# **User Manual**



**EXCELLENCE IN HYDROTHERAPY** 

# **Stationary Models**

**Podiatry** P-10-S, P-15-S, P-22-S

**Extremity** E-15-S, E-22-S, E-22-SP, E-27-S, E-45-S

**Hi-Boy** H-60-S, H-75-S, H-90-S, H-105-S **Lo-Boy** L-75-S, L-90-S, L-105-S, L-105-SL

**Sports** S-85-S, S-85-SL, S-90-S, S-90-SL, S-110-S, S-110-SL

Slant Back SB-100-S







E-27-S S-110-SL E-22-SP

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# WARNING

READ AND UNDERSTAND THIS ENTIRE MANUAL BEFORE OPERATING THE WHIRLPOOL

Failure to follow the instructions in this manual could result in Whirlpool damage and/or bodily injury

# **Symbols**



## Waste Electrical and Electronic Equipment (WEEE)

Indicates that the product must not be disposed of with regular waste. It is the customer's responsibility to dispose of waste equipment according to local laws. For information about where to drop off the waste equipment for recycling, contact your local waste collection authority.



## **General Warning or Caution**

Indicates personal injury or damage to the equipment is possible



#### **Electric Shock**

Indicates a hazard arising from dangerous voltage. Any mishandling could result in irreparable damage to the equipment and/or personal injury or death.



#### Refer To Manual (Instructions for Use)

Indicates that user manual shall be referred to before performing any installation, operation or maintenance



### Alternating Current

Indicates alternating current is present



#### Manufacturer

Indicates manufacturer of device



### **Manufacture Date**

Indicates manufacture date of device



## **Authorized representative in the European Community**

Indicates the authorized representative in the European Community



## **Medical Device**



## **Unique Device Identifier**





# **Warnings**

#### **Treatments:**

- Whirlpools are intended for use by a medical professional only, e.g., Physiotherapist, Physical Therapist, Rehabilitation Therapist, Athletic Trainers, Podiatrist.
- During treatment, the medical professional must stay with patient at all times.
- For Whirlpools that support that the entire mass of the patient, the maximum allowable patient mass is 135 kg (298 lbs).
- Ensure water in tub is no greater than 43.3°C (110°F). Higher temperatures may result in injury to patient.
- Treatment should terminate if the patient experiences dizziness, light-headedness, shortness of breath, or nausea.
- To avoid patient cross-infection, drain and clean hydrotherapy equipment after each patient's use, and disinfect equipment surfaces and components by using an EPAregistered product in accordance with the manufacturer's instructions.

## Operation:

- Use of this equipment adjacent to or stacked with other equipment should be avoided because it could result in improper operation. If such use is necessary, this equipment and the other equipment should be observed to verify that they are operating normally.
- Use of accessories and cables other than those specified or provided by the manufacturer of this equipment could result in increased electromagnetic emissions or decreased electromagnetic immunity of this equipment and result in improper operation.
- Use only Whitehall-approved items on the Whirlpool.
- Portable RF communications equipment (including peripherals such as antenna cables and external antennas) should be used no closer than 30 cm (12 inches) to any part of the Whirlpool, including cables specified by the manufacturer. Otherwise, degradation of the performance of this equipment could result.
- If there is visible damage to the Whirlpool or packaging upon receipt, report this damage to shipping company and Whitehall. Do not use the Whirlpool if damage to it is suspected.
- Operate with the bottom of the turbine submerged in at least 15.2 cm (6 inches) of water.
- Keep hair and loose items (gown straps, gauze, etc.) out of the tub. These items can be pulled into the pump and cause injury or damage to the turbine.
- Use the Whirlpool only for the purpose described in this manual.
- Position the Whirlpool so that the power cord is easily accessible.



- To avoid damage to the thermometer, do not drop the thermometer or expose it to temperatures above 60°C (140°F).
- No parts shall be serviced or maintained while in use with a patient.



- To avoid the risk of electric shock, this equipment must only be connected to a supply mains with protective earth.
- Connect the power cord to a Ground Fault Circuit Interrupter (GFCI) medical grade receptacle.
- No parts of the Whirlpool, including the power supply cord, are repairable or replaceable by service personnel.
- No modification of the Whirlpool is allowed.
- To protect stainless steel surfaces, use soft water (i.e., water with low concentrations of ions and in particular low in ions of calcium and magnesium) in the tub.

# **Incident Reporting**

Any serious incident that has occurred in relation to this device should be reported to the manufacturer and the local health authority of the Member State in which the user and/or patient is established.



## **Intended Use**

Whirlpool Hydrotherapy Baths are intended to provide temporary relief of swelling and pain from surgical procedures or sudden injuries (for example, minor sprains, strains, muscle pain, joint pain, etc.). Whirlpools Hydrotherapy Baths can be used for any part of the body below the neck. Whirlpools Hydrotherapy Baths may be used in hospitals, outpatient clinics, athletic training settings, or at home settings as determined by a medical professional.

WHIRLPOOLS ARE INTENDED FOR USE IN PROFESSIONAL HEALTHCARE AND SUPERVISED ATHLETIC TRAINING FACILITIES ONLY.

## **Contraindications**

Patient Groups in which hydrotherapy is contraindicated:

- Active infection anywhere in the body
- Open wounds
- Loss of temperature sensation
- Hydrophobia
- · Heat or cold intolerance
- Poor balance
- Kidney failure

Safety & Effectiveness has not been established in patients:

- **With Cancer**: Caution is advised when treating patients with cancer. It is best to work with the consent of a physician.
- Who Hemorrhage: Caution is advised when treating a patient who has a tendency to hemorrhage. Applications of heat and cold which cause vasodilation, which increases the possibility of hemorrhage.
- Who are Pregnant: Caution is advised when treating someone who is pregnant.
   Consult the patient's healthcare provider with any questions or concerns you may have.

## **User Skills**

The medical professional using the Whirlpool must have the following skills:

- The ability to assist the patient
- Knowledge of hydrotherapy protocols
- To have read and understood this manual



• To have become familiar with the Whirlpool before using it with a patient

# **Device Description**

The Whirlpool consists of a welded stainless steel tub for holding water and a turbine assembly mounted to the side of the tub. The turbine assembly is a motor-operated centrifugal pump that circulates the water. The pump position can be adjusted up or down and rotated to change the position of the water outlet, then locked with a handle. The tub can be supported by a full-circumference skirt (-S), legs (-SL), or post bolted to the floor (-SP). For –S and –SP models, water is drained by opening the drain valve to a fixed drain. For –SL models, water is drained by either redirecting the water flow to the drain hose on the turbine and then to a sink, by turning on the optional separate drain pump (-SDP) and then draining to a sink or floor drain, or by opening up the drain valve under the tub to the floor, after which the water will flow to a nearby floor drain. The interior of the tub and tub rim are considered Type B Applied Parts, since they are likely to be touched by the patient.

Water temperature may be adjusted by the operator depending on the desired treatment. A thermometer mounted to the side of the tube is included with the Whirlpool. The Whirlpool does not control water temperature.

For smaller Whirlpools, the patient sits comfortably next to the tub and places their extremity (hand, foot, arm or leg) in the tub. For larger Whirlpools, the patient can enter the tub and sit inside.



# **Options and Accessories**

The following options are incorporated into the Whirlpool device and are not detachable.

#	Description	Used on Models
SDO	Separate Drain and Overflow Assembly	All –S models
SDP	Separate Drain Pump	All -SL models
GFI	Ground Fault Circuit Interruption Cable	All
EGXX, where XX indicates the color of the powder coat	Powder Coat Paint	All except Slant Back
LOGO	Logo selected by customer	All except Slant Back

The following accessories are available:

#	Description	Used on Models	Instructions
RS	Reclining Seat	L-75-S L-90-S L-105-S L-105-SL	Hang seat on back edge of tub as shown. Bottom of seat rests on bottom of tub. For maintenance, see the <i>Disinfecting and Cleaning Instructions</i> section.



#	Description	Used on Models	Instructions
TTS1	Tank Top Seat for 508 mm (20 inch) wide tubs	H-60-S H-75-S H-90-S S-85-S S-85-SL	<ol> <li>Loosen wing nuts on the lower mounting clip assemblies</li> <li>Position tank top seat assembly over radius of tank and align hooks with tank rim</li> <li>Push up on the lower mounting clip assemblies and tighten wing nuts to clamp seat to the Whirlpool rim</li> <li>For maintenance, see the <i>Error!</i></li> </ol>
TTS2	Tank Top Seat for 610 mm (24 inch) wide tubs	H-105-S S-90-S S-90-SL S-110-S S-110-SL L-75-S L-90-S L-105-S L-105-SL	Reference source not found. section.
ARS	Arm Rest Support	All	Hang support on edge of tank as shown. For maintenance, see the Disinfecting and Cleaning Instructions section.
AS1	Adjustable Suspension Seat for 508 mm (20 inch) wide tubs	H-60-S H-75-S H-90-S S-85-S S-85-SL	Hang seat supports on sides of tub. Hang seat on seat supports. Adjust height of seat as desired. For maintenance, see the
AS2	Adjustable Suspension Seat for 610 mm (24 inch) wide tubs, except Lo-Boy	H-105-S S-90-S S-90-SL S-110-S S-110-SL	Disinfecting and Cleaning Instructions section.
AS3	Adjustable Suspension Seat for Lo- Boy	L-75-S L-90-S L-105-S L-105-SL	



# **Facility Requirements**

The following are needed prior to using your Whirlpool:

- Clean water source for filling tub
- Drain plumbed per Figure 1 (-S and –SP models only), installed by licensed plumber
- A sink or floor drain (-SL models only)
- Medical-grade GFCI receptacle, installed by licensed electrician
- Ability to install floor anchors (-S and -SP models only)
- Environmental conditions within those specified in the Specification section of this manual

NOTE: The emissions characteristics of this equipment make it suitable for use in industrial areas and hospitals (CISPR 11 class A). If it is used in a residential environment (for which CISPR 11 class B is normally required) this equipment might not offer adequate protection to radio-frequency communication services. The user might need to take mitigation measures, such as relocating or re-orienting the equipment.



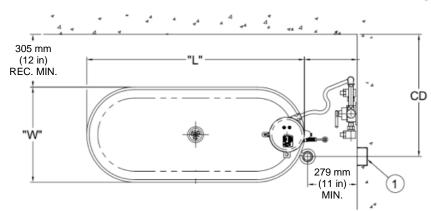
Key:

L = Length

W = WidthD = Depth

OH = Overall Height

CD = Center of Drain to Wall



TOP VIEW

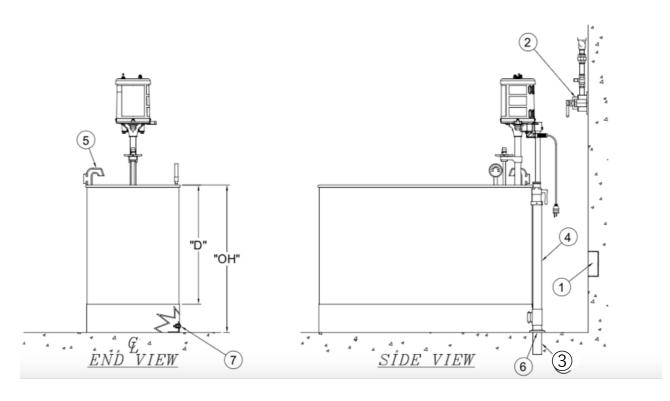


Figure 1:-S and -SP Whirlpool installation diagram - see table below for L, W, D, OH, CW, and CD values.

- ① Mains input (medical grade GFCI)\*
- 5 Filler inlet assembly
- 2 Optional thermostatic mixing valve
- 6 51 mm (2 inch) Drain\*
- ③ 51 mm (2 inch) outer diameter x 127 mm (5 inch) long drain tube coupling
- 7 Mounting clip assembly
- ④ 51 mm (2 inch) standard drain and overflow assembly

\* Customer provided



	Dimension, mm (inches)					
Model #	L	WD		Overall	Center of	
	L	VV	D	Height	Drain to Wall	
P-10-S	559 (22)	220 (12)	305 (12)	457 (18)		
P-15-S	635 (25)	330 (13)	381 (15)	533 (21)		
P-22-S	711 (28)	381 (15)	457 (18)	610 (24)		
E-15-S	635 (25)	330 (13)	381 (15)	533 (21)	672 (26.5)	
E-22-S			157 (10)	610 (24)	673 (26.5)	
E-22-SP	711 (28)	201 (15)	457 (18)	864 (34)		
E-27-S		381 (15)	533 (21)	686 (27)		
E-45-S	813 (32)		635 (25)	787 (31)		
H-60-S	914 (36)			964 (24)	737 (29)	
H-75-S	1067 (42)	508 (20)	711 (20)			
H-90-S	1210 (40)	` '		864 (34)		
H-105-S	1219 (48)				707 (21)	
L-75-S	1321 (52)	321 (52)		610 (24)		
L-90-S	1524 (60)	610 (24)	457 (18)		787 (31)	
L-105-S	1676 (66)		457 (16)			
L-105-SL	1070 (00)			699 (27.5)	N/A*	
S-85-S	1219 (48)	508 (20)		787 (31)	737 (29)	
S-85-SL	1219 (40)	300 (20)		889 (35)	N/A*	
S-90-S	1160 (46)		625 (25)	878 (31)	787 (31)	
S-90-SL	1168 (46)	C40 (04)	635 (25)	889 (35)	N/A*	
S-110-S	1422 (56)	610 (24)		787 (31)	787 (31)	
S-110-SL	1422 (56)			889 (35)	N/A*	
SB-100-S	1549 (61.0)	602 (23.7)	470 (18.5)	597 (23.5)	762 (30)	

<sup>\*-</sup>SL models can drain either through a horizontal pipe under the tub, or via the drain hose on the turbine assembly



## Instructions

## Installation Instructions

#### To install tub

#### 1. -S models:

- a. Connect tub drain to installed drain line using supplied 51 mm (2 inch) drain tube coupling and escutcheon and position the tub in desired location.
- b. Trace outline of skirt on floor near the four holes (for all but slant back) or six holes (for slant back) in the base of the skirt.
- c. Mark location of holes directly below them on floor.
- d. Disconnect drain tube coupling and move tub aside. Depending on the model, 2 people may be required to move the tub.
- e. Measure 19 mm (3/4 inch) inward (for all but slant back) or 32 mm (1-1/4 inch) inward (for slant back) from the lines marked in step b at the hole locations marked in step c.
- f. Remove and set aside attaching hardware from mounting clip assemblies.
- g. Attach brackets to floor using 6.35 mm (1/4 inch) bolts, aligning the brackets so they are just inward from and parallel to the line drawn in step b to allow for the sheet metal thickness of the tub skirt.
- h. Lift the tub over the brackets and attach with the bolts and washers using a Phillips screwdriver.
- i. Attach filler inlet assembly.

#### 2. -SP models:

- a. Connect tub drain to installed drain line using supplied 51 mm (2 inches) outer diameter drain tube coupling and escutcheon and position tub in desired location, keeping at least 30.5 cm (12 inches) clearance around outside of tub (see Figure 1).
- b. Mark bolt hole locations in post onto floor.
- c. Set tub aside and install 9.53 mm (3/8 inches) anchors in floor.
- d. Re-connect tub drain to installed drain line and tighten connections.
- e. Attach filler inlet assembly.

**To install thermometer**, insert sensing rod (7) through upper bracket (8) and into lower bracket (9), then tighten screw (10).

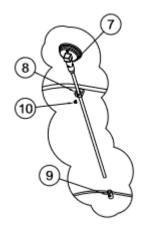


Figure 2: Installing thermometer





NOTE: The turbine assembly can weigh as much as 22 kg (48 lbs). It is recommended that 2 people mount the turbine assembly onto the tub.

## To install the turbine (3) onto tub,

- 1. (Figure 3) Loosen handle (5) then lower turbine support rod (6) into turbine support tube. Tighten handle (5) when turbine is at desired height.
- For –SL models (Figure 5) and -SL-SDP models (Figure 4): Place discharge nozzle (5) into storage socket (6).
   For –SL-SDP models only: water will flow through hose if discharge nozzle (5) is lower than water level.
- 3. Turn the pressure control valve handle (11) fully clockwise, then fully counterclockwise to completely lubricate the plunger assembly.
- 4. For –SL–SDP models only (Figure 4): Insert electrical cord twist-lock plug (7) into socket (9) and turn clockwise a quarter turn to lock in place. Ensure plug cover is firmly against the receptacle (9).
- 5. Turn the turbine power switch (13) off.
- Plug Whirlpool power cord into medical-grade GFCI outlet.

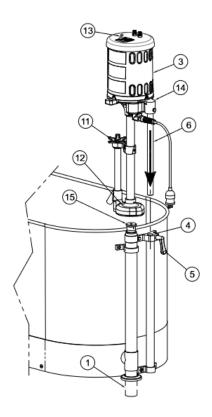


Figure 3: Installing the turbine on the tub. –S model with standard drain and overflow shown.

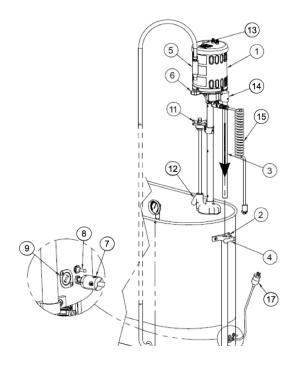


Figure 4: Detail of -SL-SDP Whirlpools

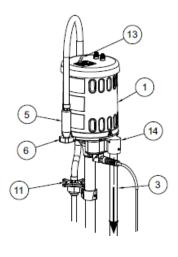


Figure 5: Detail of -SL model without -SDP





## **Operating Instructions**

Refer to warnings on page 5 before operating the Whirlpool.

- 1. Ensure Whirlpool power cord is plugged into medical-grade GFCI outlet.
- 2. Fill tub with water so that the bottom of turbine is at least 15.2 cm (6 inches) below surface of water.
- Turn the pressure control valve handle (11) fully clockwise. This will generate maximum water circulation.
- 4. Turn the turbine power switch (13) on.
- 5. Adjust position of turbine by slowly pushing down on and rotating the top of the motor support casting (14) until the bottom of the turbine (12) is at the desired location. Tighten handle (5) to lock in place.
- 6. Adjust pressure control valve handle (11) to change level of water circulation.
- 7. Turn the turbine power switch (13) off to stop circulation.
- 8. To electrically isolate the Whirlpool from supply mains, simply unplug the Whirlpool at the wall outlet, if required.

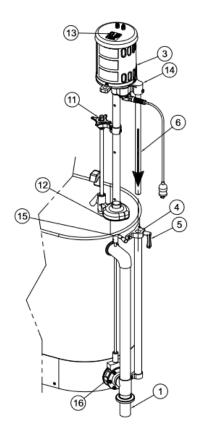


Figure 6: Operating the Whirlpool. -S model with -SDO option shown.



## **Draining Instructions**

- 1. Turn the turbine power switch off to stop water circulation.
- 2. **-SL models w/o separate drain pump** (Figure 7): Either open drain valve (2) and drain to floor or
  - a. Lower turbine to lowest position and lock in place.
  - b. Lift discharge nozzle (5) from storage socket (6) and place in sink.
  - c. Turn pressure control valve handle (3) fully counterclockwise. This diverts water to the hose (1).
  - d. Place and hold discharge nozzle (5) into sink then turn the turbine power switch (4) on to start draining to sink.

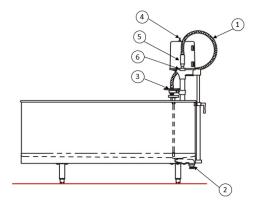
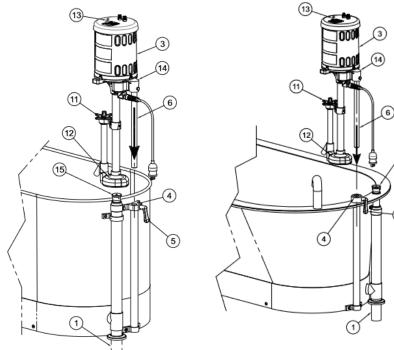
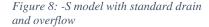


Figure 7: Draining the tub on the -SL model

- e. When water stops discharging from the nozzle, turn the turbine power switch (4) off.
- f. Drain remaining water using drain valve (2) or by using a dry sponge.
- 3. -S and -SP models with:
  - a. Standard drain and overflow (Figure 8 and Figure 9): Lift combination drain and overflow assembly handle (15).
  - b. Separate drain and overflow (Figure 10): Turn handle (15) clockwise to open drain valve (16).





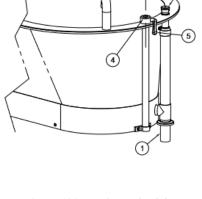


Figure 9: SB-100-S with standard drain and overflow

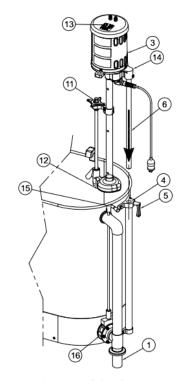


Figure 10: -S model with separate drain and overflow (-SDO)



## 4. **-SL models with separate drain pump** (-SDP, Figure 11):

- a. Place discharge nozzle (5) into floor drain or sink.
- b. Turn the drain pump switch (18, Figure 4) on. When water stops discharging from the nozzle, turn the drain pump switch off.
- c. Some residual water will remain in the drain pump. To remove this water, lower the discharge nozzle (5) to the floor and clean with a towel or sponge.
- d. Any residual water in the tub may be removed by sponge drying.
- e. Place discharge nozzle (5) into socket (6). Note: water will flow through hose if discharge nozzle (5) is lower than water level.

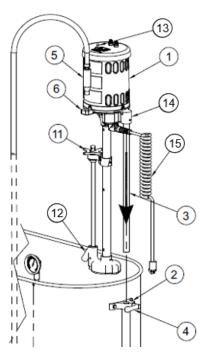


Figure 11: -SL Whirlpool with separate drain pump (-SDP)



## **Thermometer Calibration Instructions**

- 1. Fill the tub so that the bottom of the thermometer tip is immersed in at least 10.2 cm (4 inches) of water.
- 2. Place the stem tip of a calibrated thermometer next to the tip of the Whirlpool thermometer.
- 3. Turn on the turbine assembly.
- 4. If the reading on the Whirlpool thermometer is not the same as that of the calibrated thermometer, turn the external adjustment screw (a) so that the Whirlpool thermometer reading is identical to the calibrated thermometer.
- 5. Re-calibration shall be performed at least every 12 months or as needed.





## **Disinfecting and Cleaning Instructions**



### Important:

- Do not use abrasive compounds or applicators such as metal brushes they can damage the whirlpool's appearance. Do not allow steel wool to come in contact with stainless steel. Steel particles can embed into the stainless steel surface and create rust.
- Avoid cleaning or disinfecting products that contain strong acids or contain chlorine, fluorine, bromine, or iodine, as these products can damage the protective chromium oxide layer, resulting in corrosion and leaks. If such products are used on stainless steel, keep the exposure brief (less than 15 minutes) and thoroughly rinse stainless steel surfaces of all residue.

Recommended cleaning materials:

- a. Sponge (natural or artificial)
- b. Soft-bristle brush
- c. Soft cloth (e.g. microfiber cloth)

The tub, thermometer, and turbine shall be disinfected and cleaned after each patient.

## **Disinfecting and Cleaning the Tub and Thermometer**

- 1. Drain the tub following the draining instructions above.
- 2. Verify that the turbine is off.
- 3. Remove any loose objects or debris that may be present in the Whirlpool tub.

To disinfect, use a stainless steel hard surface disinfectant per the manufacturer's instructions with one of the recommended cleaning materials above.

To clean, use a mild soap solution with one of the recommended cleaning materials above.

Rinse thoroughly prior to use.

## **Disinfecting and Cleaning the Turbine**

- 1. Drain the tub following the draining instructions above.
- 2. For tubs greater than 75.7 L (20 US gallons), raise turbine, place a large clean bucket in the tub and lower the bottom of the turbine into the empty bucket.
- 3. Fill the bucket or tub with water so the bottom of the turbine is at least 15.2 cm (6 inches) below the surface of the water.
- 4. Add disinfectant solution to the water per manufacturer's instructions.
- 5. Ensure the aerator control valve is in the open position.
- 6. Turn on the turbine for 5 seconds and turn it off. Wait 10 minutes.



- 7. Spray or wipe all exposed surfaces with a mixture of suitable disinfectant solution per manufacturer's instructions. Exposed surfaces shall remain wet for at least 10 minutes.
- 8. Drain the turbine bucket into the tub and open drain.
- 9. Rinse all exposed surfaces with warm or hot water.
- 10. Fill the bucket with clean water and run turbine for five seconds to rinse impeller cavity.



# **Turbine Maintenance**

Motors are equipped with sealed greased ball bearings that do not require lubrication so are maintenance-free. Clean vent holes in the motor cover shell periodically to allow free air flow and prevent overheating.

# **Troubleshooting**

Symptom	Possible Cause	Remedy
Loss in pressure	Foreign material caught in pump inlet holes	<ol> <li>Turn off and unplug turbine assembly</li> <li>Remove foreign materials from bottom of pump</li> </ol>
	Turbine pump is not submerged fully in water	Ensure that water level is at least 6" (152mm) above bottom of turbine assembly
Water does not circulate	No power to turbine	Check the power source  Reset the GFCI(s) if tripped  Replace the fuses (see instructions below)  Contact Whitehall
	Shaft has seized	Contact Whitehall
Turbine stops operation	Motor is overloaded	Check for blocked motor ventilation holes Check for excessive current load NOTE: The motor is equipped with a thermal overload protector. In an overheated condition, the motor will automatically shut off until it has returned to a normal operating temperature, then resume operation.

## Fuse Replacement Procedure:

- 1. Turn off and unplug the turbine
- 2. Push down and turn each of the round black fuse covers counter-clockwise on top of the turbine and set aside
- 3. Remove the fuses and discard
- 4. Replace the fuses with 6525-608-000 for the 125V~ turbine and 6525-612-000 for the 230V~ turbine (or equivalent)
- 5. Replace the fuse covers by pushing down and turning clockwise
- 6. Plug in the turbine



# Classification

Electric Shock Protection	Class I
Applied Parts	None
Ingress Protection	IP24
Mode of Operation	Continuous

# **Specifications**

Water capacity   F-10	Mechanical							
Liters (UŚ Gallons)    54.1		P-10	P-15	P-22	S-85	S-90	S-110	SB-100
(14.3) (20.8) (31.9) (100.1) (110.8) (136.9) (136.2)  E-15								
E-15	Liters (00 Galloris)	(14.3)	(20.8)	(31.9)	(100.1)	(110.8)	(136.9)	(136.2)
T8,7					E-45	H-60	H-75	H-90
H-105		78.7	119.6	140.4	190.0	312.7		425.5
486.4 (123.2) (91.1) (105.3) (117.8)		(20.8)	(31.6)	(37.1)	(50.2)	(82.6)	(97.1)	(112.4)
Mater flow rate		H-105	L-75	L-90	L-105			
Vater flow rate			344.9					
Electrical Input voltage  115/230 V~  230 V~ models are for export only  Line Frequency 50/60 Hz  Rated Current 6.9/3.5 A  Electromagnetic Compatibility Compatibility Compatibility Compatibility Standard Specifications Radiated Emissions CISPR 11 30 MHz - 1 GHz, Class A Conducted Emissions, AC Mains Harmonic Emissions Ficker IEC 61000-3-2 10 min, Class D (no limits for < 75W) Ficker IEC 61000-4-2 Radiated RF EM fields IEC 61000-4-2 Radiated RF EM fields IEC 61000-4-2 Radiated RF EM fields IEC 61000-4-2 Rediated RF EM fields IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-2 IEC 61000-4-2 IEC 61000-4-3 IEC 61000-4-3 IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-5 IEC 61000-4-6 Power Supply Lines, 2 2kV 100 kHz PRF  For Surge IEC 61000-4-6 IEC 61000-4-8 IEC 61000-4-9 IEC 61000-4-1 IEC 61000-4								
Input voltage    115/230 V~   230 V~   models are for export only	Water flow rate	0-56.8 L/min	(0-15 US	gallons/mii	n)			
Line Frequency   50/60 Hz	Electrical							
Line Frequency   50/60 Hz	Input voltage	115/230 V~						
Line Frequency   50/60 Hz								
Rated Current    File		230 V~ mode	els are for	export only	y			
Electromagnetic Compatibility Compatibility Standard (IEC 60601-1-2), as shown below:  Standard Radiated Emissions CISPR 11 Sto RHz - 1 GHz, Class A Conducted Emissions, AC Mains Harmonic Emissions IEC 61000-3-2 ID min, Class D (no limits for < 75W) Flicker IEC 61000-3-3 IEC 61000-3-3 IEC 61000-4-2 Contact: ± 2kV, ± 4kV, ± 8kV; Air: ± 2kV, ± 4kV, ± 8kV ± 15kV Radiated RF EM fields IEC 61000-4-3 Radiated RF EM fields IEC 61000-4-4 Power Supply Lines; ± 2kV 100 kHz PRF Surge IEC 61000-4-5 Line to line ± 0.5kV, ± 1kV RF Conducted Immunity IEC 61000-4-8 Short Interruption IEC 61000-4-8 Short Interruption IEC 61000-4-1 IEC 61000-	Line Frequency	50/60 Hz						
Compatibility         compatibility standard (IEC 60601-1-2), as shown below:           Description         Standard         Specifications           Radiated Emissions         CISPR 11         30 MHz – 1 GHz, Class A           Conducted Emissions, AC Mains         CISPR 11         150 kHz – 30 MHz, Class A           Harmonic Emissions         IEC 61000-3-2         10 min, Class D (no limits for < 75W)	Rated Current	6.9/3.5 A						
Description         Standard         Specifications           Radiated Emissions         CISPR 11         30 MHz – 1 GHz, Class A           Conducted Emissions, AC Mains         CISPR 11         150 kHz – 30 MHz, Class A           Harmonic Emissions         IEC 61000-3-2         10 min, Class D (no limits for < 75W)	Electromagnetic	All Whirlpool	models co	mply with	the latest i	nternationa	al electroma	agnetic
Radiated Emissions         CISPR 11         30 MHz – 1 GHz, Class A           Conducted Emissions, AC Mains         CISPR 11         150 kHz – 30 MHz, Class A           Harmonic Emissions         IEC 61000-3-2         10 min, Class D (no limits for < 75W)	Compatibility	compatibility	standard (	(IEC 60601	I-1-2), as s	hown belov	w:	
Conducted Emissions, AC Mains         CISPR 11         150 kHz – 30 MHz, Class A           Harmonic Emissions         IEC 61000-3-2         10 min, Class D (no limits for < 75W)	•	Standard	Specifica	ntions				
Harmonic Emissions   IEC 61000-3-2   10 min, Class D (no limits for < 75W)   Flicker   IEC 61000-3-3   120 min (no limits for < 75W)   Electro-Static Discharge (ESD)   IEC 61000-4-2   Contact: ± 2kV, ± 4kV, ± 8kV; ± 15kV   Radiated RF EM fields   IEC 61000-4-3   3 V/m, 80% AM at 1 kHz   80MHz − 2.7GHz   Electrical Fast Transient (EFT)   IEC 61000-4-4   Power Supply Lines, ± 2kV   100 kHz PRF   Surge   IEC 61000-4-5   Line to line ± 0.5kV, ± 1kV   RF Conducted Immunity   IEC 61000-4-6   Power Supply Lines: 3 Vrms, 0.15 − 80MHz; ISM Bands   Input/Output Lines: 3 Vrms, 0.15 − 80 MHz; 6 Vrms, ISM bands, 80% AM at 1 kHz   Magnetic Field   IEC 61000-4-8   30 Arms/m, 50Hz or 60Hz   Short Interruption   IEC 61000-4-11   0 % U₁; 250/300 cycles, 0°, 90°, 270°    Environmental Conditions  Operational   10 − 33°C (50 − 90°F)   Transportation and   Storage   Relative humidity   5 − 95%, non-condensing   Atmospheric Pressure   70 − 106 kPa   Thermometer   Range   Dual scale: 5-60°C and 40-140°F	Radiated Emissions	CISPR 11						
Flicker   IEC 61000-3-3   120 min (no limits for < 75W)	· · · · · · · · · · · · · · · · · · ·							
Electro-Static Discharge (ESD)   IEC 61000-4-2   Contact: ± 2kV, ± 4kV, ± 8kV; Air: ± 2kV, ± 4kV, ± 8kV ± 15kV				•				
Radiated RF EM fields				<u> </u>		. 41.7 . 61.7 .	4511/	
SOMHz - 2.7GHz	<u> </u>				•	, ± 4KV, ± 8KV ±	15KV	
Electrical Fast Transient (EFT)	Radiated KF EWI Helds	IEC 01000-4-5			2			
100 kHz PRF	Electrical Fast Transient (EFT)	IEC 61000-4-4			kV			
RF Conducted Immunity    IEC 61000-4-6   Power Supply Lines: 3 Vrms, 0.15 - 80MHz; ISM Bands Input/Output Lines: 3 Vrms, 0.15 - 80 MHz; 6 Vrms, ISM bands, 80% AM at 1 kHz   Magnetic Field   IEC 61000-4-8   30 Arms/m, 50Hz or 60Hz	, ,							
Input/Output Lines: 3 Vrms, 0.15 - 80 MHz; 6 Vrms, ISM bands, 80% AM at 1 kHz         Magnetic Field       IEC 61000-4-8       30 A <sub>rms</sub> /m, 50Hz or 60Hz         Short Interruption       IEC 61000-4-11       0 % U <sub>T</sub> : 250/300 cycles, 0°, 90°, 270°         Environmental Conditions         Operational       10 - 33°C (50 - 90°F)         Transportation and Storage       0 - 60°C (32 - 140°F)         Relative humidity       5 - 95%, non-condensing         Atmospheric Pressure       70 - 106 kPa         Thermometer         Range       Dual scale: 5-60°C and 40-140°F								
Magnetic Field         IEC 61000-4-8         30 Ams/m, 50Hz or 60Hz           Short Interruption         IEC 61000-4-11         0 % Ur: 250/300 cycles, 0°, 90°, 270°           Environmental Conditions           Operational         10 - 33°C (50 - 90°F)           Transportation and Storage         0 - 60°C (32 - 140°F)           Relative humidity         5 - 95%, non-condensing           Atmospheric Pressure         70 - 106 kPa           Thermometer           Range         Dual scale: 5-60°C and 40-140°F	RF Conducted Immunity	IEC 61000-4-6		,	,	•		
Short Interruption IEC 61000-4-11 0 % UT: 250/300 cycles, 0°, 90°, 270°  Environmental Conditions Operational 10 - 33°C (50 - 90°F)  Transportation and Storage Relative humidity 5 - 95%, non-condensing Atmospheric Pressure 70 - 106 kPa Thermometer  Range Dual scale: 5-60°C and 40-140°F		150 64000 4.0				лнz; 6 Vrms, ISI	M bands, 80% A	M at 1 kHz
Environmental Conditions  Operational 10 - 33°C (50 - 90°F)  Transportation and 5torage Relative humidity 5 - 95%, non-condensing  Atmospheric Pressure 70 – 106 kPa  Thermometer  Range Dual scale: 5-60°C and 40-140°F								
Operational 10 - 33°C (50 - 90°F)  Transportation and 5torage 0 - 60°C (32 - 140°F)  Relative humidity 5 - 95%, non-condensing  Atmospheric Pressure 70 – 106 kPa  Thermometer  Range Dual scale: 5-60°C and 40-140°F								
Transportation and Storage  Relative humidity 5 - 95%, non-condensing  Atmospheric Pressure 70 – 106 kPa  Thermometer  Range Dual scale: 5-60°C and 40-140°F			) 00°E)					
Storage Relative humidity 5 - 95%, non-condensing Atmospheric Pressure 70 – 106 kPa Thermometer Range Dual scale: 5-60°C and 40-140°F		1						
Relative humidity 5 - 95%, non-condensing Atmospheric Pressure 70 – 106 kPa Thermometer Range Dual scale: 5-60°C and 40-140°F		0 - 60°C (32	- 140°F)					
Atmospheric Pressure 70 – 106 kPa Thermometer Range Dual scale: 5-60°C and 40-140°F								
Thermometer Range Dual scale: 5-60°C and 40-140°F								
Range Dual scale: 5-60°C and 40-140°F		70 – 106 kPa						
	Thermometer							
Accuracy ± 1.1°C (2°F)	Range							
= · · · • \= · /	Accuracy	± 1.1°C (2°F	)					



## **Mailing Address:**

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### MANUFACTURER'S WARRANTY

Go to www.whitehallrehabilitation.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. City of 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 noncompliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be properly maintained after 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.

