



Engler Piezo Scaler

Veterinary Ultrasonic Dental Scaler

Instruction Manual



Engler Engineering Corporation
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Web site: www.englerusa.com Support site: www.engler411.com

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READ BEFORE YOU START

The handpiece and tip are water cooled and must always have adequate water flow to function properly. The amount of water delivered to the handpiece must be regulated according to the power level. If the power level is increased, the amount of water must also be increased. Not having enough water flow through the scaling handpiece may permanently damage the handpiece, will cause the handpiece to get hot, and void the warranty. For more information, please turn to the **Scaler Operating Instructions** page.

When active, ultrasonic tips vibrate at over a million cycles per minute, if it touches soft tissue, gums or skin, it will cause burns due the friction of the vibration. The tip does not get hot but the ultrasonic vibration will burn if it makes contact with soft tissue. This is due to the friction between the skin and the vibrating tip. **This is normal for all ultrasonic scalers. Never let the scaling tip touch soft tissue / skin.** Engler Engineering Corporation is not responsible for any damage caused by improper use of this device or its accessories.

Only qualified and trained technicians should be allowed to use this equipment.

When using a water bottle, it must be kept pumped to at least 30 PSI (30 – 40 pumps). The pressure relief valve (if equipped) will slightly move out showing the yellow interior when pressure builds up. As water is used the pressure will decrease and the bottle must be pumped to keep adequate pressure. The bottle should be maintained at 1/2 to 2/3 full. Always use distilled water.

It is recommended to remove and clean / disinfect the scaling tip and handpiece after every use to prevent the spread of germs, bacteria and disease.

Handpieces, tips, and water filters, are normal wear and tear items. In order to achieve optimal performance they should be replaced regularly.

The power switch is on the left side of the unit.

Colors, styles, function and general appearance are subject to change without notice.

COMPANY PROFILE

Engler Engineering Corporation has been in business since 1964 and occupies an 8000 square foot facility in Hialeah, Florida (USA). Engler manufactures high speed and table top ultrasonic dental scalers, polishers and combination units. Other devices include electrosurgery equipment and ultrasonic instruments for the veterinary market as well as a microprocessor controlled anesthesia delivery system and a respiratory monitor for veterinary use..

Engler Engineering Corp. acquired the exclusive manufacturing and marketing rights of Dynax products, including stretchers, gurneys, The Cat Grabber, comfort cots, warm water heater / circulator with pads, and other products. We also acquired the Alpha-Sonic, Ora-Sonic, and Pro-Sonic line of piezo scalers.

Engler manufactures all of the inserts and tips used in the Engler products as well as many others on the market today in the 18K and 25K frequency range.

Our repair department has the technical knowledge to repair and maintain a number of dental devices manufactured by other companies including Shorline.

Engler Engineering Corporation's foreign sales are handled through a large and growing network of veterinary distributors. At the present time we are represented throughout the Middle East, Europe, Central and South America, Canada, Asia, New Zealand, Australia, and most other countries.

If you have any questions or comments, please contact:

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ENGLER ENGINEERING CORPORATION'S BRAND NAME VETERINARY PRODUCTS

- **ADS 2000**, microprocessor controlled anesthesia delivery system / ventilator,
- **Excelsior**, high speed dental air unit with vacuum / electrosurgery / ultrasonic scaler / high speed drill / low speed polisher / air - water syringe, and on demand compressor,
- **Scale - Aire**, high speed dental air unit with ultrasonic scaler / high speed drill / low speed polisher / air - water syringe and on demand compressor,
- **Scale - Aire Mini**, high speed dental air unit with ultrasonic scaler / high speed drill / low speed polisher / air - water syringe,
- **Drill - Aire Plus**, high speed dental air unit, high speed drill / low speed polisher / air - water syringe,
- **Drill - Aire**, high speed dental air unit, high speed drill / air - water syringe,
- **Son - Mate II**, ultrasonic scaler / 35,000 RPM handpiece / low speed polisher,
- **Piezo - Mate**, ultrasonic scaler / 35,000 RPM handpiece / low speed polisher
- **Tri - Mate**, ultrasonic scaler / 35,000 RPM handpiece / low speed polisher / electrosurge,
- **Vet II**, 25K ultrasonic scaler / 35,000 RPM handpiece / low speed polisher,
- **Sonus II**, ultrasonic dental scaler,
- **Engler Piezo Ultrasonic Scaler**,
- **Electro - Son**, touch screen, mono / bi-polar electrosurgical unit,
- **Poli - X**, 35,000 RPM handpiece / low speed polisher,
- **Sentinel V.R.M.**, respiratory monitor,
- **Engler Veterinary Respiratory Monitor (EVRM)**
- More coming soon!

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INTRODUCTION

Thank you for purchasing the Engler Piezo Scaler.

The design of the Engler Piezo scaler circuitry uses integrated computer technology along with our Time Remote Feedback Circuitry. This combination produces a powerful and potent tool against periodontal disease. A reinforced aluminum chassis provides a very durable and reliable unit.

The dental scaler utilizes an ultrasonic principle of operation. The microprocessor converts ordinary line voltage to an operating frequency of approximately 30,000 Hz. This frequency is then amplified and delivered to the scaling tip. As a result, the tip vibrates at this ultrasonic frequency with an amplitude of 0.001 to 0.004 in. (25.4 μ m to 102 μ m).

In designing our unique Engler tips, water flows internally through the tip as it vibrates. As the bubbles in the lavage are bactericidal, the energy released collapses and destroys the bacterial cell walls. The water flowing internally through the tip, effectively cools the area and assists in removing debris from the operative site.

This unit is equipped with a digital readout that provides an indication of the power setting.

PLEASE READ VERY CAREFULLY

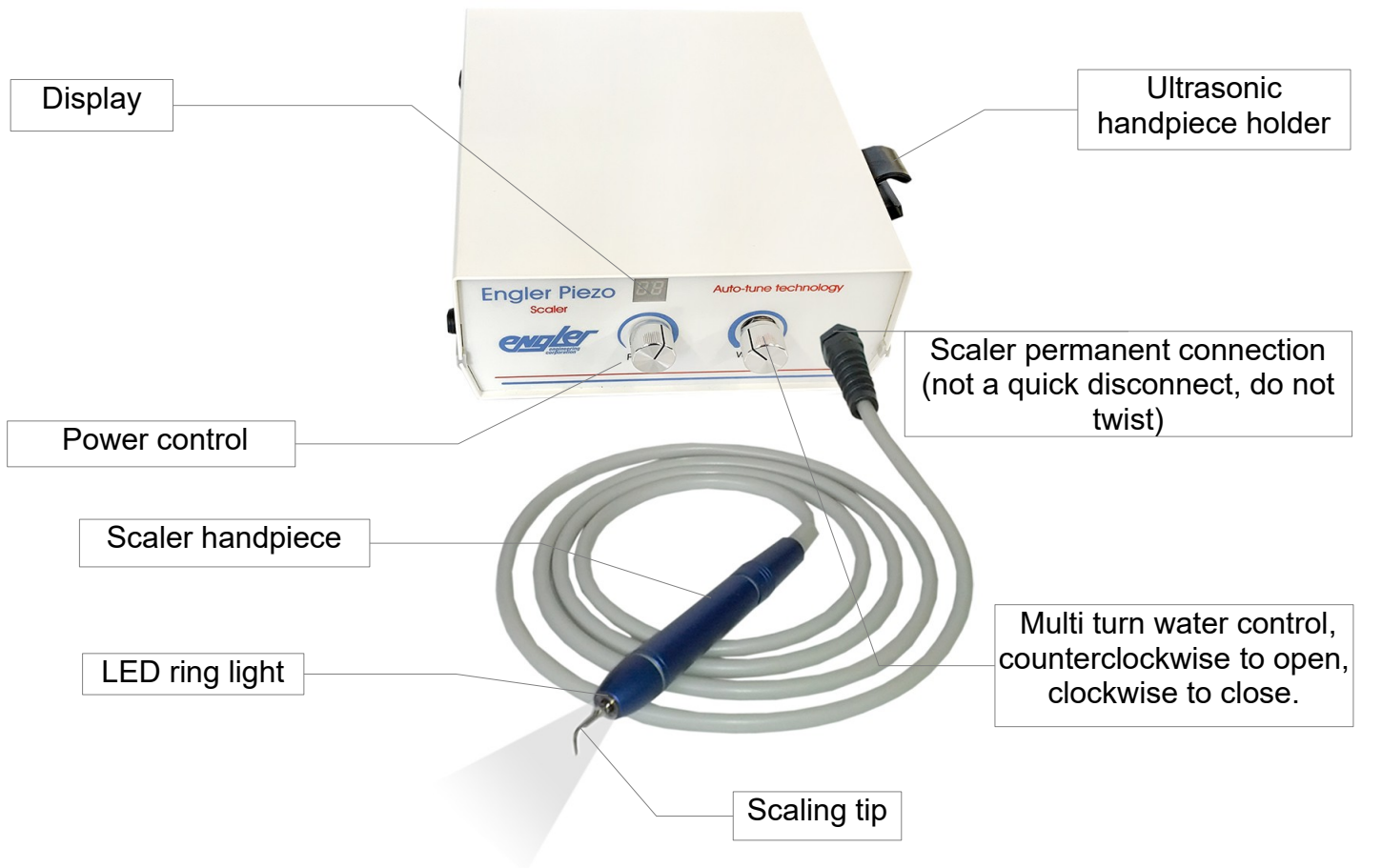
Engler Engineering Corporation (EEC) makes every effort to verify that all parts for this device including any optional accessories ordered with it are included in this shipment. It is imperative that you inspect the package and if you find any parts damaged or missing, you must notify us immediately. Claims for damaged or missing parts will only be accepted within five days of receipt.

EEC makes every effort to verify that our devices are built and tested to approved standards. Any modification to the device, hoses or power supply initiated by others nullifies all warranty statements. Engler Engineering Corporation will not be held liable in any way, for any damage, injury or death due to non-authorized service, improper installation, or improper use of this device. EEC's liability will not exceed the purchase price of this machine.

The information contained herein is intended only as a guide. Individuals not properly trained should not use this equipment. It is intended for professional use only

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INSTALLATION INSTRUCTIONS

IMPORTANT: This device must be connected to a filtered water supply, capable of delivering 30 to 60 psi (2.0 to 4.2 kg/cm²) of water pressure. This unit comes with an In-Line water filter (P/N: A52030). If the water pressure in your facility is above 60 psi, Engler recommends installing a water pressure regulator on the supply line to your scaler.

CONNECTING WATER SUPPLY:

Engler strongly recommends that a manual shut off valve be placed prior to the Female Quick Disconnect, so that the water can be completely shut-off, and line pressure relieved, when the unit is not in use.

This device is delivered with an 8 foot (244 cm) water line, a male quick disconnect fitting, a water filter and a coupling body.

The water line must be connected to the white fitting located on the back of the unit. To connect the water line, slide the white (male) insert into the coupling body until the metal latch locks it in place making a clicking sound. The water line can now be connected to your water source.

We suggest that you use one of the following methods.



44301 Male quick disconnect

A male quick disconnect is supplied as a standard item with all Engler scalers.

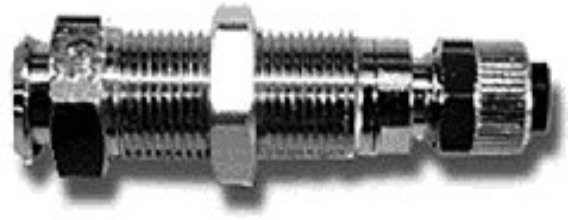
PLEASE REMEMBER

It is recommended to disconnect the device from the water supply when it is not in operation.

Engler Engineering Corporation will assume no liability for damages due to not following recommendations in the Engler manuals.

Connecting water supply continued on next page

1. Female Quick Disconnect (P/N: 44300) - This is the female connector to the male quick disconnect supplied with the Engler Piezo Scaler . Use this to create a custom water installation utilizing ¼ " I.D. water tubing.



44300 Female quick disconnect

2. Saddle Valve Assembly (P/N: A44303) - This kit contains all parts to quickly and easily connect your unit to an existing existing 3/8" to 1-3/8" copper tubing cold water supply line.



A44303 Saddle valve assembly with female quick disconnect & tubing

3. Faucet Adapter Assembly (P/N: A22303) - This screws onto a faucet and includes a female quick disconnect.



A22303 Faucet attachment with female quick disconnect & tubing

4. Portable Water Tank (P/N: PT-1) - This is a self-contained water source, which is ideally suited for portable operation. We suggest using distilled water and fill the tank to the water fill line (approximately 2/3). Tighten the cap, insert the male quick disconnect on the water line into the female quick disconnect on top of the tank, pressurize the tank by pumping the handle until the pressure relief valve's (if equipped) yellow indicator begins to show. Lock the handle in place.



IMPORTANT: Engler Engineering recommends the services of a professional plumber. Engler will not be held liable for any damage including, but not limited to leakage caused by improper installation of our products.

CONNECTING WATER SUPPLY (cont.)

The water filter supplied with this device should be opened and inspected on a regular basis. Clean or replace the filter as needed.

Engler suggests that the filter disc and O-ring be changed out at least twice per year. See WATER FILTER CLEANING INSTRUCTIONS.

CONNECTING THE FOOT SWITCH:

To connect the footswitch to the unit, insert the male quick disconnect into the female quick disconnect at the rear of the device and then tighten the securing nut by turning it clockwise.

CONNECTING POWER SUPPLY:

First plug the power cord into the unit and then plug the male end of the power cord into a grounded power outlet. DO NOT remove or bypass the ground pin from the power cord of this device. Doing so will cause a hazardous condition and void the warranty.

IMPORTANT: Your Engler Piezo Scaler has been equipped with a universal switching power supply and will automatically adjust the input voltage. It will not require any adjustments in this regard.

See technical data for specifications.

Do not alter the scaling tip. The tip is specifically shaped to deliver the optimal vibrating power and frequency. Deforming the tip in any way will cause the handpiece to get hot, degrade vibration power and void the warranty.

SCALER OPERATING INSTRUCTIONS

Initial procedures at the start of every day:

1. The power switch is located on the left side of the unit. Switch it ON.
2. Make sure the water is open (counter-clockwise) and flowing to the device. Rotate the Selector Switch to the "SCALER" position, the red LED indicator should light up, showing that you have power to the unit.
3. Adjust the power control knob to the **minimum** power setting fully counter-clockwise. The digital readout will read 1.
4. Install handpiece and tip. Use the tip wrench to gently tighten the tip.
5. With handpiece and tip installed, set the water control to its maximum setting by rotating it counterclockwise, (knob will rotate up to 3 and a half turns for maximum water) hold the handpiece over a sink and press the footswitch until water comes out in a stream. This should take no more than 30 seconds. This step is done to insure proper operation of the delay cavitation feature by removing air that may be trapped in the water lines.



6. Always keep the power control at the lowest setting and the water control at a level where you have a fine mist at the tip. Higher power settings will result in hotter water.

NOTE: Tips sent from our facility are not sterilized.

IMPORTANT: Keep in mind that higher power levels tend to heat the out-flowing water. Temperature control can be achieved by balancing the power with water flow volume. Thus, high power settings require high water flow rates and conversely low power requires low water flow rates.

7. The scaler is now ready for use.
8. An anti fatigue mat is recommended to prevent the handpiece from contacting the floor should the handpiece get dropped. Piezo handpieces work with a crystal which vibrates when energized, transmitting energy to the tip. Dropping the handpiece could break the crystal. A dropped handpiece is not covered by the warranty.

IMPORTANT: Operating this device with hot water may cause damage to gums, lips and tongue. If the handpiece begins to get warm, stop and check water temperature. If it is hot, make sure that the power is at the lowest setting and the water is set at a high enough setting to provide a lukewarm mist.

Engler Engineering Corporation will not be liable for damage due to improper use of this device. Do not use this device if the water temperature is hot to the touch.

Call Engler Engineering Corporation technical support if further help is needed.

Only qualified and trained technicians should be allowed to perform dentistry

ULTRASONIC SCALING PROCEDURES

1. Before placing tip into patient's mouth, activate the scaler over a sink by depressing the footswitch. A fine mist, with the temperature between cool to lukewarm to the touch is recommended. This should be accomplished with minimal power and proper water flow.
2. It is recommended that when a tip is placed into a patient's mouth, the lips, cheek and tongue be retracted to prevent unwanted contact.
3. Place the tip into the patient's mouth and press the footswitch.
4. Bring the tip lightly up to the tooth and gently move it over the surface of the tooth with an erasing motion using the side (edge) of the tip.
5. A saliva ejector or HVE is recommended.

IMPORTANT: Do not leave the vibrating tip in one place as it can cause serious damage to the tooth or surrounding tissues. Engler Engineering Corporation will not be liable for damage due to improper use of this device.

Note: Engler has designed this device with a feature called Delayed Cavitation. This function purges the tip of water after releasing the footswitch to prevent bacteria from entering the tip.

IMPORTANT: Pressure on the tip is not necessary to remove calculus or tartar. Enamel on the teeth may be damaged or removed if using excessive pressure. It can also be damaged if the scaling tip is left to rest in one spot for even a few seconds. Using the tip as a pry to remove calculus or tartar will likely damage the tooth and may change the shape of the tip, which in-turn, changes the frequency. The normal power setting for most procedures should be LOW range. Since every operator has a different technique and some patient's are more sensitive than others, the power may be adjusted to satisfy specific requirements.

The use of a face mask is recommended when operating the scaler, to avoid inhalation of bacterially contaminated aerosol (water mist) by the operator.

**Only individuals properly trained in modern dental cleaning techniques
should be allowed to perform dental procedures.
Improper use of dental equipment can permanently and severely harm a
patient's teeth.
This manual does not attempt to teach dentistry.
Do not use this equipment without proper training.**

SCALER MAINTENANCE

FINAL PROCEDURES AT THE END OF EACH DAY:

1. Make sure the unit is turned off.
2. Remove the tip and ultrasonic handpiece, clean then sterilize.
3. Disconnect the unit from its water source or turn off the water supply.
4. Clean and disinfect all surfaces.

Scaler Tips:

IMPORTANT: The scaling tips should be thoroughly cleaned and free of blood, tissue, or any other debris before sterilization.

The scaling tips and ultrasonic handpiece may be sterilized by autoclave or chemiclave, always follow the manufacturer's instructions and recommendations. Do not autoclave over 270 degrees F or more than twenty (20) minutes..

It is recommended to remove tips daily for sterilization. The tip may "weld" itself in the handpiece if left in for days / weeks on end.

Chassis:

The chassis should be cleaned at the end of every operating day with a chemical sterilization solution. This procedure could be done by spraying a fine mist of sterilization solution on the unit, allowing it to remain on the chassis for the length of time recommended by the manufacturer. The surface should be wiped with a clean damp cloth or as suggested by the chemiclave manufacturer. Dry completely.

SCALER HANDPIECE, FOOTSWITCH AND POWER CABLES:

After each procedure, or at least once a day, it is suggested that the handpiece and its cable be thoroughly cleaned and sterilized. The recommended procedure is as follows:

1. Remove tip, and ultrasonic handpiece, sterilize these items as listed above.
2. Clean the outer surface of the handpiece and its cable with antiseptic, rinse with water and sterilize with a chemical sterilization solution.
Caution: No chemicals or cleaners should be allowed to get into the scaler handpiece. Flush the handpiece thoroughly and completely with clean water.
3. Install sterile tip into handpiece for next patient.
4. The footswitch and power cables should be cleaned periodically by spraying a mist of sterilization or cleaning solution on the cables. It should remain on the cables for the length of time recommended by the manufacturer. Wipe the surface with a damp cloth and dry the cables completely.

SCALER TROUBLESHOOTING

“ON” LED INDICATOR DOES NOT ILLUMINATE:

1. Verify that unit is switched ON, the ON / OFF switch is located on the left hand side of the unit.
2. The unit is not plugged in to a power outlet: verify that the unit is plugged in.
3. Power outlet not active: try another outlet.
4. Verify the power cord is plugged all the way in at the back of the unit.
5. Contact Engler Engineering Corporation.

“ON” LED INDICATOR ILLUMINATES, NO WATER FLOW:

1. Verify water line is connected and water is flowing to unit.
2. Verify that the waterline is correctly connected to the quick disconnect at the back of the unit.
3. Check if handpiece cable or water line is not kinked or twisted.
4. Check Water Filter and Disc: clean disc with plain water and a toothbrush. If clogged, replace O-Ring and Disc.
5. If using Portable Water Tank: Confirm the correct water level (2/3) and sufficient pressure (30 – 40 pumps).
6. Water blockage in tip: replace the tip. (Clean with 0.012” piano wire)
7. Contact Engler Engineering Corporation.

“ON” LED INDICATOR ILLUMINATES, LITTLE OR NO VIBRATION / AT THE TIP:

1. Tip loose: tighten the tip.
2. Tip damaged: replace the tip.
3. Handpiece dropped or the crystal is otherwise damaged.
4. Contact Engler Engineering Corporation.

Scaler troubleshooting continued on the next page

HOT WATER COMING OUT OF SCALING HANDPIECE:

The handpiece requires a constant cool water flow in order to maintain tip water temperature below 100 degrees F. You may correct the problem by:

1. Adjusting water flow knob higher (counter clockwise).
2. Tip clogged. Replace tip.
3. Check and / or replace O-ring and filter disc in the inline filter.
4. Water restriction inside the unit: contact Engler Engineering Corporation repair department.
5. If using a Portable Water Bottle, check water level (2/3 minimum) then pump (30 – 40 pumps) to pressurize the bottle.

INTERMITTENT OPERATION:

I. Tip vibrates / cavitates and then stops:

1. Tip loose: tighten tip.
2. Foot switch damaged: Contact Engler Engineering Corporation.
3. Handpiece or handpiece cable damaged: Contact Engler Engineering Corporation.

II Tip action ceases abruptly during operating procedure.

1. Tip not tightened: tighten tip.
2. Handpiece or handpiece cable damaged: Contact Engler Engineering Corporation.

Video maintenance instructions are always available on engler411.com

WATER FILTER CLEANING INSTRUCTIONS

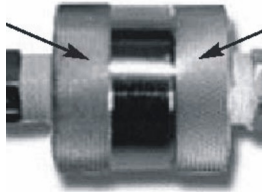
Video instructions can also be found on engler411.com

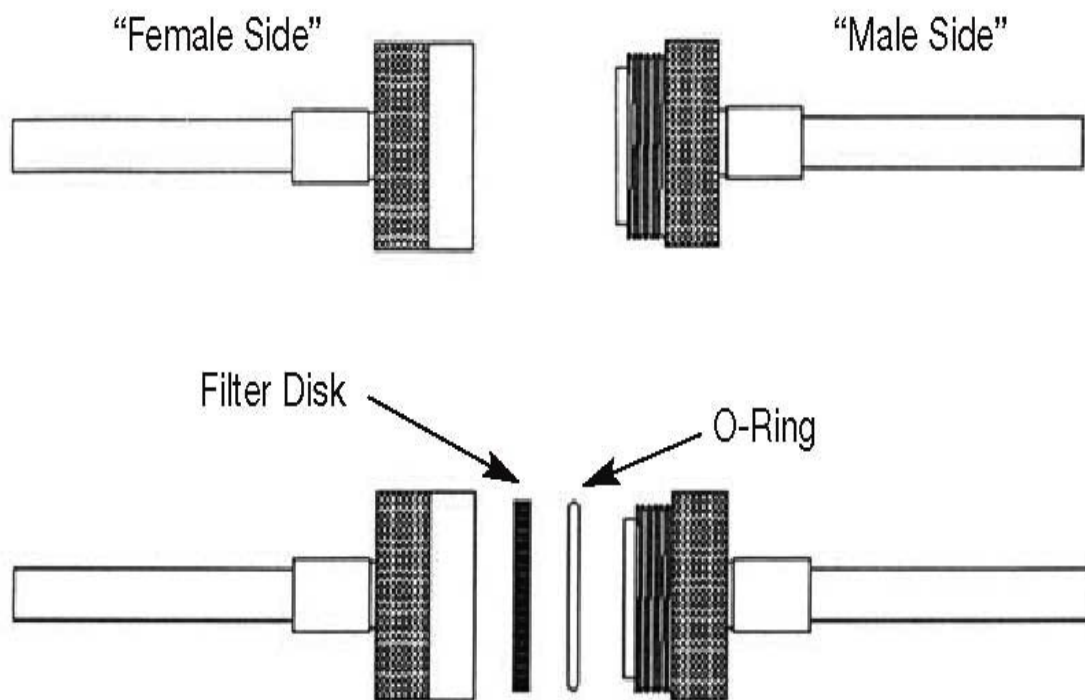
SHOULD BE PERFORMED AT LEAST QUARTERLY

1. Turn off water supply to unit or disconnect the male from the female water connector
2. Unscrew filter housing by unscrewing Side "A" from Side "B". (Refer to Figure) The housing will separate into two parts.
3. The filter body consists of two sides, one with a male thread and the other with a female thread.
4. Remove the O-Ring.
5. Remove the filter disc by turning the female side over and tapping it gently into your palm or gently on a tabletop.
6. Replace with new disc and O-ring part # A52034 (7/8").
7. Reassemble the filter in the reverse order as it was disassembled.
8. Turn on the main water supply and check for leaks.

Point A

Point B





SADDLE VALVE ASSEMBLY



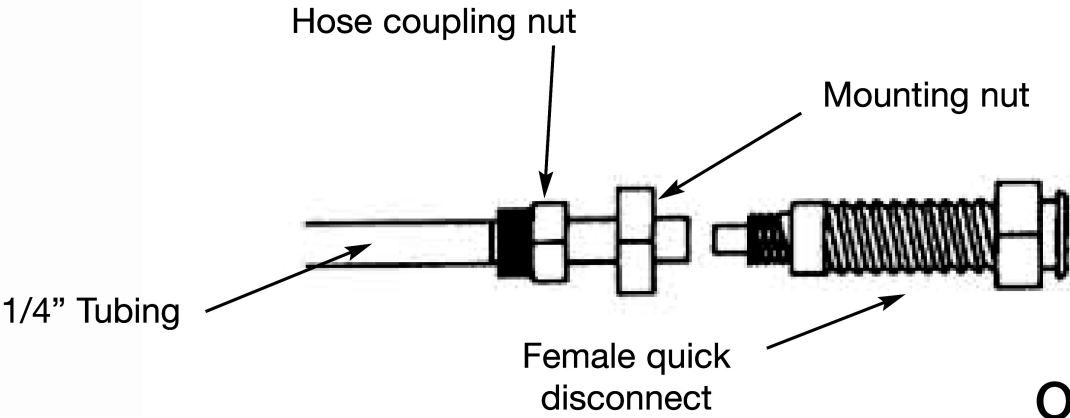
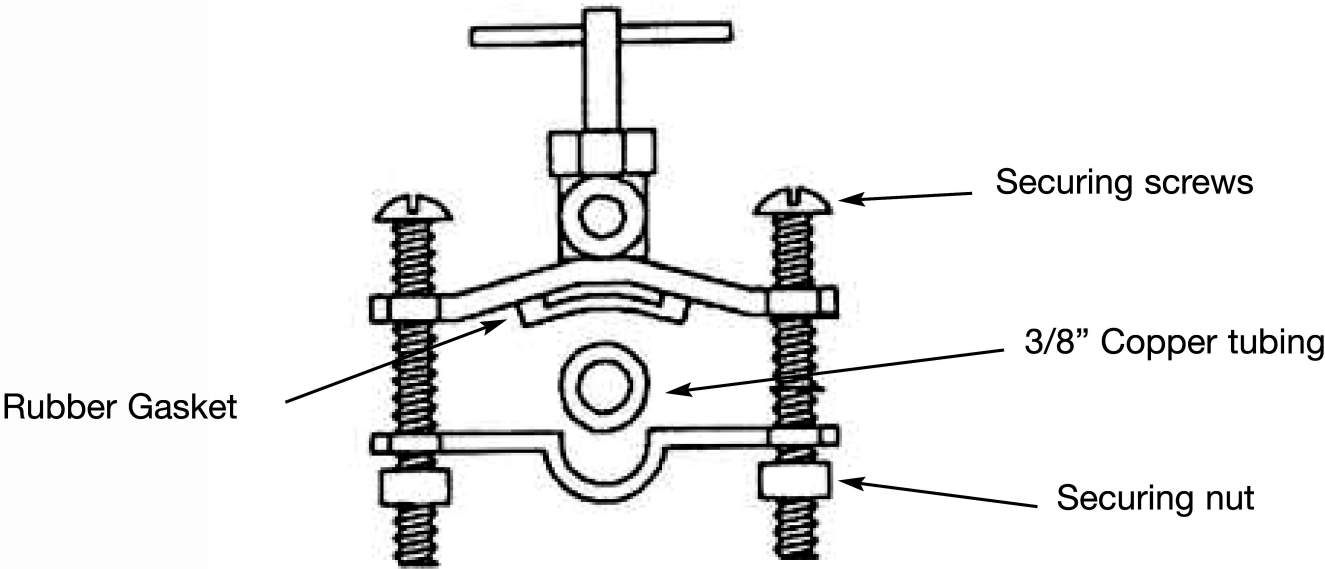
INSTALLATION INSTRUCTIONS

To connect the saddle valve to an existing water source, attach the saddle valve to your existing 3/8" to 1-3/8" copper tubing. **DO NOT ATTEMPT WITH PVC TUBING!**

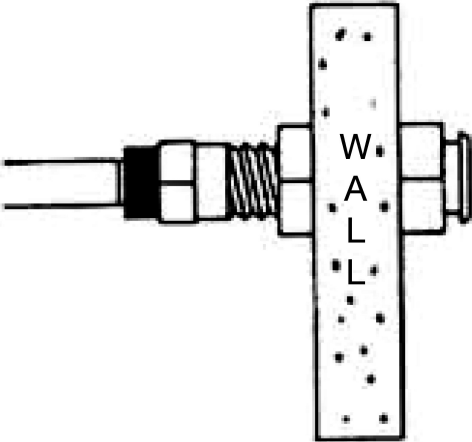
Tighten the securing screws evenly.

DO NOT OVERTIGHTEN, THIS MAY CAUSE THE COPPER TUBING TO CRIMP AND REDUCE FLOW.

See diagram below



Option B



OPTIONS FOR MOUNTING THE FEMALE QUICK DISCONNECT

Option "A" (Unmounted Assy.)

Take the free end of the 1/4" water tubing that comes from the saddle valve and connect it to the female quick disconnect. This is done by placing the hose coupling nut over the water tubing and placing the hose into the back of the female quick disconnect, then tightening the coupling nut.

A44303 Saddle valve assembly w / female connector & tubing

Option "B" (Mounted Assy.)

The female quick disconnect may be mounted directly through the sink top or vanity counter. To choose this way, a 1/2" diameter hole has to be drilled through the surface in the space desired. (see previous page) Then mount the female quick disconnect and tighten the mounting nut to hold it securely in place. Then place the hose coupling nut over the 1/4" water tubing. Place this tubing into the back of the female quick disconnect and tighten the hose coupling nut securely.

THE COPPER TUBE IS READY TO BE PIERCED.

DO NOT ATTEMPT WITH PVC TUBING!

Confirm that the saddle valve assembly is tightened onto the copper tube and the female quick disconnect is properly connected to the water line.

Turn the "T" handle of the saddle valve in a CLOCKWISE direction until it will go no further. Next, turn the "T" handle in a COUNTERCLOCKWISE direction until resistance is felt. Water will now flow to your dental unit. Check for leaks.

You may now connect the water line to the dental unit.

NOTE: The "T" handle on the saddle valve does not shut water to the dental unit. It is only used to pierce the copper tube. It is very important that you mount the saddle valve beyond a shut off valve.

Engler Engineering Corporation will not be held liable for any damage including, but not limited to leakage caused by improper installation of our products. It is suggested that a professional plumber make any necessary installations or connections.

WATER TANK INSTRUCTIONS



PT-1 Water Tank

DIRECTIONS:

1. Remove pump and cap assembly. Pull and turn the pressure relief valve if equipped. If not, slowly unscrew cap and wait for hissing to stop. Then unscrew and remove cap.
2. Fill tank with distilled water or medicated solution up to the "FILL LINE" (approx. 2/3) mark. Do NOT fill beyond this line.
3. Replace pump and cap assembly and tighten securely.
4. Pressurize tank by pumping it approximately 30-40 times (depending on the amount of liquid used). If a hissing sound is detected, tank is over-pressurized. Stop pumping. Insert the Male Quick Disconnect on the end of the water line from Scaler into Female Quick Disconnect provided on tank.

Notice

Tanks **may or may not** be supplied with a pressure relief valve. Those that do not are designed to "bleed off" pressure from the pump and cap assembly when removed (unscrewed).

The presence or absence of a pressure relief valve does not otherwise affect the function of the pump.

Notice: Tank hardware, styles, accessories, etc. are subject to availability and may change without notice. Pop off valves, oil holes, etc. may or may not be available on all tanks.

WATER TANK CARE & MAINTENANCE

1. Release air pressure by pulling and turning knob of pressure relief valve (if equipped). Pull out fully and allow air to escape. Otherwise, unscrew the cap slowly then wait until the hissing stops.
2. Remove pump & cap assembly. Pour out any remaining liquid & rinse all parts thoroughly with clean water.
3. Always store tank empty and with tank cap loose.
4. For issues with mold, see page 23

TROUBLESHOOTING:

PROBLEM: TANK FAILS TO PRESSURIZE.

1. Confirm the cap is tight.
2. Check to see if pressure relief valve (if equipped) is in safety position. Release the relief valve by twisting 1/4" turn in either direction.
3. Remove the pump from the tank. Turn pump handle counterclockwise to unlock. Pull the pump handle up and locate the "oil here" hole on the top of the pump cap. Place 3-5 drops of mineral oil into the oil hole. Pump several times to work the oil into the walls of the pump until it moves freely. Repeat if necessary. Screw the pump assy. back into the tank and resume normal operations. This process should be repeated as often as necessary or when pumping becomes difficult.
4. Black particles found in water bottle indicates that the pump assembly is deteriorating. Order new pump assembly from Engler Engineering.

Pump assembly has been pre-lubricated.

WARNING:

READ AND FOLLOW ALL INSTRUCTIONS

Inspect the pump periodically.

DO NOT use mechanical devices to pressurize the tank .

DO NOT alter the functions of the pressure relief valve (if equipped) or plug the pressure relief valve hole, as this could cause an unsafe condition.

It is not necessary to pressurize the tank until ready for use.

DO NOT lift or carry the tank by waterline, extension rod or pump handle unless it is securely locked in place.

Continued on next page

TO PREVENT SLIME FROM FORMING INSIDE THE TANK

Allowing slime mold to form inside the tank is a generally hazardous and unhealthy condition. Slime in the water tank will make it's way into the dental unit possibly causing permanent damage by clogging the small tubing inside. This will cause the unit (electronics, hoses, handpiece, stack, and tip) to overheat.

It can easily be prevented by using a few simple steps.

1. Every two weeks dispose of water in tank. Pour ½ gallon of warm water and 1 to 2 cups of vinegar into the tank and swirl the liquid thoroughly inside the tank. The vinegar solution can be left in the tank overnight.
2. The vinegar solution can be run through the unit as well.
3. Dispose of the vinegar solution and rinse tank (and the unit) with clean water thoroughly and completely.
4. Clean the outside of the pump / tank according to your facilities normal cleaning procedures.
5. The pump assembly has been pre-lubricated. DO NOT TAKE THIS ASSEMBLY APART.

TECHNICAL DATA

Scaler:

Input Voltage	110 / 250 VAC Universal (Switching) Power Supply
Input Frequency	50 / 60 Hz
Current (Amperes)	2.3 Amps
Transducer Style	Piezo
Operating Frequency	27, 500 – 31,000 HZ
Ultrasonic Generator Data	Auto-tuned Variable Power Controlled

Water: 30 PSI (min) 60 PSI (max) Filtered or distilled

Dimensions: 9" L X 7.5" W X 3" H

Weight:

Net Weight:	3 Lbs (1.36 Kg.)
Shipping Weight:	7 Lbs (3.17 Kg)

Cable Length:

Scaler:	96" (244 cm)
Foot Switch:	96" (244 cm)
Power Cord:	72" (183 cm)
Water Line:	96" (244 cm)



Web: www.englerusa.com / Email: info@englerusa.com
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www.ez-breathe.com / www.25KSeries.com
for brochures, manuals and "how to"
pages please visit www.engler411.com

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