

N7953A-02

# Modification Recommended Service Note

Supersedes:  
NONE

N7953A – Advanced Power System, Dynamic DC Power Supply, 60V, 16.7A, 1000W

Serial Numbers: MY53330101/MY54330147  
SG53330101/SG54330101

**The Problem** – Charge Present on the AC terminal when unplugging the unit.

## Parts Required:

P/N	Description	Qty.
5190-4495	Cable Assembly AC Line Filter	1
1400-3204	Cable-Tie	2

## ADMINISTRATIVE INFORMATION

ACTION	<input type="checkbox"/> ON SPECIFIED FAILURE	STANDARDS			
CATEGORY:	<input checked="" type="checkbox"/> AGREEABLE TIME	LABOR:	1.0 Hours		
LOCATION	<input type="checkbox"/> CUSTOMER INSTALLABLE	SERVICE:	<input type="checkbox"/> RETURN	USED	<input type="checkbox"/> RETURN
CATEGORY:	<input type="checkbox"/> ON-SITE (active On-site contract required)	INVENTORY:	<input checked="" type="checkbox"/> SCRAP	PARTS:	<input checked="" type="checkbox"/> SCRAP
	<input checked="" type="checkbox"/> SERVICE CENTER		<input type="checkbox"/> SEE TEXT		<input type="checkbox"/> SEE TEXT
	<input type="checkbox"/> CHANNEL PARTNERS				
AVAILABILITY:	PRODUCT'S SUPPORT LIFE	NO CHARGE AVAILABLE UNTIL:	EOS		
	<input checked="" type="checkbox"/> Calibration Required	PRODUCT LINE:	SP		
	<input type="checkbox"/> Calibration NOT Required	AUTHOR:	KHEW		

ADDITIONAL INFORMATION:

**Situation:**

A charge is present on the AC terminal when unplugging the unit and the switch is off. Input capacitor of 0.47pF will store a charge above compliance limit A for normal operating condition at 230Vac input, however non-hazardous since the charge is < compliance limit B for single fault condition. This does not meet the requirements of IEC61010-1.

**Solution/Action:**

New AC line filter (5190-4495) with 15GENG3E-R is used to replace the existing AC line filter to optimize the discharge time.



**Dismantle AC Line Cable**

1. Unscrew six screws from top cover as shown in Figure 1.

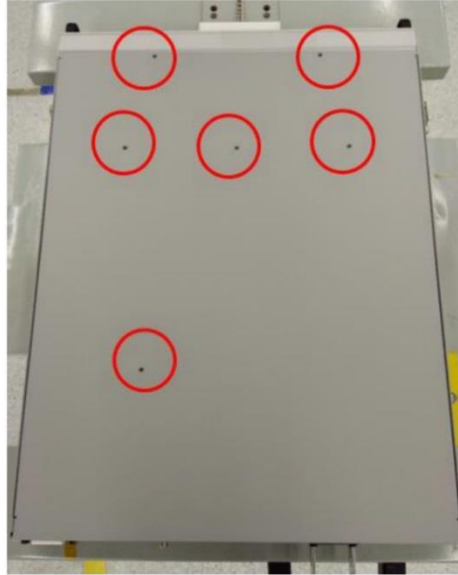


Figure 1

2. Unscrew total of 14 screws from left, right and bottom side as shown in Figure 2.

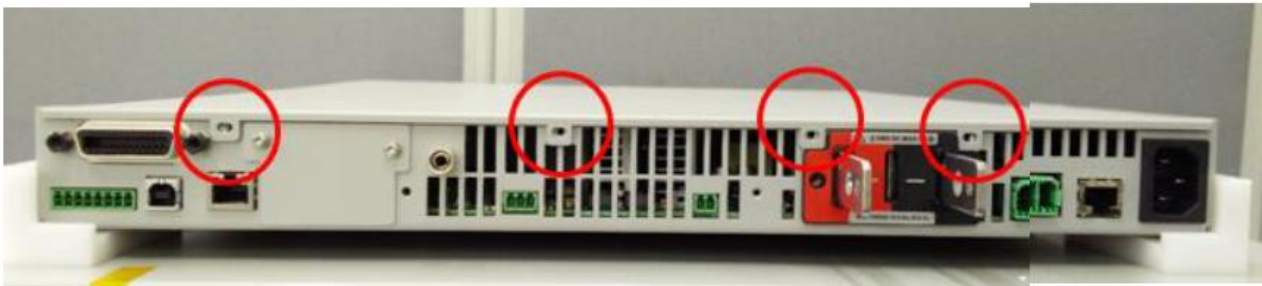
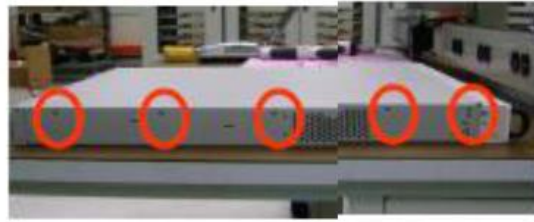


Figure 2

3. Remove 4 screws from both side of front panel as shown in Figure 3.

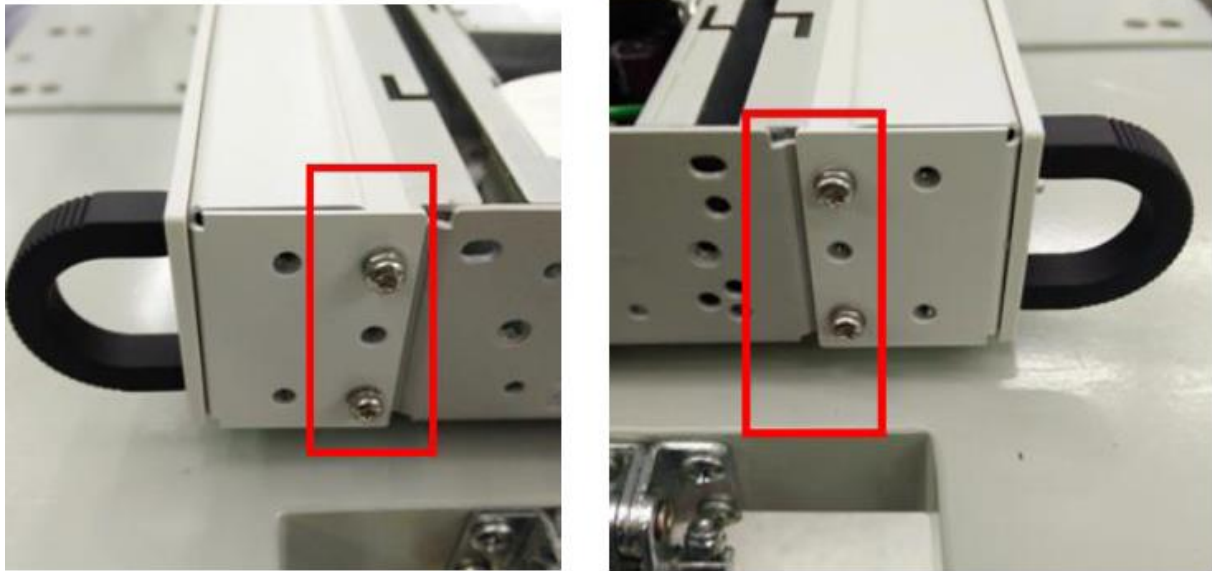


Figure 3

4. Remove the front panel from the chassis and dismantle the AC line cable and cable ASSY from the front panel as shown in **Figure 4**.

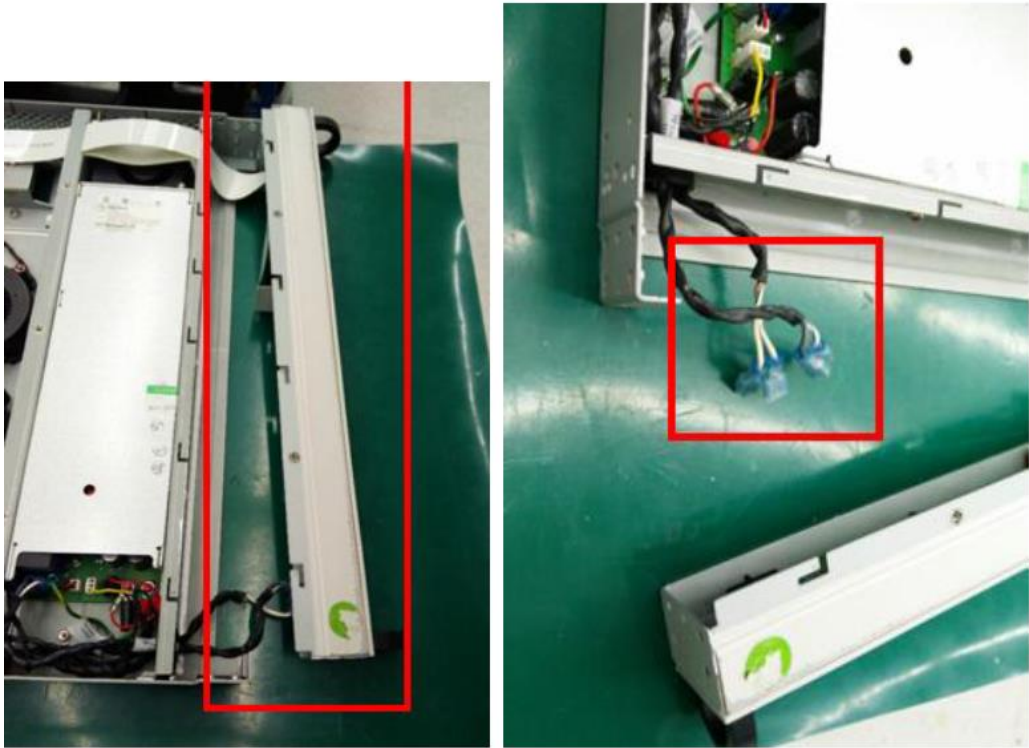


Figure 4

5. Remove AC line cable from constellation PCA Figure 5.



Figure 5

6. Pull out AC line cable from front chassis hole Figure 6.

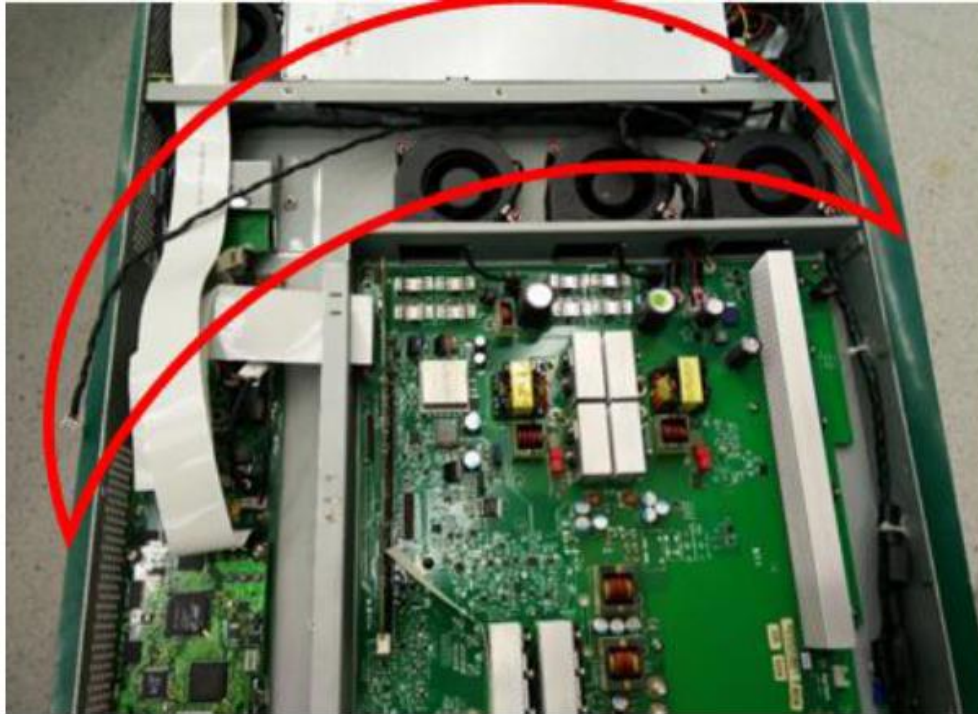


Figure 6

7. Cut 2 of the cable ties which secure the AC line cable as shown in Figure 7.

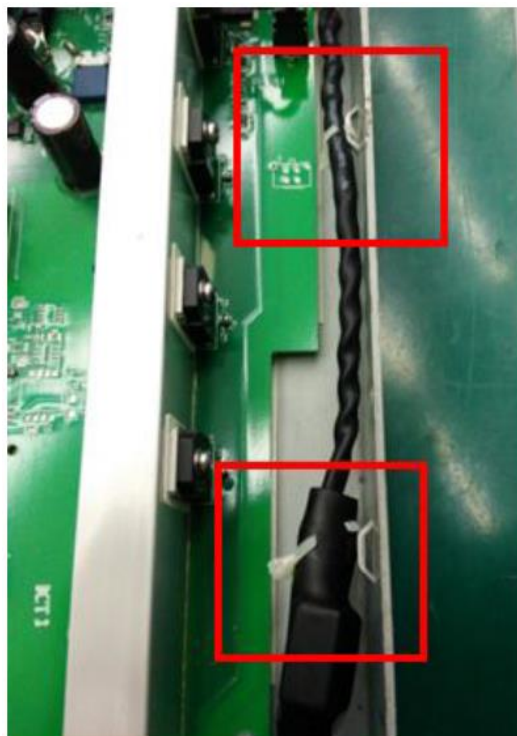


Figure 7

8. Unscrew the most right side fan as shown in Figure 8.

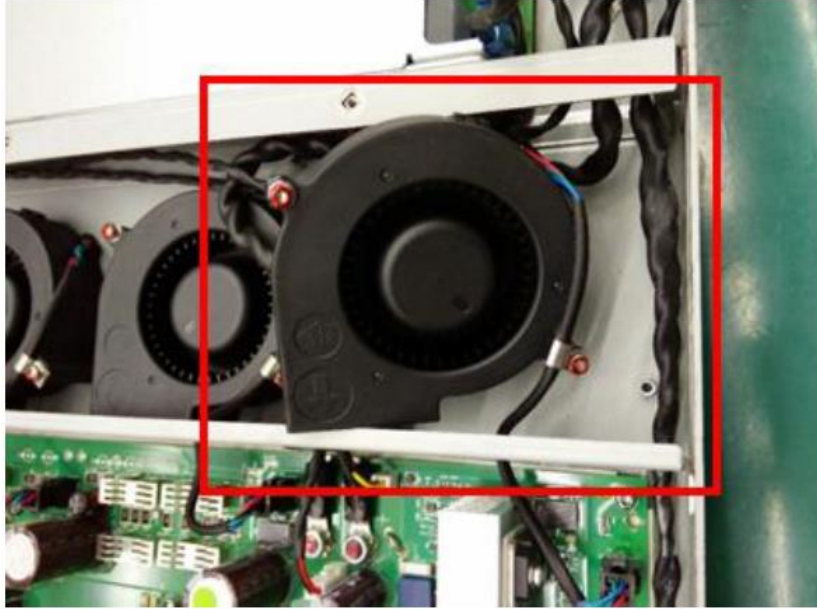


Figure 8

9. Remove AC line cable from middle chassis hole as shown in Figure 9.

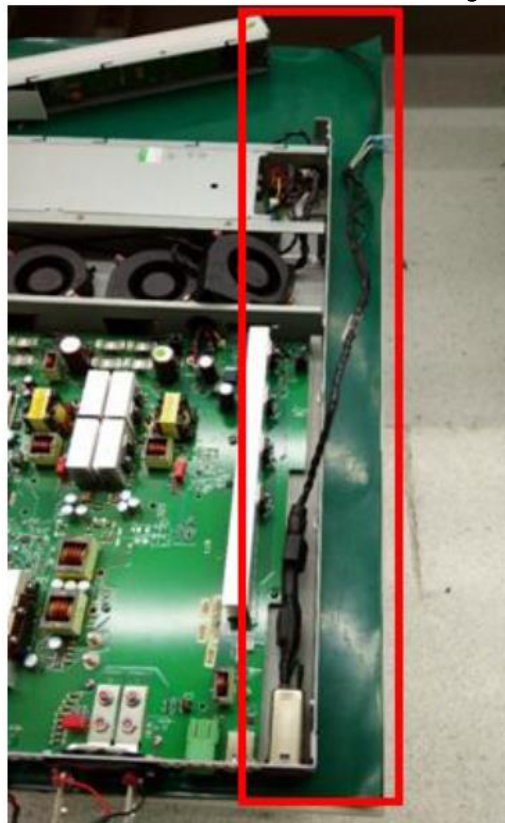


Figure 9

10. Remove nut to unsecure grounding cable AC line cable as shown in **Figure 10**.



**Figure 10**

11. Remove AC line socket from chassis by pressing the lock chip as shown in **Figure 11**.



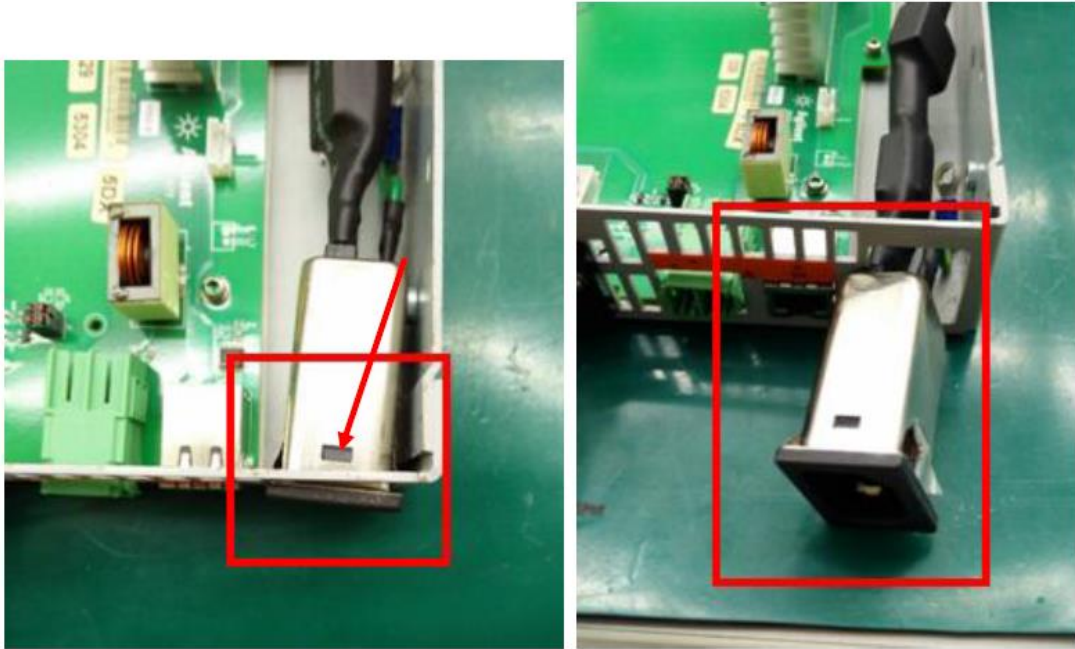


Figure 11

Assembly AC Line Cable

12. Insert the AC line cable (5190-4495) into chassis as shown in

13. Figure 12.

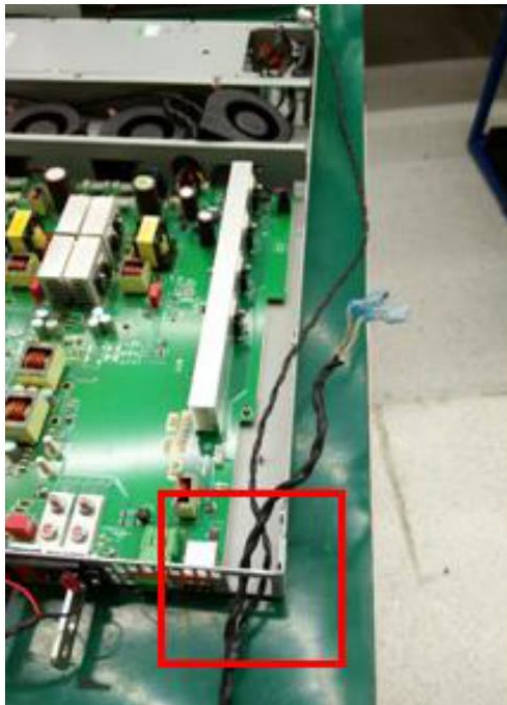


Figure 12

14. Secure grounding cable AC line cable with nut as shown in *Figure 13*.



Figure 13

15. Press in AC line socket onto chassis as shown in Figure 14.

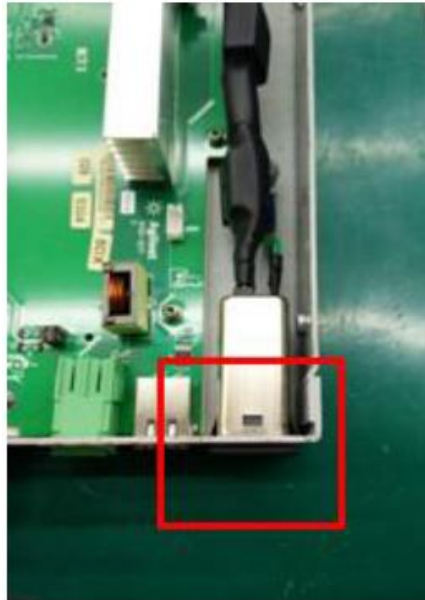


Figure 14

16. Route AC line through chassis hole until front panel. Another AC line cable will be insert into constellation PCA as shown Figure 15.

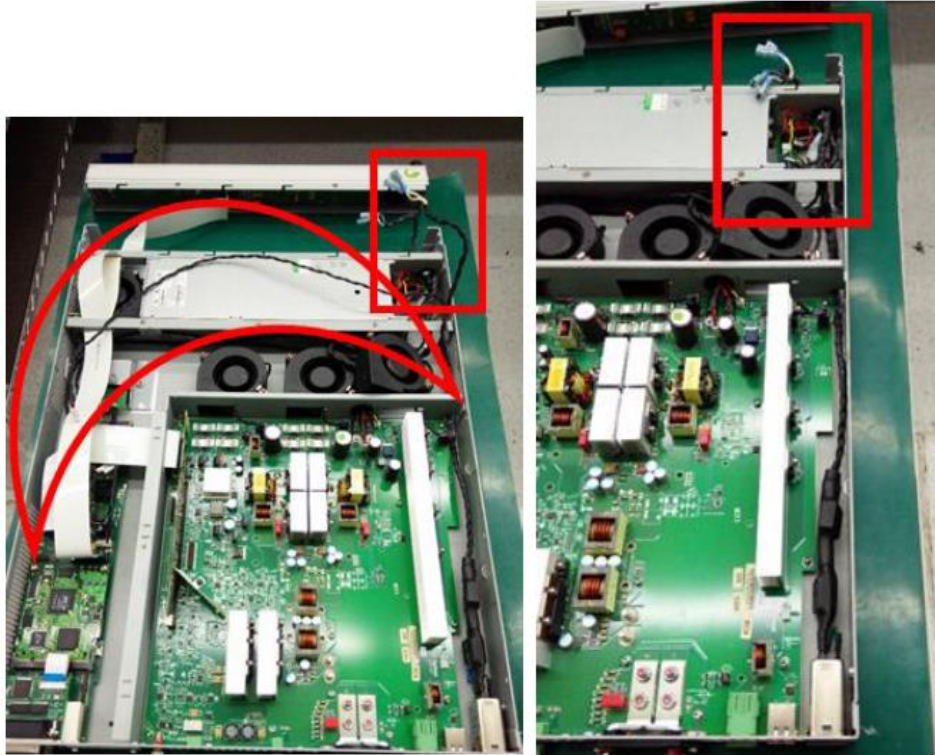


Figure 15

17. Insert 2 cable ties (1400-3204) to secure the AC line cable as shown in Figure 16.

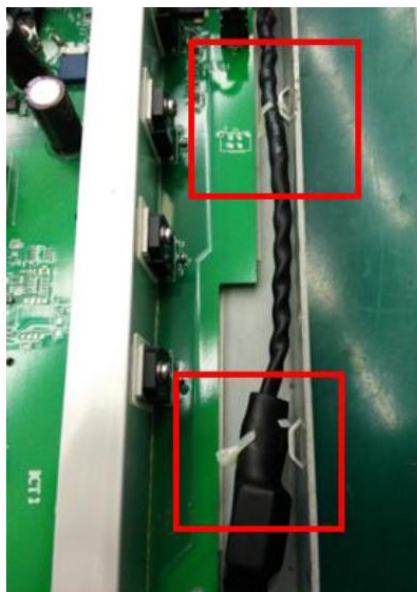


Figure 16

18. Screw the fan to the original position as shown in Figure 17.  
Note: Replace with new screws (0515-0667) if found loosen.

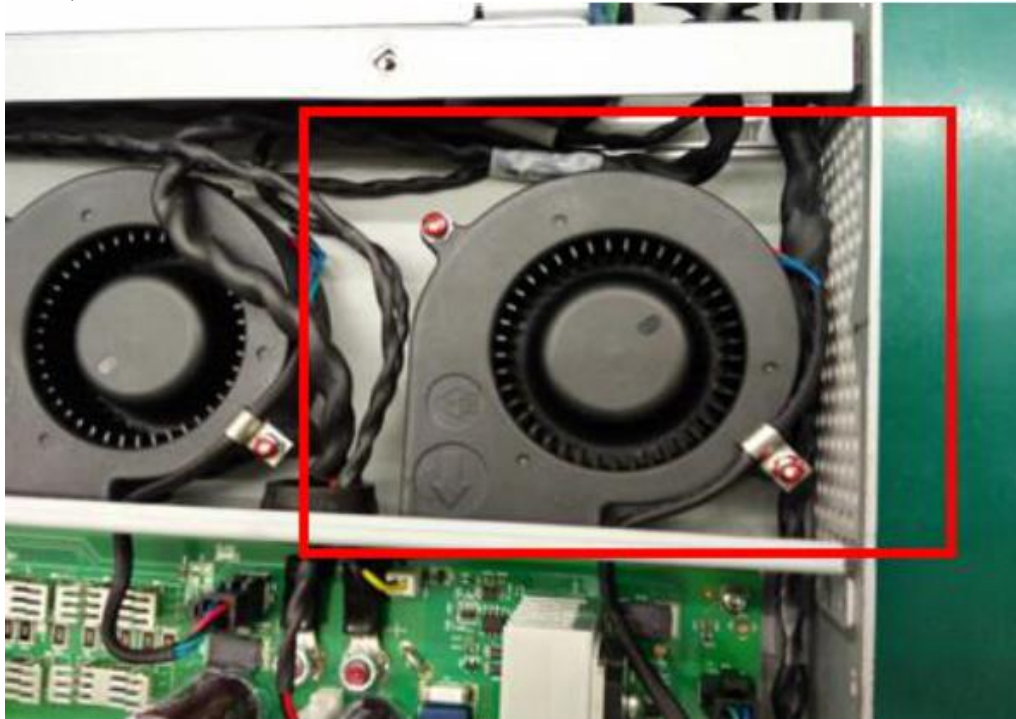


Figure 17

19. Insert the AC line cable and cable ASSY to the front panel as shown in Figure 18.

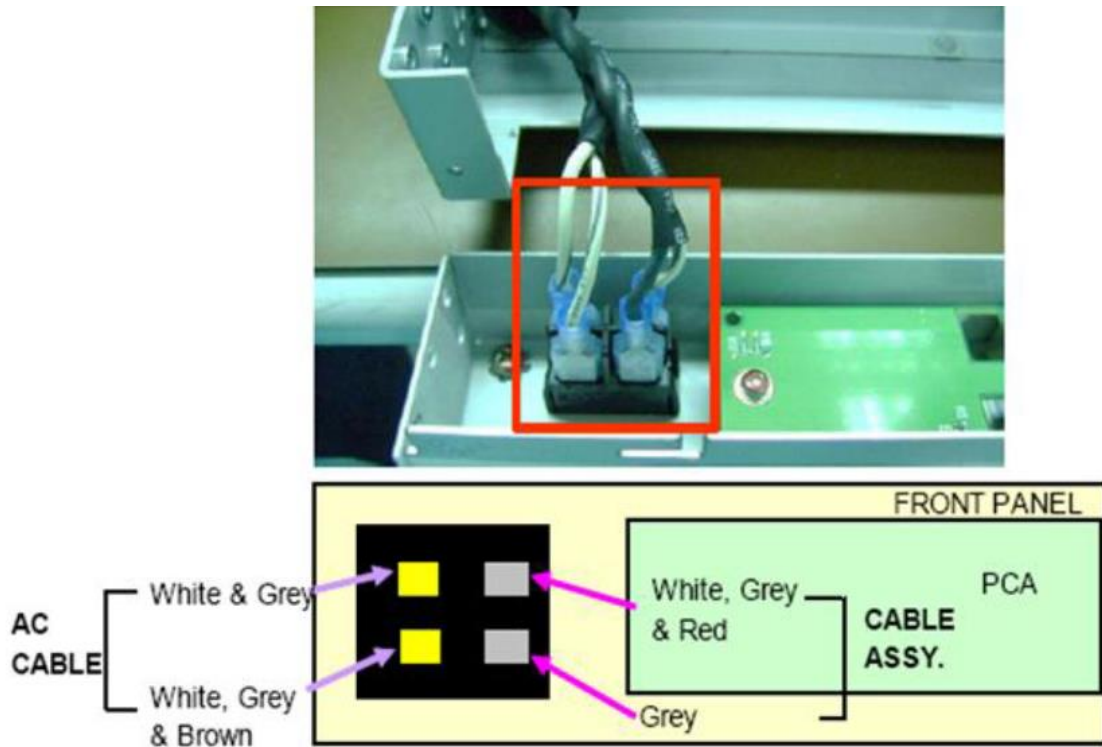


Figure 18

20. Screw 2 screws each side for both side of the front panel as shown in Figure 19.

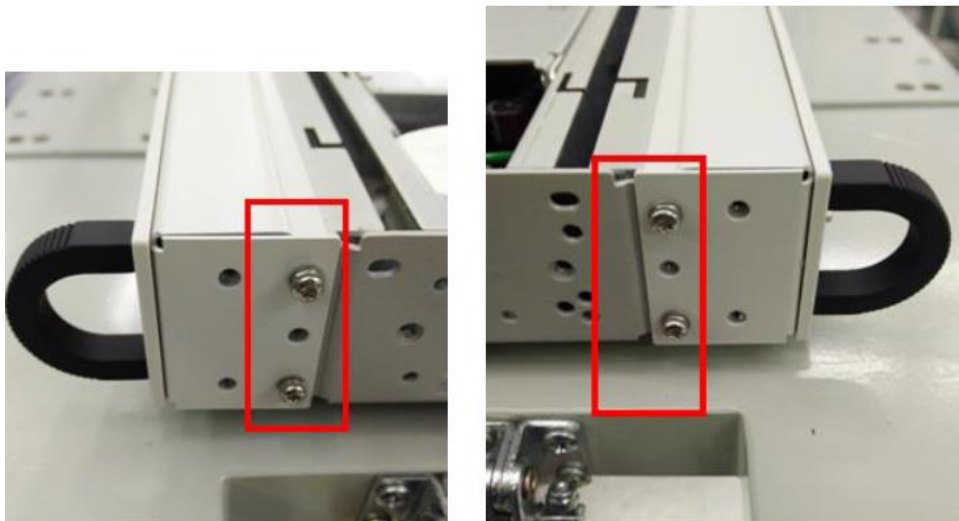


Figure 19

21. Screw 6 screws for the top cover as shown in Figure 20 .

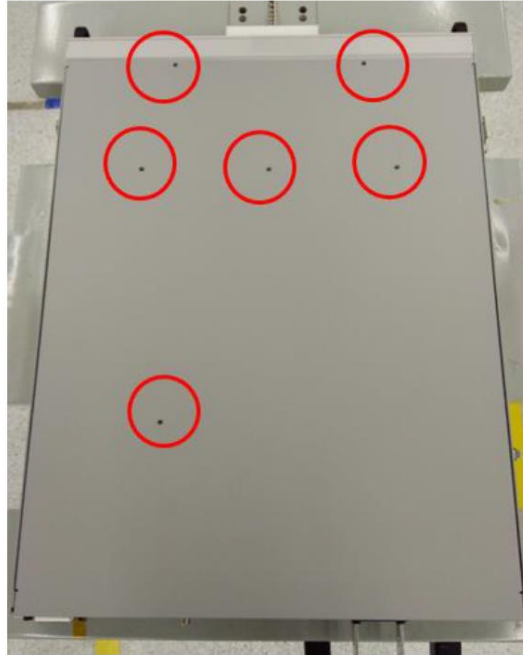


Figure 20

22. Screw total of 14 screws for both side and rear side as shown in Figure 21.

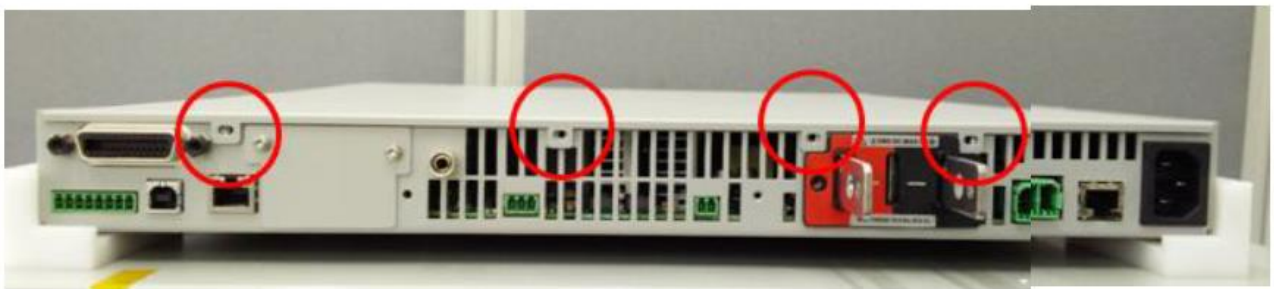
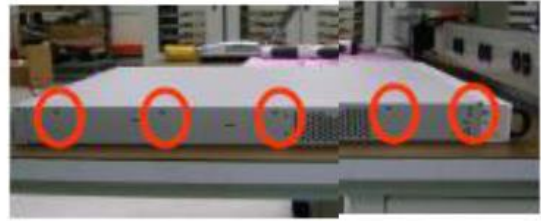


Figure 21

Revision History:

Date	Service Note Revision	Author	Reason for Change
30 Oct 2017	01	KHEW	As Published