E6607A-02A

S E R V I C E N O T E

Supersedes: E6607A-02

E6607A Wireless communication Test Set

Serial Numbers: US00000000 to US49450000 and MY00000000 to MY51282347

Replace RF connector block assembly upon failure.
RF Connectors coming loose from the RF connector block due to over tightening cable onto connector and insufficient loctite used during connector assembly

Parts Required:

P/N	Description	Qty.
E6607-61805	RF CONNECTOR MOUNTING FIXTURE	1

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:

MODIFICATION RECOMMENDED

ACTION X ON SPECIFIED FAILURE CATEGORY: [[]] AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours	
LOCATION [[]] CUSTOMER INSTALLABLE CATEGORY: [[]] ON-SITE **(active On-site contract required)** X SERVICE CENTER [[]] CHANNEL PARTNER	SERVICE [[]] RETURN INVENTORY: [[]] SCRAP X SEE TEXT	USED [[]] RETURN PARTS: X SCRAP [[]] SEE TEXT
AVAILABILITY: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: (12/31/2014)	
[[]] Calibration Required X Calibration NOT Required if Manual verification passes	PRODUCT LINE: PL13 AUTHOR: MW	
ADDITIONAL INFORMATION:		

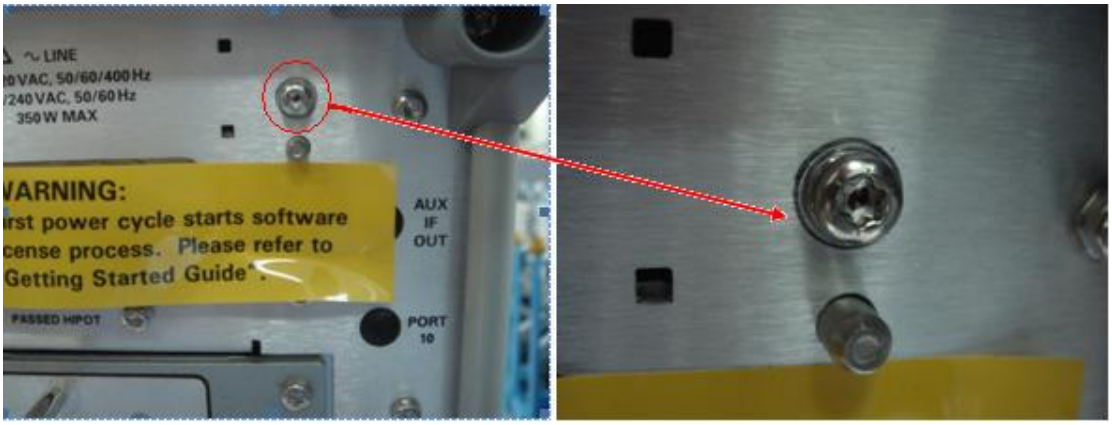
April 18, 2013

Rev. 21

Agilent Technologies

Situation:
RF Connectors are coming loose from the RF connector block assembly. This is due to over tightening of the RF cable onto connector. Also insufficient loctite used during connector assembly process.

Solution/Action:
Replaced the RF connector block assembly E6607-61805
Mark the rear panel of the instrument with a circle as indicated in the images below after replacement of the E6607-61805 RF block assembly



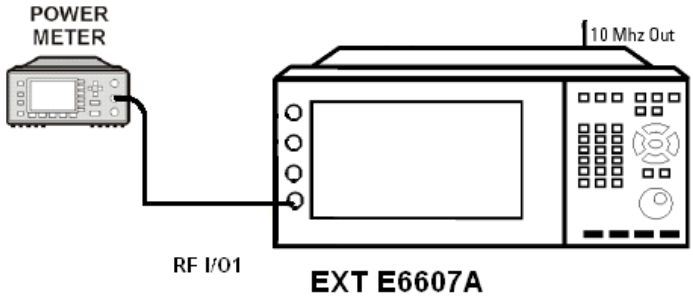
Run the following manual verification procedure.
If pass, no adjustment necessary.
If Fails, run the TX and RX power level flatness adjustments and verification test as called out in the EXT retest matrix of the service guide.

E6607A (EXT) Wireless communications Test Set
Manual Verification test after RF block assembly changed

Description:
Test manually checks the EXT RF source for a CW signal at various frequencies on all three output ports: RFIO1, RFIO2 and RF Out

Equipment required:
E4419A Power meter or equivalent with Power sensor or a Spectrum analyzer

Test Set: E6607A RF I/O1output to Power meter



Connect the Power meter with power sensor to the **RFI/O1** output
Or Connect the **RFI/O1** output port to the input of a Spectrum analyzer

Test Procedure:
Connect the Power sensor from the power meter to the **RFI/O1** port on the front panel of the EXT.

Set up the EXT Source:

1) On the E6607A press the **Source** button, **Frequency** = 350 MHz
   a) **Return, Amplitude** = -15 dBm
   b) **Return, RF** = ON
   c) Press the **Input / Output** button, more 1 of 2 and set the RF output port to **RFI/O1**

Verify that the power meter display read -15 dBm +/- 0.6 dBm, record value in table 1

If using a Spectrum Analyzer: Set the Frequency to 350 MHz and the Span to 10 MHz, Use the peak search function to read the power level. (-15 dBm +/- 1 dBm) record value in table 1

2) Press **Source** button, **Frequency** = 890 MHz and repeat the power measurement.

3) Repeat step 2 by setting the Frequency to 1900 and 2750 MHZ and repeating measurement in step 2. Record all measured valued in table 1.

4) Changed the RF output port to **RFI/O2**. Press the **Input / Output** button, more 1 of 2 and set the RF output port to **RFI/O2**

5) Press **Source** button, **Frequency** = 350 MHz and repeat the power measurement

6) Repeat step 5 by setting the RF Source Frequency to 890, 1900 and 2750 MHz Record all measured valued in table 1.

7) Changed the RF output port to **RF output**. Press the **Input / Output** button, more 1 of 2 and set the RF output port to **RF output**

8) Press **Source** button, **Frequency** = 350 MHz and repeat the power measurement.

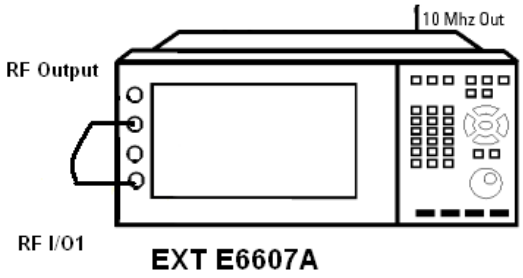
9) Repeat step 8 by increasing the RF Source output Frequency to 890, 1900 and 2750 MHz Record all measured valued in table 1.

10) Verify that all output power levels are within limits. If yes, the source is functioning. If no, proceed to replacement procedure for the source assembly.

TABLE 1- Power levels should be **-15 dBm +/- 0.6 dBm if using power meter (+/- 1 dBm if using Spectrum Analyzer)**

Output Frequency Power set to -15 dBm	RFI/O1	RFI/O2	RF out
350 MHZ			
890 MHz			
1900 MHz			
2750 MHz			

Verify Receiver power level



Test Procedure:
Connect an RF cable between the **RF output** port and the **RFI/O1** port on the front panel.

Set up the EXT Source:

1) On the E6607A press the **Source** button, **Frequency** = 350 MHz
   a) **Return, Amplitude** = -15 dBm
   b) **Return, RF** = ON
   c) Press the **Input / Output** button, more 1 of 2 and set the RF output port to **RF output**
   d) Press the **Input / Output** button, set the RF input to **RFI/O1**port
2) Press **Mode = IQ Analyzer**, Freq = 350 MHz , Span = 2 MHz , Amp = 0 dBm
3) Press the *Peak Search* function on the front panel. Verify the marker display is at 350 MHz and -15 dBm +/- 1 dBm
4) Repeat steps 2 and 3 for 890,1900 and 2750 MHz

Revision History:

Revision Number	Date	Author	Reason For Change
1.0	4/18/2013	MW	Extend serial number range of affect instruments