



# SCALEX<sup>®</sup> 890

SELF-CONTAINED PIEZO ULTRASONIC SCALER

## INSTRUCTIONS

 Read Instructions Before Use



ISO 9001  
ISO13485   
0434

## WARRANTY

**DENTAMERICA<sup>®</sup>** warrants this unit against defects in material or workmanship for a period of one year from the date of purchase. This warranty does not apply to damage arising out of abuse, alteration or improper operation of the unit.

**DENTAMERICA<sup>®</sup>** shall repair or replace the defective unit upon return of the unit together with evidence of purchase date to its authorized dealer.

SCALER TIPS are excluded from the warranty.

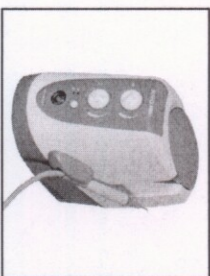
**DENTAMERICA<sup>®</sup>**

18688 E. San Jose Ave.  
City of Industry, CA 91748 U.S.A.  
[WWW.DENTAMERICA.COM](http://WWW.DENTAMERICA.COM)

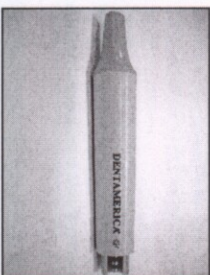


## STANDARD COMPONENTS

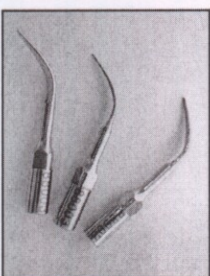
1. Control Unit
2. Piezo Handpiece
3. Universal Scaler Tips
4. Torque-Limiting Tip Wrench
5. Water Hose With Quick Connector
6. Foot Pedal
7. Power Cord
8. T Connector
9. Instructions



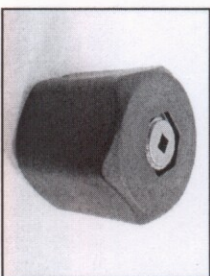
1



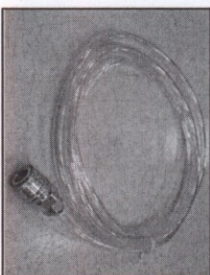
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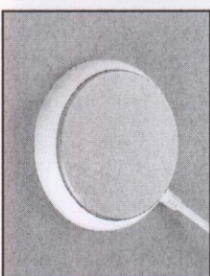
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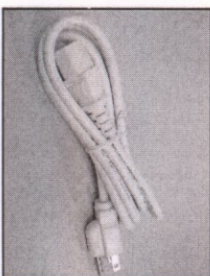
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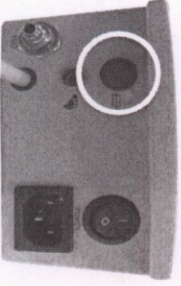
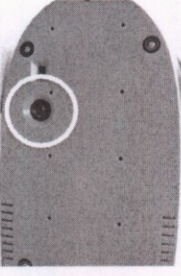
| PROBLEM                             | PROCEDURE  |
|-------------------------------------|--|
| No electrical power                 | 1. Check fuse and replace if necessary (with same fuse specifications).<br>2. If there is still no power after fuse replacement, return the unit to dealer for service.  |
| No water output when using the tank | Set the Scalex 890 to the external water source by pressing the water select button. Press the water select button again to switch back to the internal tank. Run the machine again until there is water output. |

## SPECIFICATIONS

|                                 |   |
|---------------------------------|---|
| INPUT                           | AC 115V/60Hz or 230V/50Hz                   |
| FUSE                            | INPUT 2A, OUTPUT 3A                         |
| FREQUENCY                       | 27,000 or 32,000 scaling strokes per second |
| WATER TANK VOLUME               | 1,000 ml                                    |
| DIMENSIONS                      | D260*W140*H210 mm                           |
| WEIGHT                          | 3.3 kg                                      |
| SHIPPING AND STORAGE CONDITIONS | -40°C ~ +55°C, RELATIVE HUMIDITY <93%       |
| OPERATION ENVIRONMENT           | 10~60°C, RELATIVE HUMIDITY 10%~90%          |



## TROUBLESHOOTING

| PROBLEM                                 | PROCEDURE  |
|---|--|
| No scaling, no water                    | <ol style="list-style-type: none"> <li>1. Make sure the power supply is properly connected.</li> <li>2. Make sure the <b>⓪</b> button on the front panel lights up. If not, check the fuse Input (Figure 15), fuse Output (Figure 16) and replace if necessary.</li> <li>3. Check if the foot pedal is broken.</li> <li>4. Make sure the scaler insert is inserted firmly into the handpiece base.</li> <li>5. Return the unit to local dealer for repair.</li> </ol>  |
| Only scaling, no water                  |   <p>Figure 17      Figure 18</p> <ol style="list-style-type: none"> <li>1. Make sure the correct water source is selected. (tank or external water)</li> <li>2. Make sure the water supply is properly connected.</li> <li>3. Make sure the water dial is rotated clockwise.</li> <li>4. When using the external water source, make sure the water tube is not kinked or blocked by debris. When using the water tank, make sure the water tank outlet is not blocked by debris, and the plug inside the tank outlet is properly attached.</li> <li>5. Return the unit to local dealer for repair.</li> </ol> |
| Only water, no scaling                  | <ol style="list-style-type: none"> <li>1. Make sure the scaler insert has been fully inserted.</li> <li>2. Return the unit to local dealer for repair.</li> </ol>  |
| Cannot adjust the intensity             | Return the unit to local dealer for repair.  |
| Water leaks from the bottom of the tank | Make sure the O-ring outside of the tank outlet is properly attached.  |

## INSTALLATION

1. The base unit should be placed on a flat surface.
2. Make sure the proper power supply (230V or 115V) is used with the unit. Plug the power cord into the socket at the rear of the base unit and into the electrical outlet (Figure 1).

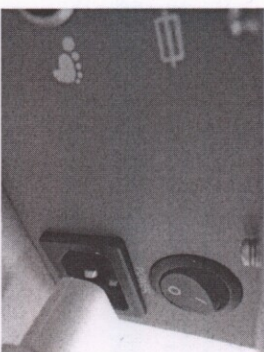


Figure 1

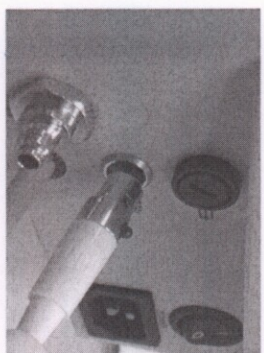



Figure 2

3. Matching the 3-pin connection, firmly plug in the foot pedal's electrical cord into the  location at the rear of the base (Figure 2).

4. Fill the water tank and press it firmly into the base unit making sure the tank is completely locked (Figure 3). To remove the water tank, use both hands to grasp the sides of the tank then lift (Figure 4).

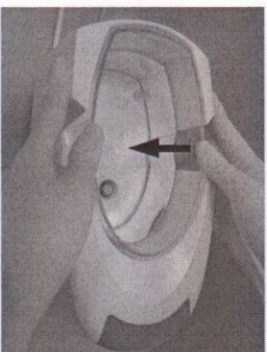


Figure 3



Figure 4



## STERILIZATION

5. The unit is equipped with an advanced auto-locking water tube fitting. At the rear of the base unit, attach the metal quick disconnect to the water connector. The fitting will automatically lock and secure a watertight connection (Figure 5).

Connect the opposite end of the water tubing to a filtered, clean water supply capable of supplying 30 to 60 P.S.I. of water pressure (Figure 6). To disconnect the water tubing from the base, grasp the metal quick disconnect and slowly pull. Make sure to turn off the water source before disconnecting the water tube from the unit.



Figure 5

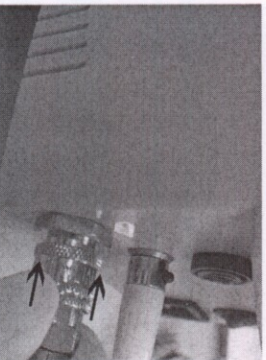


Figure 6

### **HANDPIECE**

For the purpose of autoclaving, the handpiece separates into two parts, the upper handpiece which holds the scaler tip, and the handpiece base with the tubing attachment.

To separate the two, firmly pull the upper portion of the handpiece away from the darker colored lower portion (Figure 16).

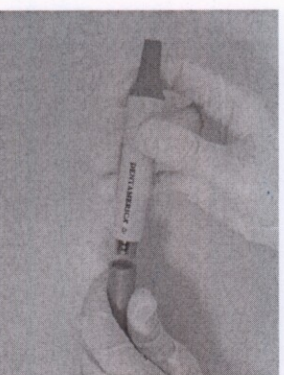


Figure 16

Sterilize the upper portion of the handpiece only. After sterilization, reinsert the upper handpiece firmly into the handpiece base. The upper handpiece and scaler tips are autoclavable. Do not sterilize the lower portion with the tubing. To prevent cross contamination between patients, the handpiece and scaler tips should be sterilized according to the autoclave manufacturer's instructions. (maximum temperature 135°C).

### **WATER TANK**

Not autoclavable. The water tank can only be chemically sterilized.



## NOTES

1. Make sure the proper power supply is selected for the unit (230V or 115V).
2. Press the tank firmly into the base unit making sure the tank is completely locked.
3. Avoid using strong acid/base liquids in the tank.
4. When changing to a different liquid, use the new liquid to flush the unit of any residual liquid. Flush the unit for about 1 minute using maximum flow.
5. A good practice requires starting with a minimum amount of intensity and increasing intensity as needed to minimize heat generation. Use a gentle touch with the handpiece held at an angle in contact with the tooth surface, moving the handpiece in a circular or wavelike motion.
6. Do not use the scaler without any water supply. When there is no existing liquid in the unit, allow for about 10 seconds for the liquid to reach the scaler tip.
7. Normal use will result in insert wear. A worn out insert will give a poor scaling.
8. Return the handpiece back onto the handpiece holder after use.
9. Turn the unit off if it will not be used for a prolonged period.

6. Insert the upper handpiece into the handpiece base.  
(Figure 7 、 Figure 8)

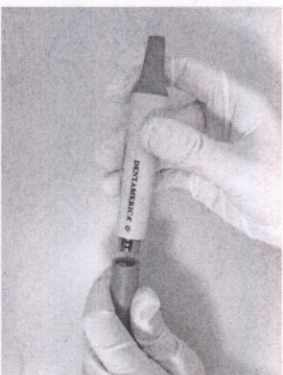


Figure 7

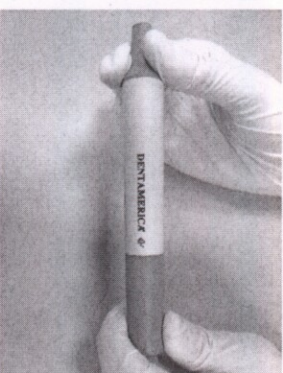


Figure 8

7. Select one of the scaler tips provided with the unit. Start threading the tip into the handpiece by hand, then place the square hole at the bottom of the tip wrench over the tip until the tip's square shank is engaged (Figure 9).  
Tighten the tip securely in place using the tip wrench.
8. Press POWER at the rear of the base unit (Figure 10).

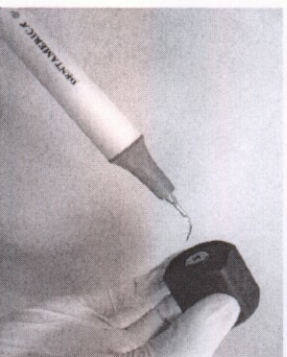


Figure 9




Figure 10

9. After completing installation, the unit is ready for use.



## OPERATION

1. Press the  button on the front panel (Figure 11).

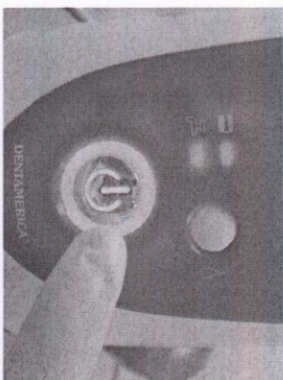




Figure 11

2. Select the water source by pressing the white button on the front panel. When the  icon lights up, the water source is from the water tank (Figure 12).

(If selecting the water tank, fill the water tank and press it firmly into the base unit making sure the tank is completely locked.)

When the  icon lights up, the water source is from the external water source (Figure 13).

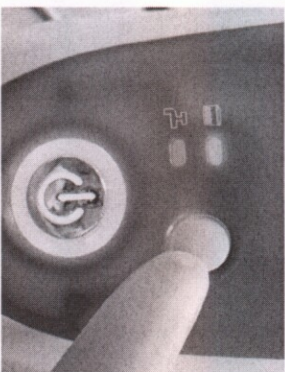


Figure 12

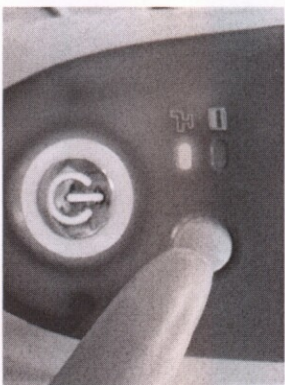


Figure 13

3. The foot control will activate/deactivate the power and the water as set manually by the dials on the face of the unit.

4. Rotate the intensity dial on the front panel in a clockwise direction to turn the unit on and to increase the intensity level (Figure 14).

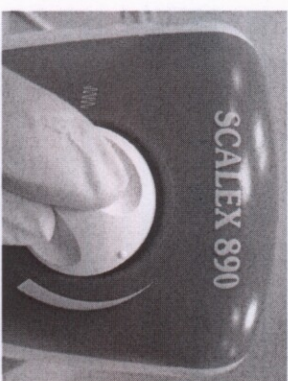


Figure 14

5. Rotate the water dial on the front panel in a clockwise direction to regulate the water flow through the handpiece (Figure 15).

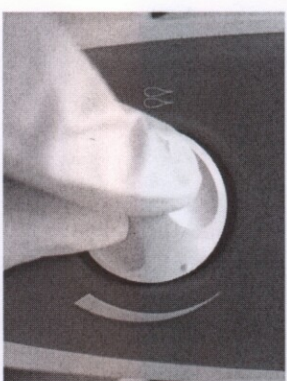


Figure 15