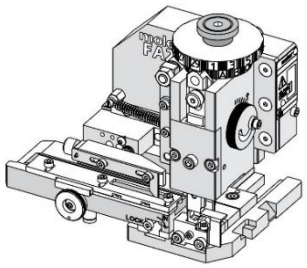
**Order Number**
**63808-0500**

molex

## Application Tooling Specification



## FEATURES

- Applicator designed to industry-standard mounting and 135.80mm (5.346”) shut height.
- Quick setup 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 0.015mm (.0006”) for conductor crimp height and 0.025mm (.001”) for insulation height.
- Fine adjustment of the bend is achieved using the bend adjust dial.
- 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.

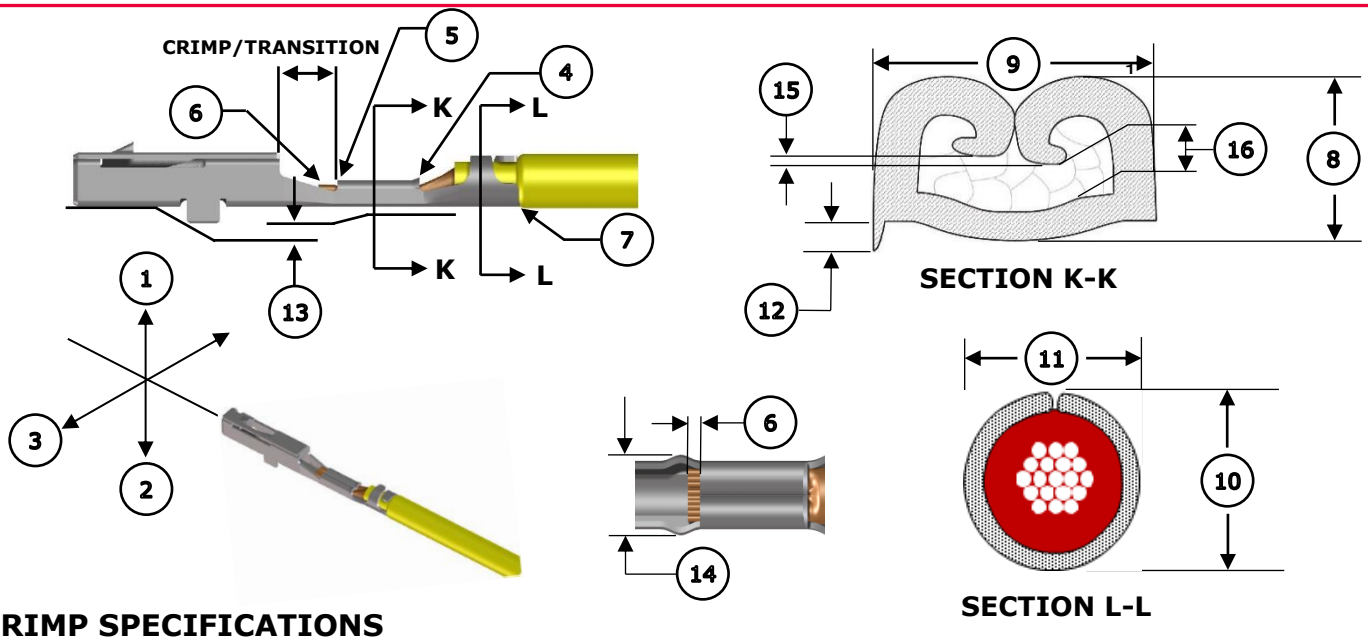
## SCOPE

**Products:** TAK50 Receptacle Terminal, Unsealed, Large Grip, “D” winding.

| Terminal Series No. | Terminal Order No. | Wire Standard | Wire Size | Insulation Diameter | | Strip Length (Ref) | |
|---|---|---|---|---|---|---|---|
| | | | $mm^2$ | mm | In. | mm | In. |
| 200096 | 200096-3101<br>200096-6101 | ISO 6722-1<br>GMW 15626 | 0.35 | 1.20-1.30 | .047-.051 | 3.50 | .140 |
| | 200096-3101 | LV 112-1<br>VW 60306 | | | | | |

**CAUTION:** This applicator is intended for use in a wire processor or stripper-crimper.

## DEFINITION OF TERMS




## CRIMP SPECIFICATIONS

The following crimp specifications are based on document 2000960001 Rev F5:

| Feature | Requirement | | | | | |
|---|---|---|---|---|---|---|
| **1. Bend Up** | 1° Max | | | | | |
| **2. Bend Down** | 1° Max | | | | | |
| **3. Twist** | 2° Max | | | | | |
| **4. Bell Mouth Rear** | 0.10-0.40mm (.004-.016 in.) | | | | | |
| **5. Bell Mouth Front** | Not Applicable | | | | | |
| **6. Conductor Brush** | 0.10-0.50mm (.004-.020 in.) | | | | | |
| **7. Cut-Off Tab** | 0.20mm (.008 in.) Max | | | | | |
| **Conductor Crimp** | **Wire Standard** | **Wire Size** | **8. Crimp Height** | | **9. Crimp Width** | |
| | ISO 6722-1<br>GMW 15626 | 0.35mm² | 0.76-0.80mm | .030-.031 in. | 1.04-1.10mm | .041-.043 in. |
| | LV 112-1<br>VW 60306 | | 0.72-0.76mm | .028-.030 in. | | |
| **Insulation Crimp** | **Wire Standard** | **Wire Size** | **10. Crimp Height** | | **11. Crimp Width** | |
| | ISO 6722-1<br>GMW 15626 | 0.35mm² | 1.40mm max | .055 in. max | 1.17-1.37mm | .046-.054 in. |
| | LV 112-1<br>VW 60306 | | | | | |
| **Pull Force** | **Wire Standard** | **Wire Size** | **Minimum Force** | | **Conditions** | |
| | ISO 6722-1<br>GMW 15626 | 0.35mm² | 50 N | 11.3 lb. | To be measured with no influence from the insulation crimp. | |
| | LV 112-1<br>VW 60306 | | | | | |
| **12. Conductor Anvil Flash** | 0.15mm (.006 in.) Max | | | | | |
| **13. Insulation Grip Step** | 0.00±0.10mm (.000±.004 in.) | | | | | |
| **14. Crimp Bulge** | 1.25mm (.049 in.) Max | | | | | |
| **Misc.** | **Wire Standard** | **Wire Size** | **15. Wing Dissymmetry** | | **16. Space Between Wing Tips and Crimp Bottom** | |
| | ISO 6722-1<br>GMW 15626 | 0.35mm² | 0.10mm Max | .004 in. Max | 0.015mm Min | .0005 in. Min |
| | LV 112-1<br>VW 60306 | | | | | |

## NOTES

### General Notes

1. Molex recommends that an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by hand 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 the work area.
4. Wear safety glasses when operating or maintaining the applicator.
5. For recommended maintenance, refer to the FA2 manual (TM-638080200).
6. Molex recommends crimping stranded copper wire only.
7. Lubrication must be used when crimping this terminal to prevent terminal from sticking in the conductor punch. Use 63801-7240 oiler or equivalent.

## WARNINGS

**CAUTION:** This applicator must be installed in a press with a standard shut height of 135.80mm (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 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.

## PARTS LIST

| FA2 Applicator 63808-0500 | | | | |
|---|---|---|---|---|
| **Item** | **Order No.** | **Engineering No.** | **Description** | **Quantity** |
| **Perishable Tooling** | | | | |
| | 63808-0570 | 63808-0570 | Tool Kit (All "Y" Items) | Ref |
| 1 | 63454-0162 | 63454-0162 | Insulation Punch | 1 Y |
| 2 | 63457-0112 | 63457-0112 | Conductor Punch | 1 Y |
| 3 | 63456-0110 | 63456-0110 | Insulation Anvil | 1 Y |
| 4 | 63455-0139 | 63455-0139 | Conductor Anvil | 1 Y |
| 5 | 63808-0576 | 63808-0576 | Cut-Off Plunger | 1 Y |
| 6 | 63443-0119 | 63443-0119 | Cutting Insert | 1 Y |
| 7 | 63443-0118 | 63443-0118 | Front Plunger Retainer | 1 Y |
| **Non-Perishable Components** | | | | |
| 8 | 11-24-1067 | 4996-4 | Cut-Off Plunger Spring | 1 |
| 9 | 63443-0117 | 63443-0117 | Front Scrap Chute | 1 |
| 10 | 200213-7578 | 200213-7578 | Anvil Mount | 1 |
| 11 | 63443-0090 | 63443-0090 | Wire Stop | 1 |
| 12 | 63443-5205 | 63443-5205 | Front Plunger Striker | 1 |
| 13 | 63443-5301 | 63443-5301 | Wire Hold Down Plunger | 1 |
| 14 | 63700-5305 | 63700-5305 | Wire Hold Down Spring | 1 |
| 15 | 63600-5813 | 63600-5813 | Soft-Tip Set Screw | 1 |
| 16 | 63600-5775 | 63600-5775 | Nose Hold Down Shank | 1 |
| 17 | 63443-4701 | 63443-4701 | Terminal Guide | 1 |
| 18 | 63443-7403 | 63443-7403 | Hold Down Block | 1 |
| 19 | 63808-0229 | 63808-0229 | Bend Adjust Dial | 1 |
| 20 | 63443-4402 | 63443-4402 | Feed Cam | 1 |
| 21 | 63808-0249 | 63808-0249 | Feed Pawl | 1 |
| **Frame** | | | | |
| 22 | 63808-0200 | 63808-0200 | Applicator Core | 1 |
| 23 | 63808-0197 | 63808-0197 | Mechanical Feed Assembly | 1 |
| 24 | 63808-0191 | 63808-0191 | Track Assembly | 1 |
| **Hardware** | | | | |
| 25 | — | — | M2.5 x 3 SHCS | 2* |
| 26 | — | — | M3 Flat Washer Hard | 1* |
| 27 | — | — | M3 Inner Tooth Lock Washer | 1* |
| 28 | — | — | M3 Hex Nut | 1* |
| 29 | — | — | M3 x 6 BHCS | 2* |
| 30 | — | — | M3 x 12 SHCS | 4* |
| 31 | — | — | M4 x 6 SHCS | 1* |
| 32 | — | — | M4 x 4 SSS | 1* |
| 33 | — | — | M4 x 8 SHCS | 2* |
| 34 | — | — | M4 x 45 SHCS | 2* |
| 35 | — | — | M5 x 12 SHCS | 1* |
| 36 | — | — | M5 x 10 Long Cup Point SSS | 1* |
| 37 | — | — | M5 Hex Jam Nut | 1* |

*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.

## ASSEMBLY DRAWING

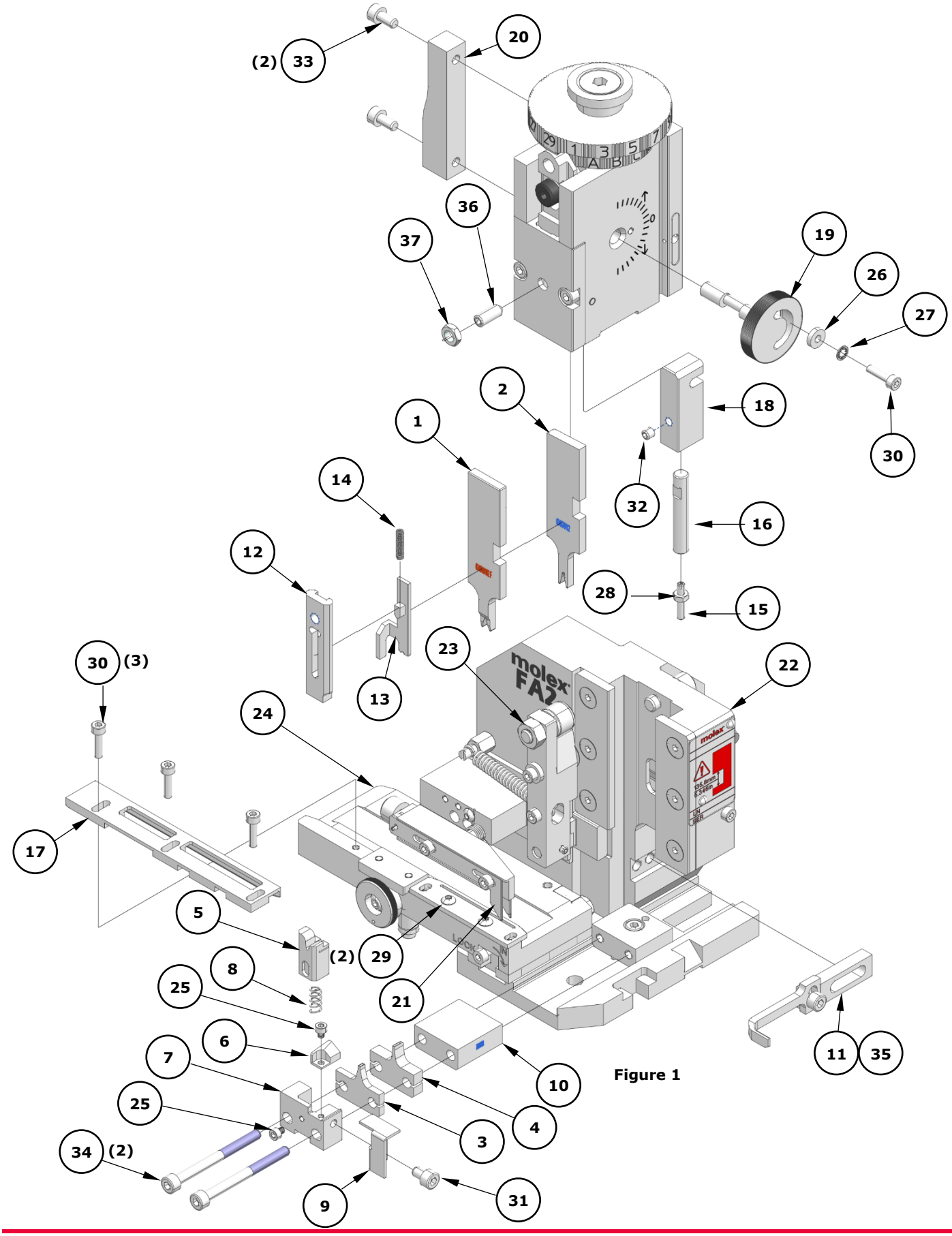



Figure 1

## FACTORY SETTINGS

### Feed Pawl Assembly

The FA2 applicator number 63808-0500 ships with the following factory settings. See Figure 2:

- The feed pawl shaft and M3 screw that holds the feed pawl spring are in position 2.
- The pin is in position B.

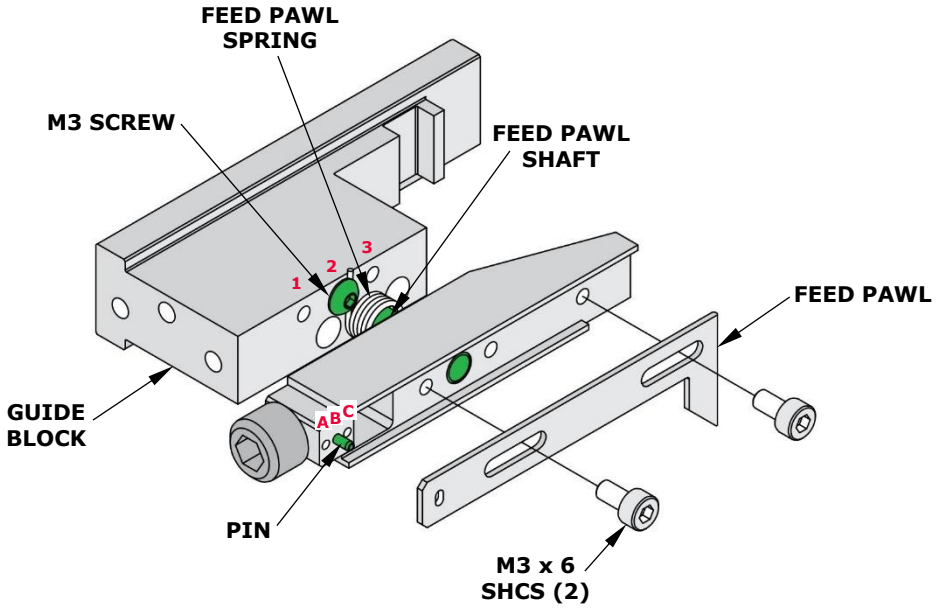



Figure 2

**Note:** Each applicator is configured and tested by Molex prior to shipping, and the above settings were used to produce the included sample crimps.

### Third Dial/Ram Assembly

◯ Indicates item number on the Parts List and Assembly Drawing

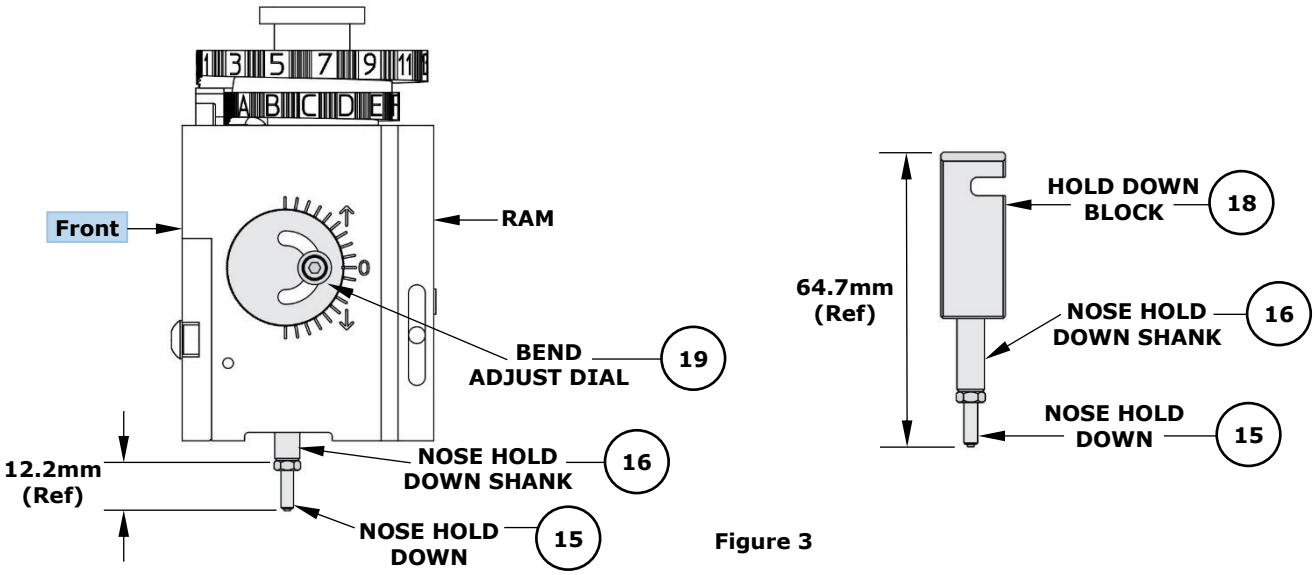



Figure 3

**Note:** The above dimensions were measured during setup and are included as a reference only. Additional adjustments may be required before crimping for production.

## Mounting Datum Location

This applicator was assembled and tested by Molex with the mounting datum in the location shown in Figure 4. Do not remove the mounting datum.

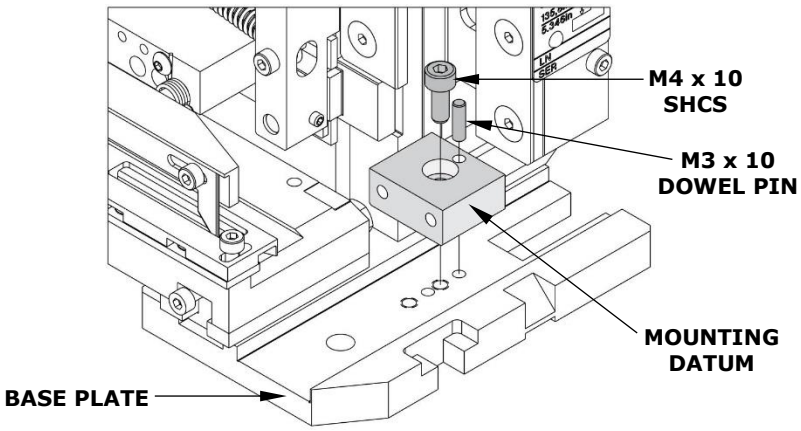



**Figure 4**

**Application Tooling Support**

**E-Mail:** toolingsupport@molex.com
**Website:** www.molex.com/applicationtooling

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