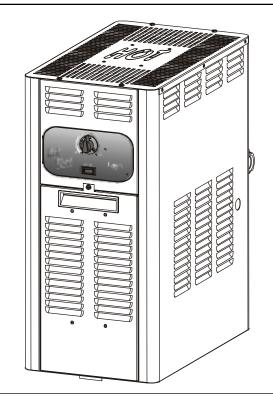
FOR YOUR SAFETY - This product must be installed in accordance with the procedures in this manual, local codes and ordinances, and in accordance with the latest edition of the National Fuel Gas Code, ANSI Z223.1. In Canada, the installation must be in accordance with CAN1-B149.1 or .2 and local codes. Improper installation and/or operation could create carbon monoxide gas in flue gases which could cause serious injury, property damage, or death. Improper installation and/or operation will void the warranty.

Installation and Operation Manual

Hot Shot™ Above Ground Pool and Spa Heater

Model LHS
Natural Gas or LP Gas
For Outdoor Use Only



AWARNING: If these instructions are 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 and 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 nearby 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.



TABLE OF CONTENTS

SEC	ΓΙΟΝ 1.		SECT	TION 3.		
General Information			Opera	Operating Instructions		
Insta 2A. 2B.	Introduction	1 2 2 2	3A. 3B. 3C. 3D. 3D-1. 3D-2. 3D-3. 3E. 3F.	General Information Lighting and Shutdown Procedures Setting the Temperature Control Seasonal Care Spring and Fall Operation Winterizing Spring Startup Swimming Pool Energy Saving Tips Periodic Inspection Owner Inspection	7 7 7 9 9	
2C. 2C-1. 2C-2. 2D. 2D-1. 2D-2. 2F-1. 2F-2. 2F-3. 2F-4. 2F-5. 3F-6	Site Location Installation Information Outdoor Installation Gas Supply and Piping General Instructions Special Precautions for Propane Gas Water Flow System Flange Installation Valve Installation Water Chemistry Adjusting the Pressure Switch Automatic Flow Control Valve Wiring Diagram	2 3 4 4 5 5 5	SECTION		10 10 11	

SECTION 1. General Information

1A. Introduction

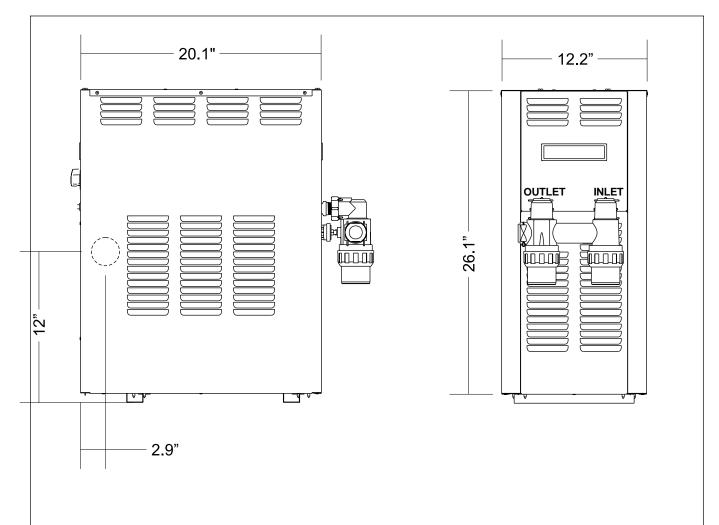
This manual provides installation and operation instructions for the Laars Hot Shot, Model LHS above ground pool heater. Read these installation and operation instructions completely before proceeding with the installation. Consult the Laars factory, or local factory representative, with any questions regarding this equipment. Experience has shown that most operating problems are caused by improper installation.

The Laars Hot Shot heater is design certified by the CSA, International (Canadian Standards Association), formerly IAS (International Approval Services), as complying with the latest edition of the Unified Standard for Gas-Fired Pool Heaters, ANSI Z21.56 in the United States, and CAN1-4.7-M85 in Canada.

Certain sections of this manual are specific to either United States or Canadian installations, and are labeled as such.

1B. Description

The Laars Hot Shot heater is specifically designed for heating above ground swimming pools. Do not use it as a general service water heater. There are specially designed models of Laars pool heaters for heating in ground pools, salt water pools. An accessory kit is available so that temperature rise may be measured and adjusted for spa applications. Consult your dealer for the appropriate Laars products for these applications.



Notes:

- 1. The Laars Hot Stot heater is designed for optimun efficiency at altitudes of 0-3000 feet (0-915m) above sea level for natural gas heaters and 0-5000 feet (0-1525) for LPG. In Canada regulations limit optimun efficieny use to 0-2000 ft (0-610m) above sea level for natural gas and 0-4500 feet (0-1370m) for LPG.
- 2. The Laars Hot Shot is constructed for 75 psi working pressure.

Figure 1. General Configuration.

1C. Warranty

The Laars Hot Shot heater is sold with a limited factory warranty. Details are specified on page 14 of this manual.

Make all warranty claims to an authorized Laars representative or directly to the factory. Claims must include the heater serial number and model (this information can be found on the rating plate), installation date, and name of the installer. Labor and shipping costs are not included in the warranty coverage.

Damage caused by improper installation or assembly, or to the heat exchanger by corrosive water, is NOT covered by the Warranty. See Section 2F-3 for maintaining proper pool water chemistry.

NOTE: Keep this manual in a safe place for future reference when inspecting or servicing the heater.

1D. Technical Assistance

Consult Water Pik Technologies or your local distributor of Laars products with any questions or problems involving the specifications, installation, and operation of your Laars equipment. An experienced technical support staff is ready to assist in assuring the proper performance and application of Laars products. For technical support call (707) 776-8200.

SECTION 2. Installation Instructions

2A. General Information

Install the Laars Hot Shot heater in accordance with the procedures in this manual, local codes and ordinances, and in accordance with the latest edition of the National Fuel Gas Code, ANSI Z223.1. In Canada, the installation must be in accordance with CAN1-B149.1 or .2 and local codes. Any changes to the heater, gas controls, gas orifices, wiring, or improper installation may void the warranty. If field conditions require change to any of the above, consult the factory.

All gas-fired products require correct installation to assure safe operation. The requirements for pool heaters include the following:

- 1. Field assembly (if required)
- 2. Appropriate site location (clearances)
- 3. Sufficient combustion and ventilation air
- 4. Properly sized gas meter and piping
- 5. Adequate water flow

This manual provides the information needed to meet these requirements. Review all application and

installation procedures completely before continuing the installation.

2B. Field Assembly

The Laars Hot Shot heater is shipped from the factory ready for outdoor installation in the U.S. and Canada.

The only preparation needed is the connection for the gas line and the water connection.

2C. Site Location

A WARNING

Improper installation or maintenance can cause nausea or asphyxiation from carbon monoxide in flue gases which could result in severe injury, or death.

2C-1. Installation Information

All Hot Shot pool heaters are designed and certified for installation on a combustible floor. For added safety, Water Pik Technologies recommends placing the heater on a cement or other non combustible surface. Ensure that the heater is level from all sides. NEVER store objects on or around the heater. The heater must NEVER be installed on any type of carpeting.

Avoid placing the heater in locations where it can cause damage by water or condensate leakage. If this is not possible, provide a suitable drain pan to catch and divert any leakage. The pan must not block natural flow of air around the heater.

Locate the heater so the clearances from combustible surfaces shown in Table 1 are met.

Table 1. Minimum Heater Clearances From Combustible Surfaces

	Distance From	
Side of	Combustible Surface	
Heater	Inches	Centimeters
Sides	4	10
Piping		
(Rear)	12	30
Тор	Open Unroofed Area	
Front	18	45

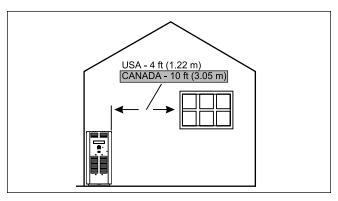


Figure 2. Outdoor Heater Installation.

2C-2. Outdoor Installation

Laars Hot Shot heaters are design certified only for outdoor installation. The heater should be installed as received from the factory, in accordance with this manual and following all federal, state and local codes. Any attempt to modify the heater may cause personal injury, property loss or death and will void the warranty.

Locate the heater in an **open, unroofed area**. Do not install the heater under a deck. Do not locate the heater below or adjacent to any doors, glass openings, louvers, grills, etc., which connect in any way with an inhabited area of a building, even though the access might be through another structure (e.g., a garage or utility room. In the United States there must be a minimum of 4 feet (1.2 m) horizontally or vertically between the heater and any door, glass opening, or gravity inlet to a building. In Canada this distance must be at least 10 feet (3.0 m) (see Figure 2).

Be sure that the heater is installed away from traffic areas such as walkways or pool ladders. It is recommended that the heater be enclosed by protective fencing to prevent accidental contact with hot surfaces.

▲ WARNINGUnited States

Do not install the heater with the top within 4 feet (1.2 m) of any opening into a building.

Canada

Do not install the heater with the top within 10 feet (3.0 m) of any opening into a building.

If the heater is installed under an overhang, there must be a minimum clearance of 5 feet (1.5 m) above the top of the heater and the structure should not overhang the heater more than 12 inches (0.3 m). The area under the overhang must be open on three sides. This prevents combustion gases from being diverted into living areas through doors, windows, or gravity inlets.

If the heater is installed close to a structure, protect it from rain water runoff with rain gutters on the roof or other measures. Do not locate the heater near sprinkler systems that could spray water on it. Be sure to locate the heater where oversplash from the pool will not damage the heater.

Avoid locations where wind deflection off nearby structures might cause downdraft conditions. Where downdraft conditions exist, locate the heater at least 3 feet (0.9 m) from vertical surfaces (e.g., nearby buildings and walls).

▲WARNING

Laars Hot Shot heaters are design certified only for outdoor installation. Any attempt to modify the heater for any other use may cause personal injury, property damage or death and will void the warranty.

2D. Gas Supply and Piping

2D-1. General Instructions

Review the following general instructions before continuing the installation.

A WARNING

Do not convert this heater from natural gas to propane gas, or propane to natural. Field conversion could create carbon monoxide gas which can cause property damage, serious injury, or death.

- Gas piping installation must be in accordance with the latest edition of ANSI Z223.1 and all local codes. In Canada, the installation must be in accordance with CAN- B149.1 or .2 and all local codes that apply.
- 2. Check the rating plate to make sure the heater is fitted for the type of gas being used. Laars heaters, as shipped from the factory, are certified to operate within a specific altitude range.
 - a) In the United States, the altitude range specified is 0 to 3000 feet (0 to 915 m) above sea level for natural gas and 0 to 5000 feet (0 to 1525 m) for propane gas.
 - b) In Canada, the heater rating plate is marked for specific altitude requirements: 0 to 2,000 feet (0 to 610 m) above sea level for natural gas and 0 to 4500 feet (0 to 1370 m) for propane gas.
- 3. Use the figures in Table 2 to size the gas inlet piping from the gas meter to the heater. Check all local codes for compliance before installing the heater.

Table 2. Natural Gas Pipe Size Requirements

Distance from Gas Meter					
0-50 feet 50-100 feet (0-15 m) (15-30 m)			100-200 feet (30-60 m)		
in.	(mm)	in.	(mm)	in.	(mm)
3/4	(19)	1	(25.4)	1	(25.4)

Notes:

- These numbers are for natural gas (0.65 Sp. Gr.) and are based on 1/2 inch (13 mm) water column pressure drop. Check supply pressure with a manometer, and local code requirements for variations.
- Check supply pressure and local code requirements before proceeding with work.
- 3. Pipe fittings must be considered when determining gas pipe sizing.

NOTE: For LP gas use a minimum pipe size of 3/4 inch diameter pipe and a minimum 20 lb fuel tank. A 20 lb fuel tank will provide approximately four hours of firing time for the heater.

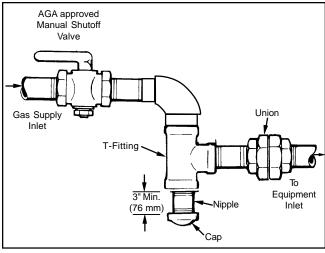


Figure 3. The proper design for a sediment trap / drip leg.

- 4. Install a sediment trap (drip leg) ahead of the gas controls (see Figure 3). Fit the trap with a threaded cap which can be removed for cleaning.
- 5. Install an AGA approved manual gas shutoff valve on the outside of the heater jacket for service and safety. Do not use a restrictive gas cock.

AWARNING

The use of a flexible connection is not recommended as they cause high gas pressure drops.

6. Disconnect the heater and its individual shutoff valve from the gas supply system during pressure testing of the system at pressures higher than 1/2 pounds per square inch (psi) (3.45 kilopascals [kPa]). If the test pressure is equal to or less than 1/2 psi (3.45 kPa), close the manual shutoff valve on the heater during the pressure test.

Table 3. Gas Supply Pressure Requirements

Supply Pressure Water Column	Natural Gas "W.C.	Propane Gas "W.C.	
Minimum	5.5	10.0	
Maximum	10.0	14.0	

▲Caution

Permanent damage to the gas valve will occur if the following procedures are not followed.

7. If the gas supply pressure is less than required, check for undersized pipe between the meter and the heater, a restrictive fitting, or an undersized gas meter. Gas supply pressures to the heater are listed in Table 3.

NOTE: The maximum inlet gas pressure must not exceed the specified value. The minimum value listed is for the purpose of input adjustment. Refer to Table 3.

8. Before operating the heater, test the complete gas supply system and all connections for leaks using a soap solution. Do not use an open flame.

ACaution

Some leak test solutions (including soap and water) may cause corrosion or stress cracking. Rinse the piping with water after testing.

2D-2. Special Precautions for Propane Gas

ACaution

Liquefied petroleum (LP) gas is heavier than air. Therefore, do not install pool heaters using LP gas in pits or locations where gas might collect. Locate heaters a safe distance from LP gas storage and filling equipment. Consult local codes and fire protection authorities about specific installation restrictions.

2E. Water Flow System

2E-1. Flange Installation

The water inlet/outlet header has PVC connections designed for 1-1/2" PVC schedule 40 pipe. A reducing adapter must be used to decrease the connection to the diameter of the flexible hose used to plumb the other components of your filter system.

Note: Due to various diameters of filter system flexible hose, PVC reducers are not supplied with this heater.

To install the flexible plumbing:

- Using a suitable PVC primer and adhesive, glue the reducing adapter into the coupling of the water connection. Check the adhesive manufacturer's instructions for proper application and curing times.
- 2. Use a hose clamp to attach the filter system flexible hose to the reducing adapters.

Table 4. Mineral Concentration Levels

Test	Recommended Level
Free chlorine	1.0 to 3.0 ppm
Bromine	3.0 to 5.0 ppm
рН	7.2 to 7.8
Total alkalinity (TA)	80 to 120 ppm
Calcium hardness (CH)	200 to 400 ppm
Langelier saturation index (LSI)	-0.5 to +0.5
Total dissolved solids (TDS)	Less than 2000 ppm
Cyanuric acid	30 to 150 ppm
Copper	0 ppm

2E-2. Check Valve Installation

Install a check valve if there is any chance of back-siphoning when the pump stops. Do not install any other valve in the piping between the heater outlet and the pool, unless it is being used as a diverter valve.

2E-3. Water Chemistry

Proper chemical balances are necessary for sanitary bathing conditions as well as ensuring your heater's long life. Be sure to keep your chemical levels within the values indicated in Table 4. Water Pik Laars does not warrant heat exchangers damaged by corrosive chemical levels or excess dissolved solids in pool water.

2F-E. Adjusting the Pressure Switch

Caution

The pressure switch should be adjusted to turn the heater off when the pump is off. Setting the switch to close at too low of a flow can damage the appliance. Adjust the switch to turn the heater off, not on.

The pressure switch is preset at the factory for activation at 2 psi (14 kPa). Adjust the pressure switch only if any part of the filter system piping is 3 feet (0.9 m) or more above the top of the heater jacket.

Do not adjust the pressure switch if the heater is installed more than 15 feet (4.5 m) below or 6 feet (1.8 m) above the pool surface. Consult your local Water Pik Laars representative for recommendations.

On some installations, the piping from the heater to the pool is very short. The back pressure could be too low to trigger the pressure switch. If this happens, it may be necessary to install a directional fitting or elbows where the return line enters the pool. This will increase back pressure enough for the heater to operate properly.

Make sure the pool filter is clean before making any pressure switch adjustment: A dirty filter will restrict the water flow and the pressure switch cannot be adjusted properly. To adjust the pressure switch:

- 1. Set the control panel rocker switch to the OFF position (see Figure 4).
- 2. Set the temperature control to the HIGH position.
- 3. Turn filter pump on.
- 4. Turn rocker switch to ON. Heater should start.
- 5. Pry out the top rubber dust plug on the top of the pressure switch.
- 6. Use a 7/32 inch (5.55 mm) Allen wrench to turn the adjustment screw very slowly clockwise until the heater goes off (see Figure 5).
- 7. Slowly turn the pressure switch adjustment screw **counterclockwise** one-quarter turn. The heater should come back on.



Figure 4. Temperature Control Panel.

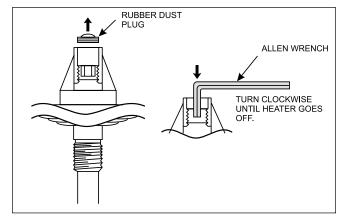
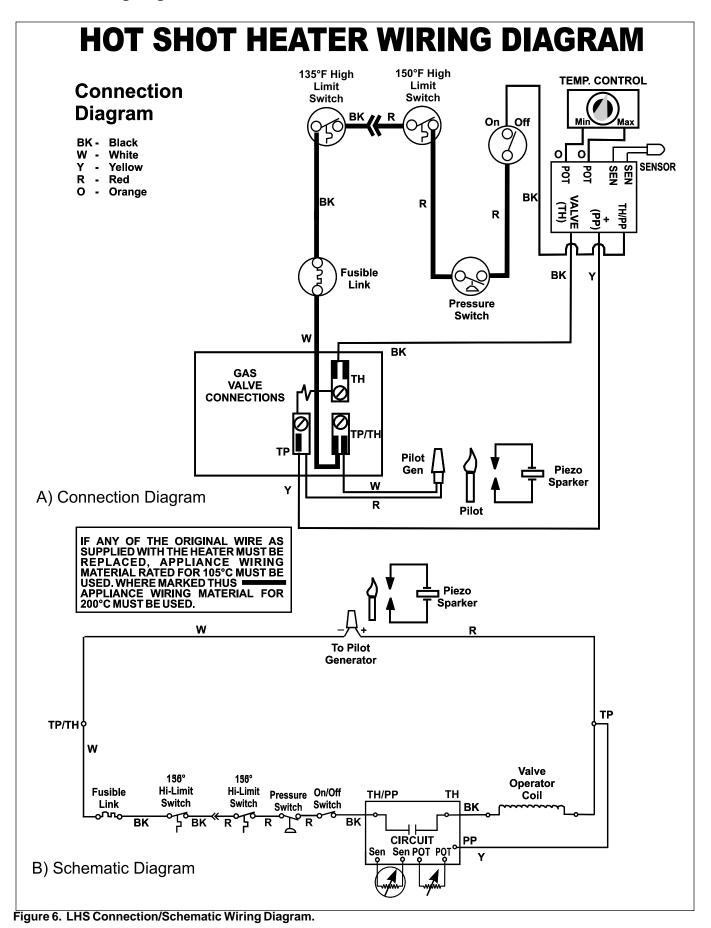


Figure 5. Pressure switch adjustment.

2E-6. Wiring Diagram



- 8. Check the adjustment by turning the filter pump OFF. The heater should shut off immediately. If it does not, restart the filter pump immediately and repeat Steps 6 and 7. Check the adjustment again.
- 9. Return the pool temperature control to the desired temperature.

2E-5. Automatic Flow Control Valve

The flow control valve automatically maintains the proper flow through the system.

SECTION 3. Operating Instructions

3A. General Information

With any new pool or spa installation, and at spring startup, operate the filter pump with the heater off long enough to completely clean the water. This will remove any installation residue from the water. Clean the filter at the end of this operation before starting the heater.

ACaution

Do not use this heater if any part has been under water. Immediately call a qualified service technician to inspect the heater and replace any part of the control system and any gas control which has been under water.

A Attention

N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

ACaution

Should overheating occur or the gas supply fail to shut off, turn off the manual gas control valve to the heater.

A Attention

En cas de surchauffe ou si l'alimentation en gaz ne s'arrête pas, fermez manuellement le robinet d'arrêt de l'admission de gaz.

ACaution

Keep all objects off the top of the heater. Blocking air flow could damage the heater, and may void the warranty.

AWARNING

For your safety, when starting the heater, stand away from the front of the heater and keep your head and face well away from the firebox opening to prevent any risk of personal injury.

3B. Lighting and Shutdown Procedures (See page 8)

NOTE: If your LP tank runs out of fuel, turn off gas at the heater. After the tank is refilled, the heater must be relit following the instructions found on the heater. DO NOT attempt repairs on the gas control or heater. Tampering is dangerous and voids all warranties.

3C. Setting the Temperature Control

The temperature control (see Figure 4) is calibrated at the factory and covers a range from approximately 70°F to 104°F (21°C to 40°C). Use an accurate pool thermometer to determine the best water temperature for your uses.

IMPORTANT: The temperature controls cannot be calibrated in the field. If the control is faulty, shut down the heater and have a qualified service technician replace the control. DO NOT use the thermostat switch to completely shut down the heater.

3D. Seasonal Care

ACaution

Do not operate this heater outdoors at temperatures below 20 degrees Fahrenheit (°F) (-7 degrees Celsius [°C]).

3D-1. Spring and Fall Operation

During periods when the pool is only going to be used occasionally, turn the temperature control down to the MIN setting. This prevents the pool from water from becoming chilled, and minimizes the time required to raise the pool water back up to the desired temperature.

In areas subject to only short freeze periods, turn off the heater and run the pump continuously for the length of the freeze period.

If the heater is not going to be used for a long period of time, shut it down completely. Follow the instructions found on the inside of the heater, or page 8 of this manual.

Water Pik Technologies Inc.

Laars

FOR YOUR SAFETY READ BEFORE OPERATING

⚠WARNING: If you do not follow these instructions exactly, a fire or explosion may result, causing property damage, personal injury or loss of life.

- A. This appliance has a pilot which must be lighted by a push button sparker. When lighting the pilot, follow these instructions exactly.
- B. BEFORE OPERATING, smell all around the appliance area for gas. Be sure to smell next to the floor because LP gas is heavier than air and will settle on the floor.

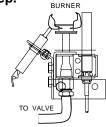
WHAT TO DO IF YOU SMELL GAS

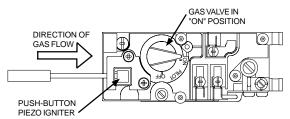
- · Do not try to light any appliance
- Do not touch any electric switch; do not use any phone in your building.
- Immediately call your gas supplier from a neighbor's phone. Follow the gas supplier's instructions.

- If you cannot reach your gas supplier, call the fire department.
- C. Use only your hand to push in or turn the gas control knob. Never use tools. If the knob will not push in or 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.
- 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.

OPERATING INSTRUCTIONS

- 1. STOP! Read the safety information above.
- 2. Set the thermostat to lowest setting and turn appliance ON/OFF switch to "OFF".
- 3. Turn gas control knob clockwise until it stops at "OFF" position.
- 4. Wait five (5) minutes to clear out any gas. If you then smell gas, STOP! Follow "B" in the safety information above. If you don't smell gas go to the next step.
- To find pilot—follow gas line from gas valve to pilot location.
- Turn knob on gas valve counterclockwise to "PILOT" then push control knob all the way and hold down.





LHS GAS VALVE

- 7. Push the button of the sparker, repeating until confirming that pilot lights, by observing reflection on burner tray mirror.
- Continue to hold the control knob down for about one (1) minute after the pilot is lit. If it goes out, repeat steps 3 through 8.
 - If knob does not pop out when released, stop and immediately call your service technician or gas supplier.
 - If the pilot will not stay lit after several tries, turn the gas control knob to "OFF" and call your service technician or gas supplier.
- Turn gas control knob counterclockwise to "ON".
- 10. After replacing control compartment access panel, set thermostat to desired setting and turn appliance ON/OFF switch to "ON". Valve has built-in delay before coming on.
- 11. If the appliance will not operate, check that the filter pump is on, that the filter is clean and water is flowing to the pool. Otherwise, follow the instructions "To Turn Off Gas To Appliance" and call your service technician or gas supplier.

TO TURN OFF GAS TO APPLIANCE

- 1. Set the thermostat to lowest setting and turn appliance ON/OFF switch to "OFF".
- Turn gas control knob clockwise until it stops at "PILOT". Then press down slightly on knob while turning clockwise to "OFF". Do not force

3D-2. Winterizing

In areas where freezing temperatures occur in winter, and the pool or spa will not be used, it is best to store your heater in a dry environment such as a shed or garage. Perform the following steps:

- 1. Shut down the heater following the shutdown instructions found on the heater.
- 2. Turn off the main gas supply valve to the heater, outside the heater jacket.
- 3. Disconnect the heater from the gas line and cover the end of the gas line to prevent debris from entering the pipe.
- 4. Disconnect the water connections at the reducing adapters on the header.
- 5. Allow the water to drain from the heater.
- 6. Store the heater in a dry place until its next use. In milder climates where freezing does not occur, but the pool will not be used for an extended period, follow these steps:
- 1. Shut down the heater following the shutdown instructions found on the heater.
- 2. Turn off the main gas supply valve to the heater, outside the heater jacket.
- 3. Drain the water from the system.
- 4. Cover the heater and other components with a tarp.

3D-3. Spring Start-up

- Secure all connections as discussed in the installation section of this manual.
- 2. Turn on the filter pump and circulate water until the water is clean. Check for leaks while circulating.
- 3. Turn on the main gas supply valve to the heater, outside the heater jacket.
- 4. Turn on the heater following the lighting instructions found on the heater, or page 8 of this manual.

3E. Swimming Pool Energy Saving Tips

Water Pik offers the following recommendations to help conserve fuel and minimize the cost of operating your pool heater without sacrificing comfort.

1. The American Red Cross recommends a maximum water temperature of 78°F (25°C). Use an accurate pool thermometer. A difference of 4F° (3C°), between 78°F and 82°F (25°c and 28°C), will use as much as 40% more gas.

- 2. Carefully monitor the water temperature of your pool in the summertime. You can reduce heater usage due to warmer air temperatures.
- 3. Find the proper setting on the pool heater temperature control and use the TEMP-LOK to discourage further adjustments.
- 4. Set the filter time clock to start the pump no earlier than 6:00 AM during the pool heating season. This is the time when nightly heat loss balances.
- 5. If the pool is only going to be used on weekends, reduce the heater temperature control setting by 8 or 10 degrees during the week. Reset it to the 78°F (25°C) level a day or so before you plan to use the pool.
- 6. During the winter or when on vacation for longer than a week, shut down the heater by following the shutdown instructions found on the inside of the heater.
- 7. Where possible, shelter the pool from prevailing winds with well-trimmed hedges or other land-scaping, cabanas, or fencing.
- 8. Always use a pool cover when practical. Besides providing a valuable safety feature, a pool cover will reduce heat loss, conserve chemicals, and reduce the load on filter systems.

3F. Periodic Inspection

3F-1. Owner Inspection

Water Pik designs and constructs the Laars Hot Shot heater to provide long performance life when installed and operated properly under normal conditions. The following basic guidelines are suggested for your inspection:

- 1. Keep the top and surrounding area of the heater clear of all debris.
- 2. Keep the heater area clean and free of all combustible materials, flammable liquids and vapors, as well as sanitization chemicals.
- Do not use the heater if any part has been under water. Immediately call a qualified professional technician to inspect the heater and replace any part of the control system which has been submerged.

N'utilisez pas cet appareil s'il a été plongé dans l'eau, même partiellement. Faites inspecter l'appareil par un technicien qualifié et remplacez toute partie du système de contrôle et toute commande qui ont été plongés dans l'eau.

4. Be sure all combustion air and ventilation openings are not blocked.

SECTION 4. Parts List for Hot Shot Heater

4A. General Information

To purchase parts for the Laars Hot Shot heater, contact your nearest Laars dealer or distributor. If they cannot supply you with what you need, contact the Customer Service Manager, Water Pik Technologies, Telephone (707) 776-8200 extension 245.

ACaution

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation.

A Attention

Au moment de l'entretien des commandes, étiquetez tous les fils avant de les débrancher. Des erreurs de câblage peuvent entraîner un fonctionnement inadéquat et dangereux.

Verifiy proper operation after servicing.

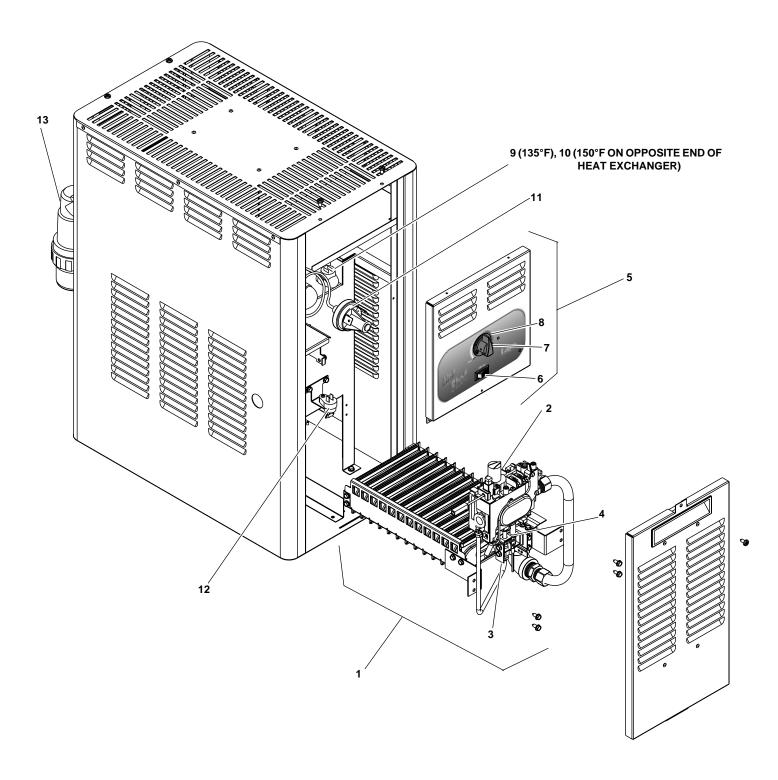
S'assurer que l'appareil fonctionne adéquatement une fois l'entretien terminé.

4B. Parts List

The following page shows an exploded view to aid in parts identification. Please refer to this pages when ordering parts for your Laars Hot Shot heater.

Key		ORDER
No	Description	PART NO
	GASSYSTEM	
1	Burner Tray Assembly, Natral Gas	R0367800
1	Burner Tray Assembly, LP Gas	R0367900
2	Gas Valve, Natural Gas	R0368000
2	Gas Valve, LP Gas	R0368100
3	Pilot Assembly, Natural Gas	R0368200
3	Pilot Assembly, LP Gas	R0368300
4	Pilot Generator	W0036901
	ELECTRICALSYSTEM	
5	Thermosat Assembly	R0367700
6	On/Off Switch	R0099800
7	Temperature Control Knob	R0010700
3	Stop Plate, "Temp-:Lok"	10583100
9	High Limit Switch, 135°F	R0368400
10	High Limit Switch, 150°F, (Not shown)	R0368500
	Pressure Switch, 2 PSI	R0013200
12	Fusible Link	R0012200
	WATERSYSTEM	
13	I/O Header Assy	R0368600
	OPTIOAL	
	Touch-up Spray Paint, Pewter	X0022700

4C. Exlpoded View



N	NOTES

NOTES

LAARS HOT SHOT **LIMITED WARRANTY**

Your Laars Hot Shot pool heater is backed by this warranty to assure your complete satisfaction.

All parts are warranted against defects in materials and workmanship for one (1) year from date of purchase.

The above warranty applies only if the installation and operating instructions applicable to the model purchased are expressly and completely followed. Water Pik does not warrant heat exchanger damage due to corrosive water or freezing. These instructions are furnished with the unit and are also available by writing to the Laars factory. The liability of Water Pik Technologies shall not exceed the repair or replacement of defective parts, and shall not include transportation to or from factory, any labor costs, and consequential or

incidental damages. Ship inoperative parts or complete heater with Serial number, Model number and purchase date, transportation prepaid, directly to address below, attention Customer Service, for evaluation and warranty consideration.

This warranty gives you specific legal rights. You may also have other rights which vary from state to state, and by province. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.



6000 Condor Dr., Moorpark, CA 93021 USA* 707.776.8200 480S. Service Road West, Oakville, Ontario, Canada L6K 2H4 905.844.8233









