

17. Fault finding



Warning

Before starting fault finding, switch off the power supply for at least 5 minutes.
Make sure that it cannot be accidentally switched on.

Fault	Cause	Remedy
1. The Hydro Multi-E does not run when started.	a) The actual pressure is higher than or equal to the setpoint set.	Wait until the pressure has dropped, or lower the pressure on the discharge side of the Hydro Multi-E, and check that the booster system starts.
	b) Power supply disconnected.	Connect the power supply.
	c) Circuit breakers cut out.	Correct the fault and cut in the circuit breakers.
	d) Internal motor protection activated.	Contact Grundfos.
	e) Circuit breaker defective.	Replace the circuit breaker.
	f) Motor defective.	Repair or replace the motor.
	g) Pressure transmitter fault. – Pressure transmitter defective.	Replace the pressure transmitter. Transmitters with 0-20 mA or 4-20 mA output signals are monitored by the Hydro Multi-E.
– Cable broken or short-circuited.		Repair or replace the cable.
2. The Hydro Multi-E starts, but stops immediately afterwards. The operating pressure is not reached.	a) Dry running or no inlet pressure.	Check the supply of water to the Hydro Multi-E. When the inlet pressure has been reestablished, the pumps will restart after 15 seconds.
3. The Hydro Multi-E is stopped and cannot restart.	a) Pressure transmitter fault. – Pressure transmitter defective.	Replace the pressure transmitter. Transmitters with 0-20 mA or 4-20 mA output signals are monitored by the Hydro Multi-E.
	– Cable broken or short-circuited.	Repair or replace the cable.
	b) Control unit fault. – Power supply disconnected on pump 1.	Connect the power supply.
	– Control unit defective.	Replace the terminal box of pump 1. Contact Grundfos.
4. Unstable water delivery from Hydro Multi-E (applies only to very low consumption).	a) Inlet pressure too low.	Check the suction pipe and possible suction strainer.
	b) Suction pipe or pumps partly blocked by impurities.	Clean the suction pipe or pumps.
	c) Pumps suck air.	Check the suction pipe for leakages.
	d) Pressure transmitter defective.	Replace the pressure transmitter.
5. Pumps are running, but deliver no water.	a) Suction pipe or pumps blocked by impurities.	Clean the suction pipe or pumps.
	b) Non-return valve blocked in closed position.	Clean the non-return valve. The non-return valve must move freely.
	c) Suction pipe leaky.	Check the suction pipe for leakages.
	d) Air in suction pipe or pumps.	Vent the pumps. Check the suction pipe for leakages.
6. The Hydro Multi-E is unable to reach the setpoint.	a) Cable broken or short-circuited (GENibus communication between pump 1 and pump 2/3).	Repair or replace the cable.
	b) Pump 2 or 3 out of operation.	Connect the power supply to the pump and check the pump condition.
7. Leakage from a shaft seal.	a) Shaft seal defective.	Replace the shaft seal.
	b) CRE and CRIE pumps: Height adjustment of pump shaft inaccurate.	Readjust the shaft height.
8. Noise.	a) The pumps are cavitating.	Clean the suction pipe or pumps and possible suction strainer.
	b) CRE and CRIE pumps: The pumps do not rotate freely (frictional resistance) due to inaccurate height adjustment of the pump shaft.	Readjust the shaft height. See the CR, CRI, CRN installation and operating instructions supplied with the Hydro Multi-E.
9. Very frequent starts and stops.	a) Wrong diaphragm tank precharge pressure.	Check the precharge pressure.
	b) The difference between start and stop pressures is too small. Note: This situation will only arise if emergency operation is installed.	Increase the differential pressure setting on each pressure switch.