

Maintenance Overview

RAMVAC preventive maintenance is simple, clean, and inexpensive, however we recommend that all maintenance and service be provided by a trained dealer service technician.
It can help ensure your RAMVAC provides years of predictable performance.

Key points for trouble-free operation:

- Rinse vacuum lines daily with the recommended quantity of liquid.
- Change oil and check filters on schedule.

Upon request, RAMVAC will provide circuit diagrams, component parts lists, descriptions, calibration instructions, or other information to assist service personnel to repair parts.

| Preventative Maintenance Schedule | | |
|-----------------------------------|--|---|
| 1st Week | Check Drip Rate | See “Check Oil Drip Rate” |
| Daily | Rinse Vacuum Lines | See “Cleaning the Vacuum System” |
| Every 1,000 hours | Check Air Filters | See “Air Filters” |
| Every 2,000 hours* | Check Drip Rate Change Oil and check oil filter Check V-Belt | See “Check Oil Drip Rate” See “Oil Change” See “Check V-Belt” |

The S2 will display the number of hours before maintenance is due.

If a Lighted remote switch is installed it will also flash the light indicating that maintenance is due.

If the OWL Touch is installed it will indicate the maintenance is due on the display.

Oil Fill Level



To read correctly, get eye level with sight glass while unit is sitting level, and check that oil level is even with the head of the red arrow. Add or drain oil accordingly.

Cleaning the Vacuum System

Clean vacuum lines daily. Just before turning off the RAMVAC, rinse vacuum lines first with hot water -- approximately one quart through each high volume line and a few ounces through each saliva ejector line. Then aspirate a few ounces of a dental vacuum line cleaner through each vacuum line. SlugBuster™ is highly recommended. Cleaners should have these qualities:

Non-Foaming:
De-Odorizing:

Foam may cause a Moisture in Filtrols Fault (See "Moisture in Filtrols Fault") and shut down the Bulldog. Avoid interruptions by insuring your cleaner is truly "non-foaming".

Test by shaking the mixed solution. True "non-foamers" will be bubble free.

Cleaning requirements will vary according to activity. After surgical procedures, aspirate a few ounces of an appropriate vacuum line cleaner, such as SlugBuster, through the lines.

For overhead plumbing, be sure to allow air to follow liquids before closing vacuum valves.

Clean treatment room solids separators routinely. Check the treatment room solids separator routinely and clean when dirty.

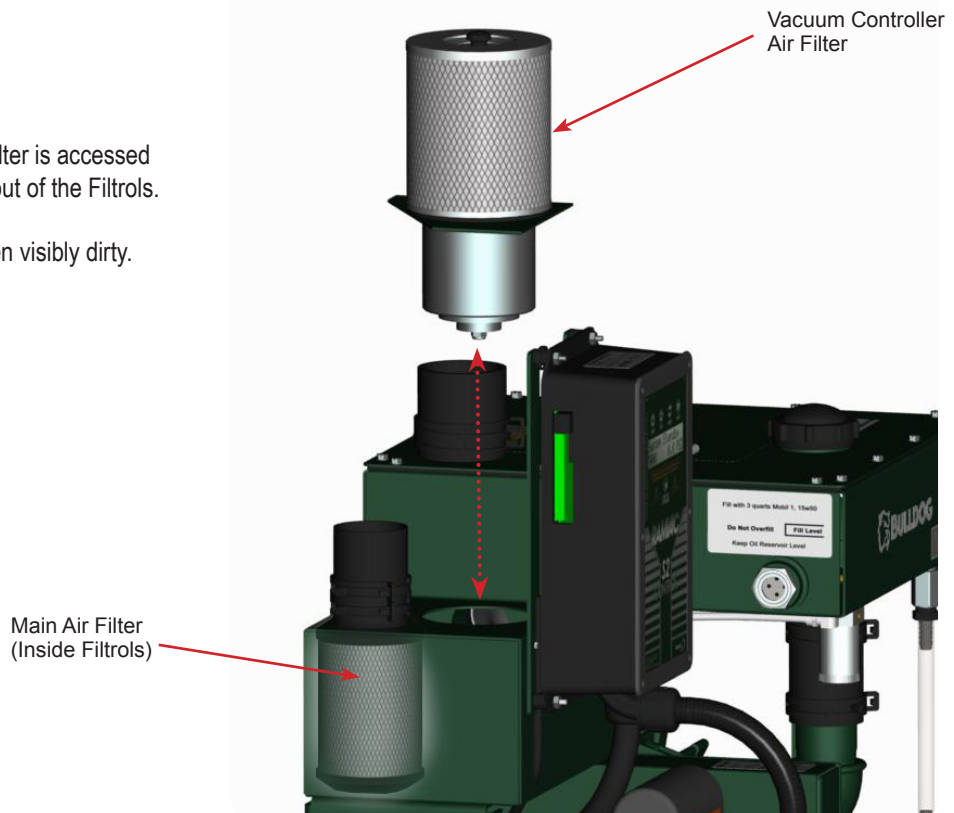
Cleaning Unit

1. Always disconnect the power from the equipment prior to cleaning.
2. Some parts on the vacuum get hot during operation. Provide the unit ample time to cool prior to cleaning.
3. All components can be safely wiped down with a damp cloth, wet with water. We do not recommend using any cleaners or harsh chemicals to clean this equipment since their potentially harmful effects have not been evaluated.
4. Do not heavily wet electrical components
5. Allow equipment to air dry or dry with clean, soft cloth.

Air Filters

Inspect air filters often. The Main Air Filter is accessed by lifting the Vacuum Controller up and out of the Filtrols.

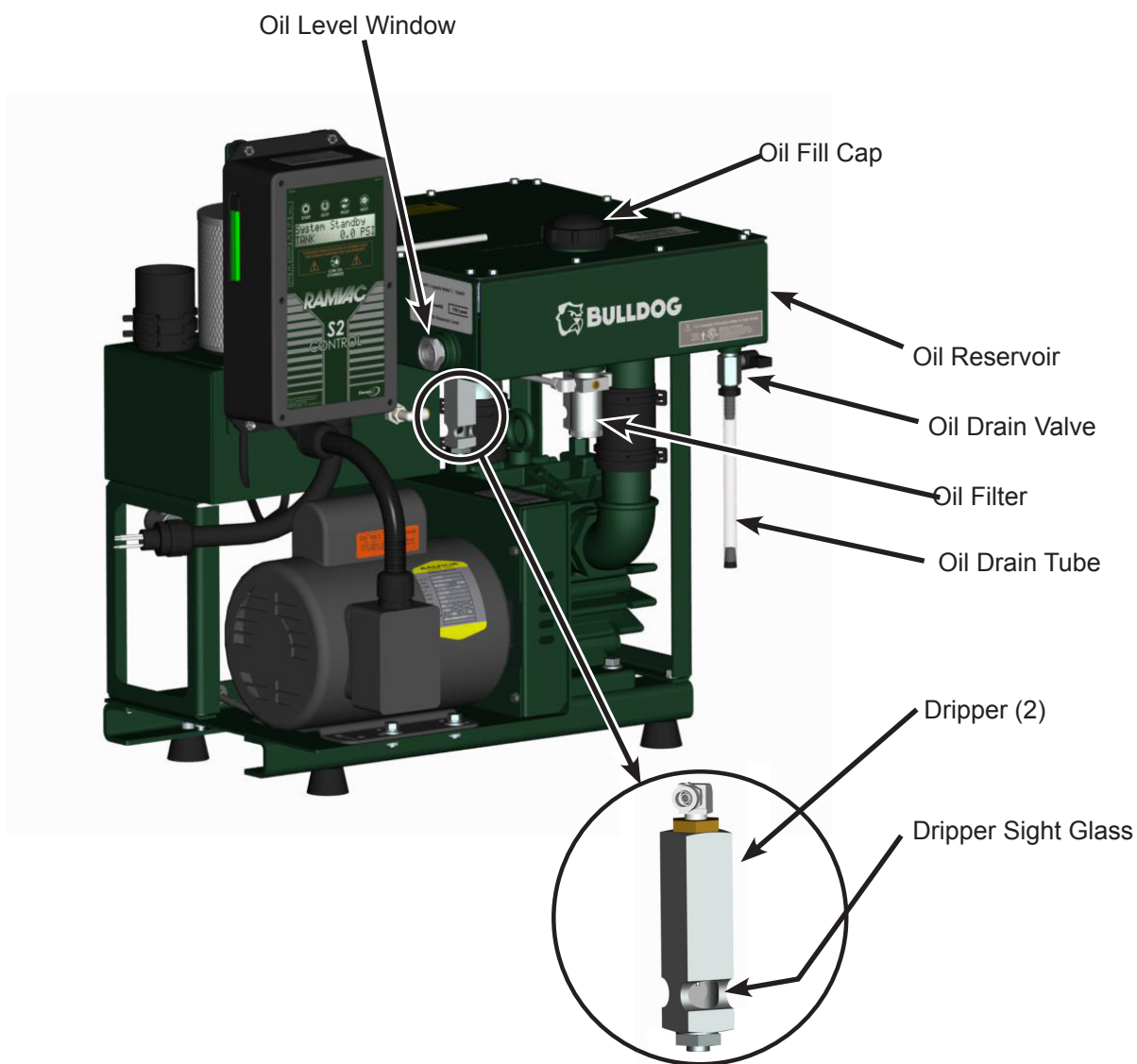
Replace Filters every 2000 hours or when visibly dirty.



Lubricating System Components

One reason your **RAMVAC** will outlast every other dental vacuum system is its “Lubrication System”. The “Lubrication System” supplies oil drop by drop through “Drippers” to the pump. Used oil is discharged back into the Oil Reservoir as a mist, separated from the exhaust, filtered and recirculated.

Change oil every 2,000 hours.



Oil Change

“ Change Oil ” is displayed on the S2 Electrols every 2000 hours .

Procedure:

1. Drain Used Oil
 - Place empty oil container (minimum 4 quarts) under oil drain tube
 - Open oil drain valve. When oil stops draining, close valve.
 - If you see water in the oil, contact your dealer or RAMVAC.
2. Check Oil Filter
 - Unscrew oil filter and remove filter element.
 - Normally your oil filter element will be clean. If dirty, contact your dealer or RAMVAC.
 - Re-assemble oil filter. Hand tighten only.
3. Add Fresh Oil
 - Remove oil filler cap.
 - Add 3 quarts Mobil 1, 15w50. Check Oil Fill Level at sightglass and add or drain oil accordingly. (see pg. 9).
 - Use only recommended oil, available locally and also available from RAMVAC.
 - Securely install oil fill cap.
 - Check oil drip rate. See “Check Oil Drip Rate”
 - Dispose of used oil at a gas station or lubricant recycling station.
4. Reset “Change Oil”
 - From “Change Oil” screen press and hold the reset button for 5 seconds.

Check Oil Drip Rate

Check the drip rate at the “Dripper Site Glass” after the first week of operation, after every oil change, and every time the 1000 hour Filter Maintenance displays.

Drip rate should be 1 to 3 drops per minute at each “Dripper” when the Bulldog vacuum unit is thoroughly warmed-up, the vacuum setting is 7” to 7.5” Hg, and ambient temperature is 70°F to 75°F.

Stronger vacuum and/or elevated temperature will increase the drip rate. Weaker vacuum and/or cooler temperature will decrease the drip rate.

If the drip rate is not as specified, contact your dealer or RAMVAC.

Check V- Belt

Inspect V-belt for wear every 2,000 hours. Replace if cracked or frayed.

V-belt tension will not normally need adjustment. However, tension will need adjustment if belt squeak at start up. Contact **RAMVAC** for information.