













WINDOW TECHNOLOGY



UNITAS



EN Horizontal-Pivot and **Vertical-Pivot hardware**

Operation and maintenance instructions







Horizontal-Pivot and Vertical-Pivot hardware



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Please hand this document over to the user!



1. Safety instructions

1.1 Explanation of warning symbols

A DANGER

DANGER denotes a dangerous situation which, if ignored, could lead to death or serious injury.

A WARNING

WARNING denotes a dangerous situation which, if ignored, could lead to death or serious injury.

A CAUTION

CAUTION denotes a dangerous situation which, if ignored, could lead to injuries.

ATTENTION

ATTENTION denotes a situation which could lead to property damage.

NOTE

NOTE denotes a statement which is informative in nature.

Horizontal-Pivot and Vertical-Pivot hardware



1.2 Safety instructions







Risk of falling out of the window when open! Do not leave the window unattended when it is open!







Risk of crushing and entrapment. Be sure that all limbs are clear of the area between the sash and frame when closing the window.







Risk of injury from an uncontrolled movement of the sash caused by a gust of wind. Close and lock the window when wind or draughts are present





Damage to the window caused by opening the sash too wide. Do not push the sash against the reveal.







Damage to the window caused by excessive loading of the sash. Do not put any additional weight on the sash.







Damage to the window caused by objects. Do not wedge or prop the sash by placing an object between sash and frame.



Window manufacturers must draw the attention of building owners and end-users to the maintenance and care instructions.



NOTE

We recommend that a service contract be concluded between the window fabricator and the building owner or end user.

2. Commissioning

Make sure before commissioning that the hardware components are adequately cleaned and greased in accordance with the operating and maintenance instructions and have been adjusted correctly.

Remove contamination due to building materials (construction dust, gypsum plaster, cement, etc.) or similar materials before setting with water.

Observe the specifications in Chapter 4 "Maintenance and cleaning".

3. Operation

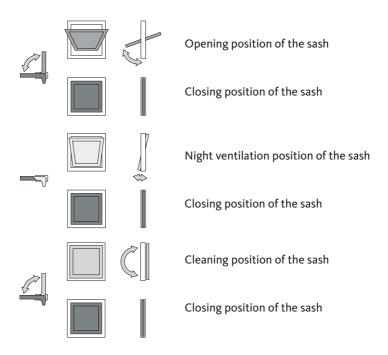
The functionality of the window hardware and the lifetime of your window mainly depends on its operation, maintenance and care. Operate the sash at a moderate speed. Guide the sash smoothly without jolting until it comes to a standstill in the required position. Make sure that the sash never slams shut or swings open uncontrollably.

Horizontal-Pivot and Vertical-Pivot hardware



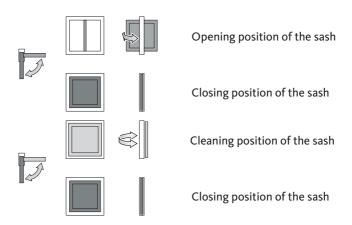
3.2 Horizontal-Pivot hardware

The following symbols depict various window handle settings and the resulting positions of the Horizontal-Pivot sash.



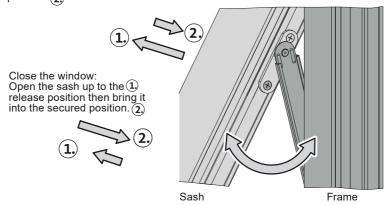
3.1 Vertical-Pivot hardware

The following symbols depict various window handle settings and the resulting positions of the Vertical-Pivot sash.



3.3 Opening and closing the Horizontal-Pivot window with latchable opening restrictor

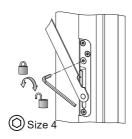
Open the window: Open the sash up to the release position (1), then bring it into the engaged ventilation position. (2)



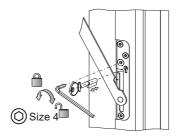
Horizontal-Pivot and Vertical-Pivot hardware



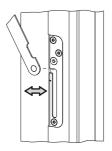
3.4 Attaching and detaching the rebate and limiting stays



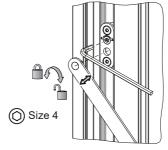
Locking or unlocking the rebate stay 27



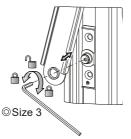
Locking or unlocking the lockable rebate stay 27



Attaching/detaching rebate stay 27 or lockable rebate stay 27



Rebate stay 28 or limiting stay K-13393



Latchable opening restrictor



3.5 Cleaning position of sash

You can clean the outside of the sash in the cleaning position conveniently from the interior.

- Open the sash. To do this with UNITAS 10 and UNITAS 10 Bo, deactivate the 22° detent (see page 17).
- Detach the rebate stay and limiting stay or the latchable opening restrictor.
- Turn the sash by hand slowly through 180° to the cleaning position.
- Secure the sash by allowing the detent pin to engage at 180°.

Close the sash in the reverse order.

Horizontal-Pivot and Vertical-Pivot hardware



4. Maintenance and cleaning

4.1 Inspection

Check all safety-relevant hardware components are securely fastened and check for wear.

 Check for loose fixing screws. Have loose fixing screws retightened with a suitable tool.

ATTENTION

Avoid overtightening the screws when retightening!

- Have worn/defective hardware components or overtightened screws replaced by a specialist company.
- It must always be possible to turn windows into the frame without resistance.

NOTE

We recommend that any later adjustments on the window be carried out by a specialist.

	Specialist company	End user
Check security-relevant hardware components are securely fastened.		
Check security-relevant hardware components for wear.		
Check the function of all moving parts.		
Check the function of all locking points.		
Retighten fixing screws if required.		
Replace damaged screws.		
Replace parts if necessary.		
Grease the locking and sliding points with GU service grease H-01960.		



A WARNING	The horizontal pivots should not be greased or oiled.
NOTE	Regularly check the surface of the window and glazing and have any damage repaired.
NOTE	The window gaskets must not be painted over or cleaned with aggressive agents.

Horizontal-Pivot and Vertical-Pivot hardware



4.2 Maintenance

Horizontal-Pivot or Vertical-Pivot hardware by Gretsch-Unitas Baubeschläge GmbH is fitted to your windows.

Windows are subject to normal wear and tear.



If maintenance work is not carried out correctly this could lead to serious injury and/or property damage!

To ensure maintenance is carried out properly, please observe the following:

- Make sure there is enough room to carry out the assembly before starting work.
- Make sure the area around the window is clean and tidy.
- Secure the window to prevent it from opening or slamming shut uncontrollably.
- Do not unhang the sash when carrying out maintenance. The sash must be unhung and rehung by an expert.
- Check all hardware components at regular intervals for damage and warping.

Pay particular attention to safety-relevant hardware components such as central locking system components and horizontal or vertical pivots.

The maintenance intervals which must be adhered to are listed in the following table:



Maintenance interval	General lubricating point C (see hardware overview)
Schools or hotels *	every 6-12 months
Administrative or public buildings	every 6-12 months
Residential buildings	annually
* In coastal regions or areas in which wind	

we recommend maintenance be carried out every 3 months

Inspection and maintenance must be carried out according to the specifications and documented accordingly.

NOTE

If it cannot be verified that maintenance has been carried out, no guarantee will be provided.

NOTE

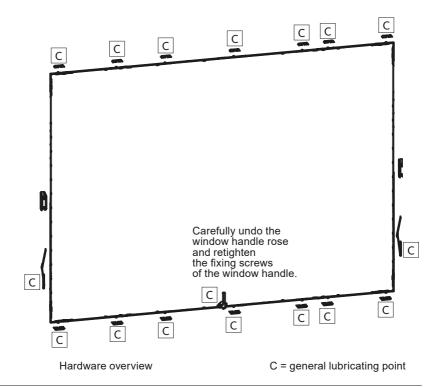
Remove any discharged or excess grease at lubricating points and dispose of it in accordance with the applicable local regulations.

We recommend you conclude a service contract.

If the window cannot be operated safely because a fault has occurred, get in touch with an expert without delay.

Horizontal-Pivot and Vertical-Pivot hardware

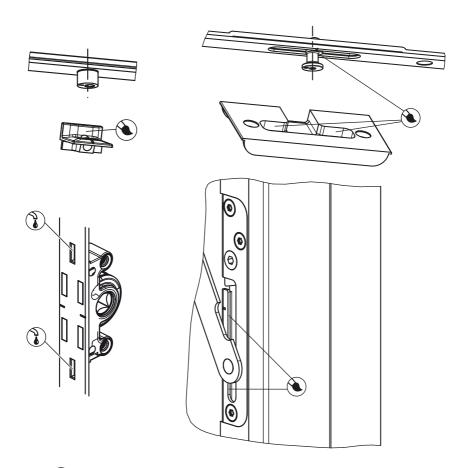




NOTE

The hardware overview shows the location of possible lubricating points and does not necessarily accurately reflect the actual hardware installation. The number of lubricating points varies depending on the size and format of the window.

Greasing and lubricating the general lubricating points C



- Grease the locking points, sliding and bearing points with GU service grease H-01960.
- Oil the marked spots with the GU-BKS high-performance spray B 9780 001.

Horizontal-Pivot and Vertical-Pivot hardware



4.3 Care

- Only use mild ph-neutral cleaner in diluted form for cleaning!
- Never use sharp objects, scouring agents or aggressive cleaning detergents (e.g. vinegar or cleaners containing acid) as they could adversely affect the corrosion protection of the hardware!
- During cleaning make sure that water does not enter the hardware.
- Once you have cleaned the hardware, thoroughly dry it and gently oil the surface by wiping it with a soft lint-free cloth impregnated with GU-BKS high-performance spray B 9780 0001.
- It is essential to avoid aggressive vapours, e.g. from acetic acid, ammonia, chlorine, tannic acid, etc, forming in the vicinity of the window
- Do not use vinegar or acid-curing sealants. These sealants and the vapours they produce may corrode the surface of the hardware.
- Promptly remove all contamination, making sure no residue is left behind, as otherwise this could affect the function and surface protection of the hardware.
- When applying a surface treatment by painting or varnishing the window, avoid the hardware components and prevent these from contamination by the treatment described above.

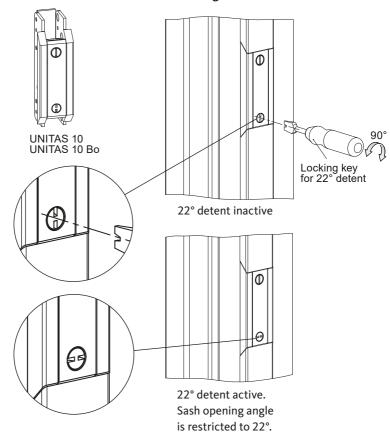


4.4 Adjustment

NOTE

We recommend that any later adjustments on the window be carried out by a specialist.

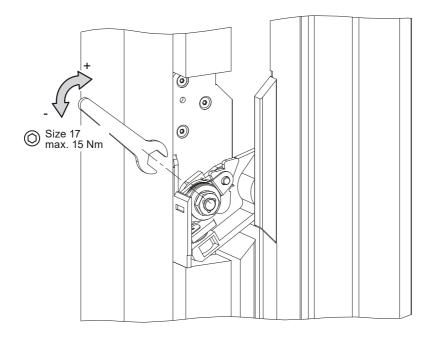
4.4.1 Adjusting a Horizontal-Pivot window UNITAS 10 and UNITAS 10 Bo – activating the 22° detent



Horizontal-Pivot and Vertical-Pivot hardware



UNITAS 10 and UNITAS 10 Bo - adjusting the turn-brake of the 1st pivot point



Adjusting the brake of the 1st pivot point (opening the sash up to 60°)

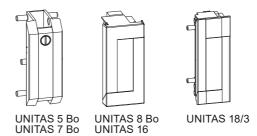
Tighten the turn-brakes on both pivots equally.

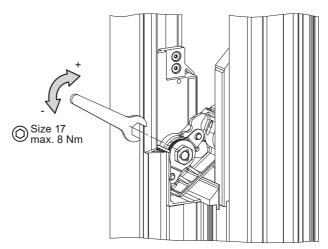


The horizontal pivots should not be greased or oiled.



UNITAS 5 Bo, UNITAS 7 Bo, UNITAS 8 Bo, UNITAS 16 and UNITAS 18/3 – adjusting the turn-brake of the 1st pivot point





Adjusting the brake of the 1st pivot point (opening the sash up to 54°)
Tighten the turn-brakes on both pivots equally.



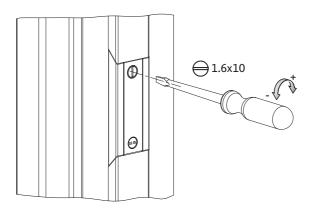
The horizontal pivots should not be greased or oiled.

Horizontal-Pivot and Vertical-Pivot hardware



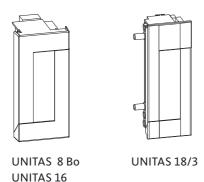
UNITAS 5 Bo, UNITAS 7 Bo, UNITAS 10 and UNITAS 10 Bo – adjusting the turn-brake of the 2nd pivot point for the cleaning position

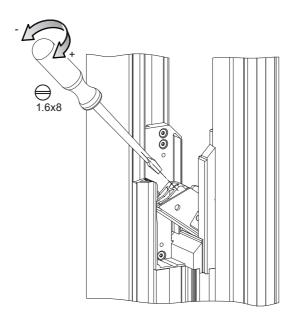






UNITAS 8 Bo, UNITAS 16 and UNITAS 18/3 – adjusting the turn-brake of the 2nd pivot point for the cleaning position



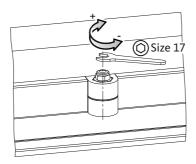


Horizontal-Pivot and Vertical-Pivot hardware



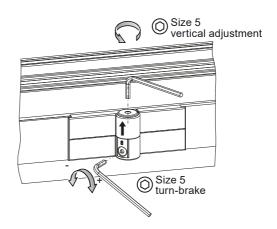
4.4.2 Adjusting a Vertical-Pivot window

UNITAS 93 Bo - Adjusting the sash brake



Tighten turn-brakes on both pivots equally.

UNITAS 88 - Adjusting the sash brake and vertical adjustment



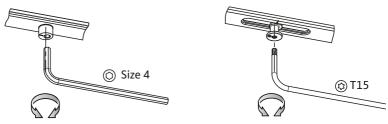
Tighten turn-brakes on both pivots equally.



The vertical pivots must not be lubricated, neither with grease nor with oil.



4.4.3 Adjusting the gasket pressure



Adjusting the gasket pressure ± 1mm on locking cam

5. Warranty

Always heed the safety instructions and maintenance and operation requirements.

These requirements and instructions must be strictly observed as otherwise warranty claims may not be recognised.

6. Taking out of operation and disposal



Always observe the warning signs of the installation drawings!

The procedure is the same as that shown in the installation drawing, but in reverse.

No adjustment work is required.

Dispose of the product according to statutory rules and regulations.



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