
Section 4:

Dryer Service, Trouble Shooting and Schematics

Dryer Trouble Shooting

DRYER ERROR MESSAGES

The O-Series dryer control reacts to various abnormal conditions by displaying an Error message. These messages usually contain the "Error" text, and then a general description of the message. Below is a listing of Error messages separated by each potential displayed message in bold face. Each is followed by:

- Condition that creates the displayed message on the control
- Action that the control takes responding to the condition
- Exit is the method the user (or the control) should use to bring the machine back to normal operation.

The actual displayed message on the control may contain the general description listed below and additional details (such as number or additional text). However, the condition, action or exit qualities of the error message should be the same for all variations.

POWER LOSS	
Condition	This error occurs when the Main Control Board detects a total loss of 24VAC power.
Control Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Customer Action	Test incoming Voltage. Make sure on correct Transformer tap. Test step down transformer make sure voltage within range.
TEMP SENSOR SHORT	
Condition	There is a short circuit across the thermistor terminals or the measured temperature is above 385 degrees F (below 100 ohms).
Control Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Customer Action	1) Inspect Thermistor connections and harness for damage. 2) Test Thermistor resistance (10K OHMs at room temperature)

TEMP SENSOR OPEN

Condition	There is an open circuit across the thermistor terminals or the measured temperature is below -33 degrees F (above 310 Mohms)
Control Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Customer Action	1) Inspect Thermistor connections and harness for damage. 2) Test Thermistor resistance (10K OHMs at room temperature)

NO HEAT RISE

Condition	This error occurs when the control detects that the temperature is not increasing.
Control Action	When detected there is a delay of 15 minutes before the error is active. Once active, the control will display the "NO HEAT RISE" prompt, alternating with the normal Cycle Progress screen at a rate of 5 seconds on, 5 seconds off. The heating relay will also be turned off. Otherwise the cycle will continue normally.
Exit	The Error Code will continue to be displayed until the in-progress cycle is stopped and the control is returned to Idle Mode. It will then reset automatically.
Customer Action	1) Reset overtemperature Thermostat. 2) Inspect lint screen, makes sure it is clean. 3) test airflow switch. 4) Test for voltage at Ignition module, if has voltage but no spark replace module. 5) Check to see if Ignition circuit has gone to lockout due to improper flame sense.

HEAT RISE OUT OF RANGE

Condition	This error occurs when the control detects that the operating temperature is greater than 220 degrees F (or 104 degrees C).
Control Action	When detected, the control will display the "HEAT RISE OUT OF RANGE" prompt, alternating with the normal Cycle Progress screen at a rate of 5 seconds on, 5 seconds off. The heating relay will also be turned off. Otherwise the cycle will continue normally. There is no delay in the action once the criteria are met.
Exit	The Error Code will continue to be displayed until the in-progress cycle is stopped and the control is returned to Idle Mode. It will then reset automatically.
Customer Action	1) Check thermistor under tumbler. 2) OHM test Thirmister (10K OHMS at room temperature) 3) test gas valve operation.

NO PROX SENSOR OUTPUT

Condition	This error occurs when the machine control does not detect output from the proximity sensor(s) when the cylinder has been commanded to turn.
Control Action	When detected, there is a short delay before the error is active. When active, the control turns off the motor and the heating relay.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Update firmware to latest version. This firmware can be found at DexterLive.com

PROX SENSOR OUT OF RANGE

Condition	This error occurs when the machine control sees output from the proximity sensor(s) that does not fall in the acceptable range for the particular washer or dryer model running at normal speeds. It also occurs when the machine control sees output from the proximity sensor that implies the tumbler is still turning when the control has commanded it to Stop.
Control Action	When detected, there is a short delay before the error is active. When active, the control turns off the motor and the heating relay.
Exit	The machine will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Update firmware to latest version. This firmware can be found at DexterLive.com

OVER TEMPERATURE DETECTED

Condition	This error occurs when an overheat condition has been detected at the OHP sensor
Control Action	When detected there is a calculated delay before the error is active. Once active, the control turns off the heating relays, the control buzzer is turned on, and the alarm relay closes. After 5 seconds, tumbler rotation may occur. If the dryer is equipped with a Fire Suppression system, water may be injected into the dryer cylinder.
Exit	The Error Code will continue to be displayed until the condition is no longer present and the mechanical Reset button is pressed on the Main Control board.
Customer Action	Check Thermistor connections. Test resistance of thermistor (10K ohms).

OVERHEAT SENSOR SHORT

Condition	This error occurs when the control detects a short circuit from the overheat temperature sensor.
Control Action	When detected, the control turns off the motor and the heating relay. There is no delay in the action once the criteria are met.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present. Once the condition is removed, the machine still will not start and the Error Code will continue to be displayed until the prompt is followed to Reset the Error and return the machine to Idle Mode.
Customer Action	1) Inspect Thermistor connections and harness for damage. 2) Test Thermistor resistance (10K OHMs at room temperature)

AUTODRY COMMUNICATION 1

Condition	AutoDry Communication 1 is caused by a faulty CAN bus communication.
Control Action	When detected, there is a delay of 30 seconds before the error is active. When active, the control will display the "AUTODRY COMMUNICATION 1" prompt and the current drying stage will end. AutoDry Communication Error 1 will alternate on the display for 5 seconds on, then 5 seconds off continuously until the end of the drying cycle which continues as normal. The error occurs within 5 seconds of a CAN communication malfunction. Eventually, if CAN communications are missing for 5 minutes, AutoDry communication Error 2 will be displayed.
Exit	The Error Code will continue to be displayed until the cycle is stopped and the control is returned to Idle mode. See our Auto Dry Adjustment procedure.
Customer Action	1) update firmware. 2) Inspect Auto dry harness between control board and stationary board for damage. 3)Inspect and reset gap between stationary and rotating boards to 3/16" and resynchronize through the control. See Service procedures. 4) Test Can circuit Display board, control board, Auto dry stationary board. See Service procedures. See our CAN Circuit testing procedure. See our Auto Dry Adjustment procedure.

AUTODRY COMMUNICATION 2

Condition	AutoDry Communication Error 2 is caused when there is a fault in the wireless communication between the RMC stationary and rotating board.
Control Action	When the RMC stationary board tries to send/receive communication to/from the rotating board and fails, it will reboot. After 5 minutes of failed attempts of communicating, AutoDry Communication Error 2 is displayed. If the CAN bus is not functioning to allow communication between the RMC stationary board and the control board, then AutoDry Communication Error 2 will appear after AutoDry Communication Error 1 has been displayed.
Exit	The Error Code will continue to be displayed until the cycle is stopped and the control is returned to Idle mode.
Customer Action	1) Inspect Auto dry harness between control board and stationary board for damage. 2)Inspect and reset gap between stationary and rotating boards to 3/16" and resynchronize through the control. See Service procedures. See our CAN Circuit testing procedure. See our Auto Dry Adjustment procedure.

AUTODRY COMMUNICATION 3

Condition	AutoDry Communication Error 3 is caused by 5 minutes of faulty data being transmitted between the RMC stationary and rotating boards.
Control Action	When detected, there is a delay of 30 seconds before the error is active. When active, the control will display the "AUTODRY COMMUNICATION 3" prompt and the current drying stage will end. The next stage will begin and the error will continue to be displayed alternating with the Cycle Progress screen during the remainder of the stage.
Exit	The Error Code will continue to be displayed until the cycle is stopped and the control is returned to Idle mode.
Customer Action	Inspect and reset gap between stationary and rotating boards to 3/16" and resynchronize through the control. See Service procedures. See our CAN Circuit testing procedure. See our Auto Dry Adjustment procedure.

Control Board Error 11	
Condition	Model jumper not Selected or detected. Relay Board or control board.
Control Action	Error will display and cycle will stop.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Inspect Model Jumper on Relay board (P3) make sure connected and present. Inspect I2C harness between control (Relay Exp.)and relay board (P1). Inspect for 12VO_SW LED make sure iluminated. If not test 12Vdc power supply, (must be 11.4 or above). Inspect harnesses if pinched of damaged (loading door and lint switch). See our CAN Circuit testing procedure.
Control Board Error 66	
Condition	Model jumper not Selected or detected. Relay Board or control board.
Control Action	Error will display and cycle will stop.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Inspect Model Jumper on Relay board (P3) make sure connected and present. Inspect I2C harness between control (Relay Exp.)and relay board (P1). Inspect for 12VO_SW LED make sure iluminated. If not test 12Vdc power supply, (must be 11.4 or above). Inspect harnesses if pinched of damaged (loading door and lint switch). See our CAN Circuit testing procedure.
Control Board Error 68	
Condition	Model jumper not Selected or detected. Relay Board or control board.
Control Action	Error will display and cycle will stop.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Inspect Model Jumper on Relay board (P3) make sure connected and present. Inspect I2C harness between control (Relay Exp.)and relay board (P1). Inspect for 12VO_SW LED make sure iluminated. If not test 12Vdc power supply, (must be 11.4 or above). Inspect harnesses if pinched of damaged (loading door and lint switch). See our CAN Circuit testing procedure.

Control Board Error 82

Condition	Model jumper not Selected or detected. Relay Board or control board.
Control Action	Error will display and cycle will stop.
Exit	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the prompt is followed to Reset the Error Code and return the Machine to Idle Mode.
Customer Action	Inspect Model Jumper on Relay board (P3) make sure connected and present. Inspect I2C harness between control (Relay Exp.)and relay board (P1). Inspect for 12VO_SW LED make sure iluminated. If not test 12Vdc power supply, (must be 11.4 or above). Inspect harnesses if pinched of damaged (loading door and lint switch). See our CAN Circuit testing procedure.