34703A-7 SERVICE NOTE

P.C. 09-11653

SUPERSEDES NONE

## -hp- MODEL 34703A DCV/DCA/OHMMETER

Serial Numbers: Prior to 1251A01651

## TEMPERATURE SENSITIVE OHMS OPERATION

A simple modification to the A2 Front Panel Board (-hp- Part Number 34703-66502) is recommended for those instruments that were factory modified to the new (Service Note 34703A-6) DCA terminal configuration prior to February 14, 1975.

A limited number of the early factory modified 34703A's may exhibit erratic OHMS, especially at elivated temperatures. The logic signal HPFA may not come up high enough to be recognized as a logic high. When this happens, the outputs of the Analog Switch Controller A1U19 (-hp- Part Number 1818-2133) become erratic causing unpredictable OHM operation.

The problem is eliminated by changing the value of a resistor on the A2 Front Panel Board. Instruments modified in accordance with Service Note 34703A-6 already incorporate this change. Instruments factory modified and shipped after February 14, 1975 will also incorporate this change.

## **MODIFICATION PROCEDURE**

1. Separate the Model 34703A from the display module by pulling the two side locks at the back of the instrument and lifting the mainframe from the 34703A. Separate the 34703A main assembly from its cover by carefully spreading apart the two sets of plastic fingers.

## NOTE

The Model 34703A A1 Mother board (-hp-Part Number 34703-66501) contains areas of high impedance circuitry and should be clean handled.

2. Locate the two screws that go through the A1 Mother board and screw into the two flanges that project back from the metal Front Panel Assembly (-hp- Part Number 34703-00201). Remove these two screws as shown in Figure 1.

GWH/bjb/WA

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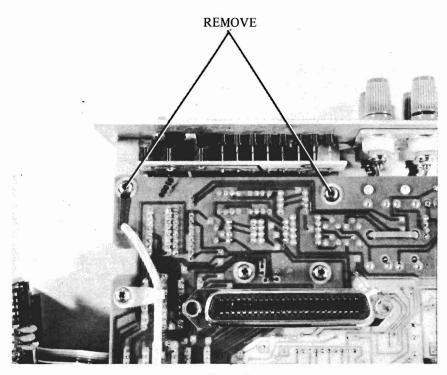
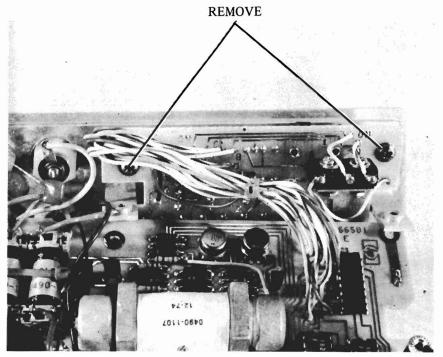


Figure 1.

After these two screws are removed, the Front Panel Assembly will be attached to the A1 Mother board only by wiring connections so extreme care must be taken in handling the unit.

3. Refer to Figure 2 to locate the two screws that go through the A2 Front Panel Board and screw into the two thin metal posts on the Front Panel Assembly.





Remove these two screws and carefully separate the A2 board and the metal front panel enough to gain access to the component side of the A2 board.

4. Refer to the following component locator to determine if the A2 board is Revision C or earlier.

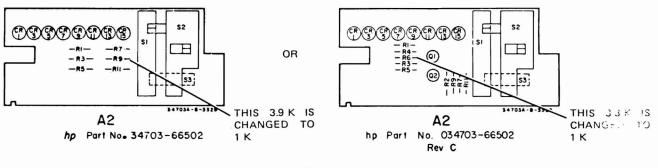


Figure 3.

If the A2 board is Revision C, change the 3.3 k $\Omega$  resistor A2R6 (-hp- Part Number 0683-3325) to a 1 k $\Omega$  resistor (-hp- Part Number 0683-1025). If the A2 board is prior to Revision C, change the 3.9 k $\Omega$  resistor A2R9 (-hp- Part Number 0684-3921) to a 1 k $\Omega$  resistor (-hp- Part Number 0683-1025).

- 5. Reassemble the Front Panel Board and the metal Front Panel, again being careful not to damage any of the wiring to the A1 board. Reassemble the 34703A and its cover. The instrument should not need to be recalibrated.
- 6. Update your Model 34703A Operating and Service Manual to reflect this change.