# PRODUCTION MEMO

TO:

FROM:

Microwave Division

INSTRUMENT: Model 8690B Sweep Oscillator, serials between 959-01651 and 959-01901.

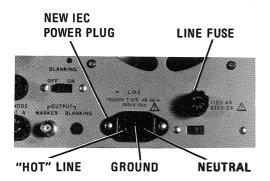
SUBJECT:

POSSIBLE SAFETY HAZARD.

All 8690B Sweep Oscillators, serials between 959-01651 and 959-01901, should be checked to determine that the primary power wiring on the rear panel is wired correctly.

- (1) The line fuse and the line switch should always be wired on the "hot" side of the 115V ac line.
- (2) With an enclosed fuse holder, the "hot" power lead should be connected to the center terminal at the rear of the fuse holder.

The "hot power line on these 8690B's can be identified from the figures below.



HOT (WHITE-BLACK-GRAY)

NEUTRAL (WHITE-GRAY)

"HOT" LINE GROUND (GREEN-YELLOW)

HOT (WHITE-BROWN-GRAY)

Figure 1. Rear Panel of 8690B with new IEC Power Plug (serials above 959-01651)

Figure 2. Inside View of the 8690B Rear Panel

#### NOTE

It is a good practice to check all of the instruments you service to make certain they meet these two safety requirements.

J. Detrick/mh

8/70-4



# PRODUCTION MEMO

December 1970

TO:

FROM: Microwave Division

INSTRUMENT: Model 8690B Sweep Oscillator

Serials 921-01050 through 959-02071

SUBJECT: RECOMMENDED REPLACEMENT FOR 500 K $\Omega$  RESISTORS

## **ACTION REQUIRED:**

The four 500 K $\Omega$  summing resistors in 8690B Sweep Oscillators, serials 921-01050 through 959-02071, should be replaced with a more reliable resistor, HP Part Number 0811-2993. These summing resistors are A3R55 and A3R56 in the Reciprocal Amplifier, and A4R3 and A4R4 in the Helix Amplifier. The four resistors are wirewound, non-inductive, 500K,  $\pm 1\%$ , 1/4 watt.

#### HOW TO DETECT THE PROBLEM:

The failure mode of these resistors is usually an open, a partial open, or a change in the inductive characteristics. Open and partial opens will show up as an out of tolerance 3.00V - 73.00V tuning ramp. A change in inductive characteristics will show up as poor sweep stability with SWEEP TIME change. Observe a wave meter marker pip in a sweep of the top 2% of the frequency band. Switch the SWEEP TIME from 10 msec sweep to 100 msec sweep. The shift in the marker should be less than  $\pm 0.1\%$  of the full frequency band. If the shift is greater than this, replace the 500K resistors.

## **WARRANTY REPAIRS:**

Replace these 500 K $\Omega$  resistors in all 8690B Sweep Oscillators, serials 921-01050 through 959-02071, being serviced under warranty.

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