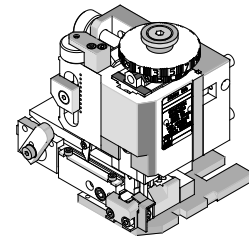


**FineAdjust
Applicator**



**Application Tooling
Specification Sheet**



Order No. 63901-8600

FEATURES THIS APPLICATOR IS FOR AUTOMATIC WIRE PROCESSOR USE ONLY.

- 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

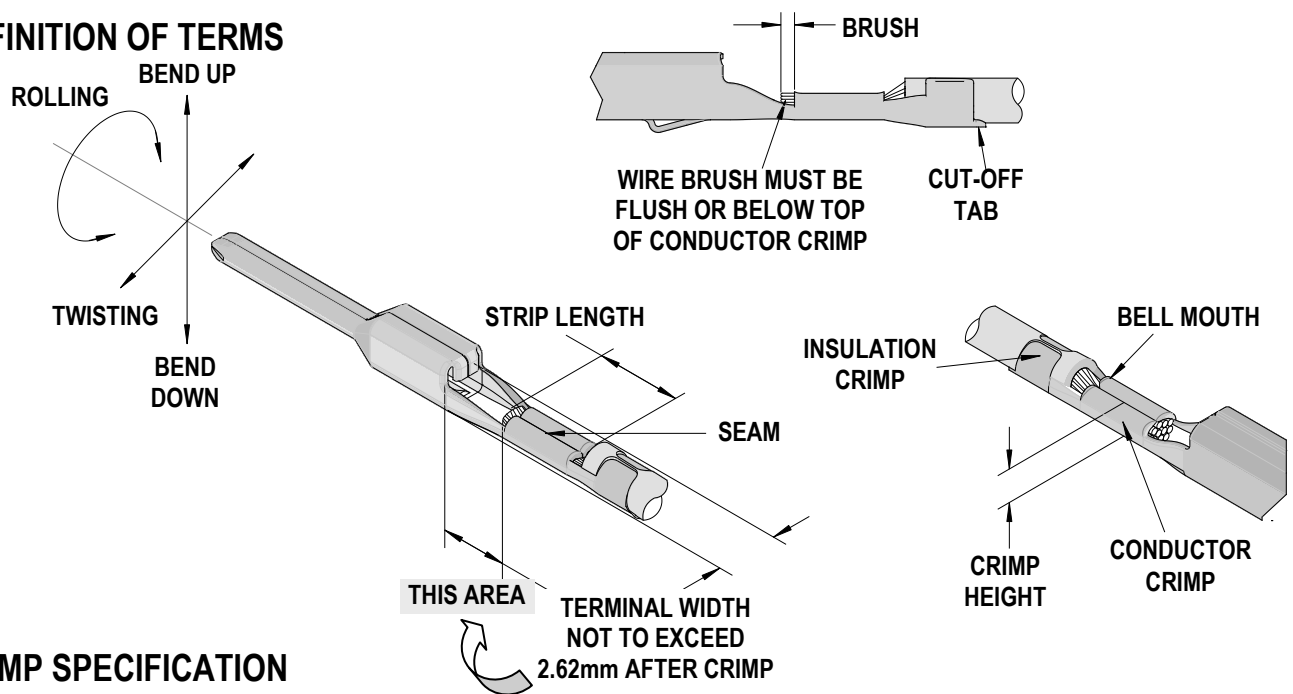
SCOPE

Products: MX150 ISO (M3) Blade Terminals: 0.35, 0.50 metric, type ISO wire.

| Terminal Series No. | Terminal Order No. | | Wire Size and Type | | Insulation Diameter | | Strip Length | |
|---------------------|--------------------|------------|--------------------|------|---------------------|-----------|--------------|-----------|
| | | | mm ² | Type | mm | In. | mm | In. |
| 33000 | 33000-1004 | | 0.35 | ISO | 1.20-1.40 | .047-.055 | 4.70-5.60 | .185-.220 |
| | | | 0.50 | ISO | 1.40-1.70 | .055-.067 | 4.70-5.60 | .185-.220 |
| 33011 | 33011-0008 | 33011-3004 | 0.35 | ISO | 1.20-1.40 | .047-.055 | 4.70-5.60 | .185-.220 |
| | | | 0.50 | ISO | 1.40-1.70 | .055-.067 | 4.70-5.60 | .185-.220 |
| 34781 | 34781-1004 | | 0.35 | ISO | 1.20-1.40 | .047-.055 | 4.70-5.60 | .185-.220 |
| | | | 0.50 | ISO | 1.40-1.70 | .055-.067 | 4.70-5.60 | .185-.220 |

Terminals were validated per USCAR-21 using the ISO 6722 wire specifications.
Customers are required to complete validation testing if tooling purchased outside Molex Inc.
And/or wire specifications are different than above.

DEFINITION OF TERMS



CRIMP SPECIFICATION

| Terminal Series No. | Bell mouth | | Cut-off Tab Maximum | | ▶ Conductor Brush (Maximum) | |
|---------------------|------------|-----------|---------------------|------|-----------------------------|------|
| | mm | In. | mm | In. | mm | In. |
| 33000 | 0.30-0.70 | .012-.028 | 0.50 | .020 | 0.40 | .016 |
| 33011 | 0.30-0.70 | .012-.028 | 0.50 | .020 | 0.40 | .016 |
| 34781 | 0.30-0.70 | .012-.028 | 0.50 | .020 | 0.40 | .016 |

▶ Wire brush must be flush or below top of Conductor Crimp.

▶ **THIS APPLICATOR IS INTENDED FOR AUTOMATIC WIRE PROCESSOR USE ONLY.**

It is very important that the brush length is consistently within specification for this sealed connector system to work properly. This applicator should only be run in a properly setup automatic wire processor in order to consistently achieve the brush length. Any attempt to use this applicator outside a properly setup automatic wire processor will likely not meet the brush specification and cause this sealed connector system to not work properly.

| Terminal Series No. | Bend up | Bend down | Twist | Roll | Punch Width mm (Ref) | | | | Seam |
|---------------------|---------|-----------|--------|------|----------------------|------|------------|------|---|
| | Degree | | Degree | | Conductor | | Insulation | | |
| | | | | | mm | In | mm | In | |
| 33000 | 1.5 | 1.5 | 3 | 3 | 1.56 | .061 | 2.00 | .079 | Seam shall not be open and no wire allowed out of the crimping area |
| 33011 | 1.5 | 1.5 | 3 | 3 | 1.56 | .061 | 2.00 | .079 | |
| 34781 | 1.5 | 1.5 | 3 | 3 | 1.56 | .061 | 2.00 | .079 | |

After crimping, the conductor profile should measure the following.

| Terminal Series No. | Wire Size | Conductor | | | | Insulation | | | | Pull Force Minimum | |
|---------------------|-----------|--------------|-----------|-------------|-----------|--------------|-----------|-------------|-----------|--------------------|------|
| | | Crimp Height | | Crimp Width | | Crimp Height | | Crimp Width | | | |
| | | mm | In. | mm | In. | mm | In. | mm | In. | | |
| 33000 | 0.35 | 1.02-1.08 | .040-.042 | 1.50-1.70 | .059-.067 | 1.65-1.85 | .065-.073 | 1.90-2.10 | .075-.083 | 50 | 11.3 |
| | 0.50 | 1.05-1.15 | .041-.045 | 1.50-1.70 | .059-.067 | 1.80-2.00 | .071-.079 | 1.90-2.10 | .075-.083 | 75 | 16.9 |
| 33011 | 0.35 | 1.02-1.08 | .040-.042 | 1.50-1.70 | .059-.067 | 1.65-1.85 | .065-.073 | 1.90-2.10 | .075-.083 | 50 | 11.3 |
| | 0.50 | 1.05-1.15 | .041-.045 | 1.50-1.70 | .059-.067 | 1.80-2.00 | .071-.079 | 1.90-2.10 | .075-.083 | 75 | 16.9 |
| 34781 | 0.35 | 1.02-1.08 | .040-.042 | 1.50-1.70 | .059-.067 | 1.65-1.85 | .065-.073 | 1.90-2.10 | .075-.083 | 50 | 11.3 |
| | 0.50 | 1.05-1.15 | .041-.045 | 1.50-1.70 | .059-.067 | 1.80-2.00 | .071-.079 | 1.90-2.10 | .075-.083 | 75 | 16.9 |

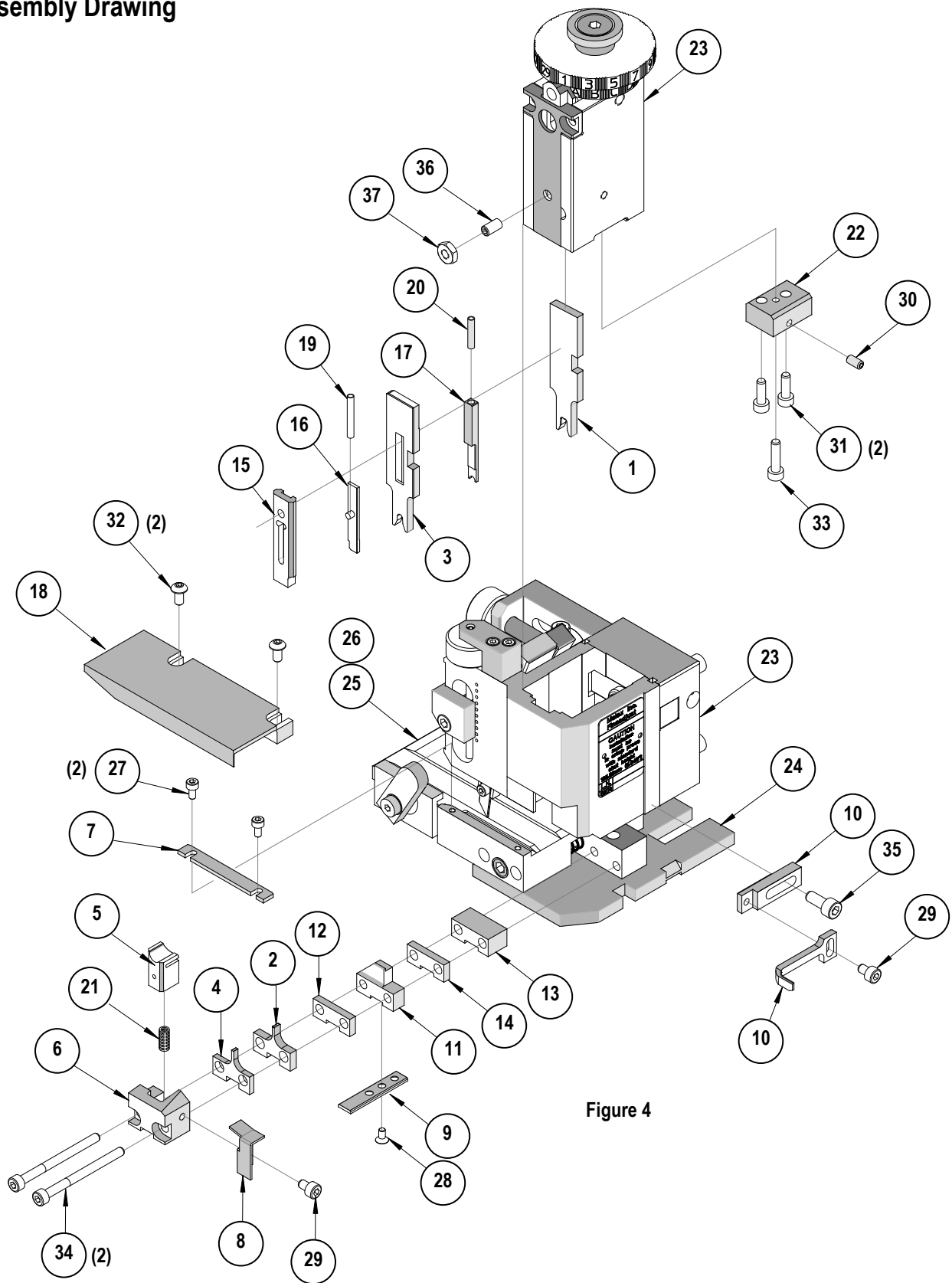
Tool Qualification Notes:

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 63901-8600 | | | | |
|--|------------|-----------------|------------------------------------|----------|
| Item | Order No | Engineering No. | Description | Quantity |
| Perishable Tooling | | | | |
| | 63901-8670 | 63901-8670 | Tool Kit (All "Y" Items) | REF |
| 1 | 63457-0070 | 63457-0070 | Conductor Punch | 1 Y |
| 2 | 63455-0096 | 63455-0096 | Conductor Anvil | 1 Y |
| 3 | 63454-0114 | 63454-0114 | Insulation Punch | 1 Y |
| 4 | 63456-0078 | 63456-0078 | Insulation Anvil | 1 Y |
| 5 | 63443-0037 | 63443-0037 | Cut-Off Plunger | 1 Y |
| 6 | 63443-0038 | 63443-0038 | Front Plunger Retainer | 1 Y |
| Other Components | | | | |
| 7 | 11-18-4094 | 60709A111 | Feed Guide | 1 |
| 8 | 63443-0009 | 63443-0009 | Scrap Chute | 1 |
| 9 | 63443-0024 | 63443-0024 | Key | 1 |
| 10 | 63443-0090 | 63443-0090 | Wire Stop | 1 |
| 11 | 63443-1716 | 63443-1716 | Height Spacer | 1 |
| 12 | 63443-2202 | 63443-2202 | Coarse Spacer (2.00mm) | 1 |
| 13 | 63443-2209 | 63443-2209 | Coarse Spacer (9.00mm) | 1 |
| 14 | 63443-2301 | 63443-2301 | Fine Spacer (3.05mm) | 1 |
| 15 | 63443-2804 | 63443-2804 | Front Plunger Striker | 1 |
| 16 | 63443-2915 | 63443-2915 | Striker Plunger | 1 |
| 17 | 63443-3204 | 63443-3204 | Wire Pusher | 1 |
| 18 | 63443-6115 | 63443-6115 | Rear Cover | 1 |
| 19 | 63600-0021 | 63600-0021 | Striker Plunger Spring | 1 |
| 20 | 63600-5016 | 63600-5016 | Wire Pusher Spring | 1 |
| 21 | 63700-0539 | 63700-0539 | Cut-off Plunger Spring | 1 |
| 22 | 63867-3007 | 63867-3007 | Bottom Cap | 1 |
| Frame | | | | |
| 23 | 63800-4901 | 63800-4901 | Top | 1 |
| 24 | 63801-3281 | 63801-3281 | Base | 1 |
| 25 | 63801-4650 | 63801-4650 | Track | 1 |
| 26 | 63459-0001 | 63459-0001 | Terminal Track with Relief Groove | 1 |
| Hardware | | | | |
| 27 | N/A | N/A | M3 by 6 Long SHCS | 2** |
| 28 | N/A | N/A | M3 by 6 Long FHCS | 1** |
| 29 | N/A | N/A | M4 by 6 Long SHCS | 2** |
| 30 | N/A | N/A | M4 by 8 Long Flat Point SSS | 1** |
| 31 | N/A | N/A | M4 by 12 Long SHCS | 2** |
| 32 | N/A | N/A | M4 by 12 Long BHCS | 2** |
| 33 | N/A | N/A | M4 by 16 Long SHCS | 1** |
| 34 | N/A | N/A | M4 by 50 Long SHCS | 2** |
| 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.

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