	C-41 Field Cal/Test	DOCUMENT NO. 1-906	REV.
Created by: D.NEFF	Date: 25 OCT 94	Sheet 1 of 1	

Rev	Date	Appd	DCN				
Α	25OCT94	DJN					

## **Suggested Equipment:**

Solid state relay (or a known good C-41)

Oscilloscope

Counter (or Altek 941/942)

Frequency Generator (or Altek 941/942)

10 Ohm resistor

## **Test Read**

- -Before the Model C-41 is checked for proper operation, a fresh 9 volt battery (alkaline, DURACELL MN1604B is recommended) should be placed in the unit.
- -Connect the frequency generator to the input of the solid state relay (or to the 'to 941' posts of a known good C-41 turned on to source).
- -Turn on the C-41 to be tested to read and short the dry contact leads. Verify that the LED lights.
- -Connect the dry contact leads of the C-41 being tested to the output of the solid state relay (or to the dry contact leads of the known good C-41).
- -Connect the counter to the 'to 941' posts of the C-41 being tested.
- -Set the counter to read 10KHz range at 1V trigger level.
- -Set filter to min on C-41 being tested (fully CCW).
- -Set frequency generator to source a 2KHz, 10V peak, zero based square wave.
- -Verify that the frequency counter reads  $2KHz \pm 0.1Hz$ .
- -Set filter to max on C-41 being tested, and verify that the counter can not read the 2KHz signal.
- -Reduce the frequency of the frequency generator and verify that the counter can not read frequencies above  $400~Hz \pm 100~Hz$ .

## **Test Source**

- -Connect the frequency generator to the 'to 941' posts on the C-41 to be tested.
- -Connect the dry contact leads of the unit being tested to a 5V source in series with a 10 Ohm resistor.
- -Turn on C-41 to be tested to source.
- -Set frequency generator to source a 5KHz, 10V peak, zero based square wave.
- -Connect counter across the 10 Ohm resistor (observe polarity).
- -Set the counter to read 10KHz range at 0.3 V trigger.
- -Verify counter reads 5 KHz  $\pm$  0.1 Hz.