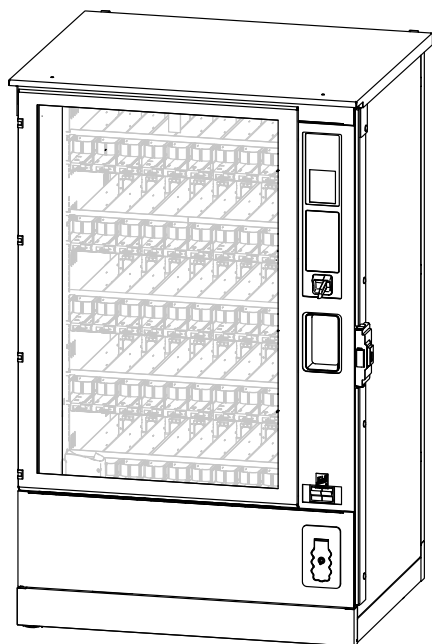
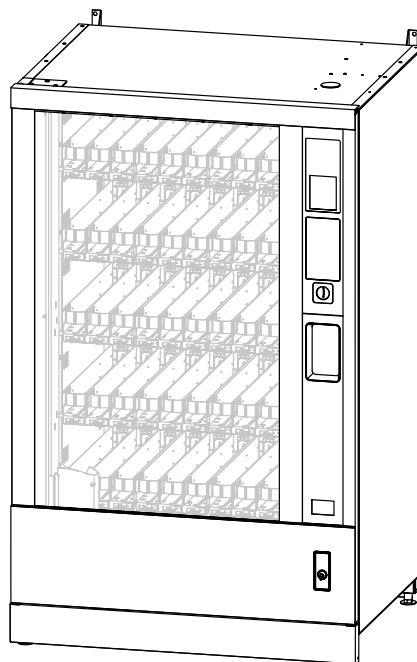
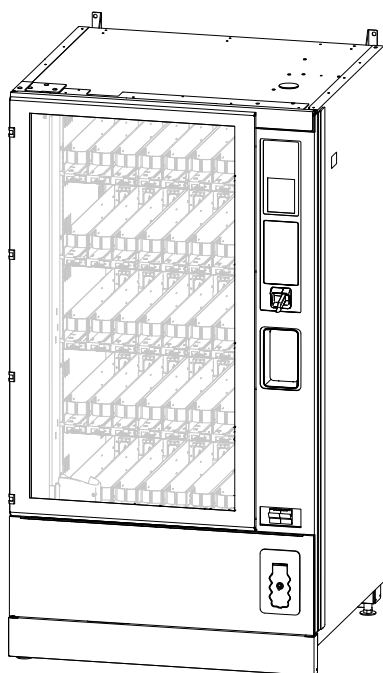




Technical manual

GF SiLine L / GF SiLine M

Type 04



en

25/03/2026

707 66 010 00 _ 031



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1. General

Versions

Please note that these instructions apply to different machine versions. For this reason, some information may not apply to your machine.

These instructions apply to the following versions:

Designation	Part no.....	Note
GF SiLine L RB04	705 00 000 14	RAL trim panel
GF SiLine L RP04	705 00 000 34	RAL trim panel, Public
GF SiLine L RO04	705 00 000 44	RAL Outdoor
GF SiLine M RB04.....	707 00 000 14	RAL trim panel
GF SiLine M RP04	707 00 000 34	RAL trim panel, Public

1.1 Identification

Sielaff GmbH & Co. KG
Automatenbau
D-91567 HERRIEDEN
www.sielaff.de



Bezeichnung / Designation / Désignation:
Kaltgetränkautomat/Bottle and can vending machine/Distributeurs réfrigérés de
boissons en boîtes et bouteilles

Typenbezeichnung / designation of type / désignation du type

GF SiLine

850 W 230 V~ 50 Hz

CE IP 20 N
Made in Germany

707 00 900 00 / 3



If cooling with R-290 is installed: Symbol for “Warning: flammable substances”

1.2 Who this document is intended for

This document is intended for trained personnel and service engineers. It is assumed that the target group has received training on the vending machine.

1.3 Safety information

Repairs

- There may be sharp edges and corners inside the vending machine. Wear protective gloves when carrying out maintenance work.
- The use of the service key is reserved exclusively for trained personnel. When the service key is inserted, a protective device is bypassed. Risk of injury!
- Use original spare parts only.
- Only products approved by SIELAFF may be used.
- Any modification or conversion of the machine is prohibited. SIELAFF does not accept any responsibility for any defect claims as a result of not following the aforementioned instructions!

Requirements for maintenance and repairs

- Before any repairs are carried out on the machine, the mains plug must always be disconnected from the mains power supply. The mains plug must be positioned in such a way that it can be monitored during repair work without anyone plugging it back in by accident.

1.4 Explanation of signs and symbols

This beverage dispenser has been manufactured according to current state of the art production processes. Nevertheless, all machines pose certain risks that cannot be eliminated by design.

In order to ensure sufficient safety for the operator, additional safety instructions are provided, which are identified and described in the highlighted text below.

Observing this information is the only way to ensure adequate operational safety.

The wording and/or symbols carry different meanings:

**DANGER**

Immediate danger which could result in death or severe injury.

**WARNING**

Possible dangerous situation which could result in death or severe injury.

**CAUTION**

Dangerous situation which could result in minor injury or damage to the machine.

**NOTE**

Note that should be observed to avoid damaging the vending machine.

**TIP**

Information to facilitate handling and use of the machine.

In addition, the following hazard symbols are used in some places:

**WARNING: electrical energy! Danger to life!**

There are live parts in the vicinity of this symbol. Covers marked with this symbol may only be removed by a recognised electrician.

**Observe handling regulations when dealing with electrostatically sensitive devices (ESD)**

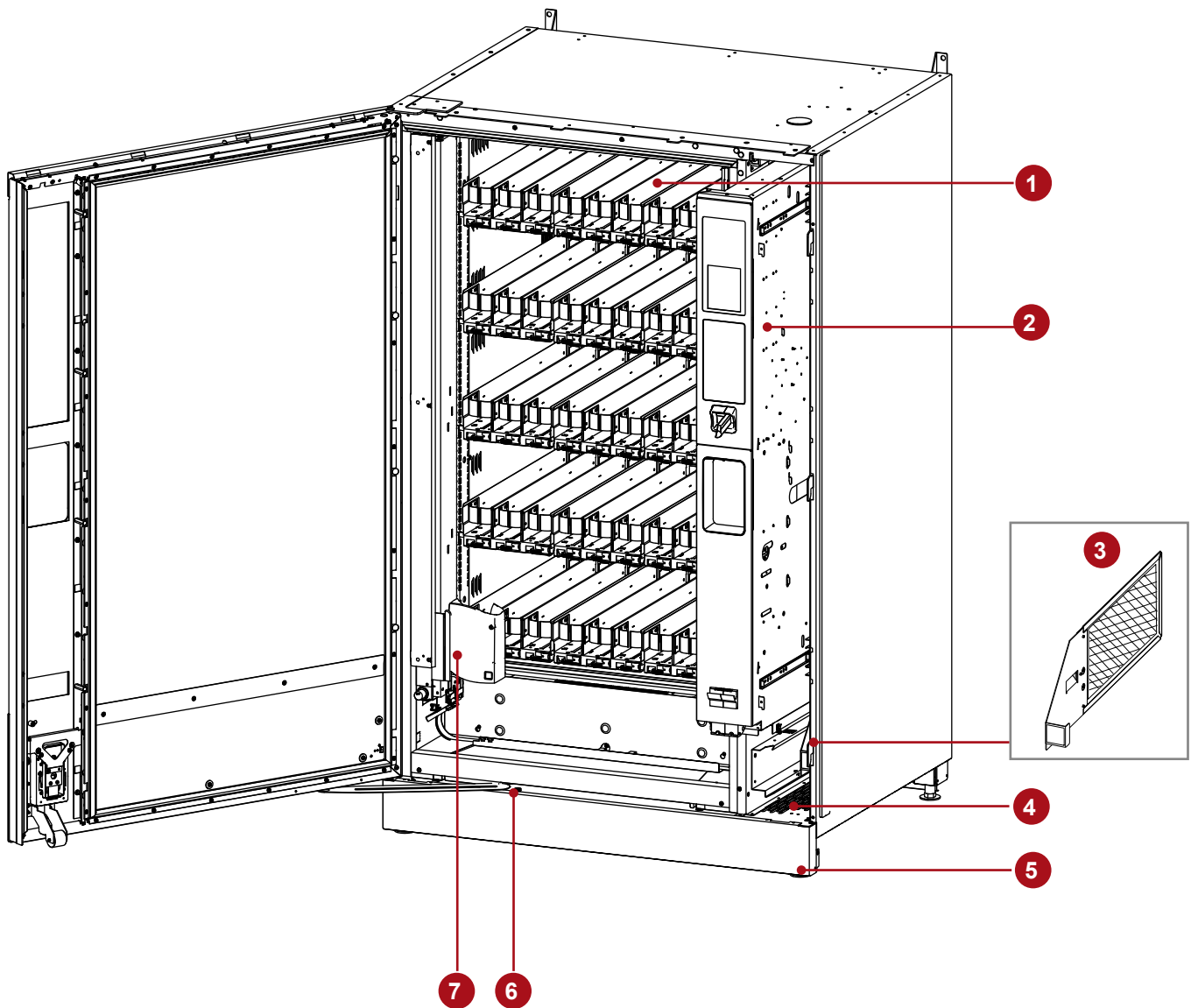
Covers marked with this symbol have electrostatically sensitive devices located behind them.

Contact with plug-in connections, conductor tracks and component pins must be avoided at all costs. Only specialist personnel with ESD knowledge are authorised to carry out work!

**DANGER! Flammable substances!**

This symbol warns of flammable substances. There is a risk of serious injuries or death. Ignition sources, such as burning cigarettes or lighters, must be kept away when opening the vending machine door.

2. Machine diagram



1 Product container

2 Telescopic sliding door unit

3 Dust filter, removable

4 Cooling air inlet

5 Plinth

6 Door stop

7 Basket on lift arm

3. Maintenance schedule

To keep unplanned machine downtime to an absolute minimum, we recommend adhering to the following maintenance schedule. Depending on the ambient conditions at the installation site, it may be necessary to adjust the maintenance intervals.

Every 30,000 vends - at the latest every 12 months

Housing, machine door

OK	Component	Additional equipment	Action/operation
	Secure vending stand		Check
	Machine exterior	Cleaning and care products	Clean
	Vending machine door closes properly		Check
	Insulating glass pane	Glass cleaner	Clean
	Bearing studs, machine door top and bottom	998 90 023 00	Lubricate
	Bolt hook	998 90 023 00	Lubricate
	Bolt bar	998 90 023 00	Lubricate
	Bearing axle, locking pin	998 90 023 00	Lubricate
	Lock	According to manufacturer specifications	Lubricate
	Door seal, entire circumference		Check, clean and – if necessary – maintain
	Product lighting		Check
	Partition wall flap: Torsion spring, seal, closing function		Check
	LED operation		Check
	Folding function left light strip		Check
	Cable routing top left		Check
	Junction box (optional) Test button T on the RCD	Test button T on the RCD	Operate

Product container

OK	Component	Additional equipment	Action/operation
	Price/selection sign legibility		Check
	Interior of the product container	Rinsing water	Clean
	Snap-in function of the product container		Check
	Product pusher	Can be moved with uniform force	Check
	Pusher/sliding piece engaged		Check
	Pusher belt seated correctly		Check
	Belt deflection seated correctly at the rear		Check
	Toothed belt free of damage?		Check
	Front drive gear		Check
	Pendulum hook hooking point		Check
	Product retaining spring	Engaged and not damaged?	Check

Payment system

OK	Component	Additional equipment	Action/operation
	Coin mechanism (optional)		According to manufacturer specifications
	Card reader (optional)		According to manufacturer specifications
	Note validator (optional)		According to manufacturer specifications

Sliding door unit

OK	Component	Additional equipment	Action/operation
	Coin channels	Rinsing water	Clean
	Display		Clean
	Money return tray		Clean
	Money return motor - function	Coin return button [R]	Check
	Product removal unit, inner area		Clean
	Ease of movement of the locking slide incl. spring		Check
	Dispenser flap	The motor can be moved smoothly by hand	Check
	Min. lifting force 250 g	e.g. 0.25 l can	Check
	Slipping clutch function	e.g. 0.25 l can	Check

Lift system

OK	Component	Additional equipment	Action/operation
	Horizontal linear rail top	998 90 023 00	Clean, lubricate
	Horizontal guide rail bottom	998 90 023 00	Clean, lubricate
	Damage to horizontal toothed belt		Check
	Damage to vertical toothed belt		Check
	Belt drive deflection pulleys (7x)		Check
	Belt tension: Horizontal drive: measuring point: top centre; I rail on the far left. 1 N at 15 mm deflection or 20 Hz	Force gauge	Check
	Vertical drive: measuring point: in the middle, basket at the bottom. 1 N at 15 mm deflection or 15 Hz	Force gauge	Check
	Displacement forces: I rail left/right: max. 15 N Basket at the top: max. 9 N Basket at the bottom: max. 6 N	Force gauge	Check
	Movable ribbon cable loop at the bottom: no kinks/damage?		Check
	Fork light barrier for height detection + Y-reference	Brush, air	Clean
	Microswitch for X-reference		Check

Product basket

OK	Component	Additional equipment	Action/operation
	Basket top section	Rinsing water	Clean
	Light barrier	Brush, air, flashing mode at 5 second intervals	Clean, test
	Drive belt damage		Check
	Gear pendulum damage		Check
	Gear self-aligning bearing incl. toothed wheels	Berulub FR 43; 998 90 064 00	Check, lubricate
	Even level of force when pendulum is swung in and out		Check
	Pendulum hook damage		Check
	Pendulum hook mounting	MicroLube GL 261; 998 90 037 01	Check, lubricate
	Gear motor, shaft bearing top	MicroLube GL 261; 998 90 037 01	Check, lubricate

Cooling

OK	Component	Additional equipment	Action/operation
	Dust filter	Brush, compressed air	Clean
	Compressor	Brush, compressed air	Clean
	Condenser	Brush, compressed air	Clean
	Base plate ventilation slots		Clean
	Connection seals, front, rear + left, right in housing	Vaseline, rubber care solution	Check, clean, lubricate
	Plugs and connections		Check
	Fan	Brush, compressed air	Clean

	Gas sensor (no damage visible)		Check
	Gas inlet on the gas sensor: dust, dirt, moisture deposits	Brush, cloth	Clean
	Activate self-test		Check
	Test gas sensor with test gas	Test gas	Check

Final checks

OK	Component	Additional equipment	Action/operation
	Approach positions for selections 10, 18, 30, 38, 50, 58	X direction: toothed wheel for pendulum drive aligned with toothed wheel of product container Y-direction: pendulum hook grips centrally at the hooking point on the product container	Check

Every six months (if required)

OK	Component	Additional equipment	Action/operation
	Electrical repeat test according to VDE 0701		Carry out

4. Maintenance components

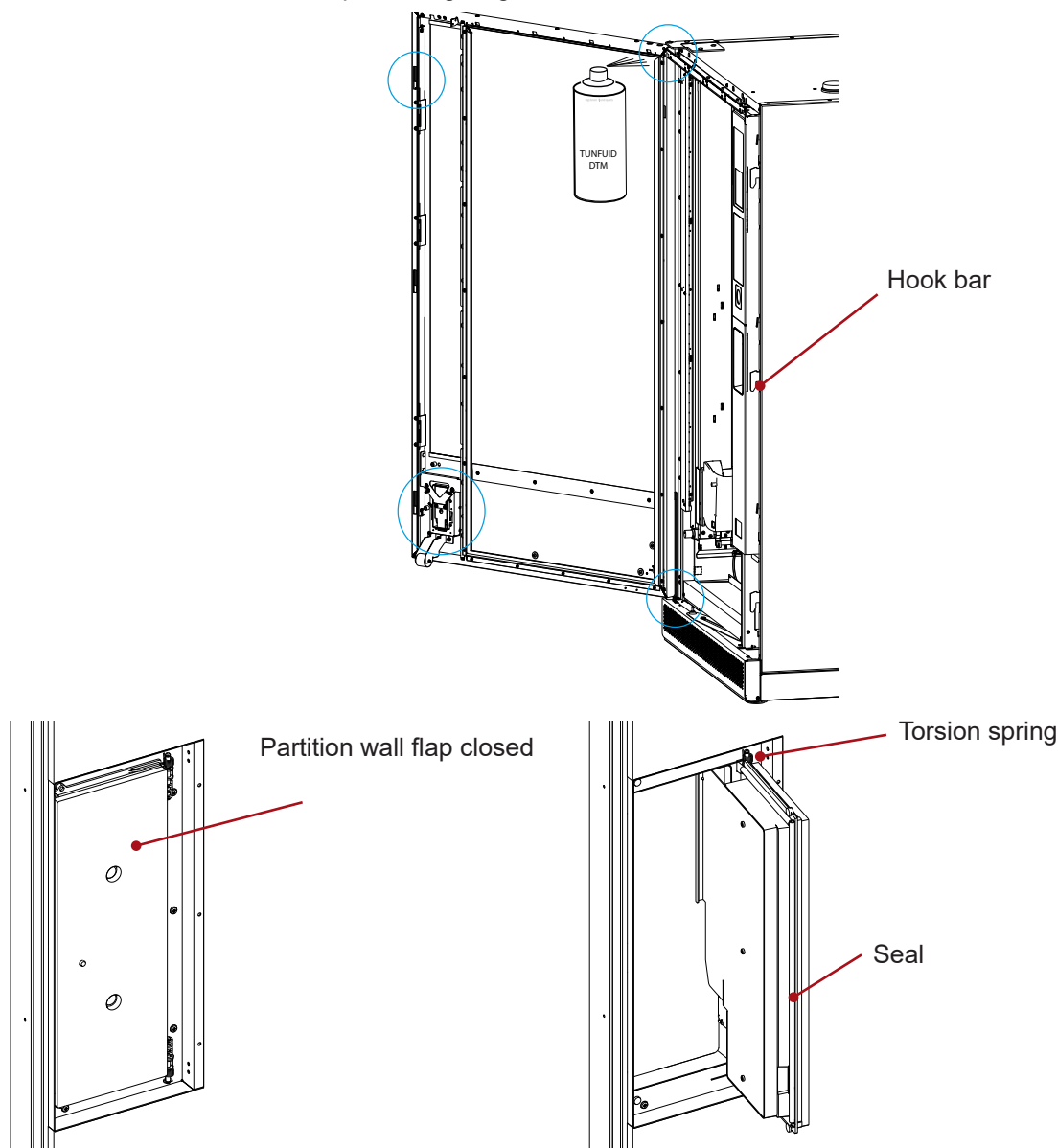
4.1 Housing

Additional equipment

- Lubricant Tunfluid DAB Aerosol, spray can part no. 998 90 023 00

Procedure

- Check that the vending machine is secure and anchored.
- Check the mains connection cable of the vending machine.
- Check the function and fit of the closed vending machine door.
- Check the integrity of the vending machine door bearings and lubricate them.
- Lubricate the contact surfaces of the hook bar.
- Check bearing axle, locking pin for function and lubricate.
- Check the integrity of the seal on the vending machine door and maintain it if necessary.
- Maintain the lock of the locking flap according to the manufacturer's instructions.
- Check the integrity of the insulating glass pane.
- Clean the inside and outside of the insulating glass pane.
- Check that all individual LEDs of the product lighting come on.



4.2 Notes on cooling

- The operating company is responsible for instructing the skilled workers, for arranging regular maintenance and for ensuring compliance with all regulations at the place of work.
- Install the machine in such a way that the air inlet and outlet areas of the heat exchanger are always kept completely free and that a thermal short circuit cannot occur at any time.
- The vending machine must have at least 50 mm clearance to the wall at the back because the hot air must be able to escape.
- A backflow of warm air must be prevented. This is the case if the intake protection in the rear panel of the machine is correctly mounted (exception: promotional rear panel).
- To ensure the function of the finned heat exchanger, the individual fins must not be bent.

**CAUTION! Risk of injury!**

Danger of cuts from touching the fins. Wear protective gloves.

The cooling unit should be operated in accordance with the German Ordinance on Industrial Safety and Health (BetrSichV). It has been tested for leaks.

- The cooling is controlled automatically via temperature sensors and the vending machine control unit.
- When the cooling unit stops, the fan starts up automatically at set intervals to circulate the air and prevent air stratification.
- The cooling module is largely maintenance-free.
However, the lint filter and the fins on the evaporator and condenser sides should occasionally be dedusted with compressed air.

4.3 Cooling module removal



NOTE

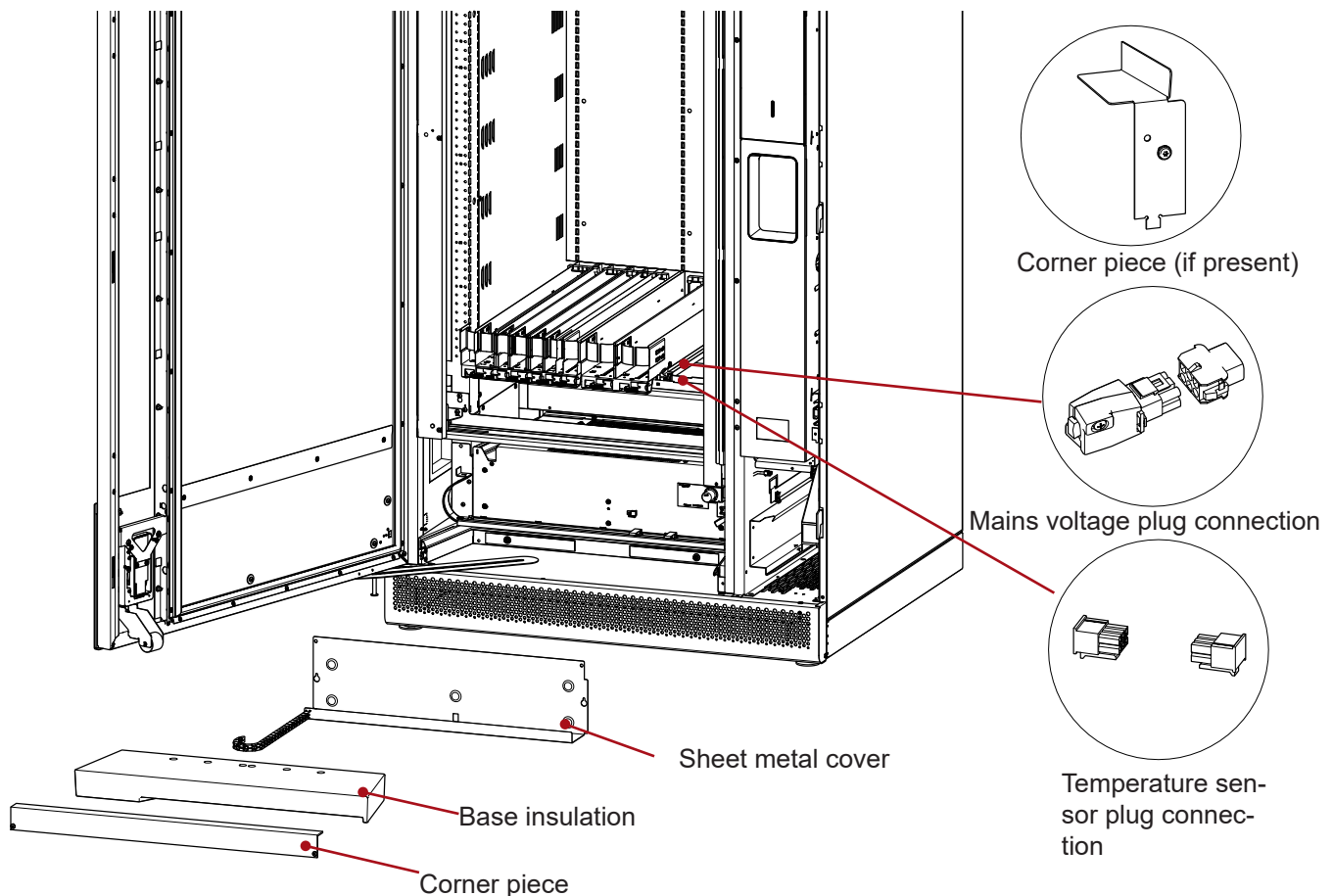
The cooling module may be damaged if it is turned upside down. Store and transport the cooling module in the installation position only. If the cooling module has been turned upside down, it must be stored in the installation position for at least 24 hours before switching on.

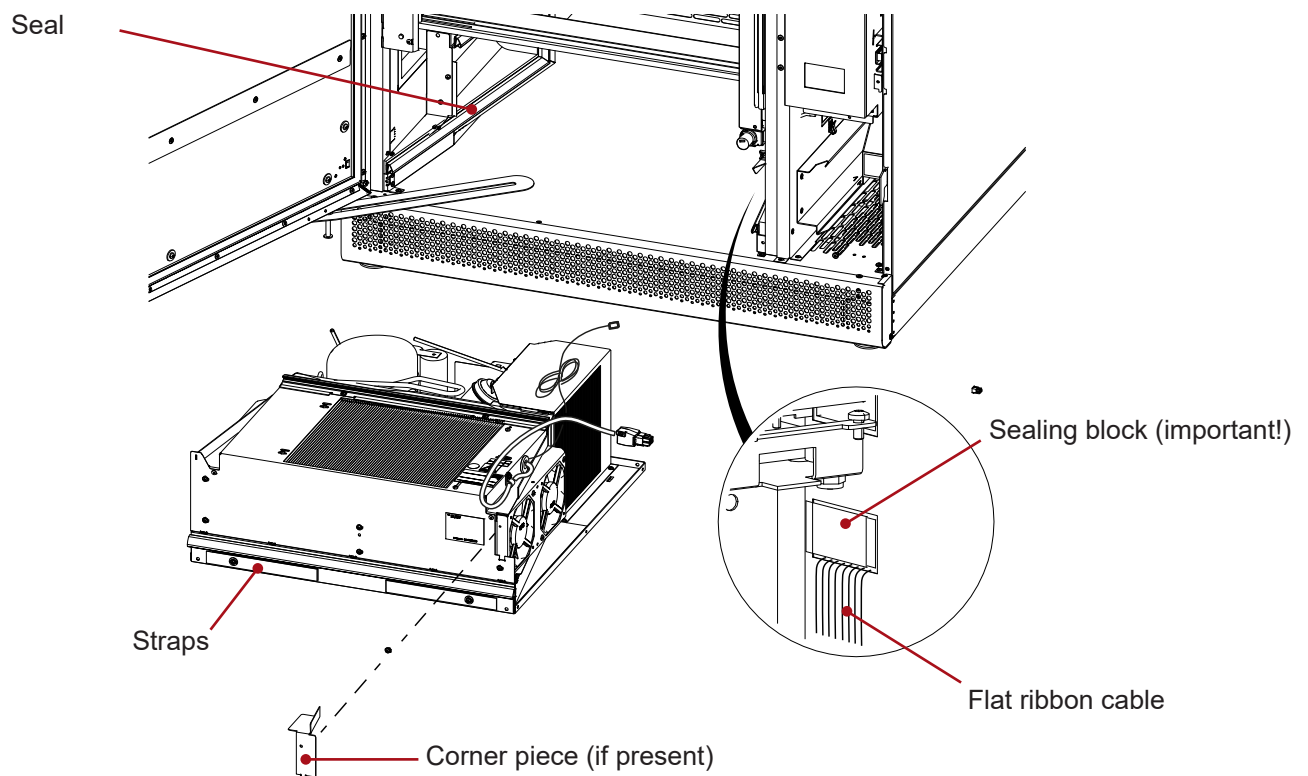
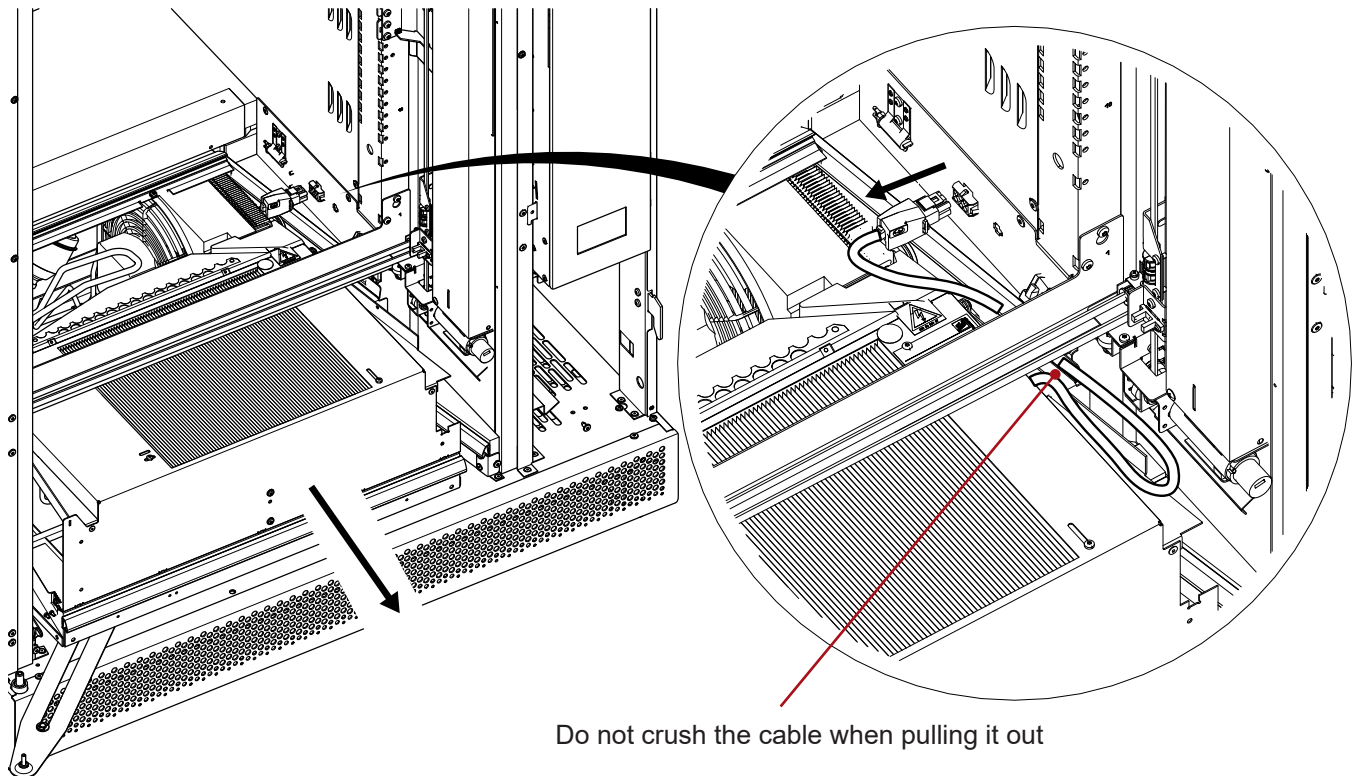
Removing the cooling unit:

1. Pull out the mains plug. Open the machine door.
2. Empty the lower right product container and remove it. The plug connections are now accessible.
3. Open the terminal points and remove the ribbon cable.
4. Loosen the screws and remove the sheet metal cover.
5. Loosen the angle bracket. Remove the base insulation.
6. M version only: Loosen the screw and remove the corner piece.
7. Slowly slide the lift system to the right and push the product basket into the dispenser tray.
8. Unplug the plug connections: the thin wire is for the temperature sensor; the thick wire is for the mains voltage.
9. Slowly pull out the cooling module by the straps. Do not crush the electrical cable!

Installing the cooling unit:

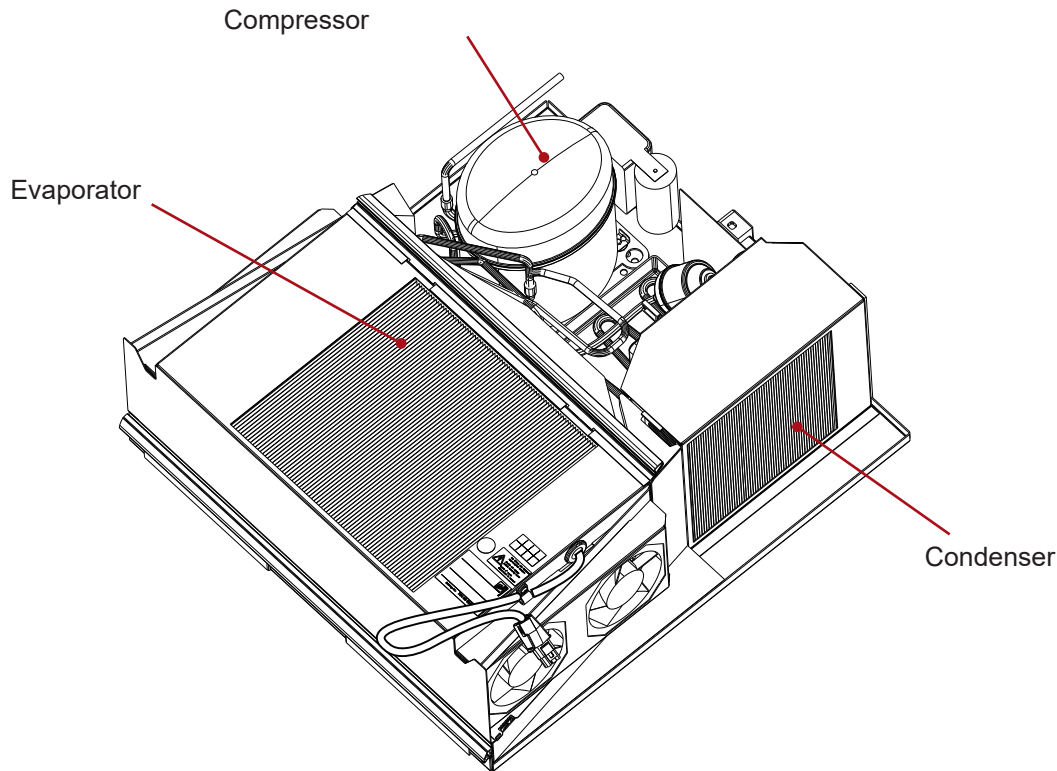
- To carry out installation, perform the above steps in reverse order.
- Before inserting the cooling module, check that the installation space does not contain any foreign objects (e.g. screws). The entire width of the cooling module must rest against the rear panel.
- Check the sealing surfaces for integrity on the right and left inside the installation space.





4.4 Cleaning the evaporator, condenser

- Cleaning work must only be carried out by trained specialist personnel. Incorrect cleaning can lead to damage and failure of the cooling unit!
- Do not use sharp-edged objects.
- Do not use abrasive or acidic cleaning agents.
- The evaporator and the condenser must be dedusted with a vacuum cleaner or compressed air at least once every six months. Any build-up reduces performance and increases energy costs.
- Particularly in installation locations with higher dust levels, more frequent cleaning is recommended.

**Note****Risk of damage to the compressor**

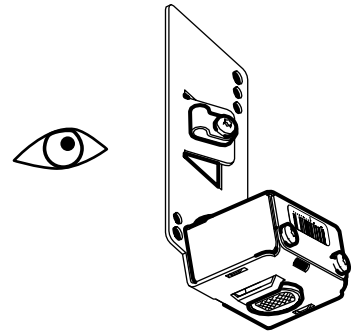
Do not start the compressor more than 5 times an hour.

Observe the minimum compressor standstill time of 5 minutes.

- Whenever the vending machine door is closed, the machine becomes ready for vending after a few seconds; the compressor starts audibly, the lighting comes on.
- Each insertion of the service key simulates a closed door.

4.5 Checking the gas sensor

Visually inspect the gas sensor for potential damage.



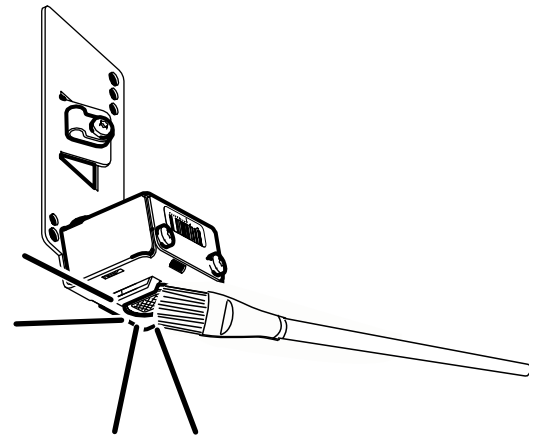
4.6 Cleaning the gas sensor

Only clean the gas inlet with a brush. The gas inlet must be kept clear at all times.



NOTE!

Never clean the gas sensor with compressed air. Compressed air damages the sensor.



4.7 Activating a self-test

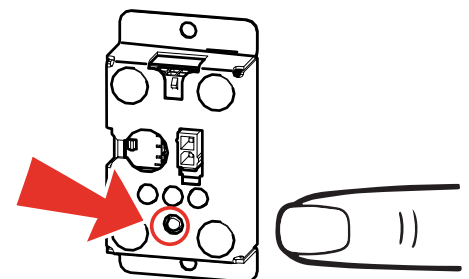
To carry out the test, the machine must be switched on and ready for operation.

Press the button on the service board for at least 2 seconds. The vending machine is disconnected from the mains while the button is being pressed, the yellow LED goes out and a self-test is triggered.

→ This test checks the two-pole mains disconnection of the vending machine via the two cut-off relays. If the self-test is successful, the green LED lights up.

If the red LED lights up constantly, repeat the test. If the red LED continues to light up, the shut-off device must be replaced.

→ When the button is released, the mains voltage for operating the vending machine is connected to the power supply again and the yellow LED lights up. The vending machine goes into operation.



4.8 Testing the sensor

Requirements

- The gas sensor must be accessible (gas inlet)
- Standard stick lighter

Procedure

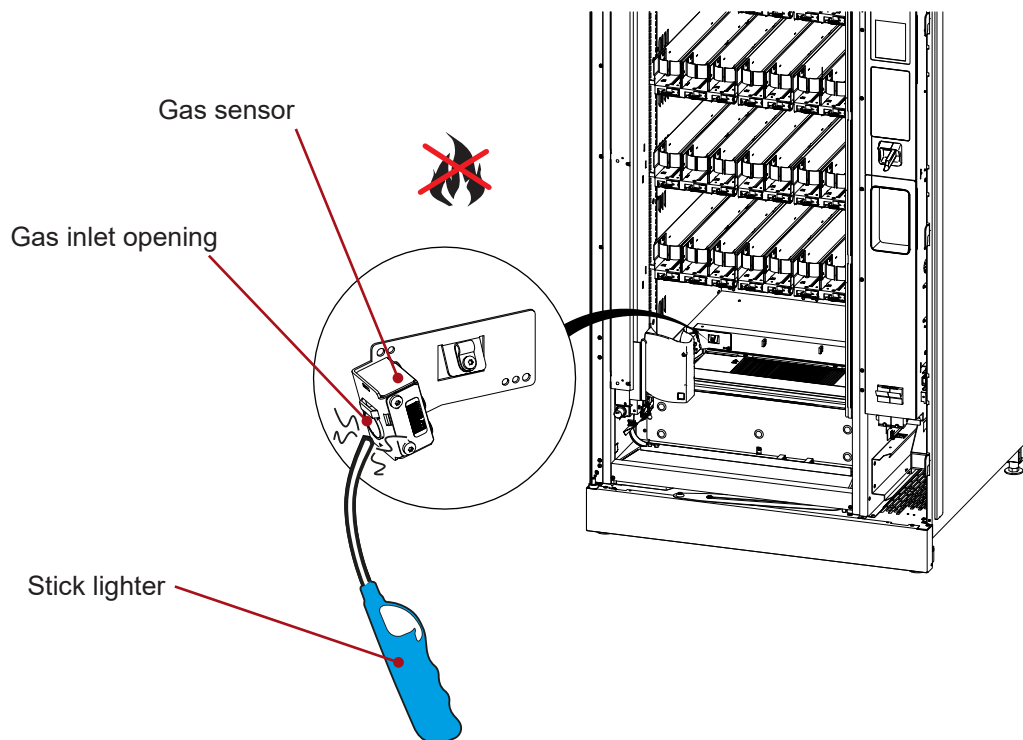
1. Switch on the vending machine.
 2. Ignite the stick lighter away from the vending machine (flame height 2 cm).
 3. Extinguish the stick lighter flame while continuing to hold down the stick lighter actuator.
 4. Hold the opening of the stick lighter in front of the gas inlet opening of the gas sensor for a maximum of 20 seconds.
 5. Put the stick lighter away and wait a few seconds.
- Safety shut-off device disconnects the vending machine from the mains. Display, machine lighting etc. go out.
- ✓ Safety shut-off device is functioning correctly.

If the machine has not switched off automatically, proceed as follows:

- Check the level of the stick lighter and the flame height (2 cm). Repeat the steps for testing the sensor.
- If the test fails again, the gas sensor must be replaced.
The vending machine must be taken out of service. The shut-off device and the cooling unit must be checked.

After the check

It can take several minutes for the gas to escape from the sensor head again and for the concentration in the sensor to fall below the maximum permissible level. The process can be accelerated by fanning air to the sensor.
The machine switches itself on again automatically.



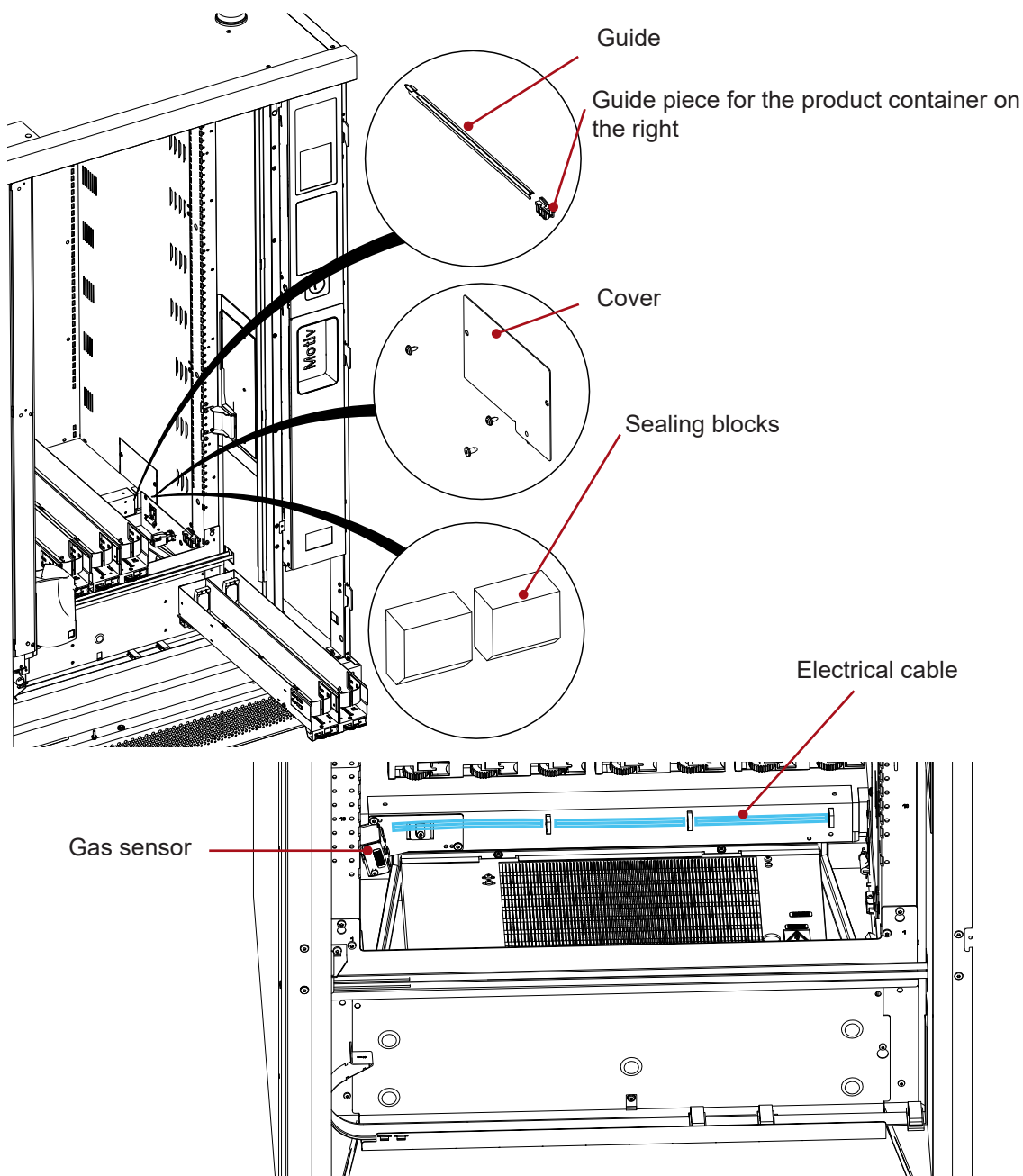
4.9 Replacing the gas sensor

Procedure

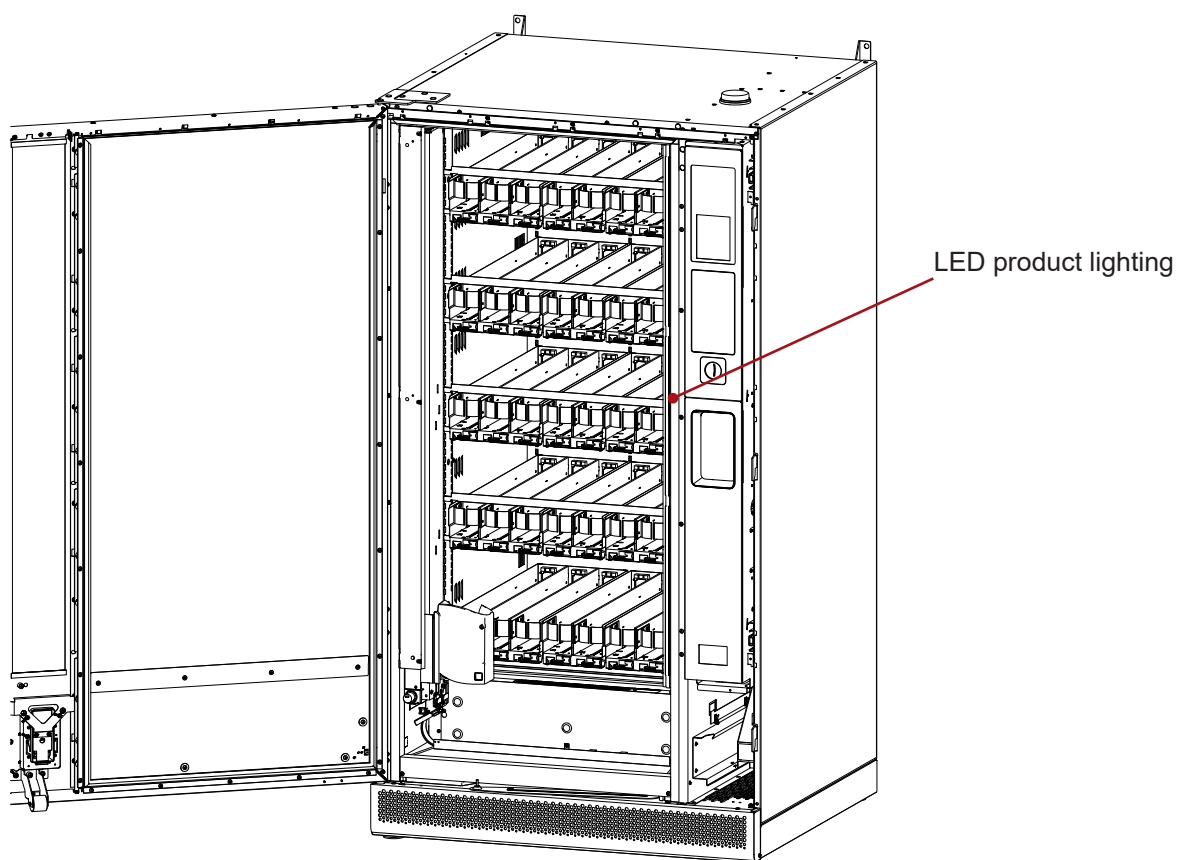
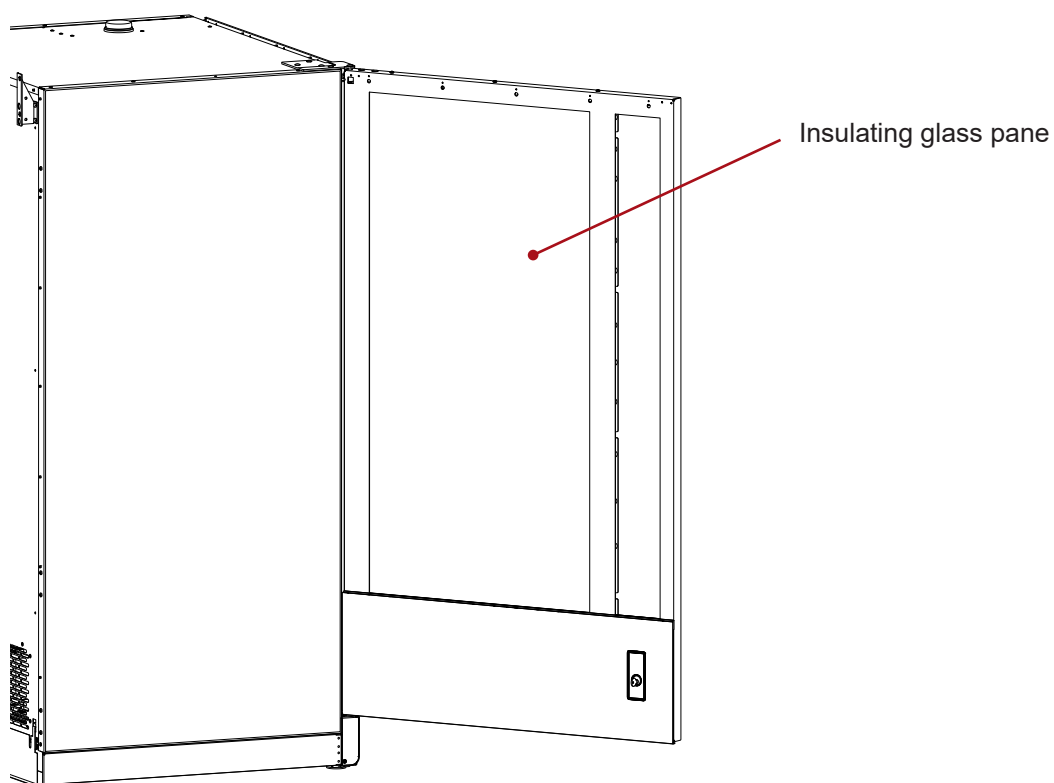
1. Loosen the screw on the bracket and unhook the gas sensor (keyhole).
 2. Remove the product container on the bottom right.
 3. Remove the guide piece for the product container on the right.
 4. Remove the guide for the product container on the right.
 5. Loosen the screws.
 6. Remove the cover.
 7. Remove the sealing blocks.
- ✓ The electrical cable can be pulled through the partition wall.
8. Remove the gas sensor plus electrical cable.

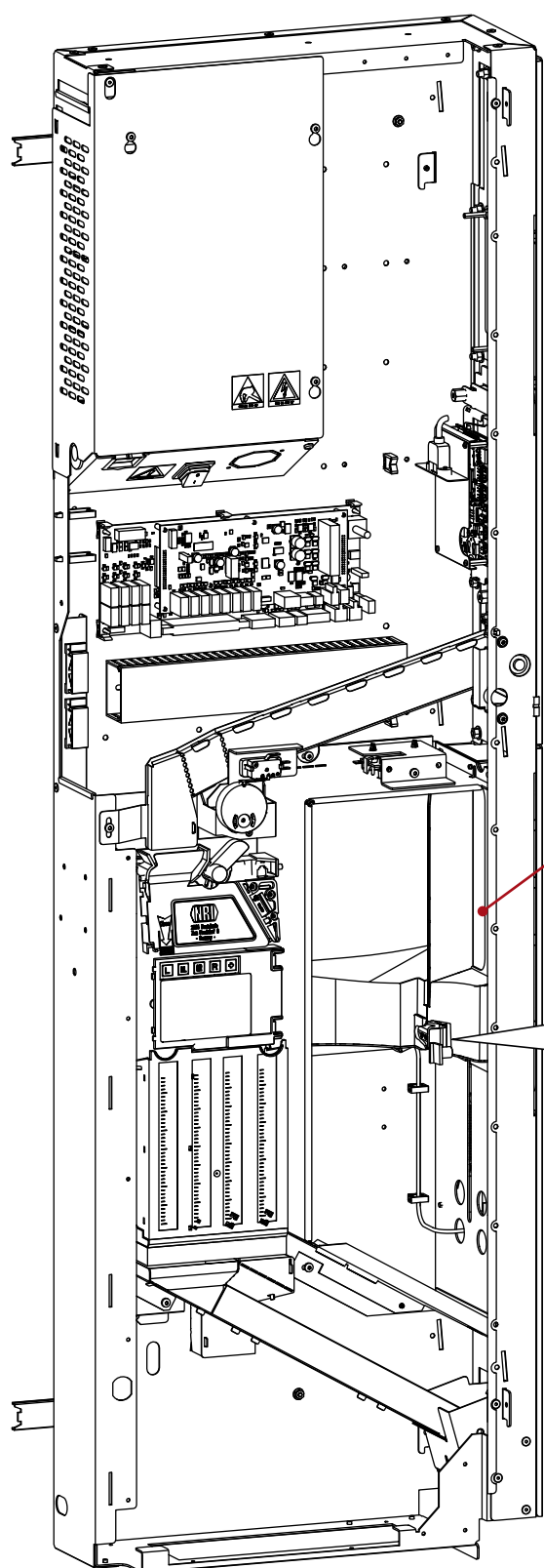
✓ **The gas sensor has now been removed.**

Installation is carried out by following the above steps in reverse order.



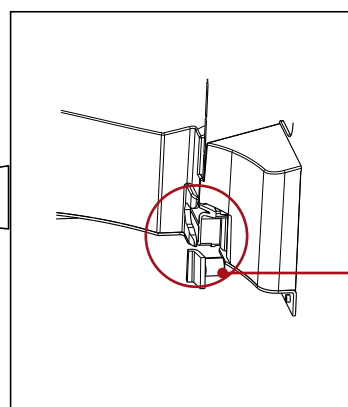
4.10 Machine door



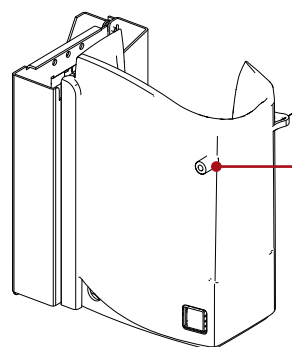
Sliding door unit

The dispenser flap can be moved down when the release mechanism is operated by hand.
It can be unlocked during a vend via the stud at the top of the product basket.

Dispenser flap



Release mechanism

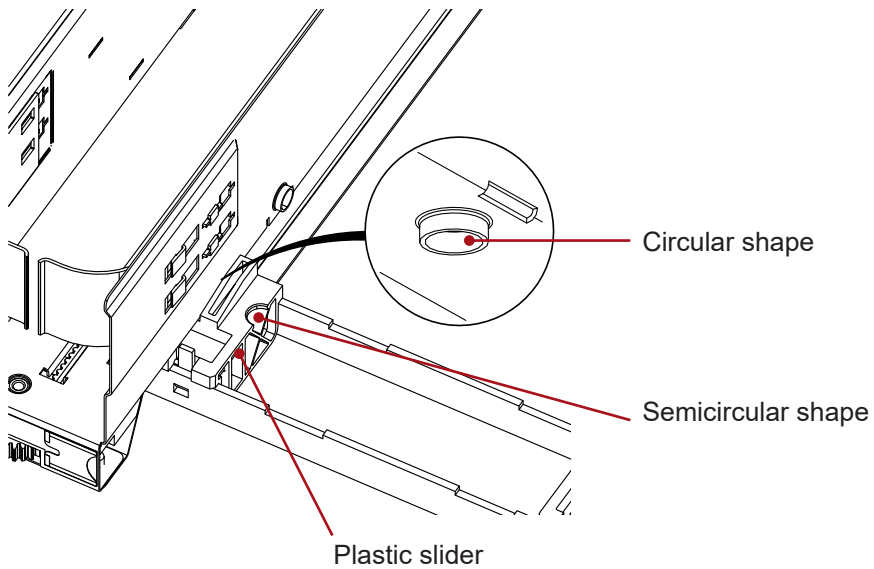


Stud

Product containers

Engagement of the product containers

- The product containers must engage correctly. This is to ensure their exact positioning. Only then will the basket approach the containers correctly during operation when the gear wheels mesh.
- The circular shape on the underside of the product container must engage with the semi-circular shape on the plastic slider. A distinct engagement noise can be heard.



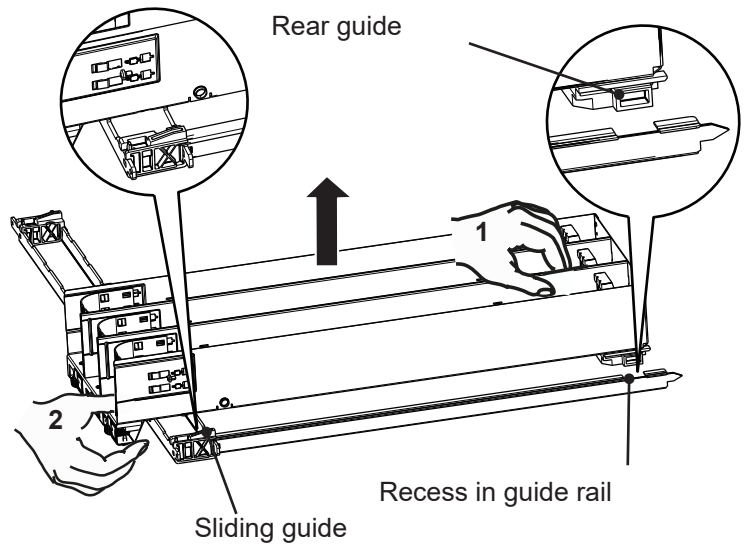
4.11 Removing and inserting the product container

Removing the product container

Remove the products from the product container to take it out.

With one hand, lift the product container slightly at the back, using the other hand to pull the product container out towards the front.

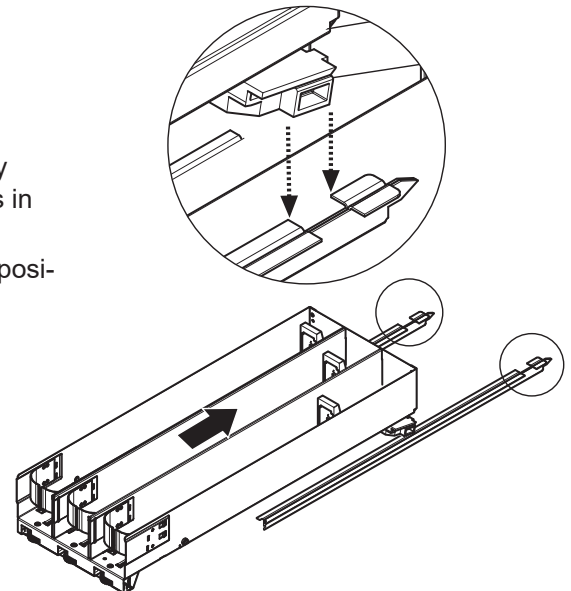
Unhook the rear guide through the recess in the guide rail.



Inserting the product container

Place the product container on the guide rails and push it in. Shortly before the stop on the rear panel, the sliding guide audibly engages in the recess of the guide rail.

Make sure that the product container is horizontal in the pushed-in position and almost touches the rear.



Inclining the pusher product container

The product containers can be tilted. The tilt mechanism for pusher product containers is locked at the factory.

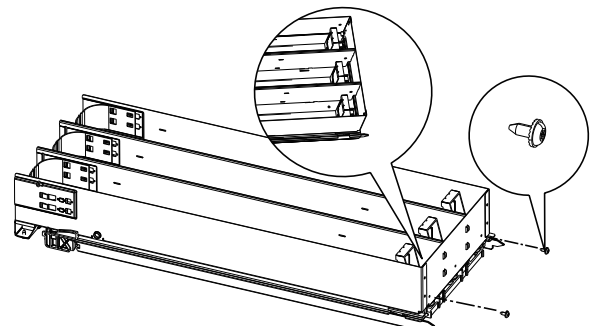
Product containers can only be tilted at your own risk.



Caution!

Products can fall out when the product container is tilted.

Do not use the tilt mechanism with glass bottles.



4.12 Replacing the product container drive

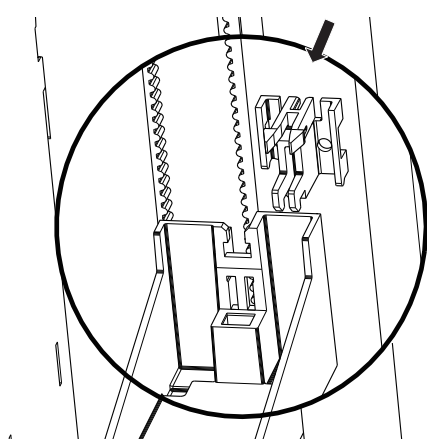
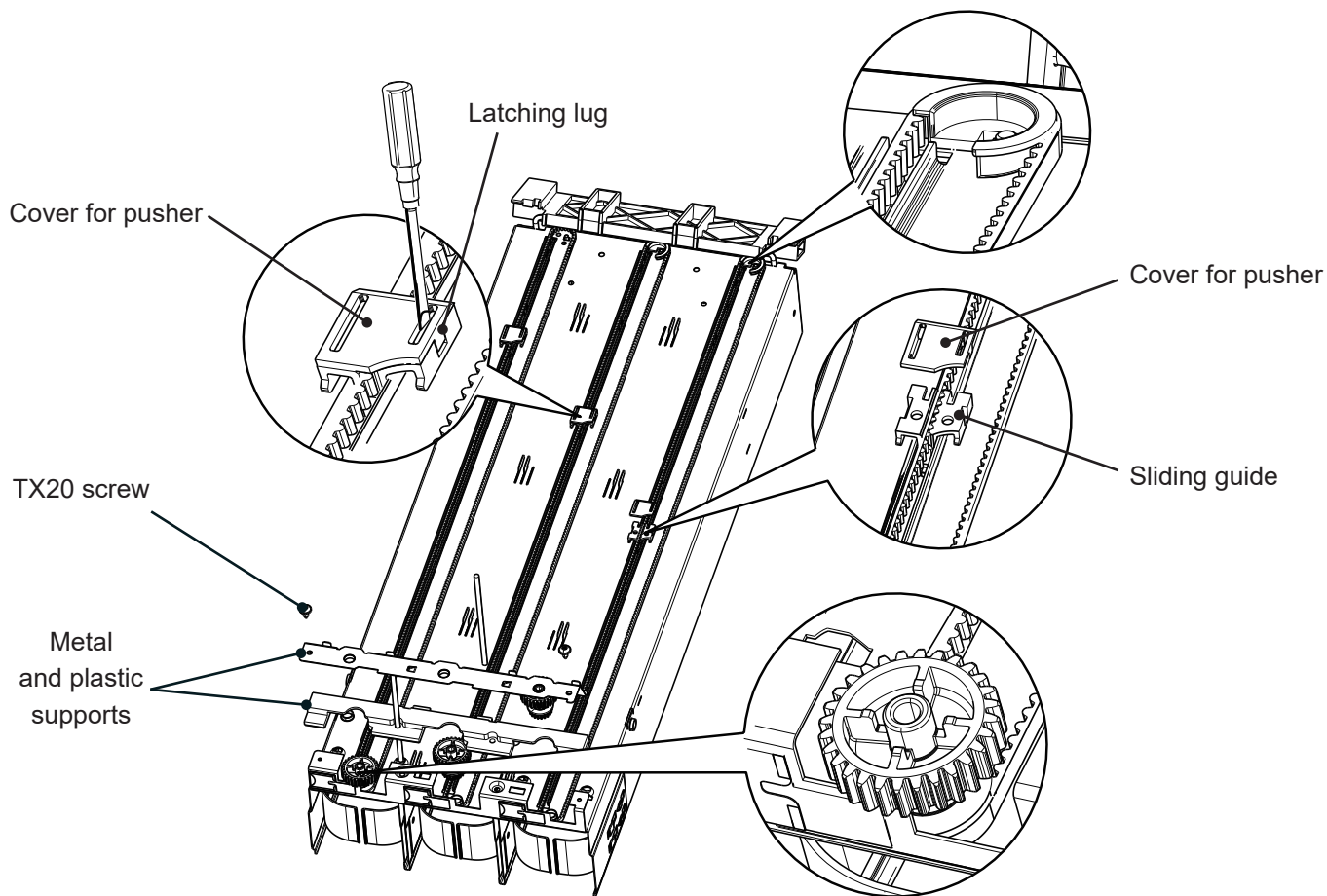
The drive of the shaft is designed to be maintenance-free and service-friendly. All components can be replaced if damaged.

Procedure

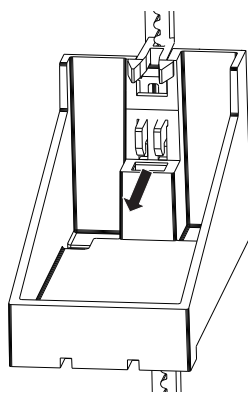
Turn the product container over. Remove the two screws with a TX 20 screwdriver. Lift off the metal and plastic supports. Pull out the axles.

Release the cover's latching lug and lift off the cover. Now unhook the ribbed belts from the sliding guide.

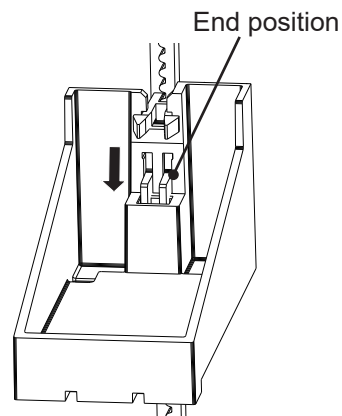
To carry out installation, perform the above steps in reverse order.



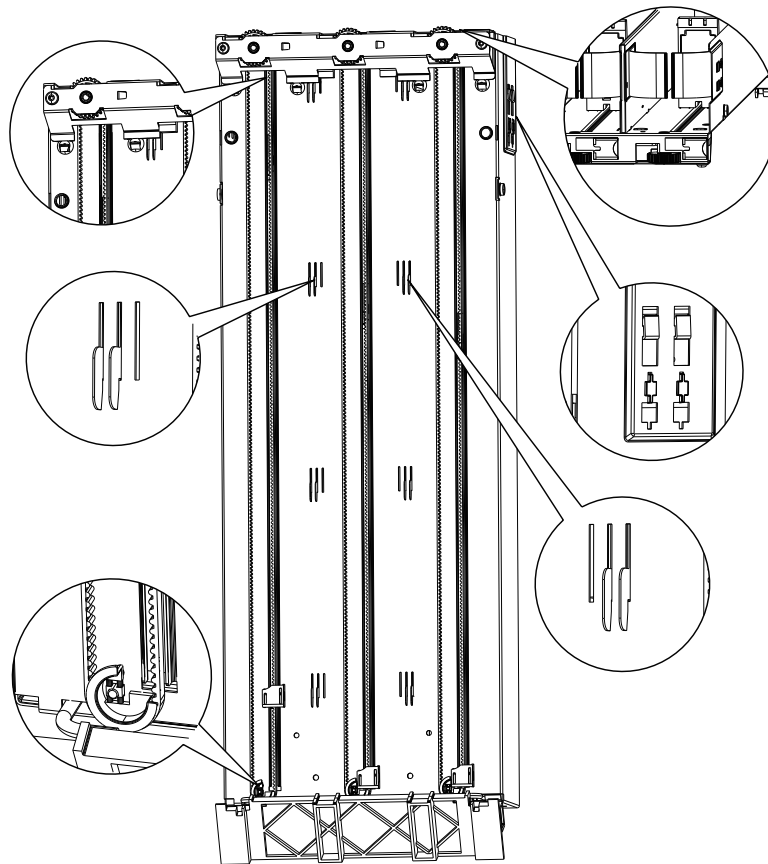
Position the sliding guide from the product container shelf.



Hold the pusher and clip in the sliding guide.



Move the sliding guide to the end position.



The drive is correctly mounted.

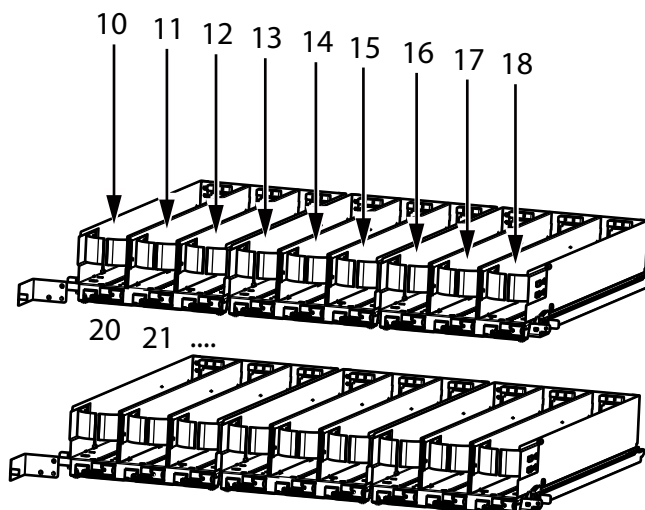
4.13 Product container counting method

The product containers run from the top left starting at shaft number 10. From here, they run to the right and are numbered consecutively up to a maximum of 16 or 18.

At the second level, the numbering starts at 20 and ends at 28.

A maximum of eight levels can be installed.

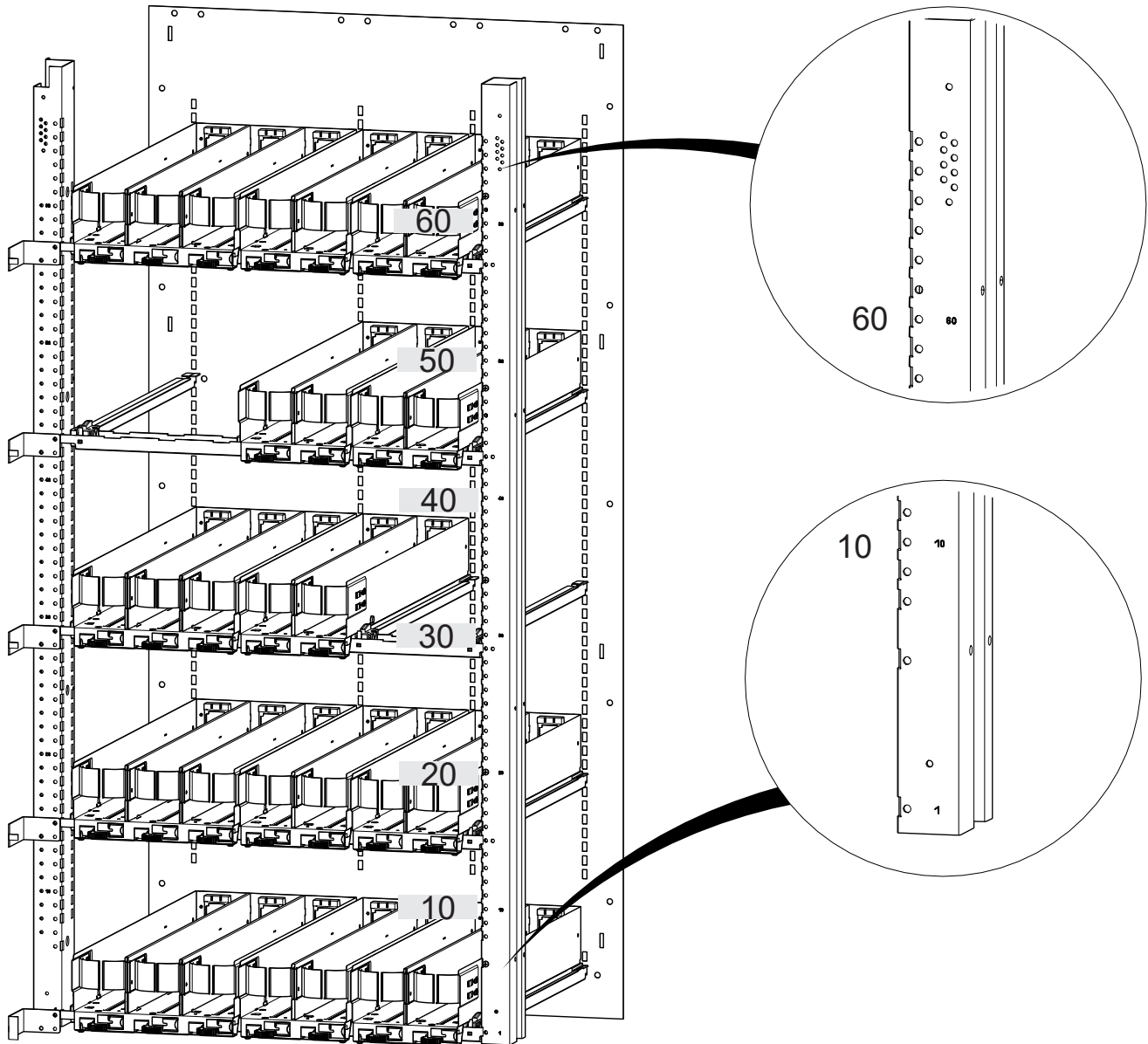
If the levels have been changed, the M10 AutoConfig menu must be called up so that the levels can be determined automatically.



10	11	12	13	14	15	16	17	18
20	21	22	23	24	25	26	27	28
30	31	32	33	34	35	36	37	38
40	41	42	43	44	45	46	47	48
50	51	52	53	54	55	56	57	58
60	61	62	63	64	65	66	67	68
70	71	72	73	74	75	76	77	78
80	81	82	83	84	85	86	87	88

5. Removing components

5.1 Height adjustment of product containers (by counting)



5.2 Offsetting the product container levels

The levels can be adjusted according to the desired product height.

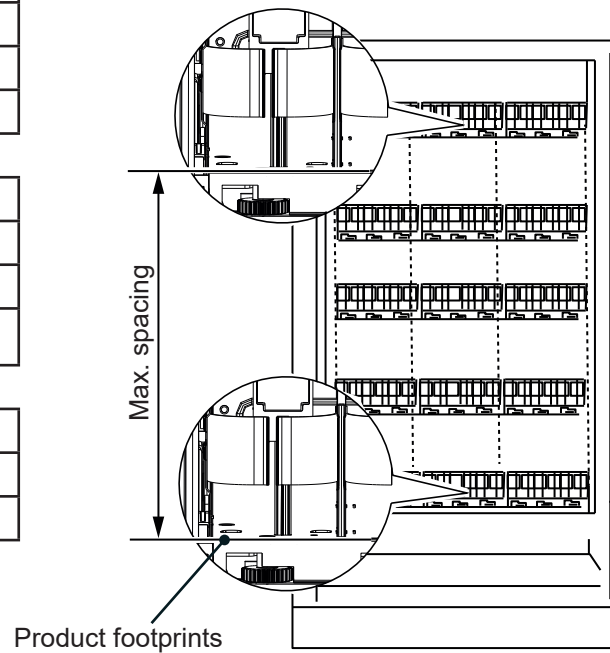
The grid dimension is 19.35 mm, i.e. the level can be adjusted by this dimension.

Following mechanical conversion, a reference run must be activated. See „6.14 Referenzfahrt auslösen [Ebenen-suchlauf]“ auf Seite 48.

Product specification	
0.25 l can	Ø 53 mm / height 134 mm
0.5 l bottle	Ø 66 mm / height 234 mm
0.6 l bottle	Ø 72 mm / height 240 mm

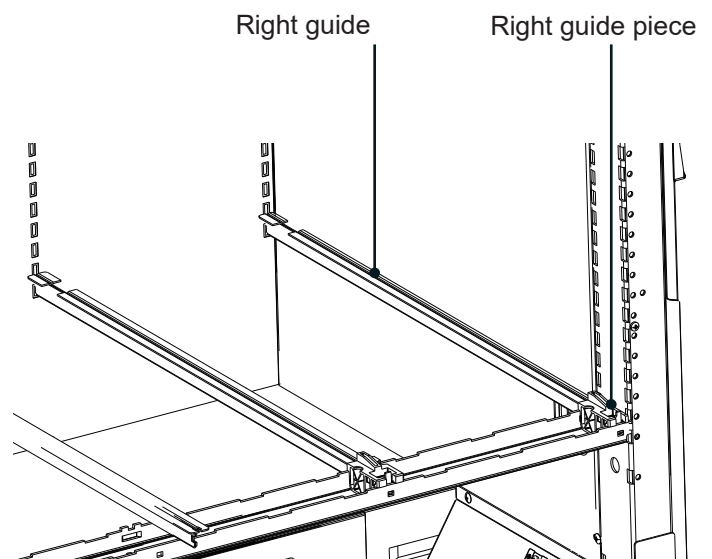
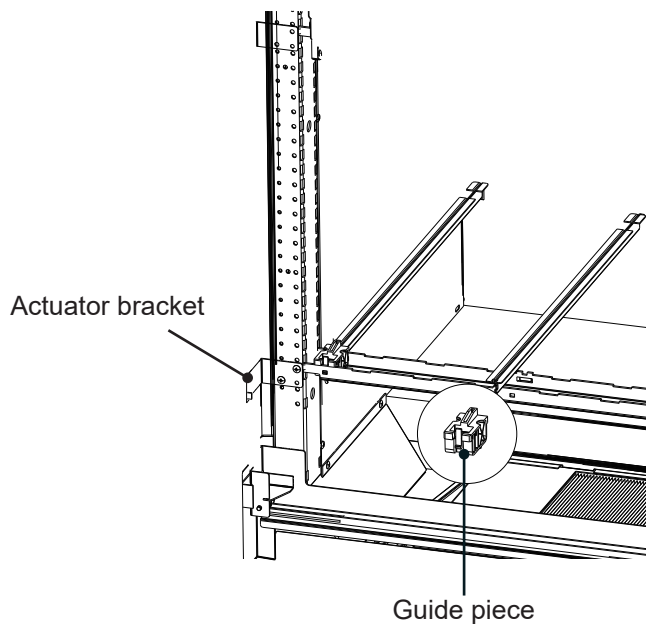
Maximum product heights	
5 levels	240 mm
8 levels	123 mm
Transportable through partition wall.	270 mm

Product footprint spacing	
Minimum spacing	154.8 mm
Maximum spacing	1161.0 mm



Procedure

- Empty and remove the product containers.
- Unlock the guide pieces of the guide and remove the parts. The guide is inserted into the rear panel.
- Unscrew the securing strut on the front cross strut and remove the cross strut. Important: also offset the actuator bracket!



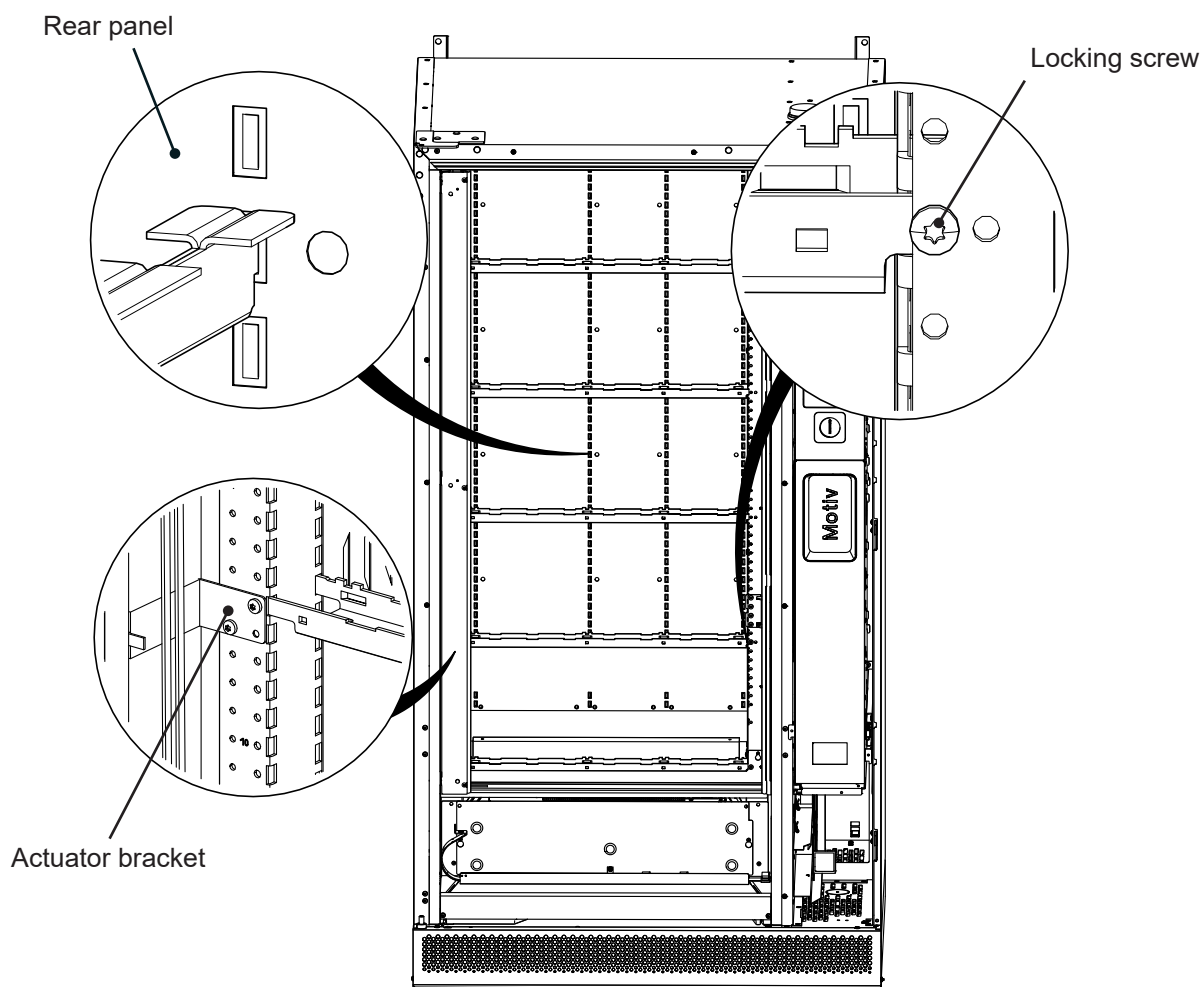
5.3 Installing product container levels

Insert the cross struts at the desired height. Insert a locking screw on the right and fasten the actuator bracket with two locking screws on the left.

First insert the guide with the tip into the recess provided, then secure the guide at the front with the guide piece.

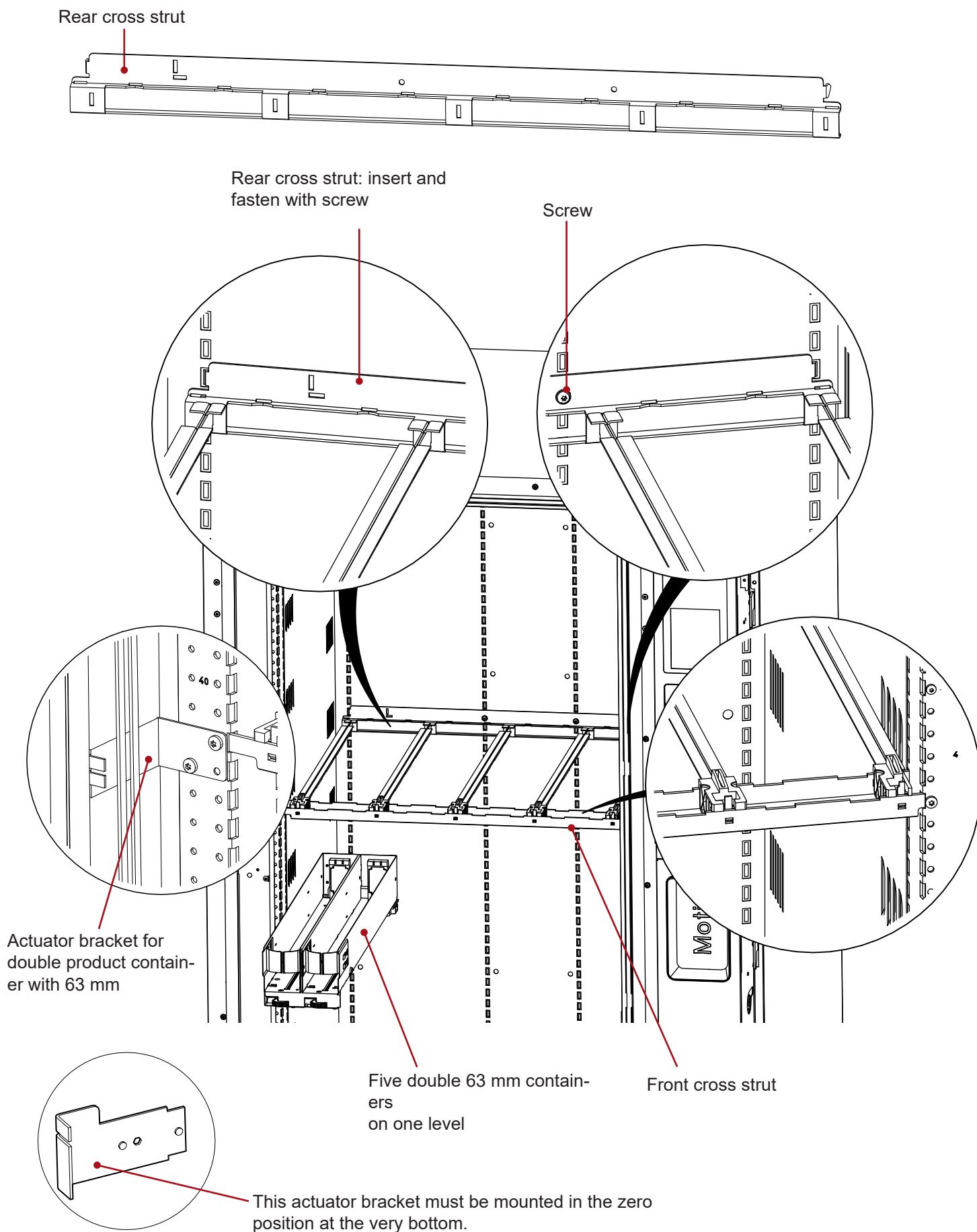
Please note: for the right-hand side, there is a “right guide” with a “right guide piece”.

After installing the guides, check that all levels are installed horizontally.



5.4 Installing double product container with 63 mm

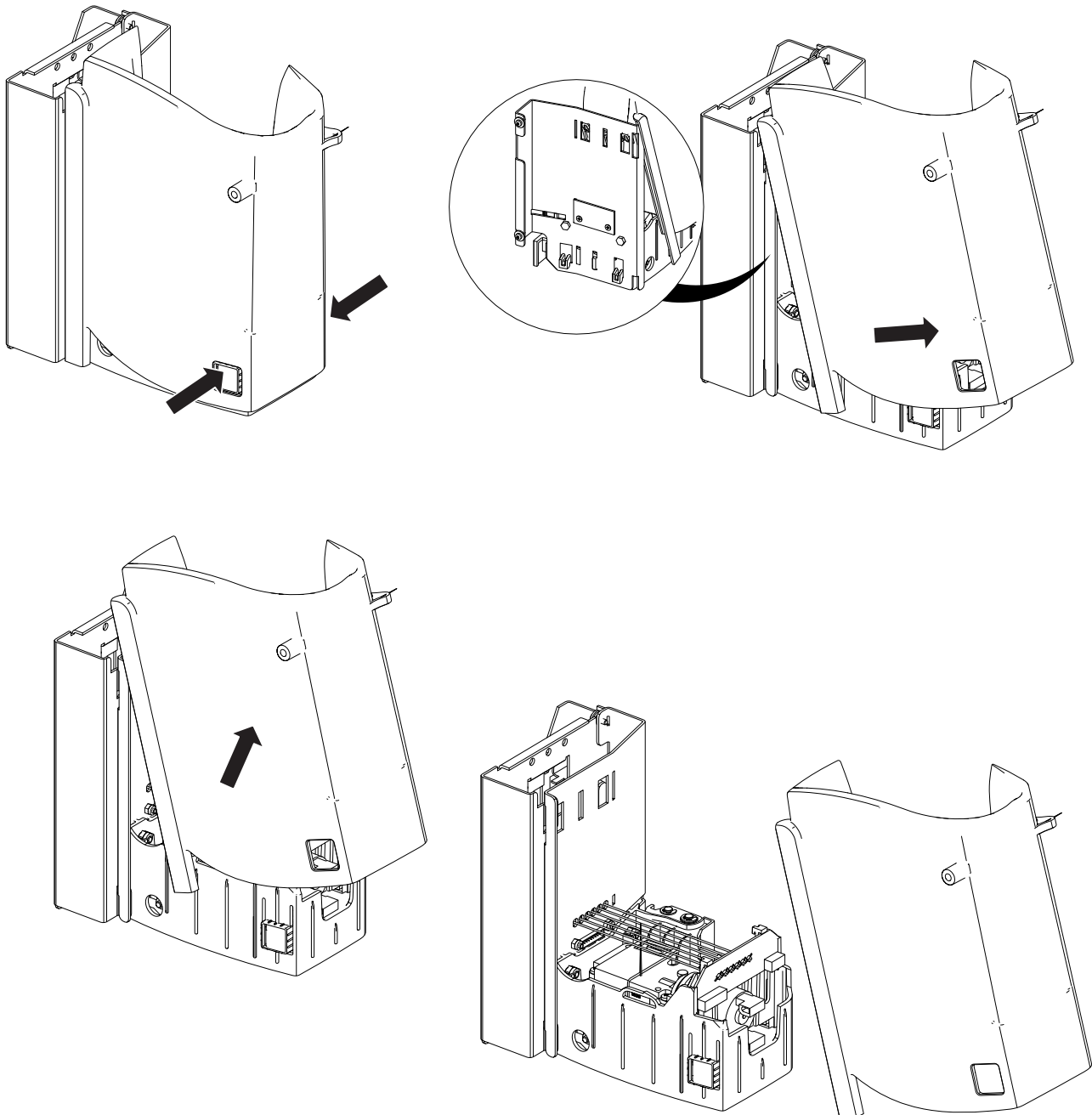
Insert the rear cross strut at the back of the rear panel and fasten it with screws.



5.5 Removing the product basket

1. Push in the front and rear locking nipples at the same time.
2. Tilt the basket slightly upwards.
3. Pull the basket down and back at the same time.

To carry out installation, perform the above steps in reverse order.

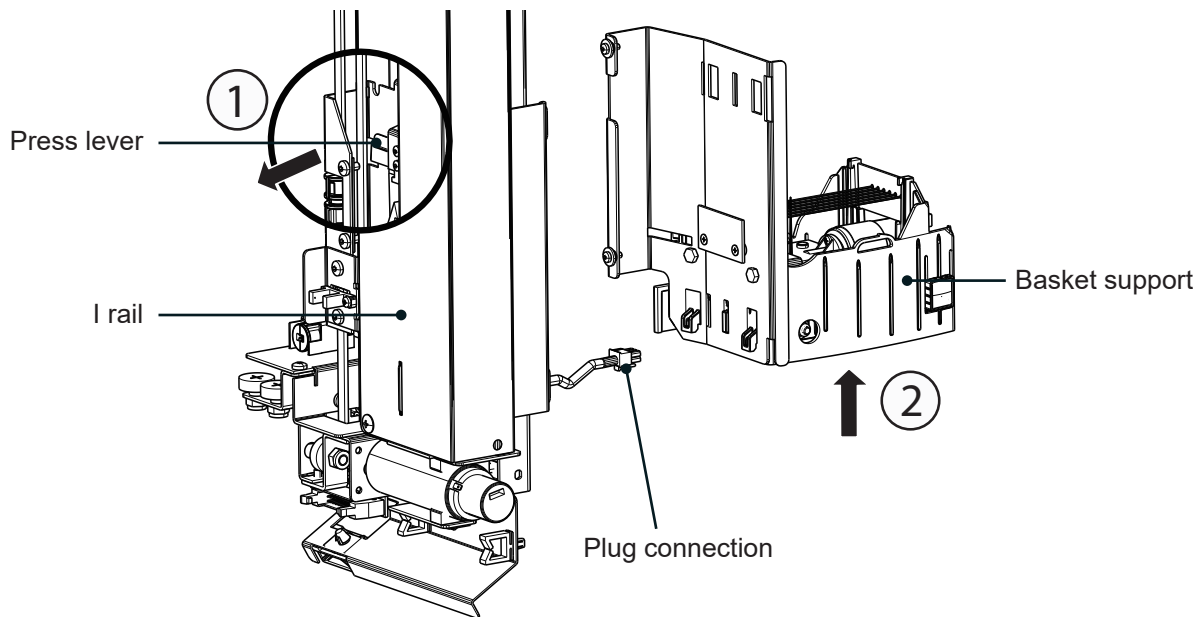


5.6 Replacing the basket support

The basket support can be unhooked and replaced without tools.

5.6.1 Removal

Grasp the carriage of the I rail with your left hand and operate the lever with your index finger (press to the left). Now separate the basket support from the bracket by lightly tapping the basket support from below. After unhooking the basket support, disconnect the plug connections of the electrical cables.

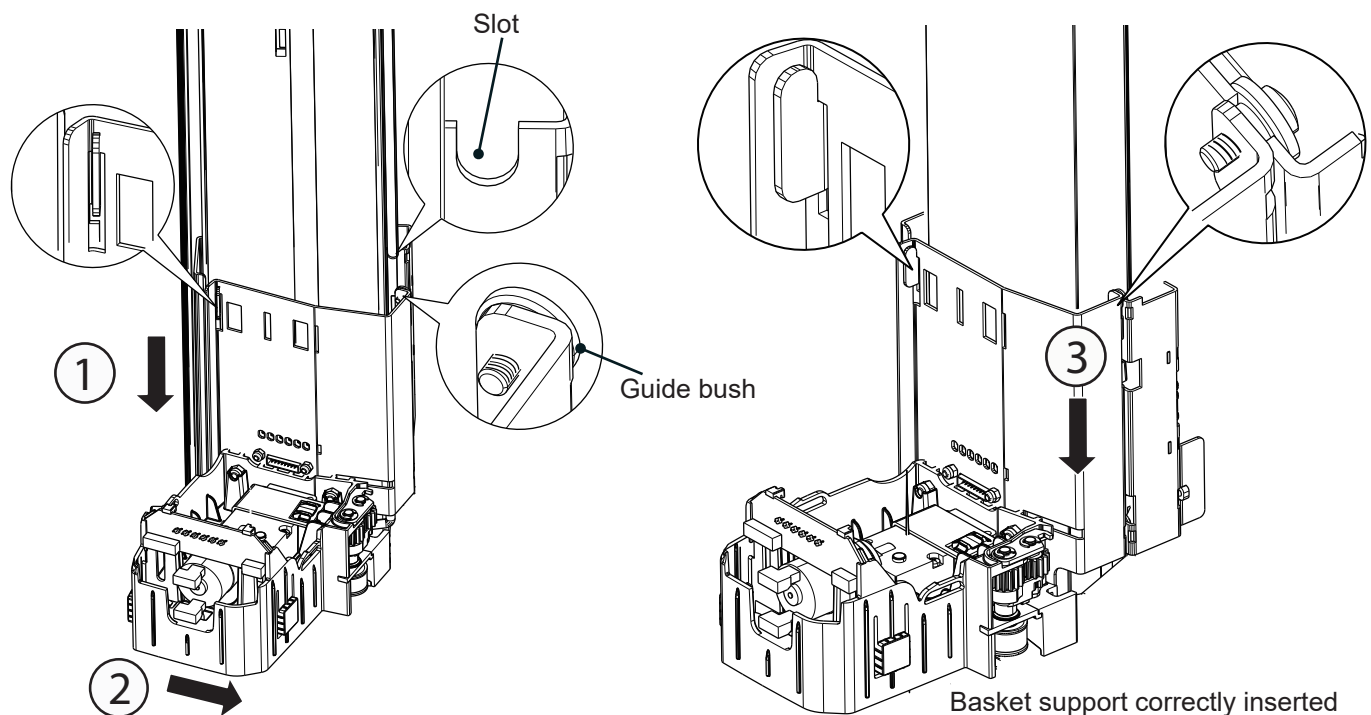


5.6.2 Installation

Lay the electrical cable at the terminal points provided for this purpose on the underside of the basket support and re-fit the plug connections.

Hook the basket support into the front and swing it backwards. Insert the two guide bushes into the slots from above; to do this, press the basket support down while operating the lever.

Ensure that it is definitely installed correctly.



6. Structure information

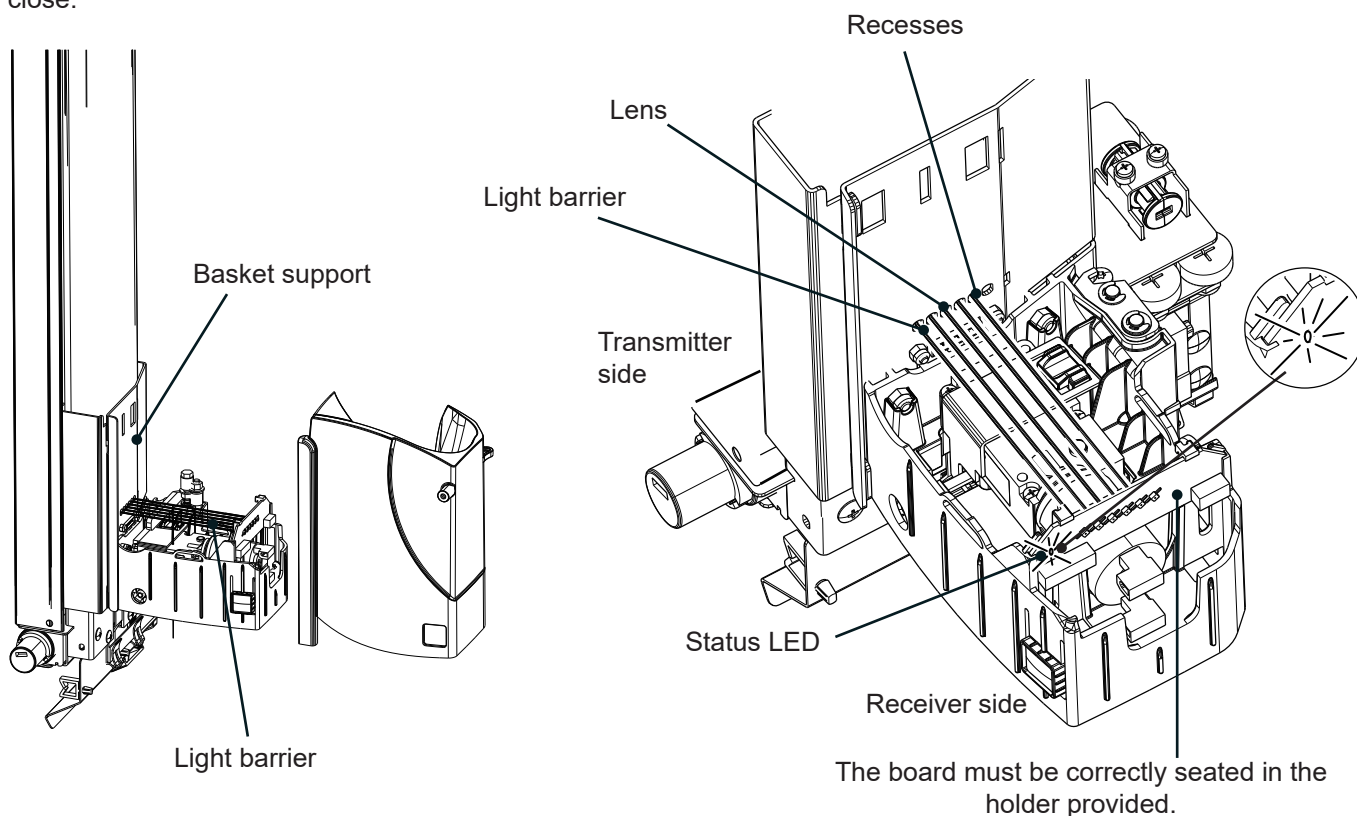
6.1 Product basket light barrier

The light barrier in the basket support must detect the product in the basket. For this purpose, several beams are grouped next to each other and only one of them has to be interrupted to activate the light barrier.

A status LED flashes on the receiver board.

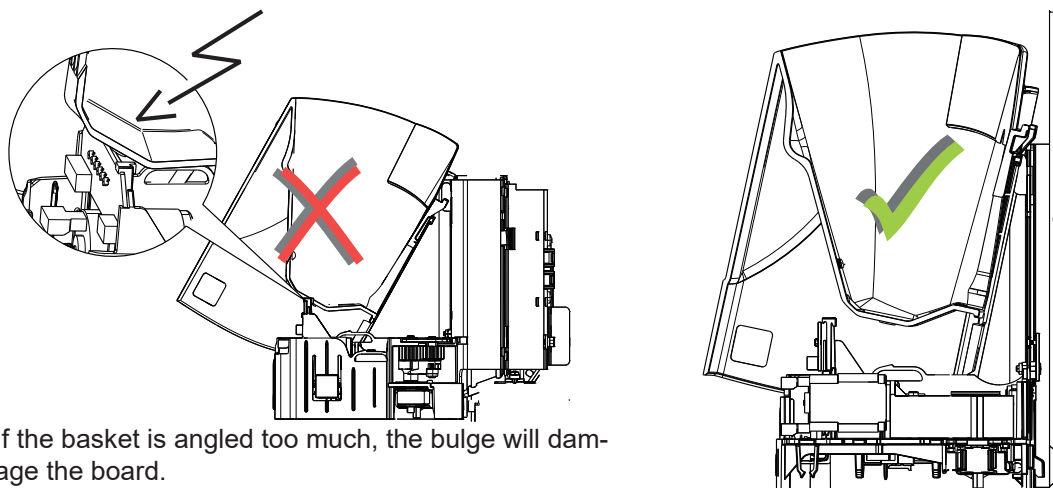
Flashing frequency	State
Slow (every 5 s)	OK
Quick	Light barrier disturbed

The recesses and the lenses on both boards must be dust-free; remove any foreign bodies (e.g. labels). Air from a compressed air spray is sufficient for cleaning. Attention, sensitive components! Do not hold the spray head too close.



Risk of damage to the circuit board

Incorrect insertion of the product basket can damage the circuit board for the light barrier. Therefore, do not allow the bulge in the bottom of the basket to damage the circuit board.



If the basket is angled too much, the bulge will damage the board.

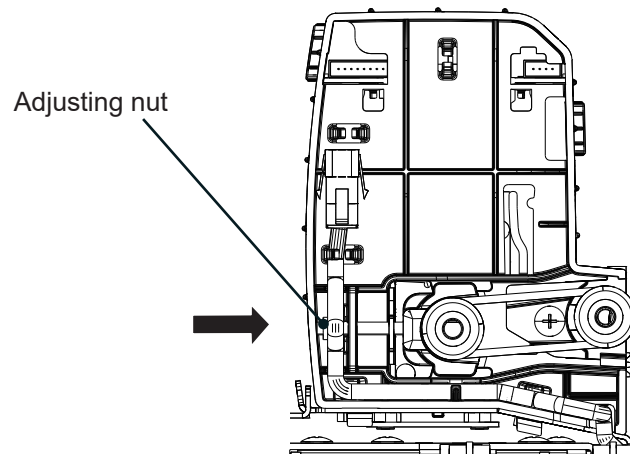
6.2 Product basket belt tension

The toothed belt for driving the Z-axis with the pendulum drive is located on the underside of the basket. A size 7 (WAF) socket spanner is used to adjust the belt tension (use a setting gauge if available).



NOTE!

Do not tension the belt too much, risk of damage!



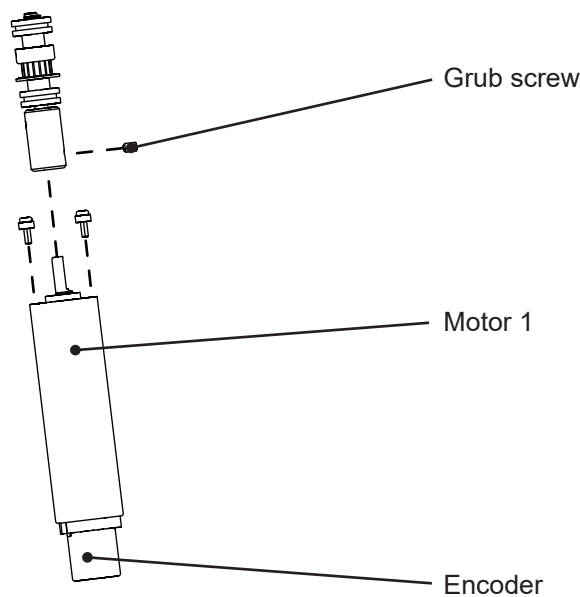
6.3 Location of the motors

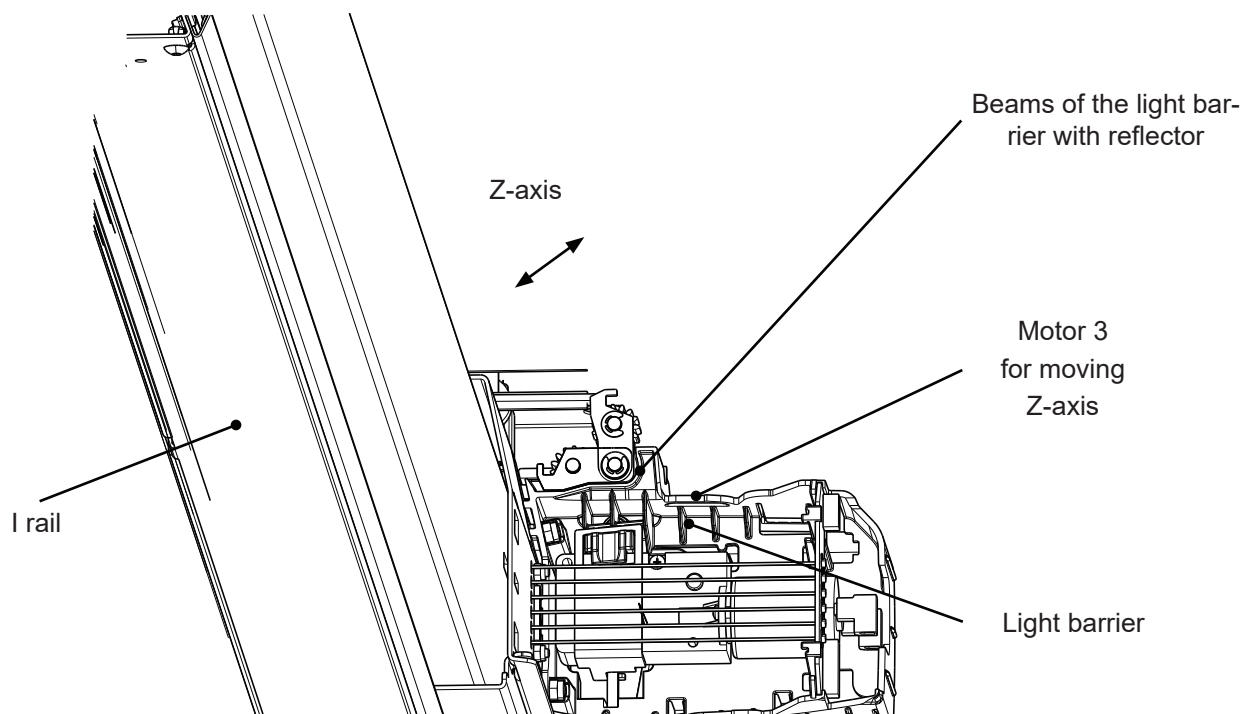
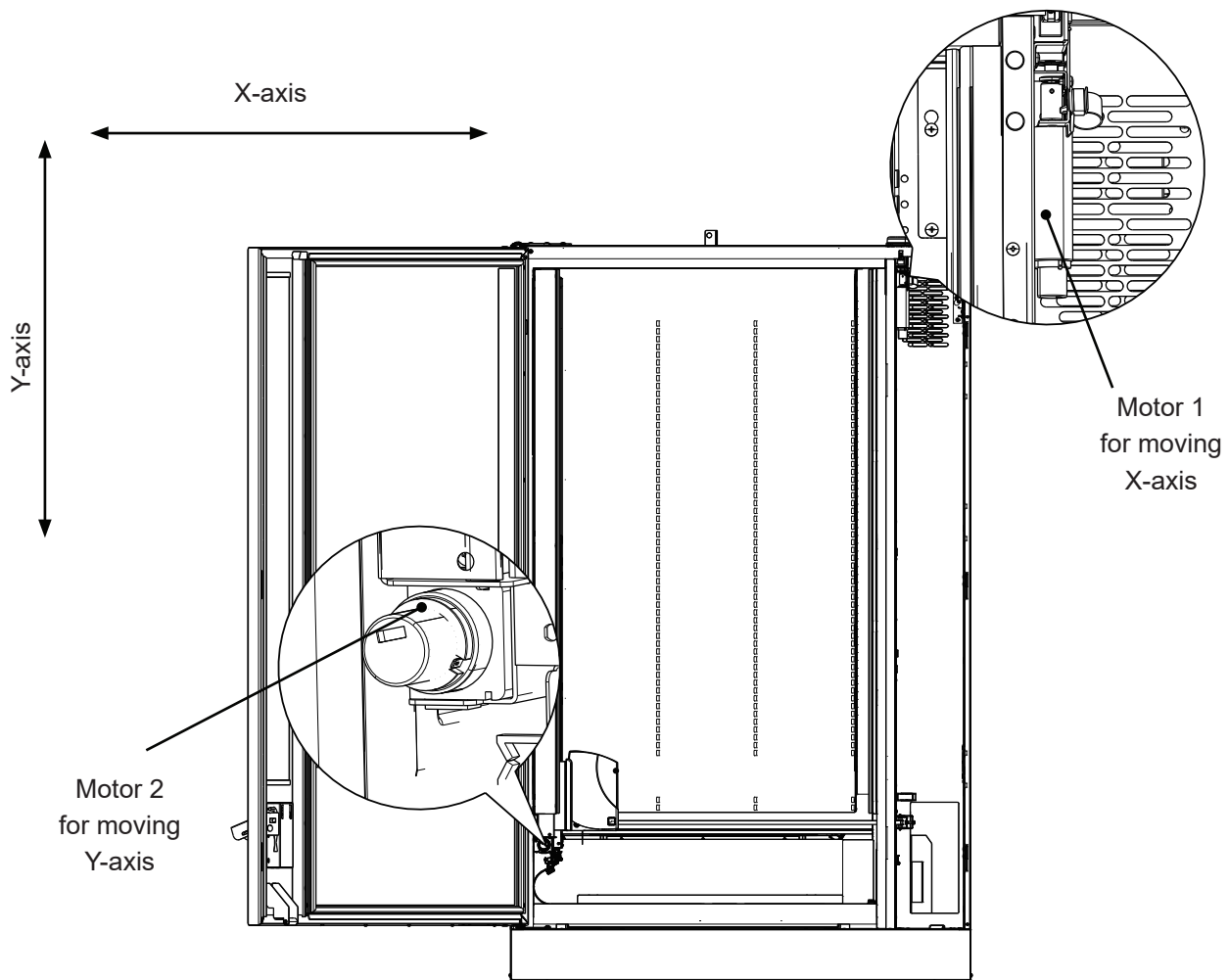
The drive inside the vending machine relies on three electric motors.

Motor 1: located at the top right and becomes visible when the (telescopic) sliding door unit is pulled out.

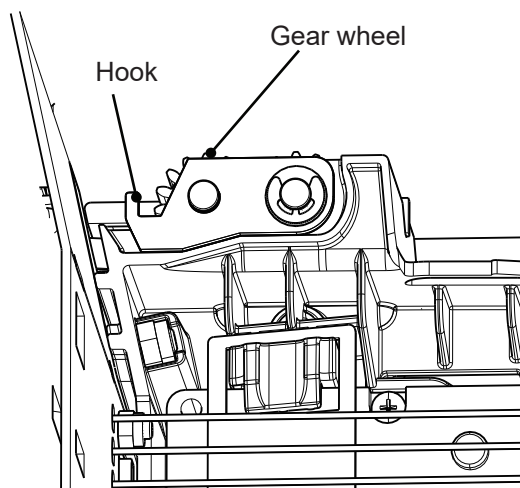
Motor 2: located on the I rail on the outside of the product basket.

Motor 3: located under the product basket.

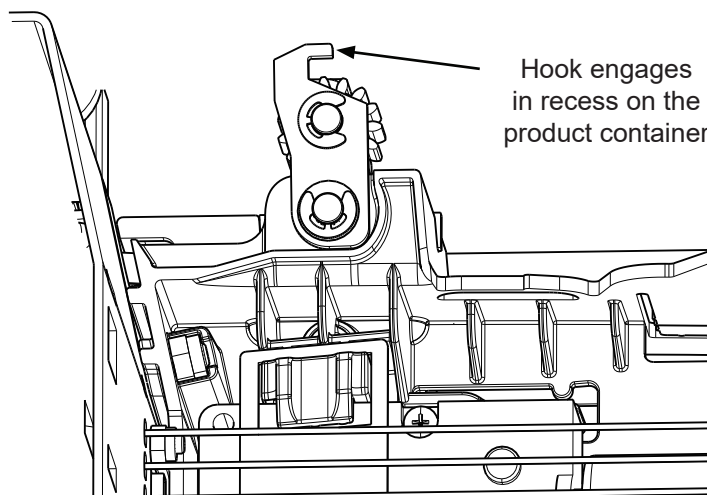




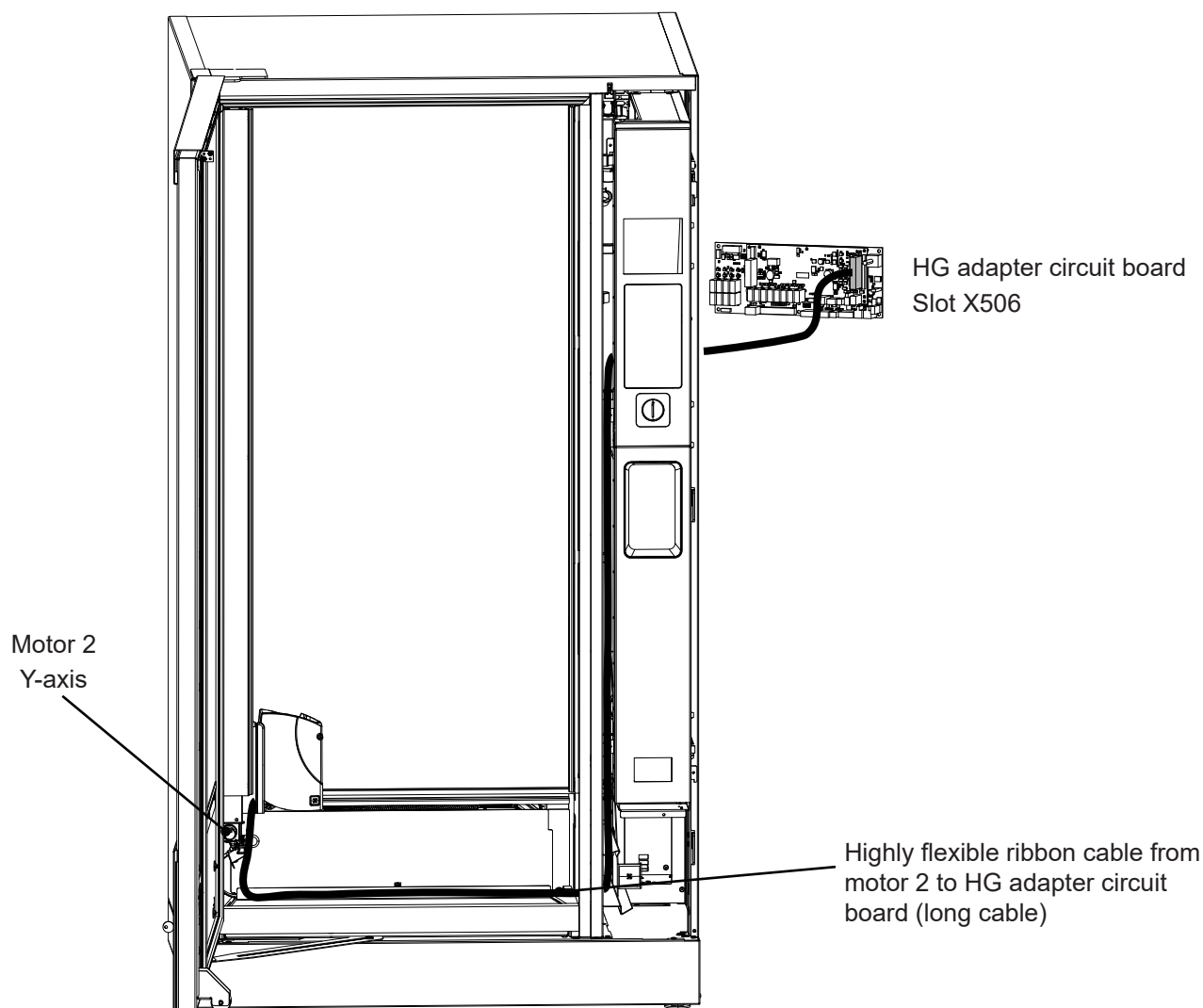
Motor 3 for
Z-axis
Home position,
hook retracted

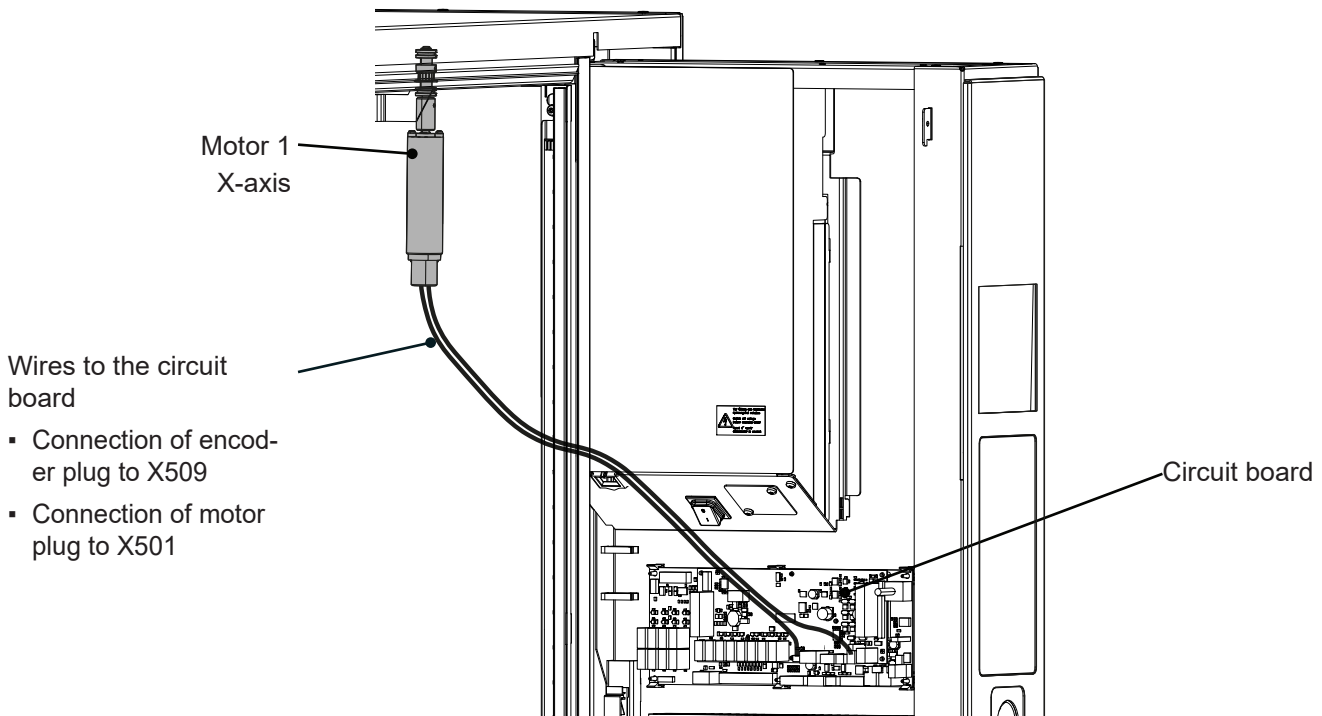


Motor 3 for
Z-axis
Transport position,
hook extended,
products in the product container
are pushed forward when driven



6.4 Electrical wires, cable connections (KV)

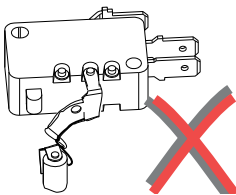
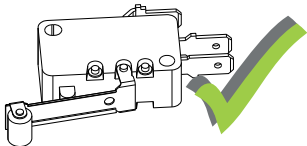




6.5 Switches, buttons, locking mechanisms

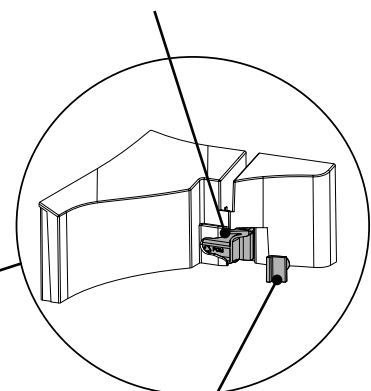
The button for the X-axis home position is located here.

Terminal lugs



The terminal lugs are available individually as spare parts.

Mechanical locking with button for the dispenser flap (shutter).



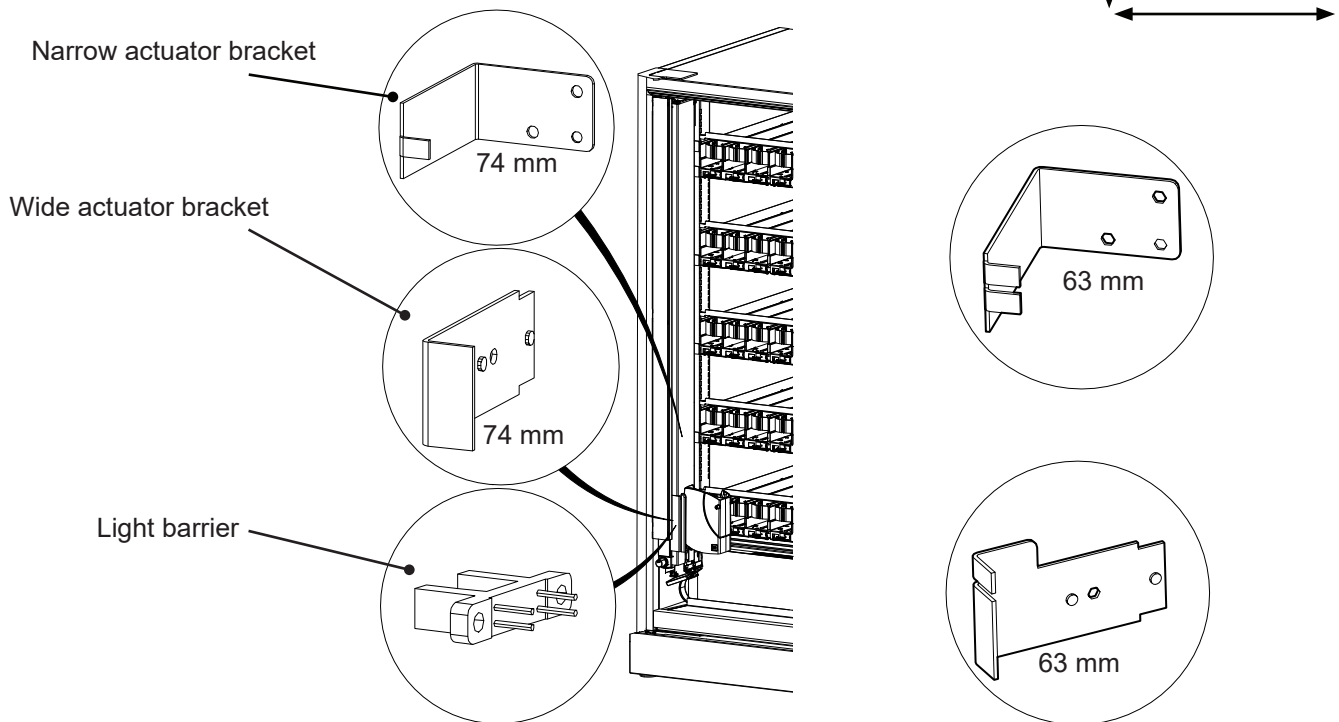
Stud on product basket unlocks the dispenser flap.

6.6 Actuator bracket level determination

The Y-axis home position is determined by a light barrier on the product basket:

- Narrow actuator bracket = product container
- Wide actuator bracket = bottom home position

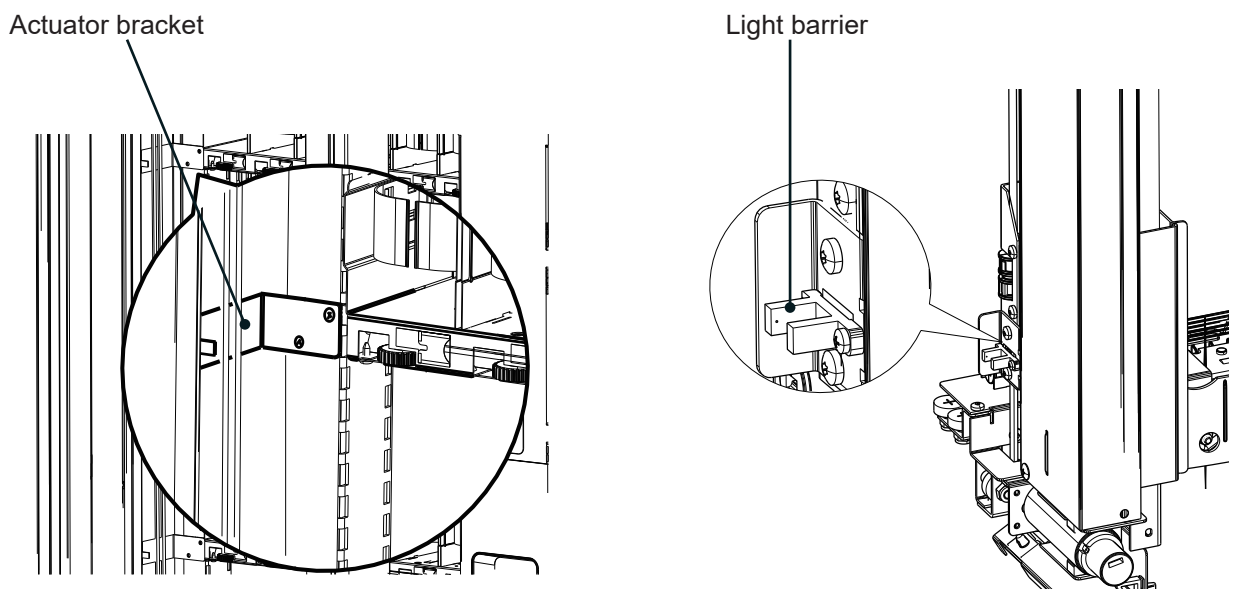
See also „6.14 Referenzfahrt auslösen [Ebenensuchlauf]“ auf Seite 48



Standard: product container width 74 mm, 9 product containers on one level

Optional: product container width 63 mm: 10 product containers on one level

If the actuator bracket is inadvertently omitted when converting the levels, this level is ignored.



6.7 Calibrating the pendulum hook/performing lift calibration

During lift calibration, 3 positions are automatically approached and the lift position is checked via the gear self-aligning bearing.

Lift calibration is generally necessary both for a new machine and for an older machine. New units are calibrated at the factory. However, lift calibration may be necessary due to the transport and installation processes.

To do this, remove the basket so that you can see the hooking point of the gear self-aligning bearing. See „5.5 Produktkorb ausbauen“ auf Seite 28

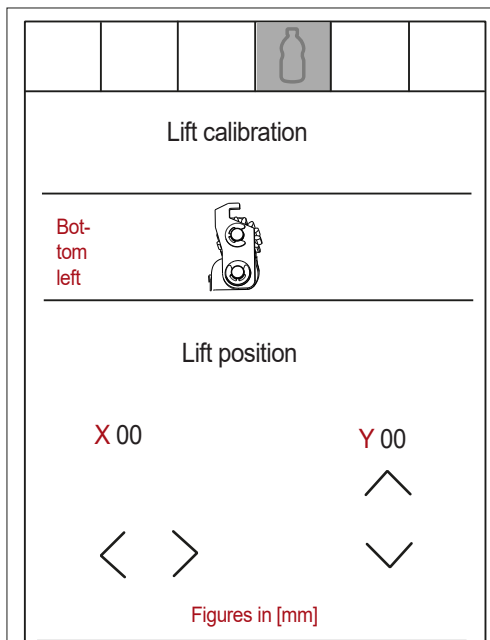
Requirements

- Push the product pusher of the 3 listed product containers all the way back by hand.
- Service key

Procedure

1. Press tab 4 [Products].
2. Press [Level configuration] and then [Lift calibration].
3. Insert the service key.
4. Keep your distance from the lift arm because it starts suddenly.
→ Position 1 is approached and the pendulum hook is hooked in.
5. Check the position in the X and Y directions and use the up/down arrows or right/left keys for correction.
6. Press [Next].
→ Position 2 is approached and the pendulum hook is hooked in.
7. Repeat the operations until the process is complete.
8. Finally, reinstall the basket.

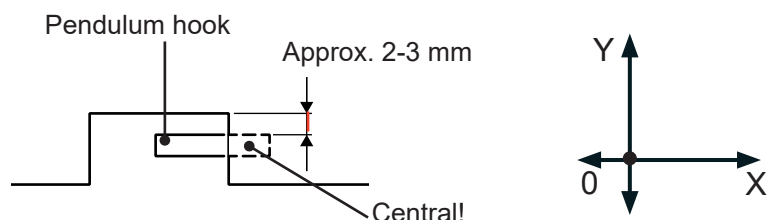
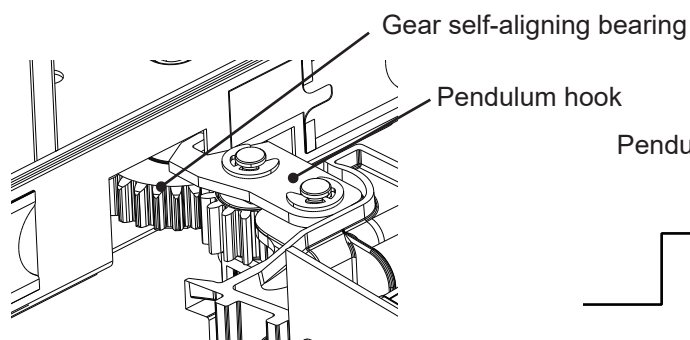
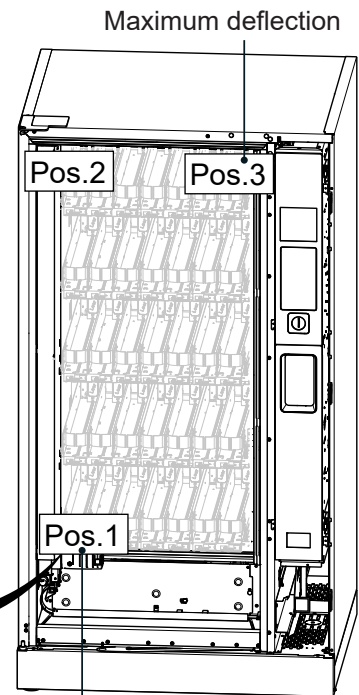
✓ The lift for dispensing products from the containers is now aligned.



Position 1:
bottom left

Position 2:
top left

Position 3:
top right



6.8 Detaching the sliding door unit

The sliding door unit can be detached for repair work. This does not take long to do.

Disconnect the electrical cables from the sliding door unit.

Disconnect the two protective conductor connections with ring cable lug.

Pull the sliding door unit out as far as it will go, press the separating levers at the top and bottom.

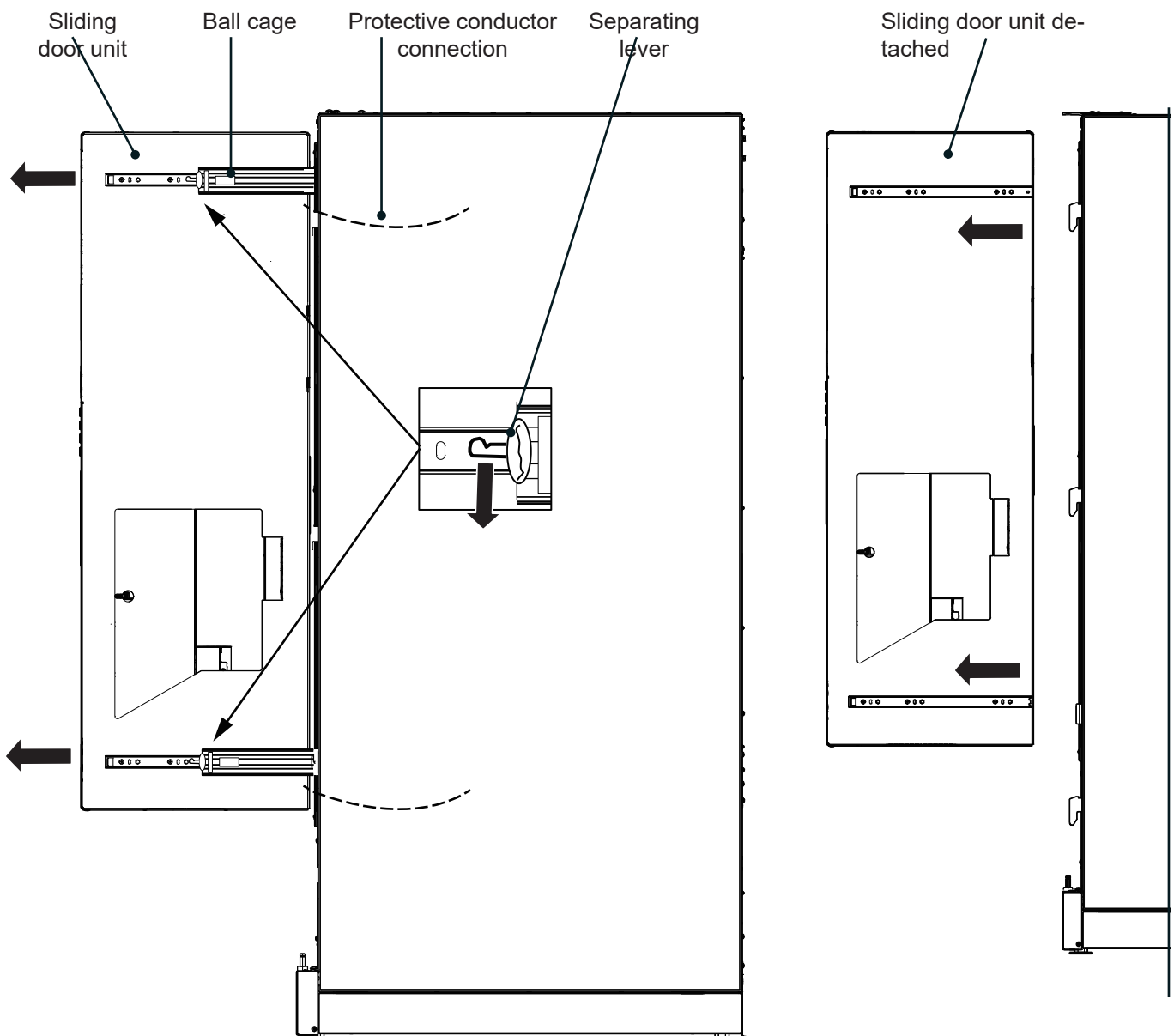
Now pull the sliding door unit outwards, which separates the rails. Hold or secure the sliding door unit sufficiently.

Inserting the sliding door unit:

Pull the ball cage forward as far as it will go.

Insert the sliding door unit and the two fixed rails into the pulled-out rails and ball cages.

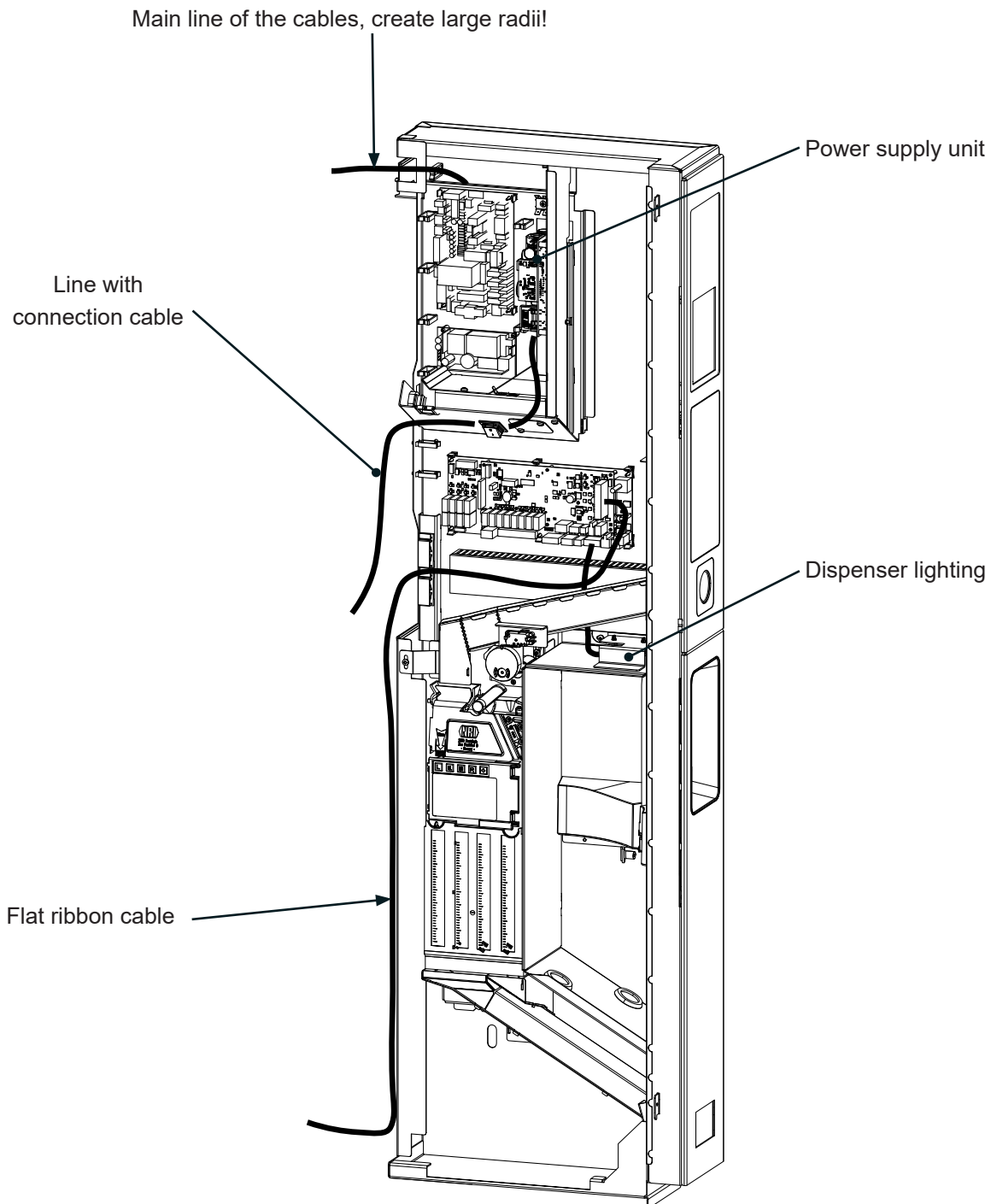
Make sure that the ball cage does not slide away to the rear, but that the rail is inserted into it.



6.9 Sliding door unit cable routing

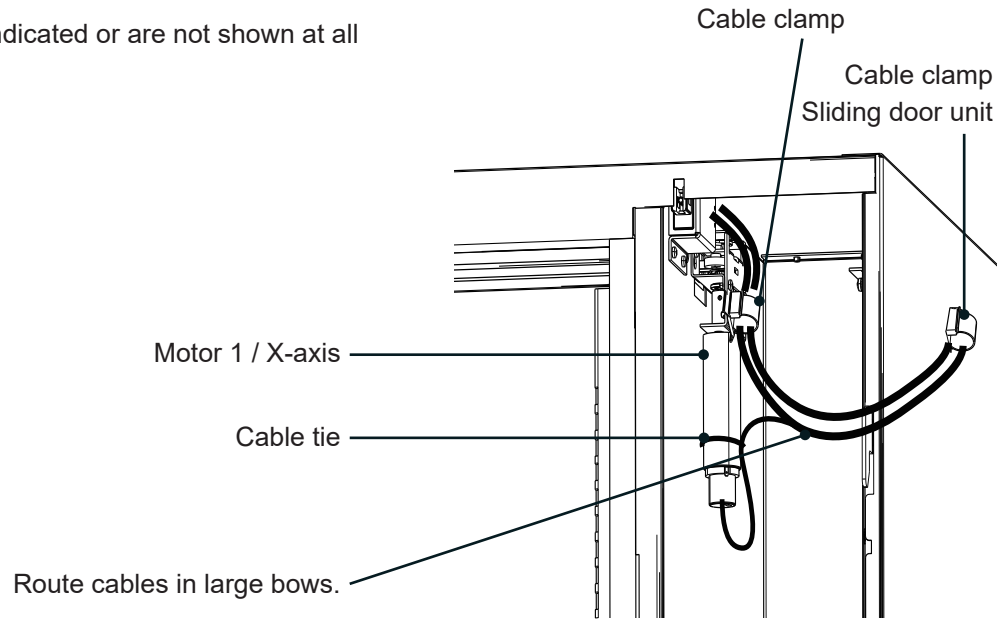
The cables from the vending machine to the sliding door unit must be routed in large loops and through strain reliefs.

Ensure that the cables are laid without kinks and that they do not get caught and are not subjected to tension.



6.10 Note on illustrations

Cables and plugs are merely indicated or are not shown at all in illustrations.



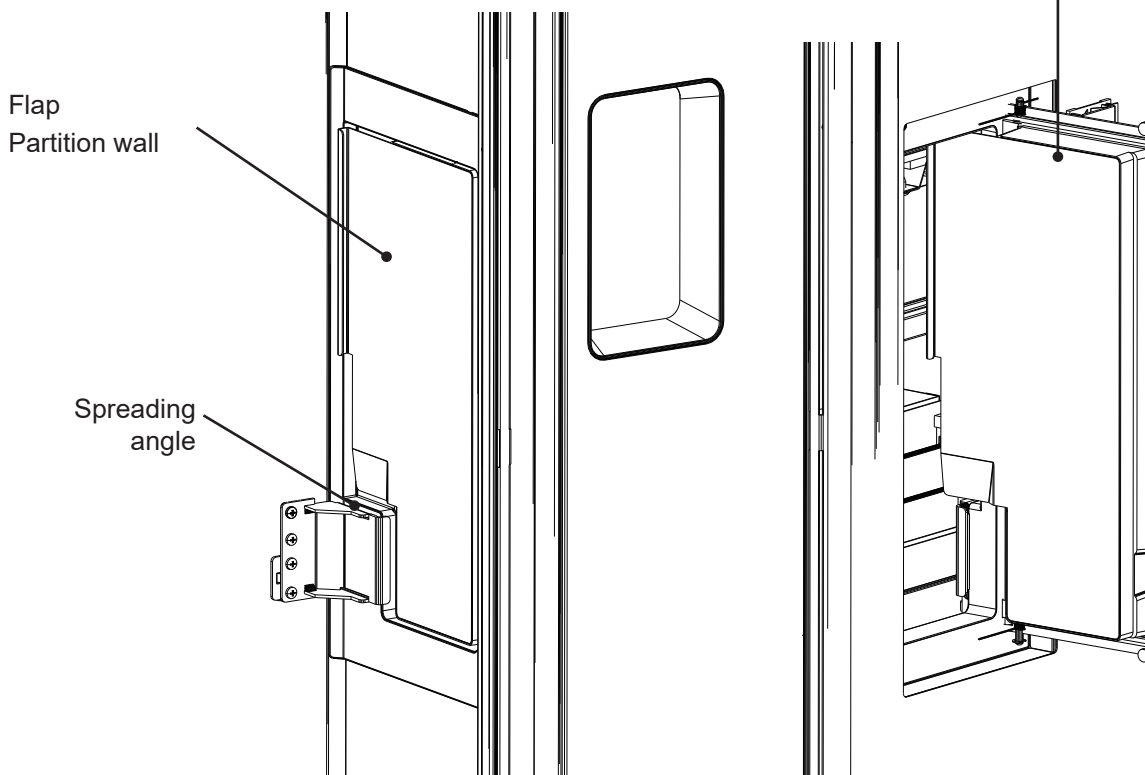
Partition wall flap

There is a flap between the cooling area and the ambient area.

This is pressed into the closed position by two springs on the hinge axis.

When a product is to be dispensed in the basket, the basket simply pushes open this partition wall flap. After it moves away, the flap closes again.

Partition wall flap in open state, product basket not shown here.



Removing and installing the partition wall flap:

Pull the two snap rings off the axles.

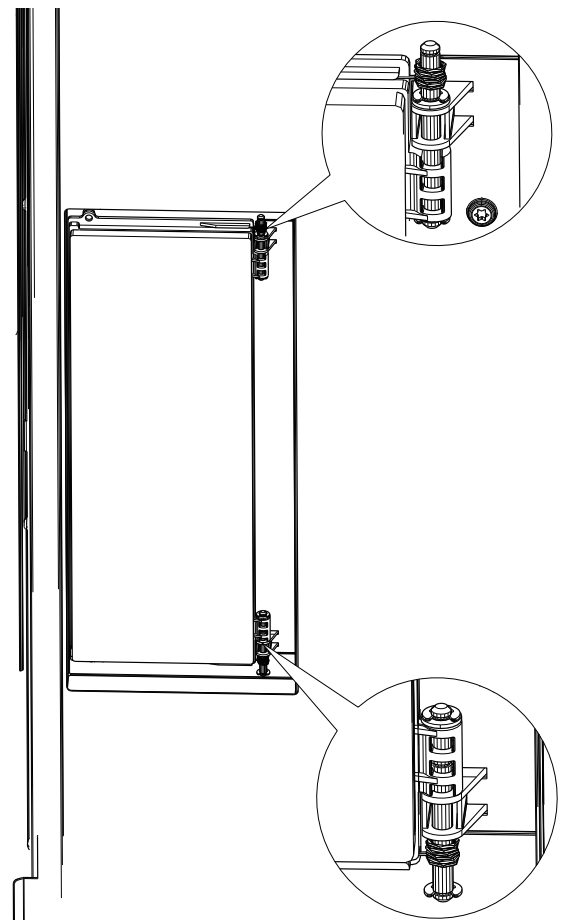
Now pull out the axles.

Now you can remove the flap.

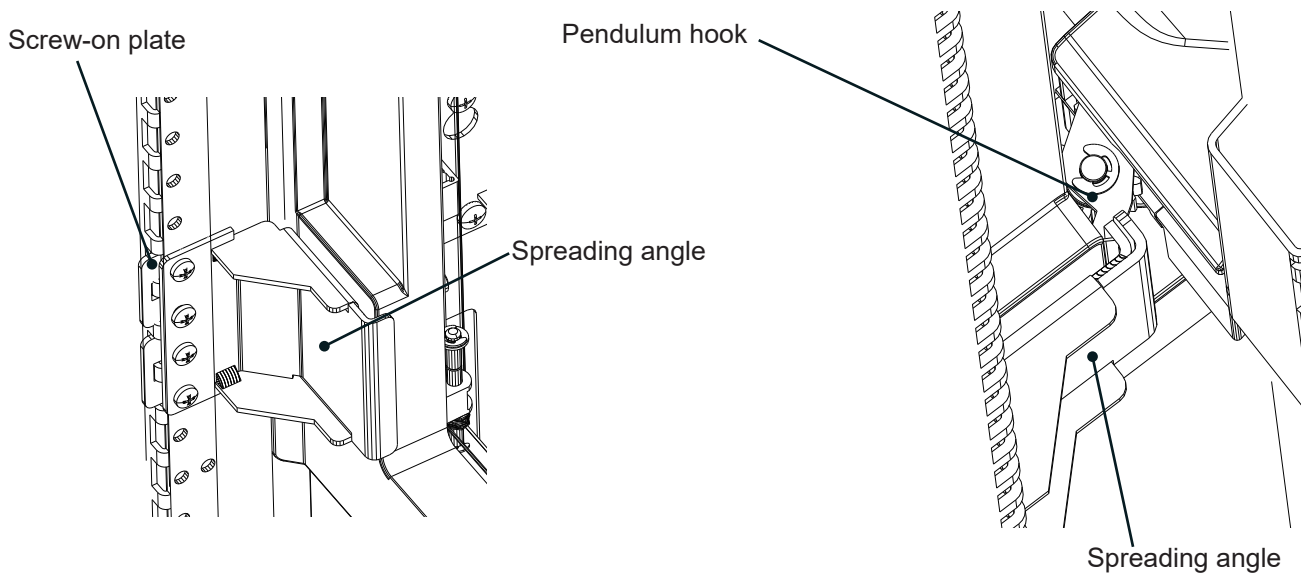
To carry out installation, perform the above steps in reverse order.

Finally, check that the flap is functioning properly so that there is no unnecessary energy loss.

The flap must close by itself!

**6.11 Securing the basket during product dispensing**

When the I rail with the product basket is in the dispenser, the pendulum hook is extended, thereby blocking the basket at the spreading angle. This mechanically prevents the product basket from being pushed back (anti-theft device).



6.12 Vending machine lighting: LED strip left/right

The products are illuminated by two energy-saving, long-life LED light strips.

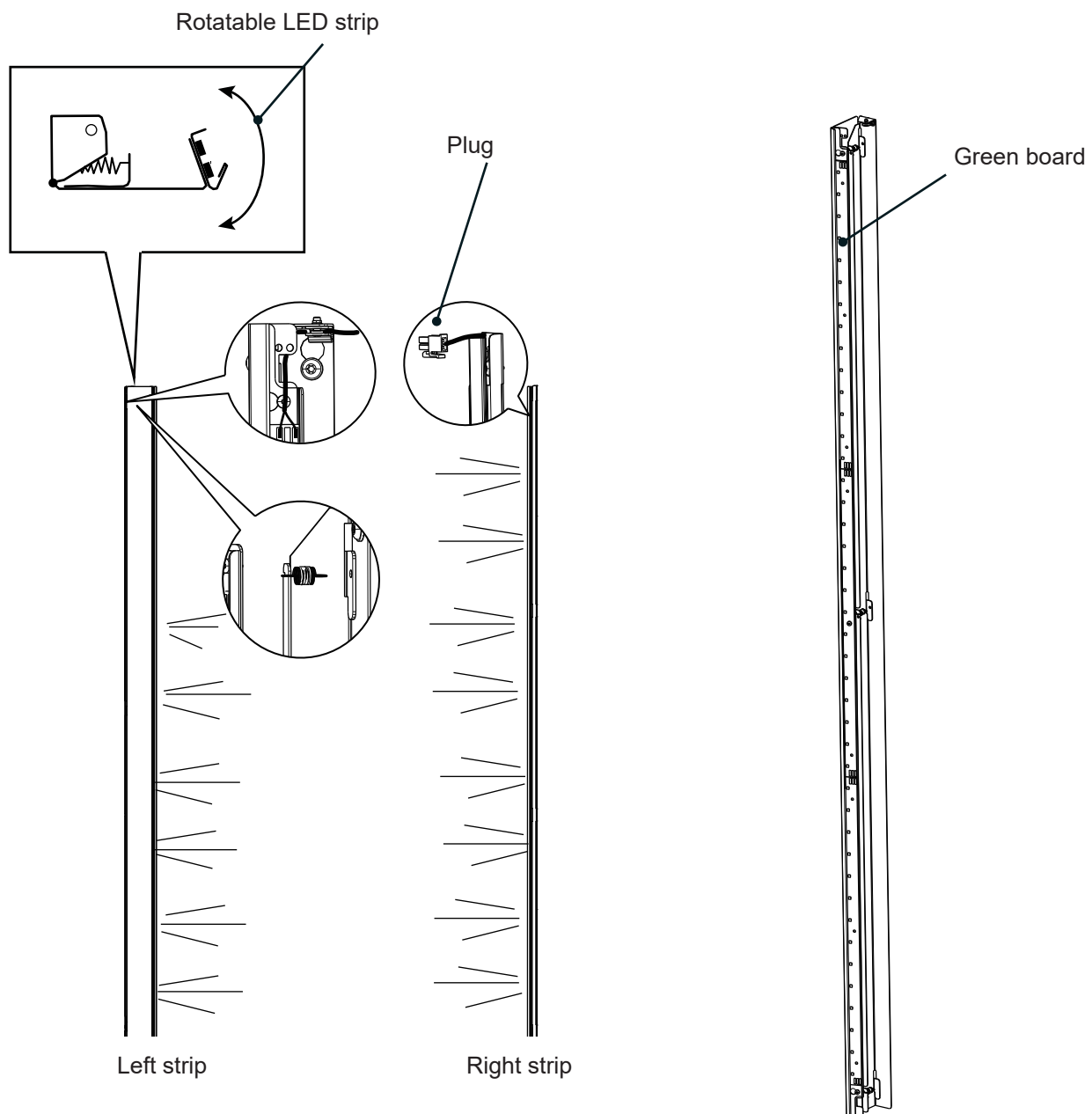
The left strip flips open when the door is opened. This prevents damage caused by pulling out the left product containers.

The right-hand strip is permanently mounted.

The light strips can be replaced by loosening the fastening screws. The electrical supply line is connected with plugs protected against polarity reversal.



Do not touch the green LED light strip board. It contains sensitive components.



6.13 Lift system

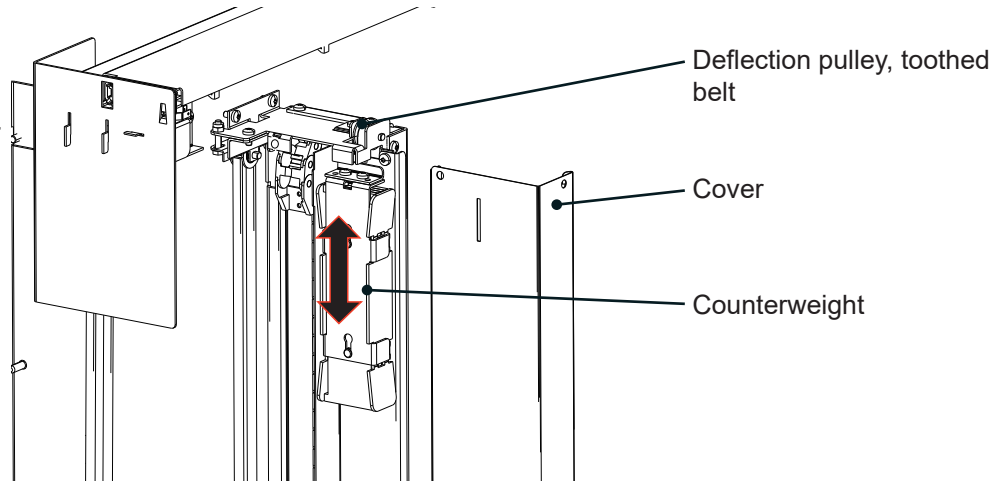
6.13.1 I rail counterweight

To compensate for the weight of the basket, there is a built-in counterweight of approx. 0.8 kg. The two parts are connected by a deflection pulley with ball bearings and a toothed belt.

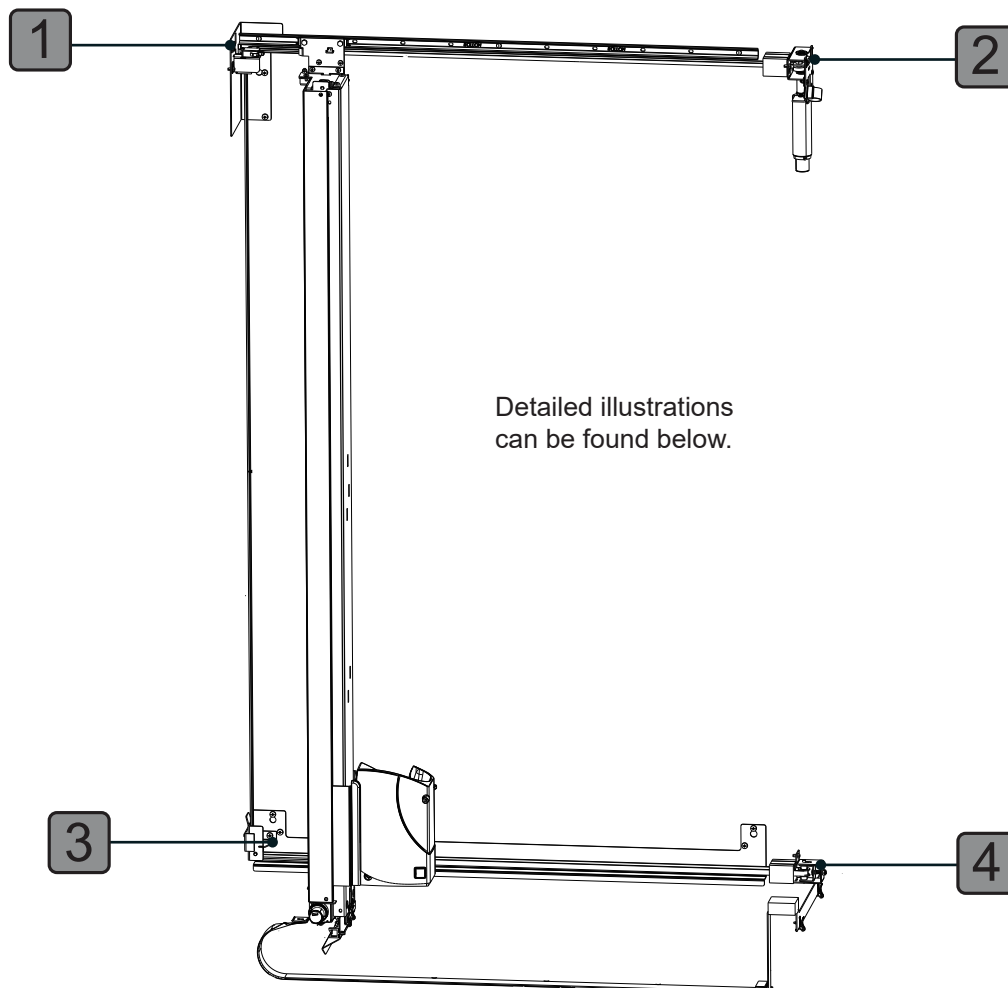
The counterweight can be accessed after removing the cover.

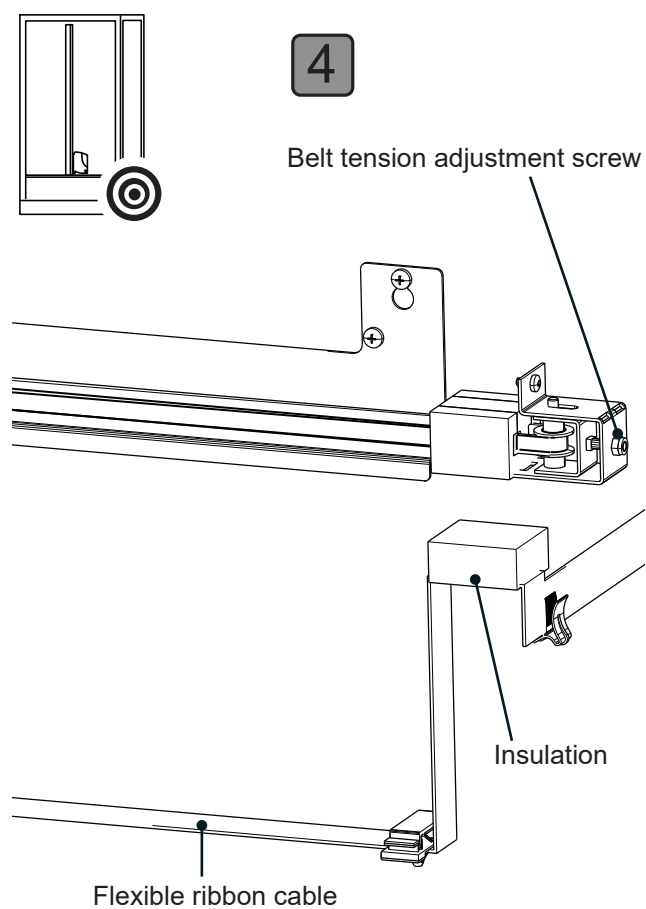
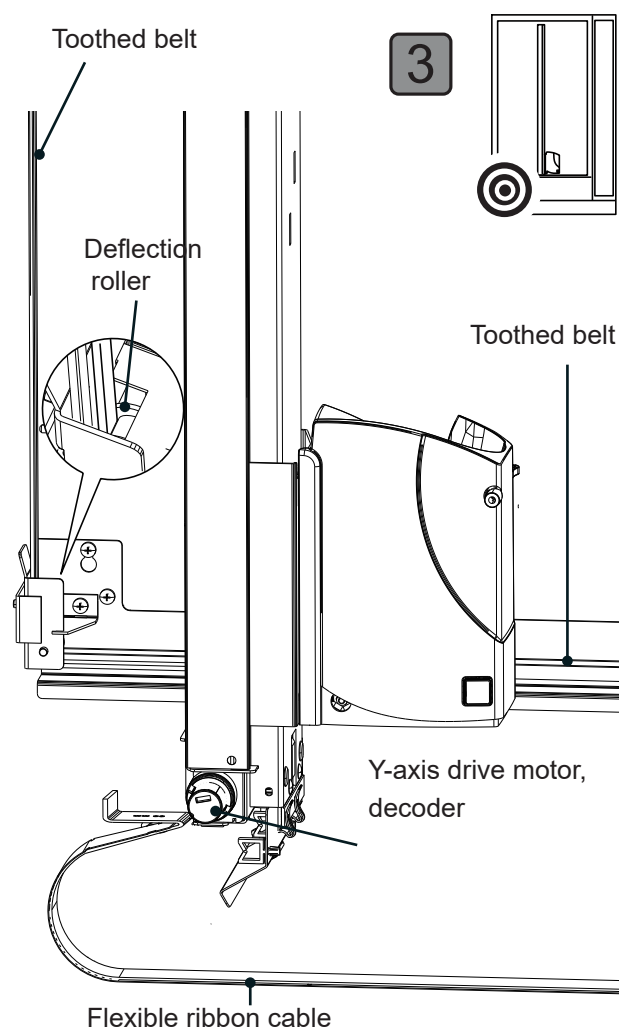
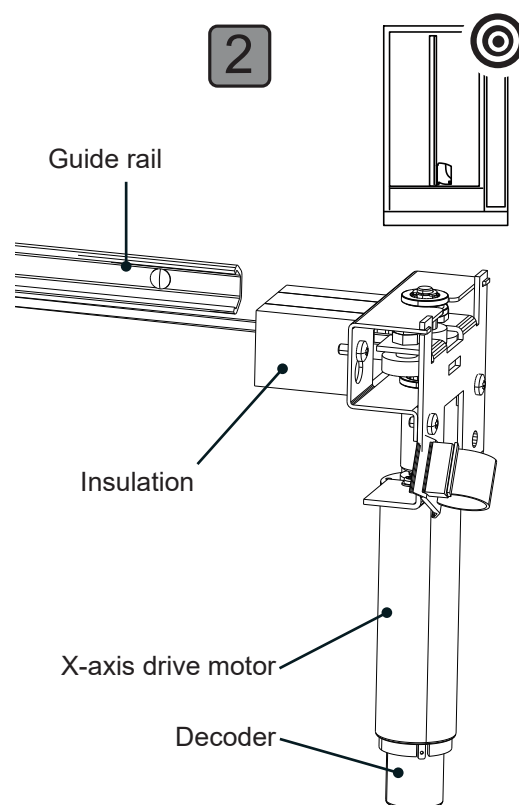
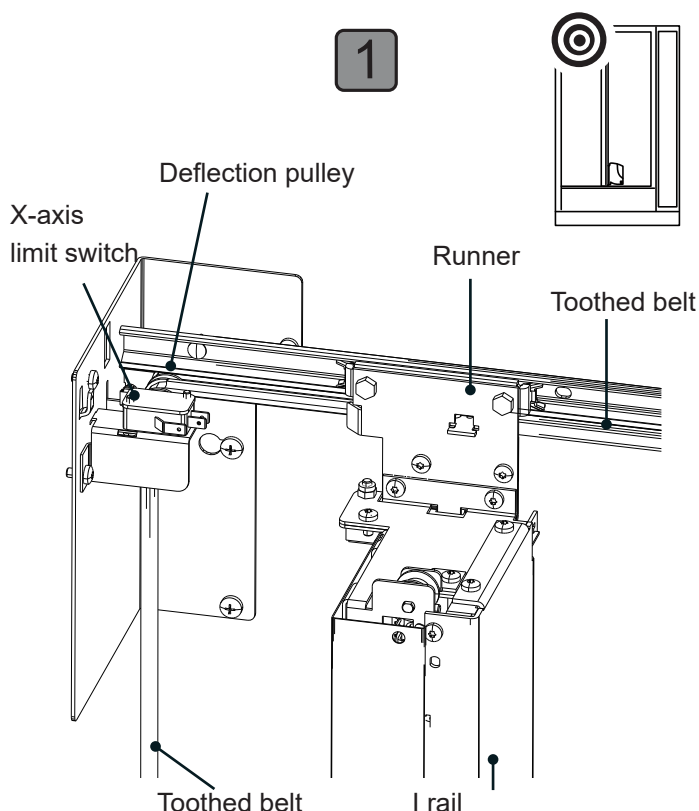
Note:

The counterweight and deflection pulley are maintenance-free.



6.13.2 Belt drive, I rail, lift system structure





6.13.3 Removing the I rail

Procedure

Empty and remove the lower right product container.

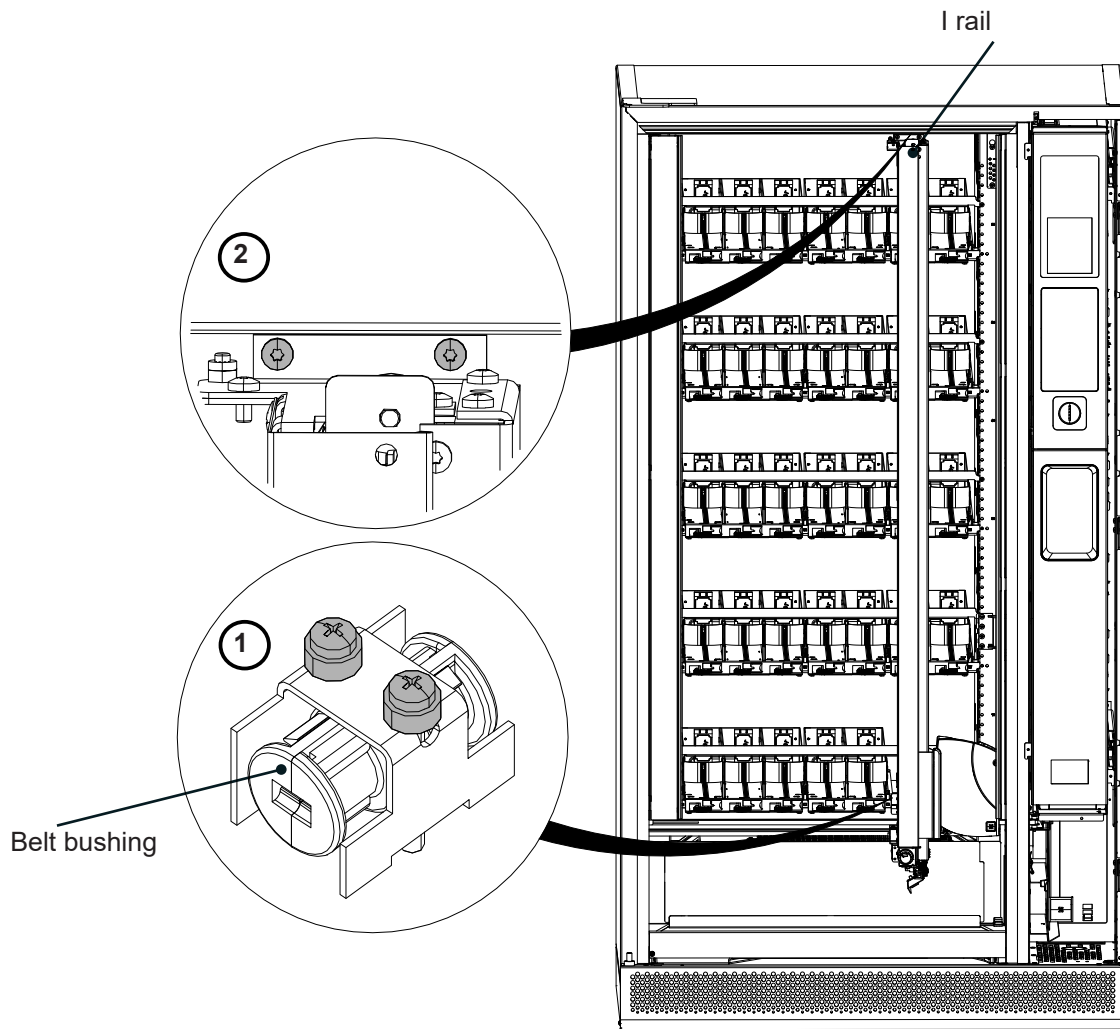
Slide the I rail all the way to the right.

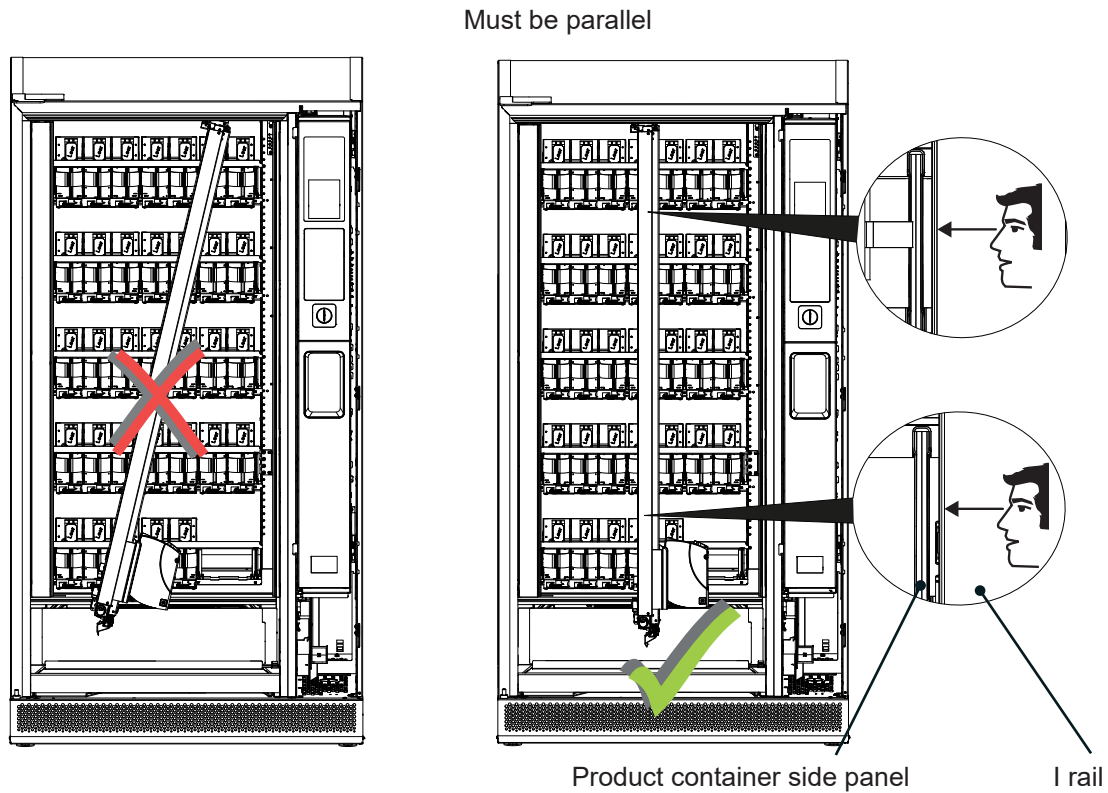
1. Completely unscrew both guide screws on the lower belt bushing; this releases the I rail/toothed belt connection.
2. At the top of the I rail, remove the two screws for fastening. The I rail is now detached and you can remove it completely.

Note on installation

The I rail is installed by following the above steps in reverse order. The lower roller guide must be inserted into the rail from below.

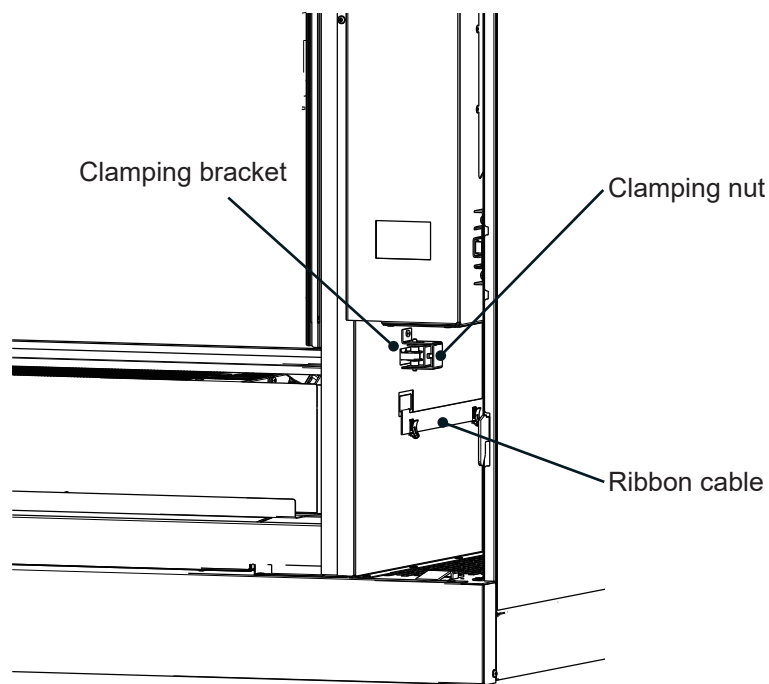
After installation, push the I rail into the centre and check for parallelism. To do this, make sure that the left side of the I-rail – top and bottom – is rear aligned with the product containers. You can then check the alignment (line) with care and accuracy.





6.13.4 Adjusting the belt tension (X-axis)

The belt tension and parallelism are adjusted on the clamping bracket by turning the clamping nut. After carrying out the adjustment, the parallelism must be checked.



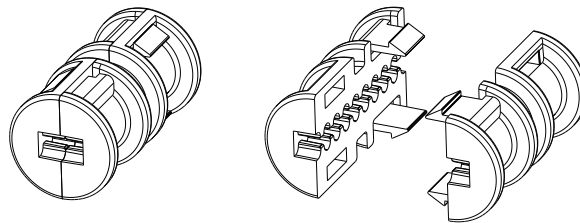
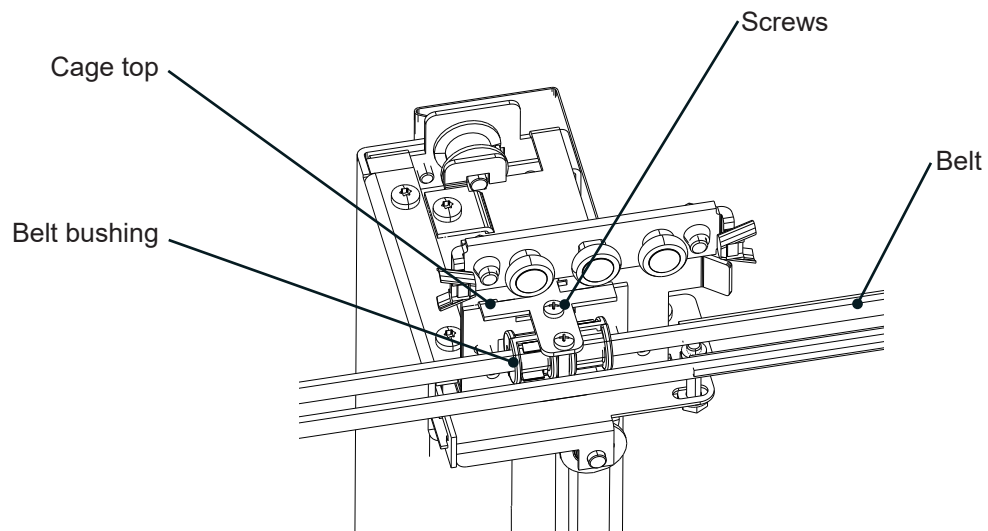
NOTE!

Observe the installation and testing instructions in part no. 704 01 001 00.

6.13.5 Detaching the runner at the top

The belt bushing is clamped in place by the runner with its two inserted screws clamps. The belt bushing in turn is moved by the belt.

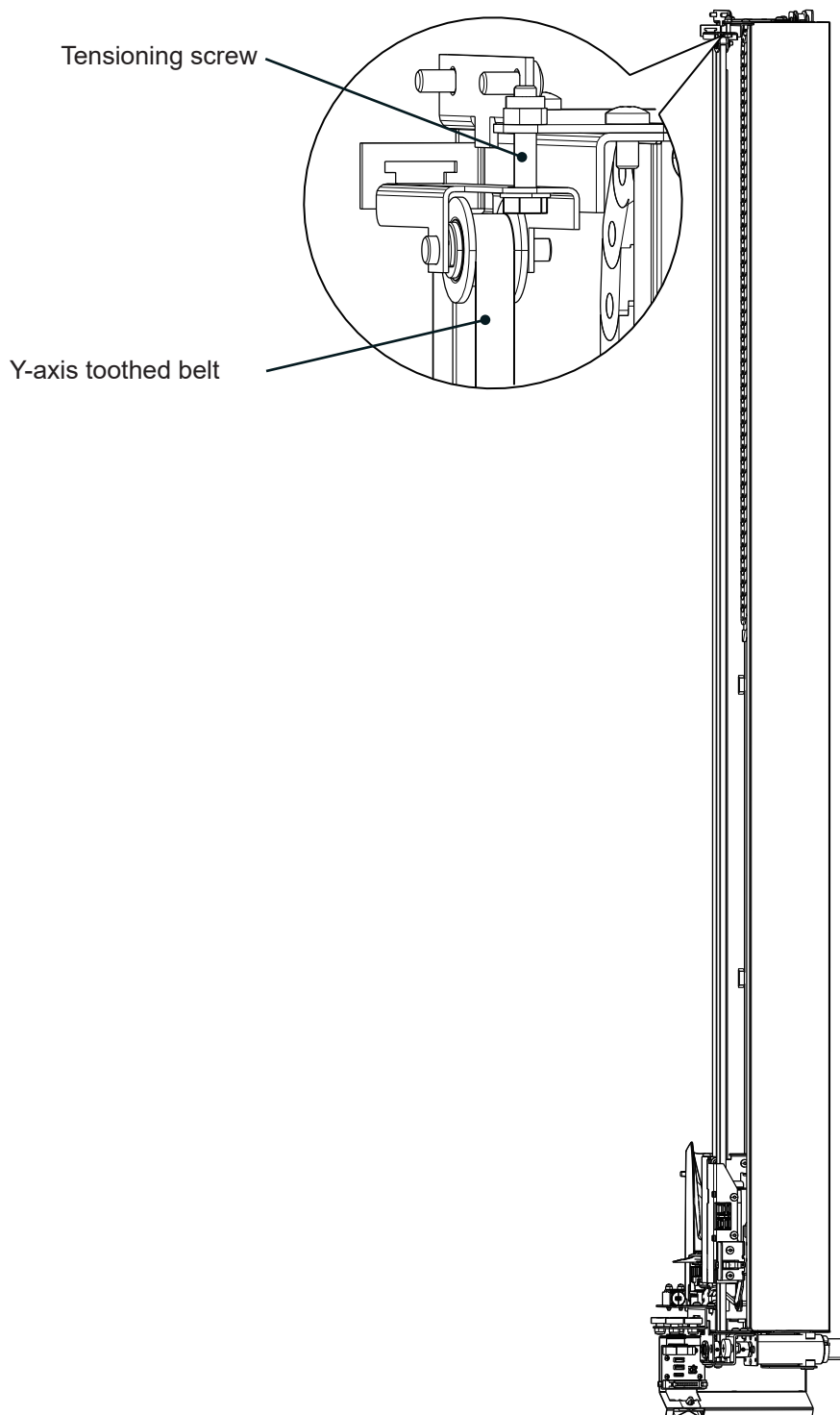
The belt bushing consists of two identical halves fitted together.



Belt bushing open (clip fastener)

6.13.6 Adjusting the belt tension (Y-axis)

The belt tension is adjusted at the tensioning screw.

**NOTE!**

Observe the installation and testing instructions in part no. 704 01 230 00.

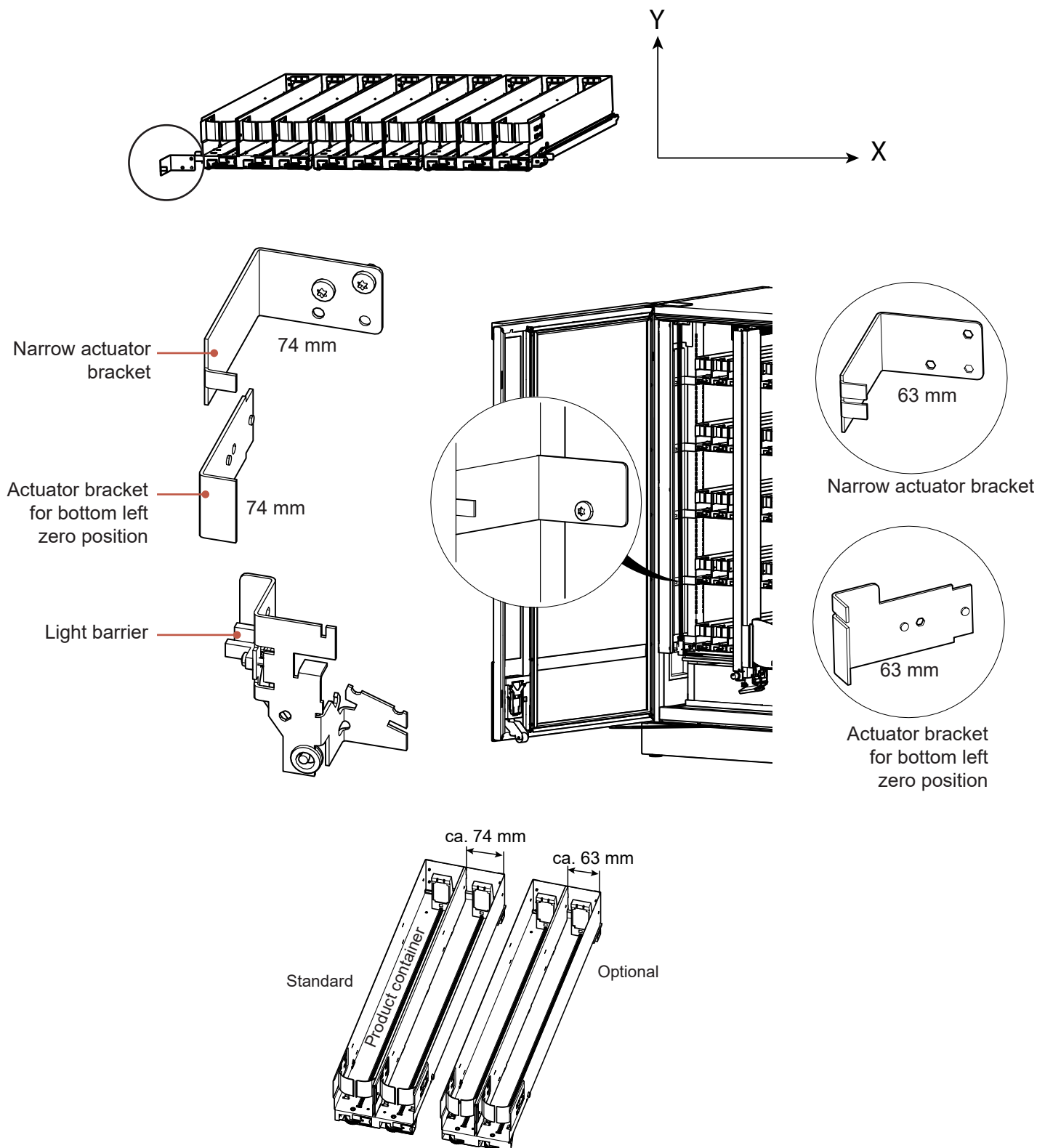
6.14 Triggering a reference run [level search]

[Level configuration]

You can find the function in [Products] {}

When this menu is selected, the vending machine analyses the type, number and installation height of the product containers. You must call up this menu whenever you have changed the layout of the vending machine (e.g. by changing the installation height of product containers or the number of product containers on a level).

Each product container level must have an actuator bracket so that the product container is detected when the level is determined. The light barrier is guided past the actuator brackets, enabling it to determine the positions.



7. Error messages

Yellow or red error messages

As soon as the vending machine door is opened, the display changes from vending mode to the start menu. The filler or service technician can find important information here in the status window:

- Window highlighted in red: machine out of operation
- Window highlighted in yellow: vending machine remains in operation, warnings are present

Example: [No payment system found]

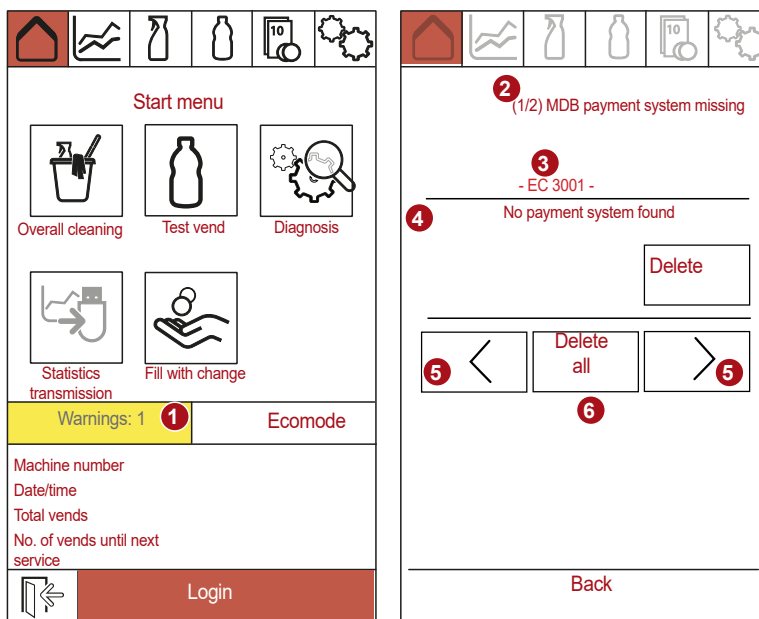
In the following example, the error text [-EC 3001 -] is shown in red. The associated plain text [No payment system found] helps the filler or service technician.

In the settings, [MDB] has probably been set but the coin mechanism has been removed. The software searches for communication with the coin mechanism via the MDB protocol but cannot find any. This is a serious error that must lead to the machine being stopped.

What can you do now?

- Log in, i.e. register as *operator* or *technician*.
- Install a coin mechanism and connect it to the MDB.
- Press tab 5 [Payment systems] and then [General]. In the menu item [Credit system protocol] you must set [MDB].

- 1 Yellow error message
- 2 Error number, error text
- 3 Internal error number
- 4 Note on correcting the error
- 5 For scrolling through the error list
- 6 The errors can be deleted with [Delete All]. If you do not correct the cause of the fault, the fault will reappear on the next occasion.



Error codes

The error codes are available for download on our homepage.

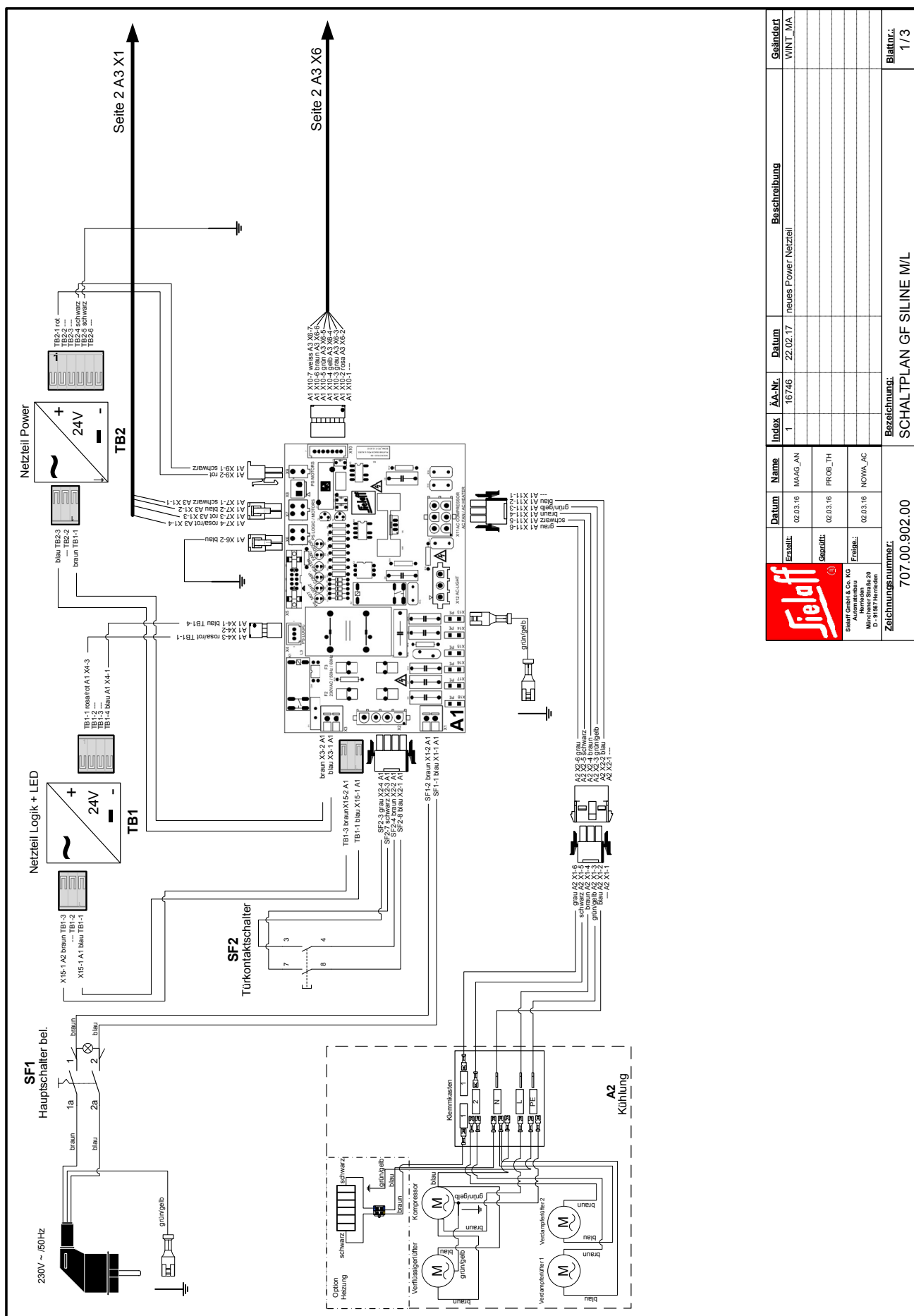
Procedure

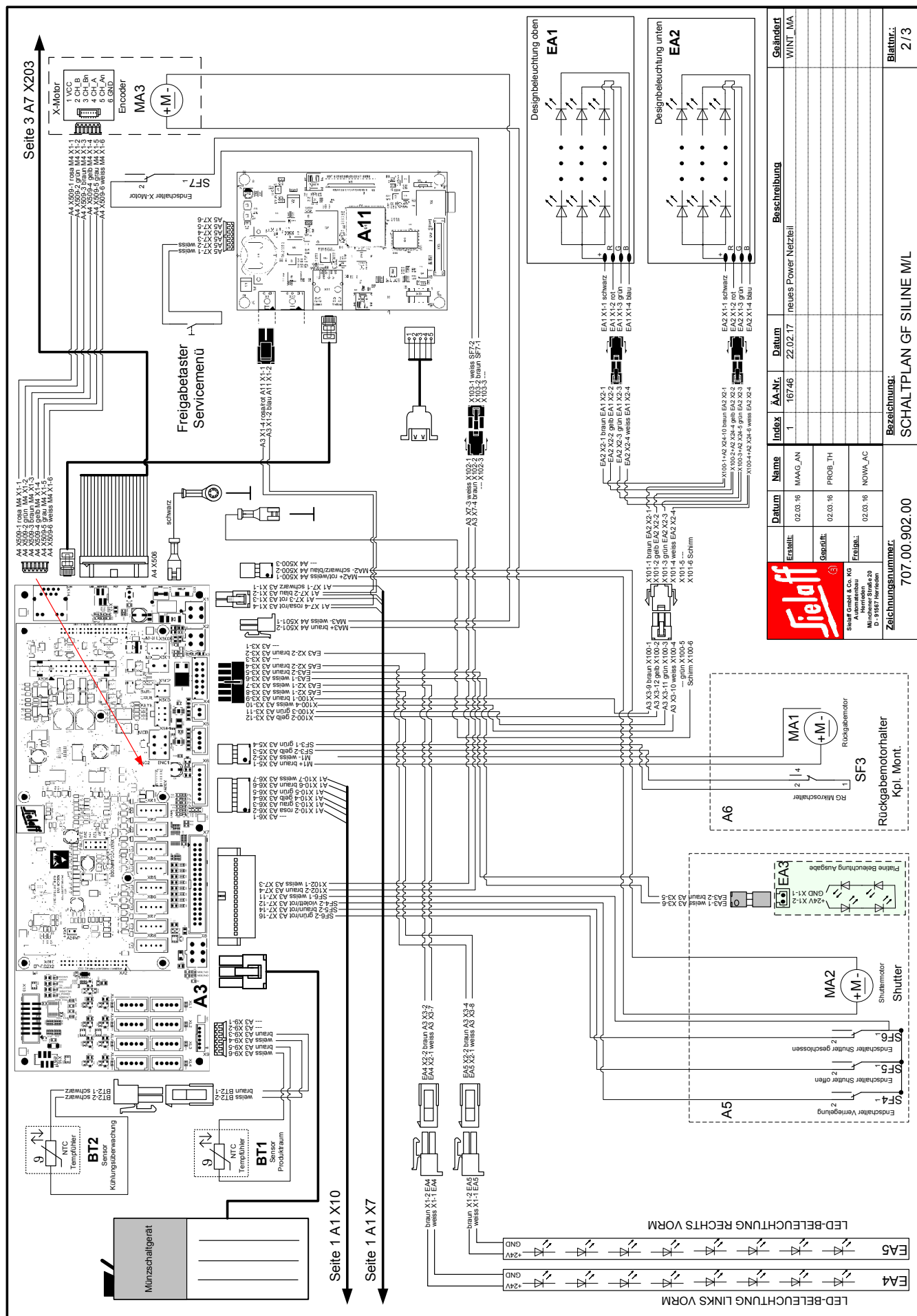
1. Go to the SIELAFF website.
 2. Enter login details in the customer login.
 3. Open Download section.
 4. Search for vending machine.
 5. Open [Software] section.
 6. Download the SIELAFF Error Finder.
 7. Set the language in the SIELAFF error finder and enter the error number.
- Error text and error description/cause are displayed.

✓ Done.

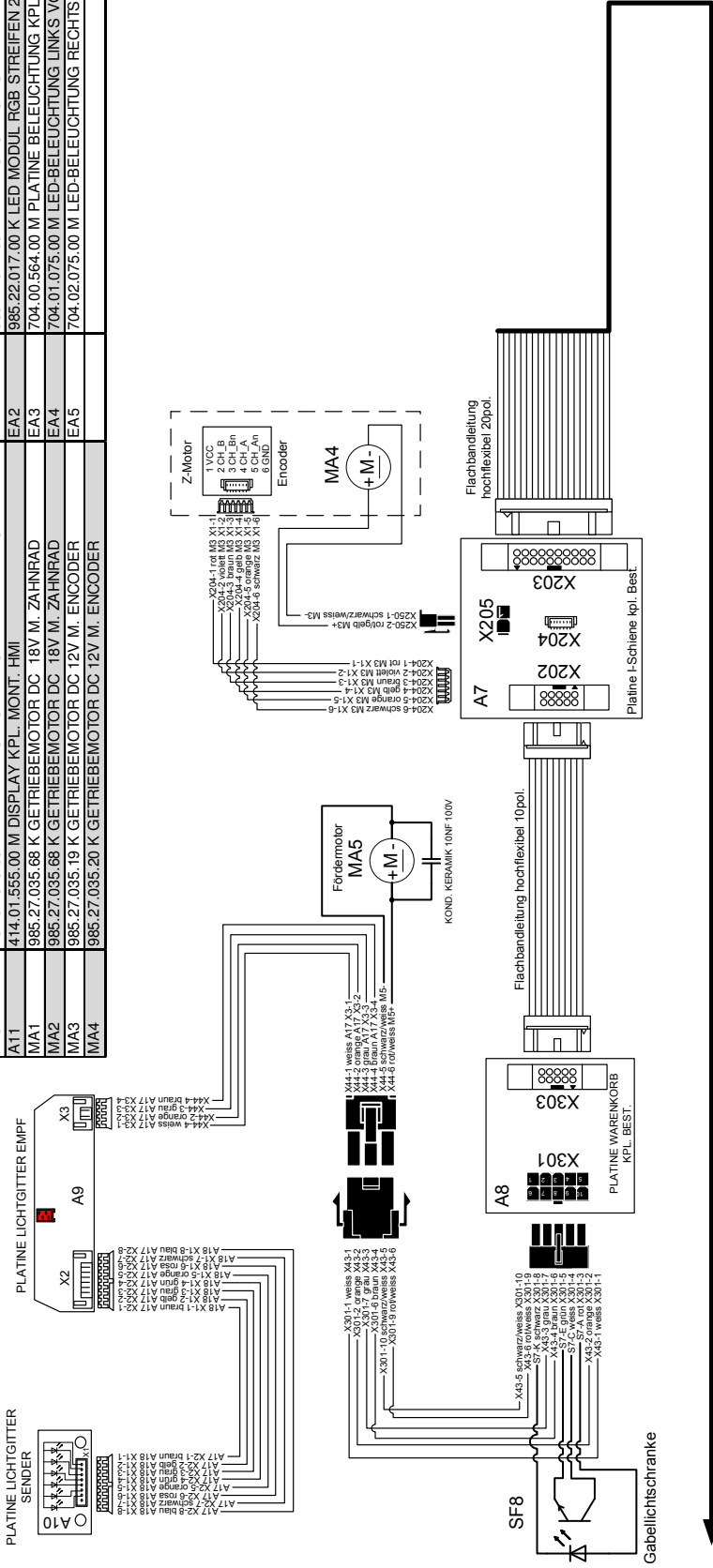


8. Circuit diagrams





Komponente	Stelaff Artikelnummer	Komponente	Stelaff Artikelnummer
A1	343.00.515.00 M PLATINE SNAOK PDU 4 AUSG. KPL. BEST	MA5	704.00.563.00 M GETRIEBEMOTOR VORM.
A2	704.00.550.00 M KUEHLUNG SKA 435 KPL. MONT.GF XLXM	SF1	985.14.290.29 K WIPPSCHALTER BEL. SNAP-IN 2 POL
	704.00.574.00 M KUEHLUNG SKA 751 KPL. MONT.	SF2	985.14.065.27 K SICHERHEITS-TRENNSCHALTER SNAP-IN
	704.00.581.00 M KUEHLUNG SKA 791 KPL. MONT.	SF3	985.14.060.20 K MIKROSCHALTER WECHSLER
A3	343.00.502.00 K STEUERUNG VMI LAN MIN KPL. BEST	SF4	985.14.060.20 K MIKROSCHALTER WECHSLER
A4	343.00.520.00 K PLATINE ADD-ON VMI KPL. BEST.	SF5	985.14.060.20 K MIKROSCHALTER WECHSLER
A5	705.01.021.00 M AUSGABE VORM.	SF6	985.14.060.20 K MIKROSCHALTER WECHSLER
A6	343.01.233.00 M RUECKGABEMOTORHALTER KPL. MONT.	SF7	985.14.060.20 K MIKROSCHALTER WECHSLER
A7	704.00.514.00 M PLATINE I-SCHIEBE KPL. BEST.	SF8	704.00.520.00 M KV KORB - PLATINE
A8	704.00.515.00 M PLATINE WARENKORB KPL. BEST.	BT1	985.26.001.53 K NETZTEIL 230VAC 24VDC 120W 90W
A9	704.01.547.00 M PLATINE LICHTGITTER EMPF KPL. BEST.	BT1	985.26.001.59 K NETZTEIL 230VAC 24VDC 90W
A10	704.01.549.00 M PLATINE LICHTGITTER SENDER KPL. BEST	EA1	985.22.017.00 K LED MODUL RGB STREIFEN 24V 14.4W/M
A11	414.01.555.00 M DISPLAY KPL. MONT. HMI	EA2	985.22.017.00 K LED MODUL RGB STREIFEN 24V 14.4W/M
MA1	985.27.035.68 K GETRIEBEMOTOR DC 18V M. ZAHNRAD	EA3	704.00.564.00 M PLATINE BELEUCHTUNG KPL. BEST.
MA2	985.27.035.68 K GETRIEBEMOTOR DC 18V M. ZAHNRAD	EA4	704.01.075.00 M LED-BELEUCHTUNG LINKS VORM.
MA3	985.27.035.19 K GETRIEBEMOTOR DC 12V M. ENCODER	EA5	704.02.075.00 M LED-BELEUCHTUNG RECHTS VORM.
MA4	985.27.035.20 K GETRIEBEMOTOR DC 12V M. ENCODER		



Datum	Name	Index	ÄÄ-Nr.	Datum	Beschreibung	Geändert
02.03.16	MAIG_AN	1	16746	22.02.17	neues Power Netzteil	WINT_MA
02.03.16	PROD_TH					
02.03.16	NOWA_AC					
Zeichnungsnummer: 707.00.902.00						Blattnr.: 3 / 3
SCHAL TPLAN GF SILINE M/L						



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