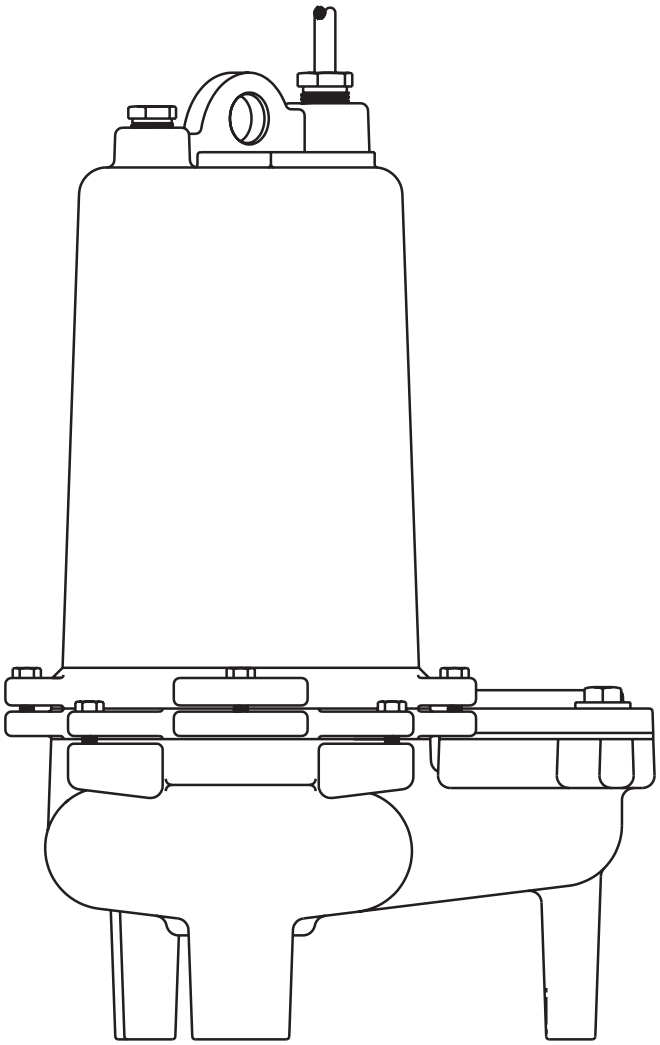
Myers®

Pentair Water

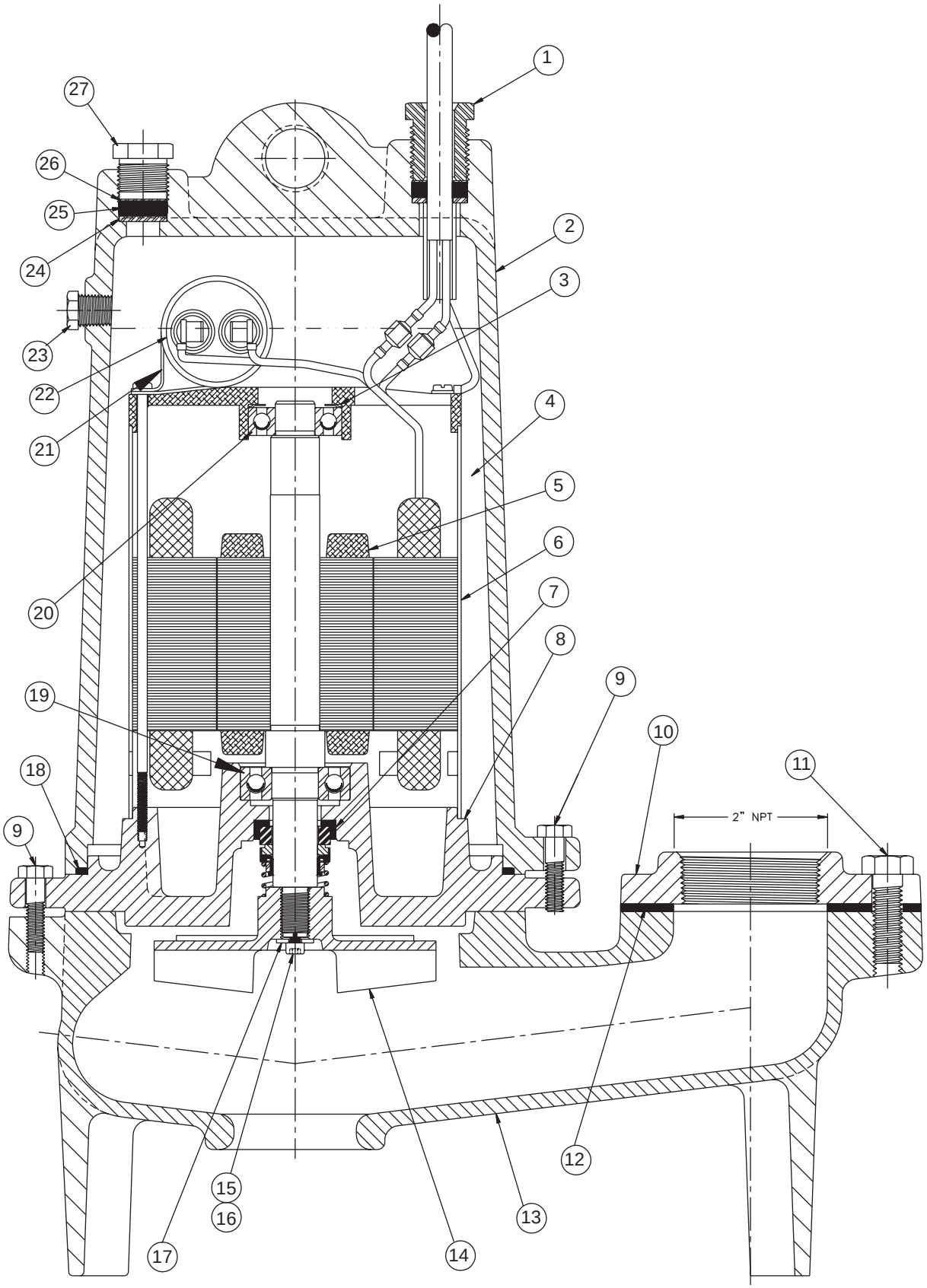
WHR5H, WHR10H, WHR15H & WHR20H

Submersible Sewage Pump Installation and Service Manual

Single seal, single and three phase power



TYPICAL SECTION DRAWING



REPAIR PARTS LIST

SINGLE SEAL REPAIR PARTS LIST WHRH, SERIES

Ref. No.	Description	No. Req'd	Part No.
1	Cord, Power	1	See Chart
2	Housing, motor	1	25327D000
3	Washer, Bearing	1	19331A005
4	Oil, Transformer (5 gal.)	.8-1 gal	11009A006
5 &6	Stator, Rotor shaft with shell	1	See Chart
6A	Connectors (3 Ph only)	3-6	15781A001
7	Seal, shaft	1	25370A000
8	Plate, brg & seal	1	25367D000
9	Screw, cap, 5/16 x 1-1/4	8	19100A012
10	Flange, 2" CI	1	002080002
10	Flange, 3" CI Alternate	1	002070002
11	Screw, cap, 1/2-13 x 1-1/2	2	19103A043
12	Gasket, rubber	1	003240011
13	Case, volute	1	27195E000

Ref. No.	Description	No. Req'd	Part No.
14	Impeller, DI (std. series)	1	See Chart
15	Screw, Machine #10 x 3/8	1	06106A042
16	Sealant (Grade 271 Loctite)	1	14550A001
17	Washer, Impeller Retainer	1	05030A242
18	Gasket, tetraseal,7 x6-3/4 x1/8	1	05014A181
19	Bearing, ball, lower	1	08565A022
20	Bearing, ball, upper	1	08565A013
21	Clip, capacitor (1 Ph only)	1	See Chart
22	Capacitor (1 Ph only)	1	See Chart
23	Plug, 1/4" pipe	1	05022A009
24	Washer, 3/32" Thk.	1	05030A235
25	Gasket, rubber	1	05014A193
26	Washer, 1/32" Thk.	1	05030A234
27	Nut, cord plug,solid	1	25341A002

Unit manufactured prior to Aug-2007 contact factory for repair parts

VARIABLE PARTS CHART

ITEM NUMBER			1	1	22	21	5 & 6	14
HP	VOLTS	PH	POWER CORD W/PLUG	POWER CORD NO PLUG	CAP.	CAP.CLIP	STATOR ROTOR & SHAFT ASS,Y	WHRH IMPELLER DI
1/2	115	1	25338B004	25338B006	23839A000	20333A006	25484D100	27194C003
1/2	208	1		25338B006	23839A000	20333A006	25484D101	27194C003
1/2	230	1	25338B005	25338B006	23839A000	20333A006	25484D101	27194C003
1/2	208	3		25338B003			25484D102	27194C003
1/2	230	3		25338B003			25484D102	27194C003
1/2	460	3		25338B003			25484D102	27194C003
1/2	575	3		25338B003			25484D103	27194C003
3/4	115	1	25338B000	25338B002	23839A000	20333A006	25484D100	
3/4	208	1		25338B002	23839A000	20333A006	25484D101	
3/4	230	1	25338B001	25338B002	23839A000	20333A006	25484D101	
3/4	208	3		25338B003			25484D102	
3/4	230	3		25338B003			25484D102	
3/4	460	3		25338B003			25484D102	
3/4	575	3		25338B003			25484D103	
1	208	1		25338B002	23838A000	20333A004	25484D104	27194C002
1	230	1	25338B001	25338B002	23838A000	20333A004	25484D105	27194C002
1	208	3		25338B003			25484D106	27194C002
1	230	3		25338B003			25484D106	27194C002
1	460	3		25338B003			25484D106	27194C002
1	575	3		25338B003			25484D107	27194C002
1 1/2	208	1		25338B002	23838A000	20333A004	25484D104	27194C001
1 1/2	230	1	25338B001	25338B002	23838A000	20333A004	25484D105	27194C001
1 1/2	208	3		25338B003			25484D106	27194C001
1 1/2	230	3		25338B003			25484D106	27194C001
1 1/2	460	3		25338B003			25484D106	27194C001
1 1/2	575	3		25338B003			25484D107	27194C001
2	208	1		25338B009	23839A000	20333A006	25484D108	27194C010
2	230	1		25338B009	26520A000	20333A006	25484D109	27194C010
2	208	3		25338B008			25484D110	27194C010
2	230	3		25338B008			25484D111	27194C010
2	460	3		25338B003			25484D111	27194C010
2	575	3		25338B003			25484D112	27194C010

GENERAL DESCRIPTION AND USES

The WHRH Series are solids handling pumps that can be used to pump RAW SEWAGE for COMMERCIAL and DOMESTIC use, but are not intended to handle large rags, mop heads or strings. All pumps can be used for normal sewage duty where extra capacity is required.

RECESSED IMPELLERS

All of the pumps are of the recessed impeller type that provides a clear volute passage for solids as no solids pass through the impeller.

All of the pumps listed can be used to pump septic tank EFFLUENT or GROUND sewage as used in some pressure sewer systems.

WARNING! THESE PUMPS ARE NOT APPROVED FOR, AND SHOULD NOT BE USED IN SWIMMING POOLS OR FOUNTAINS.

AIR LOCKING

A sewage pump is air locked if water traps air in the pump and it cannot get out, thus preventing the pump from operating.

In installations of this type a 1/8" hole should be drilled in the discharge pipe below the check valve. The check valve should be 12 to 18 inches above pump discharge. Do not put check valve directly into pump discharge opening.

LEVEL CONTROLS

All pumps must use sealed level control switches for automatic operation. MLC and MFLC controls have sealed switches that are 1 HP rated at 230 volts. ALC and AWS-1 controls have sealed mechanical switches that are rated 2 HP at 230 volts.

Simplex single phase pumps can be automatic by attaching MFLC or MLC controls to the pump. These switches have a fixed draw off level of 8 to 10 inches and can be used up to 1 HP. For higher horsepower ratings two mercury* switch (or SMNO) controls with a magnetic starter can be used.

The ALC and AWS-1 controls can be used for simplex single phase pumps with ratings up to 2 HP.

All duplex systems must use pilot mercury* control sensor switches with control box and magnetic starters.

Plug in cords can be used on all the single phase pumps without seal leak detector. This cord has a GROUND pin that plugs into a grounded receptacle. The grounded receptacle cannot be used in the wet sump or basin due to DANGER of current leakage.

Sealed junction boxes must be used in wet sumps or basins to make connections to motor cord. The AWS-1 control also acts as a sealed junction box for connecting power cord to pump cord.

*This product contains mercury and must be disposed of according to local and federal codes

MOTOR TYPES

All single phase pump motors are of the permanent split capacitor type that do not require a start switch or start relay.

Automatic reset overload switches are attached directly to the motor windings.

Three phase pump motors are squirrel cage induction type.

SAFETY WARNINGS

WARNING: Risk of electric shock. Pumps without seal leak detectors are supplied with a grounding conduction and grounding-type attachment plug on the power cord. To reduce the risk of electric shock, be certain that it is connected only to a properly grounded, grounding-type receptacle. **DO NOT** cut off ground pin or use and adapter fitting. **DO NOT** use an extension cord with this pump. Entire plug may be cut off if a control panel is used.

When wiring this pump follow all local electrical and safety codes and ordinances as well as the most recent National Electric Code (NEC-ANSI/NFPA 70).

All pumps have a GROUND WIRE that is connected to a screw in the metal motor housing. This wire goes to the receptacle or control box which must be connected to a good outside GROUND such as a metal water pipe or GROUND STAKE driven at least 8 feet into the ground.

INSTALLATION

Pumps can be installed inside sealed basins with proper venting for either simplex or duplex systems. Simplex or duplex basin systems are available.

It is not recommended that basins be used for raw sewage inside the home, but are for use in office buildings and small industrial buildings and factories.

If raw sewage must be pumped in the home use outside basins that connect with pressure sewer mains or gravity sewers, or run to septic tanks.

Basins can be used inside the home where extra capacity sump pumps are required for water softeners and wash water.

If an inside basin is used it is usually installed at time of pouring the concrete floor.

Pumps can be installed in a compartment of septic tanks for pumping to pressure sewer mains, gravity sewers, leach fields, or evaporation mounds.

PROPER VENTING FOR BASINS INSTALLED INSIDE

All inside sealed basins must have a 2” or 3” vent pipe installed in accordance with local codes. Basins for handling softener water, wash or drainage water do not have to be sealed or vented.

Outside basins are usually of fiberglass and from 4 to 8 feet deep and have a sealed cover. Pump is usually installed with a lift out rail system so that pump can be removed without disturbing the discharge piping. The check valve comes out with pump for servicing. Complete lift-out systems mounted in fiberglass basins are available to meet customer specifications.

WARNING: Basin must be vented in accordance with local plumbing codes. These pumps are not designed for and CANNOT be installed in locations classified as hazardous in accordance with the National Electric Code ANSI/NFPA 70.

PIPING

Pumps are fitted with 2” or 3” female threaded pipe flange. Galvanized or PVC plastic pipe can be used. Plastic pipe is preferred for raw sewage or septic tank effluent.

CHECK VALVES AND SHUT-OFF VALVES

All pumps must have check valves and shut-off valves in the discharge line. Check valves must be flapper type with outside spring or ball type. Shut-off valves can be ball or gate type. Plastic construction for both check or shut-off valves is preferred.

HOW TO SET CONTROLS FOR SIMPLEX SYSTEMS

1. Automatic systems — These systems have the float switches mounted on the pump, so pump is installed in the basin and motor cord is plugged into GROUNDED receptacle. For sealed basin cover, power cord is brought through a split rubber plug in the basin cover.
2. Where 2 float controls are used the turn-on control is set 3” to 6” above top of motor, and the turn-off control is set about 6” to 8” above bottom of basin. If a high level alarm control is used it is set about 6” above upper control. If basin depth will not allow these settings closer spacing can be used.
3. Where ALC or AWS-1 (automatic wet systems) controls are used the displacement weights are set so that turn-on weight is 4” to 6” above top of motor and lower weight is set about 6” above basin bottom.

HOW TO START SIMPLEX SYSTEMS

1. For single-phase pumps with MLC or MFLC control, plug cords piggy-back into receptacle and run water into basin until pump starts. Allow pump to make several on/off cycles. Leave power cord plugged in.

   If pump runs but does not pump it may be air locked. Unplug cord and crack union in the discharge line then restart pump, this should vent off any trapped air. Retighten union.
2. With 2 float controls turn on power at the control box and run water into basin. When level gets above top control pump should start and continue to pump until level drops to lower control stopping pump. Run pump through several cycles. If pump runs but does not pump, check air lock as in 1. Leave power on for automatic operation.
3. Where ALC or AWS-1 controls are used plug in cord or turn-on power and run water into basin, when level is about half way up on upper weight pump should start and run until level drops until about half the lower weights is above water, stopping pump. Check 1, if pump does not operate properly.

For all cases if motor does not start when water level is up check for proper plug in or that start switch is on, or if fuse is blown.

ALWAYS HAVE ELECTRICIAN MAKE ELECTRICAL CHECKS.

STARTING PUMP WHRH-PIGGYBACK (AUTOMATIC) USING MECHANICAL SWITCH WITH SERIES PLUG - SIMPLEX SYSTEM

1. These pumps have a mechanical (mercury-free) float switch with a 20 ft. cord and a 115 volt or 230 volt series piggy-back plug on 1/2 HP with switch mounted to the pump. On 3/4, 1, and 2 HP, it requires 20 ft. cord and 230 volt only.
2. Plug the switch cord plug into a proper voltage, properly grounded outlet.
3. Plug the pump power cord into the back of the switch cord series plug.
4. Tape the cords to the discharge pipe every 12”.
5. Run water into basin until pump starts. Be sure discharge line valve is open.
6. Allow pump to operate through several on/off cycles.
7. If pump does not operate properly, refer to page 6.

HOW TO SET CONTROLS AND START DUPLEX SYSTEMS

CONTROL BOX MUST BE USED ON ALL DUPLEX SYSTEMS

1. 4 float controls are used for duplex systems. Set turn-on control 6” to 8” above pumps. Set turn-off control 8” to 10” above bottom of basin. Set override control 6” to 8” above turn-on control. Set high level alarm control about 6” to 8” above override control. Mark all control cords so that they can be connected correctly in the control box.
2. Turn Hand-Off-Auto switches to OFF position and close circuit breaker.
3. Turn both H-O-A switches to the AUTO position and run water into basin. When level floats up and activates the turn-on switch one pump should start and run, pump will continue to run until lower control is exposed stopping pump.
4. Run water into sump again and when level floats up turn-on control, opposite pump will start and run until level drops exposing lower control, stopping pump.

5. Run this test several times to be sure pumps are alternating properly.
6. To check high level alarm, again turn both switches to OFF and fill basin until level is above the alarm control. Turn switches to AUTO position and alarm buzzer should sound and alarm light should come on. When level drops below the alarm, control buzzer should stop.
7. If pumps operate as described then set both H-O-A to AUTO and pumps are ready to operate automatically.
8. If pumps do not operate properly then check as described for simplex systems.

CAUTION: NEVER WORK ON PUMPS OR CONTROL BOXES UNTIL CIRCUIT BREAKERS ARE TURNED OFF. Always have a qualified electricion make electrical connections and service checks.

SPECIAL INSTRUCTIONS FOR THREE PHASE PUMPS

1. **WARNING! Only qualified persons shall conduct services and installations of this pump. The pump must be wired by a qualified electrician, using an approved starter box and switching device.**

   CAUTION! Risk of electric shock. Do not remove cord and strain relief. Do not connect conduit to pump.

2. Three phase pumps are always installed with control boxes having magnetic starters with 3-leg overload protection. **DO NOT TRY TO RUN THREE PHASE PUMPS DIRECTLY ACROSS THE LINE.**

3. To Connect Pump: Run wire from pump to the bottom of control box or appropriate junction box suitable for enclosing splice connections. A hole must be cut into the control box for the wires. With power to control box off, connect green (ground) line to ground lug. Connect black (power) wires to power lead terminals. Make sure that all wires are inside control box and not in a position to be pinched or shorted when the door is closed. See wiring diagrams, page 7.

4. All three phase motors can run either direction. Rotation can be changed by interchanging any two line leads at magnetic starter. **BE SURE CIRCUIT BREAKER IS OFF BEFORE MAKING THIS CHANGE.**

   To find if rotation is correct operate pumps and check delivery operation. If flow and head is low (refer to pump curve shown in this manual) the rotation is wrong. With duplex pumps check operation of both pumps.

5. All pump impellers either single or three phase must turn counterclockwise when looking into pump inlet. If uncertain of rotation, **TURN OFF POWER** and lift pump from basin with cord connected and lay pump on side so impeller can be seen. Turn on power and start pump using hand position of H-O-A switch. Turn on and off fast, so that coast of impeller can be seen. **NEVER PUT HAND OR FINGERS ON THE IMPELLER.** Interchange any two line leads at the magnetic starter to change rotation.

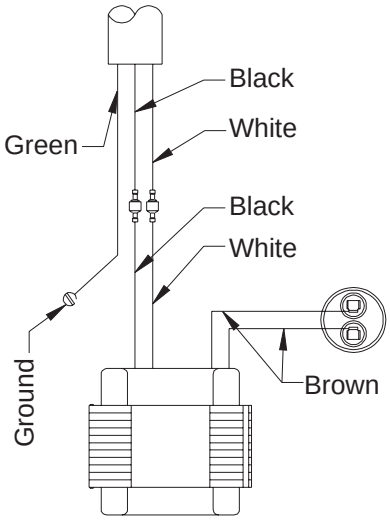
POINTS TO CHECK IF PUMP DOES NOT RUN OR DOES NOT RUN PROPERLY

1. **Pump does not run or start when water is up in tank.**
   a. Check for blown fuse or tripped circuit breaker.
   b. Check for defective level switch.
   c. Where control panel is used be sure H-O-A switch is in the AUTO position. If it does not run, turn switch to the HAND position and if the pump runs then the trouble is in the automatic electrical system. Have an electrician make electrical checks.
   d. Check for burned out motor. Occasionally lightning can damage a motor even with lightning protection.
   e. Where plug-in cords are used be sure contact blades are clean and making good contact. DO NOT USE PLUG-IN CORDS INSIDE A BASIN OR WET WELL.

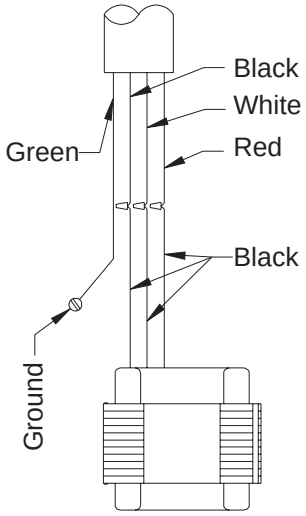
2. **Pump runs but does not deliver flow.**
   a. Check for airlock. Start and stop pump several times, if this does not help it may be necessary to loosen a union in the discharge line to relieve airlock.
   b. Check valve may be installed backwards. Check flow arrow on valve body. Check shut-off valve. It may be closed.
   c. Check vertical elevation. It may be higher than pump can develop. (See pump curve page 11).
   d. Pump inlet may be plugged. Remove pump to check.
   e. Level control ball or weight may be stuck on side of basin. Be sure it floats freely.

CAUTION: ALWAYS UNPLUG POWER CORDS OR TURN OFF ALL MAIN AND BRANCH CIRCUIT BREAKERS BEFORE DOING ANY WORK ON THE PUMP. If control panel is remote from pump, disconnect lead wires to motor so that no one can turn the circuit breaker back on.

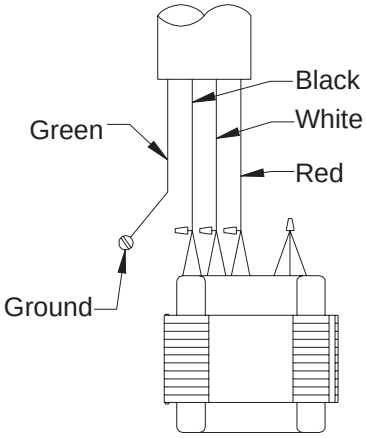
WIRING DIAGRAMS



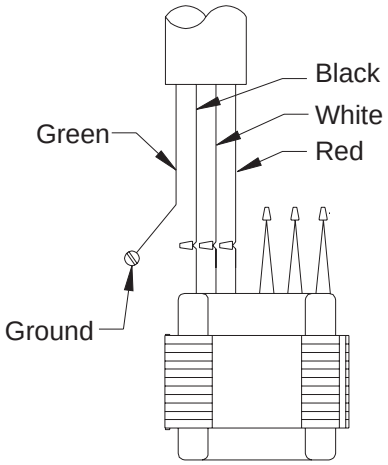
200V or 230V
1 Phase, P.S.C.



575V - 3 Phase
200V - 3 Phase (3 HP)



230V - 3 Phase
208V - 3 Phase (1-2 HP)



460V - 3 Phase

3 Phase Dual Voltage Winding

Voltage	Leads			
	Black	White	Red	Together
208, 230	1 & 7	2 & 8	3 & 9	4 & 5 & 6
460	1	2	3	4&7, 5&8, 6&9

Model	HP	Volts	Phase	Hertz	Winding Resistance in Ohms			Max. Amps
					Main Black to White	Start Black to Brown	Brown to Purple	
WHR5H-11	1/2	115	1	60	0.85	-	4.9	13.8
WHR5H-01	1/2	208	1	60	4.5	-	12.0	7.6
WHR5H-21	1/2	230	1	60	4.5	-	12.0	6.9
WHR5H-03	1/2	200	3	60	7.6	7.6	7.6	5.2
WHR5H-23	1/2	230	3	60	7.6	7.6	7.6	4.7
WHR5H-43	1/2	460	3	60	30.1	30.1	30.1	2.3
WHR5H-53	1/2	575	3	60	47.0	47.0	47.0	1.9
WHR10H-01	1	208	1	60	1.71	-	7.1	14.8
WHR10H-21	1	230	1	60	2.4	-	12.0	12.8
WHR10H-03	1	200	3	60	4.5	4.5	4.5	7.7
WHR10H-23	1	230	3	60	4.5	4.5	4.5	7.0
WHR10H-43	1	460	3	60	16.0	16.0	16.0	3.5
WHR10H-53	1	575	3	60	25.0	25.0	25.0	2.8
WHR15H-01	1 1/2	208	1	60	2.1	-	9.3	15.3
WHR15H-21	1 1/2	230	1	60	1.6	-	7.4	13.1
WHR15H-03	1 1/2	200	3	60	4.5	4.5	4.5	8.5
WHR15H-23	1 1/2	230	3	60	4.5	4.5	4.5	7.7
WHR15H-43	1 1/2	460	3	60	18.0	18.0	18.0	3.9
WHR15H-53	1 1/2	575	3	60	28.0	28.0	28.0	3.1
WHR20H-21	2	230	1	60	1.43	-	1.94	18.0
WHR20H-03	2	200	3	60	2.3	2.3	2.3	10.4
WHR20H-23	2	230	3	60	2.6	2.6	2.6	9.0
WHR20H-43	2	460	3	60	10.4	10.4	10.4	4.5
WHR20H-53	2	575	3	60	13.1	13.1	13.1	3.6

TO REPLACE CAPACITORS ONLY

All of the single phase motors are of the permanent split capacitor type and have no relays or starting switch. They have only a starting capacitor that is in the circuit for both starting and running conditions. Three phase units do not have a capacitor.

1. Remove oil fill plug near the top of the motor and pour the oil out. (see Fig. 6)

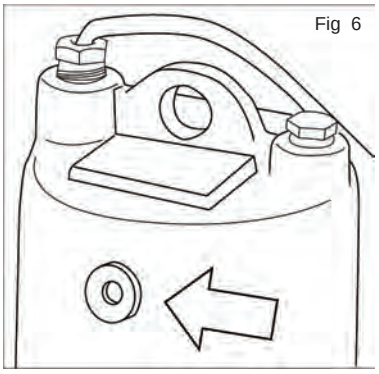


Fig 6

2. Loosen the plug nuts around the cords until they are loose enough to push the cords down inside of the motor housing.
3. Remove the four bolts from the motor housing and bump the housing with a plastic hammer to loosen. Lay the pump on its side. (see Fig. 7)

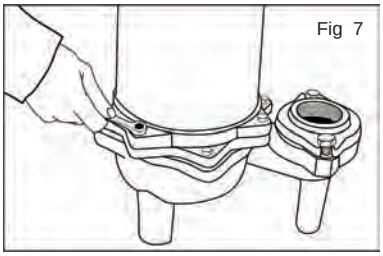


Fig 7

4. Remove the housing carefully to be sure that enough cord is pushed into the housing to create not tension on the cords.
5. Slide motor housing up far enough to expose the capacitor and to be able to lay the housing down. (see Fig. 8)

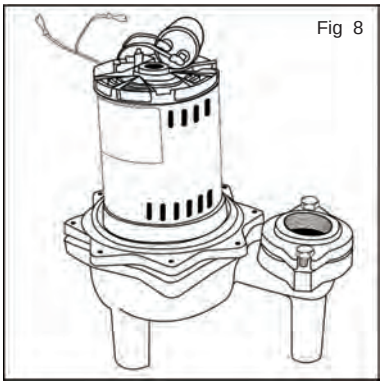


Fig 8

6. Disconnect wiring from capacitor and loosen capacitor clamp and slide out capacitor. Replace with new capacitor, tighten and reconnect. Wiring diagram is given in these instructions.
7. Check all wiring connectors to be sure they are secure.
8. Be sure tetraseal gasket is in place.
9. Slide motor housing back onto pump while pulling the cords out slowly. Assemble the motor housing with the four bolts.
10. Reassemble cord nuts. Be sure washers are seated and cords are pulled up to stop against the washers. Tighten nuts securely.
11. Put pump upright and refill motor with Myers submersible motor oil. **DO NOT OVER FILL WITH OIL.** With pump upright fill oil to bottom of oil fill tapping. Replace oil fill plug.
12. Be sure pump turns freely before connecting to power. Turn pump on side and turn impeller, using screwdriver in slotted shaft. Plug pump into receptacle to test operation. Pump must run quiet and free of vibration.

TO REPLACE POWER CORD AND/OR SEAL LEAK DETECTOR CORD

1. Remove motor housing as described above. Disconnect the push-together terminals and remove the ground screw from the power cord if being replaced.
2. Completely unscrew cord bushing to be replaced and remove cord assembly from housing. Be sure remaining terminals are secure on the wires.
3. Replace with proper cord and fittings. Push cord into the motor housing far enough to make proper connections. Reconnect ground wire if replacing power cord and securely connect the wires correctly. See wiring diagram in these instructions.
4. Assemble cords and motor housing as described in “Capacitor Replacement”. Fill with oil as noted and be sure pump turns freely before connecting to power.

TO REPLACE MOTOR STATOR AND SHELL

1. Remove motor housing as described previously.
2. Disconnect all leads from power and seal leak cords and ground wire and set pump upright.
3. Loosen the four long screws holding the motor and remove slowly. (see Fig. 9)
4. Either remove previous capacitor and clamp from

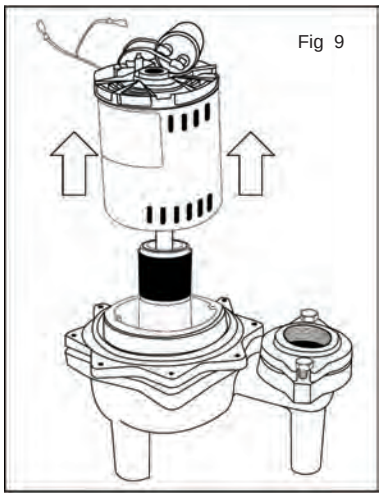


Fig 9

old motor and assemble onto new stator and shell or replace with a new
capacitor and assemble the two capacitor leads per wiring diagram.

5. Position bearing spring washer on top of upper ball bearing.
6. Position the “stator with shell” into place and line up screws with the bosses an tighten the (4) long screws. Lay unit down in line with motor housing.
7. Be sure pump turns freely with screwdriver in impeller end of shaft.
8. Reconnect all terminals securely per wiring diagram.
9. Be sure tetraseal gasket is in place.
10. Reassemble motor housing and fill with oil as noted above in “capacitor replacement”.

NOTE: On three phase motors always check unit for proper rotation. With pump on its side apply power by turning on, then off, quickly. Impeller must turn counterclockwise when looking into the impeller inlet. If not, interchange any two leads in the control box.

SHAFT SEAL REPLACEMENT

1. Remove plugs in motor housing and drain oil, observe for water in the oil. If no water is present check winding with ohmmeter or megger at cord end.
2. Remove four bolts holding the volute case and bump with plastic hammer to loosen and remove case (see Fig. 10)

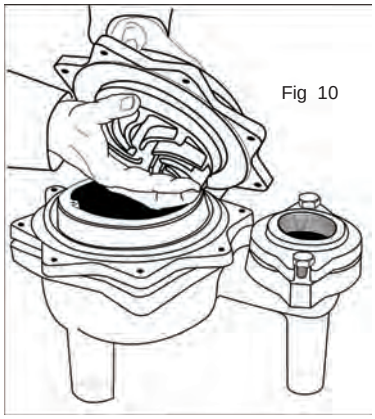


Fig 10

3. Hold impeller and unscrew impeller Allen head locking screw. Turn counterclockwise to loosen.
4. Insert flat screwdriver into slot where the impeller locking screw was. Holding screwdriver stationary, remove impeller from shaft, rotating counterclockwise.
5. Pry off seal bellows and ceramic seat. Break seat if necessary to get out since it must be replaced with a new one anyway. (see Fig. 11)

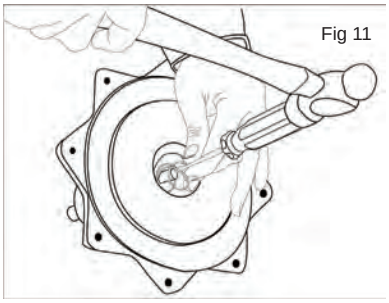
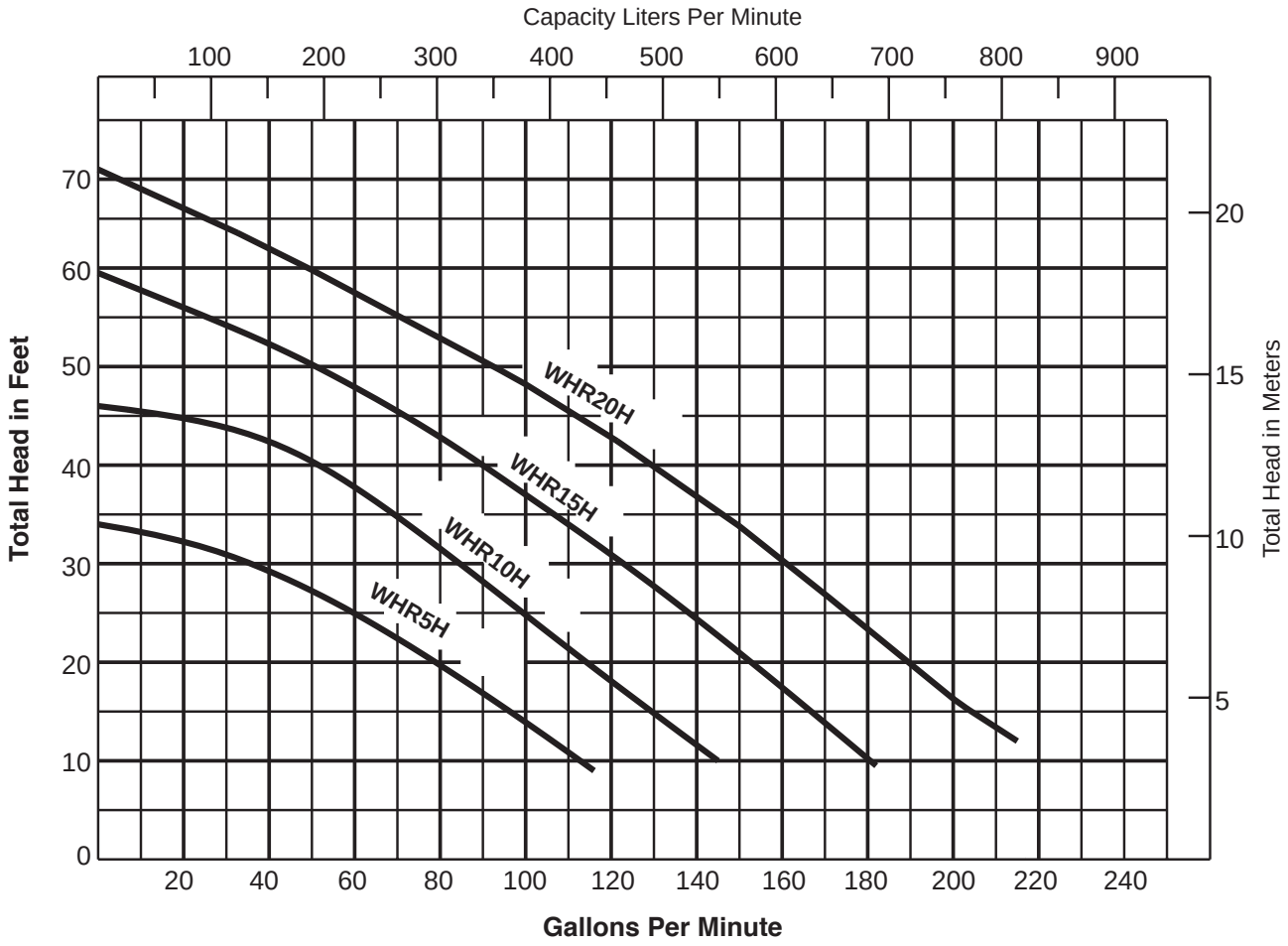


Fig 11

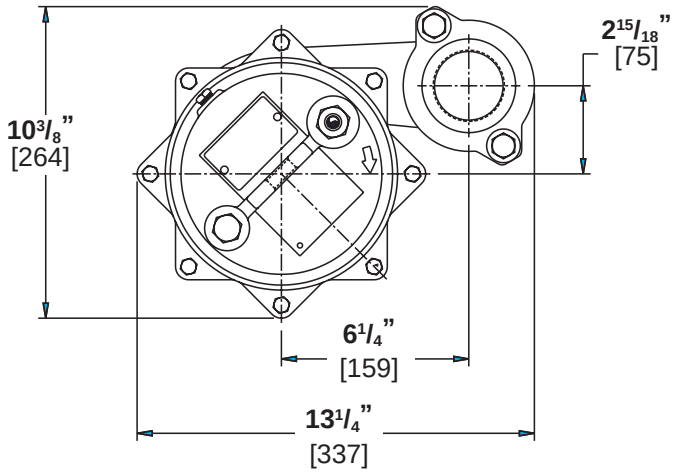
6. NEVER USE OLD SEAL PARTS. USE ONLY COMPLETELY NEW SEALS.
7. Clean seal chamber and shaft thoroughly before installing a new seal.
8. Lightly oil the ceramic rubber cup O.D., install square and flat with seal pusher (a pusher can be made from 3/4” Sch. 40 PVC pipe - must be clean)
9. Lightly oil (Myers motor oil) the clean shaft and slide carbon half of seal into position.
10. Discard spring retainer. Spring seats directly on impeller.
11. Be sure tetraseal is in position (replace if worn) and reassemble.
12. Replace oil in motor housing, use only Myers submersible oil.
13. Be sure pump turns freely before connecting to power. After connecting, check for proper rotation noted under “Stator Replacement”.

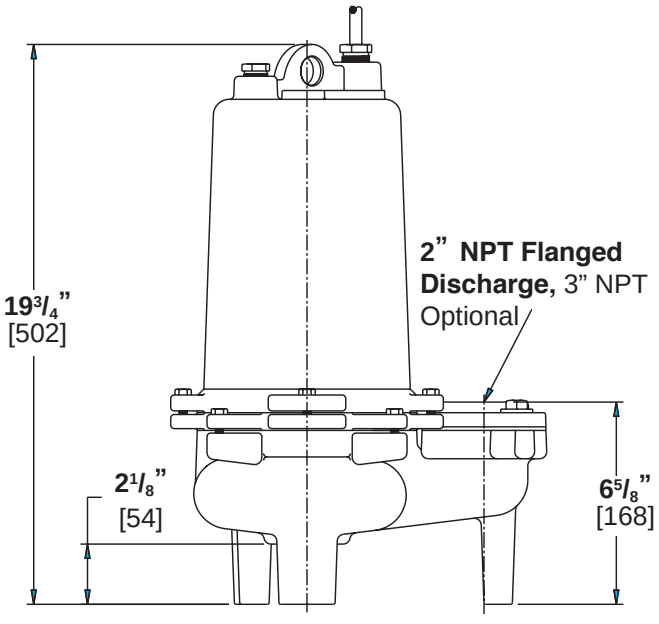
PUMP PERFORMANCE



DIMENSIONS

(dimensions in mm)





MYERS
LIMITED WARRANTY
SUMP & RESIDENTIAL SEWAGE

During the time periods and subject to the conditions hereinafter set forth, **F. E. Myers** will repair or replace to the original user or consumer any portion of your new **MYERS product which proves defective due to defective materials or workmanship of MYERS**. Contact your nearest Authorized **MYERS** Dealer for warranty service. At all times **MYERS** shall have and possess the sole right and option to determine whether to repair or replace defective equipment, parts, or components. Damage due to lightning or conditions beyond the control of **MYERS** is NOT COVERED BY THIS WARRANTY.

WARRANTY PERIOD

Pumps: 12 months from date of purchase or 18 months from date of manufacture.

Labor, etc. Costs: MYERS shall IN NO EVENT be responsible or liable for the cost of field labor or other charges incurred by any customer in removing and/or reaffixing any **MYERS** product, part or component thereof.

THIS WARRANTY WILL NOT APPLY: (a) to defects or malfunctions resulting from failure to properly install, operate or maintain the unit in accordance with printed instructions provided; (b) to failures resulting from abuse, accident or negligence; (c) to normal maintenance services and the parts used in connection with such service; (d) to units which are not installed in accordance with applicable local codes, ordinances and good trade practices; or (e) unit is used for purposes other than for what it was designed and manufactured, and (f) if three phase submersible motors are installed on a single phase power supply using a phase converter or if three phase power is supplied by only two transformers, making an open Delta system.

RETURN OR REPLACED COMPONENTS: any item to be replaced under this Warranty must be returned to **MYERS** in Ashland, Ohio, or such other place as **MYERS** may designate, freight prepaid.

PRODUCT IMPROVEMENTS: MYERS reserves the right to change or improve its products or any portions thereof without being obligated to provide such a change or improvement for units sold and/or shipped prior to such a change or improvement.

WARRANTY EXCLUSIONS: MYERS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AFTER THE TERMINATION OF THE WARRANTY PERIOD SET FORTH HEREIN.

Some states do not permit some or all of the above warranty limitations and, therefore, such limitations may not apply to you. No warranties or representations at any time made by any representatives of Myers shall vary or expand the provision hereof.

LIABILITY LIMITATION: IN NO EVENT SHALL **MYERS** BE LIABLE OR RESPONSIBLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL DAMAGES RESULTING FROM OR RELATED IN ANY MANNER TO ANY **MYERS** PRODUCT OR PARTS THEREOF. PERSONAL INJURY AND/OR PROPERTY DAMAGE MAY RESULT FROM IMPROPER INSTALLATION. MYERS DISCLAIMS ALL LIABILITY, INCLUDING LIABILITY UNDER THIS WARRANTY, FOR IMPROPER INSTALLATION -- MYERS RECOMMENDS FOLLOWING THE INSTRUCTIONS IN THE INSTALLATION MANUAL. WHEN IN DOUBT, CONSULT A PROFESSIONAL.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This Warranty gives you specific legal rights and you may also have other rights which vary from state to state.

In the absence of suitable proof of this purchase date, the effective date of this warranty will be based upon the date of manufacture.

DETERMINATION OF UNIT DATE OF MANUFACTURE: Submersible Sump pump (8-95) month and year stamped on pump nameplate; column sump pump month and year on red warranty tag.

Myers®

Pentair Water

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