

PATIO SUNSHADE

MANUAL CRANK OR MOTORIZED

Installation and Operation

The Carefree Patio Sunshade is quick, simple, great looking and built to last. The heavy-duty extruded aluminum case houses a high performance roller.

The Sunshade is available with manual crank or as 110V motorized.

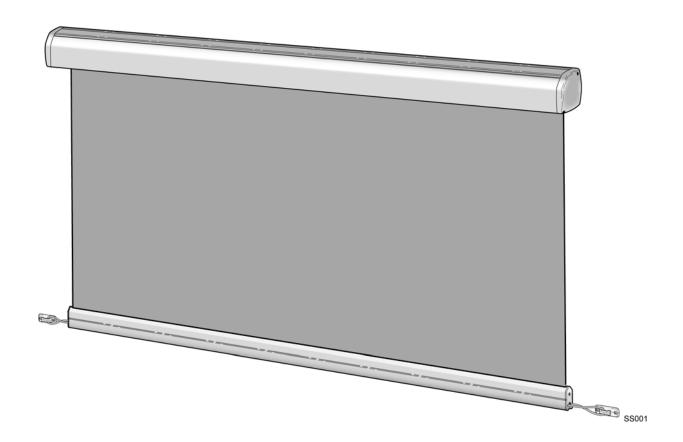


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SAFETY INFORMATION

AWARNING

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

ACAUTION

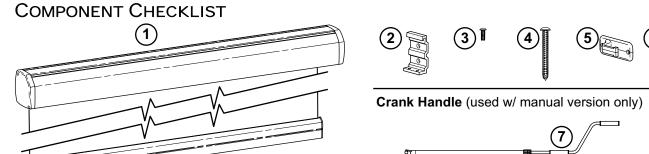
A CAUTION INDICATES A POTENTIALLY HAZARDOUS SITUATION THAT MAY CAUSE MINOR TO MODERATE PERSONAL INJURY AND/OR PROPERTY DAMAGE. IT MAY ALSO BE USED TO ALERT AGAINST UNSAFE PRACTICES.

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

Tip: A tip provides helpful suggestions.

Safety Notes:

- Always disconnect power sources before working on or around the electrical system.
- Always wear appropriate safety equipment (i.e. goggles).
- Always use appropriate lifting devices and/or helpers when lifting or holding heavy objects.
- When using fasteners, use care to not over tighten. Soft materials such as fiberglass, aluminum or fiberboard can be "stripped out" and lose the ability to grip.



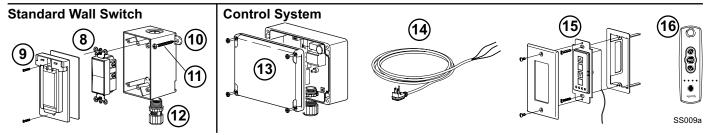


Figure 1. Component Checklist.

	Ì	3	QUANTITY		
\square	ITEM	DESCRIPTION	Α	В	NOTE
	1	SunShade Assembly	1	1	2
	2	Mounting Bracket	3	5	2
	3	Screw, #8-32 x 1/2	6	10	2
	4	Screw, 1/4 x 2 1/2	6	10	2
	5	Tie-down Catch	4	4	2
	6	Screw #10 x 2	8	8	2
	7	Manual Crank	1	1	3
STANDARD SWITCH (HARDWIRED)					
	8	Switch, Wall	1		4
	9	Switch Cover		1	4
	10	Junction Box	1		4
	11	Screw #8 x 2	2	2	4
	12	Strain Relief Connector	•	1	4
POWER CONTROL SYSTEM					
	13	Control Box Assy	1		
	14	AC Power Cord w/ Wall Connector	1		
	15	Wireless Wall Switch	1		5, 6
	16	Remote Control		1	6

Notes:

- 1. Shade configuration is specified at time of order. Check assembly and electronics against original purchase order.
- 2. Hardware quantities are dependent on size:
- A = Shade lengths 3 feet to 8 feet
- B = Shade lengths 8 feet to 17 feet

- 3. Used with manual version only.
- 4. Components used with motorized version w/ hardwired switch.
- 5. Mounting bracket, switch plate and screws are included with switch.
- 6. Wall Switch (item 18) and Remote (item 19) are available as a single channel or multiple channel transmitter.

INSTALLATION

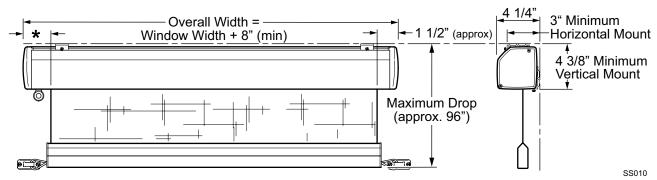


Figure 2. General Layout.

AVAILABLE WIDTHS: 3' to 17' in 1/4" increments DROP: 96" Max. (92" w/ optional Sunbrella Acrylic)

OPERATION: Manual Quick Crank w/ 3:1 turn ratio Available in LH or RH
Motorized 110VAC Tubular Motor configuration

w/ single hardwired switch or remote control

Prior to mounting the SunShade, clean and inspect the area. Standard construction uses a solid wood header across the top of an opening. If the shade is to be mounted in a different location or the header is not present, it will be necessary to locate the wall studs. If mounting in an alternate position, adjust the dimensions below to allow the bracket mounting screws to attach into the studs.

INSTALLING THE BRACKETS

The brackets may be mounted vertically (on a wall) or horizontally (under an overhang). The screws provided can be used in a variety of materials, for soft materials refer to step 4.

1. Mark the position of the shade.

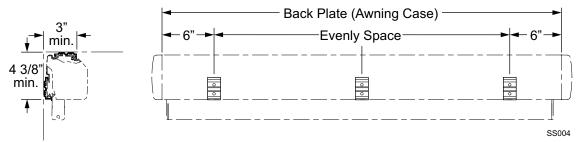


Figure 3. Bracket Layout.

2. Using a chalk line, mark the position of the mounting brackets.

NOTE: For shades less than 7 feet long, 2 brackets are included. For longer shades, additional brackets are included. Mark the location of the outer brackets, then evenly space the additional brackets inbetween.

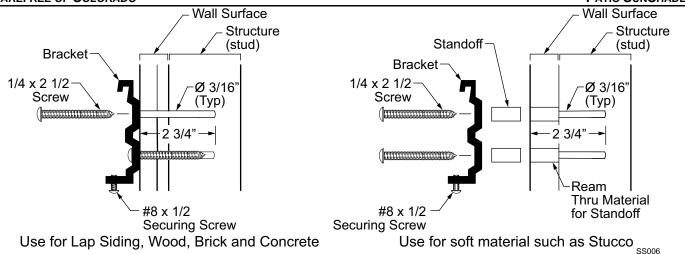


Figure 4. Mounting the Bracket.

- 3. Using the bracket as a template, drill 2 3/16" pilot holes. The hole should be at least 1/4" deeper than the length of the screw (approximately 2 3/4").
- 4. FOR SOFT OUTER MATERIALS SUCH AS STUCCO. Use a standoff large enough to allow the 1/4" screw to pass through with a length equal to the depth of the material. It will be necessary to ream out the hole through the soft material only (e.g. stucco).

NOTE: This will prevent the bracket from crushing or sinking into the outer wall material.

- 5. Attach the brackets using the 1/4 x 2 1/2 screws. Ensure that the brackets are in line and perpendicular to the length of the shade.
- 6. If not previously done, start the #8 x 1/2 securing screws in the bracket. Do not screw in fully.

MOUNTING THE SUNSHADE

CAUTION

BECAUSE OF THE WEIGHT OF THE SHADE, IT IS RECOMMENDED THAT AT LEAST TWO PEOPLE LIFT AND HOLD THE SHADE DURING INSTALLATION.

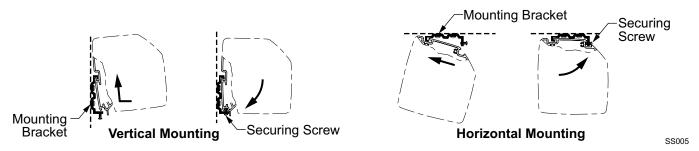


Figure 5. Mounting the SunShade.

- 1. Lift the shade up and tilt as shown in the illustration.
- 2. Hook the shade cover into the hook of the mounting bracket.
- 3. Rotate the shade into position.
- 4. Adjust the position of the shade as required.
- 5. Tighten the securing screws in the mounting brackets.
- For manual crank shades, go to "Installing the Tie-Down Catches on page

WIRING

AWARNING

ALWAYS DISCONNECT THE ELECTRICAL SOURCES BEFORE WORKING WITH ELECTRICAL WIRING AND COMPONENTS.

The 110VAC motorized Carefree SunShade is available with two power options.

- a) A single hardwired switch; or,
- b) Power Control System. The system offers several options that are not available with the standard hard wired installation. These options include remote controls and wireless wall switches for interior installation. The switches and remotes are available as single or multiple channel.

Important Notices:

- Failure to follow the wiring instruction in this publication may void the motor warranty.
- All wiring must conform to NEC (National Electrical Code) and the prevailing building codes of the area.
- Do not wire two or more motors to one switch or control box No parallel wiring.
- It is strongly recommended that wiring be done by a qualified electrician.
- The installer must furnish required UL approved junction boxes, conduit etc. where required.

SINGLE SWITCH INSTALLATION

- 1. Determine the location of the switch and junction boxes. The following cable lengths should act as a guide for locating the components:
 - 8 feet of cable from shade motor (attached to motor);
 - 12 feet of 2 conductor 18AWG cable w/ ground and standard grounded plug;
 - The installer must furnish the 3 conductor cable w/ ground that runs from the junction box to the switch box.
- 2. Attach the appropriate junction and switch boxes in the desired location.
- 3. Route the cables as shown and connect the wires with standard wire nuts. Be sure to match wire colors; white to white (neutral), black to black (line) and green to green (ground).

Note: Form drip loops at the motor and junction boxes to avoid water following the cables into the components.

Connect wires to the switch and install switch and cover.

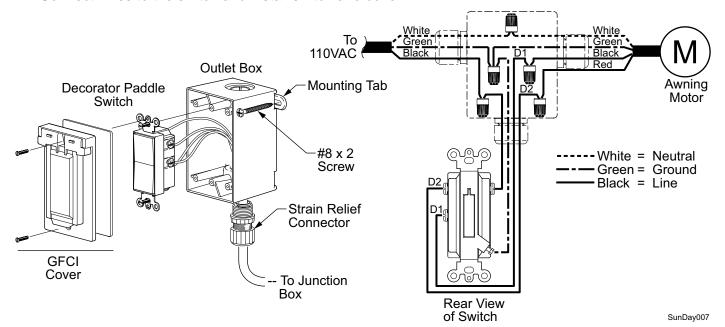


Figure 6. Single Switch Installation.

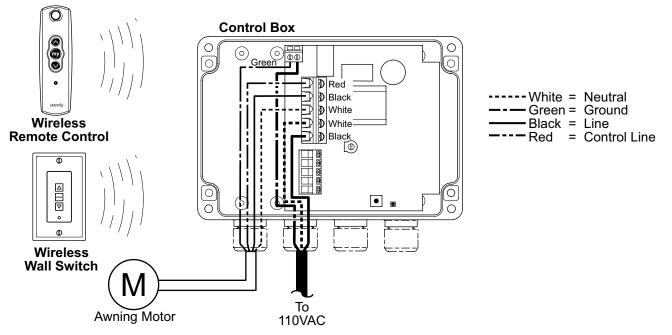
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POWER CONTROL SYSTEM

The power control system provides the home owner several options that are not available with the standard hard wired installation. These options include remote controls; wireless wall switches for interior installation and the wind-sense auto retract for protection against adverse wind conditions.

Control Box Installation

The control box is used when the installation uses a wireless remote and/or wireless switch. For multiple shade applications, each unit must have a dedicated control box. Multiple shades cannot be controlled by a single control box.



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Figure 7. Control Box Wiring Diagram.

- 1. Determine the location of the control box.
 - Mount the box as close to the motor as possible.
 - The following cable lengths should act as a guide for locating the components:
 - 8 feet of cable from shade motor (attached to motor);
 - 12 feet of 2 conductor 18AWG cable w/ ground and standard grounded plug;
 - Do not mount the box on or next to metal surfaces. This can affect radio reception.
 - When mounting the box outside, ensure that the cable entry glands are pointed down to avoid moisture seepage.
- 2. Remove the front cover of the control box.
- 3. Attach the box using a minimum of two (2) #8 x 2 screws. The screws should be mounted in opposite corners.
- 4. Route the 2-conductor 18 AWG wire w/ ground into the box. Connect wires to the control box as shown in the wiring diagram.
- 5. Route the cable wire from the shade motor to the control box and connect the wires as shown.
 - Note: Form drip loops at the motor and control box to avoid water following the cables into the components.

Do not attach the control box cover at this time.

Wireless Switch Installation

ACAUTION

THE WIRELESS WALL SWITCH IS DESIGNED AS AN INTERIOR SWITCH ONLY. MOUNTING THE SWITCH OUTSIDE OR IN AN AREA DIRECTLY INFLUENCED BY ADVERSE ENVIRONMENTAL FACTORS CAN CAUSE PREMATURE DAMAGE TO THE SWITCH AND VOID WARRANTY.

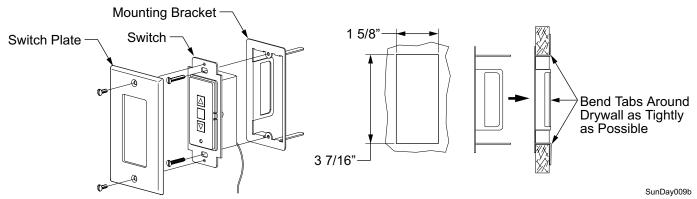
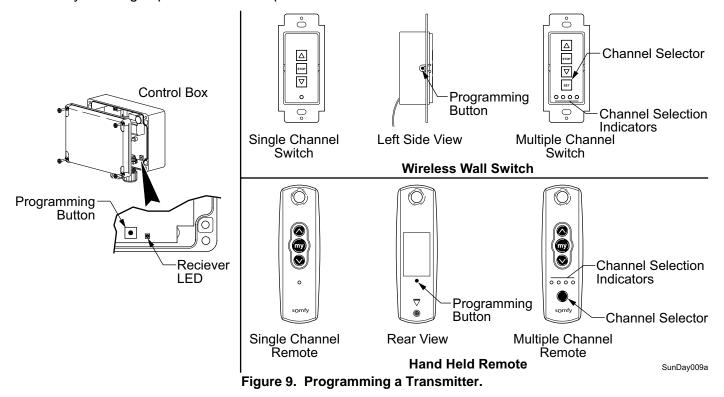


Figure 8. Mounting the Wireless Switch.

- 1. Determine the location of the switch. The switch should be positioned so that the operator can see the shade operate.
- 2. Carefully cut a hole 1 5/8" wide x 3 7/16" tall into the wall.
- 3. Press the mounting bracket into the hole and bend the bracket tabs tightly around the drywall as shown.
- 4. Program the switch and control box. Refer to "Programming a Transmitter" on page 8.
- 5. After programming is complete, attach the switch and switch plate to the mounting bracket using the furnished screws.
- 6. If all options are installed, attach the control box cover.

Programming a Transmitter

The wireless wall switch and hand held remote are both available as a single channel or multiple channel. A single channel transmitter controls one shade, the multiple channel transmitter can control up to 4 separate units individually or as a group. Transmitters require a control box installed for each shade.



- 1. Connect control box to power source (110VAC).
- 2. Press the Programming Button (PROG) of the receiver located in control box (lower right corner) until LED illuminates. This indicates that for one (1) minute the receiver is ready to receive the address of the transmitter. After this time, the control box exits the programming mode and the LED goes out.
- 3. For multiple channel transmitters, use the channel selector until the 1st channel (LED) is illuminated.
- 4. Press the Programming Button on the transmitter with a ballpoint pen until the receiver's LED blinks rapidly and shuts off. The address of the transmitter is instantly memorized and the receiver automatically ends the programming mode.
- 5. For multiple channel transmitters:
 - To set the group control, Use the channel selector until all 4 LEDs are blinking, this is the group (master) channel. Repeat steps 5 & 7.
 - Repeat the above steps for each control box using the channel selector to set the channel to #2 for the second control box, #3 for the third control box and #4 for the fourth box. For each control box also set the master channel.
- 6. Test operation. The "UP" arrow should retract the shade; the "DOWN" arrow should extend the shade. If the shade works opposite the switch markings, reverse the red and black motor wires in the control box.

IMPORTANT NOTE: The shade must operate as described if the wind-sense auto retract is installed. If the shade operates in reverse of the markings, the system will try to extend the shade instead of retracting the shade.

NOTES FOR SWITCHES AND REMOTES

- Transmitters operate on a frequency of 433.42 MHz.
- Transmitters use a 3V Lithium Battery (CR 2430)
- Maximum operating range is 65 ft. Actual distance may vary based on installation.
- The control box may be programmed for up to 12 transmitters (switches and remotes).
- Programming additional transmitters may be accomplished as described previously or can be done using the
 existing transmitters. To use an existing transmitter: press the programming button of the existing transmitter
 for 3 seconds then press the programming button of the new transmitter for 1 second (max).

Installing the Tie-Down Catches

Two sets of tie-down catches are provided to prevent the shade from moving during windy conditions. One set should be installed at the shade's maximum extension. The second set can be installed at an intermediate height.

- Extend the shade to the maximum extension to be used.
- 2. Hook a catch into the cord located at the bottom end of the shade.
- 3. With someone holding the shade still, stretch the cord with the catch. Mark the location.
- 4. Using the catch as a template, drill two (2) 1/8" pilot holes approximately 2 1/4" deep.
- 5. Attach the catch using two (2) #10 x 2 screws.
- Repeat steps 2 through 5 for the other side.

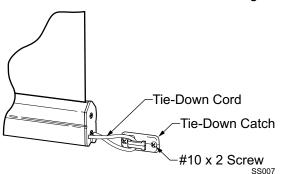


Figure 10. Tie-Down Catch.

7. Position the shade at mid height and repeat steps 2 through 6 for the second set of catches.

SETTING THE MOTOR LIMITS

The motor limit switches have been preset at the factory for best operation. The "DOWN" limit switch is used to stop the motor when the shade is extended. The "UP" limit switch is used to stop the motor when the shade is fully retracted.

The limit switches are located inside the case, near the end cap.

When the shade is extended, the motor should stop and the fabric should be tight. If the motor continues to run, the fabric will sag; or, if the motor stops before the fabric is fully extended, it will be necessary to adjust the "DOWN" limit switch.

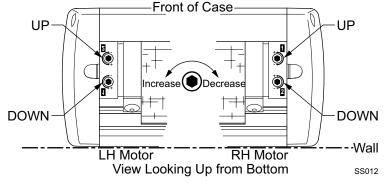


Figure 11. Motor Limit Switches.

When the shade is retracted, the motor should stop when the shade is fully retracted. If the motor continues to run; or, if the motor stops before the fabric is fully retracted, it will be necessary to adjust the "UP" limit switch.

NOTE: It is best to make the adjustments in increments of a single turn. 3 full turns of the screw equals approximately 2" of fabric extension.

Adjusting the Down Limit Switch

- 1. Extend the shade completely.
- 2. Using a 4mm Allen wrench, turn the "DOWN" limit switch. Clockwise decreases time the motor runs during extension, counterclockwise increases the time the motor runs.
- 3. Extend and retract the shade several times to confirm that the adjustment is correct.
- 4. Repeat steps 3 & 4 as required until the shade extends correctly.

Adjusting the Up Limit Switch

- 1. Retract the shade completely.
- 2. Using a 4mm Allen wrench, turn the "DOWN" limit switch. Clockwise decreases time the motor runs during extension, counterclockwise increases the time the motor runs.
- Extend and retract the shade several times to confirm that the adjustment is correct.
- 4. Repeat steps 3 & 4 as required until the shade retracts correctly.

NOTE: The tubular motor is not continuously rated. A built in thermal overload device protects the motor from over heating. If the motor continues to run for an extended period of time, the device will shut down the motor. It will be necessary to allow the motor a 15 minute "cool down" period before operation can resume.

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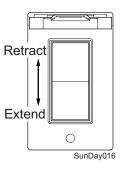
OPERATION

SWITCH OPERATION -STANDARD HARDWIRE

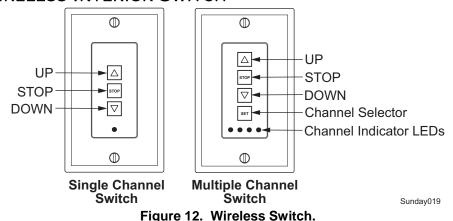
Press and hold the switch down to extend the shade to the desired extension.

Tip: Extend the shade slightly below the catches, place the loops over the catches then retract the shade to tension the fabric.

• Press and hold the switch up to retract the shade.



USING THE WIRELESS INTERIOR SWITCH



UP......Press and release the UP arrow to retract the shade. The shade will retract until fully closed.

STOP Press the center button to stop the shade during extend or retract functions.

DOWN...... Press and release the DOWN arrow to extend the shade. The shade will extend to the

maximum extension.

Channel Selector .. For multiple channel switches: Press the "Channel Selector" until the corresponding selection indicator LED is illuminated for the shade to be operated.

When all 4 indicator LEDs are illuminated the remote is in "Group" mode. All shades will respond to the command buttons as a group (i.e. pressing the DOWN button will cause all shades to extend).

The wireless switch uses a flat 3V Lithium Battery (CR2430) that should provide a long period of service. To replace: Remove the switch from the wall mount. On the back remove the box (2 screws). Slide the old battery from the battery holder and slide a new battery in. Pay attention to the polarity of the battery. Batteries are available through local battery outlets.

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USING THE REMOTE CONTROL

UP......Press and release the UP arrow to retract the shade. The shade will retract until fully closed.

STOP Press the center button to stop the shade during extend or retract functions.

DOWN...... Press and release the DOWN arrow to extend the shade. The shade will extend to the

maximum extension.

Channel Selector .. For multiple channel remotes:

Press the "Channel Selector"

until the corresponding selection
indicator LED is illuminated for

the shade to be operated.

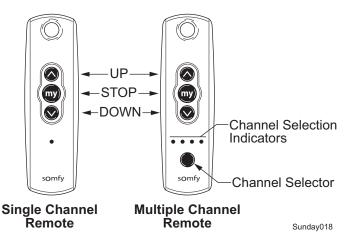


Figure 13. Remote Control.

When all 4 indicator LEDs are illuminated the remote is in "Group" mode. All shades will respond to the command buttons as a group (i.e. pressing the DOWN button will cause all shades to extend).

The remote uses a flat 3V Lithium Battery (CR2430) that should provide a long period of service. To replace: Remove the screw and back of the remote. Slide the old battery from the battery holder and slide a new battery in. Pay attention to the polarity of the battery. Batteries are available through local battery outlets.

OPERATING THE MANUAL CRANK

The following information applies to the manual configuration only.

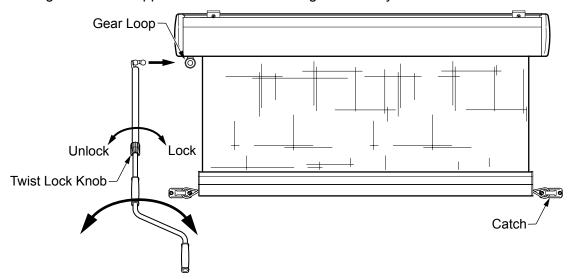


Figure 14. Manual Crank.

NOTE: The crank handle may be extended or shortened by turning the twist lock knob counterclockwise and sliding the handle in or out as desired. Lock the handle in place by turning the twist lock knob clockwise.

• Insert the manual crank into the gear loop located on the side of the shade. Turn the handle to extend the shade. Place the lead rail loops over the catches.

Tip: Extend the shade slightly below the catches, place the loops over the catches then turn the crank to retract the shade to tension the fabric.

• To retract the shade, reverse the above procedure, do not forget to release the lead rail loops from the catches.

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FABRIC MAINTENANCE

ACAUTION

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

- 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. In most environments, a thorough cleaning will be needed every two to three years.
- 2. When it's time for a thorough cleaning, the fabric can be cleaned while mounted.
 - For Acrylic Fabric Use a stiff brush and warm water with soap.
- 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.

Mildew

Mildew is a fungus growth that looks like dirt. Vinyl coated polyester fabrics are mildew resistant because of a chemical biocide in the vinyl coating. Under ordinary conditions, mildew will not appear. However, in areas where high temperature and humidity are common, mildew can be a problem and require the material to be washed more frequently. Thoroughly rinse the fabric with clean water and allow to air dry completely before rolling up the shade.

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LIMITED WARRANTY

Carefree of Colorado (hereafter referred to as Carefree) warrants to the FIRST retail Purchaser that the Patio 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 motor and canopy.
- b) 10 years on springs, rollers and hardware.
- c) 12 months on electronic components.
- d) 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%.
- e) After the initial 12 months, any defects in the product will be replaced or repaired for a prorated amount of the cost of the part 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.

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 shade.
- 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.

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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

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