



An **IDEAL** Company

## SB® Connector Assembly Sheet

### For all models: 50, 120, 175 and 350 amps

### Two Pole Connectors with Single Piece Housings



#### ASSEMBLY INSTRUCTIONS

For installation by a qualified electrician in accordance with national and local electrical codes and the following instruction. The suitability of this type of termination must be evaluated by Underwriter's Laboratories, Inc. and Canadian Association for the end use application. Do not assemble connector to live wires. Assemble contact to the cables according to the equipment manufacturer's assembly instructions. The following instructions are supplied as a reference.

SB® crimp contacts are for use with stranded copper (Cu) wire only. Crimp tools recommended by APP® are required to achieve the designed performance of the connector. Use of solid wires, alternate conductor materials, or tools not recommended by Anderson™ can affect UL and CSA approvals of the connector and may produce unpredictable or health threatening results.



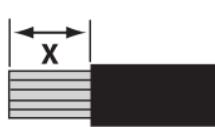
#### Instruction Steps:

1. Strip cable to dimensions in Section A.
2. Crimp or solder contact to cable following Sections B, C and D\*.
3. Observing proper polarity relative to markings on the connector housing, place contacts in housing with notched side of tongue next to spring (see figure 1).
4. Push contacts and cable into housing until the notched tongue snaps over end of spring; tug slightly to make sure contact is locked into place.

\* Soldering recommended for cables with minimal conductor stranding (ex. THHN type wire).

#### Section A: Cable Stripping Dimensions

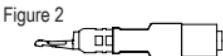
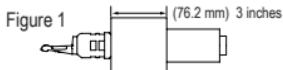
Connector Series	"X" inches	"X" mm
SB®50	9/16	14
SB®120	15/16	24
SB®175**	1-1/8	29
SB®350	1-3/8	35



\*\* Except when using contact #1348: 7/8 inch / 23mm

For SB®350 using a cable with a jacket diameter over 1.00" [28mm], it will not fit into the connector:

1. Cut shrink wrap to approximately 3 inches (76 mm) long.
2. Place shrink wrap over crimped contact as shown (see figure 1).
3. Align edge of shrink wrap tubing to the bottom of the last crimp (see figure 2).
4. Heat shrink wrap as required to form around the contact, cabling and the cable's insulation.



## Section B: Recommended Soldering Techniques

Use rosin flux solder only. Wrap cable strands. Melt solder into well, heat and insert stripped cable. Continue heating well until solder flows into wire, being careful not to over flow onto contact surface. Do not solder-dip contacts. Cable clamps for solder connections to unsupported leads (required by Underwriter's Laboratories, Inc.) are listed in Section E.

## Section C: Recommended Crimping Techniques

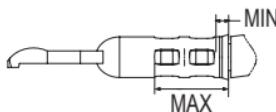
PLEASE CONSULT YOUR AUTHORIZED ANDERSON REPRESENTATIVE FOR  
RECOMMENDED TERMINATION TOOLING

Connector Series	AWG	mm <sup>2</sup>	Portable Tool	Pneumatic Bench Tool
SB <sup>®</sup> 50	16 - 6	1.3 - 13.3	1309G4	
SB <sup>®</sup> 120	6 - 1	13.3 - 42.4		
SB <sup>®</sup> 175	12 - 1/0	3.3 - 53.5		1387G1 or 1387G2
SB <sup>®</sup> 350	1/0 - 4/0	53.5 - 107.2		NA
	300 mcm	152		

Notes:

1. Ensure crimps are positioned on crimp barrels as shown. (see figure 2).
2. Use appropriate reducing bushings for smaller cable sizes (selected from Section D).
3. Pneumatic bench tools require specific die and locators for each contact being crimped, see APP<sup>®</sup> website Pneumatic Tooling Chart.
4. For high volume crimping (reeled contacts), see APP<sup>®</sup> website Press / Applicator Tooling Chart.

Connector Series	Min in. (mm)	Max in. (mm)
SB <sup>®</sup> 50	0.25 (6.35)	NA, Single Crimp
SB <sup>®</sup> 120	0.38 (9.65)	NA, Single Crimp
SB <sup>®</sup> 175	0.25 (6.35)	0.81 (20.57)*
SB <sup>®</sup> 350	0.225 (5.71)	1.15 (29.2)



\* Except contact number 1348, single crimp only @ 0.38 min.

## Section D: Contact Well Reducing Bushing

Catalog Number	For Use With	AWG Wire Size
5912		#6 - 8
5910	SB <sup>®</sup> 50	#6 - 10 & 12
5913		#6 - 14 & 16
5919		#2 - 4
5920	SB <sup>®</sup> 120	#2 - 6
5921		#2 - 8

## Section E: Cable Clamp Catalog Number

Catalog Number	For Use With	AWG Wire Size
5687		1/0 - #1
5690		1/0 - #2
5693	SB <sup>®</sup> 175	1/0 - #4
5663		1/0 - #6
5648		1/0 - #10
5918	SB <sup>®</sup> 350	2/0 - 1/0

## Disassembling Unmated SB<sup>®</sup> Housing

Switch off power. Remove contacts by depressing springs at the front end of the connector with an insulated screwdriver having a 1/4" blade. Pull the contact lightly out of the housing.

**WARNING: UTMOST CAUTION SHOULD BE USED WHEN WORKING ON LIVE CONNECTOR CONTACTS**

RECOGNITION: Recognized under the Component Program of Underwriter's Laboratory, Inc.<sup>®</sup> File E26226. CSA Certified under Report LR25154. UL and CSA Reference.

UL and CSA Reference - These connectors are recognized under the component program of Underwriters' Laboratories, File E26226, as well as Canadian Standards Association, Report LR25154.

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