Best Fogger

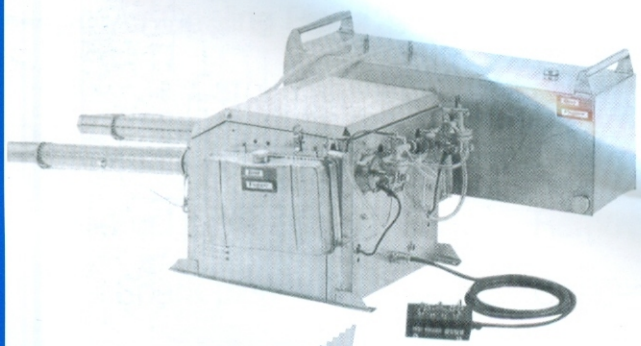
User's Operating Manual

BF150

BF150P

BF200

BF200P

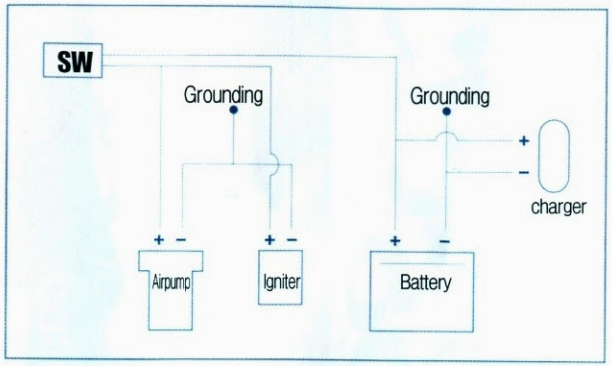


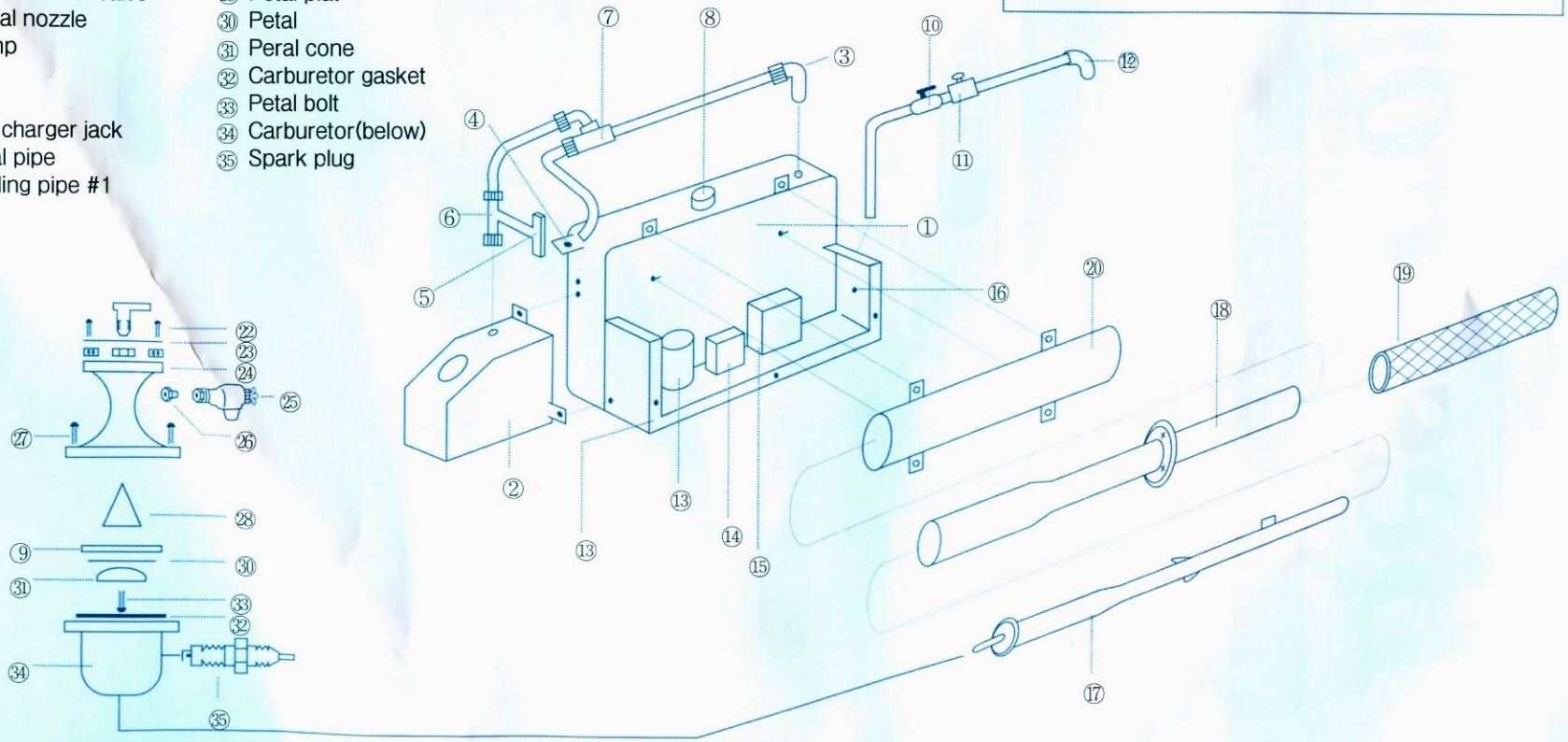
BF400

Best Fogger

Description of fogging machine– portable

① Chemical tank
② Fuel tank
③ Chemical tank elbow nipple
④ Start button
⑤ Fuel check valve
⑥ Fuel T nipple
⑦ Chemical check valve
⑧ Chemical tank cap
⑨ Battery case
⑩ Chemical valve
⑪ Chemical control valve
⑫ Chemical nozzle
⑬ Air pump
⑭ Igniter
⑮ Battery
⑯ Battery charger jack
⑰ Thermal pipe
⑱ Air cooling pipe #1
⑲ Air cooling pipe case
⑳ Air cooling pipe #2
㉑ Air nozzle
㉒ Air nozzle bolt
㉓ Air nozzle board
㉔ Carburetor(above)
㉕ Fuel valve
㉖ Fuel nozzle
㉗ Carburetor bolt
㉘ Petal bullet
㉙ Petal plat
㉚ Petal
㉛ Peral cone
㉜ Carburetor gasket
㉝ Petal bolt
㉞ Carburetor(below)
㉟ Spark plug





Portable Fogging machine

1.Part Names and Functions

Name of Part	Function
①Chemical tank	Holds and stores chemicals
②Fuel tank	Holds and stores fuel
④Start button	Button used to start-up the machine
⑤Fuel check valve	Keeps air flowing in one direction within the fuel tank
⑦Chemical check valve	Keeps the air flowing in one direction within the chemical tank
⑩Chemical valve	Controls the flow of chemicals
⑪Chemical control valve	Contorls chemical quantity
⑫Chemical nozzle	Injects chemicals into the thermal pipe
⑬Air pump	Pumps air into the carburetor and fluel tank when startion in Automatic mode
⑭Igniter	Changes low voltage into high voltage during when start button is pushed
⑮Battery	Runs the air pump and igniter
⑯Battery charger Jack	Outlet for Charger insertion
⑰Trermal Pipe	Where fuel is burned
⑱Air Cooling Pipe#1	Bring in air to cool machine during operation
⑳Air Cooling Pipe#2	Bring in air to cool machine during operation
㉔~㉞ Carburetor	Mixes fuel and air for ignition purposes
㉕~㉖Fuel nozzle and Fuel valve	Controls the amount of fuel into the carburetor
㉕Fuel filter	Removes impurities in the fuel
㉟Spark plug	Creates a spark which ignites the fuel

2.Machine Features

❶ Simplicity of Operation

Air and fuel is automatically mixed in the 12V air pump. So it starts with the simply with the push of al button.

❷ Durability of the Machine

This machine is made almost entirely of Staninless Steel or polyethylene(chemical tank, fuel tank etc), which prevents corrosion due to chemicals, and fuels

❸ Re-chargeable Battery

It is a non-liguid, 12V DC, rechargeable Battery, which does not degrade and also avoids the user the hassle of constant battery changes.

❹ Little Heat Generation

The Machine has been designed so it is cooled by two air-intake valves, that are connected to the fuel ignition part of the machine. This allows the machine to remain cool during use.

❺ Storng laniter

The igniter uses a 12V DC battery so that starting the machine is quick and easy.

❻ Easily Repaired

All components are designed for easy assembly/disassembly, the fuel line is made of a transparent material, and the spark plug is easily seen, so it is easy to spot problems when they happen.

3. How to use

❶ Items to be checked before use

a. Add the fuel and chemicals and then check that the spark plug is installed tightly, this guarantees that there will be no air leakage, which would cause the machine not to work.

b. Battery charge : if you are not using the machine in the semi-automatioc mode then you should check the 110V and 220V input power swich on the back of the machine. It should be in the middle position and then attach it to the power outlet.

Set the charger at 'automatic', but if charging is not performing well at 'automatic', set it to ' manual'.

To charge the machine, connect the charger jack to the charging outlet of the machine's main unit. The red light will go on during charging and then a green light will go on when the process is complete. The entire process takes between 10-12 hours.

❷ Starting

a. Automatic

Make sure the automatic/manual switch is in the automatic position.

Open the fuel nozzle in a counter clockwise direction, then squeeze the nozzle at the same time as you press the start button. If the machine fails to start then you should close the fuel nozzle by turning it in a clockwise direction and pressing the start button until you hear a 'cough' like sound. This makes sure that any excess fuel in the carburetor is gone.

Then repeat the steps to operate the machine.

b. Manual

Put the automatic/manual switch in manual position. Open the fuel nozzle in a counter clockwise direction and operate the machine by rapidly pressing the start button, which is located beside the automatic/manual switch. If the machine fails to start then you first should colse the fuel nozzle and then continually press the start button untill you hear a 'cough' like sound, which tells you that the carburetor has been cleared of any excess fuel.

Then repeat the steps to operate the machine.

❸ How to Spary the Chemicals

a. Open the chemical valve while the machine is running

b. Regulate the desired quantity of chemicals by adjusting the chemical control valve and then begin spraying.

❹ How to Stop the Machine

a. Close the chemical valve

b. You should wait for 5 or 6 seconds.

c. Close the fuel nozzle by turning it in a clockwise direction

d. Remove any air by turning the chemical cap. (Caution: the machine has the potential of causing a fire if the above steps are not conducted after every use.)

❺ What to do when use is complete

a. Clean the thermal pipe with the cleaning rod. Insert the rod then tuen turn it in a clockwise motion, in order to prevent damage to the machine.

b. Charge the battery

c. If carbon has collected in the spark plug, take out the plug and remove the carbon. (when replacing the plug make suer it maintains a 2-3mm gap)

4. Storage

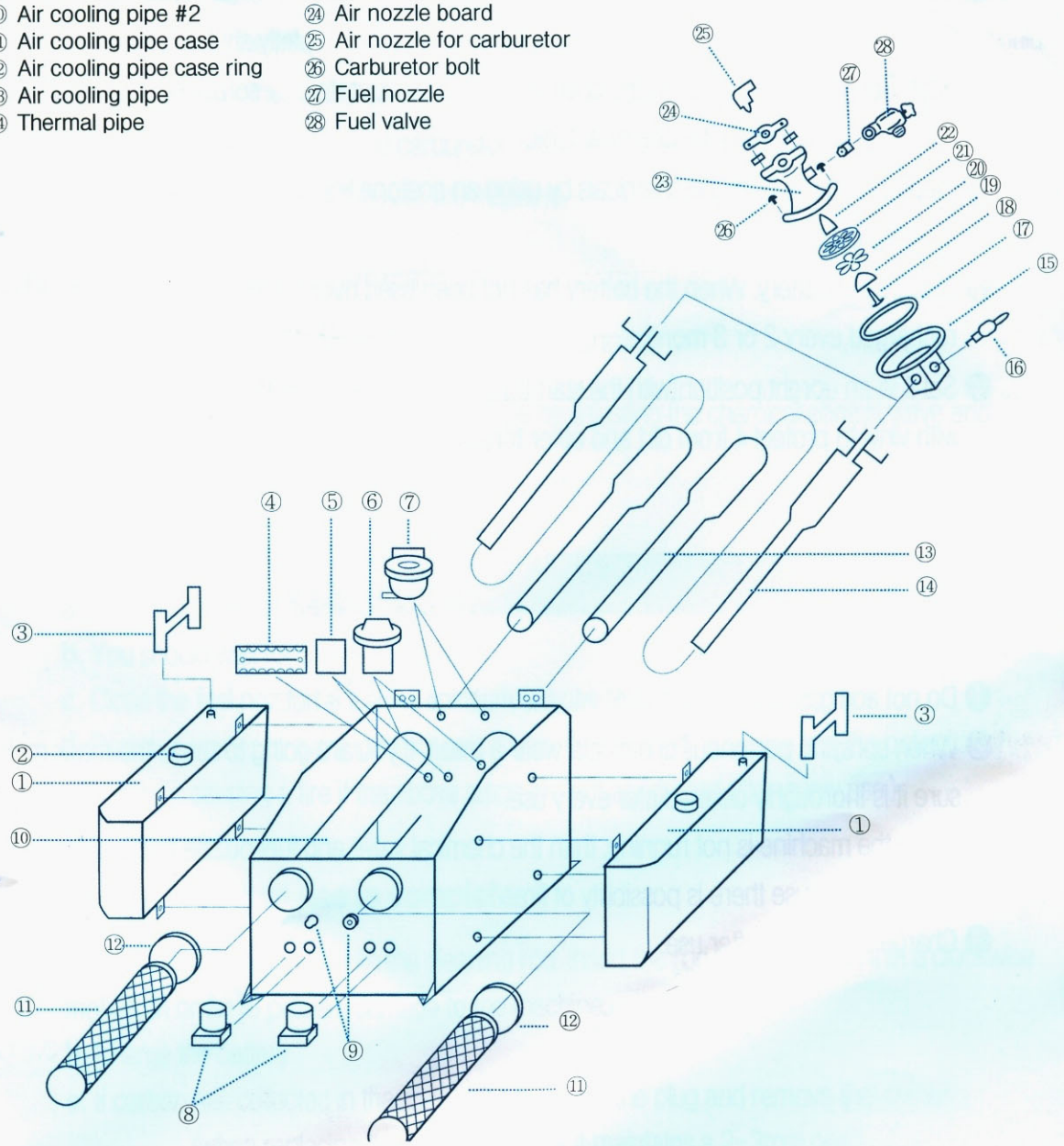
1. Completely empty the chemical and fuel tanks, then clean them thoroughly by the following method. Fill with acetone liquid, screw the caps completly shut and leave for one hour. Put light oil, or water in the chemical thak then operate it by spraying. Then clean any remaining sediment in the chemical tank.
2. Clean the reside from the chemicals by using an acetone liquid. Clean the residue due to oil by using gasoline.
3. Charge the Battery. When the battery has not been used over an extended time it should be recharged every 2 or 3 months.
4. Set it in an uprght position(with the start button pointing towards the ceiling)and cover it with vinyl to protect it from dirt and other foreign materials.

5. Caution

1. Do not add gasoline or chemicals into the machine while it is hot.
2. When spraying poisonous chemicals, wear a mask. If you are going to reuse the mask make sure it is thoroughly cleaned afer every use.
3. When the machine is not running, thun the chemical valve and fuel nozzle to the close positions because there is possibility of fire.
4. Charge the battery after use.

Description of machine– mounted on vehicle

① Fuel tank
② Fuel tank cap
③ Fuel check valve
④ Terminal board
⑤ Igniter
⑥ Air pump
⑦ Pressure switch
⑧ Solenoid valve
⑨ Connecter
⑩ Air cooling pipe #2
⑪ Air cooling pipe case
⑫ Air cooling pipe case ring
⑬ Air cooling pipe
⑭ Thermal pipe
⑮ Carburetor(below)
⑯ Ignition plug
⑰ Carburetor gasket
⑱ Bolt
⑲ Petal cone
⑳ Petal
㉑ Petal plate
㉒ Petal bullet
㉓ Carburetor(above)
㉔ Air nozzle board
㉕ Air nozzle for carburetor
㉖ Carburetor bolt
㉗ Fuel nozzle
㉘ Fuel valve



6. How to Check/Repair Machine in Case of Problems

A. If there is a banging or coughing sound before machine, it shuts itself off.

Cause	How to Check	Solution
1. Gasoline doesn't folw freely due to a blocked fuel nozzle.	It is normal when the gasoline flows evenly when the start button is pressed or pumped.	Clean the fuel nozzle opening with a thin metal wire. Replace the o-ring of the fuel nozzle clen the fuel nozzle completely.
2. When gasoling does not go through the fuel filter.	Normally gasoline goes through the fuel filter right away when the start button is pressed or pumped.	Replace and clean the fuel filter if it does not.
3. Defective rubber liner of the fuel tank check valve.	① It is normal if air goes in, in one direction but cannot go out the way it came in, does not leak from the check valve of the main body of the machine causing blowing or a sucking sound. ② It is defective if the side of the liner is torn or swollen	Replacement should be performed carefully to guarantee that the air only exits the machine in one direction. To check the liner put your tougue in the middle of it and when blow, air should move freely through the liner. If you try to suck air through the liner using the same method as above no air should move through the liner.
4. The air pump is not working well when you don't have enough air exiting the machine.	① The machine is normal when a strong wind exits the machine, when the start button is pressed. ② Check if air pump hose is properly inserted.	① Check to see if the air pump hose is securely attached. ② Replace air pump.
5. Insufficient battery charge is happening when the battery does not operate the motor and ignition after being charged.	① The carge is normal when a strong spark occurs when touching+and-terminals of the battery to each other. ② Check to see if the voltage falls in the following rang;6V+for manual and 12V+for automatic.	① Replace or recharge the battery. ② Charge the battery until the red signal light flickers in the automatic mode. If the signal light doesn't flicker then check the charger and connections.
6. Damaged rubber packing on the fuel cap or the cap doesn't screw closed tightly.	① The cap is defective when the user must hold the cap with his/her hand to start the mcahine. ② Rubber packing is swollen.	① Replace packing ② Make sure the cap is closed completely.
7. Leaking air from the nipple.	To check use soap and water to find where the air is leaking from then replace the nipple from which the air leaking.	Replace the nipple
8. Insufficient gasoline or chemicals/foreign materials in the fuel tank.	Check out fuel tank	① Clean the fuel tank completely ② Change the gasoline.
9. Carbon build up in the thermal pipe.	Check to see if this is the problem by using a flashlight. If this is the problem then clean the thermal pipe completely with the clening rod.	Check the spark plug and if there is a carbon build-up remove it with a screwdriver.

B. When air leaks and makes a puck or whew sound and the machine won't start.

Possible damage the thermal pipe. Check to see what the damage is by using a flashlight. To correct this problem, replace the thermal pipe.

C. Chemical Spraying won't work after the machine is started.

Cause	How to Check	Solution
1. Defective rubber liner in the chemical check valve	Normally air enters the machine in only one direction, without any leaks. It is defective if the side of the packing is torn or swollen. You should then replace the packing in the chemical check valve. To check the liner, put your tongue in the middle of it and when you blow,air should move freely through the liner. If you try to suck air through the liner using the sam method as above no air should move through the liner.	
2. Blockage of the chemical spray pipe	If you separate the chemical spary pipe from the chemical nozzle and the chemicals do not come out of the chemical tank then the chemical spray pipe could be blocked.	Using an air compressor, blow the obstruction out of the pipe.
3. Blockage of the Chemical Nozzle.	If you separate the chemical spray pipe from the chemical nozzle and then chemicals do not com out of the chemical tank then the chemical nozzle could be blocked.	① Replace chemical Nozzle. ② Clean chemical nozzle with a thin metal wire.
4. Blockage of the chemical valve.	If you separate the chemical spary pipe from the chemical valve and then the chemicals do not come out of the chemical tank then the chemical valve could be blocked.	① Replace chemical valve. ② Clean the chemical valve by using air compressor to force air through the blockage.
5. Chemical cap refuses to close tightly	① The cap is defective when the user must hold the cap with his/her hand to start the machine. ② Rubber packing is swollen.	① Replace packing ② Make sure the cap is closed completely.

D. You can hear the air pump operating but the machine will not work. (That means the ignition is not working)

Cause	How to Check	Solution
1. Defective igniter or defective terminal wires.	It's normal if a spark occurs when you hold the spark plug. 2-3mm from the ignition terminal. Make sure the+terminal has firm contack with the ground wire	① Replace the igniter. ② Make sure terminal contact is firm.
2. Defective Spark Plug. Insufficient spark to start the machine	Normal when spark occurs when start button is pushed. The gap of the spark plug is normal when it is 2-3mm. Check to see if carbon has built up on the spark plug.	① Reokace tge soarj okyg. ② Maintain 2-3mm gap. ③ Remove carbon from the spark plug.
3. Too much gas in the carburetor has occurred when there is a knocking sound is coming from the carburetor.	Machine isn't working correctly if when you take the carburetor cover off and cover is very wet.	① Wipe the gasoline off the carburetor completely. ② Shut the fuel nozzle and wait until you hear a cough sound while operating the machine, then press the start button.
4. Thermal Pipe Coil damage.	Check damage with a strong flashlight.	Haver the thermal pipe coil repaired.
5. Insufficient Battery Charge.	Insufficient charge if the sound of the machine is weak.	Replace recharge the battery.