# **Parts & Tools Required**

#### Parts:

- Ozone Generator
- Ozone Tubing
- Pipe Cap (3/4")
- Flow Meter Assembly
- Check Valve
- Tube Adapter
- Tube Clamps

#### Tools:

- Phillips Screwdriver
- Scissors to cut tubing

# **Power Requirements**

MODEL NUMBER	RATED VOLTAGE RANGE	MAX CURRENT	POWER FREQUENCY
CD40	120-240 VAC	0.17A	50-60 Hz
CD70	120-240 VAC	0.29A	50-60 Hz
CD100	120-240 VAC	0.40A	50-60 Hz

Injector Manifold Assembly OR

Mixing Degas Vessel (MDV)

• Mounting Screws (3), size 0.25

in. (6.3 mm), with anchors

(NOT INCLUDED. Choose

for the mounting surface.)

appropriate hardware

# **Location Requirements**

The generator must be mounted (as follows):

- In a clean, protected area either indoors or outdoors (preferably out of direct sunlight) an ideal ambient temperature between 32°F - 120°F (0°C - 50°C). (Indoor installations must be in a forced air ventilated room.)
- Out of reach of sprinklers or drainage spouts.
- With sufficient access for maintenance, all tubing, and electrical wires.
- At least (not less than) one foot above the maximum water level.
- So that the bottom of the enclosure is at least three (3) feet above ground and such that the center of the enclosure is no more than six (6) feet above ground.

# Water Chemistry

Adjust water chemistry to within the following guidelines:

- **pH**: 7.4 7.6
- Total Alkalinity: 80 120 ppm
- *Free Chlorine*: 1.0 3.0 ppm
- Combined Chlorine (Chloramines): None (superchlorinate to remove all chloramines)
- Chlorine Stabilizer (Cyanuric Acid): 30 50 ppm
- Calcium Hardess: 200 400 ppm
- Metals (Iron, Manganese): None
- Nitrates: None
- Phosphates: None

**Important Safety Information** 

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FOR YOUR SAFETY - This product must be installed and serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed where such state or local requirements exist, the maintainer must be a professional with sufficient experience in pool equipment installation and maintenance so that all of the instructions in this installation guide AND the complete installation and operation manual accompanying the product can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty. Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death. Turn off all circuit breakers required in order to prevent the possibility of electric shock.

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### ELECTRIC SHOCK HAZARD

- Be sure to turn OFF and disconnect from power source before any routine maintenance is performed. Failure to do so could result in serious injury or death.

- Install at least 5 feet (1.5 meters) from wall of pool using nonmetallic tubing. Install ozone generator no less than one (1) foot above maximum water level to prevent water from contacting electrical equipment. Install in accordance with the installation instructions.

- A pressure wire connector is provided on the outside of the unit, marked with "Bonding Lugs" to permit connection to a minimum No. 6 AWG (13.3 mm<sup>2</sup>) solid bonding conductor between this point and any metal equipment, metal enclosures of electrical equipment, metal water pipes, or conduit within five (5) feet (1.5m) of the unit or as needed to comply with local requirements.

- The Jandy® Pro Series Ozone generator must be installed in an outdoor location, or indoors in a forced air ventilated room, and installed so that the orientation is exactly as shown in Figure 1. Install to provide water drainage of generator to protect electrical components.

- Mount the Jandy Pro Series Ozone generator so that it is inaccessible to anyone in the pool, at least five (5) feet above ground height, and adequately outside of the direct path of sprinklers. Never attempt any servicing while unit is wet.

- Plastic ozone supply tubing is supplied with the Jandy Pro Series Ozone generator. Never replace this tubing with metal tubing.

- A green-colored terminal or a terminal marked G, GR, Ground, Grounding, or the symbol is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.

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Short-term inhalation of high concentrations of ozone and long term inhalation of low concentrations of ozone can cause serious harmful physiological effects. DO NOT inhale ozone gas produced by this device.Do not install this product indoors.

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Do not store or use gasoline, chemicals or other flammable liquids or vapors near this or any other appliance.

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If the Jandy Pro Series Ozone generator electrical connection is to be attached to the pool controls, be sure the pool controls are protected by a Ground Fault Circuit Interrupter (G.F.C.I.). If the Jandy Pro Series Ozone generator is connected to an independent electrical supply, then a G.F.C.I. must be installed between the Jandy Pro Series Ozone generator and the electrical supply. Refer to local codes for complete details.

H0516300 REVC

mounting the power pack **Ozone Generator Mounting Template** drill holes for þ template this Use

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# **Corona Discharge Ozone Generator** CD40 CD70 CD100



### **Prepare the Pool**

Before installation and initial startup of the ozone generator:

- 1. Backwash or clean filters one day before.
- 2. Superchlorinate the pool water using a chlorine based shock treatment.
- 3. Test the pool water chemistry according to the guidelines in this Quick Start Guide.
- 4. Run the pool filter continuously for 24 hours.

#### **Mount the Generator**

- 1. Unscrew two (2) screws to open the enclosure door.
- 2. Locate the three mounting holes in the back of the enclosure.
- 3. Align the drill guide against the mounting surface using a level. (The drill guide for aligning the top two holes can be found on the edge of this Quick Start Guide). Make pencil marks on the mounting surface through the paper guide holes.
- 4. Install two (2) screws through the top mounting holes.
- 5. Install the third screw through the bottom mounting hole.
- NOTE: Mounting hardware must be driven until the head fully contacts the enclosure wall.

### **Connect to Power Source**

#### IMPORTANT

Be sure to refer to the installation and operation manual and to the IMPORTANT SAFETY INSTRUCTIONS contained therein, along with those contained on the reverse side of this guide to avoid possibly serious electrical hazards.

- 1. Connect the ozone generator to the filter pump relay.
- 2. Install conduit fitting through one of the three knockouts (one on the back, two on sides).
- Locate the Terminal Block inside enclosure. 3. (Refer to wiring diagram on the label inside the enclosure door)
- 4. For 120V, connect Line to L1, Neutral to L2 and Ground to the terminal block as indicated by the label on the inside of the enclosure door.
- Using a 6 AWG (13.3 mm<sup>2</sup>) conductor, connect the grounding lug on the 5. bottom of the ozone generator to an appropriate earth contact.



#### **IMPORTANT**

A check valve must be installed immediately after the heater and before any device which can introduce strong oxidizers or affect key measurable water parameters. Not installing a check valve may void the warranty of your heater or heat pump.

The injector manifold is installed in the pool's main return line after all other pool equipment (pump, filter, heater, and cleaner). Refer to the Owner's Manual for alternate configurations for systems with the following components: Pool Cleaner, Salt Chlorinator, Chlorine Tab/ Mineral Erosion Feeder, In-Floor Cleaning System, Water Features.

As an alternative to the standard injector manifold configuration, a mixing degas vessel (MDV) may be recommended to reduce the chance of fading at the ozone return fitting in vinyl lined pools.

#### To plumb either injector manifold or MDV:

- 1. Locate an appropriate section of the return line (see below).
- 2. Observe and follow correct water flow direction (indicated by the arrow on the injector manifold).
- 3. Connect the injector manifold to existing pipe with PVC cement.

#### **Injector Manifold Plumbing**

Ozone Generator Check valve, recom-Jacob. mended part: Jandv Pro Series 180 Degree 2" - 2 1/2". Check Valve (P/N 7305) -----FII TM Check Iniecto Valve Manifold Check Valve -Required if equipmen Ô

#### **MDV Plumbing**



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If pressure testing a new equipment system, perform the pressure test prior to connecting the ozone gas line.

Install the 3/4" pipe cap provided onto the manifold injector before performing the pressure test.

- the tube adapter.
- assembly.

- 5. the bottom.
- 6. Turn on the pump.

- 9.
- dips and loops.



### **Perform Ozone Flow Test**

#### **IMPORTANT**

1. Install the tube adapter on the manifold injector. DO NOT use Teflon<sup>®</sup> thread tape.

2. Connect the longer ozone tubing (with check valve) onto

3. Connect the flow meter assembly tubing to the ozone outlet barb at the bottom of the ozone generator.

4. Connect the ends of the ozone tube and the flow meter



Hold the flow meter assembly tubing so that the clear plastic chamber is vertical with the longer tubing toward

7. Verify that the metal ball in the flow meter assembly floats between the Max and Min lines.

8. If ozone gas flow is too low, verify that other valves in the system are not inhibiting flow through the manifold.



Remove the flow meter assembly from the ozone outlet barb and from the ozone tube.

10. Cut off any excess tubing so that the line from the injector manifold to the ozone generator is straight and free from

11. Connect the end of the ozone tube to the ozone outlet barb. Ensure that all hose barb connections are secured with hose clamps. Secure and route and slack tubing as necessary, to minimize tripping or entanglement hazard.

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Top Right