Routine Equipment Maintenance and Checklist

Whether you use equipment daily, weekly or monthly, everything needs upkeep. The following list, which was supplied by American Dental Accessories and ran on a Dentaltown message board, will help you know what to do to keep that equipment in top shape. The list is not all-inclusive, but it should cover most of what the average dental practice is using.

Daily

At the beginning of the day:

- Turn on compressor, vacuum and main water lines (you should have a solenoid on your water).
- Check fluid levels in sterilizer and X-ray processor, topping off if necessary, and then turn them on.
- Run a cleaning sheet through your processor (if such is available for it).
- Turn on delivery systems and open oxygen and nitrous tanks (if you have a central system).
- Check ultrasonic cleaner solution.
- If using self-contained water systems and air purging every night, run handpieces and depress water buttons on air/water syringes to establish water-line pressure.
- Refill water bottles of self-contained systems.
- Verify previous day's computer backup and install next generation of media (i.e., the next drive/cartridge etc., in sequence).

At the end of the day:

- Clean the sterilizer door gasket with a soft cloth and mild (non-antibacterial) liquid soap.
- Clean out or change chairside vacuum traps and run vacuum system cleaner through all vacuum lines. Be certain to securely replace the lid of the trap after checking screen on trap.
- Empty waste bottle/tank on sterilizers equipped with one.
- Turn off all equipment as above—delivery systems, oxygen and nitrous tanks, sterilizer, processor, compressor, vacuum and main water line. If using a Dent-X processor, remove the cover and slide the covers of the solution trays to the side, allowing vapors to escape.
- Dry water lines by purging with air (if using self-contained water systems).

Weekly

- Clean interior and exterior of sterilizer(s), including reservoir. Check autoclave safety valve by pulling on the ring with pliers (it should spring back).
- Check sterilizer filters and perform a spore test.
- Verify sterilizer is level.
- Check chairside trap screens and lid O-rings for wear, and replace if necessary. Be certain to securely replace the lid of the trap afterward.
- Check and replace or clean out central vacuum and main water-line filters.
- If present, check amalgam separator.
- Disassemble and lubricate vacuum valves (HVE and SE).
- Clean ultrasonic cleaner.
- Clean operating light reflectors and lens shields (make sure reflectors are cool first).
- Check oil on oil-lubricated compressors and drain compressor tank. An auto-drain can also be installed on your compressor to drain as needed, automatically.
- Clean processor racks according to manufacturer's instructions. You may need to let them dry over the weekend as well.
- Empty and clean out bottles of self-contained water systems.
- Clean boiling chamber of water distiller.

Monthly

- Perform extended cleaning of X-ray processor per manufacturer's recommendations. Special cleaning solution may be required as well.
- Check/clean plaster trap.
- Check emergency resuscitation equipment.
- Lubricate joints in operating lights, sterilizer door hinges, air/water syringe buttons, and other similar items around the office.
- Clean Pan or Ceph X-ray screens with a screen cleaner.
- Using heat-resistant PPE, check sterilizer safety valve while under pressure … and check sterilizer door for plumb.
- Check air and water filters in junction boxes.

Quarterly

- Check filters on compressor and central vacuum.
- Check compressor oil (if oil-lubricated).
- Check tubing on delivery systems, nitrous, and vacuum as well as handpiece gaskets and/or coupler O-rings for signs of wear.
- Clean model trimmer wheel and drain lines.
- Lubricate drive chain on Dent-X processors.
- Check hydraulic fluid of patient chair.
- Check life of computer battery backup (UPS).
- Test smoke alarms.
- Verify computer backup by restoring from a backup.

Annually

- Change sterilizer door gasket, bellows and fill filters.
- Change oil (if oil-lubricated) of compressor.
- Check power cords for all electronic equipment around the office and replace any that are frayed or worn.
- Have fire extinguisher(s) inspected.
- Observe a complete sterilization cycle, looking for any signs of malfunction, such as a steam leak.
- Conduct staff OSHA training.
- Review emergency procedures with staff—how to handle patient emergencies as well as what to do in case of fire, etc.
- Have X-ray equipment inspected, calibrated and certified (requirements vary—may be as infrequently as once every five years).

In General

- Be observant. Note any equipment which exhibits unusual behavior, such as loud or abnormal noises or an unusual appearance/discoloration.
- Keep owner's manuals for all equipment in a secure place.
- Consult owner's manuals for manufacturer's recommended maintenance, and supplement the list above accordingly.
- Check with local authorities for your requirements. Some things (for example, spore tests) may have a different frequency requirement in your area. We have attempted to list such things at the most common intervals, but there can be wide variation.
- Be aware of seasonal tendencies for extremes of heat, cold and humidity, and the effect these extremes can have on specific pieces of equipment. For example, replacing compressor dryer desiccant is commonly required in the summer months.
- It may be helpful to have primary equipment wired to a master switch to simplify turning on in the morning and off at night (just one switch to throw).
- Be mindful of critical equipment and always have spares of the following on hand:
1. Light bulbs for operating lights and curing lights
2. Filters for air and water lines
3. Replacement screens/traps for central vacuum
4. Fuses for chairs, sterilizer, processor, etc.
5. Hydraulic fluid (if you have hydraulic chairs)
6. Compressor oil
7. Have a back-up plan in case of failure of compressor, vacuum or sterilizer. Having a smaller secondary unit on hand that can be "hot-swapped" temporarily can keep you up and running.
- Have a contingency plan in case of failure of computer system. ■