



MAINTAINING YOUR WINDOWS AND PATIO DOORS

<u>Table of Contents:</u>	1
Routine Maintenance	
* Cleaning of glass, frame and hardware	2
Glass Replacement	3
Metal Hardware	3
Picture Windows	3
Awning Windows	3
Casement Windows	4
Sliding Windows	4
Double Hung Windows	5
Screens	
* Double/Single Hung & Single Slider	6
* Double Slider and Casement/Awning	7
Patio Doors	
* Adjustment of the operating panel	8
* Adjustment of screens	9

MAINTAINING YOUR WINDOWS AND PATIO DOORS

Proper care and maintenance of your new Minnkota windows and patio doors will aid in a smooth operation and lasting beauty of your new windows and patio doors.

----- ROUTINE MAINTENANCE -----

- Cleaning out dirt and debris from the sills and tracks will allow them to open and close smoothly and lock tight.
- Cleaning the frames and sashes with mild soap, water and a soft cloth will keep them looking as new as the day they were made.
- Clean the glass with a soft cloth to remove loose dirt and dust from the surface. Then use a solution of mild, soapy water; vinegar and water; or window cleaner to clean the glass, wiping in a circular motion. Remove the cleaning solution using a squeegee or a clean/lint-free cloth.



- Do not use newspaper to dry the glass surface as the news-print may rub off onto the surrounding vinyl.
- It is recommended that a razor blade is not used to clean the glass surface, however, if a razor blade is used to clean residue off the glass, only use a new straight-edge blade. Keep the blade edge flat against the glass at all times and apply liberal amounts of glass cleaner to keep the glass lubricated and to prevent scratching of the glass surface.

- To remove built-up grease or silicone, you may need to use stronger cleaning solutions such as Mr. Clean or Goof off for silicone/caulking residue.
- To clean insect screens, remove the screen and rinse off with a garden hose. You may also wash using soap and water then rinse it off with clean water.
- After cleaning moving parts on sliders, casement, awning windows and patio doors, it is recommended to lubricate these moving parts; rollers, hinges, operating guides/tracks and locks.
DO NOT ! use harsh lubricants or abrasive cleaners, for they may produce scratches that will collect more dirt particles.
- On the sliding window track and double hung window frame, use a dry lubricant such as teflon or a silicone spray to make the operation easier.



- Modifying window or door products after the installation voids the manufacturer's warranty. This includes driving nails or screws through the vinyl window and door sash or frame.
- Application of any insulating or glare-reduction films to the glass surface may cause thermal stress conditions, resulting in glass breakage and/or a seal failure, which will void the warranty.



- Do not fasten blinds to the vinyl frame of your Minnkota Window
- It is allowed to screw through the vinyl extension jamb of the window.
- Damage to a window from misplaced screws or product modification is the responsibility of the homeowner and does not imply a product or material failure

GLASS REPLACEMENT

	Wear gloves, safety glasses, goggles, or eye shields when handling glass. Tape broken glass with duct tape before removal to reduce glass fragmentation.
---	--

- Minnkota Windows will replace any glass that has **internal** defects between the panes of glass and/or has a seal failure **free of charge** if it occurs within the stated warranty period. Glass cracks will be under warranty for the period of **one year** from the date of production.
- ***Scratched glass is **not** covered under the warranty*
- Operating/removable sashes of the double hung, single hung and slider units may have the entire sash and glass replaced. These sashes can be replaced by the dealer, contractor, installer and even the homeowner (*the locks may need to be relocated/fastened onto the replacement sash*).
- Glass in the picture window, casement and awning windows as well as frame sashes on the single hung and single slider windows need to have an experienced technician/installer replace the glass.

METAL HARDWARE

	Any harsh chemical or cleaners that come in contact with the hardware or glass should be rinsed off immediately. Protect glass and hardware from masonry cleaning solutions; contact with the solution could etch the glass or vinyl and cause failure of the insulated glass unit.
--	---

- A simple routine maintenance will extend the life of any moving parts of your patio door, casement and awning windows, sliding windows and double/single hung windows.
- Occasionally wiping it with a clean, soft, wet or dry cloth to maintain its beauty and luster
- Do not use harsh abrasives or any product that contains chlorine to clean your hardware. Using such materials may damage the finish of the hardware.

-CLEANING OF YOUR WINDOWS-

PICTURE WINDOWS

Washing the window

The exterior of a picture window must be washed from the outside.

AWNING WINDOWS

Washing the window

The exterior of the awning window must be washed from the outside.

CASEMENT WINDOWS


Do not leave casement windows open in high winds. A sash blow out could occur in extreme conditions, resulting in window, structural or personal damage.
Do not permanently remove handles. They must be in place and tightened to allow egress in case of an emergency.


<ul style="list-style-type: none">■ Use extreme caution when working around window and door openings. Never leave an open window unattended when children are present. Falling from window may result in serious injury or death.■ Screens are used to minimize the infiltration of bugs, insects and blowing leaves. Screens can tear or fall out of the window frame if pushed on by a person or child(ren).

Washing the window

Remove the screen from the window. Then, to clean the exterior, open the window fully and reach between the frame and sash as shown in the *fig 4a*.

NOTICE! Windows with egress hinges must be washed from the exterior due to the hinge being located towards the edge of the window frame. Wide casement windows may exceed your reach and may need to be washed from the exterior.



Fig. 4a

SLIDING WINDOWS

Washing the window

	The weight of each window sash will vary. Always use appropriate lifting techniques. The use of two people to remove and reinstall some sashes may be necessary, depending on the weight/size of the sash.
---	--

1. Unlock the sashes and slide the sashes apart so you can grasp the edges of the sash firmly with both hands.
2. Lift the sash up firmly into the head jamb and pull the bottom of the sash toward you (*fig 4b*).
3. Once the lower part of the sash is out of the track then you can lower the sash out of the head jamb and the sash will be completely out.
4. Repeat steps 2 and 3 to remove the secondary sash.
***Removal of the outside sash is not necessary in order to clean the glass.*

- On double sliders with larger, heavier sashes...
We recommend removing the insect screen and leaving the sashes in the tracks. Slide each sash over side to side and clean from the inside.

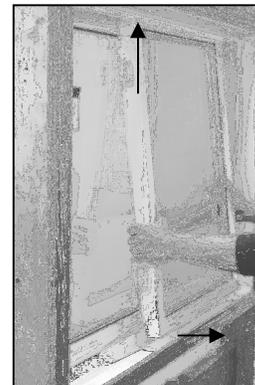


Fig 4b

DOUBLE HUNG WINDOWS

Washing the window

Minnkota double hung windows have a tilt out option on both sashes. The lower sash has two latch pulls on the top of the sash and the upper sash has a concealed latch pull recessed on the top of the sash at the corners.

To Open the Lower Sash:

1. Unlock the window and raise the sash up about 2". Slide the latch buttons towards the inside and pull the sash out (*figs. 5a and 5b*).
2. While holding the tilt buttons in...grasp the lower sash (with both hands) and tilt the sash inward toward you.
3. The sash pivots at the bottom and the sash can be rested gently on a firm surface, such as the back of a chair.

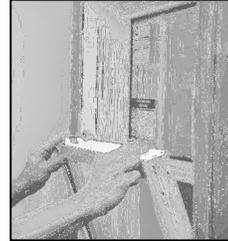


Fig. 5a



Fig. 5b

	<p>Tilting the sashes beyond 90° and letting the sash hang can be damaging to the balance shoes and the locking mechanism for the sashes may wear out prematurely, resulting in a service call.</p>
--	---

To Open the Upper Sash:

1. To tilt in the upper sash, the lower sash must be in the tilt-open position.
2. Lower the upper sash until it is about 2- 6" from the lower sash, then feel along the top of the upper sash for the tilt out latches. Grasp both latches and pull them toward each other (to the center of the window), then pull the sash inward towards you. (*see fig 4c*).
3. The sash will pivot inward toward you. Rest the sash gently on the lower sash and it is ready to be cleaned.

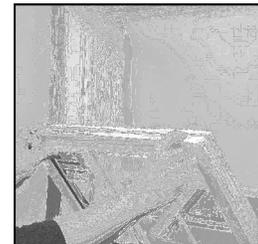


Fig. 4c

To Close a Tilted Sash:

1. Begin with the upper sash and tilt the sash back into the frame while pulling in the tilt latch buttons as the sash is returned into the frame.
2. Firmly push the sash into the frame and make sure both tilt latches lock positively into the side jambs.
3. Next, tilt up the lower sash while pulling in the tilt latch buttons as the sash is firmly pushed into the side jambs.
4. Close both sashes and lock the window to confirm that the sashes are in the proper operating locations.

	<ul style="list-style-type: none">• Do not slam sashes shut into frame to lock into place.• Slamming may break the tilt out latches in the sashes.• Pulling in tilt latches will prolong the life of your double hung window.
--	---

SCREENS --- Removal and Installation

...REVERSE THESE PROCESSES TO INSTALL YOUR SCREENS

Double Hung (*these screens are released to the exterior of the window*)

Full Screen

1. Push the screen frame to the right.
2. Grasp the lower left screen tab and pull the tab inward and to the right, until the corner of the frame releases from the screen track.
3. Now grasp the upper left tab and pull it downward and to the right until the corner releases from the screen track.
4. With the left side of the frame out of the screen track, you can then pull grasp the lower right tab and pull it to the left and upwards. This will release that corner from the screen track.
5. Now secure the screen frame and pull it downward and to the left, this will completely remove the screen from the track.
6. Finally, tilt the screen at a slight angle so it can be pulled through the window opening.

Half Screen

1. Slide the screen up several inches.
2. Push the screen frame to the right.
3. Grasp the pull tabs on the left and pull/push the screen to the right and out of the track.
4. The screen should be free and be able to be pulled in through the window opening, if tilted at a slight angle.

Single Hung

Half Screen Only

1. Slide the sash to the open position/completely up.
2. The sash *may* need to be removed to remove the screen.
3. Push the screen frame upwards, while pulling the lower screen tabs up and inward toward you (*pulling one corner at a time*).
4. As the bottom of the screen frame releases from the retainer clips, pull the screen down into the sash track.
5. To remove screen, pull the top of the screen up and out of the window.

Single Slider

Half Screen Only

1. Slide the sash to the open position.
2. Push the screen frame towards the center mullion (stationary glass), while pulling the screen tabs on the opposite side of the screen inwards and out of the retainer clips (*pulling one corner at a time*).
3. As the side of the screen frame releases from the retainer clips, pull the screen out and into the sash track.
4. To remove screen, pull the screen out of the window opening.

Double Slider (these screens are released to the exterior of the window)

Full Screen

1. Slide both sashes open, so you may access all four corners of the screen.
2. Push the screen frame to the right.
3. Grasp the lower left screen tab and pull the tab inward and to the right, until the corner of the frame releases from the screen track.
4. Now grasp the upper left tab and pull it downward and to the right until that corner releases from the screen track.
5. With the left side of the frame out of the screen track, you can then pull grasp the lower right tab and pull it to the left and upwards. This will release that corner from the screen track.
6. Now secure the screen frame and pull it downward and to the left, this will completely remove the screen from the track.
7. Finally, tilt the screen at a slight angle so it can be pulled through the window opening.

Half Screen

1. Slide the sash completely open.
2. Push the screen frame upwards.
3. Grasp the pull tabs on the bottom and pull upwards while pushing the bottom of the screen frame outwards from the track.
4. Lower the screen out of the track.
5. The screen should be free and be able to be pulled in through the window opening, if tilted at a slight angle.

Casement

1. Rotate all swivel clips at least $\frac{1}{4}$ turn or 90° .
2. Pull screen out of screen frame.



...REVERSE THESE PROCESSES TO INSTALL YOUR SCREENS

PATIO DOORS

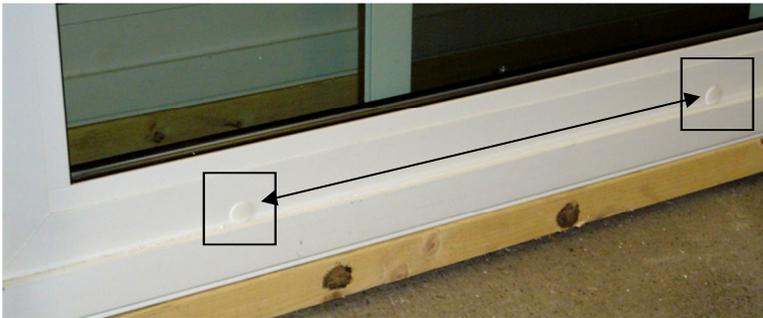
Washing the patio door

The exterior of a patio door must be washed from the outside

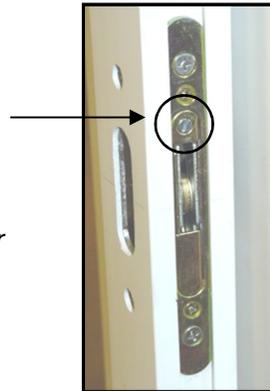
How to adjust your Minnkota patio door

Sash adjustment:

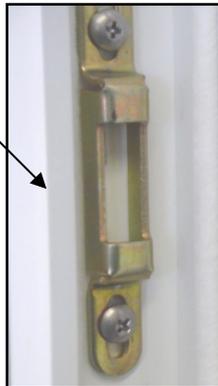
- Use a thin putty knife or flat screw driver to remove screw cap covers on the operating sash.
- Use flat screw driver to adjust rollers up or down as needed so that sash slides easily and lines up square/plumb with the frame.
- Turn adjustment screw clockwise to adjust sash up or counter clockwise to lower sash.
- Reinstall screw cap covers when done.



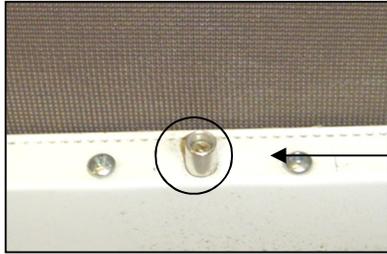
- With the lock engaged, turn adjustment screw counterclockwise to move lock out.
- Turn the adjustment screw clockwise to pull lock in or to make door lock tighter.



** Note! The keeper on the frame may need to be adjusted up or down to properly lock the sash to the frame.*



Screen Adjustment:

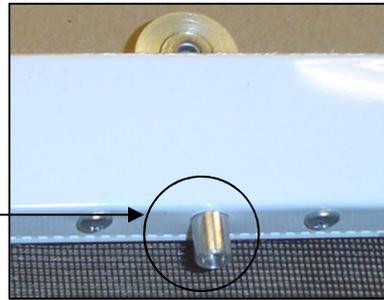


LOWER SCREEN ROLLER

Use a Phillips screwdriver

- To adjust rollers up or down, turn adjustment screws as stated:
- Turn counter-clockwise to lower screen
- Turn clock-wise to raise screen up off the track
- Keep the bottom of the screen about 1/8" from the aluminum screen track.
- Raise the screen equally on both sides, so to allow screen to slide squarely on the track.

- To adjust rollers up or down, turn the adjustment screws until desired play is allowed in the screen.
- Turn top screws clockwise in order to extend roller up into the track.
- Turn screws counter-clockwise to loosen the tension on the screen track.
- Set both screws equally to allow the screen to roll in the track and stay square.



UPPER SCREEN ROLLER

**** Set these rollers last to get the proper tension / fit in the screen track.**