

TRIPADDLE SIGNAL ITA CONTACT ASSEMBLY

PART # 610 110 108 / 610 110 129 / 610 110 146
 610 110 147 / 610 110 169 / 610 110 172 / 610 110 173



TOOLS REQUIRED

Crimp Tool, Part # 910 101 102 or 910 101 103
 Crimp Locator, Part #910 104 107 or 910 104 118
 Determine proper crimp tool and locator according to **Table 1**.

CRIMP TOOL SETUP

1. Set up crimp tool, Part # 910 101 102/103 (**Figure A**), by loosening the latch locking screw (counter-clockwise, until turning stops). Remove any previously used crimp locator.
2. Insert the open end of crimp contact locator, Part # 910 104 107/118 (**Figure B**), into the crimp tool contact locator retainer.
3. Slide the retaining latch toward the contact locator until the contact locator is securely locked into place. Tighten the latch locking screw.

CRIMP TOOL ADJUSTMENT AND WIRE PREPARATION

1. Adjust the crimp tool setting by pulling the microcrimp adjusting knob and turning it at the same time (clockwise increases, counter-clockwise decreases setting) until the desired setting is achieved on the microcrimp indicator (**Table 1**). Verify with pin gauge. See calibration instructions for Part # 910 101 102/103 for pin gauge verification instructions.

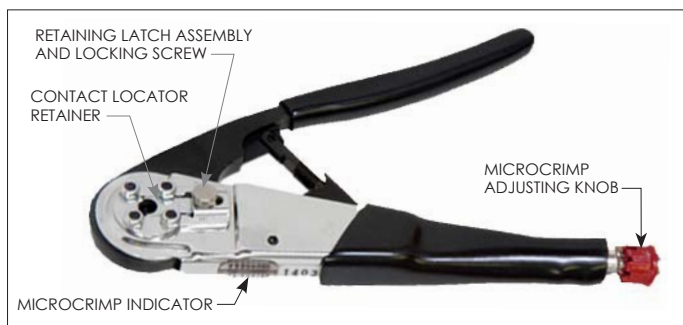


Figure A. Crimp tool, Part # 910 101 102.

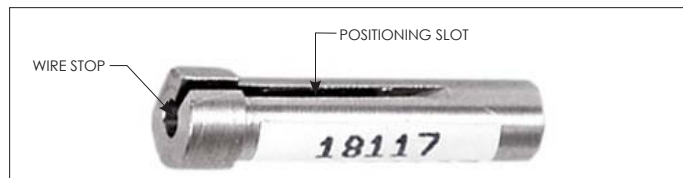


Figure B. Locator positioning slot and wire stop only found on Part # 910 104 107.

Table 1.

CONTACT	CRIMP TOOL	LOCATOR DIE	STRIP LENGTH (IN [MM])	WIRE GAUGE	CRIMP SETTING (IN [MM])		PULLOUT FORCE (LBS [N])	EXTRACTION TOOL
					MAX	MIN		
610110108 610110146	910101103	910104107	0.250 [6.35]	20	0.037 [0.94]	0.033 [0.84]	10 [44.5]	910110102
				22	0.033 [0.84]	0.029 [0.74]		
				24	0.029 [0.74]	0.025 [0.64]		
				2-24*	0.041 [1.04]	0.037 [0.94]	8* [35.6]*	
				26	0.024 [0.61]	0.021 [0.53]	4* [17.8]*	
				2-26*	0.036 [0.91]	0.033 [0.84]		
610110129 610110147	910101102	910104118	0.400 [10.16]	14	0.063 [1.60]	0.059 [1.50]	10 [44.5]	
				16	0.059 [1.50]	0.055 [1.40]		
				18	0.055 [1.40]	0.051 [1.30]		
610110169	910101103	910104107	0.250 [6.35]	26	0.028 [0.71]	0.026 [0.66]	4 [17.8]	
				28	0.024 [0.61]	0.023 [0.58]		
				2-28*	0.028 [0.71]	0.026 [0.66]	2* [8.9]*	
				30	0.022 [0.56]	0.020 [0.51]	1.0* [4.4]*	
2-30*	0.026 [0.66]	0.025 [0.63]						
610110172 610110173	910101102	910104118	0.300 [7.62]	14	0.063 [1.60]	0.059 [1.45]	10* [44.5]*	
				16	0.059 [1.50]	0.055 [1.34]		
				18	0.055 [1.40]	0.051 [1.30]		
				1-18/1-22*	0.055 [1.40]	0.051 [1.30]		
				2-20*	0.055 [1.40]	0.050 [1.27]		
2-22*	0.046 [1.17]	0.042 [1.07]						

*Pullout force is for individual wires

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CRIMP TOOL ADJUSTMENT AND WIRE PREPARATION, CONTINUED

- Determine the strip length according to wire gauge (**Table 1**). Strip wire.

CONTACT SETUP AND CRIMPING

- Insert the contact into the crimp tool.
- Insert stripped wire fully into the contact and squeeze the crimp tool handle until a positive stop is reached. The tool will release and return into a fully "open" position. Remove crimped contact and wire.



OBSERVE PRECISION RATCHET ACTION BY OPENING AND CLOSING THE CRIMP TOOL FULLY SEVERAL TIMES. NOTE THAT THE TOOL CANNOT BE OPENED WITHOUT COMPLETING A CYCLE. NEVER ATTEMPT TO DISASSEMBLE THE TOOL. NEVER TIGHTEN OR LOOSEN STOP NUTS ON THE BACK OF THE TOOL.

- VPC recommends applying 0.093" [2.4 mm] diameter shrink tubing, 0.625" [16 mm] long, to all TriPaddle crimps. The shrink tubing should be applied adjacent to the inspection hole (**Figure C**).

NOTE: Larger or smaller shrink tubing may be required for larger or smaller gauge wire and multiple wires crimped to one contact.

ACCEPTABLE CRIMP CRITERIA

- Follow the instructions for tool setup to ensure the tool is ready for use.
- Crimp the contact onto the respective wire according to the contact assembly instructions. Ensure that the crimp minimum is measured with an approved gauge pin.
- The crimp must be between the inspection hole and the end of the contact to be acceptable. The crimp creates two distinctive indentions on four sides of the contact creating a square appearance. This is an acceptable result (**Figure D**).
- Inspect the crimp to ensure none of the indentions are connected to the inspection hole (**Figure E**). If the indentions make contact with, or are above the inspection hole, the crimp is unacceptable.
- Inspect the crimp to ensure none of the indentions are connected to the end of the contact. If the indentions make contact with the end of the contact, the crimp is unacceptable.

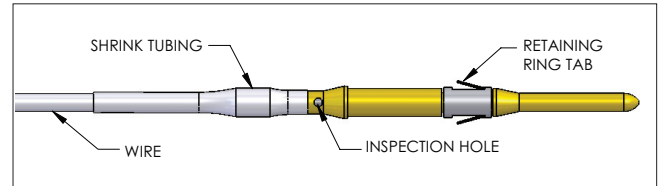


Figure C. The shrink tubing must be adjacent to, but not cover, the inspection hole.

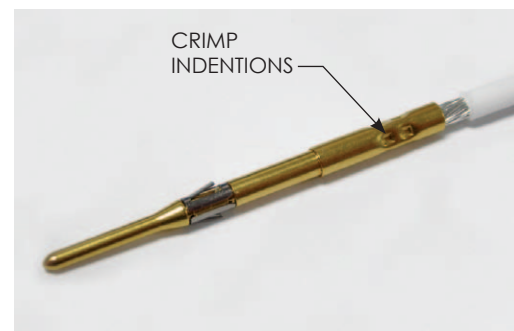


Figure D. Correct location of the crimp divots.



Figure E. The crimp region is between the inspection hole and the end.