E4407B-18

S E R V I C E   N O T E

E4407B ESA Series Spectrum Analyzers

Serial Numbers: All

An error message occurs during the 3 GHz RF Assembly Adjustment portion of the TME LO Amplitude Adjustment test on the instruments which have certain vintages of the ESA RF assembly.

Parts Required:

P/N	Description	Qty.

None

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:
INFORMATION ONLY
AUTHOR: DC   PRODUCT LINE: 12
ADDITIONAL INFORMATION:

Agilent Technologies

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Situation:

If the ESA being adjusted has a 50 ohm, 3 GHz input part number of E4403-60100 or E4403-60107, the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test will fail. The error message on the PC looks like:


The failure is occurring because a DAC was recently removed from the RF assembly board and replaced with a fixed gain amplifier.
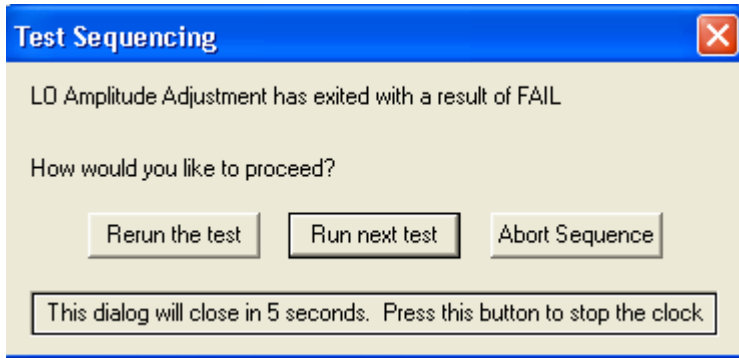
Solution/Action:

Before doing the LO Amplitude adjustment, press [System], {More 1 of 3}, {Show Hardware} on your analyzer. Look for "50 ohm 3 GHz Input" assembly name. If the part number listed is E4403-60100 or E4403-60107, skip the 3 GHz RF Assembly LO Adjustment portion under the LO Amplitude Adjustment test. Perform all the other adjustments under the LO Amplitude Adjustment except this one.

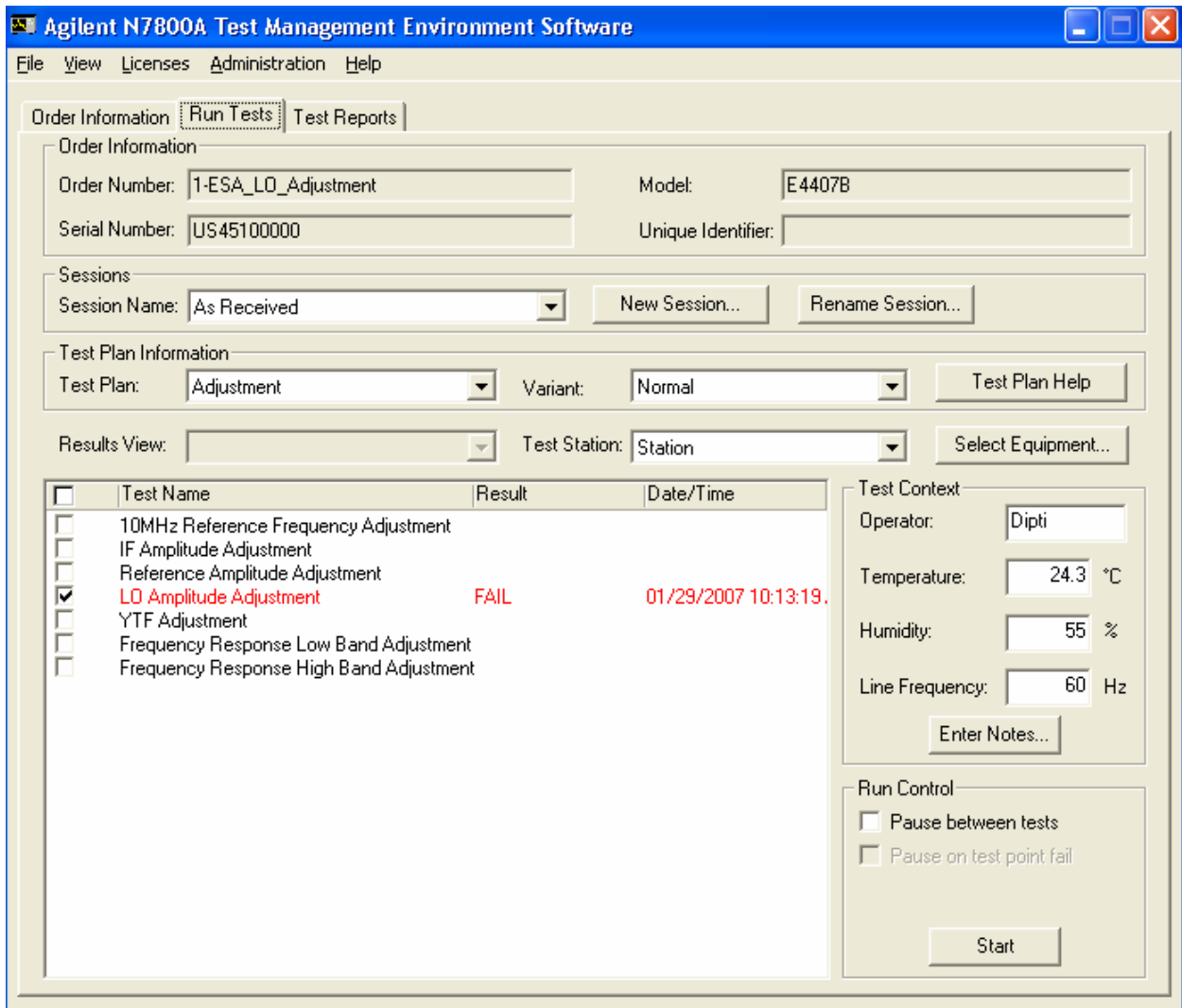After all the portions except the 3 GHz RF Assembly LO Adjustment of the LO Amplitude Adjustment test are run, when you click on "Finish" Test, the following message appears on the screen.
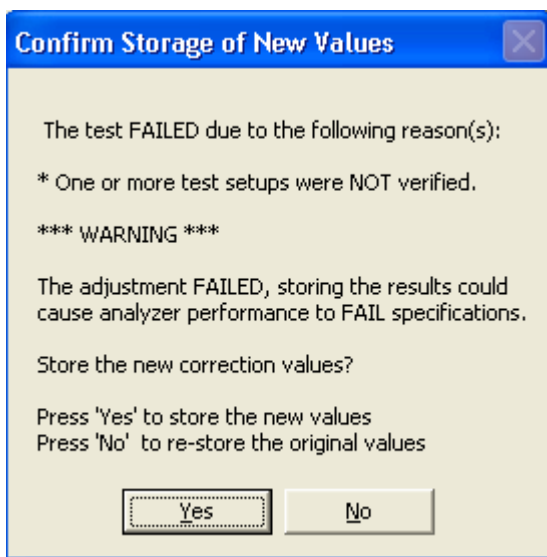
This error message occurs because the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test was not performed. Click "Yes" to store the new values. After you click yes, the following message appears on the PC screen:

Test Sequencing

LO Amplitude Adjustment has exited with a result of FAIL

How would you like to proceed?

| Rerun the test | Run next test | Abort Sequence |

This dialog will close in 5 seconds. Press this button to stop the clock

Click on "Run Next test" or just wait for 5 seconds, depending on the tests you are running. After 5 seconds or after all the other adjustment tests are performed, here is what the adjustment test result will look like:

Agilent N7800A Test Management Environment Software

File   View   Licenses   Administration   Help

Order Information | Run Tests | Test Reports

Order Information

Order Number: 1-ESA_LO_Adjustment   Model: E4407B

Serial Number: US45100000   Unique Identifier:

Sessions

Session Name: As Received   [New Session...]   [Rename Session...]

Test Plan Information

Test Plan: Adjustment   Variant: Normal   [Test Plan Help]

Results View: Test Station: Station   [Select Equipment...]

Test Name	Result	Date/Time
10MHz Reference Frequency Adjustment		
IF Amplitude Adjustment		
Reference Amplitude Adjustment		
LO Amplitude Adjustment	FAIL	01/29/2007 10:13:19.
YTF Adjustment		
Frequency Response Low Band Adjustment		
Frequency Response High Band Adjustment		

Test Context

Operator: Dipti

Temperature: 24.3 °C

Humidity: 55 %

Line Frequency: 60 Hz

[Enter Notes...]

Run Control

☐ Pause between tests
☐ Pause on test point fail

[Start]

The LO Amplitude adjustment test result appears as Fail because the 3 GHz RF Assembly Adjustment portion of the LO Amplitude Adjustment test was not performed. Ignore the fail message and continue with your tests.

The software engineering team is working on getting the TME software updated to remedy this situation. The updated version will be ready by July 2007. Check your TME software for updates during that time frame.