

PHOENIX VALUE

OPIN PXVL-07/15/03

SPECIAL OPERATING INSTRUCTIONS

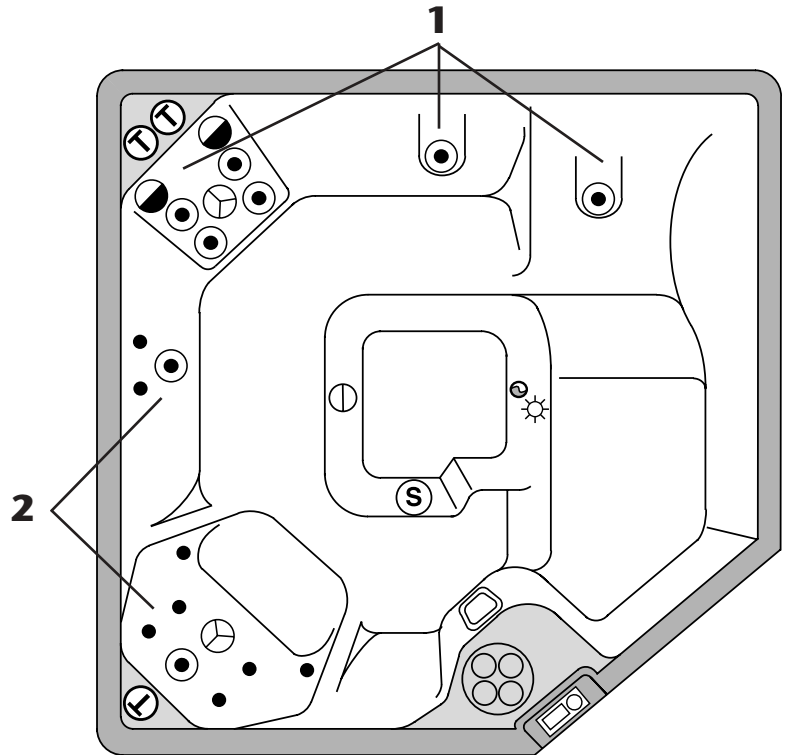
SINGLE WATER PUMP SYSTEM

Total No. of Water Jets 22
Total Horsepower:..... 2
Control System..... 1800D

LEGEND

All features not available on all models.

| | | |
|-------------------------|---------------------|----------------|
| ○ Air Jet | ● Laser Jet | ⊕ Pulsator Jet |
| ⊖ Whirlpool Jet | ◐ Shoulder Jet | ⊗ Swirl Jet |
| ⊙ Therapy Jet 1 | ⊙ Therapy Jet 2 | ☀ Light |
| ⊕ Therapy Control Valve | ☉ Ozone-ready Jet* | |
| ⊖ Blower Control Valve | ⊖ Suction Fitting | |
| ⊖ Main Control Panel | * Ozone is optional | |



ELECTRICAL REQUIREMENTS

240 V, 40 AMPS
4 WIRE (line 1, Line 2, neutral, & ground)

PRIMARY PUMP

Operates WHIRLPOOL JET ⊖.
By simply rotating outer ring of WHIRLPOOL JET ⊖, you can divert full power to water jets in section 1 or section 2 or WHIRLPOOL JET ⊖ (see spa illustration above). If you wish, you can regulate the pressure in any of the operations simply by rotating the outer ring of WHIRLPOOL JET ⊖ to the therapy level you desire. Also, by rotating the WHIRLPOOL JET ⊖, you can operate sections together at a lower pressure.

TO ACTIVATE THE PRIMARY WATER PUMP—Press pump button on control panel. This will activate the primary pump to LOW SPEED.

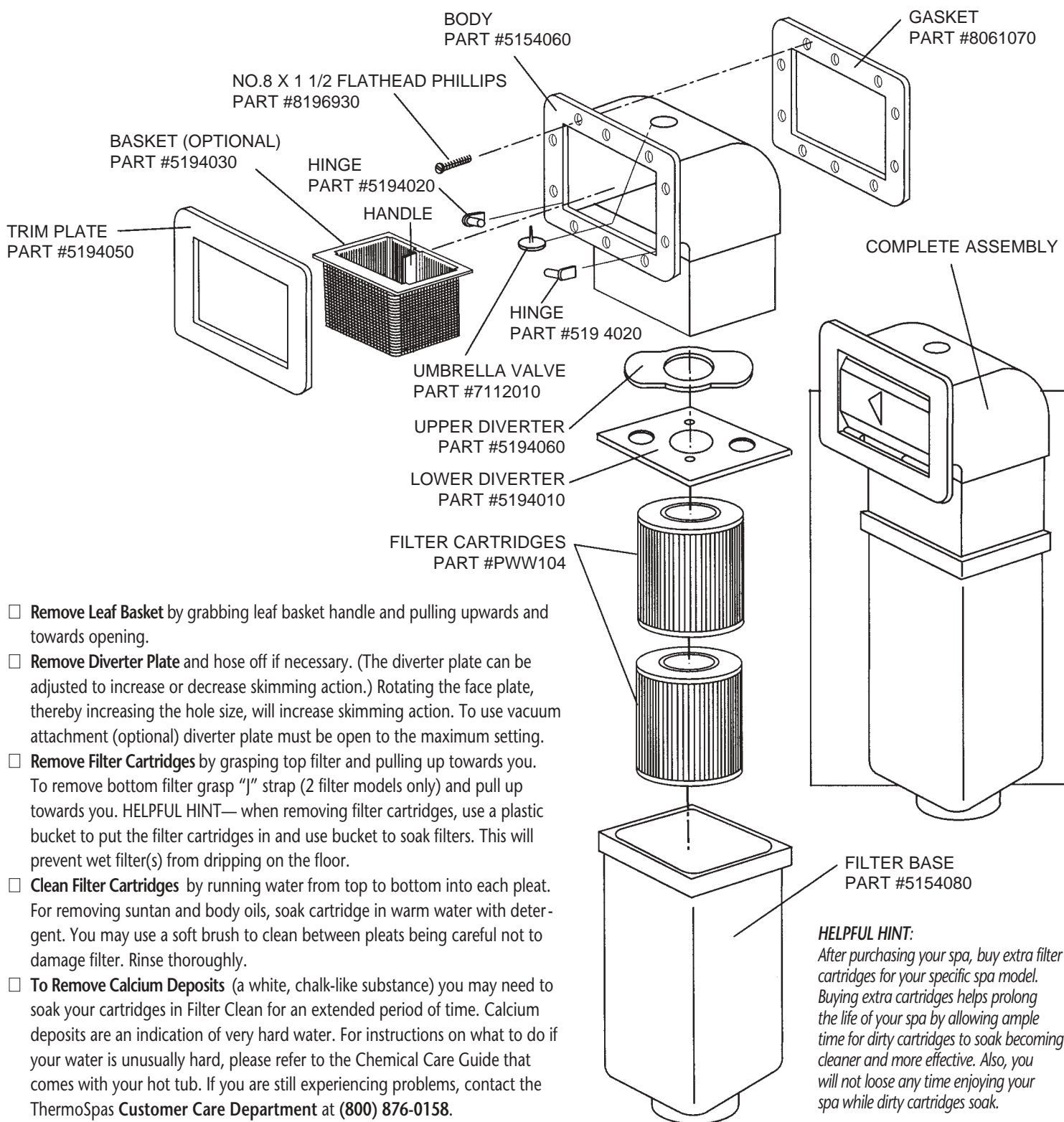
Pressing pump button a second time will turn your primary pump to HIGH SPEED.

To TURN OFF, simply press pump button again.

THERAPY CONTROL VALVES

The THERAPY CONTROL VALVES ⊕ in your hot tub allow you to increase or decrease the intensity of the hot water therapy by providing control of the water and air mixture. Simply by rotating your THERAPY CONTROL VALVE ⊕ counterclockwise, you can increase the therapeutic action. To decrease the therapeutic action, rotate the THERAPY CONTROL VALVE ⊕ clockwise. THERMO SPAS provides a THERAPY CONTROL VALVE ⊕ usually within easy reach providing convenient, total control therapy. For maximum hot tub efficiency, be sure to close all THERAPY CONTROL VALVES ⊕ when you are finished using your hot tub.

FILTER MAINTENANCE



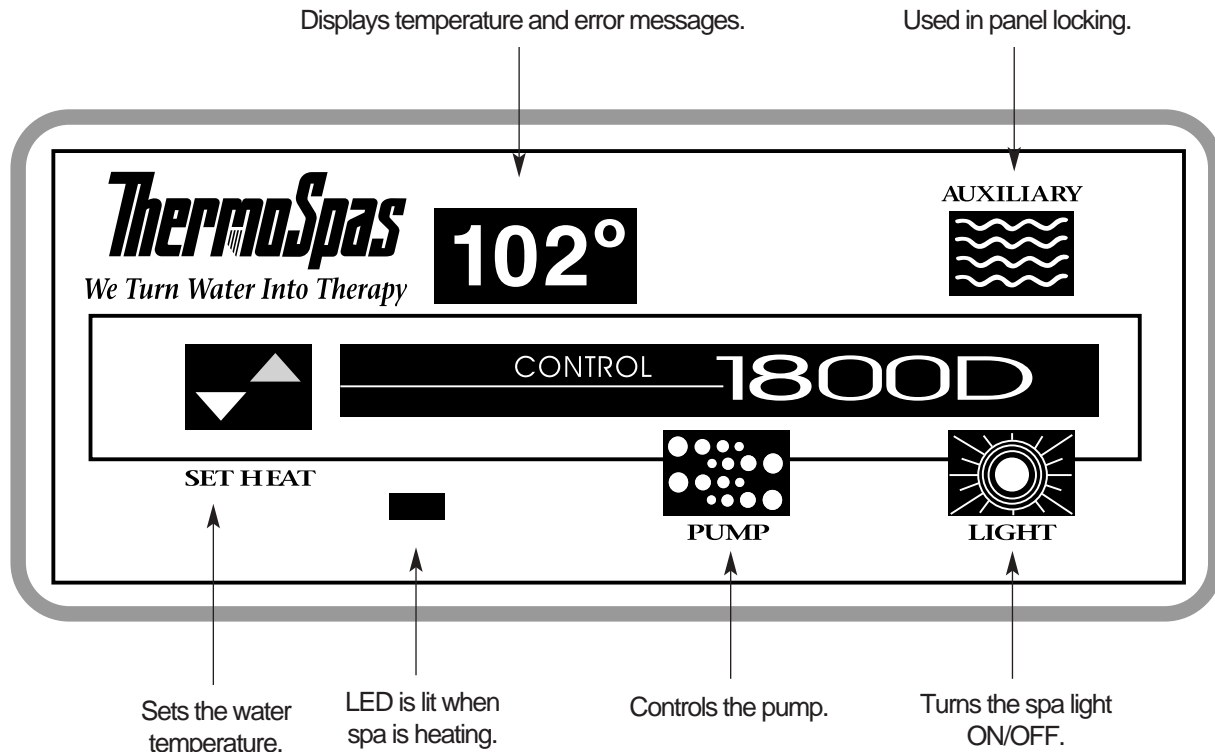
- ❑ **Remove Leaf Basket** by grabbing leaf basket handle and pulling upwards and towards opening.
- ❑ **Remove Diverter Plate** and hose off if necessary. (The diverter plate can be adjusted to increase or decrease skimming action.) Rotating the face plate, thereby increasing the hole size, will increase skimming action. To use vacuum attachment (optional) diverter plate must be open to the maximum setting.
- ❑ **Remove Filter Cartridges** by grasping top filter and pulling up towards you. To remove bottom filter grasp "J" strap (2 filter models only) and pull up towards you. **HELPFUL HINT**— when removing filter cartridges, use a plastic bucket to put the filter cartridges in and use bucket to soak filters. This will prevent wet filter(s) from dripping on the floor.
- ❑ **Clean Filter Cartridges** by running water from top to bottom into each pleat. For removing suntan and body oils, soak cartridge in warm water with detergent. You may use a soft brush to clean between pleats being careful not to damage filter. Rinse thoroughly.
- ❑ **To Remove Calcium Deposits** (a white, chalk-like substance) you may need to soak your cartridges in Filter Clean for an extended period of time. Calcium deposits are an indication of very hard water. For instructions on what to do if your water is unusually hard, please refer to the Chemical Care Guide that comes with your hot tub. If you are still experiencing problems, contact the ThermoSpas Customer Care Department at (800) 876-0158.
- ❑ **Allow Filter Cartridges to Dry Completely** before reinstalling. To install filters, first insert "J" strap then install top filter making sure that the "J" strap comes up through the middle of the top filter. Install diverter plate by pressing down notch sides into center of top filter. Insert basket by aligning the flat of the basket with the basket locks. Press down and rotate clockwise.

HELPFUL HINT:
 After purchasing your spa, buy extra filter cartridges for your specific spa model. Buying extra cartridges helps prolong the life of your spa by allowing ample time for dirty cartridges to soak becoming cleaner and more effective. Also, you will not lose any time enjoying your spa while dirty cartridges soak.

ThermoSpas

Hot Tubs • Chemicals • Service
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1800D Control Panel Instructions



Advanced microprocessor technology has been combined with solid state electronic switches to produce the Digital Duplex™ Control System. The Digital Duplex is a very simple control system designed for total ease of use. The Digital Duplex requires no programming. Each control feature is easily accessed and manipulated by the simple touch of a finger.

*Your Digital Duplex Control System is constructed to give years of trouble-free service. Safety is assured through design concepts and materials which meet, or exceed, the most stringent requirements of recognized safety agencies. Field proven through years of testing and evaluation, every feature has been optimized for maximum utilization of your spa. Relax and enjoy your spa experience—**you deserve the break!***

NOTE: Spas with an 1800D Control Panel come standard with a 1900D Spa Pac.

WARNING

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instruction, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a class B computing device in accordance with the specifications in subpart J of part 15 of the FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference, which can be determined by turning the equipment ON and OFF, the user is encouraged to try to correct the interference by one or more of the following measures: 1) Re-orient the receiving antenna; 2) Relocate the receiver with respect to the spa; 3) Move the receiver away from the spa; 4) Plug the receiver into a different outlet so that the receiver and spa are on different branch circuits; 5) If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful—"How to Identify and Resolve Radio-TV Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington, DC 20402, Stock No. 004-000-00345-4.

INITIAL START UP

Your spa control has been specifically designed so that by simply connecting the spa to its properly grounded source, the spa will automatically heat to the set temperature.

Minimum temperature = 80°F
Maximum temperature = 104°F



Temperature Adjustment –

Temperature is controlled by pushing the set temperature pad. The display shows the actual water temperature unless the pad is pressed. When the pad is pressed, the display will show the set temperature. Pressing the pad a second time will cause the set temperature to increase or decrease depending on what direction was last chosen. Each successive press will change the set temperature in the same direction.

If the opposite direction is desired, release the pad and let the display revert to the actual water temperature again. Press the pad to display the set temperature, and again to make the temperature change in the desired direction.



Pump –

Press the pump pad to turn ON the low-speed. Press the pad again to turn ON the high-speed pump. The pump will automatically turn OFF after some period of operation. Due to *Automatic Spa Control*, the low-speed pump will start automatically when the heater is turned ON, when a filter cycle is activated, or when a freeze condition is detected. If the low-speed pump is ON under *Automatic Spa Control*, it cannot be deactivated from the panel; however, the hi-speed pump may be started. Whenever the low or high-speed pump is energized with this pad, it will automatically stop after some period of operation.



Auxiliary –

This button is used in conjunction with the temperature button to set and lock the water temperature. See above right for instructions.



Light –

Press the light pad to turn the spa light On and OFF. The spa light will turn itself OFF after some period of time.



Preset Filter Cycles –

Your spa will automatically filter itself twice each day. Filtration duration is dealer settable for two or five hours. During filtration, the low-speed pump will activate. The first filter cycle will begin one minute after the spa is energized. The second filter cycle will begin 12 hours after the start of the first filter cycle. If your spa has a blower cleanout feature, the blower will activate for a short period of time at the start of the first cycle to clean out the air channel.

Warning! Shock Hazard! No User Serviceable Parts



Do not attempt service of this control. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all GROUNDING connections must be properly installed.

PANEL LOCKING SEQUENCE

Press  , then press  .



The panel will be locked and the display will alternate between water temperature and “PL.” Follow same sequence to unlock panel.

SET TEMPERATURE LOCK

Press  , then press  .

The set temperature will be locked, but may still be viewed. The display will alternate between the water temperature and “SL.” Follow same sequence to unlock temperature.

ECONOMY MODE

Press  , then press  .

The set temperature will be locked, but may still be viewed. The display will alternate between the current water temperature, “Econ,” and “COOL” until the spa water is less than 15°F cooler than the set temperature. Follow same sequence to change back to standard mode. The temperature will then rise back to its original setting.

SAFETY FEATURES

OVERHEAT PROTECTION

OH

If the spa should overheat, the display will flash “OH”— meaning the system is overheating. In such a condition— DO NOT ENTER THE WATER. Turn OFF all power to the spa and contact your dealer or service organization. To reset the spa, press any panel button.

FREEZE PROTECTION

ICE

If a freeze condition is detected, the pumps are automatically activated. This is a normal spa function— no corrective action is necessary. Freeze protection is enabled regardless of the spa's status.

FLOW SWITCH DETECTION

FL

If a pressure switch malfunctions, the display will show “FL”— meaning flow. Contact your dealer or service organization.

OPEN SENSOR (Spa is deactivated)

SN

If either the high-limit or water temperature sensor malfunctions, the display will show “SN”— meaning sensor. Contact your dealer or service organization.