

## **OPERATING, MAINTENANCE AND CLEANING INSTRUCTIONS**

### **Model 4320 Double Hung Tilt Window**

***Caution:*** *Only A Qualified Window Installer or Building Custodian with Extensive Window Experience should perform Window Maintenance.*

**Description:** The Model 4320 is a double hung unit, meaning both sash operate and can be tilted in for cleaning.

**Operation:** Unlock the window's lock by deactivating the sash lock from the keeper. This enables both sash to operate individually. To re-lock, make certain the top sash has been pushed firmly back into the head of the master frame and the bottom sash into the sill of the master frame and lock the meeting rail lock. (Re-locking should be easy if both sash are in their proper positions.)

**Maintenance:** The Model 4320 is basically a maintenance free product with only a few mechanical mechanisms.

#### **Tilting The Window For Cleaning:**

1. After raising the inset 1", use a Phillips head screwdriver. Loosen each screw located on the top rail of each sash (2 per sash, approximately 3" in from the edge). Do not unscrew the full distance, only approximately 3/8". The exposed screw now enables you to tilt the insert in. Gently pull each screw toward each other, this will allow the top of the sash to drop toward the interior by pivoting on tilt pins located at each side of the bottom rail of each sash. Now both sides of the glass can be cleaned from the interior. This sequence is the same for both the upper and lower sash.

#### **Re-glazing A Sash:**

1. Follow the steps above for tilting a window. Using a Phillips head screwdriver, loosen the screw on one of the pivot bars, slide the pivot bar away from the balance shoe (the part that slides in the jamb of the master frame and is located at

the end of the balance). This now allows the sash to be removed to the interior of the building.

2. Lay the sash on a flat working surface. Unscrew the Phillips head screws at each corner. Gently remove the metal sash frame from the soft vinyl (marine vinyl) surrounding glass. Remove the vinyl from the glass. Make certain to remove any broken pieces of glass from the vinyl. Dispose of the old glass and reverse the above steps to replace the new glass. You will reuse the vinyl material. When you replace the vinyl, always locate the “splice” so that it is at the top of the sash.

### **Screen Replacement or Removal of screen insert:**

1. Raise the bottom sash so that it just clears the inside leg of the sill of the window’s master frame.
2. The tilt releases screws located on the top of the sash should be backed out slightly using a Torx screwdriver. Pull these screws toward each other.
3. Pull the sash toward the interior until it is in a horizontal position. (This is referred to as “tilting in” the sash.)
4. Lower the bottom sash as far as possible so that when you tilt it inward it is laying on top of the already tilted-in lower sash.
5. Remove the screen by pulling on the screen tabs located at the jamb of the screen frame.
6. Pull the screen inward by pulling the tabs inward and toward you at the same time.
7. Return the upper sash to its usual position by pushing the top of the sash back into the jamb track of the master frame of the window. Push the sash tilt releases away from each other toward the jambs. Re-tighten the tilt release screws. Make certain that the screw heads are fully seated into the keyhole-shaped pockets. This is very important. This ensures that the tilt triggers are properly extended, and gives you the correct engagement into the jamb of the master frame.
8. Return the lower sash to its usual position by pushing it back into the jamb track of the master frame of the window. Push the sash tilt releases away from each other toward the jambs. Re-tighten the tilt release screws. Make certain that the screw heads are fully seated into the keyhole-shaped pockets. This is very important. This ensures that the tilt triggers are properly extended, and gives you the correct engagement into the jamb of the master frame. Make certain the sash is securely latched into position by tugging on the top of the sash.

### **Sash Removal or Pivot Bar Replacement:**

1. Proceed with steps “1” through “5” from the Screen Removal procedure.
2. Using a Phillips screwdriver, loosen the screw that holds the pivot bar.
3. Slide the bar toward center of the sash.
4. Lift the bottom sash out holding it firmly at each side.
5. To re-install a sash, reverse the above procedure.

### **Balance Replacement:**

1. First, tilt the window as explained in steps “1” through “3” of the Screen Replacement procedure. This will leave balance shoe locked into position.
2. Using a balance-tensioning tool, hook the end of the balance.
3. Hook the curved part of a balance-tensioning tool around the small pin at the end of the balance. Remove the spiral balance carefully. Use caution. The spiral balance is under tension, and must be unwound slowly.
4. Remove the sash stop from the top of the jamb.
5. Unscrew the balance and remove it from the jamb track.
6. To install the new balance, repeat the above steps in reverse. Wind the new balance approximately nine turns clockwise as a starting point.
7. Adjust balance so that the sash operates properly. Refer to the following steps for additional information.

**Balance Adjustment:** If, for some reason, your windows require adjustment, such as sash dropping or hopping up from the sill, adjustment is simple.

1. For lower sash adjustment: Before tilting the lower sash, make sure that sash is raised at least 3” off sill. Tilt the sash downward to expose the balance tilt shoe. Tilting the lower sash locks the cam inside the balance shoe and holds it in position. Disengage the balance rod from the tilt shoe. Be careful not to allow the rod to “spin off” or disconnect from the balance-tensioning tool.

2. For upper sash adjustment: Lower the upper sash a few inches below the head of the master frame. Tilt the sash downward to expose the balance tilt shoe. Tilting the upper sash locks the cam inside the balance shoe and holds it in position. Disengage the balance rod from the tilt shoe. Be careful not to allow the rod to “spin off” or disconnect from the balance-tensioning tool.
3. **If either sash is dropping,** add some tension by rotating the balance rod clockwise. Apply tension to both sides equally. Do not exceed more than two full turns at a time. Reconnect the balance rod to the tilt shoe. Re-position the sash and check the operation of the window. If additional tension is required, repeat the above process until the sash holds in any position.
4. **If either sash is hopping upward,** less tension is required. Release tension equally on both sides by allowing the tensioning tool to rotate counter-clockwise for one to two full turns. Reconnect the balance rod to the pivot shoe. Re-position the sash and check the operation of the window. Repeat this process if necessary.

#### **Cleaning and Lubricating:**

1. The glass may be cleaned using commercially available cleaning solutions intended for this purpose.
2. The aluminum portion of the window should be cleaned in accordance with AAMA publication number 610 “Voluntary Guide Specification for Cleaning and Maintenance of Painted Aluminum Extrusions and Curtain Wall Panels” or AAMA 609 “Voluntary Guide Specification for Cleaning and Maintenance of Architectural Anodized Aluminum.” The most current versions of these publications can be ordered by contacting the Architectural Aluminum Manufacturers Association at 1827 Walden Office Square, Suite 104, Schaumburg, IL 60173-4268. Phone: (847) 303-5664 or Fax: (847) 303-5774. You may also find information about AAMA at [www.aamanet.org](http://www.aamanet.org).
3. The jambs balance tracks of the window should be cleaned and lubricated at least once per year or more often if local conditions dictate.
4. To clean the jambs, use a mild non-abrasive cleaner and wipe down the interior pockets of the jamb balance track from top to bottom. Clean the jamb surfaces of the master frame and sash, which are in contact when the sash is raised or lowered.
5. A clean, soft cloth should be used to dry the jambs and balance tracks.
6. Lightly spray the entire length of the jamb and balance track with a silicone spray. This will lubricate the window and help it operate more easily and more smoothly.

### **Annual Maintenance and Record Keeping:**

1. Peerless recommends an annual inspection of your windows and installation by a qualified window installer.
2. Check the general appearance of the windows and installation. Specifically note the seal integrity of the insulating glass, the proper locking and operation of the window, and all caulking surrounding the window. Check all fin seal weather stripping and Santoprene bulbs for condition and continuity.
3. Clean the window frame and glass as recommended in the Cleaning section.
4. Maintain a window log indicating the date of the annual inspection or any service work performed on the windows. Note the person(s) who did the work, the condition of each window, the specific location of each window, and what service work or cleaning was performed.
5. Submit a photostatic copy of this log when requesting any warranty service work.