



**SOLERA® 3000WS SERIES
AWNING (WIND SENSOR)
OEM INSTALLATION MANUAL**

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Introduction

The Solera® Power Awning features an internal motor to steadily operate the awning. Additionally, the pitch arm assembly allows for rain dump and adjustable pitch features. The pitch arm assembly also 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-3000-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.

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.

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 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.

Prior To Installation

NOTE: All screws supporting the awning assembly must have a backer within the structure of the wall of the unit.

Resources Required

- 2 - 3 People, depending on task
- Cordless or electric drill or screw gun
- Appropriate drive bits
- Rivet gun (if needed)
- Screwdriver
- #6 x 1/2" hex head screws
- #10 x 3/4" screws
- #12 x 1 1/4" screws
- Wire cutters/Strippers
- Non-permanent method of marking
- Silicone sealant or tape
- Silicone lubricant

Installation

Awning Rail Installation (If Needed)

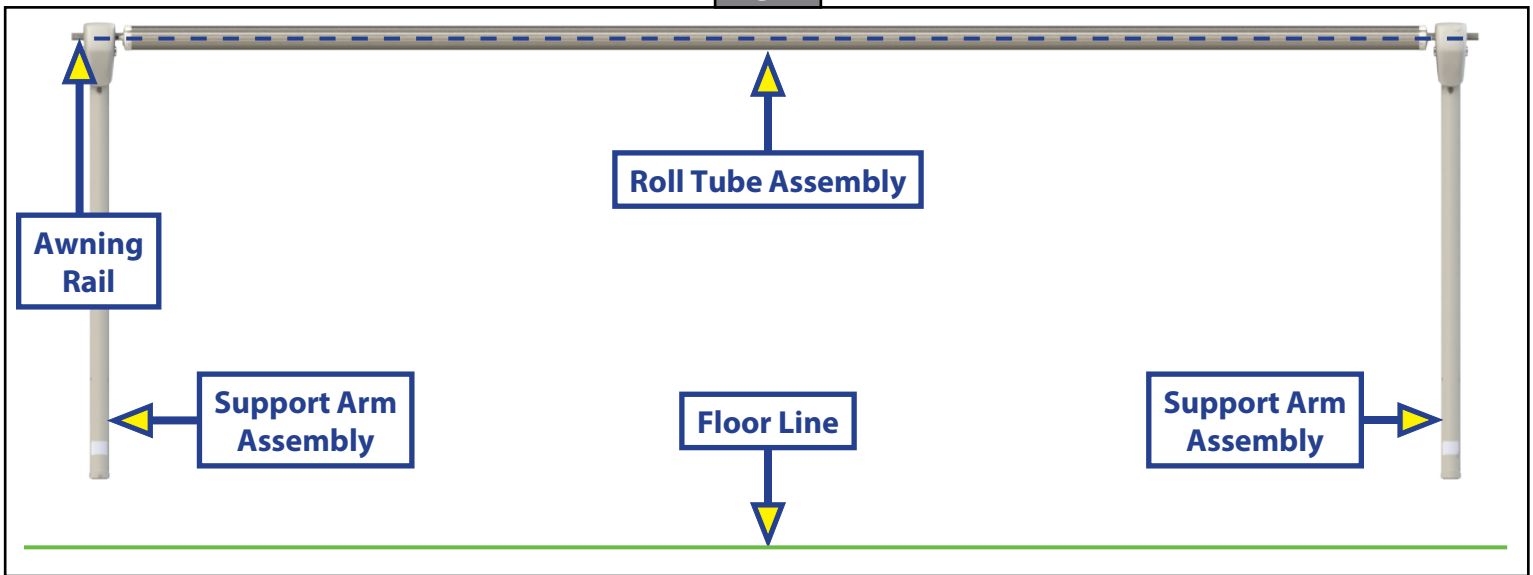
NOTE: Awning rail not included.

1. Position the awning rail along the line where the roof and wall meet or:
 - A. For pitched awnings: A minimum of 6" above doors or windows
 - B. For flat awnings: A minimum of 4" above doors or windows

NOTE: The awning rail **MUST** be level and parallel with the floor line of the unit (Fig. 1).

2. After determining the awning rail's proper location, mark its position with a non-permanent method of marking.
3. Seal the back of the awning rail with silicone sealant or tape.
4. Align the awning rail on the wall and secure with #10 x $\frac{3}{4}$ " screws, using all fastener holes.

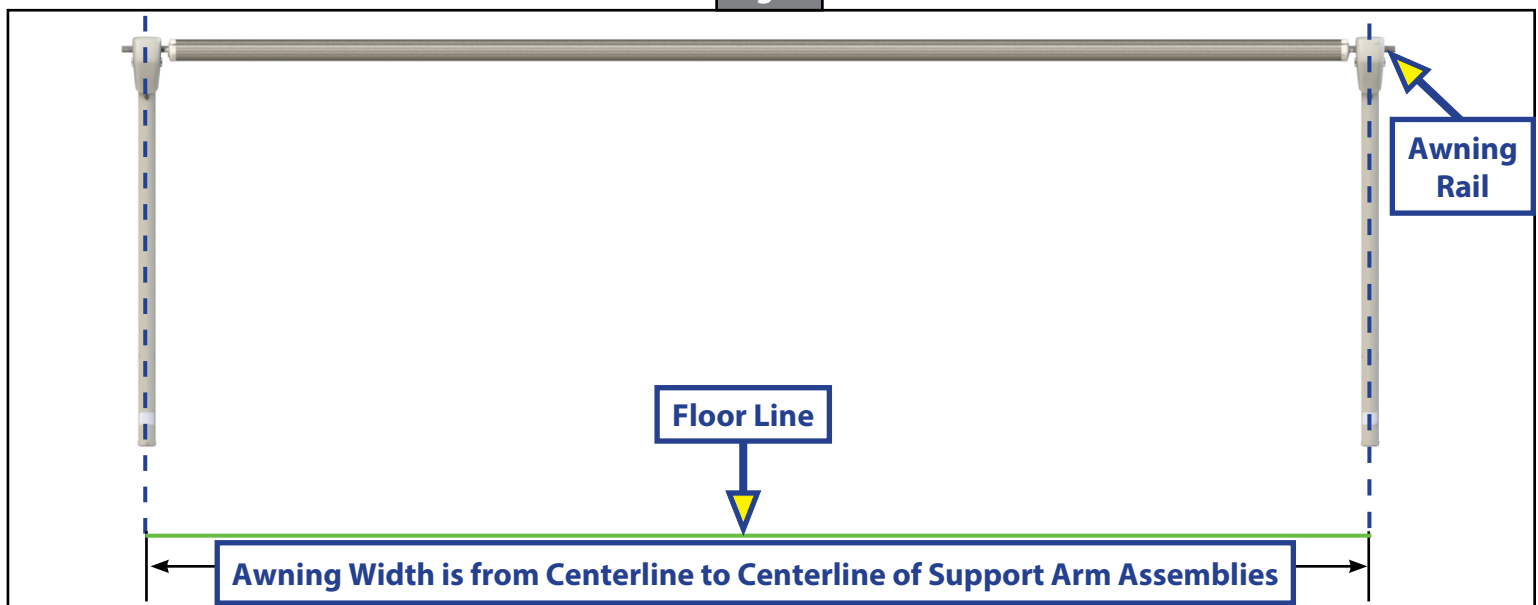
Fig. 1



Awning Installation

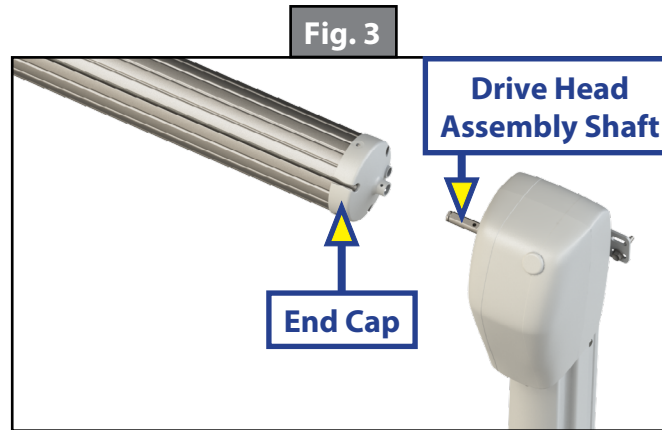
1. On the awning rail, mark the position of the centerlines of the support arm assemblies. Make sure that the support arm assemblies will not interfere with any lights, vents or other obstructions.
2. Using a non-permanent method of marking, mark a perpendicular line from the awning rail down to the floor line. This is the centerline of the support arm assembly (Fig. 2).

Fig. 2



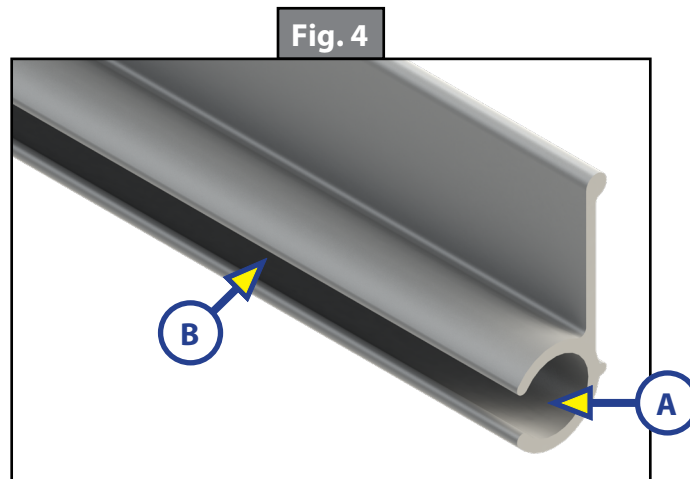
3. Insert the drive head assembly shaft into end cap (Fig. 3). Align the holes and secure with waxed screw. Repeat process for idler head assembly at opposite end of roll tube.

NOTE: Keep the head of the wax screw 1/8" from being fully fastened to avoid compromising the structural integrity of the wax screw.



4. Use a screwdriver to spread open either end of the awning rail channel (Fig. 4A).
5. To protect the fabric from damage during installation, file any sharp edges or burrs from the awning rail channel (Fig. 4B).
6. Use silicone lubricant and spray the inside of the awning rail channel (Fig. 4B).
7. Remove the tape from the fabric. Unroll a small portion of fabric.

NOTE: The next steps will require three people: One to feed the polycord into the awning rail channel; two to walk the support arm assemblies along the awning rail while the fabric slides into position.



8. Slide the polycord into the awning rail channel and walk the support arm assemblies and fabric down the awning rail channel until the support arm assemblies are in line with the centerline marks.

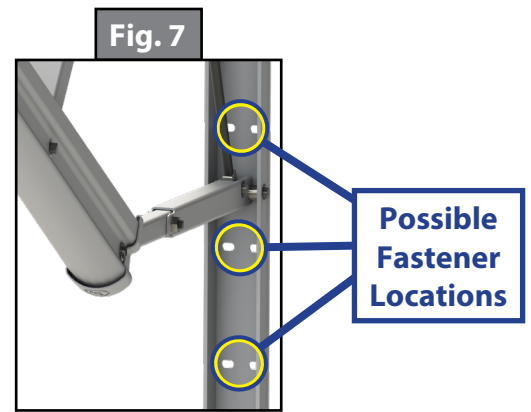
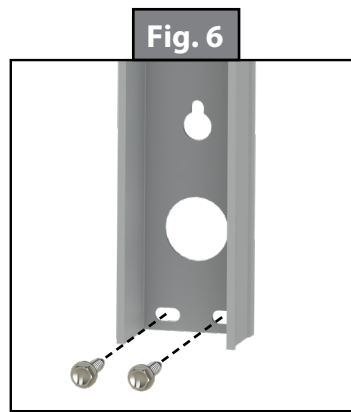
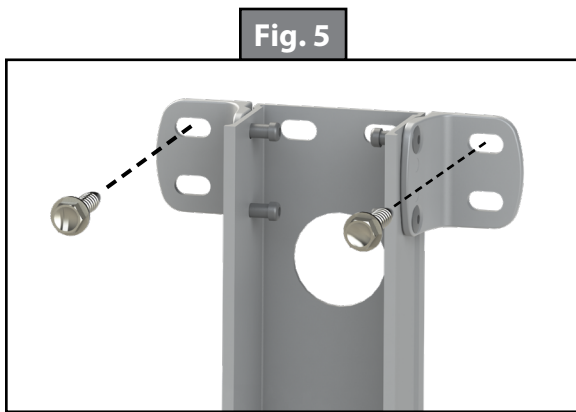
9. Lift the support arm assembly up and secure by setting the awning assembly to the desired height and attaching it to the side of the unit with two #14 x 1 1/4" screws at the top (Fig. 5) and two #14 x 1 1/4" screws at the bottom (Fig. 6).

NOTE: Make sure the awning assembly is square on the unit prior to mounting the bottom two screws.

NOTE: Best practice for setting the awning height is to push the top of the support arm assemblies up to be flush with the bottom of the awning rail. The awning height can be adjusted lower if desired, but make sure that the distance from the awning rail to the top of the support arm assemblies is consistent at both ends of the awning.

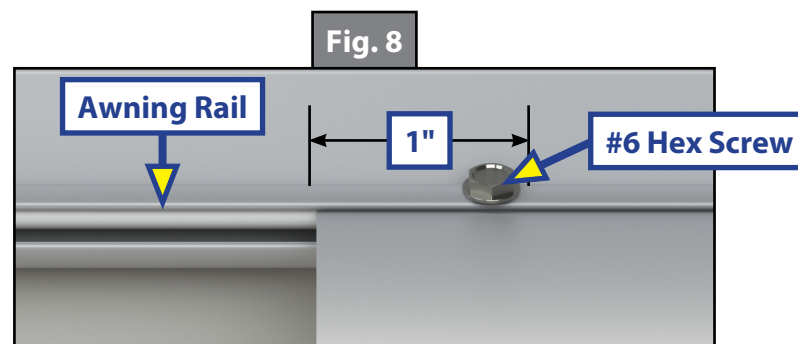
NOTE: Four rivets with 3/16" grip range can be used in place of the two middle and two lower screws on laminated walls.

10. Cut the zip ties and connect the wires from the drive head assembly to a power source and run the awning half way out.
 - A. Remove the wire cover to expose the fastening points.
 - B. Install the remaining two (2) #14 x 1 1/4" screws at any of the three locations shown (Fig. 7) in the center of the support arm.
11. Repeat this process for the opposite side of the awning assembly.



Securing the Fabric

1. Extend and retract the awning several times to make sure the fabric is square on the roll tube.
2. Secure the fabric in the awning rail no more than 1" inside the edge of the fabric on both ends using a #6 x 1/2" hex head screw. Install the screw down through the awning rail into the fabric and the polycord (Fig. 8).

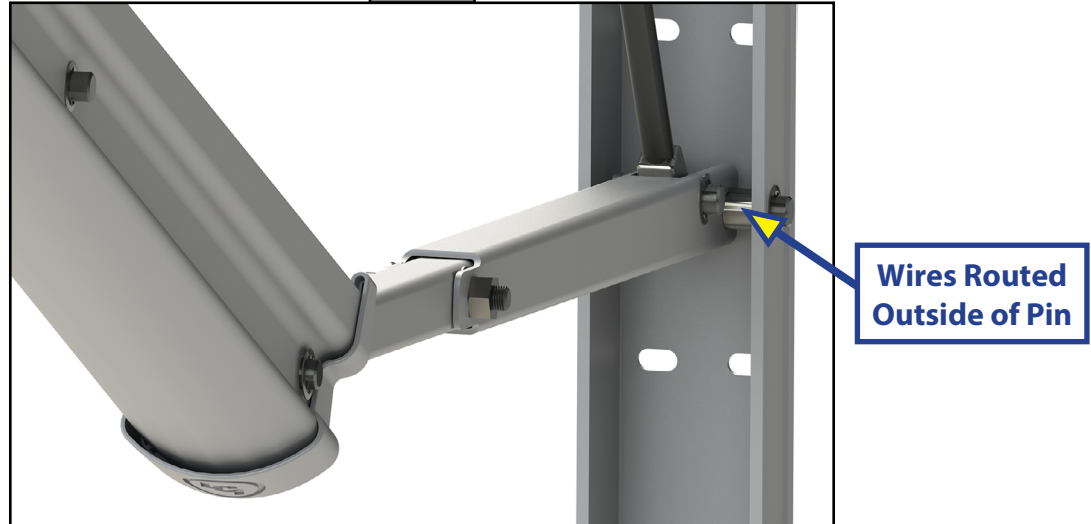


Awning Wiring

Solera Power Awning motors come stock with an internal 6A auto reset breaker. If this breaker trips, it will take approximately 30 seconds to reset. Lippert recommends the awning be wired into a 15A circuit breaker. All wire shall be 14 AWG or higher as necessary to provide 11.5V minimum at all times to the Lippert supplied power cable connection.

Note: To prevent pinching of the wires, make sure all wires are routed on the outside of the pin that secures the pitch arm to the mount arm (Fig. 9).

Fig. 9

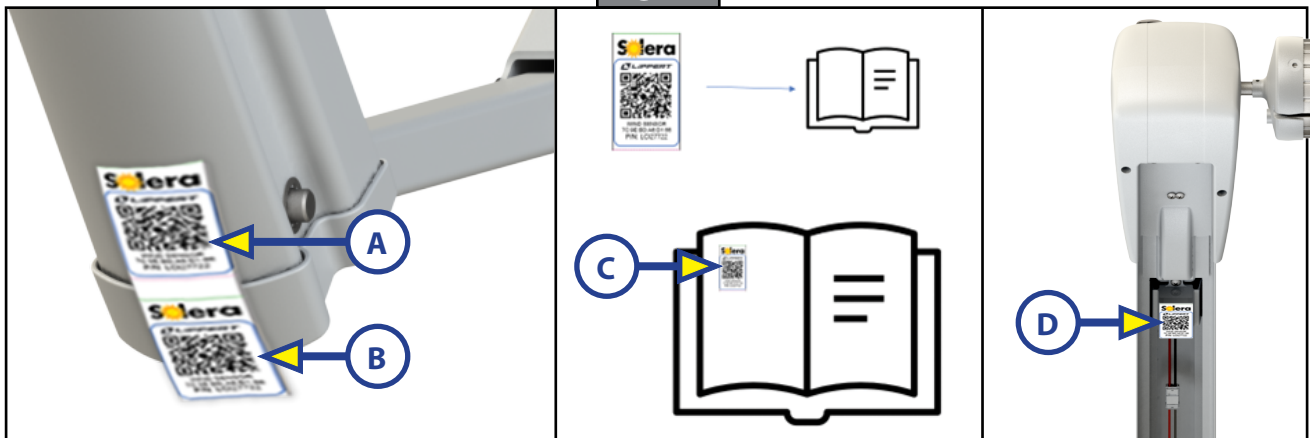


1. Pull the wires from the unit through the support arm assembly. These wires may be located at the bottom or the top of the support arm assembly.
2. Connect wiring from the unit to the switch.
3. Connect the awning drive head and wind sensor to the Lippert Unity Controller. See the Wiring Diagram Page 18 of this manual.
4. If applicable, connect the optional LED lights per the awnings configuration.
5. Check the switch. If the awning is running in reverse of what the switch indicates, reverse the wires.

OEM Syncing the Bluetooth Wind Sensor to the Lippert Unity Board for the One Control App

Located on the outside of the drive side arm will be two QR labels (Fig. 10A). Detach the bottom QR code (Fig. 10B). Remove the sticker backing from the QR code and place inside the customer's owner's manual (Fig. 10C). The customer can then scan the QR code when they are ready to pair to the OneControl application. There is also a QR code on the wind sensor (Fig. 10D) on the inside of the drive side arm should the front sticker wear off or the manual is lost.

Fig. 10



Pairing Tool Requirements

For pairing at the OEM Plant, Lippert developed an OEM Pairing Tool which allows a team member to quickly pair Lippert Bluetooth accessories.

- The OEM Pairing Tool app that works with Android devices with OS of 8 or higher.
- The Pairing tool requires camera access for VIN scanning and QR Code Scanning.
- The Pairing tool requires Bluetooth Low Energy.

VIN and QR Scanning

1. Scan either the VIN or manually enter the VIN of the unit from the build sheet. The VIN must be at least 17 digits before it will allow you to select the model and floorplan.
2. Select the model and floorplan. Click start when finished filling out the screen (Fig. 11A).
3. If the VIN was used for the pairing process before, the operator will get a notification pop-up "Existing VIN You have already paired using this VIN". Operator can choose to click CANCEL or CONTINUE to proceed.
4. Figure 12 screen will be shown once all the information has been entered. The VIN and floorplan number is displayed at the top of the screen.
5. The grey area (Fig. 12A) will be the camera view of the device being used for pairing. Using that area, scan the unit VIN and the wind sensor QR code label.
6. Once the QR codes and/or labels have been scanned correctly, it will display the status changes next to the device.
 - A. If the tool is unable to scan the label, there will be a notification that the tool was unable to scan the label and the operator can try again (Fig. 13).
 - B. If the scanned label was already paired before, there will be a notification that it is an existing device. The operator can choose to pair the device again or cancel (Fig. 14).

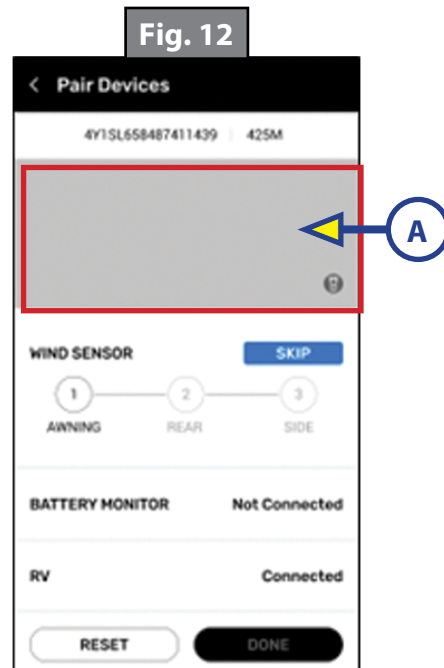
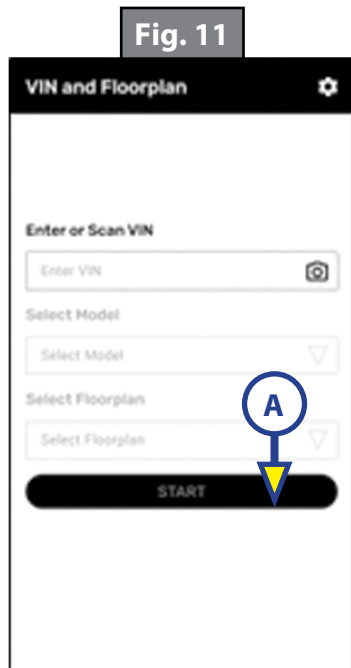


Fig. 13

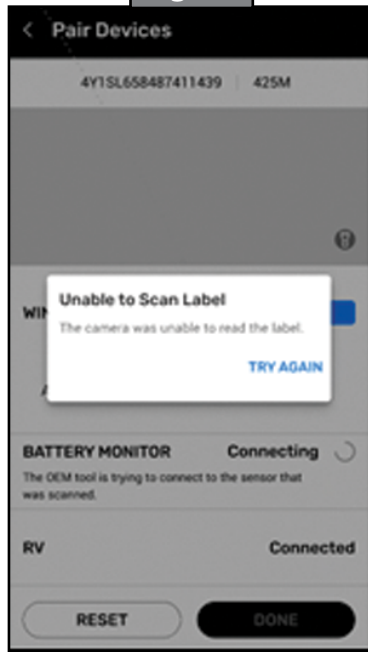
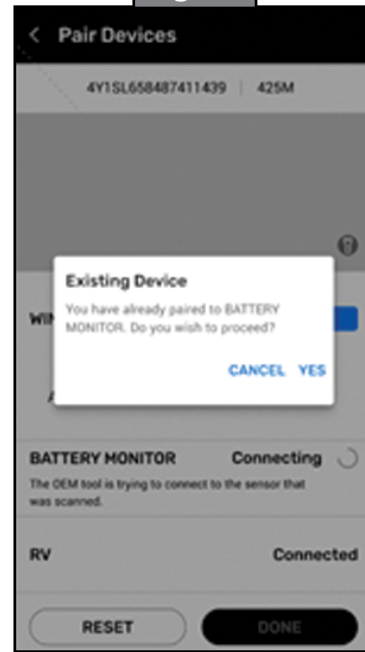


Fig. 14



Troubleshooting

If an error occurs during pairing, you will see a red explanation next to the device name (Fig. 15). Click on the error icon, you will get either of the pop-up notifications Connecting Error (Fig. 16) or Pairing Error (Fig. 17). If any time during the pairing process, the operator would like to start over, they can choose to do so by clicking the RESET button on the bottom of the screen. The notification below will display and simply select YES (Fig. 18A) to go back to the main screen. If the pairing process was incomplete (meaning with errors), the operator can click the DONE (Fig. 18B) button at the bottom of the screen which will display a notification stating the configuration was incomplete.

Fig. 15

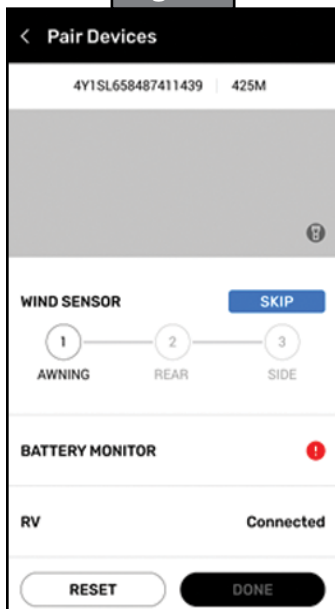


Fig. 16

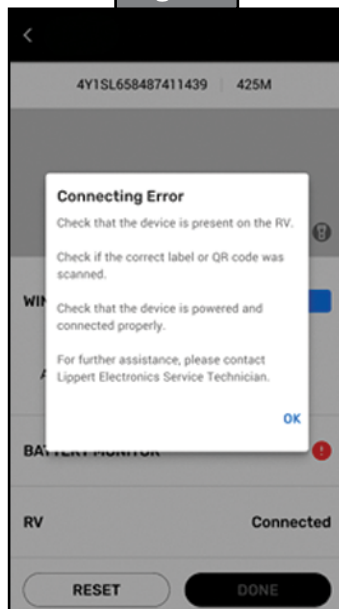


Fig. 17

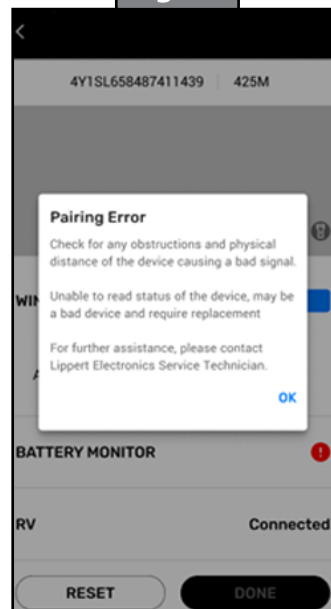
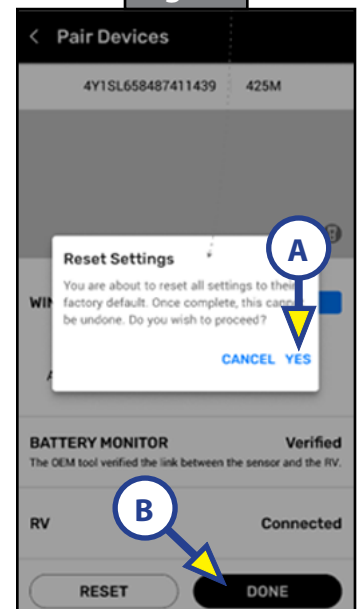


Fig. 18



Seal Wall Penetrations

1. Seal all fastener locations and wire penetrations with silicone sealant to protect against water intrusion (Fig. 19).
2. Reinstall all wire covers onto the support arm assemblies.

Fig. 19



Operation

⚠ 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

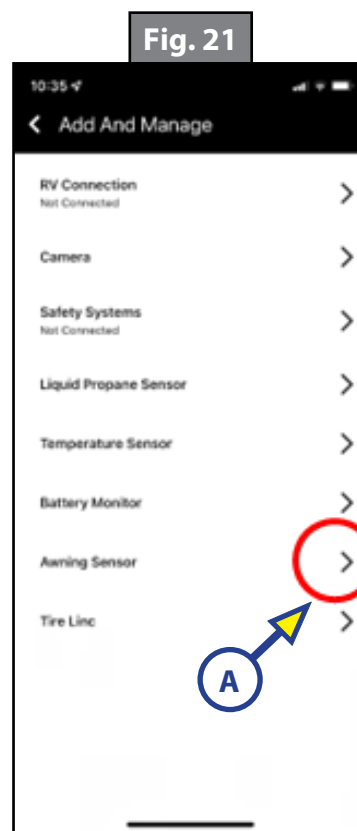
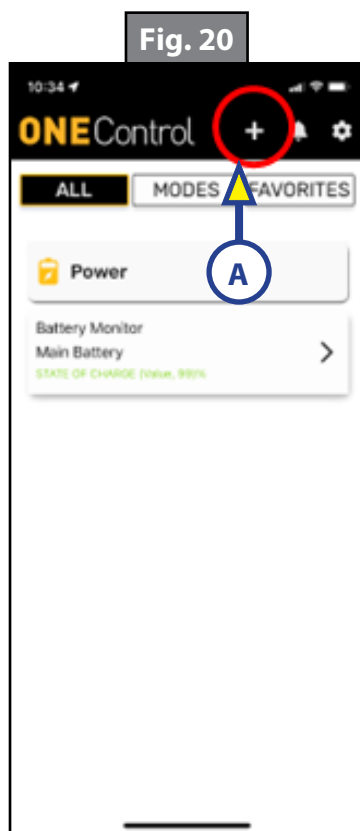
- Android, iOS smart device
- Internet connection

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. 20A) in the upper right corner.
4. Select Awning Sensor (Fig. 21A) from the list of devices to add or manage.

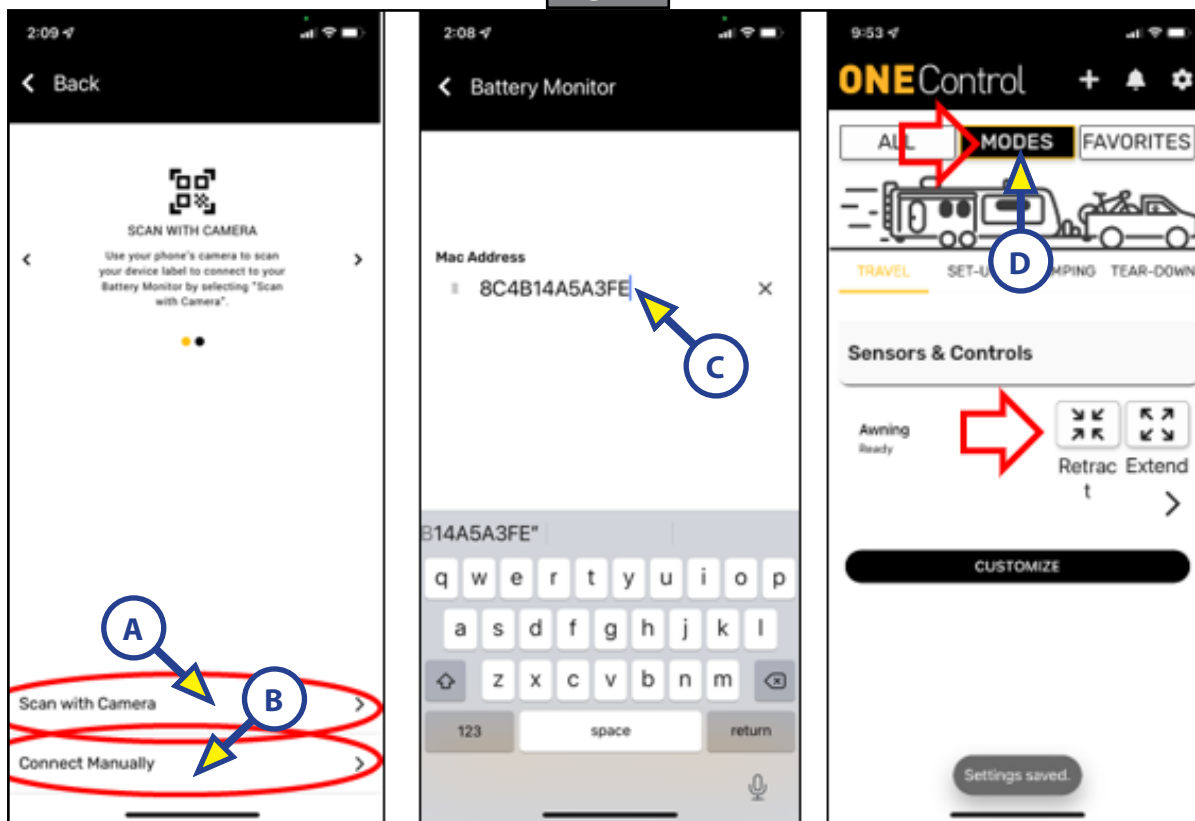


5. There are two ways to connect. You can either scan the QR code on the label (Fig. 22A), which is located on the front of the drive side of the awning arm, the label in your Owner's Manual or the label on the actual wind sensor inside the awning arm or enter the 12 digit MAC address (Fig. 22B) on the label manually.



6. Tap either Scan with Camera (Fig. 23A), or Connect Manually (Fig. 23B). Either scan the QR code or type in the MAC Address (Fig. 23C). The awning will now appear in the OneControl menu. It may be visible under Modes (Fig. 23D).

Fig. 23



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. 24A).
- B. To automatically fully extend or fully retract the awning, double tap the appropriate icon on the home screen (Fig. 25A).

Fig. 24

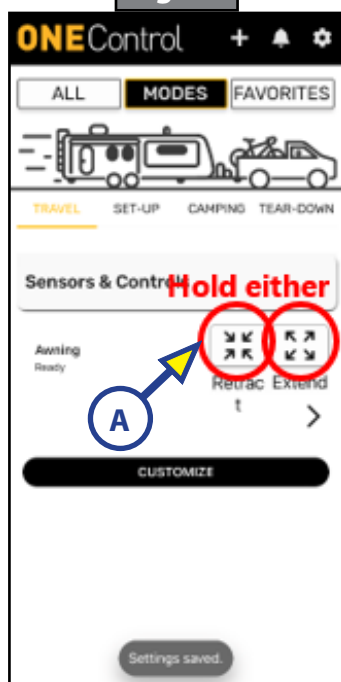
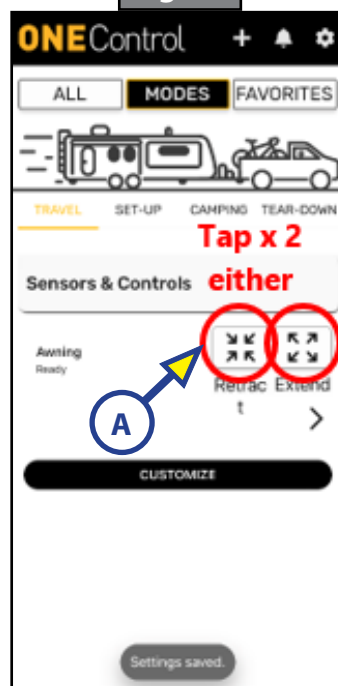


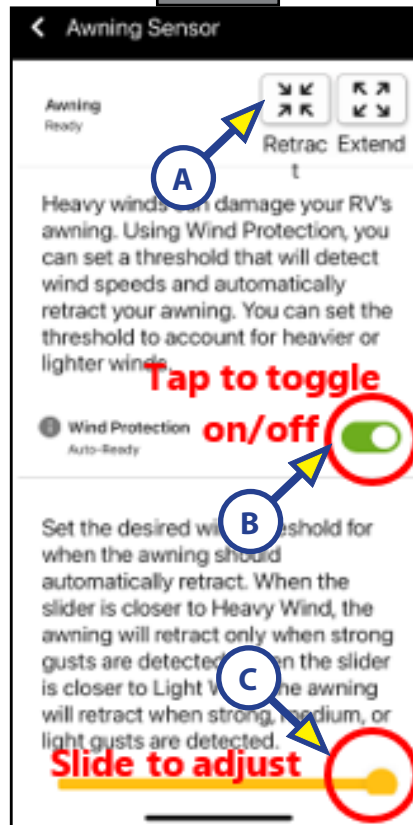
Fig. 25



Settings for Automatic Retraction Due to Wind Events

To set a wind sensitivity level, tap the arrow (Fig. 26A) in the Awning Sensor cell on the home screen and use the slider (Fig. 26C) to adjust the wind sensitivity level, or to toggle the automatic retraction due to wind events on or off (Fig. 26B).

Fig. 26



⚠ WARNING

When extending your awning, be sure to give the awning appropriate clearance. Trees, branches, nearby unit's, 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 the Awning with the Power Button Switch

NOTE: Some units may not use the Lippert switch (Fig. 27).

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. 27A) 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. 28).

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.

⚠ 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.

Fig. 27

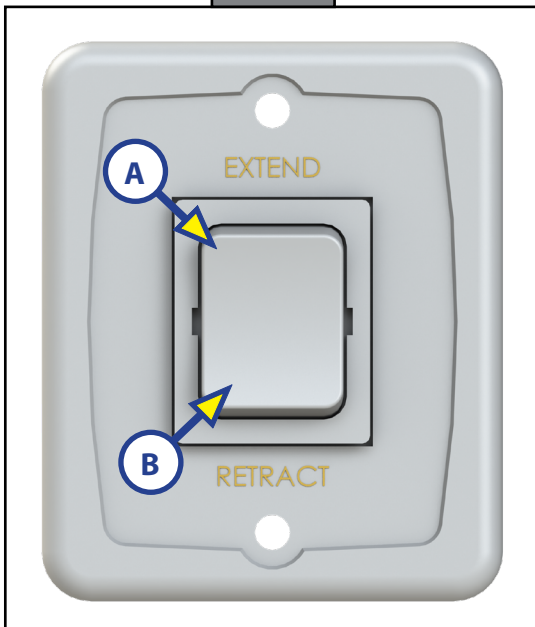
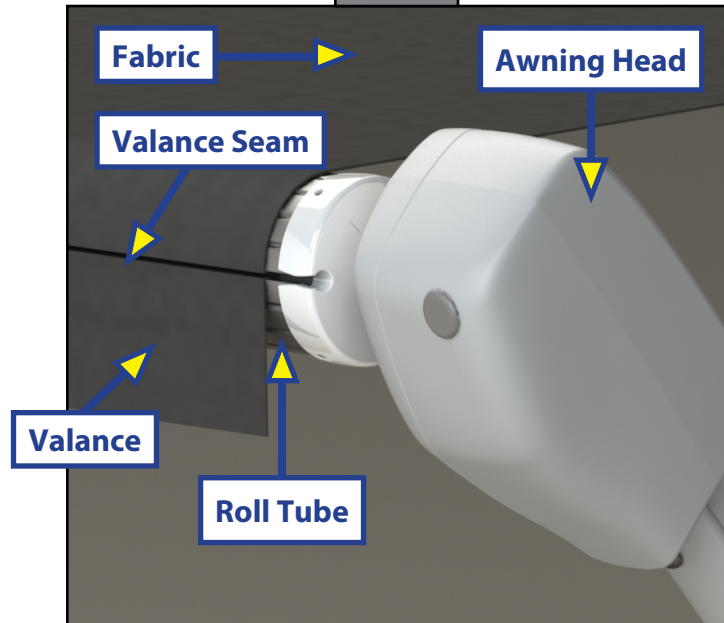


Fig. 28



Retracting the Awning with the Power Button Switch

NOTE: Some units may not use the Lippert switch (Fig. 27).

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. 27B) until the awning is retracted completely.

⚠ 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.

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.

⚠ 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.

Adjusting Pitch - All Solera Awnings

NOTE: The awning will pitch itself to purge the pooling of excess water and may dump a significant amount of water without notice.

1. Pitch can be set by adjusting the articulating arm to tip one side of the awning to allow water runoff.
2. Extend the awning to desired position.
3. Choose the side of the awning for optimum shade or convenient water runoff. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 29). Belleville washers and bolt (Fig. 30A) allow for the joint to remain in the position set by the operator.

NOTE: Do not push the joints of the articulating arms up past a straight line (Fig. 31A). This will put tension on the gas strut, which can cause the strut to break.

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

Fig. 29

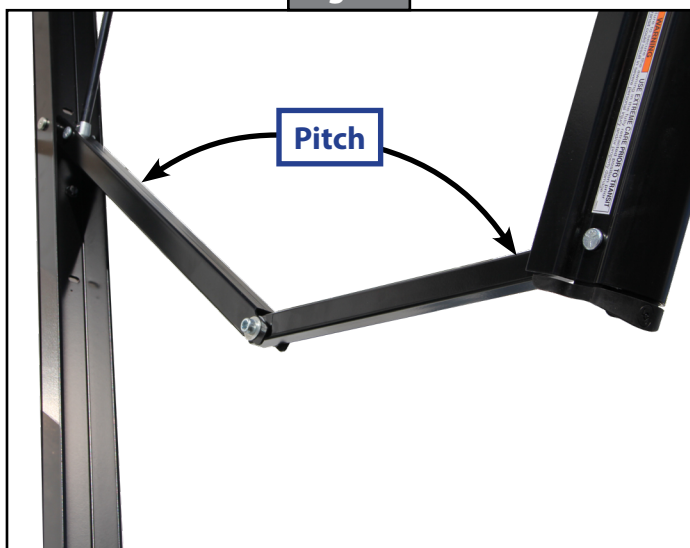
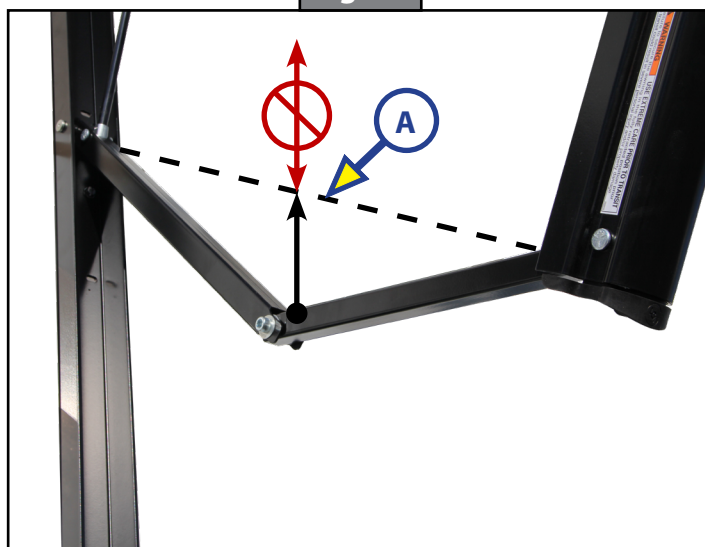


Fig. 30



Fig. 31



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. 32A) 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. 33A) clockwise to extend (Fig. 33B) or counterclockwise to retract (Fig. 33C) the awning.

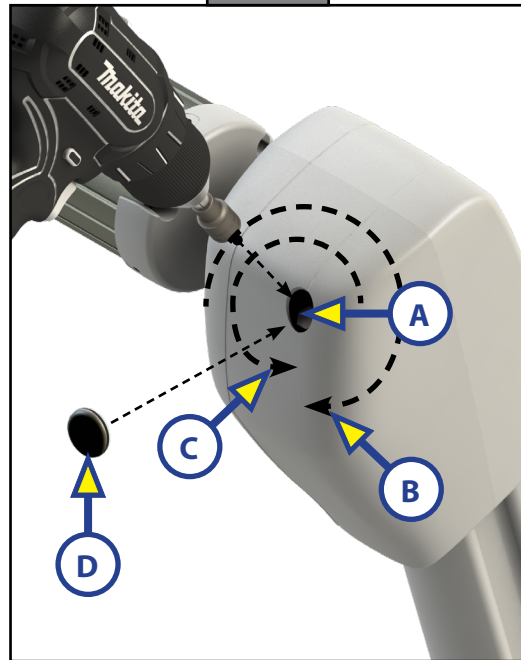
NOTE: Use caution when extending or retracting the awning manually. The use of a step stool or ladder may be required to completely extend or retract the awning.

3. When the awning is completely extended or retracted, remove socket or drive device and replace the rubber grommet (Fig. 33D) in the drive head assembly.

Fig. 32



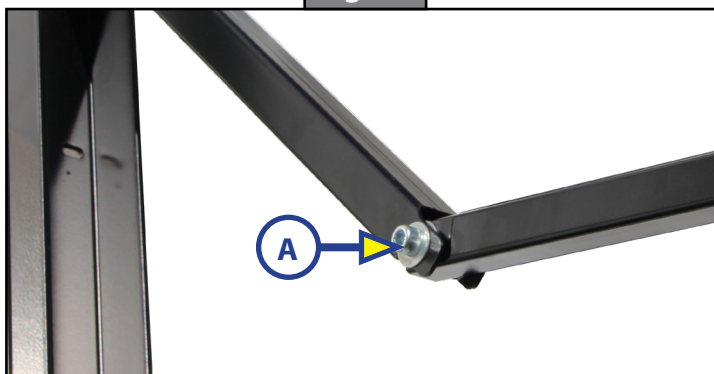
Fig. 33



Troubleshooting Adjusting Pitch - All Solera Awnings

NOTE: If the articulating arm does not hold position, it can be tightened by adjusting the bolt (Fig. 34A) in the center of the articulating arm.

Fig. 34



NOTE: When tightening the bolt 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 Belleville washers and bolt 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

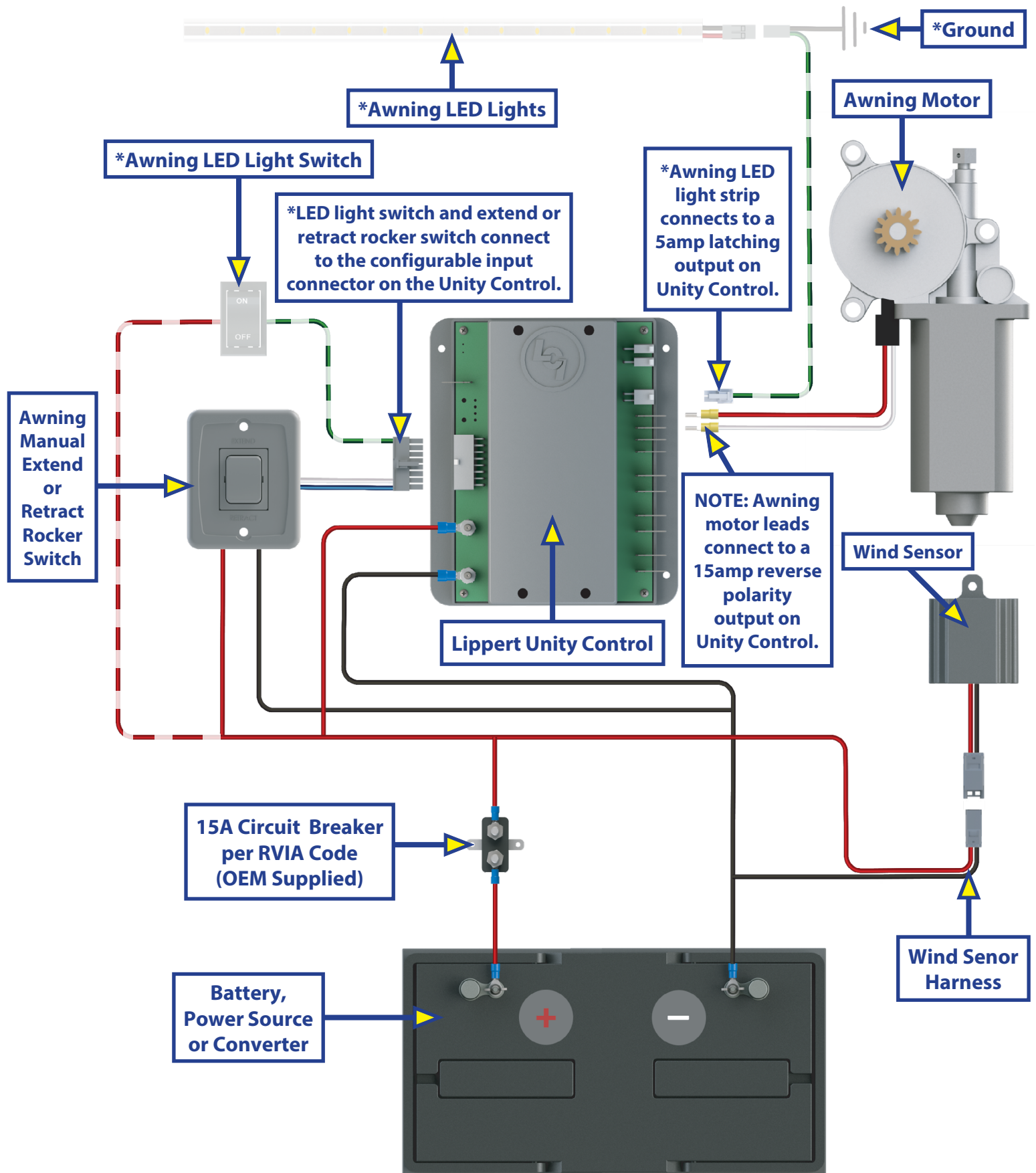
Moving parts can pinch, crush or cut. Keep clear and use caution.

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.

This image shows a full page of blank, lined paper. It features approximately 28 horizontal black lines spaced evenly across the page, typical of standard notebook paper. The lines are thin and extend from the left edge to the right edge. There is no handwriting or other markings on the page.



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