

# SERVICE MANUAL

## MODEL SDP6820

CAUTION : Before servicing this chassis, read the "PRODUCT SAFETY SERVICE FOR VIDEO PRODUCTS" section on page 2 of this manual.

### DVD and CD PLAYER

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## LASER BEAM CAUTION LABEL

- レンズには絶対に触れないでください。
- DO NOT TOUCH THE LENS.
- LINSE NICHT BRÜHREN.
- NE PAS TOUCHER LA LENTILLE.

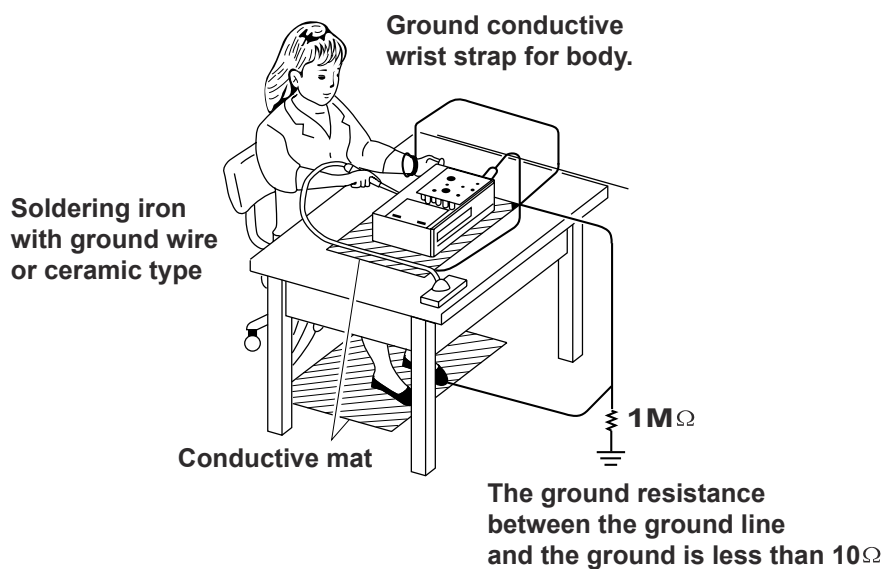
When the power supply is being turned on, you may not remove this laser cautions label. If it removes, radiation of laser may be received.

## PREPARATION OF SERVICING

Pickup Head consists of a laser diode that is very susceptible to external static electricity.

Although it operates properly after replacement, if it was subject to electrostatic discharge during replacement, its life might be shortened. When replacing, use a conductive mat, soldering iron with ground wire, etc. to protect the laser diode from damage by static electricity.

And also, the LSI and IC are same as above.



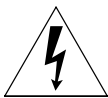
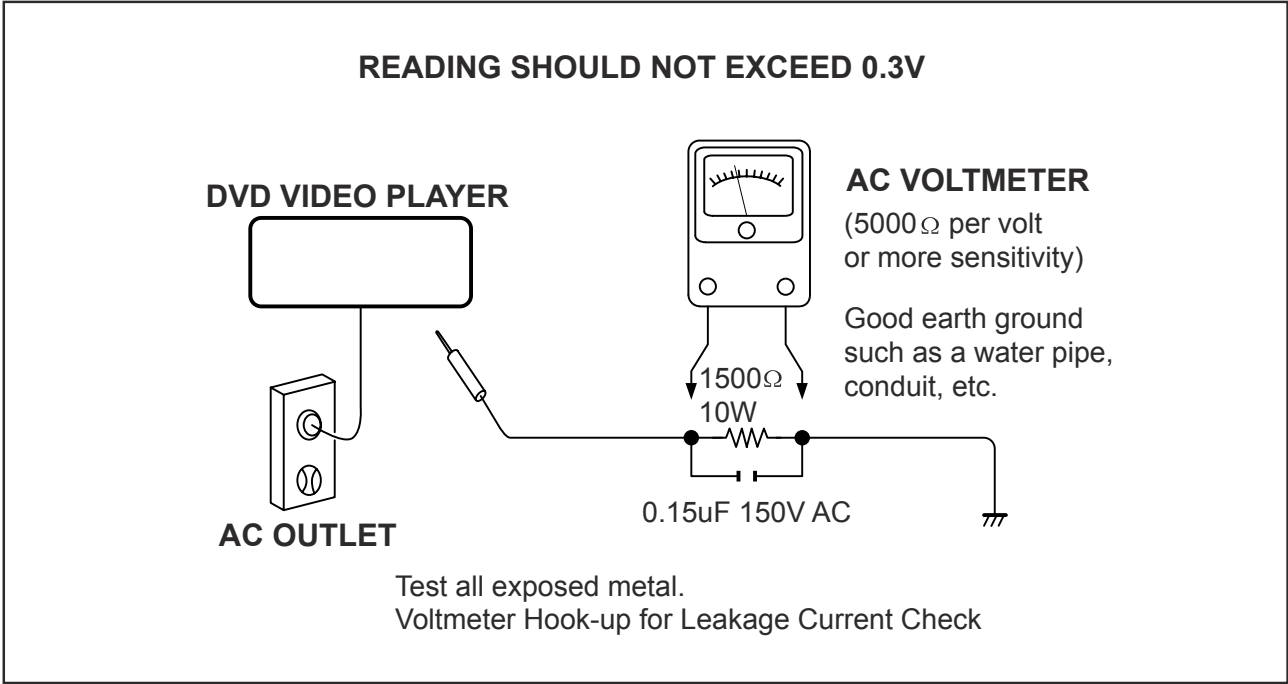
**SAFTY NOTICE**

**SAFTY PRECAUTIONS**

**LEAKAGE CURRENT CHECK**

Plug the AC line cord directly into a 120V AC outlet (do not use an isolation transformer for this check). Use an AC voltmeter, having 5000Ω per volt or more sensitivity. Connect a 1500Ω 10W resistor,paralleled by a 0.15uF 150V AC capacitor between a knomn good earth ground (water pipe, conduit, etc.) and all exposed metal parts of cabinet (antennas, handle bracket, metal cabinet screwheads, metal overlays, control shafts, etc.).

Measure the AC voltage across the 1500Ω resistor. The test must be conducted with the AC switch on and then repeated with the AC switch off. The AC voltage indicated by the meter may not exceed 0.3V.A reading exceeding 0.3V indicates that a dangerous potential exists, the fault must be located and corrected. Repeat the above test with the DVD VIDEO PLAYER power plug reversed. NEVER RETURN A DVD VIDEO PLAYER TO THE CUSTOMER WITHOUT TAKING NECESSARY CORRECTIVE ACTION.

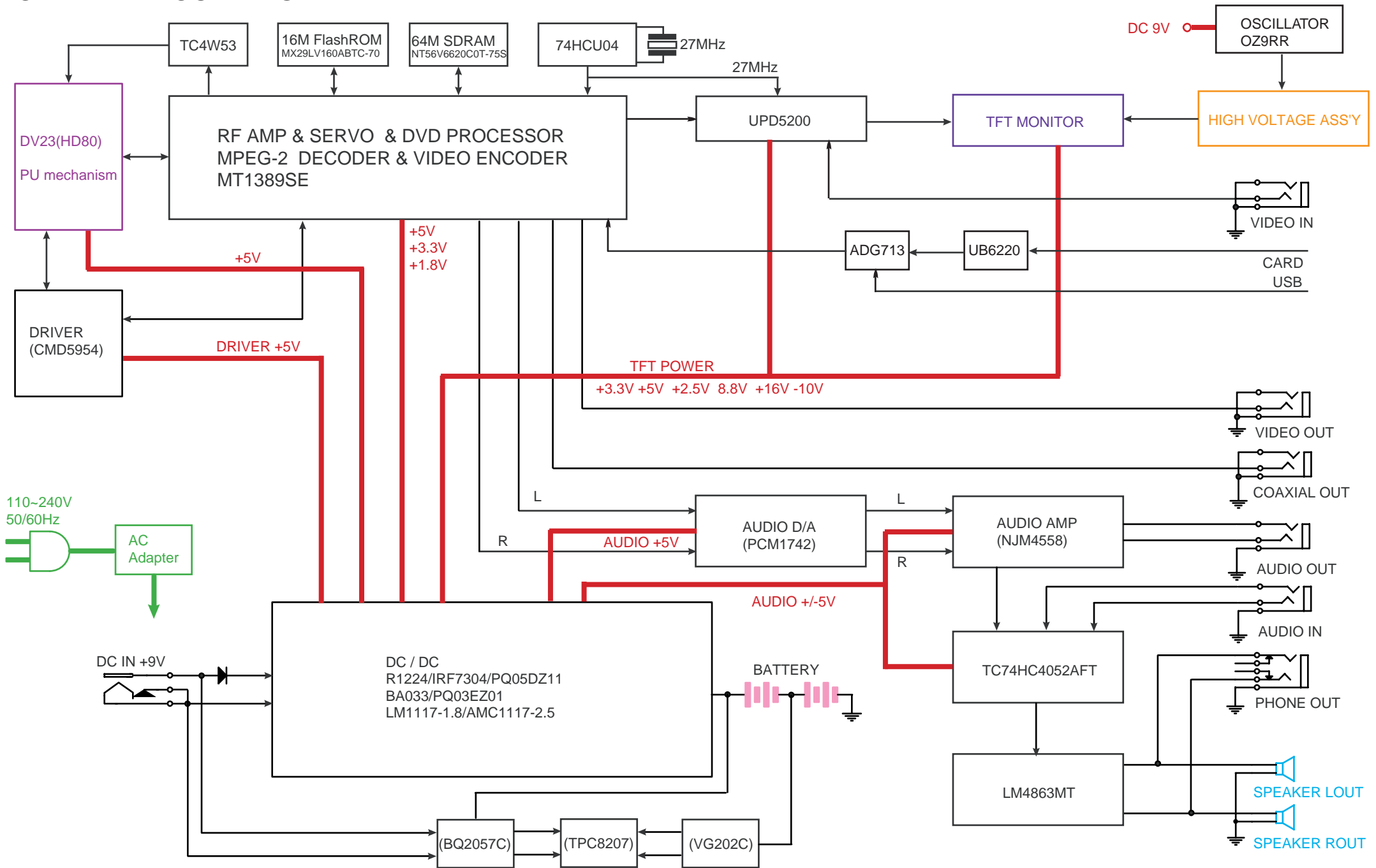


The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

# OVERALL BLOCK DIAGRAM



## 1. Troubleshooting

1. No power when turned on.
2. The initial screen is not displayed on the LCD.
3. The DVD drive does not work.
4. The operation of the DVD player stops at initializing display.
5. Image output stops during the operation.
6. No sound or abnormal sound comes out from the speakers in the DVD player.
7. No image or sound comes out from the external output.
8. No sound comes out from the headphones.
9. No image or sound is output by external input.
10. The DVD drive does not operate with the battery.

### 1.1 No power when turned on.

When the power is turned on, and if the LED on the front panel does not light green, check the following items and repair the defective parts.

#### (1) Check the power supply cable

If the cable is not the supplied one, replace it with the supplied cable and turn on the power again.

If the power supply cable is good, the AC adapter may be defective.

If the LED does not light after replacing, check the following items.

#### (2) Check the AC adapter

If the AC adapter is not the supplied one, replace it with the supplied AC adapter and turn on the power.

If the AC adapter is good, the power supply boards may be defective.

If the LED does not light after replacing, check the following items.

#### (3) Check the Power and Play buttons

Press the POWER button or the PLAY button on the DVD player. If the power does not turn on, check the following:

- Check the connector of the switch unit in the DVD player.  
(If the connection is loose, repair the connection.)
- Replace the switch unit and turn on the power again.  
If the LED does not light after replacing, check the following items.

#### (4) Replace the main board

## **1.2 The initial screen is not displayed on the LCD.**

If the initial screen is not displayed on the LCD, check the following items.

### **(1) Check the LED on the front**

If the LED does not light, proceed to 1.1.

### **(2) Check the backlight**

If the backlight does not light up, separate the DVD player into top assembly and bottom assembly, and check the connector harness, and check the connectors for defects.

#### **If the connector harness is broken:**

Replace the broken harness.

#### **If the connector harness is not broken:**

Remove the LCD cover and plate of the LCD unit and check the following:

- Check the connector of the FL harness, repair connectors.
- If the connectors are good, replace the FL inverter or the LCD.

### **(3) Check the lighting of LCD**

If the LCD does not light, separate the DVD player into the top assembly and bottom assembly, and check the LCD harness, and check the connectors on the main board.

#### **If the connector is broken:**

Replace the LCD harness or the main board.

#### **If the connector is not broken:**

Remove the LCD cover and plate of the LCD unit, and check the connection to the harness of the LCD unit.

- If a bad connection is found.  
Connect the LCD harness to the LCD unit.
- Other than the above  
Replace the LCD unit or the main board.

### 1.3 The DVD drive does not work.

When the DVD drive does not work after the power is turned on, check the following items and repair or replace the defective parts.

- (1) **Press the DISC cover switch at the center of the DVD player and turn on the power. Then check whether or not the optical pick-up lens of the DVD drive lights.**

CAUTION: Visible laser radiation when open and interlock defeated. Do not stare into Laser beam.

**The optical pick-up lens lights dim:**

It is caused by deterioration of the optical pick-up lens. Replace the DVD drive.

**The optical pick-up lens does not light:**

Check the connectors of the DVD-FFC. Also check the connection to the main board and to the DVD drive.

- Loose connection is found.  
Repair the connection, and then check the operation of the DVD drive again.
- The DVD-FFC is broken.  
Replace the DVD-FFC.
- Other than the above.  
Replace the DVD drive or the main board.

- (2) **Insert a DVD disk and turn on the power**

**The DVD drive does not work:**

The motor of the DVD drive or the main board is defective. Replace the DVD drive or the main board.

**The DVD drive works but the initializing operation of the optical pick-up lens does not start (the optical pick-up lens operates twice), or abnormal noise sound:**

The DVD drive is defective. Replace the DVD drive.

### 1.4 The operation of the DVD player stops at initializing display.

If the DVD player does not work after the initializing screen is displayed, check the indication on the screen. Then repair the defect according to it.

- (1) **Insert a DVD disk and close the DISC cover, and turn on the power. Then check the LCD screen or use an external display.**

- **The message “loading” is not displayed or the operation stops at the message “Loading”.**

Since the DVD drive or the main board is defective, check in the following order:

- 1) DVD drive
- 2) Main board

- **The message “CHECK DISK” is displayed.**

Check the DVD disk for fingerprints, dirt, etc.

If the DVD disk is OK, then check the following items:

- 1) Check the DVD-FFC  
If a loose connection, repair the connection.  
If it is damaged, replace it with new one.
- 2) Other than above  
For other cases, replace the unit in the following order:
  - DVD drive (defective optical pick-up)
  - Main board

**1.5 Image output stops during the operation.**

If the image output from the media in the DVD player stops during the operation, replace the DVD drive.

**1.6 No sound or abnormal sound comes out from the speakers in the DVD player.**

If no sound comes out from the speakers in the DVD player, check the following:

**(1) Check for moving images on the LCD screen**

Check whether or not the move of image stops in halfway. If it stops, replace the DVD drive.

**(2) Check the operation of the DVD driver.**

Check whether or not the DVD drive works. If it stops, replace the DVD drive.

**(3) Check the connection of the speakers in the LCD unit.**

Separate the DVD player into the top assembly and bottom assembly, and then check the connection of the speaker harnesses to the main board. If a bad connection, repair the connection.

Other than the above, disassemble the LCD unit and replace the speakers or the main board.

**1.7 No image or sound comes out from the external output**

If any image or sound is output from the TV connected by the external cable, replace the main board or the connector.

NOTE: Before this test, make sure the drive works.

**1.8 No sound comes out from the headphones.**

If no sound comes out from the headphones, replace the main board or the connector.

**1.9 No image or sound is output by the external input.**

If any image or sound is output by external input, replace the main board or the connector.

**1.10 The DVD drive does not operate with the battery.****(1) Check the operation with a good battery.**

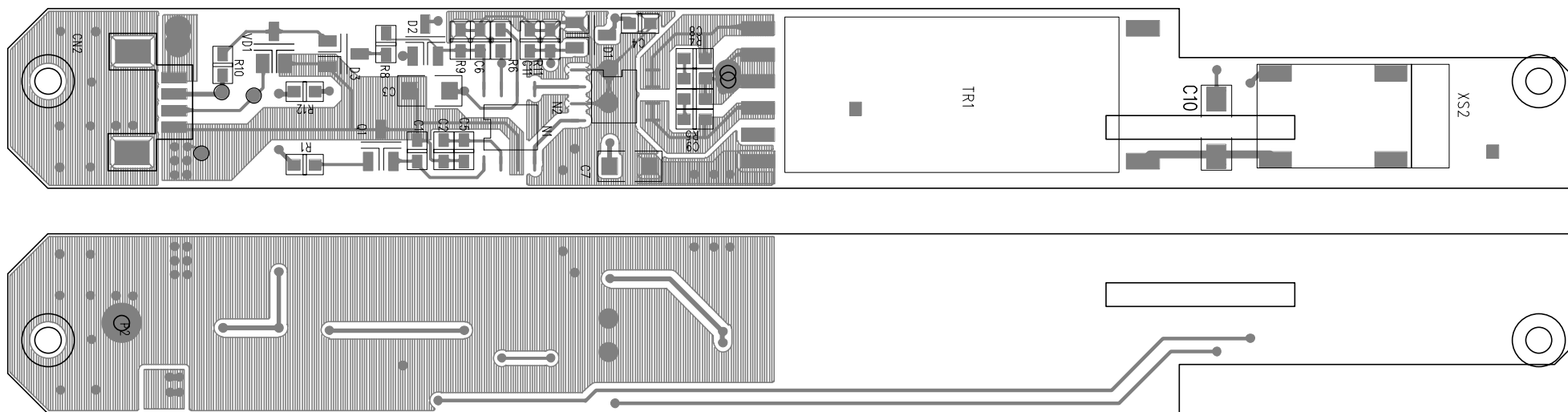
Install a good battery and make sure the LED lights up orange while the AC adapter is connected. When the LED does not light up or blinks, check the connection of the battery harness inside the DVD player. If the connection is loose, repair connection. If the harness has been connected firmly, replace the main board.

**(2) Other than the above, replace the battery.**

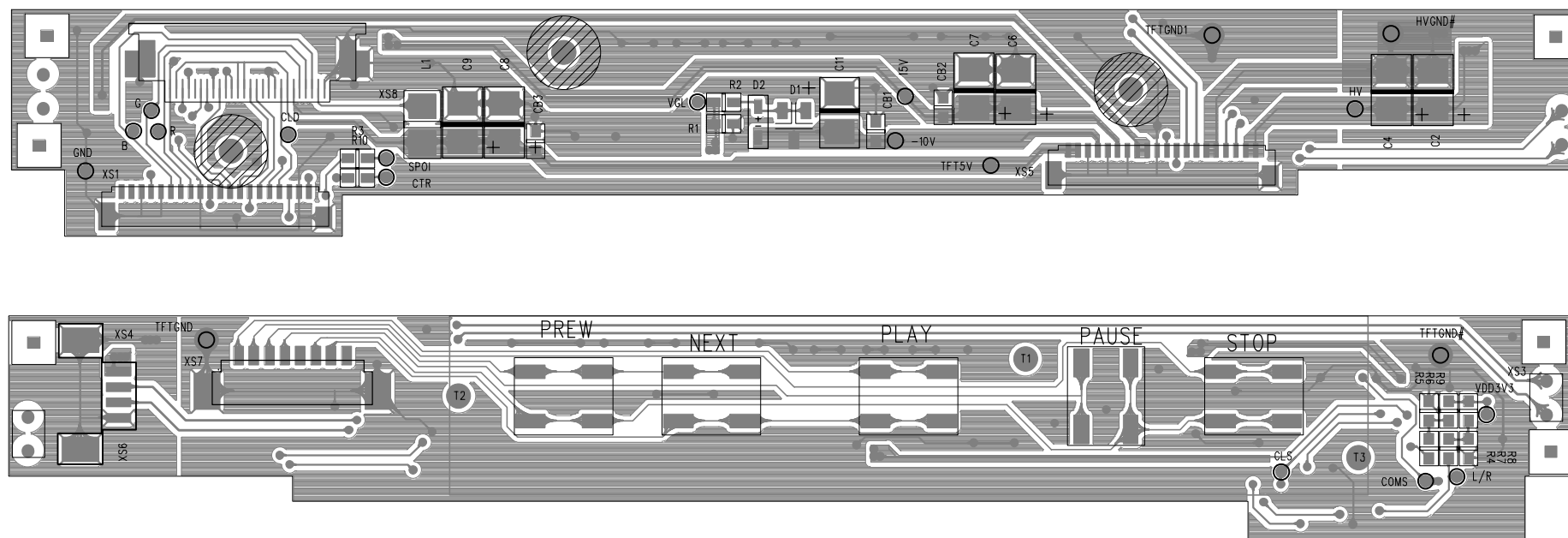
NOTE:

- For this check, use a battery which is not fully charged (because the LED does not light when the battery is fully charged.)
- Before this check, make sure other function work correctly.

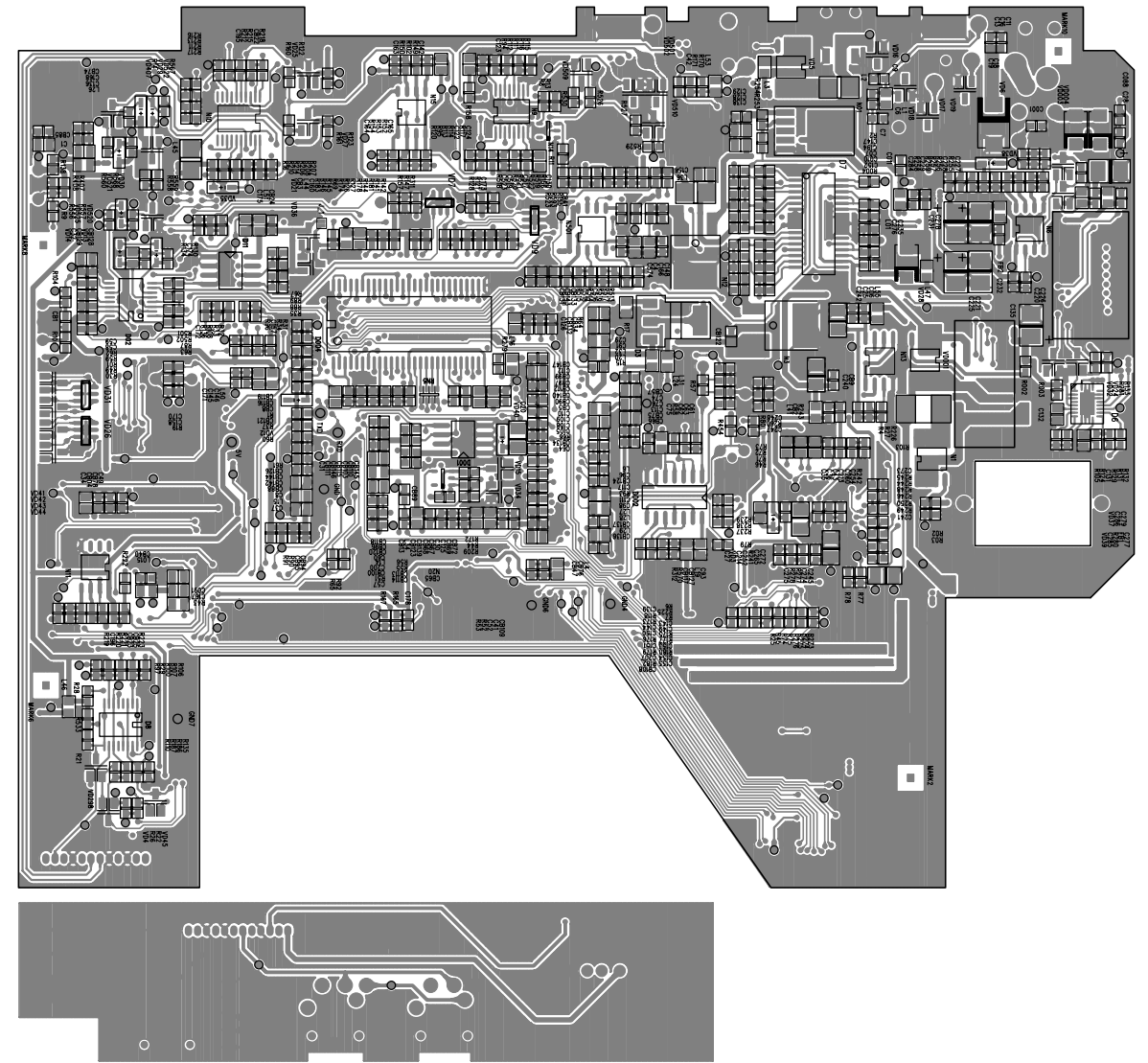
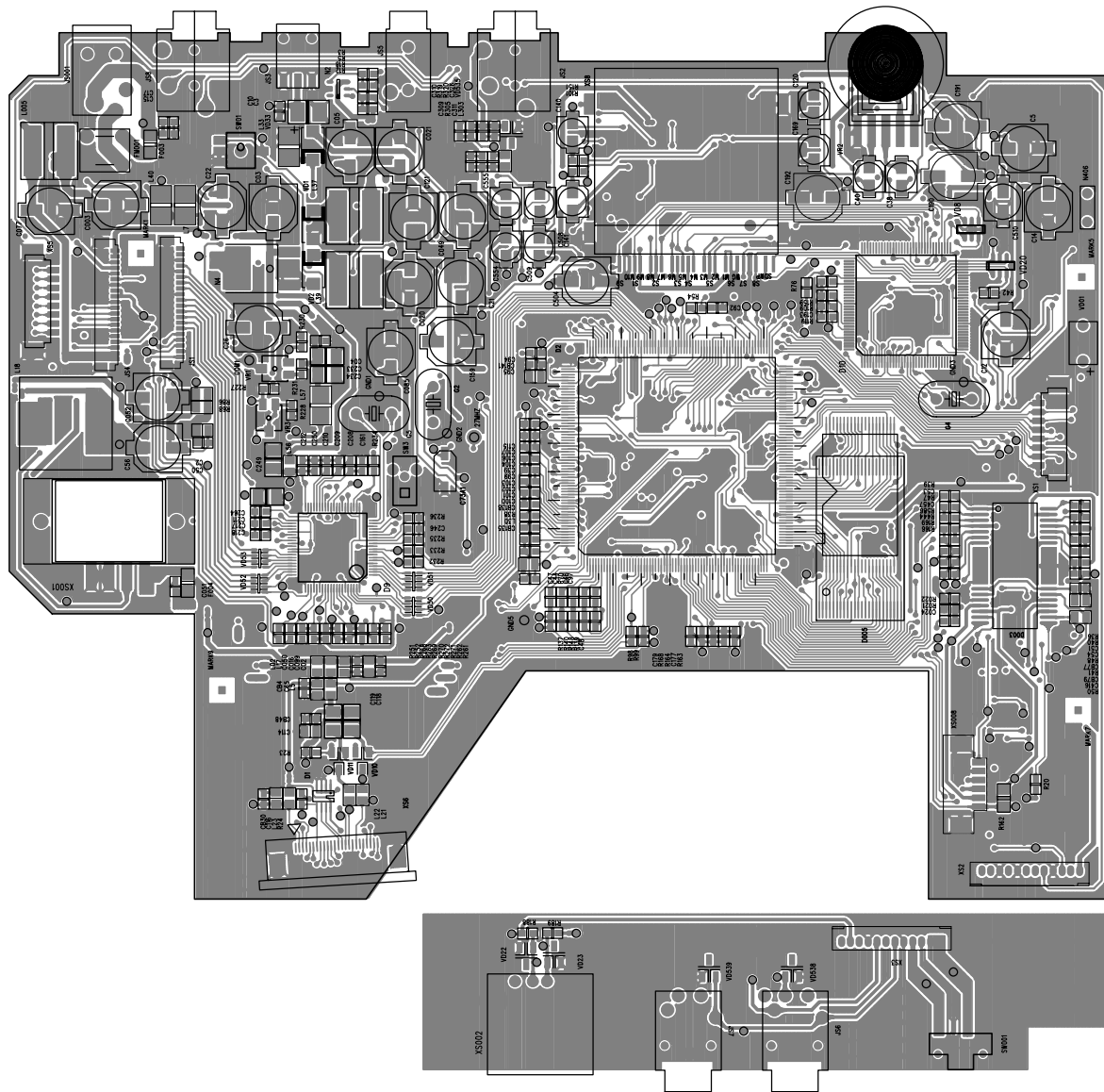




DVD6820H HV POWER BOARD DIAGRAM



DVD6820T(H3) IF BOARD DIAGRAM



DVD6820M MAIN BOARD DIAGRAM

## ELECTRICAL PARTS LIST

PART No.	PART NAME	Q'TY
SDP6820		
11081W	RB-LI37LITHIUM BATTERY	1
21785	DVD6820H HV POWER ASS'Y	1
21802	DVD6820M(H3) MAIN ASS'Y	1
21803	DVD6820K(H3) KEY ASS'Y	1
21804	DVD6820T(H3) IF ASS'Y	1
S7559	A085FW01V0/V1	1
S0535	CAR CIGARETTE ADAPTER	1
S0578e	ADPV18A AC POWER ADAPTER	1
S06115a	RC-1730A REMOTE	1
S30716	DVD6820 KEY CONNECT WIRE	1
S3242	DVD1710 SPEAKER CONNECT WIRE	2
S3421k	20 PIN HARNESS (L180)	2
S3545	SD-P1200 HC CONNECT WIRE	1
S3747	RCA CORD AV	1
S3781	TFT EARTHING WIRE	1
S4353	TS-043 EARPHONE	1
S4823a	SDP6820 OWNER MANUAL	1
S5006a	SPEAKER	2
S8115a	DV23 LOADING ASS'Y	1