

OPERATORS MANUAL
WPR-20-OP11
WATER RECYCLING TREATMENT SYSTEM



CAUTION

RISK OF INJURY!


READ MANUAL BEFORE OPERATING!

This manual is an important part of the water recycling treatment system and must remain with the unit when you sell it!

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WARNING

 **WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov

INTRODUCTION

Congratulations on the purchase of your new Water Recycling Treatment System! You can be assured your new Water Recycling Treatment System was constructed and designed with quality and performance in mind. Each component has been rigorously tested to ensure the highest level of acceptance.

This operator's manual was compiled for your benefit. By reading and following the simple safety, installation, operation, maintenance and troubleshooting steps described in this manual, you will receive years of trouble free operation from your new water recycling treatment system. The contents of this manual are based on the latest product information available at the time of publication. The manufacturer reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

! IMPORTANT !

These paragraphs are surrounded by a "SAFETY ALERT BOX". This box is used to designate and emphasize Safety Warnings that must be followed when operating this water recycling treatment system.

Accompanying the Safety Warnings are "signal words" which designate the degree or level of hazard seriousness. The "signal words" used in this manual are as follows:

DANGER: Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

WARNING: Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

CAUTION: Indicates a potentially hazardous situation which, if not avoided MAY result in minor or moderate injury.



The symbols set to the left of this paragraph are "Safety Alert Symbols". These symbols are used to call attention to items or procedures that could be dangerous to you or other persons using this equipment.

ALWAYS PROVIDE A COPY OF THIS MANUAL TO ANYONE USING THIS EQUIPMENT. READ ALL INSTRUCTIONS BEFORE OPERATING THIS WATER RECYCLING TREATMENT SYSTEM AND ESPECIALLY POINT OUT THE "SAFETY WARNINGS" TO PREVENT THE POSSIBILITY OF PERSONAL INJURY TO THE OPERATOR.

Once the unit has been uncrated, immediately write in the serial number of your unit in the space provided below.

SERIAL NUMBER _____

Inspect for signs of obvious or concealed freight damage. If damage does exist, file a claim with the transportation company immediately. Be sure that all damaged parts are replaced and that the mechanical and electrical problems are corrected prior to operation of the unit. If you require service, contact Customer Service.

CUSTOMER SERVICE
CALL OUR TOLL-FREE NUMBER
for the Sales or Service Center nearest you!
800-553-9053

Please have the following information available for all service calls:

1. Model Number
2. Serial Number
3. Date and Place of Purchase

CONTENTS OF WPR-SERIES WATER RECYCLING TREATMENT SYSTEM

Carefully unpack your new WPR-Series Water recycling treatment system. Check the contents against the packing list. Contact the freight line if a damage claim is required on any component. The following items are the basic equipment sent with your WPR-Series Water recycling treatment system.

1. Two Unattached Floats for Sump Pit/Supply Tank
 - a. Blue: Protects sump pump low level.
 - b. Red: To fill pit from the water recycling treatment system.
2. Water recycling treatment system Platform
 - a. Oil/Water/Solids Separator
 - b. Filter Pump
 - c. Flow Meter
 - d. Multi-Media Filter
 - e. Cartridge Filter
 - f. Polishing Filter
 - g. Transfer Pump
 - h. Pressurized Water Storage Tank (WPR-20 only)
3. Manual

SPECIFICATIONS


MODEL	WPR-20-0P11
MAX FLOW	20 GPM
ELECTRICAL	230 VOLT 1 PHASE 20 AMPS
SUMP PUMP	1 HP
OIL/WATER/SOLID SEPARATOR CAPACITY	215 GALLONS
OIL COALESCING GRID	576 SQUARE FEET
FILTER PUMP (CENTERIFUGAL)	1 HP
MULTI-MEDIA FILTER	600 LBS
CARTRIDGE FILTER	200 SQUARE FEET 30 MICRON
POLISHING FILTER	165 LBS DEGASSED
TRANSFER PUMP (CENTRIFUGAL)	3/4 HP
MAIN SKID DIMENSIONS	96" X 48" X 60"
MAIN SKID WEIGHT	1250 LBS
FILTER SKID DIMENSIONS	72" X 48" X 55"
FILTER SKID WEIGHT	1300 LBS



IMPORTANT SAFETY WARNINGS



WARNING: When using this product, basic precautions should always be observed, including the following:
READ ALL SAFETY WARNINGS BEFORE USING WATER RECYCLING TREATMENT SYSTEM

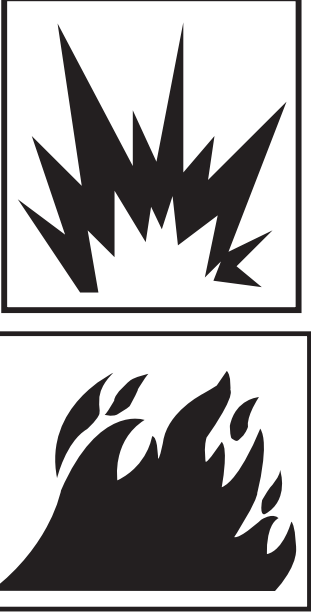

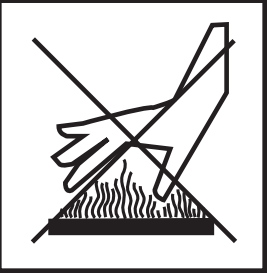
HAZARD	POTENTIAL CONSEQUENCE	PREVENTION
<p data-bbox="180 268 532 327">RISK OF ELECTRIC SHOCK OR ELECTROCUTION</p> 	<p data-bbox="561 268 976 489">Serious injury or death could occur if the water recycling treatment system is not properly grounded. Your water recycling treatment system is powered by electricity and may cause electric shock or electrocution if not installed properly.</p> <p data-bbox="561 1087 976 1171">Electrical shock may occur if water recycling treatment system is not operated properly.</p> <p data-bbox="561 1325 976 1409">Serious injury or death may occur if electrical repairs are attempted by unqualified persons.</p>	<p data-bbox="1000 268 1531 352">Installation of this unit, including all electrical connections, must comply with all local, state and national codes.</p> <p data-bbox="1000 373 1531 541">This product must be grounded. Connect to a GFCI circuit breaker when available. If the unit should malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. Do not ground to a gas supply line.</p> <p data-bbox="1000 562 1531 709">Improper connection of the equipment-grounding conductor can result in a risk of electrocution. Check with a qualified electrician or service personnel if you are in doubt as to whether the system is properly grounded.</p> <p data-bbox="1000 730 1531 867">Always be certain the unit is receiving proper voltage (+/- 5% of the voltage listed on the nameplate). Before installing electrical connections, be certain the power switches are in the "OFF" position.</p> <p data-bbox="1000 888 1531 909">Keep all connections dry and off the ground.</p> <p data-bbox="1000 930 1531 1066">Do not touch pump, pump motor, discharge piping or water when the unit is connected to the power supply; regardless of whether the unit is operating correctly or experiencing an operation failure.</p> <p data-bbox="1000 1087 1531 1171">DO NOT allow metal components of the water recycling treatment system to come in contact with live electrical components.</p> <p data-bbox="1000 1192 1531 1308">Never operate the water recycling treatment system with safety guards/covers removed or damaged. Ensure all electrical covers are securely in place when unit is operating.</p> <p data-bbox="1000 1329 1531 1465">Any electrical wiring or repairs performed on this water recycling treatment system should be done by Authorized Service Personnel in accordance with National and Local electrical codes.</p> <p data-bbox="1000 1486 1531 1864">Before opening any electrical enclosure, always shut off the water recycling treatment system and drain the water. Disconnect the water recycling treatment system from the power source. If the power disconnect is not in sight, lock it in the open position and tag it to prevent power usage. (Never assume the water recycling treatment system is safe to work on just because it is not operating, it could restart at any time! Always disconnect from the power source.) Allow the water recycling treatment system to cool down. Service in a clean, dry, flat area.</p>



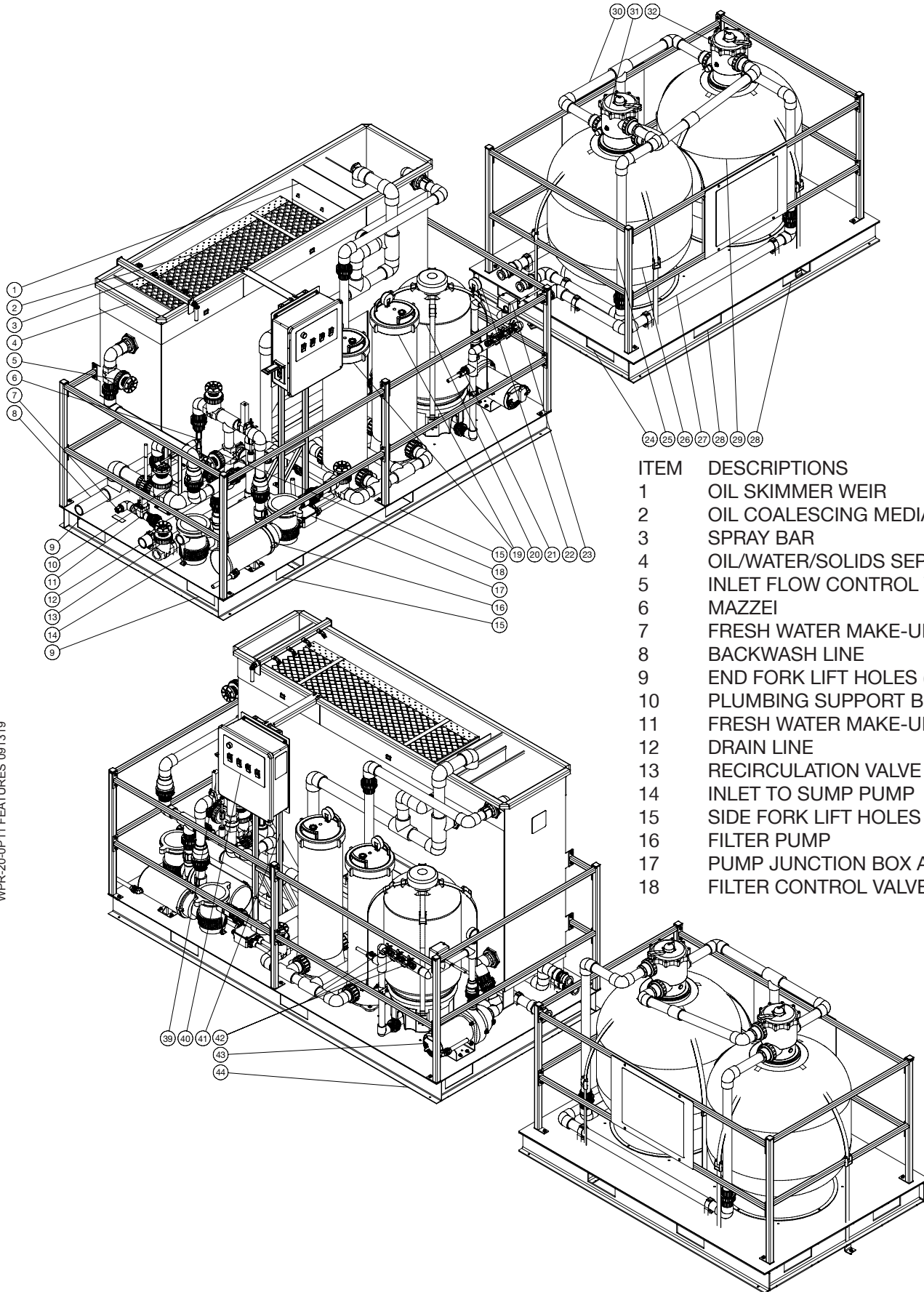
IMPORTANT SAFETY WARNINGS

READ ALL SAFETY WARNINGS BEFORE USING WATER RECYCLING TREATMENT SYSTEM



HAZARD	POTENTIAL CONSEQUENCE	PREVENTION
<p>RISK OF EXPLOSION OR FIRE</p> 	<p>Serious injury or death could occur from an explosion or fire caused by a system electric spark.</p>	<p>This unit must be placed in an area that is well ventilated, free of flammable vapors, combustible dust, gases or other combustible materials.</p>
<p>RISK OF BURSTING</p> 	<p>Serious injury or death could occur from bursting caused by excessive pressure in the system.</p> <p>Serious injury may occur if attempting to start the water recycling treatment system when the pump is frozen.</p>	<p>Do not mistreat the pressure gauges on the system. Pressure gauges will malfunction if they are subjected to excessive pressure, vibration, pulsation or temperature or if they are placed in an environment which causes corrosion of parts. Incorrect readings on a pressure gauge could mislead the operator and place him in a dangerous working condition.</p> <p>Do not use a booster pump or any type of additional pumping system. Pressurizing the suction of the pump may cause the pump body to explode.</p> <p>Do not use this water recycling treatment system to pump flammable material! An explosion could occur from a gas vapor buildup inside the system.</p> <p>In freezing temperatures, the unit must always be warm enough to ensure there is no ice formation in the pump. Do not start the water recycling treatment system if it has been in a freezing environment without first allowing the pump to thaw.</p>
<p>RISK OF BURNS</p> 	<p>Serious injury may occur from touching the electrical motor. This area can remain hot for some time after the water recycling treatment system is shutdown.</p>	<p>Never allow any part of your body to contact the electrical motor until cooled.</p>

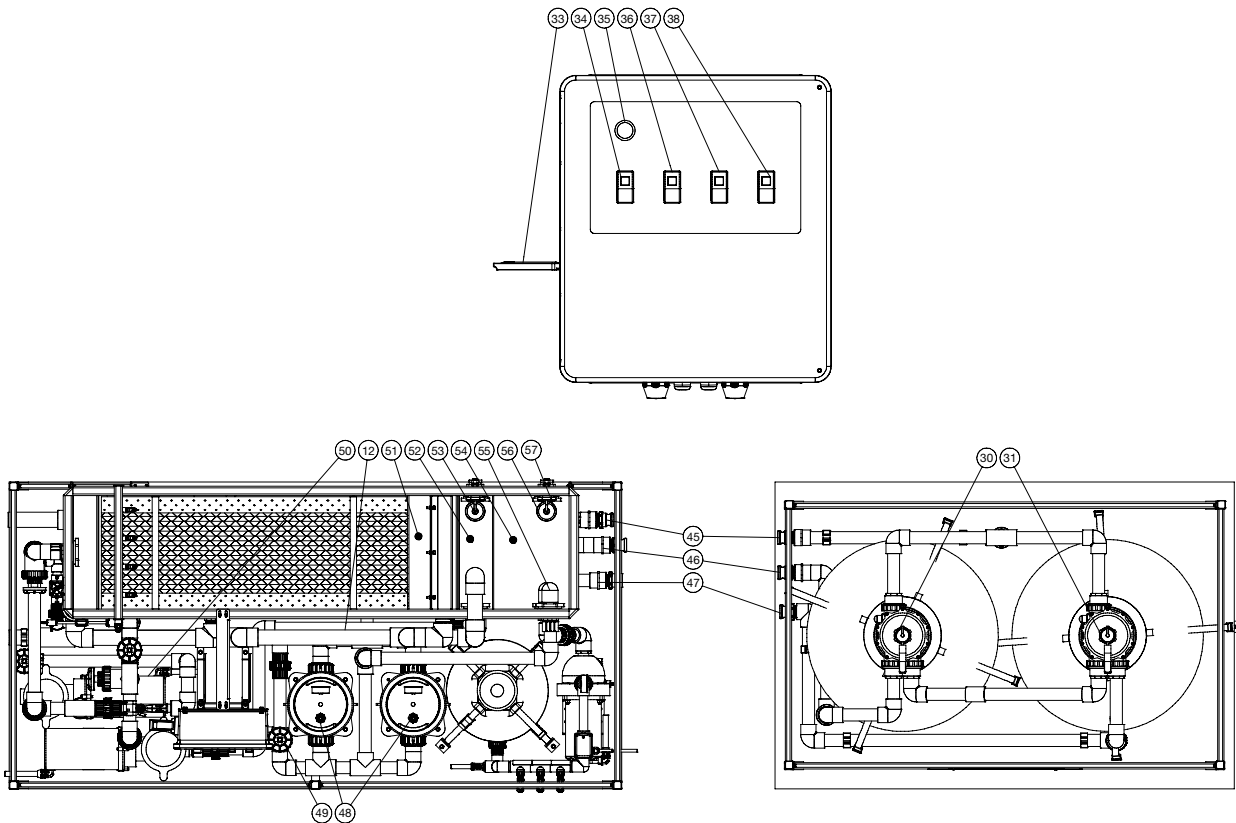
PLATFORM VIEW FOR WPR-20



ITEM	DESCRIPTIONS
1	OIL SKIMMER WEIR
2	OIL COALESCING MEDIA
3	SPRAY BAR
4	OIL/WATER/SOLIDS SEPARATOR TANK
5	INLET FLOW CONTROL VALVE
6	MAZZEI
7	FRESH WATER MAKE-UP HOOKUP
8	BACKWASH LINE
9	END FORK LIFT HOLES (TANK SKID)
10	PLUMBING SUPPORT BRACKET
11	FRESH WATER MAKE-UP SOLENOID
12	DRAIN LINE
13	RECIRCULATION VALVE
14	INLET TO SUMP PUMP
15	SIDE FORK LIFT HOLES (TANK SKID)
16	FILTER PUMP
17	PUMP JUNCTION BOX ASSEMBLY
18	FILTER CONTROL VALVE

WPR-20-0P11 FEATURES 091319

AERIAL VIEW FOR WPR-20



- | | | | |
|----|------------------------------------|----|--|
| 19 | CARTRIDGE FILTER | 40 | CONTROL BOX |
| 20 | PRESSURE TANK | 41 | CONTROL BOX STAND |
| 21 | SPRAY BAR CONTROL VALVE | 42 | PRESSURE WASHER OUTLET |
| 22 | PRESSURE GAUGE | 43 | TRANSFER PUMP |
| 23 | PRESSURE SWITCH | 44 | TANK SKID |
| 24 | END FORK LIFT HOLES (FILTER SKID) | 45 | DRAIN LINE HOSE CONNECTIONS |
| 25 | MEDIA FILTER INLET PLUMBING | 46 | FILTER PUMP TO MEDIA FILTER HOSE CONNECTIONS |
| 26 | MULTIMEDIA FILTER | 47 | CARTRIDGE TO POLISHING FILTER HOSE CONNECTIONS |
| 27 | POLISHING FILTER OUTLET PLUMBING | 48 | AIR BLEED VALVE |
| 28 | SIDE FORK LIFT HOLES (FILTER SKID) | 49 | CARTRIDGE FILTER DRAIN VALVE |
| 29 | POLISHING FILTER | 50 | SUMP PUMP |
| 30 | BACKWASH DRAIN LINE | 51 | SEPARATION CHAMBER |
| 31 | MULTIMEDIA FILTER VALVE | 52 | HOLDING TANK |
| 32 | POLISHING FILTER VALVE | 53 | LOW LEVEL FILTER PUMP FLOAT (BLUE) |
| 33 | ELECTRICAL OUTLET 120V | 54 | PRODUCT TANK |
| 34 | SUMP PUMP SWITCH | 55 | PRODUCT TANK INLET |
| 35 | POWER INDICATOR LIGHT | 56 | LOW LEVEL TRANSFER PUMP FLOAT (BLUE) |
| 36 | FILTER PUMP SWITCH | 57 | HIGH LEVEL FILTER PUMP FLOAT (RED) |
| 37 | TRANSFER PUMP SWITCH | | |
| 38 | FLOAT OVERRIDE SWITCH | | |
| 39 | FLOWMETER | | |

INSTALLATION

ATTIRE:

1. Proper attire is essential to your safety. It is advised to utilize whatever means necessary to protect eyes, ears, and skin.
-

INSTALLATION:

1. A collection pit or supply tank is required to feed the recycle system. Ensure a properly designed pit or supply tank is in a place that will work with the location of the recycle system. Consult factory with questions.
2. Place the water recycling treatment system platform on a hard, level surface in an area free of flammable vapors, combustible dust, gases or other combustible materials. Shim the Skid if necessary.
3. Place filter skid in-line with tank skid attach plumbing as needed. Shim skid as needed.
4. Set the unit so you have access to the filters and **Control Panel**.
5. Do not place unit in an area:
 - a. with insufficient ventilation.
 - b. where environmental hazards (i.e. rain and snow) can come in contact with the water recycling treatment system.
 - c. in a freezing environment.
6. Connect inlet pump, filter pump inlet, and filter outlet plumbing connections using the hose assemblies provided by manufacture.
7. Place spray bar on top of tank, nozzles pointing down into main chamber.
8. The water recycling treatment system is shipped with union connections loosened to protect the unit from shipping damage. Tighten all union connections at this time.
9. Hook up the **Inlet to Sump Pump** and **Recirculation Valve** plumbing. Use schedule 80 PVC slip connections.
 - a. Connect inlet plumbing from supply tank or pit into the Sump Pump. Use a minimum size plumbing of 2" and if the Sump Pump is located above the supply tank or pit a check valve is required to keep prime in the pump. Installing unions is recommended for ease of service.
 - b. Connect Recirculation Outlet Valve back to supply tank or pit using a minimum of 1-1/2" plumbing.
10. Hook up connections from the Backwash Outlet, Tank Overflow and Tank Drain Valve lines using sch. 80 plumbing.
 - a. Run the Backwash Outlet line to settling tank or elsewhere using a minimum of 1-1/2" plumbing.
 - b. Connect to the Tank Overflow Line from the open ended pipe stud in the center of the unit back to the pit or supply tank.
 - c. Connect the Tank Drain Valve line on the end of the tank to the pit or supply tank.
11. Install the three floats in the **Supply Tank or Pit**. Allow a 2" tether and enough room for them to move freely without interfering with the plumbing.
 - a. Float #1 Blue: low level shut-off. Attach this float 10" above the **Plumbing** inlet.
 - b. Float #5 Red: Fresh water makeup. Height of this float must be adjusted to the individual system.

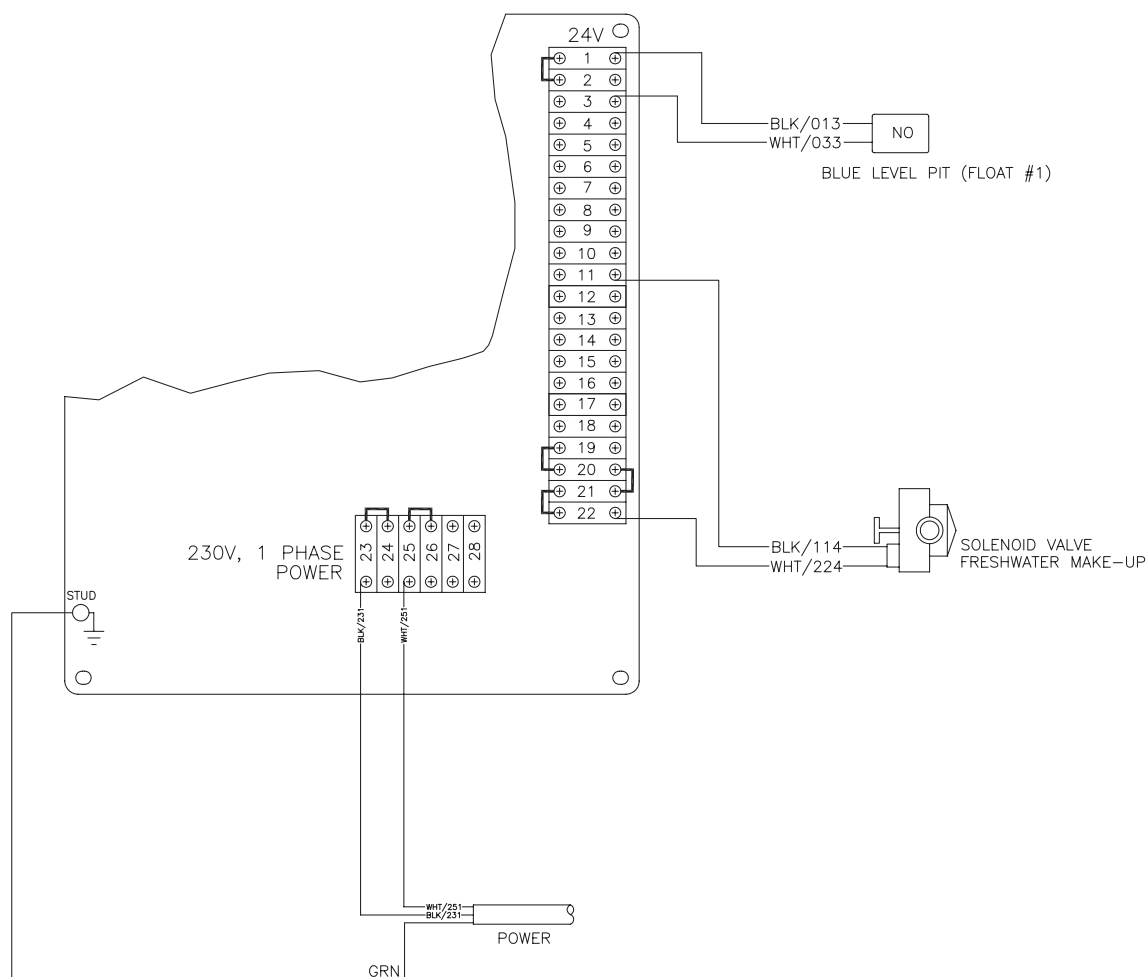
INSTALLATION



WARNING

RISK OF ELECTROCUTION! TO REDUCE THE RISK OF ELECTROCUTION, KEEP ALL CONNECTIONS DRY AND OFF THE GROUND.

12. A qualified electrician must hook up the electrical system.
 - a. Verify the electrical supply at the power source is off.
 - b. Be certain all switches on the **Control Panel** are in the "OFF" position.
 - c. Run water tight conduit
 1. From the **Sump Pump** and Floats to the **Control Panel**.
 2. From the local disconnect to the **Control Panel**. The electrician will need to drill holes in the **Control Panel** for the conduit.
 - d. Make connections to the terminal strips as shown below. WPR-20 requires three wire split-phase 230V power for a 120V circuit to outlet.
13. Make the following hose connections:
 - a. From a pressurized water supply to the **Fresh Water Hook-up**.
 - b. From the **Pressure Washer Outlet** to the pressure washer.



FIELD WIRING DIAGRAM - WPR-20-0P10

NOTES

STOP

TO ENSURE YOUR WATER RECYCLE TREATMENT SYSTEM OPERATES SAFELY AND EFFICIENTLY, COMPLETE THE PRE-OPERATION CHECKLIST BEFORE PROCEEDING.

PRE-OPERATION CHECKLIST

Before proceeding, answer all the questions on this checklist.	YES	NO
CODES:		
1. Does the electrical wiring meet all codes?		
2. Does plumbing meet all codes?		
LOCATION:		
1. Is the unit located on a hard level surface free of flammable vapors, combustible dust, gases or other combustible materials?		
2. Is the unit located in a large ventilated area?		
ELECTRICAL:		
1. Is the unit properly grounded?		
2. Does the power supply, voltage and amperage match the data plate?		
PLUMBING:		
1. Is the plumbing sized correctly?		
2. Is the check valve installed near the Sump Pump ?		
3. Are all unions tightened?		
GENERAL:		
1. Have all operators using this unit read and understood this entire manual?		
2. Has the unit been installed by qualified service people who followed the instructions listed in this manual?		

IF "NO" WAS MARKED TO ANY OF THESE QUESTIONS, CORRECT THE SITUATION BEFORE OPERATING.

PREPARATION

PRESTART PROCEDURES:

1. Position the valves on the WPR water recycling treatment system in the "Start-up Mode".
 - Recirculation Valve: Turn valve completely closed.
 - Inlet Flow Control Valve: Turn valve one rotation short of completely closed.
 - Filter Control Valve: Turn valve one rotation short of completely closed.
 - Multi-Media Filter Valve: Turn valve to "Filter".
 - Polishing Filter Valve: Turn valve to "Filter".
 - Cartridge Filter Drain Valve: Turn valve completely closed.
 - Air Bleed Valve**: Turn valve open.
 - Oil Release Valve: Turn valve completely closed.
 - Tank Drain Valve: Turn valve completely closed.
 2. Be certain all hoses are securely connected.
 3. Be certain all switches on the **Control Panel** are in the "OFF" position.
 4. Turn on the power supply. The **Power Indicator Light** should glow.
-

START-UP:

1. Ensure water supply from the **Fresh Water Make-up** is turned on and pit or supply tank is filled with water.
2. Turn on the **Sump Pump Switch**. Water will flow into the **Oil/Water/Solids Separator**.
4. Flow can be increased by opening the Inlet Flow Control Valve. Fill the **Oil/Water/Solids Separator**.
5. As the water fills the **Holding Tank**, it will begin to flow out the **Tank Overflow Line** at the top of the tank. At this point, flow can be adjusted with the Inlet Flow Control Valve. Maximum flow is achieved when the water level remains constant in the **Holding Tank**. Adjust Recirculation Valve as needed. Mazzei should pull air in.
6. Turn on the **Filter Pump Switch**. The **Filter Pump** will automatically turn off when the system is full of water.
7. As water flows to the filters, use the Filter Control Valve to adjust the water flow to the unit rating maximum. Check the **Flow Meter** located ahead of the **Multi-Media Filter**.
8. Allow **Multi-Media Filter** to fill. Once full, water will begin to flow to the **Polishing Filter**.
10. Once the **Polishing Filter** is full, water will begin flowing to the **Cartridge Filter**.
9. Air will release from the **Air Bleed Valve** as the **Cartridge Filter** fills. Close the **Air Bleed Valve** when water begins to exit from it. This indicates the **Cartridge Filter** is filled and water will begin flowing to the **Product Tank**. For optimum efficiency, occasionally open the **Air Bleed Valve** while the **Filter Pump** is operating to relieve any air buildup.
11. When the **Product Tank** is full and the **Filter Pump** turns off, prime the **Transfer Pump** by opening the **Pressure Washer Outlet** valve until water exits.
12. Turn on the **Transfer Pump Switch** to allow water to flow into the **Pressure Tank**. Once transfer pump line is filled with water, as long as there are no valves open or leaks the pump will shut-off.
13. Water is now completely cycled in the system.
14. The Spray Bar control valve will send water to the Spray Bar to knock down foam and recirculate water. Open valve as needed.
15. The Oil Skimmer Weir on the Oil Water Separator tank is adjustable. Use the thumb screws to loosen and adjust the height of the weir so it is just below the operating water level in the tank. Water should trickle over the top of the weir.

OPERATION

BEGIN:

1. The water recycling treatment system is now ready to operate.
 2. Ensure all pump switches on the **Control Panel** are on.
 3. Monitor the system closely the first few days to ensure smooth operation.
-

MAINTENANCE

SOLIDS COLLECTION AREA:

Solids Separation Chamber: The Solids Separations Chamber inside the separator tank will need to be cleaned occasionally to prevent the overflow of solids into the holding tank.

1. Periodically drain the solids from the bottom of the tank. The Tank Drain Valve should be plumbed into the collection pit or supply tank. Open up Tank Drain Valve and let the tank drain out for about 10 seconds, removing solids from the separator tank back to the pit or supply tank.
 2. Occasionally the media may need to be taken out and cleaned.
 - a. Turn the Sump pump switch off.
 - b. Open the Tank Drain Valve to let the majority of the water inside the tank drain out. Watch that the pit or supply tank does not overflow.
 - c. Use a garden hose to wash off the Oil Coalescing Grids and the inside of the tank. The coalescing grids can be removed from the tank to make this easier.
 - d. Re-insert the grids back into the tank.
 - e. Turn the Sump Pump Switch back on.
-

BACKWASHING OF FILTERS (DAILY TO WEEKLY):

1. Backwashing the multi-media and carbon filters removes debris from the filters and sends the sediments back to the pit where they can settle. Backwashing should be done at least once a week or when the pressure on the Multi-media Valve is 10PSI higher than the normal operation pressure.
2. When performing the backwashing, backwash the Polishing Filter immediately after backwashing the Multi-Media Filter. This is also a good time to check and clean the Cartridge Filter.
 - a. Turn Filter Pump Switch to Off.
 - b. Turn Float Override Switch to On.
 - c. Set Multi-media Filter Valve to "Backwash".
 - d. Turn Filter Control Valve one rotation short of completely closed.
 - e. Turn Filter Pump Switch On.
 - f. Set the Filter Control Valve so the Flow Meter is around 10-15GPM.
 - g. When backwashing water appears to clear or after approximately 5 minutes turn Filter Pump Switch Off.
 - h. Set Multi-Media Filter Valve to "Filter".
 - i. Set Polishing Filter Valve to "Backwash".
 - j. Turn the Filter Pump Switch On.
 - k. Set Filter Control Valve to 10 GPM. (If flow is too high activated carbon will be flushed out of the backwashing line, turn flow down in this is the case).
 - l. Backwash approximately 5 minutes.
 - m. Turn Filter Pump Switch Off.
 - n. Set the Polishing Filter Valve to "Filter".
 - o. Turn the Filter Pump switch On.
3. Cartridge Filter: When the pressure gauge on the cartridge filter reads over 10PSI higher than its beginning operating pressure it is time to clean the cartridge filter.
 - a. Turn Filter Pump Switch Off.
 - b. Open Cartridge Filter Drain Valve to let some water out of the Cartridge Filter. Open the Air Bleed Valve to let air displace outgoing water. Filter can also be removed and cleaned with water still in the vessel. Close Cartridge Filter Drain valve when done.
 - c. Remove the lid of the Cartridge Filter by unscrewing the lid collar and pulling up on the lid. A screw driver can be used if needed to pry loose the lid but be careful not to damage the o-ring.
 - d. Remove the filter from the vessel.

MAINTENANCE

- e. Use a garden hose to spray in between the pleats of the filter. Inspect filter for any damage.
 - f. If filter is in good condition reinsert into the vessel making sure the bottom of the filter lines up correctly with the bottom of the vessel. More water can be removed from the vessel if needed to make this easier.
 - g. Lubricate the lid o-ring with petroleum jelly and place on top of the filter.
 - h. Slide the lid collar over the lid and screw onto the vessel until tight.
 - i. Turn Filter Pump Switch On.
 - j. As water begins entering filter again make sure the Air Bleed Valve (#) is open to let air out and close when water begins to emerge from the valve.
4. After filters are cleaned readjust valves so flowrates are set to the proper operating parameters.

REMOVING & REFILLING MEDIA FROM THE MULTIMEDIA & POLISHING FILTER:

1. New media can be ordered from your local distributor.

Model:	Part Number	Description	QTY	Weight (lbs)
WPR-20	19-0558	30" Multi-Media Filter	1	
	33-0303	GRAVEL #3	2 bags	200
	33-0304	GARNET #12	1 bag	100
	33-0305	GARNET #50	2 bags	200
	33-0306	FILTER AG	2 bags	100
	19-0558	30" Carbon Filter	1	
	33-0302	ACTIVATED CARBON	6 bags	165

2. Be certain to wear proper attire such as goggles, gloves, coveralls, dust mask, etc. to protect eyes and skin.
3. Turn off the **Filter Pump Switch**.
4. Remove the valve from the desired filter tank.
5. Remove the following items from the filter tank in the order given:
Upper dispersing cup, Small section of PVC, Lower dispersing cup.
6. Use a vacuum to remove the media from the filter.
7. Cover the PVC opening to prevent media from entering the laterals.
8. Ensure the lateral assembly remains centered and flush on the bottom of the tank and the layers are level when pouring media into the filter tank.
9. Reassemble the dispersing section of the filter tank and replace its corresponding valve.
10. Turn on the **Filter Pump Switch**.
11. Dispose of used media according to EPA standards.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
<i>ELECTRICAL</i>		
No power at Control Panel .	Power failure to Control Panel .	Check circuit breaker at power source or contact your local distributor.
Power Indicator Light is OFF.	Blown fuses inside Control Panel on step down transformer.	Check fuses, replace if necessary. If fuses are OK, contact your distributor.
<i>SUMP PUMP</i>		
Sump Pump will not run.	Floats are not adjusted correctly in the Pit or Supply Tank .	Readjust.
	Not enough water in the Pit or Supply Tank .	Add water to the Sump Pit or Supply Tank .
	Float 1 is defective.	Replace.
	Circuit overload/breaker has tripped.	Reset breaker or replace fuse at power source.
	Motor overload.	Allow motor to cool. Motor will automatically restart when cool.
	Motor is defective.	Replace motor.
Sump Pump motor starts and stops frequently.	This is a common occurrence on initial start-up while pits are filling.	Allow pits to fill.
	Excessive water flow to reclaim unit.	Turn valve clockwise to reduce flow.
	Sump Pump impeller is clogged.	Disconnect power and unclog impeller.
	Motor overload.	Allow motor to cool. Motor will automatically restart when cool.
	Sump Pit is not large enough.	Expand size of pit.
Sump Pump runs, but there is little or no water discharge.	Strainer basket in Sump Pump is clogged.	Clean, repair or replace.
	Water level is below pump inlet.	Ensure Float 1 is not caught in plumbing.
	There is an air lock in the Sump Pump .	Manually fill the inlet pipe with water. Turn the Sump Pump on and off several times.
	Low voltage.	Ensure wire size is capable of handling the rated amperage of the unit. If wire size is correct, contact your distributor.
	Clogged impeller or worn pump parts.	Contact your distributor.
Sump Pump will not turn off.	Defective switch inside Float 1.	Replace.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
SEPARATOR TANK		
Water will not flow into the Separator Tank .	Sump Pump is not turned on.	Move Sump Pump Switch to "ON".
	Circuit breaker has tripped or is "OFF".	Reset or turn breaker "ON".
	Dirt is lodged in the pit check valve.	Clean.
	Sump Pump impeller is clogged.	Disconnect power and clean.
	Lines or valves contain frozen water.	Allow to thaw. Inject with warm water if necessary.
FILTER PUMP		
Filter Pump will not run.	Filter Pump Switch is off.	Turn switch on.
	Circuit overload/breaker has tripped.	Reset breaker or replace fuse.
	Motor overload.	Allow motor to cool. Motor will automatically restart when cool.
	Filter Pump Switch is malfunctioning.	Replace switch.
Filter Pump runs but there is no water discharge OR Filter Pump cycles excessively.	Pump is not primed.	Manually fill the inlet pipe with water. Turn the Filter Pump on and off several times.
	Pump sucking air.	Eliminate leaks and tighten all connections on intake line.
	Low water in Holding Tank .	Increase flow by opening <i>Water Inlet Flow Control Valve</i> .
	Check valve is leaking or stuck in closed position.	Clean or replace as necessary.
	Filters are dirty.	Backwash filters.
	Lines or valves contain frozen water.	Allow to thaw. Inject with warm water if necessary. Ensure the Sump Pit remains above freezing.
	Pump impeller is obstructed.	Contact your local distributor.
	Pump motor is operating below maximum RPM.	Contact your local distributor.
Filter Pump is hot or turns off.	Multi-Media Filter is dirty.	Backwash.
	Low voltage.	Ensure wire size is capable of handling the rated amperage of the unit. If wire size is correct, contact your local distributor.
	Motor overload.	Allow motor to cool. Motor will automatically restart when cool.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
TRANSFER PUMP		
Transfer Pump runs but there is low water discharge.	Water is being used elsewhere.	Reduce flow to other source or contact your local distributor.
	Pump is not primed.	Manually fill the inlet pipe with water. Turn the Transfer Pump on and off several times.
	Plumbing is obstructed or too small.	Remove obstruction or use larger plumbing.
	Scale buildup in metal piping.	Replace with plastic plumbing.
Transfer Pump cycles excessively.	Pump sucking air.	Eliminate leaks and tighten all connections on intake line.
	Bladder failure in Pressure Tank .	Replace Pressure Tank .
	Pressure switch malfunction.	Adjust pressure settings.
Transfer Pump does not turn off.	Too low of pressure in the Pressure Tank .	Increase pressure.
	Pressure switch line is obstructed.	Disconnect line and remove obstruction. Replace.
	Pressure switch is out of alignment.	Realign or replace.
	Pressure switch contacts are frozen.	Replace if necessary.
	Impeller is obstructed.	Contact your local distributor.
	Leak in outlet line.	Fix leak.
SHAFT SEALS		
Water is leaking at pumps.	Damaged stationary shaft seal.	Seal ran dry. Ensure seal chamber is filled with liquid.
Short seal life.	Unexpected temperature and chemical usage.	Replace.

TROUBLESHOOTING

SYMPTOM	PROBABLE CAUSE	REMEDY
<i>WATER FLOW</i>		
Air shoots from Water Outlet.	This is a common occurrence while pump is priming. Transfer Pump is sucking air at suction inlet.	Air will stop shooting from the water outlet when pump is primed. Eliminate leaks or tighten connection.
Water will not turn off.	Solenoid failure.	Repair or replace.

REPLACEMENT PARTS

DESCRIPTION	REORDER PART #
Activated carbon.....	33-0302
Gravel.....	33-0303
Garnet #12.....	33-0304
Garnet #50.....	33-0305
Filter Ag.....	33-0306
Replacement Cartridge Filter.....	19-0274

NOTES

STATEMENT OF WARRANTY

The manufacturer warrants all parts (except those referred to below) of your new WPR Water recycling Treatment system to be free from defects in materials and workmanship during the following periods:

For One (1) Year from the date of original purchase:

Defective parts not subject to normal wear and tear will be repaired or replaced at manufacturer's option during the warranty period. In any event, reimbursement is limited to the purchase price paid.

EXCLUSIONS

1. The motor is covered under separate warranty by its respective manufacturer and is subject to the terms set forth therein.
2. Normal wear parts:

Seals	Filters	Gaskets
O-rings	Packings	Pistons
Valve Assembly	Brushes	Filtering Media
Sensors		
3. Parts damaged due to:
 - normal wear, misapplication, modifications/alterations, abuse,
 - operation at other than recommended speeds, pressures or temperature,
 - the use of caustic liquids,
 - chloride corrosion or chemical deterioration,
 - fluctuations in electrical or water supply,
 - operating unit in an abrasive, corrosive or freezing environment.
4. Parts damaged by failure to follow recommended:
 - installation, operating and maintenance procedures.
5. This warranty does not cover the cost of:
 - normal maintenance or adjustments,
 - labor charges,
 - transportation charges to Service Center,
 - freight damage.
6. The use of other than genuine manufactured parts will void warranty. Parts returned, prepaid to the factory or to an Authorized Service Center will be inspected and replaced free of charge if found to be defective and subject to warranty. There are no warranties which extend beyond the description of the face hereof. Under no circumstances shall the manufacturer bear any responsibility for loss of use of the unit, loss of time or rental, inconvenience, commercial loss or consequential damages.

