Procedure 6.5 - No or Incorrect Pedaling Resistance

1. If the display is not illuminated, go to Procedure 6.3.

2. For C842 and C846 version 2 units, skip to step 15. For C846 version 1 units, continue with step 3.

3. Enter the ìmanualî program and set the work level at ìlevel 20î. Pedal the cycle and confirm that there is no resistance or that the resistance is abnormally low.

Note:
The voltage readings in this procedure will vary with the pedaling rate. Pedal the cycle at approximately 60 RPM with the work level set at ì10î while taking the voltage readings in this procedure. Resistance readings must be taken with the power off and the cycle idle.

4. Use a DC voltmeter to measure the voltage between terminals 4 (black wire) & 6 (white wire) of J1 on the lower PCA (see Diagram 6.4). The voltage should measure approximately 3.85 Vdc ± 0.5 Vdc.

5. If the voltage is missing or significantly lower than 3.85 Vdc, continue with step 6.

6. If the voltage is approximately 3.85 Vdc, but there is no resistance, measure the voltage between terminals 1 (red wire) and 4 (black wire) of the J1 connector on the lower PCA. The voltage should measure approximately 18 -19 Vdc $\pm$ 1 Vdc. Measure the voltage between terminals 1 (red wire) and 9 (yellow wire) of the J1 connector on the lower PCA. The voltage should measure approximately 2 Vdc $\pm$ 0.5 Vdc.

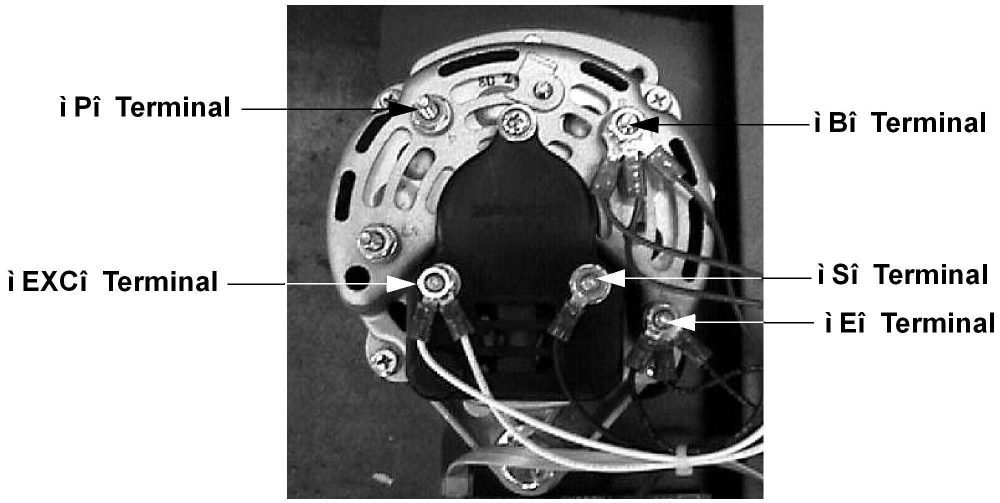
7. Set the on/off switch in the off position. Disconnect the J1 connector from the lower PCA. Measure between terminals 1 and 9 of the J1 connector. The ohmmeter should read approximately 1.5 $\Omega \pm 0.5\Omega$. If the reading is open (∞) or significantly high replace the load resistor per Procedure 7.11.

Note:
Do not reconnect the J1 connector, removed in step 6, until the resistance measurements in step 9 are completed.

8. Measure between the ìEXCî and ìSî terminals on the alternator with an ohmmeter (See Diagram 6.8). The ohmmeter should read approximately 5 $\Omega \pm 0.5\Omega$.

9. Set the ohmmeter on the ìdiodeî scale. Connect the common lead of the ohmmeter to the ìPî terminal and the Ω lead to the ìBî terminal of the alternator. The ohmmeter should read open (∞). Connect the common lead of the ohmmeter to the ìPî terminal and the Ω lead to the ìEî terminal of the alternator. The ohmmeter should read approximately 0.5.

Diagram 6.8 - Alternator, C846 version 1



10. With the ohmmeter still on the diode scale, connect the Ω lead of the ohmmeter to the ìPî terminal and the common lead to the ìEî terminal of the alternator. The ohmmeter should read open (∞). Connect the Ω lead of the ohmmeter to the ìPî terminal and the common lead to the ìBî terminal of the alternator. The ohmmeter should read approximately 0.5.

11. Reconnect the J1 connector.to the lower PCA

12. If the voltages in step 5 were not correct and the resistance readings in steps 6, 7 and 8 were correct, replace the lower PCA.

13. If the resistance readings in steps 7, 8 and 9 were not correct replace the alternator.

14. If you have performed all of the previous tests and have not been able to locate the trouble, call Precor customer support.

15. Enter the ìmanualî program and set the work level at ìlevel 20î. Pedal the cycle and confirm that there is no resistance or that the resistance is abnormally low.

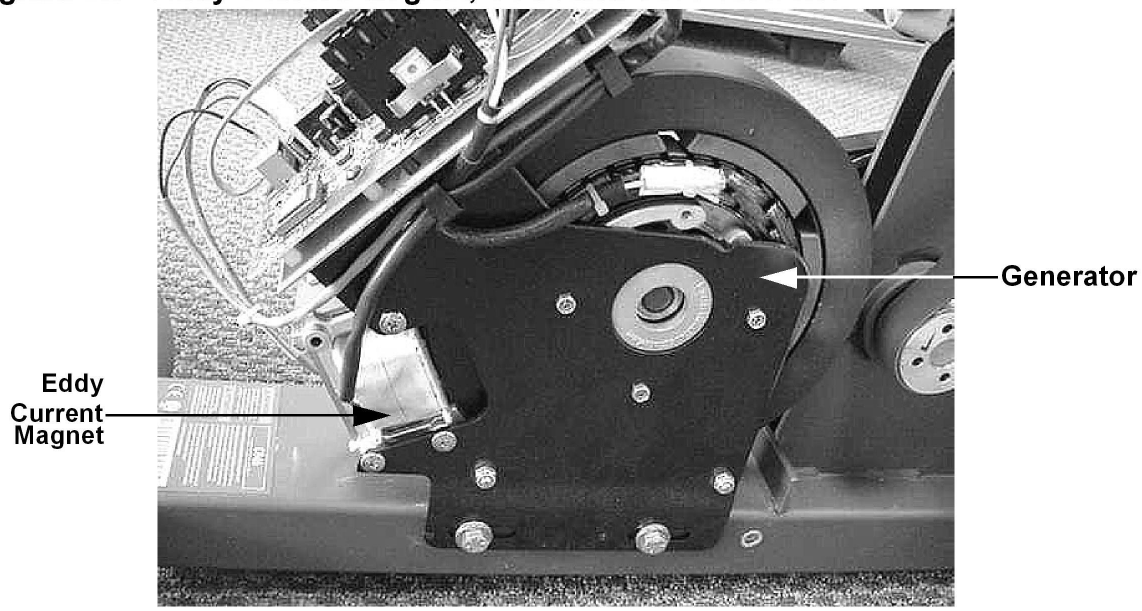
Note:
The voltage readings in this procedure will vary with the pedaling rate. Pedal the cycle at approximately 60 RPM with the work level set at ì10î while taking the voltage readings in this procedure. Resistance readings must be taken with the power off and the cycle idle.

16. Measure the DC voltage at the terminals M1 and M2 of the lower PCA. See Diagram 6.9. The voltage reading should be approximately 11 Vdc. If the the reading is significantly low, or significantly high, skip to step 18.

17. If the reading in step 18 was correct, the pedalling resistance should be correct, skip back to step 15.

18. Disconnect the eddy current magnet wires from termninals M1 and M2 of the lower PCA. Measure between the the eddy current magnet wires with an ohmmeter. It should read approximately 10 Ω.

Diagram 6.9 - Eddy Current Magnet, C842 and C846 version 2



19. If the measurement in step 18 was significantly high or low, replace the generator. The eddy current magnet is furnished with the generator. After replacing the generator, tension the secondary belt per Procedure 5.2.

20. If the measurement in step 18 was correct, replace the lower PCA.

21. It is highly unlikely that the RPM reading could every be present but incorrect. If this condition should occur, replace the lower PCA