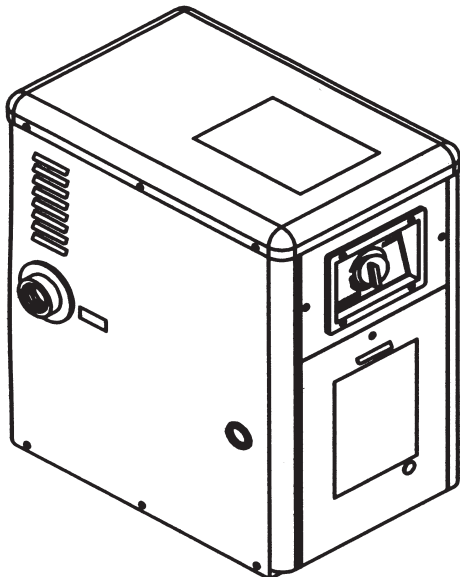




# Installation, Operation & Service Procedures Above Ground Pool Heater

## Models H100ID1 & ABG1001

Unit must be installed outdoors only  
and below an altitude of 2000 feet



### FOR YOUR SAFETY

**WARNING:** If the information in these instructions is not followed exactly, a fire or explosion may result causing property damage, personal injury, or death.

– Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.

#### WHAT TO DO IF YOU SMELL GAS

- Do not try to light any appliance
- Do not touch any electrical switch; do not use any phone in your building
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.
- If you cannot reach your gas supplier, call the fire department.

– Installation and service must be performed by a qualified installer, service agency or the gas supplier.



## **WARNING: Failure to Maintain Proper Water Chemistry May Cause Premature Heat Exchanger Damage or Failure**

The heat exchanger in your Hayward pool heater is made from the highest quality of copper materials. The premium materials and the exacting processes used in the manufacture of the heat exchanger is state of the art in pool heater design and manufacture. Yet, it remains vital that the heat exchanger be protected from damaging or corrosive chemicals, insufficient water flow or improperly balanced water chemistry. Heat exchanger damage or failure resulting from improper flow, improperly balanced pool water or the improper addition of sanitizers into the water is NOT covered under the terms of your warranty.

The following factors are critical to heat exchanger protection. Follow these guidelines to help prevent pre-mature damage or failure to your heater and heat exchanger.

### **1. WATER FLOW THROUGH HEATER**

Water must be flowing through the heater at the minimum rated flow rate during operation. Check that the pump is operating and the system is filled with water and purged of all air prior to starting the heater. The minimum rated flow rate for your heater is 20 GPM.

### **2. POOL/SPA WATER CHEMISTRY**

The chemistry balance and mineral content of swimming pool water changes daily due to the addition of pool and sanitizing chemicals, bather loads, rain, runoff and the amount of sun - to name a few. Improper chemistry balance and mineral content can cause scaling and deposits to form on pool walls, in the filtration system, in the heat exchanger tubes and additionally can promote corrosive action to all metals in the water path. Changing spa water regularly and maintaining the correct chemical balance in your pool/spa will keep the pool/spa safe and sanitary, and will help protect the heat exchanger. Use a 4-way pool/spa water test kit to check your water frequently (at least weekly). Use the following guidelines to help protect your heater's heat exchanger:

	<b>Recommended Level</b>	<b>Effect of Low Levels</b>	<b>Effect of High Levels</b>
<b>Chlorine</b>	1 - 3 ppm	hazy water, algae growth, bacteria causing infections	swimmer irritation, bleaching of clothes/hair, corrosive to heat exchanger
<b>Bromine</b>	2 - 4 ppm		
<b>pH</b>	7.4 - 7.6	corrosive to heat exchanger, swimmer irritation	cloudy water, scaling of heat exchanger, reduced sanitizer effectiveness
<b>Total Alkalinity</b>	80 - 120 ppm	corrosive to heat exchanger, large fluctuations in pH	scaling of heat exchanger
<b>Calcium Hardness</b>	200 - 400 ppm	corrosive to heat exchanger	scaling of heat exchanger
<b>Salt</b>	2700 - 5000 ppm	poor salt chlorinator performance	corrosive to heat exchanger

### **3. SKIMMER CHLORINATION**

Placing chlorine or bromine tablets directly into the skimmer may result in high chemical concentrations flowing through the heater. DO NOT place chlorine or bromine tablets in the skimmer.

### **4. CHLORINATOR INSTALLATION**

Chlorinators must be installed downstream of the heater, and a check valve must be installed between the heater and chlorinator to prevent high chemical concentrations from back flowing into the heater.

### **5. BYPASS**

Until water chemistry is properly balanced, and if your piping has a bypass valve installed for the heater, open the bypass so that corrosive and potentially damaging water will not flow through the heater and therefore the heat exchanger. Close the bypass valve once the water is properly balanced. Failure to close the bypass valve when attempting to operate the heater will result in extensive damage to the heat exchanger. Ensure water flow through the heater is restored before operating the heater. A bypass feature is also advantageous for service needs and for the ability to remove the heater from the water path when not heating. Refer to Figure 2 in the installation manual for further information.

# Section I. General Information

## Important notice:

The instructions herein are intended for the use of a qualified technician, specifically trained and experienced in the installation of this type of heating equipment. Some states or provinces require that installation and service personnel performing the installation be licensed. If this is the case in the state or province where heater is located, the contractor must be properly licensed.

**▲ WARNING: Failure to comply with the appliance installation instructions and service instructions in this manual may result in equipment damage, fire, asphyxiation, or carbon monoxide poisoning. Exposure to products of incomplete combustion (carbon monoxide) can cause cancer and birth defects or other reproductive harm.**

## Conformance with codes:

The heater shall be installed in accordance with all local and state codes. The heater installation must conform to the latest edition of the National Fuel Gas Code American National Standard (ANSI) Z223.1 and with the requirements of the authority having jurisdiction. Design Certification in the United States is in compliance with ANSI Z21.56 (latest edition).

For Canadian installations, the heater must be installed in accordance with standards CAN/CGA B149.1 and B149.2 – INSTALLATION CODES FOR GAS BURNING APPLIANCES AND EQUIPMENT and/or local codes, and if applicable, Standard CSA C22.1 – CANADIAN ELECTRICAL CODE, Part 1.

## Location of heater:

Locate the heater in an area where a leaking heat exchanger or connection leak will not result in damage to the area adjacent to the heater or structure.

**This heater must be installed at least five feet from the wall of an above-ground pool.**

The heater shall not be installed with the top of the vent assembly within 10 feet below or to either side of any opening into the building.

## Outdoor installation only:

The following installation and service clearances must be maintained from surfaces to provide adequate air flow to the heater.

Outdoor Installations	
Top - Unobstructed	Right side - 10 inches
Front - 10 inches	Left side - 10 inches
Back - 10 inches	Bottom - Combustible floor

Figure 1

An A.G.A. Certified main gas valve shutoff must be installed outside of the cabinet and within 6 feet of the heater. Gas shutoff valve must have an inside diameter large enough to supply the proper amount of gas volume to the heater.

**▲ NOTE: Do not use flexible appliance connectors on any gas connections unless the connector is A.G.A. approved for outdoor installation, is marked with the BTUH capacity (which must be equal to or greater than 100,000 BTUH), and the type of gas (Natural or LP) to be used.**

## Propane Gas:

All Propane gas tanks must be located outdoors away from the pool and in accordance with the standard for storage and handling of propane gas, ANSI/NFPA 58 (latest

edition) and applicable local codes. If propane gas tank is installed underground, the discharge of the regulator vent must be above the highest probable water level.

Propane tanks must have sufficient capacity to provide adequate vaporization for the full capacity of the equipment at the lowest expected temperatures. Consult a propane company expert for correct sizing.

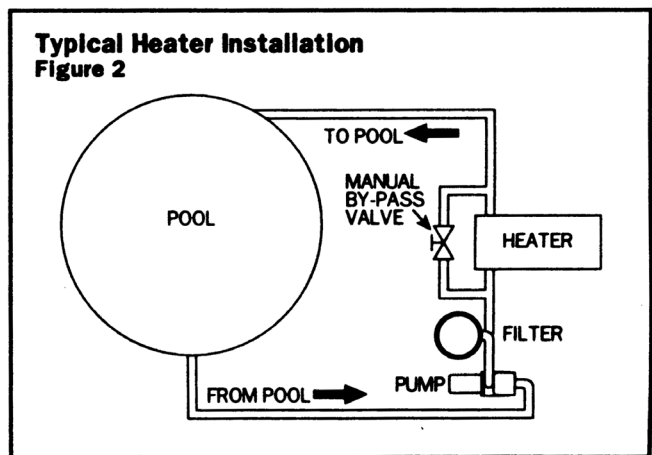
## Water piping:

This heater is designed for use with pool and spa/hot tub water only, as furnished by municipal water distribution systems. The warranty does not cover heater use with mineral water, sea, salt, or other non-potable waters.

Do not install any restriction in the water pipe between a heater outlet and the pool/spa with the exception of a three-way switching valve and associated check valve. Blockage of water flow from heater return to pool may result in fire or explosion causing property damage, personal injury, or loss of life.

## Plumbing connections:

Water flow rate to the pool must be between 20 and 70 gpm. If flow rate exceeds 70 gpm an external by-pass valve must be installed. Figure 2 shows a typical heater installation.



## Electrical system:

This heater is equipped with a standard 3-prong 120 volt cordset. The plug must be inserted into a GFI protected, watertight, outdoor receptacle rated for at least 10 amps. The heater must be electrically grounded and bonded in accordance with local codes, or in the absence of local codes, with the National Electrical Code ANSI/NFPA 70.

If the heater must be hard wired, open the junction box and disconnect the cord. Remove the cord and strain relief and wire the heater in accordance with local codes or the National Electrical Code.

The ignition system used to light the burners is a direct spark system which requires 120 volt AC current as does the blower motor. The system amp draw is 2 amps.

It is strongly recommended that the heater be supplied with a constant power source. If remote operation is required, the heater should be controlled through the thermostat only.

## Installation above or below water level:

This heater is supplied with a pressure switch factory set at 3.0 psi. If the heater does not operate and the pressure switch is at fault, the following procedure is recommended to adjust the switch:

1. Clean filter thoroughly.
2. Set heater thermostat to highest setting.
3. Start filter pump. Make sure all air is out of water lines and complete system is full of water.
4. Place a 5/64" allen head wrench in the adjusting socket on the front of the switch and turn it

- clockwise to increase the pressure required to close the switch (this may be required if the heater is installed more than 4 feet below water level).
5. To check operation, turn the pump on and off several times. The heater should shut off immediately when the pump is shut off.

## Section II. Installer

### Gas line testing:

The appliance and its gas connection shall be leak tested before placing in operation. The heater and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig. The heater must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressure equal to or less than 1/2 psig.

The gas supply line must be capped when not connected. After pressure testing, reconnect the gas piping to the gas valve. Turn gas supply on and test all pipe and pilot tubing joints for leaks. Use a soap and water solution. Bubbles forming indicate a leak. **Never use a open flame (match, lighter, torch, etc.) as a leak could cause an explosion or injury.** Shut off gas and fix even the smallest leak immediately. Be sure to leak test the main burner fittings using the above procedure once the heater is in operation.

### Gas pressure test procedure:

The following gas pressure adjustments are important to proper operation of the heater. Incorrect settings can cause improper operation.

1. Turn pump, main gas valve and heater power on. Start heater following lighting instructions.
2. Using a manometer, determine the inlet gas pressure. The inlet gas pressure must not exceed 10.5" W.C. (water column pressure) for Natural gas or 13" W.C. for Propane gas. **Exposure to higher pressures can damage the gas control valve, causing leaks or diaphragm rupture.** This damage could result in fire, explosion or burner overfiring leading to carbon monoxide poisoning. The inlet gas pressure must not be below 3.0" W.C. for Natural gas and for Propane. The heater may fail to operate at low inlet gas pressures. If the inlet gas pressure is too high or too low, the installer must contact the gas supplier and request that the inlet pressure to the heater be adjusted.
3. Using a manometer, determine the gas operating pressure. Manifold pressure for both natural and propane gas is 2.0" W.C. The gas valve is preset to operate at this pressure, no adjustment is necessary.

<b>Gas pipe size:</b>		<b>Figure 4</b>																															
<b>Follow local gas codes for proper gas line material selection (copper, iron or plastic etc.)</b>																																	
<p><b>LOW PRESSURE NATURAL GAS Pipe Sizing:</b> (Based upon gas pressure of 0.5 psig or less and a pressure drop of 0.5" W.C.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Distance from Meter (Natural Gas)</th> <th>Iron Pipe</th> </tr> </thead> <tbody> <tr> <td>0 to 25 feet</td> <td>1/2"</td> </tr> <tr> <td>25 to 100 feet</td> <td>3/4"</td> </tr> <tr> <td>100 to 200 feet</td> <td>1"</td> </tr> </tbody> </table> <p><b>LOW PRESSURE PROPANE GAS PIPE SIZING "SINGLE STAGE":</b> (Based upon gas pressure of 11" W.C. inlet pressure and a 0.5" W.C. pressure drop)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Distance from Tank (propane)</th> <th>Iron Pipe</th> <th>Tubing</th> </tr> </thead> <tbody> <tr> <td>0 to 25 feet</td> <td>3/8"</td> <td>5/8"</td> </tr> <tr> <td>25 to 100 feet</td> <td>1/2"</td> <td>3/4"</td> </tr> <tr> <td>100 to 200 feet</td> <td>3/4"</td> <td>7/8"</td> </tr> </tbody> </table>	Distance from Meter (Natural Gas)	Iron Pipe	0 to 25 feet	1/2"	25 to 100 feet	3/4"	100 to 200 feet	1"	Distance from Tank (propane)	Iron Pipe	Tubing	0 to 25 feet	3/8"	5/8"	25 to 100 feet	1/2"	3/4"	100 to 200 feet	3/4"	7/8"	<p>It is <b>VERY IMPORTANT</b> when installing a propane heater on a two (2) stage regulation system, to follow the gas line sizing chart below—without exception.</p> <p><b>HIGH PRESSURE "TWO STAGE" SYSTEMS:</b> <b>MGH PRESSURE PROPANE GAS PIPE SIZING "FIRST STAGE":</b> (Based upon gas pressure of 10 psig inlet pressure at a pressure drop of 1 psi.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Distance from outlet of 1st stage regulator to inlet of 2nd stage regulator</th> <th>Iron Pipe</th> <th>Tubing</th> </tr> </thead> <tbody> <tr> <td>0 to 200 feet</td> <td>1/2"</td> <td>1/2"</td> </tr> </tbody> </table> <p><b>LOW PRESSURE PROPANE GAS PIPE SIZING "SECOND STAGE"</b> (Based upon gas pressure of 11 inches W.C. inlet pressure at a pressure drop of 0.5 inch W.C.)</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Distance from outlet of 2nd stage regulator to inlet of gas valve</th> <th>Iron Pipe</th> <th>Tubing</th> </tr> </thead> <tbody> <tr> <td>0 to 10 feet</td> <td>1/2"</td> <td>1/2"</td> </tr> </tbody> </table>	Distance from outlet of 1st stage regulator to inlet of 2nd stage regulator	Iron Pipe	Tubing	0 to 200 feet	1/2"	1/2"	Distance from outlet of 2nd stage regulator to inlet of gas valve	Iron Pipe	Tubing	0 to 10 feet	1/2"	1/2"
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# Section III. Consumer Operation & Maintenance

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## FOR YOUR SAFETY – READ BEFORE OPERATING

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### General:

Do not operate the heater without water flowing through it.

Do not use the heater if any part has been under water.

Contact a qualified service technician to inspect the entire heater and replace any part of the control system or gas valve that was under water. If heater has been totally submerged in water, replace the entire heater.

### Heater operation:

Full lighting and shutdown instructions are included on the lighting instructions label installed on the front access door inside the heater cabinet. This heater cannot be operated with the front door removed.

**▲ WARNING: If you smell gas in the appliance area or near the floor, stop and follow instructions on the front cover of this manual.**

**▲ NOTE:** Do not use the unit below 40°F temperature. Do not operate heater while an automatic pool cleaner is in use.

**▲ NOTE:** This unit will not operate if water flow is insufficient. Make sure filter is clean.

### ▲ Warning:

Do not ingest alcohol or drugs during use or prior to using pool. Ingestion of such intoxicants can cause drowsiness which can lead to unconsciousness, and subsequently result in drowning.

Do not heat pool water in excess of 102°F. A temperature of 100°F is considered safe for a healthy adult. Hotter water increases the risk of hyperthermia. Special caution is suggested for younger children.

Pregnant women beware! Soaking in water above 102°F can cause fetal damage during the first three months of pregnancy (resulting in the birth of a brain-damaged or deformed child). Pregnant women should adhere to the 100°F maximum rule.

Before entering the water, users should check the water temperature with an accurate thermometer; operating thermostats may err in regulating water temperatures by as much as four degrees Fahrenheit.

Persons with a medical history of heart disease, circulatory

problems, diabetes, or blood pressure problems should obtain their physician's advice before using spas or hot tubs.

Persons taking medications which induce drowsiness, such as tranquilizers, antihistamines, or anticoagulants, should not use spas or hot tubs.

If the pool/spa is used for therapy, it should be done with the advice of a physician. Always stir the water before entering to mix in any hot surface water that might exceed healthful temperature limits and cause injury.

Do not tamper with controls, because scalding can result if safety controls are not in proper order.

### Temperature controls:

The heater is turned "ON" and "OFF" using the power switch, located to the right of the thermostat. The water temperature is adjusted with the thermostat. Turning the thermostat all the way counterclockwise will also turn the heater "OFF." Turning the thermostat clockwise will turn the heater "ON" and adjust the temperature higher.

The memory stop provides a manual means of locking the desired maximum temperature setting of the water. Once the maximum setting has been determined, loosen the screw and rotate the stop to the desired location and retighten the screw.

### Periodic inspection:

1. Periodically check the venting system on the heater. The venting areas must never be obstructed in any way and minimum clearances must be observed to prevent restriction of combustion and ventilation air.
2. Keep the entire pool area clean and free of all debris, combustible materials, gasoline and other flammable vapors and liquids. Remove any leaves or paper from around the heater.
3. Do not store chlorine, other pool chemicals or other corrosives in the vicinity of the heater.

### Winterization:

**Do not operate heater if the temperature falls below 40°F. Drain all water out of heater to prevent damage to heat exchanger during freezing weather.**



# Section IV. Qualified Technician - Servicing

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## General:

**▲ WARNING:** Do not attempt to repair any components of heater. Do not modify heater in any manner. To do so may result in a malfunction which could result in death, personal injury, or property damage. Check with consumer to see if any part of heater has been under water. Replace any part of the control system and any gas control which has been under water. Never use or attempt to use parts that have been previously used.

**▲ CAUTION:** Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

## Burner cleaning:

If required, burners can be cleaned in the following manner:

1. Turn pump, main gas valve and heater power off.
2. Remove the gas manifold.
3. Remove the burners.
4. Brush burners with a wire brush and check that they are free of lint, dust and spider webs before each season of use. Burners with damaged ports must be replaced.

## Gas valve replacement:

**▲ WARNING:** Do not attempt to repair gas valve. If found to be defective, replace entire valve. Attempts to repair it will void warranty.

1. Turn pump, main gas valve and heater power off.
2. Disconnect wires to gas valve.
3. Unscrew gas valve from manifold.
4. Install new valve.
5. Reconnect wires to gas valve.

## Direct spark module:

The direct spark ignition module is the master control, processing the operational information from the other controls. When the thermostat calls for heat, the blower turns on for 10 seconds before the ignitor begins to spark. The ignitor begins sparking at the same time the main gas valve opens, which causes ignition of the main burner gas. If ignition does not happen within 10 seconds, the module will try to light for (3) consecutive tries at 30 second intervals. If no ignition is received the control will lock out for 1 hour. To reset the module, the thermostat must be turned to the "OFF" position and back "ON".

### To replace the module:

1. Turn pump, main gas valve and heater power off.
2. Unplug heater.
3. Disconnect wires from the module.
4. Remove module retaining screws.
5. Replace module.

## Combustion blower:

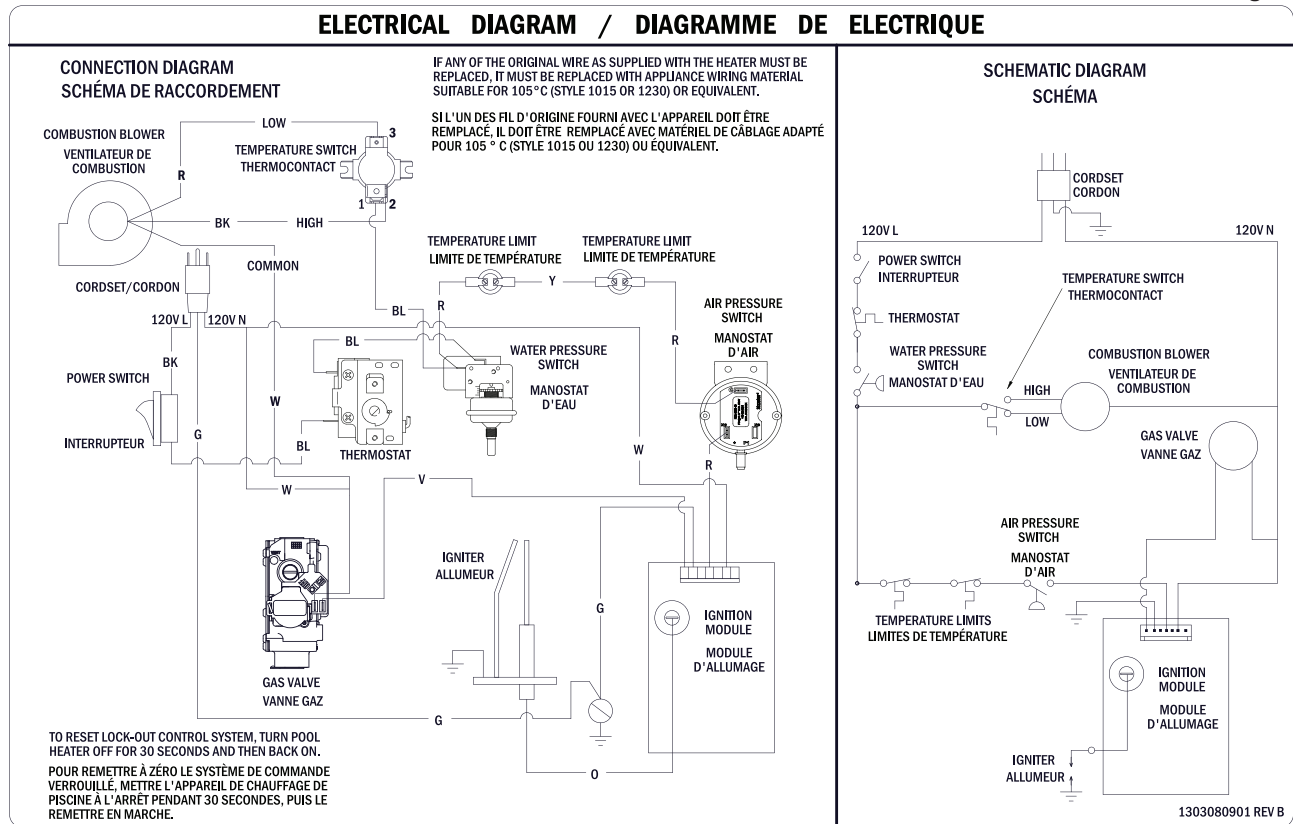
The combustion blower provides the air that mixes with the gas from the main burners for the combustion process. On initial start-up, the blower operates for 10 seconds to purge gas out of the heater. Then, the main gas valve opens, the ignitor sparks for a maximum of 10 seconds and the heater lights. The blower operates the entire time the gas valve is open.

### Combustion blower replacement:

1. Turn pump, main gas valve, thermostat and heater power "OFF".
2. Remove screws retaining the main top.
3. Disconnect wires attached to the blower.
4. Remove external vent terminal.
5. Remove duct from blower to vent terminal.
6. Remove screws attaching blower to flue collector.
7. Replace blower.
8. Reverse above procedure for installation.

# Operating Instructions

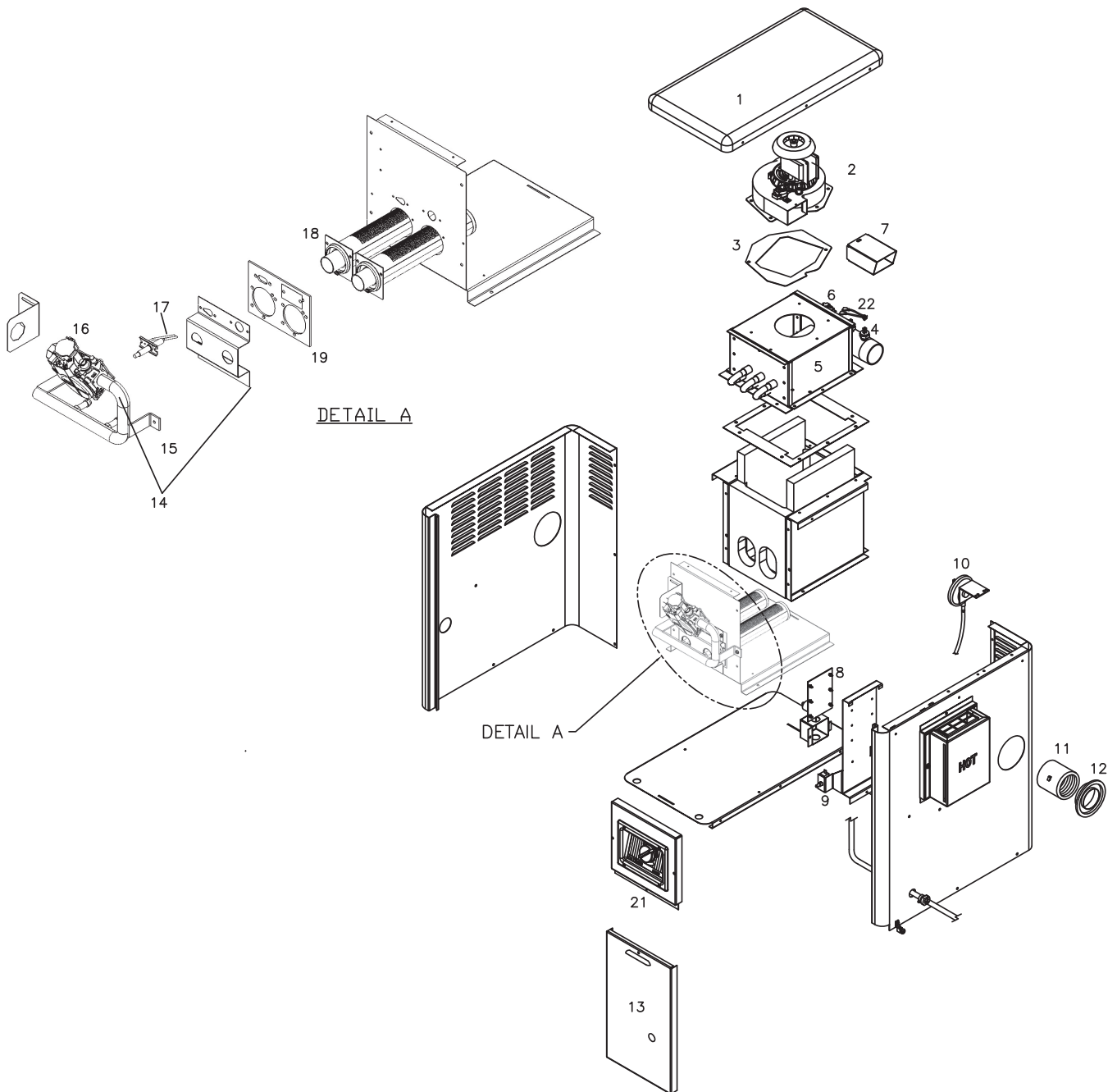
Figure 6



<h3 style="text-align: center; background-color: black; color: white; margin: 0;">FOR YOUR SAFETY READ BEFORE LIGHTING</h3> <p><b>WARNING:</b> If you do not follow these instructions exactly, a fire or explosion may result causing property damage, personal injury, or loss of life.</p> <p>A. This appliance does not have a pilot. It is equipped with an ignition device which automatically lights the burners. Do not try to light the burners by hand.</p> <p>B. BEFORE LIGHTING smell all around the appliance area for gas. Be sure to smell next to the floor because some gas is heavier than air and will settle on the floor.</p> <p><b>WHAT TO DO IF YOU SMELL GAS:</b></p> <ul style="list-style-type: none"> <li>* Do not try to light any appliances.</li> <li>* Do not touch any electric switch; do not use any phone in your building.</li> <li>* Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.</li> <li>* If you cannot reach your gas supplier, call the fire department.</li> </ul> <p>C. Use only your hand to turn the gas control knob. Never use tools. If the knob will not turn by hand, don't try to repair it; call a qualified service technician. Force or attempted repair may result in a fire or explosion.</p> <p>D. Do not use this appliance if any part has been under water. Immediately call a qualified service technician to inspect the appliance and to replace any part of the control system and any gas control which has been under water.</p> <p>E. Should over-heating occur, or the gas supply fails to shut off, turn off manual gas valve to the appliance.</p>	<h3 style="text-align: center; background-color: black; color: white; margin: 0;">POUR VOTRE SÉCURITÉ À LIRE AVANT D'ALLUMER</h3> <p><b>ATTENTION:</b> Si vous ne suivez pas ces instructions à la lettre, un incendie ou une explosion entraînant des dommages matériels, des blessures ou des pertes de vie.</p> <p>A. Cet appareil ne dispose pas d'un pilote. Il est équipé d'un dispositif d'allumage qui allume automatiquement les brûleurs. N'essayez pas d'allumer les brûleurs à la main.</p> <p>B. AVANT D'ALLUMER, sentez autour de l'appareil pour le gaz. Soyez sûr de sentir près du plancher, car certains gaz sont plus lourds que l'air et se déposent sur le sol.</p> <p><b>QUE FAIRE SI VOUS UNE ODEUR DE GAZ:</b></p> <ul style="list-style-type: none"> <li>* Ne pas tenter d'allumer d'appareils.</li> <li>* Ne pas toucher à aucun interrupteur électrique; n'utilisez aucun téléphone dans votre immeuble.</li> <li>* Appelez immédiatement votre fournisseur de gaz depuis un voisin. Suivez les instructions du fournisseur de gaz.</li> <li>* Si vous ne pouvez pas rejoindre votre fournisseur de gaz, appelez les pompiers.</li> </ul> <p>C. Utilisez seulement votre main pour tourner le bouton de commande de gaz. N'utilisez jamais d'outils. Si le bouton ne tourne pas à la main, ne pas essayer de le réparer; appelez un technicien qualifié. Réparation de la force ou la tentative peut provoquer un incendie ou une explosion.</p> <p>D. Ne pas utiliser cet appareil si une partie quelconque a été submergée. Appelez immédiatement un technicien qualifié pour inspecter l'appareil et remplacer toute partie du système de contrôle et toute commande de gaz qui a été sous l'eau.</p> <p>E. Si la surchauffe se produit, ou l'alimentation en gaz ne s'arrête pas, fermez la vanne de gaz manuelle de l'appareil.</p>
<h3 style="text-align: center; background-color: black; color: white; margin: 0;">OPERATING INSTRUCTIONS</h3> <ol style="list-style-type: none"> <li>1. STOP! Read the safety information above on this label.</li> <li>2. Turn off all electric power to the appliance.</li> <li>3. Set the thermostat to the lowest setting.</li> <li>4. This appliance is equipped with an ignition device which automatically lights the burners. Do NOT try to light the burners by hand.</li> <li>5. Remove the heater front access panel.</li> <li>6. Flip the gas valve switch to the "OFF" position.</li> <li>7. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above on this label. IF you don't smell gas, go to the next step.</li> <li>8. Flip the gas valve switch to the "ON" position.</li> <li>9. Replace the heater front access panel.</li> <li>10. Set the thermostat to the desired setting.</li> <li>11. Turn on all electric power to the appliance.</li> <li>12. If the appliance will not operate, repeat steps 2 thru 9. If the appliance will not operate after 1 retry, follow instruction "TO TURN OFF GAS TO APPLIANCE" and call your service technician or gas supplier.</li> </ol>	<h3 style="text-align: center; background-color: black; color: white; margin: 0;">INSTRUCTIONS DE FONCTIONNEMENT</h3> <ol style="list-style-type: none"> <li>1. STOP! Lire les consignes de sécurité ci-dessus sur cette étiquette.</li> <li>2. Coupez l'alimentation électrique de l'appareil.</li> <li>3. Réglez le thermostat à réglage le plus bas.</li> <li>4. Cet appareil est équipé d'un dispositif d'allumage qui allume automatiquement les brûleurs. Ne pas tenter d'allumer les brûleurs à la main.</li> <li>5. Retirez le panneau d'accès chauffe avant.</li> <li>6. Basculez l'interrupteur vanne de gaz de la position "OFF".</li> <li>7. Attendez cinq (5) minutes pour laisser échapper tout le gaz. Si vous détectez une odeur de gaz, ARRÊTEZ! Suivez "B" des consignes de sécurité ci-dessus sur cette étiquette. Si vous ne sentez pas de gaz, passez à l'étape suivante.</li> <li>8. Basculez l'interrupteur vanne de gaz de la position "ON".</li> <li>9. Remplacez le panneau d'accès chauffe avant.</li> <li>10. Réglez le thermostat sur le réglage désiré.</li> <li>11. Rétablissez l'alimentation électrique de l'appareil.</li> <li>12. Si l'appareil ne fonctionne pas, répétez les étapes 2 à 9. Si l'appareil ne fonctionne pas, après une nouvelle tentative, suivre les instructions "POUR COUPER LE GAZ À L'APPAREIL" et appelez votre technicien ou votre fournisseur de gaz.</li> </ol>
<h3 style="text-align: center; background-color: black; color: white; margin: 0;">TO TURN OFF GAS TO APPLIANCE</h3> <ol style="list-style-type: none"> <li>1. Place the power switch on the control panel in the "OFF" position.</li> <li>2. Remove the heater front access panel.</li> <li>3. Flip the gas valve switch to the off position.</li> <li>4. Replace the heater front access panel.</li> </ol>	<h3 style="text-align: center; background-color: black; color: white; margin: 0;">POUR COUPER LE GAZ À L'APPAREIL</h3> <ol style="list-style-type: none"> <li>1. Placez l'interrupteur sur le panneau de contrôle dans la position "OFF".</li> <li>2. Retirez le panneau d'accès chauffe avant.</li> <li>3. Basculez l'interrupteur vanne de gaz à la position OFF.</li> <li>4. Remplacez le panneau d'accès chauffe avant.</li> </ol>

1303081001 REV B

# Parts List & Illustration



**ITEM NO. DESCRIPTION**

- 1. Jacket, Top
- 2. Combustion Blower
- 3. Blower Gasket (Jakel only)
- 4. High Limit Kit
- 5. Heat Exchanger Assembly
- 6. Water Pressure Switch
- 8. Control Module
- 9. Interlock Switch
- 10. Air Pressure Switch
- 11. Coupling
- 12. Grommet 1 1/2" Pipe

**PART NO.**

- IDX JKT 1100
- IDX BWR 1936
- IDX BLG 1930
- IDX HLK 1930
- IDX HXA 1102
- CZX PRS 1105
- IDX ILS 1930
- IDX MOD 1930
- IDX APS 1930
- IDX CPG 1930
- IDX GRM 0001

**ITEM NO. DESCRIPTION**

- 13. Front Access Door
- 14. Burner Orifice & Air Orifice Bracket, Natural Gas
- 14. Burner Orifice & Air Orifice Bracket, Propane
- 14. Conversion Kit, LP to NAT
- 14. Conversion Kit, NAT to LP
- 15. Gas Manifold
- 16. Gas Valve
- 17. Ignitor with cable
- 18. Burner
- 19. Burner Gasket
- 21. Control Panel Assembly
- 22. Wire Harness

**PART NO.**

- IDX FAD 1101
- IDX AGK 1930
- IDX AGK 1931
- IDX CNK 1934
- IDX CNK 1933
- IDX MAN 1100
- IDX VAL 1931
- IDX IGN 1930
- IDX BNR 1930
- IDX BRG 1930
- IDX CPA 1100
- IDX WHA 1931



# Hayward Pool Heater Certificate of Limited Warranty

## Limited heater warranty:

**TERMS AND COVERAGE:** We warrant our pool heater to be free from defects in workmanship and materials under normal use and service. Pursuant to this warranty and subject to the Conditions and Exceptions indicated below:

1. We will replace (cost of freight, installation, cost of fuel, and service labor at user's expense) with the prevailing comparable model, or, at our option, repair any pool/spa heater that leaks under normal use and service within one year from the date of original installation for all users.
2. In addition, we will replace (cost of freight, installation, cost of fuel, and service labor at user's expense) or, at our option, repair any part or parts of the pool/spa heater which malfunctions under normal use and service within one year from the date of original installation for all users.

**LIMITATION ON IMPLIED WARRANTIES:** WE ARE NOT LIABLE FOR ANY CONSEQUENTIAL DAMAGES FOR BREACH OF ANY WRITTEN OR IMPLIED WARRANTY OF THIS PRODUCT. Implied warranties, including the WARRANTY of MERCHANTABILITY and all other implied warranties that may arise from course of dealing or usage of trade imposed on the sale of this heater under laws of the state are limited in duration to the term of one (1) year for all users. There are no warranties which extend beyond the description on the face hereof. We shall not in any event be held liable for any special, indirect, or consequential damages.

**EXPENSE OF DELIVERY AND INSTALLATION:** Each pool heater or replacement part to be furnished under this warranty shall be furnished at our nearest distribution center. We shall not pay, nor be responsible for shipping or delivery charges to the place of installation, nor for labor charges or other costs of removal or installation. Every defective heater or part replaced under this warranty shall become our property, and as such, must be returned to our distribution center with transportation charges paid by the user. Any replacement pool heater furnished under this warranty shall remain in warranty only for the unexpired portion of this warranty.

**CONDITIONS AND EXCEPTIONS:** This warranty applies only to the pool/spa at its original place of installation and only for the original owner. It does not apply if the pool heater is installed in violation of any applicable code or ordinance, or is not installed, operated and maintained in accordance with our instructions, or is misused, damaged by accident, weather, act of God, freezing, water void and/or excess pressure, altered or disconnected. It does not apply with respect to:

1. A heater not equipped with Certified C.S.A. limit controls or equivalent pressure relief valve.
2. A heater operated with settings in excess of, and/or with fuel not conforming to those shown on rating plate;
3. A heater on which the serial numbers have been altered, defaced, or removed.
4. Leaks arising from defective installation;
5. Production of noise, odors, or discolored (rusty, etc.) water;
6. Leakage substantially contributed to by sediment, lime precipitate and/or higher than normal dissolved solids (pH above 7.8) in the tank, copper tubes, or water ways;
7. Leakage caused substantially contributed to by corrosive elements in the atmosphere (such as the storage of chlorine or other chemicals);
8. Leakage caused substantially or contributed to by corrosive pool water in an acid condition (pH below 7.2);
9. Damage caused substantially or contributed to by an external source of energy;
10. A pool/spa heater is a water containing device. Leakage of water from this device can be expected at some time due to malfunction or the

limitations of the service life of various components. Do not install this product where such leakage can cause damage. MANUFACTURER IS NOT RESPONSIBLE OR LIABLE FOR ANY COSTS INCURRED BY SUCH DAMAGE.

IN NO CASE ARE WE TO BE HELD LIABLE FOR DAMAGE TO SURROUNDING AREA OR PROPERTY CAUSED BY LEAKAGE OR MALFUNCTION.

**HOW TO CLAIM UNDER THIS WARRANTY:** The original owner, upon discovering the defect, must present the attached completed warranty claim card with proof of purchase either to the dealer or notify the Company in writing at either address:

Hayward Pool Products, Inc.      Hayward Pool Products, Inc.  
900 Fairmont Avenue      or      2875 Pomona Boulevard  
Elizabeth, NJ 07207      Pomona, CA 91768

Upon receipt of such notification we shall decide whether to repair such parts or replace any pool heater, reserving at all times the right to inspect in order to verify any claimed defect. We also reserve the right to have our representatives make any inspections, repairs, or to furnish replacements. This warranty is intended as a legally binding obligation of the Company, enforceable in the courts. This warranty may give you specific legal rights which may vary from state to state.

**LIMITATION ON LIABILITY:** All intended representations have been expressly set forth in this document. This warranty may not be extended by oral or any other additional representations, written sales information, drawings, or other malfunction, is strictly limited to repair or replacement of the defective heater or part, as provided herein and the Company is not responsible herein for incidental or consequential or incidental costs or damages. The company neither assumes, nor authorizes any person or firm to assume for us, any further liability or obligation in connection with the sale, installation, use, maintenance, or existence of the heater.

**SAFETY WARNING:** Pool heaters are heat producing appliances and to avoid damage or injury in the event of possible overheating of the outer jacket (1) no materials should be stored against the jacket and (2) care should be taken to avoid unnecessary contact (especially by children) with the jacket. When lighting a gas heater, the lighting instructions must be followed exactly to prevent "flashback" of excess gas in the heater. Electronic ignition heaters and electric heaters must have the power shut off when making adjustments to, servicing, or coming into contact with the heater. UNDER NO CIRCUMSTANCES SHOULD FLAMMABLE MATERIALS, SUCH AS GASOLINE OR PAINT THINNERS, BE USED OR STORED IN THE VICINITY OF THE HEATER OR IN ANY LOCATION FROM WHICH FUMES COULD REACH THE HEATER. For your comfort, enjoyment and safety, please read the enclosed operating instructions carefully.

## FireTile™ five year limited warranty:

**TERMS AND COVERAGE:** This warranty is an extended warranty applicable to the FireTile™ components used in the conditions, limitations, and exceptions of the regular pool heater limited warranty remain in force, apply to this warranty, and are incorporated herein by reference.

Under the terms of this special FireTile™ limited warranty, we will replace (cost of freight, installation, cost of fuel, and service labor at user's expense) any components of your pool/spa heater made of FireTile™ which fail from defects in workmanship and materials under normal use and service in a single family residential application for a period of five (5) years.

USE THIS FORM ONLY FOR MAKING A CLAIM

### LIMITED 1 YEAR POOL/SPA/HOT TUB HEATER CLAIM FORM

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_  
Purchasers's Name \_\_\_\_\_  
Installation Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Single Family Residential Use  Yes  No If no, fill in use \_\_\_\_\_  
Dealer's Name \_\_\_\_\_  
Address \_\_\_\_\_  
Date of Installation \_\_\_\_\_

*Note to Dealer: Fill in the following information on replacement heater.*

Model No. \_\_\_\_\_ Serial No. \_\_\_\_\_ Date Installed \_\_\_\_\_



# HAYWARD®

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**Notes:**

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