Interconnect Solutions & Services

Wiring Assembly Instructions

**0883010-11 Contact, ITA, Mini-Coax, RG316, 50 Ohms.**

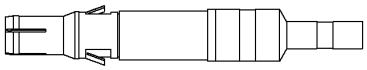
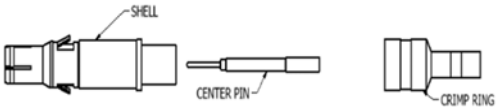


**Fig. A.** (Contact Sub-Assembly)




Contact Sub-Assembly Piece Parts.

| Contact Crimp Information Table | | | | | | | |
|---|---|---|---|---|---|---|---|
| Wire Type | Wire Awg. | Strip Length In Inches | Crimp Tool | Hex Die Set | Indicator | Selector No. | Heat-shrink Length X Dia. |
| RG316 | 26 | A) 3/16" B) 7/32" C)13/32" | 452300 | 452312 | I | N/A | 5/8 X 3/16 |

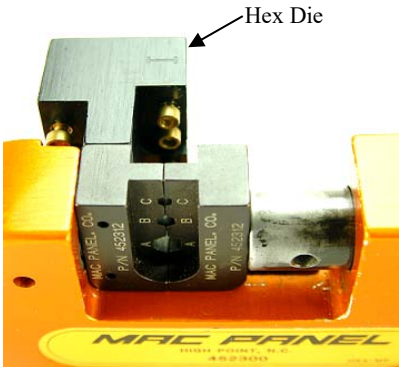
| Test Requirements | | | | |
|---|---|---|---|---|
| Test Type | Voltage (Hi-pot Only) | Pull Test | Depth Gauge | Marker Settings |
| Hi-pot | 500V DC | 3lbs | 412656 | 76 - 91 |

**NOTE 1:** Refer to **IPC/WHMA-A-620A** standard (Ch. 11.1.2) for cable lengths, measurements and tolerance.
**NOTE 2:** Overall length of cable should be less 3/8" to compensate for the contact attachment.

**STEP 1)** From the "Contact Crimp Information" Table, use the crimp tool and hex die set listed.

**STEP 2)** Ensure hex die, is set to correct indicator as listed in "Contact Crimp Information" Table.
**NOTE:** Refer to **Fig. B** for reference.


**Fig. B. (452300)**




**Detail A. (452312)**

**STEP 3)** Using a ruler along with wire strippers or automatic wire stripping machine, strip the cable to the dimensions in the "Strip Length" column. Example of stripped wire shown below in **Fig. C.**

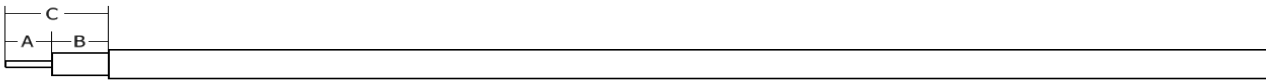



**Fig. C.**

**STEP 4)** Slide crimp ring over cable. Pull shield back over the cable outer jacket as shown below in **Fig. D.**
**NOTE:** Ensure that no strand of Center Conductor contacts the shield to prevent shorts.

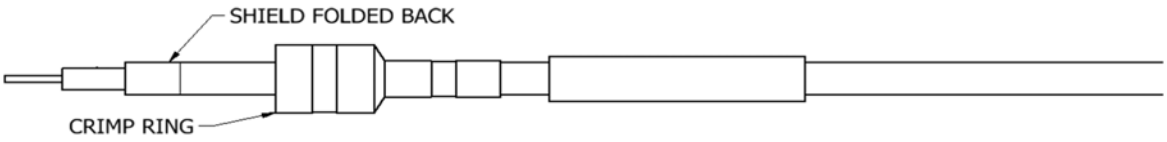



**Fig. D.**

**STEP 5)** Tin center pin and center wire. Insert cable center wire into center conductor and solder in place. **Fig. E.** and **F.**

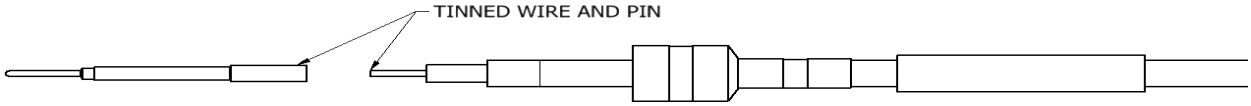



**Fig. E.**

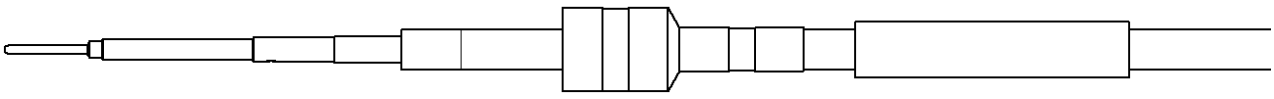


**Fig. F.**

**STEP 6)** Ensure dielectric is fully seated in shell. Slide shell assembly onto center conductor/cable sub-assembly until fully seated as shown in **Fig. G.**

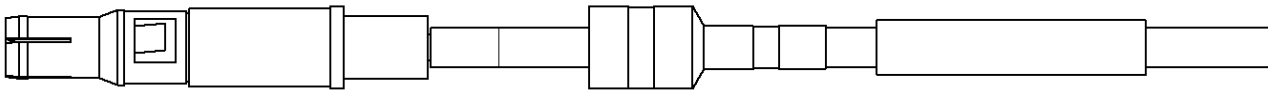


**Fig. G.**

**STEP 7)** Evenly form shielding over contact as shown in **Fig. H.**

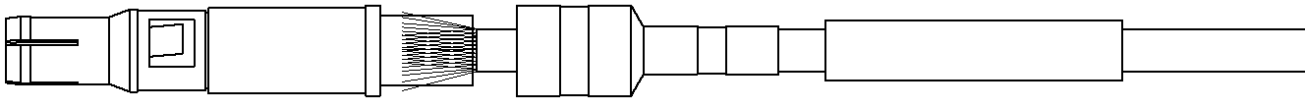


**Fig. H.**

**STEP 8)** Slide crimp ring over shield and up to contact until firmly seated in **Fig. J.**

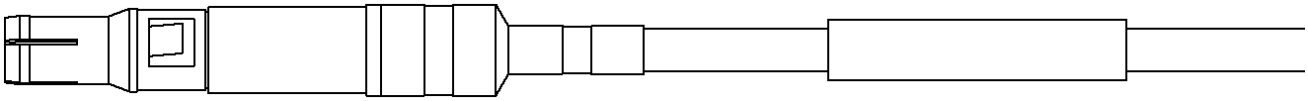


**Fig. J.**

**STEP 9)** Inspect contact/cable assembly using depth gauge listed in "Test Requirements" Table. **Fig. K.**
**NOTE**: Calibrate gauge using reference sheet **IN 412656** (Instructions for calibrating Depth Gauge) before using.

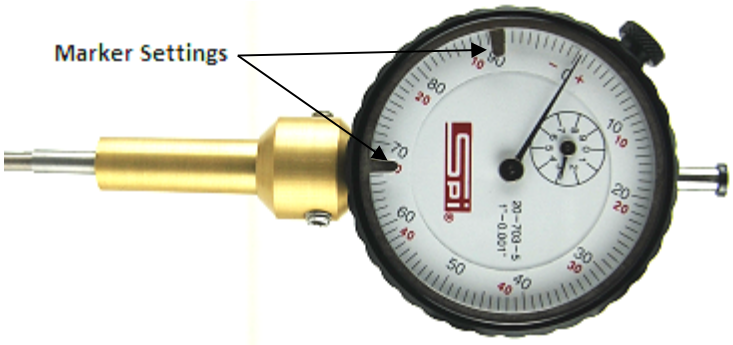



**Fig. K.**

**STEP 10)** Test contact by inserting contact/cable assembly fully into test gauge, until seated firmly. **Fig. L.**

**STEP 11)** Gently tap top of pin gauge to ensure that gauge is seated fully to bottom of center contact pin.

**STEP 12)** Hold contact/cable assembly, and test gauge firmly, proceed to take measurement as per **Fig. L.**

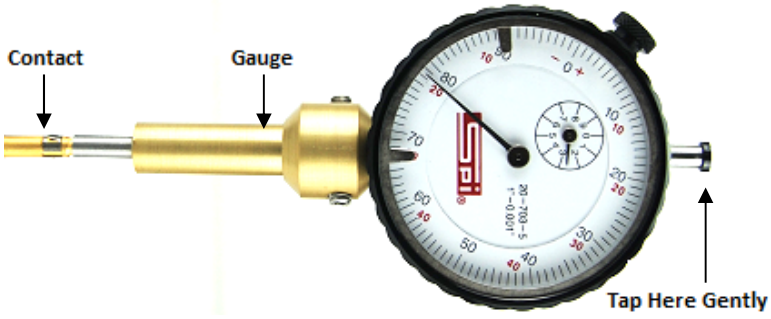


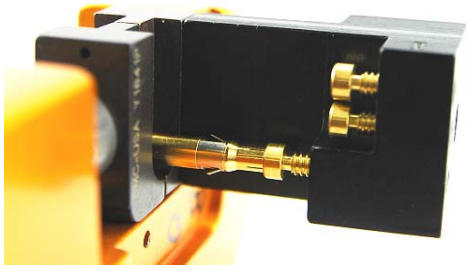

**Fig. L.**

**STEP 13)** Results should be between the "Marker Settings". Listed on the "Test Requirements" Table.
**NOTE**: Do not proceed to step 14 if results are unacceptable.(Repeat steps **3** through **13**).

**STEP 14)** Use crimp tool, and crimp large diameter of crimp ring in location **(A)** of hex die **Fig. M**.

**STEP 15)** Crimp small diameter of crimp ring in location **(B)** of hex die. **Fig. N**.
**NOTE:** Make sure the contact seats properly in the stops aligned with locations on hex die **Figs. M** and **N** details.


**Fig. M. (Front View)**



**Detail (Back View)**

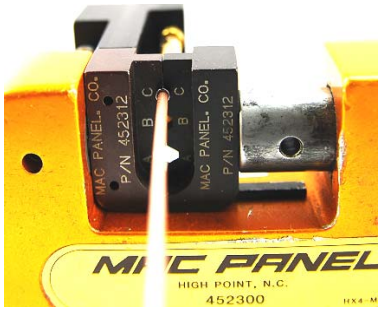
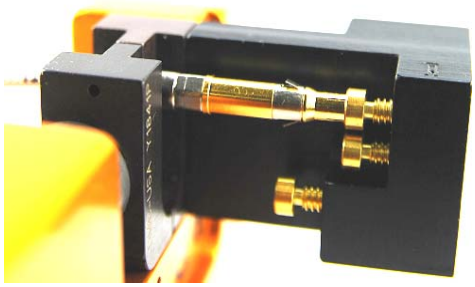



**Fig. N. (Front View)**



**Detail (Back View)**

**STEP 16)** Perform a " pull and return test" as per **IPC/WHMA-A-620A** standard (Ch. 19.7.2.1) utilizing a pull force of 2lbs.

**STEP 17)** Gauge crimped contact/cable assembly again using the depth gauge (steps 9 to 15).The reading should still be within range.

**STEP 18)** Perform a "Hi-pot" test to the settings listed in "Test requirements". If a "pass" test occurs proceed to next step.

**STEP 19)** Shrink heat-shrink onto crimp ring, to match the image below in **Fig. P**, to complete cable assembly.

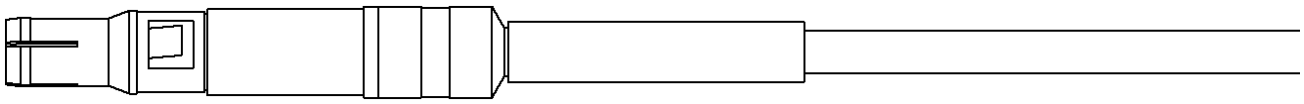


**Fig. P**.

**NOTE:** Shrink-tube is to provide strain-relief.