Learn about Window Balance Parts

2021 Presentation

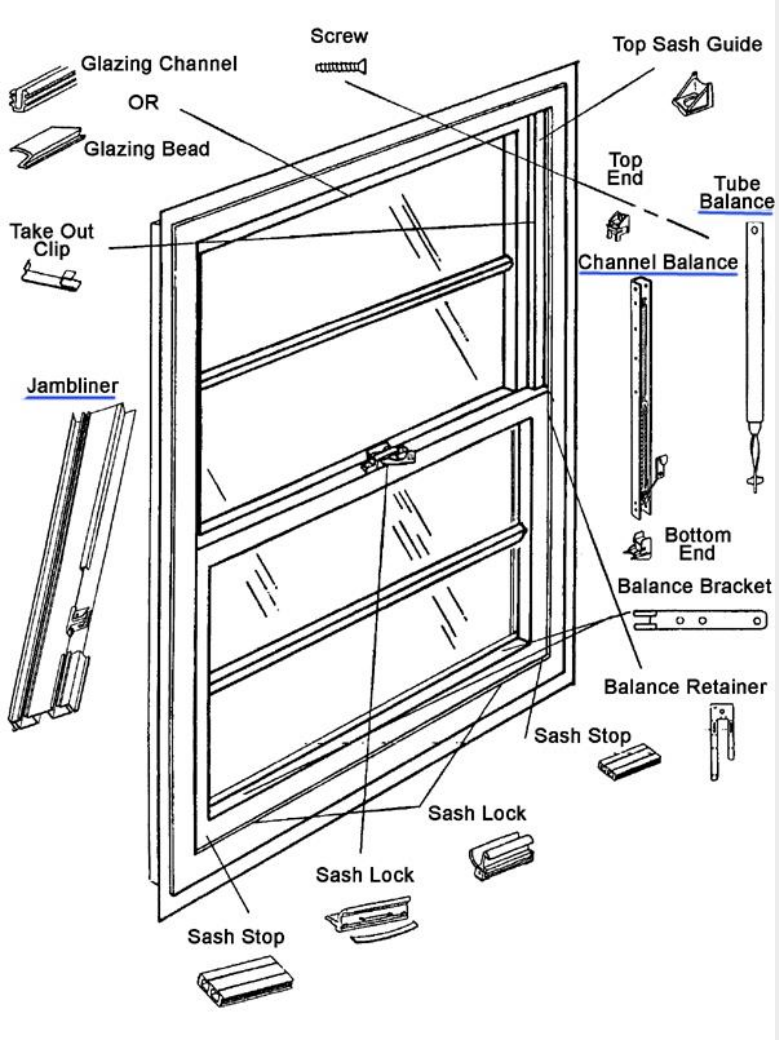
Strybuc Introduction continued…

- We can supply over 85,000 current, obsolete and hard-to-find window and door parts from stock, and over 250,000 more by special order, the most extensive variety in the industry
- We are the largest supplier of Window Sash Balances in the country
- We have a fully staffed Research Department to identify or find the part your customer needs
- We can usually ship same day with a 98% fill rate
- We can do a blind drop-ship directly to your customer
- Our small minimum order is only $25.00, FOB shipping point
- We have been in business for almost 40 years
- We have a manufacturing facility to make obsolete parts for your customer.
- We make many series of balances in house
- We assembly ends onto balances at no additional charge
- We are probably one of the last companies in the industry that honors the commitment NOT to sell to your customers.
- We have stocking warehouses in PA, FL and NV.
- We can supply you with a printed catalog or you can go on line to view our catalogs at www.strybuc.com
- We have “How To” info on our website to assist you and your customers

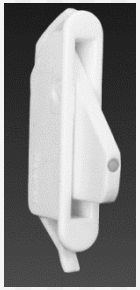
Strybuc Category List

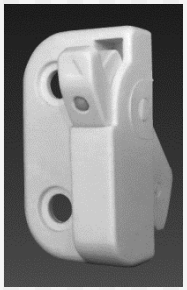
- **Window Parts** – For Single & Double Hung, Casement, Awning, Sliding, Jalousie, Project-In, Project-Out, Skylight and Other Types of Residential and Commercial Windows
- **Patio Door Parts** – For Sliding Glass and Screen Doors
- **Closet Door Parts** – For Bi-Fold, By-Pass, Pocket, Wardrobe and Other Types of Closet Doors
- **Storm Door Parts** – For Glass & Screen Doors
- **Cabinet Parts** – For Drawers and Doors
- **Shower Door Parts** – For Sliding Glass Doors
- **Door Parts** – For Swinging Entry and Interior Doors, Residential and Commercial
- **Multipoint Door Locking Systems** & Parts
- **Mail Box Locks**
- **Screen Parts & Hardware** – For Windows, Patio Doors, Storm Doors, and More
- **Toilet Partition Parts** – For Doors, Panels, Pilasters, and Urinal Screens
- **Commercial Hardware** – For Commercial, Store Front, Entrance, Exit, and Glass Doors
- **Glazing & Weatherstripping** – For Windows and Doors
- **Security Hardware** – For Doors and Windows
- **Safety Hardware** – Window Opening Control Device (WOCD) Vent Locks For Children
- **General Hardware**
- **Mobile Home & RV Hardware**
- **Custom Made-To-Order Screens** – For Residential and Commercial Windows, and Patio Doors

Single and Double Hung Window Parts

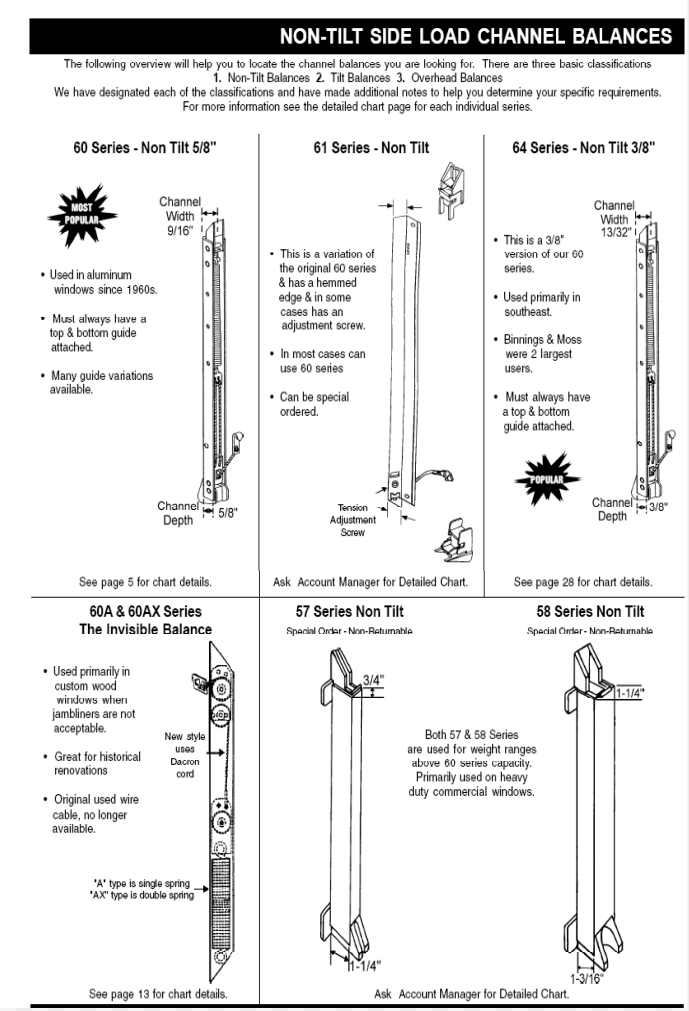


WOCD (Window Opening Control Devices)





Window Balance Overview - Non-Tilt and Tilt Channel Balances (see catalog)



NON-TILT SIDE LOAD CHANNEL BALANCES

The following overview will help you to locate the channel balances you are looking for. There are three basic classifications
1. Non-Tilt Balances 2. Tilt Balances 3. Overhead Balances
We have designated each of the classifications and have made additional notes to help you determine your specific requirements.
For more information see the detailed chart page for each individual series.

60 Series - Non Tilt 5/8"

MOST POPULAR

- Used in aluminum windows since 1960s.
- Must always have a top & bottom guide attached.
- Many guide variations available.

Channel Width 9/16"
Channel Depth 5/8"

See page 5 for chart details.

61 Series - Non Tilt

- This is a variation of the original 60 series & has a hemmed edge & in some cases has an adjustment screw.
- In most cases can use 60 series
- Can be special ordered.

Tension Adjustment Screw

Ask Account Manager for Detailed Chart.

64 Series - Non Tilt 3/8"

- This is a 3/8" version of our 60 series.
- Used primarily in southeast.
- Binnings & Moss were 2 largest users.
- Must always have a top & bottom guide attached.

POPULAR

Channel Width 13/32"
Channel Depth 3/8"

See page 28 for chart details.

60A & 60AX Series The Invisible Balance

- Used primarily in custom wood windows when jambliners are not acceptable.
- Great for historical renovations
- Original used wire cable, no longer available.

New style uses Dacron cord

"A" type is single spring
"AX" type is double spring

See page 13 for chart details.

57 Series Non Tilt

Special Order - Non-Returnable

3/4"
1-1/4"

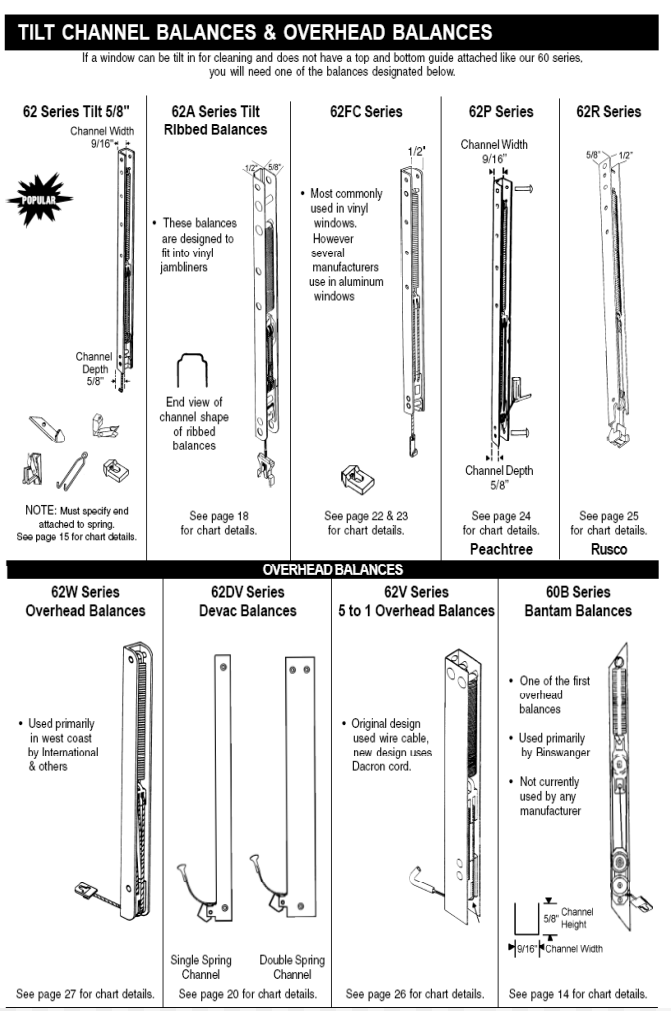
58 Series Non Tilt

Special Order - Non-Returnable

1-1/4"
1-3/16"

Both 57 & 58 Series are used for weight ranges above 60 series capacity. Primarily used on heavy duty commercial windows.

Ask Account Manager for Detailed Chart.



TILT CHANNEL BALANCES & OVERHEAD BALANCES

If a window can be tilt in for cleaning and does not have a top and bottom guide attached like our 60 series, you will need one of the balances designated below.

62 Series Tilt 5/8"

POPULAR

Channel Width 9/16"
Channel Depth 5/8"

NOTE: Must specify end attached to spring. See page 15 for chart details.

62A Series Tilt Ribbed Balances

- These balances are designed to fit into vinyl jambliners

End view of channel shape of ribbed balances

See page 18 for chart details.

62FC Series

- Most commonly used in vinyl windows. However several manufacturers use in aluminum windows

1/2"

See page 22 & 23 for chart details.

62P Series

Channel Width 9/16"
Channel Depth 5/8"

See page 24 for chart details.

Peachtree

62R Series

5/8" 1/2"

See page 25 for chart details.

Rusco

OVERHEAD BALANCES

62W Series Overhead Balances

- Used primarily in west coast by International & others

See page 27 for chart details.

62DV Series Devac Balances

Single Spring Channel
Double Spring Channel

See page 20 for chart details.

62V Series 5 to 1 Overhead Balances

- Original design used wire cable, new design uses Dacron cord.

See page 26 for chart details.

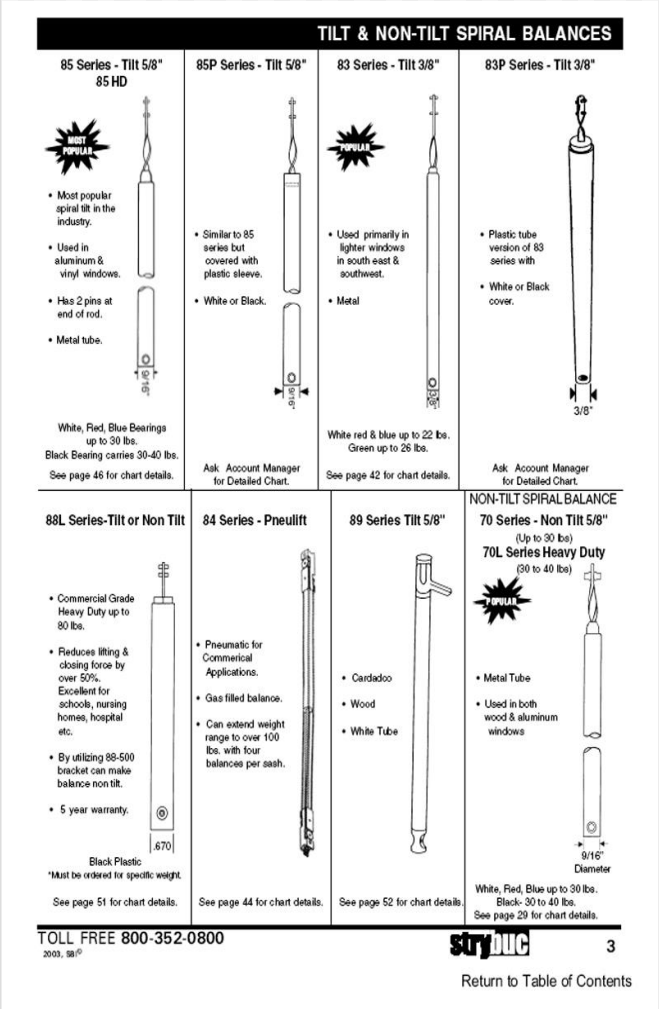
60B Series Bantam Balances

- One of the first overhead balances
- Used primarily by Rinswanger
- Not currently used by any manufacturer

5/8" Channel Height
9/16" Channel Width

See page 14 for chart details.

Window Balance Overview -
Tilt and Non-Tilt Spiral Tube Balances (see catalog)



TILT & NON-TILT SPIRAL BALANCES

85 Series - Tilt 5/8" 85 HD

MOST POPULAR

- Most popular spiral tilt in the industry.
- Used in aluminum & vinyl windows.
- Has 2 pins at end of rod.
- Metal tube.

White, Red, Blue Bearings up to 30 lbs.
Black Bearing carries 30-40 lbs.
See page 46 for chart details.

85P Series - Tilt 5/8"

- Similar to 85 series but covered with plastic sleeve.
- White or Black.

Ask Account Manager for Detailed Chart.

83 Series - Tilt 3/8"

POPULAR

- Used primarily in lighter windows in south east & southwest.
- Metal

White red & blue up to 22 lbs. Green up to 26 lbs.
See page 42 for chart details.

83P Series - Tilt 3/8"

- Plastic tube version of 83 series with
- White or Black cover.

3/8"

Ask Account Manager for Detailed Chart.

88L Series-Tilt or Non Tilt

- Commercial Grade Heavy Duty up to 80 lbs.
- Reduces lifting & closing force by over 50%. Excellent for schools, nursing homes, hospital etc.
- By utilizing 88-500 bracket can make balance non tilt.
- 5 year warranty.

.670

Black Plastic
*Must be ordered for specific weight.

See page 51 for chart details.

84 Series - Pneulift

- Pneumatic for Commerical Applications.
- Gas filled balance.
- Can extend weight range to over 100 lbs. with four balances per sash.

See page 44 for chart details.

89 Series Tilt 5/8"

- Cardadoo
- Wood
- White Tube

See page 52 for chart details.

NON-TILT SPIRAL BALANCE

70 Series - Non Tilt 5/8"
(Up to 30 lbs)

70L Series Heavy Duty
(30 to 40 lbs)

POPULAR

- Metal Tube
- Used in both wood & aluminum windows

9/16" Diameter

White, Red, Blue up to 30 lbs.
Black- 30 to 40 lbs.
See page 29 for chart details.

TOLL FREE 800-352-0800
2003, SB©

STRYBUC 3

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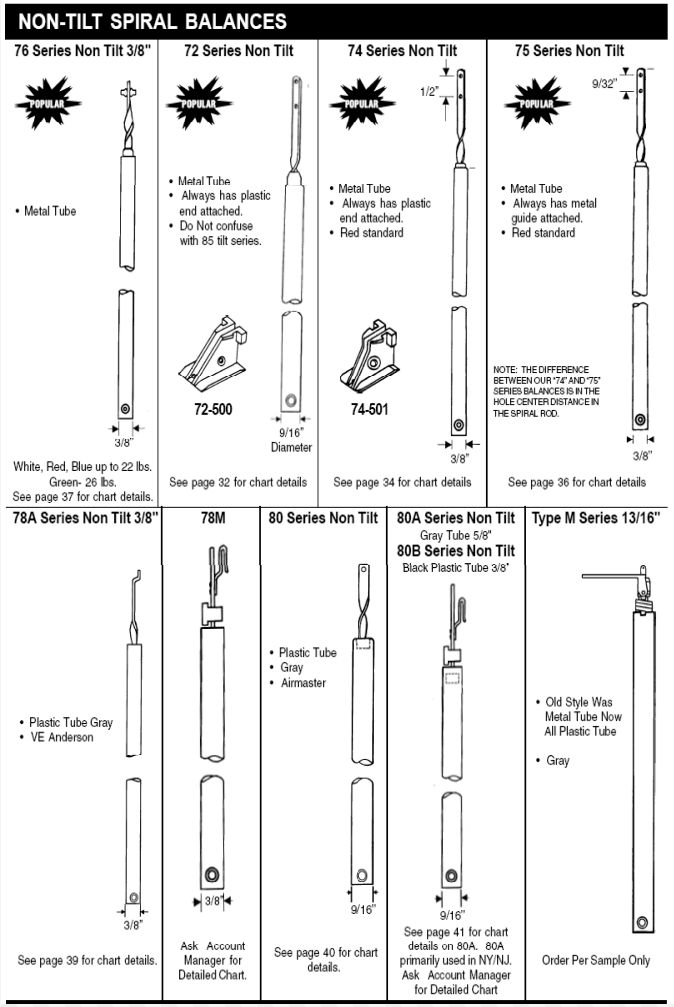


NON-TILT SPIRAL BALANCES

76 Series Non Tilt 3/8"

POPULAR

- Metal Tube

3/8"

White, Red, Blue up to 22 lbs.
Green- 26 lbs.
See page 37 for chart details.

72 Series Non Tilt

POPULAR

- Metal Tube
- Always has plastic end attached.
- Do Not confuse with 85 tilt series.

72-500

9/16" Diameter

See page 32 for chart details

74 Series Non Tilt

POPULAR

1/2"

- Metal Tube
- Always has plastic end attached.
- Red standard

74-501

3/8"

See page 34 for chart details

75 Series Non Tilt

POPULAR

9/32"

- Metal Tube
- Always has metal guide attached.
- Red standard

NOTE: THE DIFFERENCE BETWEEN OUR "74" AND "75" SERIES BALANCES IS IN THE HOLE CENTER DISTANCE IN THE SPIRAL ROD.

3/8"

See page 36 for chart details

78A Series Non Tilt 3/8"

- Plastic Tube Gray
- VE Anderson

3/8"

See page 39 for chart details.

78M

3/8"

Ask Account Manager for Detailed Chart.

80 Series Non Tilt

- Plastic Tube
- Gray
- Airmaster

9/16"

See page 40 for chart details.

80A Series Non Tilt
Gray Tube 5/8"

80B Series Non Tilt
Black Plastic Tube 3/8"

9/16"

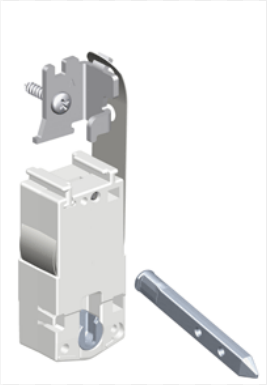
See page 41 for chart details on 80A. 80A primarily used in NY/NJ. Ask Account Manager for Detailed Chart

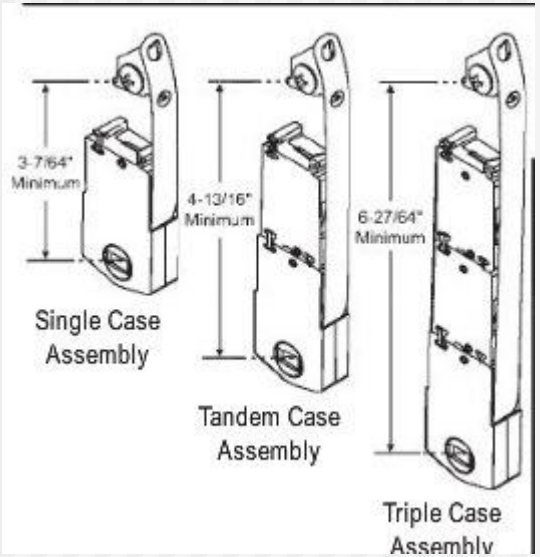
Type M Series 13/16"

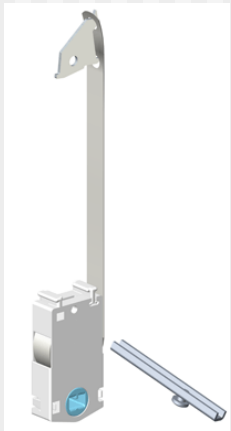
- Old Style Was Metal Tube Now All Plastic Tube
- Gray

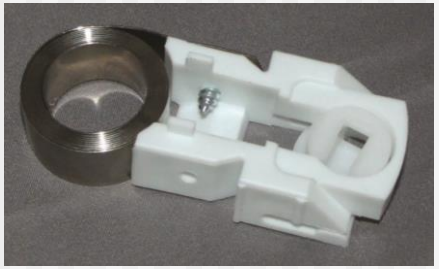
Order Per Sample Only

Constant Force Window Balances (see catalog)



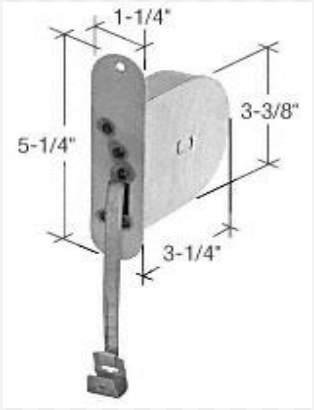


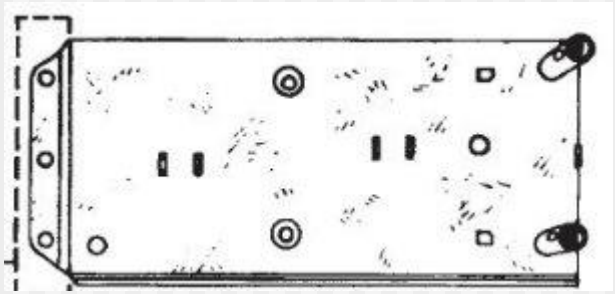




Other Types of Window Balances (see catalog)

Inverted Block & Tackle Balance

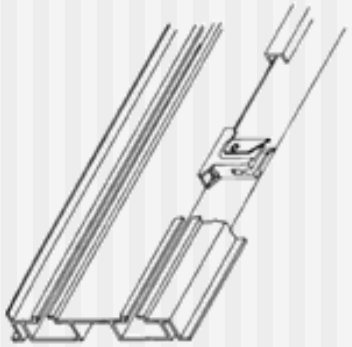




Tape Balances

Sash Pulley

Jambliners – For Wood Windows (complete form)



Account# _____ Salesman _____ PO# _____ Date _____

Jambliner Work Sheet

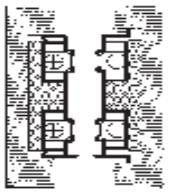
Is it for a Tilt Window?

- **Yes**
  - **Is it for 1-1/4" Sash**
    - Sash Size Doesn't Matter Because Parting Bead is Removed
    - **Do you want spring type balance or block & tackle balance.**
      - **Spring Type**
        - **V Plough** See Fig. 2
          - **Bracket Type** → **Use 86E*** (*Screw Mount)
          - **Flange Type** → **Use 86F**
        - **Square Plough** See Fig. 2
          - **Bracket Type** → **Use 86H**
          - **Flange Type** → **Use 86G**
      - **Block & Tackle** → **Use 86I**
    - Available in white & beige
    - We suggest ordering square cut so you can make field adjustments. Add 1" or 2" to overall length.
  - **Is it for 1-3/8" Sash** → same as 1-1/4" Sash
  - **Is it for 1-3/4" Sash**
    - **Do you want double hung or single hung**
      - **Double Hung**
        - **Do you want bracket type? (for repair/retrofit)** See Fig. 1
          - **Use 86M**
          - **Use 86MF**
        - **Do you want flange type? (used in Mfg.)** See Fig. 1 → **Use 86MS**
      - **Single Hung** → Bracket type only available
    - Available in white & beige
- **No**
  - **Is it Single Strength Glass SSB**
    - **Is it for 1-3/8" or 1-1/4" Sash**
      - **1-3/8" Use 86A**
      - **1-1/4" Use 86B**
  - **Is it Double Strength Glass DSB**
  - **Is it Insulated Glass SSB**
    - **Is it for 1-3/8" or 1-1/4" Sash**
      - **1-3/8" Use 86C**
      - **1-1/4" Use 86D**

Only Color Available for these Series are Beige

Bracket Type | Flange Type

Figure 1

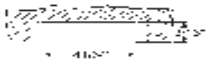


Sash + 1-1/2"

Figure 2

V Plough

Square Plough



Answer Following Questions

1. Cirele One: Balance # 86A. 86B. 86C. 86D. 86E. 86F. 86G. 86H. 86M. 86MF. 86MS
2. Cirele One: Sill Angle - Square Cut (Recommended). 15° (Most Common). 14°. 9°. 7°. 5°. Other_____
3. Cirele One: Color: Beige or White
4. Cirele One: Color of Balance: -Mill (Standard). White. Beige
5. Cirele One: Type of Glass: - Single Strength - Double Strength - Single Strength Insulated - Double Strength Insulated - Triple Glazed
6. Cirele One: Bracket Type - (Primarily used in retrofit) Flange Type - (Used in custom mfg) - See Figure 1.
7. Cirele One: V plough or Square plough only applies to 86F. 86H. 86G. 86I. - See Figure 2.
8. Visible Glass Height of Top Sash _____ Top Sash Weight _____
9. Visible Glass Height of Bottom Sash _____ Bottom Sash Weight _____
10. Glass Width (Top & Bottom Same)_____
11. Overall Length to Longest Point_____ Shortest Point _____
12. Quantity Needed _____

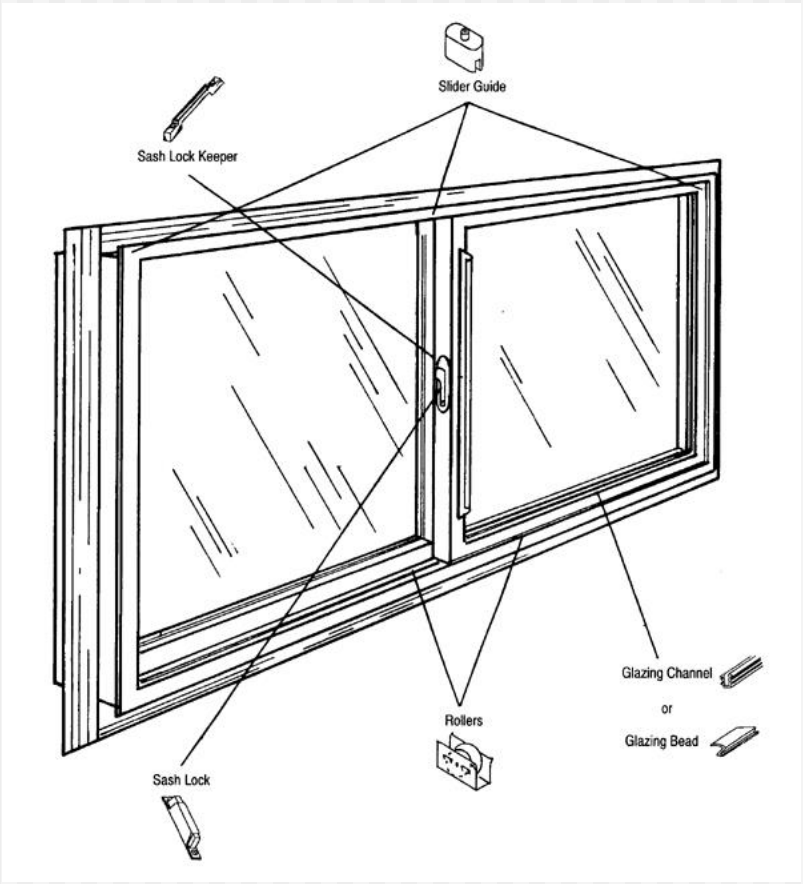
I understand this material is custom made to specifications as stated above and is non-returnable and non-cancelable.

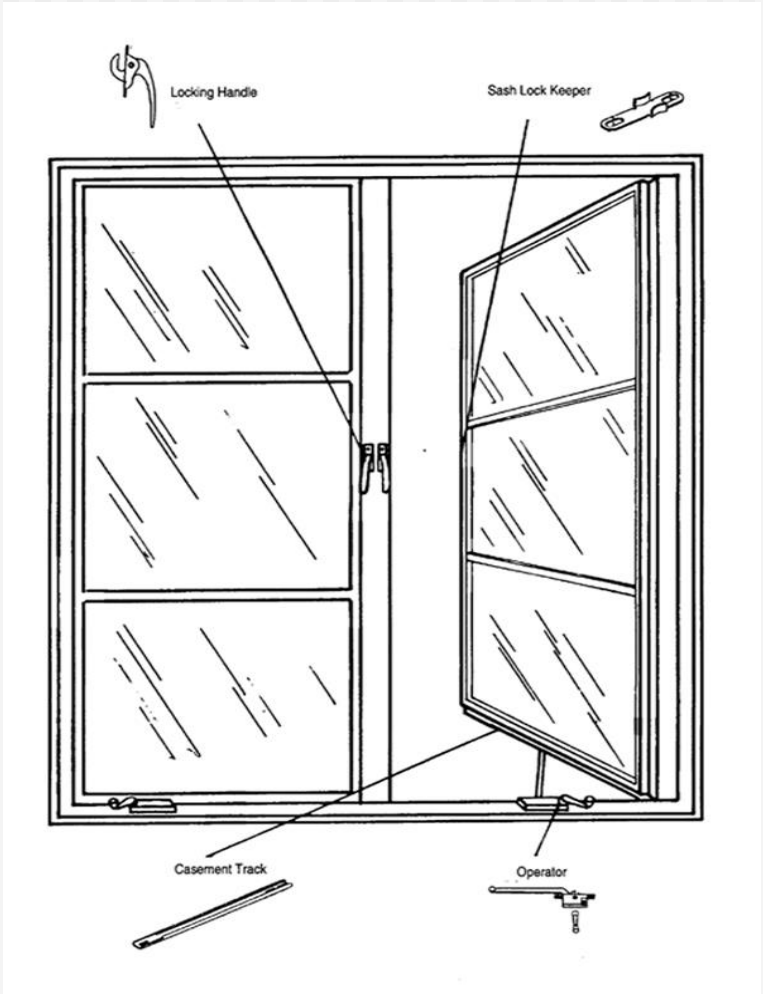
Signature of authorized buyer _____

Part#_____ Price $ _____ Balances _____ 86-cut _____ Other _____

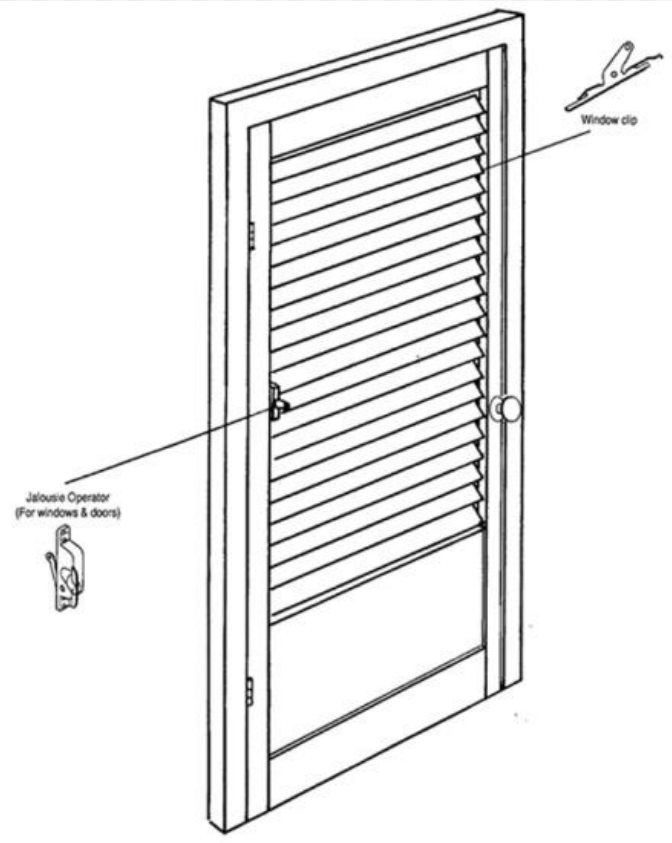
SB-17 4/07

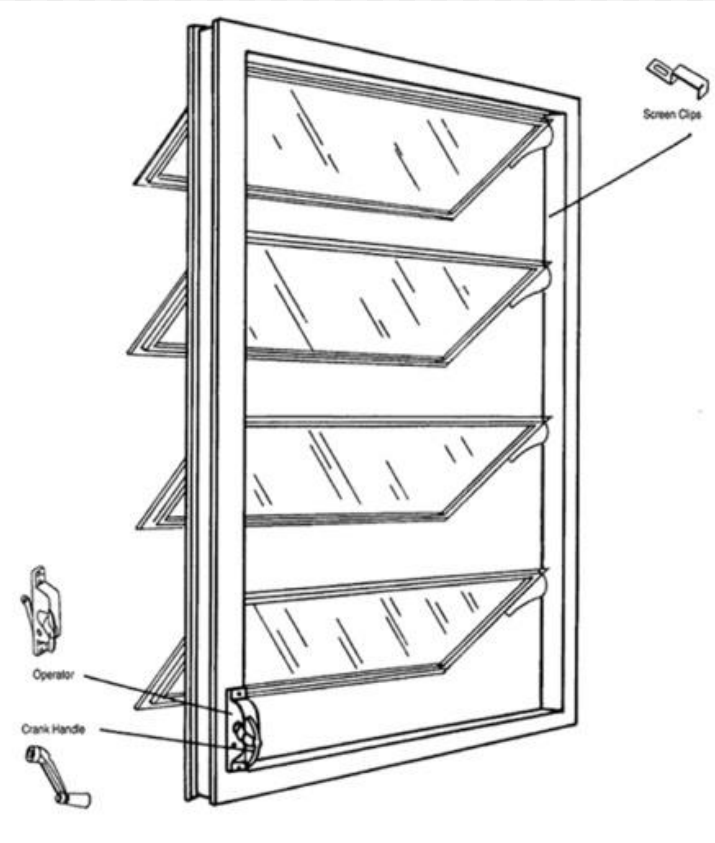
Sliding and Casement Window Parts



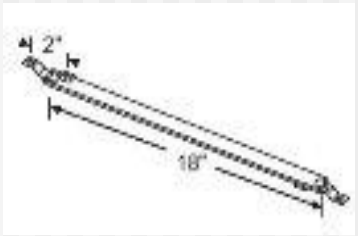


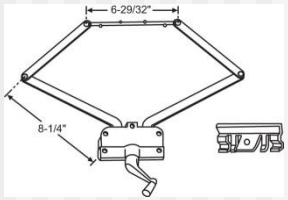
Jalousie and Awning Window / Door Parts

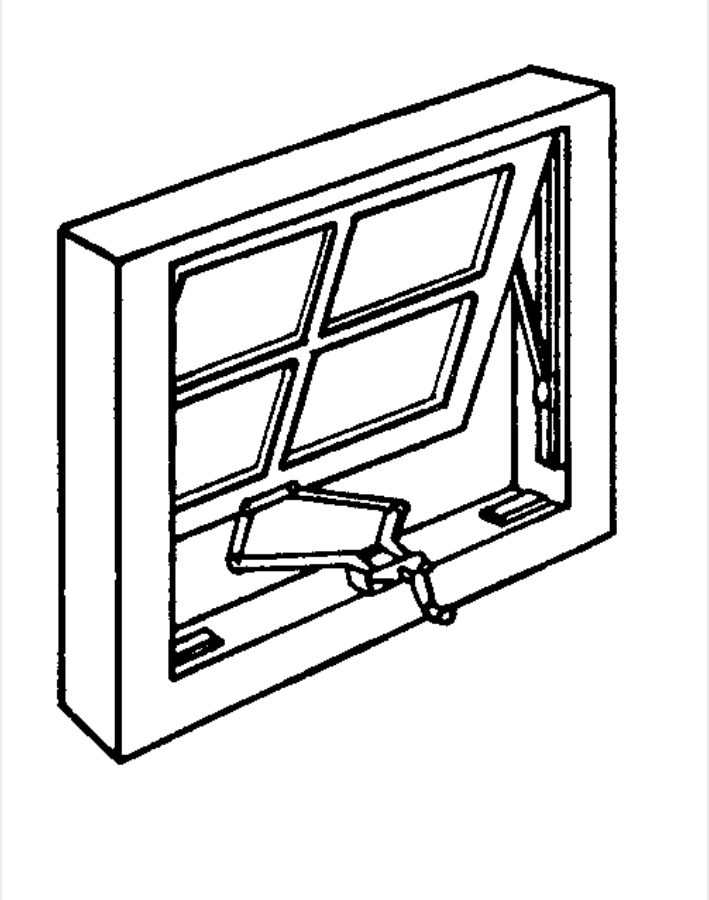


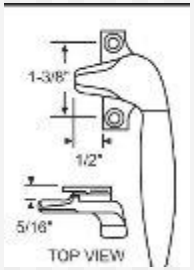


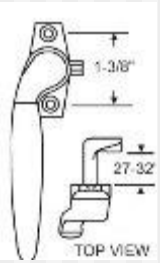
Project-Out and Project-In Window Parts

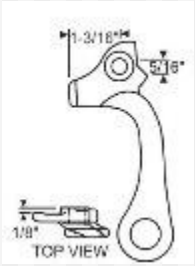












Identifying window and door parts can be very complicated and frustrating at times. To simplify this process, there are several steps you can take to identify the item your customer needs quickly and accurately.

Below are some recommendations for identifying window and door parts:

A. **Identify the "Manufacturer" of the Window or Door**: The name of the manufacturer may be printed on the window or door. If not, a manufacturer's number may be stamped on the inside of the frame, any part of the window, and/or on the actual glass. If a manufacturer name cannot be found, your customer may know who it is. Also, you may find information on an AAMA or AMSI Sticker. Getting this information will expedite your customers' requests.

B. **Identify the "Application" of the Part**: When a customer hands you a part, and they cannot identify the manufacturer's name, have them describe the application (function) or where and how the part operates. Also, identify the "type" of window or door the part is installed in (example: casement window, sliding glass or screen door) and what it is made of (example: aluminum, wood, vinyl) and the weight of the window sash (glass may have been changed) for balances [weigh on a bathroom scale or use weight chart]. You could also identify other parts used on the same system to ID the unidentifiable item. Just this information alone can make a big difference! [If you have the item number from an MRO Supplier, we may be able to cross it by providing that number without the sample.]

C. **Check the Strybuc Catalog or Strybuc Website**: After picking up customer samples and before emailing image or mailing them in, check in our full-line catalog to see if the part is immediately identifiable. If our catalog is not available, visit our website at *www.strybuc.com* to identify the part you need on the web! And use the handy web SEARCH BLOCK to find the item faster.

Over the years, Strybuc Industries has identified over 300,000 hard-to-find and obsolete window and door parts. With our insight and knowledge, along with your field representation and support, we look forward to improving the process of the identifying parts that directly effect sales growth!

Identifying window and door parts continued:

D. **Take a Digital Photo**: With technology today and the use of a cell phone, parts can be quickly photographed, emailed, then identified over the internet. When doing this, please place a ruler beside the item, and include all necessary information such as measurements, color, manufacturer of the window or door, and application. Two or three different angle shots are best. Send clear non-distorted shots. Email to your Account Manager or to cservice@strybuc.com or TEXT to 484-489-3913.

E. **Send us a Sample**: When sending samples, please include the manufacturer's name of the window or door, measurements, and application. We also suggest mailing samples via UPS and/or Fed Ex. All samples should be sent from your company to: **Strybuc Industries, 2006 Elmwood Ave, Unit 102C, Sharon Hill, PA 19079, Attention: Research Department. [**Mark the sample RUSH if your customer is in a hurry to get this replaced.] Samples are received and logged into our system. In some cases, we may have to send samples out for further research, with your customer's permission. Include your full contact info too. We will notify you with the sample ID, availability and pricing. Please note if you need your customer's sample returned or not.

F. **Strybuc's Manufacturing/Machine Shop Capabilities**: Many obsolete items made from die-cast or plastic can be custom-made, but this requires a sample or several samples in good condition. All pertinent information listed above should be included when sending in samples. Other items can be custom made by the manufacturer. Please note that custom made items are non-returnable!

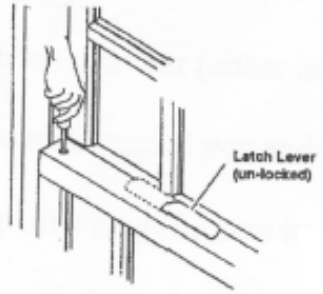
Strybuc 60P- Series Non-Tilt Channel Balance/Parts Replacement

Lower Sash Removal

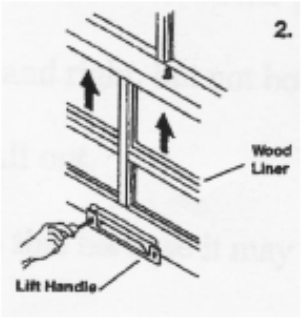
Before starting, note the following components & SAVE if to be reused. Only remove parts to be replaced.

- Balances and attaching screws
- Guide bar attaching screws
- Life handles
- Wood sash liner

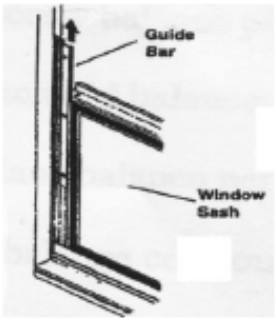
1.) With window in unlocked position, loosen set screw on latch lever. Remove latch lever by lifting up. Remove wood sash liner removing screws on each end of upper rail.



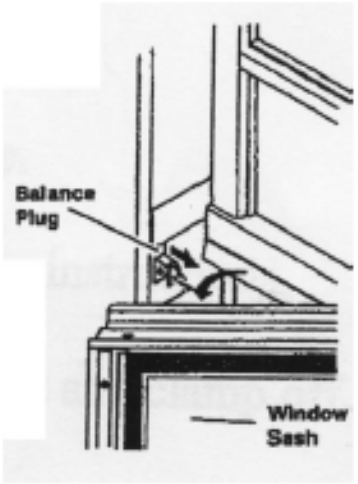
2.) Remove screws holding lift handles. Remove lift handles. Remove wood sash liner by lifting up vertically.



3.) Remove screws holding guide bar to one side of sash. Pull guide bar up until disengaged from sash.



4.) Pivot sash towards inside of room, remove balance plug screw. ***CAUTION: DO NOT ALLOW CORD TO SNAP BACK INTO BALANCE.*** Hold sash cord firmly (use pliers), remove plug from jamb and ease cord back into balance slowly. For opposite side, tilt sash over and up to relieve tension from sash cord, remove second balance plug screw and ease cord back into balance slowly.



Before starting, note that the lower sash must be removed before removing the upper sash. Save components and screws to be reused. Only remove parts to be replaced.

Lower Sash Replacement

1.) Position the original latch mechanism on the exterior side of upper rail flange and attach with screws (#8 x 3/8" Flat Head) saved/provided through latch into upper rail.
2.) Install balances in sash using original/new screws. Always replace both balances per sash with new balances. Install one of the two new guide bars to sash using original/new screws. *Note that guide bars are handed.*
3.) Reverse sash removal procedure. Use guide bars, lift handle screws (#10 x 1-1/4" w/Driftwood color head) and sash liner screws (#8 x1" w/trim washer).

Upper Sash Removal (Double Hung Windows Only)

1.) Remove lower sash following lower sash removal procedure - Do not discard any components and/or screws to be reused.

2.) Slide upper sash down to a comfortable working position. Do not discard any components and/or screws to be reused. Remove wood sash liner screws on each end of upper rail. Remove screws holding guide bar to one side of each sash. Pull guide bar up until disengaged from sash.

3.) Pivot sash towards inside of room, remove balance plug screw.
CAUTION: DO NOT ALLOW CORD TO SNAP BACK INTO BALANCE
Hold sash cord firmly (use pliers), remove plug from jamb and ease cord back into balance slowly. For opposite side, tilt sash over and up to relieve tension from sash cord, remove second balance plug screw and ease cord back into balance slowly.
Remove lock strike and attaching screws from lower rail.

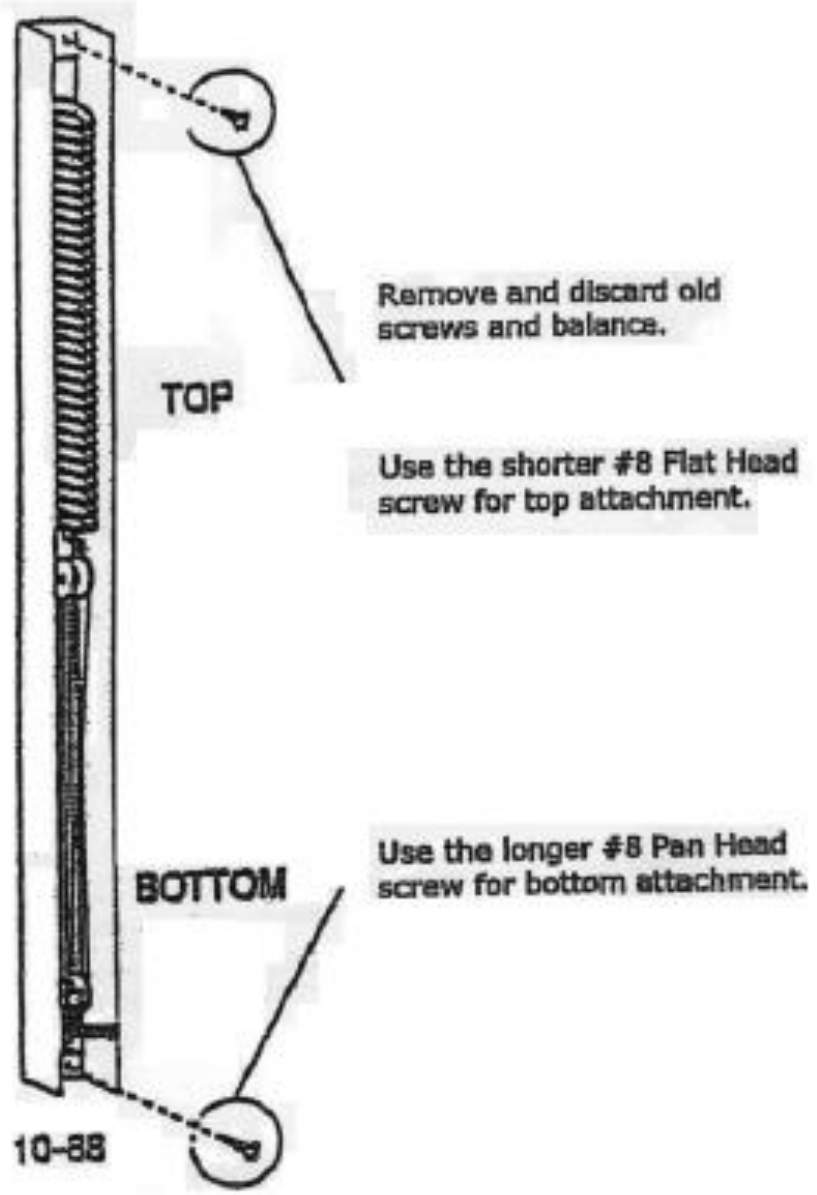
Upper Sash Replacement

1.) Install lock strike with original/new lock strike screws in sash.
2.) Install balances in sash using original/new screws. Always replace both balances per sash with new balances. Install one of two original guide bars to sash using original/new screws.
Note that guide bars are handed.
3.) Reverse sash removal procedure.

Balance Replacement Instructions for Double Hung Non-Tilt Windows

1.) Unscrew sash liners by two (2) screws at the top (loosen life handle also). Push up on liner and lift off. Upper sash liner has (2) screws on top, and no lift handles. Remove liner per instructions.
2.) Remove guide bar (either left or right, but not both) slide up and out.
3.) Rotate sash toward you and pull out.
4.) Clamp off string (be sure to do this because it may snap back and hit you).
5.) Unscrew balance plug.
6.) Detach old balance.
7.) Replace balance per instructions. Replace with 2 new balances per sash.
8.) Pull balance cord out and clamp off.
9.) Set sash in opening, insert balance plug into jamb and replace screw. Do this to both sides.
10.) Let sash hang on balance cords; while holding sash, remove clamps
11.) Reinsert sash and reinstall guide bar.
12.) Always return sash to the closed position before attempting to raise the sash to assure all parts are in place and re-aligned .
13.) Reinstall sash liners.

Double Hung Balance Replacement Instructions



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EZ-LIFT INSTALLATION PROCEDURES

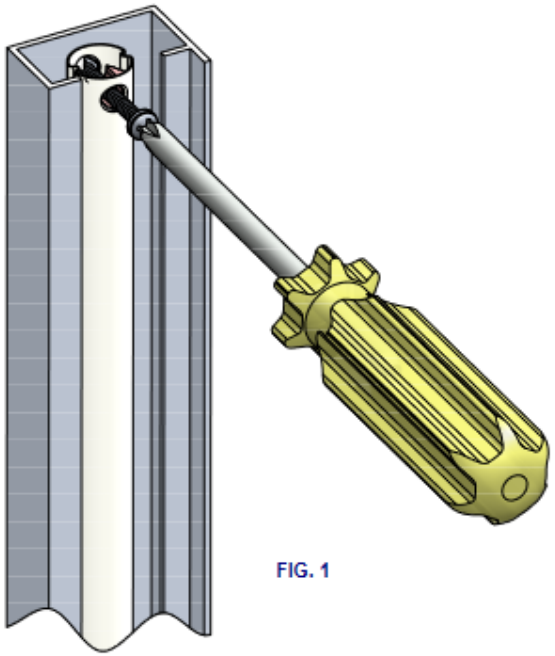

FIG. 1

FIG. 2

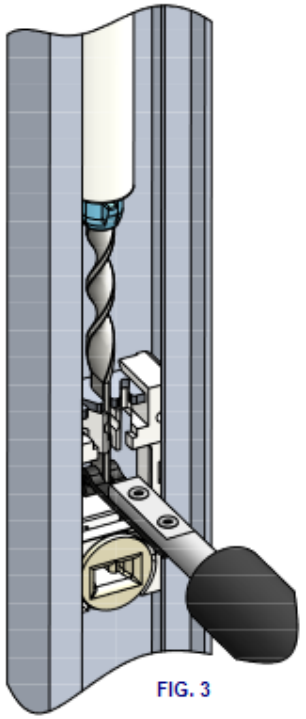

FIG. 3

INSTALLATION PROCEDURES:

1. INSERT PIVOT SHOE INTO JAMB POCKET AND LOCK INTO POSITION TO ACCEPT ENGAGEMENT OF PIVOT BARS WHEN SASH IS INSTALLED INTO FRAME.
2. ATTACH THE BALANCE TO THE WINDOW FRAME USING A #8 SCREW (SEE FIG. 1).
3. ENGAGE TENSIONING TOOL WITH LOWER ROLL PIN ON BALANCE ROD AND DISENGAGE ROD FROM PRETENSION ANCHOR BY SIMULTANIOUSLY PULLING AND ROTATING TENSIONING TOOL CLOCKWISE (WHEN VIEWED FROM BELOW). BE CAREFUL NOT TO LOOSE PRETENSION TURNS (SEE FIG. 2).
4. EXTEND ROD AND INSERT THE BALANCE ROD INTO THE PIVOT LOCK SHOE.

CAUTION:

1. AFTER ROD DISENGAGEMENT (INSTALLATION PROCEDURE STEP 3), TOOL WILL WANT TO ROTATE IN A COUNTER CLOCKWISE DIRECTION (WHEN VIEWED FROM BELOW). DO NOT ALLOW TURNS TO BE LOST.
2. MAKE SURE NOT TO BEND SPIRAL ROD DURING INSTALLATION.
3. BE SURE THAT SPIRAL ROD IS PROPERLY SEATED IN PIVOT LOCK SHOE (SEE FIG. 3).

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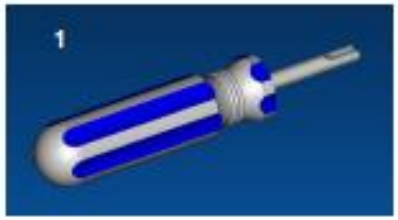
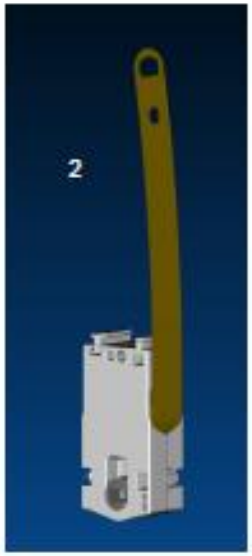
Service Installation Triple (Lower Sash)



1. Cam Assembly Tool (20H86)
2. Lock Assembly (w/ Long Tail Spring)
3. Tandem Assembly (2)
4. Mounting Bracket



Dog Bone

Dog Bone Receiver

Solutions That Set New Standards

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Service Installation Triple (Lower Sash)

Step 1

Attach the mounting bracket to the spring of one tandem assembly and position on the dog bones.

Step 2

Attach the second tandem assembly to the mounting bracket being sure that the spring of the second tandem assembly is on the outside of the spring of the first tandem assembly.

Step 3

Put the locking assembly with the longtail spring into the cut out first.

Solutions That Set New Standards

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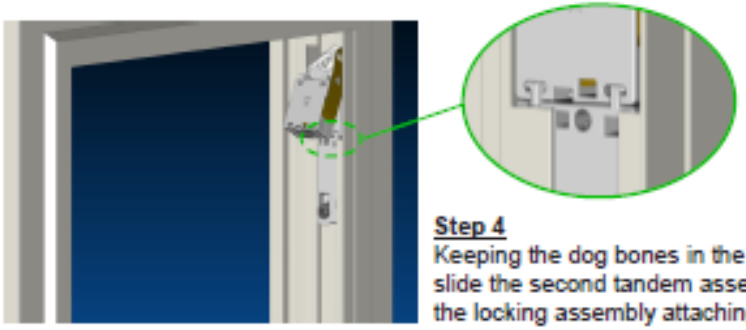
Service Installation Triple (Upper)

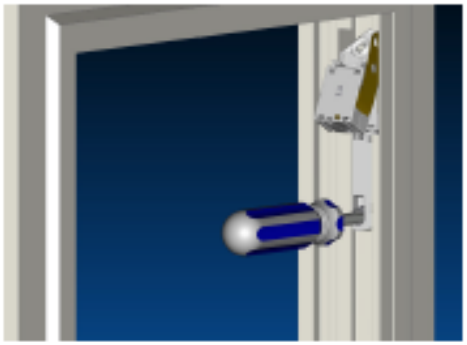


Step 4

Keeping the dog bones in the cut out, slide the second tandem assembly onto the locking assembly attaching the dog bones into the dog bone receptors.

Step 5

Pull the locking case and second tandem assembly down into the jamb using the cam actuation tool.



Step 6

Line up the second tandem assembly's dog bones with the dog bone receptors of the first tandem assembly and attach the two tandem assemblies.

Balance Adjustment

If your windows require adjustment, such as sash dropping or

1. Tilt sash downward to expose balance shoe. Using diagram 1, disengage rod from shoe. Do not disconnect rod from tensioning tool.

2. If sash is dropping, add tension by rotating rod clockwise. Do not exceed more than two full turns at a time, doing both sides equally. Reconnect rod, repeat process if needed.

3. If sash is pulling up, less tension is required. do both sides equally; rotate rod counter-clockwise one turn. Reconnect rod; repeat process if needed.

4. If rod is disconnected from shoe then follow diagram 2, for position of rod before connecting rod and balance. Apply tension to both sides equally, not exceeding four turns at a time

pulling up, or if the spiral rod is disengaged, adjustment is simple:

1. Rotate rod slightly to the right.
2. At the same time, pull rod downward.
3. slip rod away from the pivot lock shoe.

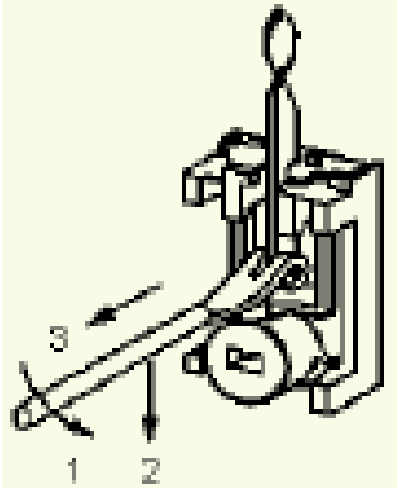


Diagram 1

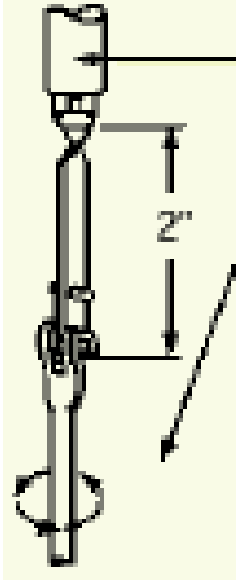


Diagram 2

NON-TILT WINDOW BALANCE INSTALLATION

1. Pull down window sash.

2. Insert balances in top of the sash groove with attaching bracket end down.

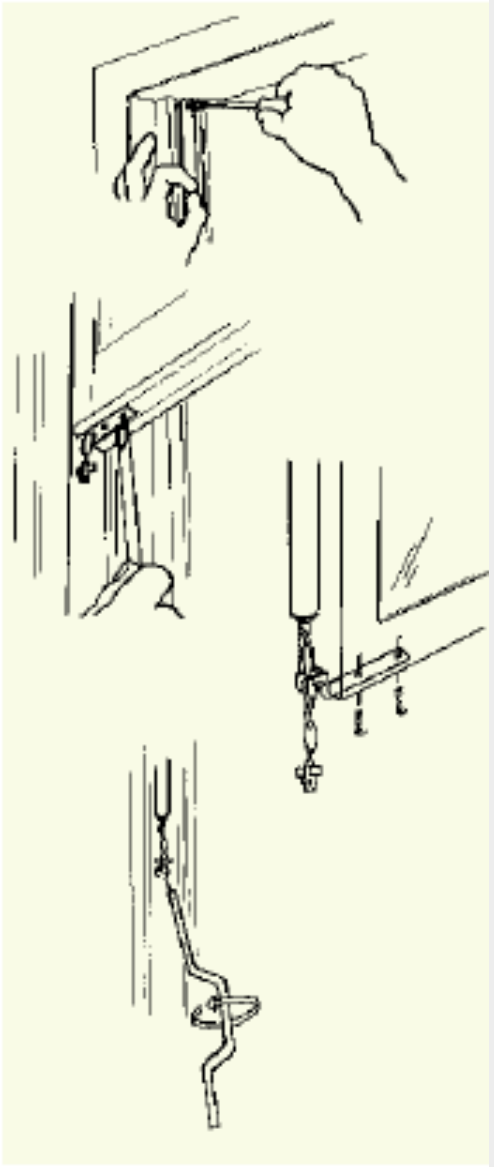
3. Attach balance with screw in center of sash run so the top end of balance is against the header of the master frame.

4. Prop sash up with a stick.

5. Attach metal brackets using two screws for each.

6. Tension balances after installing both balances in top sash. Use appropriate adjusting tool: # 75-005, insert hooked end in hole in spiral rod. *Do not pull spiral rod more than two inches out of balance to tension, as it is likely to be bent if pulled out further, this will ruin the balance.* To apply tension, rotate tool clockwise and then push the brass cross pin up into the latch in bracket and remove tool. Apply equal tension to each balance until sash is correctly balanced. To remove tension twist tool slightly clockwise and pull cross pin down out of its seat in latch.

7. Install lower balances by following same procedure as for top sash.



Caution

- *Be sure spiral rod is not bent in handling or in tensioning.*
- *Do not apply more tension than necessary to balance the sash. The same number of turns should be applied to each balance.*
- *Be sure balances are centered exactly in sash run.*
- *Be sure metal bracket is mounted in far enough to prevent it from rubbing on the side jamb of window.*

Recommendation: replace both balances on each window