TIGERFLOW
OCELOT SIMPLEX BOOSTER

TIGERFLOW®

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TIGERFLOW

OCELOT 25 SIMPLEX BOOSTER

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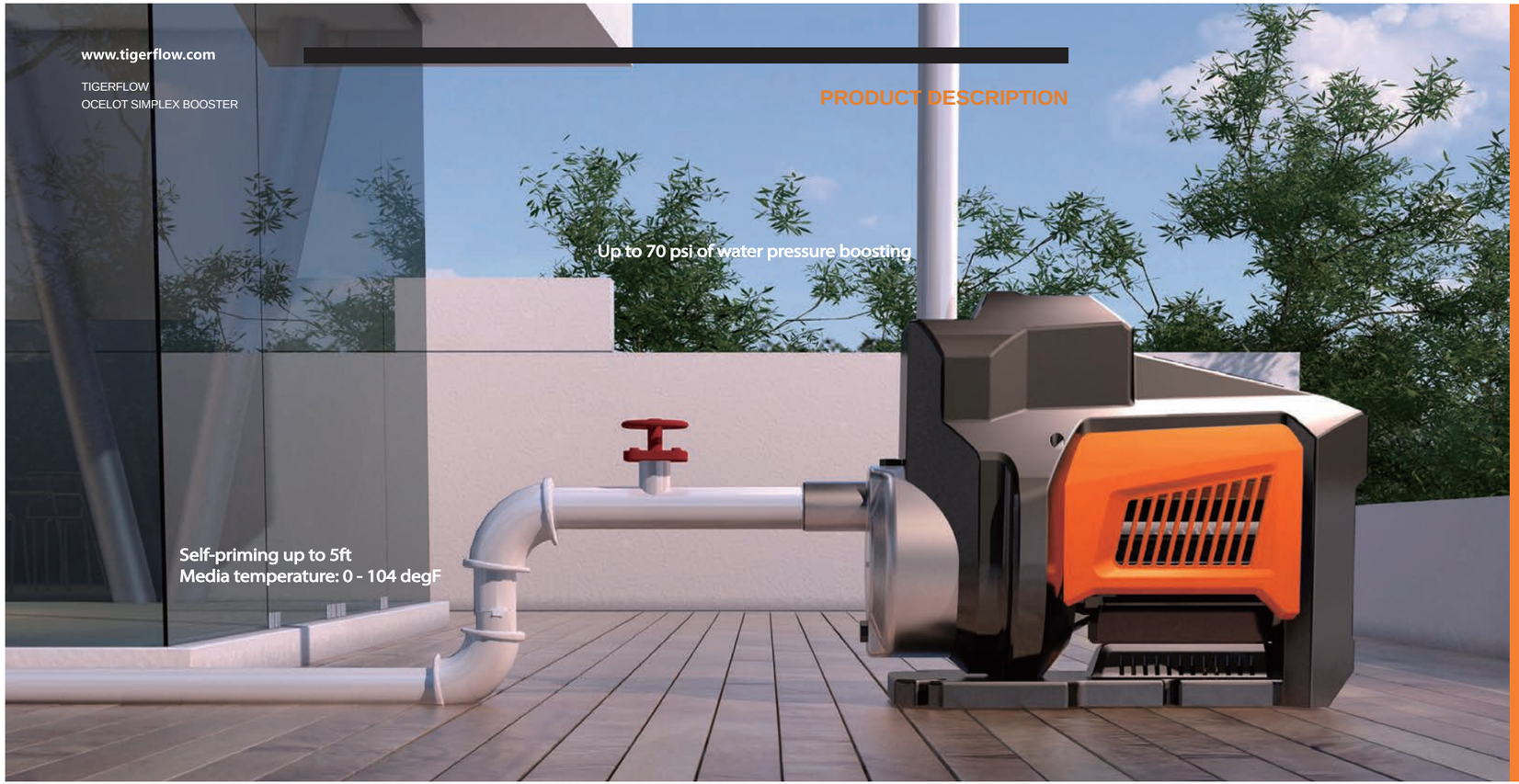
PRODUCT DESCRIPTION



- PERMANENT MAGNET MOTOR WITH VARIABLE SPEED
- QUIET OPERATION
- ENERGY EFFICIENT
- MULTIPLE PROTECTION
- INTELLIGENT OPERATION

The OCELOT 25 Booster pump is a self-priming, variable speed pump with a permanent magnet motor. The pump is constructed with stainless steel materials that provide durability and corrosion resistance. The pump includes automatic control for variable speed and low flow detection, slowing or stopping the pump when needed.

The intelligent pump control, high efficiency, and multiple pump protections make this pump very versatile for many different applications like mobile homes, RVs, temporary construction, boats, cabins, as well as light commercial and residential installations.

Product Information

The Ocelot 25 Simplex Booster is the perfect solution for small water boosting applications such as residential, light commercial, RVs, boats, cabins and remote locations, temporary water boosting, among others.

Product Display

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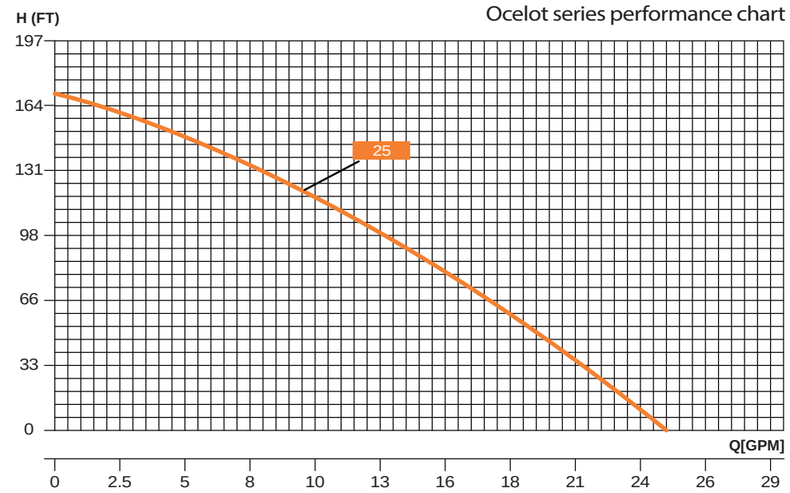
PRODUCT DESCRIPTION

Performance Curve

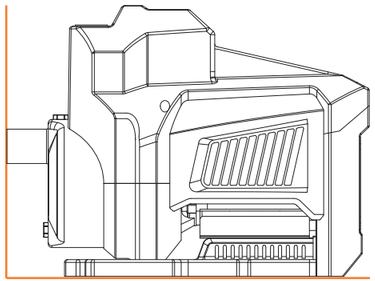


Technical Parameters (Curve Chart):

Model	Voltage (V)	Power (HP)	Max.Flow (GPM)	Max.Head (FT)	Rated Flow (GPM)	Rated Head (FT)	Piping (in)	Maximum suction range
Ocelot 25	160-260V 50/60Hz	1	24.2	164	13.2	91.86	0.98	29.5′

Product Size

PRODUCT DIMENSIONS: 15.35in*7.68in*11.42in



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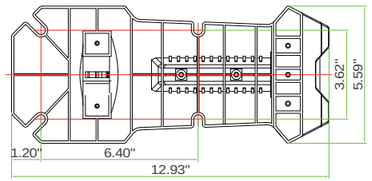

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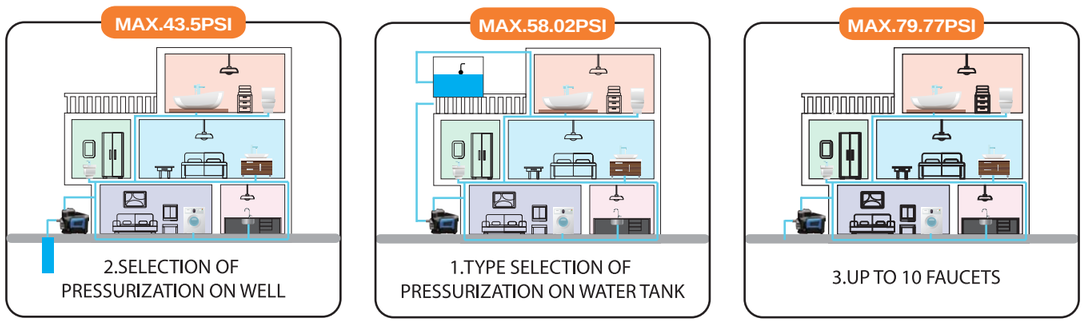
PRODUCT DESCRIPTION

Permanent Magnet Pump Head

Pump Selection For Residential Applications

For the selection of the target room, 7-8 faucets are used as an example. The flow of each faucet is 3.08GPM - 3.96GPM, and the internal pressure of the pipeline is the cumulative superimposed pressure. The loss of the pipeline must be considered. One elbow is equivalent to 3' of pressure loss. Best efficiency point of water pump + internal pressure of pipeline-actual loss of pipeline = final customer selection (for position 7-8 faucets)



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USE TYPE SELECTION

Pump Selection For Villa

PSI	BAR	Water colum [ft]/[m]	kPa	MPa
80	5.5	180/55	550	0.55
73	5.0	165/50	500	0.50
65	4.5	150/45	450	0.45
58	4.0	130/40	400	0.40
51	3.5	115/35	350	0.35
44	3.0	100/30	300	0.30
36	2.5	80/25	250	0.25
30	2.0	65/20	200	0.20
22	1.5	50/15	150	0.15

Items to Check Before Installation

- Inspect for any damaged parts
- Inspect inlet and outlets and remove covers
- Check the inlet and outlet for any debris or obstructions

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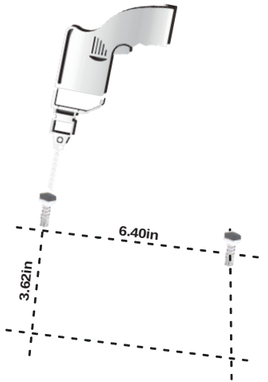
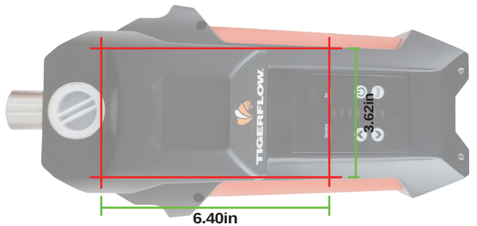
INSTALLATION INSTRUCTIONS

Precautions to Check Before Installation

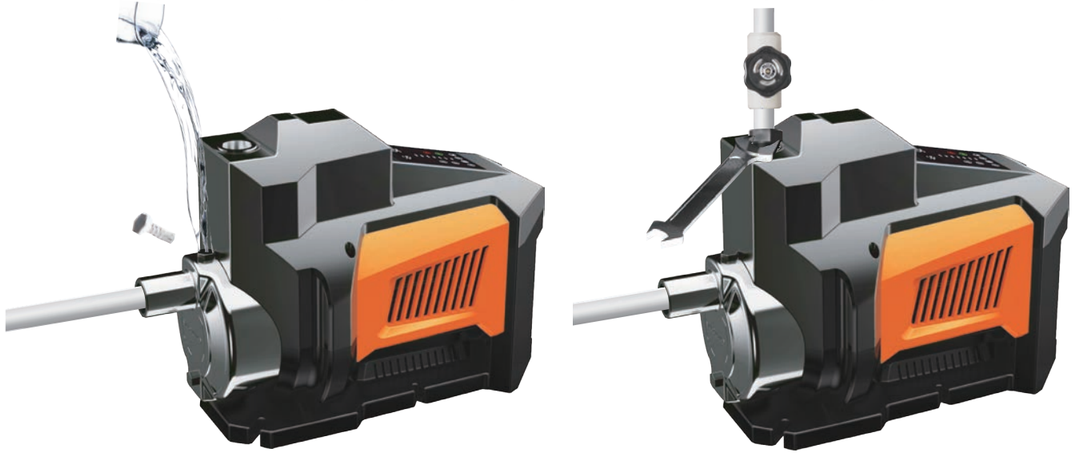
- Use the template below to locate the mounting screws.
- Mount the screws through pump base opening, and ensure the pump is leveled. Use shims if needed.





Connection Points

- Ensure the incoming water is shut-off.
- The pump can be primed before installing the discharge connection by introducing water through the bleeding port.
- Do not use hoses or soft rubber piping on the inlet side as it might collapse.
- After connecting to the inlet and outlet piping, open the incoming water and bleed the air out through the bleeding port.



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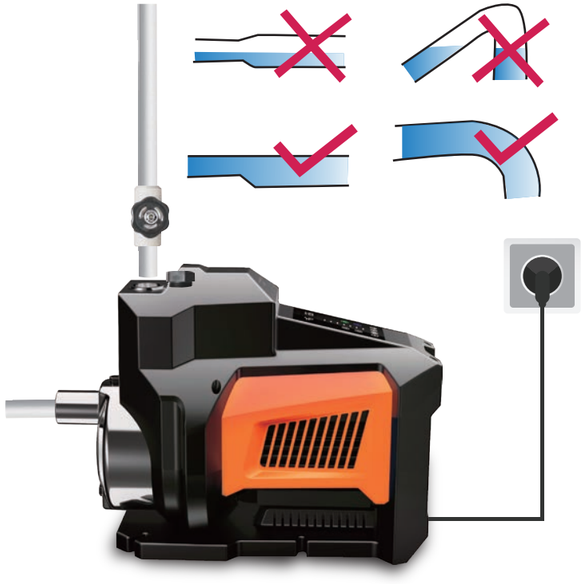
INSTALLATION INSTRUCTIONS

Checklist For Inlet Connection

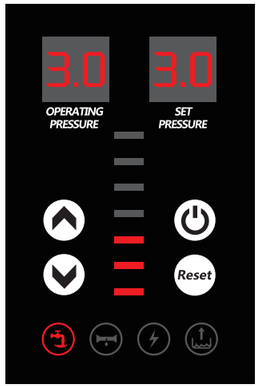
1. Incoming water is cut-off before connecting the inlet piping.
2. Inlet piping must be PVC or steel to avoid collapsing.
3. Inlet isolation valve is recommended to be installed vertically to avoid sediments collection.
4. On lift applications minimize pipe fittings to avoid drawing a vacuum.
5. The inlet piping shall be at least the same size as the inlet connection.
6. If the inlet pipe is 30 ft or longer, please use one size up for the pipe diameter.
7. A filter can be added to the inlet piping to remove solids.

Checklist For Outlet Connection

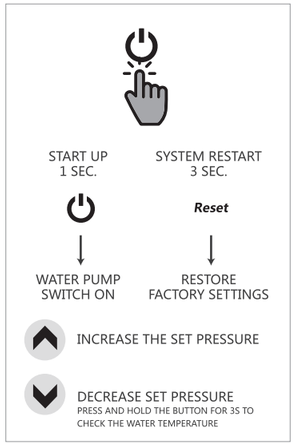
The outlet piping shall be at least the same diameter as the outlet connection to minimize friction losses, and noise at higher flow rates.



Operating Display



Menu



Pressure Setting

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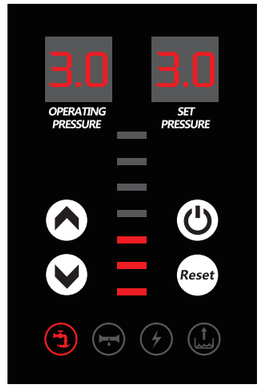
OPERATING DISPLAY

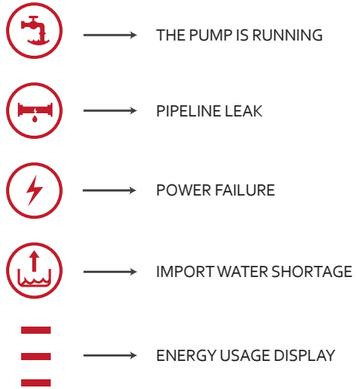
OPERATION:

1.PRESS THE UP AND DOWN KEYS TO SET THE REQUIRED PRESSURE VALUE

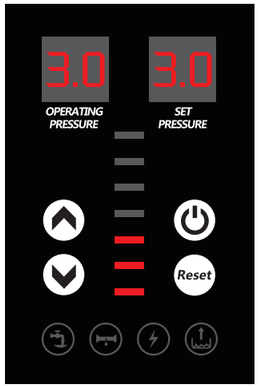
Operating Display



Indicating Lights



Operating Display



Changing Operating Mode

Press the key for 10 seconds to switch the operating mode.

In automatic pressure mode, the light is on.

In manual mode, the light is off.

Notes:

In manual mode the pump display shows the current pump frequency.

In this mode the pump will run continuously until manually shut off.

This mode can be used in case of a pressure sensor failure.

Increase pump speed

Decrease pump speed

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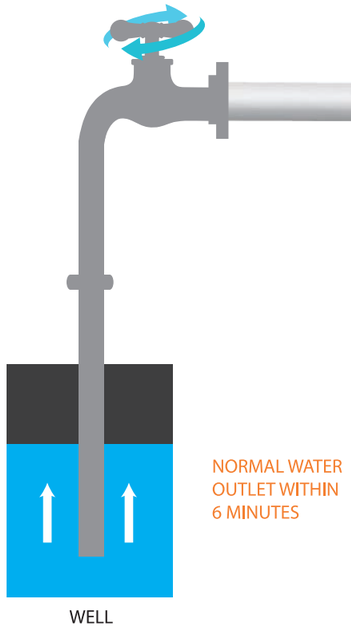
OPERATING DISPLAY

Operating Display

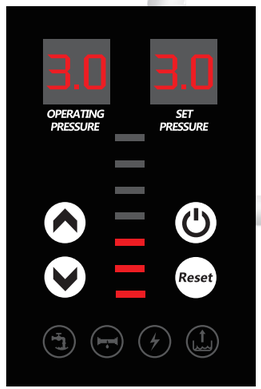
Reset

Press ***Reset*** key 3s，All parameters are restored to factory settings.

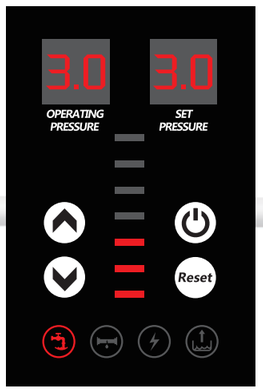
OPERATING DISPLAY



NORMAL WATER OUTLET WITHIN 6 MINUTES



Press the start button to run the pump. There is a 3 second delay after power up



1.After starting, the pump run indicating light is on.
2.When the piping outlets are closed, the water will stop flowing and the pump will turn off.

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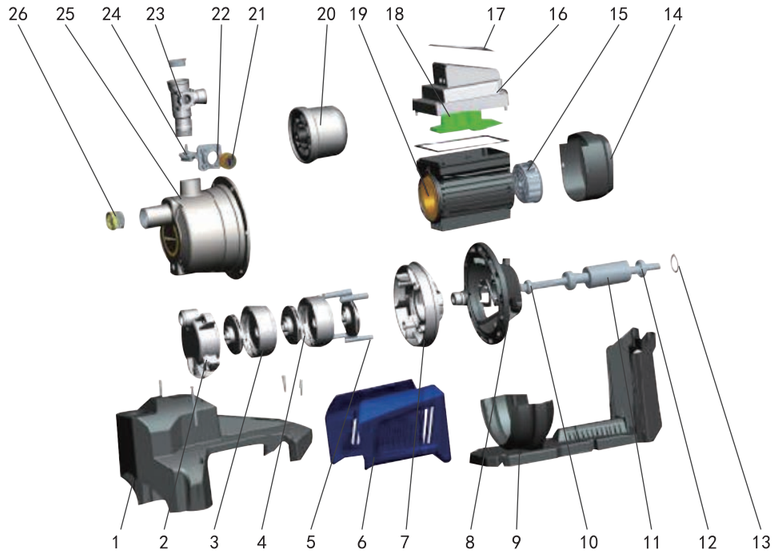
OPERATING DISPLAY

Exploded Diagram



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EXPLODED DIAGRAM

Exploded Diagram Items

Pos	Part	Pos	Part
1	Hull	14	Fan cover
2	Water inlet Guide glade	15	Fan
3	Guide glade	16	Capacitor box
4	Impeller	17	Gland
5	Prop	18	Controller
6	Radiation fin	19	Stator
7	Seal holder	20	Overhead tank
8	Pump support	21	Transducer
9	Motherboard	22	Sensor bracket
10	Water proof gland	23	Bottom bracket
11	Rotor	24	Check valve
12	Bearing	25	Pump body
13	Spring Washer	26	Check valve

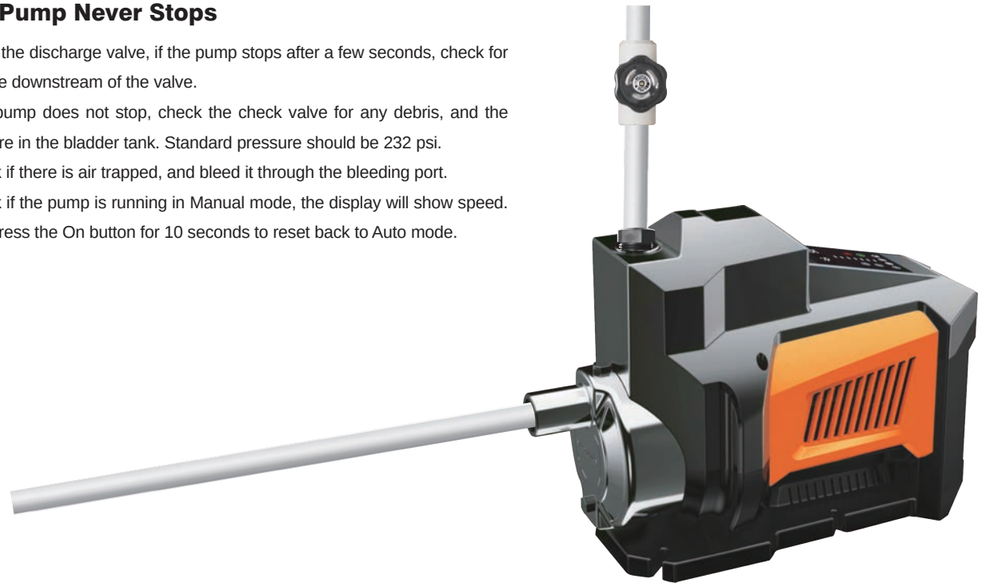
The Pump Never Stops

-Close the discharge valve, if the pump stops after a few seconds, check for leakage downstream of the valve.

If the pump does not stop, check the check valve for any debris, and the pressure in the bladder tank. Standard pressure should be 232 psi.

-Check if there is air trapped, and bleed it through the bleeding port.

-Check if the pump is running in Manual mode, the display will show speed. If so, press the On button for 10 seconds to reset back to Auto mode.



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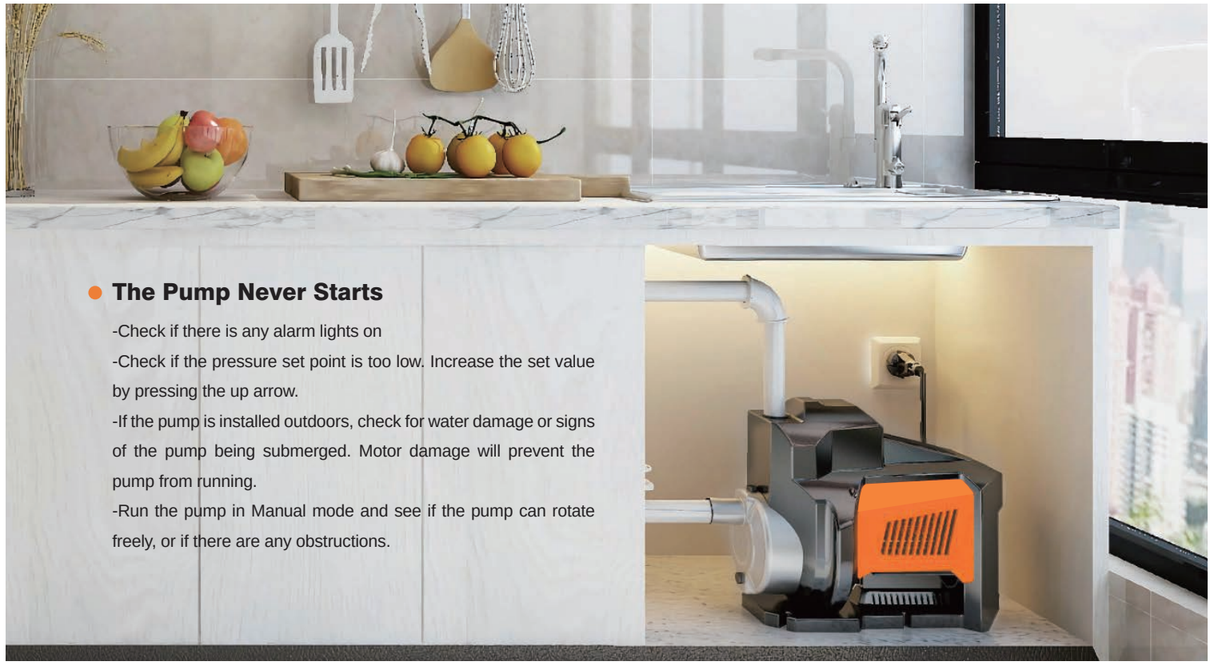
TROUBLESHOOTING



The Pump Never Starts

-Check if there is any alarm lights on

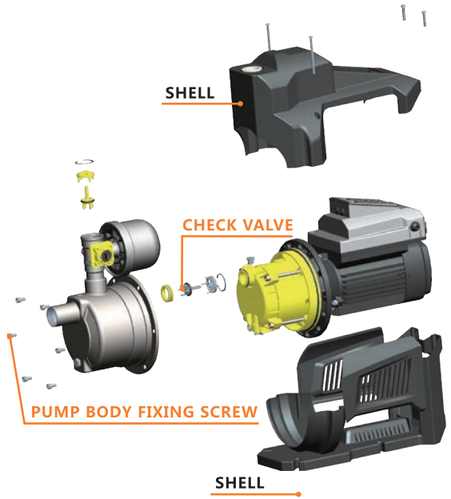
-Check if the pressure set point is too low. Increase the set value by pressing the up arrow.

-If the pump is installed outdoors, check for water damage or signs of the pump being submerged. Motor damage will prevent the pump from running.

-Run the pump in Manual mode and see if the pump can rotate freely, or if there are any obstructions.

Assembly of Check Valve

Inlet Check Valve Disassembly Instructions



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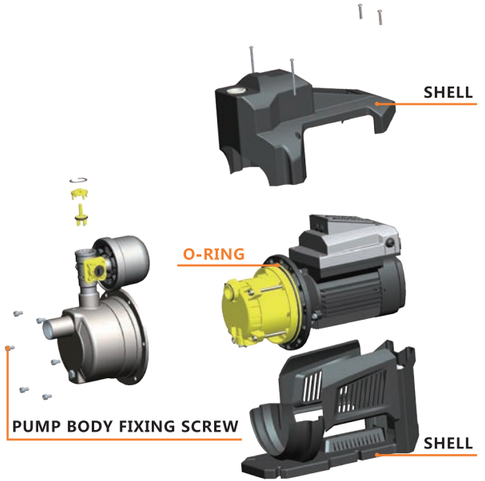
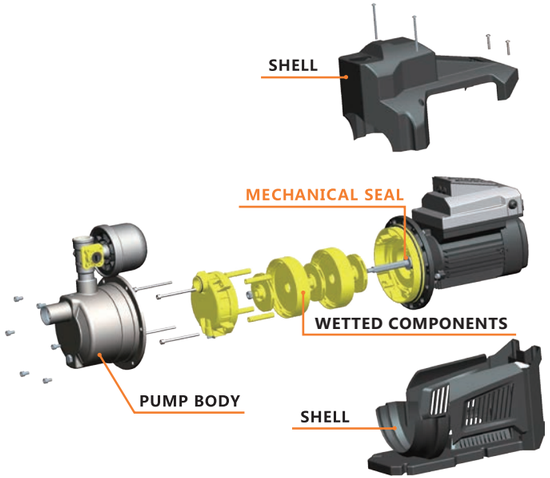
TROUBLESHOOTING

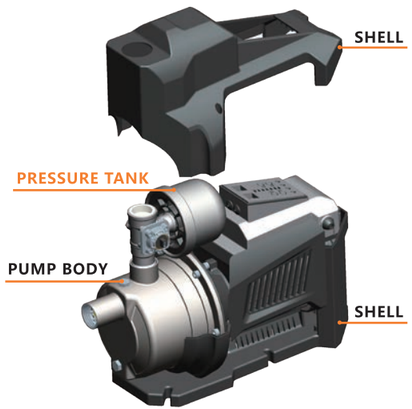
O-ring Disassembly Instructions



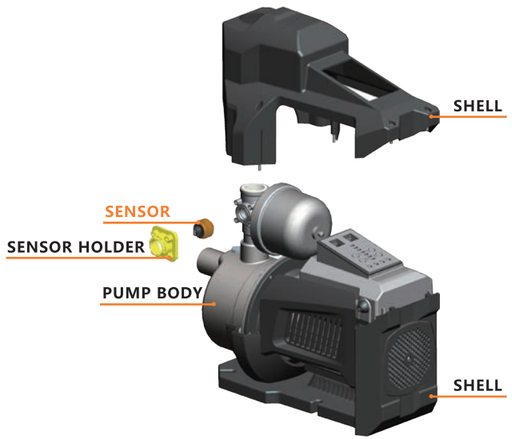
Mechanical Seal Disassembly Instructions



Tank Disassembly Instructions



Pressure Sensor Disassembly Instructions



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TROUBLESHOOTING

Factory Settings

Action	Instruction	Notes
To enter factory menu	Simultaneously long press  key to enter the factory menu.	
Navigate the menu	After entering the factory menu , Simultaneously long press  key or short press Reset toggle.	
Factory menu exit	After 10 seconds of no operation, it will automatically exit the factory mode.	

*The factory settings menu is not recommended for typical operators. Contact the factory representative.

Factory Menu Content

Menu Content	Menu Sign	Defaults	Menu Description	Notes
Non-stop fault parameters	P	0.1	Under the premise of checking that the pipeline is completely leak-proof, and there is no shutdown failure, increase this value. Increase by 3 each time, preferably not more than 30, increasing this value will increase the fluctuation of shutdown detection. Increase this value when the water is stopped by mistake, please increase the following parameter of wrong stop.	
Error stop fault parameters	t	10	In case of accidental shutdown of water, increase this value by 3 each time, and increase it successively.	
leak prompt switch	F5	1	1: Leakage prompt on, 0: Leakage prompt off	
Voltage fault misjudgment parameters	F7	3 or 2	If the voltage value is correct, this value can be increased to eliminate the misjudgment of the voltage fault. This parameter is the voltage fault count value, do not increase it too much, it will easily lead to the failure of the voltage protection of the driver, resulting in damage to the driver. For PFC models, add 1 each time, and for non-PFC models add 3 each time. If invalid, please restore the default value.	
Cryogenic protection temperature	A0	3	When the water temperature is lower than this value, it enters into low temperature protection.	
High temperature protection temperature	A1	75	Water temperature higher than this value enters high temperature protection.	

Common Fault And Troubleshooting

Error Code	Corresponding Fault	Troubleshooting
E1	Panel and motherboard communication failure	Please check whether the panel cable is connected well, and try plugging and unplugging again. If it cannot be resolved. The panel or motherboard has failed.
E2	stall	1. Please try to turn the fan blade to see if the water pump impeller is stuck.
E3	Voltage failure,  icon lights up	Please check with a multimeter
E4	Outlet pressure sensor failure	Check whether the lower pressure sensor interface is in poor contact, check the lower interface, and re-plug it. If it still can't be solved, replace the pressure sensor.
E5	Controller failure	1. Power off, wait for the panel light to go out, then power on again. 2. If it still cannot be recovered, the motor or driver board is damaged.
E6	Phase failure	Check whether the motor wire is connected well. Use a multimeter to measure the resistance of the motor wire and see if there is any disconnection.
E7	overcurrent	1. Check if there is a short circuit in the motor wire. 2. Check the voltage resistance of the motor to see if the voltage resistance is not enough. 3. Re-power on and test, the motor is good, maybe the driver is damaged due to accidental impact.
E9	water temperature protection	Check whether the water temperature is abnormal
E10	lack of water,  icon lights up	Check if water is available. If there is water, check the pump model to confirm it has a water flow switch. For models without a water flow switch, you can enter the factory menu to adjust the water shortage pressure and set it to the current pressure.
E11	leakage,  icon lights up	Check whether the pipeline is leaking, or whether the check valve is leaking, it does not affect the water use, it only serves as a reminder.
E12	Driver board overheating fault	Wait for the temperature of the drive to drop, and automatically resume operation, or move the pump to a cool and ventilated place.

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TROUBLESHOOTING

Common Faults And Solutions

FAULT	REASON	MEASURES
WATER PUMP DOES NOT STOP	1. WATER LEAKAGE OF PIPELINE	CHECK THE PIPELINE AND WATER EQUIPMENT FOR WATER LEAKAGE
	2. CHECK VALVE STUCK	CHECK THE CHECK VALVE OF WATER PUMP
WATER PUMP DOES NOT START	1. CONSTANT PRESSURE VALUE OF WATER PUMP IS TOO LOW	INCREASE THE CONSTANT PRESSURE OF WATER PUMP
	2. IMPELLER STUCK	USE A SCREWDRIVER TO MOVE THE ROTOR SHAFT AT THE BLADE END TO MAKE IT ROTATE FLEXIBLY OR DISASSEMBLE IT
	3. THERE IS AN OPEN CIRCUIT IN THE WINDING	REMOVE SUNDRIES FROM PUMP COVER
	4. POOR CONTACT OR FRACTURE OF CABLE	CHECK THE MOTOR (SEND IT TO THE MAINTENANCE POINT FOR MAINTENANCE)
	5. CONTROLLER DAMAGED	CHECK THE TERMINAL OR REPLACE THE CABLE WITH A NEW ONE
		REPLACE THE WATER PUMP CONTROLLER (SENT TO THE MAINTENANCE POINT FOR MAINTENANCE)
NO WATER IS DISCHARGED DURING THE OPERATION OF WATER PUMP	1. PUMP ROTATION DIRECTION IS WRONG	CHECK THE ROTATION DIRECTION OF THE MOTOR, AND CORRECT IF IT IS WRONG
	2. NO WATER ADDED FOR THE FIRST INSTALLATION	FILL THE PUMP WITH WATER
	3. IMPELLER DAMAGED	REPLACE IMPELLER (SEND TO MAINTENANCE POINT FOR MAINTENANCE)
	4. WATER LEVEL TOO LOW	ADJUST THE INSTALLATION HEIGHT OF WATER PUMP
	5. PUMP BODY CHECK VALVE STUCK	DISASSEMBLE THE SENSING DEVICE ON THE PUMP BODY AND CHECK WHETHER THE CHECK VALVE IS STUCK
	6. AIR LEAKAGE OF WATER INLET PIPE	CHECK THAT THE LINES ARE INSTALLED CORRECTLY
	7. BOTTOM VALVE NOT OPEN OR BLOCKED	CHECK THE FLEXIBILITY OF BOTTOM VALVE AND REMOVE OBSTRUCTION

Common Faults And Solutions

FAULT	REASON	MEASURES
INSUFFICIENT WATER PUMP PRESSURE	1. INCORRECT TYPE SELECTION OF WATER PUMP OR TOO LOW CONSTANT PRESSURE VALUE	SELECT APPROPRIATE WATER PUMP OR INCREASE CONSTANT PRESSURE VALUE
	2. THE WATER INLET PIPE IS TOO LONG, OR THERE ARE TOO MANY TURNS. THE DIAMETER OF THE WATER INLET PIPE IS NOT SUITABLE	SELECT THE SPECIFIED PIPE DIAMETER TO MAKE THE DESIGN OF WATER INLET PIPE SHORTER.
	3. FOREIGN MATTER BLOCKING THE INLET PIPE, FILTER SCREEN OR PUMP CAVITY	CLEAN THE PIPELINE, BOTTOM VALVE OR PUMP CHAMBER, AND REMOVE SUNDRIES.
EXCESSIVE VIBRATION OF WATER PUMP	1. THE PUMP IS NOT FIXED ON THE BASE	TIGHTEN THE FOUNDATION BOLT
	2. INSUFFICIENT STABILITY OF WATER PUMP FIXING FRAME	IT IS INSTALLED ON THE STABLE WATER PUMP FIXING FRAME
	3. IMPELLER STUCK	CLEAR THE SUNDRIES IN THE PUMP CAVITY
	4. WRONG GROUNDING OR DAMAGED CABLE, ELECTRIC PUMP STRUCK BY LIGHTNING	FIND OUT THE CAUSE AND REPLACE THE WINDING COIL
WATER PUMP LEAKS	1. WEAR OF MECHANICAL SEAL	CLEAN OR REPLACE MECHANICAL SEAL
	2. PUMP HEAD OR CONNECTOR LEAKING	FIND OUT THE CAUSE OF WATER LEAKAGE AND DEAL WITH IT ACCORDINGLY
THE NOISE OF WATER PUMP IS TOO LOUD	1. BEARING DAMAGE	REPLACE BEARINGS OF THE SAME MODEL
	2. IMPELLER CARD	CLEAN UP SUNDRIES
	3. WATER INLET PIPE LESS THAN 1 INCH	ADJUST THE SIZE OF WATER INLET PIPE
	4. MEDIUM TEMPERATURE TOO HIGH	REDUCE MEDIUM TEMPERATURE

Water Pump Maintenance

Maintenance in operation

1. Inlet piping must be full of liquid and the pump shall not run in state of cavitation.
2. Check the motor current regularly to ensure is withing normal parameters.
3. After long-term operation, wear and tear can cause vibration and noise, leakage might develop and the pump performance might decline. At this moment stop the pump for inspection. Wear and tear items can be replaced.

Maintenance in operation

1. The mechanical seal shall be clean and free of particle.
2. Do not run the pump dry
3. Before starting the pump continuously, start for short cycles to help prevent damage to the graphite ring due to sudden start.
4. The mechanical seal leakage tolerance is 3 drops/minute. Repair or replace if more.
5. When repairing the seal avoid oil substances, and use soapy water to lubricate.

- Only personnel capable of operating and installing this equipment should handle it. Contact a professional or the factory representative for support.
- This equipment shall not be used by children
- If the power cord is mangled or damaged, it shall be replaced. Follow NEC guidelines.