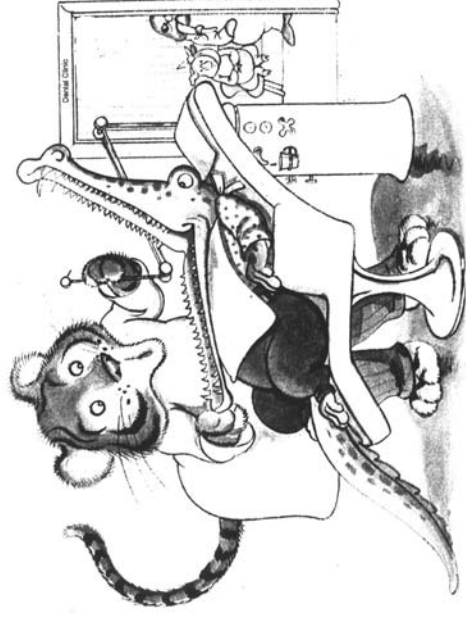




Owner's Manual
for *Dentalaire Prestige*
Dental Stations



DENTALAIRE™

Toll Free (800) 866-6881
Fax (714) 540-9947
www.dentalaireproducts.com
17150 Newhope Street, Suite 407, Fountain Valley, CA 92708

DENTALAIRE™



NOTES

SET UP PROCEDURE FOR DENTALAIRE DENTAL STATIONS

Step 1: Open crate using a large screwdriver. Please check crate for any damages and report them to DentaLaire at **(800)866-6881** immediately or note on paperwork while receiving a damaged unit.

Step 2: Loosen the bolts at cross-member with a 7/16 wrench or socket as it should be carefully rolled and gently lifted out of the crate.

Step 3: Carefully remove all the packing material that goes around the tubing for the high and low speed handpieces. Also the tubing that goes to the piezo scaler tubing. Please remove all other packing material.

Step 4: First remove the three large zip ties off of the compressor. On the side of the compressor opposite the purge valve, connect the Air Intake Filter. This is the black mushroom shaped cap, that screws on where the red cap is. The hole that you can see and feel on the Air Intake Filter should be at 12:00, not 6:00. If you have it at 6:00 oil can leak out. This should be cleaned yearly with soapy water or alcohol, rinsed well and put back on. The Air Intake Filter keeps the compressor running quietly and also keeps foreign debris out of the motor.

Step 5: Open the 22 oz. bottle of synthetic compressor oil. At the top of the compressor is the oil fill hole. This is where you are to put the oil. Unscrew and start adding the oil. Go slowly and empty the bottle by about half to two thirds empty. Wait a few minutes as the oil takes some time to go into the compressor. Slowly add some more oil and wait until you see the oil in the glass eye on the side of the compressor and stop when it gets to the mid level (the red line). In most cases you will usually use about 7/8th of the bottle. Add oil until level in sight glass is half full while motor is not running. The oil level must be half full on the sight glass. On any mobile dental station it is easier to fill the compressor with oil, when the table is at its highest 36" level, not when it is right above the compressor. Please change the oil yearly. Make sure to raise the table before putting in the compressor oil.

Step 6: Take the 2 water bottles off of the machine and fill with distilled water leaving about two inches of air space at the top.

Step 7: Connect the power cord to 110 V_{ac} grounded receptacle and place compressor power switch in the "ON" position, which means the switch on top of compressor is turned clockwise. On units that have a scaler or a fiber-optic system, you will also need to hit the switch underneath the table part of the mobile dental station.

Step 8: Unpack both handpieces and find the "Once A Day" Spray Handpiece Lubricant. Lubricate highspeed drill only, the slowspeed polisher is lube free. Insert the spray tip of the Once A Day Spray into the drive port at the base of the handpiece, spray once and then remove. Do this for highspeed drill only.

Step 9: Attach the handpieces to the appropriately labeled tubing located on the tubing connectors.

Step 10 - Depress the foot control for 5–10 seconds to permit air to purge excess lubricant from the highspeed handpiece. Do not lubricate any other handpiece. The slowspeed is a lube free handpiece.

NOTES



Lubricating Handpiece



Attaching Handpiece

CAUTION: Do not operate any handpiece without a bur; prophyl angle, contra angle or bur blank tightened securely in place. Permanent Turbine/Chuck damage will result!

Step 11: Next open up the bag containing the parts to your piezo electric ultrasonic scaler. There are two blue rubber sleeves, to install simply slip over the handpiece. You have two dental inserts which come with your scaler. One is # **32**, which is your flat or wide tip. This is for heavy duty scaling. The other is # **39**, which is your fine or universal tip. Typically used for your fine or delicate scaling. Many clinics will use this subgingivally. These tips are screwed into place using one of the two wrenches which come with this unit. Now you gently screw the dental tip into place. Finger tight is all that's required. Dentalaire also carries a true Perio Tip for subgingival scaling. It is a little longer and thinner than the Universal Tip (# **39**). DTP00786 is the order number for the Special/Perio Tip (# **33**).



Dental Inserts

Step 12: Please make sure the water switch is on and the water flow control knob is open. Counterclockwise is open (to the left), clockwise is all the way shut (turning all the way to the right). The little button on the foot control activates the piezo electric scaler only. The power setting is usually set at around 60-80. If you do an enormous amount of dentals, e.g. 15-20 a day, 5 days a week, you could wear these tips out in 3-4 months.

CAUTION: Never, ever use worn out tips. This will result in severe damage to the handpiece and could cost you a lot to get it repaired. Please routinely check the tips by using the chart provided, which shows expected tip wear. Remember, if you are having to constantly adjust the power setting up, the tips are probably worn and need to be replaced.

To clean the tips, do the following:

1. Brush off and rinse the tip with water.
 2. It can be sterilized with a cold sterile solution or put in a ultrasonic cleaner.
 3. Autoclave the tips at 275°F for no longer than 15 minutes.
- Enjoy your new dental unit. Please call us at (800)866-6881 if you have any questions. We are here to help in any way we can.

- For High-speed, slowspeed polisher, blue metal airscaler, prophyl angles and contra angles questions, ask for Debbie McCullah.
- For Technical Questions on dental machines, call Paul, Daniel and Wes.
- For all other questions, ask for Daniel Strange.

Please note: If you have any kind of damage, please notify Dentalaire right away. We have a two week window where we can make a claim if there are any damages to the dental station. After that, if you get a dental station from us, have it for a month, open it up and then find damages, we cannot get any kind of credit from our shipper. This makes it very difficult for all parties involved. Thanks for your help in this matter.

SELECTION OF HANDPIECES

Your dental station comes with a high-speed and a Low-speed handpiece. The high-speed is for drilling and sectioning of the teeth. The low speed is used mainly for polishing. It also can have an air sealer or a piezo sealer, which is used to scale (clean) the teeth.

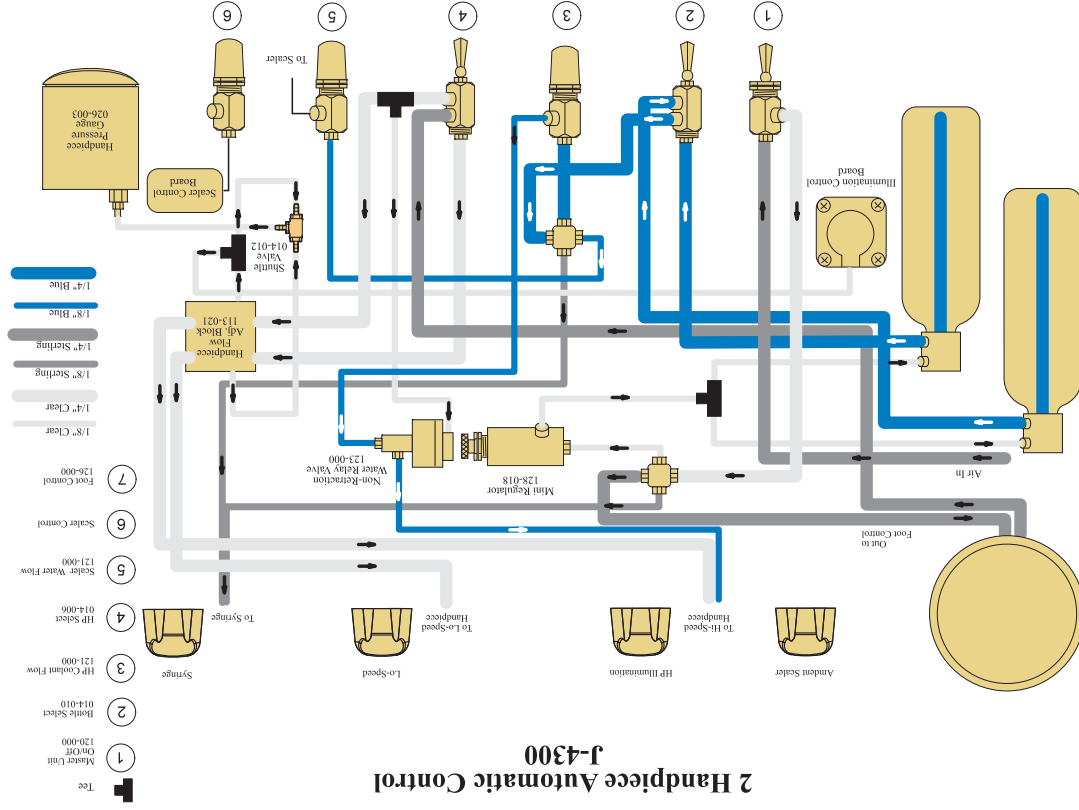
OPERATION OF HANDPIECES

High-Speed Handpiece operates at pressures of 38 to 40 PSI and attains a speed of 350,000 to 400,000 RPM. The water mist helps to keep the handpiece motor and bur cool, as well as the patient's tooth cool while doing restorations, cutting or rotary prophyl scaling procedures. *Constant preventive maintenance is essential in caring for handpieces. If they are not properly cleaned and lubricated, abrasives such as finely ground tooth, metal will cause excessive wear and undue vibration.*

When inserting and removing burs from handpieces, use the bur tool by holding it between the thumb and forefinger. Slide the bur tool over the head of the handpiece. Pull the wrench knob away from the head, then push the knob back to engage the chuck. The square tip of the wrench must fit into the square hole inside of the handpiece head (this is the chuck). To remove the bur, rotate the wrench one full turn Counter Clockwise until the bur is free. To tighten, rotate the wrench one full turn Clockwise until the bur is secure.

Never overtighten the bur, as serious damage can result to the chuck and bur tool.

On units that have a push button bur changer, to insert the bur simply push your thumb on the back cap of the high speed handpiece to engage the chuck. You will feel a click, and then you insert the bur all the way as far as you can. To take out repeat the above step and then pull out the bur.



2 Handpiece Automatic Control J-4300



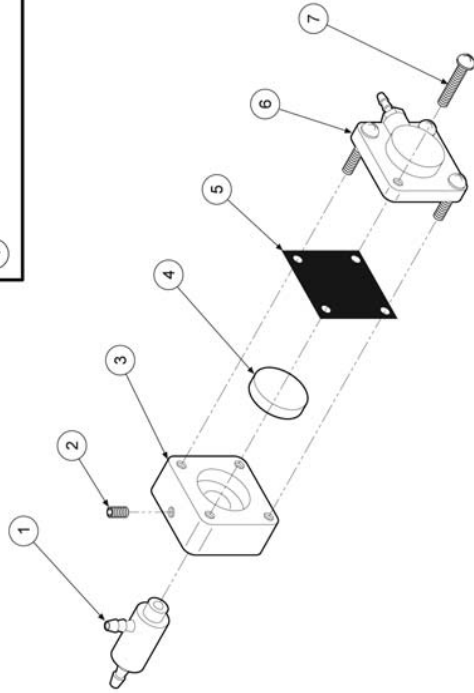
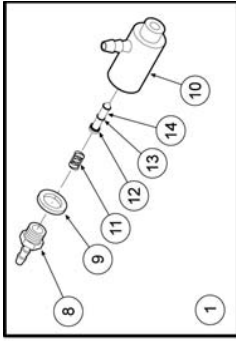
Push Button Bur

If you do not put the bur in all the way it will damage the chuck. You will then need to purchase a new turbine for your high speed handpiece.

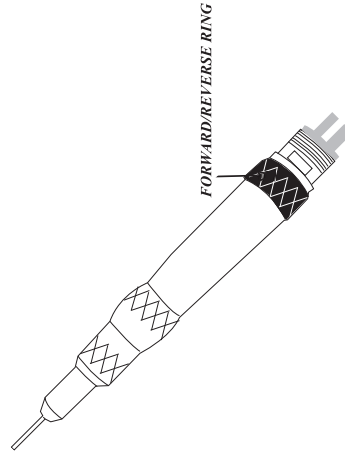
Bur Tool Changing

Slow-Speed Handpiece operates at pressures of 40 PSI and generates speeds from a crawl to 5500 RPM depending on the pressure applied to the foot control. The slow speed should be placed on the right side of the delivery system (dry side), as no coolant is needed for the slow speed procedures.

As with the high speed handpiece, always read and follow manufacturer's instructions for operation, lubrication, cleaning, and sterilization for the slow speed motor and attachments.



Non-Retraction Water Relay Valve



Slow-Speed Handpiece

Nose Portion Swivels 360° To Reduce Hand Fatigue

To attach prophyl angles, contra angles, cutting wheels or handpiece burs to the handpiece, simply turn lock ring to unlock position slide in prophyl angle then turn to lock position. Please note: If the prophyl angle ever gets stuck, once you have removed it, you can squirt a little Once A Day Spray Lubricant into the bottom of the prophyl angle. This should help resolve the problem.

CAUTION: Do not run slow-speed unless an angle or bur is installed as serious chuck damage will result.

CLEANING OF HIGH-SPEED AND SLOW-SPEED HANDPIECES

Before cleaning procedures the bur must be removed from the handpiece. The handpiece must be cleaned with a brush or wiped with alcohol after each patient.

Never use any type of chemicals to clean these handpieces. This includes Nolvasan, Roccal D, chemicals used in Ultrasonic cleaners. These cleaners will ruin the turbines and bearings in the handpieces.

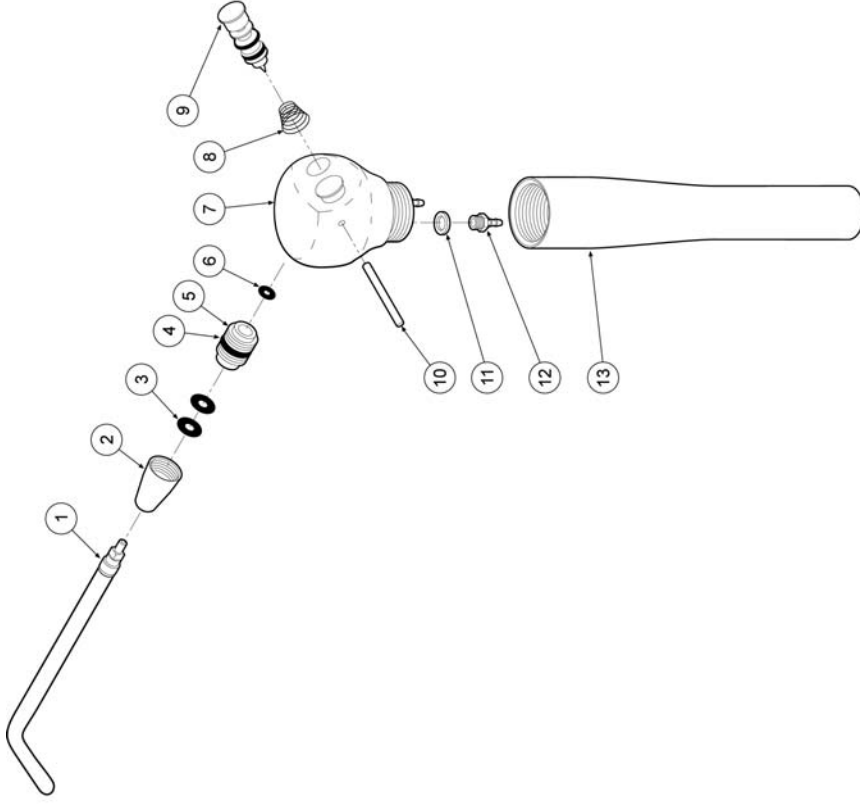
STERILIZATION OF HIGH AND SLOW-SPEED HANDPIECES

1. The handpiece must be sterilized by autoclave for 15 minutes at 135°C (275°F). Do not exceed 275°F when autoclaving.
2. Only use non chlorine products, and no chemical solutions.
3. Do not sterilize the high speed handpiece with the bur inserted. Also, never sterilize the low speed with the prophyl angle attached.
4. Always lubricate the handpieces before you autoclave them, then once handpiece has returned to room temperature you should lubricate it again.

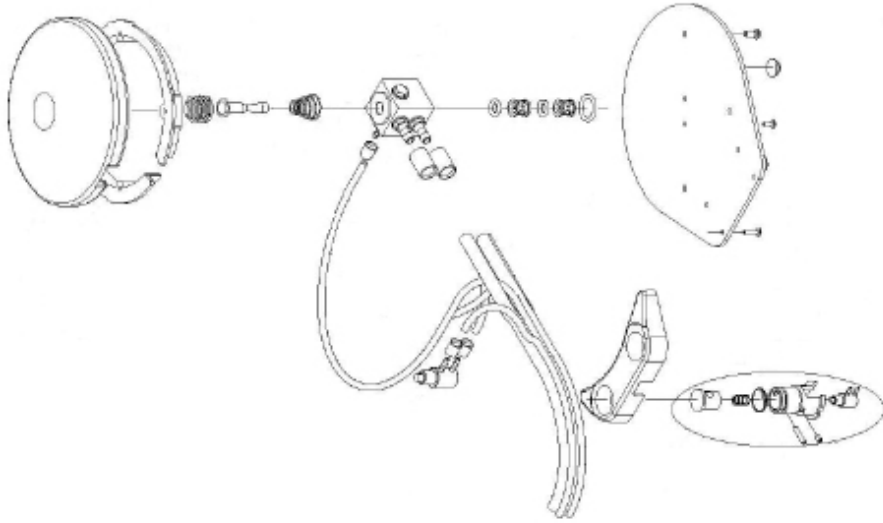
REPAIR AND REPLACING THE HIGH-SPEED CARTRIDGE

Only use the original replacement turbines, for total assurance of quality control and product life. The cartridge is a fragile instrument. Please call our service department if you have questions or need help in replacing this part.

- DA400RC – Standard Type Turbine
- DA400RCA – Push Button Turbine w/Cap
- DASKA485 – Push Button Turbine Only



Foot Control with Chip-Air Button



WATER COOLANT

ADDING WATER TO DENTAL SYSTEM

Slowly remove water bottle from pressure manifold assembly and add distilled water only. Leave approximately two inches of air space at the top. Replace bottle, tighten until secure.

AIR / WATER SYRINGE

All of our dental stations come with an air / water syringe installed and ready to use. Depress the left button for water only. Depress the right button for air only. Depress both buttons to get a mist spray.

MAINTENANCE OF THE DENTOLAIRE DENTAL SYSTEMS

COMPRESSOR

Oil Change: Please change the oil in the compressor once a year. To change the oil, you want to start by taking the compressor out of the Cart Frame, unplugging the black power cord and main Air line then remove the white cover off of the compressor by removing the six bolts at the bottom. Now tilt the compressor away from you and unscrew the site glass indicator. Tip the compressor forward and pour the oil into a small bucket or coffee can. Next screw the site glass back on. Put the white cover back over the compressor and screw in the six bolts.

Please refer to our Compressor Maintenance Guide Chart below to help you keep the compressor running in top form.

COMPRESSOR MAINTENANCE GUIDE CHART

Maintenance Procedure	Daily	Weekly	Monthly	Annually
Purge Drain	X			
Vent Moisture Trap		X		
Check Oil Level			X	
Clean Air Filter Intake				X
Change Oil				X
Complete Check of System				X

SERVICE AND MAINTENANCE LOG

Service Performed	Date	Serviced By
1. Initial Installation		

AIR / WATER SYRINGE

Air or water leakage from the syringe is due to either worn or defective O-Rings or button assemblies.

To rebuild syringe first remove the pin on the side of the housing, and then simply pull out the button straight out of the syringe head. Remove all water deposits off buttons & cylinders. Lubricate the buttons with a non-petroleum based lubricant. Reinstall the Air/Water buttons. Reinsert the pin through housing. Syringe Rebuild Kit Item # A113-403

ORAL ILLUMINATION

This refers to the high speed handpieces that have a fiber-optic system. This unit will periodically require a change in the Halogen Light Bulb. Here's how to change the bulb:

1. Please make sure you are wearing gloves (before) handling the new bulb. The oils from your body will ruin the new halogen bulb.
2. Slide both sleeves back from the connector nut exposing bulb on side of housing.
3. Remove old bulb.
4. Install new bulb.
5. Place bulb back into housing
6. Slide sleeve over housing..
7. Reinstall high speed handpiece.

Parts-List of the Series "SIL Air"

C0316	Cover T21
C0317	Gasket to Cover T21
C0318	Overload Protector 115V T 2134
C0319	Gasket to Cover T21
C0320	Stator 230V T21
C0321	Stator 230V T21
C0322	Kit Motor-Parts 230V T2134 cpl w/o Housing
C0323	Valve Intake T 2134
C0324	Valve Exhaust T 2134
C0325	Relay Starting 115V T 2134
C0331	Kit Motor-Parts 115V cpl. T21
C0332	Stator 115V T21
C0333	Kit Terminal-Block 115V T 2134
C0338	Capacitor 115V
C0339	Nylon Tube Dø6
C0340	Switch Pressure 4-P 115V
C0349	Spring for Overload
C0354	Drain-Cock tanktop 15lit
C0356	Tube Plastic Ø4 blue
C0357	Fitting "L" F1/8"-F1/8"
C0358	Oil-Level Indicator 1/2" Metal Frame
C0394XX	Tank 50-6
C0437XX	Tank 24lit 100/24 10CE D200
C0451	Cable Electric 115V 600mm
C0458XX	Pump Compressor 115V T 2134
C0461XX	Housing 50-9D
C0509	Fitting "L" M1/4"-F1/4"
C0516	Fitting Reduction M3/8"-F1/4"
C0517	Plug Drain M 1"
C0522	Washer 1"
C0567	Fitting Nipple M1/8"-M1/8"
C0583	Foot Rubber d=25mm
C0643	Valve Head Pressure Release
C0659	Boil TC M5x14mm
C0661	Nut M5 UNI 5567
C0895	Wheel Rubber d=Øx25mm
C1094XX	Tank 24lit 50/24
C1099	Oil-Level Indicator Plastic 1/2"
C1100	O-Ring 121
C1235	Kit Valve Plate T 2134 cpl. with Gaskets
B0714	Boil M8
R0103	Spring Ring Outside
R0153	Bolt M8x25mm UNI 5739 ZN

C0110	Capacitor 230V 53-64 MFD T 2134
C0111	Overload Protector 230V T 2134
C0112	Relay Starting 230V T 2134
C0113	Boil
C0114	Nut M8 UNI 5569
C0115	Gasket Exhaust-Valve T 2134
C0116	Valve Plate cpl. T 2134
C0117	Gasket Intake-Valve T 2134
C0120	Washer flat Øx24mm UNI 6593
C0124	Valve Safety 8 bar M1/4"
C0126	Foot Rubber
C0136	Frame / Support 50/15A
C0137	Tank 15lit 50/15A
C0138	Drain Cock M1/4"
C0144XX	Tank 50-9D
C0150	Fitting "L" M1/8"-F1/8"
C0151	Fitting Nipple M1/4"-M1/4" 60mm
C0154	Washer Aluminium d=6mm 2x10
C0156	Fitting Manifold 4x1/4"-1x1/8"
C0164	Valve Regulator VI
C0164-1	Pressure Bowl WI
C0164-2	Filter Element VI
C0164-4	Filter Regulator SMC
C0164-5	Pressure Bowl SMC
C0164-6	Filter Element SMC
C0164-7	Washer for Filter SMC
C0171	Kit for Grounding
C0180	Power Cord 115V American Plug
C0200	Switch Pressure 1-P 230V
C0202	Valve Head Pressure Release
C0205	Fitting Reduction M1/4"-F1/8"
C0222	Pump Compressor 230V T 2134
C0272	Check Valve 100/24
C0284	Pump Compressor 115V T 2134A
C0286	Washer 8.5x15mm UNI 3703
C0305	Kit Terminal-Block 230V T 2134
C0306	Kit for Spring-Clamp
C0308	Kit Motor-Parts 230V cpl. T21
C0309	Boil for Cover T21
C0310	Pressure-Pipe T21
C0311	Gasket Pressure-Pipe T21
C0312	Bolt to Top-Bearing
C0313	Bearing Top T21
C0314	Spring for Suspension T21

b) Tip is not installed all the way into the Air Water Sprayer. (Loosen nut, press tip further into connector and tighten nut while holding the tip in)

c) Faulty o-ring in tip adapter.

3. Air or water leaks from buttons when in use.

a) Faulty buttons.

4. Low air or water flow cont:

a) Improper regulator adjustment

b) Empty water bottle

c) Kinked supply tubing.

d) Plugged tubing.

e) Plugged syringe head

VI. FOOT CONTROL HISSES

1. Faulty foot control popped valve.

2. Foot control tubing connected backwards.

VII. HANDPIECE TUBING BLOWS OFF

1. Handpiece has been over pressurized.

VIII. COMPRESSOR WON'T TURN ON

1. Check power source. Check tank pressure (compressor will not turn on if tank is fully pressurized).

3. Faulty starting capacitor (replace).

4. Compressor is over-heated and the thermal safety switch is off. (Let unit cool and it will come on automatically, usually in 20 - 30 minutes).

IX. HANDPIECE LACKS POWER

1. Inadequate tank pressure.

2. Improper regulator pressure (reset regulator).

3. Improper individual handpiece pressure adjustment.

4. Faulty foot control.

5. Handpiece connector gasket is missing.

6. Directional selector ring is not rotated all the way into forward or reverse. (Slow speed handpiece only)

7. Faulty handpiece tubing.

X. COMPRESSOR RUNS, BUT WON'T PRESSURIZE FULLY

1. Plug is on the air inlet. Replace with air filter.

2. Compressor tank drain valve is leaking air.

3. Faulty check valve between compressor and filter tank.

XI. COMPRESSOR OVERHEATS

1. Air inlet is plugged.

2. Handpiece pressure is set too high.

3. Handpiece has been run for too long a time and the 50% duty cycle has been exceeded.

XII. UNIT IS PRESSURIZED BUT HANDPIECE DOES NOT RUN

1. Regulator pressure is low or off.

2. Supply tubing from regulator to control head is kinked.

3. Faulty foot control.

4. Handpiece directional ring is between forward and reverse (slow speed handpiece only).

5. Faulty handpiece turbine.

TROUBLE SHOOTING GUIDE FOR BUILT IN AMIDENT PIEZO SCALER

I. THE SCALER WON'T RUN

1. Check main power, main fuse, On / Off Switch.

II. WEAK OR NO TIP VIBRATION

1. Increase the power control setting.

2. Check to see if tip is tightened properly.

3. The tip is worn out, replace with new tip.

4. Change to a new handpiece.

5. Faulty air switch.

6. Change back to the old handpiece and then replace the electronic part.

7. Replace both the handpiece and electronic part.

III. INSUFFICIENT WATER SPRAY

1. Turn the knob to full open position.

2. Check / replace water filter.

3. Check all water connections. Be sure there is no leakage or kinked tubing.

4. Remove the tip, if the water is dripping from the handpiece, replace the tip.

5. Check the delivery unit's control block that activates the water out to the scaler handpiece is working properly.



FOOT CONTROL TO ULTRASONIC

"PIEZO" SCALER

This foot pedal has two buttons, one large and one small. The large button is for operating the high and low speed handpieces. The small button is for operating the piezo scaler only.