



# **GIRARD SYSTEMS**

**RV AWNING PRODUCTS**

## **NOVA**

**Dual pitch, cassette patio awning**

## **OWNERS MANUAL**

**INSTALLATION, OPERATION, ADJUSTMENT AND REPAIR**

**Rev. 010112**

**1361 Calle Avanzado, San Clemente, CA 92673 (949) 259-4000 Fax (949) 276-5500**



# **Girard Systems- Warranty Procedures**

## **Return Policy**

For all returns, please contact Girard systems Warranty and Returns Department Monday thru Friday 7:00am to 5:00pm PST at 1.800.382.84442. A "Return Goods Authorization" number must be obtained for all returned goods. You will use this RGA# as reference for all returns, and warranty claims. All returns must have the RGA# clearly marked on the packaging and on all shipping documents. All freight costs for returned goods shall be prepaid by the purchaser. All freight costs for returned goods considered under warranty for defects, etc. will be reimbursed to the purchaser. Girard Systems will not pay for expedited freight in any circumstance. All products are built to customer specifications therefore all returned goods must have prior authorization(RGA#). Goods that can be re-stocked are subject to a 20% restocking fee, this will be reflected in any credit due. Items that have custom powder coating, custom painting, special order fabric and any anodized parts are non returnable.

## **Warranty Parts and Labor Claims**

All service, repair work, and returns must have prior authorization from Girard Systems to be eligible for reimbursement. Please obtain an RGA#, as instructed above, for all warranty, parts, and labor claims. All claims can be tracked by referencing this RGA#.

**WARRANTY PARTS** – All warranty parts to be returned will be tracked by their RGA#. Girard Systems does not always require warranted parts to be returned, this is at the sole discretion of the Warranty and Returns Department. All replacement parts will be sent at no charge via ground delivery. All parts requested to be sent expedited will be at the expense of the purchaser. In the case a warranted part requires a credit in lieu of replacement, a credit will be issued in the amount of the original purchase price. In most cases returned good credits will be issued, or sent within thirty(30) days on receipt of claim paperwork or returned parts.

**LABOR CLAIMS** – All labor claims are subject to either time guidelines or flat rate according to the specific service performed. All labor claims must have a repair order to be processed. This repair order must include; a description of all labor performed, hourly labor rate, all returned parts and an RGA#. In most cases labor claims will be issued within thirty(30) days of receipt

## **Freight Damage Procedure**

**ALL CONCEALED DAMAGE MUST BE REPORTED WITHIN 5 DAYS OF RECEIPT**  
**ANY SHORTAGE TO AN ORDER MUST BE REPORTED WITHIN 10 DAYS OF RECEIPT**

Any visible damage to a shipment must be reported immediately. Please contact the freight carrier and then report damage to Girard Systems. If possible, please photo document any damaged items. Please retain original packaging for any damage returns. Replacement items may need to be ordered depending on the extent of loss or damage. In the event that a shipment is refused due to damage please file a claim with the carrier. The carrier will return the items to Girard Systems. Please contact Girard Systems immediately for replacement goods..



**Girard systems**  
**RV AWNING PRODUCTS**

## **WARRANTY UPDATES**

**EFFECTIVE MARCH 1, 2009**

### **Products**

- G-1500
- G-2000
- **ELITE**
- NOVA
- G-2085
- G-5000

### **LIMITED LIFETIME WARRANTY**

This Limited Lifetime Warranty is applicable to the original owner of the product. This warranty states that the Main Housing of the awning will be free from defects in materials and workmanship during normal use. This warranty implies no coverage of the arms, or any of the interior components or hardware.

This warranty covers the painted surfaces for five(5) years. This only applies to Girard Systems factory "powder coated" finishes, black and white. This warranty does not include OEM/Aftermarket custom painting, or any finish modifications. Painted surfaces are subject to normal fading. This warranty is null and void if proper care and maintenance guidelines have not been followed.

- |                      |                                   |
|----------------------|-----------------------------------|
| • <b>PARTS</b>       | <b>FIVE YEAR LIMITED WARRANTY</b> |
| • <b>ELECTRONICS</b> | <b>FIVE YEAR LIMITED WARRANTY</b> |
| • <b>FABRIC</b>      | <b>FIVE YEAR LIMITED WARRANTY</b> |
| • <b>LABOR</b>       | <b>ONE YEAR LIMITED WARRANTY</b>  |
| • <b>FREIGHT</b>     | <b>ONE YEAR LIMITED WARRANTY</b>  |
- 
- **All replacement parts, electronics, and fabrics will continue to be warranted by Girard Systems for the remainder of the original warranty.**
  - **All purchased replacement parts, electronics, and fabrics are carry a one(1) year replacement warranty and a ninety(90) day labor and freight warranty**

- **All other warranty terms, conditions, and procedures are located in Girard Systems Product Manuals.**

## **WARRANTY**

Girard Systems provides a Limited Lifetime Warranty for the following products; **G-2000** Automatic Lateral Arm Awning System, **G-1500** Door Awning, **NOVA**, **ELITE**, and **Window Awning** Systems. This Limited Lifetime Warranty states that all awnings will be free from defects in materials and workmanship during normal use for its intended purpose as long as you (original owner) own it. If you are not the original owner the warranty will be for a period of five(5) years from date of purchase. The fabric, motor and electronics will be warranted for a period of five(5) years from original date of purchase, regardless of the original owner.

All warranty claims must be submitted to Girard Systems by written notification. Girard Systems will repair or replace any part that is not operating as specified due to a parts defect or normal wear and tear in the allotted warranty period. However, Girard Systems will not warranty items damaged due to neglect, misuse, or failure to adhere to the operating and installation instructions included in this manual. This warranty will not be applicable if the awning has been altered or repaired by any individual that is not an authorized service agent of Girard Systems.

Girard Systems does not warrant that the awning meets the requirements of any laws or regulations of any county, state, municipality or other jurisdiction. The purchaser assumes all risks and liability whatsoever resulting from the use thereof.

**EXCEPT AS SPECIFICALLY PROVIDED HEREIN, GIRARD SYSTEMS MAKES NO WARRANTY OR REPRESENTATION, PROMISE OR GUARANTEE, EITHER EXPRESSED OR IMPLIED, WITH RESPECT TO ITS AUTOMATIC LATERAL ARM AWNING SYSTEM, INCLUDING ITS QUALITY, PERFORMANCE, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO ONE, OTHER THAN THE PRESIDENT OF GIRARD SYSTEMS, IS AUTHORIZED TO MAKE ANY MODIFICATIONS OR ADDITIONS TO THIS WARRANTY. IN NO EVENT SHALL GIRARD SYSTEMS BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING OUT OF THE USE OF OR IN ABILITY TO USE THE AWNING SYSTEM. IN NO EVENT SHALL GIRARD SYSTEMS' AGGREGATE LIABILITY HEREUNDER, IF ANY, EXCEED THE COST OF REPAIR OR REPLACEMENT OF THE AWNING SYSTEM.**

### **CAUTION**

Girard Systems awnings may be operated in light wind and rain conditions, however, when periods of heavy rain and/or wind are expected or you leave the awning unattended, the awning should be closed.

**Damage caused by wind and rain is not covered by warranty.**

All awnings must also be closed prior to moving the vehicle for any reason. As an extra safety precaution a visual check that the awning is fully closed is required.

**Damage caused by failure to comply with these instructions is not covered by warranty.**

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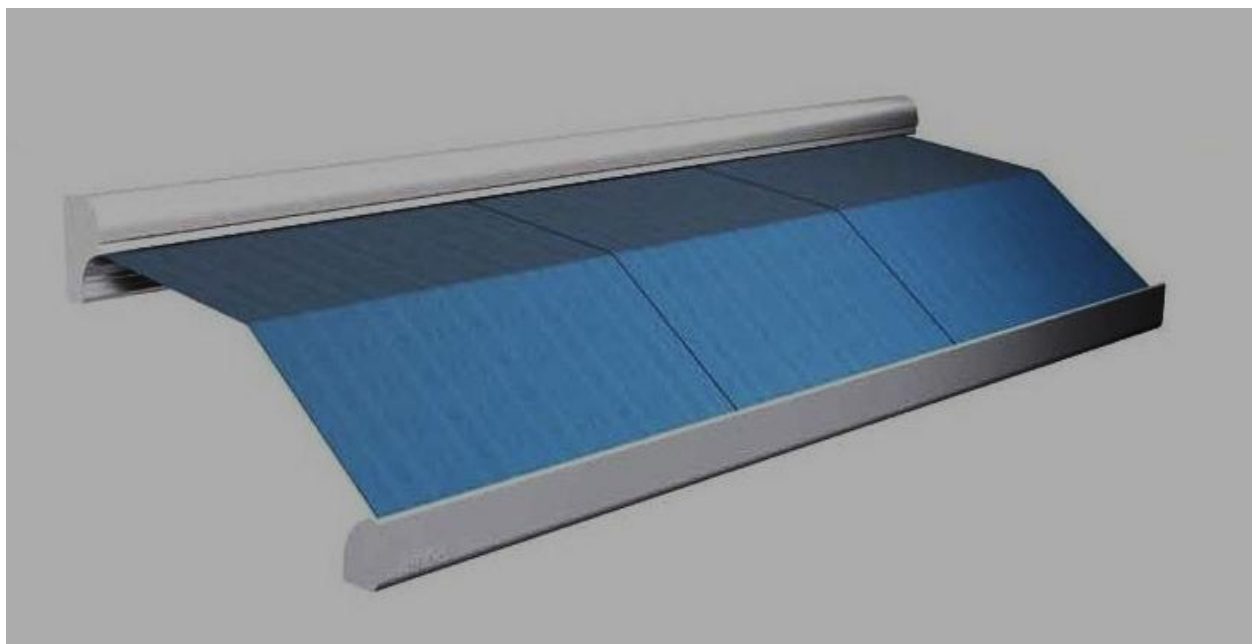
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## **Basic System Overview**

The **NOVA Awning** is the newest edition to the Girard Systems product line. The design of the product was tailored to be specific to the requirements of an RV while also adding a new element of style and class for all applications.

This awning has particular value when the product is installed over an RV's slide out. The **NOVA Awning** does not have the same slope limitations as a single pitch awning.

The addition of the second slope brings the lead rail to a level that offers excellent shade protection even when the sun is low on the horizon..



### **THE NOVA AWNING SYSTEM**

The design of the **NOVA Awning** maintains the same proven mechanical strength of Girard Systems revolutionary product the **G-2000**, while still keeping the same compact configuration and attractive appearance.



Your NOVA Awning consists of three main components:

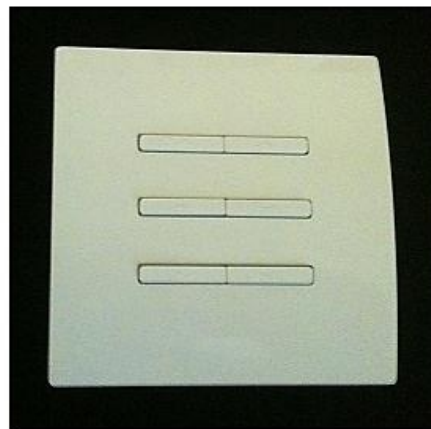
1. **Mechanical system** – consisting of:

- The enclosure (or cassette) protects the awning 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.
- Wireless Motor – This motor does not require a motor control.

3. **User Controls** – for awning operation



## **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 **NOVA Awning** is operated using a 110Volt AC motor. However, some Girard Systems awnings are equipped with 12Volt DC motors.

### **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 @[www.girardrv.com](http://www.girardrv.com)

# **INSTALLATION MANUAL**

## **Product description**

The **NOVA** dual pitch awning system provides protection from the sun at a touch of a button. The **NOVA** awning is built to your specifications with the highest quality materials available, your unit 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 **NOVA** 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.**

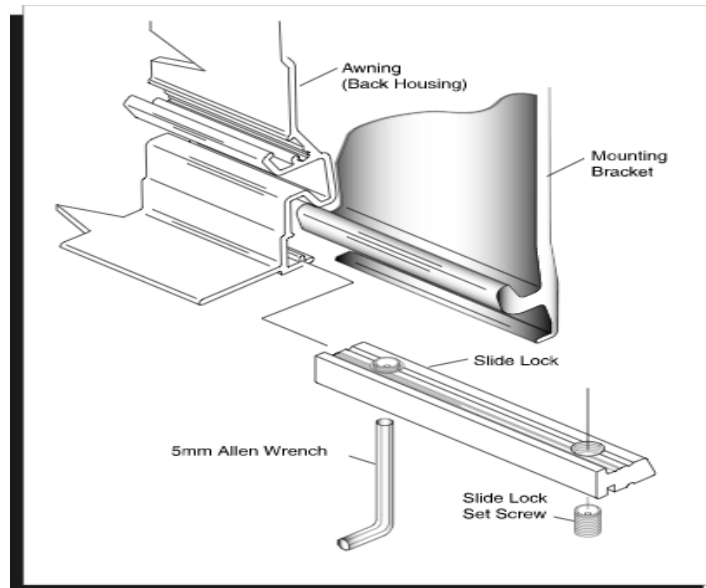
- Turn off power before beginning any electrical work.
- Please consult your RV's wiring diagram to locate any wiring prior to any drilling or any installation procedures.
- Ensure that placement of controls, cables, and wires are not in any way obstructed. This can damage the components and obstruct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

- **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. 1)
  - 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 1)

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

**A. ROOFMOUNT APPLICATION – NOTE:** The clearance needed for roofmount application of the NOVA varies by manufacturer. **NOTE:** THE LEAD RAIL OF THE NOVA Awning WILL DROP IMMEDIATELY AFTER DEPLOYMENT. The shape of the roof, the depth of installation, type of roofmount bracket used and all other factors should be taken into consideration when installing this product.. Please consult Girard Systems if there are any questions regarding your installation.

1. When using the roofmount application, roofmount brackets can be ordered through Girard Systems or you may have your own fabricated. These brackets will be used in conjunction with the mounting brackets supplied with your awning.
2. Determine the location for the final installation position of the awning, including depth to be installed.
3. Roofmount 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 reference this line to install the smaller center bracket at a later time.

4. To find the location of the smaller center bracket please refer to the chart on the following page. **NOTE: The location of the center bracket must fall directly centered behind the center arms 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. **NOTE: It is up to the installer to find adequate structure to fasten the roofmount brackets to. All caution must be taken to weather seal all installation perforations. Failure to do these items could result in damage to the vehicle.**
6. With the roofmount brackets now installed you may now install the awnings' mounting brackets. Using the hardware kit (7/16" carriage bolts) supplied with your awning, bolt the mounting bracket to the roofmount brackets through the pre-aligned holes.
7. Before installing the awning locate the motor location of the awning and pre-drill a 7/16" hole for the awning motor wire. Make sure you will be able to access the necessary electrical wiring before drilling the hole.

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

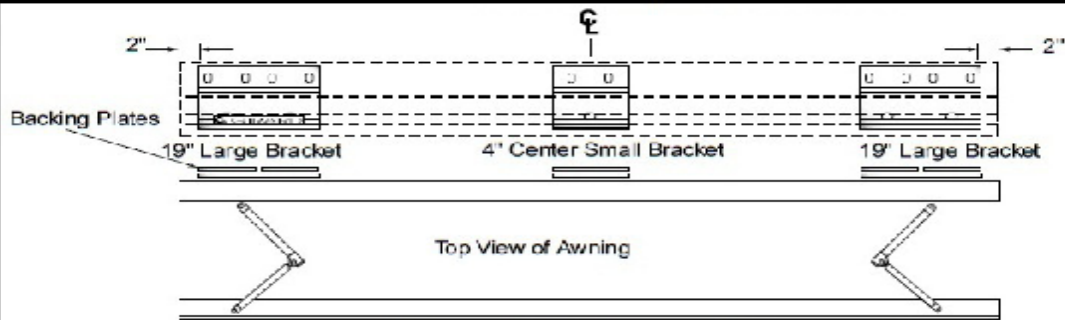
**B. SIDEWALL APPLICATION – NOTE: Please take into consideration all possible clearances, and obstacles before installing this awning. Items such as slide rooms, etc. vary from one manufacturer to another. Please consult Girard Systems if there are any questions regarding your installation.**

1. The mounting brackets and hardware used for this application are included with your awning.

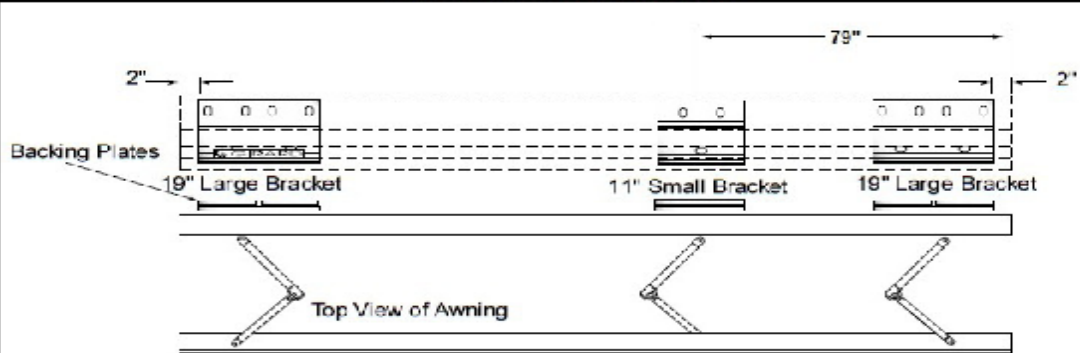
2. Determine the location for the final installation position of the awning, including height to be installed.
3. Mounting brackets must be installed within two(2) inches of the ends of the awning. Once you have determined the location of the two end brackets snap a chalk line between the two points 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.



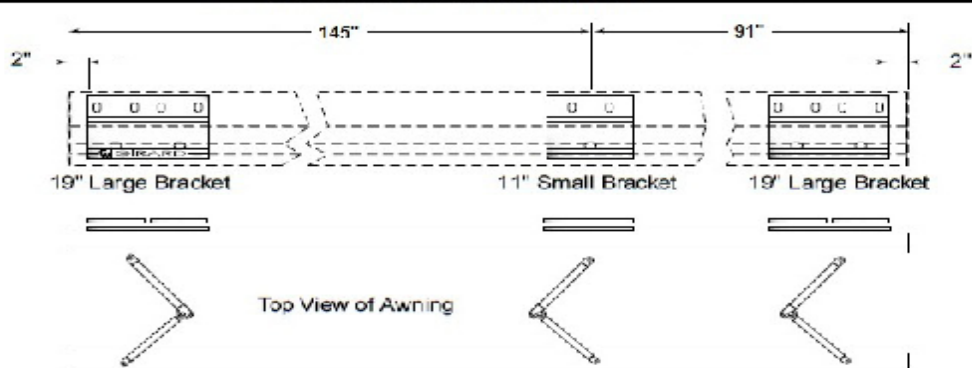
#### Placement of Brackets for Awnings under 17'



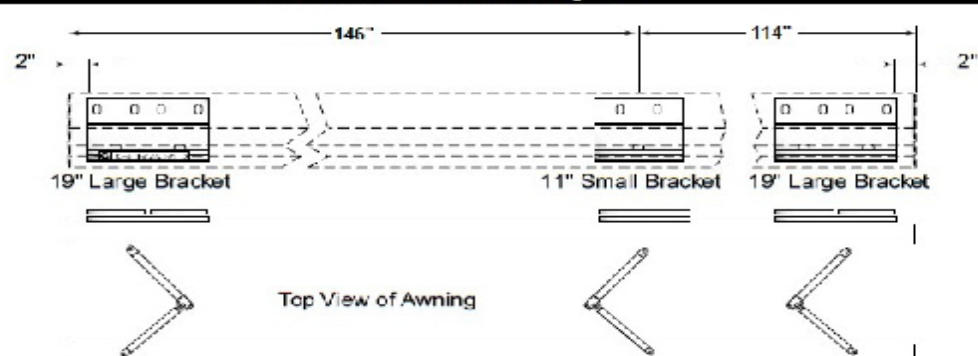
#### Placement of Brackets for Awnings 18'



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



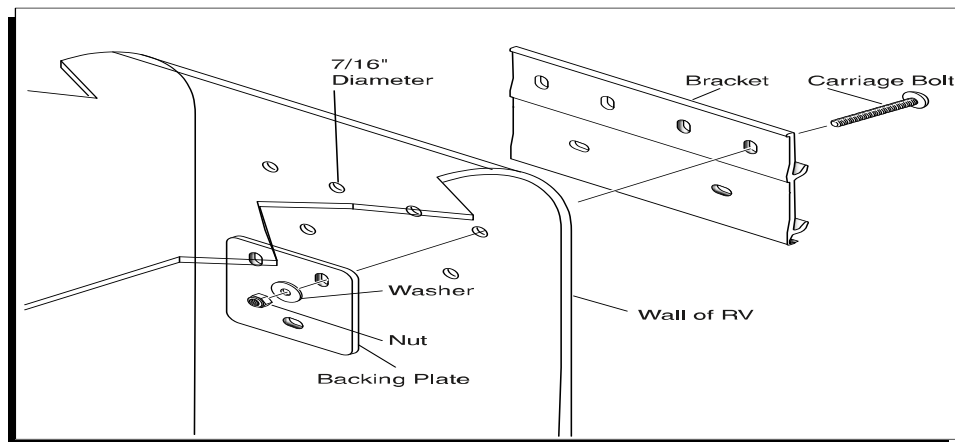
#### Placement of Brackets for Awnings 21' 8"



Two arms for awnings 17' 11" or less, two right arms, one left for awnings 18' or larger  
Brackets should be placed directly behind the arms of the awning.

Diagrams not to scale

4. To find the location of the smaller center bracket please refer to chart on the previous page.. **NOTE: The location of the center bracket must fall directly centered behind the center arms 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)



(FIGURE 3)

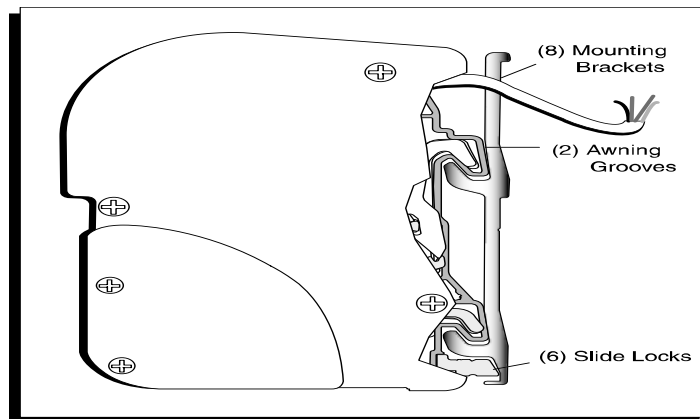
10. Tighten bolts and then apply silicone caulking to the top edge and both sides of each bracket.
11. On the motor side of the awning drill a 7/16" hole for the awning motor cable to enter the RV near the electrical source. Position the hole 1" to the left or right of the bracket. Do not drill hole higher or lower than the bracket. This will ensure that 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.

## **C. 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 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 of the awning are securely engaged into the channels on the bracket. (Figure 4)
3. Secure the awning by moving the slide locks 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.

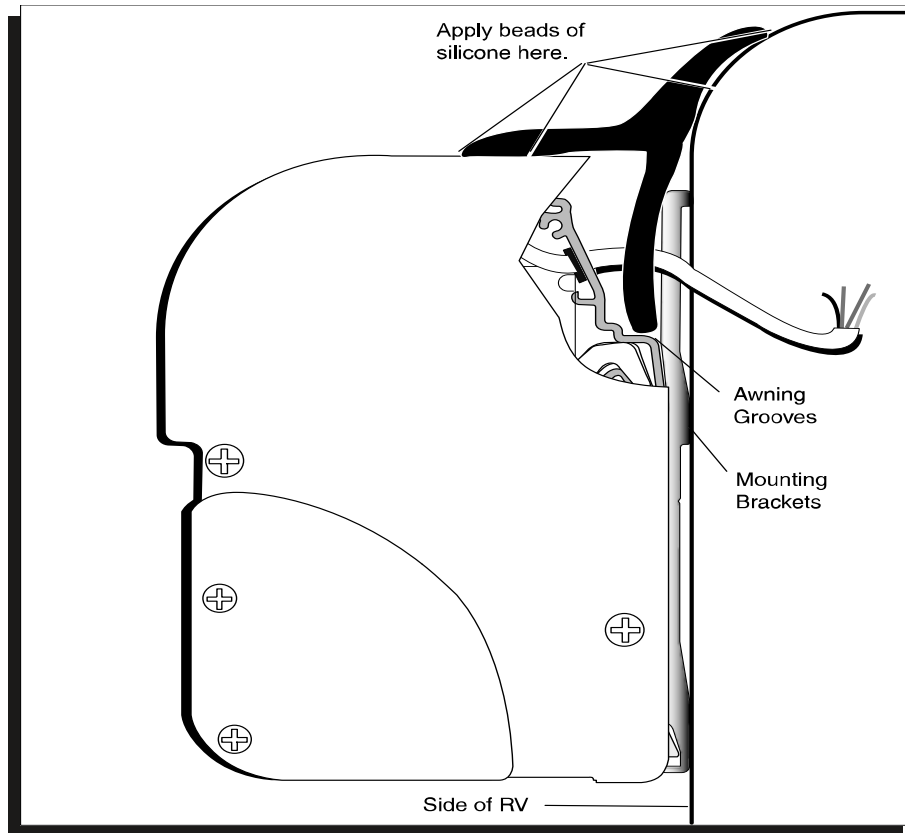
4. Once the final location of the slide locks has been achieved, tighten both set screws on each slide lock with a 5mm allen wrench.



**(FIGURE 4)**

## **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 5.
4. Push weather stripping firmly into place.
5. Wipe off excess silicone.

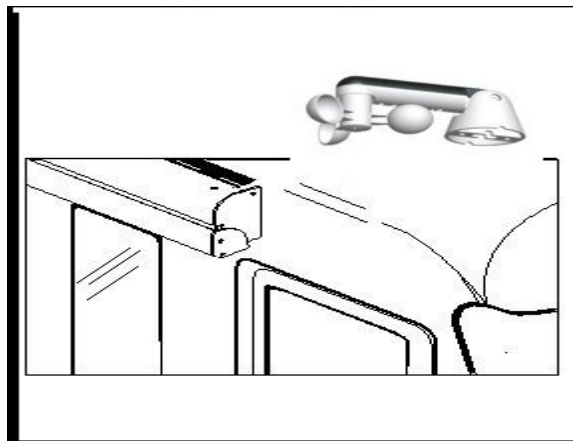


(Figure 5)

## **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 6)
2. Position anemometer as follows:
  - A. On and parallel to the roofline
  - B. Near the awning to ensure the windspeed is measured accurately
  - C. Away from all obstructions (air conditioners, storage pods, etc.)

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 6)

## **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.

PICTURE HERE

FIGURE 7

## **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**

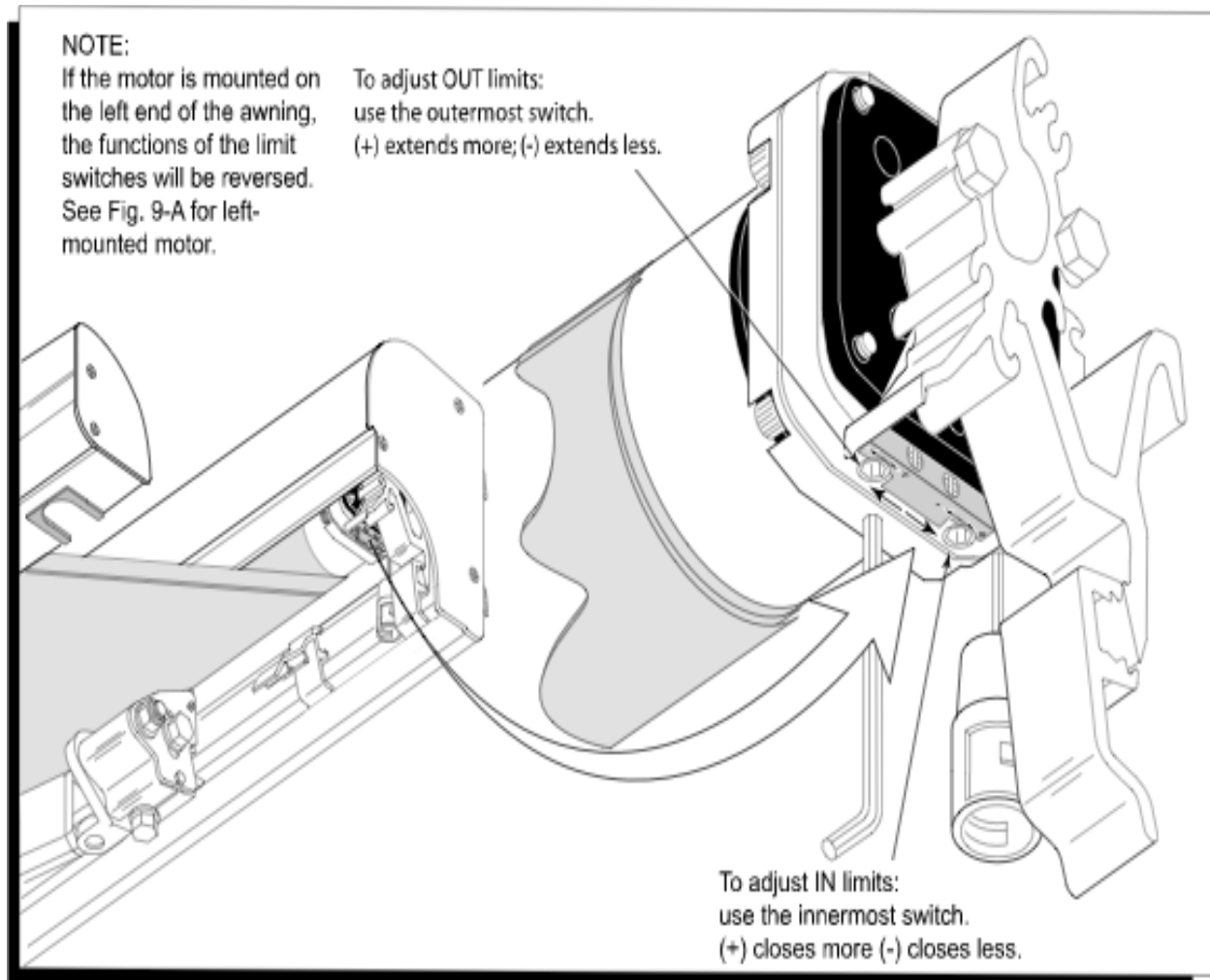
**NOTE:** The motor limit switches have been adjusted to the correct position at the factory prior to shipment. The awning motor is set to stop the exact moment the awning box closes. The fabric should be taut, the arms should be slightly bent, exposing a 1/8" gap at the elbows **when fully extended.**

**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 reference 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 8)

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**

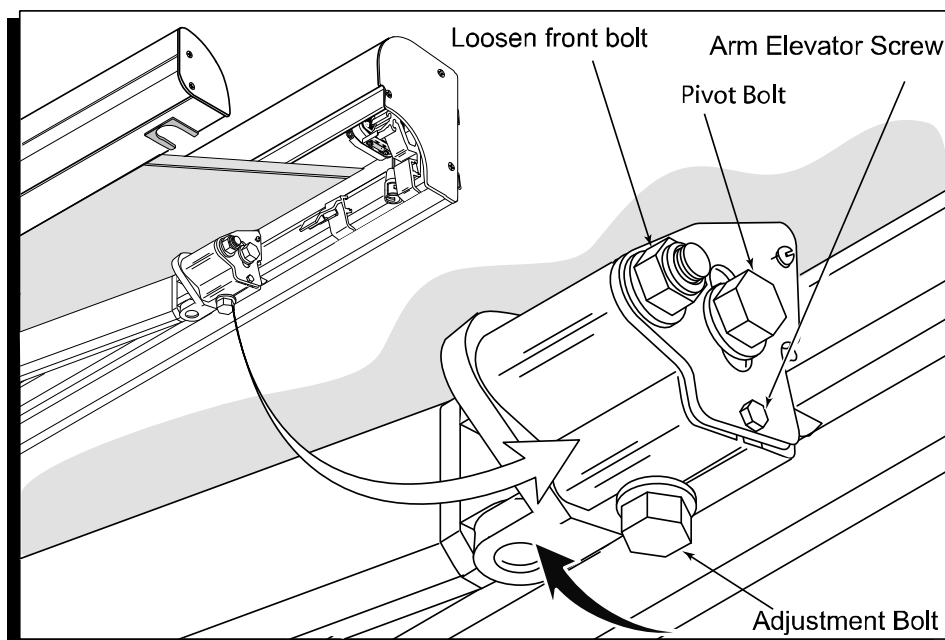
- 19mm (3/4") open-end wrench
- 10mm (3/8") open-end wrench

**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 9) 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.

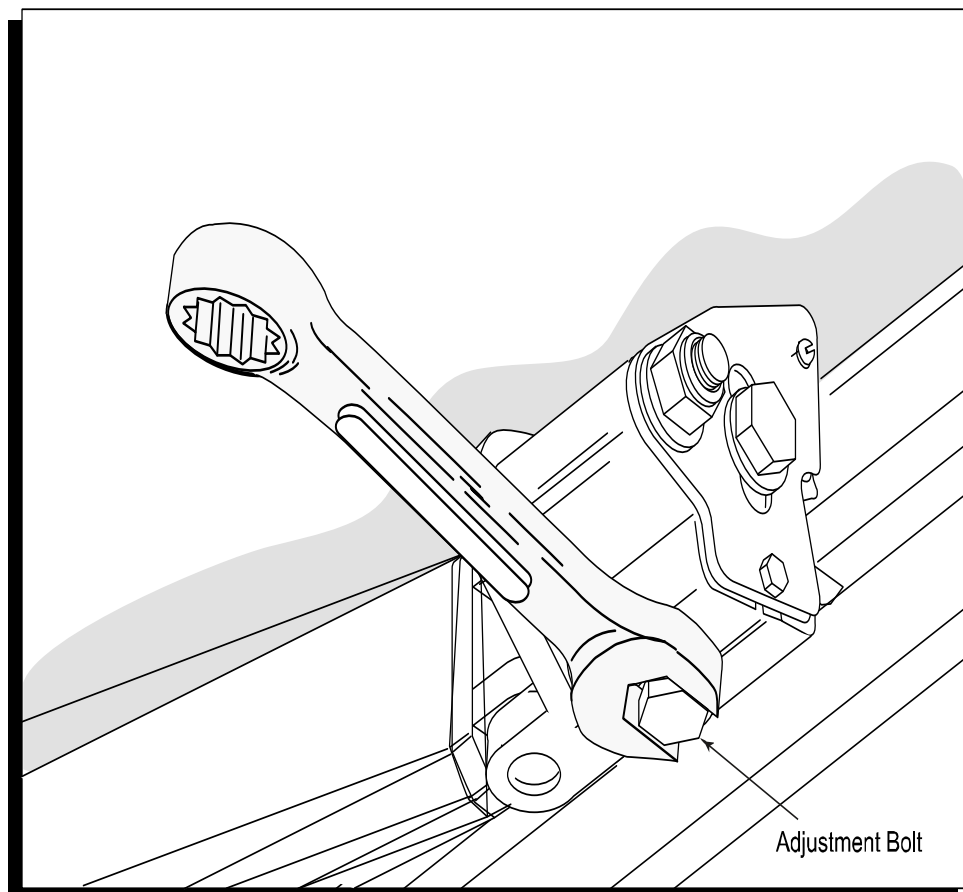


**(Figure 9)**

**B. ADJUSTING PITCH**

**NOTE: Your NOVA Awning will have the pitch adjusted to its highest point. DO NOT TRY TO RAISE THE PITCH, this could result in damaging 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 10) 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 10)

## **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.

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:

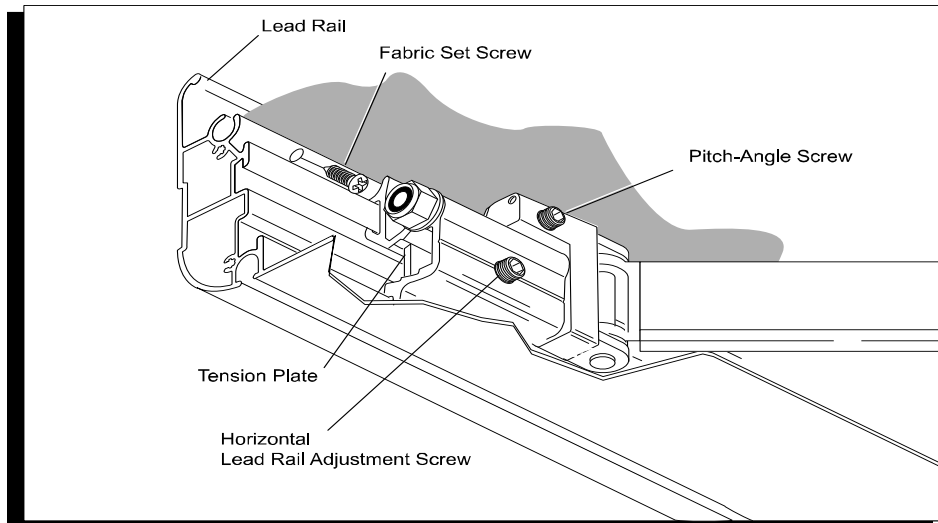
- A. Provide sufficient power from your panel.
- B. Replace the anemometer in the electronics system with a Motion Sensor.

## **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 11)



(Figure 11)

## **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, then replace the fabric screws.(Figure 12)

**PICTURE HERE**

**Figure 12**

**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 Swtch, locate that switch and make sure it is in the ON position. The 110V AC motor supplied in your **NOVA Awning** is 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:**

The **NOVA Awning** is 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>
<b>COMPLETE AWNING REPLACEMENT (WALL)</b> hrs.	<b>2</b>
<b>COMPLETE AWNING REPLACEMENT (ROOF)</b> hrs.	<b>2</b>
<b>FABRIC REPLACEMENT (WALL)</b> 1hr.	
<b>FABRIC REPLACEMENT (ROOF)</b> 2 hrs.	
<b>MOTOR REPLACEMENT (WALL)</b> 2 hrs.	
<b>MOTOR REPLACEMENT (ROOF)</b> 3.5 hrs.	
<b>LATERAL ARM REPLACEMENT (PER ARM)</b> 1 hr.	



<b>LEAD RAIL LATERAL ADJUSTMENT</b> 20 min.	
<b>LEAD RAIL REPLACEMENT</b> 2 hrs.	
<b>MOTOR LIMIT ADJUSTMENT</b> min.	<b>20</b>
<b>ANEMOMETER REPLACEMENT</b> 30 min.	
<b>CURRENT LIMITING DEVICE REPLACEMENT</b> min.	<b>30</b>
<b>ANEMOMETER CONTROLLER REPLACEMENT</b> min.	<b>30</b>
<b>ANEMOMETER CONTROLLER REPROGRAMMING</b> min.	<b>30</b>
<b>REMOTE MOTOR/SWITCH/TRANSMITTER REPROGRAMMING</b> min.	<b>20</b>
<b>ANEMOMETER WALL SWITCH REPLACEMENT</b> min.	<b>20</b>
<b>WEATHER STRIPPING REPLACEMENT</b> 1 hr.	
<b>MOTION SENSOR REPLACEMENT</b> 20 min.	
<b>RESTRINGING THE CROSSBAR</b> 1 hr.	

- 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 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

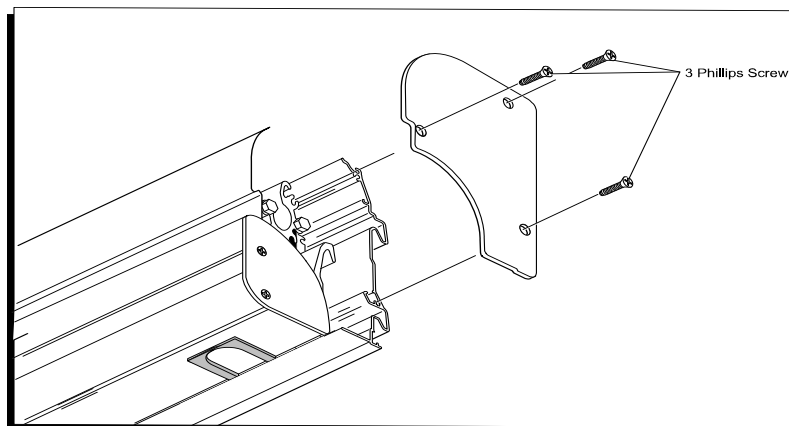
# COMMON REPAIR PROCEDURES

## 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 13)

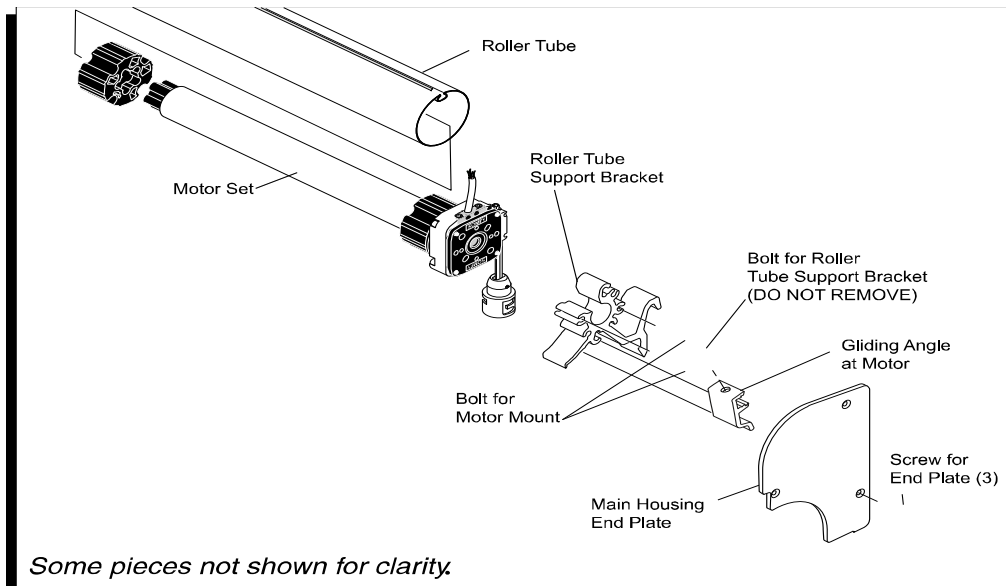


(Figure 13)

3. Remove the fasteners that hold the motor to the motor bracket. Mark the slots where they were removed.
4. Loosen the small bolt that secures the roller tube support 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 14) Pull motor cord out of the hole in the back of the awning leaving the pigtail for the new installation.

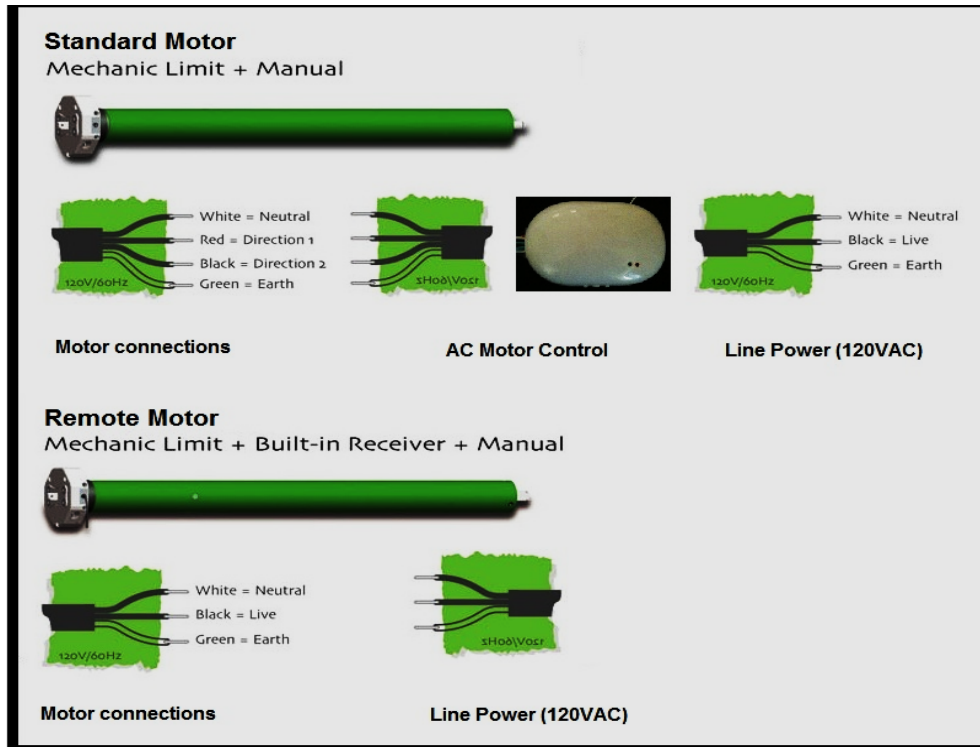


(Figure 14)

## **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 and reattach the motor to the motor bracket. Tighten fasteners securely.
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 15, 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.
11. Manually employ the anemometer by blowing on the cups, by spinning them or you can press the **UP** button on the Anemometer. The 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.
12. 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.



(Figure 15)

## **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 recessed 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. **NOTE: REMOVE POWER FROM EITHER ANEMOMETER OR MOTION SENSOR TO PREVENT CLOSURE DURING THIS OPERATION.**

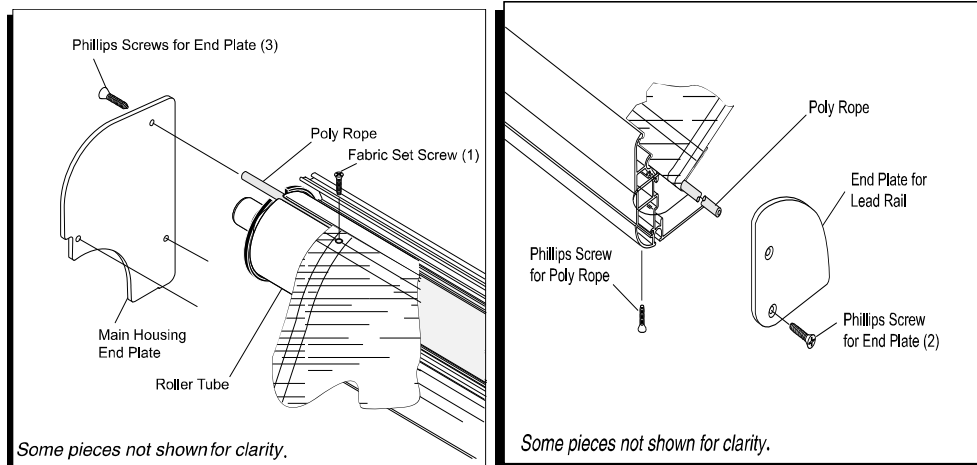
### **B. REMOVING THE OLD FABRIC**

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 all four(3) fabric set screws. There are two(2) on the lead rail and there is one(1) on the roller tube on the opposite side that the motor is located on.
3. Remove the corresponding lead rail housing end plate.

Figure 16 and 17



(Figure 16 and 17)

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 3/4" from the edge of the fabric. If necessary, re-drill the fabric set screw holes using a 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 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 NOVA 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**

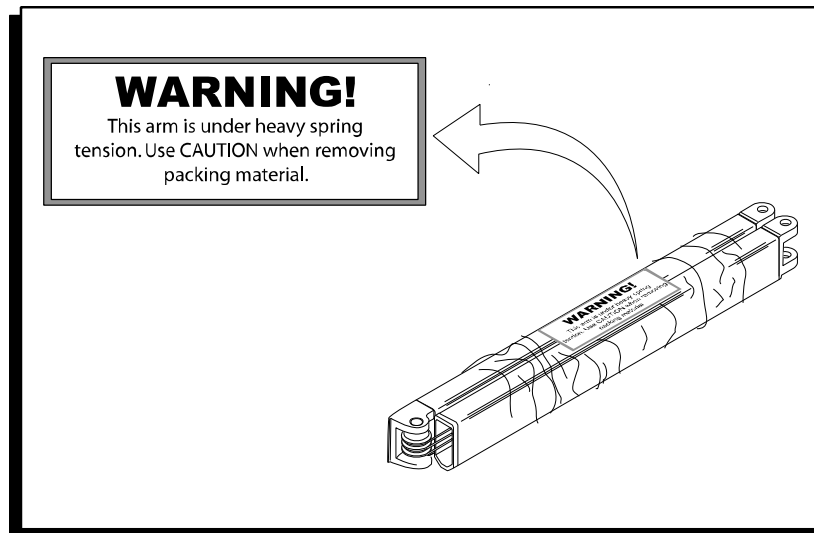
Follow this procedure when a damaged, spring loaded arm needs to be replaced. There are no repairable parts inside of the arm, if the elbow joint has broken the entire arm must be replaced.

### **TOOLS REQUIRED:**

- 19mm (3/4") open-end wrench
- 17mm (11/16") open-end wrench
- 5mm (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.**

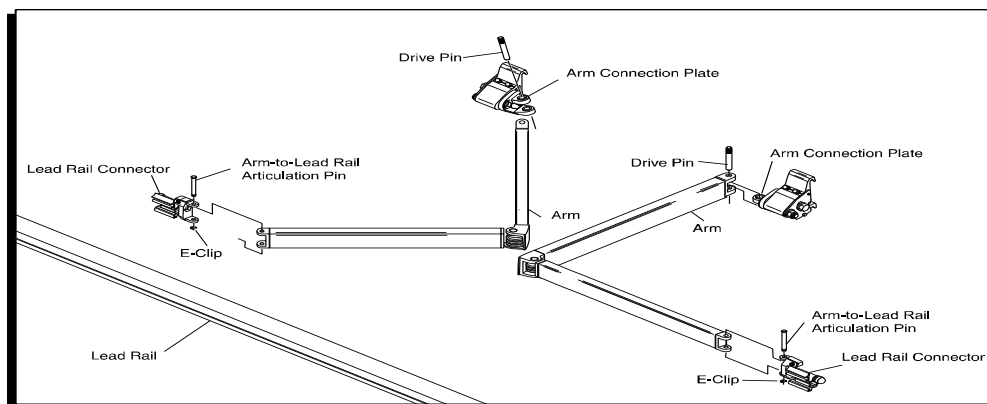




(Figure 18)

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. **CAUTION: THERE WILL BE A VERY LOUD NOISE WHEN THE CABLES ARE CUT.** 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 nut and bolt.
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 19) 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 19)

**Shoulder parts pictures here.**

## **RESTRINGING THE CROSSBAR**

**This procedure is necessary in the event that the cord inside of the crossbar breaks for any reason.**

1. Remove the screws located in the elbow that attach the pins to the arms, set aside for later use. Remove the crossbar.
2. Take off crossbar end caps and completely remove the broken or damaged cord from the crossbar. Be careful to collect and put aside the pins to reuse later.
3. Check the length of your new cord to ensure it is long enough to restring the crossbar. It should be about 6-8" longer than the crossbar with the length doubled.
4. With the crossbar laying flat with the channel facing up begin threading the new cord through the pulley on the crossbars' end cap. Make sure that you have the flat side of the endcap oriented correctly, then replace the end cap.
5. With the crossbar still laying in the same orientation thread the cord thru the opposite sides' end cap. Connect the two ends of the cord together by tying a slip knot, make this knot about 3' in in the side closest to you. Make sure you have a decent amount of tension.
6. Open the awning about 4-6". Hold the crossbar up to the bottom of the cassette and hold two(2) inches on the right side. While facing the awning, locate the knot that is in the rope 4-6" to the left of the right arms' pin location.
7. Holding that location find the center lines of the arms' pin location on the two exterior arms. Carefully transfer the center lines onto the cord with a marker. The left arms' mark will be closest to the cassette, the right arms' mark will be furthest from the cassette.
8. Take the crossbar down and place it on a level surface. Remove the slip knot and crossbars' end caps. Locate the pins and proceed to the next step.

9. Locate the mark that was made for the left arm in step 6. Thread the cord thru the left sides' end cap pulley leaving that mark on the side that is furthest from you. Make a square knot as close as possible to the location of the mark. Take a pin and place the knot in the right hand location with the slot facing away from you. Make sure the knot fits into the hole on the pin tightly. Thread the center pin onto the cord for the center arm, no knot is necessary for the center pin. Feed the center pin and the left arms' pin into the left side of the crossbar and attach the left end cap.
10. Locate the mark that was made for the right arms' pin. Once again tie a square knot as close to the mark as possible. Thread the cord thru the right end caps' pulley and then place the pin on the cord with the knot on the left hand location with the slot facing towards you. Feed the left arms' pin into the crossbar and attach the right end cap.
11. Both ends of the cord should be on the side closest to you. On the right end of the cord leave a 2-3" loop and tie it off with a double knot. Thread the left sides' end thru the loop, create a decent tension on the cord. Create a 1" loop on the left side and tie the bottom of the loop off with a double knot.
12. Cut off the excess string behind the knots, add a dab of glue or a substance to close the cord against fraying.
13. With two people hold the crossbar up to the arms of the awning and make sure that both the left arms' pin and right arms' pin engage into their holes in the arm. Once the two outer arms' pins' are engaged the center pin should slide freely and engage the center arm.
14. Relocate the crossbar into the correct position. Engage the pins into the outer arms, slide the center pin to engage in the center arm. Fasten the pins into the arms by replacing the screws that were removed earlier.

## **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**

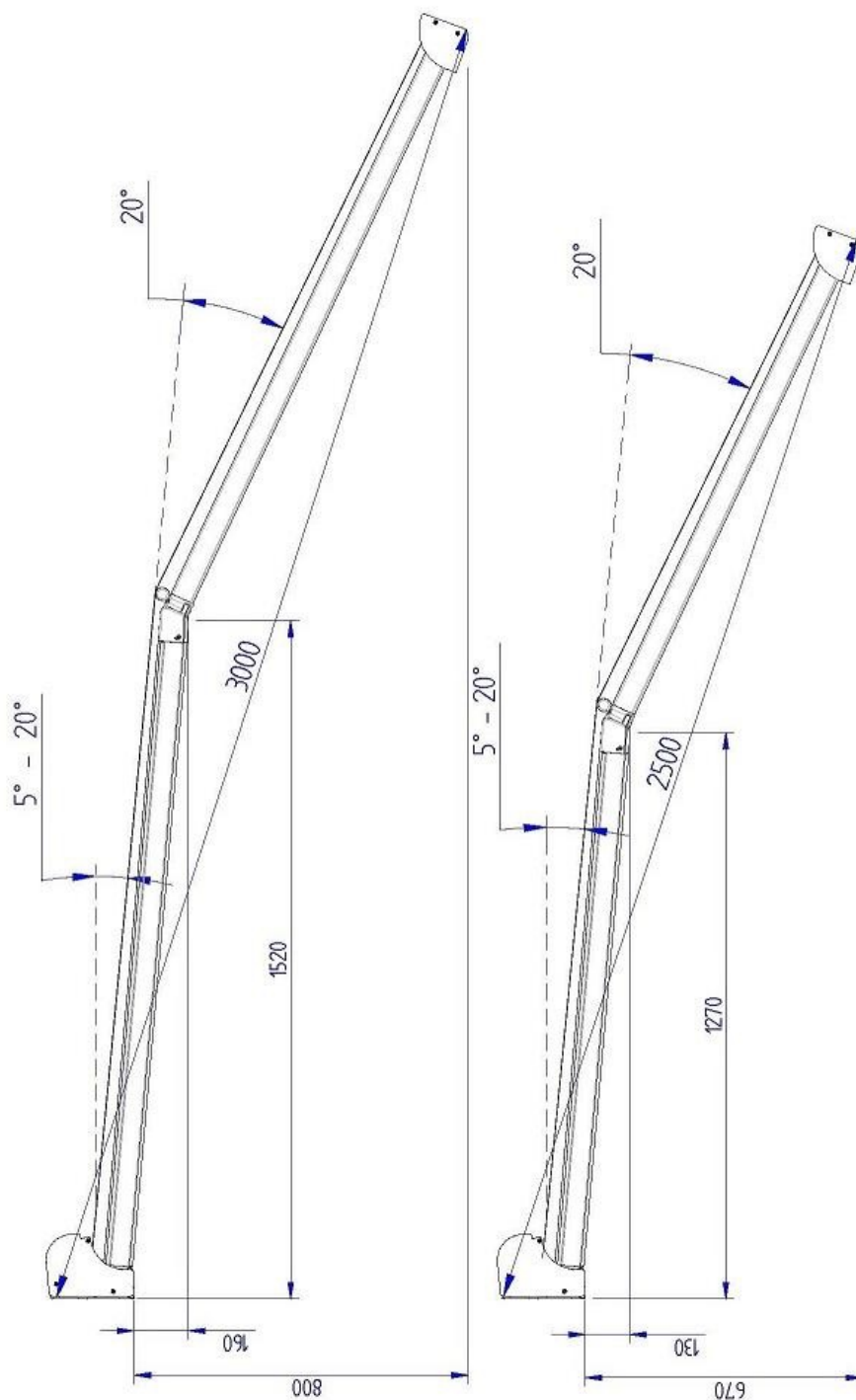
1. Brush off surface dirt.
2. Hose down the fabric
3. Prepare soap mixture in a clean bucket.
4. Dunk a clean, soft bristle brush into the mixture.
5. Use sweeping motions to clean the awning.
6. Allow soap to soak in and capture dirt.
7. Rinse thoroughly to remove all residues.

**AIR DRY ONLY! Pressing, steaming, or machine drying will shrink awning fabric**

## **TECHNICAL DRAWINGS**

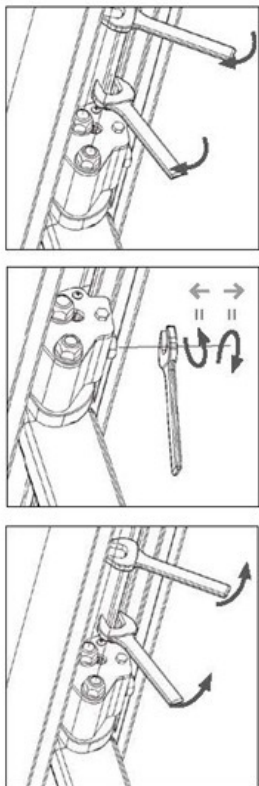
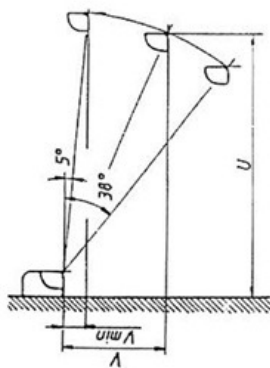
**NOVA Automatic Lateral Arm Awning Systems**

# NOVA Profile

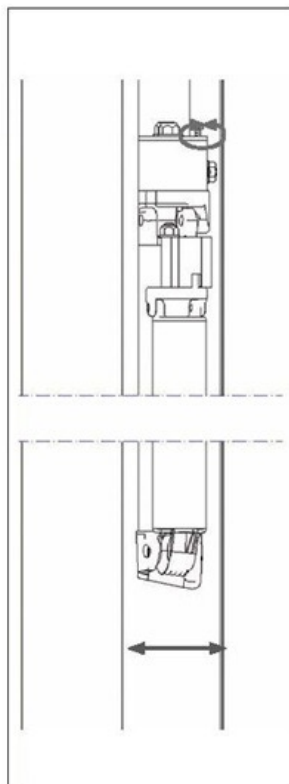


## NOVA Adjustments

### HEIGHT ADJUSTMENT



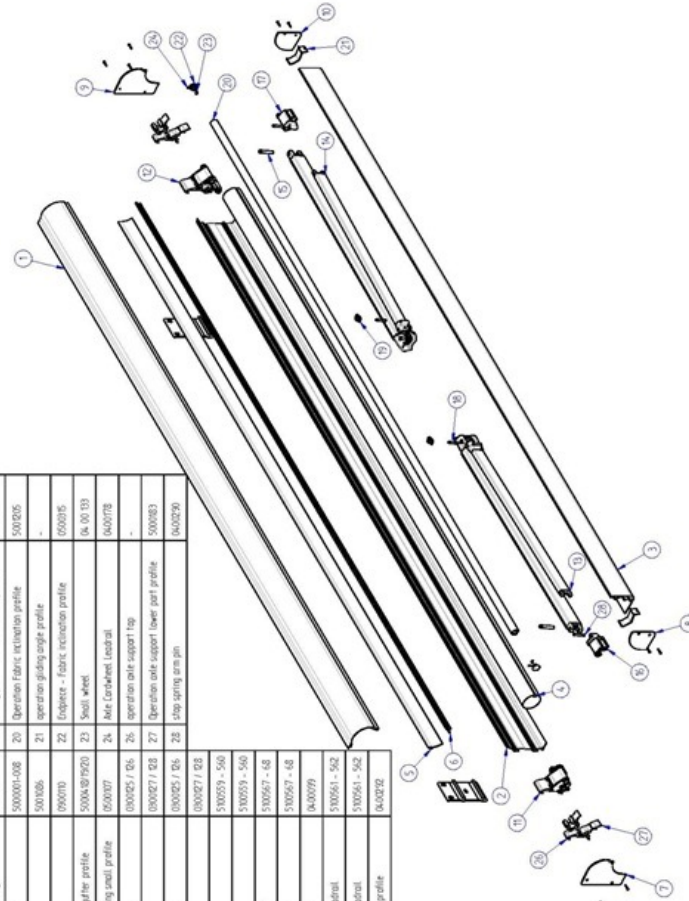
### CLOSURE ADJUSTMENT





# NOVA Exploded View

It. No	Title	Art. No	It. No	Title	Art. No
1	Operation Cover Main Housing	5100025	19	Blading part - fabric retraction profile	0500914
2	Operation Box Profile	5000001-008	20	Operation fabric retraction profile	5000205
3	Operation Internal	5100106	21	operation gliding angle profile	-
4	Assembly Ø76x1	0500710	22	Endpiece - Fabric retraction profile	0500915
5	Operation box housing gal fer profile	5000450/5020	23	Steel wheel	04.00133
6	Operation fabric protecting steel profile	0500007	24	Act. Car wheel Loadrail	0400778
7	Side plate Main housing	0500025 / 026	25	operation cable support lap	-
8	Slap plate Loadrail	0500027 / 028	27	Operation cable support lower part profile	5000583
9	Side plate Main housing	0500025 / 026	28	Slap spring arm pin	0400276
10	Side plate Loadrail	0500027 / 028			
11	Arreblock	5100059 - 560			
12	Arreblock	5100059 - 560			
13	Assembly arm B27 200m	5100567 - 48			
14	Assembly arm B27 200m	5100567 - 48			
15	relation plate cable B25	0400099			
16	assembled connection internal	5100561 - 502			
17	assembled connection internal	5100561 - 502			
18	Act. - Fabric retraction profile	0400782			













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