**Order Number
63808-5300**

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

SCOPE

Products: CTX150 M Grip Terminals, 1.00mm^2 Wire.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length	
		Wire Type	Wire Size	mm	In.	mm	In.
502307	502307-3007 502307-3402	T3-ZHID FLRY-A	1.00mm^2	1.75-2.41	.069-.095	4.50-5.00	.177-.197
34806	34806-3007 34806-3402						

Wire Seal Order No.	Wire Seal Color
64325-1085 98492-1085	Light Gray

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

DEFINITION OF TERMS

SECTION K-K

SECTION L-L
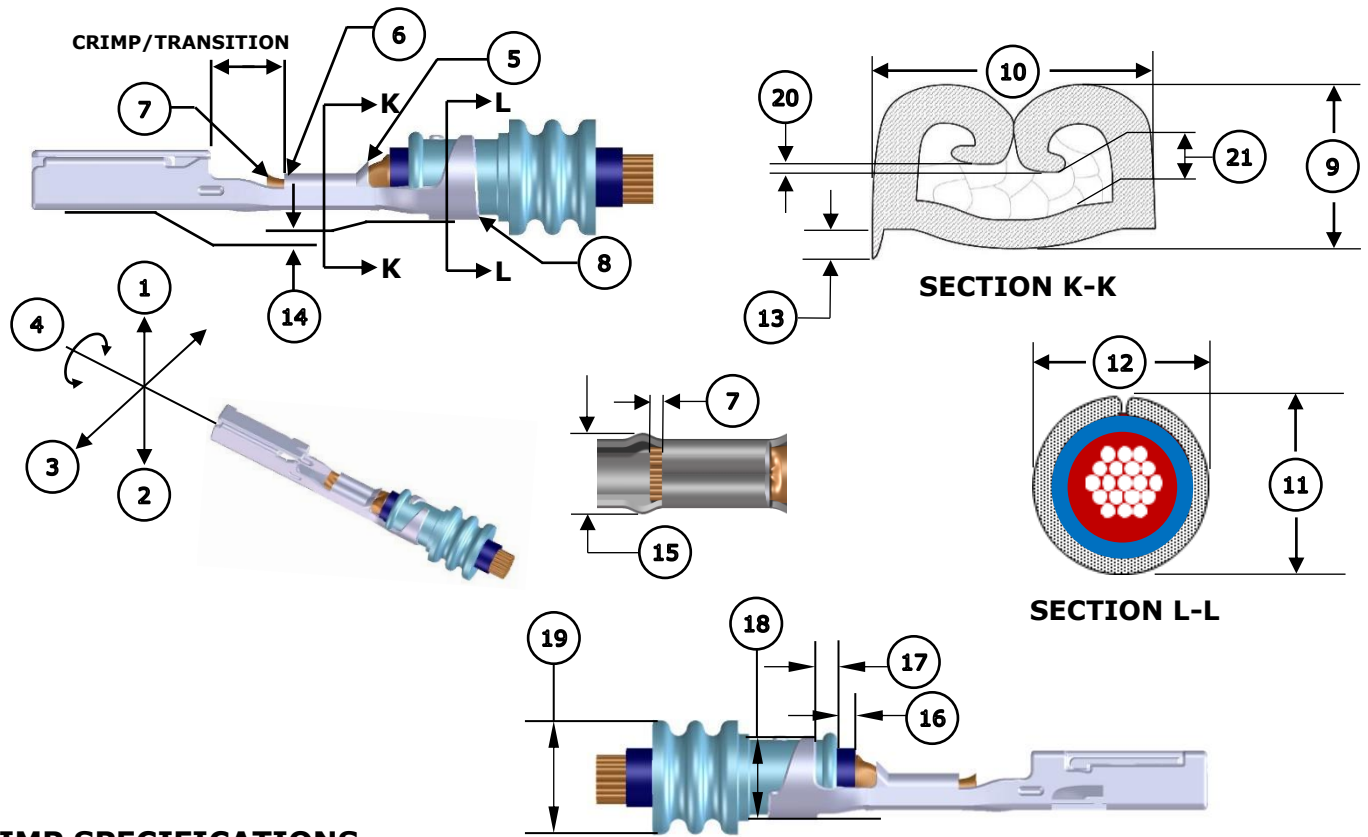
CRIMP SPECIFICATIONS

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

Feature	Requirement					
1. Bend Up	1° Max					
2. Bend Down	1° Max					
3. Twist	2° Max					
4. Roll	3° Max					
5. Bell Mouth Rear	0.20-0.55mm (.008-.022")					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.2-1.20mm (.008-.047")					
8. Cut-Off Tab	0.30mm (.012") Max					
Conductor Crimp	Wire Type	Wire Size	**9. Crimp Height**		**10. Crimp Width**	
	T3-ZHID	1.00mm²	1.00-1.10mm	.039-.043 in.	2.00-2.10mm	.079-.083 in.
	FLRY-A	1.00mm²	1.05-1.15mm	.041-.045 in.	2.00-2.10mm	.079-.083 in.
Insulation Crimp	Wire Type	Wire Size	**11. Crimp Height**		**12. Crimp Width**	
	T3-ZHID FLRY-A	1.00mm²	3.00-3.10mm	.118-.122 in.	3.05-3.25mm	.120-.128 in.
Pull Force	Wire Type	Wire Size	**Minimum Force**			
	T3-ZHID FLRY-A	1.00mm²	120 N	27.0 lb.	To be measured with no influence from the insulation crimp.	
13. Conductor Anvil Flash	0.125mm (.005") Max					
14. Insulation Grip Step	0.395mm (.016") Reference					
15. Crimp Bulge	2.24mm (.088") Max within crimp/transition area					

Doc. No: 638085300
Revision: B
Release Date: 06-08-20
Revision Date: 10-05-21
UNCONTROLLED COPY
Page 2 of 7

	Wire Type	Wire Size	16. Wire Seal Position on Wire (Ref)		17. Wire Seal Position on Terminal (Min)	
Misc.	T3-ZHID FLRY-A	1.00mm²	0.05-0.40mm	.002-.016 in.	1.10mm	.043 in.
	Wire Type	**Wire Size**	**18. Insulation Crimp Position**		**19. Wire Seal Position**	
	T3-ZHID FLRY-A	1.00mm²	0.00-0.20mm	.000-.008 in.	0.00-0.50mm	.000-.020 in.
	Wire Type	**Wire Size**	**20. Wing Dissymmetry**		**21. Space Between Wing Tip and Crimp Bottom (Min)**	
	T3-ZHID FLRY-A	1.00mm²	0.00-0.25mm	.000-.010 in.	0.125-1.10mm	.005-.043 in.

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
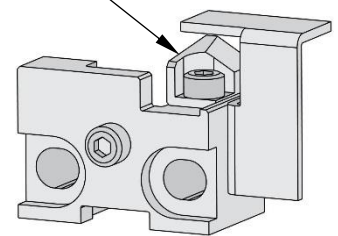
Specification Notes

- 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 stranded 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

Applicator 63808-5300				
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	63808-5370	63808-5370	Tool Kit (All "Y" Items)	Ref
1	63454-3206	63454-3206	Insulation Punch	1 Y
2	63457-2005	63457-2005	Conductor Punch	1 Y
3	63456-3205	63456-3205	Insulation Anvil	1 Y
4	63455-2106	63455-2106	Conductor Anvil	1 Y
5	63443-0014	63443-0014	Cut-Off Plunger	1 Y
Non-Perishable Components				
6	63443-0128	63443-0128	Front Plunger Retainer	1
7	11-24-1067	4996-4	Cut-Off Plunger Spring	1
8	63443-7520	63443-7520	Anvil Mount	1
9	63443-0090	63443-0090	Wire Stop Assembly	1
10	63443-3601	63443-3601	Front Plunger Striker	1
11	63443-3702	63443-3702	Wire Hold Down Plunger	1
12	63600-5776	63600-5776	Nose Hold Down	1
13	63600-5775	63600-5775	Nose Hold Down Shank	1
14	63443-4723	63443-4723	Terminal Guide	1
15	63808-0220	63808-0220	Hold Down Block	1
16	63808-0229	63808-0229	Bend Adjust Dial	1
17	63443-4404	63443-4404	Feed Cam	1
Frame				
18	63808-0200	63808-0200	Applicator Core	1
19	63808-0197	63808-0197	Mechanical Feed Assembly	1
20	63808-0191	63808-0191	Track Assembly	1
Hardware				
21	—	—	M2.5 x 4 SHCS	1*
22	—	—	M3 Flat Washer Hard	1*
23	—	—	M3 Hex Nut	1*
24	—	—	M3 Inner Tooth Lock Washer	1*
25	—	—	M3 x 3 SSS	2*
26	—	—	M3 x 6 BHCS	2*
27	—	—	M3 x 12 SHCS	4*
28	—	—	M4 x 6 SSS	1*
29	—	—	M4 x 8 SHCS	2*
30	—	—	M4 x 50 SHCS	2*
31	—	—	M5 x 12 SHCS	1*
32	—	—	M5 x 12 Flat Point SSS	1*
33	—	—	M5 Hex Jam Nut	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

ASSEMBLY DRAWING
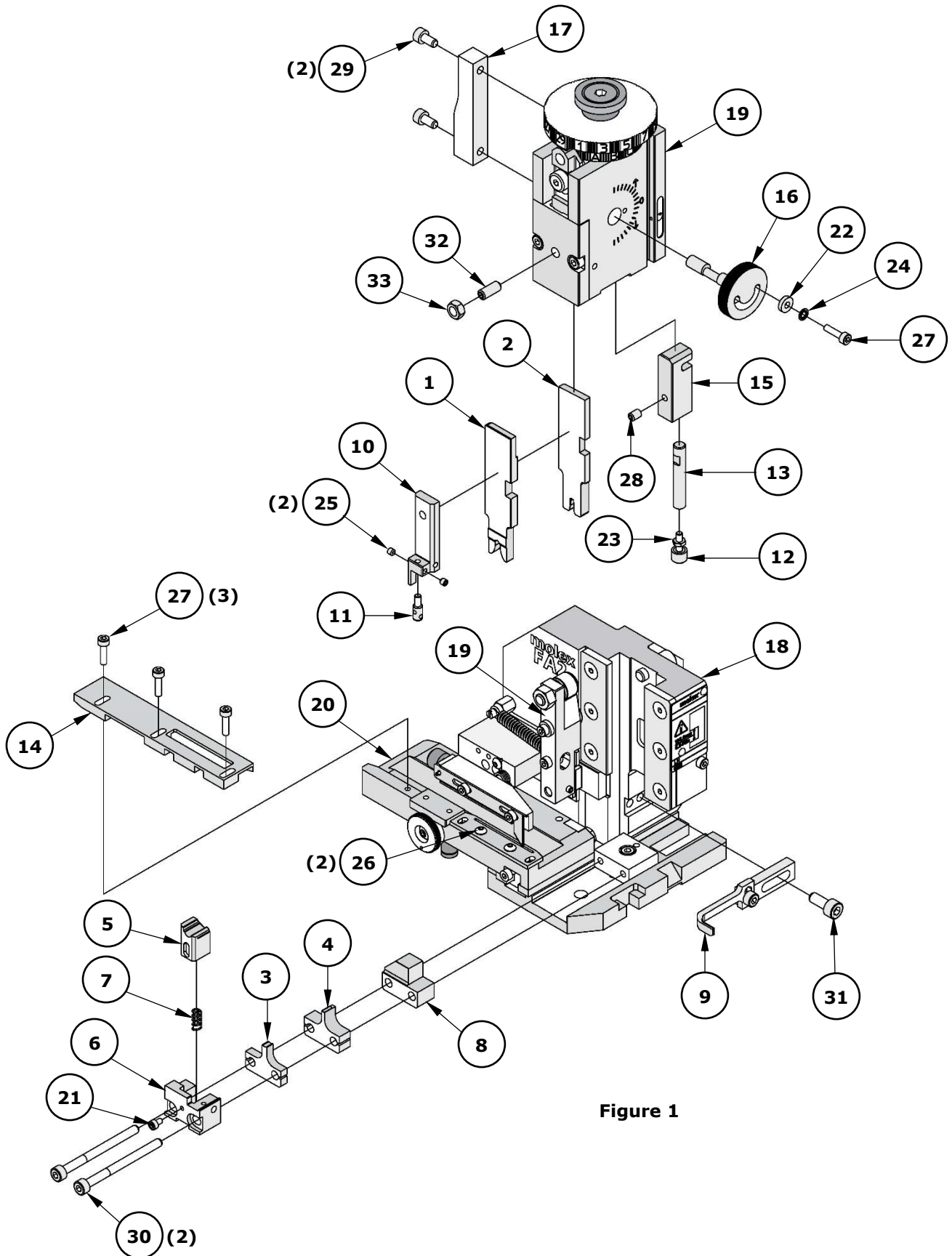
Figure 1

FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 63808-5300 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 1.
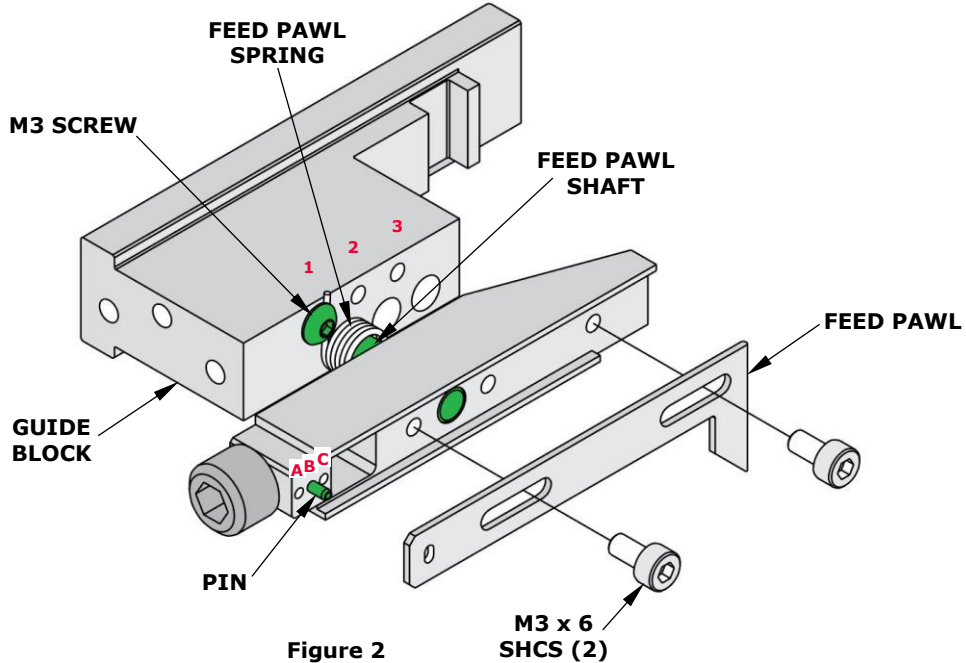- The pin is in position B.

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

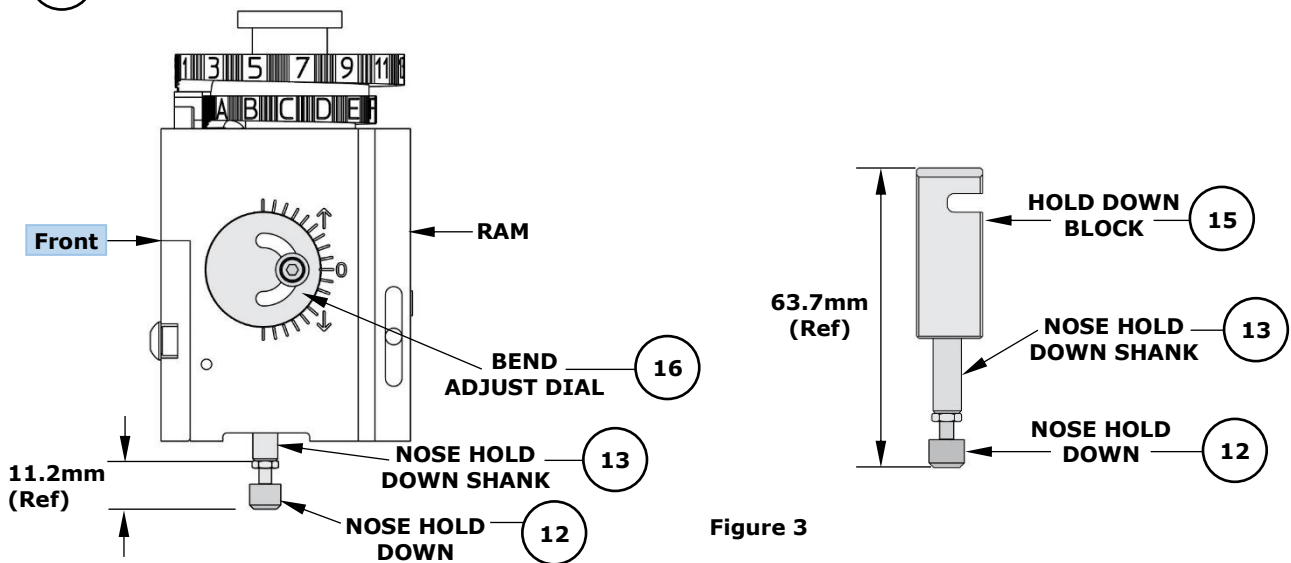Indicates item number on the Parts List and Assembly Drawing

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.
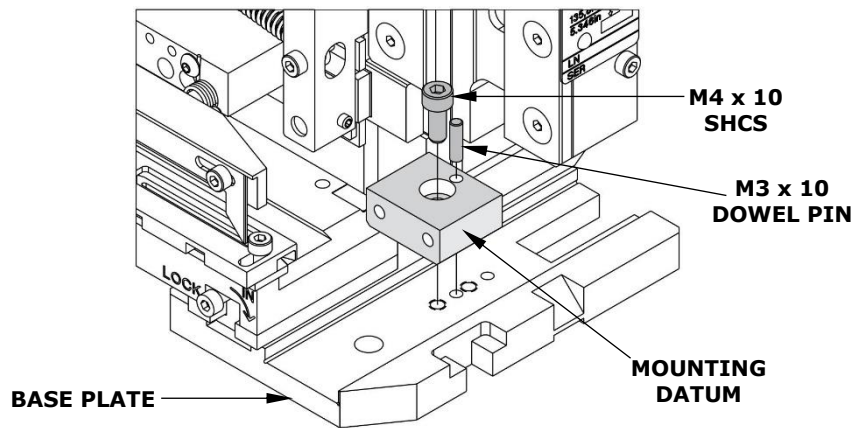

M4 x 10 SHCS

M3 x 10 DOWEL PIN

MOUNTING DATUM

BASE PLATE

Figure 4

Application Tooling Support

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