N4010A-06B

S E R V I C E N O T E

Supersedes:
N4010A-06A

N4010A Wireless Connectivity Test Set

Serial Numbers: GB44440270 / GB45500579

Performance Improvement for Units Equipped With Option 103

Parts Required:

P/N	Description	Qty.
N4010-61851	Frequency Extension Assembly	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION CATEGORY: [ ] ON SPECIFIED FAILURE; X AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours	
LOCATION CATEGORY: [ ] CUSTOMER INSTALLABLE; [ ] ON-SITE; X SERVICE CENTER; [ ] CHANNEL PARTNER	SERVICE INVENTORY: [ ] RETURN; [ ] SCRAP; X SEE TEXT	USED PARTS: [ ] RETURN; X SCRAP; [ ] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 31-Dec-2014	
AUTHOR: FC / AT	PRODUCT LINE: 13	

ADDITIONAL INFORMATION:

1. Service inventory is unaffected.
2. This upgrade requires that the instrument firmware be upgraded to A.04.01.02 (or newer).
3. The unit must be re-calibrated when once the new hardware has been installed.
4. The only difference between N4010A-06A and N4010A-06B is the extended no-charge date.

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Situation:

This Service Note addresses issues that have been identified when using the Agilent N4010A Wireless Connectivity Test set with option 103 (802.11 a/b/g Tx/Rx Analysis). These issues occur at certain frequencies, and may depend on the WLAN chipset in use.

For certain chipset architectures, measurement difficulties may be encountered, especially for the Packet Error Rate (PER) and Received Signal Strength Indicator (RSSI) measurements. This is caused by a mixing product at the lower end of the 802.11a band.

Please Note:

1. This mixing product will have little or no effect on measurements where the WLAN chipset being used has filtering built-in for real-life operation.
2. There is no issue when the N4010A is being used in the 2.4GHz frequency band.

Solution/Action:

If an N4010A with option 103 is exhibiting PER or RSSI measurement difficulties, the following procedure should be used to determine whether or not this Service Note applies:

1. Switch on the N4010A, and navigate to the 'Hardware Info' screen by pressing **System**, **Service**, **Hardware Info**.
   Note: This feature was introduced at firmware revision A.03.01.01. If the instrument firmware is older than A.03.01.01 then it must be upgraded to enable the 'Hardware Info' screen.

2. Take note of the 'N4010-xxxxx' part number that is listed against the 'FreqExt' entry.

If the listed part number is N4010-61049 then the hardware upgrade that improves performance is already in place, and this Service Note does not apply. As such, the instrument will require further debug to trace the issue to its root cause.

If the listed part number is N4010-60008 or N4010-61013, then the hardware upgrade that improves performance is not in place.

The Service Center is not required to verify the presence of PER or RSSI measurement issues - they will simply check to ensure that the unit contains one of the older parts.

The upgrade procedure is as follows:

1. Remove the old Frequency Extension assembly.
2. Install the Frequency Extension assembly supplied in kit N4010-61851 (i.e. N4010-61049).
3. Upgrade the N4010A firmware to A.04.01.02 (or newer).
4. Execute the internal 'calibrate all' procedure (i.e. press **System**, **Service**, **Calibrate All**).
5. Re-calibrate the instrument using the N7831A calibration software package.