This Bulletin Number is **PSB F-485** 

**APC:** 678, 760, 866 & 867 **Date:** October 14, 1996

Deadline Date: March 31, 1997

**MEMO TO**: PSB Mailing list

**FROM**: Product Group / Plantation, Florida

SUBJECT: GTX & LCS/LTS2000 Radios: DTMF Tone Distortion and Power Down

**Problems** 

# **Symptom 1:**

After initiating a Telephone Interconnect call, either by using the portable key pad, or using a preprogrammed lists, the user hears the dial tone and touch tones, but the radio intermittently fails to generate a call. The radio returns to the dial tone mode.

### **Radios Affected:**

All GTX, LCS, & LTS radios, portable and mobile, manufactured prior to 8/15/96.

- Mobile serial numbers 867SWLxxxx through 867SWQxxxx, 760SWLxxxx through 760SWQxxxx
- Portable serial numbers 866SWLxxxx through 866SWQxxxx, 678SWLxxxx through 678SWQxxxx

Also, the software version can be determined by using the RSS (Radio Service Software) in the following manner:

- - Read the radio codeplug with RSS
- - From the main menu select F1 (Help)
- - Press F9 (More Help)
- The software version should be displayed in the right column. If the Portable radio does not have version 1.07 or higher; if the Mobile radio does not have version 1.08 or higher, they are susceptible to this failure mode.

#### Cause:

A timing issue within the radio firmware prevented the DTMF tones from being decoded correctly.

#### **Corrective Action:**

All radios experiencing this problem should be returned to the Rockford Support Center for have the firmware installed; version 1.07 for Portables and 1.08 for Mobiles.

# **Symptom 2:**

When using a DTMF microphone (HMN3013A), the mobile radio does not power down when using the rotary knob. In the case where ignition sense is used, the radio will function properly and power down when the ignition is turned off.

### **Radios Affected:**

All GTX & LCS mobile radios with date codes of 9631 or earlier using the DTMF Microphone - HMN3013A. Radios that have a blue mark on the bottom side of the housing, have already been reworked and do not require this fix. The problem is ONLY observed when the rotary knob is used for power down rather than the ignition switch. Mobile serial numbers - 867SWQxxxx, 760SWQxxxx

### Cause:

The impedance presented by the DTMF microphone (HMN3013A) was incompatible with the circuitry within the radio.

## **Corrective Action:**

All radios meeting the above criteria should be returned to the Rockford Support Center to have resistor R0231 changed from zero ohm part (0662057B47) to a 10K part (0662057A73). Radios that have been corrected per this PSB will be identified by a blue mark on the bottom of the radio.

Level 1 charges are authorized by warranty for shipping these radios to Rockford. Both symptoms will be corrected by referencing this bulletin.