SERVICE INSTRUCTION

Balance Replacement for Single-Hung & Double-Hung

These instructions apply to:

Pella® 250 Series 2014 - Current

Tools Required:

- Screwdriver (flat and Phillips)
- Scissors
- Cut resistant gloves
- Hook tools (2)
- Utility knife
- Side cutters
- Mr. Clean Magic Eraser® (optional for cleaning vinyl)
- #5 or 3/16" Allen wrench (for hidden screen removal)



Balance Replacement Kit - Quantity of kit parts supplied will vary based on window size and color.

Note: Remember to work safely while doing any maintenance or repair. This includes wearing safety glasses and using safe work practices. Make sure your work area is unobstructed and clear of window coverings, etc..

Note: The balances have either single, double or triple coils. Balances with multiple coils have the coils attached in succession and the top coil is attached to the balance attachment clip on all balances.

Note: Whenever the balances on a 2014-9/2025 vintage hung windows are replaced, the locking pivot bars must also be replaced.

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1 Preparation for Balance Removal:

A. **Unlock window and raise lower sash approximately 4" to 5".** At the same time, slide each tilt latch on the top of the sash toward the center of the sash.

B. **Pull the top of the sash in and tilt it down** until the sash is perpendicular with the frame.

CAUTION!
Sash may be heavy.
Two people may be needed on larger sash.



C. **Grasp the sash near the frame and lift the sash straight up** until the sash pivot bars are out of the sash balance shoes. Tilt one end of the sash up and then remove the sash from the frame.





Note: A double-hung lower sash must be removed before removing a double-hung upper sash.

D. **Double-Hung upper sash is removed using the same procedure except** – the upper sash must be lowered approximately 6 inches before sliding the tilt latches and tilting sash in for removal. Remove sash in same manner as lower sash.





1 Preparation for Balance Removal (continued):

E. **Insert a straight blade screwdriver between the balance pocket cover and the balance pocket/channel** and slide the screwdriver up along the length of the cover to release and remove it from the frame.







F. **Near the head (top) of the window,** use a straight blade screwdriver or stiff putty knife to pry the lower sash stop out of the balance channel.







1 Preparation for Balance Removal (continued):

2014 - December 2016 Vintage Balance

UPPER SASH VENT STOP REMOVAL:

G. **Slide the upper sash stop up until it clears the bottom of the balance pocket**.





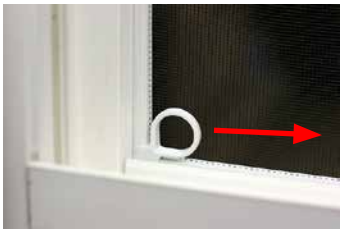
H. **Tilt the bottom of sash stop back.** Slide stop down while prying away from the jamb.





SCREEN REMOVAL:

I. **Grasp the screen handles/corner keys in the screen corners on one side of the screen and pull the screen toward the opposite side of the window frame** until the side clears the frame. Pull the screen out of the frame until the opposite side with the springs clears the opening.



Note: The screen springs are on only one side of the screen, if needed - grasp screen from other side to remove.







J. **Tilt the screen and pass it through the frame and set it in a safe place.**





1 Preparation for Balance Removal (continued):

Note: If the Upper Sash Balances are being replaced on a Double-Hung and the unit has a Hidden Screen, the hidden screen will need to be disconnected from the balance channels and the upper hidden screen moved from the balance channel pocket.

K. **Use a #5 or 3/16" Allen wrench to to pry out the upper sash hidden screen cord terminal** on each side of the frame.







L. **Lower one side of the screen** so it can be pulled out of the balance channel.

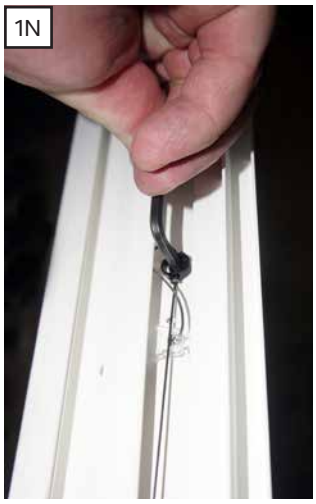




M. **Use painter's tape to tape the screen** up and out of the way into the lower sash channel.



N. **Use a #5 or 3/16" Allen wrench to to pry out the lower sash hidden screen cord terminal** on each side of the frame. This will keep the cords out of the way during the balance replacement process.







2 Lower Sash Balance Removal:

2015 - 08/2025 Vintage Balance

Note: Coil balances being replaced may be vary in appearance then those shown in the following steps, but the procedure is the same.

Note: The procedure for removing the single-, double- and triple-coil balances is similar; however, multiple coil balances may need to be disassembled while removing to complete the lower sash balance removal process.

A. **Insert a #2 Phillips screwdriver** (or flat blade screwdriver) into the balance shoe and while securely holding the screwdriver, turn the shoe 1/4 turn to release the shoe in the balance channel and slowly move balance up to the balance attachment clip.

Note: The process of turning the shoe 1/4 turn to release the shoe (or brake for 08/2025 - Current balances) to move the balance and turning the shoe back 1/4 turn to lock the shoe (brake) is the same and may need to be repeated multiple times during the balance replacement process.

B. **Place a pencil mark on the frame aligned with the bottom of the balance brake.**

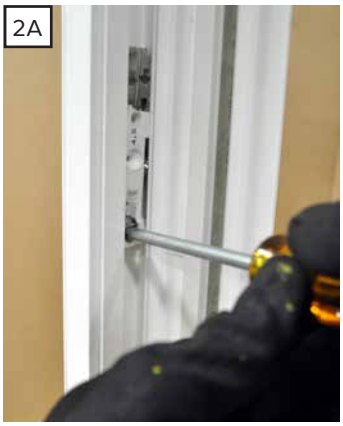
Note: If replacing sash balance on a laminated unit, place masking or painter's tape on the frame and place the marks on the tape.

C. **Use a Phillips screwdriver (or driver bit) to remove the balance attachment clip screw.** (A magnetic tip screwdriver is recommended to prevent the screw from falling.)

D. **Slide the balance up the balance pocket channel and remove it from the balance pocket slot.** For best removal results use a straight blade screwdriver to pry the balance housing out of the balance pocket channel.

Note: Triple-coil balances will have two (2) screws in the balance attachment clip to be removed.











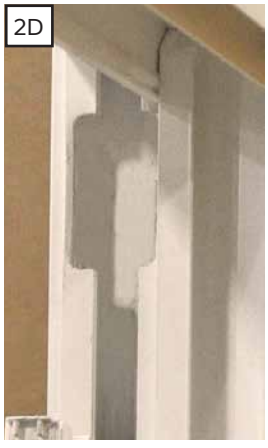












3 Lower Sash Balance Removal:

08/2025-Current Vintage Factory-Installed Balance and Previously Replaced Modular Balance

Note: The process of turning the shoe with a flat blade screwdriver may need to be repeated multiple times during the balance replacement process to move/reposition the balance in the balance channel. Make a 1/4 turn to release (unlock) the brake and move the balance then a 1/4 turn back to lock the brake.



Single-Coil



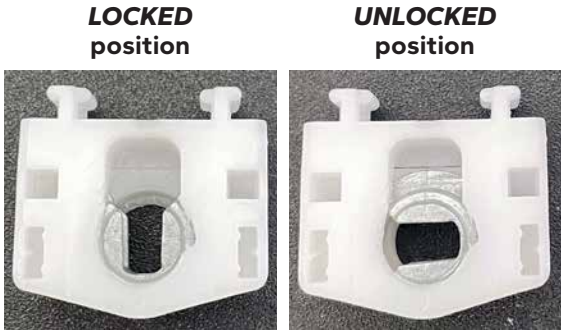
Double-Coil



Triple-Coil



Factory-Installed Balance Brake



Replacement Balance Brake

Note: Both types of balance will be removed in the same way; the factory installed balance has a brake and single-coil together while the previously replaced balance has a separate brake.

Removal of a two-coil factory installed lower sash balance is shown, removal of one and three coil balances are similar.

A. **Insert a flat blade screwdriver into the balance shoe and while securely holding the screwdriver,** turn the shoe 1/4 turn to release the shoe in the balance channel and slowly move balance up to the balance attachment clip.

B. **Use a Phillips screwdriver (or driver bit) to remove the balance attachment clip screw(s).** (Depending on the balance size, it may be attached with one or two screws.)

Tip: A magnetic tip screwdriver is recommended to prevent the screw from falling.

C. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and slide the balance up the balance channel so the clip is at the pocket and can be accessed for removal. Relock the balance in place.













3 Lower Sash Balance Removal (continued):

D. **Use a straight blade screwdriver to pry the clip from the top coil.** Then continue to pry the clip to remove the hook on the top of the clip from the metal coil(s) hole(s) and remove the clip from the channel.

E. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the balance up so the top coil can be accessed for removal. Relock the balance in place.

F. **Use a hook tool and/or a small straight blade screwdriver to pry the coil** and slowly work it off the 'dog bone' shaped tabs of the lower coil. Remove the coil.









G. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the balance up so the next coil can be accessed for removal. Relock the balance in place.

H. **Use a hook tool to reach into the channel** and hook one of the coil holes to pull the end of the coil out of the channel.

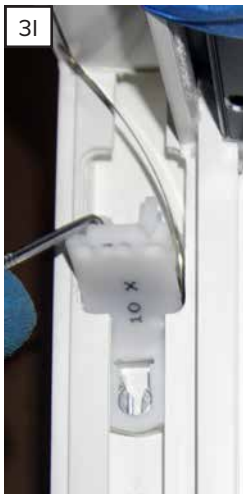
I. **Use a hook tool to pry the front cover away on the bottom coil with the brake.** Use a hook tool and position the hook through the coil hole and remove the coil.



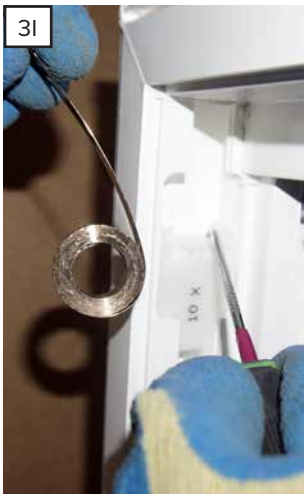












3 Lower Sash Balance Removal (continued):

J. **Pull the front cover away and then reach for the back cover** and grasp the front and back cover together and remove them from the balance channel.









08/2025 - Current Replacement Balance only:

Note: Previously replaced balance removal procedure is the same until this last step.

K. **Use a flat blade screwdriver to unlock the brake and move it up to the pocket opening.** Pry the brake out of he opening to remove.











4 Lower Sash Balance Installation:

Note: All spring coils (single, double, triple) must attach to the balance attachment clip and have the attached coil sides run along the exterior side of the balance pocket channel.

A. **When installing the brake into the balance channel, make sure it is inserted as shown.** If not inserted as shown, the sash terminal pin will not fit into the terminal.

Insert the brake like this!



CORRECT

DO NOT insert the brake like this!



INCORRECT

B. **Insert the brake into the balance channel as shown**.





C. **Position the brake in the channel opening with the 'dog bone' shaped tabs visible in the opening so they can be accessed,** and the next coil can be positioned on top of it. Use a screwdriver to turn the terminal to 'lock' the brake in place.







Note: Installation of a two-coil modular lower sash balance is shown in the following steps, installation of one and three-coil balances are similar.

D. **Thread the cord through the bottom hole in the metal of the coil.**





4 Lower Sash Balance Installation (continued):

E. **Insert the coil into the balance channel with the slots in the coil aligned with the 'dog bone' shaped tabs in the brake.** Make sure the coil tails are oriented as shown to allow proper fit of the balance pocket covers during re-assembly.





F. **Make sure the cord is out of the way while pushing the coil completely onto the brake.**

G. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the brake and 1st balance coil down in the channel so the dog bones of the coil can be accessed to install the next coil. Relock the balance in place.





H. **Thread the cord through the bottom hole in the metal of the next coil**.



4 Lower Sash Balance Installation (continued):

I. **Insert the coil into the balance channel with the slots in the coil aligned with the 'dog bone' shaped tabs on the top of the coil housing of the just installed coil.** Make sure the coil metal of the coil is on the roomside (the interior) of the balance channel. Make sure the cord is out of the way while pushing the coil completely onto the brake.









J. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the brake, 1st & 2nd balance coils down in the channel so the dog bones of the coil can be accessed to install the next coil. Relock the balance in place.

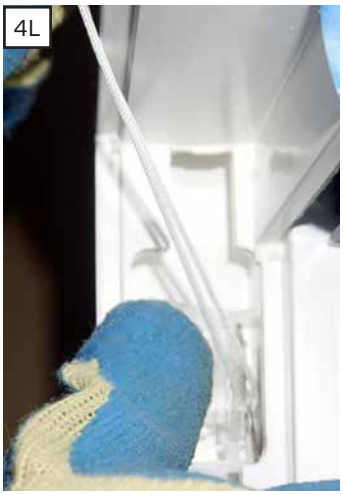
K. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the brake, 1st and 2nd balance coils down in the channel so the balance clip can be installed on top of the last coil. Relock the balance in place.

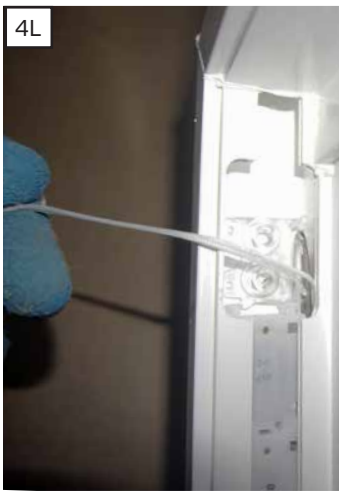


This view shows how the clip is to be positioned on top of the coil cover and hooked into the coil metal.

L. **While pulling on the cord to keep the cord out of the balance channel,** insert the clip into the balance channel and position it on top of the coil cover and work it into the channel to hook the clip into the top hole of each coil's metal.







4 Lower Sash Balance Installation (continued):

M. **Once the clip is positioned on top of all the coils in the channel,** pull the cord out of the bottom hole of the coil metal.





If replacing a 08/2025 – Current Vintage Balance – go to Step 5Q.

N. **If replacing a 2015-08/2025 vintage balance,** measure 1-1/8" up from the line marked on the frame placed there is step 2B.







4 Lower Sash Balance Installation (continued):

O. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the brake, 1st and 2nd balance coils and clip down in the channel to either the line marked in 5P when replacing 2015-08/2025 Vintage or align the clip hole(s) with the holes from the removed clip if replacing 08/2025-Current balance or previously replaced 08/2025-Current balance.



P. **Install the clip attachment screws provided in the balance replacement kit.** If replacing 2015-08/2025 Vintage; DO NOT re-use the screw from the clip of the balance being replaced.







WARNING **Must use new clip attachment screws provided in balance replacement kit (slightly longer in length).**



5 Upper Sash Balance Removal:

2015–08/2025 Vintage Balance

SINGLE-, DOUBLE- AND TRIPLE-COIL BALANCE:

Note: Single coil balance shown; procedure is the same for multiple coil balances.

A. **Insert a #2 Phillips screwdriver** (or flat blade screwdriver) into the balance shoe and while securely holding the screwdriver, turn the shoe 1/4 turn to release the shoe in the balance channel and slowly move balance up to the balance attachment clip.


5A

B. **Place a pencil mark on the frame aligned with the bottom of the balance brake**.


5B

C. **Use a Phillips screwdriver (or driver bit) to remove the balance attachment clip screw.**


5C

D. **Slide the balance up the balance pocket channel and remove it from the balance pocket slot.** If needed a flat blade screwdriver may be used to help pry the balance out of the pocket.


5D


5D


5D


5D

5 Upper Sash Balance Removal (continued):

Note: 08/2025 - Current Vintage Factory-Installed Balance and Previously Replaced Balance with 08/2025 - Current Vintage Modular Balance Removal steps are similar.

Note: The process of turning the shoe with a flat blade screwdriver - 1/4 turn to release (unlock) the brake for 08/2025 - Current (factory installed or previously replaced) balances to move the balance and turning the shoe back 1/4 turn to lock the brake may need to be repeated multiple times during the balance replacement process to move/reposition the balance in the balance channel.

E. **Use a Phillips screwdriver** (or driver bit) to remove the balance attachment clip screw(s). (Depending on the balance size, it may be attached with one or two screws.)

TIP: A magnetic tip screwdriver is recommended to prevent the screw from falling.

F. **Insert a flat blade screwdriver into the balance shoe**, unlock the balance and slide the balance up the balance channel so the balance and the clip is at the pocket and can be accessed for removal. Relock the balance in place.

ONE-COIL BALANCE (Factory Installed Balance shown; similar process for a previously replaced balance.)

G. **Use a straight blade screwdriver** to pry the bottom of the coil up and out of the balance channel. A one-coil factory installed balance may be removed with the clip still attached to the top. Continue to pry as needed to remove the coil and clip from the channel.

TWO-COIL & THREE-COIL BALANCES:

Note: Trim the upper balance channel pocket. The upper sash balance pocket in the balance channel comes from the factory at 4-3/4" tall. To remove and replace a two-coil balance, use a utility knife to trim the balance pocket to 5-3/4". To remove and replace a three-coil balance, use a utility knife to trim the balance pocket to 7-1/4".

H. **Measure and mark the balance channel for the two-coil or three-coil balance which is being replaced.**

In this example the channel was cut for a three-coil balance and then a three-coil balance being removed is shown.



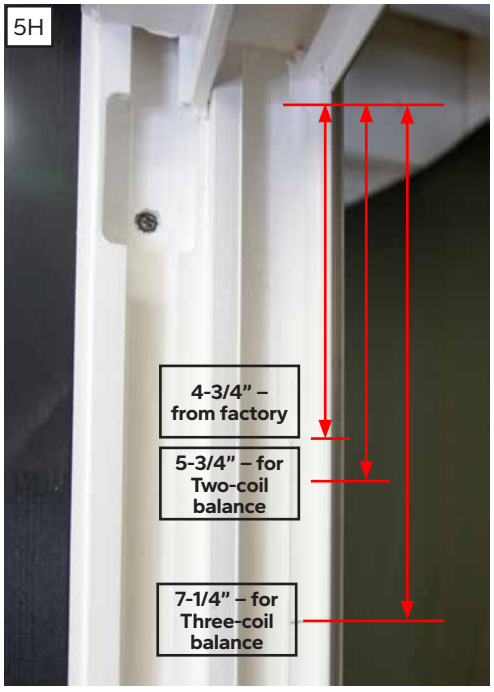
Replacement balance brake in *locked* position.



Replacement balance brake in *unlocked* position.

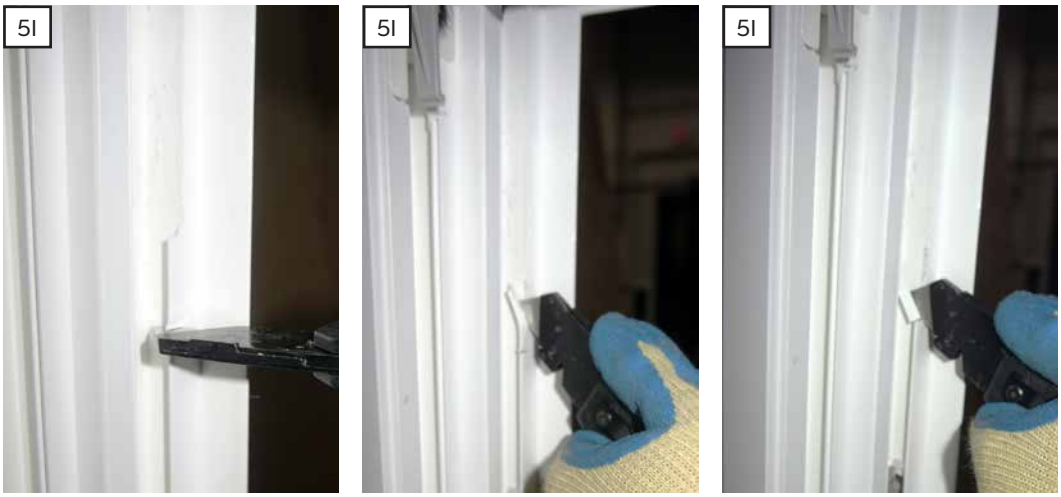




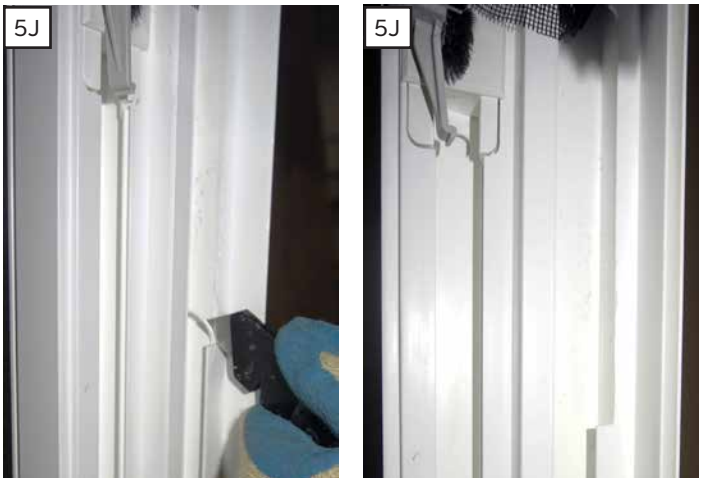


5 Upper Sash Balance Removal (continued):

I. **Use a utility knife to cut out the edge of the upper sash balance channel**.



J. **Be sure to trim the edge as flush as possible to the existing pocket edge.** This will make removal and especially installation of the replacement balance go more smoothly.



K. **Insert a flat blade screwdriver into the balance shoe** and while securely holding the screwdriver, turn the shoe 1/4 turn to release the shoe in the balance channel and slowly move balance up to the balance attachment clip.

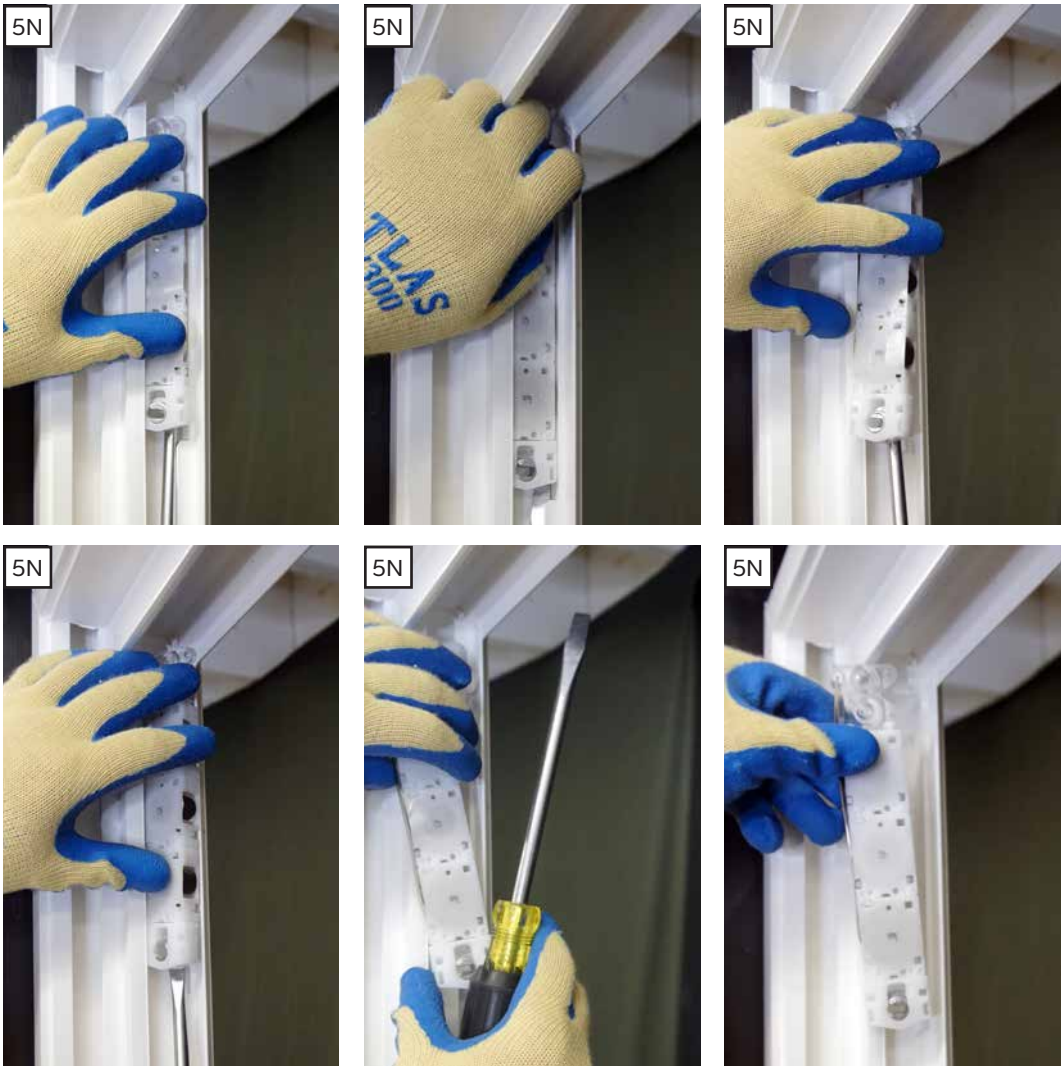
L. **Use a Phillips screwdriver (or driver bit) to remove the balance attachment clip screw(s)**. (Depending on the balance size, it may be attached with one or two screws.)

TIP: A magnetic tip screwdriver is recommended to prevent the screw from falling.

M. **Insert a flat blade screwdriver into the balance shoe,** unlock the balance and move the balance up so the balance and clip can be accessed for removal. Relock the balance in place.

5 Upper Sash Balance Removal (continued):

N. **Use a straight blade screwdriver to pry the bottom of the coil up and out of the balance channel.** A previously replaced balance (of any number of coils) may be removed with the clip still attached to the top. Continue to pry as needed to remove the coil and clip from the channel.



6 Upper Sash Balance Installation:

Note: All spring coils (single, double, triple) must attach to the balance attachment clip and have the attached coil sides run along the interior side of the balance pocket channel.

A. **If replacing a 2015 – 08/2025 vintage balance,** measure 1-1/8" up from the line marked on the frame placed there is step 6B.

Note: Assembly and Installation of a one-coil, two-coil and three-coil replacement modular upper sash balances are all similar.





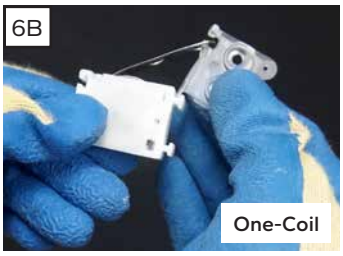


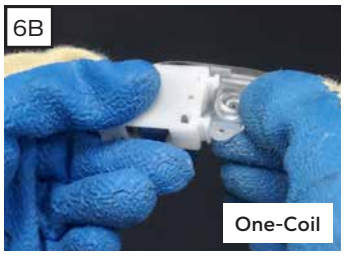
BRAKE AND COIL ASSEMBLY:

The following steps demonstrate the assembly of a one-coil replacement modular balance unless otherwise specified. Assembly and installation of a two- and three-coil balance is similar.

B. **Hook the clip into the top coil metal hole.** Then the position the lower point on the same side as the clip hook on the side of the dog bone of the coil. Twist the clip down on top of the coil.



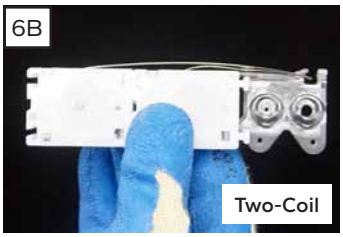


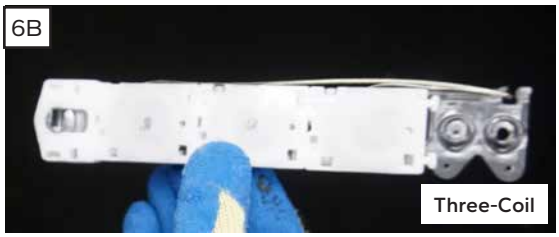




Multiple coil balances: Hook the clip into the top hole of the second and/or third coil metals and position the dog bone tabs into the grooves.

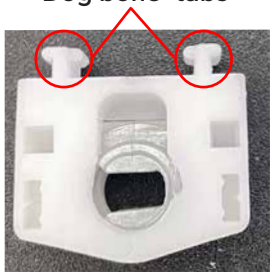






C. **Position the one-coil with the clip on top of the brake.** Align the brake dog bone tabs with the coil and push them together.

'Dog bone' tabs



CORRECT



INCORRECT





Note: Make sure the brake is attached correctly to the coil. If not attached correctly, the sash terminal pin will not fit into the terminal.

6 Upper Sash Balance Installation (continued):

BALANCE ASSEMBLY INSTALLATION:

D. **Insert the one-coil assembly into the upper sash balance channel.** Insert the edge closest to the interior first and then push the balance assembly completely into the channel.









E. **If needed,** insert a flat blade screwdriver into the balance shoe.
2015 - 08/2025 Vintage: Unlock the balance and move the brake, balance coil and clip down in the channel to either the line marked in 6A.

08/2025 - Current or previously replaced 08/2025 - Current vintage balance: Align the clip hole(s) with the holes from the removed clip if replacing.





Note: If the unit includes a hidden screen, verify that the terminal hole is not positioned beneath the upper balance or clip. If the terminal can be snapped in securely, proceed. If not, refer to Step 11 at the end of this booklet for adjustment instructions.

⚠ WARNING **Must use new clip attachment screws provided in balance replacement kit (slightly longer in length).**



F. **Install the clip attachment screws provided in the balance replacement kit.**

If replacing 2015 - 08/2025 Vintage: DO NOT re-use the screw from the clip of the balance being replaced.





7 Locking Pivot Bar Replacement:

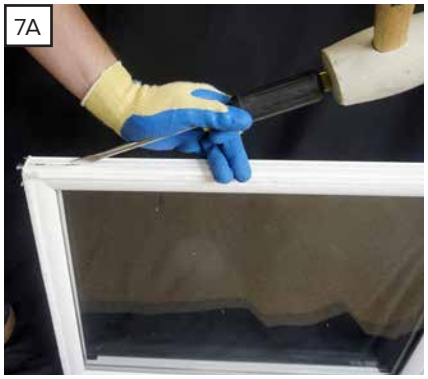
2015-08/2025 Vintage Double-Hung Windows

Note: Whenever the balances on 2015-08/2025 vintage double-hung windows are replaced, the locking pivot bars must also be replaced. The end of the replacement pivot bar will have a line as shown.





A. **Use a flat blade screwdriver and a mallet to tap and remove the locking pivot bar from one side of the sash.**







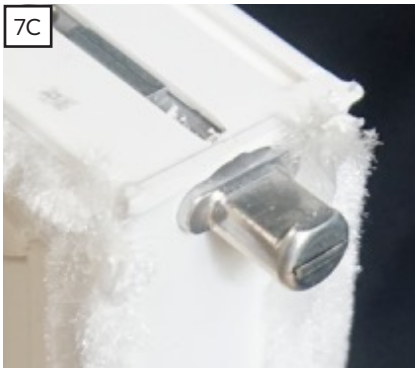
B. **Use a mallet to tap in the new locking pivot bar on one side of the sash.**







C. **Repeat 8A-8B on the other side of the sash.**



Repeat 8A-8C on other sash if balances were replaced of it as well.

8 Sash Installation:

A. **Install the upper sash.** Tilt one end of the sash up and insert the sash into the frame. Place the pivot bar on one side of the sash into one of the balance shoes, then lower opposite end of the sash into the other balance shoe. Make sure the pivot bars are completely seated in the shoes by lightly tapping the sash near the pivot bar locations.

Locking pivot bar in the balance shoe



8A



B. **Tilt the sash up and make sure the release tabs are in the channel.** Test the operation of the sash by raising and lowering it a few times. Push it up into the fully closed position.

8B



8B



C. **Install the lower sash.** Tilt one end of the sash up and insert the sash into the frame. Place the pivot bar on one side of the sash into one of the balance shoes, then lower the opposite end of the sash into the other balance shoe. Make sure the pivot bars are completely seated in the shoes by lightly tapping the sash near the pivot bar locations.

Locking pivot bar in the balance shoe



8C



8C



D. **Tilt the sash up and make sure the release tabs are in the channel.** Test the operation of the sash by raising and lowering it a few times. Push it down into the fully closed position and lock the window.

8D



8D



9 Vent Stop and Balance Pocket Cover Installation:

INSTALL LOWER SASH VENT STOP:

Note: Sash stop may look a bit different but the procedure is similar.

A. **Insert bottom of vent stop into balance pocket channel.** Slide it down while tilting top up into position. Push top to “snap” into place.

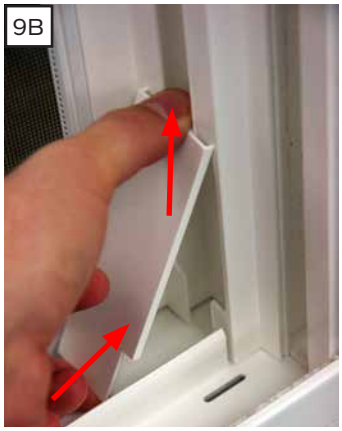






INSTALL UPPER SASH VENT STOP: 2014 – DECEMBER 2016

B. **Tilt the sash stop so the top is inserted into the balance channel pocket** with the bottom away from the jamb. Slide the top up in the channel while pushing the bottom toward the jamb. Slide and push until it is into position.

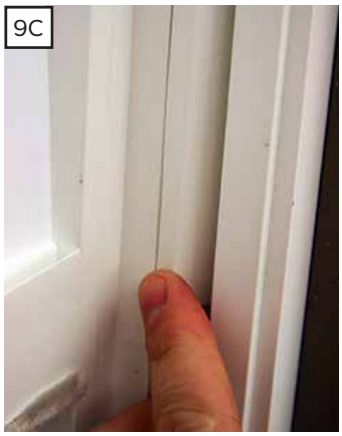


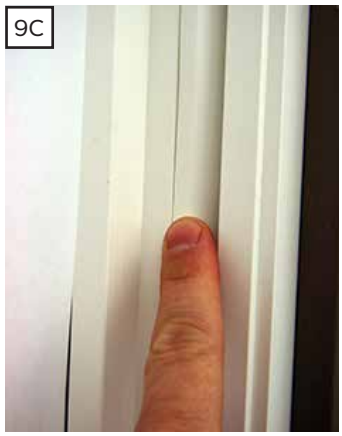




C. **Insert balance pocket cover into balance pocket and press cover until it “snaps” into place**.









10 Screen and Sash Installation:

A. **Carefully pass the screen through the sash opening** and rotate it up to align with the frame and put one side of the screen in the frame.





B. **Grasp the screen handles/corner keys in the screen corners on the opposite side of the screen** and pull the screen toward the opposite side of the window frame until the screen spring clips clear the frame and can be installed in the frame. Release the handles once the screen is installed.







C. **Install the sash.** Tilt one end of the sash up and insert the sash into the frame. Place the pivot bar on one side of the sash into one of the balance shoes, then lower opposite end of the sash into the other balance shoe. Make sure the pivot bars are completely seated in the shoes by lightly tapping the sash near the pivot bar locations.

D. **Close and lock the sash**.

11 Hidden Screen Adjustment:

For units with Hidden Screen: the terminal hole may land under the upper balance or the clip.

AFTER REMOVING THE TERMINALS:

A. **Place pencil mark at top of the terminal hole,** and add another pencil mark 1/2" higher on the jamb.

B. **Move balance up so bottom of the clip is at the pencil mark.** The upper balance may be moved up 1" – 3" as necessary.

C. **Place two screws in the clip.** Screws are provided in the replacement balance package.

D. **Using a straight screwdriver adjust the balance down to the original balance location line, then lock using a 1/4 turn.**

Go back to step 6F.

