## D12W Water Heater

**Fault Codes and Remedies** 

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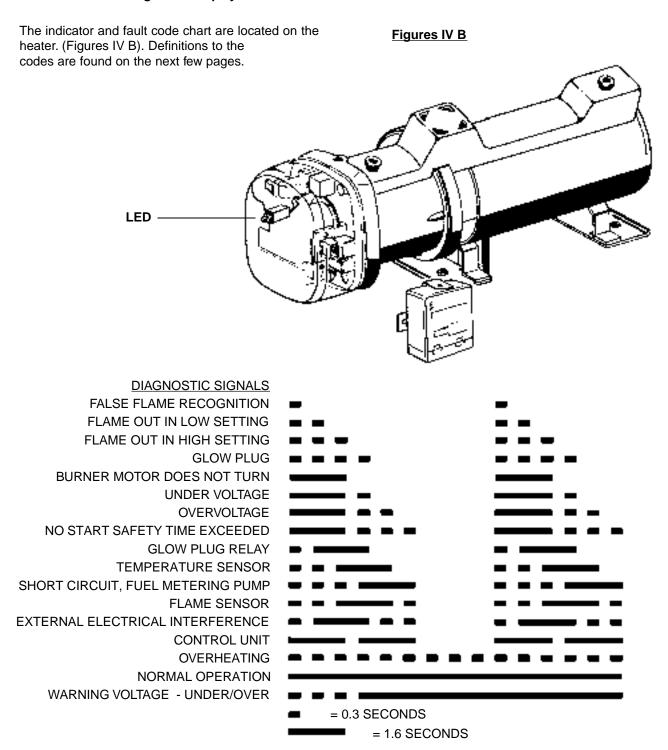
Model #'s 25 1570/71 25 1655/56 25 1744/45 25 1859/60



## C. Self Diagnostics Troubleshooting

The D12W heater is equipped with an automatic testing capability which can be used to check for faults. A built-in LED provides a full time diagnostics display. The Optional 7 Day timer provides a numeric fault code display. Both are covered on the following pages.

## Built-in LED and Diagnostic display.



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F		Indication	Remedy
Fault Code	Fault description	Fault signal/flashing code	
000	No fault		
001	Pre-heating, overvoltage		Observe and the Channel bettern
002	Pre-heating, under voltage	• • • • • • • • • • • • • • • • • • • •	Check control unit. Charge battery
010	Overvoltage switch-off		Check control unit. Check battery charge. Connect heater directly to the battery.
011	Under voltage switch-off		Charge battery, Check control unit. Check cross sections of power leads.
012	Overheating		Overheating switch has triggered, vent heater (lack of water),open heating valve, check water flow and switch.
013	Temperature at heat exchanger to high		Check for continuity through fuel metering circuit Check electrical leads and contacts to metering pump Flame sensor has reported a high temperature Check sensor
020	Glow plug defect		Check glow plug. Check connections to glow plug and to glow plug relay. Check connection to control unit.
022	Short circuit in current regulator contacts		Check glow plug relay (current regulator). Check connection to glow plug, check connection to control unit.
023	Interruption in current regulator		Check coil connection to glow plug relay Check connection to control unit
024	Short circuit in current		Check coil connection at glow plug relay.
	regulator coil		Check connection to control unit.
025	Short circuit at diagnostic output	No flashing code	No flashing code. Check diagnosis lead
UZJ	Short circuit at diagnostic output	ř	Check connection to control unit.

C14		Indication	Remedy
Fault Code	Fault description	Fault signal/flashing code	
030			
031	Combustion air fan does not		Check combustion air fan. Replace if necessary.
032	rotate		Check motor speed relay . Check connection to control unit
033			
037	Water pump does not rotate		Check water pump (external triggering). Check connections to control unit
047	Short circuit in metering pump		Check metering pump. Check connections to control unit.
051	Flame sensor defect		Temperature at flame sensor does not fall below Check flame sensor or combustion, possibly replace.
052	Failure to start/safety time expired		No flame was detected during the start up phase . Check the fuel supply & cable harness of metering pump. Check glow plug, exhaust & combustion air piping.
053	Flame out in "high" mode	fuel supply, exhaust pipe and combustion air pi	Heater has started (flame detected) and indicates flame loss in power setting. Check fuel flow rate, blower speed, ping. If combustion is O.K,
check 1	lame sensor, replace if		055 Flame out in "low" mode necessary.
059	Water temperature rises too quickly		Check water circulation and temperature control sensor
060	Interruption in temperature sensor		Measured temperature lies outside measuring range. Check sensor.
061	Short circuit in temperature sensor	Indication	Check sensor.  Check connection to control unit  Remedy



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Fault Code	Fault description	Fault signal/flashing code	
064	Interruption in flame sensor		Measured temperature lies outside measuring range.  Check sensor.
065	Short circuit in temperature sensor		Check connections to control unit
090	Control unit defect (internal reset)		
092	ROM fault		
093	RAM fault		
094	EEPROM fault		Replace control unit
095	Control unit defect (general fault)		
096	Control unit defect (general fault)		
097	Control unit defect or cable		Check and if necessary replace control unit.
	harness fault		Check cable harness.
091	External interference voltage		Check voltage supply.
			Check connection to control unit

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Fault Code	Fault description	Fault signal/flashing code	
064	Interruption in flame sensor		Measured temperature lies outside measuring range.
065	Short circuit in temperature sensor		Check sensor. Check connections to control unit
090	Control unit defect (internal reset)		
092	ROM fault		
093	RAM fault		
094	EEPROM fault		Replace control unit
095	Control unit defect (general fault)		
096	Control unit defect (general fault)		
<del>-097</del>	Control unit defect or cable		Check and if necessary replace control unit.
	harness fault		Check cable harness.
091	External interference voltage		Check voltage supply.
			Check connection to control unit