

# **HSP 7 Diana 450.08**

**Equipment sheet** Pellet stove



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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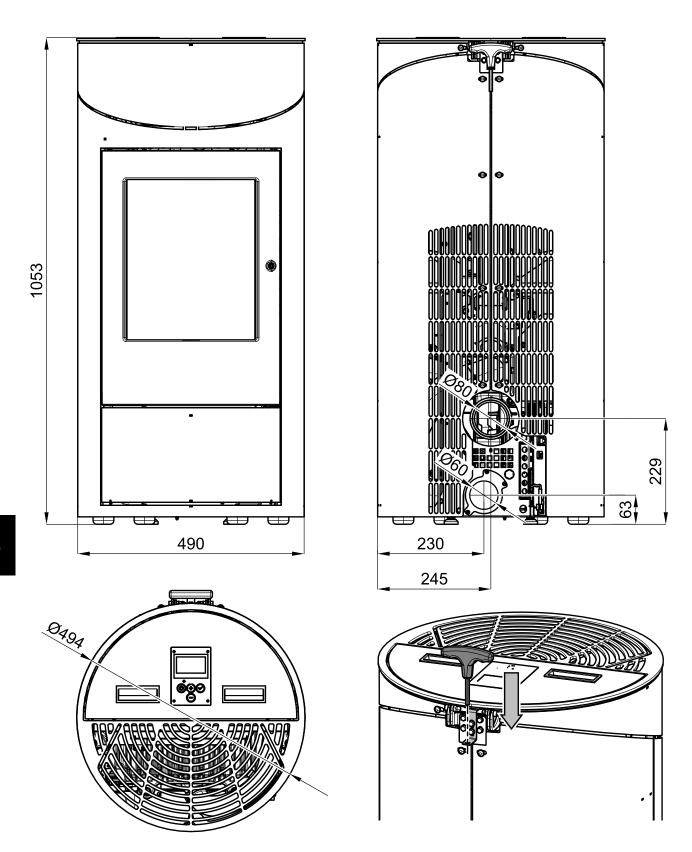
# 1. Technical data

	HSP 7 Diana 450.08
Heat output range:	2,4 – 8,2 kW
Nominal heat output:	8,0 kW
Height:	1053 mm
Width:	494 mm
Depth:	494 mm
Weight:	125 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
Flue gas flow rate in g/s	5,6 g/s
CO level in flue gas (%) (min./max.)	0,01/0,03 %
Efficiency:	90/94 %
CO level in flue gas:	138 mg/Nm³
NOx level in flue gas:	131 mg/Nm³
OGC level in flue gas:	5 mg/Nm³
Proportion of dust in flue gas:	17 mg/Nm³
Contents of storage container (pellet tank):	about 12 kg
Duration of burn with one charge (min./max.):	about 7 h/22 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 m³
Room heating capacity to DIN 18893, constant heating:	250m³/145m³/98m³
Room heating capacity to DIN 18893, timed heating:	165m³/95m³/65m³
Electricity supply:	230 V (50 Hz)
Electricity supply input:	
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):	T 3,15 A, 250 V

#### Safety distances

Minimal distances from flammable materials:	side:	10 cm
	rear:	10 cm
	front (radiation area):	80 cm

# 2. Dimensions



# 3. Cleaning work



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 reestablished: Put the combustion pot in correctly, close the combustion chamber door.

## 3.1. 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.

## 3.2. 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.

# 3.3. 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.

## 3.4. 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.



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.

# Maintenance work

# 4. 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.

## 4.1. Cleaning the flue gas passes



#### CAUTION\_

Check and clean the flue-gas ways, exhaust (flue-gas) fan and flue-gas ducts at the latest after 1000 kg of pellets have been consumed. Clean with a brush or an ash extractor.



#### 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:

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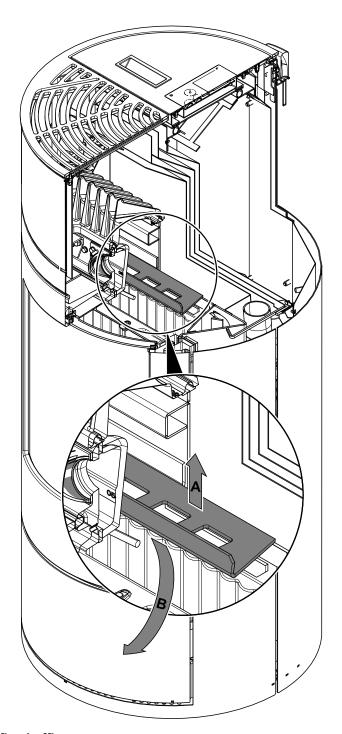


Figure 1: Removing the flue baffle

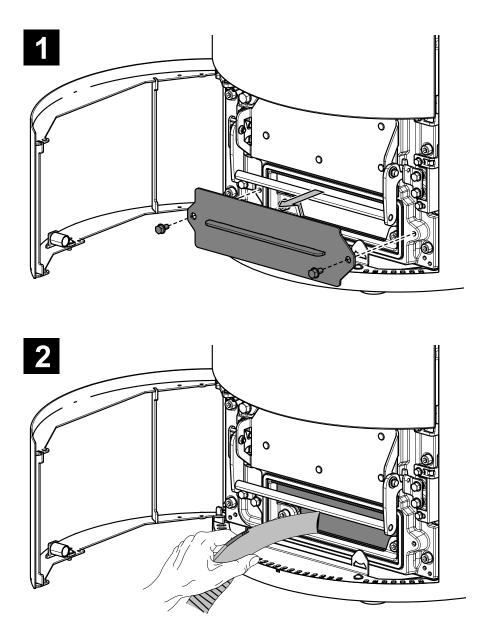


Figure 2: Removing the cleaning cover

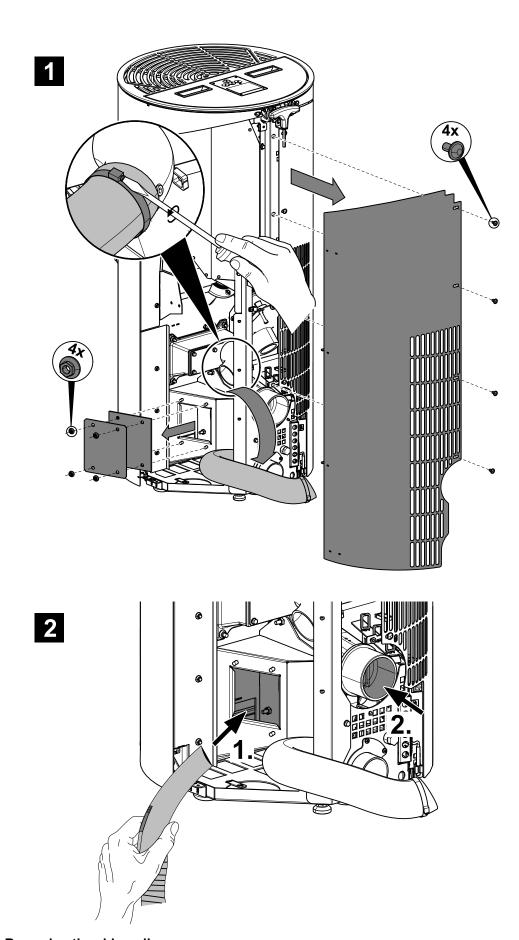


Figure 3: Removing the side wall

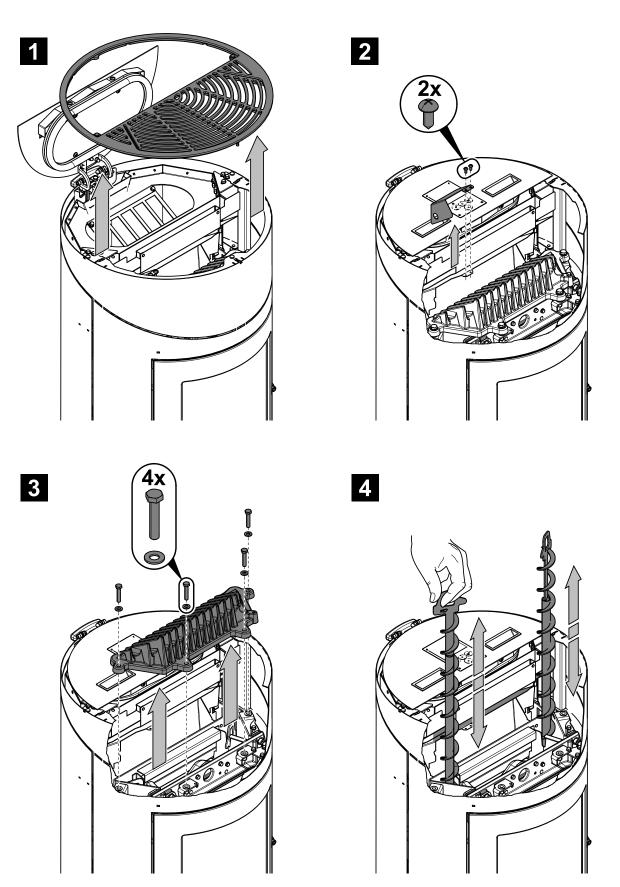


Figure 4: Shake the turbulator

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

## 4.2. 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.

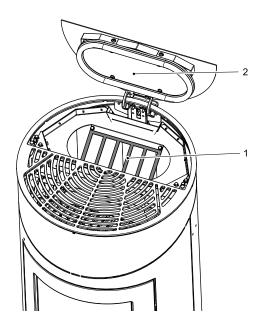


Figure 5: Pellet tank
1 Protective grille
2 Tank cover

## 4.3. Cleaning of the ash pan - once a week

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

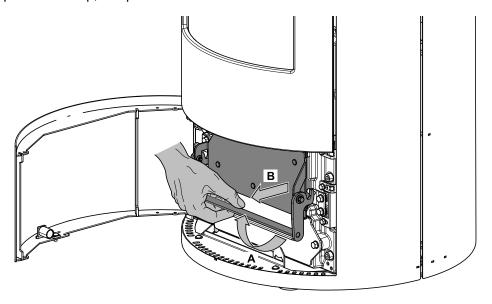
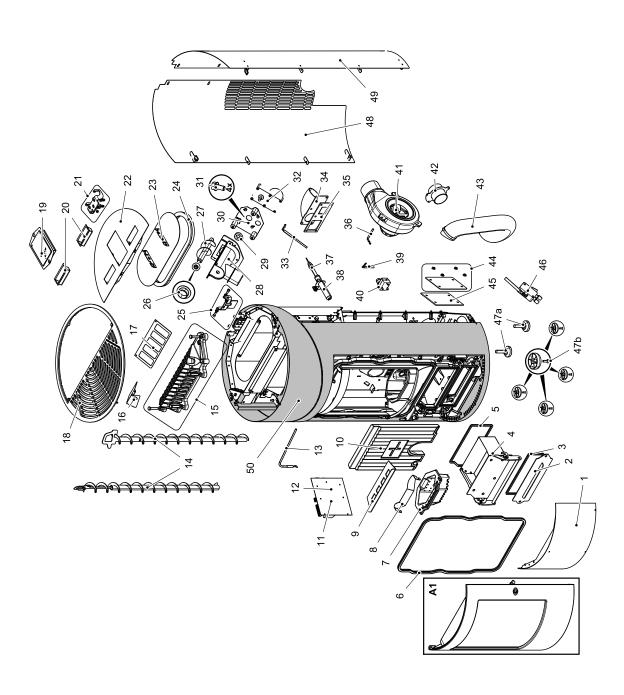


Figure 6

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# 5. Replacement parts list

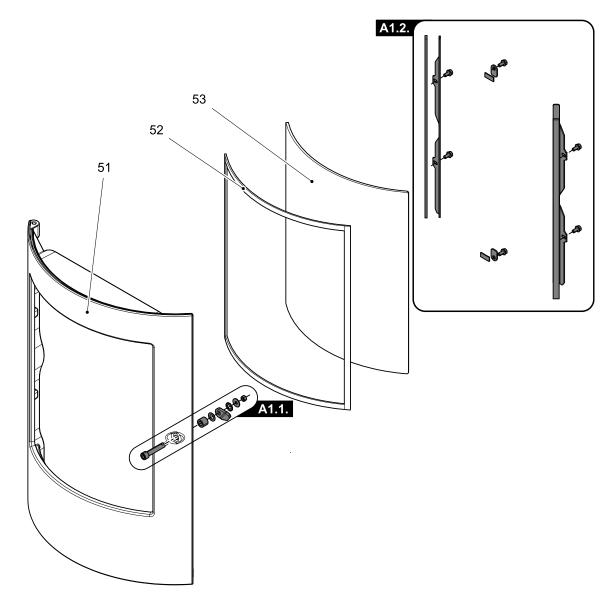
## 5.1. Replacement parts list HSP 7 Diana 450.08



Pos.	Description	Piece	Spare part number
	Replacement parts list HSP 7 Diana 450.08		
A1	Complete combustion chamber door/black	1 piece	0545008005300
1	Ash door panel/black	1 piece	0545008015330
1	Ash door panel/grey	1 piece	0545008025330
2	Cleaning cover front/black	1 piece	0545008005037
3	Seal for cleaning cover 8 mm (620 mm)	1 piece	0040008080005
4	Ash pan/black	1 piece	0545008005600
5	Seal for ash pan 8 mm (670 mm)	1 piece	0040008080005
6	Seal door 11 mm (1600 mm)	1 piece	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	0541908005569
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	0545008005981
18	Metal cover plate/black	1 piece	0545008006215
19	Operator console	1 piece	0561008005510
20	Grip	2 piece	0545008007581
21	Tank cap hinge/black	1 piece	0545008005341
22	Tank cover/black	1 piece	0545008006309
23	Profile retaining plate	1 piece	0545008006331
24	Seal, tank cover (1000 mm)	1 piece	0545008006339
25	Tank cap hinge/black	1 piece	0545008105931
26	Lower screw conveyor bearing	1 piece	0571207005026
27	Screw conveyor	1 piece	0545008007030
28	Conveyor	1 piece	0571207016060
29	Collet	1 piece	0545008005943
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

34	Suction flange	1 piece	0545008105335
35	Seal for suction flange	1 piece	0545008007333
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	ОС	1 piece	0089500080005
41	Induced draught fan	1 piece	0561008005807
42	Air inlet funnel	1 piece	0545008105920
43	Hose Meniflex AL L=570	1 piece	0545008105315
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	0545008016150
48	Side wall left/grey	1 piece	0545008026150
49	Side wall right/black	1 piece	0545008015140
49	Side wall right/grey	1 piece	0545008026140
50	Front panel/black	1 piece	0545008106100
50	Front panel/grey	1 piece	0545008116100

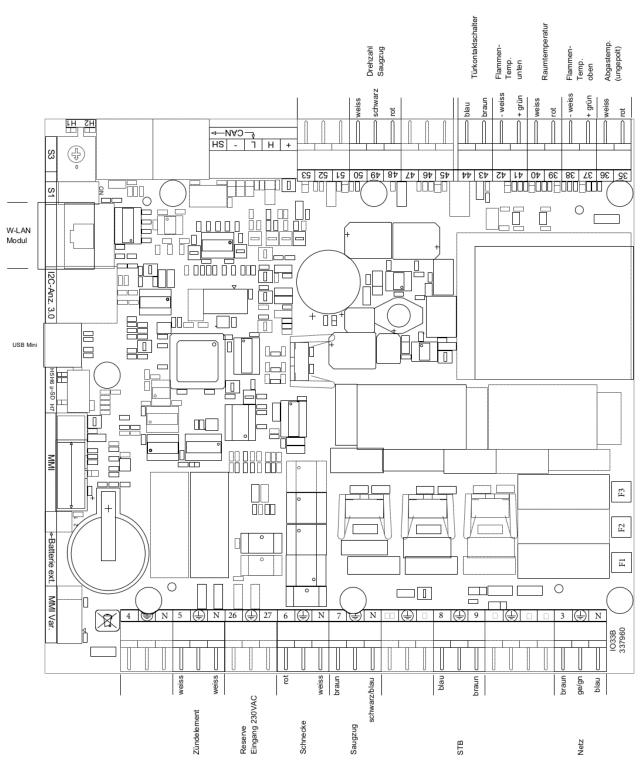
## 5.2. **Detail A1**



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)	1 piece	0040208020005
53	Door glass	1 piece	0545008005309

# 6. Circuit diagram

Circuit diagram IO 33.3



#### **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
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
F3	Fuse T 0,315 A operator console

