

INTEGRITY DOUBLE HUNG (IDH) (DISCONTINUED – JANUARY 2006)

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NOTE: For double hung direct glazed transom information see Chapter 6 Round Top/Polygon.

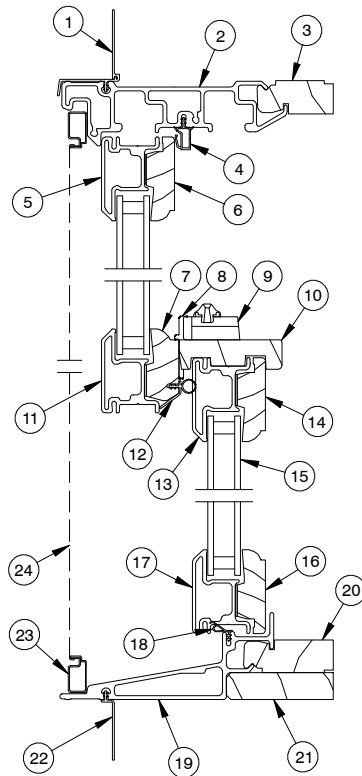
ATTENTION:

- Specification and technical data are subject to change without notice.
- Numbers listed in parentheses () are metric equivalents in millimeters rounded to the nearest whole number.

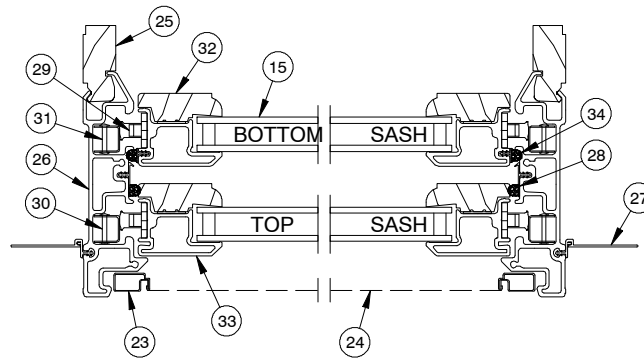
PRODUCED	UNIT TYPE	FEATURES OR CHANGES	DISCONTINUED
1995	Double Hung	<p>April 1995: Integrity Double Hung introduced. Unit features 3/4" Low E II glass with Argon, 4 9/16" jambs.</p> <p>April 1995: Pultruded fiberglass (Ultrex) exterior available in white or pebble gray, almond frost sash lock and tilt latches, white or pebble gray exterior screen surround. Abbreviated IDH</p> <p>October: Changed check rail pile weather strip (white) from location at check rail to a continuous length (gray) from check rail to sill.</p>	<p>January 2006</p> <p>Arctic White – Feb. 2002</p> <p>February 1996</p>
1996	Double Hung	<p>January 1996: Tempered glass added as an option to certain size double hungs and picture units.</p> <p>February 1996: Vinyl trim added to the stiles of the bottom sash.</p> <p>February 1996: Clutch system upgraded to ensure positive locking during sash removal.</p> <p>October 1996: Introduced 5 5/16" and 6 13/16" jamb extension available shipped loose for field application.</p> <p>November 1996: Replaced jamb weather strip profile V167 with V169 and replaced bottom sash weather strip profile V161 with foam weather strip profile V189.</p> <p>November 1996: Replaced header hollow bulb weather strip with a parting stop.</p>	<p>Present</p> <p>November 1996</p> <p>Present</p> <p>December 2000</p> <p>October 2002</p> <p>Present</p>
1997	Double Hung	<p>March 1997: Added cottage style double hung and new IDHP 5648 picture size.</p> <p>September 1997: Introduced grilles-between-the-glass (GBG) simulated divided lite option.</p>	<p>Present</p> <p>Present</p>
1998	Double Hung	<p>May 1998: Sill/jamb plug redesigned.</p> <p>July 1998: Changed to a reinforced design tilt latch cover.</p> <p>November 1998: Introduced white hardware and screen option.</p>	<p>Present</p> <p>Present</p> <p>Present</p>
2000	Double Hung	<p>April 2000: Added 4 wide mulling option in CN 22 and CN26 widths available factory mulled. Added 2 wide – 2 high mulling option available factory mulled.</p> <p>December 2000: 6 13/16" jamb extension available factory applied. 5 5/16" jamb extension no longer available.</p>	<p>Present</p> <p>Present</p>
2001	Double Hung	<p>March 2001: Added white interior finish.</p>	<p>Present</p>
2002	Double Hung	<p>February 4, 2002: Stone White replacing Arctic White as a standard color. Arctic White replacement parts available through the warranty period.</p> <p>May 2002: New sizes available. Refer to Product bulletin #46.</p>	<p>Present</p> <p>Present</p>
2002	Double Hung	<p>October 2002: Revised bottom sash weather strip profile V189.</p> <p>October 2002: Revised jamb weather strip profile V169.</p>	<p>October 2002</p> <p>Present</p>
2003	Double Hung	<p>September 9, 2003: Replaced sill weather strip profile V191 with V1165.</p> <p>September 9, 2003: Replaced bottom sash weather strip V189 with V1232. V1194 bottom Jamb weather strip added in conjunction with current V169 weather strip at top.</p> <p>September 9, 2003: Replaced bottom sash weather strip V189 with V1232. V1194 bottom Jamb weather strip added in conjunction with current V169 weather strip at top. Effective 9/29/03.</p>	<p>Present</p> <p>Present</p> <p>Present</p>
May 2004	Double Hung	<p>March 1, 2004: Pebble exterior / white interior GBGs available.</p>	<p>Present</p>
October 2005	Double Hung	<p>October 10, 2005: Sash weather strip V1232 was removed and replaced with frame weather strip as a running change.</p>	<p>October 2005</p>
January 2006	Double Hung	<p>January 2006: Integrity Double Hung discontinued sales and product was moved to obsolete status and replaced with ITDH product line.</p>	<p>January 2006</p>
August 2018	Double Hung	<p>August 27, 2018: Replacement parts have been reduced. ARCTIC WHITE NO LONGER AVAILABLE.</p>	<p>Present</p>

**DOUBLE HUNG
OPERATOR**

**Head Jamb
and Sill**



1. Head Jamb Nailing Fin/Drip Cap
2. Head Jamb (Ultrax)
3. Head Jamb Liner
4. Head Jamb Part Stop Weather Strip
5. Top Rail (Ultrax)
6. Top Rail
7. Top Check Rail
8. Sash Keeper
9. Sash Lock
10. Bottom Check Rail Cover
11. Top Check Rail (Ultrax)
12. Top Check Rail Weather Strip
13. Bottom Check Rail (Ultrax)
14. Bottom Check Rail
15. Insulating Glass
16. Bottom Rail
17. Bottom Rail (Ultrax)
18. Sill Weather Strip
19. Sill (Ultrax)
20. Sill Liner
21. Standing Block
22. Sill Nailing Fin
23. Screen Frame
24. Screen Mesh

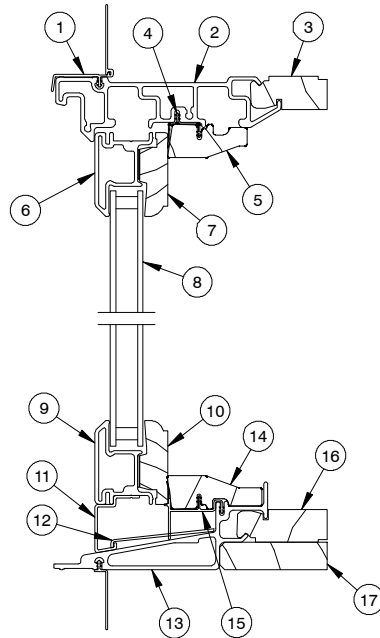


Jamb

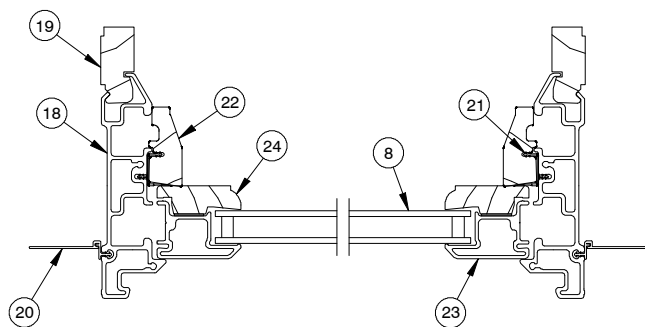
NOTE: Not to scale; specifications subject to change without notice.

**DOUBLE HUNG
STATIONARY/PICTURE**

**Head Jamb
and Sill**



1. Head Jamb Nailing Fin/Drip Cap
2. Head Jamb (Ultrex)
3. Head Jamb Liner
4. Head Jamb Interior Stop Weather Strip
5. Head Jamb Interior Stop
6. Top Rail (Ultrex)
7. Top Rail
8. Insulating Glass
9. Bottom Rail (Ultrex)
10. Bottom Rail
11. Sill Filler
12. Stationary Bracket
13. Sill Wood Stop
14. Sill, Interior Stop
15. Sill Interior Stop Weather Strip
16. Sill Liner
17. Standing Block Jamb (Ultrex)

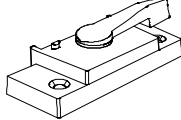
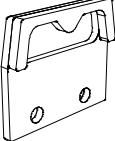
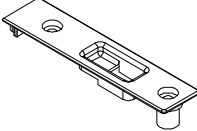
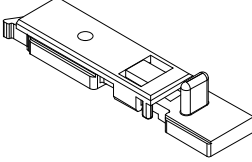
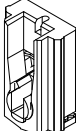
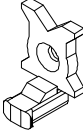
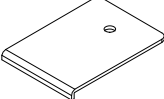
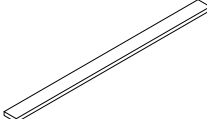


Jamb

NOTE: Not to scale; specifications subject to change without notice.

When ordering replacement hardware specify:

1. Type of unit;
2. Part number;
3. Description.

ILLUSTRATION <i>NOT TO SCALE</i>	DESCRIPTION	LENGTH/COLOR	PART NO.
	Sash Lock <i>Suggested fasteners:</i> 2 – #6 x 1 1/4" Phillips flathead wood screws. AF (11806001), WH (11806002)	AF WH	10817035 10817027
	Sash Keeper <i>Suggested fasteners:</i> 2 – #8 x 1" Phillips pan head screws. AF (11800814), WH (11800820)	AF WH	10817036 10817029
	Tilt Latch Cover <i>Suggested fasteners:</i> 2 – #8 x 1" Phillips pan head screws AF (11800814), WH (11800820)	AF WH	11869713 11869717
 <i>Note: Right hand shown</i>	Tilt Latch <i>Suggested fasteners:</i> 2 – #8x3/4" Phillips truss head screws AF (11800833), WH (11800828)	LH AF RH AF LH WH RH WH	11869712 11869710 11869716 11869715
	Clutch <i>NOTE: Non-handed</i>		10661009
	Sash Pivot Pin <i>Suggested fasteners:</i> 1 – #7 x 5/8" Phillips self tapping flat head screw (11800758) <i>NOTE: Pivot pins are non-handed</i>		10660999
	Stationary Bracket		11040359
	Frame to Sash Seal, Picture and Transom	150' (46 meters) BK	10501118

When ordering replacement Integrity Double Hung weather strip specify:

1. Description;
2. Profile number;
3. Part number;
4. Quantity.





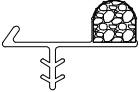
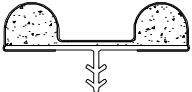
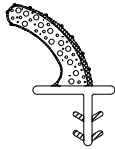
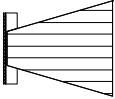
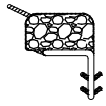

ILLUSTRATION <i>NOT TO SCALE</i>	DESCRIPTION	LENGTH/COLOR	PART NO.
	Sash Pivot Pin Pad 5/16" x 11/16" <i>NOTE: Adhesive backed</i>	GY	15607568
	Sash Stops V820	BG	No longer available
	Head Jamb Parting Stop V248	BG 84" (2134)	17003184
	Double Hung Head Jamb Weather Strip V192 Usage: 4/95–11/96	No longer available Replaced with V248	
	Top Jamb Weather Strip V169	BG 79" (2007)	17002982
	Double Hung Head Jamb Weather Strip V167 Usage: 4/95–10/02 <i>NOTE: Field service items (for replacement only) on units produced before November 18, 1996. Replaces V144 and V161</i>	No longer available Replaced with V169	
	Bottom Jamb Weather Strip V1194	No longer available	
	Frame Weather Strip, Pile V1494	BG	17009012 Specify length by LF
	Sill Weather Strip V1165	BG 40 3/8" (1026) 150" (3810)	17003642 17003699
	Sill Weather Strip V191 Usage: 4/95–9/03	No Longer Available Replaced with V1165	

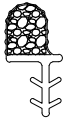
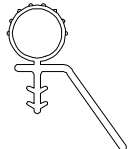
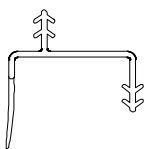
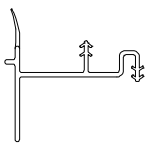
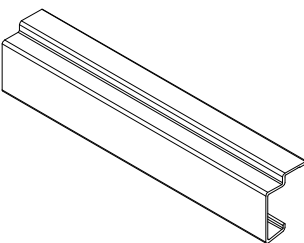
ILLUSTRATION NOT TO SCALE	DESCRIPTION	LENGTH	PART NO.
	Bottom Sash Foam Weather Strip V1232	No longer available	
	Check Rail Weather Strip V150	BG Lineal 150" (3810)	17001899
	Head Jamb Weather Strip V140 For double hung picture and transom units	BG Lineal 144" (491)	17002399
	Sill Interior Stop Weather Strip V141 BG For double hung picture and transom units	Lineal 144" (3658)	17002499
	Sill Filler* A441	SW CN22 19 3/16" (487) CN26 23 3/16" (589) CN30 27 3/16" (691) CN34 31 3/16" (792) CN36 33 3/16" (843) CN38 35 3/16" (894) CN42 39 3/16" (995) CN50 47 3/16" (1199) CN54 51 3/16" (1300) CN62 59 3/16" (1503) PB CN22 19 3/16" (487) CN26 23 3/16" (589) CN30 27 3/16" (691) CN34 31 3/16" (792) CN36 33 3/16" (843) CN38 35 3/16" (894) CN42 39 3/16" (995) CN50 47 3/16" (1199) CN54 51 3/16" (1300) CN62 59 3/16" (1503)	19611422 19611426 19611430 19611434 19611436 19611438 19611442 19611450 19611454 19611462 18611522 18611526 18611530 18611534 18611536 18611538 18611542 18611550 18611554 18611562

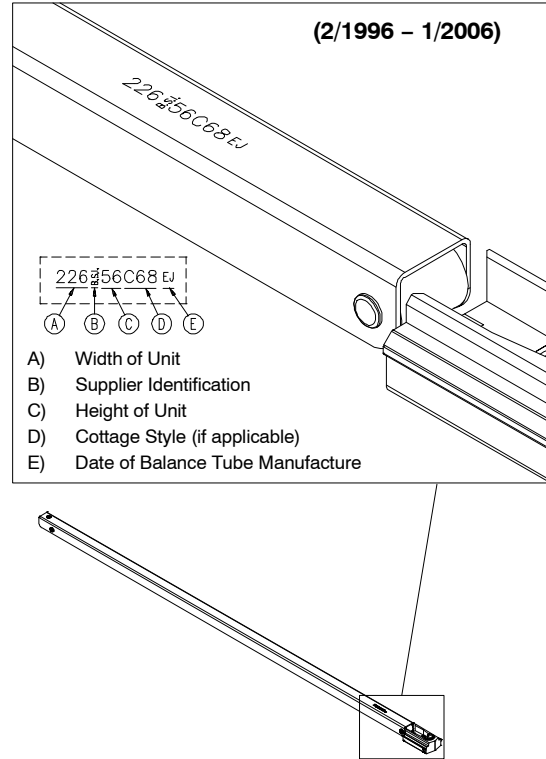
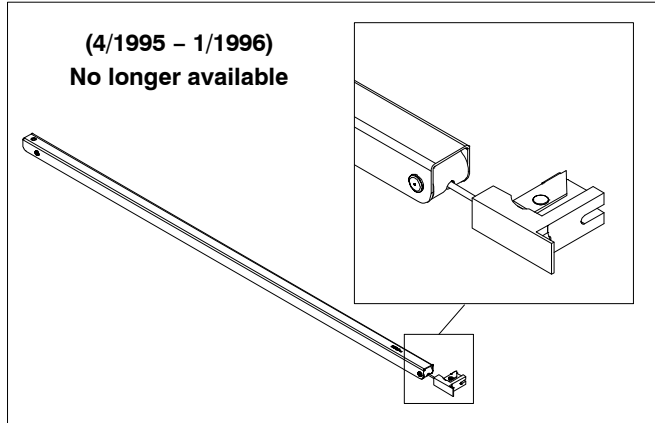
ILLUSTRATION <i>NOT TO SCALE</i>	DESCRIPTION	LENGTH	BARE WOOD PART NO.	WHITE INTERIOR PART NO.
	<p>Interior Stop- Head Jamb W7430 W7430 – Head Jamb and Jamb Stop, Picture and Transom Units V140 – Head Jamb Weather Strip included</p>		No longer Available	
	<p>Interior Stop-Sill W7429 W7429 – Sill Stop Picture and Transom Unit V141 – Sill Weather Strip included</p>		No longer Available	
	<p>IDH HP Field Applied Sill Liner Kit – Picture/Transom <i>Includes:</i> 1-W8586 HP Sill Liner (Adhesive tape applied) 4-#8 x 1 1/2" Phillips panhead screws-11865161 1-Installation Instruction-19970048</p>		No Longer Available	
	<p>IDH HP Field Applied Sill Liner Kit – Operator <i>Includes:</i> 1-W8088 HP Sill Liner (Adhesive tape applied) 4-#8 x 1 1/2" Phillips panhead screws-11865161 1-Installation Instruction-19970048</p>		No Longer Available	

BALANCE TUBES

When ordering replacement parts specify:

1. Part number;
2. Quantity;
3. Top or bottom sash.

NOTE: Part numbers listed are for one balance tube.



Top Sash (Mill Finish)								
Call Number Height	22-26CN Width		30-34CN Width		36-38CN Width		42CN Width	
	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.
36	226-36	10661036	304-36	10662036	368-36	10663036	42-36	10664036
40	226-40	10661040	304-40	10662040	368-40	10663040	42-40	10664040
48	226-48	10661048	304-48	10662048	368-48	10663048	42-48	10664048
52	226-52	10661052	304-52	10662052	368-52	10663052	42-52	10664052
56C68	226-56C68	10661056	304-56	10662056	368-56	10663056	42-56C68	10664056
60	226-60	10661060	304-60	10662060	368-60	10663060	42-60	10664060
64	226-64	10661064	304-64	10662064	368-64	10663064	42-64	10664064
72	226-72	10661072	304-72	10662072	368-72	10663072	42-72	10664072
Bottom Sash (Beige Finish)								
Call Number Height	22-26CN Width		30-34CN Width		36-38CN Width		42CN Width	
	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.	No. Stamped on Tube	Integrity Part No.
36	226-36	10661136	304-36	10662136	368-36	10663136	42-36	10664136
40	226-40	10661140	304-40	10662140	368-40	10663140	42-40	10664140
48	226-48	10661148	304-48	10662148	368-48	10663148	42-48	10664148
52	226-52	10661152	304-52	10662152	368-52	10663152	42-52	10664152
56	226-56	10661156	304-56	10662156	368-56	10663156	42-56	10664156
60	226-60	10661160	304-60	10662160	368-60	10663160	42-60	10664160
64	226-64	10661164	304-64	10662164	368-64	10663164	42-64	10664164
72C68	226-72C68	10661172	304-72	10662172	368-72	10663172	42-72	10664172

ORDERING DOUBLE HUNG REPLACEMENT SASH

When ordering replacement sash specify:

1. Specify top, bottom or pair of sash;
2. Size (using chart below):
3. Sash exterior color
4. Hardware color – White or Almond Frost;
5. Glazing;
6. Bare wood or white interior.

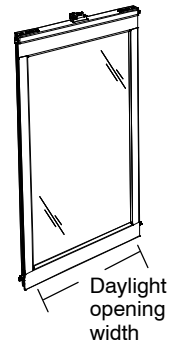
Sash Sizes for Double Hung (IDH) manufactured 1995 to January 2006			
Daylight Opening to OM of Sash			
Daylight Width + 3 1/2" = OM Width of Sash			
Daylight Height + 3 1/2" = OM Height of Sash			
<i>NOTE: Sash is not reglazable</i>			
Operator Sash			
Width		Height	
Size	OM Width	Size	OM Height
CN22	19 3/16" (487)	CN 36	17 3/16" (437)
CN26	23 3/16" (589)	CN 40	19 3/16" (487)
CN30	27 3/16" (691)	CN 48	23 3/16" (589)
CN34	31 3/16" (792)	CN 52	25 3/16" (640)
CN36	33 3/16" (843)	CN 56	27 3/16" (691)
CN38	35 3/16" (894)	CN 60	29 3/16" (741)
CN42	39 3/16" (995)	CN 64	31 3/16" (792)
		CN 68 (top)	27 3/16" (691)
		CN 68 (btm)	39 3/16" (995)
		CN 72	35 3/16" (894)
Picture/Transom Sash			
Width		Height	
Size	OM Width	Size	OM Height
CN22*	19 3/16" (487)	CN16*	13 3/16" (335)
CN26*	23 3/16" (589)	CN48	45 3/16" (1148)
CN30*	27 3/16" (691)	CN52	49 3/16" (1249)
CN34*	31 3/16" (792)	CN56	53 3/16" (1351)
CN36*	33 3/16" (843)	CN60	57 3/16" (1453)
CN38	35 3/16" (894)	CN64	61 3/16" (1554)
CN42	39 3/16" (988)	CN68	65 3/16" (1656)
CN50	47 3/16" (1199)		
CN54	51 3/16" (1300)		
CN62	59 3/16" (1503)		

NOTE: Double Hung replacement sash is supplied with weather strip and hardware. CN 68 height pertains to cottage style sash. Daylight opening is the measurement of visible glass. Double Hung picture replacement sash includes attached sill filler.

**Top Sash
Interior View**



**Bottom Sash
Interior View**



*Transom sizes only

ORDERING REPLACEMENT SCREENS FOR INTEGRITY DOUBLE HUNG

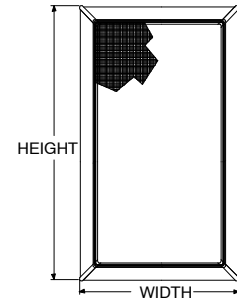
Screens are standard with a white or pebble gray aluminum surround and charcoal colored fiberglass 18x16 screen mesh. Determine the outside measurement of the existing screen. Find the sizes that correspond to the width and height indicated on the following chart.

When ordering replacement screen specify:

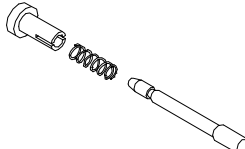
1. ETO – ITDH Screen with IDH dimensions.
2. Size; – if there is no existing screen from which to obtain the OM of the screen, determine the size of the screen by using the conversion chart below. The daylight opening is the measurement of the visible glass.
3. Color
4. Specify cottage or equal sash when ordering CN68 height.

Screen Sizes for Double Hung (IDH) manufactured 1995 to January 2006			
Daylight Opening to OM of Screen			
Daylight Width + 4 9/16" = OM Width of Screen			
Daylight Height x 2 + 7 19/32" = OM Height of Screen			
<i>NOTE: Screen feature plunger type mounting system.</i>			
	Width		Height
Size	OM Width	Size	OM Height
CN 22	20 1/4" (514)	CN 36	34 31/32" (888)
CN 26	24 1/4" (616)	CN 40	38 31/32" (990)
CN 30	28 1/4" (718)	CN 48	46 31/32" (1193)
CN 34	32 1/4" (819)	CN 52	50 31/32" (1295)
CN 36	34 1/4" (870)	CN 56	54 31/32" (1396)
CN 38	36 1/4" (921)	CN 60	58 31/32" (1498)
CN 42	40 1/4" (1022)	CN 64	62 31/32" (1599)
		CN 68	66 31/32" (1701)
		CN 72	70 31/32" (1803)

NOTE: Measure top and bottom sash separately when calculating screen OM height. CN36 and CN40 screens do not feature cross bars.



NOTE: OM of screen includes corner keys.

ILLUSTRATION <i>NOT TO SCALE</i>	DESCRIPTION	OPER./COLOR	PART NO.
	Plunger and Spring Assembly-M060 <i>Includes:</i> 1 – Plunger bolt 1 – Plunger bolt cap 1 – Plunger bolt spring	Clear Cap Off White Bolt	11900896

Tools needed: Stiff putty knife or pry bar
90° Allen wrench (or similarly fashioned tool)
Rubber mallet

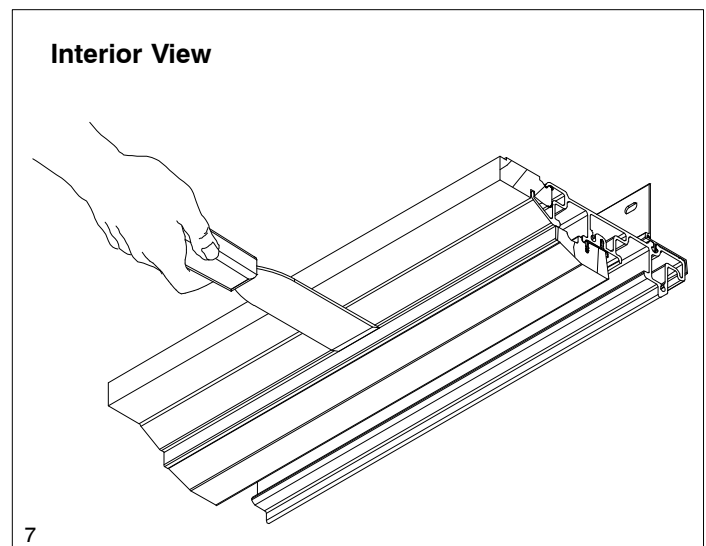
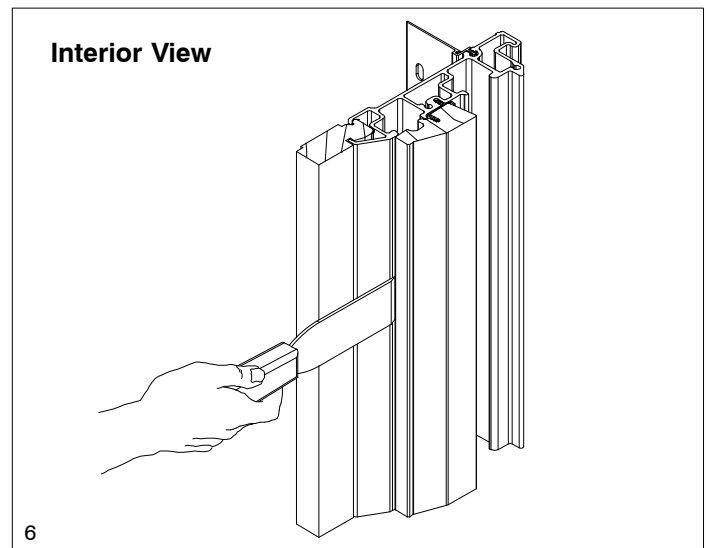
Parts needed: Stationary sill bracket
Frame to sash seal
Interior sill stop (W7429)
Interior head jamb and jamb stop (W7430)
Sill interior stop weather strip (V141)

Removing Stationary Sash

1. Begin by removing the wood jamb interior stops with a stiff putty knife as shown in illustration 6. Next remove the vinyl jamb interior stop weather strip.

NOTE: Exercise care in removing the vinyl stops from the frame kerf as they will be reused.

2. Remove the wood head jamb interior stops and vinyl interior stop weather strip in the same fashion as in step 1. See illustration 7.



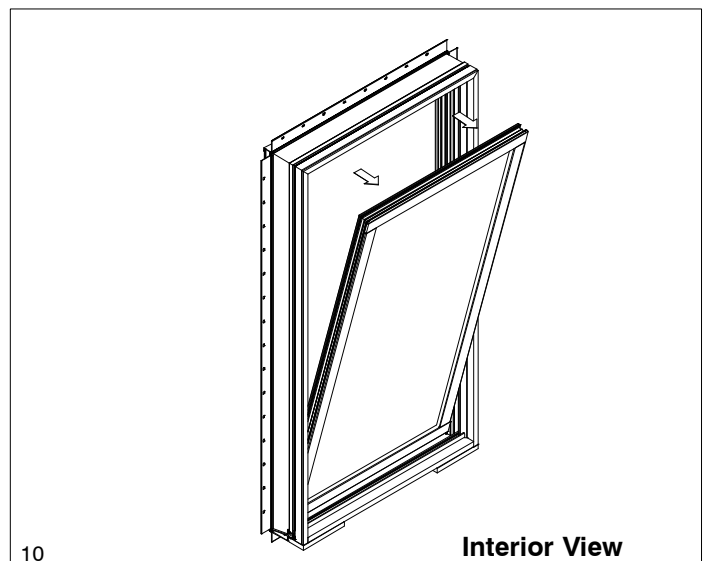
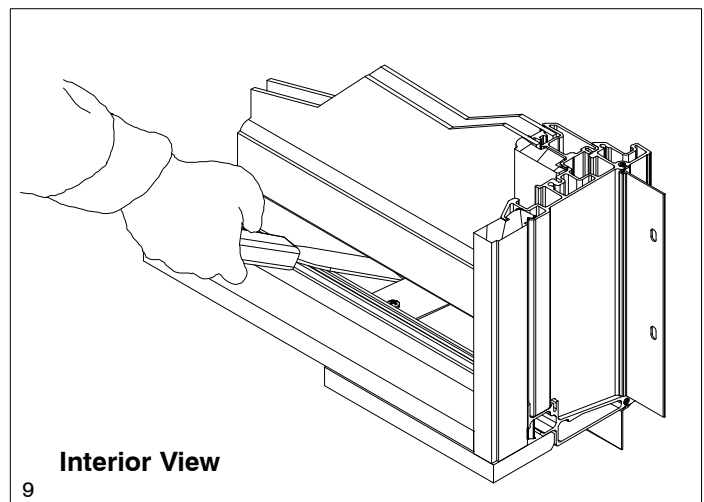
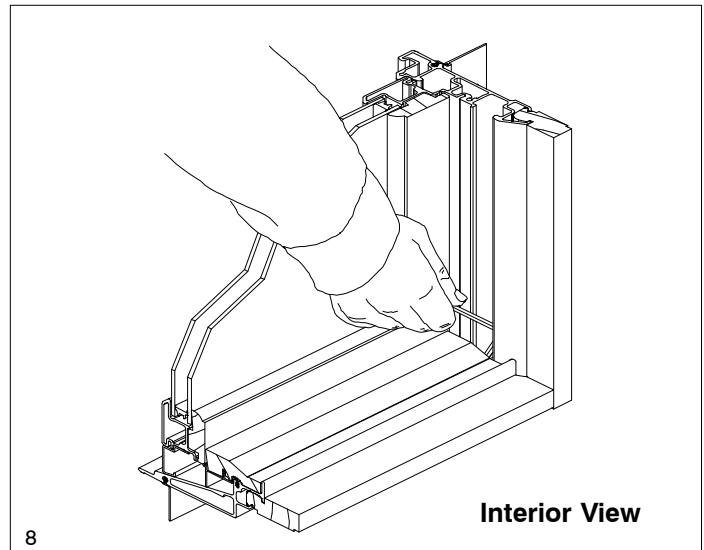
Removing Stationary Sash (Continued)

- Using the 90° Allen wrench (or similarly fashioned tool) hook the wood sill interior stop in the balance tube cavity as shown in illustration 8. Remove the vinyl sill stop weather strip.

NOTE: Interior wood sill stop may be removed with a stiff putty knife but use caution as Ultrex sill may crack or break.

- Bend the sill stationary bracket(s) up to allow for sash removal. See illustration 9.
- Carefully pull the top of the sash into the interior with a stiff putty knife or pry bar. Grasp the sash and lift out of the frame. See illustration 10.
- Once the stationary sash is out, bend the sill stationary brackets back to their original position before replacing sash.

NOTE: Before replacing the sash, make sure that the sash to frame adhesive foam found along the Ultrex jamb and head jamb is intact to ensure a proper seal.

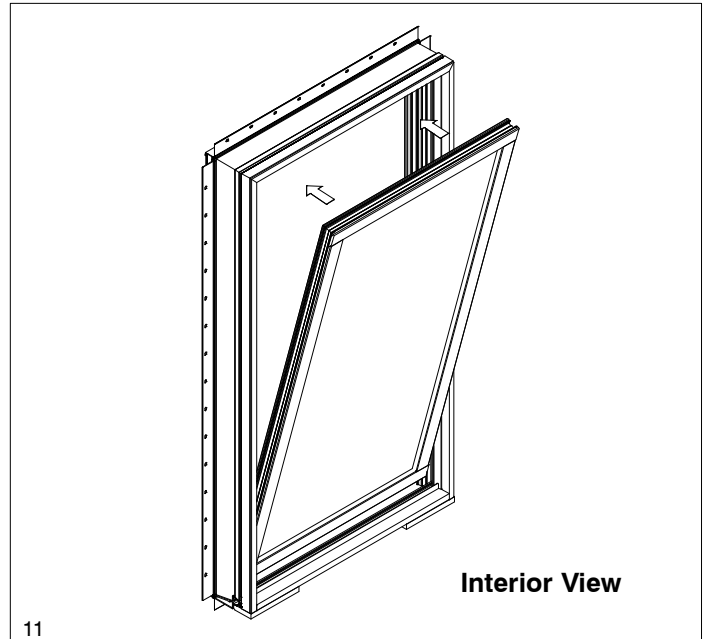


Replacing Stationary Sash

1. Grasp the sash and set the bottom into the frame first. Be sure that the stationary sill bracket engages with the sill filler. Tilt the top of the sash into the frame. See illustration 11.

NOTE: *Sill filler is supplied and attached to replacement sash.*

2. Replace the bottom and top vinyl stop weather strip by placing the connecting barb into the frame kerf. Replace the wood top stop and the bottom stop. If necessary, tap into place with rubber mallet. Replace the jamb vinyl stop weather strip and wood jamb stop in the same manner as the head jamb and sill stop.



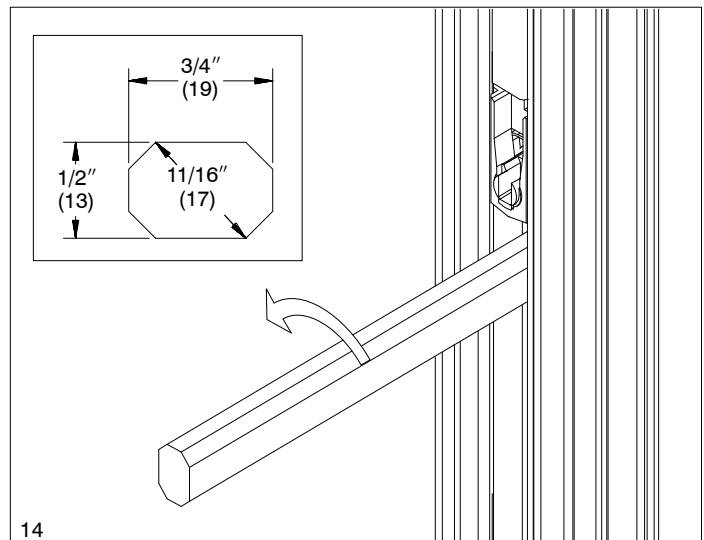
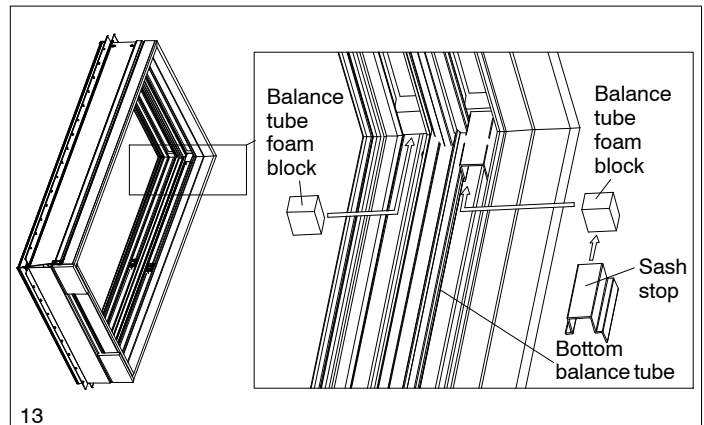
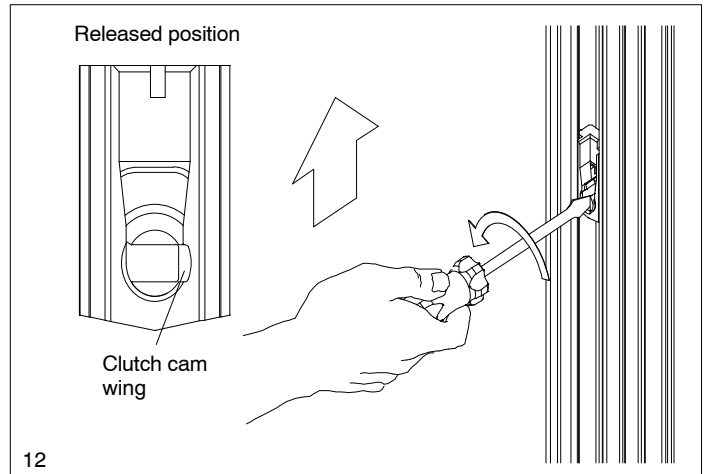
11

Tools needed: Standard flat screwdriver
 Tape measure
 Pencil
 Balance tube channel spreader (see note below)

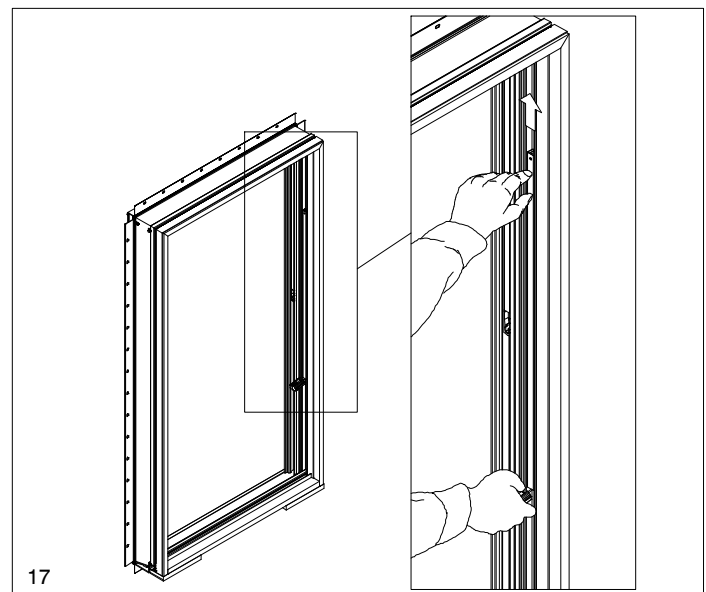
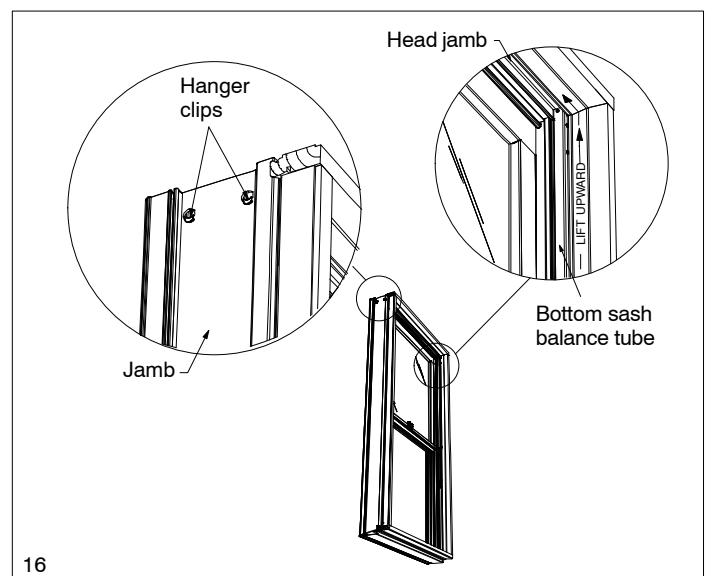
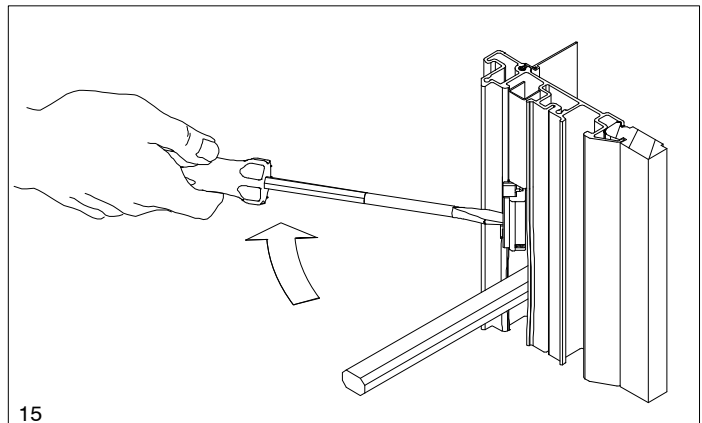
Parts needed: Balance tube(s)

1. Remove sash (see Index, Tilting or Removing Double Hung Sash).
2. Release clutches by rotating cam to the released position with a standard screwdriver. Carefully raise to the bottom of the balance tube. See illustration 12.
3. Remove balance tube foam block from head jamb channel. If replacing the bottom balance tube, slide the sash stop down the balance tube and squeeze to remove. See illustration 13.
4. Insert balance tube channel spreader below clutch assembly and turn to spread Ultrac channel. See illustration 14.

NOTE: *It is necessary to spread the Ultrac channel in order to remove the balance tube clutch assembly. The balance tube channel spreader can be fabricated from a 1/2" x 3/4" x 6" piece of oak or hard wood. Round off the corners to 11/16". See illustration 14. The handle of a screwdriver may also be a suitable substitute provided that its diameter is no larger than 5/8". Insert handle below clutch assembly and pry to the interior.*



5. Insert screwdriver into the cam and rotate clutch assembly toward the exterior so that one side clears the operating channel. Remove clutch assembly from operating channel. See illustration 15.
6. Firmly push balance tube assembly up toward the head jamb to release hanger clip from the jamb. See illustration 16.
7. Remove balance tube assembly from the operating channel.
8. Insert the new balance tube in the operating channel half way up the jamb. Slide the assembly upward against the head jamb and place the hanger clip in the jamb slot as shown in illustration 17. Check balance tube to ensure hanger clip has engaged with slot.



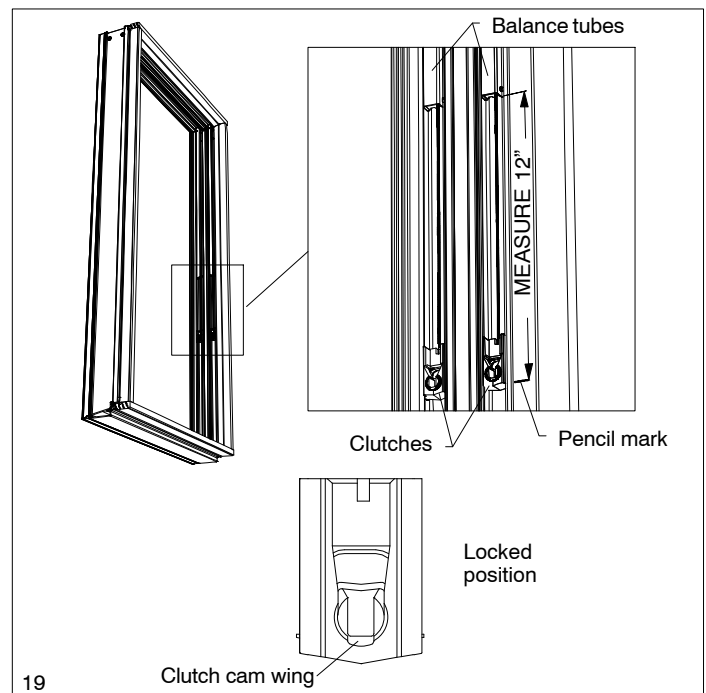
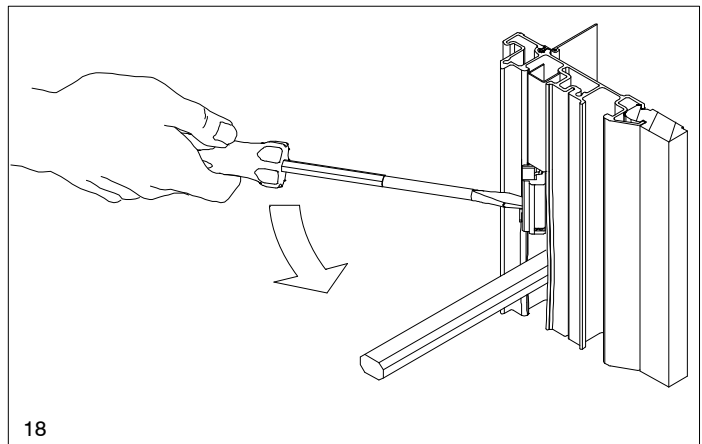
9. Position the clutch assembly for insertion into the operating channel. Using a flat screwdriver, rotate the clutch partly into the channel. See illustration 18.

NOTE: Before installing new balance tube assembly in the operating channel, make sure the clutch cam is in the released position (the wing of the cam should be to the interior of the jamb). See illustration 12.

10. Insert the screwdriver into the spring opening of the cam and (using the same rotating motion as before) pivot the clutch into position.
11. Place a pencil mark on the jamb 12" from the end of the balance tube. Insert the screwdriver into the cam and pull the clutch downward to the pencil mark. Using the screwdriver, rotate the cam into the locked position as shown in illustration 19. (The wing of the cam should be pointed down.) Repeat the same procedure for the opposing clutch.

NOTE: It is critical that opposing clutches are of equal distance from the bottom of the balance tube.

12. Replace balance tube foam block and sash stop.
13. Reinstall sash. (see Index, Installing Double Hung Sash).
14. Check sash operation. If any binding occurs during sash installation, stop immediately and make sure the sash pivot pins are completely engaged in the clutch cam.

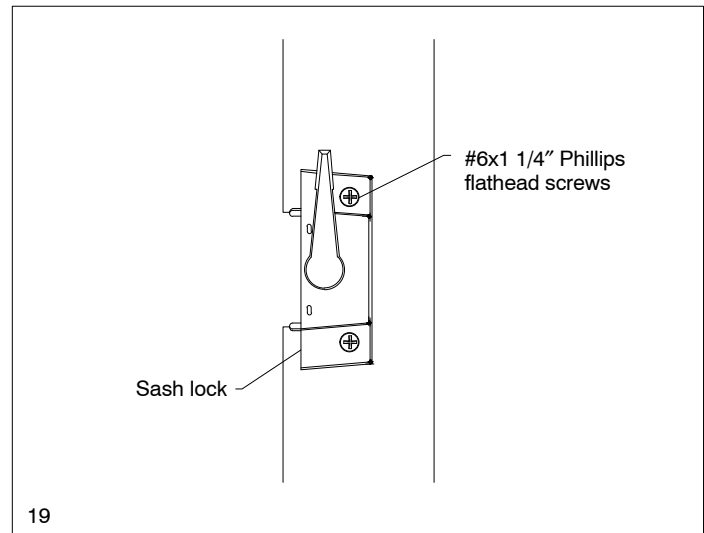


REPLACING SASH LOCKS

Tools needed: #2 Phillips screwdriver

Parts needed: Sash lock
#6x1 1/4" Phillips flathead wood screws

1. Remove the bottom sash. (see Index, Tilting or Removing Double Hung Sash).
2. Remove the two #6x1 1/4" Phillips flathead wood screws from the sash lock. See illustration 19.
3. Using the location of the old lock as a guide, install the new sash lock. Check to see that the wood screws are properly seated.
4. Replace the sash and check for proper operation. (see Index, Installing Double Hung Sash).

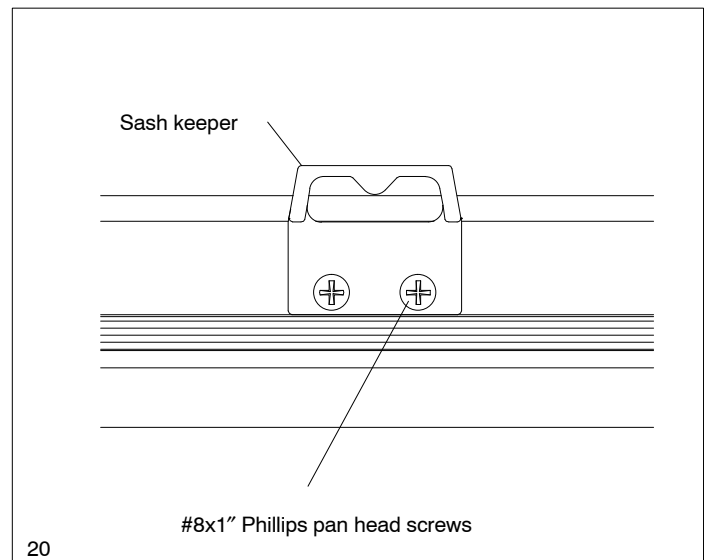


REPLACING SASH KEEPERS

Tools needed: #2 Phillips screwdriver

Parts needed: Sash keeper
#8x1" Phillips pan head screws

1. Remove the top and bottom sash (see Index, Tilting or Removing Double Hung Sash).
2. Remove the two #8x1" Phillips pan head screws from the sash keeper. See illustration 20.
3. Using the location of the old keeper as a guide, install the new keeper. Check to see that the wood screws are properly seated.
4. Replace both sash and check for proper operation. (see Index, Installing Double Hung Sash).



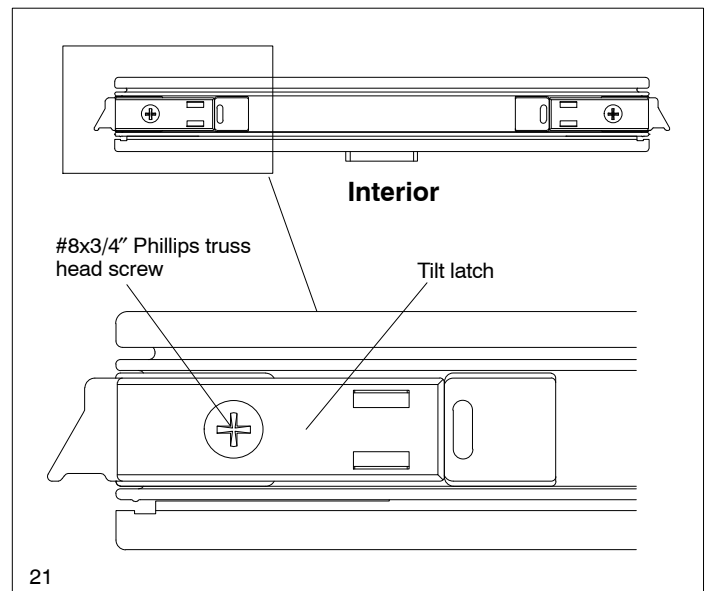
REPLACING TILT LATCHES

- Tools needed: #2 Phillips screwdriver
 Parts needed: Tilt latch
 #8x3/4" Phillips truss head screw

1. Remove the top and bottom sash (see Index, Tilting or Removing Double Hung Sash).
2. Remove the #8x3/4" Phillips truss head screw attaching the tilt latch to the top rail of the top sash. See illustration 21.
3. Using the location of the old tilt latch as a guide, install the new tilt latch.

NOTE: *Tilt latches are handed from the exterior. Make sure the correct tilt latch is being installed. Do not over tighten screws as tilt latches may not operate properly.*

4. Check new tilt latch to ensure smooth operation and adjust as necessary by tightening or loosening the screw.
5. Replace both sash (see Index, Installing Double Hung Sash).



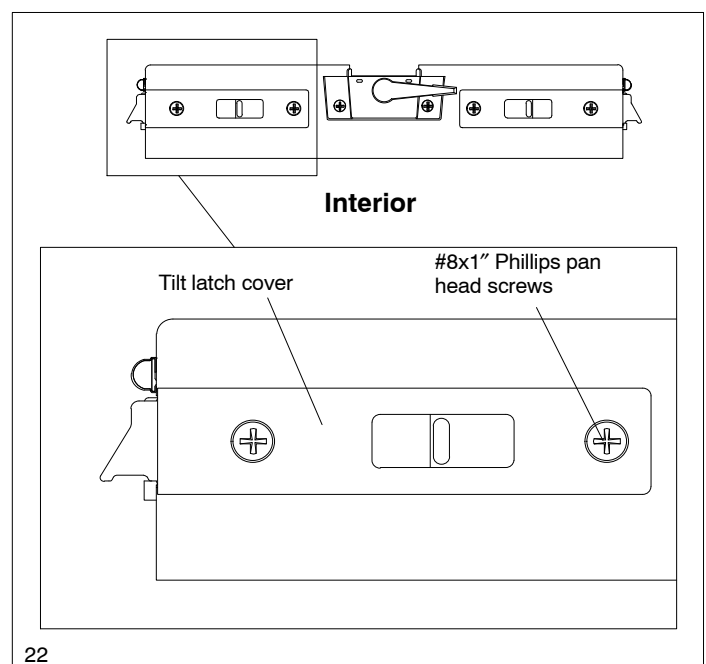
REPLACING TILT LATCH COVERS (BOTTOM SASH)

- Tools needed: #2 Phillips screwdriver
 Parts needed: Tilt latch cover
 #8x1" Phillips pan head screw

1. Remove bottom sash (see Tilting or Removing Double Hung Sash).
2. Remove the two #8x1" Phillips pan head screws attaching the tilt latch cover and tilt latch to bottom sash check rail. See illustration 22.
3. Place the new tilt latch cover over the tilt latch and replace screws.

NOTE: *Tilt latch covers are not handed. Do not over tighten as tilt latches may not operate properly.*

4. Check tilt latch to ensure smooth operation and adjust as necessary by tightening or loosening screws.
5. Replace sash (see Index, Installing Double Hung Sash).



REPLACING SASH PIVOT PINS

Tools needed: #2 Phillips screwdriver

Parts needed: Sash pivot pin
#7x5/8" Phillips flathead screw

NOTE: Sash pivot pins are non-handed.

1. Remove sash (See Index, Tilting or Removing Double Hung Sash).
2. Remove the #7x5/8" Phillips flathead screw. See illustration 23.
3. Using the location of the old pivot pin as a guide, install the new pivot pin. Check to see that the screw is properly seated.
4. Replace the sash (see Index, Installing Double Hung Sash).
5. Check for proper sash operation.

