



**WATER-COOLED  
WATER CHILLERS  
WITH SCREW  
COMPRESSORS**

**WSH-2**

**2.200-2.230-2.260-2.280-**

**2.300-2.360-2.400-2.440-**

**WATER-WATER  
HEAT PUMPS  
WITH SCREW  
COMPRESSORS**

**WSHH-2**

**3.450-3.540-3.580-3.620-3.660**

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## **TROUBLESHOOTING**

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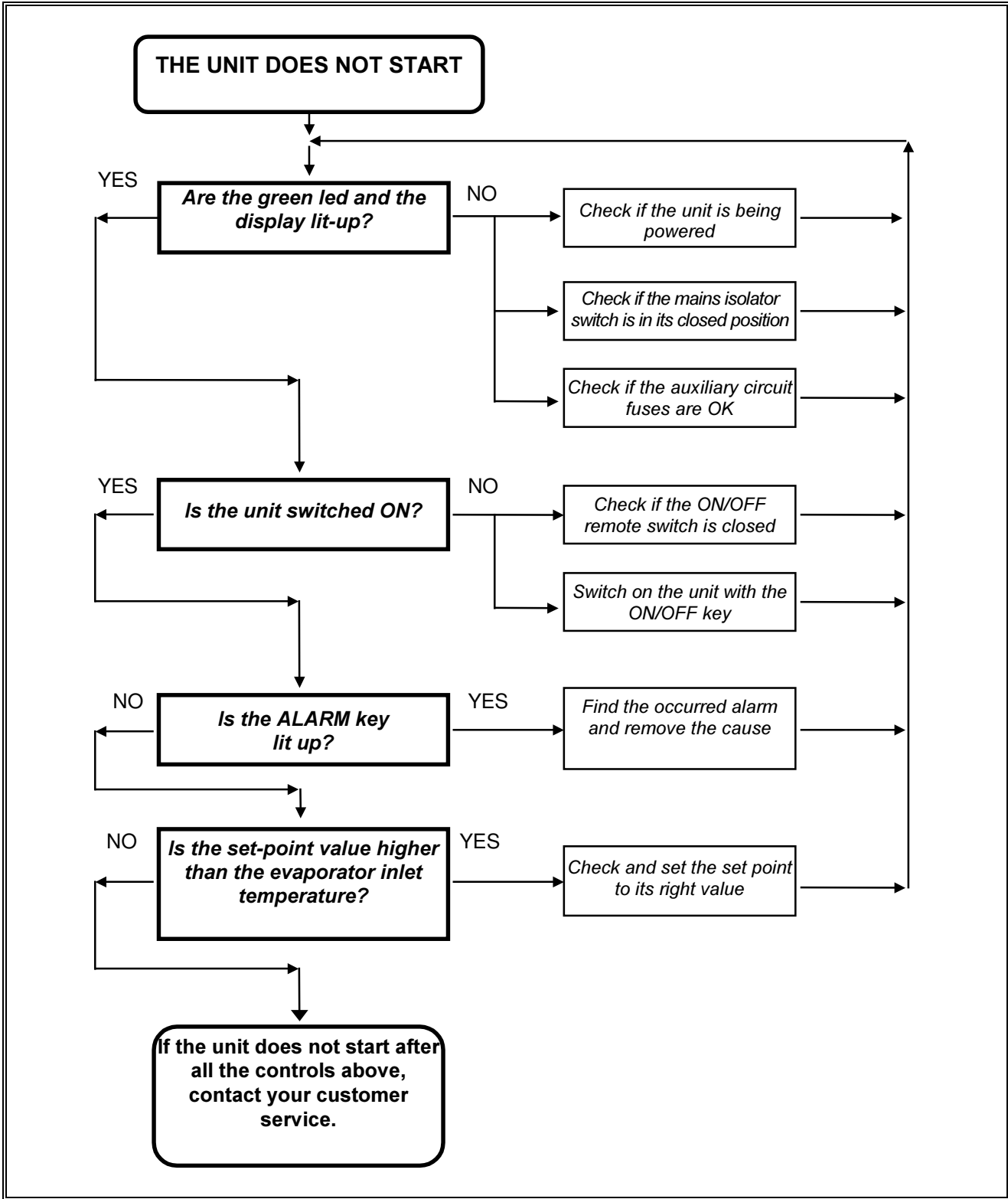
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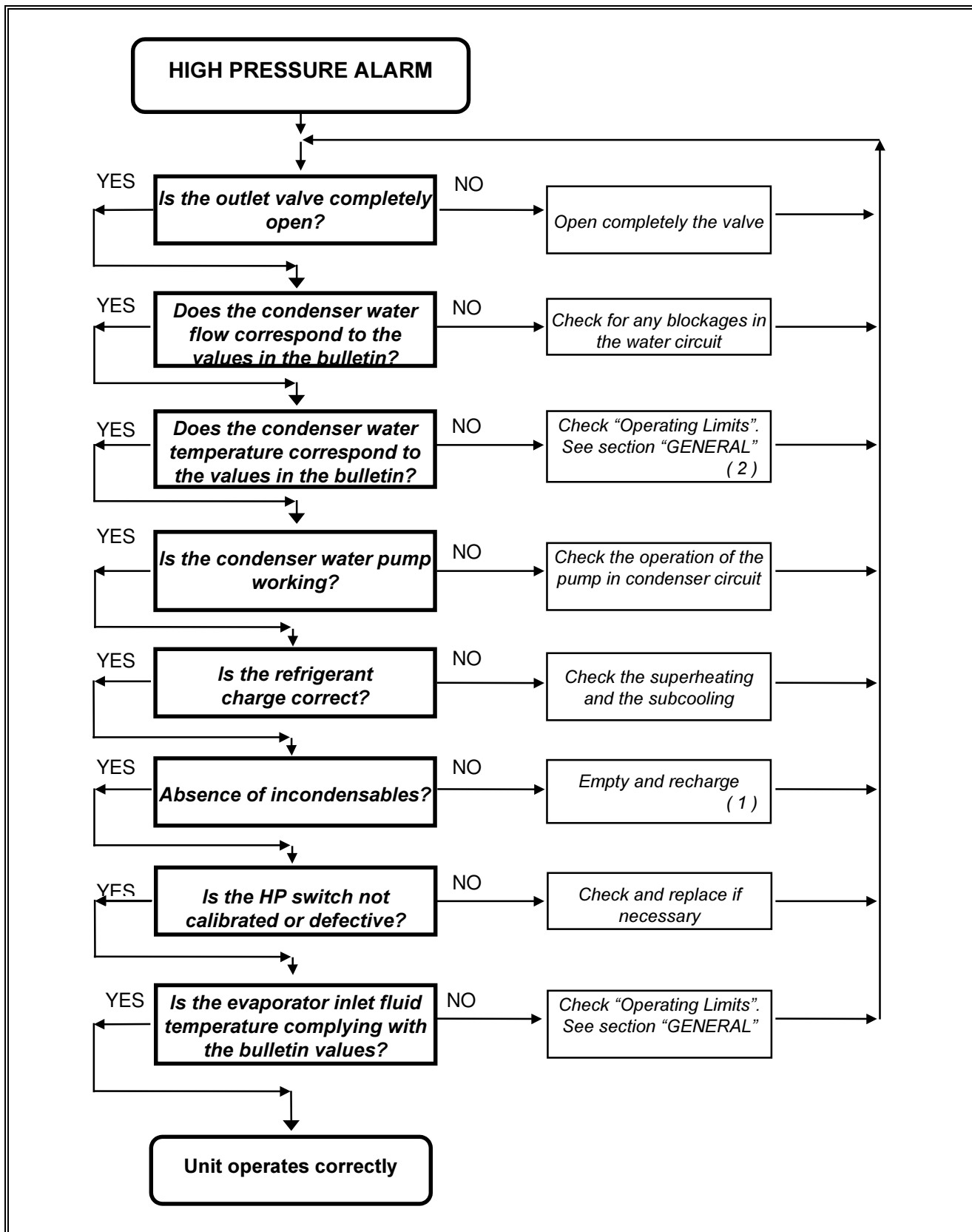
- THE UNIT DOES NOT START
- HIGH PRESSURE ALARM
- LOW PRESSURE ALARM
- COMPRESSOR FAILS TO START
- COMPRESSOR NOISY OR VIBRATING
- PROGRESSIVE LOSS OF OIL FROM THE COMPRESSOR

This section provides a comprehensive troubleshooting guide although, naturally, it cannot cover every possible fault. When a safety device is activated it indicates that an operating fault has occurred. Therefore, always identify and eliminate the cause of the fault before restarting the unit. Below is a list of possible problems and their related causes and solutions.

### **CAUTION**

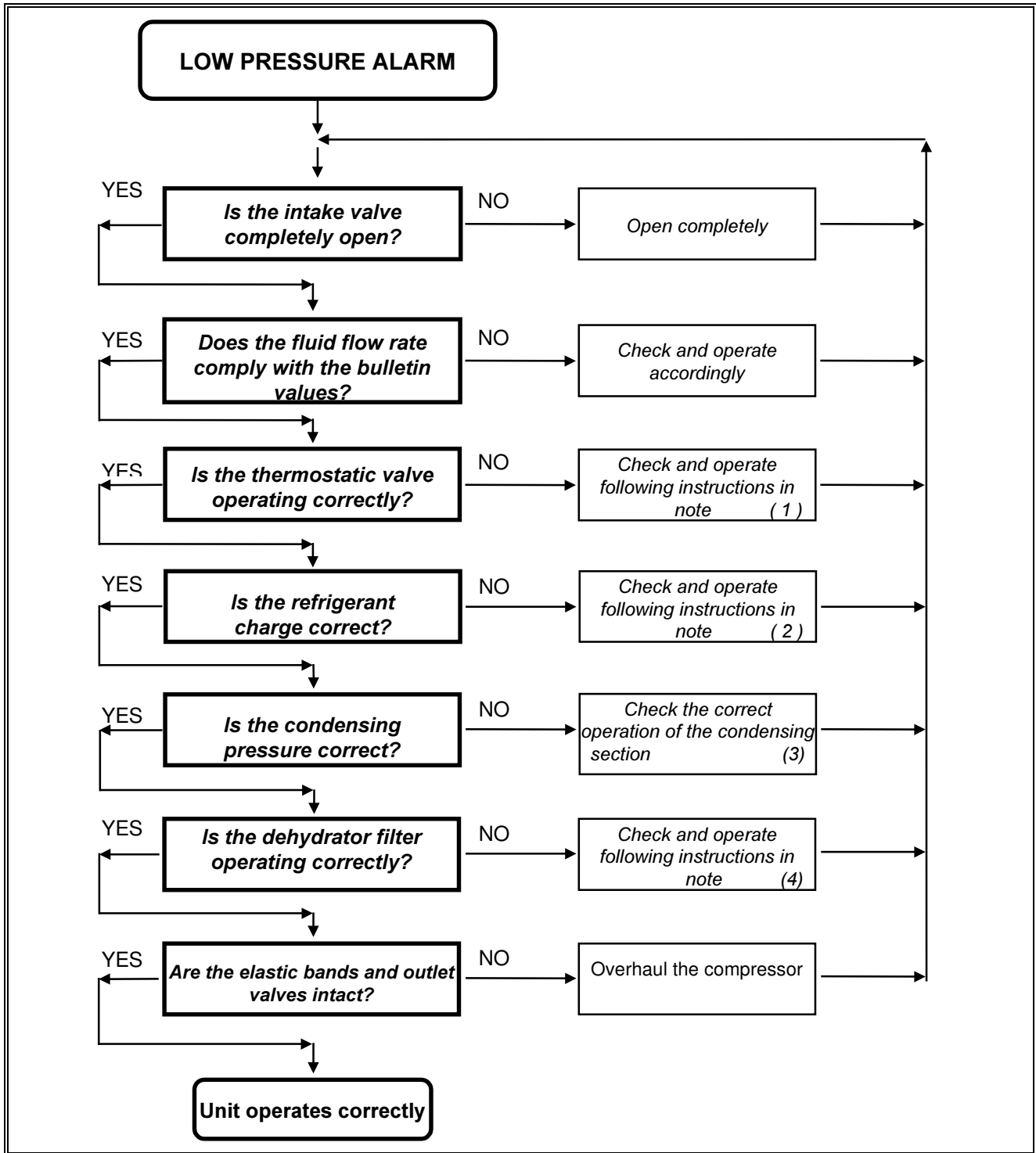
THE OPERATIONS DESCRIBED BELOW ARE ENTIRELY THE RESPONSIBILITY OF THE PERSON CARRYING THEM OUT. IT IS ESSENTIAL TO CONTACT AN AUTHORISED SERVICE CENTRE WITH THE NECESSARY EXPERTISE FOR ANY PROCEDURES REQUIRED TO RESET THE OPERATION OF THE UNIT.





**Note:**

1) In the presence of incondensables, the difference between the saturated condensing pressure and the water outlet temperature assumes values that exceed 5°C/6°C. In these cases, remove all the refrigerant present in the circuit, create a vacuum of less than or equal to 100Pa, introduce a quantity of refrigerant into the circuit as shown on rating plate, and then check the superheating and subcooling values.



**Note:**

- 1) The superheating value measured in the compressor suction line must be between a minimum of 3K and a maximum of 7K, and the subcooling value measured upstream of the thermostatic valve must be between a minimum of 3K and a maximum of 8K. Values other than these may signify unsuitable calibration of the thermostatic valve; adjust accordingly.
- 2) An excessively reduced refrigerant charge is highlighted by the activation of the low pressure switch. Repair any leaks, pressurising the circuit to detect these, if necessary, and perform the emptying and charging operations.

- 3) Check that the flow-rate and temperature of the fluid at the condenser correspond to the values in the bulletin or the operating mode. A correct condensing pressure must be 5°C/6°C higher than the temperature of the condenser fluid outlet.
- 4) Using a thermometer with the probe in contact, measure the temperature of the refrigerant upstream and downstream of the filter; temperature differences greater than 1°C signify that the filter is not working efficiently and should be replaced.

