WEATHER SHIELD®

WINDOWS & DOORS

HR175 Sash Replacement Kit™
Installation Instructions

IMPORTANT: Please read before you begin.

Weather Shield HR175 Sash Replacement Kits

🛡 **Important:**
Thoroughly read and follow these instructions, failure to install as recommended will void any warranty, expressed or implied. The following instructions are based on typical frame construction. For installation other than shown, contact your dealer.

Tools Required:
- Safety Glasses
- Tape Measure
- Carpenter's Level
- Hammer
- Screwdrivers
  (Flat and Phillips)
- Pliers
- Putty Knife
  or Pry Bar
- Hand Saw
- Gloves

Materials Required:
- High-quality Exterior Silicone Caulk
- Finish Nails
- #8 x 2$\frac{1}{2}$" Phillips Pan Head Screws
  (If installing sash lugs)

⚠

Recognize this symbol. This is the Safety-Alert symbol. When you see this symbol be alert to the potential for personal injury or product damage.

SAFETY INSTRUCTIONS

Read installation instructions completely before beginning a procedure.

⚠ DANGER

Falling from window openings may result in severe injury or death. Do not leave openings unattended when children are present.

⚠ CAUTION

Wear gloves, safety glasses, goggles or eye shields appropriate to procedure.

⚠ WARNING

Weight of window and door unit(s) and accessories will vary. Use a reasonable number of people with sufficient strength to lift, carry and install window or door unit(s) and accessories. Always consider site conditions and use appropriate techniques when lifting.

⚠ WARNING
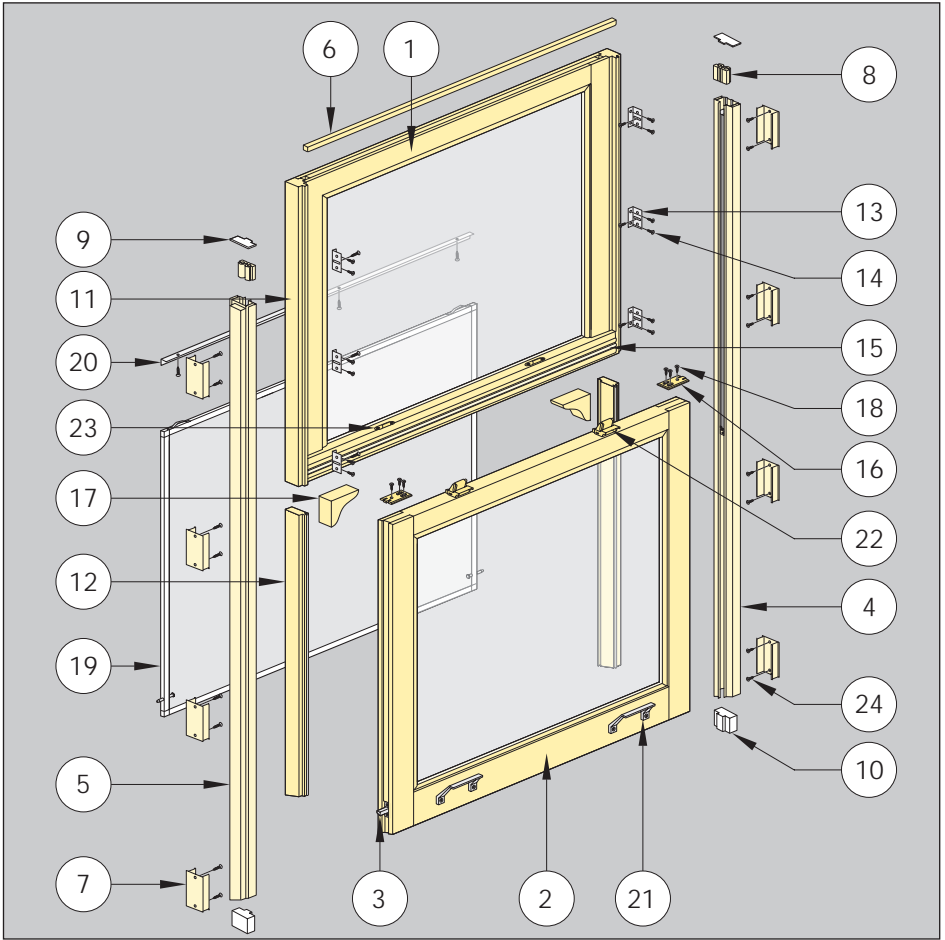
CUT HAZARD
- Non-safety glass.
- May cause serious injuries if broken.
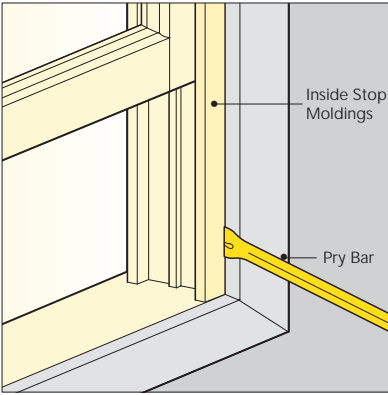- Do not install where tempered safety glass is required.

⚠ WARNING

Screen will not stop child from falling out window. Keep child away from open window.

Parts List:

1. (1) - Top Sash — Stationary
2. (1) - Bottom Sash
3. (2) - Cam Pivot Pin (Attached)
4. (1) - Left Vinyl Jamb Liner
5. (1) - Right Vinyl Jamb Liner
6. (1) - Head Stop
7. Vinyl Jamb Liner Bracket
   (Qty. Varies Per Unit Size)
8. (2) - Vinyl Sash Stop
9. (2) - Top Jamb Liner Foam Gaskets
10. (2) - Bottom Jamb Liner Foam Block
11. (2) - Sash Filler Block
12. (2) - Bottom Sash Filler Block
13. (6) - Stationary Sash Bracket
14. (18) - #8 x $^7/_8$" Phillips Pan Head Screw
15. (1) - Check Rail Weather Strip
16. (2) - Sash Retainer Plates (Attached)
17. (2) - Sash Lug
18. (6) - #7 x $^3/_4$" Phillips Flat Head Screw
19. (1) - Screen
20. (1) - Screen Channel with (3) - #4 x $^1/_2$"
    Phillips Flat Head Screw (Attached)
21. (2) - Finger Pull
22. (2) - Sash Lock
23. (2) - Sash Keeper
24. #8 x 7/8" Phillips Pan Head Screw
    (Qty. Varies Per Unit Size)
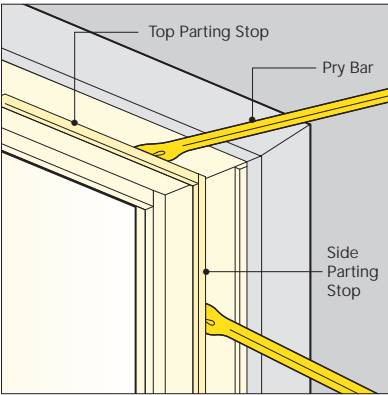
FIGURE 1

Inside Stop Moldings

Pry Bar

Removing Existing Sash

1. Remove the inside stop mouldings from the side jambs using a putty knife or pry bar. Do not break or damage these pieces as they may be reused (FIGURE 1).

2. Cut out all cords and weights (or spring balances) and lift out bottom sash.

FIGURE 2

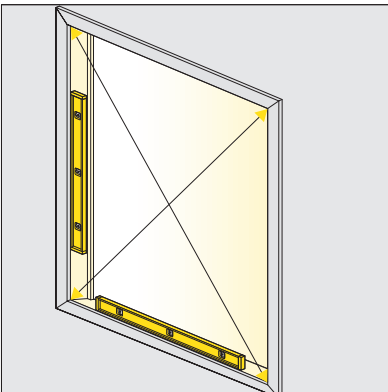

Top Parting Stop

Pry Bar

Side Parting Stop

3. After removing bottom sash, slide the top sash down to the sill and remove the parting stop from the head jamb (FIGURE 2).

4. Remove the parting stops from both side jambs (FIGURE 2).

5. Cut cords and remove the top sash.

6. Remove weights and insulate cavity, if desired.

FIGURE 3

7. Check the sill of the opening, in which you are installing the window, for level and measure the opening diagonally from corner-to-corner to check for square (FIGURE 3).

- Check frame for squareness.
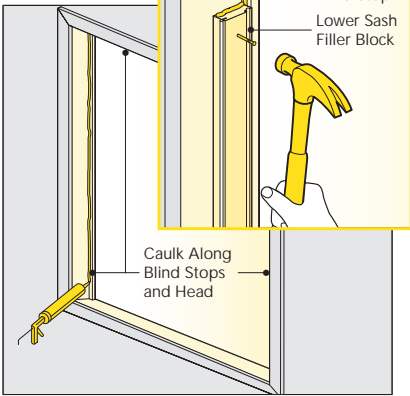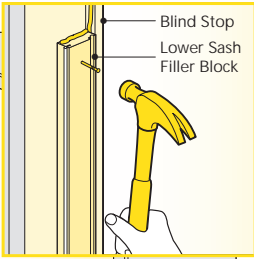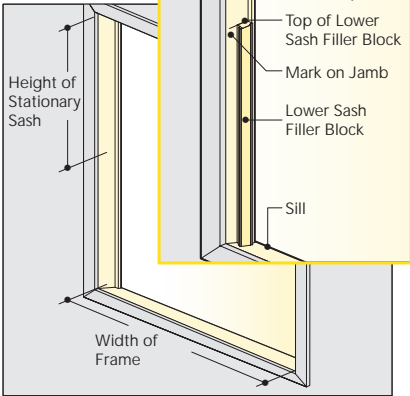- Be sure head, jambs and sill are not bowed.

FIGURE 1

FIGURE 2

Blind Stop
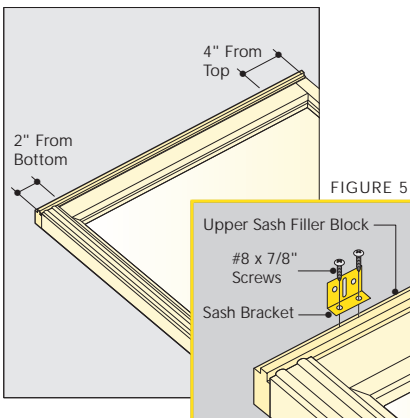
Lower Sash
Filler Block

Caulk Along
Blind Stops
and Head

Installing Stationary Sash

1. Caulk along entire length of blind stop and cross head (FIGURE 1).

2. Butt lower sash filler block against blind stop and attach to jambs with finishing nails (FIGURE 2).

3. Measure the height of the stationary sash. (FIGURE 3).

Lower sash filler blocks must hold stationary sash tight against head when installed. Compare the top of the lower sash filler block to the measurement taken from stationary sash. Any difference must be made up at the top of the stationary sash (FIGURE 3).

Compare the width of the stationary sash to the width of the frame. Any difference between the sash and the frame must be made up at the sides of the stationary sash, with equal amounts on each side (FIGURE 3).

FIGURE 3

Blind Stop

Top of Lower
Sash Filler Block

Mark on Jamb

Lower Sash
Filler Block

Sill

Height of
Stationary
Sash

Width of
Frame

FIGURE 4

4" From
Top

2" From
Bottom

FIGURE 5

Upper Sash Filler Block

#8 x 7/8"
Screws

Sash Bracket

4. Stationary sash brackets are to be installed to each upper sash filler block. Locate one bracket 4" below top of sash, or lower to be sure not to interfere with existing rollers. Then locate second bracket 2" above bottom of sash and space the remaining brackets evenly between the two (FIGURE 4). Drill pilot holes and attach brackets to upper sash filler block with #8 x $\frac{7}{8}$" phillips pan head screws (FIGURE 5).

5. Caulk top ends of both lower sash filler blocks (FIGURE 2).

3

FIGURE 6

Stationary Sash

#8 x 7/8" Screws

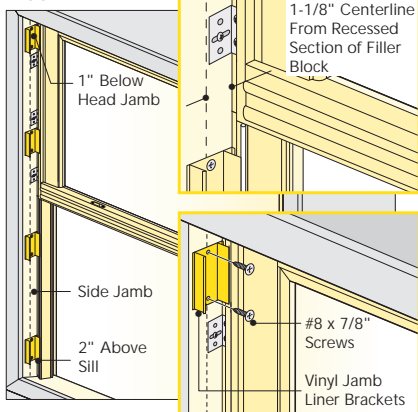**Sash Lug**

Lower Sash Filler Block
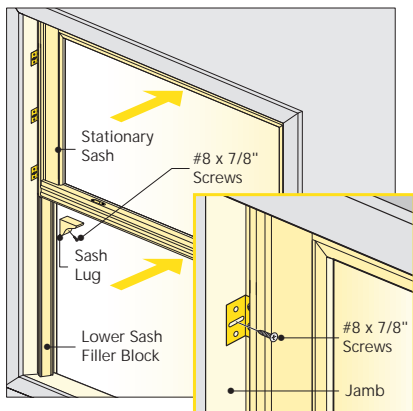
#8 x 7/8" Screws

Jamb

6. Position top sash above lower sash filler blocks. Butt top sash against blind stop and attach to jambs with #8 x ⅞" screws through sash brackets (FIGURE 6).

7. Install sash lug flush with screen channel on lower sash filler block and tight against stationary sash. Fasten using one #8 x 2½" screw (FIGURE 6).

FIGURE 1

1-1/8" Centerline From Recessed Section of Filler Block

1" Below Head Jamb

Side Jamb

2" Above Sill

#8 x 7/8" Screws
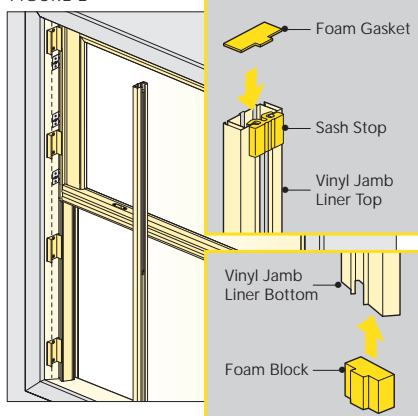
Vinyl Jamb Liner Brackets

Installing Operating Sash Hardware

1. Butt the extended foot of jamb liner bracket against filler blocks (FIGURE 1). Locate one 1" below the head jamb, one 2" above the sill, and space the remaining brackets evenly along jamb making sure not to position vinyl jamb liner brackets over stationary sash brackets. Attach vinyl jamb liner brackets to jamb using #8 x ⅞" phillips pan head screws (FIGURE 1).

The centerline of each jamb liner bracket must be located $1\frac{1}{8}$" from and parallel with the recessed section of the filler blocks.

FIGURE 2

Foam Gasket

Sash Stop

Vinyl Jamb Liner Top

Vinyl Jamb Liner Bottom

Foam Block

2. Place the sash stop and foam gasket at the top of each vinyl jamb liner. Place bottom jamb liner foam block into the bottom of each vinyl jamb liner (FIGURE 2).

FIGURE 3

Snap Vinyl
Jamb Liners
Into Place
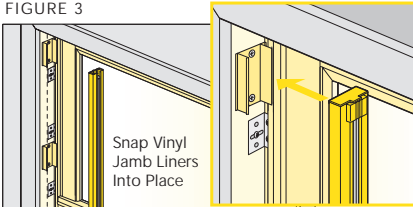
FIGURE 4

Head
Stop

3. Place vinyl jamb liner against brackets and snap into place (FIGURE 3).

4. Place the head stop into the head jamb and secure with small finishing nails (FIGURE 4).
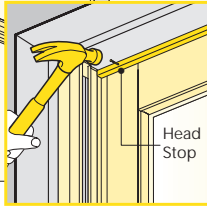
FIGURE 1

FIGURE 2

Sash
Retainer

Installing The Operating Sash

1. Sash retainers must be disengaged before the sash can be installed. Remove the two outermost screws (one per retainer). Loosen four innermost screws (two per retainer) and slide retainer toward center of sash. Retighten four screws to secure the retainer to the sash (FIGURE 1).

2. Engage left corner pivot pin (FIGURE 2) into cam then lift right corner until pivot pin can clear jamb liner and move right corner of sash toward frame until pivot pin enters cam (FIGURE 3).
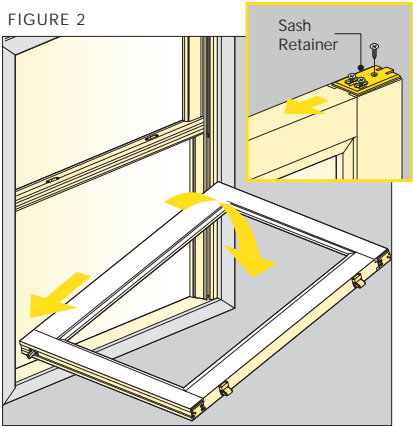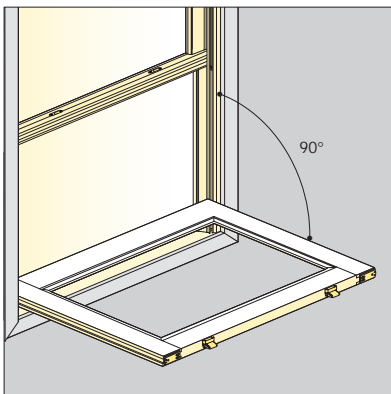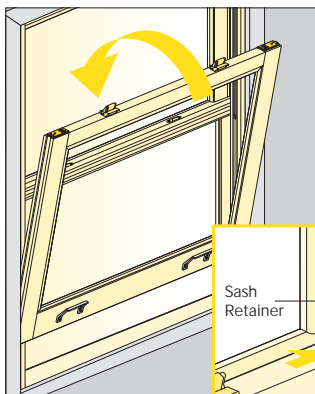
FIGURE 3

90°

FIGURE 4

FIGURE 5

Sash
Retainer

3. Grasp top of sash and pivot toward frame. Gently push sash into vinyl track while sliding sash down. Sash is now in vinyl tracks and should operate smoothly (FIGURE 4).

🛡 Important:
When operating sash, sash retainers must be engaged into jamb liner.

4. Loosen four innermost screws of sash retainers and slide retainers outward until they enter vinyl jamb liner (FIGURE 5).

5. Retighten four innermost screws and replace outermost screws to secure sash into track (FIGURE 5).

Operating Sash Tilt and Removal

⚠ WARNING

When removing or tilting sash in and returning to closed position while standing on a ladder or step stool, be careful not to lose your balance.

🛡 Important:
Sash retainers must be disengaged before the sash can be tilted. Sash retainers must be engaged into jamb liner before operating sash.

1. To tilt or remove the operating sash, reverse the steps in "Installing The Operating Sash" on page 5.
   • Disengage the sash retainers
   • Pull top corner of sash out on one side while pushing the vinyl jamb liner away from sash. Repeat for the opposite side.

⚠ Caution!
The tilt window allows for the complete removal of the sash from the frame. Sash are heavy and caution should be used when removing. For large sash it is recommended that the sash be removed with two (2) people.

- To remove the bottom sash, tilt sash in so it is at right angles to the window frame. Do not rotate past 90°. Grasp the sash firmly on both sides near the bottom and lift one side straight up to disengage the sash pin. Lift the opposite side up and out of the liner.

- To re-install the sash back into the frame, follow the steps in "Installing The Operating Sash".
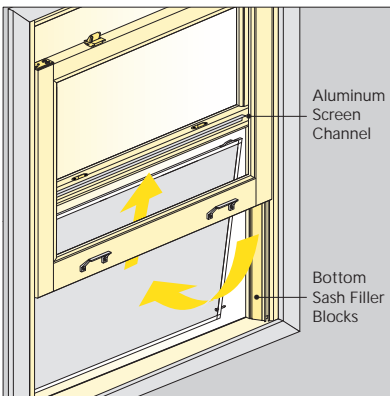
Half Screen Installation Instructions

Note: Half screens are attached to the bottom sash filler blocks with plungers located on the vertical sides of the screen.

While disengaging plungers, tilt the top of the screen up into the aluminum screen channel and position screen tight against bottom sash filler blocks and sill (FIGURE 1).

FIGURE 1

Aluminum Screen Channel

Bottom Sash Filler Blocks

Recommended Finishing Instructions

Exterior

Clean the exterior surface with mild soap and water. Hard to remove stains and mineral deposits may be removed with mineral spirits.

- Do NOT use abrasives.
- Do NOT scrape or use tools that might damage the surface.
- Do NOT paint, stain or varnish any vinyl or aluminum surface or weather stripping.

Interior

For best results, the interior wood should be sealed within 30-days of installation. Remove all construction residue before finishing.

1. Lightly sand surfaces being finished with 180 grit or finer sandpaper. Be careful not to scratch the glass.

2. After sanding, clean-off sanding dust from surface using lacquer thinner applied to a cloth so the cloth is slightly damp. Let surface dry.

3. If painted surface is desired, use only oil-based primer coats. Use compatible oil- or water-based finish coats. Refer to the manufacturers' instructions.

4. Prime the products on all sides of the wood components not permanently installed at the factory. This helps prevent end splitting, warping or checking.

5. Once primed, apply two (2) coats of paint (again on all exposed sides) to each item.

6. If a stained surface is desired, use only oil-based stain and sealer for the first coat. Clear top coats may be oil- or water-based. Apply desired stain to the manufacturers' instructions and let dry.

7. Apply one (1) coat of sealer to the surface and let dry.

⚠ Caution!

If no sealer is applied over the stain, the wood will weather very rapidly and defects will occur.

8. Lightly sand with 180 grit sandpaper. Clean off sanding dust and wipe with a tack cloth.

9. Apply one (1) coat of desired finish to surface and let dry.

10. For any additional coats of finish, repeat steps 8 and 9.

Exterior Insulation and Finish Systems (EIFS) and Similar Systems:

Serious concerns have been raised about excessive moisture problems in houses and other buildings that have Exterior Insulation Finish Systems, commonly referred to as EIFS or Synthetic Stucco.

Many experts agree that some amount of water or moisture can be expected to enter almost any building exterior system. The building system should allow such water and moisture to escape or "weep" to the exterior, so no harm is done. However, some EIFS systems may not allow water or moisture that penetrates the wall system to "weep" to the exterior. This can cause excessive moisture to accumulate within the wall system, which can cause serious damage to wall and other building components. It has been reported that so-called "barrier" EIFS systems are particularly prone to this problem.

Moisture problems in any type of building structure can be reduced by proper design and construction with appropriate moisture control considerations, taking into account prevailing climate conditions. Examples of moisture control considerations include proper flashing and/or sealing of all building exterior penetration points, use of appropriate materials and construction techniques, adherence to applicable building codes, and general attention to proper design and workmanship of the entire building system, including allowances for management of moisture within the wall system.

Determination of proper building design, components and construction, including moisture management, are the responsibility of the building designer, the contractors, and the manufacturer of the exterior wall finish products. Questions and concerns about moisture management issues should be taken up with these professionals. Weather Shield Mfg., Inc. is not responsible for problems or damages caused by deficiencies in building design, construction or maintenance, failure to install our products properly, or use of our products in systems that do not allow for proper management of moisture within the wall system.

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