Before Turning on the Water Bath:

1) Check to make sure the level of water in the bath is at an appropriate level.
   a) Minimum: Up to 5cm below cover plate
   b) Maximum: Up to 2cm below cover plate
   c) Use DI water only to fill the bath
   d) If water needs to be drained, scoop or siphon the water out of the bath.
      This model does not have a drainage nozzle.
2) Check all hose connections to make sure they are all tight and none are
   cracking due to excess heat exposure.
3) The rotation speed of the pump motor can be changed with Switch (14).
   (Refer to the attached diagram)  ••Full Speed/• Reduced Speed—
   **Note: Reduced speed is recommended**

Operating the Water Bath:

1) Turn on the circulator, Switch (1) (Refer to the attached diagram)
   a) Display light is green (1a) when unit is on
   b) Pump motor starts up – the heat transfer liquid starts to circulate
2) Using the Temperature Dial (18) (Refer to the attached diagram) set the
   desired temperature.  The temperature increases at a rate of about 5°C in
   less than 2 minutes.  When temperature is reached, it maintains the
   temperature within 0.5°C.
   a) The display (4) lights up when the unit is heating.
      i) Lights up constantly during the heating up phase
      ii) Flashes on and off during the control phase
      iii) Does not light up when the set temperature is lower than the current
           temperature, or the heating is not activated.
3) The thermometer supplied is graduated in segments of 0.5°C.  **Note: This
   thermometer is not calibrated**
   a) The Fisher Dual Channel digital thermometers are recommended for more
      accurate monitoring of the water temperature.  Be careful not to pinch the
      thermocouple between the cover and the bath.  The cover should carefully
      rest on the thermocouple to hold it in place.  Temperature can be read in
      °C or °F, and also to one decimal place.
4) When finished using the circulator bath, turn off the power switch to stop the
   pump, and turn down the dial to 20°C.  Water bath will cool on its own.
Fault Displays:

Fault display light (9) is illuminated when there is a malfunction.
**Note: The heating element and pump are completely switched off when light is illuminated**

Causes of Malfunctions:
1) The excess temperature protection is triggered due to:
   a) Not enough liquid in the bath
      i) Check for leaks and/or fluid evaporation
   b) Excess temperature has been set too closely to the desired set temperature (Refer to the HAAKE manual to set up “Excess Temperature Protection” or see Celeste @x3756 for help.)
   c) The control function is defective.
      i) May need to be returned for servicing.

2) The motor or pump is blocked.
   a) The motor switches itself off. The motor switches itself back on again automatically a few minutes later after the temperature has dropped again.
   b) Check the pump for leaks

After the fault cause has been identified and fixed, the unit can be started again by pressing the reset key (outer ring of the Setting Dial (13) at the rear of the unit). See Celeste @x3756 for help.