
LAND MOBILE PRODUCT SECTOR PSB # 726 1301 E. ALGONQUIN RD APC #
388/398 SCHAUMBURG, IL 60196 Date: 2/01/94 (708) 576-0180 EXPIRES : N/A

Subject: DISTORTION OF TRANSMIT AUDIO IN MSF STATIONS

MODELS AFFECTED: MSF 5000/10000 VHF/UHF CONVENTIONAL/TRUNKED
SHIPPED PRIOR TO 2/01/94

VERSION: ALL UNIBOARDS INCLUDING KITS TRN9880, TRN7255

In some situations the data on transmit can become distorted in the modulation compensation circuit for up to several seconds due to over reaction of the mod comp circuit to DC or low frequency inputs, particularly during transitions in audio (secure to low speed data, dead carrier to audio, etc.). The mod comp can go into an overdriven condition and the compensation itself becomes non-linear. Mod comp operation during this reaction time is ineffective, and data distortion is easily perceived.

Distortion can become severe enough that in a Trunked system, subscriber units will be unable to detect TDATA and can fail to decode the Trunking disconnect word.

If you experience this distortion it can be remedied by replacing capacitor C364 in the Mod Comp circuit on the Uniboard with a 4.7ufd capacitor Motorola part number 2313748G06. This will resolve the distortion problem while still maintaining good low frequency response for very low speed data, such as the failsoft codeword.

NOTE: ALL UNITS SHIPPING AFTER 2/01/94 HAVE THE 4.7 UFD CAPACITOR INSTALLED.

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