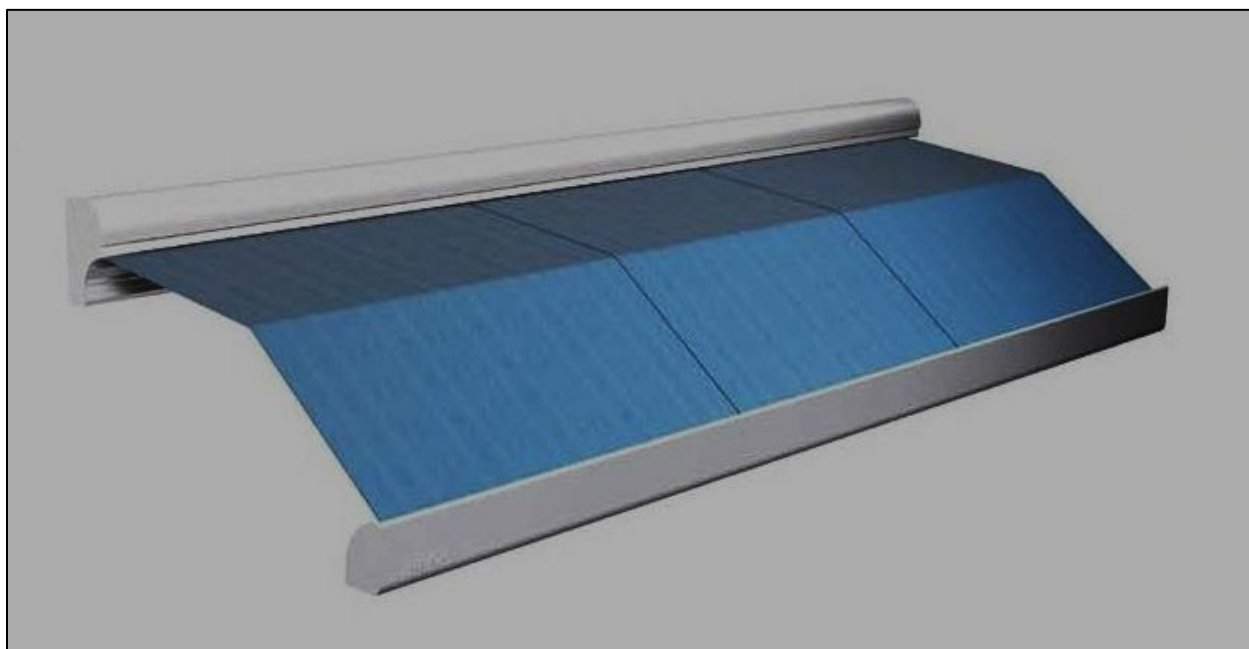


NOVA II PATIO AWNING

OPERATION AND USER CARE

REV 06042020



RV AWNING PRODUCTS

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

www.girardrv.com



Intertek
5000791

	GIRARD SYSTEMS 1361 Calle Avanzado, San Clemente, CA 92673 Phone: (800) 982-8442 FAX: (949) 276-5600		MODEL: _____
INPUT: xx VAC xxAmps xx WattsxxHz		Intertek 5000791	SERIAL NO: _____
CAUTION: TO PREVENT THE MOTOR PROTECTOR FROM TRIPPING DO NOT EXCEED 2 MINUTES OF OPERATION PER HOUR.		DATE: _____	
ATTENTION: POUR EVITER LA SURCHARGE DU MOTEUR, NE PAS UTILISER PLUS DE DEUX MINUTES PAR HEURE			
Conforms to UL STD 325 Certified to CSA STD C22.2 No. 247			

AWNINGS FITTED TO THIS VEHICLE;

MODEL _____	SERIAL No. _____
MODEL _____	SERIAL No. _____
MODEL _____	SERIAL No. _____
MODEL _____	SERIAL No. _____



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.



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BASIC SYSTEM OVERVIEW

The NOVA II 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 support 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
 - Motion Sensor – 98GC779, which enables automatic retraction of the awning during periods of high wind that may damage the awning system.
 - Ignition retract and lock module – GC 1102 for 110v systems, GC946G for 12v systems. This will send a retract signal to all extended awnings on the vehicle as soon as the ignition is turned on, then all power is removed from the awning motors after 60 seconds to ensure that the awnings cannot be deployed while the vehicle is in motion.
 - Motor Control module – GC136 or GC274A 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.

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.



GC104



GC105A/106/107



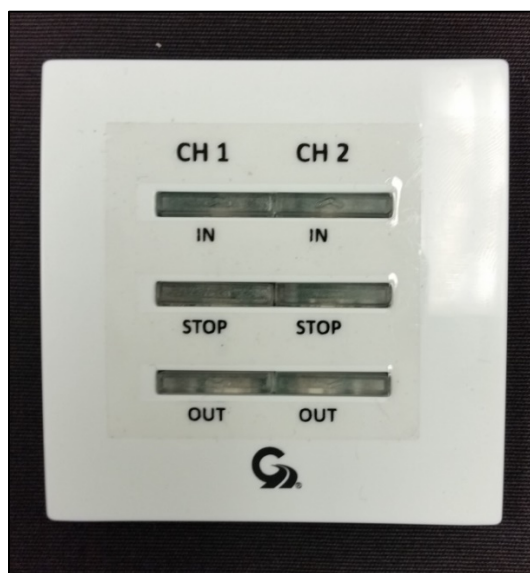
98GC1063



98GC1029



98GC229



98GC230



GC661B

TESTING AND ADJUSTMENTS

OVERVIEW

- A. Adjusting Motor-limit switches
- B. Adjusting Pitch and Arm (Elbow) Height
- C. Testing Motion Sensor
- D. Adjusting Lead Rail

TOOLS REQUIRED

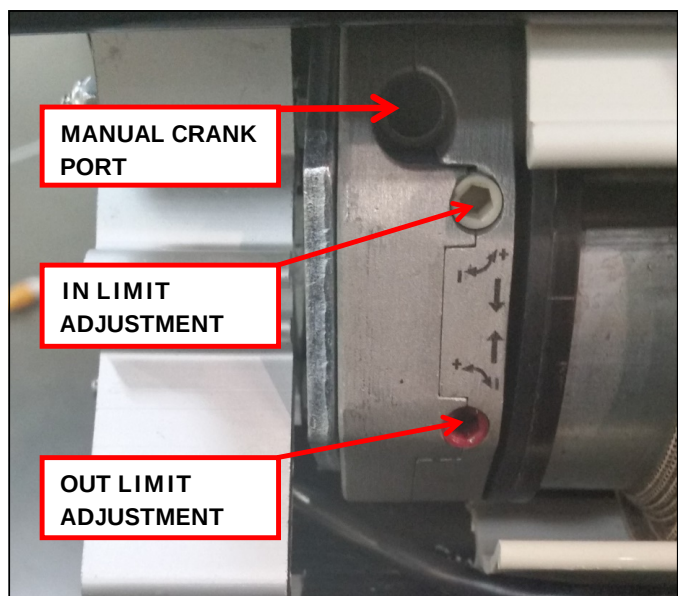
The black plastic key provided with the awning, or a 4mm (5/32") Allen wrench.

NOTE: The motor limit switches have been adjusted to the correct position at the factory prior to shipment. When retracting the awning motor is set to stop the exact moment that the awning box closes. Failure to comply with this will lead to premature failure of the motor. At full extension the fabric should be taut; the arms should be slightly bent, exposing an approximate ¼" gap at the elbows.

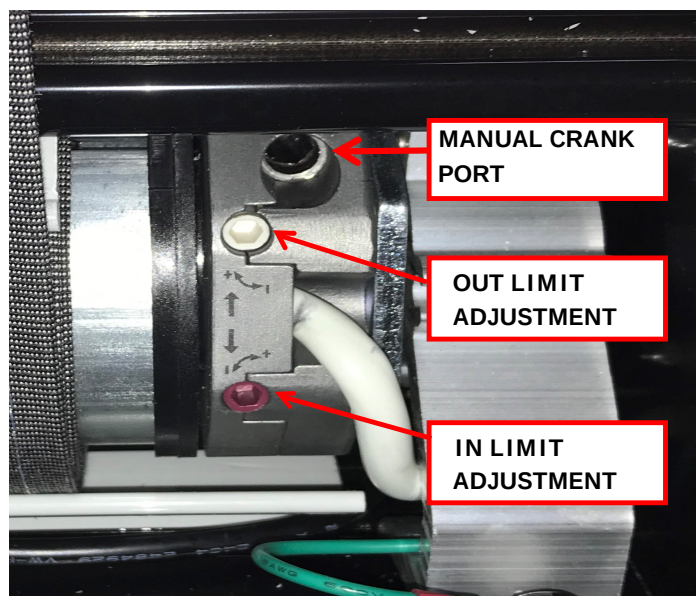
Always check the motor limits after installation to ensure that the awning opens and closes correctly. Awning fabric can stretch over time, this will require an adjustment of the IN and/or OUT limit switch.

A. ADJUSTING MOTOR LIMIT SWITCHES

Left Hand Motor Location



Right Hand Motor Location



1. Girard Systems' AC Awning motors are reversible. Pay special attention to verify which motor location you have before any attempted adjustment.
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 1)
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 an approximate $\frac{1}{4}$ " gap at the elbow.

B. ADJUSTING PITCH and ARM (Elbow) HEIGHT

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 no less than 7' (84").

This adjustment is usually required after an arm replacement. Also, if the elbow of the arm hits the bottom of the cassette as the awning retracts.

Tools Required

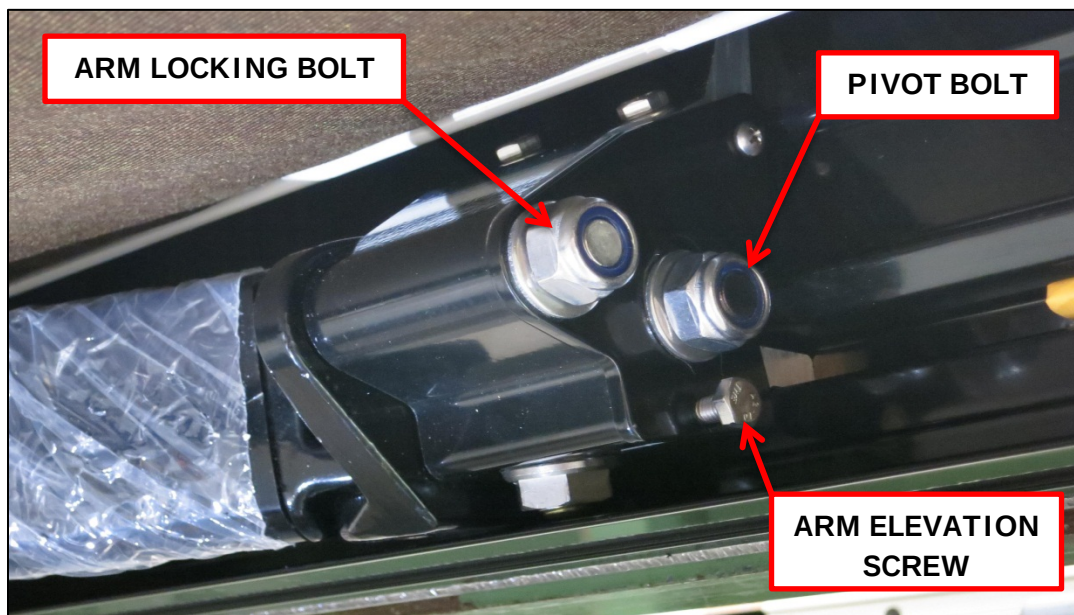
- 19mm (3/4") open-end wrench
- 10mm (3/8") open-end wrench

A. ELBOW HEIGHT

1. Extend the awning about 18"
2. On the selected arm, loosen the ARM LOCKING BOLT and PIVOT BOLT on the side of the shoulder assembly using a 19mm open-end wrench.
3. Locate the ARM ELEVATION SCREW (Figure 2). Using a 10mm open-end wrench rotate the screw CLOCKWISE to RAISE the arm position inside the cassette, or COUNTER-CLOCKWISE to LOWER the arm position inside the cassette.
4. Tighten the 2 lock nuts located on the side of the shoulder assembly.

NOTE: After retightening the Lock nuts, the arms will raise slightly.

5. Close the awning completely to ensure smooth operation and that the lead rail lies flush and square along the length of the cassette.



(Figure 2)

B. ADJUSTING PITCH

1. Extend the awning about 18"
On the arm selected, loosen the 2 lock nuts on the side of the shoulder assembly using a 19mm open-end wrench.
2. Locate the Pitch adjustment screw located on the bottom of the shoulder assembly. (Figure 3)
3. Using a 19mm open-end wrench, turn the pitch adjustment screw counter-clockwise to lower the pitch, turn the bolt clockwise to raise the pitch.

DO NOT OVERTIGHTEN AS THIS WILL DAMAGE THE AWNING.

4. Tighten the 2 lock nuts located on the side of the shoulder assembly
5. Close the awning completely to ensure smooth operation and that the lead rail lies flush and square along the length of the cassette.



(Figure 3)

C. TESTING THE MOTION SENSOR (Wind Sensor)

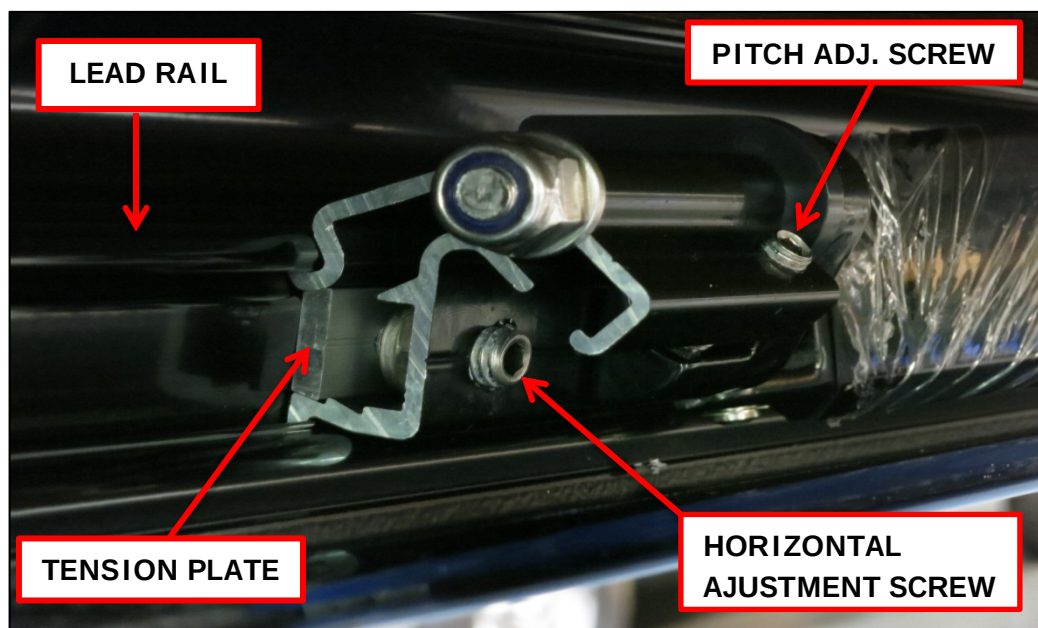
1. Partially extend the awning (at least 3 feet).
2. Physically activate the motion sensor by lifting and dropping the awning lead rail.
3. At this point the awning should retract; if not, check that there is a 12V dc supply to the motion sensor and that the motion sensor is correctly programmed.

NOTE: The Motion sensor will send a retract signal to the motor of the awning it is programmed to on the RV. If there are multiple awnings extended that begin to retract simultaneously under windy conditions, 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.

D. ADJUSTING THE LEAD RAIL

The lead rail on your awning has been preset 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 Pitch adjustment screw. Turn clockwise to increase the pitch and turn counterclockwise to decrease the pitch. (Figure 4)



(Figure 4)

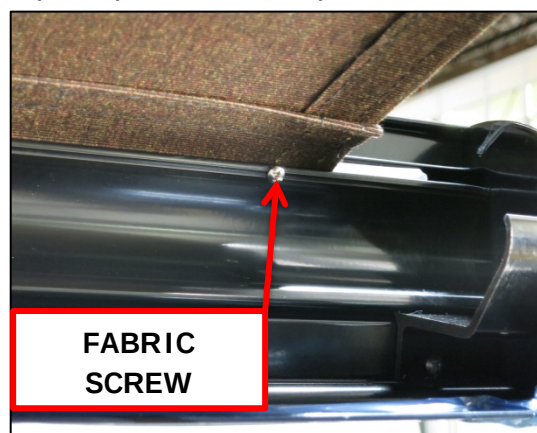
TROUBLESHOOTING GUIDE

PROBLEM:

The lead rail is binding on the side of the awning casing/ offset.

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, and then replace the fabric screws. (See pictures below)



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 10. 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 during office hours, 07:30 to 5pm PST.

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 Main Power 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 NOVA II 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. (7:30am – 5:00pm PST)

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. (7:30am – 5:00pm PST)

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 7.

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 II 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 on page 7.

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 pages 8 - 9.



CARE AND MAINTENANCE GUIDE

AWNING FABRICS

For all cleaning, stain removal, care and maintenance of Acrylic and Polyester fabrics the recommendations are the same.

Fabric Care Guidelines

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

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

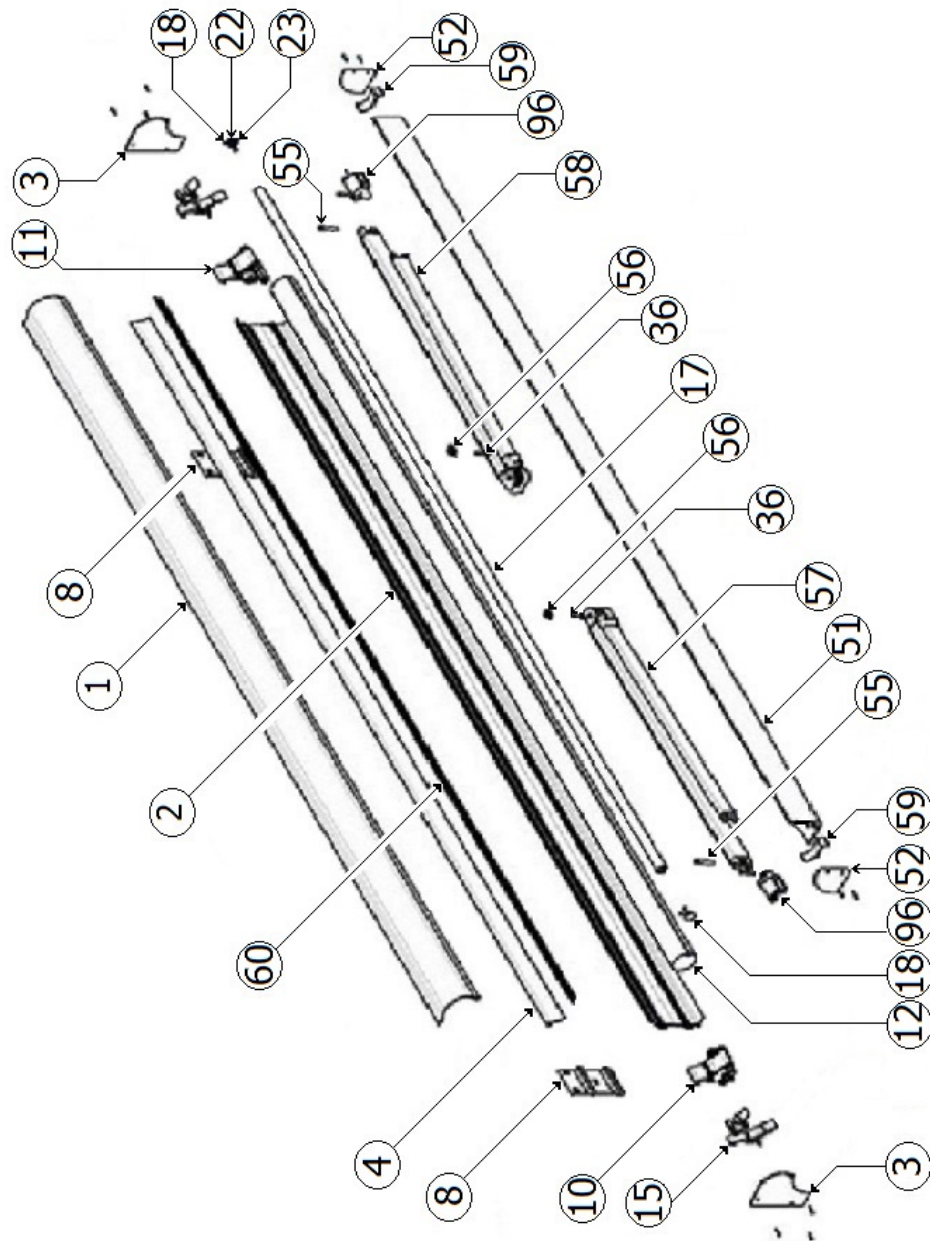
STAIN SOLUTIONS

<u>STAIN</u>	<u>RECOMMENDED CLEANING SOLUTIONS</u>
BEER	Dishwashing liquid (2 oz.)/1 gallon water/white vinegar (3 oz.)
BERRY	Dishwashing liquid (2 oz.) /1 gallon water / ammonia (4-8 oz.)
BIRD DROPPINGS	Dishwashing liquid (2 oz.)/1 gallon water.
BLOOD (DRIED)	Dishwashing liquid (2 oz.) / 1 gallon water / ammonia (4-8 oz.)
BUTTER	volatile solvent (acetone) 100%
CHARCOAL, PENCIL MARKS	vacuum, then dishwashing liquid (2 oz.) / 1 gallon water
CATSUP OR MUSTARD	Dawn® dishwashing liquid (2 oz.) / 1 gallon water
CHEWING GUM	volatile solvent (acetone) 100%
CHOCOLATE	Dishwashing liquid (2 oz.) / 1 gallon water / ammonia (4 oz.)
COFFEE	Dishwashing liquid / water, white vinegar, acetone
COLA	Dishwashing liquid (2 oz.) / 1 gallon water



CRAYON	Paint remover (100%), oil or grease remover (mix as directed)
EGG (RAW)	Dishwashing liquid (2 oz.) / 1 gallon water
GRAPE JUICE	Dishwashing liquid (2 oz.) / 1 gallon water
GRAVY	Dishwashing liquid (2 oz.) / 1 gallon water
GREASE (CAR)	volatile solvent (acetone) 100%
INK (PERMANENT, INDIA, BALLPOINT)	Paint remover (100%), volatile solvent (acetone) 100%, soap and water
IRON RUST	Oxalic or Citric acid (2oz.) / 1 gallon water
LIPSTICK	Paint remover, oil or grease remover (mix as directed)
MASCARA	Paint remover (100%), volatile solvent (acetone-100%), dishwashing liquid (2 oz.) / 1 gallon water
MILDEW	Bleach (1/2 cup) /dishwashing liquid (2 oz.) / 1 gallon water
MILK	Dishwashing liquid (2 oz.) / 1 gallon water
NAIL POLISH	volatile solvent (acetone) 100%
OIL	volatile solvent (acetone) 100%
ORANGE DRINK	Dishwashing liquid (2 oz.) / 1 gallon water
PAINT (LATEX) WET	Dishwashing liquid (2 oz.) / 1 gallon water
PAINT (LATEX) DRIED	Paint remover (100%), oil or grease remover (mix as directed)
PAINT (OIL OR LACQUER)	Paint remover (100%), oil or grease remover (mix as directed)
SHOE POLISH (LIQUID)	volatile solvent (acetone) 100%
SHOE POLISH (WAX)	apply heated iron over towel, volatile solvent (acetone) 100%
SUNTAN LOTION	Pine oil detergent / water (mix as directed)
TEA	Dishwashing liquid (2 oz.) / 1 gallon water
TOMATO JUICE	Dishwashing liquid (2 oz.) / 1 gallon water
TREE SAP	Turpentine (100%), dishwashing liquid (2 oz.) / 1 gallon water
URINE	Dishwashing liquid (2 oz.)/1 gallon water/white vinegar (3 oz.)
VOMIT	Dishwashing liquid (2 oz.)/1 gallon water/white vinegar (3 oz.)
FOOD COLOR	Dishwashing liquid (2 oz.)/1 gallon water/white vinegar (3 oz.)
WAX (CANDLE)	apply heated iron over towel, volatile solvent (acetone) 100%
WINE	Dishwashing liquid (2 oz.) / 1 gallon water / ammonia (4-8 oz.) / white vinegar (3 oz.)

Nova Exploded Diagram





NOVA II COMPONENT IDENTIFICATION

ITEM	DESCRIPTION	PART NUMBER
1	Main Housing Cover 14' BLK	2202714-B01
1	Main Housing Cover 16' BLK	2202716-B01
1	Main Housing Cover 18' BLK	2202718-B01
1	Main Housing Cover 19'8" BLK	2202719-B01
2	Back Housing 14' BLK	2202514-B02
2	Back Housing 16' BLK	2202516-B02
2	Back Housing 18' BLK	2202518-B02
2	Back Housing 19'8" BLK	2202519-B02
3	Main Housing End Plate LH BLK	2201132-B03
3	Main Housing End Plate RH BLK	2201133-B03
4	Back Housing Gutter 18' Plastic	1500549-04
4	Back Housing Gutter 19'8" Plastic	1500096-04
5	End Plate Screws	1500110-05
6	Mounting Bracket Slide Lock	1500111-06
7	Mounting Bracket Slide Lock Allen Screw	1500112-07
8	Mounting Bracket 11"	1500115-08
8	Mounting Bracket 19"	1500114-08
10	Shoulder Support LH BLK	2205133-B10
11	Shoulder Support RH BLK	2205133-B11
12	Roller Tube 14'	1500121-12
12	Roller Tube 16'	1500122-12
12	Roller Tube 18'	1500123-12
12	Roller Tube 19'8"	1500127-12
13	78mm Roller Gudgen-All in One	1500142-13
15	Roller Tube Support Bracket	2202400-15
17	Cross Bar 14'	2202114-17
17	Cross Bar 16'	2202116-17
17	Cross Bar 18'	2202118-17
17	Cross Bar 19'8"	2202119-17
18	Cross Bar End Cap LH	2202162-18
18	Cross Bar End Cap RH	2202163-18



19	Cross Bar Support	2202160-19
20	Cross Bar Lift Bracket	2202160-20
21	Cross Bar Mounting Bracket Alum	2202160-21
22	Cross Bar Pulley	2202160-22
23	Cross Bar Support Bearing	2202160-23
36	Pin for Arm Connection Plate	1500168-36
49	Guide For Lead Rail	2202300-49
51	Lead Rail 14' BLK	2202314-B51
51	Lead Rail 16' BLK	2202316-B51
51	Lead Rail 18' BLK	2202318-B51
51	Lead Rail 19'8" BLK	2202319-B51
52	End Plate for Lead Rail - LH	2201122-B52
52	End Plate for Lead Rail - RH	2201123-B52
54	Plastic Cover for Motor Cut-out on Lead Rail	2200097-54
55	Arm/Lead Articulation Connector Pin	2205100-55
56	E Clip, Arm/Lead Rail Articulation Pin	2205100-56
57	Arm BLK 9'9" LH (3.0M)	2205030-B57
58	Arm BLK 9'9" RH (3.0M)	2205030-B58
59	Gliding Angle with Bolt and Nut	1500350-593
60	Main Housing Gutter 18' Plastic	1500549-60
72	Poly Rope 5.6 mm (@ Roller Tube)	1500372-00
96	Lead Rail Connector LH	2205122-96
96	Lead Rail Connector RH	2205123-96
	Girard Logo Plastic	3300504-002
	Rubber Seal for Flush Mount - BLK (per ft.)	1500501-99
Motor Assemblies		
14	Motor Assy 45-50 w/Manual Override	97GA45M-50
Fabric Assemblies		
	Fabric Assy 14' x 9'9" Nova-II	8000030-N14
	Fabric Assy 16' x 9'9" Nova-II	8000030-N16
	Fabric Assy 18' x 9'9" Nova-II	8000030-N18
	Fabric Assy 19'8" x 9'9" Nova-II	8000030-N198



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Follow proper safety practices. If in doubt, consult a professional RV technician.