

TEST PROCEDURES

SPEED SENSOR TEST

This test is used to verify sensor operation in conditions of speed fluctuation, E2: Cal error, S4: Sensor error, E2: Overspeed error or Unsuccessful Calibration.

SS100 (Serial numbers 5-xxxx to 6-7999)

Set voltmeter to Volts DC. Treadmill power on speed and speed at 0mph

Attach voltmeter leads across outside 2 contacts at P2 on PWM

With magnet in front of sensor, 0 VDC

With no magnet in front of sensor, 3.0 VDC

SS90 (Serial numbers 6-8000 and above)

Set voltmeter to volts DC. Treadmill power on and speed at 0 mph

Attach voltmeter leads across outside 2 contacts at J1 on PWM

With magnet in front of sensor, 0 VDC

With no magnet in front of sensor, 5 VDC

Check the sensor on every magnet, adjust sensor until voltage shows

In calibration mode before pressing Start, the tread belt can be moved manually and the Met light will blink when a magnet is in front of the sensor.

VOLTAGE TO DRIVE MOTOR TEST

This test is used to diagnose conditions of NO Belt Movement, or Speed Fluctuations

Set voltmeter to volts DC and adjust speed on Control Panel to 4 mph

Attach red voltmeter lead to MTR1 on PWM with motor wires attached

Attach black voltmeter lead to MTR2 on PWM with motor wires attached

0 VDC signals no PWM output

166 VDC signals open circuit in motor or motor connection

Operating voltage will lay between 0 VDC and 166 VDC

NOTE: The reason that we do not narrow down PWM output voltage is that the PWM output is a pulse signal. The sampling rate of the voltmeter used will determine what output voltage the voltmeter is able to read.