

# ULTRASONIC CLEANER

*Ref. 9206050 – 2L 50W*

*Ref. 9206150 – 6L 150W*

*Ref. 9206400 – 20L 400W*

## USER MANUAL



## WARNING

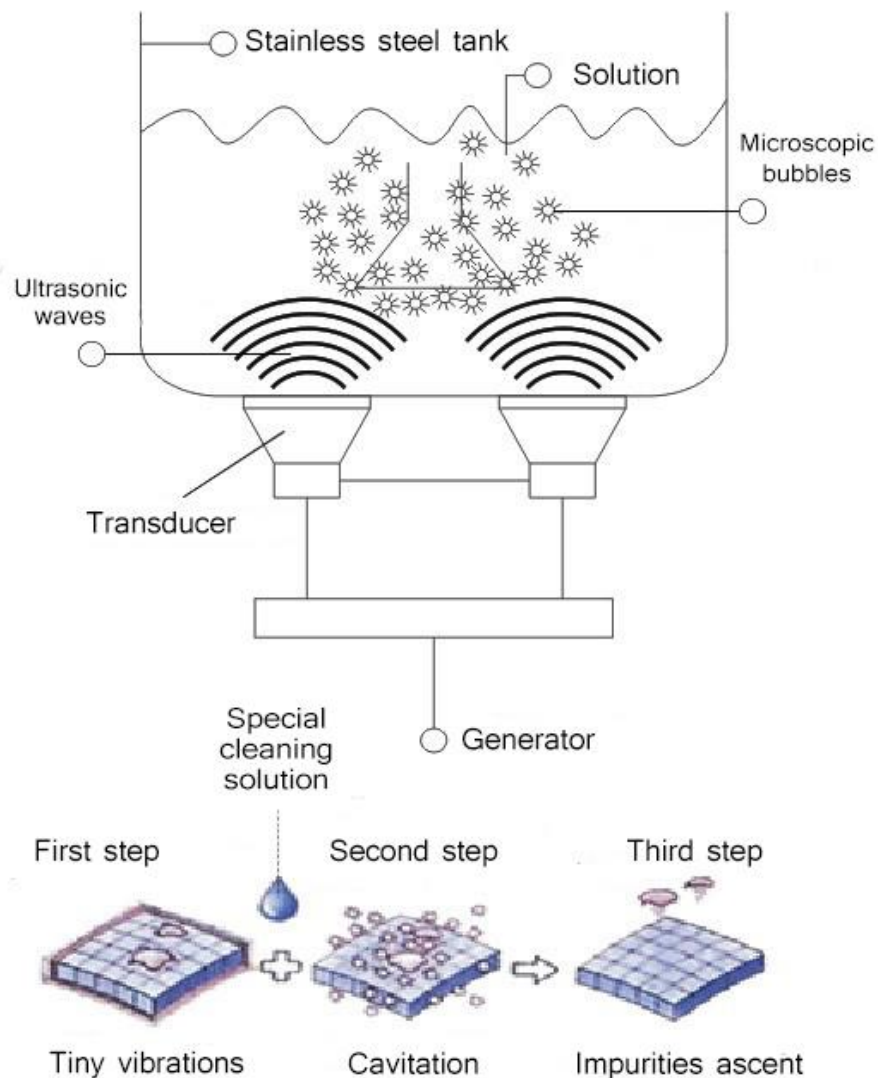


**Please take time to read these operating instructions before use and retain them for future reference. Failure to follow these instructions may lead to serious personal injuries and damage to property.**

## BASIC OPERATIONS:

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.



Thanks to ultrasound cleaning, we can have highest results than a basic manual cleaning. Coming from an industrial process to clean mechanical products before painting or treatment, ultrasounds cleaning is now available for many professional workshop, thanks to 2, 6 and 20 liters compact models.

## **SAFETY PRECAUTIONS:**



### **Keep it away from children!**

This device is not intended to use by persons with restricted physical, sensory or mental capacities, or those with lack of experience, include children, unless they are supervised by an adult who is responsible for their safety.

1. Before connecting, be sure of your device voltage, indicated on the nameplate, correspond to the power available.
2. Ensure of the plug is equipped with a residual current device (RCD), of operating current device assigned not exceeding 30mA (fuse).
3. Do not use it outdoor, designed for indoor use only.
4. Check if the cable is not damaged or aging before use.
5. Don't unplug by pulling the cable. Never carry the device by the cable. Avoid heat and corrosive liquid cable damage. Avoid cut cable damage.\*
6. Damaged power cable must be replaced immediately by a specialized professional service.
7. Ensure that the basin is filled at least three-quarters of water before turning on the device. Never start the unit if the basin is empty.
8. Never start the ultrasonic cleaner by placing the cleaning part directly on the bottom of the cleaning basin.
9. The cleaning solution must consist of 5 percent of our specific cleaner (Ref: 9202596) and 95 percent of water.
10. Always keep the ultrasonic cleaner close with the protection and condensation cover.
11. Always disconnect the device from the network when it's left unattended

12. If necessary, repair or refurbishment of the ultrasonic cleaner must only be made by the customer service of the store where you purchased it, or by a specialist workshop.
13. Keep the ultrasonic cleaner in a dry and protected place.
14. Caring and maintain the ultrasonic cleaner carefully.
15. Don't use ultrasonic cleaner more than one uninterrupted hour.
16. For a total efficiency, store the ultrasonic cleaner one by one.
17. Wait for the liquid is completely cooled before emptying or removal the ultrasonic cleaner.

## **KEEP THESE SAFETY INSTRUCTIONS**

### **UNPACKING AND INSTALLATION:**

1. Unpacking:

- Open the box and carefully remove the machine.
- Before any further step, thoroughly check that no residue or packaging accessory remains on the ultrasonic cleaner.
- Check the general appearance of the machine: impact or hole should not be present.

Check the content:

<b><u>Piece</u></b>	<b><u>Qty</u></b>
Ultrasonic Cleaner	1
Shaft cover	1
Power cable	1
Fan guard grill	1
Wire basket	1

## 2. Installation

- Place the cleaner on a clean and flat surface, to be sure the ventilation system is working properly.
- Ensure that all functions are in OFF position and the drain valve is closed.
- Ensure that the power cord is well inserted into the connection socket cleaner, and there is no sign of moisture or mold on the connections.
- Fill the tank at least  $\frac{3}{4}$  (line out) with a special ultrasonic cleaning solution (5 percent, Ref: 9202596 + 95 percent of water.)

The cleaner is now ready for use

## **APPLICATION:**

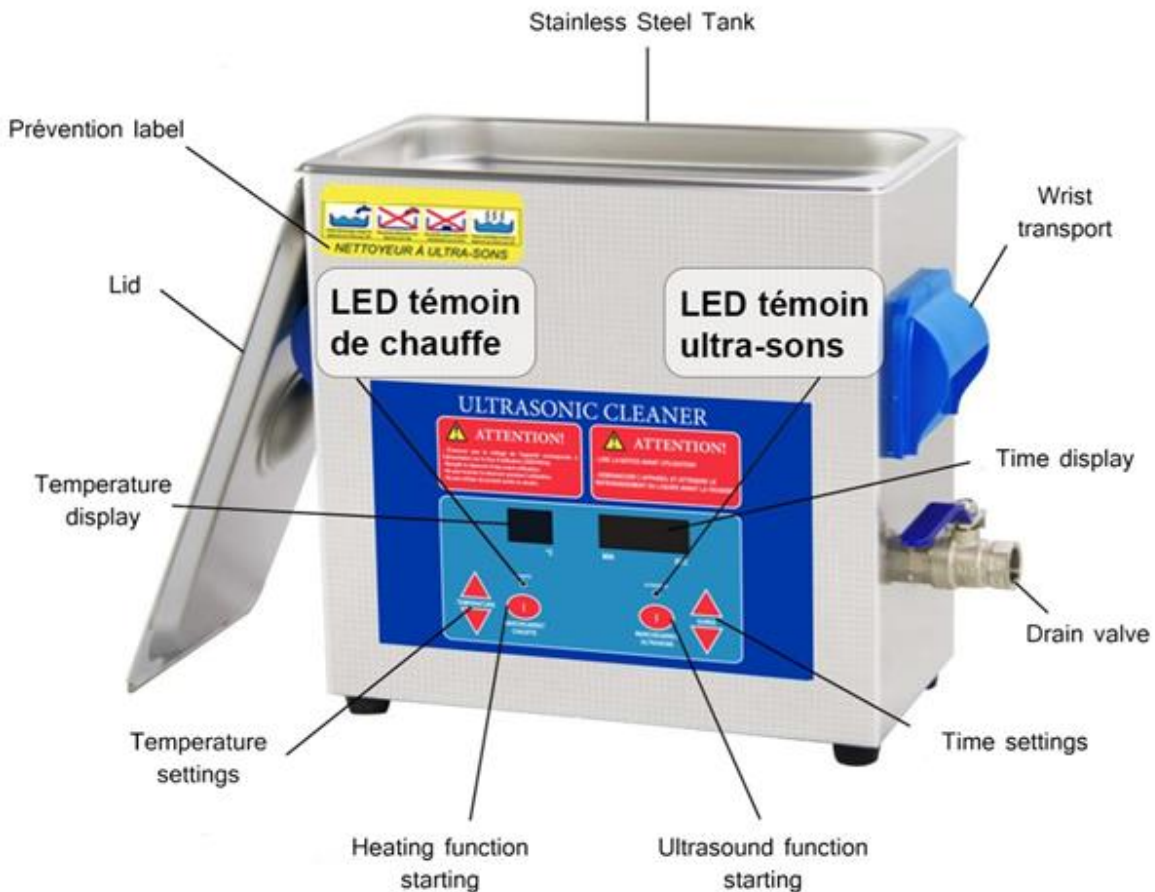
Here is a partial list of parts that can be cleaned by ultrasound:

1. Motors and mechanical machine parts
2. Electronic components
3. Metal boxes
4. Fuel injection pumps
5. Motorcycle's radiators and other machines
6. Machine's differentials
7. Bicycle derailleur
8. Blades and knives

Also suitable for heads printers and ink cartridges, balls and gold clubs, bits, stirrups and other metal equipment for riding, surgical material (cleaning only), silver or other metal cutlery, jewelry (gold, silver or platinum), metal watchbands, coins and other metal objects.



**WARNING:** Ultrasonic cleaning is not intended for the following stones and precious materials: opal, pearl, emerald, malachite, turquoise, lapis and coral.



## **UTILIZATION:**

### **1. Preparation and ignition:**

Fill the stainless steel tank with any liquid at least  $\frac{3}{4}$ . Connect the machine to the electrical courant. The machine should turn on automatically. The screen should indicate the ambient temperature and the initial setting time of 3 minutes.

### **2. Time settings:**

Press the settings time button placed on the right of the control table and adjustable between 1 and 99 minutes. (never configure over 60 minutes).

Press ▲ to increase the time, press and hold for automatic and rapid increase.

Press ▼ to reduce the time, press and hold for automatic and rapid decrease.

The cleaning will stop automatically when the countdown reaches 0:00. If the unit must be stopped before the end of the time, press the activation ultrasound button.

WARNING
Do not leave the machine active more than 60 minutes. It will cause irreversibly damage to the cleaner.

### 3. Temperature settings:

Press the temperature time button placed on the left of the control table, and adjustable between 1 and 80 degrees Celsius.

Press ▲ to increase the temperature, press and hold for automatic and rapid increase.

Press ▼ to reduce the temperature, press and hold for automatic and rapid increase.

The cleaning will stop automatically when the countdown reaches 0:00. If the unit must be stopped before the end of the time, press the activation ultrasound button.

In most cases, the temperature giving the best results is between 40 and 60 degrees Celsius.

#### 4. Starting up:

After temperature and time settings, press activation button of both functions.

#### 5. Function extinction:

Press a second time on the corresponding button to turn of the wanted function: time or temperature.

#### 6. After use:

Emptying the tank and clean with a cloth or a damp or dry sponge.

<b>WARNING</b>
Do not drain the tank before the liquid is cooled. Contact with hot water may still cause severe burns

#### Types of cleaning:

- **General cleaning:** Use only still water and a 50 degrees Celsius temperature setting.
- **Superior cleaning:** Add few cleaning liquid drops into water, like dishwashing liquid. Other kind of cleaning liquid can also be used.
- **Intensive cleaning :** To clean the non-plated metal parts severely fouled with carbon, rust, grease or other contaminants; it's advisable to use the specific solution for ultrasound machines (Ref: 9202596) for 5 percent and 95 percent of water.

<b>WARNING</b>
High acid of alkaline solution will result corrosion of the tank or the case of the cleaner. Dilute with a large quantity of liquid neutral PH.

The solution loses effectiveness after a few uses. Do not forget to change the solution regularly to conserve performance and longevity of your cleaner.

After cleaning, always wait until the machine is completely dry.



## WARNING

If the machine starts to smoke, vibrate, or if you feel a smell of burnt, it's imperative to immediately interrupt the cleaning by unplugging the cleaner. Continuing the cleaning process can lead to permanent injury or damage.

1. Always fully immerse the part to clean.
2. The machine, set at a moderate temperature and with a solution to which is added a little dishwashing liquid, helps to increase cleaning performance.
3. Always use in an open space or air can circulate freely. Don't stack several pieces on each other.
4. It's best to use the basket as much as possible, it increases the resonance of ultrasonic emitted waves.
5. Temperature: Highest is the temperature, highest the cleaning is effective; a too high temperature will cause cavitation larger bubbles, what could influence the effectiveness of cleaning.

## **TECHNICAL CHARACTERISTIC:**

Model	9206050	9206150	9206400
Power	50W	150W	400W
Heat Power	100W	300W	500W
Dimensions L x l x H mm	190x170x220mm	330x180x310mm	550x330x310mm
Tank dimensions	150x140x100mm	300x155x150mm	530x325x150mm
Tank capacity	2L	6L	20L

- Plug connection : 240V / 50 Hz
- Tank composition : SUS 304 stainless steel
- Ultrasonic frequency : 40 KHz
- Timer : 1 to 99 minutes
- Temperature : 0-80 degrees
- Preheat temperature : up to 65 degrees
- Cleaning product : Ref: 9202596 (not supplied)

## **RECYCLING:**

**WARNING:** Do not dispose defective or faulty parts. Your ultrasound cleaner is made of many recyclable parts and it's recommended to place these parts from a specialist point of recovery or recycling waste.



## **EU DECLARATION CONFORMITY**

The undersigned F1 Distribution distributor, states that ultrasonic cleaners models TDR - DTH50 (our reference 9206050), TDR - DTH150 (our reference 9206150) and TDR - DTH400 (our reference 9206400) comply with the EU Low Voltage Directive 2014/35/EU, the EU Electromagnetic Compatibility Directive 2014/30 /EU and the EU Restrictions of Hazardous Substances RoHS Directive 2011/65/EU.



*Hazebrouck October 10th, 2022*

*Jean Delhaize, General Manager F1 Distribution on behalf  
Kai Zissler President of Arrowhead Europe*

## **WARRANTY:**

Ultrasonic cleaners TDR - DTH50 (9206050) TDR - DTH150 (9206150) and TDR - DTH400 (9206400) have a one-year warranty against any manufacturing defect or component failure. This warranty is not transferable and is effective from the date of purchase. Please keep during the guarantee period proof of purchase bearing the date of acquisition of the unit.

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