



CAREFREE
SHADE SAIL
INSTALLATION INSTRUCTIONS

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INTRODUCTION

PRODUCT OVERVIEW

Carefree Shade Sails are an increasingly popular method of covering outdoor areas to provide shade and protection from the harsh UV rays of the sun. Sails are excellent for gardens, entryways, children’s play areas, pools even car parking spaces. Sails may be used individually for smaller areas or several may be combined to cover larger areas. Their use is limited only by the imagination.

Shade Sails are made in three shapes; square, rectangular and triangular, with a maximum size of 19 feet by 26 feet. Each sail is robustly constructed using high quality fabric with fortified edging (1 1/2” polyester webbing). Each corner is reinforced and triple stitched to provide long lasting durability. The stainless steel attach-ring on each corner provides a positive attach point.

Shade Sails are available in several standard shapes.

STANDARD SIZES			AVAILABLE COLORS
<u>SQUARE</u>	<u>RECTANGULAR</u>	<u>TRIANGULAR</u>	
9' x 9'	9' x 16'	11' x 11' x 11'	• Desert Sand
12' x 12'	14' x 18'	16' x 16' x 16'	• Emerald Green
18' x 18"	18' x 26'	18' x 18' x 18'	

Suggested hardware is shown on page 5 and is available from local hardware outlets. Hardware is purchased separately and not included with the Shade Sail.

Installing the Shade Sail involves 2 easy stages:

- 1) *Design and construct the layout.*
- 2) *Mount the sail.*

SAFETY INFORMATION

Throughout this publication, safety information is provided in several forms to provide a safe working environment and a carefree experience. Below are samples of safety information.

WARNING

A WARNING INDICATES A HAZARDOUS SITUATION THAT, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY AND/OR MAJOR PROPERTY DAMAGE.

CAUTION

A CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION THAT MAY CAUSE MINOR TO MODERATE PERSONAL INJURY AND/OR PROPERTY DAMAGE. IT MAY ALSO BE USED TO ALERT AGAINST UNSAFE PRACTICES.

NOTE: A note indicates further information about a product, part, or step.

Tip: A tip provides helpful suggestions.

Safety Notes:

- Always wear appropriate safety equipment (i.e. goggles).
- Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.
- Do not mount the Shade Sail on or near heat sources.
- Do not have open flame or fire near the fabric.
- Do not use a barbeque directly under the shade structure.

DESIGN & CONSTRUCT THE LAYOUT

THE LAYOUT

- Prior to starting a shade sail project:
 - Check with the local authorities for any relevant building regulations and required permits.
 - Check with the utility companies for any underground services prior to digging holes for columns.
 - Mark out the area to be shaded.
 - Determine the shade sail configuration(s) to be used.
- Shape of Sails;
- Number of Sails; and,
- Total area to be shaded.

NOTE: The sun is constantly moving across the sky from east to west. This means that the shade moves with the position of the sun. Shade will only fall directly under the sail at midday during mid-summer.

- Anchor points may be fixed to existing structure or to fixed columns.

NOTE: If the sail is to be attached to an existing structure, it is important to determine that the location is structurally sound and suited to the task. If unsure, consult a builder or engineer prior to installation.

- The actual distance between the anchor points should measure a minimum 10% greater than the corresponding edge of the sail. Example: If the sail is 9 foot square, the point-to-point distance between adjacent anchor points would be 9.9 feet.

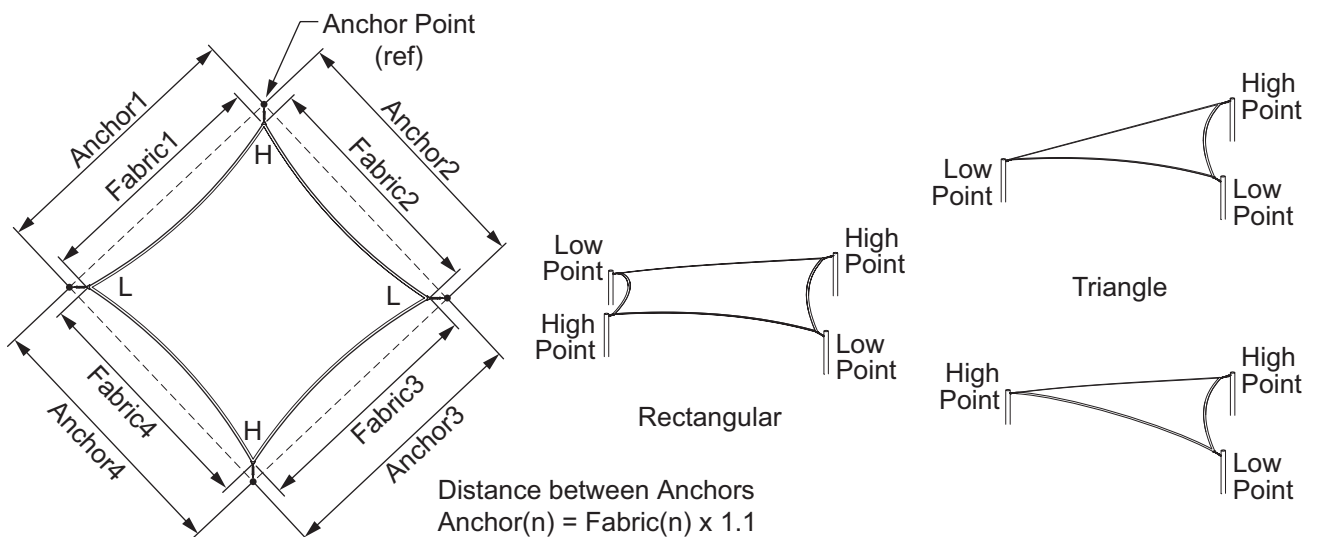


Figure 1. Possible Shade Sail Layouts.

- Shade Sails work best with high and low points. A flat sail is more difficult to properly tension and can catch rain and wind. The best arrangement is to have high points diagonally opposite each other. This creates a twist in the sail known as an architectural “hypar”. Setting the slope at approximately 15 degrees is ideal (this is equivalent to a rise / run of 1 / 3.75).

FIXED COLUMNS

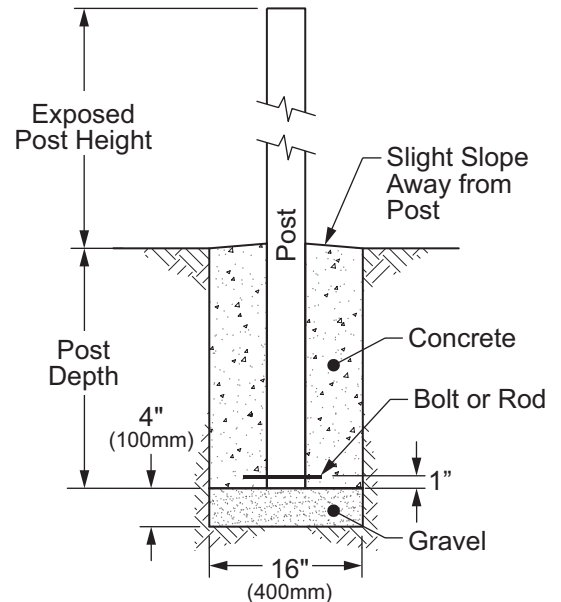
Free standing or open-ended designs require the installation of support columns.

Columns may be made with 4" (100mm) steel posts with a minimum wall thickness of 1/8" (4mm). 6" (125mm) treated timber posts may also be used. Length of the column is equal to 1.5 x the exposed height of the post.

1. Dig a hole 16" dia. x (Post Depth + 4").
2. Fill the bottom of the hole with 3/4" (20mm) gravel.
3. Drill a hole through the bottom of the post approximately 1 inch from the end and insert a bolt or rod through the post. This is to prevent the post from twisting.
4. Position the pole and brace as required to keep the pole perpendicular.
5. Fill the hole with aggregate concrete.

Tip: Finish the top of the concrete with a slight slope away from the pole. This will provide drainage.

6. Allow the pole and concrete to set for a minimum of 48 hours or as directed by the manufacturer's instructions.



Post Depth = .5 x Exposed Post Height SS001

Figure 2. Pole Footing.

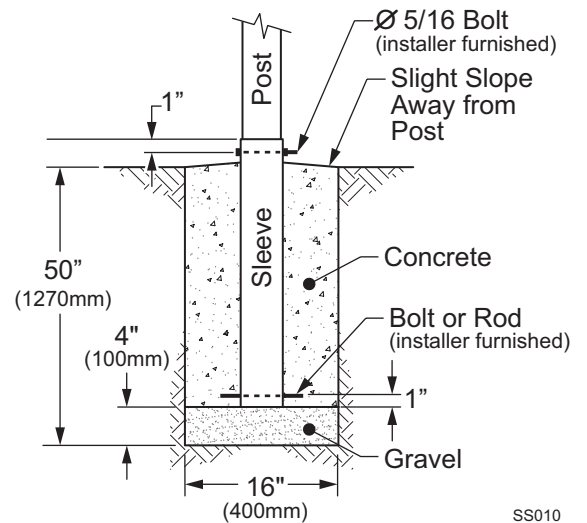
SEMI-PERMANENT (REMOVABLE) COLUMNS

It may be desirable to be able to remove the support columns when the Shade Sails are taken down. This is done by using a sleeve in the concrete footing.

1. Dig a hole 16" dia x 50".
2. Fill the bottom of the hole with 3/4" (20mm) gravel.
3. Drill a hole through the bottom of the sleeve approximately 1 inch from the end and insert a bolt or rod through the post. This is to prevent the sleeve from twisting.
4. Position the sleeve and brace as required to keep the sleeve perpendicular. There should be approximately 2" of the sleeve exposed above the ground level.
5. Fill the hole with aggregate concrete.

Tip: Finish the top of the concrete with a slight slope away from the pole. This will provide drainage.

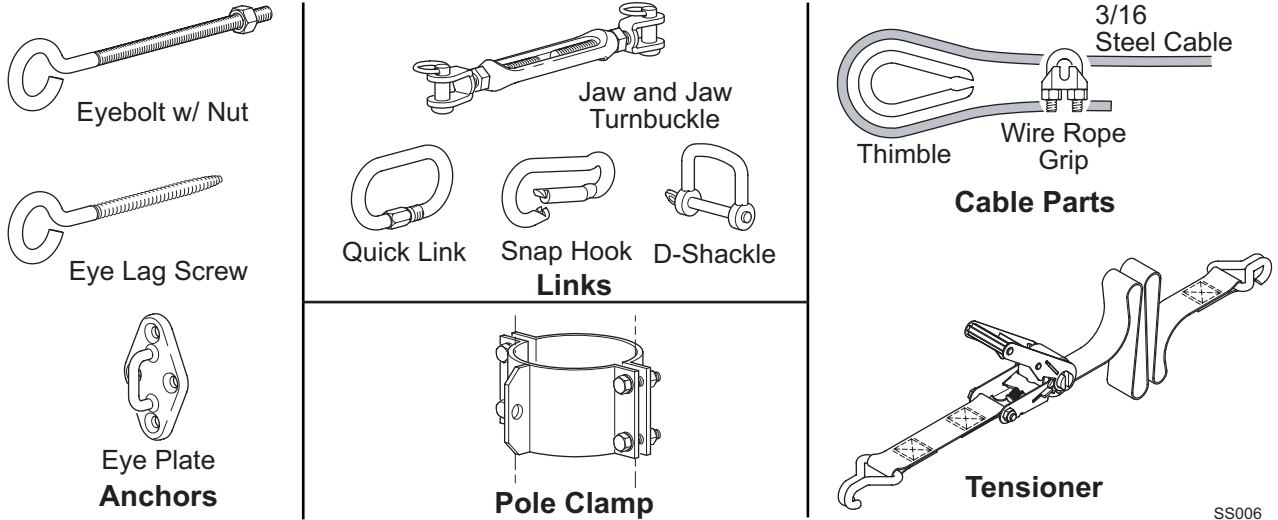
6. Allow the sleeve and concrete to set for a minimum of 48 hours or as directed by the manufacturer's instructions.
7. After the concrete has set, insert the pole into the sleeve.
8. After the Shade Sail has been installed, drill a hole through both the sleeve and pole and secure with a minimum 5/16" bolt and nut.



SS010

HARDWARE

It is recommended that all hardware should be high grade stainless steel. Below are samples of hardware used with the Shade Sail installation. Hardware is purchased seperately and available from local hardware outlets.



SS006

Figure 3. Sample Hardware.

Suggested Hardware and Quantities

	EYEBOLT W/ NUT	EYE LAG BOLT	EYE PLATE	SNAP HOOK	QUIK LINK	D-SHACKLE	TURNBUCKLE	THIMBLE	WIRE GRIP	5/32" CABLE	POLE CLAMP	
Triangle	3			3		3	2					
		3		3		3	2					
			3	3		3	2					
	3			3		3	2	6	6	15'		
		3		3		3	2	6	6	15'		
			3	3		3	2	6	6	15'		
Square	2	2	2	3		3	2	6	6	15'		
	4			4		4	2					
		4		4		4	2					
			4	4		4	2					
	4			4		4	2	8	8	20'		
		4		4		4	2	8	8	20'		
		4	4		4	2	8	8	20'			
	3	3	3	3		3	2	8	8	20'		
Tensioner							POLES (4" O.D.): 10' 12' 14' SLEEVES (4 1/2" O.D.): 4'					Poles SS008

ANCHOR POINTS

A variety of support reinforcement and anchor hardware is available, from local hardware distributors, for attaching to a structure.

Attaching to Existing Structure

In some instances, the area to be shaded is adjacent to a structure. The anchor can be mounted on the structure if the anchor point location is structurally sound and suited to the task. If unsure, consult a builder or engineer prior to installation.

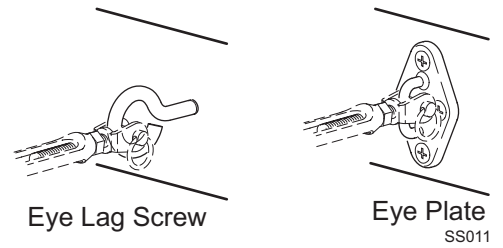


Figure 4. Structure Anchors.

Attaching to Poles

There are two methods of attaching to poles. Anchors may be directly attached to the pole or the Carefree pole clamp. The clamp provides a secure anchor while allowing flexibility in positioning during the installation.

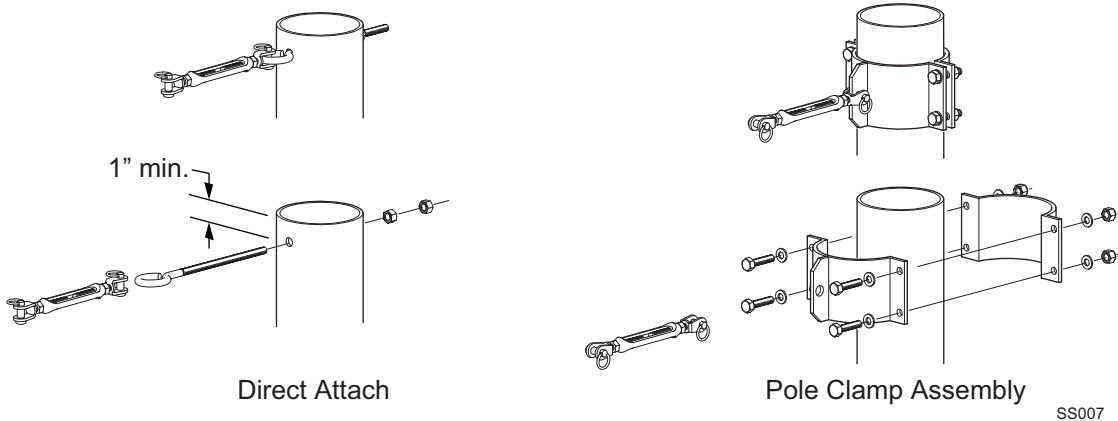


Figure 5. Pole Anchors.

Extending the Anchor Point

In certain instances, it may not be desirable or practical to have a support pole mounted in the immediate area of the sail. It is possible to extend the anchor point by using low stretch rope, chain or stranded cable. The end of the extension then becomes the anchor point for measurement purposes (refer to "The Layout" on page 3).

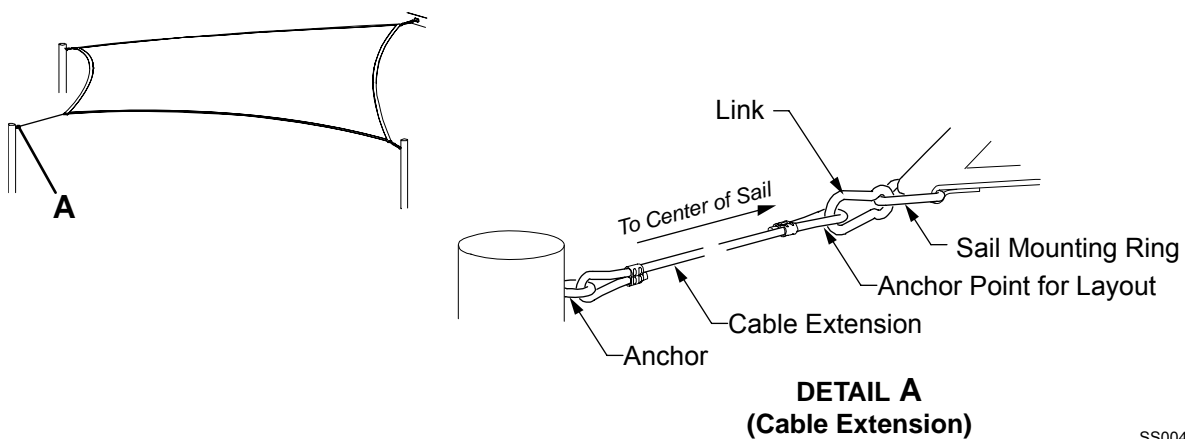


Figure 6. Extending the Anchor Point.

NOTE: When an extension is used, the final height of the fabric corner is directly influenced by the height of the structural anchor. The structural anchor may have to be adjusted up or down to keep the corner height at the desired level.

MOUNT THE SAIL

1. If not previously done, attach the anchor hardware to the anchor point locations. When choosing the hardware, remember that there can be significant wind loads. These loads are distributed between the corners; and it is important that the anchors and anchor locations are adequate for these loads.
2. Choose the appropriate hardware for attaching the sail(s) to the anchor points.
 - It is recommended to use “closed” style hardware. Open eyelets (e.g. hooks) may allow the sail to become detached during movement caused by winds. Latching or locking hardware provides ease of installation while being a “closed” link.
 - At least two adjacent corners of the sail should be attached with adjustable links (e.g. turnbuckles). The adjustable links are used to tension the sail.
 - For best durability, use high grade stainless steel hardware.

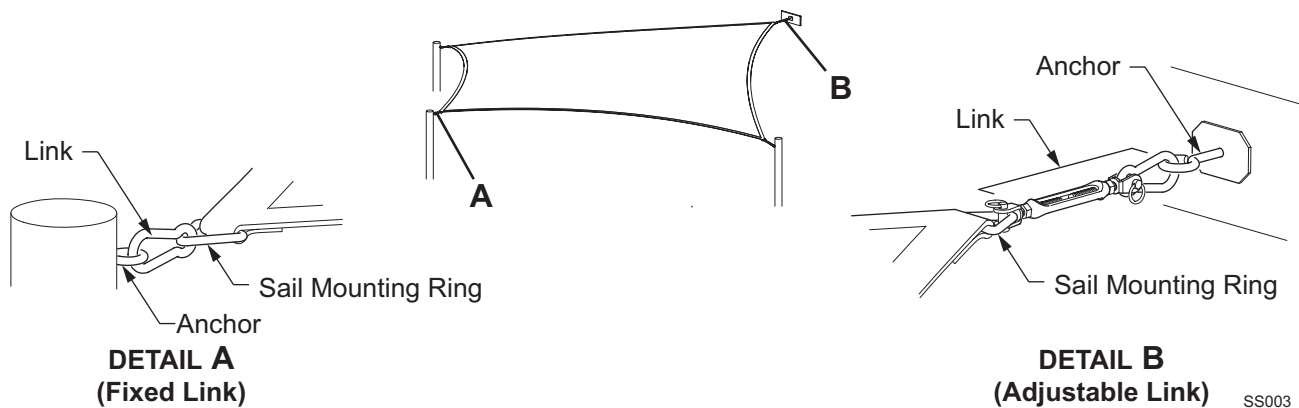


Figure 7. Mounting the Sail.

3. Attach the sail and fixed links to the corresponding anchors.
4. Attach the opposite corners of the sail with adjustable links.
5. Using the adjustable links, tension the sail until the fabric is taut with little or no creases.

! CAUTION

IT IS RECOMMENDED THAT THE SHADE SAIL BE TAKEN DOWN DURING PERSISTENT WINDS OR SNOW CONDITIONS.

FABRIC MAINTENANCE

! CAUTION

DO NOT USE OIL BASED CLEANERS OR ANY CAUSTIC, GRANULATED, OR ABRASIVE TYPE CLEANERS ON YOUR CAREFREE PRODUCT.

1. One of the best ways to keep the fabric looking good and to delay the need for deep or vigorous cleanings is to hose fabrics off on a monthly basis with clear water. This practice will help prevent dirt from becoming deeply imbedded in the fabric and eliminate the need for more frequent vigorous cleanings. In most environments, a thorough cleaning will be needed every two to three years.
2. When it's time for a thorough cleaning, use a soft brush and warm water with soap. Rinse thoroughly with clean water and allow to air dry.
3. When cleaning the fabric, it is important to observe the following:
 - Always use a natural soap. Never detergent.
 - Water should be cold to lukewarm. Never more than 100 degrees.
 - Air dry only. Never apply heat to the fabric.

LIMITED WARRANTY

Carefree of Colorado (hereafter referred to as Carefree) warrants to the FIRST retail Purchaser that the Balcony Sunshade is free of defects in material and workmanship within the terms and conditions as set forth below. Carefree's obligation under this warranty is limited to the repair or replacement, at Carefree's option, of any defective component within the stated warranty period. THIS WARRANTY IS NOT TRANSFERABLE.

1. DURATION

- a) 5 years on canopy.
- b) For the first 12 months, should a failure occur and the initial purchaser has proof of purchase (warranty card sent in or receipt of purchase) and notifies Carefree in a timely manner, all components, labor and freight are covered 100%.
- c) After the initial 12 months, any defects in the product will be replaced or repaired for a prorated amount of the cost of the fabric based upon the number of months since the initial date of purchase.

Warranty duration is not extended by the length of time the product is not in use or the time which the purchaser is deprived the use of the product. The duration of coverage is determined by the date of the original product purchase, not the date of repairs.

2. WHAT IS COVERED UNDER THIS WARRANTY

Defects in the manufacturer's material and workmanship of product under normal use, and which occur within the duration of the warranty period. The following components are covered only as listed:

- a) *Fabrics* – Free from quality defects (normal wear and fading are excluded). Cracking, peeling, hardening, sagging or loss of strength provided that the damage is not the result of high winds or water pooling.
- b) *Roller tube & Hardware* – Free from extrusion defects.
- c) *Springs* – Defects.
- d) *Electrical Components* – Defects.

3. WHAT IS NOT COVERED UNDER THIS WARRANTY

- a) Fabric damage such as pinholes or tears not reported within ten (10) calendar days of purchase.
- b) Improper installation and/or any damage or failure that results from improper installation of the product, including fabric damage caused by improper installation.
- c) Normal wear including the occasional need to re-tension the fabric.
- d) Conditions that are not related to the material or workmanship of the product: including any failure that results from an accident, wind, rain, water pooling, or other acts of God.
- e) Purchaser's abuse, including but not limited to neglect; failure to operate, use or maintain the product in accordance with the instructions provided with the product.
- f) Any component not sold or manufactured by Carefree.
- g) Any failure that results from the use of another manufacturer's product with a Carefree product that is not specifically approved by Carefree.
- h) Any incidental, indirect, or consequential loss, damage, or expense that may result from any defect, failure, or malfunction of the Carefree product.
- i) The removal or alteration of any product component or device. In the event of such removal or alteration, this warranty is void.
- j) Any expense related to delivery or pick-up of product to/from the service dealer.

4. RESPONSIBILITIES OF THE PURCHASER

IN ORDER FOR THE WARRANTY TO BE HONORED, THE PURCHASER MUST HAVE PROOF OF PURCHASE: THE ORIGINAL RECEIPT OR THE WARRANTY CARD ON FILE AT CAREFREE OF COLORADO. FAILURE TO PROVIDE THE REQUIRED DOCUMENTATION MAY DELAY OR VOID ANY WARRANTY CLAIM.

- a) Retain dated proof of purchase for specified product, and provide it as requested.
- b) Inspect the shade upon purchase to confirm the condition of the canopy, hardware and proper operation of the product.
- c) Perform "Periodic Maintenance" as specified in Owners Manual.
- d) Use reasonable care in maintenance, operation, use and storage of the product in accordance with the instructions contained in the owner's manual.

5. WARRANTY CLAIM PROCEDURE

- a) Deliver any product claimed or found defective during warranty period to a Carefree of Colorado Authorized Service Dealer. Visit www.carefreeofcolorado.com for the name of nearest Authorized Service Dealer, or call Carefree at the phone number shown.
- b) Customer shall schedule a time with an Authorized Service Dealer. Repair or replacement will be scheduled and performed at the Authorized Service Dealer according to normal work flow and availability of replacement parts.
- c) *Work must be performed by a Carefree authorized service center.* When warranty work/repair is performed by an authorized service agent, the agent is responsible for directly billing Carefree of Colorado for warranted parts and labor.
- d) Carefree shall pay the respective servicing dealer or agent for performing any repairs authorized by Carefree as per the terms of this warranty. Company will allow for freight and labor charges - labor is based on Flat Rate Form.
- e) All warranty claims shall be paid through the servicing agent. Carefree does not provide reimbursement for warranty claims paid for by the customer.
- f) The customer shall pay only those costs not covered by warranty. The customer shall have no out-of-pocket expenses except as stated.
- g) The Original Purchaser is responsible for any expenses related to delivery or pick up of product to/from the Service Dealer.
- h) If the Purchaser does not receive satisfactory results from the Authorized Service Dealer, the Purchaser should contact the Carefree of Colorado Customer Care Department within 10 days after completion of the questionable service.

THIS WARRANTY GIVES THE OWNER SPECIFIC LEGAL RIGHTS. THE LAWS OF CERTAIN JURISDICTIONS MAY GRANT THE OWNER ADDITIONAL RIGHTS AND PRIVILEGES. Except as set forth above, Carefree makes no warranty, whether statutory or otherwise, including without limitation, any warranty of merchantability or fitness for a particular purpose. Carefree shall have no liability except to repair, replace or adjust defective products and parts. Carefree specifically excludes any liability, whether in contract, tort or otherwise, for personal injury, property damage, economic or consequential losses. Carefree has not authorized any person or company to alter the terms of this warranty.

It is Carefree of Colorado's policy and practice to continuously improve the company's products and services. Therefore, Carefree reserves the right to make changes in design and components, without notice, whenever it is believed the quality of the product will be improved, but without incurring any obligation to incorporate such improvements in any product which has been shipped or in service.

FOR YOUR RECORDS: DEALER/INSTALLER

NAME: _____

ADDRESS: _____

PHONE: _____

PURCHASE DATE: _____

PART NUMBER: _____

SERIAL NUMBER: _____

PRODUCT NAME
OR DESCRIPTION: _____

Color: _____ Length: _____

Register your Carefree products on-line @
www.carefreeofcolorado.com