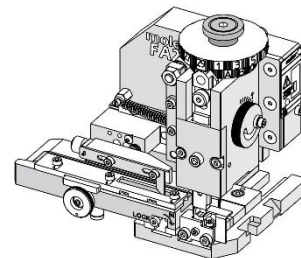


**Order Number**  
**63808-4800**



## 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

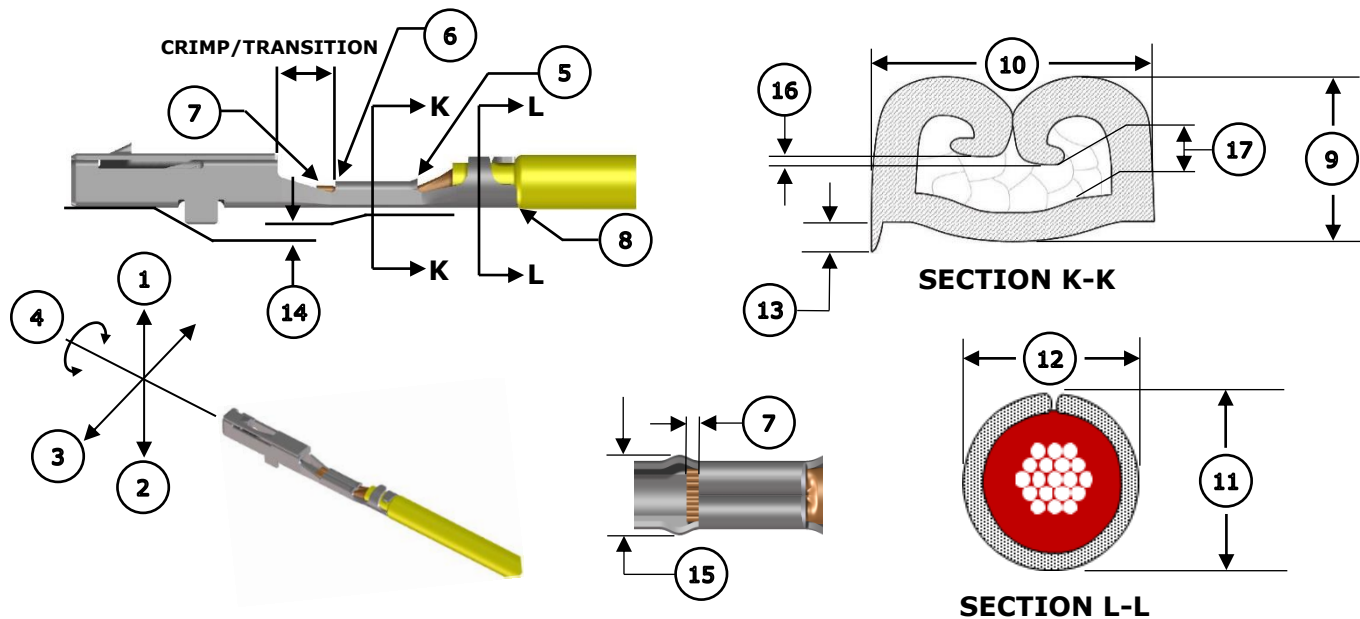
### SCOPE

**Products:** CTX50 Receptacle Terminal Unsealed, 0.22mm<sup>2</sup>.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length (Ref)	
		Wire Type	Size	mm	In.	mm	In.
560023	560023-0421 560023-0521 560023-0621	CHFUS	0.22mm <sup>2</sup>	0.95-1.20	.037-.047	2.90	.114

**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-560023-001 Rev. G:

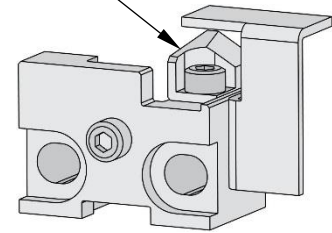
Feature	Requirement					
<b>1. Bend Up</b>	1° Max					
<b>2. Bend Down</b>	1° Max					
<b>3. Twist</b>	2° Max					
<b>4. Roll</b>	Not Applicable					
<b>5. Bell Mouth Rear</b>	0.40-0.60mm (.016-.024")					
<b>6. Bell Mouth Front</b>	Not Applicable					
<b>7. Conductor Brush</b>	0.55mm (.022") Not to extend above conductor crimp					
<b>8. Cut-Off Tab</b>	0.30mm (.012") Max, no burrs					
<b>Conductor Crimp</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>9. Crimp Height</b>		<b>10. Crimp Width</b>	
	CHFUS	0.22mm <sup>2</sup>	0.66-0.72mm	.026-.028 in.	1.01-1.07mm	.040-.042 in.
<b>Insulation Crimp</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>11. Crimp Height</b>		<b>12. Crimp Width</b>	
	CHFUS	0.22mm <sup>2</sup>	1.20-1.30mm	.047-.051 in.	1.10-1.20mm	.043-.047 in.
<b>Pull Force</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>Minimum Force</b>			
	CHFUS	0.22mm <sup>2</sup>	40 N	9.0 lb.	To be measured with no influence from the insulation crimp.	
<b>13. Conductor Anvil Flash</b>	0.10mm (.004") Max					
<b>14. Insulation Grip Step</b>	0.00-0.05mm (.000-.002")					
<b>15. Crimp Bulge</b>	1.07mm (.042") Max within crimp/transition area					
<b>Misc.</b>	<b>Wire Type</b>	<b>Wire Size</b>	<b>16. Wing Dissymmetry</b>		<b>17. Space Between Wing Tips and Crimp Bottom</b>	
	CHFUS	0.22mm <sup>2</sup>	0.20mm Max	.008 in. Max	No contact	

## 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.
7. Lubrication must be used when crimping gold and select gold terminals to prevent terminals 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.

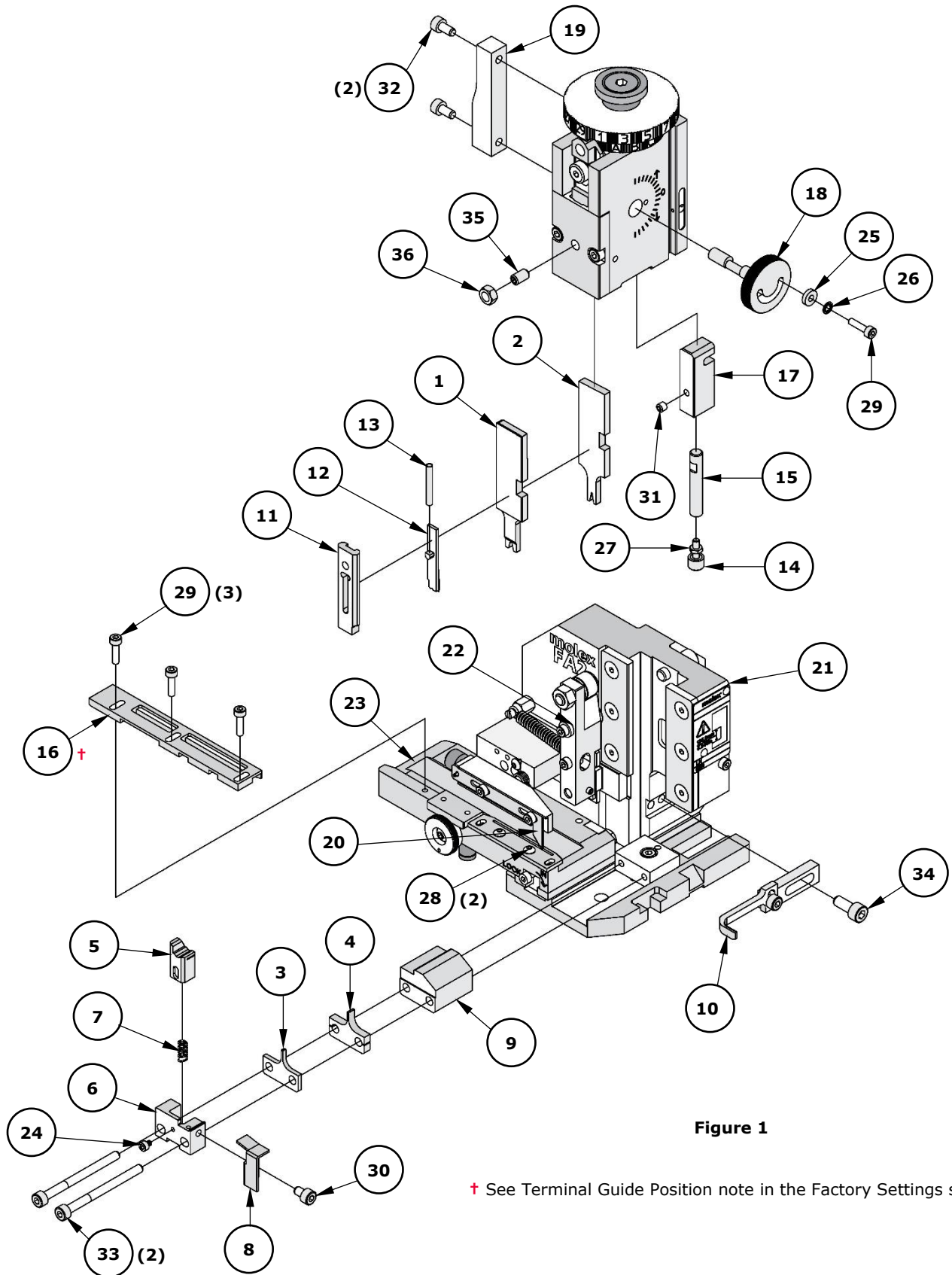
**CAUTION:** To prevent injury, never operate this applicator without the guards supplied with the press or wire-processing machine in place. Reference the press or wire processing manufacturer's instruction manual.

**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**

<b>FA2 Applicator 63808-4800</b>				
<b>Item</b>	<b>Order No.</b>	<b>Engineering No.</b>	<b>Description</b>	<b>Quantity</b>
<b>Perishable Tooling</b>				
	63808-4870	63808-4870	Tool Kit (All "Y" Items)	Ref
1	63454-0170	63454-0170	Insulation Punch	1 Y
2	63457-0056	63457-0056	Conductor Punch	1 Y
3	63456-1101	63456-1101	Insulation Anvil	1 Y
4	63455-1005	63455-1005	Conductor Anvil	1 Y
5	63443-0136	63443-0136	Cut-Off Plunger	1 Y
<b>Non-Perishable Components</b>				
6	63443-0118	63443-0118	Front Plunger Retainer	1 Y
7	11-24-1067	4996-4	Cut-Off Plunger Spring	1
8	63443-0117	63443-0117	Front Scrap Chute	1
9	63443-7519	63443-7519	Anvil Mount	1
10	63443-0090	63443-0090	Wire Stop	1
11	63443-2802	63443-2802	Front Plunger Striker	1
12	63443-2921	63443-2921	Wire Hold Down Plunger	1
13	63600-0021	63600-0021	Wire Hold Down Spring	1
14	63600-5776	63600-5776	Nose Hold Down	1
15	63600-5775	63600-5775	Nose Hold Down Shank	1
16	63443-4701	63443-4701	Terminal Guide	1†
17	63443-7403	63443-7403	Hold Down Block	1
18	63808-0229	63808-0229	Bend Adjust Dial	1
19	63443-4409	63443-4409	Feed Cam	1
20	63808-0249	63808-0249	Feed Pawl	1
<b>Frame</b>				
21	63808-0200	63808-0200	Applicator Core	1
22	63808-0197	63808-0197	Mechanical Feed Assembly	1
23	63808-0191	63808-0191	Track Assembly	1
<b>Hardware</b>				
24	—	—	M2.5 x 3 SHCS	1*
25	—	—	M3 Flat Washer Hard	1*
26	—	—	M3 Inner Tooth Lock Washer	1*
27	—	—	M3 Hex Nut	1*
28	—	—	M3 x 6 BHCS	2*
29	—	—	M3 x 12 SHCS	4*
30	—	—	M4 x 6 SHCS	1*
31	—	—	M4 x 4 SSS	1*
32	—	—	M4 x 8 SHCS	2*
33	—	—	M4 x 50 SHCS	2*
34	—	—	M5 x 12 SHCS	1*
35	—	—	#10-32UNF x .50" Cup Point SSS	1*
36	—	—	#10-32UNF Jam Nut	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

**ASSEMBLY DRAWING**



**Figure 1**

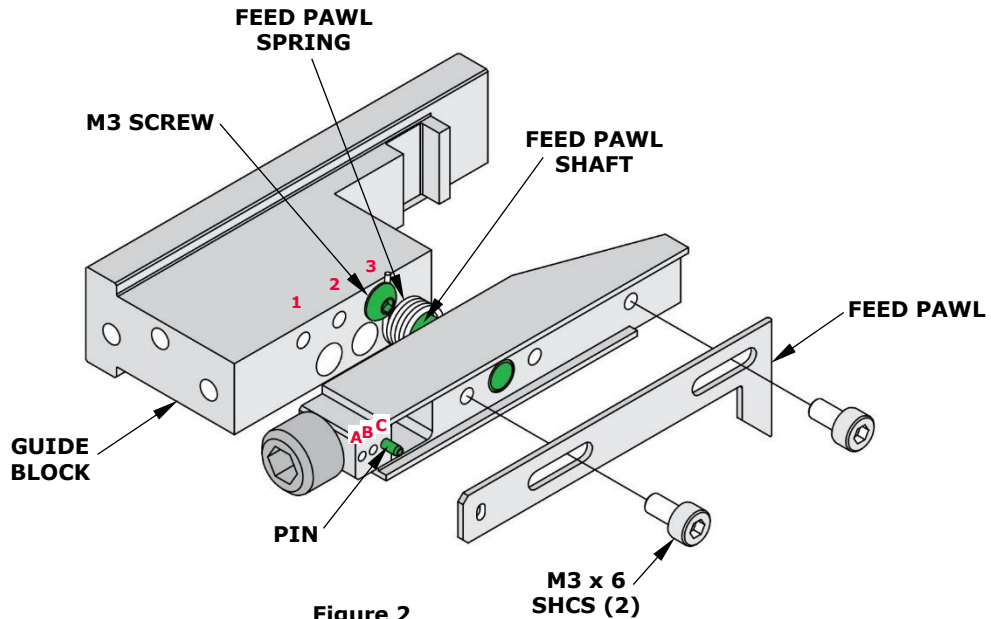
† See Terminal Guide Position note in the Factory Settings section.

## FACTORY SETTINGS

### Feed Pawl Assembly

The FA2 applicator number 63808-4800 ships with the following factory settings. See Figure 2:

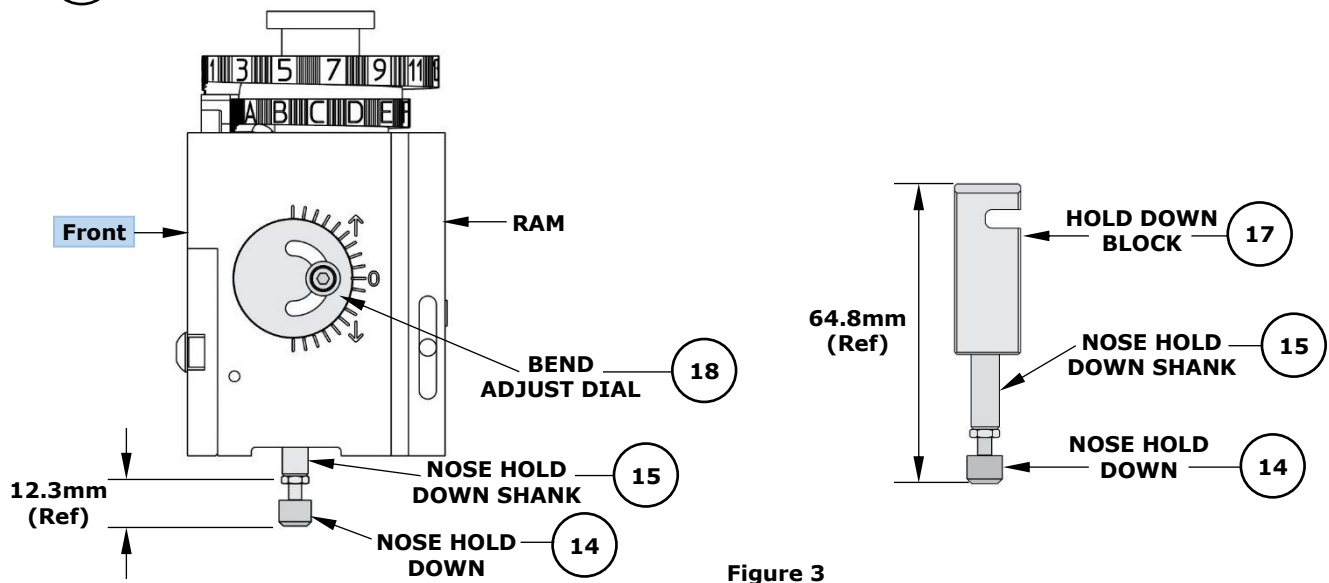
- The feed pawl shaft and M3 screw that holds the feed pawl spring are in position 3.
- The pin is in position C.



**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.

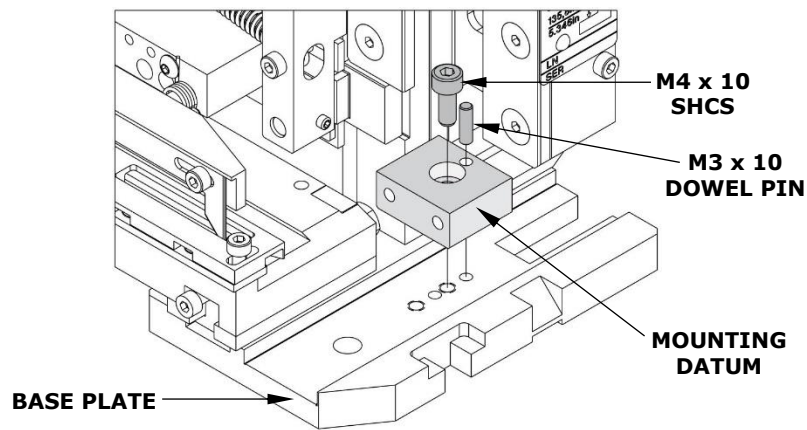


Figure 4

### Terminal Guide Position

The terminal guide on this applicator should be positioned so that it is in front of the terminal conductor grips, as shown in Figure 5.

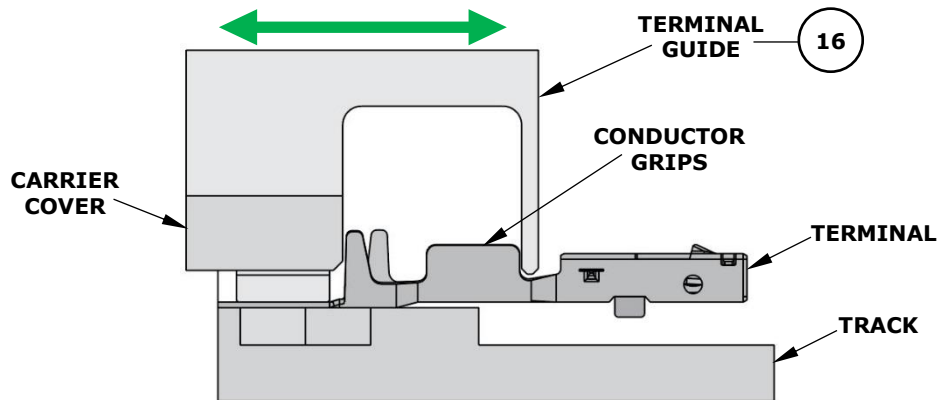


Figure 5

### Application Tooling Support

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

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