

## **5.0 Parts and Tuneup Procedure**

### **5.1 GSM Module Tuneup Procedure**

Each modem is tested during routine supplier testing;

- The modems are tested to GSM standards using an Agilent 8960 GSM test set.
- Multiple channels and power levels are tested and if correction is necessary.
- If correction is necessary, the "Automatic Power Control" software tables are adjusted in the modem's Flash memory.
- After passing all tests, the modem is labeled and assigned an IMEI

During final assembly of the SNT-250, the signal power is verified to be within 5 dB of nominal levels.

### **5.2 GPS Section Tuneup Procedure**

During final assembly if the SNT-250, the signal levels of actual GPS satellites are recorded. These are compared to past results and if they are within 5 dB.

### **5.3 RF Beacon Section Tuneup Procedure**

Each completed SNT-250 is tested for RF Beacon operation. A beacon receiver (Wildlife Materials model TRX-3S) is used during final assembly to verify that the power level is normal for its sole operating power level. Normal is indicated by the peak number of LEDs lit during beacon operation.

### **5.4 Device Tuneup Procedure**

Results from sections 5.1, 5.2 and 5.3 are combined and if all levels are within normal operating parameters a label is printed and adhered to the device. An electronic record is made that the device has passed inspection and the signal levels of the tests.