WM9999-ND

Crimp Service Tool
Part No. 63811-1000

Crimp Procedure

1. Select the appropriate Molex terminal for crimping. Strip the wire to the proper strip length.
2. Open the tool handles and insert the terminal into the desired wire crimp section. Squeeze the tool handles together just enough to hold the wire barrel in place.
3. Insert the stripped wire into position.
4. Holding the wire in place, squeeze the tool handles together to complete the crimp.
5. Open the tool handles and insert the terminal into the desired insulation crimp section. *(Caution - Do not use the insulation section of this tool for terminating of wire conductors. This could result in a poor connection.)*
6. Holding the terminal in place, squeeze the tool handles together to complete the crimp.

Conductor Profile Guidelines

Largest Terminal Gage	Conductor Section Range	* Pull Force (MIN)
24	1.40	5
22	1.40-1.60	8
20	1.40-1.80	13
18	1.60-2.00	20
16	2.00-2.30	30
14	2.30-2.50	50

Insulation Profile Guidelines

Insulation Diameter Range	** Insulation Section Range
1.00-1.50	1.40-2.00
1.50-2.00	1.80-2.80
2.00-2.50	2.30-3.40
2.50-3.00	2.80-3.90
3.00-3.50	3.40-4.80
3.50-4.00	3.90-4.80
4.00-4.50	4.30-4.80

* Each application should be verified for minimum pull force.
** Housing openings should be evaluated before termination.

Terminal	Wire Range	Insulation Range	Conductor Section	Insulation Section
1189/1190	14-20	1.50-4.00	2.30	3.20
1380/1381	18-22	1.20-3.00	2.00	2.80
1560/1561	18-24	1.20-3.00	1.60	2.80
2478	18-24	2.50 max	2.00	2.50
2578	22-24	1.65 max	1.60	1.80
2759	22-24	1.57 max	1.40	2.00
5556/5558	18-24	1.30-3.10	1.60	3.20
555612/555811	22-24	0.90-1.80	1.40	1.80
70021/70058	22-24	1.63 max	1.40	1.60

Notes

1. Termination quality is dependent on the profile choice and hand strength of the operator. Manually powered hand tools do not offer the same level of quality as powered application tooling. Molex customers should independently verify that the termination they intend to use meets their quality and performance needs. As such, Molex makes no warranties, express or implied, as to the performance or reliability of the crimp, ,or the appropriateness of the customers application.
2. Insulation rubber handles are not protection against electrical shock.
3. Manually powered hand tools are intended for low volume or field repair. This tool is not intended for production use.
4. Wear eye protection at all times.
5. Crimp Profile Reference Table information is for reference only. (Diameter plus two times terminal thickness)

HAND CONNECTION

Crimp Service Tool #63811-1000

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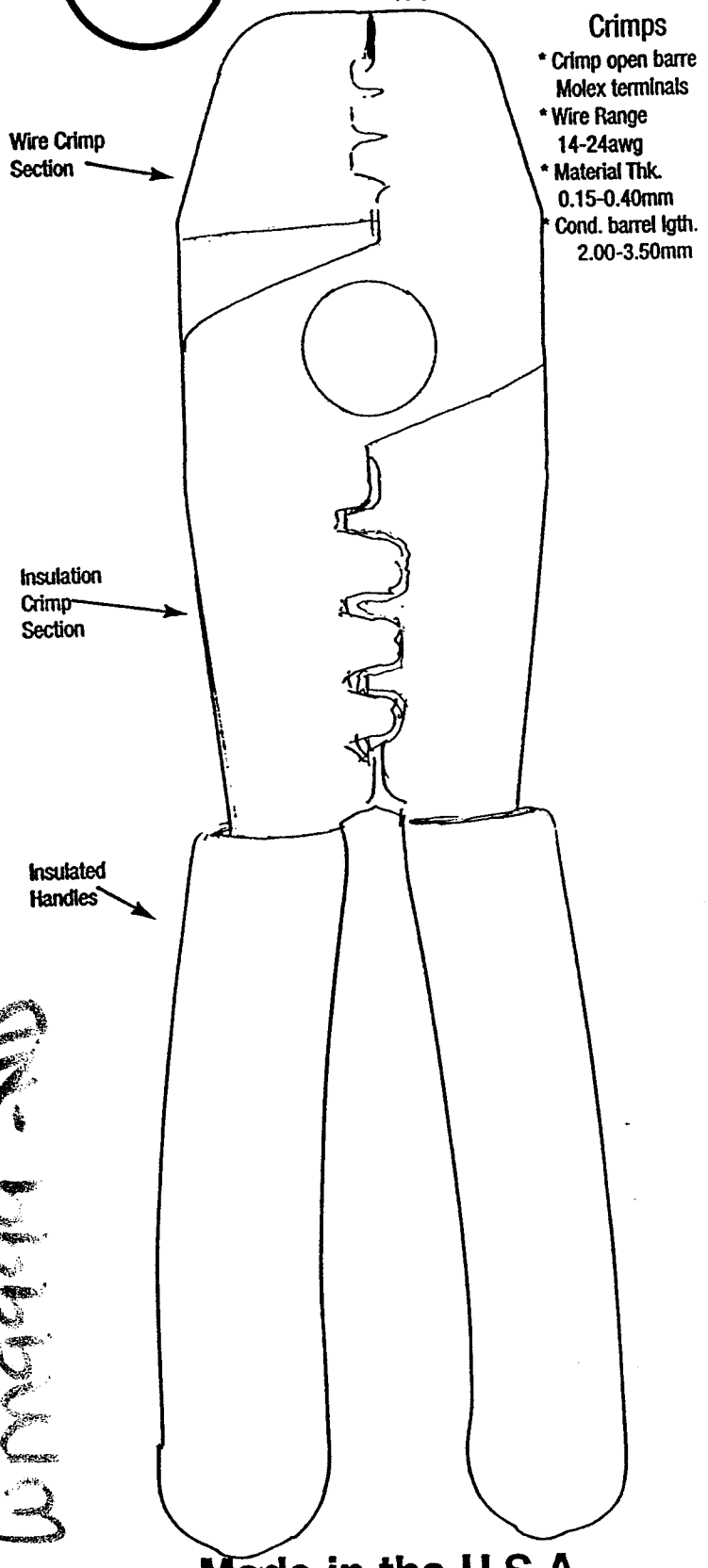

Crimps

* Crimp open barre Molex terminals
* Wire Range 14-24awg
* Material Thk. 0.15-0.40mm
* Cond. barrel lgth. 2.00-3.50mm

Made in the U.S.A.

WM9999

Crimp Service Tool
Part No. 63811-1000

CRIMPING PROCEDURE

1) Select the appropriate Molex terminal (.093", .062", Mini-Fit, KK, SL, etc.). Verify that the wire size, terminal material thickness, and conductor barrel length, are within the specifications for this tool. (front of card)

2) Strip the wire to the proper strip length. Open the tool handles and insert the terminal into the desired conductor profile. Squeeze the tool handles together just enough allowing the terminal barrel to touch the top of the profile radii.

Profile Selection Guidelines

Largest Wire Gage	Conductor Tool Section Range	*Pull Force Min.(lbs)	Insulation Diameter Range (in)	Insulation Tool Section Range
24	1.40-1.40	5	0.039-0.059	1.40-2.00
22	1.40-1.60	8	0.059-0.079	1.80-2.80
20	1.40-1.80	13	0.079-0.098	2.30-3.40
18	1.60-2.00	20	0.098-0.118	2.80-3.90
16	2.00-2.30	30	0.118-0.138	3.40-4.80
14	2.30-2.50	50	0.138-0.157	3.90-4.80
			0.157-0.177	4.30-4.80

**Each application should be verified for pull force.*

3) While aligning the insulation edge between the conductor and insulation barrel, insert the stripped wire into the terminal. Verify that conductor brush is present. If the wire does not fit into the terminal, the conductor profile selection may be too narrow.

4) Holding the wire in place, squeeze the tool handles firmly together. Use two hands if necessary. After crimping, if any strands of wire are visible at the top of the crimp form, the conductor profile selection chosen may be too wide.

5) Open the tool handles and insert the terminal into the desired insulation section. An evaluation of the housing openings should be performed before termination. Gently squeeze the tool handles together allowing the terminal insulation profiles to provide an acceptable strain relief.

CAUTIONS

1) Termination quality is dependent on profile choice and hand strength of the operator. Manually powered hand tools do not offer the same level of quality as ratcheted hand tools or powered application tooling. Molex customers should independently verify that the termination they intend to use meets their quality and performance needs. Not all terminal , wire, and profile combinations will achieve minimum pull force requirements, or provide an acceptable crimp form. As such, Molex makes no warranties, express or implied, as to the performance or reliability of the crimp, or the appropriateness of the customers application.

2) Do not use the insulation section of this tool for terminating of the wire conductors. This could result in a poor connection. Manually powered hand tools are intended for low volume or field repair. This tool is NOT intended for production use. Hand injury can result from repetitive use.

3) Insulated rubber handles are not protection against electrical shock.

4) Conductor and insulation profile guidelines are for reference only.

5) Wear eye protection at all times.