

Error Code and Status LED Summary T9.14, T9.16, and TC9.16 products

LED Operation & What this means

Note about use of Status LEDs: A single LED does not show the complete picture of an error condition. Review the status of all LEDs prior to deciding which assemblies to replace.

	First Action	Second Action	Third Action	Fourth Action
PS1 Processor PCBA				
DS1 Flashing @ 1 Second Rate	Normal Condition.			
DS1 Flashing @ Irregular Rate	PS1 Processor Nonoperational.	PCBA	Power off/on breadmill, see if problem self-clears. Check for unplugged or damaged cables. Communication cable from J10 on PS1 Processor PCBA is cable most likely to cause problem.	Replace PS1 Processor PCBA.
DS1 Off	Processor is non operational. No power or PS1 Processor PCBA has failed.		Power off/on breadmill, see if problem self-clears. Check for unplugged or damaged cables. Communication cable from J10 on PS1 Processor PCBA is cable most likely to cause problem.	Check LEDs on VSD to see if VSD has power. Replace PS1 Processor PCBA.
DS1 On Continuous	PS1 Processor PCBA Nonoperational.	Replace PS1 Processor PCBA.		
VSD PCBA				
DS1 Flashing @ Any Rate	VSD PCBA is Nonoperational.		Power off/on breadmill, see if problem self-clears. Check for unplugged or damaged cables. Communication cable from J10 on PS1 Processor PCBA is cable most likely to cause problem.	Replace VSD PCBA.
DS1 Off	Highspeed motor is Off.			
DS1 On Continuous	Highspeed motor is On.			
DS2 Flashing @ 1 Second Rate	Normal Condition.			
DS2 Flashing @ Irregular Rate	Processor in Reset is attempting to reestablish communication.	Power off/on breadmill, see if problem self-clears. Check for unplugged or damaged cables. Communication cable from J10 on PS1 Processor PCBA is cable most likely to cause problem.	Replace VSD PCBA.	Replace Configuration Plate.

DS2 Off	Processor in Reset or No Communication.	Power off/on treadmill, see if problem self-clears. Check for unplugged or damaged cables. Communication cable from J10 on P51 Processor PCBA is cable most likely to cause problem.	Replace VSD PCBA.	Replace P51 Processor PCBA.	Replace Configuration Plate.
DS2 On Continuous	Walkbelt Overcurrent Condition.	This error is usually caused by excessive drag or friction on the deck. Closely inspect the deck and look for signs of excessive wear. If needed replace the belt and deck.	Power off/on treadmill, see if problem self-clears. Check for unplugged or damaged cables.	Replace VSD PCBA.	Replace Drive Motor.
DS3 On Continuous	5V VCC Power Supply is Operational.	Normal condition no action required.			
DS3 Off	5V VCC Power Supply is Nonoperational.	Check for unplugged or damaged cables. Cable going to P14 on VSD PCBA is most likely to cause problem.	Use an ohmmeter to verify Config PCBA fuses F3 and F4.	Replace VSD PCBA.	Replace Configuration Plate.
DS4 On Continuous	15V Predrive Power Supply is Operational.	Normal condition no action required.			
DS4 Off	15V Predrive Power Supply is Nonoperational.	Check for unplugged or damaged cables. Cable going to P20 on VSD PCBA is most likely to cause problem.	Use an ohmmeter to verify Config PCBA fuses F3 and F4.	Replace VSD PCBA.	Replace Configuration Plate.
DS5 On Very Bright	Danger! High Voltage Drive Bus Voltage Present.	Normal powered up condition. Do not handle VSD PCBA until LEDs go out after about 2 minutes.			
DS5 Off	High Voltage Drive Bus Capacitors have Discharged.	High Voltage Drive Bus is discharged and VSD PCBA is safe to handle.			
DS6 On Very Bright	Danger! High Voltage Drive Bus Voltage Present.	Normal powered up condition. Do not handle VSD PCBA until LEDs go out after about 2 minutes.			
DS6 Off	High Voltage Drive Bus Capacitors have Discharged.	High Voltage Drive Bus is discharged and VSD PCBA is safe to handle.			
Self-Test Error Codes	What this means	First Action	Second Action	Third Action	Fourth Action
ALU ERROR PROGRAM ERROR STATIC RAM ERROR TIMER ERROR	Internally generated processor error.	Power off/on treadmill, see if problem self-clears.	Replace P51 Processor PCBA.		
EEPROM ERROR	Stored data such as user preferences, total time, and mileage has been corrupted.	Power off/on treadmill, see if problem self-clears. Defaults and configuration data will need to be entered again.	Replace P51 Processor PCBA.		

Operational Error Codes	What this means	First Action	Second Action	Third Action	Fourth Action
DRIVE ERROR	Occurs when the VSD PCBA detects too low or too high of a voltage on the DC drive bus.	Verify input line voltage is within specifications. Error indicates voltage is too low or high.	Ensure all cables from the configuration plate to the VSD PCBA are connected. Cable going to P20 on VSD PCBA is most likely to cause problem.	Replace VSD PCBA.	Replace Configuration Plate.
DRIVE PWR ERROR. Early versions of software displayed this error as "ABS ERROR" or "POWER LOSS ERROR"	Can occur during program operation. Treadmill goes to idle and stops quickly. This Error can denote any of the following: 1) The DC bus that powers the walkbelt is too low or high. 2) The thermal switch on the walkbelt motor is open due to the motor overheating. 3) The circuitry that measures the walkbelt motor current has failed.	Verify input line voltage is within specifications. Error indicates voltage is too low or high.	Let walkbelt motor cool down and cycle power. Motor thermal switch may open due to worn belt and deck.	Ensure all cables from the configuration plate to the VSD PCBA are connected. Cable going to P20 on VSD PCBA is most likely to cause problem.	Replace VSD PCBA. If problem persists replace Configuration Plate.
DRV RESET	The processor on the VSD PCBA cannot communicate with the motor control IC on the VSD PCBA.	Ensure all cables from the configuration plate to the VSD PCBA are connected. Cable going to P20 on VSD PCBA is most likely to cause problem.	Replace VSD PCBA.		
GRD LIMIT ERROR (on T914 or T916)	Grade motor beyond its lower (0%) or upper (15%) limits.	Press [CLEAR] Go to Diagnostic Mode (Speed Increase, 8, Enter), then scroll to "GRADE ACT" using the Speed Increase and Speed Decrease keys. If the grade is reading over 15% or less than 0%, attempt to adjust grade up or down using the Grade Increase and Grade Decrease keys.	If "GRADE ACT" is over 15%, check to see if grade pot (sensor cable) is unplugged from AC Drive board. Otherwise, mechanically disconnect grade motor from frame, and manually rotate grade shaft clockwise (for up) or counterclockwise (for down). Then reassemble. It is best to be in the diagnostic mode when manually rotating the shaft. This allows the person rotating the shaft to see the current grade position and turn the shaft in the correct direction.	Replace grade motor.	Replace VSD PCBA. If problem persists replace Configuration Plate.
GRD LIMIT ERROR (on TC916 TreadClimber)	Unit must be reconfigured as a TreadClimber.	Press [CLEAR] Go to Change Machine Mode (Speed Increase, 8, Enter), then scroll to "TreadClimber" using the Speed Increase and Speed Decrease keys.			

GRD MOVE ERROR (on T914 or T916)	Grade failed to move when commanded by software.	Check to see that grade wires (red, black, and white quick disconnects) are properly connected. The cable going to P18 on the VSD PCBA will also cause this error.	Use an ohmmeter to verify Config PCB fuses F1 and F2.	Replace grade motor.	Replace VSD PCBA.
GRD MOVE ERROR (on TC916 TreadClimber)	Unit must be reconfigured as a TreadClimber.	Press [CLEAR] Go to Change Machine Mode (Speed Increase, & Enter, Enter), then scroll to "TreadClimber" using the Speed Increase and Speed Decrease keys.			
MULTIPLE KEY	Message appears during the Service Test KEY TEST if two keys are held down simultaneously or if a key is pressed while another key is stuck closed.	If possible, Press [CLEAR] then Go to Diagnostic Mode (Speed Increase, & Enter), then scroll to "Key Test" using the Speed Increase and Speed Decrease keys. Press each key to identify which key is stuck.	If problem persists, open rear console access panel. Disconnect main keypad cable from Processor board, and connect an alternate known-good keypad. Determine whether keys are now operable. If the alternate keypad works, replace the keypad.	Disconnect ROC keypad cable, determine whether problem persists. If problem goes away with ROC (Ergo) keypad disconnected, check Ergo cable. Plug alternate Touchsensor keypad and check operation. Replace either ROC cable or keypad as required.	Replace P51 Processor PCBA.
NOT DEFINED. THEN DRIVE POWER ERROR	Message appears when Pin 10 of the communication cable between the P51 Processor and VSD PCBA's is open.	Replace Communication cable which connects J10 on P51 Processor PCBA to P1 on VSD PCBA.	Replace VSD PCBA.	Replace P51 Processor PCBA.	
NTM CONFIG RQRD	This error indicates that the P51 Processor PCBA was manufactured for a Non Treadmill product such as an elliptical, stepper or bike.	Replace P51 Processor with one manufactured for use in Treadmills or TreadClimbers.			
OUT CUR ERROR	Walkbelt motor current is too low.	Ensure motor is connected to VSD PCBA. Cycle power and see if problem self clears.	Replace VSD PCBA.	Replace Drive Motor.	
SYS OVRD ERROR	Walkbelt motor current is too high or walkbelt motor thermal switch has opened due to a motor overload.	This error is usually caused by excessive drag or friction on the deck. Closely inspect the deck and look for signs of excessive wear. If needed replace the belt and deck.	Let walkbelt motor cool down and cycle power. Motor thermal switch may open due to worn belt and deck.	Replace VSD PCBA.	Replace Drive Motor.
TC/NTM CONFIG RQRD	Unit must be reconfigured as either a Treadmill or TreadClimber or VSD PCBA has wrong Jumper configuration.	Press [CLEAR] Go to Change Machine Mode (Speed Increase, & Enter, Enter), then scroll to appropriate configuration using the Speed Increase and Speed Decrease keys, then press Enter.	Ensure jumpers on VSD are correct. Treadmills should have no jumpers. TreadClimbers should have all three jumpers in place on PC0, PC3, & PC5.		
TM COM ERROR	Treadmill or TreadClimber communications error. Means P51 Processor PCBA can't talk serially to VSD PCBA.	Cycle power and see if problem self clears.	Replace communication cable between P51 Processor PCBA and VSD PCBA.	Replace VSD PCBA.	Replace P51 Processor PCBA.