



## Attachment No. 2

### Instructions for the maintenance, restoration, operation and use of windows and doors

#### 1. Cleaning and maintenance of the joinery

Twice a year (preferably before the summer and winter) the surface of the wooden windows should be thoroughly cleaned from dust, insects and other impurities using a mild detergent and water. This should be done not only for aesthetic reasons, but also in order to prevent the dirt from damaging the varnish coating (this type of contamination can result in the growth of green algae and fungi). After cleaning, a protective emulsion should be applied on the frames. Caution! Most products for cleaning glass contain ammonium chloride. After cleaning windows or glass panes in the doors it is necessary to remove the ammonium chloride residue, preferably using clean water. The cleaned elements should be wiped dry with a soft cloth.

Both transparent and opaque coating systems provide protection against the destructive impact of weather factors

Cleaning product: **Teknoclean 1951-00** effectively removes dirt, grease and other contamination from wooden surfaces. Packaging: 0,5 l

Care product: **GORI 690-31 Surface Maintenance**. Gives a shine and protects surfaces damaged by exposure to sunlight, rain and frost, but cannot be used as a replacement for the renovation of damaged coating. Packaging: 0,5 l

#### 2. Inspection of the technical condition of the window and the varnish coatings

The window seals should be wiped once a year with talcum powder in order to prevent them from sticking to the varnished surfaces. In order to secure the ease of movement of the fittings, they should be greased or oiled after cleaning. When performing these steps we must check the correct operation of the fittings. We make sure that the position of the screws is correct. We also check the adhesion of the silicone to the glass. Inspecting the condition of the coatings on an ongoing basis allows us to quickly detect any damages. The condition of the coatings should be controlled each time after a hail storm, as the impact of ice crystals may cause damage to the surface. When inspecting the condition of the coatings, we must also check whether any cracks occurred in the joint filler. In the case damages of this type are observed, the joint filler must be removed completely and reapplied. Any cracks, chipping or flaking of the coating should be immediately repaired by the customer or by specialized service employees. Maintenance carried out in a timely manner will prevent further damage, and thus allow the user to save time and avoid unnecessary costs. Properly cleaned, cared for and regularly inspected paint coating should be renovated if it is determined that the layer of coatings has become thinner or in case micro cracks are found.



### 3. Renovation

Prior to renovation all fittings should be secured against paint. All areas that will be renovated should be thoroughly cleaned using a mild detergent and rinsed with clean water. Window frames should be renovated using the same products they were coated with by the manufacturer.

During the renovation of the coatings we should keep in mind that impregnation, application of a primer or the topcoat layer cannot be carried out at a temperature below 8°C and relative humidity higher than 80%. We do not recommend applying coating in strong sunlight. Water-soluble products are fit for use for 12 months, provided they are stored in a tightly closed container at a temperature above 5°C.

#### **The renovation process depending on the degree of damage to the surface.**

##### **3.1 The coating system is intact and requires only cosmetic touch-ups.**

We apply two top coating layers (GORI 660/Aquatop 2600) in the appropriate color and shine using a synthetic brush with long bristle for acrylic paints. We should wait 4 hours before applying the second layer.

##### **3.2 Minor flaking of the topcoat layer, without damage to the wood**

We sand the damaged places using fine sandpaper. Be careful to only sand damaged places and not to sand the primer. We carefully vacuum the surface from dust, wash it and let it dry completely.

We apply two top coating layers (GORI 660/Aquatop 2600) in the appropriate color and shine using a synthetic brush with long bristle for acrylic paints. We should wait 4 hours before applying the second layer.

##### **3.3 Extensive damage of the coating**

We should sand the entire window frame using fine sandpaper. Be careful not to sand the primer. We carefully vacuum the surface from dust, wash it and let it dry completely. We apply two top coating layers (GORI 660/Aquatop 2600) in the appropriate color and shine using a synthetic brush with long bristle for acrylic paints. We should wait 4 hours before applying the second layer.

Entirely damaged varnish coating, e.g. curring in the coating layer, hole in the coating. The complete restoration of the coating is necessary.

We remove the damaged coating using medium-grade sandpaper and then fine sandpaper. We carefully vacuum the surface from dust, wash it and let it dry completely.

We impregnate the raw wood (GORI 356\* or Teknol Aqua 1410\*).

After the impregnation layer has completely dried, we prime the surface using an undercoat in the appropriate color, in order to increase the adhesion of the top coat paint (Aqua Primer 2900/Antistain Aqua 2901/GORI 615).



We apply two top coating layers (GORI 660/Aquatop 2600) in the appropriate color and shine using a synthetic brush with long bristle for acrylic paints. We should wait 4 hours before applying the second layer.

### **3.4 Natural expansion and contraction of wood caused the cracking of the coating or the moisture penetrated the joints and cross sections.**

We remove the damaged coating using medium-grade sandpaper and then fine sandpaper. We carefully vacuum the surface from dust, wash it and let it dry completely.

We impregnate the raw wood (Teknol Aqua 1410\* or GORI 356\*).

After the impregnation layer has completely dried, we prime the surface using an undercoat in the appropriate color, in order to increase the adhesion of the top coat paint (Aqua Primer 2900/Antistain Aqua 2901/GORI 615).

We fill the open joints with joint filler (TEKNOSEAL 4001 or GORI 691 V-Joint Protection).

We smooth out the joints using a wet cloth or a spatula and let them dry completely.

We seal all the exposed cross sections with the filler and allow them to dry completely.

We apply two top coating layers (GORI 660/Aquatop 2600) in the appropriate color and shine using a synthetic brush with long bristle for acrylic paints. We should wait 4 hours before applying the second layer.

## **4. Use, maintenance and adjustment of the fittings.**

### **4.1 Use of the windows**

Method of opening:

fitting closed - handle positioned vertically downwards

fitting in the OPEN position - handle in the horizontal position

fitting in the MICROVENTILATION position - handle in upwards position at an angle of 45°

fitting in the TILTED position - handle positioned vertically upwards

Please note that due to the application of anti burglary elements such as hooks, as well as the handle, it is necessary to use greater force in order to open it.

### **Maintenance of window fittings and adjustment of fittings:**

Your windows and balcony doors have been equipped with high quality SIEGENIA fittings. In order to ensure the reliable operation of these fittings we recommend carrying out maintenance and inspection of the fittings at regular intervals (at least twice a year, or more frequently).



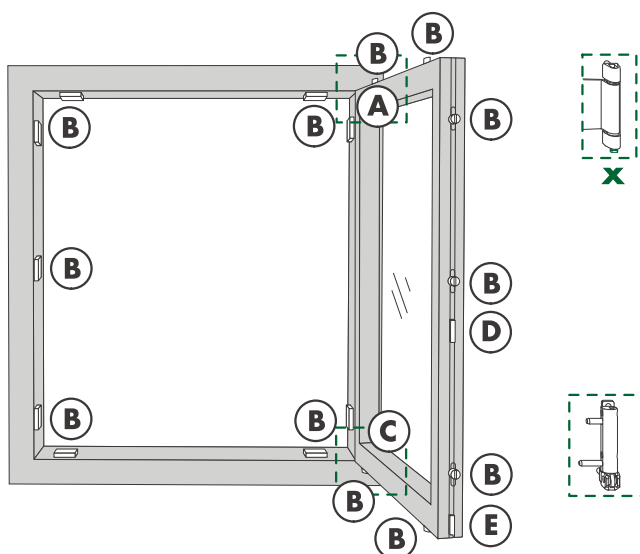
## 4.2 Maintenance of the fittings

Check all the elements responsible for the safety of the fitting [ ] in terms of attachment and possible friction.

- Check whether the pin of the upper frame hinge (x) is fully inserted. If not, push the hinge pin in completely.
- Check for loose mounting screws and proper mounting of the handle. Tighten the loose screws using the appropriate tools.  
Note: do not strip the screws during tightening!
- Replace the damaged components of the fittings or the stripped screws with the help of the appropriate service crew.

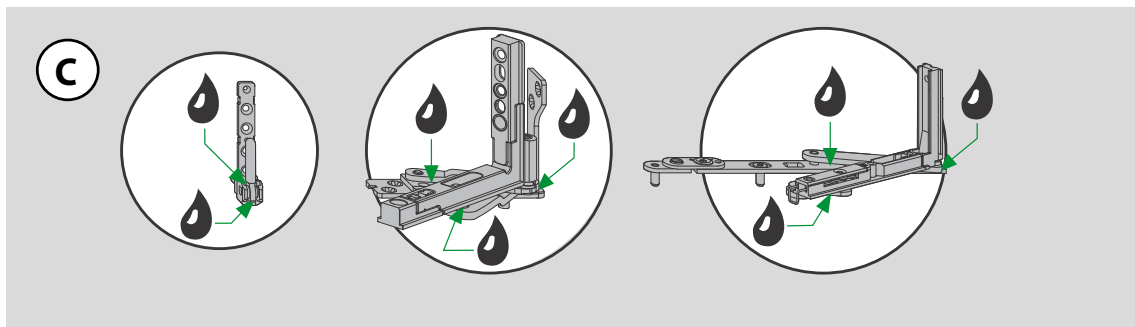
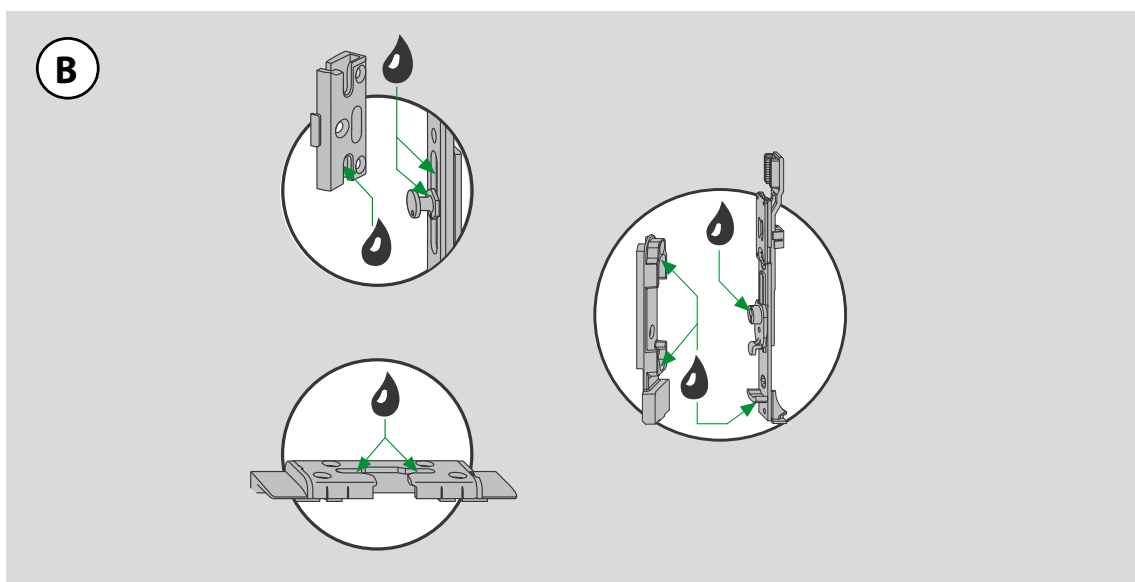
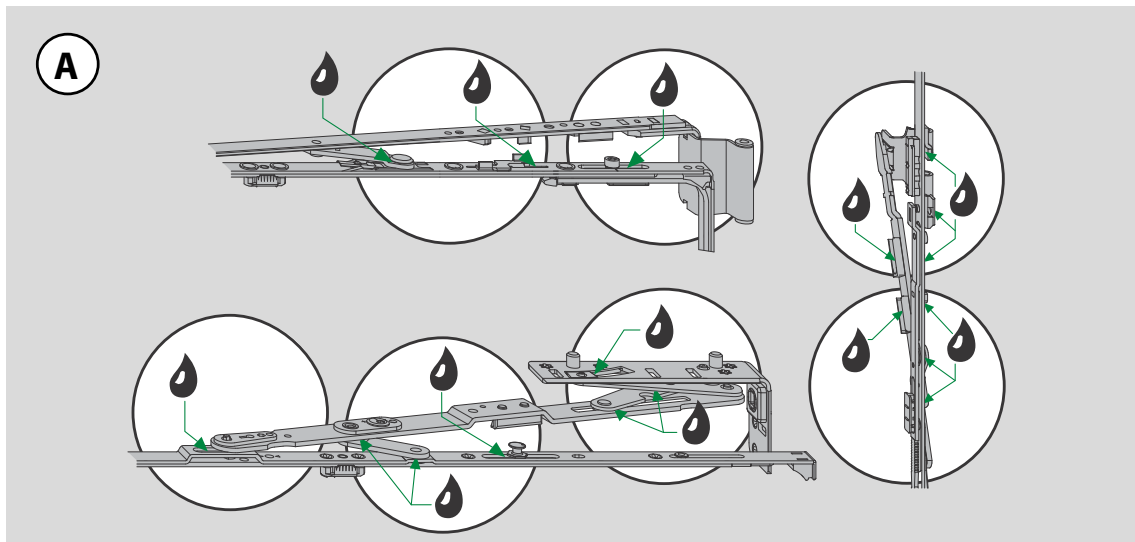
Lubricate all places where friction occurs.

- Only use lubricants/oils that do not contain acids and resins.
- In order to lubricate the moving parts of the fittings, use spray lubricants, which should be introduced into each hole of the fitting. After lubrication open/tilt the window a few times until the grease is evenly distributed and then wipe off the excess grease. Lubricate the hinges on the frame in the place where the bolt enters using a solid consistency grease (consistency class 2 according to DIN 51818). The GREENTEQ grease for fittings is perfectly suited for this purpose.



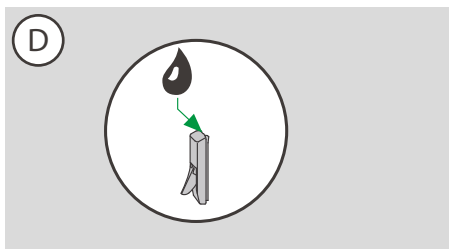


## maintenance - fittings lubrication points





**maintenance - fittings lubrication points**

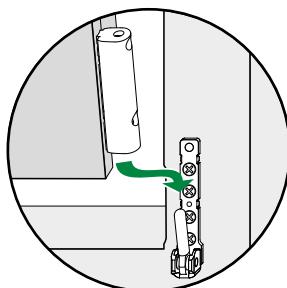
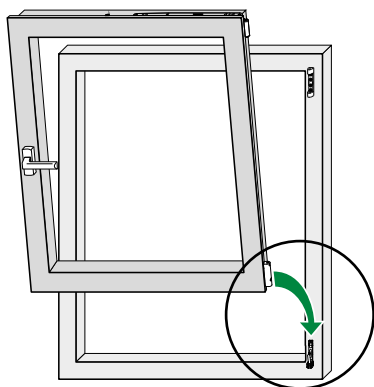


**4.3 Adjustment of window fittings**

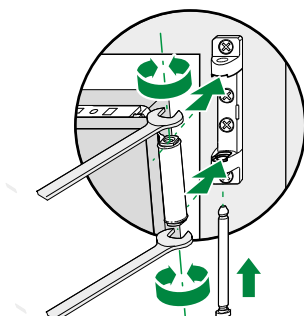
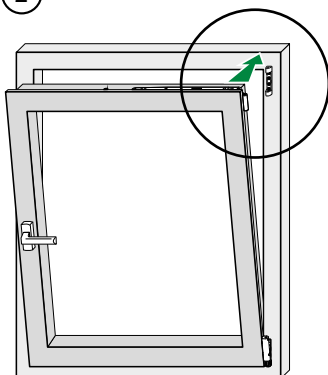
**Installing and removing window sashes**

Installation of the sash

1



2



TITAN hinge side

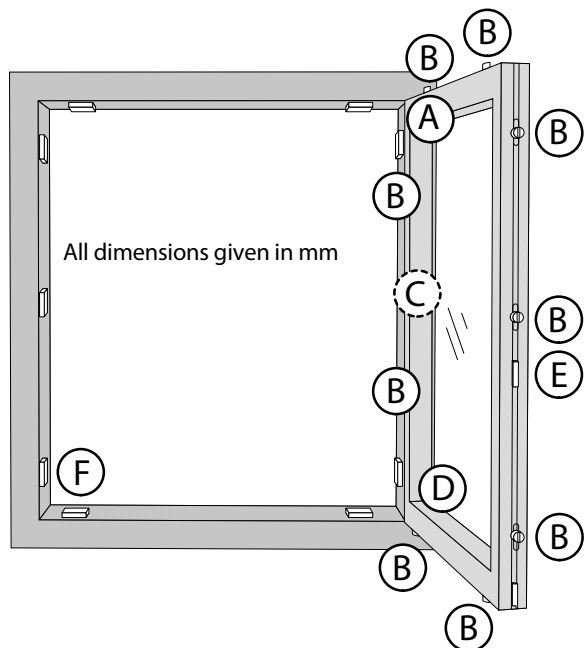


The sash stay hinge pin should be inserted from the bottom, with the sash in the position of 0° or opened at 60°.

### Removal of sashes

The sashes should be removed in reverse order.

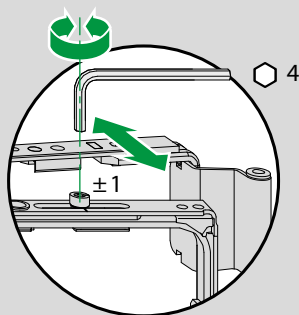
### Method of adjustment



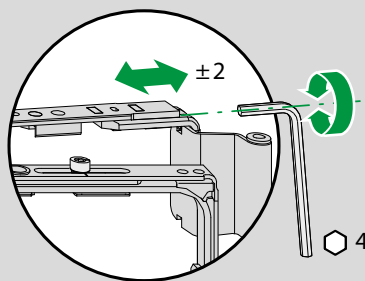
- (A) Stay and top hinge
- (B) Locking point
- (C) Tilt sash hinge (only for tilt sash)
- (D) Corner hinge – rebate corner hinge – bottom hinge
- (E) Door snapper
- (F) Run – up

#### (A) Stay

Pressure adjustment



Side adjustment





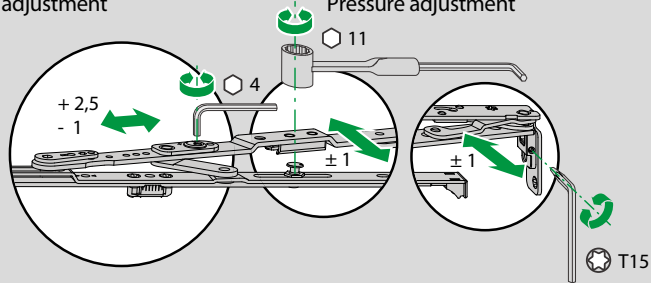
**A**

Stay

Concealed hinges AXXENT 24

Side adjustment

Pressure adjustment



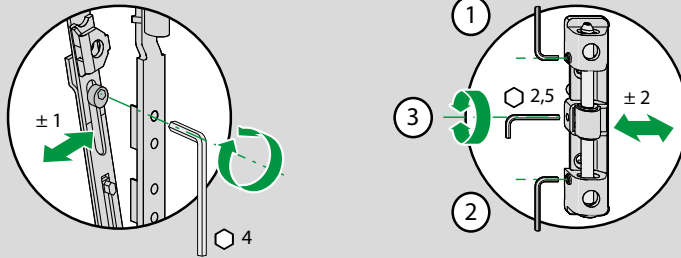
**A**

Stay/Top hinge

Arched head

Pressure adjustment

Side adjustment



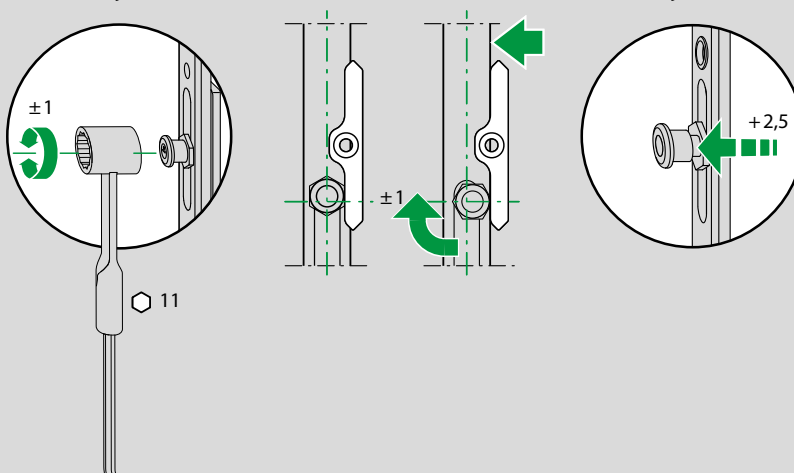
**B**

Locing points

Comfort mushrooms

Pressure adjustment

Adjustment



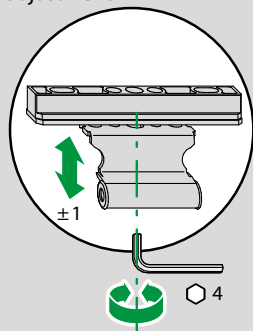




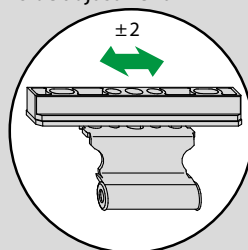
**C**

### Tilt sash hinge

Height adjustment



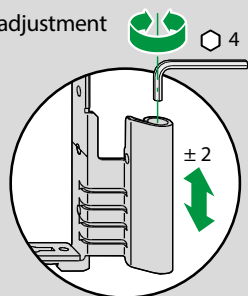
Side adjustment



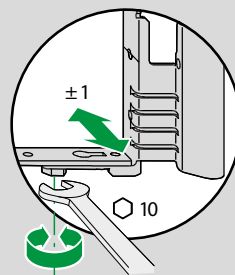
**D**

### Corner hinge

Height adjustment



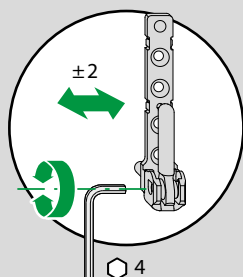
Pressure adjustment



**D**

### Bottom hinge

Side adjustment

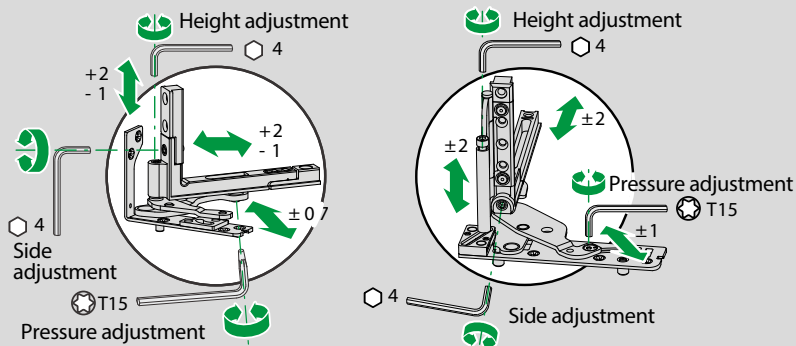




**D**

Bottom hinge/Corner hinge

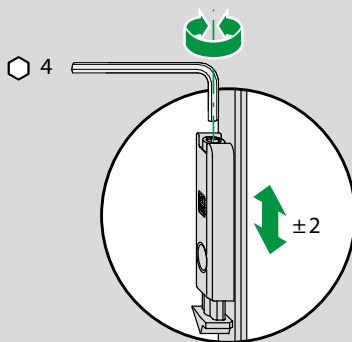
Concealed hinges AXXENT 24



**E**

Snapper

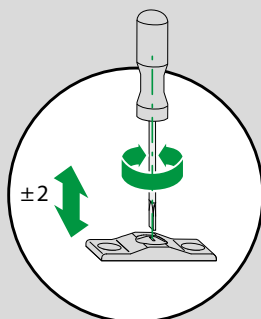
Height adjustment



**F**

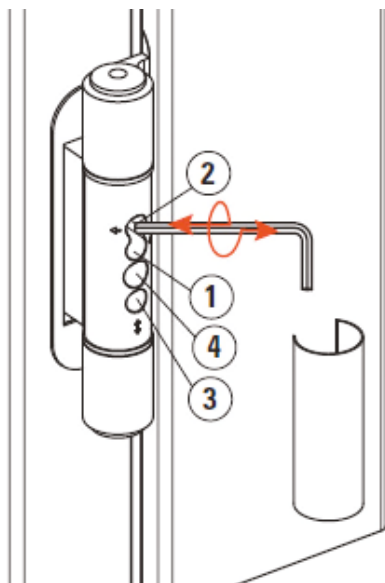
Arched head run-up

Height adjustment



## 4.4 Adjustment of door fittings

HINGES 4mm hex key



### Horizontal adjustment to the left

screw (1) by turning it to the left and tightening screw (2) by turning it to the right

### Horizontal adjustment to the right

screw (2) by turning it to the left and tightening screw (1) by turning it to the right

### Height adjustment

screw (3) to the right or the left in order to raise or lower the door

The adjustment mechanism is self-locking.

### Adjustment of the seal clamp

screw (4) to the right or the left, until the desired pressure is obtained

The adjustment mechanism is self-locking.

MIDDLE LOCKING PLATE  
cross-screwdriver

UPPER and BOTTOM LOCKING PLATE  
2.5mm hex key



Loosen the indicated screws, manually move the locking plate to the desired position, tighten the screws



loosen screws (1), turn screws (2) to the right or to the left to set the locking plate in the desired position, tighten screws (1)



## 5. Seals:

Maintenance should be carried out every 12 months. After disassembly the seal should be cleaned from dust and grease using neutral cleaning agents. After drying we coat the rubber seal with a preservative in order to retain its flexibility and reassemble the seal in the window. In the event permanent damage or deformation is identified, the seal must be replaced with a new one.

## 6. Proper operation and safety of use:



Do not leave the window sash in the open position during strong wind!



Do not put any objects between the window sash and the frame!



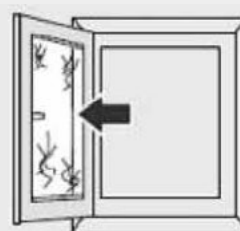
Do not apply any loads on the window!



In the case children with mental disorders have access to the window, it is necessary to install elements blocking the opening of the window! (window lock or a handle with a key locking)



When opening the window, do not put your hand between the window sash and the frame! The impact of a strongly pushed window sash (e.g. by a gust of wind) may cause injury!



Do not push the sash against the frame