

# SPEC Pak® High Power Plug

## Assembly Instructions For 2, 3 & 6 Position

### SPEC Pak® High Power Shell Kit:



Plug Shell  
Included Component



Holder Set  
Included Component



#8 x 5/8 Screw  
Included Component



Gland Assembly  
Optional Component

**You will need:** - Wire Stripping Tool - APP Crimp Tool, See Section 2 - Phillips Head Screw Driver - 8 Screws, Size #10 or M5

#### Step 1 Slide PG Gland assembly onto wires

- Pull approximately 14 inches (355 mm) of wire through the gland to allow working space.

#### Step 2 Cable and/or Wire Preparation

- Jacketed cable: Strip outer jacket. Strip insulation from discrete wires (See Table 1 & Figure 2)
- Discrete wires: Strip insulation from discrete wires (See Table 1 & Figure 2)

**Caution:** Do not damage copper conductors when stripping wires



Figure 1

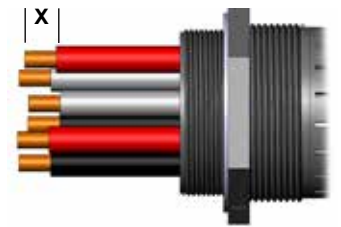


Figure 2

Table 1

Powerpole® Contacts		PowerMod® Signal Contacts	
Outer Jacket – 4" [102 mm]		Outer Jacket – 5.5" [139.7 mm]	
Contact Series	"X"	Wire Insulation	Wire Insulation
PP75	9/16" (14.5 mm)	Contact OD < Barrel ID	Contact OD < Barrel ID
PP120	15/16" (24.0 mm)	Pins 0.18" (4.5 mm)	0.24" (6.0 mm)
PP180	1-1/8" (28.6 mm)	Sockets 0.21" (5.5 mm)	0.28" (7.0mm)

#### Step 3 Secure body of PG Gland to Receptacle Shell

- Apply a generous bead of Permabond 941 or Loktite 411 to the center of the gland thread and rotate the gland body to insure full coverage. Work quickly. The adhesive sets quickly.
- Hand tighten body of PG Gland to the Plug Shell until snug, tighten 1/8 - 1/4 turn with spanner or crescent wrench

**Caution:** Do NOT over tighten the sealing gland body to the shell. Do NOT tighten the sealing nut at this time.



Figure 3

#### Step 4 Contact Termination

- Insert wire into crimp barrel to the full depth
- Visually verify that all strands are inserted into the barrel
- Follow the appropriate crimp instructions which are included with the crimp tools and/or at [www.andersonpower.com](http://www.andersonpower.com)



Power Contact



Signal Contacts

**Caution:** Keep all Powerpole® contacts parallel to each other while crimping jacketed cable. Improper crimping may produce high resistance or contact distortion.

Tool PN	Tool Type	Contact Series	Contact
1309G4	Hand	PP75	5900, 5952 or 5915
1368	Die-less Hydraulic	PP120	1319, 1319G4, 1319G6, 1323G1, 1323G2
1368	Die-less Hydraulic	PP180	1328G1, 1328G2, 1347, 1348, 1382, 1383, 1384
PM1000G1	Hand	Auxiliary (PowerMod®)	PM16P12S30, PM16P1416S30, PM16P1620S30, PM16P2024S30, PM16S12S32, PM16S1416S32, PM16S1620S32 or PM16S2024S32

**Step 5 Block Powerpole® housing together**

- Orient Powerpole® housings with hoods down (See Figure 4)
- Block Powerpole® housings by interlocking dove tails to create individual rows (See Figure 5)
- If more than one row is required, block rows together by interlocking dove tails

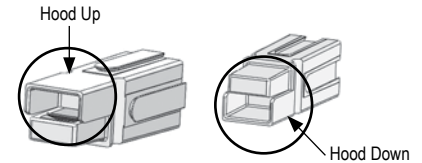




Figure 4

**Step 6 Insert Powerpole® block into Powerpole® Holder**

- With Hood down, slide Powerpole® block into the holder half marked with  on the left side, aligning the holder posts with the groove in Powerpole® (See Figure 6)
- Orient the remaining holder half with  on the left side (See Figure 6)
- Slide remaining half into the assembly, inserting the holder posts into the Powerpole® groove and aligning the tongues and grooves on the holder halves

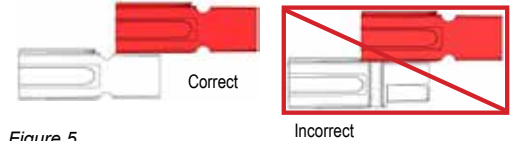



Figure 5

**Step 7 Install Crimped Signal Contacts into the Connector Housings:**

- Orient the insert holder with the  to the left
- Snap the crimped signal contacts into the appropriate holes in the back of the holder halves (See Figure 7). A tactile snap will be felt when contact is latched.
- Repeat until all signal contacts have been installed into the housing

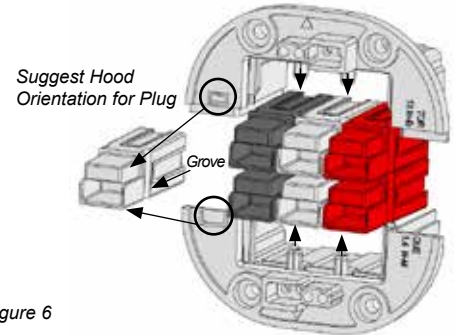



Figure 6

**Step 8 Install Crimped Power Contacts into the Connector Housings**

- Orient the insert holder with the  to the left
- Insert crimped power contacts into the appropriate Powerpole® housing until the contact lip snaps over the edge of the spring (See Figure 8)
- Repeat until all power contacts have been installed

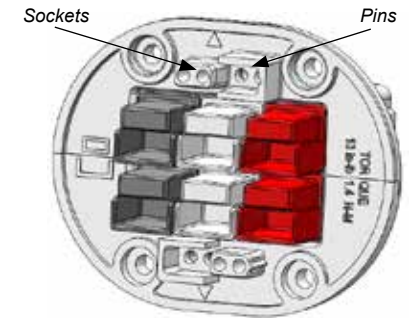
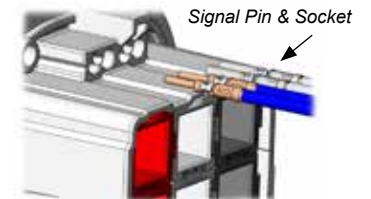


Figure 7

**Step 9 Install insert holder into the plug shell**

- Prior to inserting the holder into the plug shell, create 2" (50.8 mm) of slack in the signal wires, if applicable. **Hint:** To maintain the proper amount of slack with the wires, temporarily tape wires together.
- Secure insert holder to the plug by tightening the screws in an alternating manner. Torque: 13 in-lb (1.4 N-M) (See Figure 9)



**Step 10 Secure Sealing Nut on Gland**

- Hand tighten until snug.
- Stabilizing sealing gland body (from step 3) with a spanner or crescent wrench (see Figure 10).
- Tighten additional ½ - ¾ turn using a second spanner or crescent wrench.

**Caution:** Do NOT over tighten the sealing gland body to the shell.

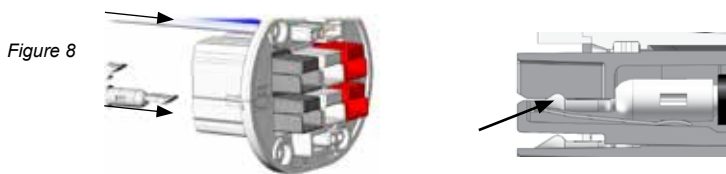


Figure 8



Figure 9

Figure 10

