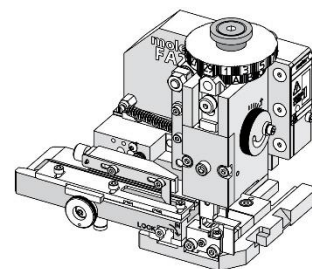


Order Number
213069-7600



Application Tooling Specification



FEATURES

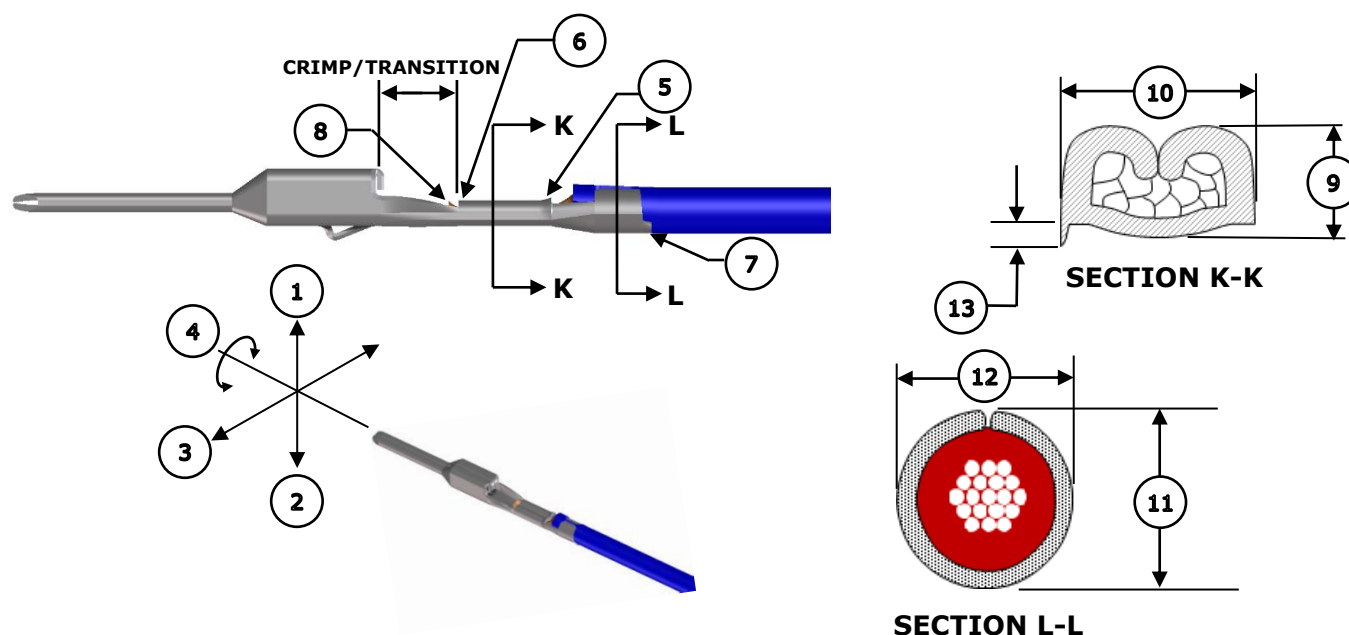
- Applicator designed to industry-standard mounting and 135.80mm (5.346") shut height.
- Quick setup time plus, the crimp height, track, and feed adjustments can be set without removing the applicator from the press.
- Fine adjustment allows users to achieve target with little effort by adjusting in increments of 0.015mm (.0006") for conductor crimp height and 0.025mm (.001") for insulation height.
- Fine adjustment of the bend is achieved using an adjustable plastic-tipped bumper.
- 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: Squba 1.8mm WTW Plug and Receptacle Crimp Terminals,
26 AWG UL1007/UL1569 wires.

Terminal Series No.	Terminal Order No.	Wire		Insulation Diameter				Strip Length	
				IPC/WHMA-A-620 (2)		Terminal (3)			
		AWG	Style (1)	mm	In.	mm	In.	mm	In.
204226	204226-1002	26	UL1007 UL1569	0.89-1.30	.035-.051	0.95-1.40	.037-.055	3.5-4.0	.14-.16
204301	204301-0002								
<p>(1) Wire Style shown was used to validate the crimp tooling. It is the responsibility of the end user to choose the wire style that is appropriate for their needs. Other wire styles may not meet the same range for IPC/WHMA-A-620.</p> <p>(2) To achieve IPC/WHMA-A-620 insulation crimps, use this Insulation Diameter range.</p> <p>(3) Insulation Diameter per Squba Product Specification 2042200000-PS, Section 4.2.</p>									

CAUTION: Lubrication must be used to prevent terminals from sticking in the conductor punch. Use 63801-7240 oiler or equivalent.

DEFINITION OF TERMS**CRIMP SPECIFICATIONS**

Refer to the following crimp specifications:

Feature	Requirement					
1. Bend Up	3° Max					
2. Bend Down	3° Max					
3. Twist	3° Max					
4. Roll	3° Max					
5. Rear Bell Mouth	0.55-0.75mm (.022-.030 in.)					
6. Front Bell Mouth	Not Applicable					
7. Cut-Off Tab**	0.25mm (.010”) Max					
8. Conductor Brush	0.30-0.70mm (.012-.028 in.) Max					
9. Conductor Crimp Height	Terminal Series No.	Wire Type	Wire Size	Crimp Height		
	204226-1002 204301-0002	UL1007 UL1569	26 AWG	0.60-0.66mm	.024-.026 in.	
10. Conductor Crimp Width	0.86-0.92mm (.034-.036 in.)					
Wire Pull-out Force	Terminal Series No.	Wire Type	Wire Size	Minimum Force		To be measured with no influence from the insulation crimp.
	204226-1002 204301-0002	UL1007 UL1569	26 AWG	13.4 N	3 lb.	
11. Insulation Crimp Height	Terminal Series No.	Wire Type	Wire Size	Crimp Height		
	204226-1002 204301-0002	UL1007 UL1569	26 AWG	1.45-1.55mm	.057-.061 in.	
12. Insulation Crimp Width	1.30-1.39mm (.051-.055 in.)					
13. Conductor Anvil Flash	0.09mm (.004”) Max					

**** See Applicator Notes and Terminal Feed Notes on page 3.**

NOTES

Applicator Notes

The plug terminals (204226 series) are extremely delicate. This section lists suggestions to help ensure smooth operation of this applicator:

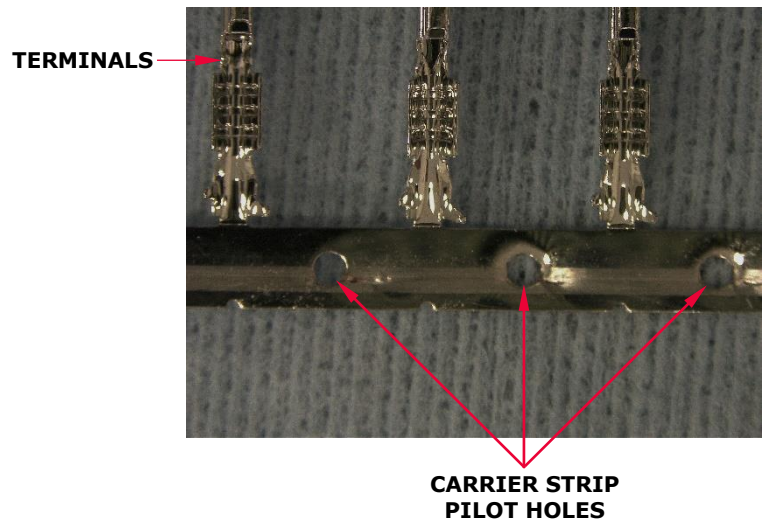
- **Caution:** The wire stop on this applicator (Order Number 63443-0090) assists in removing terminals that stick into the crimp tooling and should not be readjusted.
- **Lubrication must be used to prevent terminals from sticking in the conductor punch.** See General Notes below.
- The terminal feed and track may need cleaning every 10,000 cycles to reduce jamming.

****** Generally, a short or “zero” cut-off tab is desired. However, the tab on these terminals is extremely delicate. By maintaining a cut-off tab length of approximately 0.08-0.15mm, the terminals can feed through the cut-off plunger with minimal bending or jamming.

Terminal Feed Notes

Feed jams may occur because of damaged carrier strip pilot holes. This damage can occur because of the following:

- Debris buildup in the track.
- Press speed is set too fast.



Specification Notes

- It is very important that the brush length is consistently within specification for this sealed connector system to work properly.

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 to prevent terminals from sticking in the conductor punch.** Use 63801-7240 oiler or equivalent. The oiler must be positioned so terminals remain straight on the carrier strip.

PARTS LIST

Applicator 213069-7600				
Item	Order No.	Engineering No.	Description	Quantity
Perishable Tooling				
	213069-7670	213069-7670	Tool Kit (All "Y" Items)	REF
1	63454-1304	63454-1304	Insulation Punch	1 Y
2	200216-8604	200216-8604	Conductor Punch	1 Y
3	63445-1328	63445-1328	Insulation Anvil	1 Y
4	63455-0146	63455-0146	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	200213-7546	200213-7546	Anvil Mount	1
11	63443-0090	63443-0090	Wire Stop	1
12	63443-2803	63443-2803	Front Plunger Striker	1
13	63443-2917	63443-2917	Wire Hold Down Plunger	1
14	63600-0021	63600-0021	Wire Hold Down Spring	1
15	63600-5776	63600-5776	Nose Hold Down	1
16	63443-7406	63443-7406	Terminal Hold-Down Mount	1
17	63808-0224	63808-0224	Stop Plate	1
18	63443-4405	63443-4405	Feed Cam	1
19	63443-4720	63443-4720	Terminal Guide	1
20	63443-4603	63443-4603	Carrier Cover - Thin	1
21	203045-0030	203045-0030	Spring, Feed Pawl	1
22	63808-0249	63808-0249	Feed Pawl Narrow	1
Frame				
23	63808-0200	63808-0200	Applicator Core	1
24	63808-0197	63808-0197	Mechanical Feed	1
25	63808-0191	63808-0191	Track Assembly	1
Hardware				
26	—	—	M2.5 by 3 Long SHCS	2*
27	—	—	M3 by 6 Long BHCS	2*
28	—	—	M3 by 12 Long SHCS	3*
29	—	—	M4 by 8 Long FHCS	1*
30	—	—	M3 Hex Nut	1*
31	—	—	M4 by 10 Long SHCS	1*
32	—	—	M4 by 6 Long SHCS	1*
33	—	—	M4 by 8 Long SHCS	2*
34	—	—	M4 by 40 Long SHCS	2*
35	—	—	M5 by 12 Long SHCS	1*
36	—	—	#10-32UNF by .38" Long Set Screw	1*
37	—	—	#10-32UNF Hex Jam Nut	1*
* Available from an industrial supply company.				

ASSEMBLY DRAWING

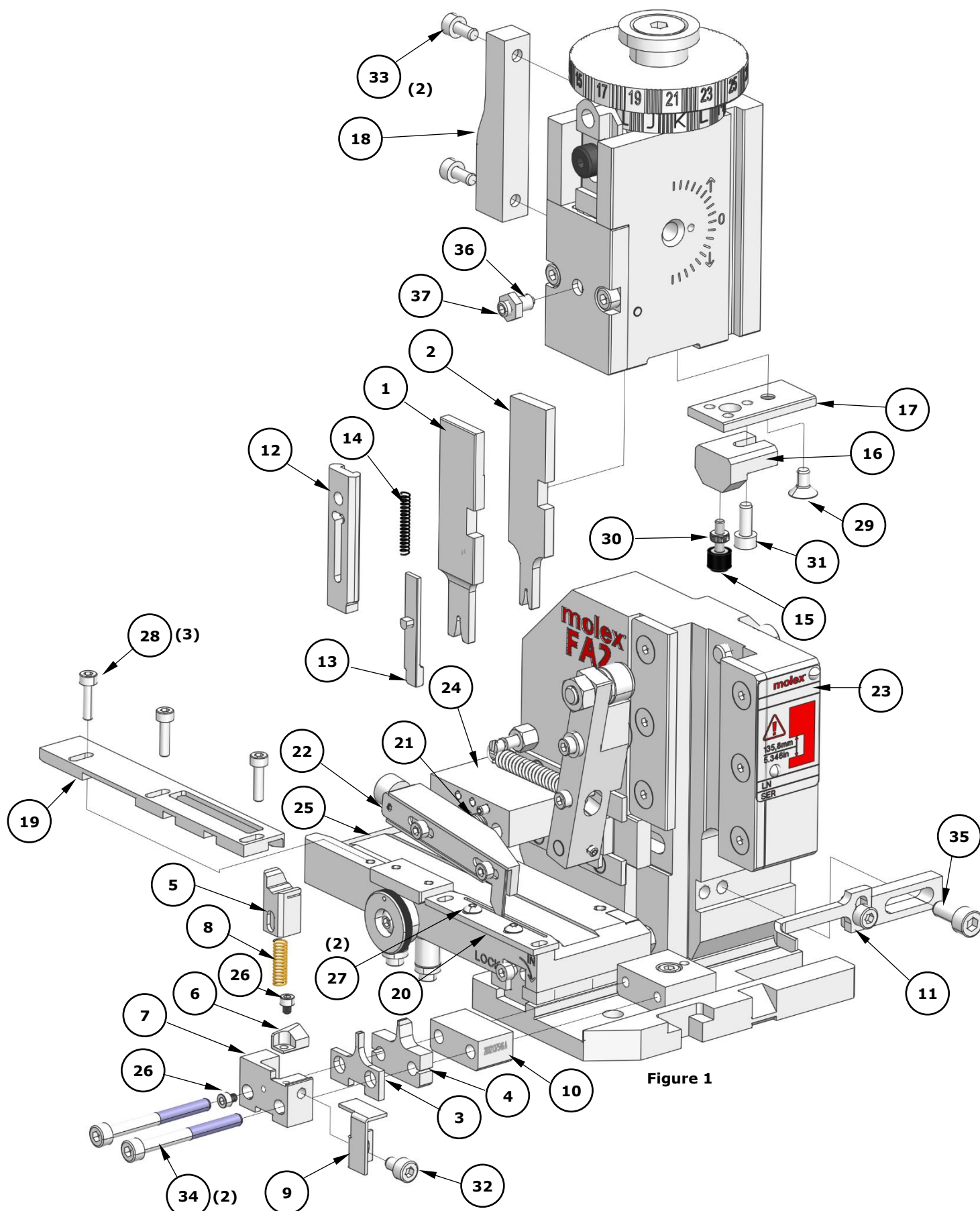


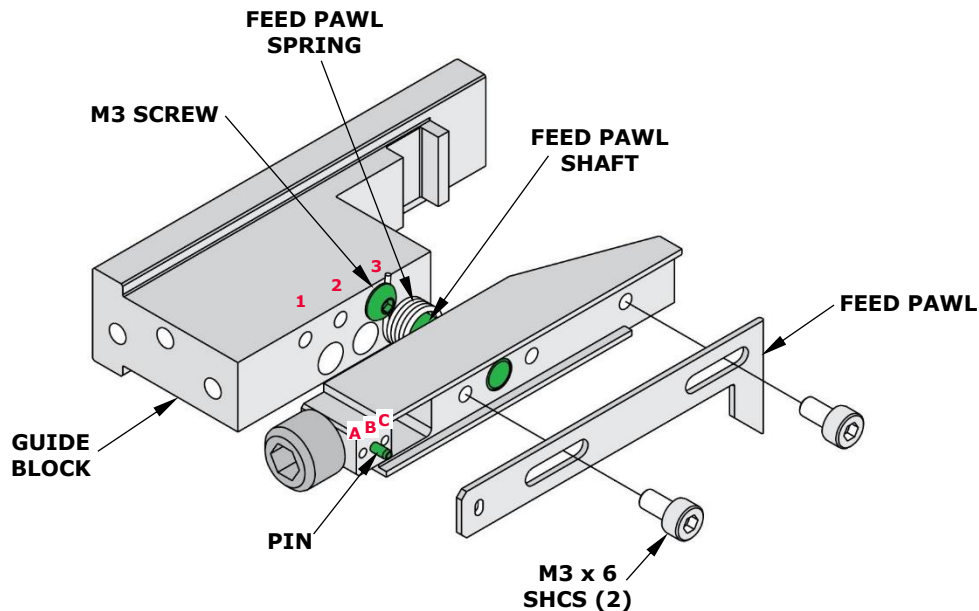
Figure 1

FACTORY SETTINGS

Feed Pawl Assembly

The FA2 applicator number 213069-7600 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.



Note

Figure 2

This information is included as a reference only. 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 3. Do not remove the mounting datum.

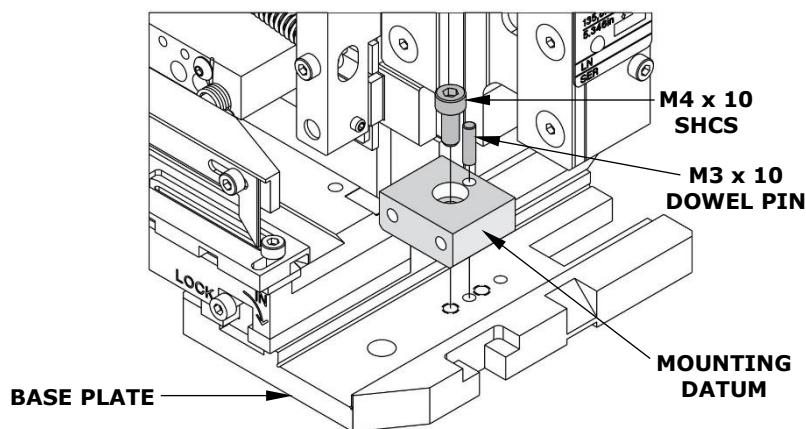
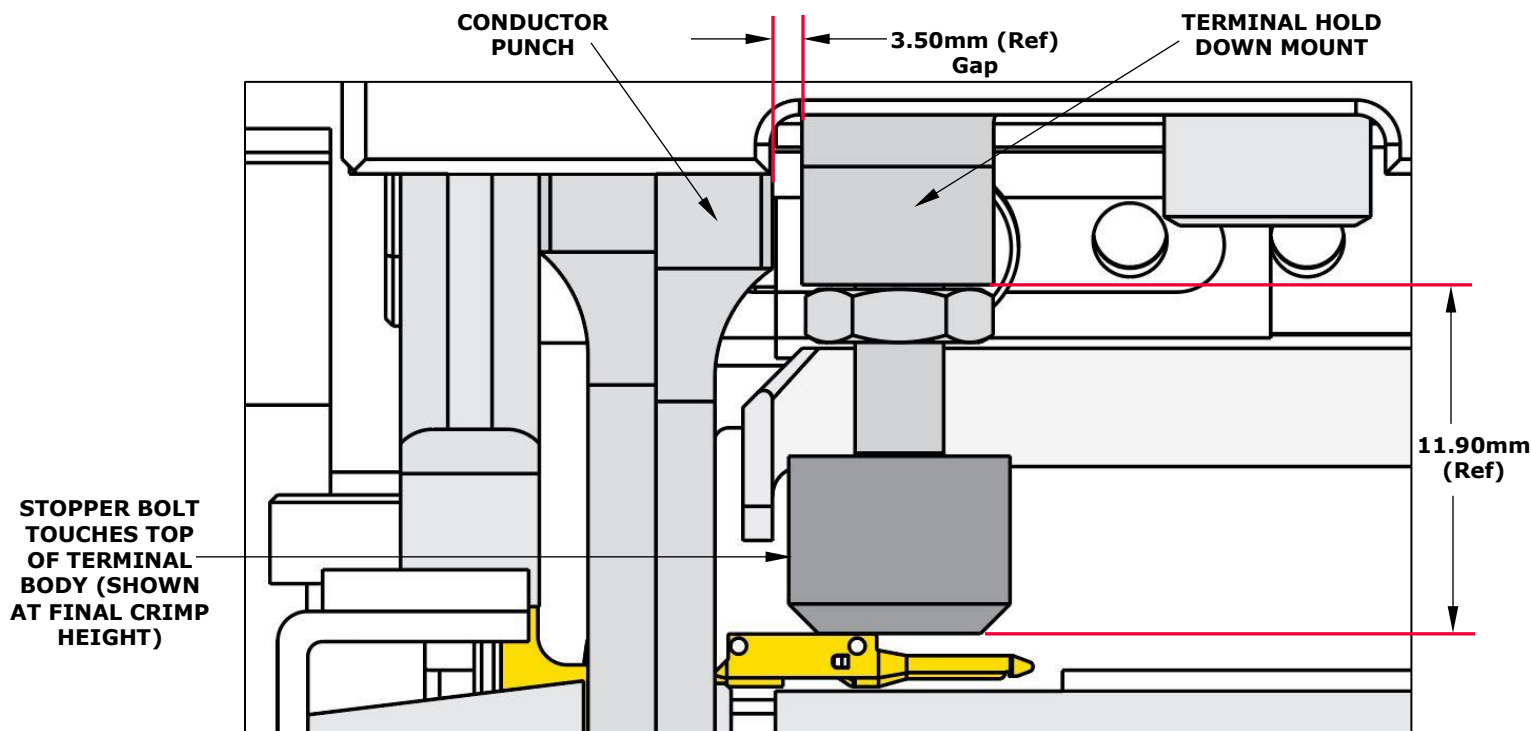


Figure 3

Terminal Hold Down Position

This applicator ships with the following factory settings:



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.

Application Tooling Support

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

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