

Procedure 6.5 - Troubleshooting the Speed Sensor

Note:

If the stairclimber is unused for 30 seconds, power is removed from the magnets. The stairclimber senses that it is being used by monitoring the speed sensor output.

1. Set the circuit breaker in the **on** position and enter the manual program.
2. Using a voltmeter, measure the voltage between the orange and brown wires on the speed sensor. The voltage should be approximately 12 Vdc. If the voltage is 0 Vdc or very low, go to step 4, otherwise continue with step 3.
3. Using a voltmeter, measure the voltage between the blue and brown wires on the speed sensor. Slowly rotate the disc assembly by hand, the voltage should alternate between approximately 12 Vdc and 0.5 Vdc. If the voltage is good, skip to step 5.
4. Perform the voltage measurements in steps 2 and 3 on the orange, blue and brown wires on connector P2 of the lower board.
 - a. If both voltages are good, check the wiring and connections between connector P2 of the lower board and the speed sensor. If the wiring and connections are good, go to step 5.
 - b. If the voltage in step 2 is 0 Vdc or very low, disconnect the P2 connector and recheck the voltage on terminals 1 and 4 of P2 on the lower board. If the voltage is correct, replace the speed sensor. If the voltage is still 0 Vdc or very low, replace the lower PCA. If you have performed all of the previous procedures and have been unable to locate the problem, contact Precor Customer Support.
5. At this point the voltages at the speed sensor and at the P2 connector of the lower board are correct but a stepping rate is not displayed when the stairclimber is used. There are three possible parts that could cause these symptoms. They are the lower PCA, lower ribbon cable, upper ribbon cable and upper PCA. The easiest method of determining which part is bad is to substitute a known good part. Substitute one part at a time and replace the original part if the replacement does not correct the problem.
6. If you have performed all of the previous procedures and are unable to locate the problem, contact Precor Customer Support.