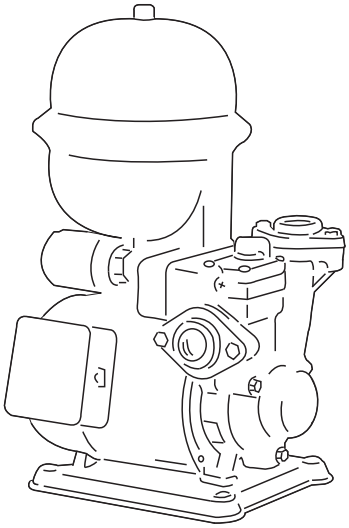
WALRUS PUMP

TP8-PB Series

Instruction Manual

Automatic Booster Pump



Model : TP820PB / TP820PTB / TP825PB / TP825PTB

To ensure safe and proper use, please read this instruction before operation.

ISO 9001 Certified **WALRUS PUMP CO., LTD.**

TP8-PB Series Instruction Manual

Please read all instructions carefully before installing your new systems, as failures caused by incorrect installation or operation are not covered by the warranty.

I. Product

The TP8-PB series are designed for the pumping of non-aggressive water, or water not containing solid particles.

The pump casing for TP8-PB series is made of antibacterial engineering plastics containing silver ions that comply with R oHS specifications.

When positively-charged silver ions meet the negatively-charged microbial cells, silver ions will pierce through the surfaces of bacterial cells, damaging their structure and inhibiting bacterial reproduction.

The silver ions feature applied to the pump casting will provide an excellent bacterial-inhibiting effect and improve the quality of water.

Operation Conditions:

1. Ambient temperature: Max. +40°C
2. Liquid temperature: +4°C ~ +40°C
3. Inlet pressure: Lower than the pressure switch ON setting. (See Specification)
4. Operating pressure: Max. 6 kg/cm²

OPERATION

1. Make sure connect the correct voltage.
2. Remove the water plug and pour water into the pump and suction piping ,then secure the plug.(FIG.1)

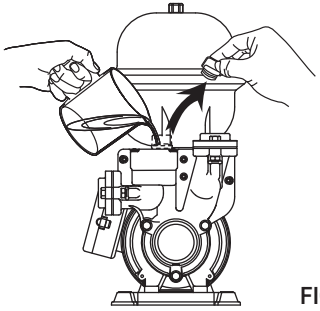


FIG.1

In suction lift application, please follow below instruction fill up water to the chamber

1. Remove 4 screws and water cover
2. Remove check valve
3. Fill up water

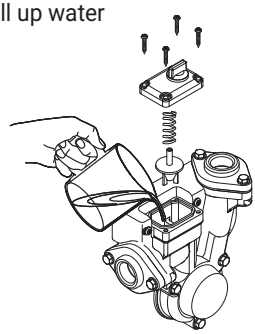


FIG.2

3. Insert a screw driver cross into the shaft slot , and turns the shaft 2-3 rounds to check if the pump runs normally , then open one faucet on the delivery side , the turn the power switch ON.(FIG.3)

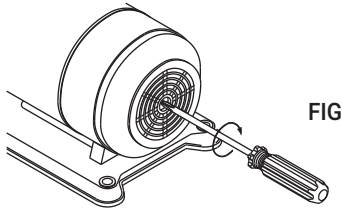


FIG.3

4. After the power switch on, the motor should turn immediately . After a few seconds, the water should be delivered .
5. If the water does not be delivered immediately turn the power OFF. Repeat step 2 and set power ON/OFF continuously to make the suction piping be filled with water.
6. Once the water is pumped out, close the faucets on the delivery side to check the automatic stopping and pumping operation.

IMPORTANT NOTE

1. Use the correct voltage and wiring by the connecting diagram. Motor must be grounded in compliance with applicable electrical code to avoid accident.
2. please use a sturdy foundation and bolt the pump to it securely.

3. Be sure to arrange earthling or circuit breaker against electric leakage.
4. The pump should be installed as close as to the reservoir or well to avoid the low efficiency due to the long suction pipe.
5. The location must be dry with good ventilation and adequate space.
6. Do not run without water actually pumping. Do not operate hot water (more than 60 °C), or the other liquid except normal water.
7. Be careful not to allow the foreign matter (chips, dirt, sand, glue, etc) into the pump, or the will damage and shorten the life of pump.
8. Piping joints should be fitted carefully to prevent leakage.
   a. Leakage in the suction piping will cause the pump does not function well.
   b. Leakage in the discharge piping will cause a high frequency ON /OFF motor operation while all the faucet and valves are closed.
9. Keep the faucets opened fully to get more efficient operation. Never keep continuous operation under the condition of half open.
10. TO avoid your furniture damage, do not install the pump on ceiling, carpet or any place close to electrical appliance, outdoor installation must covered by tent.

Electrical connection



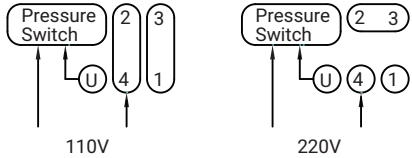
This mark located outside the connection box is a warning for an electrical hazard.

Please make sure that the power has been switched off, before below connection.

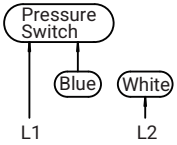
If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

The installer shall chose a suitable power cable (min. cross-section 1.5 mm²) of outdoors use to connect the power of pump.

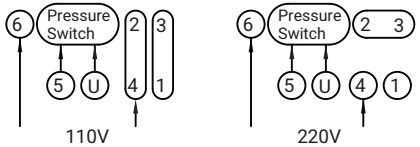
A. 60Hz 110/220V (TP820PB/ TP825PB)



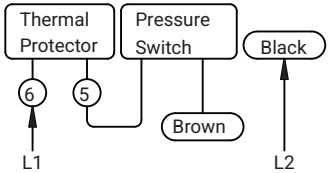
B. 50Hz 200-240V (TP820PB / TP825PB)



C. 60Hz 110/220V (TP820PTB / TP825PTB)



D. 50Hz 200-240V (TP820PTB / TP825PTB)



TROUBLE SHOOTING

(Turn the power switch OFF before fixing.)

1. **MOTOR FAILS TO START OR RESTART AFTER A SHORT-TERM RUNNING**

   The overheating protector is mounted directly on the motor windings. It will stop the motor automatically when the motor temperature is up to abnormal, and restart the motor after the temperature back to normal in 20 minutes.
   a. Check the electrical power source, fuse, and circuit breaker.
   b. Check if pump is locked by rust or foreign objects.
   c. Check if the ventilation of the location is bad for causing the overheating of motor.

2. **PUMP CYCLES FREQUENTLY WHILE ALL THE FAUCETS AND VALVES ARE CLOSED:**
   a. Check and fix the leakage in discharge piping, faucets, and valves.
   b. Clean pump check valve (FIG.5-8) which may be locked by foreign objects.

3. PRESSURE SWITCH FAILS TO FUNCTION

The pump's pressure switch has been set accurately. Please do not try to adjust except by qualified personnel.

a. If the motor does not start after any of the faucets or valves are opened, adjust the pressure setting screw to the "+" direction (counterclock- wise) until the motor starts.(FIG.4)

b. If the motor fails to stop after all the faucets and valves are closed, adjuts the pressure setting screw to the "-" direction (clockwise) until the motor stops.(FIG.4)

c. Repeat step (a) and (b) until the pump work normally.

Coverage of Application:

1. Directly and automatically supply water to the building without roof water tower.
2. Automatically increase pressure as soon as the insufficient water pressure in top floor.
3. To be used on supplying water for washing machine and heater if water pressure is too low.
4. To drain accumulated water for civil and architecture engineering, to be applicable to the skyscraper villa, pond and farm.
5. To be used on circulating water for garden and on supplying water for auto car-washer.

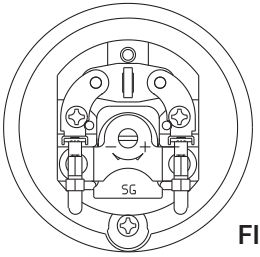


FIG.4

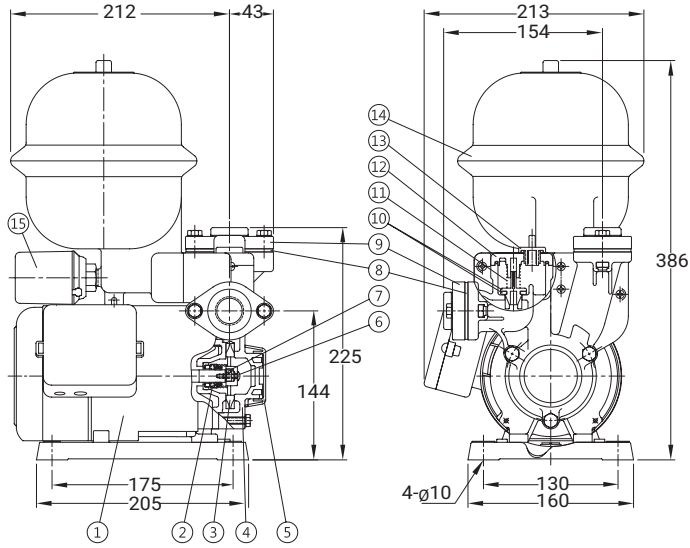
SPECIFICATIONS

Model No:		TP820PB / TP820PTB	TP825PB / TP825PTB
Output(W)		180	370
Cycle(Hz)		50 / 60	50 / 60
Revolution		2820 / 3420	2820 / 3420
Delivery head(m)		10 /12	18 / 20
Suction head(m)		8	8
Total head(m)		25 / 34	30 / 38
Total capacity(L/min)		30 / 35	35 / 42
Pressure switch	ON	0.9 / 1.2	1.8 / 2.0
(kg/cm²)	OFF	1.8 / 2.4	2.8 / 3.0
Inlet / Outlet mm(in)		20(¾")	25(1")
N.W. (kg)		6.7	7.6

PARTS

NO.	Part
1	Motor
2	Mechanical Seal
3	Impeller
4	Pump Casing
5	Cover
6	Screw
7	Steel Ball
8	Gasket
9	Flange
10	Check Valve Set
11	Spring
12	Water Cover
13	Water Plug
14	Pressure Tank
15	Pressure Switch

FIG.5



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