# INSTRUCTIONS FOR OPERATION AND CARE OF



# **EXCELLENCE IN HYDROTHERAPY**

(Full Immersion Tanks)



F-300-S



P.O. Box 3527 • City of Industry, CA, 91744-0527, U.S.A. 800-782-7706 • 626-968-6681 • www.whitehallmfg.com

Member of MORRIS GROUI

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### PLEASE READ THIS ENTIRE **BOOKLET BEFORE OPERATING** YOUR NEW WHIRLPOOL



Failure to follow these instructions could result in damage to your new whirlpool and/or bodily injury

### 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.

# 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.

### Electric Shock (A)



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.

# Hot Surface

This symbol is used to indicate a hot surface and to avoid prolonged contact with indicated surface.

#### Refer To Installation Manual



This symbol means refer to installation manual prior to performing any installation, operation or maintenance.

#### The Sine Wave <



This symbol on the label indicates the turbine motor operates on alternating current at the listed cycles.

# Figure of a Person T





#### WARNING

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

- WHIRLPOOLS intended for professional use only.
- 220v WHIRLPOOLS for export only.
- DO NOT operate appliance without properly filling tub with water. Under no conditions should the appliance be operated without water. Fill tub with water to the prescribed level before plugging turbine into an electrical receptacle. Operating the appliance without water may result in damage to the motor.
- IMPROPER USE of the whirlpool can cause injury. Use the whirlpool only for the purpose described in this manual.
- THE TURBINE is top-heavy. Improper handling can cause injury or damage. Handle the turbine with care.
- ATTACHING IMPROPER items to the whirlpool can cause injury to persons and damage to equipment. Use only Whitehall approved items on the whirlpools.
- INCORRECT PARTS and service can cause injury to persons and damage equipment. Use only Whitehall parts and Whitehall approved service on turbines. Contact Whitehall Customer Service.



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### **OPERATOR SKILLS AND TRAINING**

#### Skills:

Operators using the whirlpool tub/turbine set need:

- a working knowledge of aquatic physical-therapy procedures.
- the ability to assist the patient.

# **△ WARNING**

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

#### **TRAINING**

Operator trainees need to:

- be trained in hydrotherapy protocols.
- be familiar with the types of patients who should or should not receive this type of physical therapy (see Patient Evaluation, below).
- read and understand this manual for the tub/turbine combination.
- · be trained on the use of the whirlpool and turbine.
- Become familiar with the use of the whirlpool (bath and turbine) before using with patient.

### PATIENT EVALUATION

### Require Each Patient To Be Evaluated

Patients who are electrically-susceptible (patients with exposed, non-waterproof electric leads, monitors, etc.), patients carrying infectious disease, or patients with certain other medical, mental or physical conditions should not receive treatment with the whirlpool.

The trained operator must evaluate and verify that each patient is suitable for hydrotherapy treatment before permitting the patient to begin hydrotherapy. If in doubt, consult a medical professional before providing hydrotherapy treatment.

# **⚠ WARNING**

Certain medical conditions are incompatible with hydrotherapy. The trained operator is responsible for determining each user's suitability for hydrotherapy before beginning treatment.

### **Important**

BLOODBORNE DISEASE NOTICE: To reduce the risk of exposure to bloodborne diseases such as HIV-1 and hepatitis when using the whirlpool, read and follow the disinfecting and cleaning instructions in this manual thoroughly.

# INSPECTING THE WHIRLPOOL TUB AND TURBINE

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.

# **MARNING**

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.

Have your facility's equipment maintenance personnel inspect the whirlpool regularly. Follow the checklist at right and operate the whirlpool device through all its functions as described in this manual.

### Inspection Checklist

- Are all components present?
- Does the turbine mount securely in place?
- Is a properly-grounded and voltage-matched hospital grade receptacle available for the turbine?
- Is the outlet equipped with a functioning GFCI (or RCD)?
- Is the turbine located close enough to the electrical outlet to prevent cord interference?
- Can the turbine be raised, lowered and locked at the desired height?
- Does the drain valve open and close properly?
- Is the thermometer present and is it legible?
- Do the installed accessories operate without interfering with tub use or turbine operation?



### **USING THE WHIRLPOOL**

#### **Device Intended Use:**

Whitehall Whirlpool turbines are intended to provide clinical, physical hydro-massage treatment within a fluid medium, mounted in a tank of a size and shape as deemed effective and determined by a medical professional.

# Before Placing the Whirlpool Tub and Turbine Combination In Service:

Operators using the whirlpool need:

- To read and understand the information in this manual.
- To have a plumbing professional install the whirlpool as instructed in *Installing the Whirlpool*, page 4. A rough-in drawing is available to assist the installer. Contact Whitehall Customer Service, bottom of page, for any additional information not covered in this manual.
- Confirm that the whirlpool operates properly. See *Inspecting the Whirlpool*, page 2.

#### **General Guidelines for Use:**

- Medical advice is beyond the scope of this manual.
- The whirlpool is for professional use only. A minimum of one trained operator is required.
- The trained operator must evaluate and verify that the patient is suitable for hydrotherapy treatment before beginning hydrotherapy with the whirlpool. See *Patient Evaluation*, page 2.
- Follow your state and local hydrotherapy procedures and, if the patient has one, the physician's order for treatment (see *Patient Evaluation*, page 2).
- · Stay with patient at all times.
- It is the operator's responsibility to ensure safe practices for the patient and themselves.
- Turbine precautions:
  - Plug the turbine cord only into a receptacle that is voltage-matched, properly grounded and polarized. Verify that the receptacle has GFCI protection.
- Cord plug is disconnect device. Always maintain clear access to this connection after installation.
- Keep patient hair, gown strings and other loose items away from the impeller housing to avoid entanglement and injury.
- Keep the area around the tub clear a minimum of 12" (305mm) of clearance.

### **General Guidelines for Use: (Continued)**

- Avoid prolonged contact with the motor cover, as elevated temperatures can cause discomfort.
- Normal Operating Conditions: Temperature range between 50° and 93°F (10° and 35°C).
- Relative humidity 5 to 95% and atmospheric pressure sea level to 3,000 meters during use.

Transportation and Storage Conditions:

- Temperature Range should remain between 32° and 110°F (0° and 43°C)
- Relative Humidity Range: 5 to 95%.
- Room Atmospheric Pressure sea level to 3,000 meters.
- Prior to unpacking, when new, tipping has no effect.
  However, after assembly, the equipment should
  remain upright, as tipping or inversion may cause
  damage from components coming loose.

# **MARNING**

Certain medical conditions are incompatible with hydrotherapy. The trained operator is responsible for determining each user's suitability for hydrotherapy before beginning treatment.

Improper operation can cause injury. Operate the whirlpool only as described in this manual.

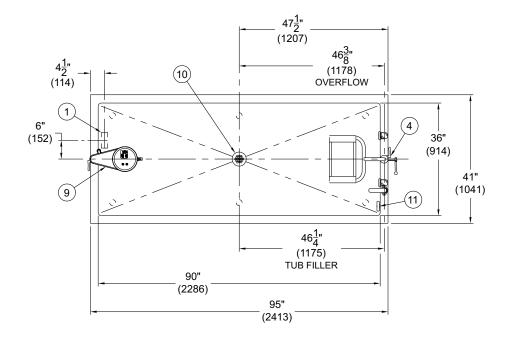
An unattended patient can be injured. Stay with patient at all times.

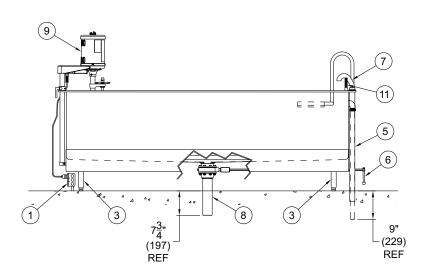
Loose items such as gown straps or gauze can be pulled into the turbine impeller and cause injury. Keep loose items away from the turbine impeller housing.

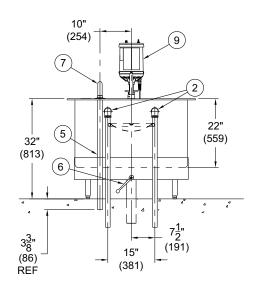
# **Important**

Communicate with patient at all times. When the turbine is used, tell the patient before starting or stopping the turbine and before changing the water or aeration level.





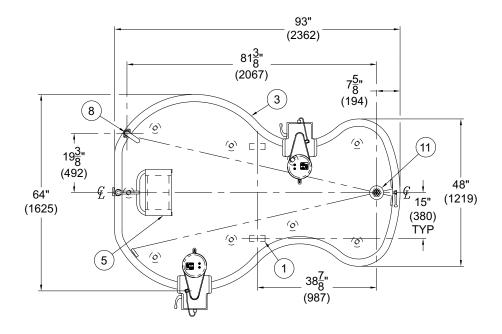


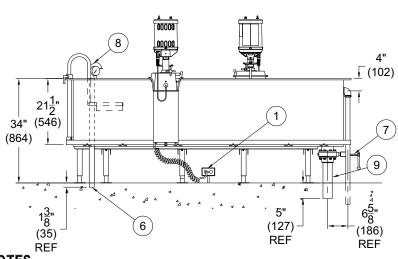


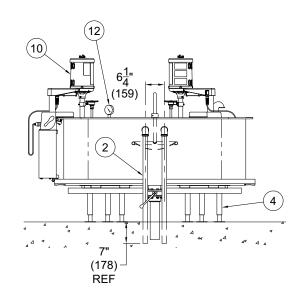
- (1) ROUGH-IN POSITION OF ELECTRICAL RECEPTACLE BY OTHERS, IN LOCATION SHOWN: REFER TO SPECIFIC TURBINE FOR ELECTRICAL REQUIREMENTS. PROVIDE ONE HOSPTIAL GRADE 3 POLE RECEPTACLE WITH GROUND FAULT INTERRUPT FOR TURBINE.
- (2) TWIN OVERFLOW ASSEMBLIES
- (3) ADJUSTABLE TANK SUPPORTING LEGS
- (4) HEADREST RAISING AND LOWERING ASSEMBLY

- (5) CONNECT 1-1/2" PIPE TO DISCHARGE OF MIXING VALVE
- (6) DRAIN VALVE LEVER HANDLE
- (7) OVER RIM INLET SUPPLY FITTING
- (8) 3" DRAIN VALVE, 3" OD TAIL PIECE
- 9 TURBINE ASSEMBLY
- (10) REMOVABLE GRID STRAINER
- (11) THERMOMETER





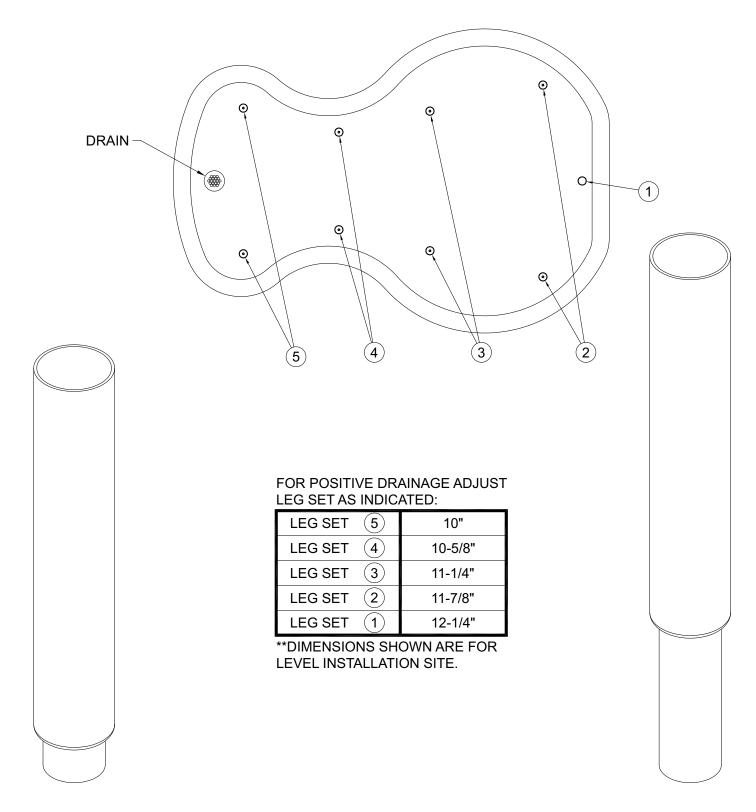




- (1) ROUGH-IN POSITION OF ELECTRICAL RECEPTACLE
  BY OTHERS, IN LOCATION SHOWN: REFER TO SPECIFIC
  TURBINE FOR ELECTRICAL REQUIREMENTS. PROVIDE
  TWO (2) HOSPITAL GRADE 3-POLE RECEPTACLE WITH
  GROUND FAULT INTERRUPT FOR TURBINE.
- (2) 1-1/4" OD TWIN OVERFLOW ASSEMBLIES
- (3) 2-1/2" RAIL ALL AROUND PERIMETER
- (4) ADJUSTABLE TANK SUPPORTING LEGS
- (5) HEAD RESTRAISING AND LOWERING ASSEMBLY

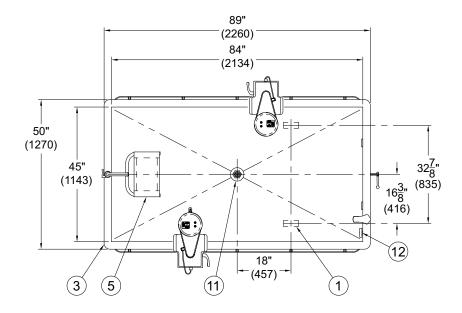
- (6) 1-1/4" NPT x PLAIN END PIPE TUB FILLER CONNECTION
- 7) DRAIN VALVE LEVER HANDLE
- (8) FILLER SPOUT
- 9) 3" BUTTERFLY VALVE, 3" OD TAIL PIECE
- (10) TURBINE AND CARRIAGE ASSEMBLY
- (11) REMOVABLE GRID STRAINER
- (12) THERMOMETER

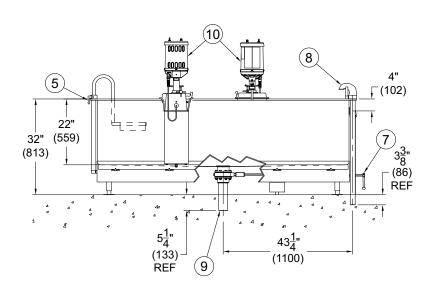


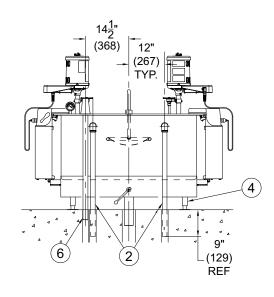


17	ГЕМ	PART NUMBER	DESCRIPTION
	1	6507-011-000	ADJUSTABLE LEGS - 10" TO 12-1/2" MAX





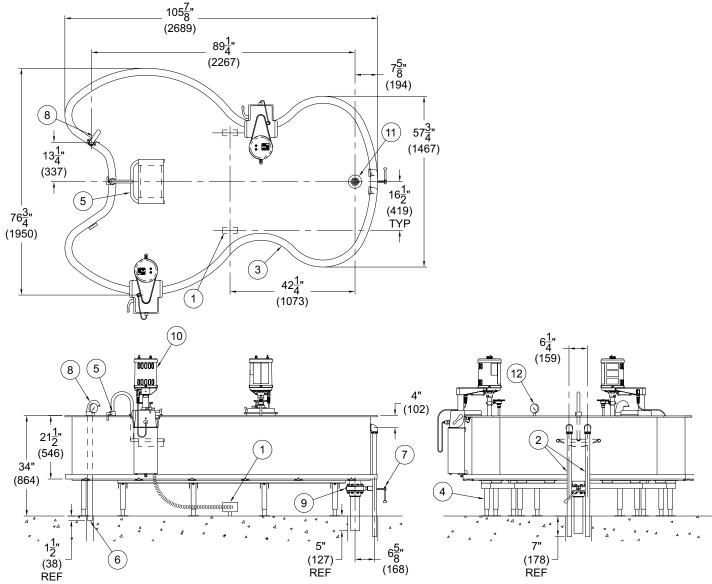




- 1 ROUGH-IN POSITION OF ELECTRICAL RECEPTACLE BY OTHERS, IN LOCATION SHOWN: REFER TO SPECIFIC TURBINE FOR ELECTRICAL REQUIREMENTS. PROVIDE TWO (2) HOSPITAL GRADE 3-POLE RECEPTACLE WITH GROUND FAULT INTERRUPT FOR TURBINE.
- (2) 1-1/4" OD TWIN OVERFLOW ASSEMBLIES
- (3) 2-1/2" RAIL ALL AROUND PERIMETER
- (4) ADJUSTABLE TANK SUPPORTING LEGS
- (5) HEADREST RAISING AND LOWERING ASSEMBLY

- 6 1-1/4" NPT x PLAIN END PIPE TUB FILLER CONNECTION
- (7) DRAIN VALVE LEVER HANDLE
- 8 FILLER SPOUT
- (9) 3" BUTTERFLY VALVE, 3" OD TAIL PIECE
- (10) TURBINE AND CARRIAGE ASSEMBLY
- (11) REMOVABLE GRID STRAINER
- (12) THERMOMETER

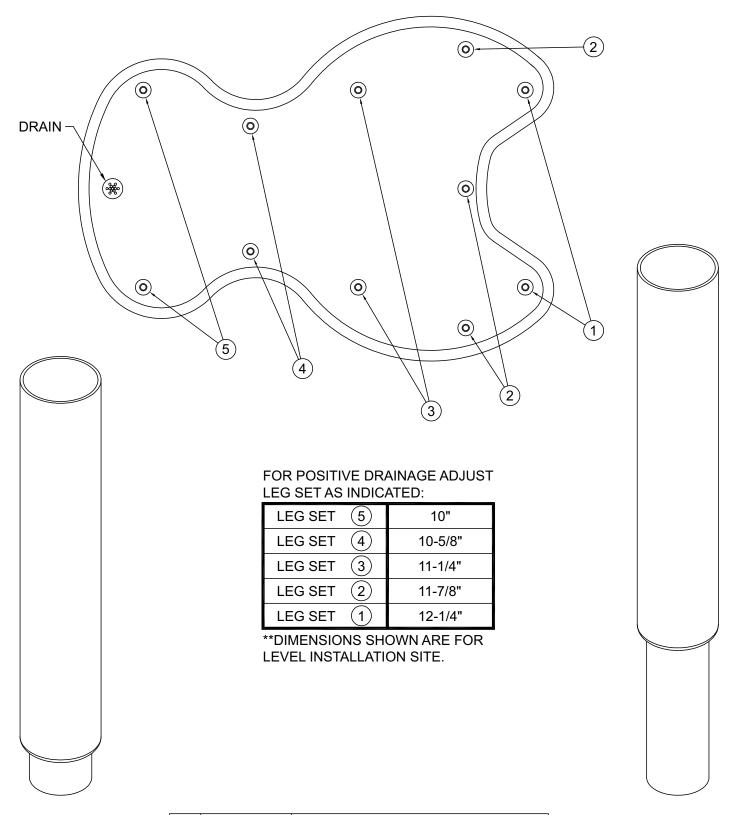




- 1 ROUGH-IN POSITION OF ELECTRICAL RECEPTACLE BY OTHERS, IN LOCATION SHOWN: REFER TO SPECIFIC TURBINE FOR ELECTRICAL REQUIREMENTS. PROVIDE TWO (2) HOSPITAL GRADE 3-POLE RECEPTACLE WITH GROUND FAULT INTERRUPT FOR TURBINE.
- (2) 1-1/4" OD TWIN OVERFLOW ASSEMBLIES
- (3) 2-1/2" RAIL ALL AROUND PERIMETER
- (4) ADJUSTABLE TANK SUPPORTING LEGS
- (5) HEADREST RAISING AND LOWERING ASSEMBLY

- 6 1-1/4" NPT x PLAIN END PIPE TUB FILLER CONNECTION
- (7) DRAIN VALVE LEVER HANDLE
- 8 FILLER SPOUT
- (9) 3" BUTTERFLY VALVE, 3" OD TAIL PIECE
- (10) TURBINE AND CARRIAGE ASSEMBLY
- (11) REMOVABLE GRID STRAINER
- (12) THERMOMETER



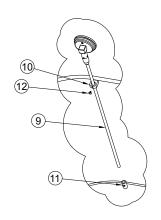


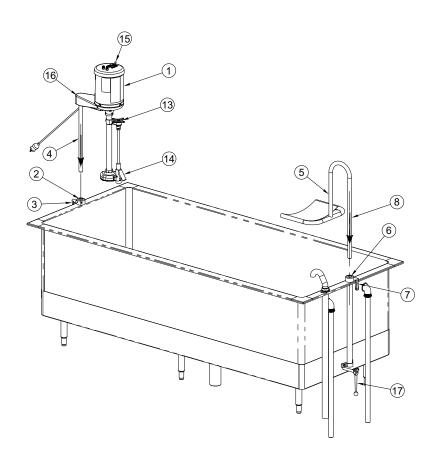
ITEM	PART NUMBER	DESCRIPTION	
1	6507-011-000	ADJUSTABLE LEGS - 10" TO 12-1/2" MAX	



#### NOTE: THESE INSTALLATION INSTRUCTIONS ARE USED FOR ALL WHITEHALL F-260-S MODELS.

REFERENCE DRAWINGS				
ASSEMBLIES	PAGE NUMBER			
MOTOR/TURBINE	13-14			
RAISING/LOWERING	17			
HEAD REST	18			
OVERFLOW	19			
FILLER SPOUT	20			
DRAIN ASSEMBLY	21			
THERMOMETER	22			





#### **ASSEMBLY PROCEDURE:**

- A- ROUGH-IN PER SPECIFIED MODEL, SEE PAGE 4.
- B- INSTALL TURBINE ASSEMBLY 1 INTO RAISING AND LOWERING ASSEMBLY 2 BY LOOSENING HANDLE 3, SLIDING TURBINE SUPPORT ROD 4 INTO RAISING AND LOWERING ASSEMBLY 2 AND TIGHTENING HANDLE 3.
- C- INSTALL HEAD REST ASSEMBLY (5) INTO RAISING AND LOWERING ASSEMBLY (6) BY LOOSENING HANDLE (7), SLIDING HEAD REST ROD (8) INTO RAISING AND LOWERING ASSEMBLY (6) AND TIGHTENING HANDLE (7).
- D- INSTALL THERMOMETER 9 THRU UPPER BRACKET 10 AND INTO LOWER BRACKET 11, TIGHTEN SCREW 12.
- E- TURN THE PRESSURE CONTROL VALVE HANDLE (3) FULLY CLOCKWISE, THEN FULLY COUNTERCLOCKWISE TO COMPLETELY LUBRICATE THE PLUNGER ASSEMBLY.
- F- PROVIDE ELECTRICAL SERVICE AND PROPERLY INSTALLED, GROUND FAULT CIRCUIT INTERRUPTER (GFCI) FOR TURBINE SPECIFIED.

# **A WARNING**

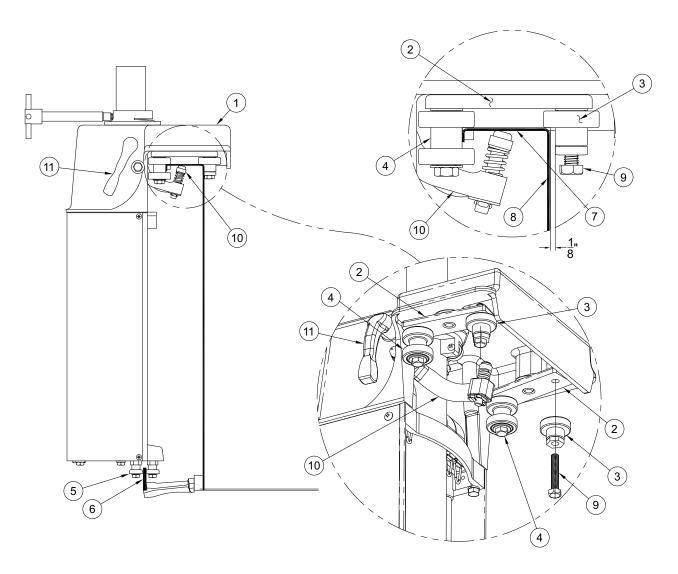
Turbine assembly is provided with a 3-way plug. The third prong functions as a built-in ground and must be plugged into a matching grounded GFCI receptacle to properly ground the product.

#### **OPERATION PROCEDURE:**

- A- FILL TUB AS DESIRED USING THERMOSTATIC MIXING VALVE. WATER LEVEL SHOULD BE A MAXIMUM OF 4" BELOW THE RIM AND A MINIMUM OF 6" ABOVE BOTTOM PUMP  $\widehat{\mbox{14}}$ .
- B- TURN THE PRESSURE CONTROL VALVE HANDLE (13) FULLY CLOCKWISE, THIS PROVIDES MAX PRESSURE AND AGITATION.
- C- TURN ON THE SWITCH (15).
- D- ADJUST RAISING AND LOWERING ASSEMBLY ② BY SLOWLY PUSHING DOWN ON TOP OF THE MOTOR SUPPORT CASTING ⑥ UNTIL THE PUMP ④ IS AT THE DESIRED LOCATION. TIGHTEN HANDLE ③. INTERNAL BUSHING MAY NEED ADJUSTMENT.
- E- ADJUST PRESSURE CONTROL VALVE (3) TO DELIVER DESIRED LEVEL OF AGITATION AND PRESSURE.

#### **DRAINING PROCEDURE:**

- A- TURN OFF SWITCH (14)
- B- TURN DRAIN HANDLE (17).



#### **INSTALLATION INSTRUCTIONS:**

THE AUTO-COUNTERBALANCER AND CARRIAGE ASSEMBLY IS DESIGNED FOR INSTALLATION ON THE UPPER AND LOWER TANK RAILS. AFTER INSTALLATION, THE ASSEMBLY WILL MOVE FREELY AROUND THE TANK UNTIL LOCKED IN DESIRED POSITION.

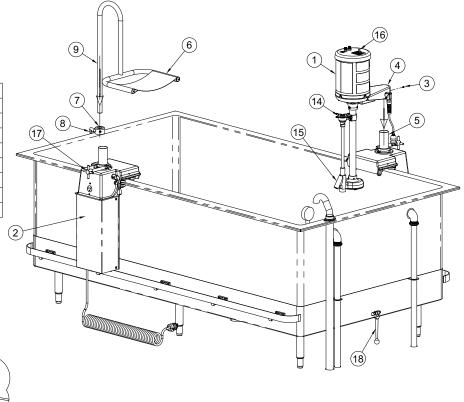
- A- AT THE TOP OF THE CARRIAGE ASSEMBLY (1), THERE ARE TWO SETS OF UPPER GUIDE RAIL BEARING ASSEMBLIES (2) EACH CONSISTS OF ONE SINGLE ROLLER BEARING WITH AN ECCENTRIC SHAFT (3) AND ONE DOUBLE ROLLER BEARING (4). REMOVE BOTH SINGLE ROLLER BEARINGS (3) BEFORE MOUNTING CARRIAGE ASSEMBLY (1) ONTO TANK.
- B- PLACE CARRIAGE ASSEMBLY (1) ON TANK BY POSITIONING THE LOWER GUIDE RAIL BEARING (5) ONTO THE LOWER GUIDE RAIL (6).

- C- WHILE HOLDING CARRIAGE ASSEMBLY (1) IN PLACE ONTO THE UPPER GUIDE RAIL (7) RE-INSERT SINGLE ROLLER BEARINGS (2), DO NOT TIGHTEN COMPLETELY AS ADJUSTMENTS ARE REQUIRED.
- D- WITH CARRIAGE ASSEMBLY 1 RESTING ON UPPER GUIDE RAIL 7 ADJUST SINGLE ROLLER BEARINGS 2 TO PROVIDE 1/8" CLEARANCE BETWEEN INNER TANK WALL 8 AND ROLLER BEARING 2, THEN SECURE INTO POSITION BY TIGHTENING BEARING BOLT 9. MOVE CARRIAGE ASSEMBLY 1 AROUND TANK AND READJUST IF NECESSARY.
- E- ENGAGE FRICTION LOCK (10) BY ROTATING THE LOCK HANDLE (11) COUNTERCLOCKWISE.



NOTE: THESE INSTALLATION INSTRUCTIONS ARE USED FOR ALL WHITEHALL F-270-S, F-300-S AND F-425-S MODELS.

REFERENCE DRAWINGS				
ASSEMBLIES	PAGE NUMBER			
MOTOR/TURBINE	15-16			
RAISING/LOWERING	17			
HEAD REST	18			
OVERFLOW	19			
FILLER SPOUT	20			
DRAIN ASSEMBLY	21			
THERMOMETER	22			



#### **ASSEMBLY PROCEDURE:**

A- ROUGH-IN PER SPECIFIED MODEL, SEE PAGES 5, 7 AND 8.

(11) (13)

(10)

(12)

- B- INSTALL TURBINE ASSEMBLY ① ONTO MOTOR CARRIER ASSEMBLY ② BY LOOSENING SET SCREW ③, (SHOWN LOOSE) AND SLIDING THE MOTOR SUPPORT CASTING ④ ONTO THE RAISING AND RAISING TUBE ⑤ AND SECURING SET SCREW ③.
- C- INSTALL HEAD REST ASSEMBLY (6) INTO RAISING AND LOWERING ASSEMBLY (7) BY LOOSENING HANDLE (8), SLIDING HEAD REST ROD (9) INTO RAISING AND LOWERING ASSEMBLY (7) AND TIGHTENING HANDLE (8).
- D- INSTALL THERMOMETER (1) THRU UPPER BRACKET (1) AND INTO LOWER BRACKET (2), TIGHTEN SCREW (3).
- E- TURN THE PRESSURE CONTROL VALVE HANDLE 4 FULLY CLOCKWISE, THEN FULLY COUNTERCLOCKWISE TO COMPLETELY LUBRICATE THE PLUNGER ASSEMBLY.
- F- PROVIDE ELECTRICAL SERVICE AND PROPERLY INSTALLED, GROUND FAULT CIRCUIT INTERRUPTER (GFCI) FOR TURBINE SPECIFIED.

# **MARNING**

Turbine assembly is provided with a 3-way plug. The third prong functions as a built-in ground and must be plugged into a matching grounded GFCI receptacle to properly ground the product.

#### **OPERATION PROCEDURE:**

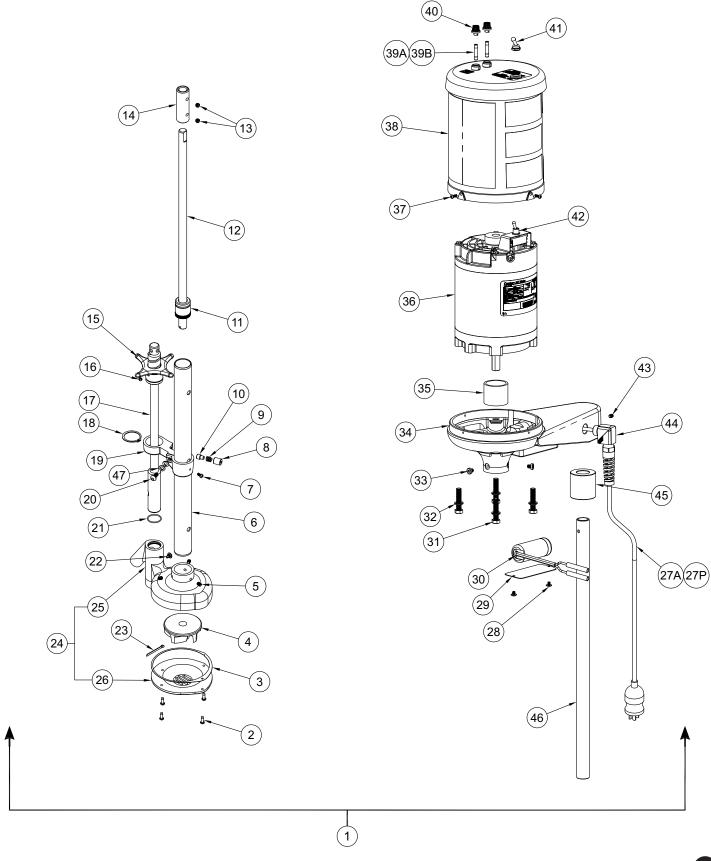
- A- FILL TUB AS DESIRED USING THERMOSTATIC MIXING VALVE. WATER LEVEL SHOULD BE A MAXIMUM OF 4" BELOW THE RIM AND A MINIMUM OF 6" ABOVE BOTTOM PUMP (15).
- B- TURN THE PRESSURE CONTROL VALVE HANDLE (4) FULLY CLOCKWISE, THIS PROVIDES MAX PRESSURE AND AGITATION.
- C- TURN ON THE SWITCH (16).
- D- ADJUST RAISING AND LOWERING TUBE 4 BY LOOSENING LOCKING HANDLE 7 AND SLOWLY PUSHING DOWN ON TOP OF THE MOTOR SUPPORT CASTING 4 AND UNTIL THE PUMP 5 IS AT THE DESIRED TIGHTEN LOCKING HANDLE 7. INTERNAL BUSHING MAY NEED ADJUSTMENT.
- E- ADJUST PRESSURE CONTROL VALVE (4) TO DELIVER DESIRED LEVEL OF AGITATION AND PRESSURE.

#### **DRAINING PROCEDURE:**

- A- TURN OFF SWITCH (16).
- B- TURN DRAIN HANDLE (18)



### SEE PAGE 14 FOR PART DESCRIPTION





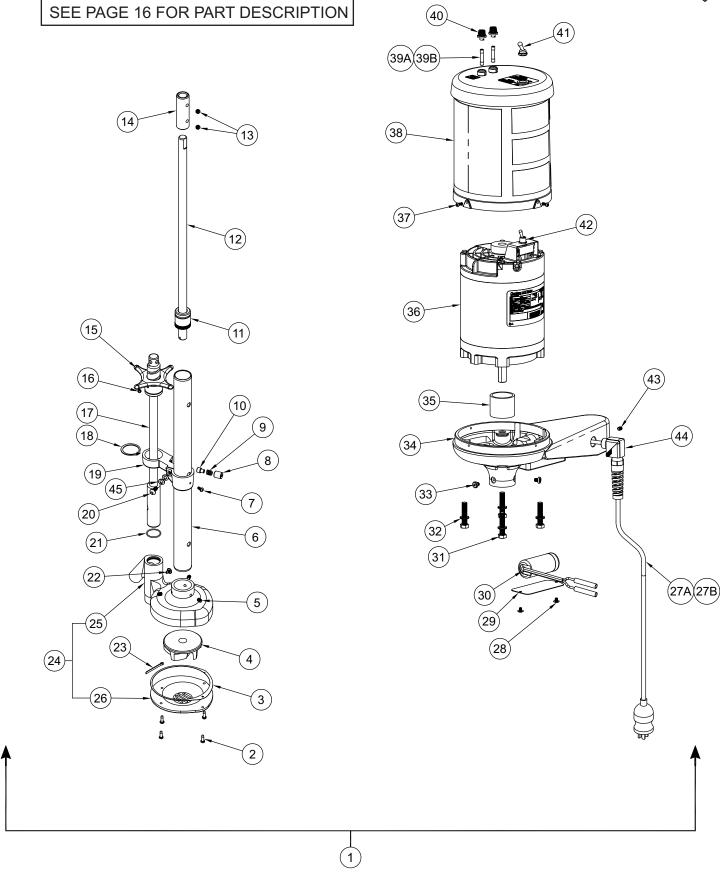
# THESE REPLACEMENT TURBINES ARE USED FOR THE FOLLOWING MODEL NUMBERS:

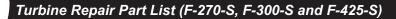
WHITEHALL MODEL NUMBERS	REPLACEMENT TURBINE ASSEMBLY
F-260-S	TA-22-S-T1-RS2

		SPECIFY MODEL
1	COMPLETE TURBINE ASSEMBLY	
36	1/2 HP TURBINE MOTOR	

ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	SEE CHART	COMPLETE TURBINE ASSEMBLY	27G	6505-070-001	ISRAEL POWER CORD, 250VAC
2	6502-307-000	#8-32 x 1/2" PHIL FLAT HD SELF TAP SCREW	27H	6505-071-001	AUSTRALIAN POWER CORD, 250VAC
3	6504-501-199	17" PUMP GASKET	271	6505-030-003	10 FEET, 115VAC, 60Hz GFI POWER CORD
4	6525-518-000	TURBINE IMPELLER - PLASTIC	27J	6505-034-003	DOMESTIC GFI POWER CORD 220VAC
5	6502-401-000	1/4"-20 x 5/16" HEX SOCKET SET SCREW	27K	6505-043-003	RUSSIAN GFI POWER CORD, 250VAC
6	6509-123-199	IMPELLER SHAFT HOUSING TUBE	27L	6505-074-003	INDIA/S. AFRICA GFI POWER CORD, 250VAC
7	6502-300-000	#8-32 x 3/8" PHIL FLAT HD SELF TAP SCREW	27M	6505-043-003	EUROPEAN GFI POWER CORD, 250VAC
8	6531-112-199	TENSION ADJUSTER	27N	6505-073-003	UK GFI POWER CORD, 250VAC
9	6531-113-000	SPRING	270	6505-070-003	ISRAEL GFI POWER CORD, 250VAC
10	6531-111-199	FRICTION LOCK ROD	27P	6505-071-003	AUSTRALIAN GFI POWER CORD, 250VAC
11	6525-514-001	SHAFT BEARING ASSEMBLY	28	6502-202-000	#10-32 x 1/4" PHIL TRUSS HEAD SCREWS
12	6509-521-199	IMPELLER SHAFT	29	6550-060-199	CAPACITOR COVER
13	6502-402-000	5/16"-18 x 1/4" HEX SOCKET SET SCREW	30	6505-015-001	CAPACITOR ASSEMBLY
14	6525-513-199	SHAFT COUPLING	31	0206-010-000	3/8"-16 x 1-3/4" HEX CAP SCREW
15	6525-584-199	HANDLE	32	6502-562-000	3/8" LOCK WASHER
16	6502-410-000	1/4"-20 x 1/4" DOG SET SCREW	33	6502-102-000	1/4"-20 x 5/16" PHIL PAN HD SCREW
17	6525-531-001	PLUNGER ASSEMBLY	34	6550-105-199	MOTOR BASE
18	6502-620-000	1-3/8" RETAINING RING	35	6525-507-199	COUPLING SLEEVE
19	6525-570-199	AIR RING BRACKET	36	SEE CHART	1/2 HP TURBINE MOTOR
20	6502-042-000	1/4"-20 x 5/8" PHIL PAN HEAD SCREW	37	0126-199-000	#8-32 x 3/8 TORX BUTTON HD SCREW
21	6504-022-000	O-RING	38	6525-605-001	PLASTIC MOTOR COVER ASSEMBLY
22	6502-413-000	1/4"-20 x 5/16" DOG SET SCREW	39A	6525-608-000	1/4" OD- 12.5A - 250VAC FUSE (110VAC TURBINE)
23	0341-101-000	COTTER PIN	39B	6525-612-000	1/4" OD- 8A - 250VAC FUSE (120VAC TURBINE)
24	6525-509-001	PUMP BODY / COVER ASSEMBLY	40	6525-607-000	FUSE HOLDER
25	6525-510-299	PUMP BODY	41	6505-035-000	WATERPROOF TOGGLE SWITCH CAP
26	6525-509-299	PUMP COVER	42	6505-025-000	DPST TOGGLE SWITCH
27A	6505-030-000	10 FEET, 115VAC, 60Hz POWER CORD	43	6502-401-000	1/4"-20 x 5/16" UNC ALLEN SET SCREW
27B	6505-034-001	DOMESTIC POWER CORD 220VAC	44	6525-520-001	FLEXIBLE STRAIN RELIEF ASSEMBLY
27C	6505-043-001	RUSSIAN POWER CORD, 250VAC	45	6550-120-199	MOTOR BASE BUSHING
27D	6505-074-001	INDIA/S. AFRICA POWER CORD, 250VAC	46	6509-160-199	Ø1" RAISING & LOWERING TUBE (F-260-S)
27E	6505-043-001	EUROPEAN POWER CORD, 250VAC	47	0337-050-000	1/4" LOCK WASHER
27F	6505-073-001	UK POWER CORD, 250VAC			









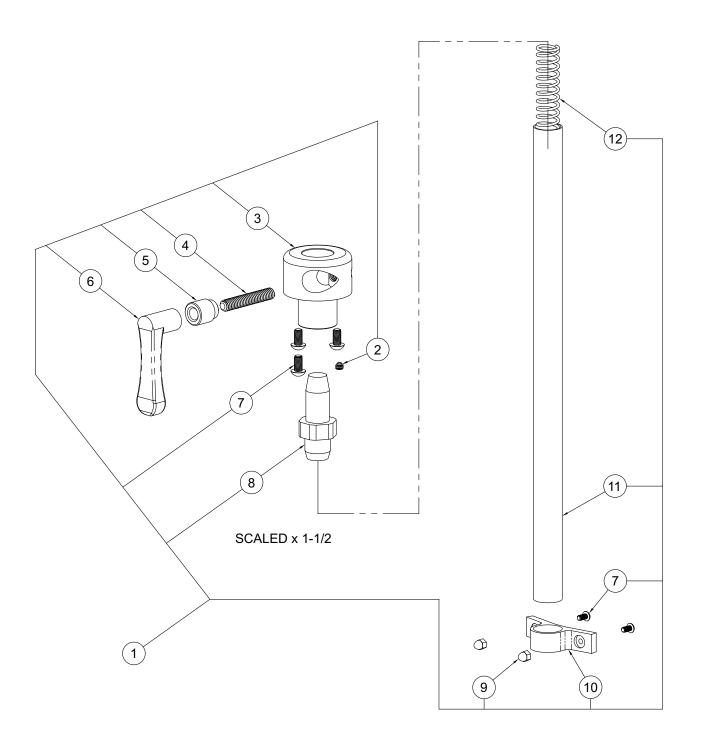
# THESE REPLACEMENT TURBINES ARE USED FOR THE FOLLOWING MODEL NUMBERS:

WHITEHALL MODEL NUMBERS	REPLACEMENT TURBINE ASSEMBLY
F-270-S	
F-300-S	TA-22-S-T2-RS2
F-425-S	

		SPECIFY MODEL
1	COMPLETE TURBINE ASSEMBLY	
36	1/2 HP TURBINE MOTOR	

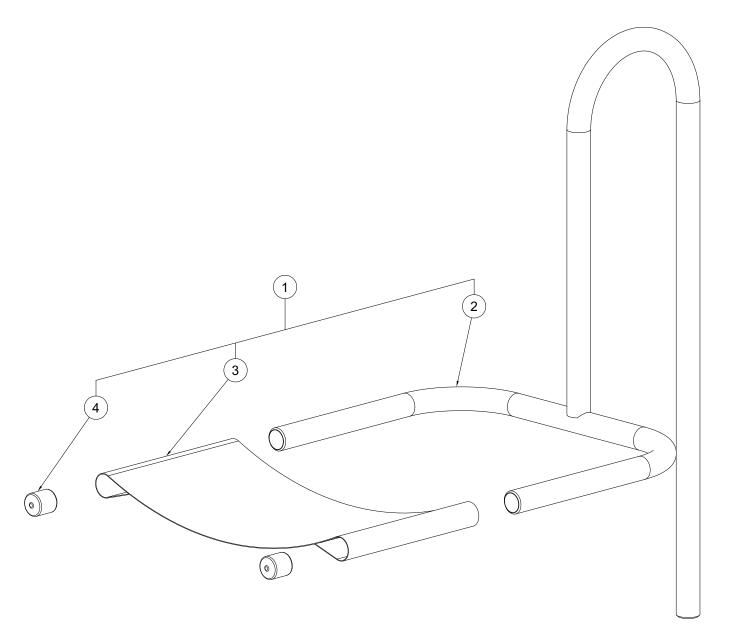
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	SEE CHART	COMPLETE TURBINE ASSEMBLY	24	6525-509-001	PUMP BODY / COVER ASSEMBLY
2	6502-307-000	#8-32 x 1/2" PHIL FLAT HD SELF TAP SCREW	25	6525-510-299	PUMP BODY
3	6504-501-199	17" PUMP GASKET	26	6525-509-299	PUMP COVER
4	6525-518-000	TURBINE IMPELLER - PLASTIC	27A	6505-030-000	10 FEET, 115VAC POWER CORD
5	6502-401-000	1/4"-20 x 5/16" HEX SOCKET SET SCREW	27B	6505-034-001	DOMESTIC POWER CORD 220VAC
6	6509-123-199	IMPELLER SHAFT HOUSING TUBE	28	6502-202-000	#10-32 x 1/4" PHIL TRUSS HEAD SCREWS
7	6502-300-000	#8-32 x 3/8" PHIL FLAT HD SELF TAP SCREW	29	6550-060-199	CAPACITOR COVER
8	6531-112-199	TENSION ADJUSTER	30	6505-015-001	CAPACITOR ASSEMBLY
9	6531-113-000	SPRING	31	0206-010-000	3/8"-16 x 1-3/4" HEX CAP SCREW
10	6531-111-199	FRICTION LOCK ROD	32	6502-562-000	3/8" LOCK WASHER
11	6525-514-001	SHAFT BEARING ASSEMBLY	33	6502-102-000	1/4"-20 x 5/16" PHIL PAN HD SCREW
12	6509-521-199	IMPELLER SHAFT	34	6550-105-199	MOTOR BASE
13	6502-402-000	5/16"-18 x 1/4" HEX SOCKET SET SCREW	35	6525-507-199	COUPLING SLEEVE
14	6525-513-199	SHAFT COUPLING	36	SEE CHART	1/2 HP TURBINE MOTOR
15	6525-584-199	HANDLE	37	0126-199-000	#8-32 x 3/8 TORX BUTTON HD SCREW
16	6502-410-000	1/4"-20 x 1/4" DOG SET SCREW	38	6525-605-001	PLASTIC MOTOR COVER ASSEMBLY
17	6525-531-001	PLUNGER ASSEMBLY	39A	6525-608-000	1/4" OD- 12.5A - 250VAC FUSE (110VAC TURBINE)
18	6502-620-000	1-3/8" RETAINING RING	39B	6525-610-000	1/4" OD- 8A - 250VAC FUSE (220VAC TURBINE)
19	6525-570-199	AIR RING BRACKET	40	6525-607-000	FUSE HOLDER
20	6502-042-000	1/4"-20 x 5/8" PHIL PAN HEAD SCREW	41	6505-035-000	WATERPROOF TOGGLE SWITCH CAP
21	6504-022-000	O-RING	42	6505-025-000	DPST TOGGLE SWITCH
22	6502-413-000	1/4"-20 x 5/16" DOG SET SCREW	43	6502-401-000	1/4"-20 x 5/16" UNC ALLEN SET SCREW
23	0341-101-000	COTTER PIN	44	6525-520-001	FLEXIBLE STRAIN RELIEF ASSEMBLY





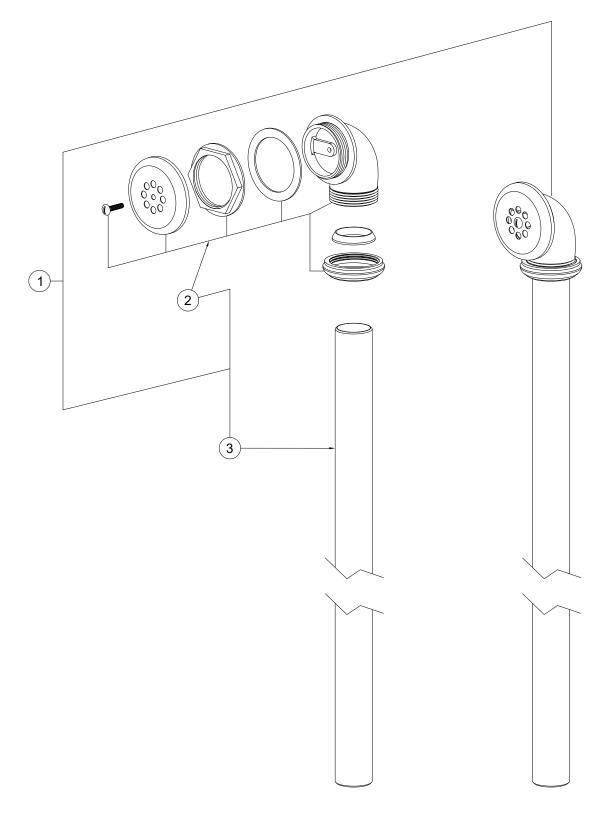
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	6530-260-001	RAISING & LOWERING ASSEMBLY	7	0116-104-000	1/4"-20 x 1/2" PHILLIPS ROUND HEAD SCREW
2	6502-401-000	1/4"-20 x 5/16 SET SCREW	8	6530-310-199	END CAP
3	6530-411-199	LOCKING HUB	9	6530-520-000	1/4"-20 STAINLESS STEEL ACORN NUT
4	6530-114-199	3/8"-16 UNC STUD	10	6530-301-199	LOWER BRACKET
5	6530-112-199	BUSHING	11	6509-265-199	1-3/8" DIA. x 23-1/2" R & L TUBE
6	6530-111-199	LOCKING HANDLE	12	6503-065-000	1-1/8" DIA. x 27" SPRING





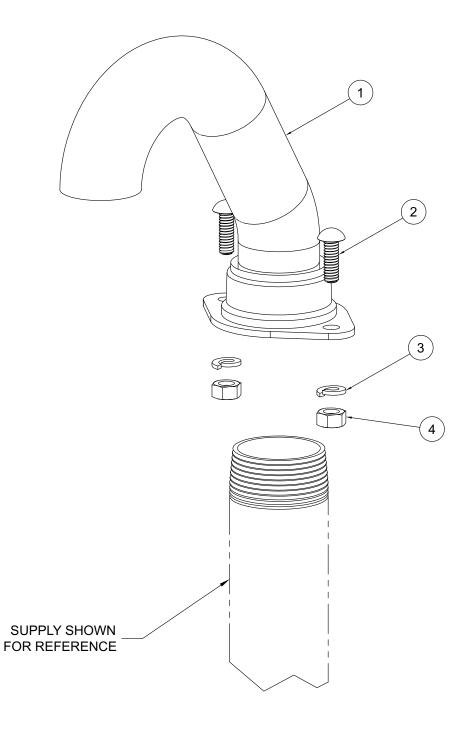
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	6506-171-001	HEADREST ASSEMBLY	3	6506-022-000	HEAD SLING
2	6506-171-002	HEADREST FRAME	4	6556-063-000	TUBE END CAP





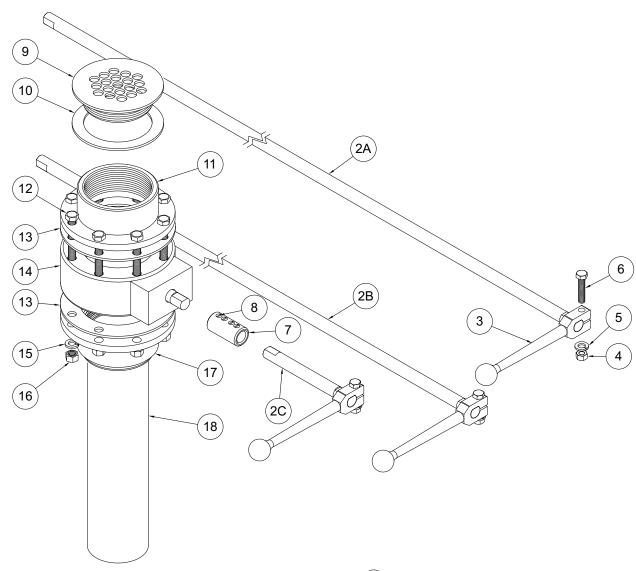
ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	6556-050-001	DUAL OVERFLOW ASSEMBLY	3	6556-074-199	1-1/4" O.D. x 36" OVERFLOW TUBE
2	6556-055-000	OVERFLOW ELBOW ASSEMBLY			





ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION
1	6508-058-001	FILLER SPOUT	3	0337-050-000	1/4" HELICAL LOCK WASHER
2	0117-003-000	1/4"-20 x 3/4" NO SLOT ROUND HEAD SCREW	4	0302-005-000	1/4"-20 HEX NUT





- (1A) F-260-S DRAIN VALVE ASSEMBLY
- (1B) F-300-S DRAIN VALVE ASSEMBLY
- (1C) F-270-S / F-425-S DRAIN VALVE ASSY

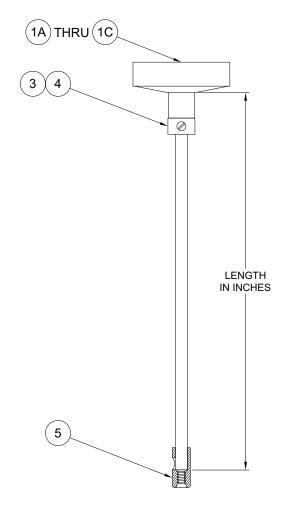
ITEM	ITEM PART NUMBER DESCRIPTION IT		ITEM PART NUMBER		DESCRIPTION		
1A	6556-013-001	F-260-S DRAIN VALVE ASSEMBLY	8	6502-402-000	5/16"-18 UNC x 1/4" SET SCREW		
1B	6556-014-001	F-300-S DRAIN VALVE ASSEMBLY	9	6556-025-199	3" NPS STRAINER		
1C	6556-020-001	F-270-S / F-425-S DRAIN VALVE ASSEMBLY	10	6504-510-000	STRAINER GASKET		
2A	6556-045-199	5/8" O.D. x 44" EXTENSION ROD - F-260-S	11	6556-026-001	TOP DRAIN FLANGE		
2B	6556-046-199	5/8" O.D. x 39" EXTENSION ROD - F-300-S	12	6502-359-000	3/8"-16 UNC x 2-1/2" SS CAP SCREW		
2C	6556-033-199	5/8" O.D. x 5-1/2" EXTENSION ROD - F-270/425	13	6556-032-000	DRAIN VALVE GASKET		
3	6556-031-000	DRAIN VALVE HANDLE	14	6556-030-000	DRAIN VALVE		
4	0302-006-000	5/16"-18 UNC STAINLESS STEEL HEX NUT	15	6502-562-000	3/8" STAINLESS STEEL LOCK WASHER		
5	6502-563-000	5/16" STAINLESS STEEL LOCK WASHER	16	0302-007-000	3/8"-16 UNC STAINLESS STEEL HEX NUT		
6	6502-358-000	5/16"-18 UNC x 1-1/2" SS CAP SCREW	17	6556-028-001	BOTTOM DRAIN FLANGE		
7	6556-035-199	DRAIN HANDLE EXTENSION COUPLER	18	6556-015-001	3" DRAIN		

### Thermometer



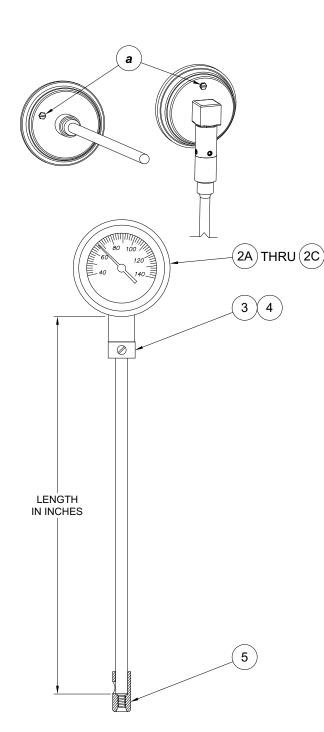
NOTE: THE THERMOMETER GAUGES TEMPERATURES FROM 40° TO 140° F. DO NOT ALLOW TEMPERATURES TO EXCEED 140° TO AVOID DAMAGING THE THERMOMETER.

TO RECALIBRATE: IMMERSE THE STEM A MINIMUM OF 4" INTO THE WATER TURN ON THE TURBINE ASSEMBLY AND ANOTHER ACCURATE TEMPERATURE GAUGE TO COMPARE AND USE THE EXTERNAL ADJUSTMENT SCREW PROVIDED ON THE THERMOMETER CASING AS INDICATED (a).



# BACK CONNECTED THERMOMETER

AVAILABLE IN 12", 15" & 18" LENGTHS



# BOTTOM CONNECTED THERMOMETER

AVAILABLE IN 21", 25" & 28" LENGTHS

ITEM	PART NUMBER	DESCRIPTION	ITEM	PART NUMBER	DESCRIPTION		
1A	6532-005-000	BACK CONNECTED THERMOMETER 12"	2C	6532-080-000	BOTTOM CONNECTED THERMOMETER 28"		
1B	6532-010-000	BACK CONNECTED THERMOMETER 15"	3	0116-004-000	#10-32 x 1/4" PHILLIPS ROUGH HEAD SCREW		
1C	6532-015-000	BACK CONNECTED THERMOMETER 18"	4	6532-100-199	UPPER THERMOMETER BRACKET		
2A	6532-070-000	BOTTOM CONNECTED THERMOMETER 21"	5	6532-101-199	LOWER THERMOMETER BRACKET		
2B	6532-075-000	BOTTOM CONNECTED THERMOMETER 25"					



### **Cleaning and Disinfecting the Whirlpool Tub**

After draining the Whirlpool:

- 1. Verify that the turbine is OFF.
- 2. Remove any loose objects or debris that may be present in the whirlpool tub.
- 3. To Disinfect:
  - \*Whitehall recommends that you disinfect the whirlpool after each patient.
  - \*Spray or wipe all surfaces of the whirlpool tank and thermometer with a hard surface disinfectant, following the disinfectant manufacturer's instructions.
  - \*Rinse away disinfectant residue with warm, clean water. If needed (or after the last patient of the day) wipe the inside and outside surfaces of the whirlpool with a towel to reduce streaking and spotting.
- 4. To Clean:
  - \*Clean as needed, or weekly at minimum.
  - \*Hand-wash all surfaces of the whirlpool and thermometer with a non-abrasive stainless steel cleaner. Scrub only in the direction of the polish lines on the whirlpool. Follow the manufacture's instructions for use.
  - \*Rinse with cold water.
  - \*Wipe inside and outside surfaces with a towel to reduce streaks and spotting.

### Disinfecting and Cleaning of the Turbine

- 1. Drain the tank.
- Place an empty bucket beneath the turbine. Fill with water and add disinfectant solution per manufacturers recommended use.
- 3. Ensure the aerator control valve is in the open position.
- 4. Turn on the turbine for 5 seconds and turn it off. Allow the turbine to soak for a 10 minute contact time.
- Spray or wipe all exposed surfaces with a mixture of suitable disinfectant solution per manufacture's recommended use. Exposed surfaces should remain wet for at least 10 minutes.
- 6. Drain the turbine bucket into the tank and open drain.
- 7. Rinse all exposed surfaces with warm/hot water.
- 8. Fill the bucket with clean water and run turbine for five seconds to rinse impeller cavity.

#### **Important**

The following chemicals are NOT recommended:

- Sodium or calcium hypochlorite, chlorine, or bleach: Chloride ions are a major cause of stainless steel pitting and are highly caustic and corrosive. If used, wear skin, eye and respiratory protection. Immediately rinse off residue.
- Phenolics: Phenolics damage metal parts and plastics and distort the water-lubricated hardrubber bearing in turbine. DO NOT USE.
- Glutaraldehydes: These chemicals are good disinfectants but poor cleaners. Exposure to vapors is harmful. DO NOT USE.
- lodines: lodines are good disinfectants but poor cleaners. lodines corrode metal surfaces including stainless steel. If used, wear respiratory protection. Immediately rinse off residue.
- Alcohol: Alcohol-based cleaners have limited effectiveness against\_some common microorganisms. They are also extremely flammable and corrosive. DO NOT USE.

#### **Important**

Using abrasive compounds or applicators can damage the whirlpool's appearance. Do not use abrasive materials to clean the whirlpool.

\*Whitehall recommends the use of Hydrochlor® Whirlpool Antiseptic with all patient treatments. This simplifies cleaning of equipment by eliminating need for repeated rinsing and scrubbing.

#### CARE AND CLEANING OF STAINLESS STEEL

#### **NORMAL CLEANING**

Clean weekly or more often, as needed (especially high-polish surfaces)

#### RECOMMENDED CLEANING MATERIALS

- Sponge natural or artificial
- Nylon or other soft-bristle material brush
- **SOFT** cloth (as used on automobile finishes)

#### RECOMMENDED CLEANING SOLUTIONS

- Hand dishwashing liquid/soft water solution
- Mild soap/soft water solution
- 3M Stainless Steel Cleaner/Polish
- White vinegar/soft water solution (for brightening, removing oil deposit and hard water deposits)
- CLR Brand Cleaner or baking soda /soft water solution (for brightening, removing hard water deposits)
- Club soda and sponge

#### To remove smudges and fingerprints:

Wipe surfaces with a quality Stainless Steel Cleaner / Polish. Apply using a soft non-abrasive cloth. Always follow cleaner/polish product directions provided.

#### To remove dirt and debris:

Wash surfaces with a mild liquid soap. Apply using a soft, non-abrasive cloth. Rinse surfaces thoroughly with clean water. Afterwards, using a soft non-abrasive cloth, wipe surfaces with stainless steel cleaner/polish.

#### To remove rust stains:

Wipe surfaces with CRES (available through Whitehall) or equivalent cleaner. Use recommended solutions. Apply using a soft non-abrasive sponge. Rinse surfaces thoroughly immediately after application. Always follow cleaner product directions provided. Afterwards, using a soft, non-abrasive cloth, wipe surfaces with stainless steel cleaner/polish.

#### FOR TOUGH PROBLEMS

- CRES Cleaner specifically for rust stains (Available through Whitehall)
- Tarn-X for general stains
- #7 chrome polish
- Silver polish

# To remove stubborn spots or to treat a scratch (Standard Satin Finish only):

Use of synthetic, abrasive, general-purpose pads such as Scotch Brite® is recommended. Apply the stainless steel cleaner/polish to the synthetic, abrasive pads and

# To remove stubborn spots or to treat a scratch (Standard Satin Finish only): Continued:

CAREFULLY rub out spot with cleaner/polish. Be sure to rub in the direction of the grain! Do not allow steel wool to come in contact with stainless steel. Steel particles can embed into the stainless steel surface and create rust!

Special Note: After cleaning for serious problems, let dry, and expose to air for at least 24 hours to allow "healing" (restoring of the chromium oxide layer) of the stainless steel surface.

#### FOR ENVIRO-GLAZE STAINLESS STEEL

Protecting the powder coated surface is the major key in keeping an Whitehall Enviro-Glazed stainless steel product clean and under warranty.

- For normal wipe-down cleaning, a mild soap and a sponge or cotton cloth will perform well.
- Ordinary mild cleaners for home use will sanitize the fixture. (eg. Soft-Scrub<sup>®</sup>, Comet Soft Cleanser<sup>®</sup> Clorox<sup>®</sup>, Scrubbing Bubbles<sup>®</sup> Gel.)
- NEVER use harsh cleansers such as "Kaboom<sup>®</sup>, Lysol<sup>®</sup>
  Gel, Lysol Cling<sup>®</sup> or "The Works" as these contain
  powerful acidic or alkaline chemicals which may damage
  the finish or even the metal of the tank itself. Use of such
  chemicals will void the warranty.
- NEVER use a metal brush while cleaning. The use of such a tool at any time will scratch the finish and perhaps cause corrosion, voiding the warranty.

#### THINGS TO AVOID

- Harsh polishing cleanser (Comet, Bon Ami, etc.)
- Harsh chemicals (strong acidic or alkaline materials such as hydrochloric acid, sodium hydroxide, etc.)
- Any abrasive substance (dirt/mud, ceramic items, etc.)
- Chlorinated cleansers, sanitizers or bleach of any kind
- Steel wool, steel utensils or any object made of steel or metal, left in contact with stainless surface (hair pins, paper clips, aerosol cans)
- Scotch-Brite® type pads on high-polished surfaces
- Seawater or excessively hard water
- · Salt or salty foods allowed to dry on surface
- Leaving scratches in metal surface (soil can collect in these, preventing surface from "healing")
- Leaving hard water sitting (evaporating) for extended periods, allowing mineral deposits to collect.





#### Maintenance Schedule

The whirlpool requires regular maintenance. Set up and follow a maintenance schedule. The table at right represents minimum intervals for maintenance.

When using maintenance products, follow the manufacturers' directions and read the manufacturer's SDS, Safety Data Sheets. You can purchase a recommended disinfectant from Whitehall Customer Service (Back of Manual) or your Whitehall distributor.

#### **Maintenance Procedures**

#### Turbine:

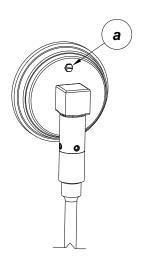
Motors are equipped with sealed greased ball bearings that do not require lubrication. Vent holes in the motor cover shell must be cleaned periodically to allow free air flow and prevent overheating.

#### Hard Water:

The mineral properties of hard water, if allowed to build up over a period of time, have the potential for creating damage to the moving parts of the turbine assembly. We recommend the installation of a water softener or if that is not possible, the use of a water softening agent.

Note: The thermometer gauges temperatures from 40° to 140° F. Do not allow temperatures to exceed 140° to avoid damaging the thermometer.

To recalibrate: Immerse the stem a minimum of 4" into the water turn on the turbine assembly and another accurate temperature gauge to compare and use the external adjustment screw provided *a* on the thermometer casing as indicated.



#### **Troubleshooting**

When there is a significant loss in pressure at the turbine assembly:

- Check water inlet holes underneath the pump, clean away any foreign material.
- · Add water, pump body must be completely submerged.

#### Turbine does not start when switch is turned on:

- · Check your power source.
- Have a qualified technician check switch, fuses, GFI Cord and main circuit.

#### **Turbine ceases operation:**

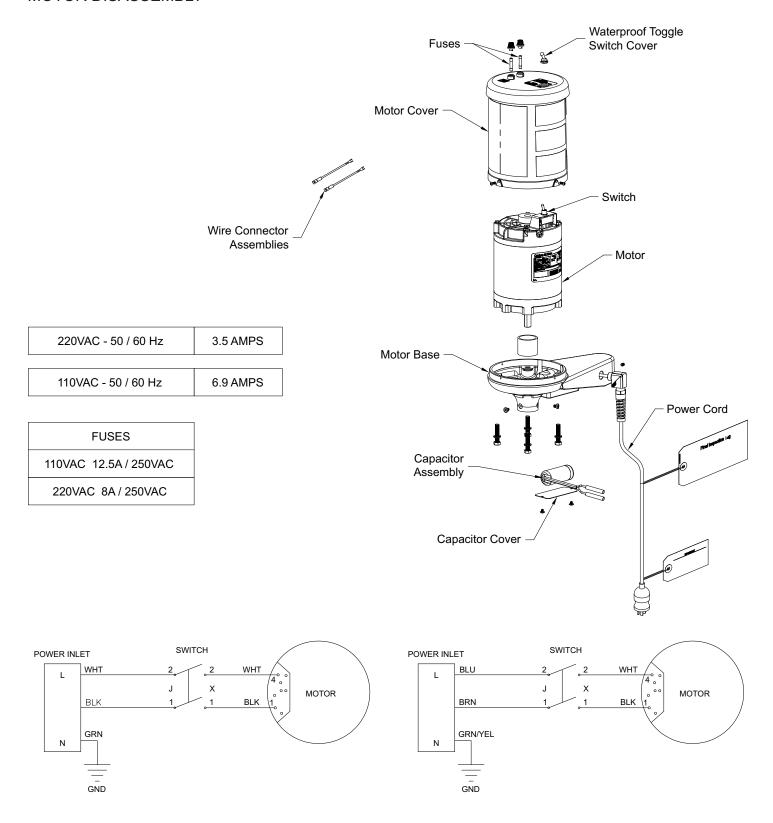
- · Check for motor overloads: Possible causes are:
  - A- Blocked motor ventilation holes
  - B- Excessive current load

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.

Minimum Maintenance Intervals	Each Use	As Needed	Each Week	Each Month
Disinfecting (page 24)				
Cleaning (page 25)			•	
Inspecting (page 2)				



#### MOTOR DISASSEMBLY





#### **Mailing Address:**

P.O. Box 3527 • City of Industry, CA 91744-0527 U.S.A.

#### **Physical Address:**

15125 Proctor Avenue • City of Industry, CA 91746 U.S.A

Phone 800-782-7706 • 626-968-6681

Fax 626-855-4862

Web: www.whitehallmfg.com E-mail: info@whitehallmfg.com

Any questions regarding servicing of products in Europe or the Middle East should be directed to: Acorn Powell LTD • Unit 5 Brearley Court, Baird Road, Waterwells Business Park CE

Quedgeley, Gloucester, GL2 2AF, United Kingdom Phone 01452 721211 • Fax 01452 721231

EC **REP** 

Web www.acornpowell.co.uk • E-mail customerservices@acornpowell.co.uk

0537

#### MANUFACTURER'S 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 noncompliance with these instructions will constitute an abnormal use condition and void the warranty. Stainless steel must be protected on jobsites during construction and must be properly maintained after the water has been introduced into the fixture, or Whitehall's limited warranty is void. If you have any guestions 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.

