

Master Owner's Manual

Awnings



LIPPERT
COMPONENTS®

User notice

The Table of Contents is an interactive field. Click on the desired section to be taken immediately to the corresponding page.

Master Owner's Manual

The Master Owner's Manual is intended to provide information on Lippert Components Inc.'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 lci1.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 Components provides explicit consent to distribute individual parts.

TABLE OF CONTENTS

SOLERA® HYBRID AWNING	5
System Information	5
Operation	6
Extending the Awning.....	6
Retracting the Awning.....	7
Adjusting Pitch.....	8
Troubleshooting	9
Maintenance	10
Fabric Care.....	10
SOLERA® POWER AWNING	11
System Information	11
Operation	12
Extending the Awning.....	12
Retracting the Awning.....	12
Adjusting Pitch - All Solera Awnings.....	13
Maintenance - All Solera Awnings	13
Fabric Care.....	13
Troubleshooting	14
Manual Override.....	14
SOLERA® CLASSIC AWNING	15
System and Safety Information	15
Operation	16
Extending the Awning.....	16
Optional Car Port Position.....	16
Retracting the Awning.....	16
Fabric Replacement	17
Fabric Removal.....	17
Installing Replacement Fabric	18
Troubleshooting	20
Maintenance - Solera Awnings	21
Fabric Care.....	21
SOLERA® PULL STRAP AWNING	22
System Information	22
Operation	23
Extending the Awning.....	23
Adjusting Pitch - All Solera Awnings.....	25
Maintenance - All Solera Awnings	25
Fabric Care.....	25

SOLERA® AWNING SMART ARM™	26
Introduction	26
Operation	26
Extending the Awning	26
Retracting the Awning	27
LED Lights - Optional	27
IR Sensor - Optional	27
Wind Sensor - Optional	28
Adjusting Pitch	28
Troubleshooting	29
Manual Override	29
Troubleshooting Chart	30
Maintenance	31
Fabric Care	31
Additional Information Sources	31
EDGE™ AWNING	32
Introduction	32
Safety	32
Operation	33
Extending the Awning	33
Adjusting Pitch	34
Retracting the Awning	35
Troubleshooting	35
Resources Required	35
Manual Override	36
Maintenance	37
Resources Required	37
Fabric Care	37

SOLERA® HYBRID AWNING

AWNINGS

System Information

The Solera® Hybrid Awning extends and retracts with the easy-to-use hook-and-crank tool. Simply insert the hook into the drive head and turn clockwise to extend the awning and counterclockwise to retract the awning. The Solera® Hybrid Awning features an internal gear box that allows the awning to stop at any point during extension or retraction. Additionally, the pitch arm allows for rain dump and adjustable pitch features, and there is no rafter arm to lock in place. The pitch arm also provides added stability — the arms don't need to be locked in place like manual awnings.

CAUTION

This manual provides operational procedures for the Solera Hybrid Awning. Operating the Solera Hybrid 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.

Operation

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

Extending the Awning

1. Locate the crank handle for the awning.
2. Insert the hook end of the crank handle into the eye bolt on the drive head (Fig. 1).
3. Turn the crank in a clockwise direction and fully extend the awning (Fig. 2).

NOTE: Keeping the handle as parallel to the support arm assembly as possible makes it easier to turn.

NOTE: Extension is considered complete when the fabric is completely unrolled, the valance is hanging down from the roll tube and a section of the roll tube is exposed (Fig. 3).

⚠ CAUTION

Tying the roll tube down 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.

Fig. 1

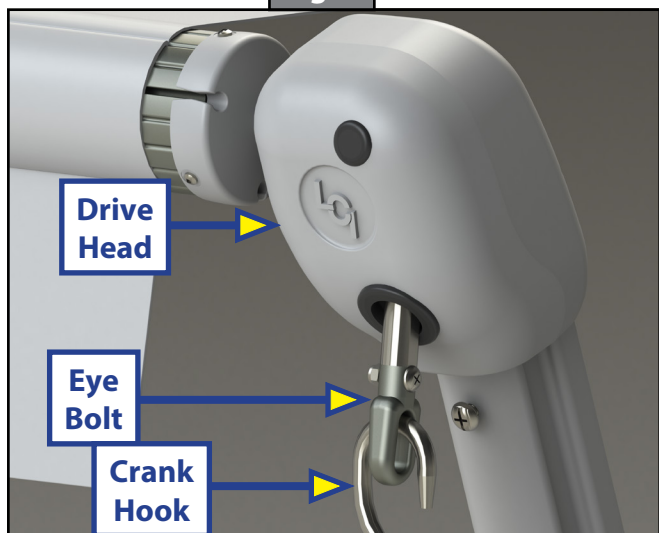


Fig. 2

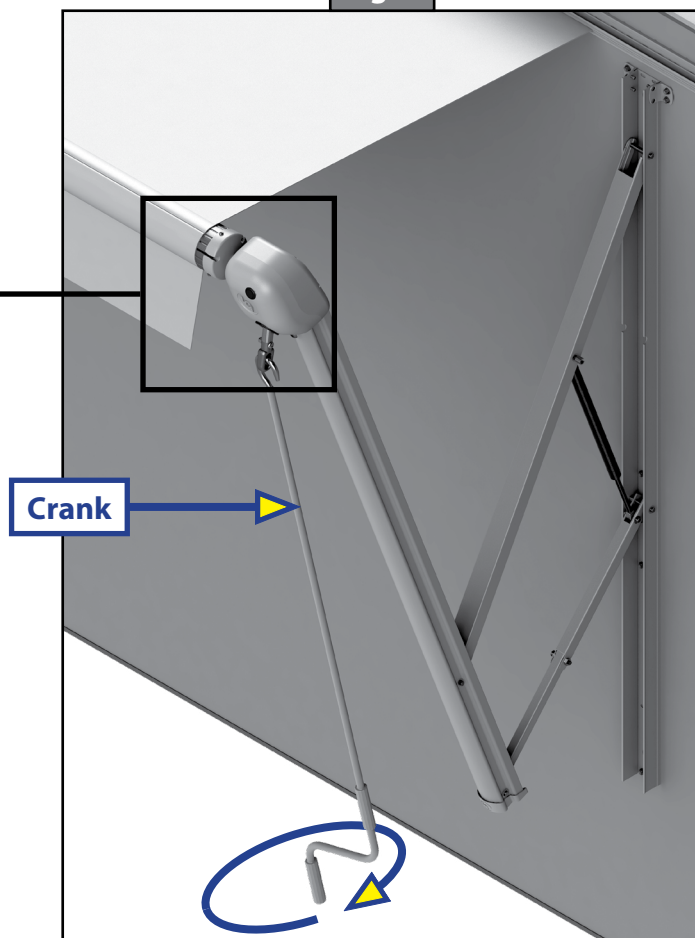
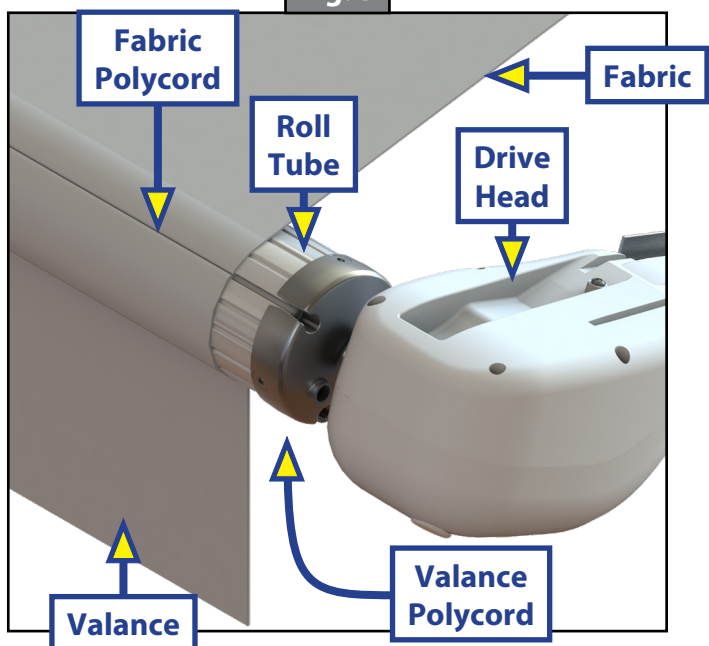


Fig. 3

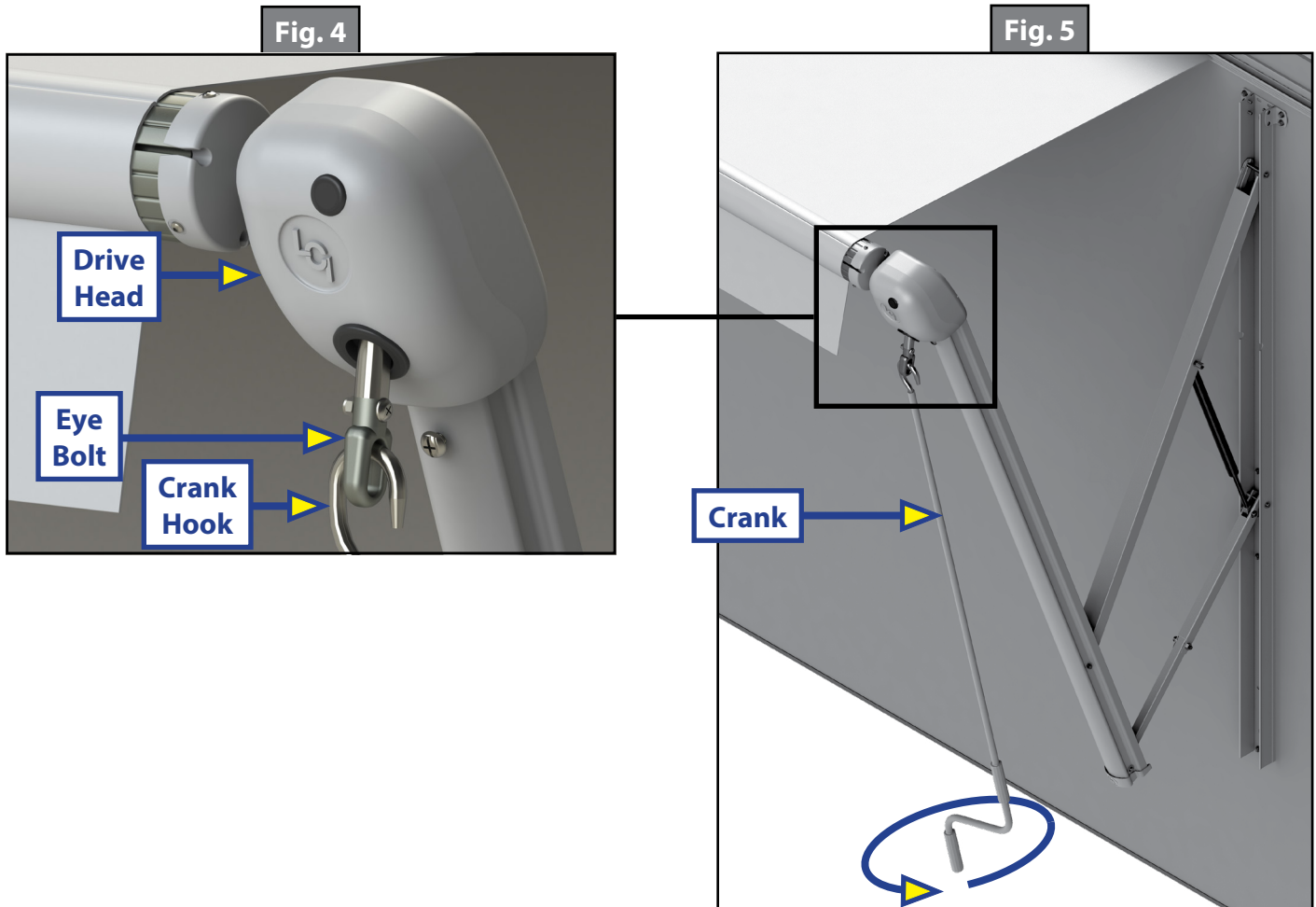


Retracting the Awning

NOTE: The awning can be retracted without resetting the pitch (see Adjusting Pitch).

1. Locate the crank handle for the awning.
2. Insert the hook end of the crank handle into the eye bolt on the drive head (Fig. 4).
3. Turn the crank handle in a counterclockwise direction until the awning is fully retracted (Fig. 5).

NOTE: Keeping the handle as parallel to the support arm assembly as possible makes it easier to turn.



Adjusting Pitch

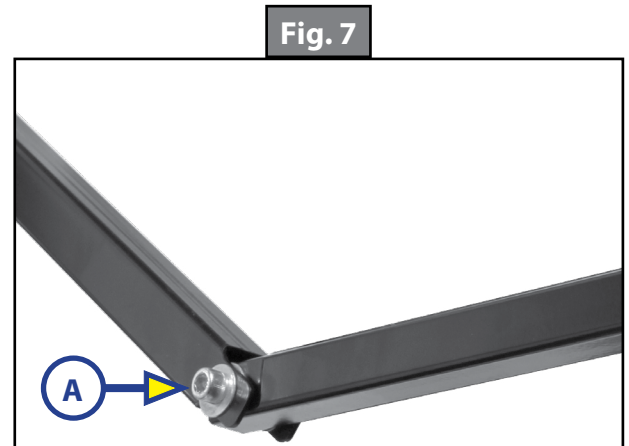
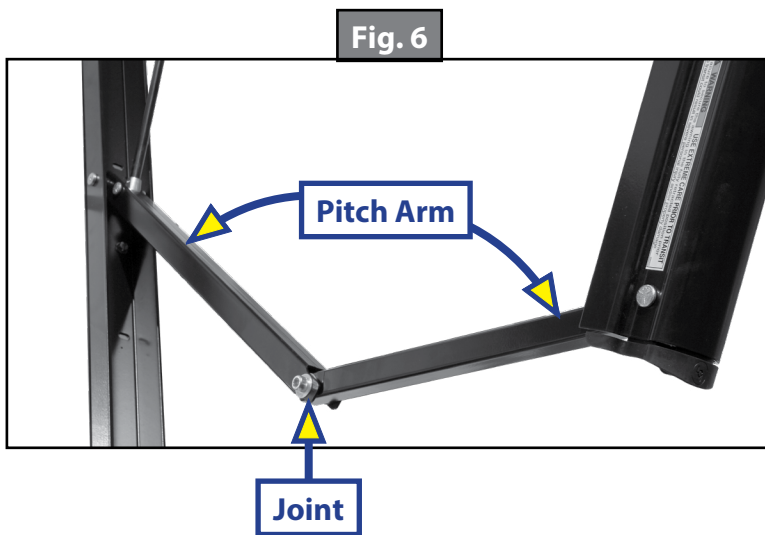
NOTE: The awning will pitch itself to purge the pooling of excess water and may dump a significant amount of water without notice.

1. Pitch can be set by adjusting the pitch arm to tip one side of the awning to allow water runoff.
2. Extend the awning to the fully open 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. 6). Belleville washers and bolt (Fig. 7A) allow for the joint to remain in the position set by the operator.

NOTE: Do not push the joint of the pitch arm up past the point where the two sections are in a straight line. 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.

NOTE: If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 7A) in the center of the joint.



Troubleshooting

Solera Hybrid Awning Basic Troubleshooting Chart	
What's Happening?	What Should Be Done?
Awning won't open or close	If optional travel locks are installed, ensure that they have been unlocked.
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 3 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.
	Ensure there are no obstructions in the support arm assemblies preventing the awning from closing.
	Verify the fabric is square from unit to roll tube and is rolling up straight on the roll tube.
Awning seems to wobble when extending or retracting.	Ensure the bolts that hold the head to the support arm assemblies are tight.
	Ensure the end caps are seated properly on the roll tube.
	Ensure the shaft coming out of the head going to the end cap isn't bent.
	Ensure the mount arms are properly secured to the wall.
	Ensure no part of the support arm assemblies are bent.
	Ensure the wear collar spacers are all properly located in the support arm assemblies.
Awning rolls up backwards.	The awning fabric should always be above the roll tube. However, if the crank handle is operated past full extension, the awning will roll up backwards. This is not a defect. To correct the fabric orientation, simply operate the crank handle in the retract direction and the awning will then extend to its correct orientation and normal operation can resume.

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 $\frac{1}{4}$ 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.

SOLERA® POWER AWNING

AWNINGS

System Information

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.



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 Components Limited Warranty.

Operation

NOTE: Some coaches may not use the LCI switch (Fig. 3).

Extending the Awning

1. Verify the RV battery is fully charged and connected to the electrical system.
2. Locate the locking latch (Fig. 1), if equipped, and unlock the latch (Fig. 2).

NOTE: This latch is optional and may or may not be installed on one or both support arms.

3. Press and hold EXTEND (Fig. 3A) 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. 4).

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 to work as designed and may cause damage to the awning or RV.

Retracting the Awning

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. 3B) until the awning is retracted completely.
3. Locate the locking latch (Fig. 2), if equipped, and lock the latch (Fig. 1).

NOTE: This latch is optional and may or may not be installed on one or both support arms.

Fig. 1



Fig. 2

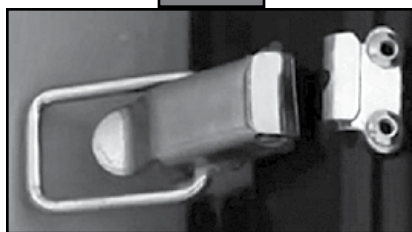


Fig. 3

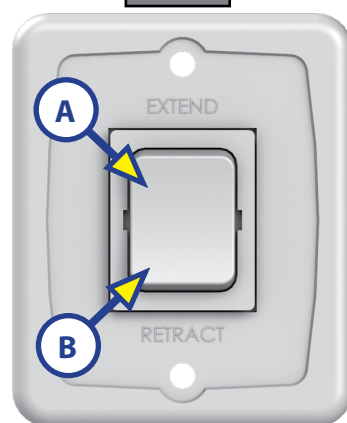
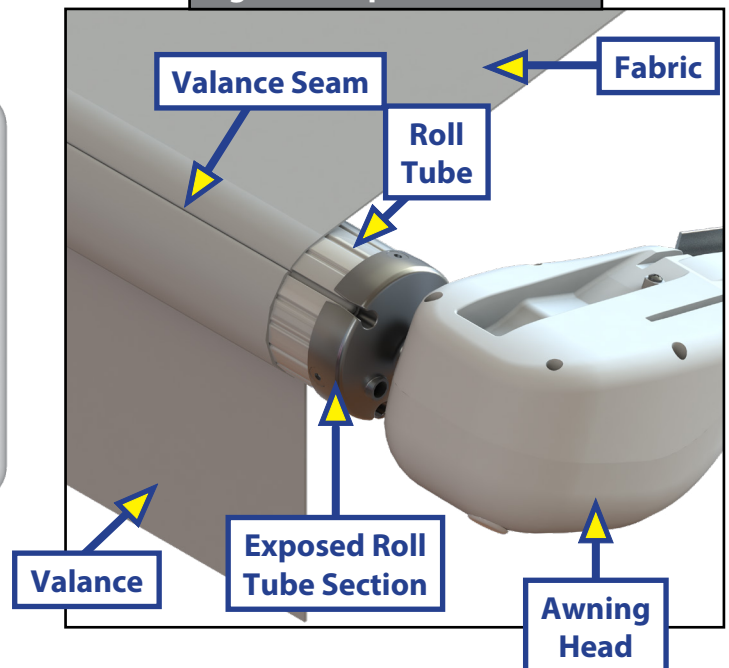


Fig. 4 - Complete Extension



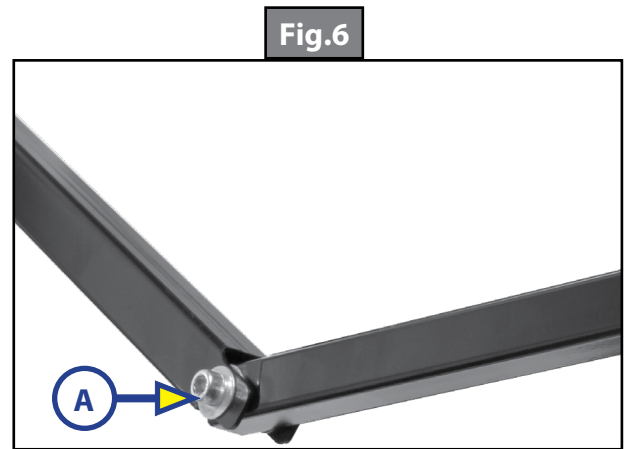
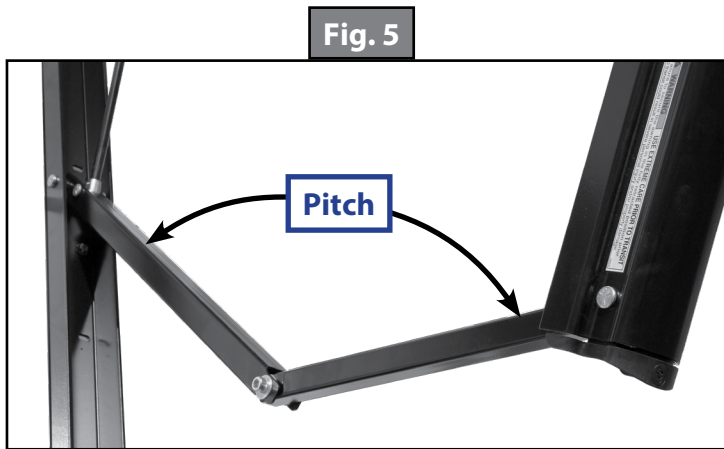
Adjusting Pitch - All Solera Awnings

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 articulating arm until desired pitch is set (Fig. 5) to allow for water runoff. Do not push the joints of the articulating arms up. This will put tension on the gas strut, which can cause the strut to break. Belleville washers and bolt (Fig. 6A) allow the joint to remain in the position set by the operator.

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

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



Maintenance - All Solera Awnings

Fabric Care

If the awning is rolled up while wet, roll it out and let it dry as soon as conditions allow before rolling it up again. 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 $\frac{1}{4}$ cup of dish soap and 5 gallons of warm water. Liberally slosh the mixture on the top of the fabric and roll up the awning for 5 minutes. This will apply the mixture to the bottom of the fabric as well. Roll the awning back out and hose off with fresh water. Repeat if necessary. Allow to dry before rolling up.

Troubleshooting

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.

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. 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 coach.

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

NOTE: A ratchet may also be used to turn the manual override nut. Using a ratchet will take a significant amount of time and should only be used if no cordless/power drill is available.

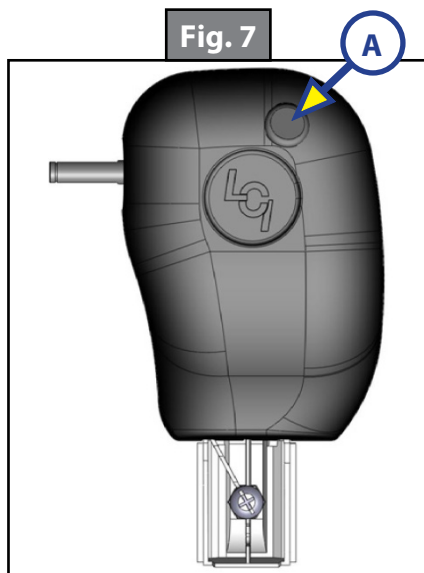
NOTE: Use caution when retracting the awning manually. The use of a step stool or ladder may be required to completely retract the awning.

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

NOTE: The motor's internal drive system prevents the awning from moving (extend or retract) on its own. If the motor is damaged or disabled, be sure to secure the awning in the retracted position with a strap around both the outer support arm and the mounted support arm before the manual override nut is released.

⚠ 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 RV.



SOLERA® CLASSIC AWNING

AWNINGS

System and Safety Information

The Solera Classic Awning is designed for use on most recreational vehicle units and is available in a variety of sizes to fit even the largest unit. Additional information about this product can be obtained from www.lci1.com/support or by downloading the free myLCI app. The app is available on iTunes for iPhone and iPad and also on Google Play™ for Android™ users.

iTunes, iPhone, and iPad are registered trademarks of Apple Inc. Google Play™ and Android™ are trademarks of Google Inc.

WARNING

Failure to follow the instructions provided in this manual may result in death, serious injury, unit damage, or voiding of the component warranty.

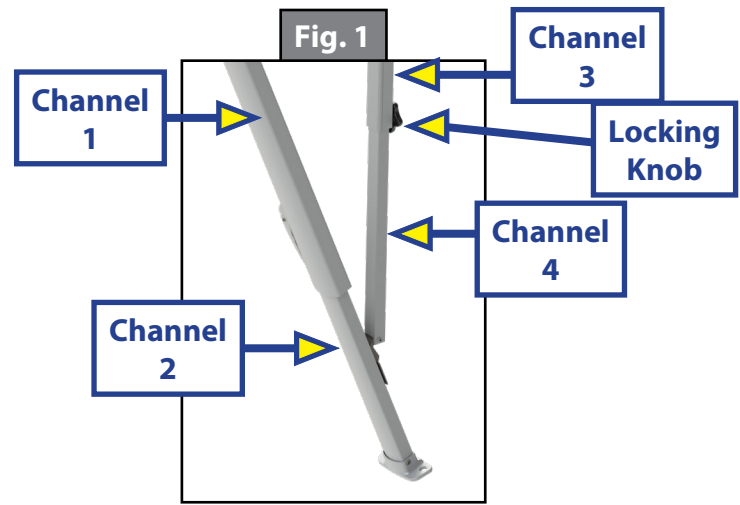
CAUTION

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

Operation

Extending the Awning

1. Make sure the black locking knobs on the mount/rafter arm upper channel (channel #3) (Fig. 1) are loosened and pinch the travel locks together to release the outer arm from the mount/rafter arm.
2. Flip the cam lock down to the roll out position.
3. Using the pull rod, start pulling the awning outward until full extension is complete.
4. Slide the mount/rafter arms all the way to the top of the outer arm and make sure they lock into place.
5. Pull on the mount/rafter arm to ensure the fabric is taut and tighten the black locking knob to lock it into place.
6. Raise the outer arms to the desired height by releasing the support arm assembly handle and allow the outer arm upper channel (channel #1) (Fig. 1) to slide on the outer arm lower channel (channel #2) (Fig. 1). Once to the desired height let go of the support arm assembly handle to lock the arm at this position.
7. Slide the pull strap to one end or the other and wrap it around the arm to get it out of the way.



Optional Car Port Position

1. Once all the above steps are complete, remove the outer arm from the side of the unit by releasing the lever on the lower mounting bracket.
2. Walk the awning out until the outer arm is straight up and down and let it set on the ground.
3. Make sure to secure the foot of the outer arm to the ground with the provided stakes.

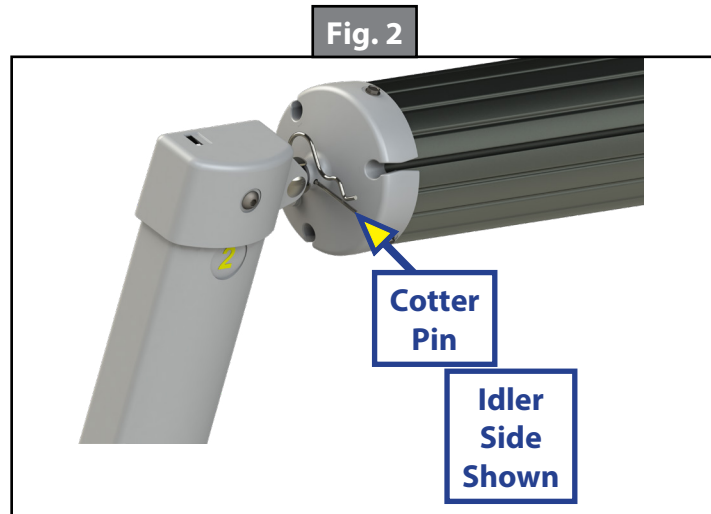
Retracting the Awning

1. If in car port mode, remove the stakes from the foot of the outer arm. Then walk the outer arm back to the unit and secure it to the lower mounting bracket on the sidewall of the unit. Do this for both ends.
2. Take the awning pull strap and return it to the center of the awning roll tube.
3. Lower the roll tube by holding the outer arm and releasing the support arm assembly handle on the side. Let the outer arm upper channel (channel #1) (Fig. 1) slide down the outer arm lower channel (channel #2) (Fig. 1) until it rests on the acorn nut. Repeat this for the other end.
4. Loosen the black locking knob and unlock the mount/rafter arm by releasing the spring clip from the top of the head assembly. Allow the mount/rafter arm to slide all the way down toward the bottom of the outer arm. Repeat this for both ends.
5. Take a firm hold on the awning strap and release the tension on the springs by flipping the cam lock up to the roll in position.
6. Walk the awning in toward the unit. Hook the pull rod into the pull strap before the strap gets too high. Using the pull rod, walk the awning to the fully-closed position.
7. Lock the arms for travel mode by compressing the outer arm and mount/rafter arm together until the red tab disappears. Then tighten the black locking knob.

Fabric Replacement

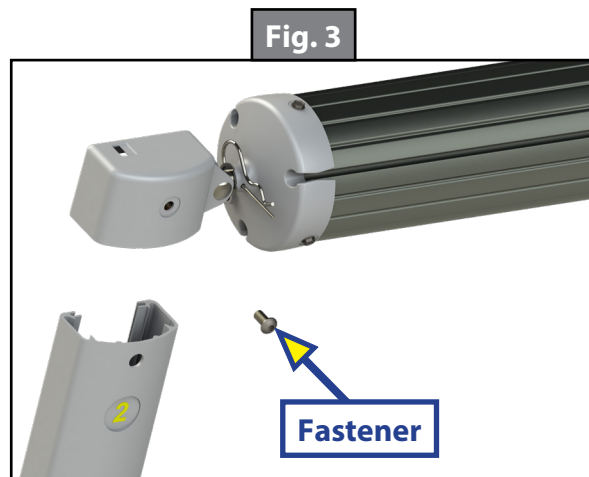
Fabric Removal

1. Remove the drip cap (if equipped) from the end the fabric will be removed from.
2. Remove the #6 x 1/2" hex head screws located on the awning rail (2 total). Set screws aside.
3. Extend the awning out completely by sliding the mount/rafter arms all the way to the top of the outer arm and make sure they lock into place and insert cotter pins (Fig. 2).



NOTE: If the awning is 6' in length it will only need one cotter pin for the drive side end cap.

4. Pull on the mount/rafter arm to ensure the fabric is taut and tighten the black locking knob to lock it into place. As a precaution, tape the cam lock in the roll out position.
5. On the end of the awning rail the fabric will be removed from, remove the upper mounting bracket from the unit wall. Allow the mount/rafter arm to pivot out of the way.
6. Remove the drive head assembly and idler head assembly retaining fasteners from the outer arms to separate the components (Fig. 3).



7. Working together, remove the roll tube assembly (which includes the drive/idler head assemblies) from the awning rail and support arms by sliding the assembly along the awning rail until clear.

⚠ WARNING

Failure to support the roll tube, fabric and drive/idler head assemblies during removal may result in serious injury or property damage.

8. Place the removed assembly onto a level area.
9. Have someone securely hold the idler head and roll tube.
10. Hold the drive head assembly securely (there will be tension to be released) and remove the drive head assembly cotter pin.

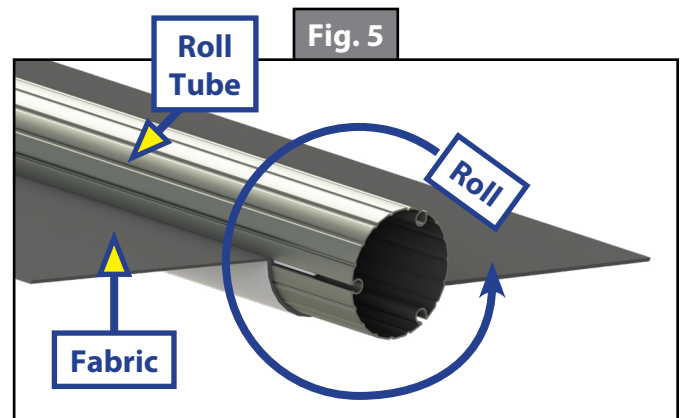
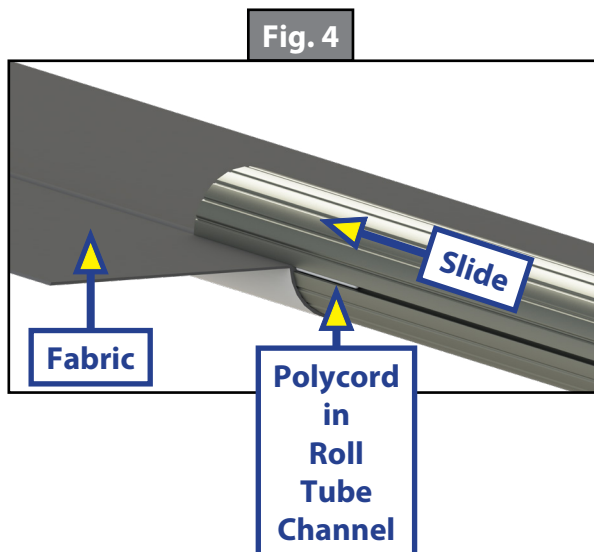
⚠ WARNING

Failure to maintain control of the roll tube, fabric and drive/idler head may result in serious injury or property damage.

11. Flip the cam lock to the roll in position. Slowly rotate the drive head assembly clockwise to release tension.
12. Mark the cam lock position on the roll tube.
13. Remove the three screws holding the drive head assembly end cap on the roll tube and set the drive head assembly aside.
14. Mark the roll tube grooves containing the polycords prior to removing the fabric from the roll tube.
15. Remove the two screws holding the fabric in place on the roll tube.
16. To remove the fabric, gently pull the roll tube from one end, while another person holds the fabric in place.

Installing Replacement Fabric

1. Unroll the replacement fabric so that the polycords are parallel with the roll tube.
2. Gently slide the roll tube on to the two polycords of the fabric, making sure that the non-printed side is touching the roll tube (Fig. 4).
3. Center the fabric on the roll tube.
4. Apply the screws that were holding the polycords in place on the roll tube.
5. Roll the fabric onto the roll tube (Fig. 5). Make sure the fabric stays snug and flat to the roll tube with the printed side facing away.



6. Using the three screws previously removed from the end caps, attach the drive head assembly to the roll tube, making sure the orientation is the same.

NOTE: Be sure the drive head assembly with the cam lock is on the right-hand side of the awning.

7. Secure the idler head and roll tube.
8. Rotate the drive head assembly counterclockwise the number of turns stated on the turn chart (Fig. 6). Insert a cotter pin into the end cap into the shaft on the drive head assembly.

Fig. 6

Classic Awnings Fabric Replacement Turn Chart	
Size	Turns
6 ft to 10 ft	12
11 ft to 14 ft	13
15 ft to 18 ft	14
19 ft and up	16

⚠ WARNING

Failure to maintain control of the roll tube, fabric and drive/idler heads may result in serious injury or property damage.

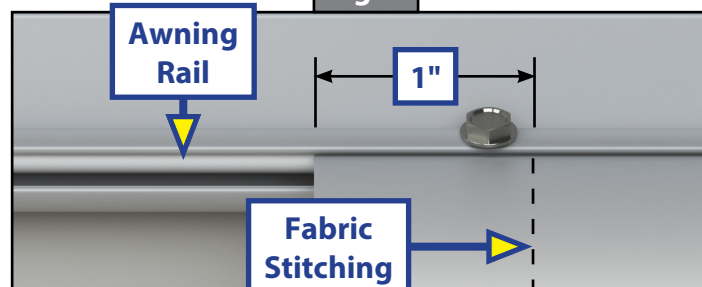
9. Working together, install the roll tube assembly (which includes the drive/idler head assemblies) to the awning rail by sliding the assembly along the awning rail. Make sure the awning will unroll with the printed side of the fabric up.

⚠ WARNING

Failure to support the roll tube, fabric and drive/idler head assemblies during installation may result in serious injury or property damage.

10. Unroll the fabric from the roll tube to allow the drive/idler head assemblies to be installed into the outer arms.
11. Install the previously-removed drive head assembly and idler head assembly retaining bolts into the outer arms to secure the components.
12. Reinstall the previously-removed support arm upper mounting bracket to the unit wall.
13. Make sure the cam lock is in the roll out position and remove cotter pins from the awning heads.
14. Retract and extend the awning several times (see Operation section of manual) to ensure that the fabric is square on the roll tube.
15. 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. 7).
16. Reinstall the drip cap if previously equipped.

Fig. 7



Troubleshooting

Solera Classic Awning Troubleshooting	
What's Happening?	What Should Be Done?
Awning will not extend.	Check position of the cam lock (roll out).
	Ensure that the travel locks have been released from the outer arm.
	Make sure the locking knob for the rafters has been loosened.
	Check to see if the outer arm is resting on the mount/rafter arm. If so, the outer arm height adjustment is not set properly.
Awning will not retract or only retracts part way.	Make sure the mount/rafter arms have been put in the stored position and the locking knob has not been tightened.
	Check position of cam lock (roll in).
	Ensure the outer arms have been placed in the closed/stored position.
	Ensure the awning has the proper tension on it.
Fabric is loose or sags on the edges and middle.	Ensure that the mount/rafter arm is not secured to the head of the outer arm.
	Make sure that the mount/rafter arm has been pulled tight and the locking knob is secured.
	Check that the fabric is square on the unit and with the roll tube.
	Make sure the fabric is properly secured to the awning rail on the unit.
Fabric is loose or sags on the edges and middle.	Make sure roll tube is not bent.
	The nut for this is a thread part that tightens the arms together. Open the awning and check when turning the knob that the nut is not stripped out. If it is not stripped, it would require replacing both parts.
	Make sure the locking knob has been loosened.
	Make sure there is no debris in the track the arm slides in.
Mount/rafter arm will not extend.	Make sure arm is not bent.
	Check to make sure fabric is centered on roll tube and also centered between the arms attached to the unit.
	If the fabric is not centered, move the screws on both ends of the awning and shift the fabric accordingly.
	Make sure there are screws at both ends of the fabric securing it to the roll tube and at the awning rail. If there is only one screw at one end and not the other, the awning may not roll up correctly.
Awning will not roll up straight.	Make sure the legs are square and straight.
	Check the cam lock. Signs of a faulty cam lock include:
	- The absence of a clicking noise when the awning is rolled out.
	- The awning rolling back up after it is placed in the stop position.
Awning will not stay in the rolled out position.	

Maintenance - Solera Awnings

Fabric Care

NOTE: 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 $\frac{1}{4}$ 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.

SOLERA® PULL STRAP AWNING

AWNINGS

System Information

The Solera® Manual Pull Strap Awning extends and retracts with the easy-to-use pull strap. The Solera® Manual Pull Strap Awning features an internal spring system that quickly extends and retracts 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.

CAUTION

This manual provides operational procedures for Solera® Manual Pull Strap Awning. Operating the Solera® Manual Pull Strap 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.

Operation

Extending the Awning

1. Locate the locking latch (Fig. 1), if equipped, and unlock the latch (Fig. 2).

NOTE: This latch is optional and may or may not be installed on one or both support arms.

2. Using the pull rod, place the "L" end of the rod on top of the cam lock (Fig. 3A) and pull down on the lock to release it (Fig. 3).

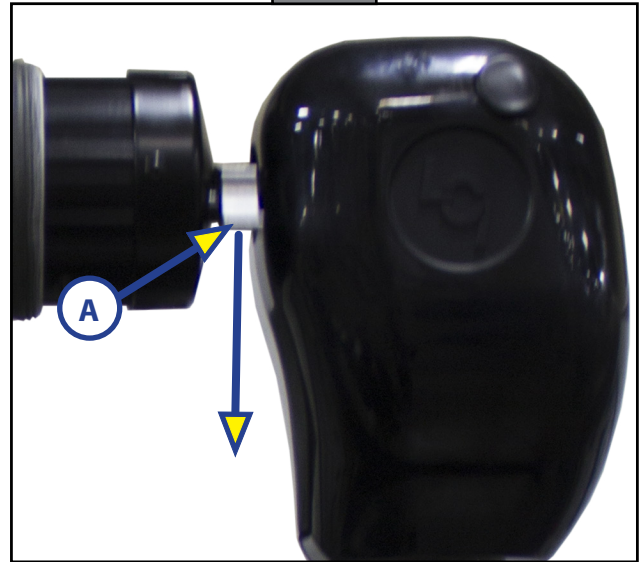
Fig. 1



Fig. 2



Fig. 3



3. Insert the pull rod into the pull strap (Fig. 4).
4. Pull strap to chest height using the pull rod. Using hands to grasp the strap, walk the awning outward, keeping in front of the roll tube at all times (Fig. 5).

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. 6). The exposed part of the roll tube will be under the awning upon full extension. Also check to make sure the cam lock is on top of the roll tube.

Fig. 4



Fig. 5

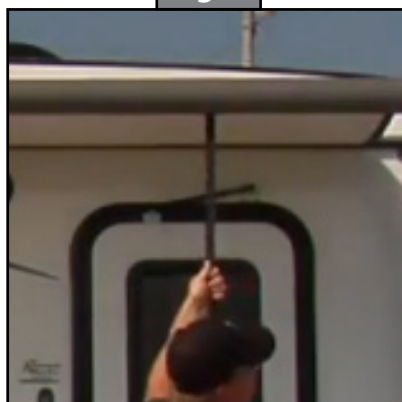
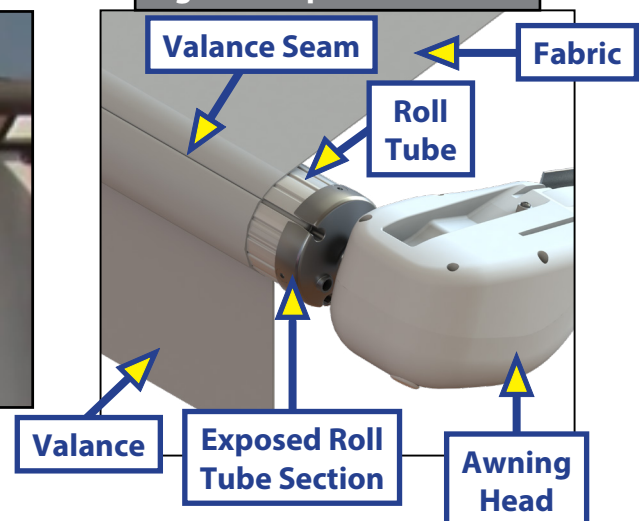


Fig. 6 - Complete Extension



CAUTION

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

Retracting the Awning

NOTE: The awning can be retracted without resetting the pitch (see Page 5).

1. Grasp the strap and pull slightly toward you (Fig. 7) to release pressure on the cam lock (Fig. 7A) and disengage the cam lock.
2. While holding the strap in hand, walk the awning toward the coach until the strap is about chest height (Fig. 8).

Fig. 7

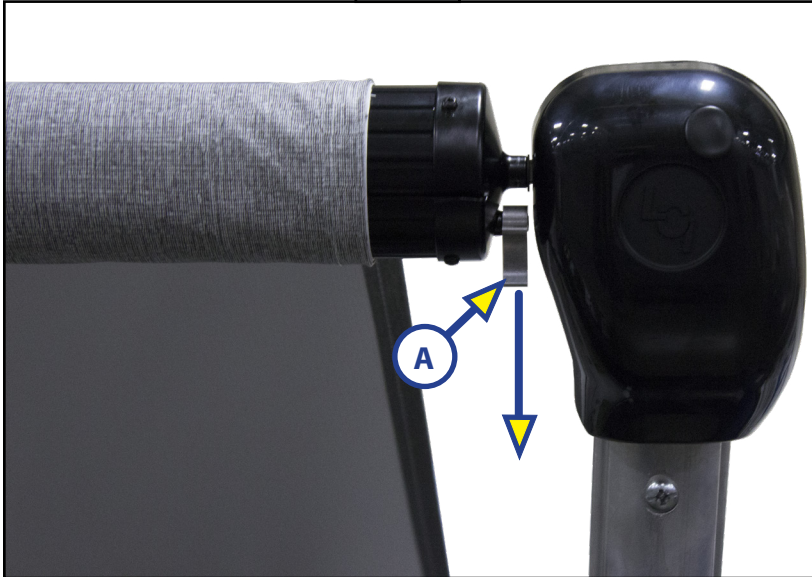


Fig. 8



3. Insert pull rod into the pull strap.
4. Walk awning all the way in until it stops (Figs. 9 and 10). Remove pull rod from strap.
5. Locate the locking latch (Fig. 11), if equipped. Lock the latch to secure the awning in place (Fig. 12).

NOTE: This latch is optional and may or may not be installed on one or both support arms. If not installed, awning is secured and ready for transportation.

Fig. 9



Fig. 10



Fig. 11



Fig. 12



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 manually 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 articulating arm until desired pitch is set (Fig. 13) to allow for water runoff. Do not push the articulating arm up past straight. This will put tension on the gas strut, which can cause the strut to break. Belleville washers and bolt (Fig. 14A) allow for the joint to remain in the position set by the operator.

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

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

Fig. 13

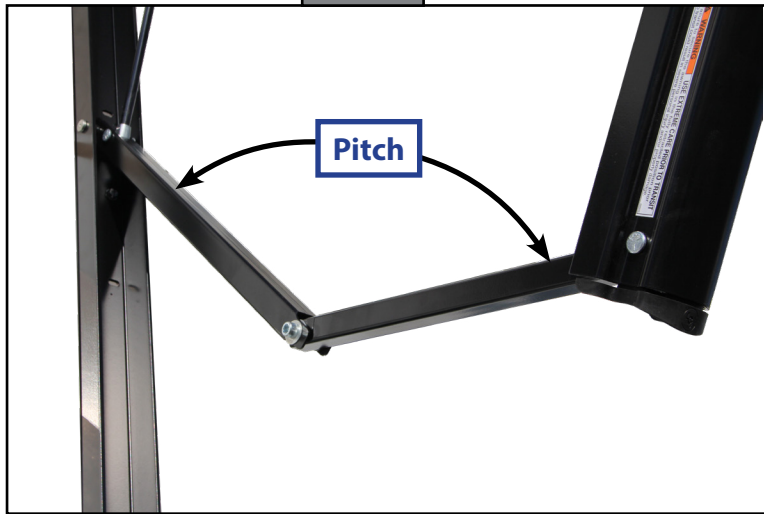
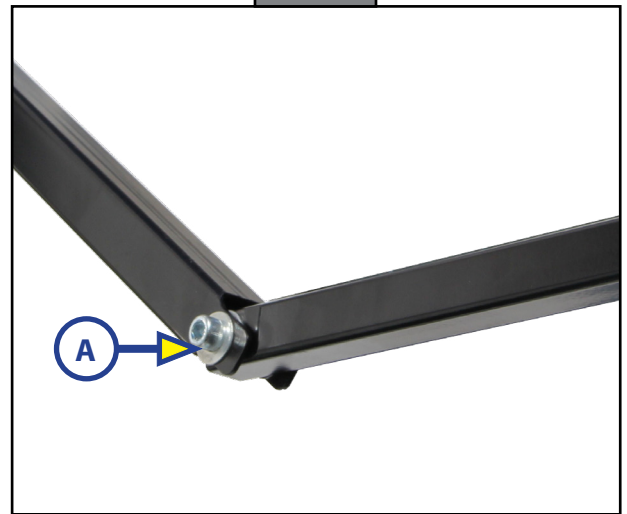


Fig. 14



Maintenance - All Solera Awnings

Fabric Care

If the awning is rolled up while wet, roll it out and let it dry as soon as conditions allow before rolling it up again. 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 $\frac{1}{4}$ cup of dish soap and 5 gallons of warm water. Liberally slish the mixture on the top of the fabric and roll up the awning for 5 minutes. This will apply the mixture to the bottom of the fabric as well. Roll the awning back out and hose off with fresh water. Repeat if necessary. Allow the fabric to dry before rolling up.

Introduction

The Solera® Smart Arm™ 12V DC 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.

WARNING


This manual provides operational procedures for the Solera Awning Smart Arm. Operating the Solera Awning 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.


Operation


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.

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.

⚠ 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.

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.

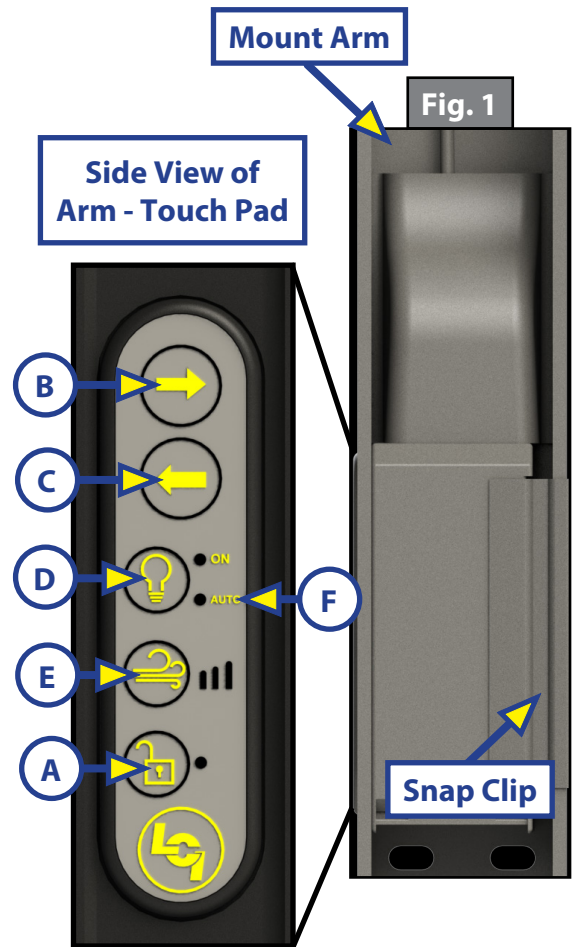
1. Press the light button (Fig.1 D) to turn on the LED light strip.
2. There are three light levels available:
 - A. Press light button (Fig.1 D) once for the low setting or 10% illumination.
 - B. Press light button (Fig.1D) twice for the medium setting or 30% illumination.
 - C. Press the light button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

⚠ 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

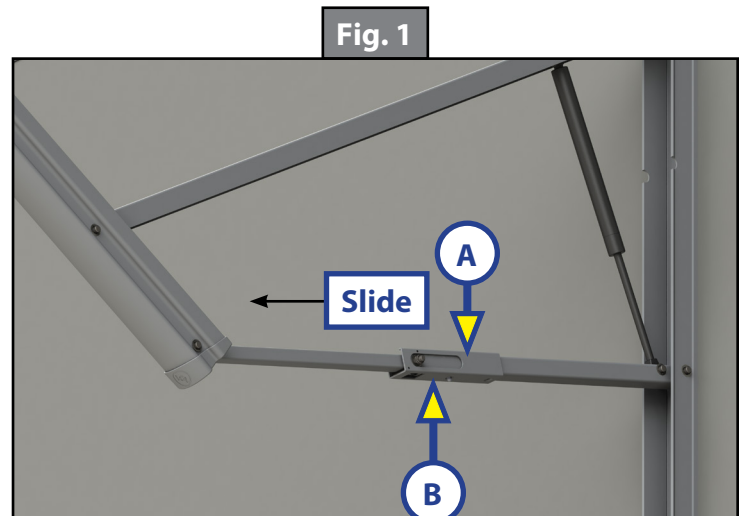
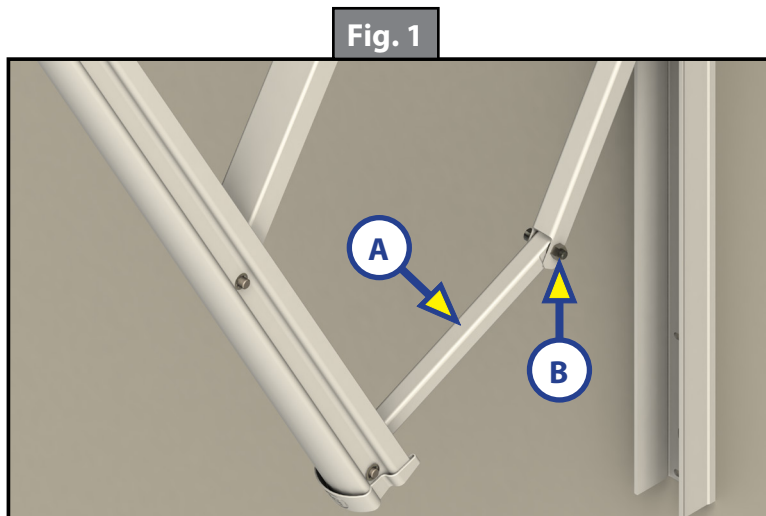
NOTE: The awning will pitch itself to purge the pooling of excess water and may dump a significant amount of water without notice.

NOTE: Pitch can be set by adjusting the pitch arm to tip one side of the awning to allow water runoff.

1. Extend the awning to the fully open position.
2. Choose the side of the awning for optimum shade or convenient water runoff.
3. Pull downward on the joint of the pitch arm until desired pitch is set (Fig. 2A). Belleville washers and bolt (Fig. 2B) allow for the joint to remain in the position set by the operator.

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

NOTE: If the pitch arm does not hold position, it can be tightened by adjusting the bolt (Fig. 2B) in the center of the joint.



NOTE: Some awnings are equipped with a two-position pitch arm (Fig. 3). The two-position pitch arm can be set in the pitch position or snapped into a straight position by pushing the release button (Fig. 3A) and sliding the sleeve (Fig. 3B).

NOTE: Do not push the joint of any pitch arm up past the point where the two sections are in a straight line. This will put tension on the gas strut, which can cause the strut to break.

Troubleshooting

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. 4) 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. 5).

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 the rubber grommet in the drive head assembly (Fig. 4).

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. 6) before the manual override nut is released.

Fig. 1

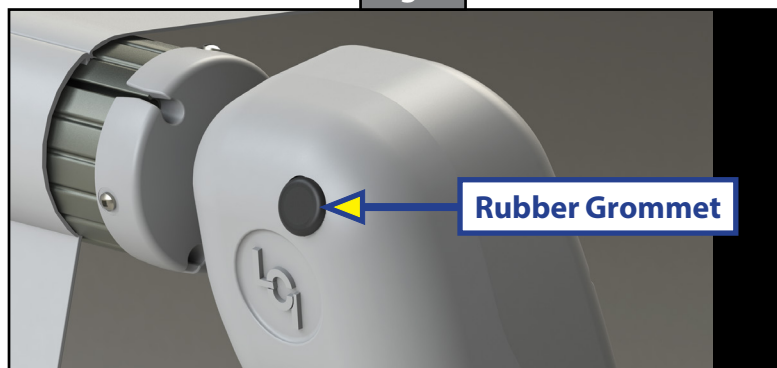


Fig. 1



Fig. 1



Troubleshooting Chart

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.

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.

Additional Information Sources

Additional information about this product can be obtained from lci1.com/support or by using the myLCI app. Replacement components can be ordered from <https://store.lci1.com/> or by using the myLCI app. The myLCI app is available for free on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

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

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

Introduction

The Edge Awning features an internal motor to steadily operate the awning. The awning also features adjustable pitch arms and optional Serenity lighting.

Safety

Read and understand all instructions before 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 LCI 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

Unit MUST be supported per manufacturer's recommendations before working underneath. Failure to do so may result in death or serious personal injury.

⚠ CAUTION

The "CAUTION" symbol above is a sign that a procedure has a safety risk involved and may cause personal injury, product or property damage if not performed safely and within parameters set forth in this manual.

⚠ 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

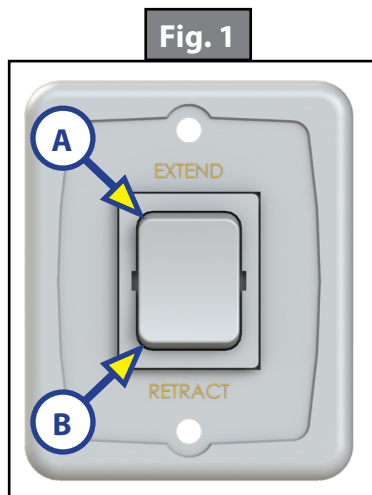
Moving parts can pinch, crush or cut. Keep clear and use caution.

Operation

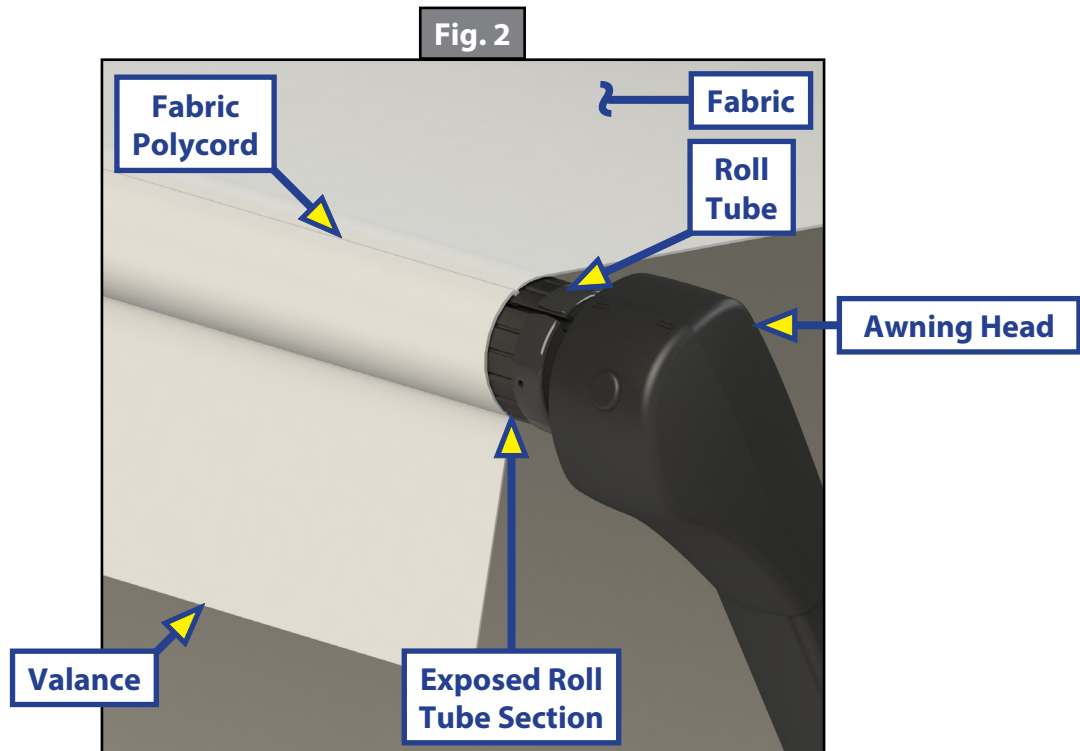
The following instructions provide general operation of the Edge Awning. However, some units may not use the LCI switch (Fig. 1).

Extending the Awning

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 has extended completely.



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).

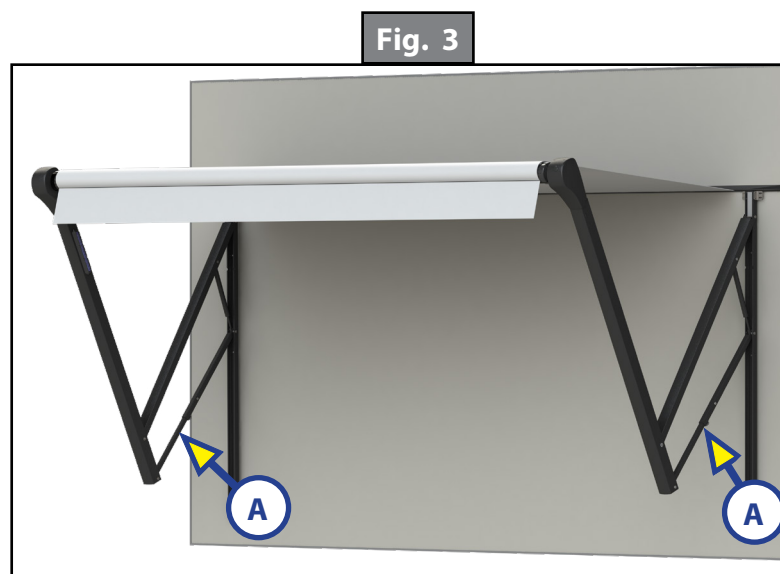


NOTE: The awning fabric should always be above the roll tube. However, if the EXTEND switch is engaged too long or EXTEND is hit inadvertently instead of RETRACT, the awning will roll up backward. This is not a defect. To correct the fabric orientation, press the RETRACT button. The awning will then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

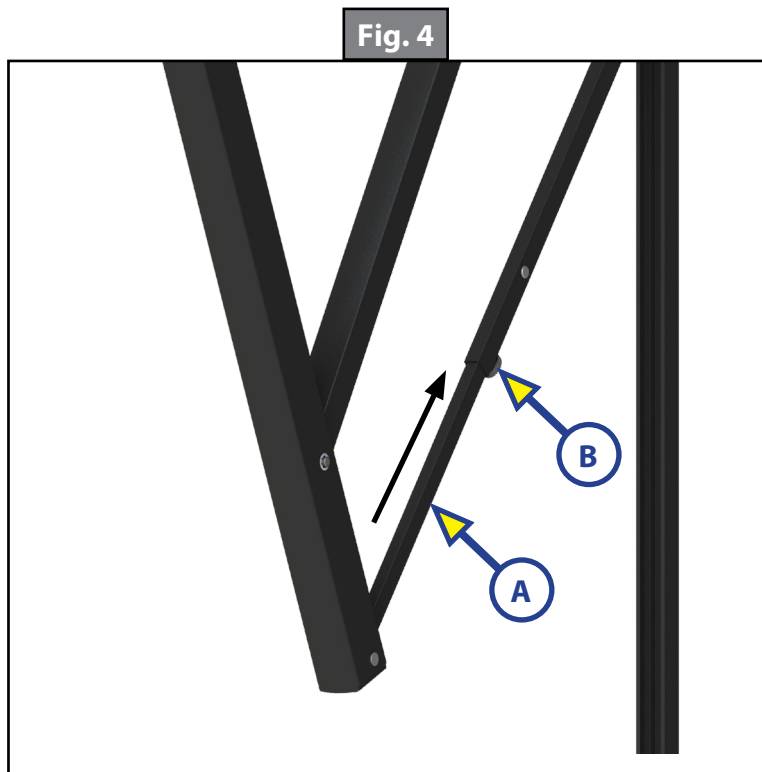
Adjusting Pitch

Pitch can be set by adjusting one of the sliding pitch arms (Fig. 3A) to tip one side of the awning to allow water runoff.

1. Choose the side of the awning for optimum shade or convenient water runoff.



2. Slide the pitch arm (Fig. 4A) up to the desired position.
3. Tighten the knob (Fig. 4B) on the underside of the pitch arm to secure in the desired position.



Retracting the Awning

NOTE: The awning must be in the flat position prior to retracting the awning.

1. If the pitch arm has been set, loosen the knobs (Fig. 4B) on the underside of the pitch arms (Fig 4A).
2. Verify the unit's battery is fully charged and connected to the electrical system.
3. Press and hold RETRACT on the switch (Fig. 1B) until the awning is retracted completely.

Troubleshooting

Resources Required

- Cordless or electric drill or screw gun
- $\frac{7}{16}$ " socket
- Socket wrench (optional)

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 RV.

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.

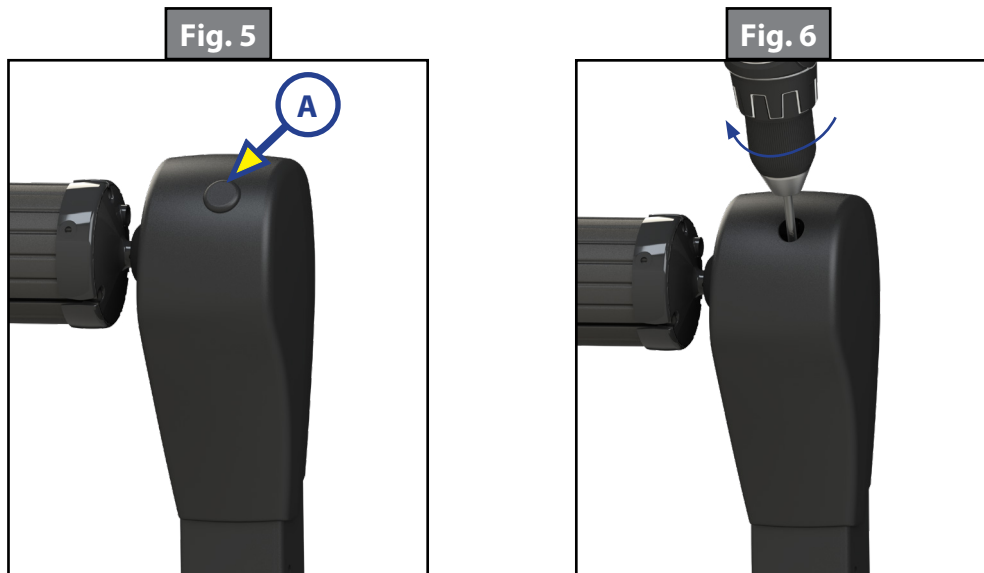
NOTE: This procedure may also be performed to extend or retract the awning in the event of dry camping or camping without a battery.

1. Remove the rubber grommet (Fig. 5A) 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 or screw gun, spin the manual override nut counterclockwise to retract the awning (Fig. 6).

NOTE: A ratchet may also be used to turn the manual override nut. Using a ratchet will take a significant amount of time and should only be used if no drill or screw gun is available.



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, remove socket or drive device and replace the rubber grommet in the drive head assembly.

The motor's internal drive system prevents the awning from moving (extend or retract) on its own. If the motor is damaged or disabled, make sure the awning is secured in the retracted position with a strap around both the outer support arm and the mounted support arm before the manual override nut is released.

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 Components, Inc. ("LCI"). LCI prohibits the copying or dissemination of portions of this manual unless prior written consent from an authorized LCI 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 LCI. Revised editions are available for free download from lci1.com.

Please recycle all obsolete materials.

For all concerns or questions, please contact
Lippert Components, Inc.

Ph: 574-537-8900 | Web: lci1.com | Email: customerservice@lci1.com