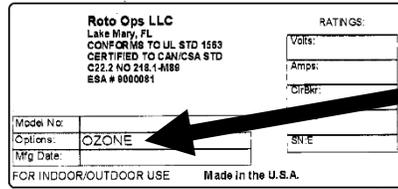
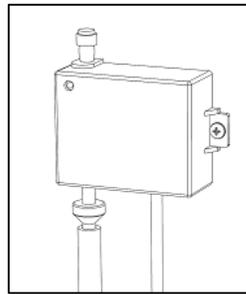
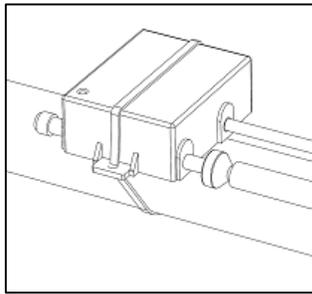


Your Spa's Ozonator. (Optional equipment)

If you ordered your spa with the optional ozonator installed, you can confirm this by viewing the spa's rating plate. The rating plate is located near the floor and equipment access door. As shown below, look in the option box to confirm the ozonator has been installed. The word "OZONE" will be seen.

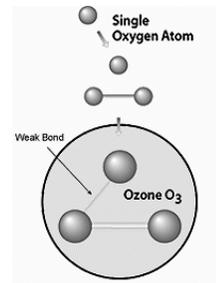


Further to verifying the ozone option is installed on your spa. If you look in the equipment compartment you will see a small black or blue box, about 2.6 inches by 3.3 inches x 1.3 inches (6.6cm x 8.4cm x 3.3cm). It will be either strapped to the plumbing or mounted on a wall, as shown below.



Ozone is an oxidizer used to sanitize water and air. Ozone is created naturally in the environment during thunderstorms. The electric charge created by lightning converts the oxygen in the air into ozone. Your ozonator creates ozone using the same principle. It utilizes a very high electric charge to convert oxygen into ozone. This ozone is then injected into the spa's water stream and eventually through two of the spa's jets. These jets will always produce air bubbles (however fine they may be) while the pump is operating and are not controlled by the air injector venturi dials.

The oxygen in the air is normally O₂. That is a molecule consisting of two atoms of oxygen. When exposed to a high electrical charge, a 3rd oxygen atom is added to some of the O₂, forming O₃ (ozone). The weak bond holding the third oxygen atom causes the molecule to be unstable. An oxidation reaction occurs upon any collision between an ozone molecule and a molecule of a substance that can oxidized, i.e. bacteria, fungi, mould, yeast, viruses, and forms of metals. The weak bond 3rd oxygen atom splits off to these substances, leaving oxygen (O₂) as a by-product. During this oxidation reaction, organic molecules are changed and dissolved metals are made no longer soluble.



Although ozone is more effective than chlorine, chloramines and chlorine dioxide for inactivation of viruses, Cryptosporidium and Giardia; it dissipates very quickly. For this reason ozone can only be used as a secondary sanitizer, to enhance the primary sanitizer used to keep your spa safe. You must use a primary source of sanitizer which is always present in the spa water. Please see the Water Chemistry section of the spa owner's manual for further information about sanitizers.