Product Code 5643928

TECHNICAL MANUAL

OPERATION/MAINTENANCE MANUAL

Eureka!
Rapid Deployable System
(RDS)
Tent

Nomenclature	NSN	MODEL
RDS 150- Small Tan	8340-01-540-9961	2480570
RDS 150 – Small Green	8340-01-540-9960	2480540
RDS 480 – Medium Tan	8340-01-541-0101	2480580
RDS 480 – Medium Green	8340-01-540-9981	2480550
RDS 635 – Medium Tan	8340-01-550-3834	2480630
RDS 635 – Medium Green	8340-01-550-3900	2480620
RDS 695 – Large Tan	8340-01-541-0102	2480590
RDS 695 – Large Green	8340-01-541-0008	2480560

Eureka!
Johnson Outdoors Gear Inc.
625 Conklin Road
Binghamton, NY 13903
Customer Service 1 800 847-1460
http://www.eurekamilitarytents.com

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify the above named Contractor.

Entire contents copyright (c) 2006, 2007, 2008, 2009 , 2011, 2012, 2013
Johnson Outdoors Gear Inc. All rights reserved.

10 September 2015
Rev K

Table of Contents

Page

List of Figures....ii
List of Tables....iii

Summary of Warnings and Cautions.... 1

CHAPTER 1 - GENERAL INSTRUCTIONS.... 3
Section I - GENERAL DESCRIPTION OF SYSTEM.... 3
1-1 Introduction.... 3
a. RDS Configurations.... 3
b. Package Size and Package Weight 5
c. List of Components 6
d. Operational Environment.... 7
1-2 Warranty Information.... 8
1-3 Site Selection 9
1-4 Set Up 9
a. Transport Frame/Fabric Package.... 9
b. Orient Frame/Fabric Package 10
c. Remove Web Straps 10
d. Extend the Frames 11
e. Expand the Arches 13
f. Raise the Ridge Purlins and Secure the Cables.... 15
g. Expand Frame Arch and Lock Slope Hubs.... 16
h. Install Side Walls 18
i. Install Liner/Floor 18
j. Arrange Fabric.... 24
k. Raise Tent to Full Height.... 24
l. Secure Tent Walls 26
m. Stake the Side Walls.... 28
n. Install Wind Guys 29

Section III INSTALLATION INSTRUCTIONS.... 33
1-5 Install Lights 33
1-6 Install Vestibule 34

CHAPTER 2 - OPERATION INSTRUCTIONS.... 37
Section I - THEORY OF OPERATION.... 37
2-1 Doors.... 37
2-2 Windows.... 37
2-3 Vents 37
2-4 Stove Pipe Opening - Optional.... 38
2-5 Connector.... 38

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CHAPTER 3 - PREPARATION FOR SHIPMENT 39
Section I - PREPARATION TO STRIKE 39
3-1 Remove Vestibules If Installed 39
3-2 Close and Secure all Windows and Doors 39
3-3 Lower Leg Assemblies 39
3-4 Remove Light Assemblies 40
3-5 Remove Floor/Liner 40
3-6 Unlock All Slope and Ridge Purlin Hubs 42

Section II STRIKE TENT 43
3-7 Compress Ends 43
3-8 Unlock Eave Purlin Hubs and Compress Side Frames 44
3-9 Package 47

CHAPTER 4 REPAIR PROCEDURES 49
Section I FIELD EXPEDIENT REPAIR PROCEDURES 49
4-1 General 49
4-2 Gear/Tube/Cable/Hub Replacement 49
a. Identify the Damaged Gear 49
b. Remove and Replace Damaged Gear 50
4-3 Arch/Purlin Tube/Hub and Cable Replacement 51
a. Identify the Damaged Tube and Cable 51
b. Remove and Replace Damaged Tube/Cable 55
4-4 Fabric Repair 55
a. Small Holes or Rip Repair 55
b. Large Holes or Large Rip Repair 55

List of Figures

Page
Figure 1 – Major Frame Components (figure shown without fabric skin, liner or floor) 4
Figure 2 - Frame/Fabric Package (RDS 480 / RDS 695 Shown) 10
Figure 3 – Lift and pull ends (figure shown without fabric skin, liner or floor) 11
Figure 4 – Move middle arch legs (figure shown without fabric skin, liner or floor) 12
Figure 5 – Lift and pull end legs (figure shown without fabric skin, liner or floor) 12
Figure 6 – Raise eave purlins (figure shown without fabric skin, liner or floor) 13
Figure 7 – Eave Purlin Hub - Locking Pin shown in the Locked Position 13
Figure 8 – Lift and pull side in unison (Figure shown without fabric skin, liner or floor) . 14
Figure 9 – Pull Detachable End Wall Fabric over the Peak Hubs 14
Figure 10 – Raise the ridge purlins (figure shown without fabric skin, liner or floor) 15
Figure 11 - Ridge Purlin Hub showing both Pins in the Locked Position 16
Figure 12 – Expand Frame and Lock Slope Hubs -RDS-635 shown 16
Figure 13 – Slope Hub with locking Pin in the Locked Position 17
Figure 14 – Install side walls 18

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Figure 16 – Position Liner/Floor Package Under the Tent (RDS-695 shown) 20
Figure 17 – Liner Attachment near the Corner Hub (Blue web strap) 20
Figure 18 – Liner Attachment near the Eave Purlin Hubs (Blue web strap) 21
Figure 19 – Liner Attachment to Slope Hub (White web strap) 22
Figure 20 – Liner Attachment to End Peak Hub (Red web strap)..... 23
Figure 21 – Unclip Snap Hooks..... 24
Figure 22 – Pull Locking Pin and Extend Leg..... 25
Figure 23 – Stake Each Leg through Stake Port..... 25
Figure 24 – Secure Black Floor/liner Web Strap 26
Figure 25 – Lace the Web Strap and Secure to the Leg 27
Figure 26 – Twist Rope Loop for Stake..... 28
Figure 27 – Stake the Wall to the Ground 28
Figure 28 – RDS-150 Wind Guy Stake Pattern..... 31
Figure 29 – RDS-150 or RDS-695 Wind Guy Stake Pattern 31
Figure 30 – RDS-635 Wind Guy Stake Pattern..... 32
Figure 31 – Light Assembly with Light Strap Attached 33
Figure 32 – Light Assemblies Installed..... 34
Figure 33 – Fold Ends – Sidewall is removed, folded and placed in bag 40
Figure 34 – Liner/Floor Assembly under Tent (RDS-695 shown)..... 41
Figure 35 – Locked and Transport Pin Locations..... 42
Figure 36 – Place the End Fabric on Top of the Frame..... 43
Figure 37 – Compress End 44
Figure 38 – Compress Sides..... 45
Figure 39 – Compress Sides..... 46
Figure 40 – Compress Sides..... 46
Figure 41 – Frame/Fabric Assembly on wrapper 47
Figure 42 – Frame/Fabric Assembly packaged for Transport 47
Figure 43 – Location of Gear Sets (RDS 480 / RDS 695) 50
Figure 44 – Proper Gear Set Indexing..... 51
Figure 45 – Location of Tubes and Cables (RDS-480/RDS-635)..... 52
Figure 46 – Location of Tubes and Cables (RDS-695)..... 53
Figure 47 – Location of Tubes and Cables (RDS-150)..... 54
Figure 48 – Large Holes or Large Rip Repair..... 56

List of Tables

Page

Table 1 – RDS Sizes..... 5
Table 2 – RDS Package Size and Package Weight..... 6
Table 3 – List and Quantity of Components 7
Table 4 – Stake Type and Applications..... 26
Table 5 - Number of Stakes to be Installed at the Base of the Tent..... 29
Table 6 – Wind Guy Stake Quantity for Each RDS Configuration 29
Table 7 – Boot Connector 38

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

This page intentionally left blank.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Summary of Warnings and Cautions

This warning summary contains general safety warnings and hazardous materials warnings that must be understood and applied during operation of this equipment. Failure to observe these precautions could result in serious injury or death to personnel.

WARNINGS

• Lethal voltage is present when light set is connected to power source. Disconnect from power source before inspecting or repairing any electrical component. ***Electrical shock or death*** **may result from failure to acknowledge this warning.**

• Overhead power lines are a source of lethal voltage. Select a site free of overhead power lines. ***Electrical shock or death*** **may result from failure to acknowledge this warning.**

• Do not use any type of non vented heaters. The use of non vented heaters will cause the accumulation of **Carbon monoxide gas**. **Carbon monoxide gas** is not visible and has no smell. If symptoms of headache, dizziness, fatigue, nausea, or irregular breathing occur, move affected personnel to fresh air.
Failure to comply with this warning may result in personal injury or death.

• All fuel burning heaters consume oxygen. Adequate ventilation must be maintained at all times. Keep roof vents clear of snow, ice or debris. Open doors, windows, flaps, hook and pile fastener wall closures as needed to introduce sufficient fresh air to replace oxygen consumed by heaters. If symptoms of headache, dizziness, fatigue, nausea, or irregular breathing occur, move affected personnel to fresh air.
Failure to comply with this warning may result in personal injury or death.

• Do not run internal combustion engines inside tent.
Failure to comply with this warning may result in personal injury or death.

• Frame/Fabric package is heavy. Four to eight personnel are required to lift each main section. Always lift with your legs *not* with your back.

• Always begin raising the tent from downwind, lowering from upwind side. This will prevent wind from getting underneath and moving partially raised unsecured tent.

• Use care to ensure fingers or other parts are not caught in hinge points.

• Two to four personnel are required to stand the Frame/Fabric in the upright position. Always lift with your legs, *not* your back.

• Ensure all personnel and equipment have been removed from tent before striking or lowering.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

• Use seam sealer and adhesive in well ventilated areas only. Use personal protective equipment to prevent inhalation of fumes. In case of dizziness *leave area immediately*.

• Stakes at leg feet and on bottom of walls are required on the RDS. Failure to stake tent may result in personal injury or damage to equipment.

CAUTIONS

• Allow slack in electrical cables. Strain on cable can damage equipment.

• Avoid damage to fabric. Do not stand on fabric. Material may rip or lacerate.

• Position hitch clip pins toward inside of vestibule at vestibule doorframe. Vestibule door fabric may tear if positioned toward outside.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CHAPTER 1 - GENERAL INSTRUCTIONS

Section I - GENERAL DESCRIPTION OF SYSTEM

1-1 Introduction

The RDS was developed as a tactical use shelter that maximizes component commonality, ease of use, operational effectiveness, durability, and the ability to connect with vehicles and like shelters using the standard TEMPER vestibule.

a. RDS Configurations

RDS is available in four configurations; RDS-150, RDS-480, RDS-635 and RDS-695. Review the following sections to acquaint yourself with the sizes and the requirements.

The RDS includes an articulated frame system, integrated roof fabric, detachable liner/walls/ends and floor, and plenum. All doors include a vestibule adapter that interfaces with the standard TEMPER vestibule. Figure 1 defines the major components of the RDS systems.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

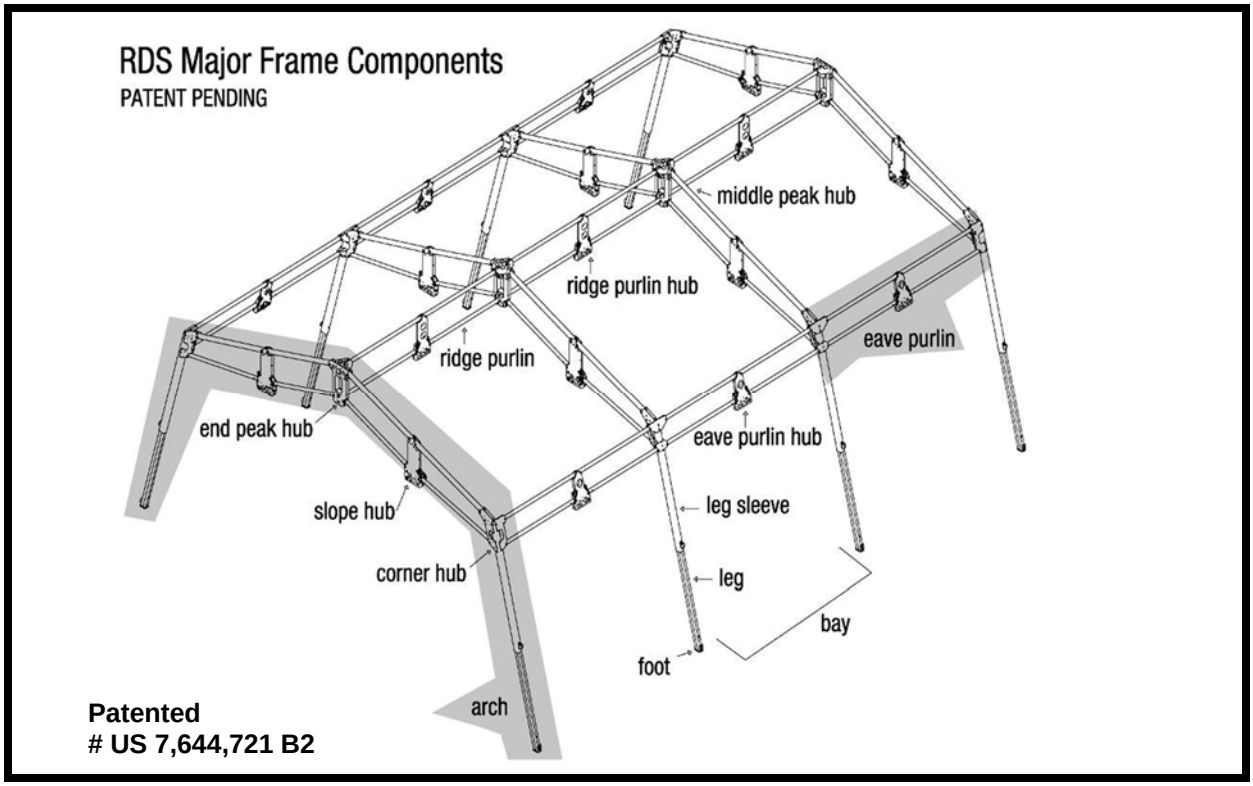

Figure 1 – Major Frame Components (figure shown without fabric skin, liner or floor)

The key components identified in Figure 1 and discussed in the following sections are listed below. Refer to the list below and Figure 1 to become familiar with the component terminology.

Arch – structural members that connect at the leg and at the peak of the shelter

Leg – lower member of the leg assembly
Leg Sleeve – upper member of the leg assembly

Purlin – structural members that run along the length of the shelter at the eave and at the ridge
- **Eave purlin**
- **Ridge purlin**

Hub – structural assembly where the tubes of the arch or purlin join
- **End peak hub**
- **Middle peak hub**
- **Ridge purlin hub**
- **Eave purlin hub**
- **Slope hub**
- **Corner hub**

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Table 1 defines the deployed width, length and area of each configuration. Table 2 defines the package size and weight as well as the overall system weight.

All configurations require the leg foot and walls to be staked.

WARNING

Stakes at leg feet and wall bottoms are required on the RDS. Failure to stake tent may result in personal injury or damage to equipment.

Optional stakes and wind guys are supplied.

Table 1 – RDS Sizes

Model Number	**RDS-150**	**RDS-480**	**RDS-635**	**RDS-695**
Tan	2480570	2480580	2480630	2480590
Green	2480540	2480550	2480620	2480560
Size				
Width (without liner)	16 ft 6 in (5.03 m)	20 ft (6.09 m)	20 ft (6.09 m)	23 ft 6 in (7.16 m)
Length (without liner)	10 ft 1 in (3.07 m)	24 ft (7.32 m)	31 ft 9 in (9.68 m)	29 ft 6 in (8.99 m)
Area (usable)	146 ft^2 (13.56 m^2)	458 ft^2 (42.54 m^2)	609 ft^2 (56.56 m^2)	653 ft^2 (60.65 m^2)
Eave Height inside	6 ft 11 in (2.11 m)	6 ft 11 in (2.11 m)	6 ft 11 in (2.11 m)	6 ft 11 in (2.11 m)
Peak Height	10 ft (3.05 m)	10 ft 6 in (3.20 m)	10 ft 6 in (3.20 m)	11 ft (3.35 m)
Minimum Site area required	16ft 10in X 10ft 1in (5.13m X 3.07m)	20ft X 24ft (6.09m X 7.32m)	20ft X 31ft 9 in (6.09m X 9.68m)	23ft 6in X 29ft 6in (7.16m X8.99m)

Note: Dimensions are +/- 2 inches.

b. Package Size and Package Weight

Table 2 describes the package size and package weight of the RDS-150, RDS-480, RDS-635 and RDS-695 configurations.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Table 2 – RDS Package Size and Package Weight

Model	RDS-150	RDS-480	RDS-635	RDS-695
Pack Size (inches)				
Package 1 Frame / Fabric Top and End Walls	74 X 29 X 15 (188cm x 74cm x 38cm)	70 X 37 X 29 (178cm x 94cm x 74cm)	70 X 48 X 29 (178cm x 122cm x 74cm)	75 X 36 X 31 (191cm x 91cm x 79cm)
Package 2 Liner / Floor / Plenum	and sidewalls 48 X 36 X 7 (122cm x 91cm x 18cm)	60 X 40 X 8 (153cm x 101cm x 20cm)	60 X 40 X 9 (153cm x 101cm x 23cm)	60 X 40 X 8 (153cm x 101cm x 20cm)
Package 3 Sidewalls	Repair Kit and Stakes only 17 X 9 X 3 (43cm x 23cm x 8cm)	60 X 40 X 8 (153cm x 101cm x 20cm)	60 X 40 X 9 (153cm x 101cm x 23cm)	60 X 40 X 8 (153cm x 101cm x 20cm)
Package 4 Repair Kit and Stakes	N/A	22 X 10 X 6 (56cm x 25cm x 15cm)	22 X 12 X 8 (56cm x 31cm x 20cm)	22 X 10 X 6 (56cm x 25cm x 15cm)
Weight (pounds)				
Package 1 Frame / Fabric Top and End Walls	207 pounds (93.89kg)	397 pounds (180.08kg)	493 pounds (223.62kg)	517 pounds (234.51kg)
Package 2 Liner / Floor / Plenum	and sidewalls 74 pounds (33.57kg)	96 pounds (43.55kg)	117 pounds (53.07kg)	123 pounds (55.79kg)
Package 3 Sidewalls	Repair Kit and Stakes only 20 pounds (9.07kg)	91 pounds (41.28kg)	107 pounds (48.54kg)	99 pounds (44.91kg)
Package 4 Repair Kit and Stakes	N/A	35 pounds (15.88kg)	39 pounds (17.69kg)	35 pounds (15.88kg)
Total System	301 pounds (136.53kg)	619 pounds (280.78kg)	756 pounds (342.92kg)	774 pounds (351.08kg)

WARNING

Frame/Fabric package is heavy. Four to eight personnel are required to lift the Frame/Fabric section. Always lift with your legs *not* with your back.

c. List of Components

Table 3 lists the components included in each configuration.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Table 3 – List and Quantity of Components

Component (part number)	**RDS-150**	**RDS-480**	**RDS-635**	**RDS-695**
Package 1				
Frame/Fabric/End Walls/Roof Assembly	1	1	1	1
Package 2				
Floor	1	1	1	1
Liner/Plenum	1	1	1	1
Package 3				
Sidewalls	0	2	2	2
Package 4				
Alum V-Stakes-12 inch (5652053)	22	52	60	52
18 inch Black Alum Stakes (5652055)	12	20	22	20
Mini Sledge (5441263)	1	2	2	2
Tan patch (5441041T)	3	3	3	3
Green patch (5441041)	3	3	3	3
3/16 Inch Rivets (5691983)	10	20	20	20
3/16 Inch Washers (5691984)	10	20	20	20
Rivet Gun (5441264)	1	1	1	1
Combo Wrench (5441307)	2	2	2	2
Phillips Head Screwdriver (5441261)	1	1	1	1
#10 Jam Lock Nuts (5441220)	12	12	12	4
1/4 inch x 20 Jam Lock Nuts (5441225)	5	10	10	10
3/8 inch Jam Lock Nuts (5441229)	10	20	20	10
2 Inch Split Ring (5441043)	4	4	4	4
Alcohol Swabs (5441053)	8	8	8	8
Cutter (5441042)	1	1	1	1
Purlin Bolt (5441222)	2	2	2	2
Leg Locking Pin (5441306)	2	2	2	2
Instructions	1	1	1	1

d. Operational Environment

The RDS was designed for maximum wind loads of 55 MPH (88 KPH) steady state with gusts up to 65 MPH (104 KPH). It is designed for maximum snow loads of 10 pounds per square foot (48.82 kg/m^2).

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

If official weather information is not available, a method to estimate wind speed and snow loads can be used. One accepted method for estimating wind speed is the Beaufort wind speed estimation method. This is an estimate and good judgment should be used.

- 25 to 31 MPH (40 to 50 KPH)- Large branches in motion; whistling heard in telegraph wires; umbrellas used with difficulty.
- 32 to 38 MPH (51 TO 61 KPH) - Whole trees in motion; inconvenience felt when walking against the wind.
- 39 to 46 MPH (62 TO 74 KPH) - Breaks twigs off trees; generally impedes progress.
- 47 to 54 MPH (75 TO 86 KPH)- Slight structural damage occurs (chimney-pots and slates removed).

Snow loads can be estimated by measuring the depth of snow accumulated on the tent roof. Depending on the snow conditions, large accumulations of snow should be removed.

If conditions are in excess of the design criteria, the tent should be evacuated or secured for the severe environmental conditions.

1-2 Warranty Information

There is no extended warranty option available for the RDS. The system is designed for a minimum field life of three years and a minimum shelf life of 10 years.

Limited Warranty: Johnson Outdoors Gear Inc. warrants the shelters are free from major defects in materials or workmanship and will meet performance specifications contained herein for a period of three years from date of shipment. If defects are found, using units will fill out a Product Quality Deficiency Report and notify Johnson Outdoors Gear Inc. customer service for a return authorization.

Johnson Outdoors Gear Inc.
625 Conklin Road
Binghamton, New York 13903
1 (800) 847-1460

If, after inspection, we find that the product was defective in material or workmanship, we shall, at our option, either repair or replace it without charge and pay for shipping within continental United States (CONUS). If, after inspection, Johnson Outdoors Gear Inc. finds the product was not defective, shipping charges will be the responsibility of the user. Johnson Outdoors Gear Inc. is not responsible for normal wear and tear or for damage caused by accidents, misuse, alterations, or improper installations. Additionally, although we manufacture our products with quality materials, we are not responsible for the negative effects of climate, pollution or acts of God beyond those outlined herein.

Because shelters are temporary structures, it is necessary that each unit be installed and maintained according to the manufacturer's instructions.

There are no other express warranties beyond the terms of this limited warranty. In no event shall Johnson Outdoors Gear Inc. be liable for incidental or consequential damages.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Section II - PREPARATION FOR USE

1-3 Site Selection

Select an area to erect the tent. Ensure the area will be large enough for the tent that will be erected. Table 1 identifies the minimum area required based on the tent foot print.

The area should be clear of trees, rocks and debris. Choose a relatively flat area. The ground should not vary by more than 6 inches in height, per 10 feet.

Avoid areas with overhead power lines. The RDS-695 has an 11 feet peak height. The shelter may come in contact with low power lines during erection if the site is not clear of power lines.

WARNING

Overhead power lines are a source of lethal voltage. Select a site free of overhead power lines. ***Electrical shock or death*** **may result from failure to acknowledge this warning.**

If the RDS will be deployed in the selected location for an extended time or if the area is subject to heavy rains, a trench should be dug around the perimeter of the tent about 2 feet away from the edge. A drainage ditch should also be dug for water to exit the perimeter trench.

1-4 Set Up

a. Transport Frame/Fabric Package

Transport the Frame/Fabric package in the transport wrapper to the selected site.

NOTE: The Frame/Fabric package can be rolled if sufficient personnel are not available to carry the package.

WARNING

Frame/Fabric package is heavy. Four to eight personnel are required to lift the Frame/Fabric section. Always lift with your legs *not* with your back.

Remove and set cover aside. Place the tent in upright position with the leg feet on the ground near the center of the selected site.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

WARNING

Two to four personnel are required to stand the Frame/Fabric in the upright position. Always lift with your legs, *not* your back.

b. Orient Frame/Fabric Package

Orient the Frame/Fabric package in the approximate center of the site and such that the side of the tent is aligned with the side of the site. The length dimension listed in Table 1 for each size tent is measured along the side of the package with the leg extension pins. See Figure 2.

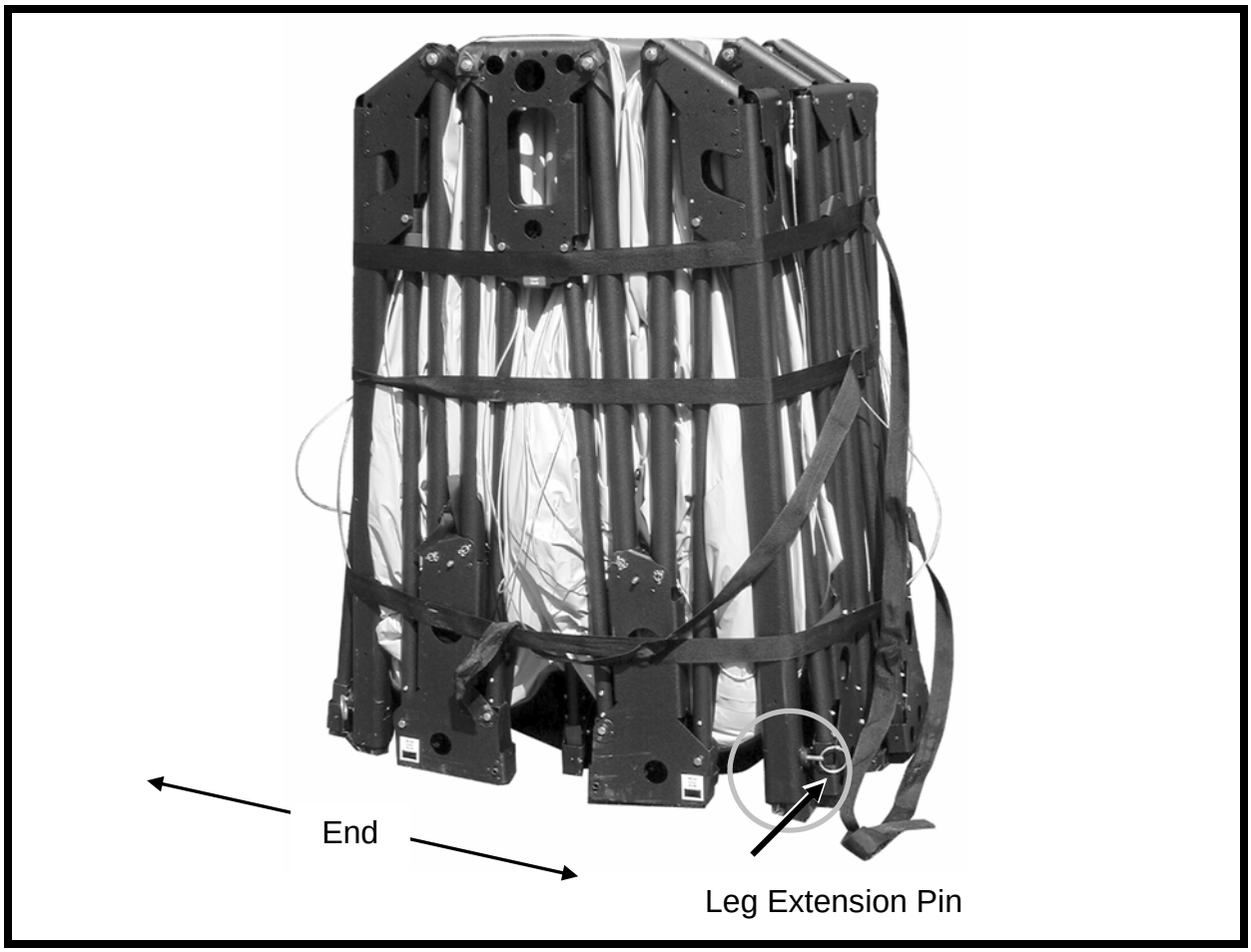

Figure 2 - Frame/Fabric Package (RDS 480 / RDS 695 Shown)

c. Remove Web Straps

Release the buckles and remove the 2 inch web straps securing the Frame/Fabric in the packaged position. The web straps are required to repackage the Frame/Fabric.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

d. Extend the Frames

This is accomplished in steps by pulling the ends of the tent out and away from the center, raising the purlins and securing the cables.

(1) Move the ends of the tent. Place one person at each end leg. Lift and pull the end legs to extend the frame. See Figure 3.

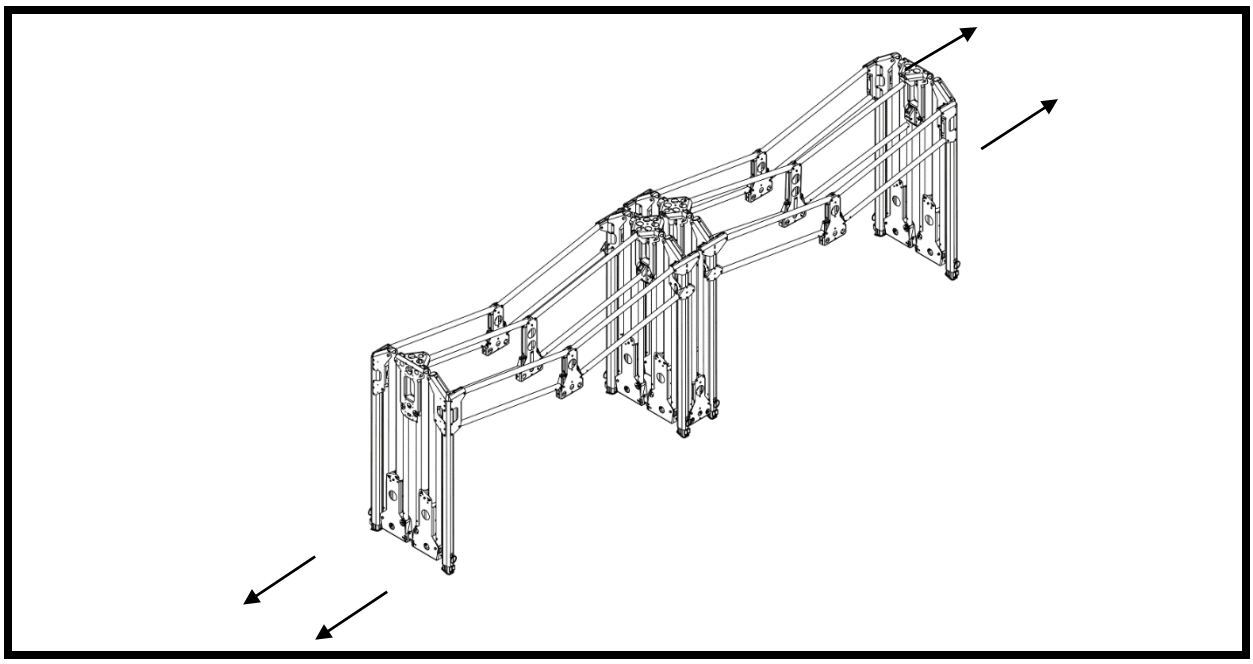

Figure 3 – Lift and pull ends (figure shown without fabric skin, liner or floor)

(2) Move the mid arch legs of the tent. Place one person at each of the side legs. Lift and pull legs to extend the frame from the center. See Figure 4. This step is not required for the RDS-150.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

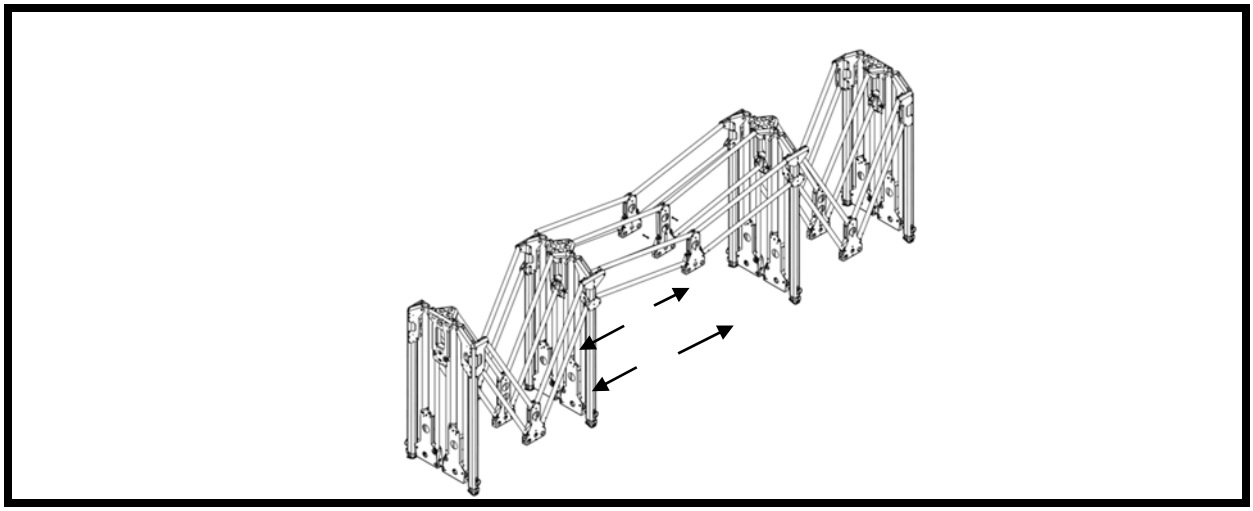

Figure 4 – Move middle arch legs (figure shown without fabric skin, liner or floor)

(3) Move the end legs to the fully extended position. Return to the end legs. Lift and pull to extend the frame to its full position. See Figure 5. This step is not required for the RDS-150.

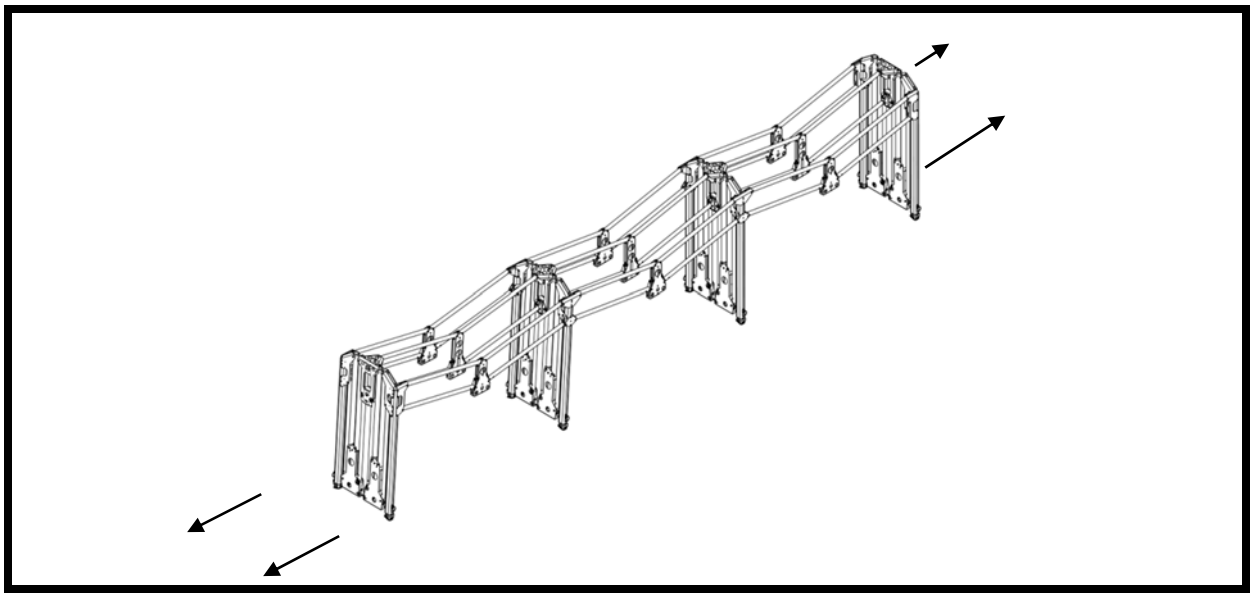

Figure 5 – Lift and pull end legs (figure shown without fabric skin, liner or floor)

(4) Raise the eave purlins and secure the cables. Place one person at Point A and B (see Figure 6). Raise the eave purlins to the horizontal position. Remove the locking pin from the transport position on the inside of the eave purlin hub and place it in the locked position. Do this on eave purlin hubs only. The ridge purlin hubs will

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

be locked at a later step. Move to the other Bays and repeat. See Figures 6 and 7. The RDS-150 has only 1 bay.

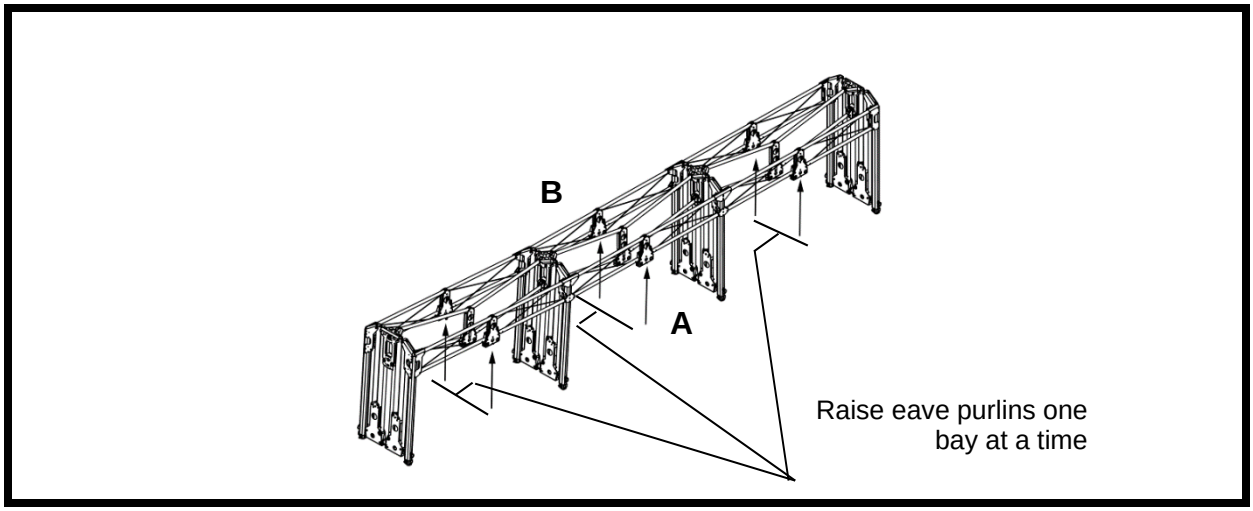

Figure 6 – Raise eave purlins (figure shown without fabric skin, liner or floor)

(5) Repeat step 4 for each of the bays. This step is not required for the RDS-150.

Figure 7 – Eave Purlin Hub - Locking Pin shown in the Locked Position

e. Expand the Arches

This is accomplished in steps by pulling the sides of the tent out, raising and locking the ridge purlins, raising and locking the end arches.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(1) Position one person at each of the legs on one side of the tent. In unison, lift and pull that side of the tent out approximately 3 steps. See Figure 8.

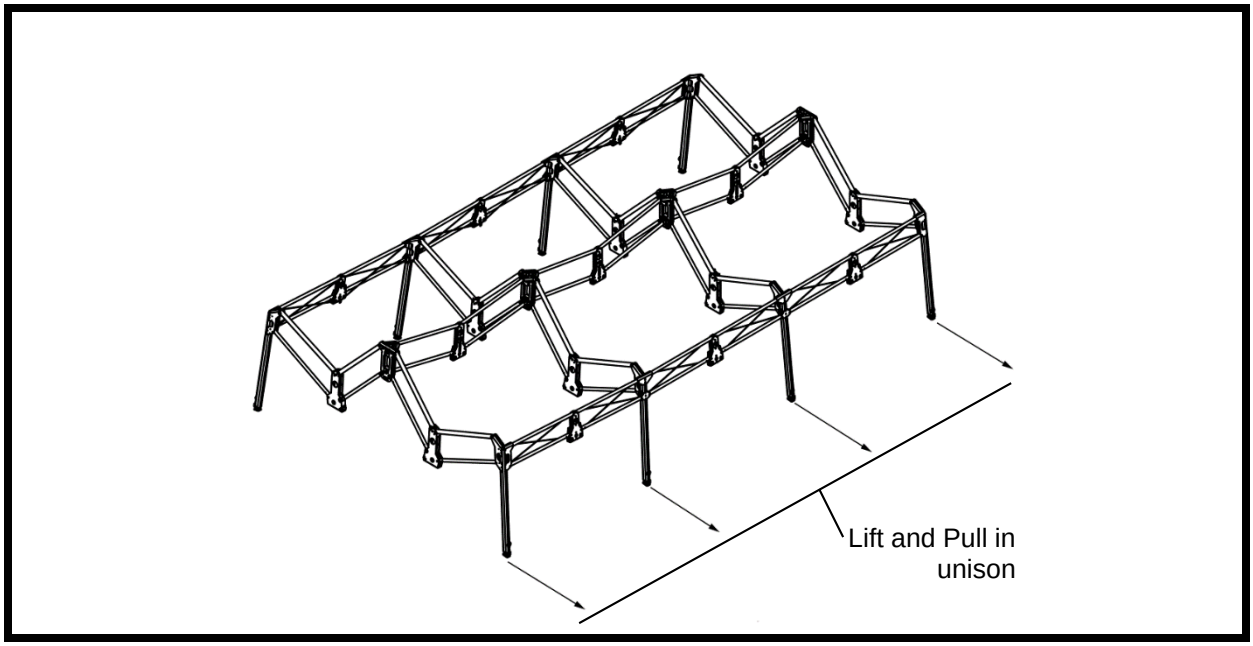

Figure 8 – Lift and pull side in unison (Figure shown without fabric skin, liner or floor)

(2) Pull the detachable end wall fabric completely over the end peak hubs on one end. (This normally comes from the factory attached.)The fabric is placed on top for transport and must be pulled down before the tent is fully erected. See Figure 9.

(3) Move to the opposite end and repeat step 2.

Figure 9 – Pull Detachable End Wall Fabric over the Peak Hubs

(4) Move to the opposite side and repeat step 1. See Figure 8.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CAUTION

Do not attempt to expand the end frames in one step as this will produce undue stress on the frame.

f. Raise the Ridge Purlins and Secure the Cables.

(1) Place one person on each ridge purlin hub and raise the ridge purlins to the horizontal position. See Figure 10.

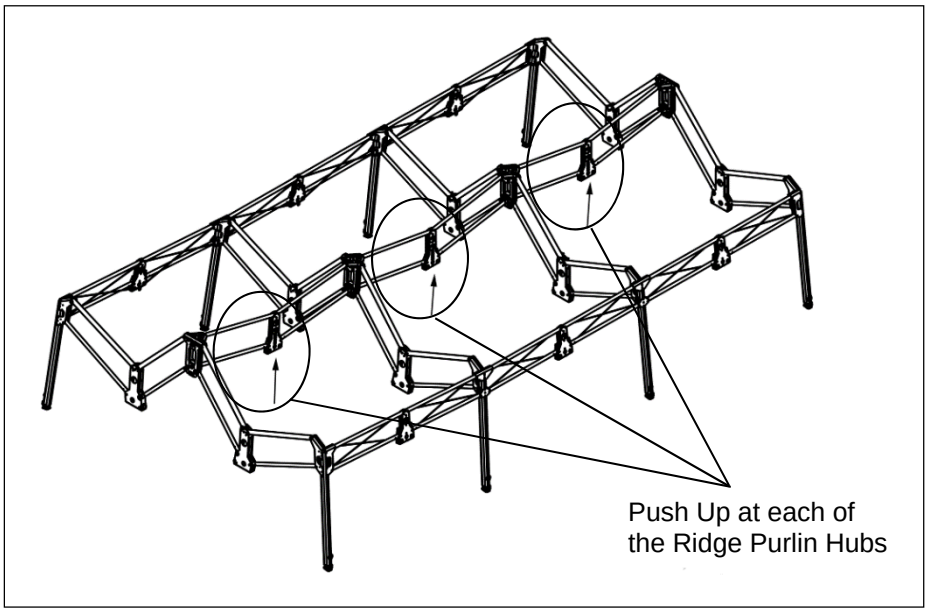

Figure 10 – Raise the ridge purlins (figure shown without fabric skin, liner or floor)

(2) Remove the locking pins from the transport position on both sides of the ridge purlin hub and place them in the locked positions. See Figure 11.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

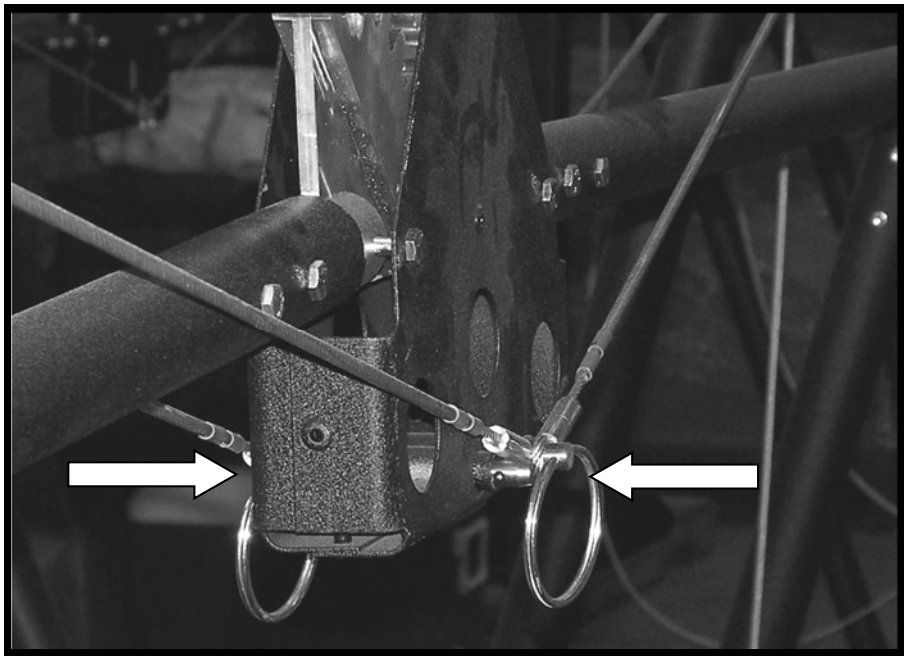

Figure 11 - Ridge Purlin Hub showing both Pins in the Locked Position

g. Expand Frame Arch and Lock Slope Hubs

(1) Beginning at one end of the shelter (see Figure 12) position one person at each of the 2 legs and one person (inside the shelter) at each of the slope hubs. At legs, pull outward while pushing slope hub up.

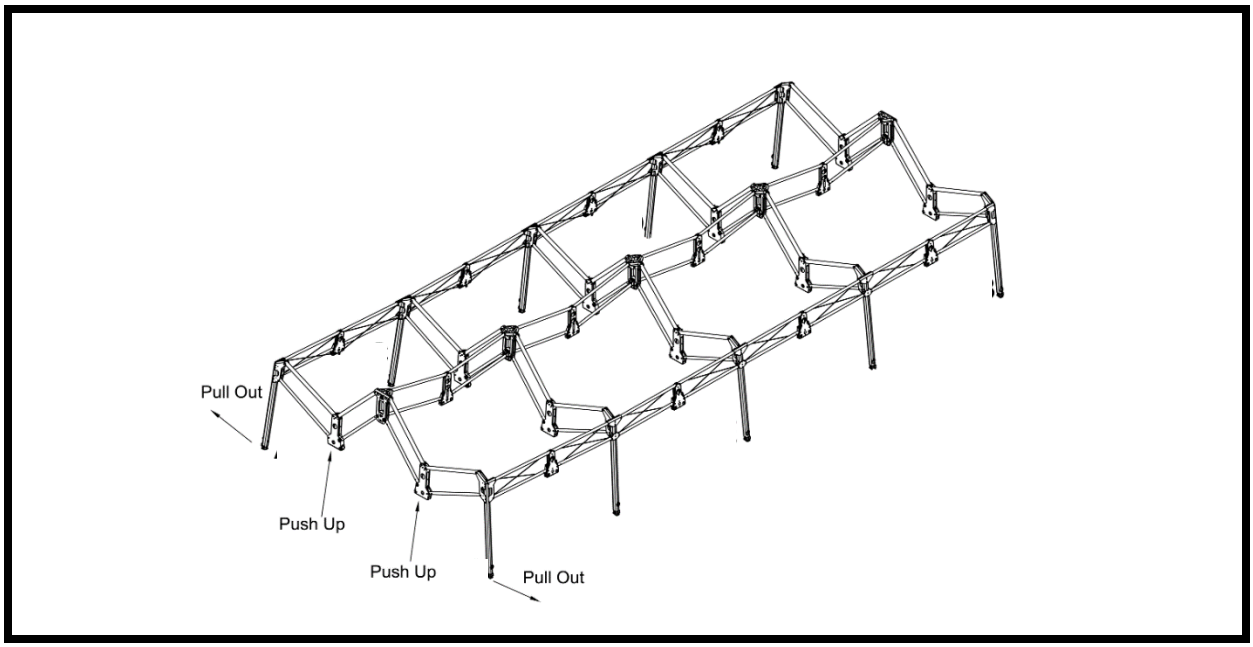

Figure 12 – Expand Frame and Lock Slope Hubs -RDS-635 shown (figure shown without fabric skin, liner or floor)

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(2) Remove locking pin from transport position and place into locked position. See Figure 13.

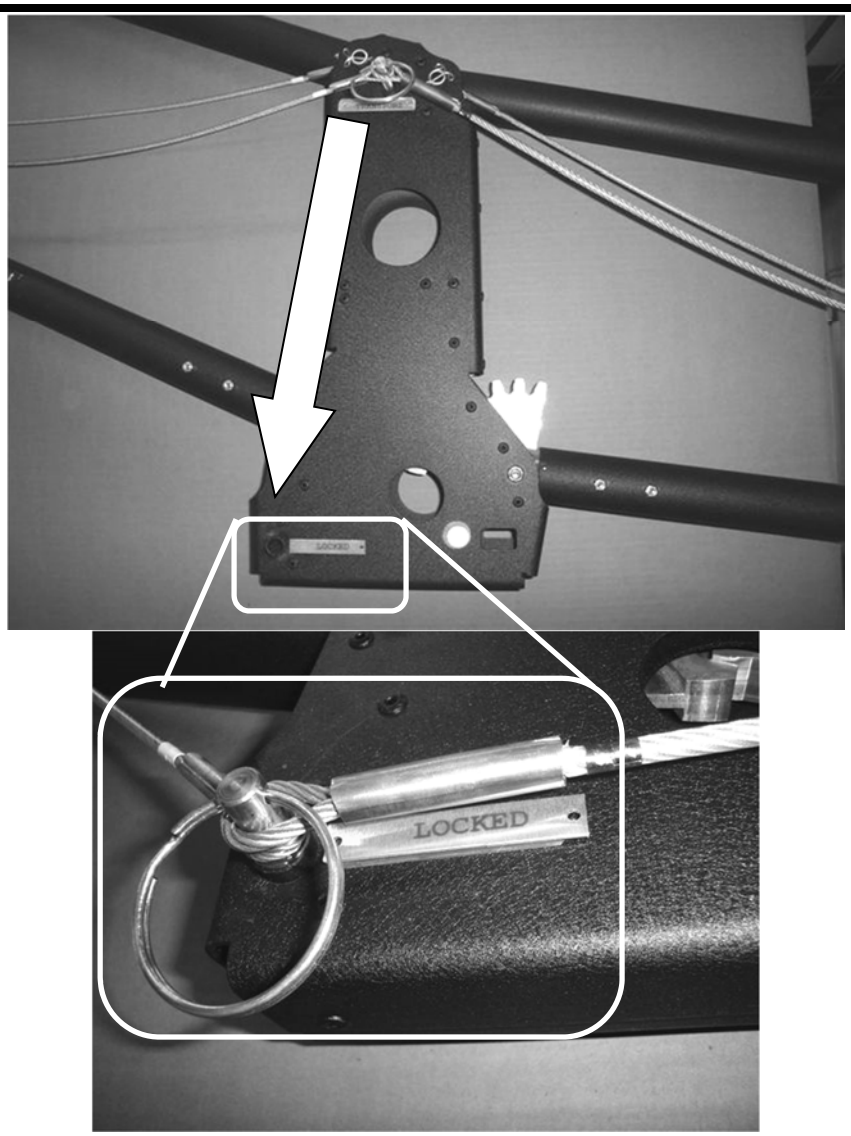

Figure 13 – Slope Hub with locking Pin in the Locked Position

(3) Repeat Steps 2 and 3 for each arch, moving towards the other end of the shelter.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

h. Install Side Walls

(1) Locate the two sidewalls in Package 2.

NOTE

The side walls are interchangeable.

(2) Start at one end. One person folds up sidewall flap on the roof exposing the hook and loop fastener strip. A second another person positions the side wall hook and loop fastener and installs sidewall. Once sidewall is installed, fold outer flap down to fully secure walls. (Each sidewall will attach to either side). See Figure 14.

Figure 14 – Install side walls

(3) Repeat step 2 for the other side wall.

i. Install Liner/Floor

Prior to raising the tent to the full height, begin the installation of the liner/floor. The liner attaches to the frame with color coded web straps; Blue, White and Red. Figure 15 shows the approximate locations and order of installation.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

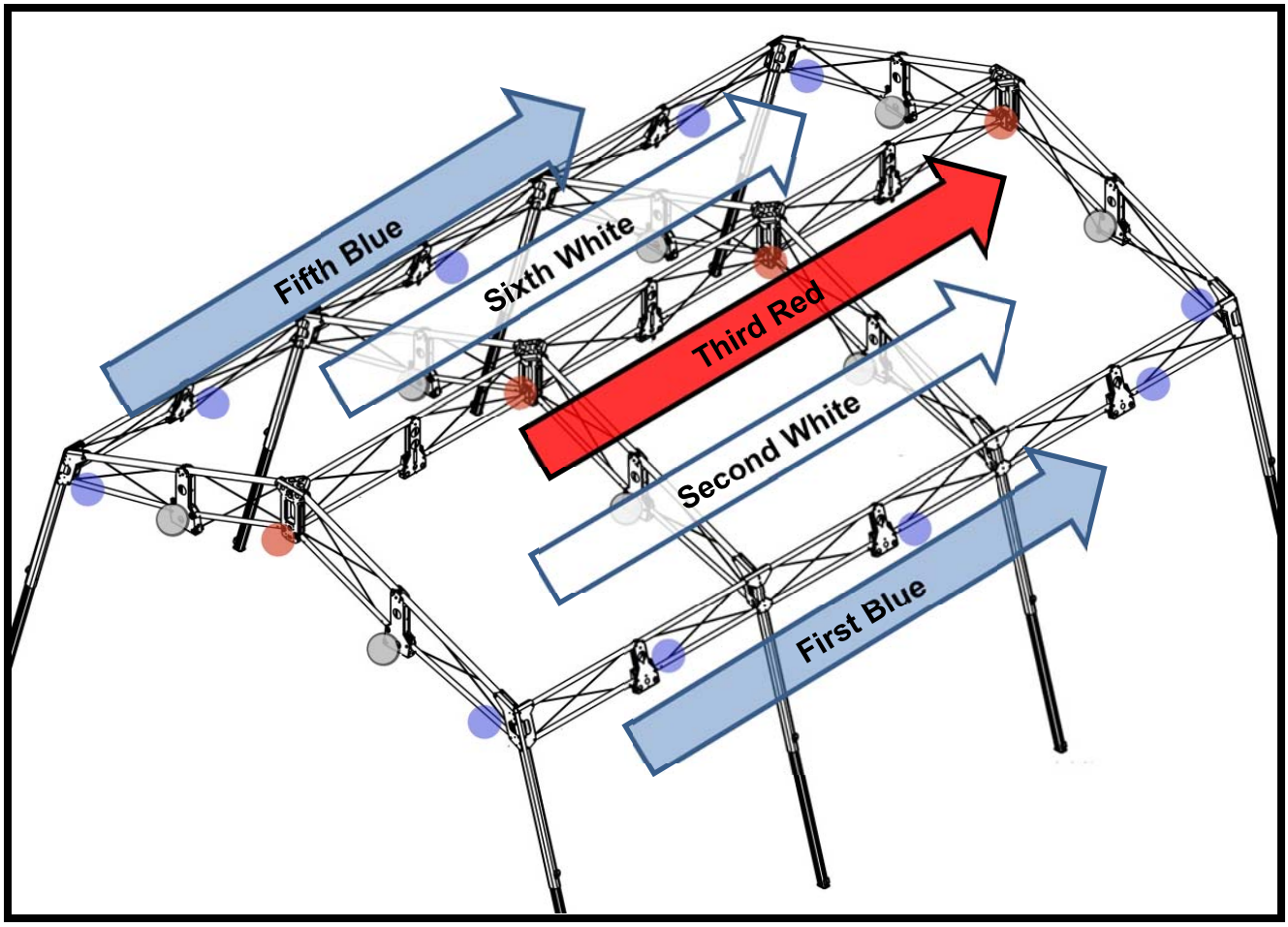

Figure 15 - Liner Strap Attachment Locations and Order

(1) Move the liner/floor bundle under the tent and place at one end, along the back wall (length) of the tent. Remove the transport wrapper from the liner/floor package.

(2) Unroll the liner/floor along the length of the tent. See Figure 16.

Caution

When installing the liner/floor, DO NOT stand on the fabric. This could cause tears or damage to the liner/floor fabric.

NOTE

For the RDS-150, make sure the smoke hole vent in the liner is aligned with the smoke hole vent in the tent roof (if equipped).

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

.

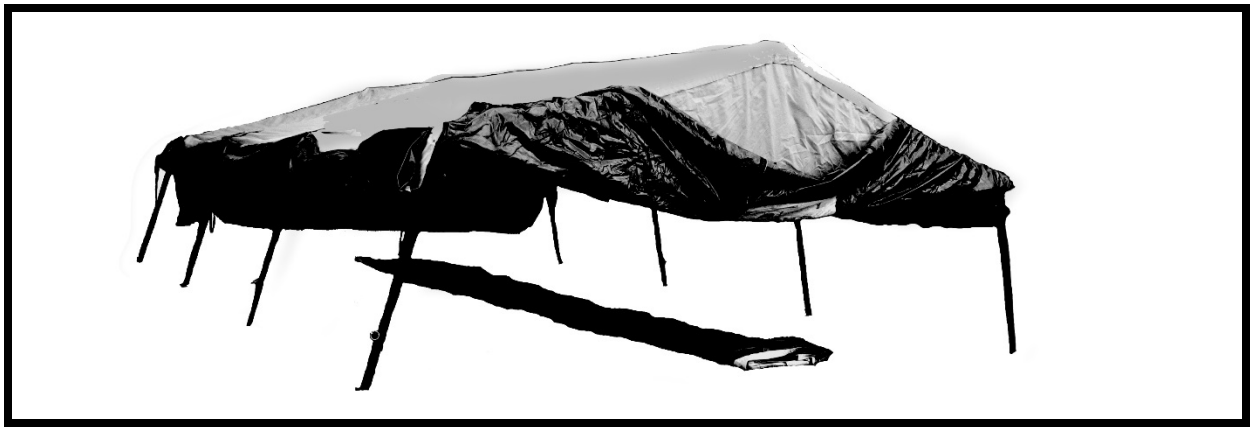

Figure 16 – Position Liner/Floor Package Under the Tent (RDS-695 shown)

(3) Locate the blue liner strap on one end of the folded liner/floor package.

(4) Attach the blue strap around the arch tube near the corner hub. The strap should go around the cable as shown in Figure 17.

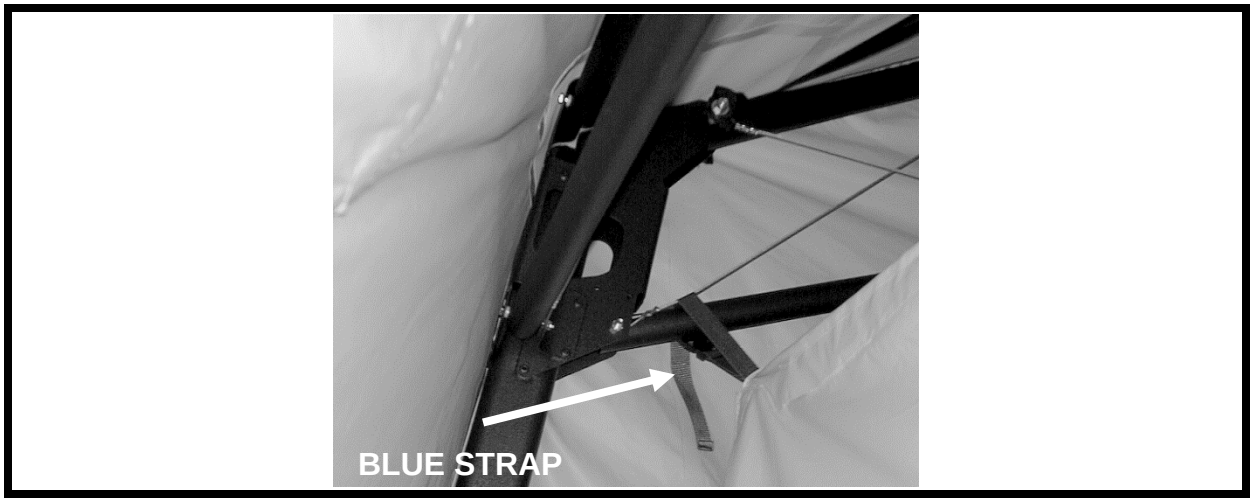

Figure 17 – Liner Attachment near the Corner Hub (Blue web strap)

(5) Moving along the length of the tent. Locate and attach the blue liner strap at the eave purlin hub. The strap should attach around the lower purlin tube near the eave purlin hub. See Figure 18.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

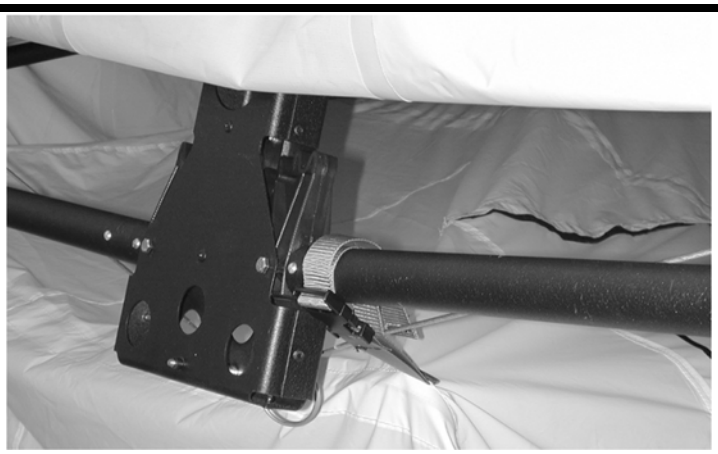

Figure 18 – Liner Attachment near the Eave Purlin Hubs (Blue web strap)

(6) Repeat step 5 for each eave purlin hub on that side.

(7) Move to the end (on the same side) and repeat step 4 at the corner hub.

(8) From the position in step 7, move to the nearest one slope hubs on that end of the tent.

(9) Locate the white liner strap with wire hook on the liner.

(10) Attach the wire hook to slope hub at the slot with the white label. See Figure 19.

NOTE

There are two slope hub attachments per arch assembly.
Position the liner/floor such that you can reach the attachment points without stepping on the liner material.

(11) Move along the length of the tent to the next arch assembly. Repeat steps 9 and 10 for each of the remaining arch assemblies.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

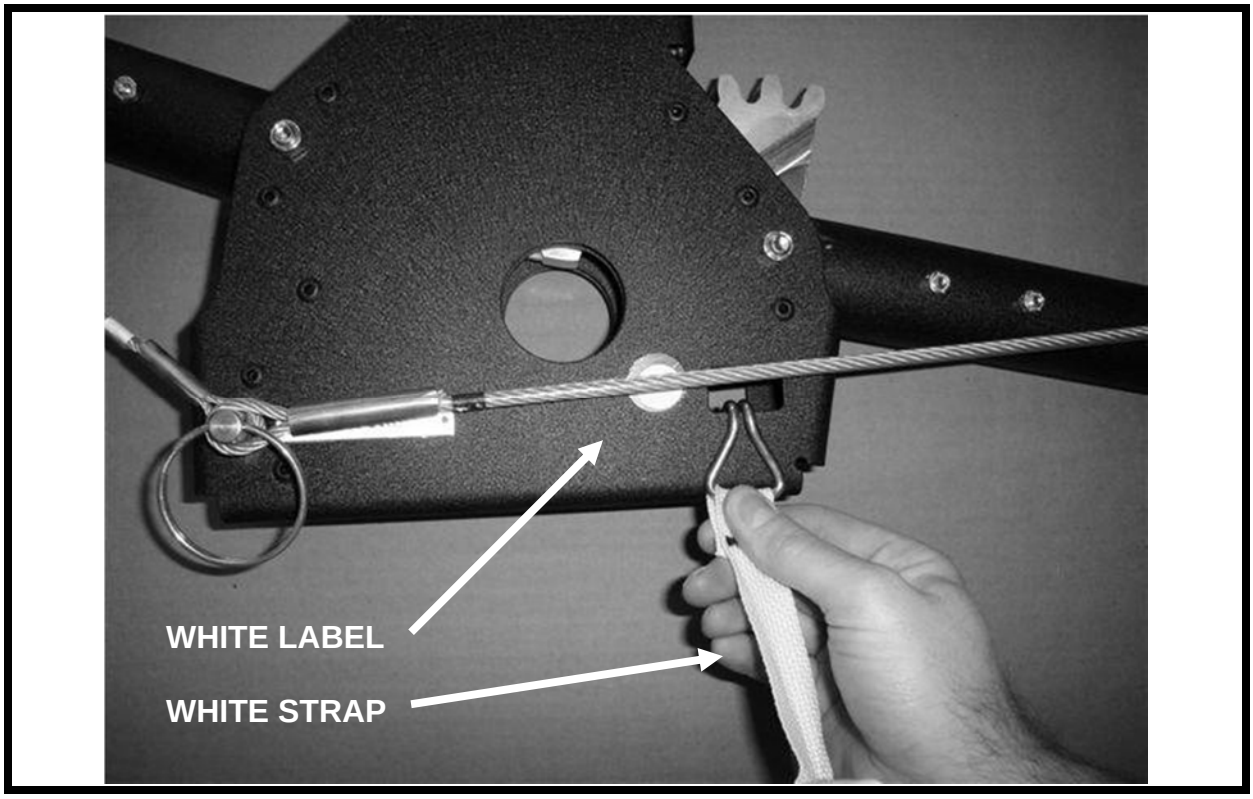

Figure 19 – Liner Attachment to Slope Hub (White web strap)

(12) Move to an end arch.

(13) Locate the red liner strap with wire hook at the end of the liner.

(14) Attach the wire hook to the peak hub at the red markers See Figure 20.

NOTE

There is one peak hub attachment per frame arch assembly.

(15) Move down the length of the tent to the next arch assembly.

(16) Locate the red liner strap with wire hook on the liner below the arch assembly and attach the wire hook to the peak hubs at the red marker.

(17) Repeat steps 15 and 16 for the remaining arch assemblies.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

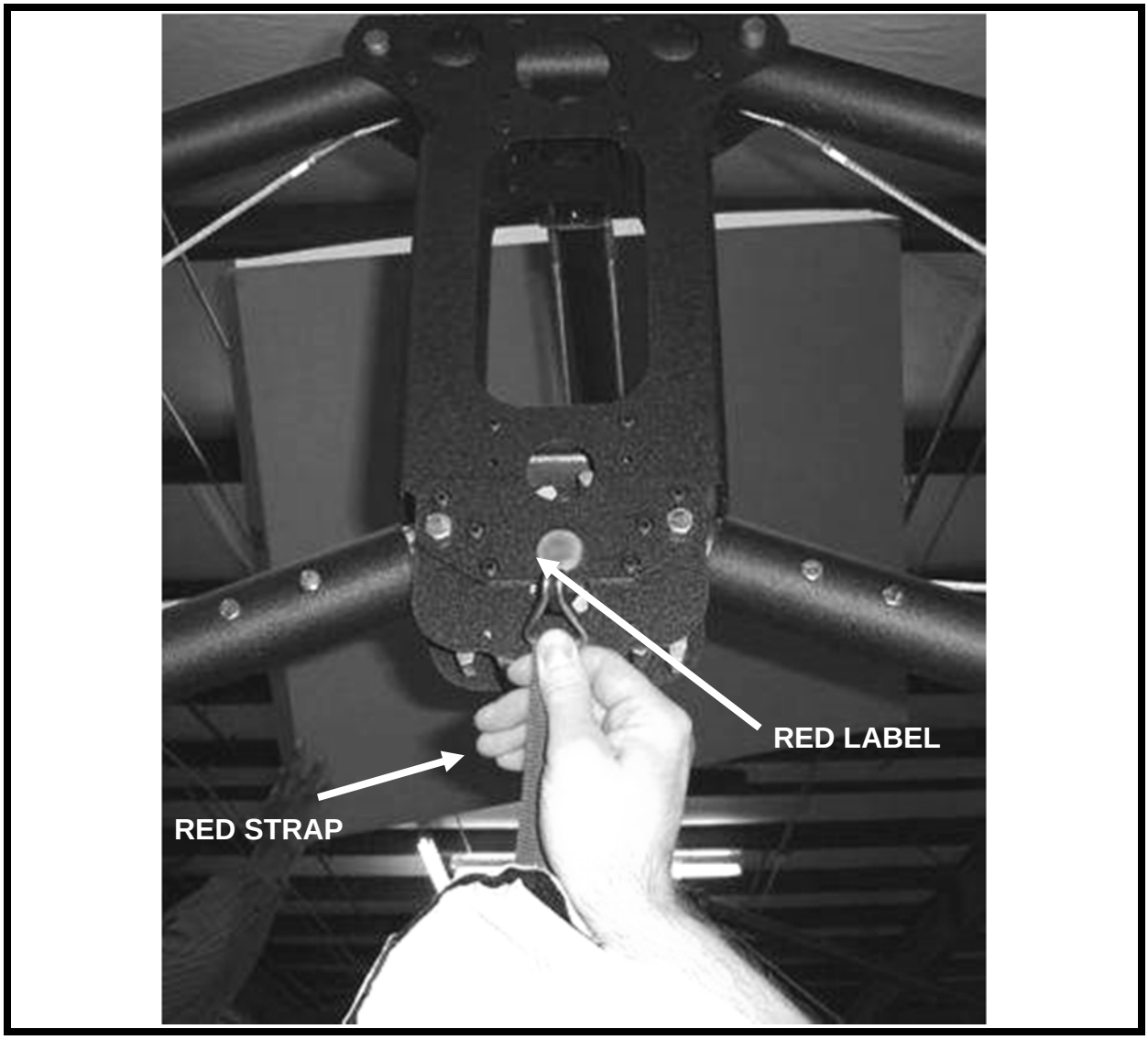

Figure 20 – Liner Attachment to End Peak Hub (Red web strap)

(18) Move to the opposite side of the centerline of the tent under the slope hub on one end of the tent.

(19) Repeat steps 9, 10 and 11.

(20) Move to the far side of the tent at one end.

(21) Repeat steps 3 through 7.

NOTE

Attachments at the base of the liner are made after the legs are extended.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

j. Arrange Fabric

Unclip the snap hooks located above the doors on each end of the tent and lower the fabric. See Figure 21. If not pulled down at this time, you may not be able to reach the side wall fabric when the legs are extended.

Figure 21 – Unclip Snap Hooks

k. Raise Tent to Full Height

NOTE

All clips securing side and end wall should be released prior to raising tent to full height.

(1) Place one person at each leg on one side of the tent. Bend with the knees and wrap an arm around the leg sleeve as near to the bottom as possible. **IN UNISON**, lift the assembly – legs, purlins, and fabric. With your free hand, pull the ring pin on the sleeve to let the leg slide out. With the leg fully extended, push the pin in to locked position. See Figure 22.

(2) Move to the opposite side and repeat step 1.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

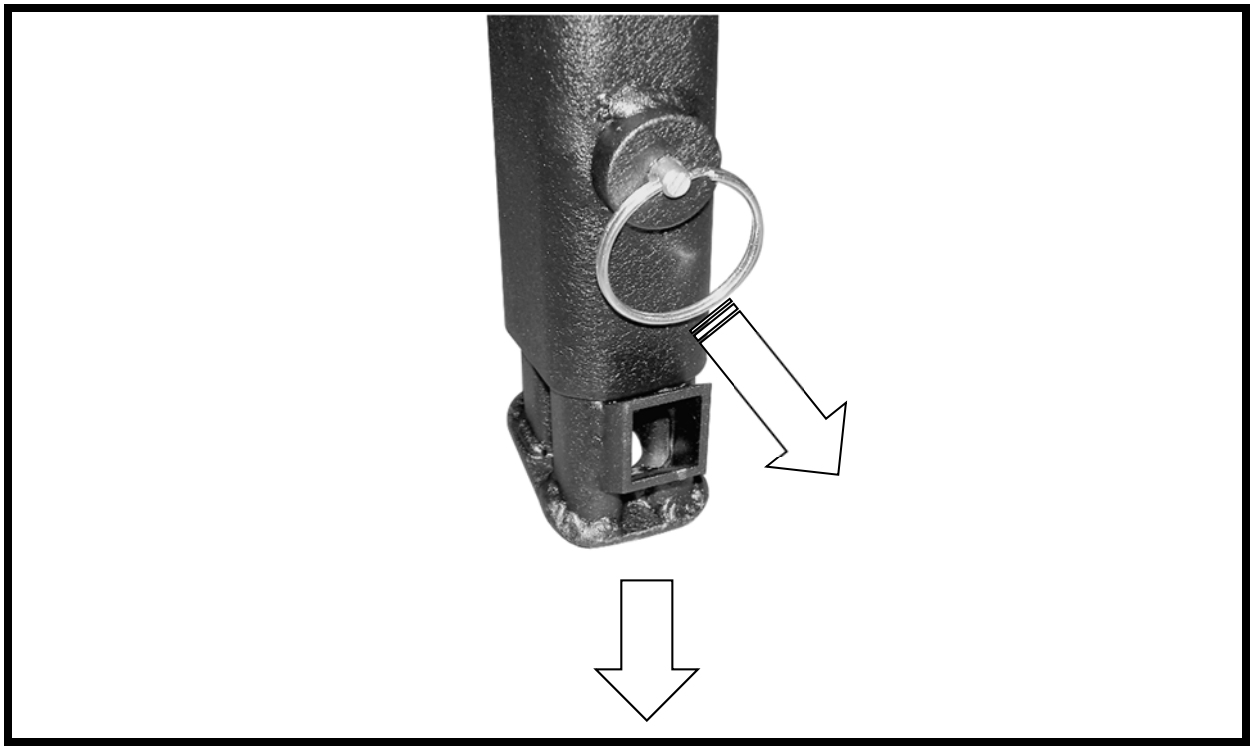

Figure 22 – Pull Locking Pin and Extend Leg

(3) Stake each leg through the stake port on the foot using the 18 inch round stake. See Figure 23.

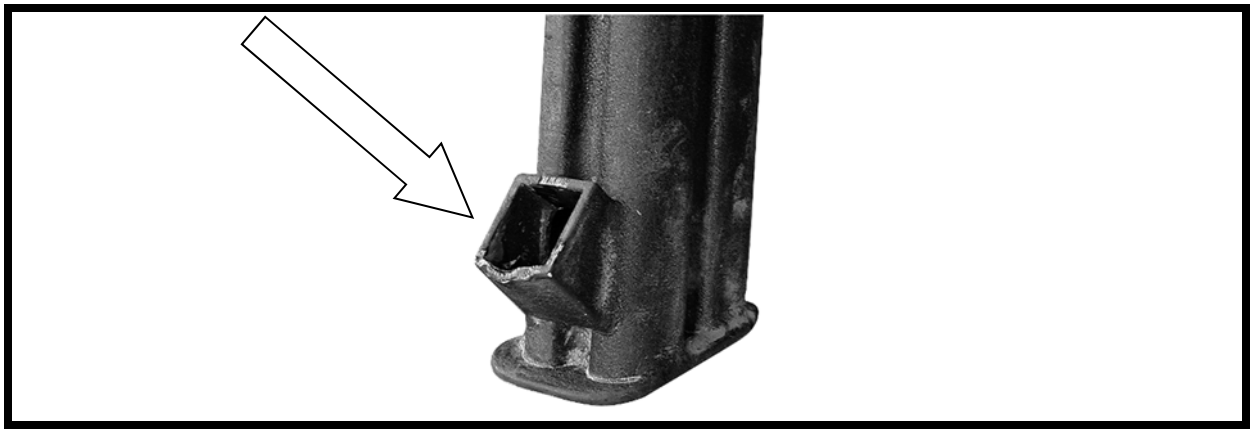

Figure 23 – Stake Each Leg through Stake Port

There are two types of stakes supplied with the RDS. Be sure to use the correct stake for different applications. See Table 4.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Table 4 – Stake Type and Applications

Application	Stake type	Part number
Leg	18 inch long round	5652055
Fabric Base	12 inch long “V”	5652053
Optional Wind Guys	18 inch long round	5652055

(4) Secure the black liner/floor web strap around the leg below the stake port as shown in Figure 24.

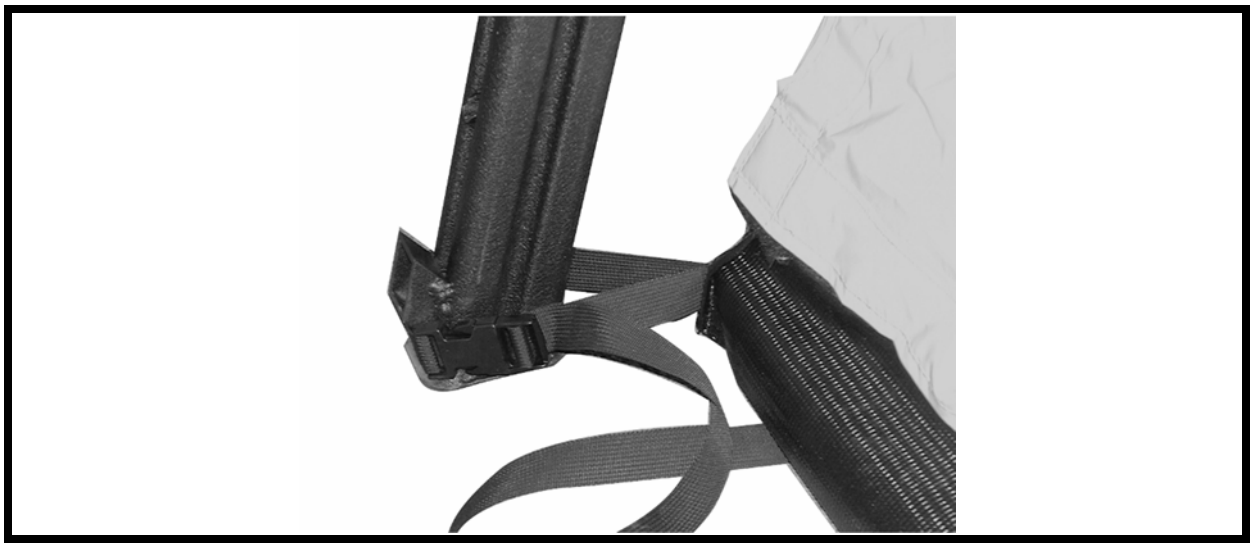

Figure 24 – Secure Black Floor/liner Web Strap

The tent is now considered “Under Canopy”. Equipment may be set up in the tent during the remaining installation

I. Secure Tent Walls

NOTE

The tent fabric is an integral part of the RDS and must be secured. Use the attached webs to secure the wall sections to the legs.

(1) Locate the two web straps on the fabric side wall at one corner.

(2) Laced the top web strap through the opening in the end wall and then secured to the leg as shown in Figure 25.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(3) Repeat step 2 for the lower web strap.

(4) Repeat steps 1 through 3 for the other three corners.

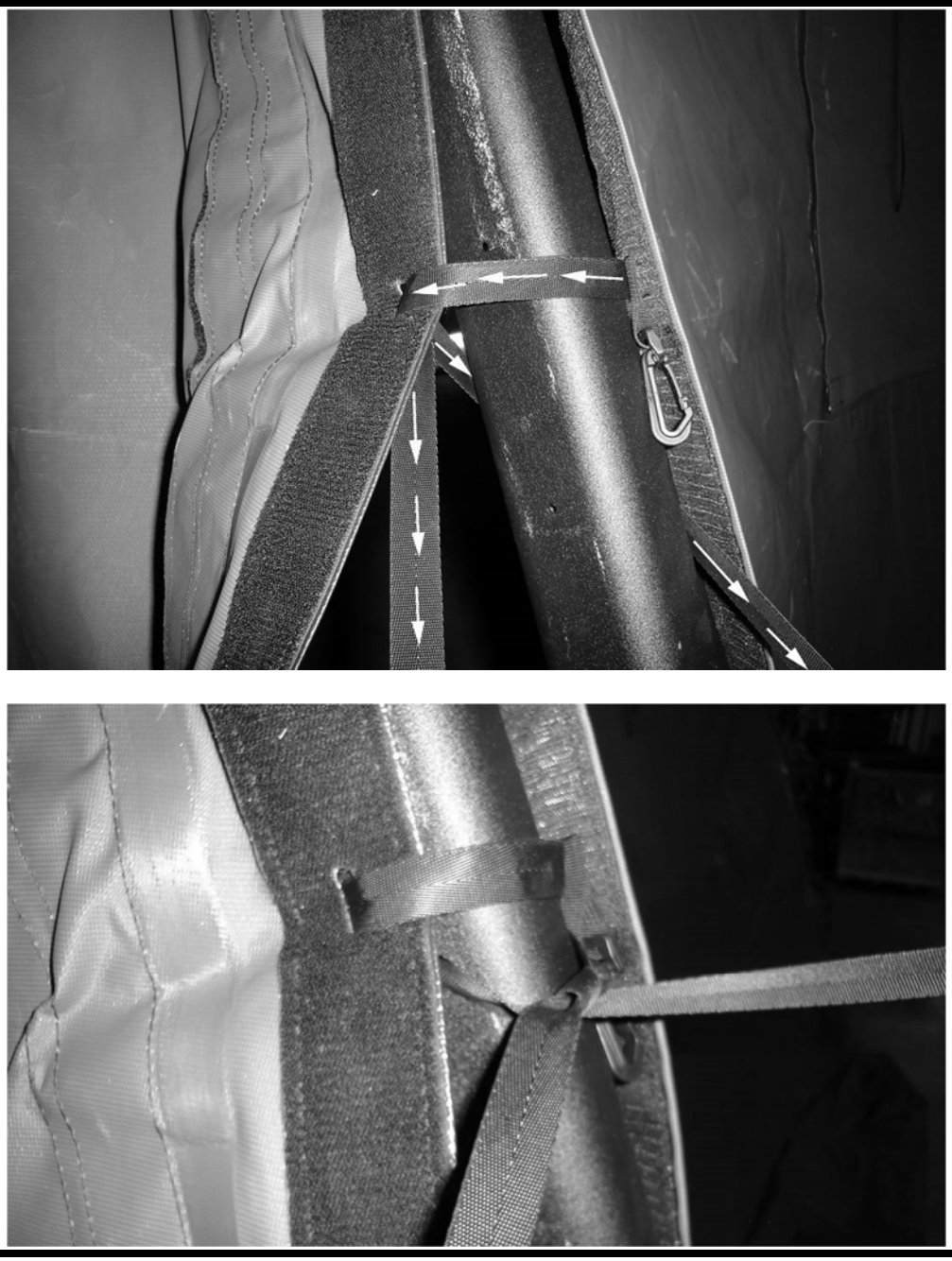

Figure 25 – Lace the Web Strap and Secure to the Leg

(5) Locate the three (3) web straps on the side wall fabric at the one of the mid arch legs.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(6) Secure the top web strap to the leg by inserting the web from the outside to the inside, and wrapping the web around the leg, pulling it tight and tying it with a standard shoelace knot.

(7) Close the hook and pile fastener flaps on the corners. Press the flaps closed for a sound seal.

m. Stake the Side Walls

(1) Locate the grommet hole at the bottom of the side walls with rope loop installed.

(2) Twist the loop. See Figure 26.

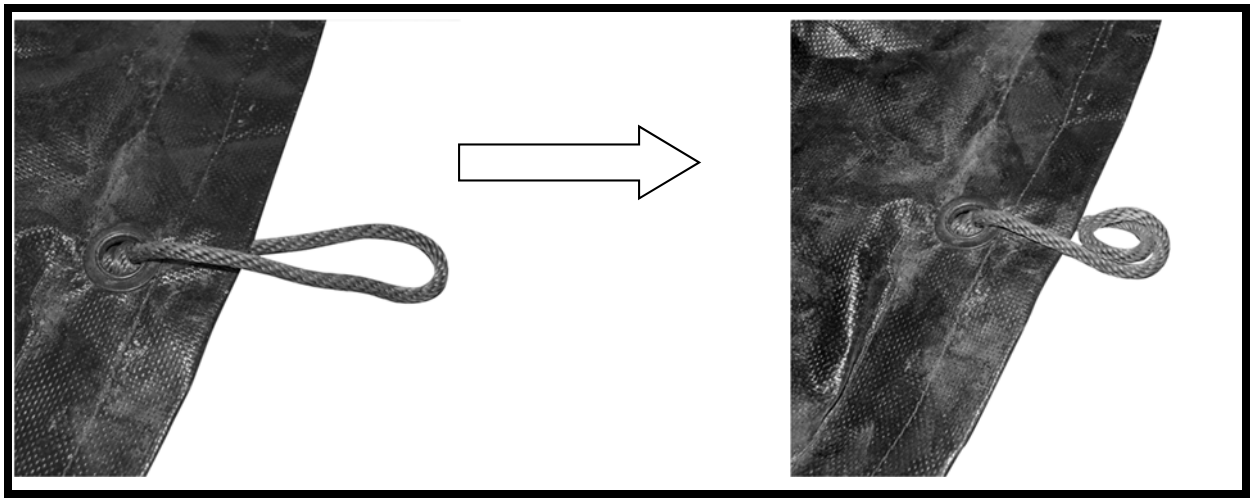

Figure 26 – Twist Rope Loop for Stake

(3) Insert a 12 inch “V” stake as shown in Figures 27.

Figure 27 – Stake the Wall to the Ground

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(22) Stake the wall to the ground.

(23) Repeat step 3 for the remainder of rope loops.

NOTE

Table 5 below identifies the number of 12 inch “V” stakes to be installed at the base of the fabric for each configuration. Refer to Table 4 for general stake applications and part numbers.

Table 5 - Number of Stakes to be Installed at the Base of the Tent

RDS Configuration	Stakes at the base of the fabric
150	22
480	52
635	60
695	52

n. Install Wind Guys

The RDS is a stable free standing shelter. Optional wind guys can be installed. The following procedure identifies the proper installation of the wind guys for the RDS shelter.

(1) Locate the 18 inch long, round stakes.

NOTE

Table 6 identifies the quantity required for each RDS configuration. If the stakes are damaged and inoperable or if there is not at the minimum required, contact Johnson Outdoors Gear Inc. customer service at 1-800-847-1460 for information on getting replacement parts and instructions.

Table 6 – Wind Guy Stake Quantity for Each RDS Configuration

RDS Configuration	Quantity of 18 Inch Long, Round Stake (Part number 5652055)
RDS-150	8
RDS-480	12
RDS-635	14
RDS-695	12

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(2) Install one 18 inch long, round stake at each wind guy stake location identified in Figure 28, 29 or 30 depending on the configuration.

(3) Locate one wind guy at one corner of the shelter.

(4) Loop the free end of the wind guy over the stake at that location and pull the guy snug by pulling the tensioner toward the tent. Do not over tighten at this time.

(5) Move to the second wind guy at that corner and repeat step 4.

(6) Repeat steps 4 and 5 for the other 3 corners.

(7) Move to one side and locate a wind guy at the leg arch location. Skip this step if you are deploying the RDS-150 configuration.

(8) Loop the free end of the wind guy over the stake at that location and pull the guy snug by pulling the tensioner toward the tent. Do not over tighten at this time. Skip this step if you are deploying the RDS-150 configuration.

(9) Repeat steps 7 and 8 for the remaining wind guy locations.

(10) Move to one corner and tighten the wind guy.

(11) Moving in one direction around the shelter, repeat step 10 for each wind guy.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

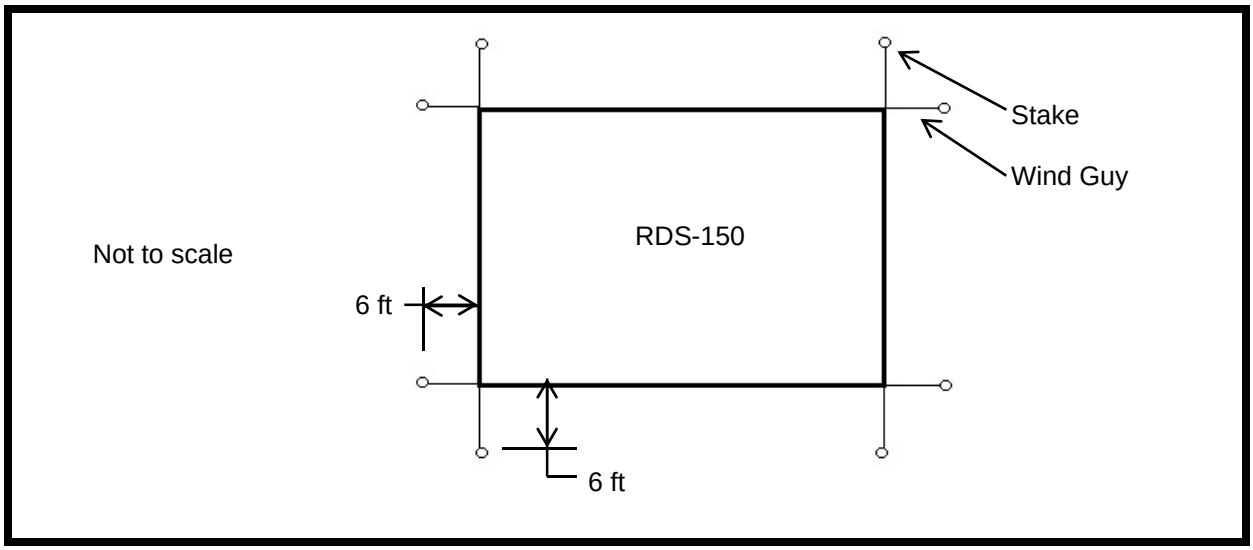

Figure 28 – RDS-150 Wind Guy Stake Pattern

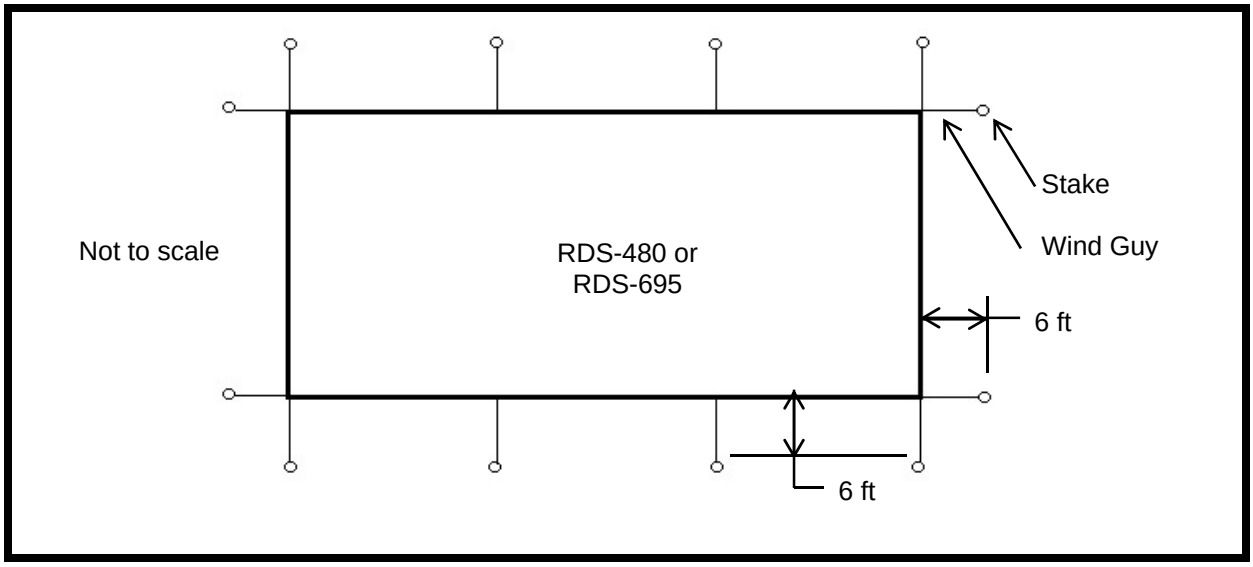

Figure 29 – RDS-150 or RDS-695 Wind Guy Stake Pattern

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

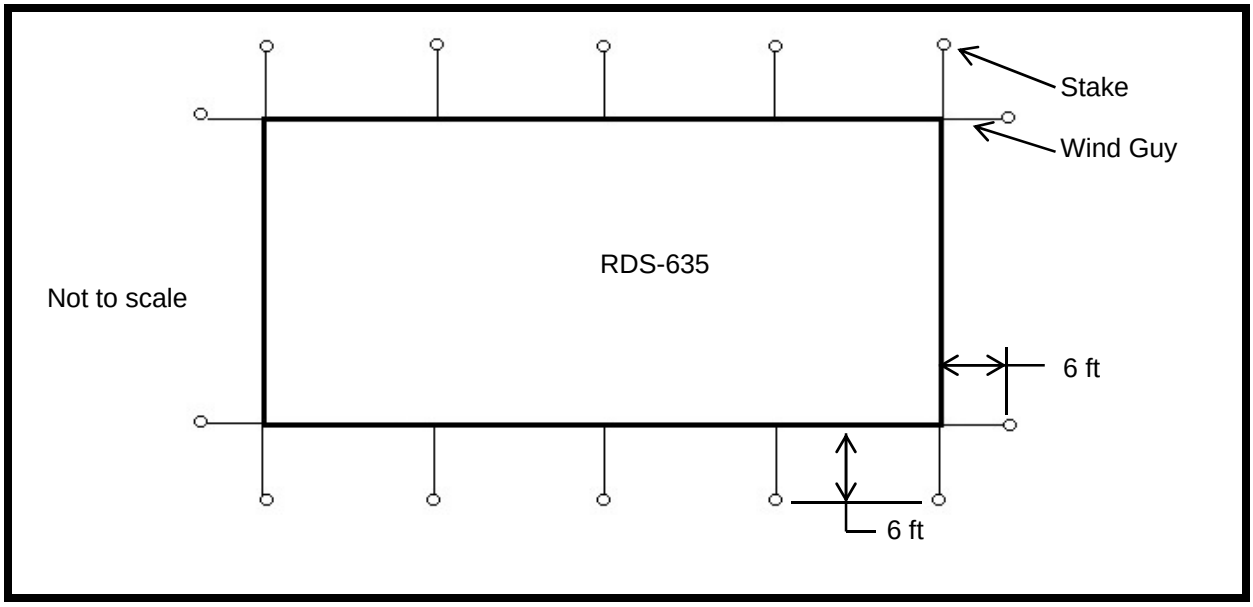

Figure 30 – RDS-635 Wind Guy Stake Pattern

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Section III INSTALLATION INSTRUCTIONS

1-5 Install Lights

Lights and cable assemblies can be purchased separately. When authorized use these procedures to install light in the RDS.

The following procedure is based on the Jameson (model 31-502SK-1P EMI Hardened or 31-5004M-1P General Purpose) light assembly and the Eureka Light Strap (product number 2480246). If other lights are used refer to the supplied instructions.

(1) Attach light strap to each end of the light assembly. Use the loop and hook fastener to secure the light strap to the light assembly. See Figure 31.

Figure 31 – Light Assembly with Light Strap Attached

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(2) Attach the snap hook on the light straps to the “D” rings on the liner roof. See Figure 32.

Figure 32 – Light Assemblies Installed

(3) Adjust the light to the desired height by adjusting the plastic ladder lock assemblies on the light straps.

1-6 Install Vestibule

Vestibule assemblies can be purchased separately

Vestibule may be used as a passageway or blackout entryway. It may be connected to end or side doorways. Refer to the instructions included with the vestibule for set up and strike procedures. Otherwise, erect the vestibule as follows for all configurations.

(1) Unroll vestibule adapter on tent door.

(2) Locate and lay out guy ropes from vestibule.

(3) Identify and spread out vestibule fabric.

(4) Locate, layout and assemble vestibule arch sections.

(5) Identify ridge spindle grommet at one end of vestibule and vestibule adapter.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(6) Align vestibule spindle grommets with vestibule adapter spindle grommet.

(7) Insert vestibule arch spindles in vestibule adapter and vestibule spindle grommets. Secure ridge grommets with hitch clip pins.

NOTE

Position hitch clip pins toward inside of vestibule at vestibule doorframe. Vestibule door fabric may tear if positioned toward outside.

(8) Becket lace the vestibule fabric to the adapter starting at the ridge and working towards eave and then to the bottom. Tie off at bottom with half hitch knot.

(9) Starting at the ridge and working toward each eave, secure the weather seal flaps with hook and loop fastener. Secure adapter and vestibule using the tie tapes at all frame locations.

(10) Install vestibule door and secure with ridge hitch clip pins.

(11) Extend arch and fabric.

(12) Install two guy ropes under hitch clip pins on eave spindles of last vestibule arch.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

This page intentionally left blank.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CHAPTER 2 - OPERATION INSTRUCTIONS

Section I - THEORY OF OPERATION

2-1 Doors

Use following procedures to operate door on RDS:

Door is opened and closed using the zipper fasteners. The inner door can be rolled up and secured with straps at the top.

2-2 Windows

Windows can be opened for ventilation or closed due to inclement weather. Windows have three panels.

The fabric cover and clear windows are closed by hook and pile fasteners. The fabric cover and clear window can each be held open with tie tapes. Each layer must be rolled up towards the inside to prevent rain from being trapped within the folds. To fully close the fabric cover, the clear window must first be unrolled and secured.

2-3 Vents

TEMPER-Style vents are located on the End Walls and can be opened or closed using the supplied ropes.

WARNING

Do not use any type of non-vented heaters. The use of non-vented heaters will cause the accumulation of carbon monoxide gas. Carbon monoxide gas is not visible and it has no smell. If symptoms of headache, dizziness, fatigue, nausea, or irregular breathing occur, move affected personnel to fresh air.

Failure to comply with this warning may result in personal injury or death.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

WARNING

All fuel-burning heaters consume oxygen. Adequate ventilation must be maintained at all times. Keep roof vents clear of snow, ice, or debris.
Open doors, windows, flaps, hook and pile fastener wall closures as needed to introduce sufficient fresh air to replace oxygen consumed by heaters. If symptoms of headache, dizziness, fatigue, nausea, or irregular breathing occur, move affected personnel to fresh air.

Failure to comply with this warning may result in personal injury or death.

2-4 Stove Pipe Opening - Optional

The stove pipe vent is opened and closed by pulling the cord attached to the vent cover. To open, pull the cord to the opposite side of the tent. To close, pull cord to the near side. The vent cover will secure itself when it is closed.

2-5 Connector

The integral fabric of the shelter and the detachable liner include provisions for removing the end walls. With the end wall removed, like shelters can be complexed end to end with an optional Connector to make a larger configuration.

Table 7 – Connector

RDS Model	Connector Part Number
480-480 GREEN 635-635 GREEN 480-635 GREEN	2480660
480-480 TAN 635-635 TAN 480-635 TAN	2480665
695-695 GREEN	2480670
695-695 TAN	2480675
695-480 GREEN 695-635 GREEN	2480680
695-480 TAN 695-635 TAN	2480685

Refer to the instructions included with the Connector for setup and strike procedures.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CHAPTER 3 - PREPARATION FOR SHIPMENT

Section I - PREPARATION TO STRIKE

3-1 Remove Vestibules If Installed

Remove the vestibules if installed.

Remove lights and other equipment inside the shelter.

3-2 Close and Secure all Windows and Doors

To ensure that the system can be packaged properly, all doors and windows need to be closed and secured. Leave one liner door open to allow trapped air to escape when folding. Leave all adjustable webs loose.

Remove wind guys if installed.

3-3 Lower Leg Assemblies

(1) Remove the stakes from the bottom of the fabric, leg stake ports and wind guys, if installed.

(2) Open the tent fabric at the corner wall connections.

(3) Untie all leg connections.

(4) Disconnect the black web liner/floor straps.

(5) Position one person at each leg on one side of the tent.

(6) Wrap an arm around the leg sleeve as near to the bottom as practical. IN UNISON, lift the assembly – legs, purlins, and fabric. With a free hand, pull the ring pin on the sleeve and lift tent leg into the sleeve.

(7) Push the pin back into the lock position and lower tent IN UNISON.

(8) Move to the opposite side and repeat the procedure.

(9) Fold up and connect end fabric to upper D-rings. See Figure 21.

(10) The side walls should be removed, folded and placed in the Liner/Floor bag (Package 2). See Figure 33.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Figure 33 – Fold Ends – Sidewall is removed, folded and placed in bag

3-4 Remove Light Assemblies

With the tent at the lower position, you can remove the light assemblies and secure them outside the tent.

3-5 Remove Floor/Liner

Leave one liner door open to allow trapped air to escape when folding. Start at one end and begin disconnecting the liner from the frame.

(1) Begin with the blue web straps at the corner hub. Continue down the length of the tent disconnecting the blue web straps.

(2) Fold the liner/floor assembly toward the center of the tent.

(3) Disconnect the white web strap on one end. Work down the length of the tent disconnecting the white web straps at each of the arch assemblies.

(4) Fold the liner/floor toward the center.

(5) Disconnect the red web straps at the end and middle peak hubs on one end. Work down the length of the tent disconnecting the red web straps at each of the arch assemblies

(6) Fold the liner/floor over onto itself, toward the back wall of the tent.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(7) Repeat process for white web strap. Disconnect the white web strap on one end. Work down the length of the tent disconnecting the white web straps at each of the arch assemblies.

(8) Fold the liner/floor toward the back wall of the tent.

(9) Repeat process for final blue web straps. Begin with the blue web straps at the corner hub. Continue down the length of the tent disconnecting the blue web straps.

(10) Fold the liner/floor assembly over onto itself from the sides until it fits in the center of the liner/floor wrapper as shown in Figure 34. Roll from one end into a package that will fit into the liner/floor wrapper.

(11) Remove the package from the tent and place in the liner/floor wrapper.

Figure 34 – Liner/Floor Assembly under Tent (RDS-695 shown)

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

3-6 Unlock All Slope and Ridge Purlin Hubs

NOTE

It is important to unlock the hubs by removing the locking pins from the locked position and placing them in the transport position. Failure to unlock a hub will result in damage to the tent.

Unlock all slope and ridge purlin hubs by moving the locking pins from the Locked position to the Transport position. Figure 35 shows the locking pin located in the locked position. The eave purlin hubs will be unlocked in section 3-8 page 44.

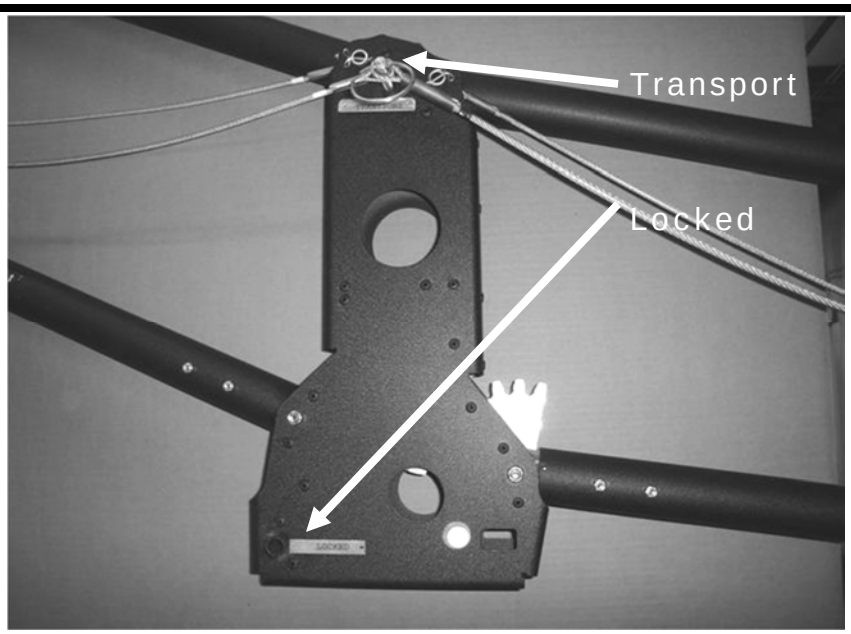

Figure 35 – Locked and Transport Pin Locations

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

Section II STRIKE TENT

3-7 Compress Ends

(1) Position one person at each of the legs on one side of the tent. Lift and push that side of the tent in approximately 3 steps.

(2) Place the end fabric on top of the frame prior to compressing end section as shown in Figure 36.

Figure 36 – Place the End Fabric on Top of the Frame

(3) Move to the opposite side and repeat Step 1. This will fully compress the end frame. See Figure 37.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

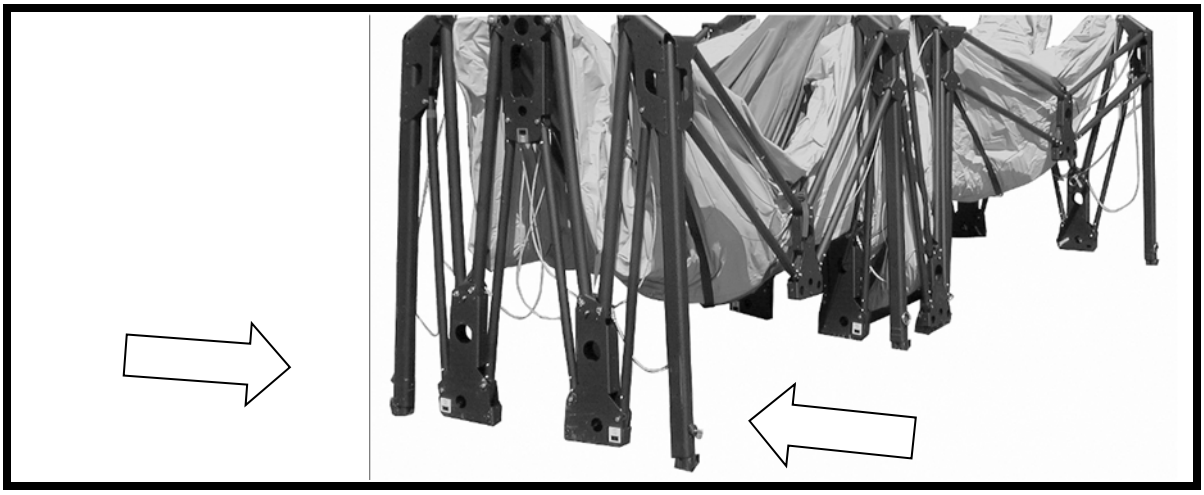

Figure 37 – Compress End

3-8 Unlock Eave Purlin Hubs and Compress Side Frames

NOTE

It is important to unlock the hubs by removing the locking pins from the locked position and placing them in the transport position. Failure to unlock a hub will result in damage to the tent.

(1) Unlock all eave purlin hubs by moving the locking pins from the Locked position to the Transport position.

(2) Move the ends of the tent. This is accomplished in steps by lifting and pushing the ends of the tent toward the center. Place one person at each end leg. Lift and push the end legs to compress the frame. See Figure 38.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

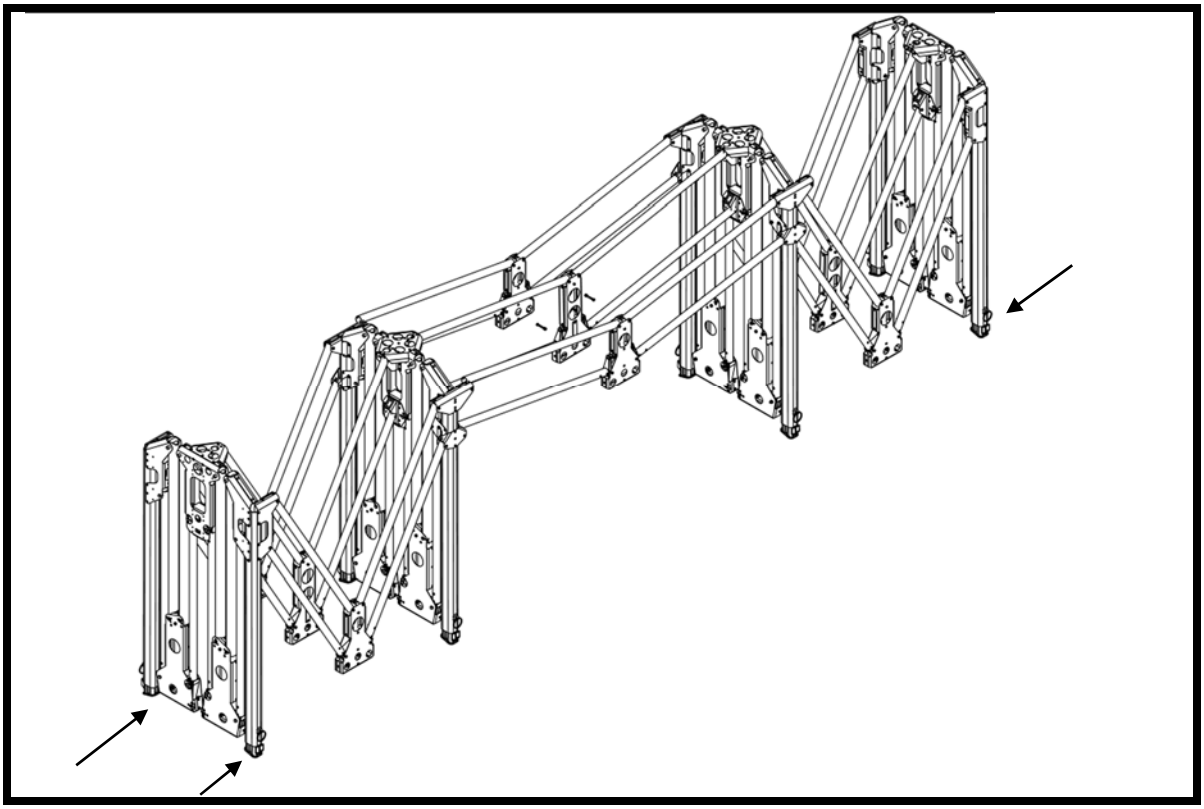

Figure 38 – Compress Sides

(3) Move the side legs of the tent. Place one person at each of the side legs. Lift and push legs to compress the frame to the center. See Figure 39. This step is not required for the RDS-150.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

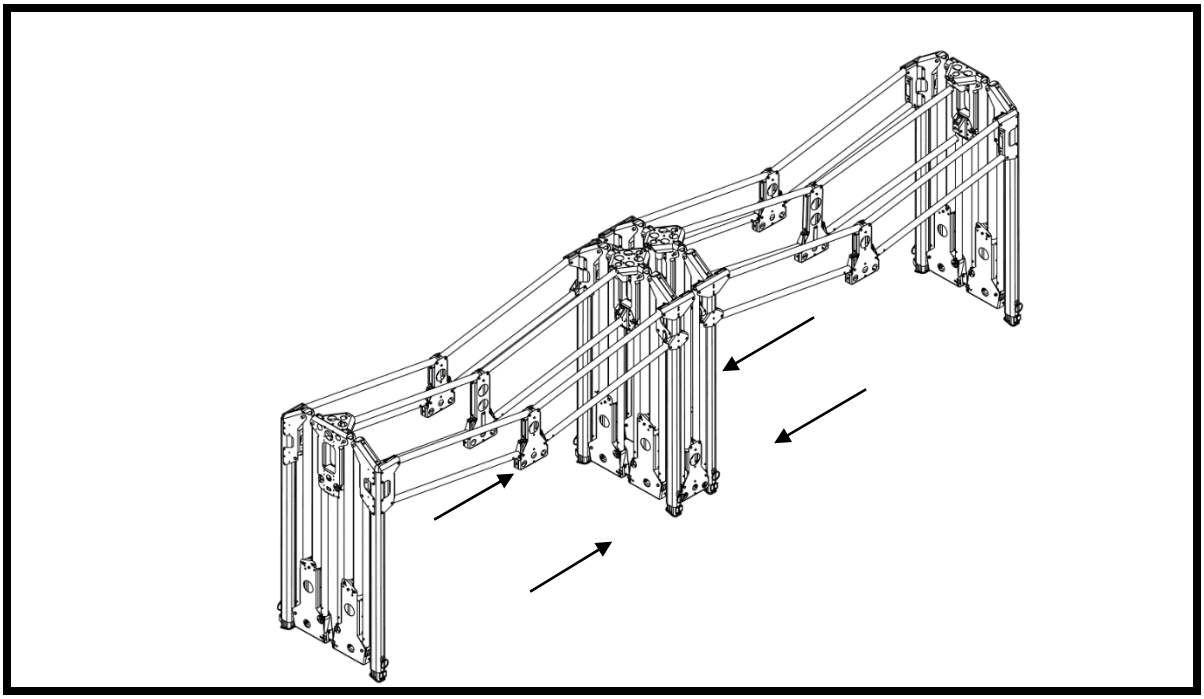

Figure 39 – Compress Sides

(4) Move the end legs to the fully compressed position. Return to the end legs and push the frame to its fully compressed shape. All fabric must be positioned inside the frame. You may need to reposition the fabric to allow the frame member to package properly. See Figure 40.

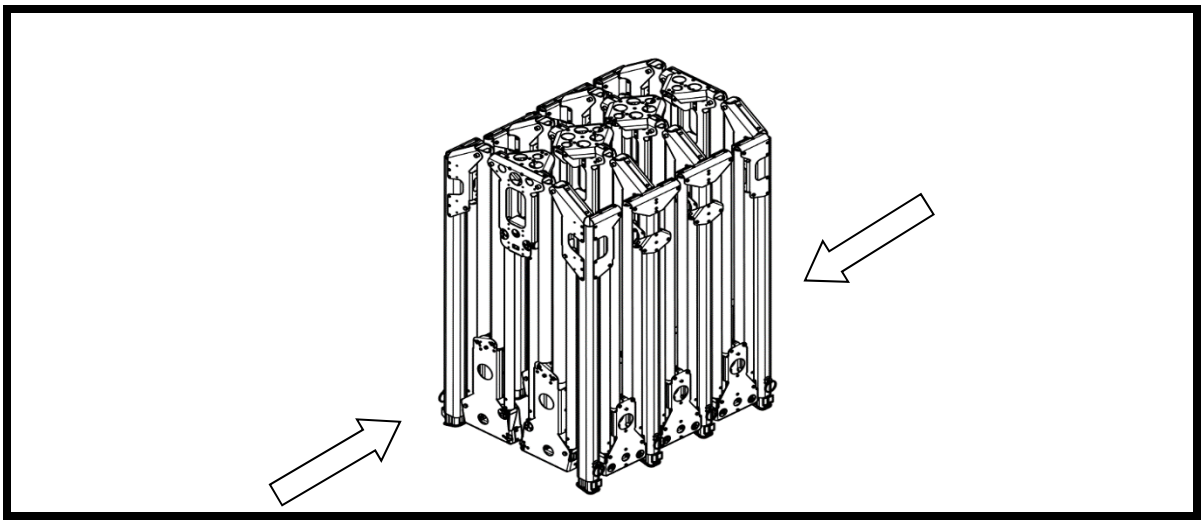

Figure 40 – Compress Sides

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

3-9 Package

(1) Secure the frame/fabric package with the 2 inch web straps. You may need to lay the package down and use your body weight to fully compress the frame and fabric.

(2) Position the frame/fabric package on the wrapper. See Figure 41.

(3) Fold up the ends with the 1 inch web straps on the wrapper then buckle the web strap.

Figure 41 – Frame/Fabric Assembly on wrapper

(4) Fold up the sides and secure the package with the 2 inch web straps. Figure 42 shows the frame/fabric package secured and ready for transport.

Figure 42 – Frame/Fabric Assembly packaged for Transport

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

This page intentionally left blank.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

CHAPTER 4 REPAIR PROCEDURES

Section I FIELD EXPEDIENT REPAIR PROCEDURES

4-1 General

The field repair kits for the RDS-150, RDS-480, RDS-635 and RDS-695 include fabric patch kits.

Durability tests have shown that under normal operation the synchronizing gears, tubes and cables will not be a repair issue. We have removed gears 1A and 1B which further minimizes this risk. However, if the locking pins are not moved from the locked position before striking, the shelter may experience damage and repairs will need to be made.

Please contact 1-800-847-1460 for information on getting replacement parts and instructions.

4-2 Gear/Tube/Cable/Hub Replacement

The following sections identify the repair/replacement procedures for the synchronizing gears.

a. Identify the Damaged Gear

Figure 43 shows the locations of the two gear sets. Gear sets 2A and 2B are located in the slope hubs. Gear Sets 3A and 3B/4A and 4B are located in the Purlin Hubs. Select the correct gear for replacement.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

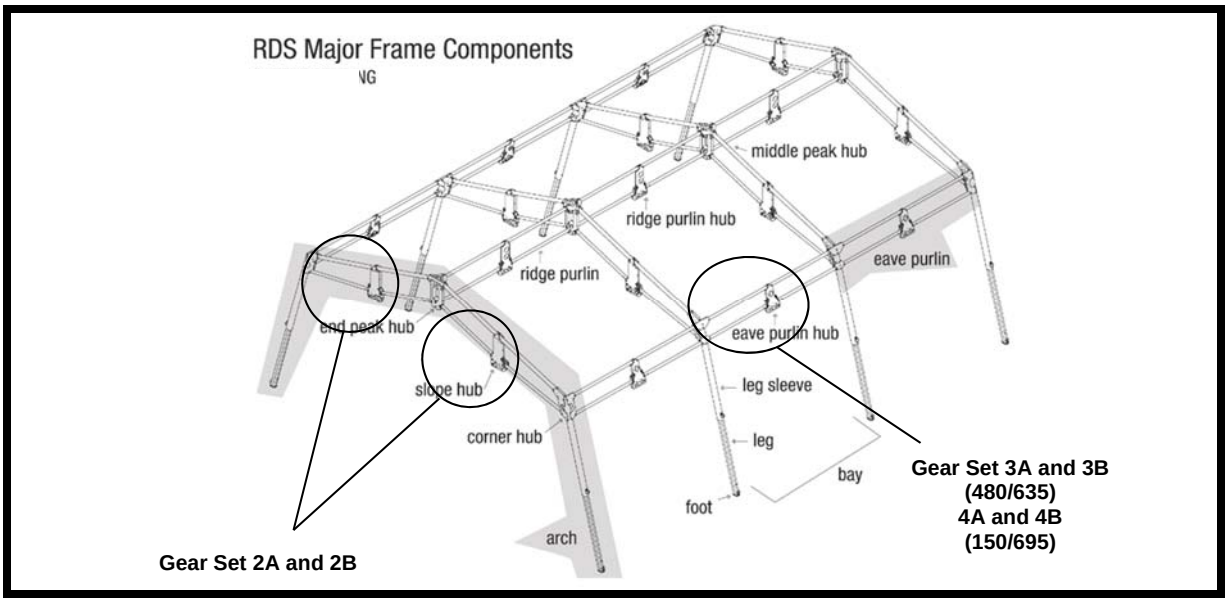

Figure 43 – Location of Gear Sets (RDS 480 / RDS 695)

b. Remove and Replace Damaged Gear

Refer to Figure 44.

(1) Use the wrench supplied in the repair kit to remove bolt “A” securing the tube assembly with the damaged gear.

(2) Remove the damaged gear from the tube assembly by removing bolts “B” in the tube and gear assembly.

(3) Replace gear and secure with bolts “B”.

(4) Position the tube assembly in the hub and align the gear teeth such that tooth 1 of the smaller gear is positioned between tooth 1 and tooth 2 of the larger gear. See Figure 40.

(5) Replace bolt “A” and tighten. Do not over tighten. Two threads should extend beyond the nut when properly tightened.

(6) Operate the assembly to insure that the teeth are properly aligned.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

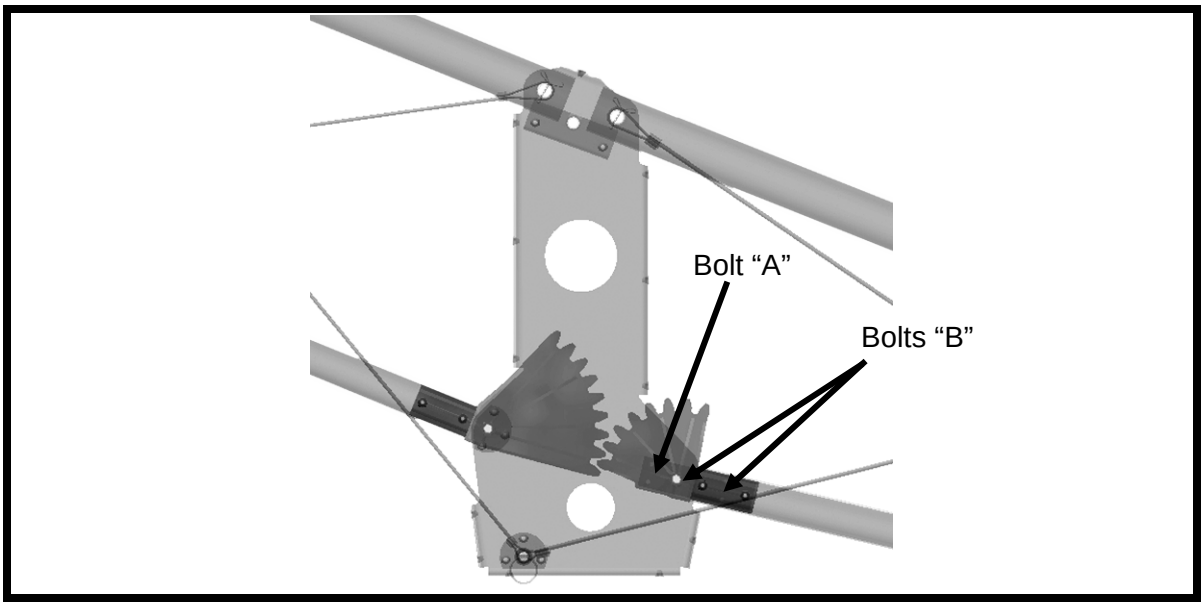

Figure 44 – Proper Gear Set Indexing

4-3 Arch/Purlin Tube/Hub and Cable Replacement

The following sections identify the repair/replacement procedures for the arch/purlin tubes and cables.

a. Identify the Damaged Tube and Cable

Figure 45 shows the locations of the arch/purlin tubes and cables for the RDS-480 and RDS-635. Figure 46 shows the locations of the arch/purlin tubes and cables for the RDS 695. Figure 47 shows the locations of the arch/purlin tubes and cables for the RDS-150. Replacement tubes and cables are identified with the part numbers shown in the figures. The cables are color coded. Select the correct tube and cable for replacement.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

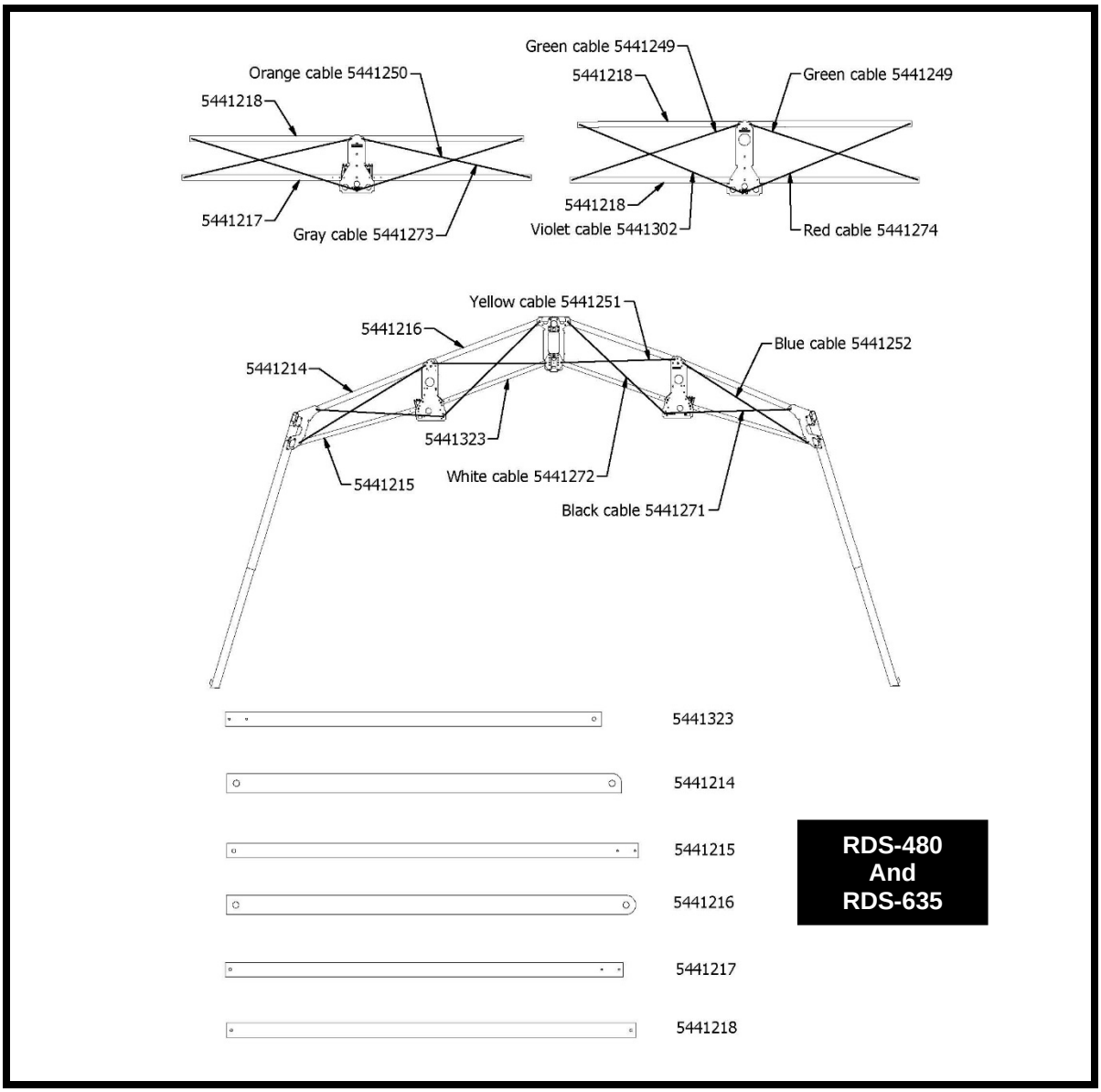

Figure 45 – Location of Tubes and Cables (RDS-480/RDS-635)

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

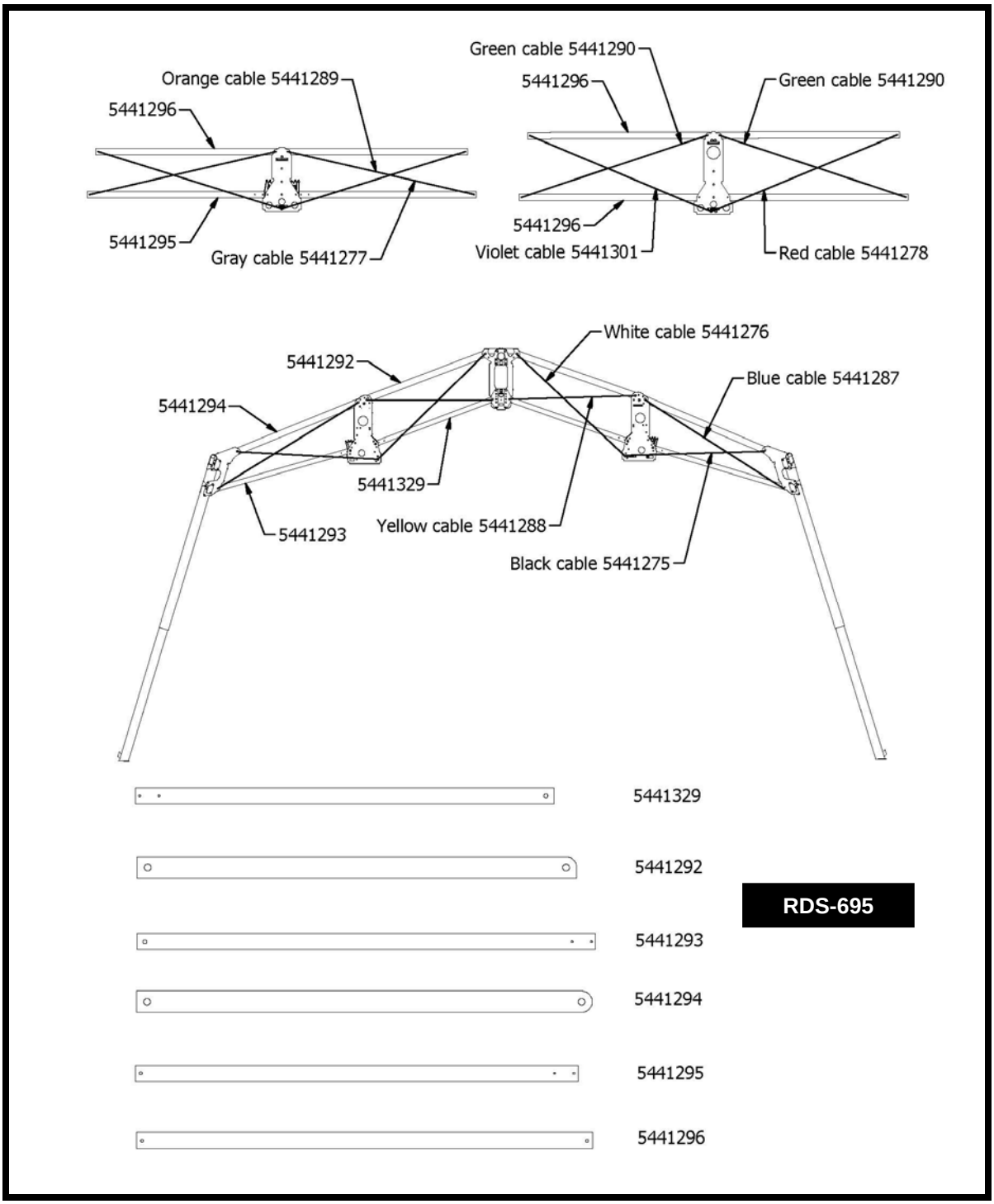

Figure 46 – Location of Tubes and Cables (RDS-695)

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

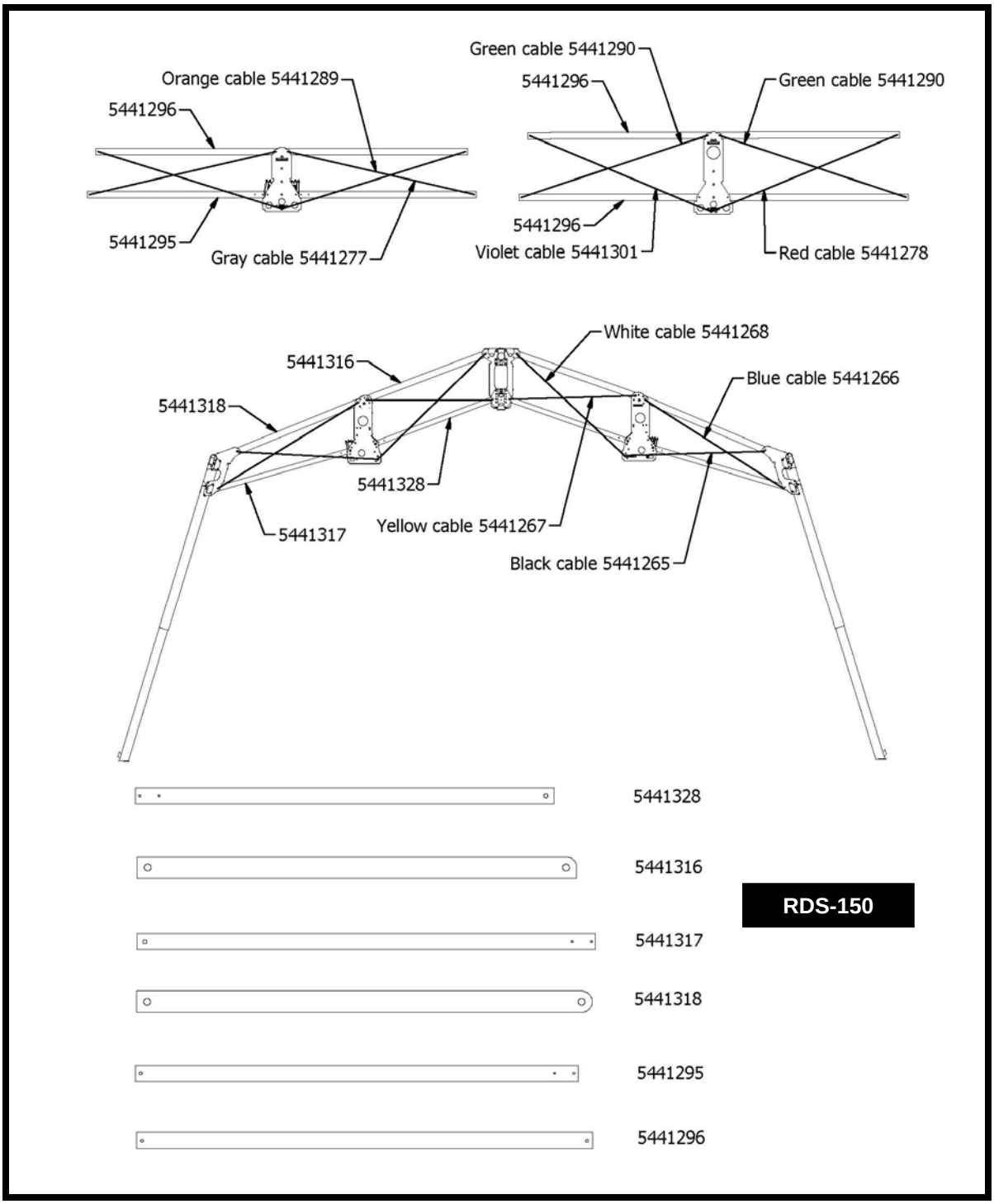

Figure 47 – Location of Tubes and Cables (RDS-150)

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

b. Remove and Replace Damaged Tube/Cable

(1) Use the wrench supplied in the repair kit to remove the bolts securing the tube/cable assembly.

(2) Remove the damaged tube/cable. Make note of the placement of all attachment hardware.

(3) If the damaged tube has gears attached to one or both ends refer to Section 4-2 for relocation the gears to the new tube.

(4) Reattach the cable with the existing hardware.

(5) Position the tube assembly in the hub. If the tube has gears on either end, align the gear teeth such that tooth 1 of the smaller gear is positioned between tooth 1 and tooth 2 of the larger gear. See Figure 44.

(5) Replace bolts and tighten. Do not over tighten. Two threads should extend beyond the nut when properly tightened.

(6) Operate the assembly to insure that the teeth are properly aligned.

4-4 Fabric Repair

a. Small Holes or Rip Repair

(1) Make sure area is clean and dry.

(2) Cut adhesive patch to be at least 1 inch larger in all directions than the hole or rip.

(3) The patch should be placed on the inside of the tent fabric. Clean area to be patched with alcohol swab and allow to dry.

(4) Peel backing off patch to expose adhesive side.

(5) Apply patch over hole or rip. Use firm pressure to the patch. Pay particular attention to the edges of the patch.

b. Large Holes or Large Rip Repair

Refer to Figure 48.

(1) Make sure area is clean and dry.

(2) Cut adhesive patches to at least 1 inch larger in all directions than the hole or rip.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

(3) Patches should be placed on the inside and outside of the tent fabric. Clean area to be patched with alcohol swab and allow to dry.

(4) Peel backing off patch to expose adhesive side.

(5) Apply a patch over hole or rip on the inside and outside of the fabric. Use firm pressure to the patch. Pay particular attention to the edges of the patch.

(6) Punch a 3/16 inch diameter hole through the patches and fabric on each side of the rip.

(7) Insert a pop rivet through the punched hole from the outside of the tent.

(8) Place a fender washer over the rivet on the inside and set the pop rivet using the supplied rivet gun.

(9) Repeat steps 7 and 8 for the second punched hole.

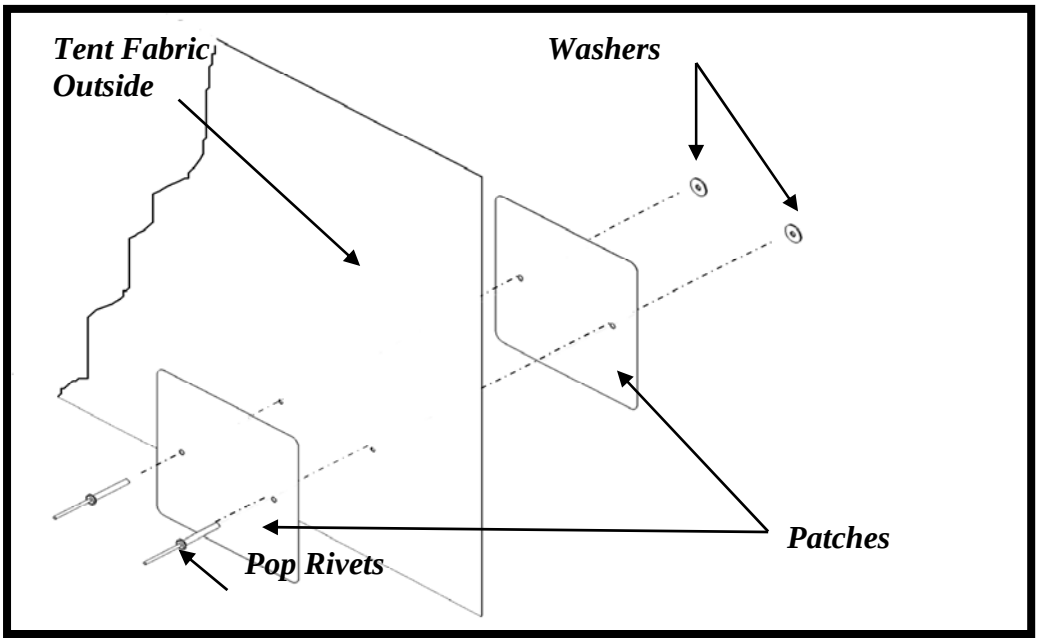

Figure 48 – Large Holes or Large Rip Repair

This is the end of the Field Expedient Repair Procedures.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.

The Government's rights to use, modify, reproduce, release, perform, display, or disclose these technical data are restricted by paragraph (b)(3) of the Rights in Technical Data--Noncommercial Items clause DOD FARS 252.227-7013. Any reproduction of technical data or portions thereof marked with this legend must also reproduce the markings. Any person, other than the Government, who has been provided access to such data must promptly notify Johnson Outdoors Gear Inc.