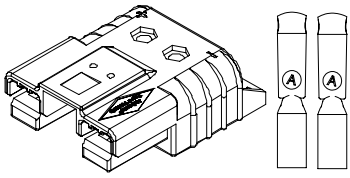
SBE® & SBO® Connectors

Assembly instruction for SBE®80 & SBO®60 Series
two pole battery connectors with option for auxiliary contacts.

Contains one (1) housing and two (2) contacts.



FOR INSTALLATION BY A QUALIFIED ELECTRICIAN IN ACCORDANCE WITH NATIONAL AND LOCAL ELECTRICAL CODES AND THE FOLLOWING INSTRUCTIONS. THE SUITABILITY OF THIS TYPE OF TERMINATION MUST BE EVALUATED BY UNDERWRITERS' LABORATORIES, INC. AND CANADIAN STANDARDS. ASSOCIATION FOR THE END USE APPLICATION: Assemble contacts to the cables according to the equipment manufacturer's assembly instructions. The following instructions are supplied as a reference. Please note: instructions are included with each crimp tool for proper use.

1. CONNECTOR RATINGS

			Max Cable Size	
Series	**Amperes**	**Volts**	**AWG**	**mm²**
SBE80	80	150	#6	16
SBO60	60	600	#6	16

2. TOOLING CHART

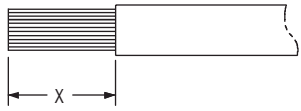
Contact Part Number"	Wire Size	Pneumatic Bench Tool	+ Die	+ Locator	or Hand Tool
1399G1	16 mm	1387G1	1388G6	1389G9	1309G4

3. REDUCING BUSHING

Bushing Part Number	Wire Size AWG (mm²)	For Use With Contact Part Number
5910	#10-12 (5.3 - 3.3)	1339G1
5912	#8 (8.4)	1399G1

4. CABLE STRIPPING DIMENSIONS FOR PRIMARY POWER CONTACTS

Connector Series	Strip "X" To Inches	mm
SBE80 / SBO60	0.56	14



5. 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 surfaces. DO NOT SOLDER DIP CONTACTS when contacts are soldered to unsupported lead. Underwriters' Laboratories, Inc. requires use of cable clamps, listed in table below.

Connector Series	For Two Single Conductor Cables
SBE80 / SBO60	SBE80REDCLP-BK

6. CABLE / CONTACT & HOUSING ASSEMBLY

Observing polarity of markings, push each contact into rear of housing until notched side snaps over spring, tug on cable to make sure contact is locked into place.

DISASSEMBLING CONNECTORS

Switch off power first. Remove contact by depressing spring with a small flat blade screwdriver and pulling lightly on the cable.

CAUTION: Replace contacts individually on battery leads to reduce potential danger of shorting.

Anderson Power Products®

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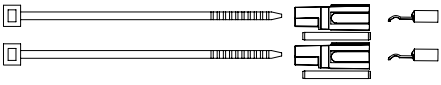
SBE® & SBO® Auxiliary Contact

Assembly Instructions

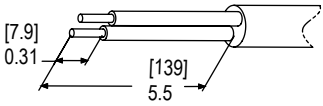
NOTE: These assembly instructions apply only to the catalog numbers listed below. For instructions to assemble the 1x4 Auxiliary Connector, use instruction 1S6229. Instruction 1S6229 is provided with all 1x4 Auxiliary Kits.

Catalog Number	Application	Contact	Wire Size	Retaining Pin Length
6344	SBE80, SBE160, SBO60, SBX175	1331	#12/16	0.85

Contains two each of: housings, contacts, retaining pins, & cable ties.



1. Single conductors use #12 to #18 AWG wire only. Strip to 0.31 inch (7.9mm) off end of insulation.



2. Twin conductor cable #12 to #18. Strip back outer jacket 5.50 inches (139 mm). (See illustration). Then strip conductor insulation as in 1.

3a. To crimp: use the recommended tool. Crimping by other means may disturb contact position in housing and or produce high resistance joints.

Crimp Tool	Catalog Number
Manual - cycle controlled	1309G2
Pneumatic - cycle controlled	1367G1

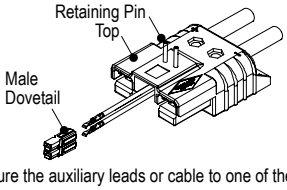
3b. To Solder: Not recommended.

4. Thread or push one or two auxiliary contacts and wires through the rear of the connector before inserting into auxiliary housings. Push into auxiliary housings through rear until notched side of contact tip snaps over spring. Tug wires to make sure wires are secure.

5. Slide two auxiliary Powerpole housings together by dovetails to stack vertically. They cannot be inserted separately into SBE/SBO housing. The rear of each of the Powerpole housings must be flush.

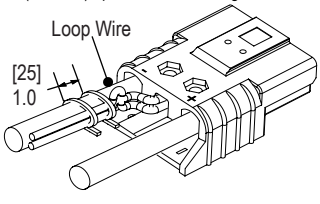
6. Slide stacked auxiliaries back into connector housing until seated. The male dovetail should be on top as shown in Figure 1. Make sure side grooves of auxiliaries are aligned for retaining pins and insert tubular pins. Tap pins in holes from top, as shown in Figure 1.

Figure 1



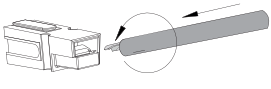
7. Cable ties are supplied to secure the auxiliary leads or cable to one of the main power cables. Leave slack or loop in leads to Powerpole contacts when applying cable ties. Wraps to be placed approximately 1 inch (25.4mm) apart as shown in Figure 2.

Figure 2



8. To remove auxiliary housings, punch out retaining pins from bottom of the connector housing with an 0.06 inch (1.5mm) diameter steel rod or pin driver. Pull auxiliary housings out of the SBE/SBO connector housing. Use contact insertion-extraction tool kit (part number 111038G2), to remove contacts from auxiliary housings see Figure 3.

Figure 3



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

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.

PATENTS AND TRADEMARKS

This product is covered by the following patents: U.S. 3,794,957; U.K. 1,443,819; France 73,44153; Italy 1,000442; Japan 885,802; South Africa 74/0939; Canada 990,821. Other U.S. and foreign patents pending. "SBE", "SBO", "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