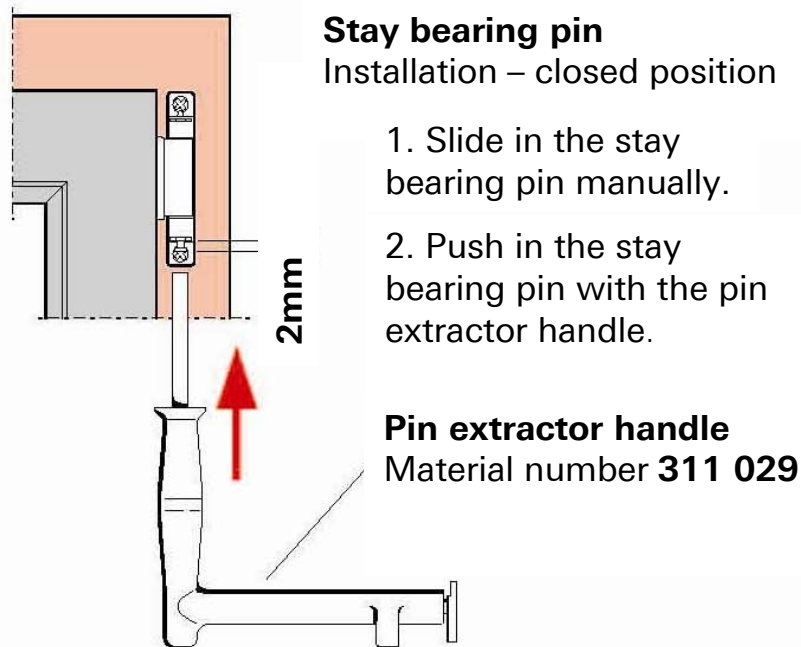


INSTALLATION ADVICE

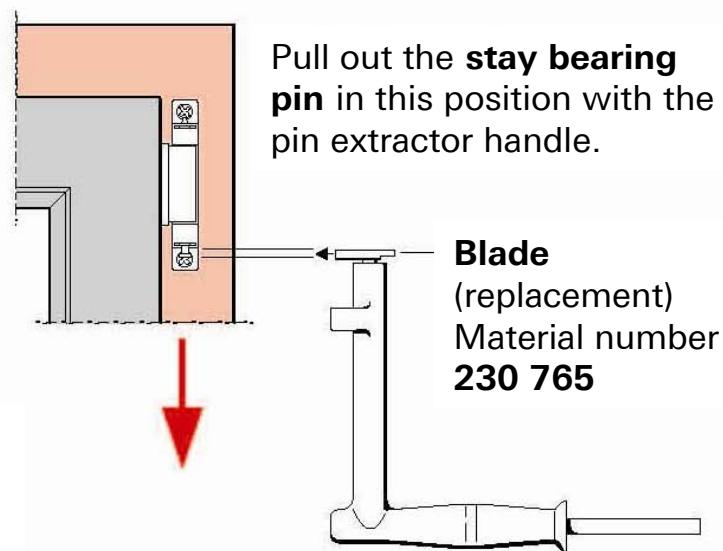
Hinging the sash

It is only possible to **insert** the stay bearing pin in the closed position.



Unhinging the sash

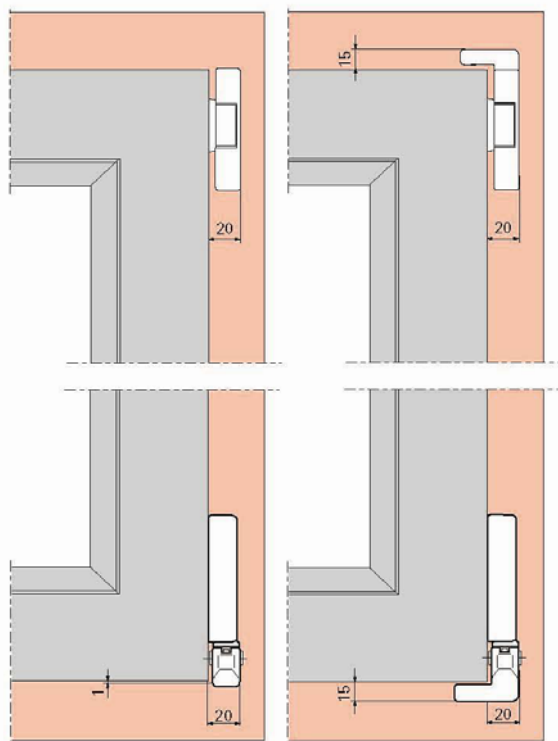
It is only possible to **remove** the stay bearing pin in the closed position.



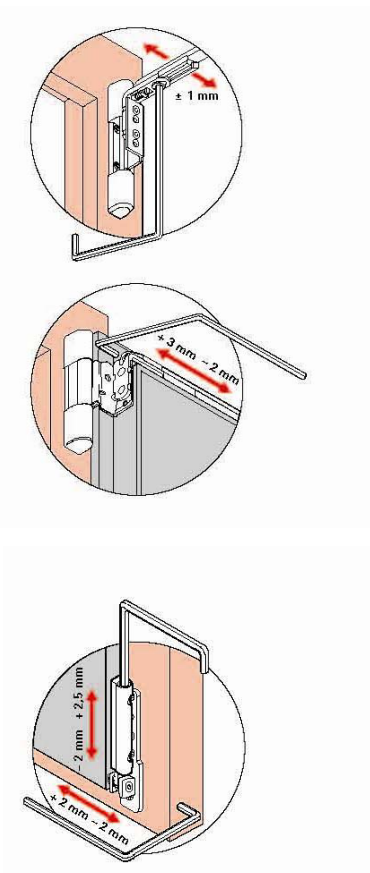
INSTALLATION ADVICE

➔ **Frame clearances**
(including cover caps):

- ➔ Sash weight 100kg
- ➔ Sash weight 130kg



➔ **Retro adjustment**
(only if necessary):

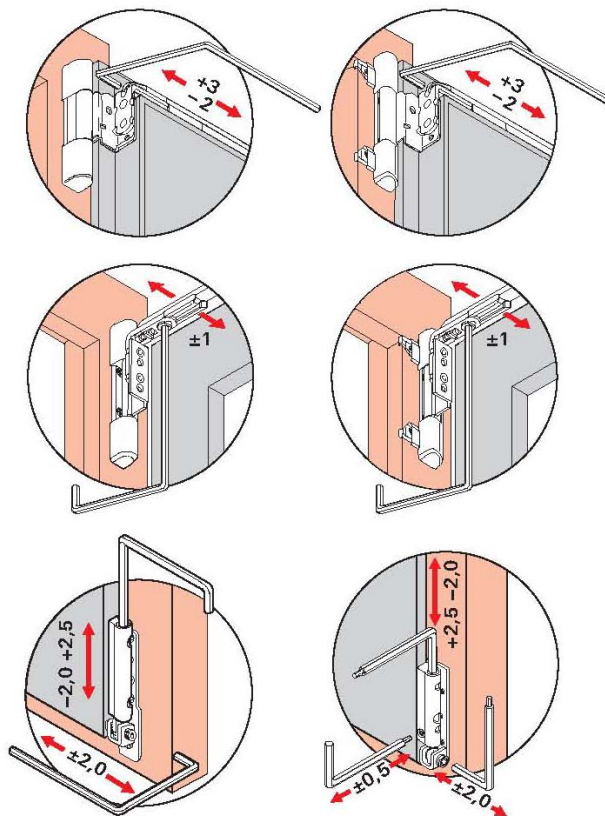


ADJUSTMENT INSTRUCTIONS FOR HINGE-SIDES K & A



PVC windows and balcony doors
Hinge-side K

Hinge-side A*



→ **Adjusting Roto hardware components may only be carried out by authorised and qualified personnel.**

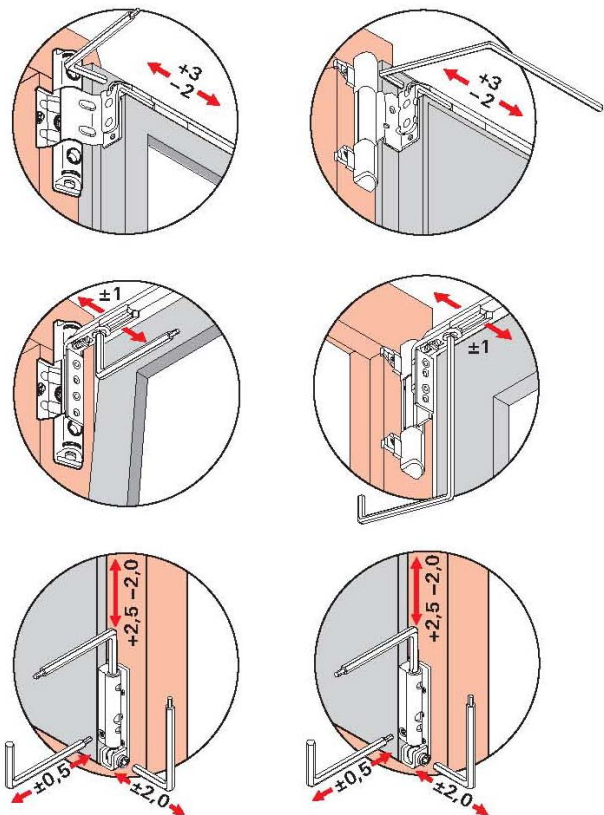
→ * The indicated adjusting dimensions change upon use of cover caps (on stay bearing / pivot rest) and corner-rebate-security components).

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ADJUSTMENT INSTRUCTIONS FOR HINGE-SIDES E5 & A

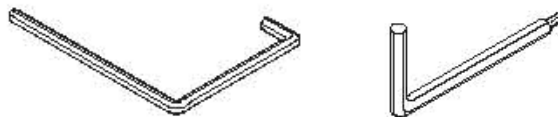


Timber windows and balcony doors
Hinge-side E5 Hinge-side A*



→ Adjusting tools:

- 4mm Allen-key **P 010 A 2100.**
- 2.5mm & 4mm Allen-key **P 010 A 2400.**



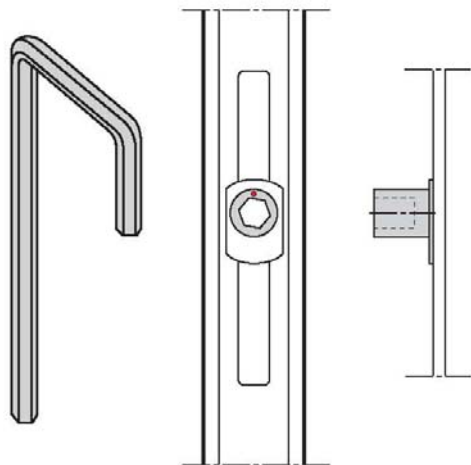
Roto NT

E & P CAM ADJUSTMENT INSTRUCTIONS



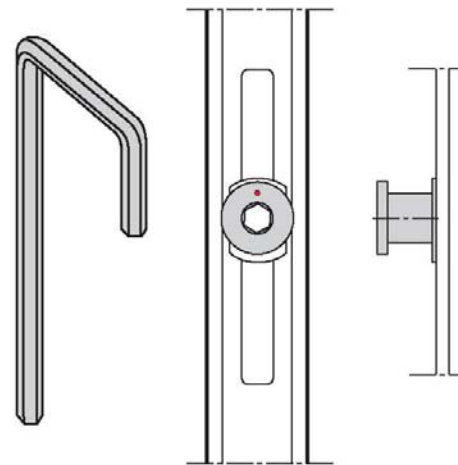
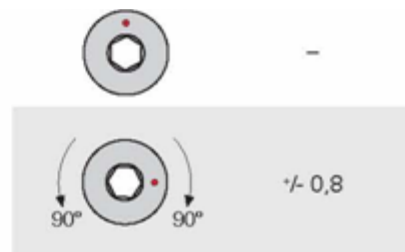
Locking cam **V** Adjustment range in ° Gasket-compression adjustment in mm

Original position



Locking cam **P** Adjustment range in ° Gasket-compression adjustment in mm

Original position



Roto NT

V CAM ADJUSTMENT INSTRUCTIONS



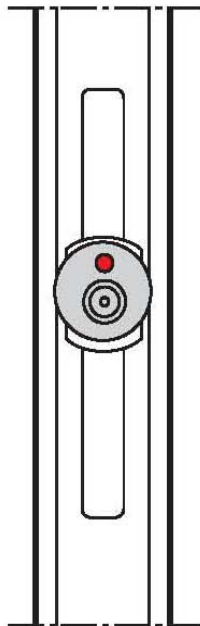
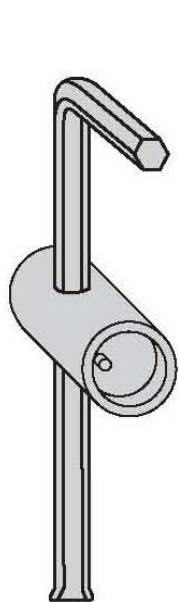
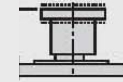
Locking cam **V**

Adjustment range in °

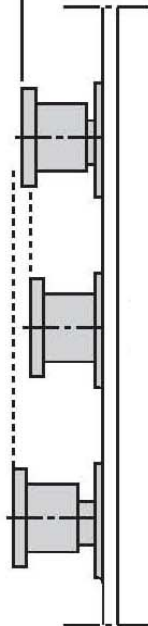
Gasket-compression adjustment in mm



Height adjustment in mm




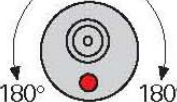

0 = original position



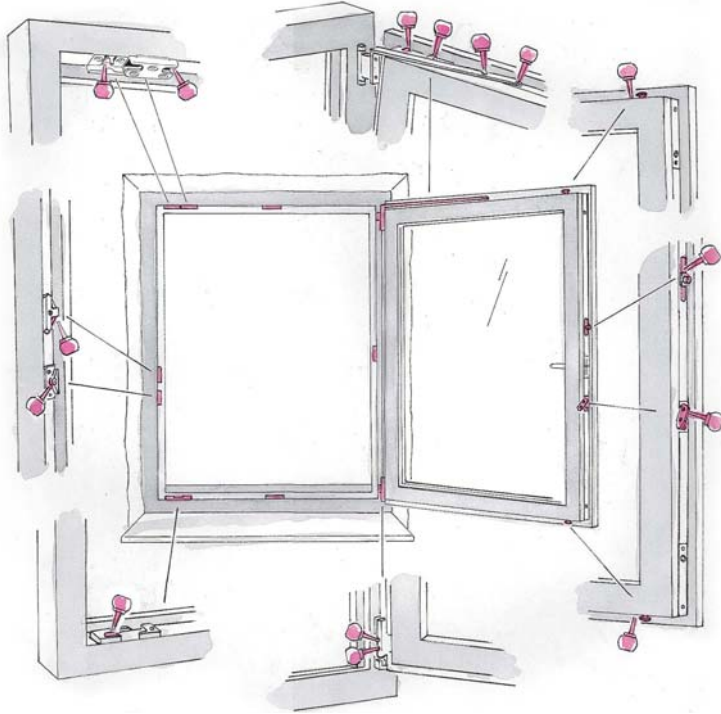
-0.8mm max. adjustment

+0.8mm max. adjustment

Original position

	-	-
	+/- 0,8	+/- 0,2
	-	+/- 0,4
	+/- 0,8	+/- 0,6
	-	+/- 0,8

MAINTENANCE INSTRUCTIONS FOR TIMBER / PVC WINDOWS AND BALCONY DOORS

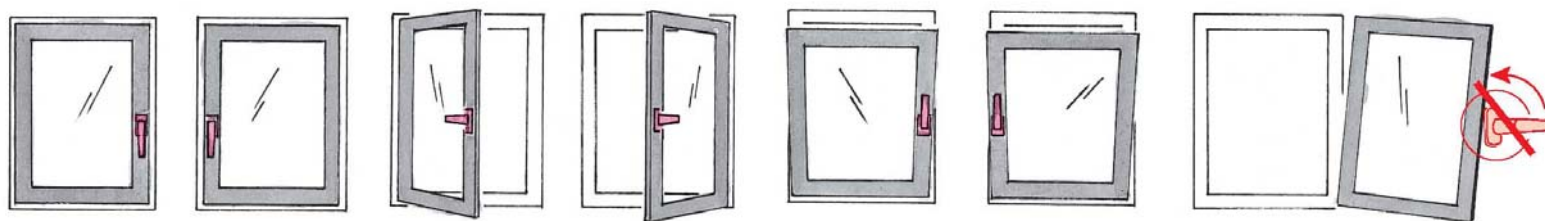


- ➔ By means of regular greasing and oiling* (at least once annually) of all operation-relevant components in the sash and frame, you maintain the smooth operation of your Roto hardware and you protect against premature wear and tear.
- ➔ Security strikers made of steel require continuous greasing in order to avoid unnecessary abrasion.
- ➔ In addition the individual screws are to be checked.
- ➔ Possible loose screws or broken off screw-heads are to be tightened or replaced immediately.
- ➔ *Please use acid free and non resinous grease and/or oil from a specialised dealer.
- ➔ **Please contact your specialised dealer with all unclarified points.**

OPERATING INSTRUCTIONS FOR TIMBER / PVC WINDOWS AND BALCONY DOORS



Operation

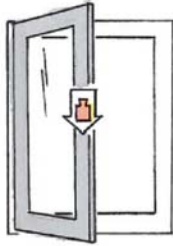


Avoid mishandling

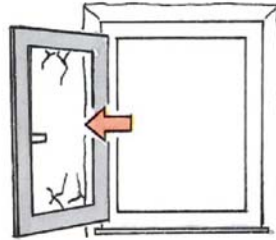
In order to preserve the long **operativeness** of your window and to guarantee **security**, it is imperative to observe the directives listed below.

Roto NT

SAFETY INSTRUCTIONS FOR TIMBER / PVC WINDOWS AND BALCONY DOORS



The window sash may not be burdened with additional weight.



Do not allow the sash to hit or press up against the window reveal.



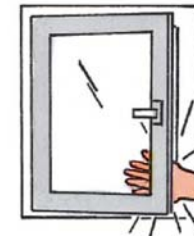
Do not place any objects between the sash and frame.



Where small children or mentally handicapped persons have access to the window, the sash is to be safeguarded against turning, for example with a child-safety lock (inhibits turn-modus, permits tilt-modus) or key-lockable handle.



Do not leave sashes open in the turn-modus during strong winds.



Caution! A slamming sash can lead to injuries. While closing, do not grasp between the sash and frame.

WHAT TO DO IF ...

Problem:	Reason:	Rectify by:
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The handle can only be turned arduously

Handle	- Bad handle	- Replacing
Sash hardware	- Screw fixing is too tight	- Loosening the screws
	- Screws fixed at an angle	- Screwing straight
	- Fault in the hardware	- Replacing
	- Wrong striker location	- Changing the location
Hardware	- Sash stay gasket-compression too strong (gasket accumulation)	- Retro-adjusting or cutting out
	- Not lubricated	- Lubricating

The sash goes into the tilt mode although the handle is in the turn position

	- Too much clearance on top	- Adjusting the corner hinge / set higher (please note: Horizontal Tilt&Turn striker!)
	- Check the position of the corner hinge	
	- Check the position of the pivot rest	

The sash brushes up against the frame in the tilt-mode

	- Too little clearance on top	- Lowering the corner hinge (please note: Horizontal Tilt&Turn striker!)
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WHAT TO DO IF ...

The handle cannot be turned 180°

Sash hardware	- Incorrectly mounted	- Check the adjustment in turn-mode (perhaps change – starting with the T&T espagnolette)
Frame hardware	- Incorrect striker location	- Change the striker location

The sash goes into the turn mode although the handle is in the tilt position

- | | |
|--------------------------|-----------|
| - Damaged Tilt component | - Replace |
|--------------------------|-----------|

The bottom of the sash brushes up against the frame on the handle side

Manufacturing	- Not produced or glazed at right angles	- Realign – tridimensional adjustment
Installation	- Sash stay disconnects	- Readjust
	- Sash sags	- Readjust
	- Frame is offset	- Realign

Locking cam brushes up against the striker

Sash	- Incorrectly inserted	- Reinsert
Frame	- Incorrect striker location	- Remount