

OWNER'S MANUAL SPARE PARTS & MAINTENANCE ACCESSORIES



PowerHot Box 500

V17HB1

Technical data

Model	PowerHot-Box 500 / 18		
Code No	405020	406020	406120
Voltage & frequency	230V / 50Hz	230V / 60Hz	110V / 60Hz
Motor power rating	0.15 Kw		
Operating Pressure (maximum)	500 bar		
Water flow (maximum)	18 lpm		
Minimum inlet hose size	3/8"		
Dimension	90 x 56 x 85cm		
Weight	100 Kg		

Machine's I.D.

Serial Number:

Important note

You should never exceed the maximum permissible pressure stated on machine's name plate!

Check carefully the nozzle size at the spraying gun before using the Hot Box.

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USER'S MANUAL

Introduction

Thank you for purchasing **PowerHot-Box 500!**

This manual or part of it should not be reproduced without the written approval of the manufacturer.

Every effort has been made to ensure that the information in this manual is both accurate and current. However, we reserve the right to change, alter or otherwise improve the product and its documentation at any time without prior notice.

Manufacturer's warranty is limited to repair or replacement of faulty parts at the time of manufacture. **Manufacturer has no responsibility in case of:**

Wrong use of the machine; Use contrary to specific national regulations;
Wrong installation; Lack of maintenance; Unauthorised modifications; Use of non-original spare parts; failure to comply with recommended instructions; exceptional invents

Warning

Please read carefully this manual before starting the machine for the first time and keep this manual in a safe place. We cannot be held responsible for damages or malfunctions due to not reading this manual.

Safety precautions



This machine should be operated by qualified adult people only.

Never let children or people who are not trained for its use, to run the machine.

The machine should be used according to relevant national safety rules.



Always check and ensure that the machine and its accessories (hoses, cable, fittings, gun, nozzle etc.) are in good working condition before start-up.



If during operation you observe any leakage, abnormal noise or any other malfunction, stop the machine and get it serviced.

You should not attempt to repair and reuse damaged high pressure hoses. Replace with original hoses only.



Never direct the spray jet at yourself, other people or animals, at the machine itself and never attempt to clean your clothes or footwear with the machine.

Keep bystanders away from the working area.

Always use eye protection, ear protection, adequate protective clothing and footwear.



Use the correct type of electric plug to a corresponding socket with ground earth wiring.

Ensure you connect the machine to the correct main supply voltage, as specified by the manufacturer.

Use only watertight cable, plugs and sockets. Any electrical installation should be made only by a qualified electrician.



Always ensure the machine is placed in a stable position and cannot move.

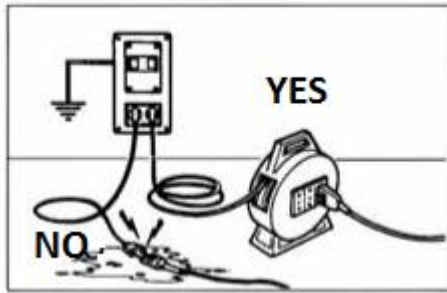
Do not operate the machine without water or with insufficient quantity of water.



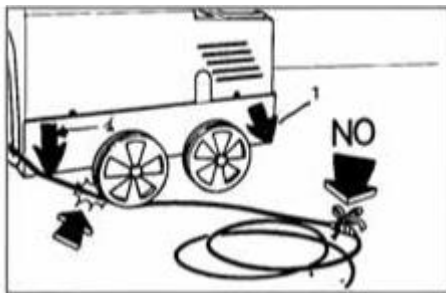
Do not make modifications and service regularly the machine as described in this manual.

Use only original spare parts for maintaining the machine. Repairs should be done only by qualified personnel.

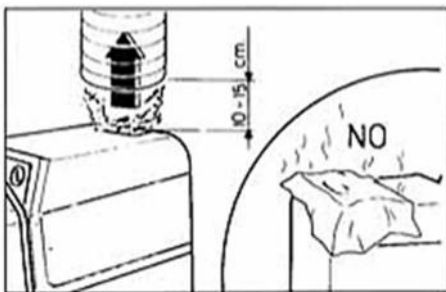
After works, the machine should be stored and secured against unauthorised use.



Be sure your electric plug complies with the safety rules in force. The plug must be properly and securely connected with an approved earth terminal. If you want to use an extension cable always use a cable reel with proper section cable.



Do not use the machine near inflammable materials and observe relevant fire prevention regulations. It is recommended to have an extinguisher near the machine.

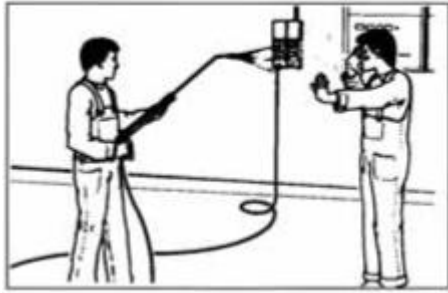


Do not use the burner in buildings or confined spaces without adequate ventilation. Do not touch or cover the exhaust.

If connected to a chimney, ensure adequate draught is available. If necessary, install a fan in the system.



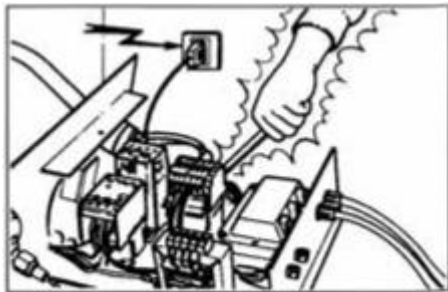
Do not allow children or untrained personnel to operate the machine.



High pressure water jets can be dangerous. Do not direct the water at any person, animals or electrical equipment, or towards the machine.



Do not place any object over exhaust.



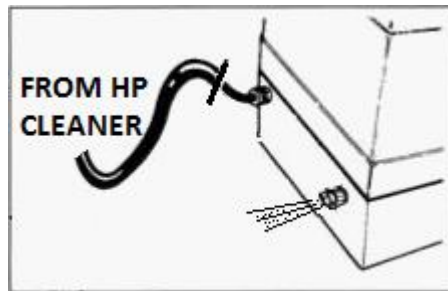
Always disconnect the plug before commencing any servicing work on the machine (do the same during installation).

OPERATION

Installation and use

Important!!

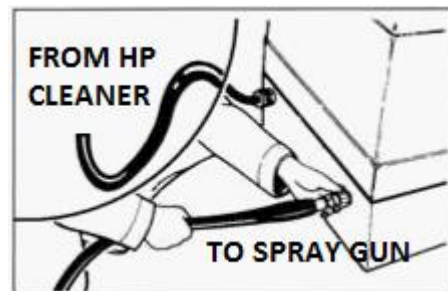
- Check that the electric mains supply is suitable for the Hot Box, as indicated in its name plate.
- After connecting the plug to the electric supply source, turn the main switch ON and check that air comes out of the chimney.
- Switch OFF.



Connect the high pressure hose from the High Pressure Cleaner to the inlet of the Hot Box.

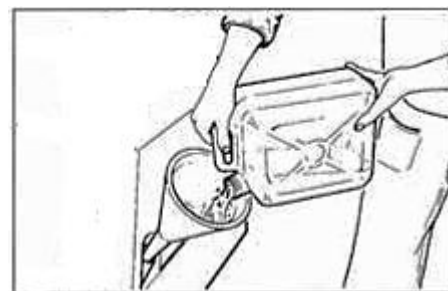
Do not connect yet the high pressure hose and spray gun to the outlet of the Hot Box.

Open the water tap, start the High pressure cleaner and let water come out for about 2 minutes to impurities.

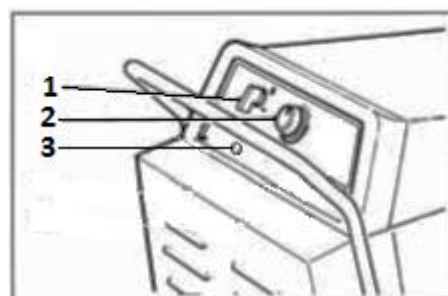


Connect your High Pressure Cleaner's Outlet to the Hot Box INLET port via a proper high pressure hose.

Then connect a high pressure hose at the OUTLET of the Hot Box to the spray gun.



Check the level of the fuel and fill with clean diesel if required.



Turn ON the main switch (1)
Adjust the temperature required by the thermostat (2)

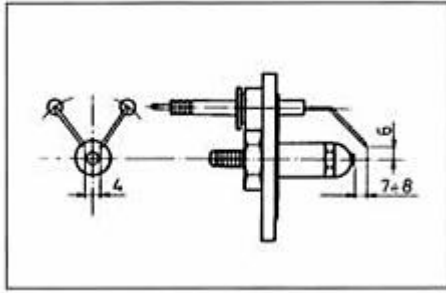
The red indication light (3) will lit if there is a problem:

- Continuously when fuel level is low
- Flashing; photo-cellular indicates an abnormal function of the burner

After works

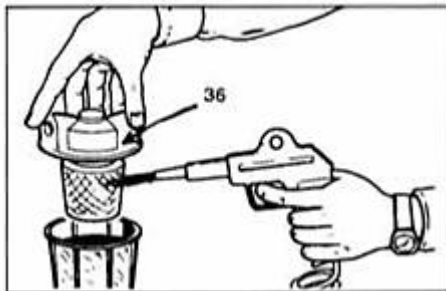
- Turn the thermostat at 0 °C and let cold water come out for about 2 minutes to cool the coil of the burner.
- Turn the switch of the Hot Box to OFF position.
- Switch OFF the high pressure cleaner as well.
- Disconnect the machines' electric cables from the electric power source.
- Press the trigger of the gun to de-pressurize the high pressure circuit.
- Close the feed water tap and disconnect the hoses.
- Release remained water at the high pressure hoses, reel up and store carefully.
- Store the Hot Box in a safe, frost protected and dry area.

MAINTENANCE



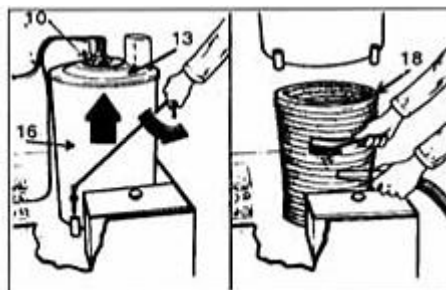
Electrodes:

Check the electrodes position periodically to obtain perfect combustion and to avoid soot.



Diesel Filter:

To avoid damage of fuel pump due to dirty fuel, there is a filter (No 36 in the picture) that you have to remove and clean periodically with a jet of compressed air. Place it back again and check the seal gaskets with a compressed air jet.



Boiler:

To clean the boiler, dismantle as follows.

- Take down the combustion group (10)
- Remove the boiler cover (13)
- Remove the screws from the lining of the boiler (16)
- Clean the soot from the coil (18) with a stiff brush and vacuum cleaner
- Rebuild everything following the above operations on the opposite side

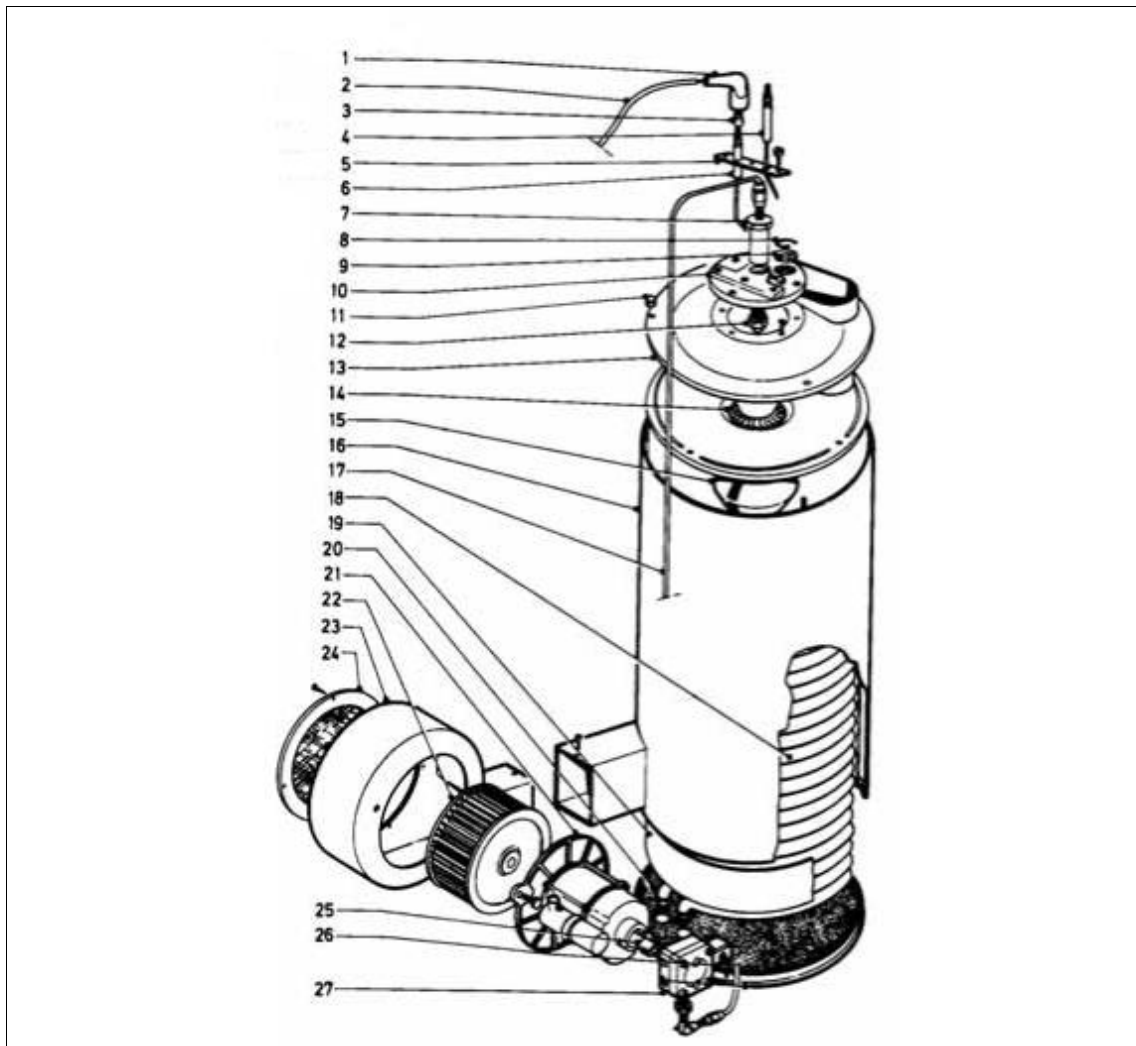
Troubleshooting

Malfunction	Possible cause	Repair
Burner does not start	Thermostat not set or disconnected	Set the thermostat
	No diesel in tank (Red trip indicator should lit)	Fill tank
	Electrodes dirty	Clean electrodes
	High tension cables of the electrodes faulty or burnt	Change high tension cables
	Diesel filter dirty	Remove and clean the filter
	Electrodes too far apart	Reposition
Burner makes too much smoke	Air not open enough	Set air by regulation lock
	Diesel pressure too high	Reduce fuel pump pressure
	Boiler very dirty	Clean out boiler
	Burner nozzle unserviceable	Replace burner nozzle

➤ If the problem insists, ask for assistance from the manufacturer

SPARE PARTS

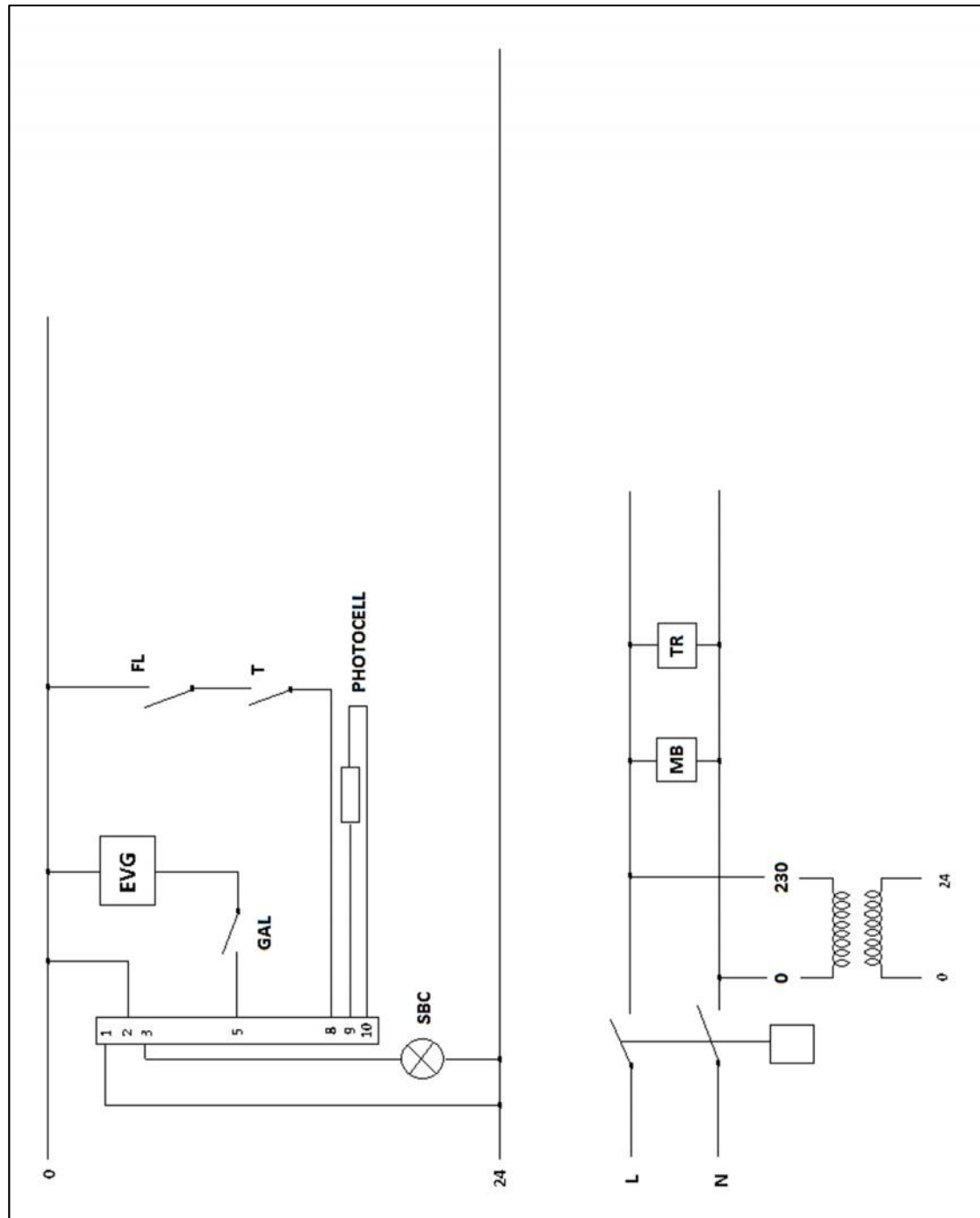
Boiler



Pos	Part No	Description
1	321001	Ignitor cap
2	321002	H.T. electric cable
3	321003	Pipette
4	321004	Electrode
5	321005	Retainer 70x20x3 (electrode)
6	321006	Electrode
7	321007	Nozzle Holder
8	321008	Circlip
9	321009	Sight glass
10	321010	Burner Head
11	321011	Nut M6
12	321012	Fuel Nozzle
13	321013	Boiler top cuter
14	321014	Swirl plate

Pos	Part No	Description
15	321015	Boiler top inner
16	321016	Boiler jacket
17	321017	Copper pipe(fuel)
18	321018	Coil spiral
19	321019	Stainless steel band
20	321020	Boiler bottom complete
21	321021	Fan motor
22	321022	Fan
23	321023	Fan housing
24	321024	Fan guard
25	321025	Coupling
26	321026	Solenoid
27	321027	Diesel pump with solenoid

Electrical circuit diagram



Symbol	Description
IG	Switch
FL	Flow switch
EVG	Diesel solenoid valve
T	Thermostat

Symbol	Description
GAL	Floating
MB	Burner motor
TR	Transformer
SBC	Spy boiler block

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