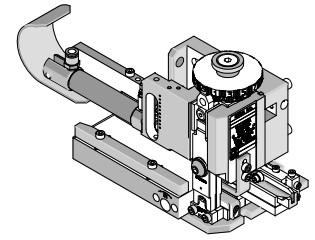




**Mini-Mac
Applicator
Air Feed-Mylar Tape**

Application Tooling Specification Sheet



Order No. 63885-1000

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: Krimptite™, Insulkrimp™, and Versakrimp™ Ring Tongue, Spade Tongue, Hook Tongue, Flanged Spade Tongue, Rectangular Tongue, Snap Spades, Mult-Stud Ring, Temp Terminals, Butt Splices and Step Down Butt Splices 10–12 AWG and 14–16 AWG Heavy Duty.

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 and government specifications (MIL-T-7928) 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 A	*UL - 486 C	*UL - 310	*Military Class 2
Yellow	26	3	N/A	N/A	7
Yellow	24	5	N/A	N/A	10
Red	22	8	8	8	15
Red	20	13	10	13	19
Red	18	20	10	20	38
Blue	16	30	15	30	50
Blue	14	50	25	50	70
Yellow	12	70	35	70	110
Yellow	10	80	40	80	150
Red	8	90	45	N/A	225
Blue	6	100	50	N/A	300

*UL - 486 A - Terminals (Copper conductors only)

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

*UL - 310 - Quick Disconnects, Flag and Couplers

*Military Class 2 - Military Approved Terminals only as listed

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.

Terminal Order No.	Terminal Eng. No.	Wire Size		Insulation Diameter Maximum		Strip Length	
		AWG	mm ²	mm	In	mm	In
19044-0019	B-128-04HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0020	B-128-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0021	B-128-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0022	B-130-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0023	B-130-14HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0024	B-130-56HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0025	B-136-04HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0026	B-136-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0027	B-136-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19044-0164	B-128-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19054-0023	B-236-04HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19054-0024	B-236-06HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19054-0025	B-236-08HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19054-0123	B-240-10HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19056-0078	B-328-04HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0080	B-328-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0082	B-328-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0084	B-328-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0086	B-330-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0088	B-330-14HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0090	B-330-56HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0096	B-336-04HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0098	B-336-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0100	B-336-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0122	B-340-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0124	B-340-14HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0126	B-340-38HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19056-0128	B-340-56HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19069-0147	C-128-04T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0148	C-128-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0149	C-130-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0150	C-136-04T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0208	C-128-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0212	C-128-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0218	C-130-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0221	C-130-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0225	C-130-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0232	C-136-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0235	C-136-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0237	C-140-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0243	C-140-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0246	C-140-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19069-0443	C-101-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19079-0012	C-1006-MST	10-12	5.00-3.30	6.35	.250	7.14	.281
19087-0146	C-1103-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19087-0148	C-1106-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19087-0150	C-112-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19087-0152	C-112-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19087-0154	C-112-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19093-0066	C-3103-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19093-0068	C-3106-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19093-0070	C-312-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19093-0072	C-312-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19093-0074	C-312-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0062	C-1196-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0064	C-1197-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0066	C-1198-10T	10-12	5.00-3.30	6.35	.250	7.14	.281

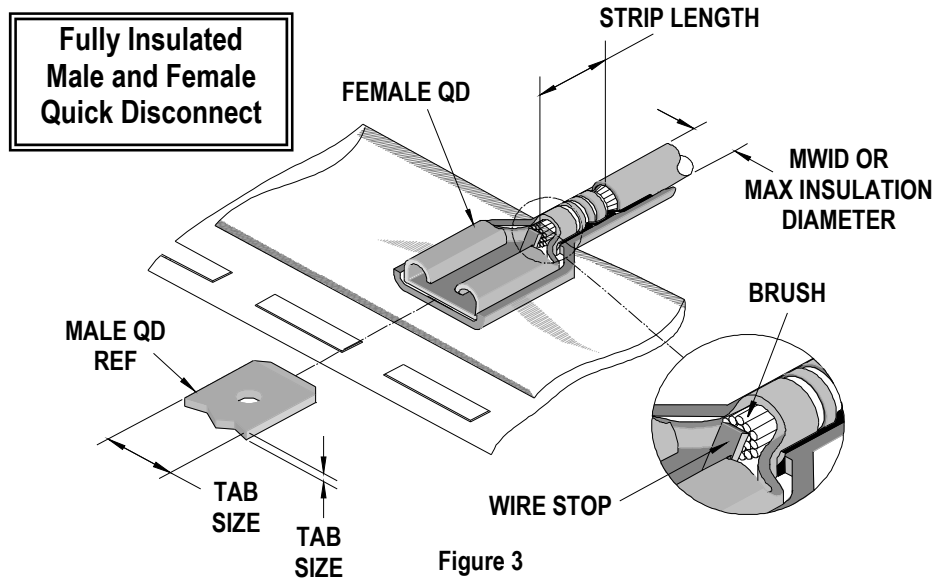
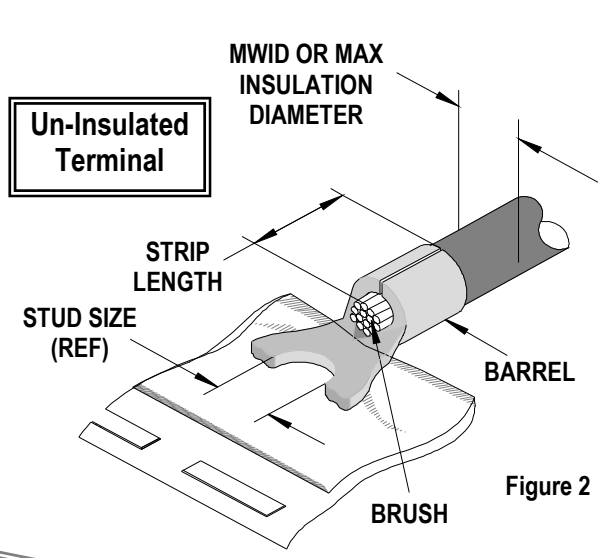
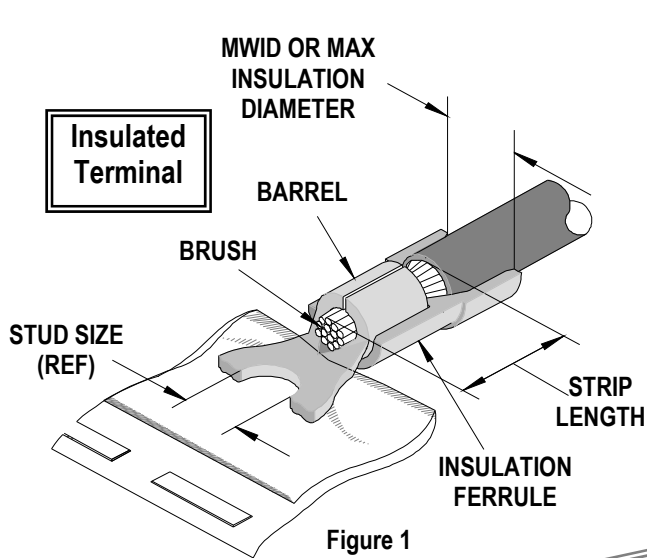
Terminal Order No.	Terminal Eng. No.	Wire Size		Insulation Diameter Maximum		Strip Length	
		AWG	mm ²	mm	In	mm	In
19098-0070	C-1710-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0075	C-1719-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0086	C-1199-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0087	C-1710-05T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0088	C-1711-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0089	C-1712-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19098-0091	C-1718-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19117-0057	B-117-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19117-0086	B-117-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19117-0087	B-117-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19118-0081	C-1104-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0083	C-1104-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0084	C-117-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0087	C-117-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0090	C-117-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0128	C-1101-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19118-0129	C-1104-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19119-0063	B-217-06HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19119-0064	B-217-08HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19119-0065	B-217-10HDXT	14-16HD	2.00-1.30	6.35	.250	7.94	.313
19123-0056	B-317-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19123-0057	B-317-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19123-0058	B-317-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19124-0062	C-3101-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19124-0064	C-3104-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19124-0068	C-317-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19124-0070	C-317-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19124-0072	C-317-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19129-0006	C-1105-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19129-0079	C-1102-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19129-0080	C-1481-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19129-0081	C-1481-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19140-0136	B-141-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19140-0137	B-141-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19140-0138	B-141-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19141-0080	C-1105-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19141-0082	C-141-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19141-0084	C-141-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19141-0086	C-141-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19141-0089	C-168-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19141-0091	C-168-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19146-0073	B-341-06HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19146-0074	B-341-08HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19146-0075	B-341-10HDT	14-16HD	2.00-1.30	6.35	.250	7.14	.281
19147-0084	C-3102-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0087	C-3105-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0089	C-3105-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0091	C-3105-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0093	C-341-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0095	C-341-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19147-0098	C-341-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19178-0015	C-111-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19178-0017	C-111-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19178-0019	C-111-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19178-0023	C-199-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19180-0014	C-311-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19180-0016	C-311-08T	10-12	5.00-3.30	6.35	.250	7.14	.281

Terminal Order No.	Terminal Eng. No.	Wire Size		Insulation Diameter Maximum		Strip Length	
		AWG	mm ²	mm	In	mm	In
19180-0018	C-311-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19180-0020	C-399-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19180-0021	C-399-556	10-12	5.00-3.30	6.35	.250	7.14	.281
19189-0017	C-146T	10-12	5.00-3.30	6.35	.250	5.95	.234
19189-0019	C-L146T	10-12	5.00-3.30	6.35	.250	9.13	.359
19193-0102	C-328-04T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0105	C-328-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0108	C-328-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0111	C-328-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0113	C-328-209T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0115	C-330-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0118	C-330-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0122	C-330-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0127	C-336-04T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0129	C-336-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0131	C-336-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0133	C-340-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0135	C-340-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0139	C-340-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19193-0142	C-340-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0009	C-S-140-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0092	C-S-128-06T	10-12	5.00-3.30	6.35	.250	7.14	.281

Terminal Order No.	Terminal Eng. No.	Wire Size		Insulation Diameter Maximum		Strip Length	
		AWG	mm ²	mm	In	mm	In
19203-0094	C-S-128-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0095	C-S-130-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0096	C-S-130-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0097	C-T-328-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0098	C-T-328-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0100	C-T-328-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0101	C-T-330-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0102	C-T-330-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0103	C-T-340-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0104	C-T-346T	10-12	5.00-3.30	6.35	.250	9.13	.359
19203-0111	C-U-128-06T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0112	C-U-128-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0114	C-U-128-10T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0115	C-U-130-14T	10-12	5.00-3.30	6.35	.250	7.14	.281
192030116	C-U-130-56T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0117	C-U-140-38T	10-12	5.00-3.30	6.35	.250	7.14	.281
19203-0278	C-S-128-08T	10-12	5.00-3.30	6.35	.250	7.14	.281
19211-0002	WP-1210T	10-12	5.00-3.30	3.40	.136	7.14	.281
19215-0024	CB-346-OPT	10-12	5.00-3.30	6.35	.250	9.13	.359
19215-0027	CB-346T	10-12	5.00-3.30	6.35	.250	9.13	.359
19215-0030	CS-346T	10-12	5.00-3.30	6.35	.250	9.13	.359

DEFINITION OF TERMS

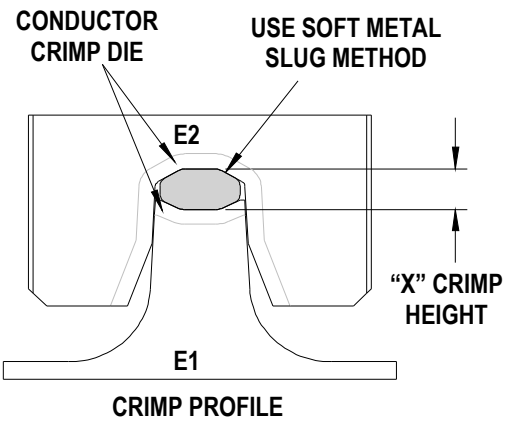
The following illustrations are a generic terminal representation and not an exact image of any terminal listed in the scope.



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 Size		"X" Dimension Conductor Crimp						Pull Force Minimum	
AWG	mm ²	Mean		Go		No Go		Lbs	N
		In	mm	In	mm	In	mm		
16	1.30	.119	3.02	.116	2.95	.123	3.12	30.0	133.5
14	2.00	.119	3.02	.116	2.95	.123	3.12	50.0	222.6
12	3.30	.119	3.02	.116	2.95	.123	3.12	70.0	311.4
10	5.25	.119	3.02	.116	2.95	.123	3.12	80.0	355.9

* 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.

PARTS LIST

Mini-Mac Applicator 63885-1000				
Item	Order No	Engineering No.	Description	Quantity
Perishable Tooling				
	63885-1070	63885-1070	Tool Kit (All "Y" Items)	REF
1	63465-0003	63465-0003	Conductor Punch	1 Y
2	63464-0003	63464-0003	Conductor Anvil	1 Y
Other Components				
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
9	63890-0867	63890-0867	Collar-7.7mm Long	1
Frame				
10	63801-3301	63801-3301	Air Feed Applicator Frame Head	1
11	63801-3281	63801-3281	Base	1
12	63801-5850	63801-5850	Track Assembly	1
13	63801-3390	63801-3390	Air Kit	1
Hardware				
14	N/A	N/A	M3 by 12 Long SHCS	1**
15	N/A	N/A	M4 by 10 Long SHCS	2**
16	N/A	N/A	M4 by 16 Long SHCS	1**
17	N/A	N/A	M4 by 45 Long SHCS	1**
18	N/A	N/A	M8 by 30 Long BHCS	1**
19	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 63885-1000 are equivalent to 19027-0088/ATP-C-130 (UL file number E32244).

Assembly Drawing

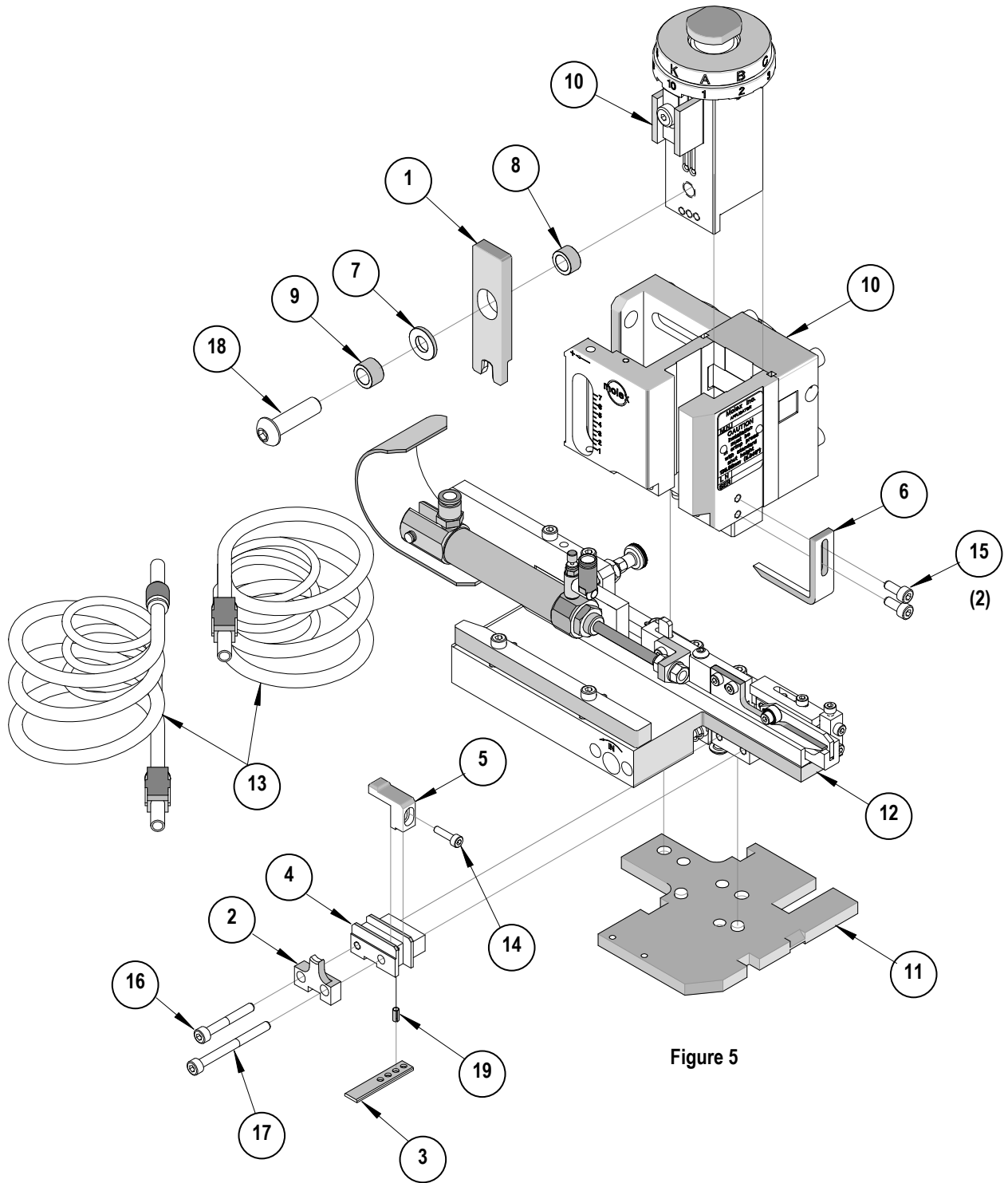


Figure 5

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.

<http://www.molex.com>