

LIPPERT

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#### **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.



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

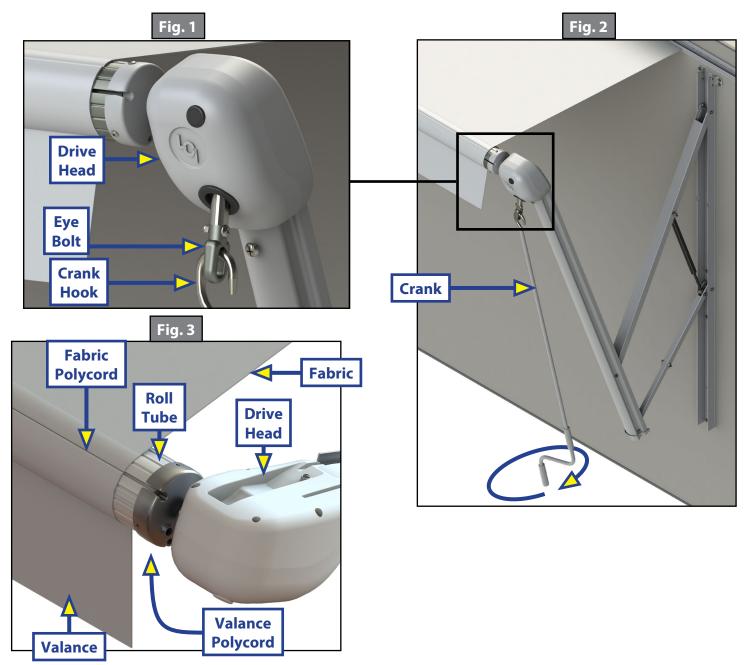
- 1. Locate the crank handle for the awning.
- 2. Insert the hook end of the crank handle into the eye bolt on the drive head (Fig. 1).
- **3.** Turn the crank in a clockwise direction and fully extend the awning (Fig. 2).

**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).

## **A** 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.

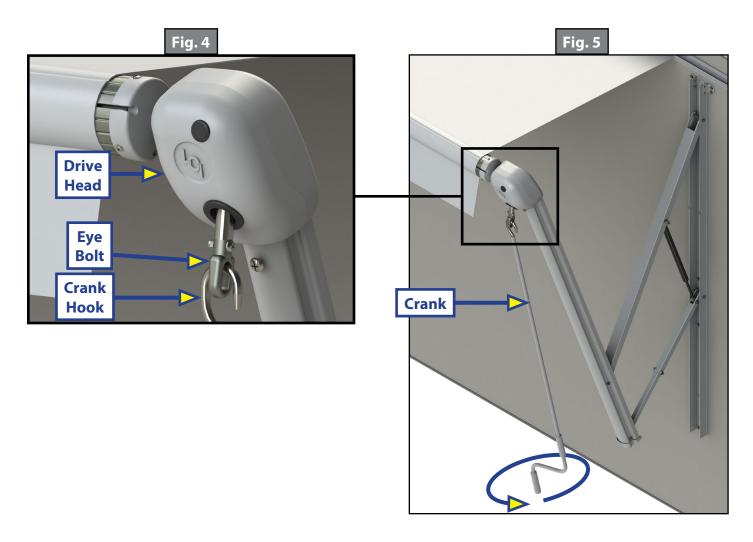


## Retracting the Awning

**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**

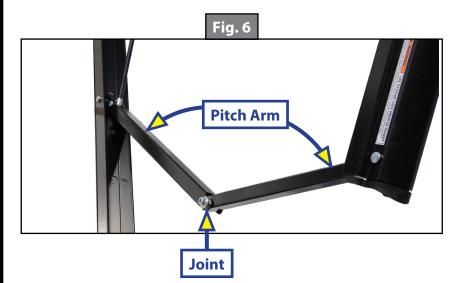
**NOTE:** The awning will pitch itself to purge the pooling of excess water and may dump a significant amount of water without notice.

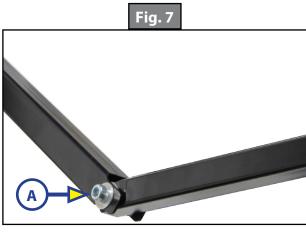
- 1. Pitch can be set by adjusting the pitch arm to tip one side of the awning to allow water runoff.
- **2.** Extend the awning to the fully open position.
- 3. Choose the side of the awning for optimum shade or convenient water runoff. Pull downward on the joint of the pitch arm until desired pitch 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 Is Happening?	What Should Be Done?	
Awning won't open or close.	If optional travel locks are installed, ensure that they have been unlocked.	
	Check for bad gas strut	
Awning pitch won't stay in the flat position.	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.	
	The awning is considered completely closed as long as the outer arm is overlapping the mount arm. This overlap can vary.	
Awning doesn't close all the way.	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.	
	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.	
Awning seems to wobble when extending or retracting.	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

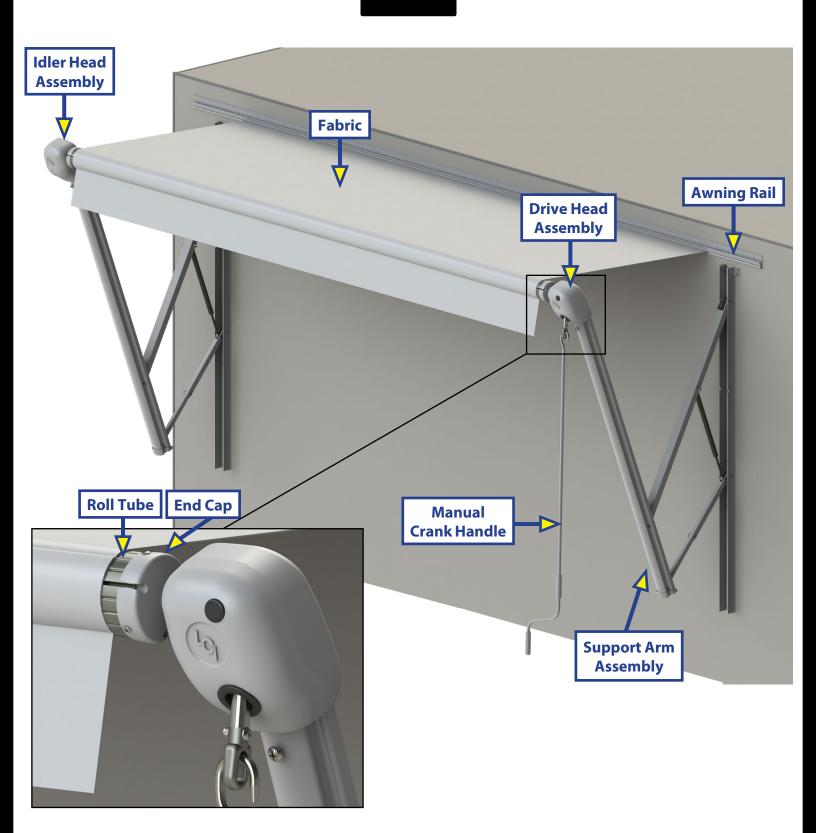
#### Fabric Care

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 ½ 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**

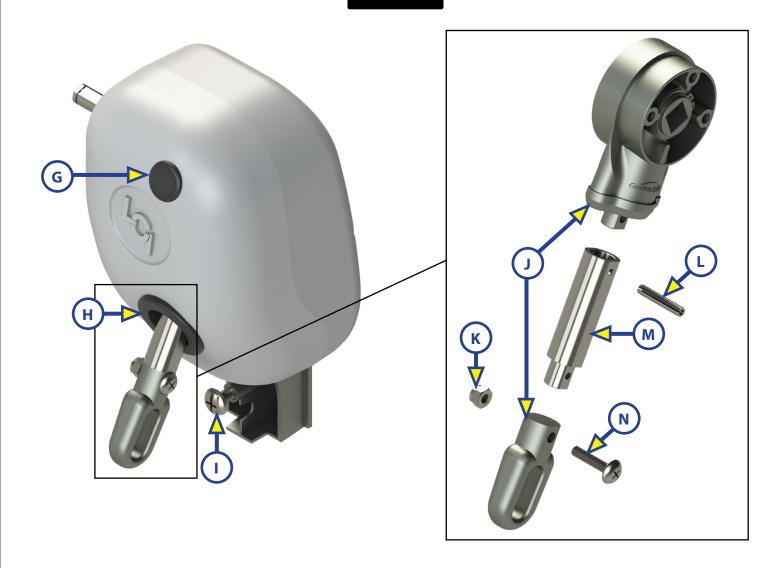






Callout	Part #	Description
^	<u>266147</u>	White Idler Head Assembly
A	<u>273479</u>	Black Idler Head Assembly
D	<u>289563</u>	White Idler Head Front Cover
В	<u>289566</u>	Black Idler Head Front Cover
	<u>289564</u>	White Idler Head Rear Cover
	<u>289567</u>	Black Idler Head Rear Cover
D	<u>300029</u>	White Drive Head Assembly
	<u>300031</u>	Black Drive Head Assembly
E	<u>289557</u>	White Drive Head Front Cover
	<u>289560</u>	Black Drive Head Front Cover
F	<u>289558</u>	White Drive Head Front Cover
Г	<u>289561</u>	Black Drive Head Front Cover





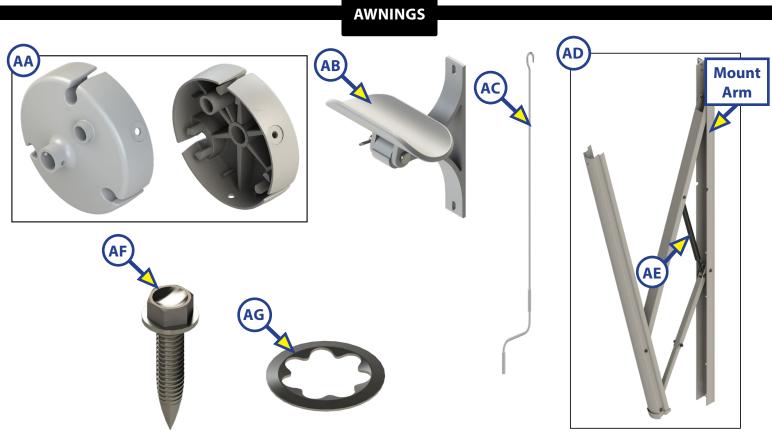
Callout	Part #	Description
G	<u>275071</u>	Grommet, Rubber (for Manual Override Opening)
Н	<u>299993</u>	Grommet Diaphragm, Rubber (for Manual Crank Opening)
I	266148	Screw 5/16" - 18 x 2 - 1⁄4" (Head to Arm)
J	300028	Box Gear with Eyelet (Gear Will Come Disassembled)
K	322401	Nut, nylon lock ¼" - 20 (for Drive Head)
L	300026	Spring Slotted Pin (for Drive Head)
М	299889	Coupler (for Drive Head)
N	300027	Screw ¼"- 20 x 1 ½" (for Drive Head)





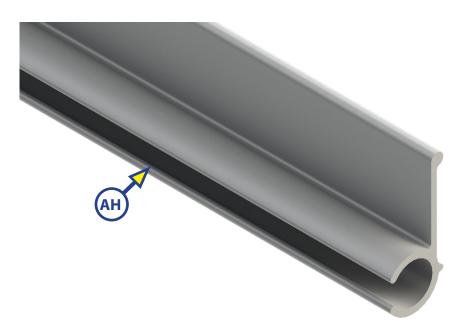
Callout	Part #	Description
0	298760	Hairpin Cotter, Zinc Plated 0.093" x 2 - 5/16"
Р	347119	Cotter Pin, Zinc - 1/8" x 3"
Q	299419	Screw #8 - 15 x ½" (End Cap to Roll Tube)
R	266156	Screw, #6 x ½" (Fastener for Head Covers, 6 Per Cover)
S	299630	End Cap Screw, Wax #8 (Head to Roll Tube)
Т	<u>118043</u>	Nut, nylon lock <sup>5</sup> ⁄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"
Υ	384906	Nut, Stainless Steel, nylon lock #10 - 32
Z	237315	Aluminum Rivet - 3/16" x 1.3000





Callout	Part #	Description
AA <u>423750</u>		White End Cap
AA	423751	Black End Cap
AB	<u>289373</u>	White Awning Center Support Assembly
AD	289374	Black Awning Center Support Assembly
<b>NOTE</b> : Only red	quired for Solera	Awnings greater than 21' in length.
AC	<u>300030</u>	Manual Crank Handle
	<u>295742</u>	White Support Arm Assembly (Short, 61")
	295743	Black Support Arm Assembly (Short, 61")
AD	<u>260294</u>	White Support Arm Assembly (Pitched, 66 1/8")
	<u>266169</u>	Black Support Arm Assembly (Pitched, 66 1/8")
	362132	White Support Arm Assembly (Short Standard Fixed Pitch)
	362133	Black Support Arm Assembly (Short Standard Fixed Pitch)
	<u>281152</u>	White Support Arm Assembly (Flat, 69")
	<u>281154</u>	Black Support Arm Assembly (Flat, 69")
NOTE: Support	t Arm measurem	ent based on wall mount extrusion.
AE	<u>280343</u>	Gas Strut; 61 ½" Short, 69" Tall and 77" XL Awning Arms
	<u>260282</u>	Gas Strut; 63" Tall and 66 1/8" Tall Awning Arm
	346882	Gas Strut; 60 ½" Tall Awning Arm
AF	348108	Screw #14 - 10 x 1 $\frac{1}{4}$ " (Arms to Unit)
AG	<u>282484</u>	Star Washer (for Gas Strut)





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

Notes	
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# COMPONENTS

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