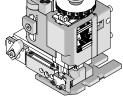


Application Tooling Specification Sheet



Order No. 63904-2600

BEND UP

FEATURES

FineAdjust Applicator

- 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: 2.00mm W/B DuraClik TPA Series Receptacle Terminals.

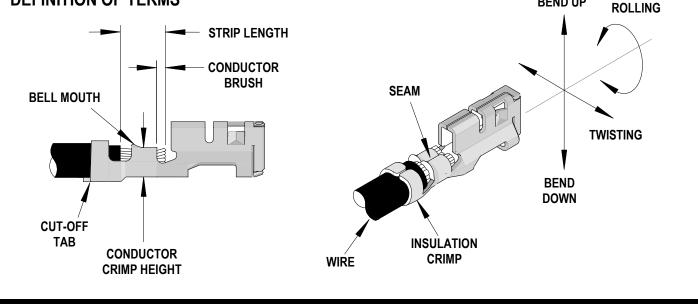
| Terminal | Townsings | Wi | - | | | Insulation | Strin Longth | | | | |
|--|-----------------------|---------------|-------|------|-----------|------------|--------------|----------|--------------|---------|--|
| Series | Terminal Order No. | VVI | le | | IPC/WHMA | A-A620 (1) | Termi | nal (2) | Strip Length | | |
| No. | | Wire Type (3) | AWG | mm² | mm | ln. | mm | ln. | mm | In. | |
| | 505153- 8000 | AVSS | NA | 0.30 | 1.15-1.40 | .045055 | 1.40 Max | .055 Max | 1.30-1.80 | .051071 | |
| 505153 | | UL1061 | 22-24 | NA | 1.15-1.40 | .045055 | 1.15-1.40 | .045055 | 1.30-1.80 | .051071 | |
| | | Mocar150C | NA | 0.35 | NA | NA | 1.20-1.30 | .047051 | 1.30 | .051 | |
| (1) To achieve optimum IPC-A620 insulation crimps, use this insulation OD range. | | | | | | | | | | | |

(2) Overall insulation OD specification for terminal.

(3) The Mocar150C 0.35 mm² wire qualified per USCAR21 Rev3.

(4) Oiler (63801-7240) required to crimp all terminals. See 63800-4900 FineAdjust Manual. See Tool Qualification Notes on page 2.

DEFINITION OF TERMS



Doc No. ATS-639042600 Revision: A

Release Date: 06-23-16 Revision Date: 06-23-16 UNCONTROLLED COPY

CRIMP SPECIFICATION

| Terminal Series No. | Bell n | nouth | Cut-off Tab |) Maximum | Conductor Brush | | |
|---------------------|-----------|---------|-------------|-----------|-----------------|---------|--|
| Terminal Series No. | mm | In. | mm | ln. | mm | In. | |
| 505153 | 0.05-0.35 | .002014 | 0.15 | .006 | 0.10-0.50 | .004020 | |

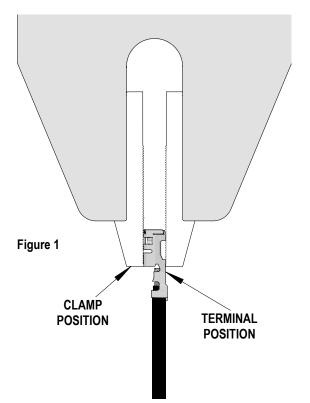
| Terminal Series No. | Bend up Bend down | | Twist Roll | | Punch Wi Conductor | | idth (Ref) | | Seam |
|---------------------|-------------------|---|-------------|---|-----------------------|------|------------|------|--|
| | Degree Max. | | Degree Max. | | mm | In | mm | In | Seam shall not be |
| 505153 | 4 | 3 | 3 | 4 | 1.20 | .047 | 1.40 | .055 | open and no wire allowed out of the crimping area |

After crimping, the crimp profiles should measure the following:

| | Wire | | | Conductor | | | | Insulation | | | | | Pull Force | |
|------------------------|-----------|-----|-----------------|--------------|---------|----------------------|------|--------------|-----------|----------------------|------|---------|------------|--|
| Terminal Series No. | | | | Crimp Height | | Crimp Width (Ref) | | Crimp Height | | Crimp Width (Ref) | | Minimum | | |
| | Wire Type | AWG | mm ² | mm | ln. | mm | ln. | mm | ln. | mm | ln. | Ν | Lb. | |
| | AVSS | NA | 0.30 | 0.69-0.74 | .027029 | 1.25 | .049 | 1.60 Max. | .063 Max. | 1.47 | .058 | 50.0 | 11.2 | |
| 505153 | UL1061 | 22 | NA | 0.65-0.70 | .026028 | 1.25 | .049 | 1.58 Max. | .062 Max. | 1.47 | .058 | 39.2 | 8.8 | |
| 505155 | UL1061 | 24 | NA | 0.59-0.64 | .023025 | 1.25 | .049 | 1.45 | .057 | 1.47 | .058 | 29.4 | 6.6 | |
| | Mocar150C | NA | 0.35 | 0.65-0.71 | .026028 | 1.25 | .049 | 1.28-1.38 | .050054 | 1.47 | .058 | 50.0 | 11.2 | |

Tool Qualification Notes:

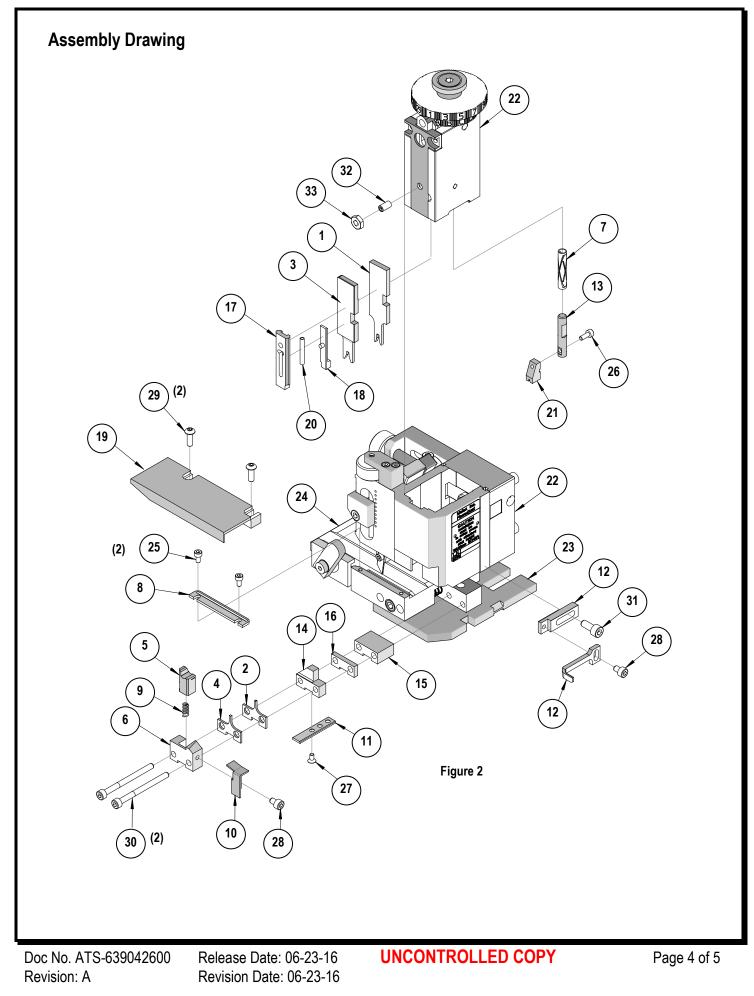
- 1. Pull Force should be measured with no influence from the insulation crimp.
- 2. The above specifications are guidelines to an optimum crimp.
- 3. Oiler (63801-7240) required to crimp terminals to improve tooling life and also to minimize the crimp extrusion. See 63800-4900 FineAdjust Manual.
- 4. Use the recommended pull force clamping technique to achieve the maximum pull force result. See Figure 1.



Release Date: 06-23-16 Revision Date: 06-23-16 **UNCONTROLLED COPY**

PARTS LIST

| FineAdjust Applicator 63904-2600 | | | | | | | | | |
|----------------------------------|------------|-----------------|------------------------------------|----------|--|--|--|--|--|
| ltem | Order No | Engineering No. | Description | Quantity | | | | | |
| | | Perisł | nable Tooling | | | | | | |
| | 63904-2670 | 63904-2670 | Tool Kit (All "Y" Items) | REF | | | | | |
| 1 | 63457-1212 | 63457-1212 | Conductor Punch | 1 Y | | | | | |
| 2 | 63455-0132 | 63455-0132 | Conductor Anvil | 1 Y | | | | | |
| 3 | 63454-0169 | 63454-0169 | Insulation Punch | 1 Y | | | | | |
| 4 | 63456-0105 | 63456-0105 | Insulation Anvil | 1 Y | | | | | |
| 5 | 63443-0005 | 63443-0005 | Cut-Off Plunger | 1 Y | | | | | |
| 6 | 63443-0012 | 63443-0012 | Front Plunger Retainer | 1 Y | | | | | |
| | | Other | Components | | | | | | |
| 7 | 11-17-0022 | 1739-21 | Hold Down Spring | 1 | | | | | |
| 8 | 11-18-4083 | 60707-8 | Feed Guide | 1 | | | | | |
| 9 | 11-24-1067 | 4996-4 | Cut-off Plunger Spring | 1 | | | | | |
| 10 | 63443-0009 | 63443-0009 | Scrap Chute | 1 | | | | | |
| 11 | 63443-0024 | 63443-0024 | Key | 1 | | | | | |
| 12 | 63443-0090 | 63443-0090 | Wire Stop | 1 | | | | | |
| 13 | 63443-0093 | 63443-0093 | Shank | 1 | | | | | |
| 14 | 63443-1721 | 63443-1721 | Height Spacer | 1 | | | | | |
| 15 | 63443-2217 | 63443-2217 | Coarse Spacer | 1 | | | | | |
| 16 | 63443-2302 | 63443-2302 | Fine Spacer | 1 | | | | | |
| 17 | 63443-2806 | 63443-2806 | Front Plunger Striker | 1 | | | | | |
| 18 | 63443-2904 | 63443-2904 | Wire Hold-Down Plunger | 1 | | | | | |
| 19 | 63443-6109 | 63443-6109 | Rear Cover | 1 | | | | | |
| 20 | 63600-1057 | 63600-1057 | Striker Plunger Spring | 1 | | | | | |
| 21 | 63903-7407 | 63903-7407 | Terminal Hold Down | 1 | | | | | |
| | | | Frame | • | | | | | |
| 22 | 63800-4901 | 63800-4901 | Тор | 1 | | | | | |
| 23 | 63801-3281 | 63801-3281 | Base | 1 | | | | | |
| 24 | 63801-4650 | 63801-4650 | Track | 1 | | | | | |
| | | H | lardware | • | | | | | |
| 25 | N/A | N/A | M3 by 6 Long SHCS | 2** | | | | | |
| 26 | N/A | N/A | M3 by 8 Long SHCS | 1** | | | | | |
| 27 | N/A | N/A | M3 by 6 Long FHCS | 1** | | | | | |
| 28 | N/A | N/A | M4 by 6 Long SHCS | 2** | | | | | |
| 29 | N/A | N/A | M4 by 12 Long BHCS | 2** | | | | | |
| 30 | N/A | N/A | M4 by 50 Long SHCS | 2** | | | | | |
| 31 | N/A | N/A | M5 by 12 Long SHCS | 1** | | | | | |
| 32 | N/A | N/A | #10-32 by 3/8"Long Flat Point SSS | 1** | | | | | |
| 33 | N/A | N/A | #10-32 Hex Jam Nut | 1** | | | | | |
| | | | y company such as MSC (1-800-645-7 | /270). | | | | | |



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.

CAUTION



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.

Molex accepts no liability for connector performance or tooling support where tooling other than Molex Tooling is used or where Molex Tooling is modified.

Application Tooling Support

2200 Wellington Court Lisle, IL 60532 USA Phone: +1-402-458-TOOL (8665) E-mail: applicationtooling@molex.com

Visit our Website at www.molex.com/applicationtooling

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