

# GIRARD SYSTEMS

RV AWNING PRODUCTS

G-2000 CASSETTE PATIO AWNING

G-1500 DOOR AWNING

## OWNERS MANUAL

INSTALLATION, OPERATION, ADJUSTMENT AND REPAIR

Rev. 010112

1361 CALLE AVANZADO, SAN CLEMENTE, CA 92673 (949)259-4000 FAX (949)276-5500



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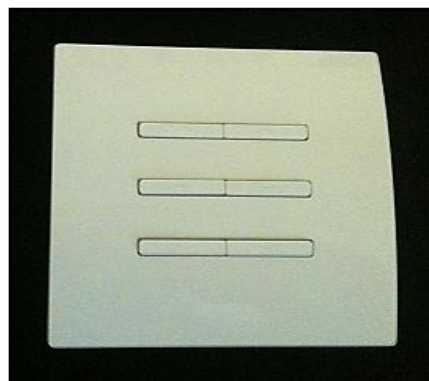
## **Basic System Overview**

**Your G-2000 and G-1500 Awnings consist of three main components:**

- 1. Mechanical System** – consisting of:
  - The enclosure (or cassette) protects the fabric while closed.
  - The roller tube which is mounted within the cassette.
  - The top cover or fabric rolled onto the roller tube and connected to the lead rail that extends from the enclosure when the awning is opened.
  - The folding arms that supports the lead rail and the fabric.
  - The tubular motor which is mounted inside of the roller tube that allows the awning to extend and retract.
- 2. Electronic controls** – to power and operate the motor
  - Anemometer (wind sensor) automatically retracts the awning in case of high wind that may damage the awning system.
  - Motion Sensor – This can be used in place of the anemometer.
  - G-Links model GC136 Motor Control (single motor) to power and operate the motor.
  - DC motor control.
  - Wireless Motor – This motor does not require a motor control.
- 3. User Controls** – for awning operation



GC136



98GC230



## **Important Reminders**

Before using your awning make sure that all of your electrical circuits are operating correctly. Recreational Vehicles can generate AC power from three separate sources; shore power (hookup), generator, or inverter. The electrical system transfer switch in your vehicle will select power for the awning as follows:

**Shore Power – if connected;**

**Generator Power – if generator is running;**

**Inverter Power – batteries must be charged for inverter operation.**

Your **G-2000** is usually operated using a 110Volt AC motor. However, some awnings are equipped with 12Volt DC motors. Your **G-1500** is usually operated using a 12 Volt DC motor. However, some awnings are equipped with a 110 Volt AC motor.

### **NOTICE**

For a detailed description and user instructions for all electronic and user controls please refer to the **Girard Link System (G-Link)** manual supplied with the awning. If you do not have a copy of the **G-Link** manual you may download a copy from the Girard Systems website at **[www.girardrv.com](http://www.girardrv.com)**.

## Extending/Retracting Awning

### 1. Programming the Remote Control

Wireless remote controls must first be programmed to your awning. Programming is usually done at the factory and the user does not need to program his units.

### 2. Using the Remote Controls

**G-Links** hand held Remote Controls are capable of controlling several awnings and use a different communication channel for each awning. If your unit can control only two channels it will indicate the channel selected using one of two LEDs above the control buttons. If your unit can operate more than two channels an LCD display shows the number of the channel that is currently selected. Your remote control will have the capability to control every Girard System product installed on your coach up to a maximum of 15 units.

- To operate the hand held Remote Control you only need to press the button labeled with the appropriate icon shown on the round rocker switch below the channels display.
- Channel selection is made by pressing the two icons marked on the round rocker switch below the display.



- Pressing the center button will stop the motor.
- The custom LCD display, when activated by pressing any of the above buttons, shows the active channel and the direction of motion.
- The operation of wall mounted switches is self-explanatory and normally **UP** indicates the **RETRACT** function and **DOWN** the **EXTEND** function.



## INSTALLATION MANUAL

### Product Description

The **G-2000** and **G-1500** awning systems provide protection from the sun at a touch of a button. The **G-2000** and **G-1500** awnings are built to your specifications with the highest quality materials available, your units features:

- A standard motor that operates with a wireless motor control, or a wireless motor that operates with an integrated motor control.
- An anemometer (wind sensor) or a Motion Sensor that will retract the awning to prevent damage from the wind.
- A hand held Remote Control
- A wall mounted Remote Switch
- Options include; electronic automation controls to ensure proper closing at all times, a control to retract all awnings when the vehicles' motor is started, and more....

Your **G-2000** and **G-1500** awnings controls' use a RF (radio frequency) link to communicate with each other. This simplifies the installation and maintenance by removing the need for extensive wiring. This RF network is called the **G-Link** system. For more information please refer to the **G-Link** manual that was included with your awning. All necessary power cables are supplied with this product.

### Getting Started

#### Tools required:

- Electric Drill
- Tape measure
- (2) ladders
- Socket wrench: 7/16" deep socket
- Chalk line
- Flat head screwdriver (small)
- Phillips screwdriver
- Caulking gun
- (2) tubes silicone caulking
- Drill bits: 1/8", 3/8", and 7/16"
- Allen wrenches: 5mm and 4mm
- Open-end wrenches: 10mm, 19mm
- Keyhole saw

## **WARNING**

### **ALL ELECTRICAL WORK MUST CONFORM TO APPLICABLE ELECTRICAL CODES AND STANDARDS.**

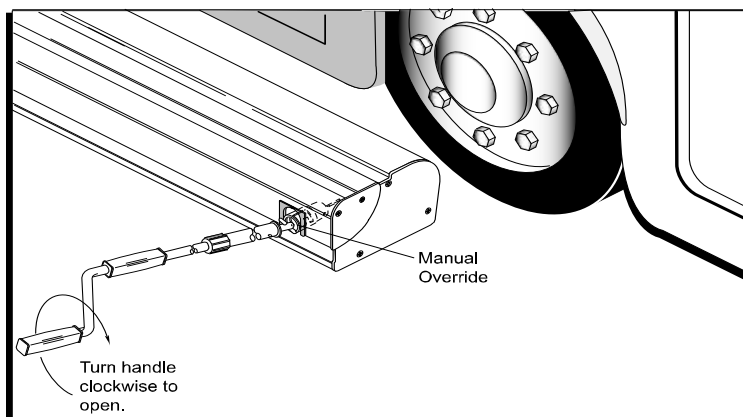
- Turn off power before beginning any electrical work.
- Please consult your RV's wiring diagram to locate any wiring prior to any drilling or any installation procedures.
- Ensure that placement of controls, cables, and wires are not in any way obstructed. This can damage the components and obstruct electrical current.
- Use only certified components.

**Duration:** 4.5 hours (based on two installers)

### **Prior to beginning installation sequence:**

1. Insert end of crank into manual override receiver, located at extreme end of awning.
2. Push in and rotate handle 1/4-turn clockwise. Let handle drop approximately 1/2". (Handle should lodge in receiver and awning may now be extended/opened.)
3. Extend awning approximately 12" by turning handle clockwise (see Fig. 1); confirm that awning shoulders are in proper locations; make note of shoulder locations; and retract/close awning by turning handle counter-clockwise.

**NOTE: Roof mount awnings will have the manual override receiver positioned on the top of the awning.**



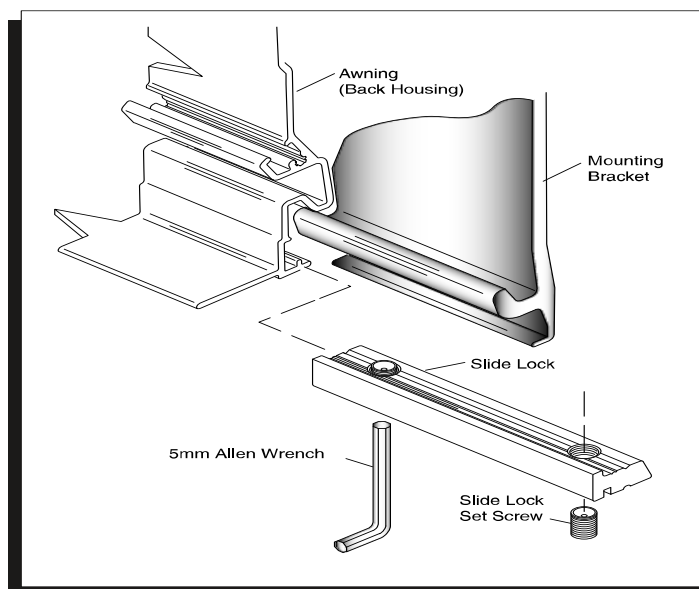
**(FIGURE 1)**



## FOR PERSONAL SAFETY AND QUALITY OF INSTALLATION, TWO INSTALLERS ARE RECOMMENDED FOR THIS PRODUCT

### A. UNPACKING

1. Before starting any of the installation procedures unpack the awning and inspect the product for any possible damage that may have occurred during shipping.
2. Before starting any of the installation procedures review the length and motor placement of your awning for correctness.
3. When you have determined that the product is to your satisfaction, remove the mounting brackets and place the awning in a safe location while preparing the RV.
  - A. To remove the brackets locate the slide lock that retains the bracket to the housing. (Figure. 2)
  - B. Using a 5mm Allen wrench loosen the set screws on the slide locks.
  - C. Once the set screws have been loosened the slide locks should slide freely, clear the slide lock away from the bracket.
  - D. You should now be able to remove the bracket.
4. If you have discovered any damage or missing parts please follow the instructions in the Warranty section of this manual.



(FIGURE 2)





## **B. LAYOUT, MOUNTING THE BRACKETS**

**ROOFMOUNT APPLICATION** –The clearance needed for the roof mount application of the G-2000 varies by manufacturer. The shape of the roof, the depth of installation, type of roof mount bracket used and all other factors should be taken into consideration when installing this product. It is up to the installer to find adequate structure to fasten the roof mount brackets. All caution must be taken to weather seal all installation perforations. Please consult Girard Systems if there are any questions regarding your installation.



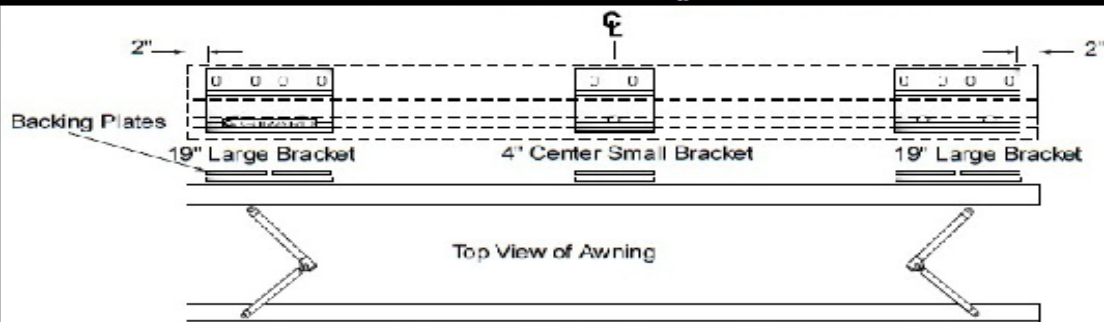
**NOTE: Please consult your RV's wiring diagram to ensure that no wiring will be damaged while drilling the hole.**

#### **A. SIDEWALL APPLICATION**

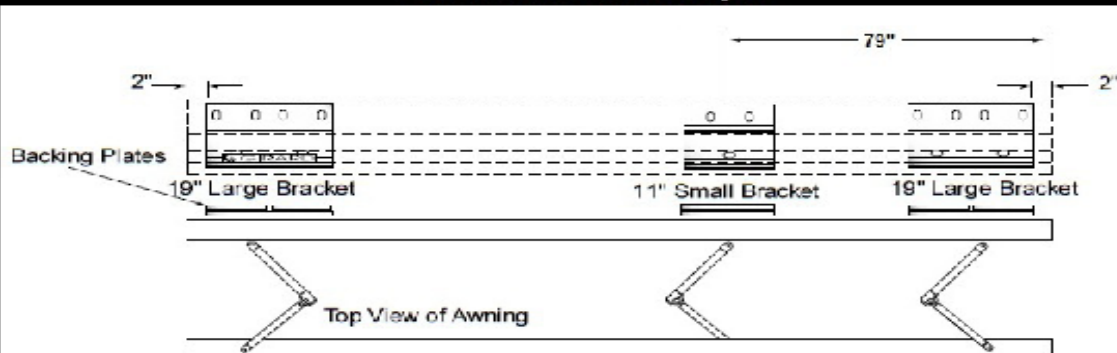
**NOTE: Please take into consideration all possible clearances, and obstacles before installing this awning. Items such as slide rooms, etc. vary from one manufacturer to another. Please consult Girard Systems if there are any questions regarding your installation.**

1. The mounting brackets and hardware used for this application are included with your awning.
2. Determine the location for the final installation position of the awning, including height to be installed.
3. Mounting brackets must be installed within two (2) inches of the ends of the awning. Once you have determined the location of the two end brackets snap a chalk line between the two points to ensure straightness of the installation. You will be able to use this reference line to install the smaller center bracket at a later time.
4. To find the location of the smaller center bracket please refer to chart on the following page. **NOTE: The location of the center bracket must fall directly centered behind the center shoulder location. Failure to follow these instructions will void the warranty of this product.**
5. Now that you have located the bracket locations, using the bracket as your template, mark the holes for fastening the bracket.
6. Using a 1/8" bit (8" long), pilot drill the centers of the marked holes. Inside of the RV verify the locations of the backing plates. **NOTE: Please consult your RV's wiring diagram to ensure that no wiring will be damaged while drilling the hole.**
7. Pre-drill six 7/16" holes per mounting bracket through the pilot holes.
8. Apply a liberal amount of silicone caulking around each hole before installing the brackets.
9. Install the two (2) outer brackets, and then the center bracket (if required) with six 7/16" carriage bolts, washers, nylon nuts and two(2) backing plates per bracket. (Figure 3) Tighten bolts and then apply silicone caulking to the top edge and both sides of each bracket.
10. On the motor side of the awning drill a 7/16" hole for the awning motor cable to enter the RV near the electrical source. Position the hole 1" to the left or right of the bracket depending on motor location. Do not drill hole higher or lower than the bracket. This will ensure that it will not be seen after the awning is installed.

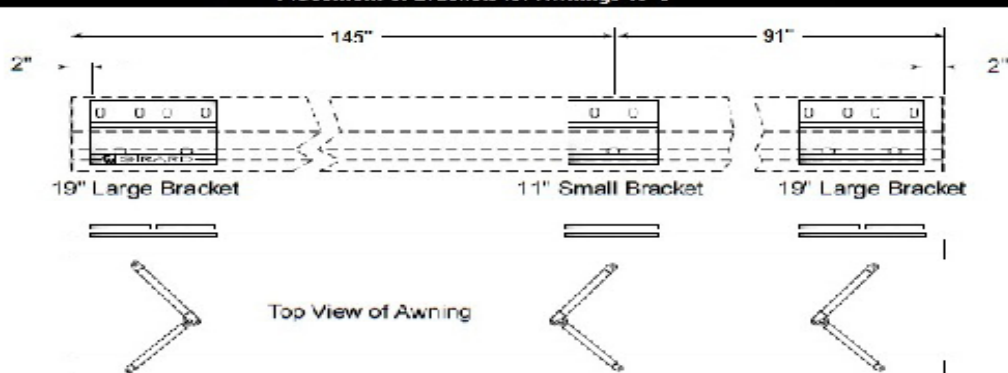
### Placement of Brackets for Awnings under 17'



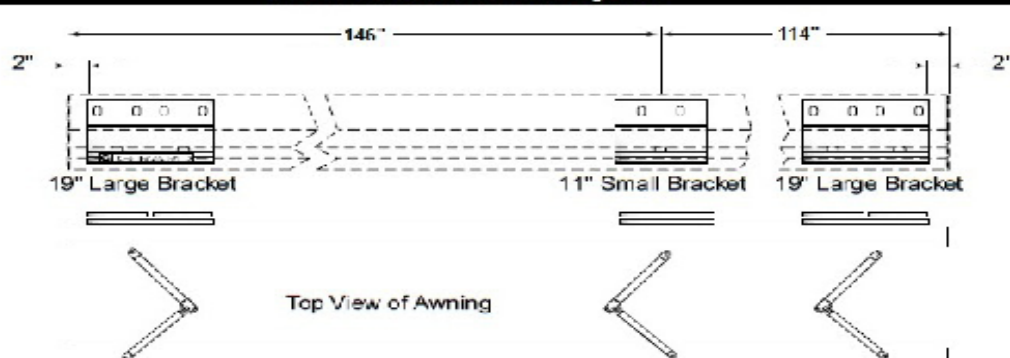
### Placement of Brackets for Awnings 18'



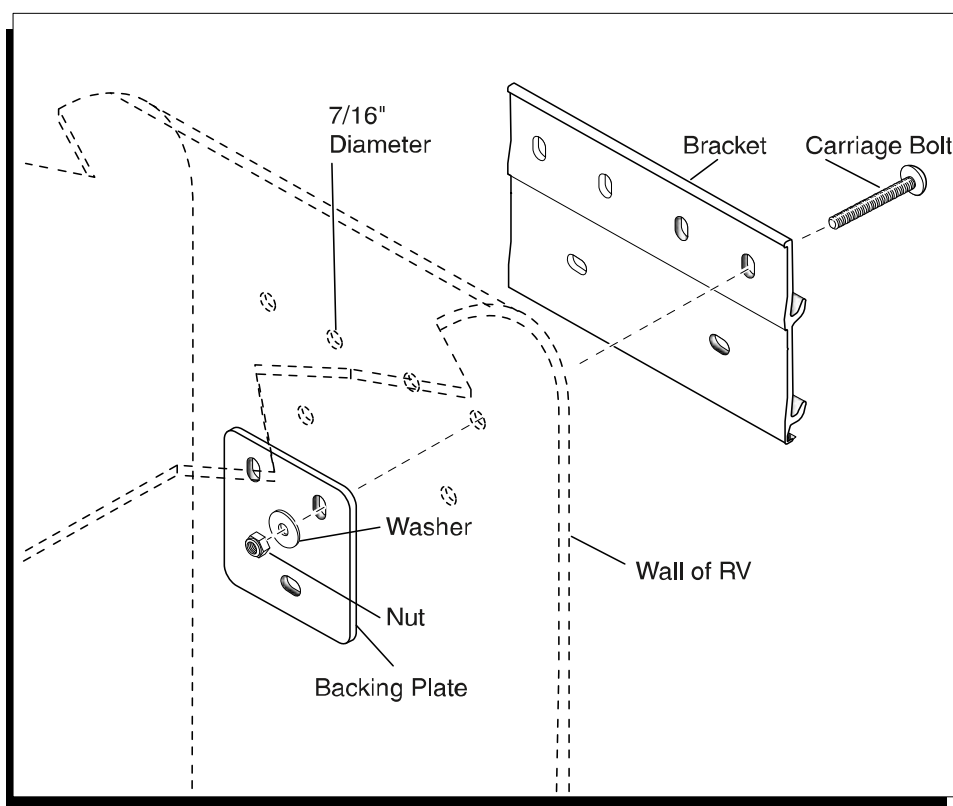
### Placement of Brackets for Awnings 19' 8"



### Placement of Brackets for Awnings 21' 8"



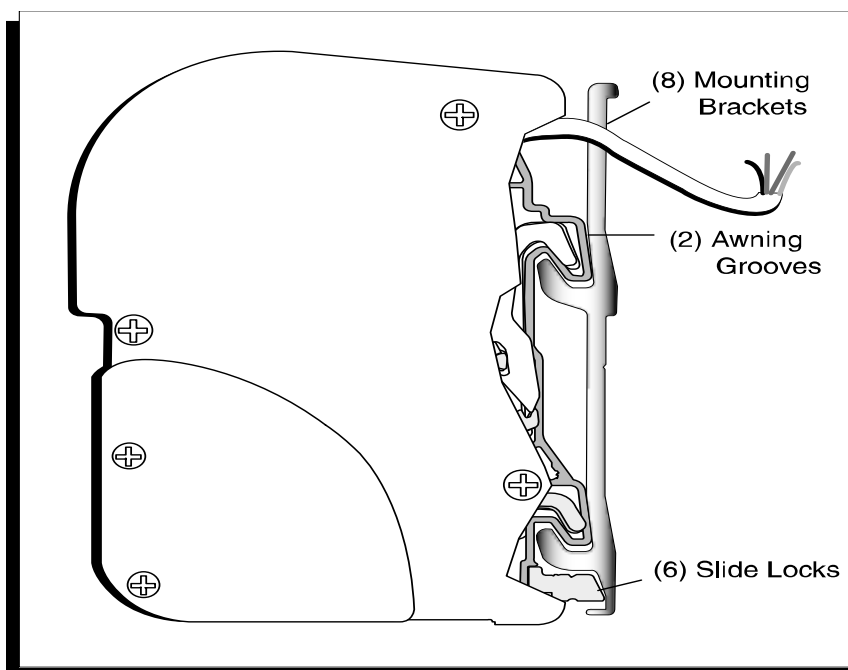
11. On the motor side of the awning drill a 7/16" hole for the awning motor cable to enter the RV near the electrical source. Position the hole 1" to the left or right of the bracket depending on the location of the motor. Do not drill hole higher or lower than the bracket. This will ensure it will not be seen after the awning is installed.
12. If you are using a 12V Motion Sensor locate the wire, then drill the appropriate sized hole to rout the wire to your interior 12V source. Make sure to seal any perforations made in the shell of the vehicle.
13. Locate the white wire grommet supplied with the awning. Place a fine bead of silicone around the body of the grommet. Slide grommet into the 7/16" hole previously drilled for the motor wire.



(FIGURE 3)

## B. **MOUNTING THE AWNING TO THE BRACKETS**

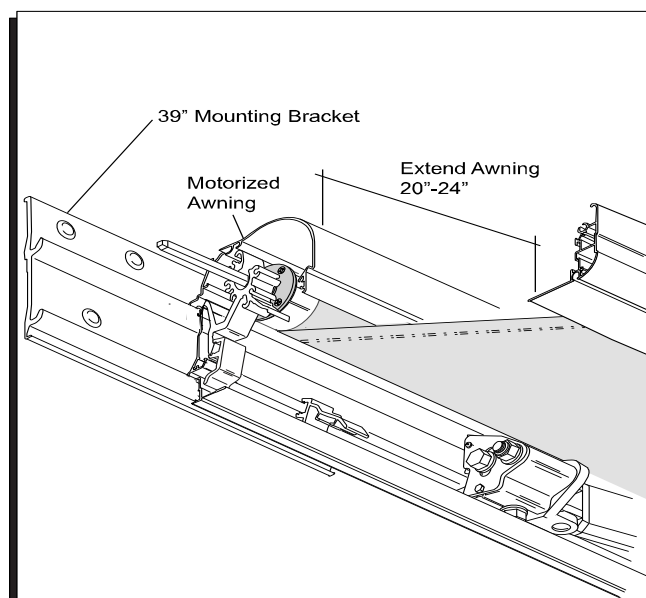
1. Lift the awning into position for installing the awning on the brackets.
  - A. Ladders are usually sufficient; however, a scaffold or forklift may be used.
  - B. If using a forklift use all necessary caution to protect the surface of the awning. Lift from the center of the awning to maintain product balance while elevating.
2. Place the awning onto the brackets (Fig. 4 #8) while feeding the motor wire through the white motor grommet. A small amount of lubricant may aid the feeding of the wire. Make sure the grooves (Fig. 4 #2) of the awning are securely engaged into the channels on the bracket. (Figure 4)
3. Secure the awning by moving the slide locks (Fig. 4 #6) along the bottom awning track until they are located under their respective brackets. The final position of the slide lock should be directly under the shoulder of the arm.
4. Once the final location of the slide locks has been achieved, tighten both set screws on each slide lock with a 5mm allen wrench.



(FIGURE 4)

### C. INSTALLATION INSTRUCTIONS FOR COUPLED AWNINGS

1. The 19" end brackets are installed 2" from the overall length of the awning. The 39" mounting bracket is located in the center, at the junction of the two awnings. Additional brackets need to be located behind, and centered on the arms of each awning.
2. After all the mounting brackets are firmly attached; place the motorized awning on the mounting brackets. Place the slide locks under each plate, but do not tighten. A fourth slide lock should be on the awning. This lock will be placed between the two awnings once they are mounted. (Refer to Figure 16 in the Installation Manual.)
3. Extend the motorized awning 20"–24". Temporarily install the controller to the motor and use the remote control.

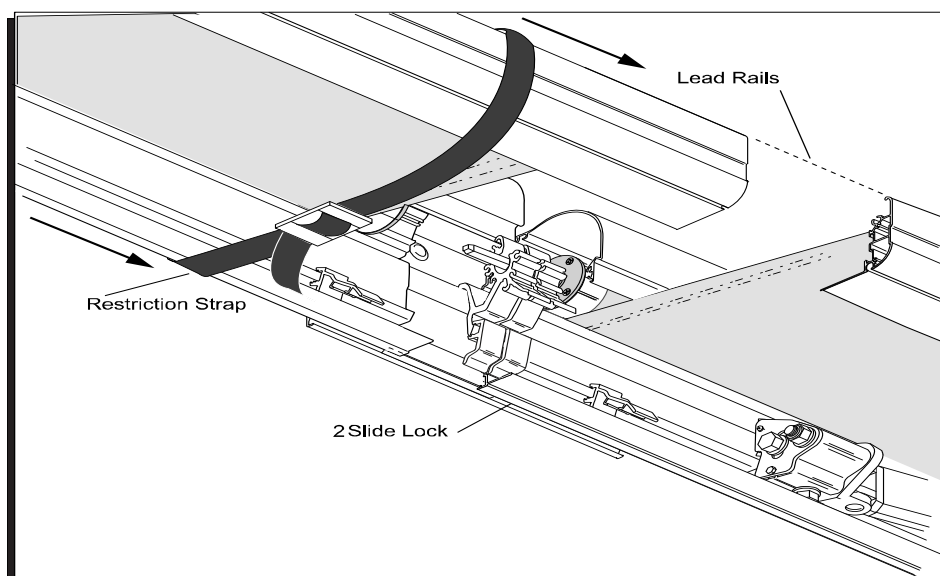


(FIGURE 5)

**NOTE:** Do not remove the plastic from the non-motorized awning. Move the plastic away from the area in contact with the mounting bracket.

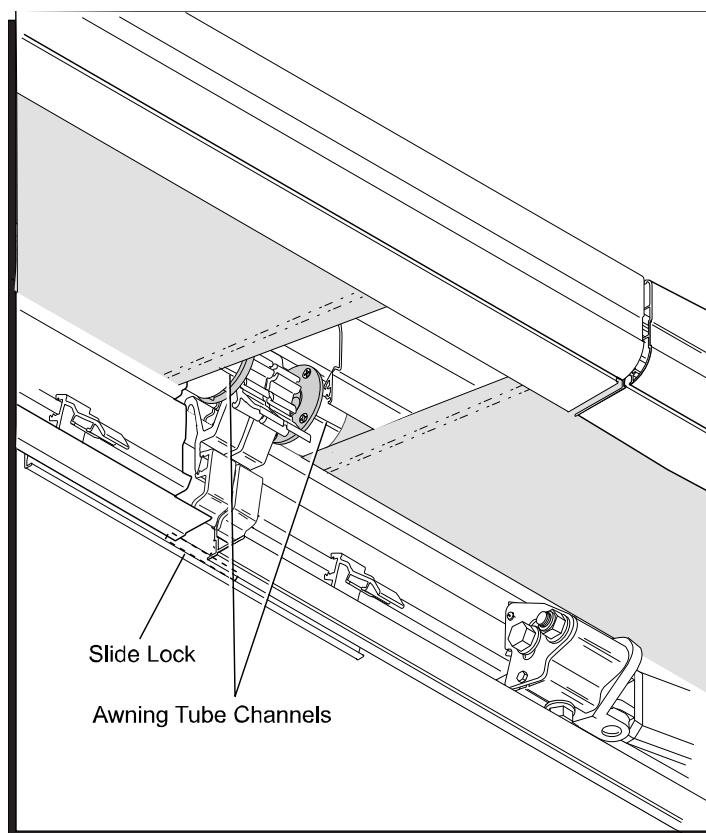
4. Hang the non-motorized awning on the mounting brackets so it aligns up to the drive shaft of the motorized awning. The slide locks should now be positioned on the brackets and should not be locked to allow awnings to slide together freely. (See Fig. 6)
5. Extend the non-motorized awning by 20" to 24". To do so, use heavy cord or straps on both ends of the awning to encircle the awning box, using enough to allow the outward movement of the awning lead rail.

**CAUTION:** The arms are under extreme spring pressure. Once the plastic is cut, the lead rail will instantly extend from the box! After the cord/straps are tied securely around the awning box, carefully remove the plastic. The lead rail will then extend to the length of the cord/straps. (See Fig. 6)



(FIGURE 6)

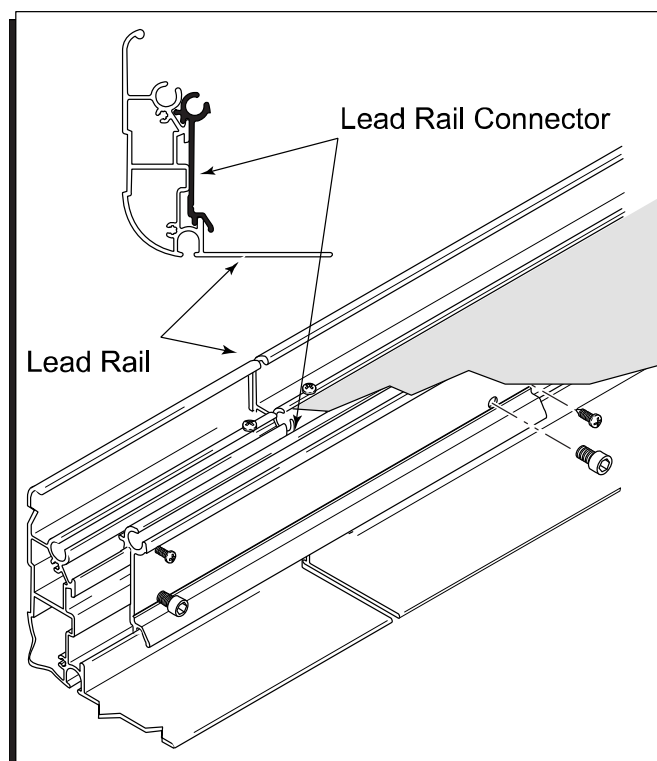
6. Extend the motorized awning past the non-motorized awning by about 8". This will allow the non-motorized awning with loose fabric to catch-up. Next you want to align the black marks on gudgeons or align the poly ropes of the non-motorized awning with the motorized awning. These adjustments are to be made with the motorized awning, still keeping the motorized awning ahead of the non-motorized. Once the alignment has been done slide the awnings together. Then tighten all of the slide locks. Including the one positioned in between both awnings. (See Fig 7)



**(FIGURE 7)**

7. Remove the cord/straps from the non-motorized awning. Extend the coupled awnings. The fabric should be tight on both sides; if the motorized side is tighter, the awnings must be realigned. See note on the last page for the realignment procedure.
8. Adjust the awnings for equal pitch and lead rail adjustment. (Refer to the Adjustments section of this manual)
9. Move the lead rail guides away towards the center and make room to insert the lead rail connector. The lead rail connector is installed in the lead rails. Center the connector bar between the two awnings (approximately 8¾" per side). Remove the two Phillips screws and drill one 9/64" hole into the lead rail using the lead rail connector as your template. Insert and tighten the one Phillips screw and the tighten the hex screw on the same side. Draw the lead rails together until they are joined and flush in the center. Using the attached lead rail connector as your template drill a second 9/64" hole and tighten the other Phillips screw. Tighten the remaining hex screw. (Figure 8)





**(FIGURE 8)**

10. At the juncture of the two awnings inside of the cassette are two glide angles. Move the right glide angle 9" from the center and tighten until secure. (The awning should be open about 24"–36" when performing this function.) With the removable bracket on the right, slide the fabric onto the roller tube and roll the fabric over the TOP of the roller tube.

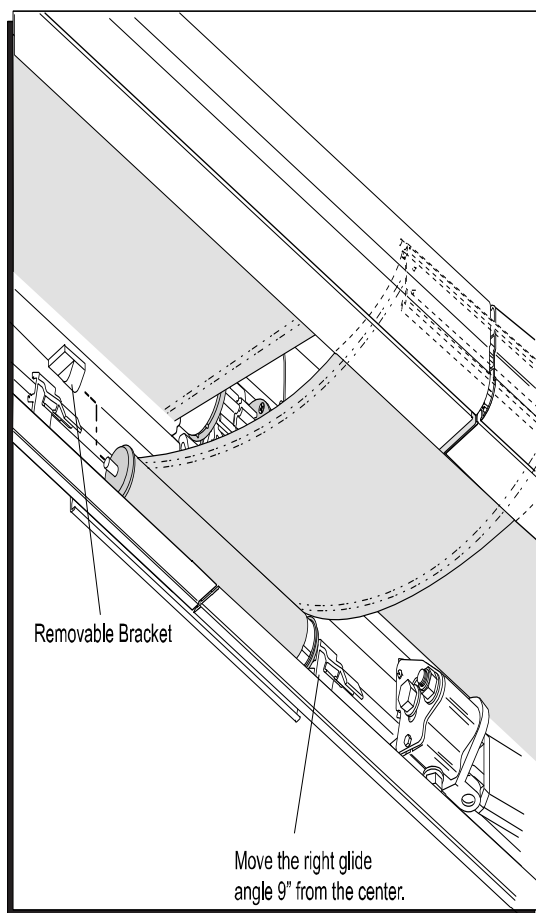
11. With the fabric on the roller tube, insert the fabric end into the lead rail connector. Slowly unroll the fabric until you are up to the awning box. Place the right side into the glide angle that you tightened down in step 10. (Figure 9)

12. Turn the left-hand side of the center roller tube towards the TOP (counter-clockwise) 13 complete rotations to tighten the spring. Place the left glide angle over the left side of the center roller tube to hold it in place, and tighten down the left glide angle. (Figure 10)

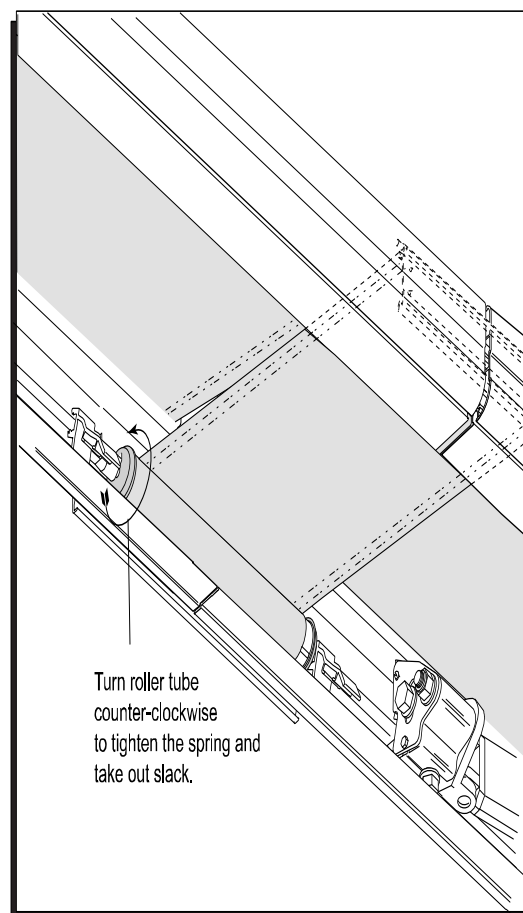
13. Extend the awning to its full projection. If you have excessive sag in the center roller fabric, repeat step 12 and add additional rotations.



**NOTE:** If the awnings do not align after completing step 7, release the tension on the fabric using manual override. Then go to the end of the non-motorized side and remove the side plate and the roller tube support bracket (Part #15 in the manual). Pull the roller tube out of the middle insert and realign on the gudgeon or the poly cord. Reassemble the awning and repeat steps 8–13. Readjust motor limits per this Installation Manual.



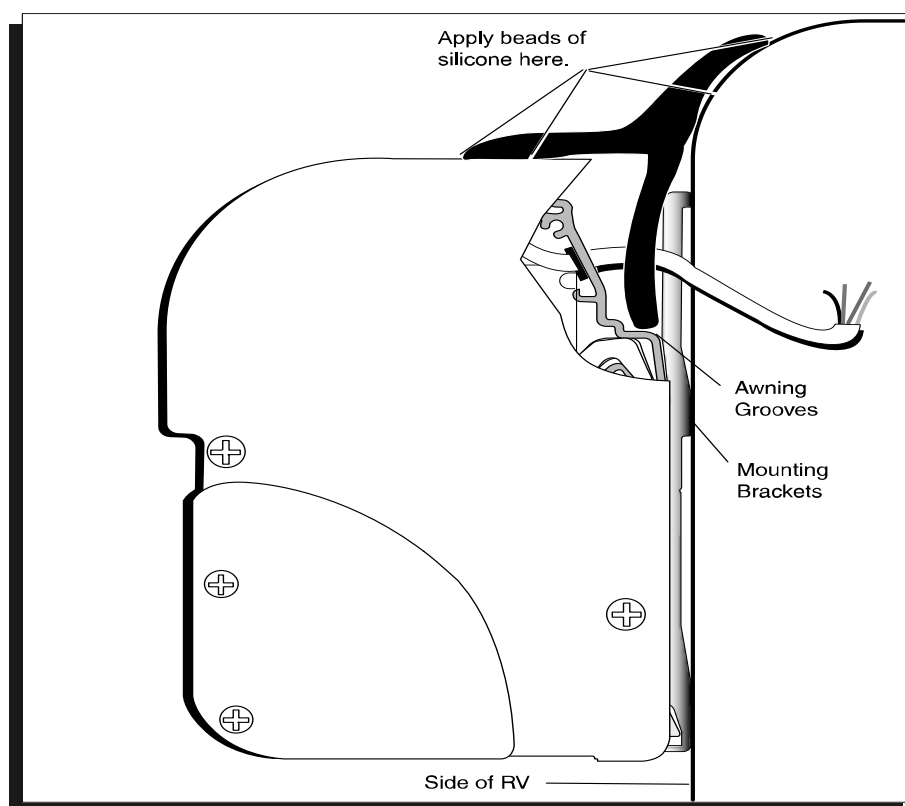
**(FIGURE 9)**



**(FIGURE 10)**

#### D. **WEATHERSTRIPPING INSTALLATION** - (SIDEWALL APPLICATION ONLY)

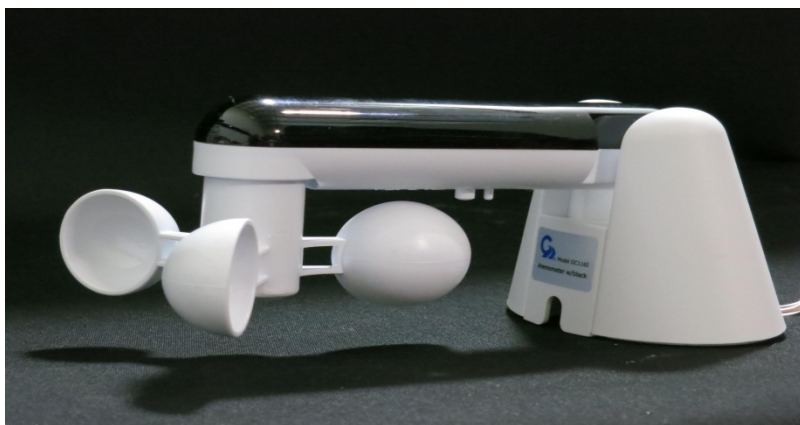
1. Trim weather stripping to the length of the awning and remove any overhang.
2. Make a small cut in the weather stripping to allow for the motor cord.
3. Apply generous beads of silicone where indicated in Figure 11.
4. Push weather stripping firmly into place.
5. Wipe off excess silicone.



(FIGURE 11)

#### E. **ANEMOMETER** – (Hardware Installation Only)

1. Place the anemometer on the roof of the vehicle. The unit can be mounted to a horizontal, vertical, or an inclined surface. The rotor of the anemometer must be pointing down. (Figure 12)
2. Position anemometer as follows:
  - A. On and parallel to the roofline
  - B. Near the awning to ensure the wind speed is measured accurately
  - C. Away from all obstructions (air conditioners, storage pods, etc.)
  - D. Orient the cups of the anemometer to the rear of the coach.
3. The anemometer operates remotely by sending a retract signal to the motor control system of the awning.
4. The anemometer must have 12VDC power at all times when the awnings are extended. The minimal power consumption will not affect the charge of the batteries in any appreciable way. If there is a suitable source of 12VDC power located on the roof then penetrating the shell of the vehicle will not be necessary.
5. The power cord extends from the base of the unit and is suitable for outdoor use.
6. To obtain power from the inside of the vehicle a 3/8" hole must be drilled for the Power wire. Drill the hole directly below where the power cord exits the anemometer base.
7. Feed anemometer cord thru the 3/8" hole, leave 3-4" of slack. Silicone around the wire to prevent any water intrusion.
8. Apply a bead of silicone where the footprint of the anemometer will be installed. Mount the anemometer with two (2) screws. Silicone the perimeter of the base.



(FIGURE 12)

F. **MOTION SENSOR** – (In place of anemometer)

**NOTE:** The Motion Sensor can be used in place of the Anemometer in your electronics system. The Motion Sensor may be battery powered or hard wired for a 12VDC connection.

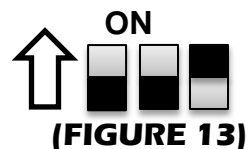
**MOTION SENSOR (Battery)**

1. The Motion Sensor will come from the factory pre-programmed and pre-installed. No additional installation is necessary.

**MOTION SENSOR (Hard wired)**

1. The Motion Sensor will come from the factory pre-programmed and pre-installed.
2. A hole must be drilled for the power wire. Locate the wire at the back of the awning cassette and the nearest source of 12VDC power.
3. Drill the appropriate sized hole, feed the wire to the interior of the vehicle and connect to the 12VDC source of power.

**NOTE:** TO TURN THE POWER ON TO THE MOTION SENSOR RAISE THE #1 IN FIGURE 13 TO THE “UP POSITION. THE MOTION SENSOR WILL BE SHIPPED WITH THE #1 IN THE “DOWN” POSITION TO PRESERVE BATTERY LIFE. THIS APPLIES TO FIGURE 15



**(FIGURE 14)**



**(FIGURE 15)**



## **TESTING AND ADJUSTMENTS**

### **OVERVIEW**

- A. Adjusting Motor-limit switches**
- B. Testing Anemometer (Wind Sensor)**
- C. Adjusting pitch angle**
- D. Adjusting arm (elbow) height**
- E. Adjusting Lead Rail**

### **TOOLS REQUIRED**

Black plastic key provided with awning, or 4mm (5/32") allen wrench.

#### **A. ADJUSTING MOTOR LIMIT SWITCHES**

**NOTE:** The motor limit switches have been adjusted to the correct position at the factory prior to shipment. The awning motor is set to stop the exact moment the awning box closes. The fabric should be taut, the arms should be slightly bent, exposing a 1/8" gap at the elbows when fully extended.

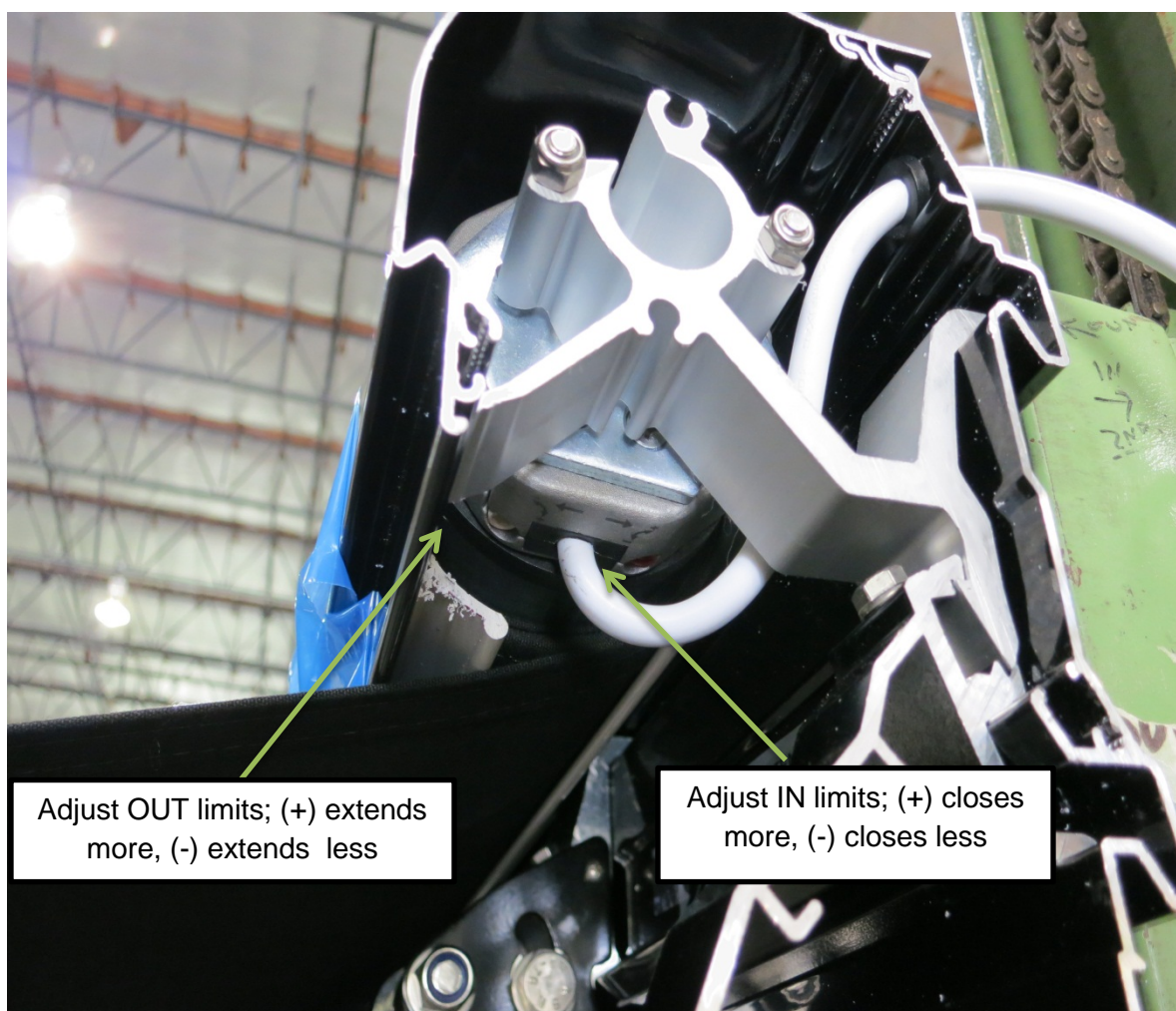
Always check the motor limits after installation to ensure that the awning opens and closes correctly. Awning fabric can stretch over time, this will require an adjustment of the OUT limit switch.

**IMPORTANT: EXTREME CARE SHOULD BE TAKEN TO ENSURE THAT THE MOTOR LIMIT TURNS OFF AT THE EXACT MOMENT THE AWNING BOX CLOSSES. FAILURE TO DO SO WILL CAUSE THE MOTOR TO RUN WHEN THE AWNING IS CLOSED. THIS CAN SUBSTANTIALLY REDUCE THE LIFE OF THE MOTOR.**

1. The AC motors used in Girard Systems awnings are reversible. Any references made to the motor limit switches in these instructions are based on the right-hand placement of the motor. For left hand placement, simply reverse the instructions. (Figure 8)
2. The motor has limit settings for both **OUT** (extension) and **IN** (retraction).
3. Adjust the limit switches with the black key provided with the awning, or you may use a 4mm (5/32") allen wrench.



4. Extend the awning a few feet to gain access to the motor. Locate the motor (standard installation is on the right hand side of the awning). The limit adjustment holes are located on the head of the motor. Using the symbols printed next to the adjustment holes, turn the black key (or 4mm allen wrench) to make the necessary adjustments. Typically, the motors are labeled with a + or a -. (Figure 7)



(Figure 16)

5. Approximately  $\frac{1}{4}$  turn of the adjustment screws represents about 1" of awning movement. **NEVER** set outward limits so that the fabric is slack with full arm extension. For proper adjustment set limit switch to stop the motor just before the arms lock. This will expose about an  $\frac{1}{8}$ " gap at the elbow.

## **B. ADJUSTING PITCH and ARM (Elbow) HEIGHTH**

**NOTE:** This adjustment is usually required after an arm replacement. Also, when the elbow of the arm hits the bottom of the casing as the lead rail closes.

### **Tools Required**

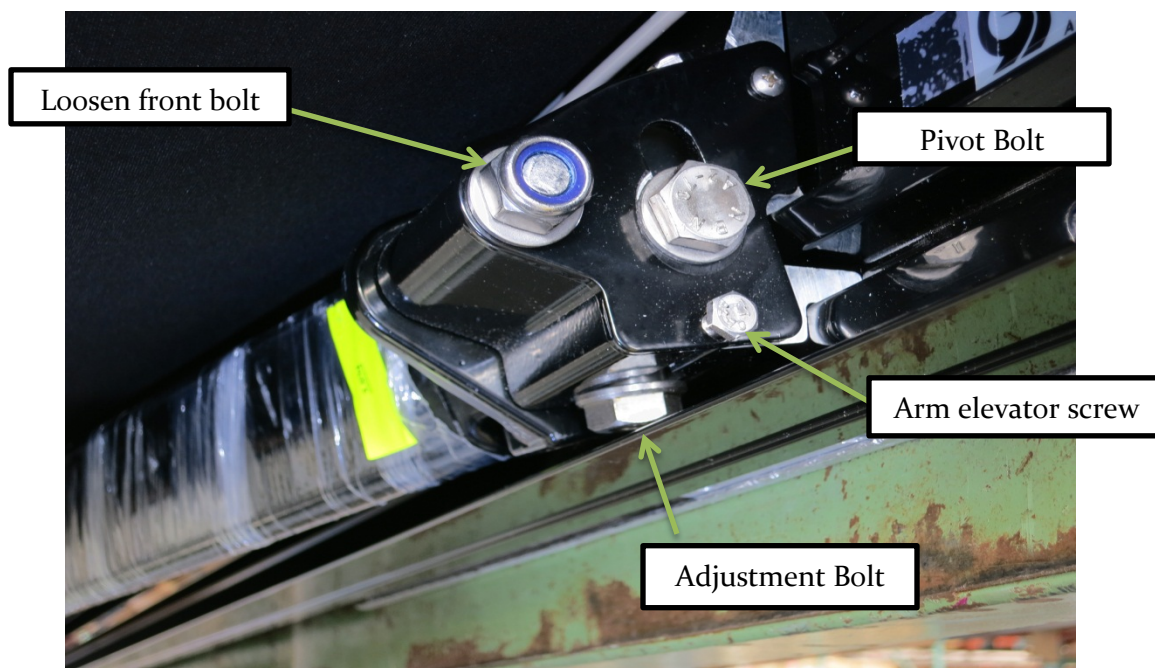
- 19mm (3/4") open-end wrench
- 10mm (3/8") open-end wrench

### **A. ELBOW HEIGHTH**

1. Extend the awning about 18"
2. On the selected arm, loosen the two(2) nylon nuts on the side of the upper arm connection, using a 19mm open-end wrench.
3. Locate the smaller adjustment bolt located directly below the rear lock nut loosened in step #2. (Figure 17) Using a 10mm open-end wrench rotate the bolt clockwise to TIGHTEN and raise the arm location inside the cassette. Rotate the bolt counter-clockwise to LOOSEN or lower the arm location inside the cassette.

**NOTE:** After retightening the nylon nuts, the arms will raise slightly higher.

4. Tighten the two(2) nylon nuts located on the side of the upper arm connection.
5. Close the awning completely to ensure a proper fit.



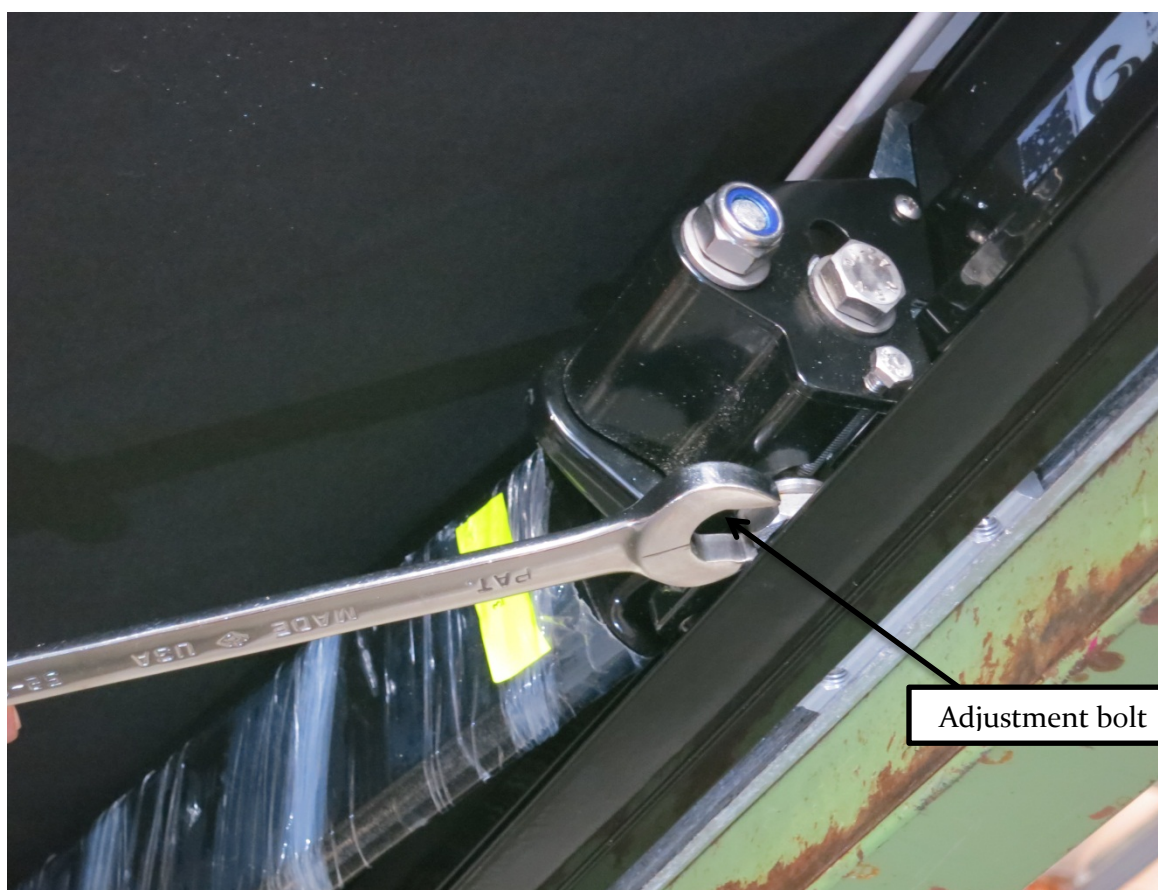
**(Figure 17)**



## B. ADJUSTING PITCH

**NOTE:** Your G-2000 and G-1500 Awnings will have the pitch adjusted according to manufacturer specifications. Please note the position of the pitch and **DO NOT** overtighten. This may damage the awning.

1. Extend the awning about 18"
2. On the arm selected, loosen the two(2) nylon nuts on the upper side of the arm connection using a 19mm open-end wrench.
3. Locate the larger adjustment bolt located on the bottom of the upper arm connection. (Figure 18) Using a 19mm open-end wrench rotate the bolt counter-clockwise to LOOSEN or lower the pitch. If the pitch is lowered too far you may turn the bolt clockwise or TIGHTEN to raise the pitch. **DO NOT OVERTIGHTEN.**
4. Tighten the two(2) nylon nuts located on the side of the upper arm connection.
5. Close the awning completely to ensure a proper fit.



(Figure 18)

### C. TESTING THE ANEMOMETER (Wind Sensor)

1. Partially extend the awning.
2. Manually employ the anemometer by blowing on the cups or by spinning them. You may also press the **UP** button on the anemometer. **NOTE: When you use the up button the anemometer will be disabled for 5 minutes.**
3. At this point the awning should retract; if not, check motor connection for proper polarity.

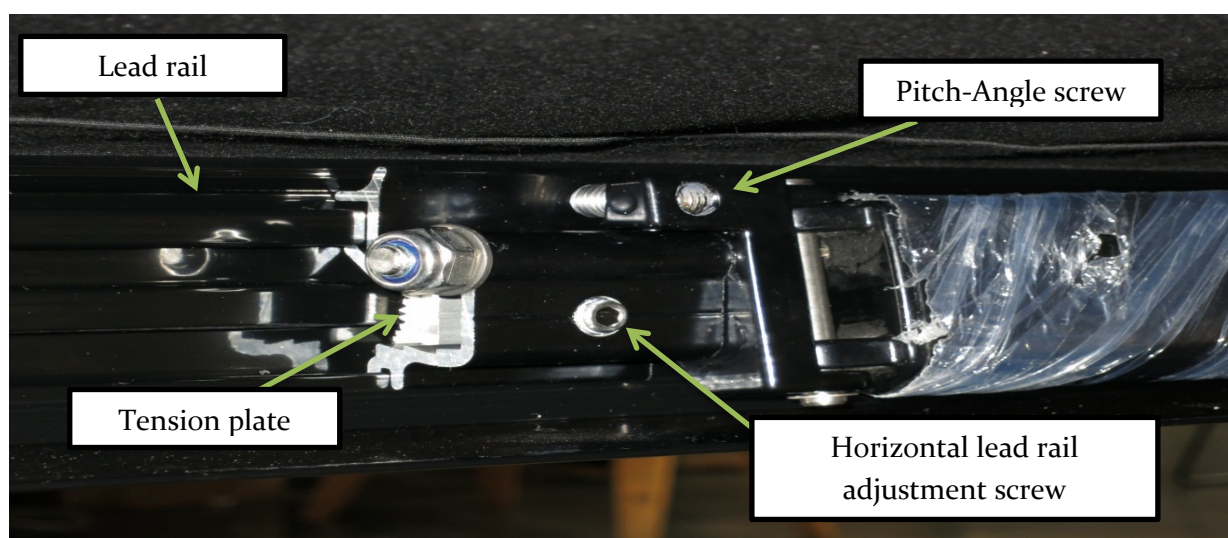
**NOTE: The Anemometer will send a retract signal to TWO (2) of the awnings installed on the RV. The power system of the vehicle must be able to withstand the resulting surge of current. The surge will be the greatest when the awnings are fully extended. When testing the system verify all of the awnings will close when fully extended. If you have more than two awnings a second anemometer must be used.**

If the system does not operate correctly under these conditions you may:

- A. Provide sufficient power from your panel.
- B. Replace the anemometer in the electronics system with a Motion Sensor.

### D. ADJUSTING THE LEAD RAIL

1. The lead rail on your awning has been preset from the factory at +/- 3 degrees. This allows the lead rail to rest firmly into the cassette and also creates a weather resistant seal for travel. To increase or decrease the pitch angle insert a 5mm allen wrench into the top pitch-angle screw. Turn clockwise to increase the pitch and turn counterclockwise to decrease the pitch. (Figure 19)



(Figure 19)

# **TROUBLESHOOTING GUIDE**

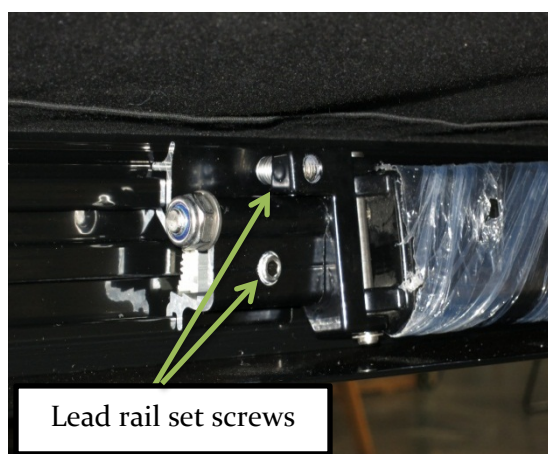
**Girard Systems recommends that all adjustments be made by authorized service centers. The following guide is intended to help you become familiar with the awning in case of emergency.**

## **PROBLEM:**

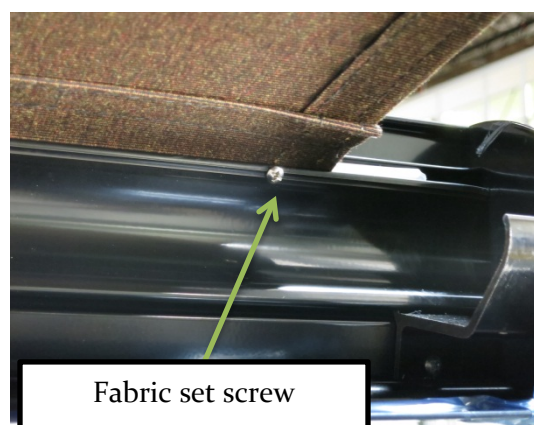
The lead rail is binding on the side of the awning casing; i.e. the rail is offset from housing.

## **SOLUTION:**

Open the awning about 3 feet. Loosen the set screw on each arm at the point of connection to the lead rail. Locate and remove the two fabric set screws that are on each end of the lead rail. The lead rail is now ready to be shifted. Close the awning until the lead rail is about 4" away from closing into the housing. Using a rubber mallet, tap the end of the lead rail to move it into the correct position. When proper alignment has been achieved retighten the lead rail set screws (Figure 20), then replace the fabric screws. (Figure 21)



**(FIGURE 20)**



**(FIGURE 21)**

## **PROBLEM:**

The motor side of the awning closes when the awning is retracted but the opposite end does not.

## **SOLUTION:**

Refer to "Adjusting the Lead Rail" on page 23. If this does not solve the issue please call the Girard Systems service line at (949)259-4000 or toll free at (800)382-8442.

**PROBLEM:**

Motor will not operate.

**SOLUTION:**

Check that all of the GFI switches in the vehicle are turned on. If your vehicle has a Awnings Power Main Switch, locate that switch and make sure it is in the ON position. The motor supplied in your **G-2000** and **G-1500** Awnings are designed for intermittent use and may cut out temporarily if it has overheated. When this occurs you must allow the motor to cool so that the internal circuit breaker can reset. This may take up to an hour depending on the outside temperature. You may use a manual crank during this period.

If this does not solve the issue please call the Girard Systems service line at (949)259-4000 or toll free at (800)382-8442.

**PROBLEM:**

The motor will operate for 10-12" and then stop.

**SOLUTION:**

The motor may not be receiving enough amps (inverter power is low) to operate correctly. Check to ensure that you have a minimum of 10 amps, if not turn on the generator or switch to a shore connection. If this does not solve the issue please call the Girard Systems service line at (949)259-4000 or toll free at (800)382-8442.

**PROBLEM:**

The fabric is loose when the awning is fully extended; i.e. the roller keeps turning after the awning arms have locked open.

**SOLUTION:**

The motors OUT limits must be reset to factory standards. Please refer to the "Adjusting the Motors Limit Switches" section on page\_\_

**PROBLEM:**

The motor stops before the lead rail has closed completely into the awning cassette on either or both sides. There is no apparent binding of the awning components.

**SOLUTION:**

Your **G-2000** and **G-1500** Awnings are equipped with a manual override motor which has manual limit settings. The **IN** limit may need to be adjusted to allow the box to be closed tighter. "Adjusting the Motors Limit Switches" section on page 19-20.

**PROBLEM:**

As the awning is closing, the elbow of one or more of the arms is hanging down preventing the case from closing.

**SOLUTION:**

Please refer to the "Adjusting pitch and Arm (Elbow) Height on page 21-22.



## **WARRANTY LABOR TIME GUIDELINES**

<b>LABOR TO BE PERFORMED</b>	<b>TIME ALLOWED</b>
COMPLETE AWNING REPLACEMENT (WALL)	2 hrs.
COMPLETE AWNING REPLACEMENT (ROOF)	2 hrs.
FABRIC REPLACEMENT (WALL)	1 hr.
FABRIC REPLACEMENT (ROOF)	2 hrs.
MOTOR REPLACEMENT (WALL)	2 hrs.
MOTOR REPLACEMENT (ROOF)	3.5 hrs.
LATERAL ARM REPLACEMENT (PER ARM)	1 hr.
LEAD RAIL LATERAL ADJUSTMENT	20 min.
LEAD RAIL REPLACEMENT	2 hrs.
MOTOR LIMIT ADJUSTMENT	20 min.
ANEMOMETER REPLACEMENT	30 min.
CURRENT LIMITING DEVICE REPLACEMENT	30 min.
ANEMOMETER CONTROLLER REPLACEMENT	30 min.
ANEMOMETER CONTROLLER REPROGRAMMING	30 min.
REMOTE MOTOR/SWITCH/TRANSMITTER REPROGRAMMING	20 min.
ANEMOMETER WALL SWITCH REPLACEMENT	20 min.
WEATHER STRIPPING REPLACEMENT	1 hr.
MOTION SENSOR REPLACEMENT	20 min.

- These totals are applicable to flat-rate compensation based on applicable hourly service rates.
- Authorization must be obtained before beginning any repair. All claims will require the defective parts to be returned prior to any payment. If returned parts are found to be not defective there will be a 20% restocking fee. All replacement parts will be shipped by carrier via ground.
- If you have any questions or concerns about any of the labor functions or the time allowed, please contact Girard Systems' Warranty and Returns Department at (800)382-8442



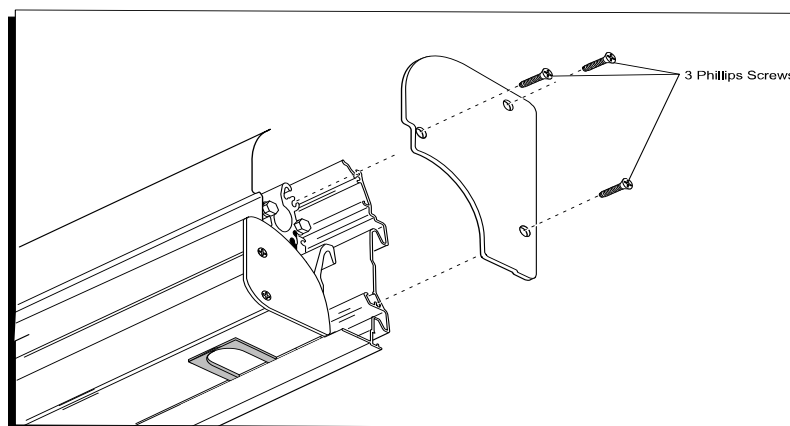
## **COMMON REPAIR PROCEDURES**

### **MOTOR REPLACEMENT**

**NOTE:** Replacement procedures vary due to motor styles, placement, factory installation methods, and preferences of different vehicle manufacturers. These variations primarily effect how the motors are accessed, replacement operations are generally the same for any situation.

#### **A. REMOVING THE OLD MOTOR**

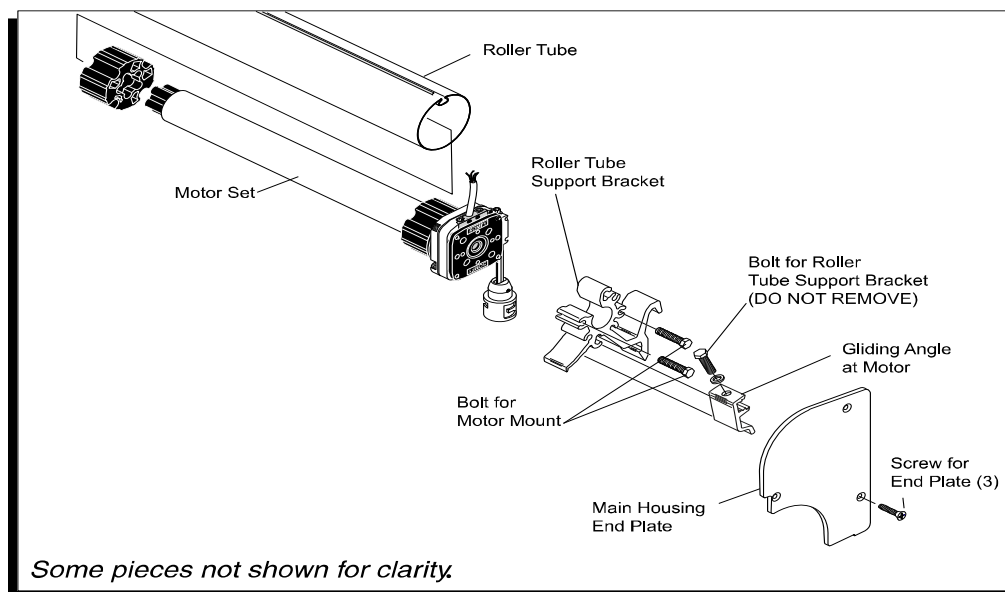
1. Fully extend the awning with the manual crank until the fabric is hanging directly from the bottom of the roller tube.
2. Remove the right-hand awning end plate by removing the three screws that secure it to the awning case. (Figure 22)



**(Figure 22)**

3. Remove both of the motor bolts that fasten the motor to the end bracket. Mark the slots from which the bolts were removed.
4. Loosen the small bolt that secures the roller tube support bracket to the main housing. **DO NOT OVER-LOOSEN OR ATTEMPT TO REMOVE THIS BOLT.** Slide motor support out of main housing.
5. From inside of the vehicle locate the motor cord. Find the termination point of the cord. (This may be located in a junction box used for the awnings, or an electrical junction box. These are typically located in an upper cabinet. The motor cord is white with four wires. Notate the points that each of the motor wires connect to. Disconnect all four motor cord wires.

6. Fasten a long “pigtail” extension to the motor cord (string, rope, a small wire, etc. can be used). This will allow you to pull through the new motor wire. Exit the vehicle and pull the motor cord completely through the wall.
7. Remove the screw that fastens the fabric to the roller tube. This screw is located along the edge of the roller tube near the head of the motor.
8. Carefully pull the old motor out of the awning roller tube. (Figure 23) Pull motor cord out of the hole in the back of the awning leaving the pigtail for the new installation.

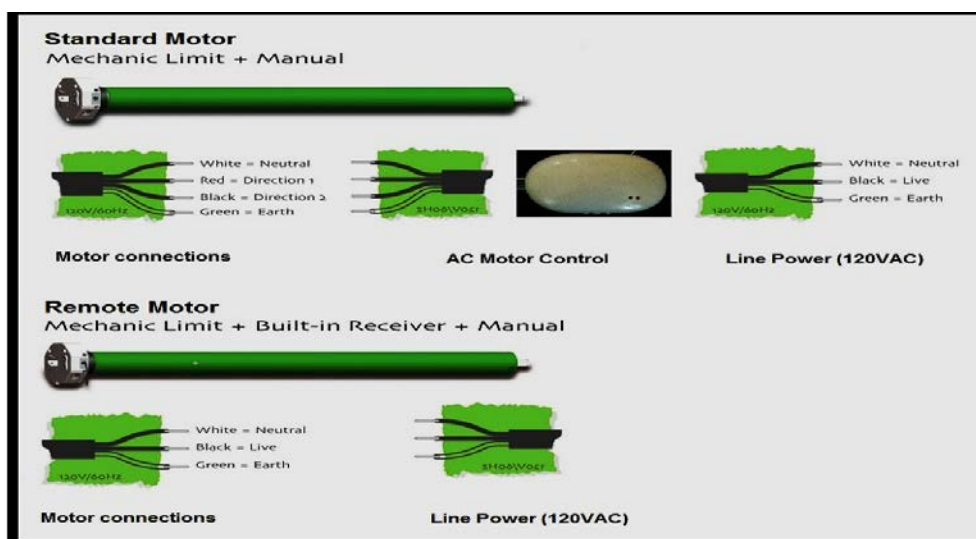


(Figure 23)

## B. INSTALLING THE NEW MOTOR

1. With the new motor in hand, align the notch in the black drive-disk (at the far end of the motor) with the indentation in the awning roller tube. Slide the motor all the way in. Turn the motor until its notch also lines up with the roller tube indentation.
2. Feed motor cord completely through strain relief in the back of the awning casing. Fasten the motor cord to the “pigtail” that was previously left.
3. Make sure the awning roller tube is still seated and connected into the roller tube support bracket at the opposite end of the awning.
4. Rotate the motor and roller tube assembly until the motor-limit switches are accessible. They will be at an approximate 6 o'clock position, The manual overdrive mechanism must have proper downward clearance.
5. Slide the roller tube bracket back into the cassette and then tighten the small bolt that secures the two brackets together.

6. Adjust the roller tube/ motor assembly until the threaded holes in the motor bracket line up with the two(2)holes that were marked previously. IMPORTANT NOTE: TAKE CARE WHEN ALIGNING THE MOTOR NOT TO DAMAGE THE MOTOR OR THE SURROUNDING PARTS.
7. Replace the end cap.
8. From the interior of the vehicle pull the motor cord all the way into the unit.
9. Wire the new motor as shown in Figure 24, according to the type of motor.
10. Test for the proper function of the new motor by using the Remote Control or the wall switch. Manually crank the awning to the closed position to adjust the motor limits.
11. After the motor has been replaced, the motors' limit switches must be adjusted. Please refer to the "ADJUSTING MOTOR LIMIT SWITCHES" section of this manual.
12. Manually employ the anemometer by blowing on the cups or by spinning them. Awning must retract, if not check motor connections for proper polarity. If your electronics system is equipped with a Motion Sensor, while extended, push up on the lead rail about 12" and let it drop. Awning must retract.



(Figure 24)



## **FABRIC REPLACEMENT**

**IMPORTANT NOTE:** These procedures require the use of a manual crank. if no manual crank is available the motor limit switches must be used to create the settings. please refer to the “adjusting motor limit switches”. use the motor sparingly to prevent overheating.

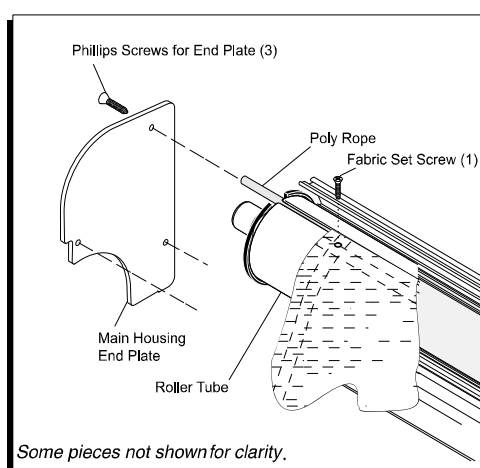
### **A. FABRIC REPLACEMENT PROCEDURE**

This procedure is recommended for all patio awnings that have been surface or recess mounted to the vehicles sidewall, as well as roofmount applications. In all cases the old fabric can be removed without having to remove the entire awning or the roller tube. All awning components will remain in position.

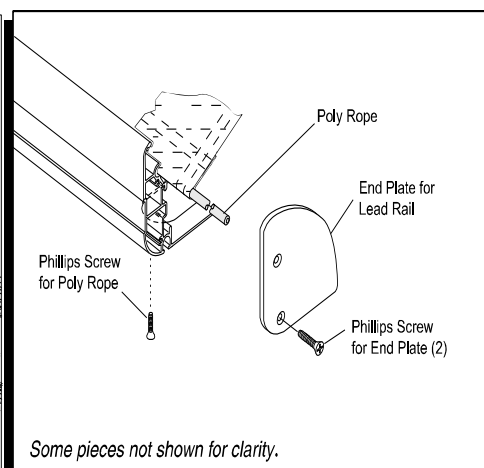
### **B. REMOVING THE OLD FABRIC**

1. Open the awning to full extension. Use the manual crank to continue rotating the roller tube until all of the fabric is unrolled and the C-shape channel of the roller tube is accessible. If no manual crank is available use the motor limit switches to adjust the OUT limit until the C-shaped channel is accessible
2. Remove the two fabric set screws. The two (2) fabric set screws are located on the lead rail.
3. Remove the corresponding lead rail end cap and housing end plate.

***See Figure 25 and 26.***



**(Figure 25)**



**(Figure 26)**



4. Carefully slide out the entire fabric from the left end of the roller tube and lead rail. Make sure the polyrope clears the support bracket.

**NOTE: FOR PERSONAL SAFETY, AND BEST RESULTS IT IS RECOMMENDED THAT TWO TECHNICIANS PERFORM THIS FUNCTION.**

### **C. INSTALLING THE NEW FABRIC**

**IMPORTANT:** Replacement fabrics are rolled for shipment. the seams must face downwards as the fabric is installed. there is a small white poly (polyester) rope inserted in the fabric that will slide into the roller tube.

1. Apply masking tape to the sharp edges of the lead rail's C-shaped fabric channel, and all sharp edges of the awning cassette and the roller tube support bracket. This will allow the fabric to enter the channel freely without snagging or tearing.
2. Insert the leading edges of the fabric into the C-shaped channel in the lead rail and roller tube on the side where the end caps have been removed. This function is the safest and most easily achieved with four people. Carefully slide the new fabric into the lead rail and roller tube simultaneously. Two people can pull the fabric through the channels while two others support the excess fabric and feed the fabric into the lead rail and roller tube.
3. Center the fabric on the roller tube and then smooth all of the wrinkles out at the lead rail. Insert a self-tapping screw into the roller tube on the side opposite the motor location. The fabric will center itself on the lead rail. (Figure 16)
4. Using the manual crank, slowly begin rolling the fabric onto the roller tube. Roll the fabric from the bottom of the roller tube.
5. Start retracting the awning using the remote control or the wall switch. Using two people carefully stretch the fabric from end to end during the first couple of revolutions of the roller tube. This will ensure that the fabric is rolling onto the tube straight. Continue to slowly roll the fabric onto the tube until the fabric is taut against the lead rail. Continue to roll the fabric onto the tube. Make sure the fabric rolls straight and the awning closes completely.
6. Open the awning about 18" and replace both fabric set screws on the lead rail.



**NOTE: These screws should be located no more than  $\frac{3}{4}$ " from the edge of the fabric. If necessary, re-drill the fabric set screw holes using a  $\frac{1}{8}$ " drill bit to maintain this distance.**

7. Reinstall both the lead rail and main housing end caps.
8. After the fabric replacement it may be necessary to make minor adjustments to the motor limit switches. The awning motor needs to stop the exact moment when the awning box is fully closed. Likewise, it is important that the awning motor stops just before the arms become fully locked in the extended position. (The fabric will be taut; the elbows slightly bent exposing about  $\frac{1}{8}$ ' of gap.) Please refer to the "ADJUSTING MOTOR LIMIT SWITCHES" section of this manual.

**IMPORTANT NOTE: THE HIGH-TORQUE MOTOR SUPPLIED WITH THE G-2000 AWNING IS DESIGNED TO RUN FOR ONLY FOUR (4) MINUTES PER HOUR. THE MOTOR HAS A BUILT-IN CIRCUIT BREAKER WHICH IS DESIGNED TO ACTIVATE IF THE MOTOR OVERHEATS. COOL DOWN TIME CAN BE UP TO AN HOUR DEPENDING ON THE OUTSIDE TEMPERATURE.**

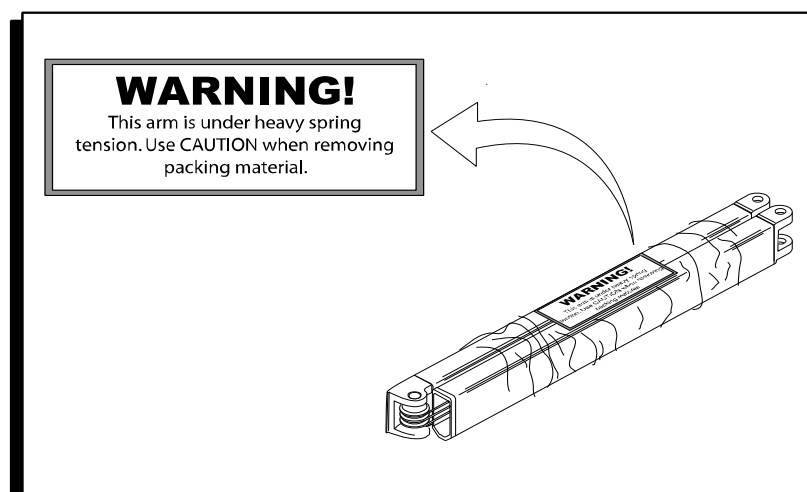
## **ARM REPLACEMENT**

Follow this procedure when a damaged, spring loaded arm needs to be replaced. There are no repairable parts inside of the arm, if the elbow joint has broken the entire arm must be replaced.

### **TOOLS REQUIRED:**

- 19mm ( $\frac{3}{4}$ ") open-end wrench
- 17mm ( $\frac{11}{16}$ ") open-end wrench
- 5mm ( $\frac{3}{16}$ ") allen wrench

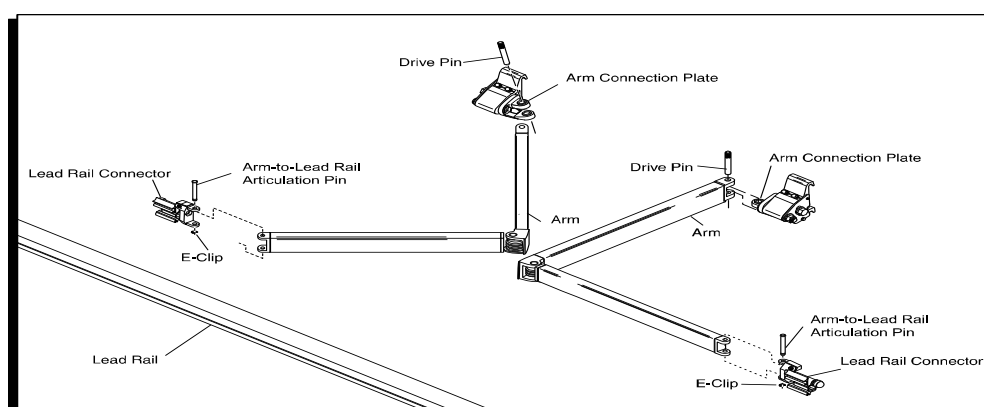
**EXTREME CAUTION MUST BE USED WHEN WORKING WITH THESE ARMS. ARMS ARE ALWAYS UNDER HEAVY SPRING TENSION. WHEN SHIPPED AS REPLACEMENT PARTS THEY ARE BANDED. (Figure 18) THE ARMS MUST BE HANDLED WHEN FOLDED UNTIL THEY ARE READY TO BE FASTENED TO THE LEAD RAIL.**



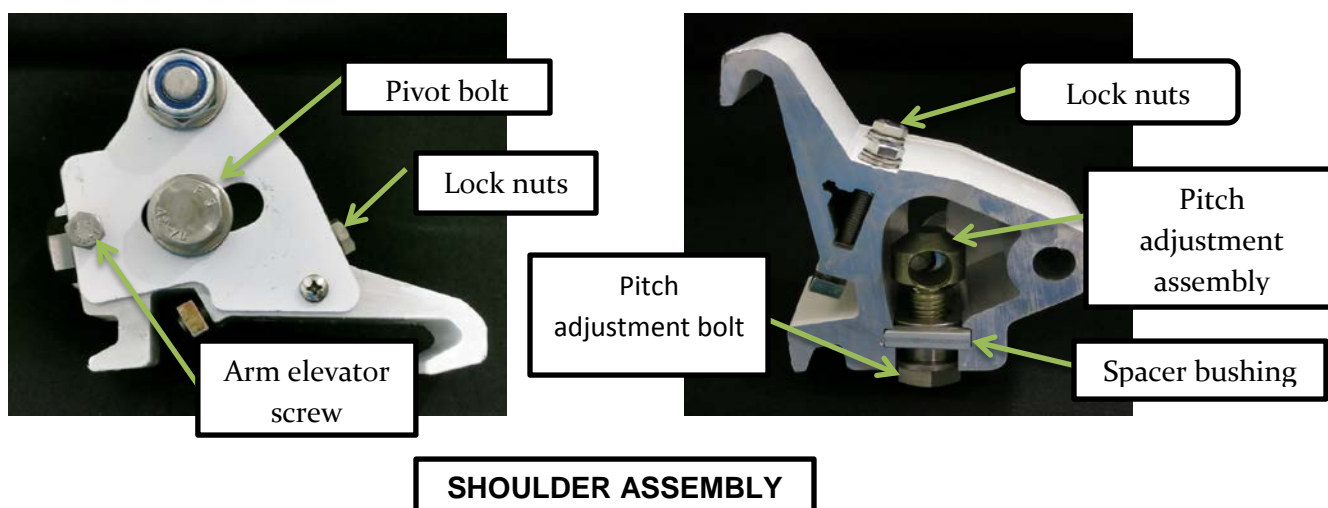
(Figure 27)

1. Support the lead rail and carefully open the awning a few feet. If the elbow is open tie a large rag around it to protect the fabric from the elbow.
2. Cut the stainless steel cable at the elbow to release the spring tension, then proceed with arm removal. If leaving the arm under tension, remove the 17mm nut at the lead rail connection, fold and tape the arm very carefully, then proceed with arm removal.
3. On the lead rail side of the arm remove the 17mm nut and washer, set them aside to later connect the new arm.
4. At the shoulder assembly of the arm, in the cassette, remove both 19mm lock nuts and washers, or the bolt and nut.
5. Remove the forward most bolt from the arm and shoulder connection. Use this bolt for the new arm installation if new hardware is not provided. Hold the bottom pitch adjustment block with your thumb to keep it from falling. When removing the arm from the shoulder pay special attention to the parts located in the shoulder washer-square tube pitch adjustment screw and block.
6. Carefully slide the arm and remaining bolt away from the shoulder.
7. **Do not unband new arm until it has been fastened to the shoulder inside of the cassette.**
8. **If the arm you are replacing has a fixed bolt:** Insert the arm into the shoulder, ensure that the fixed bolt on the arm goes through the pitch adjustment assembly, the spacer bushing, and the washer. (These are the components inside of the shoulder) Insert the previously removed bolt and nut. **If the arm you are replacing does not have a fixed bolt:** Use the bolt supplied with the arm, slide through the spacer bushing for shoulder support, the pitch-adjustment assembly, and the arm connection plate. Insert the previously removed bolt and nut.

9. With the awning open about 18", **unband the high tension arm very carefully.** Slowly guide it into position on the lead rail and fasten with the 17mm bolt and nut.
10. Attach the front of the arm to its connection point at the lead rail by replacing the pivot pin from the top and securing it with the retaining ring (F-clip). (Figure 28) Then slide into the lead rail connection and replace the nut and washer. At the shoulder assembly of the arm, tighten both lock nuts until they are one turn from being tight. Adjust the arms' pitch angle to match the others by rotating the head of the pitch-adjustment screw as follows; rotate in a clockwise direction to lower the arm, or rotate counterclockwise to raise it. Fully tighten both lock nuts on the shoulder assembly. Please refer to the "ADJUSTING THE PITCH ANGLE" section of this manual.



(Figure 28)





## **CARE AND MAINTENANCE GUIDE**

### **AWNING FABRICS**

#### **100% Acrylic Fabric Care Guidelines**

- Use only mild soap (no harsh chemicals or detergent)
- Use only cold to lukewarm water (not hot water)
- Air dry only (to prevent shrinkage and damage)

### **STAIN SOLUTIONS**

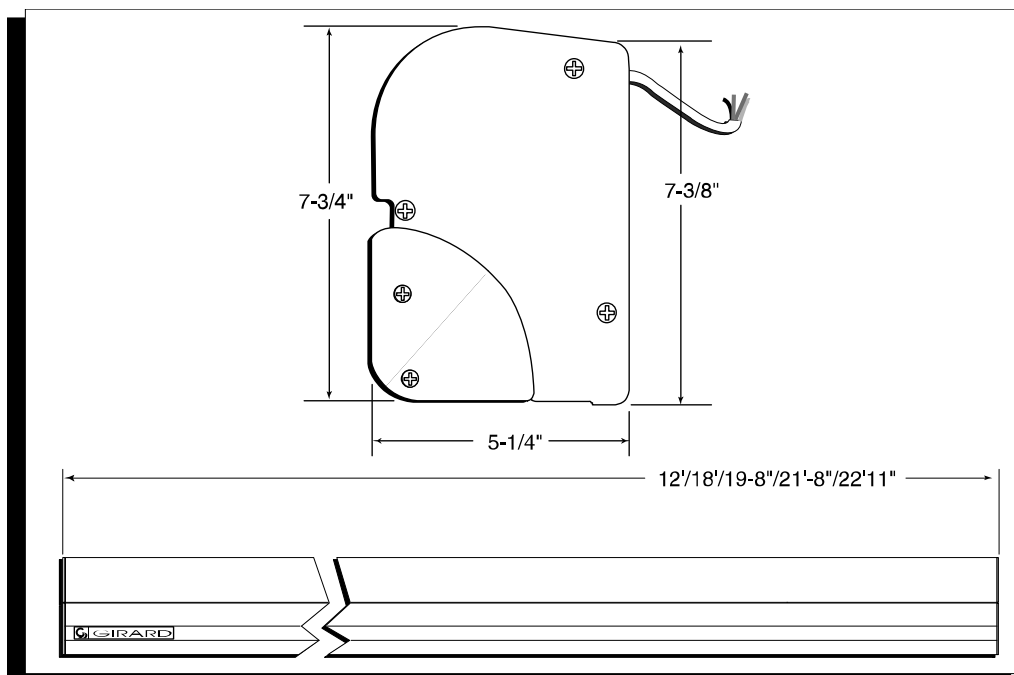
- |                        |   |
|------------------------|---|
| • Fruit stains:        | liquid detergent/ ammonia 3-6% water (per gallon) |
| • Grease (automotive): | volatile solvent (acetone)                        |
| • Iron rust:           | oxalic or citric acids, water                     |
| • Mildew:              | ½ C bleach + ¼ C natural soap per gallon of water |
| • Oil:                 | liquid detergent, water                           |
| • Paint (latex), wet:  | paint/ oil/ grease remover                        |
| • Paint (latex), dry:  | paint/ oil/ grease remover                        |
| • Tree sap:            | turpentine, liquid detergent                      |

### **CLEANING YOUR AWNING**

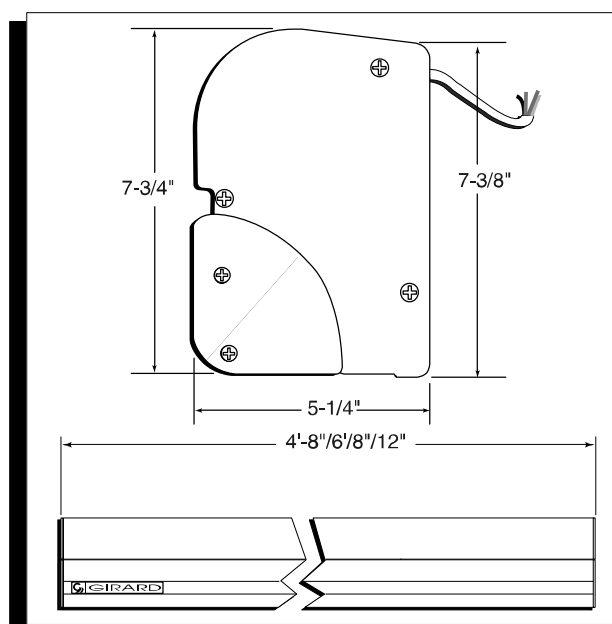
1. Brush off surface dirt.
2. Hose down the fabric
3. Prepare soap mixture in a clean bucket.
4. Dunk a clean, soft bristle brush into the mixture.
5. Use sweeping motions to clean the awning.
6. Allow soap to soak in and capture dirt.
7. Rinse thoroughly to remove all residues.

**IMPORTANT NOTE: FABRIC MUST BE AIR DRY ONLY! Pressing, steaming, or machine drying will shrink awning fabric.**

## TECHNICAL SPECIFICATIONS



**G-2000 Awning Case Dimensions (External)**



**G-1500 Awning Case Dimensions (External)**



## **I. Awning Case**

### 1. Height:

- a. 7-3/8" at mounting point
- b. 7-3/4" at front

### 2. Width: 5-1/4"

### 3. Weight: **G-2000**

- a. 12'0" Awning - 116 lbs.
- b. 18'0" Awning - 172 lbs.
- c. 19'8" Awning - 188 lbs.
- d. 21'8" Awning - 208 lbs.
- e. 22'11" Awning - 220lbs.

### **G-1500**

- a. 4'8" Awning - 40 lbs.
- b. 6'0" Awning - 55 lbs.
- c. 8'0" Awning - 70 lbs.
- d. 10'0" Awning - 85 lbs.
- e. 12'0" Awning - 95 lbs.

### 4. Fabric: 100% woven acrylic

## **II. Roller Tube**

### 1. Diameter: 3"

## **III. Motor Specifications**

- 1. Type: Tubular with manual override
- 2. 120V AC - 60 Hz
- 3. 13 RPM - 4-minute maximum run time
- 4. 2.2 Amps - 235 watts
- 5. 50 Nm
- 6. Thermal-protected

- 1. Type: Tubular motor
- 2. 12VDC
- 3. 7 RPM – 4 minute maximum run time
- 4. 7 Amps – 84 watts
- 5. 35 NM

## **IV. Mounting Brackets**

### 1. Height: 7-5/16"

### 2. Width:

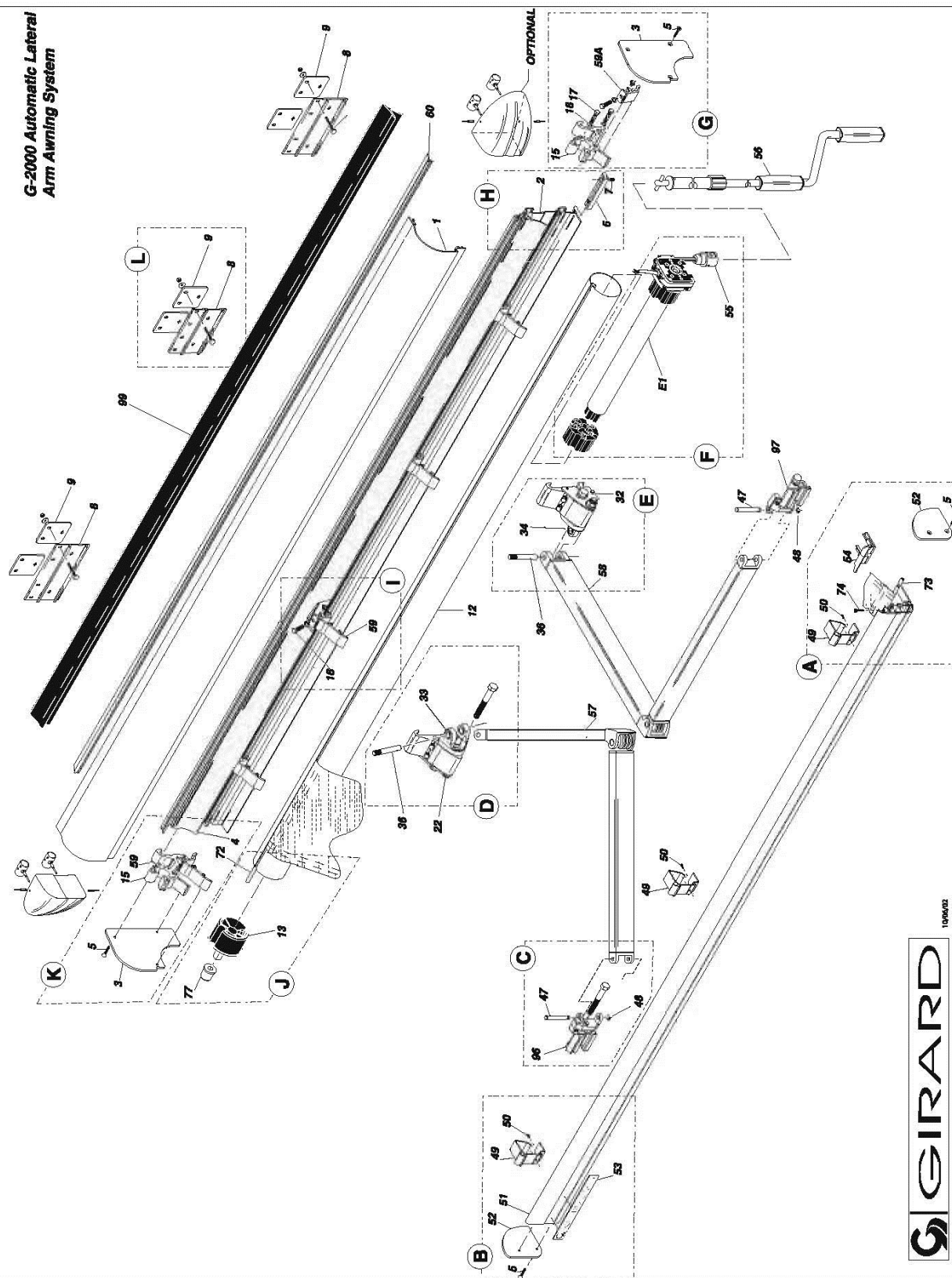
- a. Outer brackets: 19-1/2"
- b. Center bracket: 11-1/2" (over 18')
- c. Center bracket: 4" (14'–18')

## **V. Cord/Cable Lengths**

- 1. Awning Motor: 6-ft. cord
- 2. Anemometer: 6-ft. cord
- 3. Wall-Mounted Rocker Switch (G-2000): 10-ft. low-voltage cable
- 4. Wall-Mounted Paddle Switch (G-1500): 10-ft. low voltage cable



# G-2000 Automatic Lateral Arm Awning System

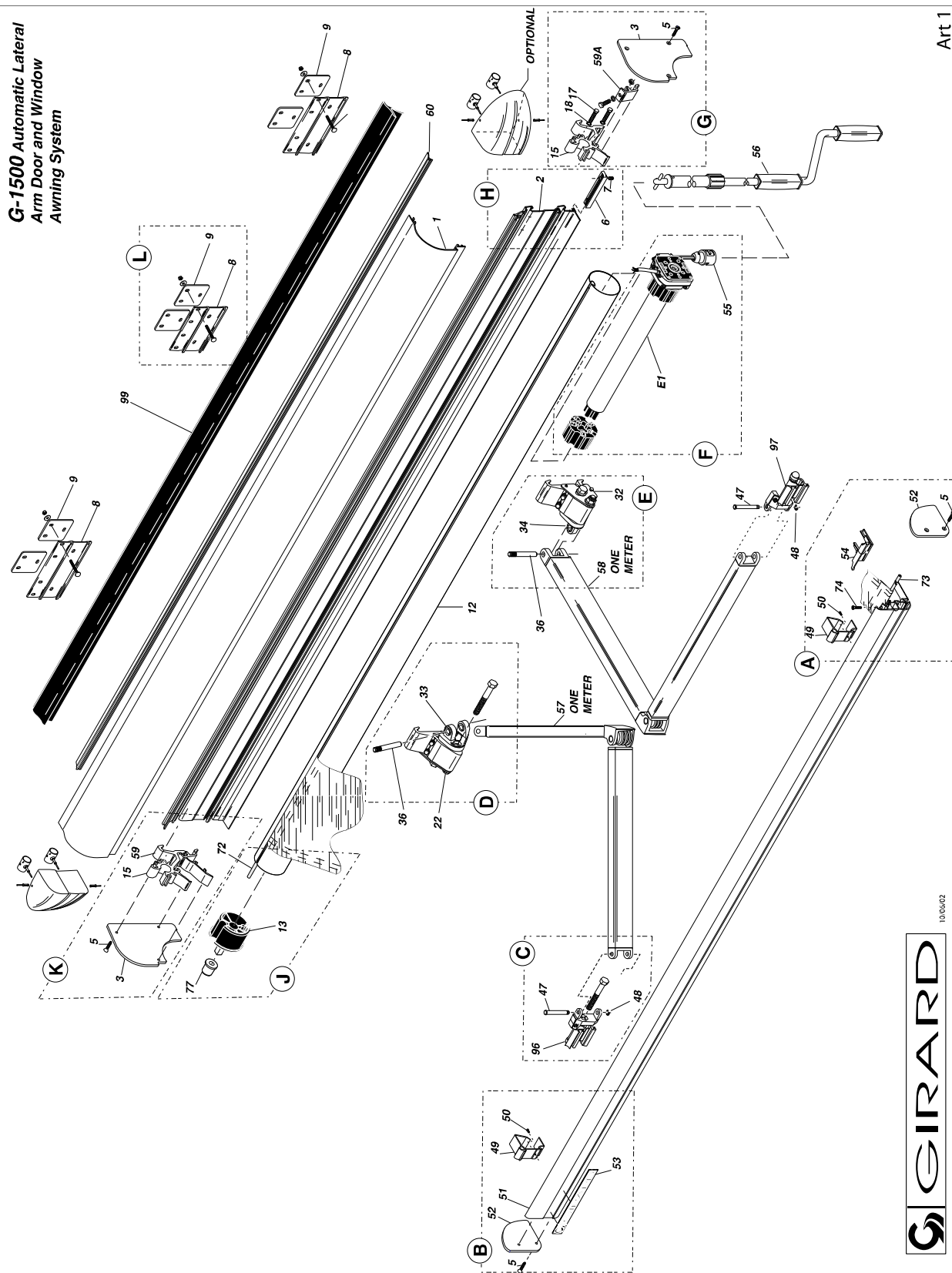


**GIRARD**

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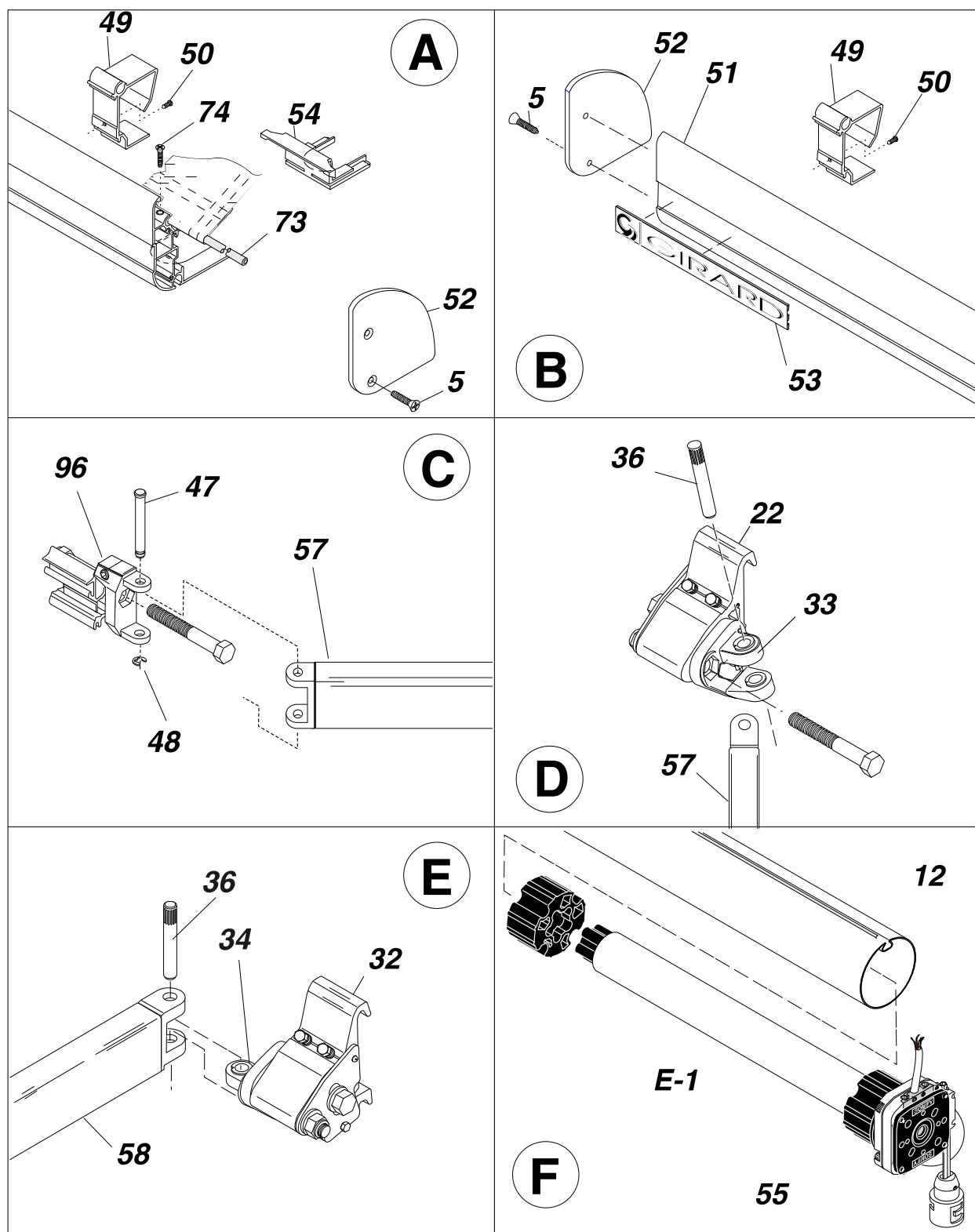
**G-1500 Automatic Lateral  
Arm Door and Window  
Awning System**

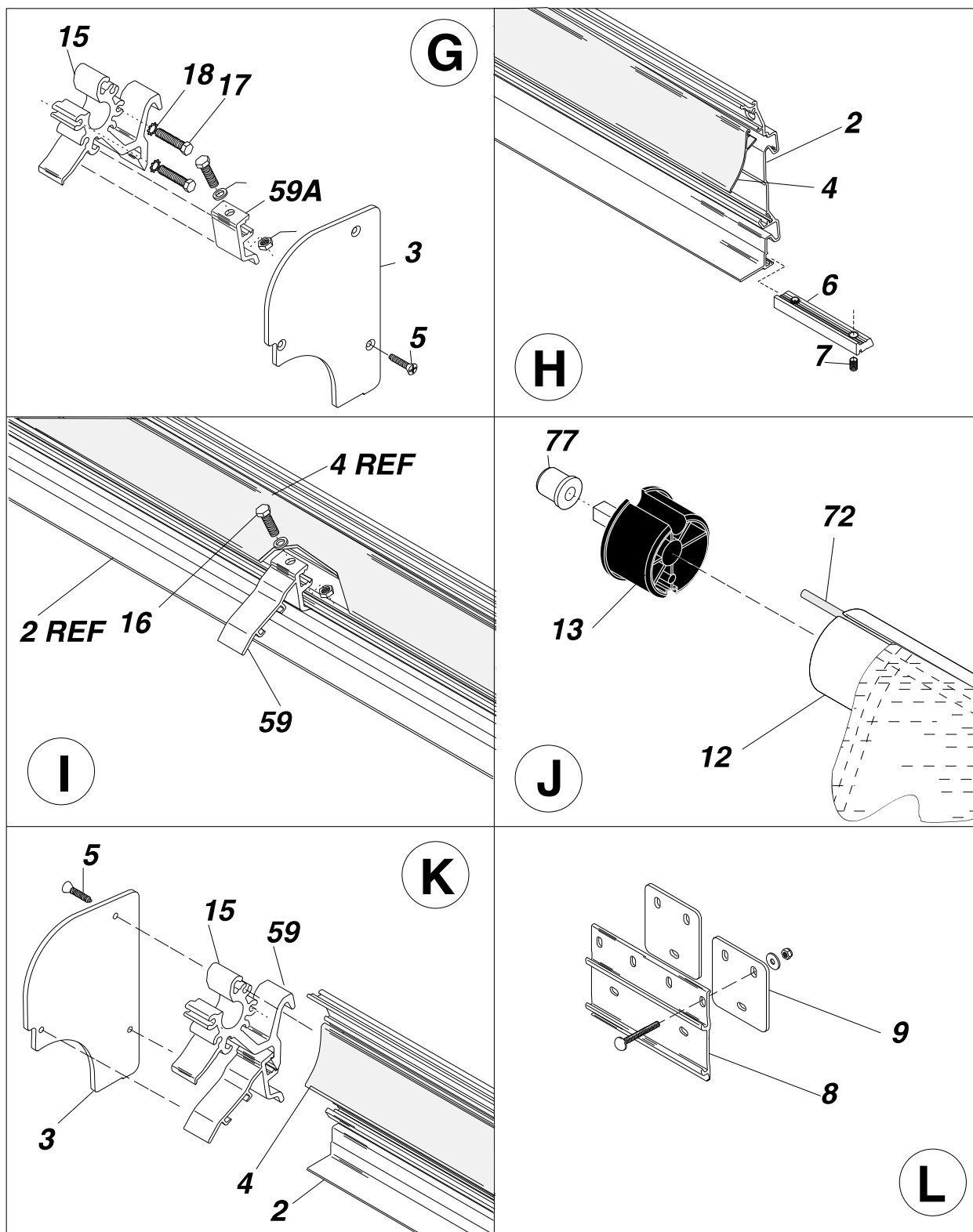


Art 1

**GIRARD**

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NOTES: