

# INDUSTRIAL ULTRASONIC CLEANER

# USER MANUAL



Thank you for purchasing the ultrasonic cleaner. Please take the time to read these operating instructions before using and retain them for future reference. Failure to follow these instructions may lead to serious personal injury and damage to property.

#### INTRODUCTION



Ultrasonic cleaning is based on the cavitation effect caused by high frequency ultrasonic wave vibration signal in the fluid. Microscopic bubbles are formed, and they implode violently causing the cavitation which create an intense scrubbing action on the surface of the item being cleaned. The bubbles are small enough to penetrate microscopic crevices, cleaning them thoroughly and consistently.

Ultrasonic cleaning is extremely effective at removing dirt and grime which would normally require tedious manual cleaning by hand. It has been used to clean a wide variety of instruments and mechanical parts such as carburetors, returning them to almost "like new" condition without damage to delicate parts.

#### **PREPARATION:**

 Carefully unpack the cleaner and remove all traces of packing materials from it. Visually inspect the cleaner for any parts that may have become loose or damaged during transit.

#### Contents:

- a: Main machine
- b: lid.
- c: Power lead
- d: Generator
- e: Basket
- Place the cleaner on a flat, clean surface where the cooling fans will receive adequate ventilation and ensure all controls are set to off. Also ensure the drain tap is in the closed position.
- Ensure the power lead is securely plugged into the cleaner and that no part of the lead is likely to come into contact with moisture.

Carefully fill at least 1/2 of the tank with a solvent solution. For demanding cleaning we
recommend suitable solution, this will help increase the cleaning performance. The
cleaner is now ready for use.

# \land Attention

a) While the machine is working normally, ultrasonic and tank syntony gives a well-proportioned sound, and no shudder on the surface of the water, yet there is spray made by the tiny bubbles. If there are discontinuous surges, please add or release a little of washing solution in the tank, stopping the surges is better for the objects cleaning.

## SAFETY PRECAUTIONS



## Keep it away from children !

This device is not intended to use by individuals with restricted physical sensory or metal capacities or those with lack of experience or knowledge, include children, unless they are supervised by an individual who is responsible for their safety or have received training in operating the device.



# PLEASE READ THE FOLLOWING VERY CAREFULLY AS FAILURE TO COMPLY MAY INVALIDATE YOUR GUARANTEE

- 1) DO NOT operate the unit without fluid in the tank. Always ensure the fluid is no higher than the max mark, Always ensure that cleaning items immersed well in the water.
- DO NOT drop any item into the tank as this may cause damage to the transducer.
   Always place the items gently into the tank and use the basket whenever possible.
- The more items that you place in your cleaning bath the less efficient it will clean. It is not advised to overlap items. Always allow plenty of clear space between the items.

- 4) Do keep the lid on during use. This will prevent splashes and reduce evaporation of the fluid.
- 5) Never immerse the machine or power cord in water or other liquid.

6) DO NOT touch the power plug with wet hands, especially when inserting or removing the plug.

- DO NOT touch the unit if the machine has fallen into water during operation.
   Remove the power plug from the socket first.
- 8) DO NOT disassemble the machine, except by professionals.
- 9) UNPLUG the power source while filling or emptying the tank.
- 10) DO NOT spray water or liquid over the device and the control panel
- 11) DO NOT operate the cleaner without proper grounding.
- 12) DO NOT place the device on a soft surface, where the vents could be blocked.
- Always turn the heater off after using as leaving it on can cause the fluid to evaporate and damage the internal components.
- Upon completion of the cleaning cycle, turn the heater knob off and isolate the machine from the electrical supply.
- 15) Take care when adding or removing items from the cleaning tank as the fluid is likely to be hot and displaced fluid can damage the internal components. Any displaced fluid must be dried up immediately.
- 16) In the event of failure/emergency, disconnect the mains supply by removing the plug from the mains socket.

# APPLICATIONS

This list is almost endless, provided the product is non porous and can normally be immersed in water anything can be thoroughly cleaned. Here are some examples:

- Engine/model parts
- Electrical components
- Diesel injection pumps
- Printer heads and toner cartridges
- Motorcycle radiators
- Vehicle differentials
- Golf club&grips&golf balls
- Horse bits&stirrups&horse brasses
- Motorcycle engine crank cases
- Engine cylinder heads
- Bicycle derailleurs
- Gun and gun components



# INDUSTRIAL ULTRASONIC CLEANER STRUCTURE



Generator's front panel





#### OPERATION

- Place cleaning items in the machine basket, Fill stainless steel tank with solution(better 2/3 of the tank, cleaning items should be immersed in the solution)
- Connect lines: Make sure the wires of the generator and machine are connected.
- 3) Press the "Power" Button on the Generator, the left indicator light will turn on.

#### 4) Ultrasonic Power Setting:

Ultrasonic cleaner's power can be adjusted, press the left"power" button to reduce/increase ultrasonic power.

#### 5) Time Setting:

Timer is 0-60minutes adjustable, Press time button to reduce/increase working time.

If need Sweep function, just press the according button on the Generator, after time and power setting, press the button"on/off" to start work. During working, you will hear the "sizzling" voice ,that means the cleaner running properly.

#### START UP HEATING FUNCTION:

1) Set temperature (if need): Turn the "Heater" switch for setting temperature  $30^{\circ}$ C-110°C, the indicator on the machine will turn on. Please set the temperature switch to the degree that needed, normally  $40-60^{\circ}$ C.

#### STOP ULTRASONIC & HEATING PROCESS:

**1)** Press "Power" button(On the Generator), the cleaner will stop working, indicator light will turn off. And then disconnect the power supply.

2) Switch "Heater" button(On the machine) to stop the heating function.

3) Empty the tank and clean both the outside and inside of the cleaner with clean and

dry cloth for next use.

# SPECIFICATIONS

Model	Tank Size	Volume	power	Frequency	Heating power	Temperature
	L*W*H(mm)	(L)	(W)	(KHz)	(W)	( <sup>O</sup> C)
SONICA-36L	510×300×250	36	720	28/40	500	30-110
SONICA-57L	470×340×360	57	1080	28/40	3000	30-110
SONICA-90L	590×400×400	90	1440	28/40	1200	30-110
SONICA -112L	600×470×400	112	1800	28/40	4000	30-110
SONICA -145L	650×500×450	145	2160	28/40	6000	30-110
SONICA -235L	650×600×600	235	2520	28/40	6000	30-110

# MRC.4.15