

# IMPORTANT SAFETY INSTRUCTIONS

## READ AND FOLLOW ALL INSTRUCTIONS.

**WARNING** – To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times. Hot tub covers are equipped with clip tie-downs or snap locks. There is no representation that the cover tie-downs or snap locks will prevent access to the hot tub. Cover locks are to discourage unsupervised children from entering the hot tub and to secure cover in high-wind conditions.

**WARNING** – A wire connector is provided on this unit to connect a minimum 6 AWG (13 mm<sup>2</sup>) solid copper conductor between this unit and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.

**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 hot tub unless they are supervised at all times.

**DANGER** – Risk of Injury. The suction fittings in this hot tub are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate hot tub if the 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.

**DANGER** – Risk of Electric Shock. Install at least 5 feet (1.5 m) from all metal surfaces. As an alternative, a spa may be installed within 5 feet of metal surfaces if each metal surface is permanently connected by a minimum 6 AWG (13 mm<sup>2</sup>) solid copper conductor to the wire connector on the terminal box that is provided for this purpose.

**DANGER** – Risk of Electric Shock. Do not permit any electric appliance, such as a light, telephone, radio, or television, within 5 feet (1.5 m) of a hot tub.

**WARNING** – To reduce the risk of injury:

- The water in a hot tub should never exceed 40°C (104°F). Water temperatures between 38°C (100°F) and 40°C(104°F). are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when hot tub use exceeds 10 minutes.
- Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 38°C (100°F).
- Before entering a hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.
- The use of alcohol, drugs, or medication before or during hot tub use may lead to unconsciousness with the possibility of drowning.
- Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, diabetes, or any condition requiring medical treatment should consult a physician before using a hot tub.
- Persons using medication should consult a physician before using a hot tub since some medication may induce drowsiness while other medication may affect heart rate, blood pressure, and circulation.

**CAUTION** – Risk of Electric Shock. Do not leave compartment door open.

**CAUTION** – Risk of Electric Shock. Replace components only with identical components.

**CAUTION** – Do not operate the audio/video controls while inside the hot tub.

**WARNING** – Prevent Electrocutation.:

- Do not connect any auxiliary components (for example cable, additional speakers, headphones, additional audio/video components, etc.) to the system.
- These units are not provided with an outdoor antennae; when provided, it should be installed in accordance with Article 810 of the National Electrical Code, ANSI/NFPA 70.
- Do not service this product yourself as opening or removing covers may expose you to dangerous voltage or other risk of injury. Refer all servicing to qualified service personnel.
- 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 servicing to a qualified service personnel.
- This unit should be subjected to periodic routine maintenance (for example, once every 3 months) to make sure that the unit is operating properly.

**WARNING: CHILDREN SHOULD NOT USE SPAS OR HOT TUBS WITHOUT ADULT SUPERVISION.**

**WARNING: DO NOT USE SPAS OR HOT TUBS UNLESS ALL SUCTION GUARDS ARE INSTALLED TO PREVENT BODY AND HAIR ENTRAPMENT.**

**WARNING: PEOPLE USING MEDICATIONS AND/OR HAVING AN ADVERSE MEDICAL HISTORY SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT UTB.**

**WARNING: PEOPLE WITH INVECTIOUS DISEASES SHOULD NOT USA A SPA OR HOT TUB.**

**WARNING: TO AVOID INJURY EXERCISE CARE WHEN ENTERING OR EXITING THE SPA OR HOT TUB.**

**WARNING: DO NOT USE DRUGS OR ALCOHOL BEFORE OR DURING THE USE OF A SPA OR HOT TUB TO AVOID UNCONSCIOUSNESS AND POSSIBLE DROWNING.**

**WARNING: PREGNANT OF POSSIBLY PREGNANT WOMEN SHOULD CONSULT A PHYSICIAN BEFORE USING A SPA OR HOT TUB.**

**WARNING: WATER TEMPERATURE IN EXCESS OF 38°C (100°F) MAY BE INJURIOUS TO YOUR HEALTH.**

**WARNING: BEFORE ENTERING THE SPA OR HOT TUB MEASURE THE WATER TEMPERATURE WITH AN ACCURATE THERMOMETER.**

**WARNING: DO NOT USE A SPA OR HOT TUB IMMEDIATELY FOLLOWING STRENUOUS EXERCISE.**


**WARNING: PROLONGED IMMERSION IN A SPA OR HOT TUB MAY BE INJURIOUS TO YOUR HEALTH.**



# IMPORTANT SAFETY INSTRUCTIONS continued

**WARNING:** DO NOT PERMIT ELECTRIC APPLIANCES (SUCH AS A LIGHT, TELEPHONE, RADIO, OR TELEVISION) WITHIN 1.5M (5 FT) OF THIS SPA OR HOT TUB.

**WARNING:** When using this electrical equipment, basic safety precautions should always be followed, including the following:

- A green colored terminal or a terminal marked G, GR, Ground, Grounding, or with the  symbol is located inside the supply terminal box or compartment. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment.
- At least two lugs marked "BONDING LUGS" are provided on the external surface or on the inside of the supply terminal box or compartment. To reduce the risk of electric shock, connect the local common bonding grid in the area of the hot tub or spa to these terminals with an insulated or bare copper conductor not smaller than No. 6 AWG (13 mm<sup>2</sup>).
- All field-installed metal components such as rails, ladders, drains or other similar hardware within 1.5 m(5 ft) of the spa or hot tub shall be bonded to the equipment grounding bus with copper conductors not smaller than No. 6 AWG (13 mm<sup>2</sup>).

**WARNING:** Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia are:

1. Unawareness of impending hazard;
2. Failure to perceive heat;
3. Failure to recognize the need to exit the hot tub;
4. Physical inability to exit the hot tub;
5. Fetal damage in pregnant women;
6. Unconsciousness and danger of drowning.

**WARNING:** THE USE OF ALCOHOL OR DRUGS CAN GREATLY INCREASE THE RISK OF FATAL HYPERTHERMIA IN HOT TUBS OR SPAS.

**CAUTION:** MAINTAIN WATER CHEMISTRY IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTION.

**CAUTION:** TEST THE GROUND FAULT CIRCUIT INTERRUPTER BEFORE EACH USE OF THE SPA.

## SAVE THESE INSTRUCTIONS

## PROPER PLACEMENT OF YOUR HOT TUB

It is extremely important that the base on which the hot tub is placed is smooth, level, and can uniformly support the complete weight without settling or shifting. If these requirements are not met, possible damage to your cabinet or tub shell may result. Damage caused by improper support is not covered under warranty. It is the responsibility of the hot tub owner to meet these requirements and to assure the integrity of the hot tub support at all times.

We recommend a reinforced poured concrete slab that has a minimum thickness of 4 inches (10cm). If a wood deck is used, construction must comply with all local building codes.

Proper drainage around the hot tub is necessary to allow overflow, rain and other casual water to drain away from the hot tub so the equipment area does not get flooded and cause problems. Failure to do so will void warranty.

## POWER INSTALLATION INSTRUCTIONS

**Important Notice:** The electrical installation of this tub must meet the requirements of all applicable country, state and local codes. The electrical installation must be performed by a qualified electrician and be approved by the local building/electrical inspection authority.

**WARNING:** DO NOT CONNECT POWER UNTIL TUB IS FILLED COMPLETELY WITH WATER!

### 230V/240V Service

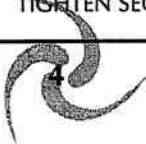
1. NO PLUG-IN CONNECTIONS OR EXTENSION CORDS ARE TO BE USED IN CONJUNCTION WITH THE OPERATION OF THIS TUB. All wiring must be permanently connected (hard wired) to the equipment pack. Power supply that is not in accordance with these instructions will void warranty.
2. This tub requires that the power supply be on a dedicated circuit with no other electrical appliances or lights sharing the circuit that is providing power to the hot tub.
3. Do not use aluminum wiring. ALL WIRING MUST BE COPPER.
4. A suitable ground fault circuit interrupter (GFCI) as required by the local building/electrical inspection authority, must be included in the electrical circuit supplied to the hot tub.
5. Proper wire size must be used in accordance to the local building/electrical inspection authority.
6. All wires must be securely hooked up or damage could result. **TIGHTEN SECURELY!**

### 120V Service

1. This tub requires that the power supply be on a dedicated circuit with no other electrical appliances or lights sharing the circuit that is providing power to the hot tub.
2. Do not use aluminum wiring. ALL WIRING MUST BE COPPER.
3. A suitable ground fault circuit interrupter (GFCI) as required by the local building/electrical inspection authority, must be included in the electrical circuit supplied to the hot tub.
4. Proper wire size must be used in accordance by the local building/electrical inspection authority.

### Cord Connection Option

The cord connection option is only available for 120V operation on the Omni, Bella, Cottage and Impulse models rated 12/32 A. Only the manufacturer supplied power cord and GFCI should be used for cord connected installations. Plug the cord into a 120V receptacle.



# POWER INSTALLATION INSTRUCTIONS continued

## Permanently connected installation instructions

Electrical installation should be performed by a qualified licensed electrician.

1. Remove cabinet service panel. The panel is secured with pan head Phillips screws.
2. Remove system controller cover.
3. If spa was manufactured with a cord.
  - a. Disconnect cord wires from terminal TB1 and ground wire from ground bar.
  - b. Loosen cord strain relief.
  - c. Remove cord.
  - d. Remove strain relief.
4. Drill hole for conduit through bottom or side of spa.

5. Secure conduit at system controller box.
6. Connect hot and neutral wires to corresponding terminals TB1. Connect ground wire to grounding bar on the outside of box by running it through hole marked for ground wire.
7. Voltage selection for North American 60 Hz systems.
  - a. 120V installation. Attach jumper to J11 and J32. A jumper wire is supplied in a bag attached to the back or side of controller. Switch DIP switch A10 to on (up).
  - b. 240V installation. Remove J11 to J32 jumper if installed. Switch DIP switch A10 to off (down).
8. Attach system controller cover.
9. Attach cabinet service panel.

**WARNING: DO NOT CONNECT POWER UNTIL TUB IS FILLED COMPLETELY WITH WATER!**

# POWER REQUIREMENTS

Your Hot Tub is designed to provide optimum performance when connected to the maximum electrical service. The listing below will show the various options and performance levels available on your hot tub.

**A new GFCI must be used for your Hot Tub installation. Do not use an existing breaker (GFCI), as its condition is unknown.**

	Escape, Escape R, Sport, Crown II, Warrior XL, Amoré, Retreat	Omni, Cottage, Bella, Impulse, Impulse DP	Escape Premium, Escape Premium R, Crown XL, Rendezvous Royal
<b>AMERICAS 60Hz</b>	120v/240v	120v/240v	240v
Circuit Breaker	20A/50A	15A/50A	50A
Number of Wires	3/4	3/4	4

Escape, Sport, Crown II, Impulse, Crown XL

Escape Premium, Escape Premium R, Rendezvous Royal

	Escape, Sport, Crown II, Impulse, Crown XL	Escape Premium, Escape Premium R, Rendezvous Royal
<b>EUROPE 50Hz</b>	230v	230v
Circuit Breaker	16A	32A
Number of Wires	3	3

**On all systems, your Hot Tub must be connected to a dedicated circuit breaker that is not shared with any other equipment.**

**DO NOT USE EXTENSION CORDS OF ANY KIND.**

# START-UP INSTRUCTIONS

1. Clean tub of all debris.
2. Use a garden hose to fill your hot tub through the empty filter canister (to avoid air pockets during filling) to the appropriate level of a minimum 2 inches (5.08cm) over the filter skimmer.
3. **DO NOT USE WATER THROUGH A WATER SOFTENER.**
4. Locate the shut-off T-valves. Make sure they are in the up or open position. (See page 7)
5. Check heater and pump unions. Occasionally during shipping these become loosened. A simple tightening of these (if necessary) will do, being careful not to over tighten. (See page 7)
6. Once water has reached correct level, turn power on to the hot tub.
7. To activate jets and to purge air from the pump, press/push jet button located on the top side control. A second press/push

will put the pump on high speed. Repeat this process until water flows from the jets. When the jets are working, set the pump to low speed. (See page 9 or 10)

8. Some start-up chemicals will be needed; please see your dealer for recommendations.
9. Set the temperature located on the top side control (See page 9 or 10) to the desired setting. The heater will shut off when the water temperature reaches the set temperature.
10. Place the hot tub cover on tub. Keeping the cover on the hot tub when the tub is not in use will help minimize operating costs.
11. The time it will take for the water temperature to reach the desired setting will vary.

# OPERATING INSTRUCTIONS

## Whirlpool Diverter Jet(s):

Your hot tub (except Omni™) is equipped with at least one Whirlpool Diverter jet (2, 3, or 4 position), located on filter wall on most models. These jets when turned will divert water to different groups of jets. Each position is reached with a 90 degree turn of the whirlpool jet face. Always turn the collar of the diverter jet clockwise when possible. Remember, turning your diverter will affect the flow of water to different seat jets. Adjust to suit your personal needs.

## Topside Control Pad:

Your hot tub is equipped with an electronic topside control pad. The topside control pad will allow you to control the speed of the pump, the light, and the temperature setting, as well as some programming options. Familiarize yourself with the topside control by viewing the Operation Guide at the back of this manual.

