

WS-VC-CBTA

Vehicle Connector Boot



**WESTERN
SHELTER** SYSTEMS

TABLE OF CONTENTS

A.	Warnings	3	F.	Troubleshooting	17
B.	Shelter Specifications	4	1.	Frame Connections	17
C.	Component List	4	2.	Wall Panels	17
D.	Erecting the Shelter	5	3.	Roof Panels	17
1.	Unpacking the Shelter	6	4.	Torn or Worn Vinyl	17
2.	End Frame Assembly	6	5.	Parts will not fit in case	17
3.	Center Frame Assembly	6	G.	Tips, Care, and Repair	18
4.	Roof Assembly	7	1.	Vinyl Panels	18
5.	Raising the Frame	8	2.	Insulation Panels	18
6.	Floor and Basebars	8	3.	Mainframe and Bars	18
7.	Hanging the Doors	9	4.	Hinges and Pull-Pins	18
8.	Hanging Shelter Walls	9	5.	Cases and Lids	18
9.	High Wind Tiedowns	10	6.	Vinyl Repair	19
10.	Finishing the Shelter	11	7.	Replacement Parts	19
E.	Striking the Shelter	12			
1.	Removing Wall Panels	12			
2.	Folding Wall Panels	12			
3.	Folding Floor Panels	13			
4.	Lowering the Frame	14			
5.	Removing Vent Caps	14			
6.	Folding Roof Panels	14			
7.	Striking the Frame	16			

CONDITIONAL WARRANTY

Western Shelter Systems warrants all products against defects in materials or workmanship for a period of one (1) year from date of manufacture. Component manufacturers' warranties may exceed that of Western Shelter.

No warranty is made or implied regarding the intended use of the product. Warranty does not cover damage caused by abuse, misuse, neglect or improper care by the end user in the application of the Western Shelter Systems product.

Western Shelter Systems will repair or replace any component deemed to be faulty from manufacture in the most efficient and timely means available to Western Shelter Systems.

Western Shelter Systems must authorize all claims prior to any action taken by the end user.

For immediate attention regarding any defective product, please phone Customer Support at 1-800-971-7201, 7am-330pm PST.

Shipping: 815 Conger St. Eugene, OR 97402
PO Box 2729 Eugene, OR 97402 USA
Phone 1-541-344-7267
Toll Free 1-800-971-7201
Fax 1-541-284-2820
www.WesternShelter.com

A. WARNINGS

WARNING

Follow all written and common sense safety procedures when raising, striking, and occupying this shelter. Failure to do so may result in property damage or personal injury.

WARNING

All flammable materials or other items that are potential fire hazards must not be placed on or adjacent to the Shelter.

WARNING

Pinch hazard: Always wear gloves when raising or striking the shelter. Setup entails working with rigid metal components bearing significant weight.

B. SPECIFICATIONS

Frame Specifications

All-aluminum frame constructed of 6063-T5 and 6061-T6 alloys with clear industrial anodized support members.

Octagonal frame configuration, pivoting from a central fixture. Roof trusses and uprights shall be one assembly.

Eave bars and base bars shall lock and unlock into the mainframe with integral spring-loaded buttons, requiring no tools for assembly. Eave bars and base bars shall have a clear anodized finish.

Eave bars shall be of an extruded design to accommodate rigid hook-and-loop fastening strips for the attachment of roof and sidewalls.

Upright legs shall lock either up or down with a steel captive locking pin. Legs shall have a flat foot with provisions for securing to the ground or floor surface. Legs shall provide a full 6-foot sidewall.

The frame assembly shall include vented weather caps.

Doors shall be aluminum framed and fabric covered.

Cover Specifications

The entire cover shall be of 14-oz vinyl-covered polyester scrim.

The material shall meet NFPA-701 standards for fire resistance.

The material shall contain ultra-violet ray and mildew inhibitors.

Roof panel sections shall be thermo-welded to insure against leakage.

All fabric security to the frame shall be by the hook-and-loop fastening process.

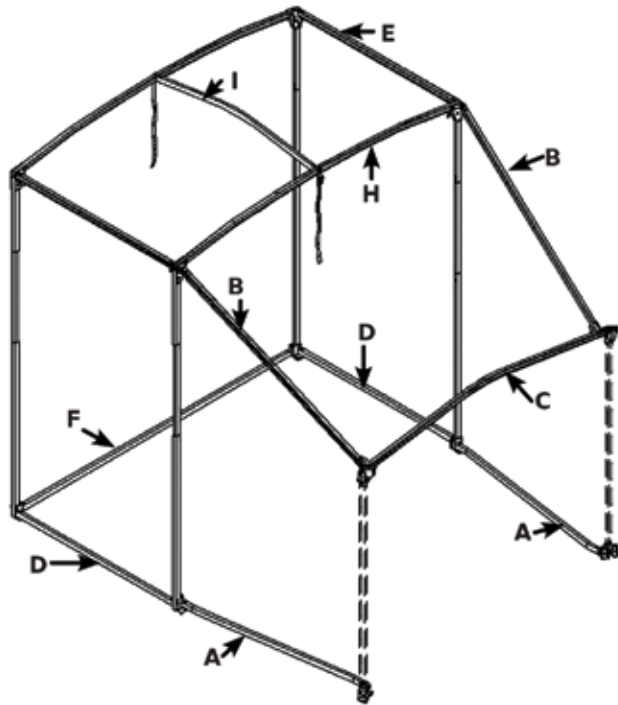
C. COMPONENT LIST

Basic configuration:

- Mainframe end sections (2)
- Mainframe center sections (3)
- Eave bars with fastening strips (12)
- Base bars without fastening strips (12)
- Plastic vent caps (2)
- Double doors (4)
- Threshold ramps (4)
- Vinyl roof panel (1)
- Insulated roof panel (1)
- Vinyl wall panels (8)
- Vinyl floor panel (1)

Common accessories:

- Insulated wall panels (8)
- Fluorescent lights with dimmer sleeves (7)
- Wiring harness (4)
- High wind stake kit with straps (1)



LETTER	QTY	PART #TR-STOCBAB	PART DESCRIPTION
A	2	PA-SHBBACB	ANGLED BASE BAR
B	2	PA-SHEBACB	ANGLED EAVE BAR
C	1	PA-SHAEBCB	ARCHED EAVE BAR
D	2	PA-SHBBBCB	BASE BAR
E	2	PA-SHEBCB	EAVE BAR
F	1	PA-SHBBTECB	END BASE BAR
G	1	BG-CBTA	FIELD BAG FRAME
H	1	PA-SHBGWD	FIELD BAG VINYL
I	1	PA-SHEFACB	FOLDING FRAME SECTION
J	1	PA-SHMFACEB	MID FOLDING FRAME SECTION
K	1	PA-SHRBCB	RIDGE BAR
L	1	PA-SHFLCB	VINYL FLOOR
M	1	PA-SHRPCB	VINYL ROOF
N	1	PA-SHWPRODCB	VINYL WALL RIGHT
O	1	PA-SHWPLDCB	VINYL WALL LEFT
P	1	PA-SHABCB	TRAILER BOOT AIR BEAM

D. ERECTING THE TRAILER BOOT

1. Frame Assembly

- Position trailer roughly 10 feet away from shelter, centered with a door or wall split. The trailer may be moved for final positioning after framework is fully erected.
- Peel the walls away from the shelter door or wall split all the way back to the first leg on each side.



- Remove the door, base bar and eave bar from the side of the shelter where the Trailer Boot will connect.



- Place the two folding frame sections 5 feet apart with the straight receiver blocks facing each other.
- Place the eave bars and the ridge bar between the folding frame sections. Attach the eave bars and ridge bar to the outer blocks with the hook and loop material on the eave bars facing out.



- Starting on one side of an eave bar, fold out the legs to the left and the right of the eave bar, and lock them into place with the attached pins.



- Install the two base bars on the unfolded legs and the end base bar between the legs closest to the trailer.



➤ Position framework with the end base bar about 2 feet from the rear of the trailer. The angled receiving blocks should be pointing toward the shelter. If the position of the shelter and trailer are not quite correct, wait to align them until the boot has been raised.

➤ Attach the arched eave bar to the upper opening of the exposed shelter frame.



➤ Attach the two angled base bars between the folding framework and shelter.



➤ Install angled eave bars on the angled receiving blocks of the boot framework. The fastening strips should be facing out, and the hole for the button locks facing up.

2. Vinyl Assembly

- Drape roof panel over upper folding framework.



- Attach the roof panel to the arched eave bar starting at the center and working to the ends, stretching it as you go. Look for the vinyl weld or marking arrow to align with

the center screw on the bar. Do not attach the sides of the roof yet, as they go over the walls.



- The walls are labeled Left Side and Right Side, which refers to the boot when viewed from the trailer looking toward the shelter.



- Hang the wall by aligning the angled portion of the wall with the angled receiving block. Work out from the middle to both ends. The end of the wall panel should align with the trailer-side end of the roof panel, about 5 inches past the eave bar. Attach both walls.



- Secure the four clips on the walls, located near the trailer end, and tighten the straps until they are just snug. Do not over-tighten or bunching may occur in the vinyl. Do not secure the lower straps yet.



- Starting at the trailer end and working towards the shelter, attach roof sides to the walls. Pull the roof edge over the sides and attach to the fastening strip.



➤With at least 4 people, raise the trailer boot by pulling up on the 4 legs until the pin locks snap into place.



➤We will now attach the boot wall and roof to the trailer wall and roof. This connection can get complicated, but the basic order (from inside to outside) is Boot Wall, Shelter Wall, Boot Roof, Shelter Roof.

➤Attach the shelter wall ends that you pulled back from the frame to the exposed black hook and loop strip on the trailer boot walls. Be sure to leave enough slack to make a crisp corner where the shelter meets the boot. Secure the end of the wall to the large fastening strip on the trailer boot wall.



➤Now attach the angled eave bars on the trailer boot to the arched eave bar on the shelter. This can be a difficult connection to make. You may have to loosen the vinyl and twist the bars slightly to get a fit.



➤From inside the shelter, attach the shelter roof hook and loop strip to the exposed black hook and loop strip on the trailer boot roof, starting from the center and stretching the vinyl toward the ends of the eave bar.



➤At either end of the eave bar, be sure the black fastening strips are secured to the shelter wall. A small velcro tab should align with the wall directly over the leg of the shelter.

➤Finally, pull the shelter roof corners down over everything to finish the attachment. The padded roof flap of the boot just rests on top of the connection, and should be tied down later.



3. Flooring Assembly

- Spread floor out inside the trailer boot. The end with a built-in berm faces toward the trailer.



- Working around the boot, pull the edges of the floor under the base bars of the boot and shelter.
- Straighten the floor and pull it tight to eliminate wrinkles.



- The boot floor attaches to the shelter floor identically to a vestibule or entryway connection.



- Secure the remaining straps on the boot walls and floor. Snug, but do not overtighten.
- You should now make any final adjustments to the trailer position. Ideally, the back of the trailer will line up with the berm on the boot floor, as shown. It's fine to be an inch or two off in either direction. You can either move the trailer or the shelter/ boot, whichever is more convenient.



4. Attachment to the Trailer

- **Note:** this is a fairly complex series of connections. Keep in the mind the general layering order of Wall, Floor, Roof.
- Either open the back of the trailer, or get a ladder, in order to drape the boot air-beam over the back of the trailer.



- Unfold the air-beam in either direction. The velcro strip should be facing upwards and oriented toward the boot roof.



- Attach the fastening strip on the air-beam to the roof and walls of the shelter. The vinyl welds on either edge of the air-beam should align with the eave bars.



- Attach the web straps underneath the trailer to secure the air-beam. You will have to momentarily raise the trailer gate if you lowered it before. Pull the straps fairly tight.



- Attach the boot floor to the back of the trailer using the integrated magnets. Lower the trailer door.



- Now secure the boot floor to the air-beam and boot walls. Attach the boot floor to the air-beam, then the boot wall to the boot floor. Be sure the floor lies flat.



- Continue attaching the air-beam to the boot wall. There is a slit in the air-beam velcro near the bottom skirt of the vinyl to allow the airbeam skirt to hang outside.



- Inside the boot, secure the velcro strips between the air-beam and the boot floor to finish the connection.



5. Finishing the Trailer Boot

➤ Work around the boot and shelter and be sure the floor is secured to the fastening strips of the walls to create a berm.

➤ Inflate the air-beam with the included pump and hose. The inner valve can be locked and unlocked by turning it a $\frac{1}{4}$ turn. Be sure it is unlocked (springs in and out freely) to inflate, and locked when inflation is complete.



➤ It may help to lean against the air-beam to distribute air as you are pumping. If air is not getting to the other side, press hard against the inflated side.



➤ Secure tie-downs to the boot. It will have 6 in total.



E. STRIKING THE BOOT

1. Suggested Folding of Vinyl

➤ Roof Panel

1. With the interior side up, fold the width of the roof panel in half.
2. With exterior side up, fold the edges of the floor in to meet each other in the middle.
3. Starting at the wider end, roll up the folded roof panel and store in the vinyl bag.

➤ Floor Panel

1. Fold the edges of the floor in again to meet each other in the middle.
2. Fold the floor down the center of its length, making the folded edges meet. Fold in half lengthwise, then fold in half again.
3. Place folded floor in bag.

➤ Wall Panel

1. Fold the bottom quarter of the wall panel to a place roughly halfway up the panel..
2. Fold the new bottom edge up to a place roughly three-quarters up the panel.
3. Fold the remaining panel again, matching the folded edge with the top edge of the wall.
4. Roll the folded wall panel into a cylinder, beginning at the widest edge. Place wall in bag for storage. Repeat for other wall.

F. TROUBLESHOOTING

1. A frame connection will not click into place.

- Be sure the connection point is free of debris.
- Gently lift the frame to allow it to find a natural resting position. Lifting to relieve pressure on the connections allows them to fit more easily.
- Firmly tap the connection point with your palm.
- If a button lock is not popping up, try flexing the frame in various directions until it clicks into place.
- Do not use liquid-based lubricants on frame connections, as this will attract more dust and debris, making the connection less functional in the future. Compressed air may be used if necessary to clean connection points.

2. Wall panels will not meet in the center.

- Vinyl stretches to varying degrees depending on ambient temperature. The centers of the wall panels may not fully overlap in all conditions, but it should be possible to overlap the walls somewhat in all conditions.

➤ If the wall sections are not meeting, re-stretch the vinyl starting from the doorframe. Apply as much force as possible and stretch the vinyl in small sections as you work along the wall.

➤ After several years, vinyl ages and can harden and lose its elasticity. Eventually, the vinyl walls of your shelter may need to be replaced if they are cracking or not stretching enough to complete the shelter.

3. Roof panel will not fit fully over the frame

- When securing the roof panel, start by securing opposite corners of the roof panel first. Be sure the roof collars are centered on the key flanges.
- As vinyl ages it can harden and lose its elasticity. Eventually, the vinyl walls of your shelter may need to be replaced if they are cracking or not stretching enough to complete the shelter.

4. Torn or worn-out vinyl

- See the Vinyl Repair section (page 20) for information on how to fix minor tears and holes in your vinyl panels.

5. Shelter components will not fit in their cases.

- Moisture or dirt can add volume to the walls, floor and roof of the shelter. Be sure all surfaces are as clean as possible under the conditions.
- Push as much air as possible out of the walls, roof, and floor as you are folding them.
- Pack rigid items, such as base bars, in the bottom of cases, then fit softer items around them.
- Try changing the orientation of bulky components, such as the end frame assemblies.
- Have several people put their weight on the case lid and secure the latches.

G. TIPS, CARE, AND REPAIR

- Western Shelter Systems provides protective bags for shipping and storage. Do not drag these bags on the ground.
- Replacing the components in the proper bags or aluminum cases ensures all parts are accounted for and ready for the next deployment.
- Cleaning and drying of your shelter system will extend the life of the shelter and eliminate health issues associated with particulate buildup. Maintenance is best performed when the shelter is being taken down. If the shelter must be packed when wet and/or dusty, It is VERY important that the shelter is cleaned and dried as soon as possible.
- Utilize the following steps to ensure that proper care and maintenance has been performed.

1. Vinyl Panels (roof, walls, and floor)

- Clean and fold on a clean surface, such as the shelter floor. Sweep off loose debris. Remove debris from hook and loop fasteners using a rigid brush.
- Clean with a mild solution such as Simple Green™, Tilex™, or 10% bleach water solution.

- Do not saturate the fabric, especially the hook and loop fastener, which tends to retain water even after prolonged drying times.
- Dry thoroughly using towels, leaf blowers or sunlight.

2 Insulation Panels (roof & walls)

- Clean and fold on a clean surface, such as the shelter floor. Sweep off loose debris. Remove debris from hook and loop fasteners using a rigid brush.
- Clean with a mild solution such as Simple Green™, Tilex™, or 10% bleach water solution.
- Do not saturate the fabric, especially the hook and loop fastener, which tends to retain water even after prolonged drying times.
- Do not spray cleaner directly on fabric as it could soak into the air bubbles on the fabric, leading to mold and mildew. Spray cleaner on shop towels and wipe to clean.
- Never pressure wash the insulation panels.
- Dry thoroughly using towels, leaf blowers or sunlight.

- **Note:** Stains can occur on the white insulation fabric. These stains, once cleaned, are purely cosmetic and do not indicate product failure or health risks.

3. Main Frame, Eave & Base Bars

- Brush off loose debris. Clean dirt and debris out of the ends of the bars and legs. Wipe down with a mild solution such as Simple Green™, Tilex™ or a 10% bleach water solution.
- Dry thoroughly using towels, leaf blowers or sunlight.

4. Hinge Points & Pull Pins

- Keep moving parts free of debris and dust. Disassemble and clean if binding occurs.
- Do not use liquid lubricant on moving parts, as this will cause fouling.

5. Product Cases & Lids

- Brush off loose debris. Wipe down with a mild solution such as Simple Green™, Tilex™ or a 10% bleach water solution.
- Dry thoroughly using towels, leaf blowers or sunlight, making sure to remove and dry any padding material installed in the bottom of the case.
- Clean dirt and debris out.

6. Vinyl Repair

- All units come standard with a vinyl repair kit. Each kit contains a can of vinyl cement and a supply of patching material.
- To repair a damaged area, thoroughly clean with soap and water.
- Allow to dry completely.
- Cut out a piece of vinyl fabric slightly larger than the damaged area.
- Once completely dry, apply a liberal amount of vinyl cement to both the repair area and the patch.
- Allow the cement to become dry to the touch and place the patch over the damaged area. Press the patch firmly to ensure complete contact.

7. Replacement Parts and Accessories

- Western Shelter Systems offers a full line of replacement parts, as well as a wide range of optional accessories for all GateKeeper shelters. To view accessories, visit www.westernshelter.com