S E R V I C E N O T E

SUPERSEDES: 8565E-05

8565E Portable Spectrum Analyzer

Serial Numbers: 0000A00000 / 3611A00408

Power Supply Reliability Improvement

To Be Performed By: Agilent-Qualified Personnel or Customer

Duplicate Service Notes:
8560E-12A, 8561E-09A, 8563E-11A, 8564E-05A, 8565E-05A

Parts Required:

Part No.	Qty.	Description
1901-1214	1	Diode
0698-3429	2	20 Ohm Resistor
1820-4032	1	IC, Driver
0180-3705	1	47uf Capacitor
0160-4835	1	0.1uf Capacitor

Continued

DATE: October 1996

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	☐ IMMEDIATELY ☐ ON SPECIFIED FAILURE ■ AGREEABLE TIME	STANDARDS: Labor 0.5 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: October 1998	
AUTHOR: GB	ENTITY: 5320	ADDITIONAL INFORMATION:	

Agilent Technologies

Situation:
The circuit application is causing the Buck Regulator Driver IC, A6U132, to operate near its reverse current spec, which can damage the IC. Similarly, the reverse voltage across diode A6CR131 is near its breakdown spec, which can cause the diode to short.

In addition, some instruments can experience intermittent power-up and “kick-start” problems when warm.

Solution:
Changing resistors A6R133 and A6R137 from 10 ohms to 20 ohms will protect A6U132 from excessive reverse current. When making this modification, A6U132 should also be changed, even if the power supply is still working. This is because it could be partially damaged.

Changing diode A6CR131 to 1901-1214 will replace a 400V breakdown part with a 600V breakdown part.

Changing A6C201 to 47uf and A6C133 to 0.1uf will eliminate the intermittent power-up problem when the instrument is warm.