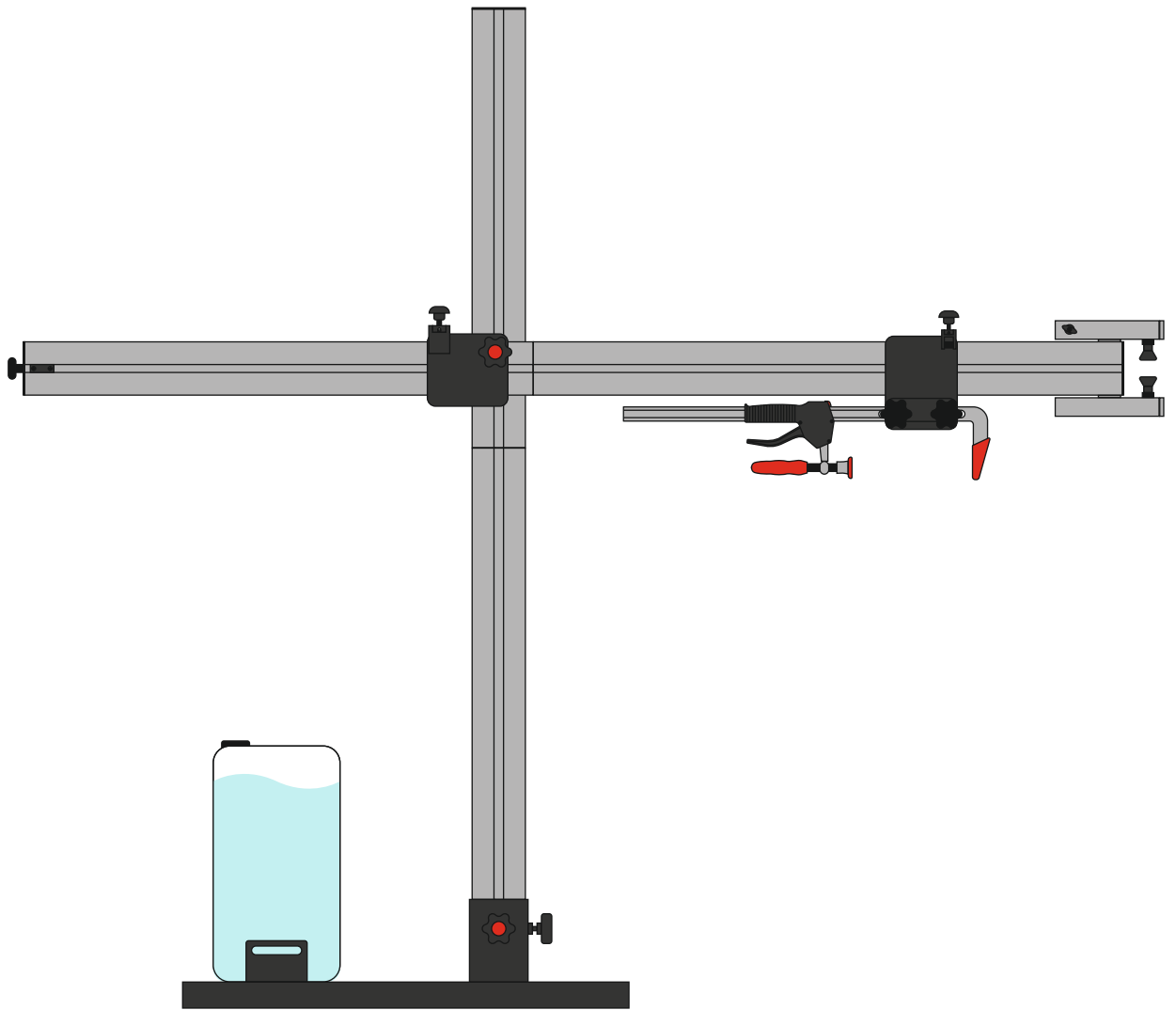




LASERSCANNING
EUROPE



User Manual

Horizontal Tripod with Safety Adapter

Horizontal Tripod with Safety Adapter

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With this horizontal tripod, you can place your laser scanner outside the building by sliding the scanner from inside the building through windows, dormers or other openings to the outside.

The horizontal arm of the tripod is equipped with two safety adapters for your scanner, one for standard scanning and one for overhead scanning. In this way, both upper and lower areas can be scanned without any problems. Thanks to the high stability of the tripod, vibrations are reduced to a minimum.

Developed and manufactured in Germany.

Use in line with intended purpose

- Use with compatible scanner and safety adapter compatible with scanner
- Scanning of facades, roofs and outdoor areas from windows or dormers
- Scanning of elevator shafts
- Inspection of bridges
- The weight of the scanner including batteries must not exceed 6kg.

Compatible laser scanners

Please contact Laserscanning Europe GmbH, the manufacturer of the horizontal tripod, for the compatibility of your laser scanner.

If necessary, please ask the scanner manufacturer if your device is authorised for overhead scanning.

Safety

To prevent personal injury or damage to property, comply with the safety information provided in this guide. The manufacturer shall assume no liability for damage or impairments resulting from non-compliance.

WARNING



Danger of crushing at connection points

Touching two components at connection points during assembly can lead to hand injuries (crushing).

Do not touch in the area of the connection.

WARNING



Damage due to falling components

Components falling out of the window or other openings can cause serious personal injury or material damage.

Make sure that all components are firmly mounted and secured according to the instructions.

2 Scope of delivery

Scope of delivery:

1 transport box with carrying handles and 4 rollers

1 base

2 water cans

1 vertical extrusion composed of 2 segments

1 horizontal arm composed of 3 segments

1 window frame bracket

1 case with:

- 1 connector for vertical extrusion/horizontal arm

- 1 safety adapter for scanner, with safety rope

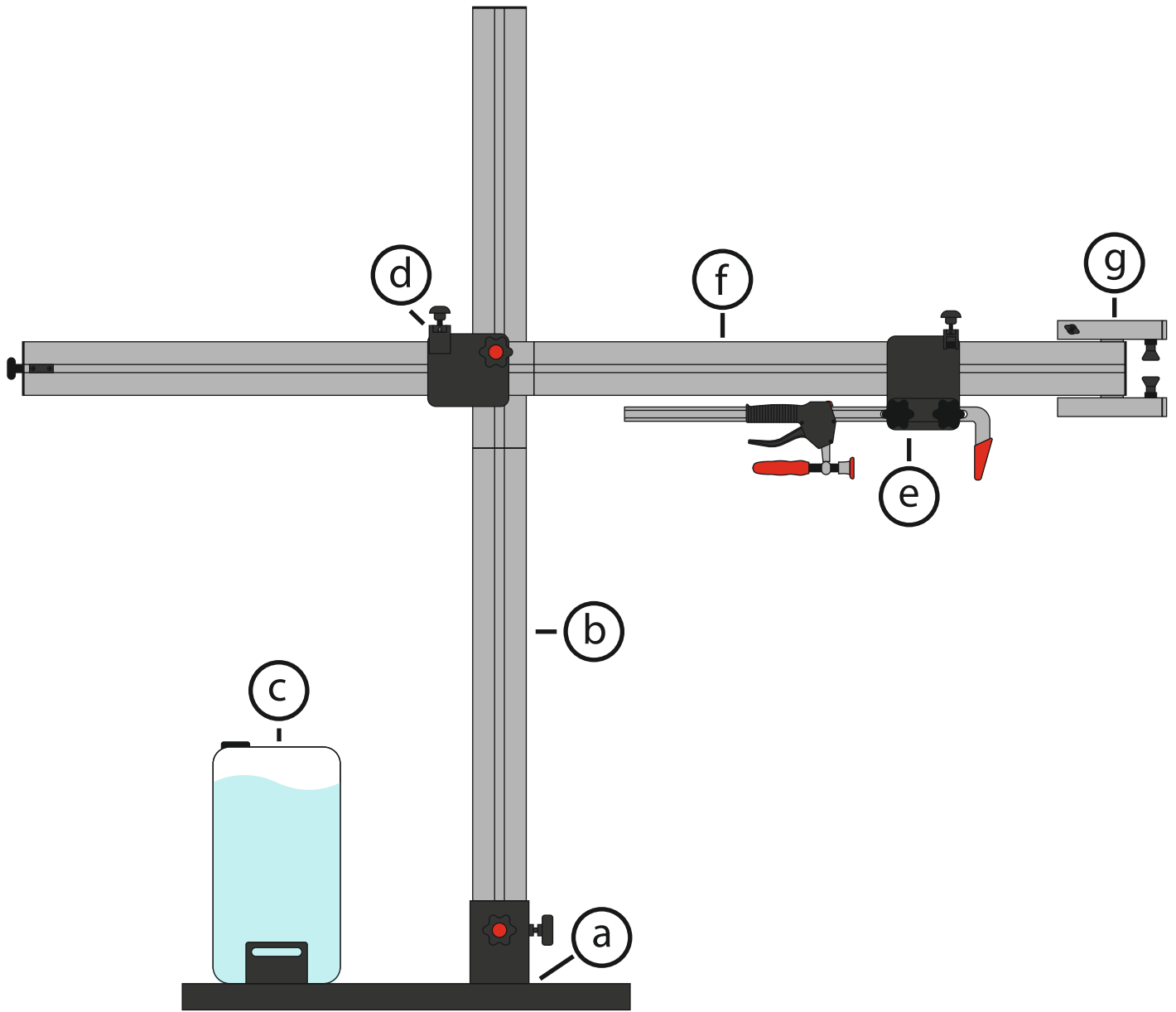
- 1 screw handle for horizontal arm

- 1 Allen key

- 13 screws in mini case

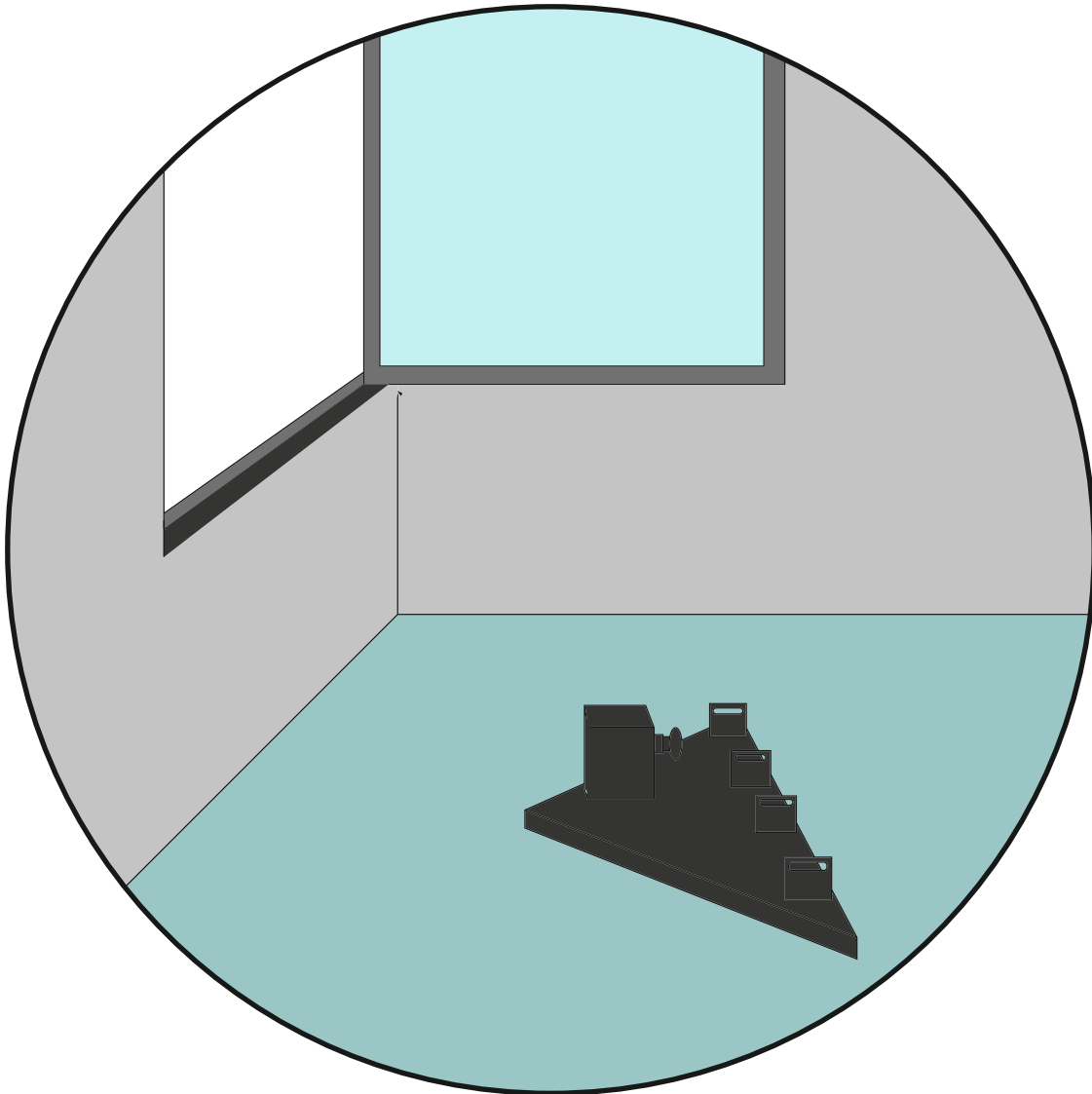
1 user manual

Packing instructions



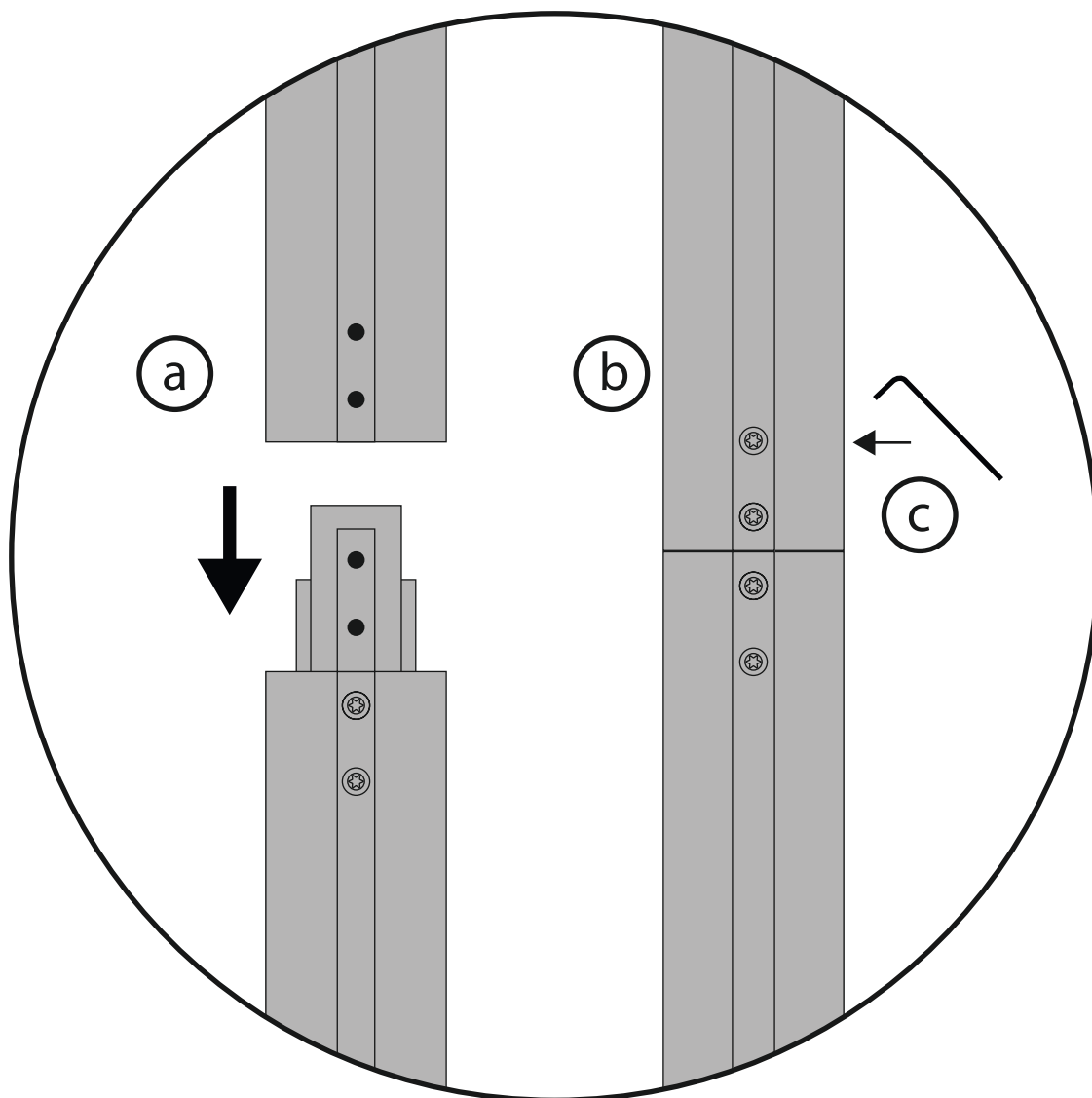
a	Base
b	Vertical extrusion
c	Water cans
d	Connector for vertical extrusion/horizontal arm
e	Window frame bracket
f	Horizontal arm
g	Slot for safety adapter including safety adapter

4 Setting up & initial use
4.1 Position the base



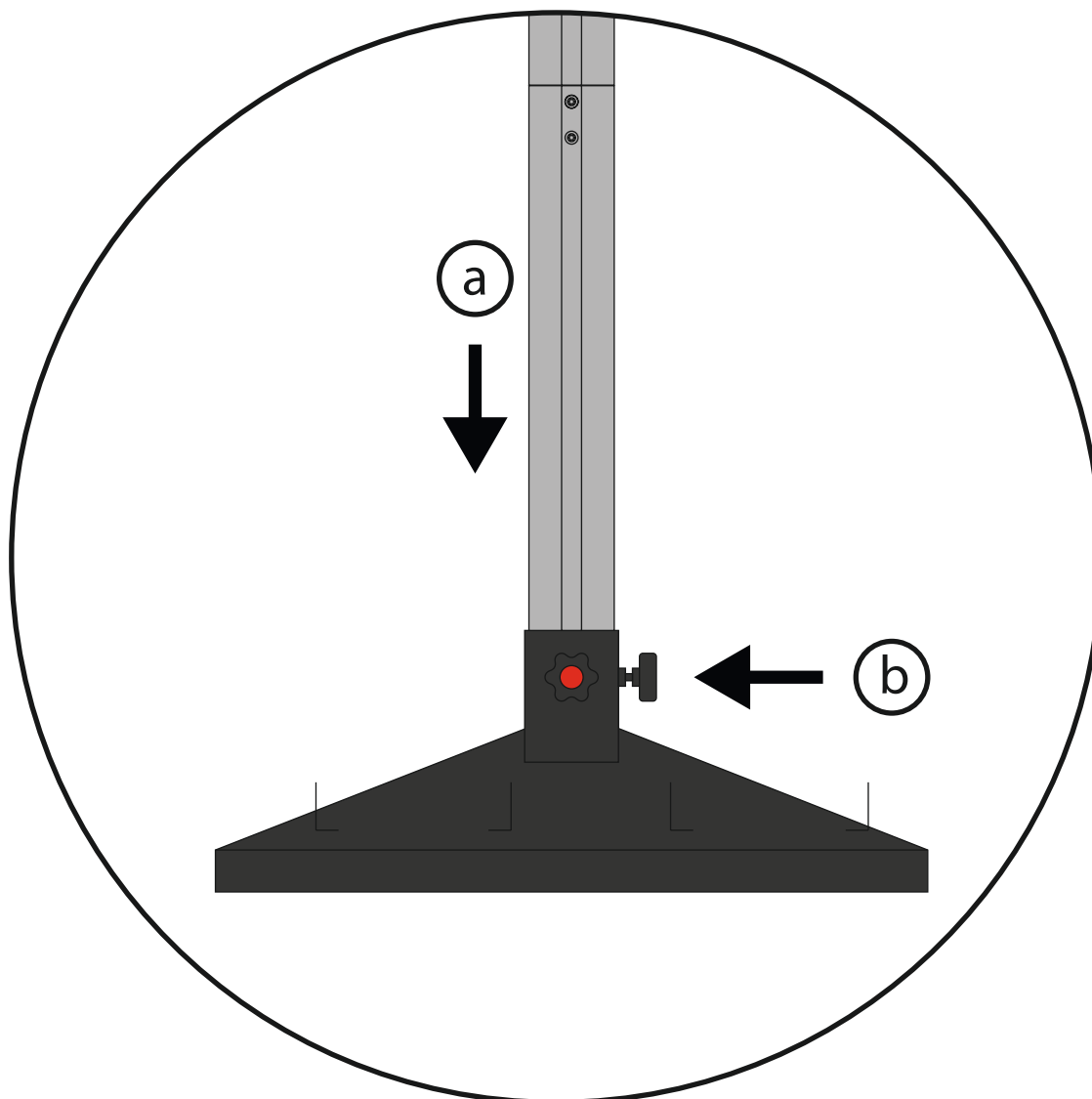
Position the stand at least 60cm away from the window.

The support for the vertical extrusion points in the direction of the window.

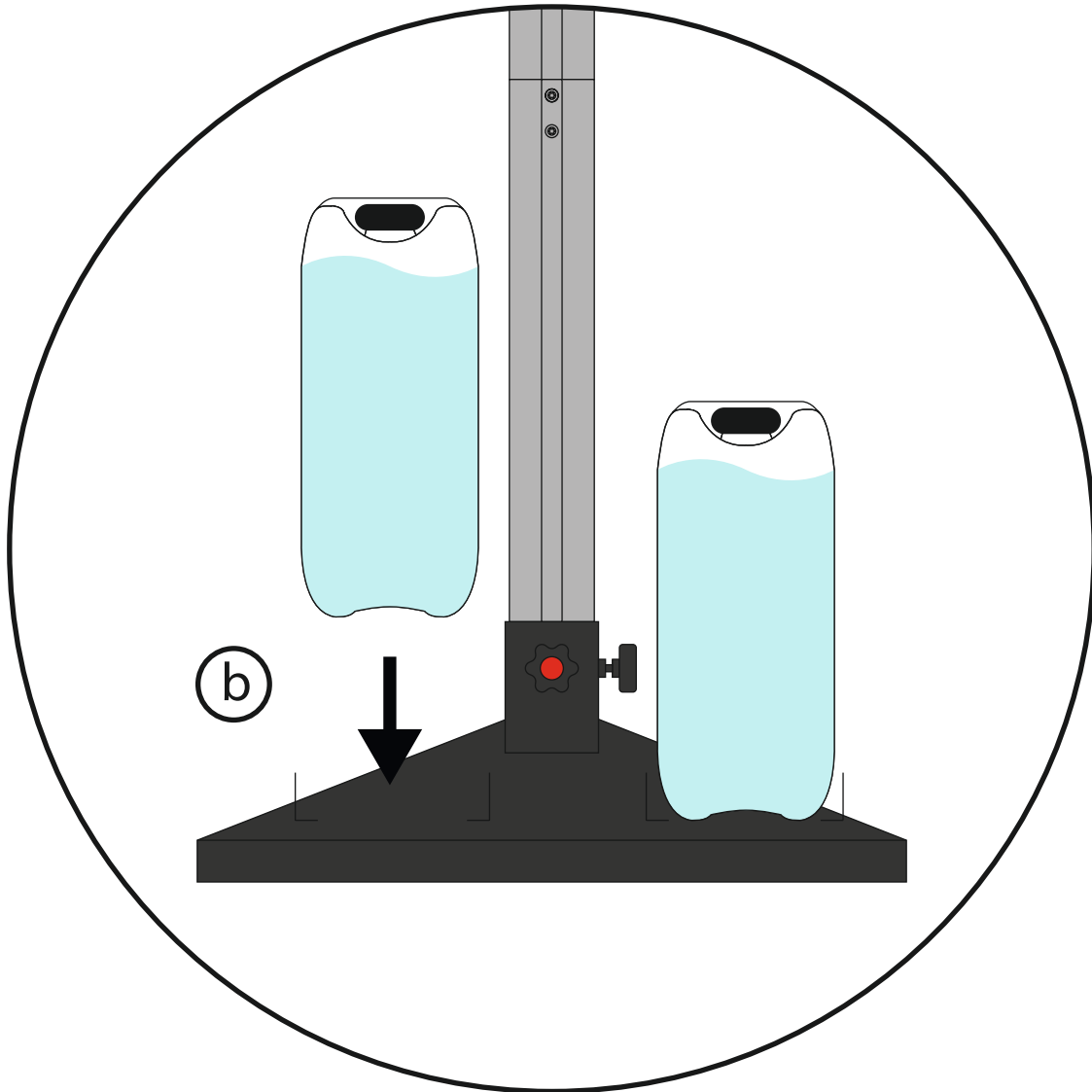


- a. Slide “vertical bottom” into “vertical top”.
- b. Screw both elements hand-tight with the Allen key and 4 screws.
- c. Tighten all screws.

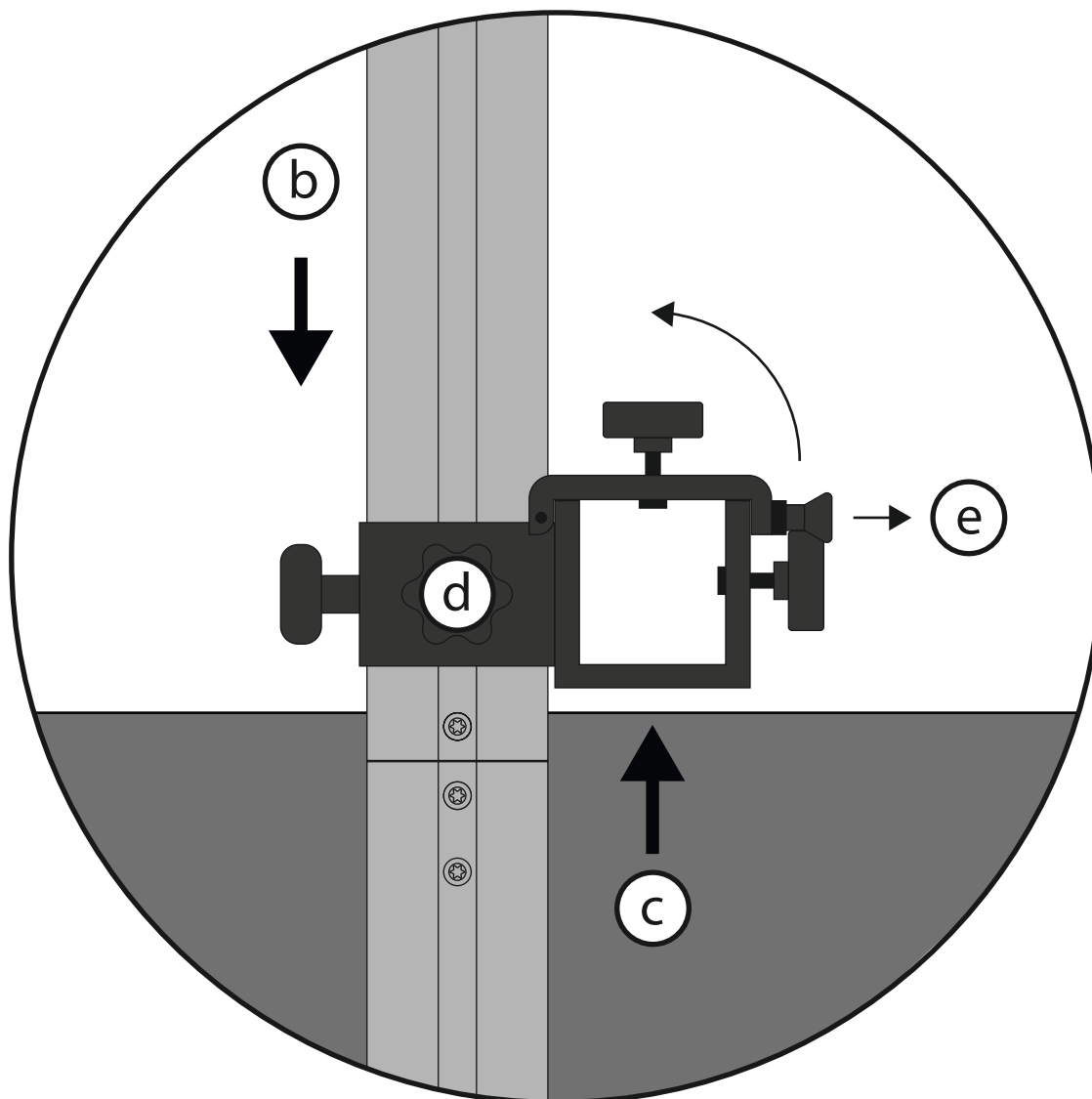
4.3 Insert vertical extrusion into the base



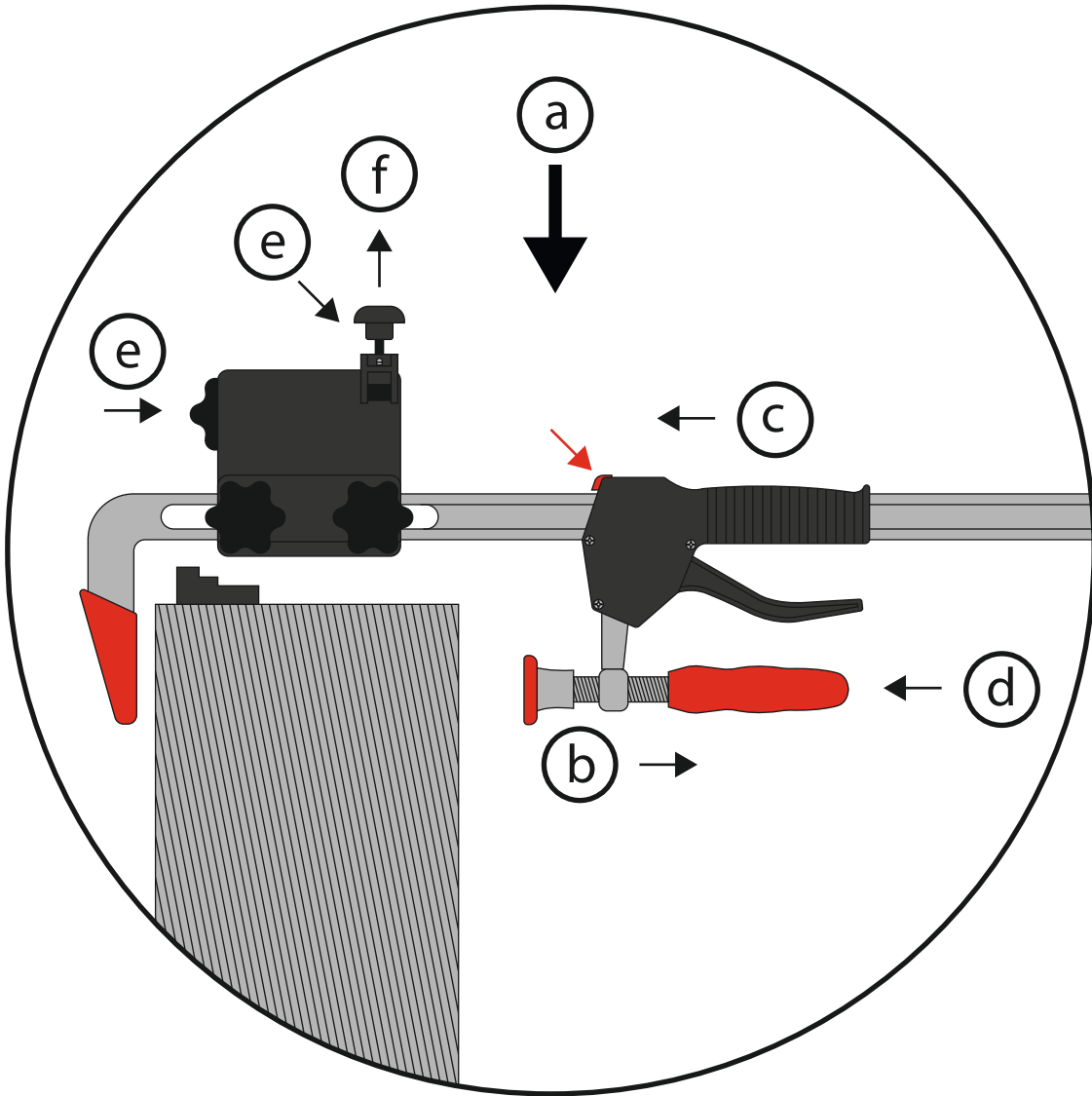
- a. Insert the vertical extrusion with “vertical bottom” into the base. The screws point towards the window opening.
- b. Secure the vertical extrusion to the support with the 2 fixing screws.



- a. Fill the 2 canisters with water.
- b. Position the canisters on the base.



- a. Loosen all screws at the connector.
- b. Slide the closed half (without locking lever) onto the vertical extrusion.
- c. Roughly align the connecting connector at the height of the window frame.
- d. Tighten the two fixing screws.
- e. Open the locking lever at the bracket for the horizontal arm.



- a. Place the bracket on the window frame. To avoid later readjustment, position the bracket in alignment with the open part of the connector on the vertical extrusion.

Note!

Narrow window sill:

Slide the profile holder close to the angle and fix it using the fixing screws.

Wide window sill:

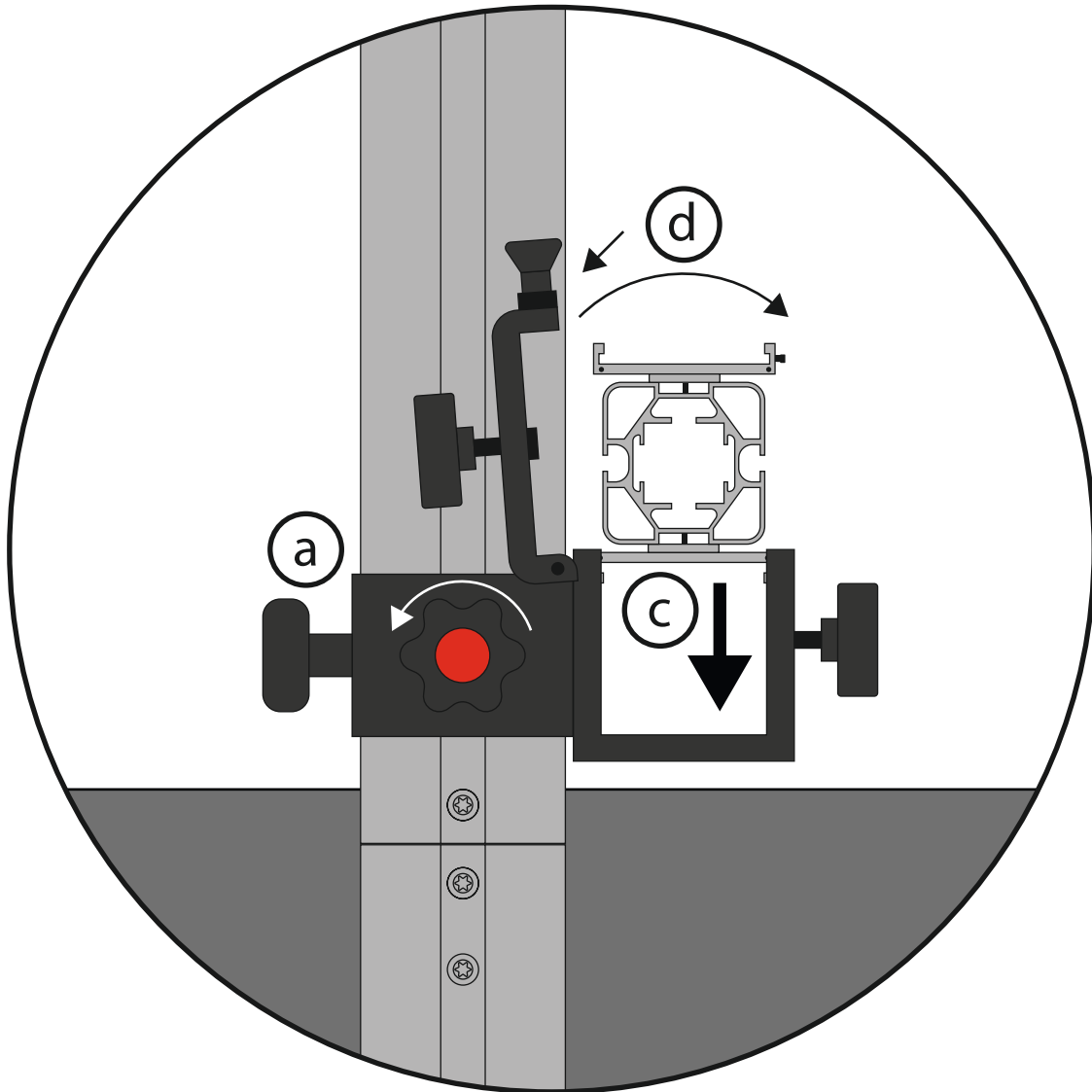
Slide the profile holder far away from the angle and fix it using the fixing screws.

- b. Unscrew the 2 screw clamps almost completely (at least to the middle). If necessary, pull the spring clamps back with the red switch pressed (red arrow in image).
- c. Push the levers of the 2 spring clamps until the bracket is firmly in contact with the window frame and window sill.
- d. Firmly fix the bracket with the 2 screw clamps.

Note!

The red switches on the spring clamps must not touch the profile holder completely, otherwise they cannot be pressed later.

- e. Loosen the 2 screws at the holder for the horizontal arm.
- f. Open the locking lever.



- a. Loosen the screws of the connector on the vertical extrusion, slide it to the height of the window frame bracket and tighten the screws again.

Note:

If the holder on the vertical extrusion is not at the level of the window frame holder, the horizontal arm may jam when inserted.

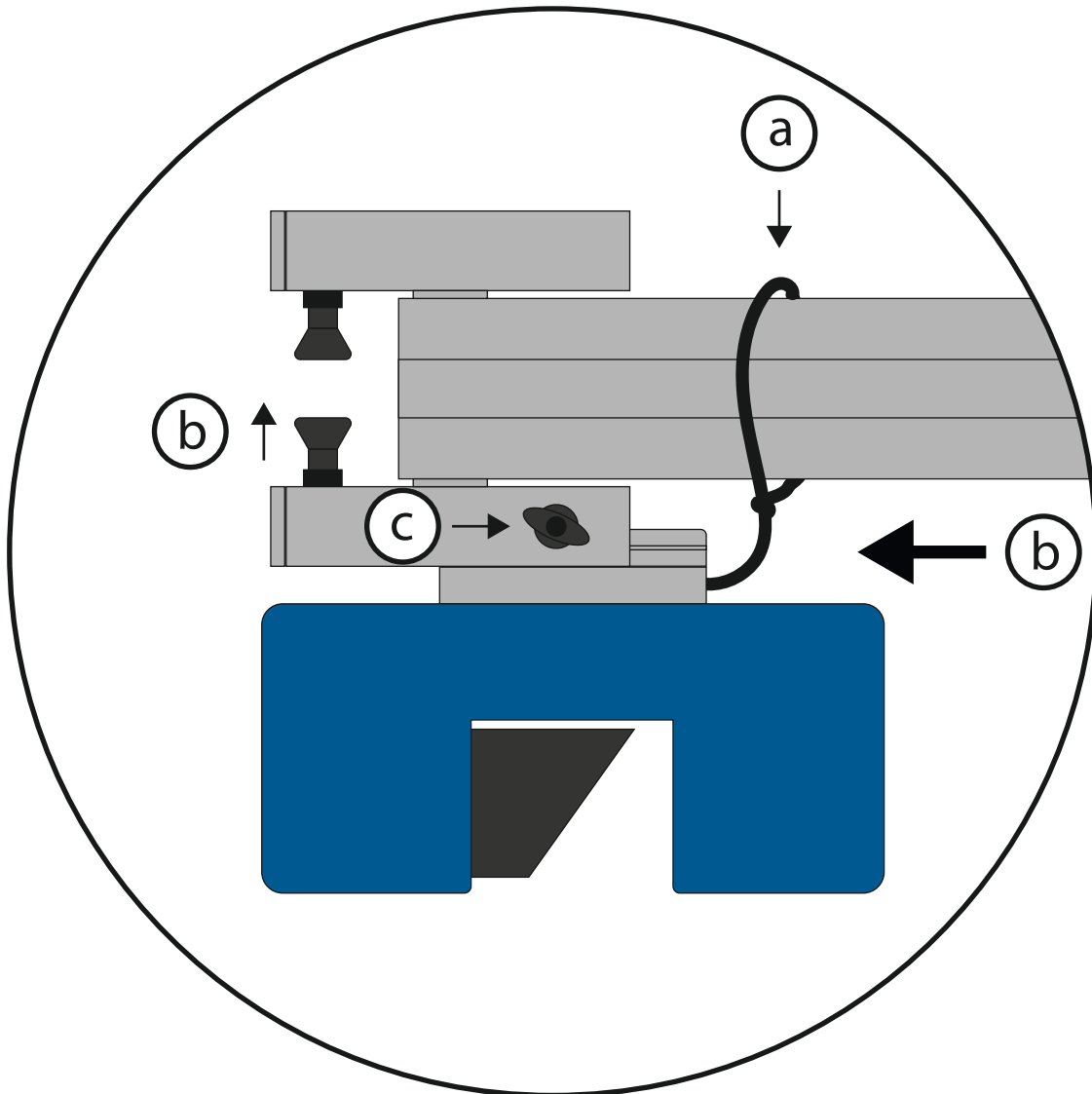
- b. Fasten the parts “horizontal middle” and “horizontal out” with 4 screws. (see step 4.2)
- c. Place the part “horizontal out” with the outwardly pointing fittings for the safety adapter (top & bottom) in both holders.
- d. Close both locking levers. The safety pin must engage.

Note:

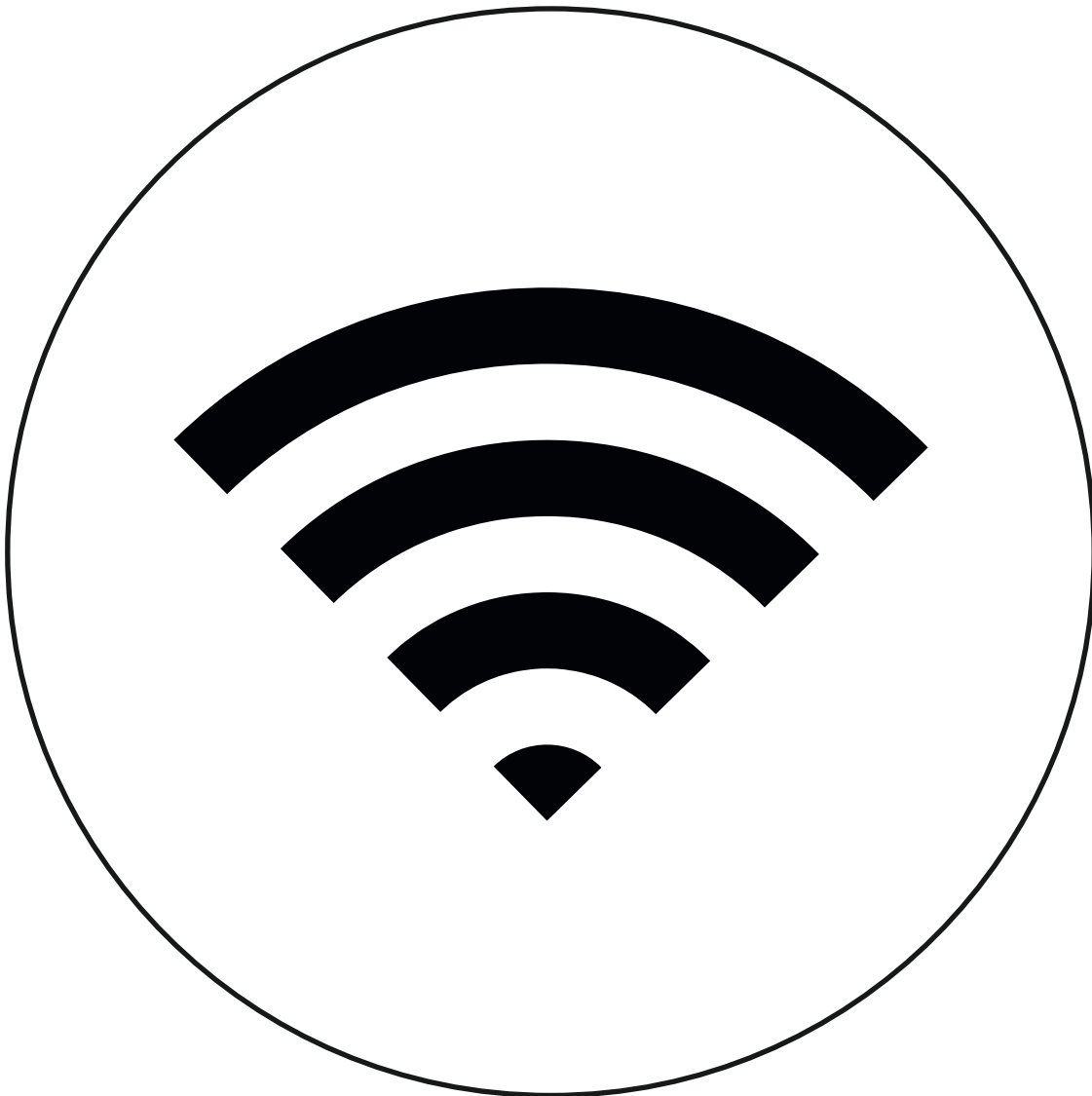
If the horizontal arm jams in the holders, readjust the height and position of the connector on the vertical extrusion..



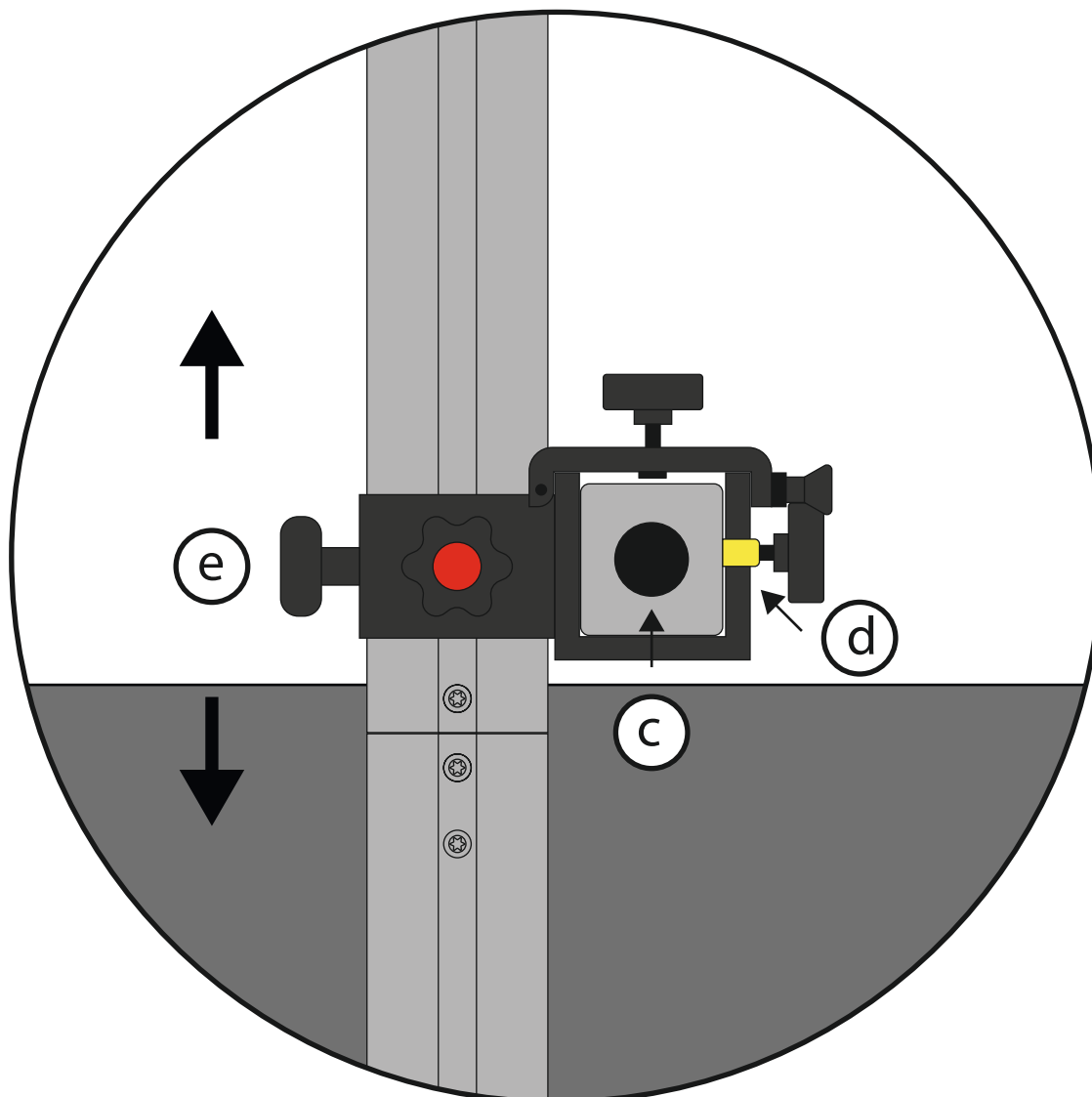
Please refer to the enclosed sheet for using the supplied adapter with your respective scanner.



- a. Lay the safety rope of the safety adapter around the horizontal arm.
- b. Insert the scanner with safety adapter – depending on the desired scan area – upright or upside down into the holder on the horizontal arm by pulling the safety pin, pushing the adapter completely into the holder and letting the pin snap in audibly.
- c. Tighten the fixing screw completely.



- a. Start the scanner.
- b. Set up remote control to the scanner via WLAN.

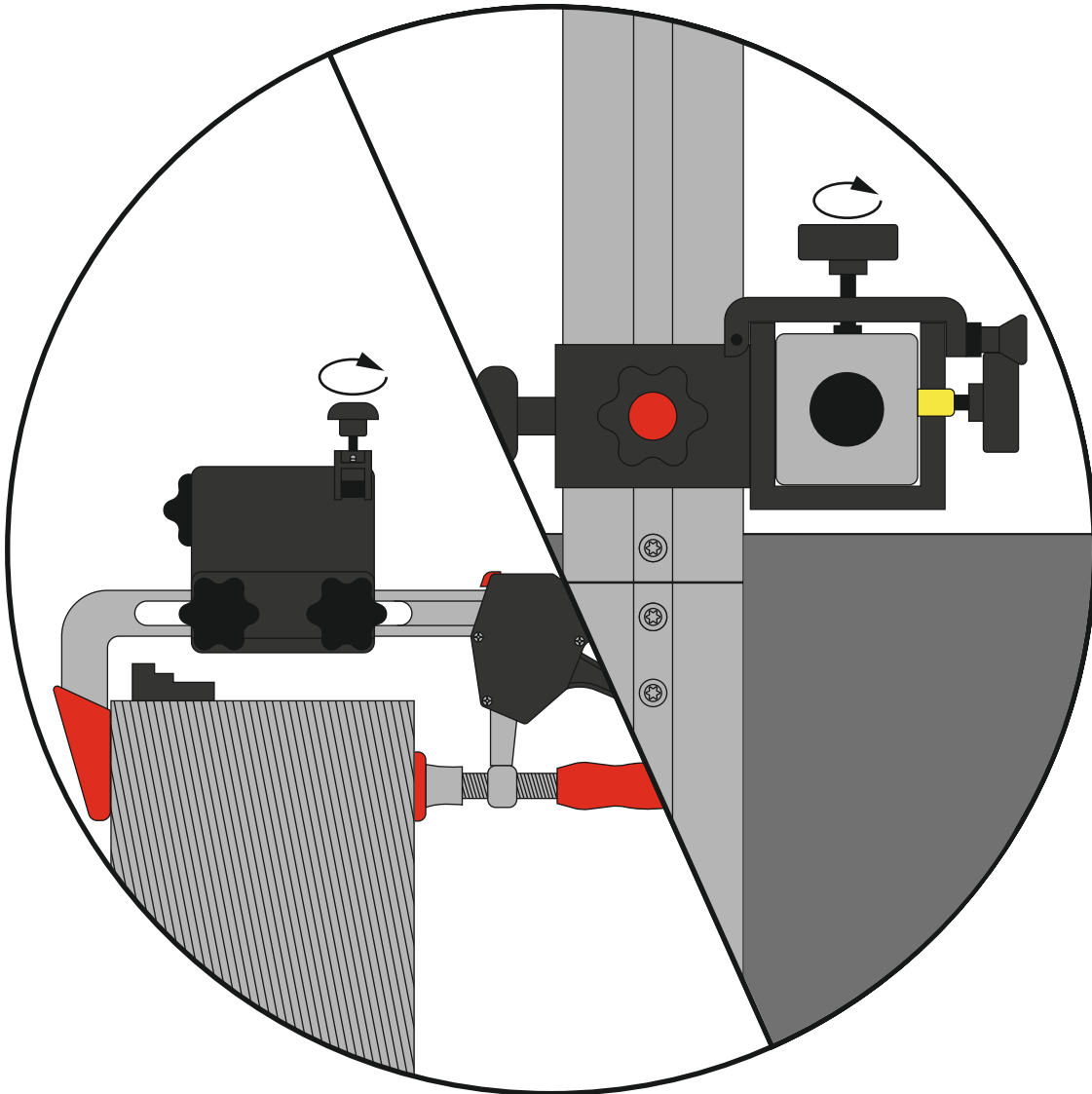


- a. Push the horizontal arm only so far out of the window that the part “horizontally out” protrudes from the window.
- b. Screw the part “horizontal in” to “horizontal middle” using 4 screws. (see step 4.2)

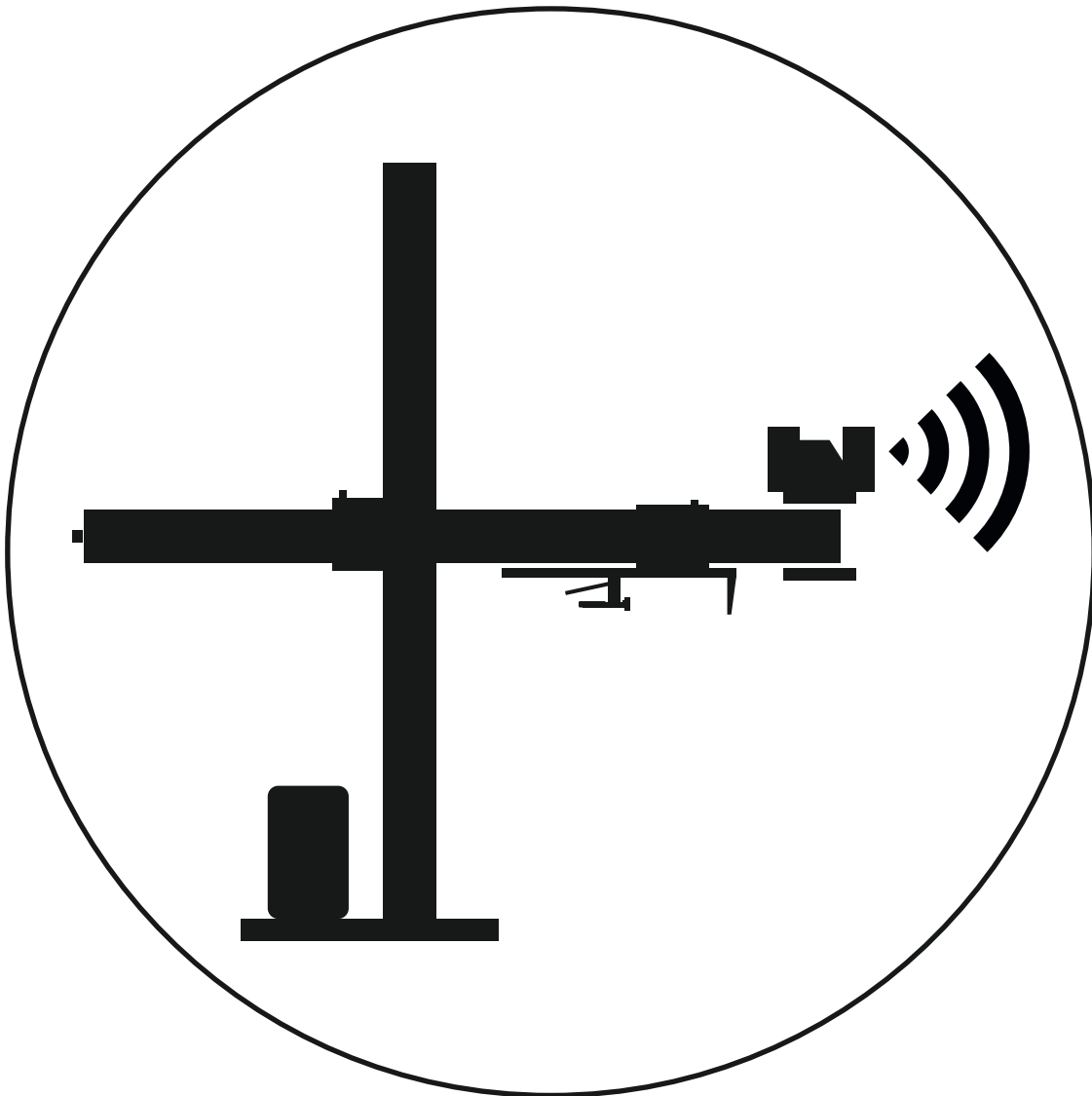
Note!

If the screws jam, relieve the connection by lifting the element to be screwed on.

- c. Screw the screw handle to “horizontal in”.
- d. Push the horizontal arm further out, at the most until further pushing out is prevented by touching the spirit level.
- e. Align the horizontal arm using the spirit level at the part “horizontal in”.

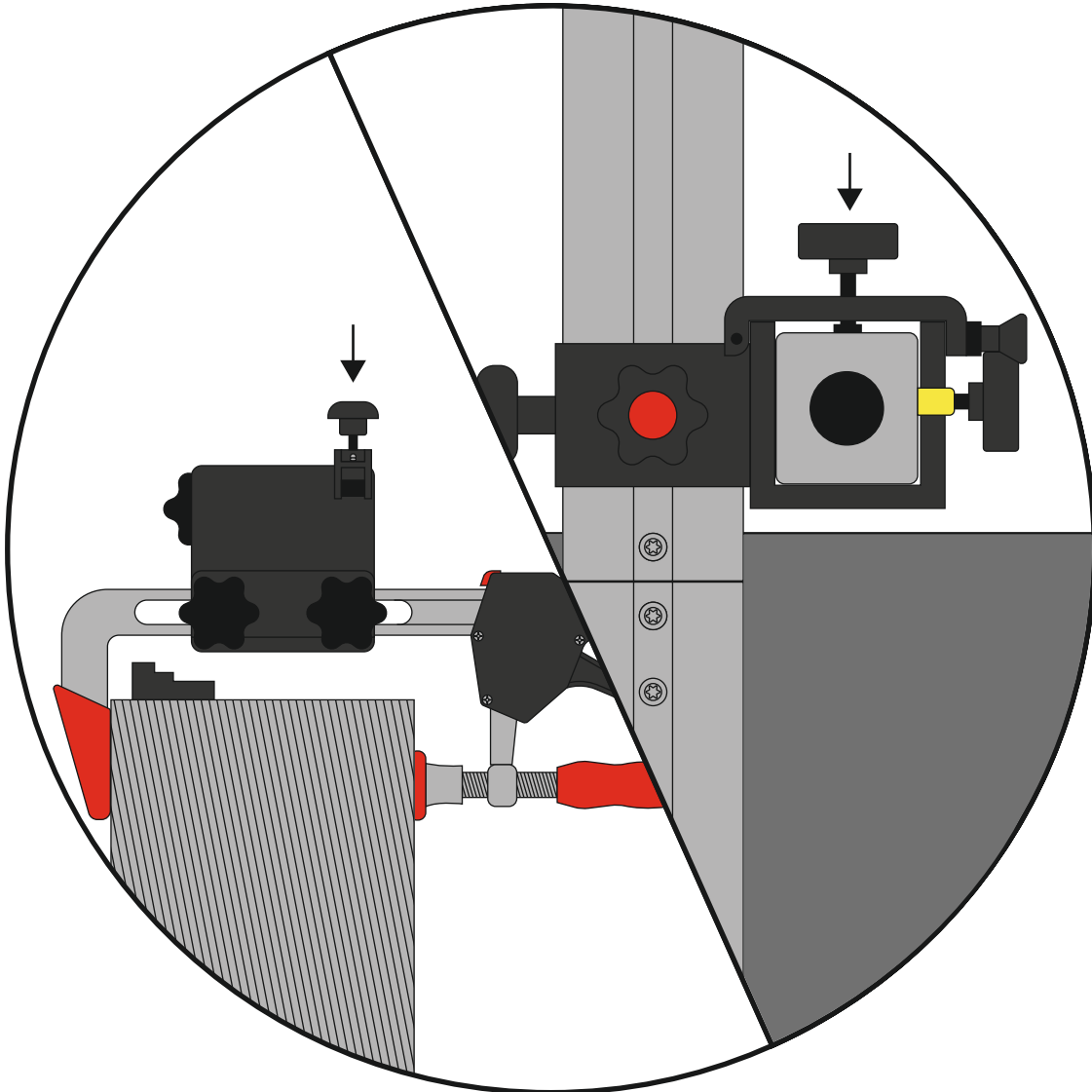


When the scanner has reached the desired scan position, tighten the 4 fixing screws on the window frame bracket and on the connector vertical extrusion/horizontal arm



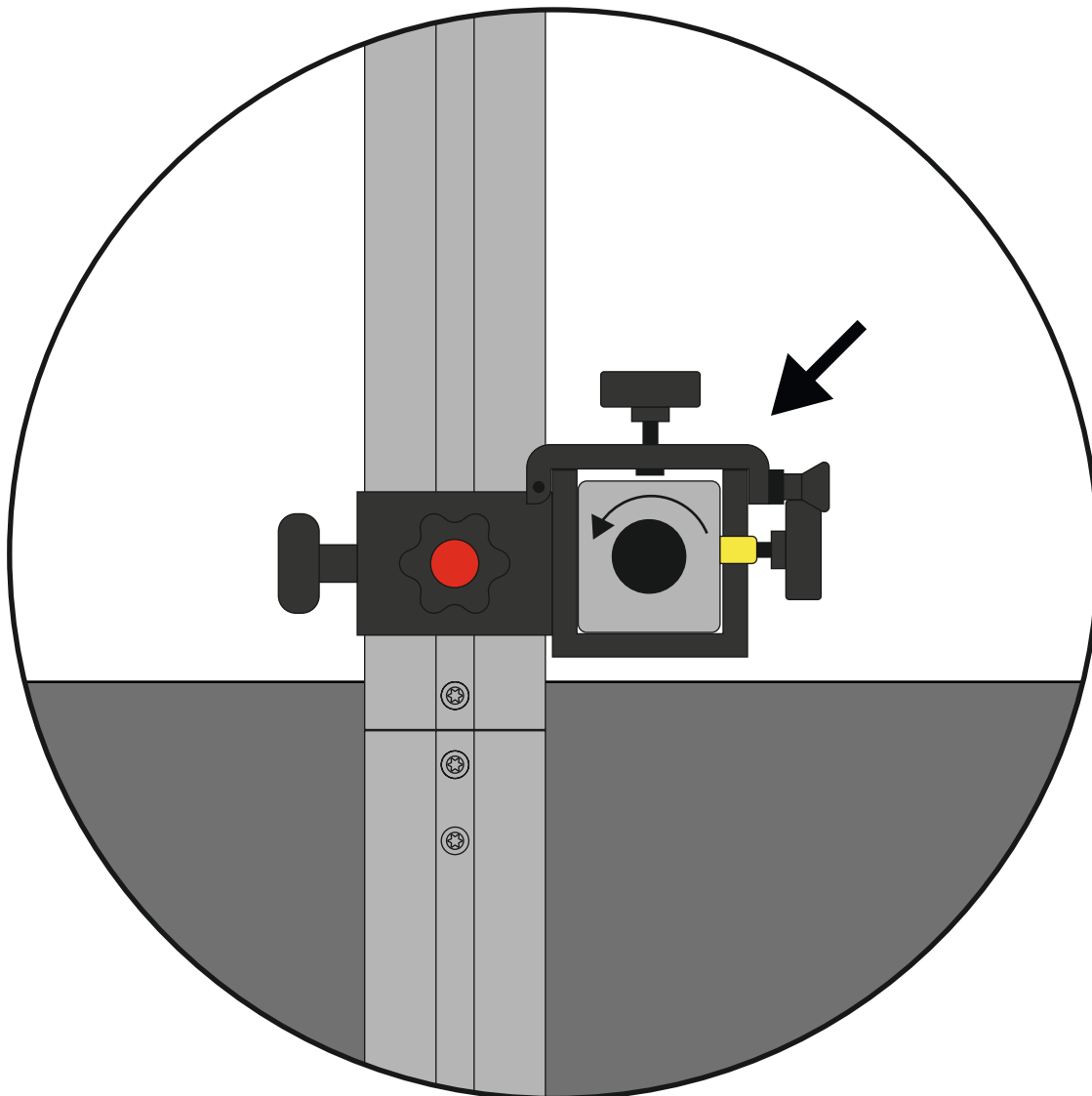
You can now start scanning.

5 Disassembly
5.1 Loosen fixing screws



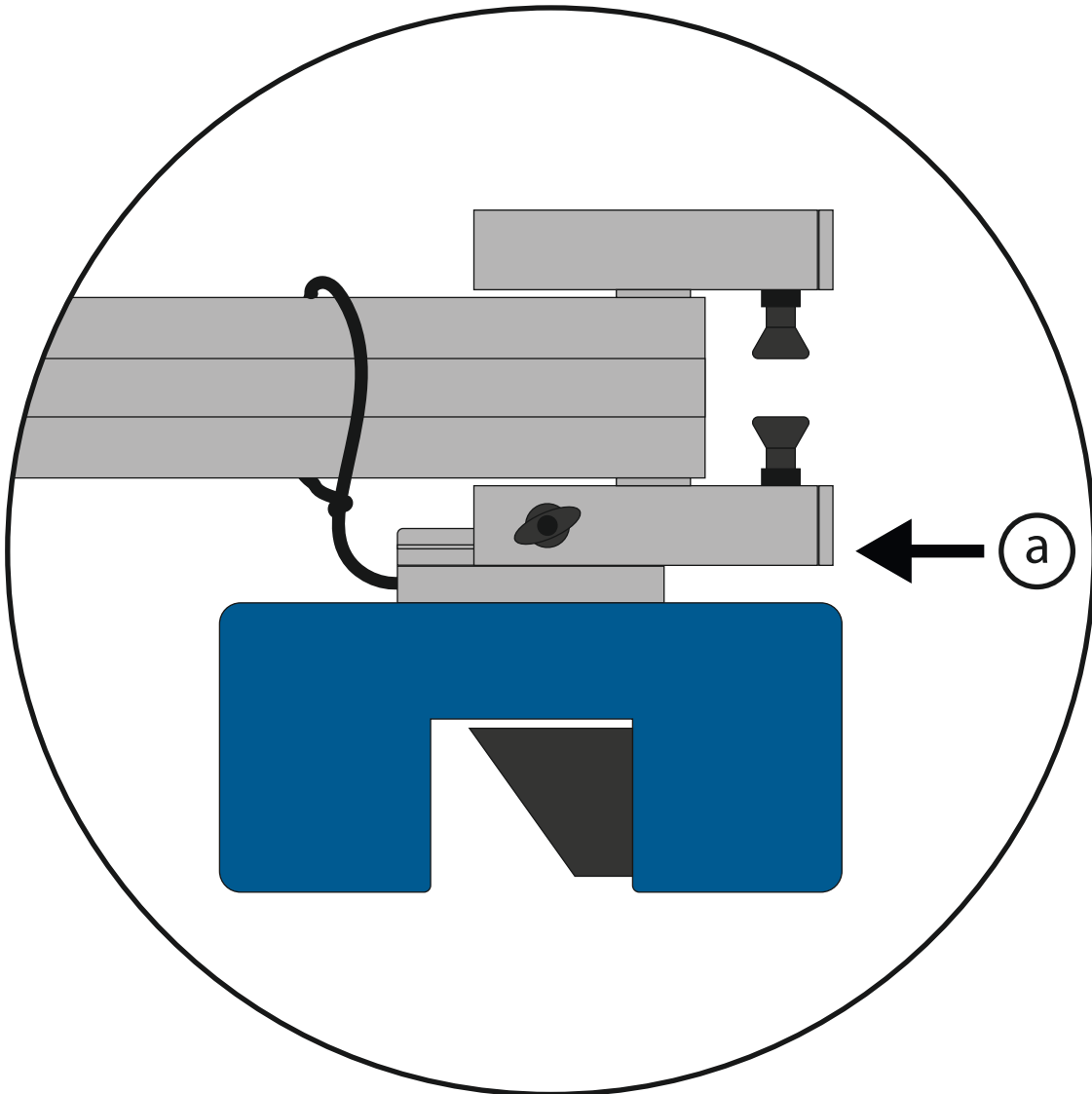
Loosen the fixing screws on the window frame bracket and on the connector vertical extrusion/horizontal arm.

5.2 Remove “horizontal in” element and screw handle

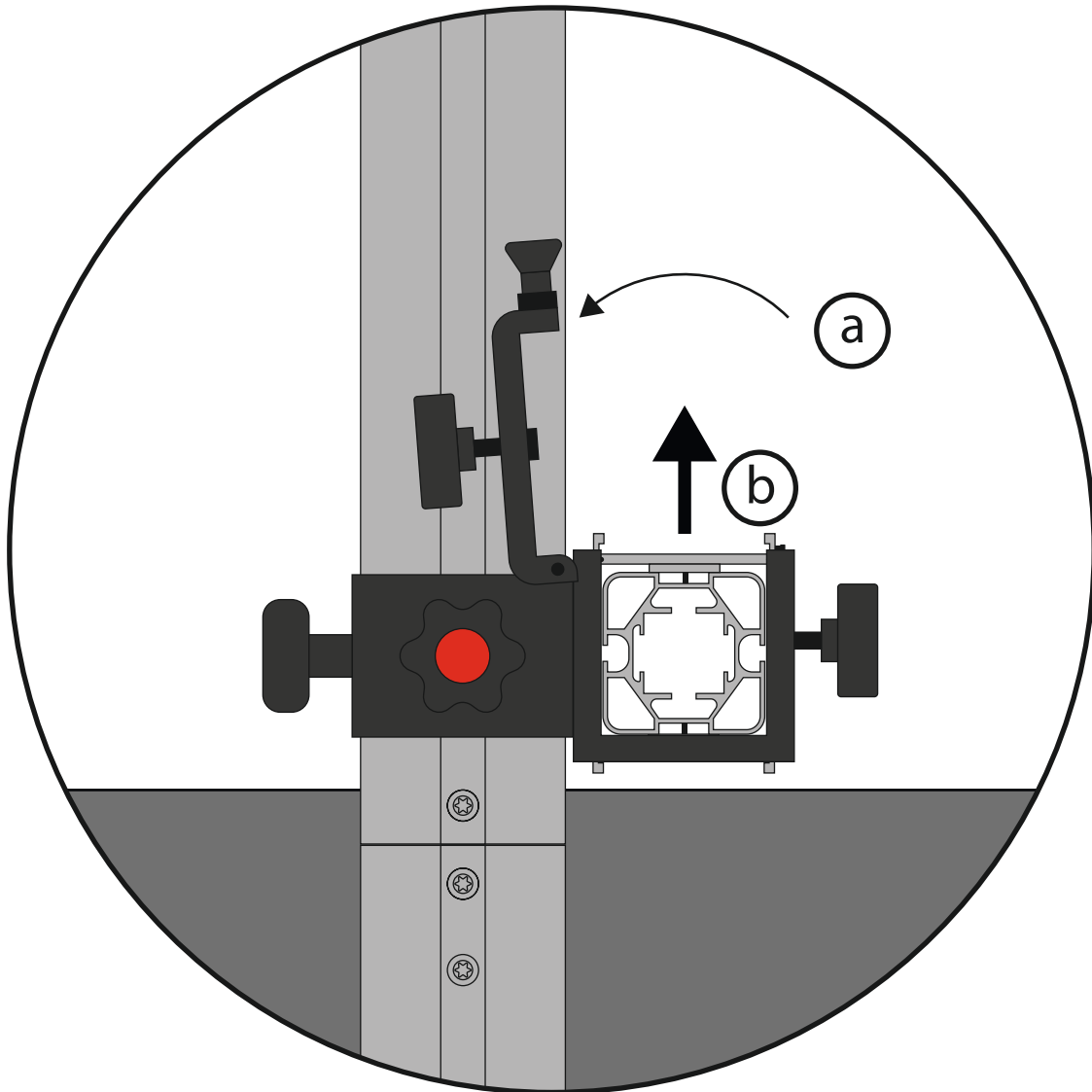


Push the horizontal arm back to unscrew the part “horizontal in” and the screw handle.

5.3 Remove scanner from the tripod

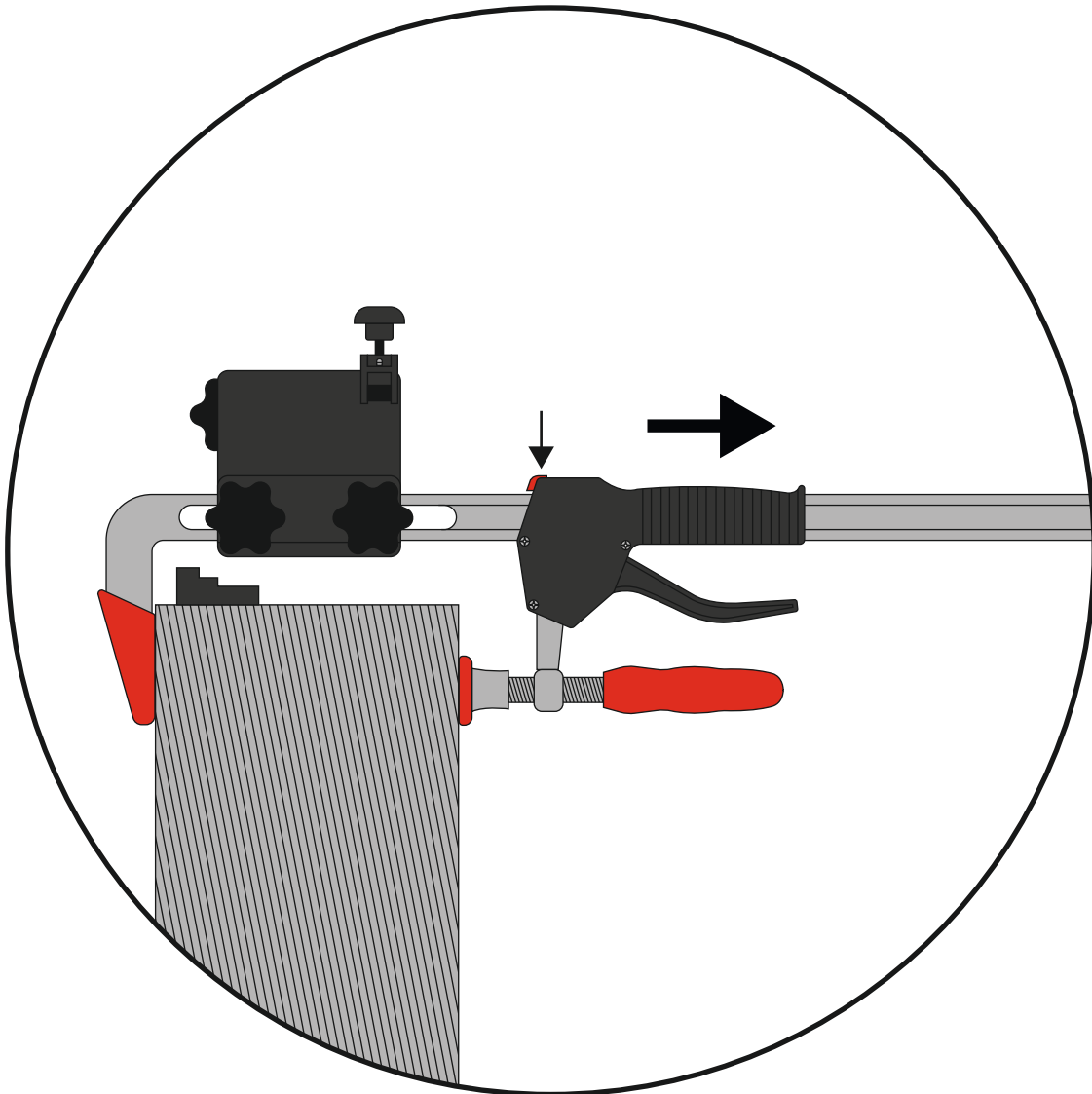


- a. Push the horizontal arm completely back into the building.
- b. Remove the scanner with the safety adapter from the tripod.

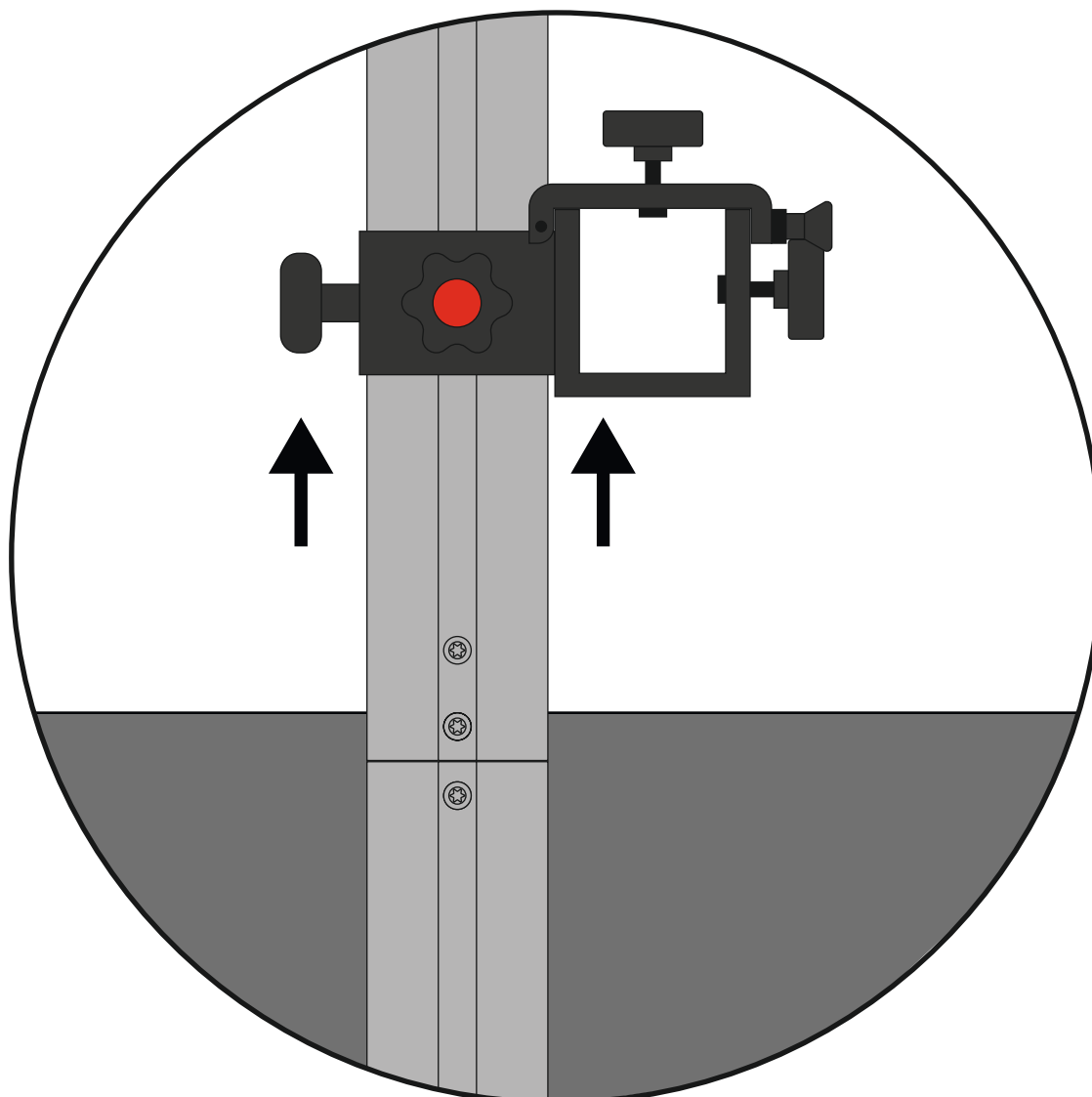


- a. Open the locking levers.
- b. Take the horizontal arm out of the holders and unscrew both parts.

5.5 Remove the window frame bracket

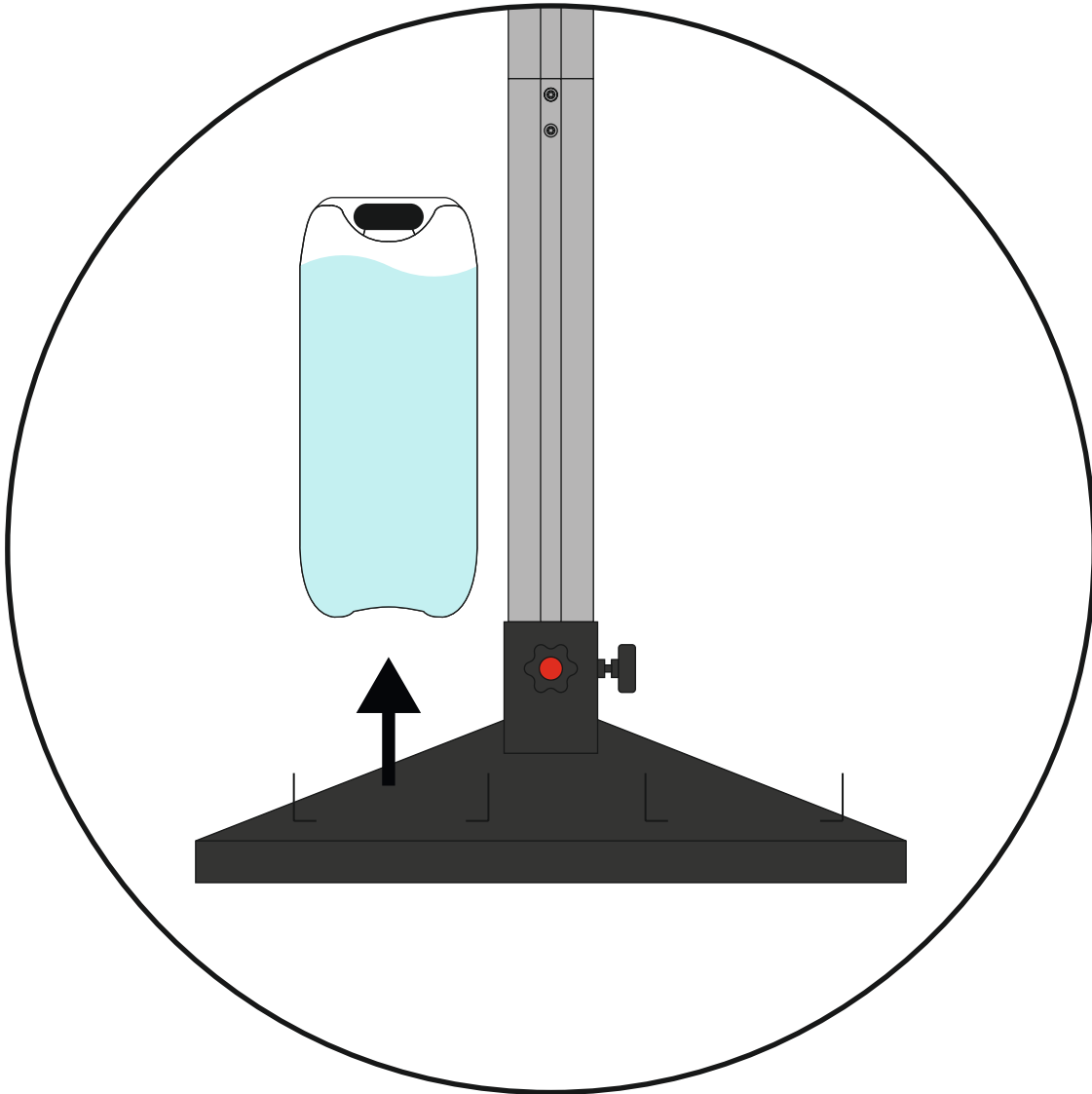


Remove the window frame bracket. By keeping the red switch pressed down you can retract the spring clamps.

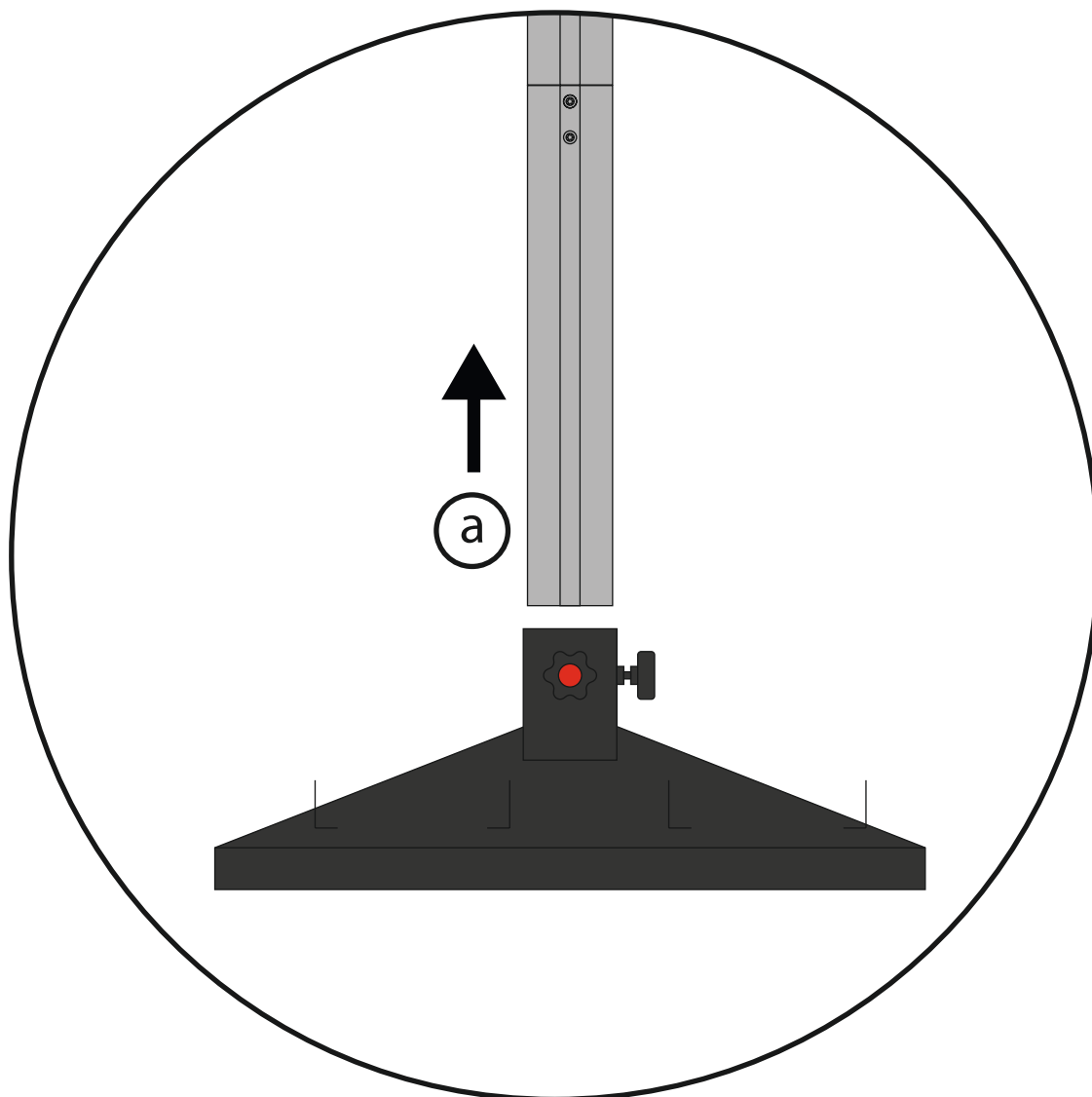


Remove the connector from the vertical extrusion.

5.7 Remove water canisters



Take the water canisters off the base.



- a. Take the vertical extrusion from the base and disassemble it.
- b. Stow all parts as shown in the illustration in the case lid.

6 Specifications



Horizontal tripod	For upright or overhead scanning thanks to 2 adapter supports on the horizontal arm
Weight of the tripod	37kg
Max. distance from scanner to facade	260cm
Material	Aluminium and steel
Max. load	6 k
Max. useful height	157cm
Min. useful height	18cm
Max. width of windows or parapets	22cm
Dimensions of transport box (L x W x H)	135 x 42 x 44cm
Weight of transport box (incl. tripod)	50kg
Compatible laser scanners	With suitable adapter compatible with various scanners up to 6kg; ask the manufacturer

7 Disclaimer



Laserscanning Europe GmbH assumes no liability and grants no warranty, neither expressly nor by implication, with regard to the information contained in this operating manual.

Buyers of the product bear the costs of all required services or repairs and damage caused as a result of improper use of this product or non-compliance with the safety instructions as well as direct or indirect damage and loss (including loss of profit and information loss) resulting from product deficiencies.

Unauthorized copying or dissemination of the content of this document, whether in part or as a whole, is prohibited. The right to make changes to the product and instructions is reserved. Everything possible has been done to ensure that the content of this document is correct. Should you discover any errors or if details appear to be unusual, please notify Laserscanning Europe GmbH.

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