

Operation Manual

for Electric Steam Car Wash



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1. Components

- **Main Body and accessories**



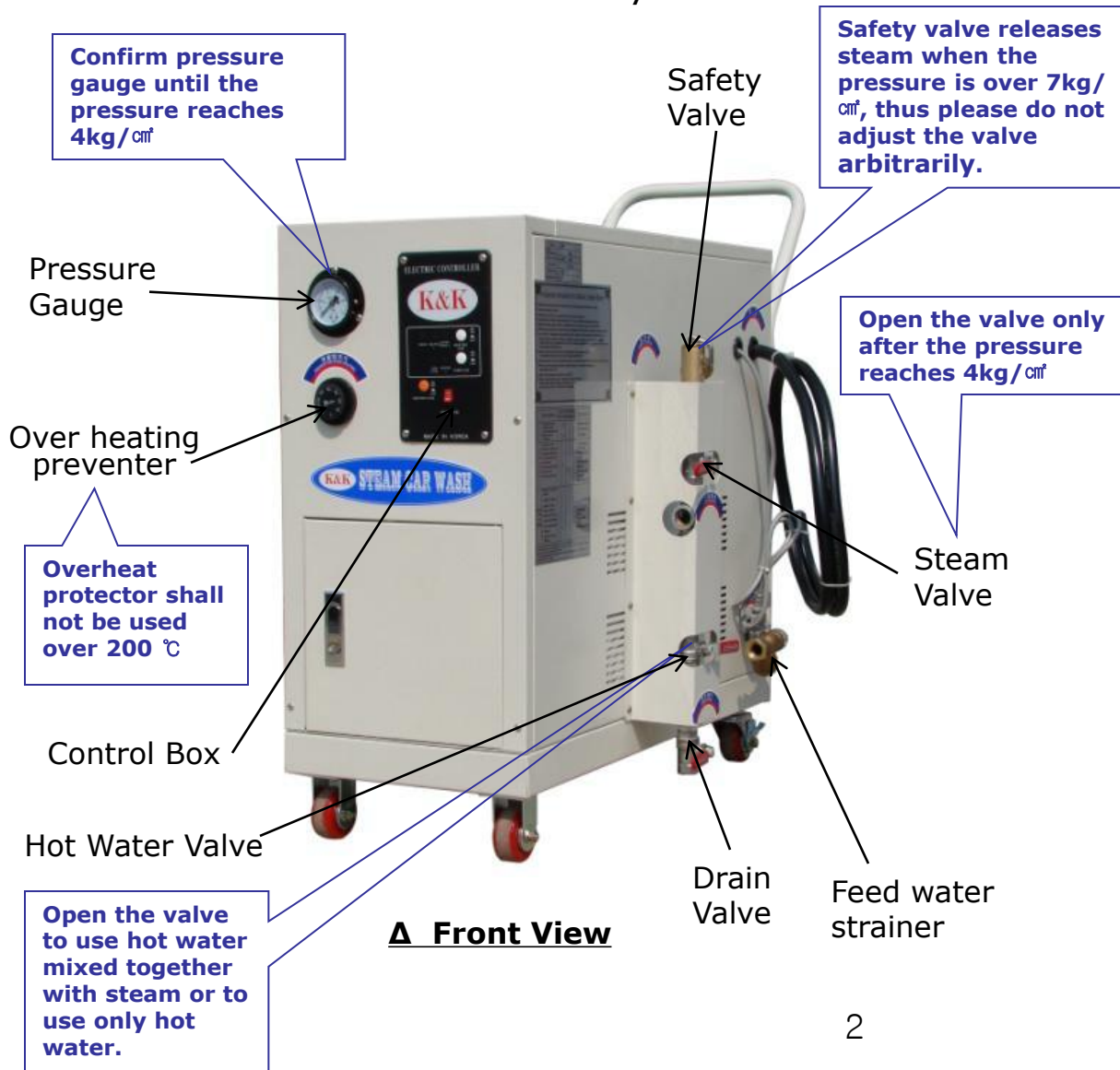
Electric Steam Machine



Steam Gun + Steam Hose

2. Names of parts

A. Names of the Main Body Parts



- ① Heater 1
- ② Drive
- ③ Heater 2
- ④ Low water level
- ⑤ Heater 2 S/W
- ⑥ Water supply
- ⑦ Heater 1 S/W
- ⑧ Pump S/W
- ⑨ Drive S/W

B. Names inner side parts

**Warning! Don't adjust the PB arbitrarily.
Prohibited to use over 4kg/cm²**

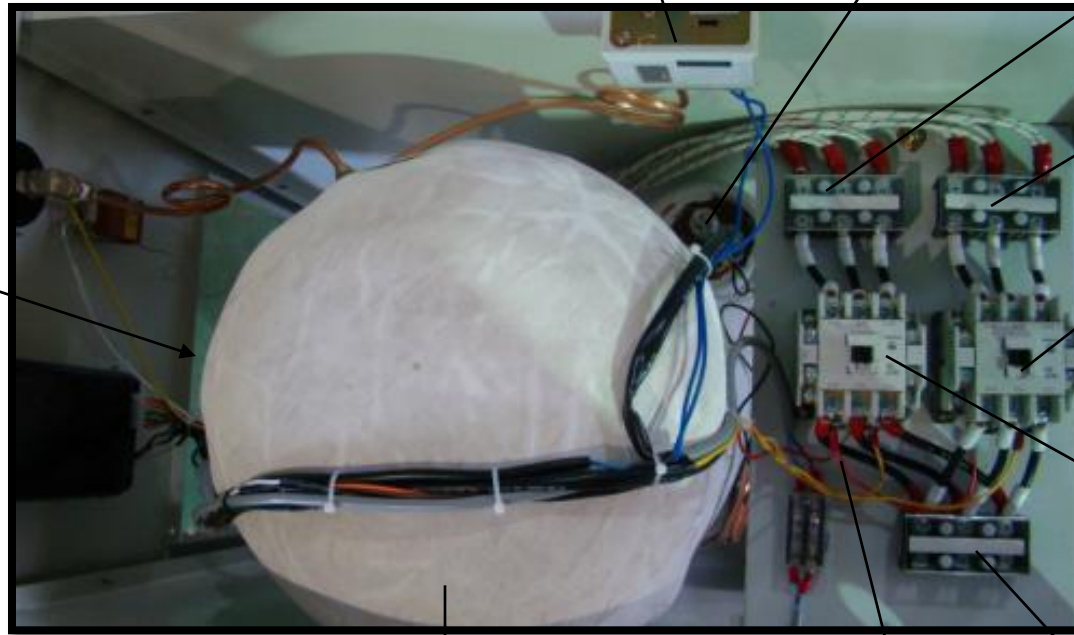


Pressure Breaker



Electric Heater
(Behind the lower door)

Front side



Boiler

Fuse Set

Water Level Sensor
(E1, E2, E3)

Terminal block
60A 3P

Terminal block
60A 3P

Electronic
contactor
(MUF35)

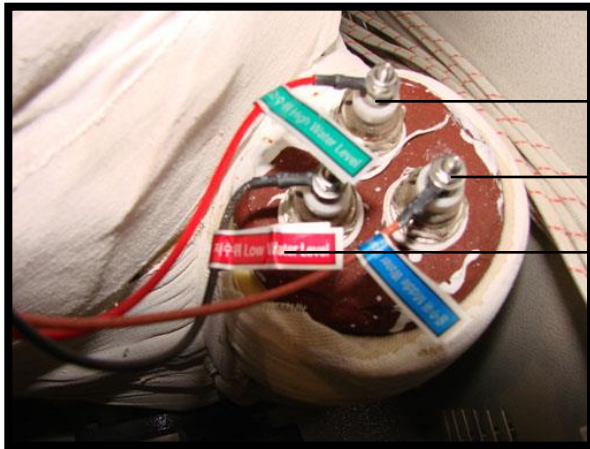
Electronic
contactor
(MUF35)

Terminal block
60A 3P

- Top View -

C. Water sensor parts

Low, Mid & High Level Sensor



→ High Water Level Sensor

→ Mid Water Level Sensor

→ Low Water Level Sensor



→ **Water Level
Sensor Rod**

D. Names of inner side parts

When you use this boiler first time, please open the cap and fill the water inside.

Boiler body

Check valve

Any other substance in the water can cause trouble.

Feed water pump

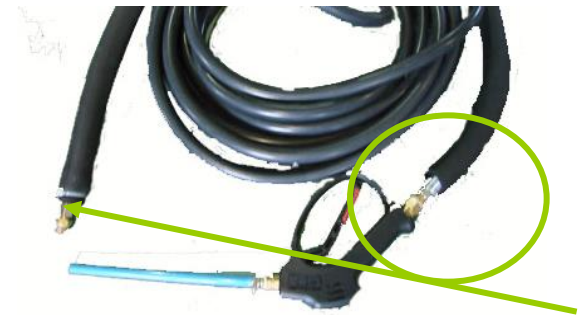
Solenoid valve



3. Drawing

4. Preparation Before Use

1. Confirm the supply power before connecting the Machine. Power could be 220V
2. Electric Circuit Breaker has to be connected with 20-30amps power. It may vary according to the capacity of the Machine.
3. Please connect water hose to the water tank of the Machine.
4. Connect the steam gun to steam hose with spring at the end.
5. Please cover disclosed connecting part with soft insulator when using it.



5. Operation Method

- **First Step : Turn on the power**

1. Turning on the power switch, the lights of " power", "drive", "water supply" and "low water level" will be lit up and water supply will be started .
2. When set amount of water is supplied, heater light will be turned on automatically and the pre-set steam pressure will be reached within 10 minutes. The pressure is limited to 4kgs.
3. All these functions will work automatically as soon as the power switch is turned on.

- **Second Step : Select the Economy Switch**

In case of the 20KW machine, there are four Heaters inside the machine. Heater 4 does 28kgs of steam.

If the economy switch is turned on, both Heater 1 & Heater 2 will be working.

If the economy switch is turned off, only Heater 1 will be working.

Then you can use it for the other purposes.

- **Third Step : to wash Car**

1. When the steam gauge goes up to 4kg, open the steam valve to use.
2. And start washing cars, hold the steam gun properly and shoot the
3. steam to the car surface you want to wash.

- **Fourth Step : After use**

1. Close the steam valve tightly.
2. Turn off the power and close the water supply valve.
3. If the machine is not in use for a long time, open the drain valve and discharge the water from the tank.

6. Maintenance

- Remove moisture and dust from the Machine and keep it always clean.
- Use tap water (underground water can shorten the life of car wash)
- If not in use for a long time, please drain water of the Heater.
- Store the Machine at a place where the temperature is always not lower than 5 °C.
- (Be careful not to be frozen as it may cause damage.)
- Remove water completely at 1Kg/cm² of pressure.
- Always follow the instruction of the manual and don't handle such parts like pressure breaker and electric panels & safety valve freely. When it is required to repair such parts, contact service man or the manufacturer.
- Any trouble caused by arbitrary handling is subject of no warranty.
- When not in use , please reconfirm to turn off "Power" and "Water Supplies".
- Turn off the power in case of natural disasters, electric work, or in case of any other emergencies.
- Never adjust the Over Heating Protector freely over 200 °C.
- Don't strip off the short hose cover from the main hose.

7. Troubleshooting

Trouble	Reason	Maintenance
No sign of power light	Poor connection. (electric circuit breaker worked)	Check plug connection or electric circuit breaker
Pump is working, but no sign of low water level light.	Failure of water supply, dirty electrode of low water level gauge or mal function of solenoid valve	Check water supply and clean the electrode of low water level gauge or check whether solenoid valve work properly or not
No Steam but Heater Light is on	Heater defect	Contact the manufacturer
Electric circuit breaker is off without any reason.	Heater defect or short circuit	Contact service man or the manufacturer
Set pressure uneven	Defect of Over Heat Preventer or Pressure Breaker	Contact service man and check Over Heat Preventer or Pressure Breaker
Keeps feeding but no feeding light on.	Malfunction of Solenoid valve	Pull the drain out from Solenoid valve or check the water pump
Leak of minute steam from Safety Valve	Safety Valve	Check the Pressure Breaker
Overheat light is on	The over heat protector works	Contact service man and reset the temperature. Check the water supply or overheat protector.

8. Specifications

Model	Type: SMCW-E20
HEATER POWER	220V, 60Hz, 3phase
DIMENSION	500mm × 950mm × 1010mm
NET WEIGHT	110kg
CONTROL POWER	220V, 60Hz, single phase
HOSE LENGTH	10 M
POWER CONSUMPTION	20 KW
STEAM PRESSURE	4 Bar
STEAM PRODUCTION CAPACITY	28KG/Hr
PREHEATING TIME	7~10 Min
FOR OVERPRESSURE	7 Bar of safety valve
ELECTRIC CIRCUIT BREAKER	30Amp