

HAAS
+
SOHN

HSP 7 II Grande RLU

Equipment sheet
Pellet stove

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Introduction

We thank you very much for purchasing our product!

The description of the heating device will inform you in detail about the design, technical specification and operation of the heating device. We recommend you to acquaint yourselves closely with these data. In this way, you will avoid possible faults during the proper assembly and operation.

You will find detailed conditions of installation and operation in General Manual of Operation (included in the scope of the delivery).

Notes in the text

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Of utmost importance there are the notes entitled **WARNING**. The notes entitled **WARNING** advise you on **serious danger of damage to the heating device or of an injury**.



The note entitled **Notice** advises you on possible damage to your heating device.



The note entitled **Important** calls your attention to the information important for the operation of your heating device.



The note itself calls your attention to the information important for the operation of your heating device in general.

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Important Information from Manufacturer!



IMPORTANT

Please, observe the following instructions:

Quality of wood pellets:

Depending on the manufacturer, there are light, dark, shorter or longer pellets. **Even deliveries from one supplier may contain different qualities.** Standards for wood pellets are constantly tightened, but: The wood remains wood and has its peculiarities in terms of ash and slag.

Cleaning:

Once you find ash and slag deposits in the cold combustion chamber, you must clean it. **See Chapter 4 and 5.** If you fail to do it, the layer will increase and the stove will no longer be able to self-ignite properly.

The pellets may accumulate in the combustion chamber. In the extreme case, the pellets can accumulate up to their filling chute. Possible consequences could result in their bursting in the flame and burning in the pellet container. **It would destroy your stove, which is not covered by the warranty.**

To ensure maximum service life and trouble-free operation:

Read the installation and operating instructions carefully and completely. We recommend keeping it if required in future.

1. Enhanced daily control according to the instructions should be carried out on each new supply of pellets or if the stove has been shut down for a longer period of time – e.g. summer season.

2. Recommendations:

Consign the first installation and their first cleaning and inspection to one of our contracted professional service organizations. Their employees are professionally trained and have the knowledge needed to install your new pellet stove safely, put it into operation and carry out its maintenance. They will personally familiarize you with the rules of its use and maintenance and will show you the stove in practice.

Keep in mind that in the event of any malfunctions due to improper installation, operation or maintenance, your warranty claims will be lost.

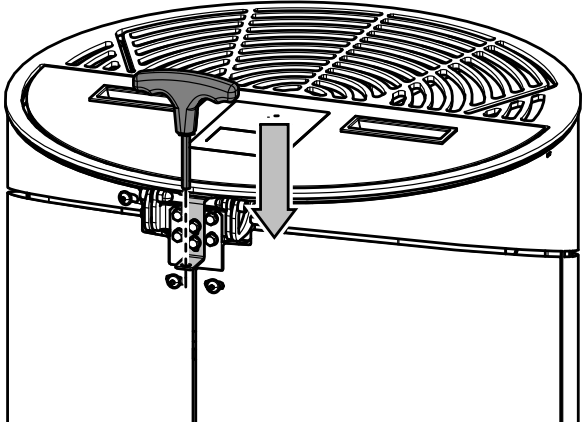
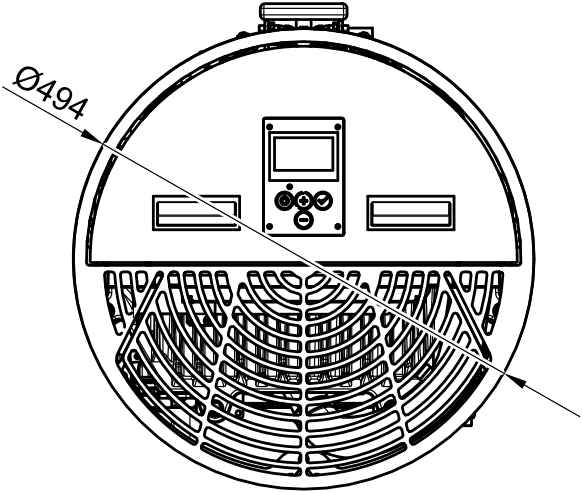
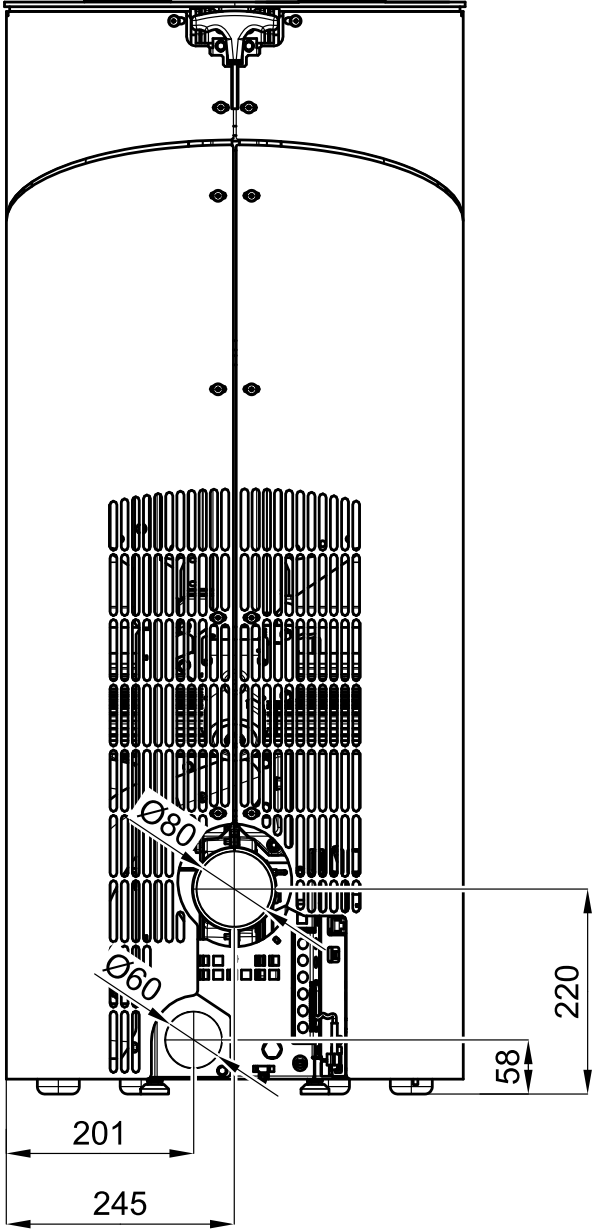
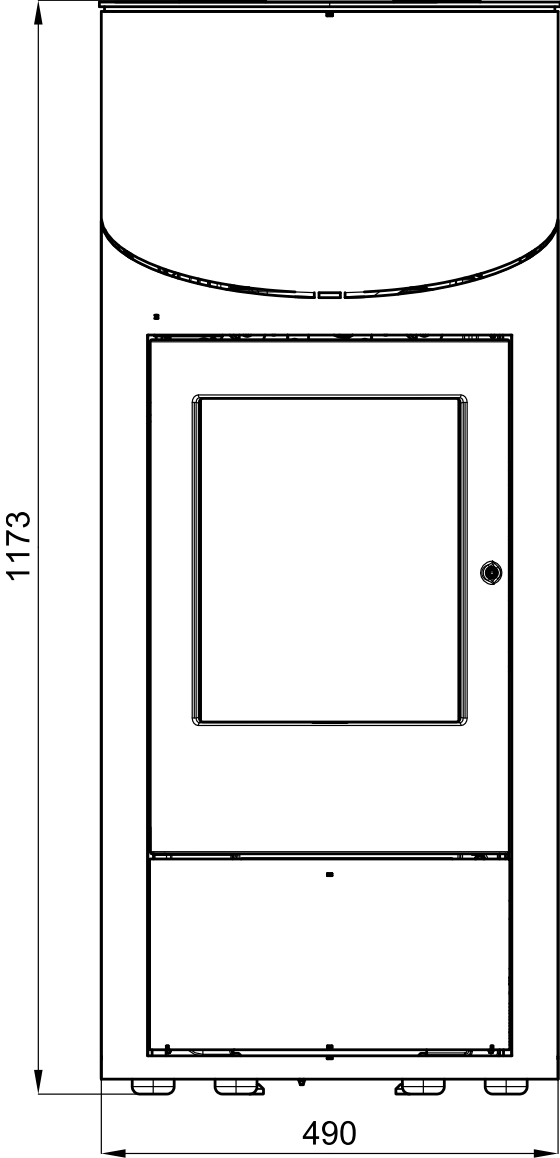
1. Technical data

| | HSP 7 II Grande RLU |
|--|--------------------------------|
| Heat output range: | 2,4 – 8,2 kW |
| Nominal heat output: | 8,0 kW |
| Testing standard: | EN 14785 |
| Height: | 1173 mm |
| Width: | 494 mm |
| Depth: | 494 mm |
| Weight: | 132 kg |
| Diameter of flue elbow: | 80 mm |
| Flue gas temperature: | 197 °C |
| Testing transport pressure at nominal output: | 12 Pa |
| Testing transport pressure at partial output: | 6 Pa |
| Min. flue draft: | 5 Pa |
| Max. flue draft: | 15 Pa |
| Flue gas flow rate in g/s | 5,6 g/s |
| CO level in flue gas at 13% O ₂ (%) (min./max.): | 0,01/0,03 % |
| Efficiency: | 90/94 % |
| CO level in flue gas at 13% O ₂ : | 138 mg/Nm ³ |
| NO _x level in flue gas at 13% O ₂ : | 131 mg/Nm ³ |
| OGC level in flue gas at 13% O ₂ : | 5 mg/Nm ³ |
| Proportion of dust in flue gas at 13% O ₂ : | 17 mg/Nm ³ |
| Contents of storage container (pellet tank): | about 17 kg |
| Duration of burn with one charge (min./max.): | about 10 h/30 h |
| Permitted fuel: Low-dust wood pellets | diameter: 6 mm |
| to Ö-Norm M 7135, DIN plus, EN plus-A1 | length: max. 30 mm |
| Room heating capacity to Ö-Norm M 7521: | max. 230 m ³ |
| Electricity supply: | 230 V (50 Hz) |
| in normal operation: | max. 50 W |
| Electric ignition (for max. 15 minutes on ignition): | max. 380 W |
| Electronics fuses: (F3) | T 0,315 A, 250 V |
| Fuses for the ignition, screw conveyor motor, induced draught, (F1), conv. fan (F2): | T 3,15 A, 250 V |

2. Dimensions

Dimensions

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3. Pellet Stove Installation and Connection to Chimney

The pellet stoves must be connected to a separate chimney. It is not permissible to divert flue gas from other equipment to this chimney. Flue gases are fed through an 80 mm smoke duct connected to the stove smoke-flue being located on the rear side of the stoves. The smoke-flue should be fitted with a T-piece and stopper, see **fig. 1.1 - 1.3**. The smoke-flue must be made of steel or stainless steel tubes. The horizontal part of the smoke-flue must have an incline of **at least 5 % (3°)** upwards from the heater. The connection must be made in the shortest way with a maximum length of 1.5 m and max. 2 fittings (T-piece, elbow). The connection of the solid fuel heater to the chimney **must comply with the provisions of ČSN 73 4201 standard**. It is necessary to observe all requirements for the chimney body which are required by the standard.

Under the Government Decree No. 91/2010 Coll. It is necessary to revise the combustion routes:

- before the flue route is put into operation or after each chimney reconstruction
- before replacing or re-installing a fuel appliance

The inspection is carried out by a competent chimney sweep who is also a chimney inspection technician.

Informative examples of pellet stove installation and connection to chimney:

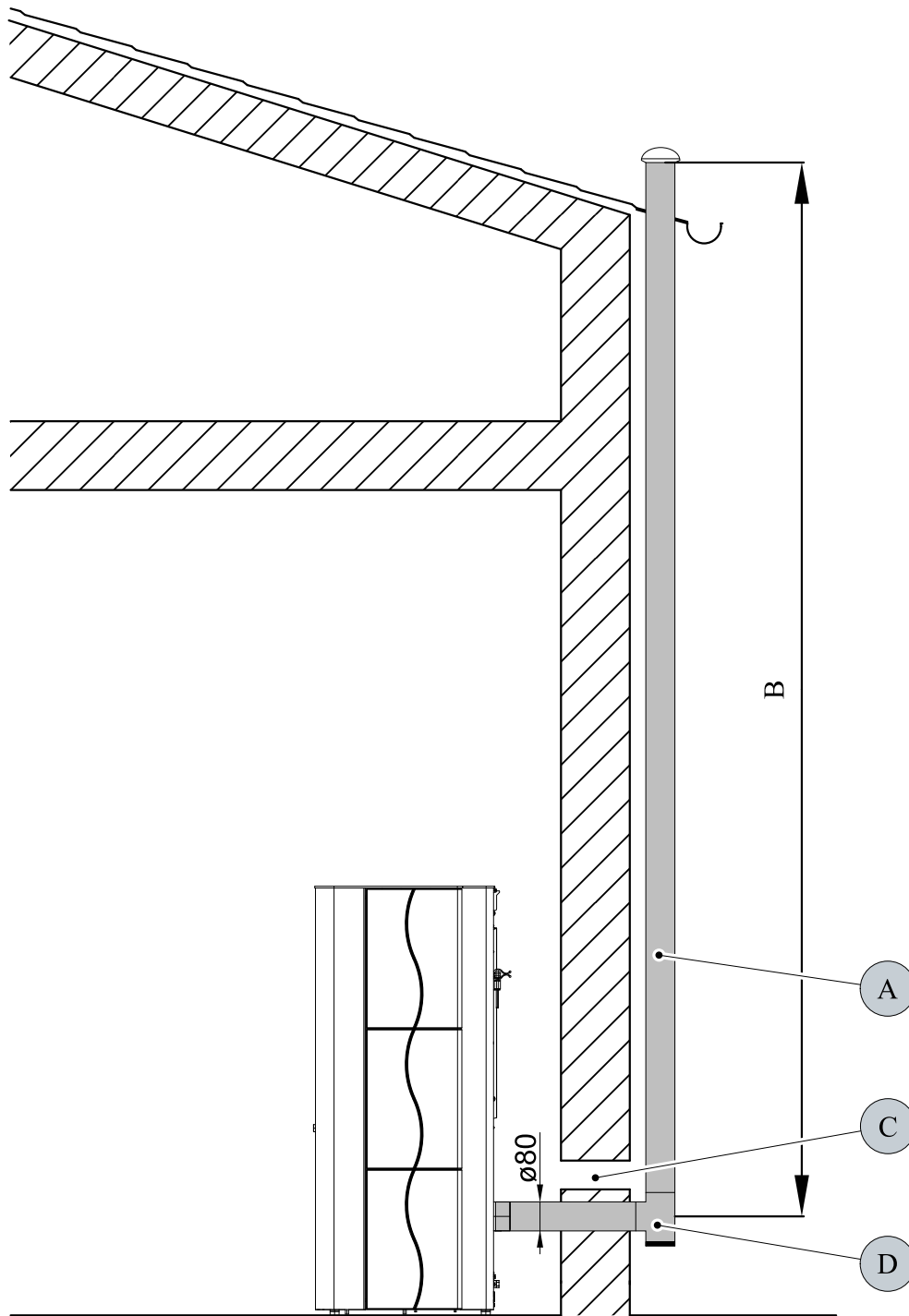


Figure 1.1: Chimney outside the building

- A) Chimney situated outside the building
- B) Effective chimney height. The chimney must be led above the roof level and fitted with thermal insulation
- C) External air inlet to the heater
- D) T-piece with stopper

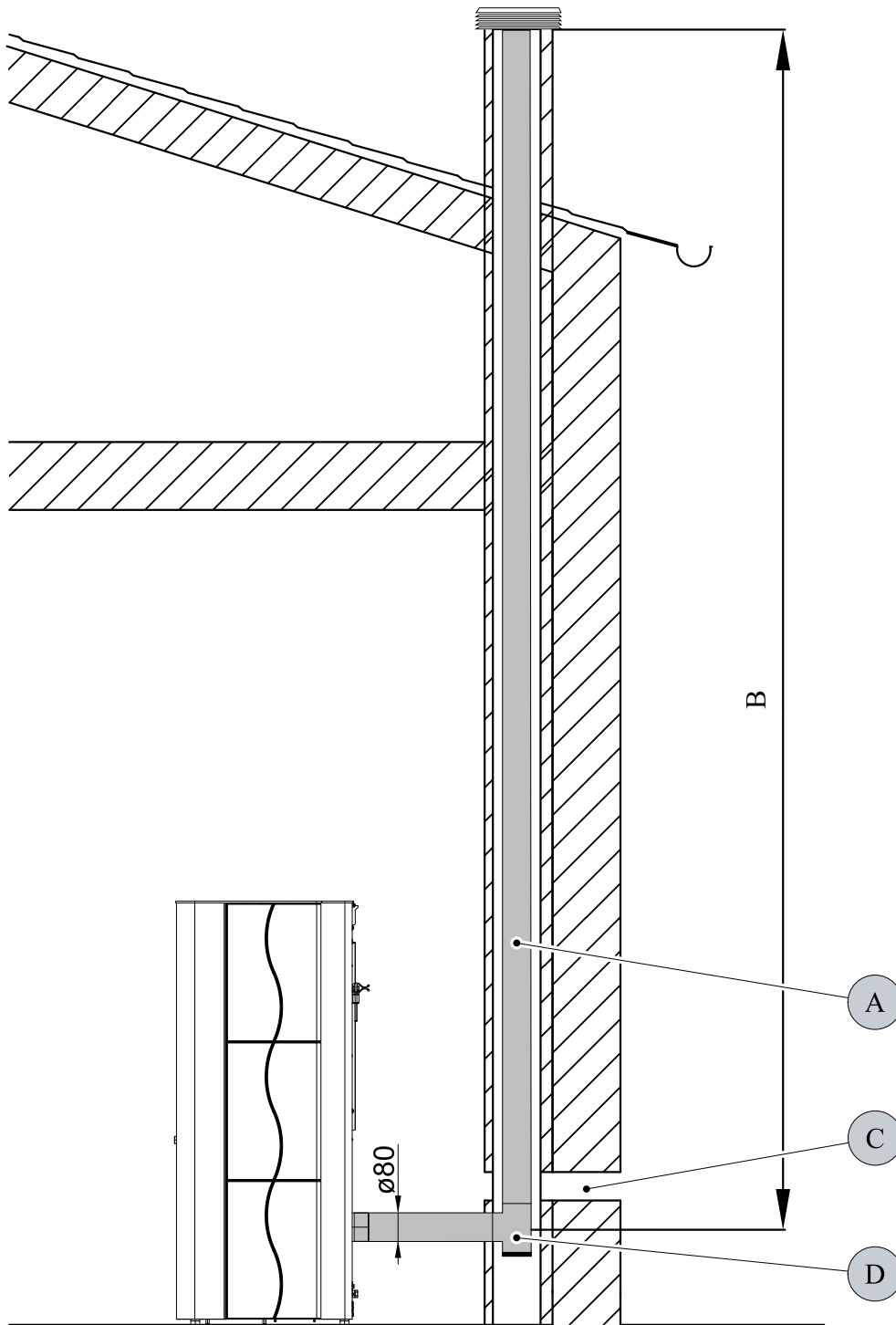


Figure 1.2: Chimney as a part of building

- A) The smoke-flue inserted into the existing chimney. Here, the possibility of cleaning is required.
- B) Effective chimney height.
- C) External air inlet to the heater
- D) T-piece with stopper

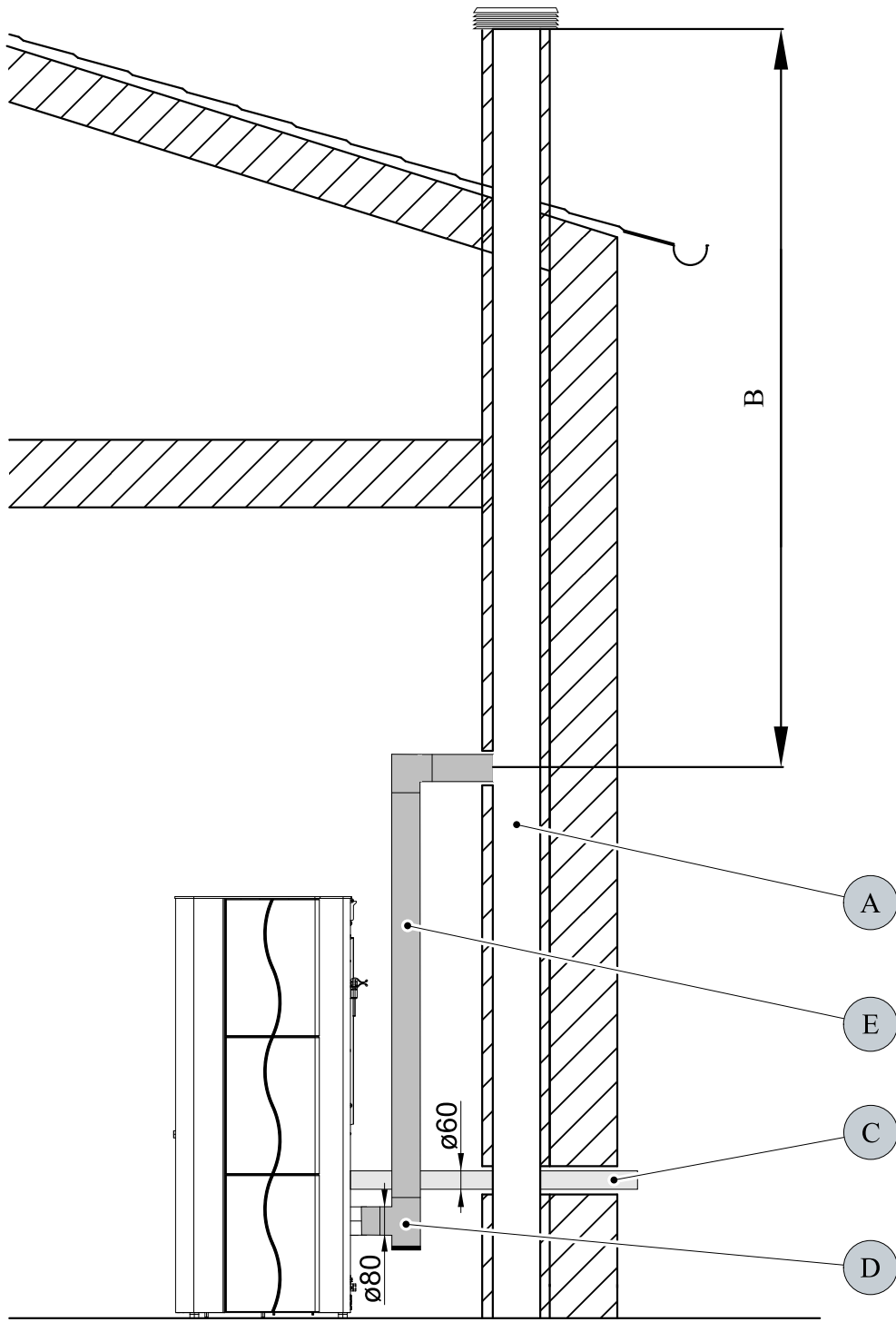


Figure 1.3: Connection to the existing chimney

- A) Existing chimney
- B) Effective chimney height.
- C) External air inlet to the heater
- D) T-piece with stopper
- E) Smoke-flue

4. Cleaning work



WARNING

Before starting any cleaning work, the stove must be cool down!

Once the cleaning work is completed, the correct operating status of the device must be re-established: Put the combustion pot in correctly, close the combustion chamber door.

4.1. Cleaning the surface

Dirt on the upper surface of the stove may be cleaned off with a damp cloth or if necessary with mild soapy water. You are advised against using corrosive cleaning agents and solvents since these might damage the surfaces.

4.2. Cleaning the glass panel

To clean the viewing panel, you must first open the stove door. Dirt on the glass panel can be removed with a glass cleaner or with a damp sponge on which you have sprinkled some of the wood ash present. (Environmentally friendly). Cleaning the glass panel may only be done with a cooled down stove in the OFF operating mode.

4.3. Clean combustion chamber “function instruction” Error F040

- The whole combustion space must be cleaned after **30-hours operation at the latest, or once a week**.
- The requirement to clean the fire-box (flickering of the display) appears during heating, in case that the cleaning interval has elapsed.
- After the fire-box has been cleaned, the error message "Clean the fire-box" will be confirmed automatically. The condition for automatic confirmation of this error message is that the fire-box door is opened for more than **60 seconds**. This time is necessary for careful cleaning of the fore-box, including the burner.
- This reset of the operating hours counter occurs even if the cleaning of the combustion chamber is performed before the 30 operating hours have run provided that the stove is in “Off” operating status and the door is open for longer than 60 seconds during cleaning.

4.4. Cleaning the combustion pot - weekly

During operation, deposits may form in the combustion pot. How quickly the combustion pot becomes dirty depends solely on fuel quality. The deposits or encrustations must be removed from time to time.



WARNING

If this is not done, the clinker will continue to accumulate. Then the device will no longer be able to ignite properly. Pellets can pile up in the combustion pot. In extreme cases, this can reach all the way back to the pellet chute. Backfire in the pellet container and smouldering in the pellet tank might possibly result.

This will destroy your device and is not covered in your guarantee.



WARNING

Cleaning the combustion pot may only be done with a cooled down stove in “OFF” operating mode. Otherwise there is a risk of burns!

- Take out the burner bowl from the stove.
- Remove the remains of ashes and slag.
- After the cleaning, mount the burner bowl back to its proper position on the burner rest.
- Re-check the proper seating of the burner bowl, in order to avoid any lack of tightness.

5. Maintenance work



WARNING

Before starting any cleaning work, the stove must be cool down! The mains plug must be pulled out of the power supply socket (always in advance)!

The frequency of maintenance in turn depends to a large extent on the pellet quality (ash content). Quality pellets have a low ash content of about 0.2-0.3%. However, if the ash content is higher (0.5% and over), the interval from maintenance to maintenance is reduced and the accumulation of ash increases by 2 or 3 times.



WARNING

Devices that are not maintained in accordance with our specifications must not be operated. Failure to observe this point will invalidate all guarantee claims.

5.1. Cleaning the flue gas passes



CAUTION

After the consumption of 1000 kg of pellets at the latest, it is recommendable to check & clean the conduits of combustion products, the (induced) draught fan and the smoke flues. For cleaning, employ a brush or an ash exhauster.



CAUTION

After completion of the cleaning make sure that when putting back the covers, the seals are seated in the right positions. It is essential to replace defective seals.

Please perform the long-time cleaning in four steps:

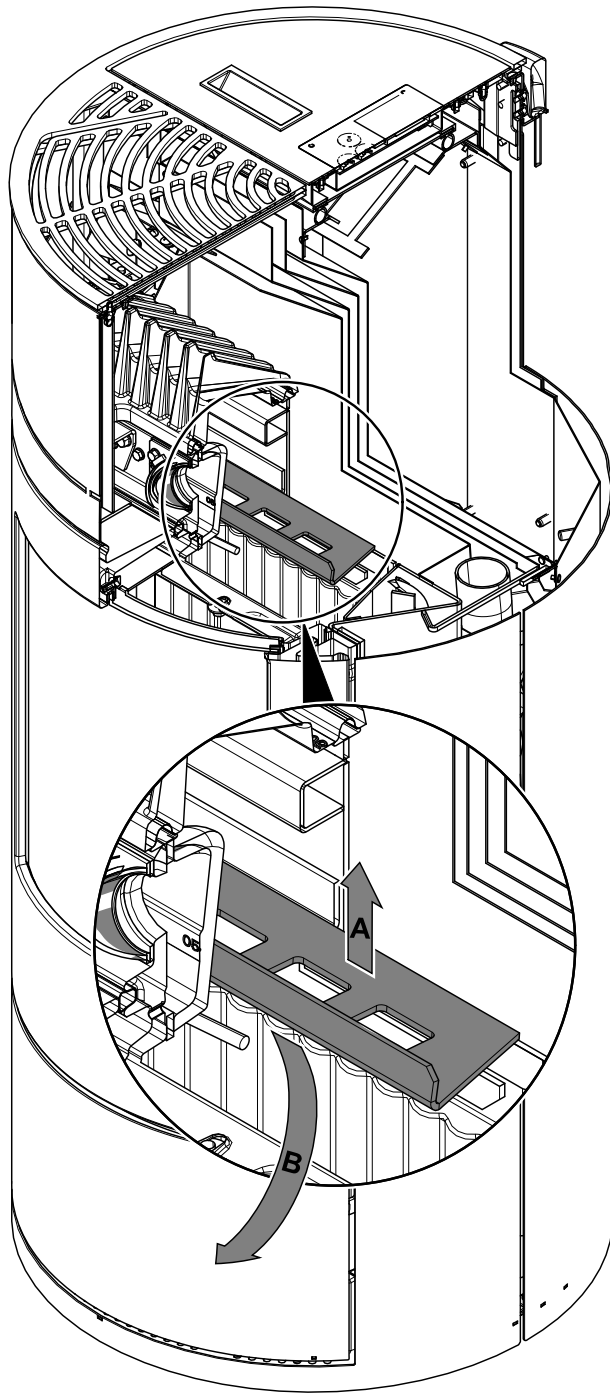


Figure 2: Removing the flue baffle

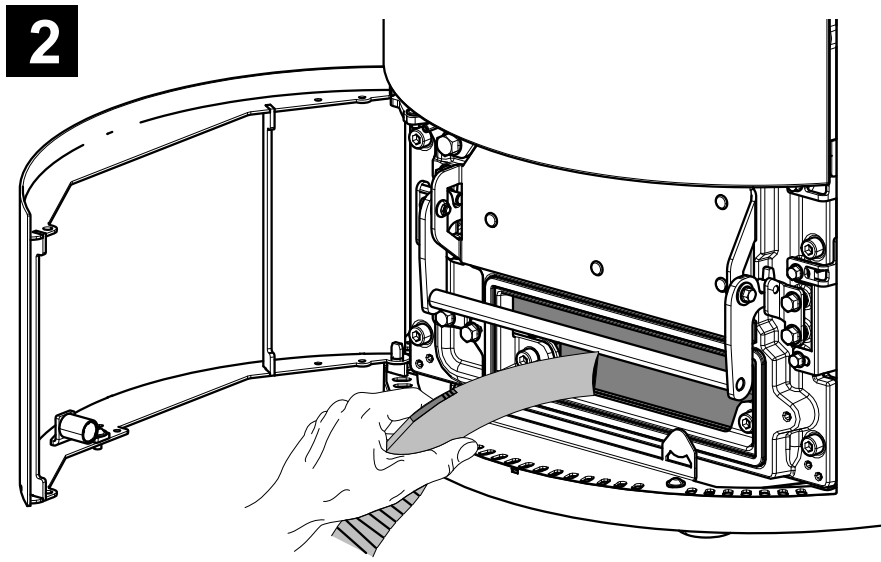
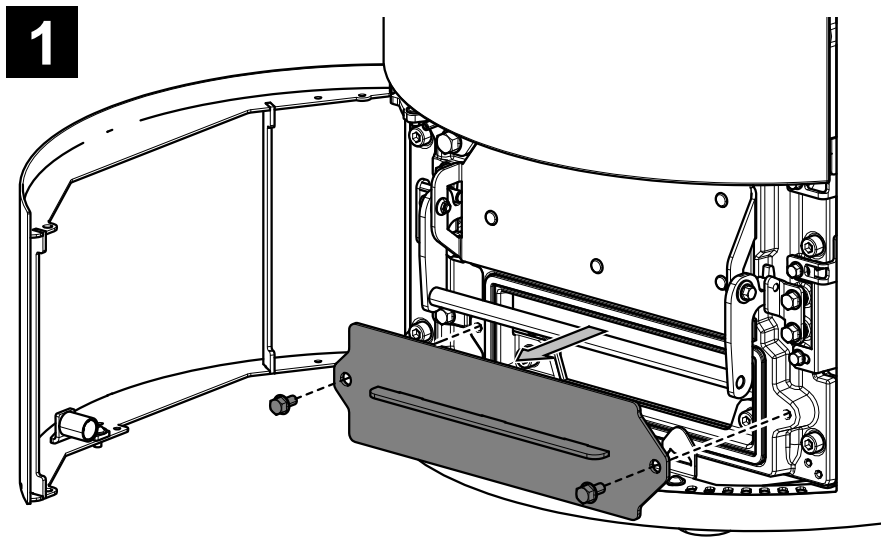


Figure 3: Removing the cleaning cover

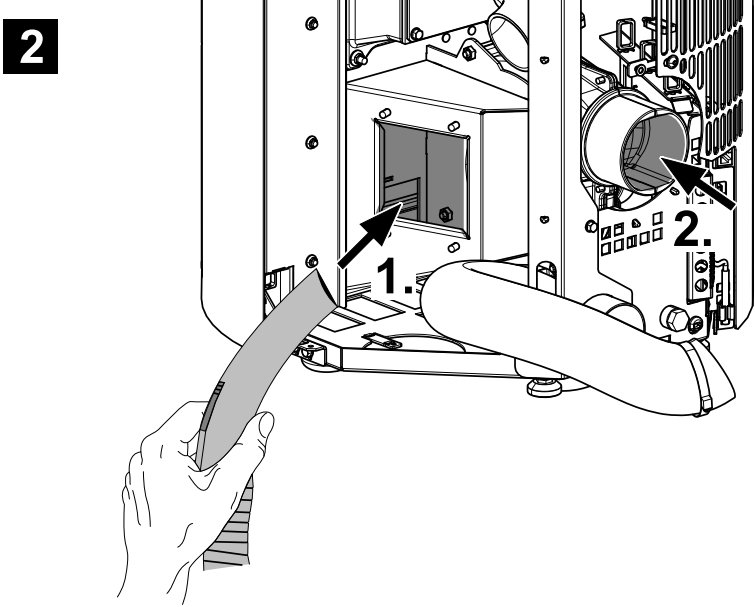
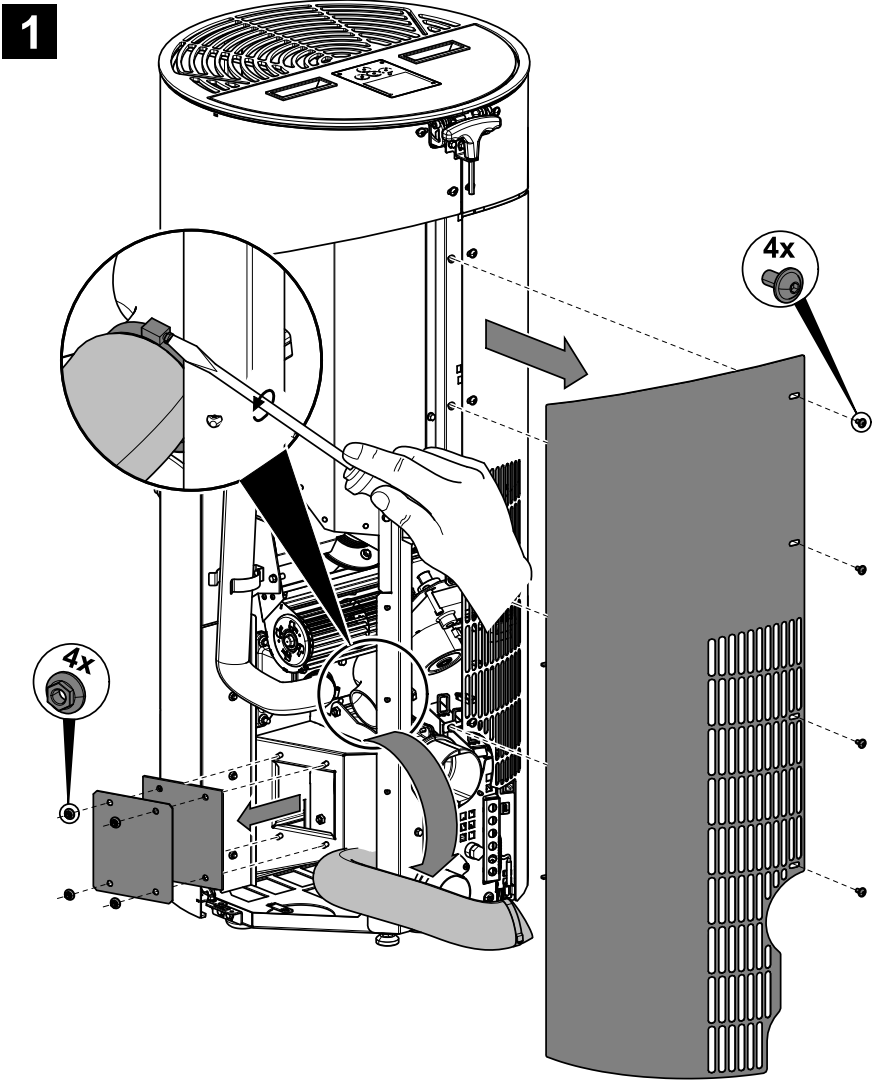


Figure 4: Removing the side wall

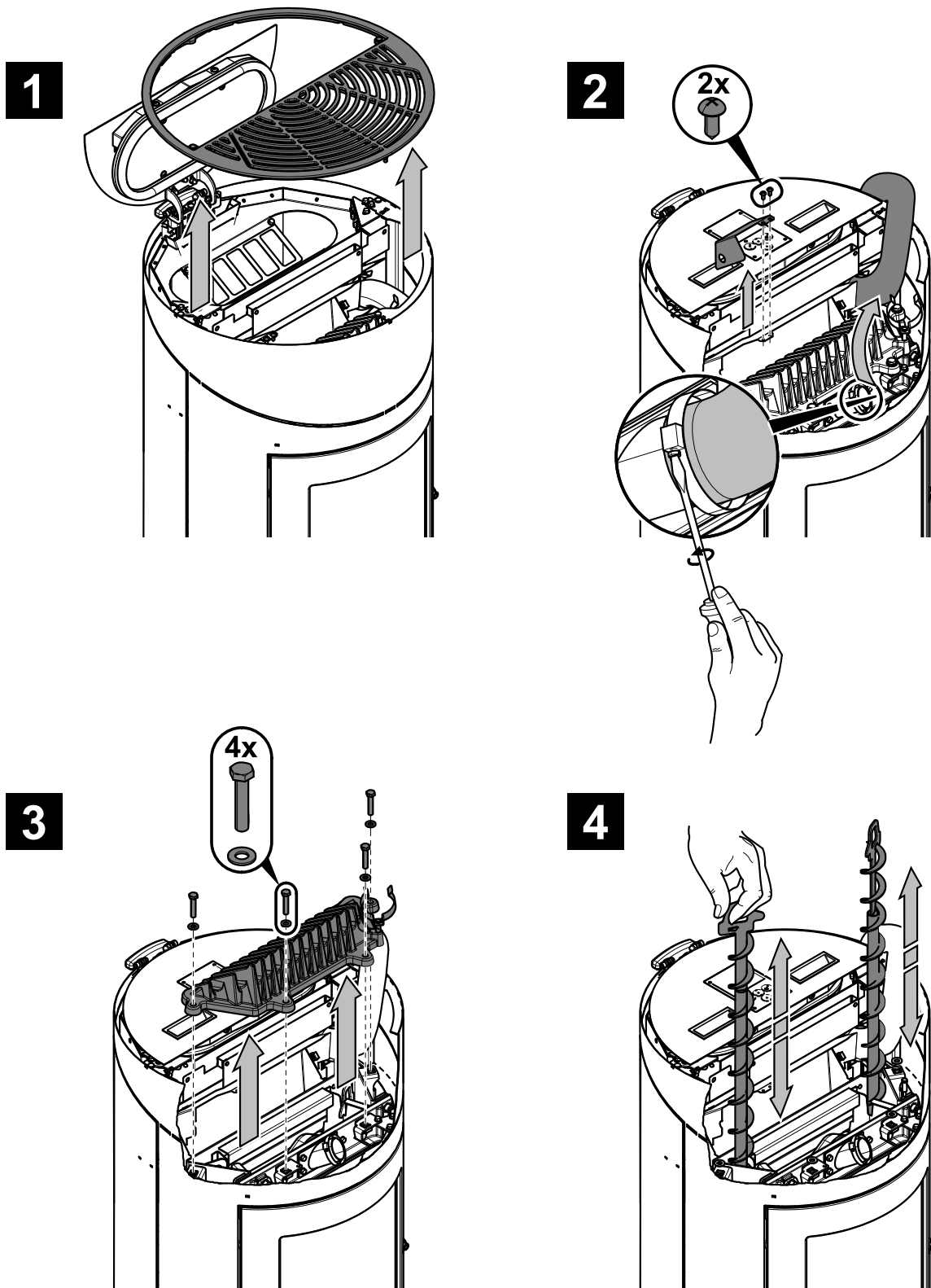


Figure 5: Shake the turbulator

- For cleaning the flue gas passes, shake the turbulator 5 times at least, in compliance with the Fig. 5, pos. 4.

5.2. Cleaning the pellet container - annual maintenance

- Heat the pellet stove until the storage tank is completely empty.
- Then the protective grille (1) in the pellet tank may be removed.
- Then clean the tank and the intake of the screw conveyor housing with a vacuum cleaner.
- After cleaning, it is essential to put back the protective grille. When doing this, make sure that no screws fall into the pellet tank so as to avoid consequential damage to the screw conveyor.

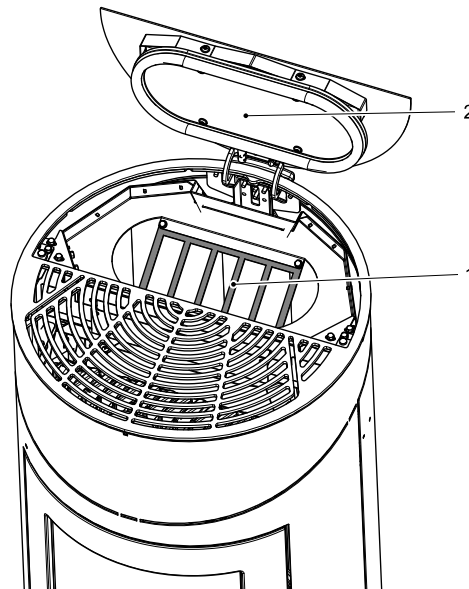


Figure 6: Pellet tank

- 1 Protective grille
- 2 Tank cover

5.3. Cleaning of the ash pan - once a week

- Open door, push handle up, and pull out the ash bin.

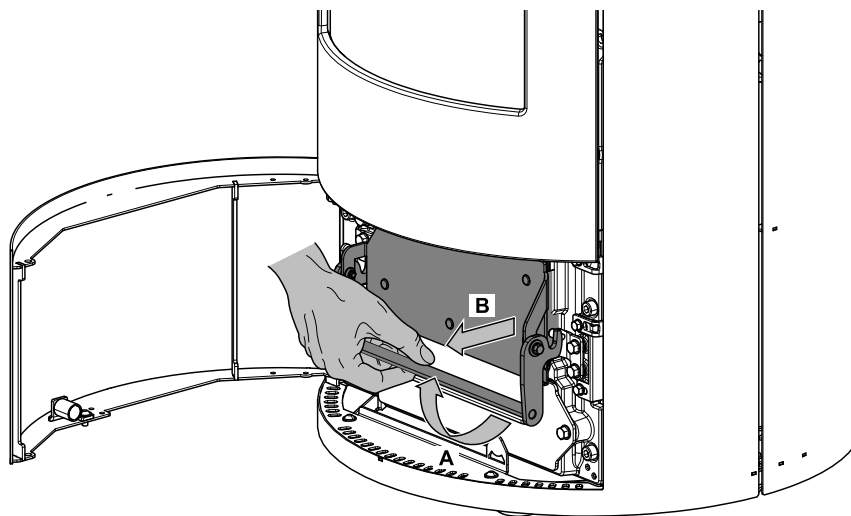
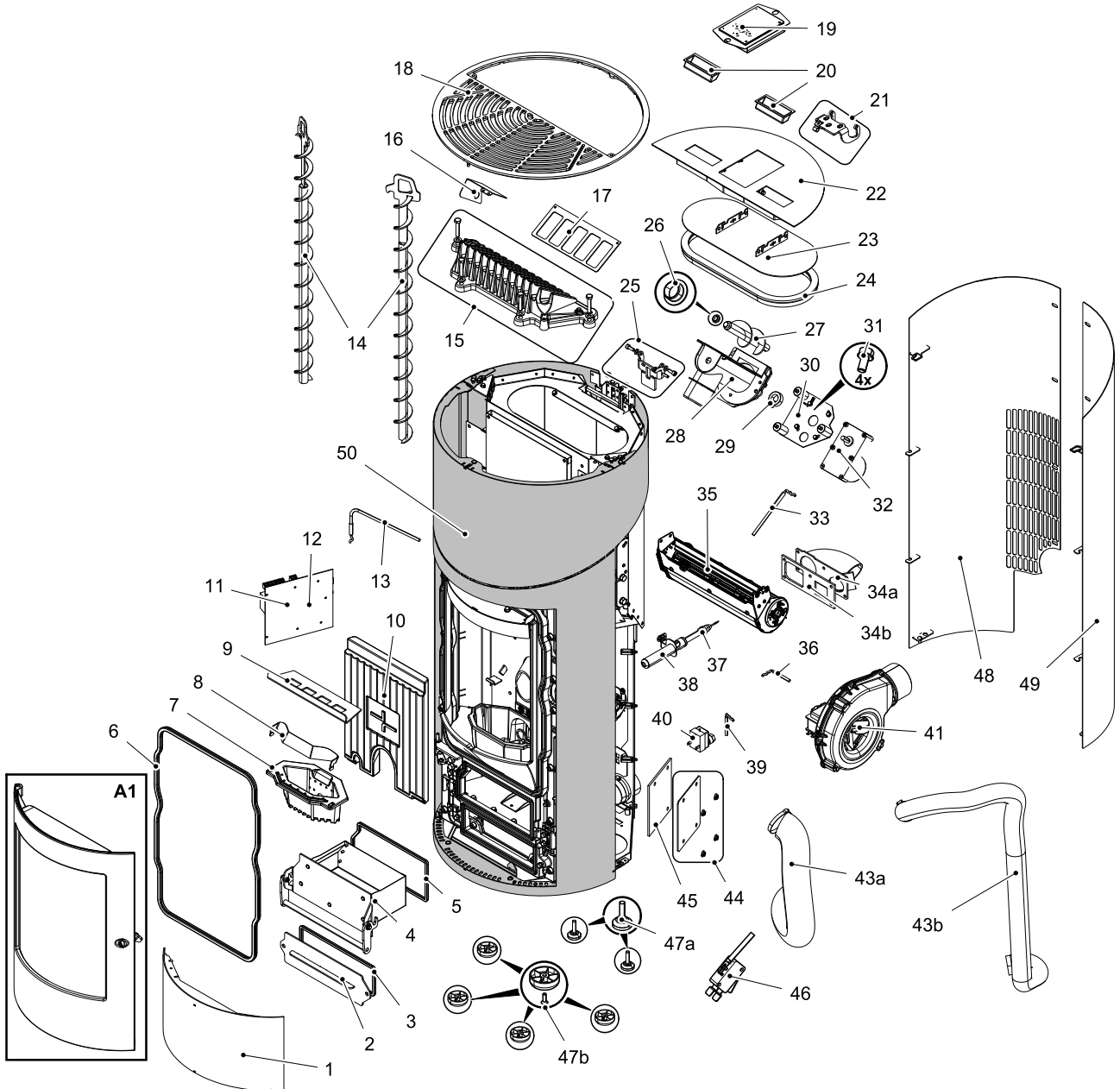


Figure 7

6. Replacement parts list

6.1. Replacement parts list HSP 7 Diana Plus 451.08 RLU



Replacement parts list

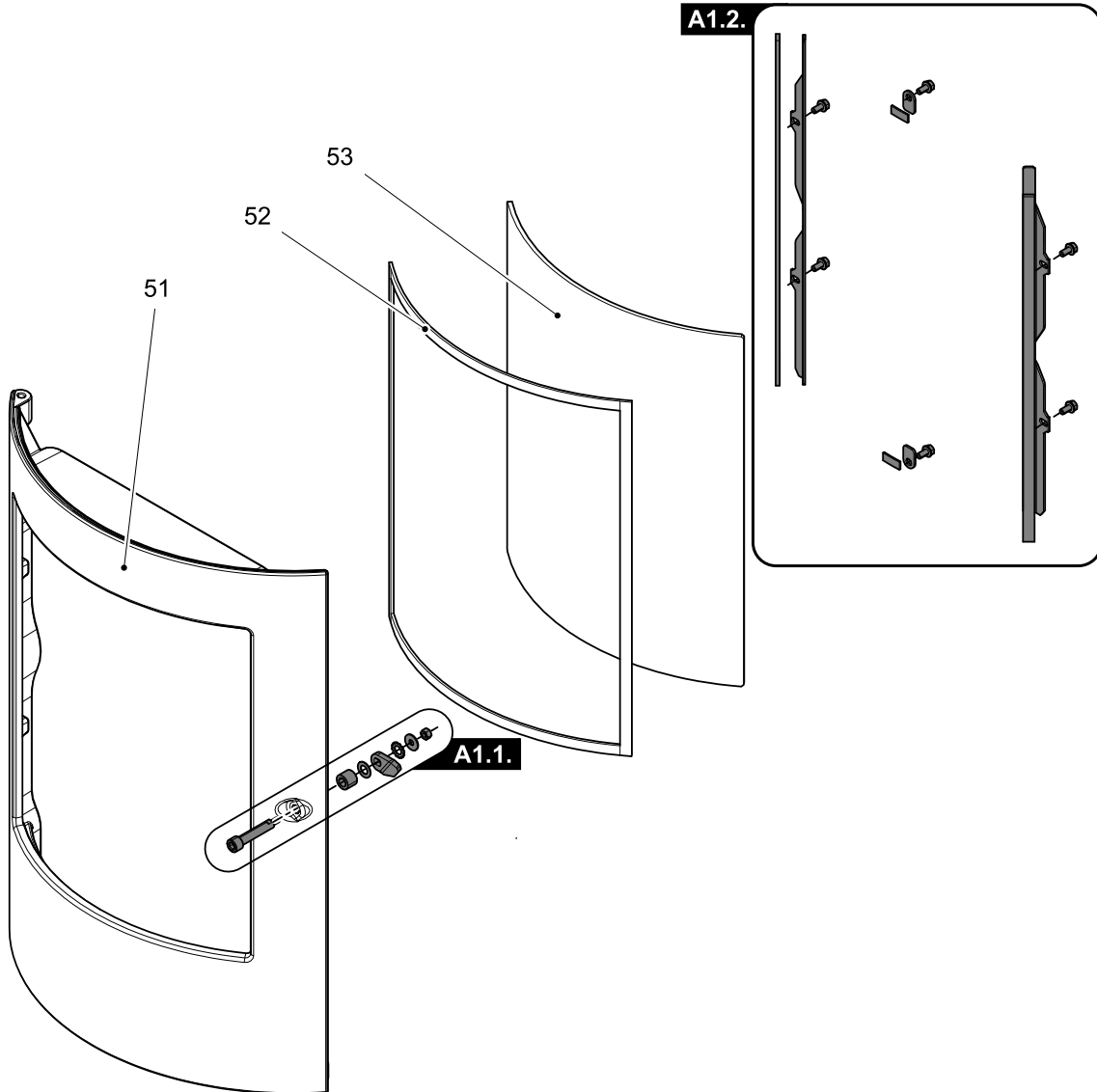
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| Pos. | Description | Piece | Spare part number |
|---|---|---------|-------------------|
| Replacement parts list HSP 7 Diana Plus 451.08 RLU | | | |
| A1 | Complete combustion chamber door/black | 1 piece | 0545008005300 |
| A1 | Complete combustion chamber door/black-glossy (DE LUXE) | 1 piece | 0545008115300 |
| 1 | Ash door panel/black | 1 piece | 0545008105330 |
| 1 | Ash door panel/black-glossy (DE LUXE) | 1 piece | 0545008125330 |

| | | | |
|-----|--|---------|---------------|
| 2 | Cleaning cover front/black | 1 piece | 0545008005037 |
| 3 | Seal for cleaning cover 7,5 mm | 620 mm | 0040300075005 |
| 4 | Ash pan/black | 1 piece | 0545008105600 |
| 5 | Seal for ash pan 7,5 mm | 670 mm | 0040300075005 |
| 6 | Seal door 11 mm | 1600 mm | 0040300110006 |
| 7 | Burner cast/black | 1 piece | 0545008006756 |
| 8 | Protection grate | 1 piece | 0551908006709 |
| 9 | Draught baffle plate/black | 1 piece | 0545008005073 |
| 10 | Furnace back wall Vermiculite | 1 piece | 0545008005041 |
| 11 | Complete control unit | 1 piece | 0545008007569 |
| 12 | Backup battery CR 2032 | 1 piece | - |
| 13 | Flame temperature sensor | 1 piece | 0553808005541 |
| 14 | Turbulator | 2 piece | 0545008005030 |
| 15 | Furnace lid/black | 1 piece | 0545008006871 |
| 16 | Baffle plate | 1 piece | 0545008007652 |
| 17 | Protective grille | 1 piece | 0545008105981 |
| 18 | Metal cover plate/black | 1 piece | 0545008106210 |
| 18 | Metal cover plate/black-glossy (DE LUXE) | 1 piece | 0545008115210 |
| 19 | Operator console | 1 piece | 0571207005510 |
| 20 | Grip | 2 piece | 0089500940005 |
| 21 | Tank cap hinge/black | 1 piece | 0545008108341 |
| 22 | Tank cover/black | 1 piece | 0545008107321 |
| 22 | Tank cover/black-glossy (DE LUXE) | 1 piece | 0545008115321 |
| 23 | Profile retaining plate | 1 piece | 0545008105333 |
| 24 | Seal, tank cover | 1000 mm | 0546608005189 |
| 25 | Tank cap hinge/black | 1 piece | 0545008105931 |
| 26 | Upper screw conveyor bearing | 1 piece | 0571207005027 |
| — | Lower screw conveyor bearing | 1 piece | 0571207005026 |
| 27 | Screw conveyor | 1 piece | 0571207005030 |
| 28 | Conveyor | 1 piece | 0571207015560 |
| 29 | Collet | 1 piece | 0089000345000 |
| 30 | Motor plate - set | 1 piece | 0551908007080 |
| 31 | Screw UN5950 M5x10 | 4 piece | - |
| 32 | Screw conveyor motor | 1 piece | 0089500000006 |
| 33 | Bottom temperature sensor | 1 piece | 0561008005543 |
| 34a | Suction flange | 1 piece | 0545108115335 |
| 34b | Seal for suction flange | 1 piece | 0545008007333 |

| | | | |
|------------|--|---------|---------------|
| 35 | Conv. fan | 1 piece | 0545008007600 |
| 36 | Flue gas thermosensor | 1 piece | 0553808005540 |
| 37 | Ignition | 1 piece | 0541908005202 |
| 38 | Lighter case | 1 piece | 0545008105220 |
| 39 | Room temperature sensor | 1 piece | 0089500390005 |
| 40 | OC | 1 piece | 0089500080005 |
| 41 | Induced draught fan | 1 piece | 0545508005880 |
| 43a | Hose Meniflex AL L=570 mm | 1 piece | 0545008105315 |
| 43b | Hose foxiVulca L=1150 mm | 1 piece | 0545008105317 |
| 44 | Cleaning cover back/black | 1 piece | 0545008005052 |
| 45 | Seal for cleaning cover | 1 piece | 0545008005081 |
| 46 | Door contact switch | 1 piece | 0089500040005 |
| 47a | Stand - back | 2 piece | 0551908505005 |
| 47b | Stand | 4 piece | 0089501090005 |
| 48 | Side wall left/black | 1 piece | 0545009015151 |
| 48 | Side wall left/white | 1 piece | 0545009006151 |
| 48 | Side wall left/black-glossy (DE LUXE) | 1 piece | 0545009025151 |
| 48 | Side wall left/grey-glossy (DE LUXE) | 1 piece | 0545009065151 |
| 48 | Side wall left/red (DE LUXE) | 1 piece | 0545009045151 |
| 48 | Side wall left/copper brown (DE LUXE) | 1 piece | 0545009055151 |
| 49 | Side wall right/black | 1 piece | 0545009015141 |
| 49 | Side wall right/white | 1 piece | 0545009006141 |
| 49 | Side wall right/black-glossy (DE LUXE) | 1 piece | 0545009025141 |
| 49 | Side wall right/grey-glossy (DE LUXE) | 1 piece | 0545009065141 |
| 49 | Side wall right/red (DE LUXE) | 1 piece | 0545009045141 |
| 49 | Side wall right/copper brown (DE LUXE) | 1 piece | 0545009055141 |
| 50 | Front panel/black | 1 piece | 0545009015100 |
| 50 | Front panel/white | 1 piece | 0545009025100 |
| 50 | Front panel/black-glossy (DE LUXE) | 1 piece | 0545009045100 |
| 50 | Front panel/grey-glossy (DE LUXE) | 1 piece | 0545009085100 |
| 50 | Front panel/red (DE LUXE) | 1 piece | 0545009065100 |
| 50 | Front panel/copper brown (DE LUXE) | 1 piece | 0545009075100 |

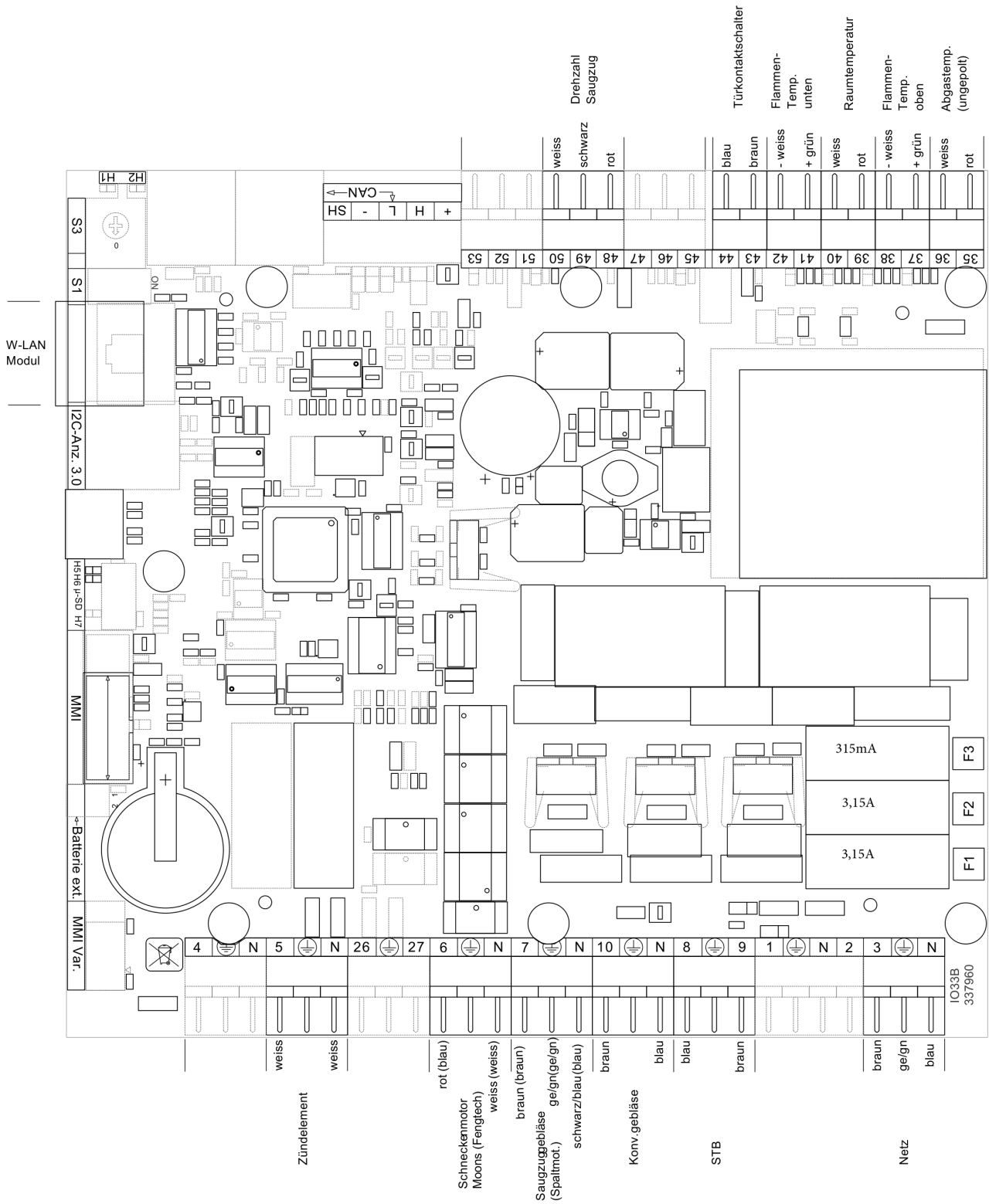
6.2. Detail A1



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| Pos. | Description | Piece | Spare part number |
|------------------|-------------------------------|---------|-------------------|
| Detail A1 | | | |
| A1.1. | Screwing door - Set | 1 piece | 0545008005221 |
| A1.2. | Glass holder/black - Set | 1 piece | 0545008005222 |
| 51 | Combustion chamber door/black | 1 piece | - |
| 52 | Seal glass 8x2 mm | 1340 mm | 0040208020005 |
| 53 | Door glass | 1 piece | 0545008005309 |

7. Circuit diagram



Description Circuit diagram:

| | |
|-------|---|
| No.: | Description Cable harness |
| 3 | Mains plug / mains filter |
| 5 | Electric ignition |
| 6 | Screw conveyor motor |
| 7 | Induced draught |
| 8/9 | OC |
| 10 | Conv. fan |
| 35/36 | Flue gas temperature sensor |
| 37/38 | Flame temperature sensor |
| 39/40 | Room temperature sensor |
| 41/42 | Bottom flame temperature sensor |
| 43/44 | Door contact switch |
| 48-50 | Flue gas fan rotation speed |
| F1 | Fuse T 3,15 A ignition, induced draught fan, screw conveyor motor |
| F2 | Fuse T 3,15 A conv. fan |
| F3 | Fuse T 0,315 A operator console |