

TECH BULLETIN # 1008

Products Affected:

CTI# 5560, 5561, 5562, 5563, 5564, 5660, 5661, 5662, 5663, 5664: Anderson Connector (Any color)

Overview:

Below are instructions from Anderson Power Products on properly crimping/soldering Powerpole® contacts to wire and inserting contacts into Powerpole series housings.

CTI products can connect with both 30A and 45A Anderson Powerpole connectors. These connectors have identical bodies but use different current-rated contacts.

- The correct crimper for 30A contacts is Anderson Power # 1309G2
- The correct crimper for 45A contacts is Anderson Power # 1309G3W

Anderson Power products are available from Allied Electronics <u>http://www.alliedelec.com/</u> and from the Anderson Power on-line store: <u>http://store.andersonpower.com/default.aspx</u>

ASSEMBLY INSTRUCTIONS

1. Strip wire to "X" dimension (Figure 1) taking care to avoid nicking or cutting of wire strands. Do not bend or twist strands too sharply.



Connector		"X"	"X"
Series	amps	inches	mm
1395 Series	15	5/16	7.9
1330 Series	30	5/16	7.9
1845 Series	45	5/16	7.9
1345 Series	45	5/16	7.9
1300 Series	75	9/16	14.5
1320 Series	120	15/16	24.0
1380 Series	180	1 - 1/8	28.6

TERMINATION

2. Manufacturer recommends termination by crimping.

a. Crimped

1300, 1320 and 1380 series contacts accept largest wire sizes rated. Smaller wire sizes require reducing bushings, Cat. Numbers 1395, 1300, 1845 and 1345 do not require reducing bushings. Insert wire to the base of contact, then crimp. Note: indentation should fall in the middle of the barrel (see Figure 2). Use recommend crimp tools only. Crimping by other means may disturb contact position in housing and/or produce high resistance joints.



PP Crimping Tool (1)	Connector	Wire Sizes		Tool Part
	Rating (amps)	AWG	mm	Number
Manual, cycle controlled F-type crimping tool	15-30 amps	#20-12	0.5-4.0	1309G2 1309G6*

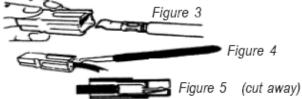
* For use with superflex wire

b. Soldered

Melt rosin flux tin solder into contact well, do not solder-dip contacts or overload the joint with solder. On 1395 and 1300 Series contacts, solder flow should not extend beyond contact wall. On all models, care should be taken that no solder adheres to contact surfaces.

CONTACT INSERTION

Insert contact and wire into the housing from the rear (See Figure 3). Position contact as shown (See Figure 4) and push forward using insertion / extraction tool Cat. Number 111038G2 for smaller wire sizes in 1345, 1395, 1330, 1845, 1300 models so that contact slips under the barrier and snaps over the end of the retaining spring (See Figure 5). Tug slightly to make sure contact is locked in place.



CONTACT REMOVAL

Switch off power first. For 1320 and 1380 series select a screwdriver of appropriate size. Depress spring at front of housing and pull wire out. For 1395, 1330, 1845, 1345 and 1300 series, insertion / extraction tool (Number 111038G2). Place one of the forward prongs of the tool between the contact and spring using a rotary motion. Continue rotation while pulling on the wire until the prong causes disengagement of contact from the spring. Withdraw contact from rear of housing

(See Figure 6)



Figure 6

CONNECTOR USAGE

1. Do not disconnect under load. Not for interrupting current.

2. Connector halves should not be disconnected by grasping cable leads.

3. For use only in equipment where the acceptability of the combination is determined by UL / CSA or other applicable certification agencies and installed by a qualified electrician.

PATENT INFORMATION

Powerpole connectors are patented under one or more of the following patents Other U.S. and foreign patents pending U.S.: 3218559; 3259870

Canada: 744,469; 744,470 U.K.: 965,074 "Powerpole," and Anderson Power Products" are registered U.S. and foreign trademarks of Anderson Power Products, 13 Pratts Junction Road, Sterling, MA 01564-2305 USA **WWW.andersonpower.com**