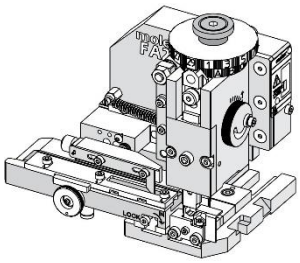
Order Number
63808-4800

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.

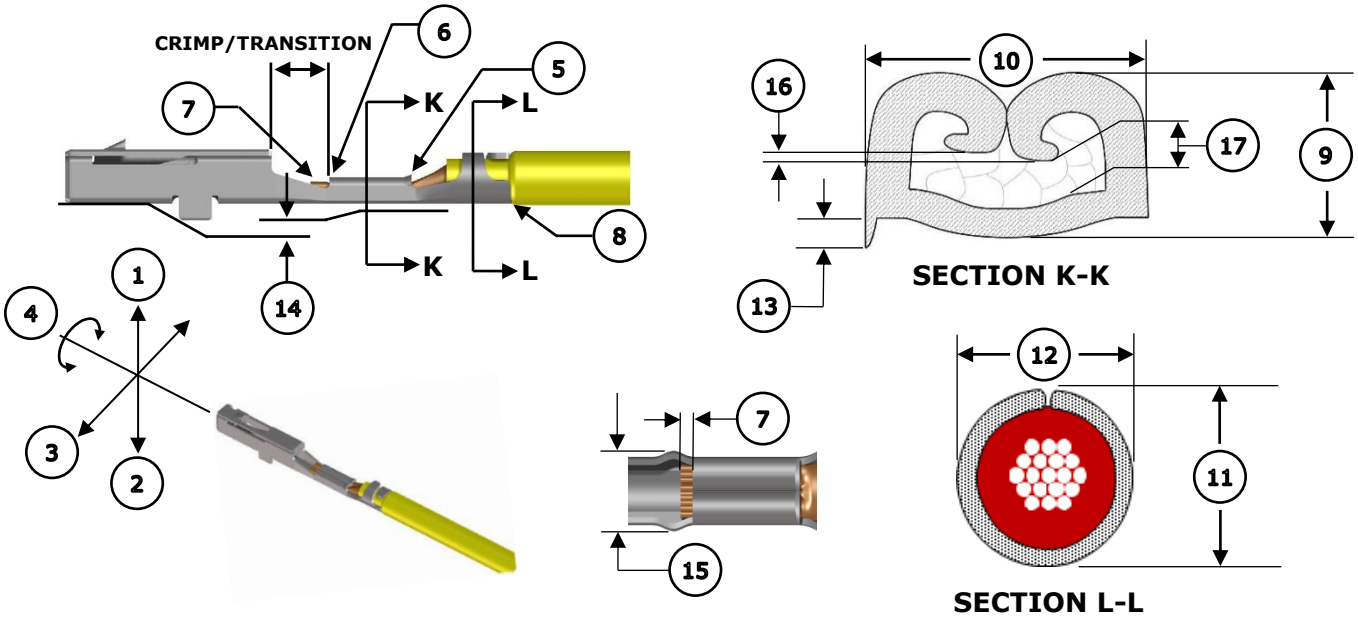
SCOPE

Products: CTX50 Receptacle Terminal Unsealed, 0.22mm^2 and 24 AWG wires.

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 560023-0721	CHFUS	0.22mm²	0.95-1.20	.037-.047	2.90	.114
		UL 1332	24 AWG	1.15-1.35	.045-.053		

CAUTION: This applicator is intended for use in a wire processor only.

DEFINITION OF TERMS



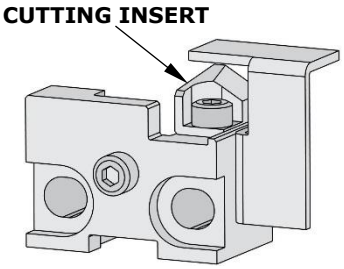
CRIMP SPECIFICATIONS

The following crimp specifications are based on document AS-560023-001 Rev. M:

Feature	Requirement					
1. Bend Up	1° Max					
2. Bend Down	1° Max					
3. Twist	2° Max					
4. Roll	Not Applicable					
5. Bell Mouth Rear	0.40-0.60mm (.016-.024")					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.55mm (.022") Max, not to extend above conductor crimp height					
8. Cut-Off Tab	0.30mm (.012") Max, no burrs					
Conductor Crimp	**Wire Type**	**Wire Size**	**9. Crimp Height**		**10. Crimp Width**	
	CHFUS	0.22mm²	0.66-0.72mm	.026-.028 in.	1.01-1.07mm	.040-.042 in.
	UL 1332	24 AWG				
Insulation Crimp	**Wire Type**	**Wire Size**	**11. Crimp Height**		**12. Crimp Width**	
	CHFUS	0.22mm²	1.20-1.30mm	.047-.051 in.	1.10-1.20mm	.043-.047 in.
	UL 1332	24 AWG				
Pull Force	**Wire Type**	**Wire Size**	**Minimum Force**			
	CHFUS	0.22mm²	40 N	9.0 lb.	To be measured with no influence from the insulation crimp.	
	UL 1332	24 AWG				
13. Conductor Anvil Flash	0.10mm (.004") Max					
14. Insulation Grip Step	0.00±0.05mm (.000±.002")					
15. Crimp Bulge	1.07mm (.042") Max within crimp/transition area					
Misc.	**Wire Type**	**Wire Size**	**16. Wing Dissymmetry**		**17. Space Between Wing Tips and Crimp Bottom**	
	CHFUS	0.22mm²	0.20mm Max	.008 in. Max	No contact	
	UL 1332	24 AWG				

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.

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

FA2 Applicator 63808-4800				
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	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
Non-Perishable Components				
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
Frame				
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
Hardware				
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

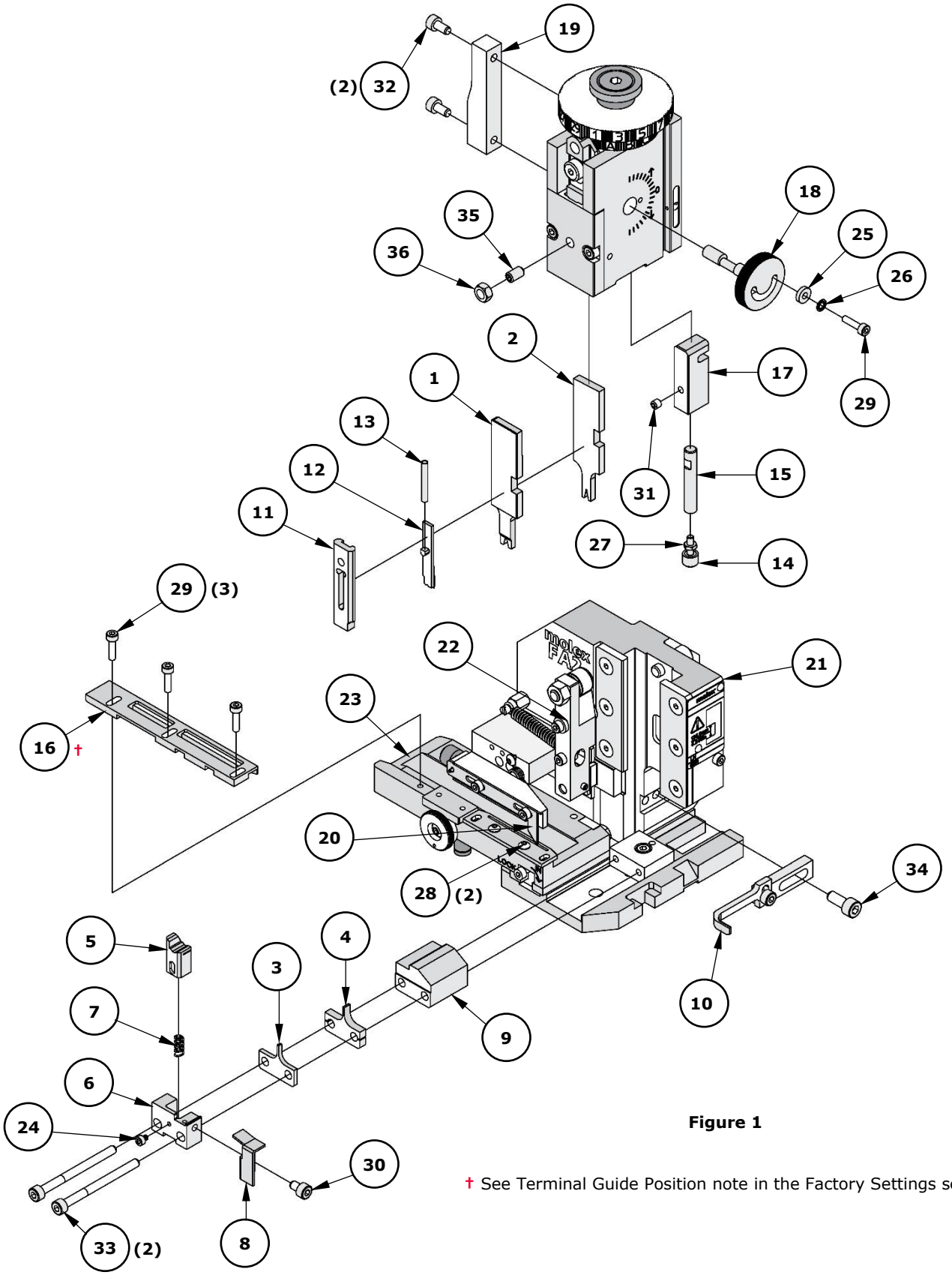


Figure 1

† 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.

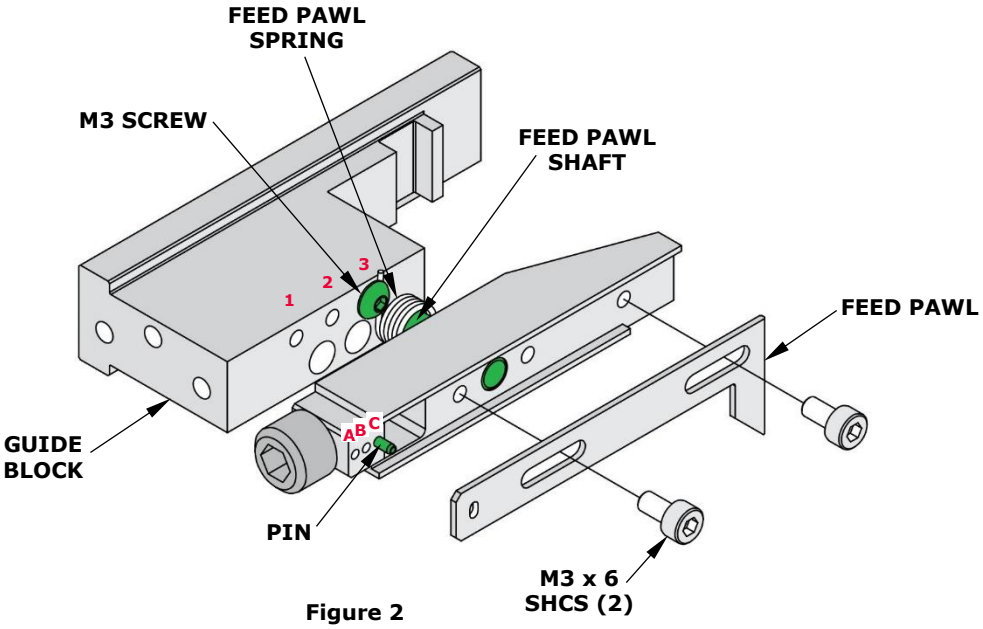


Figure 2

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

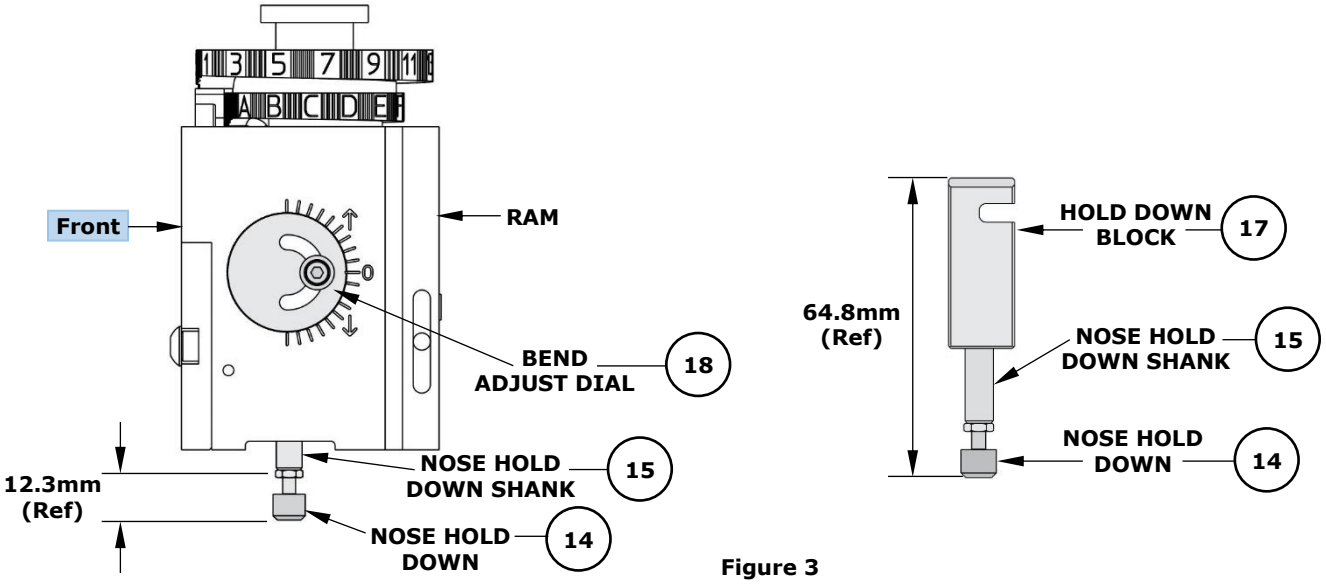


Figure 3

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.

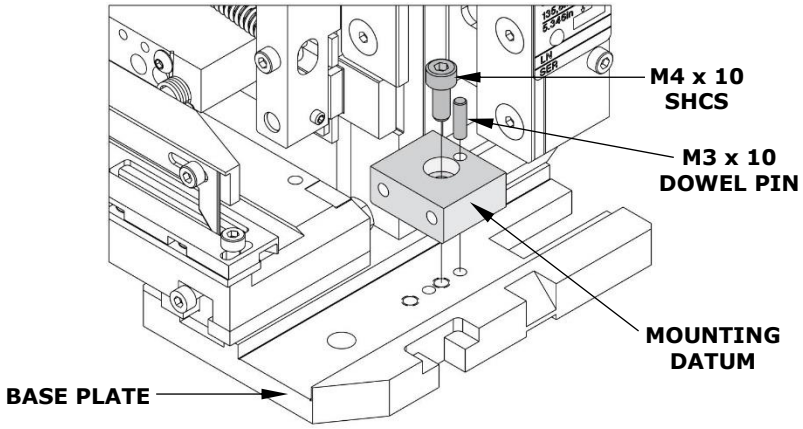


Figure 4

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.

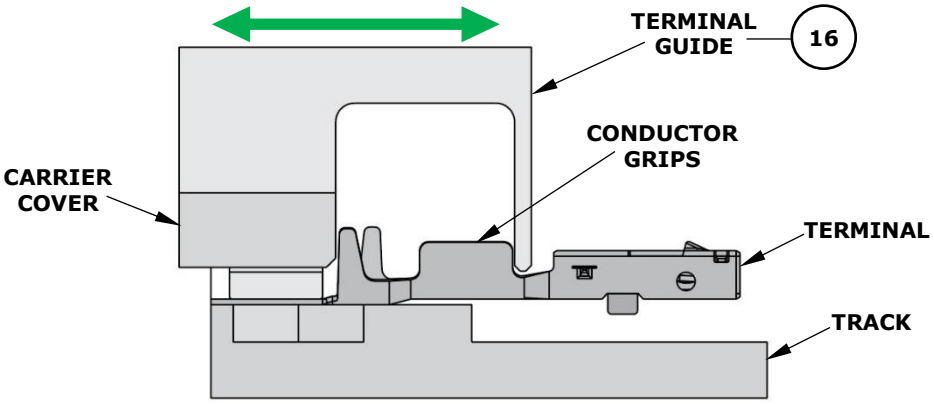


Figure 5

Application Tooling Support

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

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