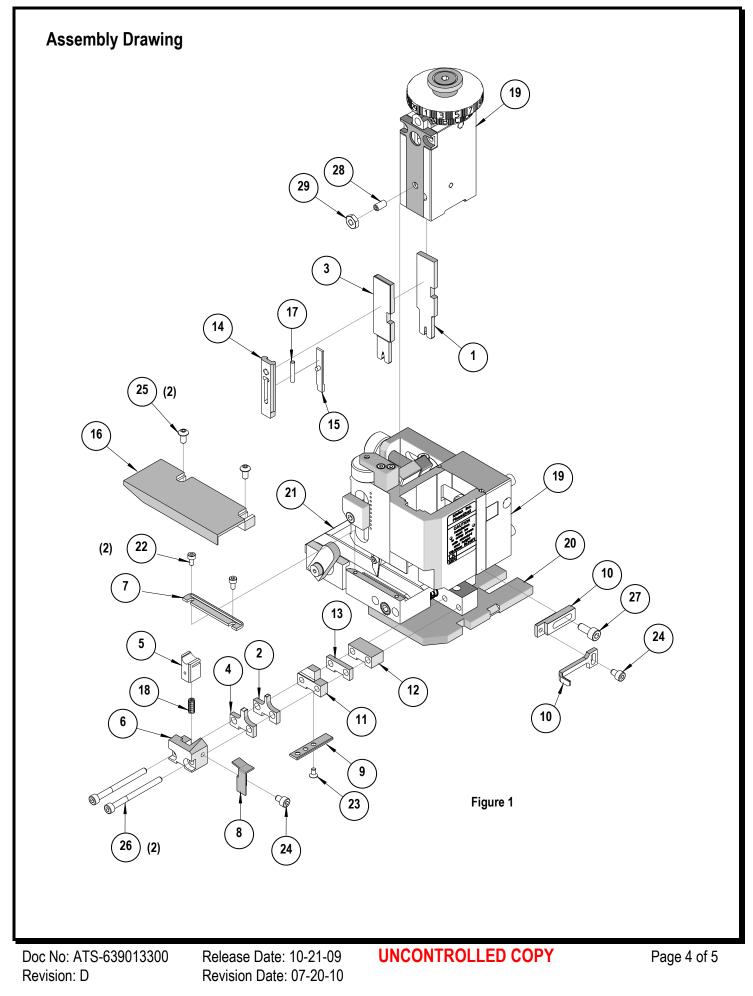
Pull Force should be measured with no influence from the insulation crimp.

The above specifications are guidelines to an optimum crimp.

PARTS LIST

| FineAdjust Applicator 63901-3300 | | | | | | | | | |
|--|------------|-----------------|-----------------------------------|----------|--|--|--|--|--|
| ltem | Order No | Engineering No. | Description | Quantity | | | | | |
| Perishable Tooling | | | | | | | | | |
| | 63901-3370 | 63901-3370 | Tool Kit (All "Y" Items) | REF | | | | | |
| 1 | 63444-2309 | 63444-2309 | Conductor Punch | 1 Y | | | | | |
| 2 | 63445-2337 | 63445-2337 | Conductor Anvil | 1 Y | | | | | |
| 3 | 63446-3613 | 63446-3613 | Insulation Punch | 1 Y | | | | | |
| 4 | 63445-3622 | 63445-3622 | Insulation Anvil | 1 Y | | | | | |
| 5 | 63443-0037 | 63443-0037 | Front Cut-Off Plunger | 1 Y | | | | | |
| 6 | 63443-0038 | 63443-0038 | Front Plunger Retainer | 1 Y | | | | | |
| Other Components | | | | | | | | | |
| 7 | 11-18-4083 | 60707-8 | Feed Guide | 1 | | | | | |
| 8 | 63443-0009 | 63443-0009 | Front Scrap Chute | 1 | | | | | |
| 9 | 63443-0024 | 63443-0024 | Key | 1 | | | | | |
| 10 | 63443-0090 | 63443-0090 | Wire Stop | 1 | | | | | |
| 11 | 63443-1712 | 63443-1712 | 18.20mm Height Spacer | 1 | | | | | |
| 12 | 63443-2215 | 63443-2215 | 15.00mm Spacer | 1 | | | | | |
| 13 | 63443-2301 | 63443-2301 | 3.05mm Spacer | 1 | | | | | |
| 14 | 63443-2801 | 63443-2801 | Front Plunger Striker | 1 | | | | | |
| 15 | 63443-2915 | 63443-2915 | Wire Hold Down Plunger | 1 | | | | | |
| 16 | 63443-6121 | 63443-6121 | Rear Cover | 1 | | | | | |
| 17 | 63600-1057 | 63600-1057 | Wire Hold Down Spring | 1 | | | | | |
| 18 | 63700-0539 | 63700-0539 | Compression Spring | 1 | | | | | |
| Frame | | | | | | | | | |
| 19 | 63800-4901 | 63800-4901 | Тор | 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 Lg 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). | | | | | | | | | |

Release Date: 10-21-09 Revision Date: 07-20-10



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.

http://www.molex.com

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