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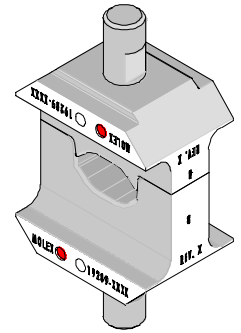
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## Crimp Tooling Specification Sheet HHL Tooling Kit No. 19290-0001 Engineering No. HHL-D-110



### 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 8 AWG.

Refer to the Product part number charts on this sheet for terminals with the barrel and tongue styles listed above.

### Testing

#### Mechanical

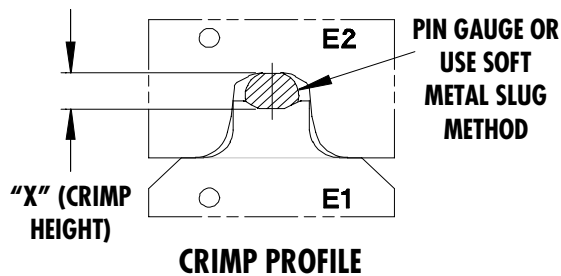
The tensile test or pull test is a means of evaluating the mechanical properties of the crimped connections. The following charts show the UL Specifications for various wire sizes. The tensile strength is shown in pounds and indicates the minimum acceptable force to break or separate terminal from the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

Color Code	Wire Size (AWG)	*UL - 486 A	*UL - 486 C	**MIL-T-7928
Red	8	90	45	225

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

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

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



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	
8	6.6-10.5	.155	3.94	.149	3.78	.161	4.09	8

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: 8 AWG 6.6-10.5mm <sup>2</sup> CMA 13,100-20,800			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19193-0143	D-350-06	.437	11.11
19193-0144	D-350-06R90	.437	11.11
19193-0146	D-350-08	.437	11.11
19193-0147	D-350-08R90	.437	11.11
19193-0149	D-350-10	.437	11.11
19193-0154	D-350-14R90	.437	11.11
19193-0157	D-350-56	.437	11.11
19193-0159	D-351-10	.437	11.11
19193-0160	D-351-10-N	.437	11.11
19193-0163	D-351-14	.437	11.11
19193-0164	D-351-14-N	.437	11.11
19193-0169	D-351-38-N	.437	11.11
19193-0173	D-351-56-N	.437	11.11
19193-0175	D-351-76	.437	11.11
19193-0176	D-351-76-N	.437	11.11
19193-0178	D-352-10	.437	11.11
19193-0182	D-352-14	.437	11.11
19193-0184	D-352-38	.437	11.11
19193-0185	D-352-56	.437	11.11
19193-0186	D-352-58	.437	11.11
19193-0187	D-352-76	.437	11.11
19193-0190	D-353-12	.437	11.11
19193-0191	D-353-14	.437	11.11
19193-0192	D-353-34	.437	11.11
19193-0193	D-353-38	.437	11.11
19193-0194	D-353-56	.437	11.11
19193-0195	D-353-58	.437	11.11
19193-0196	D-353-76	.437	11.11
19193-0198	D-356-06	.437	11.11
19193-0204	D-356-14	.437	11.11
19193-0615	D-350-10T45	.437	11.11
19193-0829	D-350-10R90	.437	11.11
19205-0004	D-355	.312	7.94

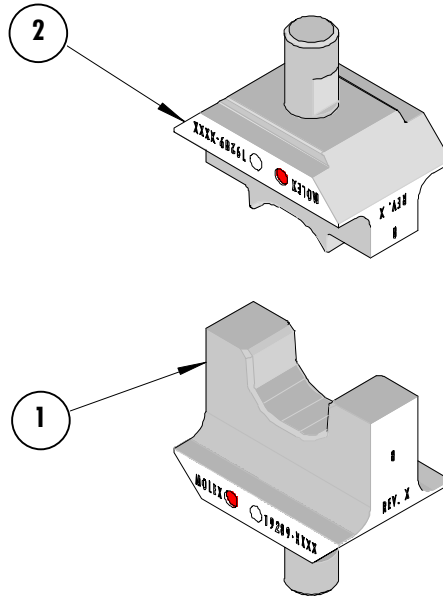
Wire Size: 8 AWG 6.6-10.5mm <sup>2</sup> CMA 13,100-20,800			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19215-0034	D-354	.375	9.53
19215-0037	DC-354	.375	9.53
19215-0059	BCL-8	.437	11.11
19221-0223	BCL-810-PL	.437	11.11
19221-0224	BCL-814-PL	.437	11.11
19221-0225	BCL-8516-PL	.437	11.11
19221-0226	BCL-838-PL	.437	11.11
19221-0408	BCL-810	.437	11.11
19221-0409	BCL-814	.437	11.11
19221-0410	BCL-838-WP	.437	11.11
19221-0411	BCL-8516	.437	11.11
19221-0414	BCL-812-PL	.437	11.11
19221-0415	BCL-812-XWP	.437	11.11
19221-0481	BCL-838-XWP	.437	11.11
19221-0482	BCL-8516-WP	.437	11.11
19221-0483	BCL-8516-WP-PL	.437	11.11
19221-0484	BCL-838-XWP-PL	.437	11.11
19221-0562	BCL-814-WP	.437	11.11
19221-0563	BCL-814-WP-PL	.437	11.11

<b>MILITARY</b> Wire Size: 8 AWG 6.6-10.5mm <sup>2</sup> CMA 13,100-20,800			
Terminal No.	Terminal Eng No. (REF)	Wire Strip Length	
		In	mm
19193-0152	D-350-14	.437	11.11
19193-0167	D-351-38	.437	11.11
19193-0171	D-351-56	.437	11.11
19193-0179	D-352-12	.437	11.11
19193-0200	D-356-08	.437	11.11
19193-0202	D-356-10	.437	11.11

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

## Parts List

Item	Order No.	Engineering No.	Description	Qty
	<b>19290-0001</b>	<b>HHL-D-110</b>	<b>HHL Tooling Kit</b>	<b>REF</b>
1	19290-0003	HHL-D-110-E2	Conductor Punch	1
2	19290-0002	HHL-D-110-E1	Conductor Anvil	1



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