

WARNING - Connectors should never be assembled or disassembled when contacts are live.

# SPEC Pak® High Power & Mid Power Connectors: Use Step 1 Only

#### Step 1 Crimping wire contacts

 Strip insulation from the end of the wire to be terminated, being careful not to damage the copper conductors (See Figure 1).



If the wire insulation OD is smaller than the crimp barrel ID, strip to the following dimensions:

For Pin Contacts:

X=.18", 4.5mm

For Socket Contacts:

X=.21", 5.5mm

If the wire insulation OD is greater than the crimp barrel ID, strip the wire to the dimensions:

For Pin Contact X=.24", 6mm For Socket Contact X=.28", 7mm

- Insert the wire into the crimp barrel to the full depth. Visually verify that the wire is inserted fully by observing the strands through the inspection hole. All strands must be inserted into the barrel.
- Follow the appropriate crimp instructions for either the hand tool (Part No. PM1000G1) or the semi-automatic crimp tool (Part No. PM1001G1). See website for crimp instructions, <a href="www.andersonpower.com">www.andersonpower.com</a>.

The maximum dimension across the crimp must not exceed .129"(3.30mm) or the contact will not latch into the housing. Crimps should be verified for the specific application due to variations in wire and stranding.

Refer to 1S6494 for greater detail.

### Step 2 Insertion of Contacts into Housing

- Crimped contacts are to be inserted fro the rear side of the connector using insertion tool PM1002G1, if appropriate. A tactile snap will be felt when contact is latched. Apply a slight tug to confirm latching. The wire and contact will spin freely when latched in the housing. Contact retention should be 18lb (80N) minimum.
- Contacts are released from the front side of the connector and removed from the rear using extraction tool PM1003G1:
- Slide tool over pin or socket body until the tool bottoms on the housing.
- 2. Push the button on the top of the tool with thumb.
- 3. Simultaneously, gently pull on the wire from the back of the connector.
- 4. Contact should release.

Care should be taken not to damage the contact OD or housing ID. If there is any doubt with respect to the housing integrity after contact removal, replace the housing. When replacing contacts in completed assemblies, great care must be taken to ensure that the replacement contact is latched (see instructions above).

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## Step 3 Hood Installation

The optional hood kit consists of:

- Two hood halves
- · Strain relief bar
- Two screws
- Two nuts



Note: If an odd number of wires is used in the connector assembly, it's recommended to heat shrink the wires into one bundle prior to installation in the hood.

 Lay one half of the hood body, inside up on a table. Place strain bar in location in the orientation as shown.



Slide connector with contacts inserted into the hood half. Make sure the "ear" of the housing fits in the opening of the hood.

3. Put the second half of the hood on top



- of the connector. Press down on the hood until the four latches audibly click to lock the halves together (no picture).

  4. Insert the two hood screws through the
- 4. Insert the two hood screws through the holes in the top hood half. Maneuver the wires so that they do not interfere with the screws. Start to engage the screw threads into the strain relief bar.



5. Flip the assembly over and install the two nuts in the hexagonal pockets of the lower half hood. Using your fingers to keep the nuts in place, resume tightening the screws until the screws engage the nuts.



Fully tighten the screws until a torque of
 5-3.5 in-lbs (.28-.40 N-M) is achieved.
 Consideration should be given to protection of latches during shipping and handling.

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