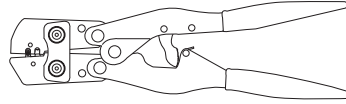


## CRIMP TOOL OPERATION

There are five different crimp tools used with Trident contacts. Find the appropriate tool on the Contact Selection Chart → on page 69 and follow the instructions for that tool below.

### HAND CRIMP TOOL FOR STAMPED CONTACTS

(192990-3140 for 16-28 AWG contacts and 192900-0175 for 14 AWG contacts)



**STEP 1:** Strip wires to length (See strip length in Column 8 of contact chart → on page 69).

**STEP 2:** Open the tool and select the proper crimp cavity for the wire gauge.

**STEP 3:** Hold tool with the die cavity identification facing away from you.

**STEP 4:** Pick up the contact by the mating end. Slip the contact into the appropriate die cavity so that the notch just behind the “gold” portion of the contact fits over the sliding plate on the lower half of the die.

**STEP 5:** Squeeze the handle just enough to hold the contact in the die cavity.

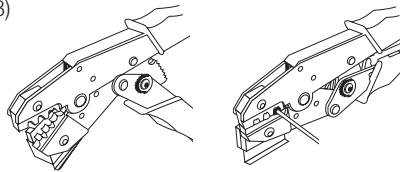
**STEP 6:** Turn the tool over and insert the stripped wire into the contact until it bottoms.

**STEP 7:** Cycle the tool. The tool will not open until the contact has been completely crimped.

**STEP 8:** Inspect the crimp. A contact crimp verification tool is available. Please contact us. See “Stamped Contacts” in Crimp Inspection section → on page 67.

### CONTACT CRIMP TOOL

(121586-5236) (121586-5237) (121586-5238)



**STEP 1:** Strip wires to length (see strip length in Column 8 of contact chart → on page 69).

**STEP 2:** Open the tool and select the proper crimp cavity for the wire gauge.

**STEP 3:** Now hold the tool so that the cavity identification is away from you (the back side).

**STEP 4:** Surrounding the lower die is a holding frame; push up on the tab to fully raise the frame.

**STEP 5:** While holding the frame open, insert the power contact wire side first, until the lip of the contact hits against the ledge of the lower die. The U-shaped wire crimps should be upright in the die.

**STEP 6:** Release the tab. The frame should now be holding the contact in the proper cavity, ready to crimp.

**STEP 7:** Close the tool just enough to grip the contact.

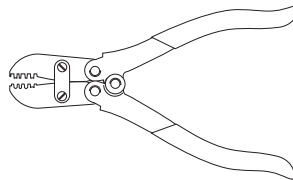
**STEP 8:** Insert the stripped wire into the contact from the wire side.

**STEP 9:** Cycle the tool. The tool will not open until the contact has been completely crimped. An escape lever is located on the ratchet mechanism to release the tool if necessary.

**STEP 10:** Inspect the crimp. See “Stamped Contacts” in Crimp Inspection section → on page 67.

### ECONOMY TOOL FOR STAMPED CONTACTS

(192922-1440)



**STEP 1:** Strip wires to length (See strip length in Column 8 of contact chart → on page 69).

**STEP 2:** Select the proper crimp cavity for the wire gauge.

**STEP 3:** The contact itself has two U-shaped crimp areas, each requiring a separate crimp operation. The larger, rear U-shaped area crimps over the wire insulation and provides strain relief. The smaller, longer, U-shaped area crimps over the bare wire and provides the electrical connection.

**STEP 4:** Insert the contact into the tool so that the smaller wire crimp U is upright and centered in the proper die (the open portion of the U facing the cavity identification on the tool).

**STEP 5:** Close the tool just enough to grip the contact.

**STEP 6:** Insert the stripped wire into the contact until it bottoms.

**STEP 7:** Cycle the tool.

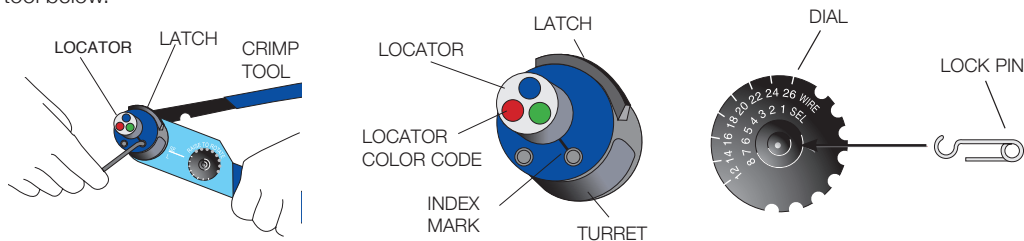
**STEP 8:** Remove the crimped contact. Now you must crimp the insulation grip.

**STEP 9:** Place the insulation U upright in the die cavity marked INS. Crimp the Insulation U over the wire insulation in the same manner as the wire crimp.

**STEP 10:** Inspect the two crimps. See “Stamped Contacts” in Crimp Inspection section → on page 67. A contact crimp verification tool is available. Please contact us.

### CRIMP TOOL FOR MACHINED CONTACTS

There are five different crimp tools used with Trident contacts. Find the appropriate tool on the Contact Selection Chart → on page 69 and follow the instructions for that tool below.



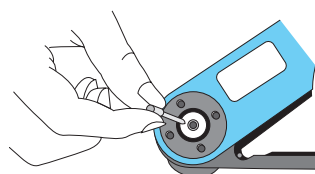
**STEP 1:** Strip the wires to length (see column 8 of contact chart → on page 69).

**STEP 2:** Open the crimp tool by squeezing the handles. Push the latch on turret to pop up the locator. Attach the turret to the crimp tool using the two captive hex bolts in the turret.

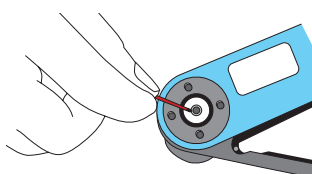
**STEP 3:** Select the proper locator position for your contact by rotating the locator until the proper color is aligned with the index mark. Push locator back down until it snaps into position.

**STEP 4:** Adjust dial for proper wire gauge. To change the dial setting, remove the lock pin and lift center of dial. Turn to the desired wire gauge. Replace lock pin on dial.

CONTACT TYPE	LOCATOR COLOR
PINS	BLUE
SOCKETS	GREEN
FIRST-MATE	RED



**STEP 5:** Cycle the tool before inserting the contact to be sure the tool is in the open position. Drop the contact, mating end first, into the crimp cavity of the tool. Squeeze the tool handle just enough to grip the contact without actually crimping it.



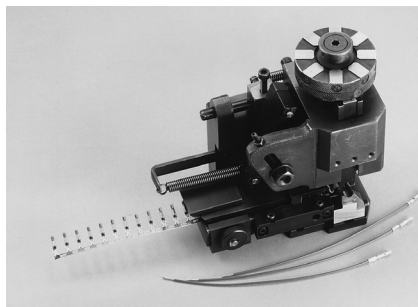
**STEP 6:** Insert the stripped wire into the contact with a slight twisting motion. Be sure all wire strands are inside the contact. Squeeze the handle to cycle the tool. The handle will not release until the contact is completely crimped.

**STEP 7:** Remove the crimped contact. Pull on the wire slightly to be sure it is properly crimped. Be sure the contact is not bent or damaged in any way.

**STEP 8:** Visually inspect the crimp. See Machined Contacts drawing in Visual Check section on next page.

### NEW TRIDENT AUTOMATIC CRIMP TOOLS FOR REELED STAMPED CONTACTS

Mini Applicator modules are used in industry-standard crimp presses. This allows for fast change-over for crimping different contacts. Using the same crimp press saves valuable factory floor space over multiple presses.



CONTACT	TYPE	MINI APPLICATOR PART NUMBER	
		METCAL	SCHAFFER
20-26	Signal	121586-5239	121586-5142
16-18	Signal	121586-5217	121586-5141
14-16	Signal	121586-5240	Contact us for details

Adjustment fixture for signal applicators 317-8675-133

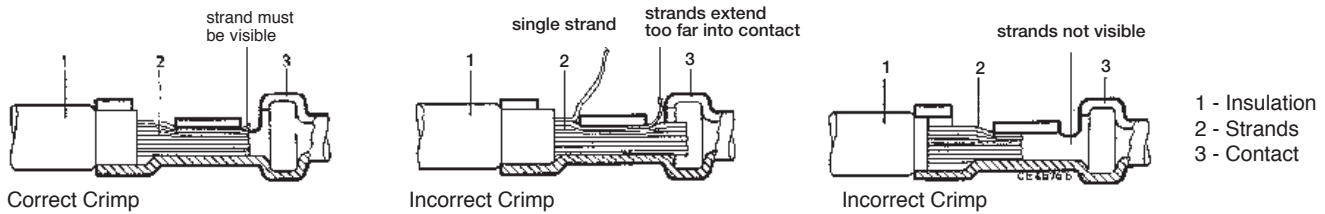
CONTACT	TYPE	MINI APPLICATOR PART NUMBER
16-18	Power	193800-0031
14-16	Power	193800-0024
12-14	Power	193800-0023

Contact us for detailed crimp specifications.

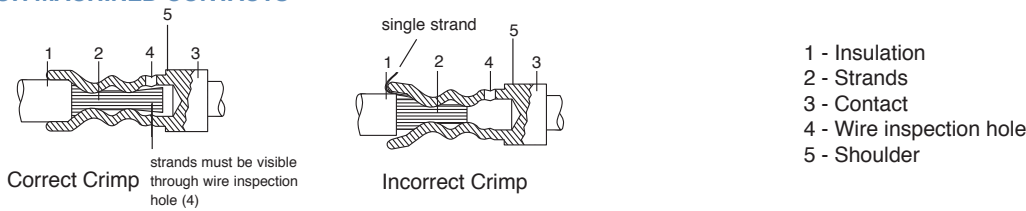
### CRIMP INSPECTION (MICRO SECTIONS)

Enlargement of micro section allows for final judgment of crimp quality. This test is recommended whenever new tools or new types of wire are used.

#### FOR STAMPED CONTACTS



#### FOR MACHINED CONTACTS



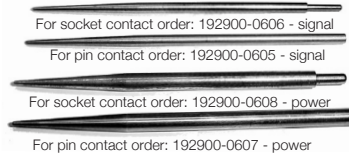
### INSERTION OF CONTACTS

No insertion tool is required.

**STEP 1:** Strip wires to length (See strip length in Column 8 of contact chart → on page 69.)

**STEP 2:** When using Neptune connectors with the rear wire sealing grommet, put the grommet in place on the connector and push the contact directly through the grommet into the cavity. Start at the center of the layout and work concentrically to the outside edge to eliminate the possibility of the grommet shifting or bunching during loading.

Wire needles may be used as an assembly aid for use with high density layouts, maximum size wire insulation, or when adding to already terminated connectors.



To use, push the point of the needle through the selected hole and check that it has passed through to the correct contact cavity by looking at the mating face of the connector. Once verified, attach the contact to the non-pointed end of the needle. Holding the point of the contact, push the contact into the connector body until the contact locks into place. Note: The wiring needle is used as a guide and will not pull the contact into the connector body. Be sure to inspect the mating face (see 3 below) as the grommet mutes the “feel” of the contact locking into place.

**STEP 3:** Inspect by looking at the mating side of the connector. Be sure that all of the contacts are on the same plane (fully inserted). If not, use the extraction tool to remove the contact and re-insert.

### EXTRACTION OF CONTACTS

Contacts can be removed from the housings using the appropriate extraction tool. The tool is placed over the mating end of the contact and the sleeve is rotated slightly as it is pushed into the connector.

**IMPORTANT:** Make sure the depth indicating line on the tool is even with the mating face of the connector before depressing the plunger to avoid damage to connector and contact. Light pressure on the plunger will eject the contact from the rear of the connector.

**STEP 1:**

Contact in connector

**STEP 2:**

Extraction tool compresses tines

**STEP 3:**

Plunger pushes contact out rear of connector

