S E R V I C E   N O T E

SUPERSEDES: 6842A-01

6842A AC Power Source / Analyzer

Serial Numbers:

6812A-06:	0000A00000 / 9999A99999
6813A-06:	0000A00000 / 9999A99999
6814A-02A:	0000A00000 / 9999A99999
6834A-03A:	0000A00000 / 9999A99999
6841A-01A:	0000A00000 / 9999A99999
6842A-01A:	0000A00000 / 9999A99999
6843A-01A:	0000A00000 / 9999A99999

Output Voltage Transient during Output Voltage Level Change

Duplicate Service Notes: See Above

To Be Performed By: Agilent-Qualified Personnel

Parts Required:
ROM, part number 5080-2424 Rev A.00.04
ROM, part number 5080-2425 Rev A.00.04

Situation:
The AC source may randomly output a high voltage transient when being programmed from a high voltage level to a low voltage level. This random high voltage transient will only be generated if the programmed low voltage level is zero volts. The magnitude of the transient will be dependent upon programmed slew rate and waveform phase, the transient pulse width will be 200uS.

Continued

DATE: October 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ■ AGREEABLE TIME	STANDARDS: Labor 1.0 Hour			
LOCATION CATEGORY:	■ CUSTOMER INSTALLABLE ☐ ON-SITE ■ SERVICE CENTER	SERVICE INVENTORY:	☐ RETURN ■ SCRAP ☐ SEE TEXT	USED PARTS:	☐ RETURN ■ SCRAP ☐ SEE TEXT
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	AGILENT RESPONSIBLE UNTIL: August 1998			
AUTHOR: BH	ENTITY: 2100	ADDITIONAL INFORMATION:			

Agilent Technologies

Solution/Action:
Replace ROMs U734 (p/n 5080-2424) and U735 (p/n 5080-2425) with Rev A.00.04 parts. The model number and ROM revision are displayed during power-on self test. If "Rev A.00.03" or lower is displayed the ROMs should be replaced.

To replace ROMs U734 and U735 with revision A.00.04 parts without destroying calibration data, perform the following:

   a. Disconnect AC mains power and remove top cover (requires Torx #25 driver) and inner cover (requires Torx #15 driver).

CAUTION
Static Sensitive Components. Use a static safe workstation.

   b. Carefully remove ROMs U734 and U735 from their sockets. These parts may be removed by gently prying them up from the corners with a sharp pointed tool such as a scribe. The socket is very fragile so use as little force as possible.If you have difficulty reaching the components, the board may be removed by removing 3 screws from the right side of the chassis.

   c. Carefully install new ROMs and re-assemble unit (covers and AC mains cord).

   d. Turn instrument on.

   e. Turn calibration mode on: Press SHIFT (blue key) then 7 key, when CAL ON 0.0 is displayed, press ENTER.

   f. Press 0 and 9 keys simultaneously, then use command scroll keys to scroll till ROMUPD model # is displayed.

   g. Use command parameter keys to scroll till display reads ROMUPD 6842A, press ENTER.

If the commands are successful, the unit will go through a normal power-on sequence. If OUT OF RANGE is displayed, the unit will have to be re-initialized with the EEINIT command and re-calibrated. This can occur if non-volatile memory has become corrupted.

CAUTION
Be careful not to execute the EEINIT model # command when
ROMUPD was intended in steps f and g or the unit will have to
be re-calibrated.

Program the output voltage to 120 volts and check that the meter indicates the programmed value.

Software: A software solution is available until the ROM up-grade can be performed. Programming any voltage level except zero does not generate the high voltage transient. Program low voltage level to 0.1 volts, ie. VOLT:TRIG 0.1