

MODIFICATION RECOMMENDED

**N4903A-04**

**S E R V I C E N O T E**

Supersedes:  
None

**N4903A - Serial Bit Error Ratio Tester with Option J20**

**Serial Numbers of the N4903A-J20 or N4903B-J20 plug-in:**

- DE45A00100 – DE45A00399**
- DE49100100 – DE49100150**
- MY49100200 – MY49100499**
- MY45AEX000 - MY45AEX199**

**Front plate has incorrect physical dimensions (wrong thickness)**

**Parts Required:**

<b>P/N</b>	<b>Description</b>	<b>Qty.</b>
<b>N4901-20231</b>	<b>Front Plate</b>	<b>1</b>

**ADMINISTRATIVE INFORMATION**

<b>SERVICE NOTE CLASSIFICATION:</b>			
<b>MODIFICATION RECOMMENDED</b>			
<b>ACTION CATEGORY:</b>	<input type="checkbox"/> ON SPECIFIED FAILURE <input checked="" type="checkbox"/> AGREEABLE TIME	<b>STANDARDS</b>	<b>LABOR:</b> 0.5 Hours
<b>LOCATION CATEGORY:</b>	<input type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input checked="" type="checkbox"/> SERVICE CENTER Roseville ONLY <input type="checkbox"/> CHANNEL PARTNER	<b>SERVICE INVENTORY:</b> <input type="checkbox"/> RETURN <input type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT	<b>USED PARTS:</b> <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> SCRAP <input type="checkbox"/> SEE TEXT
<b>AVAILABILITY:</b>	PRODUCT'S SUPPORT LIFE	<b>NO CHARGE AVAILABLE UNTIL:</b> 13-Mar-2013	
<b>AUTHOR:</b> HK	<b>PRODUCT LINE:</b> PL24		
<b>ADDITIONAL INFORMATION:</b>			

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Rev. 19

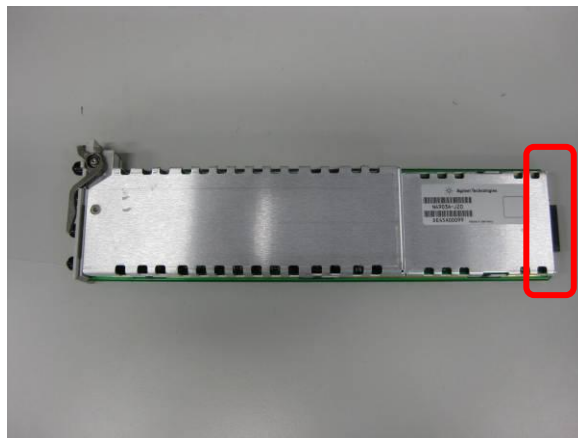


**Situation:**

The N4903A Option J20 or N4903B Option J20 is a plug-in module that inserts into a N4903A or N4903B product as shown in the next 2 pictures.



Due to mechanical problems (physical thickness of the front plate) there may be connection problems, i.e. the connector at the other end of the plug-in does not full insert into the connector inside the N4903A/B. The next picture shows the connector at the other (inserting) end of the N4903A/B-J20 plug-in.



Therefore we may have to exchange the front plate and replace it with one that has the correct physical dimensions.

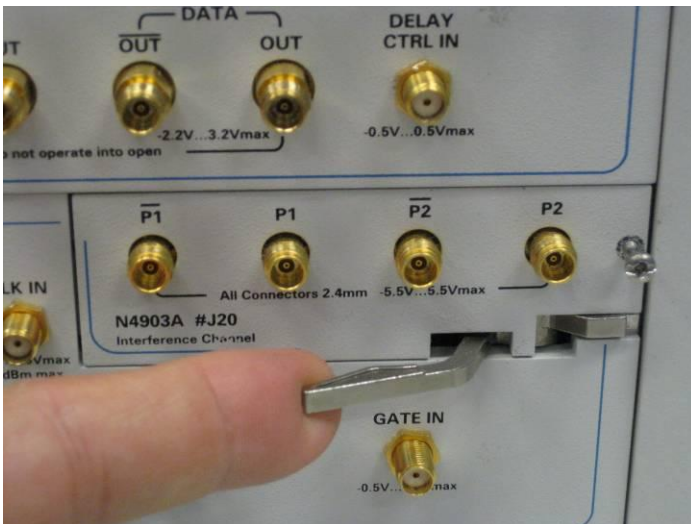
**Solution/Action:**

The following paragraphs contain instructions on how to exchange the front plate. You will need a normal screw driver and a Torx T10.

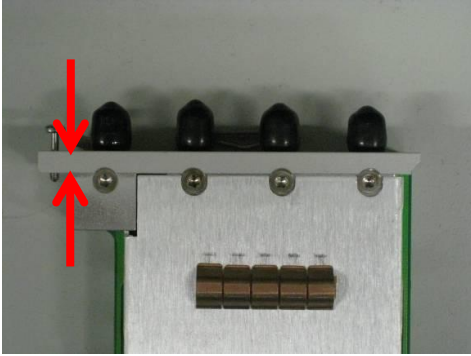
Unplug the N4903A/B-J20 from the N4903A. Completely loosen the screw shown in the next picture.



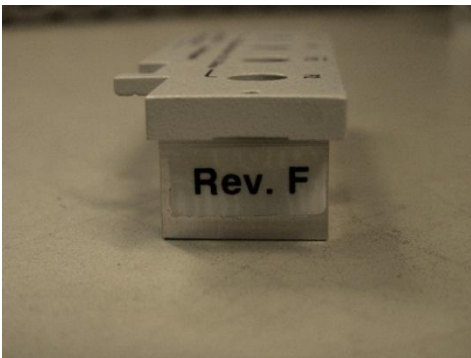
And then use the lever to unplug the module.



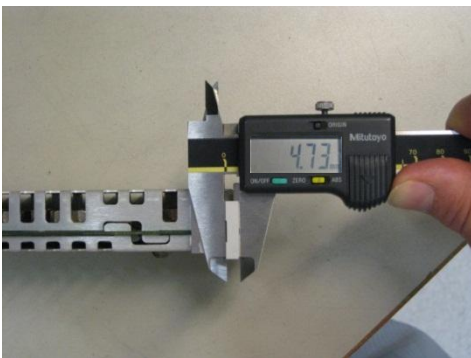
This issue with some of the older front plates is the following: the width of the front plate (red arrows in picture below) is too high (too thick), which may result in connection problems, if other mechanical tolerances add up in an unfavorable way.



Please check if the front panel is already marked with the label “Rev. F” or if the serial number is higher than MY49100500 (for new trade shipments) or higher than MY45AEX200 (for spare parts from SPO). If one of the conditions is true then the front plate was already exchanged or manufactured with the correct front plate.



If you do not find the label or if you are unsure (with the serial number) then please take a caliper and measure the width:

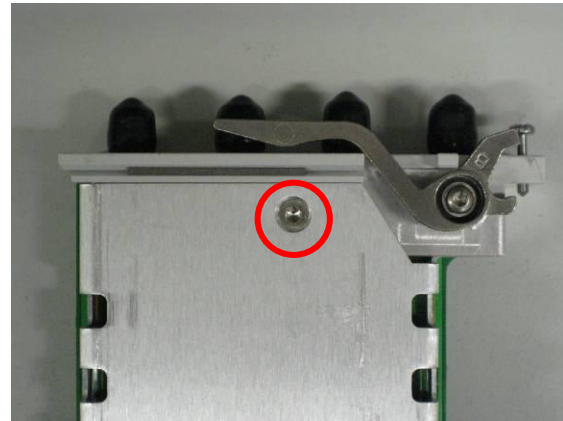
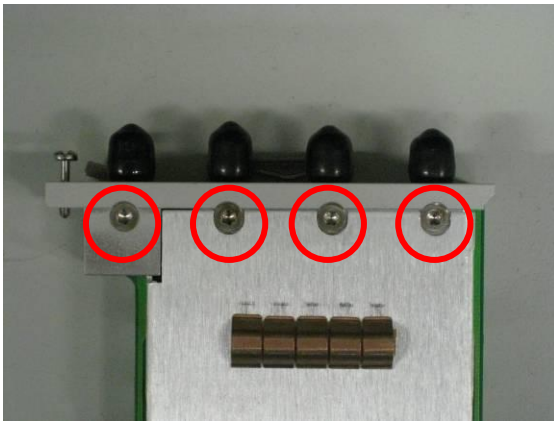


The width of the front panel should be:

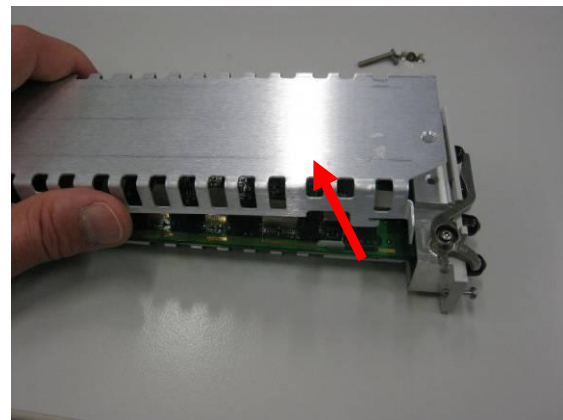
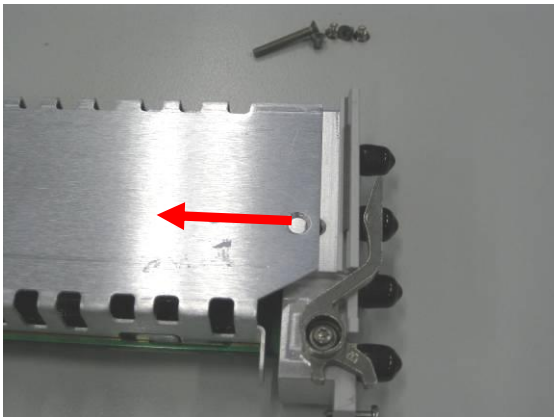
**4.7mm (0.185in) +/- 0.1mm (0,004in)**

If the width is too high please exchange the front plate using the instructions on the following pages.

Identify the 5 screws (4 + 1) and unscrew them:



Slowly move the cover to the left and start lifting it up as shown in the left picture:

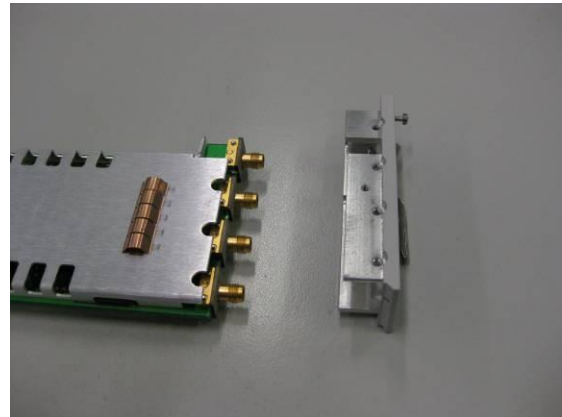
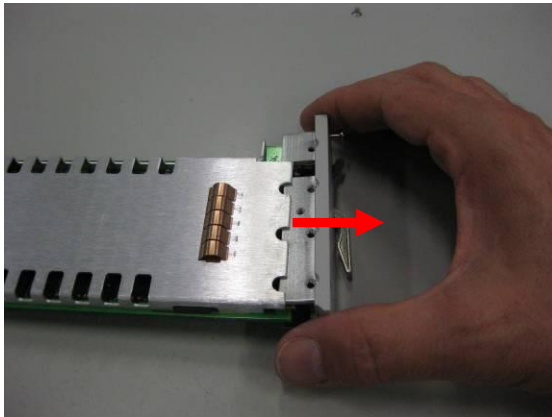


Put the cover to the side and turn the plug-in to the other side.

In case there are connector protectors used, please pull them off.



Then slowly pull the front plate to the left as shown below:



Now unscrew the lever and fasten it on the new front plate:



## Re-Assembly

Take the new front plate with the newly attached lever and re-assemble the plug-in using the reverse order of steps from above.

Make sure that you securely fasten the 5 screws that hold the front plate.

Now insert the N4903A/B-J20 back into the N4903A/B product and secure it by tightening the Screw:



Turn on the N4903A/B and check whether the plug-in is recognized correctly.

Use the Bigfoot Calibration / Performance Verification software to verify that the N4903A/B-J20 plug-in is fully working. 3 measurements cover the J20:

- PG Sinusoidal Interference Amplitude Accuracy (Normal and Complement)
- PG Sinusoidal Interference Frequency Accuracy
- PG Intersymbol Interference Trace Length Accuracy (Normal and Complement)

## Repair Tracking Sheet

Please track the repairs in the following spreadsheet:

<\\BERT-Support\public\Repair J20\ISI Service Note Track.xlsx>