

Nordkapp Aqua 5kW & 12 kW

User manual

The heater installation, repair, maintenance work requires specialized knowledge and specialized tools, wrong Settings or

The installation, repair and maintenance of the machine may cause damage to the machine or lead to accidents. Parking heaters are prohibited from starting near gas stations and oil depots, and in places where flammable gases or dust may form, where flammable liquids or flammable solid materials accumulate (such as attached near fuel oil, coal and wood chips, barns, hay and leaves, cardboard, paper, etc.). In confined Spaces (such as garages), do not start and run the heater even with a timer and remote control.

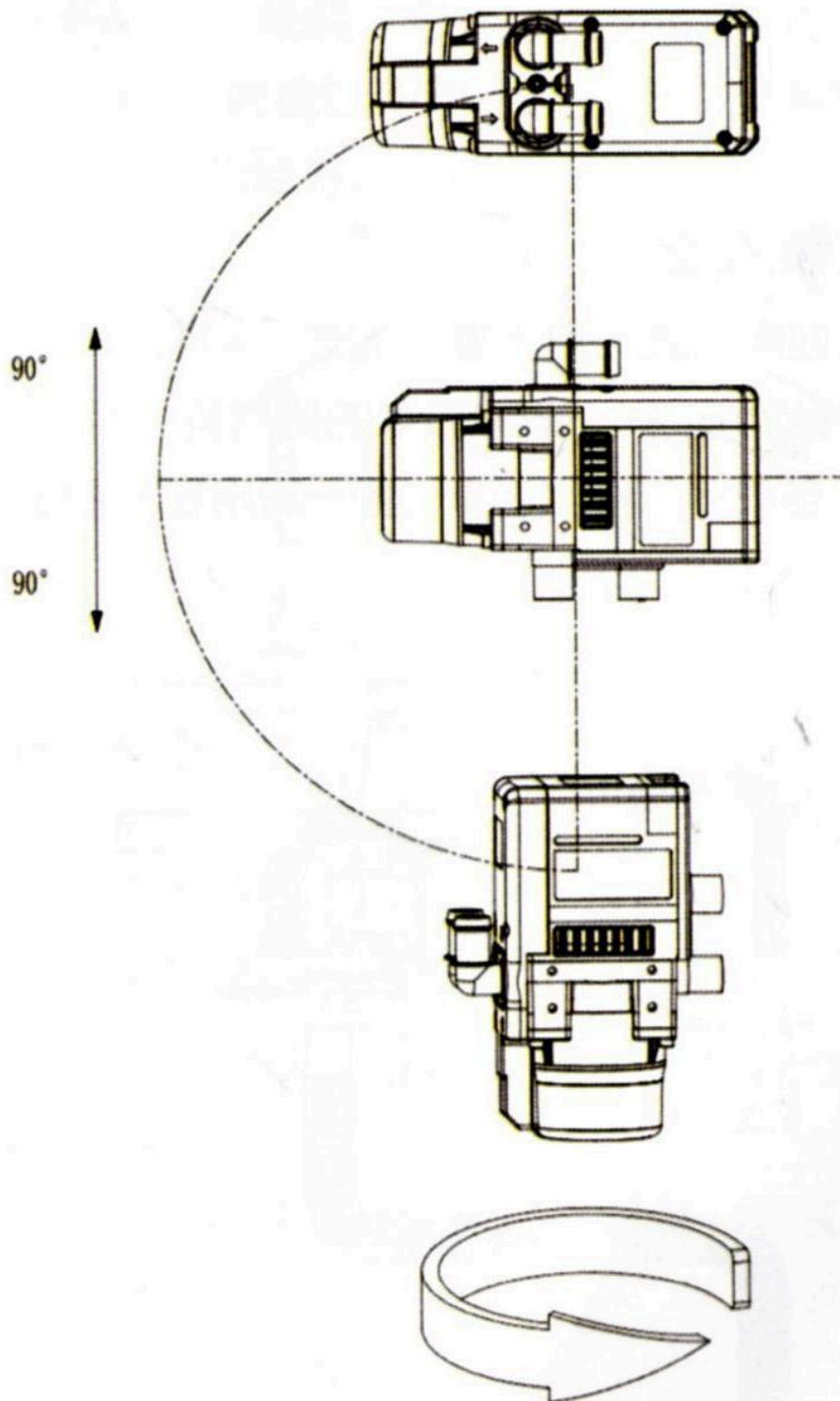
-- After the parking heater is installed, the bleed bolt must be relaxed before heating for the first time, the gas in the pipeline must be discharged, and then heated. Dry burning without water is strictly prohibited!

Whether in use or not, to maintain optimum performance, the heating system must be inspected and maintained by an authorized dealer at least once every two years

- The heater can only use the fuel specified on the nameplate and can only operate at the rated voltage indicated on the nameplate, and must be turned off immediately in case of smoke, abnormal burning sound or abnormal fuel odor. Close the heater switch to stop the heater and drain fuel. Before starting the heating again, please be sure to check the equipment by professionals before starting to use it again. Run the heater at least once a year for ten minutes under cold engine and minimal blast and turn it off until the heater is clean. Do not use high pressure cleaning systems or compressed air for cleaning. We believe that the relevant personnel of the service station or service outlet that installed the heater for you have explained the principle and operation method of this new heater to you in detail, in this operation manual, we will again point out the general situation and precautions on how to use the heating equipment safely. In order to understand and understand the functions of the heating equipment, please be sure to read the instructions of the product carefully. If lost, please contact your authorized dealer immediately to obtain a new operating instruction.

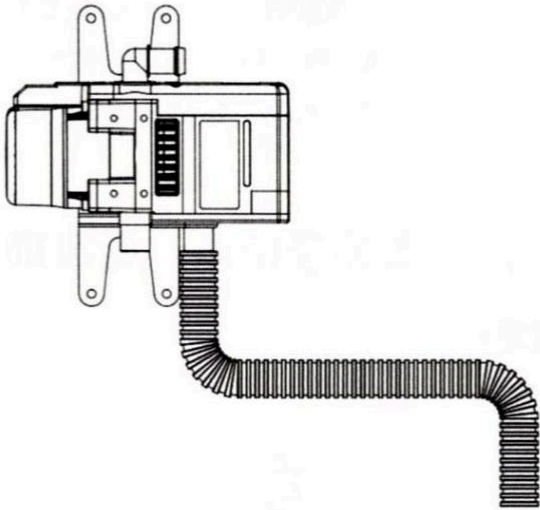
Installation and use precautions

1. Allow installation Angle range



2. Installation of combustion air inlet pipe

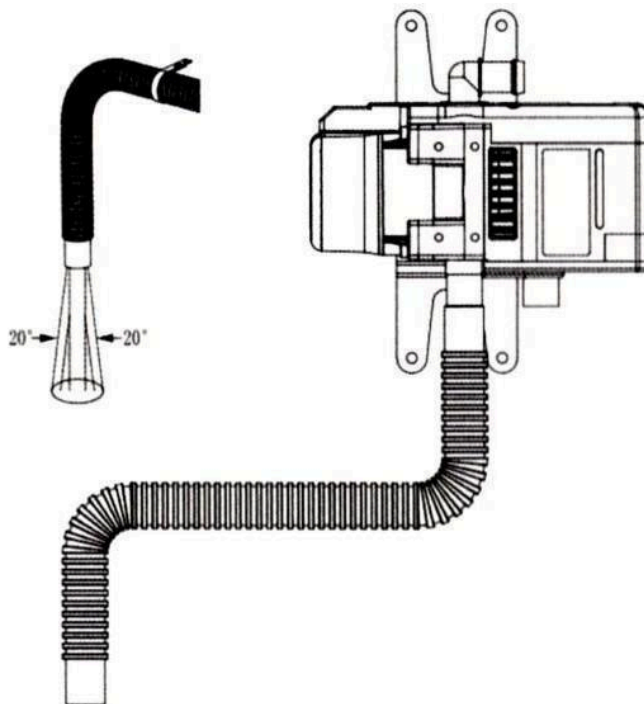
There is a corrugated hose with an inner diameter of 25 mm in the installation assembly. According to the installation situation, the combustion air duct should not be shorter than 20 cm; The maximum length of the combustion air duct should not be longer than 1.5 meters. The pipe clamp is fixed on the heater, and the other end is fixed on the car body with a bracket.



3. Heater exhaust gas installation (important installation procedures must be observed)

Do not install exhaust ports in the direction of air flow, and do not be blocked by mud, rain and snow.

The mounting assembly contains an internal diameter of 25 mm and a length of 60 cm exhaust pipe. Depending on the installation, the exhaust pipe can be shortened to 20 cm or lengthened to a maximum of 1 m. One end of the exhaust pipe is fixed on the heater with a pipe clamp, and the other end is fixed on the body with a bracket. When fixing, please pay attention to the exhaust pipe to avoid the car line and various pipelines to avoid the risk of high temperature burning!



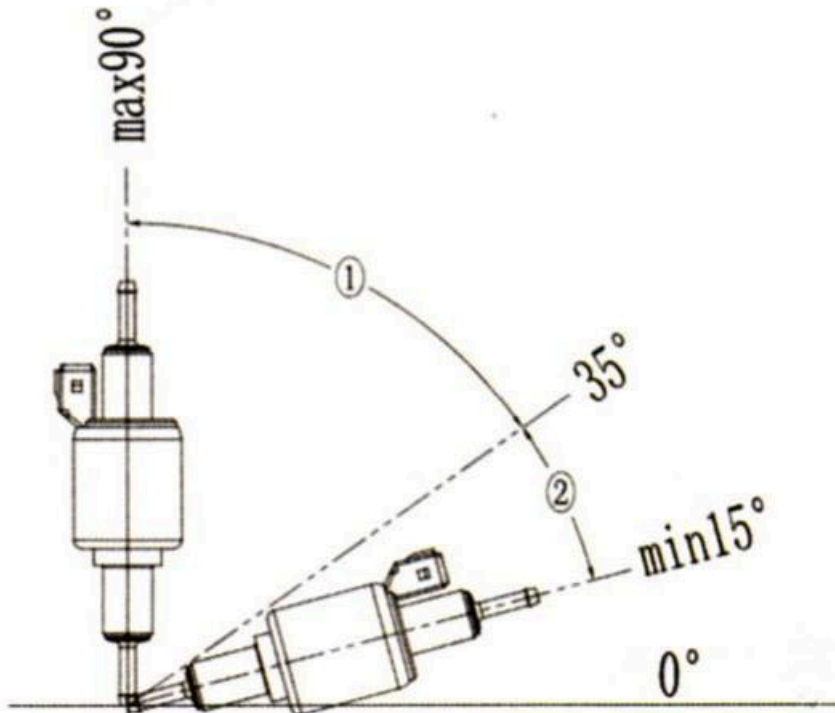
(Exhaust pipe correct installation diagram)

4. Dosage oil pump installation and precautions

The installation of the oil circuit is best tilted all the way upward to facilitate the discharge of gas in the oil circuit. Be careful to check the fuel tank

To avoid negative pressure in the tank. The oil pipeline should be far away from the heat source, not close to the silencer, exhaust pipe, etc., when installed, and protected by bellows, bundled in the appropriate place, and the strapping distance is not more than 50cm.

Electromagnetic pump installation diagram:



Metering oil pump installation Angle

When installing metering oil, it should be noted that the oil nozzle should be tilted upward, and the installation Angle should be greater than 15°

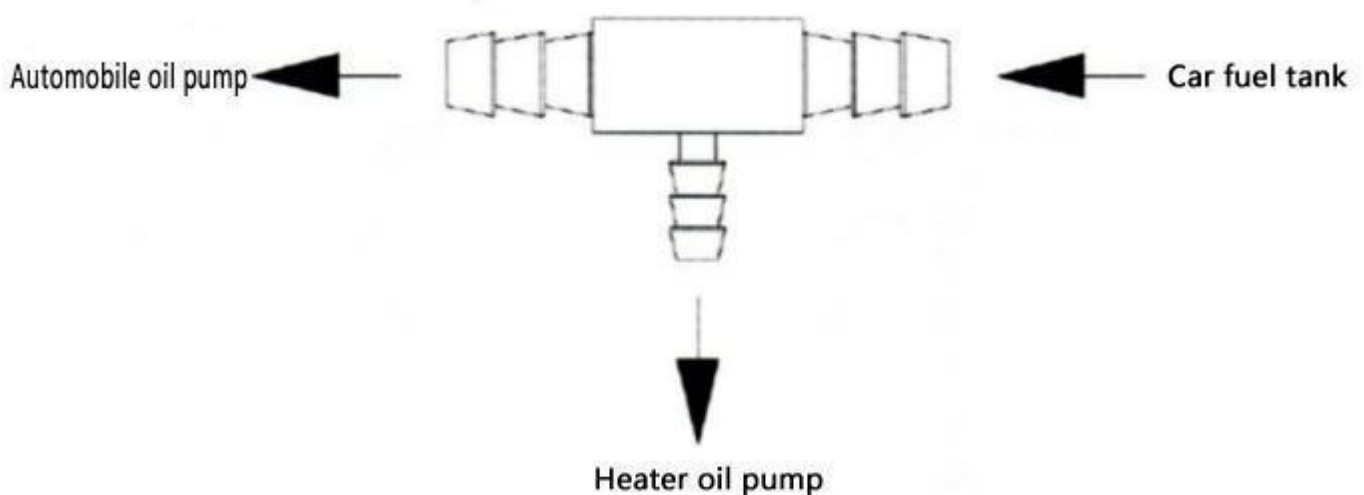
Choose a mounting Angle between 15° 35

- 1, do not choose the installation Angle between 0 and 15
2. The installation Angle between 15-35 is preferred
3. The installation Angle between 35 and 90 is allowed

Tubing connection

When connecting the oil pipe, after inserting the heater nozzle head, oil pump nozzle head, oil collector and T-tee nozzle head into the rubber, it should form a seamless joint with the oil pipe inserted at the other end to avoid forming bubbles in the oil line, producing noise and affecting the combustion effect.

1. Nylon tubing
2. Tubing card
3. Tubing connector



T tee oil installation precautions

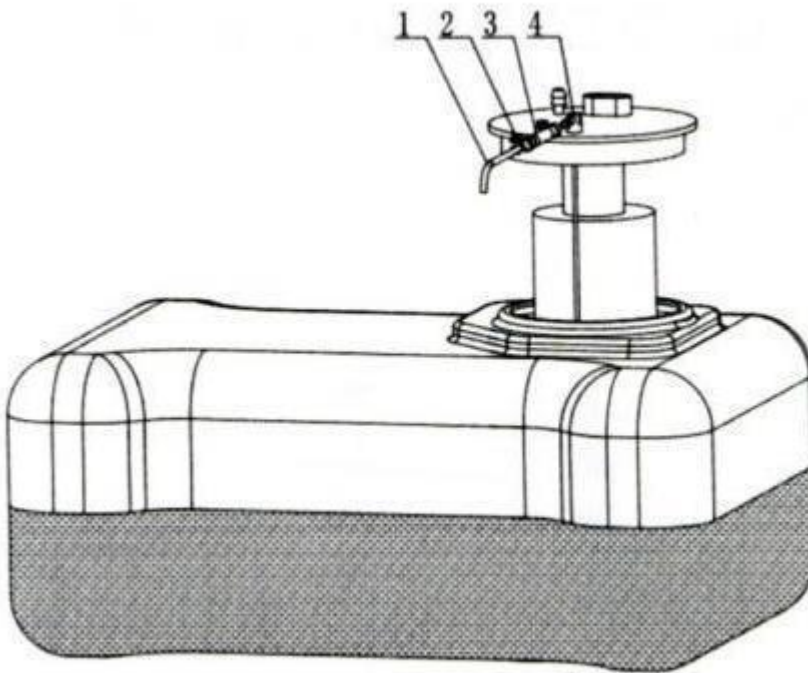
The oil tee must be connected between the original vehicle oil tank and the original vehicle oil pump; Do not connect the original oil pump with the engine

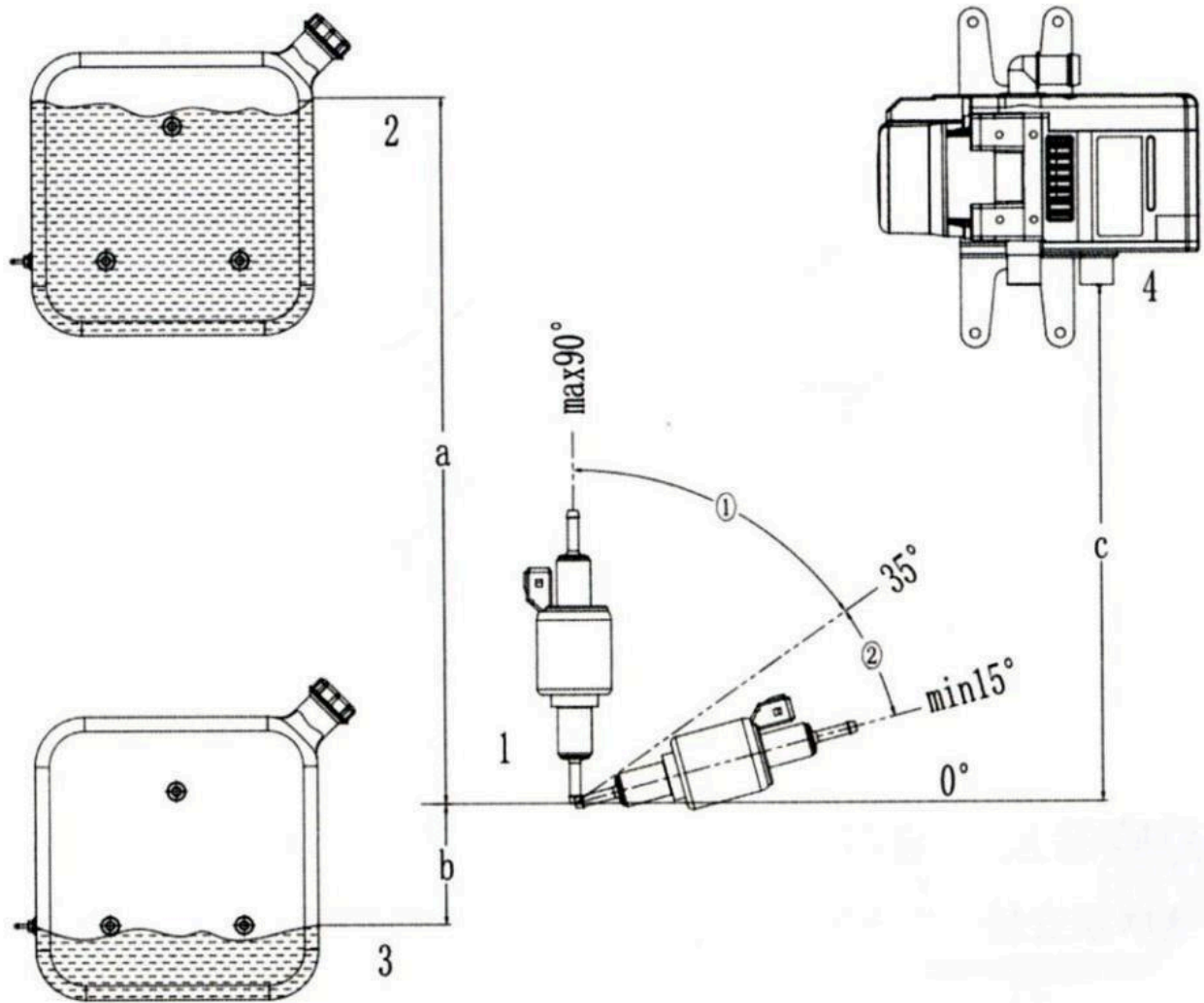
Between the machine, so as to avoid the high pressure of the original oil pump will inject fuel into the heater, causing great danger. The original vehicle oil pump installed in the tank of the vehicle, can not use T tee to take oil, should use the oil extractor directly in the tank to take oil.

5. Oil extractor installation and precautions

When installing the oil tank, the length of the metal suction pipe can be intercepted on site according to the height of the oil tank, and then the connection can be sealed. When the 5KW machine is installed, a 4mm hole is cut on the end face of the fuel tank (a 5mm hole is required for the 12KW machine) to remove burrs; Cut off the appropriate length of the tank oil extractor (the bottom of the suction pipe and the bottom of the tank to keep 10mm distance), into the oil extractor, once into the sealing ring, pressure sheet, adjust the oil direction, and finally lock the connection of the oil pipeline, the joint pay attention to seal, to prevent leakage of fuel supply. Be careful to check the gas tank vent. The fuel line should be far away from the source of heat to avoid damage to the line.

1. Nylon tubing
- 2, tubing fixed card
- 3, rubber tubing connector
4. Oil extractor



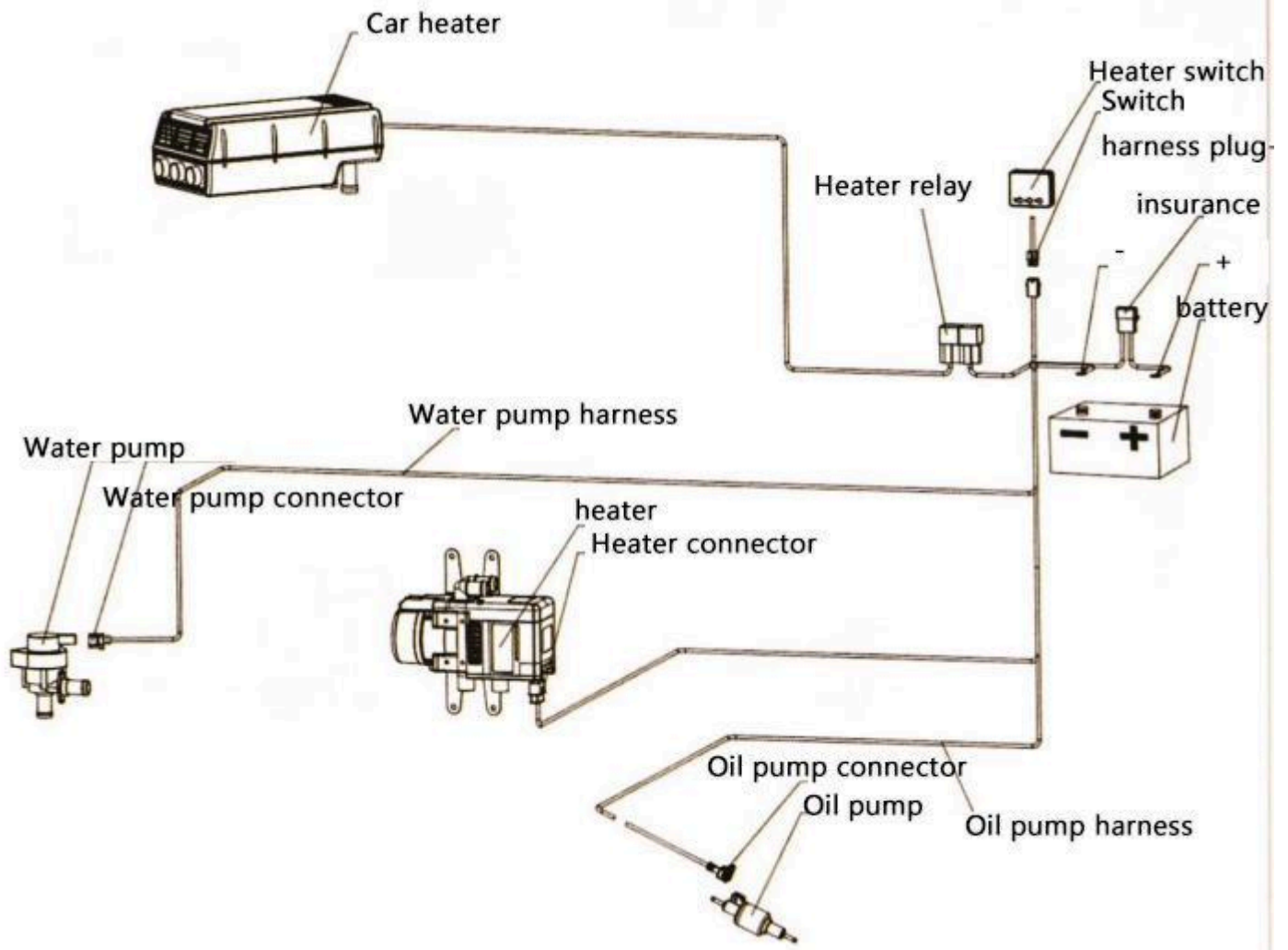


1: oil pump 2: fuel maximum level 3: fuel minimum level 4: heater inlet

2: a: Max. 3m b: Max. 1m c: Max. 1.5m (the length of the tubing between the fuel tank and the oil pump should not be greater than 1.5m, and the distance between the oil house and the actuator should not be greater than 6m)

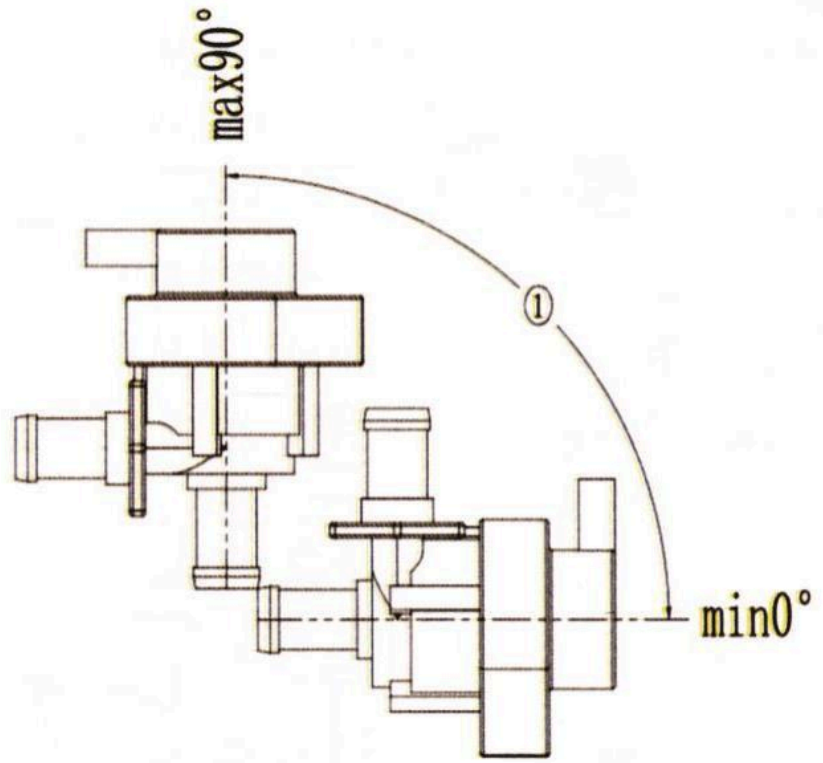
6. Heater harness installation and precautions

The positive and negative terminals of the wire harness should be directly connected to the positive and negative terminals of the vehicle battery to ensure that the heater has been powered Its normal operation

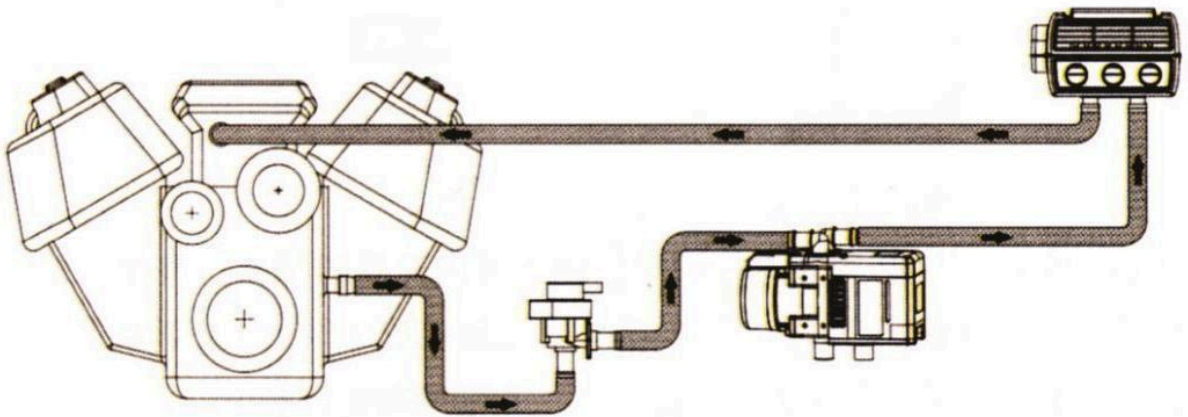


7, water installation and precautions

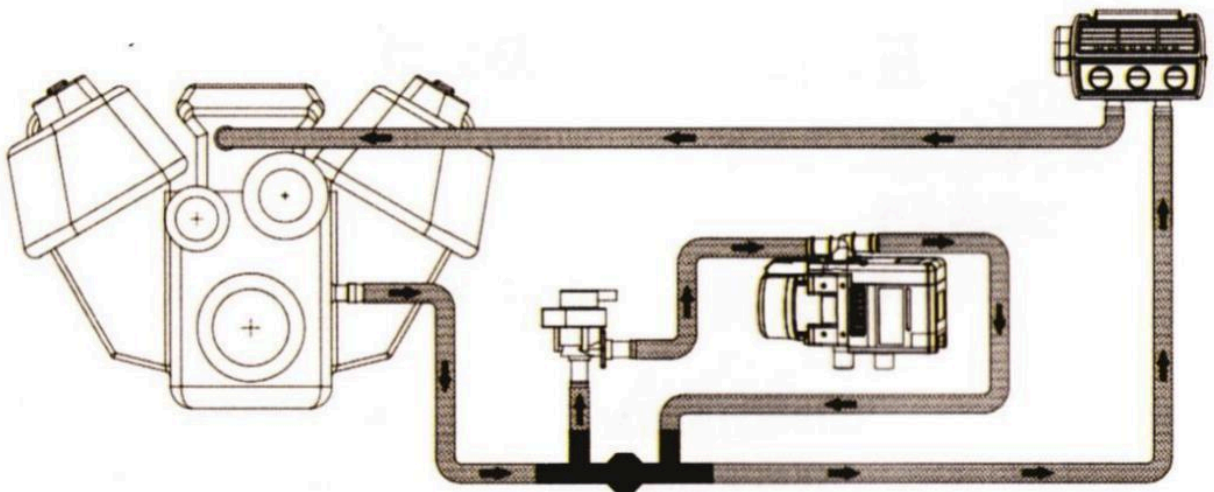
1. The heater water pump should be installed less than 20 cm below the engine level to ensure that the water flow direction is consistent with the original car water pump
- 2 The vehicle with the original fan temperature should be installed over the temperature valve.

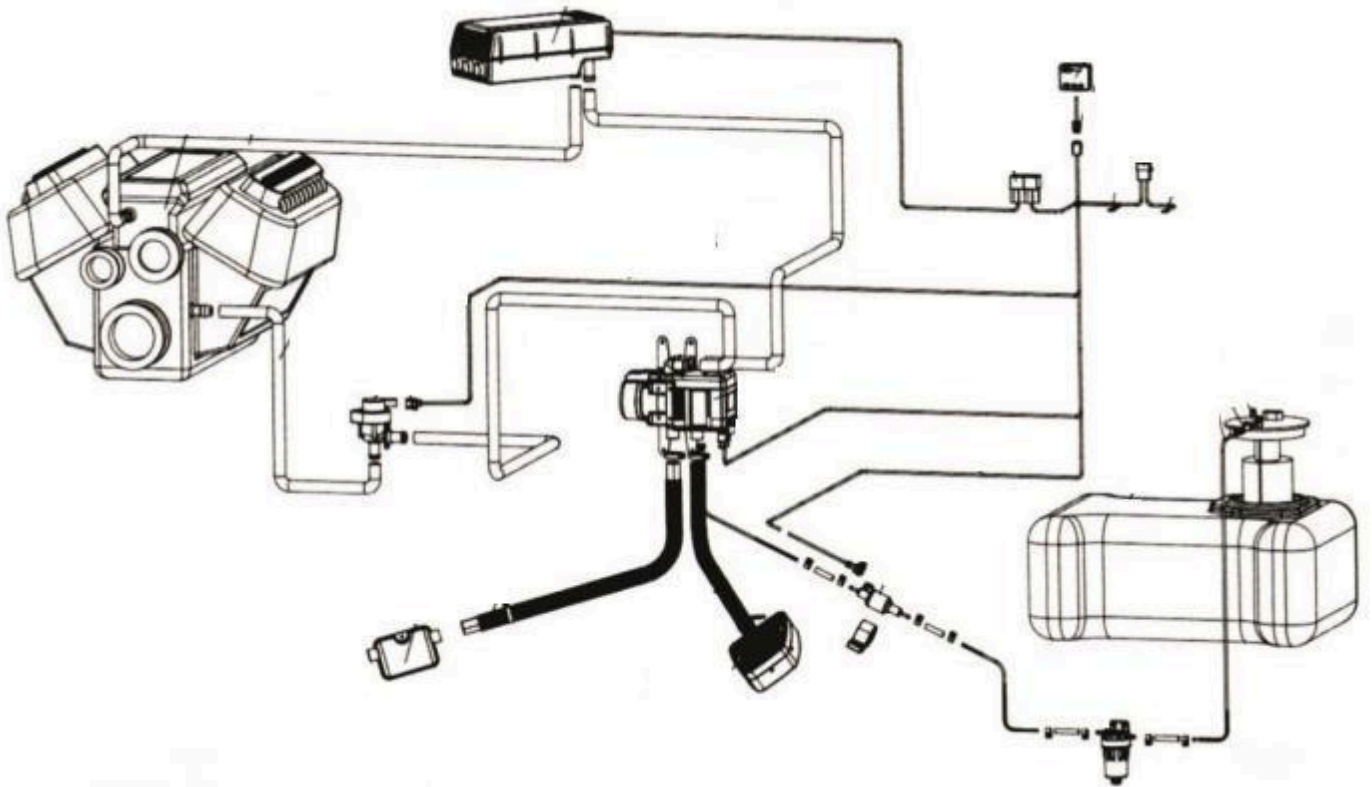


(Installation diagram 1)



(Installation diagram 2)





※ **Debugging of heater after installation**

After the heater is installed, it must be vented first to fill the pump with antifreeze and fill the entire pipeline Antifreeze. After the heater is installed, you can start the engine and let the pump of the engine fill the entire parking lot with water

Heater and pipeline, properly increase the throttle to facilitate the installation, the gas generated in the pipeline discharge.

Pay attention to check the liquid level of the tank, add an appropriate amount of antifreeze, so as to avoid water shortage in the tank, resulting in the heater can not work normally, it is strictly prohibited to start when the heater is without water.

Fifth, heater operation and function display liquid heater one-button start, automatic control, the user only through the heater running switch can be heated for the entire heating process operation.

First of all, before starting the heater to heat, check whether the heater pipes (including water pipes, oil pipes) have pool leakage switch turned on to the heating gear, the heater began to detect its own device, after the device is normal, the ignition plug preheats 60 seconds before ignition, the sensor detects that the flame in the heater is burning steadily and the ignition succeeds and starts to burn normally.

If the first fire fails, it automatically enters the second preheating ignition process. If the second ignition fails and the controller goes into self-protection, check that the relevant parts are properly connected.

After normal combustion, the heater will continue to heat the antifreeze, and the temperature of the heater outlet reaches 65°C

When the water temperature reaches 78 °C , the heater stops oil supply and combustion, the fan motor stops working after 3 minutes delay, the pump is still rotating at this time, when the water temperature drops to 58 °C , the heater automatically starts and starts heating. If the user does not need the constant temperature function, turn off the switch, the heater exits the constant temperature state, and the heating work is finished. Do not turn off the power switch of the vehicle during heating (suddenly turn off the fan and water pump during heating, the high-temperature gas in the heater will stay, or even flow in the opposite direction, which will burn the controller and other components). Turn off the heating switch. Wait for more than 3 minutes until the fan and water pump stop running.