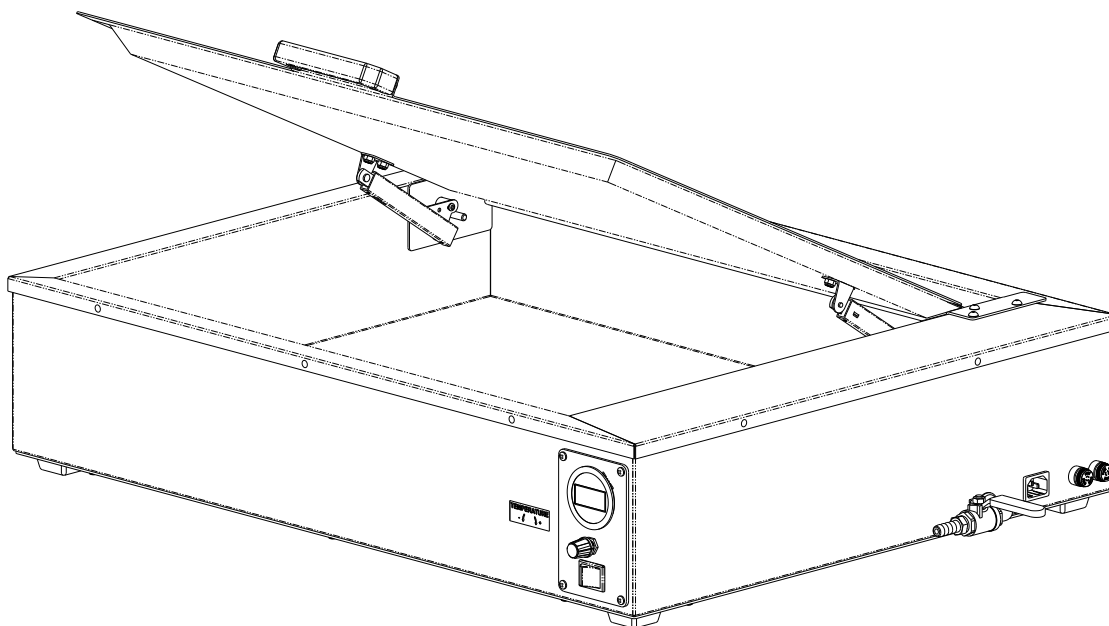


# INSTRUCTIONS FOR OPERATION AND CARE OF **WATER BATH**



SP-1600-A-B



**Whitehall Manufacturing**<sup>®</sup>  
Manufacturer of Healthcare and Rehabilitation Products since 1946

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# WARNING



**PLEASE READ THIS ENTIRE  
BOOKLET BEFORE OPERATING  
YOUR NEW WATER BATH**



**Failure to follow these instructions could result in damage  
to your new heating appliance and/or injury**

## European Union CE Mark

The presence of the CE Mark on Whitehall equipment means that it has been designed, tested and certified as complying with all applicable European Union regulations and recommendations.

## Waste Electrical and Electronic Equipment (WEEE)

This symbol on the product or on its packaging indicates that this product must not be disposed of with regular waste. Instead, it is the user's responsibility to dispose of waste equipment according to the local laws. Separate collection and recycling of the waste equipment at the time of disposal will help conserve natural resources and ensure it is recycled in a manner that protects human health and the environment. For information about where the user can drop off the waste equipment for recycling, please contact your local waste collection authority. See Page 11 for instructions on how to disassemble the equipment for recycling purposes.

## Electric Shock

The Electric Shock Symbol is used to indicate a hazard arising from dangerous voltage. Any mishandling could result in irreparable damage to the equipment and/or personal injury or death.

## General Warning or Caution

The Exclamation Symbol appears in Warning and Caution statements. This symbol designates where personal injury or damage to the equipment is possible.



### WARNING

**To avoid electric shock, connect the instrument to properly earth-grounded, GFCI protected, 3-prong receptacles only. Failure to observe this precaution can result in severe injury.**

- DO NOT operate the appliance without properly filling with water. Under no circumstance should the appliance be operated without water, as operating the appliance without water may result in damage to the heating element. Appliance must be unplugged while filling or emptying water.
- CONNECT the appliance into a properly polarized G.F.C.I. (Ground Fault Circuit Interrupter) electrical receptacle for protection against electrical shock. Have a qualified electrician verify the wall socket is properly polarized and grounded. Use only the power cordset provided with the unit. The Water Bath appliance must be properly grounded.
- AVOID skin contact with HOT water at all times! Carefully place splinting material into the Water Bath appliance to avoid splashing onto skin or coming into contact with HOT water. DO NOT reach into HOT water with bare hands to remove heated splint material. Use a grasping device, such as tongs, to remove splint material from HOT water.
- DO NOT use in the presence of flammable liquids or gases, as these may present a fire and/or explosion hazard.
- ALWAYS allow the appliance to cool down before draining water or moving unit.
- DO NOT use the lid handle to lift or transport appliance.
- NEVER leave appliance operating unattended for long periods of time. Water can evaporate and cause appliance to over-heat which may result in damage to the heating element. Turn "OFF" when not in use.
- FOLLOW splint material manufacturer instructions for proper material heat-up temperature and duration.



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## Instructions for Operation and Care of Water Bath SP-1600-A-B

The Water Bath is a water tank capable of heating water within a set temperature range of 45°C (113°F) to 93°C (200°F). The unit is intended and designed to heat and soften thermoplastic splinting material at a user-entered set water temperature. Proper splint material heat-up temperature & duration is based on the splint material manufacturer's requirements and instructions. The Water Bath is primarily constructed of Type 304 Stainless Steel material, is internally insulated and has variable temperature settings with a LED display and a concealed wire-wound heating element.

The Water Bath has an illuminated ON-OFF power switch and a water-resistant temperature controller conveniently located at the front of the appliance. The temperature is easily adjustable by turning the thermostat knob. Fuses and power cord inlet are located on the right side of the appliance. A durable plastic lid handle is provided on the lid and helps minimize contact with warm surfaces.

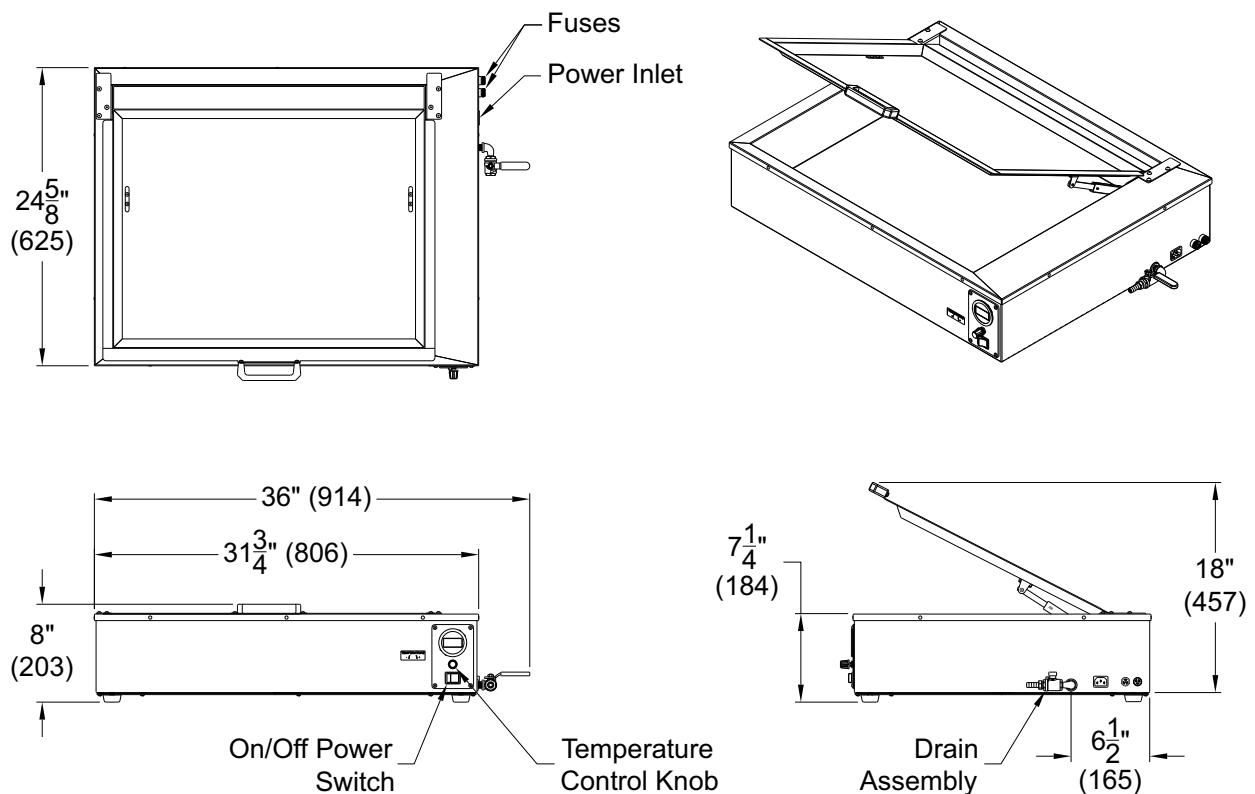
### Model No. SP-1600-A-B

**Electrical Specifications:** 200-240 Volts • 50/60 Hz • 7 Amps

**Inner Tank Dimensions:** 559 x 660 x 127 mm Deep (22" x 26" x 5")

**Inner Tank Capacity:** 28.5 Liters, (7.5 Gallons) 76.2 deep water pool

Environmental conditions recommended 5°C to 45°C (41°F to 113°F) <90% RH





## OPERATOR SKILLS AND TRAINING

### Skills:

Operators using the Water Bath need a working knowledge of occupational therapy procedures.

### **WARNING**

Only trained personnel should operate the Water Bath. Untrained operators can cause injury or be injured.

### Training

Operator trainees need to:

- be trained in occupational therapy protocols.
- read and understand this manual.

## INSPECTING THE WATER BATH

This Whitehall product has been carefully packaged at the factory to minimize the possibility of damage during shipping.

- Inspect the packaging for external signs of damage.
- Inspect the contents for damage.

If there is visible damage to the instrument upon receipt, inform the shipping company and Whitehall immediately.

### **WARNING**

Do not attempt to operate this equipment if there is evidence of shipping damage or you suspect the unit is damaged. Damaged equipment may present additional hazards to you. Contact Whitehall technical support for advice before attempting to plug in and operate damaged equipment.

### Inspection Checklist

- Is the Water Bath free of excessive wear?
- Is a properly-grounded and voltage-matched receptacle available?
- Is the outlet equipped with a functioning GFI?
- Does the drain valve open and close properly?

## SET-UP INSTRUCTIONS

### 1. Your new Water Bath includes the following:

- (1) Heating Appliance
- (1) Power Cordset
- (1) Operation & Maintenance Manual

**NOTE:** If you are missing any of the above, contact **WHITEHALL MANUFACTURING** toll free telephone no. (800) 782-7706 or (626) 968-6681

### 2. Unpacking your Water Bath

Remove all shipping & packaging material. Remove all items from inside of tank such as Power Cordset, Warranty Registration Card, and Operation & Maintenance Manual.

### 3. Location of your Water Bath

Place the Water Bath at a convenient height & location such as on a table or scratch-resistant counter top.

**IMPORTANT:** Appliance must be placed on a level surface! Water Bath must be positioned so to allow ease of disconnecting Power Cordset if necessary.



## SET-UP INSTRUCTIONS (continued)

### 4. Preparing to Fill your Water Bath

Make sure appliance is unplugged and all packaging has been removed from reservoir. Ensure that the inside of tank is thoroughly clean before filling with water.

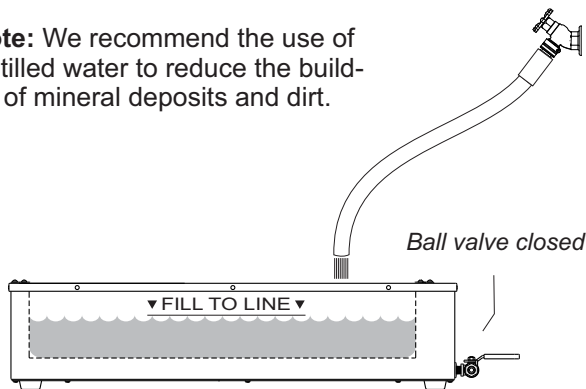
DO NOT use any medium except water.

Check drain valve and make sure handle is in the "closed position" by turning clockwise to make certain no water in tank will drain out of appliance while being filled.

### 5. Filling your Water Bath

Appliance must be unplugged. Fill appliance with water to line labeled "FILL TO LINE", which is located inside tank side.

**Note:** We recommend the use of distilled water to reduce the build-up of mineral deposits and dirt.



### 6. Preparing to turn "ON" your Water Bath

Close lid.



Caution! Lid can pinch fingers.

Locate the Power Switch at front of the appliance and make sure it is set to "OFF" (the switch will not be lit). Insert connector end of power cordset into power inlet at side of appliance.

Connect plug end of power cordset into a G.F.C.I. protected AC electrical receptacle.

### 7. Turning "ON" your Water Bath

You are now ready to turn "ON" the appliance. Locate the Power Switch at the front of the unit and press to "ON" position causing the switch to light.

- | ON
- O OFF

### 8. Changing the temperature on your Water Bath

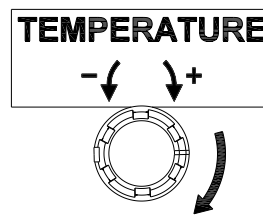
Your water temperature is adjustable and can be set to reach splint materials recommended operating temperature. (See splint manufacturer's instructions.)

**Note:** Most splint material on the market today, has an operating range between 113°F (45°C) to 200°F (93°C). Your Water Bath is capable of approximate maximum temperature of 200°F (93°C), depending on amount of water in unit.

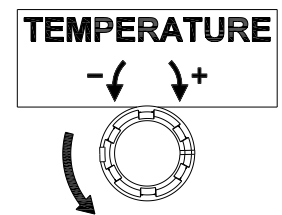
**Note:** Thermal Overheating Sensor is set to shut down unit at temperatures of 215°F (102°C) and above. (Caution: Unit will automatically turn back on once the temperature has dropped to lower temperature.)

The thermostat is very sensitive, even a small adjustment can raise or lower the temperature several degrees. To adjust the temperature, turn black knob at the lower right hand side of unit:

TO RAISE TEMPERATURE



TO LOWER TEMPERATURE



When raising temperature, allow the temperature to stabilize and read the water temperature on the digital thermometer above the knob. Keep lid closed while unit is heating up.

When lowering temperature, allow the temperature to stabilize and read the water temperature on the digital thermometer above the knob. Keep lid open while unit is cooling down.

## **⚠ WARNING**

Use the Water Bath only as directed in this manual. Any other use can cause injury.



## USING YOUR WATER BATH

Once the Controller display indicates the desired set point temperature, the appliance will be ready for use. Please allow +/- -16°C (3°F) temperature variance.

Always refer to the correct temperature & duration as specified by the splinting material manufacturer.

Be certain to heed all warnings as outlined in the WARNING section (inside front cover of this manual).

Keep lid closed while water is heating up.

Carefully insert splinting material into tank and avoid splashing HOT water. Avoid direct skin contact with HOT water at all times. While splint material is immersed in water, lid should remain closed to help retain heat inside tank. Remove splint material from tank only after it has reached the manufacturer's specified duration. Use caution when removing splint material from tank. Apply splint material as specified by splint manufacturer's instructions.

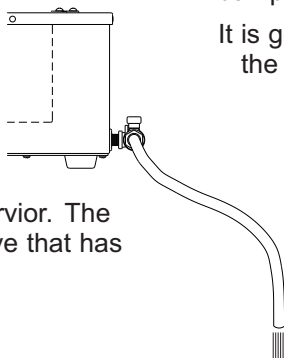
Keep lid closed when appliance is not in use. Maintain proper water level at all times, as indicated by the "Fill to Line" etched inside the tank. Avoid allowing water to reach a "very low water" level. A "very low water" level would be any water level 20mm (3/4") or less water depth as measured from the tank bottom. Never operate appliance without water! These precautions will prevent appliance from over-heating and preventing potential damage to the heating element.

**IMPORTANT:** The Water Bath is provided with an Over-Heating Temperature Limiting Sensor. If the appliance reaches excessively high temperatures beyond normal operation, Sensor will 'trip' the electrical circuit rendering the appliance inoperable. Please refer to FAQ's section of the manual for more details.

**Note:** If lid locks in the open position and will not close, place index finger on the left side lid stay reset button and work lid up and down until lid stays synchronize and allow lid to close.

## EMPTYING YOUR WATER BATH

Before emptying (draining) your appliance, be sure that the power switch is set to "OFF". Allow the appliance to cool down before emptying it. Lifting the lid will accelerate this cooling. The appliance must be unplugged when emptying the reservoir. The appliance has been provided with a Drain Valve that has a 6.35mm barbed nipple to attach a hose.



## CARE & CLEANING OF YOUR WATER BATH

Turn power switch "OFF" and unplug the unit from the electrical receptacle. If necessary, drain the appliance by following instructions as outlined in the "EMPTYING YOUR WATER BATH" section.

The appliance should be routinely cleaned to help ensure the appearance as well as years of reliable service. Routine cleaning helps to remove contaminants from the stainless steel surfaces and maintains the integrity of the stainless steel's inherent properties. Not routinely cleaning the appliance may lead to corrosion of the stainless steel and the build-up of scaly hard-water deposits, which may void the warranty.

Use a soft cloth, sponge, and/or non-abrasive cleaning pad to clean & wipe down the appliance. DO NOT use steel wool to clean the stainless steel surfaces since it can cause rusting on the stainless steel surfaces.

When cleaning, rinsing, and/or drying your appliance always rub in the direction of the stainless steel polish (grain) lines for maximum effectiveness and to minimize marring or scratching the surfaces.

Attempt to use the mildest cleaning product and most effective method to clean the stainless steel surfaces. Use mild soaps, gentle non-abrasive detergents, or mild mixtures of ammonia to routinely clean the surfaces of the appliance. Be sure to always rinse with clean, warm water and wipe dry. Use stainless steel cleaners such as *3M Stainless Steel Cleaner/Polish*, *Sheila Shine®*, *Twinkle® Stainless Steel Cleaner/Polish*, *Penny Brite*, *Cameo Stainless Steel Cleaner/Polish*, and *EZ Brite*, on stainless steel surfaces. Strictly follow brand name manufacturer's instructions on proper use of the stainless steel cleaner. **NOTE:** The use of brand names is intended only to indicate a type of cleaner.

DO NOT use bleach, chlorinated solvents, or other harsh chemicals to clean your appliance. For scaly, hard-water spots use a strong solution of vinegar & water and let it stand for approximately 5 minutes. Rinse with clean, warm water and wipe dry. Be sure to quickly wipe down dampened areas to avoid "water marks".

It is good practice to periodically change out the water in the tank that may become too cloudy as a result of use or contamination.



## **FAQs (Frequently Asked Questions) & TROUBLESHOOTING**

NOTE: If the appliance is operated without water, the concealed heating element may be subjected to damage and may no longer heat up the tank even though power is "ON". If heating element becomes damaged, it will have to be replaced.

*I filled my Water Bath with water, plugged it in, turned it "ON" (power switch is not illuminated), the Temperature Controller display is not illuminated, and the unit is not heating up the water.*

Mains circuit breaker may have "tripped". Reset the power mains circuit breaker. Plug the Water Bath into a G.F.C.I. protected electrical receptacle. Do not plug in any other devices or appliances to the same receptacle the Water Bath is using.

Equipment Circuit Protection fuse(s) may have "blown". Check fuse(s) for electrical continuity using a Multi-Meter (combination Volt, Ampere, & Ohm meter). Replace fuse(s) if necessary. Be sure to use the correct fuse size & type. Refer to the Repair Parts section of this manual.

Electrical component(s) such as power inlet, fuse holders, fuse carriers, power switch, quick disconnect terminals, wire connectors, wiring, etc. may have become faulty. A qualified electrical technician should perform an electrical continuity inspection of the entire electrical system using a Multi-Meter to identify possibly bad electrical component(s). Replace electrical component(s) as required.

### ***My Water Bath temperature raises and lowers by itself?***

The Water Bath is provided with an Over-Temp thermostat. If the operating thermostat fails the temperature will rise. When a temperature of 102°C (215°F) is achieved the over-temp thermostat will open the circuit and the temperature will drop to 82°C (180°F), then rise again. This cycle will continue until the operating thermostat is replaced.

The appliance will require a qualified technician to turn over the unit; carefully remove the bottom cover by removing the mounting screws. The technician will troubleshoot and/or replace the operating thermostat.

The heating element should be visually and electrically inspected to ensure that it is still in good, proper working condition. Make sure the heating element did not delaminate from the underside of the tank. Make sure the heating element still has electrical continuity by checking circuit with a Multi-Meter. Check that the heating element does not have dark discolored spots, which may indicate that the element has burned.

Before reassembling, be sure to perform a visual and electrical inspection of the rest of the electrical system. Make certain all other electrical components are in good, working condition. Replace any components that appear to be burned or have become faulty.

### ***How do I adjust the temperature on the Water Bath?***

Follow the detailed instructions in the SET-UP INSTRUCTIONS, "Item #8 - Changing the temperature on your Water Bath". This will explain in detail how to adjust the temperature.

### ***How do I know what to adjust the temperature to?***

Refer to splint material manufacturer for recommended temperature & duration of splint material used.

### ***How long will it take for my Water Bath to reach the adjusted temperature?***

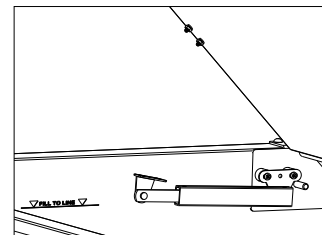
Allow 60 to 75 minutes for the appliance to reach temperature. Keep Lid closed to ensure quickest heat-up and to maintain set point temperature.

### ***How do I open the lid more than 90°?***

Make sure unit is unplugged and all water is drained from the tank. Take an adjustable wrench and screwdriver and remove the 2 screws and nuts from the lid stay on the underside of the lid. Remove the lid stay and reinstall the screws and nuts in the lid. Follow this procedure for both sides.

Remove the hinge stays from the pins located in the tank. Make sure to reinsert the screws.

This will allow the lid to open past 90° and keep the lid in an upright position. Please keep these parts as they can be used to reassemble the lid stays to the lid if a partially open lid is again warranted.







## FAQs (Frequently Asked Questions) & TROUBLESHOOTING (continued)

**The water in my Water Bath is becoming too cloudy.**

The water inside the tank has not been replaced in quite a while or has become contaminated.

Drain the existing water, clean the tank and refill with clean water. Be sure to follow instructions on how to empty the appliance by referring to the *EMPTYING YOUR WATER BATH* section of this manual. Be sure to follow instructions on how to clean the appliance by referring to the *"CARE & CLEANING..."* section of this manual.

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**There is rusting on the inside of my Water Bath tank.**

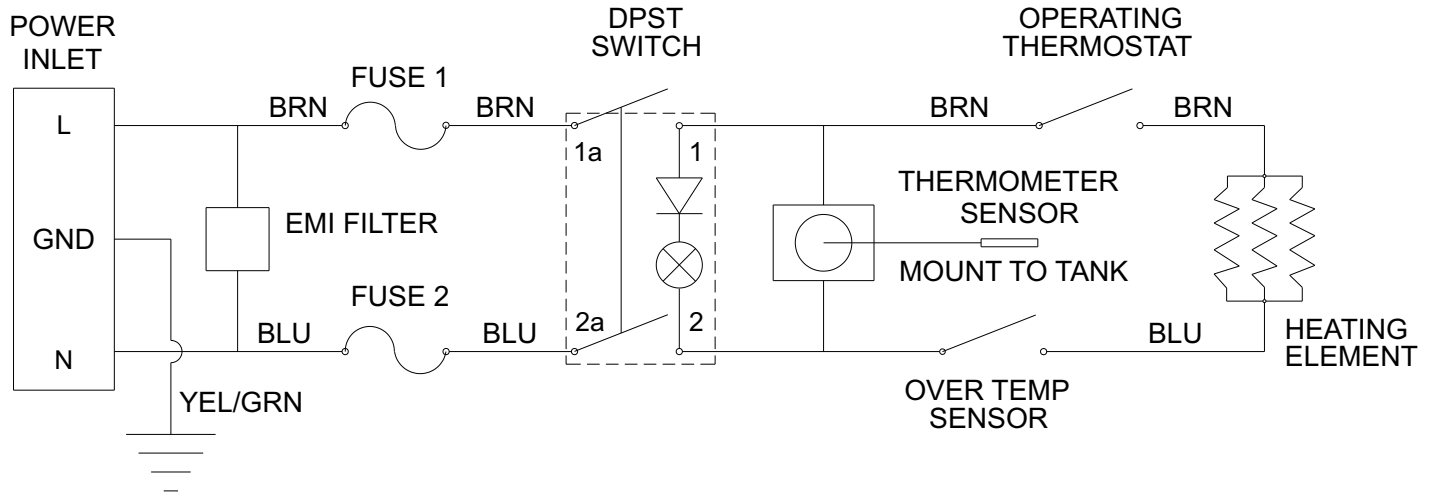
Some form of "ferrous" (iron-containing) metal object may have come into contact with the tank. Inspect the inside of the tank. Determine if some form of metallic object such as a staple, metal paper clip, safety pin, etc. has fallen into the tank. If so, remove the object and thoroughly clean the affected area of the tank. If rusting persists after foreign object has been removed and tank has been thoroughly cleaned, use a rust remover on the affected area. Rust remover must be safe for use on stainless steel, such as CRES Cleaner. (CRES Cleaner is available through Whitehall.) Be sure to follow rust remover instructions.

## TROUBLESHOOTING FOR TEMPERATURE CONTROLLER

INDICATION	PROBABLE CAUSE	CORRECTIVE ACTION
No power. Appears dead.	<ul style="list-style-type: none"> <li>- Power to unit may be off.</li> <li>- Fuse may be blown. Breaker may be tripped.</li> <li>- Wiring may be open. Input power may be incorrect.</li> </ul>	<ul style="list-style-type: none"> <li>- Check switch.</li> <li>- Check fuses and breakers.</li> <li>- Check for bad connections.</li> </ul>
Water doesn't get hot, even though unit is plugged in and switch is ON.	<ul style="list-style-type: none"> <li>- Circuit breaker is off.</li> <li>- Thermostat is not working.</li> <li>- Heating element is burned out.</li> <li>- The ON/OFF switch is broken.</li> <li>- The Over Temp Sensor is burned out.</li> </ul>	<ul style="list-style-type: none"> <li>- Turn on the circuit breaker.</li> <li>- Replace the thermostat.</li> <li>- Replace the heating element.</li> <li>- Replace the switch.</li> <li>- Replace Over Temp Sensor.</li> </ul>
Splint material too hot.	<ul style="list-style-type: none"> <li>- The thermostat is set too high.</li> <li>- The thermostat is broken.</li> </ul>	<ul style="list-style-type: none"> <li>- Adjust the thermostat.</li> <li>- Replace the thermostat.</li> </ul>
Splint material too hot & then too cool.	<ul style="list-style-type: none"> <li>- The thermostat is broken.</li> </ul>	<ul style="list-style-type: none"> <li>- Replace the thermostat.</li> </ul>
Splint material too cool and will not form.	<ul style="list-style-type: none"> <li>- The thermostat is set too low.</li> <li>- The thermostat is broken.</li> </ul>	<ul style="list-style-type: none"> <li>- Adjust the thermostat.</li> <li>- Replace the thermostat.</li> </ul>



# ELECTRICAL DIAGRAM FOR MODELS SP-1600-A-B





### Protective Conductor Terminal

The protective conductor terminal symbol in the above figure identifies the location of the bonding terminal, which is bonded to conductive accessible parts of the enclosure for safety purposes.

Use only Time Delay Fuse.  
See Parts List, Page 10, Item 26

Symbols on labels:

-  Alternating Voltage or Current
-  Fuse Location



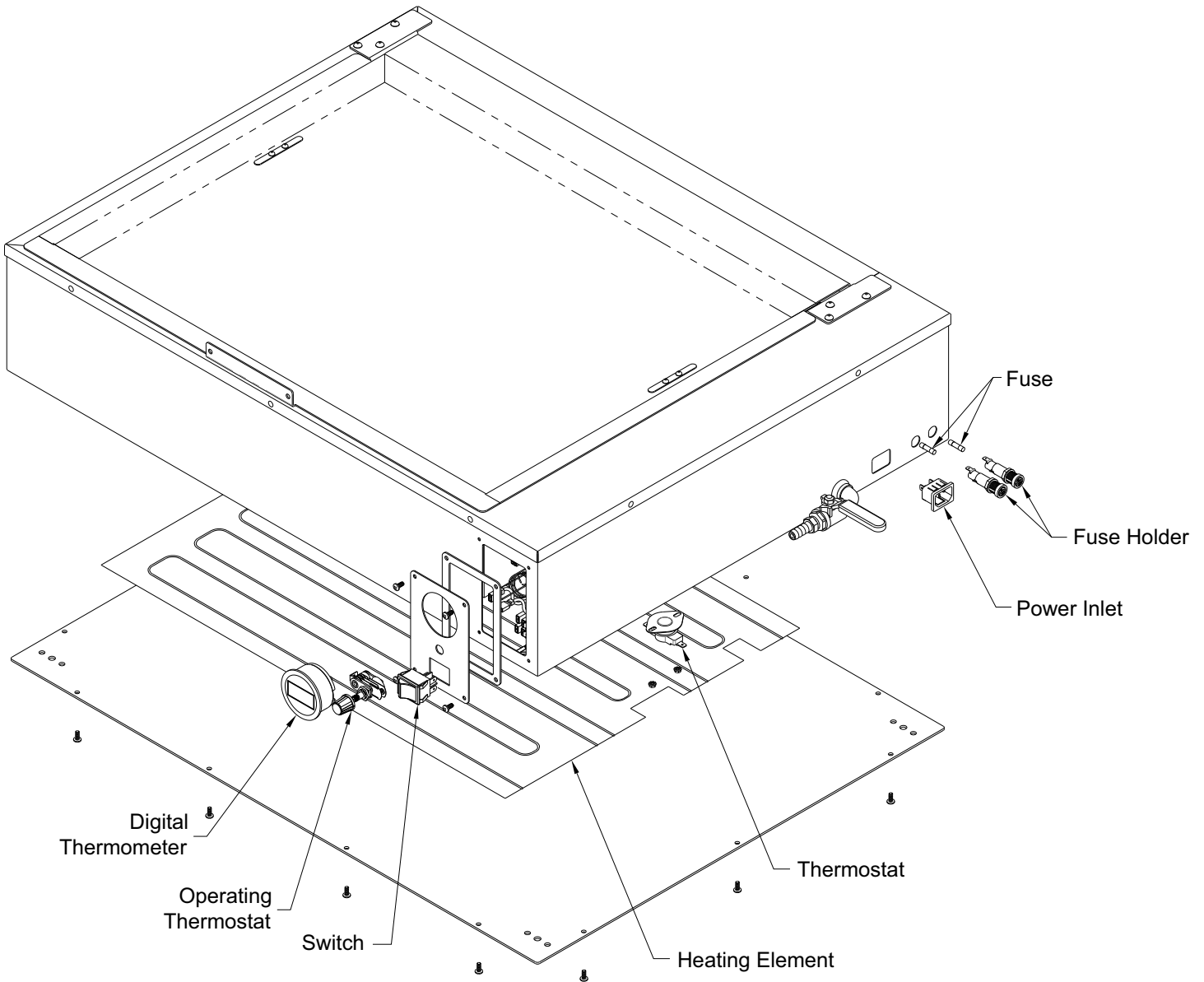


## PARTS LIST FOR WATER BATH MODEL SP-1600-A-B

ITEM #	PART #	DESCRIPTION
1	5903-750-001	Lid Assy
2	5903-749-000	Lid Stay
3	5903-740-001	Side Hinge Bracket R Assembly
4	5903-741-001	Side Hinge Bracket L Assembly
5	0116-013-000	#10-32 x 3/4" SST Phil Round Head Screw
6	6900-128-000	1/2" ID 1" OD Rubber Grommet
7	1936-060-000	1/4"-18 x 6" NPT SST Nipple
8	6903-166-000	1/4" NPT Street Elbow SST
9	6903-152-000	1/4" NPT SST Ball Valve
10	6903-160-000	1/4" NPT x 1/4 Tube Drain Barb SST
11	5903-715-199	Bottom Cover Assembly
12	7000-415-000	Self Retaining J Nut
13	6502-100-000	#8-32 x 3/8" Phil Pan Head Screw
14	6900-138-000	Pull Handle
15	6900-154-000	#10-24 x 1/2" Pan Head Screw SST
16	0411-021-000	#10 Gray Fiber Washer
17	6900-142-000	Switch, 2P1T Red Lighted Rocker
18	6505-546-000	10A/15A/250VAC Snap-In Power Inlet
19	0710-230-001	Fuse Holder Assembly, 5mm x 20mm Long
20	6903-154-001	EMI Filter
21	6903-143-000	Digital Thermometer & Sensor (Celsius)
22	6900-140-000	Heater Control Knob
23	6903-151-000	Operating Thermostat
24	6903-557-000	Heating Element
25	6903-147-000	3/4" Thermostat, Manual Reset
26	0710-226-001	Fuse, 8 Amp, 220V, Time Delay, 5mm x 20mm
27	5903-737-199	Control Panel Analog
28	5903-738-000	Control Panel Gasket
29	6502-300-000	#8-32 x 3/8" SST Phil Head Screw
30	Call for part #	Power Cord 220V



## ELECTRICAL PARTS DISASSEMBLY





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Manufacturer of Healthcare and Rehabilitation Products since 1946

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Any questions regarding servicing of products in Europe or the Middle East should be directed to:  
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[sales@acornthorn.co.uk](mailto:sales@acornthorn.co.uk)

## MANUFACTURER'S WARRANTY

Go to [www.whitehallmfg.com](http://www.whitehallmfg.com) to fill out eWarranty Registration, keyword search: WARRANTY.

Whitehall Manufacturing Company warrants that its products are free from defects in material or workmanship under normal use and service for a period of one year from date of shipment. Whitehall's liability under this warranty shall be discharged solely by replacement or repair of defective material, provided Whitehall is notified in writing within one year from date of shipment, F.O.B. Industry, California.

**This warranty does not cover installation or labor charges, and does not apply to materials which have been damaged by other causes such as mishandling or improper care or abnormal use.** The repair or replacement of the defective materials shall constitute the sole remedy of the Buyer and the sole remedy of Whitehall under this warranty. Whitehall shall not be liable under any circumstances for incidental, consequential or direct charges caused by defects in the materials, or any delay in the repair or replacement thereof. This warranty is in lieu of all other warranties expressed or implied. Product maintenance instructions are issued with each fixture, and disregard or non-compliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be properly maintained after the water has been introduced into the fixture, or Whitehall's limited warranty is void. If you have any questions or require technical assistance, please call 800-743-8219.

**NOTICE TO KEEP ORIGINAL PACKAGING-** Regarding warranty claims: customer must retain original packaging for one year upon receipt of product. If packaging is discarded, it is the customer's responsibility to provide adequate packaging. Any shipping claims that are a direct result of customer-provided packaging materials will be handled by the shipper.