

**ÖkoFEN Automatic Wood Pellet Boiler System
(OE12) Maintenance and Servicing Guidance**

Name and address of system installation:

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Name and address of Service Engineer:

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Date:
Pellematic Boiler Type:
Boiler set output in kW:
Boiler serial No:
Pelletronic controller type:
Controller SW version:
Heating circuit regulator:
Version of CMP software:
System Installed:
System Commissioned:
Last service:
Total boiler running time:
Number of start-ups:
Average cycle time:

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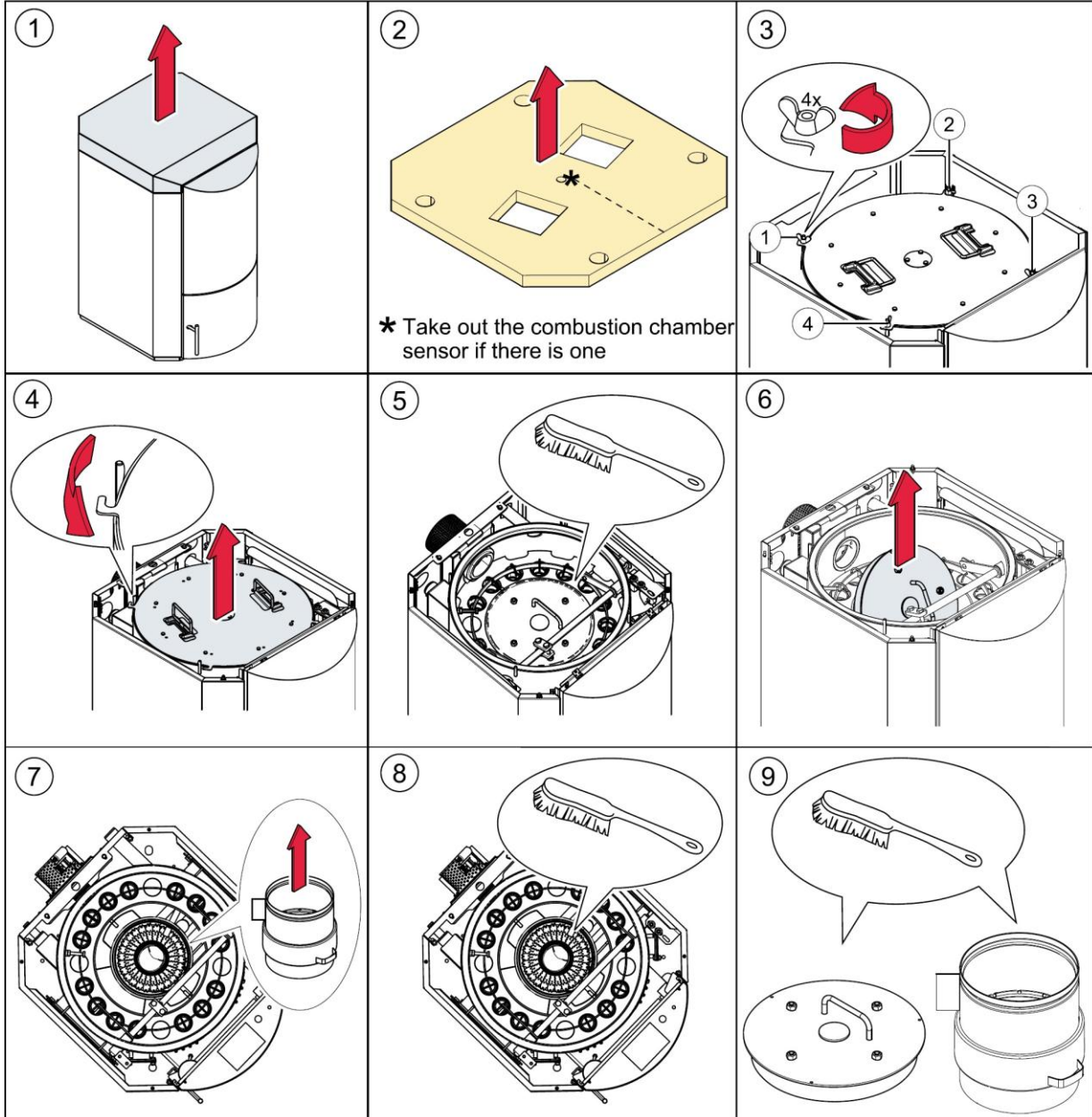
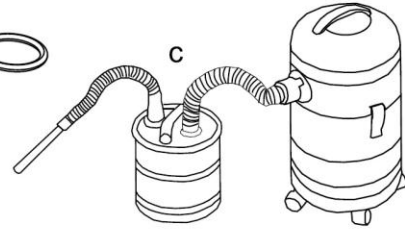
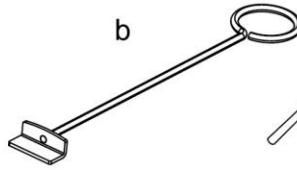
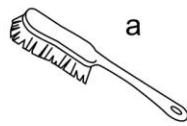


ANNUAL CLEANING AND SERICING INTERVALS:	Check:	Comments:
<ul style="list-style-type: none"> ▪ The flue should be swept once a year. Flue sweeping is not part of the OkoFEN engineers' service. 		
<ul style="list-style-type: none"> ▪ The boiler should be cleaned and undergo an engineer's service every year. 		
<ul style="list-style-type: none"> ▪ Exception: Where the boiler is being used as a BASE LOAD BOILER the service interval is 1,500 hours of operating time. 		

BOILER CLEANING CHECK LIST:	Check:	Comments:
Please request that the boiler is switched off the night before.		
<ul style="list-style-type: none"> ▪ Isolate power supply 		
<ul style="list-style-type: none"> ▪ Boiler dust is very fine, it is important to work clean. Protect all areas with dust sheets etc. 		
<ul style="list-style-type: none"> ▪ Take the necessary personal protection measures: Disposable overalls, dust mask, latex gloves. 		
<ul style="list-style-type: none"> ▪ You will need a suitable, bucket type vacuum cleaner with a good filter system. (similar to a "Vax" or "Henry") 		

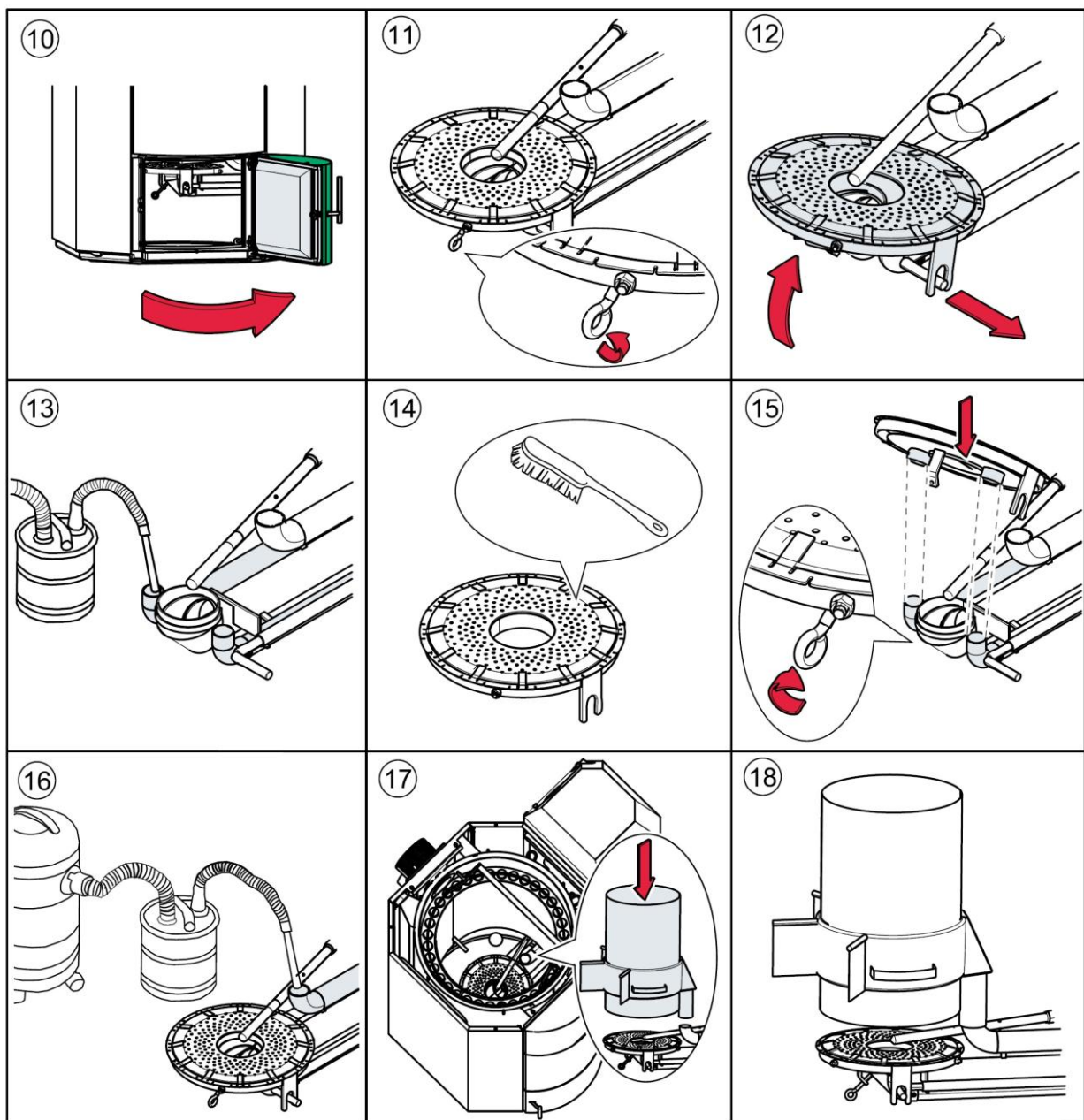
PROCEDURE FOR CLEANING THE BOILER:	Image Ref:	Comments:
Always clean from the top down and try not to disturb too much of the dust.		
a) Lift outer boiler lid off and set aside.	1	
b) Remove flame temperature sensor from its pocket and examine.	2	
c) Remove insulation and set aside.	2	
d) Remove top boiler lid_ take special care to lift the lid vertically clear of boiler when a flame sensor is fitted , vacuum off lid before putting on dust sheet.	3,4	
e) Lift out combustion chamber lid and vacuum off lid before putting on dust sheet.	5,6,9	
f) Carefully remove the main burner [flame] tube. Clean it off and examine. Is it damaged? If so incorrect fuel may be indicated and replacement may be necessary.	7,9	
g) Clean down the inside of the boiler body.	8	
h) Vacuum up the ash & partially burnt pellets from the burner end of the boiler auger. (This is best done from the top).	8	

You need:
 a) Brush
 b) Poker
 c) Vacuum cleaner with ash filter

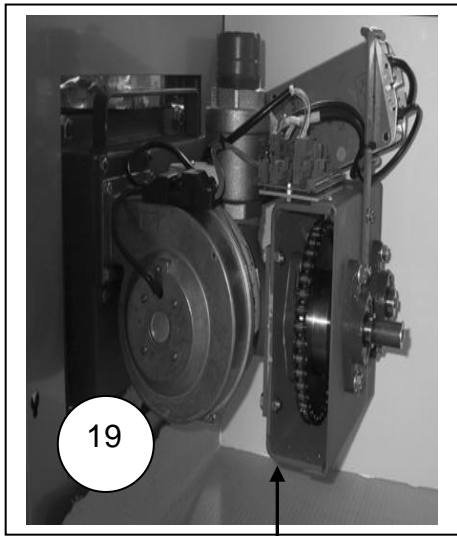


i) Open ash door, clear surface of burner disc and loosen off the wing nut that retains the burner disc.	10,11	
j) Lift off burner disc. Ensure NO debris falls into the primary air supply pipes.	12,13	

k) Clean with a wire brush, removing any carbon deposits. Examine and check condition then replace. Note: Small fractures radiating from the weld at the centre of the burner disk are normal and don't impair its function. (N/A to segmented burner plate)	14,15	
l) From the top of the boiler look into the boiler auger, using an old chisel or screwdriver remove any carbon deposits at / in the end of the boiler auger.	15	
m) Remove ash pan, empty & clean.	10	
n) Clean round the inside base of the boiler cavity.	10	
o) Clean the primary air tubes using a vacuum cleaner	13,16	



NOTE: Reduction in boiler performance and damage to pellet boiler due to blockages in the air inlets. Ensure all air intakes on the burner plate and flame tube are clean.



Drive chain



Flue fan

p) With side casing removed vacuum clean the burner auger motor to ensure it is dust free. Clean around the other burner assembly components too.		
q) With side casing already off lightly grease drive chain on both auger and vacuum type boilers.	19	
r) Remove flue fan and clean out thoroughly with a vacuum cleaner.	20	

NOW THE BOILER IS CLEAN

REASSEMBLE & CLEAN EXTERIOR OF BOILER:	Check:	Comments:
a) Ensure the inner combustion chamber lid is correctly seated.		
b) Once the inner combustion lid is fitted correctly carry out a cleaning motor test (P203). This is a visual check to ensure the springs reach their maximum height.		
c) Replace outer lid and panels.		
d) Refit ash pan and ash compression chain.		
e) Dust off boiler exterior, clean and polish.		
f) Remove overalls		

Output Test:	Check:	Comments:
a) Motor burner auger [ES] – Does the motor feeds pellets to the burner plate?		
b) Motor suction fan [VAK] – Does the fan run?		
c) Motor auger fabric tank [RA] – Does the auger run?		
d) Motor store room auger – Does the auger run, if so is it in the right direction?		
e) Motor ash auger [AV] – If installed does the auger run?		
f) Motor burner plate cleaning system [AV] – Does it rotate back and forth?		
g) Combustion air fan [LUFT] – Does the combustion fan run?		
h) Solenoid valve [MA] - Does the solenoid switch over, can you here it click? Note: Low temp systems only.		
i) Flue gas fan [SZ] – Does the flue gas fan run? Note: Test all 5 power settings.		
j) Boiler controlled pump [UW] – Does the pump run? Note: Only possible if connected.		
k) Fault signal relay [SM] – Does the relay switch on and off, can you here it clicking?		
l) Ignition [ZUEND] – Is the electrode working, can you see the current draw?		
m) Anti-burn back system [BSK] – Does the Belimo valve open and close?		
n) Motor hopper [RES1] – Does this motor run?		

SYSTEM EXAMINATION: PE Auger Boiler	Check:	Comments:
a) Is the external auger motor fitted correctly? Is it clear of obstructions?		
b) Is the auger motor bracket fitted correctly? If the auger is fitted on the right hand side the support bracket should be on the bottom, if fitted on the left then the support bracket will be on the top... <u>Very important.</u>		
c) Check the flexi hose between the external auger and the auger fire gate is not broken or damaged in any way. This should be near vertically straight as possible.		

SYSTEM EXAMINATION: PES Vacuum Boiler	Check:	Comments:
a) Are all vacuum connections air tight?		
b) Check the vacuum hose from boiler to Flexilo is clear of obstructions.		
c) Is the top cover of the day hopper with the vacuum motor attached airtight?		
d) Check the capacity sensor functions properly, this can be checked by seeing if the LED lights on/off.		
e) Visually inspect wiring and in particular the earthing of vacuum hoses etc.		

SYSTEM EXAMINATION: Flexilo Tank	Check:	Comments:
a) Check the overall construction of the tank, is it in good order?		
b) Is the filler nozzle at the maximum height possible?		
c) Check auger or vacuum unit is fitted correctly to tank.		
d) If the emergency shut off slot is open on the spigot (S type only) underneath the tank clear dust off and cover with duct tape.		

Boiler Check:	Check:	Comments:
a) Restart boiler: After 15 minutes of boiler run time on full load check combustion and adjust as necessary		
b) Is the Boiler working well? Check heating controls (Pelletronic). Adjust as/if necessary.		
c) Check function of pump sets and mixers.		

