

CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

PIVOT BAR/TILT LATCH FABRICATORS MANUAL

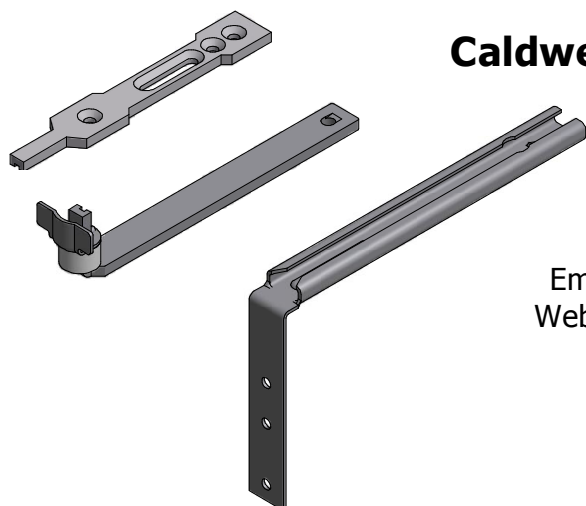
10th Edition

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KEY FEATURES

- STANDARD & SLIDE IN PIVOT BARS FOR TILT IN VERTICAL SLIDING WINDOWS
- TILT LATCHES FOR TILT IN VERTICAL SLIDING WINDOWS
- SLIDE IN PIVOT BARS FOR EASE OF MAINTENANCE AND FABRICATION
- FOR USE ON TILT IN WINDOWS
- COLOUR OPTIONS FOR TILT LATCHES
- CAN BE FITTED TO MOST TIMBER, ALUMINIUM, or U-PVC VERTICAL SLIDERS.



Caldwell Hardware (UK) Ltd

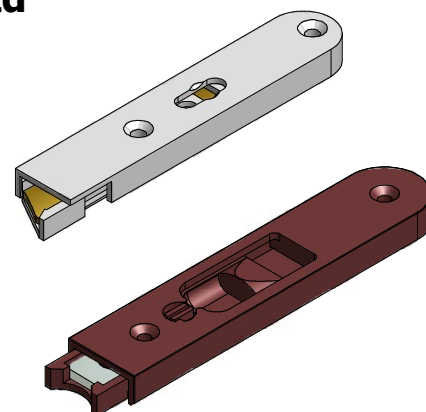
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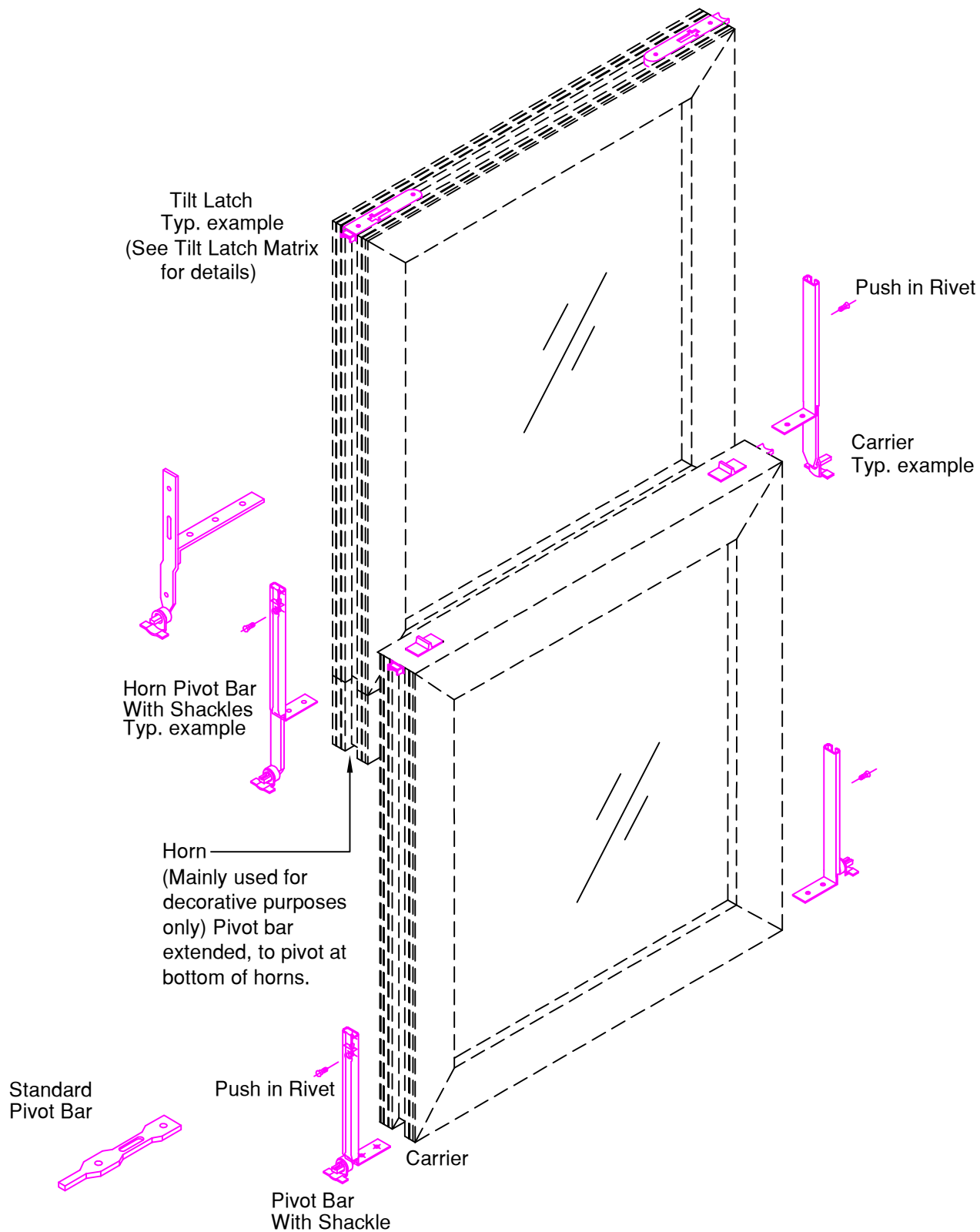


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Typical Vertical Sliding Window



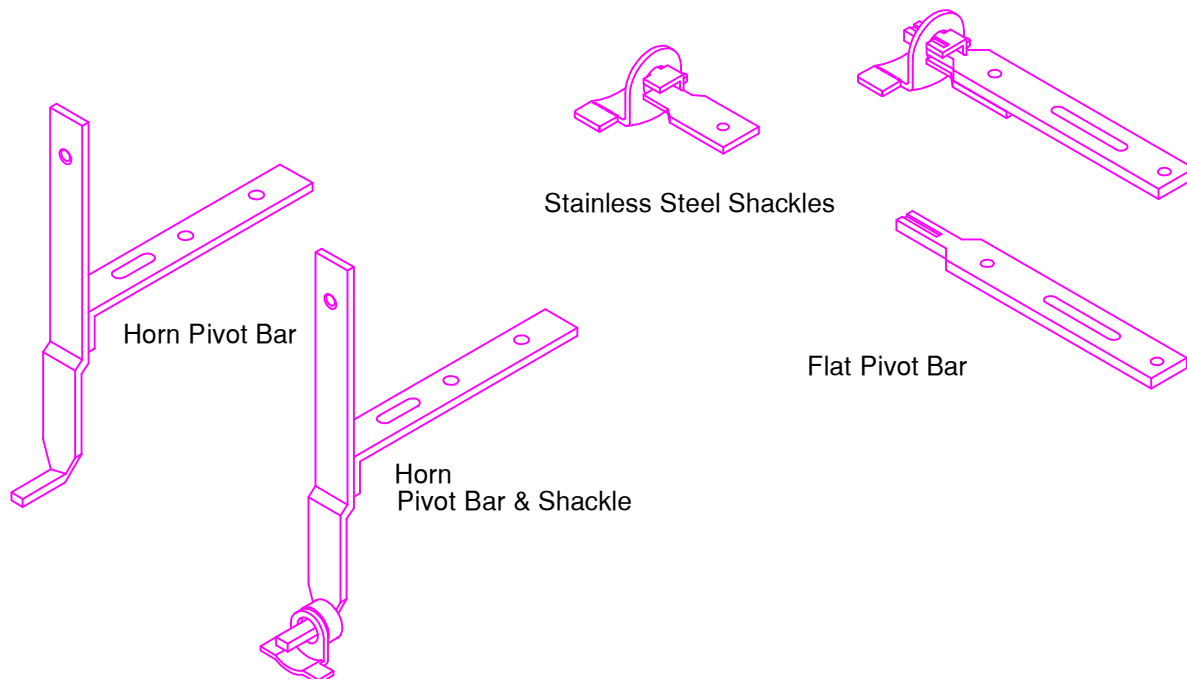
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Introduction to Standard Pivot Bars



Standard pivot bars are attached to the bottom of the sash and either have an integral shackle or fit into a shackle.

This system allows the sash to tilt in for cleaning purposes.

The shackle is a standard component, ensuring the sash cannot be removed during window operation. It also avoids the common problem of sash disengagement during transit.

Suitable for use with PVC-U, Timber and Aluminium sliding sash windows.

Fixing Details

PVC-U Windows

When using PVC-U windows, it is necessary for the fixings to be secured into the reinforcement to ensure a firm fixing. Use the appropriate Pivot bar for that particular system. Refer to the Standard Pivot bar matrix. (see page 6)

Timb-tilt windows

When using timber windows a rebate needs to be cut into the sash to accommodate the Pivot bar. Refer to Manual-0001.

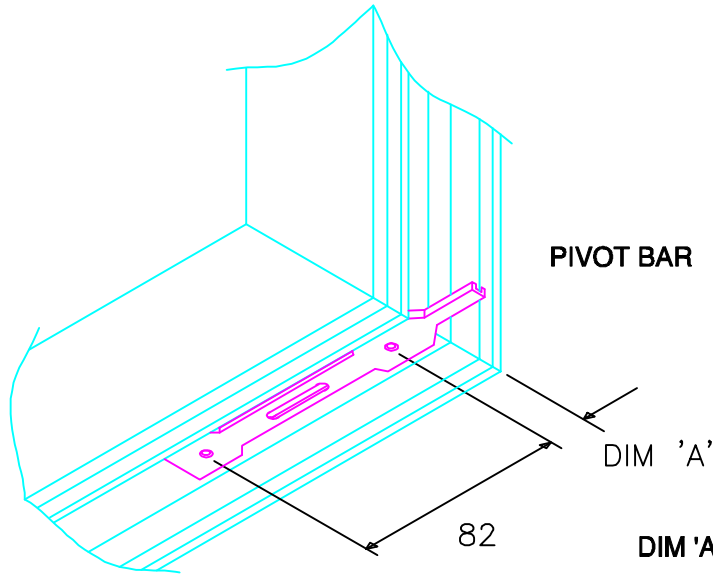
Corrosion Resistance

'Dacromet' finish gives 480 hours of corrosion resistance.

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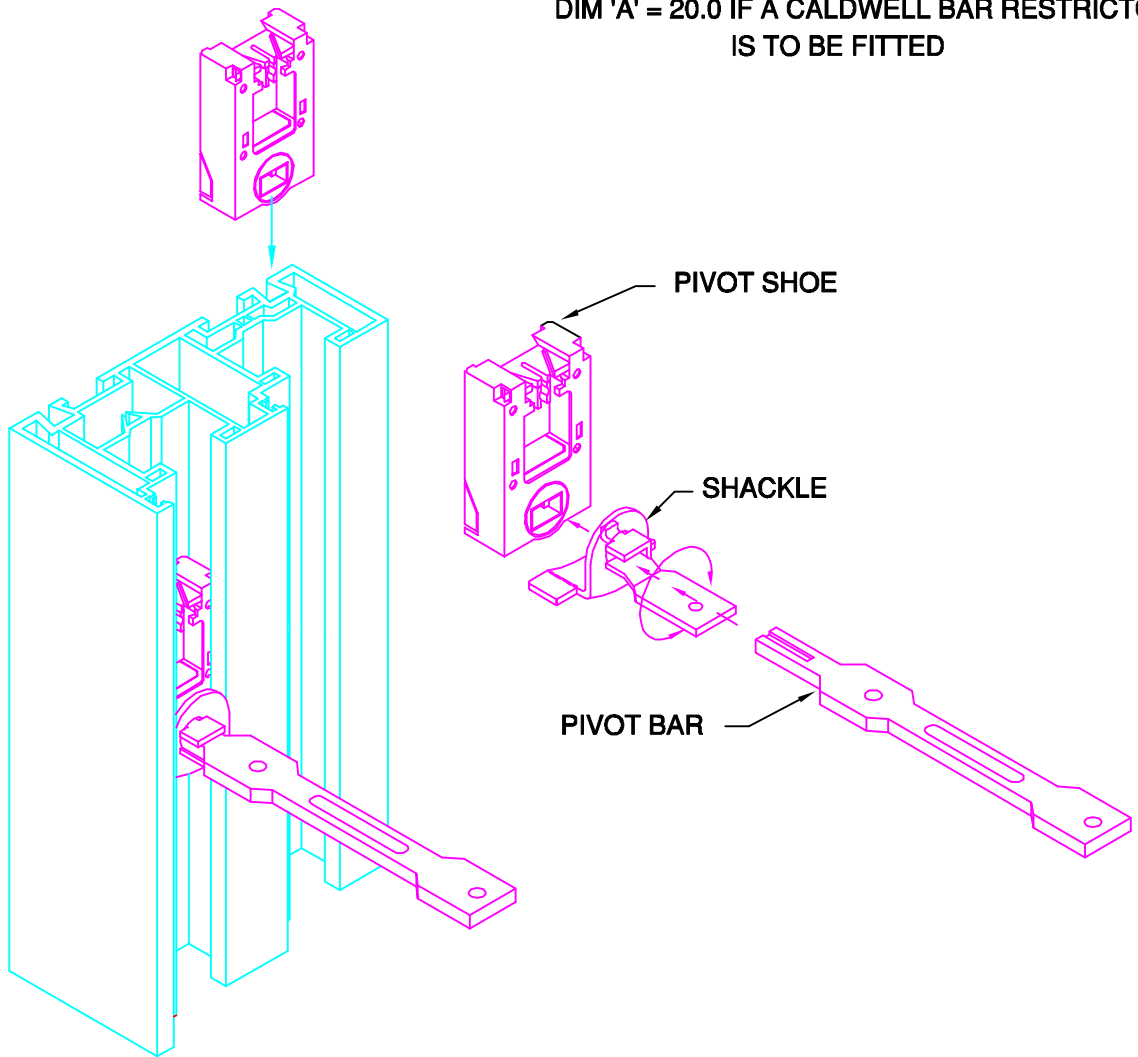
Standard Pivot bar & Shackle Application



Please ensure corner detail of sash is cleaned out flush for fitting of pivot bar.
(This applies to all Pivot Bar types)

PIVOT BAR (SHOWN AS EXAMPLE ONLY)

DIM 'A' = 21.0 IF NO RESTRICTOR IS FITTED
DIM 'A' = 20.0 IF A CALDWELL BAR RESTRICTOR IS TO BE FITTED



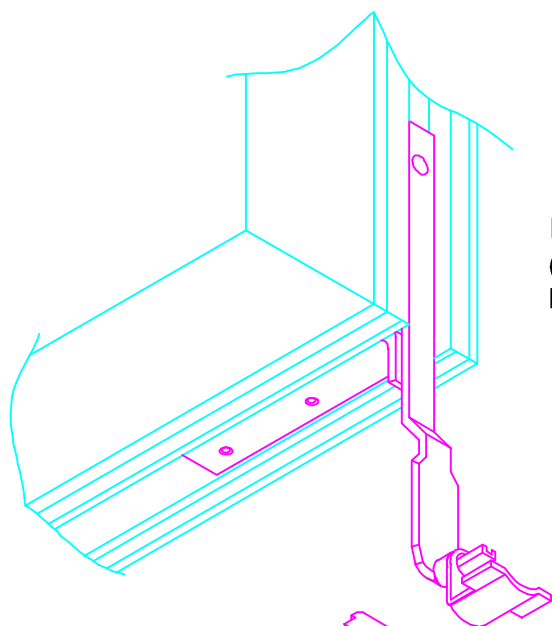
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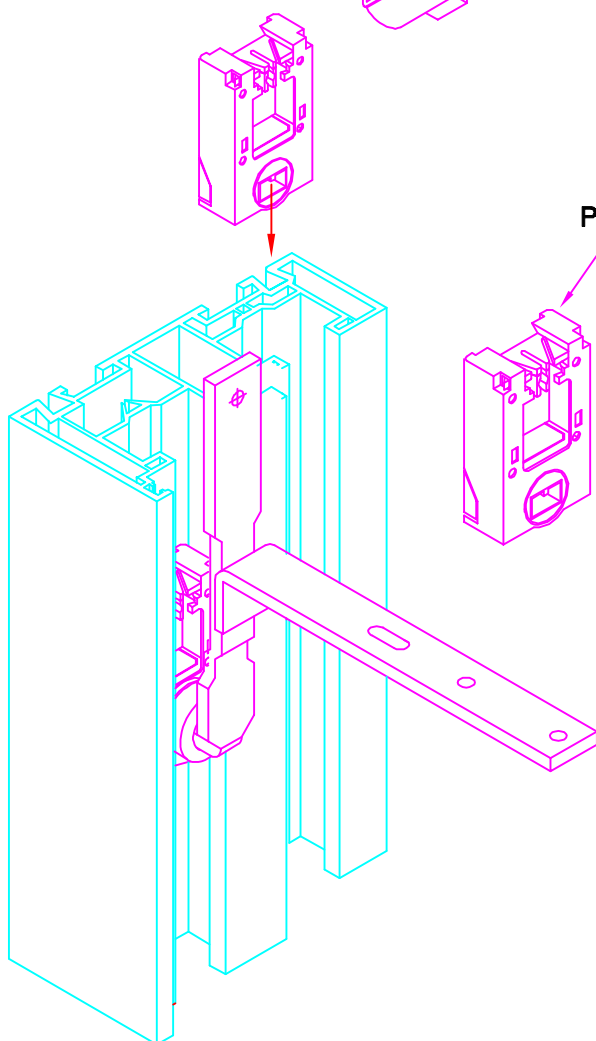
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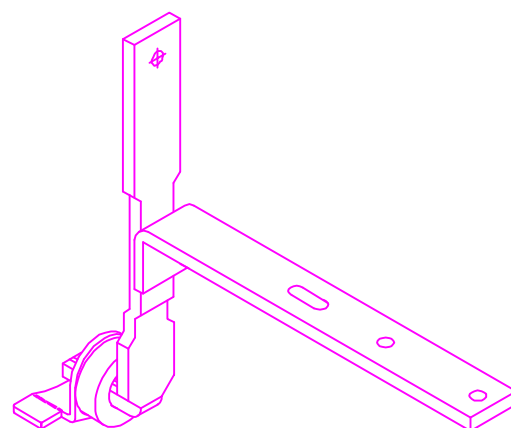
Horn Pivot bar & Shackle Application



PIVOT BAR ASSY
(SHOWN AS
EXAMPLE ONLY)



PIVOT SHOE

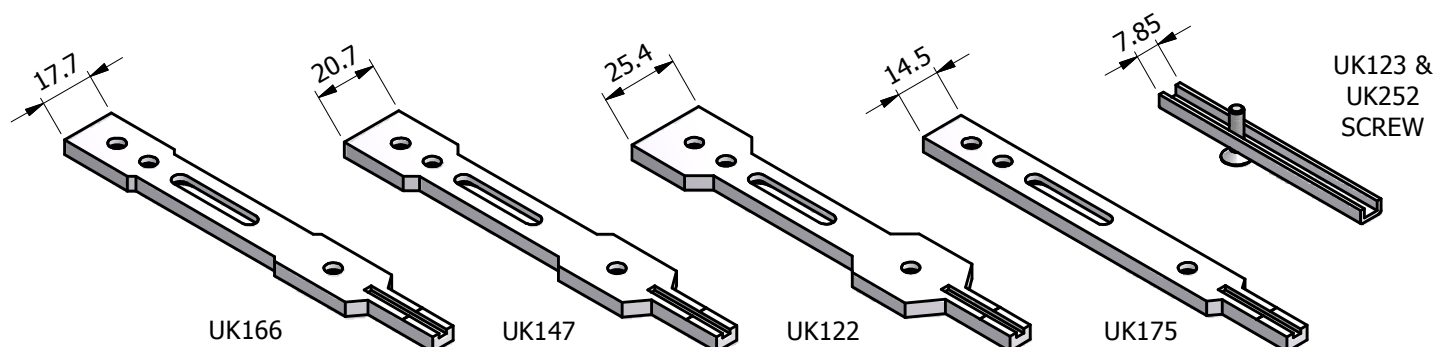


PIVOT BAR ASSY

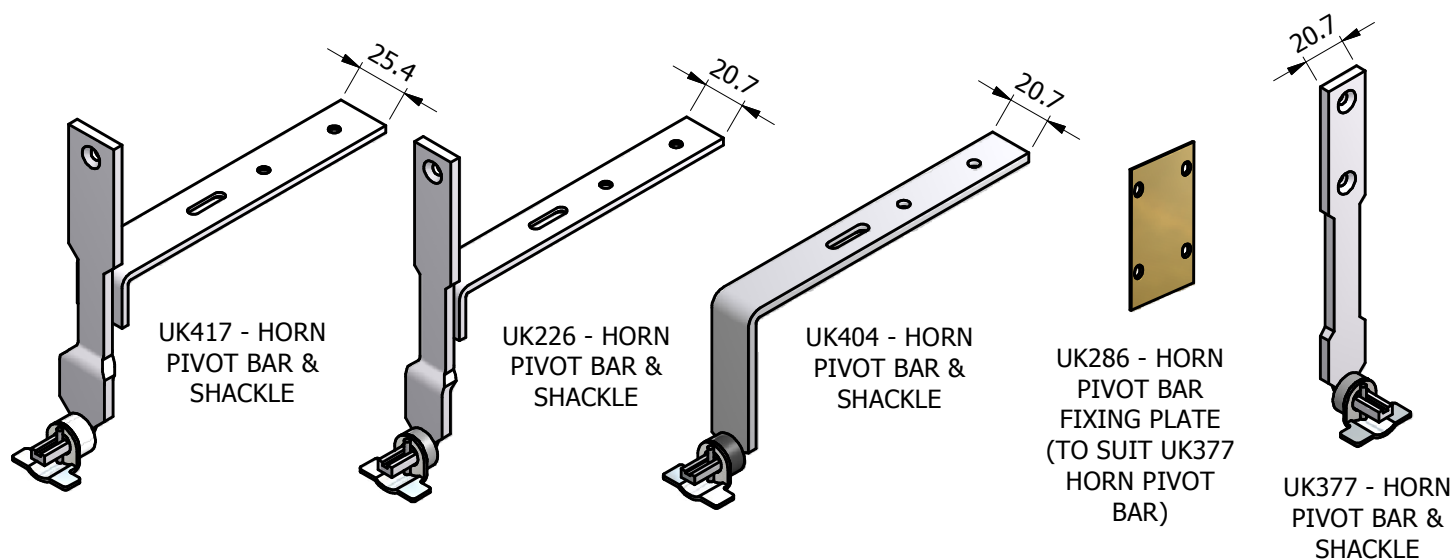
NOTE:
Shackle & Spacer are pre-assembled
on Pivot bar during manufacture.

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STANDARD PIVOT BAR & SHACKLE MATRIX



WINDOW SYSTEM	UPPER SASH PIVOT BARS		LOWER SASH PIVOT BARS	SHACKLE
	NO HORNS	WITH HORNS (INC. SHACKLE)		
ALCOA SYSTEM 80	UK123 & UK252		UK123 & UK252	UK220
DECEUNINCK	UK147	UK226	UK147	UK216
LB PLASTICS	UK166		UK166	UK217
MARSHALL TUFFLEX	UK175	UK222	UK175	UK216
PLUS PLAN	UK122	UK417	UK122	UK217
REHAU 719	UK147		UK147	UK217
REHAU HERITAGE MK1	UK147		UK147	UK217
REHAU HERITAGE MK2	UK147		UK147	UK217
SPECTUS RENAISSANCE	UK147	UK226	UK147	UK216
TIMB-A-TILT	UK166	UK377 & UK286	UK166	UK216
VEKA MATRIX	UK122		UK122	UK217
WHS HALO	UK147	UK404	UK147	UK216



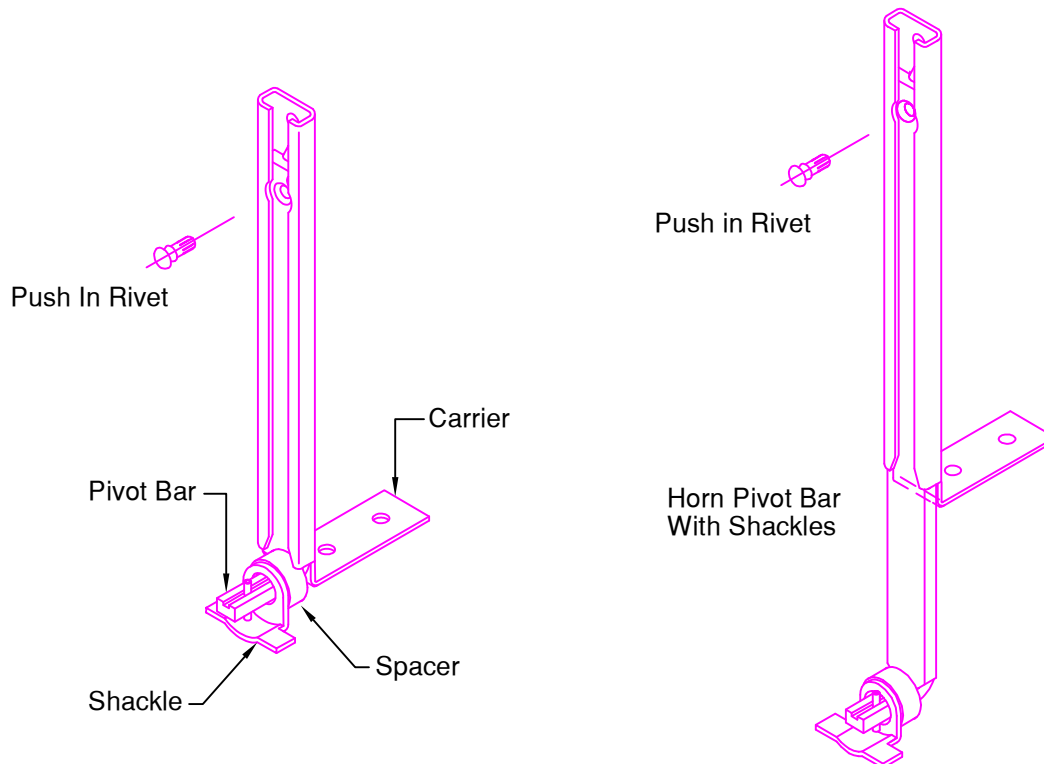
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Introduction to Slide in Pivot Bars



Slide in Pivot bars allow the window to be manufactured with the balances fitted in to the outer frame and the sashes to be installed on site.

Sashes simply slide into the frame and are held in position by the black nylon quick release push rivet. This also allows simple removal of the sash, for maintenance work.

Suitable for use with PVC-U, Timber and Aluminium sliding sash windows.

The shackle is an integral standard component, ensuring the sash cannot be removed during window operation. It also avoids the common problem of sash disengagement during transit.

Fixing Details

PVC-U Windows

When using PVC-U windows, it is necessary for the fixings to be secured into the reinforcement to ensure a firm fixing. Use the appropriate Pivot bar assembly for that particular system, see the Slide in Pivot bar matrix. (see page 11)

Timb-tilt windows

When using timber windows a rebate needs to be cut into the sash to accommodate the Pivot bar carrier. Refer to manual 0001.

Corrosion Resistance

'Dacromet' finish gives 480 hours of corrosion resistance.

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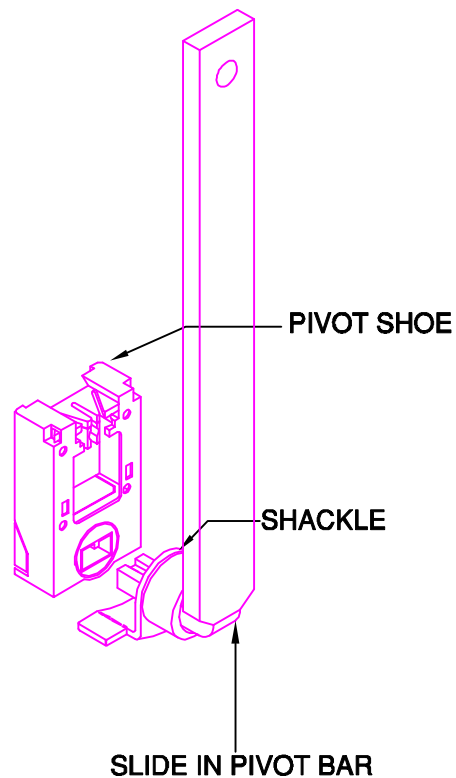
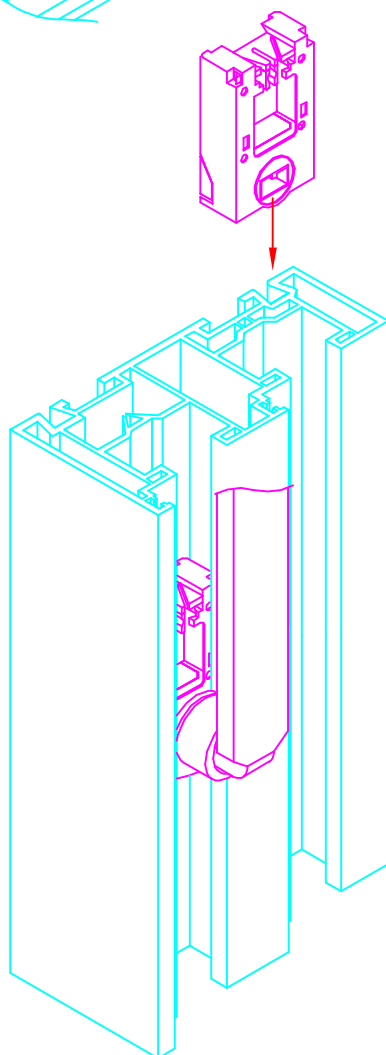
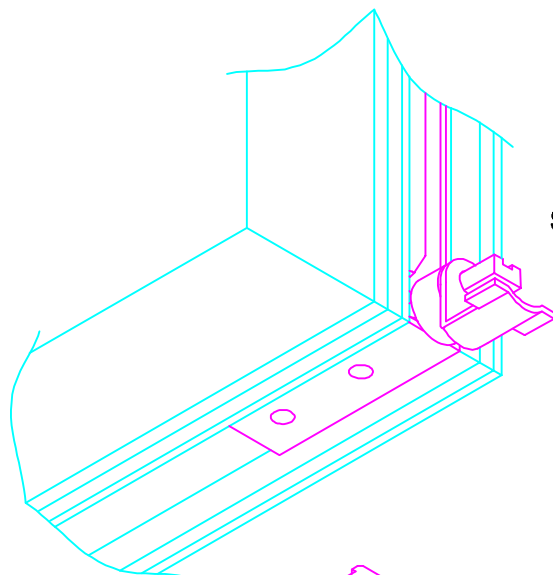
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Slide in Pivot bar & Shackle

Please ensure corner of sash is cleaned out flush for fitting of pivot bar. This will allow carrier to sit correctly in rebate.

SLIDE IN PIVOT BAR ASSEMBLY

Assemble pivot bars into shoes & slide into jamb profiles.
(As shown below)

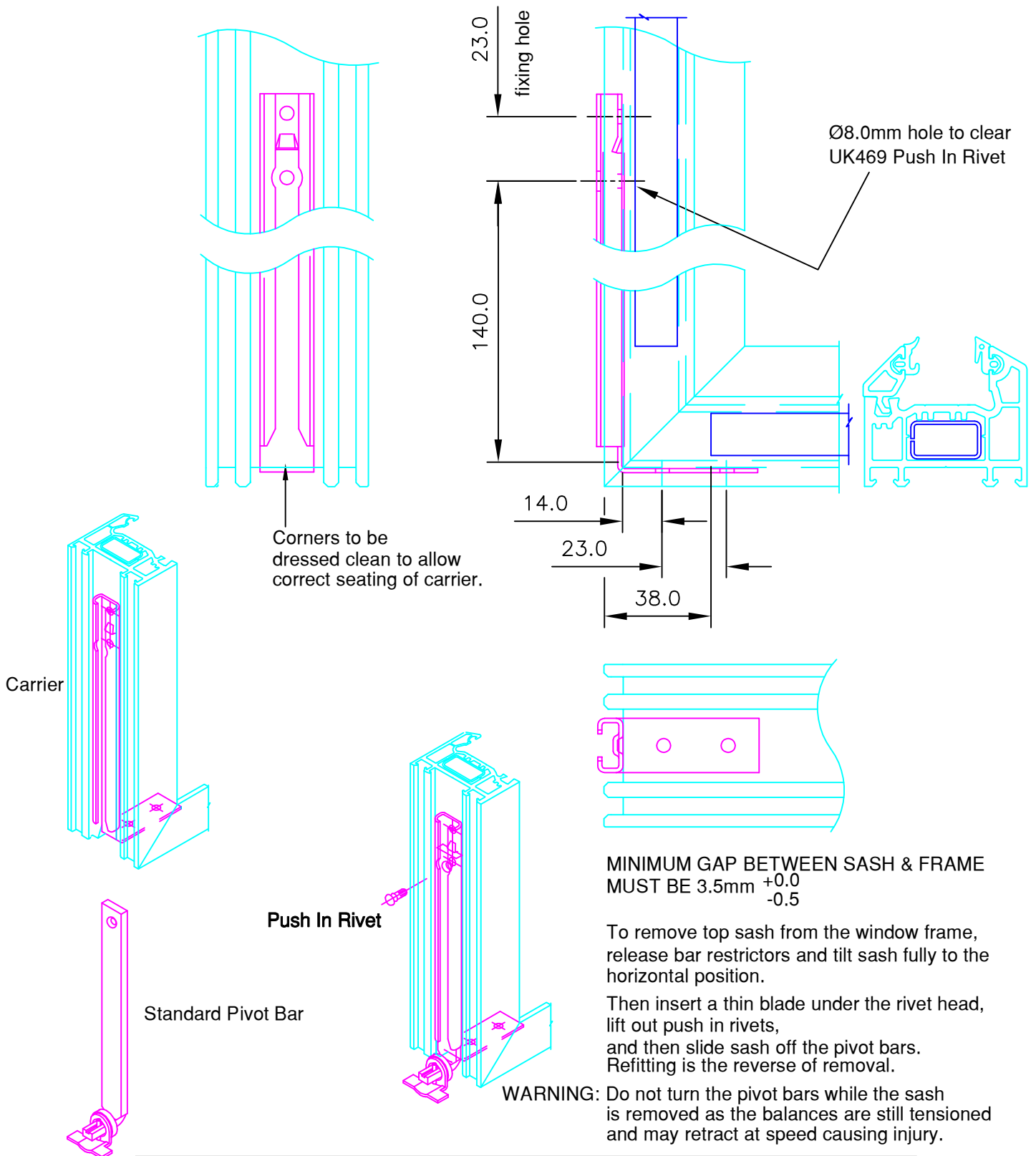


(SHOWN AS
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Slide in Pivot Bar Application



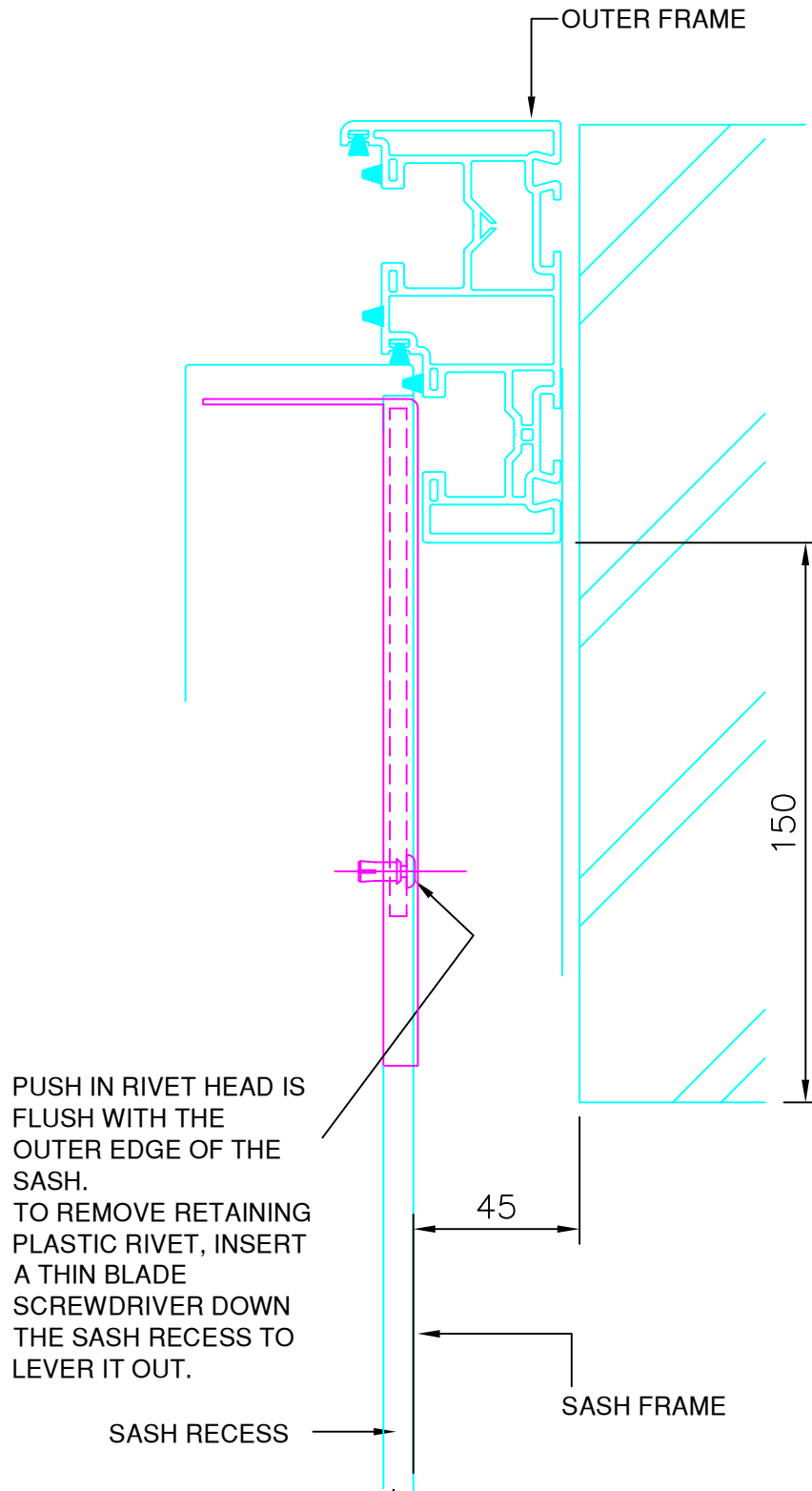
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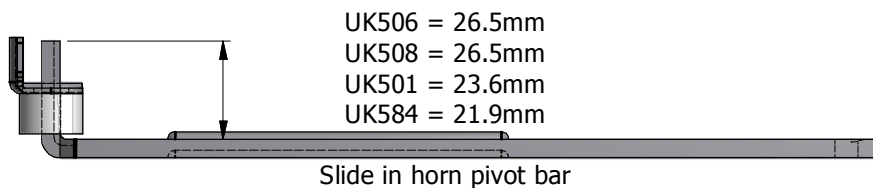
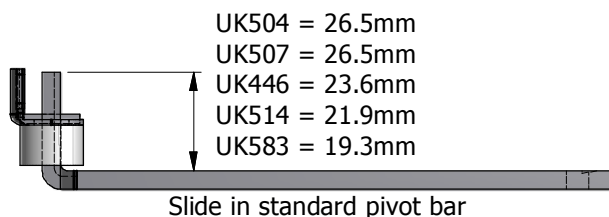
Vertical Sliding sash shown in Tilt position



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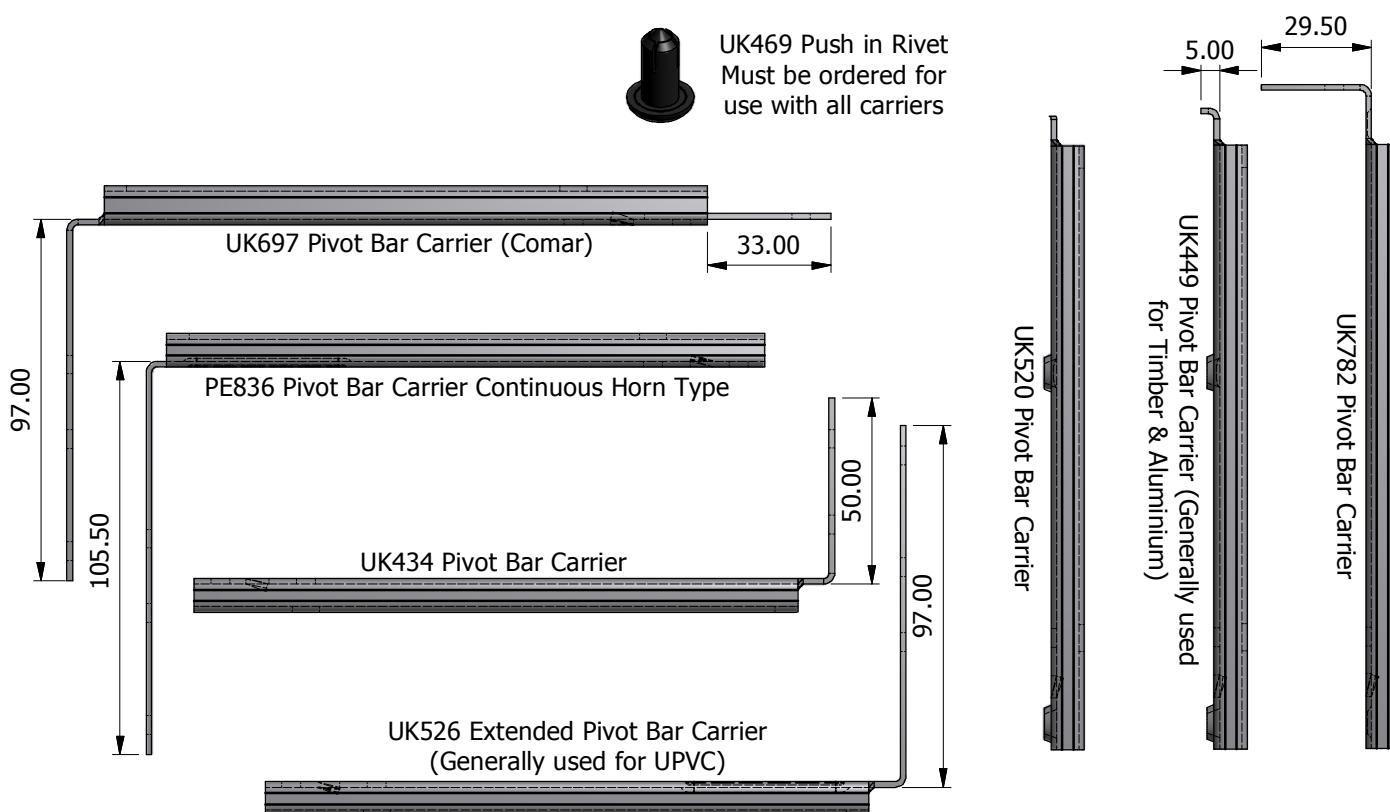
Slide in Pivot Bar Matrix



SYSTEM	HORNS		NO HORNS		SPACER COLOUR
	Slide in Assembly	Carrier	Slide in Assembly	Carrier	
Comar			UK608	UK697	GREY
Deceuninck	UK501	UK434	UK514	UK434	GREY
Eurocell	UK508	UK434	UK507	UK434	WHITE
Plastmo	UK508	UK434	UK507	UK434	WHITE
Rehau Heritage MK2			UK507	UK526	WHITE
Sapa			UK446	UK782	BLACK
Spectus	UK508	UK434	UK507	UK434	WHITE
Timb-a-Tilt	UK446	UK449	UK446	UK449	BLACK
Veka Matrix 2007	UK506	UK434	UK504	UK434	WHITE
WHS Halo	UK506	UK526	UK504	UK526	WHITE

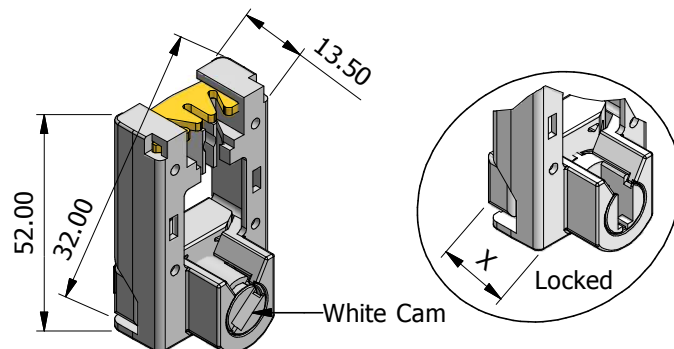
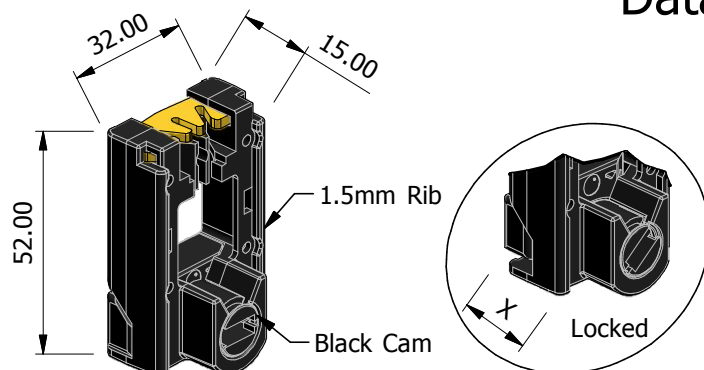


UK469 Push in Rivet
 Must be ordered for use with all carriers



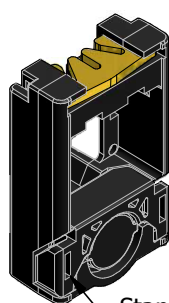
Lift Out Pivot Shoes PE695 & PE700

Datasheet

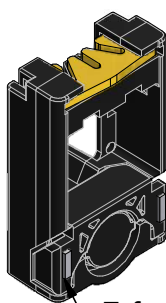


Part No.	Applications	Cam	Unlocked 'X'	Locked 'X'
PE695	Alumatilt Balances	Black	15.0 to 15.5mm	17.0 to 17.5mm
PE699	Ultralift & Torso Balances	Black	15.8 to 16.3mm	17.8 to 18.3mm

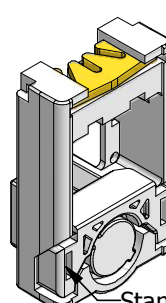
Part No.	Applications	Cam	Unlocked 'X'	Locked 'X'
PE700	Alumatilt Balances	White	13.5 to 14.0mm	15.5 to 16.0mm
PE704	Ultralift & Torso Balances	White	14.3 to 14.8mm	16.3 to 16.8mm



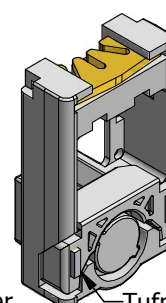
PE695



PE699



PE700



PE704

Standard Follower

Tufnol Brake Inserts

Standard Follower

Tufnol Brake Inserts

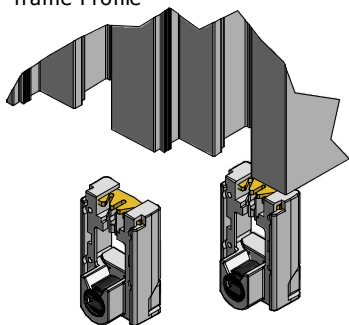
Window System	Pivot Shoe Type	Window Tolerance Required	Take Out Pivot Bar
		(Between Sash And Frame)	
Alcoa	PE695	3.5mm +0.00 -0.50mm	UK765
Comar 5Pi	PE700	3.5mm +0.00 -0.50mm	UK765
Deceunicek	PE695	3.5mm +0.00 -0.50mm	UK765
WHS System 10	PE695	3.5mm +0.00 -0.50mm	UK765
Plastmo	PE700	3.5mm +0.00 -0.50mm	UK765
Plusplan	PE700	3.5mm +0.00 -0.50mm	UK765
Rehau MK2 *	PE700	3.5mm +0.50 -0.00mm	UK765
Sapa	PE695	3.5mm +0.50 -0.00mm	UK765
Spectus	PE700	3.5mm +0.50 -0.50mm	UK765
Timb-a-tilt	PE695	3.5mm +0.00 -0.50mm	UK765
Veka	PE695	3.5mm +0.50 -0.50mm	UK765

IMPORTANT PLEASE NOTE THAT THESE ARE NOT SUITABLE FOR USE WITH THE REHAU SPRING LOADED HORN
FOR PIVOT BAR DETAILS REFER TO PIVOT BAR/TILT LATCH FABRICATORS MANUAL (MAN-0011)

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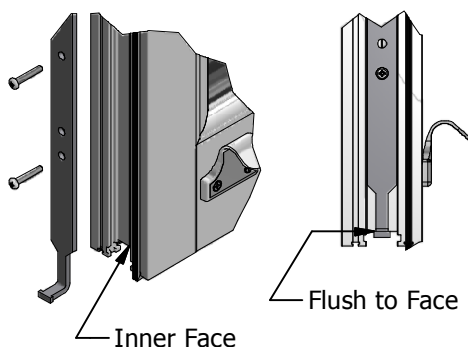
Lift Out Pivot Shoes PE695 & PE700 Fitting Instructions

Step 1. Slide Pivot Shoes into the frame Profile

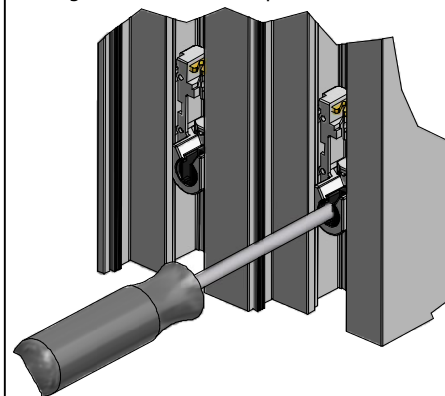


Note: If assembling once window has been installed. You will require an entry slot in the jamb channel of approx 34.00mm wide.

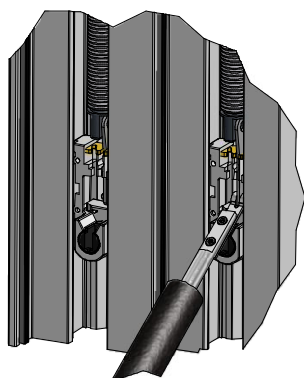
Step 2. Fix the UK765 Pivot bar flush to the internal face on the bottom of the sash. Ensure the hammer head profile is flush to the face as shown.



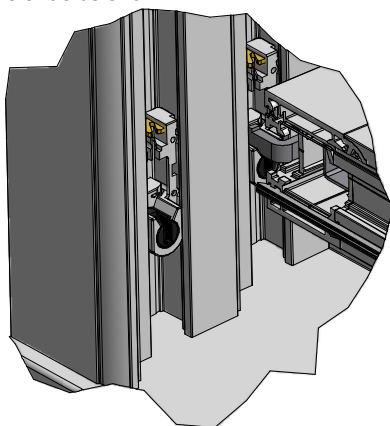
Step 3. Using an 8mm wide flat bladed screw driver, rotate the cam to the vertical position, locking the shoe into the profile.



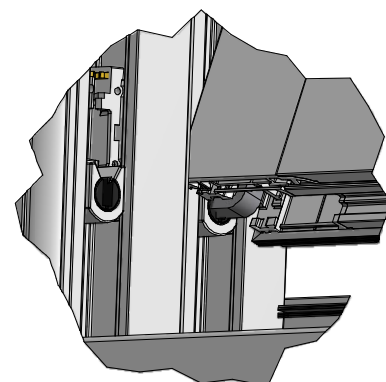
Step 4. Using a tensioning tool extend the balance and locate the top roll pin into the shoe.



Step 5. Locate the sash horizontally into the frame, locating the hammer head profile on the pivot bar into the shoe as shown.



Step 6. Once the sash has been located into the shoe, rotate the window to the upright position.

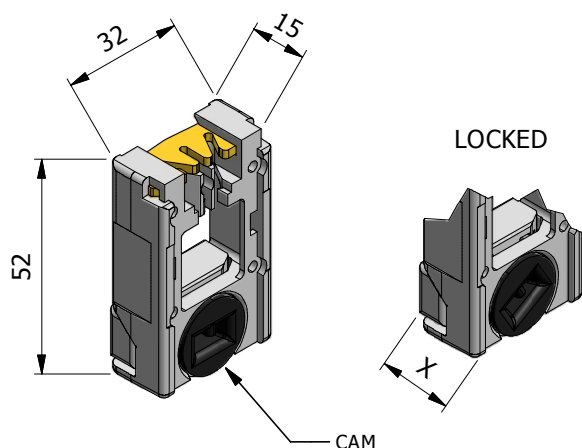


Window System	Pivot Shoe Type	Colour	Window Tolerance Required (Between Sash And Frame)	Take Out Pivot Bar
Alcoa	PE695	Black	3.5mm +0.00 -0.50mm	UK765
Comar 5Pi	PE700	White	3.5mm +0.00 -0.50mm	UK765
Deceunicek	PE695	Black	3.5mm +0.00 -0.50mm	UK765
WHS System 10	PE695	Black	3.5mm +0.00 -0.50mm	UK765
Plastmo	PE700	White	3.5mm +0.00 -0.50mm	UK765
Plusplan	PE700	White	3.5mm +0.00 -0.50mm	UK765
Rehau MK2 *	PE700	White	3.5mm +0.50 -0.00mm	UK765
Sapa	PE695	Black	3.5mm +0.50 -0.00mm	UK765
Spectus	PE700	White	3.5mm +0.50 -0.50mm	UK765
Timb-a-tilt	PE695	Black	3.5mm +0.00 -0.50mm	UK765
Veka	PE695	Black	3.5mm +0.50 -0.50mm	UK765

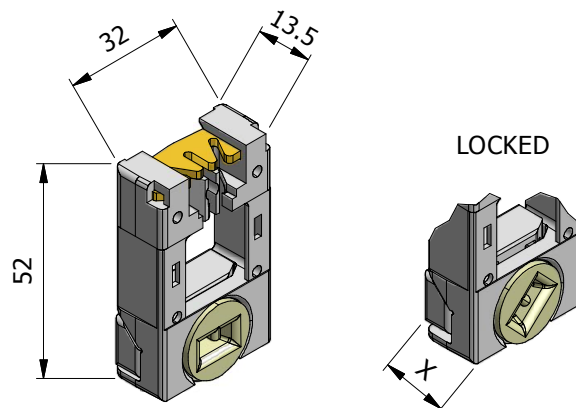
IMPORTANT PLEASE NOTE THAT THIS IS NOT SUITABLE FOR USE WITH THE REHAU SPRING LOADED HORN

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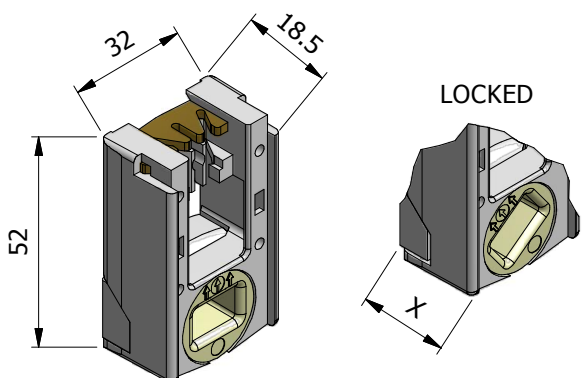
Accessories - Pivot Shoes



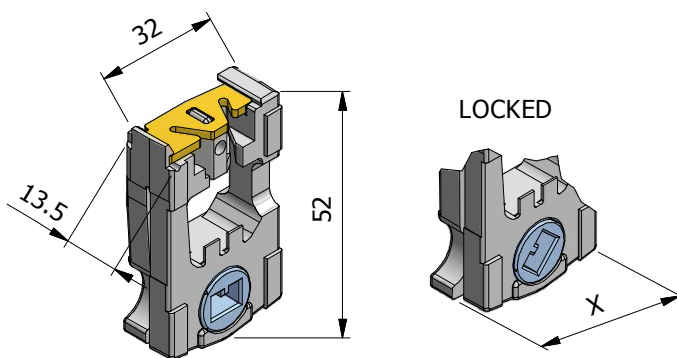
Part No.	Applications	Cam Colour	Un-Locked 'X'	Locked 'X'
16H70	Alumatilt Balances	Black	15.0mm	17.0mm
UK132	Ultralift & Torso Balances	Black	15.8mm	17.8mm



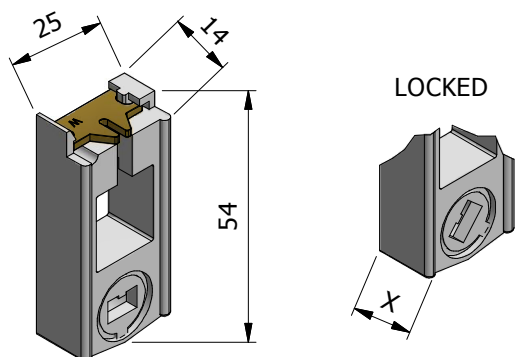
Part No.	Applications	Cam Colour	Un-Locked 'X'	Locked 'X'
16T85	Alumatilt Balances	Natural	13.5mm	15.5mm
UK133	Ultralift & Torso Balances	Natural	14.3mm	16.3mm



Part No.	Applications	Cam Colour	Un-Locked 'X'	Locked 'X'
16H96	Alumatilt Balances	Natural	18.5mm	20.5mm



Part No.	Applications	Cam Colour	Un-Locked 'X'	Locked 'X'
16T45	Torso Balances	Blue	32.0mm	34.0mm



Part No.	Applications	Cam Colour	Un-Locked 'X'	Locked 'X'
16T25	All Balances	White	14.0mm	15.5mm

NOTE:
 UK132 & UK133 HAVE TUFNOL
 INSERTS ADDED TO ENHANCE THE
 CAPABILITY OF MAINTAINING A
 STABLE POSITION OF THE SASH
 WHEN IN THE TILT POSITION

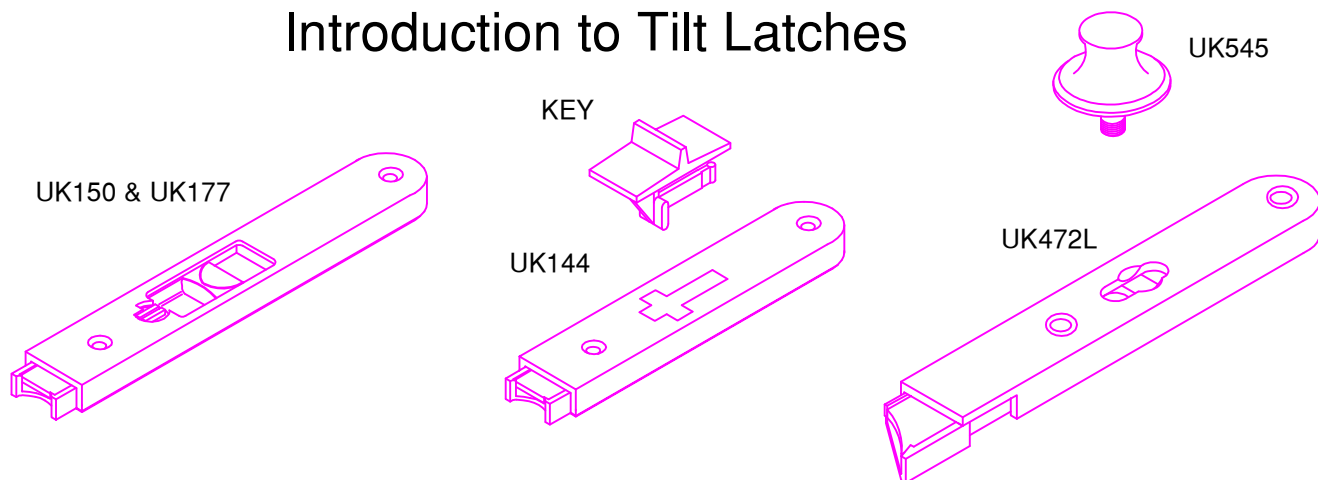
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Introduction to Tilt Latches



Tilt Latches provide a secure method of retaining the sashes of vertical sliding windows in the upright position, whilst permitting tilting of the sash when required. They engage with the jamb profile to provide an easy sliding movement without the risk of the sash inadvertently dropping into the tilted position.

The tilt latches are simply released by sliding back the integral release mechanism, or the external button ordered with the latch.

UK150 is usually used on Timber windows. UK144 on PVC-U windows.

UK472L & UK472R are used universally.

UK448 dummy latch is used when tilting of the sash is not required.

79455 & 79456 are used by Alcoa aluminium window.

Refer to the Tilt Latch Matrix for full details (Page 14).

Fixing Details

PVC-U Windows

When using PVC-U windows, it is necessary to use the appropriate latch for that particular system. Refer to the Tilt Latch Matrix (see page 14)

Timber Windows

When using timber windows, the slot to take the tilt latch will need to be routed out of the top rail. Refer to sash preparation in Manual-0001.

Finish Details

All Tilt Latches are available in White.

UK150, UK177, UK144, UK448 are also available in Brown.

UK150, UK144, 79455, 79456 are also available in Black.

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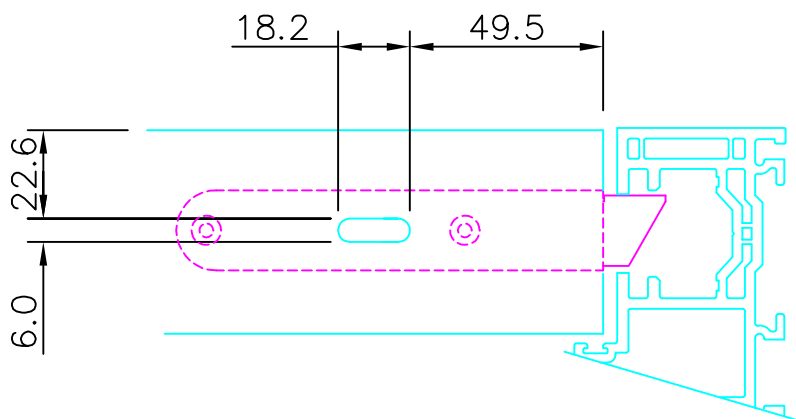
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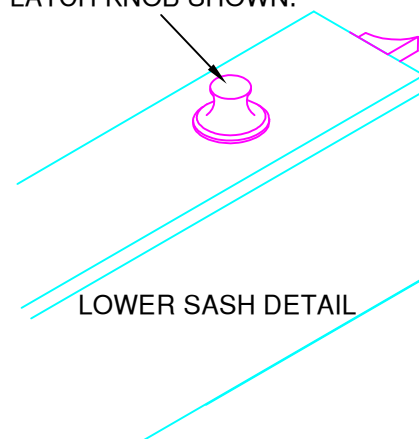
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Application detail for UK472 tilt latch

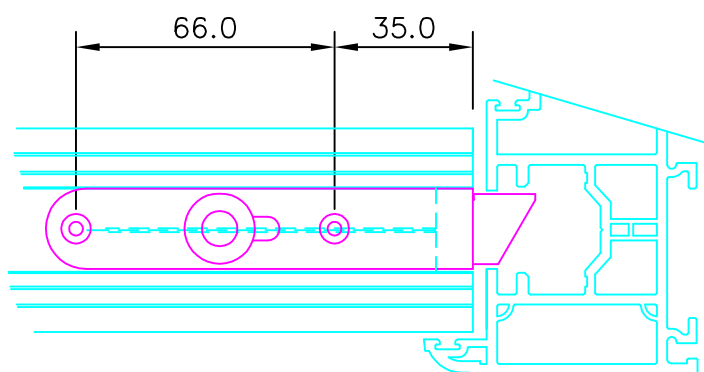
SLOT POSITION ON INTERLOCK FOR UK472 TILT LATCH



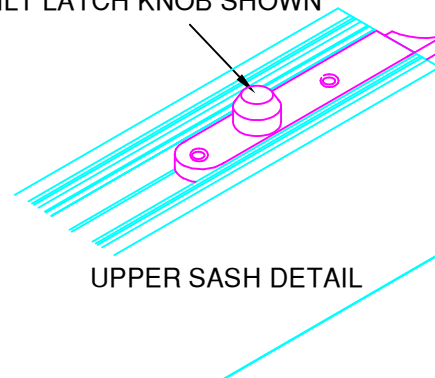
UK545 DECORATIVE
TILT LATCH KNOB SHOWN.



HOLE POSITION FOR UK472 TILT LATCH



UK499 STANDARD
TILT LATCH KNOB SHOWN

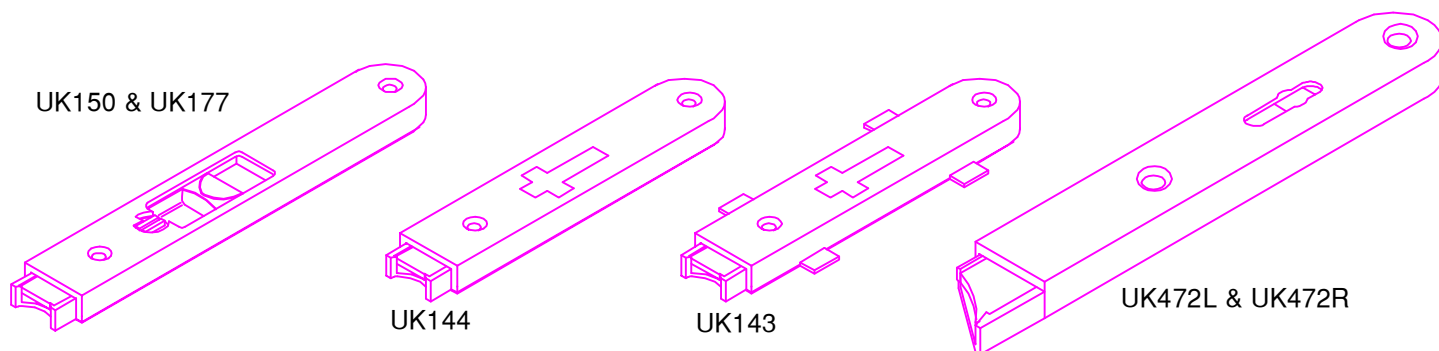


THE HOLE POSITIONS OF THE UK472 TILT LATCH ARE IN THE SAME POSITION FOR BOTH TOP AND BOTTOM SASHES.

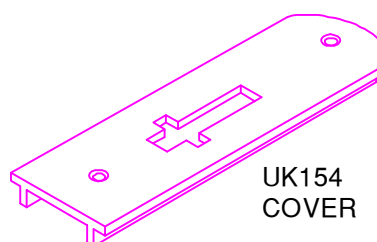
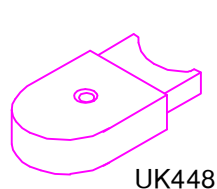
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Telephone 024 76437900

Tilt Latch Matrix



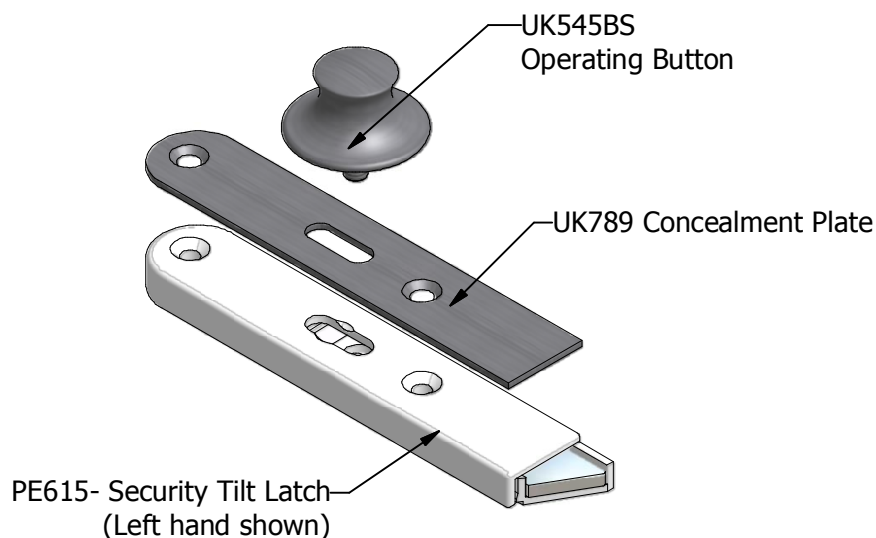
Window System	UK144	UK150	UK177	UK472L & UK472R	UK143 & UK154	UK448
Arden Kinward		✓				✓
Deceuninck	✓					
LB Plastics	✓					
Magnet Sliding Sash PLUS			✓			
Plus Plan		✓				
Plastmo	✓			✓		
Rehau 719	✓					
Rehau Heritage MK1	✓			✓		
Rehau Heritage MK2				✓		
Spectus Renaissance				✓		
Timb-A-Tilt		✓		✓		
Veka Matrix					✓	
WHS Halo				✓		
WHS Halo (Masterframe)				✓		



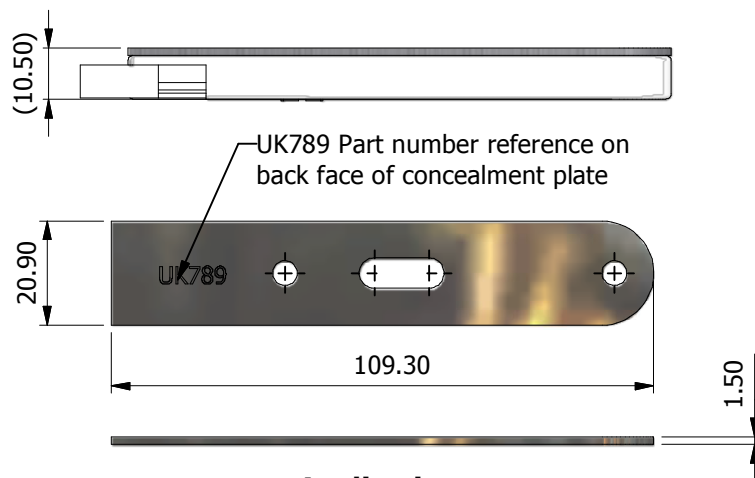
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Tilt latch Concealment Plates

Typical Assembly Example



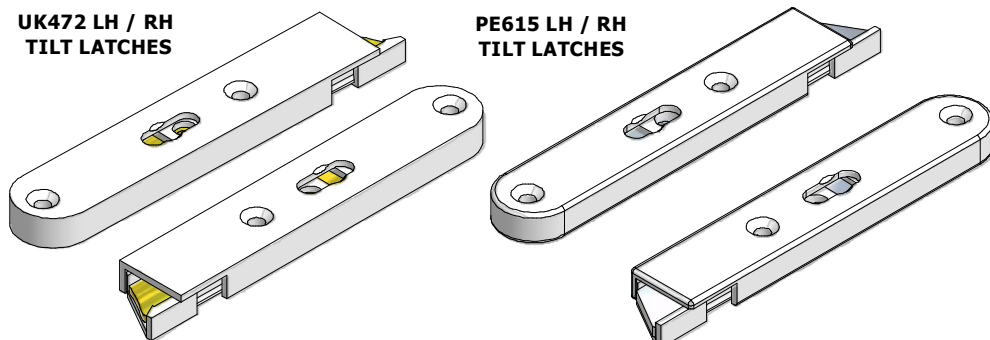
Dimensional References



Applications

UK472 LH / RH
TILT LATCHES

PE615 LH / RH
TILT LATCHES

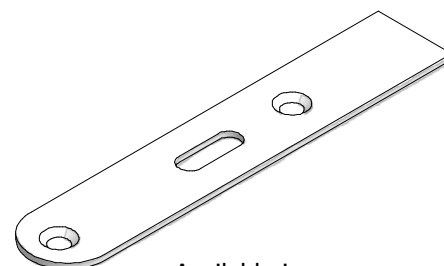


Designed to fit UK472 LH & RH Tilt Latches and PE615 LH & RH Security Tilt Latches

Painted Finish Options

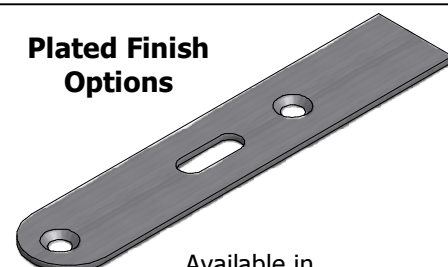


Available in
UK789B - Brown Powder Coat Finish



Available in
UK789HIPCAWHITE - White Powder Coat Finish

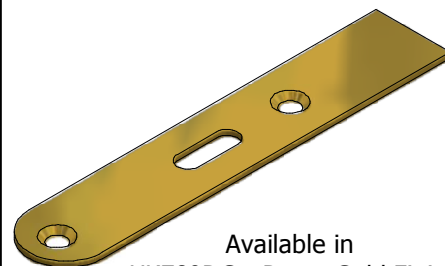
Plated Finish Options



Available in
UK789BS - Brushed Stainless Finish



Available in
UK789CH - Chrome Finish



Available in
UK789DG - Dawn Gold Finish

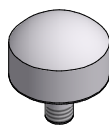
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CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

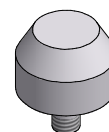
Telephone 024 7643 7900

Tilt Latch Operating Knobs



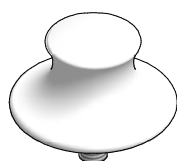
All customers

UK499ANSAT	SATIN ANODISED
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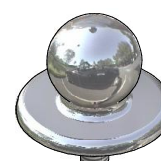
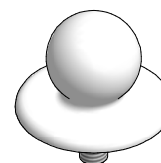
Masterframe/WHS Halo

UK482ANSAT	SATIN ANODISED
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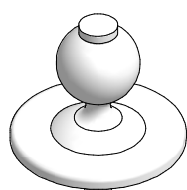
All customers

UK545HIPCAWHITE	PC WHITE
UK545DG	DAWN GOLD FINISH
UK545CH	CHROME FINISH



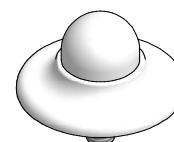
Masterframe

UK479W	PC WHITE
UK479DG	DAWN GOLD FINISH
UK479CH	CHROME FINISH



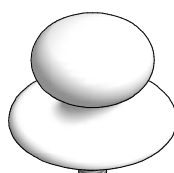
WHS Halo

UK493HIPCAWHITE	PC WHITE
UK493DG	DAWN GOLD FINISH
UK493CH	CHROME FINISH



H.W. Plastics/Spectus

UK498HIPCAWHITE	PC WHITE
UK498DG	DAWN GOLD FINISH
UK498CH	CHROME FINISH



Rehau

AVAILABLE FROM REHAU ONLY

UK654HIPCAWHITE	PC WHITE
UK654DG	DAWN GOLD FINISH
UK654CH	CHROME FINISH

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CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

TROUBLESHOOTING PIVOT BARS

PROBLEM	CAUSE	SOLUTION
Sash will not tilt.	Pivot bar and shackle not properly engaged into pivot shoe.	Lift or lower the pivot shoe, so that the pivot bar leg slides into the cam on the pivot shoe.

TROUBLESHOOTING TILT LATCHES

PROBLEM	CAUSE	SOLUTION
Sash will not stay in upright position.	Tilt latches not properly engaged into the outer frame.	Push sash hard against the gaskets, whilst pulling the operating knob back. Then release knob, so that the tongue of the latch goes into the outer frame.

Pivot Bar & Tilt Latch order form

Company Name	Order No.
Delivery Address	
	Date
	Required Delivery Date
Tel No.	Contact
Fax No.	

ACCESSORIES

Please enter QUANTITY required in boxes provided:

Standard Pivot Bars

UK122		UK123		UK147		UK166		UK175		UK252	
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Standard Horn Pivot Bars

UK222		UK226		UK286		UK377		UK404		UK417	
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Standard Pivot Bar Shackles

UK216		UK217		UK220	
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Slide in Pivot Bar Carriers

UK434		UK449		UK526	
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Slide in Pivot Bar

UK446		UK504		UK507		UK514		UK583	
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Slide in Horn Pivot Bar

UK501		UK506		UK508		UK584	
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Push in Rivet

UK469	
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Tilt Latches

Part Ref.	White	Brown	Black
UK144			
UK150			
UK177			
UK472L		N/A	N/A
UK472R		N/A	N/A
UK143			
UK154		N/A	N/A
UK448			N/A

Upper sash Tilt Latch Operating Knob (Suitable for UK472 tilt latches only)

UK482		UK499	
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Only available in silver anodised

Lower sash Tilt Latch Operating Knobs (Suitable for UK472 tilt latches only)

Part Ref.	Chrome	Dawn Gold	Gold	White
UK479				
UK493				
UK498				
UK545				

THIS ORDER IS ACCEPTED ONLY UNDER OUR CURRENT 'TERMS & CONDITIONS OF SALE' COPIES AVAILABLE UPON REQUEST.

AUTHORITIES



All Caldwell products are manufactured according to BS EN ISO 9001:2008 certified Quality Management Systems.

Where product standards do not exist Caldwell have set in house procedures.

Further information on specific testing is often available from our technical department.



Caldwell are also members of The Council for Aluminium in Building (CAB) which brings together three existing trade associations, the Architectural Aluminium Association, The Patent Glazing Contractors Association and the Aluminium Window Association, into a unified voice.

