S E R V I C E N O T E

SUPERSEDES: 8560E-12

8560E Portable Spectrum Analyzer

Serial Numbers: 3406A00768 / 3611A02090

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 RETURN USED RETURN INVENTORY: SCRAP SEE TEXT SEE TEXT | | |
| AVAILABILITY: | PRODUCT'S SUPPORT LIFE | AGILENT RESPONSIBLE UNTIL: October 1998 | | |
| AUTHOR: GB | ENTITY: 5320 | ADDITIONAL INFORMATION: | | |

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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.