

ULTRASONIC CLEANER

Ref. 9206051 – 2L 60W

Ref. 9206151 – 6L 180W

Ref. 9206401 – 22L 480W

INSTRUCTIONS FOR USE



WARNING!

Read this instruction manual and the safety instructions carefully before use and follow them to the letter.

Any failure to follow the instructions in this manual may result in personal injury or damage to property.

If you have any questions that are not covered in this manual, please contact your dealer.



Translation of the original instructions ▪ Notice version 1 - 14/3/2024

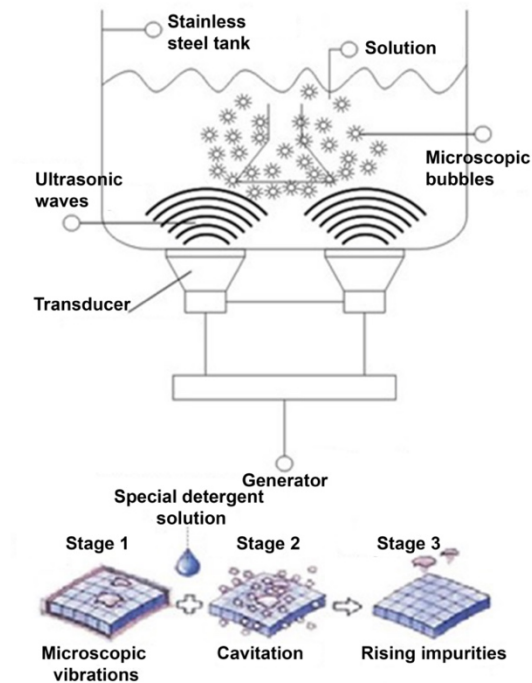
Principle

Ultrasonic cleaning is based on the principle of cavitation caused by the vibrations of high-frequency ultrasonic waves acting on the fluid filling the cleaning tank.

Microscopic bubbles form under the influence of the vibrations and then burst, triggering a process known as cavitation.

The cavitation creates significant friction, developing a highly effective active cleaning principle.

The unique feature of this principle is the size of its bubbles. Their microscopic size can reach the deepest, most recessed parts of the object to be cleaned.



Ultrasonic cleaning means that we can achieve much better results than with manual cleaning, no matter how meticulous it is done.

Having originated as an industrial process for cleaning mechanical parts prior to treatment or painting, the compact sizes of our 2, 6 and 22 litre models means that ultrasonic cleaning is now available to many professionals in their own workshops.

Safety instructions



Keep out of reach of children!

1. Before connecting the cleaner, make sure that the voltage indicated on the rating plate corresponds to the power supply available at the place of use.
2. Ensure that the power socket is fitted with a residual current device (RCD) with a rated operating differential current not exceeding 30mA (fuse).
3. Do not use outdoors. The item is designed for indoor use only.
4. Before use, check that the power cable shows no signs of damage or ageing.
5. Do not unplug by pulling on the cable. Never carry the cleaner by the cable. Ensure that the cable is not damaged by heat, corrosive liquids or sharp objects or edges.
6. If the power cable is damaged, it must be replaced immediately by a specialist technician.
7. Make sure the tank is at least three-quarters full of water before switching on the cleaner. Never start the cleaner if the tank is empty.
8. Never start the cleaner with the part to be cleaned directly on the bottom of the cleaning tank.
9. The cleaning solution should be composed of 5% of our specific cleaner (ref: 9202596) and 95% water.
10. Never use the cleaner without the condensation and protection cover on the cleaner.
11. Always disconnect the cleaner from the mains when it is left unattended.
12. When necessary, the cleaner must only be repaired or serviced by the after-sales service of the shop where you purchased it or by a specialist workshop.
13. Keep the cleaner in a dry, protected place.
14. Treat and maintain the cleaner with care.
15. Never use the cleaner continuously for more than thirty minutes.
16. For maximum efficiency, only clean one object at a time.
17. Wait for the liquid to cool completely before draining or removing the object.
18. Never dismantle the cleaner. If necessary, call in a specialist technician.

KEEP THESE SAFETY INSTRUCTIONS

Unpacking and installation

1. Unpacking:

- Carefully open the package and remove the cleaner.
- Before you do anything else, make sure that no residue or packaging material remains on the cleaner.
- Check the overall appearance of the cleaner and make sure that there are no signs of impact or holes
- Check the contents:

a. Ultrasonic cleaner	1 piece
b. Soundproofing cover	1 piece
c. Power cord	1 piece
d. Instructions for use	1 piece
e. Wash basket	1 piece

2. Installation

Place the cleaner on a clean, flat surface so as the ventilation system only works properly then.

Ensure that all functions are in the OFF position and that the drain plug is closed.

Make sure that the power cord is properly inserted into the cleaner's connection socket and that there are no signs of moisture or mould on the connections.

Fill the tank to with the special ultrasonic cleaning solution (5% ref. 9202596 + 95% water) at least $\frac{3}{4}$ (see measurement line).

The cleaner is now ready for use.

Applications

The following is a non-exhaustive list of parts that can be ultrasonically cleaned:

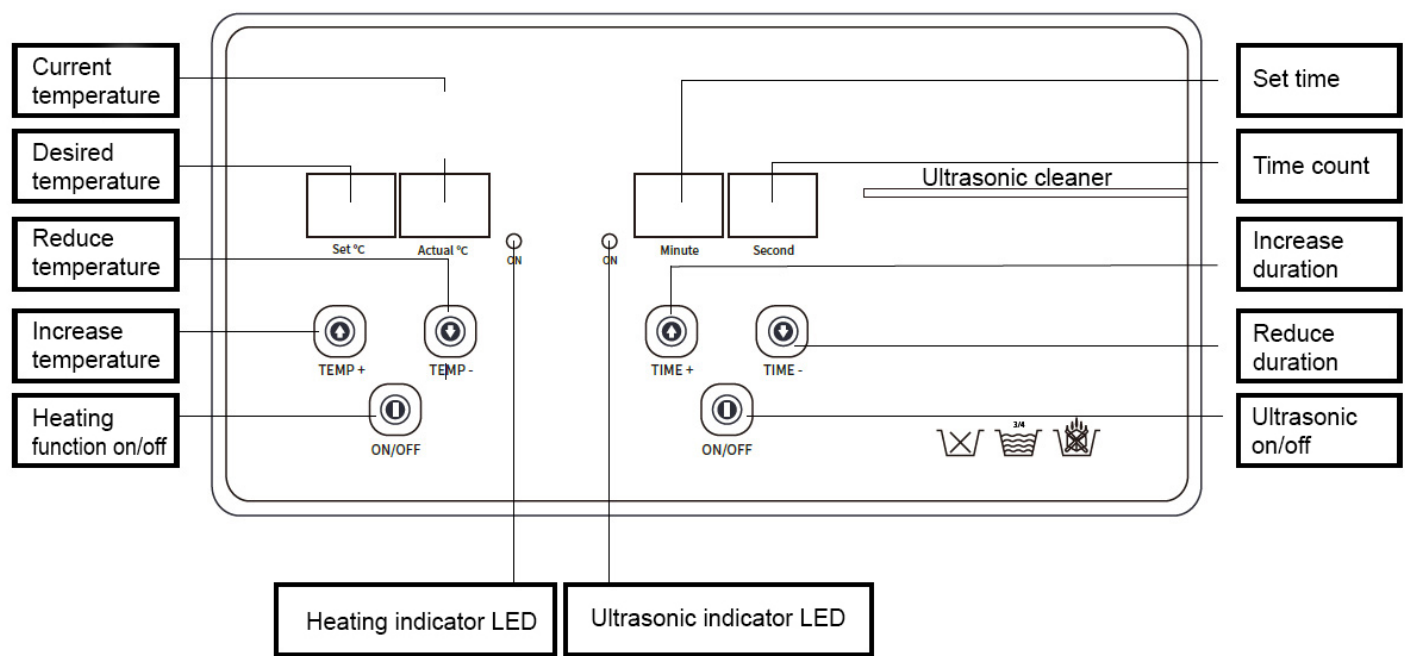
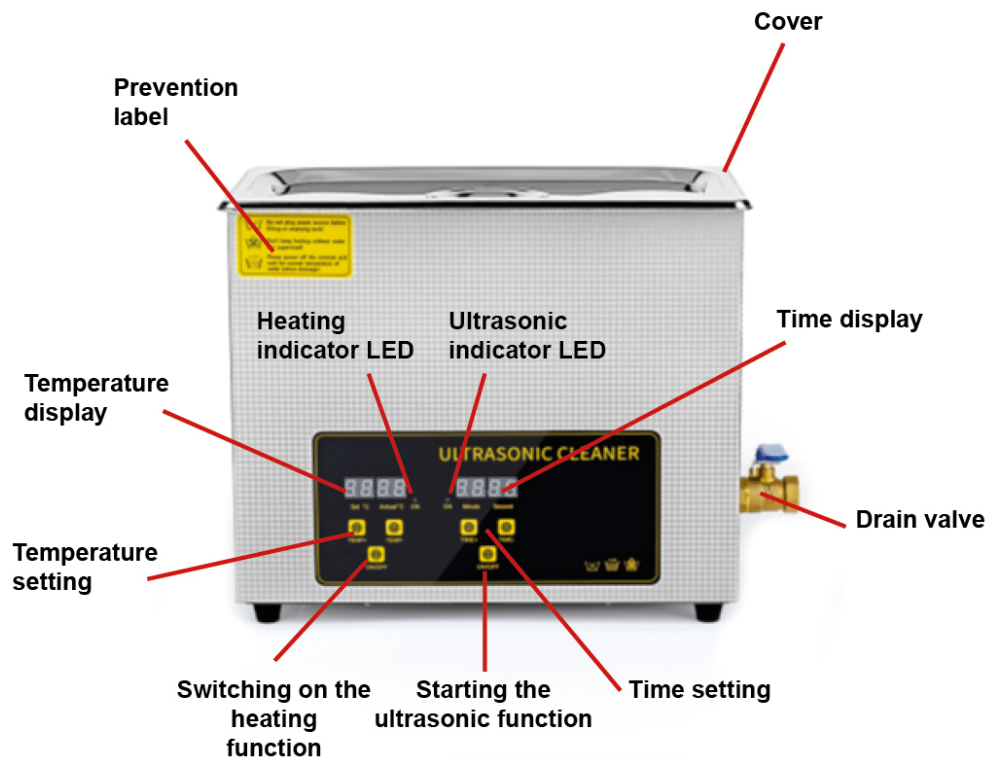
1. Motors and mechanical machine parts
2. Electronic components
3. Metal housing
4. Fuel injection pumps
5. Radiators (cooling) for motorbikes or other machines
6. Machine differentials
7. Bicycle derailleurs
8. Blades and knives

Also suitable for printer heads and ink cartridges, golf balls and clubs, bits, stirrups and other riding equipment in metal, surgical equipment (cleaning only), silver or other metal cutlery, jewellery (gold, silver or platinum), metal watch straps, coins and other metal objects.



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

Description and accessories



Use

1. **Preparation and ignition:** Fill the stainless steel tank with the special liquid to at least 3/4. Connect the cleaner to the mains. The cleaner should switch on automatically. The display should show the room temperature and time initially set to 5 minutes.
2. **Time setting:** Press the time setting buttons on the right of the control panel, adjustable from 1 to 30 minutes (never set beyond 30 minutes):
Press "TIME +"  to increase the time, hold down for automatic and rapid increase.
Press "TIME -"  to reduce the time, hold down for automatic and rapid reduction.
Cleaning will stop automatically when the countdown reaches 00:00. If the cleaner is to be stopped before the end of the count, press the ultrasound activation button.

ATTENTION: Do not leave the cleaner running for more than 30 minutes. This will cause irreversible damage to your cleaner!
3. **Temperature setting:** Press the temperature adjustment buttons located on the left of the control panel – adjustable from 1 to 80°C:
Press "TEMP +"  to increase the temperature, keep pressed for automatic and rapid increase.
Press "TEMP -"  to reduce the temperature, hold down for automatic and rapid reduction.
Cleaning will stop automatically when the countdown reaches 00:00. If the cleaner is to be stopped before the end of the count, press the ultrasound activation button.
The temperature giving the best result is between 40 and 60°C.
4. **Getting started:** After setting the time and temperature, press the buttons to activate the two functions.
5. **Termination of functions:** Press the corresponding button a second time to deactivate the desired function: time or temperature.
6. **After use:** Drain the tank and clean with a damp or dry cloth or sponge.

ATTENTION: Do not drain the tank until the liquid has cooled. Contact with hot water can cause serious burns.

Types of cleaning

General cleaning: Use only still water and a temperature setting of 50°C.

Top cleaning: Add a few drops of washing-up liquid to the water, other agents can also be used.

Intensive cleaning: To clean unplated or treated metal parts that are severely clogged with carbon, rust, grease or other dirt, we recommend using the specific solution for ultrasonic cleaners (our reference 9202596) for 5% and 95% water.

ATTENTION: Solutions with a high acid or alkaline content will lead to corrosion of the tank or cleaner casing. Dilute in a large quantity of PH-neutral liquid.

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

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

ATTENTION: If the cleaner starts to smoke or vibrate, or if you smell something burning, you must stop cleaning immediately by unplugging the cleaner. Continuing with the cleaning process can cause irreversible damage to property and injury.

1. Always make sure that the object or area to be cleaned is completely immersed.
2. The cleaner, set at a moderate temperature and with a solution to which a little washing-up liquid is added, helps to increase cleaning performance.
3. Always use in an open space where air can circulate freely. Do not stack several objects on top of each other.
4. It is preferable to use the basket as much as possible, as it increases the resonance of the ultrasound waves emitted.
5. Temperatures: The higher the temperature, the more effective the cleaning. However, if the temperature is too high, larger bubbles will cavitate, which can affect the cleaning efficiency.

Technical specifications

Model	9206051	9206151	9206401
Power	60W	180W	480W
Heating power	100W	300W	500W
Dimensions L x W x H mm	175x160x205	325x175x275mm	530x330x275
Tank dimensions	150x140x100mm	300x155x150mm	500x300x150
Tank capacity	2L	6L	22L

Mains connection: 240 V / 50 Hz

Tank composition: SUS 304 stainless steel

Ultrasonic frequency: 40KHz

Cleaning duration: 1 to 30 minutes

Temperatures: 0-80°C

Pre-heating temperature: up to 65°C

Cleaning product: 9202596 (not supplied)

Recycling

Warning! Do not dispose of defective parts or faulty equipment with household waste. Your ultrasonic cleaner is made up of many recyclable parts and it is recommended that you dispose of these parts at a specialist waste recovery or recycling point.



EU Declaration of Conformity

The undersigned F1 Distribution, distributor, declares that the ultrasonic cleaner models TDR-F6 (our reference 9206151), TDR-F2 (our reference 9206051) and TDR-F22 (our reference 9206401) comply with the EU Low Voltage Directive 2014/35/EU, the EU Electromagnetic Compatibility Directive 2014/30/EU and the EU Restriction of Hazardous Substances Directive RoHS 2011/65/EU.

Prepared at Hazebrouck, 14 March 2024.

*Jean Delhaize - Managing Director F1 Distribution
on behalf of Kai Zissler – Chair Arrowhead Europe*

Warranty

The TDR-F2 (9206051), TDR-F6 (9206151) and TDR-F22 (9206401) ultrasonic cleaners are guaranteed for one year against any manufacturing defect or component failure. This guarantee is non-transferable and is effective from the date of purchase. Please keep a proof of purchase showing the date of purchase for the entire warranty period.

Distributed by: F1 Distribution

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