

Additional Service Manual

SERVICE INFORMATION (QUALITY)



Date: Feb. 9, 2009

No.: SQH09003

MODEL No.	* SER. No	S/M No.	PG	
Refer to following pages.				
DETAIL				
SYMPTOM	Power down with no standby LED suddenly occurs when changing channel while watching TV (AC power recycling restores operation.)			
CAUSE	Since the comparator which detects over voltage of PFC of power supply unit generates oscillation, protector circuit malfunctions caused by change of oscillation attribute to occurrence of sudden load change due to switching channel. (PFC: Power Factor improvement Circuit)			
SERVICE REMEDY	Removing chip ceramic capacitor C614 of PFC over voltage detection circuit on power supply unit As per this change, Assy suffix is changed to AXY1153-B			
FACTORY COUNTER -MEASURE	Service remedy only			
<p>In case of subjected symptom above , please treat this remedy , removing C614. If the operation is not restored by recycling AC power , please replace Power Supply Assy . Please refer to following pages for procedure and PCB handling .</p> <p>Note: All WPC stock has been treated this remedy .</p>				
*	CURRENT PARTS		NEW PARTS	
	SYMBOL/DESCRIPTION	PART NUMBER		PART NUMBER
(!):You should use specified parts by safety regulations.				
PIONEER SERVICE NETWORK CORPORATION		NOTE:PARTS CODE		
H. KISHIDA, MANAGER		1:Changeable form old to new. Memo: QI630025		
HE Technical Support Group		2:Not Interchangeable at all.		
Service Support Division		3:Interchangeable in both ways.		
		5:Do not use old parts.		
		KO (E1 W1)		

MODEL No.	*	SER. No.	S/M No.	PG
PDP-4216HD/KUCXC		NA		
PDP-427XA/WYVIXK5		NA		
PDP-427XA/WYV5		NA		
PDP-427XC/WA5		NA		
PDP-427XD/WYVIXK5		NA		
PDP-427XDA/YP		NA		
PDP-427XG/DLFR		NA		
PDP-4270HD/KUCXC		NA		
PDP-4270XA/WYVIXK5		NA		
PDP-4270XA/WYV5		NA		
PDP-4270XD/WYVIXK5		NA		
PDP-4271HD/KUCXC		NA		
PDP-5016HD/KUCXC		NA		
PDP-507XA/WYVIXK5		NA		
PDP-507XA/WYV5		NA		
PDP-507XC/WA5		NA		
PDP-507XD/WYVIXK5		NA		
PDP-507XDA/YP		NA		
PDP-507XG/DLFR		NA		
PDP-5070PU/KUCXC		NA		
PDP-5071PU/KUCXC		NA		
PRO-507PU/KUCXC		NA		
PRO-940HD/KUCXC		NA		

Procedure for removing part of AXY1153

AXY1153

Parts side



Soldering side



1. Confirm failure condition

(1) Disconnect AC power to reset failure condition of Power Supply unit (PS unit)

Note: PS unit is reset after 3 minutes of AC power disconnection

(2) Connect AC power and check whether PDP works or not

In case PDP works correctly : Operate remote control and check whether failure is reproduced or not

In both case, remove C614.

In case PDP does not work correctly : There can be another problem.

Replace PS unit to another one

2. Remove Power Supply unit

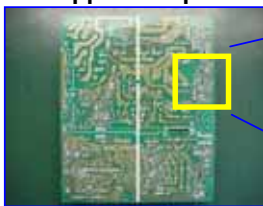
Remove PS unit after discharging electron of electrolytic capacitor.

It takes approximately 8 minutes to discharge electron by itself with no load.

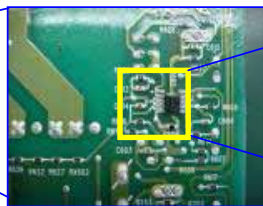
Above "8 minutes" means the time to discharge C702 and C702, which are electrolytic capacitor on Vsus output side, with no load. It varies in case PS unit is mounted on PDP. Regarding other electrolytic capacitors, it takes 3 minutes to discharge.

3. Remove chip ceramic capacitor

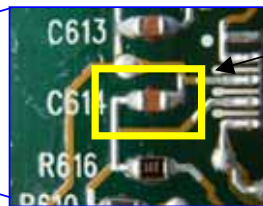
Applicable part



Expanded

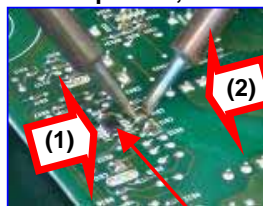
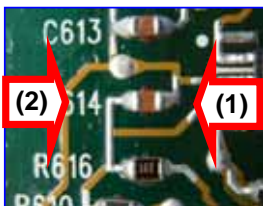


Expanded



The part to be removed
Chip ceramic capacitor
C614

Procedure to remove chip ceramic capacitor, C614

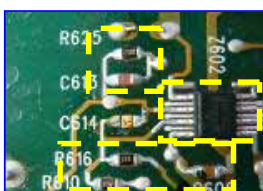


- Use 2 soldering irons and heat soldering point by attaching iron, in order, first IC Z602 side, second opposite side.

- After making sure that the solder on both contacts are melted, slowly lift up C614 and remove it from substrate.

- In order to avoid wrong use, please keep removed part on any tray or so to segregate it.

Confirmation



(Appearance check point)

- Make sure no solder bridge, peeled substrate contact and damaging substrate contact.
- Make sure no solder scattering around peripheral parts.
- Make sure no dropped solder on the way which soldering iron has been passed through.
- Although it is not problem if some solder remain on the substrate contact of removed part, remove the solder if it is attached excessively.
- Mark a dot on the cement resistor, R209, by black maker.

Others



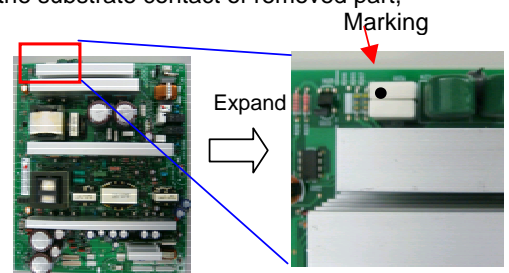
D type (Recommendation) B type

Soldering

Soldering temperature: 270 to 330 degree centigrade

Recommendation: 320 + - 10 degree centigrade

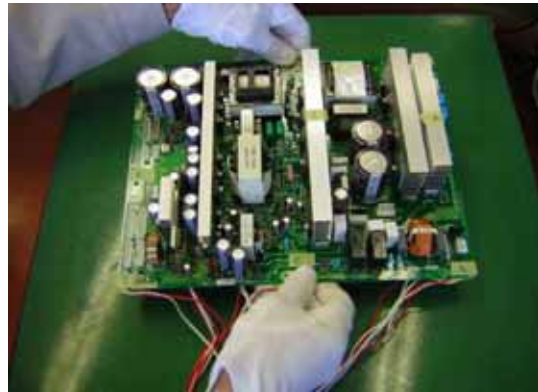
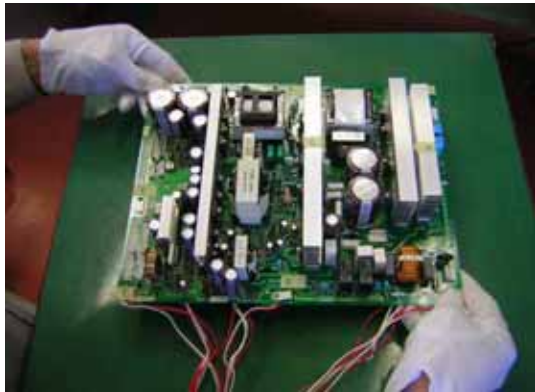
- Although there is no problem to use general B type solder iron, it is better to use D type one for stable work.



Caution for holding substrate

Hold both sides of substrate by both hands.

Good



It gives stress on chip devices if you hold it by one hand or one side by both hands

Bad

