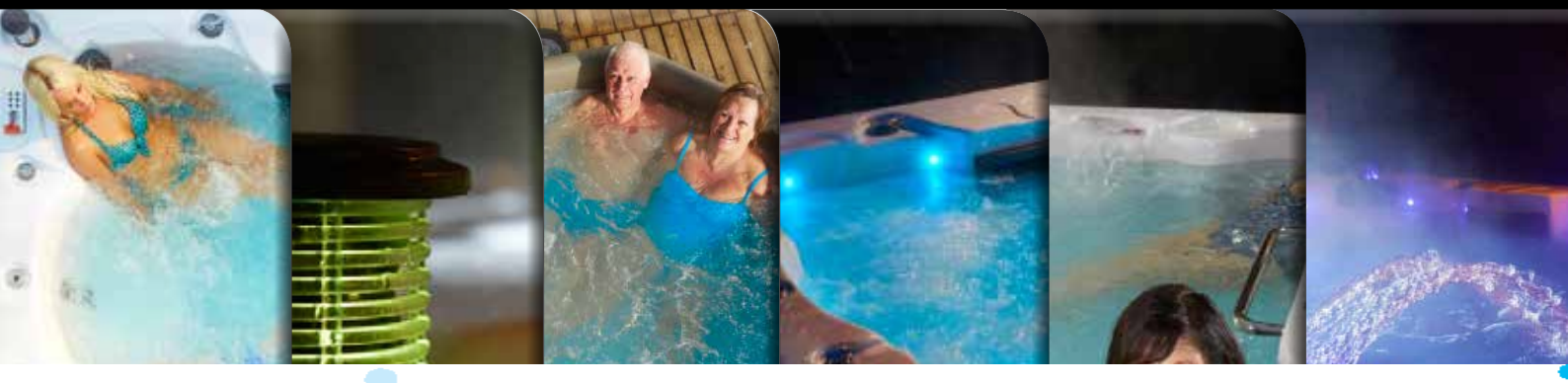


Canadian Spa Company

Owners Manual

North American 60Hz

www.canadianspacompany.com

SAFETY INFORMATION - North America (60Hz)

IIMPORTANT SAFETY INSTRUCTIONS

When installing and using this electrical equipment be sure to follow these basic safety precautions:

1. **WARNING:** To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
2. **WARNING:** A wire connector is provided on this unit to connect a minimum 8 AWG (8.4mm) solid copper conductor between this unit and any metal equipment, metal enclosure of electrical equipment, metal pipe, or conduit within 5 feet (1.5m) of the unit.
3. **DANGER:** Risk of Accidental Drowning. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use this spa unless they are supervised at all times.
4. **DANGER:** Risk of injury. The suction fittings in this spa are sized to match specific water flow created by the pump. Should the need arise to replace the suction fitting or the pump, be sure to that the flow rates are compatible. Never operate spa if suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
5. **DANGER:** Risk of Electrical Shock. Install at least 5 feet (1.5m) from all metal surfaces. As an alternative, spa may be installed within 5 feet (1.5m) of metal surfaces if each metal surface is permanently connected (bonded) by a minimum No. 8 AWG (8.4 mm) solid copper conductor attached to the wire connector on the grounding lug, inside the equipment compartment on the equipment box.
6. **DANGER:** Risk of Electrical Shock. Do not permit any electrical appliance such as a light, telephone, radio, television, etc. within 5 feet (1.5m) of a spa unless such appliances are installed and built-in by the manufacturer.
7. **ELECTRICAL SUPPLY:** The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with the national electrical standards. This disconnect must be readily accessible and visible to the spa occupant but installed at least 5 feet (1.5m), from the spa water.
8. **WARNING:** To reduce the risk of injury:

a) The water in the spa should never exceed 40°C (104°F). Water temperature between 38°C (100°F) and 40°C (104°) is considered safe for a healthy adult. Lower water temperatures are recommended for young children and when the spa use exceeds 10 minutes.

b) Since excessive water temperatures have a high potential for causing fetal damage during early months of pregnancy, pregnant women should limit spa water temperatures to 38°C (100°F)

c) Before entering a spa, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature regulating devices varies.

d) The use of alcohol, drugs, or medication before or during spa use may lead to unconsciousness with the possibility of drowning.

e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.

f) Persons using medication should consult a physician before using a spa since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

9. **AUDIO/VIDEO EQUIPMENT WARNINGS (Optional equipment based on model)** **CAUTION:** Risk of Electrical Shock. Do not leave compartment door open.
10. **CAUTION:** Risk of Electrical Shock. Replace components only with identical components.
11. **WARNING:** Prevent Electrocution. Do not connect any auxiliary components (for example cable, additional speakers, headphones, additional audio/video components, etc.) to system.
12. The units with an AM / FM tuner are not installed with an outdoor antenna; if you choose to install an outdoor antenna it should be installed in accordance with Article 810 of the National Electrical Code, ANSI/NFPA 70. The units contain an internal antenna installed under the spa skirt.
13. **CAUTION:** Risk of Electrical Shock. Do not service this product yourself as opening or removing audio covers may expose you to dangerous voltage or other risk of injury. Refer all servicing to qualified service personnel.
14. **CAUTION:** Risk of Electrical Shock. When the power supply connections or power supply cord(s) are damaged; if water is entering the audio / video compartment or any electrical equipment compartment area; if the protective shields or barriers are showing signs of deterioration; or if there are signs of other potential damage to the unit, turn off the unit and refer the servicing to a qualified service personnel.
15. This unit should be subject to periodic routine maintenance (for example, once every 3 months) to make sure that the unit is operating properly.
16. **CAUTION:** Do not operate audio video controls while inside the spa
17. Installation of the spa for other than a residential dwelling will result in voiding the manufacturer's warranty.
18. Do not bring any object into the spa that could damage the spa shell.
19. Never insert any object into any opening.
20. **WARNING:** Do not sit on the spa cover or place objects on it.
21. Remove any water or debris that may collect on the spa cover.
22. **WARNING:** Do not use the spa immediately after strenuous exercise.
23. If you feel pain or dizziness at any time while using the spa, discontinue use and contact a physician.
24. **WARNING:** To reduce risk of injury it is especially important that persons with pre-existing health conditions or problems such as obesity, heart disease, high or low blood pressure, circulatory problems, pregnancy or diabetes to consult their doctor before using the spa.
25. **WARNING:** Observe reasonable time limits when using the spa. Long exposures at high temperatures can cause high body temperatures. Symptoms may include dizziness, nausea, fainting, drowsiness, and reduced awareness. These effects could possibly result in drowning.
26. **WARNING:** The spa jets produce a stream of water with relatively high pressure. Prolonged exposure of localized area of the body may cause bruises to the skin.
27. **IMPORTANT:** The include warning sign must be posted where all users of the spa can see and read it.
28. **WARNING:** To avoid risk of drowning. Spa cover should be in place and properly latched when spa is not in use.
29. **IMPORTANT:** Read and understand the warnings on the spa cover.
30. Proper water chemistry is necessary to maintain the water and prevent possible damage to spa components.

WARNING

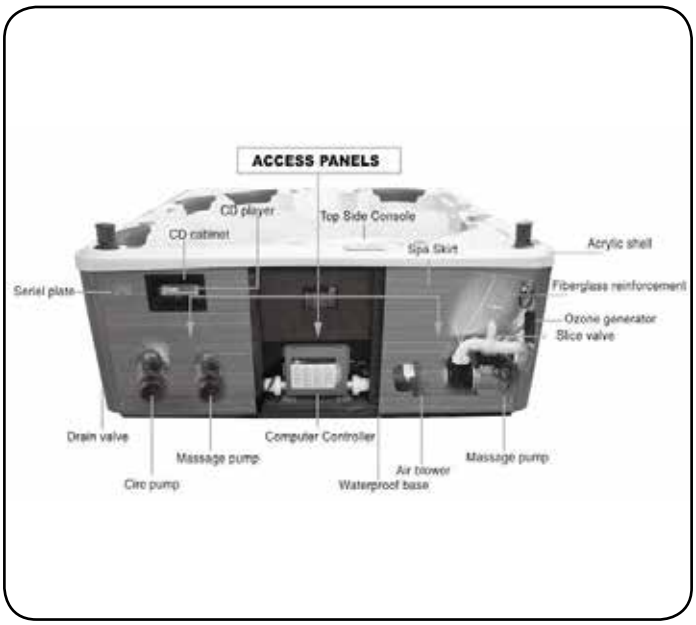
REDUCE THE RISK OF ELECTROCUTION
1. Never place an electric appliance within 5 feet (1.5m) of spa.

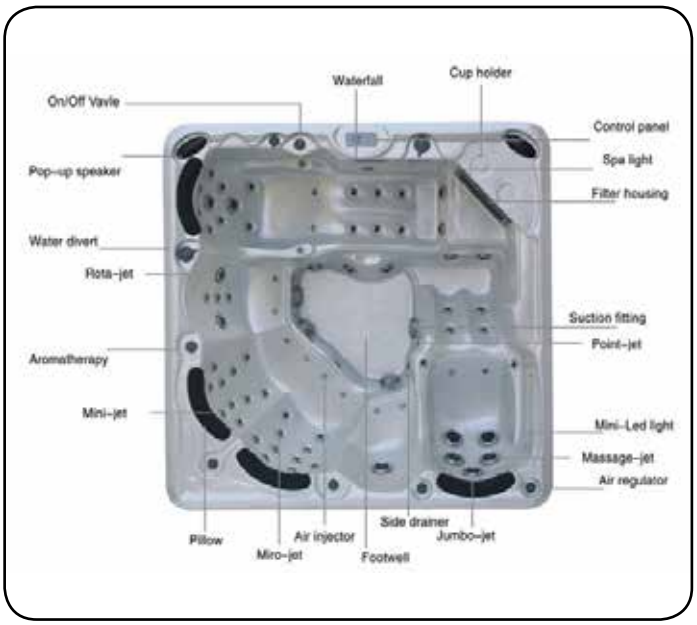
REDUCE THE RISK OF CHILDREN DROWNING
1. Supervise children at all times.
2. Attach and lock down spa cover after each use.

REDUCE THE RISK OF OVERHEATING
1. Check with a doctor before use if pregnant, diabetic, in poor health, or under medical care.
2. Exit immediately if uncomfortable, dizzy, or sleepy. Spa heat can cause hyperthermia and unconsciousness.
3. Spa heat in conjunction with alcohol, drugs, or medication can cause unconsciousness.

WHEN PREGNANT; soaking in hot water for long periods can harm your fetus. Measure water temperature before entering
1. Do not enter spa if water is hotter than 100^0F (38^0C).
2. Do not stay in spa for longer than 10 minutes.

Introduction to your hot tub /spa





SPA SHELL: Surface of the spa that holds the water, constructed of Acrylic and fiberglass.

SPA SKIRT: Surrounding material that conceals the underside of the Spa shell and equipment bay. Also referred to as the 'spa cabinet', 'Cladding' or 'Panels'.

ACCESS PANELS: Removable sections of the spa skirt located on the operator side of the spa. The Equipment Bay, including pump(s) and spa controller are located behind the access panels.

COMPUTER CONTROLLER SPA: Unit that controls spa operations, containing electronic programming boards, heater and all connections for Pump(s), Light(s), Ozone Generation Unit and Topside Console. Also referred to as 'Spa Pack' or 'Controller'.

CIRCULATION PUMP: Small, energy efficient pump used for filtration and heating of the spa.

MASSAGE PUMP: Electro-mechanical device to move water, consisting of a wet end and a motor.

AIR BLOWER: Air pump used to add extra bubbles to the water stream. The pump is connected electrically to the Control Pack and is controlled by the spa controller.

OZONE GENERATOR: Device that generates ozone to aid in maintaining water quality. Ozone helps eliminate organic material such as body oils, dead skin cells and hair.

HEATER: Electrical resistance device located in the Spa Controller containing the heating element and 2 temperature sensors. The flow through heater heats the spa's water as it flows across the heating element. Heaters are available in several wattages.

TOPSIDE CONSOLE: Button pad and temperature display panel located on the top of the spa into which various commands, control sequences and options for operating the spa can be input. User can set temperature, filtration cycle and mode through the console. Consoles have various shapes and button configurations. Also referred to as the 'Console'.

AIR INJECTOR: Small jet that allows air from the Air Blower into spa jets.

JET: Device that ejects water, creating water movement in the spa.

AROMATHERAPY: Treatment achieved by adding a scent directly to the water or a canister containing the scent in the air control system.

DRAIN VALVE: Valve located on the outside of spa cabinet used to drain water from the spa. A garden hose can be attached to the drain valve.

EQUIPMENT BAY: Location under the Spa Shell covered by access panels that houses the spa controller and pumps.

FILTER HOUSING: Assembly that holds the filter cartridge (configurations may differ from model to model).

FLOATING WEIR: Telescoping device in the filter system that skims the water to collect floating particles.

FOOT WELL: Lowest portion of the spa where the suction fittings are located.

OVERLAY: Decal covering the Topside Console, showing button location for various spa operations.

SUCTION FITTING: Located at the bottom of the spa, used to return water back into the filter and pump system.

AIR CONTROL: Device located on top side of spa used to turn on and off air assist to jets. One valve can operate up to 20 jets.

WATER DIVERTER: Device located on top side of spa and used to change the direction of water flow.

ON/OFF VALVE: Located on Top Rail of spa used to turn water on and off to features such as waterfalls and fountains.

SLICE VALVE: Two-position (open or closed) sliding valve, used to cut off water flow so that the pumps and spa controller can be removed or serviced. Slice valve operations: up for open, down (toward the valve body) for closed.

SPA COVER: Marine grade vinyl covering filled with rigid foam inserts to cover the top of the spa. The spa cover is the most important item for maintaining consistency of the spa water temperature and chemistry.

How your spa functions

BASIC: Water is drawn through the drains in the foot well and the skim filter on the side of the spa. Water is pumped through a filter, over the heater, into the Ozone Reaction Chamber and returns to the jets. Water entering the spa has been filtered, heated and mixed with air ready for use. **Note:** A sensor on the heater ensures water flow over the heater before allowing the heater to energise.

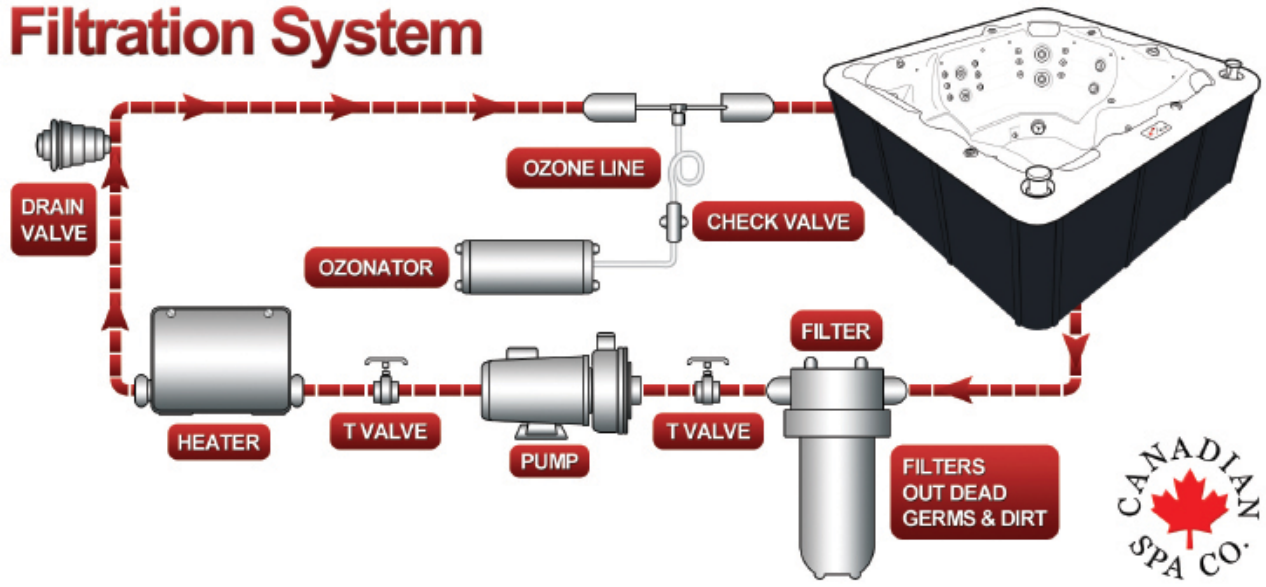
JETS: All regular jets can be flow adjusted by rotating the face of the jet. As the jet face is turned clockwise the water pressure will start to decrease, and when turned counter-clockwise the water pressure will increase.

FILTER: A weir is located on the skimmer. It is used to skim oils and floating pieces of debris from the surface of the spa. (If applicable, the weir should be facing in to the skimmer opening.)

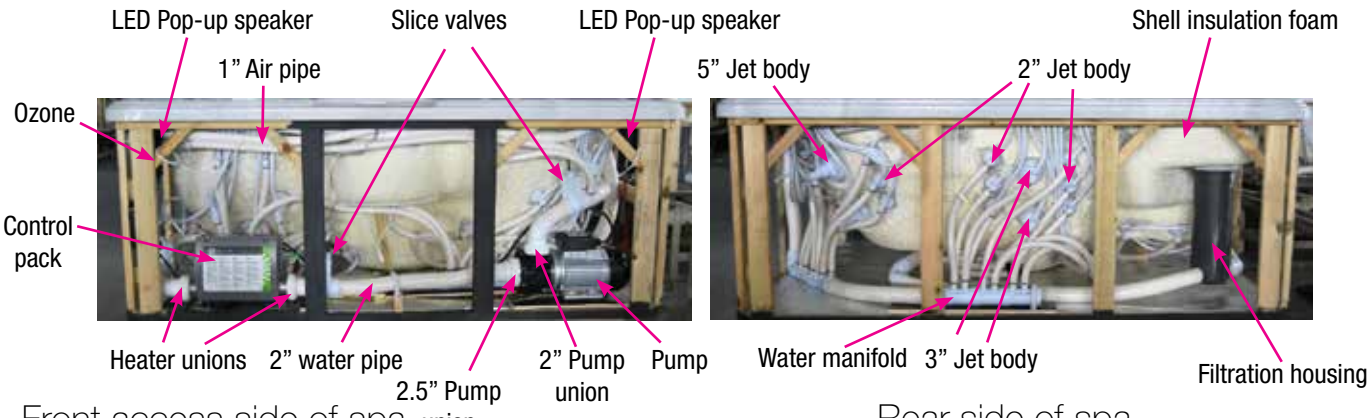
AIR CONTROLS: Air Controls inject air into the jets via a venturi system. Rotating the left or right control from Min. to Max. activates the air control.

NOTE: The system functions when your jets are at full power only.

Spa operation - Filtration cycle

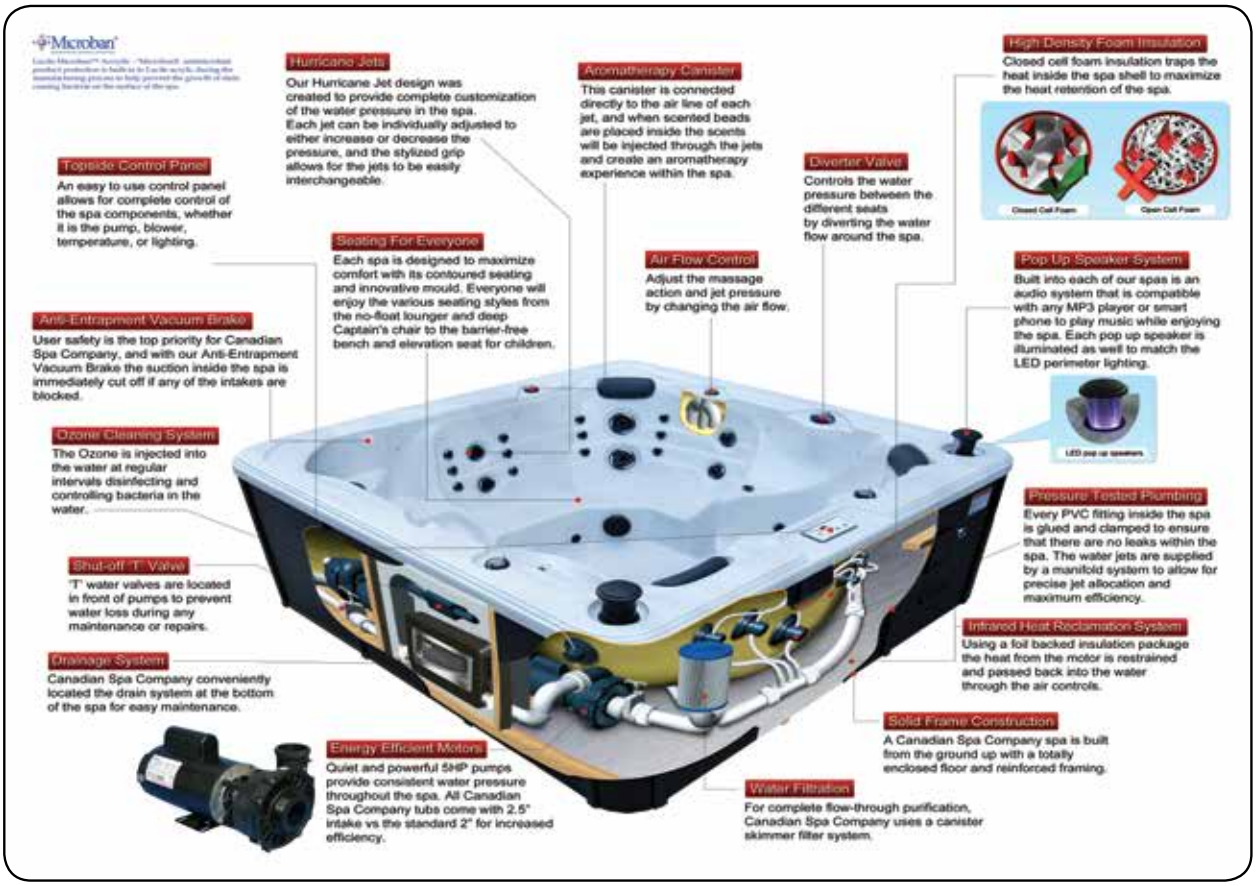


Your spa exposed (Toronto model)*



* There may be slight differences/variations with each spa and that not every spa is exactly the same.

Spa operation - Hot tub controls / Jets



HOW JETS WORK

Air is mixed with the water by using the air controls to create massage of varying degrees Water flow is adjusted by simply turning the outer face of the full sized jets. Our hot tubs have a combination of pulsating, rotating, and directional adjustable jets.

2" Directional jet
Adjustable and interchangeable jet features a directional nozzle. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

2" Twin Roto jet
Adjustable and interchangeable jet spins and pulsates. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

2" Point jet
Standard jet is permanently on and supplies heated water continually. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

3" Directional jet
Adjustable and interchangeable jet features a directional nozzle. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

3" Massage jet
Adjustable and interchangeable jet which spins to deliver a soothing massage. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

5" Massage jet
Adjustable and interchangeable jet features an internal spinner to deliver a low pressure soothing massage. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

5" (Jumbo) Directional jet
Adjustable and interchangeable jet features a directional nozzle. The jet can be removed by turning it counter-clockwise. To replace the jet push inward and clockwise until it clicks into place.

Circ Jet
Supplies Ozone and heated water from the circulation pump.

Air Jet (pepper pot)
Linked to the blower to inject air into the spa for an invigorating massage.

Large Diverter
Located on the topside of the spa, this valve physically diverts the flow of water from one jet zone of the spa to the other.

Air Controller
These are located around the top of your spa. Increase or decrease the force of your jets by opening or closing the air control valves.

Waterfall control
Located on the topside of the spa, this valve adjusts water flow to the waterfall.

Aroma basket cap
Open cap to place aromatherapy beads. Close after use.

Locating your hot tub/spa

CHOOSING A LOCATION

This spa is designed for indoor or outdoor use. Factors to consider when choosing a location for the spa include: weight of the spa, indoor/outdoor location and drainage. The following section provides guidelines that must be followed. It is the sole responsibility of the spa owner to ensure proper installation of the spa.

IMPORTANT: The base upon which the spa is placed must be smooth, flat, level and capable of uniformly supporting the combined weight of the spa, water and users, without shifting or settling, for the entire time the spa is in place. If the spa is placed on a surface which does not meet these requirements, damage to the Spa Skirt and/or Spa Shell may result. Damage caused by improper support is not covered by the manufacturer's warranty. It is the responsibility of the spa owner to ensure the integrity of the supporting structure at all times. **SPA BASE:** We recommend a poured, steel reinforced concrete slab with a minimum thickness of 4 inches (10cm). Wood decking is acceptable if it is constructed so that it meets the structural requirements outlined above.

The spa location must provide drainage away from the spa. Placing the spa in a depression without provisions for proper drainage could allow rain water, snow melt, overflow and other casual water to flood the equipment bay, creating a wet condition in which the spa could be damaged. For spas recessed into a deck, installation must permit access to the spa access panels, either from above or below for servicing. Ensure that there are no obstructions which would prevent removal of all access panels and access to jet components, especially on the side of the access panels (typically under the Topside Console).

WEIGHT CALCULATIONS: See spa specifications for exact weights. Typically the dry weight of a spa can range from 600-1000 lbs (US) (220-455 kg) dry. The volume of the spa can range from 300-400 gallons US (1135-1515 litres). Use the average weight of water (8 lbs (US) per gallon or 2.1 kg per litre) to approximate the total weight of the spa without users.

OUTDOOR LOCATION

Considerations for selecting an outdoor spa location:

- Proximity to the power source (long length of cable can be expensive)
- Local building and home owner association codes pertaining to the installation of a portable spa
- Do not place your spa within 3m of overhead power lines. Make sure the spa is positioned so that access to the equipment compartment and all side panels will not be blocked. Be certain that your installation will meet all relevant local and national safety codes and requirements.
- How you intend to use your spa will help you determine where you should position it. If your spa is mainly used for family recreation be sure to leave plenty of room around it for activity. If you will use it for relaxation and therapy, you'll probably want to create a specific mood around it.
- If you live in a region where it is cold or rains frequently, place the spa near a house entry.
- In a cold-weather climate, bare trees won't provide much privacy. Think of your spa's surroundings during all seasons to determine your best privacy options. Consider the view of your neighbours when you plan the location of your spa.
- Prevent dirt and contaminants from being tracked into your spa by placing a foot mat at the spa's entrance where the bather's can clean their feet before entering your spa. You may also consider keeping a small water-filled basin nearby for bathers to rinse their feet before enter your spa.
- Adequate space for spa with accessibility for service (Clearance of 3 ft (1m) around the spa is recommended to permit servicing the unit)
- Proper structural support is critical. Consult a licensed professional Structural Engineer to determine if the foundation will adequately support the spa the entire time it will be in place, especially if the spa is to be placed on a deck, balcony, roof or other platform not specifically tied into the main structural support.
- Drainage: The area in which the spa is placed must have adequate drainage to handle the entire water content of the spa. In the event of spillage, areas around the spa may become wet; therefore, all flooring, furniture, walls and adjacent structures should be able to withstand or resist water and moisture.
- Pathway to and from the spa (free of debris, dirt and leaves as not to be tracked into the spa)
- Closeness to trees and shrubbery (leaves and birds create extra cleaning)
- Sheltered environment (less wind and weather exposure results in lower operating and maintenance costs)
- Proximity to changing area and shelter (especially in cold weather)
- Environmental factors such as rain, wind, snow and sunlight (run off water, as from an unguttered roof overhang, shortens the life expectancy of the spa cover)
- Accessibly to children (you should be able to monitor the use of the spa from the home to prevent unauthorised use by children; you may want to enclose the spa with a fence or a self latching gate to prevent unauthorised use)
- Cover lift clearance (if you will be installing a cover lift as an add-on feature, allow 3ft (1m) on all sides of the spa)

Locating your hot tub/spa

INDOOR LOCATION

Considerations for selecting an indoor spa location:

- Local building codes for indoor installation of a portable spa
- Adequate space for spa with accessibility for service (Clearance of 3 ft (1m) around the spa is recommended to permit servicing the unit)
- Proper structural support is critical. Consult a licensed professional Structural Engineer to determine if the foundation will adequately support the spa the entire time it will be in place, especially if the spa is to be placed on a second story or higher, balcony, roof or other platform not specifically tied into the main structural support.
- Proper ventilation: Consult an Engineer or authority who understands the necessary provisions to vent moist or heated air and air with chemical odours. When the spa is in use considerable amounts of moisture escapes, potentially causing mould and mildew which can damage certain surfaces and surroundings.

POSITIONING YOUR HOT TUB/SPA

When selecting a site for your spa, take into account the following:

A) Local Codes:
There may be certain restrictions and/or requirements that are particular to your locality. If in doubt, check with your local council.

B) Delivery Passageway:
The spa will arrive as a unit, and cannot be disassembled. Ideally the spa will be placed on a dolly, either on its side or on its base. The unit will then be rolled into place easily crossing grass, gravel, and small terrain anomalies. For safe and non-intrusive installation, we require an opening not less than the width of your spa (see dealer for current sizes) plus at least 1 foot in height for the dolly and a minimum of 5 inches clearance on each side for adequate access. If your access does not meet these conditions, or in the case of other obstacles (steps, fences, walls, steep hills, etc.) contact Canadian Spa Company for advice and conditions.

C) Location & Base:
A sheltered environment can result in lower operating and maintenance costs. You must allow 1 metre/ 3 feet clearance for access to the spa's access panel for servicing.

- The site you select for your spa MUST be a flat, level continuous surface that fully contacts the bottom of the spa.
- Your new spa weighs between 300-450kg when dry, and when filled to capacity weighs 900-2300kg. Therefore a solid support is essential when the spa is mounted on a deck or ground level patio/floor. We recommend that you install your spa at ground level. This allows for easy access to equipment.
- A 10 to 15cm thick re-enforced concrete slab is ideal, but not essential. In most cases your spa can be placed on properly installed existing patios.
- The base must be at least the size of the bottom of your spa (see dealer for current sizes).
- Water should always drain away from the spa. DO NOT locate your spa in a low run-off area since melting snow or rain could flood the area and cause pump and equipment damage.
- DO NOT situate the spa near or under overhead wires and keep clear of all electrical appliances.

Installation & Setup

PRE-DELIVERY SETUP

A standard Canadian Spa Company hot tub will be delivered to your curb, standing on its side and securely strapped to a pallet (the swim spa models will arrive via flatbed truck). Ensure that you will have sufficient means to move your spa to your desired location (dolly, forklift, crane etc). The spa cannot be disassembled and will require sufficient clearance to move it (refer to table below for spa dimensions).

A sheltered environment (such as a gazebo) can prolong the life of the spa and reduce operating costs. When planning your spa location keep these tips in mind:

- Water should always drain away from the spa. DO NOT locate your spa in a low run-off area since melting snow or rain could flood the area and cause pump and equipment damage
- Allow a minimum of 3' (1m) access around the base of the spa in case your spa requires servicing
- Do not locate your spa underneath any overhanging wires and keep it clear of any electrical appliances
- Try to position your spa away from any overhanging trees as small debris (such as pine needles) can become lodged inside the jets, causing damage to the equipment
- Be sure to have a proper base created before delivery. Your spa must be placed on a flat, level surface that is at least 4" (10 cm) thick and every part of the spa base must be in contact with the surface. Patio stones, concrete slabs, and well supported decks should be sufficient to support for your spa
- For Swim Spa owners: Your spa will arrive as a single unit on a flatbed truck and will require a crane or other mechanical method of unloading to get the spa to your location. We recommend that you hire a professional lifting company to assess the situation and organise the move for you. Canadian Spa Company will not take any responsibility for moving the spa and the spa warranty does not cover damage incurred from unloading. We recommend a 6" (15cm) re-enforced concrete pad as a suitable base for your swim spa

Failure to properly locate your spa may void your warranty, please contact your local Canadian Spa Company Dealer if you have any questions.

Spa Model	Dimensions	Dry Weight	Filled Weight
Yukon Plug & Play	79" x 40" x 30" 200cm x 100cm x 74cm	310lb 140kg	1,310lb 595kg
Quebec Plug & Play	79" x 59" x 32" 200cm x 150cm x 80cm	550lb 250kg	1,970lb 890kg
Winnipeg Plug & Play	79" x 79" x 32" 200cm x 200cm x 80cm	690lb 310kg	2,650lb 1,200kg
Toronto	84" x 84" x 33" 213cm x 213cm x 82cm	840lb 380kg	3,000lb 1,360kg
Thunder Bay	87" x 87" x 34" 220cm x 220cm x 85cm	880lb 400kg	3,475lb 1,575kg
Niagara	90" x 90" x 39" 228cm x 228cm x 99cm	1,015lb 460kg	4,235lb 1,920kg
Vancouver	90" x 90" x 35" 228cm x 228cm x 87cm	1,015lb 460kg	4,235lb 1,920kg
Victoria	87" x 87" x 34" 220cm x 220cm x 85cm	880lb 400kg	3,595lb 1,630kg
Alberta	83" x 83" x 34" 211cm x 211cm x 85cm	815lb 370kg	3,350lb 1,520kg
Halifax	84" x 64" x 34" 213cm x 160cm x 85cm	660lb 300kg	2,490lb 1,130kg
Montreal	84" x 64" x 34" 213cm x 160cm x 85cm	660lb 300kg	2,335lb 1,060kg
St Lawrence 13' Sport Pool	154" x 90" x 54" 390cm x 230cm x 140cm	2,200 lb 998 kg	15,000 6804 kg
St Lawrence 16' Swim Spa	197" x 90" x 54" 500cm x 230cm x 140cm	2,515lb 1,140kg	16,975lb 7,700kg

Installation: Electrical requirements

Electrical Installation NORTH AMERICA 60HZ

Spa Model	Voltage requirement	Minimum GFCI Size	Minimum AWG
Yukon Plug & Play	110V	N/A	N/A
Quebec Plug & Play	110V	N/A	N/A
Winnipeg Plug & Play	110V	N/A	N/A
Toronto	220V	50A	#6
Thunder Bay	220V	50A	#6
Niagara	220V	50A	#6
Victoria	220V	50A	#6
Alberta	220V	50A	#6
Halifax	220V	50A	#6
Montreal	220V	50A	#6
St Lawrence 13' Sport Pool	220V	60A	#6
St Lawrence 16' Swim Spa	220V	60A	#6

Refer to this table for the electrical requirements of your Canadian Spa hot tub.

Do not use an Electrical extension cord to install any Canadian Spa hot tub.

The GFCI (ground fault circuit interrupter) must be installed according to the pictures below.

Canadian Spa Company requires that the electrical installation of your hot tub is carried out by a professionally licensed electrician and that all local electrical and building codes are adhered to.

Access to the electrical pack can be found by removing the panel directly below the topside control.

CONNECTING HOT TUB TO GFCI AND MAIN PANEL:

- All hot tubs must be wired with the appropriate sized wiring. Failure to do so will cause equipment damage and will not be covered by your warranty
- All hot tubs must be protected with a appropriately sized GFCI in the consumer panel. Have your electrician verify using the diagram below

ITEMS NEEDED TO HELP COMPLETE ELECTRICAL CONNECTION:

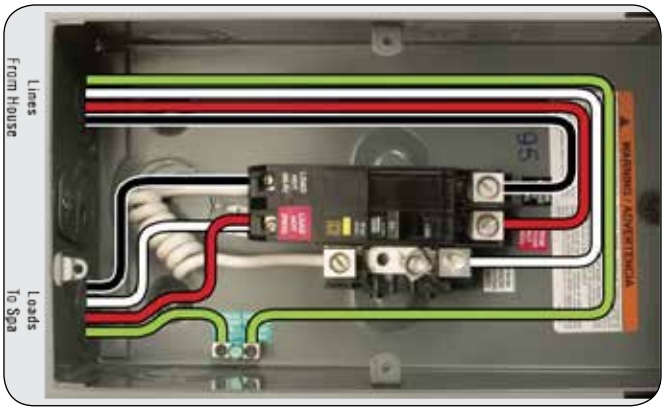
1. GFCI Breaker, 2. Electrical cable (check length and width for amperage and distance), 3. Cable gland, 4. clips.

1. Consumer Panel (GFCI Protected)

2. Outside isolation switch

3. Hot tub Control box

ELECTRICAL WIRING PLAN (NORTH AMERICA)



IMPORTANT: The electrical wiring of this spa must meet the requirements of any applicable local codes. The electrical circuit must be installed by a qualified electrician and approved by a local building/electrical inspection authority.

1. This spa must be permanently connected (hard wired) to the power supply. No plug-in connections or extension cords are to be used in conjunction with the operation of the spa.

   Supplying power to the spa which is not in accordance with these instructions will void both the independent testing agency listing and the manufacturer's warranty.
2. The power supplied to this spa must be a dedicated circuit with no other appliances or lights sharing the power provided by the circuit.
3. To determine the proper wire size, see Electrical Requirements section.
   a) Wire size must be appropriate per local codes.
   b) All wiring must be copper to ensure proper connections. Do not use Aluminum wire. Using Aluminum wire will void the manufacturer's warranty.
4. Although not required, a suitably rated isolator switch is recommended for accessibility
5. The electrical circuit supplied for the spa must include a suitable Ground Fault (GFCI) having a rated residual operating current not exceeding 30 mA.

IMPORTANT: For supply connections, use conductors sized on the basis of amperage but rated for 75°C (167°F).

6. An GFCI breaker must be used in order for the spa to function properly.
7. To gain access to the spa's power terminal block, remove the screws to the access panel located under the Topside Console. Remove the cover to the spa controller.
8. Feed the supply power cable through the side of the spa or from underneath the unit. Use the appropriate cable gland to secure the power supply.
9 Connect the wires, colour to colour on the terminal block. TIGHTEN SECURELY (all wires must be connected securely or damage could result).
10. After connecting your the electrical connection close the spa control box cover and replace the spa access panels.

Installation: Electrical requirements

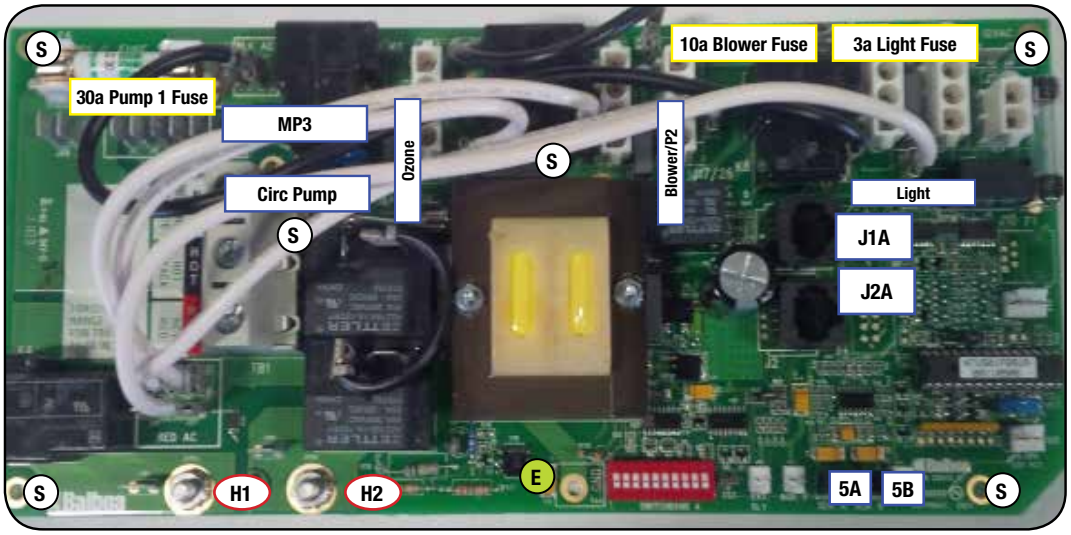
ELECTRICAL WIRING INSTRUCTIONS
Have a licensed electrician run the required 220V power line to the spa installation site. This power line must be permanently connected (hard-wired) to the mains supply. Do not use extension cords or plug-in type connections. At the site where the spa is to be located leave 5 metres of cable and secure with the appropriate cable gland. All electrical wiring to a hot tub / spa must be installed by a qualified, licensed electrician, and meet local building/electrical codes. A certificate from the electrician verifying it has been tested must be obtained.

PLEASE NOTE: Failure to supply the recommended power will void the Manufacturer's Warranty.

To connect your spa follow these instructions: Ensure that the power supply is shut off prior to connection. To be carried out by qualified personnel only:

1) Remove the access panel from the front of the spa cabinet.
2) To access the power terminal strip, remove the cover from the control box.
3) Feed the mains power supply into the box through one of the removable cable entry points. Fit a cable gland (not supplied) to the box and connect securely to the panel.
4) Connect wires to terminal block. All wires must be connected and tightened securely, or damage may result.
5) Replace the control box cover. Electrical connection is now complete.
6) A Green coloured terminal or a terminal marked Ground is located in the supply terminal box/compartment or on the side of the box. 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 the equipment, to reduce the risk of electric shock.
7) "BONDING LUGS" are provided on the external surface of the supply terminal box/compartment. All field installed metal components such as rails, ladders, drains or other similar hardware within 3 metres of the spa or hot tub must be bonded to the bonding lugs with a continuous copper wire equivalent in size to the supply conductors

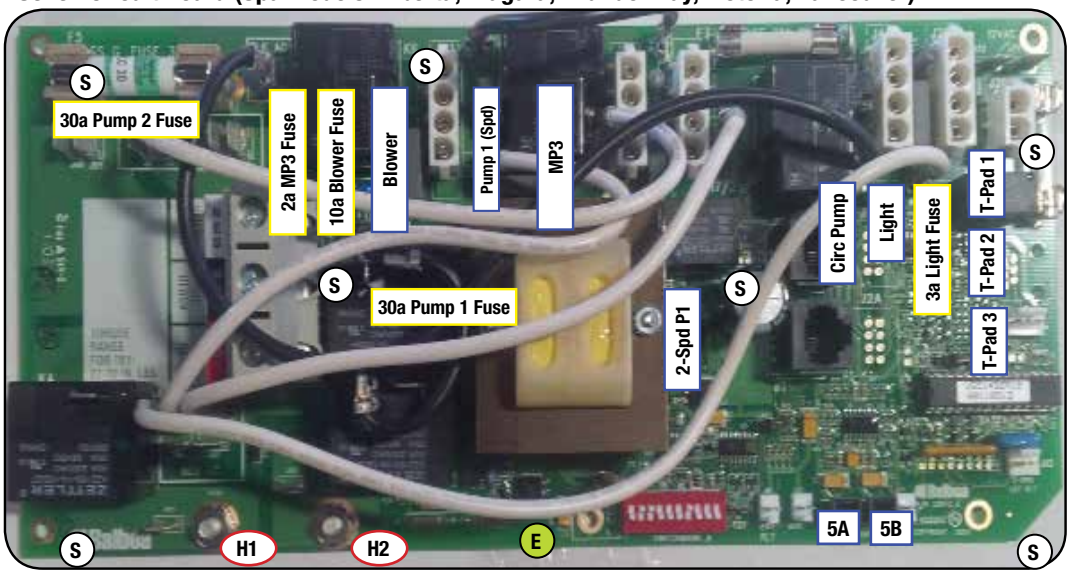
CPVS501z Circuit Board (Spa models: Toronto, Winnipeg, Halifax, Montreal, Yukon, Quebec)



CIRCUIT BOARD CODES:
E = 1 x Earth Screw
S = 6 x Standard Screws
H1 = Heater Connection '1'
H2 = Heater Connection '2'
SA = Sensor Port 'A'
SB = Sensor Port 'B'
J1A = Topside Port '1' -RJ Type plug (phone connector)
J2A = Topside Port '2' -RJ Type plug (phone connector)

JUMPER:
J91 = Jumper on 1 pin enables Real Time Clock function (ML900), Jumper on 2 pin disables RTC function

VS515Z Circuit Board (Spa models: Alberta, Niagara, Thunder Bay, Victoria, Vancouver)



CIRCUIT BOARD CODES:
E = 1 x Earth Screw
S = 7 x Standard Screws
H1 = Heater Connection '1'
H2 = Heater Connection '2'
SA = Sensor Port 'A'
SB = 2 x Sensor Port 'B'
T-Pad 1/2/3 = Topside Ports 1, 2 & 3 (Molex Connector)

JUMPER:
J91 = Jumper on 1 pin enables Real Time Clock function (ML900), Jumper on 2 pin disables RTC function

Installation: Electrical requirements

ELECTRICAL REQUIREMENTS FOR SWIM SPA

Your swim spa runs on 220V 60Hz. There are two configurations you can run your swim spa on.

The minimum supply current is 60 amps, in this configuration the heater will disengage if all 4 pumps are turned on.

The second option is to have the heater on even when the spa is running at full speed; in very cold climates this may be desirable especially if using the spa outdoors in winter continually. In this configuration a 60 amp supply is required.

The size of the wire required will be determined by the distance to the supply and the shielding method; your electrician will be able to advise you of the required wiring for your specific situation.

Access

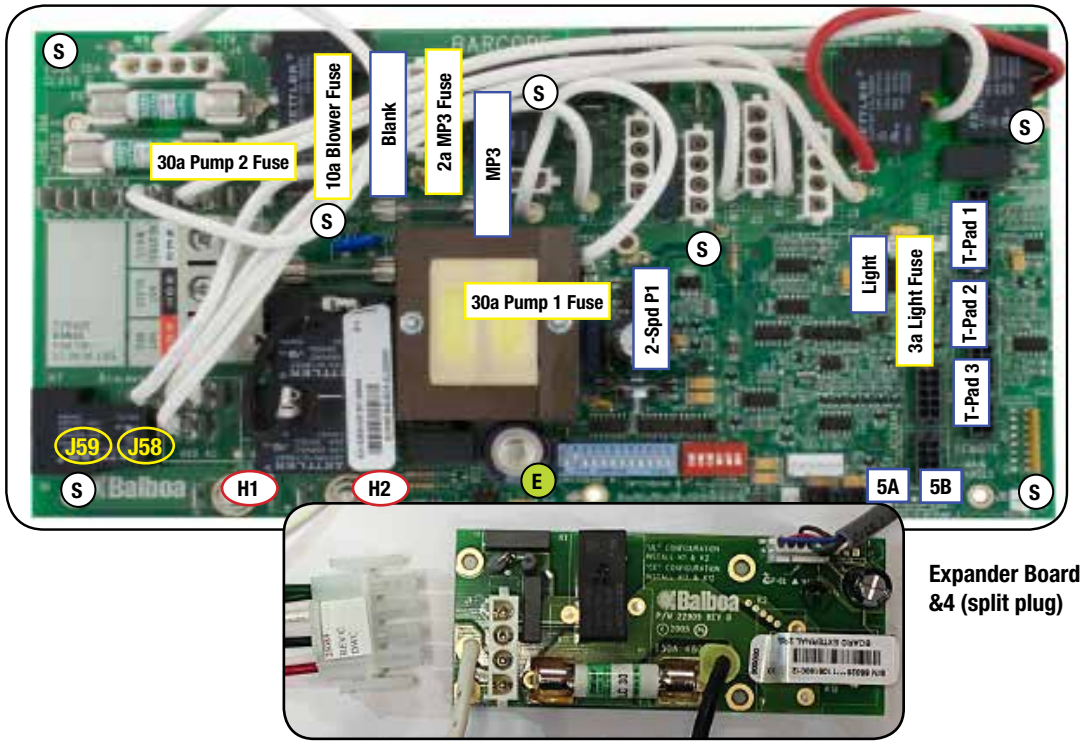
The Swim spa will arrive assembled as a single unit on a pallet. It will weigh approx one metric ton and cannot be disassembled. For this reason you will need to have a crane or other mechanical method of unloading the spa and getting it to your chosen site.

We recommend you book a contract lift where the lifting company will assess the situation and method of lift and carry insurance in case of accidental damage to the spa or the property. The spa warranty does not cover damage from installation. It is the responsibility of the customer or his agents be it crane company or lift operator to assess the lift and control all aspects of the moving of the spa. Canadian Spa Company will not take responsibility for any part of the moving of the spa, and cannot advise on the methods used to move the spa.

Base

The base for your swim spa must be a flat level surface that contacts the entire base of the spa. We recommend 15 cm of re-enforced concrete but any flat level base that is stable and will not shift or settle will suffice. If sinking your spa into the ground you need to provide adequate drainage for water so that the hole the spa sits in cannot flood as this will damage the electronics and electrical components. Also at least a metre of access to the entire front of the spa filters is required for component access. You are responsible for providing adequate access in order to repair the spa in case of fault.

EL XXXXXXX Circuit Board (Swim spa models: St Lawrence 13' and 16' Swim Spa)



CIRCUIT BOARD CODES:
E = 1 x Earth Screw
S = 7 x Standard Screws
H1 = Heater Connection '1'
H2 = Heater Connection '2'
SA = Sensor Port 'A'
SB = Sensor Port 'B'
T-Pad 1/2/3 = Topside Ports 1, 2 & 3 (Molex Connector)

JUMPER:
J8 = Jumper on 1 pin when using 2kW or 1kW Heater. Jumper on 2 pin when using 3kW Heater

J91 = Jumper on 1 pin enables Real Time Clock function (ML900), Jumper on 2 pin disables RTC function

Expander Board - 55026: for pump 3 &4 (split plug)

Starting your hot tub/spa

FILLING UP YOUR HOT TUB/ SPA

IMPORTANT: Before filling the spa, it is important to read and understand the water chemistry section of this manual. Do not proceed until the water chemistry section is understood and the source water is tested.

Verify that the spa is in the desired final location. Refer to the 'Choosing a Location' section - once filled, the spa cannot be moved without draining.

Follow these filling instructions to avoid damage to the spa pumps:

1. Leave power to the spa off until spa is completely filled.
2. Never leave an unfilled spa exposed to direct sunlight without the Spa Cover installed. Resulting damage such as bubbles and wrinkles in the spa shell and fading of the jet faces is not covered by the manufacturer's warranty.
3. Never operate spa pumps without water because this could result in permanent pump and/or heater damage which is not covered by the manufacturer's warranty.
4. Remove all warning labels from spa shell.
5. Apply Acrylic Surface Protection solution if desired to keep the spa shell clean, especially around the water line. Follow package instructions.
6. Remove the filter lid, basket and filter cartridge.
7. Inspect all Jets (shipping may cause jets to become loose or detached). Check to see that the Black Drain Valve (located to the left or right of the front access panel) is closed and that all barrel unions are tight. The slice valves should be open

   IMPORTANT: Follow the next steps closely to prevent damage to the Spa Pumps.
8. Insert garden hose or other clean water source directly into filter housing. Push hose pipe into filter housing until it stops. Fill up to bottom of the LED lights. Secure hose placement and turn on water.

Filling spa through the filter housing prevents air lock in the spa pumps, which is an air pocket preventing the flow of water through the pump. Permanent damage caused by running the pump with an air lock (or without water) is not covered by the manufacturer's warranty.

10. Check for leaks! Although spas are fully checked at the factory, shipping and delivery might cause a leak.
11. Before power is applied familiarise yourself with the spa control operations.
12. Adding a Scale Control during the filling process to reduces limescale. Follow package instructions.
13. Fill the spa until water is 1 inch (25mm) above the waterline on the spa shell or 1 inch (25mm) above the mid point of the filter housing. Do not overfill the spa. If needed, more water may be added after the power is turned on and the plumbing is filled. See Powering Up Spa section.
14. Turn water off and remove hose.
15. Reinstall filter cartridge, basket and filter lid.
16. Add Start-up Chemicals after power is turned on. Refer to Powering Up the Spa section.

DRAINING YOUR HOT TUB/ SPA USING THE DRAIN VALVE

1. Start by shutting off the electrical breaker connected to your spa
2. Open the drain valve located at the side of the spa and let the water drain out. This valve has a straightforward locking mechanism that stops the water from flowing out while you attach a garden hose to the cap. Here are the steps to operate your valve:
3. With the valve extended, unscrew the cap from the middle of the valve.
4. Screw in the male end of the garden hose to the valve and run the hose to your drain location. When ready, push the valve back in and twist it to empty the water from the spa.
5. Once the water has stopped flowing out of the drain valve, use the wet/dry vacuum to suck out any remaining water from each jet head (NOTE: If your spa is equipped with a blower, briefly turn the power to the spa back on and run the blower for 10 seconds to remove excess water. Shut off the power when finished).
6. Twist valve and pull out to CLOSE.

Starting your hot tub/spa

POWERING UP YOUR SPA

Once the spa is properly wired and filled with water, the spa power can be turned on and Start-up chemicals added.

1. Turn on GFCI breaker. If breaker trips immediately check wire connections. Upon initial power up, 4 sets of numbers flash on the LED display of the topside Console. The last number in the sequence is the incoming power meter which can be used to verify that the spa is wired correctly.
2. The spa begins an automatic priming routine which will last 5 minutes (**"Pr"** is on the LED display).
3. The priming routine will automatically run each spa pump to prime. When the **"Pr"** is displayed, press any PUMP button to prime that pump or wait for the priming routine to turn on the Pump. **IMPORTANT:** To avoid pump damage, do not run pumps for more than 1 minute without moving water. If no water is moving, turn the power off and perform air lock procedure.
4. The Topside Console display flashes **"100F"** then**"--F"** for approximately 2 minutes to determine water temperature as it flows through the heater.
5. The default pre-set temperature is 100F The last measured temperature is constantly displayed on the LCD readout. This temperature will be current only when the pump has been running for at least 2 minutes. Set the desired temperature between 80-104°F (26- 40°C) by pressing the temp button(s). If the water temperature is below the set temperature, the spa's heater and heat indicator light will turn on. All features of the Topside Console will be available. The spa will heat approximately 1° every 10 minutes.
6. Check for leaks! Although spas are fully checked at the factory, shipping & delivery might cause a leak. Remember to pay particular attention to barrel unions adjoining the heater. Contact your Canadian Spa dealer directly if there is a problem.

If your new spa pump does not prime (flow) on the initial start-up you may be experiencing an "air lock".

This normal occurrence can be easily corrected by loosening the plumbing union on the suction side of the Jet or Circulation Pump until water flows into the pump and all air is expelled.

PRESS BUTTONS SLOWLY FOR FIRST RUN WHEN STARTING UP

ONCE PR EXITS, SET TEMPERATURE ON SPA (SEE SPA OPERATION SECTION FOR DIFFERENT SPA TOPSIDES)

The above photograph refers to plug and play models only

Installation: Adding your spa cover

ATTACHING YOUR SPA COVER

The Spa Cover is an important accessory to help preserve the spa's temperature. The Spa Cover also serves as a safety device, preventing unauthorised users from entering the spa. Proper installation of the Spa Cover is an important addition in the spa installation.

1. Remove Spa Cover from packaging.
2. Place Spa Cover on spa in order to allow easy access to the topside console when opening the cover.
3. Line up attaching straps and secure with mounting hardware.
4. Use locking mechanism to lock Spa Cover in place.

IMPORTANT:

- Always lock Spa Cover in place when not using the spa.
- Do not walk or sit on Spa Cover.
- Remove snow build-up to avoid breaking the foam inner core.
- Do not drag Spa Cover on rough surfaces.

Like any luxury item - a boat, car or recreational vehicle, care and maintenance is critical to the lasting quality and enjoyment of a spa. The spa has been designed to provide years of health and relaxation benefits. Proper care and maintenance outlined in this section is necessary to ensure the longevity of the spa. Damage caused by not following care and maintenance guidelines in this section is not covered by the manufacturer's warranty.

BOTTOM MOUNT
HOT TUB COVER LIFTER.

Fully compatible with Canadian Spas; this Cover Lifter is the ideal choice to complement your hot tub or spa, making cover removal and replacement a quick, one-handed operation while reducing wear and tear on your hot tub cover.

- Mounts directly to the spa
- Can be mounted with optional under-spa brackets without the need for drilling holes in the skirt.
- Made of black powder-coated Aluminum
- Requires 31cm - 46 cm rear clearance

TOP MOUNT
HOT TUB COVER LIFTER

Fully compatible with ALL our Canadian Spa hot tubs and spas and most other brands; this Cover Lifter is the ideal choice to complement your Hot Tub, making cover removal and replacement a quick, one-handed operation and reducing wear and tear.

- Low-profile design
- Virtually zero clearance required behind spa – great for tight spaces (particularly if your spa is located in a gazebo)
- Mounts directly to the spa
- Fits up to 2.4m Spas
- Made of Aluminium

CANADIAN SPA CABINET MOUNT LIFTER.

Fully compatible with Canadian Spa Company spas; this cover lifter is the ideal choice to complement your hot tub or spa, making cover removal and replacement a quick, one-handed operation while reducing wear and tear on your hot tub cover.

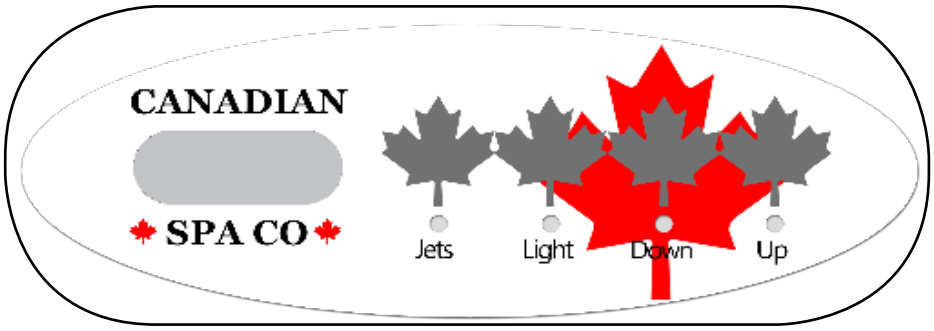
- Mounts directly to the spa cabinet
- Made of black powder-coated Aluminum
- Fits up to 2.4m Spas (including swim spa)
- Requires 30.48cm - 45.72cm rear clearance

Whilst this is the most suitable product to complement our hot tub range, this product will also fit most regular shaped hot tubs and spas up to 2.4m wide.

NOTE: This product requires some tools to assemble and fit, including: a spanner and a cordless drill.

Spa operation - VL 200 Control Pad

VL200 (3 Button) CPVS501Z - TOPSIDE CONTROL EXPLANATION (Models: Yukon, Winnipeg, Quebec)



Phone Plug RJ Type,
VL/GS Connector

START UP
When your spa is first actuated, it will go into Priming mode, indicated by **"Pr."** The Priming mode will last for less than 5 minutes (press **"Temp"** to skip Priming Mode) and then the spa will begin to heat and maintain the water temperature in the Standard mode.

TEMPERATURE ADJUSTMENT
Temp (80°F - 104°F / 26°C - 40°C)
The start-up temperature is set at 100F°/37°C. The last measured temperature is constantly displayed on the LCD.
Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes.

To display the set temperature, press the "Temp" pad once. To change the set temperature, press the pad a second time before the LCD stops flashing. Each press of the "Temp" pad will continue to either raise or lower the set temperature. If the opposite direction is desired, release the pad and let the display revert to the current water temperature. Press the pad to display the set temperature, and again to make the temperature change in the desired direction. After three seconds, the LCD will stop flashing and display the current spa temperature.

Note: If there is an alternate panel with separate **"Up"** and **"Down"** buttons in place of a **"Temp"** button may be used. Simply press **"Up"** or **"Down"** where a **"Temp"** button press is indicated. (Ignore the "direction reversal paragraph.")

JETS 1
Touch the "Jets" button once to activate the low speed of the pump and again for the high speed. Press the **"Jets"** button again to turn off the pump. If left running, the low speed of the pump will automatically turn off after 4 hours, and the high speed will automatically turn off after 15 minutes. It may also activate for at least 2 minutes every 30 minutes to detect the spa temperature and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically in its Filtration cycle, it cannot be deactivated from the panel; however, the high speed may be started.

Note: Filtration Cycles will activate every 12 hours from the time spa was first powered up.

LIGHT
Press the **"Light"** button to turn the light on and off. If left on, the light automatically turns off after 4 hours.

To change the light effect sequence: Press the light button on then off, then immediately press the button again (within 5 seconds) to allow you to select another lighting effect (i.e flashing, intermittent, fading) repeat sequence until desired lighting effect is achieved.

MODE
Mode is changed by pressing the **"Temp"** button, then pressing the **"Light"** button.

- **Standard Mode ("St")** is programmed to maintain the desired temperature. Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes. **"St"** will be displayed momentarily when you switch into Standard Mode.
- **Economy Mode** (**"Ec")** heats the spa to the set temperature **only** during filter cycles.
  "Ec" will alternate with temperature when heater current, **"Ec"** will display solid when heater is not current.
- **Sleep Mode** (**"SL")**heats the spa to within 20°F/10°C of the set temperature only during filter cycles.
  "SL" will alternate with temperature when heater current, **"SL"** will display solid when heater is not current.

PRESET FILTER CYCLES
The first filter cycle begins 6 minutes after the spa is powered up. The second filter cycle begins 12 hours later. Filter duration is programmable for 2, 4, 6, 8 hours or for continuous filtration (indicated by "F C"). The default filter time is 2 hours.

To program, press **"Temp"** then **"Jets."** Press **"Temp"** to adjust. Press "Jets" to exit programming.

The blower purges for 30 seconds at the beginning of each filter cycle. The low speed of the pump runs during filtration and the ozone generator (if installed) will be enabled.
Note: Setting filtration cycles for long periods on high cycles will overheat pump, it is advisable to set on "F 2" or "F 4." Only use "F 8" or "F C" to help clear cloudy water for a short period.

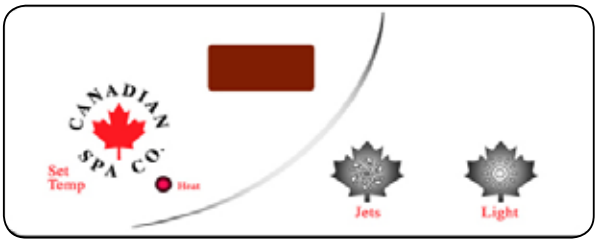
FREEZE PROTECTION (IC / ICE)
If the temperature sensors detect a drop to below 44°F/6.7°C within the heater, the pump will automatically activate to provide freeze protection. **"ICE"** will alternate with temperature display until temp reached.

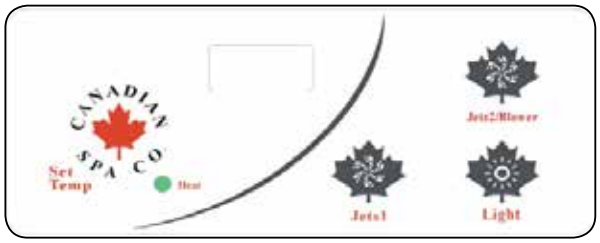
The equipment stays on until 4 minutes after the sensors detect that the spa temperature has risen to 45°F/7.2°C or higher. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a 4-minute delay in turn off. Contact your dealer for details.

Spa operation - VL404 Control Pad

VL404 North America (3 & 4 Button) VS501 SZ- TOPSIDE CONTROL EXPLANATION (Models: Winnipeg, Toronto, Quebec, Halifax, Montreal)

VL404 (3 & 4 Button) CPVS501Z - TOPSIDE CONTROL EXPLANATION (Models: Toronto)





START UP

When your spa is first actuated, it will go into Priming mode, indicated by **"Pr."** The Priming mode will last for less than 5 minutes (press **"Temp"** to skip Priming Mode) and then the spa will begin to heat and maintain the water temperature in the Standard mode.

TEMPERATURE ADJUSTMENT

Temp/Set (80°F - 104°F / 26°C - 40°C)

The start-up temperature is set at 100F°/37°C. The last measured temperature is constantly displayed on the LCD.

Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes.

To display the set temperature, press the "Temp" pad once. To change the set temperature, press the pad a second time before the LCD stops flashing. Each press of the "Temp" pad will continue to either raise or lower the set temperature. If the opposite direction is desired, release the pad and let the display revert to the current water temperature. Press the pad to display the set temperature, and again to make the temperature change in the desired direction. After three seconds, the LCD will stop flashing and display the current spa temperature.

Note: If there is not a blower on the system, an alternate panel with separate "Up" and "Down" buttons in place of a "Set" or "Temp" button may be used. Simply press "Up" or "Down" where a "Temp" or "Set" button press is indicated. (Ignore the "direction reversal paragraph.")

JETS 1

Touch the **"Jets"** button once to activate the low speed of the pump and again for the high speed. Press the **"Jets"** button again to turn off the pump. If left running, the low speed of the pump will automatically turn off after 4 hours, and the high speed will automatically turn off after 15 minutes. It may also activate for at least 2 minutes every 30 minutes to detect the spa temperature and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically in its Filtration cycle, it cannot be deactivated from the panel; however, the high speed may be started.

Note: Filtration Cycles will activate every 12 hours from the time spa was first powered up.

Note: Circulation pumps may also be installed into some makes of spas, which will run the heater and filtration cycles. The circulation pump cannot be controlled on the topside panel and will run for duration of heating or Filtration cycles.

JETS 2 / BLOWER (4 Button pad)

Touch the "Blower" button once to activate blower on and off. If left on, the blower will automatically turn off after 15 minutes.

Note: The blower will turn on for 30 seconds at the beginning of every filter cycle.

LIGHT

Press the **"Light"** button to turn the light on and off. If left on, the light automatically turns off after 4 hours.

To change the light effect sequence: Press the light button on then off, then immediately press the button again (within 5 seconds) to allow you to select another lighting effect (i.e flashing, intermittent, fading) repeat sequence until desired lighting effect is achieved.

MODE

Mode is changed by pressing the **"Temp"** button, then pressing the **"Light"** button.

- **Standard Mode ("St")** is programmed to maintain the desired temperature. Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes. **"St"** will be displayed momentarily when you switch into Standard Mode.
- **Economy Mode** (**"Ec")** heats the spa to the set temperature only during filter cycles. **"Ec"** will alternate with temperature when heater current, **"Ec"** will display solid when heater is not current.
- **Sleep Mode** (**"SL")**heats the spa to within 20°F/10°C of the set temperature only during filter cycles.
  "SL" will alternate with temperature when heater current, **"SL"** will display solid when heater is not current.

PRESET FILTER CYCLES

The first filter cycle begins 6 minutes after the spa is powered up. The second filter cycle begins 12 hours later. Filter duration is programmable for 2, 4, 6, 8 hours or for continuous filtration (indicated by **"FC"**). The default filter time is 2 hours.

To program, press **"Temp"** then **"Jets."** Press **"Temp"** to adjust. Press **"Jets"** to exit programming.

The blower purges for 30 seconds at the beginning of each filter cycle. The low speed of the pump runs during filtration and the ozone generator (if installed) will be enabled.

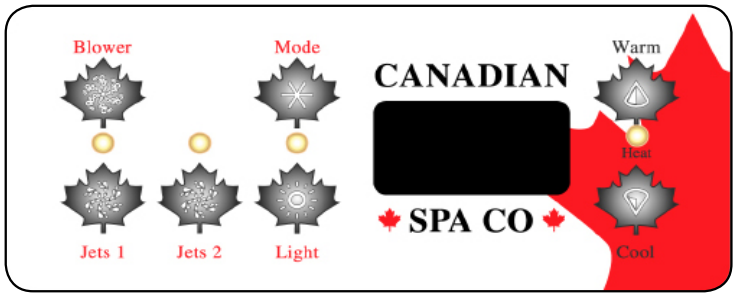
Note: Setting filtration cycles for long periods on high cycles will overheat pump, it is advisable to set on **"F 2"** or **"F 4."** Only use **"F 8"** or **"F C"** to help clear cloudy water for a short period.

FREEZE PROTECTION (IC / ICE)

If the temperature sensors detect a drop to below 44°F/6.7°C within the heater, the pump will automatically activate to provide freeze protection. **"ICE"** will alternate with temperature display until temp reached. The equipment stays on until 4 minutes after the sensors detect that the spa temperature has risen to 45°F/7.2°C or higher. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a 4-minute delay in turn off. See your dealer for details.

Spa operation - VL701S Control Pad

VL701S (7 Button) VS514SZ - TOPSIDE CONTROL EXPLANATION (Models: Niagara, Alberta,Victoria)



Phone Plug RJ Type,
VL/GS Connector

START UP
Temp Set (80 °F - 104 °F /26 °C - 40 °C)
The start-up temperature is set at 100 °F (37.5 °C). The last measured temperature is constantly displayed on the LCD.
Note that the last measured spa temperature displayed is current only when pump 1 (Jets 1) has been running for at least 2 minutes.
Press the "Warm " or "Cool " button to display and adjust the set temperature. After three seconds,the LCD will automatically display the last measured spa temperature.

JETS 1
Touch the "Jets 1"button once to activate the low speed of pump 1 and again for the high speed. Press the "Jets 1" button again to turn off pump 1. If left running, the pump's low speed will automatically turn off after 4 hours, and the pump's high speed will automatically turn off after 15 minutes. The pumps low speed runs when the spa is heating,when a filter cycle is activated, or when a freezing condition is detected. When the low speed turns on automatically, it cannot be deactivated from the panel; however, the high speed may be started.

JETS 2
Touch the "Jets 2"button once to turn pump 2 on or off, and to shift between low and high speeds if it is a two speed pump. If left running, pump 2 will automatically turn off after 15 minutes.
Note: Either pump can also be activated by an optional auxiliary control button.

LIGHT
Press the "Light"button to turn the spa light on and off. If left on, the light automatically turns off after 4 hours. By pressing the light button again the light sequence will change.

To change the light effect sequence: Press the light button on then off, then immediately press the button again (within 5 seconds) to allow you to select another lighting effect (i.e flashing, intermittent, fading) repeat sequence until desired lighting effect is achieved.

BLOWER
This button turns the blower on and off. The blower automatically turns off after 15 minutes.

MODE (M7 SYSTEM SPAS PRE- 2012)
Press this button to switch between Standard, Economy, and Sleep Modes.

- **Standard Mode ("Std")** is programmed to maintain the desired temperature. Note that the last measured spa temperature displayed is current only when pump 1 has been running for at least 2 minutes. **'STd'** will be displayed momentarily when you switch into Standard Mode.
- **Economy Mode ("Ecn")** heats the spa to the set temperature only during filter cycles.**"Ecn"** will display solid when temperature is not current,and will alternate with temperature when temperature is current.
- **Sleep Mode ("SLP")** heats the spa to within approx 20 °F (10 °C) of the set temperature only during filter cycles.**"SLP"** will dis-play solid when temperature is not current,and will alternate with temperature when temperature is current.

MODE (GS SYSTEMS AFTER 2012)
1. Press "Warm" to select **"Standard"**
2. Press "Warm" again to select "**Economy"**
3. Press "Warm" again to select "**Sleep"**

PRESET FILTER CYCLES
The first filter cycle begins 6 minutes after the spa is energised. The second filter cycle begins 12 hours later. Filter duration is programmable for 2, 4, 6, 8 hours or for continuous filtration (indicated by **"FILC"**).The default filter time is 2 hours. To program, press **"Warm"**or **"Cool"**, then **"Jets 1."** Press **"Warm"** or **"Cool"**to adjust. Press **"Jets 1"** to exit programming. Pump 2 purges for 5 minutes and the blower purges for 30 seconds at the beginning of each filter cycle. The low speed of pump 1 runs during filtration and the ozone steriliser (if installed) will be enabled.

FREEZE PROTECTION
If the temperature sensors detect a drop to approximately 44°F (6.7 °C) within the heater, then the pump and the blower will automatically activate to provide freeze protection. The equipment stays on until 4 minutes after the sensors detect that the spa temperature has risen to approx 45 °F (7.2 °C) or higher. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Aux freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a 4-minute delay in turn off. See your dealer for details.

OPTIONAL
If your system is equipped with a circ pump, it may be configured to work in one of three different ways:

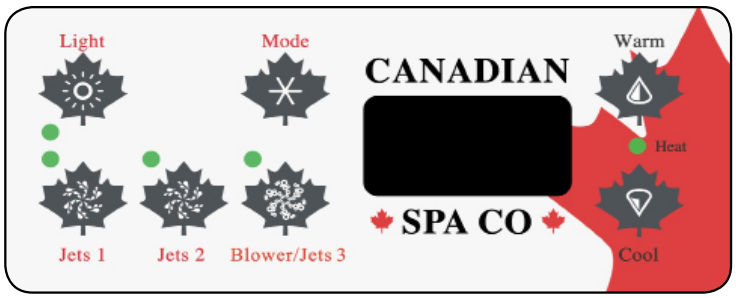
1) The circ pump operates continuously (24 hours) with the exception of turning off for 30 minutes at a time when the water temperature reaches 1.5°C (3°F) above the set temperature (most likely to happen in very hot climates).

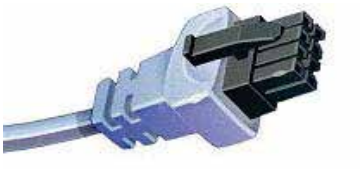
2) The circ pump stays on continuously, regardless of water temperature.

3) The circ pump will come on when the system is checking temperature (polling), during filter cycles, during freeze conditions, or when another pump is on.

Spa operation - ML551Control Pad

ML551 (7 Button) EL2000m3 - TOPSIDE CONTROL EXPLANATION (Models: Niagara, Alberta, Vancouver, Victoria)





Molex type
ML/GL Connector

START UP
When your spa is first powered up, it will go into Priming mode, indicated by **"Pr."** The Priming mode will last for less than 5 minutes (press **"Warm"** button to skip Priming Mode) and then the spa will begin to heat and maintain the water temperature in the Standard mode.

TEMPERATURE ADJUSTMENT
Temp (80°F - 104°F / 26°C - 40°C)
The start-up temperature is set at 100F°/37°C. The last measured temperature is constantly displayed on the LCD.
Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes.
Press the "Warm2 or "Cool" button to display and adjust the set temperature. After 3 seconds, the LCD will automatically display the last measured spa temperature.

JETS 1
Touch the **"Jets 1"** button once to activate the low speed of the pump and again for the high speed. Press the **"Jets 1"** button again to turn off the pump. If left running, the low speed of the pump will automatically turn off after 4 hours, and the high speed will automatically turn off after 15 minutes. It may also activate for at least 2 minutes every 30 minutes to detect the spa temperature and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically in its Filtration cycle, it cannot be deactivated from the panel; however, the high speed may be started.
Note: Filtration Cycles will activate every 12 hours from the time spa was first powered up.
Note: Circulation pumps may also be installed into some makes of spas, which will run the heater and filtration cycles. The circulation pump cannot be controlled on the topside panel and will run for duration of heating or Filtration cycles.

JETS 2
Touch the **"Jets 2"** button once to activate and again to turn off. If left running the Pump will automatically turn off after 15 minutes.
Note: Jets 2 will purge for 5 minutes at the beginning of each filter cycle.

BLOWER/JETS 3
Touch the **"Blower/Jets 3"** button once to activate either blower or pump 3 depending on item that is fitted in spa, and press again to turn off. If left running the blower/jets 3 will automatically turn off after 15 minutes.
Note: Blower will purge for 30 seconds at the beginning of each filter cycle. Jets 3 will purge for 5 minutes at the beginning of each filter cycle.

LIGHT
Press the **"Light"** button to turn the light on and off. If left on, the light automatically turns off after 4 hours.

To change the light effect sequence: Press the light button on then off, then immediately press the button again (within 5 seconds) to allow you to select another lighting effect (i.e flashing, intermittent, fading) repeat sequence until desired lighting effect is achieved.

MODE
This button is used to switch between Standard, Economy or Sleep Mode settings.

- **Standard Mode ("Std")** is programmed to maintain the desired temperature. Note that the last measured spa temperature dis played is current only when the pump has been running for at least 2 minutes.
  "Std" will be displayed momentarily when you switch into Standard Mode. (Spa will restart heating when 0.5 degree temperature is lost in spa)
- **Economy Mode ("Ecn")** heats the spa to the set temperature **only** during filter cycles.
  "Ecn" will alternate with temperature when heater current, **"Ecn"** will display solid when heater is not current. (Spa will only heat within Filter cycle sessions)
- **Sleep Mode ("SLP")**heats the spa to within 20°F/10°C of the set temperature only during filter cycles.
  "SLP" will alternate with temperature when heater current, "SLP" will display solid when heater is not current. (Spa will only heat within Filter cycle sessions)

To switch between Modes. Press **"Mode"** button, then **"Cool"** button until you reach desired mode, then press **"Mode"** button to select.

PRESET FILTER CYCLES
The first Filter Cycle begins 6 minutes after the spa is powered up. The second Filter Cycle begins 12 hours later.
Filter duration is programmable from 1 to 12 hours. Indicated by **'F 1', 'F 2', 'F 3'** until **'F 12'.**
- The default Filter time is **'F 2.'**
- To program, press **"Warm"** button, then **"Jet 1."**
- Press the **"Cool"** button to adjust to desired setting.
- To select and continue press **"Jet 1"** button.

"DN", **"D"** or **"N"** will now be shown on display.
- **"DN"** = Day and Night Filtration
- **"D"** = Day Filtration
- **"N"** = Night Filtration

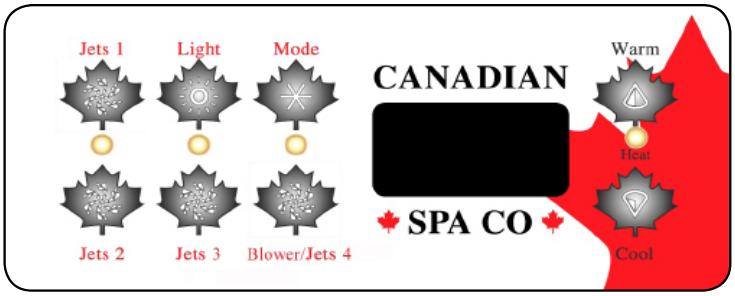
(Please note: 2 Filtration cycles daily is recommended)
- To Select Program press **"Cool"** until desired setting.
- To select and Exit press **"Jet 1"** button

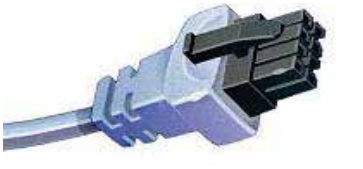
Freeze Protection - ICE
If the temperature sensors detect a drop to approximately 44 °F (6.7 °C) within the heater, then the pump(s) and blower will automatically activate to provide freeze protection.
The equipment will stay on until 4 minutes after the sensors detect that the spa temperature has risen to approx. 45°F (7.2 °C) or higher.
N.B. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Aux freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a 4-minute delay in turn off. See your dealer for details.

Spa operation - ML551Control Pad (UK/Europe/North America)

ML551 (8 Button) EL2KM3 St Lawrence 13 & 16' Swim Spa (UK/Europe)

ML551 (8 Button) EL2000 St Lawrence 13 & 16' Swim Spa (North America)





Molex type
ML/GL Connector

START UP

When your spa is first powered up, it will go into Priming mode, indicated by **"Pr."** The Priming mode will last for less than 5 minutes (press **"Warm"** button to skip Priming Mode) and then the spa will begin to heat and maintain the water temperature in the Standard mode.

TEMPERATURE ADJUSTMENT

Temp (80°F - 104°F / 26°C - 40°C)
The start-up temperature is set at 100F°/37°C. The last measured temperature is constantly displayed on the LCD.
Note: that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes.
Press the **"Warm2"** or **"Cool"** button to display and adjust the set temperature. After 3 seconds, the LCD will automatically display the last measured spa temperature.

JETS 1

Touch the **"Jets 1"** button once to activate the low speed of the pump and again for the high speed. Press the **"Jets 1"** button again to turn off the pump. If left running, the low speed of the pump will automatically turn off after 4 hours, and the high speed will automatically turn off after 15 minutes. It may also activate for at least 2 minutes every 30 minutes to detect the spa temperature and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically in its Filtration cycle, it cannot be deactivated from the panel; however, the high speed may be started.
Note: Filtration Cycles will activate every 12 hours from the time spa was first powered up.
Note: Circulation pumps may also be installed into some makes of spas, which will run the heater and filtration cycles. The circulation pump cannot be controlled on the topside panel and will run for duration of heating or Filtration cycles.

JETS 2

Touch the **"Jets 2"** button once to activate and again to turn off. If left running the Pump will automatically turn off after 15 minutes.
Note: Jets 2 will purge for 5 minutes at the beginning of each filter cycle.

JETS 3

Touch the **"Jets 3"** button once to activate pump 3, and press again to turn off. If left running jets 3 will automatically turn off after 15 minutes.
Note: Jets 3 will purge for 5 minutes at the beginning of each filter cycle.

BLOWER/JETS 4

Touch the **"Blower/Jets 4"** button once to activate pump 3, and press again to turn off. If left running Blower/Jets 3 will automatically turn off after 15 minutes.
Note: Jets 4 will purge for 5 minutes at the beginning of each filter cycle.

LIGHT

Press the **"Light"** button to turn the light on and off. If left on, the light automatically turns off after 4 hours.

To change the light effect sequence: Press the light button on then off, then immediately press the button again (within 5 seconds) to allow you to select another lighting effect (i.e flashing, intermittent, fading) repeat sequence until desired lighting effect is achieved.

MODE

This button is used to switch between Standard, Economy or Sleep Mode settings.

- **Standard Mode ("Std")** is programmed to maintain the desired temperature. Note that the last measured spa temperature displayed is current only when the pump has been running for at least 2 minutes. **"Std"** will be displayed momentarily when you switch into Standard Mode. (Spa will restart heating when 0.5 degree temperature is lost in spa)
- **Economy Mode ("Ecn")** heats the spa to the set temperature only during filter cycles. **"Ecn"** will alternate with temperature when heater current, **"Ecn"** will display solid when heater is not current. (Spa will only heat within Filter cycle sessions)
- **Sleep Mode ("SLP")**heats the spa to within 20°F/10°C of the set temperature only during filter cycles.
  "SLP" will alternate with temperature when heater current, **"SLP"** will display solid when heater is not current. (Spa will only heat within Filter cycle sessions)

To switch between Modes. Press **"Mode"** button, then **"Cool"** button until you reach desired mode, then press **"Mode"** button to select.

PRESET FILTER CYCLES

The first Filter Cycle begins 6 minutes after the spa is powered up. The second Filter Cycle begins 12 hours later.
Filter duration is programmable from 1 to 12 hours. Indicated by **'F 1', 'F 2', 'F 3'** until **'F 12'**

- The default Filter time is **'F 2.'**
- To program, press **"Warm"** button, then **"Jet 1."**
- Press the **"Cool"** button to adjust to desired setting.
- To select and continue press **"Jet 1"** button. **"DN"**, **"D"** or **"N"** will now be shown on display.

- **"DN"** = Day and Night Filtration
- **"D"** = Day Filtration
- **"N"** = Night Filtration

(Please note: 2 Filtration cycles daily is recommended)

- To Select Program press **"Cool"** until desired setting.
- To select and Exit press **"Jet 1"** button

Freeze Protection - ICE

If the temperature sensors detect a drop to approximately 44 °F (6.7 °C) within the heater, then the pump(s) and blower will automatically activate to provide freeze protection.
The equipment will stay on until 4 minutes after the sensors detect that the spa temperature has risen to approx. 45°F (7.2 °C) or higher.
N.B. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Aux freeze sensor protection acts similarly except with the temperature thresholds determined by the switch and without a 4-minute delay in turn off. See your dealer for details.

Chemical maintenance

INITIAL TREATMENT

Fill spa with fresh water through the skimmer basket. Do not use water from a water softener. Before adding chemicals, it is important to find out your spa's water capacity in litres (See opposite)

1. Add 60 ml (2 oz) of Scale Control (scale Inhibitor) per1000 litres.
2. Once the spa has sufficient water for circulation, turn on power.
3. Add 30 ml. (1 oz) of Spa Clear per 1000 litres.
4. Using the test strips, balance pH to 7.2-7.6, Total alkalinity to 80-150 ppm.
5. Add a chlorine tablet to floating dispenser or Chlorine granules directly into water

DAILY MAINTENANCE

1. The spa must be left powered up at all times!
2. Test and maintain ideal levels of pH, Alkalinity, and Chlorine using the test strips.

WEEKLY MAINTENANCE

1. Add 30 ml of Scale Control (scale Inhibitor) per 1000 litres while water is circulating.
2. Add 30 ml of Spa Clear per 1000 litres
3. Test and maintain ideal levels of pH, Alkalinity and Chlorine using the test strip.

PERIODIC MAINTENANCE

1. Calcium and organic waste can build up on the filter. Use Filter Clean every month to prolong the life of the filter.
2. If foam appears, squirt a small amount of Defoamer on the area.
3. We recommend you drain your spa every 3 months to ensure water purity.

   *** Important Note:** In hard water areas use two to three times the recommended amount of stain and scale inhibitor (Control).

Spa Capacity (Litres)	
Spa type	Volume
Yukon	455
Quebec	645
Montreal	795
Halifax	835
Winnipeg	895
Toronto	980
Alberta	1150
Thunder Bay	1273
Victoria	1230
Vancouver	1260
Niagara	1465
St Lawrence 13'	5250
St Lawrence 16'	6475

Canadian Spa Company
Deluxe Chemical Kit

PROBLEM	POSSIBLE CAUSE	SOLUTION
Cloudy water	Suspended particles High pH (test to verify) Poor filtration High dissolved solids	Add spa clear Add pH down Clean filter w/ Filter Free Empty spa and re-fill
Coloured Water	Dissolved metals	Add Scale Control (de-scaler)
Foaming	Fragrance High concentration of oils,	Reduce amount of fragrance Add Foam Free defoamer soaps and organic compounds, Rinse bathers and suits prior to entry
Scale deposits	High calcium level High pH (control) High alkalinity Balance pH	Add Stain & Scale Inhibitor
Odour	High level of organic contaminates	Increase the amount of Chlorine tabs and check Ozonator
Eye/skin irritation	Low pH and/or alkalinity Combined chlorine due to organic contamination	Add Alkalinity Booster Increase the amount of Chlorine tabs / Granules and check Ozonator

Diagnostic Messages

MESSAGE	MEANING	ACTION REQUIRED
	No message on display. Power has been cut off to spa	The control panel will be disabled until power is re-established. Based on the spa controller configuration will return to the Factory Default Settings.
--	Temperature unknown	After the Pump has been running for 2 minutes, the current water temperature will be displayed.
HH/OHH	"Overheat" The spa has shut down. One of the sensors has detected that the spa water is 110°F/43.3°C or higher.	DO NOT ENTER THE WATER. Remove Spa Cover and allow water to cool. Once the Heater has cooled, press any button to reset. If spa does not reset, shut off power to the spa and contact the dealer.
OH/OHH	"Overheat" The spa has shut down. One of the sensors has detected that the spa water is 110°F/43.3°C	DO NOT ENTER THE WATER. Remove spa cover and allow water to cool. At 107°F/41°C, the spa should automatically reset. If spa does not reset, shut off power to the spa and call your dealer.
SA/SnA	Spa is shut down. The sensor that is plugged into Sensor "A" jack is not working.	If problem persists, contact the dealer. (May appear temporarily in an overheat condition).
Sb/Snb	Spa is shut down. The sensor that is plugged into Sensor "B" jack is not working.	If problem persists, contact the dealer. (May appear temporarily in an overheat condition).
Sn/SnS	Sensors are out of balance. If alternating with spa temperature, it may be a temporary condition. If flashing by itself, spa is shut down.	If problem persists, contact the dealer. (May appear temporarily in an overheat condition).
HL/HFL	A significant difference between temperature sensors has been detected. This could indicate a flow problem.	If the water level is normal, make sure all pumps have been primed and no Air Lock exists. If problem persists, contact the dealer.
LF	Persistent low flow problems. (Display on the fifth occurrence of HL/HFL message with in 24 hours.). Heater is shut down, but other spa functions continue to operate.	Follow action required for HL/HFL message. Heating capability of the spa will not reset automatically; Press any button to reset.
dr	Possible inadequate water, poor flow or air bubble detected in the heater. Spa is shut down for 15 minutes.	If the water level is normal, make sure all pumps have been primed and no Air Lock exists. This message will reset within 15 minutes. If problem persists, contact the dealer.
dry	Inadequate water detected in heater. (Displays on third occurrence of dr message). Spa is shut down.	Follow action required for dr message. Spa will not reset automatically; Press any button to reset.
IC/ICE	"Ice" Potential freeze condition detected.	Please contact your Dealer
EC/ECN	Spa is in Economy Mode	See Spa Modes section
SL/SLP	Spa is in Economy Mode	See Spa Modes section

Troubleshooting

ISSUE	POSSIBLE CAUSE	SOLUTION
Cloudy water	Inadequate filtration/dirty filter	Increase filtration Cycle duration if used heavily. Clean or replace filter as necessary
	Excessive oils/organic matter	Shock spa with Sanitiser or Shock
	Suspended particles	Run jets and clean Filter; Use a Clarifier
	High total dissolved solids (TDS)	Depending on severity, drain spa to half full and refill or completely drain and refill.
	Low Chlorine levels	Add Chlorine
Cloudy Green Water	Low sanitizer level	Use Spa Shock and adjust sanitiser level
Water Odour	Excessive organics	Use Spa Shock and adjust sanitiser level
	Improper sanitisation	Use Spa Shock and adjust sanitiser level
	Inadequate filtration/Dirty filter	Increase Filtration Cycle duration if used heavily, Clean or replace filter as necessary
	Low pH	Raise pH with product “Spa Up”.If metals are present use a Metal Chelate
	Low Chlorine levels	Add Chlorine
Chlorine Odour	Chloramine level too high	Use Spa Shock and adjust sanitiser level
	Low pH	Raise pH with PH UP
Bromine Odour/Yellow Water	Low pH	Raise pH with PH UP ”
Musty Odour	Bacteria or algae growth	Shock water with Sanitiser, if problem persists drain, clean and refill the spa
Foaming/Scum Ring	Build up of body oils, lotion and chemicals resulting from soap or detergent	Remove scum line with a clean towel. Use a “Foam-Free” product
	Calcium Hardness too low	Add Calcium to obtain 150-400 ppm Calcium level
	Large amounts of Total Dissolved Solids(TDS)	Drain and refill the spa
Algae Growth	High pH	Adjust pH
	Low Sanitizer level	Shock and adjust Sanitiser level, Adjust pH.
Eye Irritation	Chloramine level too high	Shock and adjust Sanitiser level, Adjust pH
	Low sanitizer level	Shock and adjust Sanitiser level, Adjust pH.
	pH or total Alkalinity out of balance	Adjust pH
Skin Irritation/Rash	Unsanitary water	Use Spa Shock and adjust Sanitiser level.
	Chlorine level above 5 ppm	Allow Chlorine level to drop below 5 ppm
	Soaking too long	Recommended use 15 minutes or less
Stains	Total Alkalinity and/or pH too low	Adjust Total Alkalinity and/or pH. with PH UP
	High iron or copper content	Use a Metal Chelate (Metal be Gone).
Limescale	High Calcium content	Adjust Total Alkalinity and/or pH
	Total Alkalinity and/or pH too high	Add Scale Control or completely drain and refill spa
Erratic pH Test Results/	Low Sanitiser level	Test pH, when Sanitiser level is below 5 ppm
Unusual pH Test Color	Old pH indicator dye	Replace test strips

Canadian Spa Company
Deluxe Chemical Kit

Canadian Spa Company
Chemical Kit

Trouble shooting

ISSUE	POSSIBLE CAUSE	SOLUTION
• **No power**	Breaker or GFCI off	Check that GFCI breaker is turned ON
	Loose wire connection	Check wire connections
• **GFCI trips**	Mis-wired	Check wiring per diagram, especially neutral wire
	Component failure	Perform elimination test to determine failed component. See elimination test section
• **Heater not operating or spa not heating**	Improper voltage to heater	At power up, verify voltage to heater by observing the last numbers displayed on Topside Console:'12' for 110-120 volt spas or '24' for 230-240 volt spas
	Set on ECON or SLP mode	Reset to STD
	Temperature set to low	Set temperature above current water temperature
	Water level too low	Add water until water level is 1 inch (25mm) above Water Line
	Blown fuse	Check 30amp bus fuse on control board
	Component failure	Contact dealer
• **Pump not operating or turns off after a short time**	Air lock	See Air lock procedure
	Improper voltage to pump	Contact dealer or qualified electrician
	Time out	As a safety precaution, the Spa Controller only allows Pump operation for 15 minutes continuously
	Component failure	Contact dealer or qualified electrician
	Thermal overload	During extreme high ambient temperatures the pump motor may reach the motor thermal overload limit. Wait until motor cools and retry. If problem persists contact dealer
• **Pump surging**	Low water level	Add water until water level is 1 inch (25mm) above water line
• **Light will not turn on**	Burned out bulb	Change bulb
	Light bulb may have fallen out	Unscrew back housing and reinsert bulb
• **Air Blower will not operate or turns off after a short time**	Blown fuse	Check Air Blower fuse
	Time out	As a safety precaution, the Spa Controller only allows Air Blower operation for 15 minutes continuous
	Thermal overload	During extreme high ambient temperatures the Air Blower motor may reach the motor thermal overload limit. Wait until motor cools to and retry. If problem persists contact dealer
	Component failure	Contact dealer or qualified electrician
• **Ozone Generation Unit will not operate**	Blown fuse	Check Ozone fuse
	Burned out UV bulb	Replace unit
	Component failure	Contact dealer
• **No water Flow from Jets**	Air lock	See air lock procedure
	Adjustable jets turned off	Turn jets on
	Faulty pump or motor	Contact dealer
	Slice valve closed	Open slice valve
	Clogged filter	Clean or change filter
• **Jet popped Out**	Jet face not seated	Insert jet and turn clockwise until jet snaps into place you will feel the jet seat
	Broken jet	Contact dealer
• **No air flow from jet**	Adjustable jets turned off	Turn jets on
	Air control valve not open	Open air control valve
	Broken jet	Contact dealer
	Jet not seated properly	Insert jet and turn clockwise until jet snaps into place as it seats
• **Noisy Pump or Motor**	Air lock	See air lock procedure
	Low water level	Add water until water level is 1 inch (25mm) above water line
	Clogged filter	Clean or replace filter
	Damaged or warn motor bearings	Contact dealer
• **Spa Overheating**	High ambient temperature	During extreme high ambient temperatures the spa may over heat due to internal friction with in the plumbing. Reduce set temperature or remove spa cover to cool.
	Filtration duration	Reduce filtration cycle duration to minimum setting
• **Spa will not turn off**	Spa is trying to heat	Check set temperature or heat indicator light on topside console is ON
	Spa is on high filter cycle	Check filter cycle and reduce to 2 or 4
	Spa is in standard mode	See spa modes section
• **Abnormal water**	Excessive evaporation	Check and adjust spa cover if needed
	Excessive splashing	Monitor water level after each use
• **Water not clean**	Dirty or clogged filter	Clean or replace filter
	Poor water chemistry	See common water problems section
	Insufficient filtration Cycle duration	Based on usage ,adjust filtration cycle duration
	High solids content	See common water problem section

HOW TO CHANGE A FILTER ON A CANADIAN SPA HOT TUB

If the spa will not be used for extended periods in a location where there IMPORTANT: SWITCH OFF ELECTRICAL SUPPLY BY DISCONNECTING THE PLUG AT THE SOCKET OR ISOLATION SWITCH. Please contact a qualified electrician if you need assistance or contact us at Canadian Spa.

Change a floating skimmer filter

Step 1. Removing the basket and filter can be done with or without water in the spa/hot tub (Tip: when lifting filter from water have a net or sieve to hand in order to catch any residual dirt).

Step 2. To lift basket turn anti-clockwise until the flat part of the basket aligns with the flat part of the filter housing

Step 3. Lift out the basket

Step 4. Remove the old filter

Step 5. Replace with the new filter

Change a Wier style skimmer filter

Step 1. Remove the filter cover by sliding up the front plate

Step 2. Remove the filter tray in order to access the filter compartment.

Step 3. Remove the old filter(s) by unscrewing

Step 4. Replace with the new filter(s) and rescrew filter

Step 5. Ensure the filter tray locates on the runners and slide back in place.

Note: Follow the same process for a single port filter

NOTE FOR SWIM SPAS:
Change the two filters (stacked one on top of each other). Bottom filter is threaded and the top filter is push fit)

TIP: CLEANING YOUR FILTER

It is advisable to clean your hot tub filters every 2 or 3 weeks.

- Turn off spa power
- Remove the cartridge from the filter housing and use a garden hose, or a tap, to wash down the filter. Rinse until all dirt and debris have been removed.
- Soak the filter cartridge for at least 1 hour (overnight is preferable) in a clean, suitable size bucket using a filter cleaner solution.
- Rinse the cartridge again after cleaning to remove any traces of cleaning solution.
- Always dry the filters before inserting them back into your hot tub. This ensures that the filters perform to there best and last longer. Let them dry naturally. It is also a good idea to keep a spare set of filters.
- Do not run spa without filters

To order more filters call **1 877 347 7727** or our website: www.canadianspacompany.com

How to Guide

HOW TO CHANGE A PUMP ON A CANADIAN SPA HOT TUB

TOOLS NEEDED: Phillips CH3 screwdriver, 51/8”(13mm) spanner head, oil filter grip (available at large hardware retailers), Wire- cutters.

IMPORTANT: SWITCH OFF ELECTRICAL SUPPLY BY DISCONNECTING THE PLUG AT THE SOCKET OR ISOLATION SWITCH. Please contact a qualified electrician if you need assistance or contact us at Canadian Spa

STEP 1 - Unscrew side panels to access pump on the side with air vent and the MP3 Player housing

STEP 2 - Remove panel strips and side panels (on the ‘touch pad ‘ side)

STEP 3 - Uncouple on/off switch to MP3 allowing you to remove the panel away from the spa and gain access to the pump.

STEP 4 - Shut down both slice valves to isolate water

STEP 5 - Unscrew Control pack cover using a Phillips screwdriver

STEP 6 - Remove clamp to wire - unplug pump plug from circuit board (ensure cable ties are removed from plumbing)

STEP 7 - Unscrew earth wire from pump (ensure wire is moved safely away from pump area)

STEP 8 - Remove all 4 nuts from pump base using a 51/8”(13mm) wrench

STEP 9 - Undo pump union joints using an oil filter grip (available at large hardware retailers).

STEP 10 - Lift pump off the 4 screw pump base and replace with NEW pump ensuring the screw heads are aligned with pump holes

STEP 11 - To re-assemble reverse the above sequence

How to Guide

HOW TO CHANGE A HEATER ON A CANADIAN SPA HOT TUB

TOOLS NEEDED: Drill, Phillips CH3 screwdriver, 13mm spanner head, Grips, 6mm wrench 3/8 Wrench.

IMPORTANT: SWITCH OFF ELECTRICAL SUPPLY BY DISCONNECTING THE PLUG AT THE SOCKET OR ISOLATION SWITCH. Please contact a qualified electrician if you need assistance or contact us at Canadian Spa

STEP 1 - Unscrew side panels to access pump on the fascia with air vent and the MP3 Player housing

STEP 2 - Remove panel strips and side panels on the 'touch pad 'side

STEP 3 - Shut down slice valves either side of control box.

STEP 4 - Unscrew face plate of control box using screwdriver

STEP 5 - Unplug sensors plug from circuit board - Pinch tab down before pulling out plug.

STEP 6 - Unscrew heater nuts using 3/8 inch+9 wrench underneath copper jumper and hold in place while unscrewing top nuts using a 6 mm spanner

STEP 7 - Unscrew both locking nuts on heater from brackets using 6 mm spanner

STEP 8 - Undo left and right side heater unions using large grips

STEP 9 - Remove gaskets from plumbing and fit new ones from new heater

STEP 10 - Install new heater.

STEP 11 - To re-assemble reverse the above sequence

How to Guide

REPLACE AN AMPLIFIER ON A HOT TUB

TOOLS NEEDED: Drill, Phillips CH3 screwdriver, Wire cutters, insulation tape, 4 x 5A connection strips, small flat screwdriver.

IMPORTANT: SWITCH OFF ELECTRICAL SUPPLY BY DISCONNECTING THE PLUG AT THE SOCKET OR ISOLATION SWITCH. Please contact a qualified electrician if you need assistance or contact us at Canadian Spa

STEP 1 - Remove panels below Touch pad (to get access to MP3 panel housing on/off button)

STEP 2 - Unscrew nut and then unplug on/off connection from amplifier

STEP 3 - Remove wiring from MP3 housing.

STEP 4 - Disconnect power supply lead from amplifier by pulling plugs apart.

STEP 5 - Cut Black/Red and Red wires on amplifier wires.

STEP 6 - Unscrew amplifier from cabinet.

STEP 7 - Re-screw NEW amplifier onto cabinet

STEP 8 - Remove insulation cover from wires.

STEP 9 - Insert wires into 5A connection blocks (Red to Brown and Red/Black to Grey).

STEP 10 - Insulate tape connector and wire

STEP 11 - To re-assemble follow steps 4-1

How to Guide

REPLACE A SPEAKER ON A HOT TUB

TOOLS NEEDED: Drill, Wire cutters, 5A Connection Strip x 2, Small flat screwdriver, insulation tape.

IMPORTANT: SWITCH OFF ELECTRICAL SUPPLY BY DISCONNECTING THE PLUG AT THE SOCKET OR ISOLATION SWITCH.
Please contact a qualified electrician if you need assistance or contact us at Canadian Spa

STEP 1 - Remove panel next to faulty speaker

STEP 2 - Unplug white plug to speaker light

STEP 3 - Cut Red wire and Red/ Black wires to speaker

STEP 4 - Using body of speaker unscrew by turning anti-clockwise (Note: the nut is 'silliconed' in place')

STEP 5 - Screw in new speaker using body to tighten - removing nut and using fixed nut to spa until tight.

STEP 6 - Remove insulation from speaker wires and join using 5A connection block (Red to Red and Black/Red to Black/Red)

STEP 7 - Insulate tape wires and block before reassembly

STEP 8 - To re-assemble reverse the above sequence: Steps 3 to 1

Disconnect the inlet and outlet union to the Control Pack

Remove the motors, pumps, electronics, and blowers and store them in a warm dry place

Ensure the drain valve is left open (i.e pushed in)

Wrap spa/hot tub cover or Canadian Spa winter cover

Winterising your spa

If the spa will not be used for extended periods in a location where there is likelihood of below freezing temperatures, the spa should be prepared as follows:

1 Shut off power

2 Drain spa of all water.

3 If spa is equipped with a blower, turn on power and run the blower for 10 seconds to clean the air channels of water.

4 Shut off the power

5 Remove any remaining water with a sponge or wet dry vacuum.

6 Disconnect the inlet and outlet union to the Control Pack, and tilt the Pack, slightly to allow any remaining water to run out. Using a wet dry vacuum or similar product, vacuum any additional water out of the uncoupled lines, pack and pump heads.

7 Remove the motors, pumps, electronics, and blowers and store them in a warm dry place to prevent moisture damaging the units. (Leave the TOPSIDE control in place and seal wire ends in a plastic bag.

8 Using a wet/dry vacuum, either suck water from each jet, and open line or blow water from each jet.

9 Ensure Hose Bib (drain) is left open.

10 Cover all open pipes from motors and control system with screen mesh to prevent debris from entering the system.

11 Wrap spa/hot tub with hard cover (for added protection; cover spa with tarpaulin or Canadian Spa winter cover)

Note: Damage caused by moisture, condensation, and or any other problems arising from winterizing your spa will not be covered under the warranty.

For other service packages available visit:
www.canadianspacompany.com

Limited Warranty

LIMITED WARRANTY

Canadian Spa Company. Manufacturing extends the following warranties to the original purchasers of its portable spas:

Structural Warranty: Canadian Spa Co. warrants structure of the spa shell against water loss due to structural failure for the period of 25 years from the date of purchase by the original owner. If in Canadian Spa Co. opinion, structure proves to be defective Canadian Spa Co. will repair or, at its option, replace the defective structure without charge to the customer

Surface Warranty: Canadian Spa Co. warrants the acrylic finish against defects in material and workmanship and specifically against blistering, cracking or delamination for the period of two (2) years from the original purchase date to the original purchaser. If, in Canadian Spa Co. opinion, the surface proves to be defective during this period, Canadian Spa Co. will repair or, at its option, replace the defective spa shell without charge to the customer.

Plumbing Warranty: Canadian Spa Co. warrants the plumbing of the spa will remain free from leaks for the period of two (2) years from the date of purchase to the original purchaser.

Equipment Warranty: Canadian Spa Co. warrants the equipment pack (pump, blowers, heater, and control system) against malfunction and defects in the materials and workmanship for two (2) years from the date of purchase to the original purchaser.

Skirting Warranty: Canadian Spa Co. warrants the wood skirting surrounding the spa to be free from defects in materials and workmanship at the time of purchase. Because wood skirting is a natural product and subject to weathering, any fading, crazing, cracking or warping of the wood finish is not covered.

Extent of Warranty: This Limited Warranty applies to portable spas manufactured after January 1st 2013 and sold by authorised Canadian Spa Co. dealers to residential retail customers. This Limited Warranty is given only to the first retail purchaser and terminates upon transfer of ownership. No warranty is provided on light bulbs, light lens covers, filters or any dealer installed accessories. Cost of installation, removal and/or shipping of the spa is not covered by this Limited Warranty. In the event Canadian Spa Co. deems necessary the removal of the spa to a place of repair or that the spa must be replaced, any and all costs of the spa removal and replacement; landscaping, decking, fencing and/or structure removal, alteration and/or replacement; or other costs of providing access to the spa will be for the purchaser. This Warranty applies only to spas in single family, residential installations. This Limited Warranty becomes void if the spa is placed in commercial application.

TERMS, CONDITIONS AND LIMITATIONS

Any defect or damage caused by installation, alteration or repair by anyone who is not an employee of Canadian Spa Co. or authorised service technician is not covered by the Warranty. This Warranty becomes void if the spa has been subjected to misuse, abuse, alteration or attempted alteration, repairs or attempted repairs by anyone other than an authorised Canadian Spa Co. service technician, improper installation, improper water chemistry, improper maintenance, acts of god, or damage caused beyond the control of Canadian Spa Co. Misuse and abuse shall include any operation of the spas other than as directed in the Canadian Spa Co. Manual.

Examples of misuse and abuse include, without limitation:

- Damage of the spa surface caused by leaving the spa uncovered while the spa is empty of water or due to covering the spa with plastic film of any kind.
- Damage to the spa surface caused by contact with cleaners or solvents.
- Damage caused by the operation of the spas at water temperatures outside of the range of 2 – 40 degrees Celsius.
- Damage caused by unapproved sanitizer such as calcium hypochlorite, tri-chlor type chlorine or any sanitising chemical that may remain undissolved on the spa surface.
- Damage caused by failure to provide even sufficient support for the spa.

Warranty Performance: In the event of a defect covered under the terms of this Limited Warranty, notify your authorised Canadian Spa Co dealer. A Canadian Spa Co. authorised service technician will repair the spa subject to the Terms and Conditions of this Limited Warranty. Use all reasonable means to protect the spa from further damage. Reasonable travel charges may be assessed by Canadian Spa Co. or its authorised service technician if the spa is located outside the nearest authorised service technician's service area. This warranty covers parts ONLY and does not include travel or on-site service charges unless a Service Contract has been purchased from Canadian Spa Co. Ltd.

Disclaimers: Canadian Spa Company or any of its authorised service technicians shall not be held liable for injury, inconvenience, loss of use, chemical or water damage, transportation costs, continent liabilities or any other incidental or consequential costs, expenses or damage as result of any deficiency or alleged deficiency of the spa. In no event shall Canadian Spa Co. be liable, for any reason or cause, in excess of the amount paid for the product. No other warranties, expressed or implied, are valid. No agent, dealer, distributor, Service Company or other party is authorised to change, modify or extend the terms of this Limited Warranty in any manner whatsoever.

Our vision is to continue being a caring viable, community-driven company.

We improve our customers quality of life by delivering a unique product and outstanding customer care.

Our pride of reputation ensures peace of mind and continuous commitment to our customers.

Notre objectif est de demeurer une societe quiassocie bien etre, viabilite et esprit communautaire.

Nous ameliorons la qualite de vie de nos clients en leur offrant a la fois des produits uniques ainsi qu'un service client de premier ordre

Le renom de notre reputation garantit a nos clients tranquilite d'esprit et engagement perpetuel.

Unsere Unternehmensphilosophie ist es, ein zuverlässiger Partner mit hohen Anforderungen an Qualität und Ausstattung zu sein und zu bleiben.

Wir möchten Ihre Lebensqualität verbessern, indem wir einzigartige Produkte und herrausragenden Service liefern und Sie mit unseren Aussenwhirlpools Entspannung und Erholung in Ihrer eigenen Wellnessoase finden.

Dafür steht die Canadian Spa Company seit mehr als 20 Jahren.

North America Office:
Canadian Spa Company
3-3620B Laird Road
Mississauga, Ontario
Canada, L5L 6A9
T: +1-877-347-7727
F: +1 (905) 825 2513
www.canadianspacompany.ca

US Office:
Canadian Spa Company
6848 Airport Rd
W Jordan Utah
84084
T: +1 (801) 696-5677
www.canadianspacompany.com

UK Office:
Canadian Spa Company
Canada House
Salbrook Road
Salfords, Redhill
Surrey, RH1 5GL, UK
T: +44 1293 824094
F: +44 1293 824750
www.canadianspacompany.co.uk

Germany Office:
Canadian Spa Company GmbH
Lutzerathstrasse 127
51107
Koln
Germany
T: +49-2203-995580
www.canadian-whirlpools.de

France Office:
Canadian Spa Company sarl
2 rue de la Moudrerie
27370 La Saussaye
France
T: +33 235 775 331
www.canadianspacompany.fr

Dubai / Middle East Office
Canadian Spa Company
JAFZA 8, Office no.27
P. O. Box 26455
Dubai, UAE
T: + 9714 - 8815223
F: + 9714 - 8815224
www.canadianspacompany.co.uk

Canadian Spa Company meets ISO 9001 Standards.
When you purchase a hot tub from Canadian Spa Company, the ISO 9001 certification assures world class excellence in manufacturing and customer service.