N5230A-06A

S E R V I C E N O T E

Supersedes:
N5230A-06

N5230A PNA-L Series RF Network Analyzers

Serial Numbers: MY00000000-MY46401145

Add-on mechanical components to enhance instrument reliability

This optional modification is chargeable to customer warranty only if done concurrently with other instrument repairs in an Agilent service facility.

Parts Required:

P/N	Description	Qty.
Enhancement No.1 (Applies to all Options)		
E8364-00021	Ribbon Cable Clamp	1
0515-0374	Screw, M3.0x10mm, Pan Head	1
Enhancement No.2 (Only For Options 146 and Option 246)		
E8361-20067	Retainer Clip	2
0515-1644	Machine Screw, M3.0 x 12mm Flat Head (For Retainer Clip)	2
Enhancement No.3 (Only For Option 146 and Option 246)		
0515-1753	Patch-lock Screw, M3.0x 8mm Pan Head (For Cable Hold Wire)	2
3050-0891	Flat Washer (For Patch-lock Screw)	2

ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION: **MODIFICATION AVAILABLE**	
ACTION CATEGORY:: AGREEABLE TIME	X PERFORMANCE ENHANCEMENT X SERVICE / RELIABILITY ENHANCEMENT
LOCATION CATEGORY: X SERVICE CENTER	AVAILABILITY: Support Life
AUTHOR: DYCS	PRODUCT LINE: WN
ADDITIONAL INFORMATION: **To Be Performed By: Agilent-Qualified Personnel or Customer with specific product repair knowledge – requires instrument disassembly and component replacement.** This service note (written April 3, 2008) applies to all N5230A being manufactured before this serial number MY46401146. The unit serial number is found at the back of the instrument. This Service Note must go along together with the instrument model Service Guide during modification.	

Situation:

Further design review has suggested the addition of a clamping mechanism to ensure that the 8121-0118 ribbon cable can not vibrate loose from the Test Set Motherboard connector during extreme handling.

New clamps and locking screws are being added to ensure that those printed circuit assemblies can not vibrate loose from their connectors during extreme handling.

Solution/Action:

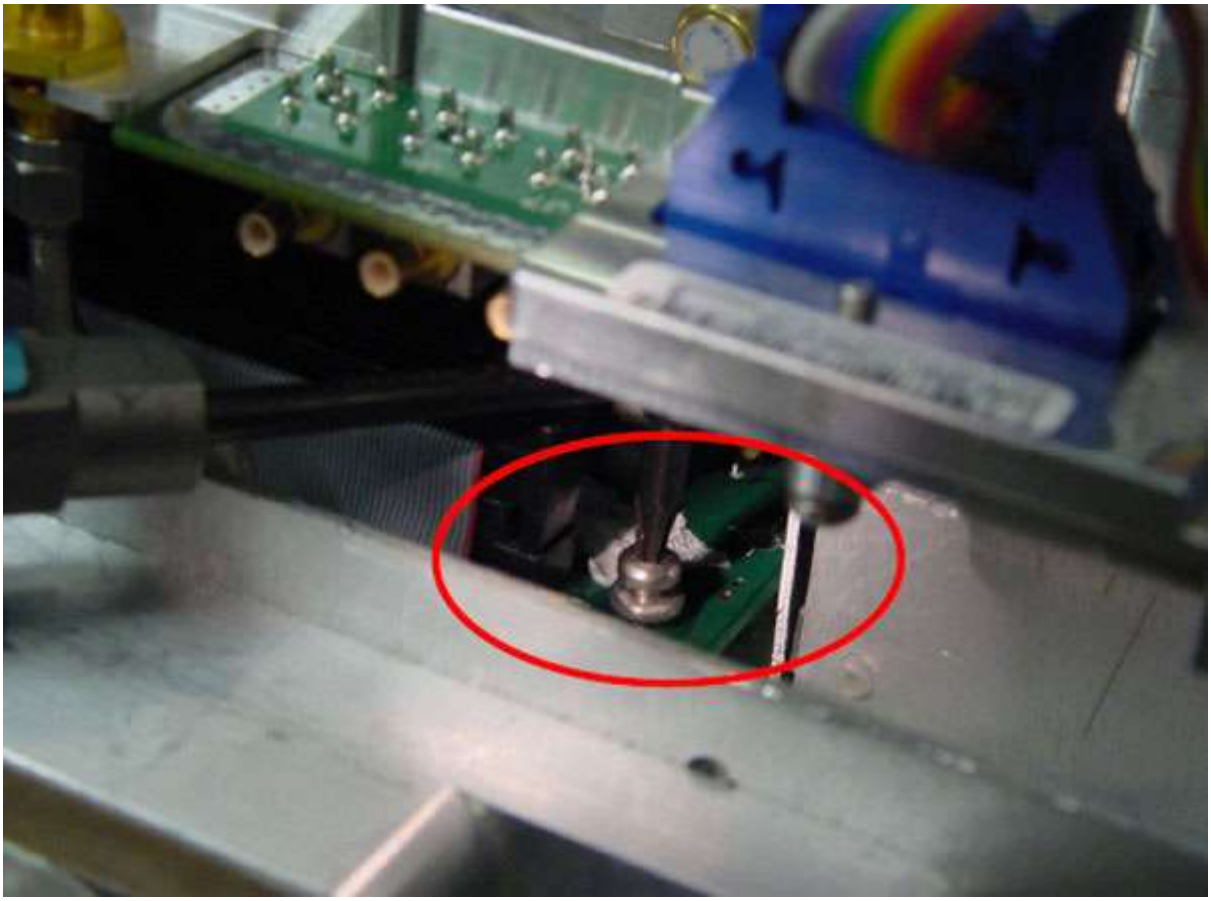
Enhancement No.1 (Applies to all Options)

1. **Required Tool for Ribbon Cable Clamp**
   a. Gather a standard 10 lb-in breakaway wrench (used for semi-rigid cables).

   b. Remove the open end head by loosening set screw. It will be replaced with L-Key shown below.

   c. Secure and orient the L-Key to the breakaway handle

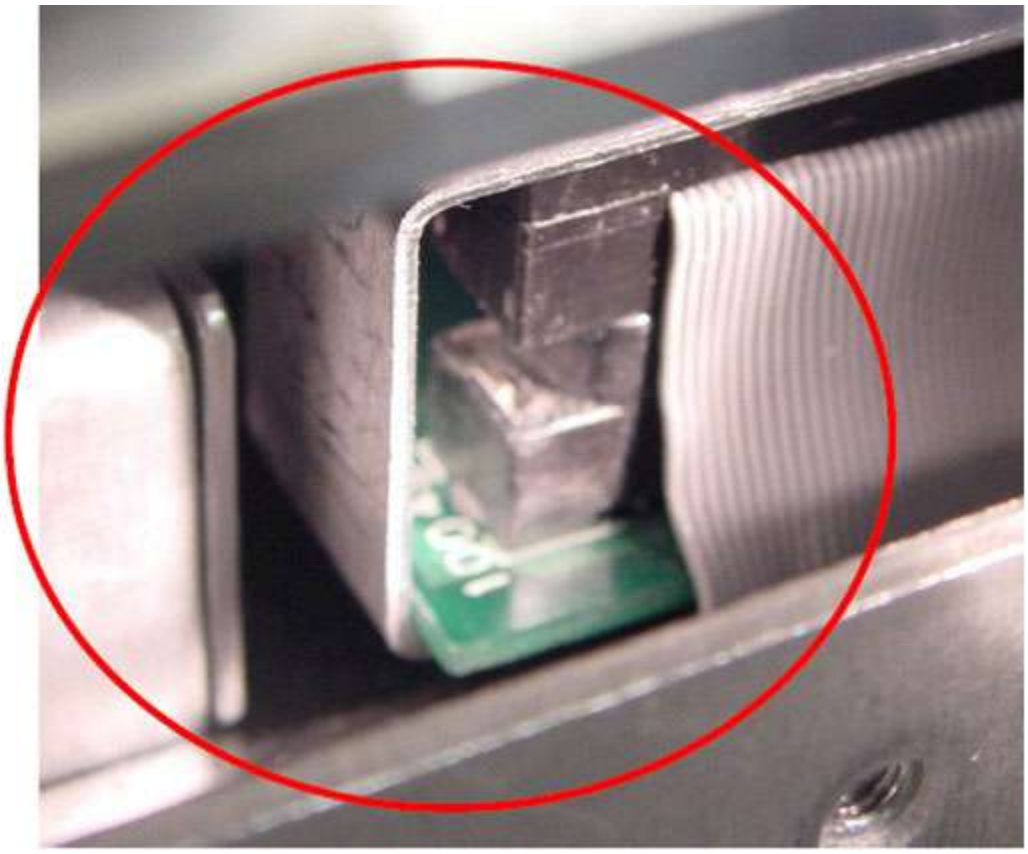
2. **Ribbon Cable Clamp Installation Instructions**
   a. Remove and discard existing screw near ribbon cable connector on System Motherboard. See below.



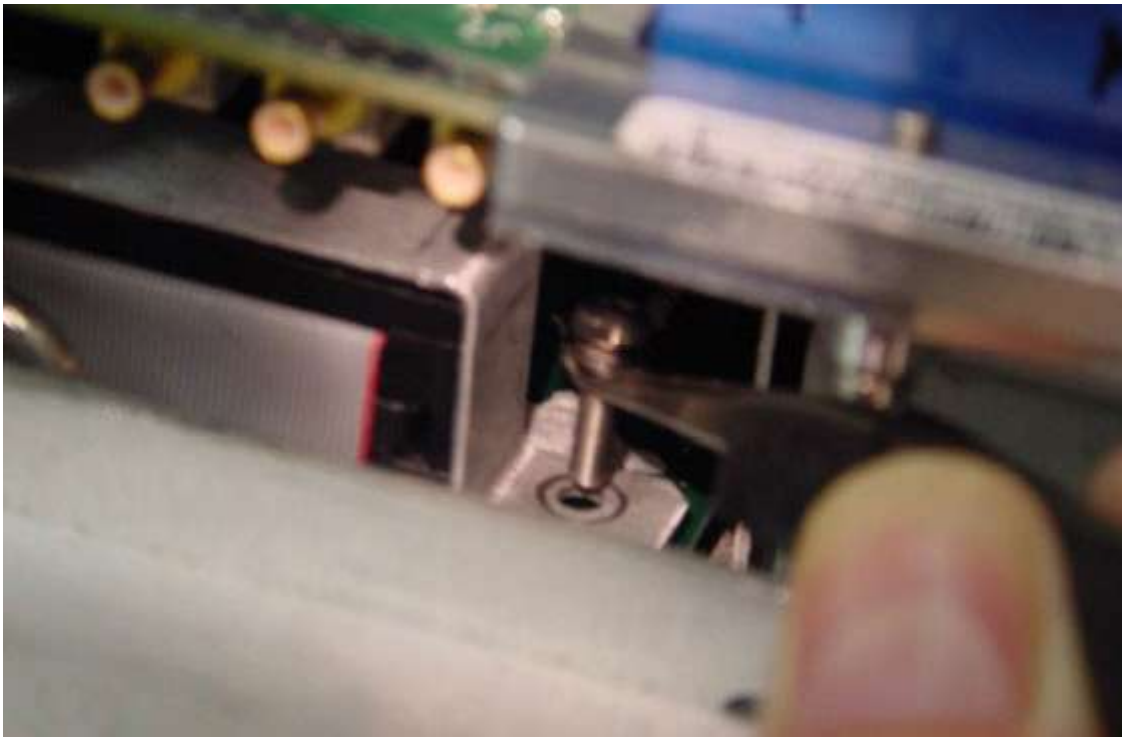
b. Insert Ribbon Cable Clamp under Source Assembly as shown.

c. Position the clamp over the Ribbon Connector. Use needle nose pliers if necessary to slide the clamp into place. Ensure that the edge of the clamp is parallel to the connector and not skewed.

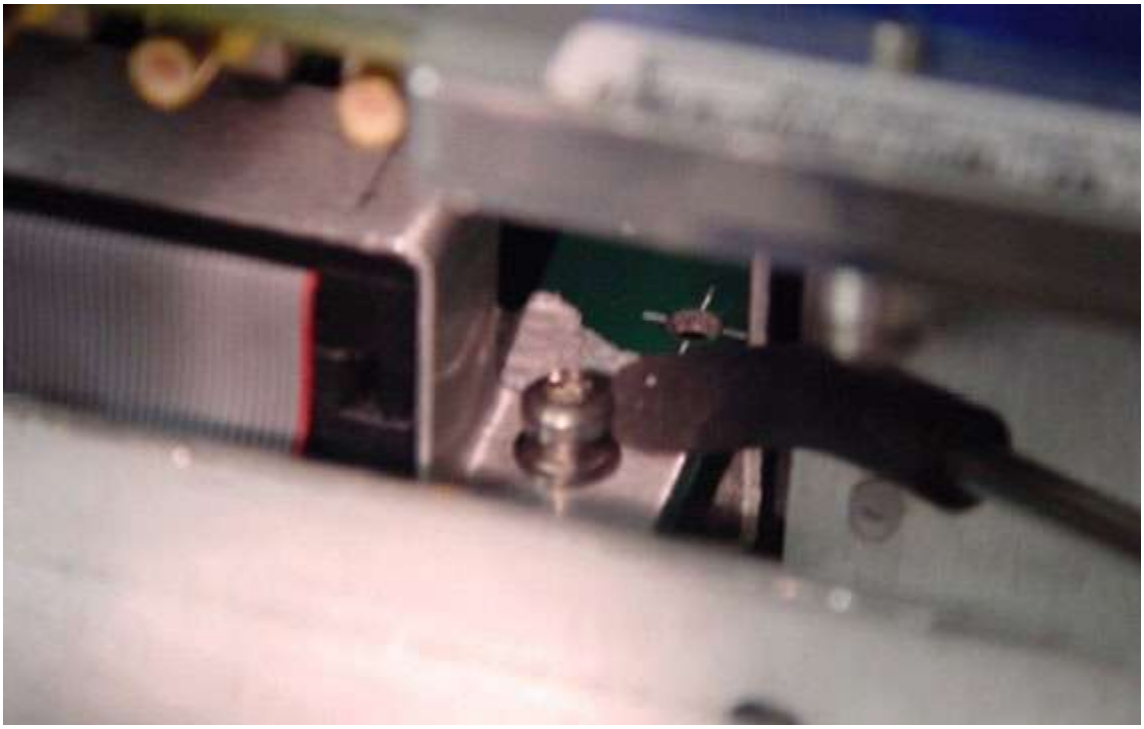
NOTE: Ensure that the Clamp Lip is secured BELOW the edge of the System Motherboard



d. Using tweezers, install a new 0515-0374 screw through the hole in the bracket.

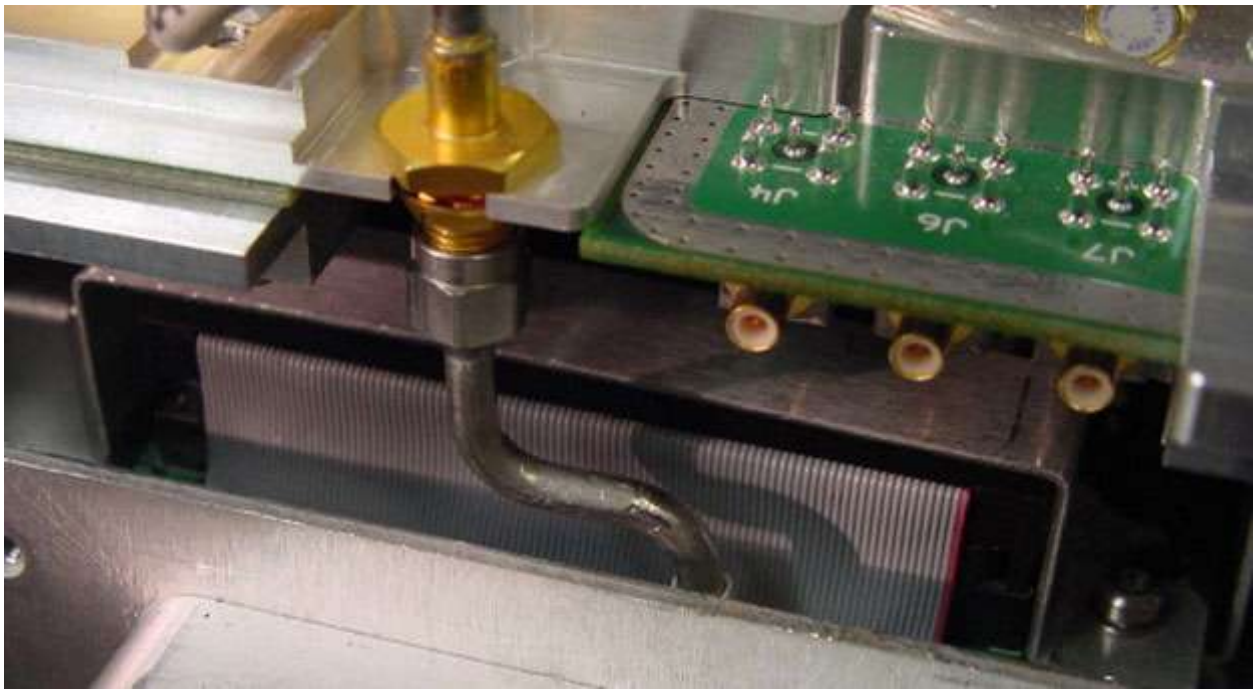


e. Use a nut runner tool (T-316130) or alternatively a clean erasure end of a pencil to help run the screw.



f. Secure screw using the modified 10 lb-in breakaway wrench.

g. This image shows the final position of the secured clamp.



Enhancement No.2 (Only For Option 146 and Option 246)

The Clip Retainer (E8361-20067) to be secured with Flat Head screw (0515-1644) in 2 places at 9 lb-in. This Retainer Clip may naturally rotate a bit when being secured, which is acceptable. Note that the existing screw needs to be removed and discarded prior installing Retainer Clip #1 (shown below in Figure 2a, 2b and 3). The final replacement out is as shown in Figure 3.

Figure 2a

Figure 2b

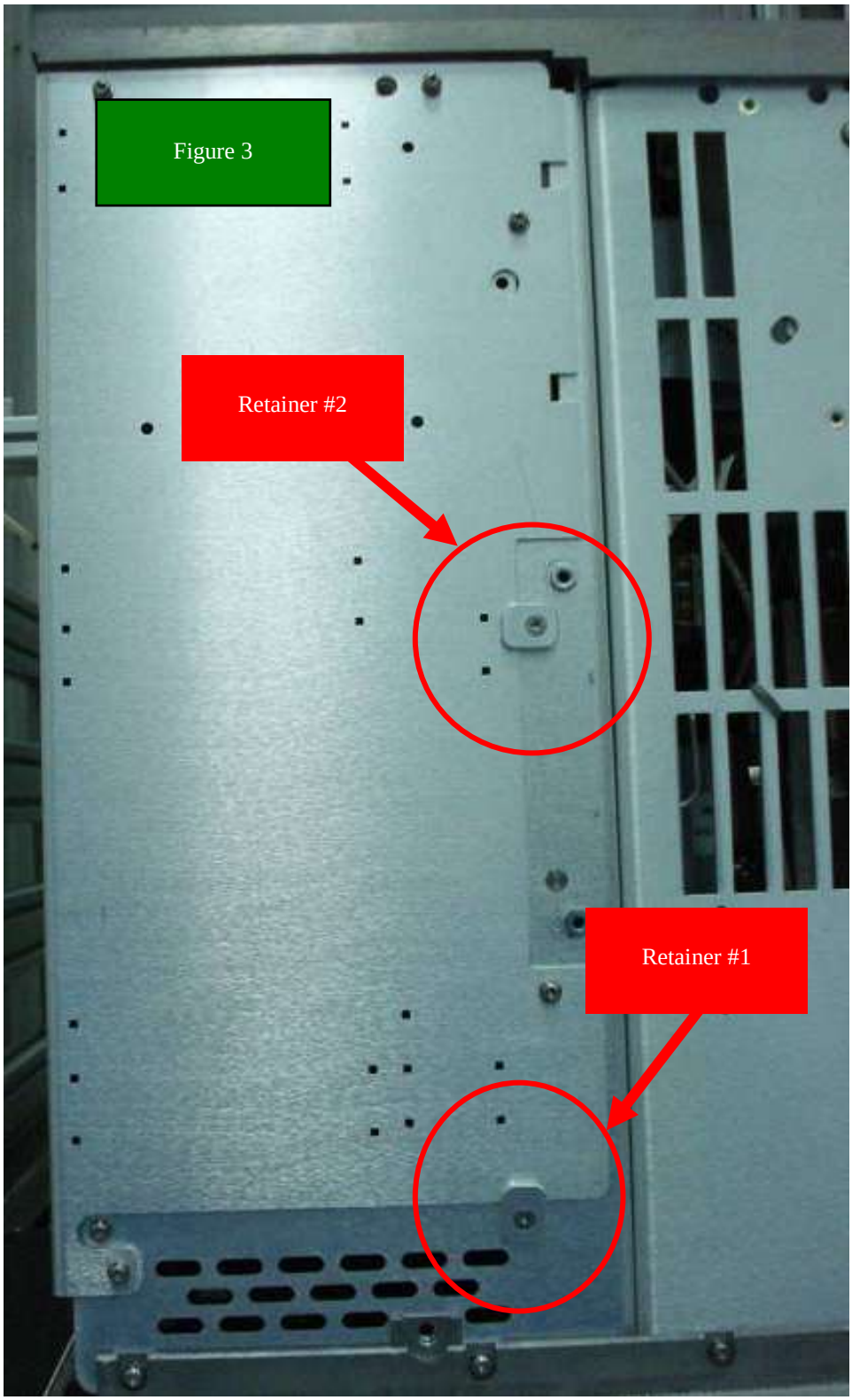


Figure 3
Retainer #2
Retainer #1

Enhancement No.3 (Only For Option 146 and Option 246)

The Patch-Lock Screw (0515-1753) and Flat Washer (3050-0891) to be used in 2 places and secured at 9 lb-in. These parts will replace existing screw (0515-0372) used in Step 3 and 4 (as shown in Figure 2) to secure the Plenum Bracket (E8356-00033). Note that in Step 1 and Step 2; please discard BOTH plenum bracket screws as both being replaced.

Figure 1:

Patch-Lock Screw (0515-1753)

And

Flat Washer (3050-0891)

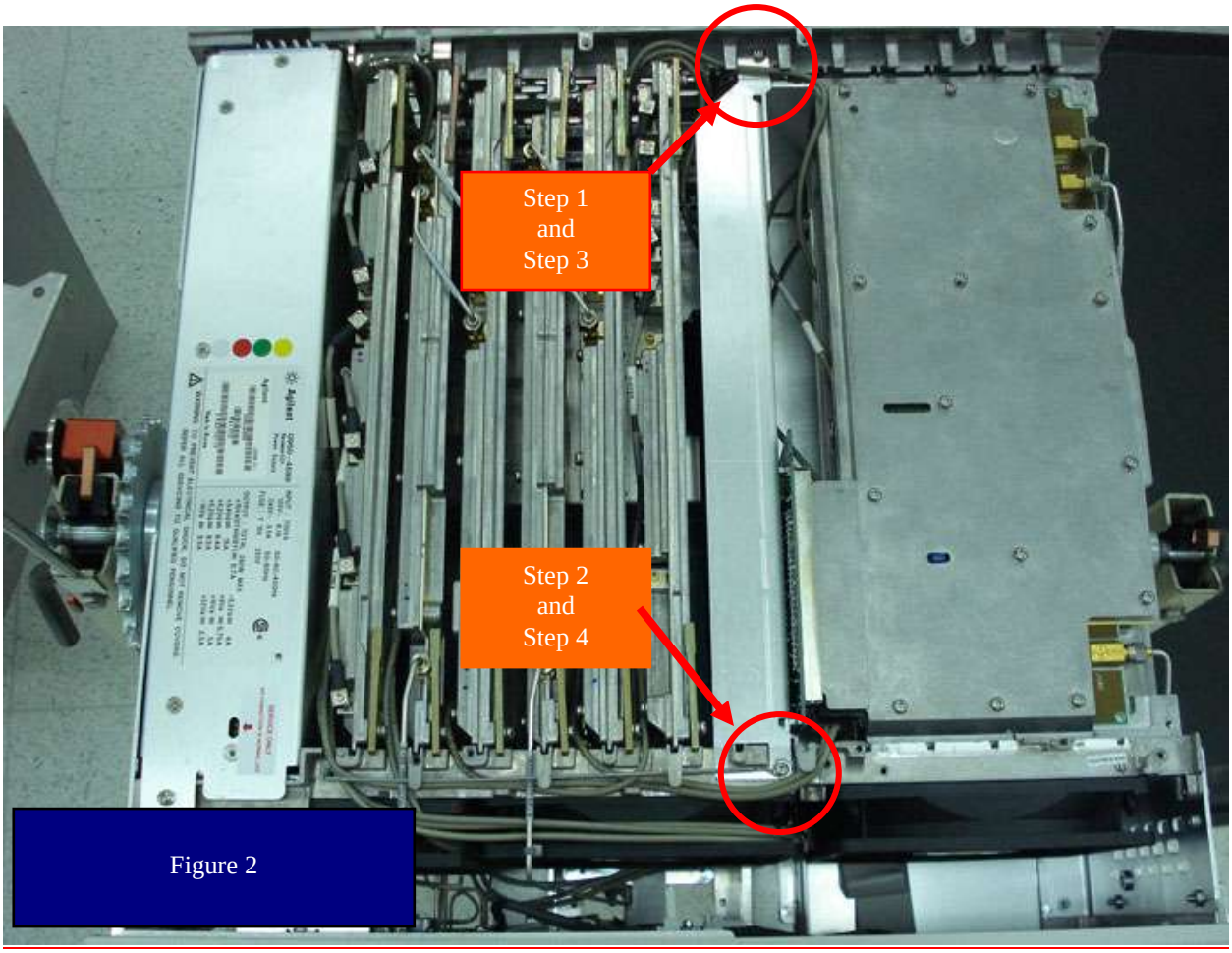


Figure 2