S E R V I C E N O T E

SUPERSEDES: NONE

HP85420E RF Filter Section
HP85460A RF Filter Section
HP8542E EMI Receiver System
HP8546A EMI Receiver System

Serial Numbers: 0000A00000 / 9999Z99999

RF Overload Improvement Kit

Duplicate Service Notes: 85420E-05

To Be Performed By: HP-Qualified Personnel

History / Situation:

In early 1996, the 85420E/85460A Input 2, RF Overload level was raised from -5dBm to -2dBm in order to improve CISPR Pulse Test Performance. This resulted in the use of larger RF Overload DAC values across the Input 2 frequency range. In some cases, it is necessary to change the value of R205 on the A1A1 Interconnection Board (85460-60001) in order to increase the op-amp output voltage that corresponds to the DAC value of 255. This effectively will reduce the DAC values used over the full frequency range of the RF Filter Section.

Continued

DATE: January 2000

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY:	☐ IMMEDIATELY ■ ON SPECIFIED FAILURE ☐ AGREEABLE TIME	STANDARDS: LABOR 2.0 Hours				
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: January 2002				
AUTHOR: JMS	ENTITY: 5340	ADDITIONAL INFORMATION:				

Agilent Technologies

If the 85420E/85460A fails the "RF Overload Calibration, Input 2" Alignment at or around 750 MHz, more than likely, the DAC values have become "railed". It will be necessary to install the "RF Overload Improvement Kit" in order to properly adjust the RF Overload DAC values.

Solution / Action:

If it is determined that the "RF Overload Improvement Kit" needs to be installed, the following part number corresponds to the kit and should be ordered:

Kit	Part Number
RF Overload Improvement Kit	85460-60029

Because R205 is the feedback resisitor for an operational amplifier that is used to set a DAC value for BOTH Input 1 and Input 2, it is EXTREMELY IMPORTANT to run the necessary Alignment and Performance Tests once this kit is installed. This consists of the following:

Alignment (** AT LEAST Revision A.00.02 **)

RF Overload Calibration, Input 1
RF Overload Calibration, Input 2

Performance Tests (** AT LEAST Revision A.00.04)

RF Overload Power, Input 1
RF Overload Power, INput 2