

TRIPADDLE SIGNAL RECEIVER CONTACT ASSEMBLY

PART # 610 110 101 / 610 110 125 / 610 110 128
 610 110 167 / 610 110 171 / 610 110 174



TOOLS REQUIRED

Crimp Tool, Part # 910 101 102 or 910 101 103
 Crimp Locator, Part # 910 104 116 or 910 104 127
 Determine proper crimp tool and locator according to **Table 1**.

CRIMP TOOL SETUP

1. Set up the crimp tool, Part # 910 101 102/103 (**Figure A**), by loosening the latch-locking screw (turn counter-clockwise to loosen). Remove any previously used crimp locator.
2. Insert the open end of the crimp contact locator, Part # 910 104 116/127 (**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.

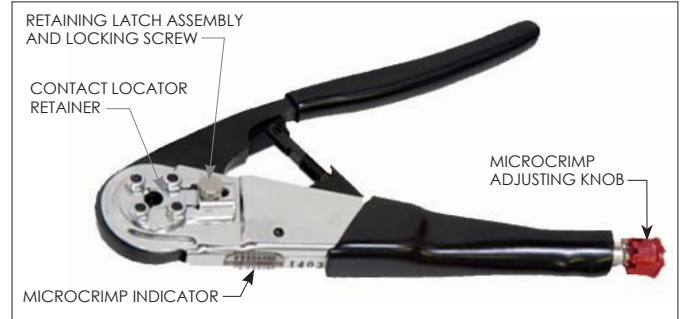


Figure A. Crimp tool, Part # 910 101 102.

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.

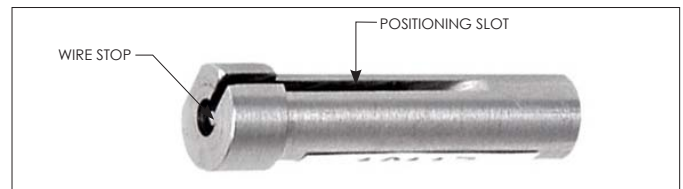


Figure B. Locator positioning slot and wire stop only found on Part # 910 104 127.

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					
610110101 610110125	910101103	910104127	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]	
							2-26*		0.036 [0.91]	0.033 [0.84]	4* [17.8]*
			3-26*	0.041 [1.04]	0.037 [0.94]						
610110128	910101102	910104116	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]					
610110167 610110171	910101103	910104127	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* [8.9]*				
				2-28*	0.028 [0.71]	0.026 [0.66]	1.0* [4.4]*				
				30	0.022 [0.56]	0.020 [0.51]					
610110174	910101102	910104116	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]					

Locator Part # 910 104 107 can be substituted for 910 104 127; however, VPC recommends the use of Part # 910 104 127.

*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.
- Insert the contact into the crimp tool. For contacts using the crimp contact locator, Part # 910 104 127, align the contact retaining tab (**Figure C**) with the positioning slot in the crimp contact locator and insert the contact into the crimp tool.

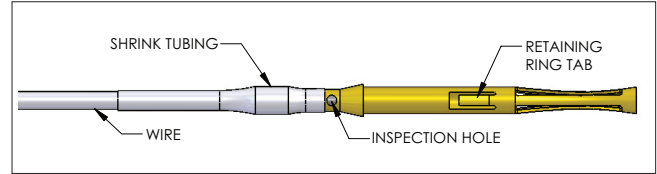


Figure C. Contact retaining tab must be aligned with the contact locator positioning slot.

NOTE: The contact will drop completely into the crimp tool if properly positioned. If the contact does not drop completely into the crimp tool, remove the contact, ensure that the contact retaining tab is properly aligned with the contact crimp locator, and re-insert the contact into the crimp tool. Do not force the contact into the crimp tool, as contact damage will occur.

CONTACT SETUP AND CRIMPING

- 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.



Figure D. Correct location of the crimp divots.



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

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.