



Fixed Sash Replacement Service Instruction

These instructions apply to:
ProLine® 1991-Current

Tools Required:

- Utility knife
- Suction cups
- Screw driver with Torx T-15 bit
- Sealant Gun

- Chisel
- Punch
- Saw
- Hammer

Supplies Needed:

- Mineral Spirits
- 1/2 " masking tape
- Wood matchsticks
- White glue

CAUTION!

- Read the entire procedure before beginning work.
- Adequate personal safety equipment should be worn
- Use appropriate fall protection before removing the sash.
- Two or more people may be required for this instruction.

Note: If the replacement sash is to be finished before being installed, take care not to get finish on the foam weather strip.

Note: The replacement sash is provided with weather strip gasket attached.

Note: Before beginning replacement procedure, measure the replacement sash and the window frame to be sure the replacement sash is the correct size.

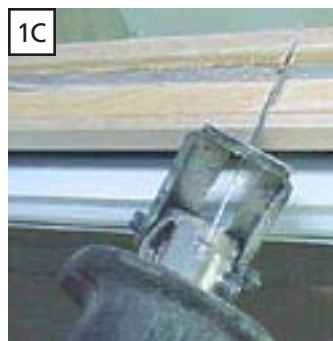
1 Removing The Fixed Sash:

1991 – 2/2007

A. Remove cladding, See Supporting Document--*Sash Cladding Replacement*--in web browser.

B. Remove glass, See Supporting Document--*Glazing Replacement*--in web browser.

C. Use a reciprocating saw to make two cuts through each of the four sides of the sash at approximately a 45 degree angles. Be careful not to hit the cladding or the wood frame.



D. Insert a flat pry bar into one cut and pry out the center section of each side of the sash.



1 Removing The Fixed Sash (continued):

- E. Remove the other sash parts from the corners by using a pry bar and by working both pieces back and forth at the corners.



3/2007 – Current:

- F. Cut the finish between the sash and the frame. Remove the Torx head screws from the sash. The number of screws will vary depending on the size of the unit.

Torx Head Screw

Refer to diagram and charts on the following page for screw locations.

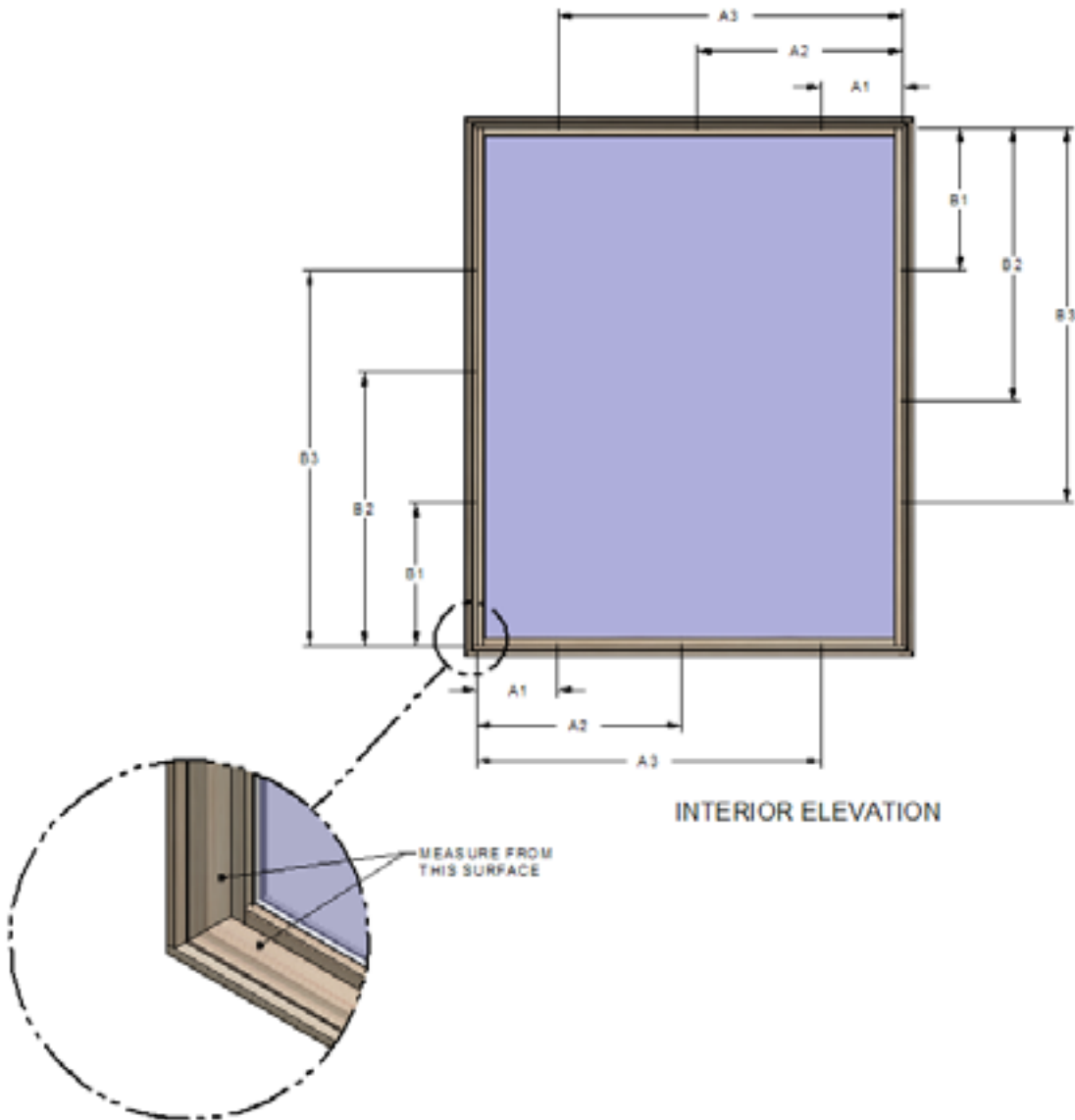


1 Removing The Fixed Sash (continued):

Use this information to locate the sash installation screws on 3/2007 - Current units.

WIDTH	A1	A2	A3	HEIGHT	B1	B2	B3
17	6-1/16"			14	6-9/16"		
21	8-1/16"			17	8-1/16"		
23	9-1/16"			21	10-1/16"		
25	10-1/16"			23	11-1/16"		
29	12-1/16"			25	12-1/16"		
33	14-1/16"			29	14-1/16"		
35	15-1/16"			35	18-1/16"		
*35	8-13/16"	25-5/16"		41	7-11/16"	30-7/16"	
37	9-13/16"	24-5/16"		47	13-13/16"	30-5/16"	
41	11-13/16"	26-5/16"		53	14-11/16"	35-7/16"	
47	13-13/16"	30-5/16"		57	15-13/16"	29-1/16"	38-5/16"
53	13-13/16"	36-5/16"		59	16-3/16"	30-1/16"	39-15/16"
59	10-11/16"	27-1/16"	45-7/16"	65	17-1/16"	33-1/16"	45-1/16"
				71	18-13/16"	36-1/16"	49-5/16"

* Use for units built after 8/2007.



1 Removing The Fixed Sash (continued):

G. Apply suction cup(s) to the sash to support the weight of the sash as it comes free of the frame.



H. Starting on a bottom sash corner, apply steady pressure by pushing on the sash. A 2 x 4 with the end covered with duct tape works well. Start with one corner and work it out slightly, before moving on to the next corner.



I. Apply pressure to the top corners while supporting the sash using the suction cup(s).



J. Pull the top of the sash clear of the frame and remove the sash to the interior.



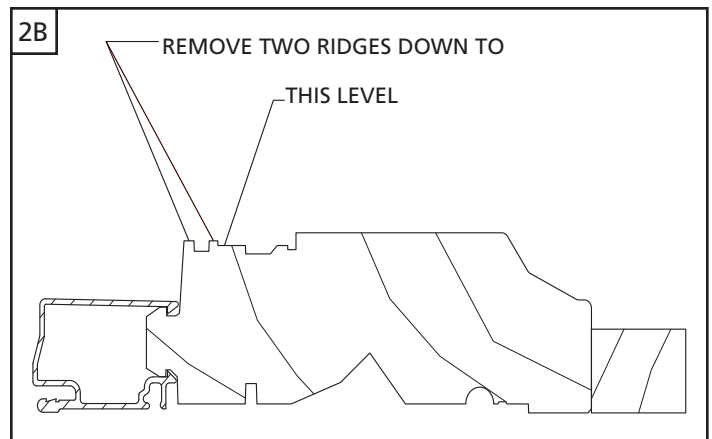
2 Cleaning the Frame and Test Fitting the Replacement Sash:

1991 - 2/2007

All replacement sashes are built with a Load Distribution Plate at each screw hole. When replacing the sash in a unit manufactured before 3/2007, the frame must be prepared to receive the plates, if either the frame width is $\geq 29"$ or the frame height is $\geq 53"$.

Sashes for frames that both the width is $< 29"$ and the height is $< 53"$ the Load Distribution Plates can be removed which eliminates the need for special preparation of the frame. (Skip steps C, D & E on units $< 29" \times 53"$)

- A. Use a side cutters to cut the exposed screws and use a hammer to tap the end of the screw flush with the wood.
- B. Use a wood chisel to remove the ridges in the frame.
- C. Make a mark on the frame where each screw will be located. Use the chart from Step 1 for screw location information.



- D. Use the template (packaged in the screw pack) as shown to make marks $3 \frac{1}{4}"$ on either side of the screw location mark. The space between these marks will need to be prepared for the Load Distribution Plates.



- E. Use a sharp chisel to remove just enough wood to permit the template to fit the new profile. Take care not to remove excess wood.



2 Cleaning the Frame and Test Fitting the Replacement Sash (continued):

1991 - 2/2007

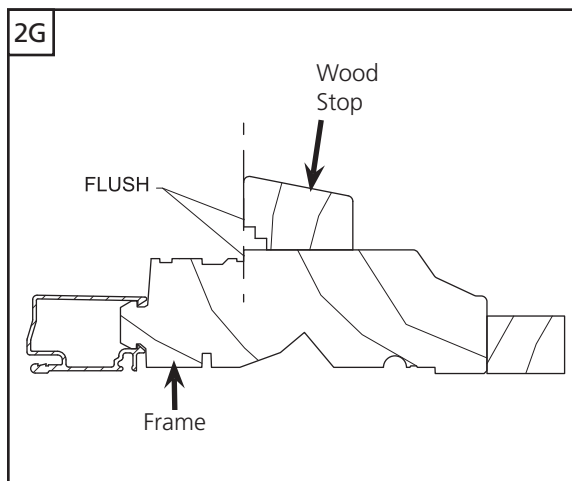
- F. Cut two wood stops provided for the head and sill to fit between the jambs. Then cut a 1/4" chamfer on each end as shown.



- G. Use a square or wood block to help locate the head and sill wood stops on the frame.

Secure the wood stops in place using 1-1/2" finish nails located 3" from each end and 8-10" on center.

- H. Cut wood jamb stops at an 11 degree miter to fit between the head and sill stops.



- I. Install the jamb wood stops using 1 1/2" finish nails located 3" from each end and 8-10" on center.



2 Cleaning the Frame and Test Fitting the Replacement Sash (continued):

3/2007 - Current

- J. Remove the frame weather strip from around the frame. The weather strip will rip when removed, but it will not be re-used.

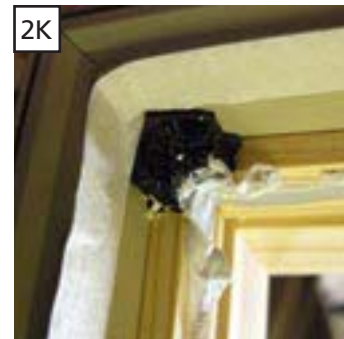


- K. Place a 10" long piece of 1/2" wide masking tape in each corner, extending 5" out from the corner on the sides of the frame covers along the edge of the existing black urethane sealant.

1 – It protects the cladding through steps that are to follow.

2 – It allows for easier clean-up after the replacement sash is installed.

Note: Do NOT remove tape until step 4I.



- L. Remove the sealant from each corner.

- Use a sharp chisel to remove the black urethane sealant from each corner. Be careful not to damage the wood or frame cladding.
- Completely remove the sealant from the corners. There may be a small amount of residue on the wood, but it must be as clean as possible.



2 Cleaning the Frame and Test Fitting the Replacement Sash (continued):

M. Test fit the sash into the frame. Use suction cups to handle the sash. If the sash does not fit, use a chisel on any frame interference points. Repeat test fit and chisel process until sash fits completely against the frame stops.

Note: Weather strip will not be applied to the frame. The replacement sash is provided with weather strip gasket attached.



3 Prepping the Frame and the Replacement Sash for Installation:

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A. On 3/2007 - Current units; Plug the frame screw holes using wood match sticks (or small dowels) and white glue.

Note: This strengthens the wood at the screw hole for the replacement screws.

B. Clean the frame where the sash will be installed and clean the weather strip gasket on the replacement sash. Use mineral spirits and a clean cloth or paper towel.

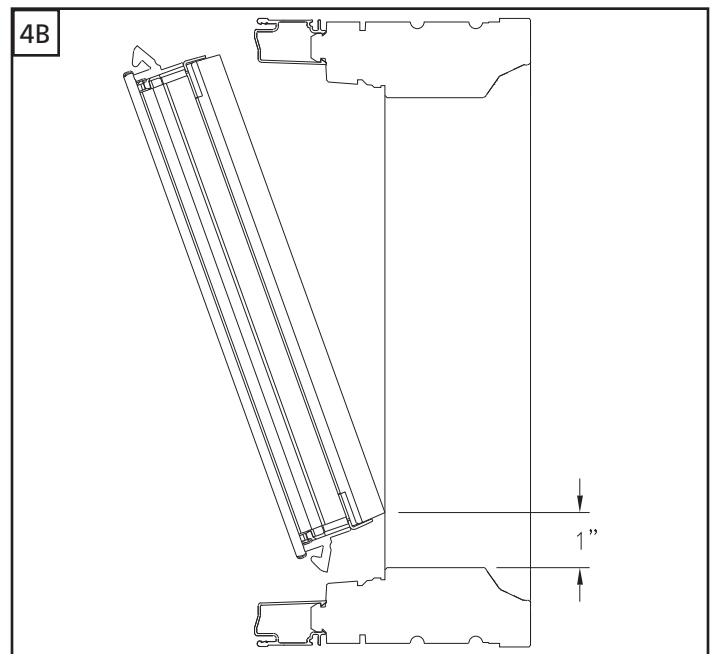
C. Insert the Torx head screws into the pre-drilled holes in the replacement sash.

4 Installing the Replacement Sash:

A. Using suction cups; pass the replacement sash through the frame.

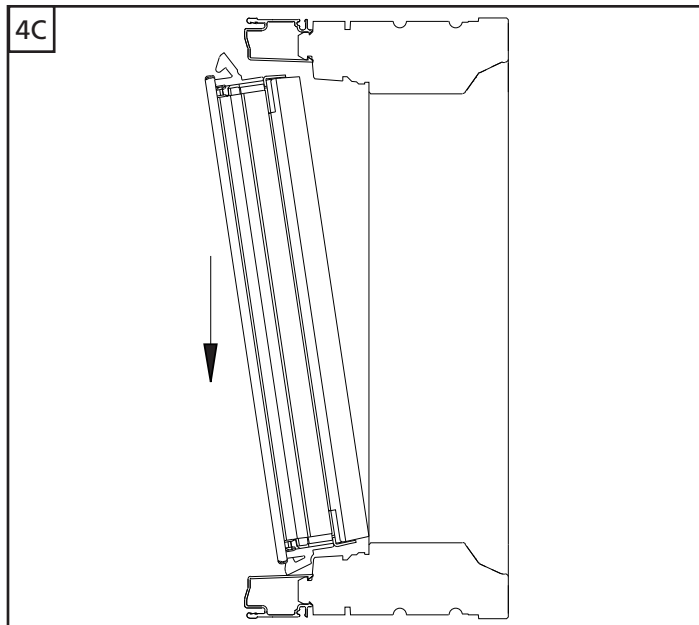


B. Keep the bottom of the sash above the sealant until the sash is pulled all the way into the frame.

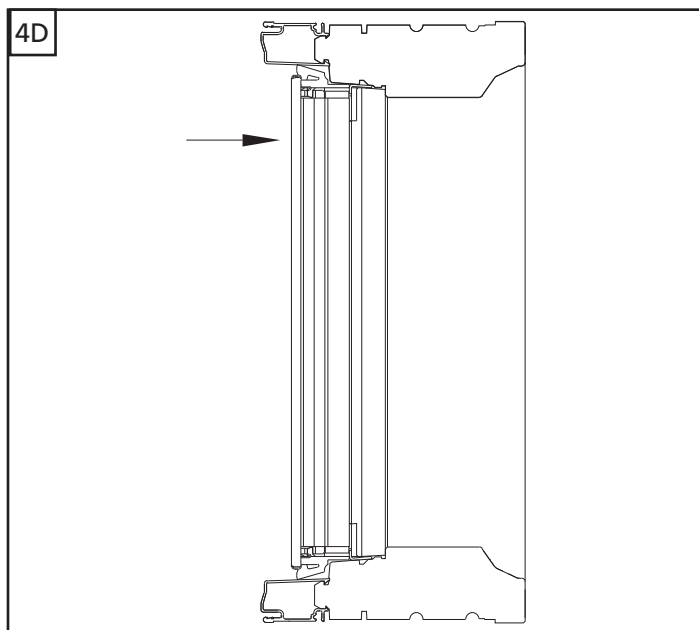
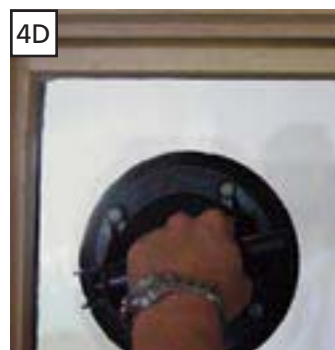


4 Installing the Replacement Sash (continued):

C. Lower the sash straight down until the sash is supported by the sill.



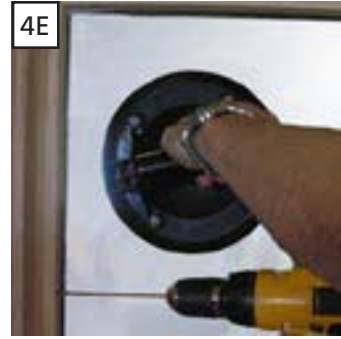
D. Pull the top of the sash into the frame and place it in the correct position. Make sure the sash is tight against the frame.



4 Installing the Replacement Sash (continued):

E. While holding the sash against the frame, fasten the sash to the frame by driving the Torx head screws into the frame. The screws were inserted into the pre-drilled holes in step 3C.

Note: Be sure to keep the sash tight up against the frame while the screws are being driven to assure minimal gap between the face of sash and the frame.

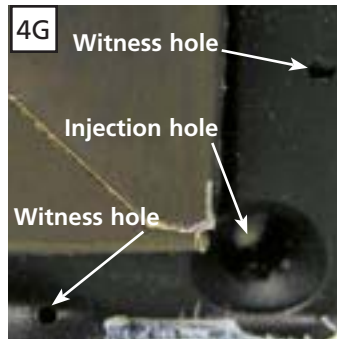


F. The replacement sash comes with a sealed package containing a cartridge of the correct urethane sealant to use when installing the replacement sash.

Note: Keep the cartridge at room temperature before use.



G. Urethane sealant is to be injected from the exterior into each frame corner through the corner hole in the corner cover. It may be necessary to lance the corner hole slightly using a nail, knife or awl to assist the flow of the sealant into the frame corner.

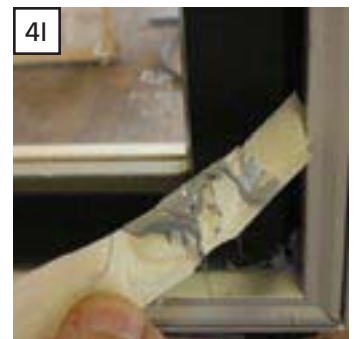


H. Inject sealant until sealant is visible at the two "witness" holes in each corner cover. Visible sealant at the witness holes is an indication the correct amount of sealant has been injected into the corner.



I. Clean up cladding on the exterior by removing the masking tape from each corner. Remove the protective film from the sash cladding. Clean off any remaining sealant from the cladding using mineral spirits.

DO NOT use isopropyl alcohol.





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