

# ANTHONY ULTRASONIC CLEANERS

## OPERATIONS MANUAL



anthony products, inc.



## CHECK FOR VISIBLE OR HIDDEN DAMAGE

If there is any damage apparent upon opening the case, hold all shipping materials, including the case, and call the shipping agency which delivered the unit. They are responsible for all damage in transit; therefore, all claims should be filed directly with them. The factory will not be responsible for any damage in shipping nor allow any adjustment unless proper formal claim for damage has been filed against the carrier.

## LIMITED WARRANTY

This product is warranted against defects in materials and workmanship for a period of one year from the date of purchase. During the warranty period Anthony Products, Inc. will, at its discretion, either repair or replace the Product without charge for these types of defects. For service under this warranty, the Product must be returned within the warranty period to Anthony Products, Inc. ***Shipping charges to and from Anthony Products, Inc. under this warranty must be paid by the buyer. The buyer must also include a copy of the sales receipt or other proof of the date of purchase. If the product is returned without proof of the date of purchase, it will be serviced as an out-of-warranty product at Anthony Products, Inc. prevailing service rates.***

***This warranty shall not be effective unless the Warranty Registration card included with the Product is returned to Anthony Products, Inc. within thirty (30) days of the date of purchase.***

***Alteration or misuse or neglect of the Product voids the warranty. Except as specifically set forth above, Anthony Products, Inc. makes no warranties, expressed or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose, with respect to the product. If any implied warranties apply as a matter of law, they are limited in duration to one year.***

***Anthony Products, Inc. shall not be liable for any indirect, special, consequential or incidental damages resulting from any defect in or use of the Product.***

Any suit brought against the buyer relating to this warranty must be commenced within one year from the date any claim arises and must be brought only in the State or Federal courts located in Orange County, California.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to the buyer. This warranty gives the buyer specific legal rights, and the buyer may also have other rights which vary from state to state.

NOTE: The immediate return of the Guarantee card will insure the registration of the unit and verify your purchase.

## HOW DOES ULTRASOUND WORK?

Instead of a few hundred brush-bristles scratching the surface here and there, the ultrasound has millions of microscopic bubbles or "vacuum cleaners" dislodging contamination and foreign matter, even *from blind holes, tight joints, pores and places that cannot be reached by long time soaking and/or scrubbing.* Ultrasound does it by cavitation in minutes, sometimes seconds.

Now you can take full advantage of that remarkable ultrasonic action called "cavitation" which gets items 16-times cleaner than the next best method: the scrub brush...and in 1/50th the time...with 1/3rd the personnel. Most Anthony cleaners pay for themselves in 3 to 10 months. You now have at command adequate energy to reach and clean even the tightest hidden clearances between close-fitting parts-otherwise impossible to clean. You can now loosen even strongly-adherent foreign particles...and rinse them away in seconds.



## PRECAUTIONS

1. **GROUNDING THE UNIT** - Grounding the unit is very important. If not grounded, a strong alternating current tingling sensation may be encountered by the operator. For added safety, ALL electrical equipment must be grounded.
2. **SUBMERSION OF HANDS IN TANK** - Although no physiological harm from ultrasonic energy at these frequencies has been reported, submersion of hands in the tank during operation is not recommended.
3. **DO NOT USE ACIDS** - Do not use acids in the cleaning tank, or place the unit so that ventilation is inhibited. This will prevent undesirable effects during the cleaning operation.
4. **ELECTRIC SHOCK HAZARD** - Dangerous voltages are present behind the protective covering. Refer servicing to qualified service personnel.
5. **THREE-PRONG PLUG** - Each unit is equipped with 8-foot (2.4m) U.L. approved line cords fitted with three-prong plugs. Do not use "cheater" adapters to defeat the purpose of safety features.

## OPERATING PROCEDURES

1. Fill the tank with enough water or suitable solvent to cover the parts. (The unit operates efficiently at any liquid level from one inch to full.)
2. Plug the unit into a grounded AC outlet.
3. Turn the timer/switch to the desired time (1 to 15) minutes and cleaning will start immediately as evidenced by a "hissing" sound from the tank. (NOTE: The presence of this "hissing" sound is ALL IMPORTANT! It's a sign that your unit has the most efficient type of cavitation...vaporphase cavitation.)

Each time the water is changed, add detergent and run the unit for five minutes to drive out the entrapped gasses that would otherwise slow the ultrasonic cleaning action.

**Note:** For the USC5.5 cleaner, a stand-by switch is provided to keep the tube filaments heated when the timer/switch is off. With this switch ON, cleaning starts as soon as the timer/switch is set to the desired time. A 30-second warm-up period is required if the stand-by switch is off.

4. After the designated time has elapsed, the unit will automatically turn off. (The stand-by switch on the USC5.5 model is independent of the timer function and must be operated separately.)
5. Rinse away excessive loose foreign material before placing parts in the tank. (The spray-rinse attachment, as shown on page 3, is designed specifically for this purpose.) This allows the liquid to remain cleaner for longer usage.
6. Since the cleaners are completely self-tuned and are pre-set and tested at the factory, no adjustments are necessary in the field.

## CHOOSING A CLEANING SOLUTION

1. Selection of a proper detergent is important because some detergents inhibit ultrasonic action and attack the stainless steel tank.
2. The choice of cleaning solutions depends upon the nature of the soil and the material to be cleaned. An almost infinite range of solvents and all aqueous solutions will support cavitation at the desirable, powerful low frequencies generated by these units.
3. While certain solvents will not support direct cavitation at these preferred frequencies, more than ample power for effective cleaning is transmitted through the metal parts, provided they rest on the bottom of the cleaning tank.
4. **REMEMBER:** Do not use acids in the cleaning tank.



## CLEANING IN BEAKERS

Many acid solutions and strong solvents may be successfully used by cleaning in auxiliary beakers. The beakers containing the special cleaning solutions can rest at the bottom of the main cleaning tank. Enough water with detergent should be maintained so that the beakers are in at least one inch of water. The large opening of the cleaner will chamber several large beakers which may be purchased at any laboratory supply company. Do not use plastic containers for the above cleaning.

## CAVI-CLEAN DETERGENT

### PHOSPHATE - FREE & BIODEGRADABLE

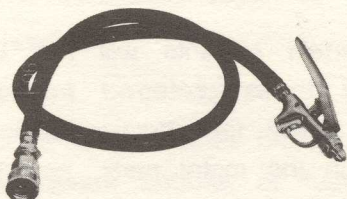
An all purpose concentrated detergent formulated especially to increase the cleaning efficiency of ultrasonic cleaners. It is gentle to the hands and is neutral pH. It will not harm metals or their alloys. Blood cutting agents, a rust inhibitor, high sudsing for general cleaning and an excellent wetting and penetrating agent are among its features.

Water hardness makes little change in the cleaning action when CAVI-CLEAN is used.

**DIRECTIONS:** Use approximately 1 part in 100 parts of water. (1 or 2 ozs. (28.g or 56.g) per gallon (3.78 liters)

Furnished in unbreakable plastic 1 gallon (3.78 liter) containers.

## ACCESSORIES



### SPRAY - RINSE ATTACHMENT

The #USC510 Spray-Rinse Attachment was designed specifically for rinsing before and after ultrasonic cleaning, and is an essential step in successful cleaning. It is a simple job to plumb this attachment to any sink faucet or water supply.

## MODELS USC2.1 & USC4.6

Accessories: (for both units above)

#USC1025 Stainless steel cover

#USC1058 Stainless steel cleaning basket 1" (2.54cm) deep

## MODEL USC11

#USC1011 Stainless steel cleaning basket 3" (7.6cm) deep

#USC1012 Stainless steel cleaning cover

## MODEL USC5.5G

#USC1055 Extra Stainless steel cleaning basket 4" (10.2cm) deep

#USC1038 Stainless steel cover

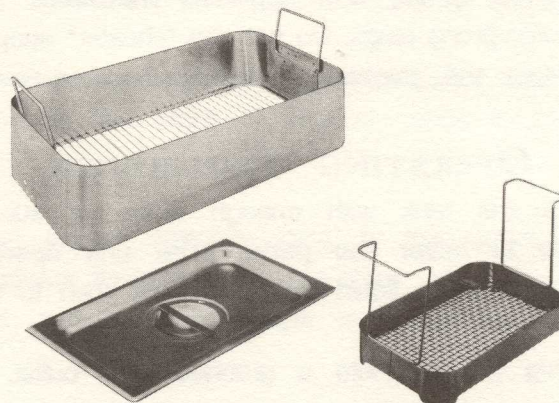
#USC1453 Extra detachable 8' (2.4m) line cord

#USC1159 Extra 5' (1.5m) long fill hose

## MODEL USC18G

#USC1059 Stainless steel cleaning basket 4" (10.2cm) deep

#USC1159 Extra 5' (1.5m) long fill hose



#USC1011, #USC1055, #USC1058, & #USC1059  
Stainless Steel Cleaning Baskets

#USC1012, #USC1025 & #USC1038  
Stainless Steel Covers

7740 Records Street  
Indianapolis, IN 46226  
(317) 545-6196 • 800-428-1610  
[www.anthonyproducts.com](http://www.anthonyproducts.com)