Troubleshooting on 2k6 Plasma Units:

. **Unit has no Display with Back Cover Off**

Sequence lighting of the LED's

PSU has one Green LED on the left lower portion (LED8001) that is On.

Logic Bd. has three Green LED's on lower center of the Bd. (Photo below)

One Green LED (LED2010) on the right hand side turns on first

One Green LED (LED2001) on the left hand side turns on next with a steady LED.

The Green LED (LED2001) turns Off when the center Green LED (LED2011) starts flashing.

One Green LED (LED2011) in the center between the above two green LED's is Flashing (Data is flowing in Logic Bd)..

Note a: if LED above has the LED not flashing then no Data is flowing and Logic Bd. may be defective.

Note b: if LED above has the LED ON then check LVDS Cable & SSB as problem is no communications with Logic Bd.

Check connector CN8002 between Logic & PSU 2nd pin from Left (Vs_ON) for DC volts.

If Voltage is 0 then problem is with Logic or SSB.

If Voltage is 3.1 VDC then problem is with PSU or other PCB's on Panel.

On startup Logic checks for errors and also polls the SSB for Errors. If Errors are found then Logic will not send High to PSU.

To confirm if SSB or Logic is at fault then disconnect and remove SSB.

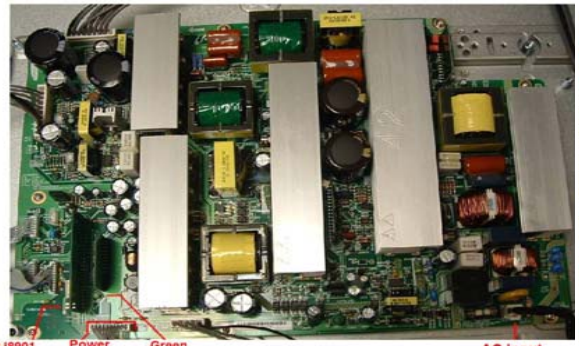
Use 1 Jumper to short BJ8901 on 2k6 Alarm Bd on lower left portion of the PSU (see figures below).

Use 1 Jumper to short Pin 1 & 2 of CN2072 on the upper left part of the Logic PCB, this Jumper will supply a White + Other .

sequential screen patterns to the Display. See Screen Change Button photo below for the Button location to Freeze a White Screen pattern.

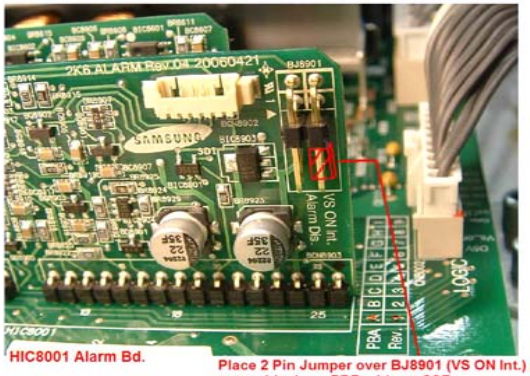
Plug in the AC to the PSU thru CN8001.

If PDP panel operates with White + Other patterns on screen then problem is the SSB. Screen shots of the Patterns are shown on next page.



2K6 Power Supply-42PF9631A/37

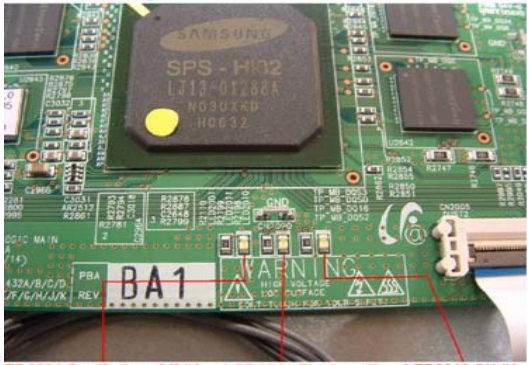
2k6 Alarm Bd - 42PF9631A/37



HIC8001 Alarm Bd.

Place 2 Pin Jumper over BJ8901 (VS ON Int.) pins to troubleshoot PDP without SSB.

Logic Bd - 42PF9631A/37



LED2001 On #2, then Off #4 LED2011 Flashes #3 LED2010 ON #1

Pwr Supply Bd - 42PF9631A/37

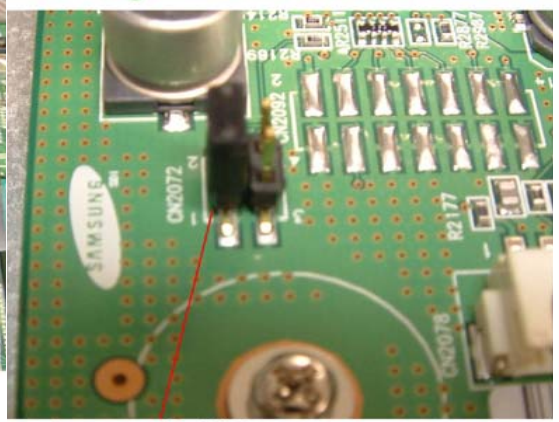
A Bd version Green LED8001 CN8002 pin 2 - Vs_ON
Normal condition - 3.1VDC

Jumper Pins 1 & 2 of CN2072

2K6 Internal Screen Change Button

Push Button 2 sec to Pause Screen Pattern,
then push 2 sec to select Random Screen Pattern's.

Logic Bd - 42PF9631A/37

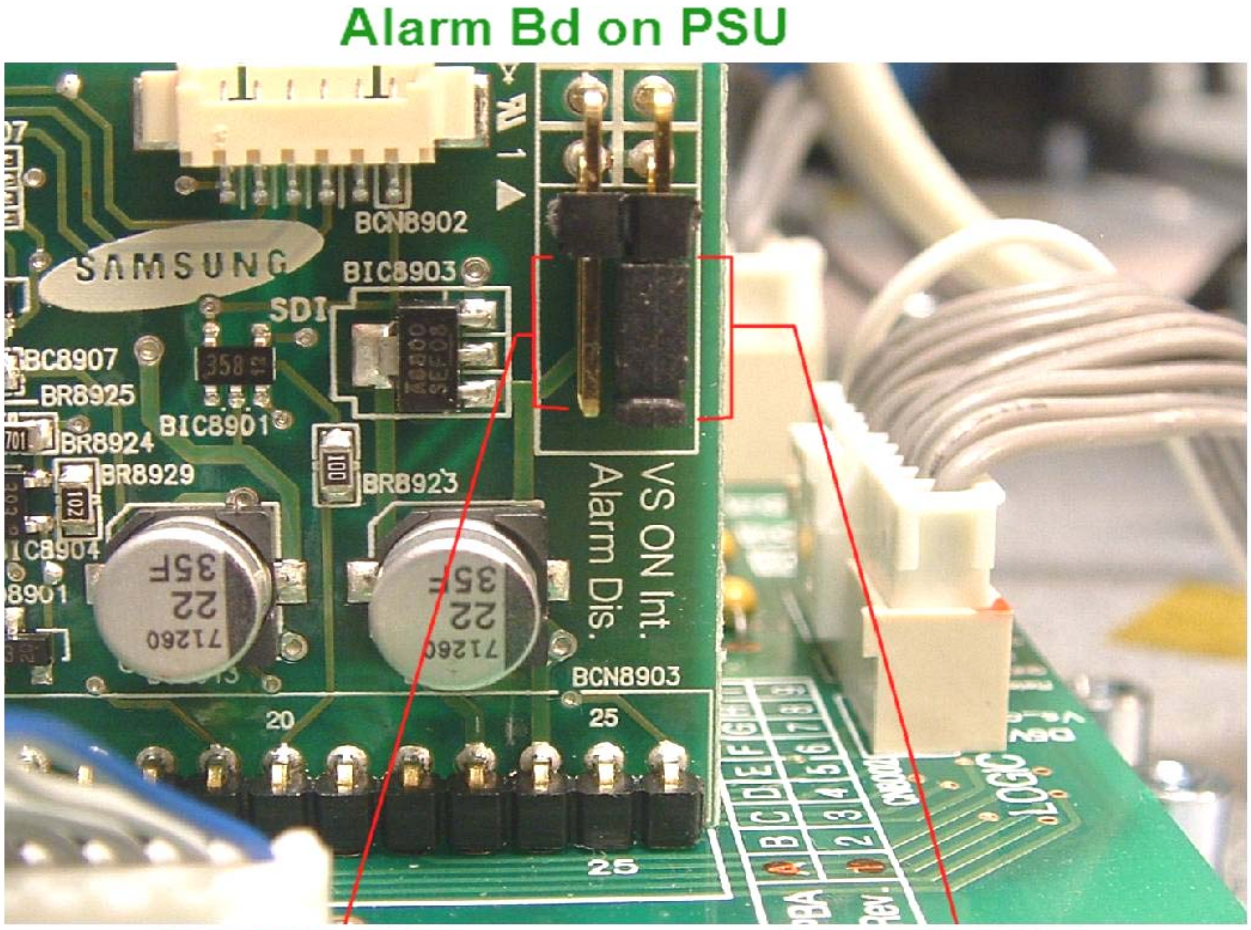


Jumper used for White
+ other Screen Patterns

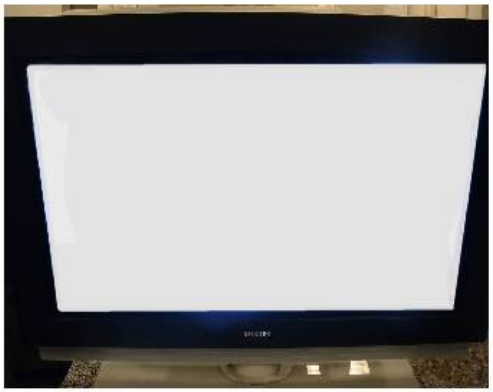
Forced Operation of Power Supply Board when troubleshooting it by itself:

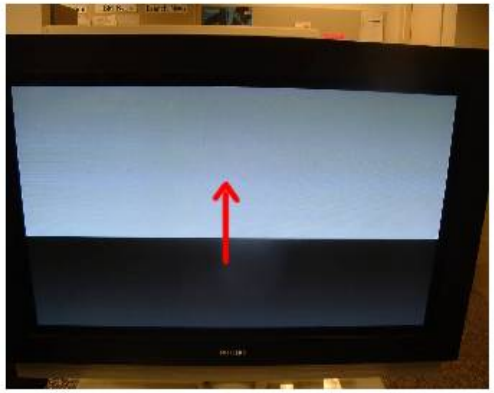
On 2k6 Alarm Bd. their are two sets of Jumper Pins. The left hand set of BJ8901 (Alarm Dis.[able]) can be used to disable the UVP & OVP circuits.

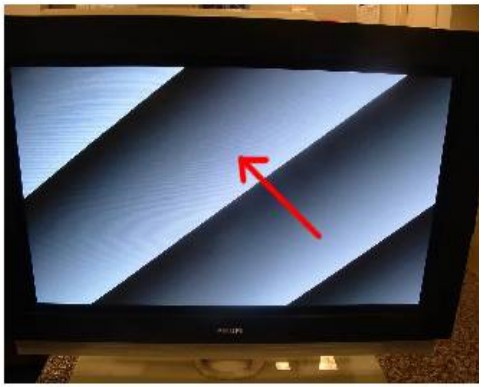
Do not use the BJ8901 set of jumpers unless you want to troubleshoot the PWR Supply by itself without connection to the other Bd's on the PDP panel. Use the other Jumper VS ON Int. on the Alarm Bd. to activate the Pwr Supply before the unit has AC applied to CN8001. See below.



Press the Button located on the Logic Bd. Hold it for 2 sec then a White Pattern will be generated until you press the button again for 2 sec.







2K6 Auto- Generated Screen Displays

Unit has no Display with Back cover Off

Sequence lighting of the LED

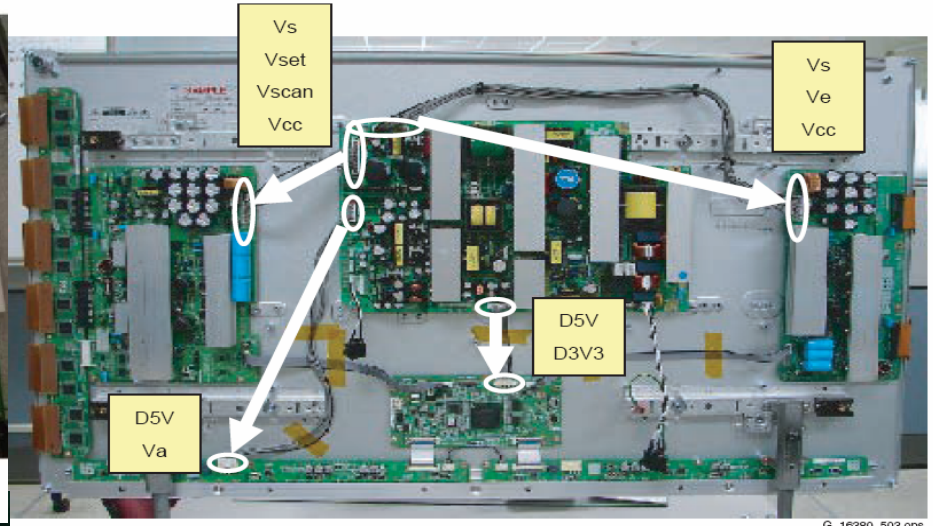
PSU Bd. has one Green LED (LED8001) on the left lower portion that is On.
Logic Bd. has one Green LED (LED2011) on lower middle right side that is On.
Logic Bd. then next has one Green LED (LED2001) on lower middle left side that is On.
Logic Bd. then next has one Green LED (LED2010) on lower middle center between LED2011 & LED2001 that is Flashing.
Logic Bd. then next has one Green LED (LED2001) on lower middle left side that turns Off when LED2010 starts Flashing.
Note a: if LED2010 above has the LED not flashing then no Data is flowing and Logic Bd. may be defective.
Note b: if LED2010 above has the LED ON then check LVDS Cable & SSB as problem is no communications with Logic Bd.

Problem: If OVP (Over Voltage Protect) or UVP (Under Voltage Protect) is activated by this circuit on any Voltage part of the PSU Bd.
PSU Bd. has the single Green LED (LED8001) will go Off, then all LED's & Relays will turn Off.
Then LED8001 on the PSU flashes a code. E.g. it flashes 6 times then has a longer interval before flashing 6 times again.
6 flashes points to the voltage V_SET to be either UVP or OVP has been activated.

Below is a photo that is screened on the PSU Bd in the left center portion.
Refer to the number of flashes and the Power Supply fault location.

Printed on 2k6 PSU

Below is reference Voltages the PSU supplies to the other Modules.



Different codes are used between the 2k5 codes and the 2k6 codes.

Unit has no Display with Back Cover Off

Sequence lighting of the LED

PSU Bd. has one Green LED (LED8001) on the left lower portion that is On.
Logic Bd. has one Green LED (LED2011) on lower middle right side that is On.
Logic Bd. has one Green LED (LED2001) on lower middle left side that does not Turn On (middle photo shows normal operation below).
Logic Bd. has one Green LED (LED2010) on lower middle center between LED2011 & LED2001 that is not On or Flashing (right photo shows normal operation below).

Note a: if LED2010 above has the LED not flashing then no Data is flowing and Logic Bd. may be defective.
Note b: if LED2010 above has the LED ON then check LVDS Cable & SSB as problem is no communications with Logic Bd.

Problem: If LED 2010 do not turn on then this is showing that no Data is flowing through the Logic Bd. So this points to the Logic Bd. May be the problem. To see the Logic Bd. LED's then look at the photos below that show how to see the lighting of the LED's to determine the possible failure of the Logic Bd.

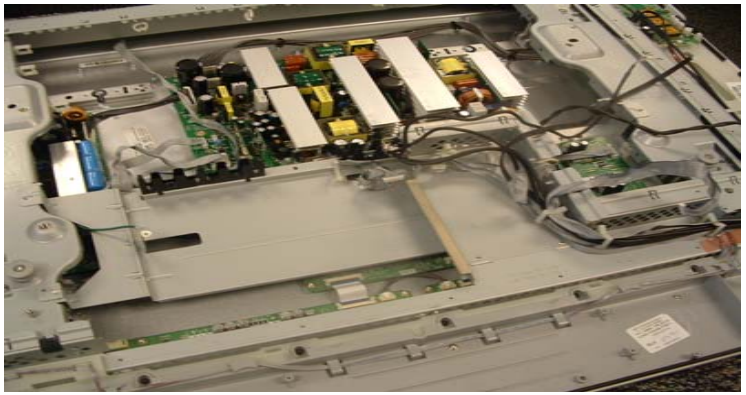
2k6 Ambilight Under SSB viewing Logic LED's

2k6 Left & Right LED's

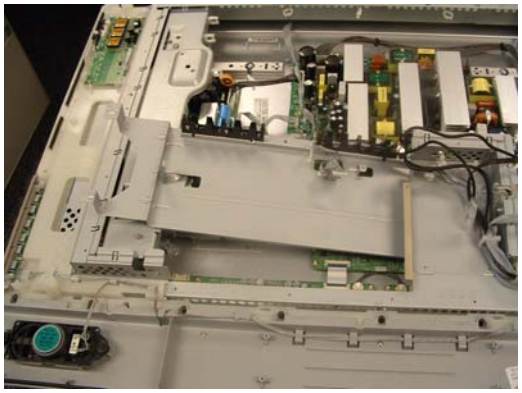
2k6 Center & Right LED's
Center LED is Flashing

Removal of Logic Bd.:

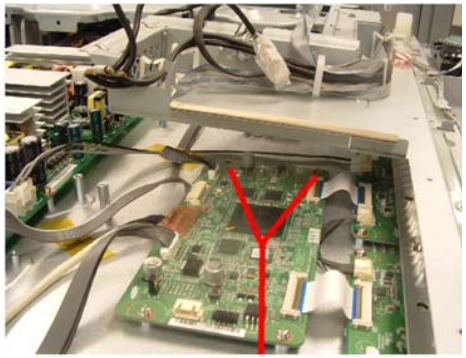
Remove SSB.
Loosen the SSB Frame by removing 4 screws.
Remove the SSB Frame by moving it to the left over the left frame and then angle the rear portion so it goes over the Pwr. Supply Bd. Heat sink.
Then on Logic Bd remove the left side screws and remove the right side screws by using a 90 deg Philips Head Allen Wrench Type Tool (See below).



2k6 Remove 4 screws from Shield under SSB
Then lift left side of SSB shield up on top of Frame.



Lift rear of SSB Shield over PSU Heat Sinks



2k6 Logic Board Removal

Model 50MF231D/37

Troubleshooting on 2k6 Plasma Units: Model 50MF231D/37 (50" HD V5.1 ASIS LOGIC MAIN)

. **Unit has no Display**

Metal Cover & Plastic Back Cover Off

Sequence lighting of the LED's

PSU has one Green LED on the left lower portion (LED8001) that is On.

Logic Bd.(LJ92-01371A/B/C/D/E) has three Green LED's on the Bd. (Photo below)

One Green LED (LED2000) on the right hand top corner turns On first

One Green LED (LED2001) on the left outer side of U2014 uP turns on next with a steady LED.

One Green LED (LED2002) on the left inner side toward U2014 uP starts Flashing (Data is flowing)..

The Green LED (LED2001) turns Off when the Green LED (LED2002) starts Flashing.

Note a: if LED2002 above has the LED not flashing then no Data is flowing and Logic Bd. may be defective.

Note b: if LED2002 above has the LED ON then check LVDS Cable & SSB as problem is no communications with Logic Bd.

Check connector CN8005 between Logic & PSU 2nd pin of CN8002 from Left (Vs_ON) for DC volts.

If Voltage is 0 then problem is with Logic or SSB.

If Voltage is 3.1 VDC then problem is with PSU or other PCB's on Panel.

On startup Logic checks itself for errors and also polls the SSB for Errors. If Errors are found then Logic will not send High to PSU.

To confirm if SSB or Logic is at fault then disconnect and remove SSB.

Use 1 Jumper to short BJ8901 on 2k6 Alarm Bd on lower left portion of the PSU (see figures below).

Use 1 Jumper to short Pin 1 & 2 of CN2009 on the center left part of the Logic PCB, this Jumper will supply a White + other .

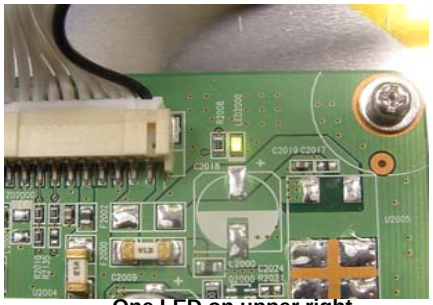
sequential screen patterns to the Display. See Screen Change Button photo below for the Button location to Freeze a White Screen pattern.

Plug in the AC to the PSU thru CN8001.

If PDP panel operates with White + other patterns on screen then problem is the SSB. Screen shots of the Patterns are on Pg. 3.

2K6 Power Supply-42PF9631A/37

Place 2 Pin Jumper over BJ8901 (VS ON Int.) pins to troubleshoot PDP without SSB.



One LED on upper right

2k6 PSU Alarm signals printed on PSU

Logic Bd.

Two LED's - left turns On, then right LED starts blinking and then left LED turns Off

Jumper On pins 1 & 2 to left of LED's

Model 63PF9631D/37

Troubleshooting on 2k6 Plasma Units:

. **Unit has no Display with Back Cover Off**

Sequence lighting of the LED's

PSU has no Green LED's.

Logic Bd. has three Green LED's on the Bd. (Photo below)

Two Green LED's (LED 2000 & LED 2001) on the upper center portion of Board are always turned On with a steady LED

One Green LED (LED 2002) on the lower center portion of the Board (Blue Circle in photo) is Blinking (Data is flowing).

Note a: if LED2002 above has the LED not flashing then no Data is flowing and Logic Bd. may be defective.

Note b: if LED2002 above has the LED ON then check LVDS Cable & SSB as problem is no communications with Logic Bd.

Check connector between Logic & PSU (CN803 pin 9) 2nd pin from Left (Vs_ON) for DC volts.

If Voltage is 0 then problem is with Logic or SSB.

If Voltage is 3.1 VDC then problem is with PSU or other PCB's on Panel.

On startup Logic checks for errors and also polls the SSB for Errors. If Errors are found then Logic will not send High to PSU.

To confirm if SSB or Logic is at fault then disconnect and remove SSB.

Use Jumper to short 1M03 at Pin 4 & 7 on the lower portion of the 2k6 Sub PSU Bd (see photos below).

Use 1 Jumper to short Pins 1 & 2 of CN2012 just below the large IC on the Logic PCB, this Jumper will supply a White + Other .

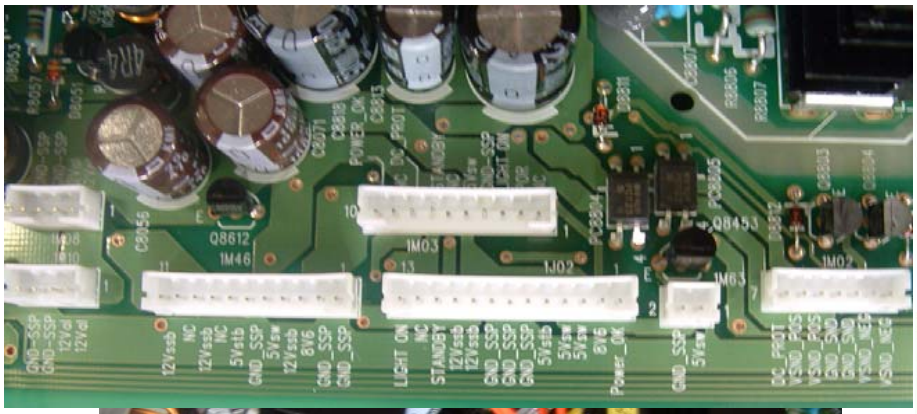
sequential screen patterns.

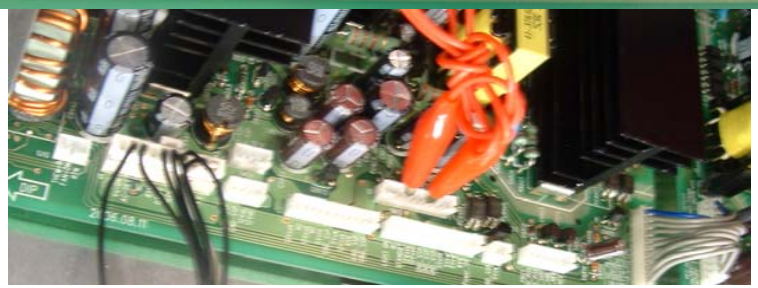
To Freeze a White Screen pattern remove the CN2012 jumper when the White screen appears (according to Svc Mnl) or try using the.

button on the upper right corner of the Logic Bd.

Plug in the AC to the PSU thru CN800 on Main Power Supply Bd. (Right side smaller Bd.).

If PDP panel operates with White + Other patterns on screen then problem is the SSB. Screen shots of Patterns are shown on page 2.

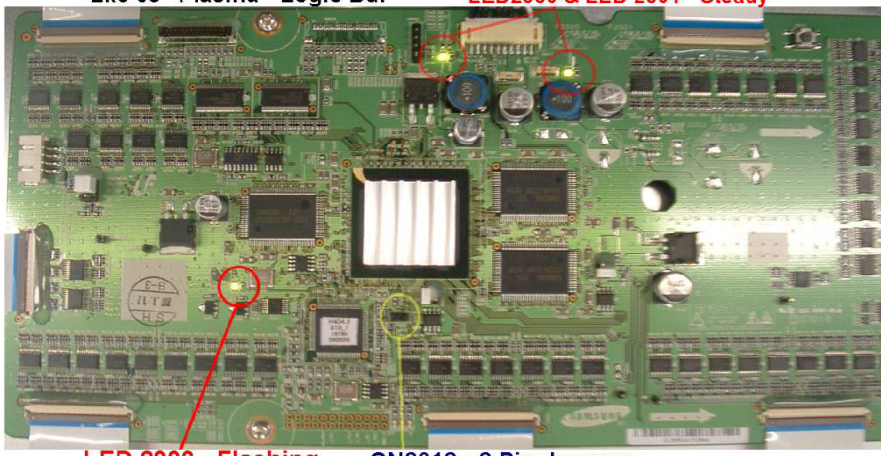




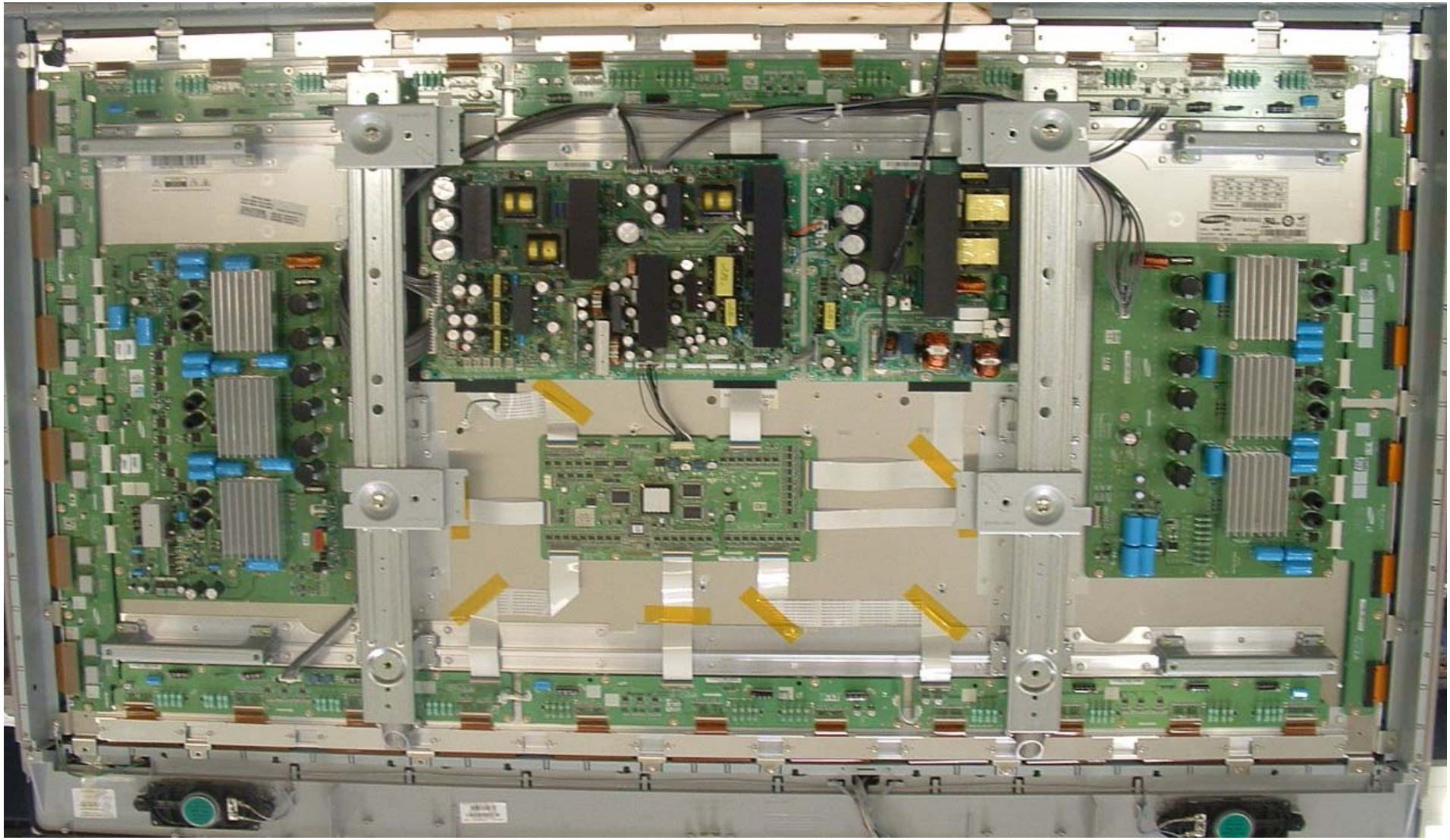
1M03 Pins 4 (GND-SSP) & 7 (STANDBY) - Sub Power Supply

Do Not use Clip Leads, but small pin capture tools

2k6 63" Plasma - Logic Bd.



CN2012 Jumper both Pins on Logic Board
To Freeze White Screen remove Jumper when White screen displays
or
use the Button on the upper right corner of the Logic Bd.



2k6 63" Plasma Unit

On Slanted test stands do not place unit in normal position as weight will break plastic bottom Front part.
Picture was taken with unit on test stand upside down, then rotated 180 degrees.