Ⅳ. Troubleshootings

Symptom	Likely causes	What to do
The pump is not working	Loose power cable connection	Make sure the power cable is connected securely and firmly
	Blown fuse	Replace the fuse
	Capacitor damaged	Replace the capacitor
	The impeller, motor may be wound by fibers or jammed with sundries	Clean the fibers and sundries
Noise within system or pump casing	Impurities within pump	Dismantle the pump and clean the impurities
	Flow rate is set too large	Switch to lower speed
	Air or gas within system or pump casing	Exhaust the air or gas
The pump is working, but not produce any force	Intake valve is closed	Open the valve
	Air or gas within pipes or pump	Open the valve to make the pump running and meanwhile loosen the connector of the outlet ports to ensure gas emission

SHIMGE®

for better life

SERVICE MANUAL

XPS/BPS/XP CIRCULATION PUMP

Model:XPS/BPS/XP

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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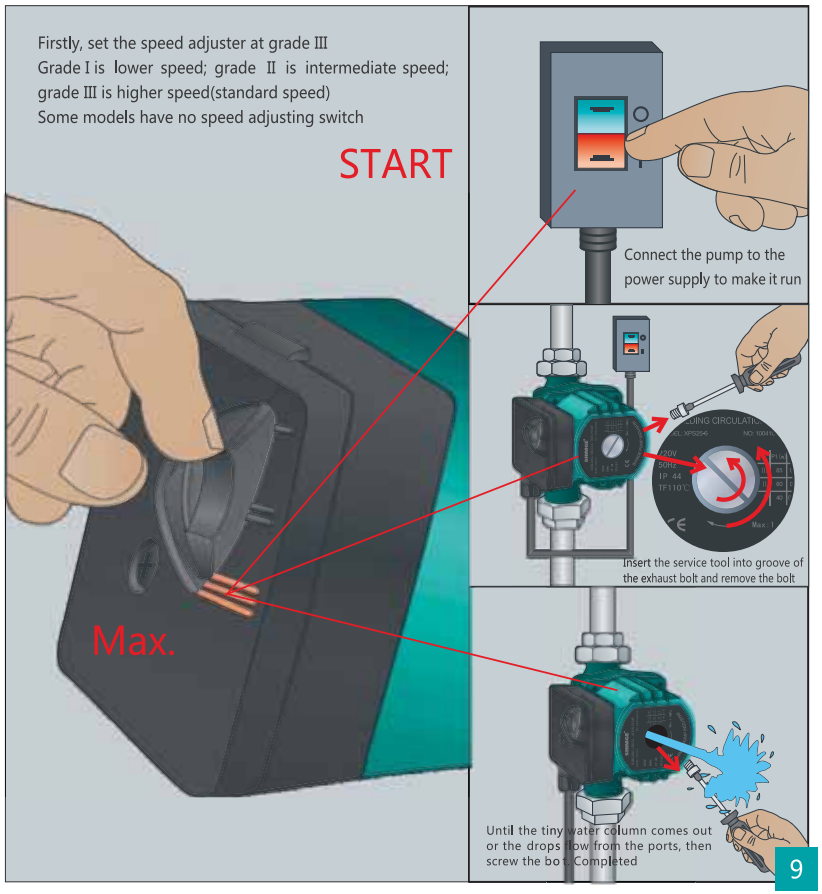
21. Pump Exhaust

The gas within the pump must be also exhausted after the system being exhausted to ensure the pump to work in best condition.

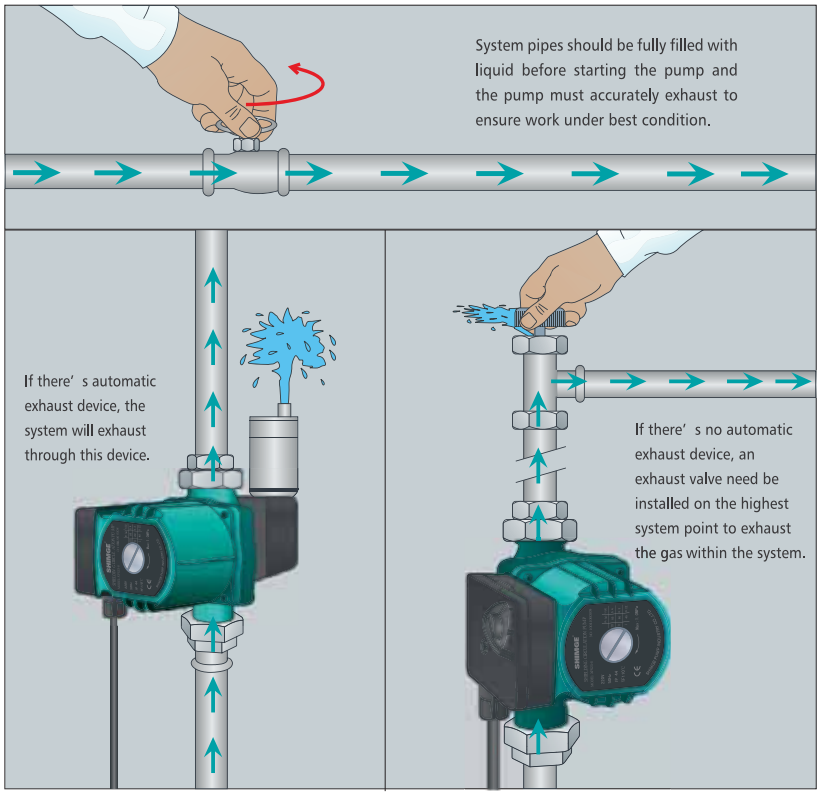
Note: care must be taken not to splash the water column or drops go into the junction box to avoid the electric fault.



20. Pipe Exhaust

We suggest installing automatic exhaust valve in pipe ensure smooth emission of the system gas.

If the pump is used in household heat system. switch on the water source and turn on each tap, then the gas can be exhausted.



Ⅰ. Introduction

1. XPS/BPS/XP shielded muting circulating pump (hereinafter called as “electronic pump”). The motor stator will be totally shielded and the rotary components will emerge into clean water, playing an important role in cooling and lubricating during working; the thin housing structure is used as pump shielded sleeve, which fully separates the inner core and external water. it also cancels the traditional mechanicalsealing structure and successfully solves the common leakage, The rotary components are adopted on ceramic bearing, which is durable and can be purified with clean water. Ceramic bearing can not only effectively cool the motor, but also reduce the noise, and guarantee no overload during all the working process. This product is able to be free of service if accurately usde.

2. There' re three-grades settings on switch knob of junction box fors peed adjusting and the flow and total head change. Grade Ⅰ is low speed with min flow and head; Grade Ⅱ is intermediate speed; Grade Ⅲ is the rated speed. that is, high speed with max flow and total head.

3. Heat-proof material is adopted in inner motor available for heat circulating compression system.

Ⅱ. Model instruction

1. Model instructions

X P S 32 – 8 F – 220

- 220 — por-to-port length(mm)
- F — pipe connection: no letter=spin;F=Flange
- 8 — Max head(m)
- 32 — Nominal intake diameter(mm)
- S — S represents stepping adjustment; No letter represents single speed;
- P — Single phase cannned motor pump
- X — X represents basic circulation type; B represents automatic exhaust circulation type

Ⅲ. Installation and Cautions

1. Make sure that the pipe system is securely connected before installation and verify that the impurities, soldering leftover and wastes have been cleaned within the pipes.

2. Make sure the pump is located in dry and ventilation environment to avoid short circuit due to moisture or splashing into the casing, and guarantee its availability to service and replacement.

3. The protection cover must be added, for the requirement of outdoor installation: while actions must be taken to avoid being splashed and to prevent electric shock risk in indoor installation. Warning: do not install in bathroom to prevent vapor or water or moisture from going into the junction box resulting in electric leakage.

4. When complete installing the pump, connect the power supply as pilot run and set the speed adjusting switch at rated max grade to check if the starting is normal, but the pilot running time can not be over 10 seconds so as to avoid idle running influencing shelf life of the bearing.

5. We strongly suggest you esteemed users to install shutoff valves at intake and outlet ports for the sake of following pump service and maintenance.

6. When the pump is supplying water to match the heat system, do not touch the pump and/or other pipes to avoid burning.

7. The power plug must be strictly grounded. Securely connect the GND pin of the power plug to the power plug grounded hole. Do not attempt to defeat the GND plug of the pump.

8. The striking security caution markings must be set up during pump working to avoid any accident.

9. The power supply must be firstly disconnected before adjusting pump location or before any action that may touch the pump during the pump is working to avoid any accident.

10. Regularly check the pump and timely replace in case of any damage.

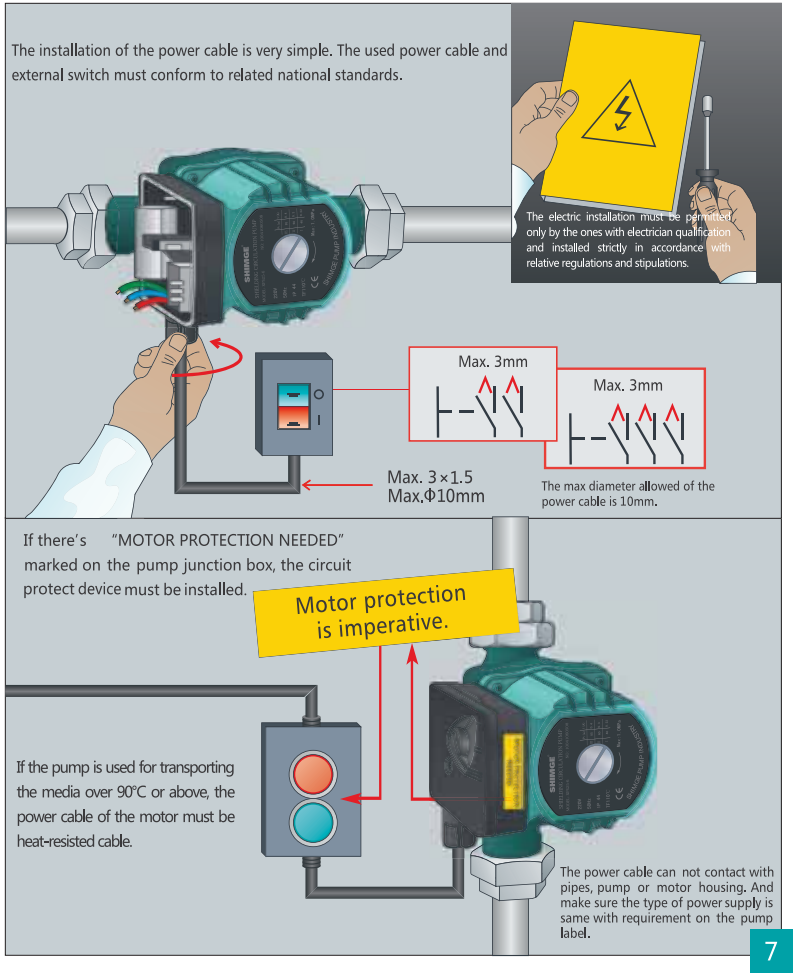
11. Regularly check the insulating resistor of the pump, the insulating resistor in cooled state can not be lower than 50MΩ; and the insulating resistor can not be lower than 5 MΩ when it closes to working temperature.

12. The power cable can only be replaced with corresponding cords or the dedicating components.

13. In Winter, when the environment temperature is below 0℃, the water within the pipes must be exhausted thoroughly if the pump ceases working to avoid pump frost crack.

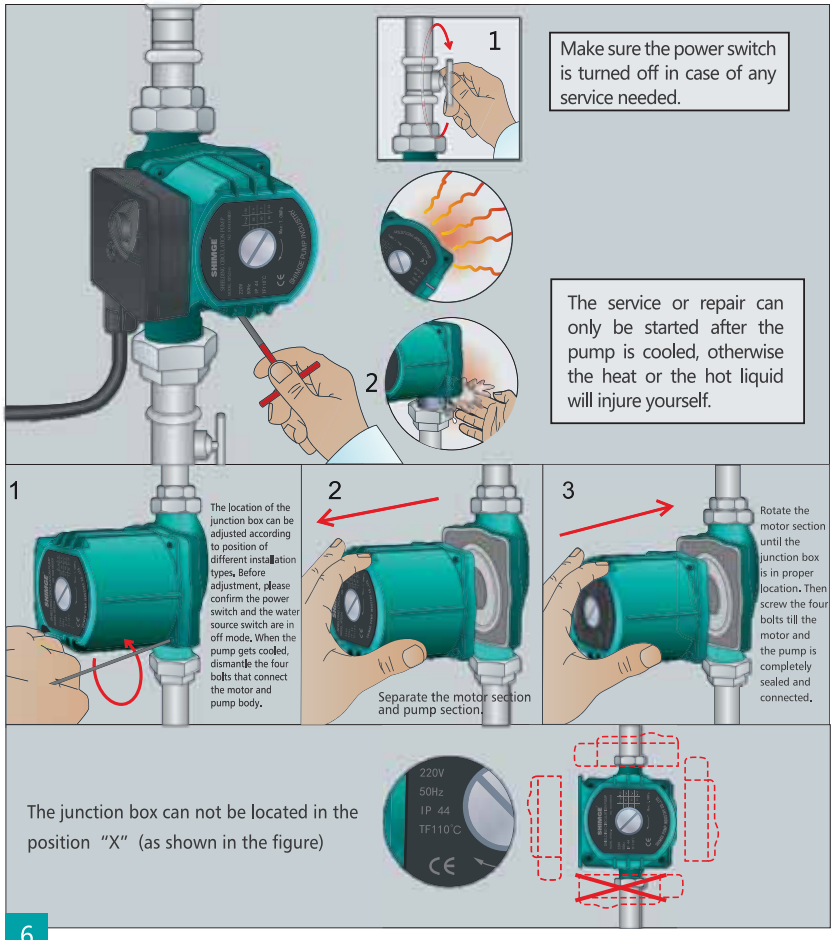
14. The heat supply pipes can not be always compensated with non-soft water to avoid the calcareous that water contained increasing even jam the impeller.

19、Grounded protection is needed.



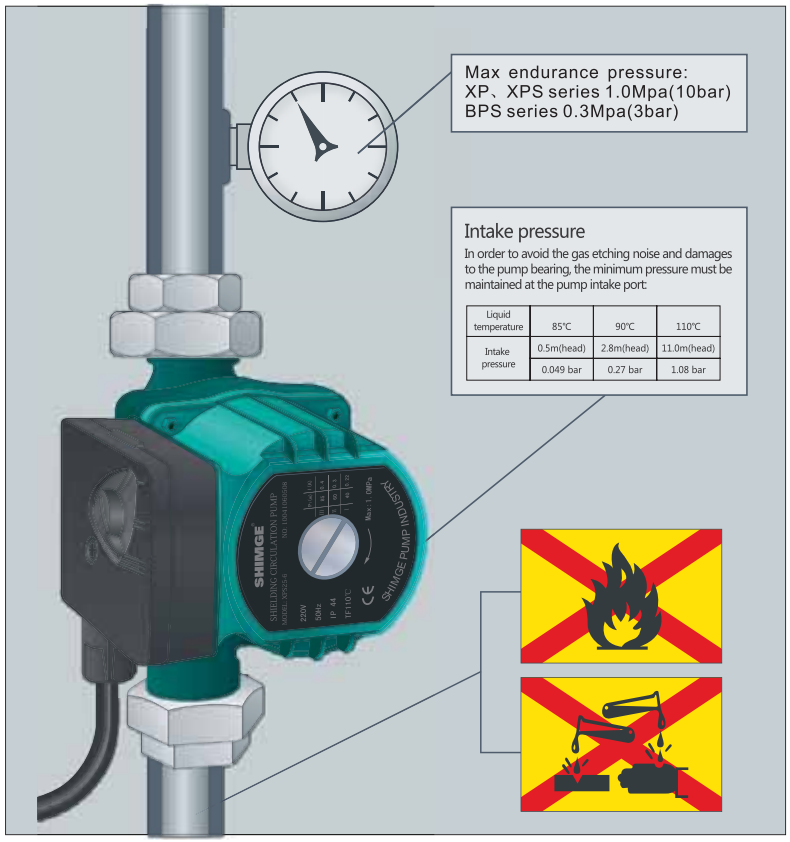
18. The way to adjust the position of junction box;

The above operations can only be completed by qualified personnel.



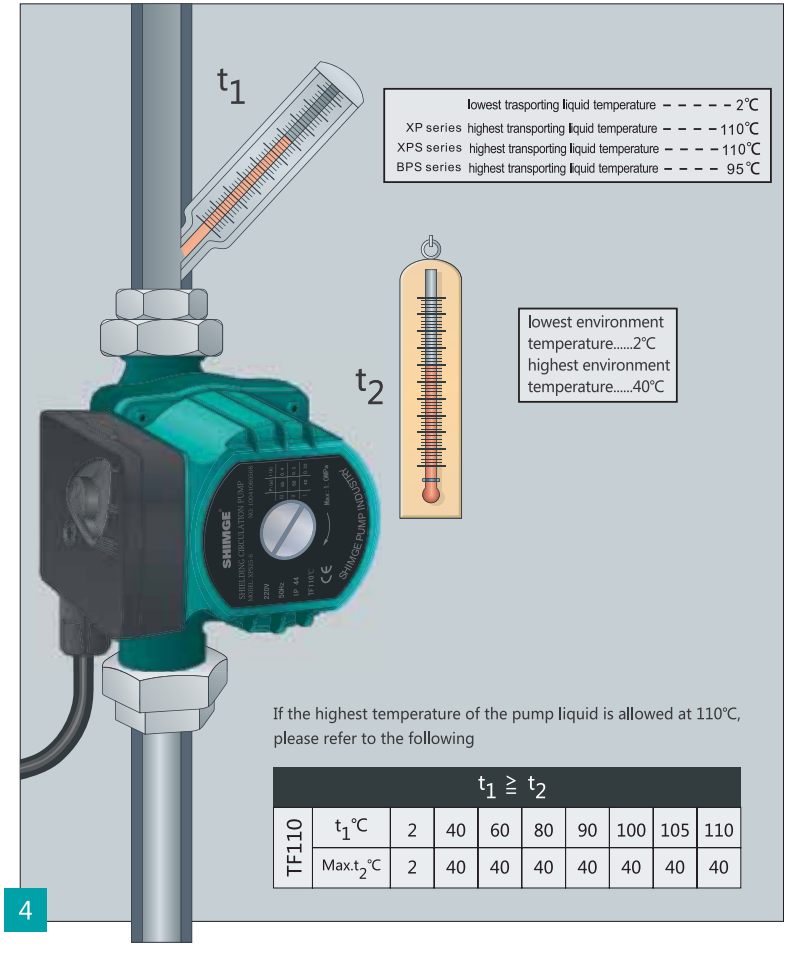
15. Pumping Liquid

The medium transmitted must be the soft water, thin clean non-erosive, non-explosive. non-solid particle contained liquid without fiber and minerals, the PH is 6.5~8.5.



16. Cautions:

System temperature (t1) must be higher than environment temperature (t2) to avoid pump condensation resulting in short circuit of the junction box. The pump of different models has its own liquid transporting temperature range. Please refer to the temperature instructions on the product label.



If the highest temperature of the pump liquid is allowed at 110℃, please refer to the following

	$t_1 \geqq t_2$								
TF110	t_1℃	2	40	60	80	90	100	105	110
	Max.t_2℃	2	40	40	40	40	40	40	40

17. Pump installation

The motor shaft must be kept in vertical direction when installing; the liquid flowing direction in pipe must be same with the arrow marked on pump body.