

Applicability T837-2X-102X

## 1. Introduction

### Background

There have been reports of the T837-2X-102X paging exciter, producing spurious emissions of varied amplitude and frequency, either side of the desired carrier frequency.

This problem has been traced to an LMC660 (IC240) operational amplifier situated just prior to the VCO input. The issue has arisen due to a manufacturing change in the construction of the LMC660 op-amp. This tolerance change has been found to cause the op-amp to become unstable causing oscillation.

This is a potential problem with all T837-2X-102X paging exciter products, manufactured, and dispatched from September 2002 onwards.

It is suggested however, the following modification is carried out before any current stock of T837-2X-102X paging exciters are dispatched for installation, and also added to any T837 paging exciters that are returned for servicing.

## 2. Remedy

The solution for correcting this problem is to place a capacitor in parallel with the existing feedback resistor on IC240 to supply additional filtering.

This is accomplished by soldering a 10pf capacitor directly onto the top of R191. This section of the PCB circuitry is displayed below, and can also be located at grid reference 'C8' of the T837 PCB Layout – Top Side.

- IPN for 10pf 0805 Capacitor: 015-22100-05

