

## >> Horizon Fitness “5-Step” Treadmill Diagnostic Process

### IMPORTANT

The following steps are provided as routine checkpoints when diagnosing problems on a Horizon Fitness treadmill. If followed correctly, these checkpoints should help diagnose the majority of problems that may be encountered.

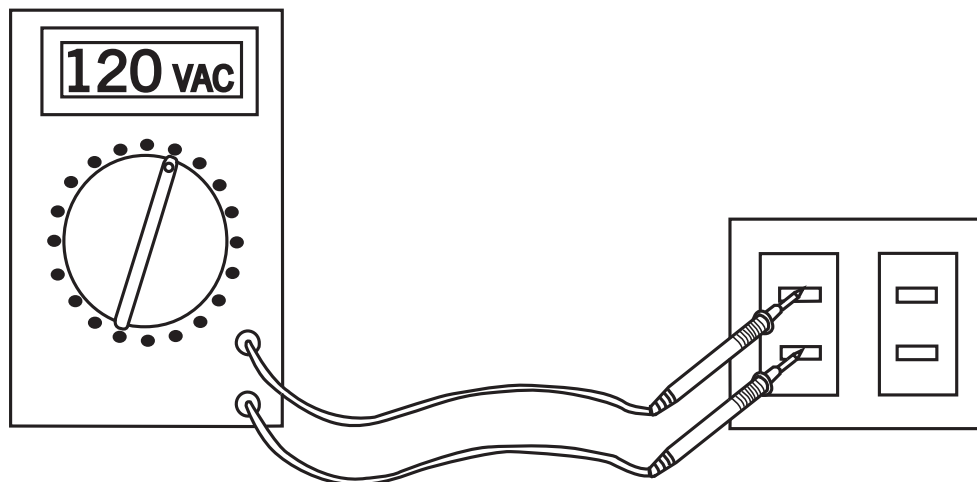
#### Step 1 | Proper supplying power to treadmill.

- Make sure the treadmill is not on an extension cord, surge protector or GFCI circuit. Extension cords and surge protectors create energy loss, which prevents proper voltage from being supplied to the treadmill.
- Make sure the treadmill is on a dedicated circuit. Horizon Fitness recommends a 20 amp dedicated circuit, but a 15 amp dedicated circuit may be sufficient.
- Make sure that proper voltage is being supplied from the wall outlet.

### WARNING

Hazardous voltages will be tested in the following procedure. Exercise extreme caution when performing these procedures. Do not connect or disconnect any wiring, connectors, or other components with the power applied to the treadmill.

- Disconnect the treadmill power cord from the wall outlet. Using an AC voltmeter, verify that the proper AC voltage is present at the wall outlet. Nominal 120 volts AC may vary between approximately 105 volts AC and 135 volts AC. If the AC voltage is missing or incorrect, check the AC service or consult an electrician.

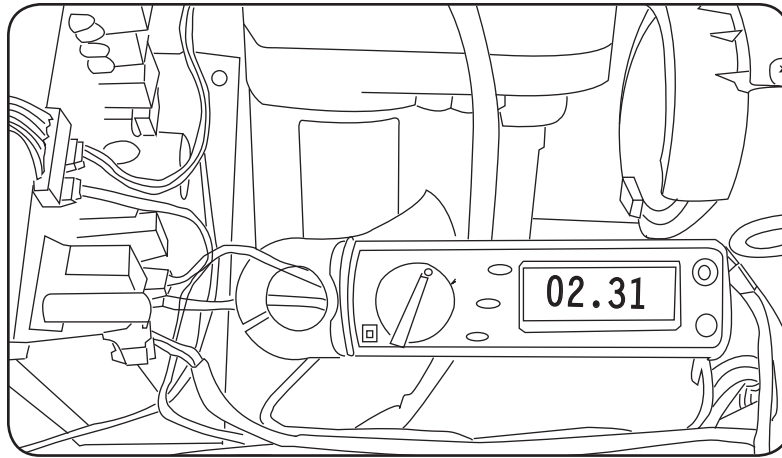


#### Step 2 | Proper Wiring

- Verify that all wires are secure and attached in the correct position.
- Verify that there aren't any pinches or cuts in any of the wires, especially the console cable connecting from the motor control board to the upper board. Replace any wires that are pinched or cut.

### **Step 3 |** Proper Motor Function

- Verify that the treadmill is properly lubricated and drive motor is operating at the proper amperage rating. To verify the current draw, place a clamp meter around the red motor wire.



- Remove the brush covers on the drive motor and inspect the brushes and the motor commutator for any uneven wear. If the surface of the motor brush is pitted, rough, has burn marks, or the commutator has a black residue on it, replace the motor.

### **Step 4 |** Proper Speed Calibration

- To ensure proper belt speed and proper calibration use engineering mode to verify that machine is running in MPH not KM.
- Auto-calibrate the machine from engineering mode if the belt speed is erratic or the belt speed does not correspond to what is displayed on the console.

### **Step 5 |** Voltage Checkpoints

- Verify that proper voltage is being transferred through the console cable.