



# ULTRASONIC CLEANER

## HOW ULTRASONIC CLEANERS WORK

High frequency sound waves agitate the solution. Cavitation bubbles induced by the agitation adhere to substances like metals, plastics, glass, rubber and ceramics. This action also penetrates holes, cracks and crevices thoroughly removing all traces of contamination such as dirt, oil, dust, grease, flux agents, etc. that adhere to or are embedded in solid surfaces.

Ultrasonic cleaning can be used for a wide range of items from carburetors to spray nozzles and a variety of small parts and instruments. Most hard, non-absorbent materials which are not chemically attacked by the cleaning fluid are suitable for ultrasonic cleaning. We recommend using DTI FORMULA #201 which has been specifically developed to be used with this Ultrasonic Cleaner. It is non-toxic and biodegradable, and has been shown to produce superior results without tarnishing or changing the color of metal surfaces.

## OPERATING INSTRUCTIONS

1. Place the unit on a stable and flat working surface.
2. Put the item(s) to be cleaned in the basket. Very small items can be placed in a plastic bag containing solution and then be put in the tank.
3. Fill the tank to the crease near the top with cleaning fluid. ***DTI Formula #201 cleaning solution must be diluted 1 part solution to 5 parts water.***

 **DO NOT TURN ON CLEANER WITHOUT FLUID IN THE TANK!** 

4. Connect to power outlet.
5. **Setting the Temperature:** The TEMP keys are on the left side of the panel. They increase or decrease in increments of 5 degrees. Set the temperature between 100°F to 120°F for most jobs. Remember, the sonic agitation will also be creating some heat. The heating indicator light will stay on when the heat is going up and will turn off when the set temperature has been reached or exceeded. **Note:** When the unit has been used for several cleaning jobs, the unit should be shut down to allow the temperature to come down before continuing. This prevents overheating damage to the cleaner.
6. **Starting the cleaning process:** Press “ON/OFF” to turn cleaner on. When the display on the right side shows “00” the Ultrasonic Cleaner is in standby and the indicator light is off. Press time setting key “+ 5” to increase time in 5 minute increments. 25 to 30 minutes should be sufficient for most jobs. The cleaning indicator light turns on and the timer begins to count down — the unit is cleaning. When the timer counts down to “00”, the unit stops automatically and the indicator light turns off.

## CARBURETOR CLEANING INSTRUCTIONS:

Use only DTI Formula #201 cleaning solution mixed 1 part cleaner to 5 parts water.

**NOTE:** *In areas with hard water, high levels of calcium can leave deposits on metal parts. It is recommended that you use distilled water for the mix to avoid this problem if you have hard water.*

1. Fill the tank to ridge mark with diluted DTI Formula #201.
2. Turn the cleaner ON
3. Set tank temperature at 120°F degrees for most carbs (too hot can damage some plastic parts and seals.)
4. **Preparing the carburetor for cleaning**
  - A. Remove the bowl and the needle valve/float.
  - B. Place the carb body and the bowl (upside down) in the basket.
  - C. Small parts can be put in a solution filled “zip-top plastic bag” set in the basket with the bowl and body. This will keep small parts from falling through the basket.
5. When the set temperature is reached, set the cleaning time and put on the cover.
6. When the time is up, remove the basket and the parts (may be hot). Blow them off to remove solution and any loose particles left on the housings.

**NOTE:** *Ultrasonic action will raise the solution temperature sometimes as much as 10 degrees in 30 minutes. It is NOT good for the unit to run at high temperatures for long periods of time, or to run continuously without a cool down period.*

 <b>IMPORTANT WARNINGS - PLEASE READ</b> 	
<b><i>Failure to follow warnings can cause serious damage to your Sonic Cleaner and/or the person using it!!</i></b>	
<ol style="list-style-type: none"><li>1. DO NOT turn the cleaner on without fluid in the tank.</li><li>2. After use TURN OFF THE POWER and unplug unit.</li><li>3. Before adding or changing solution, the unit must be unplugged from the electrical outlet.</li><li>4. NEVER use a corrosive or flammable solution to clean with your Sonic Cleaner. The sonic agitation will atomize solutions during cleaning and can create an EXPLOSION HAZARD.</li><li>5. CAUTION: The solution and parts of the machine are hot during use.</li></ol>	

For information or to purchase this or other Design Technology products, please go to our web page -- [www.designtechnologyinc.com](http://www.designtechnologyinc.com)

The Ultrasonic Cleaner has a 6 month limited warranty. Design Technology Inc. will repair or replace (at its option) units found to be defective within warranty period and returned, transportation prepaid, to its factory at 768 Burr Oak Drive, Westmont, IL 60559.



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