

5.3 Failure Symptoms during Operation

The following table (Fig. 502) lists the possible failure symptoms as they might occur during the functional sequence of operation.

In case of malfunction the failure is to be isolated and removed using this table. It is important to accurately identify the failure symptom.

Should the failure symptom not be contained in this table or the trouble not be detected under the specific

failure symptom listed, in emergencies assistance by our service technicians may be requested (Tel. 089 / 8 57 94 - 512).

NOTE

Overheating and dosing pump failure are always indicated additionally after run-down by the flashing LED of the control element.

In all cases of trouble also a defective control unit may be the cause should all other components turn out to be serviceable.

Failure Symptom	shows afters	Possible Causes
No start and no illumination of LED on control element	immediately	Wrong cabling, defective fuse
No start but LED illuminates	immediately	Fan or control unit defective or fan blocked
Very low speed with no start	immediately	Control idle operation: wrong manual control (selected temperature is below air intake temperature) or wrong integration (excessive air intake temperature)
Motor operates momentarily and then stops	1	Glow plug or flame sensor short or open circuit or control unit defective
Stoppage without run-down	5	Fan motor obstructed, binding
Run-down after	1	Flame detection erroneous
Run-down after	20	Voltage to control unit too low
Run-down after and dosing pump does not cycle	120	Cabling to dosing pump, pump itself or overheat protection defective
Run-down after	40 to 120	Intermittent disconnect of connection to dosing pump or to overheat protection
Run-down after	230	No flame: wrong fuel supply quantity, defective or slow fan, coked burner (in particular pilot flame outlet bore), combustion air/exhaust ducting obstructed or heat exchanger coked, dosing pump seized
Run-down	during combustion operation	Overheating or voltage too low or component error (flame sensor, glow plug, overheat sensor, dosing pump, burner) or no fuel supply or obstructed combustion air/exhaust ducting
Stoppage without run-down	during combustion operation	Fan motor failure or seizure
Interruption of dosing pump cycling and max. speed for 30 sec with subsequent re-start	during combustion operation	Flame-out by gas bubbles in fuel delivery or strong wind against exhaust outlet or defective no-flame detection

Fig. 502 Failure Symptoms during Operation

5.4 Error Code Output (Air Top 2000 Diagnosis)

When equipped with a combination or standard timer a malfunction will cause an error code output to the display of the timer for indication.

NOTE

When equipped with a control element the error code output is indicated by flashing of the operating indicator/error code indication. The number of flash pulses corresponds to the number indicated in the table below. After a quick pulse train there will always be an error code output.

Error code output on display of combination or standard timer

F	01	No start (after 2 attempts)
F	02	Flame out (at least >5)
F	03	Voltage too low or too high
F	04	Premature flame detection
F	05	Flame sensor open or short circuit
F	06	Temperature sensor open or short circuit
F	07	Dosing pump open or short circuit
F	08	Fan motor open or short circuit or wrong speed
F	09	Glow plug open or short circuit
F	10	Overheating