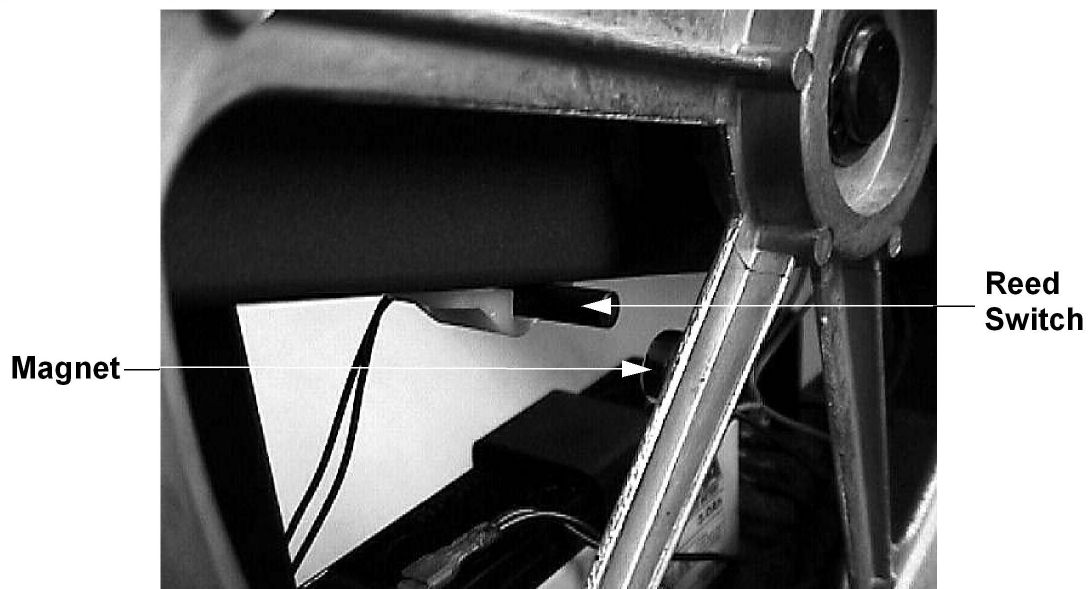


## Procedure 6.4 - The RPM Display is Incorrect

1. For C842 and C846 version 2 units, skip to step 8. For C846 version 1 units, continue with step 2.
2. Set the on/off switch in the **on** position. Use the **Quick Start** key to enter the manual program. Use the **Change** to set the display to read RPM. Using a watch or clock as reference, pedal the bike at a rate of one revolution per second. The display should indicate approximately 60 RPM. If the RPM reading is missing or significantly low continue with step 2. If the reading is significantly high, replace the reed switch.

**Diagram 6.7 - Speed Sensor, C846 version1**



3. Connect a DC voltmeter across resistor R25, See Diagram 6.5, and pedal the bike for a minute. Stop pedaling the bike. Slowly rotate the secondary pulley by hand until the magnet mounted on the flywheel passes the speed sensor. The DC voltmeter will read 0 Vdc when the magnet is away from the speed sensor and 5 Vdc when the magnet is near the speed sensor. If both voltage readings are correct, skip to step 5.
4. If either voltage reading in step 2 was incorrect, set the on/off switch in the off position. Connect an ohmmeter across capacitor C24, See Diagram 6.5, and pedal the bike for a minute. Stop pedaling the bike. Slowly rotate the secondary pulley by hand until the magnet mounted on the flywheel passes the speed sensor. The ohmmeter will read open ( $\infty$ ) when the magnet is away from the speed sensor and approximately 100  $\Omega$  when the magnet is near the speed sensor. If both ohmmeter readings are correct, skip to step 5.

5. If either ohmmeter readings is incorrect, perform the same ohmmeter readings using a strong external magnet instead of the magnet on the secondary pulley. If the ohmmeter readings are still incorrect, replace the speed sensor. If the ohmmeter readings are correct using an external magnet, adjust the gap between the magnet, mounted on the secondary pulley, and the speed sensor to approximately 1/8 inch. Repeat the ohmmeter measurements in step 3. If either ohmmeter reading is incorrect, replace the secondary pulley (with magnet). Skip to step 6.
6. Replace the lower PCA. Check the lower PCA as in step 1.
7. If you have performed all of the previous tests and have not been able to locate the trouble, call Precor customer support.
8. The C842 and C846 version 2 do not use a speed sensor like the C846 version 1 units. Instead the system monitors one of the three phase generator windings. The system monitors AC zero cross. The monitoring system notes every time the generator AC voltage passes through zero volts. By counting the zero cross rate, the system knows how fast the generator is turning. The system calculates the user RPM from the generator speed. If
9. It is highly unlikely that the RPM reading could every be present but incorrect. If this condition should occur, replace the lower PCA.