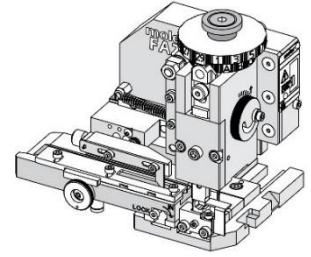


**Order Number**  
**63808-4900**

**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
- 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
- This applicator was designed for use in a wire processor only
- Fine adjustment of the bend is achieved using the bend adjust dial

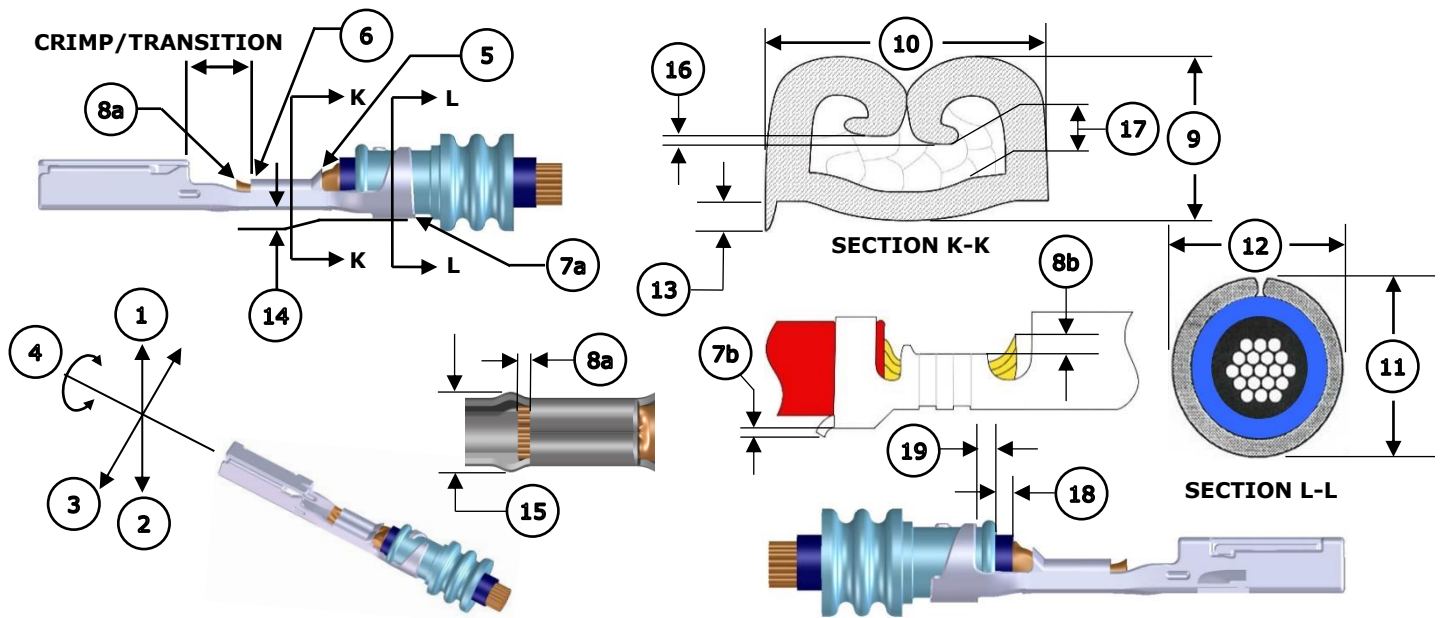
**SCOPE**

**Products:** CTX150 (L) 1.50mm<sup>2</sup> Wire Seal.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length	
		Wire Type	Size	mm	In.	mm	In.
34806	34806-3008 34806-3403	T3-ZHID FLRY-A	1.50mm <sup>2</sup>	2.10-2.25	.083-.089	4.50-5.00	.177-.197
502307	502307-3008 502307-3403						

**CAUTION:** This applicator was designed for use in a wire processor only.

**DEFINITION OF TERMS**



**CRIMP SPECIFICATIONS**

The following crimp specifications are based on document AS-502307-002 Rev. D:

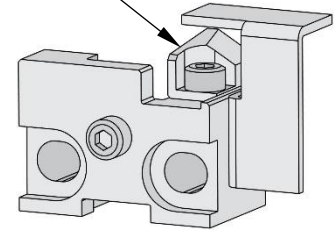
Feature	Requirement					
<b>1. Bend Up</b>	1° Max					
<b>2. Bend Down</b>	1° Max					
<b>3. Twist</b>	2° Max					
<b>4. Roll</b>	3° Max					
<b>5. Bell Mouth Rear</b>	0.20-0.55mm (.008-.022")					
<b>6. Bell Mouth Front</b>	Not Applicable					
<b>7. Cut-Off Tab</b>	a. 0.30mm (.012") Max			b. 0.10mm (.004") Max		
<b>8. Conductor Brush</b>	a. 0.20-1.20mm (.008-.047") Max			b. Not to exceed above conductor crimp height		
<b>Conductor Crimp</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>9. Crimp Height</b>		<b>10. Crimp Width</b>	
	T3-ZHID	1.50mm <sup>2</sup>	1.30-1.40mm	.051-.055 in.	2.10-2.20mm	.083-.087 in.
	FLRY-A	1.50mm <sup>2</sup>	1.30-1.40mm	.051-.055 in.	2.10-2.20mm	.083-.087 in.
<b>Insulation Crimp</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>11. Crimp Height</b>		<b>12. Crimp Width</b>	
	T3-ZHID	1.50mm <sup>2</sup>	3.34-3.44mm	.131-.135 in.	3.20-3.40mm	.126-.134 in.
	FLRY-A	1.50mm <sup>2</sup>	3.34-3.44mm	.131-.135 in.	3.20-3.40mm	.126-.134 in.
<b>Pull Force</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>Minimum Force</b>		To be measured with no influence from the insulation crimp	
	T3-ZHID	1.50mm <sup>2</sup>	155 N	34.9 lb.		
	FLRY-A	1.50mm <sup>2</sup>	200 N	45 lb.		
<b>13. Conductor Anvil Flash</b>	0.125mm (.005") Max					
<b>14. Insulation Grip Step</b>	0.485mm (.019") Reference					
<b>15. Crimp Bulge</b>	2.24mm (.088") Max within crimp/transition area					
<b>Misc.</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>16. Wing Dissymmetry (Max)</b>		<b>17. Space Between Wing Tips and Crimp Bottom (Min)</b>	
	T3-ZHID	1.50mm <sup>2</sup>	0.25mm	.010 in.	0.125mm	.005 in.
	FLRY-A	1.50mm <sup>2</sup>				
	<b>Wire Type</b>	<b>Wire Size</b>	<b>Insulation T.P.</b>		<b>Seal T.P.</b>	
T3-ZHID	1.50mm <sup>2</sup>	0.20mm	.008 in.	0.50mm	.020 in.	
	FLRY-A					
	<b>Wire Type</b>	<b>Wire Size</b>	<b>18. Wire Seal Position on Wire</b>		<b>19. Wire Seal Position on Terminal (Min)</b>	
	T3-ZHID	1.50mm <sup>2</sup>	0.05-0.40mm	.002-.016 in.	1.10mm	.043 in.
	FLRY-A					

## NOTES

### Applicator Notes

- This applicator is for automatic wire processor use only.
- This applicator does not include a cutting insert.
- Installing a cutting insert will cause jamming in this applicator.

CUTTING INSERT



### Specification Notes

- 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 set up wire processor to consistently achieve the brush length

### 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 at all times.
5. For recommended maintenance, refer to the FA2 manual (TM-638080200).
6. Molex recommends crimping standard copper wire only.

## 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**

<b>Applicator 63808-4900</b>				
<b>Item</b>	<b>Order No.</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63808-4970	63808-4970	Tool Kit (All "Y" Items)	Ref
1	63454-3300	63454-3300	Insulation Punch	1 Y
2	63457-2106	63457-2106	Conductor Punch	1 Y
3	63456-3304	63456-3304	Insulation Anvil	1 Y
4	63455-2105	63455-2105	Conductor Anvil	1 Y
5	63443-0014	63443-0014	Cut-Off Plunger	1 Y
<b>Non-Perishable Components</b>				
6	63443-0128	63443-0128	Front Plunger Retainer	1
7	11-24-1067	4996-4	Cut-Off Plunger Spring	1
8	63443-0117	63443-0117	Front Scrap Chute	1
9	63443-7514	63443-7514	Anvil Mount	1
10	63443-0090	63443-0090	Wire Stop	1
11	63443-3601	63443-3601	Front Plunger Striker	1
12	63443-3702	63443-3702	Wire Hold Down Screw	1
13	63600-5776	63600-5776	Nose Hold Down	1
14	63600-5775	63600-5775	Nose Hold Down Shank	1
15	63808-0220	63808-0220	Hold Down Block	1
16	63443-4710	63443-4710	Terminal Guide	1
17	63808-0229	63808-0229	Bend Adjust Dial	1
18	63808-0297	63808-0297	Feed Cam	1
<b>Frame</b>				
19	63808-0200	63808-0200	Applicator Core	1
20	63808-0191	63808-0191	Track Assembly	1
21	63808-0197	63808-0197	Mechanical Feed Assembly	1
<b>Hardware</b>				
22	—	—	M2.5 x 4 SHCS	1*
23	—	—	M3 Flat Washer Hard	1*
24	—	—	M3 Inner Tooth Lock Washer	1*
25	—	—	M3 Hex Nut	1*
26	—	—	M3 x 3 SSS	2*
27	—	—	M3 x 6 BHCS	2*
28	—	—	M3 x 12 SHCS	4*
29	—	—	M4 x 6 SHCS	1*
30	—	—	M4 x 6 SSS	1*
31	—	—	M4 x 8 SHCS	2*
32	—	—	M4 x 50 SHCS	2*
33	—	—	M5 x 12 SHCS	1*
34	—	—	M5 x 12 Flat Point SSS	1*
35	—	—	M5 Hex Jam Nut	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

**ASSEMBLY DRAWING**

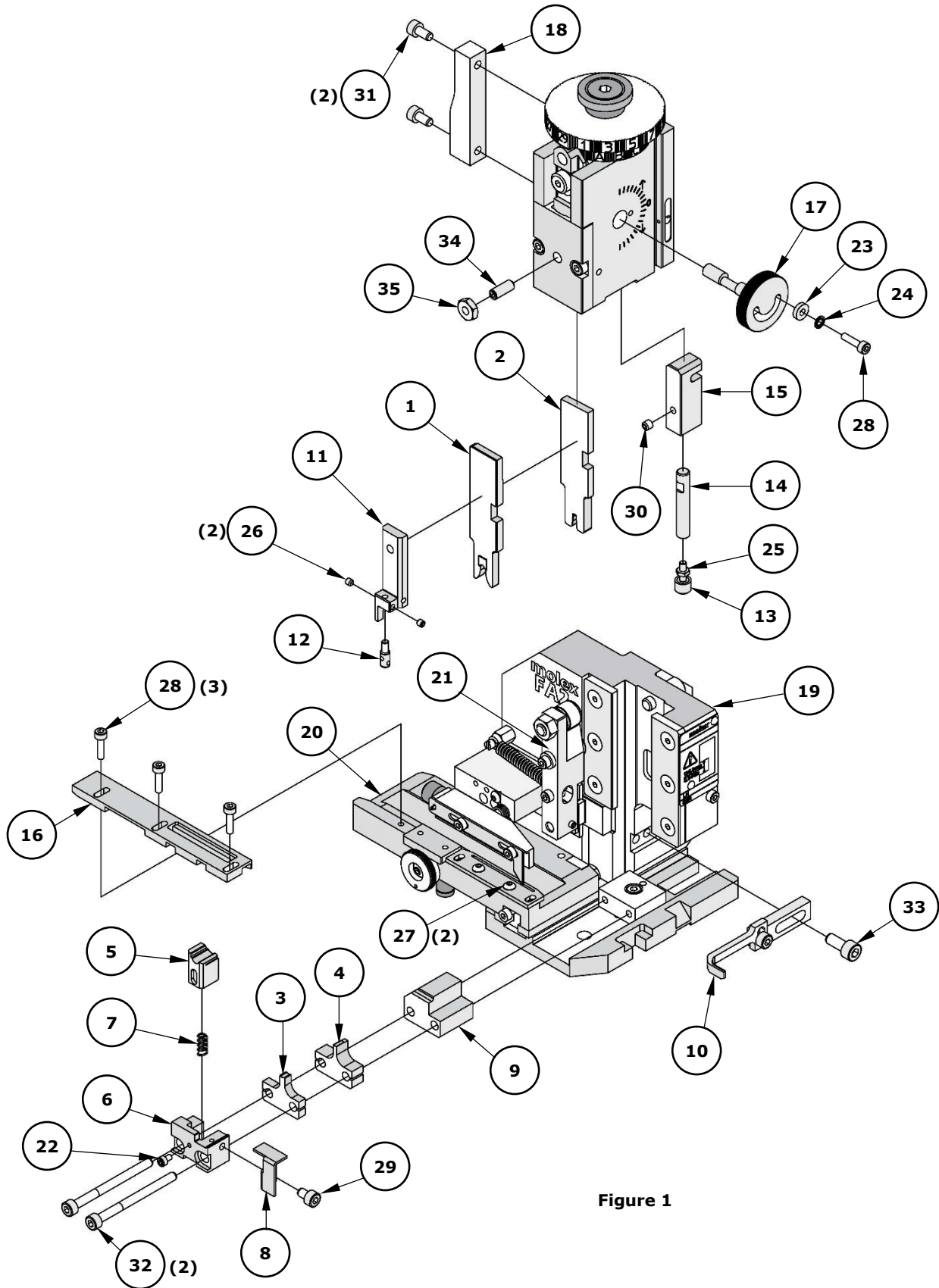


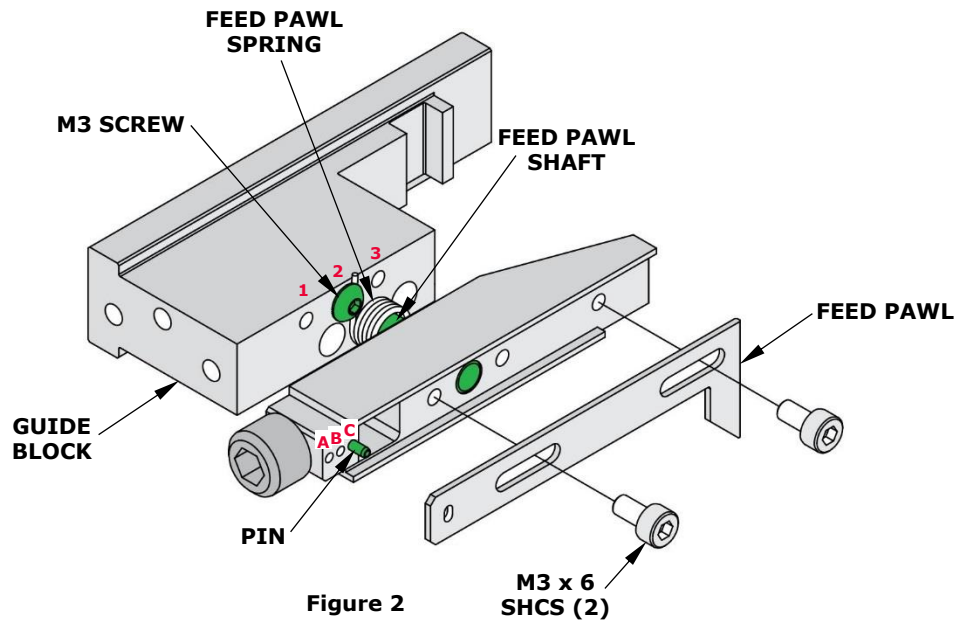
Figure 1

## FACTORY SETTINGS

### Feed Pawl Assembly

The FA2 applicator number 63808-4900 ships with the following factory settings. See Figure 2:

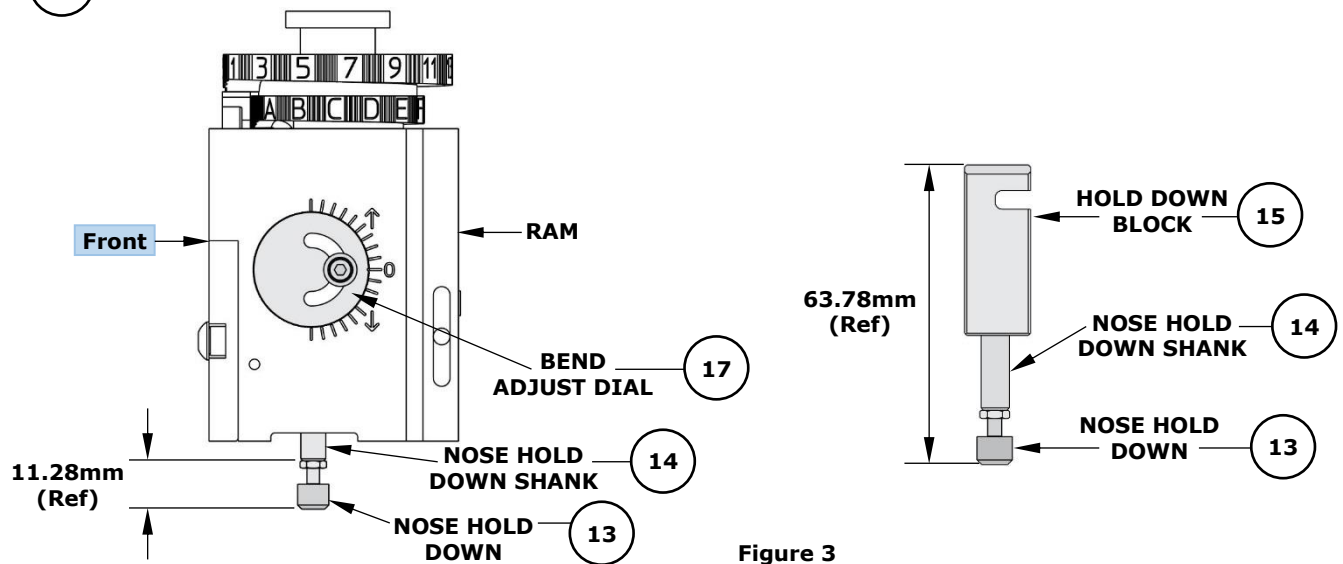
- The feed pawl shaft and M3 screw that holds the feed pawl spring are in position 2.
- The pin is in position C.



**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



**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.

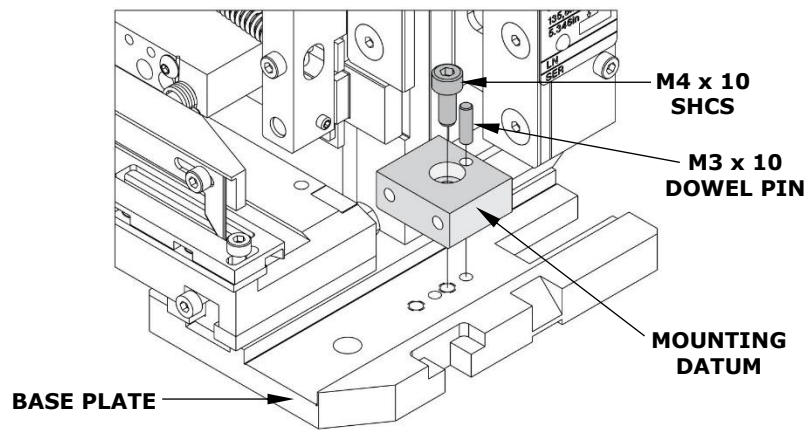


Figure 4

### Application Tooling Support

**Phone:** (402) 458-TOOL (8665)  
**E-Mail:** [toolingsupport@molex.com](mailto:toolingsupport@molex.com)  
**Website:** [www.molex.com/applicationtooling](http://www.molex.com/applicationtooling)

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