

Wood Tilt Pacs

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Wood Tilt Pacs

Unit Features

Wood Tilt Pac: WTP

Wood Magnum Tilt Pac: WMTP

Sash:

- Double Hung Tilt Pac sash thickness: 1 5/16" (33)
- Double Hung Tilt Pac: Top rail width: 2 15/32" (63), Bottom rail width: 3 3/4" (95), Stile width: 1 25/32" (45).
- Magnum Double Hung Tilt Pac sash thickness: 1 3/4" (44)
- Magnum Double Hung Tilt Pac: Top rail width: 2 1/4" (57), Bottom rail width: 3 1/2" (89), Stile width: 2 1/4" (57)
- Bottom rail bevel 14 degrees.
- Removable exterior glazing stops.

Hardware:

- Lock: High pressure zinc die-cast cam lock and keeper. Optional keyed lock. Two locks on glass sizes of 36" (914) and wider.
 - Color; Satin Taupe. Optional: Bronze, White, Plated brass.
- Double Hung Tilt Pac Balance System: coil spring block and tackle with nylon cord and fiber filled nylon clutch.
- Double Hung Magnum Tilt Pac: double coil spring block and tackle with nylon cord and fiber filled nylon clutch.
- Jamb Track: Vinyl extrusion, foam backing. Color: beige or white
- Sash Retainer Plate: Standard for Magnum units, optional for double hung - Polycarbonate thermoelastic.
 - Color: Bronze or White.
- Optional Sash Lifts: high pressure zinc die-cast.
 - Color: Satin Taupe. Optional: Bronze, White or Brass.

Weather Strip:

- Double Hung weather strip: Dual durometer double leaf at check rail; bulb type dual durometer weather strip at bottom rail.
- Double Hung Magnum weather strip: Continuous leaf weather strip at head jamb parting stop which seals against top sash; dual durometer double leaf at check rail; bulb type dual durometer weather strip at bottom rail
- Color: beige for both product types

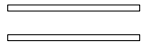
Insect Screens:

- Standard is full sized wood screen. With an optional wood half screen, or aluminum full or half screen. All screens are slipped loose.
- Aluminum screen colors: Any standard screen colors.
- Screen Mesh: Charcoal fiberglass.
 - Optional Screen Mesh: Charcoal Aluminum Wire, Black Aluminum Wire, Bright Aluminum Wire, Bright Bronze Wire or Charcoal High Transparency (CH Hi-Tran) fiberglass.

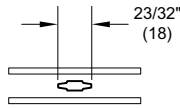
Glass and Glazing:

- Glazing method: Single glaze, single glazed with energy panel or hermetically sealed insulated glass.
- Glazing seal: Silicone glazed.
- Standard glass is insulating LoE²-272[®] with Argon or Air.
- Optional glazing available: LoE²-180[™] with or without Argon, LoE³-366[®] with or without Argon, clear, tints, tempered, obscure and others.
- Insulated glass will be altitude adjusted for higher elevations, argon gas not included.

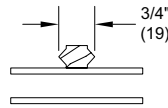
Divided Lite Options



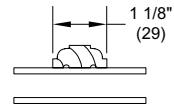
Insulating Glass



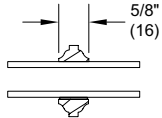
Aluminum 11/16"
Contour GBG



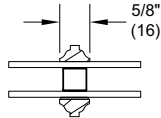
3/4" Grille



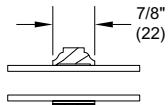
1 1/8" Grille



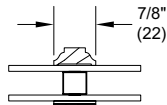
5/8" SDL



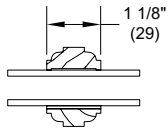
5/8" SDL
W/Spacer



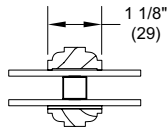
7/8" SDL



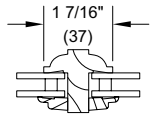
7/8" SDL
W/Spacer Bar



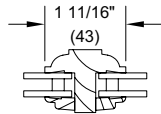
1 1/8" SDL



1 1/8" SDL
W/Spacer Bar



1 7/16" IG ADL



1 11/16" IG ADL

Wood Tilt Pacs

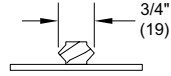
Divided Lite Options



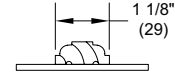
Single Glaze



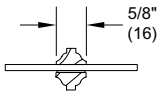
Single Glaze
W/ Energy Panel



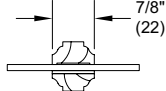
3/4" Grille



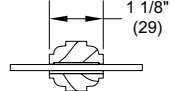
1 1/8" Grille



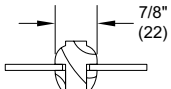
5/8" SDL



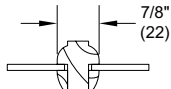
7/8" SDL



1 1/8" SDL



7/8" SG-ADL



7/8" SG-ADL
W/ Energy Panel

Min and Max Glass Size

Minimum and Maximum Glass Size - Double Hung Tilt Pac													
Unit Type		Min Glass Size					Max Glass Size					Max Glass	
		in	mm	x	in	mm	in	mm	x	in	mm	Sq. Feet	Sq. Meters
Double Hung Tilt Pac	Insulated Glass	8	(203)	x	8	(203)	44	(1118)	x	48	(1219)	10	0.929
	Single Glaze	8	(203)	x	8	(203)	44	(1118)	x	48	(1219)	12	1.115

Minimum and Maximum Glass Size - Magnum Double Hung Tilt Pac													
Unit Type		Min Glass Size					Max Glass Size					Max Glass	
		in	mm	x	in	mm	in	mm	x	in	mm	Sq. Feet	Sq. Meters
Magnum Double Hung Tilt Pac	Insulated Glass	12	(305)	x	12	(305)	60	(1524)	x	60	(1524)	18 1/2	1.719
	Single Glaze	12	(305)	x	12	(305)	60	(1524)	x	64	(1626)	19	1.719

NOTE: When glass height exceeds 48" (1219), top sash will be stationary and bottom sash will have limited travel. Maximum sash weight is 70 lbs per sash.

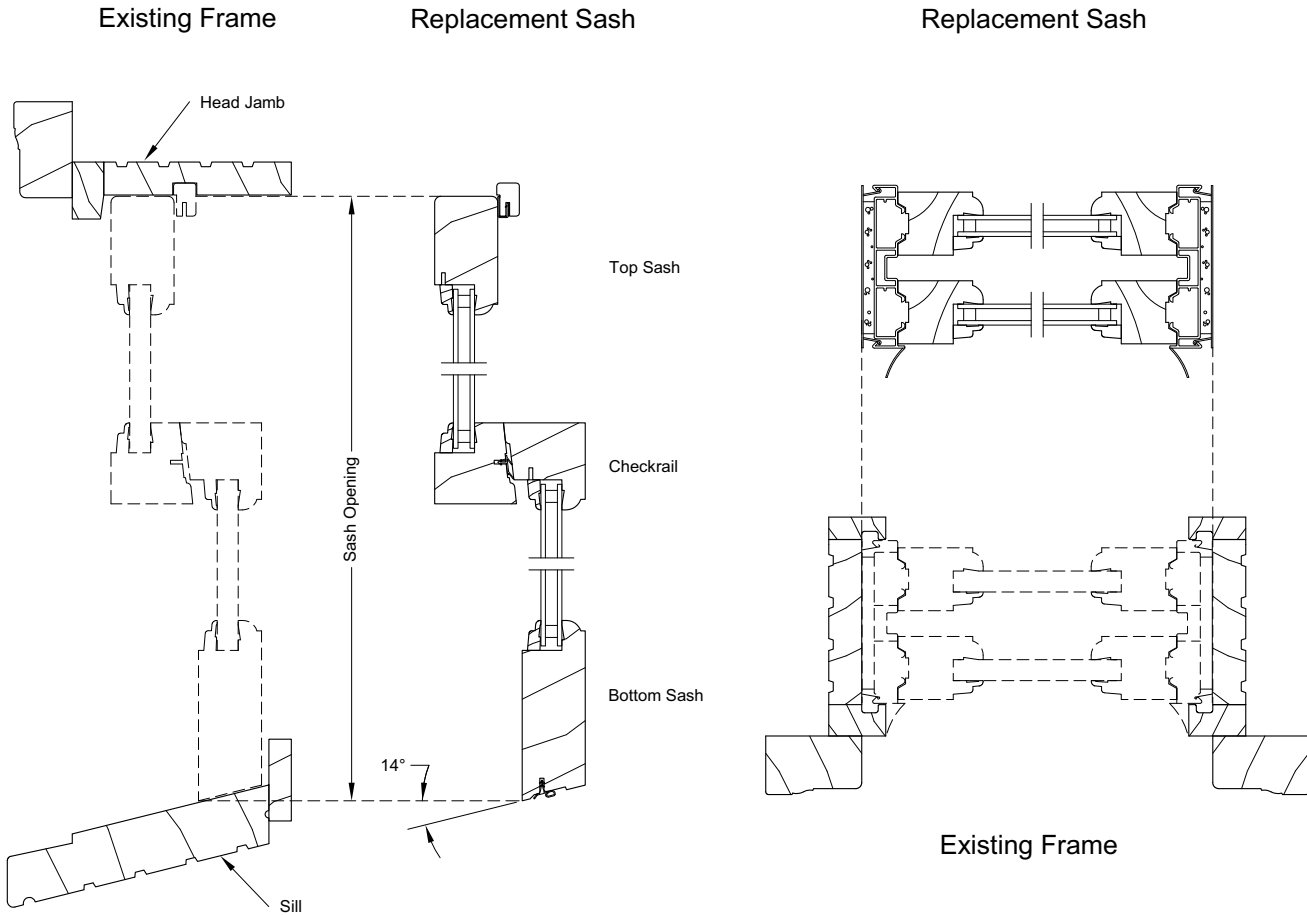
Measurement Conversions

Double Hung Tilt Pac						
Unit Measurements		Width		Height		
From	To					
Daylight Opening		in	mm		in	mm
Daylight Opening	Sash Opening	+ 5 1/16	(129)	× 2	+ 8 1/8	(206)
Daylight Opening	Outside Measurement Bottom Sash	+ 3 9/16	(90)		+ 5 9/16	(141)
Daylight Opening	Outside Measurement Top Sash	+ 3 9/16	(91)		+ 4 5/32	(106)
Outside Measurement		in	mm		in	mm
Outside Measurement Top Sash	Outside Measurement Bottom Sash				+ 1 13/32	(36)
Outside Measurement Top Sash	Sash Opening	+ 1 1/2	(38)	× 2	-3/16	(05)
Outside Measurement Bottom Sash	Sash Opening	+ 1 1/2	(38)	× 2	-3	(76)

Double Hung Magnum Tilt Pac						
Unit Measurements		Width		Height		
From	To					
Daylight Opening		in	mm		in	mm
Daylight Opening	Sash Opening	+ 6 13/16	(173)	× 2	+ 8	(203)
Daylight Opening	Outside Measurement Bottom Sash	+ 4 1/2	(114)		+ 5 19/32	(142)
Daylight Opening	Outside Measurement Top Sash	+ 4 1/2	(114)		+ 3 31/32	(101)
Outside Measurement		in	mm		in	mm
Outside Measurement Top Sash	Outside Measurement Bottom Sash				+ 1 5/8	(41)
Outside Measurement Top Sash	Sash Opening	+ 2 5/16	(59)	× 2	-1/16	(02)
Outside Measurement Bottom Sash	Sash Opening	+ 2 5/16	(59)	× 2	-3 3/16	(81)

Tilt Pac Measurements

Scale: 3" = 1'0"



Instructions:

Follow these steps to measure an opening for Tilt Pac Replacement Sash

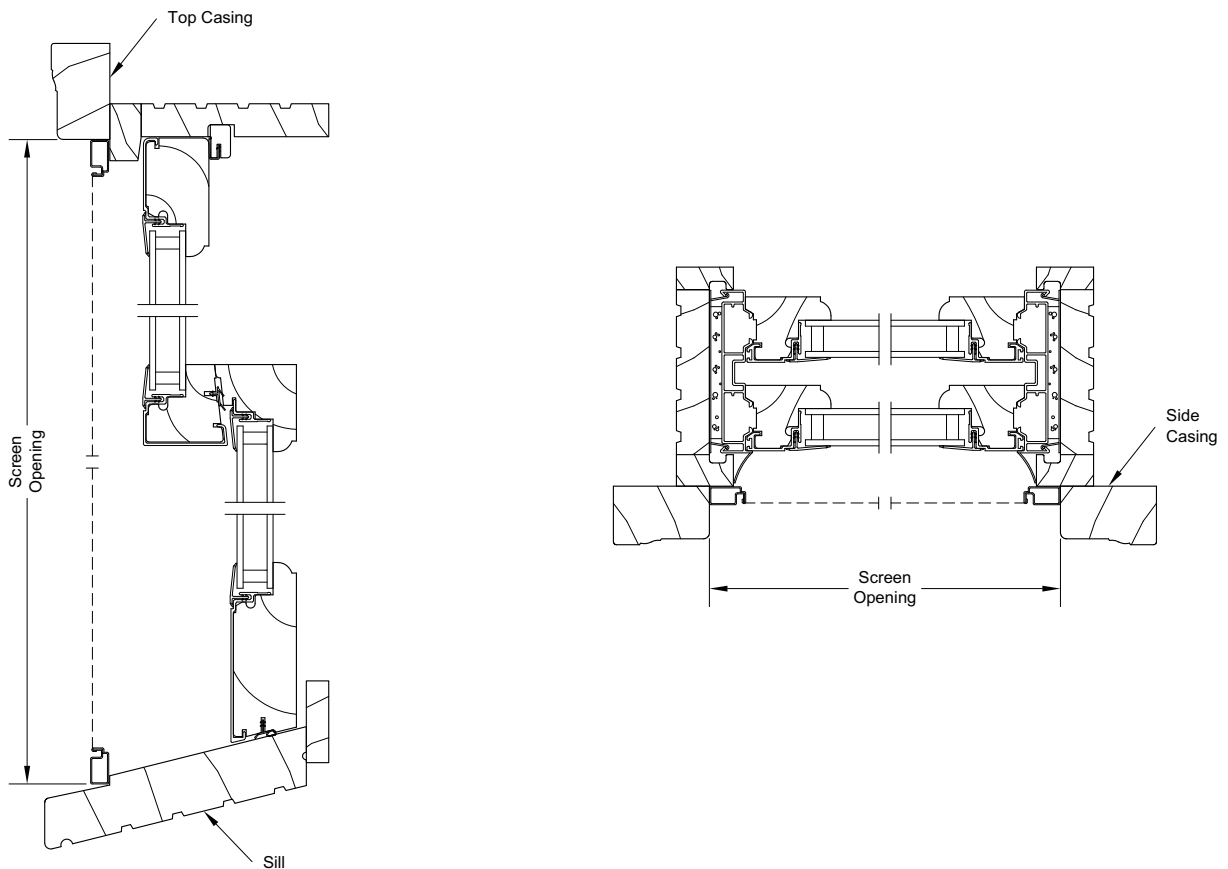
1. To find the sash opening height:
If the old window has Wood blocks holding the top sash in place, remove them. Lower the top sash for measuring clearance, then measure the height of the window from where the top sash meets the head jamb to where the bottom sash meets the sill when the bottom sash is fully closed.
2. To find the sash opening width:
Take an inside measurement of the frame from jamb to jamb.
3. To find the sill angle:
Raise the bottom sash and place a carpenter's protractor on the sill, the angle will register. Marvin's standard bottom rail is 14 degrees, other angles must be specified.

NOTE: Double Hung sash shown above. Instructions and measuring locations apply to Single Hung, Magnum Double / Single Hung sash.

Wood Tilt Pacs

Tilt Pac Full Screen Measurements

Scale: 3" = 1'0"



Instructions:

To insure a proper screen fit, it is recommended to order a screen after the Tilt Pac installation.

1. To find the screen opening height:
Measure from the top casing to the edge of where the screen will rest at the sill, minus $\frac{3}{32}$ (2) for the outside measurement (OSM) of the screen height.
2. To find the screen opening width:
Measure from the inside edge of the side casing to the inside edge of the opposite side casing, minus $\frac{1}{8}$ (3) for the outside measurement (OSM) of the screen width.

NOTE: Double Hung sash and screen are shown above. Instruction and measuring locations apply to Single Hung, Magnum Double Hung/Single Hung Sash. Screen measuring instructions also apply to Combination Storm/Screen measurement. Standard angle on combination bottom rails is 14 degrees, other angles must be specified.

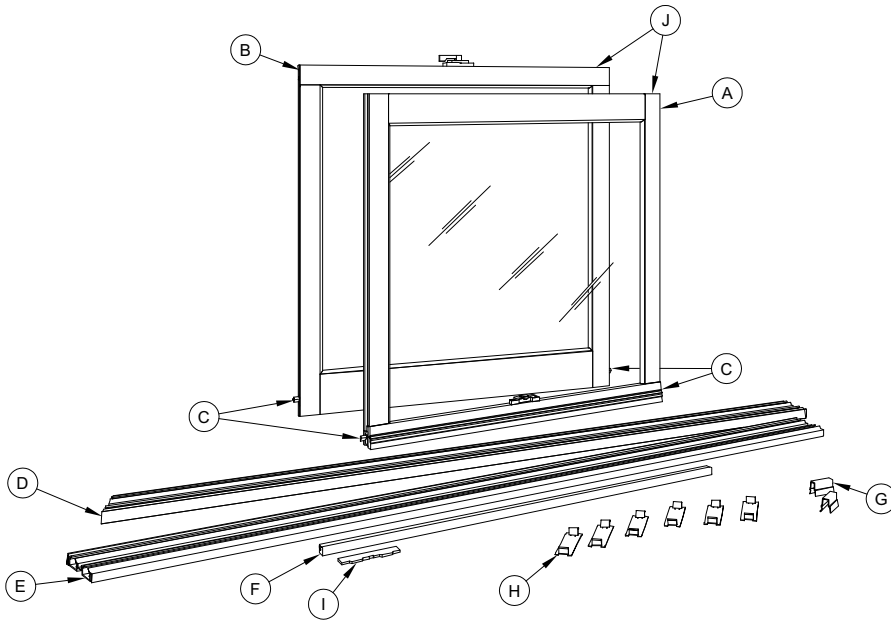
Standard Unit Measurements

Tilt Pac Unit Measurements						
Width						
CN	Sash Opening		Daylight Opening Double Hung Tilt Pac		Daylight Opening Double Hung Magnum Tilt Pac	
	ft - in	mm	ft - in	mm	ft - in	mm
16	1-8	(508)	1-2 15/16	(379)	1-1 3/16	(13)
20	2-0	(610)	1-6 15/16	(481)	1-5 3/16	(17)
24	2-4	(711)	1-10 15/16	(583)	1-9 3/16	(21)
26	2-6	(762)	2-0 15/16	(633)	1-11 3/16	(23)
28	2-8	(813)	2-2 15/16	(684)	2-1 3/16	(25)
30	2-10	(864)	2-4 15/16	(735)	2-3 3/16	(27)
32	3-0	(914)	2-6 15/16	(786)	2-5 3/16	(29)
36	3-4	(1016)	2-10 15/16	(887)	2-9 3/16	(33)

Tilt Pac Unit Measurements						
Height						
CN	Sash Opening		Daylight Opening Double Hung Tilt Pac		Daylight Opening Double Hung Magnum Tilt Pac	
	ft - in	mm	ft - in	mm	ft - in	mm
12	2-6	(762)	0-10 15/16	(278)	0-11	(11)
14	2-10	(864)	1-0 15/16	(329)	1-1	(13)
16	3-2	(965)	1-2 15/16	(379)	1-3	(15)
18	3-6	(1067)	1-4 15/16	(430)	1-5	(17)
20	3-10	(1168)	1-6 15/16	(481)	1-7	(19)
22	4-2	(1270)	1-8 15/16	(532)	1-9	(21)
24	4-6	(1372)	1-10 15/16	(583)	1-11	(23)
26	4-10	(1473)	2-0 15/16	(633)	2-1	(25)
28	5-2	(1575)	2-2 15/16	(684)	2-3	(27)
30	5-6	(1676)	2-4 15/16	(735)	2-5	(29)
32	5-10	(1778)	2-6 15/16	(786)	2-7	(31)
34	6-2	(1880)	2-8 15/16	(837)	2-9	(33)
36	6-6	(1981)	2-10 15/16	(887)	2-11	(35)

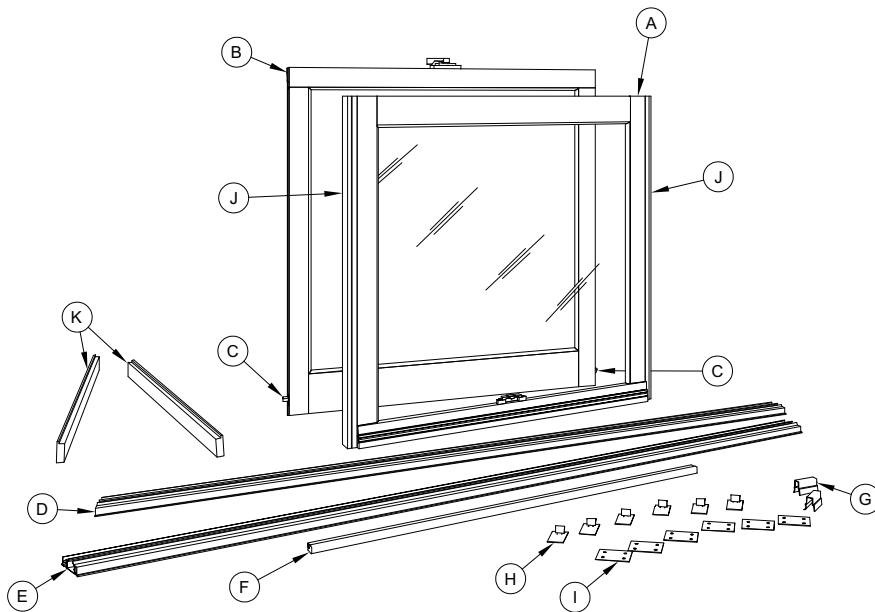
Double Hung Tilt Pac Parts List

Double Hung Tilt Pac



- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Two foam gaskets

Single Hung Tilt Pac

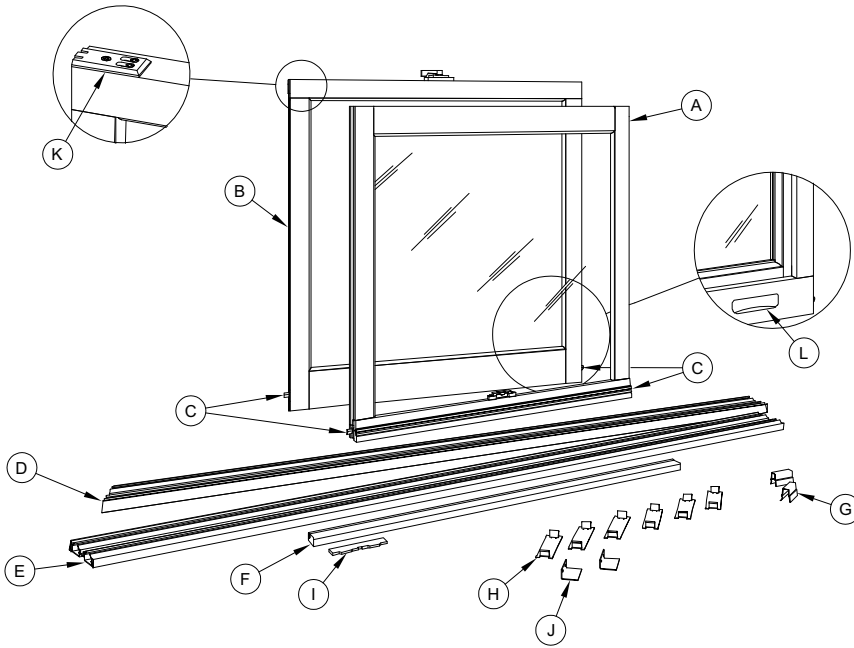


- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Stationary Sash Bracket (quantity may vary)
- J. Sash Filler
- K. Sash Opening Filler

Magnum Double Hung Tilt Pac Parts List

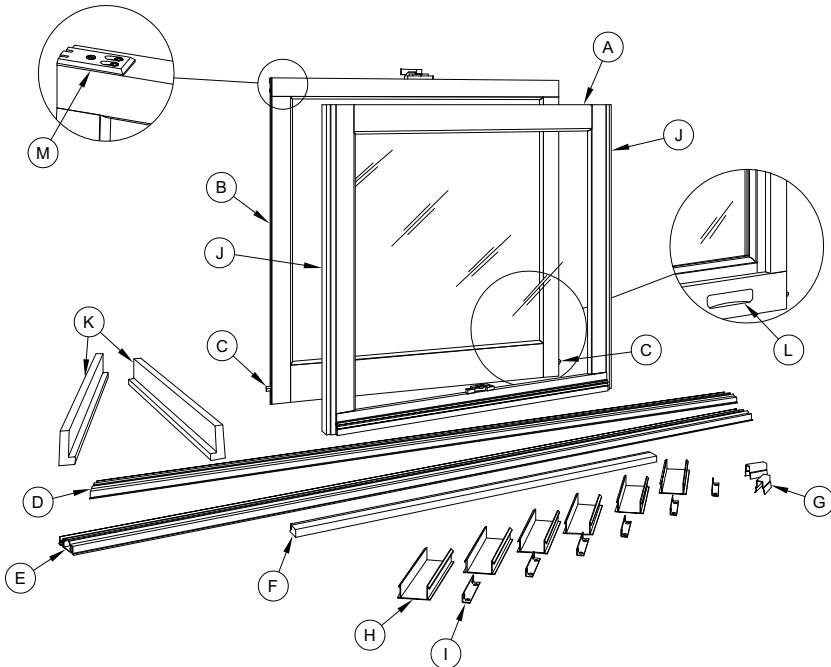
Magnum Double Hung Tilt Pac

ILLUSTRATIVE PURPOSE



- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Metal Brackets (quantity varies)
- I. Two foam gaskets
- J. Two Top Sash Stays
- K. Two Sash Retainer Plates
(NOTE: Only on Magnum Tilt Pacs)
- L. Finger Pulls
(NOTE: Only on Magnum Historical Tilt Pacs)

Magnum Single Hung Tilt Pac



- A. Top Sash
- B. Bottom Sash
- C. Cam Pivots
- D. Left Vinyl Jamb Liner
- E. Right Vinyl Jamb Liner
- F. Head Jamb Part Stop
- G. Two Plastic Sash Stops
- H. Vinyl Hardware Clips
(Amount varies with unit size)
- I. Stationary Sash Brackets
(Amount varies with unit size)
- J. Stationary Sash Filler
- K. Sash Opening Filler
- L. Finger Pulls
(NOTE: Only on Magnum Historical Tilt Pacs)
- M. Two Sash Retainer Plates
(NOTE: Only on Magnum Tilt Pacs)