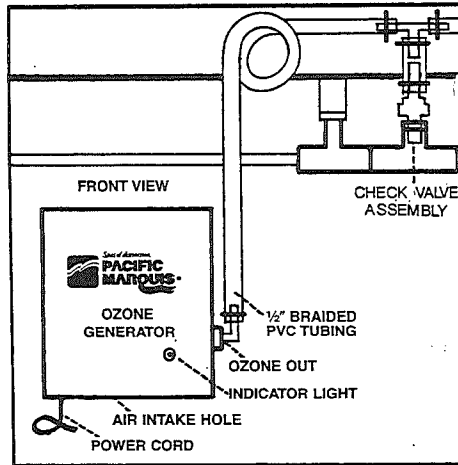


MAINTENANCE

Routine maintenance procedures which should be performed at least every three months include checking:

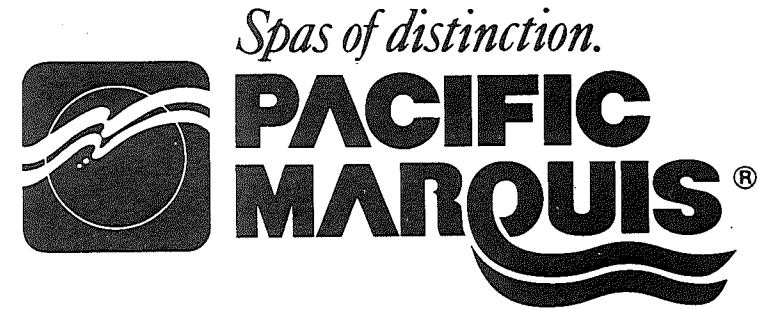
1. Check valve assembly. Inspect and clean or replace.
2. All hose connections. Replace worn or oxidized tubing.
3. Ozone sanitation is very effective and will require more frequent filter maintenance. Refer to owner's manual for filter service.



TROUBLESHOOTING

When the lamp cell blue light is out, ensure that the power cord to the ozone generator is plugged into the bottom of the control box. If the lamp still does not light, internal service-

ing may be required, including replacement of lamp bulb, which is not authorized for the consumer. Contact your dealer for further assistance.



MARQUIS CORP. 596 Hoffman Rd. Independence, Oregon 97351 (503) 838-0888

OZONE PURIFICATION SYSTEM OWNERS MANUAL



Listed by
the International
Association of
Plumbing and
Mechanical Officials



This symbol on the product's nameplate
means it is Listed by
UNDERWRITERS LABORATORIES, INC.



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THIS IS AN IMPORTANT SAFETY DOCUMENT.

- Keep it in a safe place.
- Pass it on to any new owner.
- If lost, contact your local Pacific Marquis dealer or write to Pacific Marquis and new copy will be provided at no-charge.

GENERAL INFORMATION

Ozone is the most powerful oxidizer that can be used safely in spas. It has the ability to destroy bacteria, viruses, molds, yeasts, fungi, organic and inorganic contaminants.

Ozone can be produced when oxygen in air reacts with ultraviolet light. This very active form of oxygen (O) when introduced into a spa, works extremely fast, destroying contaminants on the average of several thousand times faster than chlorine or bromine.

Ozone will not affect the pH of the water, nor is it affected by pH fluctuations.

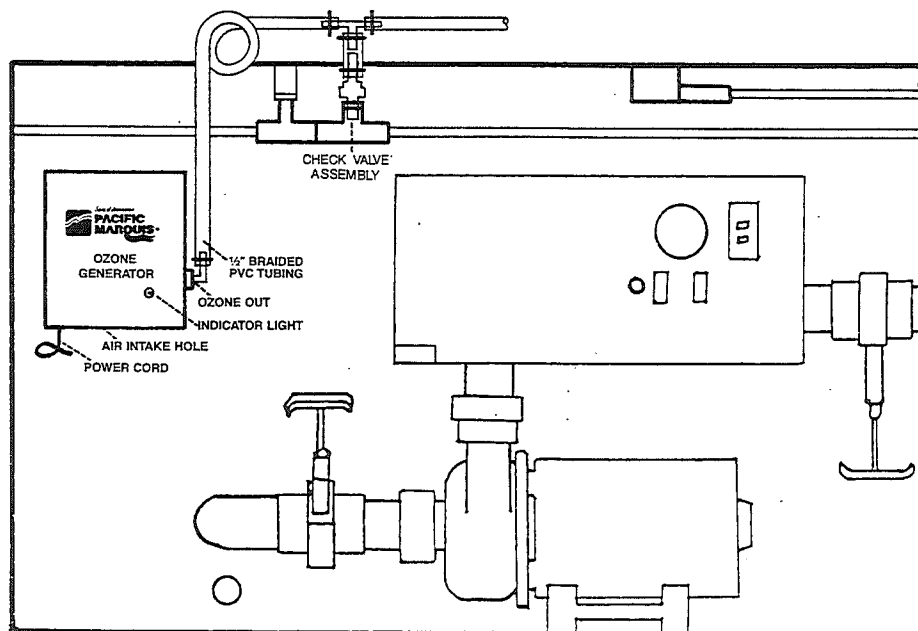
Ozonation is superior to chlorination in terms of water quality, operation and maintenance costs and effectiveness as a disinfectant and oxidizer. Ozone is a cost effective alternative to 100% chlorine or bromine purification of your spa water.

NOTE: Much misinformation has been given to consumers relating to ozone as a spa water purification system. Many consumers

have been led to believe that ozone will "replace all other chemicals." This is false. Not only does ozone not replace chemicals relating to control of pH and total alkalinity, but does NOT totally replace chlorine or bromine. However, with ozone use it is estimated that chlorine usage is reduced by 80% to 90%. Some chlorine or bromine is still required on a periodic basis for super chlorination in periods of heavy contamination and to provide a residual effect, preventing re-growth of microorganisms. The residual effect of chlorine is necessary because ozone offers no residual protection.

Minimum daily use of an ozone injection system is six to eight hours daily for proper purification and filtration. A longer time may be necessary during periods of heavy use.

Ozone generation systems require no regular maintenance but occasionally will require a new bulb. Estimated life of ultraviolet lamps of this type is 7,000 to 8,000 hours.



SPA OPERATING GUIDELINES WITH AN OZONE PURIFICATION SYSTEM

To maintain a clean and healthy spa, the following guidelines should be followed:

WATER BALANCE

Test the water regularly using a water test kit available from your dealer.

TEST	IDEAL RANGE (PPM)
Free Chlorine	0.5
pH	7.2-7.8
Total Alkalinity	80-110
Calcium Hardness	170-200

CHLORINE

The use of chlorine or bromine as a sanitizer and disinfectant in conjunction with the ozone generator is required. A residual of 0.5 PPM of free chlorine should be kept in the spa at all times.

OPERATING TIME OF OZONE GENERATOR

The length of the run time will be determined by the spa usage. It is recommended that the spa be run continuously or at least the run time should be divided so that ozone treatment occurs before and after use. The ozone generator operates in conjunction with the pump and should be operated six to eight hours daily. Longer operating time may be necessary during periods of heavy use. The ozone generator can operate 24 hours a day by leaving the spa in continuous operation.

WATER CHANGES

The water should be changed at least two to four times a year. More frequent changes may be necessary for spas subject to regular heavy use.

OZONE GENERATOR OPERATION

Your ozone system was manufactured with simplicity of operation and ease of maintenance as a priority. To ensure that your system is functioning properly, the following operating maintenance program should be followed:

On A Regular Basis Check:

1. That the blue light is on to ensure operation of the U.V. lamp (view through peep-hole).
2. That the bubble mist entering the spa from one or more of the jets is in a fine and steady flow.
3. The 1/2" braided PVC tubing for water leaking back through the check valve assembly.

