DENTAL MACHINES & TOOLS
Maintenance and Identification
“Dental disease is one of the most common problems seen in veterinary practice and the veterinary nurse is increasingly involved with client education in this respect. Changes in the consistency of petfood have led to a greater need for routine teeth cleaning, which is now recognised as necessary for dental health. For optimum results, all teeth should be cleaned daily.”

(‘Veterinary Nursing’, D.R. Lane & B. Cooper.)
Here are 5 common methods of removing tartar.
1. Hand scaling.
2. A scaling burr in a high speed handpiece of an air operated machine.
3. An air scaler handpiece fitted to the high speed line of an air machine.
5. A piezo electronic scaler.

Apart from the hand scaling instruments, and the burrs, the other scalers have a vibrating tip which, as it is moved over the tooth, causes an ultra sonic vibration which removes the tartar. The scaling burr has a five sided tip which, as it spins at nearly 350,000, also creates a vibration to remove the tartar.

The tips of all these scalers can create considerable heat so must have a pressurised water supply to keep them cool. This can be supplied from the system of an air machine, from a pump-up bottle, or from the clinic's tap supply via a special fitting and filter. It is advisable that distilled water be used with scalers.

Advantages/ Disadvantages of the different scalers:

**Hand Instruments**
Cheap to purchase, hard work to use. Essential to have in stock.

**Scaling Burrs**
Relatively inexpensive providing an air powered machine is available. Not commonly used and require more care/concentration than other methods.

**Air Scaler Handpiece**
On sophisticated equipment the handpiece can have a fibre optic light. The tips have a finite life expectancy and it is imperative the handpiece is lubricated to the manufacturer’s requirements. Price is approx half that of electronic machines.

**Cavitron Electronic Scaler**
The most economical unit in our range. Operates at 25,000 cycles per second. The cavitron insert (or stack) has a finite life (about 9 to 12 months). Comes complete with water pump.

**Piezoelectric Scaler**
Operates at 30,000 cycles per second. Tips need replacing at periodic intervals. The best of the scalers. “Scrapes, not knocks.” Supplied with water pump.
Dental polishers are available in several configurations.

1. Micro-motors
2. Scaler/Polisher combo machines.
3. Compressed air powered dental machines.

Micro-motors

These are electric machines with a minute motor in the handpiece. Fittings are usually supplied for the handpiece so it can be used for polishing (prophy angle) and for using burrs to section teeth (contra angle). The speed of the handpiece can be varied from 0 up to 30,000 rpm. No water supply is required. The prophy and contra angles are semi disposable but good maintenance can extend their lives. Disposable prophy angles are also available which eliminate the hassles of cleaning etc for a reasonable price.

Scaler Polisher Combo

A complete dental system for scaling and polishing. The combo machines, as the description suggests, are a combination of cavitron scaler and micro-motor. A water supply is required and the details of both machines apply. These are a popular entry level dental machine. Micro-motor has a speed range of 300 to 30,000 rpm. The ultra sonic scaler operates at 25,000 cycles supplied with cutting burrs, contra angle, water tank, prophy paste and cups.

Compressed Air Machines

Similar to the equipment used for human dentistry, these machines have a compressor which supplies compressed air to power the handpieces. The low speed handpiece takes prophy angles as per the micro-motors. Burrs are fitted to the high speed handpiece which operates at up to 350,000 rpm (over 10 times the speed of a micro-motor) and is the reason a water supply is used on these handpieces. The water supply is normally incorporated in the machine and has a screw-on bottle to fill with distilled water. On some machines the high speed handpiece may have a fibre optic light source. A scaler handpiece can also be fitted to the high speed line of these machines and they also have the luxury of an air/ water syringe. Suction is another available option.

It is very important that these machines are correctly maintained. The handpieces must be lubricated daily and compressor oil regularly changed etc. As with all equipment poor maintenance will severely reduce the life expectancy and will invalidate warranties.
Accessories

**Burr s**
These are available in many different styles for various uses. There are two types of fittings. The burs used on compressed air machines have smooth shafts and the micro-motor’s use latch type burs. These are identified by a groove around the shaft on the end which fits into the contra angle.

_Crosscut fissure burs:_
Are usually numbered in the 500s through 700s. They are for gaining access to root canals, cutting teeth and preparing cavities. The crosscut fissure burr is one of the best all-around dental burs. The burr is slightly tapered with a cutting surface on the side as well as the tip.

_Pear shaped burs:_
Are usually numbered in the 320s through 330s. These burs are a cross between the round burr, crosscut burr and inverted cone burr. The result is a burr that has a round cutting tip, cutting sides and a slight taper for undercutting. It is an ideal all-purpose burr for cavity preparation.

_Inverted cone burs:_
Usually given number in the 30s, the larger the number the larger the burr. Inverted cone burrs are used for undercutting in cavity preparation. They are wider at the tip than the shank.

_Round burs:_
Are general all-purpose burs, they may be used for access into pulp chambers and for cavity preparation.

_Diamond burs:_
Are used for crown preparation. A wide variety of shapes and degrees of coarseness are available.

_Changing high-speed burs:_
Two styles of high-speed burr heads are available. One uses a push button on the handpiece to open the chuck. The burr may be removed by twisting the key counter-clockwise. The new burr is placed in the handpiece, and the burr key turned clockwise to tighten. Burrs should be removed from the handpiece when it is not in use and when the handpiece is covered. If the burr is removed from the handpiece, a “blank” should be fitted. If the handpiece is accidentally turned on without a burr in the handpiece chuck, the chuck may be damaged.

**Prophy Cups**
Prophy cups can either be a screw-on fitting, which are identified by a small threaded shaft, or snap on. Which type to use is dictated by the prophy angle.

**Prophy Angles (heads)**
Depending on the type of machine and handpiece, there are 3 main types of prophy angle. Most handpieces are fitted with sheath fitting heads but some air handpieces have a turret style, which once they have been removed from the handpiece, can be identified by their castle type connection.

**Lubricants**
As mentioned, proper lubrication of handpieces and accessories is essential. Lubricant is available in both aerosol cans and pen style applicators. The aerosol can is ideal for air handpieces and the pen style ideal for micro-motors.

Regular maintenance is essential for a long and trouble free life from dental equipment. Machines have varying requirements so it is essential that all instruction manuals are read thoroughly.
### Dental Machine Maintenance

**FIRST: Read the manual that has been sent with the machine!**

Types of machines and tips for maintenance:

**Ultrasonic Scalers** - consist of a handle and a removable tip. The working tip vibrates at 25-40kHz and has a jet of water flowing through the handpiece and tip for cooling the tooth and flushing away debris. The scaler should be used with gentle strokes with the side of the tip to remove plaque and calculus.

- **Monthly:** check the tip for possible wear
- **Tips should be replaced after approximately 30 dentals**
- **Check for torqueing, splits and rust on the stack (the tip and stack comprise the insert that can be removed from the handle).**
- **Weekly:** remove the insert and wipe the silver solder at the end of the stack with an alcohol swab to remove any corrosion
- **Use only distilled water in any dental reservoir**

**The Polisher** - polishing is performed by applying abrasive paste in a slowly rotating prophy cup to the tooth surface. **Excessive force or time should not be used as the heat generated may damage the pulp.**

- **Discard used prophy cups**
- **Disinfect angle**
- **After completion of the dental, release the pressure from the water container. The water supply can remain connected to the machine. Do not over-pressurise the water pump as it will leak at the hose joints. Five or six pumps should be adequate.**
- **Disconnect the foot pedal and power lead and store with the machine.**
- **Micro-motor:** disconnect after use.

- **Leave the micro-motor attached if it is in a safe place and will not be damaged (e.g. knocked to the floor etc – the micro-motor is expensive to replace!).**
- **Wipe the machine with mild disinfectant (e.g. Dilute chlorhexidine) and take the scaler insert out of its casing.**
- **Drain the casing and clean and dry the insert, then store with the machine.**

- **Do not leave the insert inside the casing as it will rust.**
- **Remove the prophy angle/ contra angle off the micro-motor and clean and dry.**
- **Drop a couple of drops of pen lube into the top of the micro-motor.**
- **Drop oil into the contra angle into the two holes.**
- **Run either of the angles in a small amount of clipper blade wash while they are attached to the micro-motor. Simply dip the end in and run at a slow speed – this helps lube all the small gears inside the hand pieces.**

To take them apart – refer to the insert that came with the angles.

To autoclave the angles - follow instructions on the inserts.

**Air driven dental units**

- **Yearly:** oil change
- **Monthly:** drain air reservoir (more frequently if more than one cup of moisture is collected)
- **check hoses for cracks**
- **check pressure for each handpiece and maintain at manufacturer’s recommendation**
- **lubricate the smaller of the two large holes at the bottom of high, low and sonic handpieces with lubricant**
- **Clean each handpiece between patients – wipe with alcohol after each**
- **chlorhexidine rinse**
- **Always use distilled water in water bottle**
- **Clean and check high and low speed burrs, cold sterilise rinse and dry**
- **Discard any burrs which have rusty shanks**
- **In order to avoid cross contamination between patients, keep the surfaces of your unit clean.**
- **Two types of high speed burrs are available: either push button or chuck key.**

The high speed drill is used to section teeth before extraction or make openings in the enamel for root canal work. The handpiece takes friction grip burrs, usually round or tapered fissure in shape, with either diamond or tungsten carbide cutting edges. The slow speed handpiece can be used for polishing the teeth after scaling, or sectioning a tooth prior to extraction. The handpiece takes right-angle or latch-type burrs for sectioning and screw-on or snap-on prophy cups for polishing.
Cabinet Regulator/Water Panel

**Air/water filter regulator** is factory set at 70 - 80 lbs. Adjustment, if needed, is done by turning the black knob clock-wise to increase pressure; counter clock-wise to decrease pressure. This regulator after compressor has run a complete cycle and shut off.

Pressure gauge should indicate approximately 80 lbs.

**Aux Water Connection** This is a handy water connection for such accessories as an electronic scaler, to the pressurized water bottle system.

**Water Bottle** To refill water bottle first relieve pressure in the bottle by flipping off the bottle shut off switch. Be sure to refill with distilled water.

Pressure to the water bottle is controlled by the bottle pressure regulator. To increase pressure, turn the knurled knob clock-wise, counter clock-wise to decrease pressure. (Water Bottle Pressure gauge should indicate approx. 40 lbs.)

**NOTICE:** If switching to a different size water bottle, be sure to use tubing that will reach the bottom of the water bottle.

**A/C Accessory Receptacle** An added feature for such accessories as an electronic scaler or a high-speed handpiece illumination system.

**NOTICE:** Maximum electrical rating is 10 amps.

**Cabinet Handpiece Control Module**

The SL-830 has provision for high and low speed handpieces. Both handpieces use a standard four hole Midwest coupling.

**High Speed:** (right side)

To operate the high speed handpiece selector toggle switch to HP.1.

Water is available to the highspeed handpiece only and is selected by flipping the toggle switch to ON. Water flow is controlled by the adjustment knob, much like a water faucet.

**Low Speed:** (centre)

To operate low speed handpiece, position handpiece selector toggle switch to HP.2.

To activate the desired handpiece, step on the variable speed disc-type foot control. The face mounted pressure gauge will show operating pressure. Ideal operating pressures are between 45 and 50 PSI. Experience and practise will soon give you the proper feel for any procedure.

**Air/water syringe:** (left side)

The sir/water syringe provides pressurized water, (blue button), pressurized air, (yellow button), or atomized water by pressing both simultaneously. An extra sterilizable syringe tip is included with wrench.

**Handpiece & Syringe Water/ Air Pressure Adjustment**

Although rarely required, air and water pressure to the handpieces and syringe may be adjusted by turning the slotted pressure adjusters on the bottom of the control module behind their respective connections - clock-wise to decrease, and counter-clock-wise to increase pressure.
Dental Machine Maintenance

SL-830 Regular Maintenance Requirements

The SL-830 cabinet solid surface top may be washed with abrasive cleaners such as Ajax or Comet. Stubborn stains on stretches can be removed by simply scouring with a scotch brite pad.

The handpiece control module requires no regular maintenance.

The air/water filter regulator, (fig.8), at the back of the cabinet should be flushed periodically for moisture and traces of oil seen on the clear bowl attached to the underside of the regulator. These fluids may be removed by turning counter clock-wise and pressing up on the valve-core located on the bottom of the bowl.

The oil filter should also be drained of oil regularly by pressing up on the valve stem on the bottom of the clear plastic bowl or by unscrewing the bowl. If handpiece performance deteriorates and the control module face mounted gauge show reduced pressure while a handpiece is being operated (less than 30 PSI), the filters in the oil filter and the air/water filter regulator may be clogged and needs replacement. Both filters may be changed by removing the plastic bowls, and unscrewing the plastic filter retainer. Replacement filters may be obtained through Sage-London.

**NOTICE:** Be sure there is no air pressure in the bowl before venting or removing bowl. Pressure may be released by opening the pressure tank on the drain compressor (Fig.9.). Be sure compressor is turned off.

**IMPORTANT:** On a regular basis all air lines should be carefully inspected for leaks and repaired. Leaks with a significant air loss can usually be heard or will be noted by the compressor cycling often, without the unit being used. Action should be taken as soon as possible, as leaks may result in decreased handpiece performance, reduced compressor life or compressor shut down through overload protectors.

Sil-Aire Compressor Maintenance: (if so equipped)

The air intake (Fig. 1) must be kept clean to prevent unclean air flow into the compressor. Filters that become dirty, oily or clogged should be cleaned thoroughly with detergent soap and water solution or replaced. Cleaning or replacing of the air filter under normal operations is necessary every three to six months. NEVER operate the compressor without an air filter in place.

Check the oil level periodically through the sight glass. (Fig.10) Should the level drop toward the lower etch mark on the sight glass, add the necessary oil to bring the oil level to the middle of the sight glass. It is strongly recommended to change the oil every 150 hours of operation or when the oil is dis-coloured. To change the oil, remove the air intake filter and tilt the unit until all the oil is drained.

**NOTICE:** The oil supplied with your compressor is a highly synthetic researched grade. Do not mix or substitute the oil in the compressor with other available brands. Use of other oils not specified by the manufacturer, may result in compressor breakdown and exclusion of warranty. **NEVER** attempt to service compressor when it is plugged into an electrical outlet.

**NOTICE:** The air tank should be checked for water daily. Unplug the unit and release all air and water in the tank by opening the drain plug, (Fig.9), on the bottom of the pressure tank.

**NOTICE:** A standard feature of your compressor is the safety release valve that opens automatically if the tank pressure goes beyond a safe level. **DO NOT ATTEMPT TO ADJUST OR REMOVE THIS DEVICE!**
## Trouble Shooting Guide

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>CAUSE</th>
<th>REMEDY</th>
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<tbody>
<tr>
<td>No water to stringe only</td>
<td>- Pressure adjustment for water syringe</td>
<td>Adjust (see 2.11)</td>
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<tr>
<td></td>
<td>- shut off handpiece control module</td>
<td></td>
</tr>
<tr>
<td>No water to high speed handpiece only.</td>
<td>- Water toggle switch on handpiece control module turned off</td>
<td>Adjust (see 2.7)</td>
</tr>
<tr>
<td></td>
<td>- Water valve on handpiece control module shut off</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Pressure adjustment for high speed handpiece water turned off</td>
<td>Adjust (see 2.11)</td>
</tr>
<tr>
<td></td>
<td>- on handpiece control module.</td>
<td></td>
</tr>
<tr>
<td>Water streams and will not atomize from high speed handpiece</td>
<td>- Water valve on handpiece control module incorrectly set.</td>
<td>Adjust (see 2.7)</td>
</tr>
<tr>
<td>Oil in air</td>
<td>- Too much oil in compressor</td>
<td>Drain excessive oil (see 3.4)</td>
</tr>
<tr>
<td></td>
<td>- Compressor not sitting level</td>
<td>Drain oil bowl and replace filter</td>
</tr>
<tr>
<td></td>
<td>- Oil filter saturated</td>
<td></td>
</tr>
<tr>
<td>Tubing falls off connectors</td>
<td>- Tubing has stretched</td>
<td>Shorten tube slightly</td>
</tr>
<tr>
<td></td>
<td></td>
<td>We recommend using loctite and/or nylon</td>
</tr>
<tr>
<td></td>
<td></td>
<td>bushings when installing</td>
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<tr>
<td>Air/ water filter regulator show proper pressure and pressure adjustments are open wide but handpiece performance is poor and control module gauge pressure drops below 30 PSI while handpiece is operating.</td>
<td>- Oil and or air/ water regulator filter clogged</td>
<td>Replace filter(s) (see 3.2)</td>
</tr>
</tbody>
</table>
**Handpiece Maintenance Instructions**
(For Champion Contra Angles and Prophy Heads)

**Handpiece maintenance is EXTREMELY important** if you wish to ensure the maximum life span! Please follow these instructions to help you properly care for your new handpiece.

It is somewhat difficult to state intervals at which maintenance should be performed as case-loads vary from one facility to the next. It is better to be over cautious about maintenance than careless.

It is recommended that this procedure be followed after every 3-4 dentistry as well as prior to and following autoclaving. Maintenance may be performed at any time if it seems necessary.

The following steps should be taken to ensure proper maintenance is completed:

1. Loosen and remove the Prophy Head by turning the threaded (knurled) collar (see drawing).

2. Remove the "Drive Shaft" by pulling it gently. (It just sits in there)

3. Place 2 (two) drops of "Champ Lube" Handpiece lubricant in the bottom of the prophy head. (see Drawing)

4. Place 2 (two) drops of "Champ Lube" Handpiece lubricant in the hole at the top of the contra angle. (See Drawing)

5. Reassemble the Handpiece and put it on the "Air Motor"

6. Now run the Handpiece for 20-30 seconds. You may notice some black fluid coming out around the prophy head. It is just excess oil and this is normal. Run until the fluid subsides and wipe off the excess oil.

7. The Handpiece is now ready for use again!
1) Connecting the Handpiece: Attach the threaded connector on the tubing set to the mating connector on the Champion Air Motor. Make sure that the small metal tubes extending from the rear of the motor are properly nested in the matching holes in the fitting and the gasket is in place. An air leak will be apparent if an improper connection is made.

Note: Operating the Air Motor with the Reversing Ring positioned between the two limit positions, will restrict the passage of air and possibly stop the motor. Do not change rotational direction when motor is in operation.

Maintenance Instructions For Champion
Low Speed Air Motors

A. Apply 2 to 4 drops of Champ Lube/ChampLube+ in the drive air hole of your handpiece to purge and clean handpiece of debris and old lubricant. (see drawing)

B. Operate the handpiece to clear excess lubricant for 30 to 40 seconds.

Sterilization - Remove any attachments from the Air Motor. Put into seam to chemical vapour sterilizer device unbagged and cycle. Steam autoclave/chemiclave up to 275 degrees F (135 degrees C) **DO NOT DRY HEAT STERILIZE.**

TROUBLE SHOOTING TIPS

Problem
Sluggish staring. Stops/stalls during operation. Inadequate speed

Possible Causes
a) Improper Lubricant or Aerosol Sprays
b) Pinched or restricted air supply or exhaust tubing (otuboard tubing)
c) Inadequate air pressure
d) Reversing ring not fully positioned
e) Loose coupling to tubing
f) Faulty coupling gasket
g) Defective attachments or contra-angle

Solution
a) Check to insure that only Champion lubricant is used and directions carefully followed.
b) Eliminate restriction or replace tubing.
c) Adjust to 45 PSI measured at Air Motor
d) Make sure reversing ring is turned to fully cleared position
e) Tighten coupling or replace
f) Replace gasket
g) Change or replace attachment/Angle
Hand Instruments

Hand instruments basic kit:

- hand mirror
- explorer
- periodontal probe
- H 6/7 scaler
- Gracey 7/8 curette
- Columbia 13/14 curette
- elevators
- root tip pick
- tooth extraction forceps
- tartar removing forceps
- periosteal elevator/scalpel blade/sutures
- instrument tray (keeping instruments together on a tray allows you to autoclave them together and helps prevent breakages and loss)
- sharpening stone - instruments should be sharpened and sterilised before each patient

**Mirror**

<table>
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<tr>
<td>201 919</td>
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**Elevator**

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<tr>
<td>2mm feline</td>
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<tr>
<td>3mm feline serrated</td>
<td>201 879</td>
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<tr>
<td>5mm canine</td>
<td>201 876</td>
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</tr>
<tr>
<td>5mm canine serrated</td>
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**Elevator Winged**

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<tr>
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</tr>
<tr>
<td>2mm</td>
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<tr>
<td>3mm</td>
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**Elevator Bein**

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<tr>
<td>Shoof</td>
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<tr>
<td>Aesculap</td>
<td>201 871</td>
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**Tartar Scraper Double End**

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<td>175mm</td>
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**Scissors Dean**

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<td>175mm</td>
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Ideal tool for lengthening and trimming gingival flaps. Particularly useful for cutting sutures in the far back of the mouth. Quality stainless. Dentalaire USA. Length 17.5cm o.a.

**Curette**

- Barnhart 1/2 | 201 867 | $34.80 |
- McCall 13/14  | 201 869 | $59.00 |

**Curette Gracey 5/6**

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**Scaler Sickle/Chisel**

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**Scaler Sickle H6/H7**

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**Explorer/Probe 1/23**

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**Forceps Tartar Removal**

- small 120mm | 201 892 | $75.00 |
- large 130mm  | 201 891 | $89.00 |

A simple and economic tool for tartar removal.

**Elevator Periosteal**

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<td>201 880</td>
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**Tool Grinding Stone**

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<tr>
<td>201 981</td>
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High-quality wedge-shape grinding stone especially suitable for sharpening scalers, curettes and other dental tools. Supplied complete with sharpening instructions. Size 80mm long x 35mm wide x 7mm thick, fine grey-white stone.

**Root Tip Pick**

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<tr>
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**Tool Trays**

- small 100 x 200mm | 201 983 | $19.90 |
- large 340 x 245mm | 201 982 | $29.90 |


*twelve*
Dental Scaler

hook Shoof 201 946 $10.95
hook Aesculap 201 947 $37.50
hatchet 1 Shoof 201 940 $10.95
hatchet 1 Aesculap 201 943 $26.90
hatchet 2 Shoof 201 941 $10.95
hatchet 2 Aesculap 201 944 $26.90
hatchet 3 Shoof 201 942 $10.95
hatchet 3 Aesculap 201 945 $26.90
wing right Shoof 201 965 $11.95
wing right Aesculap 201 966 $34.90
wing left Shoof 201 966 $11.95
wing left Aesculap 201 967 $34.90
chisel enamel Aesculap 201 939 $43.55

All 150mm o.a. length. Shoof wing scalers are 4mm wide at tip.

Dental Forceps Tooth Extracting

small 120mm 201 985 $89.00
large 180mm 201 984 $99.00

Extracting forceps with angle jaw.

PERIODONTAL/EXPLORER PROBES

These instruments are designed for exploring under the gum and for delicate tartar removal.

Dental Scaler Aesculap

sickle shape 201 963 $44.50
McCall 201 951 $55.00

Length 175mm o.a.

Dental Forceps Upper

straight Shoof 201 896 $44.75
straight Aesculap 201 887 $167.00
angled Shoof 201 893 $44.75
angled Aesculap 201 894 $115.25

Forcèps for upper teeth. Length 165mm o.a.

Dental Forceps Lower

molar Shoof 201 887 $44.75
molar Aesculap 201 889 $113.25
angled Shoof 201 888 $44.75
angled Aesculap 201 890 $115.25

Forcèps for lower teeth. Length 155mm o.a.

Dental Probe Aesculap

periodontal 201 922 $52.65
McCall 201 921 $33.90

Length 150mm o.a.
Operator Protection

Dental scaling produces a bacterial laden aerosol, so the operator should wear gloves, mask, and safety glasses during all dental procedures. Debris such as chipped teeth, saliva, blood, etc can travel far! Protect yourself.

Face Shield
- shield complete 201 885 $29.95 $69.95
- repl. visors 3-pk 201 886 $44.00 $39.00
This face shield is ultra lightweight, attractive and easy-to-use. It provides complete facial protection from splattering of bloody fluids and bacteria. The shield has excellent optical qualities and does not fog.
NB: Remove protective film prior to use.

Safety Glasses
- each 201 936 $16.95
Lightweight clear plastic glasses to protect your eyes from splattering fluids and bacteria.

Surgical Mask Disposable
- 50-pack with ties 206 034 $11.95
Hi-filtration, fibreglass-free face masks with ties. Pleated with a super-soft inner lining.

Surgical Gown Disposable
- 206 025 $2.25
A multi-purpose gown with thumb loops which hold the sleeves in place. Wrap around style with ties. Ideal for wearing whilst handling or grooming animals and in isolation situations. Also useful in general cleaning situations.

Surgical Box Holder
- holder only 203 200 $19.95
Simple and convenient stainless steel wire wall-mount dispenser rack to hold boxes of Shoof latex gloves. Requires 2 screws to attach (not supplied).

Apron Plastic Disposable
- 15-pk 200 216 $29.00 $59.00
White plastic non-sterile apron, 140cm length. Pack of 150 aprons.

Apron Polyurethane Reusable
- each 200 215 $39.95
Manufactured from 300-micron polyurethane film. These aprons are abrasion and cut resistant. Extra strong, they can be washed and sanitised. Good length.

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A copy of the Shoof 2009 Veterinary Catalogue is just a phone call away

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