Most dental assistants don’t keep a tool belt handy, but when a piece of equipment malfunctions it’s often the assistant who addresses the problem. Dental assistants aren’t just responsible for managing clinical issues such as patient care, ordering supplies, or administrative duties—they’re also responsible for maintaining equipment, which is an important skill. Proper maintenance alleviates the possibility of sudden problems, and extends the life of the equipment. While we’re usually aware of what needs to be done to keep equipment running on a day-to-day basis, what needs to be done on a weekly, monthly, quarterly, or annual basis is uncertain.

The Dental Assistant’s Guide TO DENTAL EQUIPMENT MAINTENANCE

By Lori Paschall, CDAA, CDA, CDFA, CFDA, FADAA

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DAILY
At the beginning of the day:
• Turn on the vacuum and air compressor systems as well as the master water switch.
• If applicable, turn on the nitrogen oxide and oxygen tanks.
• If you are still using a film-based processor, turn it on and replenish the fixer and developer.

At the end of the day:
• Run suction cleaner through the operatory HVE and saliva ejector tubing; clean out delivery unit traps or replace if necessary.
• If your delivery system has a self-contained water bottle system, flush all handpiece nozzle lines between each patient; and check the water levels in all handpiece waterlines.

MONTHLY
Monthly maintenance of equipment should include:
• Checking, cleaning, or replacing the plunger trap.
• Cleaning the model trimmer.
• Cleaning panoramic/coronal cassette and interaluminate screen.
• Checking rubber goods on nitrogen oxide systems and emergency oxygen units for deterioration.
• Checking, cleaning, or replacing the master trap.

WEEKLY
Change the traps on the delivery unit, and check and replace O-rings on handpiece couplers and gaskets on handpieces. It would also be a good idea to carry a sterilizer door gasket or cassette gasket for every sterilizer. This is also a good time to check and replace the O-rings on HVE and saliva ejector valves—remember to disassemble and lubricate the valves. Clean the interior and exterior of sterilizer(s), including reservoir. Check sterilizer filters and perform a biological spore test in each sterilizer if the practice has multiple sterilizers.

Over the course of a typical day, it is important to lubricate and sterilize handpieces as well as lubricate probe tips, angles (if not disposable), contra angle, and nose cones between patients; disinfect operatory equipment after each patient; flush handpiece waterlines between each patient; and check the water levels in self-contained water bottles.

Also, once per month, take a seat in the operator’s chair and look at the operatory from the patient’s perspective. What do you see? Is the operatory light clean and fog-free? Are there cobwebs in the corners of the room? Does everything look clean, fresh, and dust-free?

ANNUALLY
On a yearly basis, it is recommended to:
• Change sterilizer door gasket and cassette seals.
• Change oil (if oil lubricated) of compressor.
• Have fire extinguisher(s) inspected.
• Have X-ray equipment inspected, calibrated, and certified (as or required/recommended by state regulations).
• Conduct staff OSHA training.
• Review emergency procedures with staff, including how to handle patient emergencies and what to do in case of fire.

Each office should have an equipment “first aid” kit. These are items that would be available for routine self-maintenance. They include handpiece lube and cleaner; air compressor oil and intake valves; vacuum intake filters, line cleaner, traps, and canisters; spare handpiece turbines, chuck, bur tools, and cleaners; spare light bulb for handpieces, cutting lights, and operatory lights; spare O-rings and gaskets.

Make sure to keep owner’s manuals for all equipment in a secure place and consult them for the manufacturer’s recommended maintenance. Equipment invoices should be maintained in a secure place and consult them for the manufacturer’s recommendations prior to servicing any equipment beyond routine maintenance.

This is not an all-inclusive list (individual offices should determine a maintenance schedule based on their practice’s equipment and state requirements). You should always check with manufacturer recommendations prior to servicing any equipment beyond routine maintenance. One of the best ways to make sure that equipment is in good working condition is to establish a schedule for routine maintenance.

“Be observant. Note any equipment that exhibits unusual changes such as loud or abnormal noises, an unusual appearance, or discoloration. If you notice anything out of the ordinary, contact your dealer service technician—don’t try to fix it yourself. These skilled, professional technicians are specifically trained to install, trouble-shoot, and repair your equipment. In many cases they have been factory-trained by the manufacturer so contact them with any issues outside of the basic care of your equipment.”

When your equipment is properly maintained and serviced you can concentrate on delivering great care to your patients.

RESOURCES:
ADA SAFETY CHECKLIST FOR DENTAL EQUIPMENT
ATLANTA DENTAL SUPPLY REPAIR & MAINTENANCE CHECKLIST
AMERICAN DENTAL TECH TIPS

Ms. Paschall is a Regional Account Manager for Hu-Friedy Mfg. Co., Chicago, and has been a dental assisting professional for almost 30 years. Read more about her in our Featured Contributor section on page 6.