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Note: Please read and understand these instructions before attempting setup.

Note: Setting up the Inflatable Acoustical Shell requires two or more people.

Note: If you need additional information about the Inflatable Acoustical Shell, contact the Wenger Corporation using the information below.

SAFETY PRECAUTIONS

GENERAL

Throughout this manual you may find **CAUTIONS** and **WARNINGS** which are defined as follows.

- **WARNING** means that failure to follow the instruction may result in serious injury or death.
- **CAUTION** means that failure to follow the instruction may result in serious injury or damage to property.

Read all of these safety instructions before setting up the Inflatable Acoustical Shell.

SET UP AND USAGE

<p>⚠ CAUTION</p> <p><i>Make sure that anyone setting up or working with the Shell has read and understands these instructions.</i></p>	<p>⚠ CAUTION</p> <p><i>Always observe and comply with the Warnings and Cautions posted on the system equipment.</i></p>	<p>⚠ CAUTION</p> <p><i>Failure to comply with Warnings and Cautions in this document can result in damage to property or serious injury.</i></p>
<p>⚠ CAUTION</p> <p><i>Some steps require that two or more people work together.</i></p>	<p>⚠ CAUTION</p> <p><i>Do not allow spectators or untrained people to walk through the tethers and stakes.</i></p>	<p>⚠ CAUTION</p> <p><i>Do not allow anyone to climb on the inflated Shell.</i></p>
<p>⚠ WARNING</p> <p><i>When driving stakes into the ground, make sure that there is no possibility of striking electrical cables or gas pipes. Always contact local utility companies for information regarding the location of underground gas pipes and electrical cables.</i></p>	<p>⚠ WARNING</p> <p><i>If an electrical generator is used as a power source for the Blower, make sure that the generator is grounded. Connect a wire from the generator to a metal stake driven into the ground, a water pipe or other grounded object.</i></p>	<p>⚠ WARNING</p> <p><i>Always connect the Blower to a power source with Ground Fault Circuit Interrupter (GFCI) protection.</i></p>
<p>⚠ WARNING</p> <p><i>Never operate or connect the Blower to an electrical source in wet and rainy conditions.</i></p>	<p>⚠ WARNING</p> <p><i>Avoid touching overhead electrical cables when inflating the Shell.</i></p>	

SAFETY PRECAUTIONS (CONTINUED)

STABILITY

⚠ CAUTION
Never attempt to set up the Shell when winds are 20 mph (32 km/h) or greater.

⚠ CAUTION
Deflate the Shell when winds exceed 20 mph (32 km/h).

⚠ CAUTION
If the Shell is inflated outside, do not attach the tethers to sandbags.

⚠ CAUTION
If the Shell is inflated on a stage surface, make sure that the entire bottom surface is supported.

⚠ CAUTION
The anchoring of the Shell must follow the methods described in these instructions.

⚠ CAUTION
When inflating the Shell outside, always use the 40" (102 cm) Stakes that were supplied with the Shell. Always drive each Stake into the ground at least 30" (76 cm) and no more than 10" (25 cm) above the ground surface. Stakes driven through the Stake Plate are driven into the ground at least 36" (91 cm).

FIRE HAZARD

⚠ WARNING
The Shell is constructed from vinyl coated nylon fabric. Do not allow open flames or very hot lighting to come into close proximity to the Shell. Lighting that is close to the Shell must not exceed 176°F (80°C).

IMPORTANT USER INFORMATION

GENERAL

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The information in this document is not intended to cover all possible conditions and situations that might occur. The end user must exercise caution and common sense when assembling or installing Wenger Corporation products. If any questions or problems arise, call Wenger Corporation at 1-800-887-7145.

MANUFACTURER

The Inflatable Acoustical Shell is manufactured by:

Wenger Corporation
555 Park Drive
Owatonna, MN 55060
1-800-4WENGER (493-6437) • 1-507-455-4100
www.wengercorp.com

INTENDED USE

- This product is not intended to be inflated as a permanent installation.
- This product is not intended to support people.
- This product can be used in an outside area during dry and calm conditions.
- This product can be inflated on the ground or on a stable platform that completely supports the bottom surface and is anchored to stakes provided with the Shell.
- This product can be inflated in an enclosure such as a tent or auditorium on a stable platform with the bottom surface fully supported.
- This product must be inflated with the original blower supplied with the Shell or a blower with the same specifications.
- This product is intended to be used only as described in these instructions.

WARRANTY

This product is guaranteed free of defects in materials and workmanship for five full years from date of shipment. A full warranty statement is available upon request.

SETTING UP FOR THE FIRST TIME

1. Remove all parts from their shipping containers (refer to the packing list enclosed with the shipment).
Save all packaging materials until the Shell has been set up and assembled for the first time.

2. The following items are shipped with each Shell.

Item	Quantity
Shell	1
Blower	1
Stakes	20
Storage Bag	1
Vinyl Repair Kit	1
Stake Plates	2

3. If the Shell is to be stored before the initial set up, see the "Shell Storage" section.

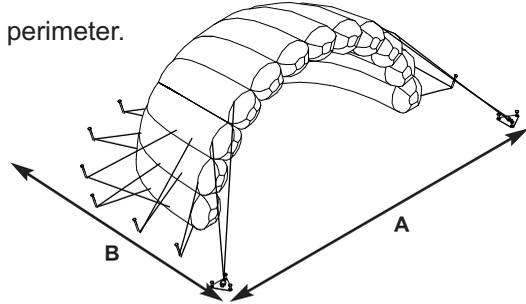
SHELL SETUP

BEFORE SETUP

Note: If the Shell will be inflated inside a tent or building, it is not necessary to anchor the tethers.

1. Make sure that **all personnel (including temporary labor)** setting up or operating the Shell has read and understands the warnings, cautions, and setup procedure.
2. If the Shell will be inflated outside and on the ground or on an outside stage or platform, do the following.
 - a. Decide where the Shell will be inflated and mark the perimeter. Refer to the dimensions in the illustration.

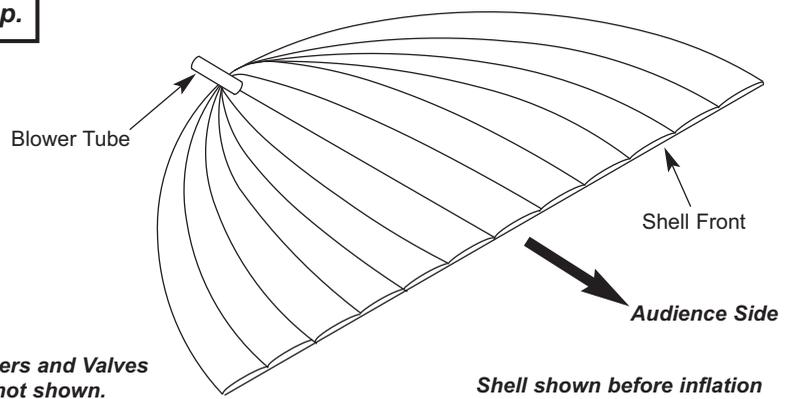
Shell	A	B
091A501, Small	36' (11 m)	30' (9.1 m)
091A502, Medium	58' (17.7 m)	42' (12.8 m)
091A503, Large	72' (22 m)	54' (11 m)



- b. Consult with local utility companies and make sure that no below ground level electrical cables, telephone cables, water pipes or gas pipes are within the Shell perimeter.
- c. Make sure that no overhead power lines or other obstructions are close to the Shell perimeter.
- d. If the Shell will be inflated on the ground, Wenger recommends obtaining a tarpaulin to protect the bottom surface of the Shell and to insure a firm dry working surface inside the Shell.
- e. Locate a fused, 20 ampere, 120 VAC, grounded power source with a disconnect and Ground Fault Circuit Interruption (GFCI) protection for the Blower power connection.

SETUP

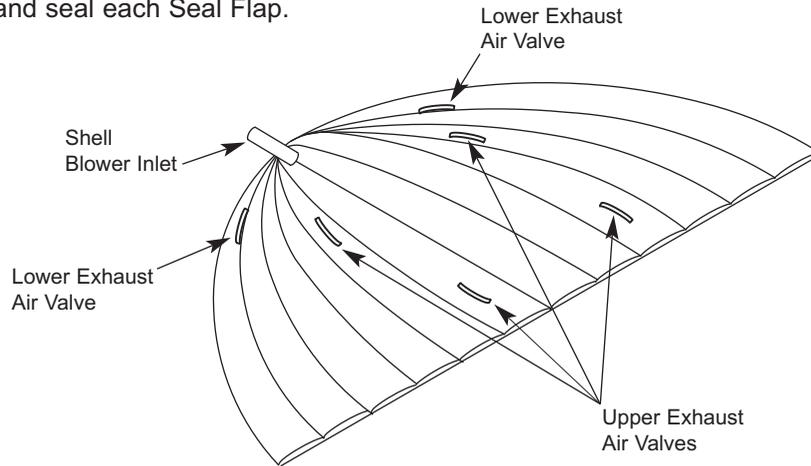
1. If a tarpaulin is to be used under the Shell, lay the tarpaulin on the ground where the Shell will be inflated.
2. Place the Shell where it will be inflated.
 - a. With two or more people working together, remove the Shell from the Storage Bag and spread the Shell on the surface where the Shell will be inflated.
 - b. Make sure that the surface with the Tethers and Exhaust Valves are facing upward.
 - c. Make sure that the Blower Tube is facing away from the audience.



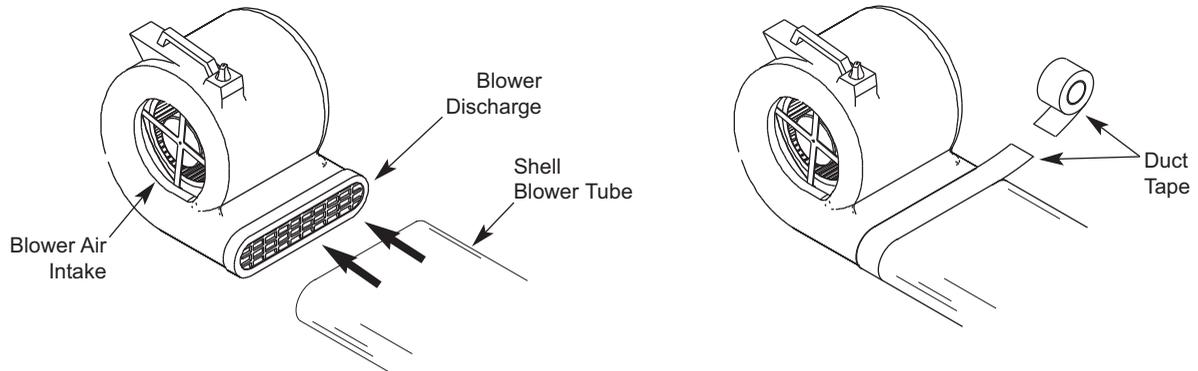
SHELL SETUP (CONTINUED)

SETUP (CONTINUED)

3. Make sure that the four Upper Exhaust Air Valves and two Lower Exhaust Air Valves are closed.
 - a. Open each Seal Flap (with a Velcro® closure).
 - b. Close the zipper.
 - c. Close and seal each Seal Flap.



4. Connect the Shell Blower Tube to the Blower Discharge.
Slide the Tube over the Air Blower Discharge and fasten it in place with Duct Tape.



SHELL SETUP (CONTINUED)

SETUP (CONTINUED)

5. Connect the Blower power cord to a 120VAC, 20 ampere, fused, grounded power source with Ground Fault Circuit Interruption (GFCI) protection and a disconnect. Consult local authorities for specific regulations.

Note: ***Do not turn the Blower on.***

⚠ WARNING

Never operate or connect the Blower to an electrical source in wet and rainy conditions.

⚠ WARNING

If an electrical generator is used as a power source for the Blower, make sure that the generator is grounded. Connect a wire from the generator to a metal stake driven into the ground, a water pipe or other grounded object.

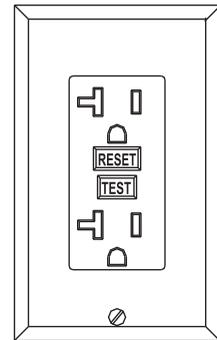
⚠ WARNING

Always connect the Blower to a power source with Ground Fault Circuit Interrupter (GFCI) protection.

- a. If the power source does not have a GFCI Receptacle, use a 120 VAC, 20 ampere, 12 gauge, three-wire GFCI Extension Cord similar to the illustration.

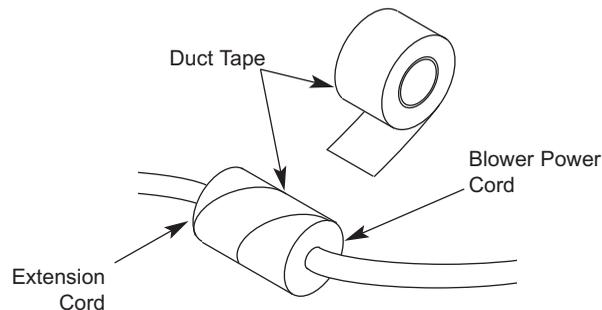


GFCI One-foot Extension Cord



GFCI Receptacle

- b. If an extension cord must be used, it must comply with the NEC Code Type 12/3 SJOW (12 gauge, three-wire, 300 Volt, Thermoset Rubber, Oil Resistant Jacket).
- c. When the Power Cord is plugged into an Extension Cord, wrap the connection with Duct Tape to prevent it from being mistakenly disconnected.
- d. Use Duct Tape to fasten the Plug to the Power Source to prevent it from being mistakenly disconnected.

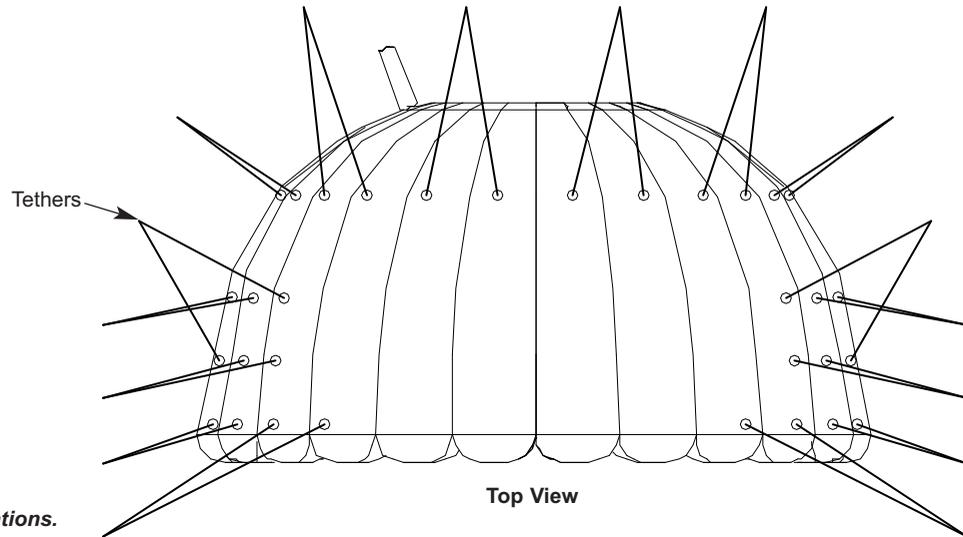


SHELL SETUP (CONTINUED)

SETUP (CONTINUED)

6. Pull the Tether ends from the Shell outward to the approximate location for the Stakes.

⚠ CAUTION
Never attempt to set up the Shell when winds are 20 mph (32 km/h) or greater.



Pull the Tethers to the approximate Stake locations.

Top View

SHELL SETUP (CONTINUED)

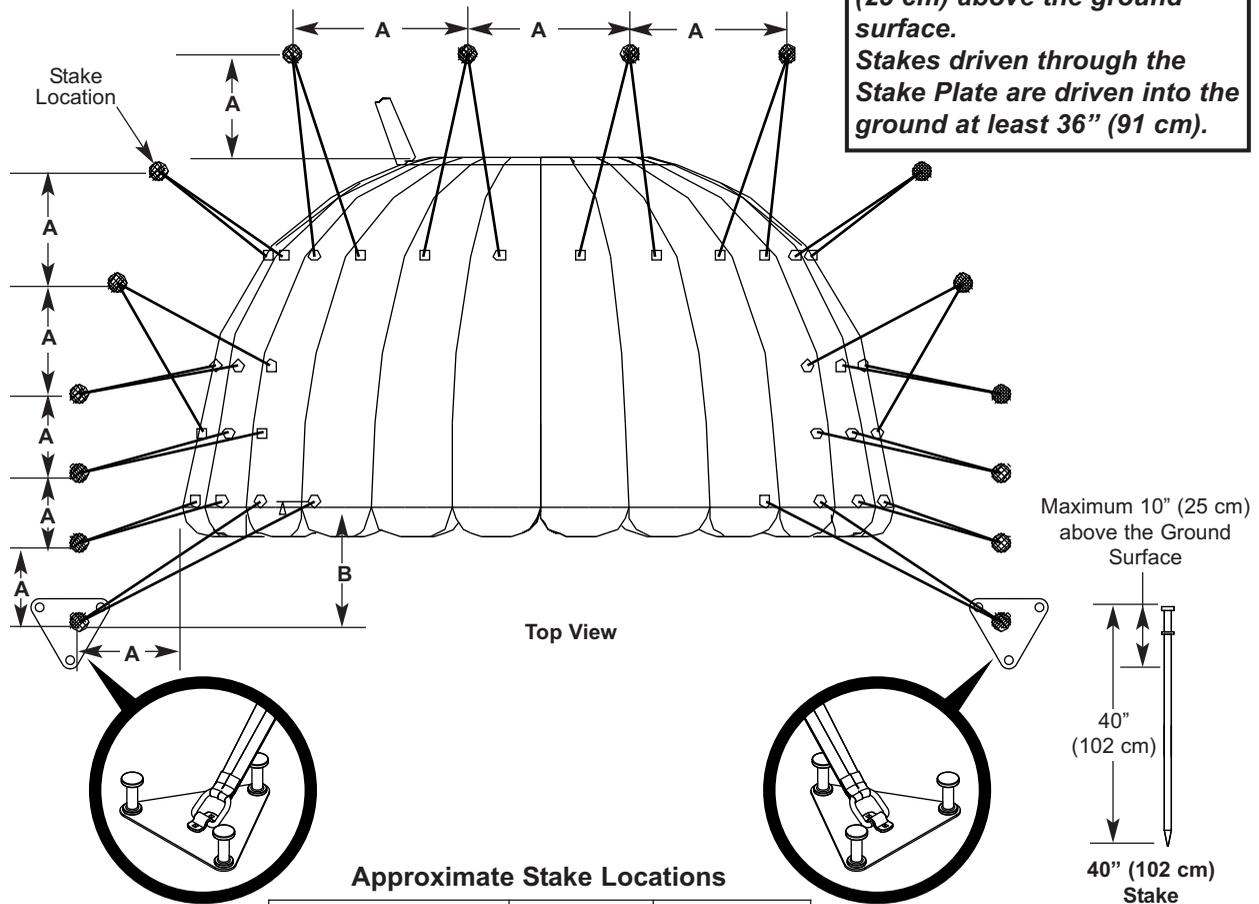
SETUP (CONTINUED)

7. Anchor the Tethers to the ground using Stakes as follows:
 - a. Locate each of the 20 Stakes at the approximate location shown in the illustration below. Each pair of Tethers are anchored using one Stake except for the front Tethers. Both front sets of Tethers are secured to a Stake Plate and anchored to the ground using three Stakes in each.
 - b. The upper Tethers should be at a 50° vertical angle when the Shell is inflated.
 - c. Drive each 40" (102 cm) Stake into the ground until no more than 10" (25 cm) are exposed.

CAUTION
The anchoring of the Shell must follow the methods described in these instructions.

CAUTION
Use only the supplied Stakes. Do not attach the Tethers to sandbags.

CAUTION
When inflating the Shell outside, always use the 40" (102 cm) Stakes that were supplied with the Shell. Always drive each Stake into the ground at least 30" (76 cm) and no more than 10" (25 cm) above the ground surface. Stakes driven through the Stake Plate are driven into the ground at least 36" (91 cm).



Shell	A	B
091A501, Small	5' (1.5 m)	14' (4.3 m)
091A502, Medium	7' (2.1 m)	14' (4.3 m)
091A503, Large	9' 2.8 m)	14' (4.3 m)

SHELL SETUP (CONTINUED)

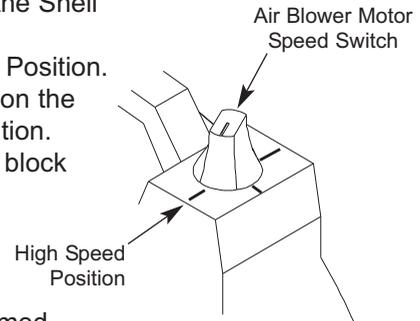
SETUP (CONTINUED)

8. To inflate the Shell, do as follows.

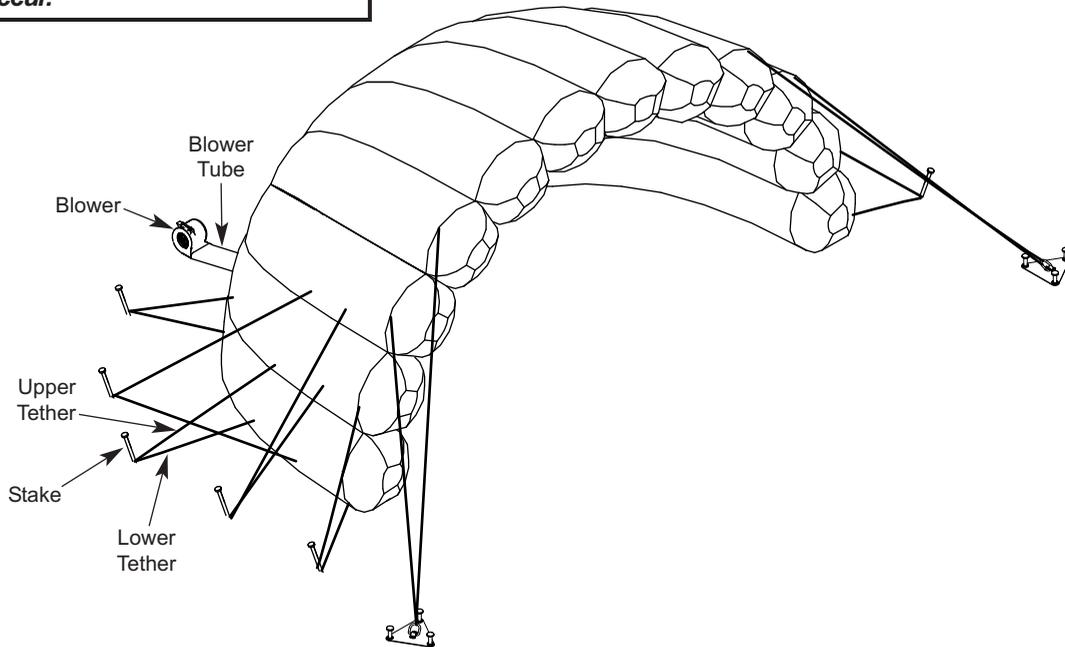
CAUTION
Never attempt to set up the Shell when winds are 20 mph (32 km/h) or greater.

WARNING
Avoid touching overhead electrical cables when inflating the Acoustical Shell.

- Tie each Upper Tether to a Stake with enough slack to allow the Shell to be inflated.
 - Turn on the Blower by placing the switch into the High Speed Position.
 - As the Shell inflates, guide the Shell by adjusting the tension on the Upper Tethers. Make sure that the Tethers do not restrict inflation.
 - During inflation, watch for folds in the individual air tubes that block air flow and prevent total inflation of the Shell.
 - Make sure that the Blower Tube is not kinked or twisted
 - When the Shell is fully inflated, tie each Bottom Tether to a Stake.
 - Adjust the tension on all Tethers so that the Shell is not deformed.
9. When the Shell is fully inflated (about 15 minutes after turning on the Blower), the Upper Tethers should be at about a 50° angle with the vertical. Adjust the position of Stakes if necessary.



CAUTION
Do not allow the Shell to drag over the Stakes. Damage could occur.



SHELL OPERATION

1. After the Shell is inflated, adjust all of the Tethers so that they all have equal tension and do not deform the shape of the Shell.
2. Turn the Air Blower Motor Speed Control to a slower speed.
3. While the Shell is deployed, always observe current weather conditions. Deflate the Shell if inclement weather such as high winds greater than 20 mph (32 km/h) or heavy rain begins or is expected.



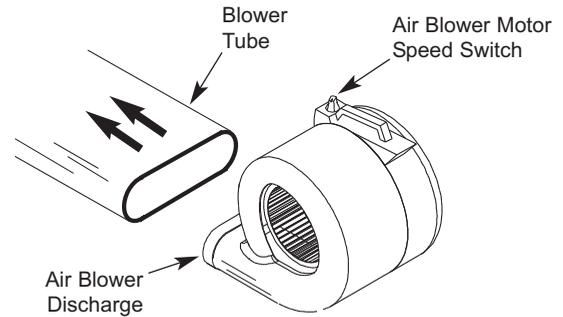
4. Never leave the Inflated Shell unattended.



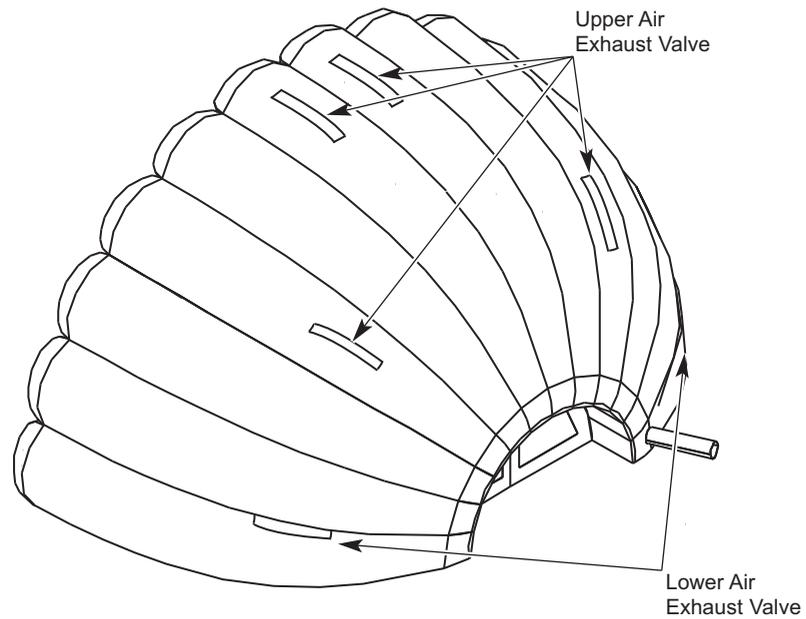
SHELL STORAGE

To deflate the Shell and store it, do as follows.

1. Turn the Air Blower Motor off.
2. Disconnect the Air Blower Motor Power Cord from the power source.
3. Remove the Duct Tape that fastens the Blower Tube to the Blower Discharge and remove the Blower Tube.



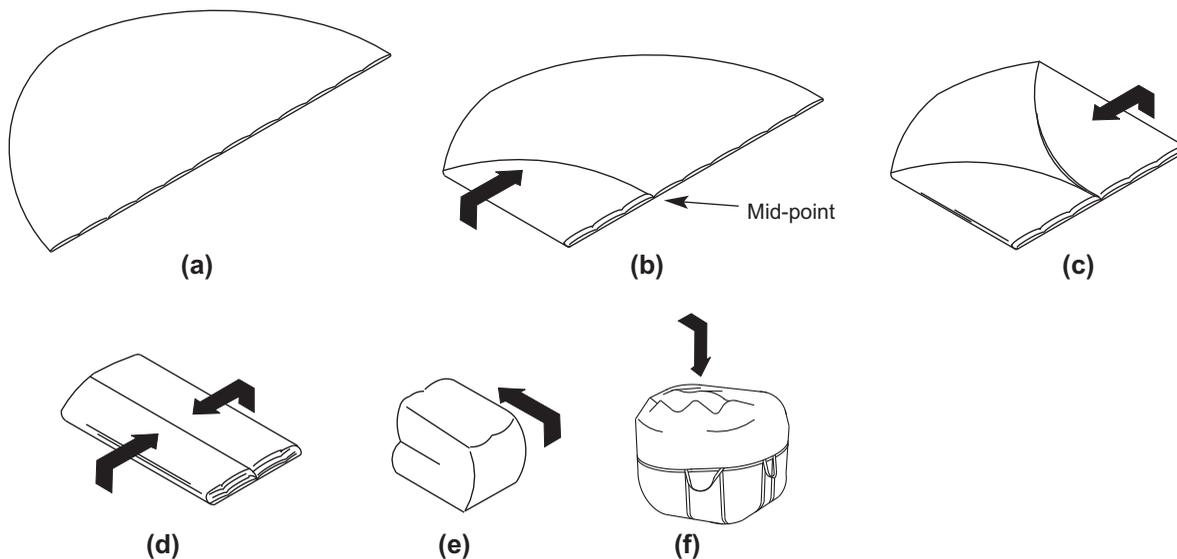
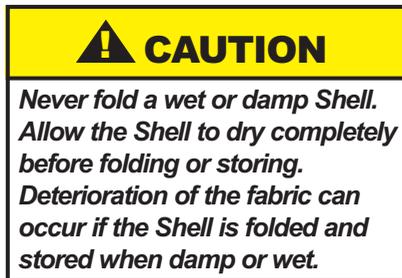
4. Open the two Lower Air Exhaust Valves by pulling the Velcro® closures open and then opening the Valve Zippers.
5. As soon as the Shell has deflated enough to reach the Upper Air Exhaust Valves, open the four Valves.



6. Push all of the air out of the Shell.
7. Untie the Tethers from the Stakes.

SHELL STORAGE (CONTINUED)

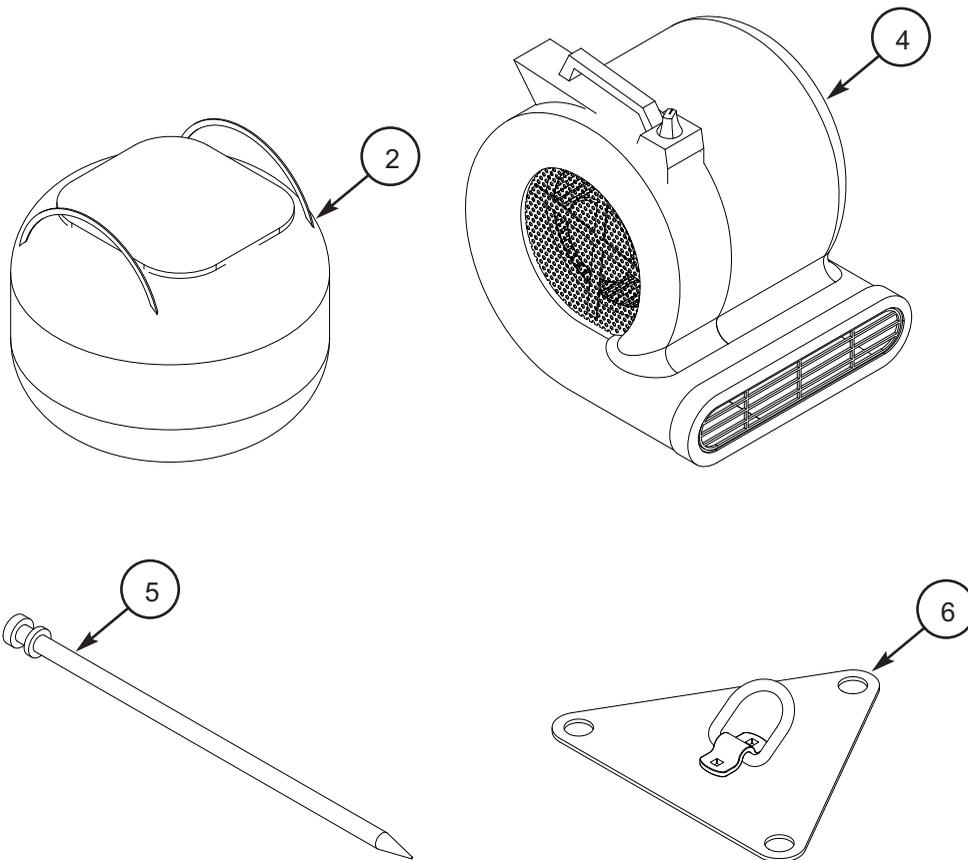
8. Fold the deflated Shell as follows.
 - a. Smooth the deflated Shell flat as much as possible.
 - b. Grasp the front left (or right) corner and drag it to the center edge of the flat Shell as shown in (b) below.
 - c. Grasp the opposite corner and drag it to the center edge so that it touches the first fold as shown in (c) below.
 - d. Fold the left (or right) side again to the center as shown in (d) below. Continue folding the sides inward until the width of the folded Shell is narrower than the Storage Bag (e).
 - e. Fold the front edge of the Shell toward the back edge as shown in (e) below. Continue folding until the Shell will fit into the Storage Bag.
 - f. Insert the folded Shell into the Storage Bag as shown in (f) below.



SHELL CLEANING

1. Clean the Shell surface with a mild detergent such as *Simple Green*.
2. Never use harsh or abrasive detergents or cleaning products.
3. Never soak the Shell which promotes mildew.

REPLACEMENT PARTS LIST



Item	Description	Qty.	Item	Description	Qty.
1	Shell*	1	4	Air Blower	1
2	Storage Bag	1	5	Stake	20
3	Vinyl Repair Kit*	1	6	Stake Plate	2

*Item not shown.

TROUBLESHOOTING

Air Blower Does not turn on

Make sure that the Blower Motor is connected to a power source.

Check the power source (turned on).

Check the Motor Overloads.

Check the Motor for continuity.

Blower runs but Shell does not fill

Check the Inflation Tube for obstructions.

Check the Air Blower Discharge and Air Intake for obstructions.

Make sure that there are no tears in the Shell. Repair by using the vinyl repair kit supplied with the Shell or by sewing the tear together or covering with duct tape.

Make sure that the Shell Air Exhaust Valves are closed.

Shell inflates but is mis-shaped

Check the Tethers for excessive tension.