

# Maintaining Mechanical Room Equipment

Whether you are working through reduced hours or plan to close your practice temporarily, ensuring regular maintenance of your air compressors and vacuums is important for maximum performance of your mechanical equipment, as well as your handpieces and suction.

## POWERAIR® COMPRESSORS

### After Weekly Use:

#### Check Moisture Indicator

If indicator is BLUE, no action is required. If indicator is PINK, marginal life or compressor is overcycled. If indicator is WHITE, dryer tank needs replacing.

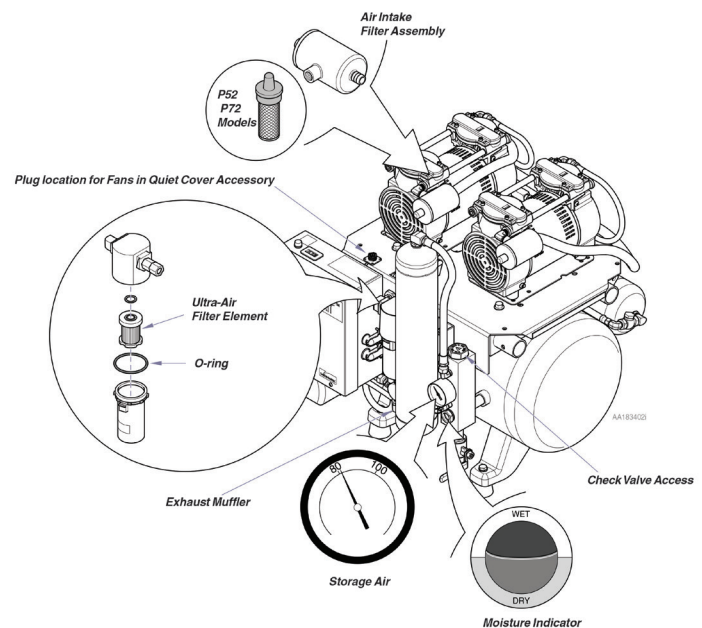
### After Monthly Use:

#### STEP 1: Check Pressurization Time

Watch the Storage Air gauge as the compressor runs. Record the time it takes to go from 80 PSI to 100 PSI. It should take approximately 15 to 45 seconds. (Contact your dealer if significantly out of range)

#### STEP 2: Clean/Dust Compressor

Wipe with a clean cloth to remove dust and debris.



### After Semiannual Use:

#### Replace Exhaust Muffler

### After Annual Use:

#### STEP 1: Replace Air Intake Filters

The number of air intake filters varies by model. You must replace all of these filters annually.

#### STEP 2: Replace Ultra-Air Filter Element and O-ring

All models have only one Ultra-Air Filter.

Note: For complete maintenance instructions and service kit numbers, [click to view the PowerAir maintenance guide.](#)

# POWERVAC® AND POWERVAC® G DRY VACUUMS

## After Daily Use:

**Clean Vacuum Piping System Daily:** Use a non-foaming vacuum system cleaner, such as Precision Clense™, to keep the separation tank rinsed and clean. This practice helps protect the internal tank controls and eliminates the need to rinse the separator tank.

**STEP 1: Start with Farthest Operatory**

Go to the farthest operatory from the vacuum first, working your way back toward the vacuum.

**STEP 2: Suction Cleaning Solution**

Follow the mixture instructions provided with the vacuum system cleaner. Alternate air and vacuum while cleansing—submerge and remove HVE and SE from mixture several times until mixture is consumed.

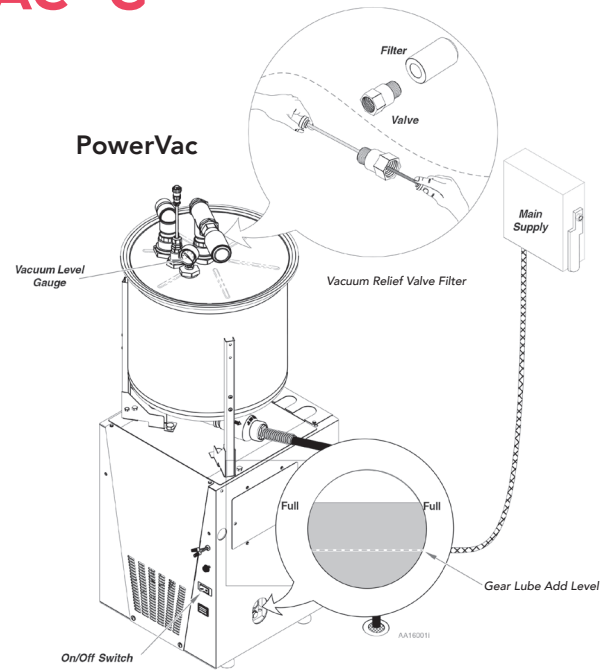
**STEP 3: Move to Next Operatory**

Keep the cleansed vacuum lines (HVE and SE) open and move to the next operatory.

**STEP 4: Repeat Steps 1–3**

Continue until all vacuum lines are cleansed.

**Note:** MUST run the PowerVac and PowerVac G for 5 minutes after all operatories are cleansed.



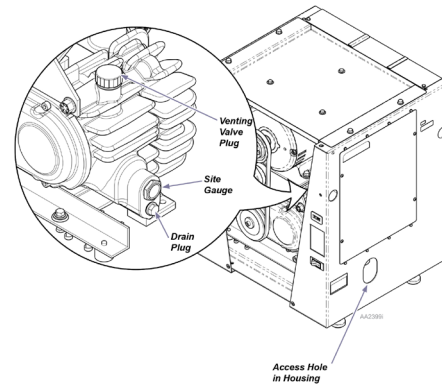
## After Quarterly Use:

**STEP 1: Check Gearbox Lube Level**

The gear lube level is set at the factory to just above half full. A sight glass is provided to visually inspect the gear lube level. If the gear lube is below 1/3 full, fill as needed and monitor oil level. Replace absorbent pad located at the bottom of the base, if required.

**STEP 2: Inspect Vacuum Relief Valve Filter (PowerVac only)**

If the mechanical room contains excessive contaminated air, the VRV filter may become dirty. If it appears clogged, contact Midmark Technical Service at 1.800.MIDMARK.



## After Annual or 2,000 Hours of Use:

**STEP 1: Inspect Belt**

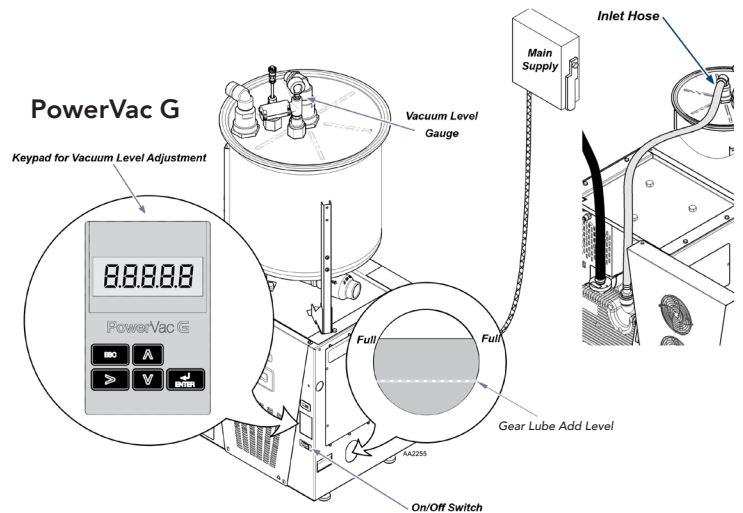
If the belt appears loose or abnormally worn or is making noise, contact Midmark Technical Service.

**STEP 2: Use Conditioning Fluid**

To maintain proper vacuum performance, pour conditioning fluid into intake hose. See maintenance kit instructions.

**STEP 3: Inspect Tank**

If required, use garden adapter and flush tank with garden hose. Refer to service and parts manual, [PowerVac G](#) or [PowerVac](#).



*Note:* For complete maintenance instructions and service part numbers, click to view the maintenance guide for [PowerVac](#) and [PowerVac G](#).

**Note:** When working on twin units (replacements or adjustments), unplug parallel harness.

# CLASSIC SERIES® WET-RING VACUUMS

## After Daily Use:

**EQUIPMENT ALERT:** Scavenging polishing paste with abrasives, running the pump with no water supplied, or using water with high mineral content or excessive sediment can damage or reduce the lifespan of the pump.

### STEP 1: Clean Vacuum Piping System

Clean piping system with a non-foaming vacuum system cleaner. Midmark recommends Precision Clense™.

### STEP 2: Clean Vacuum Inlet Strainer

Turn vacuum "OFF." Remove, replace and or clean filter bowl, screen and gasket. Reassemble. Turn vacuum "ON."

## After Annual Use:

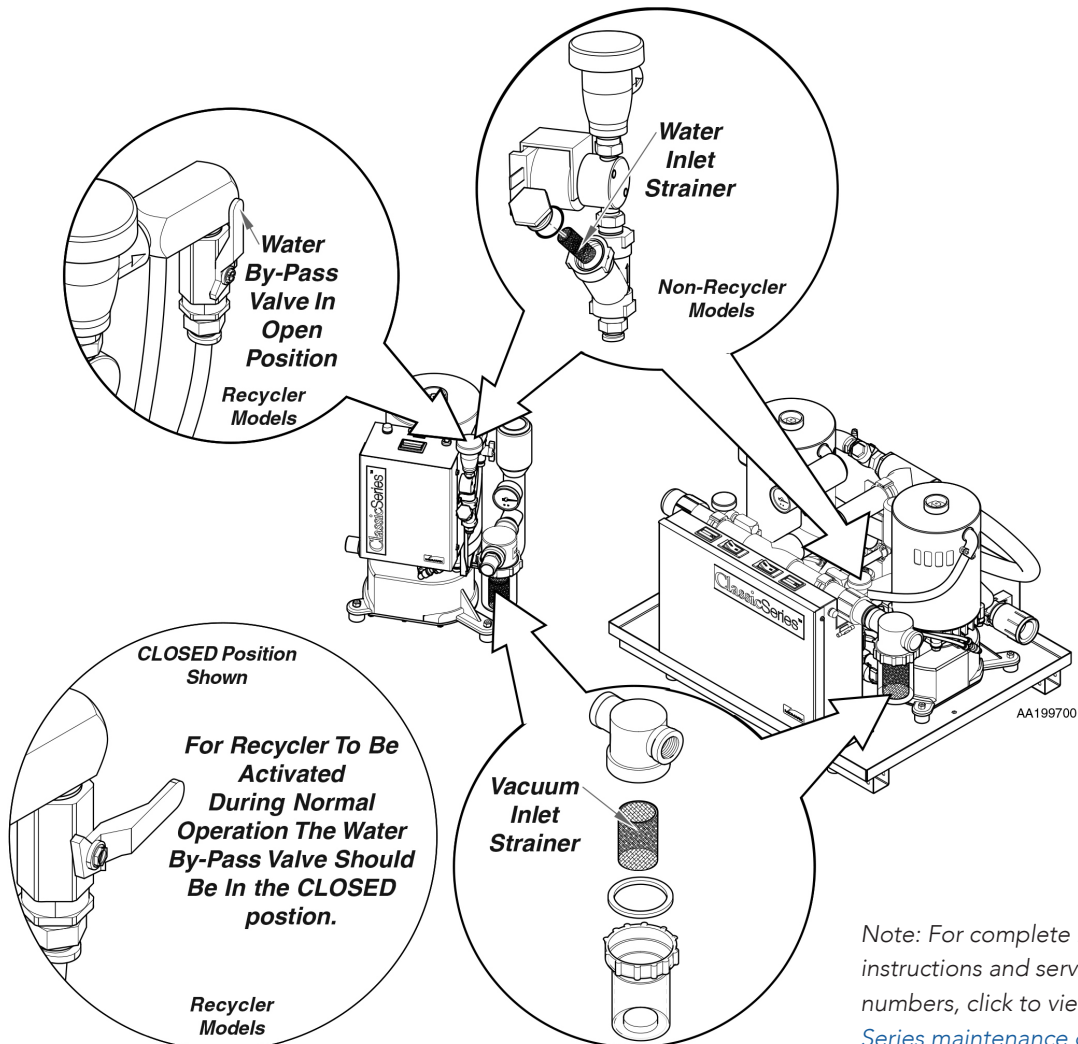
### STEP 1: Check Pressurization Time

Watch the Storage Air gauge as the compressor runs. Record the time it takes to go from 80 PSI to 100 PSI. It should take approximately 15 to 45 seconds. (Contact your dealer if significantly out of range)

### STEP 2: Clean/Dust Compressor

Wipe with a clean cloth to remove dust and debris.

**NOTE: Recycler Models Only**—If the vacuum has low-to-no suction due to a clog of built-up residue, the bypass feature can help keep the vacuum running until a technician can troubleshoot the problem. Turn the water bypass valve to the OPEN position. This adjustment will bypass the recycler and may keep the pump running.



# POWERMIX HIGH PERFORMANCE VACUUMS

## After Each Use:

**Replace Collection Canister:** Midmark operatory recovery room collection canisters are designed for single patient use only. Refer to collection canister manufacturer directions for replacement.

## After Semiannual Use:

**Clean Air Vents on Motors:** Disconnect power, then wipe with a clean cloth to remove dust and debris.

## After Annual Use:

### STEP 1: Replace Vacuum Filter

- Shut off power at supply box.
- Vent tank by closing ball valve and opening service valve.
- Allow pump(s) to cool.
- Unscrew end cap from pump(s).
- Remove filter(s) and o-ring(s).
- Replace with new filter(s) and o-ring(s).

### STEP 2: Drain Moisture from Tank

Open service valve to drain any accumulated moisture in tank.

## As Needed:

**STEP 1: Vacuum Pump Flushing:** Vacuum pump(s) can be flushed to remove deposits, which build up on the pump vanes over time. Removal of these deposits will help to maintain proper vane performance.

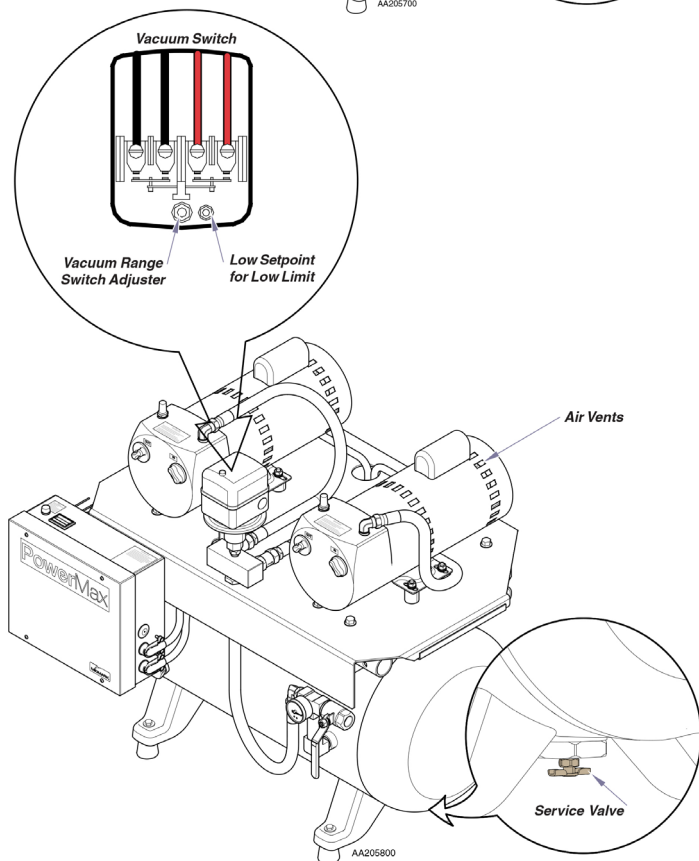
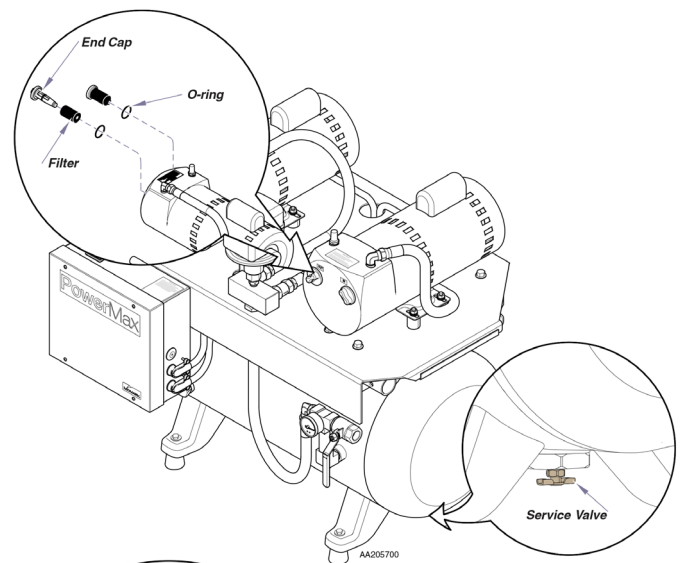
**STEP 2: Adjust Vacuum Setpoints:** Adjust vacuum setpoints at initial setup or when needed.

**Low Setpoint:** Adjust low limit if system did not turn on at 13" Hg.

- Clockwise will decrease reading.
- Counterclockwise will increase reading.

**Vacuum Range:** Adjust vacuum range if system didn't shut off at 20" Hg.

- Clockwise will decrease reading.
- Counterclockwise will increase reading.



Note: For complete maintenance instructions and service kit numbers, click to view the [PowerMax maintenance guide](#).