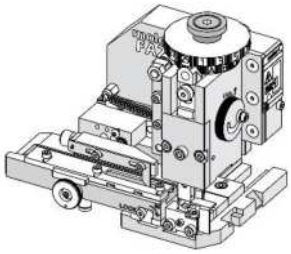
Order Number
213069-4800

molex

Application Tooling Specification



FEATURES

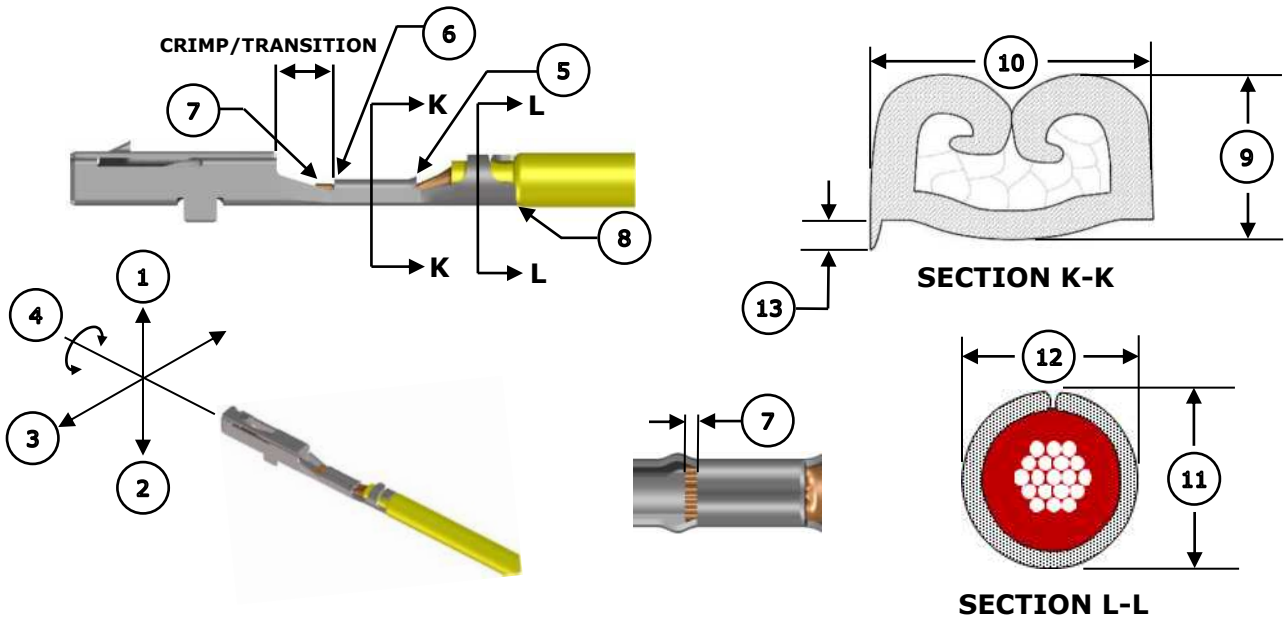
- Applicator designed to industry-standard mounting and 135.80mm (5.346”) shut height
- Quick setup time; plus, the crimp height, track and feed adjustments can be set without removing the applicator from the press
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of 0.015mm (.0006”) for conductor crimp height and 0.025mm (.001”) for insulation height
- 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: DuraClik Robust (025 Receptacle), 0.30mm² and 0.50mm² AVSS Wire.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter		Strip Length	
		Wire Type	Size	mm	In.	mm	In.
503116	503116-0102	AVSS	0.30mm²	1.40-1.50	.055-.059	4.00	.157-.177
		AVSS	0.50mm²	1.60-1.70	.063-.067	4.00	.157-.177

DEFINITION OF TERMS



The above terminal drawing is a generic terminal representation. It is not an image of a terminal listed in the scope.

CRIMP SPECIFICATIONS

Feature	Requirement					
1. Bend Up	2° Max					
2. Bend Down	1° Max					
3. Twist	4° Max					
4. Roll	6° Max					
5. Bell Mouth Rear	0.35-0.65mm (.014-.026”)					
6. Bell Mouth Front	Not Applicable					
7. Conductor Brush	0.10-1.00mm (.004-.039”)					
8. Cut-Off Tab	0.20mm (.008”) Max					
Conductor Crimp	**Wire Type**	**Wire Size**	**9. Crimp Height**		**10. Crimp Width**	
	AVSS	0.30mm²	0.90-0.95mm	.035-.037 in.	1.70mm Max	.067 Max
	AVSS	0.50mm²	0.94-1.04mm	.037-.041 in.	1.70mm Max	.067 Max
Insulation Crimp	**Wire Type**	**Wire Size**	**11. Crimp Height**		**12. Crimp Width**	
	AVSS	0.30mm²	1.90-1.95mm	.075-.077 in.	1.70mm Max	.067 Max
	AVSS	0.50mm²	2.05-2.15mm	.081-.085 in.	1.70mm Max	.067 Max
Pull Force	**Wire Type**	**Wire Size**	**Minimum Force**			
	AVSS	0.30mm²	50 N	11.2 lb.	To be measured with no influence from the insulation crimp.	
	AVSS	0.50mm²	70 N	15.7 lb.		
13. Conductor Anvil Flash	0.10mm (.004”) Max					

NOTES

Applicator Notes for Wire Processor Performance

- In the event the insulation grips 'flag over' or do not provide adequate forming to the insulation wire diameter for strain relief, it is recommended to reduce machine and/or swivel speed to achieve the desired result.

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 213069-4800				
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
Perishable Tooling				
	213069-4870	213069-4870	Tool Kit (All "Y" Items)	Ref
1	200220-1651	200220-1651	Insulation Punch	1 Y
2	200216-1605	200216-1605	Conductor Punch	1 Y
3	200217-1603	200217-1603	Conductor Anvil	1 Y
4	63443-0136	63443-0136	Cut-Off Plunger	1 Y
Non-Perishable Components				
5	63443-0118	63443-0118	Front Plunger Retainer	1
6	63443-0119	63443-0119	Cutting Insert	1
7	11-24-1067	4996-4	Cut-Off Plunger Spring	1
8	63443-0117	63443-0117	Front Scrap Chute	1
9	200213-0024	200213-0024	Anvil Mount	1
10	63443-0090	63443-0090	Wire Stop Assembly	1
11	63443-2806	63443-2806	Front Plunger Striker	1
12	63443-2912	63443-2912	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	63443-4702	63443-4702	Terminal Guide	1
17	63443-7403	63443-7403	Hold Down Block	1
18	63808-0229	63808-0229	Bend Adjust Dial	1
19	63443-4404	63443-4404	Feed Cam	1
Frame				
20	63808-0200	63808-0200	Applicator Core	1
21	63808-0197	63808-0197	Mechanical Feed Assembly	1
22	63808-0191	63808-0191	Track Assembly	1
Hardware				
23	—	—	M2.5 x 4 SHCS	2*
24	—	—	M3 Flat Washer Hard	1*
25	—	—	M3 Hex Nut	1*
26	—	—	M3 Inner Tooth Lock Washer	1*
27	—	—	M3 x 6 BHCS	2*
28	—	—	M3 x 12 SHCS	4*
29	—	—	M4 x 4 SSS	1*
30	—	—	M4 x 6 SHCS	1*
31	—	—	M4 x 8 SHCS	2*
32	—	—	M4 x 40 SHCS	2*
33	—	—	M5 x 12 SHCS	1*
34	—	—	M5 by 10 Long Flat Point SSS	1*
35	—	—	M5 Hex Jam Nut	1*
*Fastener parts can be purchased through most industrial suppliers by using the description in the table above.				

ASSEMBLY DRAWING

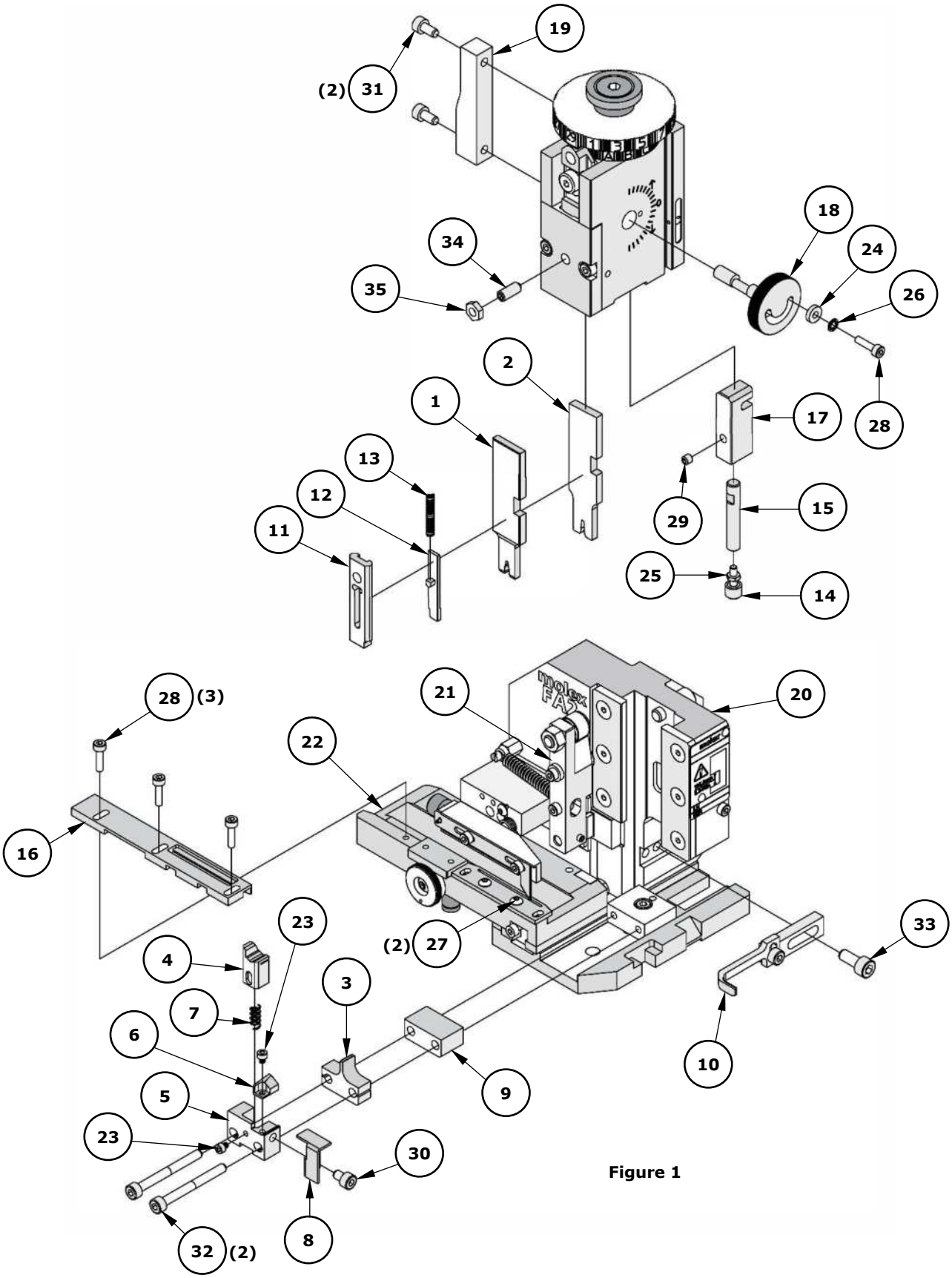


Figure 1

FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 213069-4800 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 2.
- The pin is in position B.

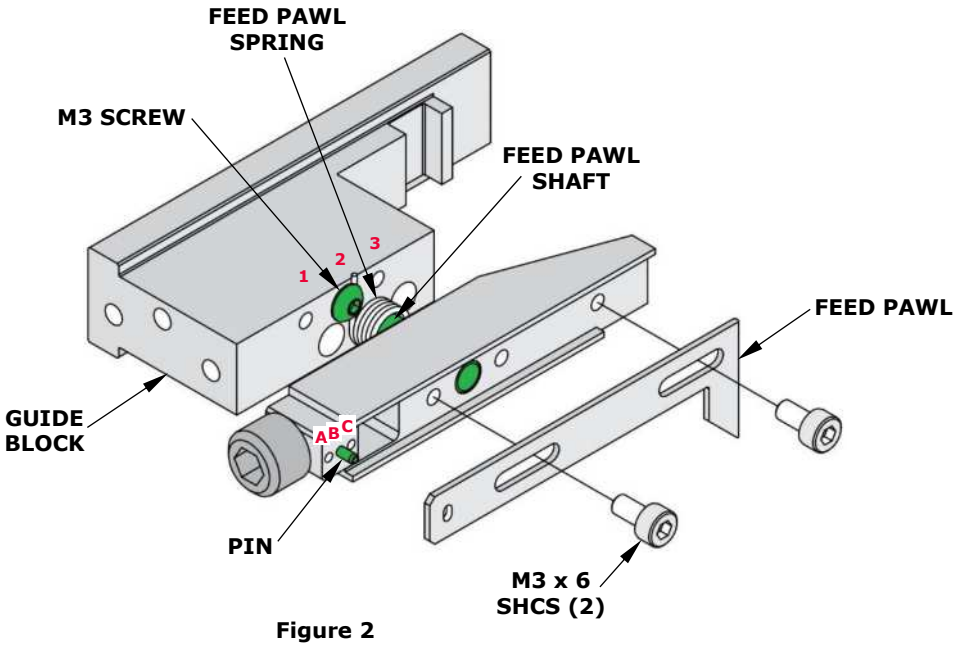
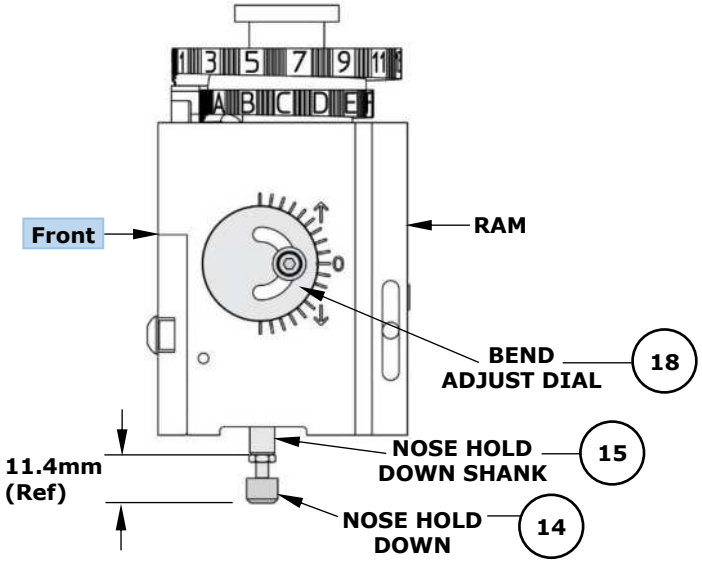


Figure 2

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



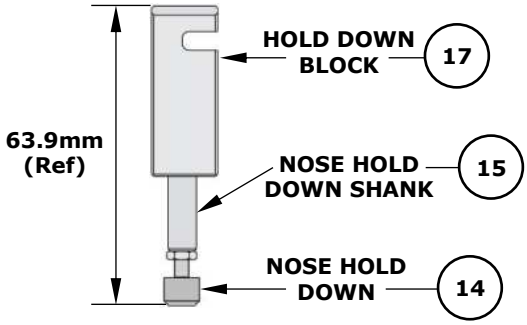


Figure 3

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.

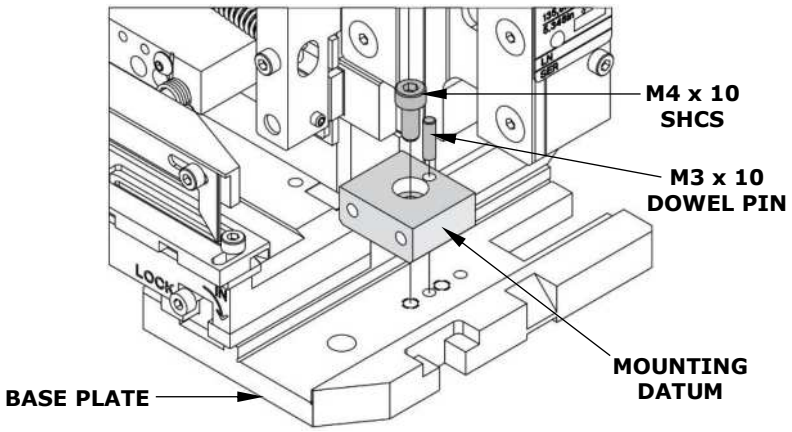


Figure 4

Application Tooling Support

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

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