



Our new and improved troubleshooting section was carefully constructed to put the power to repair your machine in your hands. As you can tell, we have put a great deal of time and effort into the process. All of this can save you the cost of a service call which is approaching \$150 in many markets and in many cases, we can save you the cost of parts since many parts are sold from factories unnecessarily (many parts cost over \$100 alone). With all of this said, if our troubleshooting tips help you out, please donate to keep this info on the web and so we can continue to add to it for your future use. As we get the funds, we will start to post video helps too. If this info helps you, please click on the donate button and donate to help us expand and maintain our troubleshooting help. Donations are NOT tax deductible.

Testing for Speed Problems

1. You may have a belt and deck problem. Test by the following procedure:
 - a) without the power on stand on the walking belt
 - b) push the belt in the direction it normally turns
 - c) if the belt is very difficult to turn (on most treadmill) this means that you have high belt/deck friction. Please click on the document "Belt and Deck Inspection Instructions" for detailed instructions. On occasion, you may have already damaged the DC board if you have high belt/deck friction. If the belt walks freely, you have a different problem.
2. If it passes the belt/deck checks, you may have a DC board output problem. If the belt tests ok and you have a speed variation, try this test:
 - a) Set the speed to 2.5 MPH. Let the treadmill run without anyone on the belt. Check to see if the speed is constant or if there is a variation.
 - b) If there is no variation, step on the belt. If the speed slows down or speeds up, you may have an output problem on the DC board. This is the board that connects directly to the motor.
3. You may have a short in the motor. If you turn the machine on and have erratic speed, you could have a problem in the DC board or the motor or both. With a simple multi-meter, you can test on the continuity scale to see if you have a closed circuit between either DC motor lead and the common earth ground. You should always have an open circuit.
4. You may have a speed signal problem. Your controls on the upper panel send a signal to the lower electronics to help them set the appropriate speed. If there is a problem in the signal generator, the communication links, or in the feedback links, you will have erratic speed operation.
 - a) Communications test- Look on the board for a flashing signal as you increase speed on the treadmill. Most boards have a

signal feedback test light. If a LED flashes, your communication is ok.

- b) Feedback test- If your unit is equipped with an optical feedback (disk inside a sensor) you can swap the feedback unit with the incline (it is the same part on many Icon machines). If it tests ok, you don't have a problem here. If it is a magnetic feedback unit, you can test continuity with a multi meter or replace with a new part to test. Many times passing a kitchen magnet in front of the signal will make a speed display on the console if the magnetic sensor is good.
- c) Signal Generator- If you have a problem with the signal generator, your speed will be erratic with either a person on the machine or without a person on the machine. You may even get a speed error code from the unit. Read our help topic on testing the signal generator.

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