

HHL Tooling Kit

## Application Tooling Specification Sheet

Order No. 19290-0007  
Eng. No. HHL-F-130

### SCOPE

**Tooling:** HHL Tooling Kits are used with Hydraulic Head Crimper with Air/Hydraulic Pump (19286-0117) or Hydraulic Head Crimper with Electric Hydraulic Pump (19286-1300). Refer to the appropriate tool instruction manual for installation and operation information.

**Products:** BCL and VersaKrimp™ Ring Tongue Terminals and Splices 4 AWG. Refer to the Product part number charts on this sheet for terminals with the barrel and tongue styles listed above.

### Testing

#### Mechanical

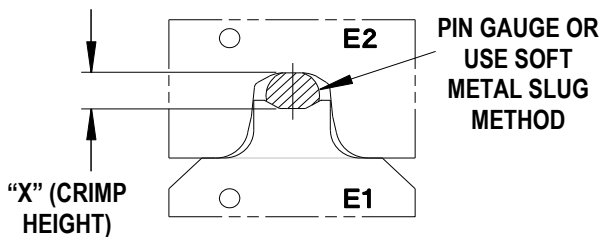
The tensile test or pull test is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL Specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate terminal from the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

Color Code	Wire Size (AWG)	*UL - 486 A	*UL - 486 C	**MIL-T-7928
Yellow	4	140	---	400

\*UL - 486 A - Terminals (Copper Conductors only)

\*UL - 486 C – Butt Splices, Parallel Splices, and Closed end Connectors. Use 486 A values.

\*\*MIL-T-7928 - Military Approved Terminals only as listed



**CRIMP PROFILE**

Use gauge pins or 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.

Molex does not sell gauge pins contact your local industrial supplier.

Wire Range		"X" Dimension Conductor Crimp						Crimp Inspection Marking
		Mean		Go		No Go		
AWG	mm <sup>2</sup>	In	mm	In	mm	In	mm	
4	16.8-26.6	.239	6.07	.233	5.91	.245	6.22	4

The following is a Partial List of the Product Part Numbers and their specifications that this tooling is designed to crimp. We will be adding to this list and an up to date copy is available on [www.molex.com](http://www.molex.com).

Wire Size: 4 AWG 16.8-26.6mm <sup>2</sup> CMA 33,100-52,600			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19107-4600	F-370-14UPML	.531	13.49
19107-4601	F-370-56UPML	.531	13.49
19107-4602	F-370-38UPML	.531	13.49
19107-4603	F-370-76UPML	.531	13.49
19107-4604	F-370-12UPML	.531	13.49
19107-4605	F-370-58UPML	.531	13.49
19107-4606	F-370-34UPML	.531	13.49
19193-0254	F-366-10	.531	13.49
19193-0258	F-366-12	.531	13.49
19193-0261	F-366-14	.531	13.49
19193-0270	F-366-76	.531	13.49
19193-0276	F-367-14R90	.531	13.49
19193-0278	F-367-56	.531	13.49
19193-0282	F-369-14	.531	13.49
19193-0283	F-369-38	.531	13.49
19193-0284	F-369-56	.531	13.49
19193-0285	F-369-58	.531	13.49
19193-0286	F-369-76	.531	13.49
19193-0287	F-370-12	.531	13.49
19193-0288	F-370-14	.531	13.49
19193-0289	F-370-34	.531	13.49
19193-0291	F-370-38	.531	13.49
19193-0292	F-370-56	.531	13.49
19193-0293	F-370-58	.531	13.49
19193-0294	F-370-76	.531	13.49
19193-0507	F-366-38R90	.531	13.49
19205-0007	F-365	.453	11.51
19215-0045	F-364	.531	13.49
19215-0061	BCL-4	.500	12.70

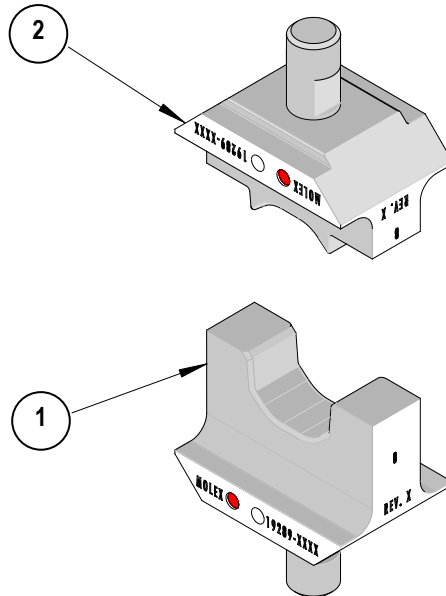
Wire Size: 4 AWG 16.8-26.6mm <sup>2</sup> CMA 33,100-52,600			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19221-0230	BCL-414-PL	.500	12.70
19221-0231	BCL-4516-PL	.500	12.70
19221-0232	BCL-438-PL	.500	12.70
19221-0383	BCL-438	.500	12.70
19221-0404	BCL-414	.500	12.70
19221-0405	BCL-4516	.500	12.70
19221-0451	BCL-410	.500	12.70
19221-0452	BCL-410-PL	.500	12.70
19221-0453	BCL-412	.500	12.70
19221-0454	BCL-412-PL	.500	12.70
19221-0456	BCL-438-WP-PL	.500	12.70
19221-0457	BCL-438-XWP-PL	.500	12.70
19221-0458	BCL-438-WP	.500	12.70
19221-0459	BCL-438-XWP	.500	12.70
19221-0460	BCL-4516-WP-PL	.500	12.70
19221-0461	BCL-4516-WP	.500	12.70
19231-0021	BCL-4516-SH	.500	12.70
19231-0022	BCL-4516-SH-PL	.500	12.70

MILITARY Wire Size: 4 AWG 16.8-26.6mm <sup>2</sup> CMA 33,100-52,600			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19193-0264	F-366-38	.531	13.49
19193-0267	F-366-56	.531	13.49
19193-0273	F-367-10	.531	13.49
19193-0275	F-367-14	.531	13.49
19193-0281	F-369-12	.531	13.49

**CAUTION:** Molex crimp specifications are valid only when used with Molex terminals and tooling.

### Parts List

Item	Order No.	Engineering No.	Description	Qty
	19290-0007	HHL-F-130	HHL Tooling Kit	REF
1	19290-0009	HHL-F-130-E2	Conductor Punch	1
2	19290-0008	HHL-F-130-E1	Conductor Anvil	1



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