

## S E R V I C E N O T E

SUPERSEDES: None

**44701A integrating Voltmeter**

3852A Data Acquisition System

**Serial Numbers:** ~2919A09737 / 2919A09858\*\*

Assembly part number 44701-66502

**System hangs while 44701A voltmeter is in loop taking multiple measurements****Situation:**

The customer may report this problem in one of several ways. If a customer suggests a possible “firmware” problem, reports that the system “hangs” somewhere when performing a series of measurements in a loop, and/or mentions ERROR 18 or ERROR 60, and is using a 44701A with a serial number in or close to the range provided above (see note below), this may be the problem.

The system ERROR 18 and/or ERROR 60 will be seen when the program is aborted after hanging the system, and then an attempt to re-run the program is initiated without recycling the power. The error is most easily found when the program is in a continuous loop. The number of loops before seeing the problem varies considerably as the problem is heat-related.

*Continued*

DATE: 08 July 1992

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:			
<b>MODIFICATION RECOMMENDED</b>			
ACTION CATEGORY:	<input type="checkbox"/> IMMEDIATELY <input checked="" type="checkbox"/> ON SPECIFIED FAILURE <input type="checkbox"/> AGREEABLE TIME	STANDARDS: Labor 1.5 Hours	
LOCATION CATEGORY:	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER	SERVICE INVENTORY: <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	USED PARTS: <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE		AGILENT RESPONSIBLE UNTIL: 08 July 1995
AUTHOR: GP	ENTITY: 0900	ADDITIONAL INFORMATION:	



The problem is caused by a malfunctioning component part, a comparator (part # 1826-0065, U618 and U619), located on the 44701-66502 board. The problem is heat-related and has been isolated to a specific date-code of the comparator (date-code 9136).

**Solution/Action:**

Disassemble the 44701A module. After removing the sheet metal cover plate, remove the “L” shaped 44701-66502 printed circuit board by disassembling the screws and disconnecting the ribbon cable from the 44701-66501 board. When removing the 44701-66502 board from the module, lift the board straight up as there is a socket/pin connection with the 44701-66501 board in the top left corner of assembly.

Verify that either/both U618 or U619, located just below the ribbon cable, has a date code of 9136. Replace both components with new 1826-0065 parts with a date code other than 9136.

When reassembling the module, take special care to properly replace and secure the internal shielding material, insure that the ribbon cable and socket/pin connections are seated, and align the locking mechanism for the module.

Calibrate and retest the instrument.

**\*\* Note:** The serial number breaks listed were derived from knowing failing units. As the problem is related to a component's date-code, and we have no way of relating the date-code of a component to a module's serial numbers, these serial numbers are to be used as a guideline only.