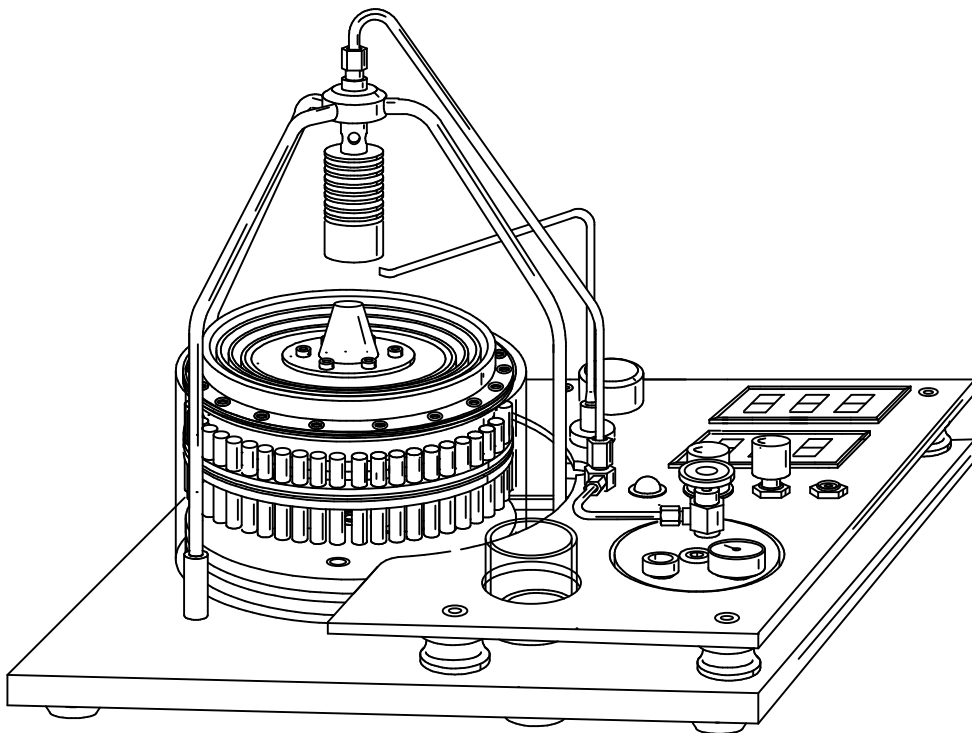
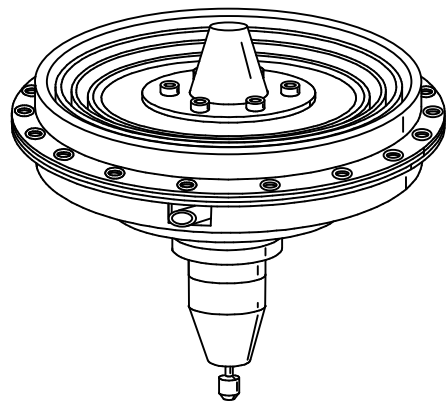
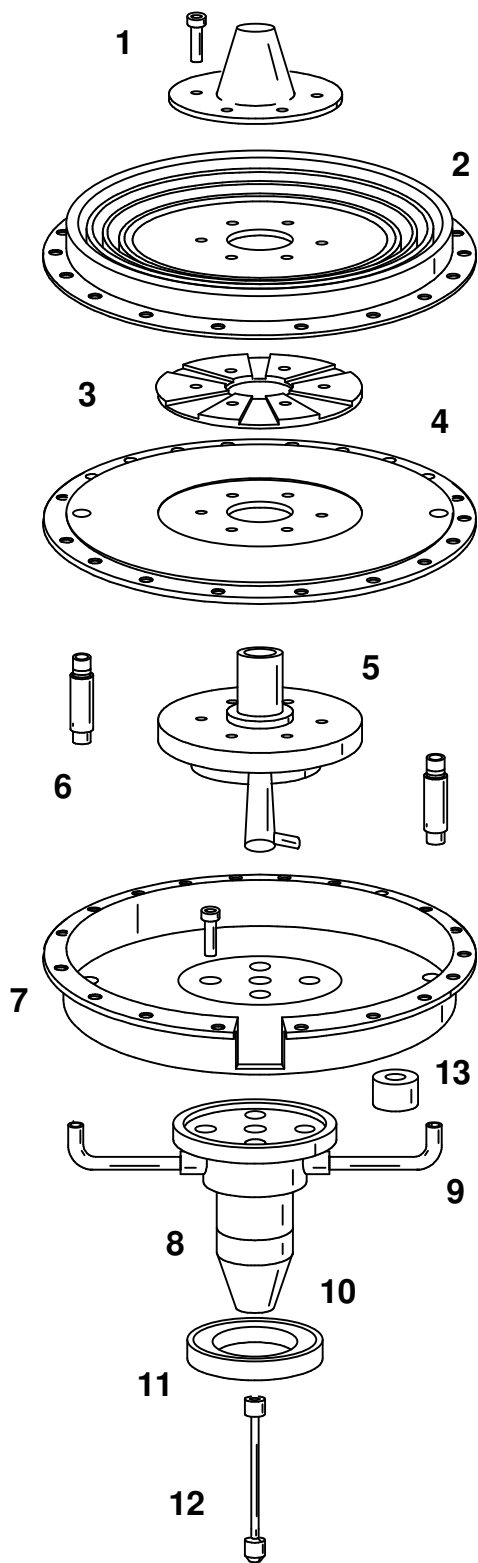


Assembly- Plan

Turbine 120





Turbine assembly

Screw together cover (1), turbine upper part (2), vaporiser disc (3), cut-off wheel (4) and nozzle holder (5).

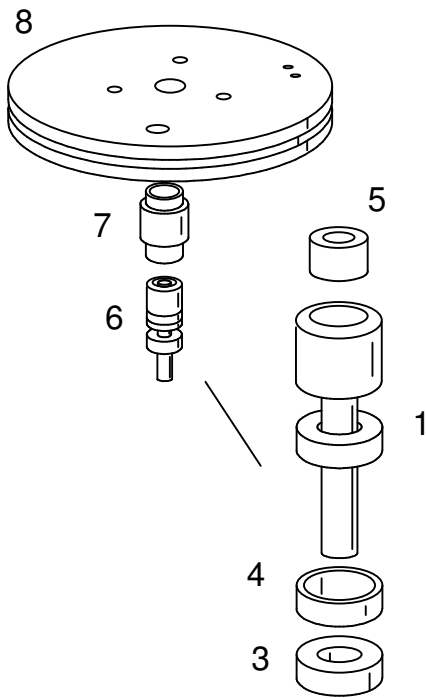
Screw both pipes (6) into the cut-off wheel (4). Screw the turbine shaft (8) onto the dished pulley (7).

Screw the assembled discs (1), (2), (3), (4), (5), onto the dished pulley (7).

Next connect and solder the ducts (9) to the pipes (6) and turbine shaft (8).

Press the turbine tip (10) into the hollow turbine shaft (8).

Lastly push the ball-bearing (11) onto the turbine shaft (8) and screw the drive shaft (12) into the turbine shaft (8).



Base plate (8) assembly.

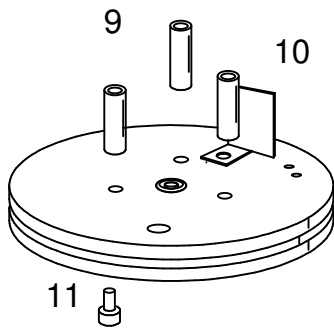
Assemble drive bearing. Push the shaft seal (1) onto drive shaft (6).

Push two ball-bearings (3) with spacing washer (4) onto the drive shaft.

Press the free-wheeling socket (5) into the drive shaft (6) from above, in so doing note the correct free-wheeling rotational direction.

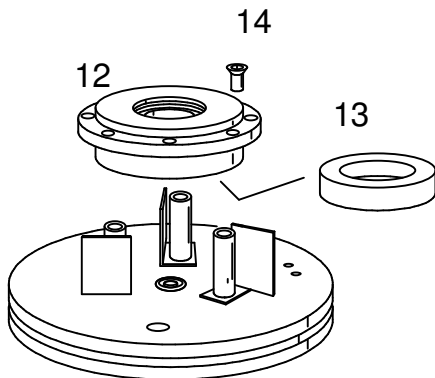
Push the assembled drive shaft (6) into the socket (7) and cement in place.

Press in this unit comprising socket, drive shaft and washer water proof into the base plate (8).

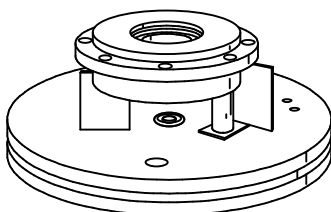


Assemble spacer bolts (9) and guide plate (10) onto the base plate (8).

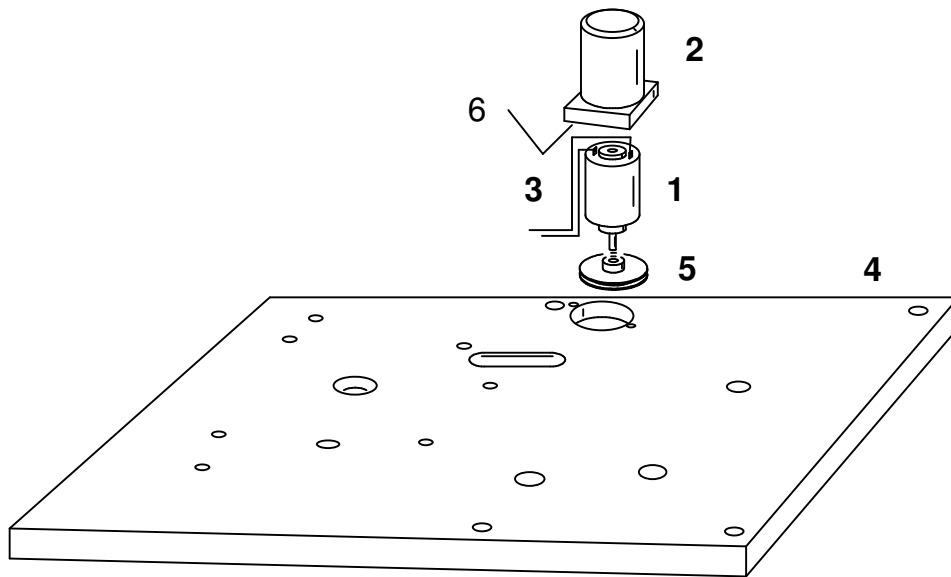
Screw on the spacer bolts and guide plate from below water proof with screws (11) and washer.



Assemble the bearing ring (12) for the turbine with screws (14) and press the ball-bearing (13) into the bearing ring.



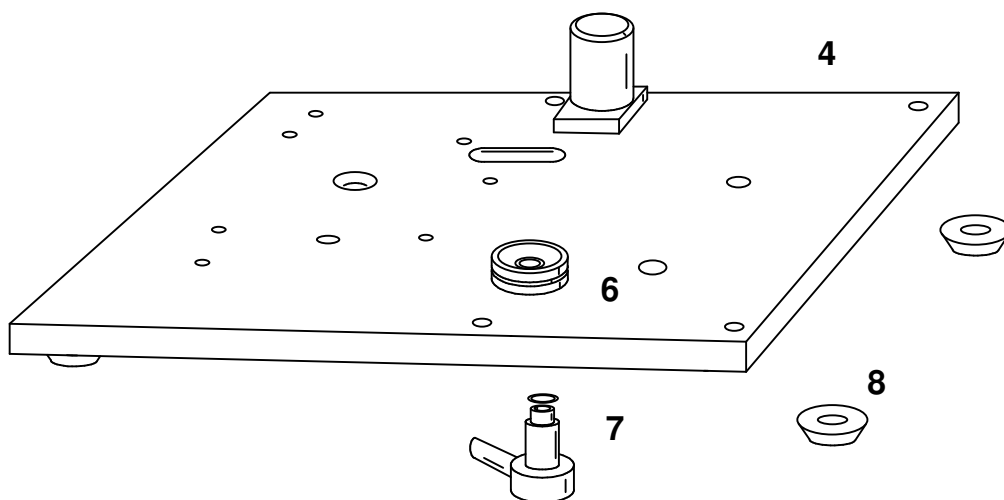
Screw the bearing ring from above with 3 screws onto the spacer bolts.



Mounting4 plate assembly

Push the electric motor (1) into the casing (2) and place the connecting cable of the motor into the cable duct 6.

Screw the electric motor tightly into the casing with the lateral screw. Screw the casing with electric motor onto the mounting plate, push the belt pulley 5 onto the engine shaft from below and screw tightly. 4

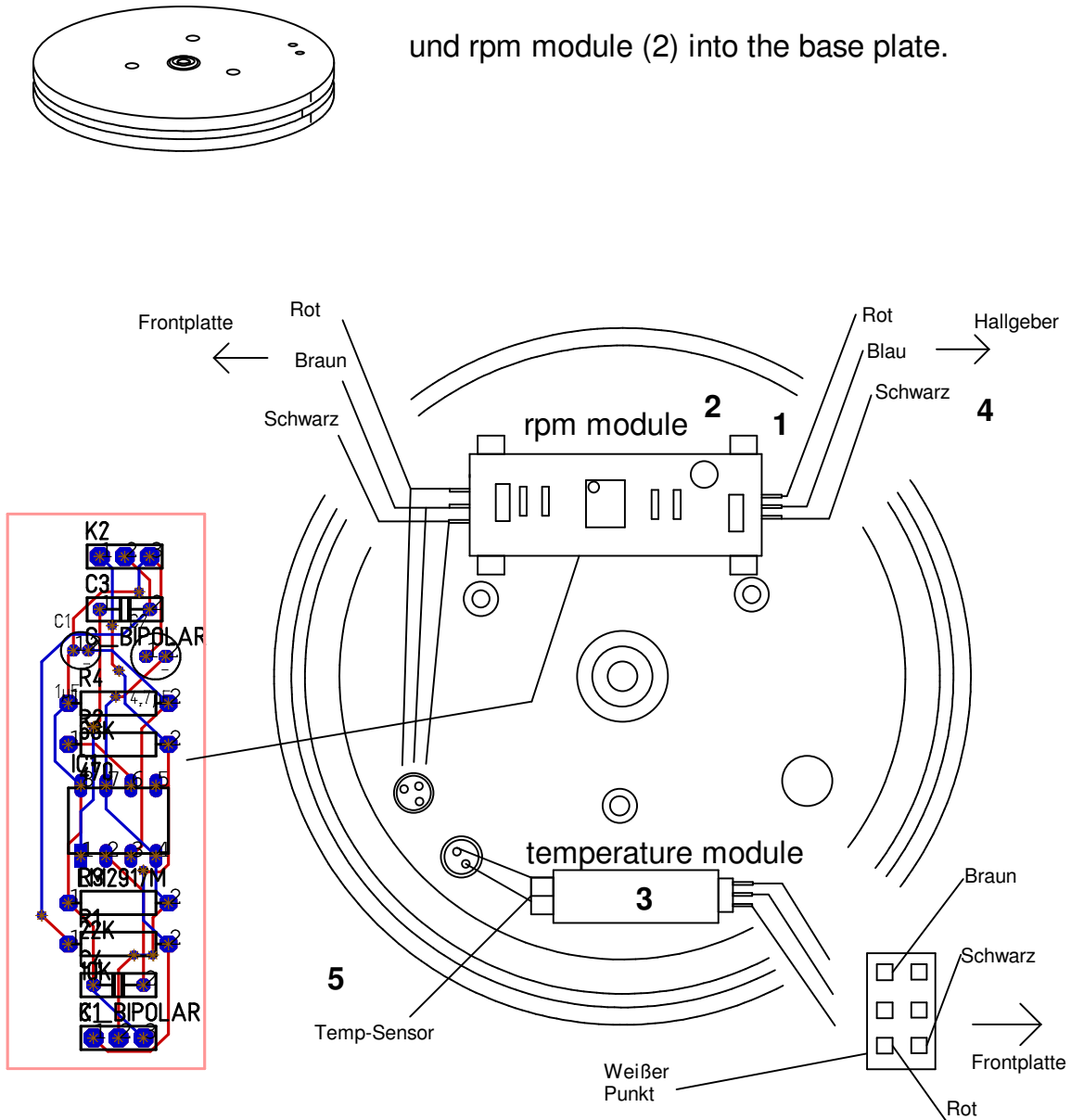


Fix the water filling apparatus (6) from above to the short feed pipe (7) below.

Stick the four feet (9) to the underside of the mounting plate (8).

Build the temperature module (3)

und rpm module (2) into the base plate.



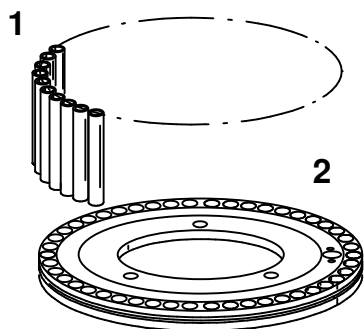
Fix the brackets (1) for the rpm module (2) and the temperature module (3) onto the underside of the base plate.

Solder the Hall sensor (4) with the three ducts onto the rpm module (2), do the same for the connecting plug which leads to the front panel.

Solder the temperature sensor (5) with the two ducts onto the temperature module (3), do the same for the connecting plug which leads to the front panel. (see diagram)

Then push both modules into the brackets.

Condenser disc assembly.

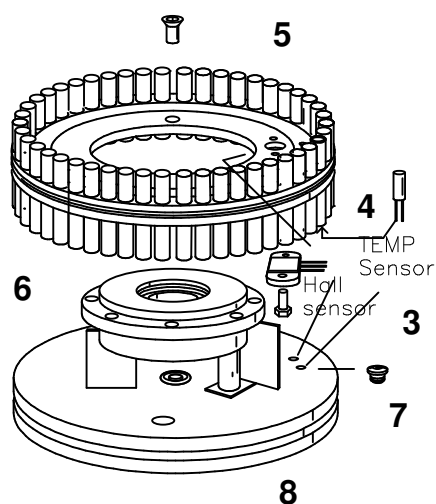


Press the tubes (1) into the boreholes on the condenser disc (2).

Screw the Hall sensor (4) on the condenser disc from below.

Push the temperature sensor (3) into a small tube.

Screw the complete condenser disc (5) onto the turbine bearings (6).

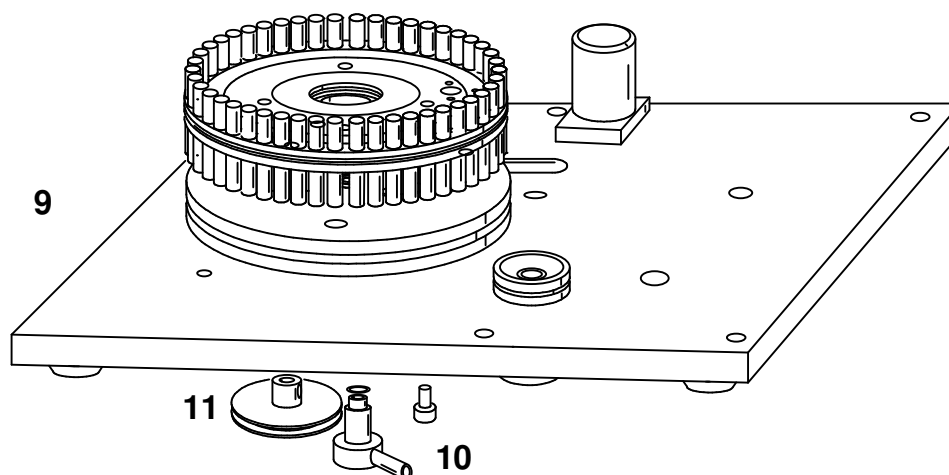


Place rubber fittings (7) for the cable feed through into the base plate (8).

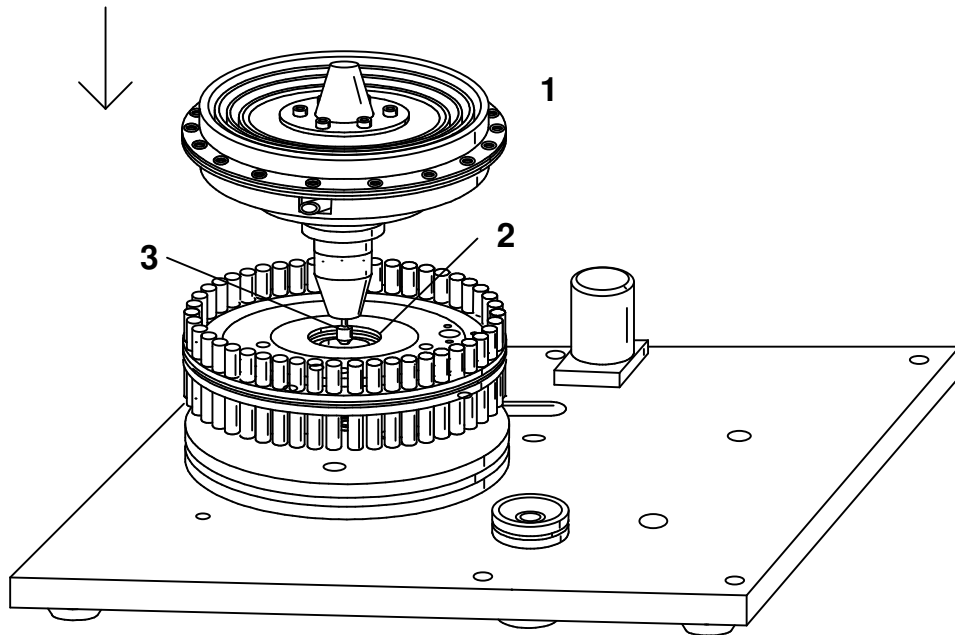
Feed the cables for the Hall sensor and temperature sensor through the designated holes and solder onto the temperature module and rpm module.

(see page 5)

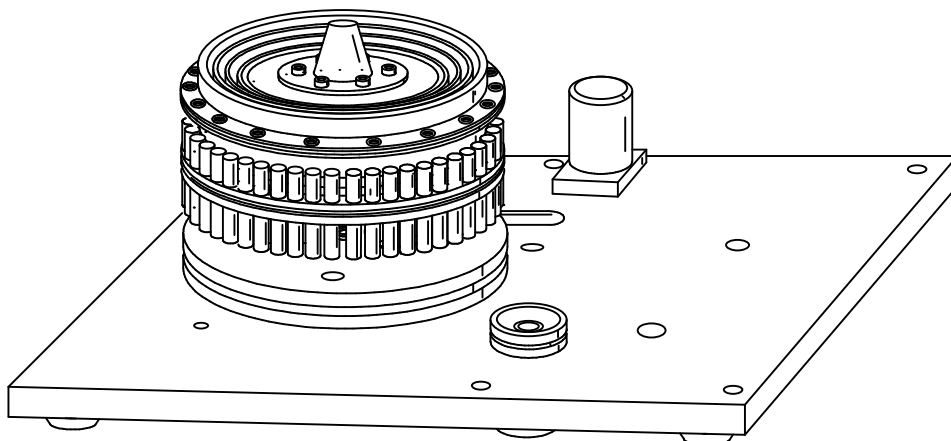
Assembly the complete unit consisting of condenser disc, turbine bearings and base plate (9) onto the mounting plate and screw on from below.

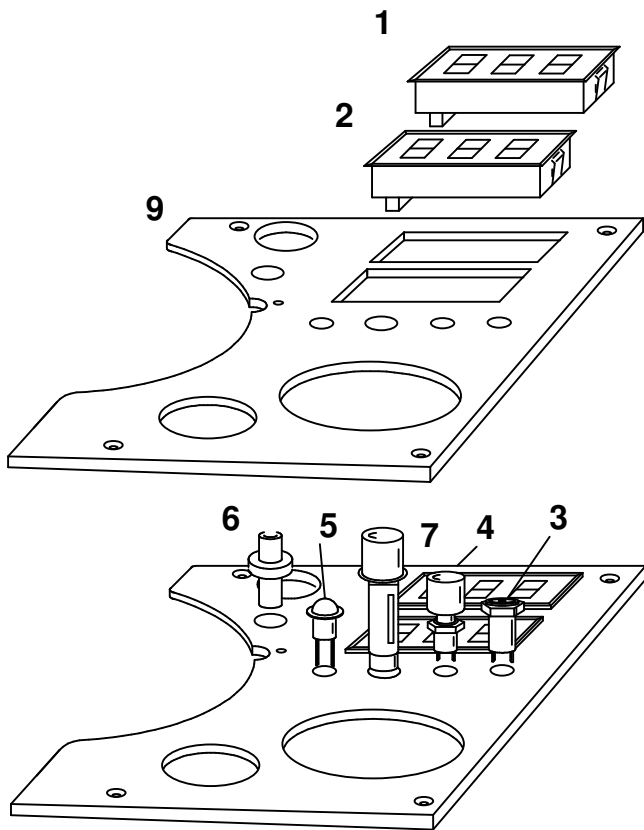


Screw the short feed pipe (10) into the mounting plate (9) from below. Push the belt pulley (11) onto the drive shaft and screw on tightly.



Place the turbine (1) onto the turbine bearings (2) and simultaneously place the drive shaft (3) into the free-wheeling socket.





Front panel 9 assembly.

Place the digital displays (1) and (2) in the designated openings.

Place the power socket (3) and push button (4) into the designated boreholes and screw on. Place LED and holder (5) into the borehole.

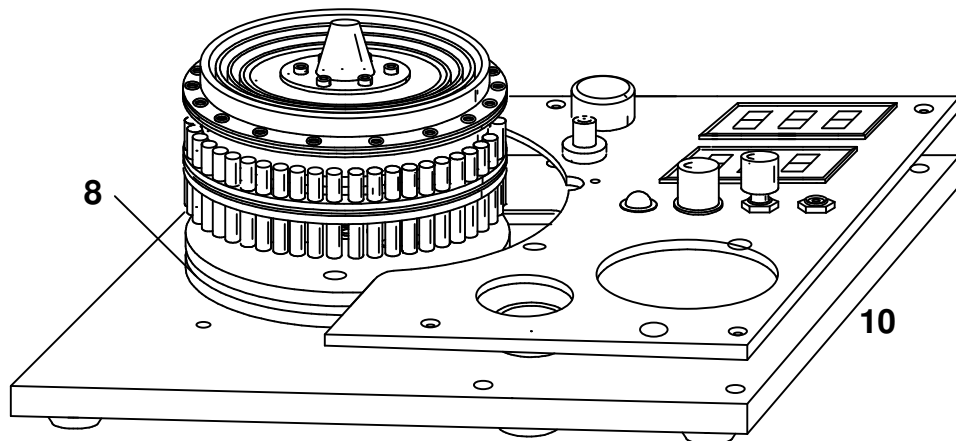
Press insulator (6) into the borehole.

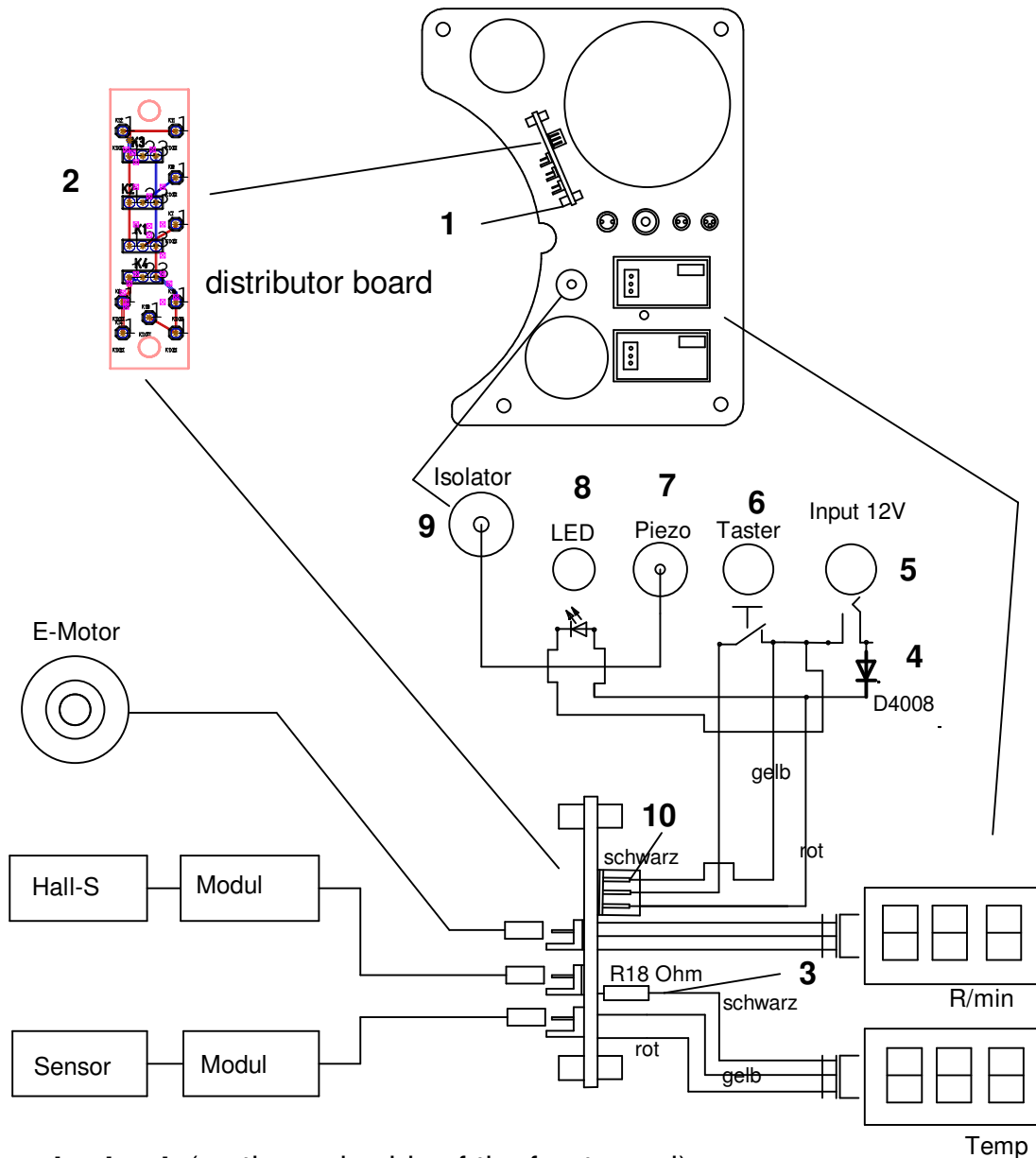
Press the Piezo (7) into the borehole from below.

The separate electrical components and cables need to be connected / soldered onto the electrical contacts on the underside of the front panel. (for this see page 9)

After this connect the electrical contacts on the front panel with the electrical contacts on the base plate (8). (see page 5)

Then mount the front panel onto the mounting plate.10





Electric circuit (on the underside of the front panel)

Fix the brackets for the distributor board (2) on the underside of the front panel. Cut the connecting plugs of both display modules to a sufficient length and solder into the corresponding holes on the distributor board.

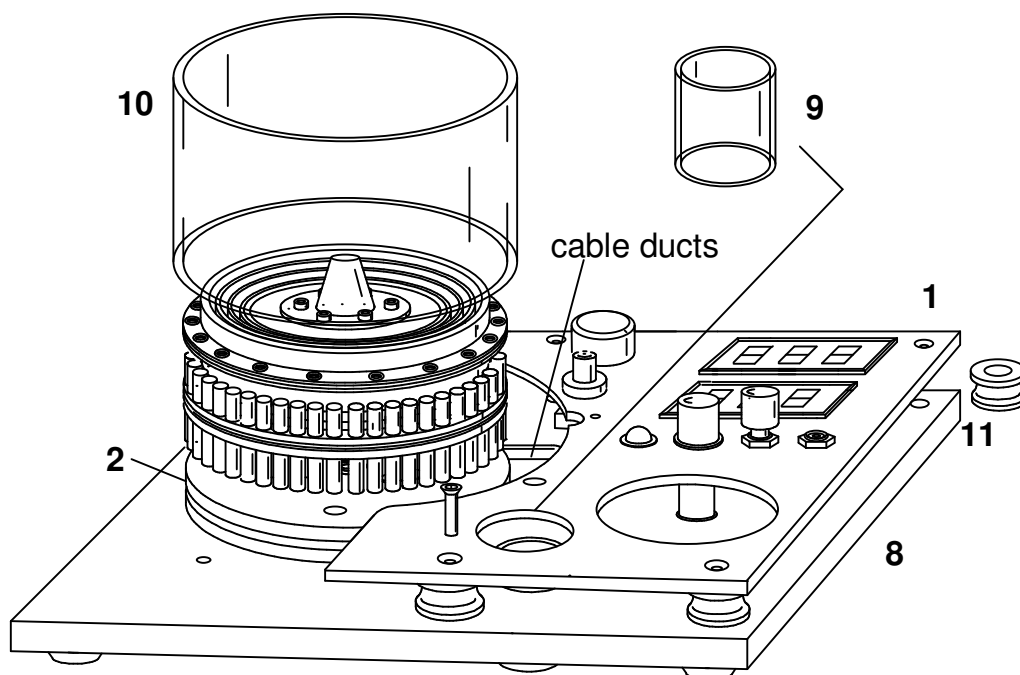
Equip the minus connection (-) for the temperature module with a resistor (3). The power supply is a diode (4) soldered in as reverse voltage protection.

Solder the connecting plug for the power supply (5) onto the plus and minus contact of the input socket (5) / 12V as well as onto the push button.

Solder the connecting plug for the power supply (6) onto the plus and minus contact of the input socket (5) / 12V.

Connect the connecting plug for the power supply with the distributor board. Push the board into the bracket (1) on the underside of the front panel.

Plug the cable from Piezo (7) into the insulator socket (8).



Connect the front panel (1) to the electrical contacts on the base plate (2).

Feed the cables through the designated cable ducts in the mounting plate.

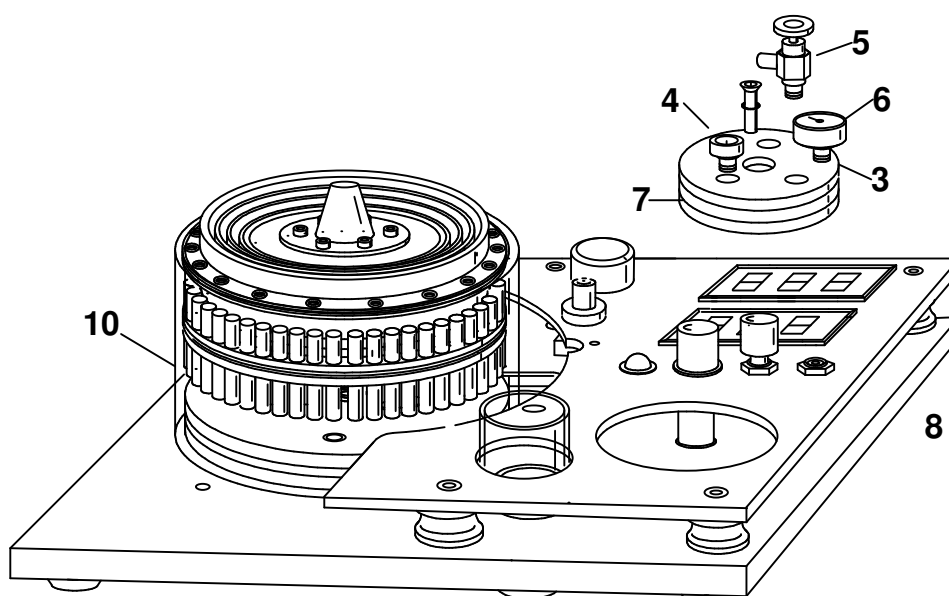
Screw the front panel with spacer rollers onto the mounting plate (8).

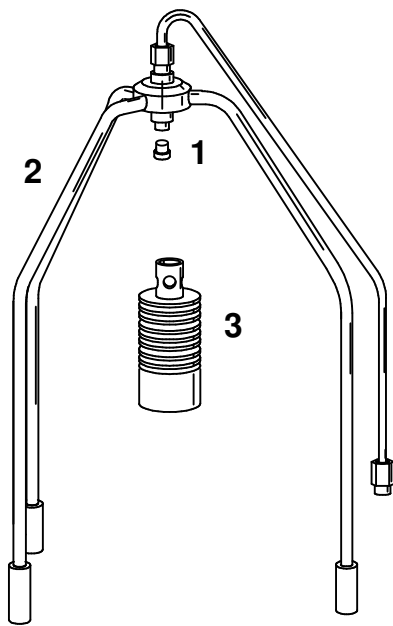
Screw the filling valve (4), cut-off valve (5) and pressure gauge (6) into the fuel tank cap.

Assemble the complete tank cap (3) with tank ring (7) and gaskets onto the mounting plate (8).

Push the acrylic tube (9) and gasket onto the water filling ring.

Push the acrylic tube (10) and gasket over the base plate (2).





Gas burner and stand assembly.

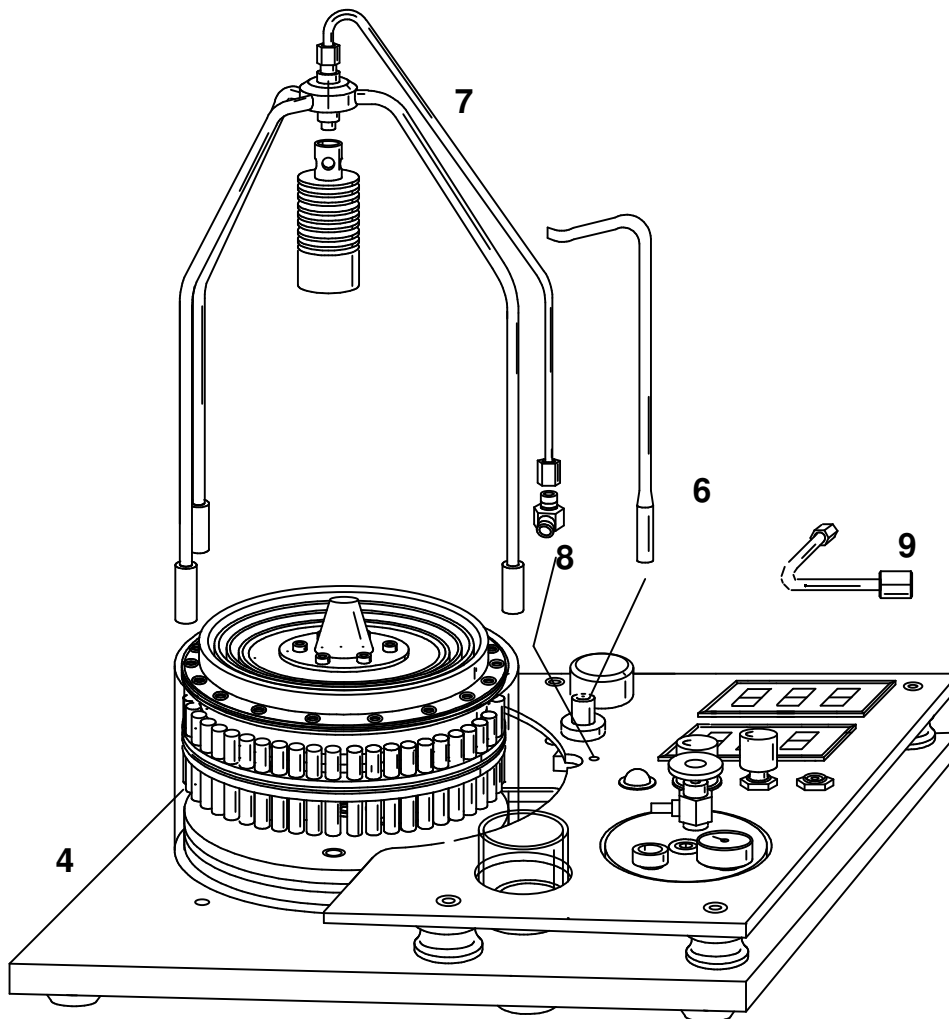
Screw the nozzle (1) into the stand (2).

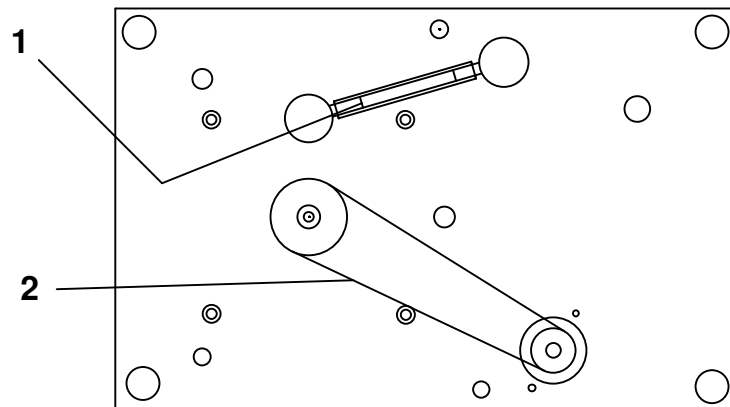
Screw the gas burner (3) into the stand.

Place the complete gas burner / stand on the mounting plate (4) and screw on from below.

Push the combustion rod (6) into the insulator (5) and screw together tightly with the lateral screw.

Assemble the gas pipes (9) from the tank cap to the gas distributor (8) and from the distributor to the burner.





Establish a hose connection (1) between both the water feed pipes.

Place the belt (2) onto the belt pulley of the electric motor and the belt pulley of the turbine drive shaft.

