6651A-11

Modification Recommended Service Note

Supersedes: NONE

6651A DC power supply, 0-8 V, 0-50 A, 400 W. GPIB

Serial Numbers: "MY53000140 to MY53000698 and SG53000101 to SG53000108"

The Problem – 6651A exhibited out of specification values for 3.8V to 4.2V at front panel read back readings.

Parts Required: P/N 06651-61020

Description PCA-Tested,Control Qty. 1

ADMINISTRATIVE INFORMATION

ACTION CATEGORY:	[X] ON SPECIFIED FAILURE [[]] AGREEABLE TIME	STANDARDS LABOR: 1.0 Hours		
LOCATION CATEGORY:	 []] CUSTOMER INSTALLABLE []] ON-SITE (active On-site contract required) [X] SERVICE CENTER []] CHANNEL PARTNERS 	SERVICE: [X] RETURN USED [X] RETURN INVENTORY: [[]] SCRAP PARTS: [[]] SCRAP [[]] SEE TEXT [[]] SEE TEXT		
AVAILABILITY	: PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL: 31 March 2018		
	[X] Calibration Required [[]] Calibration NOT Required	PRODUCT LINE: SP AUTHOR: KT		

ADDITIONAL INFORMATION:



Situation:

6651A exhibited out of specification values for 3.8V to 4.2V at front panel read back readings. Other ranges and remote programming's behaved normally.

Solution/Action:

User/SSU to verify the affected model and serial number in the following procedure as below. Turn on the unit and warm-up for 30 minutes.

User/SSU Verification Procedure

- 1. Set voltage to 4.0V and turn on the output. If the unit is good, the front panel will show voltage value (read back voltage) that is within the specification to 4.0V (+/- 0.01V).
- 2. Any front panel voltage value reading out of 3.99V ~ 4.01V range is consider out of specification and need to send back to nearest SSU for PCA board replacement.

SSU Rework Procedure

1. Remove the handle, front cap and back cap from both side of the cover with removing 2 screws from each side as shown in the following picture as below.



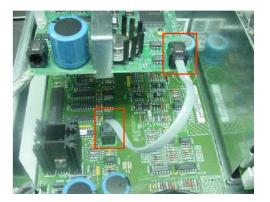
2. Remove cover block from the back cover and chassis after removed the screw at each side.



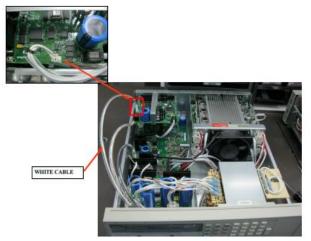
3. Remove the screw at each side of the chassis.



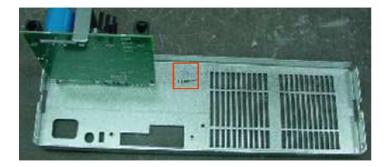
4. Disconnect phone cable from HPIB to the main PCA as shown.



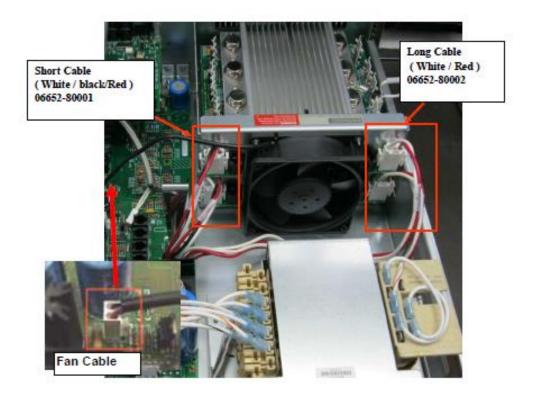
5. Disconnect white cable from transformer to the GPIB board as shown.



6. Remove the rear cover from chassis.



- 7. Disconnect the cables.
 - a. Disconnect 2 white/red cables (06652-80002) from the main PCA to connector J302 on heatsink.
 - b. Disconnect 2 white/black/red cables (06652-80001) from the main PCA to connector J202 on heatsink.
 - c. Disconnect fan cable

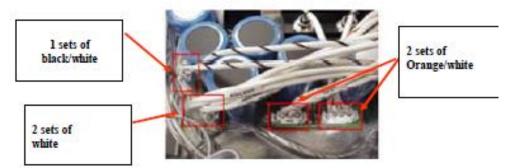


d. Disconnect 4 phone cables and cut the cable tie



e. Disconnect cables from transformer, the number of cables varies base on model 6x51A, 6x52A, 6x53A, 6x54A and 6x55A.





f. Disconnect cable J450 on PCA.



g. Disconnect J600 on PCA input as shown.

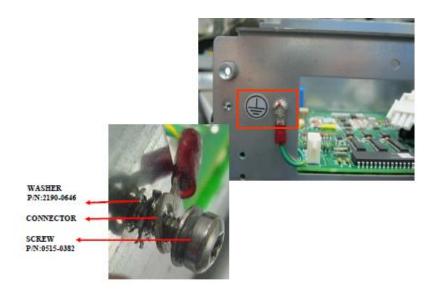


h. Remove 2 screws

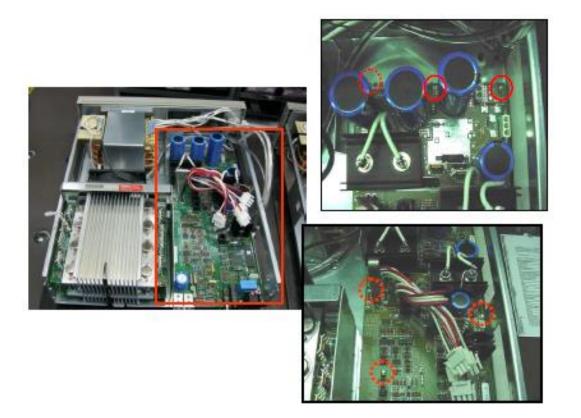




© Keysight Technologies 2015-2016 Modification Recommended Service Note Version 1.2 | October 27, 2016| Page **7** of **14** 8. Remove the ground screw.



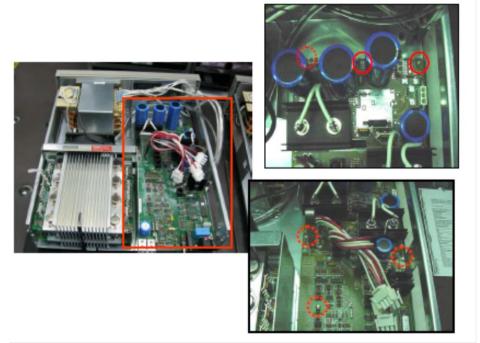
9. Dislodge the PCA board from the 6 key pin, then remove it from the chassis.



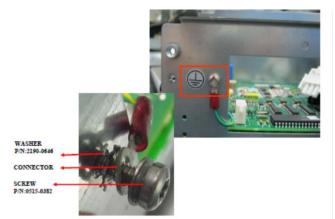
10. Replace with a new PCA board (06651-61020)



11. Lodge the PCA into the 6 key pin, then slide to lock it to the chassis.

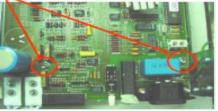


12. Tighten the ground screw.

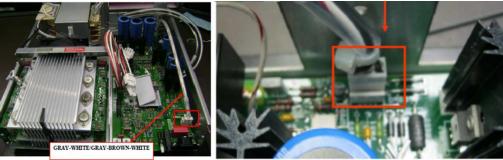


13. Tighten 2 screw as shown.

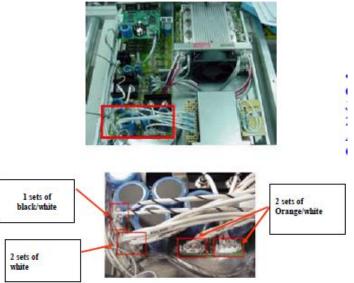




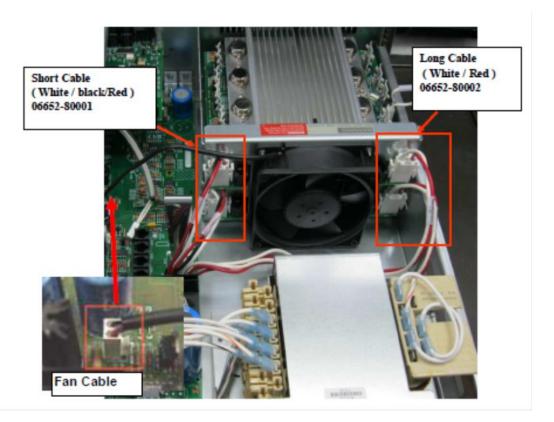
14. Insert cables J450 and J600 on PCA as shown.



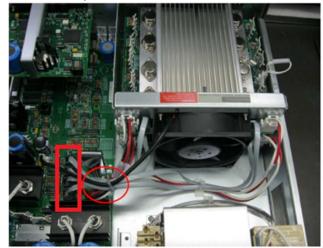
15. Connect cables from transformer, the number of cables varies base on model 6x51A, 6x52A, 6x53A, 6x54A and 6x55A.



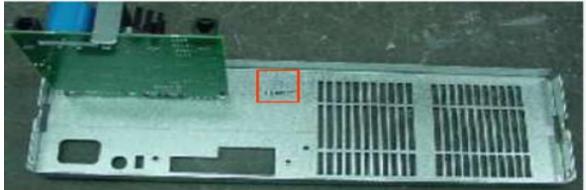
- 16. Connect cables.
 - a. Connect 2 white/red cables (06652-80002) from the main PCA to connector J302 on heatsink.
 - b. Connect 2 white/black/red cables (06652-80001) from the main PCA to connector J202 on heatsink.
 - c. Connect fan cable



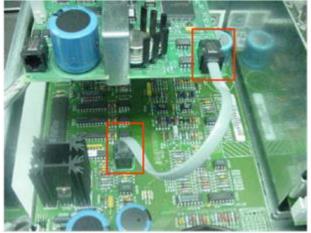
d. Connect 4 phone cables and tie all the cables with cable tie



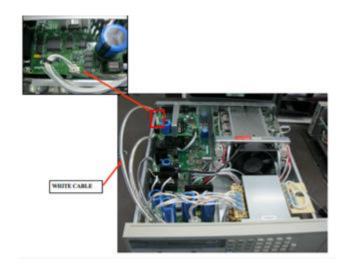
17. Assemble the rear cover to chassis.



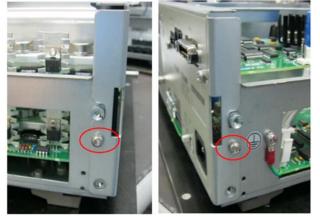
18. Connect phone cable from HPIB to the main PCA as shown.



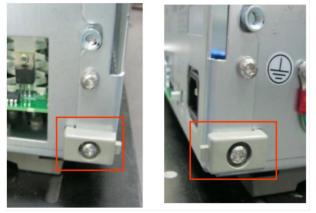
19. Connect white cable from transformer to the GPIB board as shown.



20. Tighten the screw at each side of the chassis.



21. Attach cover block to the back cover and chassis by tighten the screw at each side.



22. Mount the handle, front cap and back cap to both sides of cover with 2 screws as shown in the

following picture as below



23. Lastly, perform the hipot test, calibration and final test as stated in the service guide.

Revision History:

Date	Service Note Revision	Author	Reason for Change
29 Sep 2016	01	KT	As Published