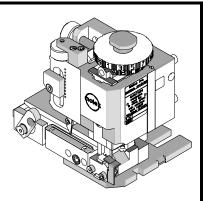
# **FineAdjust Applicator Specification Sheet** Part No. 63868-6000



# **FEATURES**

- Quick punch removal with the push of a button for fast and easy tooling change
- Applicator designed to industry standard mounting and shut height 135.80mm (5.346")
- Quick set-up 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 .063mm (.0025") 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

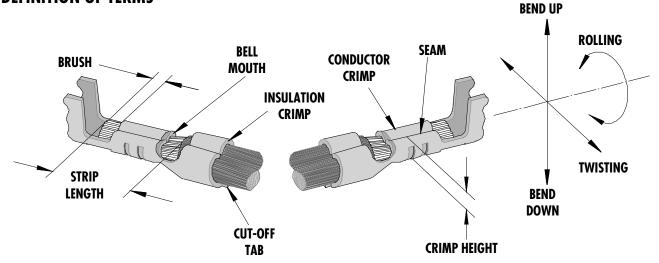
#### **SCOPE**

Products: MX150™Receptacle Terminals 0.50 metric and 22 AWG.

Terminal Series No.	Torminal	Order No.	Wire Size		Insulation	Diameter	Strip Length			
	Terminu	order no.	AWG	mm <sup>2</sup>	mm	ln.	mm	ln.		
33001	33001-3005	33001-3022	22	0.36	1.50-1.65	.059065	4.70-5.60	.185220		
	33001-3005	33001-3022	Metric Only	0.50	1.40-1.60	.055063	4.70-5.60	.185220		
33012	33012-3003	33012-3022	22	0.58	1.50-1.65	.059065	4.70-5.60	.185220		
33012	33012-3003	33012-3022	Metric Only	0.50	1.40-1.60	.055063	4.70-5.60	.185220		
Terminal is designed for thin wall insulation per Ford's specification M11135-A1 M11123-A and M11126-A1/A2/A3										

all insulation per fora's specification MILLI35-AI, MILI2

## **DEFINITION OF TERMS**



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

Release Date: 03-23-06 Revision Date: 06-23-06 UNCONTROLLED COPY

## **CRIMP SPECIFICATION**

Terminal Series No.	Bell n	nouth	Cut-off 1	ab Max.	Conductor Brush			
rerminal Series No.	mm In.		mm	In.	mm	ln.		
33001	0.25-1.25	.010049	0.50	.020	0.15-0.40	.006016		
33012	0.25-1.25	.010049	0.50	.020	0.15-0.40	.006016		
Wire brush to be below top of Conductor Crimp.								

Terminal	Bend up Bend down	Twist Roll	Punch Width (Ref)				C	
Series No.	bend up bend down	I WISI KOII	Conductor		Insulation		Seam Seam shall not be	
Selles NO.	Degree	Degree	mm	In	mm	In	open and no wire allowed	
33001	Crimped terminals and up to 5mm of wi	re past the insulator	1.52	.060	1.86	.073	out of the crimping area	
33012	cutoff tab must freely fit in the Checking Aid,	Part No. 63868-2008	1.52	.060	1.86	.073	our or me empiny area	
							•	

Order Separately

After crimping, the crimp profiles should measure the following:

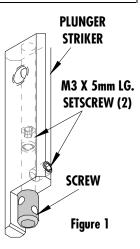
Terminal Wire Size			Conductor				Insulation				Pull Force	
Series No.			Crimp Height		Crimp Width		Crimp Height		Crimp Width		Min.	
Series No.	AWG	mm <sup>2</sup>	mm	In.	mm	In.	mm	In.	mm	In.	N	Lb.
33001	22	0.36	0.95-1.05	.037041	1.50-1.70	.059067	1.75-1.95	.069077	1.80-2.00	.071079	49.8	11.2
33001	Metric Only	0.50	1.05-1.15	.041045	1.50-1.70	.059067	1.70-1.90	.067075	1.80-2.00	.071079	75.6	17.0
33012	22	0.36	0.95-1.05	.037041	1.50-1.70	.059067	1.75-1.95	.069077	1.80-2.00	.071079	49.8	11.2
33012	Metric Only	0.50	1.05-1.15	.041045	1.50-1.70	.059067	1.70-1.90	.067075	1.80-2.00	.071079	75.6	17.0

- 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.

#### Adjusting the Wire Bend Angle (See Item17 in parts list and assembly drawing.)

**Note:** If the <u>Wire Bend</u> is present after crimping use the following method to remove the bend. This tooling may not be necessary for all wire gauges.

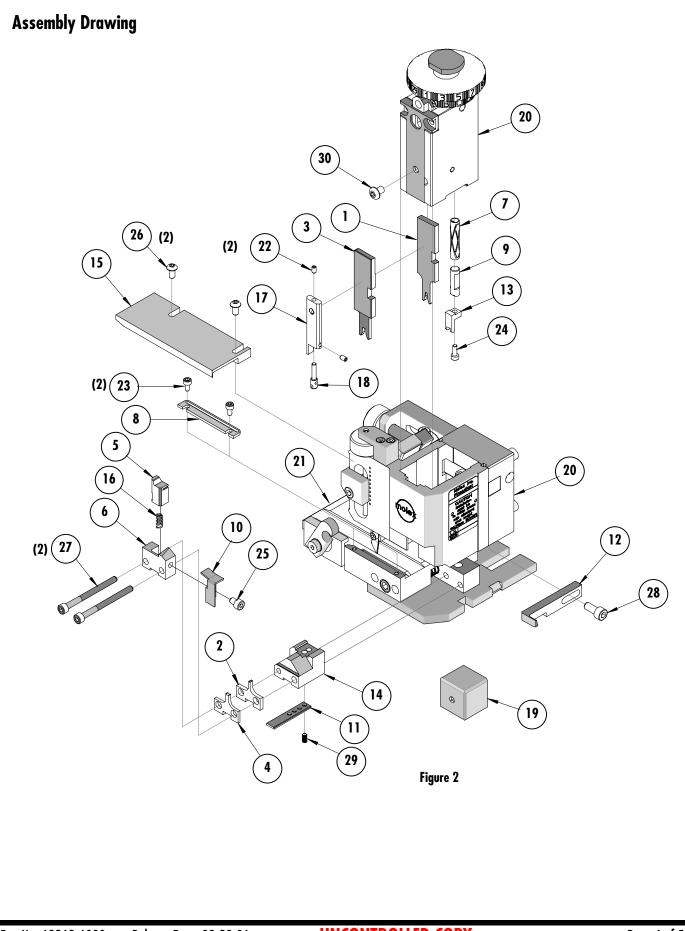
- 1. The screw is provided for wire straightening. See Figure 1.
- 2. Loosen the (2) M3 x 5mm long setscrews; see Figure 1, before turning the screw.
- 3. Start by adjusting the screw so it just touches the insulation outside diameter of the wire being crimped. If wire <u>Bend Up</u> exists, turn the screw a quarter turn clockwise (CW) to lengthen it.
- 4. Continue to adjust the length of the screw until the wire appears to be straight after crimping. If wire <u>Bend Down</u> exists, turn the screw a quarter turn counter clockwise (CCW) to shorten it. Continue to adjust the length of the screw until the wire appears to be straight after crimping.
- 5. Tighten the M3 x 5mm long setscrews, when finished adjusting the screw. Two M3 x 5mm long setscrews are provided; the top setscrew is to lock the screw after adjustments. The M3 x 5mm long setscrew on the side of plunger striker is used when making adjustments.



### PARTS LIST

ltem	Order No	Engineering No.	ator 63868-6000 Description	Quantity					
	Perishable Tooling								
	63868-6070	63868-6070	Tool Kit (All "Y" Items)	REF					
1	63457-0031	63457-0031	Conductor Punch	1 Y					
2	63455-0035	63455-0035	Conductor Anvil	1 Y					
3	63454-0050	63454-0050	Insulation Punch	1 Y					
4	63456-0036	63456-0036	Insulation Anvil	1 Y					
5	63461-0001	63461-0001	Cut-Off Plunger Front	1 Y					
6	63443-0036	63443-0036	Plunger Retainer Front	1 Y					
		Other Co	mponents	I					
7	11-17-0022	1739-21	Compression Spring	1					
8	11-18-4094	60709-A111	Front Cover	1					
9	11-24-1149	4996-37	Shank	1					
10	63443-0009	63443-0009	Scrap Chute Front	1					
11	63443-0021	63443-0021	Lower Tooling Key	1					
12	11-18-4080	60707-5	Wire Stop	1					
13	63443-0069	63443-0069	Terminal Hold Down	1					
14	63443-2506	63443-2506	Anvil Mount	1					
15	63443-6004	63443-6004	Rear Cover	1					
16	63700-0539	63700-0539	Cut-off Plunger Spring	1					
17	63443-0082	63443-0082	Plunger Striker Front	1					
18	63443-0083	63443-0083	Striker Screw	1					
19	63868-2008	63868-2008	Checking Aid	REF					
		Fra	ime						
20	63801-3100	63801-3100	Wide Track Fine Adjust Frame	1					
21	63459-0001	63459-0001	Wide Terminal Track	1					
		Hard	ware						
22	N/A	N/A	M3 by 5Lg. SHSS-Brass Tip	2**					
23	N/A	N/A	M3 by 6Lg. SHCS	2**					
24	N/A	N/A	M3 by 8Lg. SHCS	]**					
25	N/A	N/A	M4 by 6Lg. SHCS	]**					
26	N/A	N/A	M4 by 12Lg. BHCS	2**					
27	N/A	N/A	M4 by 50Lg. SHCS	2**					
28	N/A	N/A	M5 by 12Lg. SHCS	]**					
29	N/A	N/A	3MM by 6Lg. Roll Pin	]**					
30	N/A	N/A	#10-32 by 1/4″Lg. BHCS	]**					

 $\ast$  The Checking Aid 63868-2008 to be ordered separately if required. (This item is not included with the Applicator and is shown for Reference purpose only)



#### NOTES

- 1. Molex recommends an extra perishable tooling kit be maintained at your facility.
- 2. Verify tooling alignment by manually 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 work area.
- 4. Wear safety glasses at all times.
- 5. For recommended maintenance refer to the FineAdjust Manual.

**CAUTION**: This applicator should only be used in a press with a shut height of 135.80 mm (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 crimp specifications are valid only when used with Molex terminals, applicators and tooling.

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Release Date: 03-23-06 Revision Date: 06-23-06