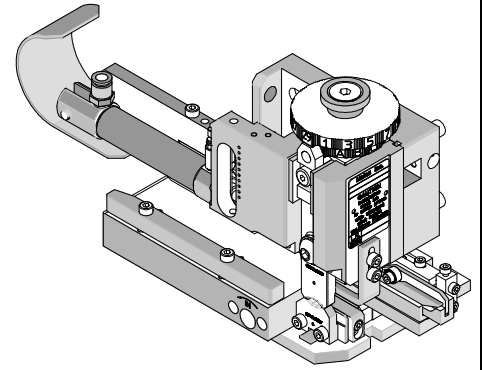




Mini-Mac Applicator Specification Sheet Air Feed-Mylar Tape Order No. 63885-8400



FEATURES

- Directly adapts to most crimp presses and automatic wire processors
- Applicator designed to industry-standard mounting and shut height of 135.80mm (5.346")
- Conductor and insulation rings allow quick adjustment for conductor and insulation crimp height change
- Quick set-up time; plus the crimp height, track and feed adjustments can be set without removing the applicator from the crimp press

SCOPE

Products: Nylon Insulated Closed-End Connectors 10-16 AWG.

Testing

Mechanical

The tensile test, or pull test, is a means of evaluating the mechanical properties of the crimped connections. The following chart shows the UL specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate the terminal from the conductor.

Color Code	Wire Size (AWG)	*UL - 486 C
RED	18	10
Blue	16	15
Blue	14	25
Yellow	12	35
Yellow	10	40

*UL - 486 C - Butt Splices, Parallel Splices, Closed End Connectors, and Wire Nuts

Product List

The following is a partial list of the product order numbers and their specifications that this tool is designed to run. Updates to this list are available on www.molex.com.

Wire Size: 10 - 16 AWG 5.00 - 1.30 mm ²					
Terminal Order No.	Terminal Eng No. (REF)	Wire Strip Length		Insulation Diameter Maximum	
		In	mm	In	mm
19160-0083	NC-1610T	Varies	Varies	See Chart 1	See Chart 1

OPERATION

Wire Preparation

Pre-twisted wire not required for OEM applications. For Solid Wire strip leads to 3/8 of an inch. Insert into connector and crimp (OEM only).

For stranded wire strip leads to approximately 3/4 of an inch. Twist the wire combination even and tight. Trim stripped pre-twisted area to 3/8 of an inch and insert into connector and crimp. For more information follow the Quality Crimping Handbook.

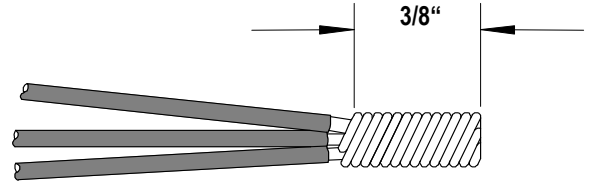
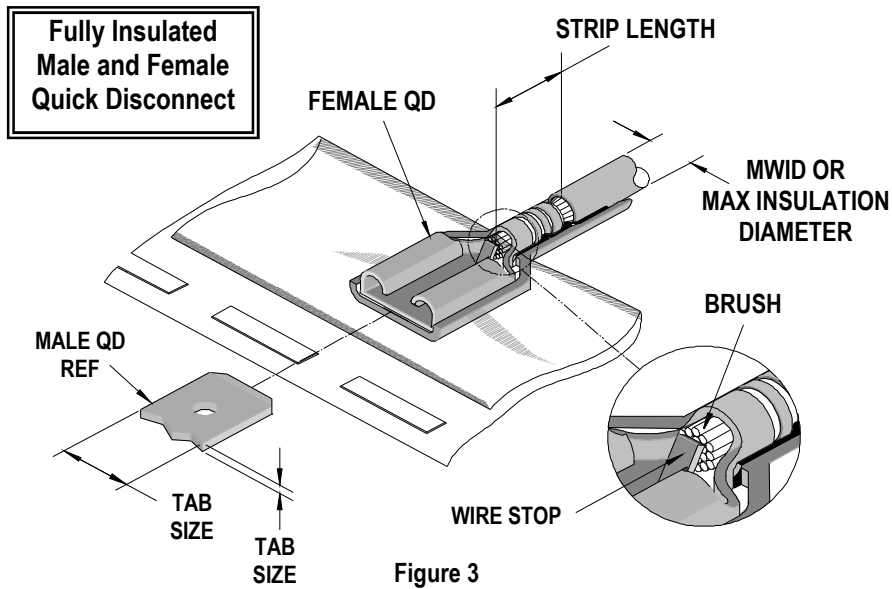
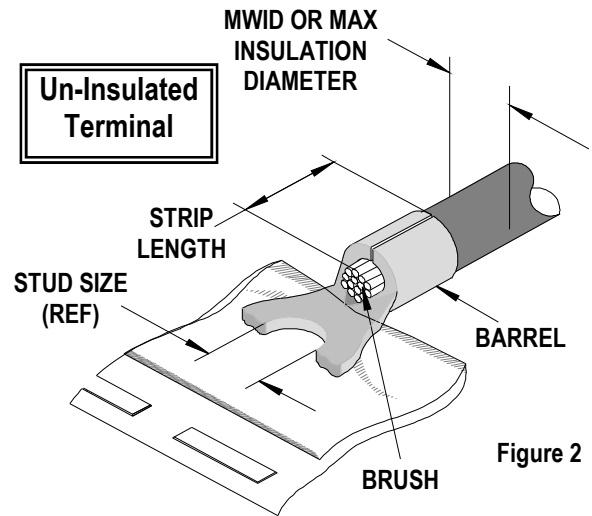
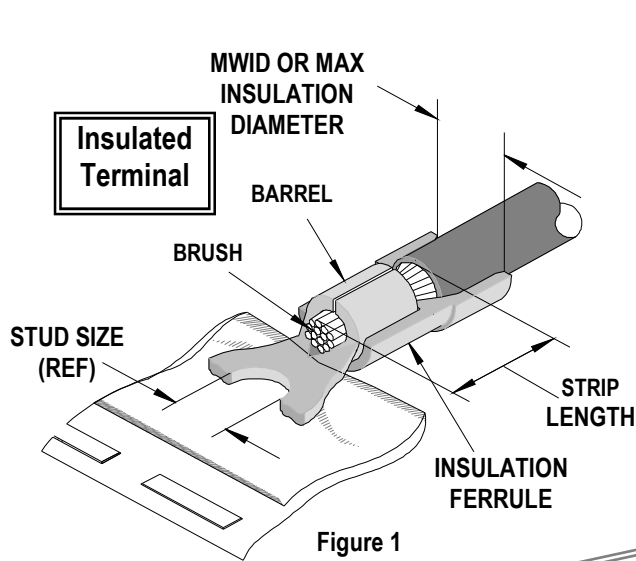


CHART 1

Wire Combinations for Nylon- Insulated Closed End Connectors Order No. 19160-0083 (NC-1610T)							
Wire Type	Wire Gauge (AWG)						Rating
	12	14	16	17	18	20	
Stranded or Solid	1		1				UL and CSA
Stranded or Solid	1				1		UL and CSA
Stranded or Solid	1				2		UL and CSA
Stranded or Solid		2					UL and CSA
Stranded or Solid		1	2				UL and CSA
Stranded or Solid		1	1				UL and CSA
Stranded or Solid		1	1		1		UL and CSA
Stranded or Solid		1			3		UL and CSA
Stranded or Solid		1			2		UL and CSA
Stranded or Solid		1			1		UL and CSA
Stranded or Solid			3		1		UL and CSA
Stranded or Solid			3				UL and CSA
Stranded or Solid			2		3		UL and CSA
Stranded or Solid			2		2		UL and CSA
Stranded or Solid			2		1		UL and CSA
Stranded or Solid			2				UL and CSA
Stranded or Solid			1		4		UL and CSA
Stranded or Solid			1		3		UL and CSA
Stranded or Solid			1		2		UL and CSA
Stranded or Solid			1		1		UL and CSA
Stranded or Solid					6		UL and CSA
Stranded or Solid					5		UL and CSA
Stranded or Solid					4		UL and CSA
Stranded or Solid					3		UL and CSA
Stranded only				2	1		UL
Stranded only				3	2		UL
Solid only	1		3				CSA

DEFINITION OF TERMS

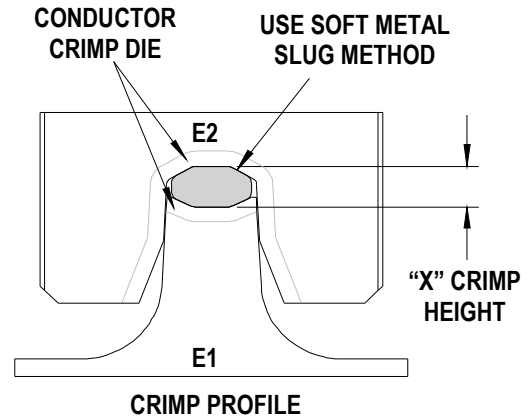
The following illustrations are a generic terminal representation and not an exact image of any terminal listed in the scope.



Tool Calibration

To recalibrate this Applicator, make sure the power is completely shut off on the press.

1. The Mini-Mac applicator must be properly installed in the press.
2. Crimping dies must be properly installed in the Mini-Mac applicator.
3. The recommended method of measuring the crimp height of the conductor dies is the soft metal slug method, (See Figure 4).
4. The slug must have a diameter 0.51mm (.020") larger than the "X" No Go dimension before crimping.
5. Place the soft metal slug (solder) into the nest of the bottom die and crimp (by hand cycling the press) similar to a terminal. The crimp height can be measured with a blade type micrometer or dial caliper, (Dimension "X").
6. Adjustment of the crimp height can be accomplished by indexing the conductor cam. The letter "A" gives the loosest position and "K" gives the tightest position. A total adjustment of 0.50mm (.020") can be achieved by adjusting the conductor cam.



Use soft metal slug (solder) method to measure the "X" dimension. Verify tooling crimp height calibration by referring to the Go/No Go dimensions shown in the chart below.

Figure 2

Note: If the crimp height is too tight on the setting "A", check the shut height of the press. See the Industrial Mini-Mac Applicator Manual Section 2.1 for adjustments.

CRIMP SPECIFICATIONS

Wire Range		"X" Dimension Conductor Crimp						Crimp Inspection Marking
		Mean		Go		No Go		
AWG	mm ²	In	mm	In	mm	In	mm	
10 - 16	5.00 - 1.30	.120	3.05	.116	2.95	.125	3.18	N/A

PARTS LIST

Mini-Mac Applicator 63885-8400				
Item	Order No	Engineering No.	Description	Quantity
Perishable Tooling				
	63885-8470	63885-8470	Tool Kit (All "Y" Items)	REF
1	63465-0066	63465-0066	Conductor Punch	1 Y
2	63464-0057	63464-0057	Conductor Anvil	1 Y
Other Components (Ref. 858450)				
3	63443-0021	63443-0021	Lower Tooling Key	1
4	63466-0912	63466-0912	Anvil Mount	1
5	63466-0913	63466-0913	Terminal Support	1
6	63466-0921	63466-0921	Terminal Stripping Blade	1
7	63600-1290	63600-1290	Washer	1
8	63890-0866	63890-0866	Collar-6.4mm Long	1
Frame				
9	63801-3301	63801-3301	Air Feed Applicator Frame Head	REF
10	63801-3281	63801-3281	Base	REF
11	63801-5850	63801-5850	Track Assembly	REF
12	63801-3390	63801-3390	Air Kit	REF
Hardware				
13	N/A	N/A	M3 by 12 Long SHCS	1**
14	N/A	N/A	M4 by 10 Long SHCS	2**
15	N/A	N/A	M4 by 16 Long SHCS	1**
16	N/A	N/A	M4 by 45 Long SHCS	1**
17	N/A	N/A	M8 by 30 Long BHCS	1**
18	N/A	N/A	3mm by 6 Long Roll Pin	1**
** Available from an industrial supply company such as MSC (1-800-645-7270).				

Note: Crimp profiles used in 63885-8400 are equivalent to 19288-0236 / ATP-NC-1610 (UL file number E32244).

Assembly Drawing

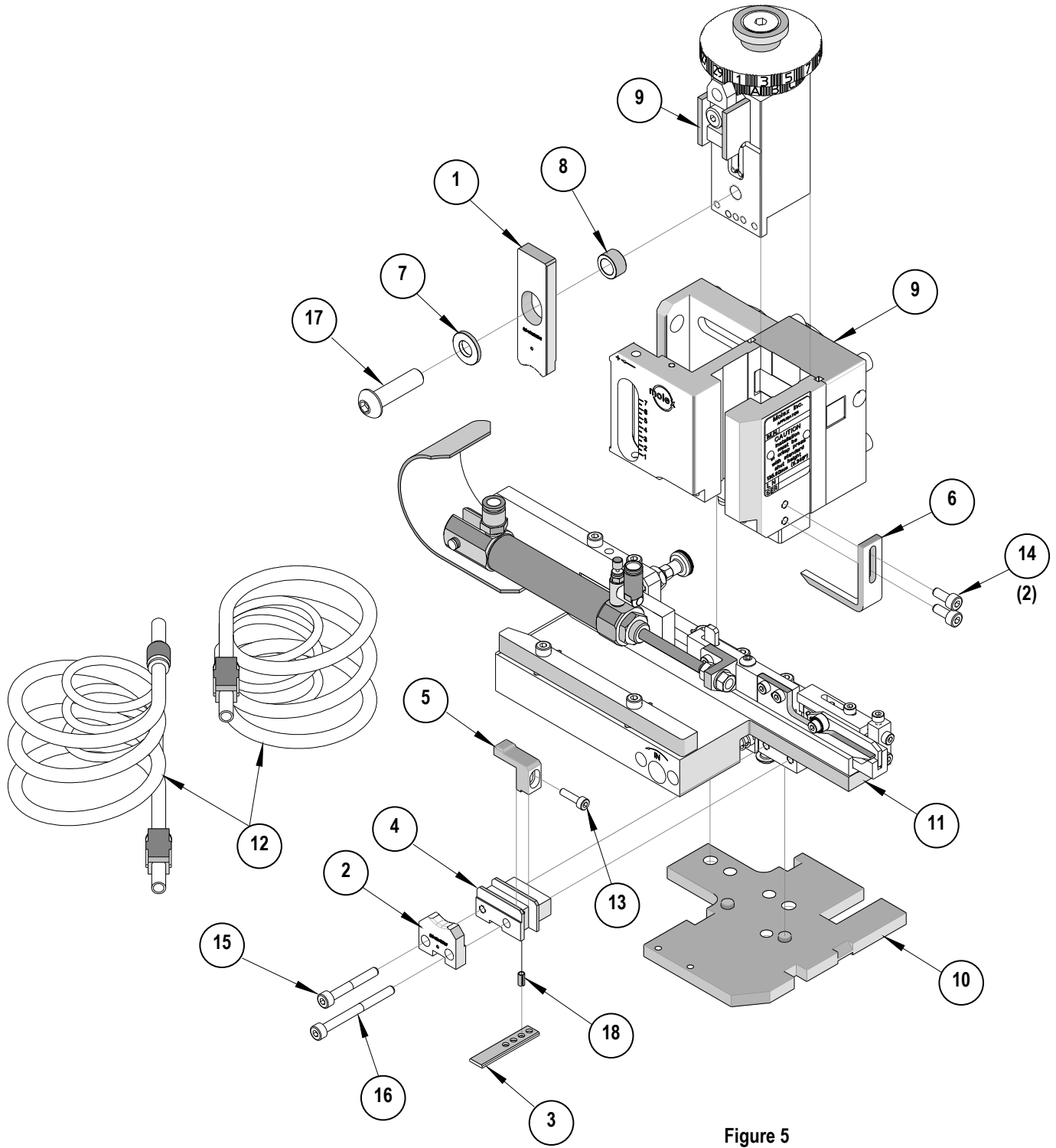


Figure 5

NOTES

1. Molex recommends an extra perishable tooling kit be maintained at your facility.
2. Verify tooling alignment by manually cycling the press with 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 Mini-Mac Applicator Manual (Document no. 63880-0000).

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.

Contact Information

For more information on Molex application tooling please contact Molex at 1-800-786-6539.

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