

# OWNER'S MANUAL

We appreciate having you as a customer and wish you many years of safe and satisfied use of your machine. This Owner's Manual is an important part of your new **Sports-O-Zone/DeconZone** machine and should remain with the machine. It will help you in the operation and maintenance of the unit for best performance.

Reading your owner's manual will help you and others avoid personal injury or damage to the machine. Information given in this manual will provide the operator with the safest and most effective use of the machine. Knowing how to operate this machine safely and correctly will allow you to train others who may operate this machine.

Sections in your owner's manual are placed in a specific order to help you understand all the safety controls and devices so you can operate this machine safely. You can also use this manual to answer any specific operating or servicing questions. A convenient table of contents is located on page 2 of this book to help guide you.

Only trained operators should have access to this equipment. There are risks associated with the equipment if direction is not followed and equipment is not properly maintained.



Global Ozone Innovations, LLC

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## Ozone Effects on Bacteria and Virus

**Important: See update to our unit's effectiveness on COVID-19 on website at [sportsozone.com](http://sportsozone.com) or [deconzone.com](http://deconzone.com)**

Bacterial infections and the spread of viruses relating to athletic gear are becoming a bigger concern each year. Numerous articles are being written and public awareness is growing rapidly to the health risks. This study and independent laboratory testing have been performed to analyze the effectiveness of the Sports-O-Zone/DeconZone system to help control this growing problem.

There are numerous ways to kill bacteria. Each way entails direct contact of the virus or bacteria with an oxidant or disinfectant. To effectively claim a 99.99% kill rate of these microorganisms, the disinfectant would have to be in contact with 99.99% of the microorganisms. One of the problems to overcome in achieving direct contact with all of the microorganisms is the clumping of bacterial cells. As noted in the Pennsylvania State University study, (Bactericidal Effects of High Airborne Ozone Concentrations, 1998) "there is a tendency of micron-sized particles to clump naturally.... The clumping of bacterial cells protects a small percentage of bacteria and causes them to behave as if they had a much higher resistance..."

There are numerous claims of 99.99% kill rate by systems offered in the market place. The problem with athletic equipment is finding an effective way to get the disinfectant into all the crevices of the equipment for direct contact with the bacteria and breaking down the clumping effect of the microorganisms. The Sports-O-Zone/DeconZone machine's answer is the use of OZONE gas to get into all those crevices and effectively work on attacking and eliminating all the bacteria as well as breaking down the clumping effect.

Ozone (O<sup>3</sup>) is one of the strongest oxidants and disinfectants available, ranking ahead of hydrogen peroxide, bleach, and iodine, without any residue or odor. Ozone is nature's way of purifying air and water. It is colorless and occurs naturally in the air we breathe everyday. Ozone is also one of the food sanitizing ingredients and processes being used in food safety. The U.S. Environmental Protection Agency, in conjunction with the Safe Drinking Water Act of 1991, confirm that ozone is effective in ridding water of hazardous pathogens, including chlorine-resistant *Cryptosporidium* (USDA Gov/publications /agoutlook /June1998). Gaseous ozone is also listed as an alternative disinfectant for water-sensitive produce (USDA *Guide to Minimizing Microbial Food*

*Safety Hazards for Fresh Fruits and Vegetables*). The flexibility of Ozone spans various industries and is well documented as a very effective disinfectant that leaves no residue.

### **IEC 61010-1, Clause 5.4.2**

In accordance with IEC 61010-1, Clause 5.4.2 requires that the pollution degree of the environment is specified. The degree noted below classifies the products manufactured by GOI.

- ***Pollution Degree 2*** – Only non-conductive pollution occurs except that occasionally a temporary conductivity caused by condensation which is expected.

## **OZONE EFFECTS ON SPECIFIC BACTERIA AND VIRUSES** **([www.ozoneapplications.com](http://www.ozoneapplications.com))**

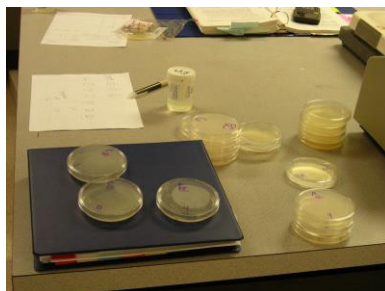
Bacteria are microscopically small, single-cell creatures having a primitive structure. The bacteria body is sealed by a relatively solid-cell membrane. Ozone interferes with the metabolism of bacterium-cells...A sufficient amount of ozone breaks through the cell membrane, and this leads to the destruction of the bacteria.

Viruses are small, independent particles, built of crystals and macromolecules. Unlike bacteria, they multiply only within the host cell. They transform protein from the host cell into proteins of their own. Ozone destroys viruses by diffusing through the protein coat...resulting in damage to the viral RNA.

There were several independent laboratory studies done on the effectiveness of the Sports-O-Zone/DeconZone process. The independent laboratory tested the machine's kill rate effectiveness on Methicillin-Resistant Staphylococcus aureus (MRSA), Staphylococcus aureus (Staph), and Candida.

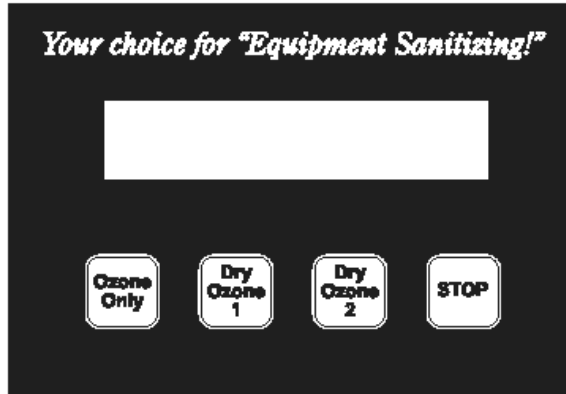


It is well documented that ozone produced 99.99% death rates of these bacteria when exposed for 10 - 480 seconds with ozone concentrations between 300 and 1500 ppm (Pennsylvania State University study, Bactericidal Effects of High Airborne Ozone Concentrations, 1998). The laboratory test performed on our machine analyzed the kill rate at 3-minute, 5-minute, and 11-minute intervals. For more information on this, please check out the bacterial studies on our website [www.sportsozone.com](http://www.sportsozone.com)



# Operation Panels

## 4201A Model



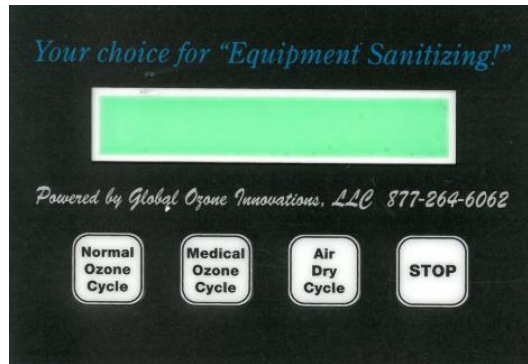
The 4201A & B models share the same control board which has four (4) buttons for its operation. The ozone only button will start the ozone "only" cycle. Ozone will be introduced into the cabinet for 16 minutes and then an ozone reduction cycle will run 16 minutes. At the end of reduction, if the cabinet's ozone level is at the safe limit, the smart technology inside the cabinet will allow the magnetic lock to release.

The "Dry Ozone 1" button will start the 30-minute dry cycle. This will bring in fresh warm air from the left side of the machine and exhaust the moist air through a vent on the other side of the machine. The ozone cycle will commence prior to the dry cycle.

The "Dry Ozone 2" button will start the 60-minute dry cycle. The warm air-dry cycle will bring in fresh warm air from the left side of the machine and exhaust the moist air through a vent on the other side of the machine. The ozone cycle will commence prior to the dry cycle.

The stop button is a feature that allows the operator to stop the machine at any point. (NOT RECOMMENDED DURING THE OZONE CYCLE). **If the ozone cycle is stopped, the ozone sensor technology will not allow the unit to open until ozone has reached acceptable safe levels determined by OSHA.** Typically, this will be used if the operator wants to stop the drying time before the ozone cycle starts.

## 4201AH Model



The 4201AH & BH models share the same control board which has four (4) buttons for its operation. The "Normal Ozone Cycle" button will start the introduce ozone into the cabinet for 16 minutes and then an ozone reduction cycle will run 16 minutes. At the end of reduction, if the cabinet's ozone level is at the safe limit, the smart technology inside the cabinet will allow the magnetic lock to release.

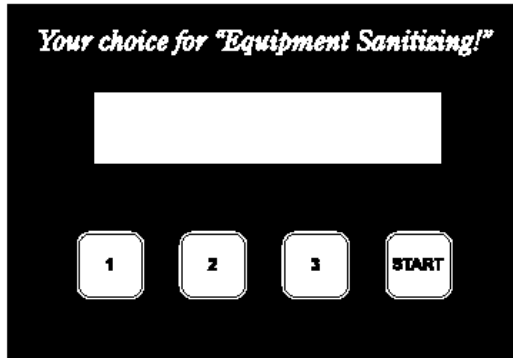
The "Medical Ozone Cycle" button will start the introduce ozone into the cabinet for 90 minutes and then an ozone reduction cycle will run 20 minutes. At the end of reduction, if the cabinet's ozone level is at the safe limit, the smart technology inside the cabinet will allow the magnetic lock to release.

*THIS IS A NEW CYCLE OPTION, CORRESPONDS TO OUR BACTERIA STUDY SUBMITTED TO THE FDA FOR A 4 TO 5 LOG REDUCTIONS ON GRAM POSITIVE AND GRAM NEGATIVE BACTERIA REQUIRED FOR A FDA SUBMITTAL FOR AN EMERGENCY USE AUTHORIZATION.*

The "Air Dry Cycle" button will start the 45-minute dry cycle. The warm air-dry cycle will bring in fresh warm air from the left side of the machine and exhaust the moist air through a vent on the other side of the machine. The ozone cycle will commence prior to the dry cycle.

The stop button is a feature that allows the operator to stop the machine at any point. (NOT RECOMMENDED DURING THE OZONE CYCLE). **If the ozone cycle is stopped, the ozone sensor technology will not allow the unit to open until ozone has reached acceptable safe levels determined by OSHA.** Typically, this will be used if the operator wants to stop the drying time before the ozone cycle starts.

## 4201, 4202 and 4203 Models



All models have four (4) buttons. For the 4201 non vending and the 4202 or 4203 vending models, the "start" button will be the only active button. The customer will load his equipment into the machine and insert his cash, coupon or credit card. After the door is shut, the customer will press the "start" button to activate the ozone cycle. For non-vending models, the operator can choose from 3 cycles. Cycle 1 is ozone only; Cycle 2 is 30 minutes of warm air followed by ozone; the third cycle is 60 minutes of warm air followed by ozone.

## 4201T Model



The 4201T is our economy model. The cycle button is pushed to choose Light (8 minutes of ozone), Normal (12 minutes of ozone) or Heavy (16 minutes of ozone). Once cycle is selected, you push start to begin cycle.



## 4201H Model



The "Normal Ozone Cycle" button will start the introduce ozone into the cabinet for 16 minutes and then an ozone reduction cycle will run 16 minutes. At the end of reduction, if the cabinet's ozone level is at the safe limit, the smart technology inside the cabinet will allow the magnetic lock to release.

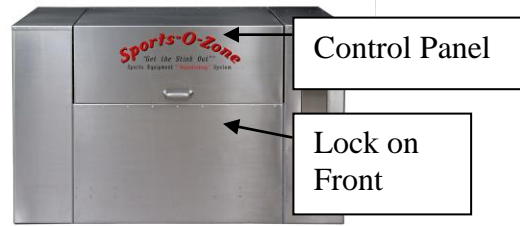
The "Medical Ozone Cycle" button will start the introduce ozone into the cabinet for 90 minutes and then an ozone reduction cycle will run 20 minutes. At the end of reduction, if the cabinet's ozone level is at the safe limit, the smart technology inside the cabinet will allow the magnetic lock to release.

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The stop button is a feature that allows the operator to stop the machine at any point. (NOT RECOMMENDED DURING THE OZONE CYCLE). **If the ozone cycle is stopped, the ozone sensor technology will not allow the unit to open until ozone has reached acceptable safe levels determined by OSHA.** Typically, this will be used if the operator wants to stop the drying time before the ozone cycle starts.

**Programming Mode for all Models:**

To use the programming mode, unlock the control panel door (which is also the cash box on the vending machine).

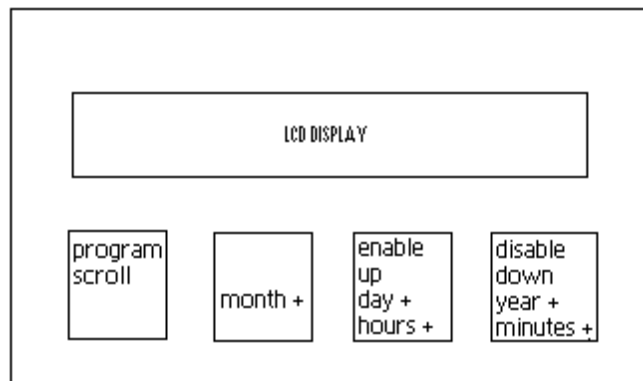


Underneath the control panel inside the door is a small “black” toggle switch. Slide the toggle switch forward to put the computer board into program mode. This option allows the owner of the machine to reset the date and time on the machine, the lock out security code, or to change the dollar amount he or she would want to charge on the vending models. COUPONS DO NOT HAVE A VALUE. THIS PROGRAM CHANGE ONLY AFFECTS DOLLARS ACCEPTED OR CREDIT CARD CHARGE.

Inside the locked door on the front of the cabinet is an electro static discharge protected area that can affect the control board.



PROGRAM BUTTONS DIAGRAM



Once in programming mode, please note that pressing the far-left button will allow you to move to each of the settings you may change, that is:

To reset the time, the third button moves through the **hours** and the fourth button moves through the **minutes**.

To reset the date, the second button moves through the **months**, the third button moves through the **days**, and the fourth button moves through the **years**.

If you purchased model 4202 or 4203, to reset the vending amount, the third button moves **up** and the fourth button moves **down** in increments of \$1.

To reset the lockout feature, press the third button to "**Enable**" this feature; security function is turned on. Press the fourth button to "**Disable**" this feature; security function is turned off.

The security code is preset at the factory to be 123. The lockout feature, if enabled, allows the owner of the machine to lock out the computer board so that the machine will not operate. The code can be up to 5 characters long, but only numbers 1, 2 or 3 can be used (i.e. the security code will not allow 4 or above to be part of the security code). To reset the code, the second button toggles the **cursor** to each number you want to change. The third button moves the number **up** to 3. The fourth button moves the number **down** to 1.

# Ozone Generator



The ***Ozone Generator*** is one of the most advanced professional high-powered ozone generators ever produced.

It features corona discharge ozone generation that's the latest in 21<sup>st</sup> century technological design.

It is used to combat strong odors and kill bacteria and mold spores.

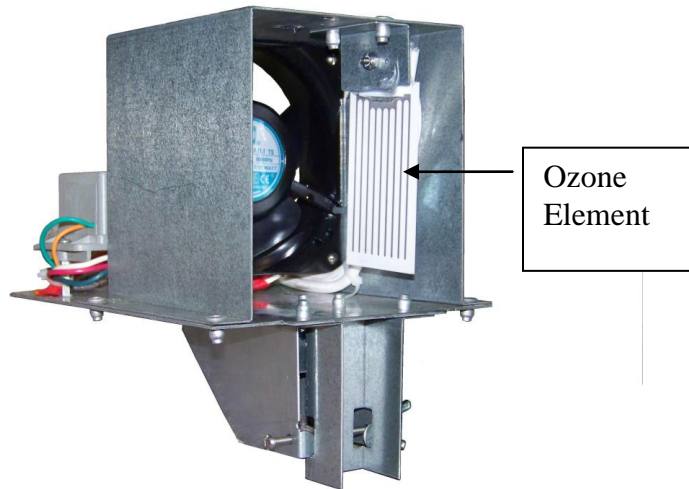
Before replacing the ozone generator, **unplug your machine**. The generator's **HIGH VOLTAGE TRANSFORMERS OPERATE AT 5000 VOLTS**. To remove the generator from the back of the machine, remove the back-access panel, unplug the generator from the harness, remove the mounting bolt, spread the clamp ears and lift the generator up out of the bracket.

## Ozone Elements

Ozone output is reduced if the ozone element becomes dirty.

If the operating environment is excessively smokey or dirty, the element can become coated with dirt. Cigarette smoke can coat the ozone element in as little as a month and reduce the ozone output significantly. You need to avoid these types of environments or the life of your ozone generator will be

significantly reduced and replacement of ozone generator will be needed.



The ozone element is a fragile part and should not be handled. If the element is not working properly, please contact our plant, 877-264-6062. We can lead you through a brief diagnostic test to determine functionality of the generator and remedy.

**ATTENTION: Always unplug the machine during repair and maintenance.**

**Global Ozone Innovations, LLC is not responsible for any damages caused by the use or misuse of this product. This owner's manual is subject to periodic updates.**

# Ozone Sensing Device

**If you have model 4201B, 4201BH or 4201T, your model does not include an ozone sensor.** Your machine is equipped with an ozone sensing device that will monitor the ozone, temperature and humidity levels inside the machine during operation. It is also a safety device to keep the door of the machine locked until the ozone level is within safe limits to open.

If the sensor is out of calibration, typically it will read high. If the door does not open after the operation is complete, it would be a good indicator that the sensor needs to be replaced. Also, please note that the sensor is calibrated at the factor of +/- 10%. **The ozone sensor module needs to be replaced annually. Not adhering to the ozone sensor replacement schedule can void your warranty.**

The device needs to be replaced annually by replacing the sensor module. The sensor module is inside the black casing. The replacement process is illustrated on the following page. Please contact Global Ozone Innovations, LLC for the replacement sensor module at 877-264-6062.

The data that is collected by the sensor is stored on a flash drive in your machine. The data is always the last reading of the day.



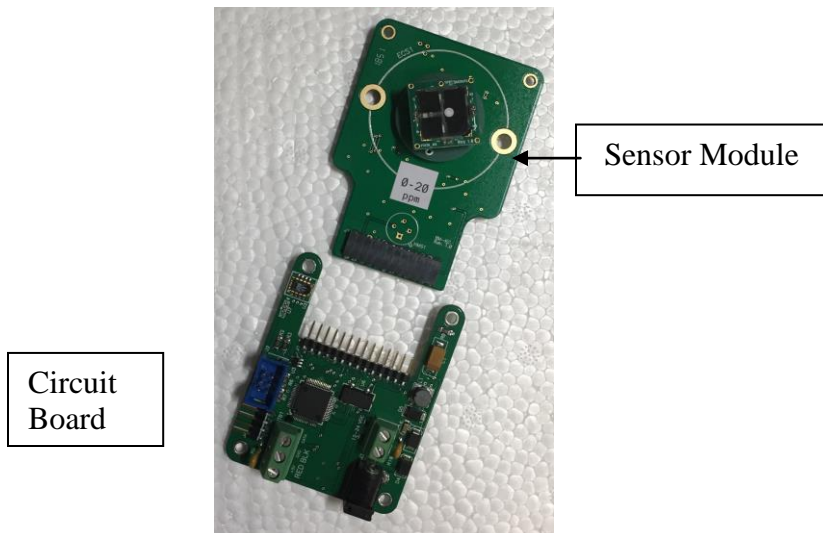
Ozone Sensor (SM-7)

## REPLACING THE SENSOR MODULE

- 1. Disconnect power to the machine.**
- 2. Locate SM-7 ozone sensor.**
- 3. Remove the two mounting screws.**



4. Turn the ozone sensor with the back facing you.
5. Remove the four screws and the back.
6. Gently pull out the end of the circuit board where the sensor module is attached.



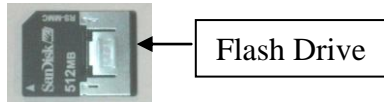
7. Carefully replace the sensor module.
8. Reassemble the SM-7 ozone sensor.

Date Replaced: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Data Recording Feature

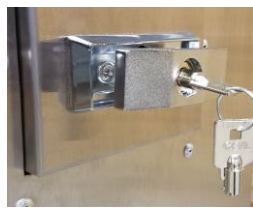
Your machine has the technology to measure and record various pieces of data to the flash drive.

The internal levels of ozone, temperature and humidity are measured by the sensor module. These levels will be recorded daily on a flash drive located on the control board.



If you purchased a 4202 or 4203 model with the vending application, the cash, coupon, and credit card transactions will be recorded on this flash drive.

To review the data, **unplug your machine** and unlock the front door.



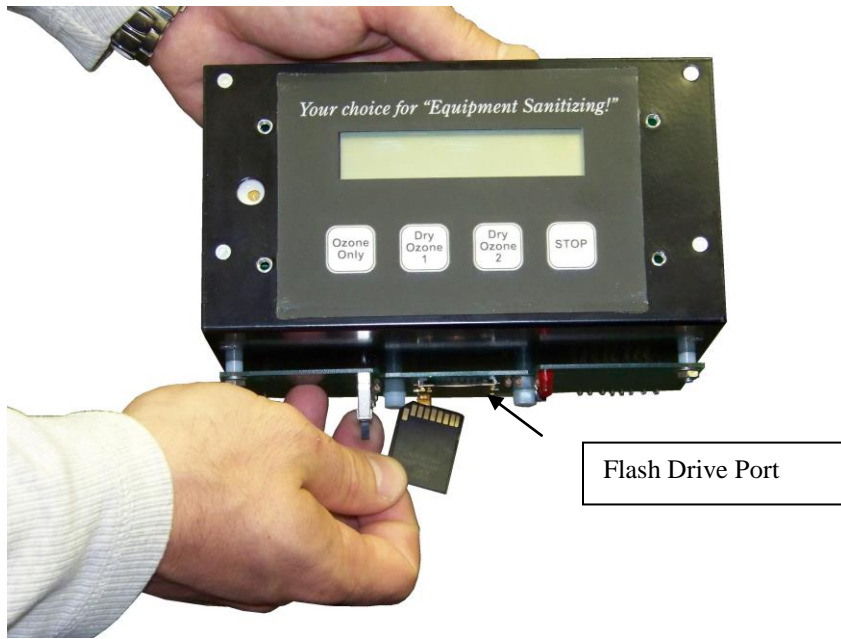
**IMPORTANT: Do Not Misplace Your Lock Box Key**

The flash drive is located on the bottom of the control panel. Carefully remove the flash drive from its holder by pushing in on the card until it clicks. Remove the drive and insert into the reader.

Inside the locked door on the front of the cabinet is an electro static discharge protected area that can affect the control board.





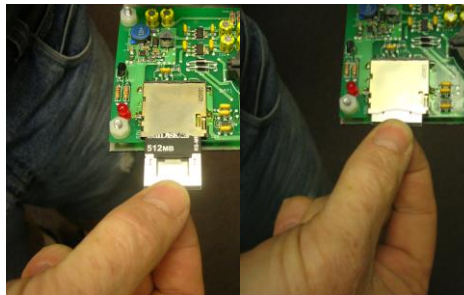


**NOTE:** Modifications or accessories not allowed to the Flash Drive Port.



The flash drive reader may change according to availability.

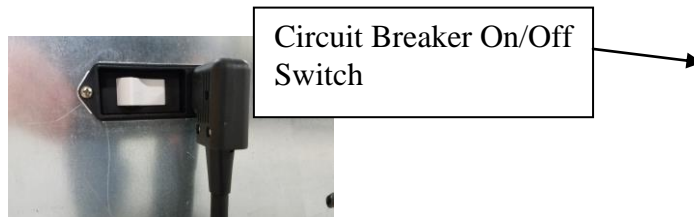
The reader plugs into the USB port in your computer. The data on the drive will load into an excel worksheet. After downloading the information, reinsert the drive back into the slot underneath the control board that you pulled it out of. The drive only goes in one way (gold strips facing up). **Do not force it into the slot.**



**View from the bottom of the control board.**

## Power Interruption Features

Your machine comes with a circuit breaker on/off switch to protect the electrical components in the machine in case of a power surge. If the circuit breaker on/off switch has been tripped, the machine will not run. To reset, flip the switch off, then on.



Your machine also has three circuit breakers inside the locked control panel door (which is also the cash box for 4202 and 4203 models). These breakers protect the computer board from an electrical short circuit by the ozone generator, fans or heating element during operation.

If one of the breakers is tripped, it may mean that the device in line with that breaker may be experiencing a problem. Reset the breaker by pushing it in. If it trips again during operation, please contact the service department at 877-264-6062.

If there is a power interruption, the control board has a battery to retain the date and time. The replacement battery is # CR2032. To replace the battery, **unplug the machine**. Unlock the control panel door (see page 6). The control board is held with four (4) screws. Remove the screws and lower the control board into the opening of the door. Unplug the wire harness to the board. You will then see the battery on the circuit board.



**CAUTION**  
When handling the control board, be cautious because static electricity can cause the board to malfunction. Always touch the metal cabinet to ground out static electricity before handling the board.

Carefully lift the spring and replace the battery. Plug the harness into the board and reinstall. See page 7 for reprogramming the date and time.

# Cabinet Safety Features

There is a kill switch inside your machine.

Location of emergency stop button and ozone sensor module



Emergency stop button is Illuminated

Ozone Sensor

In the unlikely event that an individual crawls into the loading compartment and someone else starts the machine, the individual just needs to push the button and the door unlocks immediately and the ozone generator is disabled. This is our entrapment safety feature.

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During operation, the door is magnetically locked. The lock will not release during operation.

Magnetic lock location



Magnetic lock



In **CASE OF EMERGENCY**, unplug the machine and the magnetic lock will release.

In the unlikely event that the door unlocks during operation and someone opens the door, the ozone switch inside the door ledge will release and stop the ozone generator. **THE MACHINE WAS NOT DESIGNED TO BE OPERATED WITH THE DOOR OPEN.**



## Smart Technology

Your control board is monitoring the performance and function of the machine by sampling the environment inside the cabinet every second.



This is the total remaining time.

This is the ozone level inside the cabinet

The computerized sensor controls the ozone safety system, tracks and monitors ozone levels and records data which you can correlate back to the bacteria levels on the equipment.

The software has backup timers, so that at any time the safety system fails, the control board will use tested backup timers to assure the user that the system still is within OSHA guidelines of ozone exposure.

**WARNING Maintenance Required.** When this message appears on the display, the computer has noticed that the ozone system is not operating within set parameters. This is important because your generator may be wearing out or the ozone sensor is not performing to its optimum level. All disinfectants operate on time and concentration. We want our system to be repeatable, reliable, and accountable. So, when the computer identifies a problem during the sanitation cycle, it provides you notification that you should call into Global Ozone Innovations to identify if it is the sensor and/or the ozone generator that needs to be replaced.

## **Locking the Control Board Out Allowing Only Authorized User**

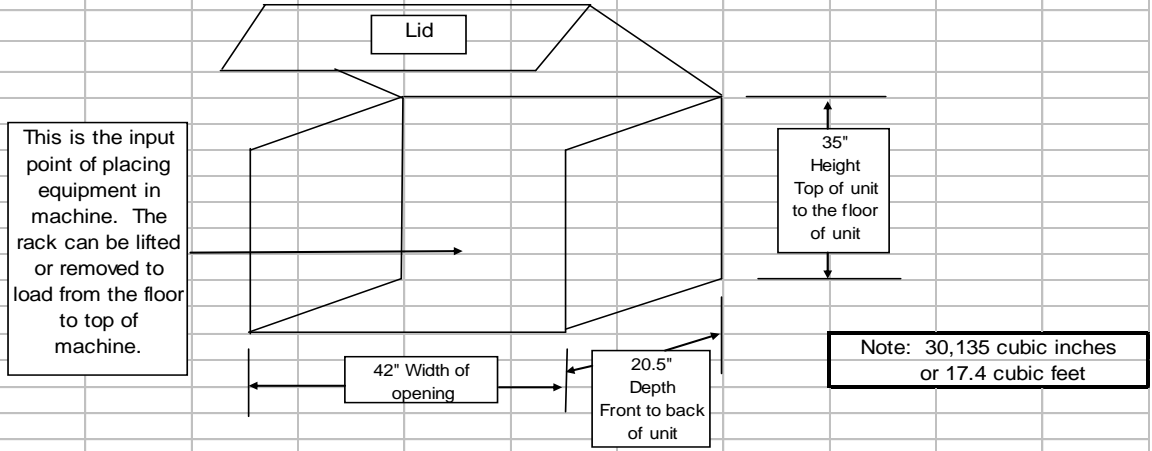
If the lockout feature is "Enable" on your machine, you can lockout the computer board so that there are no unauthorized uses of the machine. To disable the computer board, hold the first button on the left ("Ozone only" on a 4201A model and "1" on a 4201, or 4202, or 4203 model) for 7 seconds until the screen asks for the security code. Enter the code which is preset at the factory to be 123. The first button on the left is the 1, the second button from the left is the 2, and the third button from the left is the 3. To lock the machine if the code is 123, you would hit first button on the left, then the second button from the left and then the third button from the left. Once you have entered the code, you press the fourth button from the left to enter this code.

# Sports-O-Zone

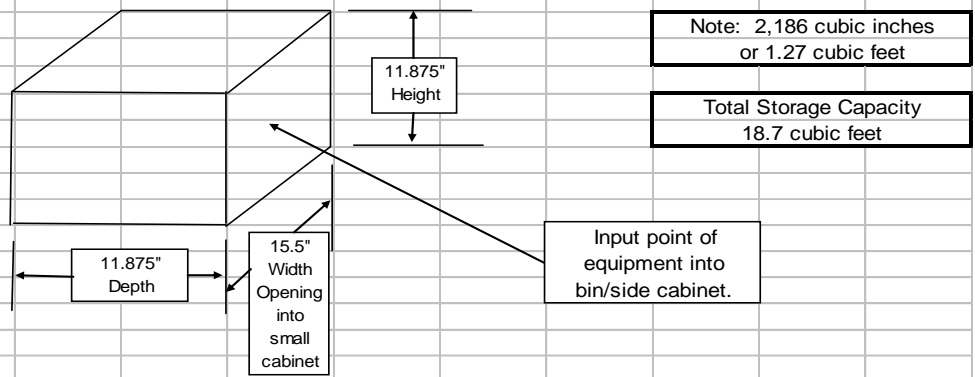
## Model 4201, 4201A, 4202, 4203

### Inside Dimensions

#### Inside Cabinet Dimensions



#### Side Top Cabinet Dimensions



Loading  
Compartment

## MACHINE SPECIFICATIONS

**MODELS 4201, 4201A, 4201B, 4201T,  
4202, 4203**

66" WIDE x 51" HIGH x 24" DEEP

**ILLUMINATED EMERGENCY STOP BUTTON** (unlocks door from inside machine,  
disables the ozone generator)

**OZONE SHUT OFF SWITCH** (operates when door is in open/closed position)

**OZONE SENSOR** (measures ozone, temperature and humidity levels)

**ELECTROMAGNETIC LOCK** (engages during machine operation)

**REMOVABLE DATA RECORDING  
DEVICE** (all models)

**ILLUMINATED LCD PROGRAMMABLE DISPLAY PANEL**

**WARM AIR DRY** (optional on push button models)

**4" CASTERS** (After May of 2020, all casters are  
locking)

**STAINLESS STEEL CABINET  
EXTERIOR**

**GALVANIZED STEEL CABINET INTERIOR**

**REMOVABLE WIRE RACK**

**REMOVABLE PERFORATED FLOOR**

**LOCKING CASH BOX DOOR**

**OPERATING VOLTAGE: 120v**

**OPERATING AMPERAGE: 11.11amps** (pushbutton model with air dry)

**OPERATING AMPERAGE: 7amps** (pushbutton model without air dry)

**OPERATING AMPERAGE: 9.45amps** (vending model)



## **Limited 5-Year Warranty**

This product is warranted by Global Ozone Innovations, LLC (*manufacturer of the Sports-O-Zone/Decon Zone Sanitizing System*) to the original consumer against defects in material and workmanship for a period of five years from the date of purchase and is not transferable. This five-year warranty applies only to this product used in consumer applications at one location. If the product is transported from one location to another for the commercial enterprise of the consumer, the warranty coverage is limited to ninety (90) days from the date of purchase. All electrical/electronic parts have a five-year warranty **except ozone generators which have a one-year warranty. Ozone sensors, if applicable, are required to be replaced each year and have a one-year warranty. Failure to replace your ozone sensor module annually can cause damage to your electrical components and void your warranty.**

**WHAT IS COVERED:** Replacement parts and labor.

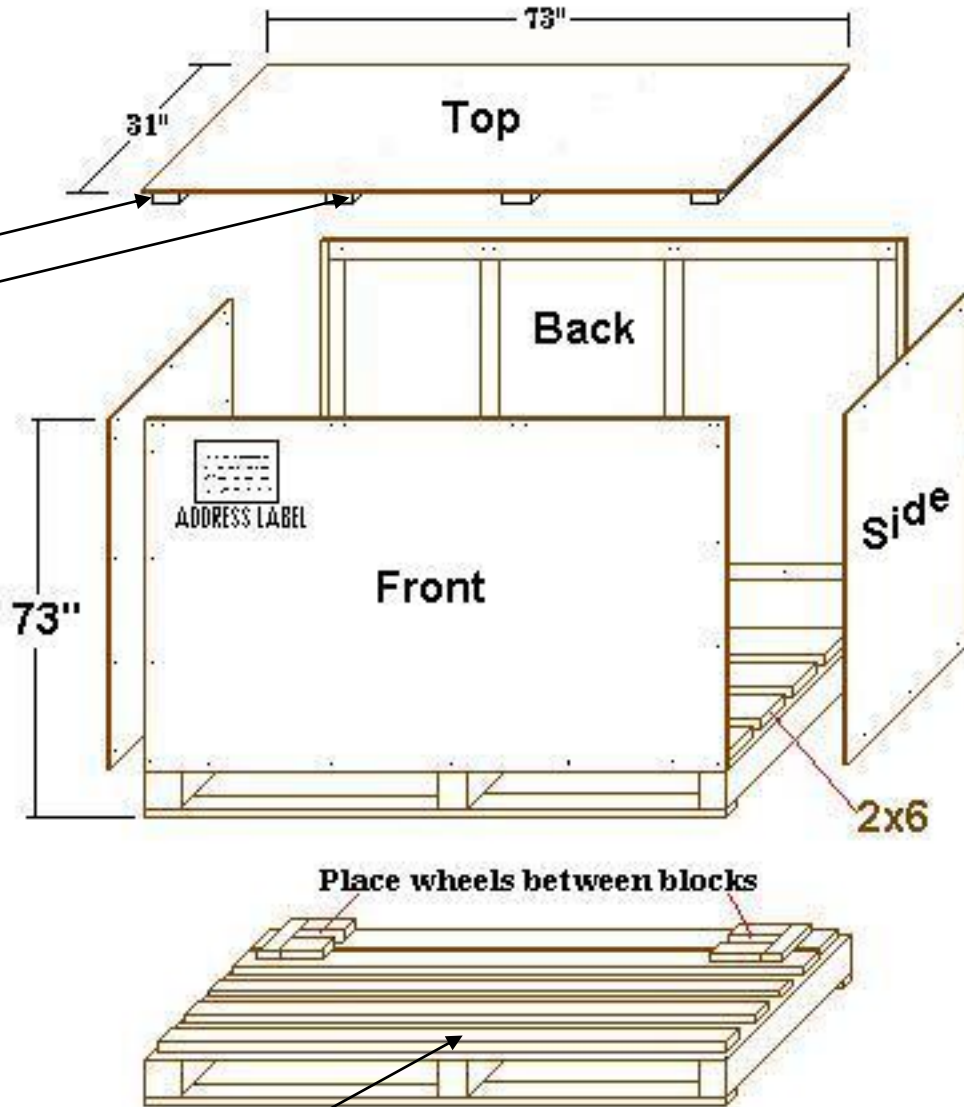
### **WHAT IS NOT COVERED:**

Transportation charges to Global Ozone Innovations, LLC for defective products.  
Transportation charges to consumer for repaired products or replacement parts.  
Filters and UV light bulbs (if applicable).  
Damages caused by abuse, accident, alteration, improper repair, misuse, neglect, failure to perform normal maintenance, vandalism, theft, fire, water, or damage because of peril or other natural disaster.  
Any other expense including consequential damages, incidental damages, or incidental expenses, including damage to property.  
Scratches in paint or other cosmetic damage including surface corrosion arising from normal use. Cosmetic damage caused by unsuitable detergents, cleaners, and lubricants.

**IMPLIED WARRANTIES:** Any implied warranties, including the Implied Warranties of Merchantability and Fitness for A Particular Purpose, are limited to five (5) years from date of purchase.

**Save the crate. You will be charged for a replacement crate plus freight should your ozone machine need to be returned to the factory.**

Make sure the foam blocks are attached to the two center 2x4's. This holds the machine in place during shipping.



Place the machine on the crate pallet.

Make sure rear casters are turned in toward the middle of the cabinet and set them between the 2"x 4" blocks. This keeps the machine in place during shipping. The dots on the panels in the diagram show where the screws are located. Use 3" screws to set the front and back panels against the 2x6's and screw them in place following the pattern in the drawing. Use 3" screws to set the side panels against the 2x6's and screw them in place following the pattern in the drawing. Use 2" screws on the corners of the panels following the pattern on the drawing. After four side panels are attached, lay the top on the crate as shown in drawing. Use 3" screws to secure 2x4's to the front, back and sides. This is to

keep the top of the crate from crushing in if something heavy is stacked on top. Tape the address labels to all four panels and ship the crate back to the company (address is on the first page). If Global Ozone Innovations, LLC is to pay for the freight because of warranty issues, call customer service at Global Ozone Innovations (877-264-6062) for the bill of lading and to coordinate pickup.