

# How to Tilt and Remove Window Sash for Cleaning



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## Tilting the Sash

Begin by raising the bottom sash about 4".



Pull the tilt lever (nested in the sash lock base) until it clicks.



Hold lever until the sash latches clear the unit frame when tilting. Ease top edge of bottom sash out toward you to a horizontal position.



To tilt the top sash, lower the sash about half way. Pull the tilt latches (in the top edge of sash top rail) simultaneously until they clear unit frame when tilting. Ease top of sash toward you to a horizontal position.

If you have a single hung window, only the bottom sash is operational. The top sash is fixed in the frame, and cannot be tilted or removed.

### **Removing the Sash**

To remove the sash, tilt the bottom sash using the same technique described in the Ultimate Double Hung and Single Hung Windows - Tilting the Sash section (above).

When sash is in a horizontal position, lift both sides of the sash upward 2-3" (raising pivot pins out of each clutch).



Now rotate the sash until pivot pins clear the jambs and remove the bottom sash from the frame.



Next, tilt the top sash using the same technique described in **Ultimate Double Hung and Single Hung Windows - Tilting the Sash**. When the sash is in a horizontal position, lift both sides upward 2-3" (raising pivot pins out of each clutch). Finally, rotate the sash until the pivot pins clear the jambs and remove the top sash from the frame.

### **Replacing the Sash**

To replace the double hung sash, first hold the top sash in a horizontal position, top rail toward you, exterior face up.

Sash pivot pins must be placed 2-3" above the clutch assemblies when relocating in the jamb carrier tracks. Pivot one side of the sash up to enable pivot pins to clear jamb carrier assemblies when aligning sash in tracks, pivot sash back to horizontal (flat) position. Lower sash pivot pins into balance clutch cams.

Check sash pivot pins to ensure they are fully engaged in the clutch cams before proceeding.

Now, tilt the sash up, pulling the tilt latches until they retract fully on both sides, and hold them while you ease the sash into place. Check the nose of each tilt latch to ensure it is fully engaged in the sash guide track of jamb carrier assembly.

Raise the top sash to the top of frame. Repeat above procedures for bottom sash, except retract the sash check rail guides with the tilt lever in the sash lock base when installing.

### **Resetting a Slipped Clutch Assembly**

Sometimes when attempting to tilt or remove a sash, the clutch assembly that helps lift the sash slips. When this happens, the two clutches (one on either side of the window) will no longer be at the same height in the jamb track. The slipped clutch will need to be reset before the sash can be replaced.

Clutches are under extreme tension. Please use caution when following the directions

below:

First you will need to raise or lower one clutch so that it matches the position of the other.

First, decide which clutch you wish to reset. Measure the other clutch's distance from the sill on the opposing side and temporarily mark that dimension on the jamb carrier that contains the clutch you will reset. (The clutches must be reset so that their respective heights in the jamb carrier system are within 1/8" of one another.) This will tell you where the slipped clutch needs to be repositioned.

Next, using a flat screwdriver, rotate the balance clutch cam in the clutch assembly of the slipped clutch to the released position. Clutches are under extreme tension! Hold the screwdriver firmly and slide the slipped clutch to the mark.



Rotate the balance clutch cam to the open locked position (cam opening up). Release the screwdriver carefully from the clutch assembly (it must lock in place or damage will occur).



Compare clutch heights from the sill for the sash affected. They **MUST** be within 1/8" of each other or damage may occur when sash are reinstalled, adjust height as needed.