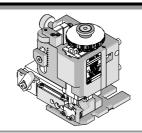




Application Tooling Specification Sheet



Order No. 63901-5600

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

<u>Products:</u> Mini-Fit Jr. ™, Mini-Fit HCS™, and Mini-Fit Plus HCS™ Crimp Terminal 18-24 AWG with smaller insulation OD's.

| Terminal | | | Wire Size | | | Insulation | Strip Length | | | |
|------------|------------|------------|-----------|-----------|-----------|------------|--------------|---------|-----------|---------|
| Series No. | Terminal | Order No. | | ie Size | IPC/WHM/ | A-A620 (1) | Termi | nal (2) | | |
| Octios No. | | | AWG | mm² | mm | ln. | mm | ln. | mm | ln. |
| | 39-00-0038 | 39-00-0055 | | | | .075090 | | | | |
| | 39-00-0059 | 39-00-0073 | | | | | | | | |
| | 39-00-0108 | 39-00-0114 | | | | | | | | |
| | 39-00-0153 | 39-00-0163 | | | | | | | | |
| | 39-00-0169 | 39-00-0175 | | | 1.90-2.30 | | | | | .118138 |
| 5556 | 39-00-0181 | 39-00-0194 | 18-24 | 0.80-0.20 | | | 1.30-3.10 | .051122 | 3.00-3.50 | |
| 3330 | 39-00-0200 | 39-00-0207 | 10-24 | 0.00-0.20 | | | | .001122 | | |
| | 39-00-0213 | 39-00-0405 | | | | | | | | |
| | 39-00-0407 | 39-00-0410 | | | | | | | | |
| | 39-00-0419 | 39-00-0425 | | | | | | | | |
| | 39-00-0428 | 39-00-0436 | | | | | | | | |
| | 39-00-0440 | 40-13-0851 | | | | | | | | |
| | 39-00-0040 | 39-00-0053 | | 0.80-0.20 | 1.90-2.30 | .075090 | 1.30-3.10 | .051122 | 3.00-3.50 | .118138 |
| | 39-00-0061 | 39-00-0075 | | | | | | | | |
| | 39-00-0120 | 39-00-0121 | | | | | | | | |
| | 39-00-0126 | 39-00-0219 | | | | | | | | |
| 5558 | 39-00-0411 | 39-00-0420 | 18-24 | | | | | | | |
| | 39-00-0426 | 39-00-0427 | | | | | | | | |
| | 39-00-0430 | 39-00-0437 | | | | | | | | |
| | 40-01-0853 | 40-13-0853 | | | | | | | | |
| | 98-00-0174 | | | | | | | | | |
| 30490 | 30490-0002 | 30490-1002 | 18-24 | 0.80-0.20 | 1.90-2.30 | .075090 | 1.30-3.10 | .051122 | 3.00-3.50 | .118138 |
| | 30490-2002 | | | 0.00-0.20 | 1.30-2.30 | .070090 | | | 3.00-3.30 | .110130 |
| 44476 | 44476-1111 | 44476-1211 | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.30-3.10 | .051122 | 3.00-3.50 | .118138 |
| 44478 | 44478-1111 | 44478-1211 | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.30-3.10 | .051122 | 3.00-3.50 | .118138 |

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| Terminal | Terminal Order No. | | Wire Size | | | Insulation | Strip Length | | | |
|------------|--------------------|------------|-----------|-----------|-------------------|------------|--------------|---------|--------------|---------|
| Series No. | | | | | IPC/WHMA-A620 (1) | | | | Terminal (2) | |
| Series No. | | | AWG | mm² | mm | ln. | mm | ln. | mm | ln. |
| 11105 | 44485-1211 | 44485-1311 | 18-24 | 0.80-0.20 | 1.90-2.30 | .075090 | 1.30-3.10 | .051122 | 3.00-3.50 | .118138 |
| 44485 | 44485-1411 | | 10-24 | | | | | | | |
| 45750 | 45750-1111 | 45750-1211 | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | .118138 |
| 46012 | 46012-1111 | 46012-1141 | 10.00 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | .118138 |
| 40012 | 46012-1211 | 46012-1241 | 18-20 | | | | | | | |
| 46018 | 46018-1541 | | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | .118138 |
| 46002 | 46083-1111 | 46083-1121 | 10.00 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | 110 120 |
| 46083 | 46083-1211 | 46083-1221 | 18-20 | | | | | | | .118138 |
| 46098 | 46098-1541 | | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | .118138 |
| 46134 | 46134-1111 | 46134-1121 | 18-20 | 0.80-0.50 | 1.90-2.30 | .075090 | 1.65-2.95 | .065116 | 3.00-3.50 | .118138 |
| | 46134-1211 | 46134-1221 | 10-20 | | | | | | | .110130 |

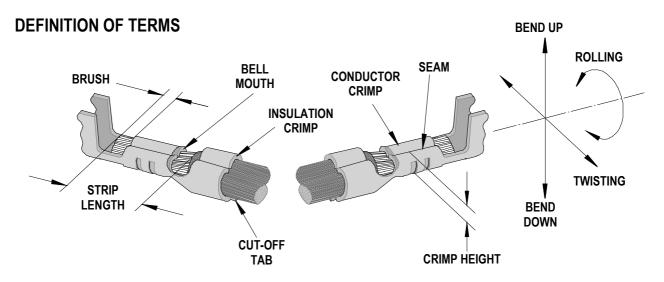
⁽¹⁾ To achieve optimum IPC-A620 insulation crimps, use this insulation OD range.

Applicator 63900-2600 should be used for insulation OD 2.50-2.95mm (example UL1015).

Applicator 63900-2900 should be used for insulation OD 1.65-2.05mm (example UL1007).

Applicator 63902-3900 should be used for insulation OD 1.40-1.70mm.

Applicator 63902-4900 should be used for insulation OD 2.30-2.60mm.



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 n | nouth | Cut-off Tab | Maximum | Conductor Brush | | |
|------------------------|-----------|---------|-------------|---------|-----------------|---------|--|
| reminal Series No. | mm | ln. | mm | ln. | mm | ln. | |
| 5556 and 5558 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 30490 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 44476, 44478 and 44485 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 45750 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 46012 and 46018 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 46083 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 46098 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |
| 46134 | 0.20-0.50 | .008020 | 0.30 | .012 | 0.00-1.00 | .000039 | |

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⁽²⁾ Overall insulation OD specification for terminal.

| | Dand up | Bend up Bend down | | Twist Roll | | unch W | idth (R | | |
|------------------------|----------|-------------------|-------------|------------|-----------|--------|------------|------|-------------------------|
| Terminal Series No. | bella up | bena aown | I WIST KOII | | Conductor | | Insulation | | |
| | De | Degree | | mm | ln. | mm | ln. | | |
| 5556 and 5558 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | Seam |
| 30490 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | |
| 44476, 44478 and 44485 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | Seam shall not be open |
| 45750 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | And no wire allowed out |
| 46012 and 46018 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | of the crimping area |
| 46083 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | |
| 46098 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | |
| 46134 | 5 | 2 | 5 | 15 | 1.60 | .063 | 2.30 | .090 | |

After crimping, the crimp profiles should measure the following:

| | \A/: | C: | | Pull Force | | | | |
|---------------------|------|-----------------|-----------|------------|---------|------------|------|------|
| Terminal Series No. | Wire | Size | Crimp | Height | Crimp W | idth (Ref) | Mini | mum |
| | AWG | mm ² | mm | ln. | mm | ln. | N | Lb. |
| | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 88.0 | 19.8 |
| 5556 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| 3330 | 22 | 0.35 | 0.85-0.94 | .033037 | 1.65 | .065 | 39.1 | 8.8 |
| | 24 | 0.20 | 0.79-0.87 | .031034 | 1.63 | .064 | 29.3 | 6.6 |
| | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 88.0 | 19.8 |
| FFF0 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| 5558 | 22 | 0.35 | 0.85-0.94 | .033037 | 1.65 | .065 | 39.1 | 8.8 |
| | 24 | 0.20 | 0.79-0.87 | .031034 | 1.63 | .064 | 29.3 | 6.6 |
| | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 88.0 | 19.8 |
| 00400 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| 30490 | 22 | 0.35 | 0.85-0.94 | .033037 | 1.65 | .065 | 39.1 | 8.8 |
| | 24 | 0.20 | 0.79-0.87 | .031034 | 1.63 | .064 | 29.3 | 6.6 |
| 44470 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 44476 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| 44470 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 44478 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 88.0 | 19.8 |
| 44485 | 20 | 0.50 | 0.95-1.04 | .037041 | 1.66 | .065 | 58.7 | 13.2 |
| 44400 | 22 | 0.35 | 0.85-0.94 | .033037 | 1.65 | .065 | 39.1 | 8.8 |
| | 24 | 0.20 | 0.79-0.87 | .031034 | 1.63 | .064 | 29.3 | 6.6 |
| 45750 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 45750 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |
| 46012 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 40012 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |
| 46018 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 40010 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |
| 46083 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 40000 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |
| 46098 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 40030 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |
| 46134 | 18 | 0.80 | 0.97-1.07 | .038042 | 1.68 | .066 | 68.4 | 15.4 |
| 40104 | 20 | 0.50 | 0.84-0.94 | .033037 | 1.66 | .065 | 58.7 | 13.2 |

* 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.

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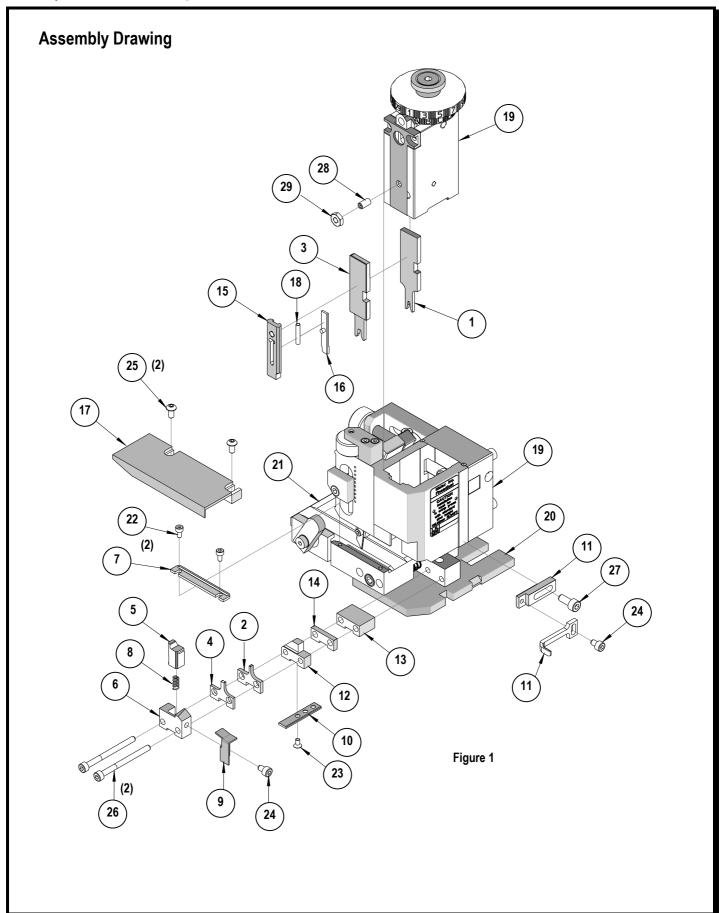
PARTS LIST

Revision: D

| | FineAdjust Applicator 63901-5600 | | | | | | | | | | | |
|------|--|-----------------|-----------------------------------|----------|--|--|--|--|--|--|--|--|
| Item | Order No | Engineering No. | Description | Quantity | | | | | | | | |
| | Perishable Tooling | | | | | | | | | | | |
| | 63901-5670 | 63901-5670 | Tool Kit (All "Y" Items) | REF | | | | | | | | |
| 1 | 63444-1609 | 63444-1609 | Conductor Punch | 1 Y | | | | | | | | |
| 2 | 63445-1646 | 63445-1646 | Conductor Anvil | 1 Y | | | | | | | | |
| 3 | 63446-2326 | 63446-2326 | Insulation Punch | 1 Y | | | | | | | | |
| 4 | 63445-2353 | 63445-2353 | Insulation Anvil | 1 Y | | | | | | | | |
| 5 | 63443-0002 | 63443-0002 | Front 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 | 63443-1717 | 63443-1717 | Height Spacer | 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 | Plunger Striker | 1 | | | | | | | | |
| 16 | 63443-2908 | 63443-2908 | 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 | Тор | 1 | | | | | | | | |
| 20 | 63801-3281 | 63801-3281 | Base | 1 | | | | | | | | |
| 21 | 63801-4650 | 63801-4650 | Track | 1 | | | | | | | | |
| | | Н | lardware | | | | | | | | | |
| 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). | | | | | | | | | | | |

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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 135.80 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 wireprocessing 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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