

Atwood (Excel) Window Condensation Repair



After Glass Replacement – Nice and clear !

This is the window that forced me to begin this project. If you are taking the time to read this, I suspect that you either have or have had a similar condensation or moisture intrusion problem with an Atwood Mobile Products thermopane window.

I have a 2002 Itasca Suncruiser 37G which was manufactured by Winnebago Industries. This is my second motorhome (my first Winnebago product), and overall I am extremely pleased with the quality and workmanship.

A year or so ago, I noticed moisture building up inside the fixed "slant" window, which is sandwiched between the windshield / A pillar and the drivers door. In my quest for a solution, I began searching the Internet, finding almost all of my information in forum postings on both the iRV2 and the RV.net websites. Based upon the high volume of the postings, it was clear to me that this was a fairly widespread problem for Atwood as the OEM supplier, and Winnebago as the coach manufacturer. Since my coach is out of the manufacturers warranty, and my extended warranty would not cover window seals, I began searching for a cost effective, long-term solution.

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After a lot of research, I concluded there were four (4) possible solutions.

- Break out the inner pane of glass, leaving just the single outer pane of glass;
- Remove the effected windows, and drill three 3/16" holes through the frame, through the seal and between the panes of glass to allow the moisture to naturally dry.
- Remove the window and replace the thermopane glass;
- Replace the entire window and frame assembly.

After giving serious consideration to each of these solutions, I chose to remove the window from the coach, drill holes, and hope that the window would dry. I was a little bit skeptical that this was a good long term solution, but I continued forward as it appeared to be the most cost effective solution, and I had little to lose at that point. After several days of trying to dry the window, I conceded defeat, and contacted Atwood Mobile Products (563-422-5641) to purchase replacement glass. Replacement of the glass proved to be a very cost effective solution, as I was able to replace my three (3) problem windows for less than \$150.

WHAT DID IT COST ?

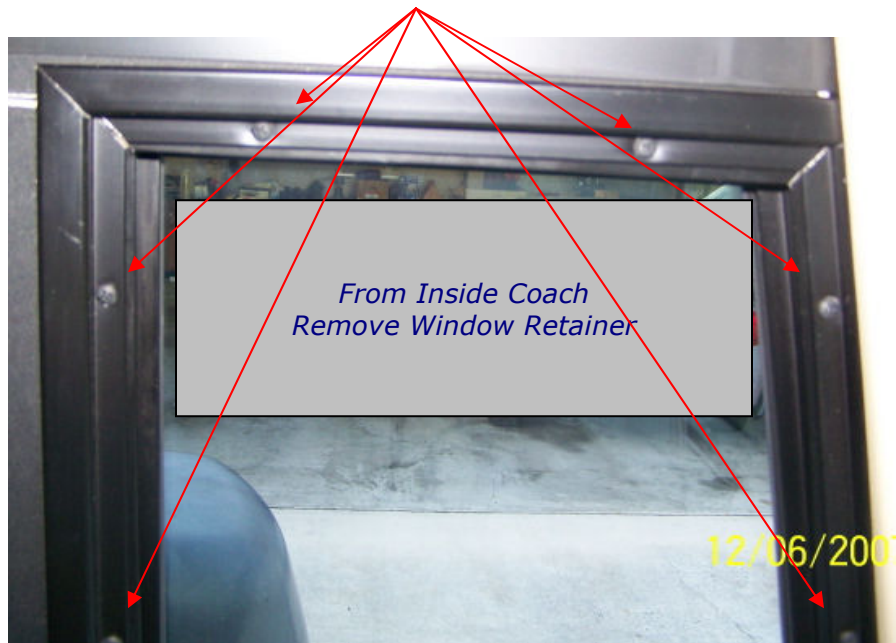
Description	Winnebago Part No. / Atwood Part No.	Qty	Price
Atwood (R/H "Passenger Side Lower" Fixed)	125583-01-702/ 390026101	1 ea.	\$45.48
Atwood (R/H "Passenger Side Upper" Fixed)	125583-01-70 / 390026100	1 ea.	\$23.82
Atwood (L/H "Driver Side Front Slant" Fixed)	125585-01-700 / 390026098	1 ea.	\$24.28
Vinyl "U Shaped" Window Glazing	132027331	300 inches	\$0.00
	Shipping & Handling		\$34.00
5/16" x 15' 3M Windo Weld	3M Windo Weld	1 ea.	\$9.85
3/16" x 1" Black Butyl Tape		2 ea.	\$4.77
			\$146.97

I believe it is possible to replace the glass on the driver's side without removing the entire window assembly from the coach. However, it will require some assistance, and patience.

To remove the window assembly, from outside of the coach, remove the aluminum "A Pillar" cover (3 screws). In the lower left corner of the window frame, remove the two (2) screws, which help secure the window to the frame of the coach. Move inside the coach, and unscrew the interior window retainer.

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Phillips Head Screws



Interior side of Window Frame

Most manufacturers install and seal the windows with butyl tape. It is a sticky and gummy black pliable sealant, which dissolves fairly easily in mineral spirits.

To remove the window frame from the motorhome, **CAREFULLY**, slide a putty knife between the aluminum window frame, and the fiberglass body of the coach. SLOWLY, work your way around the window, separating the seal of the butyl tape, while gently pulling the window frame away from the body of the coach. The butyl tape may become stringy. I found that a razor knife will cut it nicely, to allow complete separation from the body.

Once you break the bond of the butyl tape, the window will easily separate from the coach.

Once the window is out of the motorhome, you will need to remove all of the old butyl tape from both the body of the motorhome, as well as the inner flanges of the aluminum window frame. I found that a flat PLASTIC putty knife works well getting the bulk of the butyl tape. If you're patient, careful and lucky, you can rub it with your thumb, and it will pull off in long pieces. Remove the remnants of the butyl tape with mineral spirits, and wipe clean.

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I discovered that the trim area around the driver door and passenger windows that I thought was painted black, is in fact black vinyl (decal). It appears to be fairly durable, but if your not careful, you will nick, cut or tear it.

On the outside of the window, there are four (4) rubber seals that appear to hold the glass in. It doesn't. Using a small screwdriver, CAREFULLY pry the each rubber piece from the frame. Once they are loose, they will pull right out.

Remove Aluminum
"A" pillar cover
(3 Phillips Head Screws)

Remove screws
under the "A" pillar
cover
(2 Phillips Head Screws)



Remove Rubber Outer Seals

Set the rubber outer seals aside to clean up and re-use.



Outer Rubber Seal

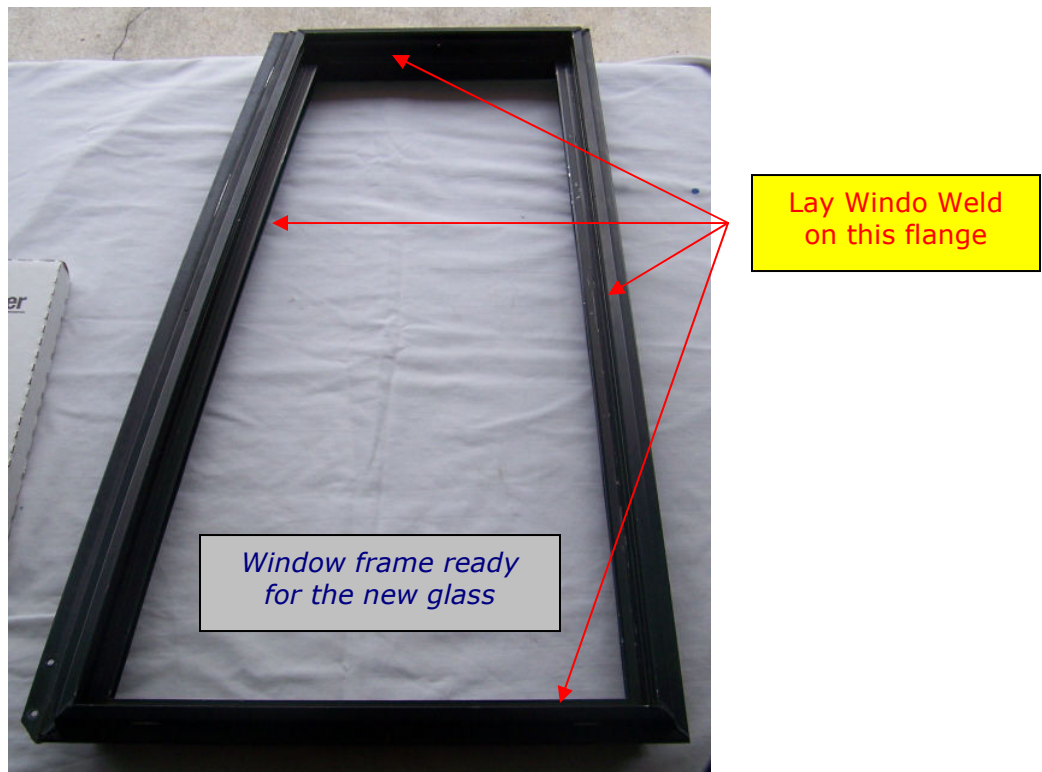
Once the rubber seals have been removed, you are ready to begin removing the glass from the frame.

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The glass is actually held in place by an internal Butyl seal, which is sandwiched between the glass and the aluminum frame. It is very durable, but fairly easily defeated. Lay the window assembly flat, with the inside facing up. Using a putty knife, carefully break the seal between the glass and the frame. As you break the seal, you should be able to gently pull up on the frame, while pushing down on the glass, and it will separate fairly easily.

Once the glass is out of the frame, clean the old butyl tape of the inside of the aluminum frame. You will likely find two small plastic rectangular blocks near the bottom inside of the frame. These are called setting blocks and will be reused. Clean them up and set them aside.

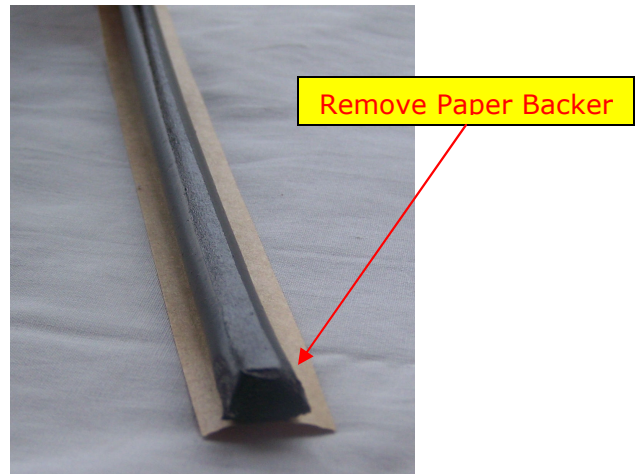
Lay the frame face up, and prepare to reinstall the new seal and the glass.



Window Frame without glass

To reinstall the glass, I used 3M Windo Weld, which is bead butyl tape. I purchased it off the shelf at my local auto body supply house. I found it through the 3M website. The roll was \$9.85 plus tax.

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3M Windo Weld 5/16" x 15'

CAREFULLY, lay the Windo Weld along the inside flange of the window frame, replacing the original butyl seal. I found that gently rolling the tape in your fingers would best allow the transitions through the corners. The auto glass folks also told me to **start the bead near the top of the frame**, so the seam will be less subject to water intrusion. The Windo Weld should seam together nicely with a slight overlap.

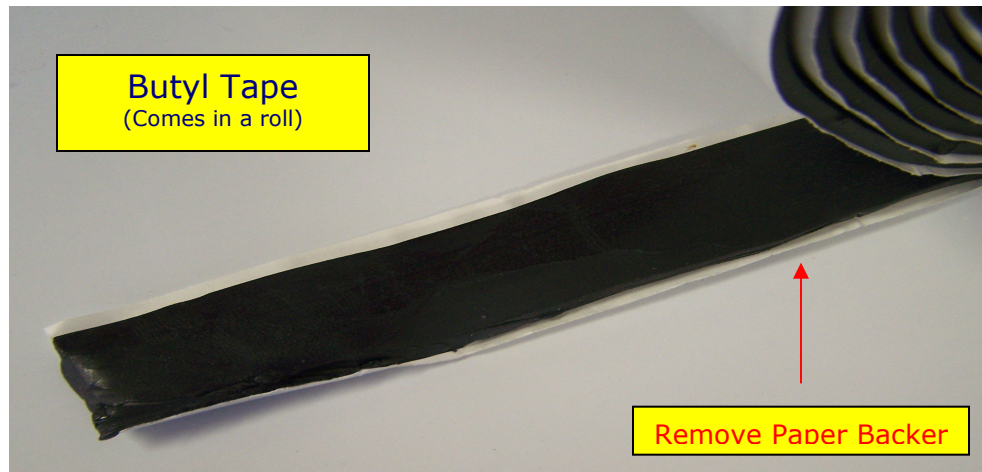
Install the setting blocks at the bottom of the frame. These will keep the glass from settling in the frame, and potentially disrupting the seal, Butt the bottom of the window up against the setting blocks and carefully lay the glass in the frame. At this point, I carefully stood the frame upright, **WHILE HOLDING THE GLASS IN PLACE**, in order to set the glass securely on the setting blocks.

Once, you have the glass positioned correctly, **LIGHTLY** press the glass against the butyl bead. The Windo Weld will flatten out slightly.

DON'T PRESS TOO HARD, AS YOU WILL WANT A TIGHT FIT WITH THE OUTER RUBBER SEALS.

Re-install the rubber outer seals. They should fit tightly, and are easier to re-insert if you twist the rubber seal slightly as you push it back into place. Use a small amount of black silicone sealant in the four corners to fill the gaps.

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Lay the window face down. Utilizing the black butyl tape, carefully lay the butyl tape on the inside flange of the aluminum window frame. The butyl tape is fairly sticky, but generally can be repositioned if you don't apply any pressure when applying. After you have the butyl tape laid out, gently lift and re-position any section that needs to be adjusted. LIGHTLY press the butyl against the aluminum frame. The window should now be ready for re-installation into the coach.

To re-stall the window, you may want to solicit the assistance of a helper.

CAREFULLY, place the window frame back into the window opening in the body of the coach. Be careful not to attach the butyl tape, until the window is where you want it to be. Once it is set, the butyl tape will become a monumental mess.

With the window in position, GENTLY press the aluminum window frame against the body of the coach. The butyl tape is sticky, and will immediately stick to the fiberglass. Re-install the interior window retainer ring. As you re-install the window retainer ring, the screws will pull the window frame against the body of the coach, and seal it. I would suggest re-installing the screws in a pattern similar to replacing lug nuts on a wheel, to equalize the seal.

PASSENGER SIDE WINDOW

The passenger side window is a single window unit, comprised of three separate glass panels. Two panels (Upper and Front) are fixed pieces, and the third is the sliding window

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In order to replace any of these glass panels, the entire window assembly must be removed from the body of the coach. This window is heavy, large and unwieldy.

YOU WILL NEED A HELPER TO REMOVE THIS WINDOW.

To remove the passenger window, remove the interior window retainer ring, as previously described. After the window retainer ring is removed, the window will only be held in place by the butyl tape seal. CAREFULLY separate the aluminum window frame, and the butyl tape from the body of the coach, as described previously. I would recommend using either a metal or plastic scraper.

Once the window is out of the coach, all remaining butyl tape must be removed from the body of the coach, as well as the flanges of the aluminum window frame.

To disassemble the window, remove the Torx screws as indicated below. The window seals (glazing) used on this window are vinyl, and "U" shaped. If you poke, pull, or pry on the vinyl glazing, you will damage it and have to replace all of it. Otherwise, if you are careful, the glazing should be re-useable.

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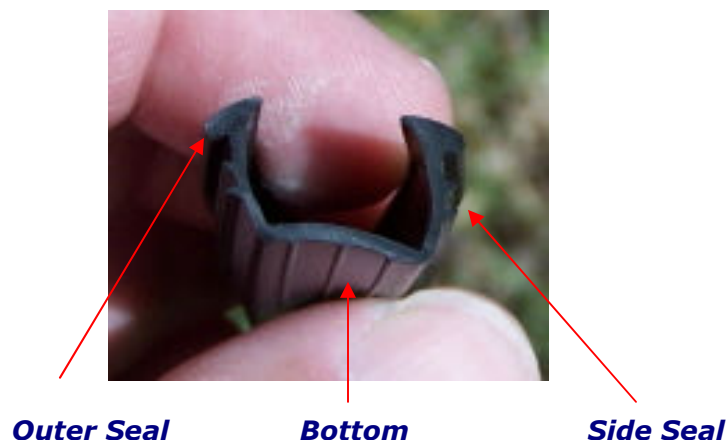
DISASSEMBLY



REMOVE TORX SCREWS

Once you remove the Torx screws, the window will easily come apart. Glass replacement is relatively simple, and should be fairly self-explanatory. If you have to replace the vinyl glazing, I found that a LIGHT touch with a heat gun will help mold the virgin vinyl transition the corners more easily. I noted that the glazing around the bottom of both fixed glass pieces had weep holes in the bottom, assumably to promote drainage. The new glazing I got from Atwood did not have any holes, so I used a handheld hole punch-to-punch holes in the bottom of the glazing.

Vinyl Window Glazing (Side View)



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Vinyl Window Glazing (Bottom View showing weep holes)

Re-assembly of the window can be a little bit challenging, and may require the assistance of a helper. The Torx screws will seat the glass and the vinyl glazing in the aluminum frame. It can prove a little bit challenging, to get everything re-aligned, and an extra set of hands will help.

When the window is reassembled, it will be ready for butyl tape and re-installation in the coach.

HOW TO FIND PART NUMBERS

There are a couple of ways to identify your window part numbers.

- Call Winnebago Industries Service at (800)-537-1885
- Search the Winnebago Industries website
 - www.WinnebagoInd.com
 - Click **"Resources"** on the top of the page
 - Click **"Manuals & Diagrams"** at the bottom of the page
 - Click **"Parts Catalog"**
 - Click the **model year** for your coach
 - Click the **model number** for your coach
 - Open "Windows and Vents Group"

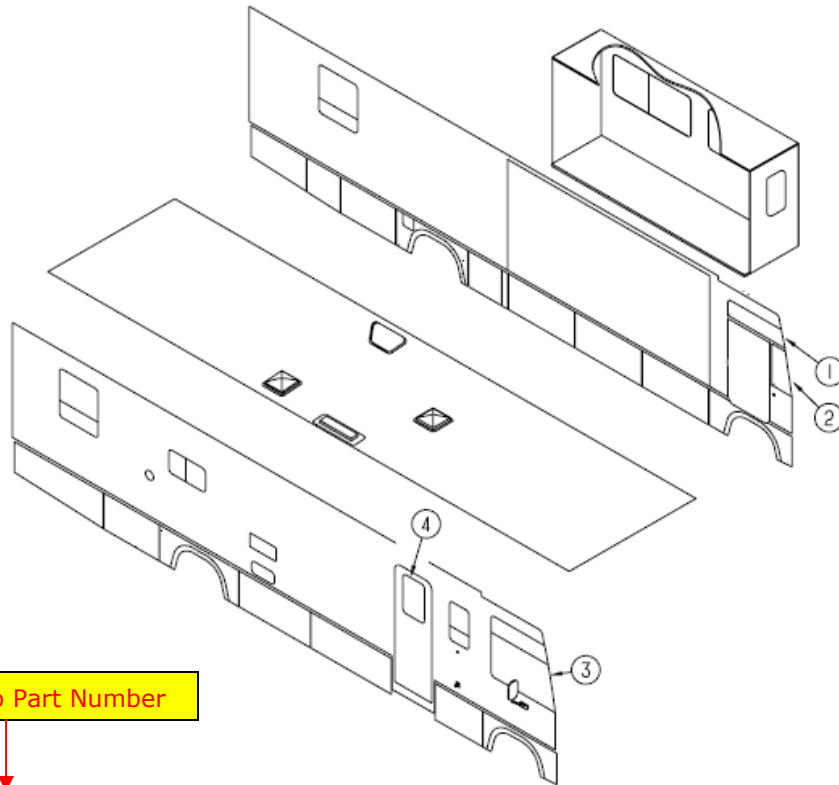
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- Download a coach specific parts list by coach serial number
 - Click on the Blue "Serial Parts List" button
 - Click your coaches model year
 - Enter your coaches five (5) digit serial number.

The first number shown will be the Winnebago number. The second number shown is Atwood's part number. I found that the folks at Atwood were very helpful and responsive to answering my questions.

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WINDOW & VENTS GROUP WINDOW & VENT LAYOUT



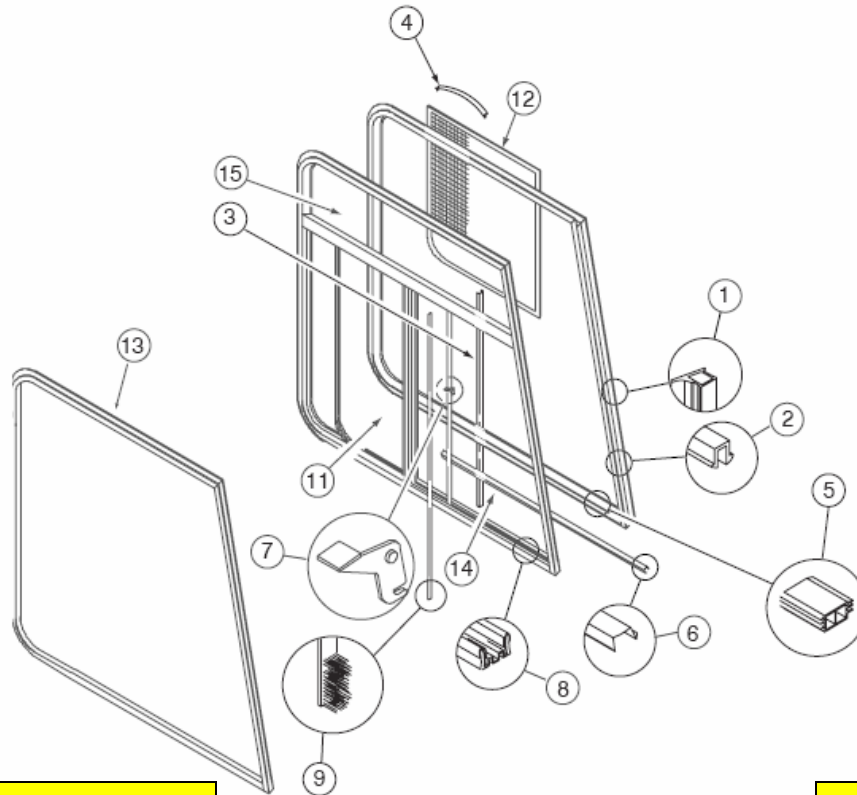
Winnebago Part Number

KEY	PART NUMBER	U/M	DESCRIPTION
1*	125600-01-01A	EA	WINDOW - VISTA - THERMOPANE
2*	125585-01-01A	EA	WINDOW - FRONT SLANT/THERMO - 11.6" T X 29.2" H X 16.8" B
3*	125583-01-01A	EA	WINDOW - CAB PASS-3 GLASS THERMO- 42.9" T X 51.2" B X 42.6" H
4*	113733-10-01A	EA	WINDOW - STATIONARY - THERMO - 26.3" X 17"
	084073-04-000	EA	BASE/VENT - ROOF/REFRIGERATOR - BLACK - NORCOLD
	084073-07-000	EA	VENT - ROOF/REFRIGERATOR - BRIGHT WHITE - NORCOLD
	118369-01-02A	EA	CAP - REFRIGERATOR ROOF VENT - SIDE/SIDE - BRIGHT WHITE
	118369-02-02A	EA	BASE - REFRIGERATOR ROOF VENT - SIDE/SIDE - BRIGHT WHITE
*	122882-04-01A	EA	VENT - ROOF - W/FAN/POWER LIFT - W/O INSIDE GARNISH - UL
*	122882-05-01A	EA	VENT - ROOF - W/FAN/POWER LIFT - W/O INSIDE GARNISH - CSA
	048648-01-000	EA	MOTOR - ROOF VENT - 1/8 SHAFT - 12VOLT
	048649-01-000	EA	FAN BLADE - ROOF VENT - 6 BLADES - 6I
	122882-07-01A	EA	GARNISH - ROOF VENT - 2.5" TO 4.1"
*	123780-03-01A	EA	FANTASTIC VENT - 3"-4" ROOF - W/FAN -W/O THERM/PWR LIFT
*	123780-09-01A	EA	FANTASTIC VENT - 4" ROOF- W/FAN/INSUL - W/O THERM/PWR LIFT
*	123780-10-01A	EA	FANTASTIC VENT - 4" ROOF- W/FAN/PWR LIFT/INSUL - W/O THERM
	009440-01-000	EA	GEAR/ARM - LIFT - ROOF VENT COVER

*COMPONENT PARTS LISTED LATER IN THIS GROUP

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WINDOW & VENTS GROUP (CONTINUED) COMPONENT PARTS FOR WINDOW & VENT LAYOUT (CONTINUED)



Winnebago Part Number

Atwood Part Number

			125583-01-01A		
KEY	PART NUMBER	U/M DESCRIPTION		VENDOR NO.	
1	112795-01-704	FT PLUG FILLER (DOUBLE GLAZED)		122-018737	
2	112795-01-705	FT VINYL-GLAZING		132-027331	
3	098644-01-706	FT WEATHERSTRIP - GLASS		171-010668	
4	098644-01-713	EA CLIP - SCREEN - METAL		226-016966	
4	125582-01-701	EA CLIP - SCREEN - PLASTIC		130-005153	
5	112795-01-701	EA SLIDE-STOP		132-019092	
6	098644-01-710	FT TRACK - SCREEN SPACER 12"		32-017135	
7	112795-01-700	EA LATCH ASM., BLK., (BOLT ON)		DH287-CK	
8	112795-01-703	IN CHANNEL-RUN (INCHES)		122-027566	
9	098644-01-711	FT WEATHERSTRIP - SCREEN BLACK		171-016965	
11	125583-01-700	EA GLASS-SLIDING W/SASH & LATCH		DH573-A9R	
12	125582-01-705	EA SCREEN - PASSENGER - W/SEALS & CLIPS		410-026545	
13	125582-01-706	EA RETAINER - TRIM		H573-27R	
14	125583-01-702	EA GLASS - STATIONARY - R.H.		390-026101	
15	125583-01-701	EA GLASS - STATIONARY - UPPER		390-026100	
	125582-01-708	EA WEEPHOLE COVER - RIGHT HAND		130-026598	
	125582-01-709	EA WEEPHOLE COVER - LEFT HAND		130-026599	
	098644-01-717	EA SPLINE - SCREEN		132-004716	