



# **1000 Series Power Bimini System** Installation and **Owner's Manual**

(For Aftermarket Applications)

1

### **Table of Contents**

Introduction	. 2
Safety	. 2
Parts List	. 3
Resources Required	. 4
Preparation	
Removal of Manual Bimini Frame	
Installation	
Actuators and Bimini Frame	
Touch-sensitive Controller	
Touch-sensitive Controller and Nose Mount Cap	13
Wiring Diagram - Touch-sensitive Controller	15
Battery Receiver - if so equipped	16
Wiring Diagram -	19
Battery Receiver	19
Battery Receiver—Electrical Connections Test	20
Canvas Top	20
Securing Straps	21
Bimini Top Positions	22
Fully Closed (Down)—Towing Position	22
Vari-pitch—For Water Use Only	22
Radar—For Water Use Only Fully Opened (Up)—For Water Use Only	22 23
Operation	23
Touch-sensitive Controller—if so equipped	23 23
Using the Bluetooth Compatible App	23 24
Quick Connect (QC) Rechargeable Battery - if so	24
equipped	38

Complete System Assembly Kits			
Part #	Description		
2023036909	Black - No Canvas		
2024050705	Black - Beige Canvas		
2024050706	Black - Gray Canvas		
2024050707	Black - Navy Blue Canvas		
2024050708	Black - Black Canvas		
2023036908	Silver - No Canvas		
2024050709	Silver - Beige Canvas		
2024050710	Silver - Gray Canvas		
2024050713	Silver - Navy Blue Canvas		
2024050714	Silver - Black Canvas		

Charging the Battery	39
Troubleshooting	40
Manual Override	41
Maintenance	42
Actuator	
Fabric Care	
Trailering (Towing)	42
Storage or Storm Position	42
Winter Storage	42
Notes	43



Installation and Owner's Manual

(For Aftermarket Applications)

### Introduction

The SureShade<sup>™</sup> Bimini System with Quick Connect (QC) wiring is an electric actuator-driven bimini top powered by a connection to the boat's power or an optional 20V DC rechargeable battery. The system can be operated by the two-button touch-sensitive controller or with a Bluetooth<sup>®</sup> compatible app.

- A basic power bimini system with a touch controller, or if selected with a rechargeable battery pack, consists of all necessary components except for a canvas top and protective boot.
- Complete power bimini systems, with or without a Quick Connect (QC) Battery Pack, come with the selected canvas color and matching protective boot.
- The selected SureShade<sup>™</sup> Bimini System, with or without a Quick Connect (QC) Battery Pack, is designed to be installed onto a pontoon boat that has never had a bimini system installed or to replace an existing manual bimini system.

Additional information about this product can be obtained from <u>lci1.com/support</u> or by using the LippertNOW app. Replacement kits can be ordered from <u>https://store.lci1.com/</u> or by using the LippertNOW app.

The LippertNOW app is available for free on Apple App Store<sup>®</sup> for iPhone<sup>®</sup> and iPad<sup>®</sup> and also on Google Play<sup>™</sup> for Android<sup>™</sup> users.

App Store<sup>®</sup> and iPad<sup>®</sup> are registered trademarks of Apple Inc.

Google Play<sup>™</sup> and Android<sup>™</sup> are trademarks of Google Inc.

For information on the assembly or individual components of this product, please visit:

https://support.lci1.com/sureshade-power-bimini .

A product installation video is available for viewing at:

https://support.lci1.com/videos/sureshade-power-biminiwith-quick-connection-installation

**NOTE:** Images used in this document are for reference only when assembling, installing and/or operating this product. Actual appearance of provided and/or purchased parts and assemblies may differ.

### Safety

Read and fully understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/ or property damage, including voiding of the Lippert limited warranty.

# **A**WARNING

THE "WARNING" SYMBOL ABOVE IS A SIGN THAT A SAFETY RISK IS INVOLVED AND MAY CAUSE DEATH OR SERIOUS PERSONAL INJURY AND/ OR SEVERE PRODUCT OR PROPERTY DAMAGE IF NOT ADHERED TO SAFELY AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL.

# **A**WARNING

DO NOT FULLY OPEN THE BIMINI FRAME WITHOUT THE CANVAS TOP INSTALLED WHEN TESTING PRODUCT FOR PROPER OPERATION. OPENING THE BIMINI FRAME WITHOUT THE CANVAS TOP INSTALLED WILL RESULT IN SEVERE PRODUCT DAMAGE. ONLY FULLY OPEN THE BIMINI FRAME WITH THE CANVAS TOP INSTALLED.

# A CAUTION

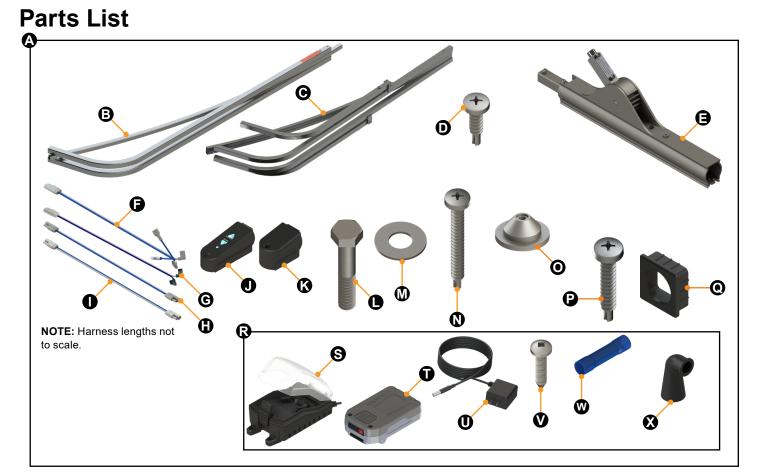
THE "CAUTION" SYMBOL ABOVE IS A SIGN THAT A SAFETY RISK IS INVOLVED AND MAY CAUSE PERSONAL INJURY AND/OR PRODUCT OR PROPERTY DAMAGE IF NOT SAFELY ADHERED TO AND WITHIN THE PARAMETERS SET FORTH IN THIS MANUAL.

# **A** CAUTION

ALWAYS WEAR APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE) WHEN PERFORMING SERVICE, MAINTENANCE OR INSTALLATION PROCEDURES.



Installation and Owner's Manual (For Aftermarket Applications)



Complete Bimini System - QC Battery Pack Kit			
Letter	PN	Description Qt	
Kit-A	2021133084	Frame System - NC (Silver)	1
	2021133085	Frame System - NC (Black) 1	
В	<u>859602</u>	Front Frame Assy (Silver) 1	
	<u>859605</u>	Front Frame Assy (Black)	1
С	<u>859603</u>	Rear Frame Assy (Silver)	1
	<u>859606</u>	Rear Frame Assy (Black)	1
D	<u>853955</u>	Screw, #8-18 x 1/2" PH SLFDR	10
E	<u>861675</u>	Actuator, 1 1/4" (Silver) 2	
	<u>861676</u>	Actuator, 1 1/4" (Black) 2	
F	<u>2020328732</u>	Controller Harness, 27"	1
G	<u>2020328733</u>	Actuator Harness, 27"	1
Н	2021130356	Side Frame Wire Harness, 7'	2
Ι	2021130357	Center Wire Harness, 7'	1
J	<u>2020329389</u>	Touch Controller	1

Complete Bimini System - QC Battery Pack Kit			
Letter	PN	Description	
K	<u>2021010666</u>	Nose Mount Cap	1
L	<u>853951</u>	Bolt, 5/16"-18 x 1 3/4" Hex	4
М	<u>853952</u>	Washer, 5/16" Flat 4	
Ν	2021106700	Screw, #8-18 x 1 1/2" PH SLFDR 2	
0	853486	Standoff Location Button 2	
Р	<u>853959</u>	Screw, #8-18 x 1" PH SLFDR 2	
Q	853976	End Cap 2	
R	<u>2021131539</u>	Bimini Battery Kit (optional) 1	
S	2021099702		
Т	<u>2021131294</u>	Battery, 20V, Rechargeable 2	
U	2021131295	5 Wall Charger, 20V Battery 1	
V	381473	Screw, #10-12 x 1" PNH SQD 3	
W	853982	Butt Conn., Insul., 14-16 AWG	2
Х	2023001135	Strain Relief Elbow, Flared	1

NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale.

All parts with a link to the Lippert Store can be purchased.

Optional Kit R is only included when Kit-A is purchased with a Battery Pack Kit.

3



Installation and Owner's Manual (For Aftermarket Applications)

### **Resources Required**

 1-2 persons, depending on task

· Electric or cordless drill or

- <sup>1</sup>/<sub>2</sub>" wrench
- %16" wrench

Wire crimper

- Wire cutter
- Wire stripper
- #2 Phillips drive bit#3 square drive bit

screw gun

5/32" hex wrench

### Preparation

#### **Removal of Manual Bimini Frame**

If an installed manual bimini system (Fig.1) is being replaced, do as follows:

#### Fig.1

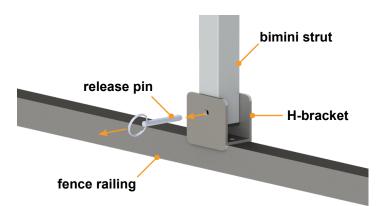
**1.** For ease of removal, retract the manual bimini into its fully closed position (Fig.2).



#### Fig.2

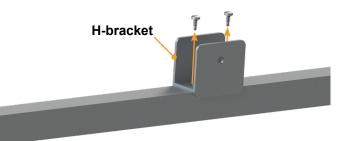
**2.** Remove all bimini frame struts from their H-brackets (Fig.3).

**3.** With assistance, lift the bimini frame off of the boat and set aside.



#### Fig.3

4. Remove all H-brackets from the fence railing (Fig.4).





### Installation

#### Actuators and Bimini Frame

When installing the complete power bimini system onto the boat's railing:

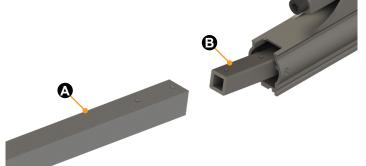
- If being used, make sure the 20V rechargeable battery is fully charged. Refer to Charging the Battery section.
- While facing the bow (front) of the boat from the helm, there is a starboard—right-handed (RH)—and a port—left-handed (LH)—actuator.
- The starboard actuator is pre-wired to the touch controller.
- Both actuators will be electrically connected by a wire harness installed through the rear frame assembly.



Installation and Owner's Manual (For Aftermarket Applications)

**1.** Insert the starboard rear frame assembly (Fig.5A) over the starboard actuator's rear handle (Fig.5B). Do **NOT** secure frame to actuator with screws at this time.

**NOTE:** Actuator electrical harness not shown for clarity.



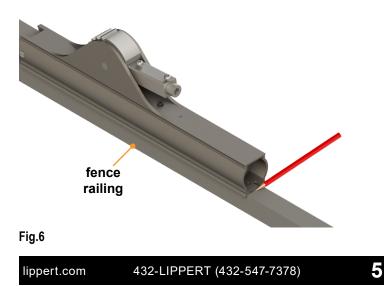
#### Fig.5

**2.** Place the starboard frame-actuator assembly onto the boat's fence railing.

**A.** Proper position is generally determined by locating the assembly so that when the top is down, the struts are just behind the rear seats. Too far forward and the top will interfere with rear seating; while too far aft will provide less shade to the front of the boat.

**B.** When properly positioned, use a pencil and trace a line across the front of the actuator (Fig.6).

**3.** Repeat step 2 for the port actuator and port rear frame assembly.



**4.** Put a tape measure on the pencil line made in previous steps 2 and 3.

**A.** Measure back  $\frac{1}{2}$ " and  $16-\frac{1}{2}$ " and mark (Fig7).

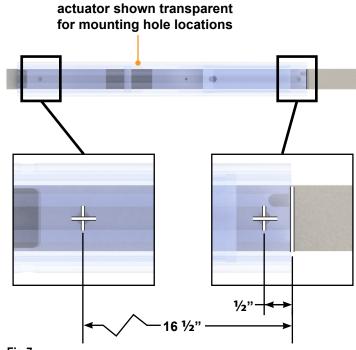
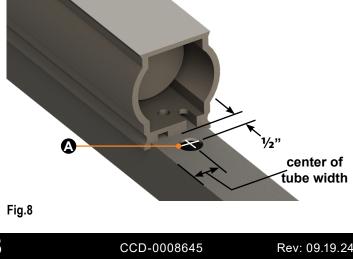


Fig.7

**B.** From the edge of the starboard actuator **ONLY**, measure out <sup>1</sup>/<sub>2</sub>" and mark at the center of the railing's width to locate the controller's wire access hole location (**Fig.8A**).





Installation and Owner's Manual (For Aftermarket Applications)

**C.** Set the actuators and frames aside.

# A CAUTION

DO NOT DRILL THROUGH EXISTING ELECTRICAL WIRING. DRILLING THROUGH EXISTING ELECTRICAL WIRING CAN RENDER SOME COMPONENTS INOPERABLE. SOME BOATS HAVE WIRES RUNNING THROUGH THE RAILING. DRILL HALF WAY THROUGH AND INSPECT FOR EXISTING WIRING. MAKE SURE YOU ARE CLEAR OF ANY WIRES.

**D.** Use a drill with a  $\frac{3}{8}$ " bit to drill both holes in the center of the frame at the previously marked locations (step A) (Fig.7).

**NOTE:** These holes need to go all of the way through the rear frame tube.

E. Repeat step D for the port-side actuator hole locations.

**F.** On the **starboard** railing **ONLY**, use a drill with a  $\frac{1}{2}$ " bit to drill one hole in the top, center of the frame (**Fig.8A**) at the previously marked location (step B) (**Fig.8**).

**NOTE:** This hole only goes through the top wall of the tube, **NOT** all of the way through the tube.

**5.** Assemble the supplied  $\frac{5}{16}$ " flat washer (Fig.10A) onto the supplied  $\frac{5}{16}$ "-18 x 1  $\frac{3}{4}$ " hex bolt (Fig.10B).

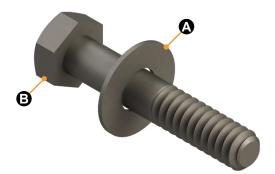


Fig.9

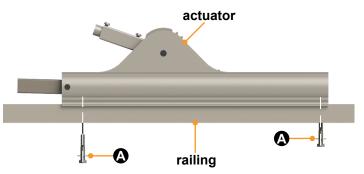
### **A**CAUTION

DO NOT CUT OR NICK ANY ELECTRICAL WIRE INSULATION. CUT OR NICKED WIRE INSULATION CAN EXPOSE BARE WIRE TO CORROSION AND/OR AN ELECTRICAL SHORT RESULTING IN A LOSS OF POWER.

**6.** Install the starboard actuator on top of the fence railing where the dry-fit markings were made (step 4) (**Fig.7**).

**NOTE:** Use care to keep the touch controller wire harness inside of the wire channel to prevent any pinching, crimping or cutting of the wires.

**7.** Install assembled bolts (**Fig.10A**) into the previously drilled bottom holes of the railing and thread into the actuator.



#### Fig.10

**8.** Use a  $\frac{1}{2}$ " wrench on the bolts to fasten down the actuator assembly to the railing.

9. Repeat steps 5-8 to install and secure the port actuator.

**10.** Install starboard/port frame wire harnesses and starboard/port rear frame assemblies.

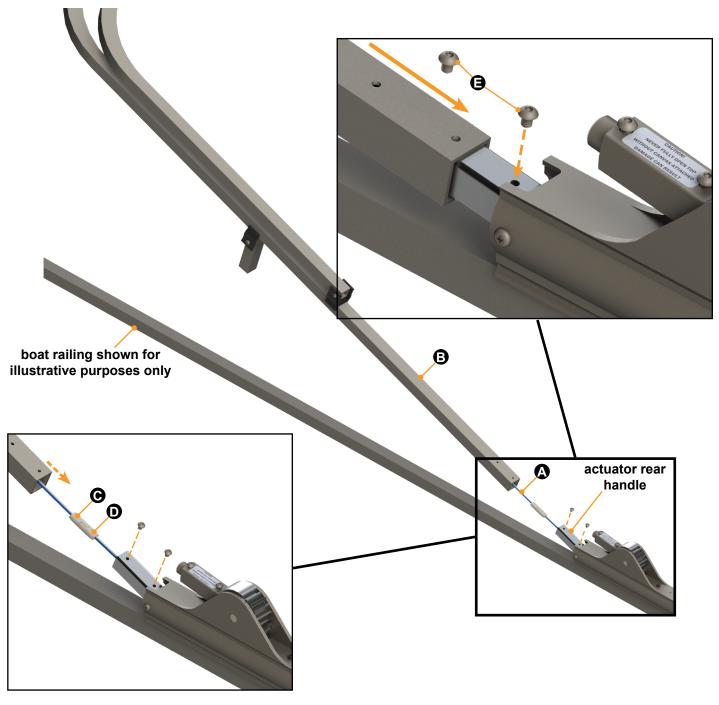
**A.** Run a starboard frame wire harness (Fig.11A) through the starboard rear frame assembly (Fig.11B).

**B.** Connect the bottom end of the side frame wire harness (Fig.11C) to the starboard actuator wire harness (Fig.11D).

**C.** Slip the starboard rear frame assembly over the starboard actuator's rear handle—using care not to pinch any electrical wires.



Installation and Owner's Manual (For Aftermarket Applications)



7



Installation and Owner's Manual (For Aftermarket Applications)

**D.** Use a  $\frac{5}{32}$ " hex wrench to secure the frame in-place with two  $\frac{1}{4}$ "-20 x  $\frac{5}{16}$ " provided screws (Fig.11E).

**11.** Repeat steps 10.A-D to install the port frame wire harness, port rear frame assembly and to secure the port actuator to the railing.

12. Install center wire harness and connecting bows.

## **A**CAUTION

DO NOT PINCH, CUT OR NICK ANY ELECTRICAL WIRE INSULATION. PINCHED, CUT OR NICKED WIRE INSULATION CAN EXPOSE BARE WIRE TO CORROSION AND/OR AN ELECTRICAL SHORT RESULTING IN A LOSS OF POWER.

**A**. Feed one end of the center wire harness (Fig.12A) through a center connecting bow (Fig.12B) until enough harness extends at both ends for connecting to the starboard and port side frame harnesses.

**B.** Connect the starboard and port ends of the center wire harness to the starboard (Fig.12C) and port frame wire harnesses respectively.

**C.** Slip the center connecting bow (**Fig.12D**) into the starboard (**Fig.12E**) and port rear frame struts.

**NOTE:** Use care when inserting a center bow into the rear frame struts to avoid pinching or cutting any wires.

**D.** Slip a center connecting bow into the starboard and port middle frame struts (Fig.12).

**E.** Make sure the center bows are evenly adjusted to accommodate the width of the boat such that the center bows do not pull in or push out on the struts.

**F.** Fasten all struts and bows together with the provided #10 self-drilling Phillips screws (Fig.12F).

**I.** Install one screw on each starboard and port rear strut where shown in figure 12.

**II.** Install two screws on each starboard and port middle strut where shown in figure 12.

**G.** Slip the starboard front frame (Fig.13A) over the starboard actuator's gear handle (Fig.13B).

**I.** Use a  $\frac{5}{32}$ " hex wrench to secure the frame in-place with two  $\frac{1}{4}$ "-20 x  $\frac{5}{16}$ " provided screws (Fig.13C).

**II.** Repeat this step to secure the port front frame over the port actuator's gear handle.

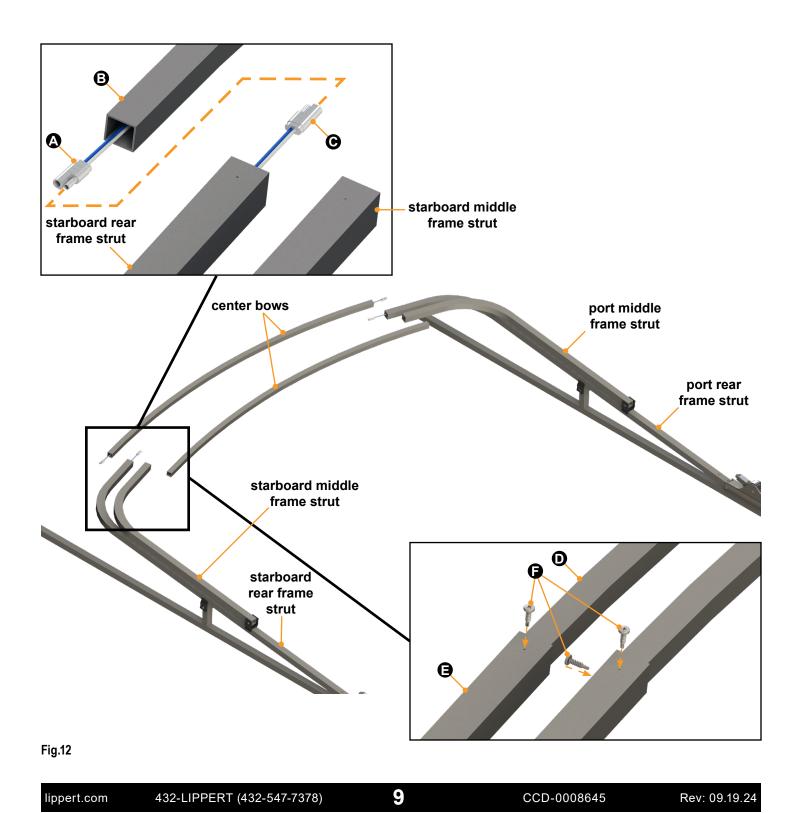
**H.** Insert a center connecting bow (**Fig.14A**) into the starboard and port front frame struts (**Fig.14**).

**I.** Make sure the center bow is evenly adjusted to accommodate the width of the boat such that the center bow does not pull in or push out on the struts.

**II.** Install one #10 self-drilling Phillips screw (**Fig.14B**) on each starboard and port front strut where shown in figure 14.

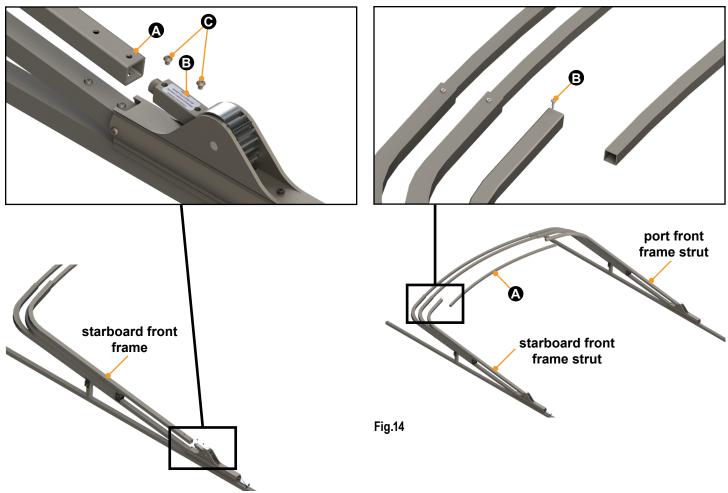


Installation and Owner's Manual (For Aftermarket Applications)





Installation and Owner's Manual (For Aftermarket Applications)

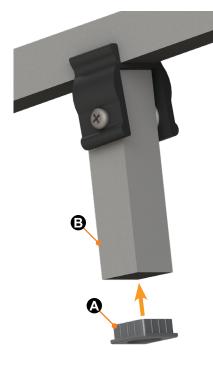




### **1000 Series Power Bimini System** Installation and Owner's Manual

(For Aftermarket Applications)

I. Insert end cap (Fig.15A) into bottom of standoff (Fig.15B).

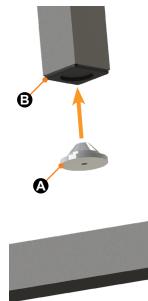


#### Fig.15

Fig.16

lippert.com

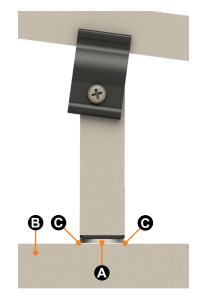
J. Insert locator button (Fig.16A) into end cap (Fig.16B).



432-LIPPERT (432-547-7378)

**K.** Lower frame assembly until locator button (Fig.17A) rests flat on the boats fence rail (Fig.17B).

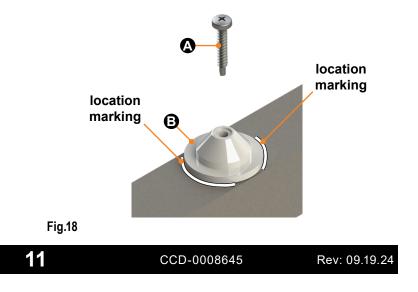
**L.** Use a pencil to mark the outer edge of the locator button on the fence rail (Fig.17C).



#### Fig.17

**M.** Raise frame assembly to separate the standoff from the locator button. Provide enough clearance for the use of a drill or screw gun.

**N.** Use an electric drill or screw gun to install the self-drilling #8-18 x 1" Philips pan head screw (**Fig.18A**) into the locator button (**Fig.18B**) to secure the button in-place.





Installation and Owner's Manual (For Aftermarket Applications)

**O.** Lower frame assembly until the standoff's end cap securely engages the locator button.

**I.** The end cap's locator hole should fully engage the locator button.

II. The end cap should rest flat against the locator.

III. Adjust locator button if necessary.

**P.** Repeat steps I-O to install second locator button and end cap.

# **A**CAUTION

DO NOT ENERGIZE THE SYSTEM DURING INSTALLATION. AN ENERGIZED SYSTEM DURING INSTALLATION CAN CAUSE PRODUCT AND/OR PERSONAL INJURY. REMOVE RECHARGEABLE BATTERY FORM BATTERY RECEIVER BEFORE INSTALLING THE ELECTRICAL HARNESS TO AVOID POSSIBLE PRODUCT AND/OR PERSONAL INJURY.

#### **Touch-sensitive Controller**

The touch-sensitive controller requires an electrical connection to the starboard actuator wire harness, to the boat's electrical power source and physical attachment to the boat's railing.

If the starboard and port actuators arrive prewired with blue and white harness wires, inspect to make sure the blue wire is fully connected to the motor's blade terminal indicated by a red dot and the white wire is fully connected to the motor's opposite blade terminal.

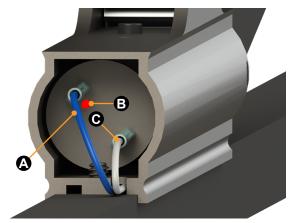
If the starboard and port actuators are **NOT** prewired, follow steps 1-10 to fully connect the two wire harnesses.

The starboard actuator wire harness has an extra set of blue and white wires for connecting to the touch-sensitive controller; the port actuator wire harness does **NOT**.

NOTE: Refer to figure 26 for electrical connections.

**1.** Connect the blue wire (**Fig.19A**) from the port actuator wire harness to the actuator motor's spade terminal indicated by a red dot (**Fig.19B**) on the motor.

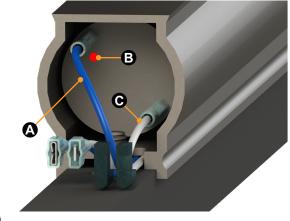
**2.** Connect the white wire from the port actuator wire harness to the other spade terminal on the actuator motor.



#### Fig.19

**3.** Connect the blue wire (**Fig.20A**) from the starboard actuator wire harness to the actuator motor's spade terminal indicated by a red dot (**Fig.20B**) on the motor.

**4.** Connect the white wire (**Fig.20C**) from the starboard actuator wire harness to the other spade terminal on the actuator motor.

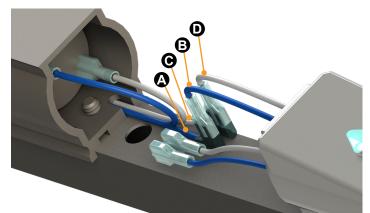




Installation and Owner's Manual (For Aftermarket Applications)

**5.** Connect the 2nd blue wire from the starboard actuator wire harness (Fig.21A) to the blue wire from the touch-sensitive controller (Fig.21B).

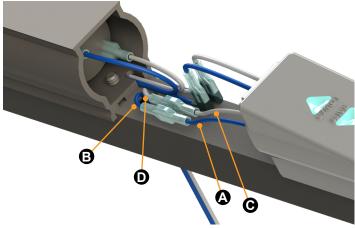
**6.** Connect the 2nd white wire from the starboard actuator wire harness (**Fig.21C**) to the white wire from the touch-sensitive controller (**Fig.21D**).



#### Fig.21

**7.** Connect the 2nd blue wire from the touch-sensitive controller (**Fig.22A**) to the blue wire from the circuit protector (6 amp short stop breaker) (**Fig.22B**) harness.

**8.** Connect the 2nd white wire from the touch-sensitive controller (**Fig.22C**) to the white wire from the circuit protector (6 amp short stop breaker) (**Fig.22D**) harness.



**9.** Connect a blue wire from the helm harness (**Fig.23A**) to OEM-supplied circuit protection—per ABYC code.

**10.** Connect the white wire from the helm harness (Fig.23B) to the boat battery's negative (—) (ground) terminal.

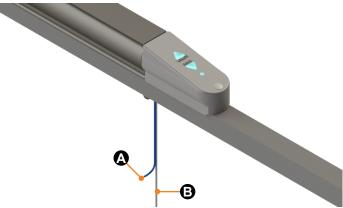


Fig.23

#### **Touch-sensitive Controller and Nose Mount Cap**

1. Attach the touch-sensitive controller (Fig.24A) as follows:

### **A**CAUTION

DO NOT PINCH, CUT OR NICK ANY ELECTRICAL WIRE INSULATION. PINCHED, CUT OR NICKED WIRE INSULATION CAN EXPOSE BARE WIRE TO CORROSION AND/OR AN ELECTRICAL SHORT RESULTING IN A LOSS OF POWER.

**A.** Carefully tuck excess harness wires into the open end of the touch-sensitive controller and starboard actuator.

**NOTE:** Use care when tucking harness wires into the touch-sensitive controller and starboard actuator to avoid pinching or cutting the harness wires.

**B.** Install the touch-sensitive controller into the end of the starboard actuator (Fig.24B) while aligning the controller's base with the top of the boat's starboard fence railing (Fig.24C).

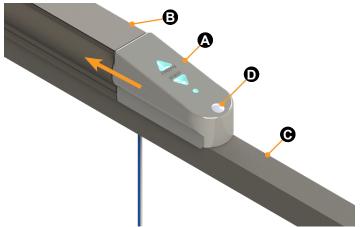
**C.** Remove the protective cap (Fig.24D) over the touch-sensitive controller's mounting hole.



Installation and Owner's Manual (For Aftermarket Applications)

**D.** Fasten the front of the touch-sensitive controller to the boat's starboard railing with the provided  $#8-18 \times 1 \frac{1}{2}$ " Phillips self-drilling screw.

**E.** Reinstall the previously removed (step C) protective cap over the mounting screw.



#### Fig.24

2. Attach the nose mount cap (Fig.25A) as follows:

**A.** Carefully tuck excess harness wires into the open end of the nose mount cap and port actuator.

### **A**CAUTION

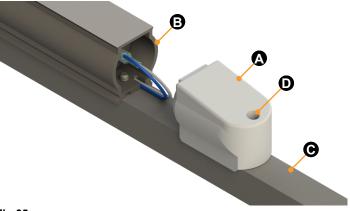
DO NOT PINCH, CUT OR NICK ANY ELECTRICAL WIRE INSULATION. PINCHED, CUT OR NICKED WIRE INSULATION CAN EXPOSE BARE WIRE TO CORROSION AND/OR AN ELECTRICAL SHORT RESULTING IN A LOSS OF POWER.

**NOTE:** Use care when tucking harness wires into the nose mount cap and port actuator to avoid pinching or cutting the harness wires.

**B.** Install the nose mount cap into the end of the port actuator (Fig.25B) while aligning the cap's base with the top of the boat's port fence railing (Fig.25C).

**C.** Remove the protective cap over the nose mount's mounting hole (Fig.25D).

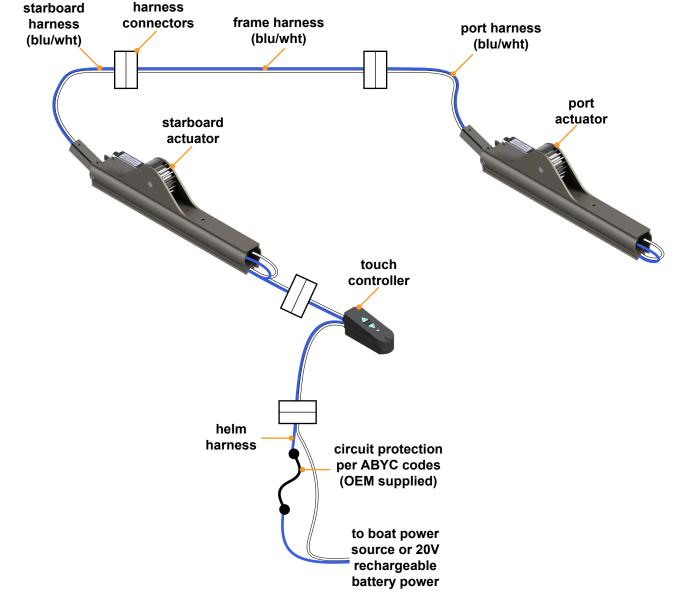
**D.** Fasten the front of the nose mount cap to the boat's port fence railing (Fig.25C) with the provided  $#8-18 \times 1 \frac{1}{2}$ " Phillips self-drilling screw.





Installation and Owner's Manual (For Aftermarket Applications)

### Wiring Diagram - Touch-sensitive Controller





Installation and Owner's Manual (For Aftermarket Applications)

#### **Battery Receiver - if so equipped**

The touch-sensitive controller requires an electrical connection to the battery receiver's power cable.

**NOTE:** If the rechargeable battery is plugged into the battery receiver, remove the battery before installing.

Install the battery receiver and power cable as follows:

**1.** Locate and mount the battery receiver by the helm as far forward as possible and clear of any walking path or door.

**2.** Position the hinged rear of the battery receiver with enough clearance for the power cord to travel up towards the touch controller without the harness being pinched. Make sure the battery receiver lid has enough room to open for ease of access to the rechargeable 20V, 2.0 Ah battery.

**3.** Use a #3 square drive bit with the three supplied #10-12 UNC screws (**Fig.27A**) to secure the battery receiver (**Fig.27B**).

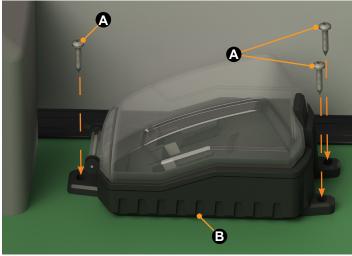


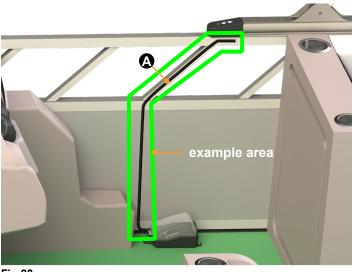
Fig.27

### **A**CAUTION

DO NOT REMOVE ANY PORTION OF THE BACKING TAPE PRIOR TO FINAL INSTALLATION. EXPOSURE TO CONTAMINANTS CAN MAKE THE ADHESIVE TAPE INEFFECTIVE.

**4.** Dry-fit the power cord and foam tubing (**Fig.28A**) from the battery receiver, up the fence, along the side of the railing and through the side wire-access hole to the touch-sensitive controller. See figure 28 for example area.

**NOTE:** The battery receiver comes with pre-installed foam tubing around the power wires. The foam tubing has an adhesive protective backing tape. Do **NOT** remove the tape until final installation.



#### Fig.28

**5.** Make sure there is enough battery receiver power cord length to allow for trimming and still reach the touch-sensitive controller's wiring.

**6.** When the proper length of battery receiver power cord has been determined, cut the cord to the determined length.



Installation and Owner's Manual (For Aftermarket Applications)

### **A**CAUTION

DO NOT CUT OR NICK ANY ELECTRICAL WIRE INSULATION. CUT OR NICKED WIRE INSULATION CAN EXPOSE BARE WIRE TO CORROSION AND/OR AN ELECTRICAL SHORT RESULTING IN A LOSS OF POWER.

**A.** Carefully trim away the outer, protective foam tubing at the location where the tubing will meet up against the underside of the fence railing at the wire access hole. Do **NOT** cut or nick any insulation covering the interior wires.

**B.** Form the exposed wires into a hook shape (Fig.29) so they will feed successfully through the elbow shroud.



#### Fig.29

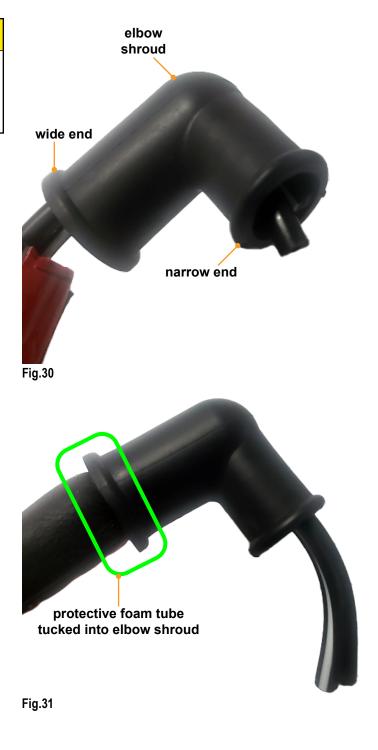
**I.** Feed the wires all the way through the elbow shroud from the wide end to the narrow end **(Fig.30)**.

**II.** Pull the wires taut on the narrow end of the elbow shroud to snug the elbow against the foam tube.

**III.** Tuck the cut end of the foam tube into the elbow shroud for neatness and protection (**Fig.31**).

**C.** Thread the battery receiver cord power wires up through the side fence railing's wire access hole (**Fig.32**).

**D.** Tuck the narrow end of the elbow shroud into the wire access hole of the fence's railing (Fig.33A).



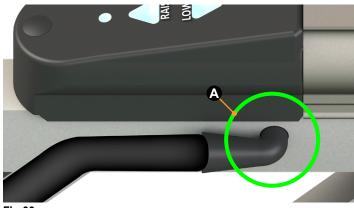
17



Installation and Owner's Manual (For Aftermarket Applications)



Fig.32



#### Fig.33

**7.** Inspect the dry-fit route (step 4) for the battery receiver harness to make sure all of the surfaces are dry and free of oils, dirt and grime. If necessary, clean all harness route surfaces.

### **A**CAUTION

EXPOSURE TO CONTAMINANTS CAN MAKE THE ADHESIVE TAPE INEFFECTIVE. USE CARE WHEN REMOVING ANY PORTION OF THE BACKING TAPE.

8. Remove the adhesive backing tape from the foam tubing.

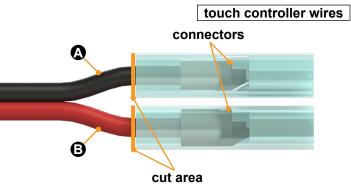
**A.** Carefully retrace the dry-fit route (step 4) with the adhesive backing of the foam tubing.

**B.** Make sure to press firmly and evenly along the length of the cord so that the adhesive backing tape takes hold.

**9.** Prepare cord power wires for connection.

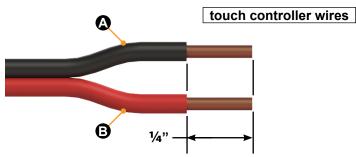
**NOTE:** Refer to Wiring Diagram - Battery Receiver (Fig.39) for electrical connections

**A.** Use a wire cutter to cut the connectors off of the touch controller's black (-) (Fig.34A) and red (+) (Fig.34B) wires where indicated (orange cut line).



#### Fig.34

**B.** Use a wire stripper to remove <sup>1</sup>/4" of insulation (Fig.35) from the ends of the black (-) (Fig.35A) and red (+) (Fig.35B) wires.



#### Fig.35

**C.** With the battery receiver cord power wires threaded up through the fence railing's wire access hole, use a wire stripper to remove 1/4" of insulation from the ends of the black (-) (Fig.36A) and black/white (+) (Fig.36B) wires.

D. Slip a butt connector (Fig.37A) over each bare wire.

**E.** Use a crimping tool to crimp each butt connector's metal sleeve (green crimp area) onto the bare wire (Fig.37).



Installation and Owner's Manual (For Aftermarket Applications)

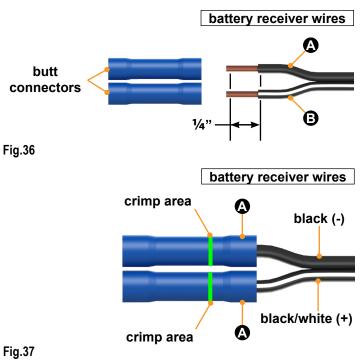
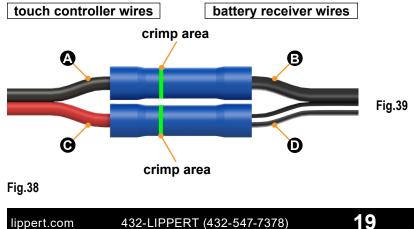


Fig.37

F. Insert the touch controller's black (-) (Fig.38A) wire into the butt connector on the battery receiver's black (-) (Fig.38B) wire.

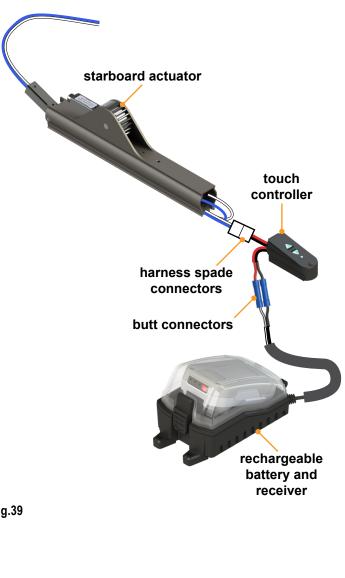
G. Insert the touch controller's red (+) (Fig.38C) wire into the butt connector on the battery receiver's black/white (+) (Fig.38D) wire.

**H.** Use a crimping tool to crimp each butt connector's metal sleeve (green crimp area) onto the two bare wires (Fig.38).



**NOTE:** If desired, the butt connectors can be heat shrunk at this time to further protect the electrical connections from possible corrosion or disconnect.

# Wiring Diagram -**Battery Receiver**



CCD-0008645

Rev: 09.19.24



Installation and Owner's Manual (For Aftermarket Applications)

#### **Battery Receiver—Electrical Connections Test**

Before completing the installation of the QC battery pack, test the previously made electrical wire harness connections.

**1.** Check the power level of the rechargeable battery. See Operation section, Quick Connect (QC) Rechargeable Battery sub-section.

2. Insert a fully charged battery into the receiver (Fig.40).



#### Fig.40

**3.** Press and momentarily hold the touch controller's **RAISE** button (**Fig.41A**) until the bimini frame begins to rise.

**A.** If the bimini frame does **NOT** rise, release the button and remove the battery from the receiver.

I. Check the battery for charge level.

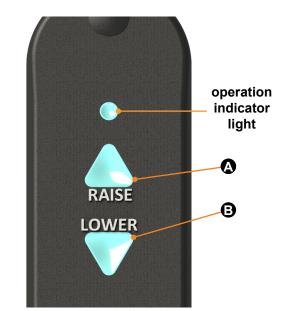
**II.** Check all electrical connections to make sure they are secure—not loose.

**III.** Inspect all wires for pinched, nicked or cut electrical wires.

**IV.** If necessary, charge battery, re-secure loose electrical connections and/or replace damaged electrical wire harnesses.

**B.** If the bimini frame rises, release the button.

**C.** Press and hold the touch controller's **LOWER** button (Fig.41B) until the bimini frame fully retracts to its fully closed position. See Bimini Top Positions section.



#### Fig.41

#### **Canvas Top**

The SureShade 1000 Series Power Bimini System with QC Battery Pack being installed is fully compatible with Lippert canvas and high speed mesh tops. Using other market tops may not be fully compatible with this bimini system, resulting in an improperly installed top that may cause poor bimini performance.

The previously removed, compatible top or the top that came with the new system, can be installed as follows: **1.** Make sure electrical power sources to the boat are fully charged.

### **A**CAUTION

DO NOT POWER ACTUATORS TO THE FULL OPEN POSITION WITHOUT CANVAS INSTALLED. DAMAGE MAY OCCUR.

**2.** Use the installed controller device to position the bimini frame into a partially raised position.

**3.** Unzip the rear, middle and front mounting pockets of the canvas top.

4. Place the canvas top over the bimini frame.

**NOTE:** The rear of the canvas top has an access hole for a mounted mast light. On newer canvas tops, the front of the top has a zippered storage pouch that is separate from the top's front zippered mounting pocket.

20



Installation and Owner's Manual (For Aftermarket Applications)

**5.** If a mast light is attached to the rear frame's bow, slip the canvas top's access hole over the light, then spread the top outward; aligning the rear zippered pouch over the bimini's rear bow frame.

**6.** Zip the rear canvas top pocket closed over the rear bimini frame bow.

**7.** Pull the middle zippered pocket of the canvas top over the middle frame bow, then zip it closed.

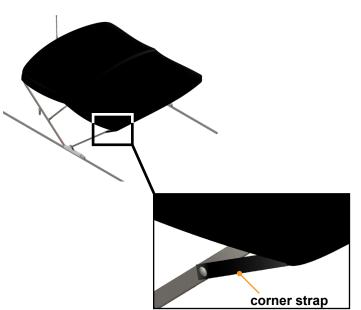
**8.** Pull the front zippered pocket of the canvas top over the front frame bow, then zip it closed.

#### **Securing Straps**

Corner securing straps are provided to prevent undue billowing of the canvas top and for the attachment of accessories. Securing straps also prevent undue billowing of the canvas top when installing the boot.

**1.** Corner securing straps are located at aft and bow port and starboard frame corners.

**2.** Start at one canvas corner and tightly pull and wrap the securing strap around the bimini top strut and snap in-place (**Fig.42**). Repeat procedure as necessary for each securing strap.





Installation and Owner's Manual (For Aftermarket Applications)

### **Bimini Top Positions**

# **A WARNING**

DO NOT TRAILER OR TOW THE BOAT WITHOUT THE PROTECTIVE BOOT PROPERLY INSTALLED ON THE TOP AND WITHOUT THE TOP IN ITS FULL DOWN POSITION. TRAILERING OR TOWING THE BOAT WITHOUT THE TOP IN ITS FULL DOWN POSITION AND WITHOUT THE PROTECTIVE BOOT PROPERLY INSTALLED CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

# **A WARNING**

DO NOT OPEN OR OPERATE THE TOP IN EXCESSIVELY HIGH WINDS. HAVING THE TOP OPEN OR OPERATING THE TOP IN HIGH WINDS, REGARDLESS IF THE BOAT IS IN MOTION OR ANCHORED, CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

Fully Closed (Down)—Towing Position

Install protective boot.

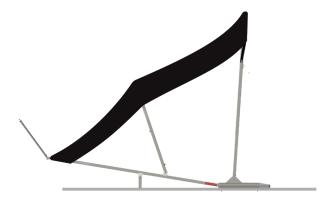


#### Vari-pitch—For Water Use Only

Remove protective boot.

Maximum water speed limit 5 MPH.

Used for improved shade protection from late-day sun.



#### Radar—For Water Use Only

Install protective boot. Maximum water speed limit 50 MPH. **NOT** for trailering or towing.

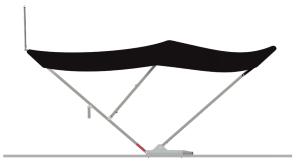




Installation and Owner's Manual (For Aftermarket Applications)

### Fully Opened (Up)—For Water Use Only

Remove protective boot. Maximum speed limit 25 MPH. **NOTE:** Do **NOT** open in excessively high winds.



### Operation

# **A WARNING**

BEFORE OPERATING THE POWER BIMINI TOP, THOROUGHLY INSPECT THE AREA AROUND THE ENTIRE BIMINI ASSEMBLY. VERIFY THAT ALL PASSENGERS ARE IN A SAFE POSITION AND THAT NOBODY IS IN AN AREA THAT WILL INTERFERE WITH THE MOTION OF THE BIMINI. SERIOUS INJURY COULD RESULT.

# **A**WARNING

NEVER OPERATE THE TOP WHILE THE BOAT IS IN MOTION. OPERATING THE TOP WHILE THE BOAT IS IN MOTION CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE INCLUDING SERIOUS PERSONAL INJURY.

The Power Bimini top can be operated in four different positions:

- Fully Closed—for lifts, bridges and storage.
- Vari-pitch—for shade during low-setting sun conditions.
- Radar-for aft entry/exit.
- Fully Opened—for maximum shade.

#### Touch-sensitive Controller—if so equipped

### 

DO NOT POWER ACTUATORS TO THE FULL OPEN POSITION WITHOUT CANVAS INSTALLED. DAMAGE MAY OCCUR.

- **1.** Remove the boot from the bimini top.
- 2. Turn on electrical power to the boat.

**3.** Use the touch-sensitive controller or Bluetooth compatible app to partially raise and lower the bimini top to ensure proper installation.

**NOTE:** Do **NOT** fully open the power bimini without the canvas top installed or failure of the system will result.

23



Installation and Owner's Manual (For Aftermarket Applications)

#### Using the Touch-sensitive Controller

The power bimini system is designed to shut itself off when full travel has been achieved. The system will not open or close any farther once the system has achieved full travel until the opposite button has been touched.

The touch-sensitive controller uses touch-sensitive buttons (Fig.43A), which do not require the mechanical motion of depressing a button. Simply place, and keep, a finger on a touch control button to activate the system. Removing the finger from a touch control button immediately stops the system; the bimini top remains in the halted state (configuration) until a touch control button is touched again.

### **A**CAUTION

DO NOT POWER ACTUATORS TO THE FULL OPEN POSITION WITHOUT CANVAS INSTALLED. DAMAGE MAY OCCUR.

**1.** Touch and hold the controller's **RAISE** button (Fig.44A) to fully extend the bimini top.

**NOTE:** Do **NOT** fully open the power bimini without the canvas top installed or failure of the system will result.

**A.** The controller's operation indicator light will turn on green (Fig.44B).

**B.** The light will turn off after the system has completed its travel.

**2.** Touch and hold the controller's **LOWER** button (Fig.45A) to fully retract the bimini top.

**A.** The controller's operation indicator light will turn on blue (Fig.45B).

**B.** The light will turn off after the system has completed its travel.

**3.** Alternately operate the controller's **RAISE** and **LOWER** buttons to place the bimini top in various positions to ensure proper touch controller installation.

#### Using the Bluetooth Compatible App

The SureShade app operates in the same fashion as the physical controller. There is no operation indicator light on the control button screen.

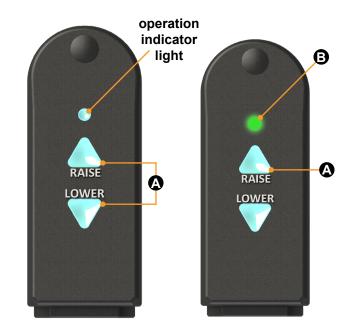
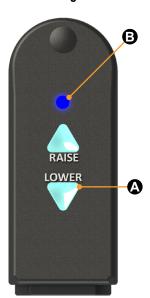


Fig.43

Fig.44



#### Fig.45

Download and install the SureShade Connect app from the Apple App Store<sup>®</sup> or Google Play<sup>®</sup> onto a smart device.



Installation and Owner's Manual (For Aftermarket Applications)

If using an iOS (Apple) smart device, do as follows:

**1.** Search the App Store for the SureShade Bimini Control app.

**NOTE:** When using SureShade as the search criteria, more than one SureShade app may appear (Fig.46A). Make sure to select SureShade Bimini Control (Fig.46B).

A. Download and open the app (Fig.47A).

**B.** Tap the I Accept button (Fig.48A) to accept the License Agreement.

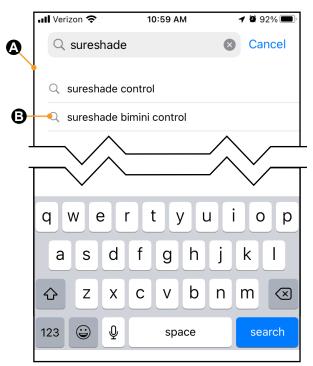
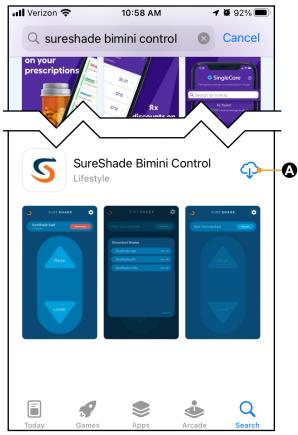


Fig.46



#### Fig.47

**C.** Read the Proper Bimini Use and Care and Maintenance statements (Fig.49A), then tap the Continue button (Fig.49B).

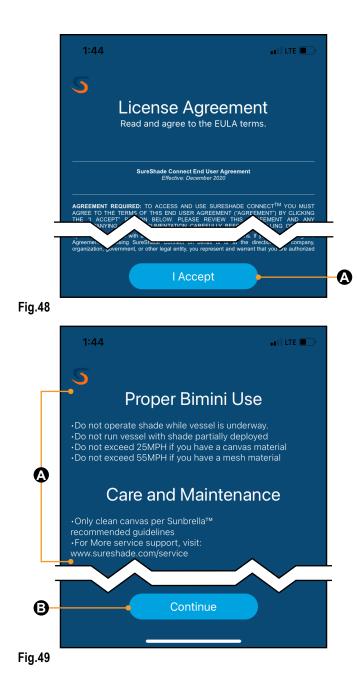
- D. Tap OK for Bluetooth (Fig.50A).
- E. Tap the Connect button (Fig.51A).

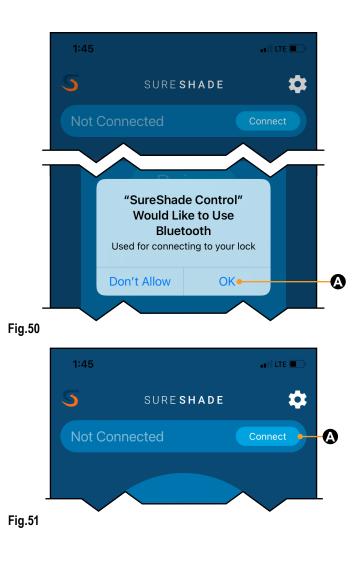


App Store<sup>®</sup> and iPad<sup>®</sup> are registered trademarks of Apple Inc. Google Play<sup>™</sup> and Android<sup>™</sup> are trademarks of Google LLC.



Installation and Owner's Manual (For Aftermarket Applications)







Installation and Owner's Manual (For Aftermarket Applications)

**F.** Follow the SureShade Connection Steps (Fig.52A), then tap Continue (Fig.52B).





### **1000 Series Power Bimini System** Installation and Owner's Manual

(For Aftermarket Applications)

**G.** Select the desired bimini from the Available Biminis list (Fig.53).

1:45	•••• LTE
Available Biminis	$\mathfrak{Z}_{1}^{t}(\cdot)$
SureShade bd1620	RSSI: -76

Fig.53

**H.** The touch-sensitive controller will begin pairing itself with the smart device (Fig.54).

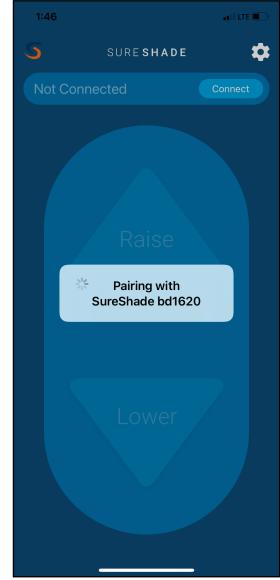


Fig.54

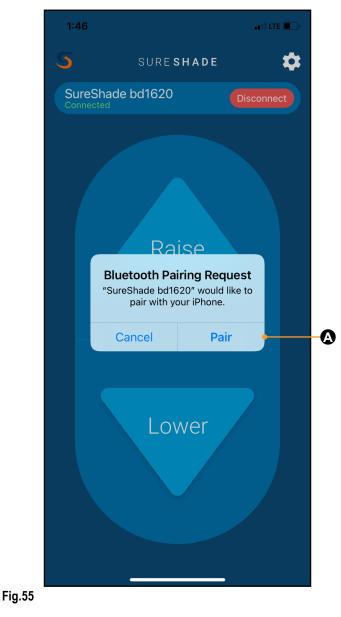
28



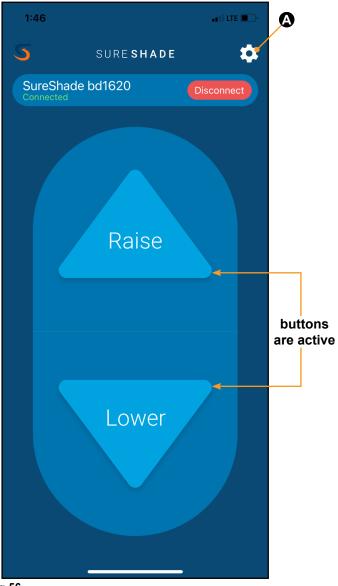
### **1000 Series Power Bimini System** Installation and Owner's Manual

(For Aftermarket Applications)

#### I. Tap the Pair button (Fig.55A) to complete the connection.



J. The controller and the paired smart device are now connected and the **Raise** and **Lower** buttons are now active (Fig.56).





Installation and Owner's Manual (For Aftermarket Applications)

# **AWARNING**

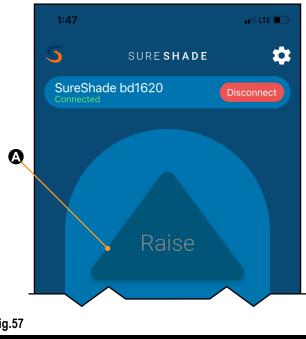
DO NOT OPEN OR OPERATE THE TOP IN **EXCESSIVELY HIGH WINDS. HAVING THE TOP** OPEN OR OPERATING THE TOP IN HIGH WINDS, **REGARDLESS IF THE BOAT IS IN MOTION OR** ANCHORED. CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

# **A WARNING**

DO NOT FULLY OPEN THE BIMINI FRAME WITHOUT THE CANVAS TOP INSTALLED WHEN TESTING **PRODUCT FOR PROPER OPERATION. OPENING** THE BIMINI FRAME WITHOUT THE CANVAS TOP **INSTALLED WILL RESULT IN SEVERE PRODUCT** DAMAGE. ONLY FULLY OPEN THE BIMINI FRAME WITH THE CANVAS TOP INSTALLED.

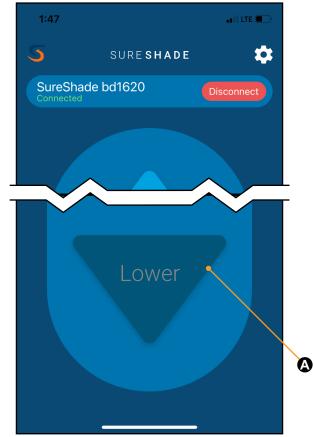
K. Tap and hold the Raise button (Fig.57A) to extend the bimini top.

NOTE: Do NOT fully open the power bimini without the canvas top installed or failure of the system will result.



L. Tap and hold the Lower button (Fig.58A) to retract the bimini top.

M. Alternately operate the app's Raise and Lower buttons to place the bimini top in various positions to ensure a aood Bluetooth connection.



#### Fig.58

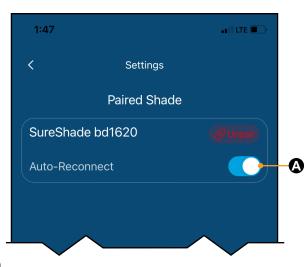
2. To disconnect and unpair the iOS smart device from the connected controller, do as follows:

A. With the app open to the **Raise** and **Lower** button screen (Fig.56), tap the gear icon (Fig.56A) to access the Settings screen (Fig.59).

B. Tap the slider button (Fig.59A) to turn Auto-Reconnect on so the smart device will always automatically reconnect with the controller.



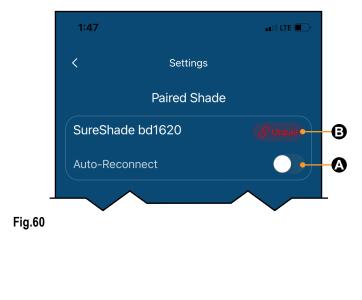
Installation and Owner's Manual (For Aftermarket Applications)



#### Fig.59

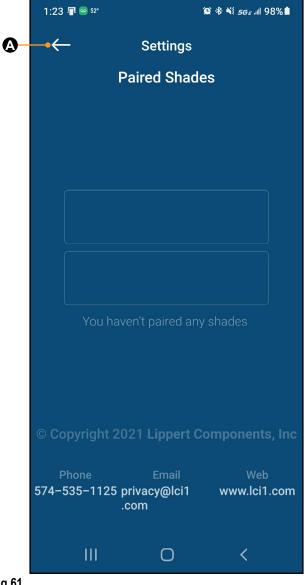
C. Tap the slider button again to turn Auto-Reconnect off (Fig.60A).

D. Tap the Unpair button (Fig.60B) for the paired/ connected shade.



E. The Paired Shades screen (Fig.61) will reflect the removed shade.

F. Tap the Back arrow (Fig.61A) to return to the Connect screen (Fig.51).



31

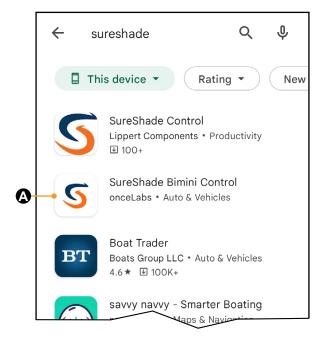


Installation and Owner's Manual (For Aftermarket Applications)

If using an Android smart device, do as follows:

**1.** Search the Google Play Store for the SureShade Connect app.

**NOTE:** When using SureShade as the search criteria, more than one SureShade app may appear. Make sure to select SureShade Connect (**Fig.62A**).

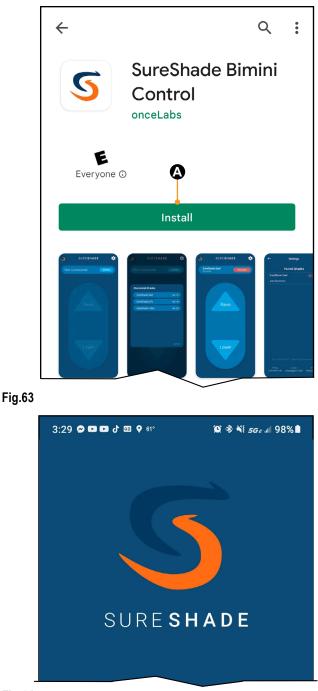


#### Fig.62

A. Tap Install button (Fig.63A) and open the app (Fig.64).

**B.** Tap the I Accept button (Fig.65A) to accept the License Agreement.

**C.** Read the Proper Bimini Use and Care and Maintenance statements (**Fig.66A**) then tap the Continue button (**Fig.66B**).

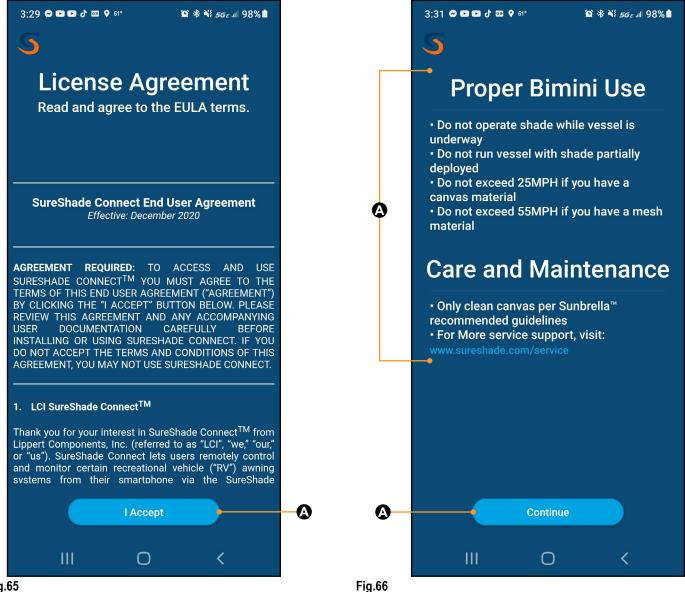




32



Installation and Owner's Manual (For Aftermarket Applications)



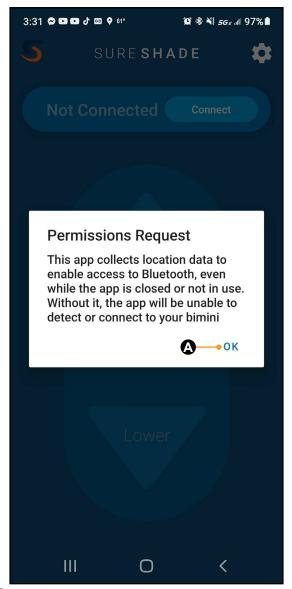


Installation and Owner's Manual (For Aftermarket Applications)

D. Tap OK (Fig.67A) in the Permissions Request window.

**E.** Tap the desired option (Fig.68A) to grant the app access to the device's location.

**NOTE:** Lippert recommends selecting the "While using the app" option.



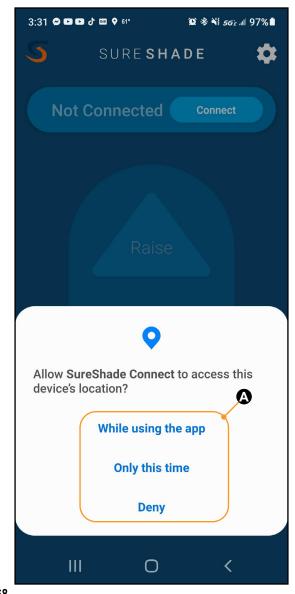


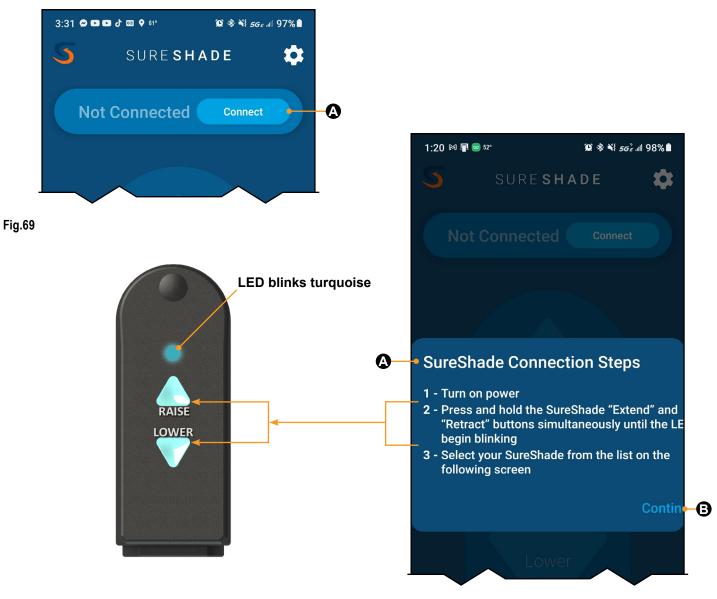
Fig.68



Installation and Owner's Manual (For Aftermarket Applications)

F. Tap the Connect button (Fig.69A).

**G.** Follow the SureShade Connection Steps (Fig.70A) then tap Continue (Fig.70B).





Installation and Owner's Manual (For Aftermarket Applications)

**H.** Select the desired bimini from the Available Biminis list (Fig.71).

**I.** The touch controller will begin pairing itself with the smart device.

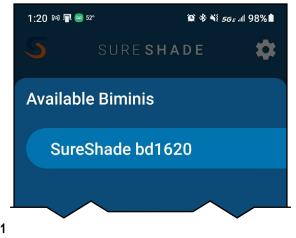


Fig.71

# **A WARNING**

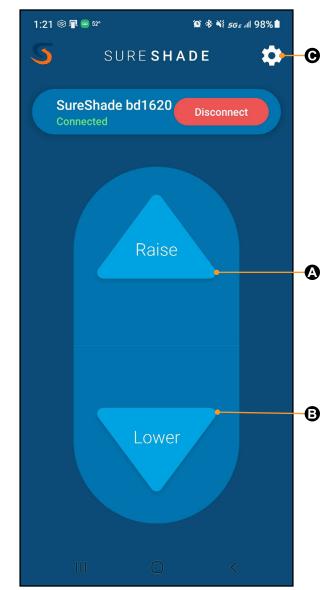
DO NOT OPEN OR OPERATE THE TOP IN EXCESSIVELY HIGH WINDS. HAVING THE TOP OPEN OR OPERATING THE TOP IN HIGH WINDS, REGARDLESS IF THE BOAT IS IN MOTION OR ANCHORED, CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

**J.** The controller and the paired smart device are now connected and the **Raise** and **Lower** buttons are now active (Fig.72).

**K.** Tap and hold the **Raise** button (Fig.72A) to extend the bimini top.

**NOTE:** Do **NOT** fully open the power bimini without the canvas top installed or failure of the system will result.

L. Tap and hold the Lower button (Fig.72B) to retract the bimini top.





**M.** Alternately operate the app's **Raise** and **Lower** buttons to place the bimini top in various positions to ensure a good Bluetooth connection.



Installation and Owner's Manual (For Aftermarket Applications)

**2.** To disconnect and unpair the iOS smart device from the connected controller, do as follows:

**A.** With the app open to the **Raise** and **Lower** button screen (Fig.72), tap the gear icon (Fig.72C) to access the Settings screen (Fig.73).

**B.** Tap the slider button (Fig.73A) to turn Auto-Reconnect on so the smart device will always automatically reconnect with the controller.

C. Tap the slider button again to turn Auto-Reconnect off.

**D.** Tap the Unpair button (**Fig.73B**) for the paired/ connected shade.

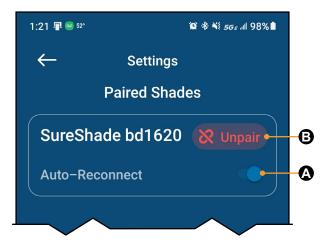
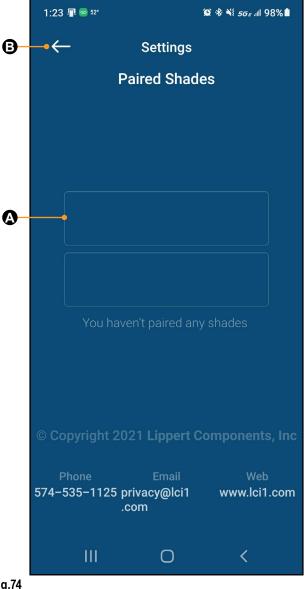


Fig.73

**E.** The Paired Shades screen (Fig.74A) will reflect the removed shade.

**F.** Tap the Back arrow (Fig.74B) to return to the Connect screen (Fig.69).





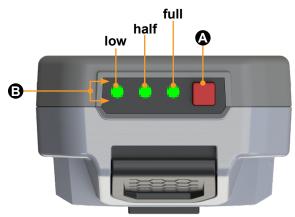
Installation and Owner's Manual (For Aftermarket Applications)

# Quick Connect (QC) Rechargeable Battery - if so equipped

**1.** For first use after initial product installation, several operations or long periods of non-use, check the power level of the rechargeable battery.

**2.** Press and hold the power level button (Fig.75A). Power level indicator lights (Fig.75B) will turn on green to indicate the battery's level of charge:

- full-charge = three lights
- half-charge = two lights
- low-charge = one light
- no-charge = no lights



### Fig.75

**3.** If necessary, use the provided battery charger to fully charge the battery. See Charging the Battery section.

**4.** Plug a fully charged battery (Fig.76A) into the battery receiver (Fig.76B) and close the lid.

**NOTE:** Always keep the battery receiver lid closed whether or not the battery is installed to protect electrical contact elements from water and other contaminants.

**5.** Remove any protective boot or restraints from the canvas top.

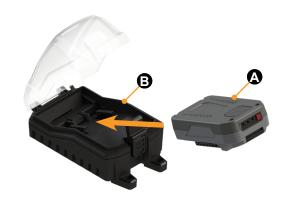


Fig.76

# **A WARNING**

DO NOT OPEN OR OPERATE THE TOP IN EXCESSIVELY HIGH WINDS. HAVING THE TOP OPEN OR OPERATING THE TOP IN HIGH WINDS, REGARDLESS IF THE BOAT IS IN MOTION OR ANCHORED, CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

# **A**WARNING

DO NOT FULLY OPEN THE BIMINI FRAME WITHOUT THE CANVAS TOP INSTALLED WHEN TESTING PRODUCT FOR PROPER OPERATION. OPENING THE BIMINI FRAME WITHOUT THE CANVAS TOP INSTALLED WILL RESULT IN SEVERE PRODUCT DAMAGE. ONLY FULLY OPEN THE BIMINI FRAME WITH THE CANVAS TOP INSTALLED.

**6.** To operate the bimini system, use one of the following methods:

- Touch-sensitive controller
- Bluetooth® compatible app

**NOTE:** Do **NOT** fully open the bimini system without a canvas top installed or failure of the system will result.



Installation and Owner's Manual (For Aftermarket Applications)

**A.** To use the touch-sensitive controller with the battery pack, follow the operational procedures outlined in the Operation section, Touch-sensitive Controller sub-section.

**B.** To use the Bluetooth app on a smart device with the battery pack, follow the operational procedures outlined in the Operation section, Bluetooth Compatible App sub-section.

# Charging the Battery

For first use after initial product installation, several operations or long periods of non-use, check the power level of the rechargeable battery.

1. Press and hold the power level button (Fig.76A). Power level indicator lights (Fig.76B) will turn on green to indicate the battery's level of charge:

- three lights = full-charge
- two lights = half-charge
- one light = low-charge
- no lights = no-charge

2. When necessary, recharge the battery with the wall charger (Fig.77A) as follows:

A. Retrieve the 20V rechargeable battery (Fig.77B) and turn it to access the charging port (Fig.77C) on the bottom.

B. Insert the 2-pronged wall charger into a standard 110V AC outlet (Fig.77D).

C. Fully insert the charger's barrel plug (Fig.77E) into the battery's charging port.

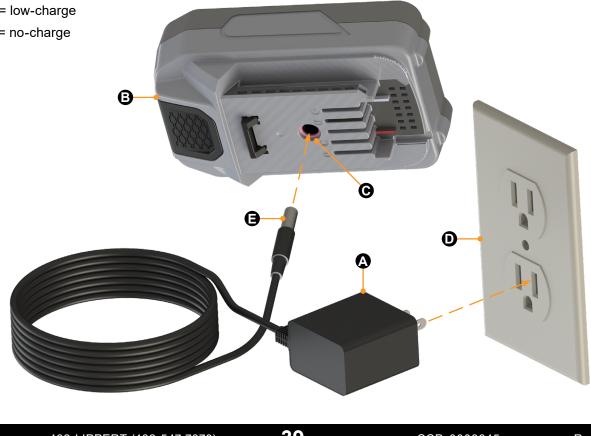
D. When all three power level indicator lights (Fig.75) turn on green, the battery is fully charged.

3. After the battery has been charged:

A. Remove the barrel plug from the battery.

**B.** Remove the charger from the outlet.

If desired, the fully charged battery can now be inserted into the battery receiver.





Installation and Owner's Manual (For Aftermarket Applications)

# Troubleshooting

What is happening?	Why?	What should be done?
Top does not raise or lower/touch controller buttons do not respond.		If using the rechargeable battery; • check the battery's energy level, • recharge battery if necessary, • install charged battery.
	Low/no power.	If using the app on a smart device; • make sure smart device is turned on, • make sure Bluetooth is turned on, • make sure the app is active. • then try controlling the actuators using the app.
		Make sure a charged battery is installed.
	Bad electrical harness.	Contact Lippert. Email: customerservice@lci1.com Phone: 432-LIPPERT (432-547-7378)
	Bad actuator.	
	Bad touch controller.	
	Bad electrical connection.	Check for loose or unconnected wires. Connect wires.
	Pinched/cut harness wire.	Contact Lippert. Email: customerservice@lci1.com Phone: 432-LIPPERT (432-547-7378)
	Foreign material blocking gear handle.	Remove foreign material from gear handle. Inspect gear handle and actuator for damage. Perform manual override if necessary.
Bimini top will not close.	Damaged actuator.	Perform manual override.
Controller power indicator light not lit.	No electrical power.	Check rechargeable battery power level; recharge battery if necessary.
		Make sure a charged battery is installed.
	Bad operation indicator light.	Replace controller.
Canvas top sags.	Unzipped frame pocket.	Zip all frame pockets closed.
	Top not fully opened.	Fully open canvas top.



Installation and Owner's Manual (For Aftermarket Applications)

### Manual Override

If the bimini system will not retract into the down or fully retracted position, a manual override of the bimini system **MUST** be done before towing or operating the pontoon. Perform a manual override of the bimini system as follows:

**1.** If a Lippert Bimini Top is installed, retrieve the  $\frac{5}{32}$ " hex wrench and manual override instruction sheet from the canvas storage pocket.

2. Zip the storage pocket closed.

3. Unzip the front frame pocket of the canvas.

A. If available, have a second person push forward on the rear frame to relieve some pressure off of the canvas.

B. Hold up the rear and middle frames while the canvas is unzipped.

4. Place the rear frame and canvas in the down position (Fig.78).



#### Fig.78

**5.** Use a  $\frac{5}{32}$ " hex wrench (Fig.79A) to remove the two  $\frac{1}{4}$ " hex cap screws (Fig.79B) located at each starboard and port front frame strut.

6. Separate the front frame (Fig.80A) from both actuator gear handles (Fig.80).

7. Reinstall the previously removed screws (step 5) into the actuator gear handles.

8. Return the hex wrench and instruction sheet to the canvas' front storage pocket.

9. Fully collapse the bimini frame by placing the front frame on top of the rear frame (Fig.81).

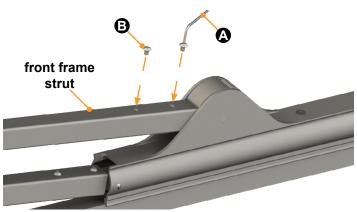
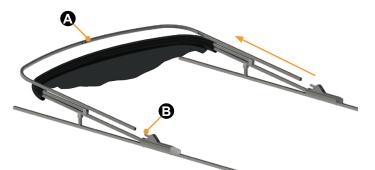


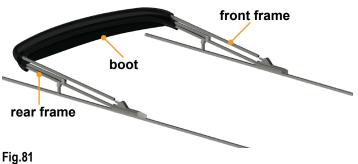
Fig.79



#### Fig.80

10. Zip the bimini top's front frame pocket over the loose front frame to help hold the frame in-place.

**11.** Secure the remainder of the front frame in-place with the protective storage boot (Fig.81), zip ties, hook-and-loop strips or with some other type of cordage.



41



Installation and Owner's Manual (For Aftermarket Applications)

## Maintenance

Heat and sun will deteriorate any fabric top.

In Florida, leaving the top open all of the time—not folded back in the storage position—the top might last 5-6 years. Folding the top back and covering it with the protective boot when the pontoon is not in use, the boot may deteriorate, but it will protect the top's fabric.

In northern climates, heat won't affect the fabric as harshly. Still, folding the top back and using the boot when not in use will dramatically increase the life of the top's fabric.

### Actuator

- Rinse with fresh water, especially in salt water environments.
- Seasonal re-tightening of mounting fasteners (recommended torque 15-18 ft lbs).

### **Fabric Care**

Use clear water to consistently hose off the fabric top during the boating season.

If necessary, do a deeper clean of the fabric top as follows:

**1.** If necessary, remove the boot and place the bimini top into its full open position.

**2.** If the fabric top was stored wet, allow the top and boot to dry.

3. Remove any loose dirt and debris from the top and boot.

4. Hose down the fabric top and boot.

**5.** Prepare a mixture of  $\frac{1}{4}$  cup of mild dish soap and five gallons of warm water.

NOTE: Do NOT use harsh detergents.

**6.** Use a soft bristle brush to apply the soapy water to the fabric top and boot to remove stains and embedded dirt.

7. Allow the solution time to soak completely into the fabric.

**8.** Hose off the fabric top and boot with fresh water. Repeat if necessary.

**9.** Allow the fabric top and boot to dry before closing the top and installing the protective boot.

### Trailering (Towing)



DO NOT TRAILER OR TOW THE BOAT WITHOUT THE PROTECTIVE BOOT PROPERLY INSTALLED ON THE TOP AND WITHOUT THE TOP IN ITS FULL DOWN POSITION. TRAILERING OR TOWING THE BOAT WITHOUT THE TOP IN ITS FULL DOWN POSITION AND WITHOUT THE PROTECTIVE BOOT PROPERLY INSTALLED CAN CAUSE SERIOUS DAMAGE TO THE TOP'S FRAMEWORK, WHICH COULD CAUSE SEVERE PRODUCT AND/OR PROPERTY DAMAGE, INCLUDING SERIOUS PERSONAL INJURY.

**1.** Make sure the protective storage boot is properly installed.

**2.** Use the proper trailer and towing safety features designed for the size, weight and style of the boat being towed and for the towing vehicle.

### Storage or Storm Position

When not boating for awhile, secure the fabric top in the zippered protective storage boot. Folding the pontoon top back into the down or fully collapsed position will increase the top's life.

### Winter Storage

To prevent small animals from nesting in the top during the winter, unzip and remove the protective storage boot. Store the boot and pontoon in a clean dry place to increase the life of the top.



Installation and Owner's Manual (For Aftermarket Applications)




Installation and Owner's Manual (For Aftermarket Applications)




Installation and Owner's Manual (For Aftermarket Applications)




Installation and Owner's Manual (For Aftermarket Applications)




Installation and Owner's Manual (For Aftermarket Applications)




Installation and Owner's Manual (For Aftermarket Applications)

### Notes





Manual information may be distributed as a complete document only, unless Lippert provides explicit consent to distribute individual parts.

All manual information is subject to change without notice. Revised editions will be available for free download at <u>lippert.com</u>. Manual information is considered factual until made obsolete by a revised version.

Please recycle all obsolete materials and contact Lippert with concerns or questions.

48