SOLERA® HYBRID AWNING

OWNER'S MANUAL

LIPPERT COMPONENTS®

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

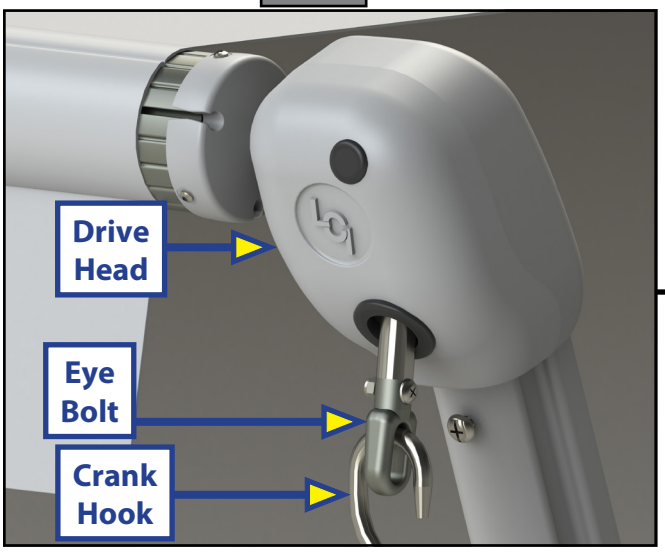


Fig. 2

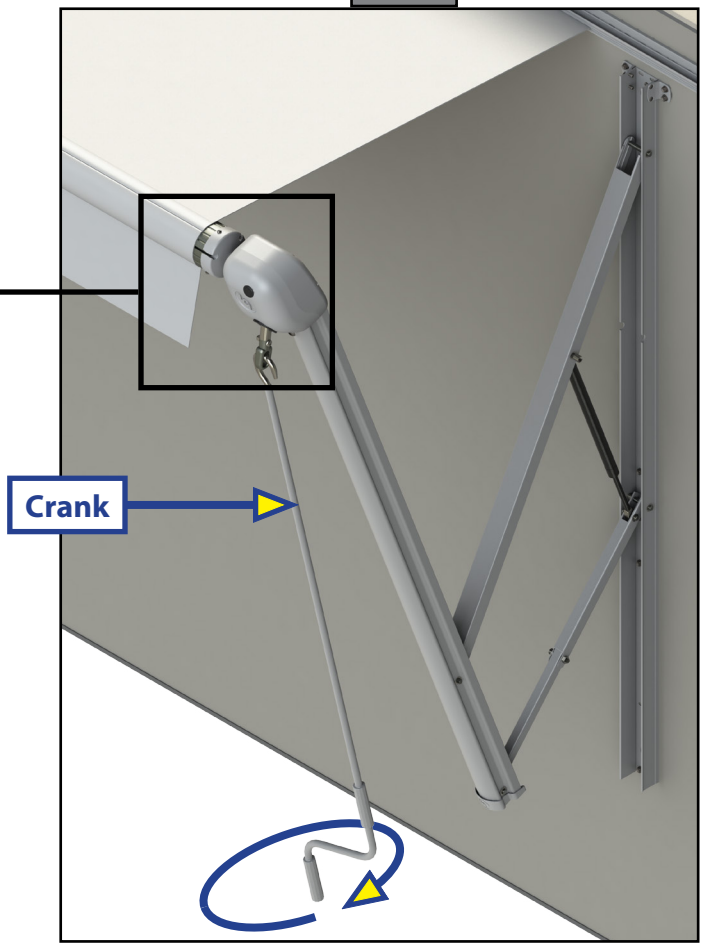
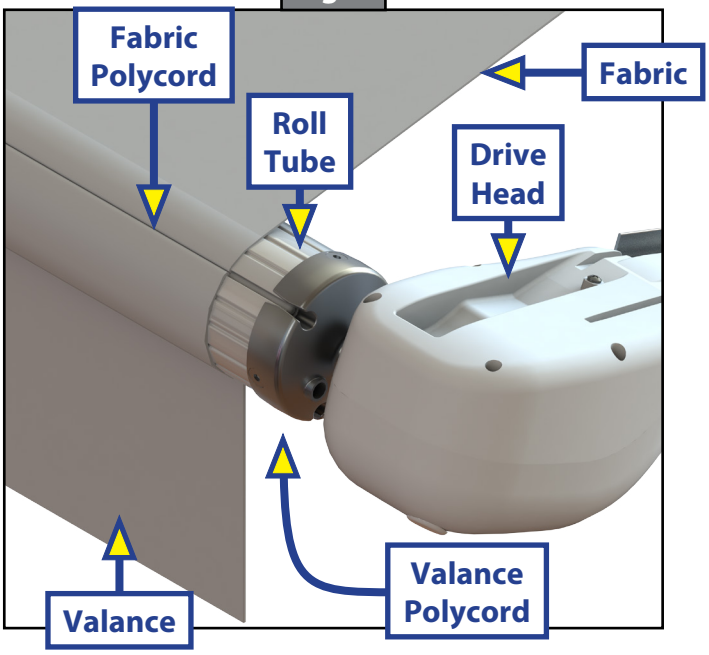


Fig. 3



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.

Fig. 4

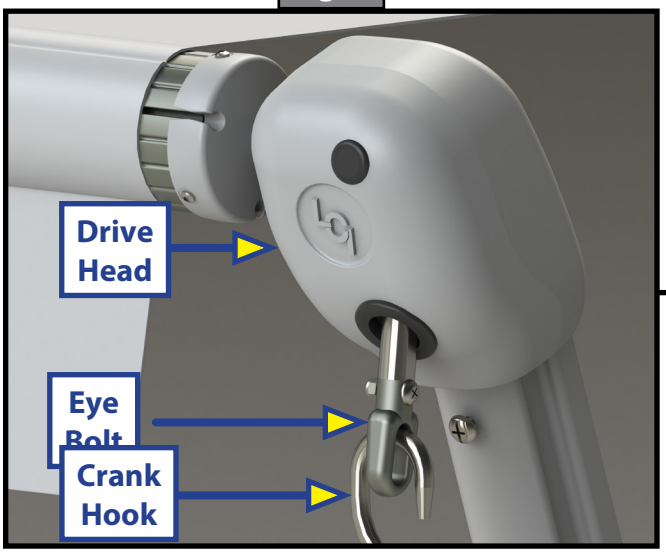
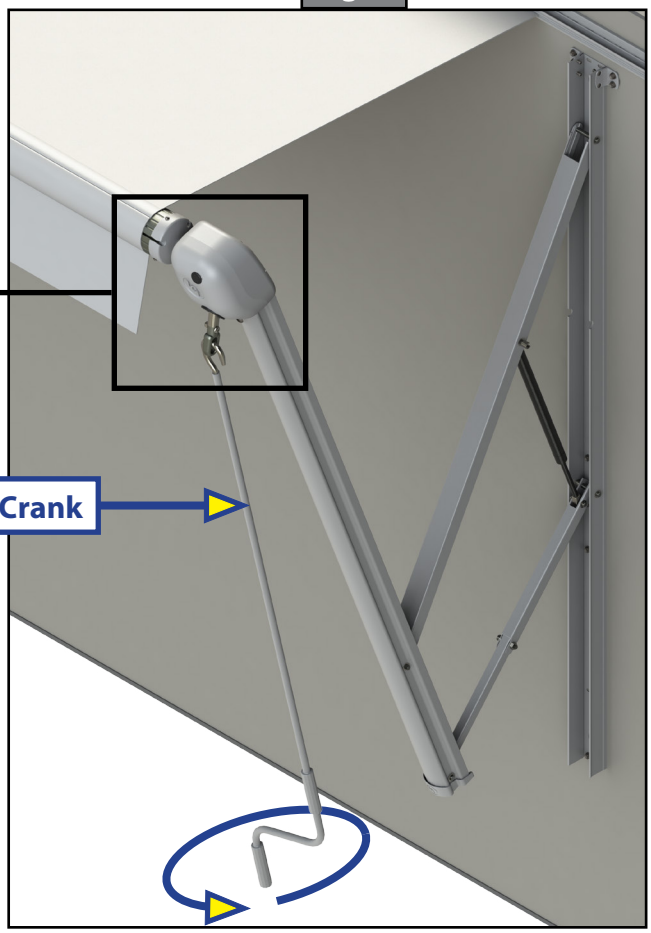


Fig. 5



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.

Fig. 6

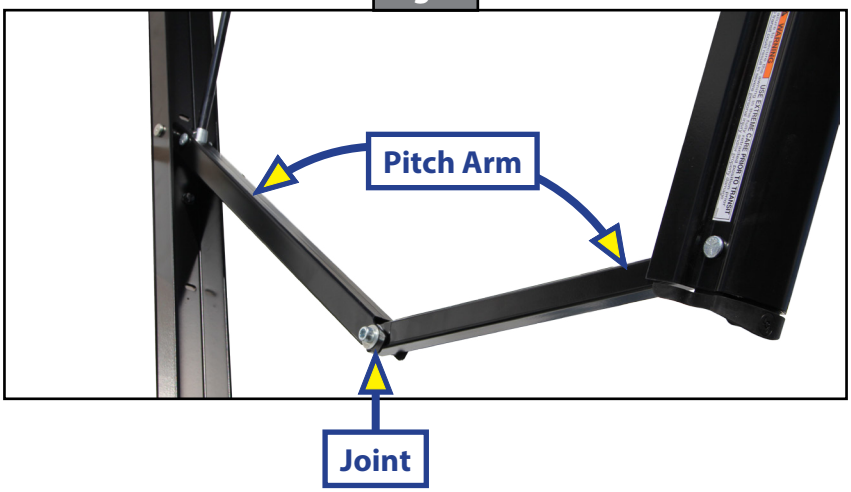
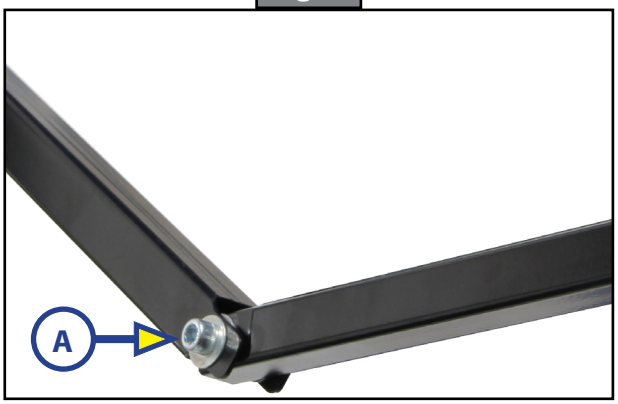


Fig. 7



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

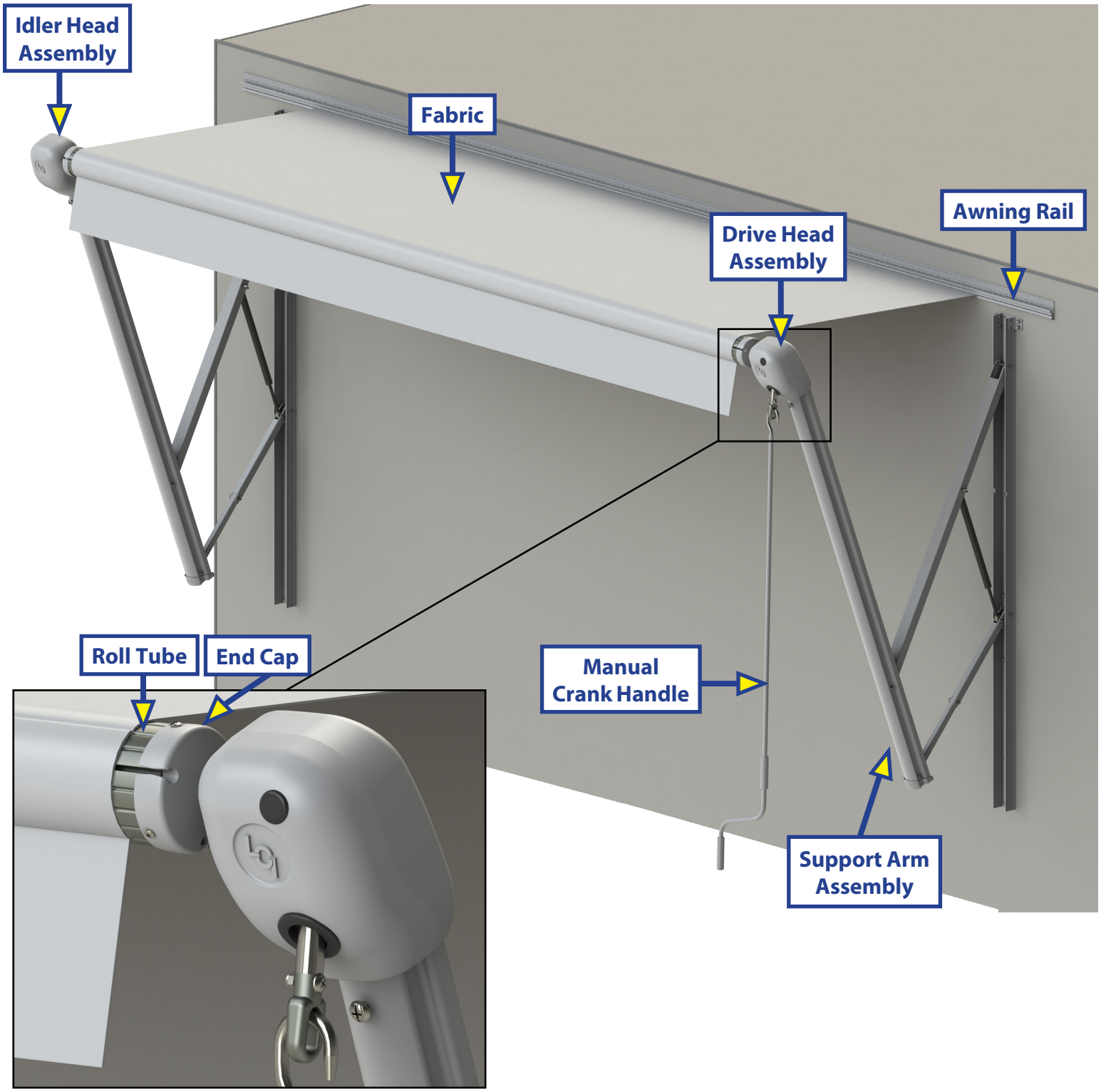
Fabric Care

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 ¼ 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 HYBRID AWNING ASSEMBLY

AWNINGS



SOLERA HYBRID AWNING COMPONENTS

AWNINGS

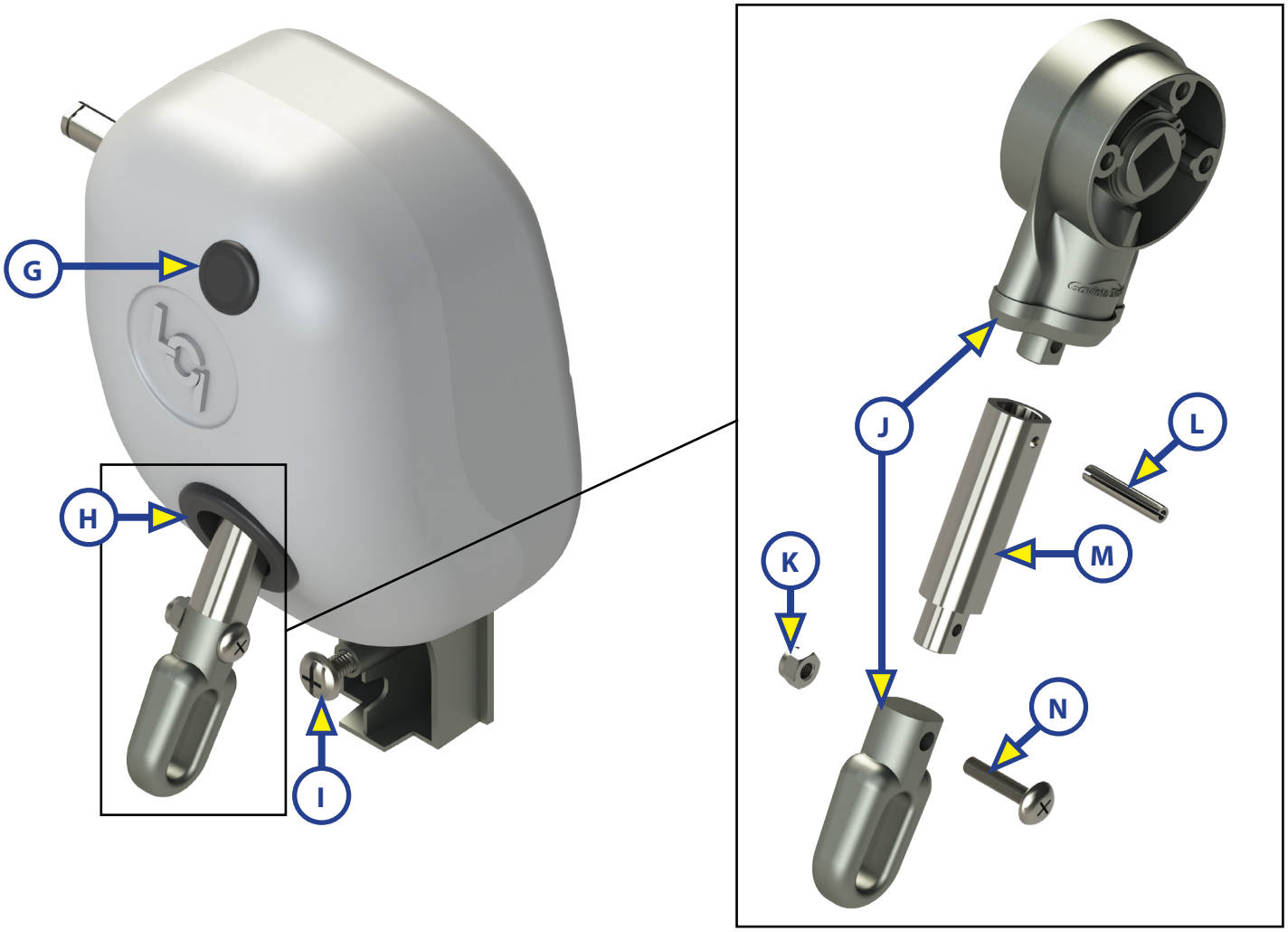
Variant Code Information

The variant code on Lippert products can assist LCI customers in obtaining additional information about the product and its components.

Callout	White Part #	Black Part #	Description
A	266147	273479	Idler Head Assembly
B	289563	289566	Idler Head Front Cover
C	289564	289567	Idler Head Rear Cover
D	300029	300031	Drive Head Assembly
E	289557	289560	Drive Head Front Cover
F	289558	289561	Drive Head Rear Cover

SOLERA HYBRID AWNING COMPONENTS

AWNINGS



Callout	Part #	Description
G	275071	Grommet, Rubber (for Manual Override Opening)
H	299993	Grommet Diaphragm, Rubber (for Manual Crank Opening)
I	266148	Screw 5⁄16" - 18 x 2 - 1⁄4" (Head to Arm)
J	300028	Box Gear with Eyelet (Gear Will Come Disassembled)
K	322401	Nut, nylon lock 1⁄4" - 20 (for Drive Head)
L	300026	Spring Slotted Pin (for Drive Head)
M	299889	Coupler (for Drive Head)
N	300027	Screw 1⁄4"- 20 x 1 1⁄8" (for Drive Head)

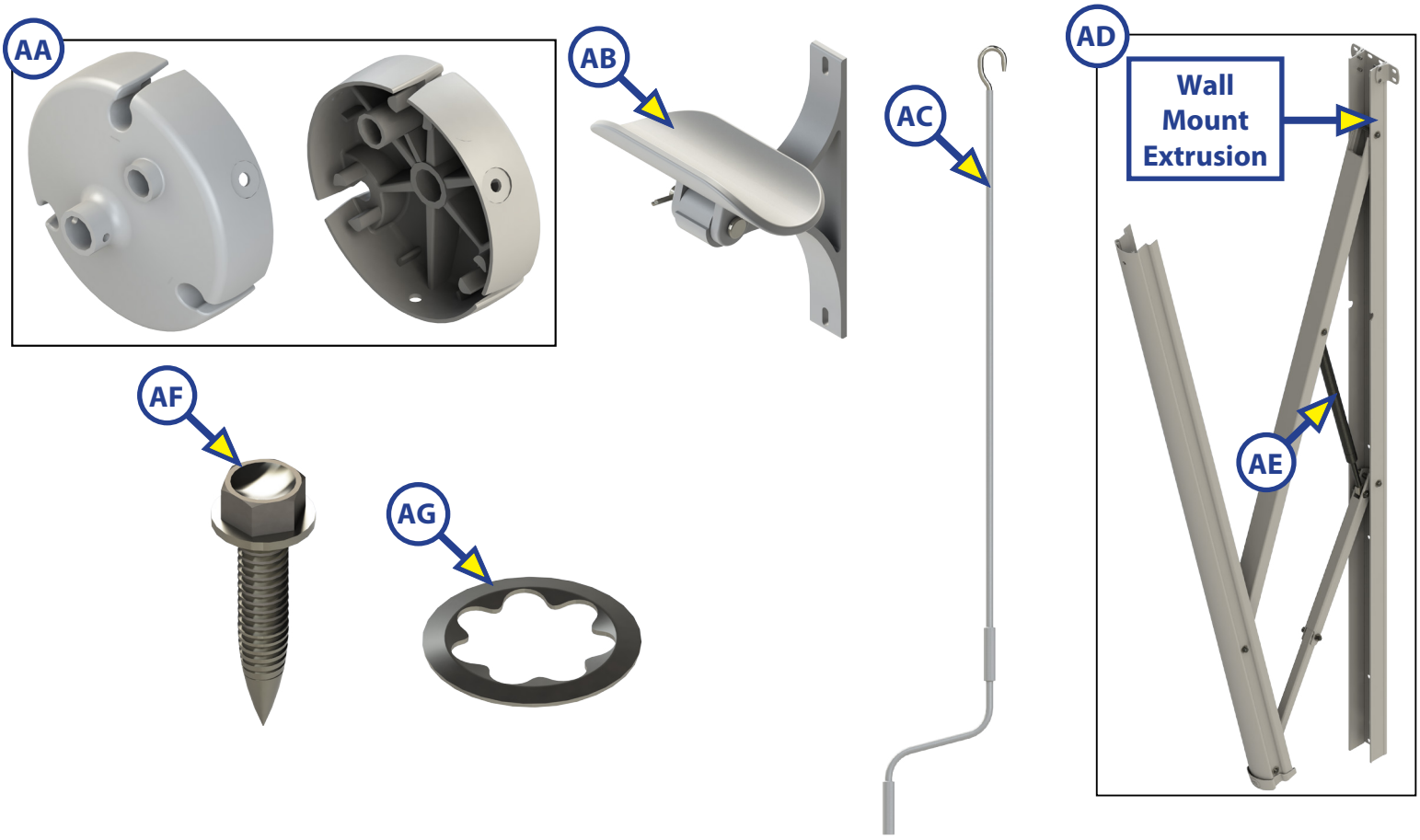
SOLERA HYBRID AWNING COMPONENTS

AWNINGS

Callout	Part #	Description
O	298760	Hairpin Cotter, Zinc Plated 0.093" x 2-5/16"
P	347119	Cotter Pin, Zinc - 1/8" x 3"
Q	299419	Screw #8 - 15 x ½" (End Cap to Roll Tube)
R	266156	Screw, #6 x ½" (Fastener for Head Covers, 6 Per Cover)
S	299630	End Cap Screw, Wax #8 (Head to Roll Tube)
T	118043	Nut, nylon lock 5⁄16" - 18 (Head to Arm)
U	266155	Screw #8 - 32 x ½" (Back Cover to Mount)
V	281079	Screw #6 - 20 x ½"
W	384905	Screw, Stainless Steel #10 - 32 x 2 ½"
X	320695	Screw, Steel #8 - 18 x ½"
Y	384906	Nut, Stainless Steel, nylon lock #10 - 32
Z	237315	Rivet, Aluminum - 3/16" x 1.3000

SOLERA HYBRID AWNING COMPONENTS

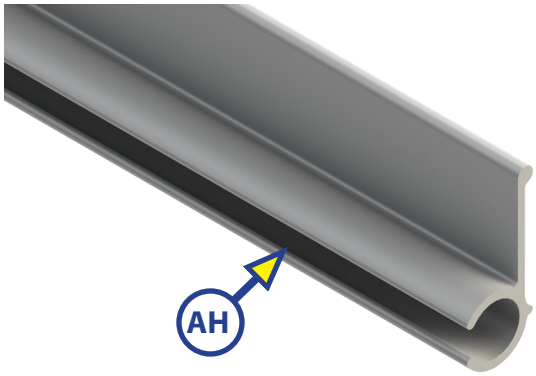
AWNINGS



Callout	White Part #	Black Part #	Description
AA	423750	423751	End Cap
AB	289373	289374	Awning Center Support Assembly
NOTE: Only required for Solera Awnings greater than 21' in length			
AC	300030		Manual Crank Handle
AD	295742	295743	Support Arm Assembly (Short, 61")
	260294	266169	Support Arm Assembly (Pitched, 66 ⅛")
	362132	362133	Support Arm Assembly (Short Standard Fixed Pitch)
	281152	281154	Support Arm Assembly (Flat, 69")
NOTE: Support Arm measurement based on wall mount extrusion.			
AE	280343		Gas Strut; 26"; 124 lbs (for Short and Flat Arm Assemblies)
	260282		Gas Strut; 124 - 144 lbs (for Pitched Arm Assemblies)
AF	348108		Screw #14 - 10 x 1 ¼" (Arms to Unit)
AG	282484		Star Washer (for Gas Strut)

SOLERA HYBRID AWNING COMPONENTS

AWNINGS



Callout	White Part #	Black Part #	Description	
AH	281928		Awning Rail (144")	White
	281929		Awning Rail (144")	Black

LIPPERT COMPONENTS®

Please recycle all obsolete materials.

SOLERA® HYBRID AWNING COMPONENTS

AWNINGS

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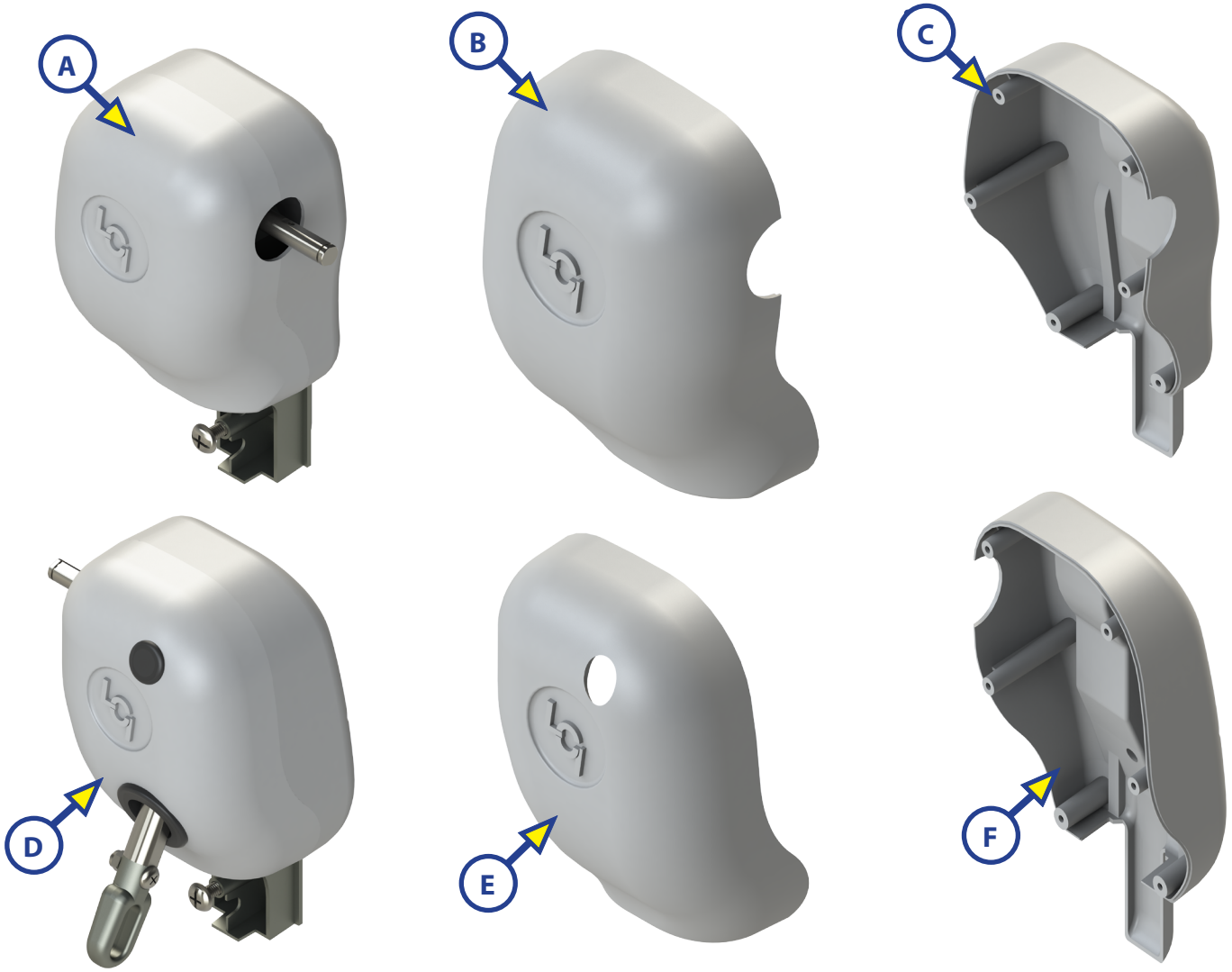

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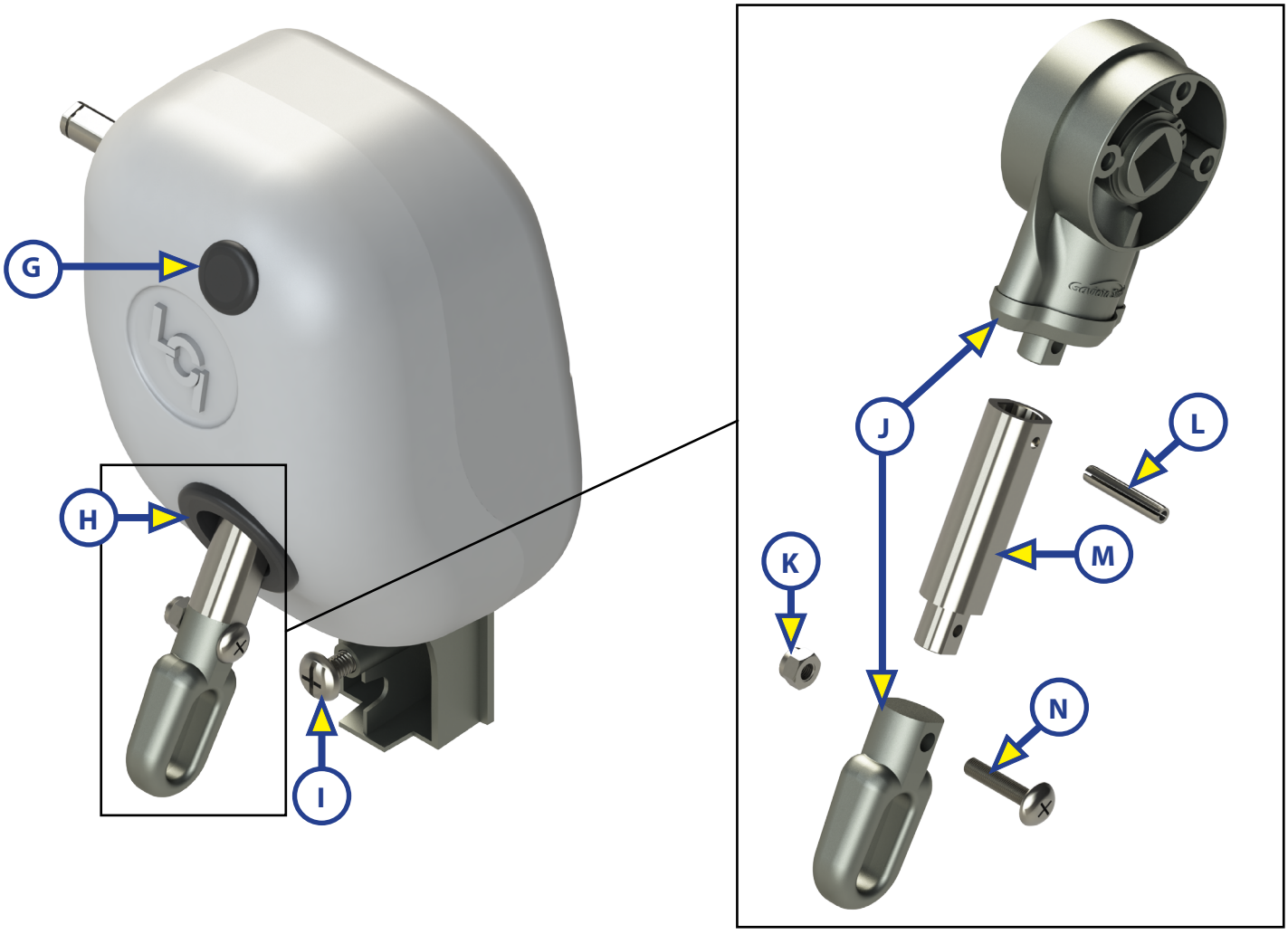

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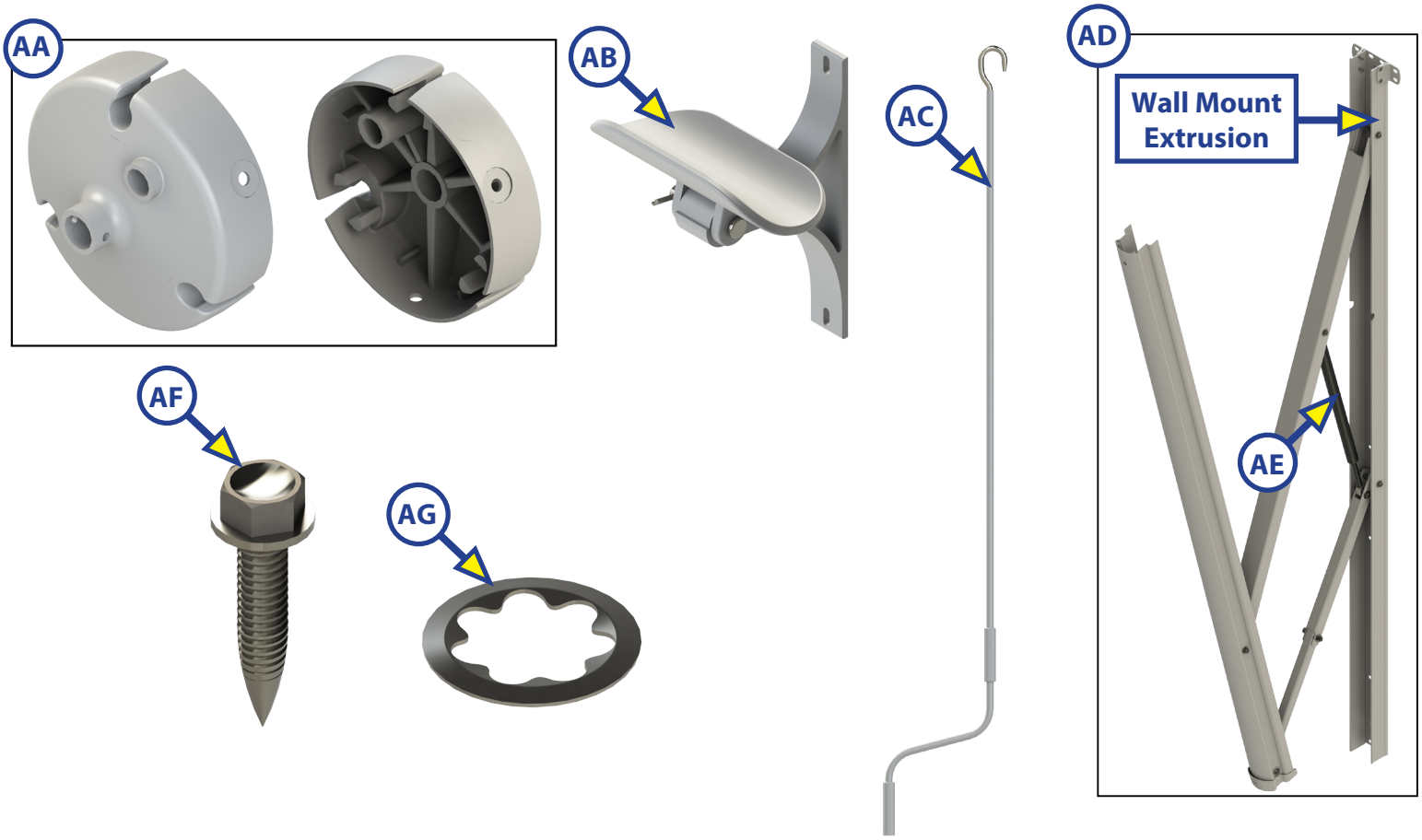

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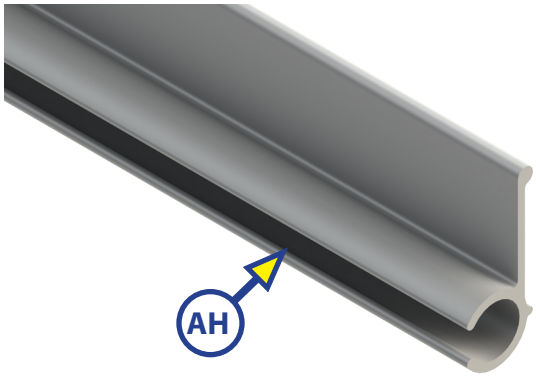
AWNINGS



Callout	Part #	Description	
AH	281928	Awning Rail (144")	White
	281929	Awning Rail (144")	Black

LIPPERT COMPONENTS®

Solera® Hybrid Awning

Introduction

The Solera® Hybrid Awning is the next best thing to a power awning. Simple crank operation makes setting up camp fast and easy, and the Hybrid locks into place when retracted for safe travel.

Additionally, the pitch arm assembly allows for rain dump and adjustable pitch features. The pitch arm assembly also provides added stability.

This manual refers 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 “drive side” head has a crank eyelet. The “idler side” is the left hand side of the awning when facing the awning from the exterior of the unit.

⚠ 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.

Prior To Installation

All screws supporting the awning assembly must have a backer within the structure of the wall of the unit. Refer to the unit manufacturer for proper location.

Resources Required

- 1 to 3 People, Depending on Task
- Cordless or Electric Drill or Screw Gun
- Appropriate Drive Bits
- Appropriate Drive Sockets
- Rivet Gun (If Needed)
- Silicone Sealant or Butyl Tape
- Screwdriver, Flat Blade
- Screwdriver, Phillips
- Medium to Fine File
- Silicone Lubricant
- Non-Permanent Method of Marking

LIPPERT COMPONENTS®

Solera® Hybrid Awning

Installing the Awning Rail (if necessary)

Awning rail not included in installation package.

1. Position the awning rail along the line where roof and wall meet or:

A. For pitched awnings - A minimum of 6.00" above doors or windows

B. For flat awnings - A minimum of 2.50" above doors or windows

2. Make sure the awning rail is level and parallel with the floor line of the unit **(Fig.1)**.

3. After determining the awning rail's proper location, mark its position with a non-permanent method of marking.

4. Apply silicone sealant or Butyl tape to seal the back of the awning rail.

5. Align the awning rail on the wall and secure with #10 x ¾" Zinc Phillips pan head screws (not included), using all fastener holes.

Letter	Description
A	Awning Rail
B	Support Arm Assembly
C	Roll Tube Assembly

Front Facing View

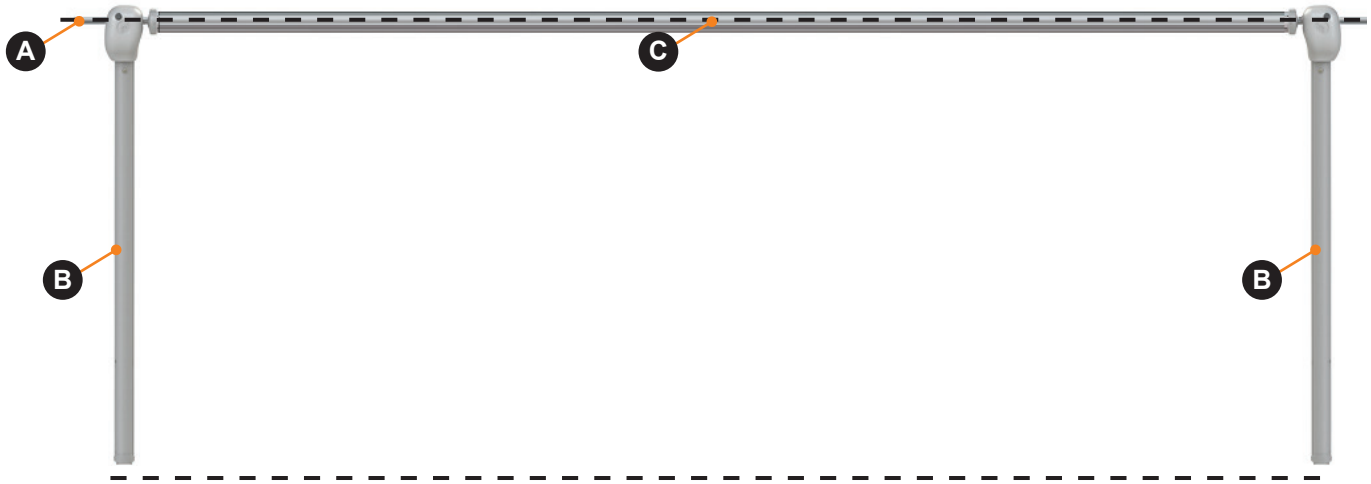


Fig.1 **Floor Line**

Installation

1. Mark the position of the centerlines of the support arm assemblies on the awning rail. Ensure the position of the support arm assemblies will not interfere with any lights, vents or other unit features.

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)**.

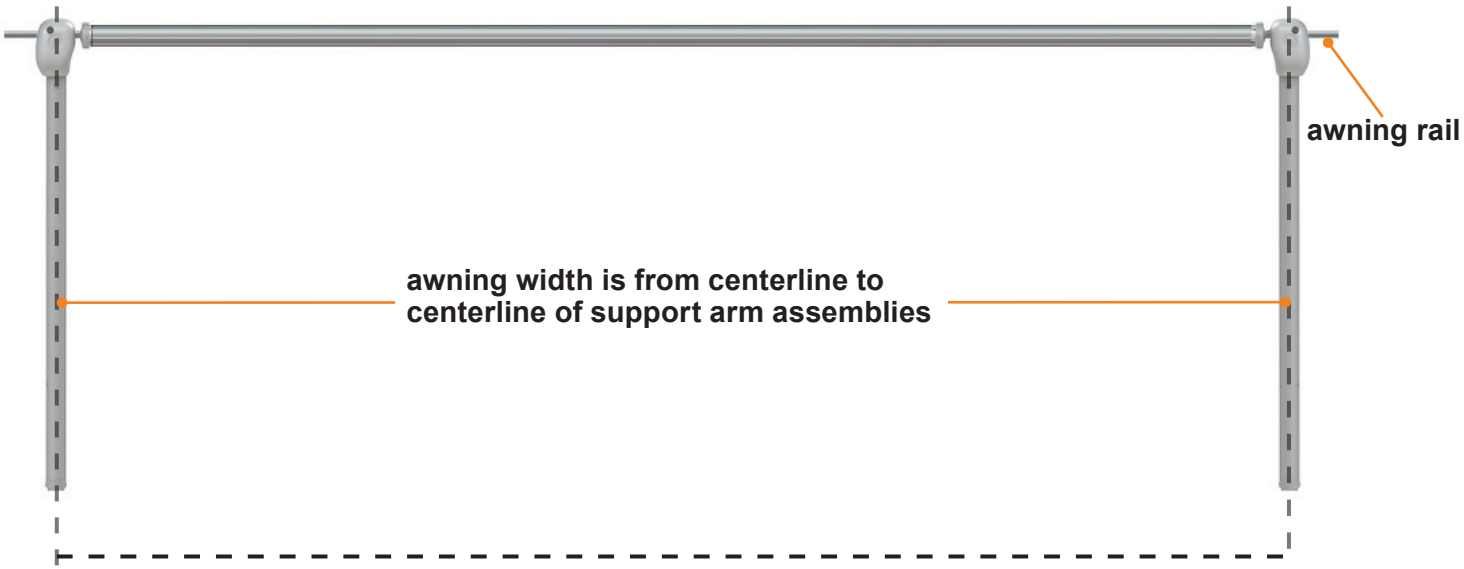


Fig.2

3. Insert the drive head assembly shaft into the end cap **(Fig.3)**. Align the holes and secure with the #8 waxed screw. Repeat process for idler head assembly at opposite end.

NOTE: Keep the head of the waxed screw approximately ⅛" away from being fully fastened to avoid compromising the structural integrity of the waxed screw.

Fig.3

4. Use a flat blade screwdriver to spread open either end of the awning rail channel on the installation side **(Fig.4A)**.

5. To protect the fabric from damage during installation, file any sharp edges or burrs from the awning rail channel.

6. Apply silicone lubricant to the inside of the awning rail channel **(Fig.4B)**.

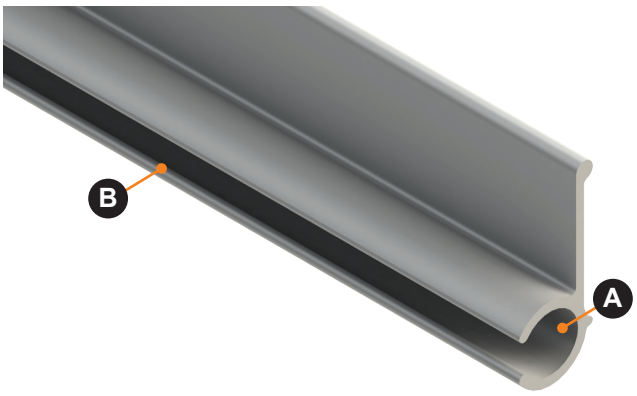


Fig.4

Setting the Awning Height

Best commercial 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 ensure that the distance from the awning rail to the top of the support arm assemblies is consistent at both ends of the awning.

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

NOTE: Four 3/16" x 0.450" aluminum rivets can be used in place of the two middle and two lower screws when installing support arms on laminated walls.

2. Remove the tape from the fabric.

3. Unroll a small portion of fabric.

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

1. 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 made previously.

2. 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" plain hex head self-tapping screws at the top **(Fig.5)** and two #14 x 1 1/4" plain hex head self-tapping screws at the bottom **(Fig.6)**.

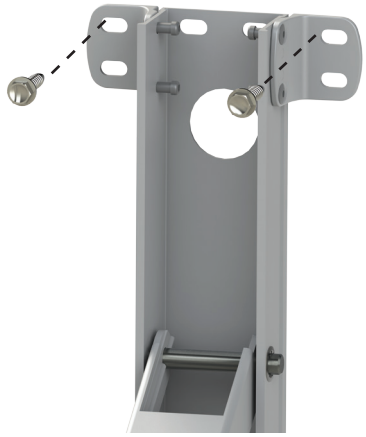


Fig.5

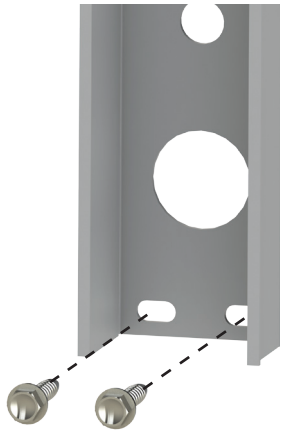


Fig.6

3. Use the crank handle **(Fig.10A)** to extend the awning (see “Operation” section of this manual). Install the remaining two #14 x 1 ¼” plain hex head self-tapping screws at any of the three locations shown **(Fig.7)** in the center of the support arm. Repeat this process for the opposite awning support arm assembly.

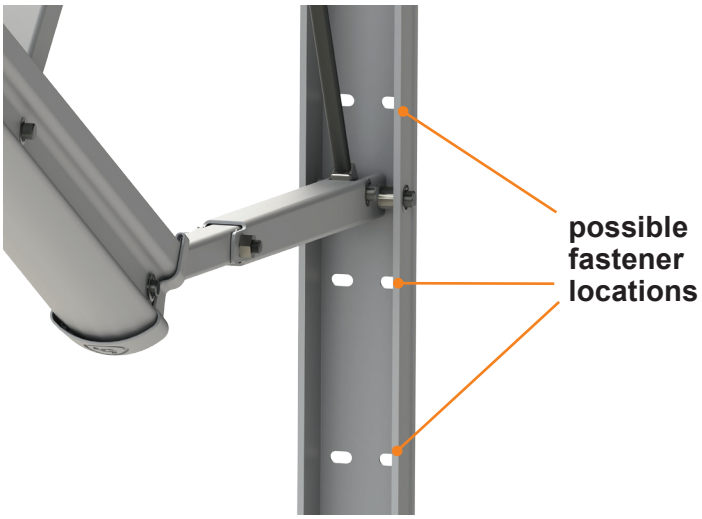


Fig.7

Securing the Fabric

1. Extend and retract the awning several times to ensure that the fabric is square on the roll tube.

2. Secure the fabric in the awning rail no more than 1.00" inside the edge of the fabric on both ends using a #6 x ½" hex head screw.

3. Install the screw down through the awning rail into the fabric and the polycord **(Fig.8)**.

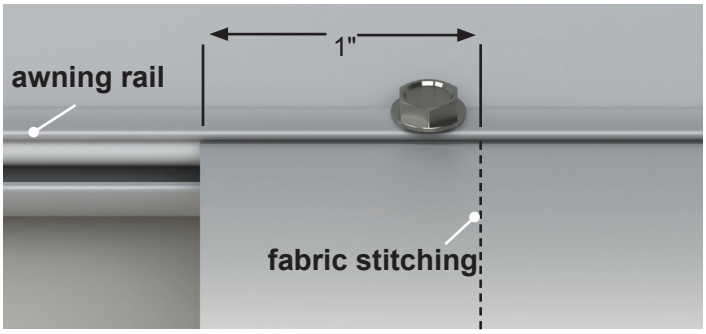


Fig.8

Seal Wall Penetrations

Seal all fastener locations and wire penetrations to protect against water intrusion **(Fig.9)**.

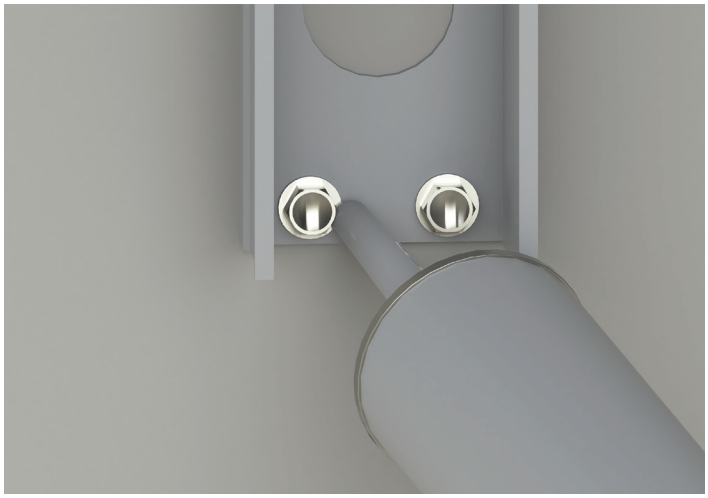


Fig.9

Operation

⚠ CAUTION

DO NOT EXTEND AWNING WITHOUT UNLOCKING LATCH. EXTENDING AWNING WHILE LOCKED MAY CAUSE PRODUCT DAMAGE. ALWAYS CHECK LOCKING LATCH STATUS BEFORE EXTENDING AWNING.

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 awning crank handle for the awning **(Fig.10A)**.

2. Insert the hook end of the crank handle into the eye bolt on the drive head **(Fig.11A)**.

3. Turn the crank handle so the eye bolt rotates in a clockwise direction to fully extend the awning.

NOTE: Keeping the crank handle as parallel to the support arm assembly as possible makes it easier to extend or retract the awning.

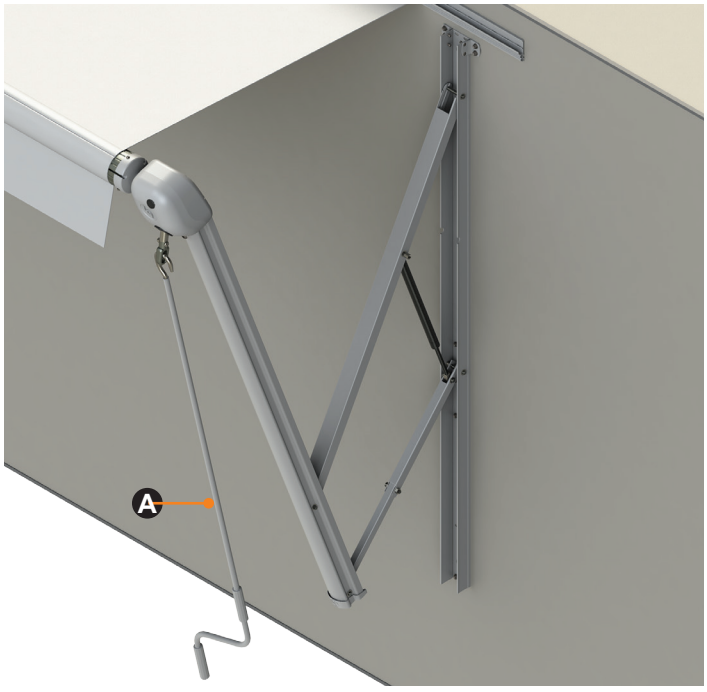


Fig.10

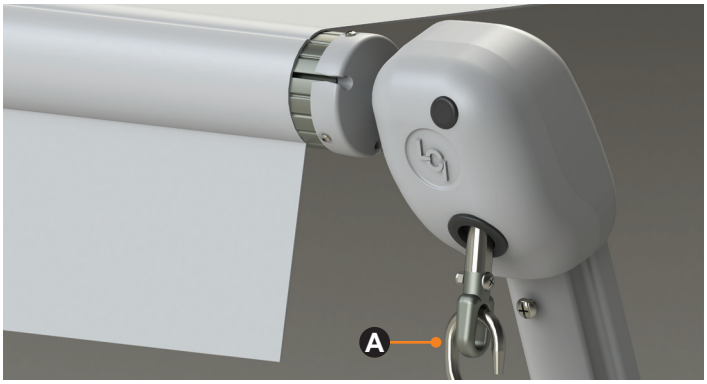


Fig.11

Awning extension is complete when the fabric is fully unrolled, the valance is hanging down from the roll tube and a section of the roll tube is exposed **(Fig.12)**.

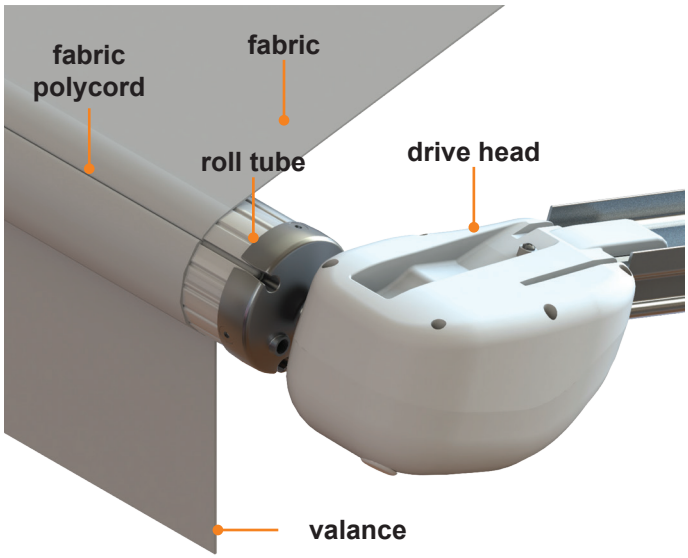


Fig.12

⚠ 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.

Retracting the Awning

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

1. Locate the crank handle for the awning **(Fig.10A)**.

2. Insert the hook end of the crank handle into the eye bolt on the drive head **(Fig.11A)**.

3. Turn the crank handle so the eye bolt rotates in a counterclockwise direction to fully retract the awning.

NOTE: Keeping the crank handle as parallel to the support arm assembly as possible makes it easier to extend or retract the awning.

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. Pull downward on the joint of the pitch arm until desired pitch is set **(Fig.13A)**. Belleville washers and bolt **(Fig.13B)** allow for the joint to remain in the position set by the operator.

NOTE: Some awnings are equipped with a 2-position pitch arm **(Fig.14)**. The 2-position arm can be set in the pitch position or snapped into a straight position by pushing the release button **(Fig.14A)** and sliding the sleeve **(Fig.14B)**.

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.14C)** in the center of the joint.

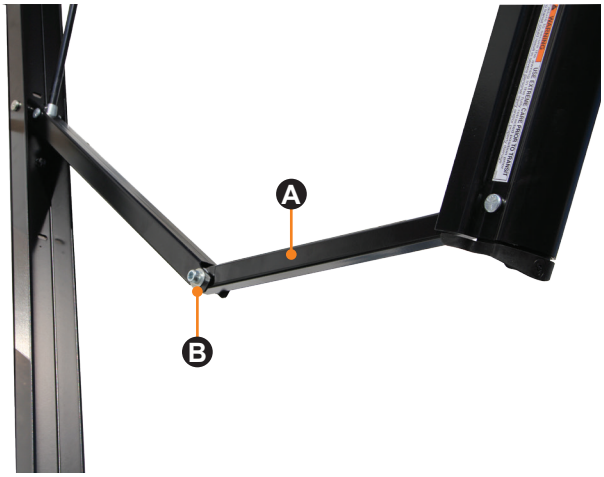


Fig.13

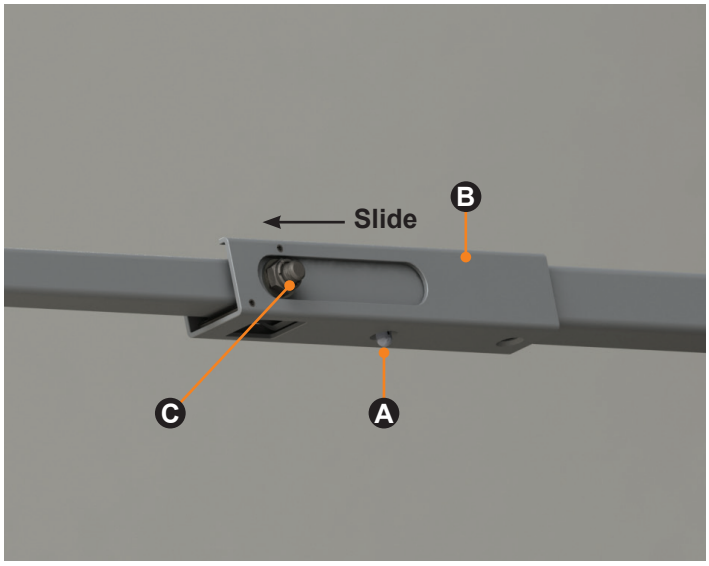


Fig.14

LIPPERT COMPONENTS®

Solera® Hybrid Awning

Troubleshooting

What Is Happening?	What Should Be Done?
Awning won't open or close.	If optional travel locks are installed, make sure they are unlocked.
Awning pitch won't stay in the flat position.	If optional travel locks are installed, make sure they are unlocked.
	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 when the outer arm overlaps the mount arm. The amount of overlap can vary.
	Make sure there are no obstructions in either support arm assembly that can prevent the awning from closing.
	Verify the fabric is square from unit to roll tube when extended and rolls up straight on the roll tube.
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 extending from the drive head going into the end cap is not bent.
	Make sure the mount arms are properly secured to the wall.
	Make sure no part of a support arm assembly is bent.
	Make sure the wear collar spacers are all properly located in the support arm assemblies.
Awning rolls up backward.	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 (counterclockwise) and the awning will then extend to its correct orientation and normal operation will resume.

LIPPERT COMPONENTS®

Solera® Hybrid Awning

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.

Periodically clean vinyl or woven acrylic fabric as follows:

1. Make a mixture of ¼ cup of dish soap to 5 gallons of warm water.

2. Liberally apply the mixture on the top of the fabric.

3. Retract the awning for 5 minutes. This will apply the mixture to the bottom of the fabric as well.

4. Extend the awning and hose off with fresh water. Repeat if necessary.

5. Allow to dry before retracting awning.

Additional Product Information

Additional information about this product can be obtained from lci1 support or by downloading the free myLCIapp. The app is available on iTunes® for iPhone® and iPad® and also on Google Play™ for Android™ users.

SOLERA® CLASSIC AWNING ARM REPLACEMENT INSTRUCTIONS

TI-231

AWNINGS

⚠CAUTION

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

⚠WARNING

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

Removal of the Arm

1. Roll awning out approximately 1 ft.
2. Align the hole in the end cap with the hole in the shaft going from the head through the end cap.
3. Insert a cotter pin through the aligned end cap and head shaft holes on each end of the awning (Fig. 1).
4. Remove the screw holding the support arm to the head on the awning roll tube (Fig. 1).

⚠CAUTION

Make sure the roll tube is adequately supported before removing the support arm assembly. Failure to do so may result in serious personal injury or property damage.

5. Remove the 2 screws securing the upper mounting bracket to the sidewall of the coach (Fig. 2).
6. Remove the support arm from the head and un-latch it from the bottom bracket (Fig. 3).

Fig. 1

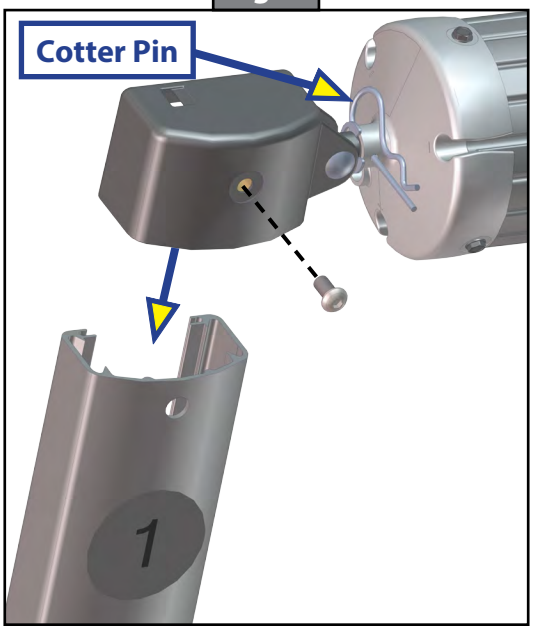


Fig. 2

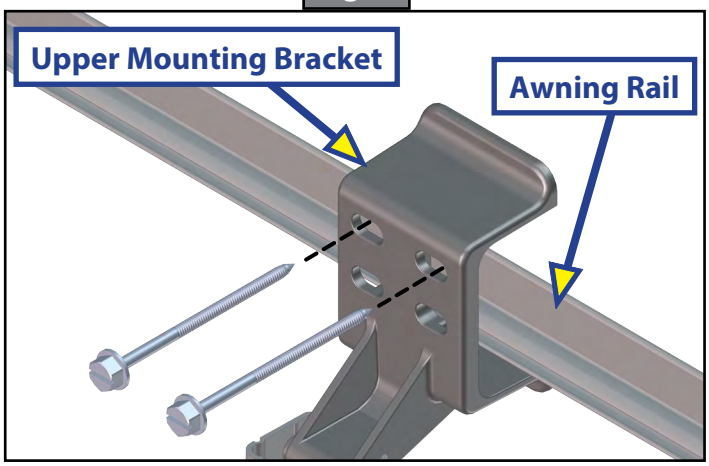
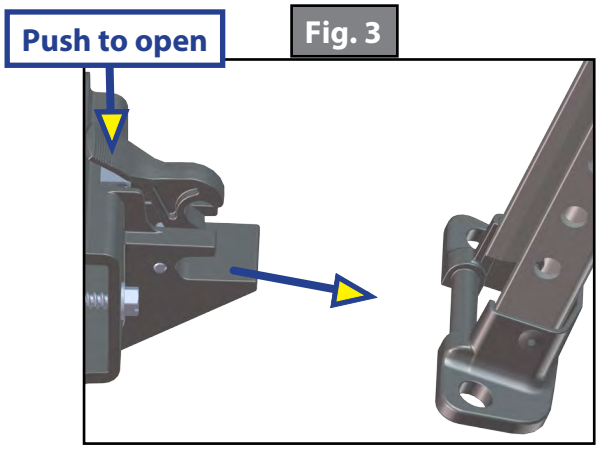


Fig. 3



Installation of the New Arm

1. Secure the support arm assembly in the lower mounting bracket (Fig. 4).
2. Place the upper bracket in place over the awning rail in the same position from which the old bracket was removed. Apply a liberal amount of sealant over the holes and attach the bracket using the ¼" x 3" lag screws provided (Fig. 5).
3. Slide the support arm assembly into the head assembly and secure with the screw that was previously removed (Fig. 6).
4. Ensure the locking lever is still in the roll out position and remove the cotter pin (Fig. 6) from the end cap and head shaft holes.

⚠ CAUTION

Firmly grasp the pull strap on the awning fabric before removing the cotter pins to prevent the awning from retracting on its own. Failure to do this may result in serious personal injury or property damage.

Fig. 4

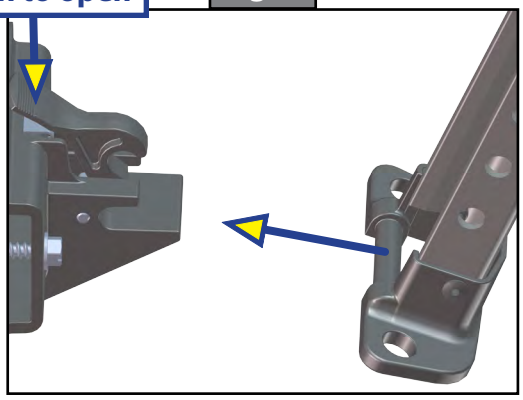


Fig. 5

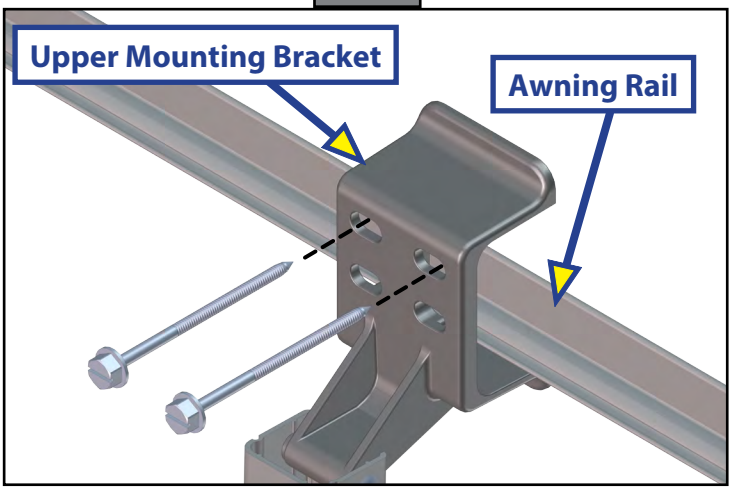
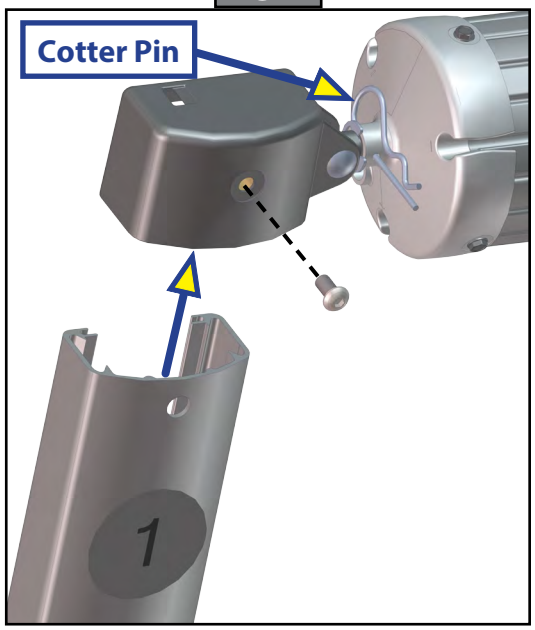


Fig. 6



Installing the Stop Bolt

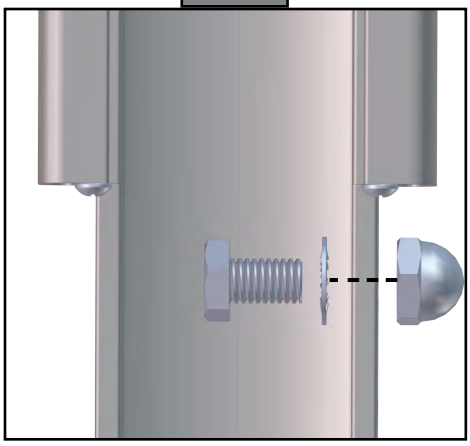
1. Retract the awning.
2. Make sure the centerline of the roll tube is level with or slightly higher than the centerline of the awning rail. The bottom of the roll tube **MUST NOT** be higher than the awning rail.
3. Adjust support arm if necessary.
   - **A.** Open the support arm handle and slide the upper arm up or down as required. Close the handle and slide the lower channel until the locking pin clicks into the nearest positioning hole (Fig. 7).
4. Mark the position of the stop hole that is directly below the upper channel.
5. From the inside of the channel, insert a 5⁄16" bolt and star washer through the hole. Secure with a 5⁄16" cap nut using ½" socket and wrench (Fig. 8).

NOTE: It may be necessary to lift the upper channel to tighten the cap nut.

6. Repeat steps 4 and 5 for the other support arm.

Fig. 7

Fig. 8



Solera® Manual Pull Strap Awning

Extending The Awning

1. Locate the locking latch (Fig. 1) (if equipped) on the drive side awning arm. Unlock the latch (Fig. 2).

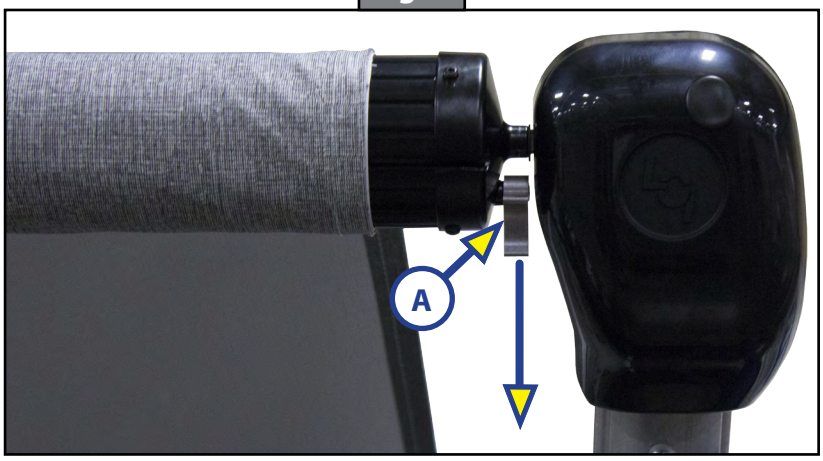
NOTE: This latch is optional and may be installed on one or both support arms.

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 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). Also check to make sure cam lock is on top of the roll tube.

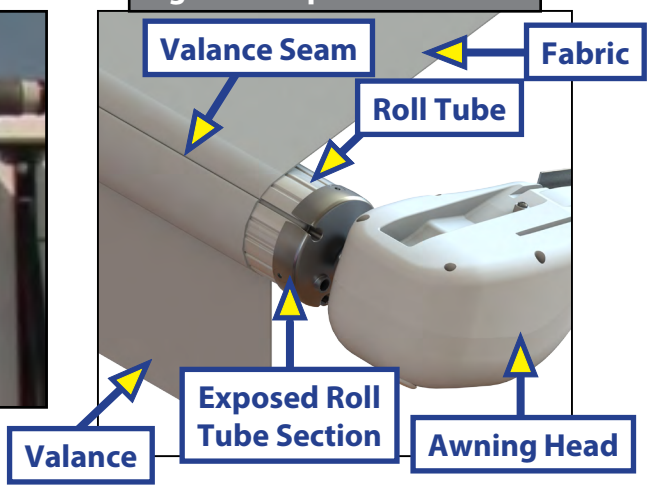
⚠ CAUTION

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.

Fig. 4

Fig. 5

Fig. 6 - Complete Extension



MANUAL AWNING OPERATION - GEARBOX AND PULL STRAP

TI-199

AWNINGS

Retracting the Awning

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

1. Grasping the strap, pull slightly toward you (Fig. 7) to release pressure on the cam lock (Fig. 7A) and disengage the cam lock.
2. While holding strap in hand, walk awning toward 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) on the drive side awning arm. Lock the latch to secure the awning in place (Fig. 12).

NOTE: This latch is optional and may not be installed. If not installed, awning is secured and ready for transportation.

Fig. 9

Fig. 10

Fig. 11

Fig. 12

Solera® Manual Gearbox Awning

Extending The Awning

1. Locate the locking latch (Fig. 13) (if equipped) on the drive side awning arm. Unlock the latch (Fig. 14).

NOTE: This latch is optional and may be installed on one or both support arms.

2. Locate the manual crank handle for the awning.
3. Insert the hook end of the crank handle into the eye bolt on the drive head (Fig. 15A).
4. Turn the crank in a clockwise direction and fully extend the awning (Fig. 16).

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. 17).

⚠ 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.

Fig. 13

Fig. 14

Fig. 15

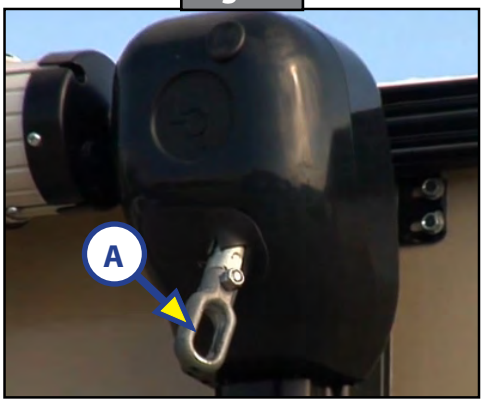


Fig. 16

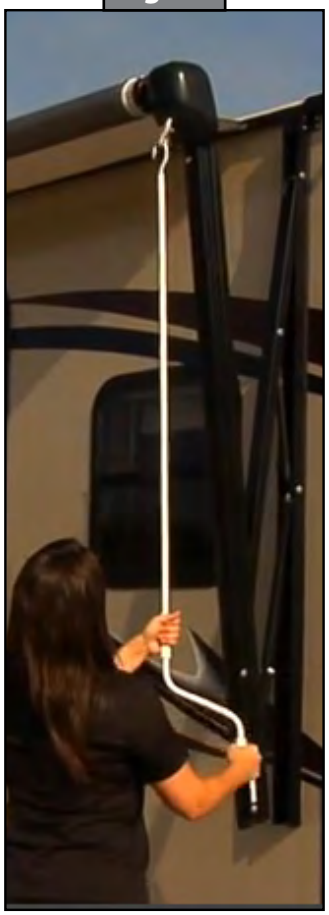
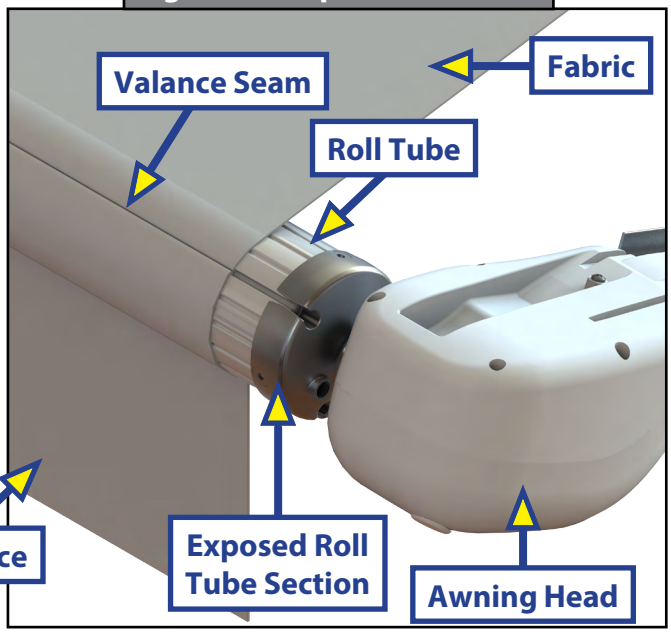


Fig. 17 - Complete Extension



MANUAL AWNING OPERATION - GEARBOX AND PULL STRAP

Retracting The Awning

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

1. Insert the hook end of the crank handle into the eye bolt on the drive head (Fig. 18).
2. Turn the crank handle in a counterclockwise direction until the awning is fully retracted (Figs. 19 and 20).

NOTE: Keeping the handle even with the roll tube makes it easier to turn.

3. Locate the locking latch (Fig. 21) (if equipped) on the drive side awning arm. Lock the latch to secure the awning in place (Fig. 22).

NOTE: This latch is optional and may not be installed. If not installed, awning is secured and ready for transportation.

Fig. 18

Fig. 19

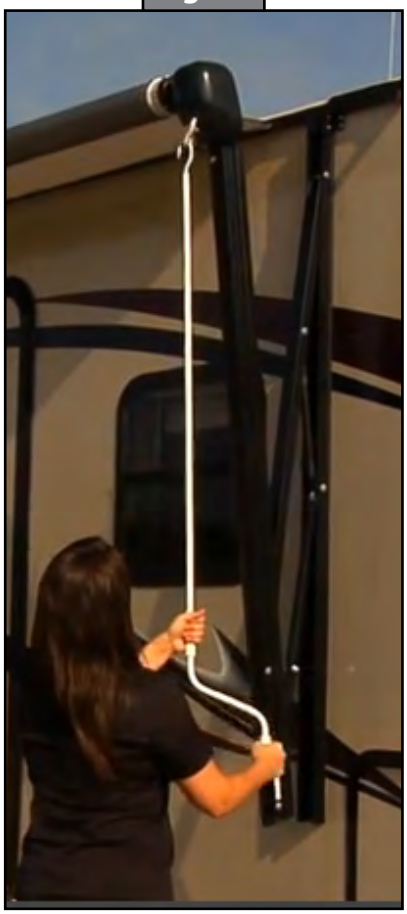


Fig. 20

Fig. 21

Fig. 22

CONVERSION FROM MANUAL PULL STRAP TO MANUAL GEAR BOX AWNING

TI-194

AWNINGS

White Kit #	Black Part #	Description
333410	333411	Conversion from Manual Pull Strap to Manual Gearbox Awning Kit
NOTE: Parts below are available in kits referenced above or individually as needed.		

White Part #	Black Part #	Description	Quantity
300029	300031	Drive Head Assembly	1
266147	273479	Idler Head Assembly	1
2661301	2661302	End Cap	2
300030		Manual Crank Handle	1
299630		#8 - 32 x ½" Wax Screws	2

Prior To Conversion

Tools Required

- Drill or cordless screw gun
- #2 square screwdriver bit
- #3 Phillips bit
- Zip ties
- (2) Cotter pins (.09" x 2 5⁄16" OAL Zinc Plated Hairpin or equivalent)

Resources Required

- Two People

Procedure

1. Extend awning out approximately 1' and insert cotter pins through both end caps into the shafts on the head assemblies (Fig. 1).

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

2. Zip tie both support arms around the outer arm and top pin of the mounted arm (Fig. 2).

⚠ CAUTION

The awning arms will be under pressure from the gas strut and can kick out from the unit if not properly secured, causing personal injury or property damage.

3. Remove the three (3) screws holding the drive head end cap onto the roll tube (Fig. 3).

Fig. 1

Fig. 2

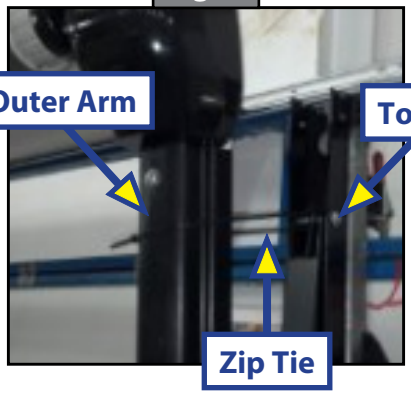
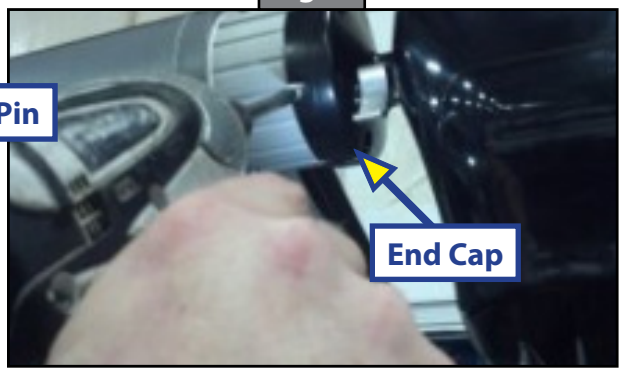


Fig. 3



CONVERSION FROM MANUAL PULL STRAP TO MANUAL GEAR BOX AWNING

4. While one person holds the roll tube, remove the bolt holding the drive head assembly into the support arm and remove the drive head assembly from the support arm.
5. Remove the drive head cotter pin, being sure to hold onto the drive head assembly and the roll tube as there will be tension that needs to be released.

⚠WARNING

Failure to maintain control of the roll tube or the drive head assembly may result in serious injury or property damage.

6. Slowly rotate the drive head assembly to release tension and then remove the drive head assembly (Fig. 4).

NOTE: Awnings longer than 6' will also have tension that needs to be released in the idler head assembly prior to continuing the procedure. To do so, remove the idler head cotter pin and slowly rotate the roll tube to release tension in the idler head's spring.

7. Install new end cap to the roll tube using the three square head screws that were removed in Step 3 above. Confirm cap is fully seated on the end of the roll tube. If the screws/screw holes have been stripped, consider using #10 screws to ensure a secure fit.
8. Insert the shaft from the gearbox drive head into the end cap and secure with the provided #8 wax screw (Fig. 5).
9. Install the head mount into the support arm and secure with the bolt removed in Step 4 (Fig. 6).
10. Repeat steps 3 through 8 for the idler head side of the awning.
11. Cut zip ties from the top arm. See TI-199 for operation instructions.

Fig. 4

Fig. 5

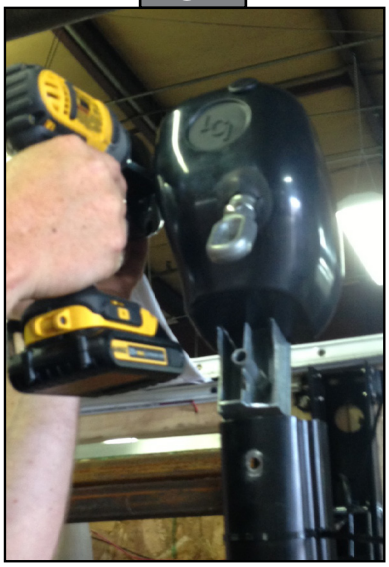


Fig. 6

MANUAL DRIVE HEAD ATTACHMENT TO ROLL TUBE

TI-163

AWNINGS

1. Insert drive head with 3-way pivot arms on the clockwise side of the cord rails (Fig. 1).

NOTE: On flat or pitched awnings, the drive head knob and drive head lock line up on the clockwise side of the second cord (Fig. 2).

NOTE: On short arm awnings, the drive head knob and drive head lock line up between the two cords (Fig. 3).

2. Push end cap completely flush with roll tube and attach with three 299419 screws. Use low setting on screw gun to ensure the roll tube is not stripped (Fig. 4).

Fig. 1

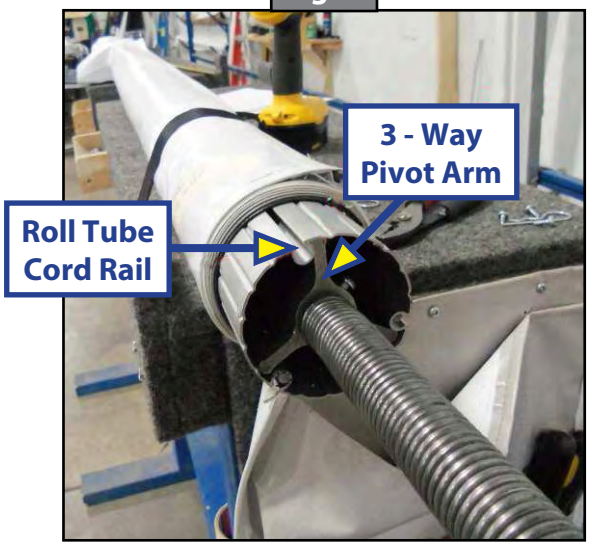


Fig. 2 - Flat or Pitched Awnings

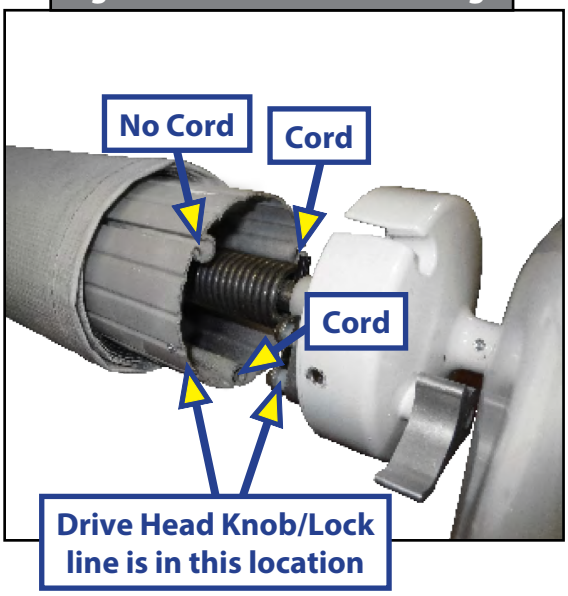


Fig. 3 - Short Arm Awnings

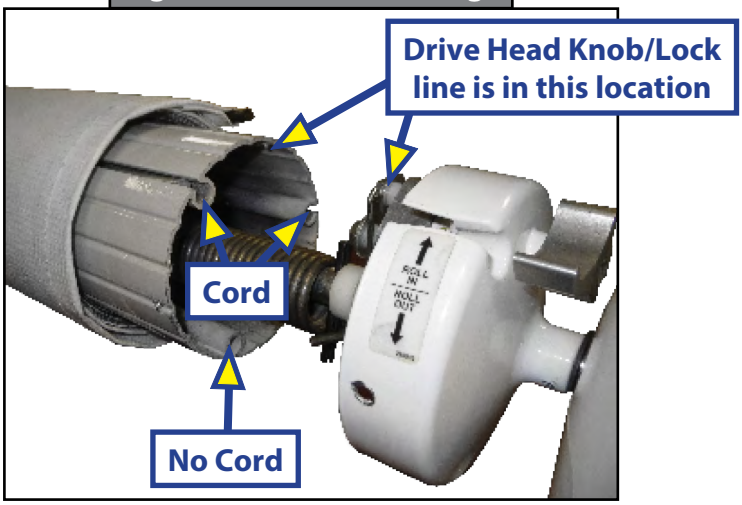
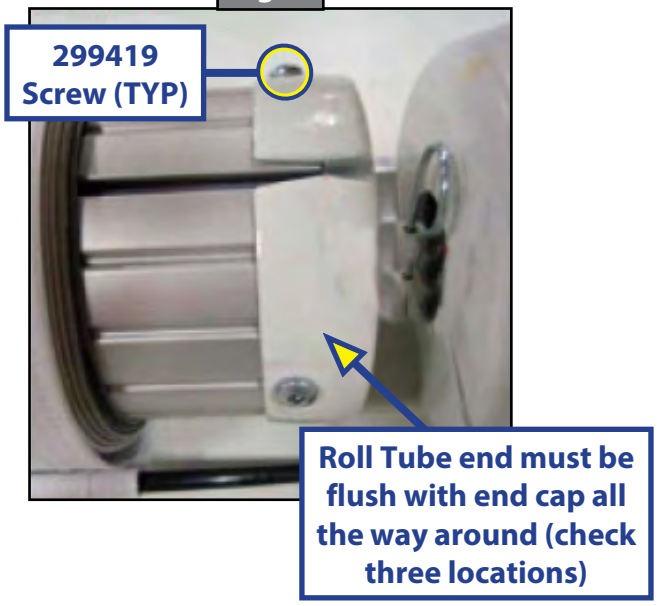


Fig. 4



3. Rotate drive head (Fig. 5) counterclockwise a number of turns according to chart and insert cotter pin 298760 (Fig. 6) to secure the head.

Fig. 5

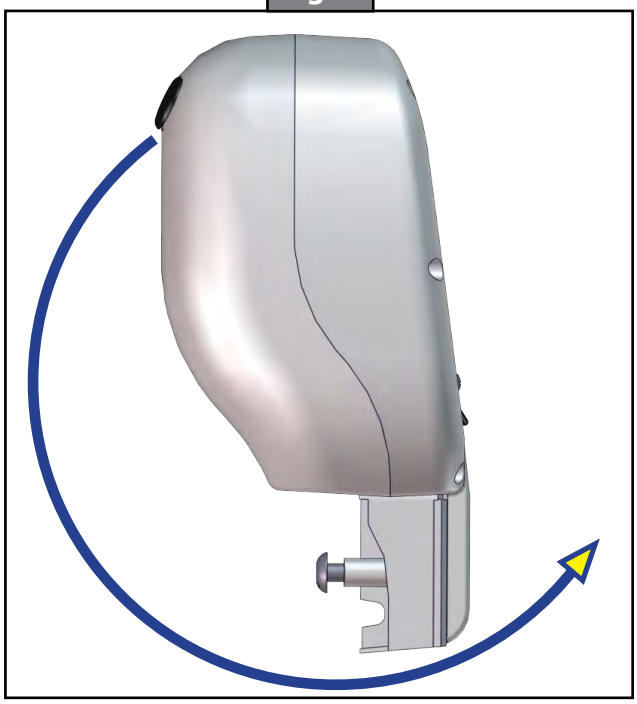
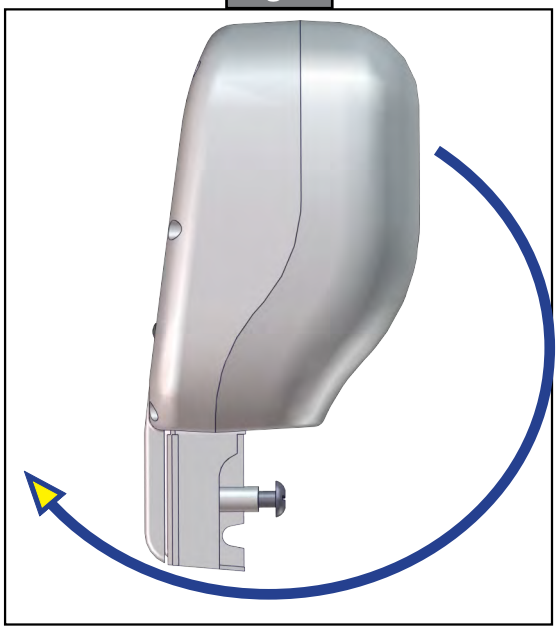


Fig. 6

Awning Length	# Of Turns
6'*	15
7'-16'	9
17'-21'	10
22'-28'	11
NOTE: *Only one spring used on 6' systems.	

4. Rotate idler head (Fig. 7) clockwise a number of turns according to the number of times the drive head was turned and insert cotter pin 298760 (Fig. 6) to secure the head.

Fig. 7



CONVERSION FROM MANUAL PULL STRAP TO POWER AWNING

TI-164

AWNINGS

White Kit #	Black Kit #	Description	
323948	323949	Conversion from Manual Pull Strap to Power Awning Kit	
NOTE: Parts below are available in kits referenced above or individually as needed.			
White Part #	Black Part #	Description	Qty.
266146	273478	Drive Head Assembly	1
266147	273479	Idler Head Assembly	1
273007		Power Feed Wires	1
280570		Wire Harness	1
2661301	2661302	End Cap	2
299630		#8 - 32 X ½" Wax Screws	2
280564	280566	Switch	1
280565	280567	Switch Plate	1
285079	285077	Bezel Spacer	2
275080353	2750701888	Wire Cover ; 22" - Narrow	2
275070157	2750701692	Wire Cover; 9.75" - Narrow	2
266139429	2661391964	Wire Cover; 26.75" - Wide	2
266139337	2661391872	Wire Cover; 21" - Wide	2
266138481	2661382017	Wire Cover; 30" - Narrow	2

Prior To Conversion

Tools Required

- Electric screw gun
- #2 square screwdriver bit
- #3 Phillips bit
- Zip ties
- (2) Cotter pins (.09" x 2 5⁄16" OAL Zinc Plated Hairpin or equivalent)

Resources Required

- Two People

Procedure

1. Extend awning out approximately 1' and insert cotter pins through both end caps into the shafts on the head assemblies (Fig. 1).

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

Fig. 1

2. Zip tie both support arms around the outer arm and top pin of the mounted arm (Fig. 2).

⚠CAUTION

The awning arms will be under pressure from the gas strut and can kick out from the unit if not properly secured, causing personal injury or property damage.

3. Remove the three (3) screws holding the drive head end cap onto the roll tube (Fig. 3).
4. While one person holds the roll tube, remove the bolt holding the drive head assembly into the support arm and remove the drive head assembly from the support arm (Fig. 4).
5. Remove the drive head cotter pin being sure to hold onto the drive head assembly and the roll tube as there will be tension that needs to be released.

⚠WARNING

Failure to maintain control of the roll tube or the drive head assembly may result in serious injury or property damage.

6. Slowly rotate the drive head assembly to release tension and then remove the drive head assembly (Fig. 5).

NOTE: Awnings longer than 6' will also have tension that needs to be released in the idler head assembly prior to continuing the procedure. To do so, remove the idler head cotter pin and slowly rotate the roll tube to release tension in the idler head's spring.

Fig. 2

Fig. 3

Fig. 4

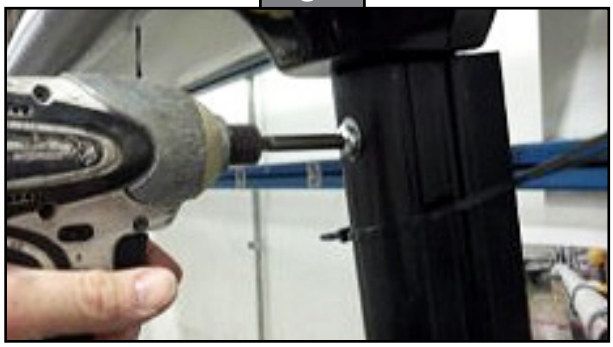
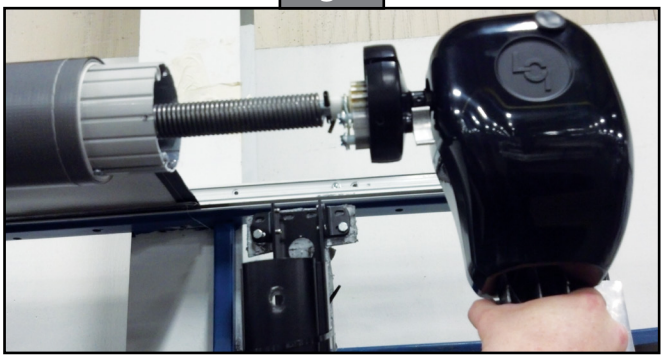


Fig. 5



CONVERSION FROM MANUAL PULL STRAP TO POWER AWNING

7. Install new end cap to the roll tube using the three square head screws that were removed in Step 3 above. Confirm cap is fully seated on the end of the roll tube. If the screws/screw holes have been stripped consider using #10 screws to ensure a secure fit.
8. Plug the power cord into the motor by matching the black wire from power cord to black wire at the motor. Next take the white wire from the power cord and plug it into the red wire on the motor. Make sure to then tuck the wires down into the mount assembly to assure wires won't be pinched during install (Figs 6 & 7).
9. Insert the shaft from the motor head into the end cap and secure with the provided #8 wax screw (Fig. 8).
10. Install the head mount into the arm and secure with the bolt removed in Step 3 above.
11. Repeat Steps 3 through 6 and 8-9 for the idler head side of the awning. Cut zip ties from top of arm. Using the cordless screw gun battery (or other low voltage battery source) run the awning out by putting the black wire from power cord to the positive side of battery and the white wire on negative.

Fig. 6

Fig. 7

Fig. 8

CONVERSION FROM MANUAL PULL STRAP TO POWER AWNING

12. Starting at the motor, run the wire approximately halfway down the outer arm, then up the inner arm to the wall mount (holes for 'top wire' and 'bottom wire' options are provided in the wall mount extrusion) (Fig 9). Install plastic wire covers into the outer arm (1 section), inner arm (2 sections), and wall mount (2 sections) extrusions to secure/protect the power supply wire (Figs 10-12). Make sure wire is placed on the outside of the pin that joins the steel tension arm to the wall mount (Fig. 12) to prevent damage to the wire.

13. Hook power cord to the coach supplied power.

14. Seal all wall penetrations to protect against water intrusion (Fig. 13).

Fig. 9

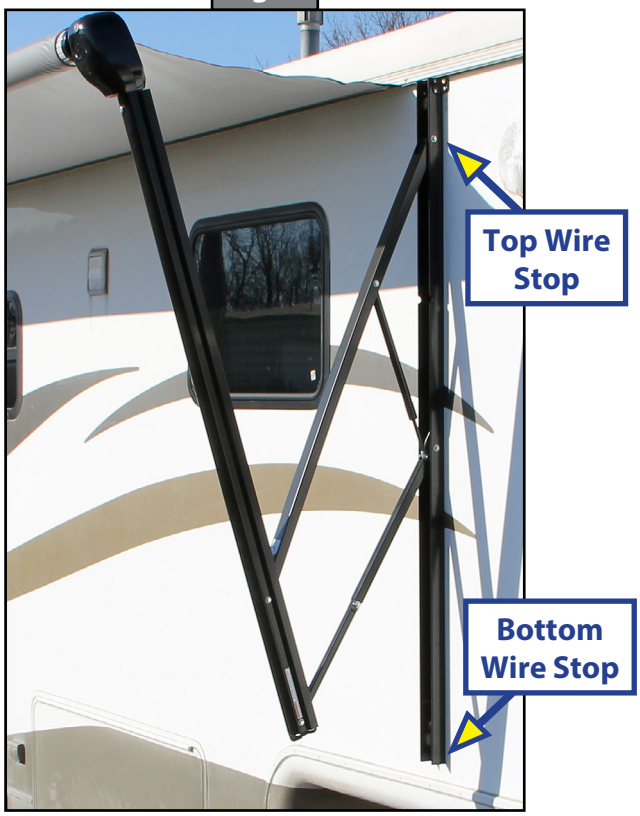
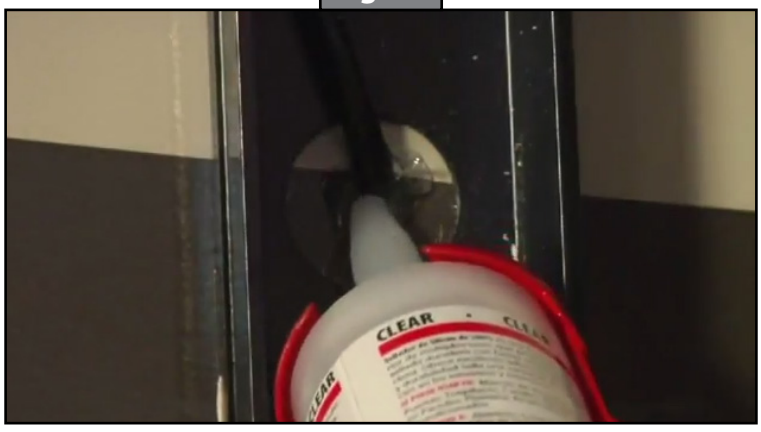


Fig. 10

Fig. 11

Fig. 12

Fig. 13



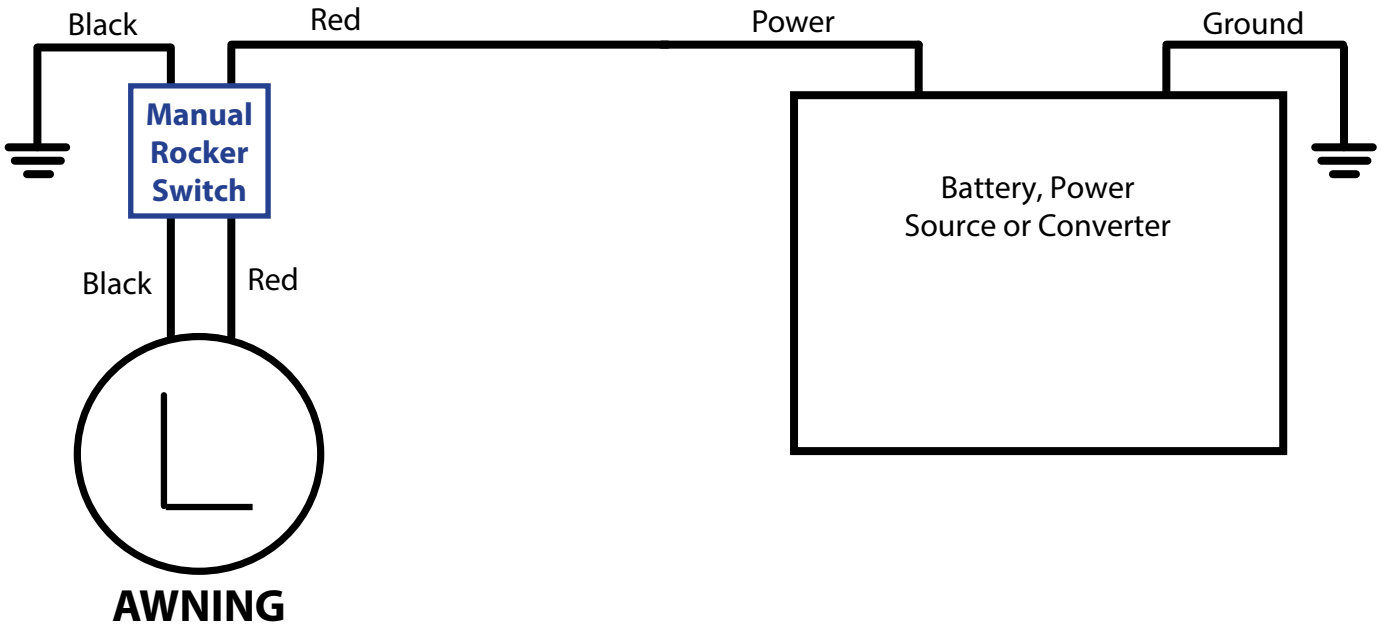
Wiring Diagram

NOTE: Solera® Awnings are equipped with a 6A Auto Reset breaker supplied by LCI.

NOTE: The motor comes stock with internal thermal protection. LCI recommends that the awning be on a 15A circuit.

NOTE: All wire to be 14 AWG or larger as necessary to provide 12V minimum at all times at the connection to the LCI-supplied power cable.

Fig. 14



SOLERA® POWER AWNING ARM REPLACEMENT

TI-230

AWNINGS

Tools Required

- Cordless or electric screw gun or drill (and appropriate drive bits)
- Zip ties

Resources Required

- 1-3 people (depending on task)

⚠ CAUTION

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

Power Awning Arm Replacement

1. Run awning out to almost full extension in order to allow access to the fasteners that secure the awning arms to the wall of the unit.
2. Remove the bottom 2 and middle 2 fasteners from the mount arm (Fig. 1 and Fig. 2).

Fig. 1

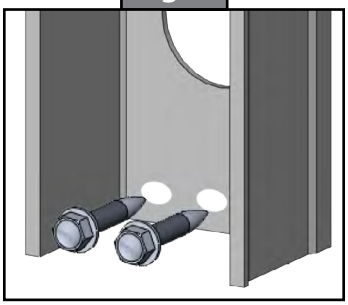
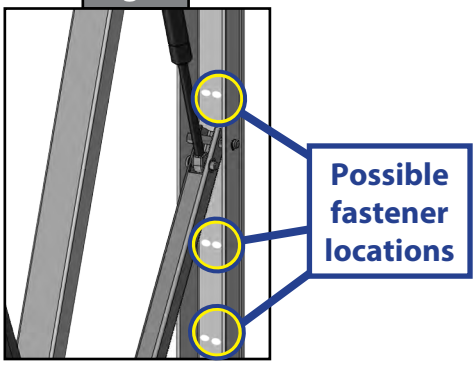


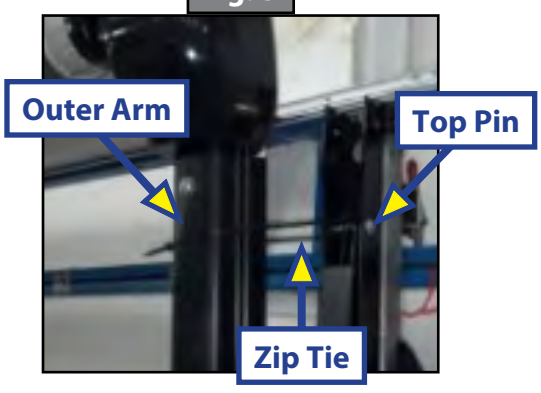
Fig. 2



3. Disconnect the wires in the awning arm from the wires on the unit.
4. If the unit is equipped with an awning light that is mounted to the wall of the unit, make sure to take the wire out of the arm from the top side.
5. Use the cordless battery from the screw gun to run the arm IN within 18" of being closed:
   - **A.** Take the red and white wires from the motor and connect them to the positive and negative posts on the cordless screw gun battery.
   - **B.** If the awning does not run in the correct direction, reverse the wires.
6. Secure the outer arm to the mount arm by taking a zip tie and running it around the pin on the top of the mount arm, where the mount arm and inner arm connect (Fig. 3)

NOTE: If replacing the drive side, secure the idler side with a zip tie to stop the awning from unrolling.

Fig. 3



7. Remove the #8 wax screws that hold the drive head shaft to the end cap on the roll tube.

⚠ CAUTION

Make sure the roll tube is adequately supported before removing the support arm assembly. Failure to do so may result in serious personal injury or property damage.

8. Remove the 4 fasteners from the angle bracket at the top of the arm. These are the last of the fasteners holding the support arm assembly to the unit (Fig 4).

9. Remove the support arm assembly from the end cap. It should be completely free now and can be removed from the working area.

10. Take the new support arm assembly and slide the head shaft into the end cap on the roll tube (Fig 5).

11. Mount the support arm assembly to the wall using similar fasteners that were previously in the old arm. One fastener will hold the awning in place at this time.

NOTE: The first fastener should be placed in the bottom of the angle bracket on the inside of the mount arm, as this is the easiest one to access.

12. Install the #8 wax screws back into the end cap to secure head shaft.

13. Cut the zip tie and install the remaining 3 fasteners into the angle brackets at the top of the arm.

14. Pull the wires out of the bottom of the awning arm. If the arm is a top mount, wires can be removed from the top as well. Use the cordless battery and extend the awning fully.

15. Install the remaining fasteners, 2 at bottom and 2 in the middle of the mount arm.

16. Reconnect the wires from the motor to the unit. Check the switch. If the awning is running reverse of what the switch indicates, reverse the wires.

17. If unit was equipped with a light, run the wire down the arm and reconnect it to the unit wiring. In order for the system to work properly the power wire **MUST** go to red and ground to black.

18. Seal all areas at this time.

Fig. 4

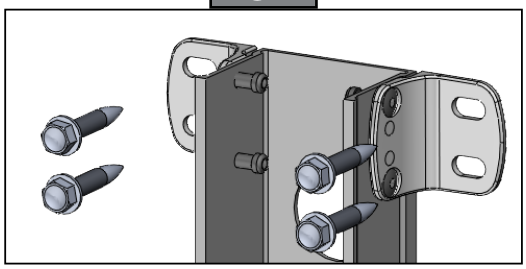
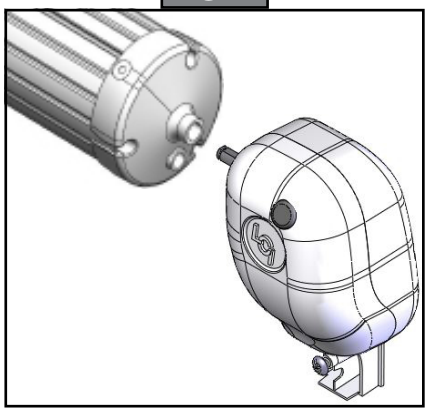


Fig. 5



SOLERA® MANUAL AWNING INSTALLATION INSTRUCTIONS

TI-147

AWNINGS

Prior To Installation

NOTE: All screws/rivets supporting awning assembly **MUST** have a backer within the structure of the wall of the coach.

Resources Required

- Three people
- Drill or cordless screw gun
- #2 square screwdriver bit
- ⅜" nut driver bit and/or rivet gun

Installation

NOTE: If installing a Pull Strap Awning, refer to TI-163 for instructions to mount heads to roll tube.

1. Attach the awning heads to the support arm assemblies by screwing the 5⁄16"-18 x 2 ¼" bolts (266148) into the ends of the support arms and tightening the bolts (Fig. 1).
2. With two people holding the support arms, one at either end of the awning assembly, a third person needs to line up the fabric cord with the awning rail that has been installed on the coach. Slide the fabric cord the length of the awning rail.

NOTE: Do not unravel fabric more than one full revolution for installation or the tension will be too weak to retract properly.

3. Set the awning assembly to the desired height and attach it to the side of the coach with two #14 x 1 ½" screws (286576) at the top (Fig. 2) and two #14 x 1 ½" (286576) screws at the bottom (Fig. 3).

NOTE: Make sure the awning assembly is square on the unit prior to mounting the bottom 2 screws.

4. Remove the cotter pin from each head assembly. Extend the awning half way out. Secure the middle of the wall mounting channel with two #14 x 1 ½" screws (286576) at any of the three locations shown (Fig. 4). Repeat this process for other side of awning assembly.

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

Fig. 1

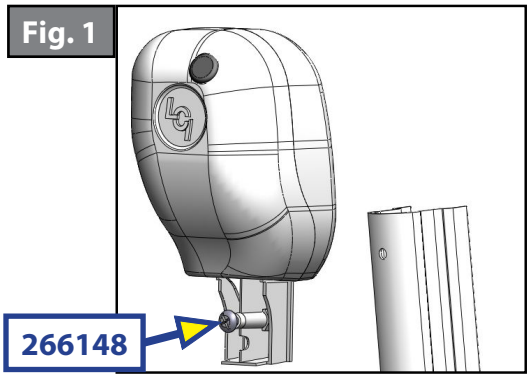


Fig. 2

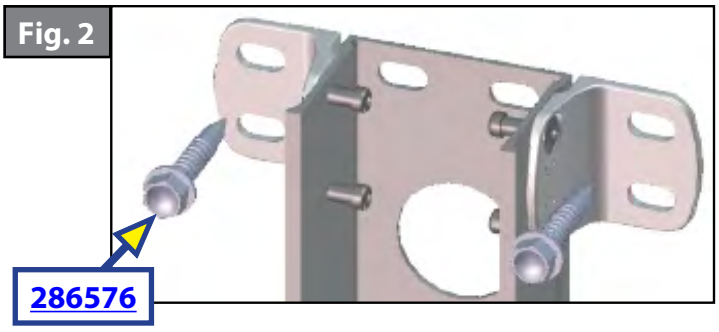


Fig. 3

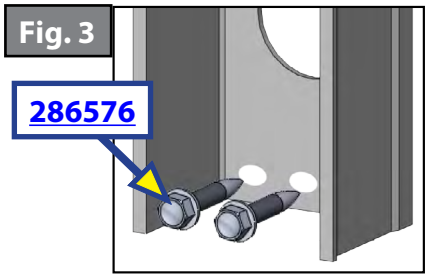
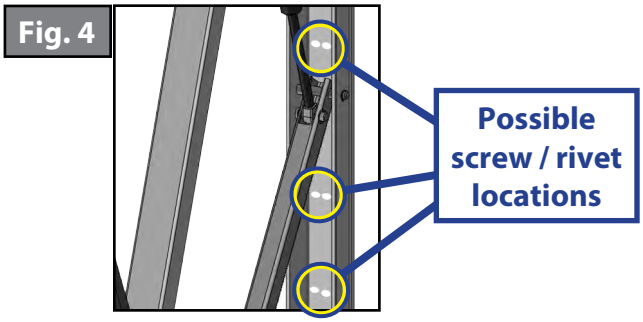


Fig. 4



Securing The Fabric

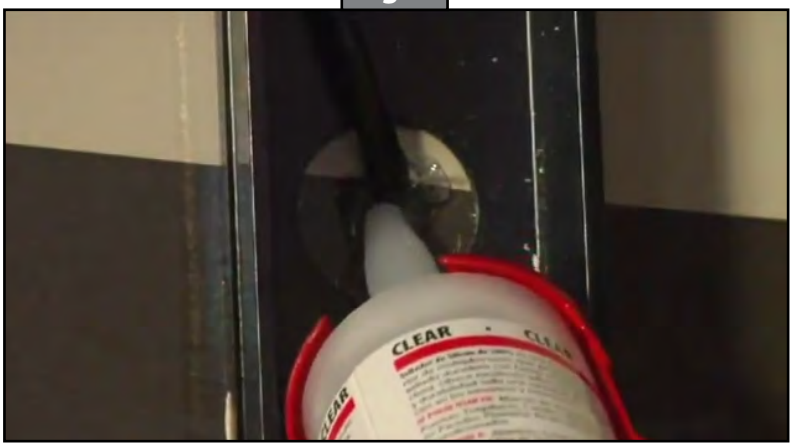
1. Roll the awning in and out several times to ensure that the fabric is square on the roll tube.
2. Secure the fabric in the awning rail by installing a #6 x ½" hex head screw through the fabric cord and fabric 1" inside the edge of the fabric on both sides (Fig. 5).

NOTE: Seal all wall penetrations to protect against water intrusion (Fig. 6).

NOTE: All Solera Awnings 21' and under **DO NOT** require a center support or cradle.

Fig. 5

Fig. 6



AWNING FABRIC REPLACEMENT

TI-166

AWNINGS

Resources Required

- 1 to 3 People
- Cordless or Electric Drill or Screw Gun
- Appropriate Drive Bits
- Zip Ties
- Two Cotter Pins (manual awning only)
- Non-Permanent Marker

⚠CAUTION

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

Manual Awning Fabric Replacement

Removal

1. Remove the drip cap (if equipped) from the end the fabric will be removed from.
2. Extend the awning out approximately 12" and insert cotter pins through both end caps into the shafts on the head assemblies (Fig. 1).

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

3. Secure both support arm assemblies by running 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. 2).

⚠WARNING

If not properly secured, the support arms can kick out due to pressure from the gas strut, which may result in serious injury or property damage.

4. Remove the screws holding the polycord in place on the awning rail.
5. Remove the drive head assembly and idler head assembly retaining bolts from the outer arms to separate the components.
6. 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.

Fig. 1

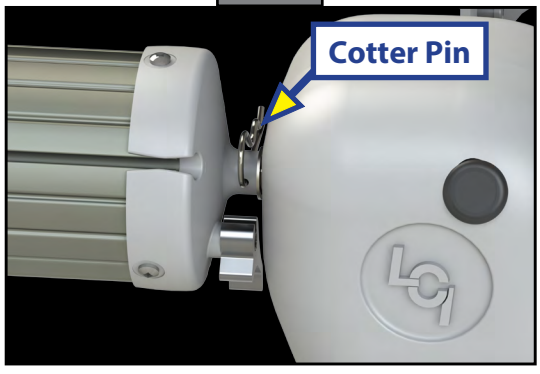
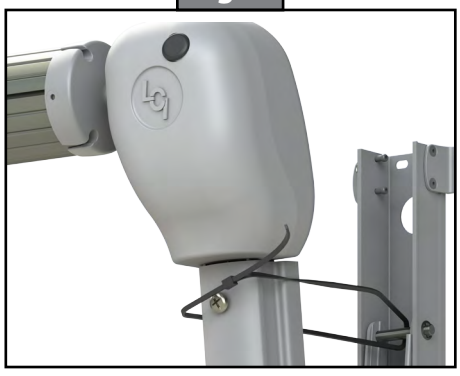


Fig. 2



7. Secure the idler head and the roll tube to the work bench.
8. Hold the drive head assembly securely (there will be tension to be released) while another person removes 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.

9. While one person holds the roll tube, have another person slowly rotate the drive head assembly clockwise to release tension.
10. Mark the cam lock position on the roll tube with a non-permanent marker.
11. Remove the three screws holding the drive head assembly end cap on the roll tube and set the drive head assembly aside.

NOTE: Awnings longer than 6' will also have tension that needs to be released in the idler head assembly prior to continuing the procedure. To release tension, remove the idler head cotter pin and slowly rotate the idler head in a counterclockwise motion to release tension in the idler head assembly's spring.

12. Place the roll tube and fabric on a clean, level surface that is free of any debris able to scratch or damage the roll tube and/or fabric.
13. With one person holding the awning rail end of the fabric, another can rotate the roll tube to unroll the fabric until only the polycords are left on the roll tube.
14. Remove the screws holding the polycords in place on the roll tube.
15. Mark the roll tube grooves containing the polycords with a non-permanent marker prior to removing the fabric from the roll tube.
16. To remove the fabric, gently pull the roll tube from the idler end, while another person holds the fabric in place.

Installation

1. Unroll the replacement fabric printed side down so that the polycords are parallel and away from the roll tube.
2. On a clean, level surface free of any debris able to scratch or damage the roll tube, gently slide the roll tube onto the two polycords of the fabric, making sure that the non-printed side is touching the roll tube (Fig. 3).
3. Center the fabric on the roll tube.
4. Apply the screws that were holding the polycords in place on the roll tube. Install the screws between the edge of the fabric and the stitching on the hem.
5. Roll the fabric onto the roll tube (Fig. 4). Make sure the fabric stays snug and flat to the roll tube with the printed side facing away.

Fig. 3

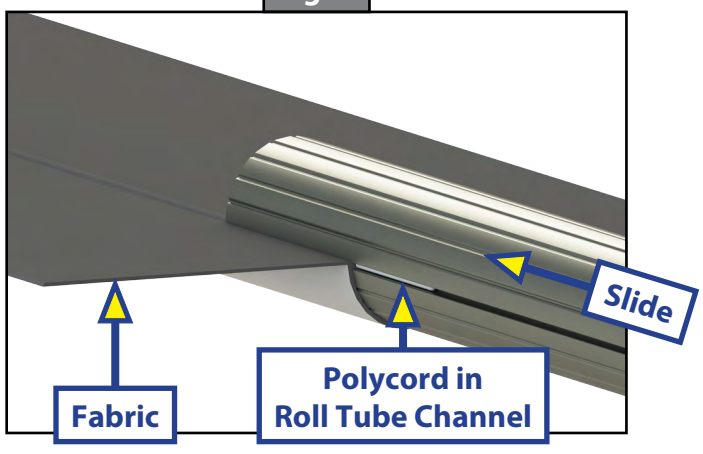
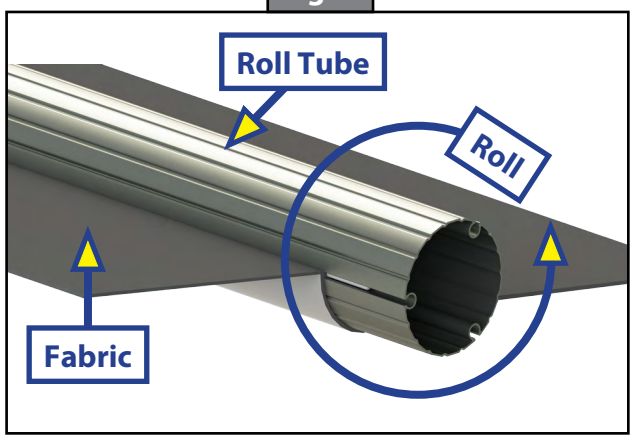


Fig. 4



6. Using the three screws previously removed from the drive head assembly end cap, attach the drive head 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 to the work bench.
8. Rotate the drive head assembly counterclockwise, proper turns according to the length of the awning (Fig. 5) and insert a cotter pin into the end cap into the shaft on the drive head assembly.

NOTE: If the awning is longer than 6' and the idler head assembly tension had previously been released, rotate the idler head assembly clockwise according to the length of the awning (Fig. 5) and insert a cotter pin into the end cap into the shaft on the idler head assembly. Be sure that both head assemblies are parallel once tension has been added.

Fig. 5

Manual Awning Tensioning	
Awning Length	Proper Tensioning (# of turns)
6'*	15
7'-16'	9
17'-21'	10
22'-28'	11
NOTE: 6' Awnings only have one spring to tension on the drive side.	

⚠WARNING

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

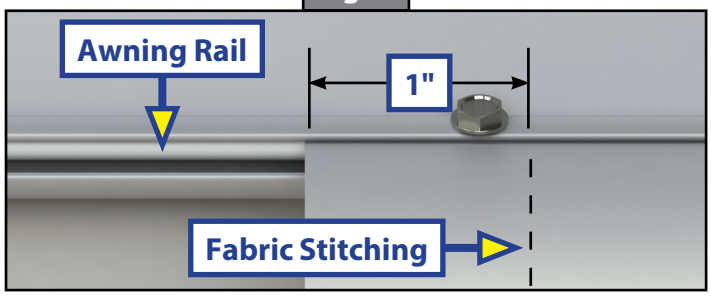
9. Working together, install the roll tube assembly (which includes the drive/idler head assemblies) to the awning rail and support arms by sliding the assembly along the awning rail. Make sure the awning will unroll with the printed side of the fabric up.

⚠WARNING

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

10. Install the previously removed drive/idler head assembly retaining bolts into the outer arms to secure.
11. Remove the cotter pins from both end caps and cut the zip ties from the support arm assemblies.
12. Extend and retract the awning several times to ensure that the fabric is square on the roll tube.
13. Secure the fabric in the awning rail 1" inside the edge of the fabric on both ends using a #6 x ½" hex head screw. Install the screw down through the awning rail into the fabric and the polycord (Fig 6).
14. Reinstall the drip cap (if previously equipped).

Fig. 6



Power and Hybrid Awning Fabric Replacement

Resources Required

- 1 to 3 People (depending on task)
- Cordless or Electric Drill or Screw Gun
- Appropriate Drive Bits
- Zip Ties

Removal

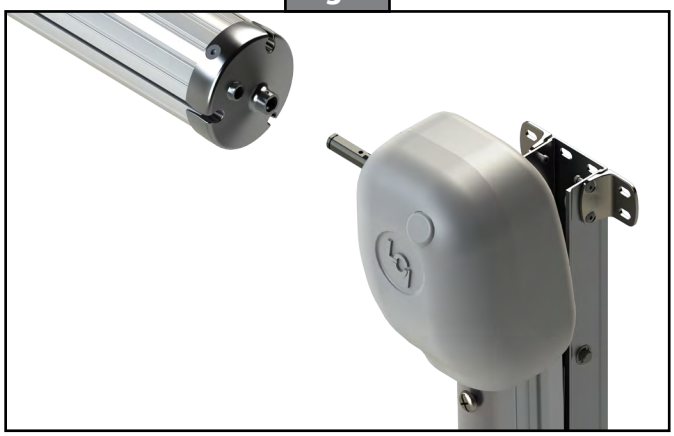
1. Remove the drip cap (if equipped) from the end the fabric will be removed from.
2. Fully extend the awning.
3. Disconnect any fabric LED lights in the support arm assembly or remove the fabric LED light strip from the polycord of the fabric.
4. Retract the awning until approximately 12" remain visible.
5. Secure both support arm assemblies by running 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. 7).
6. Remove the screws holding the polycord in place on the awning rail.
7. Remove the wax screws holding the end caps onto the drive and idler head shafts (Fig. 8).

⚠WARNING

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

Fig. 7

Fig. 8



8. Working together, remove the roll tube and fabric from the awning rail and support arm assemblies.
9. Place the roll tube and fabric on a clean, level surface that is free of any debris able to scratch or damage the roll tube and/or fabric.
10. Remove the end cap from the end of the roll tube from which the fabric will be removed.
11. With one person holding the end of the fabric that gets attached to the awning rail on the unit, another can rotate the roll tube to unroll the fabric until only the polycords are left on the roll tube.
12. Remove the screws holding the polycords in place on the roll tube.
13. To remove the fabric, gently pull the roll tube from one end, while another person holds the fabric in place.

Installation

1. Unroll the replacement fabric so that the cords are parallel with the roll tube.
2. On a clean, level surface free of any debris able to scratch or damage the roll tube, gently slide the roll tube onto the two polycords of the fabric, making sure that the non-printed side is touching the roll tube (Fig. 9).
3. Center the fabric on the roll tube.
4. Install the screws that were holding the polycords in place on the roll tube. Install the screws between the edge of the fabric and the stitching on the hem.
5. Roll the fabric onto the roll tube (Fig. 10). Make sure the fabric stays snug and flat to the roll tube with the printed side facing away.

Fig. 9

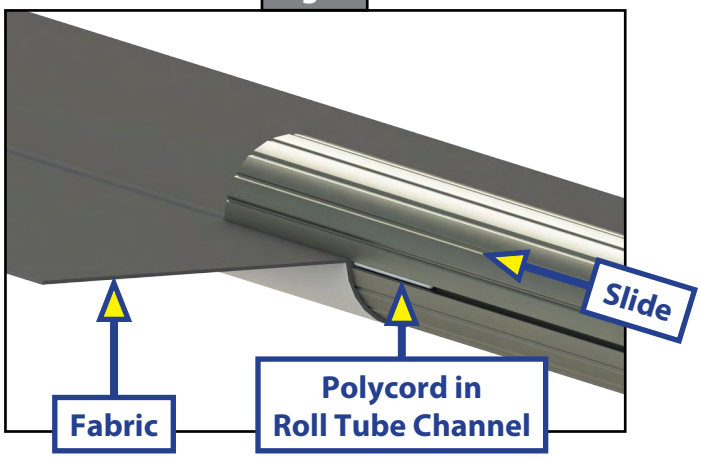
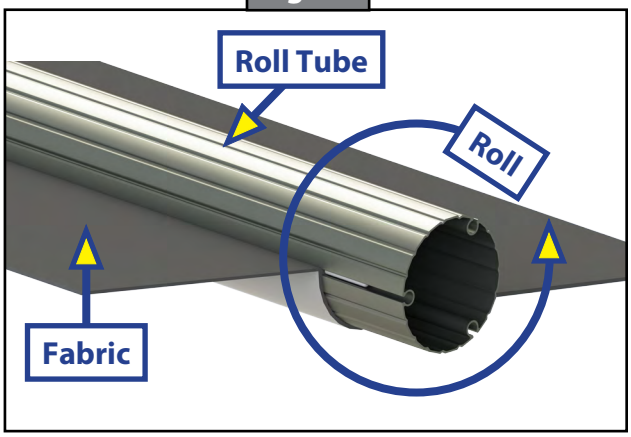


Fig. 10



6. Reinstall the end cap previously removed.
7. Working together, install the roll tube and fabric on the awning rail and support arms, making 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 during installation may result in serious injury or property damage.

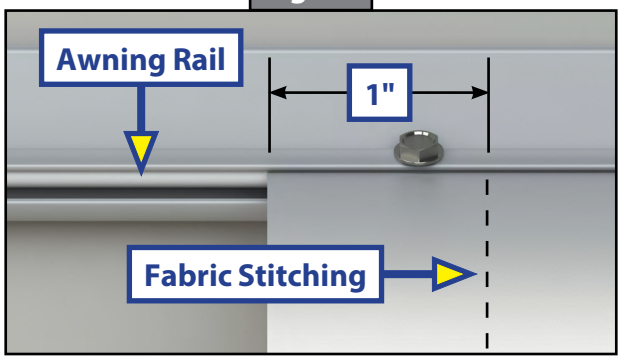
8. Working together, slide the shaft on the head assembly into the end cap. Install the wax screws at each end to secure the roll tube end caps to the head assemblies.

NOTE: It is suggested to keep the head of the wax screw ⅛" from fastened so as not to compromise the structural integrity of the wax screw.

9. Extend and retract the awning several times to ensure that the fabric is square on the roll tube.

10. Secure the fabric in the awning rail no more than 1" inside the edge of the fabric on both ends using a #6 x ½" hex head screw. Install the screw down through the awning rail into the fabric and the polycord (Fig. 11).

Fig. 11



11. Reinstall the drip cap (if previously equipped).

12. Reconnect any light wiring as needed.

NOTE: The fabric LED light strip will need to be installed on the polycord of the fabric prior to connecting any wiring previously removed.

PITCH ARM AWNING ASSEMBLY REPLACEMENT

TI-258

DOORS

Purpose

This document provides the steps to replace the awning pitch arm assembly.

⚠ CAUTION

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

Resources Required

- 2 People
- Pliers
- Flat Head Screwdriver
- 7/16" Deep Well Socket
- C-clamp (optional)

Installation

NOTE: Fig. 1 and Fig. 2 show two different types of pitch arms. The removal and replacement of the pitch arm will be the same.

1. Extend the awning to the fully-open position.
2. With a flat head screwdriver carefully remove the black spacers that are placed in between the pitch arm and the outer arm (Fig. 3A) and in between the pitch arm and the mount arm (Fig. 4A).

Fig. 1

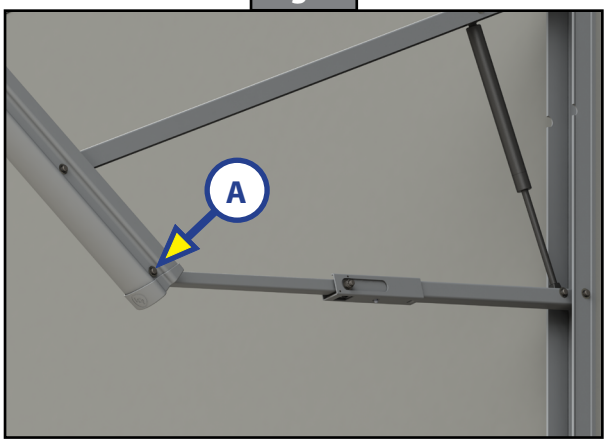


Fig. 2

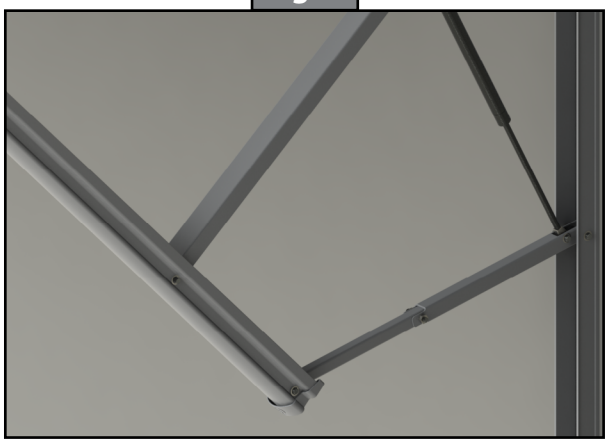


Fig. 3

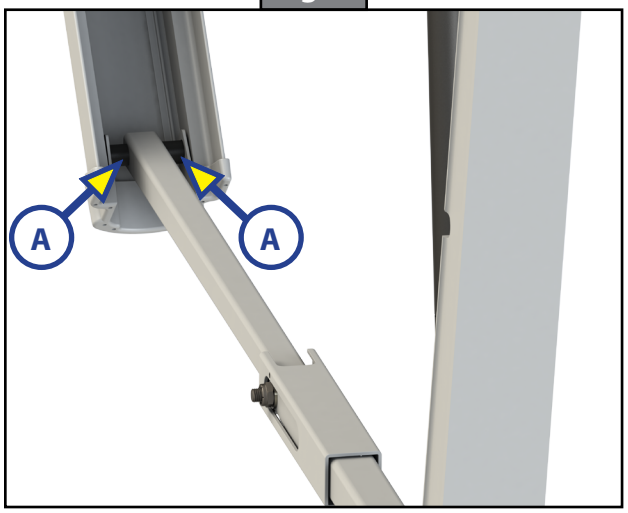
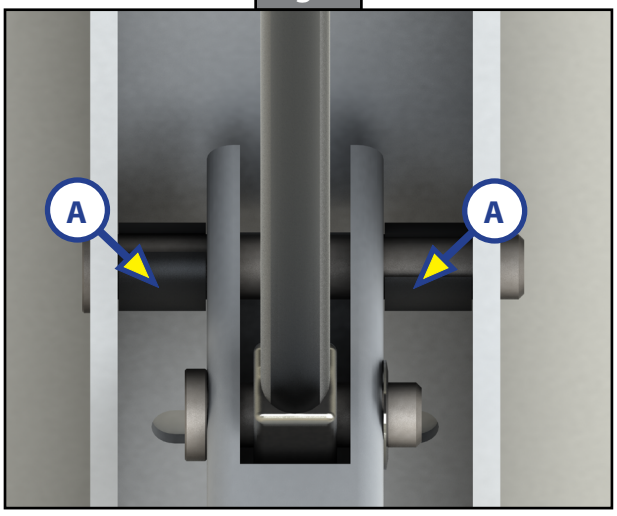


Fig. 4



NOTE: Make sure to keep all the black spacers that are placed in between the pitch arm and the outer arm (Fig. 3A) and in between the pitch arm and the mount arm (Fig. 4A).

⚠ 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.

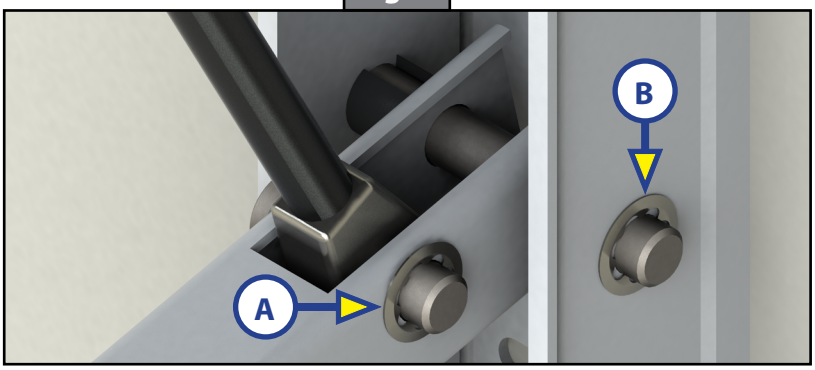
3. With an assistant holding the roll tube, remove the star washer on the pin where the pitch arm and the outer arm meet (Fig. 1A).

NOTE: Squeezing the outer arm may assist in removal of the star washer. Tin snips may also be needed to remove the star washers.

4. Remove the star washer where the pitch arm meets the gas strut (Fig. 5A) and where the pitch arm meets the mount arm (Fig. 5B).

NOTE: A C-clamp may be used carefully to squeeze the mount arm for easier removal of the star washer.

Fig. 5



5. Making sure the assistant has a firm hold on the roll tube so it will not fall, remove the pin where the pitch arm meets the outer arm. Remove the pin holding the gas strut to the pitch arm and remove the pin holding the pitch arm to the mount arm.
6. Discard the old pitch arm and install the new pitch arm in place.

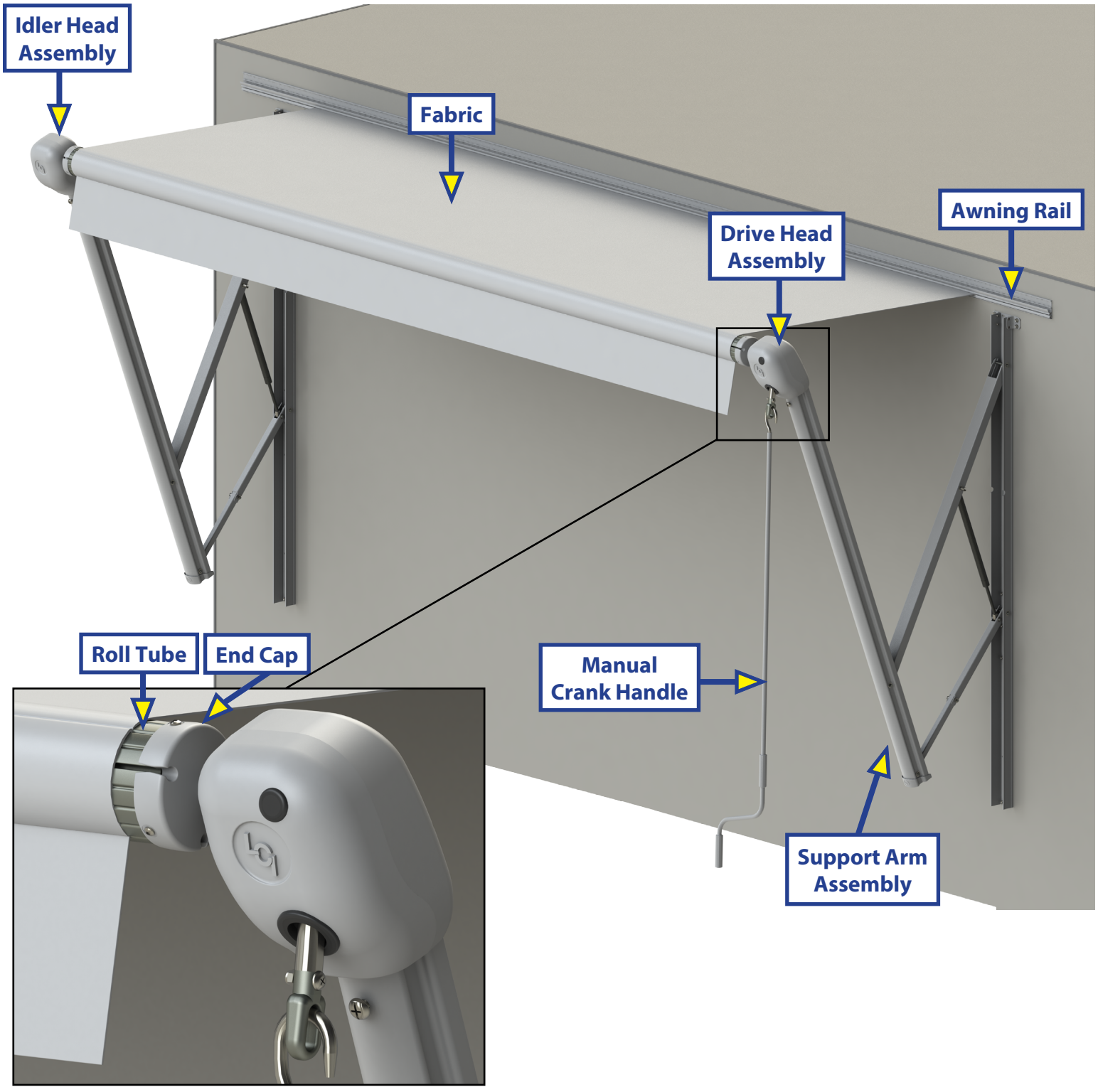
NOTE: The assistant holding the roll tube may have to raise or lower it in order to align the holes for the pins.

7. Replace the pin that holds the gas strut to the pitch arm.
8. Replace the pin that holds the pitch arm to the mount arm.
9. Replace the pin that holds the pitch arm to the outer arm.
10. Replace the 2 black spacers in between the pitch arm and the outer arm (Fig. 3A) by pushing the gap side onto the pin.
11. Replace the 2 black spacers in between the pitch arm and the mount arm (Fig. 4A) by pushing the gap side onto the pin.
12. Use a 7⁄16" deep well socket to push new star washers on to all 3 pins. The star washers can only be installed in one direction (with the points facing out).

NOTE: Always use new star washers when replacing the pins.

SOLERA® HYBRID AWNING ASSEMBLY

AWNINGS



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