



## SAMSUNG LCD Projection TV SERVICE GUIDE



\*Supercedes and appends service manual data\*  
**Covers Models: (L52A & L56A-Chassis)**

PLH403W, PLH403W1, PLH403WS, PLH403W3, PLH403WS3  
PLK435WS, PLK405W  
SLJ402W, SLK407W



# SAMSUNG LCD Projection TV SERVICE GUIDE

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# SAMSUNG PROJECTION TV SERVICE GUIDE

## Section 2 - Service Bulletins

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### *How to use this Guide*

**This guide is divided into seven sections. Start with the section marked “Instructions”.**

The models covered in this document are derived from the L52A chassis. However; this chassis has several different versions that are NOT covered in the service manuals.

Instructions to Start Service:

1. Obtain model, serial and symptom.
2. Review service bulletins (section 2), for common fixes. If Service Bulletin states that repair is common, complete repair as indicated. Otherwise, proceed to section 3.
3. If the previous steps do lead to a clear diagnosis, then proceed to the flow chart in section 3 to help assist you in determining the correct PCB's to order.
4. **Place order through Samsung Parts Department.**

**Note:** Distributors DO NOT carry PCB's, so backorder with no eta will result. Parts Department will not accept an order for PTV parts without a serial number because correct ID cannot be assured.

5. Parts will automatically ship 2<sup>nd</sup> day.
6. When installing parts (refer to section 6 - Assembly/Disassembly), repair alignment or adjustment will be necessary.

Geometric; Color Temp, etc. – to enter, press “Mute 182”

### **Important Points:**

1. Auto Mileage: We will pay \$0.50 per mile travel time without special approval, up to 50 additional miles beyond the 25 miles required by contract. However; you must provide proof, such as Internet driving directions or similar verifiable map and attach it to the claim when submitted.

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## Section 2 - Service Bulletins

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### SERVICE BULLETIN

PRODUCT: PJT  
BULLETIN: LCD-01  
MODEL: PLH403W

**Subject:** Microprocessor (IC901) software upgrade.

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**Background:**

1. During channel up / down, a pop noise is heard when connected to the "Monitor Audio / Video Output Jacks".
2. When using the DVD component input jacks, "COMPONENT" flashes (OSD).

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**Countermeasure:** Replace IC901.

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**Parts list:** Parts #: AA13-30005F.

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## Section 2 - Service Bulletins

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### SERVICE BULLETIN

**PRODUCT:** PJT  
**BULLETIN:** LCD-02  
**MODEL:** All LCD models

**Subject:** White balance and gamma adjustment.

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**Background:** When the white balance and gamma adjustment can not be performed by visual method, refer to method using test equipment.

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**Countermeasure:** Adjustment using test equipment:

Equipment:

1. NTSC signal generator, 10 – step signal. Each step of 10 IRE, last step is 100 IRE. This can be confirmed by using waveform monitor.
2. Color & chromaticity meter (Minolta CS-100).

**Procedure:** Set the color temperature to the value listed below, using the color & chromaticity meter with a specific step displayed by the signal generator. Adjust values in the service mode to achieve good white balance and gamma. Refer to service manual page 5-4 & 5-5. To enter service mode, press Mute - 1 – 8 – 2 with power off. Power set on; service mode will be displayed.

1. High light 80 IRE:  $Y=(13\pm 3.0)$ ,  $x=(0.285\pm .007)$ ,  $y=(0.284\pm .007)$ .  
Use control No. 20(Sub contrast), 22(R sub contrast), 23(B sub contrast).
2. Mid light 40 IRE:  $Y=(2.4\pm 0.5)$ ,  $x=(0.284\pm .007)$ ,  $y=(0.272\pm .007)$ .  
Use control No. 15(Sub bright), 16(B sub bright), 17(R sub bright).
3. Low light 20 IRE:  $Y=(0.3\pm 0.1)$ ,  $x=(0.291\pm .007)$ ,  $y=(0.264\pm .007)$ .  
Use control No. 7(Gamma ctrl 1), 8(R gamma ctrl 1), 9(B gamma ctrl 1).

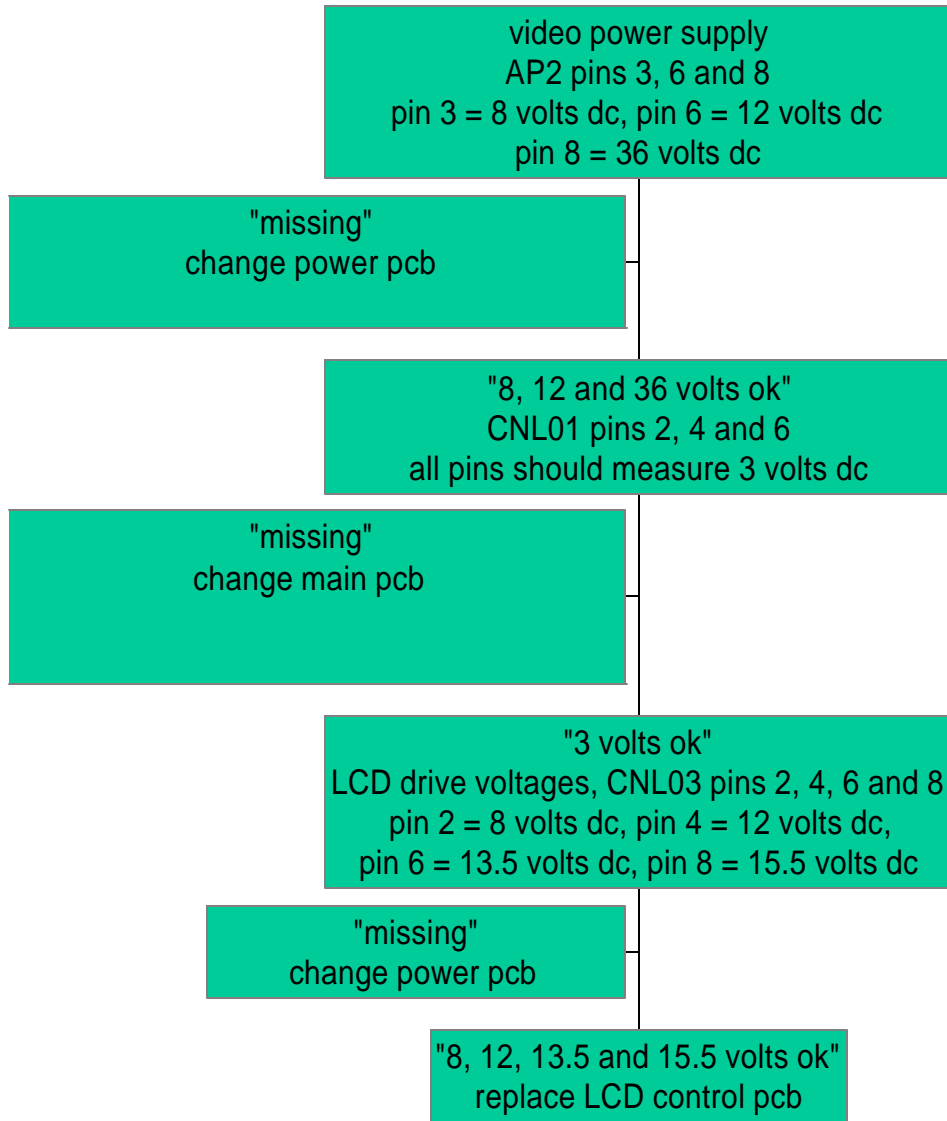
**Note:** Repeat adjustment of each control to achieve best results.

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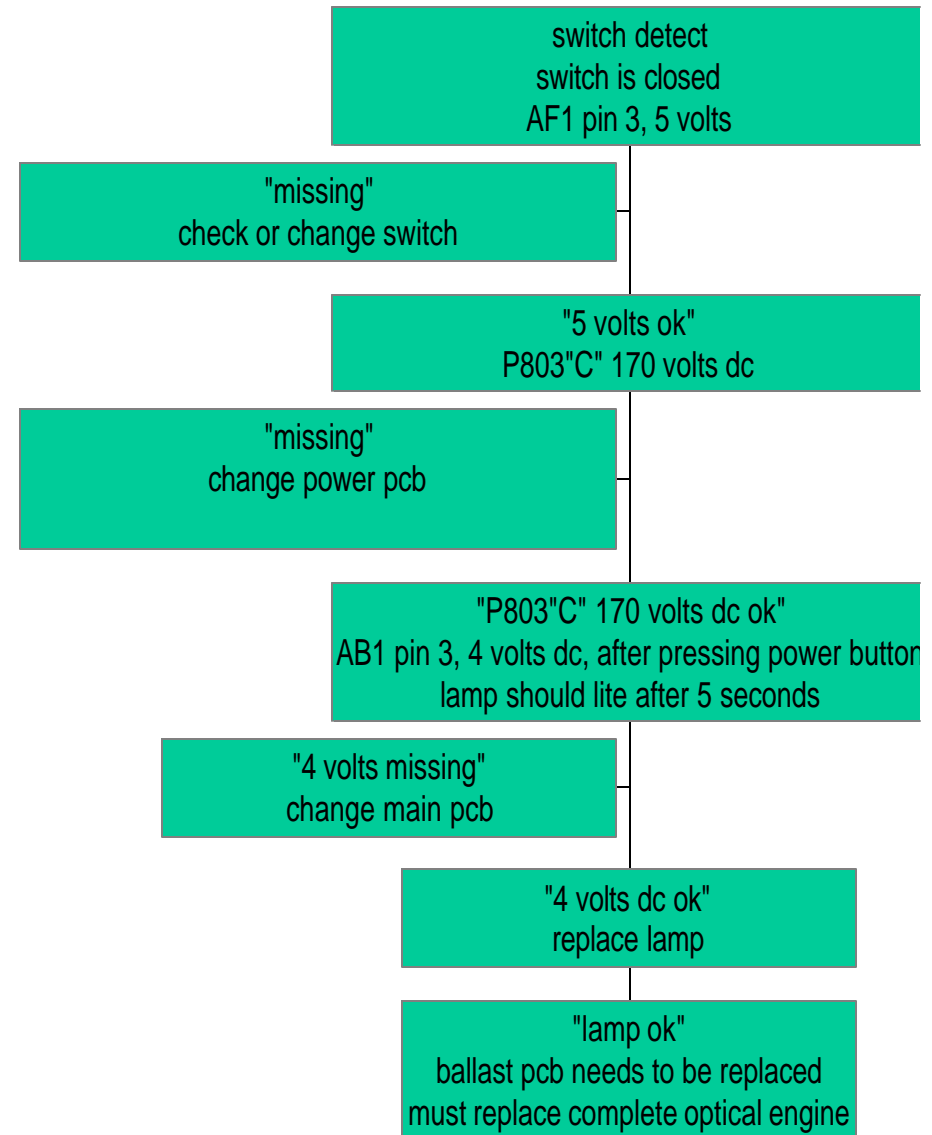
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## Section 3 - Flow Charts

video repair flow chart



power repair flow chart



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## Section 4 - Parts Data

Name	Model	Part No.	Description
Main PCB	PLH403W	AA94-10144F	ASSY-PCB,MAIN(OPT);SPT-403JA,L52A,U.S.A,
	PLH403W1	AA94-01720A	ASSY-PCB,MAIN(OPT);PLH403W1X/XAA,L52A,US
	PLH403WS	AA94-02019A	ASSY PCB MAIN(OPT);PLH403WSX/XAA,L52A,US
	PLH403W3	AA94-01956A	ASSY PCB MAIN(OPT);SLK407WX,L56A,KOREA,-
	PLH403WS3	AA94-01956B	ASSY PCB MAIN(OPT);PLH403WS3X/XAA,L56A,U
	SLJ402W	AA94-01203A	ASSY-PCB,MAIN(OPT);SLJ402WX/XAA,L52A,USA
	SLK407W	AA94-01956H	ASSY PCB MAIN(OPT);SLK407WX/XAA,L56A,U.S
	PLK405W	AA94-01956C	ASSY PCB MAIN(OPT);PLK405WX/XAA,L56A,USA
	PLK435WS	AA94-02562A	ASSY PCB MAIN(OPT);PLK435WSX/XAA,L56A,US
Optical Engine	PLH403W PLH403W1 PLH403WS SLJ402W	AA91-20057A	ASSY-LENS,MECHA;DS001AKB-6
	PLH403W3 PLH403WS3 PLK435WS SLK407W PLK405W	AA91-00242A	ASSY-LENS,MECHA;-,-,DS007,ST-43J6
LCD Control PCB	PLH403W	AA95-90036D	ASSY-PCB,LCD.CONTROL;-,-,PLH403WX/XAA,ALT5
	PLH403W1 SLJ402W	AA95-00330A	ASSY-PCB,LCD CONTROL;-,-,SLJ402WX/SHO,L52A
	PLH403WS	AA95-00501A	ASSY-PCB,LCD CONTROL;-,-,SLJ402W,L52A,-,-,
	PLH403WS PLH403WS3 PLK435WS SLK407W PLK405W	AA95-00578A	ASSY-PCB,LCD CONTROL;-,-,PLH403W3X/XAA,L56
Lamp	PLH403W PLH403W1 PLH403WS SLJ402W	AA47-10001B	LAMP;SPT-403J
	PLH403W3 PLH403WS3 PLK435WS SLK407W PLK405W	AA47-00003A	LAMP-MERCURY -,-,-,6000HR,150*73,
Power PCB	PLH403W1 PLH403WS PLH403W3 PLH403WS3 SLJ402W	AA95-00350A	ASSY-PCB,POWER;SLJ402W,L52A,40",- ,USA,-
	SLK407W PLK405W	AA95-00350A	ASSY-PCB,POWER;SLJ402W,L52A,40 10/12/1999
	PLK435WS	AA95-00671A	ASSY PCB POWER PLK435WSX/XAA,L56A,4
	PLH403W	AA95-10011E	ASSY-PCB,POWER;PLH403WX/XAA,L52A,40",- ,U
Ballast PCB	PLH403W PLH403W1 PLH403WS SLJ402W	AA81-10001A	BALLAST (SONY);SPT403J 40" LCD TV
	PLH403W3 PLH403WS3 PLK435WS SLK407W PLK405W	AA47-00002A	LAMP-BALLST;DS-B012,-,-,280,150*73,-,13

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## Section 5 - Assembly/Disassembly

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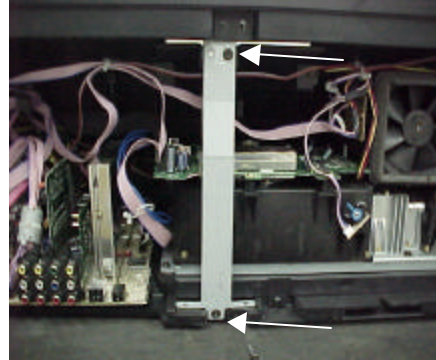
### Dis-assembly Procedure

### Dis-assembly Procedure

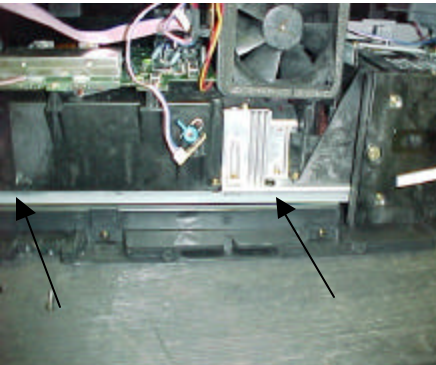
1. Open bottom cabinet



2. Unscrew bracket-back

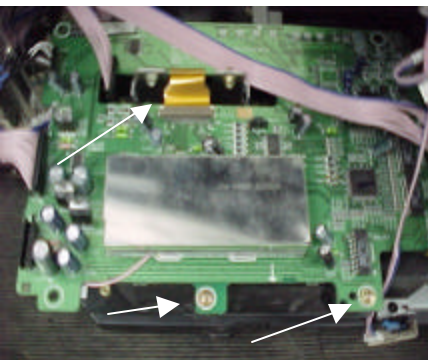


3. Unscrew Bottom screw

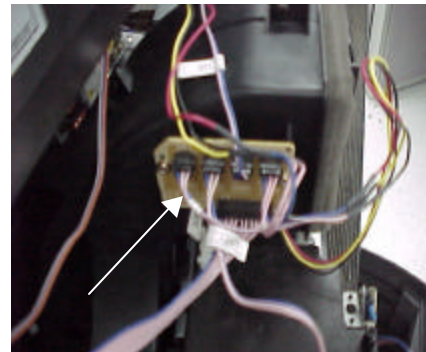


4. Unscrew Bottom screw below 2 screw

5. open Flat cable and 2 screw



6. open connector





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## Section 5 - Assembly/Disassembly

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7. unscrew 1 screw



8. exchange Optical Engine

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## Section 6 - Escalation/Who to Call

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### Escalation Paths and Technical Support

#### 1. Parts Issues

If wrong or defective parts are received, contact Parts Department with the invoice or PO numbers to resolve.

If the parts do not fix the problem and you need technical assistance:

973-601-6124 between 9:00 – 5:30 EST

- #### 3. Regional Service Engineers are available for each geographic region. They are your primary contact for all technical and policy related issues that cannot be resolved through normal means. Their regions and phone numbers:

West Zone: Jeff Reeves 310-537-7000 x131

Mid-West Zone: Mark Rowland 630-879-1401

East Zone: Anthony Ippolito 973-601-6005

South Zone: Dan Girdley 678-560-9140

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Logon: ID = your account number

Password = your zip code

Our ASC website contains most service manuals in PDF format ready for download.

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