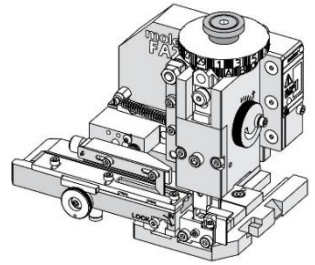**Order Number
63808-0500**

# 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.

Terminal Series No.	Terminal Order No.	Wire Type	Wire Size	Insulation Diameter		Strip Length (Ref)	
			mm²	mm	In.	mm	In.
200096	200096-3101	FLR2X A3ZH	0.35	1.20-1.30	.047-.051	3.50	.140
		MOCAR 125P					

DEFINITION OF TERMS

SECTION K-K

SECTION L-L
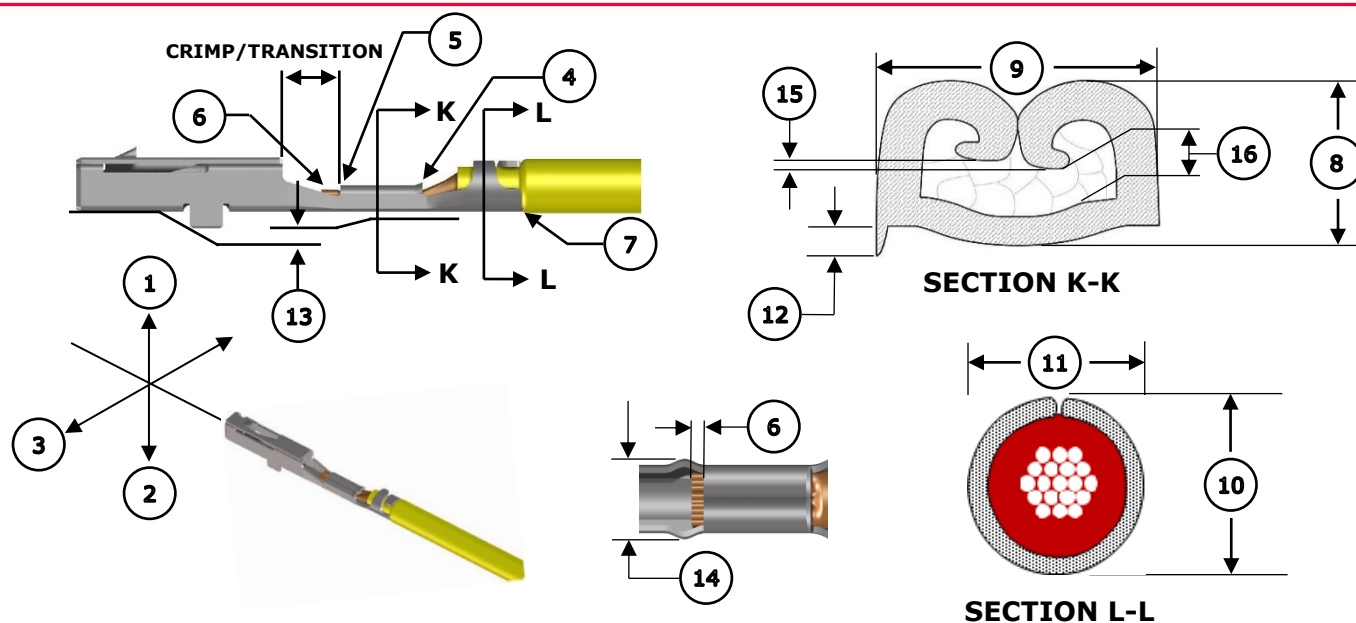
CRIMP SPECIFICATIONS

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

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")				
5. Bell Mouth Front	Not Applicable				
6. Conductor Brush	0.30-0.70mm (.012-.028")				
7. Cut-Off Tab	0.20mm (.008") Max				
Conductor Crimp	**Wire Type**	**Wire Size**	**8. Crimp Height**		**9. Crimp Width**	
	FLR2X A3ZH	0.35mm²	0.76-0.80mm	.026-.027 in.	0.97-1.17mm	.040-.042 in.
	MOCAR 125P					
Insulation Crimp	**Wire Type**	**Wire Size**	**10. Crimp Height**		**11. Crimp Width**	
	FLR2X A3ZH	0.35mm²	1.40mm max	.055 in. max	1.17-1.37mm	.046-.054 in.
	MOCAR 125P					
Pull Force	**Wire Type**	**Wire Size**	**Minimum Force**			
	FLR2X A3ZH	0.35mm²	60 N	13.5 lb.	To be measured with no influence from the insulation crimp.	
	MOCAR 125P	0.35mm²	50 N	11.3 lb.		
12. Conductor Anvil Flash	0.15mm (.006") Max				
13. Insulation Grip Step	0.00±0.10mm (.000±.004")				
14. Crimp Bulge	1.25mm (.049") Max				
Misc.	**Wire Type**	**Wire Size**	**15. Wing Dissymmetry**		**16. Space Between Wing Tips and Crimp Bottom**	
	FLR2X A3ZH	0.35mm²	0.10mm Max	.004 in. Max	0.015mm Min	.0005 in. Min
	MOCAR 125P					

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

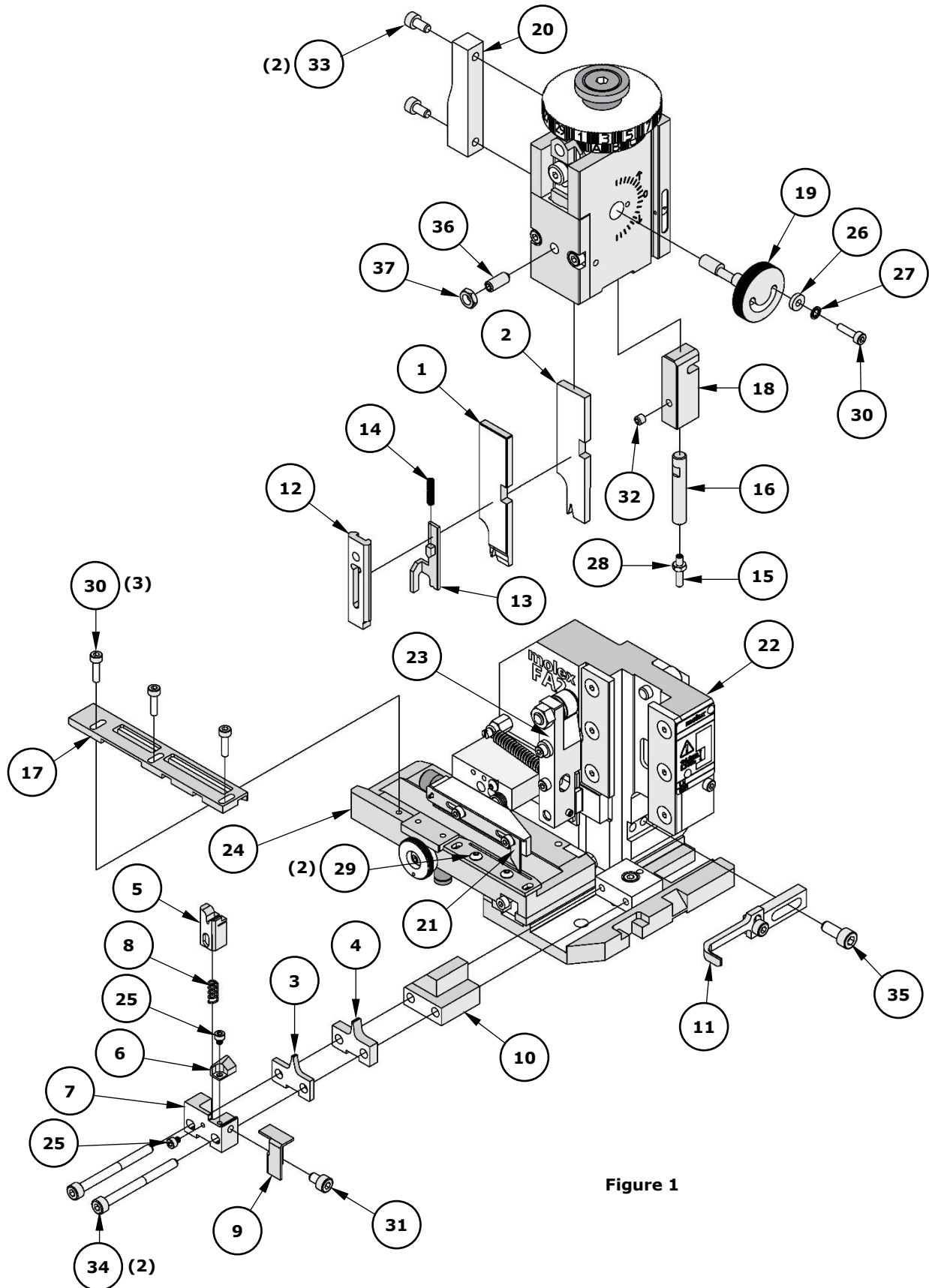| FA2 Applicator 63808-0500				
Item	Order No.	Engineering No.	Description	Quantity
Perishable Tooling				
	63808-0570	63808-0570	Tool Kit (All "Y" Items)	Ref
1	63454-0162	63454-0162	Insulation Punch	1 Y
2	63457-0112	63457-0112	Conductor Punch	1 Y
3	63456-0110	63456-0110	Insulation Anvil	1 Y
4	63455-0139	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	63443-7539	63443-7539	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.
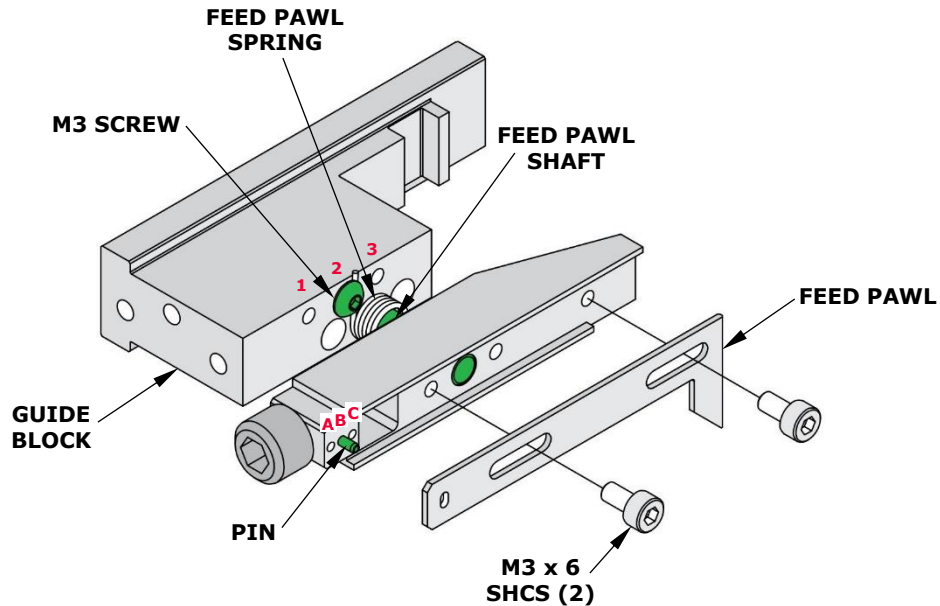- The pin is in position B.

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

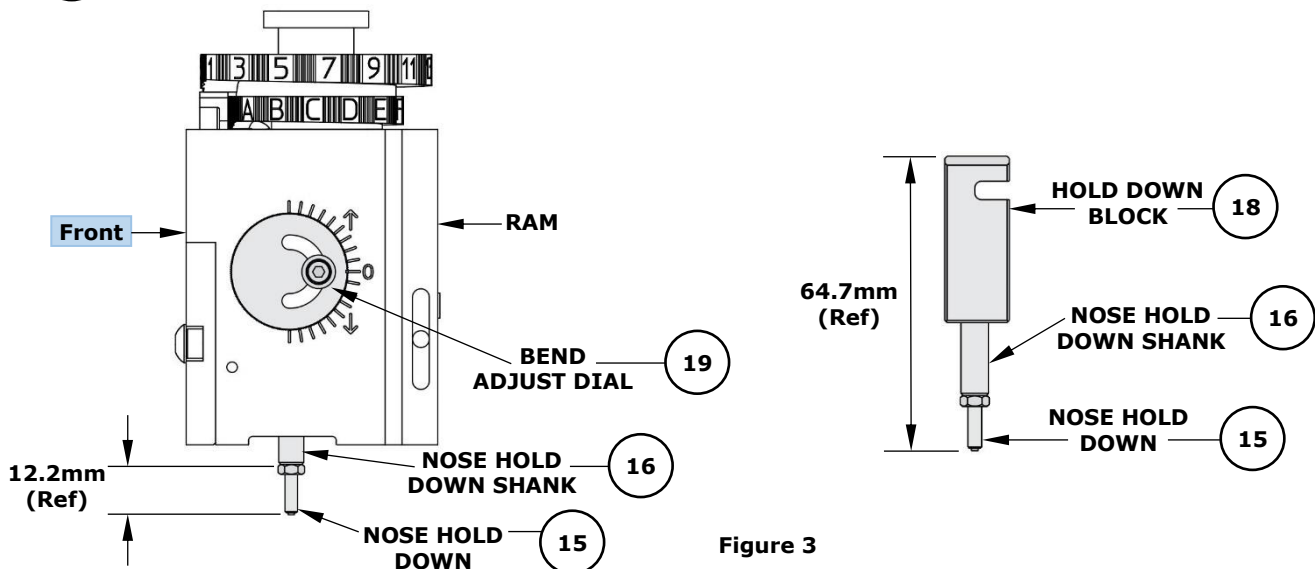Indicates item number on the Parts List and Assembly Drawing

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.
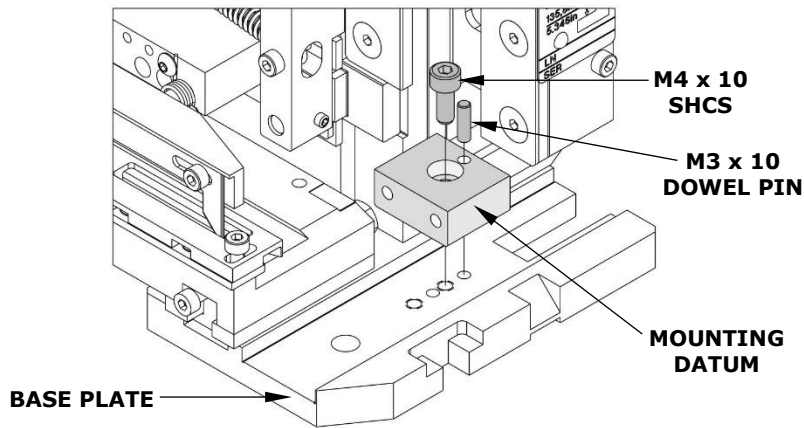

M4 x 10 SHCS

M3 x 10 DOWEL PIN

MOUNTING DATUM

BASE PLATE

Figure 4

Application Tooling Support

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