

### An IDEAL Company

# SB® Environmental Boot

**Assembly Instructions** 



| Instructions for part numbers:             |                                      |                                   |  |
|--|--------------------------------------|-----------------------------------|--|
| SB® 50 Boot, Source<br>SB® 50 Boot, Load   | <b>Cover</b><br>3-6055P2<br>3-6054P2 | <b>No Cover</b> 3-6055P1 3-6054P1 |  |
| SB® 120 Boot, Source<br>SB® 120 Boot, Load | 3-6034P1<br>3-6035P1                 | -<br>-                            |  |
| SB® 175 Boot, Source<br>SB® 175 Boot, Load | 3-6036P1<br>3-6037P1                 | -                                 |  |

1. Cut legs to accommodate the outer diameter (OD) of the wire. (See Figure 1) NOTE: Wire ODs will vary depending upon the wire type. Start cutting a little at a time until the appropriate size hole is exposed. (There should be some resistance as the wires slide through the legs)

NOTE: Both AWG and mm<sup>2</sup> sizes are referenced.

- 2. If necessary, lubricate individual wires using Isoprophy alcohol. **Warning:** Dry thoroughly before energizing the circuit. Follow all cautions on the lubricant container.
- 3. Slide the positive wire through the + side of the boot and the negative wire through the side of the boot, starting from the bottom. (See Figure 2)
- 4. Strip the Wire:

| <b>Connector Series</b> | Inches | mm    |
|-------------------------|--------|-------|
| SB® 50                  | 9/16"  | 14 mm |
| SB® 120                 | 15/16" | 24 mm |
| SB® 175¹                | 1-1/8" | 29 mm |

<sup>1</sup>Except when using contact# 1348: 7/8" [23mm]

5. Crimp or Solder the Contacts

## **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.

## **Recommended Crimping Techniques**

PLEASE CONSULT YOUR AUTHORIZED ANDERSON REPRESENTATIVE FOR RECOMMENDED TERMINATION TOOLING

| Connector<br>Series | AWG      | mm²        | Portable<br>Tool | Pneumatic<br>Bench Tool |
|---------------------|----------|------------|------------------|-------------------------|
| SB® 50              | 16 - 6   | 1.3 - 13.3 | 1309G4           | 1387G1                  |
| SB® 120             | 10 - 1   | 5.3 - 42.4 | 1368             | or                      |
| SB® 175             | 12 - 1/0 | 3.3 - 53.5 | 1500             | 1387G2                  |

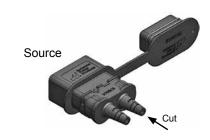
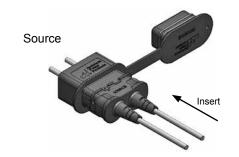
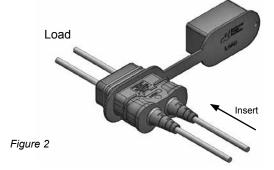


Figure 1





#### NOTES:

- a. Ensure crimps are positioned on crimp barrels as shown. (See image below).
- Use appropriate reducing bushings for smaller cable sizes.
- c. Pneumatic bench tools require specific die and locators for each contact being crimped, see APP® website Pneumatic Tooling Chart.
- d. For high volume crimping (reeled contacts), see APP® website Press / Applicator Tooling Chart.

| Connector<br>Series | Minimum inches mm |      | Maxim<br>inches | -                  |   |
|---------------------|-------------------|------|-----------------|--------------------|---|
| SB® 50              | 0.25              | 6.35 | N/A, Si         | ingle              |   |
| SB® 120             | 0.38              | 9.65 | N/A, Si         | ingle              | M |
| SB® 175             | 0.25              | 6.35 | 0.81            | 20.57 <sup>2</sup> |   |

<sup>2</sup>Except when using contact# 1348: Single Crimp Only at 0.38" minimum

## Contact Well Reducing Bushing

| Connector<br>Series | AWG         | Catalog<br>Part Number |
|---------------------|-------------|------------------------|
| Series              | AVVG        | Part Nulliber          |
|                     | 6 - 8       | 5912                   |
| SB® 50              | 6 - 10 & 12 | 5910                   |
|                     | 6 - 14 & 16 | 5913                   |
|                     | 2 - 4       | 5919                   |
| SB® 120             | 2 - 6       | 5920                   |
|                     | 2 - 8       | 5921                   |
|                     | 1/0 - 1     | 5687                   |
|                     | 1/0 - 2     | 5690                   |
| SB® 175             | 1/0 - 4     | 5693                   |
|                     | 1/0 - 6     | 5663                   |
|                     | 1/0 - 10    | 5648                   |

- e. If additional information is needed reference assembly instructions 1S1030A.
- 6. Align the positive & negative symbols on the SB Boot with the positive & negative symbols the SB housing. (See Figure 3)
- 7. Assemble the SB® connector:
  - a. Observing proper polarity relative to markings on the connector housing, place contacts in the housing with notched side of the tongue next to the spring.
  - Push contacts and cable into housing until the notched tongue snaps over the end of the spring.
  - c. If additional information is needed reference assembly instructions 1S1030A.
- 8. Slide the connector into the boot by pushing on the connector. (See Figure 4) **CAUTION:** Do not slide the connector by pulling on the wires. This may stress the wires and/or crimps.

NOTE: The boot is keyed and will only go in one way.

NOTE: When fully seated, the source connector will be slightly below the top of the boot (See Figure 5A) and the load connector will be slightly above the top of the boot (See Figure 5B).

- 9. Gently pull on the wire to remove excess slack.
- 10. Assembly is complete.

## For Surface Mounting

SB® Environmental Boots can be mounted to a surface by using such items as a hose clamp, hanger strap, cable tie or any other mounting method you have tested in your specific application.

NOTE: It is the responsibility of the customer to qualify the mounting method for each specific application prior to implementation.

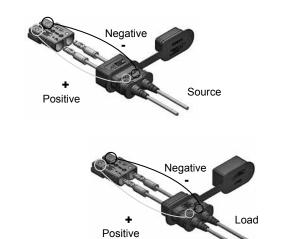
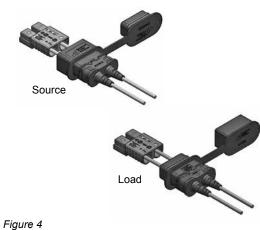


Figure 3



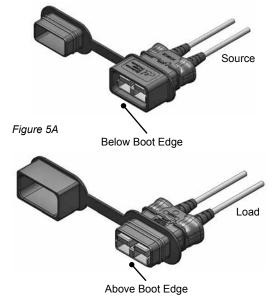


Figure 5B

WARNING: NEVER WORK WITH LIVE CONDUCTORS

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