

Digital Control Error Codes

PaceMaster Models Bronze, Silver, Gold, Platinum, and Platinum ProClub

PaceMaster treadmills have built in diagnostics that test various parts of the electronic system every time the treadmill is powered up and also during operation. When the computer detects a problem, the treadmill automatically shuts down and an error code is displayed on the control panel. The following section will show how the error code appears on the treadmill followed by a brief description of the error code and then the numbered steps to take to correct the problem. It is important that you follow the steps in the order that they are listed to properly determine and correct the problem.

Before replacing any parts on the treadmill, make sure the treadmill is properly installed as per the owner's manual under "Installation Requirements". PaceMaster Treadmills require a dedicated non-switched grounded outlet (outlet cannot be controlled by a light switch or dimmer switch) that is not part of a GFI (Ground Fault Interrupt) circuit. If an extension cord is needed, it must be a heavy duty 14 gauge cord, grounded and no longer than 12 feet in length. These requirements are to make sure the treadmill is receiving optimum current and will not be subject to "ac electrical line noise" (created by other appliances) that can interfere with the communication between the control panel and the power supply which can potentially cause an error code to appear. Check all wiring for proper connections and damage.

Example: The error message will appear as:

Err 149 – Indicates a stuck button on the control panel membrane.

"Err" will appear in the Timer Window, "149" will appear in the Results Window

1. Steps to follow to determine the problem
2.

Recommended Parts: These are the parts that the service technician should have on hand when servicing this treadmill to Qualify for Labor reimbursement, if applicable.

Error Codes reported by control panel circuit board

Err 101 – "Unexpected event" detected by the processor.

1. Make sure treadmill is properly grounded – could be static issue
2. Remove plug from wall outlet, wait 10 seconds, plug treadmill back into wall outlet.
3. Power up treadmill, if error reoccurs, replace upper control panel circuit board.

Recommended Parts: Upper Circuit Board

Err 117 – Indicates a high strobe rate.

1. Check to see if user was pushing belt while the magnetic key was in the panel.
2. Check all wiring for proper connections and damage.
3. Replace the Upper Circuit Board.

Recommended Parts: Upper Circuit Board

Err 118 – Indicates high strobe acceleration.

1. Check all wiring for proper connections and damage.
2. Replace the lower power supply board.
3. Replace the Upper Circuit Board.

Recommended Parts: lower power supply board, Upper Circuit Board

Err 119 – Indicates strobe signal failure.

1. Check all wiring for proper connections and damage
2. Replace the optical sensor
3. Replace the wiring harness
4. Replace the lower power supply board
5. Replace the upper control panel circuit board

Recommended Parts: optical sensor, wiring harness, lower power supply board

Err 133 – Indicates control panel did not receive a response from the power supply.

1. Remove the plug from the wall outlet. Disconnect the wire harness from the power supply. Reconnect the wire harness making sure it goes in straight and you hear a click.
2. Check all wiring for proper connections and damage
3. Replace the lower power supply board
4. Replace the wire harness
5. Replace the upper control panel circuit board

Recommended Parts: lower power supply board, wire harness

Err 134 – Indicates a communication failure between the power supply and control panel.

1. Remove the plug from the wall outlet. Disconnect the wire harness from the power supply. Reconnect the wire harness making sure it goes in straight and you hear a click.
2. Check all wiring for proper connections and damage
3. Replace the lower power supply board
4. Replace the wire harness
5. Replace the upper control panel circuit board

Recommended Parts: lower power supply board, wire harness

Err 136 – Indicate incorrect speed or incline target reported by power supply.

1. It is important to know what was happening at the time the error code appeared (i.e. was changing speed, changing incline, adjusting level, etc....).
2. Check all wiring for proper connections and damage.
3. Replace the lower power supply board with EMI Filter.
4. Replace the upper control panel circuit board.
5. Replace the Drive Motor.

Recommended Parts: lower power supply board, upper control panel circuit board..

Err 149 – Indicates a depressed key on the control panel membrane during power up.

1. Make sure user is not pressing any buttons on the control panel during power up
2. Check to make sure any accessory (book rack etc.) is not making contact with membrane
3. Replace the control panel membrane.

Recommended Parts: membrane

Err 151 – Indicates controller was not able to start the belt within 8 seconds after the start button was pressed.

1. Check all wiring for proper connections and damage
1. Replace the lower power supply board

Recommended Parts: lower power supply board

Err 152 – Indicates the belt was still moving 60 seconds after controller sent stop command.

1. Check all wiring for proper connections and damage
2. Check to make sure user is not pushing belt with feet (could occur at higher elevation)
3. Replace the lower power supply board

Recommended Parts: lower power supply board, wire harness

Err 153 – Indicates upper control panel circuit board problem writing to memory (flash).

1. Check all wiring for proper connections and damage
2. Replace the upper control panel circuit board

Recommended Parts: upper circuit board

Err 165 – Indicates problem while upgrading software.

1. Replace the upper control panel circuit board

Recommended Parts: upper circuit board

Err 166 – Indicates problem while upgrading software.

1. Replace the upper control panel circuit board

Recommended Parts: upper circuit board

Err 167 – Indicates problem while upgrading software.

1. Replace the upper control panel circuit board

Recommended Parts: upper circuit board

Error codes reported by power supply

Err 265 – Indicates communication problem with control panel circuit board.

1. Check all wiring for proper connections and damage
2. Replace the wire harness
3. Replace the upper control panel circuit board

Recommended Parts: upper circuit board

Err 425 – Indicates voltage across power FET low.

1. Remove plug from wall outlet, wait 10 seconds then plug treadmill back into wall outlet.
2. Check all wiring for proper connections and damage.
3. Check drive motor wire connections to power supply.
4. Check the drive motor for open and shorts to ground.
5. Check the drive circuit ceramic Fuse on the lower power supply board.
6. Replace the lower power supply circuit board
7. Replace the drive motor

Recommended Parts: Ceramic Fuse, lower power supply board, Drive Motor

Err 426 – Indicates motor voltage remained high while power relay was turned off.

1. Remove plug from wall outlet, wait 10 seconds then plug treadmill back into wall outlet
2. Check all wiring for proper connections and damage
4. Replace the lower power supply circuit board

Recommended Parts: lower power supply board

Err 427 – Indicates power supply failure.

1. Remove plug from wall outlet, wait 10 seconds then plug treadmill back into wall outlet
1. Check all wiring for proper connections and damage
2. Replace the lower power supply circuit board

Recommended Parts: lower power supply board

Err 297 - Indicates speed is at least 1.0 mph above target speed.

1. Make sure user is not pushing the belt faster than the drive motor is turning the belt
2. Check all wiring for proper connections and damage
3. Replace the lower power supply circuit board

Recommended Parts: lower power supply board

Err 298 – Indicates no strobe signal. (NOTE) Restart the treadmill. The belt will start to turn and run for approximately 10 seconds then shut down and display an error code 307.

1. Check optical sensor wire connection to power supply
2. Check the strobe disc holes for dust build up
3. The optical sensor is attached to a metal mounting bracket. Make sure the mounting bracket is bent at a 90 degree angle. If the mounting bracket is bent up or down, the optical sensor will not be in the proper position to read the strobe disc. Remove the optical sensor from the mounting bracket. Remove the mounting bracket from the drive

motor. Bend the mounting bracket to a 90 degree angle. Install the mounting bracket back on the drive motor. Install the optical sensor back onto the mounting bracket making sure the sensor is correctly positioned over the strobe disc.

4. Replace the optical sensor
 5. Replace the lower power supply circuit board
- Recommended Parts:** Optical Sensor, lower power supply board

Err 299 – Indicates erratic strobe signal problem.

1. Check optical sensor wire connection to power supply
2. Check the strobe disc holes for dust build up
3. Replace the optical sensor
4. Replace the lower power supply circuit board

Recommended Parts: Optical Sensor, lower power supply board

Err 300 – Indicates low voltage.

1. Check to make sure treadmill is plugged into a dedicated circuit
2. If an extension cord is needed, it must be a heavy duty 14 gauge wire, grounded and no longer than 12 feet in length
3. Check all wiring for proper connections and damage
4. Replace the lower power supply circuit board

Recommended Parts: Lower power supply board

Err 301 – Indicates belt motion detected before voltage was sent to the drive motor.

1. Make sure user did not “push” the belt during start up
2. Check all wiring for proper connections and damage
3. Replace the lower power supply circuit board

Recommended Parts: Lower power supply board

Err 302 – Indicates belt motion detected when FET was driven with voltage disabled.

1. Make sure user did not “push” the belt during start up
2. Check all wiring for proper connections and damage
3. Replace the lower power supply circuit board
4. Replace the drive motor (very rare)

Recommended Parts: lower power supply board, Drive Motor

Err 303 – Indicates belt failed to slow to a stop within 60 seconds.

1. Check all wiring for proper connections and damage
2. Replace the lower power supply circuit board

Recommended Parts: Lower power supply board

Err 304 – Indicates problem in start up sequence.

1. Remove the plug from the wall outlet
2. Visually inspect the wire harness for damage, confirm that it has not been rubbing against the flywheel (this can happen if assembly instructions were not followed).
3. Disconnect the wiring harness from the lower power supply board and then reconnect making sure the jack goes in straight and you hear it “click”
4. Plug treadmill back into wall outlet and retest.
5. Replace the lower power supply circuit board
6. Replace the wiring harness
7. Replace the Upper Circuit Board.

Recommended Parts: lower power supply board, wire harness, Upper Circuit Board

Err 305 – Indicates power supply shut off voltage to the drive motor while the belt was running.

1. Remove the plug from the wall outlet.
2. Visually inspect the wire harness for damage, confirm that it has not been rubbing against the flywheel (this can happen if assembly instructions were not followed).
3. Disconnect the wiring harness from the lower power supply board and then reconnect making sure the jack goes in straight and you hear it "click"
4. Plug the treadmill into the wall outlet
5. Replace the lower power supply circuit board
6. Replace the wiring harness
7. Replace the Upper Circuit Board.

Recommended Parts: lower power supply board, wire harness, Upper Circuit Board

Err 306 – Indicates power supply problem at start up.

1. Check all wiring for proper connections and damage
2. Replace the lower power supply board.
3. Replace the drive motor.

Recommended Parts: lower power supply board, wire harness

Err 307 – Indicates belt movement but no speed sensor signal was received by control panel.

1. Check to make sure user was not "holding up" the belt during startup.
2. Check the optical sensor wire connection. Replace optical sensor.
3. Replace the lower power supply board.

Recommended Parts: Optical Sensor, lower power supply board

Elevation Errors – For this category of failures, elevation control will be disabled but the belt speed control will continue to function. All three elevation error codes listed below

“Err” in the Incline Display - indicates a problem with the elevation system. Note: The treadmill will still function with the “Err” displayed in the incline Display, but the elevation system will not function. To determine the exact error code, follow the procedure below.

Insert the magnetic key, **For the purpose of this test, DO NOT stand on the tread belt**

If “Err” appears in the incline display after pressing the Start/Quick, Stop/Reset, or Pause/Enter button, the control panel is not receiving an elevation reading. Start the treadmill, press the Up or Down Incline button; an “E 2xx” will appear in the right-hand upper display follow the corresponding instructions below.

Err 217 – Indicates no incline change detected while adjusting incline position.

1. Check all wiring for proper connections and damage (including wire harness).
2. Check elevation fuse.
3. Check for voltage to elevation motor (110 VAC)
4. Replace the elevation motor.
5. Replace the lower power supply board.

Recommended Parts: Elevation Motor, lower power supply board

Err 218 – Indicates incline did not reach target within time limit.

1. Check all wiring for proper connections and damage.
2. In test mode, check for potentiometer reading changing when up/down buttons pressed. If elevation motor is moving, pot on elevation motor bad – replace elevation motor
3. Replace the elevation motor.
4. Replace the wiring harness.
5. Replace the lower power supply circuit board.

Recommended Parts: Elevation Motor, lower power supply board

Err 219 – Indicates incline reading invalid.

1. Check all wiring for proper connections and damage.
2. In test mode, check for potentiometer reading changing when up/down buttons pressed.
3. Replace the elevation motor.
4. Replace the wiring harness.
5. Replace the lower power supply circuit board.

Recommended Parts: Elevation Motor, lower power supply board