

Daily

Pump	Observe normal operating noises and listen for changes
Back flow preventer	Verify specified compound pressure gauge reading
Venturi Injector	Verify specified inlet and outlet pressures and pressure drop
Oxygen Concentrator	Verify output pressure
	Observe normal operating noises and listen for changes
Compressor	Observe normal operating noises and listen for changes
Ozone Generator	Verify specified cell pressure
	Verify specified output volume
	Check ORP Controller set point & readings

Listen for any change in tone, knocking, or louder than normal operation

This O2 feed gas pressure should be neutral to slightly negative - report if more than 5 psi above or below neutral

Confirm the pressure drop across the inlet and outlet is within the normal operating range of 25 to 35 PSI

Confirm that the pressure matches what is shown on the startup specification sheet

Confirm it is within specifications provided on startup sheets

Confirm it is within specifications provided on startup sheets

Calibrate immediately if required - replace probe if calibration does not hold

Weekly

Pump	Verify specified outlet pressure of each pump in system
Filter	verify specified inlet and outlet pressures and pressure drop
Oxygen Concentrator	Check and clean air inlet filters
Compressor	Verify output pressure
	Verify output volume
	Inspect receiver tank automatic drain valve
	Verify no water in receiver tank
Ozone Generator	Clean/replace inline filters
Ozone Reaction Vessel	Check, clean Gas Relief Valve on top of tank
	Check water in ozone destruct unit

See system startup records for specified output pressures of pumps

Confirm with start up documentation, but typical readings are 30 PSI minimum at the filter manifold inlet, 15 PSI maximum pressure drop before a Blow out, wash and dry completely before reinstalling to be sure that the oxygen concentrator receives adequate fresh air

Confirm it is at manufacturer's rated output or the pressure specified on your startup sheets

Confirm it is at manufacturer's rated output or the volume specified on your startup sheets

Weekly inspection to make sure no water is present - install automatic blow down valve if needed

Confirm receiver tank is always dry

If relief valve is clogged with iron deposits or debris the tank will empty and the system will not function

Keep the tube full of water - will not work when dry - ensure unit is free of foam and debris and does not overflow

Monthly

Back flow preventer	Verify working optical sensor and clean tube	Confirm it is free of water on the inside and dust on the outside - If any water inside, shut down and call Dramm
Oxygen Concentrator	Check and adjust output volume	Confirm the volume matches what is shown on the startup specification sheet
Compressor	Clean/replace air inlet filters	Blow out and/or wash and dry well before re-installing
	Clean/replace oil filters	Refer to owner's manual for details - call Dramm for any parts needed
	Clean/replace water separator and filters	Refer to owner's manual for details - call Dramm for any parts needed
Ozone Generator	Visually inspect inside cabinet	Make sure no water or excess dust is present, and that there are no indications of burning
	Clean/replace cooling filters	Turn off equipment before cleaning to ensure no dirt is pulled into cabinet - dry the filters well before re-installing
Sensors	Check and clean ORP probe	Swirl in distilled water and/or cleaning solution and wipe with soft cloth - never use a hard bristled brush of any kind

Quarterly

Pump	Lubricate Pump	Apply specified lubricant to points indicated in owner's manual
Venturi Injector	Lubricate as needed	See owner's manual for details
Ozone Generator	Verify tight fittings on all gas lines	Call Dramm if you suspect a leak, and a packet of Potassium Iodide will be sent to help verify
Sensors	Check and clean ORP probe	Swirl in distilled water and/or cleaning solution and wipe with soft cloth - never use a hard bristled brush of any kind
	Calibrate ORP sensor	Report to Dramm if the sensor no longer holds calibration - it may be time to replace
	Check and clean Dissolved Oxygen probe	If reading seems low check to see if the probe or membrane is fouled, or electrolyte solution needs to be replaced
	Calibrate DO probe	See Manual for details

Every 6 months

Filter	verify adequate backwash frequency	Do not allow the pressure drop to exceed 15 PSI
	inspect backwash discharge for content	Discharge several gallons into a white bucket and visually inspect for abnormal amounts (or types) of filter particulate
Back flow preventer	Verify shut off solenoid function	
Venturi Injector	Clean venturi suction port and ball check assembly	Preventatively clean every 6 months, more often if necessary. Low ORP and/or gas flow is a key indicator of a clogged injector inlet
	Verify injector pump voltage and amperage draw	Confirm that voltage supply and amperage draw match motor plate ratings
Oxygen Concentrator	Test oxygen purity	Use an oxygen purity tester and report any purity reading below 88%
	Visually inspect for sieve bed breakdown	Check and report if fine white powder deposits are seen on surfaces inside concentrator cabinet
Compressor	Lubrication	See owner's manual for lubrication details
Sensors	Check and adjust flow sensor	See Manual for details

Annually

Pump	Verify voltage and amperage draw	Verify that voltage and amperage draw match those listed on motor plates
Back flow preventer	Preventative replacement of check valve	These specialty check valves may fail in the ozone environment so preventatively replace annually
Venturi Injector	Replace suction port ball check valve	Confirm check valve is in place and preventatively replace
	Visually inspect injector pump impeller	Look for pitting, indicating cavitation, or the chipping of blades
Oxygen Concentrator	Verify dew point level	Should be at or above -150F
	Compressor rebuilt kit	Rebuild required every 8,000 to 11,000 hours (see manual) or every 12 months - takes 2 hours - order kit from Dramm
	Solenoid Replacement	The four solenoids should be replaced or rebuilt annually and are part of compressor rebuild kit
Ozone Generator	Clean ozone cells	Call Dramm to discuss before attempting - may require a service visit
Ozone Reaction Vessel	Check inside of tank for buildup or debris and clean as needed	Precipitated solids may accumulate and present extra ozone demand, decreasing system efficiency
Sensors	Replace ORP probe	Must be replaced approximately once per year, or more, depending on the source water quality

Every 2 years

Pump	Inspect pump impeller	Confirm there is no pitting, chipping or breakage of the impeller blades
	Check bearings and replace if noisy	
Filter	Rebuild filter backwash valves	May not be necessary if they are functioning well - check pressures to confirm
Sensors	Replace Ambient Ozone Sensor (annual)	Regulations require this be done once per year - pull ozone feed tube off and hold under sensor to confirm it is working