NOTES

LIMITED WARRANTY

DENTALAIRE warrants its products to be free from defects in materials and workmanship only. No other warranties are expressed or implied.

AIR COMPRESSORS & PORTABLE DENTAL UNITS

All compressors and portable dental units including wall mount dental units are warranted for one (1) year. High speed turbines are warranted for six (6) months. The High Speed Handpiece is warranted for one (1) year. Slow Speed Handpiece and Ultrasonic Scalers are warranted for two (2) years. The Sonic Air Scaler Handpiece is warranted for one (1) year. Warranty is limited to repair, parts or replacement of item by Dentalaire. WARRANTY IS VOID IF ITEMS ARE CARELESSLY USED OR IMPROPERLY MAINTAINED OR IMPROPERLY INSTALLED. NO CLAIM FOR LABOR OR CONSEQUENTIAL DAMAGES WILL BE ALLOWED.

INSTRUMENTS

All DENTALAIRE and Vetcare Dental Instruments are warranted for one (1) year. If any of our instruments break, chip, or bend during any dental procedure, Dentalaire will replace the instrument at no charge. Defective items must be returned to us for exchange.

TERMS

Net 30 days on approved accounts. A service charge of 1-1/2% per month (order only) will be charged on past due accounts. All prices subject to change without notice. All prices are FOB Fountain Valley, California or Houston, Texas. 15% handling charge on all returned items, unless deemed defective. Returned items must be shipped prepaid. Items may not be returned without factory authorization. International orders must be accompanied by an irrevocable Letter of Credit. All shipping to be paid by customer.

When placing your order please include product number, description and quantity. Also your purchase order number, shipping date required and method of shipping.
SET UP PROCEDURE FOR DENTAL AIRE DENTAL STATIONS

Step 1: Open crate using a large screwdriver. Please check crate for any damages and report them to Dentalaire at (800)666-6881 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. It 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 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.
CAUTION: Do not operate any handpiece without a bur, prophy 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, slow-speed polisher, blue metal air scaler, 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 Dentalare 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 scaler or a piezo scaler, 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 prophylaxis scaling procedures.

Constant preventive maintenance is essential in caring for handpieces. If they are not properly cleaned and lubricated, abrasives such as floss or a 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 Counterclockwise 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.
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.

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

<table>
<thead>
<tr>
<th>Maintenance Procedure</th>
<th>Daily</th>
<th>Weekly</th>
<th>Monthly</th>
<th>Annually</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purge Drain</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vent Moisture Trap</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Check Oil Level</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Clean Air Filter Intake</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Change Oil</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Complete Check of System</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

**SERVICE AND MAINTENANCE LOG**

<table>
<thead>
<tr>
<th>Service Performed</th>
<th>Date</th>
<th>Serviced By</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Initial Installation</td>
<td></td>
<td></td>
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</tbody>
</table>

**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 from buttons & cylinders. Lubricate the buttons with a non-petroleum based lubricant. Reinstall the Air/Water buttons. Reinstall 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.
DA400FOB - Fiber-optic Halogen Replacement Bulb

Changing bulb on High-speed Handpiece

TROUBLE SHOOTING GUIDE

I. NO COOLANT WATER
1. Water bottle empty.
2. Flow control knob is closed.
3. On / Off toggle is off.
4. High speed handpiece is in the low speed position.
5. Faulty water relay valve.
6. Plugged coolant port in handpiece.

II. COOLANT WATER DOES NOT SHUT OFF
1. Faulty water relay valve.
2. Water On / Off toggle left on.

III. COOLANT WATER LEAKING FROM HANDPIECE
1. Missing or damaged handpiece connector gasket.
2. Faulty water relay valve.
3. Slow speed handpiece is in the high speed position.

IV. MORE THAN ONE HANDPIECE RUNS AT THE SAME TIME
1. Handpieces are not positioned all the way down in the holders.
2. Faulty auto block diaphragm.

V. AIR / WATER SYRINGE PROBLEMS
1. Water drips from tip.
   a) Faulty valve core
2. Button blow out.
   a) Tip is plugged at the end.

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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 AMDENT 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.