



---

# Master Owner's Manual

A W N I N G S

P A R T I I

## Master Owner's Manual

The Master Owner's Manual is intended to provide information on Lippert's most widely used products. Products described in the Master Owner's Manual may not be on every trailer. The trailer may also have products not included in this manual. All manual information is subject to change without notice. Revised editions will be available for free download at [lippert.com/support](http://lippert.com/support). Manual information is considered factual until made obsolete by a revised version. Manual information may be distributed as a complete document only, unless Lippert provides explicit consent to distribute individual parts.

## User's Note

The Table of Contents is interactive. Click on the title to navigate to the first page of the manual. In the top right corner see "**RETURN to TOC**" that will return you to the Table of Contents.

# TABLE OF CONTENT

Solera 3000 Series 12V Power Awning Owner's Manual

Solera 3000 Series 12V Power Awning with No Manual Override Owner's Manual

Solera 3000WS Series Awning (Wind Sensor) Owner's Manual

Solera 3000OG Series Solar Awning Owner's Manual

Solera 3500 Series Smart Arm Power Awning Owner's Manual

Solera Slide Topper 5000 Series Owner's Manual

Solera 5000 Series Awning Owner's Manual

Solera 5000WS Series Awning (Wind Sensor) Owner's Manual



BY  **LIPPERT™**

# 3000 SERIES 12V POWER AWNING OWNER'S MANUAL



Scan for product support

## Table of Contents

|                                        |          |
|----------------------------------------|----------|
| <b>Introduction</b>                    | <b>2</b> |
| <b>Safety</b>                          | <b>3</b> |
| <b>Operation</b>                       | <b>4</b> |
| Extending the Awning and Setting Pitch | 4        |
| Retracting the Awning                  | 5        |
| <b>Troubleshooting</b>                 | <b>6</b> |
| Manual Override                        | 6        |
| Adjusting Pitch Arm Fasteners          | 7        |
| <b>Maintenance</b>                     | <b>7</b> |
| Resources Required                     | 7        |
| Fabric Care                            | 7        |

## Introduction

The Solera® 3000 Series 12V Power Awning features an internal motor to steadily operate the awning. Additionally, the friction joint allows adjustable pitch features, and there is no rafter arm to lock in place. The friction joint also provides added stability.

Additional information about this product can be obtained from [lippert.com/support](http://lippert.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

For information on the assembly or individual components of this product, please visit:  
<https://support.lci1.com/solera-3000-series-12v-power-awning>

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 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.

### **WARNING**

The “WARNING” symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **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.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Pitch **MUST** be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Do **NOT** adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### **CAUTION**

This manual provides operational procedures for Solera® Power Awning. Operating the Solera® Power Awning in any other manner than described may result in personal injury, damage to the recreational vehicle or the awning assembly as well as voiding the Lippert Limited Warranty.

## Operation

**NOTE:** Some units may not use the Lippert switch (Fig. 1).

### Extending the Awning and Setting Pitch

#### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

#### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

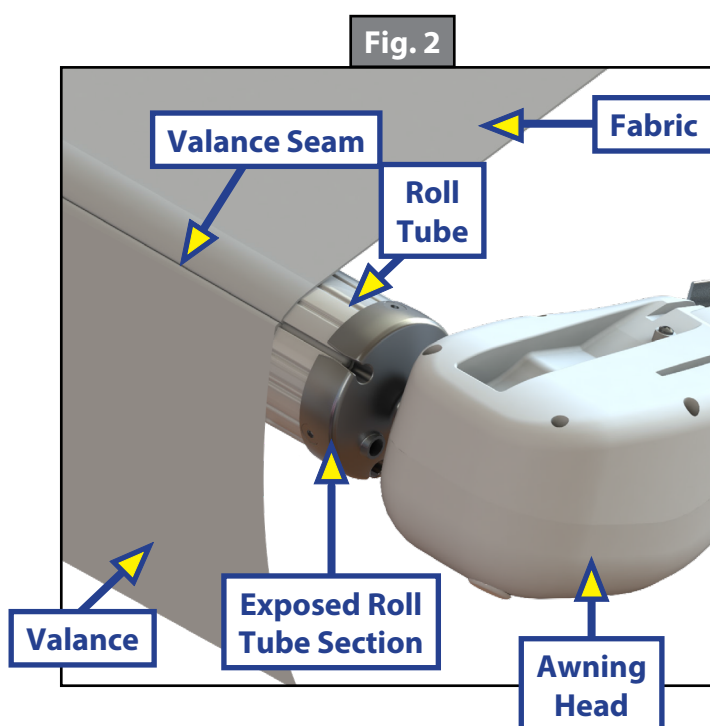
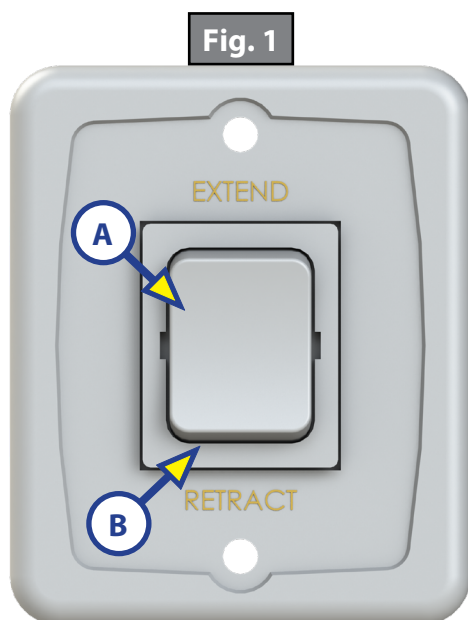
#### ⚠ CAUTION

**Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.**

1. Verify the RV battery is fully charged and connected to the electrical system.
2. Press and hold EXTEND (Fig. 1A) until the awning is extended completely.

**NOTE:** Extension is considered complete when the fabric is completely unrolled, the valance seam is visible and a section of the roll tube is exposed (Fig. 2).

**NOTE:** The awning fabric should always be above the roll tube. However, if the extend switch is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then extend to its correct orientation and normal operation can resume.



3. Set pitch using pitch arms with gas strut (Fig.3A).  
Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 3). A bolt, Belleville washers and nut (Fig. 4A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 5A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 3

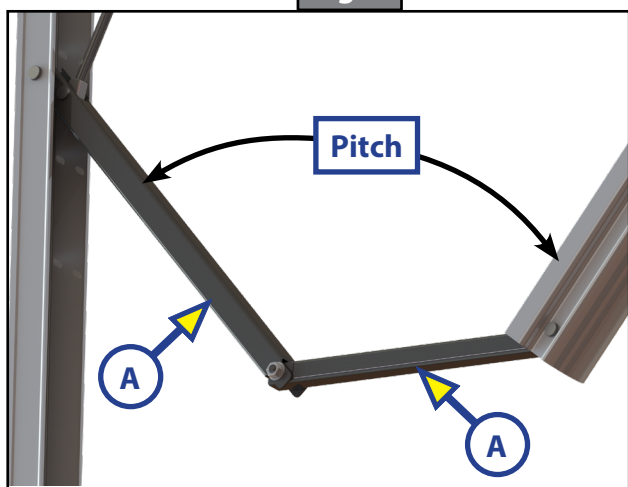


Fig. 4

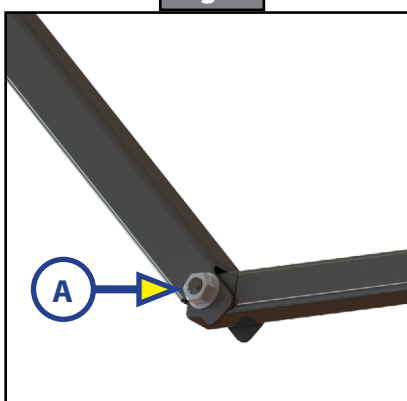
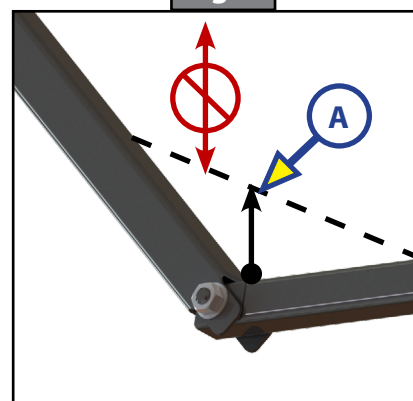


Fig. 5



### Retracting the Awning

#### **⚠ CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

1. Verify the coach battery is fully charged and connected to the electrical system.

**NOTE:** The awning can be retracted without resetting the pitch.

2. Press and hold RETRACT (Fig. 1B) until the awning is retracted completely.

**NOTE:** If the unit is equipped with a locking latch, be sure to engage the latch after retracting the awning.

## Troubleshooting

### Manual Override

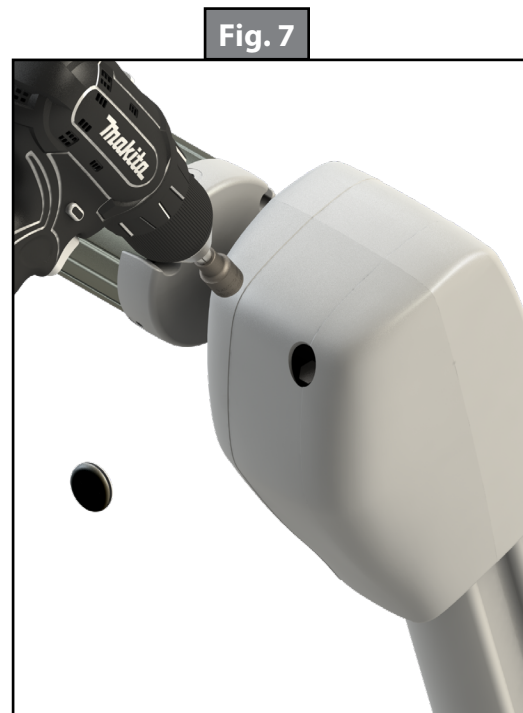
In the event of power loss or motor failure, the awning can be extended or retracted manually. Perform the following procedure to manually extend or retract the awning.

**NOTE:** This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

1. Remove the rubber grommet (Fig. 6A) from the drive head assembly, exposing the manual override nut on the motor.

**NOTE:** The drive head assembly is always located on the right side of the awning as it is viewed from outside of the unit.

2. Using a  $\frac{7}{16}$ " socket and cordless power drill, spin the manual override nut clockwise to extend or counterclockwise to retract the awning. (Fig. 7).



**NOTE:** Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

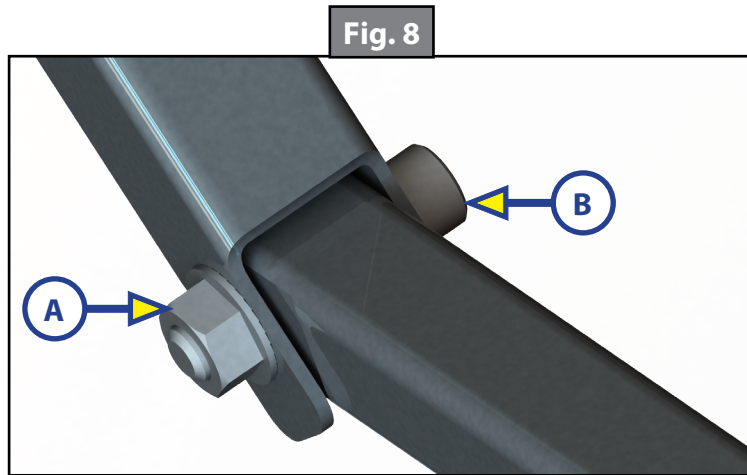
3. When the awning is completely extended or retracted, remove socket or drive device and replace the rubber grommet in the drive head assembly.

## Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 8B) in the center of the pitch arm.

1. Use a 1/2" wrench to tighten the nut (Fig. 8A) while holding the bolt (Fig. 8B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.



**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

## Maintenance

### Resources Required

- 5 gallon bucket
- Clean water
- 1/4 cup of dish soap

### Fabric Care

#### ⚠ CAUTION

**Over-spray of cleaning solution can cause eye and sensitive skin irritation. Flush affected area with clean water and seek medical attention, if necessary. Wear eye protection and appropriate protective clothing to avoid personal injury.**

#### ⚠ CAUTION

**Moving parts can pinch, crush or cut. Keep clear and use caution.**

If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert.

Revised editions are available for free download from [lippert.com](http://lippert.com)

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert

Ph: 432-LIPPERT (432-547-7378) | Web: [www.lippert.com](http://www.lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)



BY  **LIPPERT™**

# 3000 SERIES 12V POWER AWNING WITH NO MANUAL OVERRIDE OWNER'S MANUAL



Scan for product support

# TABLE OF CONTENTS

|                                        |          |
|----------------------------------------|----------|
| <b>Introduction</b>                    | <b>2</b> |
| <b>Safety</b>                          | <b>3</b> |
| <b>Operation</b>                       | <b>4</b> |
| Extending the Awning                   | 4        |
| Adjusting Pitch Arm Fasteners          | 6        |
| Retracting the Awning                  | 6        |
| <b>Maintenance</b>                     | <b>6</b> |
| Fabric Care                            | 6        |
| Variant Code Information               | 7        |
| <b>Awning Manual Retract Procedure</b> | <b>7</b> |
| Resources Required                     | 7        |
| Procedure #1 (Preferred)               | 7        |
| Procedure #2                           | 8        |
| Procedure #3                           | 8        |
| <b>Notes</b>                           | <b>9</b> |

## Introduction

The Solera® 3000 Series 12V Power Awning features an internal motor to steadily operate the awning. Additionally, the pitch arm allows for adjustable pitch, and there is no rafter arm to lock in place. The pitch arm also provides added stability.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

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

<https://support.lci1.com/solera-3000-series-12v-power-awning>

**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 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.

### **WARNING**

The “WARNING” symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **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.

### **WARNING**

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

### **WARNING**

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### **CAUTION**

This manual provides operational procedures for Solera® Power Awning. Operating the Solera® Power Awning in any other manner than described may result in personal injury, damage to the recreational vehicle unit or the awning assembly as well as voiding the Lippert Components Limited Warranty.

### **CAUTION**

Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.

## Operation

If the unit is equipped with a travel lock, be sure to unlock prior to extending the awning. After retraction and before travel, be sure to lock the support arms back into place.

**Note:** Travel locks can vary in form between manufacturers. Be sure to identify the travel lock on the awning to ensure safe and proper use.

### Extending the Awning

#### **⚠ WARNING**

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

#### **⚠ WARNING**

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

#### **⚠ CAUTION**

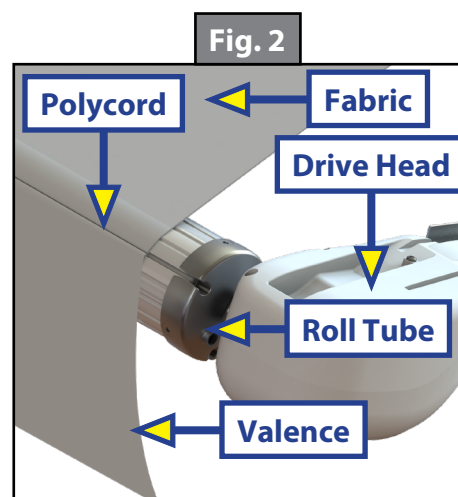
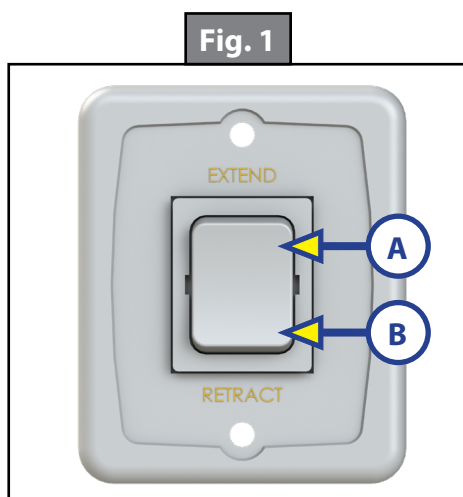
**Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.**

1. Verify the unit's battery is fully charged and connected to the electrical system.
2. Press and hold "EXTEND" (Fig. 1A) until the awning is extended completely.

**Note:** Some units may not use the Lippert switch (Fig. 1).

**Note:** Extension is considered complete when the fabric is completely unrolled, the valance polycord is visible and a section of the roll tube is exposed (Fig. 2).

**Note:** The awning fabric should always be above the roll tube. However, if the "EXTEND" switch is engaged too long or "EXTEND" is hit inadvertently instead of "RETRACT", the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the "RETRACT" button. The awning will then extend to its correct orientation and normal operation can resume.



3. Set pitch using pitch arms with gas strut (Fig.3A).  
Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**Note:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 3). A bolt, Belleville washers and nut (Fig. 4A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**Note:** Do not push the joints of the articulating arms up past a straight line (Fig. 5A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 3

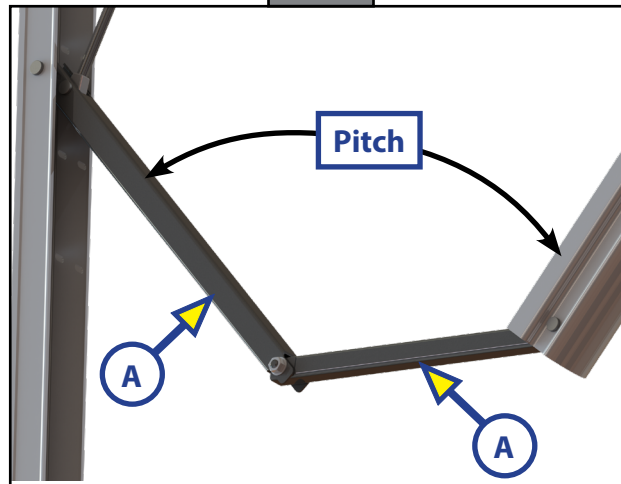


Fig. 4

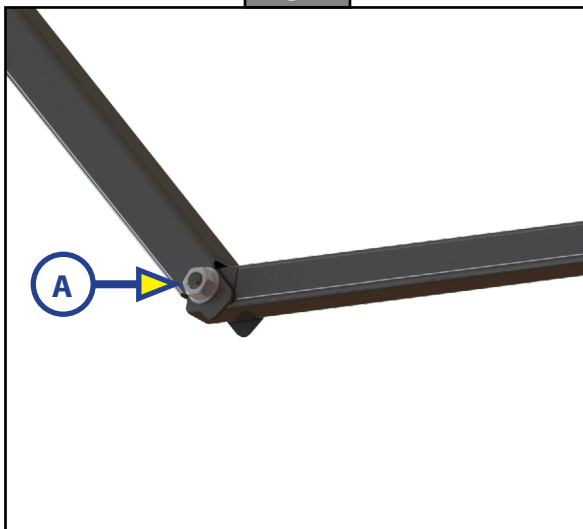
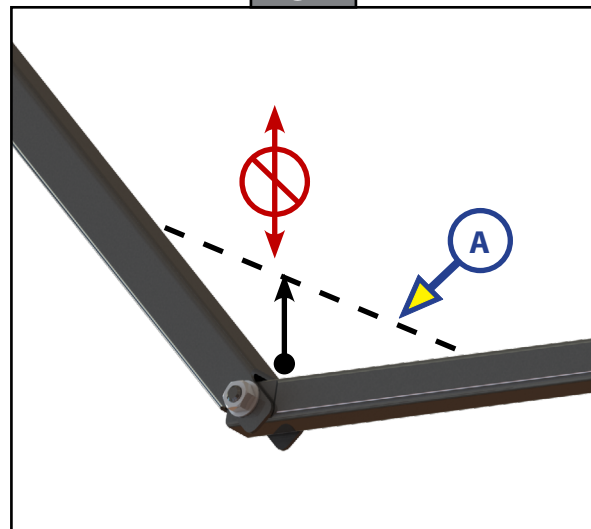


Fig. 5

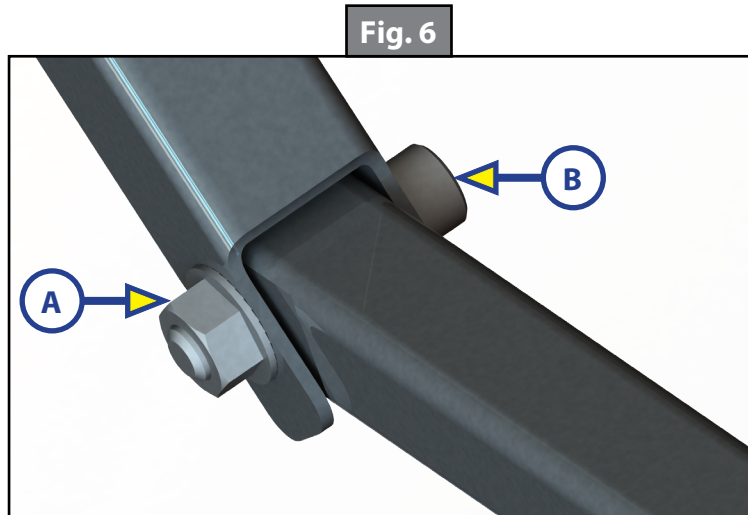


## Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 6A) in the center of the pitch arm.

1. Use a 1/2" wrench to tighten the nut (Fig. 6A) while holding the bolt (Fig. 6B) on the other side of the pitch arm with a 1/4" hex wrench.

**Note:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.



**Note:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

## Retracting the Awning

4. Verify the unit's battery is fully charged and connected to the electrical system.
5. Press and hold "RETRACT" (Fig. 1B) until the awning is retracted completely.

**Note:** The awning can be retracted without resetting the pitch.

## **Maintenance**

### Fabric Care

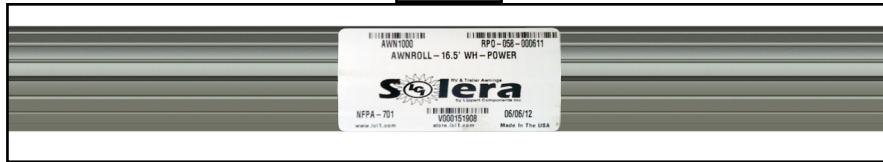
If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning. Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime.

**Note:** Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and 5 gallons of warm water. Liberally apply the mixture on the top of the fabric and retract the awning for 5 minutes. This will apply the mixture to the bottom of the fabric as well. Extend the awning and hose off with fresh water. Repeat if necessary. Allow to dry before retracting.

## Variant Code Information

Solera® awnings have a sticker located on the roll tube with a variant code that is specific to that awning assembly (Fig. 7). The sticker on newer units will be located near the motor head on the roll tube. There will also be a sticker on the awning fabric. The variant code will determine which variation of the product is being used. When ordering replacement parts, it is imperative to use the variant code to receive the most compatible part.

**Fig. 7**



## **Awning Manual Retract Procedure**

### Resources Required

- 2 or 3 People
- Cordless or Electric Drill or Screw Gun
- Appropriate Drive Bits
- Razor Knife
- Zip Ties
- Ladders

### Procedure #1 (Preferred)

1. Push both support arm assemblies closed until they are approximately one foot from fully retracted. Secure both support arm assemblies by securing a zip tie around the outer arm and around the pin on the top of the mount arm where the mount arm and inner arm connect (Fig. 8).
2. Remove the #8 wax screw that secures the end cap to the drive head shaft.
3. Pull the roll tube and end cap off of the drive head shaft.

### **⚠ CAUTION**

**Make sure to adequately support the roll tube during this process. Failure to support the roll tube may result in personal injury or property damage.**

4. Roll the fabric up around the roll tube by turning the roll tube by hand.  
**Note:** Roll the fabric as tight to the unit as possible while leaving enough slack in the fabric to be able to slide the drive head back onto the end cap.
5. Slide drive head shaft into end cap and reinstall the #8 wax screw to secure.
6. Tighten zip ties around support arms until the support arms are as tight against the unit as possible.

### **⚠ CAUTION**

**Ensure the awning assembly is secure against the side of the unit prior to travel. Failure to do so may result in personal injury or property damage.**

## Procedure #2

1. Push both support arm assemblies closed until they are approximately one foot from fully retracted. Secure both support arm assemblies by securing a zip tie around the outer arm and around the pin on the top of the mount arm where the mount arm and inner arm connect (Fig. 8).
2. Remove the #6 x 1/2" hex head screw at each end of the fabric, where it is secured to the awning rail.
3. Remove the drip cap at one end of the awning rail (if equipped).
4. Remove the #8 wax screws that secure the end caps to the drive and idler head shafts.
5. With one person at each end of the awning and one in the middle to support the roll tube, slide the roll tube and end cap assembly off the shaft from each head assembly.
6. Slide the fabric down the awning rail to the desired end to remove it from the unit.
7. Roll the fabric around the roll tube and store securely inside the unit for travel.
8. Tighten zip ties around the support arms until the support arms are as tight against the unit as possible.

### **⚠ CAUTION**

**Ensure the awning assembly is secure against the side of the unit prior to travel. Failure to do so may result in personal injury or property damage.**

## Procedure #3

**Note:** Performing this procedure will require the replacement of the fabric in addition to any other components that may need to be repaired or replaced.

1. Push both support arm assemblies closed until they are approximately one foot from fully retracted. Secure both support arm assemblies by securing a zip tie around the outer arm and around the pin on the top of the mount arm where the mount arm and inner arm connect (Fig. 8).
2. Cut the awning fabric along the roll tube and the awning rail, to remove from the awning assembly.
3. Tighten zip ties around support arms, until support arms are as tight against the unit as possible.

### **⚠ CAUTION**

**Ensure the awning assembly is secure against the side of the unit prior to travel. Failure to do so may result in personal injury or property damage.**

**Fig. 8**



## Notes

[illegible]



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)





BY  **LIPPERT™**

# 3000WS SERIES AWNING (WIND SENSOR) OWNER'S MANUAL



Scan for product support

# TABLE OF CONTENTS

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <b>Introduction</b>                                                    | <b>2</b>  |
| <b>Safety</b>                                                          | <b>3</b>  |
| <b>Syncing the Bluetooth® Wind Sensor to the One Control App</b>       | <b>4</b>  |
| Preparation - Initial Pairing of the Wind Sensor to the OneControl App | 4         |
| <b>Operation</b>                                                       | <b>6</b>  |
| Extending the Awning with the Power Button Switch                      | 7         |
| Setting Pitch                                                          | 8         |
| Retracting the Awning with the Power Button Switch                     | 8         |
| Extending and Retracting the Awning Using the OneControl App           | 9         |
| Settings for Automatic Retraction Due to Wind Events                   | 9         |
| <b>Troubleshooting</b>                                                 | <b>10</b> |
| Adjusting Pitch Arm Fasteners                                          | 10        |
| Manual Override                                                        | 11        |
| <b>Maintenance</b>                                                     | <b>12</b> |
| Resources Required                                                     | 12        |
| Fabric Care                                                            | 12        |
| <b>Wiring Diagram</b>                                                  | <b>13</b> |

## Introduction

The Solera® Power Awning features an internal motor to steadily operate the awning along with an adjustable pitch arm assembly that provides added stability. The Solera Power Awning has been upgraded to include a wind sensor in the drive side arm that pairs with the Lippert Unity board which can be controlled on the One Control app.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

For information on the assembly or individual components of this product, please visit:  
<https://support.lci1.com/solera-3000ws-series-power-awning-with-wind-sensor>

**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.

**NOTE:** This manual will refer to the “drive side” and “idler side” throughout for various instructions. The “drive side” is the right hand side of the awning when facing the awning from the exterior of the unit. The “idler side” is the left hand side of the awning when facing the awning from the exterior of the unit.

## Safety

Read and 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.

### **WARNING**

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **WARNING**

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Pitch **MUST** be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Do **NOT** adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.

### **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.

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### **CAUTION**

This manual provides operational procedures for Solera Power Awning. Operating the Solera Power Awning in any other manner than described may result in personal injury, damage to the unit or the awning assembly as well as voiding the Lippert Components Limited Warranty.

### **CAUTION**

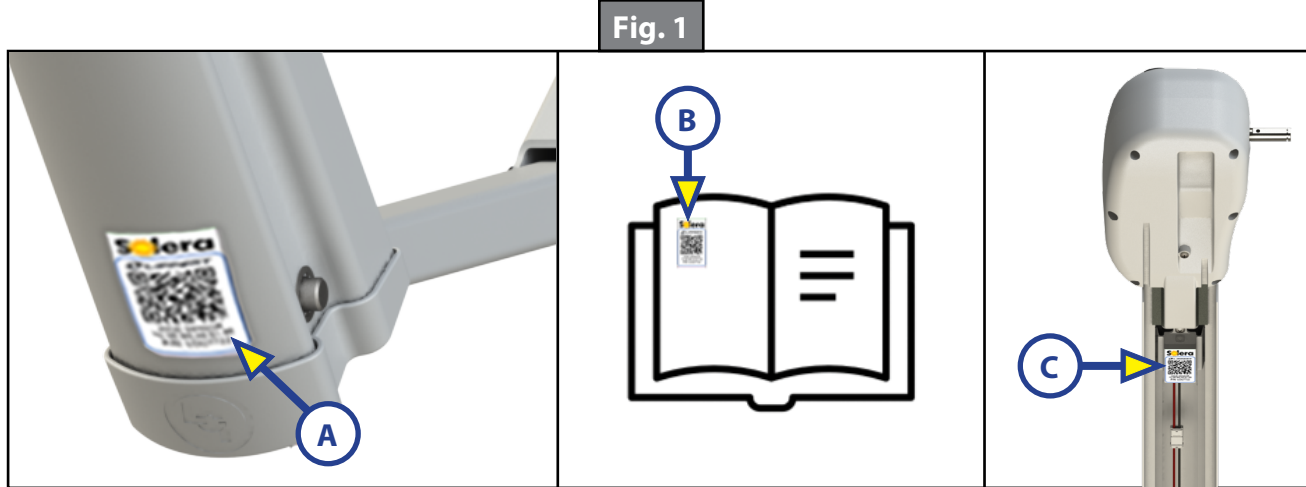
Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

### **CAUTION**

Moving parts can pinch, crush, or cut. Keep clear and use caution.

## Syncing the Bluetooth® Wind Sensor to the One Control App

Located on the outside of the drive side arm will be a QR label (Fig. 1A). The QR label is also located inside the owner's manual (Fig. 1B), or on the wind sensor (Fig. 1C) located on the inside of the drive side arm should the front of the arm sticker wear off or the manual is lost. Scan the QR code when ready to pair to the OneControl application.



### **⚠ WARNING**

**When on, the automatic retraction due to wind feature will operate without any other inputs. If people are between the awning arm and the frame, they will be injured. The awning will sound an audible chime before starting a wind-triggered auto-retraction and continue to time as it retracts. This is intended to draw attention of people who may be between the awning arm to give them time to get clear. When the automatic retraction due to wind feature is on, never hang objects from your awning. When the awning retracts, those objects and your awning will be damaged.**

## Preparation - Initial Pairing of the Wind Sensor to the OneControl App

The wind sensor **MUST** be activated by the OneControl application in order for the wind sensor to operate.

### **Resources Required**

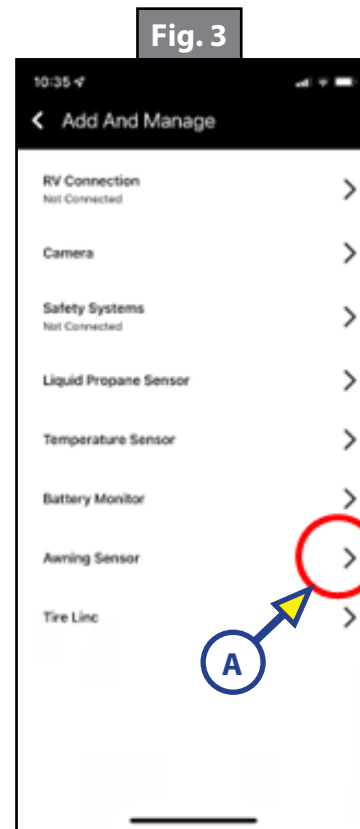
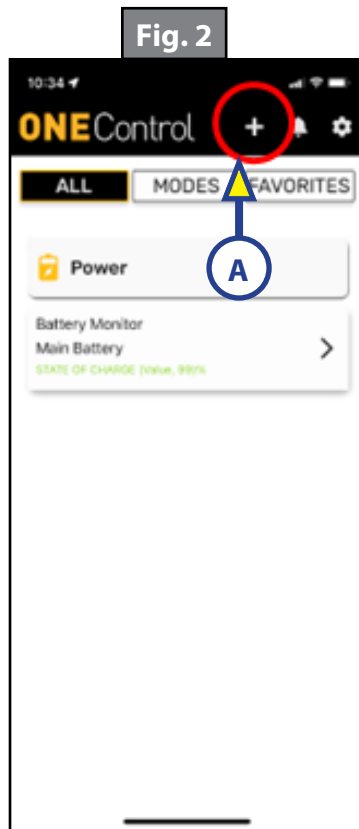
- Android, iOS smart device
- Internet connection

1. To get started, if you have not already downloaded the Lippert OneControl App to control your Bluetooth® unit devices, scan the QR code below for your smart device.



2. Open the app and either register or log in.

3. From the Main Menu, tap the + icon (Fig. 2A) in the upper right corner.
4. Select Awning Sensor (Fig. 3A) from the list of devices to add or manage.



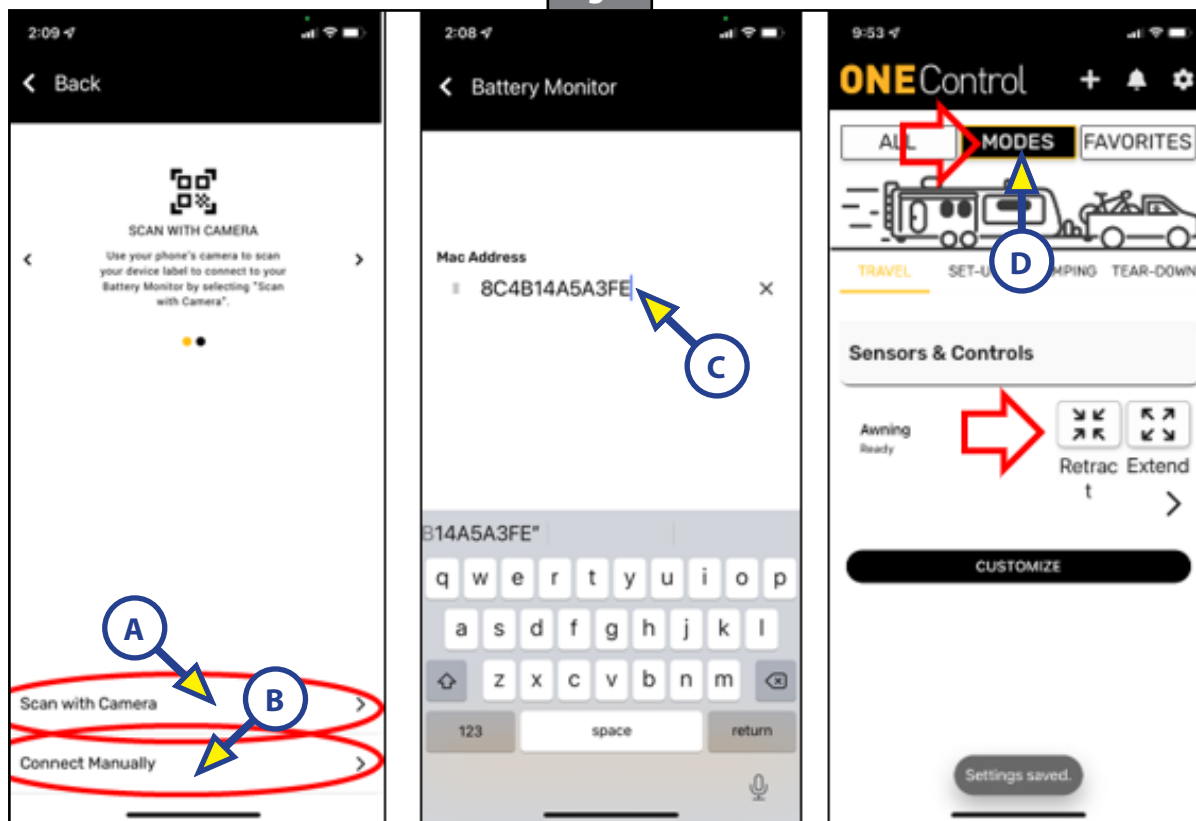
5. There are two ways to connect. You can either scan the QR code on the label (Fig. 4A), which is located on the front of the drive side of the awning arm, the label in your owner's manual or the label on the actual wind sensor inside the awning arm or enter the 12 digit MAC address (Fig. 4B) on the label manually.



**EXAMPLE LABEL**

6. Tap either Scan with Camera (Fig. 5A), or Connect Manually (Fig. 5B). Either scan the QR code or type in the MAC Address (Fig. 5C). The awning will now appear in the OneControl menu. It may be visible under Modes (Fig. 5D).

Fig. 5



## Operation

### ⚠ WARNING

When extending your awning, be sure to give the awning appropriate clearance. Trees, branches, nearby units, and other obstructions will damage your awning. The awning arms and frame are a pinch-point. Be sure the awning mechanism is clear of people before retracting. Otherwise, harm will result. Make sure the awning is free from obstructions and not tied-down before retracting. Obstructions and objects will be damaged and will damage the awning.

### ⚠ WARNING

**IMPACT OR CRUSH HAZARD** - Pitch **MUST** be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.

### ⚠ WARNING

**IMPACT OR CRUSH HAZARD** - Do **NOT** adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.

### ⚠ CAUTION

Tying down the roll tube once the awning is extended will not allow the free-floating support arms and the wind sensor to work as designed and may cause damage to the awning or Unit.

## Extending the Awning with the Power Button Switch

**NOTE:** Some units may not use the Lippert switch (Fig. 6).

1. Verify the unit battery is fully charged and connected to the electrical system.

**NOTE:** If the unit is equipped with a locking latch, be sure to unlock the latch prior to extending the awning.

2. Press and hold EXTEND (Fig. 6A) until the awning is extended completely.

**NOTE:** Extension is considered complete when the fabric is completely unrolled, the valance seam is visible and a section of the roll tube is exposed (Fig. 7 ).

**NOTE:** The awning fabric should always be above the roll tube. However, if the extend switch is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then extend to its correct orientation and normal operation can resume.

Fig. 6

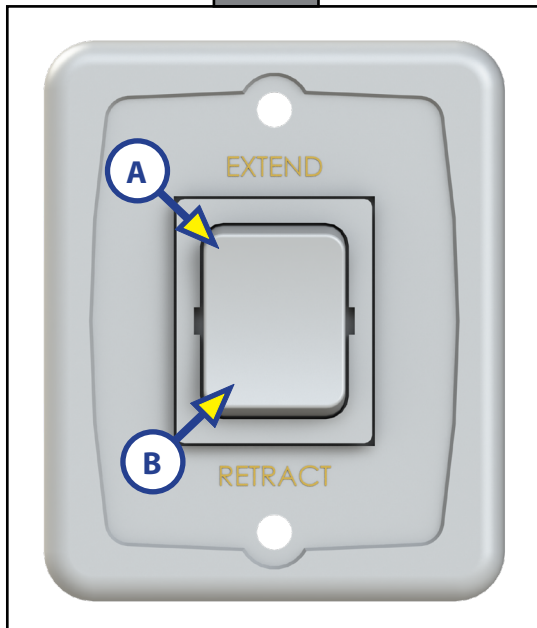
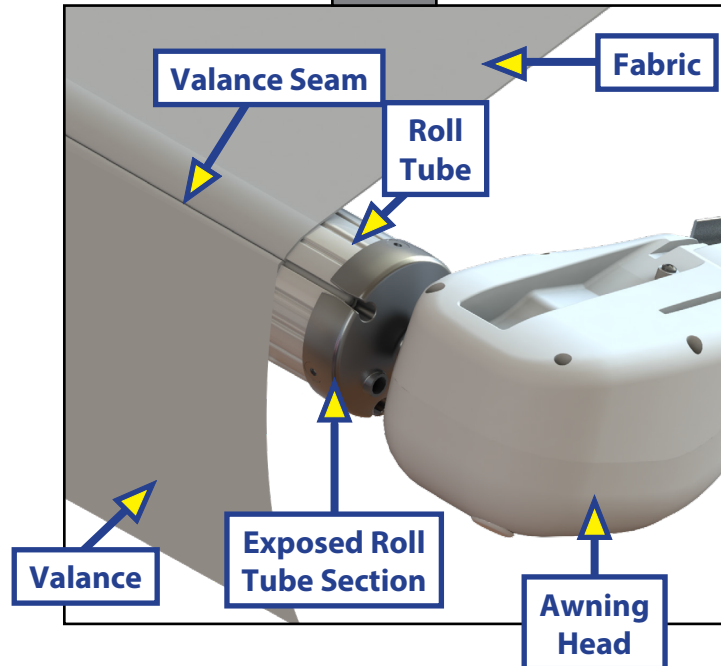


Fig. 7



## Setting Pitch

1. Set pitch using pitch arms with gas strut (Fig. 8A). Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 8). A bolt, Belleville washers and nut (Fig. 9A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 10A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 8

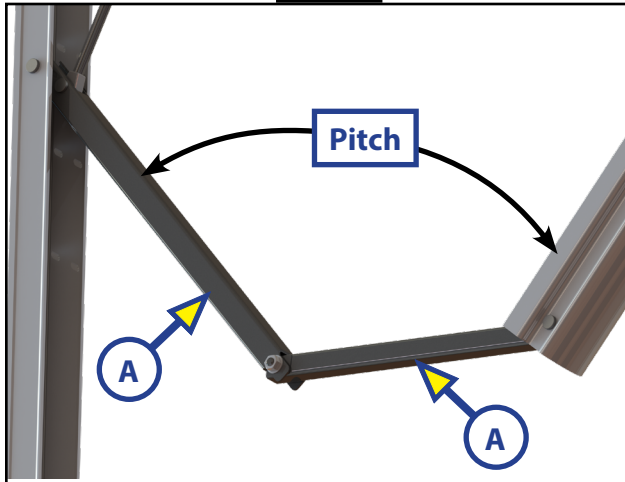


Fig. 9

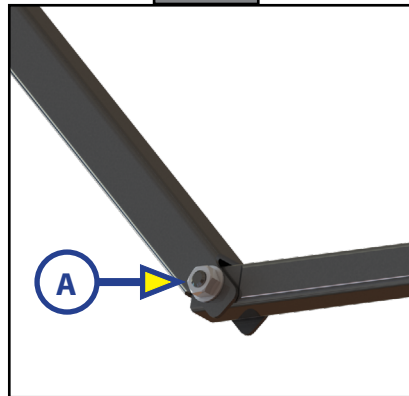
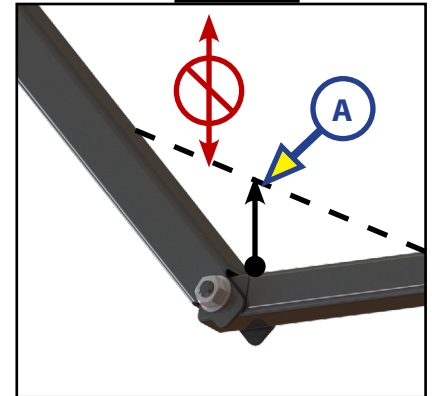


Fig. 10



## Retracting the Awning with the Power Button Switch

### ⚠ WARNING

**Warning Chime -** If the awning is paired to the OneControl app, during the automatic closure due to a wind event, a warning chime will sound. This is intended to warn users to stand clear as the awning retracts.

### ⚠ CAUTION

**The awning MUST be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.**

**NOTE:** Some units may not use the Lippert switch (Fig. 9).

1. Verify the unit's battery is fully charged and connected to the electrical system.

**NOTE:** The awning can be retracted without resetting the pitch.

2. Press and hold RETRACT (Fig. 9B) until the awning is retracted completely.

**NOTE:** The awning may automatically retract if the wind sensor is activated.

**NOTE:** If the unit is equipped with a locking latch, be sure to engage the latch after retracting the awning.



## Extending and Retracting the Awning Using the OneControl App.

A. To extend or retract the awning, press and hold the Extend or Retract buttons on the home screen (Fig. 11A).

**NOTE:** After extending the awning, follow the instructions below for setting pitch:

To set pitch using pitch arms with gas strut (Fig. 8A):

- I. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

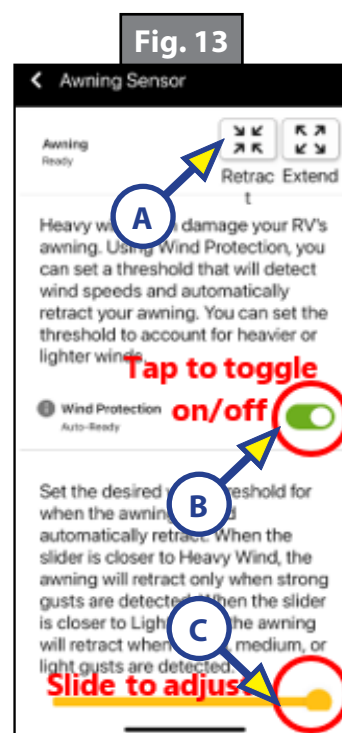
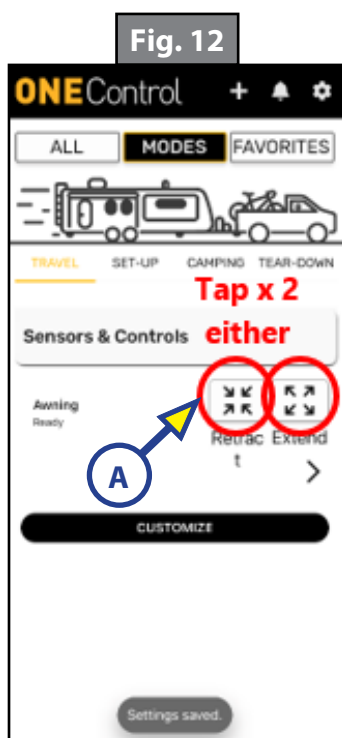
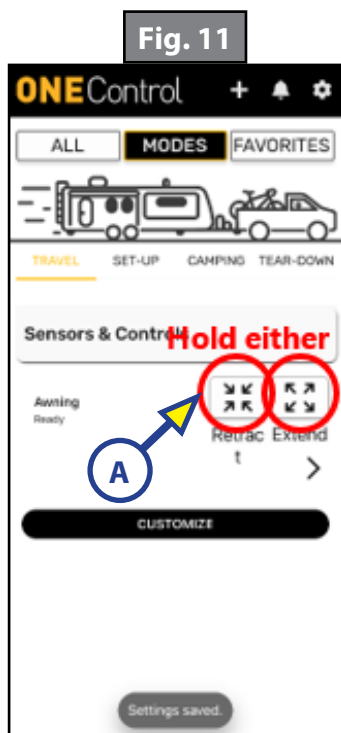
- II. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 8). A bolt, Belleville washers and nut (Fig. 9A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 10A). This will put tension on the gas strut, which can cause the strut to break.

- B. To automatically fully extend or fully retract the awning, double tap the appropriate icon on the home screen (Fig. 12A).

## Settings for Automatic Retraction Due to Wind Events

To set a wind sensitivity level, tap the arrow (Fig. 13A) in the Awning Sensor cell on the home screen and use the slider (Fig.13C) to adjust the wind sensitivity level, or to toggle the automatic retraction due to wind events on or off (Fig. 13B).



## Troubleshooting

### Adjusting Pitch Arm Fasteners

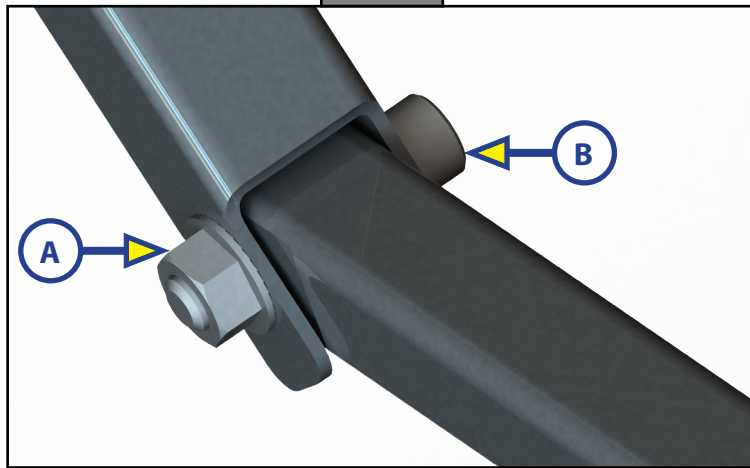
If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 14A) in the center of the pitch arm.

1. Use a 1/2" wrench to tighten the nut (Fig. 14A) while holding the bolt (Fig. 14B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.

**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

Fig. 14



## Manual Override

In the event of power loss or motor failure, the awning can be extended or retracted manually. Perform the following procedure to manually extend or retract the awning.

**NOTE:** This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

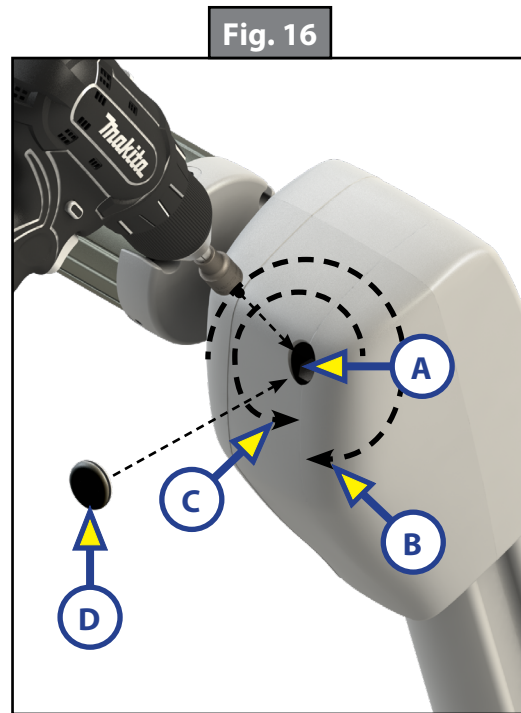
1. Remove the rubber grommet (Fig. 15A) from the drive head assembly, exposing the manual override nut on the motor.

**NOTE:** The drive head assembly is always located on the right side of the awning as it is viewed from outside of the unit.

2. Using a  $\frac{7}{16}$ " socket and cordless power drill, spin the manual override nut (Fig. 16A) clockwise to extend (Fig. 16B) or counterclockwise to retract (Fig. 16C) the awning.

**NOTE:** Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

3. When the awning is completely extended or retracted, remove socket or drive device and replace the rubber grommet (Fig. 16D) in the drive head assembly.



## Maintenance

### Resources Required

- 5 gallon bucket
- Clean water
- 1/4 cup of dish soap

### Fabric Care

#### **CAUTION**

**Over-spray of cleaning solution can cause eye and sensitive skin irritation. Flush affected area with clean water and seek medical attention, if necessary. Wear eye protection and appropriate protective clothing to avoid personal injury.**

#### **CAUTION**

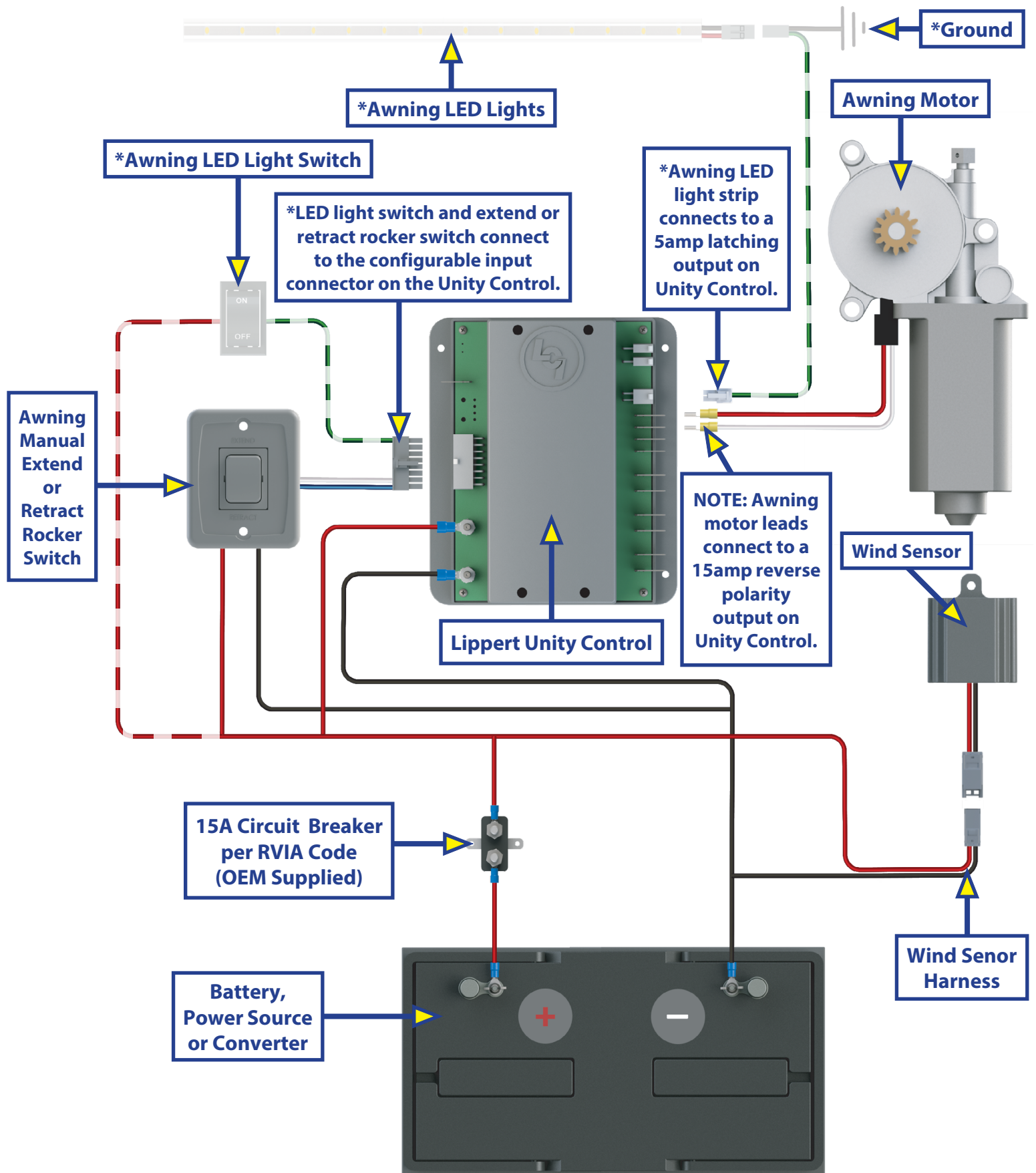
**Moving parts can pinch, crush or cut. Keep clear and use caution.**

If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.

# Wiring Diagram



**NOTE:** \*If applicable, light kits are optional.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert.  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)



BY  **LIPPERT™**

# 30000G SERIES SOLAR AWNING OWNER'S MANUAL



Scan for product support

# Table of Contents

|                                                                              |          |
|------------------------------------------------------------------------------|----------|
| <b>Introduction</b>                                                          | <b>2</b> |
| <b>Safety</b>                                                                | <b>3</b> |
| <b>Operation</b>                                                             | <b>4</b> |
| Extending the Awning                                                         | 4        |
| Adjusting Pitch Arm Fasteners                                                | 6        |
| Retracting the Awning                                                        | 6        |
| <b>Troubleshooting</b>                                                       | <b>7</b> |
| Manual Override                                                              | 7        |
| <b>Maintenance of Awning</b>                                                 | <b>8</b> |
| Resources Required                                                           | 8        |
| Fabric Care                                                                  | 8        |
| <b>Maintenance, Cleaning of AIPV (Awning Integrated Photovoltaic) Module</b> | <b>9</b> |
| Resources Required                                                           | 9        |
| Module Care                                                                  | 9        |

## Introduction

Lippert's Solera® OG (Off-Grid) brand awning installs like a regular awning. However, with Renogy's proprietary thin-film solar technology, Lippert awnings provide the extra benefit of up to 300 watts of solar power without the labor, expense, additional weight and roof intrusion of installing conventional rigid panels.

**NOTE:** The actual wattage is defined by the awning fabric roll width along the unit wall.

Renogy, a renewable energy company that specializes in solar solutions for off-grid living, is pioneering the awning integrated photovoltaic technology (AIPV) innovation. This first-generation retractable, shatterproof, laminated vinyl awning features power generation up to 300 watts in the extended position and 200 watts in the retracted, travel or stored positions.

The Solera® Power Awning features an internal motor to steadily operate the awning. Additionally, the friction joint allows for rain dump and adjustable pitch features, and there is no rafter arm to lock in place. The friction joint also provides added stability.

Additional information about this product can be obtained from [lippert.com/support](http://lippert.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

For additional support on this product go to: <https://support.lci1.com/solera-3000-series-12v-power-awning>

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 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.

### **WARNING**

The “WARNING” symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Pitch **MUST** be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Do **NOT** adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### **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.

### **CAUTION**

This manual provides operational procedures for Solera® Power Awning. Operating the Solera® Power Awning in any other manner than described may result in personal injury, damage to the recreational vehicle unit or the awning assembly as well as voiding the Lippert Components Limited Warranty.

### **CAUTION**

Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.

## Operation

**NOTE:** Some units may not use the Lippert switch (Fig. 1).

### Extending the Awning

#### **⚠ WARNING**

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

#### **⚠ WARNING**

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

#### **⚠ CAUTION**

**Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.**

1. Verify the RV battery is fully charged and connected to the electrical system.

**NOTE:** if the unit is equipped with a locking latch, be sure to unlock the latch prior to extending the awning.

2. Press and hold EXTEND (Fig.1A) until the awning is extended completely.

**NOTE:** Extension is considered complete when the fabric is completely unrolled, the valance seam is visible and a section of the roll tube is exposed (Fig. 2).

**NOTE:** The awning fabric should always be above the roll tube. However, if the extend switch is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then extend to its correct orientation and normal operation can resume.

Fig. 1

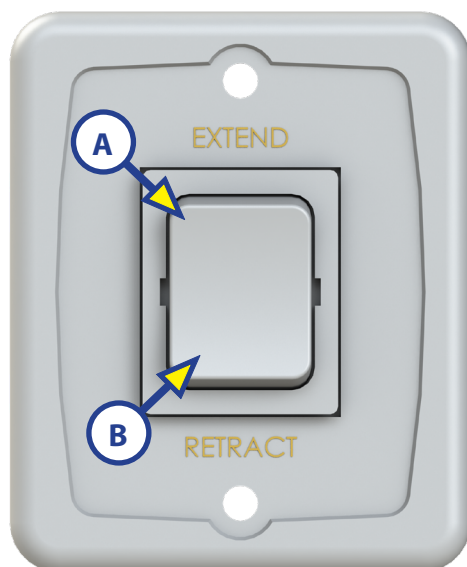
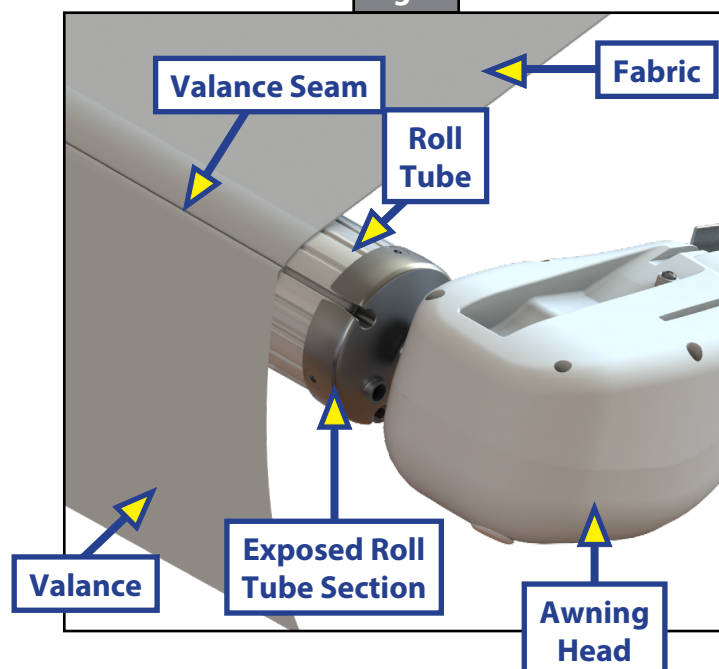


Fig. 2



1. Set pitch using pitch arms with gas strut (Fig. 3A).  
Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 3). A bolt, Belleville washers and nut (Fig. 4A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 5A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 3

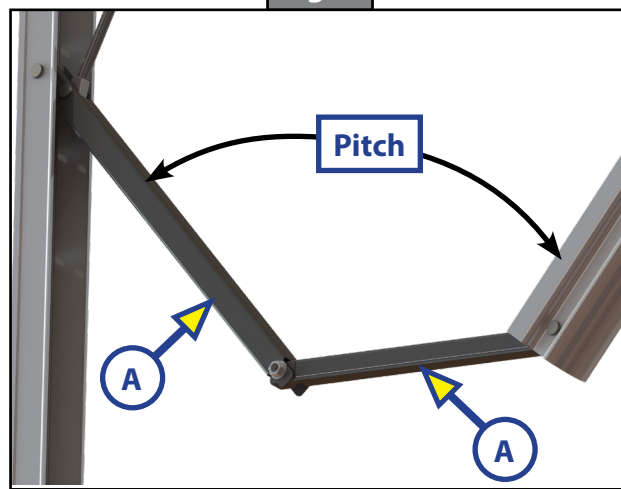


Fig. 4

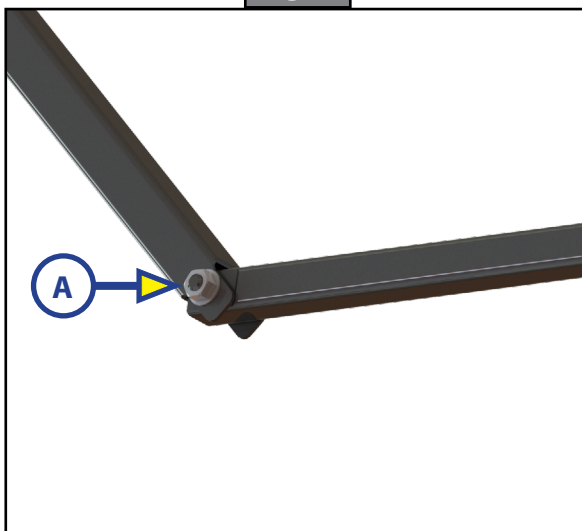
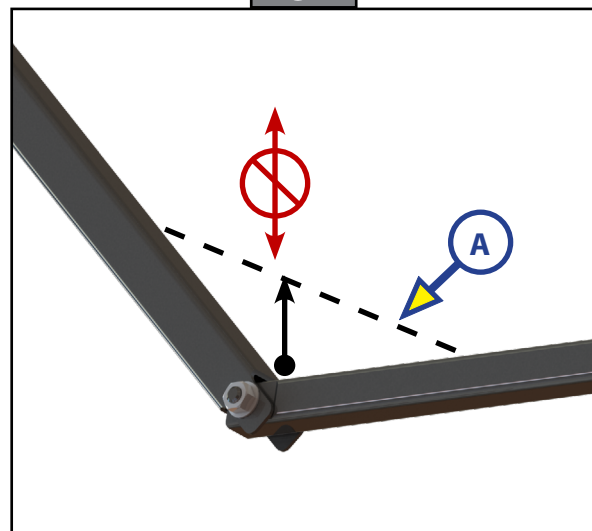


Fig. 5

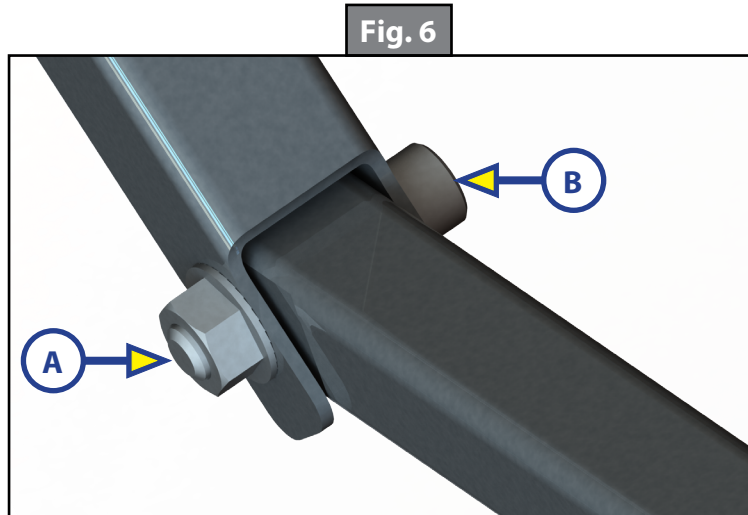


## Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 6A) in the center of the pitch arm.

1. Use a 1/2" wrench to tighten the nut (Fig. 6A) while holding the bolt (Fig. 6B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.



**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

## Retracting the Awning

1. Verify the unit's battery is fully charged and connected to the electrical system.
2. Press and hold "RETRACT" (Fig. 1B) until the awning is retracted completely.

**NOTE:** The awning can be retracted without resetting the pitch.

## Troubleshooting

### Manual Override

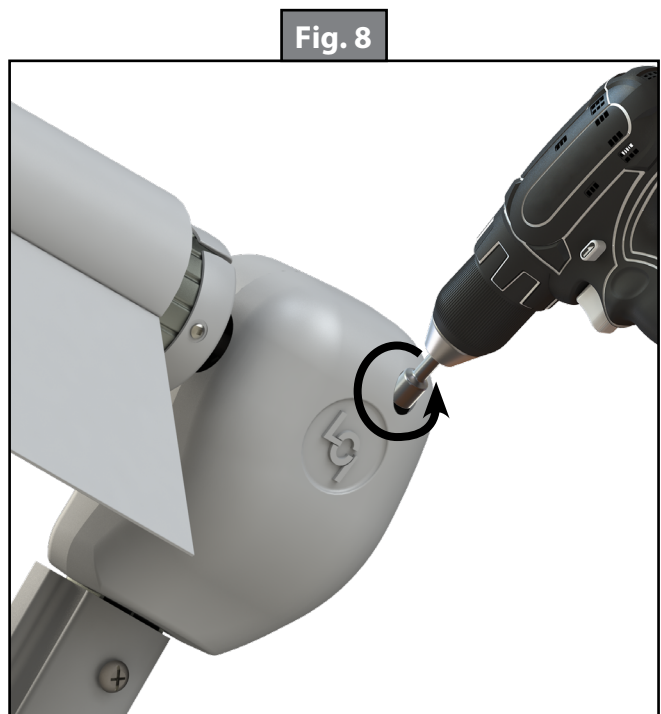
In the event of power loss or motor failure, the awning can be extended or retracted manually. Perform the following procedure to manually extend or retract the awning.

**NOTE:** This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

3. Remove the rubber grommet (Fig. 7A) from the drive head assembly, exposing the manual override nut on the motor.

**NOTE:** The drive head assembly is always located on the right side of the awning as it is viewed from outside of the unit.

4. Using a  $\frac{7}{16}$ " socket and cordless power drill, spin the manual override nut clockwise to extend or counterclockwise to retract the awning. (Fig. 8).



**NOTE:** Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

5. When the awning is completely extended or retracted, remove socket or drive device and replace the rubber grommet in the drive head assembly.

## Maintenance of Awning

### Resources Required

- 5 gallon bucket
- Clean water
- 1/4 cup of dish soap

### Fabric Care

#### **CAUTION**

**Overspray of cleaning solution can cause eye and sensitive skin irritation. Flush affected area with clean water and seek medical attention, if necessary. Wear eye protection and appropriate protective clothing to avoid personal injury.**

#### **CAUTION**

**Moving parts can pinch, crush or cut. Keep clear and use caution.**

If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.

# Maintenance, Cleaning of AIPV (Awning Integrated Photovoltaic) Module

## Resources Required

- Rubber-soled shoes
- Protective gloves
- Nonabrasive microfiber cloth

## Module Care

Keeping the modules clean and unsoiled enables maximum power production. While rain will clean off dust and light soiling, it is recommended to inspect and clean the AIPV modules periodically. In high-soiling areas such as the desert or rural areas with agriculture, the AIPV modules may require more frequent cleaning.

**NOTE:** Do not use solvents or acetone for cleaning.

**NOTE:** Do not use brushes, power cleaners or power scrubber on AIPV modules.

**NOTE:** Do not direct water spray at AIPV module junction boxes and conduit connections. High-pressure water spray should never be used as it may damage the module and void the warranty.

1. Disconnect the utility and/or battery sources.



**Use caution when cleaning AIPV modules. The combination of water and electricity may present a shock hazard.**

2. Be cautious: AIPV modules are extremely slippery when wet.
3. Wear slip-resistant soft rubber-soled shoes and protective gloves when cleaning AIPV modules.
4. Visually inspect the module for damaged wires, loose connections and damage before cleaning.
5. Use a clean, damp, soft, nonabrasive microfiber cloth or sponge to wipe soil off modules. Wipe with a gentle motion and do not use excessive down force.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert.

Revised editions are available for free download from [lippert.com](http://lippert.com)

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert

Ph: 432-LIPPERT (432-547-7378) | Web: [www.lippert.com](http://www.lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)





BY  **LIPPERT™**

# 3500 SERIES SMART ARM POWER AWNING OWNER'S MANUAL



Scan for product support

# TABLE OF CONTENTS

|                                                    |           |
|----------------------------------------------------|-----------|
| <b>Introduction</b>                                | <b>2</b>  |
| <b>Safety</b>                                      | <b>3</b>  |
| <b>Operation</b>                                   | <b>4</b>  |
| Extending the Awning                               | 4         |
| Retracting the Awning                              | 5         |
| LED Lights - Optional                              | 5         |
| IR Sensor - Optional                               | 5         |
| Adjusting Pitch                                    | 6         |
| Wind Sensor - Optional                             | 6         |
| Adjusting Pitch Arm Fasteners                      | 7         |
| Manual Override                                    | 8         |
| <b>Troubleshooting</b>                             | <b>9</b>  |
| Error Codes For Assemblies Produced After May 2018 | 10        |
| <b>Maintenance</b>                                 | <b>10</b> |
| Fabric Care                                        | 10        |
| <b>Notes</b>                                       | <b>11</b> |

## Introduction

The 3500 Series Smart Arm 12V Power Awning features a touch pad that is nested in the awning arm, so the awning can be extended and retracted without going inside the unit. It also features an optional infrared sensor that will activate the awning's security lights if a moving heat source is detected. It also has an optional wind sensor that will automatically retract the awning in case of severe winds. The awning light has a new low voltage alert system. If the voltage gets below 11V the awning light will automatically start flashing when in use. Also, the awning light has three stages of brightness: low, medium and high.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.

Google Play™ and Android™ are trademarks of Google Inc.

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

<https://support.lci1.com/solera-3500-series-smart-arm-12v-power-awning>

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 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.

### **WARNING**

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **WARNING**

This manual provides operational procedures for the 3500 Series Smart Arm. Operating the 3500 Series Smart Arm in any other manner than described may result in personal injury, damage to the recreational vehicle unit or the awning assembly as well as voiding the Lippert Components limited warranty.

### **WARNING**

Moving parts can pinch, crush or cut. Holding the touch pad from both sides can cause serious bodily injury if the awning is retracted completely. Press the buttons from the touch pad side only.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Pitch **MUST** be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.

### **WARNING**

**IMPACT OR CRUSH HAZARD** - Do **NOT** adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.

### **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.

### **CAUTION**

Do not tie down the roll tube, screen room or living room after awning has been extended. Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

## Operation

### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

### ⚠ CAUTION

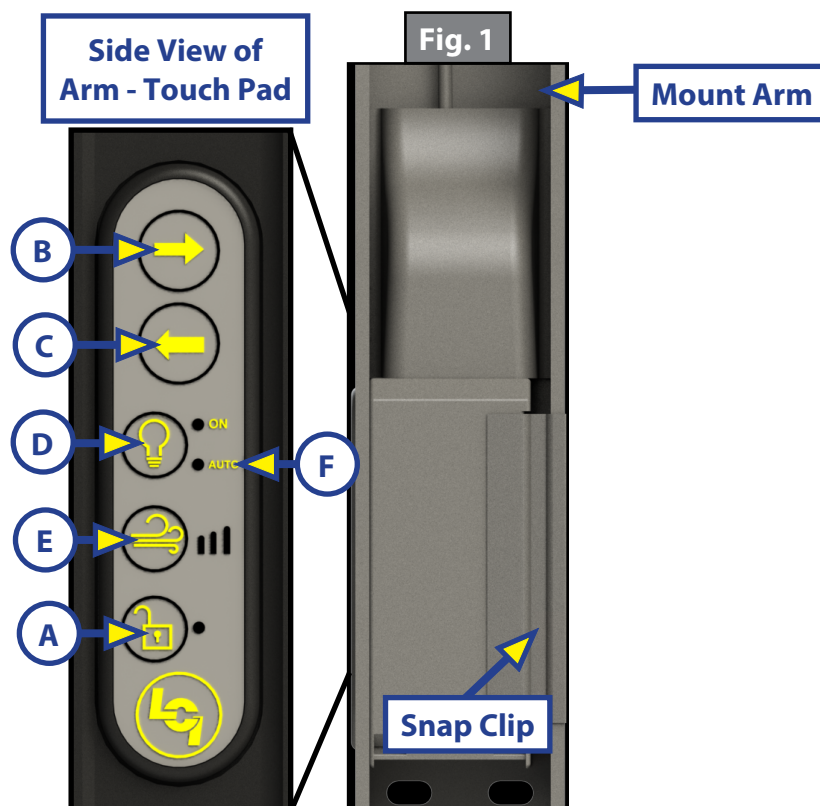
**Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.**

## Extending the Awning

1. Verify the unit's battery is fully charged and connected to the electrical system.
2. To turn the awning controller on, press and hold the lock button (Fig.1A) for three seconds. The green LED will illuminate when the awning is on.
3. Press and hold extend → arrow (Fig.1B) until the awning is extended completely.

**NOTE:** For the auto-extend feature to function, the optional wind sensor must be installed. To use the "One Touch" feature, press the extend → arrow (Fig.1B) twice within two seconds.

**NOTE:** The awning fabric should always be above the roll tube. However, if the extend button is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the retract ← button (Fig.1C). The awning will then extend to its correct orientation and normal operation can resume.



## Set Pitch Using Pitch Arms with Gas Strut

1. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff. Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

2. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 2). A bolt, Belleville washers, and nut (Fig. 3A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 4A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 2

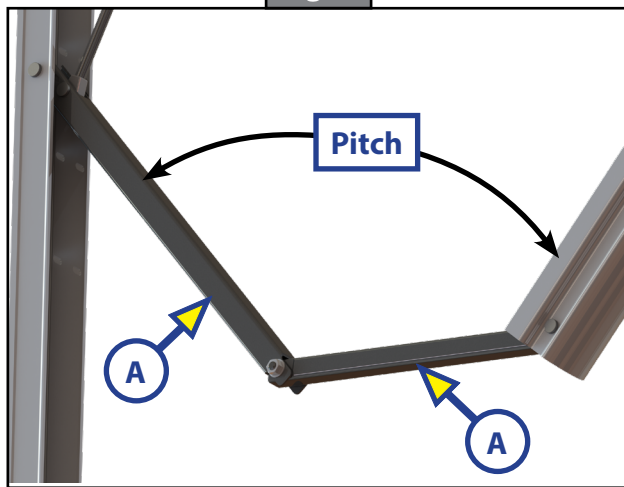


Fig. 3

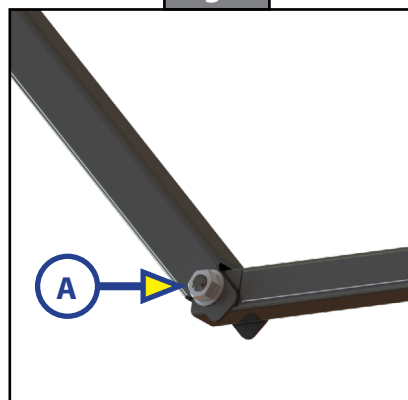
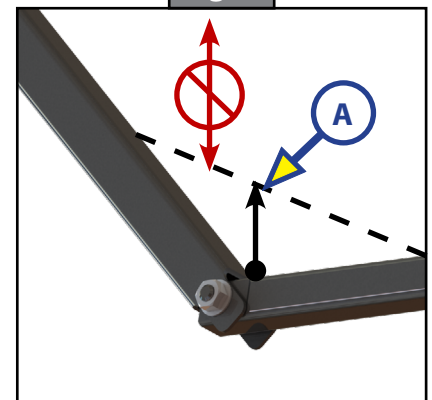


Fig. 4



## Retracting the Awning

1. Verify the unit's battery is fully charged and connected to the electrical system.
2. To turn the system on, press and hold the LOCK button (Fig.1A) for three seconds. The green LED will illuminate when the system is on.
3. Press and hold the RETRACT ← arrow (Fig.1C) until the awning is fully retracted.

## LED Lights - Optional

The awning can be ordered with or without light kits.

### **For awnings manufactured prior to 7/26/17.**

1. Press and hold the lock button (Fig. 1A) for three seconds to turn on the awning controller.
2. Then press the light button (Fig.1D) to turn on the LED light strip.
3. The lights will stay on until the light button (Fig. 1D) is pressed again.

### **For awnings manufactured after 7/26/17.**

1. Press the light button (Fig.1D) to turn on the LED light strip.
2. There are three light levels available:
  - A. Press light button (Fig.1D) once for the low setting or 10% illumination.
  - B. Press light button (Fig.1D) twice for the medium setting or 30% illumination.
  - C. Press the light button (Fig.1D) three times for the high setting or 100% illumination.
  - D. Press the light button (Fig.1D) four times to turn off the LED light strip.

**NOTE:** The light goes to 100% illumination if it is off and then is turned on by an external light input, by CAN bus or if motion is detected by the IR sensor with the AUTO mode on.

## IR Sensor - Optional

For additional safety and security, the optional IR sensor will automatically turn on the LED Lights if a moving heat source is detected during “no-light” conditions. The IR sensor range reaches out approximately 8 feet in a 180-degree radius from where it is mounted on the unit.

1. Press and hold the light button (Fig. 1D) until the red LED AUTO light (Fig.1F) comes on. The IR sensor is now operational.
2. To discontinue IR sensor function, press and hold the light button (Fig.1D) 3-5 seconds, and the red AUTO light will turn off. The IR sensor is no longer operational.

## Wind Sensor - Optional

The optional Wind Sensor will automatically retract the awning if severe wind is detected, based on the wind setting level programmed by the operator.

1. Press and hold the lock button (Fig.1A) for three seconds to unlock the controller. The green LED will illuminate.
2. Press the wind button (Fig.1E) from 1-3 times, depending on the amount of wind sensitivity desired.
3. The amount of wind sensitivity will be displayed via the three LED lights next to the button.

**NOTE:** The levels of wind sensitivity range from 1-3. Level 1 requires more wind (least sensitive) to trigger the feature. Level 3 requires less wind (most sensitive) to trigger the feature.

**NOTE:** When the awning is activated by the Wind Sensor, the awning light will flash as a notification it is preparing to close.

**NOTE:** Any time the awning is retracted for any reason (by the operator or due to strong wind), the desired level of wind sensitivity will need to be set (see Step 2 to set sensitivity). The awning can also be extended without activating the wind sensor.

**NOTE:** Auto extend can be used if the arm has the wind sensor installed. To use the “One Touch” feature, press the extend ➡ arrow (Fig.1B) twice within two seconds.



**During incidents of high wind, heavy rain or extended time away from the unit, it is advisable to retract the awning completely to prevent damage to the awning and the unit.**

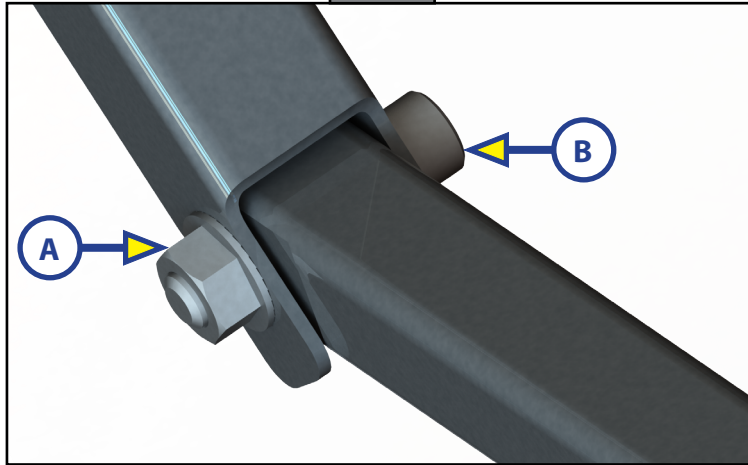
## Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt in the center of the pitch arm.

Use a 1/2" wrench to tighten the nut (Fig. 5A) while holding the bolt (5B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.

Fig. 5



**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.



## Manual Override

In the event of power loss or motor failure, the awning can be extended and retracted manually. Perform the following procedure to manually retract the awning.

1. Remove the rubber grommet (Fig. 6) from the drive head assembly, exposing the manual override nut on the motor.
2. Using a 7/16" socket and a cordless or electric drill or screw gun, spin the manual override nut counterclockwise to retract the awning (Fig. 7).

**NOTE:** Use caution when retracting the awning manually. The use of a step stool or ladder may be required to completely retract the awning.

3. When the awning is completely retracted, replace rubber grommet in the drive head assembly (Fig. 6).

**NOTE:** The motor's internal drive system prevents the awning from moving (extending or retracting) on its own. If the motor is damaged or disabled, secure the awning in the retracted position with a strap around both the outer arm and the mount arm (Fig. 8) before the manual override nut is released.

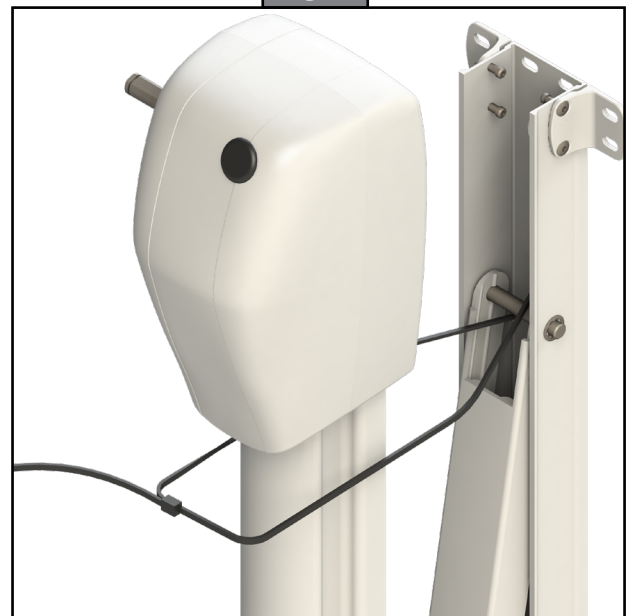
Fig. 6



Fig. 7



Fig. 8





## Troubleshooting

| What Is Happening?                                           | What Should Be Done?                                                                                                                                                                                    |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Awning won't open or close.                                  | If optional travel locks are installed, make sure that they have been unlocked.                                                                                                                         |
|                                                              | Verify the fuse is good.                                                                                                                                                                                |
|                                                              | Motor overheated, thermal breaker has tripped, auto resets once cooled.                                                                                                                                 |
|                                                              | Check for power at the motor when the switch is in the extended or retracted position.                                                                                                                  |
| Awning pitch won't stay in the flat position.                | Check for bad gas strut.                                                                                                                                                                                |
|                                                              | Check pitch arm bolt for proper tension. High winds can cause the pitch arm to deviate from the flat position due to the built-in safety feature of the awning.                                         |
|                                                              | Make sure all three washers are in the proper location of the pitch arm.                                                                                                                                |
| Awning doesn't close all the way.                            | The awning is considered completely closed as long as the outer arm is overlapping the mount arm. This overlap can vary.                                                                                |
|                                                              | Motor overheated, thermal breaker has tripped, auto resets once cooled.                                                                                                                                 |
|                                                              | Verify the fabric is square from the unit to roll tube and is rolling up straight on the roll tube.                                                                                                     |
| Lights won't work.                                           | There is a resettable fuse that can take up to 30 seconds to reset.                                                                                                                                     |
|                                                              | Make sure to have 12V DC to the red wire on the light.                                                                                                                                                  |
|                                                              | Double check power coming out of the touch pad.                                                                                                                                                         |
| Awning seems to wobble when extending or retracting.         | Make sure the bolts that hold the head to the support arm assemblies are tight.                                                                                                                         |
|                                                              | Make sure the end caps are seated properly on the roll tube.                                                                                                                                            |
|                                                              | Make sure the shaft coming out of the head going to the end cap isn't bent.                                                                                                                             |
|                                                              | Make sure the wear collar spacers are all properly located in the support arm assemblies.                                                                                                               |
| Awning works in the opposite direction of what switch shows. | Wires going to awning have been reversed or switched. Reverse the wires.                                                                                                                                |
| Awning rolls up backward.                                    | This is not a defect. To correct the fabric orientation, simply operate the awning in the retract direction and the awning will then extend to its correct orientation and normal operation can resume. |

## Error Codes For Assemblies Produced After May 2018

### **Level 1 Fault**

If moisture is detected in the main, 12-pin connector (Level 1 fault) the interior extend switch will be locked out, as well as the interior awning light control.

**NOTE:** There will be NO lock-out of the retract function.

If a Level 1 fault is detected, the touchpad lock LED (Fig.1A) will blink continuously (same as a low voltage fault) to alert moisture is detected. While the interior extend switch and light will be locked out, the exterior touchpad will remain functional (unless a Level 2 fault is also found).

On equipped units, OneControl functionality will not be actively locked out, however water in the connector can prevent operation. If a Level 1 Fault has not been detected in the previous 100 seconds, pressing any touchpad button will clear the fault, as will a power cycle on the Smart Arm controller.

### **Level 2 Fault**

If moisture is detected in the touchpad or controller board (Level 2 fault), the touchpad lock LED will also blink continuously. The exterior touchpad extend and light buttons will be locked out until a special touchpad button sequence is performed by the user, which allows for a limited-time operation. The interior switches remain functional on a Level 2 fault, as does OneControl. A power cycle will not clear a Level 2 fault. The following sequence must be performed:

1. Press touchpad extend button
2. Press touchpad retract button
3. Press touchpad light button
4. Press touchpad wind button
5. Hold touchpad unlock button for 10 seconds.

Once this unlock procedure is done, the unlock LED will remain on solid. The touchpad buttons function until the mode times out or the user locks the touchpad by depressing the lock button. If no buttons are pressed, the controller will re-lock automatically after 3 seconds. If a button is pressed before 3 seconds has passed, the timeout will be extended by another 3 seconds.

**Awning Actively Extending:** If a Level 1 or Level 2 fault is detected while the awning is extending or auto-extending, the awning will take special action to stop extending, and auto-retract to the fully retracted state. The appropriate fault will be set in the controller's memory.

**Awning Actively Retracting:** If a Level 1 or Level 2 fault is detected while the awning is retracting, the awning will not take any special action. The appropriate fault will be set in the controller's memory.

## **Maintenance**

### Fabric Care

If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime.

Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.

## Notes

This image shows a full page of blank, lined paper. It features approximately 28 horizontal blue or grey lines spaced evenly apart, typical of notebook paper. The lines extend across the entire width of the page, leaving small margins at the top and bottom. There are no vertical lines, text, or other markings on the page.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)



**SOLERA<sup>®</sup> SLIDE TOPPER**  
**5000 SERIES**  
**OWNER'S MANUAL**

# TABLE OF CONTENTS

|                          |          |
|--------------------------|----------|
| <b>Introduction</b>      | <b>2</b> |
| <b>Safety</b>            | <b>3</b> |
| <b>Operation</b>         | <b>4</b> |
| <b>Maintenance</b>       | <b>4</b> |
| Fabric Care and Cleaning | 4        |
| <b>Troubleshooting</b>   | <b>4</b> |
| <b>Notes</b>             | <b>5</b> |

## Introduction

The Solera® Slide Topper 5000 Series is a high-quality, cost-effective way to help keep slide-outs free of dirt, leaves and debris. The Solera® Slide Topper is permanently attached to the slide-out and retracts/extends with the room.

Additional information about this product can be obtained from [lci1.com/support](http://lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

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

<https://support.lci1.com/solera-slider-awning>

**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 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.

### **WARNING**

The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **WARNING**

Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.

### **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.

### **CAUTION**

Always wear eye protection when performing service, maintenance procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.

### **CAUTION**

Moving parts can pinch, crush or cut. Keep clear and use caution.

## Operation

Operation of the Solera® Slide Topper runs in parallel with the operation of the slide-out onto which it is mounted. Consult the Owner's Manual for the respective slide-out for general operation.

**NOTE:** Ensure the fabric rolls and unrolls evenly from the roll tube. Failure to ensure this may result in damage to the Slide Topper or the slide-out in the event of misalignment.

## Maintenance

### Fabric Care and Cleaning

If the slide topper is retracted while wet, extend the slide-out with slide topper and let it dry as soon as conditions allow before again retracting. This will help prevent the formation of mildew and add to the life of the slide topper.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric.

To clean:

1. Fully extend the slide-out with slide topper.
2. Make a mixture of 1/4 cup of dish soap and five gallons of warm water. Liberally apply the mixture to the slide topper fabric.
3. Retract the slide-out for five minutes.
4. Extend the slide-out and hose off the slide-topper with fresh water.
5. Repeat if necessary.
6. Allow to dry before retracting.

## Troubleshooting

### CAUTION

**Releasing tension on the springs can cause injury if performed improperly.  
Checking spring tension should only be done by a certified technician.**

| What is Happening?                     | What Should Be Done?                                                                                   |
|----------------------------------------|--------------------------------------------------------------------------------------------------------|
| Rub marks appear on the fabric.        | Check that there is no debris in the track where fabric goes into the case.                            |
| Fabric sags or is loose.               | Make sure the end caps are properly secured.                                                           |
|                                        | Check tension on springs.                                                                              |
| Fabric will not roll up.               | Check tension on springs.                                                                              |
|                                        | Make sure there are no debris or foreign objects in the fabric opening or case.                        |
| Fabric will not unroll.                | Make sure the pins that lock the tension for install have been removed from both ends of the end caps. |
|                                        | If an optional anti-billow device is present, ensure that the device is properly installed.            |
| Fabric appears to roll up at an angle. | Make sure the rail that is mounted to the unit is square with the main housing of the slide topper.    |
|                                        | Make sure fabric is cut square.                                                                        |



## Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)



BY  **LIPPERT™**

# 5000 SERIES AWNING OWNER'S MANUAL



Scan for product support

## Table of Contents

|                               |          |
|-------------------------------|----------|
| <b>Introduction</b>           | <b>2</b> |
| <b>Safety</b>                 | <b>3</b> |
| <b>Operation</b>              | <b>4</b> |
| Extending the Awning          | 4        |
| Retracting the Awning         | 5        |
| <b>Troubleshooting</b>        | <b>6</b> |
| Adjusting Pitch Arm Fasteners | 6        |
| Manual Override               | 6        |
| <b>Maintenance</b>            | <b>8</b> |
| Resources Required            | 8        |
| Fabric Care                   | 8        |
| <b>Notes</b>                  | <b>9</b> |

## Introduction

The Solera® 5000 Series Awning features easy access to an internal motor to steadily operate the awning. Additionally, the friction joint allows for adjustable pitch features, and there is no rafter arm to lock in place. The friction joint also provides added stability.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.  
Google Play™ and Android™ are trademarks of Google Inc.

For additional support on this product go to: <https://support.lci1.com/solera-5000-series-awning>

**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 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.

### **WARNING**

The “WARNING” symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.

### **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.

### **WARNING**

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

### **WARNING**

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

### **CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### **CAUTION**

This manual provides operational procedures for Solera® 5000 Series Awning. Operating the Solera® 5000 Series Awning in any other manner than described may result in personal injury, damage to the recreational vehicle or the awning assembly as well as voiding the Lippert Components Limited Warranty.

### **CAUTION**

Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.

## Operation

**NOTE:** Some units may not use the Lippert switch (Fig. 1).

### Extending the Awning

#### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

#### ⚠ WARNING

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

#### ⚠ CAUTION

**Tying down the roll tube once the awning is extended will not allow the free-floating support arms to work as designed and may cause damage to the awning or unit.**

1. Verify the RV battery is fully charged and connected to the electrical system.

**NOTE:** If the unit is equipped with a locking latch, be sure to unlock the latch prior to extending the awning.

2. Press and hold EXTEND (Fig. 1A) until the awning is extended completely.

**NOTE:** Extension is considered complete when the fabric is completely unrolled, the valance is hanging down from the roll tube and the awning's single polycord is visible between the 9 and 12 o'clock positions as viewed from the end of the drive head (Fig. 2).

Fig. 1

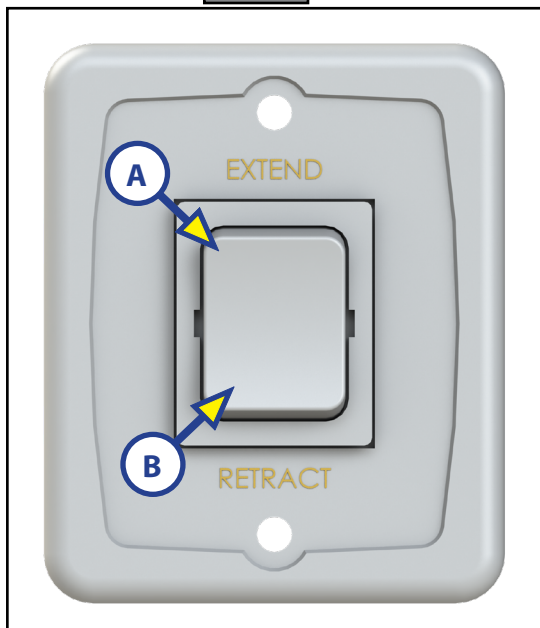
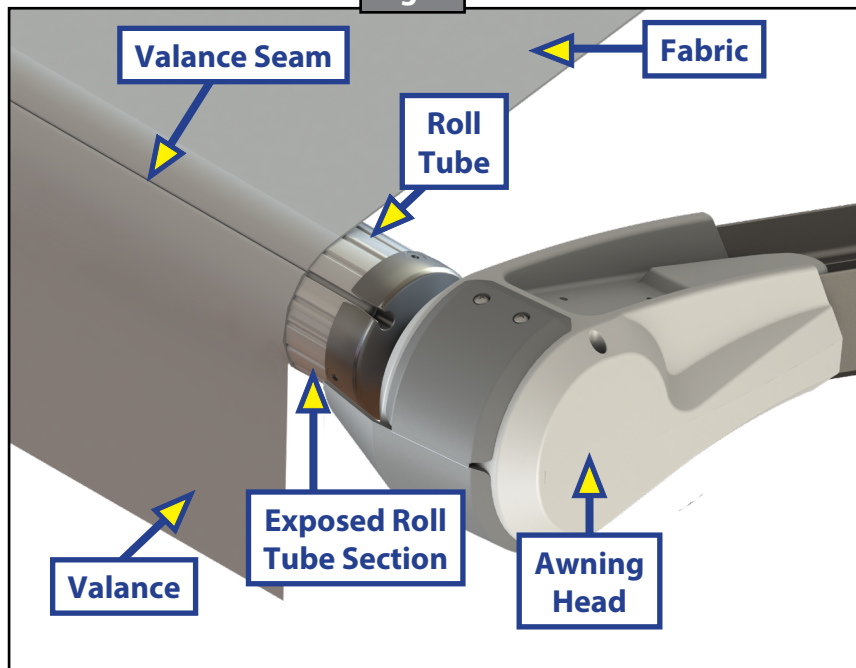


Fig. 2



**NOTE:** The awning fabric should always be above the roll tube. However, if the extend switch is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then extend to its correct orientation and normal operation can resume.

3. Set pitch using pitch arms with gas strut (Fig.3A).

- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff. Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 3). A bolt, Belleville washers and nut (Fig. 4A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 5A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 3

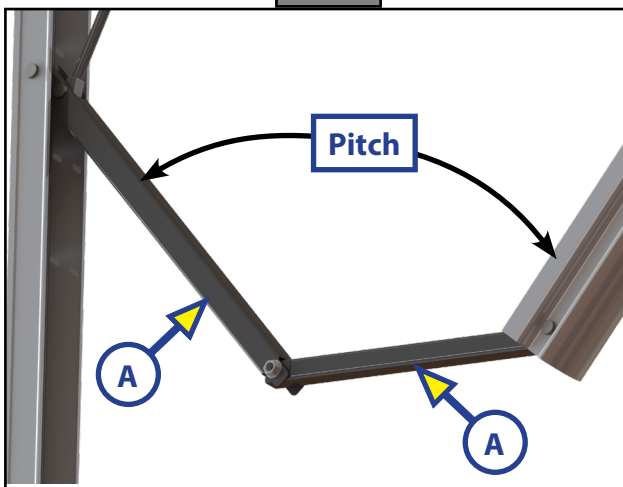


Fig. 4

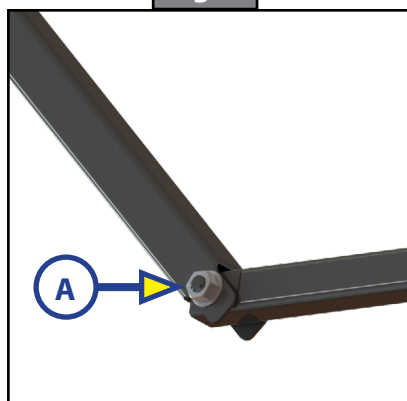
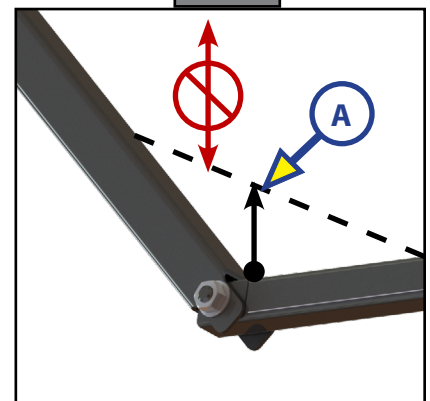


Fig. 5



## Retracting the Awning

### **⚠ CAUTION**

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

1. Verify the unit battery is fully charged and connected to the electrical system.

**NOTE:** The awning can be retracted without resetting the pitch.

2. Press and hold RETRACT (Fig. 1B) until the awning is retracted completely.

**NOTE:** If the unit is equipped with a locking latch, be sure to engage the latch after retracting the awning.

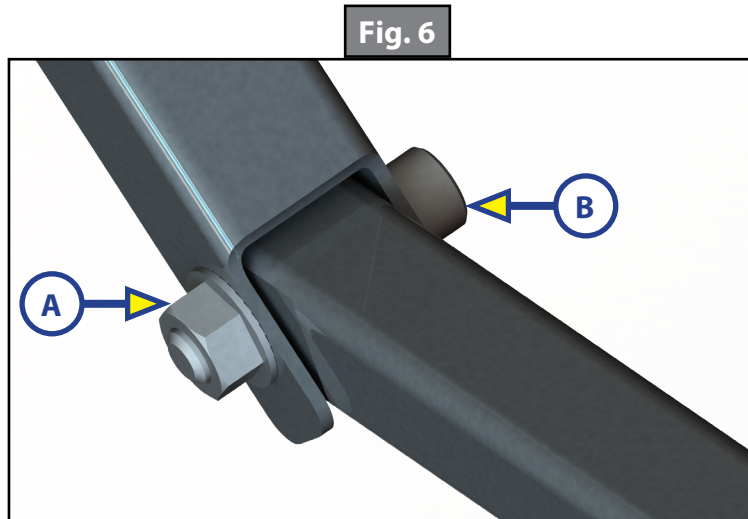
## Troubleshooting

### Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 6A) in the center of the pitch arm.

1. Use a 1/2" wrench to tighten the nut (Fig. 6A) while holding the bolt (6B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.



**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

### Manual Override

In the event of power loss or motor failure, the awning can be extended or retracted manually. Perform the following procedure to manually extend or retract the awning.

**NOTE:** This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

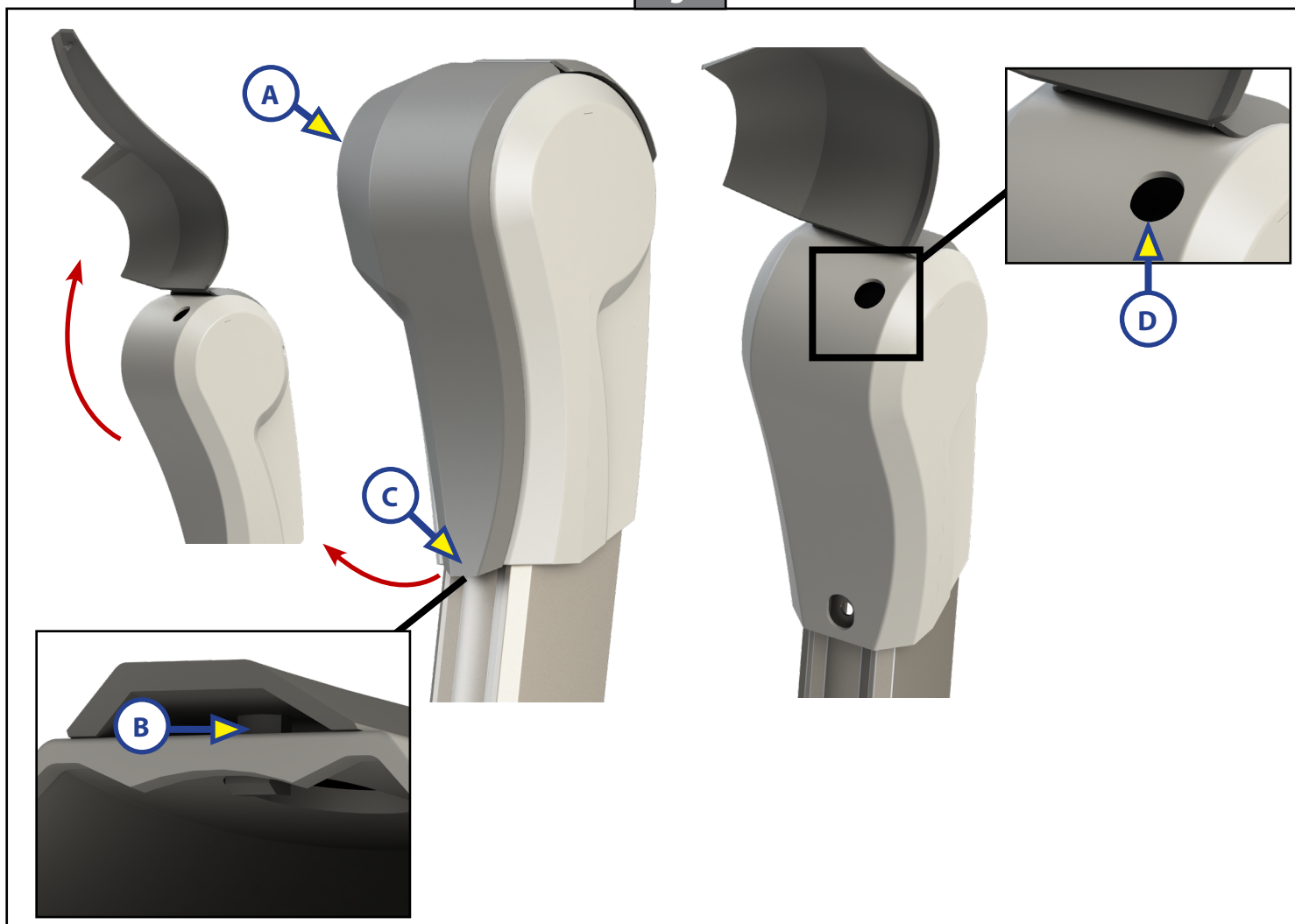
1. Lift the decorative cover (Fig. 7A) by unlatching and lifting cover up from the bottom (Fig. 7B and 7C) exposing the manual override nut on the motor (Fig. 7D)

**NOTE:** The drive head assembly is always located on the right side of the awning as it is viewed from outside of the unit.

2. Using a 7/16" socket and cordless power drill, spin the manual override nut clockwise to extend or counterclockwise to retract the awning. (Fig. 8).



Fig. 7



**NOTE:** Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

Fig. 8



3. When the awning is completely extended or retracted, remove socket or drive device and replace the decorative cover on drive head assembly.

## Maintenance

### Resources Required

- 5 gallon bucket
- Clean water
- 1/4 cup of dish soap

### Fabric Care



**Over-spray of cleaning solution can cause eye and sensitive skin irritation. Flush affected area with clean water and seek medical attention, if necessary. Wear eye protection and appropriate protective clothing to avoid personal injury.**



**Moving parts can pinch, crush or cut. Keep clear and use caution.**

If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.

## Notes

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)



BY  **LIPPERT™**

# 5000WS SERIES AWNING (WIND SENSOR) OWNER'S MANUAL



Scan for product support

# TABLE OF CONTENTS

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| <b>Introduction</b>                                                    | <b>2</b>  |
| <b>Safety</b>                                                          | <b>3</b>  |
| <b>Syncing the Bluetooth® Wind Sensor to the OneControl App</b>        | <b>4</b>  |
| Preparation - Initial Pairing of the Wind Sensor to the OneControl App | 4         |
| <b>Operation</b>                                                       | <b>6</b>  |
| Extending and Retracting the Awning Using the OneControl App           | 7         |
| Settings for Automatic Retraction Due to Wind Events                   | 7         |
| Extending the Awning with the Power Button Switch                      | 8         |
| Retracting the Awning with the Power Button Switch                     | 9         |
| <b>Troubleshooting</b>                                                 | <b>10</b> |
| Manual Override                                                        | 10        |
| Adjusting Pitch Arm Fasteners                                          | 11        |
| <b>Maintenance</b>                                                     | <b>12</b> |
| Resources Required                                                     | 12        |
| Fabric Care                                                            | 12        |
| <b>Wiring Diagram</b>                                                  | <b>13</b> |

## Introduction

The Solera® Power Awning features an internal motor to steadily operate the awning along with an adjustable pitch arm assembly that provides added stability. The Solera Power Awning has been upgraded to include a wind sensor in the drive side arm that pairs with the Lippert Unity board which can be controlled on the OneControl app.

Additional information about this product can be obtained from [lci1.com/support](https://support.lci1.com/support) or by downloading the free LippertNOW app. The app is available on Apple App Store® for iPhone® and iPad® and also on Google Play™ for Android™ users.

Apple App Store®, iPhone®, and iPad® are registered trademarks of Apple Inc.

Google Play™ and Android™ are trademarks of Google Inc.

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

<https://support.lci1.com/solera-5000-series-awning>

**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.

**NOTE:** This manual will refer to the “drive side” and “idler side” throughout for various instructions. The “drive side” is the right hand side of the awning when facing the awning from the exterior of the unit. The “idler side” is the left hand side of the awning when facing the awning from the exterior of the unit.

## Safety

Read and 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.

### **WARNING**

**The "WARNING" symbol above is a sign that a procedure has a safety risk involved and may cause death or serious personal injury if not performed safely and within the parameters set forth in this manual.**

### **WARNING**

**Failure to follow instructions provided in this manual may result in death, serious personal injury and/or severe product and property damage, including voiding of the component warranty.**

### **WARNING**

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

### **WARNING**

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

### **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.**

### **CAUTION**

**The awning MUST be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.**

### **CAUTION**

**Always wear eye protection when performing service, maintenance or installation procedures. Other safety equipment to consider would be hearing protection, gloves and possibly a full face shield, depending on the nature of the task.**

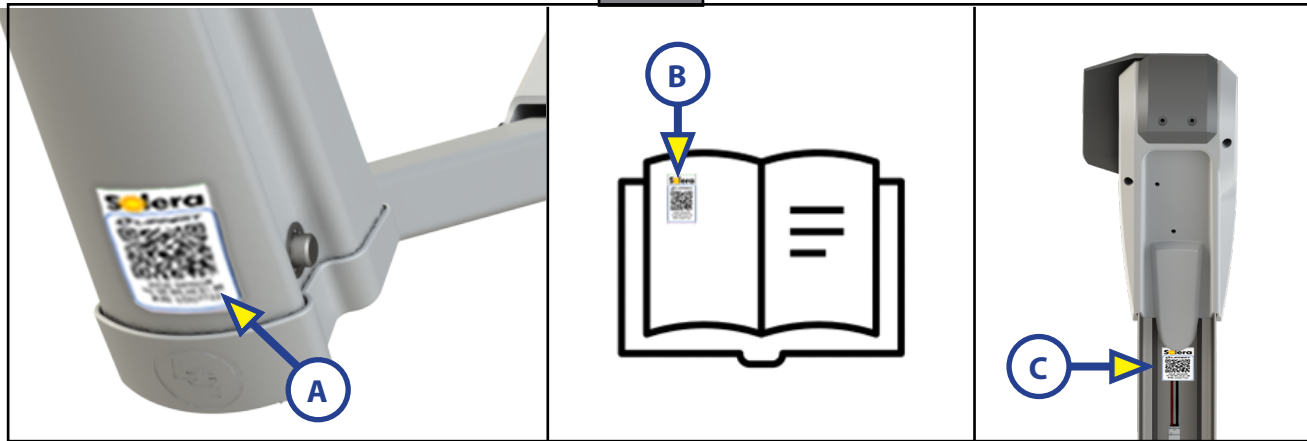
### **CAUTION**

**This manual provides operational procedures for Solera Power Awning. Operating the Solera Power Awning in any other manner than described may result in personal injury, damage to the unit or the awning assembly as well as voiding the Lippert Components Limited Warranty.**

## Syncing the Bluetooth® Wind Sensor to the OneControl App

Located on the outside of the drive side arm will be a QR label (Fig. 1A). The QR label is also located inside the owner's manual (Fig. 1B), or on the wind sensor (Fig. 1C) located on the inside of the drive side arm should the front of the arm sticker wear off or the manual is lost. Scan the QR code when ready to pair to the OneControl application.

Fig. 1



### **⚠ WARNING**

**When on, the automatic retraction due to wind feature will operate without any other inputs. If people are between the awning arm and the frame, they will be injured. The awning will sound an audible chime before starting a wind-triggered auto-retraction and continue to chime as it retracts. This is intended to draw attention of people who may be between the awning arm to give them time to get clear. When the automatic retraction due to wind feature is on, never hang objects from your awning. When the awning retracts, those objects and your awning will be damaged.**

## Preparation - Initial Pairing of the Wind Sensor to the OneControl App

The wind sensor **MUST** be activated by the OneControl application in order for the wind sensor to operate.

### **Resources Required**

- Android, iOS smart device
- Internet connection

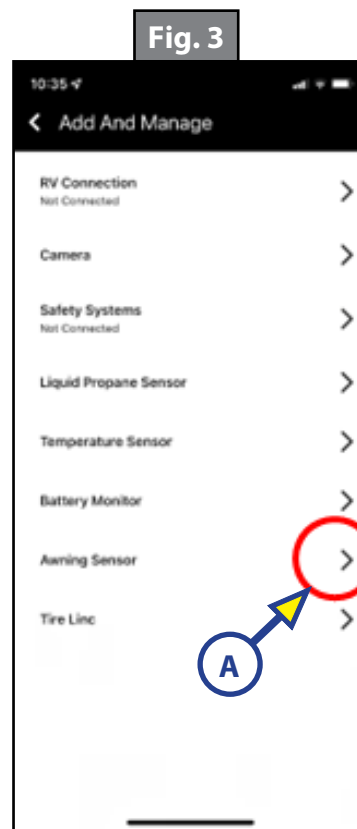
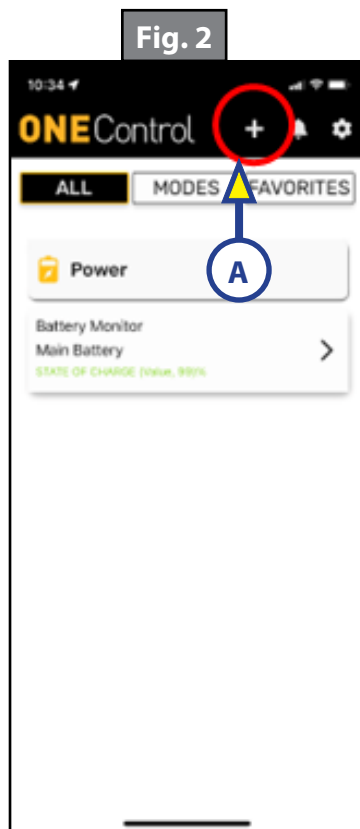
1. To get started, if you have not already downloaded the Lippert OneControl App to control your Bluetooth® unit devices, scan the QR code below for your smart device.



2. Open the app and either register or log in.



3. From the Main Menu, tap the + icon (Fig. 2A) in the upper right corner.
4. Select Awning Sensor (Fig. 3A) from the list of devices to add or manage.

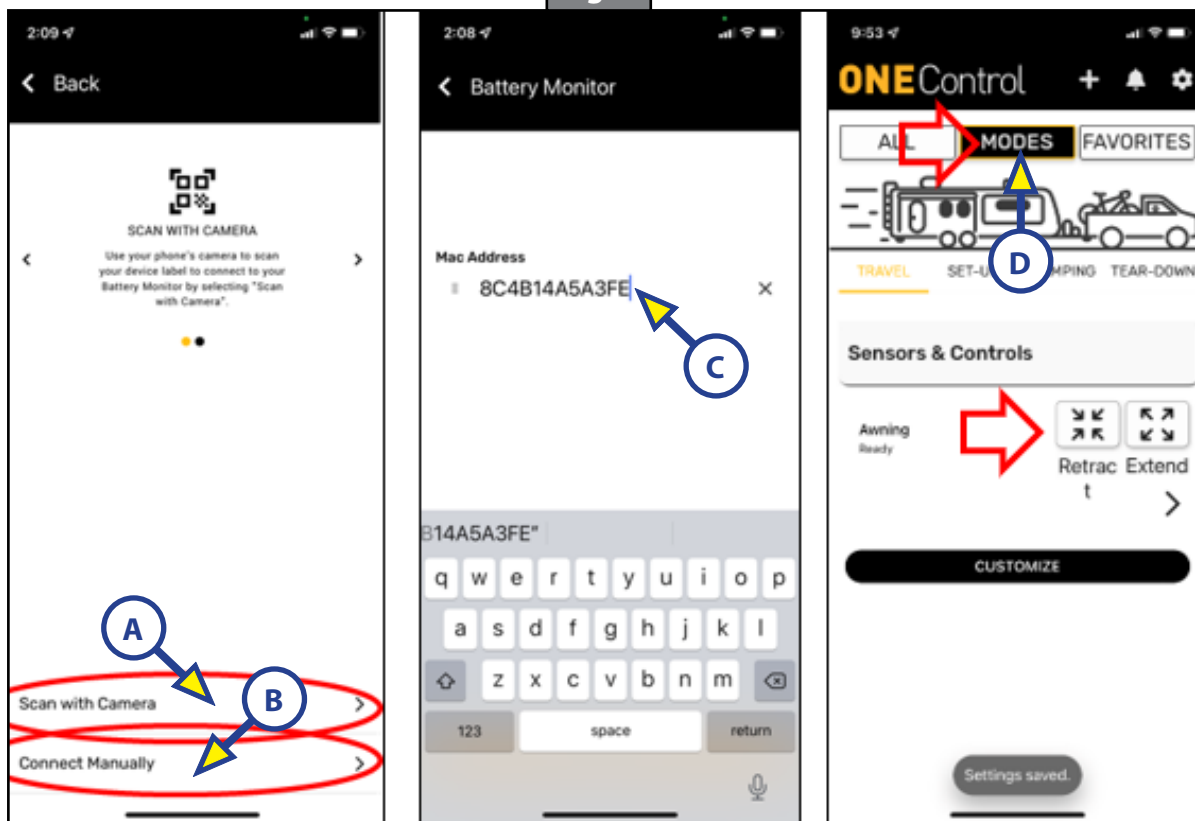


5. There are two ways to connect. You can either scan the QR code on the label (Fig. 4A), which is located on the front of the drive side of the awning arm, the label in your owner's manual or the label on the actual wind sensor inside the awning arm or enter the 12 digit MAC address (Fig. 4B) on the label manually.



6. Tap either Scan with Camera (Fig. 5A), or Connect Manually (Fig. 5B). Either scan the QR code or type in the MAC Address (Fig. 5C). The awning will now appear in the OneControl menu. It may be visible under Modes (Fig. 5D).

Fig. 5



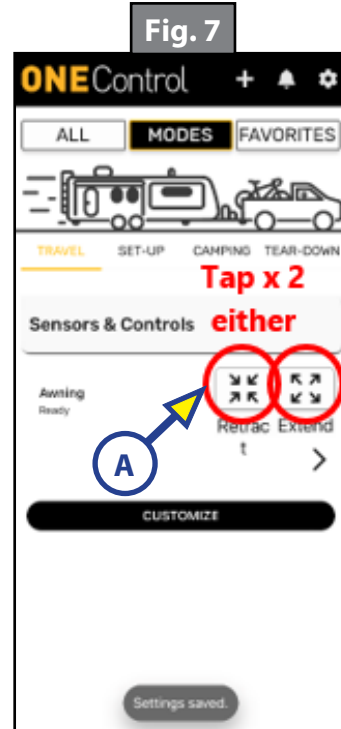
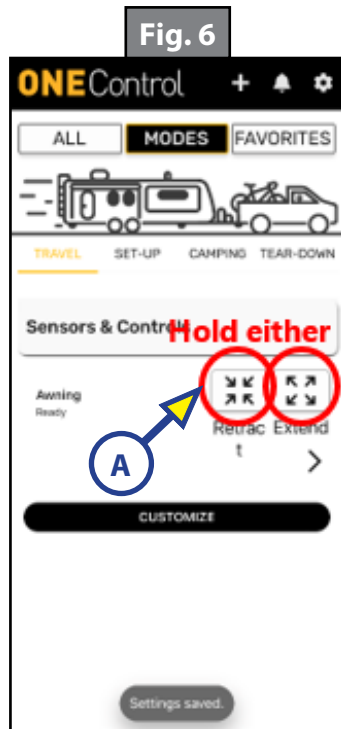
## Operation

### ⚠ WARNING

When extending your awning, be sure to give the awning appropriate clearance. Trees, branches, nearby units, and other obstructions will damage your awning. The awning arms and frame are a pinch-point. Be sure the awning mechanism is clear of people before retracting. Otherwise, harm will result. Make sure the awning is free from obstructions and not tied-down before retracting. Obstructions and objects will be damaged and will damage the awning.

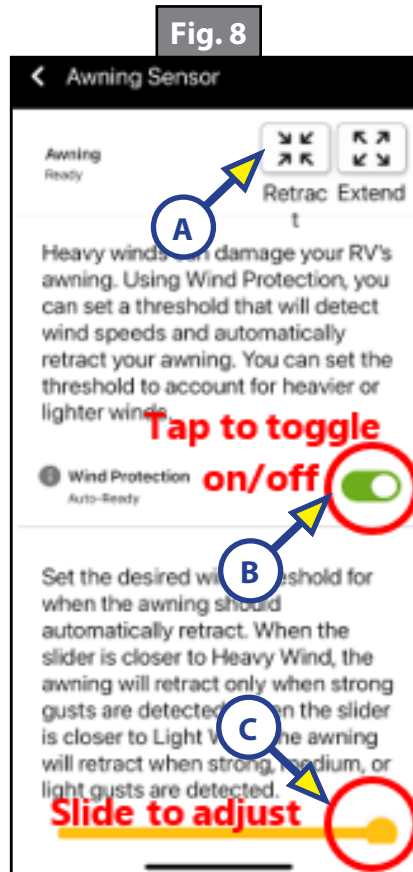
## Extending and Retracting the Awning Using the OneControl App.

- A. To extend or retract the awning, press and hold the Extend or Retract buttons on the home screen (Fig. 6A).
- B. To automatically fully extend or fully retract the awning, double tap the appropriate icon on the home screen (Fig. 7A).



## Settings for Automatic Retraction Due to Wind Events

To set a wind sensitivity level, tap the arrow (Fig. 8A) in the Awning Sensor cell on the home screen and use the slider (Fig. 8C) to adjust the wind sensitivity level, or to toggle the automatic retraction due to wind events on or off (Fig. 8B).



### ⚠️ WARNING

**IMPACT OR CRUSH HAZARD - Pitch MUST be set to lower one side of the awning after the awning is extended. Failure to set pitch could lead to water, snow or debris accumulating on the awning fabric, which could cause the awning to move unpredictably, become unstable, and bend or collapse causing death or personal injury or property damage.**

### ⚠️ WARNING

**IMPACT OR CRUSH HAZARD - Do NOT adjust pitch manually if there is already pooling water, snow or debris on the awning fabric. Keep the awning arm area clear of people and objects when in operation. Failure to heed these warnings could cause severe personal injury and/or property damage.**

### ⚠️ CAUTION

**Tying down the roll tube once the awning is extended will not allow the free-floating support arms and the wind sensor to work as designed and may cause damage to the awning or unit.**

**NOTE:** Some units may not use the Lippert switch (Fig. 9).

1. Verify the unit battery is fully charged and connected to the electrical system.

**NOTE:** If the unit is equipped with a locking latch, be sure to unlock the latch prior to extending the awning.

2. Press and hold EXTEND (Fig. 9A) until the awning is extended completely.

**NOTE:** Extension is considered complete when the fabric is completely unrolled, the valance seam is visible and a section of the roll tube is exposed (Fig. 10).

**NOTE:** The awning fabric should always be above the roll tube. However, if the extend switch is engaged too long or extend is hit inadvertently instead of retract, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then extend to its correct orientation and normal operation can resume.

3. Set pitch using pitch arms with gas strut (Fig. 11A).  
Scan this QR Code to watch the video on How to Correctly Pitch a Lippert Awning.



Fig. 9

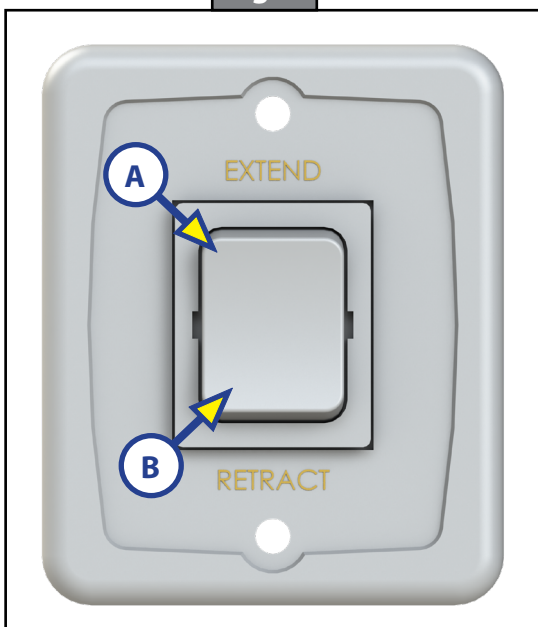
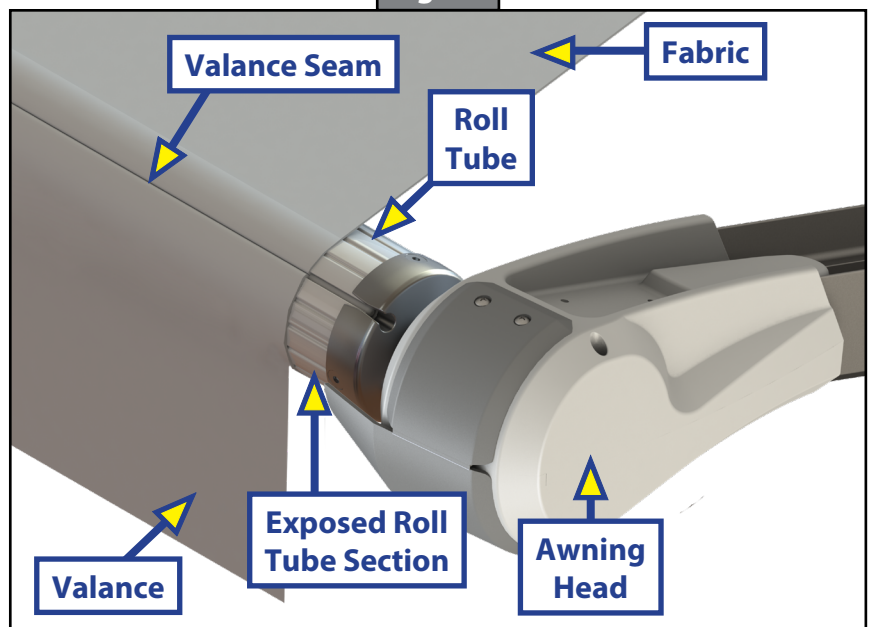


Fig. 10



- A. Choose the side of the awning for optimum shade or convenient water runoff. Pitch **MUST** be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.

**NOTE:** Before manually adjusting pitch, make sure there is no water or snow pooling or debris present on top of the awning fabric. Use a long-handled tool that will not puncture the fabric (e.g. a broom) to push up on the awning fabric to drain off the water, snow or debris.

- B. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 11). A bolt, Belleville washers and nut (Fig. 12A) allow the joint to remain in the position set by the operator. If pitch arm does not hold position, see "Adjusting Pitch Arm Fasteners" in the Troubleshooting section of this manual.

**NOTE:** Do not push the joints of the articulating arms up past a straight line (Fig. 13A). This will put tension on the gas strut, which can cause the strut to break.

Fig. 11

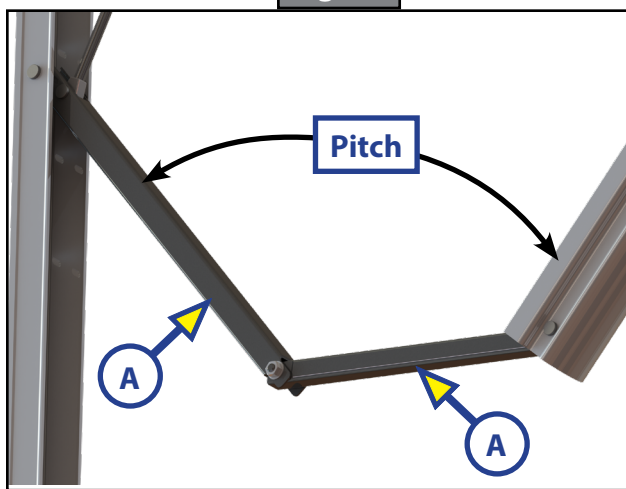


Fig. 12

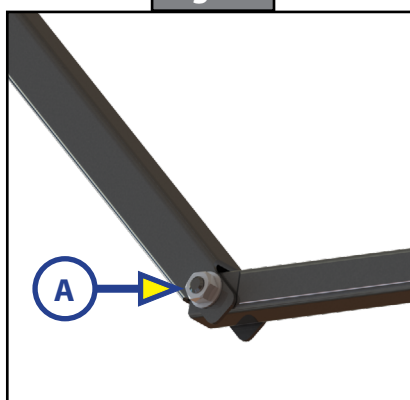
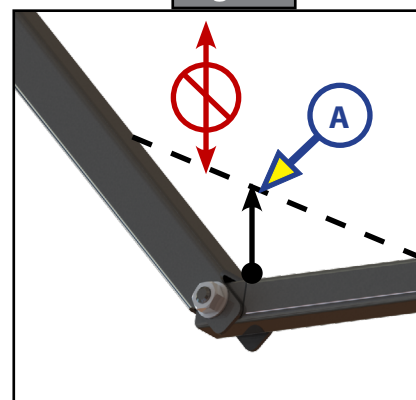


Fig. 13



### ⚠ WARNING

**Warning Chime** - If the awning is paired to the OneControl app, during the automatic closure due to a wind event, a warning chime will sound. This is intended to warn users to stand clear as the awning retracts.

### ⚠ CAUTION

The awning **MUST** be retracted completely during incidents of high wind, heavy rain and/or during any extended time away from the unit. Failure to retract the awning in those instances could cause extensive damage to the awning and unit.

### ⚠ CAUTION

During incidents of high wind, heavy rain or extended time away from the unit, it is advisable to retract the awning completely to prevent damage to the awning and the unit.

## Retracting the Awning with the Power Button Switch

**NOTE:** Some units may not use the Lippert switch (Fig. 9).

1. Verify the unit's battery is fully charged and connected to the electrical system.

**NOTE:** The awning can be retracted without resetting the pitch.

2. Press and hold RETRACT (Fig. 9B) until the awning is retracted completely.

**NOTE:** The awning may automatically retract if the wind sensor is activated.

**NOTE:** If the unit is equipped with a locking latch, be sure to engage the latch after retracting the awning.

## Troubleshooting

### Manual Override

In the event of power loss or motor failure, the awning can be extended or retracted manually. Perform the following procedure to manually extend or retract the awning.

**NOTE:** This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

4. Lift the decorative cover (Fig. 14A) by unlatching and lifting cover up from the bottom (Fig. 14B and 14C) exposing the manual override nut on the motor (Fig. 14D).

**NOTE:** The drive head assembly is always located on the right side of the awning as it is viewed from outside of the unit.

5. Using a  $\frac{7}{16}$ " socket and cordless power drill, spin the manual override nut clockwise to extend or counterclockwise to retract the awning. (Fig. 15).

Fig. 14

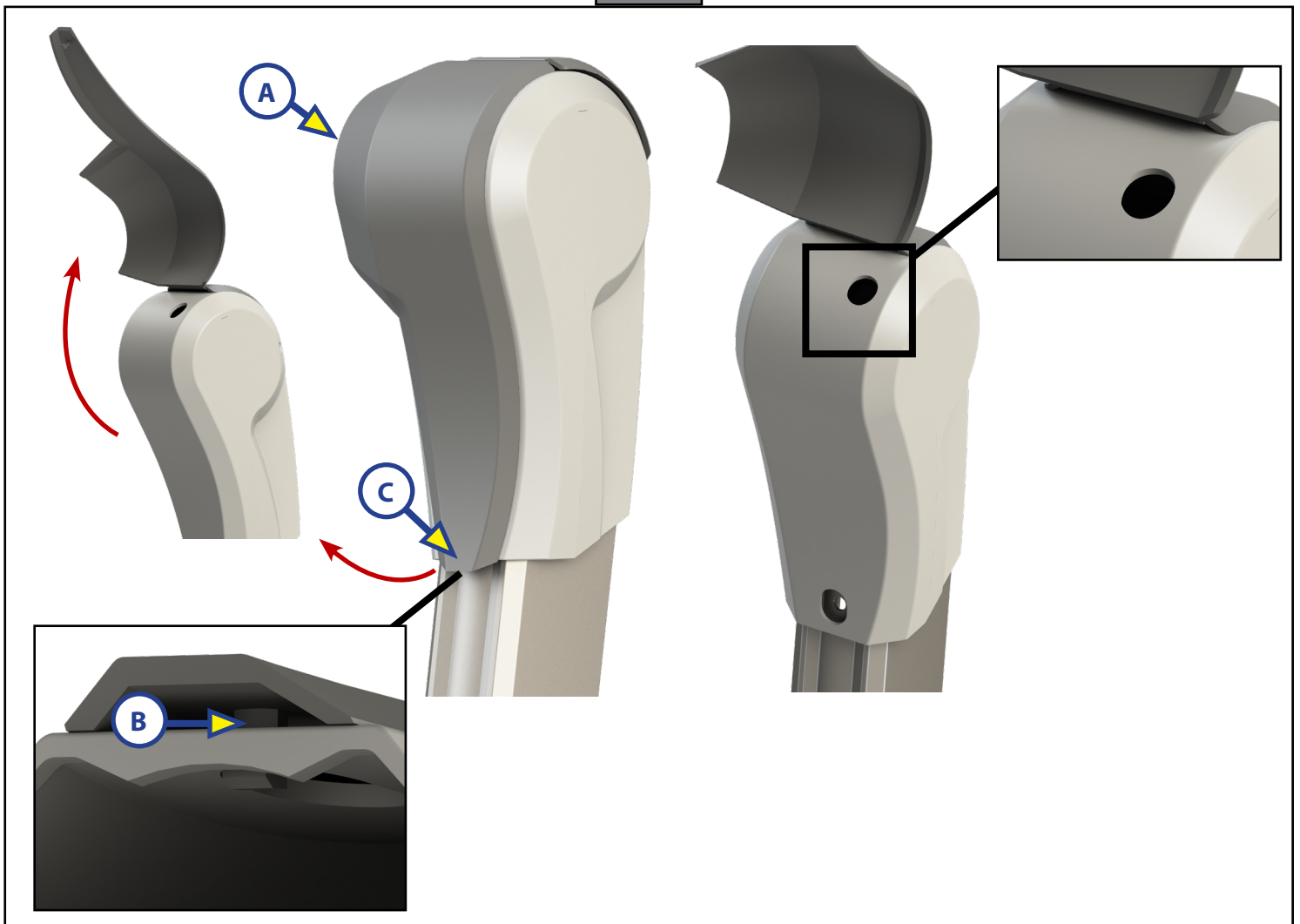




Fig. 15



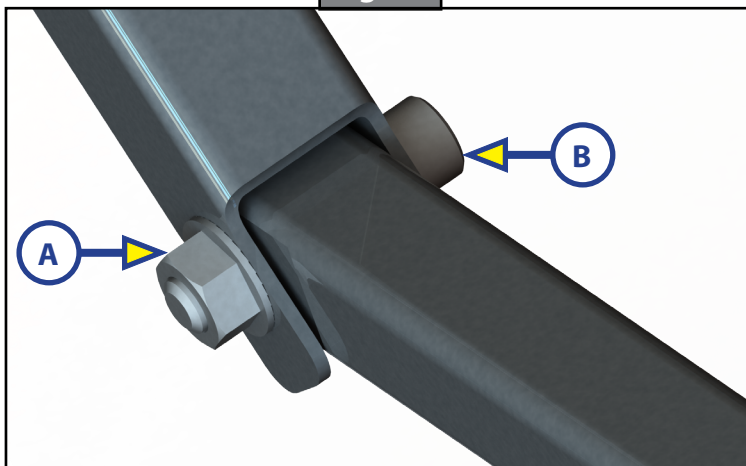
**NOTE:** Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

6. When the awning is completely extended or retracted, remove socket or drive device and replace the decorative cover on drive head assembly.

### Adjusting Pitch Arm Fasteners

If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 16A) in the center of the pitch arm.

Fig. 16



1. Use a 1/2" wrench to tighten the nut (Fig. 16A) while holding the bolt (Fig. 16B) on the other side of the pitch arm with a 1/4" hex wrench.

**NOTE:** When tightening the nut do not tighten more than 1/4 turn at a time and do not tighten to the point of crushing the pitch arm.

**NOTE:** Existing bolt, Belleville washers and nut are installed in a specific orientation for tensioning. Removal of these components or modification of the orientation will cause adverse effects on the pitch arm functionality.

## Maintenance

### Resources Required

- 5 gallon bucket
- Clean water
- 1/4 cup of dish soap

### Fabric Care

#### **CAUTION**

**Over-spray of cleaning solution can cause eye and sensitive skin irritation. Flush affected area with clean water and seek medical attention, if necessary. Wear eye protection and appropriate protective clothing to avoid personal injury.**

#### **CAUTION**

**Moving parts can pinch, crush or cut. Keep clear and use caution.**

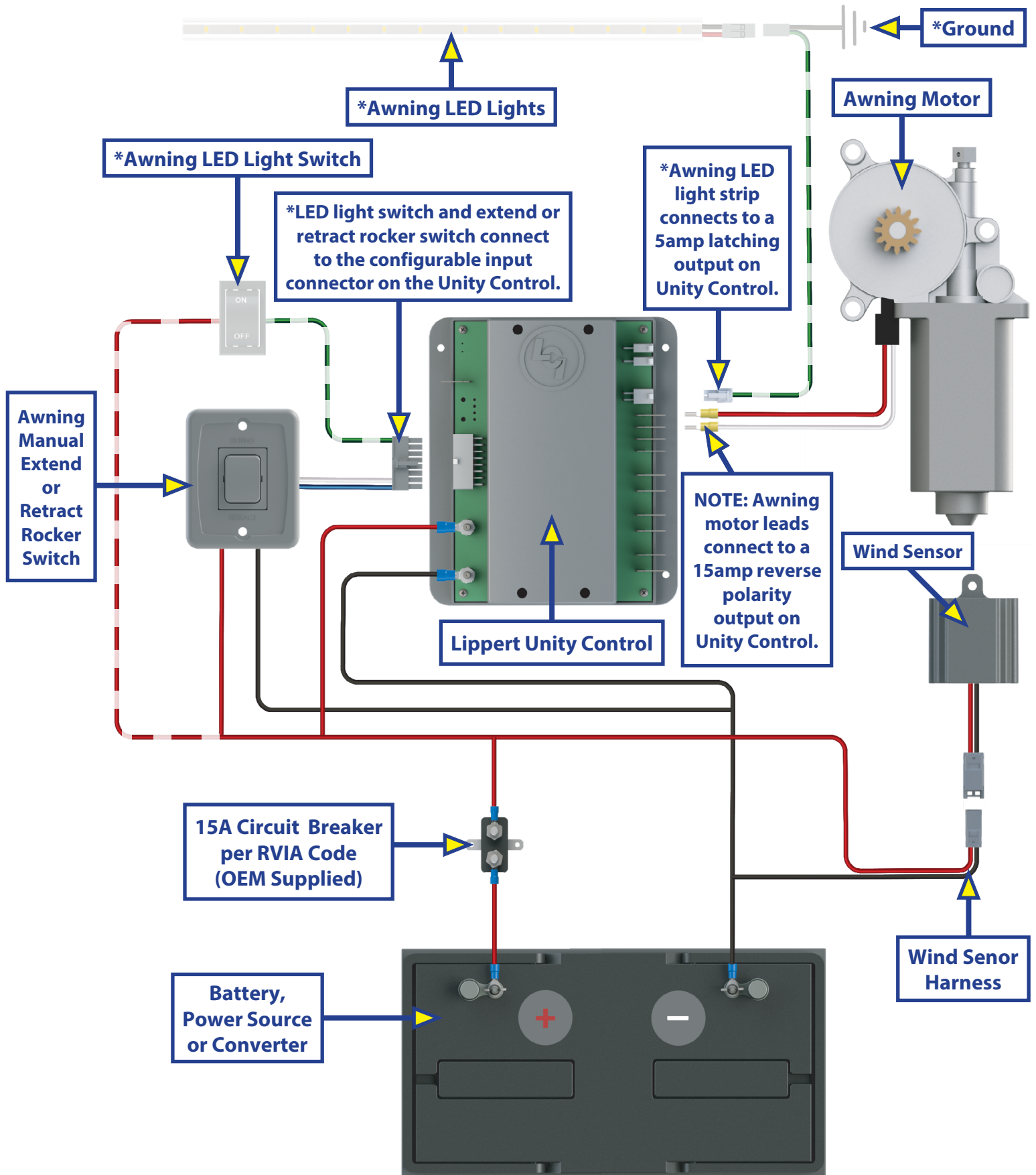
If the awning is retracted while wet, extend the awning and let it dry as soon as conditions allow before retracting. This will help prevent the formation of mildew and add greatly to the life of the awning.

**NOTE:** Mildew does not form on the fabric itself, but on the accumulated dust, dirt and grime. Periodically clean vinyl or woven acrylic fabric using a mixture of 1/4 cup of dish soap and five gallons of warm water.

1. Liberally apply the mixture on the top of the fabric and retract the awning for five minutes. This will apply the mixture to the bottom of the fabric as well.
2. Extend the awning and hose off with fresh water.
3. Repeat if necessary.
4. Allow to dry before retracting.



# Wiring Diagram



**NOTE:** \*If applicable, light kits are optional.



The contents of this manual are proprietary and copyright protected by Lippert. Lippert prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized Lippert representative has been provided. Any unauthorized use shall void any applicable warranty. The information contained in this manual is subject to change without notice and at the sole discretion of Lippert. Revised editions are available for free download from [lippert.com](http://lippert.com).

Please recycle all obsolete materials.

For all concerns or questions, please contact Lippert.  
Ph: 432-LIPPERT (432-547-7378) | Web: [lippert.com](http://lippert.com) | Email: [customerservice@lci1.com](mailto:customerservice@lci1.com)