



# ASSEMBLY AND OPERATING MANUAL

## **GLASS LIFT S-ESAM 3.0 & 3.1**

STATUS 09.2024

# Document information

Assembly and operating manual for S-ESAM 3.0 & 3.1 glass lifts.

The images show version 3.1 and use with the Premium A-3RL-60h fireplace insert.

The glass lift is referred to as the "unit" in this manual. The full system including the fireplace insert, thermal storage medium, pipes and chimney is referred to as the "stove system".

This manual only applies to the specified glass lifts. All requirements and activities relating to the fireplace are described in the applicable documents:

- Assembly and operating manual for fireplace insert
- "Technical Data"

## Safety information

### **⚠ DANGER!**

Information marked with the word DANGER indicates a dangerous situation that will lead to severe injuries or death.

### **⚠ WARNING!**

Information marked with the word WARNING indicates a dangerous situation that may lead to severe injuries or death.

### **⚠ CAUTION!**

Information marked with the word CAUTION indicates a situation that may lead to minor to medium injuries.

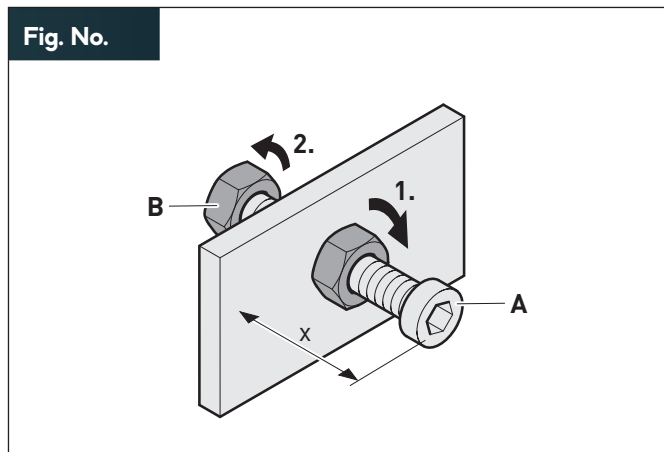
### **⚠ ATTENTION!**

Information marked with the word ATTENTION indicates a situation that may lead to property or environmental damage.

## Symbol explanation for text

- ▶ Action prompt
- List
- ✓ Check
- 💡 Advice or recommendation
- § Indication of standards or directives
- ➡ Reference to other sections of this document
- 📄 Reference to other sources to be taken into account

## Symbol explanation for images



- Highlighting of sections requiring action
- 1. Numbered action steps
- A Component designations or dimensions
- x Dimensions in mm
- ↻ Movement and direction arrows

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# Safety information

## 1. Safety information

### 1.1 Intended use

The unit is an accessory for fireplace inserts produced by the manufacturer and is used to open and close elevating combustion chamber doors electrically. The unit is fitted to the fireplace insert in the factory and cannot be retrofitted.

The following conditions apply to using the unit:

- Only the authorised target group may install or use the unit or perform other activities on the unit.
- The unit may only be used in lumpwood-fired fireplace inserts produced by the manufacturer.
- It may not be used in chimneys with multiple connections.
- Before starting the fireplace up, acceptance by the responsible authorities is required (e.g. by the district chimney sweep in Germany).
- The national and regional regulations and directives are observed.
  - ➔ “9.2 Standards and regulations” (page 23).
- The requirements and safety information in this manual are observed.

Any other use is regarded as unintended use.

The manufacturer is not liable for damage caused by unintended use.

The corresponding manual must be followed in respect of fireplace requirements.

📄 Assembly and operating manual for fireplace insert.

### 1.2 Authorised target groups

Authorised target groups are divided into groups of people with different levels of authorisation.

#### 1.2.1 Manufacturer

The manufacturer and the manufacturer's agents have the following tasks:

- Delivery of a ready-for-installation unit.
- Setting the unit to its factory settings.
- Instructing the owner in the intended use of the unit.

#### 1.2.2 Owner

The owner is responsible for the building in which the unit is used.

The owner has the following tasks:

- Meeting the requirements for the installation site.
- Ensuring that the unit is always in perfect technical condition.
- Adhering to cleaning and maintenance requirements.
- Instructing the users.
- Providing and adhering to these instructions.

#### 1.2.3 Qualified personnel

Qualified personnel are responsible for installation, commissioning, maintenance, disassembly and disposal.

Requirements for qualified personnel:

- Practical professional experience or professional training regarding gas, water and heating systems.
- Experience in installing and maintaining stove systems.
- Experience in the use of electrical and mechanical tools.
- Familiarity with occupational health and safety regulations.
- Knowledge of how to read technical drawings.
- Familiarity with this manual.
- Documentation of the work performed.

Electrical work may only be performed by qualified electricians.

§ DIN VDE 0100

Requirements for qualified electricians:

- Familiarity with the basics of electrical engineering.
- Familiarity with country-specific regulations and standards.
- Familiarity with the relevant safety regulations.
- Familiarity with this manual.

### 1.2.4 Users

Instructed users perform work during use, cleaning and servicing.

Requirements for instructed users:

- The users have been instructed in the safe and intended use of the unit.
- The users have been instructed with regard to their work by the owner.
- Familiarity with this manual.

Special requirements apply to the following users:

- Children aged 8 and over.
- People with decreased physical, sensory or mental capabilities.
- People with a lack of experience and knowledge.

These users may only use the unit under the following conditions:

- The users are supervised.
- The users have been instructed in the safe use of the unit.
- The users understand the dangers of handling the unit.
- Children may not play with the unit.

Children and pets must be supervised at all times and must be kept away from the unit.

- 🔔 We recommend attaching a fixture to protect this group (e.g. in front of hot unit components).

### 1.3 General safety information

#### **⚠️ WARNING!**

#### **Danger due to non-adherence to the operating and assembly instructions!**

These instructions contain important information on how to safely handle the unit. Potential dangers are pointed out explicitly. Non-adherence can lead to severe injuries or death.

- ▶ Carefully read this manual.
- ▶ Adhere to the safety information in this manual.
- ▶ Keep the manual in an accessible place.

The unit may not be used in the following cases:

- If the responsible authorities have not given their approval for the fireplace.
- If the unit or individual components are damaged.
- If unauthorised modifications or changes have been made to the unit.
- After improper repairs.
- If safety devices are missing or not functional.
- In fireplace inserts not approved by the manufacturer.

In the following cases, the manufacturer shall not accept any liability for damage:

- If these instructions are not adhered to.
- In the event of unintended use.
- In the event of improper handling.
- If the unit is used by unauthorised target groups.
- If the unit is installed or repaired by unauthorised experts.
- In the event of unauthorised conversions.
- If spare parts are used which were not manufactured or approved by the manufacturer.
- If the protective devices of the unit are bypassed.
- If maintenance and cleaning intervals are not adhered to.

Depending on the work, always adhere to additional relevant safety instructions. The safety instructions can be found in the corresponding chapter of these instructions.

- ➡ “3.1 Safety information for assembly” (page 8).
- ➡ “4.1 Safety information for use” (page 13).
- ➡ “6.1 Safety information for service work” (page 17).
- ➡ “7.1 Safety information for disassembly” (page 22).

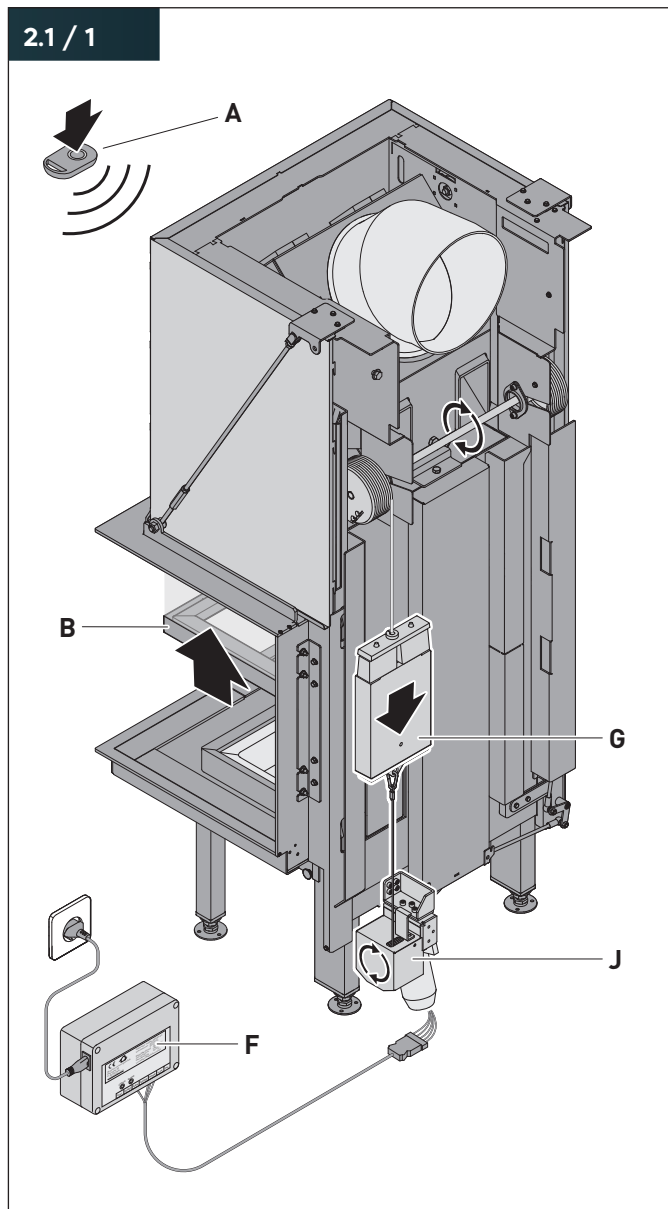
# Product information

## 2. Product information

### 2.1 Functional principle

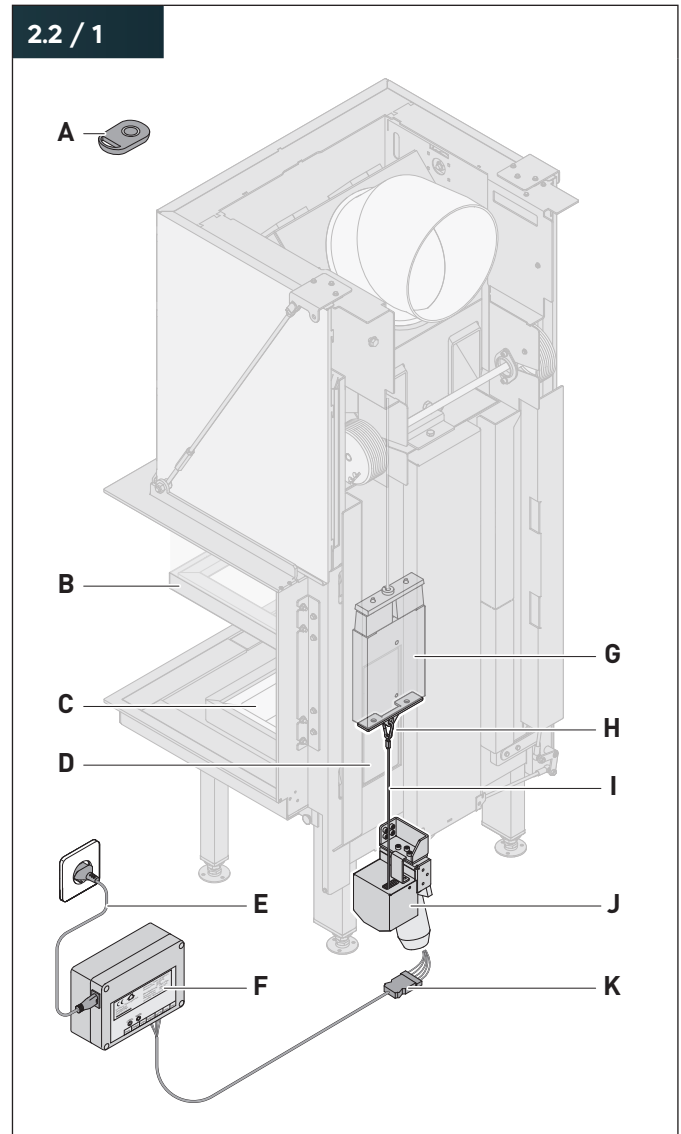
Activating the handheld transmitter (A) prompts the control system (F) to send the corresponding command to the drive unit (J):

- For opening, the drive motor pulls the pull rope onto a drum in the rope box on the drive unit. This pushes the counterweight (G) downwards and causes the combustion chamber door (B) to open.
- For closing, the pull rope is unwound from the drum and the combustion chamber door drops back down under its own weight.



### 2.2 Product overview

#### 2.2 / 1



- A Handheld transmitter
- B Combustion chamber door with ceramic glass
- C Combustion chamber with combustion chamber lining
- D Inspection port
- E Power cable
- F Control system inside control system housing with connecting sockets
- G Counterweight
- H Rope fastener
- I Pull rope
- J Drive unit with motor and rope box
- K Motor cable

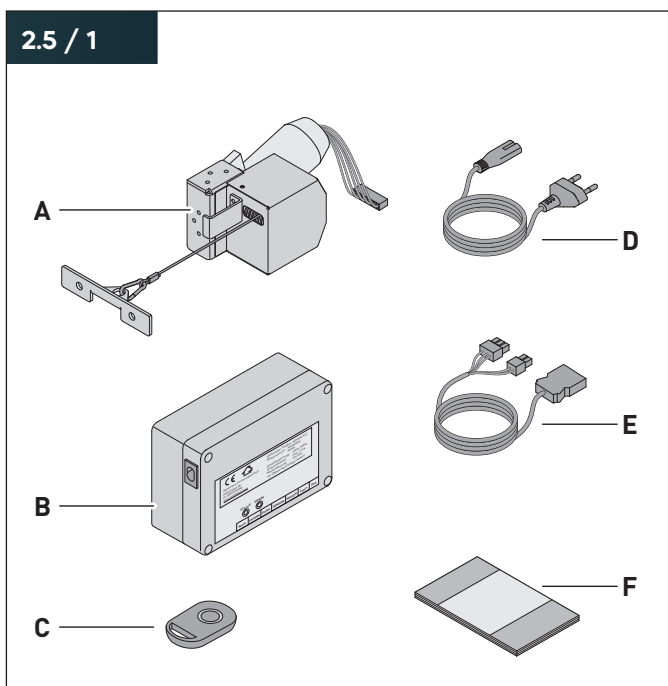
### 2.3 Versions

- S-ESAM 3.0.
- S-ESAM 3.1 with additional setting screw for adjusting the lowering speed of the firebox door.

## 2.4 Protective devices

- Automatic closing function. The combustion chamber door will be closed automatically in the following situations:
  - After two minutes if left open.
  - After three seconds if power is lost.
- Acoustic signal for announcing movements.
- Acoustic alert if power is lost.
- Emergency drain function via the “Reset” button.

## 2.5 Scope of delivery



- A** Drive unit (preinstalled on the fireplace insert)
- B** Control system
- C** Handheld transmitter
- D** Power cable
- E** Motor cable
- F** Assembly and operating manual

Optional:

- Button for external reset
- ➔ “9.1 Accessories” (page 23).

In the case of custom designs (e.g. units with custom software or units for particularly heavy combustion chamber doors):

- ▶ Contact the manufacturer or a specialised company.

## 2.6 Models

The unit is available for the following fireplace inserts:

- Premium V-1V-87h
- Premium V-FD-87h
- Premium V-2L/2R-55h
- Premium V-2L/2R-68h
- Premium V-2L/2R-80h
- Premium A-3RL-60h
- Premium A-3RL-80h
- Premium A-U-50h
- Premium A-U-70h
- Varia Sh
- Varia 1V-87h
- Varia FD-87h
- Varia 2Lh/2Rh
- Varia 2L/2R-68h
- Varia 2L/2R-80h
- Varia 2L/2R-100h
- Arte 3RL-60h
- Arte 3RL-80h
- Arte U-50h
- Arte U-70h
- Lean 2L/2R-70h
- Lean 3RL-70h

## 2.7 Technical data

Information on the model (e.g. type, inspection number, year of manufacture) can be found on the type plate on the control system housing.

### S-ESAM 3.0 & 3.1

Operating voltage	230 V / 50 Hz
Motor operating voltage	12 V DC
Power consumption when in use	< 100 W
Power consumption when on standby	< 2 W
Frequency band	868 MHz
Control system protection class	II
Internal primary fuse for control system	T 2 A
Power cable length (including Europlug)	1.8 m
Motor cable length	3.0 m
Dimensions of control system housing (L x W x H)	116 x 156 x 75 mm
Hole spacing when wall-mounted	112 x 72 mm
Control system weight approx.	1.6 kg

📄 For further details and information on the various fireplace designs, refer to the separate document “Technical Data”.

## 3. Assembly

### 3.1 Safety information for assembly

#### **WARNING!**

#### **Danger due to non-adherence to assembly instructions!**

Incorrect assembly of the unit may lead to severe injuries. This chapter contains important information for safe assembly of the unit.

- ▶ Carefully read this chapter prior to assembly.
- ▶ Adhere to the safety information.
- ▶ Perform the assembly work as described.

Only qualified personnel may assemble the unit. Electrical work may only be performed by qualified electricians.

⇒ "1.2.3 Qualified personnel" (page 4).

The owner is responsible for meeting the requirements for the installation site.

⇒ "1.2.2 Owner" (page 4).

To prevent danger, always adhere to the following requirements:


- Do not store or deposit any flammable materials or fluids in the vicinity of the fireplace.
- Do not position flammable objects (e.g. furniture, carpets, flowers) in front of the combustion chamber opening.
- Ensure that the unit is undamaged and in perfect condition prior to assembly.
- Unauthorised modifications to the unit (e.g. shortening or lengthening the cable) are not permitted.
- Before the unit can be used, the prerequisites for assembly and the requirements for the installation site must be met, in particular the legal requirements for fireplaces.

### 3.2 Requirements for the installation site

- Measures must be taken on site to ensure that the ambient temperature around the electrical components cannot exceed 50 °C.
- The installation site must be dry in order to prevent malfunctions and corrosion (e.g. due to condensation).
- The unit's components must be accessible at all times for maintenance purposes (e.g. via inspection ports fitted on site).
- Power and electrical connection cables must not be kinked, crushed or damaged. Watch out for potential pressure and abrasion points when laying them.

- 💡 We strongly recommend positioning the control system so that you will be able to hear acoustic signals and access the control system at any time. This is, for instance, required to read error codes, reset errors or execute emergency lowering.

See the corresponding manual for details of safety distances and installation dimensions applicable to the fireplace.

-  Assembly and operating manual for fireplace insert.

### 3.3 Requirements for assembly

The drive unit will already have been fitted and the counterweight adjusted accordingly before the fireplace insert is delivered. The combustion chamber door will need to weigh at least 3 kg more than the counterweight for the closing function to work perfectly.

To check whether the counterweight is adjusted correctly:

- ▶ Open the combustion chamber door by hand.
- ▶ Ensure that the combustion chamber door can be lifted up fully by hand.
- ▶ Let go of the combustion chamber door in any desired position. The combustion chamber door must drop down without a delay.
- ▶ Immediately catch the the combustion chamber door again.
- ▶ Do not let the combustion chamber door fall all the way to the bottom.

If the combustion chamber door does not close by itself:

- ▶ Contact the manufacturer or a specialised company.

### 3.4 Preparation for assembly

- ▶ Familiarise yourself with the unit and the associated documents:
  - Assembly and operating manual.
  - Fireplace insert.
- ▶ Keep the installation site free of objects which may be damaged or destroyed during assembly.

### 3.5 Unpacking the unit

- ▶ Check the packaging for damage.
- ▶ Remove the packaging.
- ▶ Check the scope of delivery for completeness and ensure that there is no damage.
  - ➔ "2.5 Scope of delivery" (page 7).

In the event of damage or incompleteness:

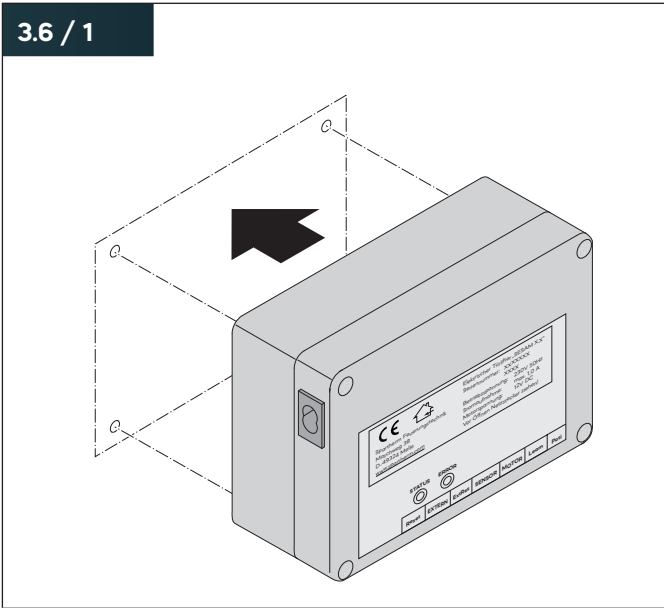
- ▶ Contact the manufacturer.

If the packaging is no longer required:

- ▶ Properly dispose of the packaging material.
  - ➔ "8.1 Disposing of the packaging" (page 22).

### 3.6 Connecting the control system

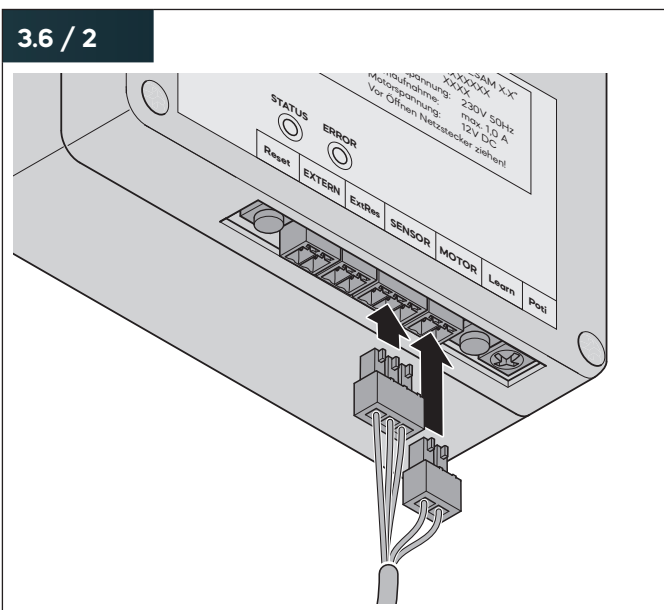
3.6 / 1



- ▶ Fit the control system in a suitable position:
  - Within cable range.
  - Somewhere dry.
  - Where the ambient temperature does not exceed 50 °C.
  - Where it can be accessed at all times for maintenance purposes.

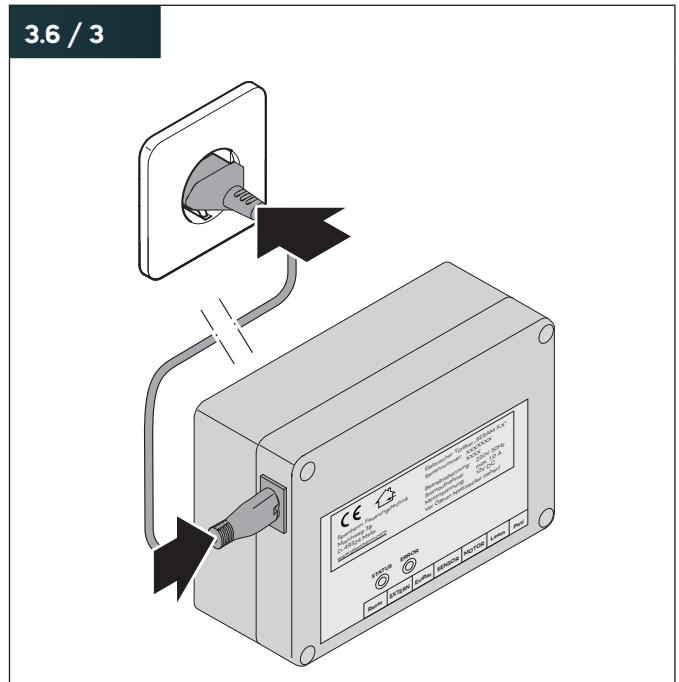
💡 We recommend positioning the control system so that you will be able to hear acoustic signals and access it at any time.

3.6 / 2



- ▶ Connect the motor cable.

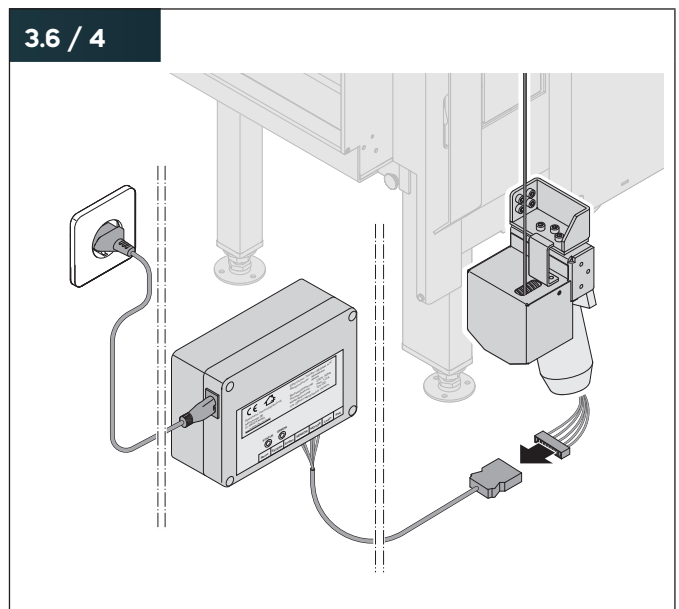
3.6 / 3



- ▶ Connect the power cable.

The "Status" LED will flash once the control system has been connected to the power supply.

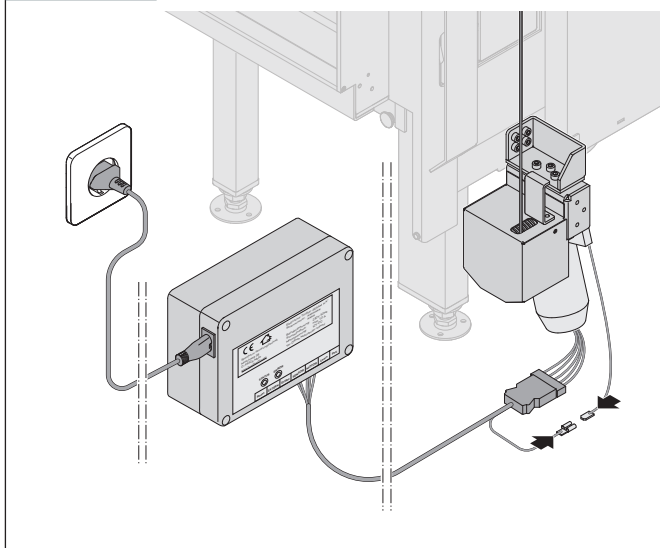
3.6 / 4



- ▶ Connect the control system to the motor.
- ▶ Ensure that the plug and bush of the motor cable are connected together as far as the stop.

# Assembly

## 3.6 / 5



f present:

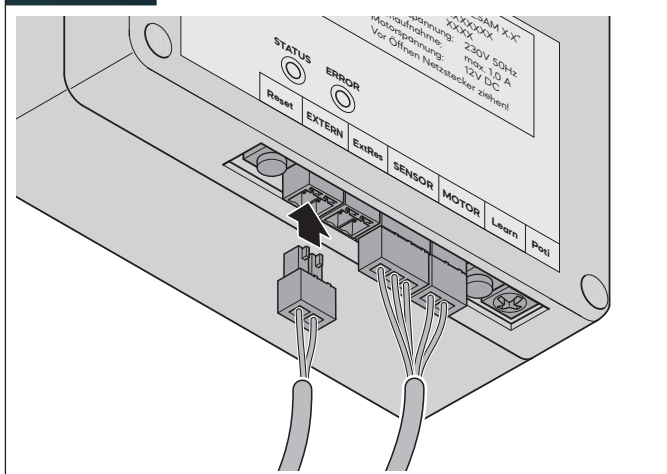
- ▶ Connect the earth cable of the control system and motor.

## 3.7 Connecting additional systems (optional)

### 3.7.1 “Extern” connection

Option for connection to external command transmitters (e.g. KNX building management system, S-Thermatik NEO combustion control).

#### 3.7.1 / 1



External relays or pushbuttons that can trigger a movement are connected to the “Extern” bush. The external devices are only permitted to issue a command briefly (1–2 seconds) in order to trigger a movement. If a command is given permanently, no more commands will be able to be entered.

When connecting the unit for operation via the S-Thermatik NEO combustion control, the unit must be connected to the “NO” and “COM” pins of the “RELAY2” or “RELAY3” connection on the combustion control. The polarity is irrelevant. The chosen relay must be assigned the “SESAM” function in the combustion control’s service menu.

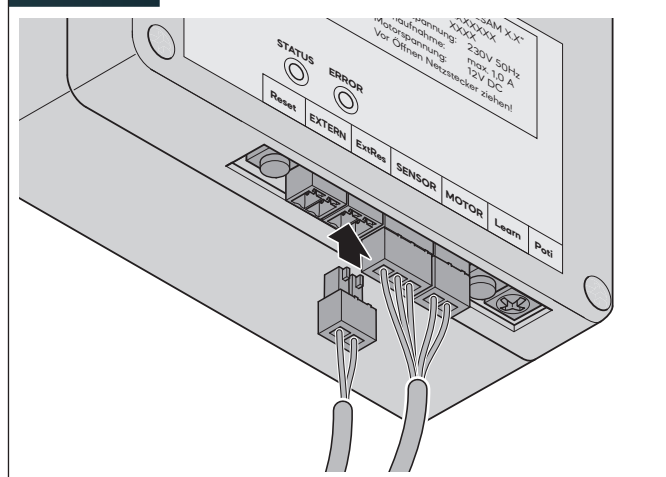
- ☞ The manuals for the external command transmitters must be followed.

### 3.7.2 “ExtRes” connection

Option for connecting a button for external reset.

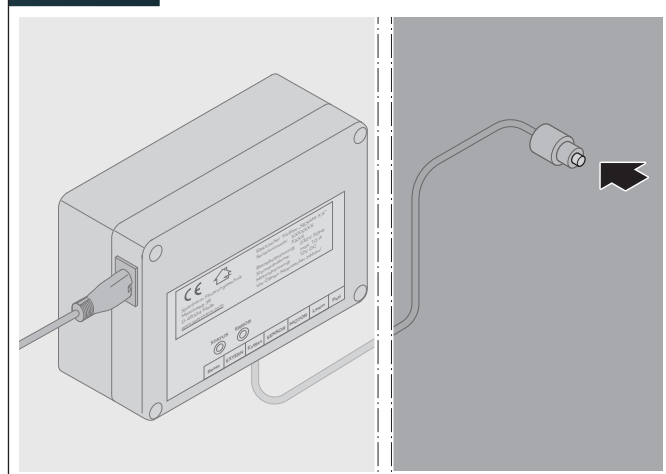
- ▶ “9.1 Accessories” (page 23).

#### 3.7.2 / 1



If the control system is hard to access, a wired button for external reset can be connected.

#### 3.7.2 / 2



- ▶ Ensure that you can access the button quickly in the event of a malfunction.

- ▶ Install the button for external reset in a suitable position, guiding it out of the fireplace cover panel, or directly behind the stove system.

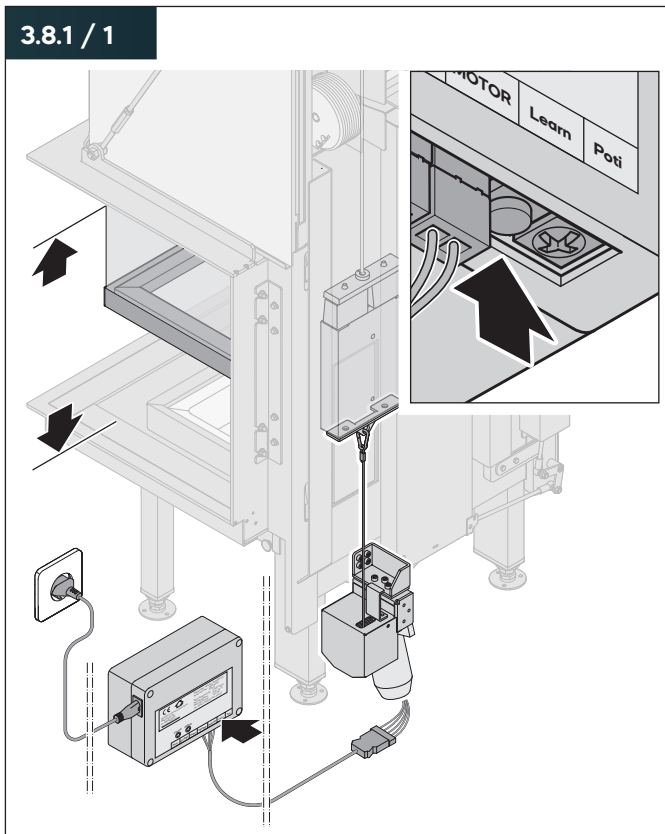
The button for external reset has the same function as the “Reset” button on the control system.

- ➔ “6.3 Malfunction repair” (page 20).

### 3.8 Teaching in end positions

#### 3.8.1 Carrying out a teach-in run

A teach-in run is carried out to establish the top and bottom end positions. The teach-in run can be started with the door in any position.



- ▶ Press the “Learn” button on the control system.

The control system moves the combustion chamber door several times in each direction in order to approach its end positions gradually.

The teach-in run ends with the combustion chamber door lifting up by 10 – 15 cm and then moving into its bottom end position.

S-ESAM 3.1 only

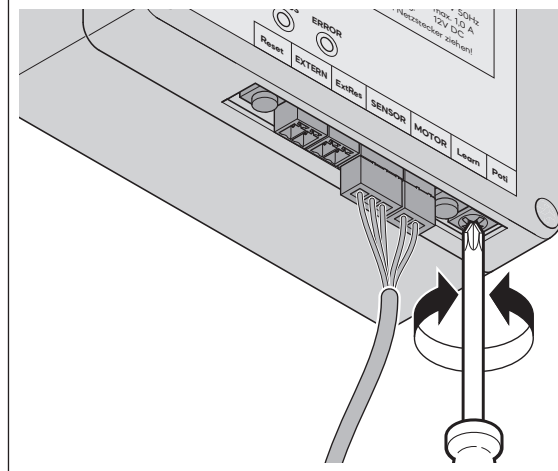
If the door does not make full contact with the seal in its bottom-most position:

- ▶ Adjust the lowering speed of the door.
  - ➔ “3.8.2 Adjusting the lowering speed” (page 11).

The unit will be ready for operation once its end positions have been taught in.

#### 3.8.2 Adjusting the lowering speed

##### 3.8.2 / 1



The version S-ESAM 3.1 is equipped with the “Poti” setting screw, which is used to adjust the lowering speed of the door.

If the door does not make full contact with the seal in its bottom-most position:

- ➔ Turn the “Poti” setting screw clockwise to increase the lowering speed of the door.
  - ➔ Perform a new teach-in run after adjusting the speed.
  - ➔ “3.8.1 Carrying out a teach-in run” (page 11).
- ▶ Ensure that the door moves as far down as possible but does not make a hard impact on the buffers.
  - ▶ If the lowering speed is too high, re-adjust it by turning the setting screw.

If the door still does not make full contact with the seal, the counterweight of the door is too high.

- ▶ Have the counterweight of the door reduced by a specialised company.

## 3.9 Checking the installation

- ▶ Make sure that the unit's components can be accessed at all times for maintenance purposes (e.g. via inspection ports fitted on site).
- ▶ Check that power and electrical connection cables are not kinked, crushed, damaged or under tension.
- ▶ Ensure that the necessary protective devices are functional.
  - ➔ "2.4 Protective devices" (page 7).


## 3.10 Instructing the owner

Prior to initial use, the qualified personnel performing installation must instruct the owner in the following matters:

- Instruction on the intended use of the unit.
- Explanation of the effects and operation of the unit, particularly taking into account safety-relevant actions.
- Information about the owner's responsibility and tasks.
  - ➔ "1.2.2 Owner" (page 4).

This manual and all technical documents must be handed over to the owner.

The corresponding manual must be followed in respect of starting up the fireplace.

 Assembly and operating manual for fireplace insert.

## 4. Use

### 4.1 Safety information for use

#### **WARNING!**

#### **Danger due to non-adherence to operating instructions!**

Incorrect use of the unit may lead to death or severe injuries. This chapter contains important information for safe use of the unit.


- ▶ Carefully read this chapter.
- ▶ Adhere to the safety information.
- ▶ Only use the unit as described here.

Only allow instructed users to use the unit.  
⇒ "1.2.4 Users" (page 5).

To prevent danger during use of the unit, adhere to the following requirements at all times:

- Do not store or deposit any flammable materials or fluids in the vicinity of the fireplace.
- Do not position flammable objects (e.g. furniture, carpets, flowers) in front of the combustion chamber opening.
- The combustion chamber door must always be kept closed in cold condition and during operation. Opening is only permissible for heating, refuelling and cleaning.
- You may only use a handheld transmitter to control the combustion chamber door if you have a clear view of the fireplace.
- A stuck combustion chamber door must never be forced shut. This can cause the drive rope to break and the combustion chamber door to fall uncontrollably.

The corresponding manual must be followed in respect of hazards when using the fireplace.

 Assembly and operating manual for fireplace insert.

### 4.2 Information on the operating principle

- An open combustion chamber door will be closed automatically after two minutes for safety reasons. The closure will be signalled ten seconds in advance by two sounds from the control system. The combustion chamber door lowers slowly, including some reversing, and the process can be continued for a further two minutes by issuing a movement command.
- A single tone will sound if power is lost or the power plug is pulled when the combustion chamber door is open. The combustion chamber door will close automatically after three seconds, without any reversing. If the power supply is restored, the unit will be ready for operation again without anything else needing to be done.
- A closed combustion chamber door can be opened and closed again by hand at any time. If the combustion chamber door has been opened by hand, the handheld transmitter must not be used to send any movement commands because this can cause a malfunction due to the rope becoming entangled. A corresponding fault message will appear on the control system.
  - "6.4 LED displays and fault codes" (page 21).
- The control system will be locked for movement commands if a fault occurs. An open combustion chamber door will be closed automatically. The fault will appear on the control system and will need to be fixed in order to use the unit again.
  - "6.3 Malfunction repair" (page 20).
- Custom designs (e.g. units with custom software or units for particularly heavy combustion chamber doors) are available without the automatic closing function. Custom designs can be recognised by a sticker on the housing lid of the control system.

## 4.3 Carrying out movements

### **⚠ WARNING!**

#### **Risk of injury due to contact with hot surfaces!**

Unit components (e.g. cover panel, combustion chamber door, door handle, viewing window) may become very hot during operation. Contact may lead to burns.

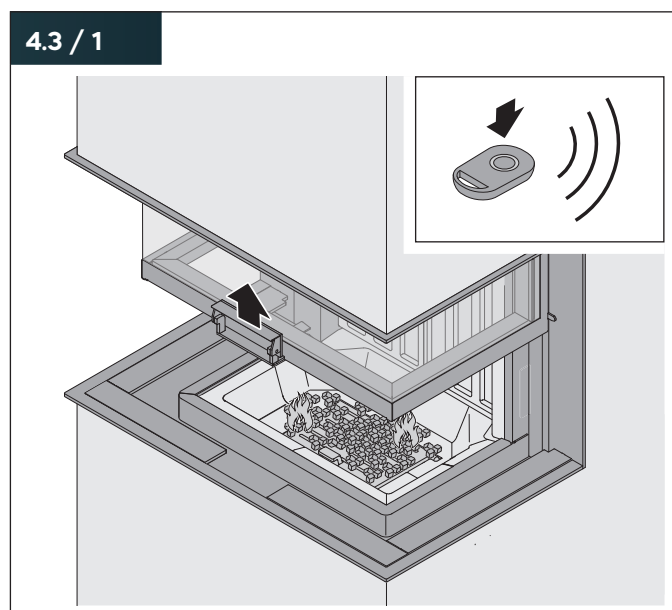
- ▶ Ensure that children do not stay near the hot unit. Children under the age of 8 and pets must be supervised at all times and must be kept away from the unit.

### **⚠ ATTENTION!**

#### **Risk of fire caused by burning particles falling out!**

When the combustion chamber door is opened during the heating process, sparks or fuel particles may emerge from the unit.

- ▶ Watch the fireplace carefully when you open the combustion chamber door.



- ▶ Keep your eye on the fireplace.
- ▶ Ensure that the combustion chamber door is closed.
- ▶ Open the combustion chamber door by activating the handheld transmitter.

The movement command is confirmed by a sound from the control system. The combustion chamber opens slowly at first so that the pressure can be equalised and nothing swirls up. The combustion chamber door then moves to its top end position.

To close the combustion chamber door again:

- ▶ Activate the handheld transmitter again.

To open the combustion chamber door a certain distance but not completely:

- ▶ Activate the handheld transmitter while the combustion chamber door is moving. The movement will be interrupted.
- ▶ Activate the handheld transmitter again in order to resume the movement but in the opposite direction.

To switch off the sound confirming movement commands:

- ▶ Pull the power plug out of its socket.
- ▶ Press and hold the "Reset" and "Learn" buttons on the control system at the same time.
- ▶ Reinsert the power plug into the socket.
- ▶ Release the "Reset" and "Learn" buttons:
  - After a single acoustic alert to switch off the sound confirming movement commands.
  - After a double acoustic alert to switch on the sound confirming movement commands.

#### 4.4 Managing handheld transmitters

At least one handheld transmitter or an external command transmitter must be connected in order to operate the control system.

The unit's control system can manage up to 200 handheld transmitters. Handheld transmitters are taught in and deleted using a small red button inside the control system housing. The LED of the receiver is located next to the button.

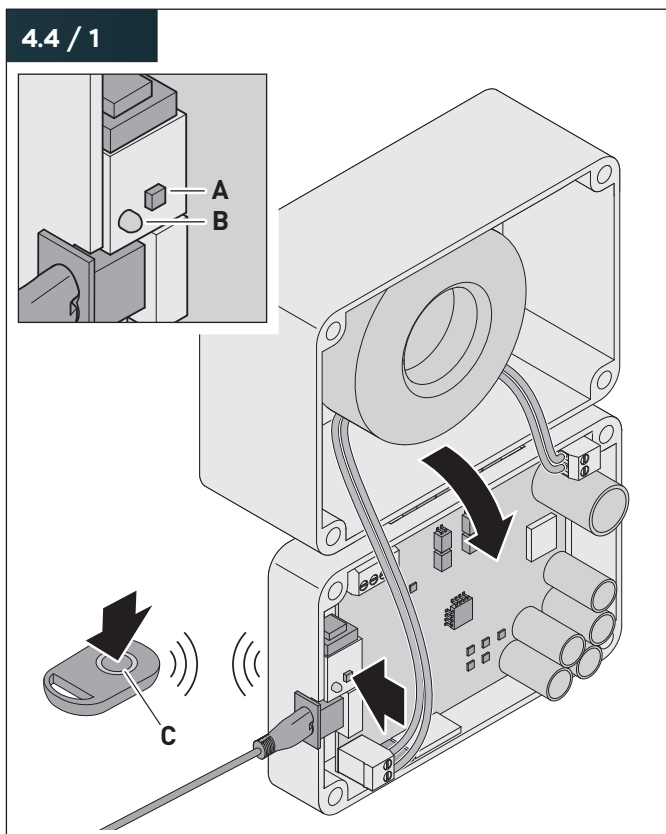
The control system must remain connected to the power supply when managing handheld transmitters.

#### **⚠ WARNING!**

##### **Risk of death by electric shock!**

Touching live parts can cause electric shock, burns or death.

- ▶ Make sure that you do not touch any small parts inside the control system apart from the red button on the receiver.



- ▶ Open the control system housing by loosening the screws in the cover.
- ▶ Swivel the cover to one side.

Connecting up a new handheld transmitter:

- ▶ Press and hold the red button **(A)**.
- ▶ Then press and hold the button on the new handheld transmitter **(C)** that you wish to connect.

The LED on the receiver **(B)** will start to flash, stopping when the handheld transmitter has been taught in.

- ▶ First release the button on the handheld transmitter **(C)**.
- ▶ Then release the red button **(A)**.

To delete a handheld transmitter:

- ▶ Press and hold the red button **(A)** and the button on the handheld transmitter **(C)** at the same time.

The LED on the receiver **(B)** will light up, stopping when the handheld transmitter has been deleted.

To delete all handheld transmitters:

- ▶ Press and hold the red button **(A)** for 15 seconds.

The LED on the receiver **(B)** will light up, stopping when all handheld transmitters have been deleted.

- ▶ Place the cover back onto the control system.
- ▶ Ensure that no cables are protruding from the housing or getting crushed.
- ▶ Lock the control system by tightening the cover screws a quarter turn.

## 5. Cleaning

The unit's closing function will close an open combustion chamber door automatically after two minutes.


To keep the combustion chamber door open permanently for cleaning:

- ▶ Open the closed combustion chamber door by hand.
- ▶ Make sure that the combustion chamber door cannot fall back down, e.g. using a piece of wood.

In the case of custom designs (e.g. units with custom software or units for particularly heavy combustion chamber doors), the automatic closing function can be deactivated.

You do not need to do anything special in order to clean the unit. The door guide must be kept clear of dirt and ash to allow the combustion chamber door to move freely.

All cleaning work is to be done at the same time as cleaning the fireplace. The corresponding manual must be followed.

 Assembly and operating manual for fireplace insert.

## 6. Service work

### 6.1 Safety information for service work

#### **⚠ WARNING!**

#### **Danger due to non-adherence to service work instructions!**

Incorrect servicing of the unit may lead to severe injuries. This chapter contains important information for safe servicing of the unit.

- ▶ Carefully read this chapter.
- ▶ Adhere to the safety information.
- ▶ Perform the service work as described.

Maintenance and repair work may only be performed by qualified experts.

⇒ "1.2.3 Qualified personnel" (page 4).

Measures for repairing malfunctions may be performed by instructed users.

⇒ "1.2.4 Users" (page 5).

To prevent danger, always adhere to the following requirements:

- Immediately eliminate any detected defects.
- Only use spare parts manufactured or approved by the manufacturer.

#### **Prior to any work on the unit:**

- ▶ Ensure that the unit and other accessible components have cooled down.
- ▶ Please note that glowing embers in the fuel residue may persist for up to 24 hours or longer.
- ▶ Protect the surroundings of the stove system, e.g. by covering the floor and furniture.
- ▶ Wear work clothing and protective gloves if necessary.
- ▶ If necessary, make sure that the combustion chamber door cannot fall back down, e.g. using a piece of wood.

Only qualified personnel may replace or repair components.

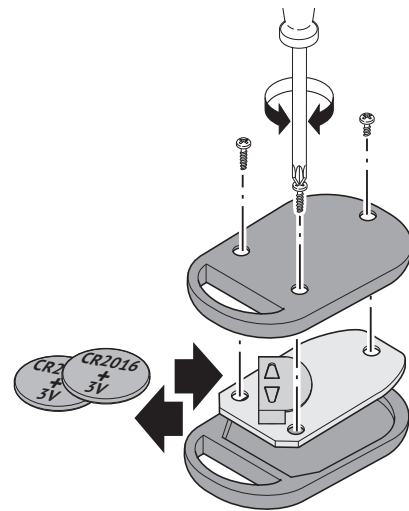
- ▶ Contact the manufacturer or a specialised company.

### 6.2 Maintenance measures

The unit does not need any maintenance. Individual components (e.g. handheld transmitter(s), motor unit) may require the following work:

#### 6.2.1 Replacing batteries

##### 6.2.1 / 1



- ▶ Undo the screws on the back of the handheld transmitter.
- ▶ Remove the circuit board.
- ▶ Replace the batteries (two 3 V CR 2016 button cells). Make sure that they are the right way round.
- ▶ Reinsert the circuit board, making sure that it fits.
- ▶ Screw the casing of the handheld transmitter back together.

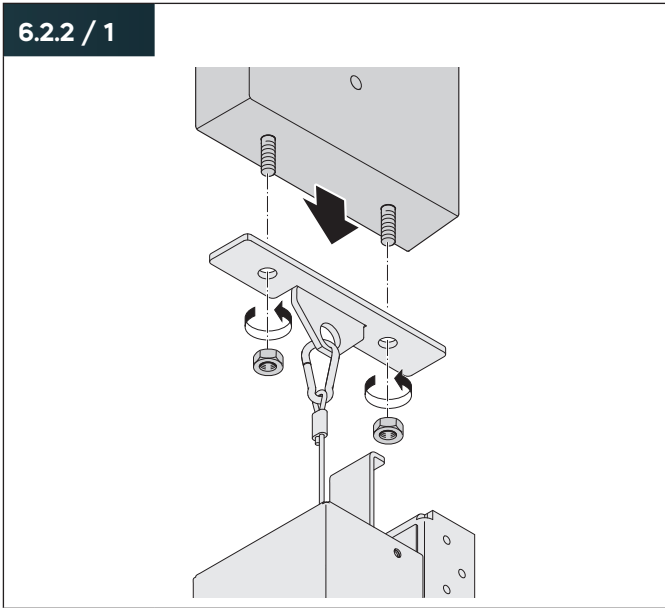
# Service work

## 6.2.2 Replacing the motor

If the drive unit is faulty, the motor and rope drum can be replaced. The drive unit can be accessed through the inspection ports on the fireplace insert.

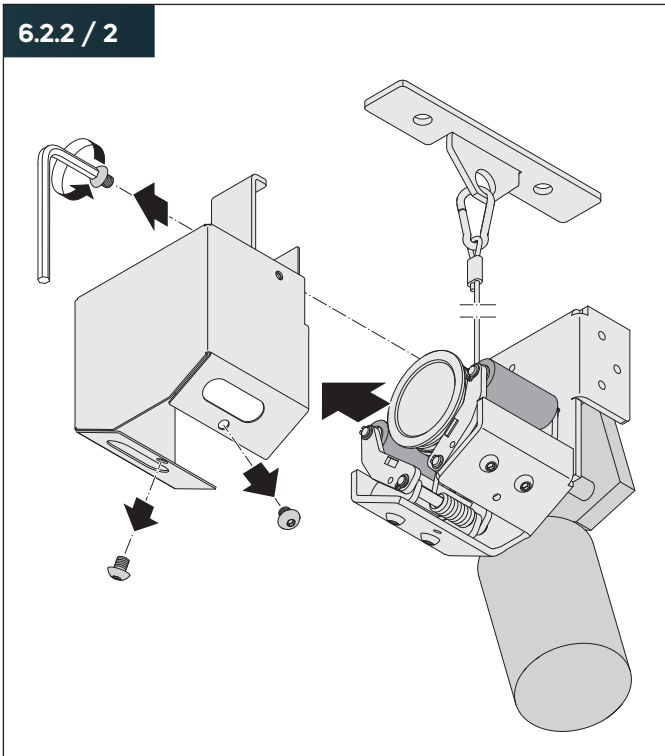
💡 We recommend changing the whole drive unit.

### 6.2.2 / 1



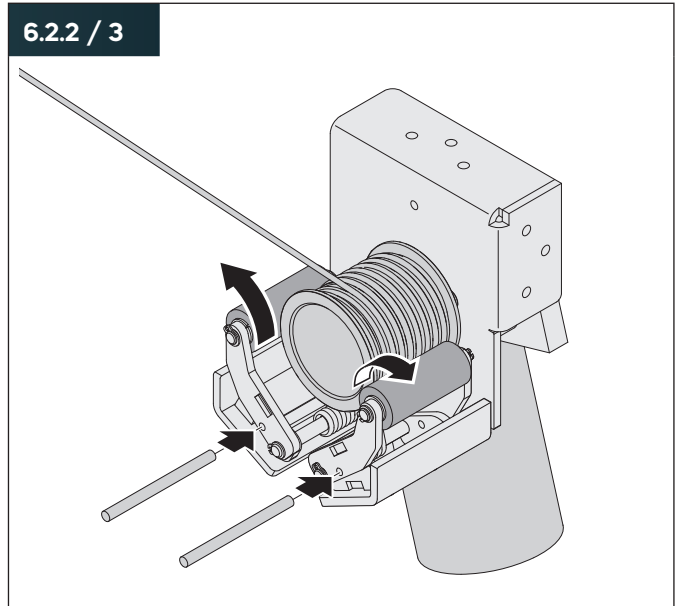
- ▶ Unscrew the rope fastener from the counterweight.

### 6.2.2 / 2



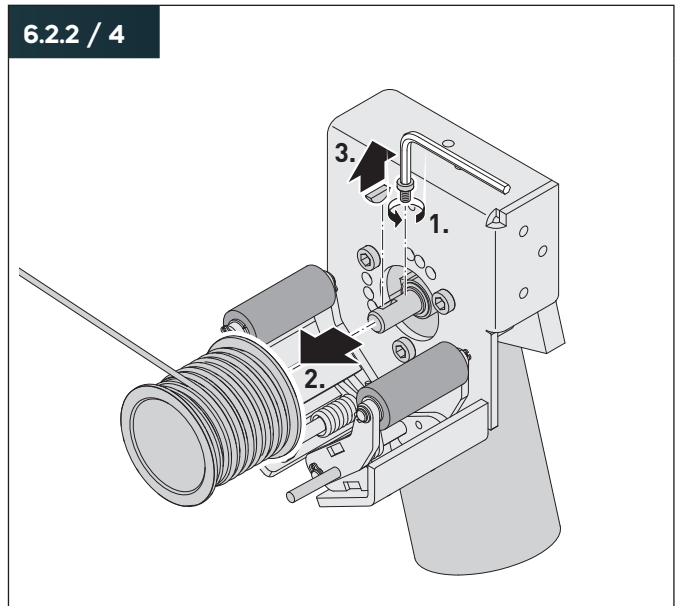
- ▶ Remove the cover plate from the rope box.

### 6.2.2 / 3



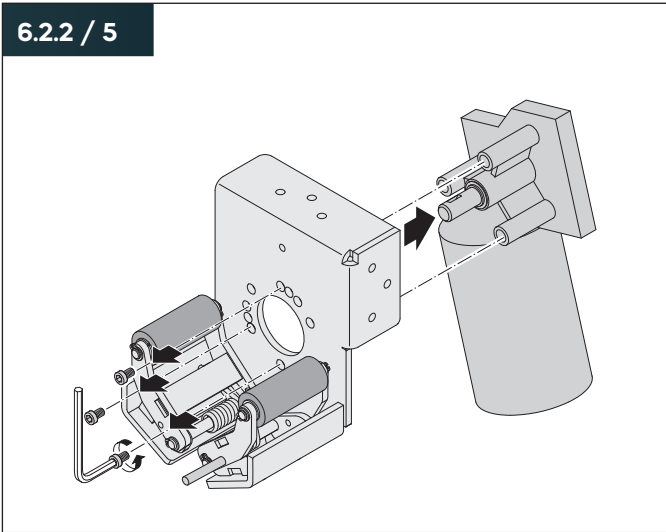
- ▶ Push the arms on the clamping rollers outwards.
- ▶ Secure the position using suitable locking pins (e.g. screwdriver, Allen key, nail).

### 6.2.2 / 4



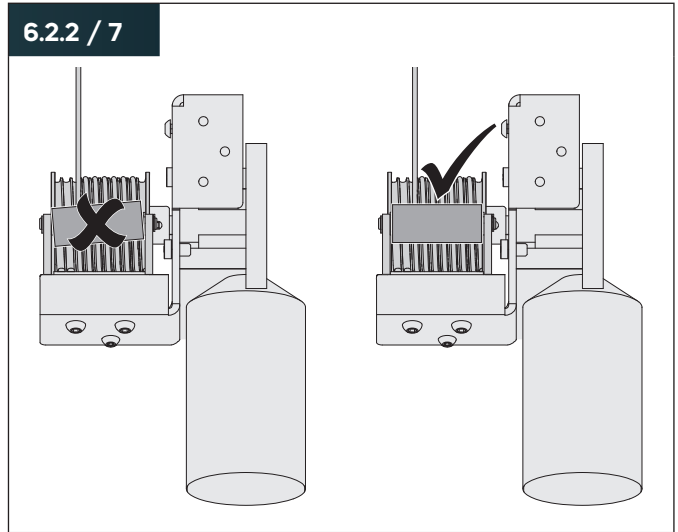
- ▶ Remove the clamping screw from the pulley.
- ▶ Remove the pulley.
- ▶ Remove the featherkeys from the motor shaft.
- ▶ Make sure that no small parts get lost.

**6.2.2 / 5**



- ▶ Loosen the three motor screws.
- ▶ Pull the motor out of the rope box.

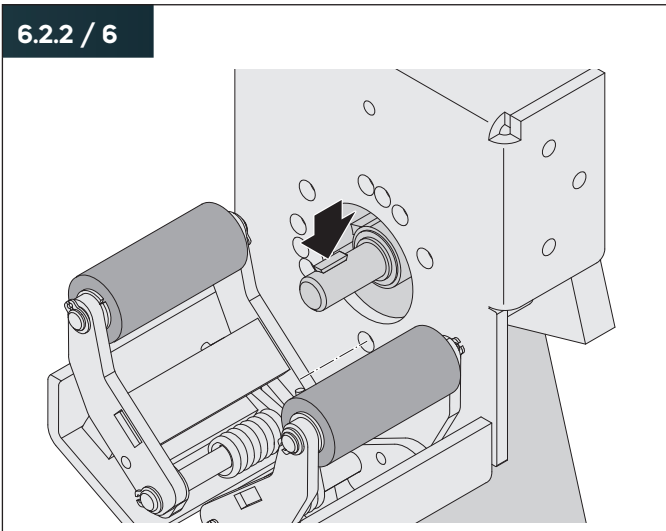
**6.2.2 / 7**



- ▶ Ensure that the rubber rollers engage precisely in the pulley.

To reinstall the motor, proceed in the reverse order. Watch out for the following when doing so:

**6.2.2 / 6**



- ▶ Ensure that the featherkeys are positioned correctly in the motor shaft.

## 6.3 Malfunction repair

Possible malfunctions are described in the following section:

### What malfunction is occurring?

- Cause of the malfunction.
  - ▶ Eliminating the malfunction.
  - ➔ Reference to the relevant chapter.

💡 We recommend using the LED display on the control system to identify a malfunction first of all.

- ➔ "6.4 LED displays and fault codes" (page 21).

---

### A movement is interrupted and the combustion chamber door gets jammed in combustion mode.

- The combustion chamber door is stuck slightly.
  - ▶ Never force the combustion chamber door downwards. This can cause the drive rope to break and the combustion chamber door to fall uncontrollably.
  - ▶ Perform an emergency lowering process: Press and hold the "Reset" button on the control system. A signal sounds after 10 seconds. The drive rope is unwound and the firebox door is lowered as long as you hold down the "Reset" button. Do not release the "Reset" button until the combustion chamber door has reached the very bottom. You can support the movement of the door slightly with your hand if need be.
  - ▶ Make sure that the combustion chamber door and door guide are free of dirt and ash.
- The combustion chamber door will not move.
  - ▶ Never force the combustion chamber door downwards. This can cause the drive rope to break and the combustion chamber door to fall uncontrollably.
  - ▶ Ensure that the door locks on all glass windows are closed. Ensure that the locking levers are fully pushed in and do not protrude.
  - ▶ Do not add any additional wood.
  - ▶ Reduce the combustion air supply.
  - ▶ Allow the fire to extinguish.
  - ▶ Ventilate the room where the stove is installed.
  - ▶ Contact the manufacturer or a specialised company.

---

### The combustion chamber door does not close or lock.

- The closing device is defective.
  - ▶ Have the closing device replaced by a specialised company.
- The door rails are warped or the door roller bearings are faulty.
  - ▶ Contact the manufacturer or a specialised company.

### Movement commands are not being carried out.

- The handheld transmitter batteries are flat.
  - ▶ Replace the batteries.
  - ➔ "6.2.1 Replacing batteries" (page 17).
- The control system is not connected up correctly.
  - ▶ Check the power supply.
  - ▶ Check all the cables and connections between the control system and the motor.
  - ➔ "3.6 Connecting the control system" (page 9).
- The control system does not recognise the handheld transmitter.
  - ▶ Connect the handheld transmitter to the control system.
  - ➔ "4.4 Managing handheld transmitters" (page 15).
- The motor is faulty.
  - ▶ Have the motor replaced by a specialised company.

---

### The combustion chamber door is hard to open.

#### The combustion chamber door does not remain open on its own.

- The cable on the counterweight has torn.
  - ▶ Have the cable replaced by a specialised company.

---

### The ring on the handheld transmitter does not light up.

- The handheld transmitter batteries are flat.
  - ▶ Replace the batteries.
  - ➔ "6.2.1 Replacing batteries" (page 17).
- The control system does not recognise the handheld transmitter.
  - ▶ Connect the handheld transmitter to the control system.
  - ➔ "4.4 Managing handheld transmitters" (page 15).

---

If a fault occurs and is picked up by the control system, the unit will be locked and unable to be operated any further. If the combustion chamber door is open at this point, it will be closed automatically.

The fault code will appear on the control system.

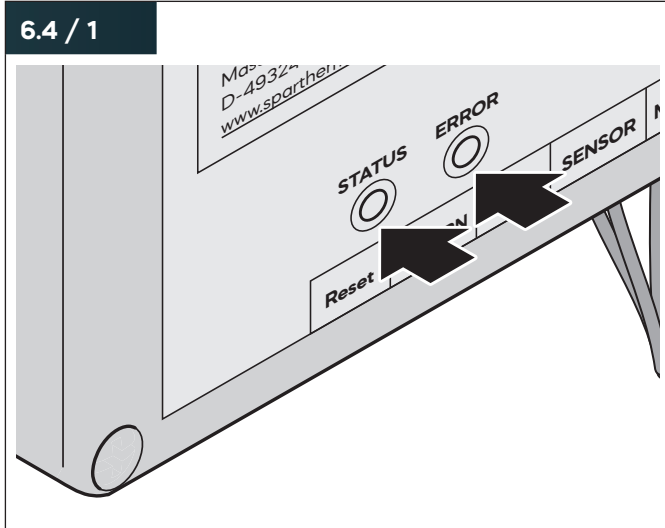
- ➔ "6.4 LED displays and fault codes" (page 21).

If a malfunction cannot be repaired:

- ▶ Contact the manufacturer or a specialised company.

## 6.4 LED displays and fault codes

The “Status” and “Error” LEDs are on the control system’s housing cover.



If the “Status” LED is shining with a steady light, the capacitors are charged. If the “Status” LED is flashing, the capacitors are being charged. The unit can be operated in either scenario.

If the “Error” LED lights up, the control system has identified a fault. The unit cannot be operated.

The fault code and the action required to fix it can be determined based on the table below and how the “Status” LED is flashing.

“Status” LED flashing	
1x	No speed signal; motor is not rotating. <ul style="list-style-type: none"> <li>▶ Check all the cables and connections between the control system and the motor.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>
2x	Combustion chamber door not closed. <ul style="list-style-type: none"> <li>▶ Remove any obstacles.</li> <li>▶ Make sure that the combustion chamber door and door guide are free of dirt and ash.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>
3x	Overcurrent when opening combustion chamber door. <ul style="list-style-type: none"> <li>▶ Remove any obstacles.</li> <li>▶ Make sure that the combustion chamber door and door guide are free of dirt and ash.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>
4x	Overcurrent when closing combustion chamber door. <ul style="list-style-type: none"> <li>▶ Remove any obstacles.</li> <li>▶ Make sure that the combustion chamber door and door guide are free of dirt and ash.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>

### “Status” LED flashing

- |    |  |
|----|--|
| 5x | The combustion chamber door has been opened by hand and a movement command has then been given via the handheld transmitter.<br><ul style="list-style-type: none"> <li>▶ Close the combustion chamber door by hand.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>                                    |
| 6x | A teach-in run has not yet been carried out.<br><ul style="list-style-type: none"> <li>▶ Check all the cables and connections between the control system and the motor.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul>  |
| 7x | The automatic closing function is not closing the combustion chamber door completely.<br><ul style="list-style-type: none"> <li>▶ Remove any obstacles.</li> <li>▶ Make sure that the combustion chamber door and door guide are free of dirt and ash.</li> <li>▶ Press the “Learn” button on the control system.</li> </ul> |

## 7. Disassembly

### 7.1 Safety information for disassembly

#### **WARNING!**

##### **Danger due to non-adherence to disassembly instructions!**

Incorrect disassembly of the unit may lead to severe injuries.

This chapter contains important information for safe disassembly of the unit.

- ▶ Carefully read this chapter prior to disassembly.
- ▶ Adhere to the safety information.
- ▶ Perform the disassembly work as described.

Only qualified personnel may disassemble the unit. Electrical work may only be performed by qualified electricians.

⇒ "1.2.3 Qualified personnel" (page 4).

To prevent danger, always adhere to the following requirements:

- The unit and other parts that you may come in contact with have cooled down for a sufficient period (e.g. several days).
- No heat or glowing embers remain in the combustion chamber.
- The surroundings of the stove system are protected, e.g. by means of covers for the floor and furniture.

Prior to disassembly, clean the unit and the stove system.

➔ "5. Cleaning" (page 16).

### 7.2 Disassembling the unit

The drive unit can be accessed through the inspection ports on the fireplace insert.

- ▶ Remove all the cables and connections between the control system and the motor.
- ▶ Remove the control system.
- ▶ Unscrew the rope fastener from the counterweight.
- ▶ Remove the drive unit.
  - ➔ "6.2.2 Replacing the motor" (page 18).

## 8. Disposal

### 8.1 Disposing of the packaging

#### **ATTENTION!**

##### **Risk of environmental damage caused by improper disposal of the packaging!**

- ▶ Do not dispose of the packaging with the normal household waste.
- ▶ Ensure that the packaging is recycled in a proper, environmentally friendly manner.

The packaging is intended to protect the unit from transport damage. The packaging materials have been selected based on their environmentally friendly characteristics and are made of recyclable materials. The packaging materials can be returned to the raw material cycle after use.

- ▶ Dispose of the packaging in an environmentally friendly manner, separated by material type.



### 8.2 Disposing of the unit

#### **ATTENTION!**

##### **Risk of environmental damage caused by improper disposal of the unit!**

- ▶ Do not dispose of the unit with the normal household waste.
- ▶ Ensure that the unit is recycled in a proper, environmentally friendly manner.

- ▶ Dispose of the unit according to the legal regulations through a specialised disposal company or your local disposal facilities.
- ▶ Remove the batteries from the handheld transmitter.
- ▶ Dispose of batteries (including rechargeable batteries) by returning them to the corresponding distributor or taking them to a local collection point.



## 9. Appendix

### 9.1 Accessories

- Button for external reset.

If required and for additional information (e.g. brochures, spare parts, price lists):

- ▶ Please contact the manufacturer or a specialist shop.

 [www.spartherm.com](http://www.spartherm.com)

### 9.2 Standards and regulations

Relevant regulations – without claim to completeness:

- **DIN EN 60335-1:** Safety of household and similar electrical appliances.
- **DIN EN 55014-1 and 55014-2:** Electromagnetic compatibility – Requirements for household appliances, electric tools and similar electrical appliances.
- **DIN EN IEC 61000-3-2, 61000-3-3 and 61000-6-3:** Electromagnetic compatibility (EMC) – Limits and emitted interference.

### 9.3 Declarations of conformity

The design and operating behaviour of this product complies with the European directives and the additional national requirements. This compliance is certified by the CE label.




An EU declaration of conformity is available on the manufacturer's website:

 [www.spartherm.com](http://www.spartherm.com)



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