

## TROUBLESHOOTING MACHINE FAULT ERRORS

*\*Displayed on front of washer.*

The following pages are a description of fault codes that will appear on the front of the washer. There is a chart format that shows what fault code that will be displayed at washer front. These codes displayed may stop machine operation or may not stop machine Please check chart before removing power to reset. PLEASE NOTE: CHECK DRIVE FAULT CODE BEFORE POWERING MACHINE DOWN!

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>TEMP SENSOR SHORT</b>	Short circuit from the temperature sensor	Condition	This error occurs when the control detects a short circuit from the temperature sensor.
		Delay	When Conditions are met.
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria are met. The prompt "TEMPERATURE SENSOR SHORT" is displayed. This error must be disabled for non-heated washers
		Solution	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.
<b>TEMP SENSOR OPEN</b>	Open circuit from the temperature sensor	Condition	This error occurs when the control detects an open circuit from the temperature sensor.
		Delay	When Conditions are met.
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria are met. The prompt "TEMPERATURE SENSOR OPEN" is displayed. This error must be disabled for non-heated washers
		Solution	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.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>NO HEAT RISE</b>	Temperature does not rise after 5 minutes	Condition	This error occurs when the control detects that the temperature does not rise after 5 minutes of normal cycle operation (with the heating relay closed).
		Delay	When Conditions are met.
		Action	When detected, 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 washer cycle time will begin decrementing when the error mode is active. There is no delay in the action once the criteria are met. This error must be disabled for non-heated washers
		Solution	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.
<b>HEAT RISE OUT OF RANGE</b>	Control detects that the temperature is greater than 220 degrees F (or 104 degrees C).	Condition	This error occurs when the control detects that the temperature is greater than 220 degrees F (or 104 degrees C).
		Delay	When Conditions are met.
		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 relays will also be turned off. Otherwise the washer cycle will continue normally. There is no delay in the action once the criteria are met. This error must be disabled for non-heated washers
		Solution	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.
<b>NO PROX SENSOR OUTPUT</b>	Machine control does not detect output from the proximity sensor	Condition	This error occurs when the machine control does not detect output from the proximity sensor in normal running conditions when the VFD output frequency is greater than zero.
		Delay	When Conditions are met.
		Action	When detected, there is a 2 second delay before the error is active. When active, the control turns off the motor and the heating relays and the cycle time will be lost. The prompt "NO PROX SENSOR OUTPUT" is displayed.
		Solution	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.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>PROX SENSOR OUT OF RANGE</b>	Output from the proximity sensor(s) that does not fall in the acceptable 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. It also occurs when the machine control seems output from the proximity sensor that implies the cylinder is still turning when the control has commanded it to Stop.
		Delay	When Conditions are met.
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria are met. The prompt "PROX SENSOR OUT OF RANGE" is displayed.
		Solution	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.
<b>NO ACCEL OUTPUT</b>	Machine control does not detect output from the accelerometer	Condition	This error occurs when the machine control does not detect output from the accelerometer out-of-balance system when the VFD is in operation.
		Delay	When Conditions are met.
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "NO ACCEL OUTPUT" is displayed.
		Solution	The Error Code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>ACCEL OUT OF RANGE</b>	Control sees output from the accelerometer out-of-balance system	Condition	This error occurs when the machine control sees output from the accelerometer out-of-balance system when the VFD is in operation.
		Delay	When Conditions are met.
		Action	When detected, the r control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "ACCEL OUT OF RANGE" is displayed.
		Solution	The Error Code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>ACCEL A/D ERROR</b>	Constant Analog-to-Digital conversion or does not detect	Condition	This error occurs when the control detects a constant Analog-to-Digital conversion or does not detect an Analog-to-Digital conversion for the accelerometer out-of-balance system.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "ACCEL A/D ERROR" is displayed.
		Solution	The Error Code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>DOOR SHUT, NOT LOCKED</b>	This error when the Door Locked signal is not received	Condition	This error when the Door Locked signal is not received within one second after the start of the cycle.
		Delay	When Conditions are met
		Action	When detected, control turns off the motor, relays, all outputs and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "DOOR SHUT, NOT LOCKED" is displayed.
		Solution	The washer will not start while the error code is displayed. The error code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>SLOW FILL ERROR</b>	Water level is not reached within 10 minutes	Condition	This error is when the set water level is not reached within 10 minutes.
		Delay	When Conditions are met
		Action	When detected, the prompt "SLOW FILL ERROR" is displayed, but the washing cycle continues as normal. There is no delay in the action once the criteria is met. This error must be optionally disabled for viewing on the display by store operators.
		Solution	The error code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>SLOW DRAIN ERROR</b>	Empty water level is not reached within 7 minutes.	Condition	This error is when an empty water level is not reached within 7 minutes.
		Delay	When Conditions are met
		Action	When detected, the prompt "SLOW DRAIN ERROR" is displayed. The washing cycle continues, but the spin portion of the cycle will not occur. It is replaced by continued tumble until the cycle time is expired. There is no delay in the action once the criteria is met. This error must be optionally disabled for viewing on the display by store operators.
		Solution	The error code will continue to be displayed until the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>MODEL JUMPER MISSING</b>	No connection to Ground (Pin 7) on the Model Jumper Header.	Condition	This error occurs when there is no connection to Ground (Pin 7) on the Model Jumper Header.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "MODEL JUMPER MISSING" is displayed. The machine control checks for this condition when power is cycled, before starting every machine cycle and once every 24 hours.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>MODEL JUMPER/DRIVE SIZE ERROR</b>	VFD size code does not match the model jumper being used	Condition	This error occurs when the VFD size code does not match the model jumper being used.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "MODEL JUMPER/DRIVE SIZE ERROR" is displayed. The machine control checks for this condition when power is cycled, before starting every machine cycle and once every 24 hours.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>MODEL JUMPER/DRIVE PARAMETER ERROR</b>	VFD parameter file does not match the model jumper	Condition	This error occurs when the VFD parameter file does not match the model jumper being used.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "MODEL JUMPER/DRIVE SIZE ERROR" is displayed. The machine control checks for this condition when power is cycled, before starting every machine cycle and once every 24 hours.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>NON-DEXTER DRIVE</b>	Non-Dexter drive has been installed	Condition	This error occurs when a non-Dexter drive has been installed in the machine. All normal parameters are correct, but the drive does not contain hidden parameters that identify it as a Dexter drive.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "NON-DEXTER DRIVE" is displayed. The machine control checks for this condition when power is cycled, before starting every machine cycle and once every 24 hours.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition no longer exists and the programming button is pressed to return the machine to idle mode, or the Stop button is pressed for 5 seconds.
<b>SPIN TIME ERROR</b>	VFD continues to see a spin frequency 150 seconds after a command has been issues.	Condition	This error occurs when the VFD continues to see a spin frequency 150 seconds after a command has been issues to stop spinning.
		Delay	When Conditions are met
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "SPIN TIME ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>DRIVE RESETTING</b>	Control is attempting to re-establish communication with the VFD	Condition	This is a general intermediate condition where the control is attempting to re-establish communication with the VFD after a VFD error condition has occurred. It is a preliminary condition to other described control Error Codes.
		Delay	When Conditions are met
		Action	When a VFD error condition has occurred, the machine control continues normal cycle operation, but attempts to re-establish communication with the VFD. For a dryer control, there are 4 attempts with 10 seconds delay in between (40 seconds of total time). The prompt "DRIVE RESETTING" is displayed during this time.
		Solution	If the VFD error condition no longer exists, then the machine control will successfully re-establish communication and will no longer display the "DRIVE RESETTING" prompt. If, after the 40 second period, the VFD error still exists, the machine control will now display the specific error condition and the action will occur depending on the error condition (See further description of error conditions).
<b>DRIVE OVERCURRENT ERROR</b>	VFD has experienced an over current condition	Condition	This error occurs when the machine control receives a message that the VFD has experienced an over current condition. This message is read in the 2100Hex address as code 1, 9, 10, 11, 20 or 23.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE OVERCURRENT ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>DRIVE OVERVOLTAGE ERROR</b>	VFD has experienced an over voltage condition	Condition	This error occurs when the machine control receives a message that the VFD has experienced an over voltage condition. This message is read in the 2100Hex address as code 2.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE OVERVOLTAGE ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>DRIVE OVERHEAT ERROR</b>	VFD has experienced an over heat condition	Condition	This error occurs when the machine control receives a message that the VFD has experienced an over heat condition. This message is read in the 2100Hex address as code 3 or 28.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE OVERHEAT ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>DRIVE OVERLOAD ERROR</b>	VFD has experienced an overload condition	Condition	This error occurs when the machine control receives a message that the VFD has experienced an overload condition. This message is read in the 2100Hex address as code 5, 6 or 7.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE OVERLOAD ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>DRIVE GROUND FAULT ERROR"</b>	VFD has experienced a ground fault interruption	Condition	This error occurs when the machine control receives a message that the VFD has experienced a ground fault interruption. This message is read in the 2100Hex address as code 12 or 22.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE GROUND FAULT ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.



FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>DRIVE LOW VOLTAGE ERROR</b>	VFD has experienced a low voltage condition	Condition	This error occurs when the machine control receives a message that the VFD has experienced a low voltage condition. This message is read in the 2100Hex address as code 13.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE LOW VOLTAGE ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>DRIVE INTERNAL ERROR</b>	VFD has experienced an internal error.	Condition	This error occurs when the machine control receives a message that the VFD has experienced an internal error. This message is read in the 2100Hex address as code 18, 19, 30 or 31.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE INTERNAL ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>DRIVE EXCEPTION ERROR</b>	VFD logs the Drive Exception Code 1, 2, 3, 4 or 10	Condition	This error occurs when the VFD logs the Drive Exception Code 1, 2, 3, 4 or 10. See Variable Frequency Drive Operation section for more detail on the Exception Codes.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE EXCEPTION ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>DRIVE COMMUNICATION ERROR</b>	Control cannot communicate with the VFD.	Condition	This error occurs when the machine control cannot communicate with the VFD.
		Delay	When Conditions are met
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE COMMUNICATION MISSING" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.

FAULT	DESCRIPTION	CUSTOMER ACTION	
<b>DRIVE ENABLE ERROR</b>	VFD enable circuit is not closed when the VFD is commanded to operate	Condition	This error occurs when the machine control receives a message that the VFD enable circuit is not closed when the VFD is commanded to operate.
		Delay	None.
		Action	There is a delay for the machine control to attempt to re-establish communication with the VFD. During this delay, the prompt "DRIVE RESETTING" will be displayed. When the re-setting attempts have failed, the dryer control turns off the motor and the heating relays and the cycle time will be lost. The prompt "DRIVE ENABLE ERROR" is displayed.
		Solution	The machine will not start and the Error Code will continue to be displayed until the condition is no longer present and power is cycled to the control. The machine will reset to idle mode.
<b>OUT OF SERVICE</b>	Out of service	Condition	This prompt occurs when the store owner has designated that the machine control should be made inoperable.
		Delay	None.
		Action	When detected, the control turns off the motor and the heating relays and the cycle time will be lost. There is no delay in the action once the criteria is met. The prompt "OUT OF SERVICE" is displayed. See the section on Out of Service mode for more details.
		Solution	The machine will not start and the Error Code will continue to be displayed until the store owner changes the Out of Service state via manual programming or Ethernet communication.

**\*NOTE:** Resistance values are measured at the stator. Values at the end of the motor wiring harness may be slightly higher.

**VENDED DRIVE MOTOR INVERTER TYPE MOTOR-WINDING RESISTANCE CHART**

<b>20 LB O-SERIES EXPRESS WASHER (208-240 ONLY)</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-350 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	3.71	4.09
Dexter #9376-307-001		T2 & T3	3.71	4.09
Marathon		T1 & T3	3.71	4.09

<b>30 LB O-SERIES EXPRESS WASHER</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-450 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	2.45	2.71
Dexter #9376-305-001		T2 & T3	2.45	2.71
		T1 & T3	2.45	2.71

<b>40 LB O-SERIES EXPRESS WASHER</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-650 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	2.25	2.61
Dexter #9376-319-001		T2 & T3	2.25	2.61
		T1 & T3	2.25	2.61

<b>T-750 C-SERIES EXPRESS WASHER</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-750 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	.944	1.097
Dexter #9376-329-001		T2 & T3	.944	1.097
Marathon #		T1 & T3	.944	1.097

<b>T-950 C-SERIES EXPRESS WASHER</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-950 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	.944	1.097
Dexter #9376-329-001		T2 & T3	.944	1.097
Marathon #		T1 & T3	.944	1.097

<b>T-1450 C-SERIES EXPRESS WASHER</b>				
			RESISTANCE	
MOTOR	WINDING	WIRE #	MINIMUM	MAXIMUM
T-1450 1ph or 3 ph 60hzMain (wash & spin)		T1 & T2	.435	.505
Dexter #9376-326-001		T2 & T3	.435	.505
Marathon #		T1 & T3	.435	.505