

Soner 203

Soner 206

Soner 210

Soner 220

Ultrasonic Cleaner

Overview

The ultrasonic cleaning function consists of chemical reaction of detergent and physical strength from so called cavitation. The primary elements of cleaning solution is surfactants or wetting agents that help to break chemical bonds between contaminants and the contaminated objects, besides, there are numerous tiny bubbles in liquid forming a tremendous physical energy from cavitation by which to remove chemical residue, dirt from the objects.

The general frequency of ultrasonic cleaner is within 20-100 KHZ, the higher the frequency be, the stronger the penetration becomes and suitable to clean the objects with complicated shapes or hard-to-reach cervices (50-100 KHZ). The lower the frequency be, the stronger the cavitation becomes and ideal for cleaning the objects with stubborn contaminants but coming with bigger noise and higher corrosion on the surface of the objects being cleaned (20-49 KHZ).

Degassing is to remove the gases from the cleaning solution before cleaning and used to keep the cleaning solution a vacuum and avoid loss of the energy produced by cavitation. Otherwise, the impact power could be absorbed just like a blow at sponge.

Always make sure to place the object being cleaned and basket in the chamber gently to avoid bubbles forming at the corners or gaps. In case of that, please shake the basket slightly to release bubbles or increase the degassing time.

Ultrasonic cleaner must be used with the cleaning solution to perform the best cleaning effect. The selection of cleaning solution should be based on different kinds of the objects being cleaned and its contaminants. (refer to as instructed on Rocker' s cleaning solution).

Note: Inflammable or low flash point detergents should be never used. As the energy generated by the cavitation phenomenon will be converted to heat and kinetic energy that would increase the solution temperature and make low flash-point solution flammable. Besides, acids, bleaches and its derivatives should be avoided because which can damage the chamber of the unit unless used with indirect cleaning.

Important notice

Thanks for your purchase on Soner Series Ultrasonic Cleaner. Please make sure to read and comply with these instructions carefully. Any unauthorized modification on the machine is not allowed and won' t fall in our guarantee scope.

- ▲ Switching on the machine with no or insufficient water is prohibited.
- ▲ When in use, please watch the water level and make sure to add water once the water is constantly evaporated and then causes insufficient water.
- ▲ Ensure proper use of cleaning solution; inflammable, acid and bleach substances are prohibited.
- ▲ The object to be cleaned is not allowed to be placed at the bottom of chamber directly and should be placed on the removable bracket or basket.
- ▲ When not used for a long time, make sure to drain the cleaning solution off and keep the chamber dry.

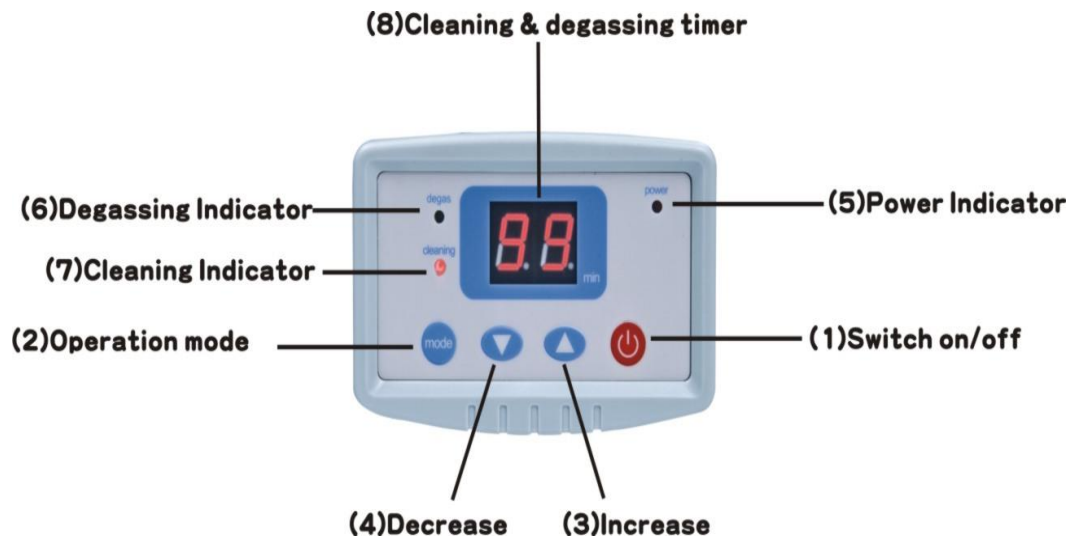
Unpacking




Carefully check if the shipping carton is in good condition before unpacking. Please check all supplied items according to standard package list. If you have any questions, please keep serial no. & shipping carton and contact your local dealer for help.

The complete package contains:

1. Ultrasonic Cleaner x 1
2. Power Cord x 1
3. Bracket x 1
4. Instruction Manual & Warranty Card x 1

Function Keys



Item	Function	Item	Function
1	 : switch on/off	5	Power indicator
2	mode: operation mode	6	Degas indicator
3	 : increase value	7	Cleaning indicator
4	 : decrease value	8	Cleaning and degassing timer

Operation

A. Installation

1. Please place the unit on a ventilated and clean table surface.
2. Check voltage specified on the nameplate at the back of the unit.
3. Ensure if it matches the line voltage on your location.
4. Plug in the power.
5. Pour the formulated cleaning solution into the chamber up to the operating level after the object being cleaned is placed in.
 - Please refer to the instruction on Soner GP about the proportion of formulating clearing solution

B. Before Operation

1. Please replace the cleaning solution if it is dirty.
2. Place the object to be cleaned in bracket or basket and then put them inside the chamber carefully. Avoid bubbles arising from the object' s corner or hard-to-reach crevices, if so, please shake the basket slightly to expel bubbles.
 - **Warning: Do not place the object directly at the bottom of the chamber, otherwise it will damage the transducer and reduce the cleaning effectiveness.**
3. Check whether the water level is sufficient and make sure to add water and clearing solution if short.
4. Please degas the object or cleaning solution when coming with bubble.

C. Operating Procedure

1. Check if (5) Power Indicator flashes indicating that the power supply is normal and the unit is standby.
2. Press (1) Switch On/Off then the panel will display the last operation mode (Cleaning or Degassing) and setting value. The first time use or re-plug the power, it will display the default setting (Mode: Cleaning, Time: 15 Min.) and start working automatically and immediately.
3. Press (3) Increase or (4) Decrease key to change the default time setting.
4. Press (3) Increase or (4) Decrease key then press (2) Operation Mode to change the default mode setting. The unit will start running the new settings automatically and immediately if without any further setting change.
5. The settings of time and operation mode can be reset during operation.
6. When the operation is finished, the unit will alarm by 6-sec whistling and keep standby by turning off the power.

Troubleshooting

Conditions	Possible Causes	Solutions
Failure to start-up	<ul style="list-style-type: none">• Unconnected power plug• Invalid power outlet• Fuse burned out	<ul style="list-style-type: none">• Plug in power exactly• Replace the power outlet• Contact service technician
Ineffective Cleaning	<ul style="list-style-type: none">• Too much bubble coming from cleaning solution without being degassed• The cleaning solution level is too high after the object to be cleaned is placed in• The cleaning solution is ineffective	<ul style="list-style-type: none">• Degas for 5 min• Lower the cleaning solution level to the operation level• Change the cleaning solution
Invalid function key	<ul style="list-style-type: none">• Failure to shift setting	<ul style="list-style-type: none">• Switch off and restart

Ordering Information

188203-11(22)	Soner 203 Ultrasonic cleaner · AC110V/60Hz (AC220V/50Hz)
188206-11(22)	Soner 206 Ultrasonic cleaner · AC110V/60Hz (AC220V/50Hz)
188210-11(22)	Soner 210 Ultrasonic cleaner · AC110V/60Hz (AC220V/50Hz)
188220-11(22)	Soner 220 Ultrasonic cleaner · AC110V/60Hz (AC220V/50Hz)
188203-30	Basket for Soner 203/203H
188206-30	Basket for Soner 206/206H
188210-30	Basket for Soner 210/210H
188220-30	Basket for Soner 220/220H
188203-31	Bracket for Soner 203/203H
188206-31	Bracket for Soner 206/206H
188210-31	Bracket for Soner 210/210H
188220-31	Bracket for Soner 220/220H
188200-31	Beaker positioning cover (S) for Soner 203/203H/206/206H
188200-32	Beaker positioning cover (M) for Soner 210/210H
188200-33	Beaker positioning cover (L) for Soner 220/220H