

Possible Cause	Action
Configuration plate connection faulty	Check configuration plate connections; reattach or crimp as required. If problem persists, replace configuration plate.
Treadmill stops during run; Stop Belt has not been pressed. No error message appears	Look for loose ground wires. Reconnect and secure if loose.
LCD screen test failure	Replace LCD (p/n 35259-002), repeat test. If test fails again, replace PCBA.
HR ClubTrack Plus LCD does not come on	If the LEDs are on and the treadmill is functioning normally, check the LCD connector. If problem persists, replace the controller PCBA.
External RS232 port failure	Perform loop-back test. If test fails, replace PCBA.
* VSD (variable speed drive): circuit board assembly that controls the motor	

Electronic Problems

Error Codes

The treadmill performs an electronic self-test each time that it is powered up. If a problem is detected during either power-up or operation, an error code appears on the display. Note the code recorded by the owner, then reference the table of error codes.

If you replace a faulty PCB Assembly, return it to the factory and note the error code.

Code	Indication	Recommended Action
E001	Variable speed drive (VSD) microprocessor chip failure	Replace VSD
E002	VSD microprocessor EPROM/SRAM failure	Replace VSD
E004	VSD A/D failure	Replace VSD
E101	Controller PCBA microprocessor failure	Replace controller
E102	Controller PCBA EPROM failure	Replace controller
E103	Controller PCBA interrupt failure	Replace controller
E104	Communication Packet Checksum Fault	Clear the error by pressing Clear or Power . Attempt to operate the treadmill again. If error persists, replace VSD.

Code	Indication	Recommended Action
E105	Controller PCBA NVRAM failure	Re-initialize NVRAM: 1. Press Stop, Faster, and Slower to enter Service Mode 2. Press Stop and Cool Down to reinitialize (For HR ClubTrack Plus, press the <i>NV PROGRAM LOAD TEST</i> key and proceed to step 4) 3. Press Clear 4. Reconfigure controller (HR Plus, adjust the contrast after reconfiguring) If error E105 persists, replace controller
E107	External UART Error	Replace the controller. Treadmill may be operated without CSAFE capability in the interim.
E201	Grade Over Limit fault	1. Use Up or Down arrows to bring grade into range 2. If error persists, replace grade actuator or VSD. Note: belt and display may continue to be used during fault conditions by pressing Clear
E202	Speed error. A software check of redundant speed variables has indicated a disagreement and the microprocessor will shut down the treadmill.	Clear the error by pressing Clear or Power. Attempt to operate the treadmill again. If error persists, replace the VSD board.
E203	High Motor Overload caused by one of the following: 1. Runner heavier than weight/speed envelope in conjunction with significant deck wear 2. Motor lead disconnected or loose 3. Electrical failure on the drive electronics 4. Motor blocked by obstruction	1. Restrict use to people within the weight/speed specifications and check deck wear; replace if necessary 2. Check the motor leads to ensure all leads are connected. One loose or disconnected lead will cause the overload 3. Replace VSD 4. Remove the obstruction
E204	VSD and controller not communicating	Verify cable connections at both ends. Check for bent or broken pins; replace if required. If error persists, replace VSD or controller as necessary.

Code	Indication	Recommended Action
E205	Software tachometer fault	Clear the error by pressing Clear or Power . Attempt to operate the treadmill again. If error persists, replace VSD board.
E206	Controller or VSD performs inadvertent reset	Verify wire grounding system is intact.
E207	Moderate Drive Overcurrent 1. Runner heavier than weight/speed envelope 2. Deck wear	1. Restrict use to people within the weight/speed specifications 2. Check deck wear/replace if necessary
E208	Drive Under Current	Replace VSD
E209	Motor Drive Switch Failure	Replace VSD
E210	Motor Current Sense Fault	Replace VSD
E211	Grade Position Detection Fault	Clear the error by pressing Clear or Power . Attempt to operate the treadmill again. If error persists, replace VSD or grade motor. Belt and display may continue to be used during fault conditions by pressing Clear .
E212	Configuration Fault	1. Enter Service Mode 2. Change Configuration Code as appropriate. See "Configuring the Controller" on page -23. 3. Press Enter 4. If error persists, replace configuration assembly
E213	Circuit breaker tripped or power lost while belt was moving	For Device History Information only.
EPHI	VSD ABS voltage is too high. Line voltage is too high. VSD board failure	Refer to EPHI error code flow chart elsewhere in this chapter.
EPLO	VSD ABS voltage is too low. Line voltage is too low. Transformer connection is bad. Transformer failure. VSD board failure	Refer to EPLO error code flow chart elsewhere in this chapter.

Service Mode

The treadmill provides a service mode for troubleshooting the electronics. To enter the service mode, press **Stop Belt**, **Faster**, and **Slower** simultaneously. P000 appears in the **Select** display, indicating that no key is pressed. In the ClubTrack Plus, the display shows the state.