Section Four - Checking C100i Operation

This section provides you with a quick method of checking C100i operation. Check the operation of the C100i at the end of most maintenance procedures.

Procedure

- 1. Start striding on the C100i or plug the optional external power supply (when available) into the C100i and the AC outlet.
- 2. When the **PRECOR** banner displayed, press **QUICK START**.
- 3. Select Resistance Level 1 and press ENTER.
- 4. Operate the C100i for 4–5 minutes. As you operate the C100i, concentrate on the operating sounds made by the unit. Be on the alert for unusual rubbing, hitting, grinding, or squeaking noises.
- 5. Ensure that the C100i is properly leveled, that all five "feet" are in contact with the floor and there is no side to side rocking.
- 6. If the C100i makes unusual noises or the electronic display does not change appropriately, troubleshoot per Section 6.
- 7. Press the **RESISTANCE** ▲ key until you reach Resistance Level 10. Operate the C100i for another 2–3 minutes.
- 8. If the C100i resistance does not change or the operation of the C100i feels inconsistent compared with Resistance Level 1, troubleshoot per Section 6.
- 9. Press the **RESISTANCE** ▲ key until you reach Resistance Level 20. Operate the C100i for another 2–3 minutes.
- 10. If the resistance of the C100i does not change or the C100i operation feels inconsistent with Resistance Levels 1 and 10, troubleshoot per Procedure 6.4.
- 11. Check the LED's mounted on the upper PCA and the function keys displayed on the electronic console by performing Procedure 3.2.
- 12. Check stride indicator for proper operation.
- 13. Check wireless and hand held heart rate functions.

Procedure 5.1 - Measuring the Resistance of a Generator

Caution

If a external power supply is connected to the C100i, disconnect the external power supply from the C100i before continuing with this procedure.

Procedure

- 1. Remove the right side cover per Procedure 7.12.
- 2. Remove the red battery wire from the lower PCA. See Diagram 5.1.

WARNING

Before continuing with this procedure, review the Warning and Caution statements listed in Section One, Things You Should Know.

- 3. Set the ohmmeter to a range that will conveniently read up to 50 Ω .
- 4. Remove the two wires from the **LOAD** terminals of the lower PCA.
- 5. With an ohmmeter, read between the wires removed in step 5. The reading should be approximately 10Ω . Replace the two wires removed in step 5.
- 6. Remove the three wires from the **3 PHASE GEN IN** terminals of the lower PCA.
- 7. With an ohmmeter, read between the red & white, red & black and white & black wires. Each reading should be approximately 25Ω. Reconnect the wires removed in step 7.
- 8. If any of the readings are significantly high or significantly low, remove the intermediate cable from the generator and perform the same measurements as in step 4 on the generator connector. If the reading are now correct check and or replace the intermediate cable.refer to Diagram 5.1. If the readings are still incorrect, remove the three phase generator.
- 9. Reconnect the red battery wire removed in step 3.
- 10. Replace the right side cover.



Diagram 5.1 - Lower PCA

LOAD —



Procedure 5.2 - Inspecting and Adjusting Belt Tension

WARNING

Before continuing with this procedure, review the Warning and Caution statements listed in Section One, Things You Should Know.

Procedure

Primary Belt Adjustment

- 1. Remove the front, rear, left and right side covers per Procedure 7.12.
- 2. Place a belt gauge to the primary belt as shown in Diagram 5.2.

Diagram 5.2 - Primary Belt Tension Adjustment



Idler Pulley –

3. The belt gauge should read approximately 70 lbs. If the belt tension is significantly high or low the belt tension may be adjusted by loosening the idler pulley mounting bolt and carefully prying against the idler pulley to obtain the correct belt tension. When belt the tension is correct, torque the idler pulley mounting bolt to 17 - 21 foot pounds (200 - 250 inch pounds).

Brake Belt Adjustment

- 4. Check the tension of the brake belt using the belt gauge, shown in Diagram 5.2. Belt tension should be approximately 100 lbs.
- 5. If the belt tension is incorrect, adjust the belt tension using the adjustment bolt shown in Diagram 5.3.



Diagram 5.3 - Brake Belt Idler Pulley Mounting Bolt

Procedure 5.3 - Drive Belt Alignment

The alignment of the drive belt between the generator pulley and the primary pulley is important. Incorrect alignment will cause premature belt wear and/or belt noise.

- 1. Remove front, rear, left and right side covers per Procedure 7.12.
- 2. Loosen but do not remove the four pillow block mounting bolts. See Diagram 5.4.



Diagram 5.4 - Drive Belt Alignment

- 3. Slide two pieces of 1/4" inch thick bar stock between the upper and lower portions primary pulley and the frame as shown Diagram 5.4.
- 4. Use the two adjustment bolts, shown in Diagram 5.4, to align the primary pulley square to frame and a 1/4" from the frame.
- 5. Torque the four pillow block mounting bolts to 50 55 foot pounds (600 660 inch pounds).
- 6. Test the alignment of the drive belt by pedaling the unit in both the forward and reverse directions. The drive belt must remain squarely on the pulley face, not riding off the edge of the pulley, with no belt noise being generated.
- 7. Replace the covers removed in step 1.