

SHIMGE[®]

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SERVICE MANUAL

HOME BOOSTER PUMP

Model:ZP(S)



- Warning**
- Ground motor before connecting to power supply.
 - Do not touch the pump while it is running.
 - Do not run the pump without water.

SHIMGE PUMP INDUSTRY GROUP CO., LTD.

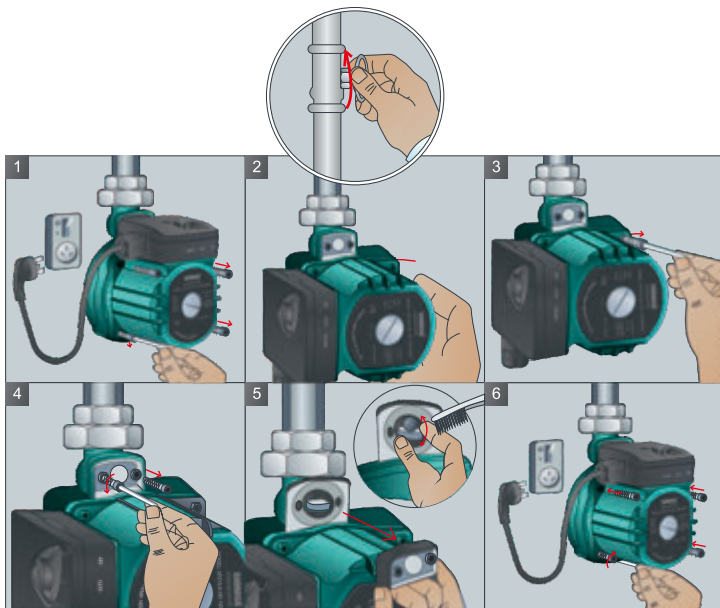
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IV. Troubleshooting

Failure description	Main cause	Solution
Motor doesn'twork.	Off mode	Switch to Auto or Manual mode
	Electricity supply trouble	Check up the fuse and power line
	Shaft is stuck	Take off the discharge bolt and rotate with the screwdriver
	The flow switch is dirty	Clean the switch
Noise in pump	Air in system or pump	Run the pump for a few minutes when the faucet is open and discharge the air.
The pump does not stop when the faucet is closed	Manual mode	Switch to OFF or AUTO mode
	The flow switch is dirty	Clean the switch
The pump is running, but not pressurizing	close the valve	open the valve
	Air in pipe or in the pump	Run the pump for a few minutes when the faucet is open and discharge the air.
	The pump is dirty, the flow switch is blocked by inclusions	Disassemble and clean the pump

22.Rinse water switch (only for ZP series)



When the pump cannot start or stop automatically, cleaning the inner flow switch is recommended, please follow the below steps:

- 1) Shut off the power, close the valve.
- 2) Screw off the fixing bolt and rotate the pump head 90 degrees.
- 3) Fix head with the bolt to avoid falling down.
- 4) Open the inner flow switch.
- 5) Clean the switch carefully and pay attention to the installation direction during removal.
- 6) Reset the flow switch and the pump head.

After maintenance, discharge the air properly referring to page 8.

I . Brief description

1. ZP(S)shielded automatic booster pump(Hereinafter refer to as The pump), electric machine stator is completely shielded, and the rotating parts are in the clean water. The traditional mechanical leakproof structure is no more used and the leakage problem is solve; The pump is with low noise, no overload when whole head, normally free of maintenance.

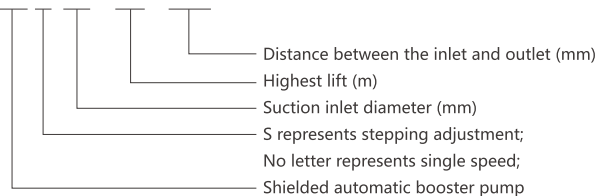
2. Three positions on the junction box: ZP series for function regulating, I for off; II for automatic mode and III for manual mode; ZPS series for speed adjustment, to adjust the flow and the lift: I for low speed, II for medium and III for rated speed. ZPS series control panel(on the cable)is for adjustment us, O for close, I for automatic mode and II for manual mode

3. Mainly used for pressurizing of hot water heater, home water use and solar hot water heater.

II . Type description

1. Type description

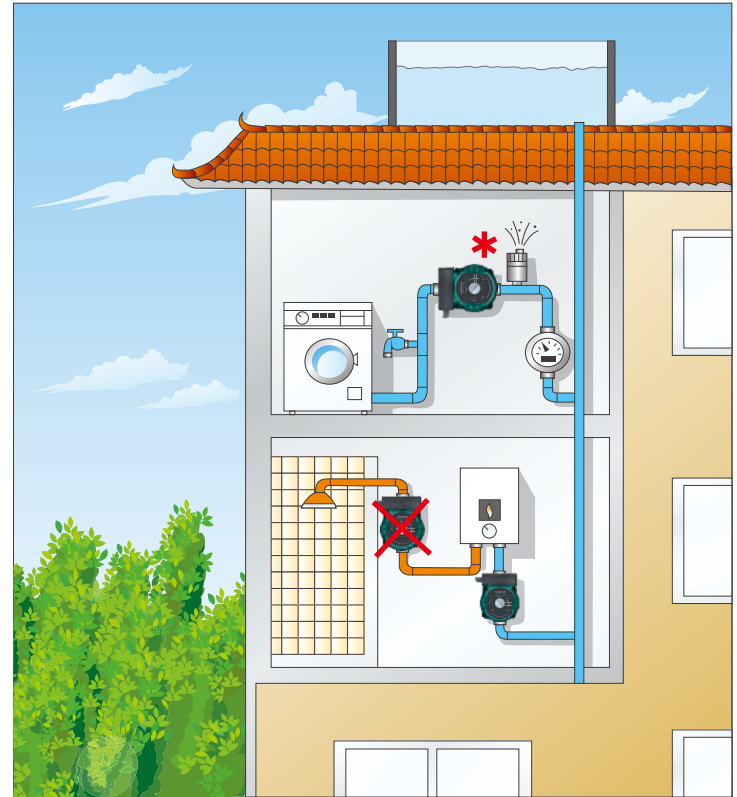
ZP S 20 - 12 - 180



III . Installation and attention

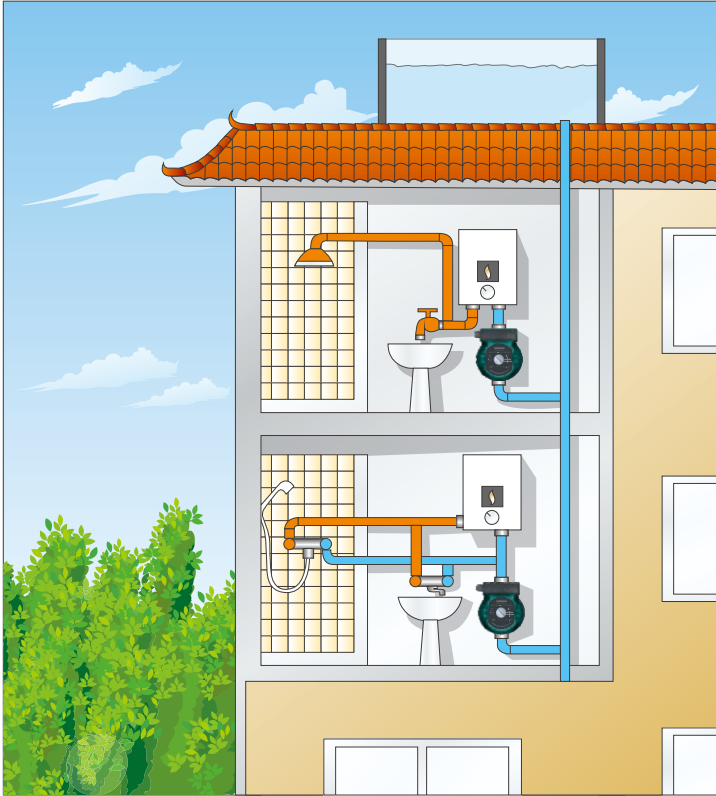
1. Before the installation, please make sure all pipe system is well connected, and free of inclusions, welding spatter and dirt; electrical frequency 50Hz, voltage single phase 220V, voltage fluctuation between -10% ~ +6%.
2. The pump should be installed in dry and ventilated place, in case any short circuit caused by moisture or water splash, and easy for maintenance and replacement afterwards.
3. Protection cover required if installed in open air; if installed indoors, prevent from water splash in case any electric shock occurs, do not install in the bathroom, in case the vapour goes into the connection box and cause the leakage.
4. After installation, connect the power and test run, switch to automatic mode and check up the starting.
5. For convenience of maintenance, it is recommended to install independent shutoff valves at the inlet and outlet pipe.
6. If long time no use, please shut off the inlet valve and cut off the electricity.
7. Make sure the socket is grounding, and connect the ground of the plug and the socket. Do not modify the grounding of the pump without approval.
8. Use visible safety warning signs at the site in case any accident happens while the pump is working
9. Shut off the power if any adjustment of the location or any contact to the pump while the pump is working.
10. Schedule inspection required, replace in time if there is any part out of order.
11. Inspect the insulation resistance of the pump regularly, and make sure the cold state insulation resistance is no less than 50MΩ.
12. Use the proper cable or buy the proper assembly to replace if there is any cable breakdown.
13. When the temperature is below 0°C, please discharge all the water from the pipe to avoid frost crack of the pump body if the pump is not in use.
14. The pump could be stopped automatically because of the water quality (like water incrustation, inclusion) or other causes. Please check up the motor and make sure it is not hot.

- ⚠ The pump is design for cold water pressurizing only and do not apply to hot water pipes
Automatic air outlet is recommend when it is use to the pipe in which air bubbles are possible to occur



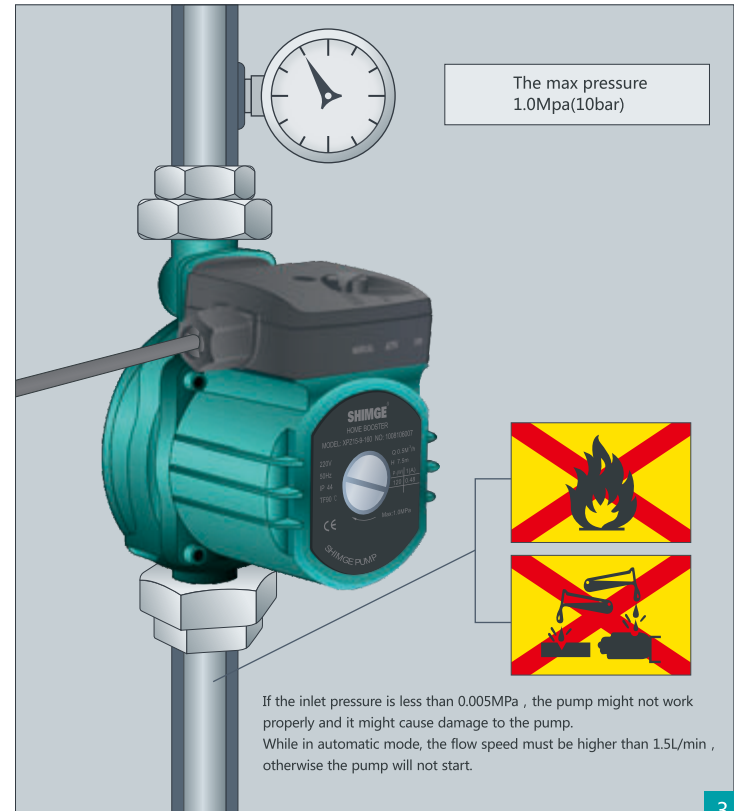
21. Installation demonstration

- ⚠ Do not install the pump in bathroom or any moist places, and do not contact the electrical parts of the pump with water.



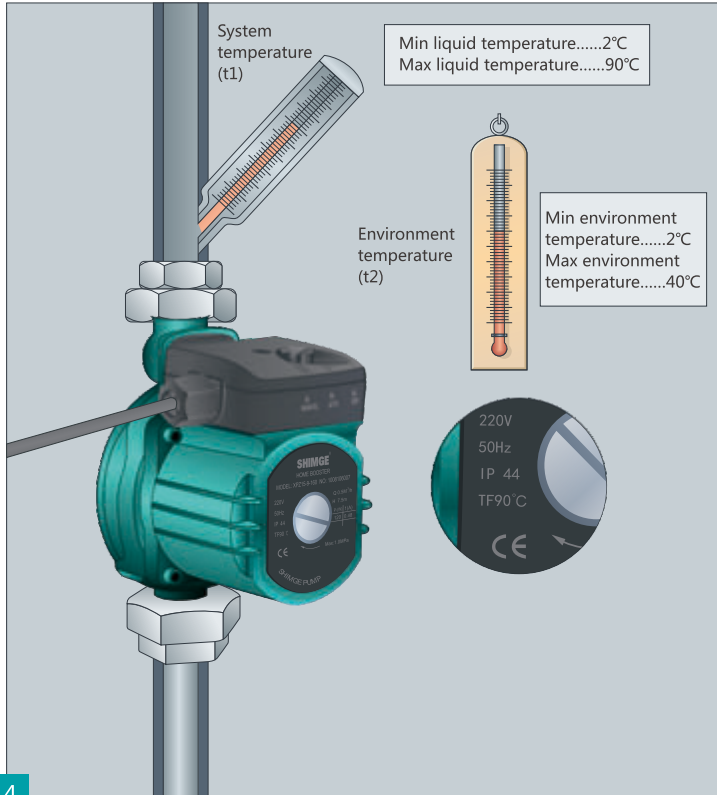
15. Pumped medium

Pumped medium should be thin, clean, non-erosive, non-explosive, no content of solid particles, no fibers and no mineral oil liquid.





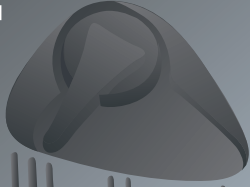
16. Medium and environment temperature

System temperature (t1) must be higher than the environment temperature (t2) in case the shortcut happens because of the moisture condensation on the pump body.



20. Function description

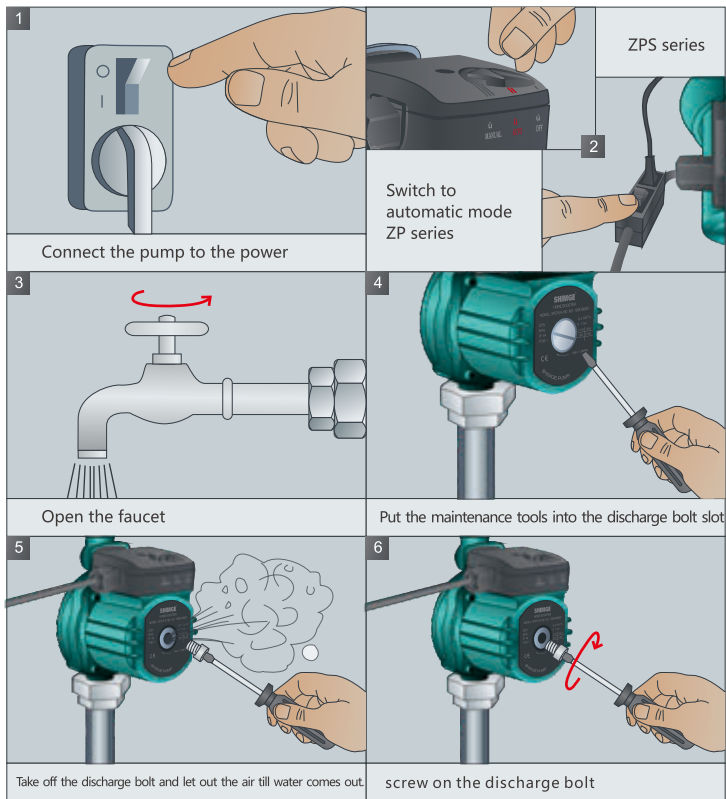
(ZPS series function panel is different from the diagram)
Switch to.....

<p>The pump stops.</p>	<p>Off</p> 
<p>Open the faucet and the pump starts automatically; Close the faucet and the pump stops automatically.</p>	<p>Automatic</p> 
<p>The pump is running continuously</p>	<p>Manual</p> 

⚠ At least one faucet is open if in manual mode, otherwise the pumped liquid will be too hot to damage the pump.

19. Discharge the air before installation

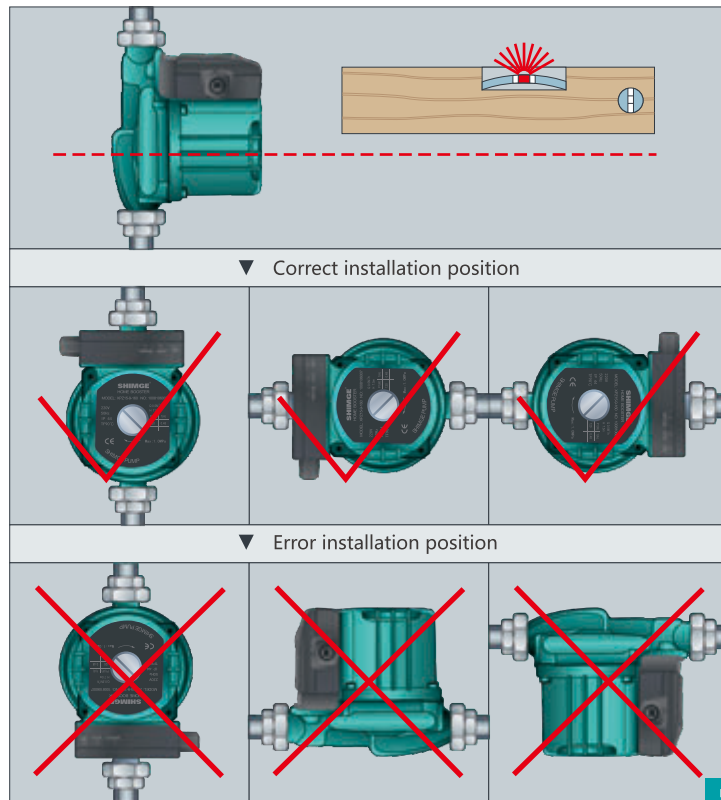
Discharge the air properly to make sure the pump is working best after installation or maintenance.



8 ⚠ Do not let the water get into the connection box or the socket in case any electrical failure caused.

17. Pump installation

Keep the motor shaft horizontally during installation; the flow direction should follow the arrow direction marked on the pump body.



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18. Installation and electric connection

<p>Use PEFE tape to wrap the pipe joint</p>	<p>Screw on the pipe joint</p>	
<p>The connection pipe must be cleaned and unblocked before installation</p>	<p>Filter is recommended in the pipe.</p>	<p>Fix the pump</p>
<p>Flow switch is required to be installed at the outlet place of ZPS series</p>	<p>Flow switch cable is required to be connected to the pump of ZPS series</p>	<p>Switch to "off " and open the valve</p>

<p>Power on the pump</p>	<p>Switch to I (automatic mode) ZPS series</p>
<p>Switch to automatic mode ZP series</p>	<p> The electrical socket must be grounded Do not modify the socket grounding without approval Appeal for licensed electrical engineers and abide by the local electrical installation regulation.</p>