# SURESHADE® TECHNICAL DOCUMENTATION

# **ATF<sup>TM</sup> Automated Boat Shade**

INSTALLATION INSTRUCTIONS AND OWNER'S MANUAL





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### GENERAL INFORMATION



#### INTRODUCTION

Thank you for purchasing a SureShade® retractable shade for your boat.

Invented by boaters for boaters, SureShade is the new standard for shade on boats. Our automated or manual retractable shade systems are featured on over 50 boat brands as factory or aftermarket installations.

SureShade is the only U.S.-made telescoping marine sunshade on the market, with patents in the U.S., Canada, Europe and China. SureShade is committed to improving sun safety on boats with shade systems that give boaters more sun protection... where and when they need it.

#### MODEL AND SERIAL NUMBER TAG LOCATION

Your shade system is identified by the serial number located on the control box. Please do not remove this label.

The canvas is identified by the white tag sewn into the canvas. Please do not remove this label.

#### **CONTACT INFORMATION**

#### **CUSTOMER SUPPORT**

We take pride in offering an unprecedented level of customer service to our boat builders, dealers and — most importantly — the boaters who use our sunshade systems.

Whether you purchased your sunshade system as a factory-install option, an aftermarket installation through your local boat dealer or directly from us, you can have confidence in continued customer service resources from SureShade.

Should you require assistance with your SureShade installation, our technical experts are available from 9am - 5pm EST Monday through Friday via email at <a href="mailto:service@sureshade.com">service@sureshade.com</a>, or call us at 877-333-8323.

Further customer resources and information can be found on our website at: <a href="https://www.sureshade.com/service/">https://www.sureshade.com/service/</a>

### SURESHADE LIMITED PRODUCT WARRANTY STATEMENT

SureShade provides the following Limited Warranty of its electric and manual sunshade awning systems.

SureShade warrants that the shade framework — which consists of the actuator drive assemblies, crossbars, roller assembly, mounts and in the case of an electric shade, the motors, controller and wire that connects the actuators to the controller — will be free from material defects and workmanship and will repair or replace, at its sole discretion, any inoperable components that are reported within 3 years from the date of shade sale to original purchaser — boat builder, dealer or private boat owner.

SureShade will also replace, at its sole discretion, the **canvas component** of the shade system (electric or manual) when reported defective within one year from the date of canvas manufacture as indicated on the white manufacturer tag attached to the canvas (tag must remain attached for warranty purposes).

Exclusions to this limited warranty are as follows:

Damage resulting from abuse, misuse, neglect, improper installation, improper operation, improper
maintenance, attempted repair efforts resulting in further damage, power surges, underpowering or forcing
operation in low voltage situations, improper stowage for ground transportation, inclement weather or other act
of nature.

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### **GENERAL INFORMATION**

- Damage resulting from leaving the shade extended unattended during inclement weather.
- Damage resulting from leaving shade extended in conditions that exceed the shade framework's wind rating of 50 mph (Applies to aft facing shade only. Forward shade must be stowed at all times while boat is underway).
- Damage resulting from corrosion.
- Any shade product that has been altered or modified from SureShade factory specifications.
- Any shade that's installed without SureShade-supplied or approved mounting components.
- Removal and/or dismantling of the shade and its components (including actuator drive system) without proper notification to SureShade.
- Attempted controller reset that results in loss of controller memory, specifically the manipulation of dip switches 1-4.
- Deterioration of the canvas thread and stitching.
- Travel time to/from boat to troubleshoot, repair and/or replace components.
- Labor cost and expenses associated with removal or reinstallation of other components in order to access the shade product components.
- Any cost associated with production downtime or time spent troubleshooting or reviewing troubleshooting documentation/videos.
- Excessive labor cost beyond recommended standard labor repair rates.

SureShade reserves the right to utilize reconditioned, refurbished, repaired or remanufactured products or parts in the warranty repair or replacement process. Such products and parts will be comparable in function and performance to an original product or part and warranted for the remainder of the original warranty period.

In no event shall any repair or replacement under this Limited Warranty exceed the fair market value of the product as of the date of the owner's claim.

Acceptance of any product returned for any refund provided by SureShade shall not be deemed an admission that the product is defective.

In order for a warranty claim to be deemed valid, the following information must be provided to SureShade immediately after discovery of any defect:

- Description of the nature of the problem
- Details of the boat that the shade is installed on year, make, model and hull identification number.
- Date of shade purchase, or in the case of factory install, date of boat purchase.
- Details of the installation Factory install? Dealer install? Private install?

SureShade will make every effort to troubleshoot, determine root cause and fully resolve the issue, either directly or with an experienced marine technician. SureShade is solely responsible for determining and authorizing the remedial actions to be performed either by a SureShade technician or an experienced marine technician approved by SureShade.

The remedy of repair or replacement of parts or materials that are found to be defective in factory materials or workmanship covered by this limited warranty shall constitute the owner's sole and exclusive remedy against SureShade for any claims whatsoever of economic loss resulting from product failure.

Please contact us or call 877-333-8323 with any questions or concerns, or if replacement canvas or parts for SureShade sunshade systems are needed.

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### **SAFETY**



#### SAFETY DESCRIPTIONS

The words WARNING, CAUTION and NOTICE are used throughout this manual to highlight important information. Be careful that the meanings of these alerts are known to all who install and operate this equipment.



This safety alert symbol appears with most safety statements. It means attention, become alert, your safety is involved! Please read and abide by the statement that follows the safety alert symbol.

### **↑ WARNING**

Indicates a potentially hazardous situation that, if not avoided, could result in death or serious injury.

### **A CAUTION**

Indicates a potentially hazardous situation that, if not avoided, could result in damage to product or equipment.

### NOTICE

Indicates a situation which can cause damage to the components and/or the environment, or cause the equipment to operate improperly.

NOTE: Important information is noted to aid in the installation process.

### **↑** WARNING



Always wear OSHA-approved body, eye, ear and respiratory system protection. Never wear loose clothing, jewelry or long hair when installing the retractable shade.

### **MARNING**



Always keep hands and loose clothing clear of the actuators when extending/retracting the shade.

### **IMPORTANT SAFETY MESSAGES**

# **MARNING**



Before installing and operating the retractable shade, be sure to read and understand the content and safety messages in this manual.



#### IMPORTANT INSTRUCTIONS

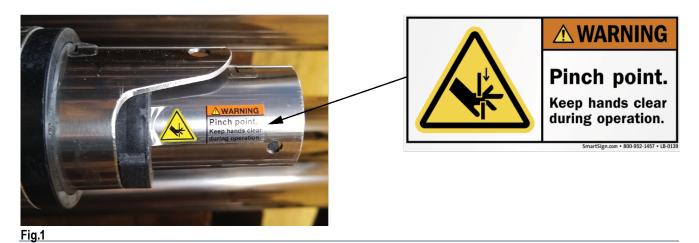
- In the event of malfunction please visit <a href="https://www.sureshade.com/service/">https://www.sureshade.com/service/</a> and review applicable videos and documentation before continuing to operate the system or making any repairs. You may also submit a service request via email at <a href="mailto:service@sureshade.com">service@sureshade.com</a>. Do **NOT** attempt to repair shade on your own or you could risk voiding the warranty.
- Never disassemble actuators without permission from SureShade factory or you will void warranty.
- Do NOT install the shade anywhere it will obstruct or interfere with the navigation lights or any other boat accessories.
- When tensioning the canvas, refer to <a href="https://www.sureshade.com/service-and-technical-documentation/">https://www.sureshade.com/service-and-technical-documentation/</a> for proper roller pre-load instructions. Improper tensioning can cause spring malfunction, which will prevent the roller assembly from operating normally.
- Be sure that boat batteries are 100% charged before operating the shade.
- Your SureShade product has been designed and tested to withstand wind speeds of up to 50 mph. However, it is recommended to retract the shade while underway.
- To protect the shade and components, always retract shade during inclement weather. Retracting the shade when **NOT** in use will prolong the life of the canvas and components.
- Shade max load weight: 20 lbs. Do NOT exceed shade max load weight or product damage may occur.
- Refer to the SureShade website for maintenance and winterization procedures: https://www.sureshade.com/customer-resources/
- Do NOT operate the shade without the crossbars attached.
- It is important to understand the Warnings, Cautions and Notices BEFORE starting the installation.

#### SAFETY WARNINGS

- Keep hands away from moving shade parts.
- Keep clear of shade while extending and retracting.
- Keep shade clear of obstructions.

#### SAFETY LABEL LOCATIONS

Safety labels must be legible to alert personnel of safety hazards. Replace any illegible or missing labels immediately. Safety labels removed during any repair work must be replaced in their original position (Fig.1) before operating the shade.



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# **SPECIFICATIONS**



# **TECHNICAL DATA**

Functional Specification	ATF STAGE
Extension length	5', 6' or 7'
Width	Up to 12'
	Over 12' custom
Hardware Specification	
Actuator material	316SS
Framework material	316SS
Mounting component material	316SS
Actuator placement	Integrated w/in bridge or hardtop
	Top surface-mount
	Underside surface-mount
Roller configuration	Straight or cambered spring-tension roller
Roller position	Traveling or stationary
Canvas	Marine-grade acrylic, Sunbrella®, any standard color
Electrical Specification	
Voltage	12V or 24V
Amperage	3 amps
Operating device	Toggle switch and remote control
Controller type	Software-based synchronization
Controller dimensions	5" x 7" x 1.75"
Structural Specification	
Maximum wind speed	50 mph
Maximum weight displacement	300 lbs across framework
Deflection	Less than 3"
Maximum Load Weight: Outer crossbar frame	20 lbs
(valance panel/enclosure)	

# **PREPARATION**

### **PARTS AND QUANTITIES**

Many of the provided parts are pre-assembled before shipping. This helps to ensure all necessary parts are included and checked for proper fit before delivery. Ensure all assembled parts are contained in the shipping crate **BEFORE** starting installation (Fig.2).

PART	QUANTITY
Shade specification drawing — specific to your shade and provided as a separate document	1
Mounting clamps w/mounting hardware and bolt covers	4
Pre-assembled actuators	2
Roller assembly w/mounting hardware	1
Outer crossbar w/mounting hardware	1
Mid-crossbar w/mounting hardware	1
Pre-rolled canvas (attached to roller assembly)	1
Pre-programmed electronic controller w/wireless remote	1
Starboard and port control harness w/Deutsch connectors	2

#### Packing contents:

- 1. Outer Crossbar
- 2. Roller Assembly
- 3. Mid-Crossbar
- 4. Electronic Controller/Connections/Wireless remote
- 5. Mounting Clamps
- 6. Control Harness, Roller Clamps, Miscellaneous Hardware
- 7. Actuators

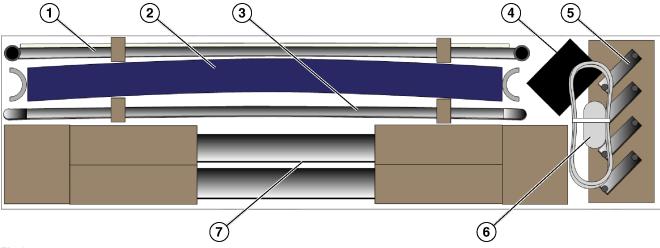


Fig.2

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# **PREPARATION**



# **TOOLS REQUIRED**

REQUIRED TOOLS (NOT INCLUDED)	SURFACE INSTALL	INTEGRATED INSTALL
Safety glasses/goggles	Х	X
Ratchet and socket set	X	X
Power drill	X	X
Jigsaw	X	X
Drill bits	X	X
Phillips head screwdriver	X	X
Allen wrench set (standard)	X	X
Wire strippers	X	X
Wire cutters	X	X
Wire crimper	X	X
Utility knife	Х	X
Assorted wire connectors	X	X
Wire (8-gauge for power as per ABYC E-11, Table IX, 10% Voltage drop, 14-gauge for switch connections)	Х	Х
Multimeter (or similar device)	Х	X
Tape measure	Х	X
Marine caulk	X	X
Extension cord	X	
Thread lock (Loctite®)	X	X
Electrical tape	X	X
Tubing cutter, hacksaw		X
Fish tape (used to route wires through inaccessible areas)		X
Level		X
Grease pencil	X	X
Wire ties	X	X
Hole saws		X
Dremel® with round sanding wheels and/or round grinding bit (If not available, a drill can be used)		Х
Ladder	X	X



# **PREPARATION**

### **SKILL LEVEL OF INSTALLER**

Must be able to read a tape measure and be comfortable using a hand drill.

For installation of shade framework - intermediate skill level:

- Read tape measure
- Use hand drill
- Able to lift 35+ lbs

Electrical installation - wiring of shade:

• Wiring of shade to the boat should be done by an experienced marine electrician.

### **INSTALLATION TIME FRAME**

It is recommended that two people perform the installation. Depending on the type of mount (surface or integrated) and the complexity of the wire run to the boat's power source, the installation can take anywhere from 10 – 16 hours.

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# DETERMINING THE CENTERLINE OF THE HARDTOP TO POSITION THE SHADE

**NOTE:** Refer to the supplied shade specification drawing to determine the shade's centerline width. Shade centerline width is determined by the centerline of the port actuator tube to the centerline of the starboard actuator tube, and is the most critical dimension in order to properly center the shade framework on the hardtop.

Mark hardtop centerline as follows:

- 1. Measure across the hardtop at the forward section from the port side to the starboard side. Using a grease pencil, mark the center of the hardtop (Fig.3A).
- 2. Repeat step 1 for the aft section (Fig.3B). Using the pencil marks as a guide, run tape or string down the center of the hardtop (Fig.3C).

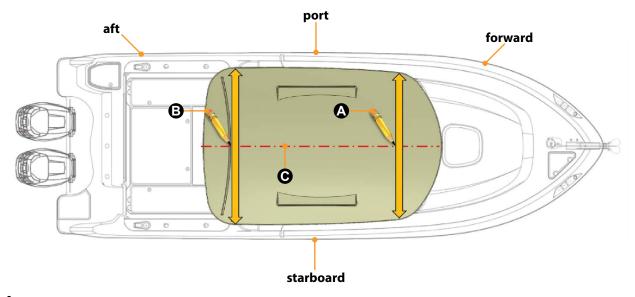


Fig.3

3. After marking the centerline of the hardtop, begin determining the placement of the mounting clamps.

### NOTICE

Placement of mounting clamps must hold actuators parallel to each other to ensure proper functioning of shade system.

- A. Refer to the shade centerline width dimension on the shade specification drawing.
- B. Take 1/2 of the width of the shade specification drawing dimension and measure out from the hardtop centerline to the port side by that amount (Fig.4, VIEW A).

**NOTE:** For example, if the shade centerline width is 80", measure 40" from the hardtop centerline to the port or starboard side (**Fig.4**, **VIEWS A and B**).



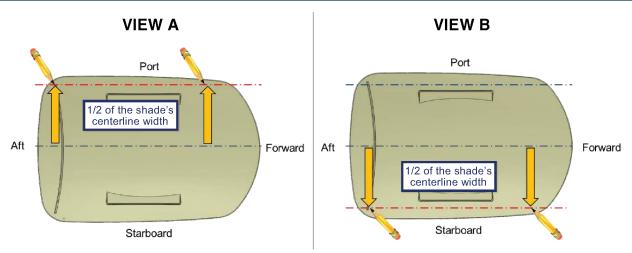


Fig.4

4. To verify centerline measurements, measure the distance from the port side to the starboard side at the forward and aft sections (Fig.5) to make sure marks are parallel. These measurements should be the same as the shade centerline width provided on the shade specification drawing.

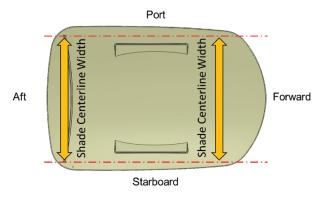


Fig.5

### SETTING THE MOUNTING CLAMPS

- 1. Disassemble the four mounting clamps, which may include spacers (Fig.6) depending on installation, by removing the two 1/4"  $20 \times 3/4$ " socket head screws from each clamp.
  - A. Remove the top clamp (Fig.6).
  - B. Set the screws and top clamps aside.
  - C. Place mounting clamps 6" 12" from aft of hardtop (Fig.7). Spacing between forward and aft mounting clamps should be no less than 26" (Fig.7).

**NOTE:** Thirty inches or more is preferred, when applicable.

2. Position the four bottom mounting clamps (Fig.6) along the predetermined lines on the hardtop (Fig.7).

**NOTE:** Place actuator in clamps to aid in aligning and spacing mounting clamps.

3. With assistance, have each person place and hold an actuator onto the starboard and port mounting clamps.

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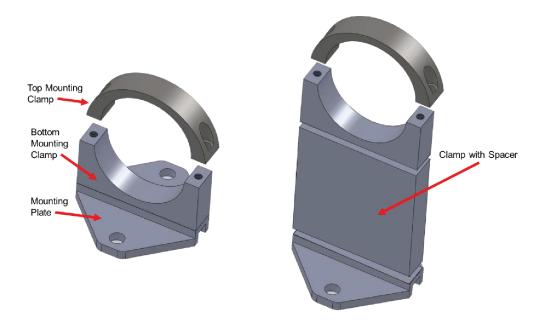


Fig.6

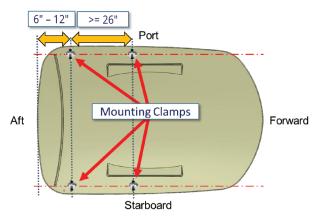


Fig.7

# NOTICE

#### Actuators should be used to finalize placement before drilling holes.

4. Measure from port actuator centerline to starboard actuator centerline at the forward and aft sections (Fig.8) to make sure the centerline width is accurate. Refer to shade centerline width dimension located on shade specification drawing.

**NOTE:** Shade actuators are used during this process to confirm proper shade position.

### **NOTICE**

Take note of the style of the hardtop (flat or curved) before drilling the mounting holes.

5. If the hardtop is flat (Fig.9), the mounting hole locations are the same as the shade's center width for either a topside or underside mount (Fig.9).



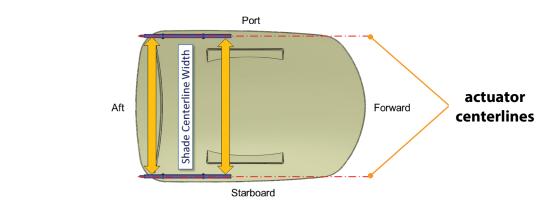


Fig.8

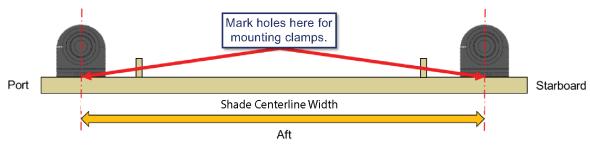
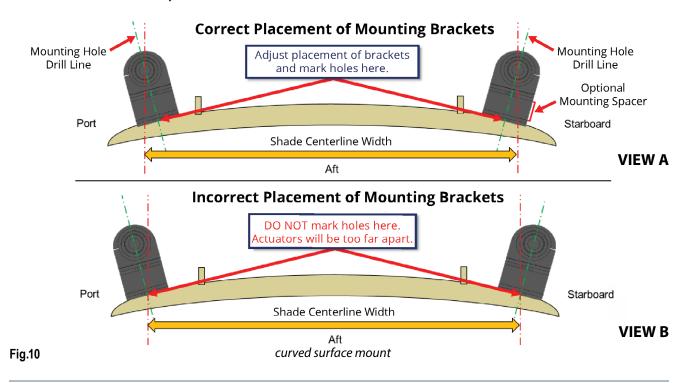


Fig.9 flat surface mount

6. If the hardtop is curved, the mounting holes are different than the shade centerline.

**NOTE:** When mounting on a curvature, mark one clamp and measure from the mounting hole to the actuator centerline. Use that measurement to aid in placement of the remaining clamps.

A. To determine mounting hole location for topside surface mount with curvature, see Fig.10. The mounting holes will ultimately be drilled narrower than the shade centerline.



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B. To determine mounting hole location for an underside surface mount on a hardtop with curvature, see Fig.11. The mounting holes will ultimately be drilled wider than the shade centerline.

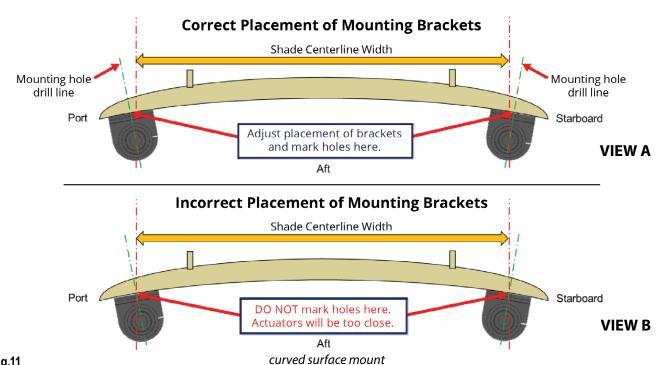


Fig.11

- 7. Mark location of mounting holes with a grease pencil.
- 8. Carefully remove actuator from mounting clamps. Make sure mounting clamps are in marked location and mark holes for drilling. See figures 12 and 13.

### NOTICE

Re-measure and make sure placement of mounting clamps for both sides are clear of any obstructions and measurements are correct before drilling holes.

- 9. Drill the two marked holes for each of the mounting clamps.
  - For flat surface mount, drill straight down (Fig.9, VIEW A).
  - For curved surface mount, drill on an angle perpendicular to surface (Fig.10, VIEW A).

#### NOTICE

Use care when tightening mounting clamp bolts. Do not overtighten to the point where the surface material starts to buckle.

10. Line up and install the four mounting clamps to the hardtop using the included 5/16" - 18 bolts and tighten down with nuts (Fig.14).

**NOTE:** Mounting hardware is **NOT** provided for OEM installs.



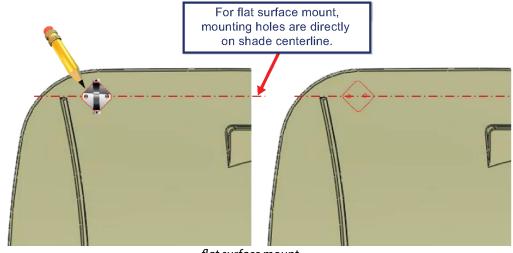


Fig.12 flat surface mount

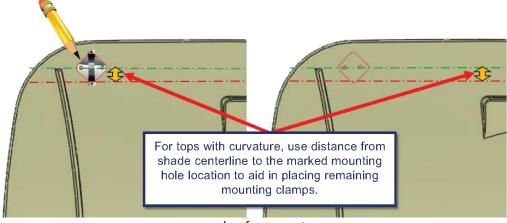


Fig.13 curved surface mount

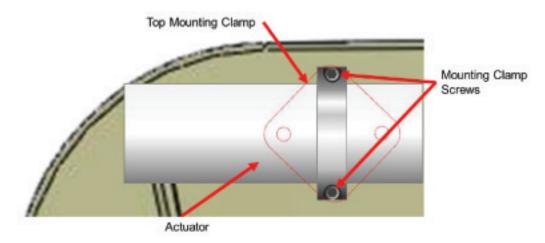


Fig.14



#### INSTALLING AND SECURING THE ACTUATORS

- 1. Place the actuators onto the installed mounting clamps.
- 2. Attach the top mount to the mounting clamps using the provided hardware. **Do not tighten as forward/aft adjustments may be needed.**
- 3. Measure from the telescoping end (Fig.15A) of the stationary actuator tube to the aft mounting clamp (Fig.15B). There should be no less than 4" between the end of the tube and the aft mounting clamp (Fig.15).
- 4. Repeat steps 2 and 3 for the other actuator.
- 5. Once both actuators are aligned, tighten the mounting clamp top brackets.

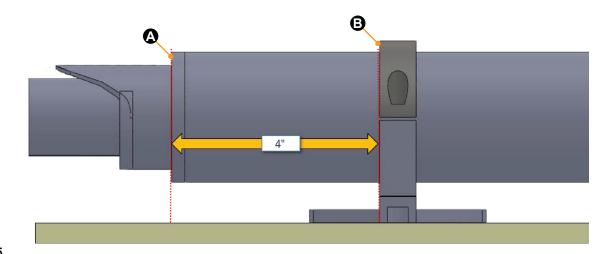


Fig.15

### SECURING THE ROLLER ASSEMBLY

### **NOTICE**

The zipper of the canvas should be facing aft and on top of the roller when installed.

- 1. Slide the roller assembly (Fig.16A) onto the actuators.
- 2. Make sure roller clamps are aligned over "Place Roller Clamp Here" stickers; 2 1/4" minimum in from the end of the actuator main tube (Fig.16).
- 3. Secure the roller in place using the provided 1/4" 20 x 3/4" socket head cap screws.
- 4. To make sure the actuator is properly spaced, do as follows:
  - A. Measure the space between the stationary actuator tube (Fig.17A) and the mid-extending actuator tube (Fig.17B). It should measure approximately 1".
  - B. Measure the space between the mid-actuator tube (Fig.17B) and the small extending actuator tube (Fig.17C). It should measure approximately 2".
  - C. If measurements are off, rotate the small extending actuator tube (Fig.17C) clockwise—to retract—or counterclockwise—to extend.

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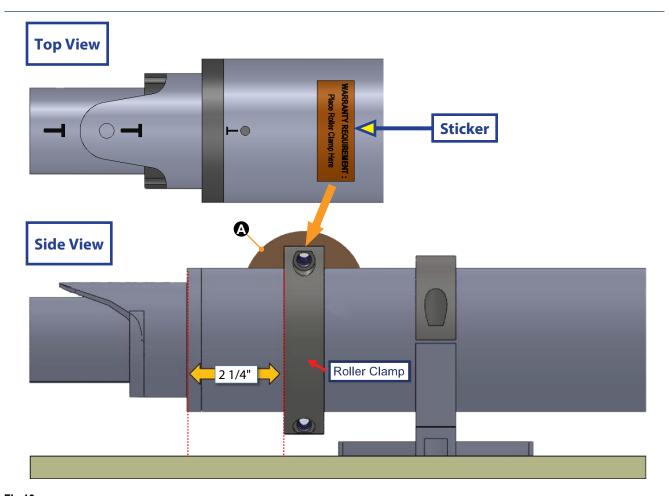


Fig.16

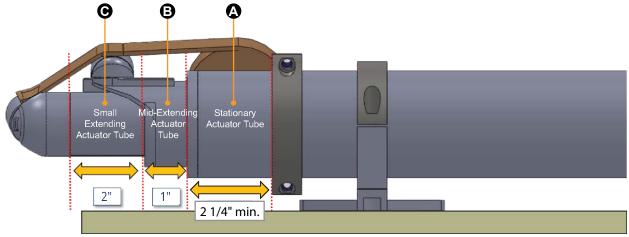


Fig.17



### **SECURING THE CROSSBARS**

1. Mid-Crossbar

# **NOTICE**

Do NOT remove the #10 - 32 set screws (Fig.18A) that connect the outer and mid-crossbar sleeves to the crossbars.

A. Remove the two 1/4" -  $20 \times 1/2$ " socket head cap screws (Fig.18B) from the ends of the mid-crossbar.

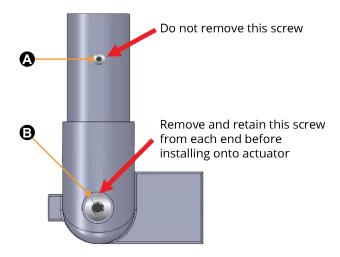


Fig.18

B. Attach the mid-crossbar (Fig.19A) onto actuator's mid-crossbar tab (Fig.19B) and secure in place using two 1/4" - 20 x 1/2" socket head cap screws (Fig.19C).

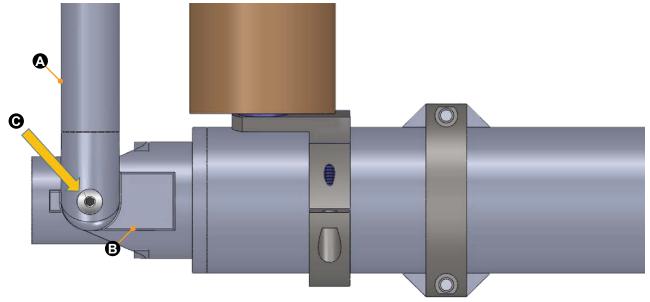


Fig.19



2. Outer Crossbar

# NOTICE

Do NOT exceed shade maximum load weight rating of 20 lbs.

A. Remove the two 10" - 32 x 3/8" button head screws (Fig.20A) from ends of the outer crossbar (Fig.20B).

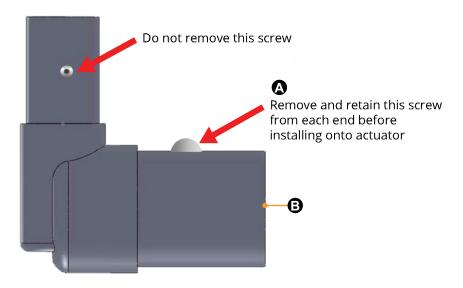


Fig.20

B. Slide the aft crossbar (Fig.21A) into the ends of actuator tubes (Fig.21B) and secure in place using the  $10^{\circ}$  -  $32 \times 3/8^{\circ}$  button head screws (Fig.21C).

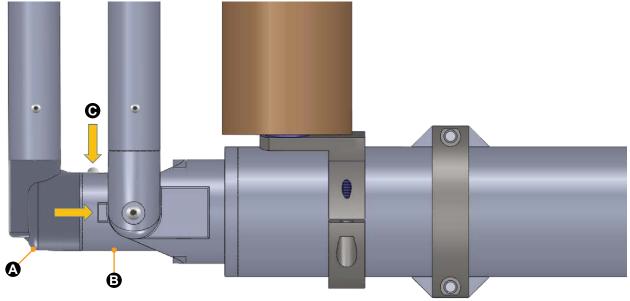


Fig.21

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#### PRE-LOADING THE CANVAS

### **NOTICE**

When pre-loading the roller, make sure the roller is rotated toward the crossbars, aft of the boat. Rotating the roller in the opposite direction will release the tension spring and prevent the roller from working.

Go to <a href="https://www.sureshade.com/service-videos/">https://www.sureshade.com/service-videos/</a> to view a video on how to properly pre-load the canvas.

- 1. Pre-load the roller by rotating the canvas and roller toward the crossbars/aft of the boat. Canvas and roller need to rotate together. Add one pre-load turn for every foot of extension—5ft extension = 5 turns, 6ft = 6 turns, 7ft = 7 turns.
  - A. Stand behind the roller facing the front of the boat and grab the canvas and roller with both hands (Fig.22).

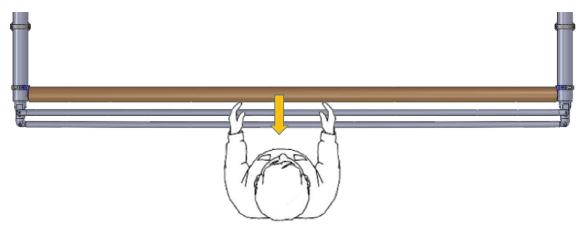


Fig.22

B. Grip and rotate the roller and canvas towards you and towards crossbars (Fig.23A). You will begin to feel the tension of the roller after about 3 to 4 full rotations (Fig.24). Continue as needed until canvas is taut.

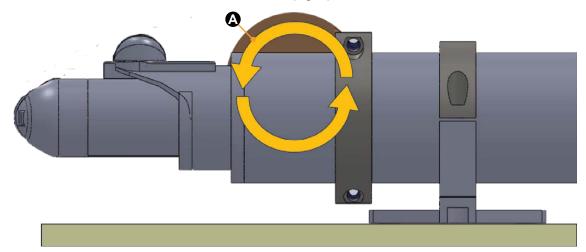
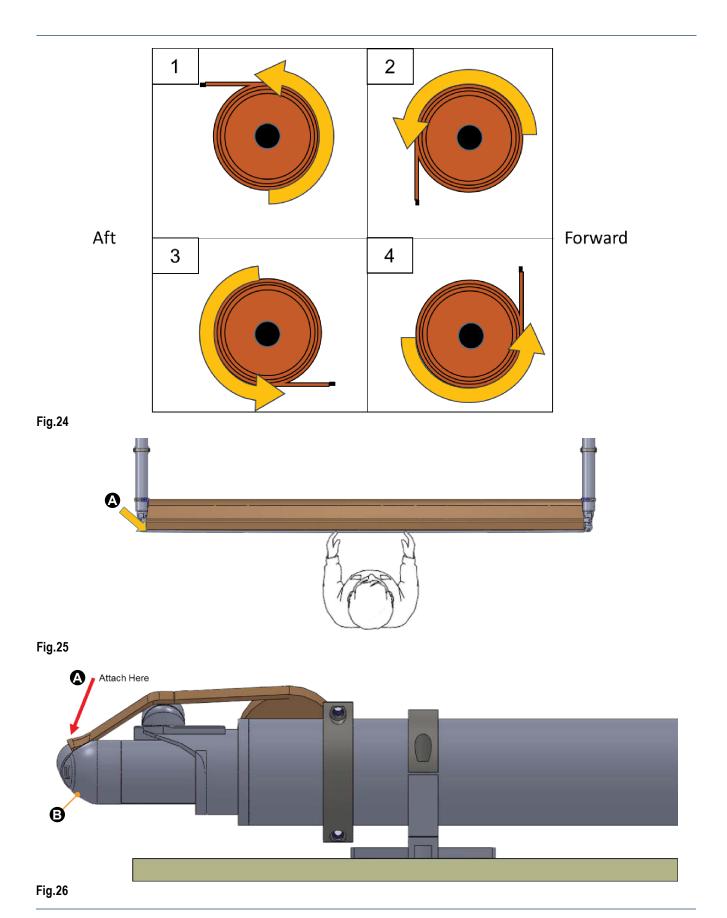


Fig.23

- 2. Holding the canvas firmly, pull the canvas to the aft crossbar (Fig.25A).
- 3. Attach the zipper of the canvas (Fig.26A) to the crossbar (Fig.26B) and fully zip the canvas.







#### WIRING THE ELECTRICAL SYSTEM

The electrical housing controls the retracted and extended positions as well as the synchronization of the actuators' movement. Sensors positioned inside the actuator communicate with the electrical housing and result in synchronization.

These sensors, along with the housing software, will keep the two actuators synchronized with each other during travel. When one actuator gets ahead of the other actuator, the system will shut the faster actuator down for a split second until the slower actuator catches up and then continues movement again. This is a completely normal function of the shade operation.

**NOTE:** The controller and electrical housing are pre-wired and tested before shipping. Supplied wire and connections are for testing purposes only.

- 1. Use new wire connections for your installation.
- 2. Make sure all wire connections are secure and watertight.
- 3. Refer to the American Boat & Yacht Council (ABYC) E-11, AC and DC Electrical Systems on Boats.

**NOTE:** When calculating wire gauges and circular mils, be sure to use the 10% voltage drop chart as per E-11, Table IX. Voltage drops can cause an intermittent communication situation during travel.

### NOTICE

A 5-Amp, slow-blow fuse must be used for the circuit board circuit. These over-current protection devices will protect the wire from overheating—with the use of E-11, Table IX—and will protect the unit itself.

**NOTE:** All control wires for the actuators to the controller are supplied with Deutsch connectors. Once the control wiring is properly fed through tubing and fiberglass, connect one end of the control wire to the actuator and the other end to the electrical housing.

### NOTICE

Control box must be at least 2' away from any RF/electromagnetic-emitting device, such as radars and GPS; as well as microwaves, ice makers and refrigerators.

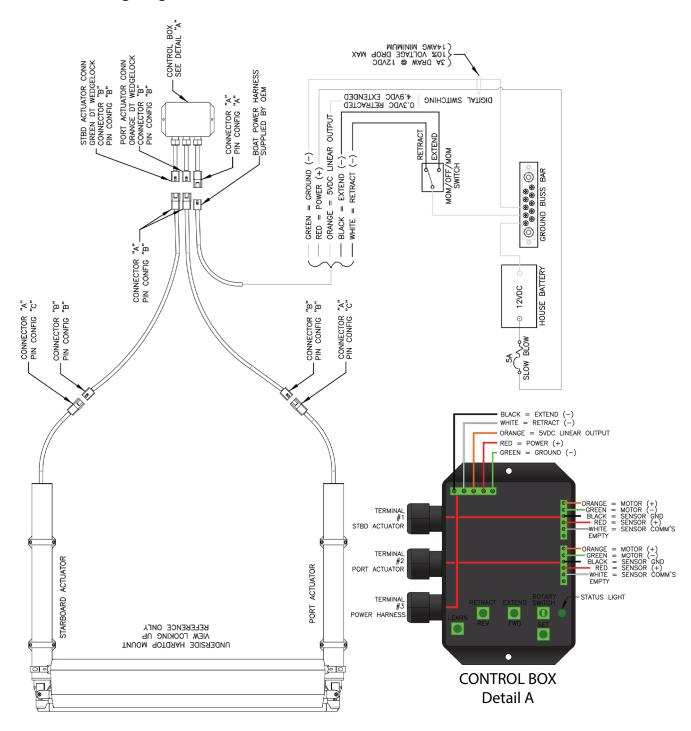
### **CAUTION**

Do NOT operate the shade without the crossbars securely mounted to the actuators.

- 4. Connect the positive and negative wires to a power source.
- 5. View the electrical schematic for more details.



#### **Electrical Wiring Diagram**



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# INITIATING THE SURESHADE ATF-SG INTELLIGENT CONTROL BOX (ICB)

The SureShade ATF-SG ICB was designed for plug and play setup. It is factory-programmed to the specified extension length and ships ready to go in operation mode.

This document contains the proper sequence for initiating the ICB when installing the ATF-SG shade on the boat. Make sure the actuators are properly mounted and the ICB is secured before proceeding with these steps.

1. Plug in boat power to the ICB. Refer to the LED light on the control box. Once the controller is powered up it will first flash the shade length in green (i.e. 5 flashes for 5-foot shade, 6 flashes for 6-foot shade, etc.). Then the LED will flash yellow for the model of shade (i.e. 1 flash for SG model, 2 flashes for ATF). The LED will then flash 3 red flashes repeatedly. You have successfully connected the boat power to the ICB and can proceed.

#### NOTE:

- If the LED flashes YELLOW at this step (prior to connecting either actuator), you have either an incorrectly wired
  rocker switch or a stuck switch relay. DO NOT PROCEED WITH CONNECTING ACTUATORS until you have the LED
  blinking RED three times.
- If the LED stays a solid YELLOW at this step—prior to connecting either actuator—you do not have sufficient voltage, less than 9.4 V. The shade will not run at any voltage under 10V.
- 2. Plug the starboard actuator connector into the GREEN STARBOARD CONNECTOR on the ICB. Refer to the LED light on the control box—when the light blinks RED one time, you have successfully connected the starboard actuator to the ICB and can proceed.
- 3. Plug in the port actuator connector to the ORANGE PORT CONNECTOR on the ICB. Refer to the LED light on the control box—when the light remains solid GREEN, you have successfully connected the port actuator to the ICB and you have completed the initiation of the ICB.

#### INITIATING THE REMOTE KEY FOB

This procedure is only necessary if the FOB/controller pairing was lost or this factory set-up step was missed.

**NOTE:** To connect to Bluetooth controllers with BLUE labels, go to Initiating Bluetooth section.

This procedure can be performed in one of two ways:

- 1. With both actuators connected and the shade fully retracted, press retract three times and the controller will enter pairing mode, or...
- 2. With both actuators disconnected, follow instructions in the Using the Momentary Rocker Switch section.

### **USING THE MOMENTARY ROCKER SWITCH**

Key fobs included with the shade will normally already be paired with the controller, but if the controller is found not to be paired please follow these instructions.

- 1. Press and hold the Extend button until the status LED turns yellow.
- 2. Next, press and release the Retract button three times, then press the Deploy button. The status LED should turn solid red.
- 3. The remote can now be paired with the controller.
- 4. Press a button on a remote. If the status LED blinks green it is now paired.





#### INITIATING BLUETOOTH

The SureShade ATF-SG ICB was designed for use with a smart phone via Bluetooth.

- 1. Download the SureShade Control app from either Apple's App Store (iOS) or Google Play (Android).
- 2. Install the app. The SureShade home screen (Fig. 27) will display briefly.
- 3. Select OK to accept Bluetooth (Fig. 28A).
- 4. Read/scroll through the License Agreement, then tap Agree>> (Fig. 29A).





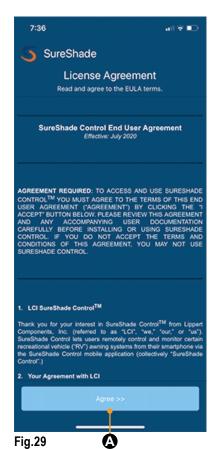


Fig.27 Fig

Fig.28



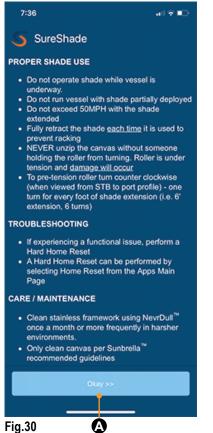


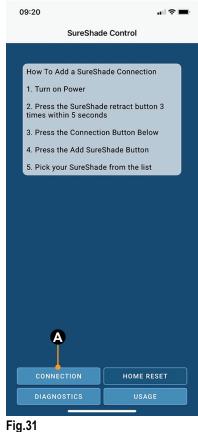
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- Read/scroll through the Proper Use screen, then tap Okay>> (Fig. 30A).
- Read instructions on how to add a SureShade Connection, then tap CONNECTION (Fig. 31A).
- Tap ADD SURESHADE (Fig. 32A).





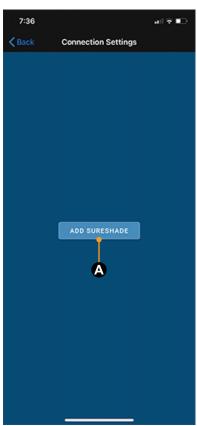
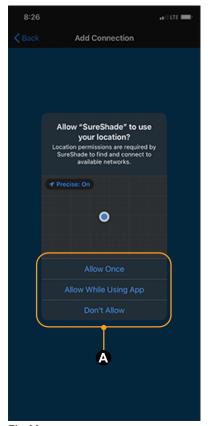


Fig.32

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- 8. Select the preferred location option for SureShade (Fig. 33A).
- The app will look for SureShade devices, then list them. Select the appropriate device from the list (Fig. 34A).
- 10. The app will begin making the connection. Tap CANCEL (Fig. 35A), if necessary.



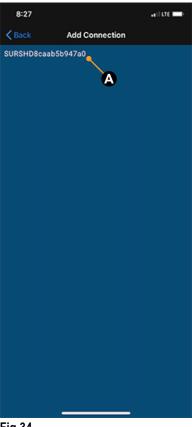




Fig.33

Fig.34

Fig.35

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- 11. If the Connection error message appears, tap OK (Fig. 36A).
- 12. Tap REMOVE SURESHADE (Fig. 37A), then follow the pairing instructions in the USING THE MOMENTARY ROCKER SWITCH section.



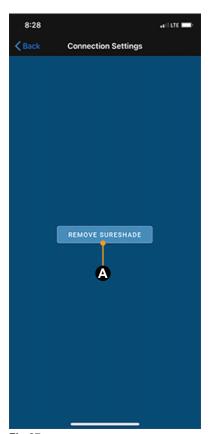
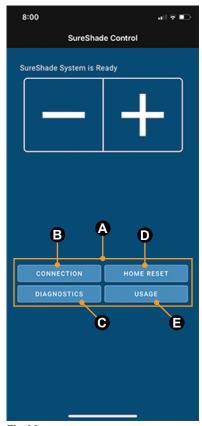


Fig.36 Fig.37



### OPERATING THE ATF-SG SHADE WITH THE SURESHADE APP

- 1. Launch the SureShade Control app from the smart phone.
- 2. The SureShade system control screen with ATF-SG shade control buttons will appear (Fig. 38).
- 3. Tap the plus button (+) (Fig. 39A) to extend the shade.
- 4. Tap the minus button (—) (Fig. 40A) to retract the shade.





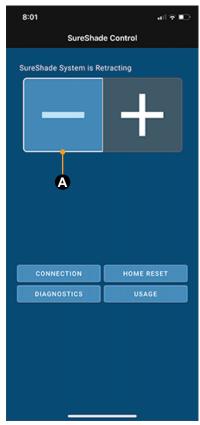


Fig.38

Fig.39

Fig.40

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- 5. Additional app control options are available at the bottom of the app screen (Fig. 38A).
- 6. Tap CONNECTION (Fig. 38B) to change the SureShade device connection setting.
- 7. Tap DIAGNOSTICS (Fig. 38C) for a list of app logs and version (Fig. 41).
- 8. Tap one of the listed options (Version) for additional information (Fig. 42). Tap OK (Fig. 42A) when done.
- 9. Tap <Back (Fig. 41A) to return to the main app screen.

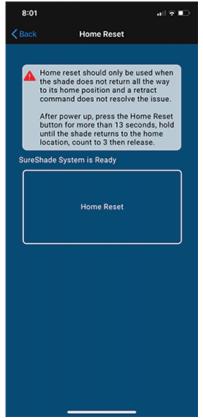




Fig.41 Fig.42



- 10. If the shade fails to retract all the way or a retract command does not work, tap HOME RESET (Fig. 38D).
- 11. Read and follow the Home Reset instructions (Fig. 43).
- 12. Press and hold the Home Reset button (Fig. 44A) as instructed.
- 13. Tap USAGE (Fig. 38E) for information on the use and care (Fig. 30) of the ATF-SG shade.



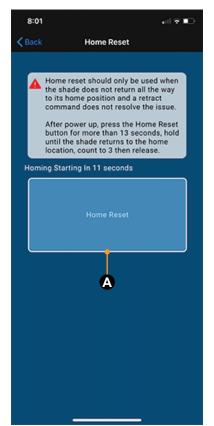


Fig.43 Fig.44

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### **MAINTENANCE**



SureShade recommends following basic care and maintenance of SureShade shade components to maintain peak performance and prolong the life of your sunshade system.

#### REGULAR CLEANING

We recommend using the cleaning product **Nevr-Dull® Magic Wadding Polish** for cleaning SureShade system components. Petroleum-based cleaners and abrasive metal cleaners **should not be used**.

To clean and polish, extend the shade fully and wipe down all components using the Nevr-Dull polish. Then, use a rag to wipe off any excess and polish the tubes.

Clean the shades no less than every other month and perhaps more frequently in saltwater areas and areas with higher-than-average temperatures (e.g., southwest Florida or the Caribbean).

#### **ACTUATOR COLLAR MAINTENANCE**

It may be necessary, as preventive maintenance, to replace the black collar/seals on the actuators every few years to prevent excessive friction while actuators are traveling. Following the recommended cleaning schedule may prolong this period, but replacement will eventually be necessary for continual peak performance.

#### **CANVAS**

### NOTICE

SureShade does not recommend removing canvas from the roller system, as it may be difficult to properly reinstall or may result in damage to the rollers. Under no circumstances should the canvas supplied with any SureShade system ever be placed in a washing machine.

SureShade sunshade systems use Sunbrella\* fabrics for canvas, and we recommend following Sunbrella's basic canvas care and cleaning instructions to prolong the life of the canvas.

Basic canvas care includes:

- General, light cleaning with a hose on a monthly basis with clear water to remove debris.
- A thorough cleaning every 2-3 years, which may include fabric guard and/or mildew treatments.
- Conduct an annual inspection of your canvas to ensure that all threading is intact.
- A pull test on the thread to confirm that threading has not become dry-rotted from the elements.
- Do NOT exceed outer crossbar frame (valance panel/enclosure) maximum weight load limit of 20 lbs.

#### LONG-TERM STORAGE

SureShade sunshade systems are built with quality marine-grade construction and materials; however, just like other parts of your boat, SureShade canvas systems need to be shielded from snow and other harsh winter weather conditions to protect the canvas and mechanical components.

SureShade recommends that customers take proper precautions to avoid damage during winter storage (or ground transportation for winter storage), which include fully retracting and securing the SureShade sunshade system and properly tarping or shrink-wrapping your boat.

Many boaters transport their boats to a storage location or a warmer climate during the winter months. To ensure that the SureShade system is properly transported and to avoid potential damage, visit <a href="https://www.sureshade.com/sureshade-ground-transportation-guide/">www.sureshade.com/sureshade-ground-transportation-guide/</a>.



# **TROUBLESHOOTING**

# TROUBLESHOOTING CHART

What is happening?	Why?	What should be done?
	Boat power not available	Make sure boat's batteries are 100% charged.
		Check current to control box using a multimeter.
	Blown fuse	Inspect 5-amp fuse and make sure it is not blown.
Shade does not extend/retract when switch is pressed	Incorrectly wired	Inspect wiring. Look for loose connections. Make sure
switch's pressed		proper gauge wire is being used.
	—undetermined	Visit: https://www.sureshade.com/service-and-
		technical-documentation/
	Boat battery is not fully charged	Ensure boat's batteries are 100% charged.
Voltage drop when extending/ retracting shade	Incorrect wire is being used	Ensure proper gauge wire is being used per
		ABYC E-11.
	Loose wiring connections	Ensure all wiring connections are tight.
System does not fully open/close Sensor and/or		Visit: https://www.sureshade.com/service-and-
	Sensor and/or motor manufiction	technical-documentation/
Canvas is sagging when shade is retracting	Not enough tension set on roller spring	Unzip canvas from outer crossbar and rotate canvas to
		add more tension. See Pre-Loading the Canvas.
		Visit: https://www.sureshade.com/service-and-
		technical-documentation/

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# **TROUBLESHOOTING**



# TROUBLESHOOTING THE SURESHADE ATF-SG INTELLIGENT CONTROL BOX (ICB)

The SureShade ATF-SG Intelligent Control Box (ICB) is designed so that the shade will not operate at any voltage under 10V at start-up of the shade. During operation of the shade, if the voltage drops below 9V, the shade will shut down.

#### IF THE SHADE DOES NOT OPERATE

In the event the shade either does not operate at start-up or it shuts down during operation, the **FIRST STEP** in troubleshooting is to **ALWAYS CONFIRM VOLTAGE AT THE ICB**:

- 1. Locate the ICB in the vessel.
- 2. Observe the status LED. If it is solid yellow voltage is below 9-volts DC.

The ICB also contains a number of additional indicators via status LED light to aid in troubleshooting efforts.

During normal operation, once the controller receives a signal from the switch or remote and the **shade starts to move**, the status LED light will turn **YELLOW**. Once the shade is either **fully deployed**, **fully retracted to home position or senses some significant obstruction**, the status LED will turn **RED**. When the controller is not receiving a signal to move (i.e. the shade is idle), the status LED light will be **GREEN**.

<b>LED Light Color</b>	Indication	Action Required
Green	Controller is ready to operate	None — Shade is operable
Blinking Yellow	Rocker switch fault	Troubleshooting needed
Solid Yellow	Low voltage (<9VDC)	Check power supply
Blinking Red	Bad encoder signal	Troubleshooting needed
1 Red Blink	Bad encoder signal on the PORT actuator	Troubleshooting needed
2 RED BLINKS	Bad encoder signal on the STBD actuator	Troubleshooting needed
3 RED BLINKS	Bad encoder signal on both actuators	Troubleshooting needed
7 RED BLINKS	Indicates shade racked	Hard home reset required

**NOTE:** This fault does not confirm that the encoder is either good or bad, just that there is a communication issue. There is a faulty power/signal connection between the ICB and the encoder and therefore the ICB will not operate. Further troubleshooting is required.

#### "FORCE HARD HOME" RESET

In the event the shade does not return all the way to its home position and a retract command does not resolve this issue, a "force hard home" action can be initiated on a new shade. After power-up, press both movement buttons simultaneously on the remote, the ICB or on the switch input for more than 10 seconds and hold until the shade returns to the home location.

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S	SURE <b>SHADE</b> EXTENDING THE EXPERIENCE

# **NOTES**



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