**Performing Maintenance**

- **Weekly or as Needed**
  1. Wearing eye protection and gloved hands, remove canister cover by twisting clockwise.
  2. Remove trap from canister directly into a leak-proof bag to avoid spilling contaminated contents.
  3. Remove and dispose of gloves and re-glove hands.
  4. Using a product labeled as a cleaner or a solution of mild dish soap/warm water, wipe surfaces and remove visible debris and contaminants from canister body and cover.
  5. Place disinfected canister body and cover using an intermediate-level EPA-registered disinfectant (excluding chlorine-based products) with the intended use in healthcare facilities and adhere to manufacturer's instructions for use. After the minimum disinfectant contact time (dwell) per manufacturer's instruction for use, remove disinfectant residue with a wipe or soft paper towel, clean contact surfaces and remove visible soil/debris and contaminants from canister body and cover.
  6. Place disposable trap and tighten canister cover counter clockwise.

**Maintenance**

At least once weekly, apply a small amount of provided lubricant to the o-rings on the spool assembly, quick-disconnect base and HVE tip after sterilization to allow the spool to move freely and prevent premature aging of o-rings.

**Resources**

- The Centers for Disease Control and Prevention (CDC) recommendations for the cleaning, disinfection, and sterilization of dental equipment can be found in:
  - The American Dental Association’s recommendations can be found at: www.ada.org
  - The Organization for Safety and Asepsis Procedures recommendations can be found at: www.osap.org
  - FDA Guidelines for Dental Unit Water Line Maintenance can be found at: www.fda.gov

**HVE/SE Reprocessing and Maintenance Operator’s Guide**

- The High Volume Evacuator (HVE) and Saliva Ejector (SE) is a high volume wet suction system powered by a dental unit to evacuate waste from the oral cavity.
- **WARNING:** Allowed cannula (extraction tip) requirement HVE: OD 0.437" ± .005 (7/16"), SE: OD 0.250" ± .005 (1/4"). Refer to Forest Delivery System Operator’s Guide for all relevant vacuum specifications.
WARNING: Always instruct patients to keep mouth open during evacuation procedures. Closing lips around HVE/SE disposable extraction tip can reduce vacuum force and allow biofouling from the device to enter the patient’s mouth.

WARNING: Always wear gloves when handling contaminated components of the dental unit, including used barrier protection, and while cleaning, disinfecting and sterilizing clinical contact surfaces. Be sure to change gloves after handling contaminated material or devices.

WARNING: Forest HVE/SE assemblies (excluding disposable extraction tip) must be operated with FDA-cleared barrier protection (FDA Product Code: PEM) during a procedure following Forest’s instruction for use; extraction tips must be disposed of between patients.

WARNING: Even with the use of barrier protection, daily clean and then disinfect clinical contact surfaces with an intermediate-level EPA-registered disinfectant (excluding chlorine-based products) with the intended use in healthcare facilities and adhere to manufacturer’s instruction for use.

WARNING: Always consult the instruction for use and the Safety Data Sheet (SDS) of the disinfectant manufacturer to be aware of any hazards.

WARNING: Sterilization parameters are gravity displacement steam autoclave. Parameters for wrapped (Sterilization Wrap FDA Product Code: FRG) are 132°C (270°F) for 15 minutes at temperature with a 30-minute drying time. Parameters for unwrapped (flash steam sterilization) are 132°C (270°F) for 10 minutes with a 30-minute drying time. Standard HVE weight: 1.28 oz, Universal HVE weight: 1.664 oz, SE weight: 1.024 oz.

NOTE: The HVE/SE aluminum body, spool (removed), SE rubber tip (removed) and Viton o-rings may be autoclaved. Aluminum quick-disconnect base remains on the tubing (refer to page 1 for part identification).

1. After HVE/SE disposable extraction tip is removed, using a product labeled as a cleaner (or a solution of mild dish soap/warm water) applied to a wipe or soft paper towel, clean contact surfaces and remove visible soil/debris and contaminants from HVE/SE body and quick disconnect base.
2. Turn off vacuum source (or use vacuum plug on quick-disconnect base after detaching HVE/SE body). Additional step for end of day:
   A. With eye protection, flush HVE/SE with evacuation system cleaner compatible with amalgam separators and vacuum dysfunctions following manufacturer’s instruction for use. Evacuation system cleaner is available from your authorized Forest dealer.
3. Detach the HVE/SE body from the aluminum quick-disconnect base (refer to page 1 for disassembly). Quick-disconnect base remains on the tubing.
4. Disinfect HVE/SE quick-disconnect base (left on tubing) and HVE/SE tubing using an intermediate-level EPA-registered disinfectant (excluding chlorine-based products) with the intended use in healthcare facilities (such as CavirWipes<sup>TM</sup>) and adhere to manufacturer’s instruction for use. Be sure to wipe around the threads and inside of the parts.
5. Contrary to disinfectant label instructions for dwell time, allow disinfectant to remain wet on parts for at least a 4-minute dwell (contact) time. Increased dwell time is due to various material and porosity types of Forest units. Use multiple wipes to adequately wipe each surface and in order to keep surface visibly wet for the entire time. Allow surface to air dry for no less than 1 minute.
6. After 1 minute if still wet, wipe surface dry and then repeat step 5 to allow for adequate disinfection due to various material and porosity types.
7. Remove disinfectant residue with a solution of mild dish soap/warm water and wipe dry to minimize the harmful effects of chemical disinfectant residues. Not doing so will accelerate degradation of materials over time.
8. Prepare the HVE/SE body for sterilization over the sink (using a plug in the sink drain to avoid losing parts). Remove spool from HVE/SE body and rubber tip from SE (refer to page 1 for disassembly). Additional step for end of day:
   A. When removing spool from HVE/SE body over sink, inspect Viton o-rings on spool, and HVE tip for cracks, nicks or missing portions. Replace if necessary.
9. Clean the external surfaces of the HVE/SE of all visual soil/debris using a solution of mild dish soap/warm water (or enzymatic cleaner). A soft-bristled nylon brush (to avoid surface damage) may be used to clean around the outer openings and connector interface.
10. Use the provided brush to clean o-rings and internal surfaces of the HVE/SE by inserting the brush in all open orifices while running warm water through the body.
11. Thoroughly rinse the HVE/SE with clean water to remove any residual soap or enzymatic cleaner. Allow the instruments to completely dry.
12. The HVE/SE assemblies are now ready for sterilization per sterilization parameters above. HVE/SE should remain disassembled during sterilization. (SE rubber tip and spool are disassembled from HVE/SE body. O-rings remain in place.)
13. After sterilization, drying and cooling, using clean gloves, reassemble HVE/SE spool and SE rubber tip on to HVE/SE body. Additional step for end of day:
   A. After drying and cleaning of sterilized devices, visually inspect the condition of the Viton o-rings on spool, quick-disconnect base and HVE tip. Replace Viton o-rings if found to have cracks, nicks or missing portions.
14. Replace HVE/SE body on to the quick-disconnect base.
15. Turn on vacuum source. Verify operation and check for audible system vacuum leaks.