

Section I

Safety Instructions

IMPORTANT SAFETY INSTRUCTIONS

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

1. **READ AND FOLLOW ALL DIRECTIONS**

2. **DANGER** -- To reduce the risk of injury, do not permit children to use this product unless they are closely supervised by an adult.

2A. **WARNING -- RISK OF CHILDREN DROWNING**

Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children DO NOT use a spa or hot tub unless they are supervised at all times.

3. **DANGER** -- To reduce the risk of injury to persons, do not remove suction fittings.

4. A pressure wire connector is provided in the control box inside the unit to permit connecting a minimum No. 8 AWG (8.4mm) solid copper bonding between this point and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5m) of the unit, as needed to comply with local requirements.

5. Installer to provide drainage of compartment for electrical components.

6. (For equipment assemblies) All other electrical equipment must be installed at least 5 feet (1.5m) from inside wall of tub using non-metallic plumbing.

7. (For equipment assemblies) To reduce the risk of drowning from hair and body entrapment, install a suction fitting(s) with a marked flow rate in gallons-per-minute that equals or exceeds the flow rate marked on the equipment assembly.

8. **DANGER -- RISK OF ELECTRICAL SHOCK**

Install at least 5 feet (1.5m) from all metal surfaces.

9. **WARNING** -- For indoor use only. This unit is not intended for outdoor use.

IMPORTANT SAFETY INSTRUCTIONS CONT'D.

10. RISK OF ELECTRIC SHOCK.

Do not connect to a circuit operating at more than 150 volts to ground for a 220-240 volt, 2-wire, single-phase or 3-wire, 3-phase spa.

11. DANGER -- RISK OF ELECTRICAL SHOCK

Do not permit any electrical appliance (such as a light, telephone, radio or television) within 5 feet (1.5m) of a spa or hot tub.

12. To reduce the risk of injury:

A. The water in a spa or 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 extended use (exceeding 10-15 minutes) and for young children. SwimEx recommends water temperatures between 70°F and 90°F.

B. 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 or hot tub water temperatures to 38°C (100°F).

C. Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer, since the tolerance of water temperature-regulating devices may vary as much as 3°C (5°F).

D. The use of alcohol, drugs, or medication before or during spa/hot tub use may lead to unconsciousness with the possibility of drowning.

E. Persons suffering from obesity or persons with a medical history of heart disease, low or high blood pressure, circulatory problems, or diabetes should consult a physician before using a spa or hot tub.

F. Persons using medication should consult a physician before using a spa or hot tub, since some medications may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.

13. A ground-fault circuit-interrupter must be provided if this device is used to control an underwater lighting fixture. The conductors on the load side of the ground-fault circuit-interrupter shall not occupy conduit, boxes or enclosures containing other conductors unless the additional conductors are also protected by a ground-fault circuit-interrupter.

IMPORTANT SAFETY INSTRUCTIONS CONT'D.

14. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electrical Code, ANSI/NFPA 70-1987. The disconnecting means must be readily accessible to the tub occupant, but installed at least 5 feet (1.5m) from tub water.
15. The causes, symptoms and effects of hyperthermia may be described as follows: Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F. The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy and an increase in the internal temperature of the body. The effects of hyperthermia include (1) unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit spa, (4) physical inability to exit spa, (5) fetal damage in pregnant women, and (6) unconsciousness resulting in a danger of drowning.

WARNING -- The use of alcohol, drugs or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.

16. **SAVE THESE INSTRUCTIONS**

IMPORTANT SAFETY INSTRUCTIONS

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

1. **READ AND FOLLOW ALL INSTRUCTIONS**
2. (For all units) **DANGER** -- To reduce the risk of injury, do not permit children to use this product unless they are under close adult supervision.
- 2A. (For all units) **WARNING- RISK OF CHILD DROWNING**
Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children **DO NOT** use a spa or hot tub unless they are supervised at all times.
3. (For cord- and plug-connected units) Connect to a grounded, grounding type receptacle only.
4. (For cord- and plug-connected units) Do not bury cord.
5. (For cord- and plug-connected units) **WARNING** -- To reduce the risk of electric shock, replace damaged cord immediately.
6. (For all units) **DANGER** -- To reduce the risk of injury to persons, do not remove suction fittings.
7. (For all units) A pressure wire connector is provided inside the unit's control box to permit connection of a minimum No. 8 AWG (8.4mm) solid copper bonding conductor between this point and any metal equipment, metal enclosures of electrical equipment, metal water pipe, or conduit within 5 feet (1.5m) of the unit, as needed to comply with local requirements.
8. (For cord- and plug-connected units) This appliance is provided with a ground-fault circuit-interrupter (give location). With the plug connected to the power supply and the unit operating, push the test button before each use. The unit should stop operating and the reset button should appear. Push the reset button. The unit should now operate normally. If the interrupter fails to operate in this manner, there is a ground current flowing, indicating the possibility of electric shock. Disconnect the plug from the receptacle until the fault has been identified and corrected.

IMPORTANT SAFETY INSTRUCTIONS CONT'D.

9. (For permanently installed units with GFCI) This appliance is provided with a ground-fault circuit-interrupter (give location). Before each use and with the unit operating, push the test button. The unit should stop operating and the reset button should appear. Push the reset button. The unit should now operate normally. If the interrupter does not perform in this manner, a ground current is flowing, indicating the possibility of an electric shock. Disconnect the power until the fault has been identified and corrected.
10. (For all units) Installer to provide drainage of compartment for electrical components.
11. (For blowers and equipment assemblies provided with a blower) Install at least 5 feet (1.5m) from tub water using non-metallic plumbing. Install blower no less than 1 foot (305mm) above the maximum water level to prevent water from contacting electrical equipment. Install in accordance with the installation instructions.
12. (For equipment assemblies) Install at least 5 feet (1.5m) from inside wall of tub using non-metallic plumbing.
13. (For equipment assemblies) To reduce the risk of drowning from hair and/or body entrapment, install suction fitting(s) with a marked flow rate of gallons-per-minute that is equal to or greater than the flow rate marked on the equipment assembly.

14. (For all spas) **DANGER--RISK OF ELECTRIC SHOCK**
Install at least 5 feet (1.5m) from all metal surfaces.

(A spa may be installed within 5 feet of metal surfaces IF each metal surface is permanently connected by a minimum No. 8 AWG (8.4mm) solid copper conductor, attached to the wire connector on the terminal box that is provided for this purpose.)

15. (For units with gas heaters that are intended for outdoor use only.)

WARNING -- Do not install indoors. This unit uses a gas heater that requires proper ventilation and is intended for outdoor use only.

- 15A. (For units intended for indoor use only) **WARNING** -- For indoor use only. This unit is not intended for outdoor use.

IMPORTANT SAFETY INSTRUCTIONS CONT'D.

15B. (For all units) DANGER- RISK OF ELECTRIC SHOCK

Do not permit any electrical appliance (ie: light, telephone, radio or television) within 5 feet (1.5m) of a spa or hot tub.

15C. (For all units) To reduce the risk of injury:

A. The water in a spa or 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 extended use (exceeding 10-15 minutes), and for young children.

B. 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 or hot tub water temperatures to 38°C (100°F).

C. Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer, since the tolerance of water temperature-regulating devices may vary as much as 3°C (5°F).

D. The use of alcohol, drugs or medication before or during spa/hot tub use may lead to unconsciousness with the possibility of drowning.

E. Persons suffering from obesity, or persons with a medical history of heart disease, low or high blood pressure, circulatory system problems or diabetes should consult a physician before using a spa or hot tub.

F. Persons using medication should consult a physician before using a spa or hot tub, since some medications may induce drowsiness while other medications may affect heart rate, blood pressure and circulation.

15D. (For controls for other than underwater lighting circuits) A ground-fault circuit-interrupter must be provided if this device is used to control an underwater lighting fixture. The conductors on the load side of the ground-fault circuit-interrupter shall not occupy conduit, boxes or enclosures containing other conductors, unless the additional conductors are also protected by a ground-fault circuit-interrupter.

IMPORTANT SAFETY INSTRUCTIONS CONT'D.

15E. (For all permanently connected units not provided with an integral disconnecting means) In order to comply with Section 422-20 of the National Electrical Code, ANSI/NFPA 70-1987, the electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors. The disconnecting means must be readily accessible to the tub occupant but installed at least 5 feet (1.5m) from tub water.

16. SAVE THESE INSTRUCTIONS