

**INTEGRITY ALL ULTREX CASEMENT  
ALL ULTREX SWINGING WINDOW PICTURE (IFSWP)  
ALL ULTREX SWINGING WINDOW TRANSOM (IFSWT)**

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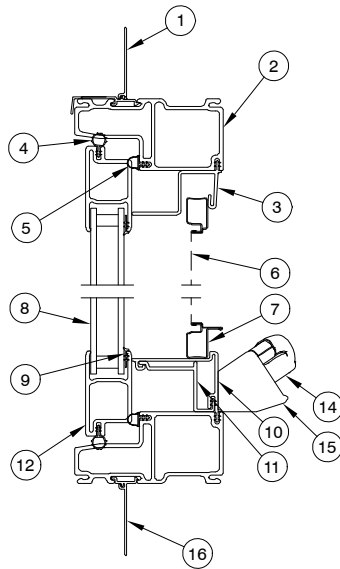
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**ATTENTION:**

- 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.

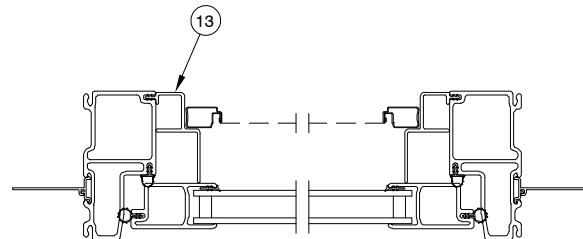
PRODUCED	UNIT TYPE	FEATURES OR CHANGES	STATUS
February 2010	Casement	Introduced the All Ultrex Casement product.	Current
December 2010	Casement	Introduced the Coastal Hardware option	Current
March 2011	Casement	Updated Bottom Sill Cover Profile	Current
October 2012	Casement	October 29, 2012: Introduced All Ultrex Expanded Sizes and Mulls.	Current
February 2015	Casement	February 23, 2015 Introduced a new drip cap with nailing fin for All Ultrex	Current
December 2017	Casement	December 18, 2017 Added availability of customer specified divided lite cut configuration for GBG. To include allowing any color GBG to the exterior only of standard and special sized units.	Current
February 2018	Casement	Introduced Bronze and Ebony interior option. Standardized Ebony exterior from Integrity Ebony to Marvin Ebony.	Current
October 2018	Casement	October 29, 2018: Low E3 ERS glass type was added.	Present
December 2018	Casement	December 10, 2018: The screen frame profile was updated. December 17, 2018: Introduced textured glass types: Reed, Narrow Reed, Rain, Glue Chip and Frost and also colored glass types: Clear, Bronze, Gray and Green.	Present

## Casement Operator



1. Nail Fin w/Drip Cap
2. Frame
3. Frame Cover Head Jamb
4. Sash Weather Strip
5. Foam Weather Strip
6. Screen Mesh
7. Screen Frame
8. Insulated Glass
9. Glazing Boot, Sash
10. Frame Cover, Sill, Top
11. Frame Cover, Sill, Bottom
12. Sash
13. Frame Cover, Jamb
14. Roto Gear Folding Handle
15. Roto Gear Assembly
16. Nail Fin, Locking

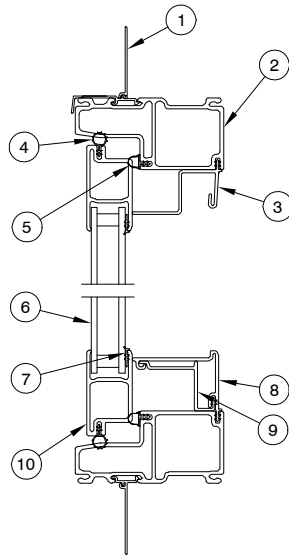
### Head Jamb and Sill Detail



### Jamb Detail

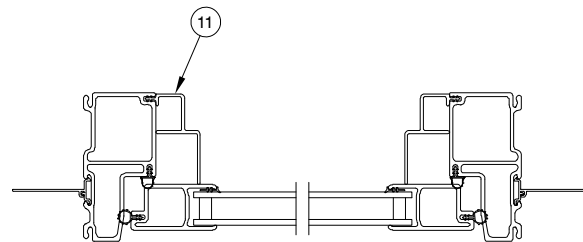
NOTE: Not to scale; specifications subject to change without notice.

**Casement  
Stationary / Picture / Transom**



1. Nail Fin, Locking
2. Frame
3. Frame Cover, Head Jamb
4. Sash Weather Strip
5. Foam Weather Strip
6. Insulated Glass
7. Glazing Boot, Sash
8. Frame Cover, Sill, Top
9. Frame Cover, Sill, Bottom
10. Sash
11. Frame Cover, Jamb

**Head Jamb  
and Sill Detail**

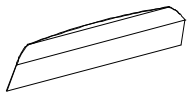
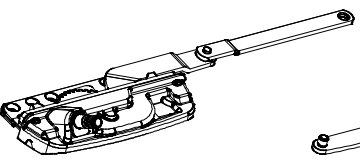
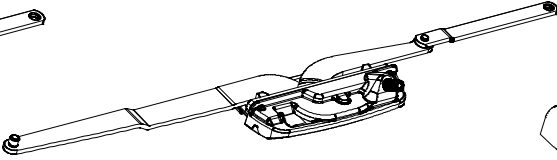
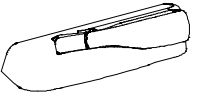


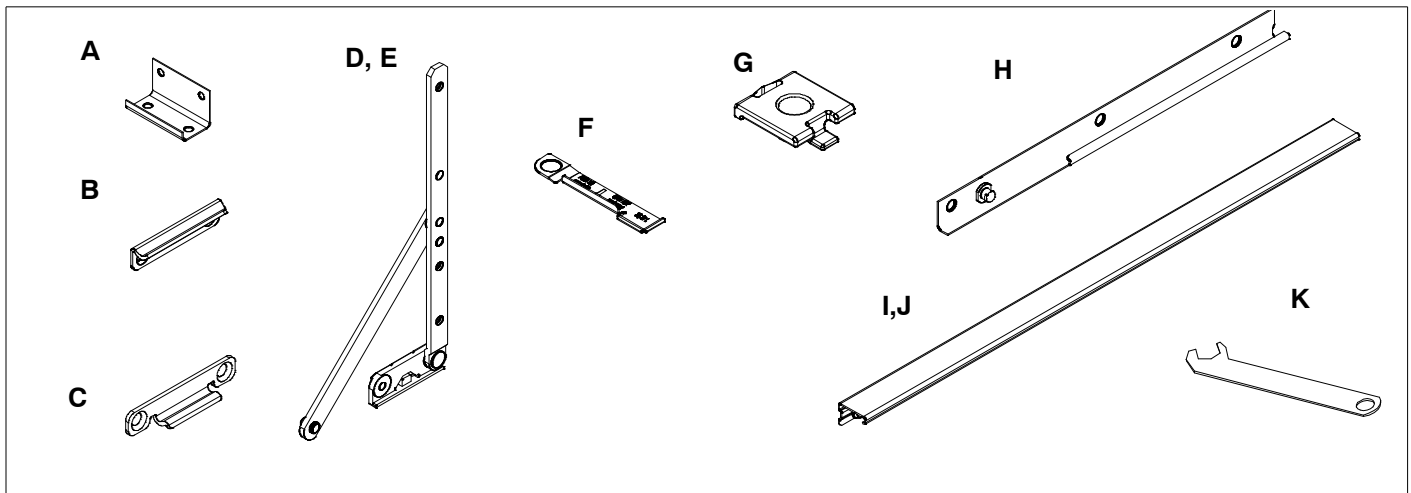
**Jamb  
Detail**

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

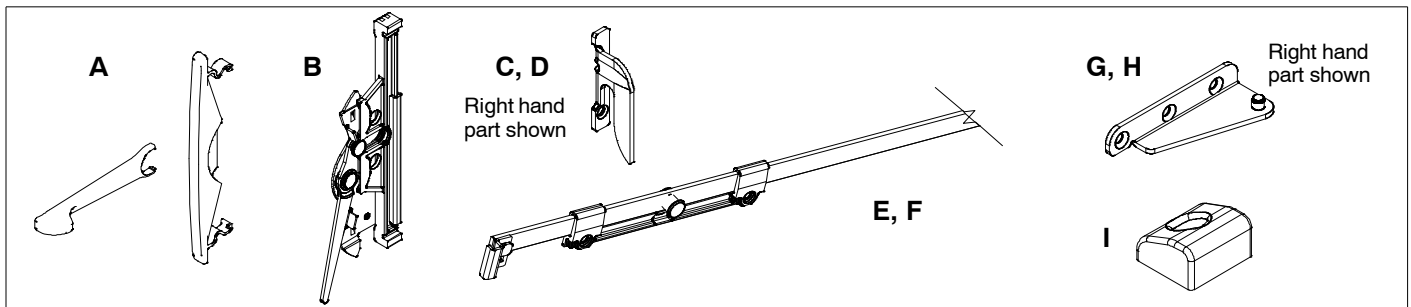
When ordering replacement HARDWARE parts specify:

1. type of unit;
2. Part number;
3. Description;
4. Color;
5. Handing (if applicable).

<p><i>Note:</i>  <i>Dyad is used on R.O. &lt; 28.000" (Frame Size &lt;27.50");</i>  <i>Dual Arm used on RO &gt;=28.000" (Frame size &gt;= 27.50")</i></p>				
				
<b>A</b>	<b>B, C</b> (LH shown)	<b>D, E</b> (LH shown)	<b>F, G</b>	
Description	Usage	Color	Part Number	
<b>A: Roto Gear Undercover</b>	Optional usage to match roto gear cover and handle color in elevated window applications. Used on the underside of the roto-gear.	AF SW ORBZ SN BS MB	10880185 10880184 10880188 10880186 10880187 10880189	
Description	Usage		RH Part No.	LH Part No.
<b>B: Dyad Operator Roto-gear</b> <b>C: Dyad Operator Roto-gear, Coastal</b>	Used on: CN16 and 20		10896280 11862611	10896279 11862610
includes fasteners: 4 - #8x7/8", PH, Flat, AB, ZYC				
<b>D: Dual Arm Operator Roto-gear</b> <b>E: Dual Arm Operator Roto-gear Coastal</b>	Used on: CN26 and 30		10896282 11862606	10896281 11862605
includes fasteners: 4 - #8x7/8", PH, Flat, AB, ZYC				
<b>F: Folding Handle/Cover - Dyad</b>	Used on: CN16 and CN20 Custom sizes less than 28"	AF SW ORBZ SN BS MB	10896251 10896254 10896306 10896305 10896304 10896318	10896250 10896253 10896303 10896302 10896301 10896319
<b>G: Folding Handle/Cover - Dual Arm</b>	Used on: CN26 and CN30 Custom sizes 28" and greater	AF SW ORBZ SN BS MB	10896250 10896253 10896303 10896302 10896301 10896319	10896251 10896254 10896306 10896305 10896304 10896318



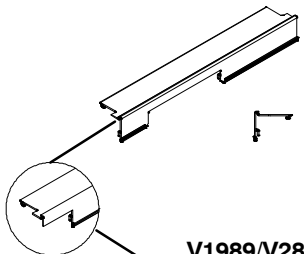
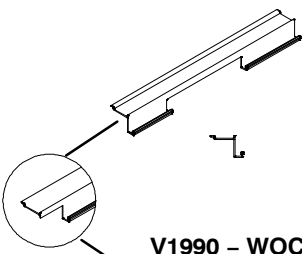
Description	Part Number
<b>A: Stationary Bracket</b> includes fasteners: 2 – 5/32" (4) X 9/16 (14)" peel rivets	11881080
<b>B: Concealed Snubber Frame</b> includes fasteners: 2 – 5/32" (4) X 9/16 (14)" peel rivets	11881082
<b>C: Sash Snubber</b> includes fasteners: 2 – 5/32" (4) X 9/16 (14)" peel rivets	11881081
<b>D: Hinge Arm Assembly</b> includes fasteners: 4 – #8x 3/4" A/TEK-2, Steel w/ZYC	UL-LR 10814755 LL-UR 10814754
<b>E: Hinge Arm Assembly, Coastal</b> includes fasteners: 4 – #8x 3/4" A/TEK-2, 410 Stainless	UL-LR 11862624 LL-UR 11862623
<b>F: Hinge Limiter</b> Used on: CN 26 and 30, Custom sizes 28" and greater.	SS RH 11862601 SS LH 11862602
<b>G: Guide Track Shoe</b>	10896277
<b>H: Adjustable Hinge Track</b>	SS UL-LR 10896284 SS LL-UR 10896283
<b>I: Guide Track</b> includes fasteners: 3 – #7x 5/8" AB-17, Steel w/ZYC	10896276
<b>J: Guide Track, Coastal</b> includes fasteners: 3 – #7x 5/8" AB-17, 410 Stainless	11862607
<b>K: 3/8" Open Ended Wrench</b>	10814840



Description	Part Number
<b>A: Lock Drive Handle and Escutcheon</b> AF WH ORBZ SN BS MB	10895019 10895018 10895020 10895021 10895022 10895023
<b>B: Lock Drive Assembly</b> includes fasteners: 2 - 1/8" (3) X 19/32" (15) peel rivets	11881083
<b>C: Keeper</b> E Guard RH E Guard LH Black 300 Series RH Black 300 Series LH	10896267 10896266 11862913 11862914
<b>D: Keeper, Coastal Products</b> 300 Series SS RH 300 Series SS LH	11862613 11862614
<b>#7-19 x.625 AB-17 Full Thread Screw (Keeper)</b> (need 2 per Keeper) E Guard Black SS (Coastal)	11800743 11800943 11806110
<b>E: Tie Bar Assembly</b> includes fasteners: 2, 4 or 6 - 1/8"(3)X19/32" (15)5056 Aluminum peel rivets CN 20, 26 CN 30, 36 CN 40, 46 CN 50 CN 56 CN 60	10896255 10896256 10896257 10896258 10896259 10896260
<b>F: Tie Bar Assembly, Coastal</b> includes fasteners: 2, 4 or 6 - 1/8"(3)X19/32" (15)5056 Aluminum peel rivets CN 20,26 CN 30,36 CN 40,46 CN 50 CN 56 CN 60	11862615 11862616 11862617 11862618 11862619 11862620
<b>G: Stud Bracket</b> includes fasteners: 3 - #7-19x5/8" AB-17, E-Gard, Steel w/ZYC LH RH	10896264 10896263
<b>H: Stud Bracket, Coastal</b> includes fasteners: 3 - #7-19x5/8" AB-17, 410 Stainless Steel LH RH	11862609 11862608
<b>I: Casement Hinge Lift</b>	11862631

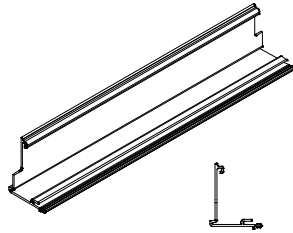
When ordering replacement vinyl, specify:

1. Profile number
2. Part number
3. Length
4. Handing (if applicable)

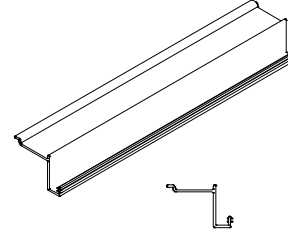
<p><b>V1989/V2840 – Frame Cover Sill Top, Operator</b></p>  <p><b>V1989/V2840 – WOCD Secondary Sill Cover</b></p>		<p><b>V1990 – Frame Cover Sill Bottom, Operator</b></p>  <p><b>V1990 – WOCD Secondary Sill Cover</b></p>		
Description	Length	CN	RH PN	LH PN
<p><b>Frame Cover Kit, Operator, Stone White</b></p> <p><i>Includes:</i> 1 – V1989 top operator 1 – V1990 bottom operator</p>	<p>13 5/16" (338)</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>11881094</p> <p>11881096</p> <p>11881098</p> <p>11881070</p>	<p>11881093</p> <p>11881095</p> <p>11881097</p> <p>11881099</p>
<p><b>Frame Cover Kit, Operator, Bronze</b></p> <p><i>Includes:</i> 1 – V2840 top operator 1 – V1990 bottom operator</p>	<p>13 5/16" (338)</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>11881220</p> <p>11881222</p> <p>11881224</p> <p>11881226</p>	<p>11881219</p> <p>11881221</p> <p>11881223</p> <p>11881225</p>
<p><b>Frame Cover Kit, Operator, Ebony</b></p> <p><i>Includes:</i> 1 – V2840 top operator 1 – V1990 bottom operator</p>	<p>13 5/16" (338)</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>11881279</p> <p>11881281</p> <p>11881283</p> <p>11881285</p>	<p>11881278</p> <p>11881280</p> <p>11881282</p> <p>11881284</p>
<p><b>Frame Cover Kit, Operator, WOCD, Stone White</b></p> <p><i>Includes:</i> 1 – V1989 top operator, WOCD 1 – V1990 bottom operator, WOCD</p>	<p>NA</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>NA</p> <p>11881196</p> <p>11881198</p> <p>11881200</p>	<p>NA</p> <p>11881195</p> <p>11881197</p> <p>11881199</p>
<p><b>Frame Cover Kit, Operator, WOCD, Bronze</b></p> <p><i>Includes:</i> 1 – V2840 top operator, WOCD 1 – V1990 bottom operator, WOCD</p>	<p>NA</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>NA</p> <p>11881102</p> <p>11881104</p> <p>11881106</p>	<p>NA</p> <p>11881101</p> <p>11881103</p> <p>11881105</p>
<p><b>Frame Cover Kit, Operator, WOCD, Ebony</b></p> <p><i>Includes:</i> 1 – V2840 top operator, WOCD 1 – V1990 bottom operator, WOCD</p>	<p>NA</p> <p>19 5/16" (490)</p> <p>25 5/16" (643)</p> <p>31 5/16" (795)</p>	<p>CN16</p> <p>CN20</p> <p>CN26</p> <p>CN30</p>	<p>NA</p> <p>11881228</p> <p>11881230</p> <p>11881232</p>	<p>NA</p> <p>11881227</p> <p>11881229</p> <p>11881231</p>



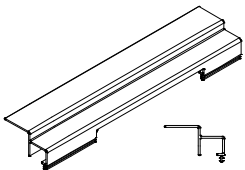
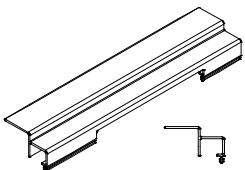
V1989 – Frame Cover Sill,  
Top, Stationary

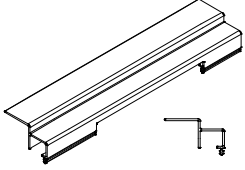
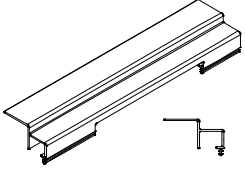


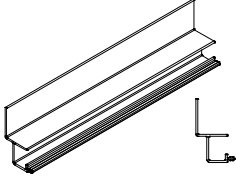
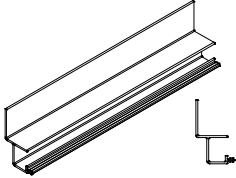
V1990 – Frame Cover Sill,  
Bottom, Stationary

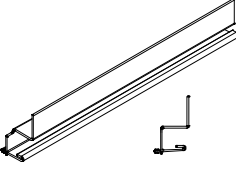


Description	Length	CN	Part Number
<b>Frame Cover Kit, Stationary, Stone White</b> <i>Includes:</i> 1 – V1989 top stationary 1 – V1990 bottom stationary	13 5/16" (338)	CN16	11881077
	19 5/16" (490)	CN20	11881078
	25 5/16" (643)	CN26	11881079
	31 5/16" (795)	CN30	11881060
	37 5/16" (947)	CN36	11881061
	43 5/16" (1100)	CN40	11881062
	55 5/16" (1405)	CN50	11881063
67 5/16" (1709)	CN60	11881064	
<b>Frame Cover Kit, Stationary, Bronze</b> <i>Includes:</i> 1 – V1989 top stationary 1 – V1990 bottom stationary	13 5/16" (338)	CN16	11881021
	19 5/16" (490)	CN20	11881022
	25 5/16" (643)	CN26	11881023
	31 5/16" (795)	CN30	11881024
	37 5/16" (947)	CN36	11881025
	43 5/16" (1100)	CN40	11881026
	55 5/16" (1405)	CN50	11881027
67 5/16" (1709)	CN60	11881028	
<b>Frame Cover Kit, Stationary, Ebony</b> <i>Includes:</i> 1 – V1989 top stationary 1 – V1990 bottom stationary	13 5/16" (338)	CN16	11881031
	19 5/16" (490)	CN20	11881032
	25 5/16" (643)	CN26	11881033
	31 5/16" (795)	CN30	11881034
	37 5/16" (947)	CN36	11881035
	43 5/16" (1100)	CN40	11881036
	55 5/16" (1405)	CN50	11881037
67 5/16" (1709)	CN60	11881038	

Description	Length	CN	Part Number			
			SW (RH)	SW (LH)		
<b>V1900 – Frame Cover, Jamb, Lock Side</b> 	20 1/2" (521)	20	17008020	17008021		
	26 1/2" (673)	26	17008026	17008027		
	32 1/2" (826)	30	17008032	17008033		
	38 1/2" (978)	36	17008038	17008039		
	44 1/2" (1130)	40	17008044	17008045		
	50 1/2" (1283)	46	17008050	17008051		
	56 1/2" (1435)	50	17008056	17008057		
	62 1/2" (1588)	56	17008062	17008063		
	68 1/2" (1740)	60	17008068	17008069		
Description	Length	CN	BZ (RH)	BZ (LH)	EB (RH)	EB (LH)
<b>V2842 – Frame Cover, Jamb, Lock Side</b> 	20 15/32" (520)	20	17007420	17007421	17007620	17007621
	26 15/32" (672)	26	17007426	17007427	17007626	17007627
	32 15/32" (824)	30	17007432	17007431	17007632	17007633
	38 15/32" (977)	36	17007438	17007439	17007638	17007639
	44 15/32" (1129)	40	17007444	17007445	17007644	17007645
	50 15/32" (1282)	46	17007450	17007451	17007650	17007651
	56 15/32" (1434)	50	17007456	17007457	17007656	17007657
	62 15/32" (1586)	56	17007462	17007463	17007662	17007663
	68 15/32" (1739)	60	17007468	17007469	17007668	17007669



Description	Length	CN	Part Number			
			SW (RH)	SW (LH)		
<b>V1900 – WOCD Secondary Locking Jamb Cover</b> 	19 3/4" (502)	20	17002720	17002721		
	25 3/4" (654)	26	17002726	17002727		
	31 3/4" (807)	30	17002732	17002733		
	37 3/4" (959)	36	17002738	17002739		
	43 3/4" (1112)	40	17002744	17002745		
	49 3/4" (1264)	46	17002750	17002751		
	55 3/4" (1416)	50	17002756	17002757		
	61 3/4" (1569)	56	17002762	17002763		
	67 3/4" (1721)	60	17002768	17002769		
Description	Length	CN	BZ (RH)	BZ (LH)	EB (RH)	EB (LH)
<b>V2842 – WOCD Secondary Locking Jamb Cover</b> 	19 23/32" (501)	20	17002820	17002821	17002920	17002921
	25 23/32" (653)	26	17002826	17002827	17002926	17002927
	31 23/32" (806)	30	17002832	17002833	17002932	17002933
	37 23/32" (958)	36	17002838	17002839	17002938	17002939
	43 23/32" (1110)	40	17002844	17002845	17002944	17002945
	49 23/32" (1263)	46	17002850	17002851	17002950	17002951
	55 23/32" (1415)	50	17002856	17002857	17032956	17002957
	61 23/32" (1568)	56	17002862	17002863	17002962	17002963
	67 23/32" (1720)	60	17002868	17002869	17022968	17002969


Description	Length	CN	Part Number		
			SW		
<b>V1900 – Frame Cover Jamb Stat/Hinge Side</b>  	8 1/2" (216)	10	17006008		
	14 1/2" (368)	16	17006014		
	20 1/2" (521)	20	17006020		
	26 1/2" (673)	26	17006026		
	32 1/2" (826)	30	17006032		
	38 1/2" (978)	36	17006038		
	44 1/2" (1130)	40	17006044		
	50 1/2" (1283)	46	17006050		
	56 1/2" (1435)	50	17006056		
	62 1/2" (1588)	56	17006062		
68 1/2" (1740)	60	17006068			
Description	Length	CN	BZ	EB	
<b>V2842 – Frame Cover Jamb Stat/Hinge Side</b>  	8 15/32" (215)	10	17008208	17009208	
	14 15/32" (367)	16	17008214	17009214	
	20 15/32" (520)	20	17008220	17009220	
	26 15/32" (672)	26	17008226	17009226	
	32 15/32" (824)	30	17008232	17009232	
	38 15/32" (977)	36	17008238	17009238	
	44 15/32" (1129)	40	17008244	17009244	
	50 15/32" (1282)	46	17008250	17009250	
	56 15/32" (1434)	50	17008256	17009256	
	62 15/32" (1586)	56	17008262	17009262	
68 15/32" (1739)	60	17008268	17009268		

Description	Length	CN	Part Number		
			SW	BZ	EB
<b>V1899/V2841 Head Jamb Frame Cover</b>  	14 1/2" (368)	16	17003013	17007113	17009013
	20 1/2" (521)	20	17003019	17007119	17009019
	26 1/2" (673)	26	17003025	17007125	17009025
	32 1/2" (826)	30	17003031	17007131	17009031
	38 1/2" (978)	36	17003037	17007137	17009037
	44 1/2" (1130)	40	17003043	17007143	17009043
	50 1/2" (1283)	50	17003055	17007155	17009055
	67 5/16" (1709)	60	17003067	17007167	17009067

When ordering replacement weather strip, specify:

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

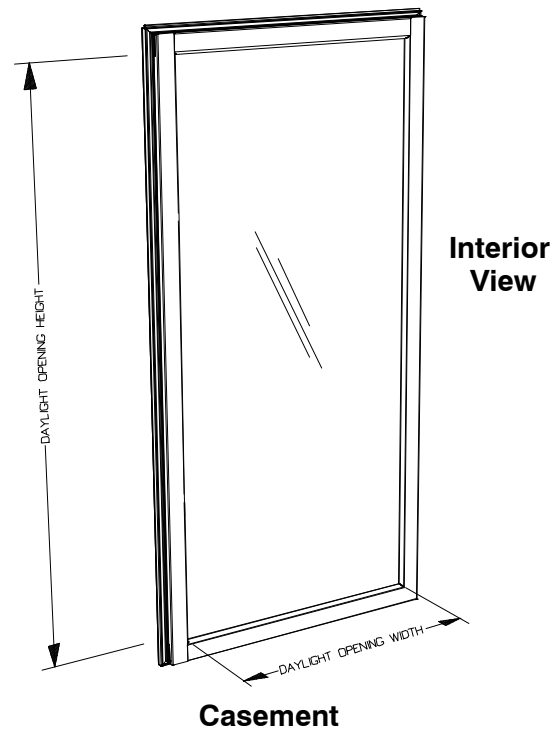
 <b>A</b> V189 Frame Weather Strip		 <b>B</b> V147 Sash Weather Strip		
Description				Part Number
<b>A: V189 Frame Weather Strip</b>		9 1/8" (232)	CN10 BK	17013009
		15 1/8" (384)	CN16 BK	17013015
		21 1/8" (536)	CN20 BK	17013021
		27 1/8" (689)	CN26 BK	17013027
		33 1/8" (841)	CN30 BK	17013033
		39 1/8" (994)	CN36 BK	17013039
		45 1/8" (1146)	CN40 BK	17013045
		51 1/8" (1298)	CN46 BK	17013051
		57 1/8" (1451)	CN50 BK	17013057
63 1/8" (1603)	CN56 BK	17013063		
69 1/8" (1756)	CN60 BK	17013069		
<b>B: V147 Sash Weather Strip</b>		9 1/2" (241)	CN10 BK	17001410
		15 1/2" (394)	CN16 BK	17001416
		21 1/2" (546)	CN20 BK	17001420
		27 1/2" (698)	CN26 BK	17001426
		33 1/2" (851)	CN30 BK	17001430
		39 1/2" (1003)	CN36 BK	17001436
		45 1/2" (1156)	CN40 BK	17001440
		51 1/2" (1308)	CN46 BK	17001446
		57 1/2" (1460)	CN50 BK	17001450
63 1/2" (1613)	CN56 BK	17001456		
69 1/2" (1765)	CN60 BK	17001460		

 <b>V2837</b> Frame Weather Strip					Part Number	
Description						
<b>Weather Strip – V2837</b>		120" (3048)	Lineal	ICA/ IAWN	BK	17000120
Field Service only to replace V189						

When ordering replacement sash, specify:

1. size (using chart below);
2. operating, stationary, transom or picture, left or right operator (if applicable);
3. Stone White (SW), Pebble Gray (PB), Bronze (BZ), Evergreen (EG), Cashmere (CA), Ebony (EB) exterior;
4. Interior Colors: Stone White, Bronze with Bronze exterior, Ebony with Ebony exterior (Split finishes not available for Dark interior option.)
5. glazing.

<b>Sash Sizes for Casement Manufactured 2010 to Present</b>			
<b>Daylight Opening to Sash OM</b>			
Daylight Width + 3 17/32" = OM Width of Sash			
Daylight Height + 3 17/32" = OM Height of Sash			
NOTE: Casement sash is not reglazable. Replacement sash will include all hardware..			
Size	OM Width	Size	OM Height
CN16	15 17/32" (420)	CN10	9 17/32" (267)
CN20	21 17/32" (521)	CN16	15 17/32" (420)
CN26	27 17/32" (674)	CN20	21 17/32" (521)
CN30	33 17/32" (775)	CN26	27 17/32" (674)
CN36	39 17/32" (928)	CN30	33 17/32" (775)
CN40	45 17/32" (1029)	CN36	39 17/32" (928)
CN50	57 17/32" (1283)	CN40	45 17/32" (1029)
CN60	69 17/32" (1537)	CN46	51 17/32" (1182)
		CN50	57 17/32" (1283)
		CN56	63 17/32" (1436)
		CN60	69 17/32" (1537)



NOTE: The daylight opening is the interior measurement of visible glass.

**ORDERING REPLACEMENT SCREENS FOR CASEMENT UNITS**

Standard screens offer almond frost aluminum surround and charcoal colored fiberglass 18 x 16 screen mesh. Determine the outside measurement (OM) 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. size; – measure the existing screen OM, if not available, determine the size of the screen by using the conversion chart below shown below.
2. Color options: Stone White exterior/interior, Bronze exterior/interior, Ebony exterior/interior (split finishes not available).

**Screen Sizes for the All Ultrex Casement**

**Manufactured 2010 to Present**  
**Daylight Opening to OM of Screen**

Daylight opening is the measurement of the visible glass.  
 Daylight Width + 1 13/32" (36) = OM Width of Screen  
 Daylight Height + 1 1/64" (26) = OM Height of Screen

NOTE: OM of aluminum screen includes corner keys.

NOTE: Screens feature leaf spring mounting system.

Size	OM Width	Size	OM Height
CN16	13 15/64" (336)	CN20	18 53/64" (478)
CN20	19 15/64" (489)	CN26	24 53/64" (631)
CN26	25 15/64" (641)	CN30	30 53/64" (783)
CN30	31 15/64" (793)	CN36	36 53/64" (936)
CN36	37 15/64" (946)	CN40	42 53/64" (1088)
CN40	43 15/64" (1098)	CN46	48 53/64" (1240)
		CN50	54 53/64" (1393)
		CN56	60 53/64" (1545)
		CN60	66 53/64" (1698)

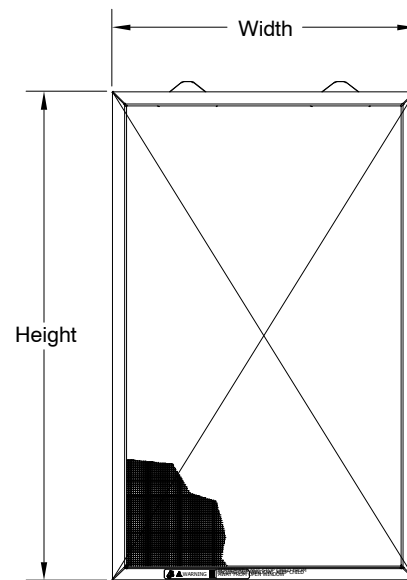
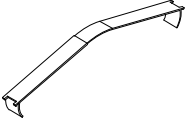
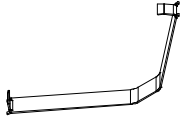
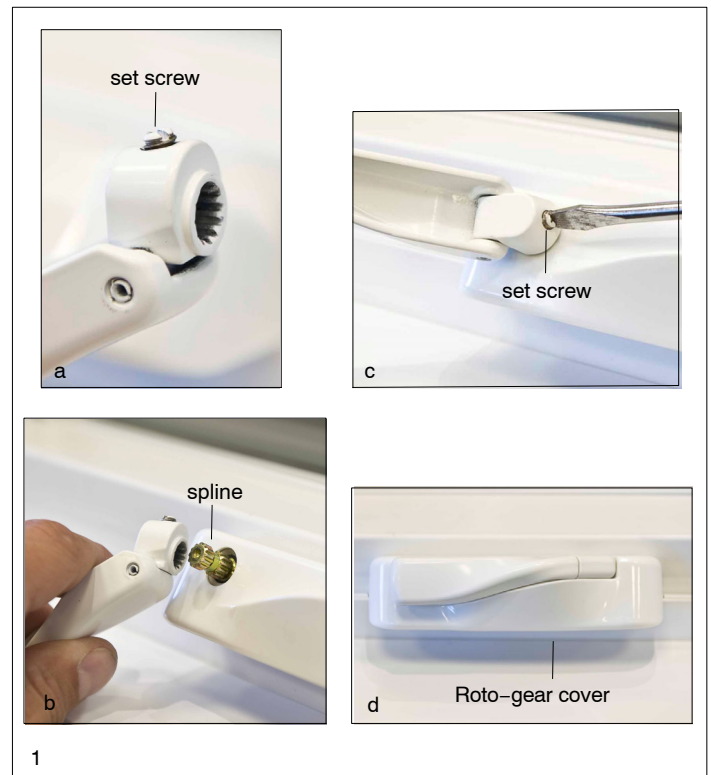


ILLUSTRATION NOT TO SCALE	DESCRIPTION	OPER./ COLOR	PART NO.
	<b>Leaf Spring</b> <i>Usage: 12/10/2018–present</i>	SS	11868835
	<b>Leaf Spring</b> <i>Usage: 02/2010 – 12/09/2018</i>	SS	313430

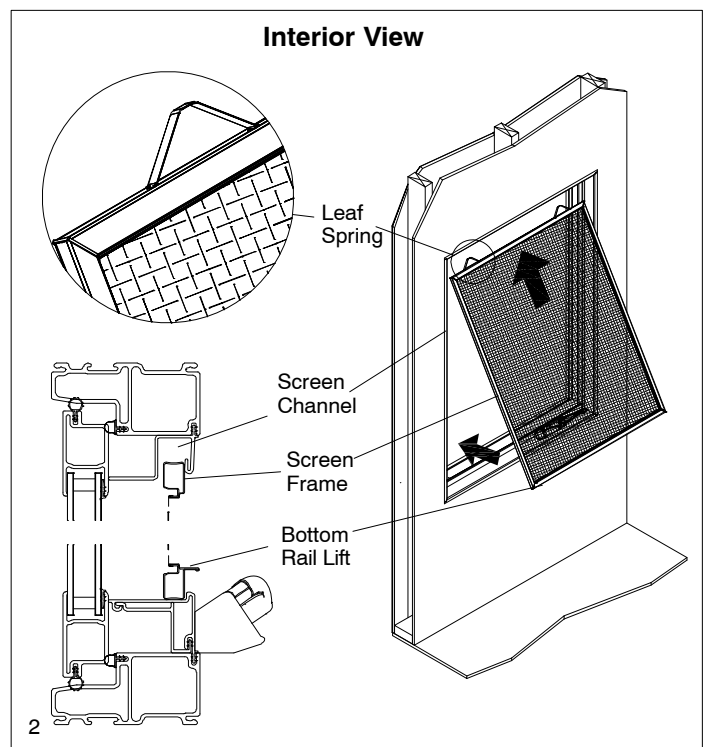
## INSTALLING THE ROTO-GEAR HANDLE

1. Use a small flathead screwdriver to loosen the set screw in the handle. See figure 1a.
2. Slide the handle onto the spline. Be sure it is fully seated by pushing toward the window until the handle rests on the crank assembly. See figure 1b.
3. Tighten the set screw using the flathead screwdriver. See figure 1c.
4. Fold the handle into the recessed area on the cover. See figure 1d.



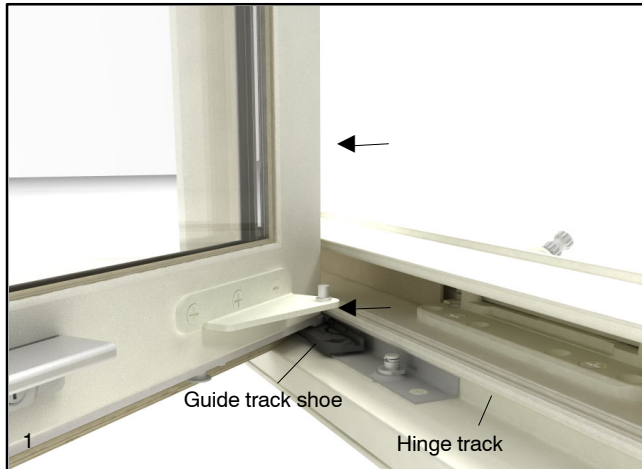
## REMOVING AND INSTALLING THE SCREEN

1. To remove the screen, grasp the bottom rail lift and push upward to depress leaf springs. Bring the screen toward you and down, to release leaf springs from the screen channel.
2. To install the screen, align the leaf springs, into the screen channel. Grasp the bottom rail lift and lift upwards to depress the leaf springs and place the screen into the screen channel. Release the bottom rail lift to seat the screen.

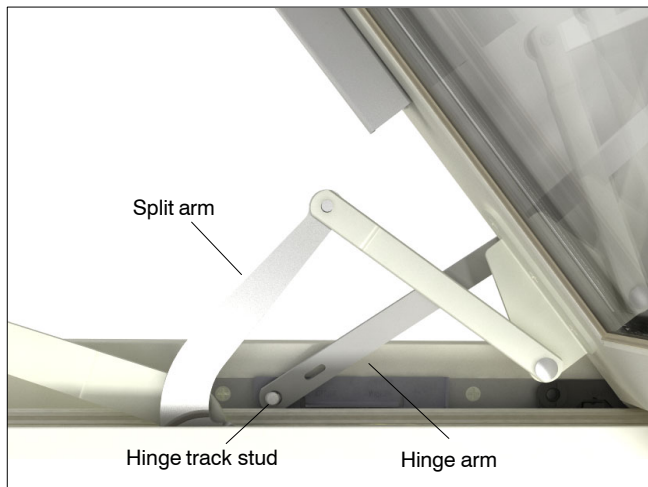


## INSTALLING THE CASEMENT OPERATOR SASH

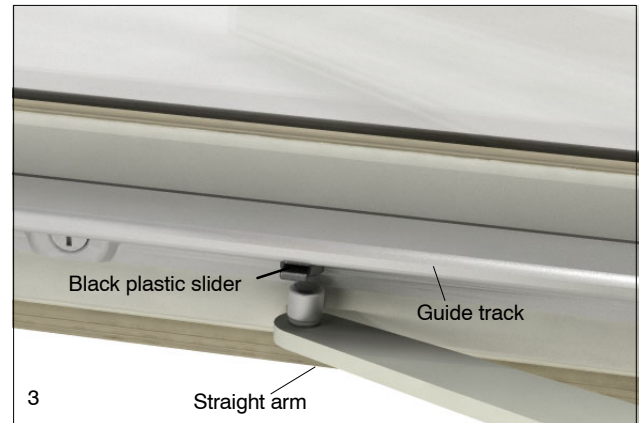
1. Place the guide track shoes on the top and bottom track near the hinge track stud. Slide the shoes into the hinge track, making sure both the top and bottom shoe enter the track. See figure 1.



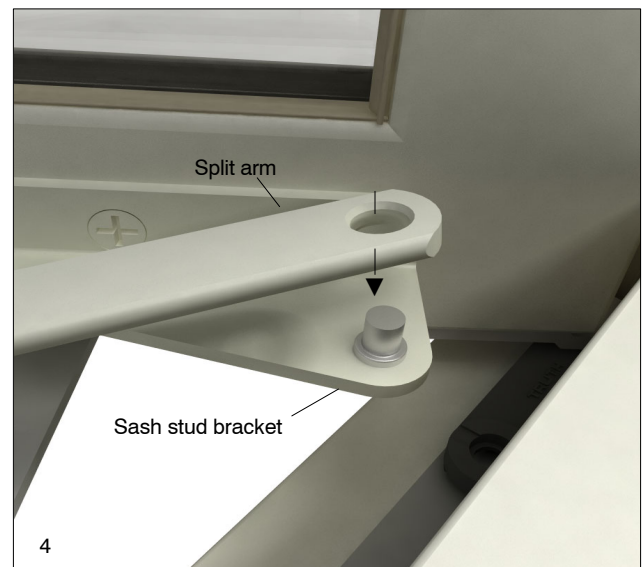
2. Do not release the sash until the hinge arms (top and bottom) have been attached to the hinge track stud by pushing or tapping the arm onto the hinge track stud. See figure 2.



3. Crank the hardware until the straight arm is positioned at the guide track and attach the arm to the black plastic slider. See figure 3.



4. Push the split arm onto the sash stud bracket. See figure 4.

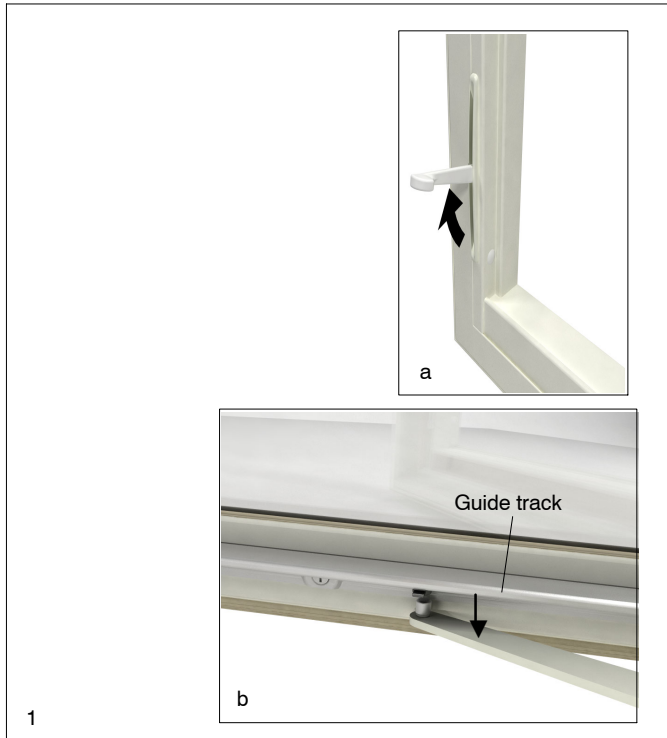


5. Check for proper sash operation.

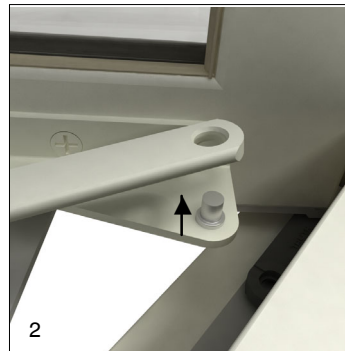


**REMOVING THE CASEMENT OPERATOR SASH**

1. Release the lock handle. See figure 1a. Crank the unit open. Detach the roto-gear straight arm by pushing down near the guide track. See figure 1b.

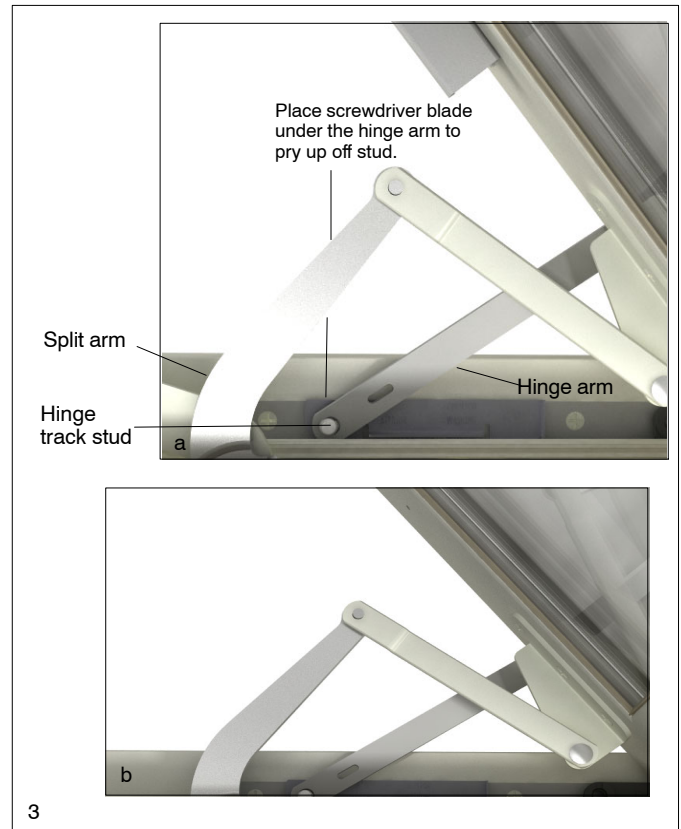


2. Detach the roto-gear split arm from the sash stud bracket. See figure 2. Crank the roto-gear until it is completely open and fold the split arm away.



**CAUTION:** Before accomplishing the next step(s) it is important to have a firm grip on the sash to prevent it from sliding when the hinge arms are released.

3. Pry the lower hinge arm off the hinge track stud using a screwdriver blade. See figure 3a.

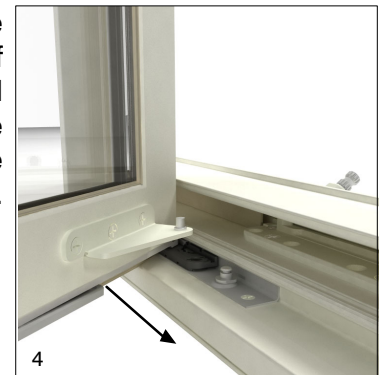


**NOTE:** CN16 and CN20 will have only the split arm as shown in figure 3b.

**NOTE:** All CN26 wide and CN30 wide casement windows utilize a hinge limiter which stops the sash at the recommended maximum unit opening. The limiter can be pivoted out to allow full sash opening for cleaning or washing the exterior. The limiter must be pivoted back in place to fully close window.

**CAUTION:** Sash can be very heavy and hard to handle when removed from the hinge tracks. Use the assistance of another individual when necessary.

4. Slide the guide track shoes out of the tracks toward the center of the unit to remove the sash. See figure 4.



**NOTE:** Assistance of another individual is highly recommended when removing and replacing Integrity Casement stationary sash or the use of a handling suction cup.

**You Will Need to Supply**

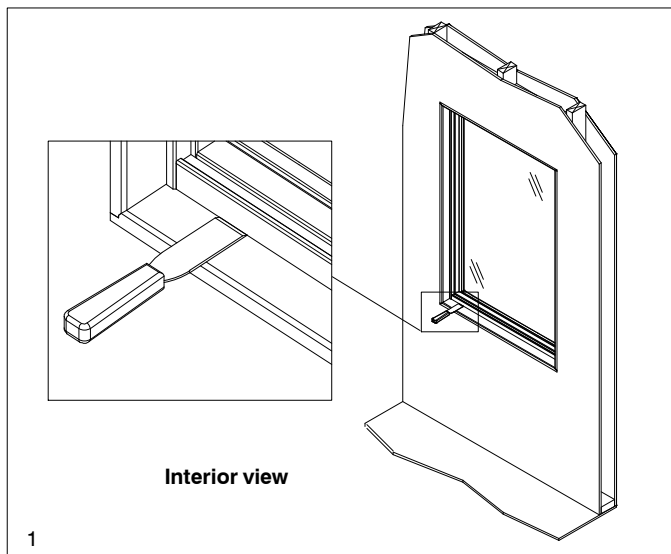
Stiff blade putty knife #2 Phillips screwdriver

**Parts Needed**

Stationary bracket  
Hardware cover  
Head jamb and jamb stop (V1900)  
Frame weather strip (V189)

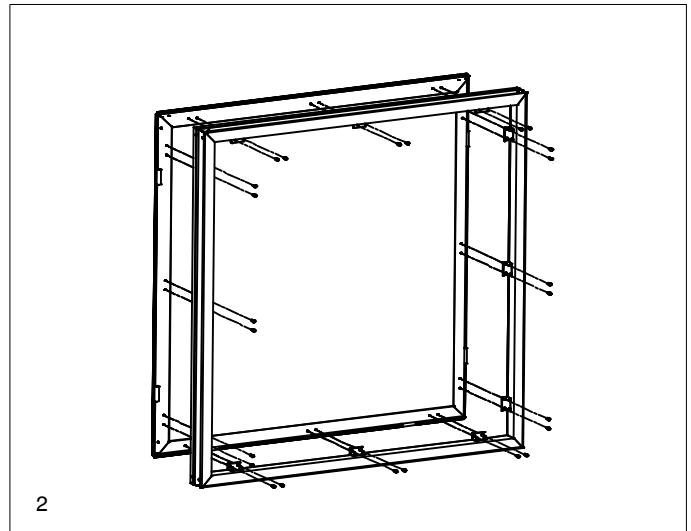
**Removing Casement Stationary Sash**

1. With a small pry bar or stiff putty knife, remove the interior stops in the following order: stationary hardware cover, head jamb stop, and jamb stop. Be careful not to damage frame, cover, or jamb stops. See illustration 1.

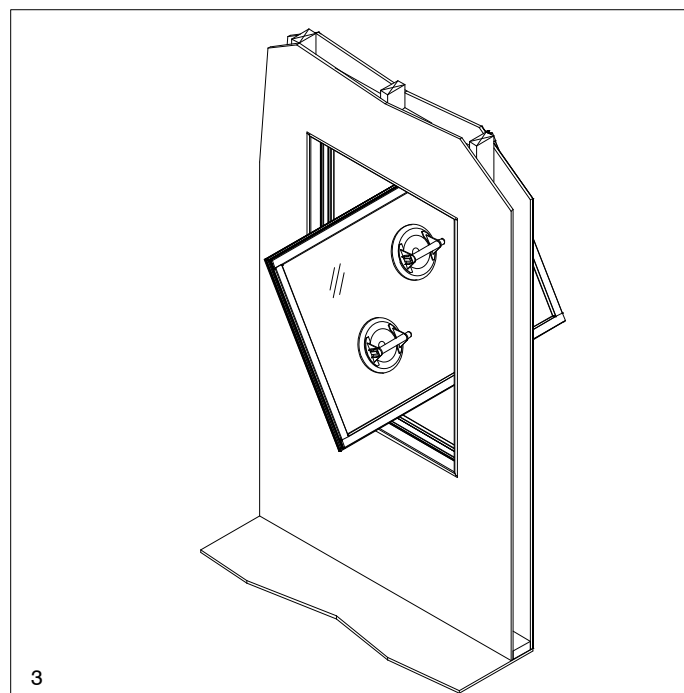


**CAUTION:** Before removing stationary bracket screws, enlist the help of another individual or use glass handling suction cups to prevent sash from falling out of frame.

2. Using a #2 Phillips screwdriver, remove the two screws from each stationary bracket. Save these screws for reinstallation of sash. See illustration 2.



3. Carefully remove the stationary sash from the exterior (with assistance) or with glass handling suction cups, push the sash out, rotate, then pull the sash in from the interior. See illustration 3.



### Replacing Casement Stationary Sash

**NOTE:** Before installing the stationary sash, carefully inspect setting blocks to make sure they remained in place. Inspect frame and sash weather strip for tears or other imperfections caused during removal.

4. With the assistance of another individual or glass handling suction cups, slide the sash through the frame, turn to an upright position and set the bottom of the stationary sash in the frame from the exterior. Tip the top of the sash in and hold in place, sash should fit snugly in frame. See illustration 4.
5. Pull the sash in with glass handling suction cups or have an assistant push from the exterior to keep the sash seated in the frame. Using a #2 Phillips screwdriver attach the sash to the stationary brackets.
6. Once the sash has been fastened to all stationary brackets check to make sure that sash is seated properly in the frame.
7. Reattach jamb stops to frame in the reverse order as step 1.

