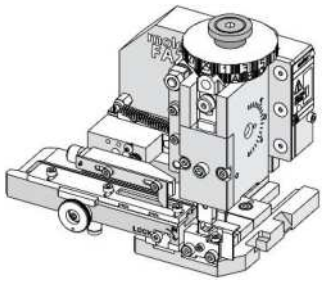
Order Number
213069-0100

molex®

Application Tooling Specification



FEATURES

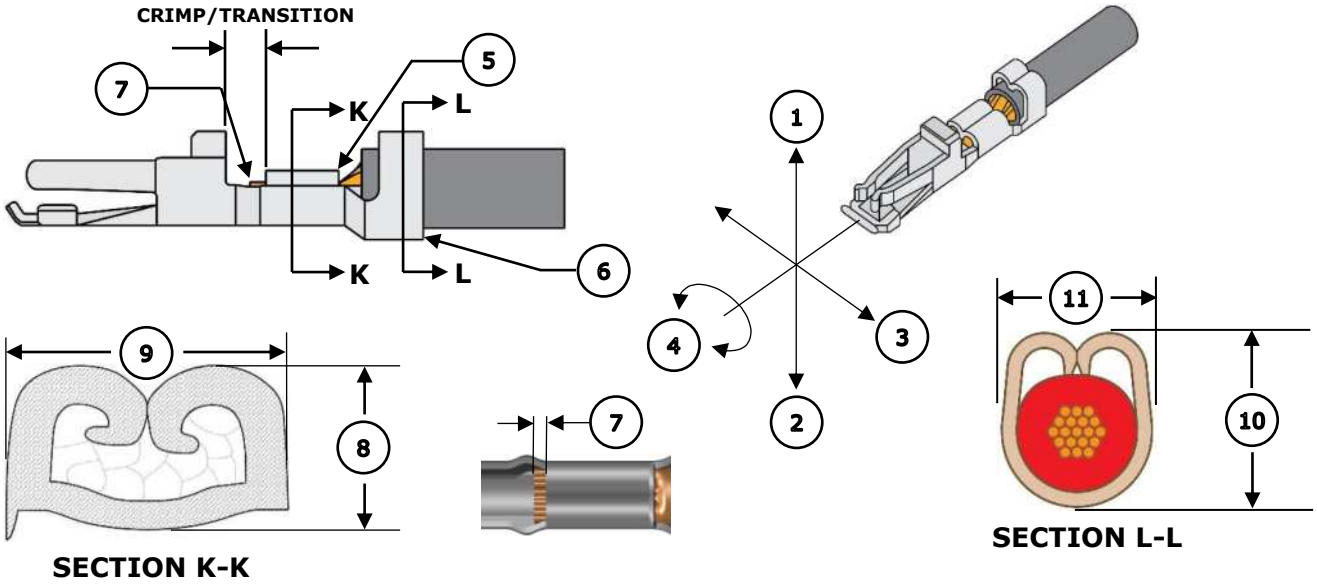
- Applicator designed to industry-standard mounting and 135.80mm (5.346") shut height
- Quick setup time; plus, the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of .015mm (.0006") for conductor crimp height and .025mm (.001") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other
- The insulation support tabs may penetrate the wire insulation material, which does not conform to IPC/WHMA-A-620 standards
- Directly adapts to most automatic wire processing machines

SCOPE

Products: Micro-Lock PLUS 22-26 AWG UL1061 and 0.30mm^2 AVSS Wire.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length	
		Size	Type	mm	In.	mm	In.
505572	505572-1000 505572-1100 505572-1200 505572-1300	22 AWG	UL1061	0.90-1.50	.035-.059	1.90-2.10	.075-.083
		24 AWG					
		26 AWG					
		0.30mm^2	AVSS	0.90-1.50	.035-.059	1.90-2.10	.075-.083

DEFINITION OF TERMS



CRIMP SPECIFICATIONS

Feature	Requirement				
1. Bend Up	4° Max				
2. Bend Down	2° Max				
3. Twist	3° Max				
4. Roll	6° Max				
5. Bell Mouth	0.10-0.45mm (.004-.018”)				
6. Cut-Off Tab	0.10mm (.004”) Max				
7. Conductor Brush	0.10-0.65mm (.004-.026”)				
Conductor Crimp	**Wire Size**	**8. Crimp Height**		**9. Crimp Width (REF)**	
	22 AWG	0.78-0.83mm	.031-.033 in.	1.20mm	.047 in.
	24 AWG	0.70-0.75mm	.028-.030 in.		
	26 AWG	0.65-0.70mm	.026-.028 in.		
	0.30mm^2	0.78-0.83mm	.031-.033 in.		
Insulation Crimp	**Wire Size**	**10. Crimp Height (REF)**		**11. Crimp Width (REF)**	
	22 AWG	1.74mm	.069 in.	1.50mm	.059 in.
	24 AWG	1.66mm	.065 in.		
	26 AWG	1.57mm	.062 in.		
	0.30mm^2	1.79mm	.070 in.		
Pull Force	**Wire Size**	**Minimum Force**			
	22 AWG	39.2 N	8.8 lb.	To be measured with no influence from the insulation crimp.	
	24 AWG	29.4 N	6.6 lb.		
	26 AWG	19.6 N	4.4 lb.		
	0.30mm^2	39.2 N	8.8 lb.		

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 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

Applicator 213069-0100				
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	213069-0170	213069-0170	Tool Kit (All "Y" Items)	Ref
1	200220-1502	200220-1502	Insulation Punch	1 Y
2	200216-1202	200216-1202	Conductor Punch	1 Y
3	200221-1401	200221-1401	Insulation Anvil	1 Y
4	200217-1202	200217-1202	Conductor Anvil	1 Y
5	63443-0136	63443-0136	Cut-Off Plunger	1 Y
6	63443-0119	63443-0119	Cutting Insert	1 Y
Non-Perishable Components				
7	63443-0118	63443-0118	Front Plunger Retainer	1
8	11-24-1067	4996-4	Cut-Off Plunger Spring	1
9	63443-0117	63443-0117	Front Scrap Chute	1
10	63443-0090	63443-0090	Wire Stop Assembly	1
11	200213-0624	200213-0624	Anvil Mount	1
12	63443-2806	63443-2806	Front Plunger Striker	1
13	63443-2905	63443-2905	Wire Hold Down Plunger	1
14	63600-0021	63600-0021	Wire Hold Down Spring	1
15	63443-4716	63443-4716	Terminal Guide	1
16	63443-7006	63443-7006	Terminal Hold Down	1
17	63808-0228	63808-0228	Nose Hold Down Shank	1
18	63600-5614	63600-5614	Hold Down Spring	1
19	63808-0226	63808-0226	Hold Down Block	1
20	63808-0224	63808-0224	Stop Plate	1
21	63443-4409	63443-4409	Feed Cam	1
22	63443-4603	63443-4603	Carrier Cover	1
23	63808-0249	63808-0249	Feed Pawl	1
Frame				
24	63808-0200	63808-0200	Applicator Core	1
25	63808-0191	63808-0191	Track Assembly	1
26	63808-0197	63808-0197	Mechanical Feed Assembly	1
Hardware				
27	—	—	M2.5 x 3 SHCS	2*
28	—	—	M3 x 6 BHCS	2*
29	—	—	M3 x 8 SHCS	1*
30	—	—	M3 x 12 SHCS	3*
31	—	—	M4 x 6 SSS	1*
32	—	—	M4 x 6 SHCS	1*
33	—	—	M4 x 8 FHCS	1*
34	—	—	M4 x 8 SHCS	2*
35	—	—	M4 x 35 SHCS	2*
36	—	—	M5 x 12 SHCS	1*
37	—	—	#10-32UNF x .25" BHCS	1*

*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.

ASSEMBLY DRAWING

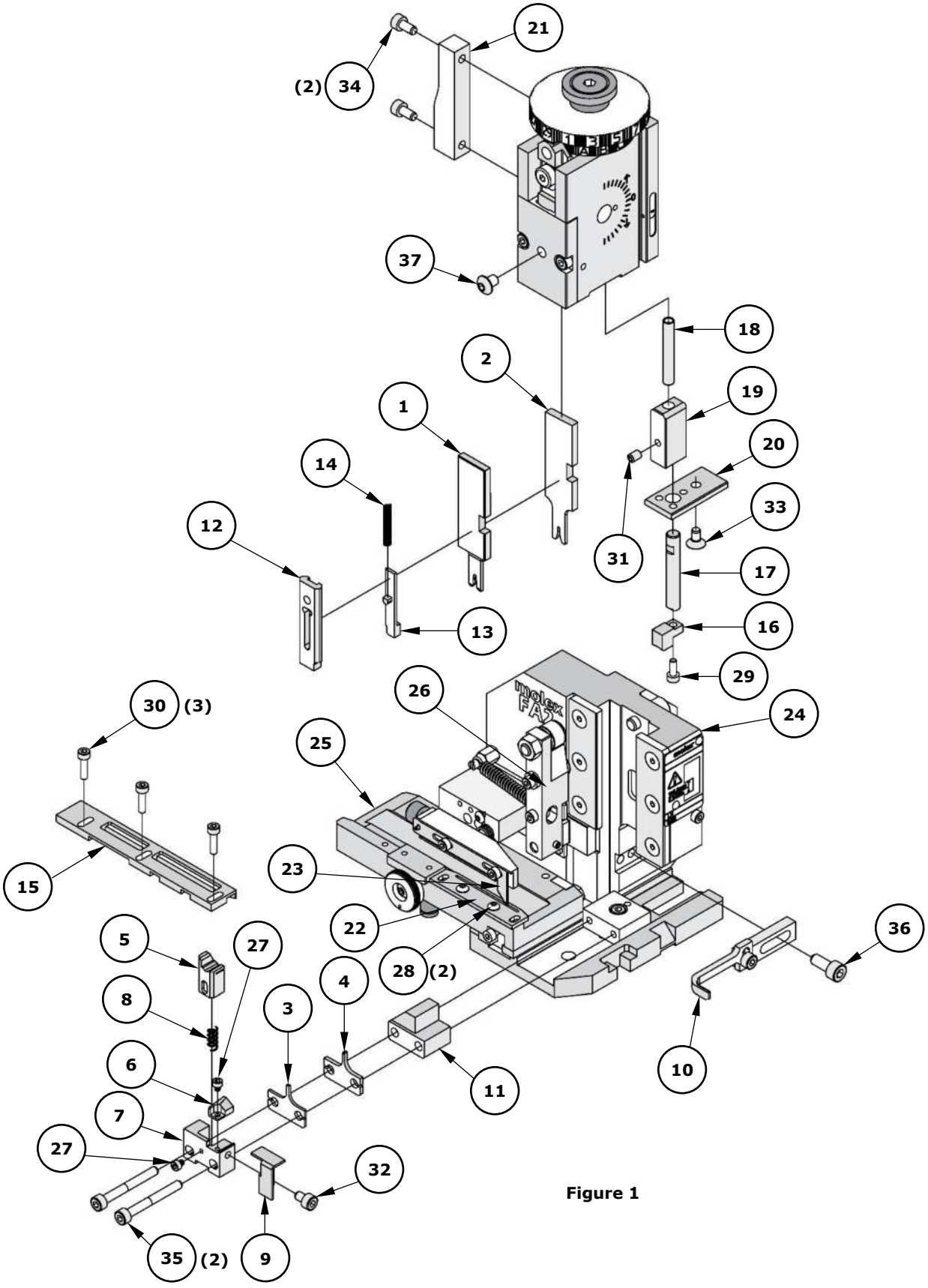


Figure 1

FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 213069-0100 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 B.

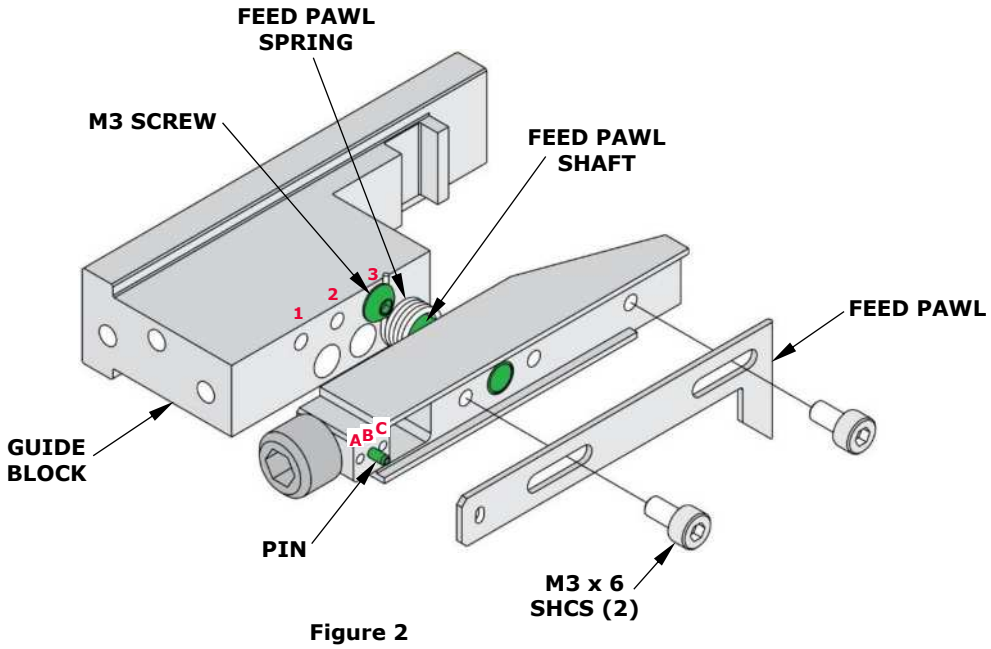


Figure 2

Note: Each applicator is configured and tested by Molex prior to shipping, and the above settings were used to produce the included sample crimps.

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.

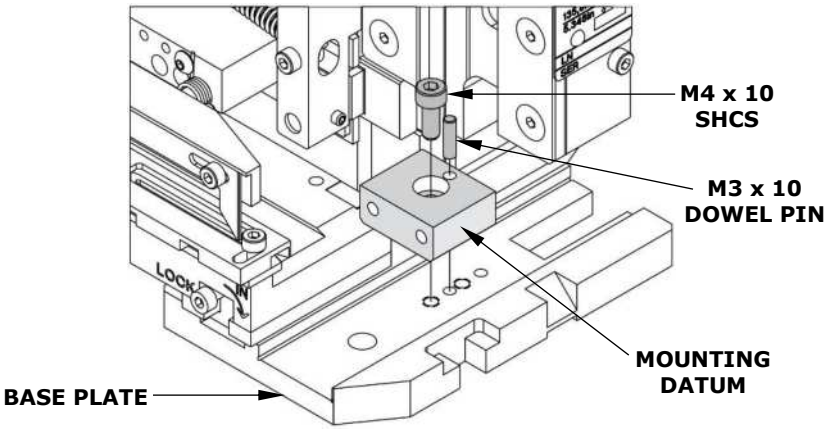


Figure 4

Application Tooling Support

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

Molex is a registered trademark of Molex, LLC in the United States of America and may be registered in other countries; all other trademarks listed herein belong to their respective owners.