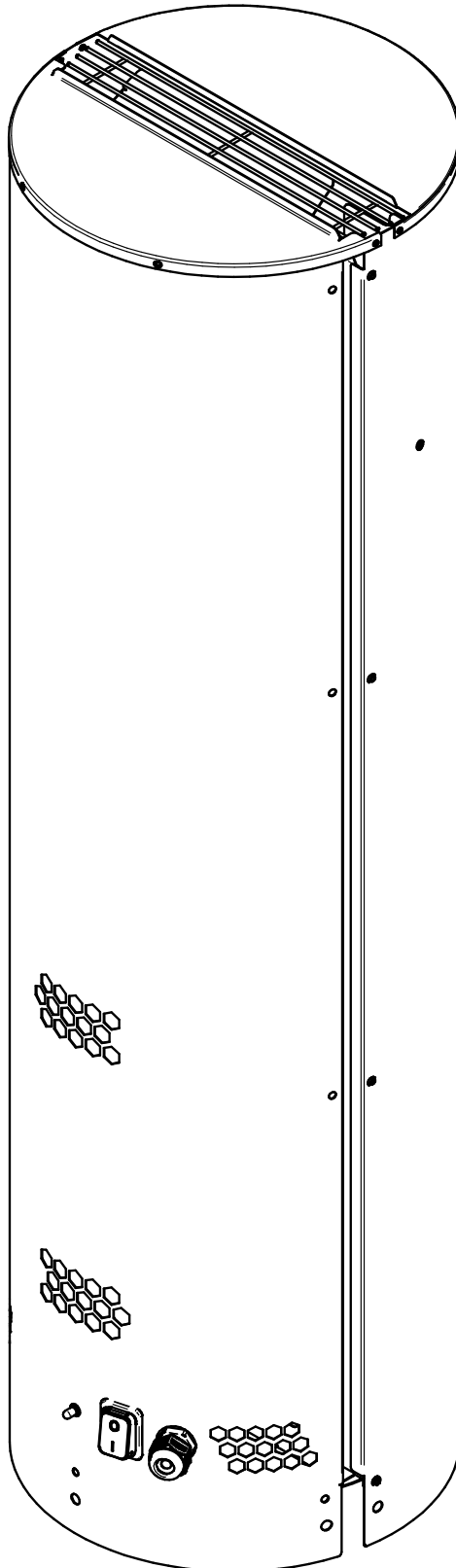


# ESP-10

- Particle Filter (Electrostatic Precipitator) for Wood-Burning Stoves



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## Safety Instructions In General

### Symbols

The following symbols show potential dangers and important information about the product:



#### Prohibited

Failure to observe instructions marked with the prohibited symbol may result in extreme danger or serious injury.



#### Danger/Warning/Hazard

Marks a dangerous situation that, in the worst-case scenario, can cause serious personal injury or significant damage of materials.



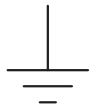
#### High Voltage

Marks a situation in which caution is advised due to risk of high voltage electric shock which can cause serious personal injury or significant damage to materials.



#### Attention

Information that is of particular importance for the function and optimum use of the device /system.



#### Attention

The ESP-10-10 must always be connected to an outlet with a PE connection (protective earth).

---

### Safety Instructions

TO REDUCE THE RISK OF FIRE, ELECTRIC SHOCK OR PERSONAL INJURY, OBSERVE THE FOLLOWING:



The ESP-10 should only be installed and used as specified by the manufacturer.



Installation work and electrical wiring must be carried out by in accordance with local law.



Power must only be turned on when the ESP-10 filter is correctly mounted, all wires to the filter are connected and the filter is closed.



For service: disable/disconnect the power supply to the electrostatic precipitator. Turn off the main switch located on the filter. Ensure that the heat source and the electrostatic precipitator cannot be turned on accidentally. Let the filter cool down before service or cleaning.



Automatic power on/off function; when the temperature in the chimney increases, high voltage automatically switches on. Touching the electrode or the electrode holder may be fatal.



This ESP-10 shall be grounded/earthed – otherwise it will not turn on.



The ESP-10 must be accessible for service and maintenance.



Undesirable stoking practice may result in problems, such as excessive soot accumulation, chimney fires, etc., which may damage the ESP-10.

# 1. Product description

## 1.1. Scope of delivery

- ESP-10 with 5-metre connection cable
- Installation manual and user instructions
- Labels for chimney sweep, indicating that power to the filter must be cut off before cleaning the chimney to be placed at fireplace and cleaning locations.

### **To be ordered separately:**

- Adapter for installation on steel or brick chimney.

This manual does not describe accessories. We refer to the separate manuals for such components.

## 1.2. Description

The exodraft ESP-10 is an electrostatic precipitator with a built-in chimney fan for mounting on top of the chimney. The filter is equipped with a self-cleaning function (patented) and designed to reduce the emissions from wood-burning appliances as well as facilitate easier lighting and refueling.

The filter is designed for closed wood-burning fireplaces (stoves) with a nominal heat output of maximum 10 kW.

The ESP-10 comes with an integrated isolation switch and a 5-metre cable with open wires for plug installation.

A mounting adapter for mounting the exodraft ESP-10 on the chimney must be ordered separately to fit the existing chimney system.

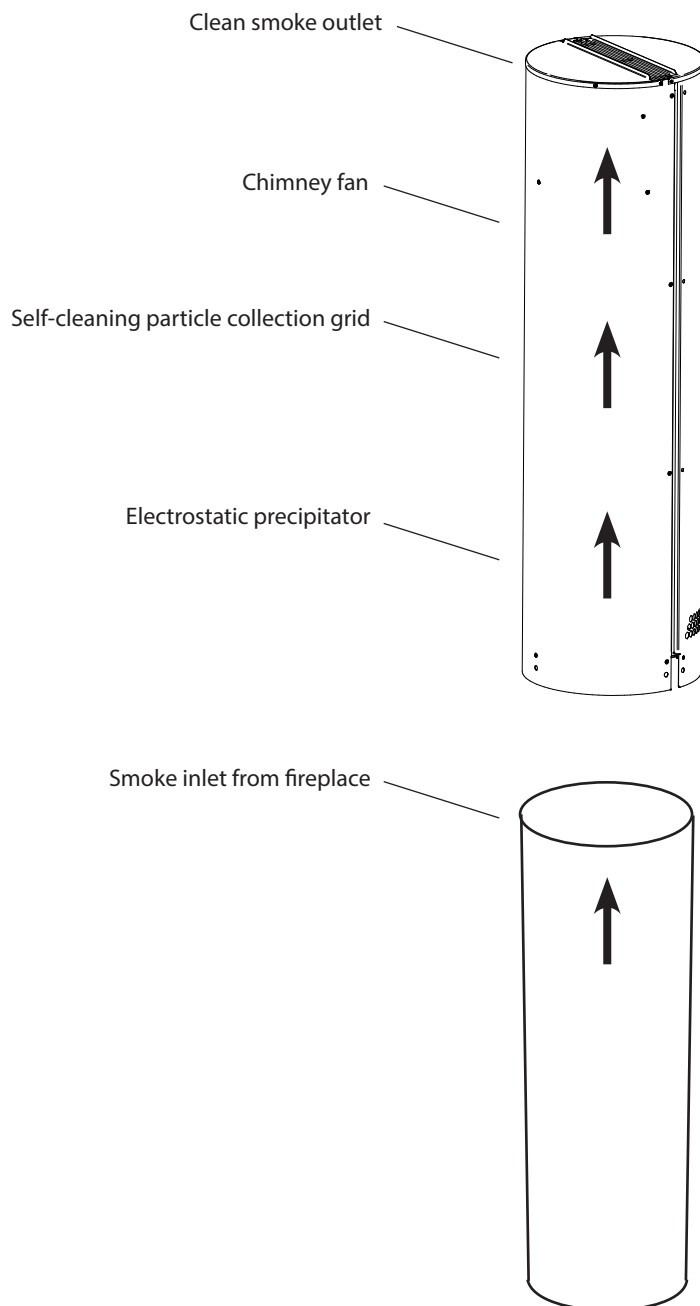
### 1.3. Functionality of the electrostatic precipitator (ESP)

The exodraft filter is an electrostatic precipitator. The filter reduces the number of fine and ultrafine particles in a flue gas flow by creating an electrostatic field between the charging electrode and the collection electrode.

The electrostatic field in the ESP-10 is generated by a charging electrode connected to a high voltage generator which ionizes the gas in its surroundings and as a result charges the particles and delivers an electrostatic field strong enough to push the charged particles towards a collection electrode.

While the electrostatic field is on, the precipitated particles will remain attached to the collection electrode. When the temperature and oxygen inside the filter is on a certain level, most of the attached particles will self-ignite and burn off in a complete combustion as a part of the normal operation.

The filter's self-cleaning functionality will remove the remaining particles inside the filter.



## 1.4. Automatic on/off

The exodraft ESP-10 filter has a built-in temperature sensor that makes it possible to control the start and stop function automatically.

After the fireplace is lit, the ESP-10 filter will activate as soon as the temperature sensor records an increase in temperature. Depending on the chimney application, the start delay will be 10-30 seconds.

When no fuel is added to the wood stove, the chimney temperature will start to decrease. Once the temperature drops below 40 °C, the ESP-10 filter continues to operate for 30 minutes, after which sleep mode is engaged.

**ATTENTION:** When the fireplace and chimney are cold, it may, depending on relevant factors (stove model, chimney size, fuel type etc.), be necessary to turn the exodraft ESP-10 filter off and then back on at the power supply (wall plug/ remote control) to get the full benefit of the ventilators mechanical draft.

## 1.5. Self-cleaning function

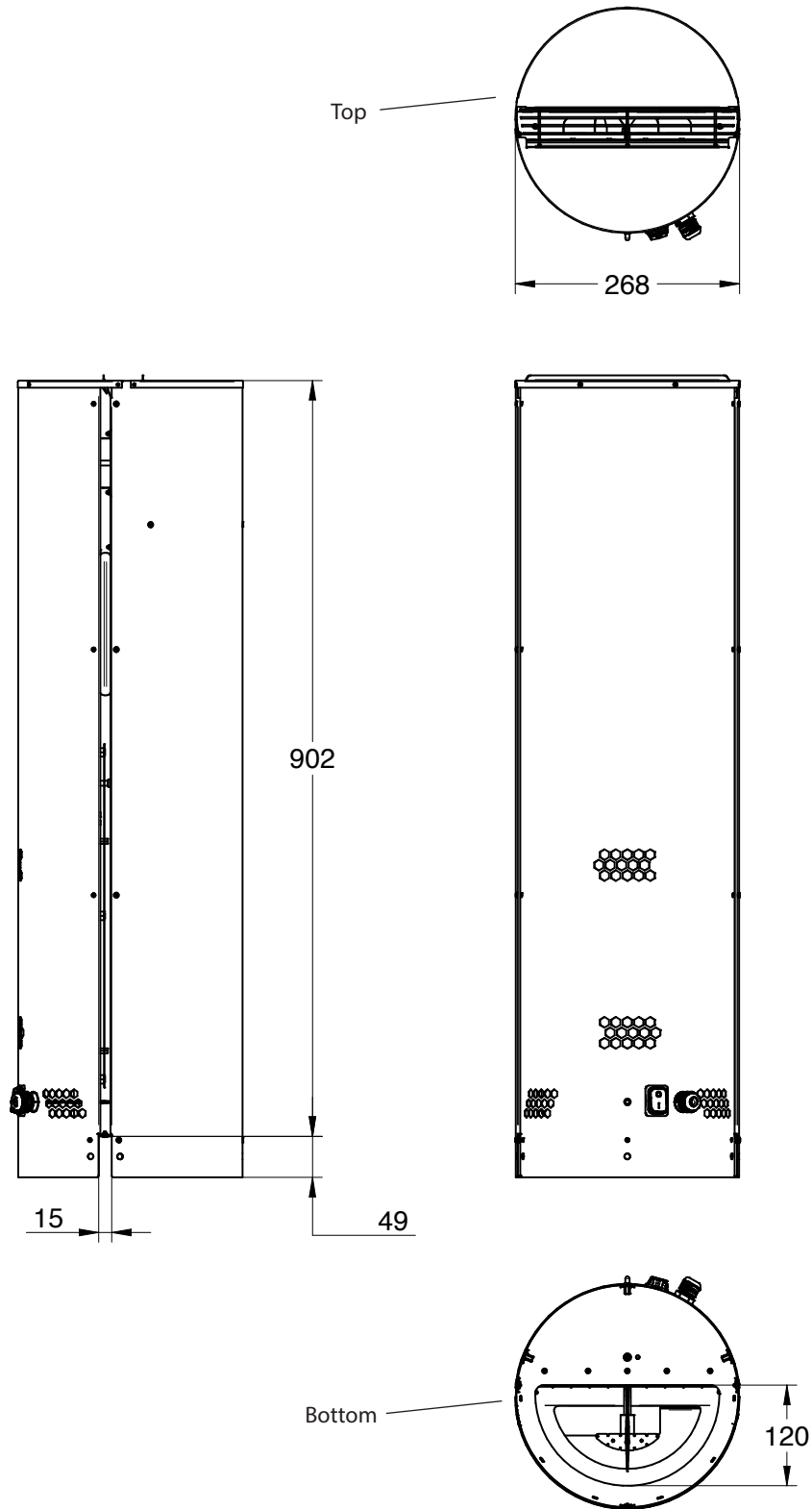
The exodraft ESP-10 filter is equipped with an automatic cleaning function that periodically cleans the filter during operation. The user may be able to hear the filter cleaning in some situations as the self-cleaning procedure is a mechanical movement inside the filter.

If the filter is restarted and the fireplace is cold, the automatic cleaning process will run for 3-5 seconds.

When the fireplace is in use the cleaning procedure is initiated after 5 hours, only starting when the fireplace is being refueled.

## 2. Technical Data

### 2.1. ESP-10 Filter measurements without adapter



All measurements in mm

## 2.2. Technical data for ESP-10

The filter first reaches its full efficiency after 10-20 fires or burning of approx. 15-20 kg of firewood.

<b>Model exodraft ESP-10-10</b>	
Used for	Closed wood-fired appliances
Fireplace performance range	2 – 10 kW
Chimney size - round	ø150 – ø200 mm
Chimney size - square (maximum)	250 x 250 mm
Min. ambient temperature	-20 °C
Max. ambient temperature	45 °C
Min. distance to fireplace	3 m
IP	24D
<b>Measurements</b>	
Height	H: 956 mm
Outer diameter	Ø: 268 mm
Flue inner width B1	B1: 150 mm
Flue inner width B2	B2: 85 mm
Weight (without adapter)	14 kg
Supply voltage	230V AC / 50Hz
Max. current	0.5 Amp
Power consumption in use	50-90 W
Power consumption standby	2 W
High Voltage	30 kV /1.7mA
Testing done at	DIBt: Z-7.4-3536
Housing material	RF 1.4401-316
Minimum distance to flammable material	500 mm
Mounting	To be mounted outside, as last item of the chimney



### 3. Warranty

**exodraft** ESP-10 has 2-years warranty from the date of purchase or in accordance with local law. Replacement or repair of the exodraft ESP-10 is handled by a dealer chosen by the manufacturer – if a factory inspection detects a defect in materials or manufacturing.



**exodraft** products must be installed by competent personnel.

**exodraft** reserves the right to change to these guidelines without prior notice. The warranty and liability do not cover instances regarding damage to persons or property that can be ascribed to one or more of the following causes:

- Failure to follow this installation and operation manual
- Incorrect installation, start-up, maintenance or servicing
- Improper repairs
- Unauthorised structural modifications made to the device
- Installation of additional components that were not tested with the device
- Any damage resulting from continued use of the device despite an evident defect
- Failure to use original spareparts and accessories
- Failure to use the device as intended
- Exceedance of or failure to meet the limit values in the technical data
- Force majeure

## 4. User operation instructions

### 4.1. User operation



Always load the stove with dry and clean wood only and in accordance with the stove manual.  
NEVER USE THE STOVE WITH THE FILTER TURNED OFF OR THE POWER CABLE NOT PLUGGED IN.  
This will result in permanent damage to the filter.

For operation, the filter must be connected to a 230V power outlet with a PE connection and turned on by activating the outlet switch as well as the main switch on the filter itself.

When the filter is turned on, it will start the automatic cleaning process which lasts for 5 seconds.

**Attention:** The automatic cleaning procedure may be heard as a mechanical noise in some situations. When the automatic cleaning process has finished, it takes approximately 5 seconds for the filter and chimney fan to be back up and running.

If the chimney temperature near the filter does not exceed 40 °C for a period of 1 hour, the filter will engage sleep/standby mode to reduce power consumption. The filter will remain in sleep mode until the fireplace is lit and the temperature exceeds 40 °C, the temperature rises 5 °C within 10min or the power supply is turned off and then back on.

#### NOTE

Please note that even if the electrostatic precipitator malfunctions, the chimney fan will still run.  
In case of a power failure (no power to the filter), air and smoke still have free passage through the filter, meaning the stove is safe to use.



#### CAUTION

Do not overheat the stove. Small deposits of soot can kindle and start a chimney fire, which may cause dangerously high temperatures in the chimney. If you have experienced a chimney fire, you must ensure that the mechanical and electrical functions of the ESP-10 are inspected. If defects or irregularities are found, these must be repaired before further use of the ESP-10 or the stove.

### 4.2. Indications on the ESP-10 filter

The LED located next to the main switch on the filter will indicate current filter status.

The following diagram illustrates the various status categories, as indicated by the LED:

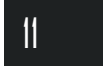
LED		
OFF	●	OFF
Green ON	●	In operation
Flashing Green once per second	● ● ● ●	Sleep mode/Standby mode
Flashing Green 5 times per second	● ● ● ● ●	Automatic cleaning in progress
Red ON	●	General failure
Flashing Green 5 times per second Solid red for 5 seconds Green for in operation	● ● ● ● ●   15 seconds   5 s   →	Automatic cleaning fail
Flashing Red once per second	● ● ● ●	No PE connection
Flashing Red/Green once per second	● ● ● ●	Current limiter/sparkover safety system activated
Flashing Red/Green 5 times per second	● ● ● ● ●	Current limiter/short circuit safety system
Solid green for 5 seconds, short black, red for 1 second, short black	● ● ● ● ●	ESP-10 control ESP-10 is overheated

### 4.3. User maintenance of the ESP-10 filter

- The user should always pay attention to the status of the filter and react promptly if something out of the ordinary should occur.
- The user must react to abnormal noise or other abnormal operation.
  - The user must inspect the filter if any abnormal function occurs.
  - The user must contact certified assistance if the abnormal function cannot be resolved.
- The user is responsible for hiring a competent person to clean the chimney and carry out periodical inspections of the filter.



- The filter must undergo a service inspection at least once a year, performed by competent personnel.
- **Important:** The chimney sweep must be informed that the chimney is equipped with an ESP-10 filter. The user is responsible for informing the chimney sweep about the filter and provide him with the relevant documentation for inspecting the filter in accordance with official guidelines.



## 5. Components

### 5.1. Standard delivery

The exodraft filter comes with a 5-metre power cable with open wires.

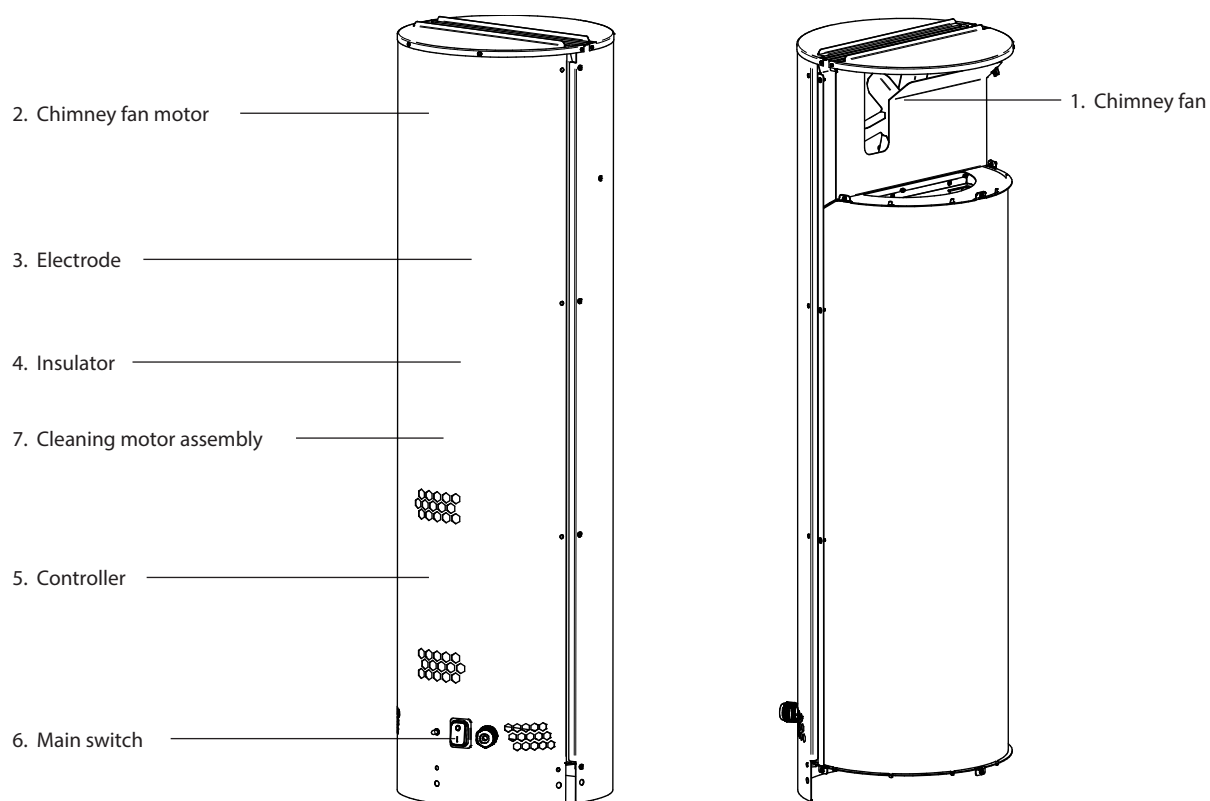
Additional equipment and accessories (to be ordered separately):

- Mounting adapter for either steel or brick chimney

### 5.2. Spareparts

1. Fan
2. Fan motor
3. Electrode
4. Insulator
5. Controller
6. Main switch
7. Cleaning motor assembly

## 6. Mechanical installation on a chimney



## 6.1. General

- These instructions, applicable standards and relevant safety procedures of the manufacturer must be followed as well as the official provisions in force in the particular country.
- The exodraft ESP-10 is only suitable for installation on wood-fired stoves in the range 2 kW – 10 kW. As the ESP-10 is part of a wood-fired installation, please ensure that the design meets the requirements in your country/ area.

### WARNING

Ensure that the chimney can provide firm support for the exodraft ESP-10. The chimney must be without leaks and stable enough to carry the weight of the filter. The statics of the chimney system should be analyzed prior to installation.



### WARNING

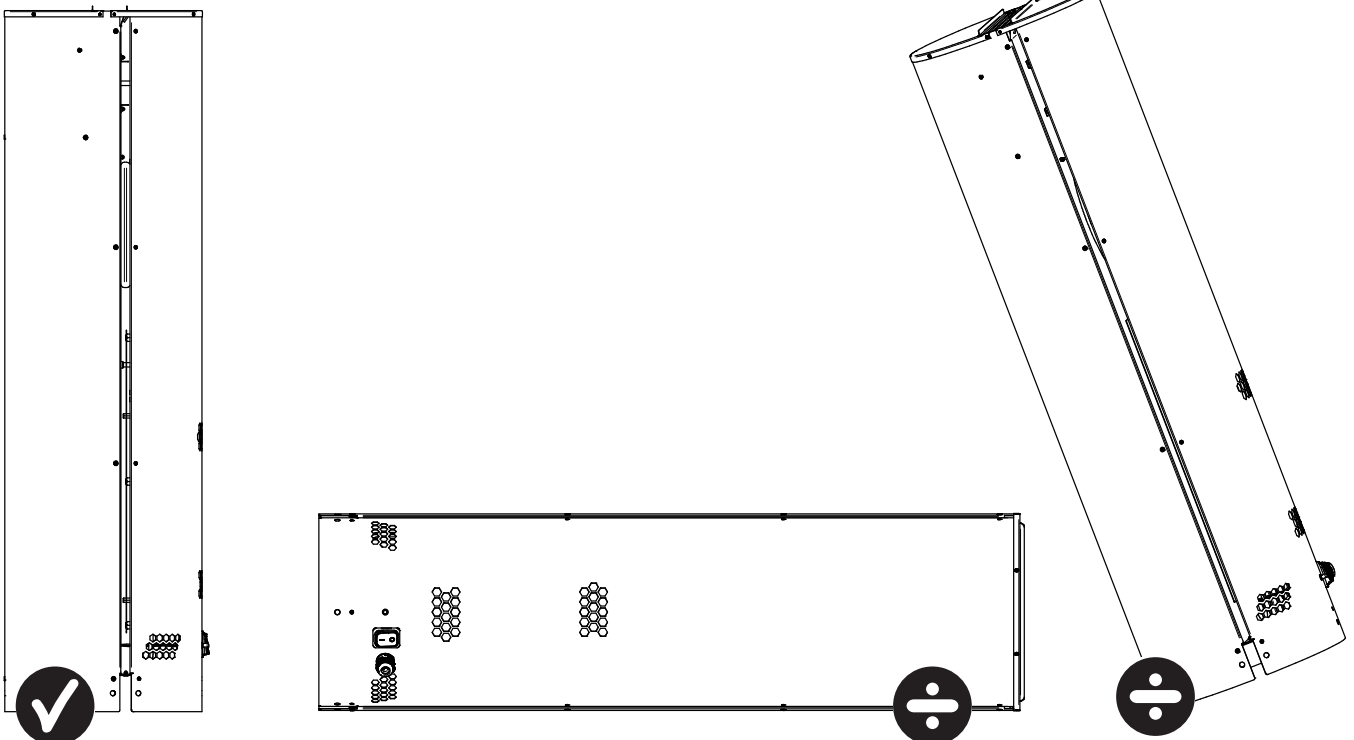
To avoid chimney fires – it is recommended that the chimney is swept and any deposits and blockages are removed before mounting the exodraft ESP-10!



It is always recommended to install a smoke alarm in connection with a wood fired installation.

## 6.2. Placement

- The ESP-10 must be installed on the chimney discharge point.
- The ESP-10 can be mounted on both steel and brick chimneys. See max. measurements in technical data.
- The ESP-10 filter must be mounted on the chimney with an approved adapter.
- The ESP-10 filter must be accessible for service and maintenance from the roof or from a ladder.
- Distance to flammable material must be at least 500 mm.
- The main switch must be easily accessible.
- The ESP-10 should only be mounted in an upright position. **DO NOT INSTALL HORIZONTALLY!**



## 7. Installation and installation components

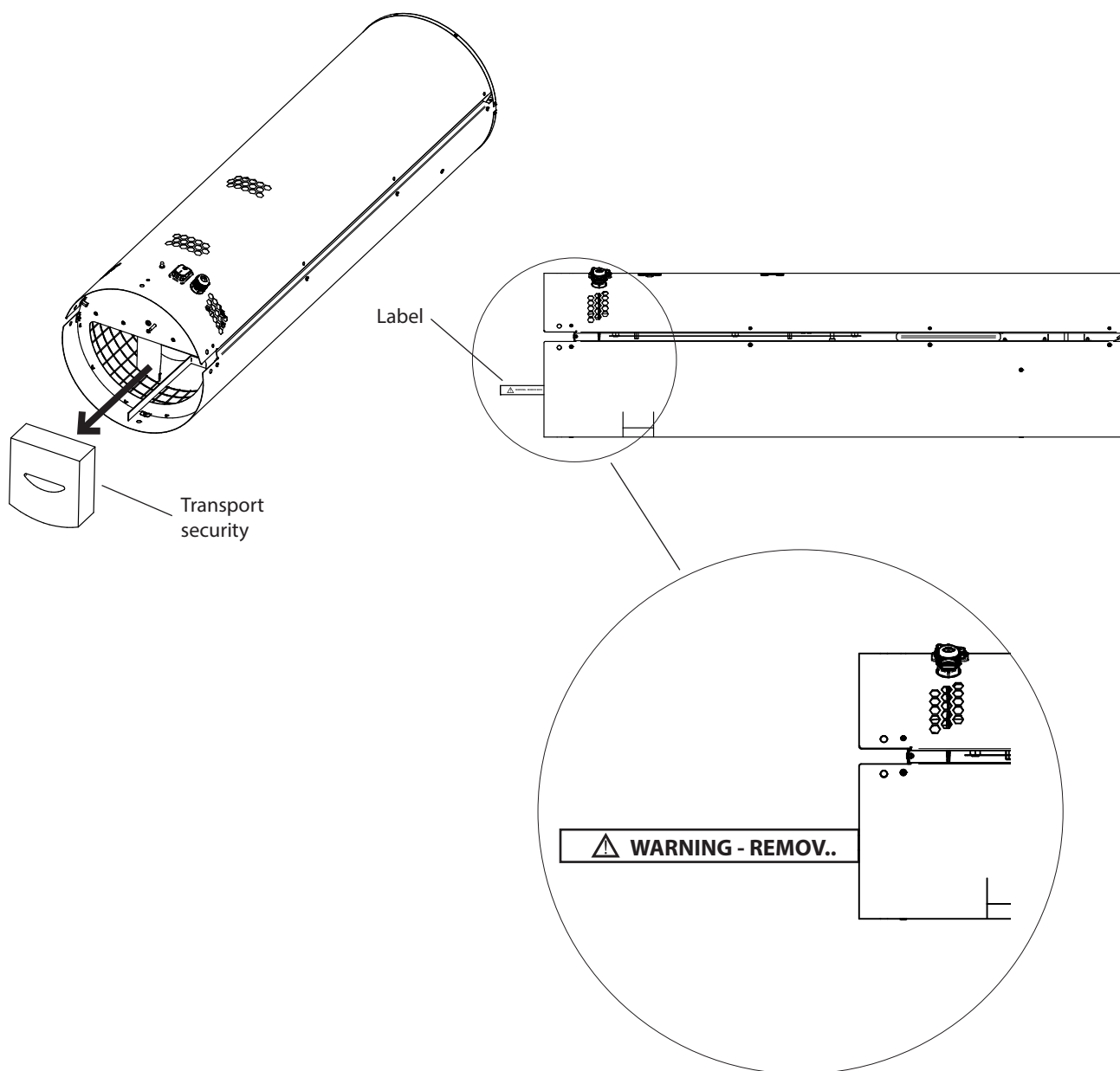
An adapter must be used for installation, fitted so that the spigot end sits inside the chimney. The adapter is fastened to the exodraft ESP-10 with screws.

Different adapters will be available for steel and brick chimneys. The adapter must be ordered separately.

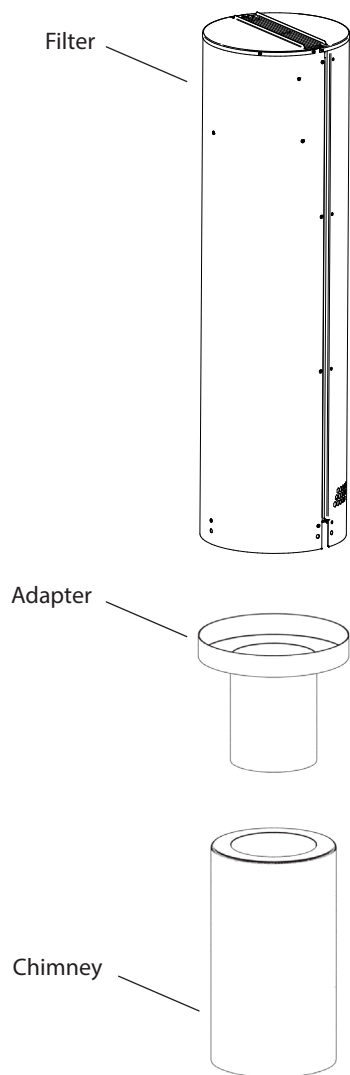
**NOTE:** A Brush stop are installed inside all adapters to avoid damage to the filter when the chimney is cleaned from bottom up.



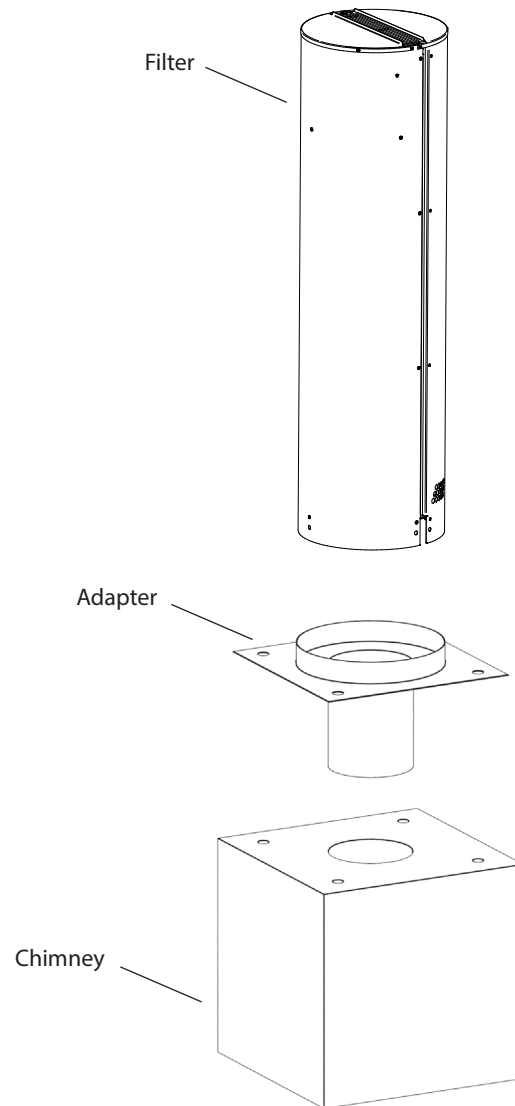
Always remember to remove the transport security!



## 7.1. Installation on steel and brick chimney



**Fig. 1.** Adapter without cleaning hatch  
- steel chimney



**Fig. 2.** Adapter without cleaning hatch  
- brick chimney

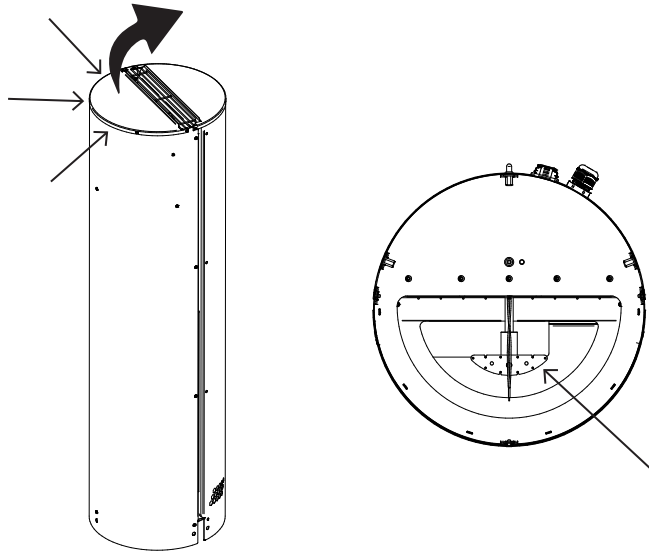
## 7.2. Aligning the electrode



### Attention: Power supply must be off.

The ESP-10 comes with the charging electrode already installed. When installing the ESP-10, the charging electrode should hang straight down inside the ESP-10.

The position of the electrode can be determined by opening the lid of the ESP-10 at the top and looking down the ESP-10. Should the electrode not be aligned properly, please see *Chapter 9 - Maintenance and cleaning* for instruction on how to realign or replace the electrode.



Remove the screw and open the lid. Look down into the filter and observe whether or not the electrode is hanging straight down inside the filter.

## 7.3. Temperature sensor position

Before mounting the ESP-10 filter on the chimney, please make sure that the temperature sensor is in position. The temperature sensor is located at the bottom of the ESP-10 filter and should be sticking out from bottom plate, approximately 3 cm. (fig. 5).

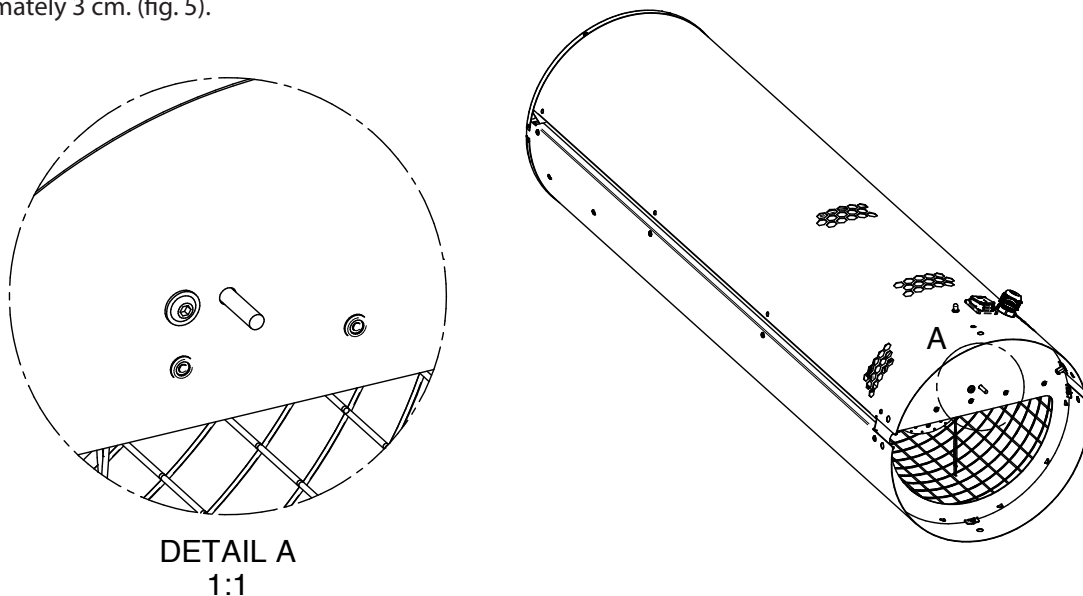


Fig. 5. Temperature sensor position



## 7.4. Attach the warning labels



The chimney sweep must be made aware that the chimney is equipped with an ESP-10 Filter. A high voltage warning label must be attached to all inspection/cleaning hatches in the chimney system.

## 7.5. Connect ESP-10 to power



Connect the ESP-10 power cable to the power outlet. See the chapter **Electrical installation**.

## 8. Electrical Installation



Disconnect the power supply before working on the device and make sure that it cannot be reconnected accidentally. Check that the power switch is set to off.



The electrical installation should only be carried out by competent personnel in compliance with applicable laws.

### 8.1. General information



The electrical installation must be carried out in compliance with applicable laws.

This ESP-10 **must have PE connection**. Power supply needed: 230 V AC / 1.0 A

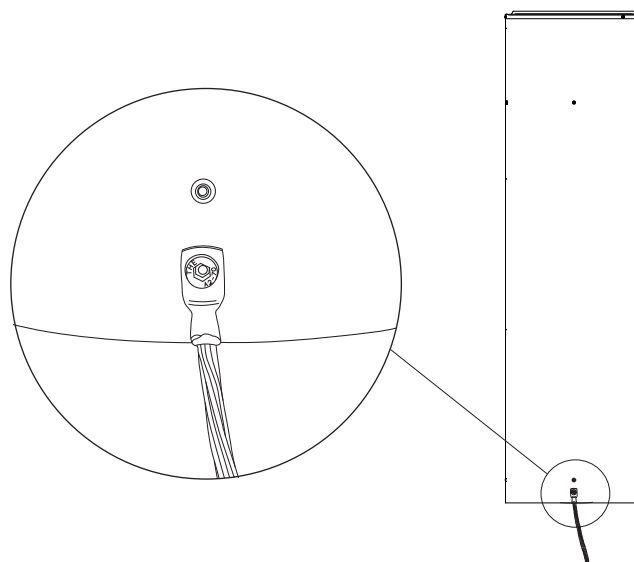
### 8.2. Power connection

The ESP-10-10 is delivered with open wires. A plug with ground connection needs to be installed on the ESP-10. The plug must match the local requirements for electrical installations.

### 8.3. Lightning/arrester protection connection

For lightning protection system. Connection as shown on picture.

Use one of the 6 hexacon screws where the adapter is mounted for direct ground connection.



## **9. Start-up and configuration**

### **9.1. General**

To enable the user to turn off the ESP-10 filter, it should be connected to either a remote controlled power supply or a power supply close to the wood stove. Plug in the power supply to the ESP-10 filter and turn the main switch on the filter to position "on". The filter will start up and is now ready for the wood stove to be lit.

There is no further configuration. The filter will run automatically.

### **9.2. System test**

When the filter is activated for the first time, the chimney must be cold. Check that the cleaning function starts and runs for 5-10 seconds. Make sure that the chimney fan starts afterwards. Ensure that the LED on the ESP-10 filter is green.

When these points have been verified, the filter is ready for operation.

## 10. Maintenance and cleaning

### 10.1. Safety precautions

The exodraft ESP-10, including the chimney fan, must be inspected at least once a year in connection with inspection of the chimney. Soot and other deposits must be removed from the fan rotor blades and from high voltage insulator.

When working on the roof you must follow the appropriate guidelines and provisions.



#### WARNING

Before working on the ESP-10 and during maintenance the ESP-10 must be switched off and removal of plug from socket-outlet is mandatory before maintenance. ESP-10 must be supplied from a mains socket-outlet close to ESP-10. Further, let the exodraft ESP-10 cool down before servicing or cleaning. Make sure that the heat source and the electrostatic precipitator cannot be enabled accidentally.



#### WARNING

Do not open any part of the ESP-10 unless the power supply is switched off at the power switch. The surface can be hot.



#### WARNING

When the temperature in the exhaust system increases, the high voltage automatically switches on. Touching the electrode or any part inside the ESP-10 during operation may be fatal.

The automatic cleaning cycle varies with the intensity in usage. Frequent use results in frequent cleaning.

The owner or chimney sweep should perform an inspection of the ESP-10 following the first month of operation to identify if any disproportionate contamination has built up.



#### NOTE

The ESP-10 must be serviced by a competent personal.



#### ATTENTION

When cleaning, ensure that there is free passage for rain water through all drainage points. The manufacturer cannot be held responsible for water ingress of any kind.



#### ATTENTION

Do not open the electrical control box. If opened, the warranty is void.

## 10.2. Annual cleaning and service of the ESP-10 filter



### DANGER

Make sure the exodraft ESP-10 is unplugged during cleaning and service



The filter is equipped with a cleaning function that automatically cleans the filter when powered up, periodically cleans it during operation and during standby. This should be enough to keep the filter compartment clean provided only dry and clean wood is being used in the stove.

The filter must be inspected at least once a year by a competent person. The chimney sweep must inspect both the filter compartment, the technical compartment and the fan compartment. To inspect the technical compartment, loosen the screws and remove the cover.

During inspection the following must be observed:

General condition of the filter on the outside:

- Is the filter fixed to the chimney?
- Is the main switch in good and working condition?
- Are all covers and lids fastened correctly?

### Opening/Removing the cover on the technical compartment of the filter for inspection

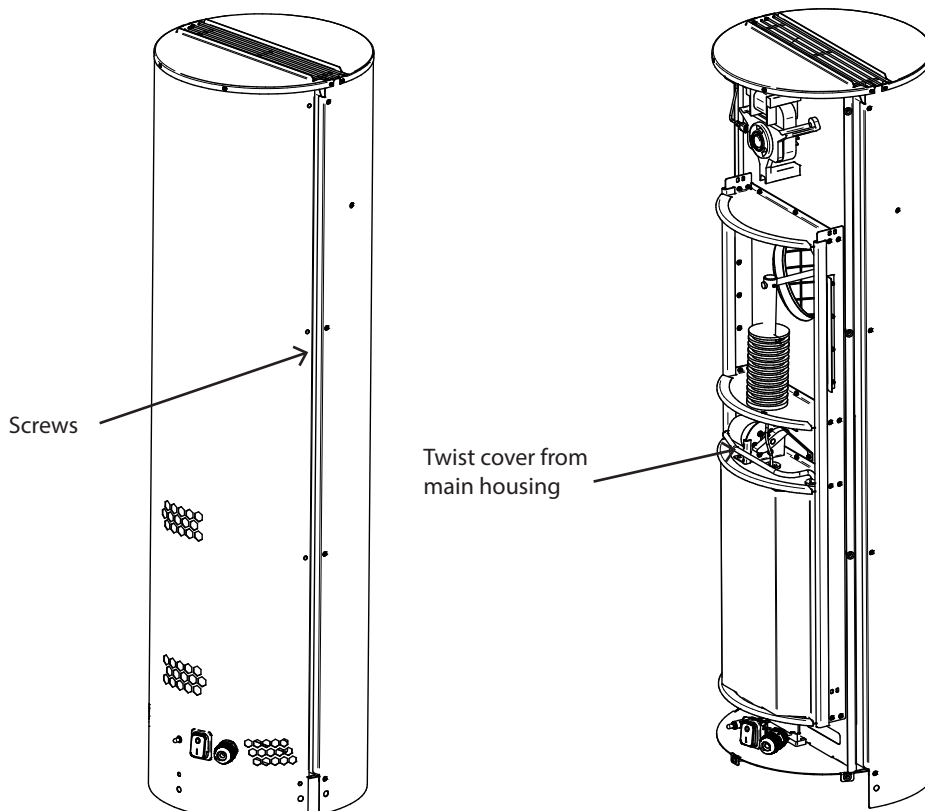
Remove all screws from the left side and center. Open the lid and pop open the cover.

- 2 pcs. allen screws (Tool - 3 TBS-4mm)
- 6 pcs. (tool - 3TXS-T15)

If needed use a screwdriver to twist the cover free from the left side of the baseplate.

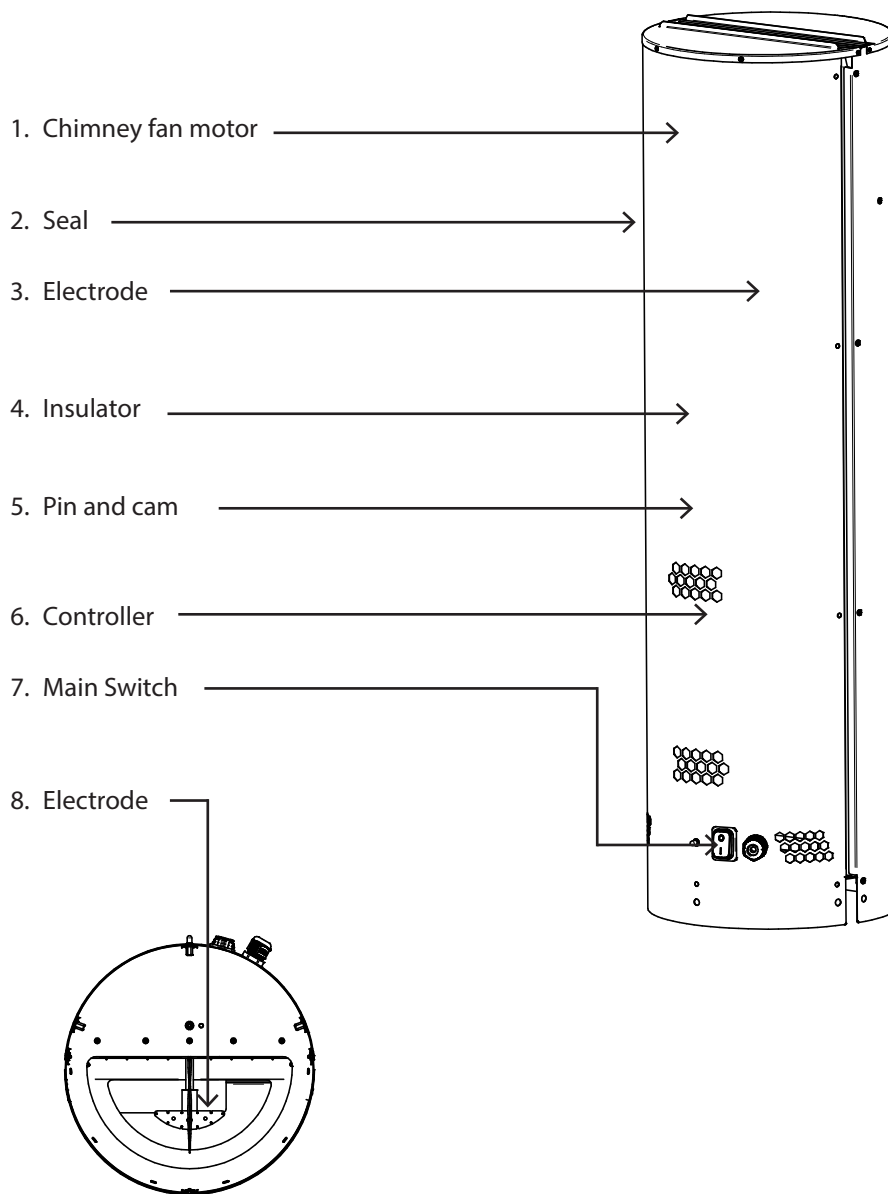
**The cover can be opened max 25 cm.**

If removal of the cover is needed, also remove the screws on the right side of the ESP-10. Now the cover can be taken off. To fasten the cover again, first, insert all the screws on the right side and then use a flat screwdriver or a small Allen key to pull the cover down over the mounting panel.



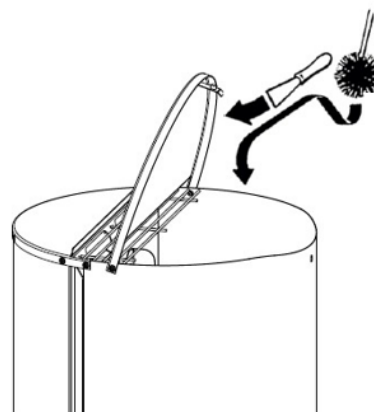
**General condition of the inside of the ESP-10 filter:**

- Is the collecting grid moving freely up and down? Check by moving the pin pos. 5 by hand.
- Is the chimney fan impeller moving freely? Turn the impeller by hand.
- Check the type of soot in the filter pipe/grid and chimney fan. If creosote soot, the stove is not used correctly.
- General cleanliness of the filter, including technical compartment.
- Is the electrode hanging straight inside the ESP-10? Open the lid and check visually. pos. 8
- Condition of the wires on the electrode? Check that the wires are not broken.
- Condition of the insulator? Check that there is no visual damage and clean the insulator of any soot buildup



### Cleaning/service

- The chimney fan motor housing and fan must be cleaned. Remove soot from the impeller and from the bottom of the motor housing. If necessary, change the motor with impeller.
- Cleaning the insulator pos. 4. The insulator is cleaned with a piece of cloth using brake cleaner or similar. *Cleaning needs to be done all the way around the insulator.*



Before cleaning



After cleaning



- Check that the inside seal pos. 2 in the technical side is undamaged.
- Check that pin and cam pos. 5 for the automatic cleaning system is tightened firmly.



#### NOTE

Apart from replacing the impeller, the cord or the electrode in case of damage, no other repairs to the ESP-10 are allowed on site. In case of defects, please contact the manufacturer.



#### DANGER

In case the original cord needs to be changed, only use a cord of the same type.

## 11. Troubleshooting

The filter first reaches its full efficiency after 10-20 fires or burning of approx. 15-20 kg of firewood.

### 11.1. Troubleshooting when warning lights are on


See also chapter 4.2 for diagram showing LED light status

Observation	Problem	Solution
LED constant red	<ul style="list-style-type: none"> <li>General failure</li> </ul>	<ul style="list-style-type: none"> <li>Call for service</li> </ul>
When powered on: Green flashing 15 sec, constant red 5 sec, constant green	<ul style="list-style-type: none"> <li>Automatic cleaning failure</li> </ul>	<ul style="list-style-type: none"> <li>Turn off power supply, wait for the ESP-10 to cool down and check if the pin is still connected to the cam.</li> </ul>
Flashing red LED	<ul style="list-style-type: none"> <li>Poor or no PE connection</li> </ul>	<ul style="list-style-type: none"> <li>Connect the power supply to a grounded power outlet</li> </ul>
Red/green light flashing once a second for 10 minutes	<ul style="list-style-type: none"> <li>Current limiter/sparkover safety system activated</li> </ul>	<ul style="list-style-type: none"> <li>Check the alignment of the electrode</li> </ul>
Red/green light flashing 5 times per second	<ul style="list-style-type: none"> <li>Current limiter/short circuit safety system activated</li> </ul>	<ul style="list-style-type: none"> <li>Check the alignment of the electrode and inspect the electrode for defects</li> </ul>

### 11.2. Other problems and solutions

Observation	Problem	Solution
No power supply to the filter	<ul style="list-style-type: none"> <li>The power is off</li> </ul>	<ul style="list-style-type: none"> <li>Check the power supply</li> <li>Check the main switch on filter</li> </ul>
The power supply to the filter is on but it is not working	<ul style="list-style-type: none"> <li>Poor or no PE connection</li> </ul>	<ul style="list-style-type: none"> <li>Have certified personnel establish grounded connection</li> </ul>
The power supply to the ESP-10 is connected but the fan hums and does not spin	<ul style="list-style-type: none"> <li>Soot may block the impeller</li> </ul>	<ul style="list-style-type: none"> <li>Clean the ESP-10, including the fan</li> </ul>
The filter does not automatically turn on even though the fire is lit	<ul style="list-style-type: none"> <li>The flue gas temperature has not yet reached 40 degrees Celsius</li> <li>The filter is switched off or has no power supply</li> <li>Temperature sensor is not working</li> </ul>	<ul style="list-style-type: none"> <li>Wait until flue gas temperature has reached a high enough temperature</li> <li>Check the power supply and the on/off switch</li> <li>Check the position and connection of the temperature sensor</li> </ul>
The ESP-10 vibrates during cleaning	<ul style="list-style-type: none"> <li>This is OK. Simply a part of the cleaning function.</li> </ul>	<ul style="list-style-type: none"> <li>Check if the LED for "cleaning function" is flashing.</li> </ul>
The ESP-10 vibrates during normal operation	<ul style="list-style-type: none"> <li>The motor shaft on the fan may be bent</li> </ul>	<ul style="list-style-type: none"> <li>Have certified personnel change the motor</li> </ul>
Noises are coming from the ESP-10	<ul style="list-style-type: none"> <li>There might be "spark overs"</li> <li>Foreign objects may be stuck inside</li> <li>The motor bearings may be worn out</li> </ul>	<ul style="list-style-type: none"> <li>This is normal for short periods. If ongoing check electrode alignment</li> <li>Remove foreign objects</li> <li>Have certified personnel change the motor</li> </ul>
The self-cleaning function is not working		<ul style="list-style-type: none"> <li>Cut the power for 10 seconds</li> <li>Remove the cover on technical side. Check that the cam is tightened firmly to the motor axel.</li> <li>Check that the pin is in place</li> <li>Check that the wires from the motor are connected to the controller</li> </ul>

## 12. Declaration of Conformity

DK: EU-Overensstemmelseserklæring GB: Declaration of Conformity DE: EU-Konformitätserklärung FR: Déclaration de conformité de l'Union Européenne NO: EU-Samsvarserklæring PL: EU Deklaracja zgodności	NL: EU-Conformiteits verklaring SE: EU-Överensstämmedeklaration FI: EU-Vaatumusten mukaisuusvakuutus IS: ESS-Samræmisstaðfesting IT: Dichiarazione di Conformità Unione Europea
<b>exodraft a/s Industrivej 10 DK-5550 Langeskov</b>	
Erklærer på eget ansvar, at følgende produkter: Hereby declares that the following products: Erklärt hierdurch auf eigene Verantwortung, daß folgende Produkte: Déclare, sous sa propre responsabilité, que les produits suivants: Erklærer på eget ansvar at følgende produkter: Niniejszym oświadczam, że następujące produkty:	Veklaart dat onderstaande producten: Deklarerar på eget ansvar, att följande produkter: Vastaa siltä, että seuraava tuote: Staðfesti à eigin ábyrgð, að eftirfarandi vörur: Dichiara con la presente che i seguenti prodotti:
<b>exodraft item no. 5113001 &amp; 5113002</b>	
Som er omfattet af denne erklæring, er i overensstemmelse med følgende standarder: Were manufactured in conformity with the provisions of the following standards: Die von dieser Erklärung umfaßt sind, den folgenden Normen: Auxquels s'applique cette déclaration sont en conformité avec les normes ci-contre: Som er omfattet av denne erklæring, er i samsvar med følgende standarder: Zostały wyprodukowane zgodnie z warunkami określonymi w następujących normach:	Zijn vervaardigd in overeenstemming met de voorschriften uit de hieronder genoemde normen en standaards: Som omfattas av denna deklaration, överensstämmer med följande standarder: Jota tämä selvitys koskee, on seuraavien standardien mukainen: Sem eru meðtalin i staðfestingu Pessari, eru i fullu samræmi við eftirtalda staðla: Sono stati fabbricati in conformità con le norme degli standard seguenti:
<b>EN60335-1, EN60335-2-80, DS/EN ISO 12100: 2012</b>	
I.h.t bestemmelser i direktiv: In accordance with Entsprechen gemäß den Bestimmungen der folgenden Richtlinien: Suivant les dispositions prévues aux directives: I.h.t bestemmelser i direktiv: Zgodnie z:	En voldoen aan de volgende richtlijnen: Enligt bestämmelserna i följande direktiv: Seuraavien direktiivien määräysten mukaan: Med tilvisun til ákvarðana eftirlits: In conformità con le direttive:
Maskindirektivet: The Machinery Directive: Richtlinie Maschinen: Directive Machines: Maskindirektivet: Dyrektywę maszynową:	De machinerichtlijn: Maskindirektivet Konedirektiivi: Vèlaeftirlitið: Direttiva Macchinari:
<b>2006/42/EF/-EEC/-EWG/-CEE</b>	
Lavspændingsdirektiv: The Low Voltage Directive: Niederspannungsrichtlinie: Directive Basse Tension: Lavspændingsdirektivet: Dyrektywę Niskonapięciową	De laagspanningsrichtlijn: Lågspänningsdirektivet: Pienjännitedirektiivi: Smáspennueftirlitið: Direttiva Basso Voltaggio:
<b>2014/35/EC</b>	
EMC-direktivet: And the EMC Directive: EMV-Richtlinie: Directive Compatibilité Electromagnétique: EMC-direktivet: Dyrektywę EMC – kompatybilności elektromagnetycznej	En de EMC richtlijn: EMC-direktivet: EMC-direktiivi: EMC-efirlitið: Direttiva Compatibilità Elettromagnetica:
<b>2014/30/EC</b>	
<b>Langeskov, 30.11.2021</b> Adm. direktør Managing Director <b>Anders Haugaard</b> 	Algemeen directeur Geschäftsführender Direktor Président Directeur Général Verkställande direktör Toimitusjohtaja Frankvemdastjóri Direttore Generale











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