

N8973A-09

S E R V I C E N O T E

Supersedes:
None

N8973A NFA Noise Figure Analyzer

Serial Numbers: [MY45270880 / MY45270943]
[SG45270152 / SG45270153]

N4000A & N4001A Smart Noise Source Excessive Noise Ratio (ENR) data may not properly download.

Parts Required:

| P/N | Description | Qty. |
|-------------|--|------|
| N8972-60021 | Noise Figure 2 nd Interface Bus Board | 1 |

ADMINISTRATIVE INFORMATION

| | |
|--|---|
| SERVICE NOTE CLASSIFICATION: | |
| MODIFICATION AVAILABLE | |
| ACTION CATEGORY:: ON SPECIFIED FAILURE | <input type="checkbox"/> PERFORMANCE ENHANCEMENT <input checked="" type="checkbox"/> SERVICE / RELIABILITY ENHANCEMENT |
| LOCATION CATEGORY: X CUSTOMER INSTALLABLE X ON-SITE X SERVICE CENTER X CHANNEL PARTNERS | AVAILABILITY: August 1, 2009 - August 1, 2010 |
| AUTHOR: BAD | PRODUCT LINE: PL12 |
| ADDITIONAL INFORMATION: | |

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Situation:

When connecting an N4000A or an N4001A, SNS Series Noise Source to the affected instruments, a constant message of “Reading SNS noise source data. Do not remove connector” may appear on the analyzer display. When this message stays on screen, the ENR data will not download into the Noise Figure Analyzer 2nd Interface Bus board.

The N4002A does not have the issue, nor does the 346 series of noise sources.

Solution/Action:

If the message “Reading SNS noise source data. Do not remove connector” appears and stays on the analyzer display when using an N4000A or an N4001A this is the specified failure. If this failure occurs, verify the following two items to make sure the Noise Figure SIB is the cause:

1. The instrument serial number **must** be within the range stated above.
2. The serial number of the Noise Figure SIB board **must** be within the starting range of 790833 to 790915 or 798330 to 799150. Using figure 1 below as an example, the instrument serial number **and** the Noise Figure SIB are within the affected range.

If the analyzer is within the instrument serial number range, the Noise Figure SIB board is within the serial number range and the message, “Reading SNS noise source data. Do not remove connector” stays on the analyzer display; the Noise Figure SIB board should be replaced with item number N8972-60021 at no charge.

Figure 1

| Agilent 23:29:44 Jul 10, 2009 R T | | | | | Hardware |
|--|------------|-------------|------|-------|----------|
| NFA Series Noise Figure Analyzer | | | | | |
| Product Number: N8973A | | | | | |
| Serial Number: MY45270929 | | | | | |
| Firmware Revision: A.01.12 Date: Nov 26 2004 13:20:53 | | | | | |
| Bootrom Revision: 500 ROM Size: 8388608 RAM Size: 16777216 | | | | | |
| Assembly Name | Part # | Serial # | Rev | HW ID | |
| Power Supply Cnt | E440160172 | 01053017862 | 01 C | 7 | |
| Noise Figure RF | N897260101 | 79903000031 | 01 A | 112 | |
| Front Panel Card | N897260007 | 23073800009 | 99 B | 12 | |
| 50Ω 3 GHz Input | E440360107 | 23084400083 | 05 A | 82 | |
| 1D5: Hi Stability Freq Ref | E440360053 | 23084600026 | 00 B | 81 | |
| Processor | N897460009 | 23083800167 | 00 E | 4 | |
| Noise Figure SIB | N897260021 | 79084400508 | 01 A | 114 | |
| Noise Figure IF | N897260002 | 79084801325 | 03 C | 113 | |
| 140 Watt Power Supply | E440160222 | 53053017862 | 00 D | 7 | |
| 3.5" Floppy Disk | | | | | |
| GPIB & Parallel | | | | | |
| LO GPIB & RS-232 | | | | | |
| Narrow BW DSP | | | | | |