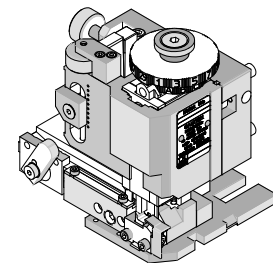**Order Number
63904-3300**

molex

Application Tooling Specification

FEATURES

- Directly adapts to most automatic wire processing machines
- Quick punch removal with the push of a button for fast and easy tooling change
- 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 0.063mm (.0025") for insulation height
- Independent adjustment rings allow users to quickly adjust the conductor or insulation crimp height without affecting each other
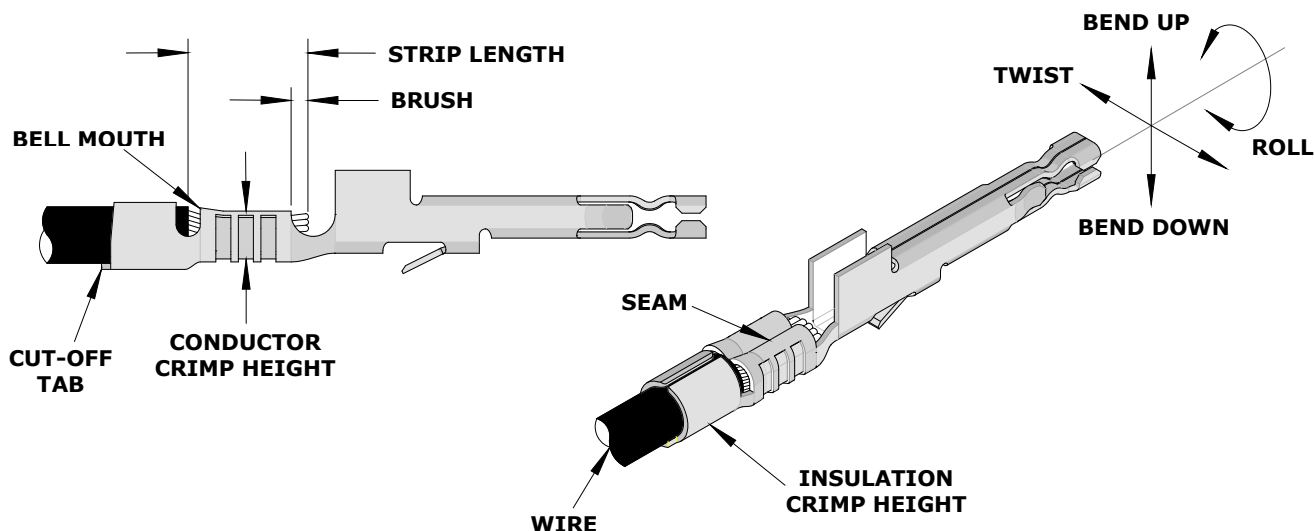
SCOPE

Products: Ultra-Fit Tangless Crimp Terminals, 16-18 AWG (UL1061) Wires.

Terminal Series No.	Terminal Order No.		Wire Size			Insulation Diameter UL1061 Wire is Recommended		Strip Length	
			AWG	mm²	Type	mm	In.	mm	In.
172253	172253-6011	172253-6012	16-18	—	UL1061	1.65-2.00	.065-.079	3.50-4.00	.138-.158
	172253-7023	172253-7024							

Note: Oiler (Order No. 63801-7240) is required to crimp these terminals. See FineAdjust manual (Order No. 63800-4900).

DEFINITION OF TERMS

STRIP LENGTH

BRUSH

BELL MOUTH

BEND UP

TWIST

ROLL

BEND DOWN

SEAM

CUT-OFF TAB

CONDUCTOR CRIMP HEIGHT

INSULATION CRIMP HEIGHT

WIRE

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

CRIMP SPECIFICATION

Terminal Series No.	Bell Mouth		Cut-Off Tab Maximum		Conductor Brush	
	mm	In.	mm	In.	mm	In.
172253	0.30-0.80	.012-.031	0.20	.008	0.00-1.00	.000-.039

Terminal Series No.	Bend Up	Bend Down	Twist	Roll	Punch Width mm (Ref)				Seam
					Conductor		Insulation		
	Degree (Max)		Degree (Max)		mm	In.	mm	In.	
172253	3	3	3	5	2.00	.079	2.40	.094	Seam shall not be open and no wire allowed out of the crimping area

After crimping, the conductor profile should measure the following:

Terminal Series No.	Wire Size		Conductor				Pull Force Minimum	
			Crimp Height		Crimp Width			
	AWG	mm²	mm	In.	mm	In.	N	Lb.
172253	16	—	1.28-1.18	.050-.046	2.00-2.12	.079-.081	68.4	15
	18	—	1.05-0.95	.041-.037	2.00-2.12	.079-.081	68.4	15

Terminal Series No.	Wire Size		Insulation			
			Crimp Height (Max)		Crimp Width (Max)	
	AWG	mm²	mm	In.	mm	In.
172253	16	—	2.20	.087	2.50	.098
	18	—	2.05	.081	2.50	.098

Tool Qualification Notes

1. Pull force should be measured with no influence from the insulation crimp.
2. The above specifications are guidelines to an optimum crimp.
3. Oiler (63801-7240) required to crimp terminals to improve tooling life and also to minimize the crimp extrusions. See 63800-4900 FineAdjust manual.

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 FineAdjust manual.

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

| \	\	\	FineAdjust Applicator 63904-3300	\
Item	**Order No.**	**Engineering No.**	**Description**	**Quantity**
\	\	\	**Perishable Tooling**	\
\	63904-3370	63904-3370	Tool Kit (All "Y" Items)	REF
1	63457-2002	63457-2002	Conductor Punch	1 Y
2	63455-2001	63455-2001	Conductor Anvil	1 Y
3	63454-2404	63454-2404	Insulation Punch	1 Y
4	63445-2411	63445-2411	Insulation Anvil	1 Y
5	63443-0002	63443-0002	Front Cut-Off Plunger	1 Y
6	63443-0012	63443-0012	Front Plunger Retainer	1 Y
\	\	\	**Other Components**	\
7	11-17-0022	1739-21	Hold Down Spring	1
8	11-18-4083	60707-8	Feed Guide	1
9	11-24-1067	4996-4	Cut-Off Plunger Spring	1
10	63443-0009	63443-0009	Front Scrap Chute	1
11	63443-0024	63443-0024	Key	1
12	63443-0090	63443-0090	Wire Stop	1
13	63443-0093	63443-0093	Shank	1
14	63443-1716	63443-1716	Height Spacer (18.60)	1
15	63443-2214	63443-2214	Spacer (14.00)	1
16	63443-2319	63443-2319	Spacer (3.95)	1
17	63443-2802	63443-2802	Front Plunger Striker	1
18	63443-2911	63443-2911	Striker Plunger	1
19	63443-6115	63443-6115	Rear Cover	1
20	63443-7102	63443-7102	Terminal Hold Down	1
21	63600-0021	63600-0021	Striker Plunger Spring	1
\	\	\	**Frame**	\
22	63800-4901	63800-4901	Top	1
23	63801-3281	63801-3281	Base	1
24	63801-4650	63801-4650	Track	1
\	\	\	**Hardware**	\
25	—	—	M3 by 6 Long SHCS	2*
26	—	—	M3 by 6 Long FHCS	1*
27	—	—	M3 by 8 Long SHCS	1*
28	—	—	M4 by 6 Long SHCS	2*
29	—	—	M4 by 12 Long BHCS	2*
30	—	—	M4 by 50 Long SHCS	2*
31	—	—	M5 by 12 Lg SHCS	1*
32	—	—	#10-32 by 3/8"Long Flat Point SSS	1*
33	—	—	#10-32 Hex Jam Nut	1*
\	\	\	* Available from an industrial supply company.	\

ASSEMBLY DRAWING
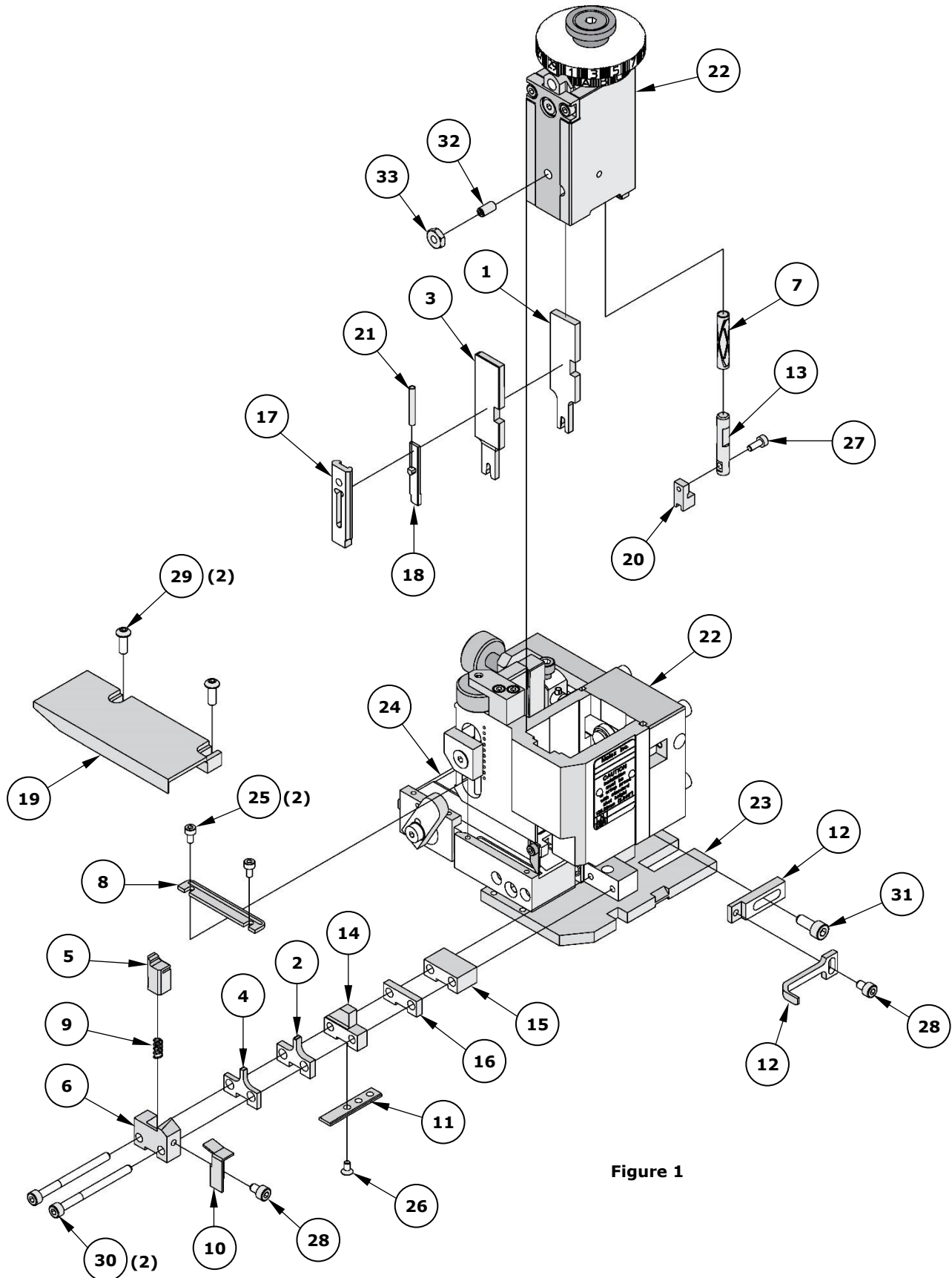
Figure 1

Application Tooling Support

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Website: www.molex.com/applicationtooling