Interconnect Solutions & Services

Wiring Assembly Instructions

0883010-10 Contact, ITA, Mini-Coax, RG178, 50 Ohms.

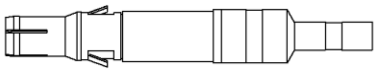
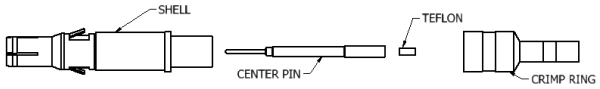


Fig. A. (Contact Sub-Assembly)



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.
RG178	30	A) 3/16" B) 7/32" C)13/32"	452300	452312	I	N/A	5/8 X 3/32

Test Requirements				
Test Type	Voltage (Hi-pot Only)	Pull Test	Depth Gauge	Marker Settings
Hi-pot	500V DC	1.5lbs	412656	70 - 90

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.

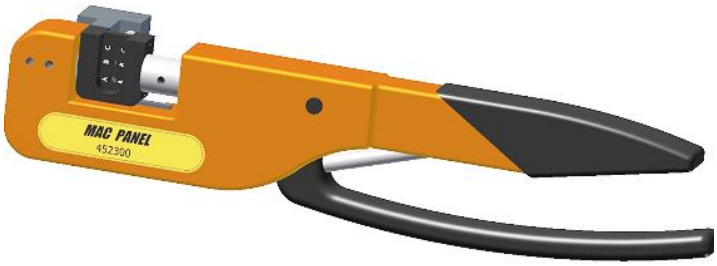
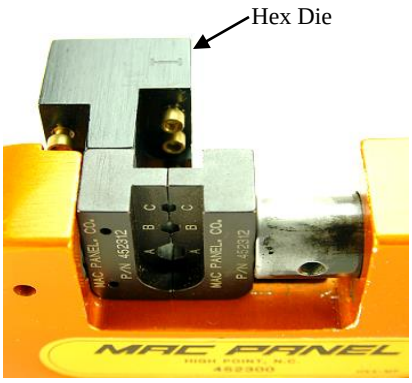


Fig. B. (452300)



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.**

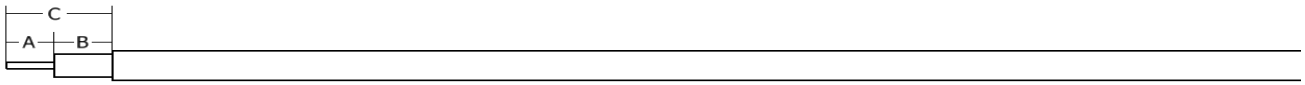


Fig. C.

STEP 4) Slide crimp ring over cable. Pull shield back over the cable outer jacket and slide Teflon over dielectric as shown below in **Fig. D.**

NOTE: Ensure that no strand of Center Conductor contacts the shield to prevent shorts.

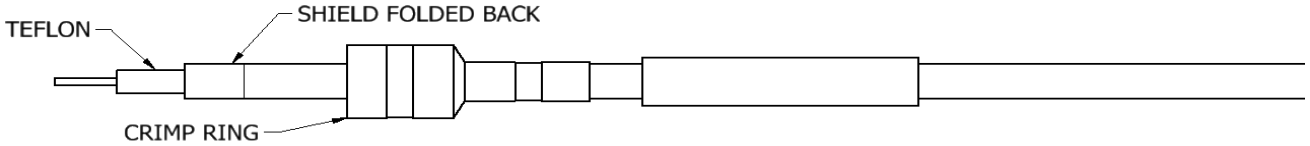


Fig. D.

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

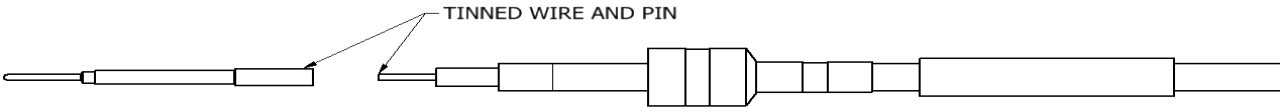


Fig. E.

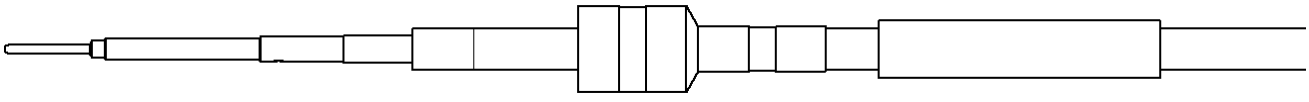


Fig. F.

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.**

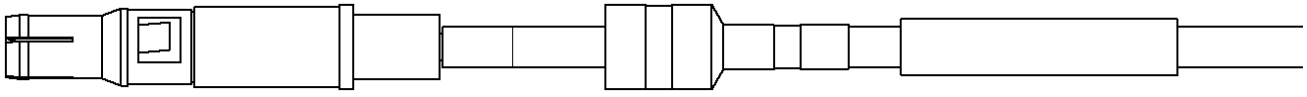


Fig. G.

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

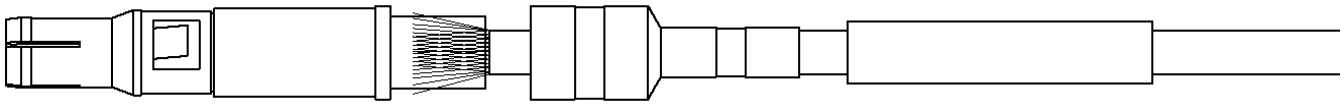


Fig. H.

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

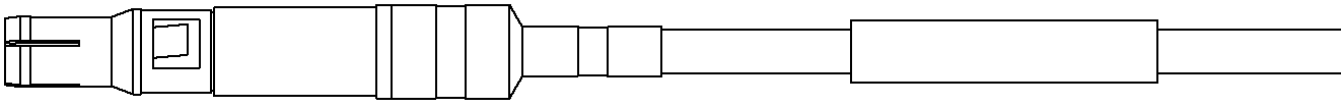


Fig. J.

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.**

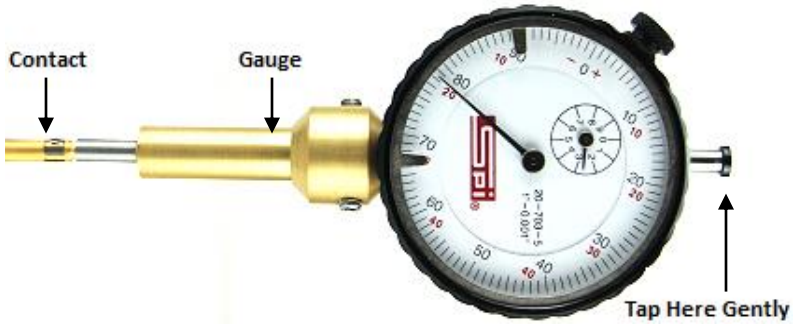


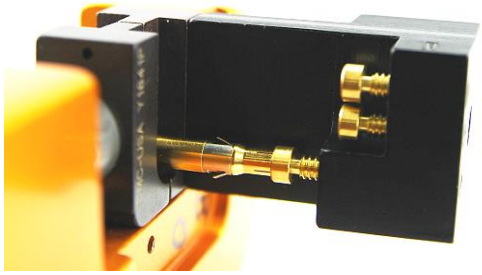
Fig. L.

STEP 13) Results should be between the "Marker Settings". Listed on the "Test Requirements" Table.
NOTE: Do not proceed to step 15 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 **(C)** 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)

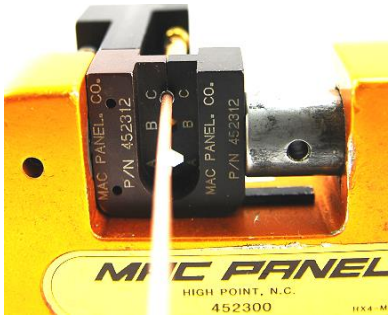
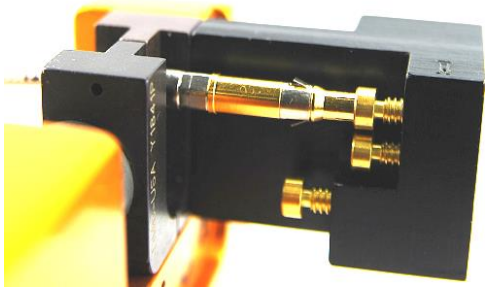


Fig. N. (Front View)



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 1.5lbs.

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.

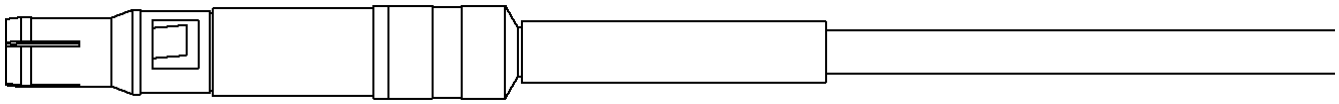


Fig. P.

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