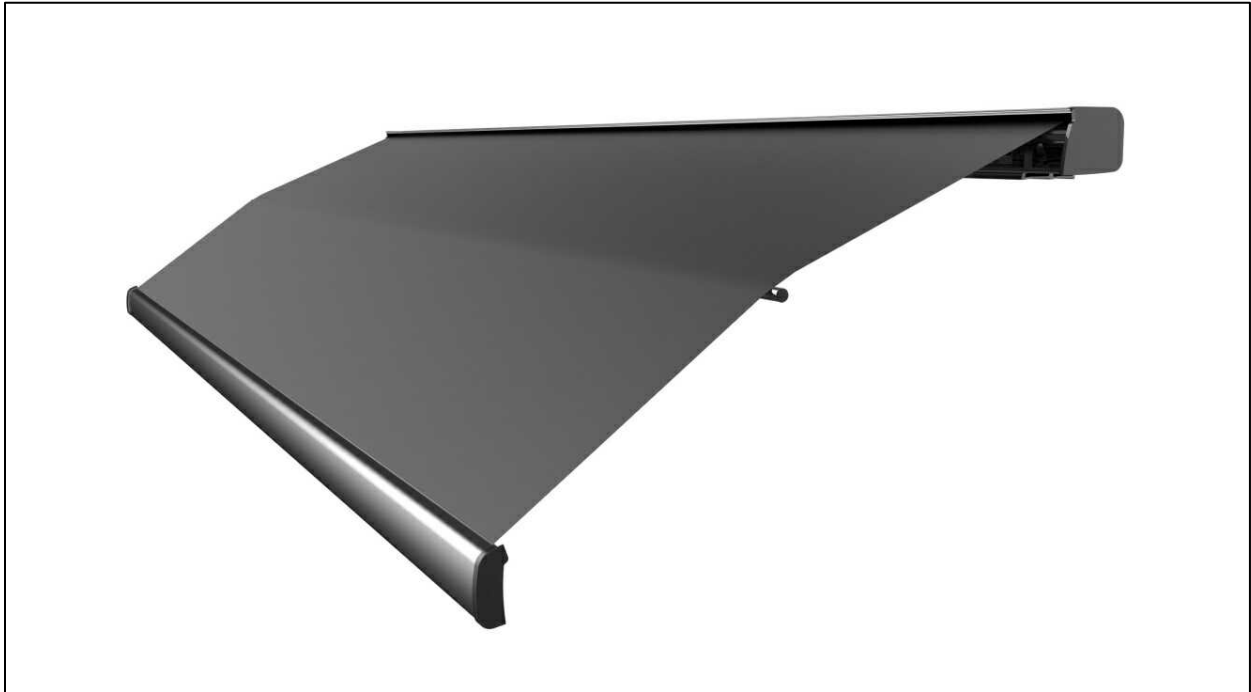


VISION

PATIO AWNING

INSTALLATION SERVICE and REPAIR

Rev. 06152020



RV AWNING PRODUCTS

1361 CALLE AVANZADO, SAN CLEMENTE, CA 92673 (800) 382-8442 FAX (949)276-5500

www.girardrv.com



WARNING

“To reduce the risk of electric shock the operator power is to be provided from a weatherproof junction box in the case of permanent wiring, as per 314.15 of the National Electrical Code, NFPA 70.”

To prevent the motor protector from tripping do not exceed 2 minutes of operation per hour.

ALL ELECTRICAL WORK MUST BE CARRIED OUT BY QUALIFIED PERSONNEL AND 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.



Girard Systems awnings may be operated in light wind and rain conditions. When periods of heavy rain and or high wind are expected the awning must be closed. Never leave the Awning open and unattended.

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

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

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

Before using your awning, ensure that the area into which the awning will be deployed is free of obstructions (Trees, walls, pillars, posts, other vehicles etc.)

Damage caused by collisions with any of the above or similar is not covered by warranty.

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. The electrical system transfer switch in your vehicle will select power for the awning as follows:

Shore Power – if connected;

Generator Power – if the generator is running;

Inverter Power – batteries must be charged for inverter operation.

Girard Systems awnings are supplied with an electric motor appropriate to the product.



CONTENTS

Basic System Overview	5
Installation Instructions	6
Product Description	7
Tools Required	7
A. Unpacking	8
B. Layout and Mounting the Brackets	9
Awning Bracket placement chart	10
C. Mounting the Awning	11
D. Motion Sensor	12
Testing and Adjustments	13
A. Adjusting Motor Limit Switches	13-14
B. Adjusting Pitch	15
C. Testing the Motion Sensor	16
D. Adjusting the Lead Rail	16
Troubleshooting Guide	17-19
Common Repair Procedures	20
Motor Replacement	20-23
Fabric Replacement	23-25
Arm Replacement	26-27
Exploded Diagram	28
Physical Dimensions	29
Component Identification	30-32

THE G-LINK SYSTEM

The G-Link motors and control modules provided by Girard Systems communicate by use of RF signals on a frequency of 433.92 MHZ. This eliminates the need for wiring and the drilling of holes in the vehicle. These components must be electronically matched, programmed or paired before use. This is usually done at the Girard Systems factory. Should the need arise for the user to pair a device with the motor controller they must refer to the appropriate manual for the devices applicable to their particular installation.



BASIC SYSTEM OVERVIEW

The VISION 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 controls the extension and retraction of the awning.
2. **Electronic controls** – to power and operate the motor
 - Motor Control module – GC136, GC274A, GC274B, 98GC74 depending upon the product purchased. This works in conjunction with the other electronic controls and the user controls included in the installation to extend and retract the awning as required.
 - Ignition retract and lock module – GC 1102 for 110v systems, GC946G for 12v systems. This will send a retract signal to extended awnings on the vehicle, then after 90 seconds all power is removed from the awning motors to ensure that the awnings cannot be deployed while the vehicle is in motion.
 - Motion Sensor – 98GC779, which enables automatic retraction of the awning during periods of high wind that may damage the awning system.
3. **User Controls** – Hand held remote controllers and wall mounted remote switches will differ according to the individual customer's needs, single or multi-channel handsets, with or without LED switching facility, and wall switches will differ depending upon how many awnings they are required to control.
 - DC104 – single channel awning remote control
 - DC105A – 5 channel awning remote control.
 - DC106 – 9 channel awning remote control.
 - DC107 – 15 Channel awning remote control.
 - 98GC1063 – Single channel with LED switching facility.
 - 98GC1029 – 5 channel with LED switching facility.
 - 98GC229 – Single channel remote wall switch.
 - 98GC230 – Dual channel remote wall switch.
 - GC661B – Multi channel remote wall switch with LED function.



INSTALLATION INSTRUCTIONS

FOR PERSONAL SAFETY AND QUALITY OF INSTALLATION, A MINIMUM OF TWO INSTALLERS IS RECOMMENDED FOR THIS PRODUCT.

Before beginning to install the awning please verify the following;

- The vehicle is parked and leveled on suitable hard standing.
- Suitable precautions have been taken to protect the vehicle from accidental damage.
- The area of the vehicle where the awning is to be installed has been prepared.
- Sufficient manpower, a minimum of 2 persons is required.
- Suitable protective clothing is worn by the persons doing the installation.
- Suitable and serviceable lifting and holding equipment should be used to avoid personal injury.
- When mounting fixtures to the vehicle be aware that the soft materials that the skin of the vehicle is made from can be torn out or “Stripped” by the over tightening of fasteners.

DO NOT OVER TIGHTEN FIXING BOLTS AND SCREWS.

- Make every effort to ensure that fasteners are mounted to the structural framework of the vehicle not just the skin.
- Any holes made in the skin of the vehicle must be sealed with silicone sealant, putty tape or similar product.



WARNING

“To reduce the risk of electric shock the operator power is to be provided from a weatherproof junction box in the case of permanent wiring, as per 314.15 of the National Electrical Code, NFPA 70.”
To prevent the motor protector from tripping do not exceed 2 minutes of operation per hour.



PRODUCT DESCRIPTION

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

- A standard motor that operates with a wireless motor controller or a wireless motor that operates with an integrated motor control.
- 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....

TOOLS REQUIRED

- Electric Drill
- Tape measure
- (2) ladders
- Chalk line
- Flat head screwdriver (small)
- Phillips screwdriver
- Caulking gun
- (2) tubes silicone caulking
- Drill bits: 1/8", 3/8", and 7/16"
- Open-end wrenches: 13mm, 17mm and 19mm.
- Keyhole saw

A. UNPACKING

Before starting any of the installation procedures:

1. Unpack the awning and inspect the product for any possible damage that may have occurred during shipping.
2. Ensure that the length and motor placement of your awning are correct.
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 13mm or ½" wrench, loosen all 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.
4. If you have discovered any damage or missing parts please contact your supplier.

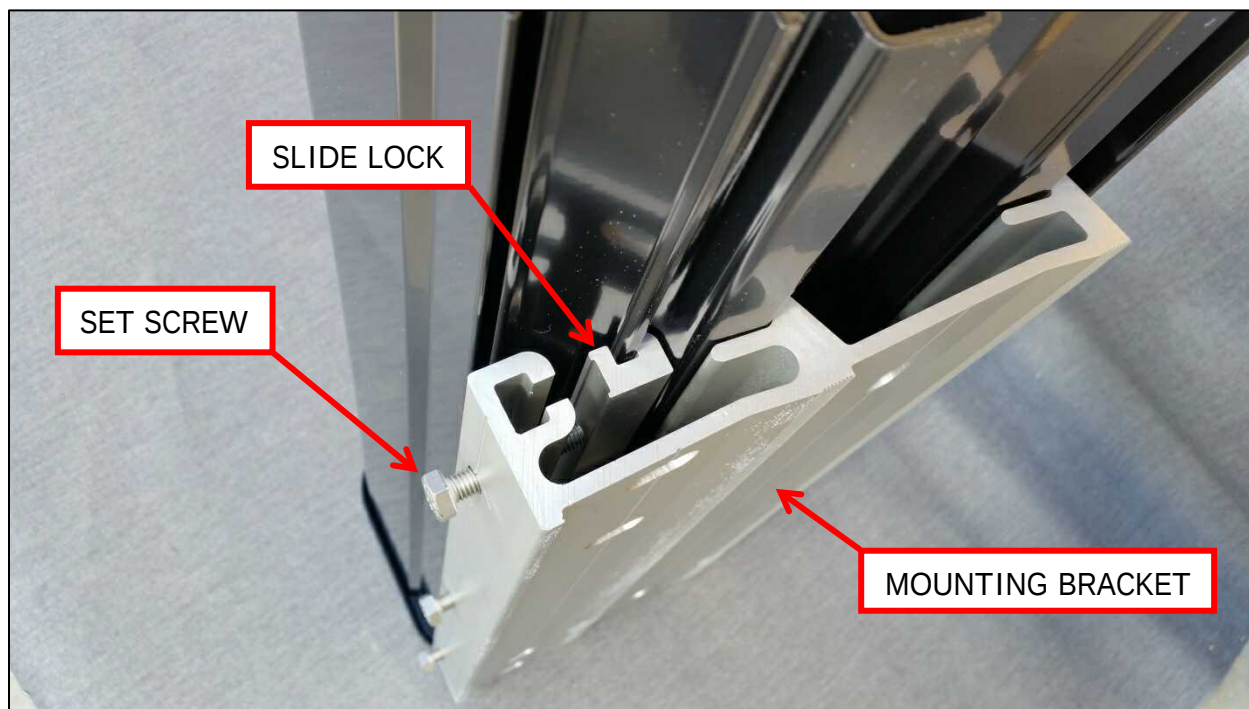


Figure 1



B. LAYOUT AND MOUNTING THE BRACKETS

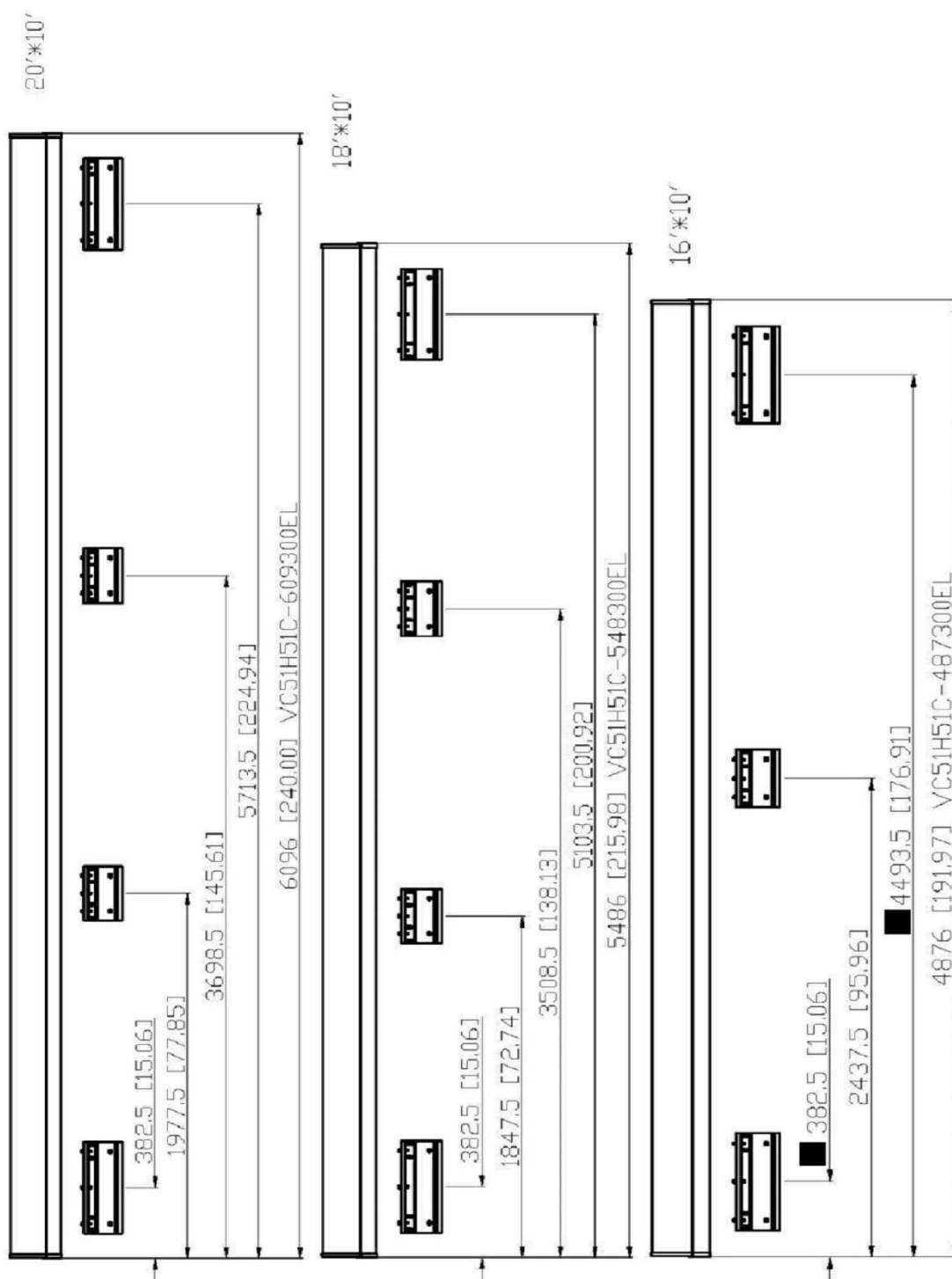
1. MOUNTING THE AWNING – NOTE: The clearances needed for mounting the VISION varies by manufacturer. The shape of the roof, the depth of installation and all other factors should be taken into consideration when installing this product. Please consult Girard Systems if there are any questions regarding your installation.

- a. Determine the exact position for the final installation of the awning.
- b. Mounting brackets must be installed within 6” 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 alignment of the installation. You will be able to reference this line to install the smaller middle brackets at a later time.
- c. To find the location of the smaller middle brackets please refer to the chart on the following page. **NOTE: The placement of the middle brackets must comply with the AWNING BRACKET PLACEMENT CHART. Failure to follow these instructions will void the warranty of this product.**
- d. Now that you have determined the bracket locations, using the bracket as your template, mark the holes for mounting the bracket.
- e. Fix the brackets to the roof of the vehicle using appropriate sized bolts.

NOTE: It is up to the installer to find adequate structure to securely fasten the mounting brackets to. All caution must be taken to weather seal all installation perforations. Failure to do this could result in damage to the vehicle.

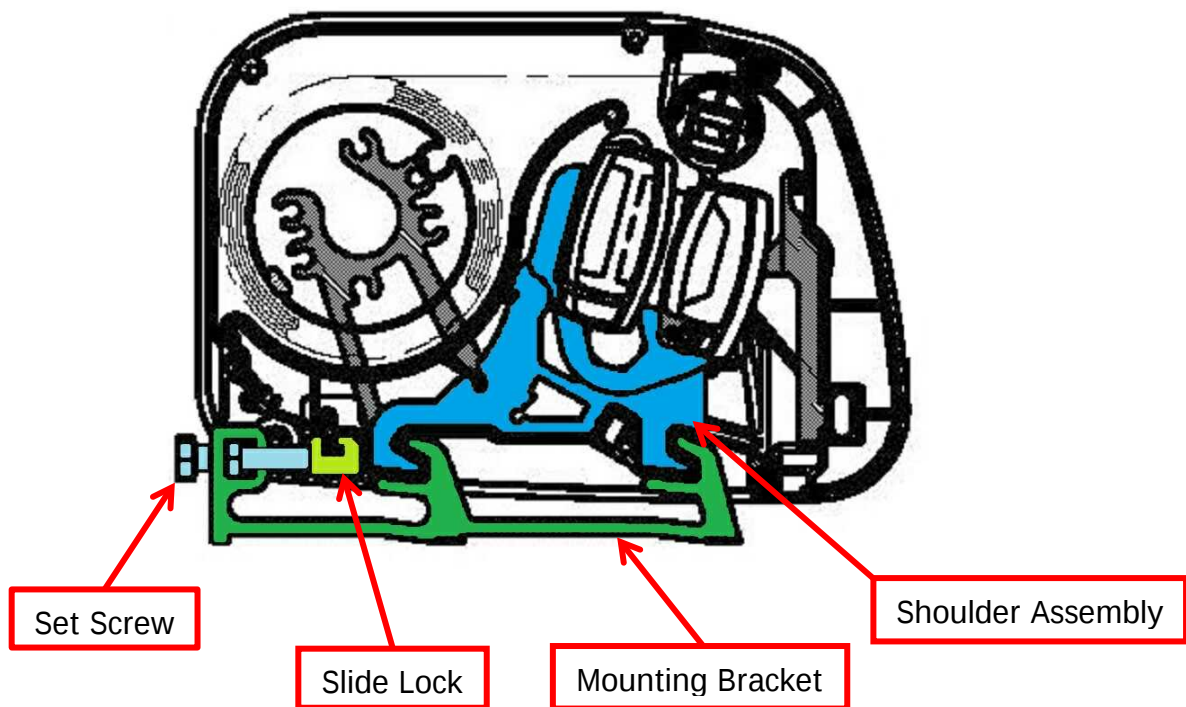
NOTE: Please consult your RV’s wiring diagram to ensure that no wiring will be damaged while drilling any holes.

AWNING BRACKET PLACEMENT CHART



C. MOUNTING THE AWNING

1. Lift the awning into position for fastening to the mounting 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. Make sure the grooves of the awning are securely engaged into the channels on the bracket. (Figure 3)
3. Secure the awning by moving the slide locks along the bottom awning track until they are located under their respective brackets.
4. Once the final location of the slide locks has been achieved, tighten all set screws on each slide lock with a 13mm or ½" wrench.



(FIGURE 3)

D. MOTION SENSOR

NOTE: The Motion Sensor requires a hard wired 12V. D.C. connection.

12v DC MOTION SENSOR (Hard wired)

The Motion Sensor will come from the factory pre-programmed.

A hole may need to be drilled for the power cable.

1. Locate the cable at the back of the awning cassette.
2. Locate the nearest source of 12V. D.C. power.
3. If required drill an appropriate sized hole, then feed the cable into the interior of the vehicle and connect to the 12V. D.C. source/ junction box.
4. If necessary refer to the Motion sensor manual for instructions to program the motion sensor.



Motion Sensor



TESTING AND ADJUSTMENTS

OVERVIEW

- A. Adjusting Motor-limit switches
- B. Adjusting Pitch
- C. Testing the Anemometer
- D. Adjusting Lead Rail

A. ADJUSTING MOTOR LIMIT SWITCHES

TOOLS REQUIRED

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

NOTE: The motor limit switches have been adjusted to the correct positions at the factory prior to shipment. When fully retracted the awning motor is set to stop the exact moment the awning box closes. When fully extended the fabric should be taut and the arms should be slightly bent, exposing a gap of about ¼" at the elbows.

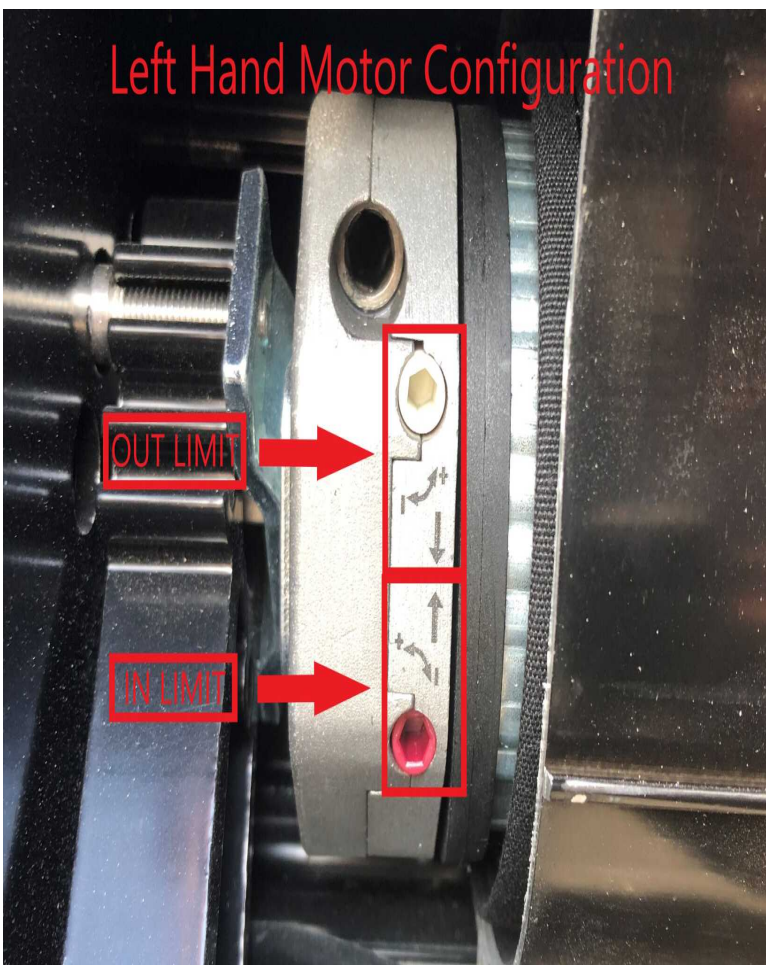
Always check the motor limits after installation to ensure that the awning opens and closes correctly. Awning fabric can stretch over time, this will require an adjustment of the IN and/or OUT limit switch.

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

1. The AC motors used in Girard Systems awnings are reversible.
2. The motor has limit settings for both OUT (extension) and IN (retraction).
3. The limit switches can be adjusted by use of the black key provided with the awning, or you may use a 4mm (5/32") Allen wrench.

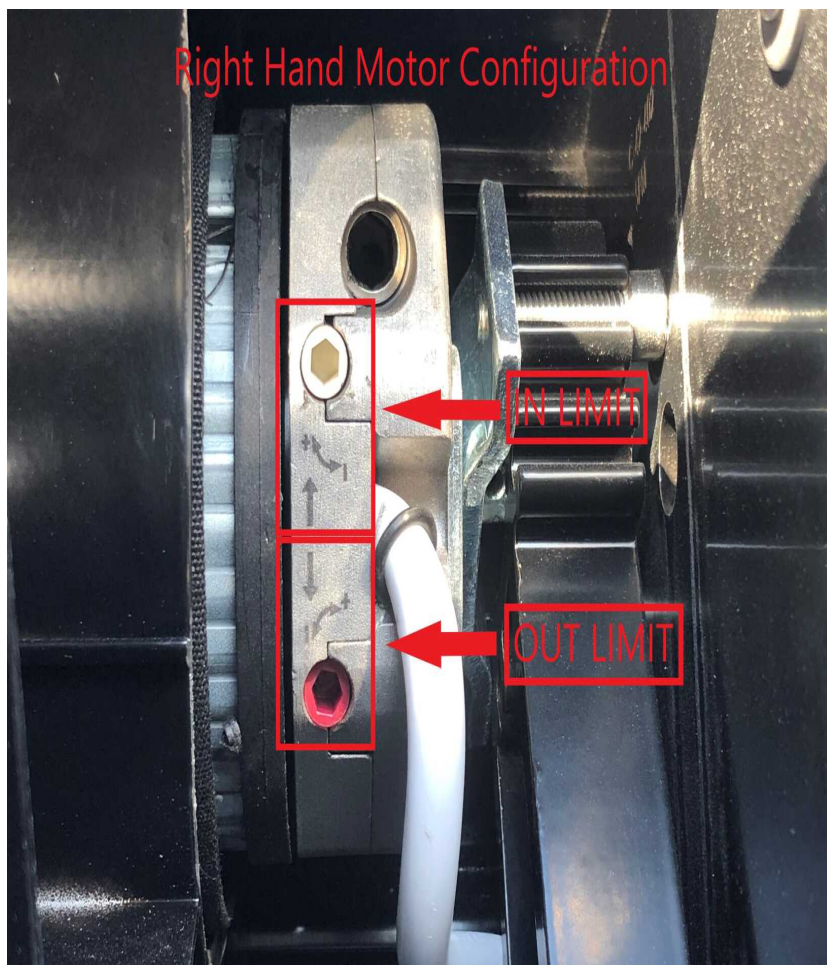
4. Extend the awning a few feet to gain access to the motor. Locate the motor. The limit adjustment screws are located on the head of the motor. Using the symbols printed next to the adjustment screws, turn the black key (or 4mm Allen wrench) to make the necessary adjustments. Typically, the motors are labeled with a + or a -. (Figure 5A and 5B)

Left Hand Motor Configuration



(Figure 5A)

Right Hand Motor Configuration



(Figure 5B)

5. Approximately $\frac{1}{4}$ turn of the adjustment screw usually represents about 1" of awning movement, but this may vary. NEVER set outward limits so that the fabric is slack with full arm. For proper adjustment set limit switch to stop the motor just before the arms lock. This will expose about a $\frac{1}{4}$ " gap at the elbow.



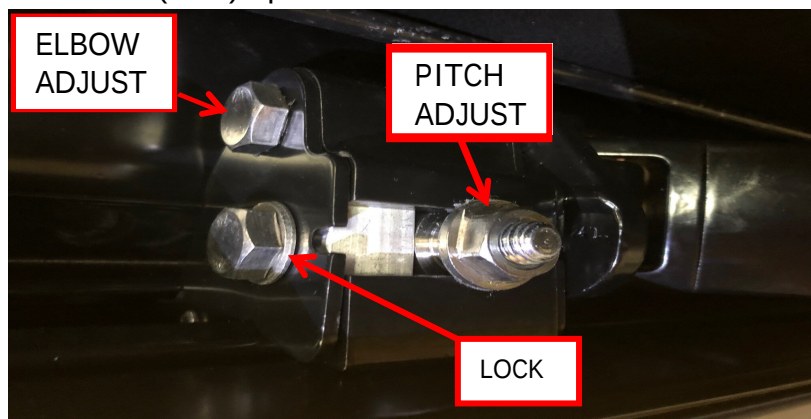
B. ADJUSTING PITCH

NOTE: Adjustment of the Elbow height and pitch will affect the height of the awning lead rail when it is fully deployed. Ensure that when making any of these adjustments the final height of the lead rail is at adequate height to avoid injury.

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

Tools Required

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



(Figure 6)

1. ADJUSTING PITCH

- Extend the awning about 18".
- On the arm selected, slightly loosen the lock bolt on the side of the shoulder assembly using a 19mm open-end wrench. (Figure 6)
- Locate the adjustment bolt located on the front of the shoulder assembly (Figure 6). Using a 19mm open-end wrench rotate the bolt **clockwise** to **Raise** the pitch or **counter-clockwise** to **Lower** the pitch.
DO NOT OVERTIGHTEN AS THIS WILL RESULT IN DAMAGE TO THE AWNING.
- Tighten the lock bolt located on the side of the shoulder assembly.
- Close the awning completely to ensure smooth operation and that the lead rail lies flush and square along the length of the cassette.

2. ADJUSTING ELBOW HEIGHT

- Extend the awning about 18".
- On the arm selected, slightly loosen the lock bolt on the side of the shoulder assembly using a 19mm open-end wrench. (Figure 6)
- Locate the elbow adjustment bolt on the side of the shoulder assembly (figure 6). Using a 19mm wrench tighten the elbow adjustment bolt **clockwise** to **raise** the elbow and **counter-clockwise** to **lower** the elbow. NOTE: To achieve maximum elbow height, a second person pushing the elbow of the arm up to relieve tension while performing this adjustment is recommended.
- Tighten the lock bolt located on the side of the shoulder assembly.
- Close the awning completely to ensure smooth operation and that the lead rail lies flush and square along the length of the cassette.

C. TESTING THE MOTION SENSOR

1. Partially extend the awning.
2. Physically activate the Motion sensor by pulling down the corner of the lead rail about 12" and then release. This should create enough movement to activate the motion sensor.
3. At this point the awning should retract; if not, check the electrical connections to the selected power source.

NOTE: The motion sensor will only retract the awning on which it is mounted. When testing the system verify all of the awnings will close properly from the fully extended position.

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

- a. Provide sufficient power from your panel.
- b. Try reprogramming the motion sensor.

D. ADJUSTING THE LEAD RAIL

The lead rail has been preset at +/- 3 degrees. This allows it to rest firmly into the cassette and creates a weather resistant seal for travel. To alter the pitch angle, at each lead rail connector loosen the lock nut with a 17mm wrench then insert a 5mm Allen wrench into the Pitch adjustment screw. Turn clockwise to increase or counterclockwise to decrease the pitch (Figure 8) and then tighten the lock nut.

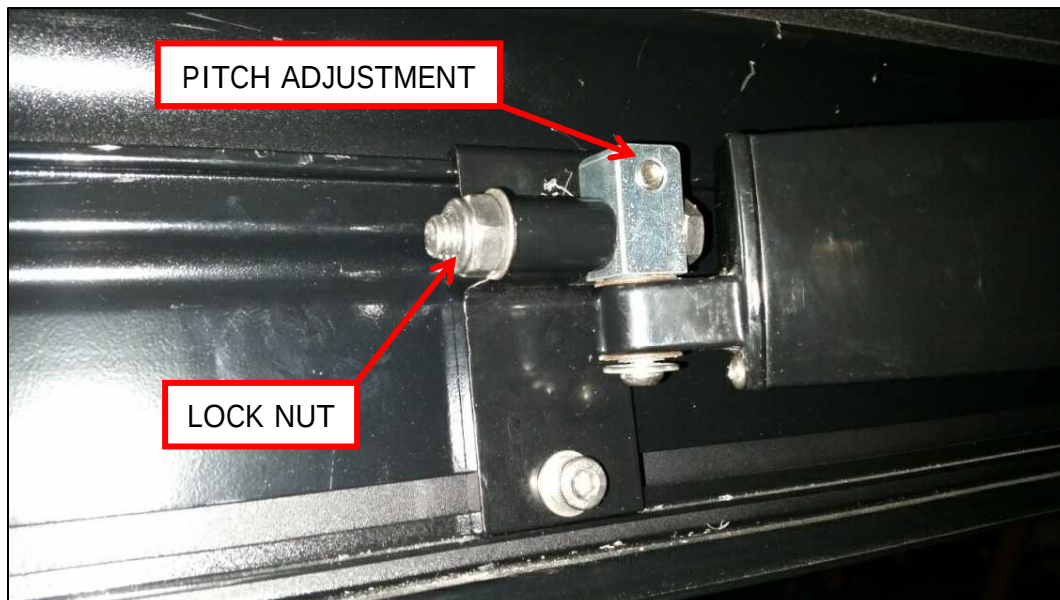


Fig 8

TROUBLESHOOTING GUIDE

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 lead rail adjustment screws on all arms.
- 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.
- Retract the awning until the lead rail is about 4 inches from the fully closed position.
- Using a rubber mallet, tap the end of the lead rail to move it into the correct position.
- When proper alignment has been achieved tighten the lead rail adjustment screws (Figure 9), and then replace the fabric screws. (Figure 10)

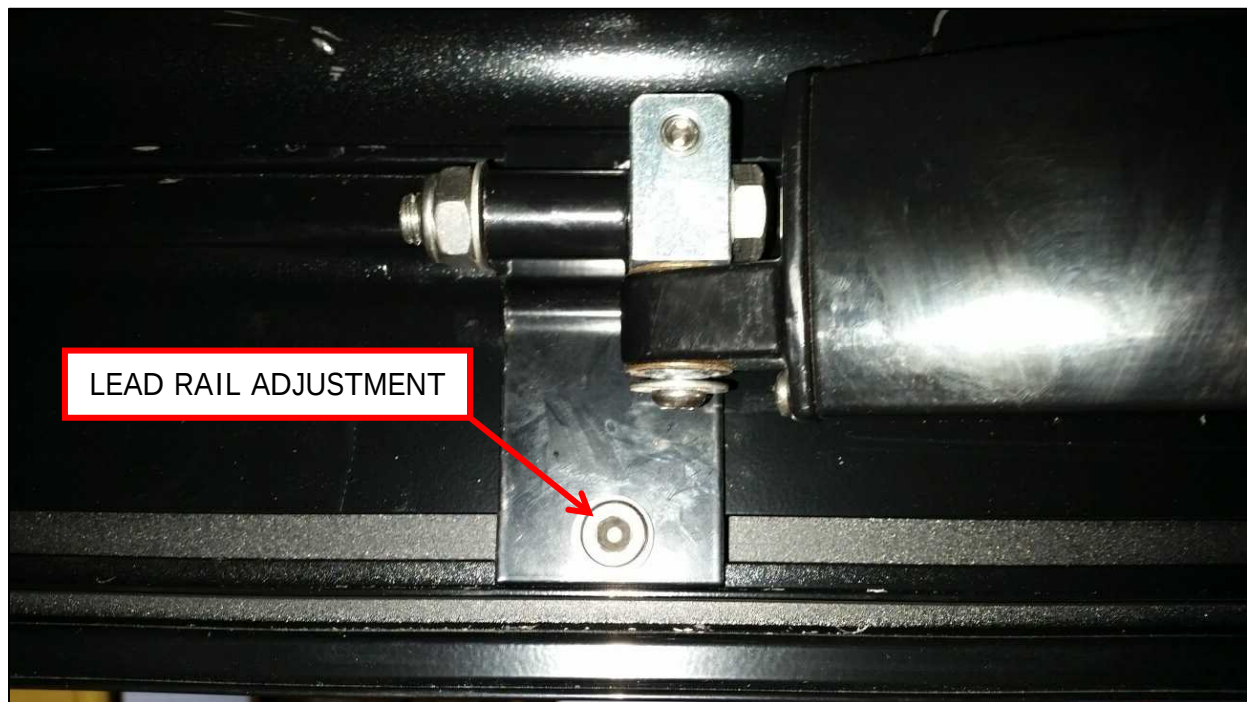


Fig.9



Fig 10

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 20. 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 an Awnings Power Main Switch, locate that switch and make sure it is in the ON position.
- Check that the motor’s thermal protection circuit breaker has not tripped. The 110V AC motor supplied in your VISION 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 power to operate correctly.

- Check to ensure that you have a minimum of 10 amps, if not switch on your generator or connect to shore power.
- 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 13-14.

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 VISION 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. Refer to the "Adjusting the Motors Limit Switches" section of this manual.

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" section of this manual.

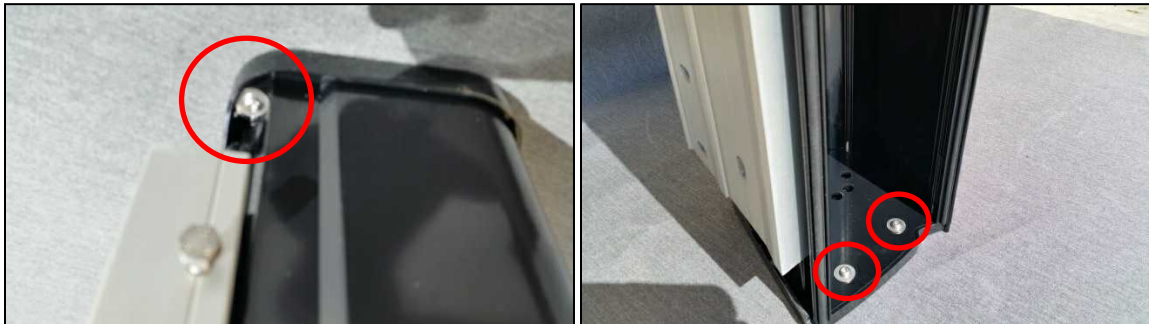
COMMON REPAIR PROCEDURES

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 11)

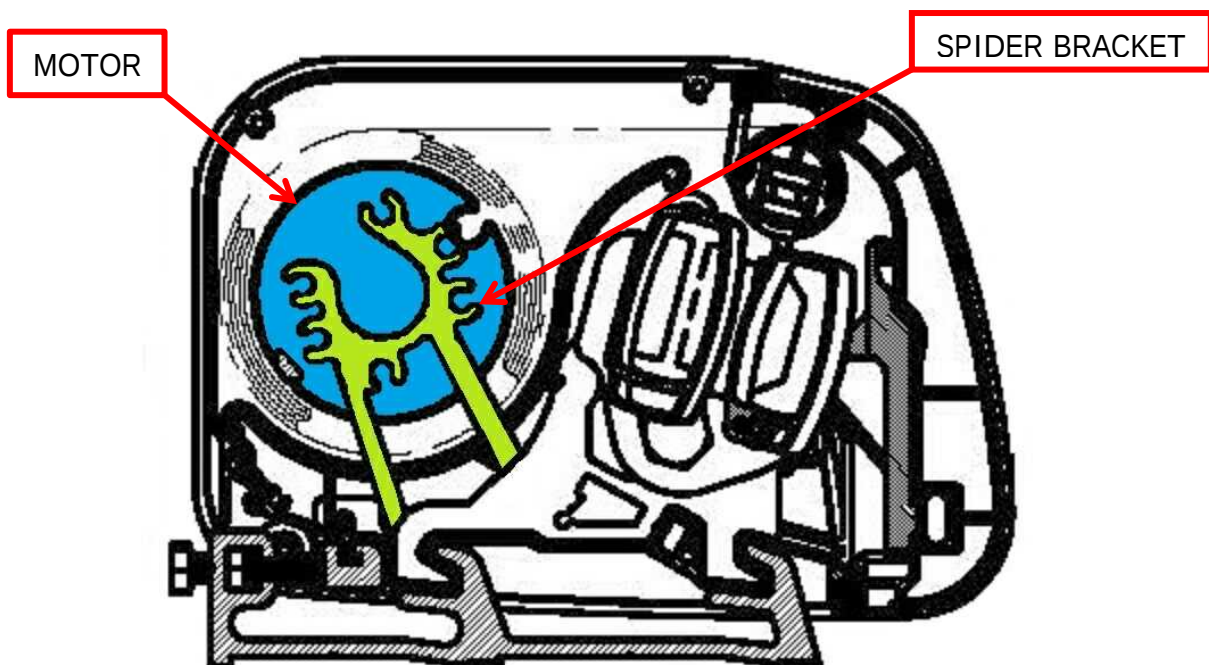


(Figure 11)

3. Remove the Lock plate by removal of the 4 Philips screws securing it in place.



4. Remove both of the motor bolts that fasten the motor to the spider bracket. Mark the slots from which the bolts were removed and then remove the spider bracket.
5. 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.
6. **ISOLATE POWER SUPPLY TO THE AWNING MOTOR BEFORE REMOVING ANY JUNCTION BOX COVERS ETC.**
7. Find the termination point of the awning motor cable. (This may be located in a junction box used for the awnings, or an electrical power distribution box. These are typically located in an upper cabinet. The motor cable is white with four wires. Make note of the points that each of the motor wires connect to. Disconnect all four motor cable wires.
8. 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.
9. Carefully pull the old motor out of the awning roller tube. (Figure 12) Pull motor cable out of the hole in the back of the awning.

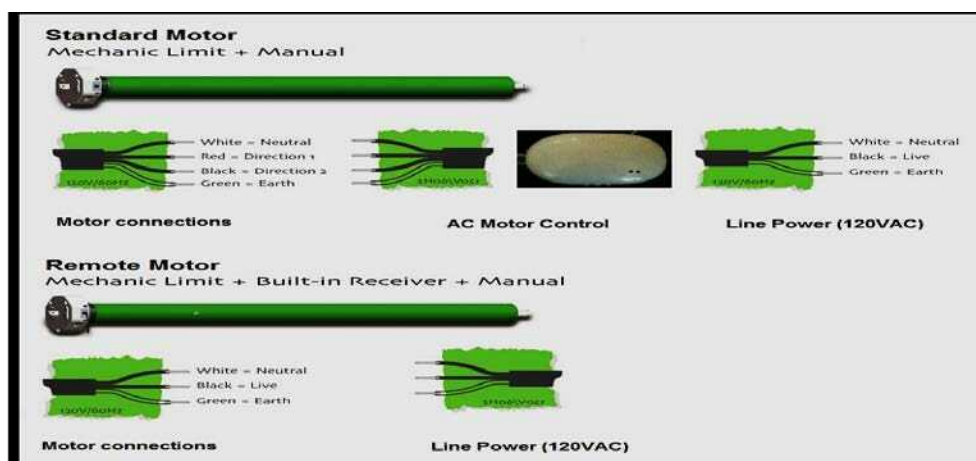


(Figure 12)



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 cable completely through strain relief in the back of the awning casing. Fasten the motor cable 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: DO NOT USE THE CENTER HOLE OF THE MOTOR CASING TO PRY, ALIGN, OR REPLACE MOTOR BOLTS. THIS WILL DAMAGE THE LIMIT SWITCHES. PRY FROM THE OUTER PART OF THE MOTOR CASING ONLY.**
7. Insert the 2 motor bolts through the end bracket and the threaded plate of the motor. Tighten bolts securely.
8. Replace the end cap.
9. From the interior of the vehicle pull the motor cable all the way into the unit.
10. Connect the new motor as shown in Figure 13, according to the type of motor.
11. Test for the proper function of the new motor by using the Remote Control or the wall switch.
12. Manually activate the anemometer by blowing on the cups or by spinning them. Awning must retract, if not check motor connections for correct 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.
13. 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 13)

FABRIC REPLACEMENT

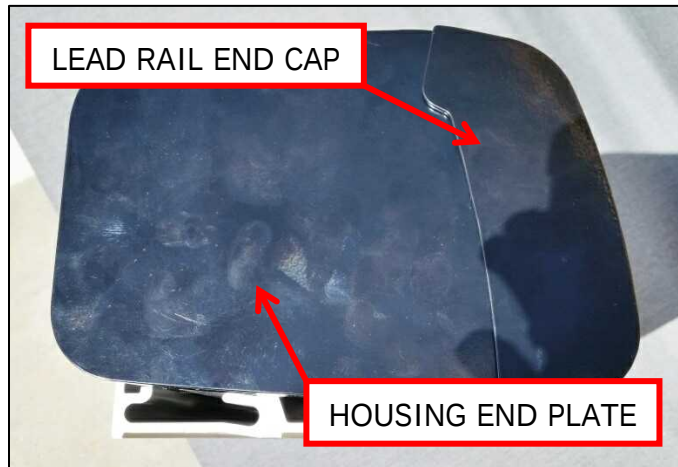
IMPORTANT NOTE: THESE PROCEDURES REQUIRE THE USE OF A MANUAL CRANK. IF NO MANUAL CRANK IS AVAILABLE THE MOTOR LIMIT SWITCHES MUST BE USED TO CREATE THE SETTINGS. PLEASE REFER TO THE “ADJUSTING MOTOR LIMIT SWITCHES”. USE THE MOTOR SPARINGLY TO PREVENT OVERHEATING.

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 roof mount 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 all 3 fabric set screws. There are 2 on the lead rail and there is 1 on the roller tube on the opposite end to which the motor is fitted.
3. Remove the corresponding lead rail end cap, housing end plate and lock plate. See Figures 14 and 15.



(Figure 14)



(Figure 15)

4. Carefully slide out the entire fabric from the left end of the roller tube and lead rail. Make sure the poly rope clears the support bracket. **NOTE: FOR PERSONAL SAFETY, AND BEST RESULTS IT IS RECOMMENDED THAT TWO TECHNICIANS PERFORM THIS TASK.**

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 10).
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 $\frac{1}{4}$ ' of gap.) Please refer to the "ADJUSTING MOTOR LIMIT SWITCHES" section of this manual.

IMPORTANT NOTE: THE HIGH-TORQUE MOTOR SUPPLIED WITH YOUR NOVA Awning IS DESIGNED TO RUN FOR ONLY FOUR 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



WARNING

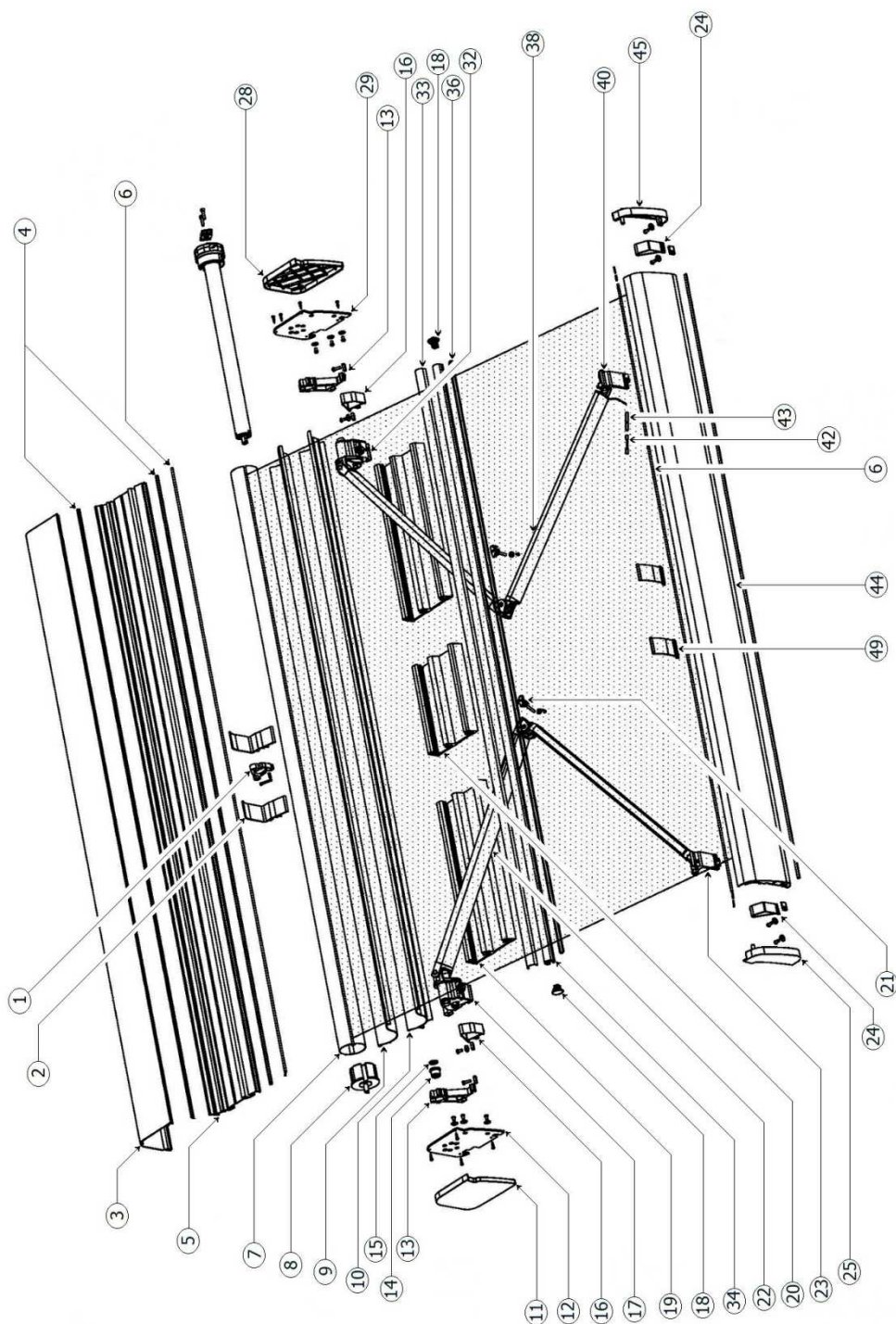
- Follow installation instructions carefully.
- Awning arms are packaged under heavy spring tension.
- To avoid serious personal injury do not remove protective wrapping until directed to do so.

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, and 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.

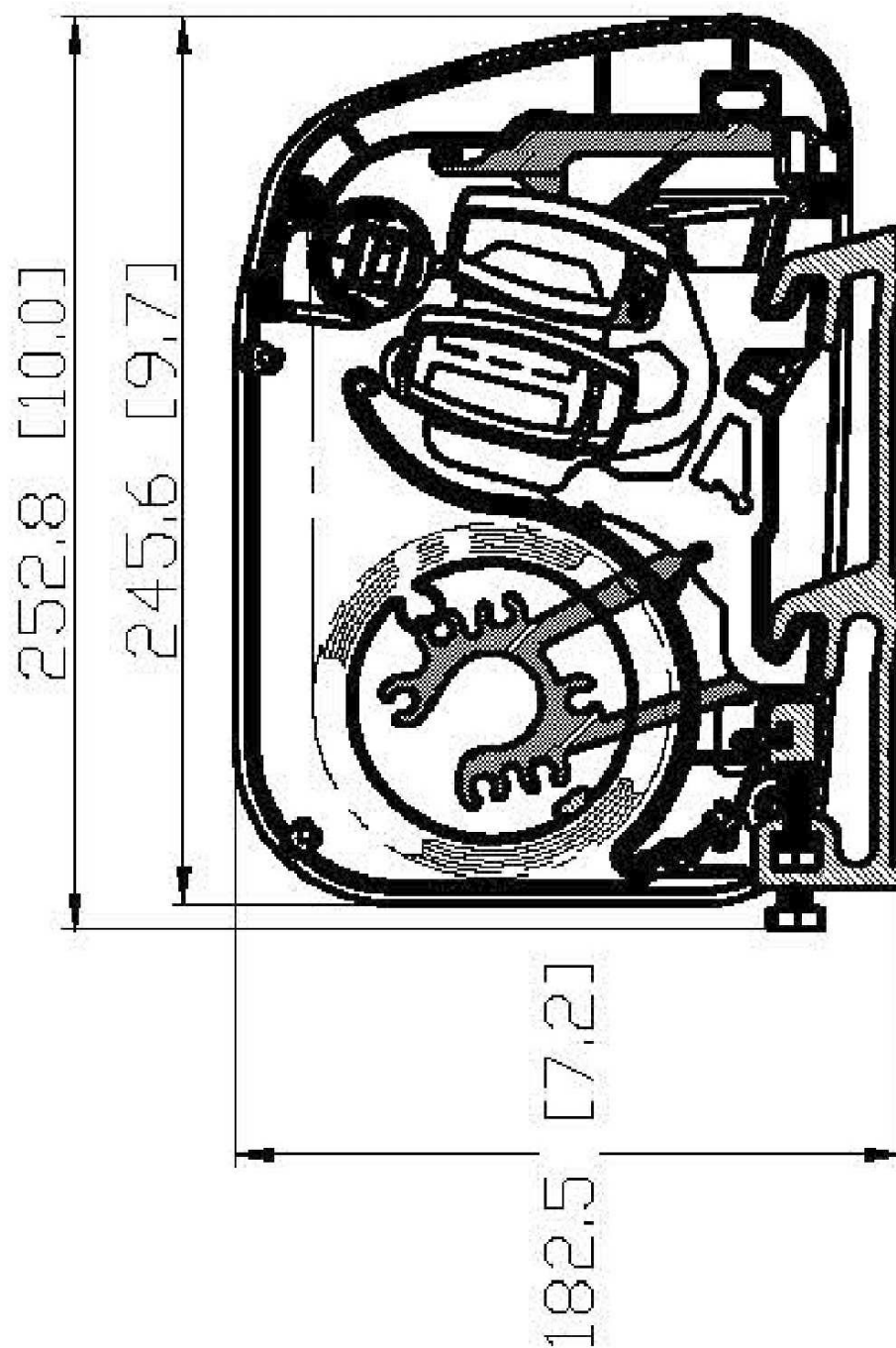


4. At the shoulder assembly of the arm, in the cassette, remove both 19mm lock nuts and washers, or the bolt and nut.
5. Remove the forward most bolt from the arm and shoulder connection. Use this bolt for the new arm installation if new hardware is not provided. Hold the bottom pitch adjustment block 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 17) 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.

VISION AWNING EXPLODED DIAGRAM



VISION PHYSICAL DIMENSIONS





COMPONENT IDENTIFICATION

For Vision II, refer to part numbers starting with '72'

ITEM	DESCRIPTION	PART
1	Rollertube Center Support Bkt Assy BLK	7100001-01B, 7200001-01B
2	Main Housing Arm Support Guide	7100002-02, 7200002-02
3	Cover Housing 16' BLK	7100016-03B
3	Cover Housing 18' BLK	7100018-03B
3	Cover Housing 19'8" BLK	7100020-03B
3	Cover Housing 22' BLK	7100022-03B
4	Rubber Gasket 16'	7100016-04
4	Rubber Gasket 18'	7100018-04
4	Rubber Gasket 19'8"	7100020-04
4	Rubber Gasket 22'	7100022-04
5	Back Housing 16' BLK	7100016-05B
5	Back Housing 18' BLK	7100018-05B
5	Back Housing 19'8" BLK	7100020-05B
5	Back Housing 22' BLK	7100022-05B
6	Poly Rope - Rollertube/Lead Rail 16'	7100016-06
6	Poly Rope - Rollertube/Lead Rail 18'	7100018-06
6	Poly Rope - Rollertube/Lead Rail 19'8"	7100020-06
6	Poly Rope - Rollertube/Lead Rail 22'	7100022-06
7	Roller Tube 16'	7100016-07
7	Roller Tube 18'	7100018-07
7	Roller Tube 19'8"	7100020-07
7	Roller Tube 22'	7100022-07
8	Gudgeon	7100003-08
9	Fabric Guide 16' Plastic	7100016-09
9	Fabric Guide 18' Plastic	7100018-09
9	Fabric Guide 19'8" Plastic	7100020-09



9	Fabric Guide 22' Plastic	7100022-09
10	Fabric Guide Support 16' BLK	7100016-10B
10	Fabric Guide Support 18' BLK	7100018-10B
10	Fabric Guide Support 19'8" BLK	7100020-10B
10	Fabric Guide Support 22' BLK	7100022-10B
11	Cover Plate Assy LH BLK	710L004-11B, 720L004-11B
12	Lock Plate Assy LH BLK	710L005-12B, 720L005-12B
13	Rollertube Support Bkt Assy BLK	7100006-13B, 7200006-13B
14	Gudgeon Bushing	7100007-14
15	Gudgeon Washer Plastic	7100008-15
16	Main Housing Guide Assy BLK	7100009-16B, 7200009-16B
17	Shoulder Support Assy LH BLK	710L010-17B, 720L010-17B
18	Crossbar Endcap	7100011-18, 7200011-18
19	Mounting Bracket w/ Slide Lock 19.5"	7100012-19, 7200012-19
20	Mounting Bracket w/ Slide Lock 11.5"	7100013-20, 7200013-20
21	Crossbar Pin Assembly	7100014-21, 7200014-21
22	Arm Assy 10' LH BLK	710L015-22B, 720L015-22B
23	Lead Rail Connector Assy LH BLK	710L016-23B, 720L016-23B
24	Lead Rail Guide Assy BLK	7100017-24B, 7200017-24B
25	Lead Rail End Cap Assy LH BLK	710L018-25B, 720L018-25B
28	Cover Plate Assy RH BLK	710R004-28B, 720R004-28B
29	Lock Plate Assy RH BLK	710R005-29B, 720R005-29B
32	Shoulder Support Assy RH BLK	710R010-32B, 720R010-32B
33	Crossbar Fabric Guide 16' Plastic	7100016-33
33	Crossbar Fabric Guide 18' Plastic	7100018-33
33	Crossbar Fabric Guide 19'8" Plastic	7100020-33
33	Crossbar Fabric Guide 22' Plastic	7100022-33
34	Crossbar 16' BLK	7100016-34B
34	Crossbar 18' BLK	7100018-34B



34	Crossbar 19'8" BLK	7100020-34B
34	Crossbar 22' BLK	7100022-34B, 7200022-34B
36	Crossbar String for 16' (32' strip)	7100016-36
36	Crossbar String for 18' (36' strip)	7100018-36
36	Crossbar String for 19'8" (40' strip)	7100020-36
36	Crossbar String for 22' (44' strip)	7100022-36
38	Arm Assy 10' RH BLK	710R015-38B, 720R015-38B
40	Lead Rail Connector Assy RH BLK	710R016-40B, 720R016-40B
42	Fabric Screw Anchor	7100019-42
43	Fabric Screw	7100020-43
44	Lead Rail 16' BLK	7100016-44B
44	Lead Rail 18' BLK	7100018-44B
44	Lead Rail 19'8" BLK	7100020-44B
44	Lead Rail 22' BLK	7100022-44B
45	Lead Rail End Cap Assy RH BLK	710R018-45B, 720R018-45B
49	Lead Rail Arm Support	7100021-49
Motor Assemblies		
	Motor Assy 45-50 w/MO	97GA45M-V50
Fabric Assemblies		
	Fabric Assy 14' x 10' SUNBRELLA	7101410-00
	Fabric Assy 16' x 10' SUNBRELLA	7101610-00
	Fabric Assy 18' x 10' SUNBRELLA	7101810-00
	Fabric Assy 20' x 10' SUNBRELLA	7102010-00
	Fabric Assy 22' x 10' SUNBRELLA	7102210-00

NOTE: WHEN QUOTING / WRITING PART NUMBERS ADD A "B" OR "W" ON THE END FOR COLOR WHERE REQUIRED.



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