



PATTERSON®  
DENTAL

# AN INTRODUCTION TO ULTRASONIC CLEANING

(OPERATOR MANUAL)



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DENTAL

Patterson Dental Supply, Inc.  
1031 Mendota Heights Road  
St. Paul, MN 55120

## **OPERATING INSTRUCTIONS FOR YOUR ULTRASONIC MACHINE**

1. Pour enough of the required Cleaning Solution, properly diluted where specified, to fill three fourths of the tank. Add the parts to be cleaned. Make sure the parts are totally covered by the cleaning solution. If necessary add more solution. NOTE: The solution level in the tank should never be less than three inches.
2. Plug the line cord into the proper AC outlet. If an adapter plug is used, the grounding wire (green wire) must be secured to either a water pipe or an adequately grounded electrical outlet.
3. Located on the right side of the front panel is an automatic electrical timer. The machine is turned "On" by setting the dial to the minutes desired. These self-timing units will automatically shut themselves off at the end of the preset time. An additional feature of the automatic timer control is the "Hold" position. This convenience allows you to clean for more than the 30-minute maximum time cycle, but requires you to manually turn the machine "Off".
4. Cleaning times may vary, depending upon the amount and types of contamination on the parts. It is our suggestion that a three to five minute cleaning cycle be initiated and more time added as necessary. Your own experience will quickly indicate the optimum cleaning time for your particular needs. NOTE: Occasionally, some components may require presoaking or hand brushing after a few minutes of ultrasonic cleaning.
5. When cleaning cycles necessitate a series of solution baths, it may save time and expense to use an auxiliary pan or a series of glass beakers. Simply place the auxiliary pan in contact with the solution in the cleaning tank (1/3 filled with the proper carrier bath), then immerse the parts into the auxiliary pan and its solution. The same procedure can be followed for the glass beakers. Place the rubber beaker band around the beakers. Fit the beakers through the beaker positioning cover (adjusting the rubber beaker bands so that approximately 1/3 of the beaker is immersed in solution), then fill the beakers with the appropriate Cleaning Solution. When utilizing these methods, solutions may be stored in the beakers, covered and reused when required.

### **OUR GUARANTEE**

IF THIS ULTRASONIC CLEANING MACHINE SHOULD FAIL WITHIN 2½ YEARS FROM THE DATE OF PURCHASE, PATTERSON DENTAL SUPPLY, INC. WILL REPAIR IT AT NO COST TO YOU. PLEASE CONTACT YOUR LOCAL PATTERSON BRANCH and PROVIDE THEM WITH THE MODEL NUMBER, SERIAL NUMBER and DATE OF PURCHASE.

FAILURE TO OPERATE ACCORDING TO OPERATING INSTRUCTIONS SUPPLIED OR MISUSE OF MACHINE WILL VOID THIS GUARANTEE.

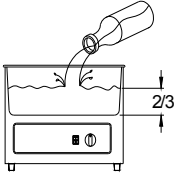
### ***DO's***

1. Properly ground machine cord. This is very important.
2. Use only proper solutions for compatibility.
3. Operate the machine with sufficient solution in tank.
4. When using beakers or an auxiliary pan for cleaning, enough solution must be in tank to act as a coupling agent. The beaker should be suspended just below the solution level, but off the bottom of the tank. Beaker covers should be on at all times.
5. To prevent solution loss through evaporation and splashing, use the tank cover when the machine is in operation.
6. Keep the inside surface of the tank clean and free of sediment.
7. Keep ventilating louvers clean and free of obstructions.

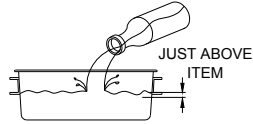
### ***DON'Ts***

1. Do not allow anyone other than Patterson Dental technicians to open the cabinet for inspection or service. The line cord must be disconnected from the electrical outlet before disassembly. High voltage in the circuit can be very dangerous.
2. Do not subject your machine to shock impact.
3. Do not operate the unit without sufficient solution in the tank.
4. Do not immerse machine in water or any other liquid.
5. Do not use gasoline, benzene, benzol or other hazardous materials.
6. Do not use acid in the stainless steel tank; it will eventually create pinholes in the tank.
7. Do not use water alone as the carrier bath. Water is not a satisfactory coupling agent unless a wetting agent is used.
8. Do not place any heavy or solid objects directly on the bottom surface of the tank. They may block cavitation, thus preventing proper cleaning and causing the buildup of heat in the transducer.
9. Do not restrict air flow — ventilation should be adequate.
10. Do not operate the unit in extremely dusty areas. Dust buildup may interfere with the unit's normal operation.

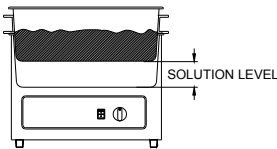
## Proper procedure for using auxiliary pans and beakers in an Ultrasonic Cleaning System.



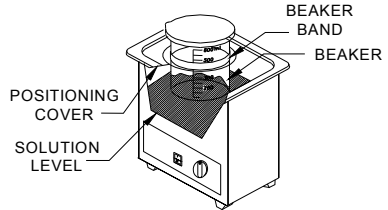
Fill the main tank approximately  $\frac{2}{3}$  full with the proper solution or carrier bath.



Fill auxiliary pan or beaker (s) with designated ultrasonic cleaning solution(s) to a level just above the item(s) to be cleaned.



Place auxiliary pan into main tank, resting it on its handles, making sure that the bottom of the auxiliary pan is below the solution level in the main tank. Add water if necessary. This ensures proper sound wave transference.



If a beaker or beakers are used, place the beaker in a positioning cover using the beaker band to adjust the depth of the suspension so that the beaker bottom is slightly below the surface of the solution in the main tank, but off the bottom.

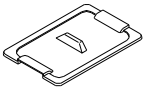
### Ultrasonic Cleaning Equipment Accessories

All accessories are made from High-Grade Stainless Steel.

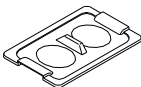
PA4 Accessory Kit Contains: 1 Accessory Basket, 1 Bur Tray, 1 Positioning Cover, (090-9564) 2 600ml Beakers and Beaker Tops.

PA12 Accessory Kit Contains: 1 1/2 Size Solid Side Basket, 1 1/2 Size Positioning Cover, (090-9572) 2 600ml Beakers and Beaker Tops, 1 Bur Box and 1 Bur Tray.

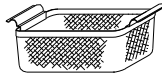
Additional Accessories Available:



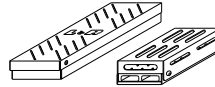
PLASTIC COVER



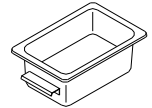
POSITIONING COVER FOR 600ml BEAKERS



STAINLESS STEEL MESH BASKET



ACCESSORY BOX AND BUR BOX



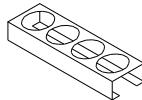
AUXILIARY AND SOAK PAN



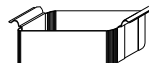
GLASS BEAKERS AND BEAKER COVERS



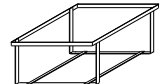
INSTRUMENT DELIVERY CASSETTES



BEAKER STAND



SOLID SIDE DRAIN BASKET



INSTRUMENT CASSETTE RACK



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