

SAMSUNG

DVD PLAYER

Chassis : Sellino

DVD-C621

SAMSUNG

SERVICE MANUAL

DVD-C621

SERVICE *Manual*

SAMSUNG

ELECTRONICS

DVD PLAYER

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1. Precautions

1-1 Safety Precautions

1) Before returning an instrument to the customer, always make a safety check of the entire instrument, including, but not limited to, the following items:

(1) Be sure that no built-in protective devices are defective or have been defeated during servicing. (1) Protective shields are provided to protect both the technician and the customer. Correctly replace all missing protective shields, including any remove for servicing convenience.

(2) When reinstalling the chassis and/or other assembly in the cabinet, be sure to put back in place all protective devices, including, but not limited to, nonmetallic control knobs, insulating fish papers, adjustment and compartment covers/shields, and isolation resistor/capacitor networks. Do not operate this instrument or permit it to be operated without all protective devices correctly installed and functioning.

(2) Be sure that there are no cabinet openings through which adults or children might be able to insert their fingers and contact a hazardous voltage. Such openings include, but are not limited to, excessively wide cabinet ventilation slots, and an improperly fitted and/or incorrectly secured cabinet back cover.

(3) Leakage Current Hot Check-With the instrument completely reassembled, plug the AC line cord directly into a 120V AC outlet. (Do not use a isolation transformer during this test.) Use a leakage current tester or a metering system that complies with American National Standards institute (ANSI) C101.1 Leakage Current for Appliances and Underwriters Laboratories (UL) 1270 (40.7). With the instrument's AC switch first in the ON position and then in the OFF position, measure from a known earth ground (metal water pipe, conduit, etc.) to all exposed metal parts of the instrument (antennas, handle brackets, metal cabinets, screw-heads, metallic overlays, control shafts, etc.), especially any exposed metal parts that offer an electrical return path to the chassis.

Any current measured must not exceed 0.5mA. Reverse the instrument power cord plug in the outlet and repeat the test. See Fig. 1-1.

Any measurements not within the limits specified herein indicate a potential shock hazard that must be eliminated before returning the instrument to the customer.

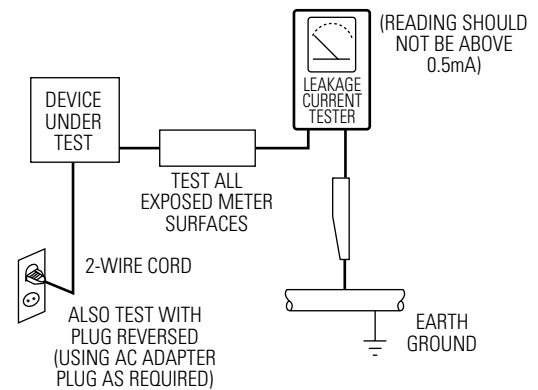


Fig. 1-1 AC Leakage Test

(4) Insulation Resistance Test Cold Check-(1) Unplug the power supply cord and connect a jumper wire between the two prongs of the plug. (2) Turn on the power switch of the instrument. (3) Measure the resistance with an ohmmeter between the jumpered AC plug and all exposed metallic cabinet parts on the instrument, such as screwheads, antenna, control shafts, handle brackets, etc. When an exposed metallic part has a return path to the chassis, the reading should be between 1 and 5.2 megohm. When there is no return path to the chassis, the reading must be infinite. If the reading is not within the limits specified, there is the possibility of a shock hazard, and the instrument must be re-paired and rechecked before it is returned to the customer. See Fig. 1-2.

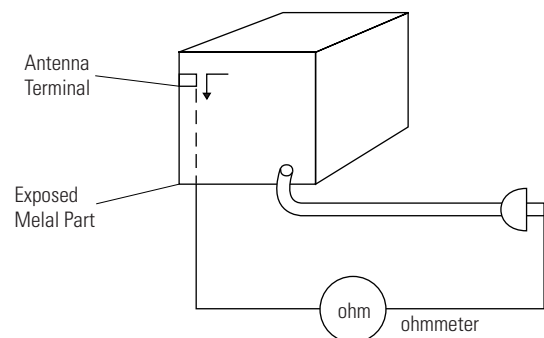




Fig. 1-2 Insulation Resistance Test

Precautions

- 2) Read and comply with all caution and safety related notes non or inside the cabinet, or on the chassis.
- 3) Design Alteration Warning-Do not alter or add to the mechanical or electrical design of this instrument. Design alterations and additions, including but not limited to, circuit modifications and the addition of items such as auxiliary audio output connections, might alter the safety characteristics of this instrument and create a hazard to the user. Any design alterations or additions will make you, the service, responsible for personal injury or property damage resulting therefrom.
- 4) Observe original lead dress. Take extra care to assure correct lead dress in the following areas:
 - (1) near sharp edges, (2) near thermally hot parts (be sure that leads and components do not touch thermally hot parts), (3) the AC supply, (4) high voltage, and (5) antenna wiring. Always inspect in all areas for pinched, out-of-place, or frayed wiring. Do not change spacing between a component and the printed-circuit board. Check the AC power cord for damage.
- 5) Components, parts, and/or wiring that appear to have overheated or that are otherwise damaged should be replaced with components, parts and/ or wiring that meet original specifications. Additionally, determine the cause of overheating and/or damage and, if necessary, take corrective action to remove any potential safety hazard.
- 6) Product Safety Notice-Some electrical and mechanical parts have special safety-related characteristics which are often not evident from visual inspection, nor can the protection they give necessarily be obtained by replacing them with components rated for higher voltage, wattage, etc. Parts that have special safety characteristics are identified by shading, an () or a () on schematics and parts lists. Use of a substitute replacement that does not have the same safety characteristics as the recommended replacement part might create shock, fire and/or other hazards. Product safety is under review continuously and new instructions are issued whenever appropriate.

1-2 Servicing Precautions



CAUTION : Before servicing Instruments covered by this service manual and its supplements, read and follow the Safety Precautions section of this manual.

Note : If unforeseen circumstance create conflict between the following servicing precautions and any of the safety precautions, always follow the safety precautions. Remember: Safety First.

1-2-1 General Servicing Precautions

- (1) a. Always unplug the instrument's AC power cord from the AC power source before (1) re-moving or reinstalling any component, circuit board, module or any other instrument assembly, (2) disconnecting any instrument electrical plug or other electrical connection, (3) connecting a test substitute in parallel with an electrolytic capacitor in the instrument.
- b. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
- c. Do not apply AC power to this instrument and /or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
- d. Always connect a test instrument's ground lead to the instrument chassis ground before connecting the test instrument positive lead. Always remove the test instrument ground lead last.

Note : Refer to the Safety Precautions section ground lead last.

- (2) The service precautions are indicated or printed on the cabinet, chassis or components. When servicing, follow the printed or indicated service precautions and service materials.
- (3) The components used in the unit have a specified flame resistance and dielectric strength. When replacing components, use components which have the same ratings. Components identified by shading, by () or by () in the circuit diagram are important for safety or for the characteristics of the unit. Always replace them with the exact replacement components.

- (4) An insulation tube or tape is sometimes used and some components are raised above the printed wiring board for safety. The internal wiring is sometimes clamped to prevent contact with heating components. Install such elements as they were.

- (5) After servicing, always check that the removed screws, components, and wiring have been installed correctly and that the portion around the serviced part has not been damaged and so on. Further, check the insulation between the blades of the attachment plug and accessible conductive parts.

1-2-2 Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power ON. Connect the insulation resistance meter (500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts(see note) should be more than 1 Megohm.

Note : Accessible conductive parts include metal panels, input terminals, earphone jacks, etc.

1-3 ESD Precautions

Electrostatically Sensitive Devices (ESD)

Some semiconductor (solid state) devices can be damaged easily by static electricity.

Such components commonly are called Electrostatically Sensitive Devices(ESD). Examples of typical ESD devices are integrated circuits and some field-effect transistors and semiconductor chip components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

- (1) Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
- (2) After removing an electrical assembly equipped with ESD devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
- (3) Use only a grounded-tip soldering iron to solder or unsolder ESD devices.
- (4) Use only an anti-static solder removal devices. Some solder removal devices not classified as "anti-static" can generate electrical charges sufficient to damage ESD devices.
- (5) Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ESD devices.
- (6) Do not remove a replacement ESD device from its protective package until immediately before your are ready to install it.(Most replacement ESD devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive materials).

- (7) Immediately before removing the protective materials from the leads of a replacement ESD device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

CAUTION : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

- (8) Minimize bodily motions when handling unpackaged replacement ESD devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ESD device).

1-4 Handling the optical pick-up

The laser diode in the optical pick up may suffer electrostatic breakdown because of potential static electricity from clothing and your body.

The following method is recommended.

- (1) Place a conductive sheet on the work bench (The black sheet used for wrapping repair parts.)
- (2) Place the set on the conductive sheet so that the chassis is grounded to the sheet.
- (3) Place your hands on the conductive sheet (This gives them the same ground as the sheet.)
- (4) Remove the optical pick up block
- (5) Perform work on top of the conductive sheet. Be careful not to let your clothes or any other static sources to touch the unit.
 - ◆ Be sure to put on a wrist strap grounded to the sheet.
 - ◆ Be sure to lay a conductive sheet made of copper etc. Which is grounded to the table.

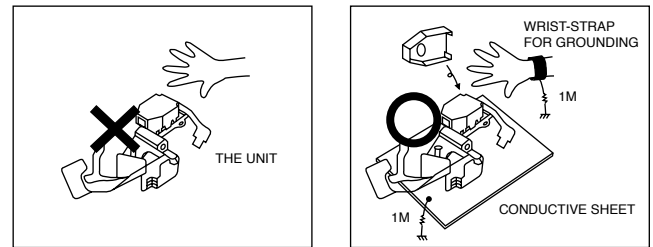


Fig.1-3

- (6) Short the short terminal on the PCB, which is inside the Pick-Up ASS'Y, before replacing the Pick-Up. (The short terminal is shorted when the Pick-Up Ass'y is being lifted or moved.)
- (7) After replacing the Pick-up, open the short terminal on the PCB.

1-5 Pick-up disassembly and reassembly

1-5-1 Disassembly

- 1) Remove the power cord.
- 2) Disassemble the Deck-Assy.
- 3) Make solder land 2 points short on Pick-up.
(See Fig. 1-4)
- 4) Disassembly the Pick-up.

1-5-2 Assembly

- 1) Replace the Pick-up.
- 2) Remove the soldering 2 points on Pick-up.
- 3) Reassemble the Deck-Assy.

Note : If the assembly and disassembly are not done in correct sequence, the Pick-up may be damaged.

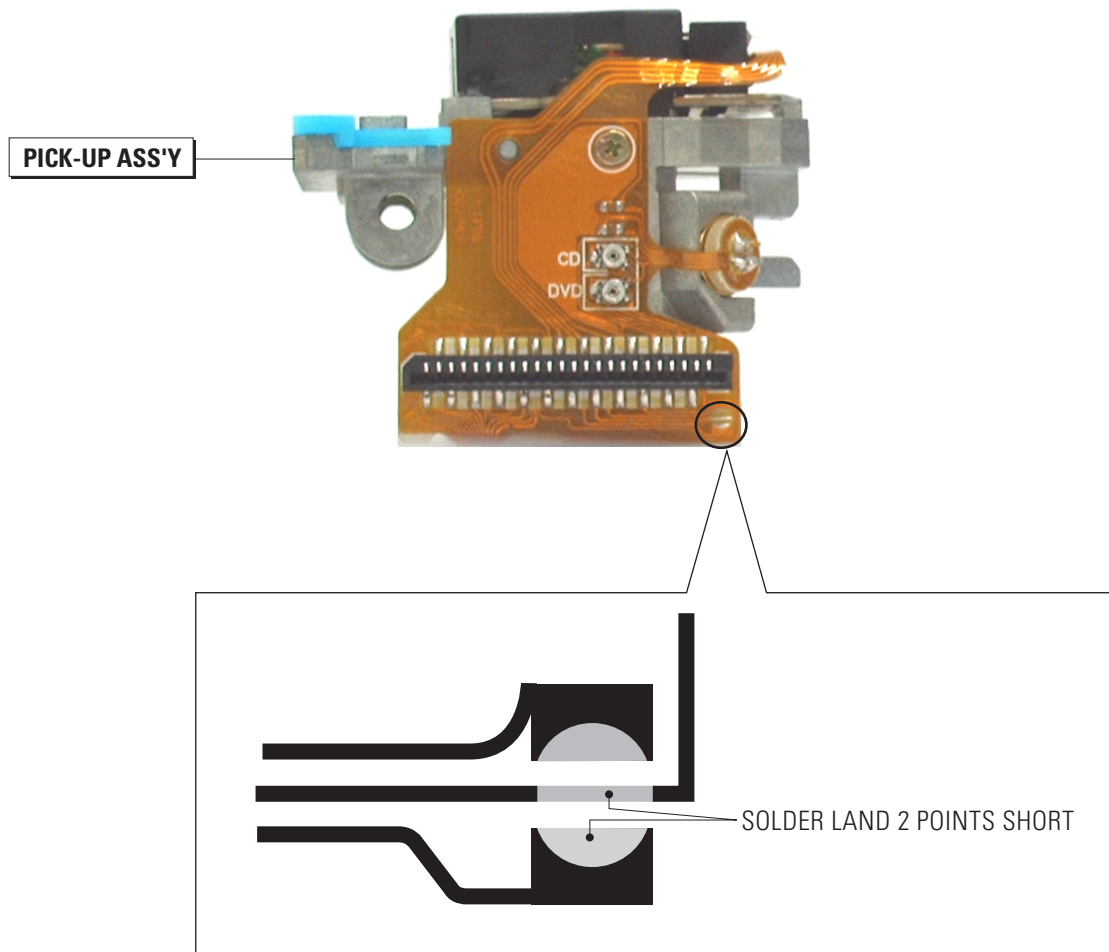


Fig. 1-4

2. Disassembly and Reassembly

2-1 Cabinet and PCB

Note : Reassembly in reverse order.

2-1-1 Top Cabinet Removal

- 1) Remove 3 Screws ❶ on the back Top Cabinet.
- 2) Remove 4 Screws ❷, ❸ on the left and right side.
- 3) Lift up the Top Cabinet in direction of arrow.

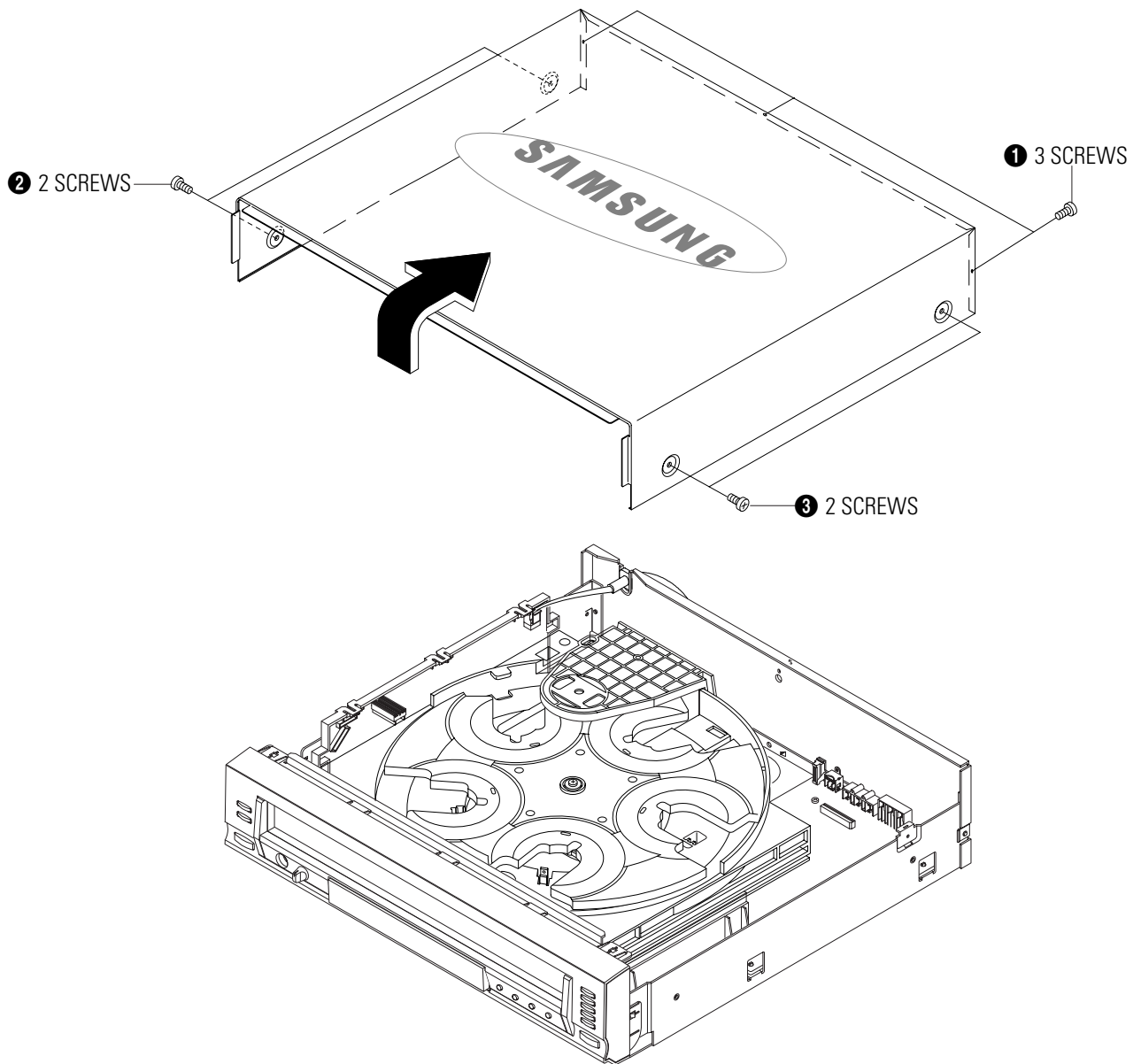


Fig. 2-1 Top Cabinet Removal

2-1-2 Door-Tray Removal

- 1) Supply power and open Tray Disc ❶.
- 2) Disassemble the Door-Tray ❷ in direction of arrow "A".
- 3) Close Tray ❶ and power off.

Note : If Tray ❶ doesn't open, insert a Screw driver ❹ into the Emergency hole ❸ (as shown in detailed drawing) and then push it in the direction of arrow "B". Open Tray manually.

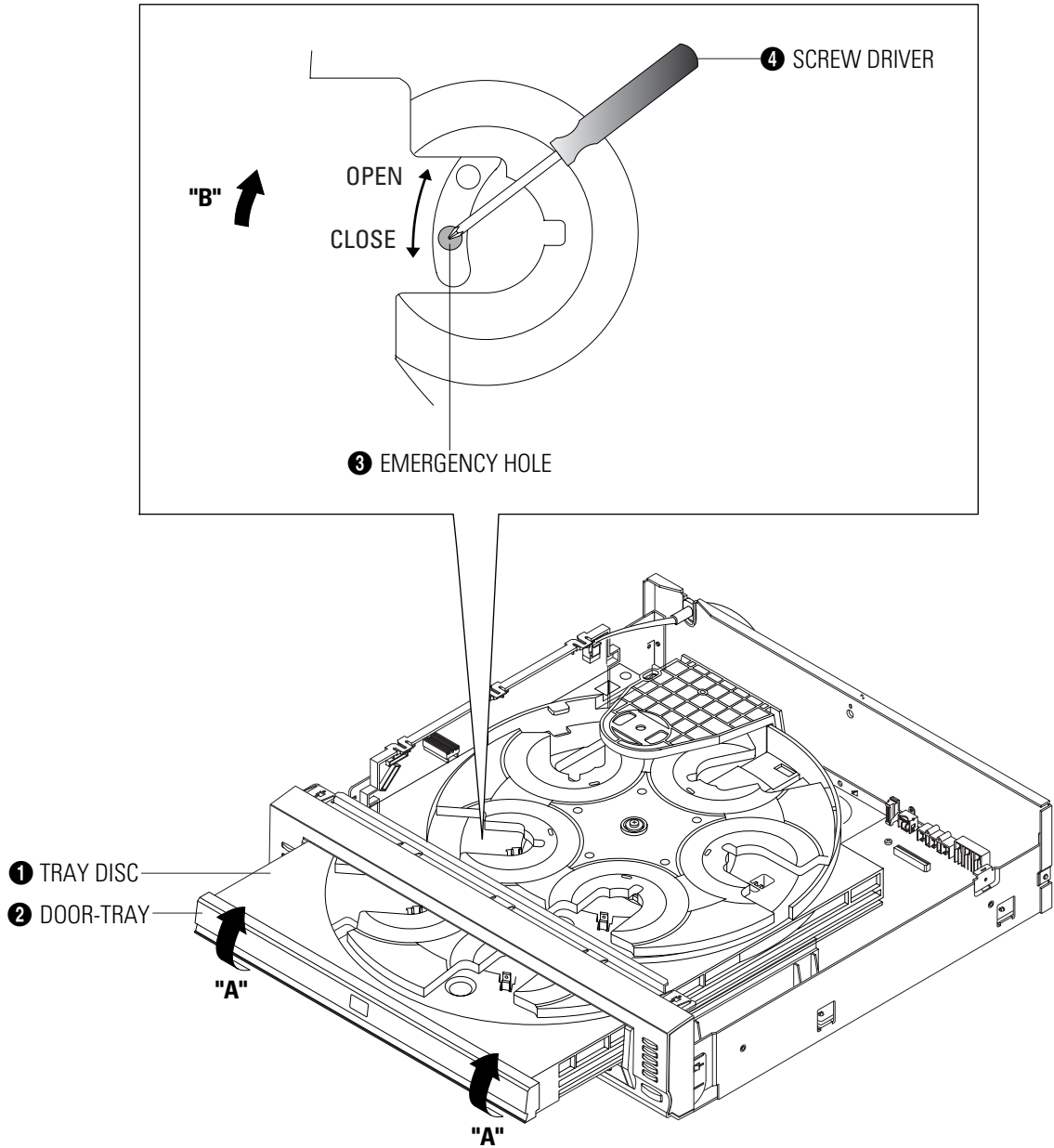


Fig. 2-2 Door-Tray Removal

2-1-3 Ass'y Front-Cabinet, Key PCB Removal

- 1) Release 6 Hooks **1**, **3**, **4**, **5** and remove Knob-Volume **2**, Ass'y Front-Cabinet **6**.
- 2) Remove 1 Screw **7** and L-Key PCB **8**.
- 3) Remove 2 Screws **9** and R-Key PCB **10**.

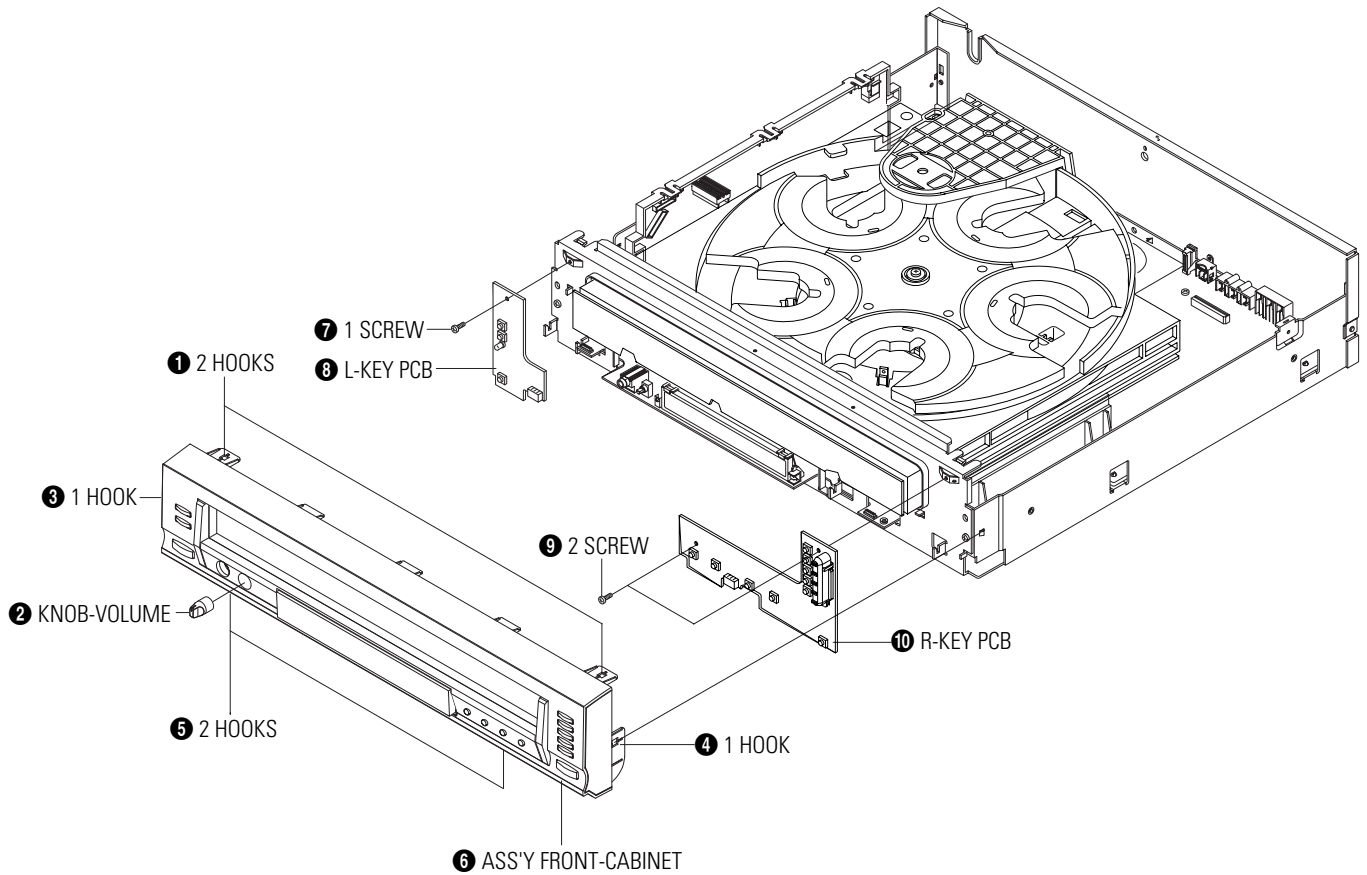


Fig. 2-3 Ass'y Front-Cabinet, Key PCB Removal

2-1-4 Ass'y Deck Removal

- 1) Remove 6 Screws ❶.
- 2) Insert a Screw Driver ❸ into Emergency Hole ❷ and turn Gear Cam ❹ in the direction of arrow "A".
- 3) When the Tray Disc ❺ comes out a little, pull in the direction of arrow "B" by hand.
- 4) Remove 2 Screws ❻ and close the Tray Disc ❺ by pushing in the reverse direction of arrow "B" by hand, and lift up the Ass'y Deck.
- 5) Disconnect Flat-Cable from MDCN1 on Main & Jack PCB and Connect-Wire from FCN5 on Front PCB.

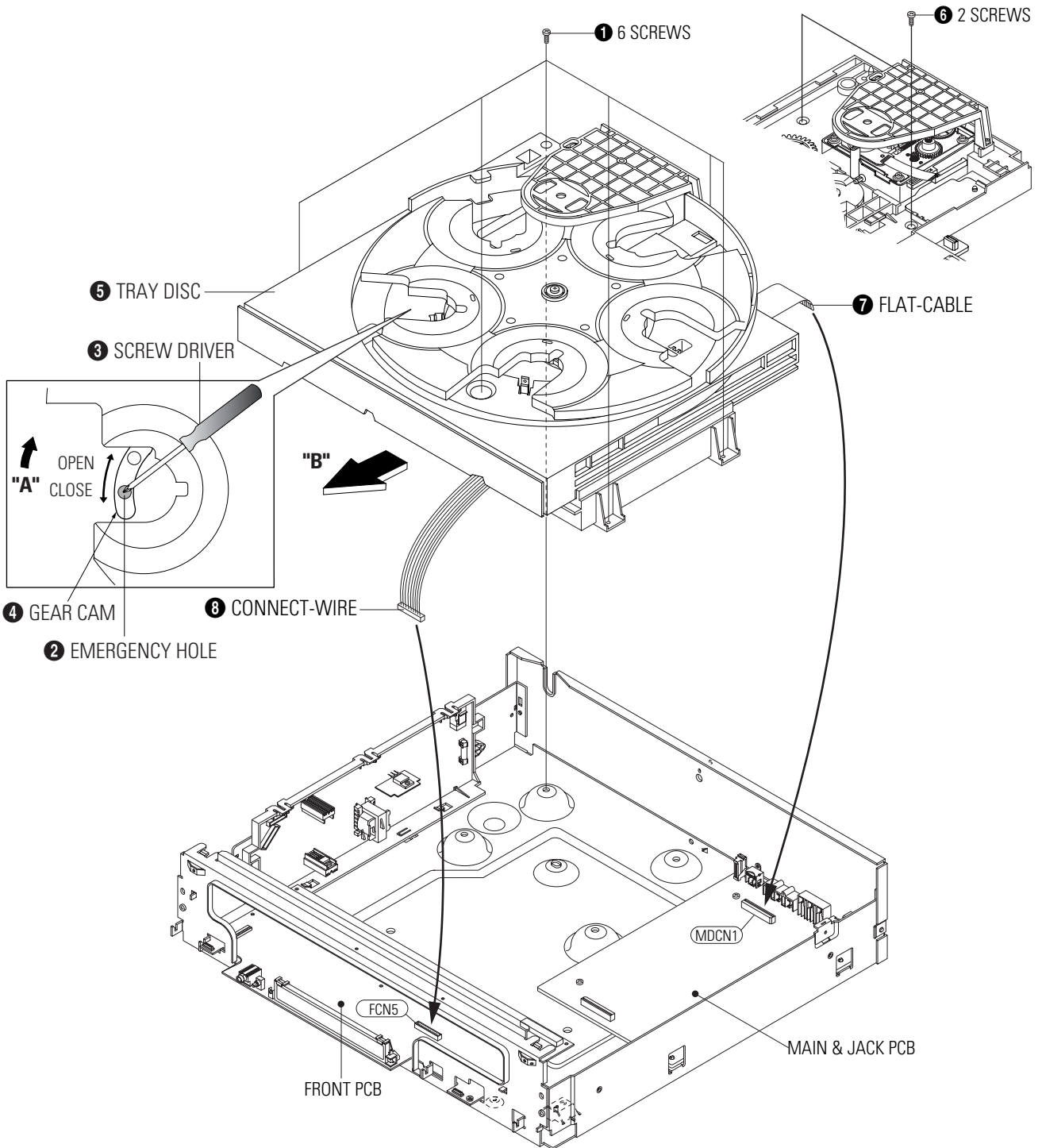


Fig. 2-4 Ass'y Deck Removal

2-1-5 Main & Jack PCB, S.M.P.S. PCB, Front PCB Removal

- 1) Remove 3 Screws **①** and lift up the Main & Jack PCB **②**.
- 2) Remove Holder SMPS **③** by pulling in the direction of arrow while pressing Hook **④** from the bottom chassis.
- 3) Release 3 Hooks **⑤** and S.M.P.S. PCB **⑥**.
- 4) Lift up the Front PCB **⑦**.

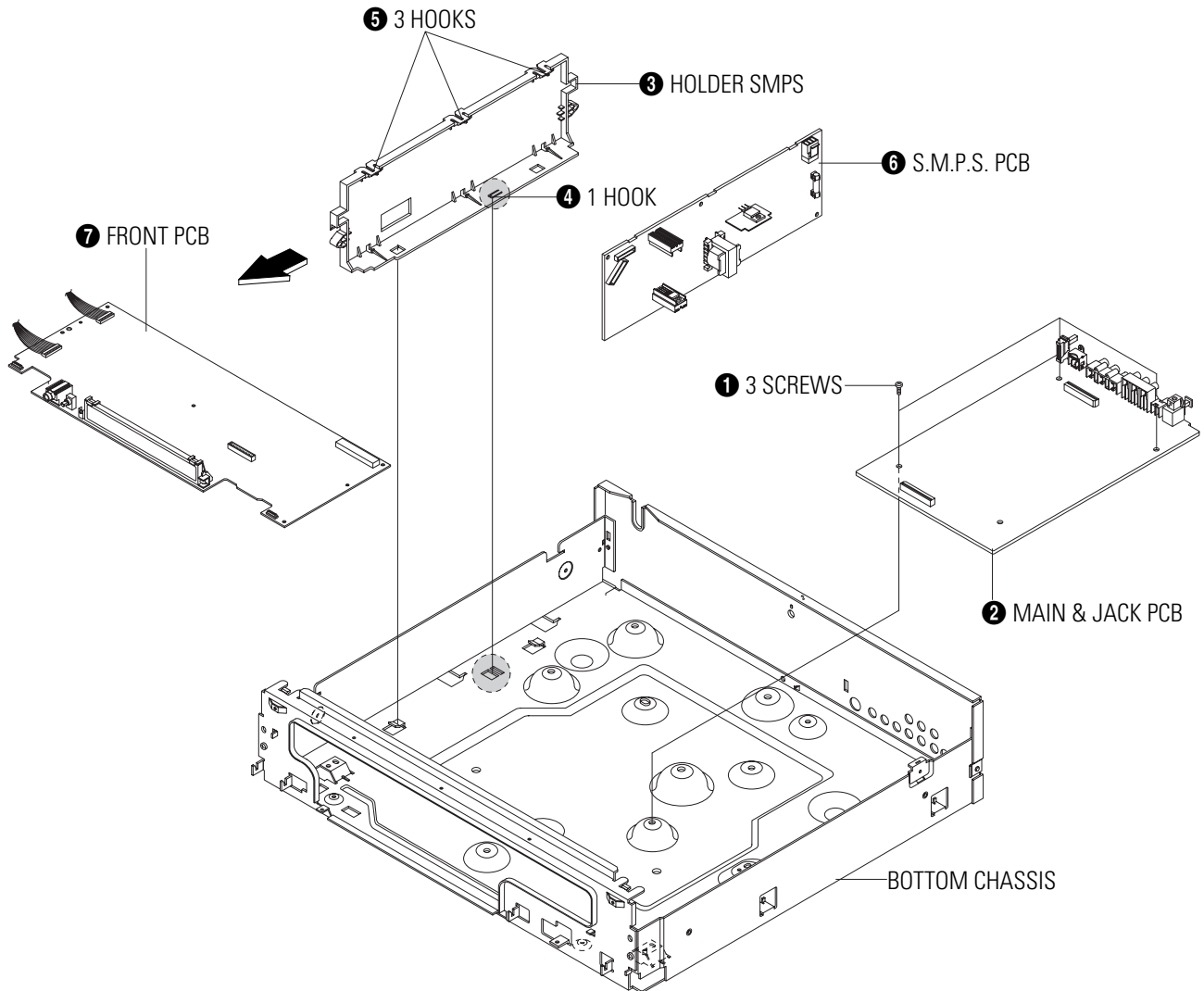


Fig. 2-5 Main & Jack PCB, S.M.P.S. PCB, Front PCB Removal

2-2 PCB Location

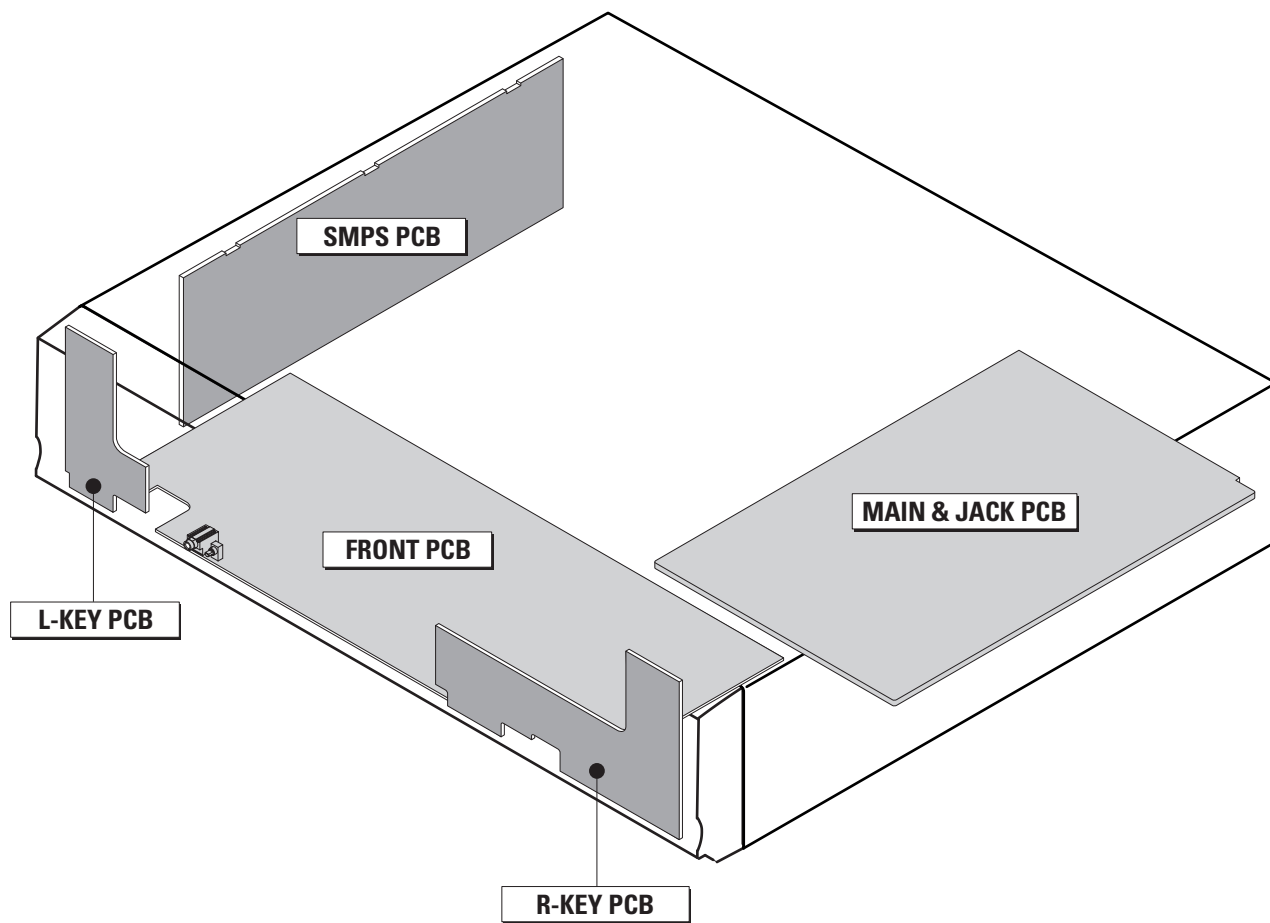
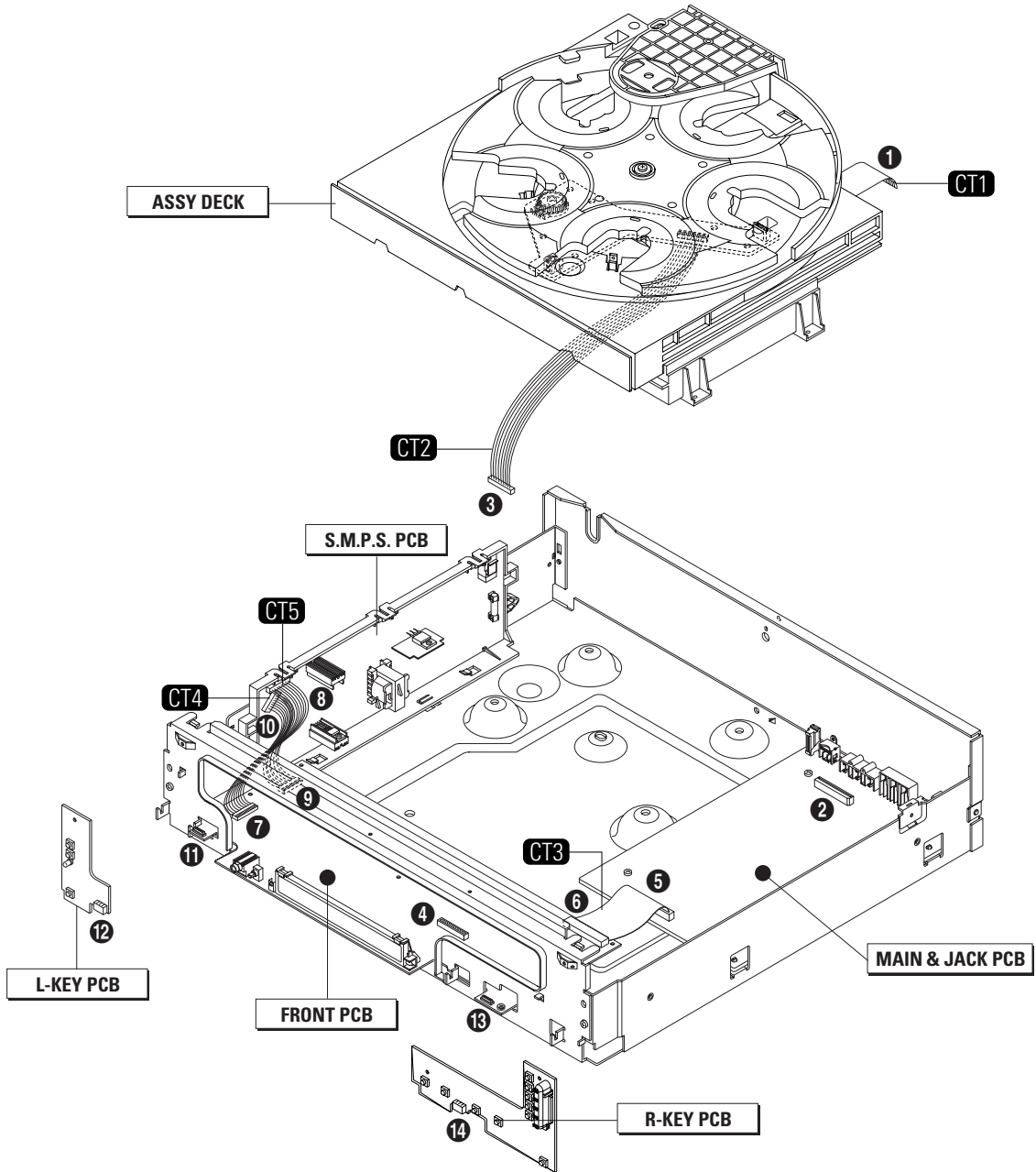


Fig. 2-6 PCB Location

2-3 Connector Diagram



NO.	CONNECTOR NO.	DIRECTION	CONNECTOR NO.	NO.
①	FLAT-CABLE	DECK PCB ← CT1 → MAIN & JACK PCB	MDCN1	②
③	CONNECT-WIRE (MCN01)	MOTOR CONNECTION PCB ← CT2 → FRONT PCB	FCN5	④
⑤	MJCN1	MAIN & JACK PCB ← CT3 → FRONT PCB	CN1	⑥
⑦	FCN22	FRONT PCB ← CT4 → S.M.P.S. PCB	PCN2	⑧
⑨	FCN21	FRONT PCB ← CT5 → S.M.P.S. PCB	PCN1	⑩
⑪	FCN4	FRONT PCB ↔ L-KEY PCB	FW1	⑫
⑬	FCN3	FRONT PCB ↔ R-KEY PCB	FW2	⑭

Fig. 2-7 Connector Diagram

2-4 Deck

2-4-1 Tray Disc Removal

- 1) Insert a Screw Driver ❶ into Emergency Hole ❷ and turn Gear Cam ❸ in the direction of arrow "A".
- 2) When the Tray Disc ❹ comes out a little, pull in the direction of arrow "B" by hand.
- 3) Disconnect Flat-Cable ❺.
- 4) Pull the Tray Disc ❹ to disassemble, while simultaneously pushing the Stopper ❻ in the direction of arrow "C".

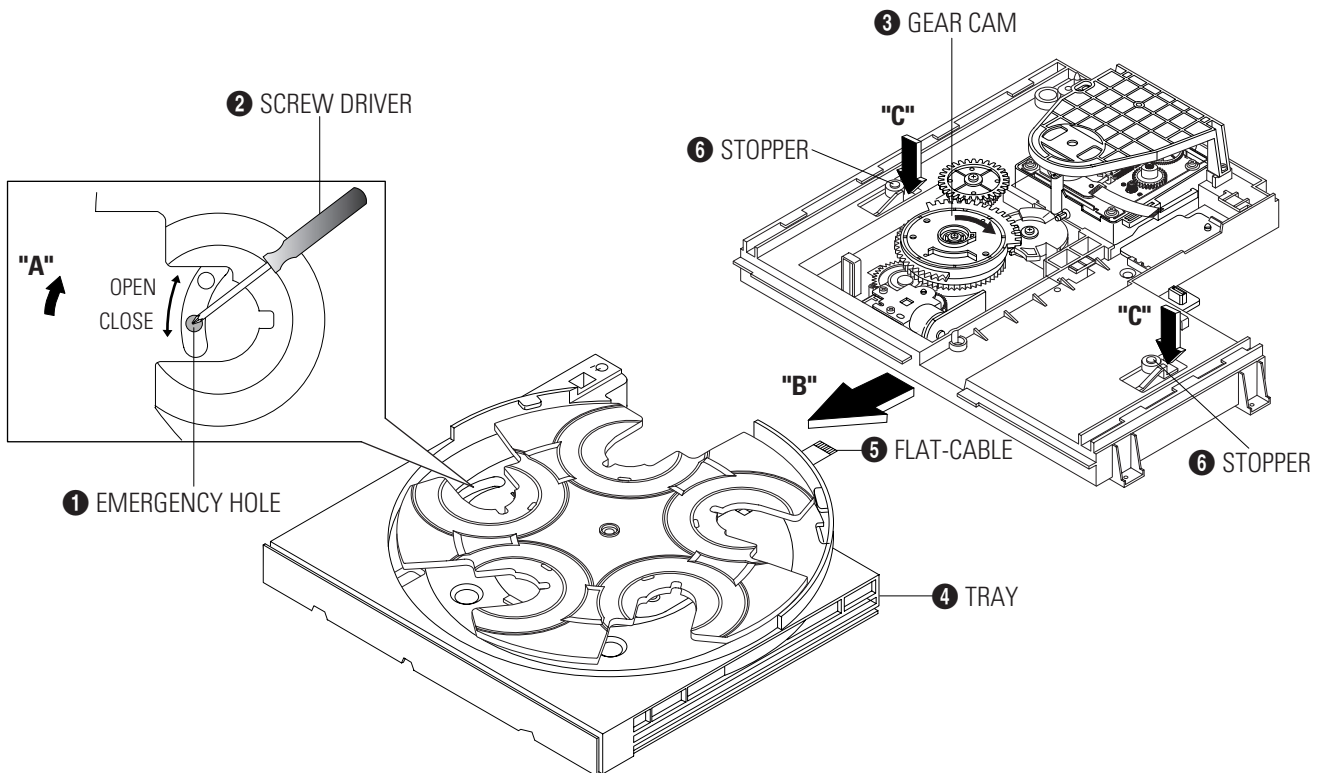


Fig. 2-8 Tray Disc Removal

2-4-2 Tray Roulette Removal

- 1) Remove 1 Screw ❶.
- 2) Lift up the Tray Roulette ❷.

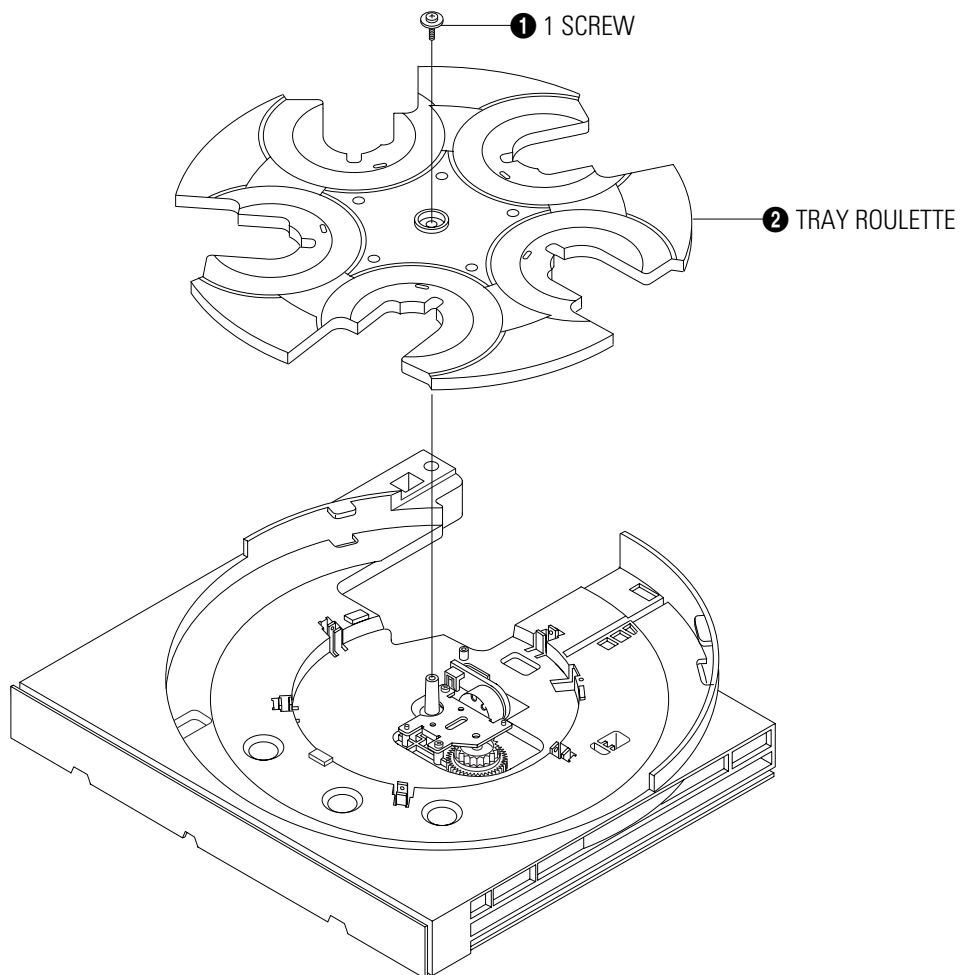


Fig. 2-9 Tray Roulette Removal

2-4-3 Motor Roulette Removal

- 1) Remove 2 Screws ❶ and lift up the Motor Rou Ass'y ❷.
- 2) Lift up the Gear Roulette ❸
- 3) Remove the 2 Screws ❹ and Sensor PCB ❺.

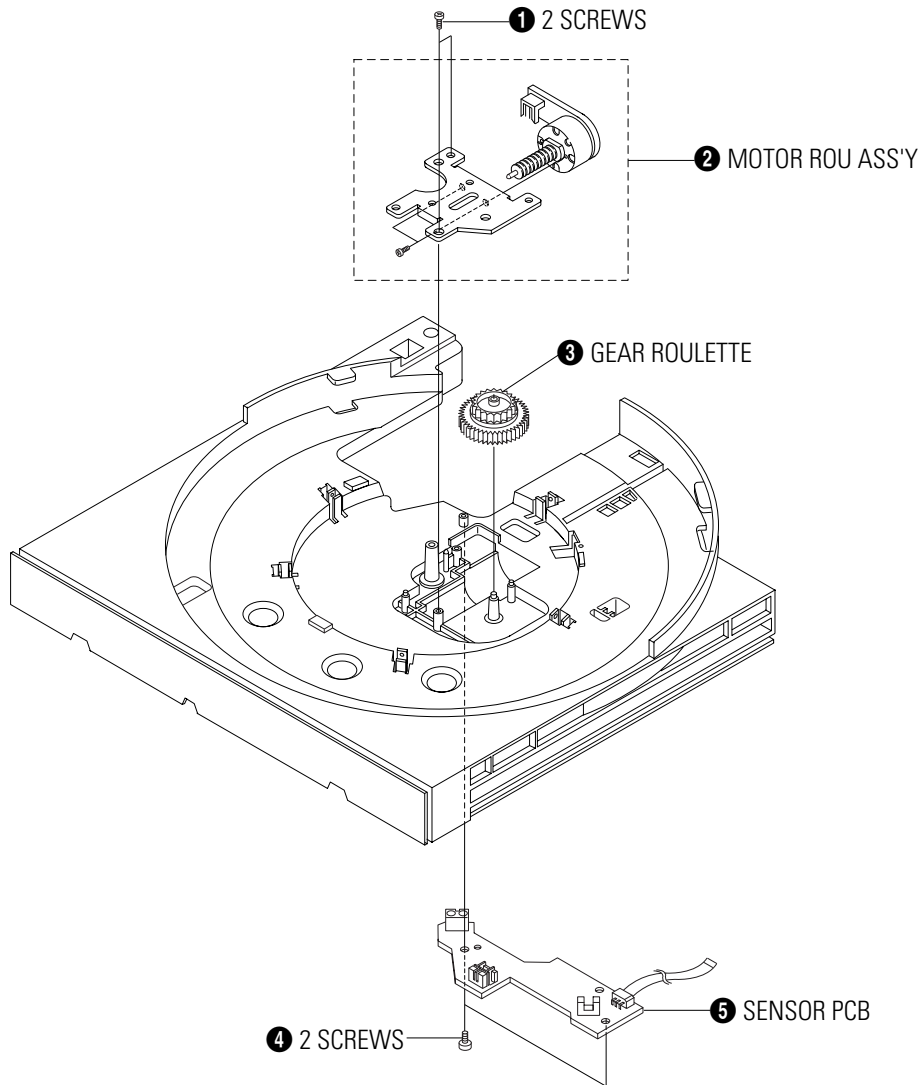


Fig. 2-10 Motor Roulette Removal

2-4-4 Ass'y P/U Deck Removal

- 1) Remove 3 Screws **①** and lift up the Holder Chuck **②**.
- 2) Push the Hook **③** in the direction of arrow "A" and lift up the Ass'y P/U Deck **④**, Deck PCB **⑤**.

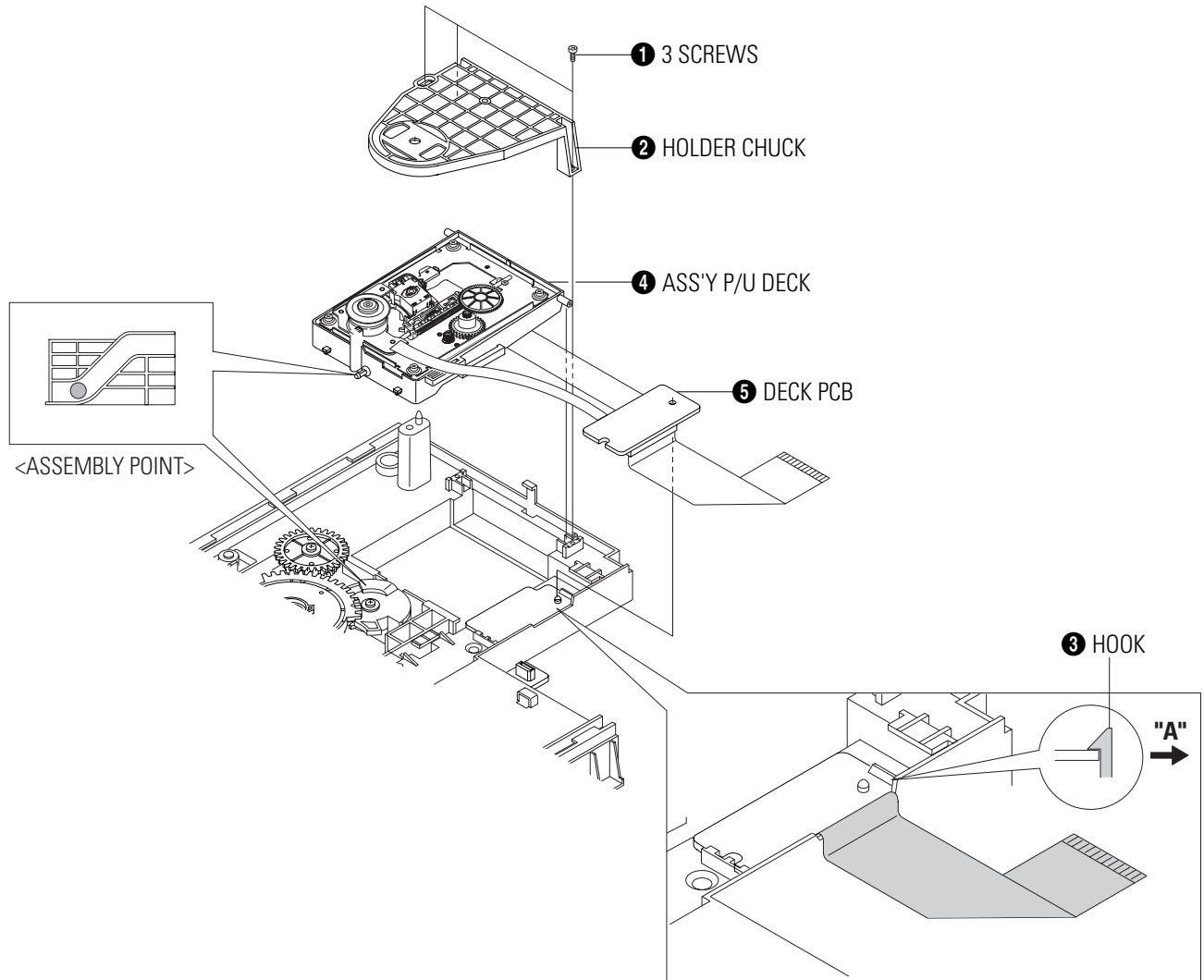


Fig. 2-11 Assy P/U Deck Removal

2-4-5 Gear Tray, Gear Cam, Gear Lift, Gear Load, Gear Worm Wheel, Motor Load Ass'y Removal

- 1) Remove 3 Screws ❶, ❷ and lift up the Gear Tray ❸.
- 2) Lift up the Gear Cam ❹ and lift up the Gear Lift ❺.
- 3) Remove 2 Screws ❻ and lift up the Motor Load Ass'y ❼.
- 4) Lift up the Gear Worm Wheel ❽ and Gear Load ❾.

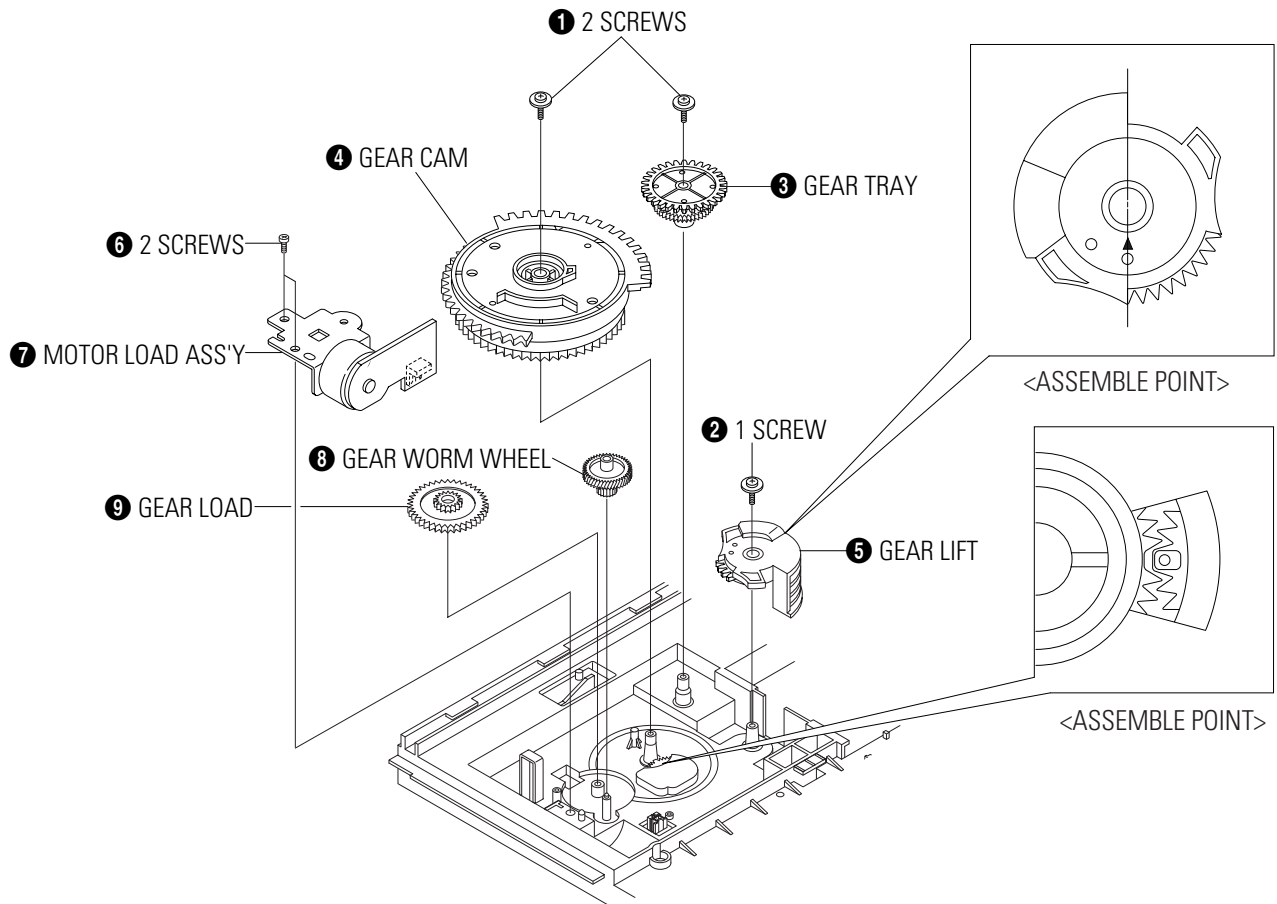


Fig. 2-12 Gear Tray, Gear Cam, Gear Lift, Gear Load, Gear Worm Wheel, Motor Load Ass'y Removal

2-4-6 Motor Connection PCB Removal

- 1) Remove 3 Screws ❶.
- 2) Lift up the Motor Connection PCB ❷.

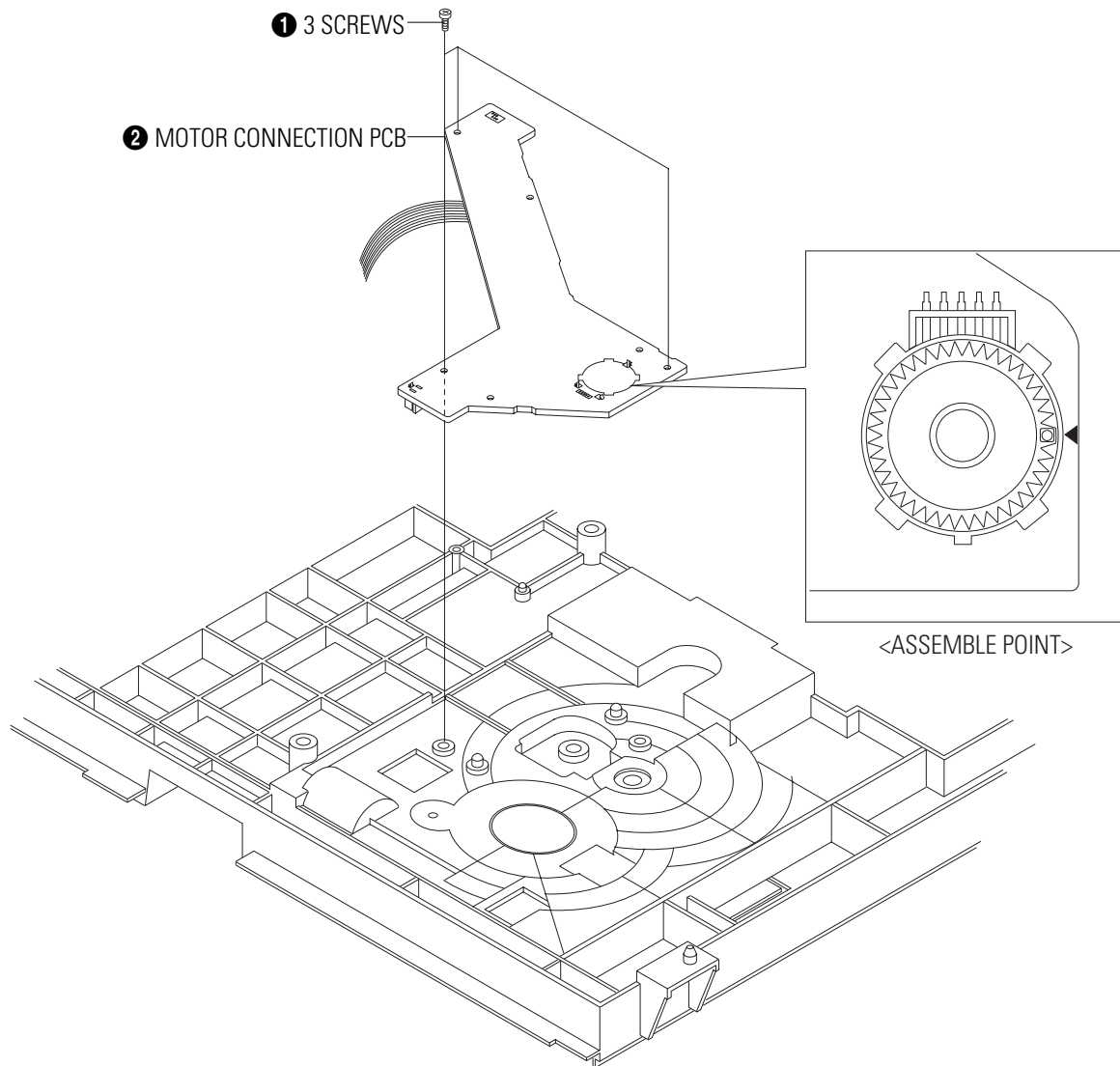


Fig. 2-13 Motor Connection PCB Removal

2-4-7 Chassis Sub Removal

- 1) Remove the Soldering (+, -) ❶.
- 2) Disconnect Flat-Cable ❷, ❸.
- 3) Remove 4 Screws ❹ and lift down the Chassis Sub ❺.

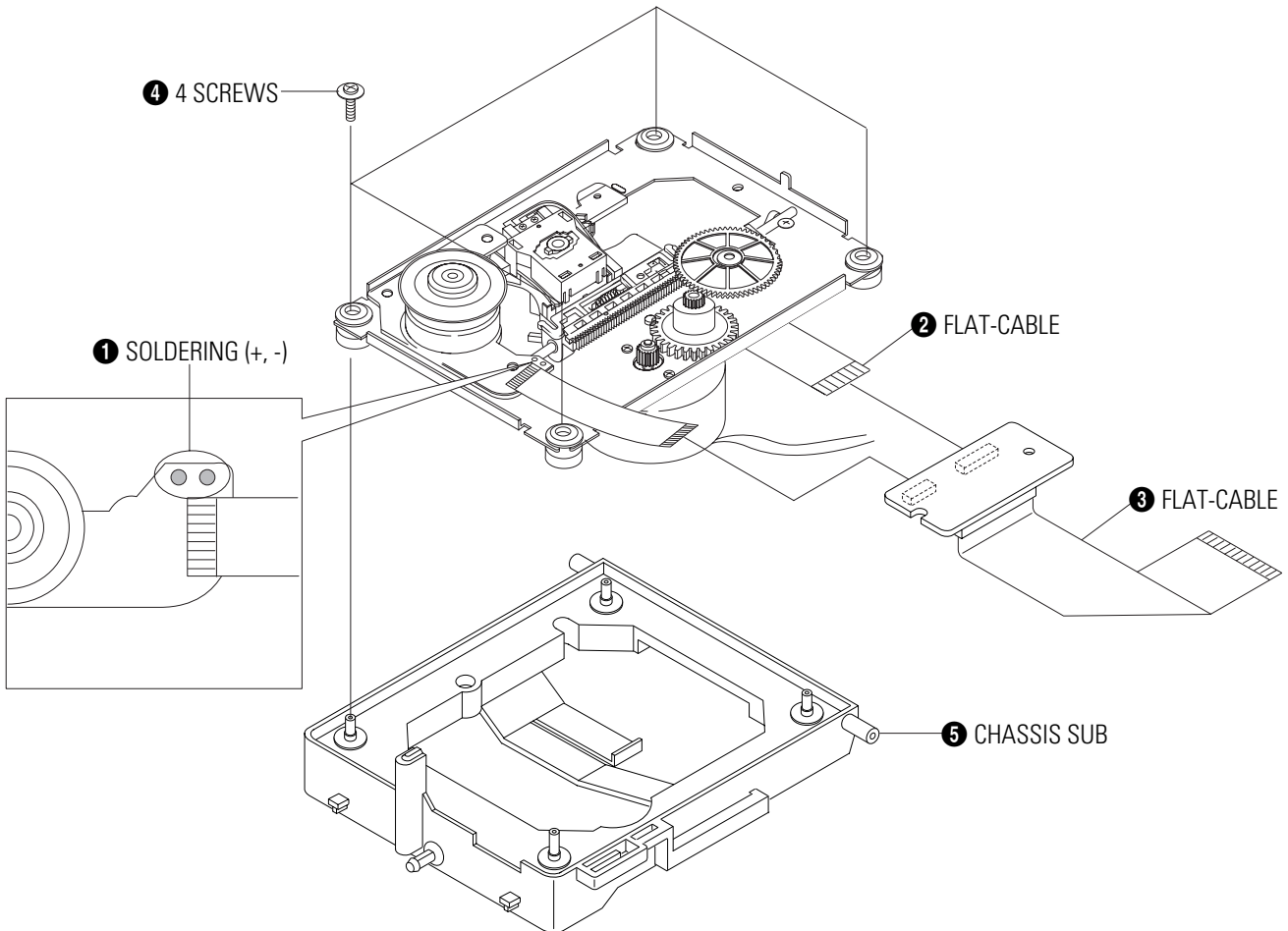
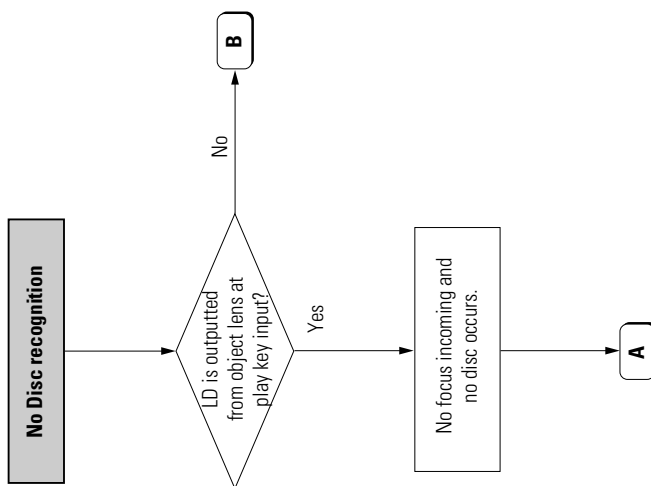
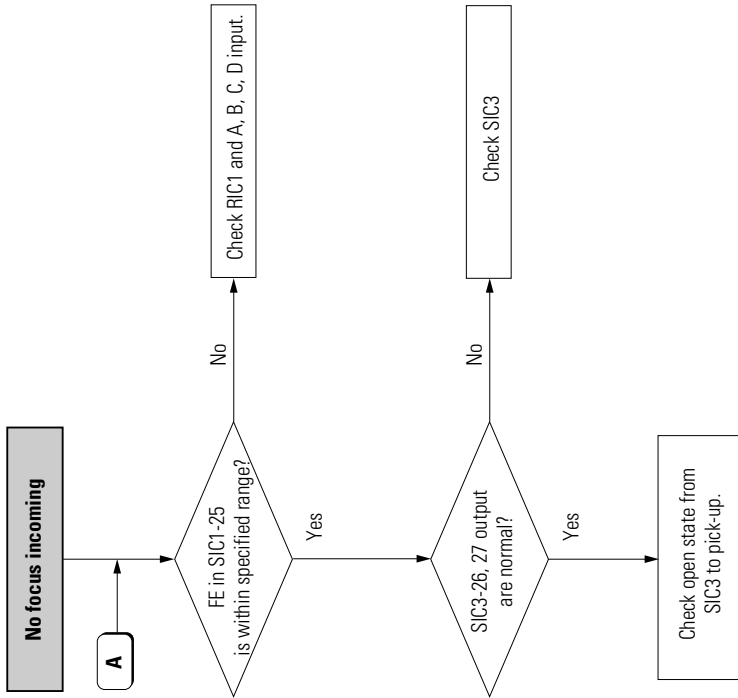
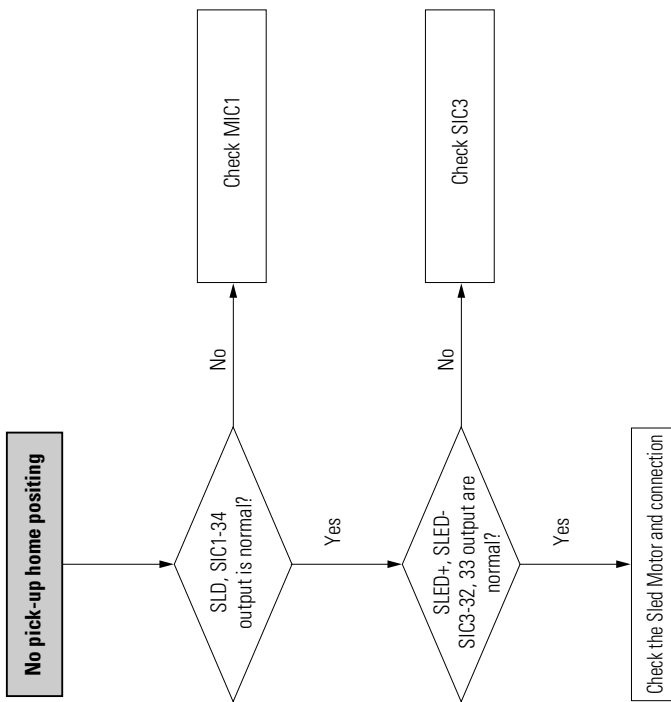
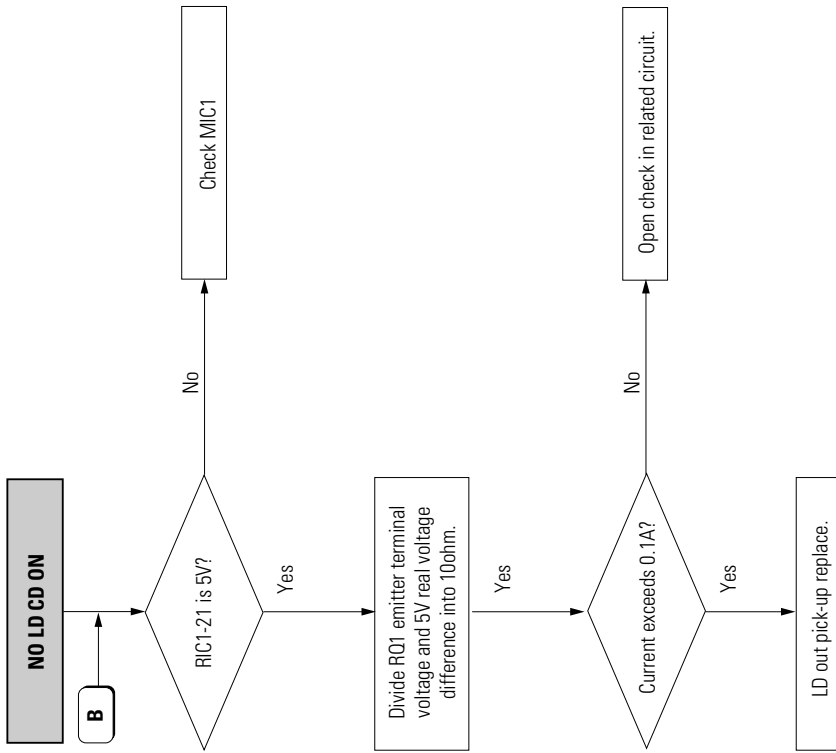
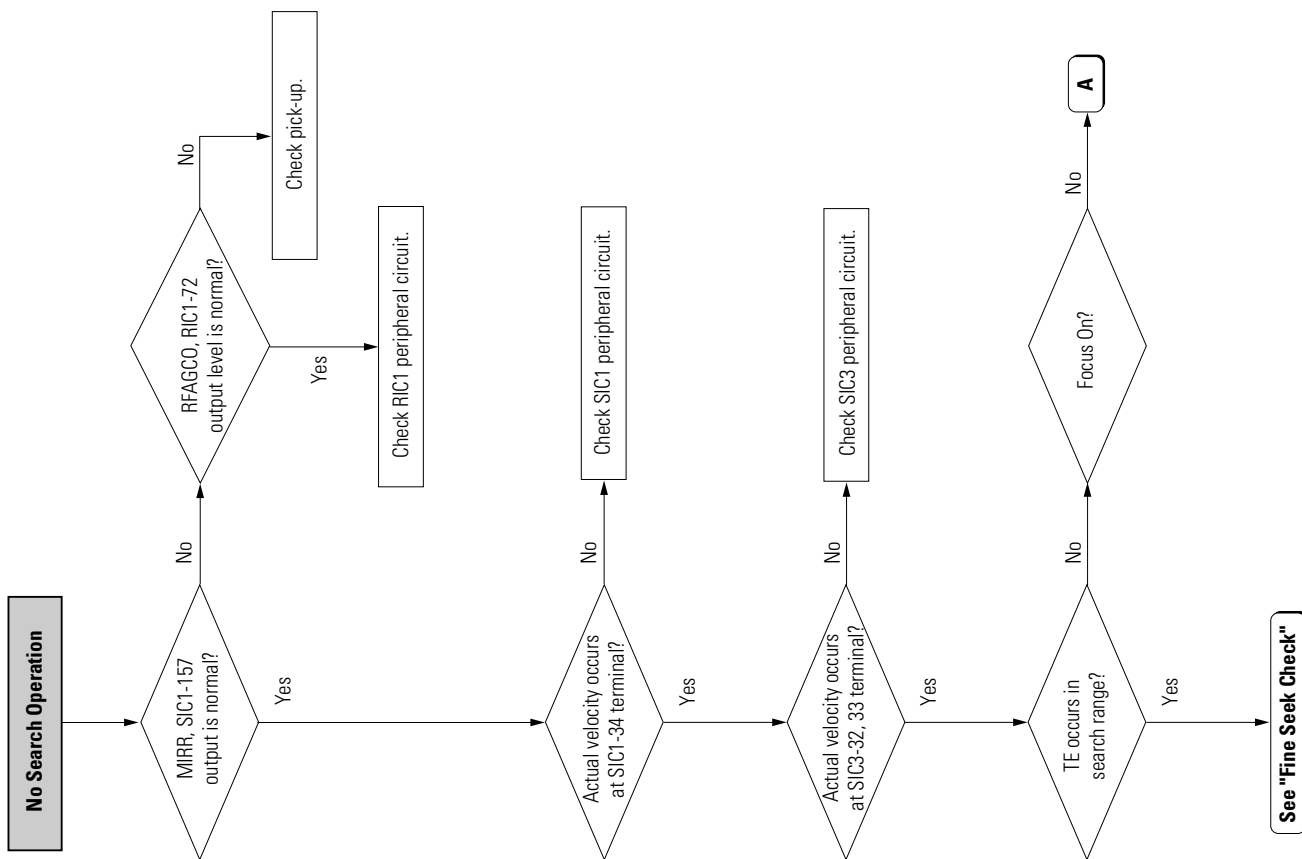
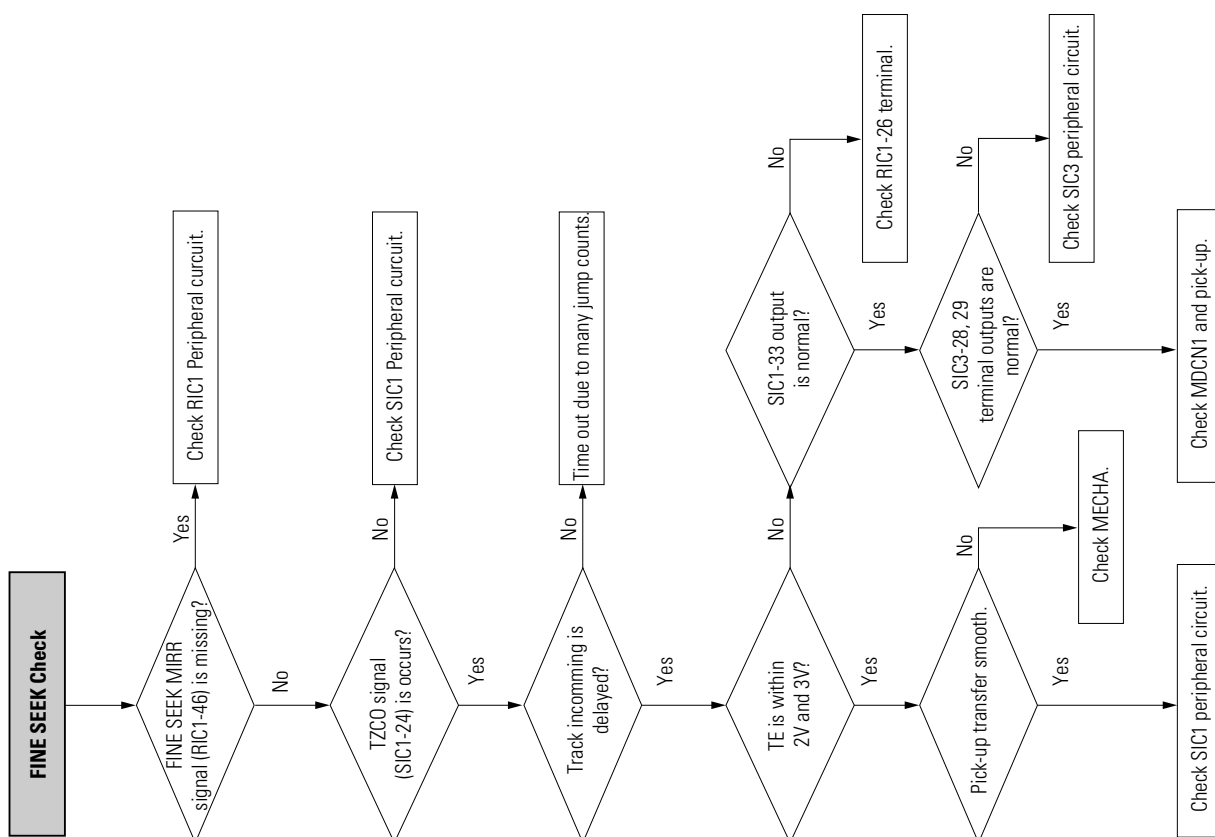


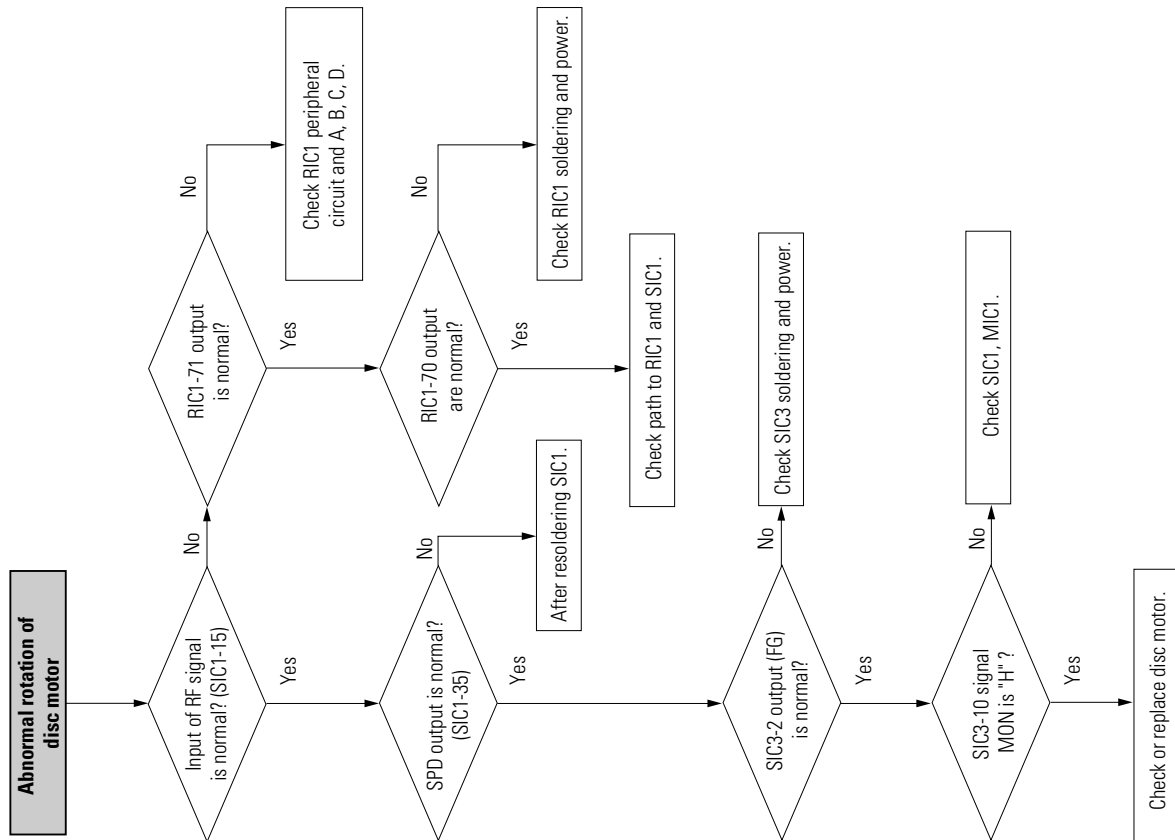
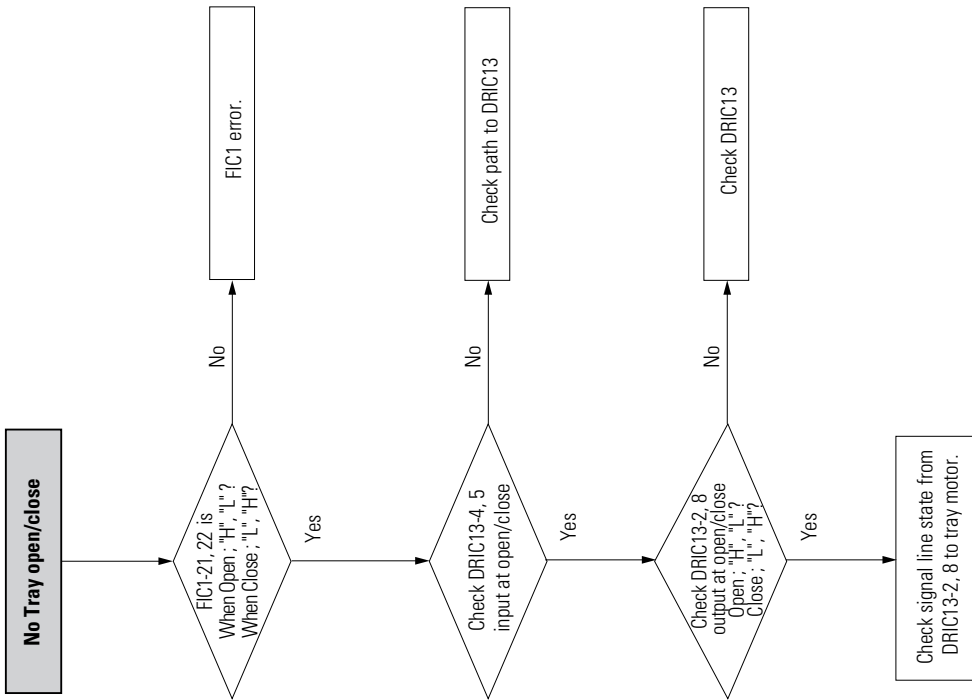
Fig. 2-14 Chassis Sub Removal

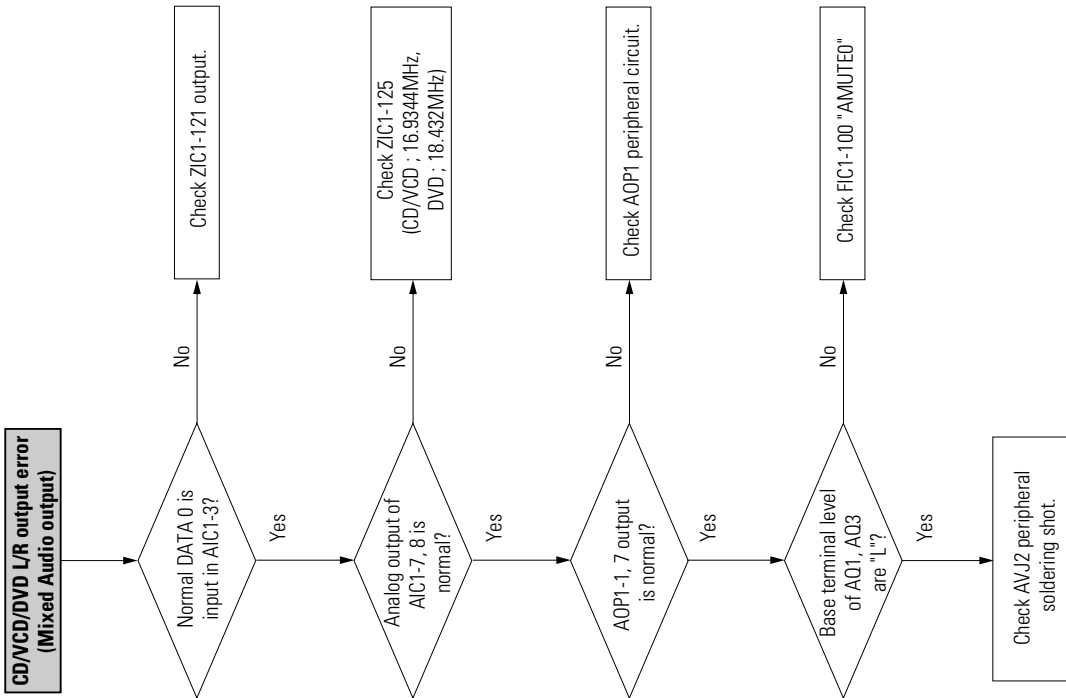
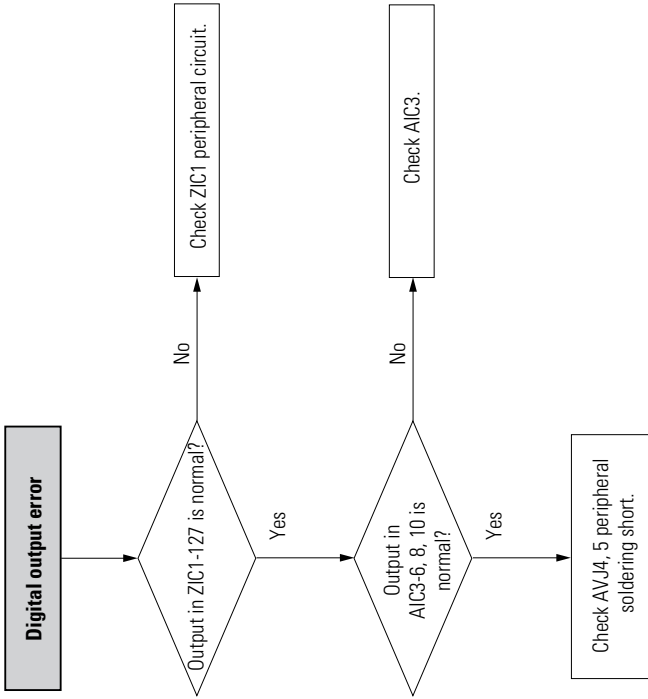
3. Troubleshooting

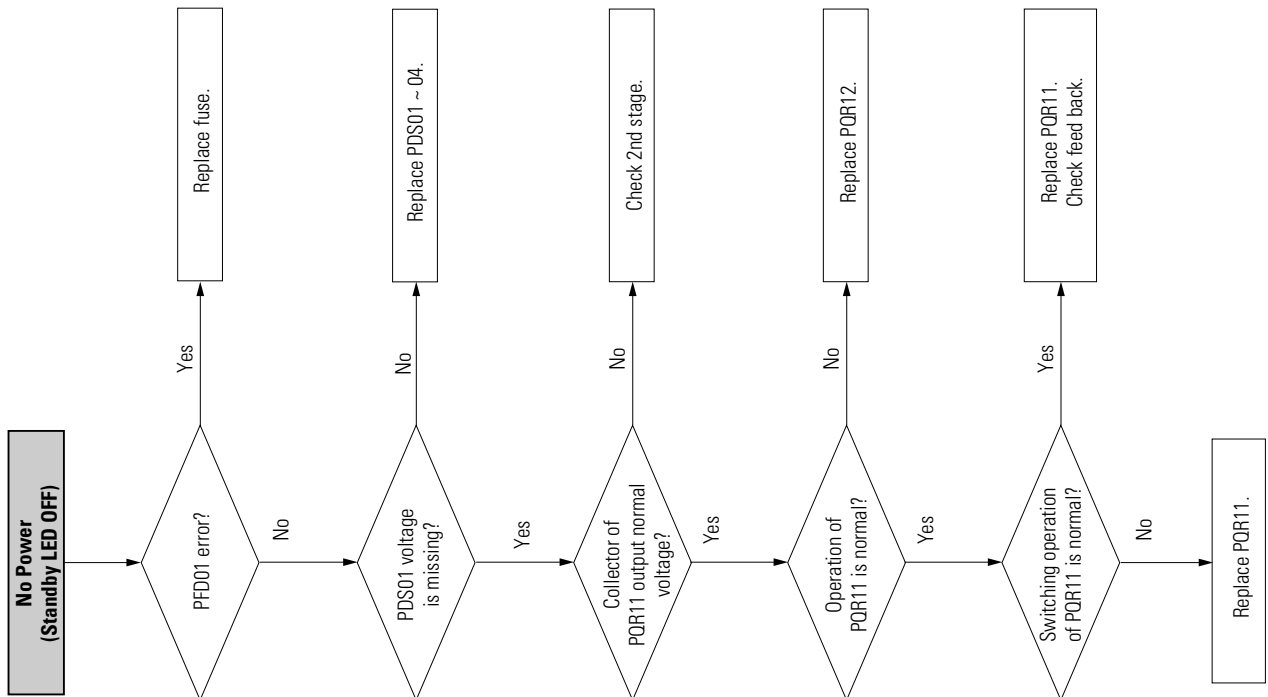
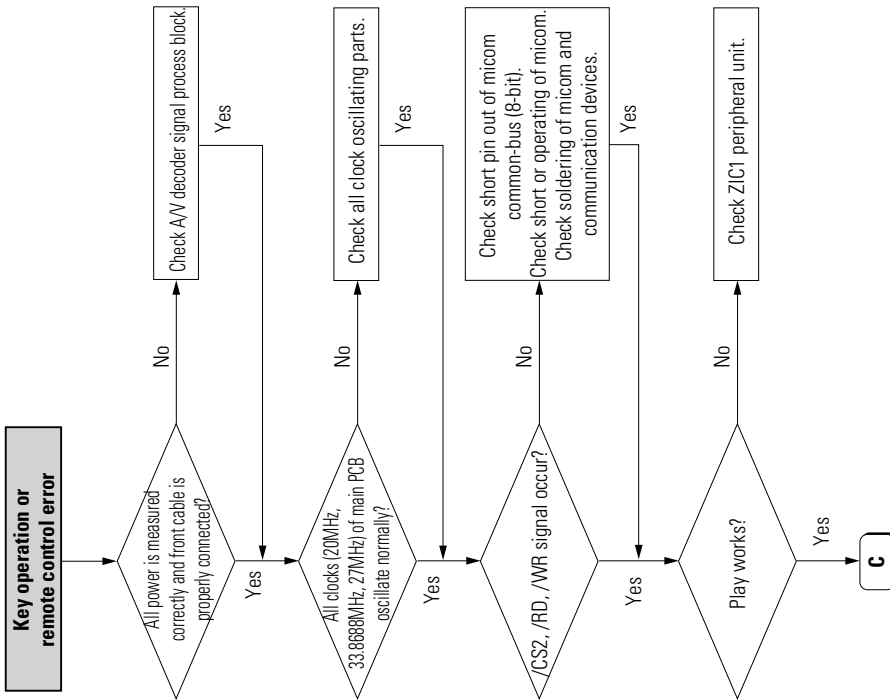


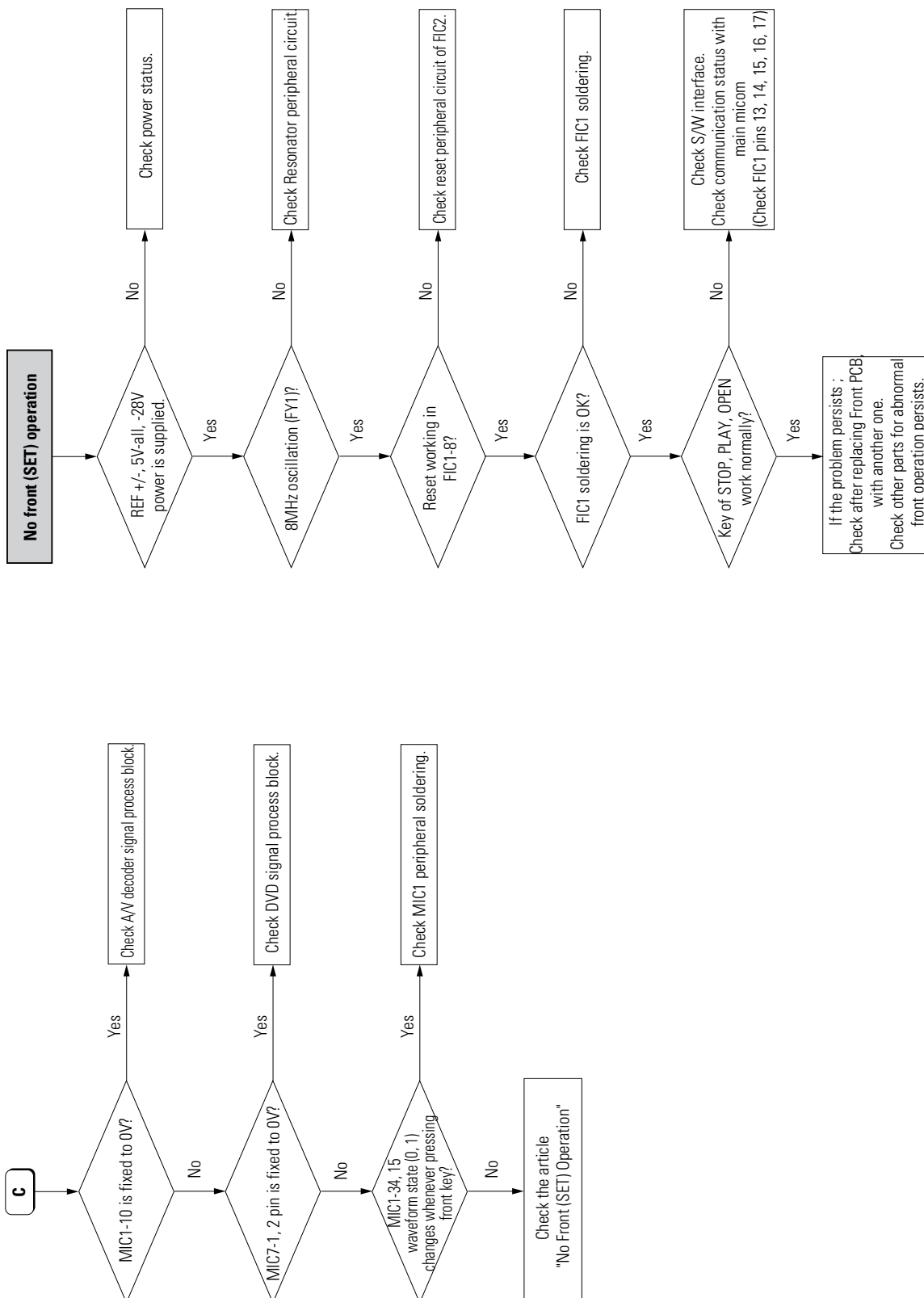


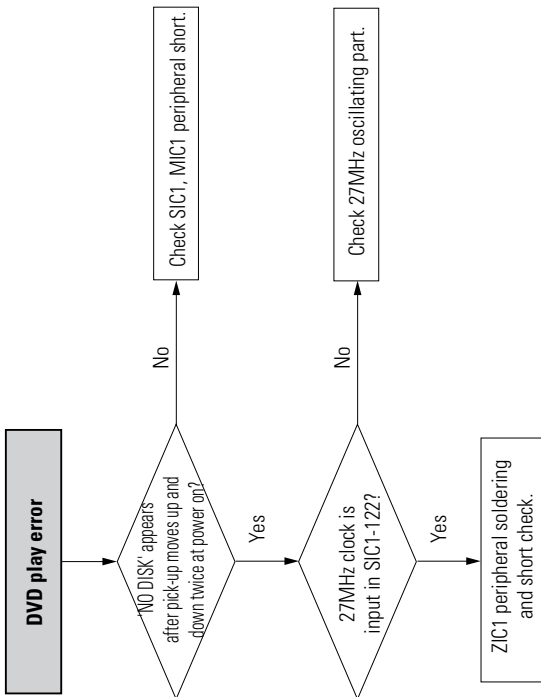
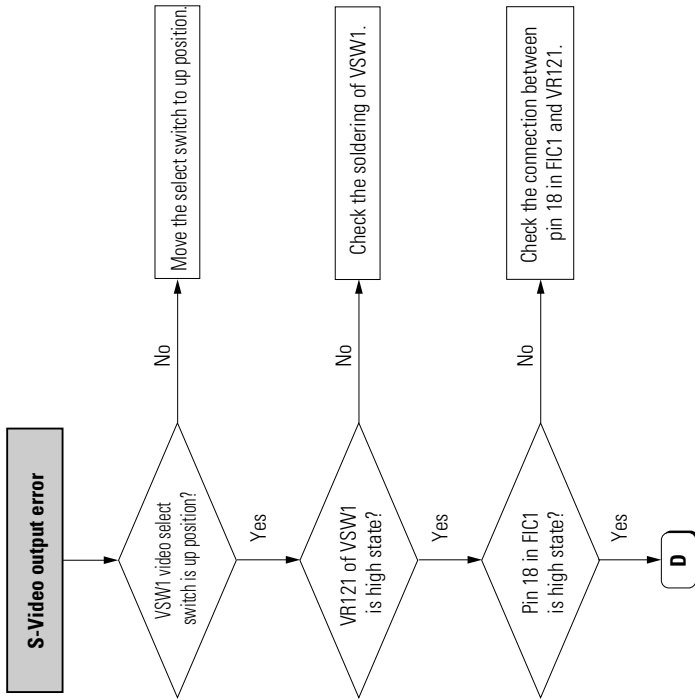


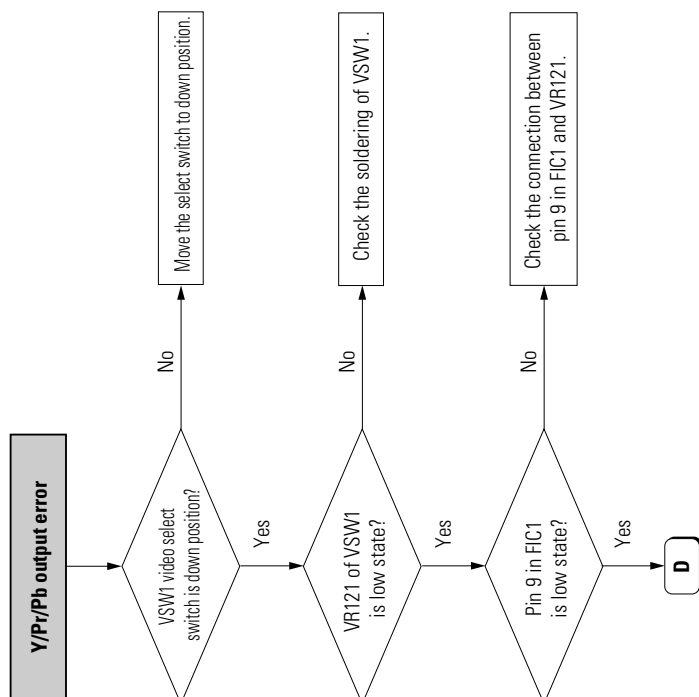
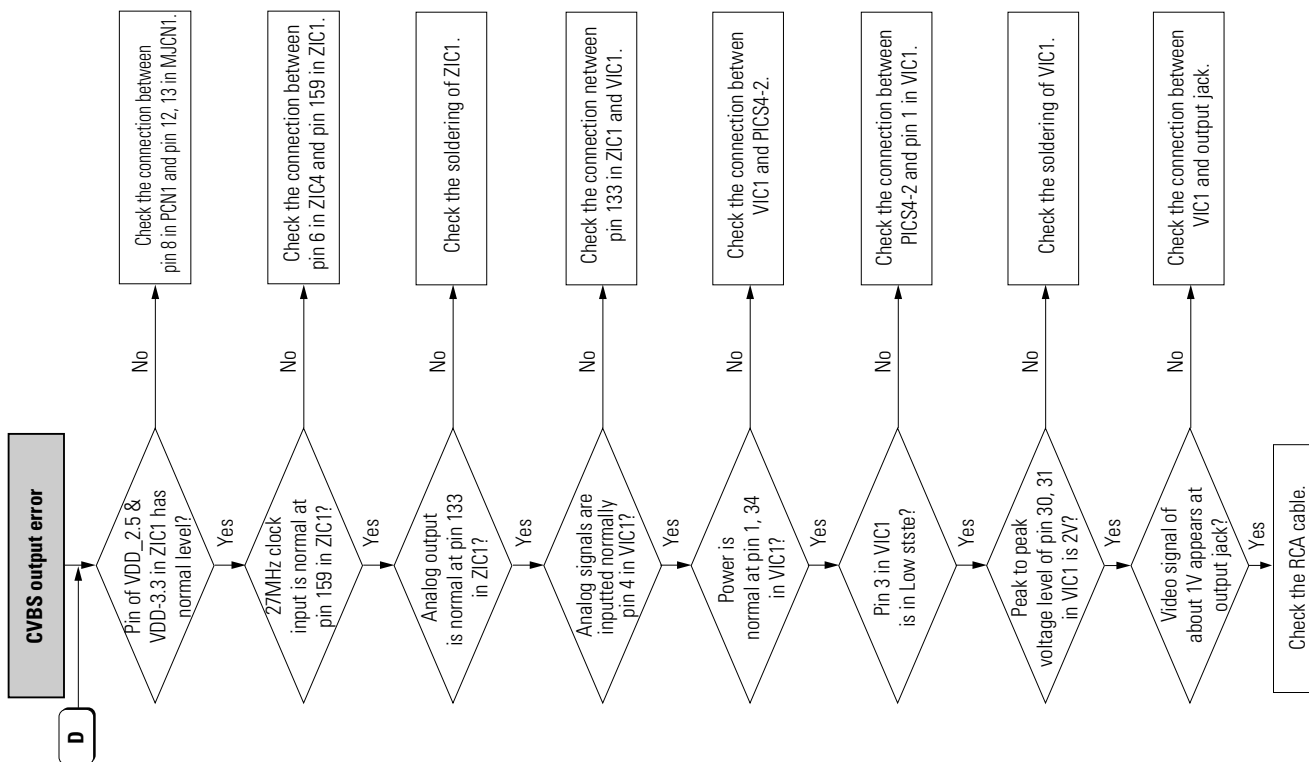












MEMO

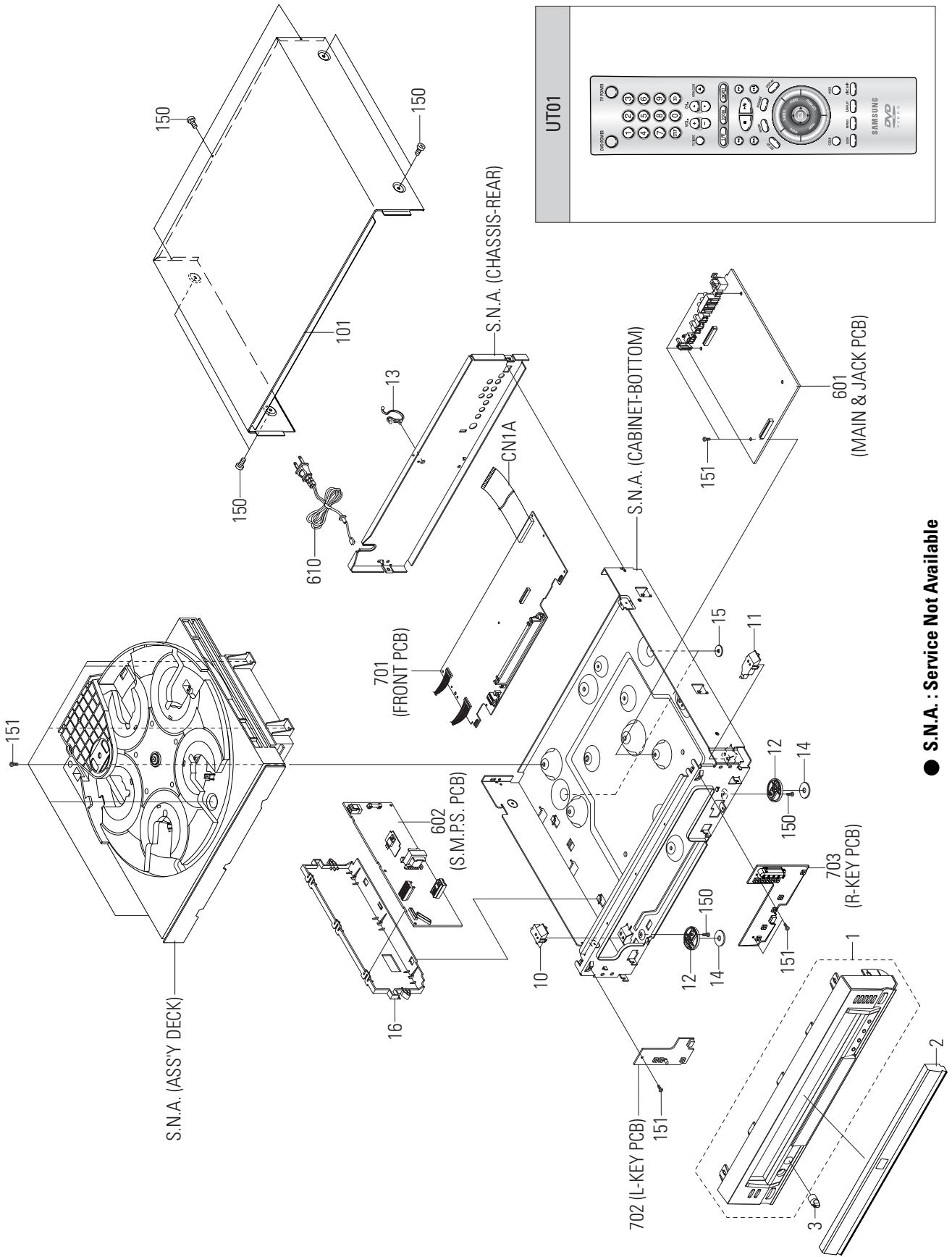
4. Exploded View and Parts List

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Notice

You can search for the updated part code through ITSELF web site.
URL; <http://itself.sec.samsung.co.kr>

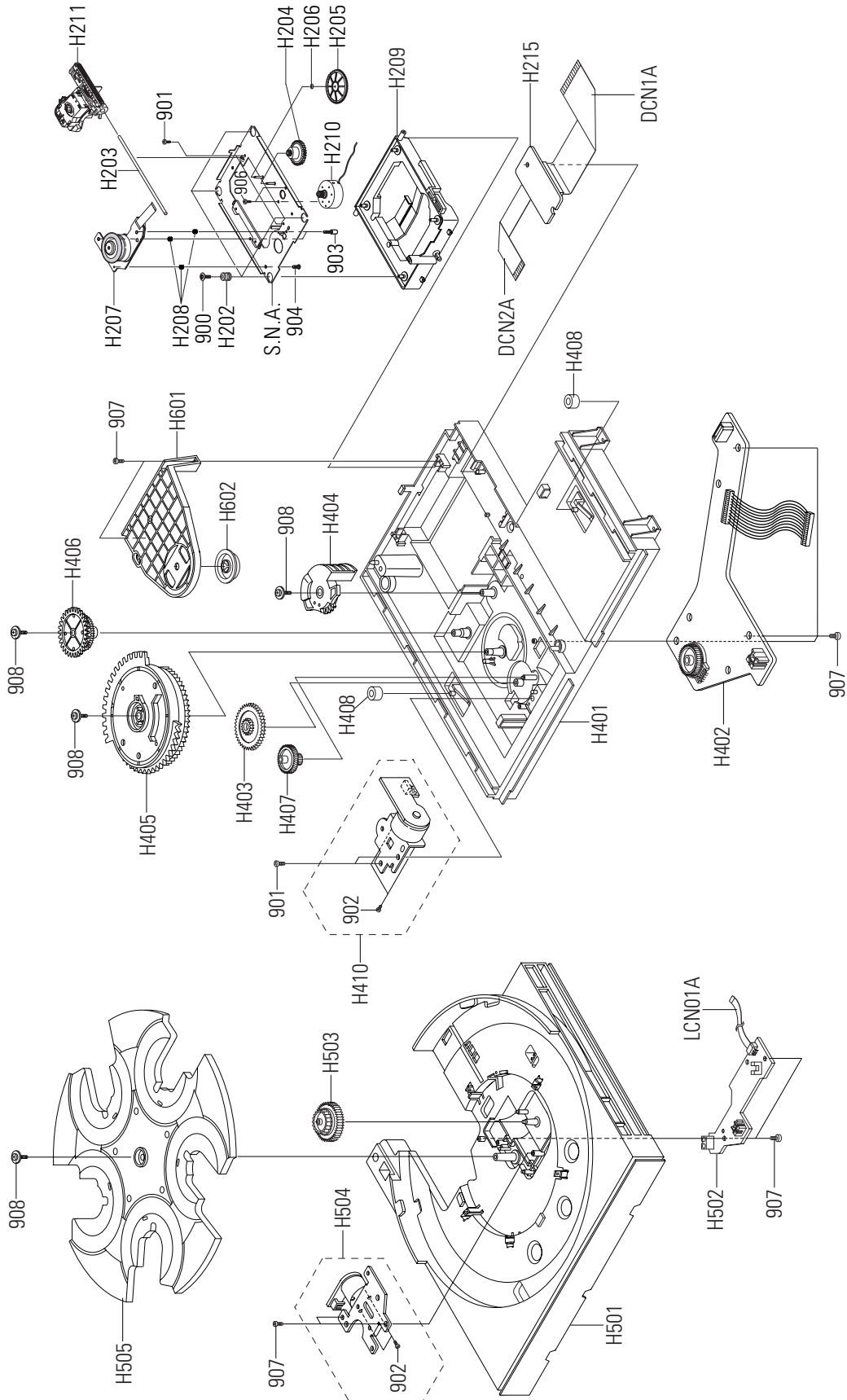
4-1 Cabinet Assembly



● S.N.A. : Service Not Available

Loc. No	Parts No.	Description ; Specification	Remark
1	AH97-00709G	ASSY FRONT CABINET;ABS94V0,DVD-C621/XAA,	
2	AH97-00710G	ASSY-DOOR TRAY;ASSY,DVD-C621/XAA,-	
10	AH61-00728A	HOLDER-DECK,L;DVD-C601,ABS 94HB,-,-,-,GR	
11	AH61-00728B	HOLDER-DECK,R;DVD-C601,ABS 94HB,-,-,-,GR	
12	AH61-00744B	LEG-FRONT;DVD-C601/XEF,ABS 94HB,-,SILVER	
13	AH65-00003A	CLAMP CORE;DVD-M101,NYLON 66,-,-,-,-	
14	AH69-20372C	CUSHION-FOOT;DVD-811,EVA 60,-,-,-,-,-,	
15	AH69-20372B	CUSHION-BOTTOM;DVD-811,EVA 60,-,-,-,-,-,	
16	AH61-00722A	HOLDER-SMPS;DVD-C601,ABS 94V0,BLK,-,-,-	
101	AH64-01266A	CABINET-TOP;DVD-C601,PCM,0.625t,-,-,T0.6	
150	6003-000275	SCREW-TAPTITE;BH,+,B,M3,L10,BLK ,SWCH101	
151	6003-000276	SCREW-TAPTITE;BH,+,B,M3,L10,ZPC(YEL),SWC	
601	AH92-01368A	ASSY PCB-MAIN&JACK;DVD-C621/XAA,MAIN & J	
602	AH92-01378A	ASSY PCB-SMPS;DVD-C621,SMPS	
610	AH39-00235A	POWER CORD;-,-,AWG#18,-,-,1650°æ20,EP2,S	
701	AH92-01377A	ASSY PCB-FRONT;DVD-C621/XAA,FRONT	
702	AH92-01391A	ASSY PCB-L KEY;DVD-C621,L-KEY	
703	AH92-01390A	ASSY PCB-R KEY;DVD-C621,R-KEY	
CN1A	3809-001180	CABLE-FLAT;30V,-30to+80C,80mm,35P,1.25mm	
UT01	AH59-00093R	REMOCON-ASSY;DVD-C621/XAA,-,-,-,-,-,-	

4-2 Deck Assembly



Loc. No	Parts No.	Description ; Specification	Remark
900	6003-001157	SCREW-TAPTITE;PWH,+,B,M2,L6,ZPC(YEL),SWR	
901	6001-001522	SCREW-MACHINE;FH,+,M2.6,L7,ZPC(YEL),SWRC	
902	6001-001118	SCREW-MACHINE;PH,+,M2.6,3,NI PLT,SWRCH10	
903	6009-001245	SCREW-SPECIAL;SWRCH18A,NYLOCK,SOCKET,HEX	
904	6001-001196	SCREW-MACHINE;BH,+,M2,L4,ZPC(YEL),SWRCH	
906	AH60-00010A	SCREW-MACHINE-MOTOR;-+,SWCH18AK,M1.7,L2	
907	6003-000283	SCREW-TAPTITE;BH,+,B,M3,L8,ZPC(YEL),SM20	
908	6003-001200	SCREW-TAPTITE;PWH,+,B,M3,L12,ZPC(WHT),SW	
H202	AH73-00023C	RUBBER-INSULATOR;DP-7,BUTYL RUBBER,-,10	
H203	AH61-50327A	SHAFT-P/U;DP-3,SUS420J2,L84.7,OD3,-,-,-	
H204	AH66-00075A	GEAR-FEED A;- ,POM M90-44,-,-,-,-,-,-,-	
H205	AH66-00170A	GEAR-FEED B;DP-7S,POM M90-44,0.5,14,-,-,-	
H206	AC60-30306A	WASHER-SLIT;- ,ID2.1,OD5.0,T0.5,- ,POLYS	
H207	AH31-00022A	MOTOR-SPINDLE ASSY;RSM-2610D,DP-7,-,-,-,	
H208	AH61-00403A	SPRING ETC-SPINDLE;DP-5,SWPB,PI4.9,-,-,-	
H209	AH61-00714A	CHASSIS-SUB;DP-8,ABS GR-4020,BLK,-,-,-,-	
H210	AH31-00016A	MOTOR-FEED ASSY;- ,DP-5,-,-,-	
H211	AH97-00900A	ASSY-PICK-UP;- ,SOH-DS2,ASSY-PICK-UP	
H215	AH92-01435A	ASSY PCB-DECK 1LD;DVD-C621,SELLINO DECK	
H401	AH61-00708A	FRAME-MAIN;DP-8,ABS HF-380,-,-,BLK,-,-,-	
H402	AH97-00735A	ASSY-PCB DECK;DP-8,DECK,-	
H403	AH66-00147A	GEAR-LOAD;DP-8,POM M90-44,-,-,-,-,NAT,-,-,-	
H404	AH66-00149A	GEAR-LIFT;DP-8,POM M90-44,-,-,-,-,-,-,-	
H405	AH66-00148A	GEAR-CAM;DP-8,POM M90-44,-,-,-,-,NAT,-,-,-	
H406	AH66-00150A	GEAR-TRAY;DP-8,POM M90-44,-,-,-,-,-,-,-	
H407	AH66-00146A	GEAR-WORM WHEEL;DP-8,POM SW-01,-,-,-,-,NAT	
H408	AH73-00030A	RUBBER-PROTECT;DP-8,CR ,OD12*ID5.7,H=25,	
H410	AH31-00026A	MOTOR-LOAD ASSY;SECC+POM+MOTOR,DP-8,-,-,-	
H501	AH66-00143A	TRAY-DISC;DP-8,ABS HR-0370F/XR-401,-,-,-,-	
H502	AH97-00737A	ASSY-PCB SENSOR;DP-8,SENSOR,-	
H503	AH66-00153A	GEAR-ROULETTE;DP-8,POM SW-01,-,-,-,-,-,-,-	
H504	AH31-00028A	MOTOR-ROU ASSY;SECC+POM+MOTOR,DP-8,-,-,-,-	
H505	AH66-00144A	TRAY-ROULETTE;DP-8,ABS HR-0370F/XR-401,-	
H601	AH61-00713A	HOLDER-CHUCK;DP-8,ABS GR-4020,-,-,-,-,BLK,	
H602	AH66-00156A	CLAMPER-ASSY;DP-8,POM+MAGNET,-,-,-,-,-,-,-	
LCN01A	3809-001152	CABLE-FLAT;30V,-20to+80C,200mm,6P,1.25mm	
DCN1A	3809-001258	CABLE-FLAT;30V,-20TO+80C,190MM,35P,1.25M	
DCN2A	3809-001318	CABLE-FLAT;30V,80C,180MM,24P,1MM,UL20696	

MEMO

5. Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark	Loc.No	Part No	Description ; Specification	Remark
601	AH92-01368A	ASSY PCB-MAIN&JACK;DVD-C621/XAA,MAIN & J		AR201	2007-000076	R-CHIP;330ohm,5%,1/16W,DA,TP,1608	
AC1	2203-000491	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1608		AR202	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
AC10	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608		AR203	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AC11	2203-000315	C-CERAMIC,CHIP;0.12nF,5%,50V,NPO,TP,1608		AR24	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AC12	2203-000315	C-CERAMIC,CHIP;0.12nF,5%,50V,NPO,TP,1608		AR25	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AC13	2203-000315	C-CERAMIC,CHIP;0.12nF,5%,50V,NPO,TP,1608		AR26	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
AC14	2203-000315	C-CERAMIC,CHIP;0.12nF,5%,50V,NPO,TP,1608		AR3	2007-001179	R-CHIP;8.2Kohm,5%,1/16W,DA,TP,1608	
AC16	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608		AR38	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AC2	2203-001640	C-CERAMIC,CHIP;0.39nF,10%,50V,X7R,TP,160		AR39	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AC201	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608		AR4	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AC202	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608		AR40	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
AC203	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608		AR5	2007-001179	R-CHIP;8.2Kohm,5%,1/16W,DA,TP,1608	
AC3	2203-000491	C-CERAMIC,CHIP;2.2nF,10%,50V,X7R,TP,1608		AR51	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
AC4	2203-001640	C-CERAMIC,CHIP;0.39nF,10%,50V,X7R,TP,160		AR54	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
AC5	2203-000125	C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP,1608		AR55	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
AC6	2203-000125	C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP,1608		AR56	2007-000077	R-CHIP;470ohm,5%,1/16W,DA,TP,1608	
AC7	2203-000125	C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP,1608		AR6	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AC8	2203-000125	C-CERAMIC,CHIP;1.2nF,10%,50V,X7R,TP,1608		AR7	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
AC9	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608		AR8	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ACC1	2203-001607	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,1608		AR9	2007-000092	R-CHIP;15Kohm,5%,1/16W,DA,TP,1608	
ACC2	2203-001607	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,1608		AVJ1	3722-001567	JACK-PIN;3P,3.5mm,NI,GRN,BLU/RED,-	
ACC3	2203-001607	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,1608		AVJ2	3722-001464	JACK-PIN;6P,3.2mm,NI,BLK,-	
ACC4	2203-001607	C-CERAMIC,CHIP;0.22nF,5%,50V,NPO,TP,1608		AVJ4	3722-001053	JACK-PIN;1P,3.2mm,NI,BLK,-	
AD1	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		AVJ5	3707-001052	CONNECTOR-OPTICAL;PLUG,GP1FA550TZ,6dB,2.	
AD2	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		DC1	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AD51	0407-000114	DIODE-ARRAY;DAN202K,80V,100mA,CA2-3,SOT-		DC2	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AD54	0401-000008	DIODE-SWITCHING;DAN217,80V,100mA,SOT-23,		DD1	0407-000116	DIODE-ARRAY;DAP202K,80V,100mA,CK2-3,SOT-	
AE1	2401-000922	C-AL;22uF,20%,16V,GP,TP,5x5,5		DQ1	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
AE2	2401-000922	C-AL;22uF,20%,16V,GP,TP,5x5,5		DQ2	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
AE201	2401-000598	C-AL;1uF,20%,50V,GP,TP,4x7,5		DQ3	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-	
AE21	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5		DR1	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AE22	2401-002144	C-AL;47uF,20%,16V,GP,TP,5x11,5		DR2	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AE3	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		DR3	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AE4	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		DR4	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AE5	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		DR5	2007-000090	R-CHIP;10KOHM,5%,1/16W,DA,TP,1608	
AE51	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		DR6	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AE52	2401-000010	C-AL;220uF,20%,16V,GP,-,6.3x11mm,2.		HC3	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AE6	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		HC4	2203-005148	C-CERAMIC,CHIP;100nF,10%,16V,X7R,TP,1608	
AE7	2401-000414	C-AL;10uF,20%,16V,GP,TP,4x7,5		HE3	2401-001225	C-AL;4.7uF,20%,16V,GP,TP,3x5,5	
AIC1	1002-001294	IC-D/A CONVERTER;PCM1742KE,24BIT,TSSOP,1		HE4	2401-001225	C-AL;4.7uF,20%,16V,GP,TP,3x5,5	
AIC3	AH14-10004R	IC;M74HC04,SOP,TAPE 14P		HOP2	1201-000163	IC-OP AMP;4560,SOP,8P;173MIL,DUAL,100V/m	
AL1	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		HR10	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
AL2	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		HR11	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
AL201	2901-001125	FILTER-EMI ON BOARD;50V,0.5A,-,220pF,7x2		HR12	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
AL3	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		HR15	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AL4	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		HR16	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608	
AL5	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		HR9	2007-000102	R-CHIP;100Kohm,5%,1/16W,DA,TP,1608	
AL6	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		KHR1	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
AL7	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm		KHR2	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608	
AOP1	1201-000163	IC-OP AMP;4560,SOP,8P;173MIL,DUAL,100V/m		MC1	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ1	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-		MC11	2203-000626	C-CERAMIC,CHIP;0.022nF,5%,50V,NPO,TP,160	
AQ3	0501-000341	TR-SMALL SIGNAL;KSC1623-L,NPN,200mW,SOT-		MC12	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ4	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-23,TP		MC13	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ5	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT		MC14	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ51	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-23,TP		MC15	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ52	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT		MC16	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ55	0501-000314	TR-SMALL SIGNAL;KSA812,PNP,150mW,SOT-23,		MC17	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ6	0504-000128	TR-DIGITAL;-NPN,200MW,22K/22K,SOT-23,TP		MC2	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AQ7	0504-000156	TR-DIGITAL;KSR2103,PNP,200MW,22K/22K,SOT		MC20	2203-000257	C-CERAMIC,CHIP;10nF,10%,50V,X7R,TP,1608	
AR10	2007-000092	R-CHIP;15Kohm,5%,1/16W,DA,TP,1608		MC3	2203-000626	C-CERAMIC,CHIP;0.022nF,5%,50V,NPO,TP,160	
AR13	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608		MC4	2203-000426	C-CERAMIC,CHIP;0.018nF,5%,50V,NPO,TP,160	
AR14	2007-000075	R-CHIP;220ohm,5%,1/16W,DA,TP,1608		MC5	2203-000426	C-CERAMIC,CHIP;0.018nF,5%,50V,NPO,TP,160	

Electrical Parts List

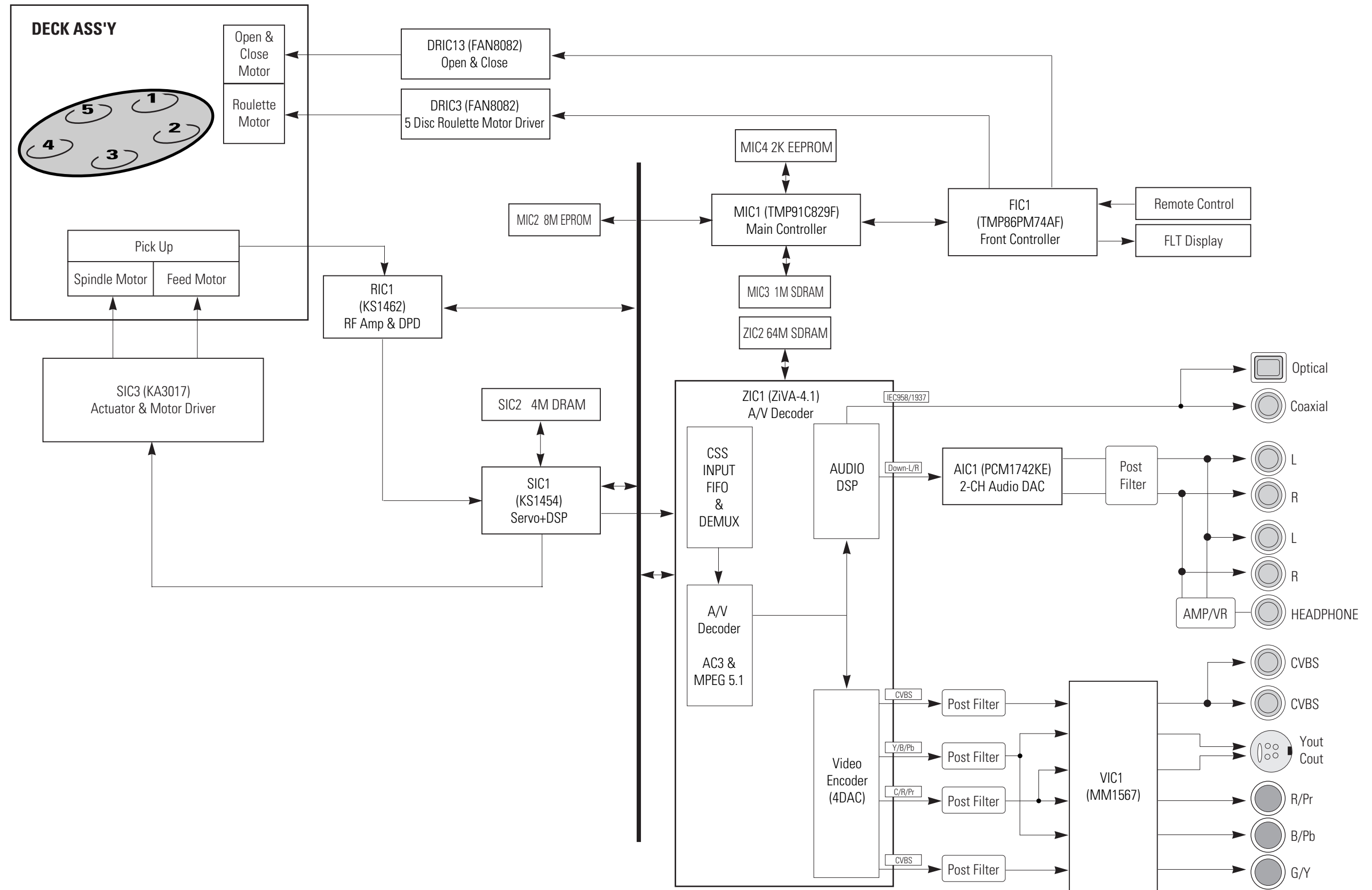
Loc.No	Part No	Description ; Specification	Remark	Loc.No	Part No	Description ; Specification	Remark
VR14	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608		ZC81	2203-000815	C-CERAMIC,CHIP;0.033nf,5%,50V,NPO,TP,160	
VR15	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608		ZC82	2203-000815	C-CERAMIC,CHIP;0.033nf,5%,50V,NPO,TP,160	
VR16	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608		ZC83	2203-000815	C-CERAMIC,CHIP;0.033nf,5%,50V,NPO,TP,160	
VR21	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608		ZC84	2203-000815	C-CERAMIC,CHIP;0.033nf,5%,50V,NPO,TP,160	
VR22	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608		ZC9	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608	
VSW1	AH34-00010A	SWITCH SLIDE;- 50V DC,-,100MOHM,-,-,-,-		ZD1	0402-000309	DIODE-RECTIFIER;1SR154-400,400V,1A,SOD-1	
VZD1	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZE30	2401-002165	C-AL;100uf,20%,16V,GP,TP,6.3x7.5	
VZD10	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZE34	2401-000414	C-AL;10uf,20%,16V,GP,TP,4x7.5	
VZD11	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZE36	2401-000414	C-AL;10uf,20%,16V,GP,TP,4x7.5	
VZD12	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZE37	2401-000414	C-AL;10uf,20%,16V,GP,TP,4x7.5	
VZD13	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZIC1	1204-001919	IC-DECODER;Z1A4.1 BO,QFP,208P;28X28MM,P	
VZD14	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZIC2	1105-001305	IC-DRAM;4S641632,1Mx16x4Bit,TSOP;54P,4	
VZD2	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZIC4	AH14-10004R	IC;M74HCU04,SOP,TAPE 14P	
VZD3	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL10	2703-000398	INDUCTOR-SMD;10uH,10%,3.2x2.5x2.2mm	
VZD4	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL12	2703-000398	INDUCTOR-SMD;10uH,10%,3.2x2.5x2.2mm	
VZD5	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL13	3301-001419	CORE-FERRITE BEAD;AB,220ohm,1.6x0.8x0.8mm	
VZD6	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL14	3301-001419	CORE-FERRITE BEAD;AB,220ohm,1.6x0.8x0.8mm	
VZD7	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL15	3301-001419	CORE-FERRITE BEAD;AB,220ohm,1.6x0.8x0.8mm	
VZD8	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL16	3301-001419	CORE-FERRITE BEAD;AB,220ohm,1.6x0.8x0.8mm	
VZD9	0403-001374	DIODE-ZENER;UDZ12B,11.74-12.24V,200mW,SO		ZL2	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm	
ZC1	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZL5	2007-000766	R-CHIP;330ohm,5%,1/10W,DA,TP,1602	
ZC10	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZL6	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm	
ZC11	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZL7	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm	
ZC12	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZL9	3301-000353	CORE-FERRITE BEAD;AB,120ohm,2x1.25x0.9mm	
ZC13	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR16	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
ZC14	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR17	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
ZC15	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR18	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
ZC16	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR2	2007-000113	R-CHIP;33ohm,5%,1/16W,DA,TP,1608	
ZC17	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR23	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC18	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR27	2007-000084	R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1608	
ZC19	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR28	2007-000084	R-CHIP;4.7Kohm,5%,1/16W,DA,TP,1608	
ZC2	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR29	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC29	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR3	2007-000113	R-CHIP;33ohm,5%,1/16W,DA,TP,1608	
ZC3	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR35	3301-001309	CORE-FERRITE BEAD;AB,47ohm,1.6x0.8x0.8mm	
ZC37	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR4	2007-000113	R-CHIP;33ohm,5%,1/16W,DA,TP,1608	
ZC38	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR5	2007-000113	R-CHIP;33ohm,5%,1/16W,DA,TP,1608	
ZC39	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR6	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC4	2203-000626	C-CERAMIC,CHIP;0.022nf,5%,50V,NPO,TP,160		ZR68	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC40	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR69	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC41	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR7	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC42	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR70	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC43	2203-005148	C-CERAMIC,CHIP;10nf,10%,16V,X7R,TP,1608		ZR72	2011-000816	R-NETWORK;100ohm,5%,63mWL,CHIP;8P,TP	
ZC44	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR73	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC45	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR74	2007-000074	R-CHIP;100ohm,5%,1/16W,DA,TP,1608	
ZC46	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR75	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC47	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR76	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC48	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR77	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC49	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR78	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC5	2203-000626	C-CERAMIC,CHIP;0.022nf,5%,50V,NPO,TP,160		ZR79	2007-007332	R-CHIP;1.18KOHM,1%,1/10W,DA,TP,2012	
ZC50	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR8	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC51	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR84	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC56	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		ZR86	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC58	2203-000440	C-CERAMIC,CHIP;1nf,10%,50V,X7R,TP,1608,-		ZR88	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC59	2203-005148	C-CERAMIC,CHIP;100nf,10%,16V,X7R,TP,1608		ZR89	2007-000109	R-CHIP;1Mohm,5%,1/16W,DA,TP,1608	
ZC6	2203-000626	C-CERAMIC,CHIP;0.022nf,5%,50V,NPO,TP,160		ZR9	2007-001164	R-CHIP;75ohm,1%,1/16W,DA,TP,1608	
ZC60	2203-000681	C-CERAMIC,CHIP;0.027nf,5%,50V,NPO,TP,160		ZR94	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC61	2007-000070	R-CHIP;0ohm,5%,1/16W,DA,TP,1608		ZR95	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC62	2203-000681	C-CERAMIC,CHIP;0.027nf,5%,50V,NPO,TP,160		ZR96	2007-000078	R-CHIP;1Kohm,5%,1/16W,DA,TP,1608	
ZC63	2203-000626	C-CERAMIC,CHIP;0.022nf,5%,50V,NPO,TP,160		ZY1	2801-003554	CRYSTAL-UNIT;27MHz,10ppm,28-AA,12pf,40o	
ZC66	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608					
ZC67	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		602	AH92-01378A	ASSY PCB-SMPS;DVD-C621,SMPS	
ZC68	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		PBR11	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
ZC69	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		PBS01	AC27-92001M	COIL-INDUCTOR;RH3.5X6.5RS,BEAD(RADIAL),-	
ZC7	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		PCD02	2201-000828	C-CERAMIC,DISC;3.3nf,20%,400V,Y5U,TP,15x	△
ZC70	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		PCD03	2201-000828	C-CERAMIC,DISC;3.3nf,20%,400V,Y5U,TP,15x	△
ZC78	2203-000626	C-CERAMIC,CHIP;0.022nf,5%,50V,NPO,TP,160		PCD12	2201-000930	C-CERAMIC,DISC;0.22nf,10%,500V,Y5P,TP,5.	
ZC8	2203-000257	C-CERAMIC,CHIP;10nf,10%,50V,X7R,TP,1608		PCN1	3711-001171	CONNECTOR-HEADER;BOX,9P,R,2mm,STRAIGHT,	

Electrical Parts List

Loc.No	Part No	Description ; Specification	Remark
FR6	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FR8	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FR80	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FR9	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL1	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL10	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL11	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL12	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL2	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL3	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL4	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL5	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL6	2001-000554	R-CARBON;270OHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL7	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL8	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRL9	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRM1	AH59-00010A	MODULE REMOCOM,-,-,37.9KHZ,940NM,-,-,-	
FRR1	2001-000793	R-CARBON;470HM,5%,1/8W,AA,TP,1.8X3.2MM	
FRR2	2001-000429	R-CARBON;1KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRM1	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FRV1	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV10	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV11	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV12	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6.4MM	
FRV13	2001-000027	R-CARBON;100OHM,5%,1/4W,AA,TP,2.4X6.4MM	
FRV2	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV3	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV4	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV5	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV6	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV7	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV8	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRV9	2001-000273	R-CARBON;100KOHM,5%,1/8W,AA,TP,1.8X3.2M	
FRX1	2001-000435	R-CARBON;1MOHM,5%,1/8W,AA,TP,1.8X3.2MM	
FX1	2802-001189	RESONATOR-CERAMIC;8MHZ,±æ0.5%,TP,10X5.0X	
HPJ01	3722-001465	JACK-PHONE;3P;6.43P,AG,BLK,-	
KC1	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
KC101	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
KC102	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
KC2	2202-000797	C-CERAMIC,MLC-AXIAL;10NF,30%,16V,Y5S,TP,	
KCE8	2401-001507	C-AL;47uF,20%,16V,GP,TP;6.3x5.5	
KCE9	2401-001507	C-AL;47uF,20%,16V,GP,TP;6.3x5.5	
KL1	2701-000113	INDUCTOR-AXIAL;100uH,5%,2.5x3.4mm	
KL2	2701-000113	INDUCTOR-AXIAL;100uH,5%,2.5x3.4mm	
KL3	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
KL4	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
KL5	3301-000297	CORE-FERRITE BEAD;AA,3.6x1.2x5.7mm,1400,	
KOP03	1201-000191	IC-OP AMP;4558,DIP;8P;300MIL,DUAL,20V/mV	
KR3	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
KR32	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
KR33	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KR34	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
KR35	2001-000800	R-CARBON;5.1KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KR4	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
KVR4	2101-001090	VR-ROTARY;20KOHM,20%,1/20W,SIDE	
KZD1	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
KZD2	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
KZD3	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
KZD4	0403-001211	DIODE-ZENER;MTZJ12B,11.44-12.03V,500MW,D	
VFD1	AH07-00043A	VF DISPLAY,-,DVD-M201,74X9.0mm,1/13.75,9	
ZD1	0403-000546	DIODE-ZENER;MTZ3.6B,3.6V;3.6-3.845V,500m	
ZD11	0403-000297	DIODE-ZENER;MTZ6.2B,6.2V;5.96-6.27V,500m	

Loc.No	Part No	Description ; Specification	Remark
702	AH92-01391A	ASSY PCB-L KEY;DVD-C621,L-KEY	
CON2	3710-001812	CONNECTOR-SOCKET;5P,1R,1.25MM,ANGLE,-	
KLED1	0601-001447	LED;ROUND,RED,3.1mm,650nm	
KLR1	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KLR2	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KLR3	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KLSW1	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KLSW2	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KLSW3	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
703	AH92-01390A	ASSY PCB-R KEY;DVD-C621,R-KEY	
CON1	3710-001813	CONNECTOR-SOCKET;9P,1R,1.25MM,ANGLE,-	
KRLED1	0601-001644	LED;ROUND,RED,3MM,632NM,4X5.25MM	
KRLED2	0601-001644	LED;ROUND,RED,3MM,632NM,4X5.25MM	
KRLED3	0601-001644	LED;ROUND,RED,3MM,632NM,4X5.25MM	
KRLED4	0601-001644	LED;ROUND,RED,3MM,632NM,4X5.25MM	
KRLED5	0601-001644	LED;ROUND,RED,3MM,632NM,4X5.25MM	
KRR1	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRR2	2001-000258	R-CARBON;1.8KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRR3	2001-000591	R-CARBON;3.3KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRR4	2001-000995	R-CARBON;820OHM,5%,1/8W,AA,TP,1.8X3.2MM	
KRR5	2001-000241	R-CARBON;1.5KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRR6	2001-000472	R-CARBON;2.7KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRR7	2001-000977	R-CARBON;8.2KOHM,5%,1/8W,AA,TP,1.8X3.2M	
KRSW1	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW10	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW2	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW3	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW4	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW5	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW6	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW7	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW8	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
KRSW9	3404-000165	SWITCH-TACT;12V,50mA,160gf,6x6mm,SPST	
H215	AH92-01435A	ASSY PCB-DECK 1LD;DVD-C621,SELLINO DECK	
DCN1	3708-001364	CONNECTOR-FPC/FFC/PIC;35P,1.25MM,STRAIGH	
DCN2	3708-001704	CONNECTOR-FPC/FFC/PIC;24P,1MM,ANGLE,SN	
DCN3	3708-001589	CONNECTOR-FPC/FFC/PIC;13P,1MM,ANGLE,SN	
DOR1	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM	
DOR2	2001-000325	R-CARBON;120OHM,5%,1/8W,AA,TP,1.8X3.2MM	
H402	AH97-00735A	ASSY-PCB DECK;DP-8,DECK,-	
MCN02	3708-001444	CONNECTOR-FPC/FFC/PIC;6P,1.25mm,STRAIGHT	
MCN03	3710-000405	CONNECTOR-SOCKET;2P;2R,2.5mm,-,	
MR1	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR2	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR3	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR4	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR5	2001-000290	R-CARBON;10KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
MSW01	AH34-00014B	SWITCH-MODE;MMS00660ZM0B,DP-8,-,-,-,-,-,-,-	
H502	AH97-00737A	ASSY-PCB SENSOR;DP-8,SENSOR,-	
LCN01	3708-001443	CONNECTOR-FPC/FFC/PIC;6P,1.25mm,ANGLE,SN	
LCN02	3710-000405	CONNECTOR-SOCKET;2P;2R,2.5mm,-,	
LSS01	AH32-00002A	SENSOR-ROULETTE;-,-,DP-4,-,-,-,-,-,-,-	
LSS02	0604-001005	PHOTO-INTERRUPTER;TR,-,-,DIP-4,BK	
MR6	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR7	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR8	2001-000281	R-CARBON;100OHM,5%,1/8W,AA,TP,1.8X3.2MM	
MR9	2001-000411	R-CARBON;18KOHM,5%,1/8W,AA,TP,1.8X3.2MM	

6. Block Diagram

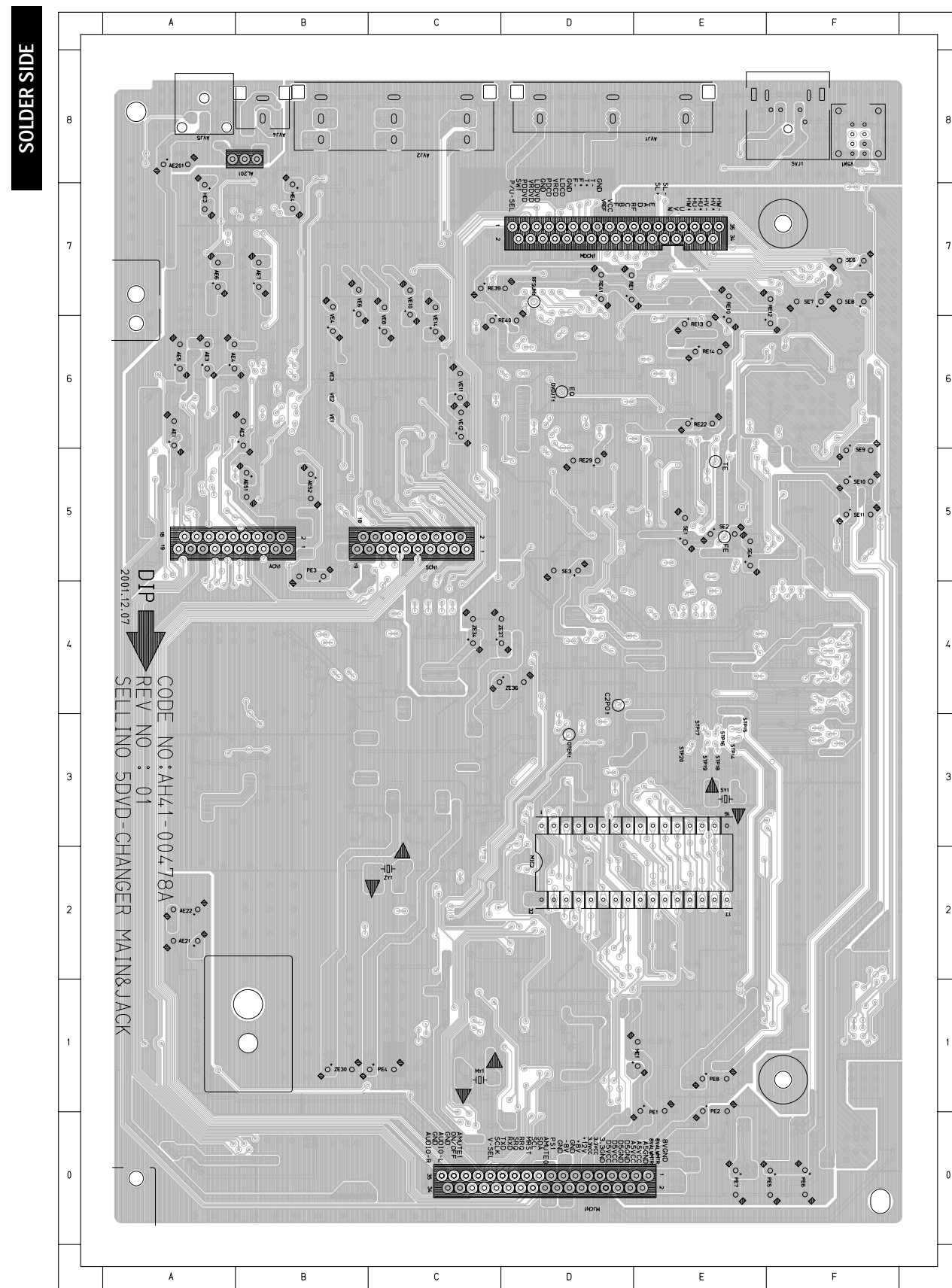
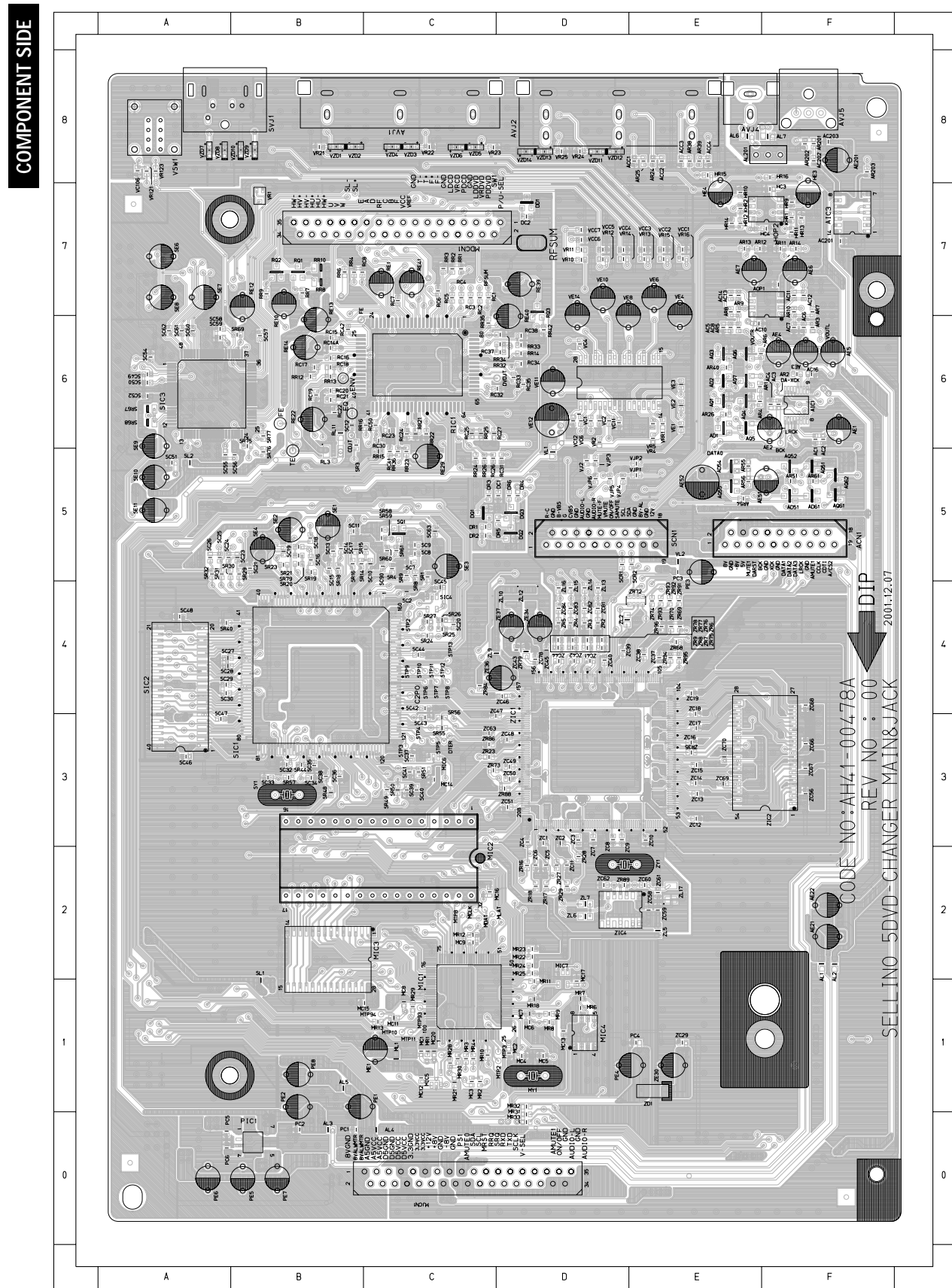


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7. PCB Diagrams

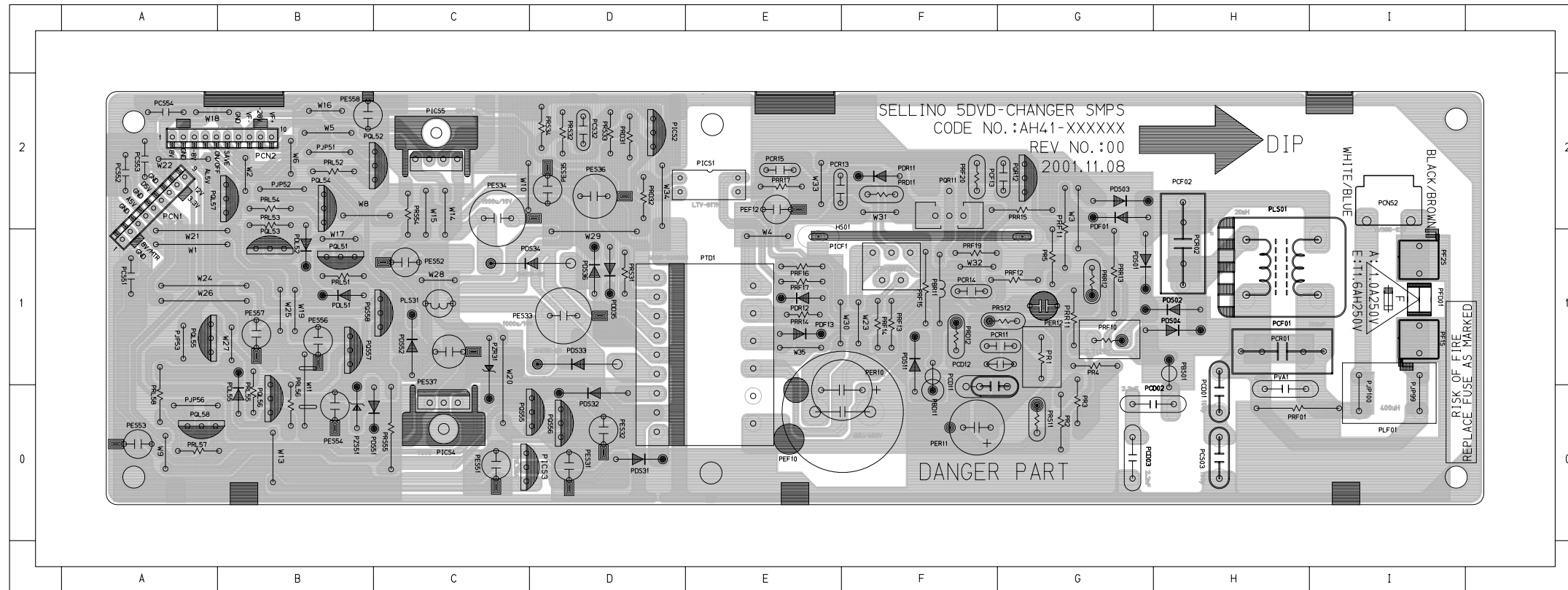
7-1 Main & Jack	7-2
7-2 S.M.P.S.	7-3
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7-1 Main & Jack

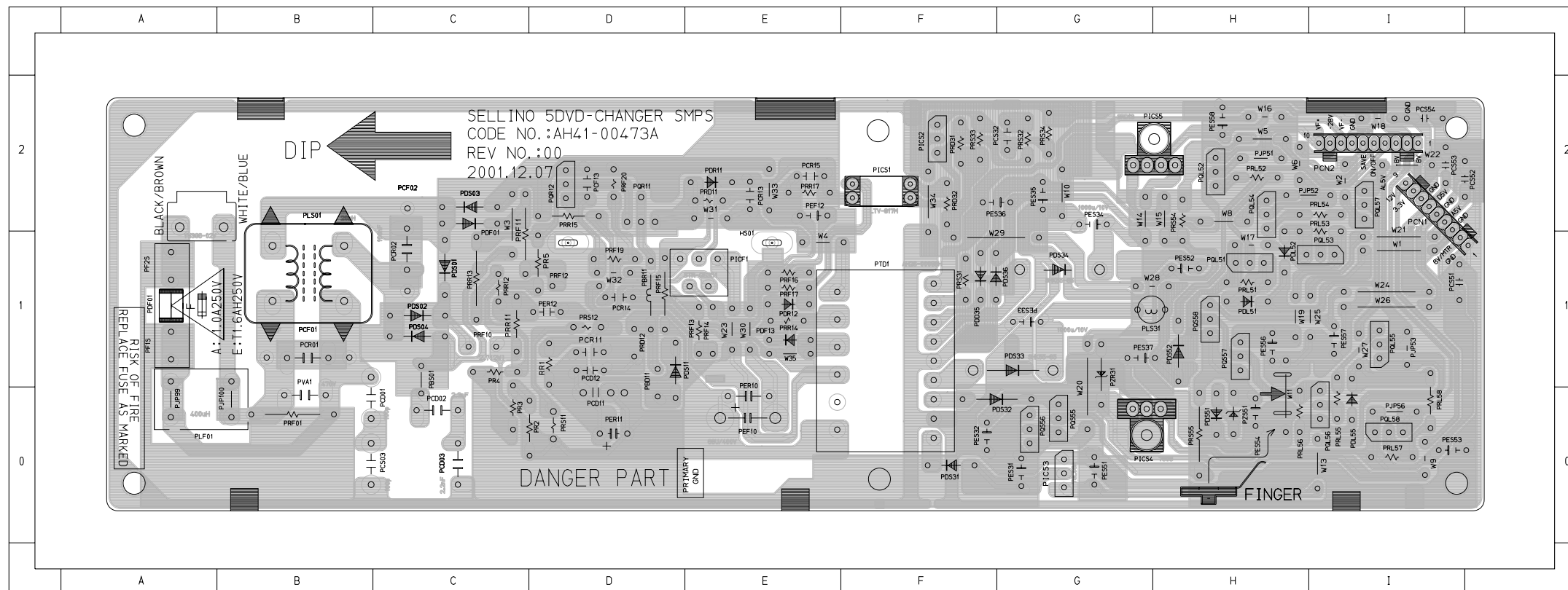


7-2 S.M.P.S.

COMPONENT SIDE

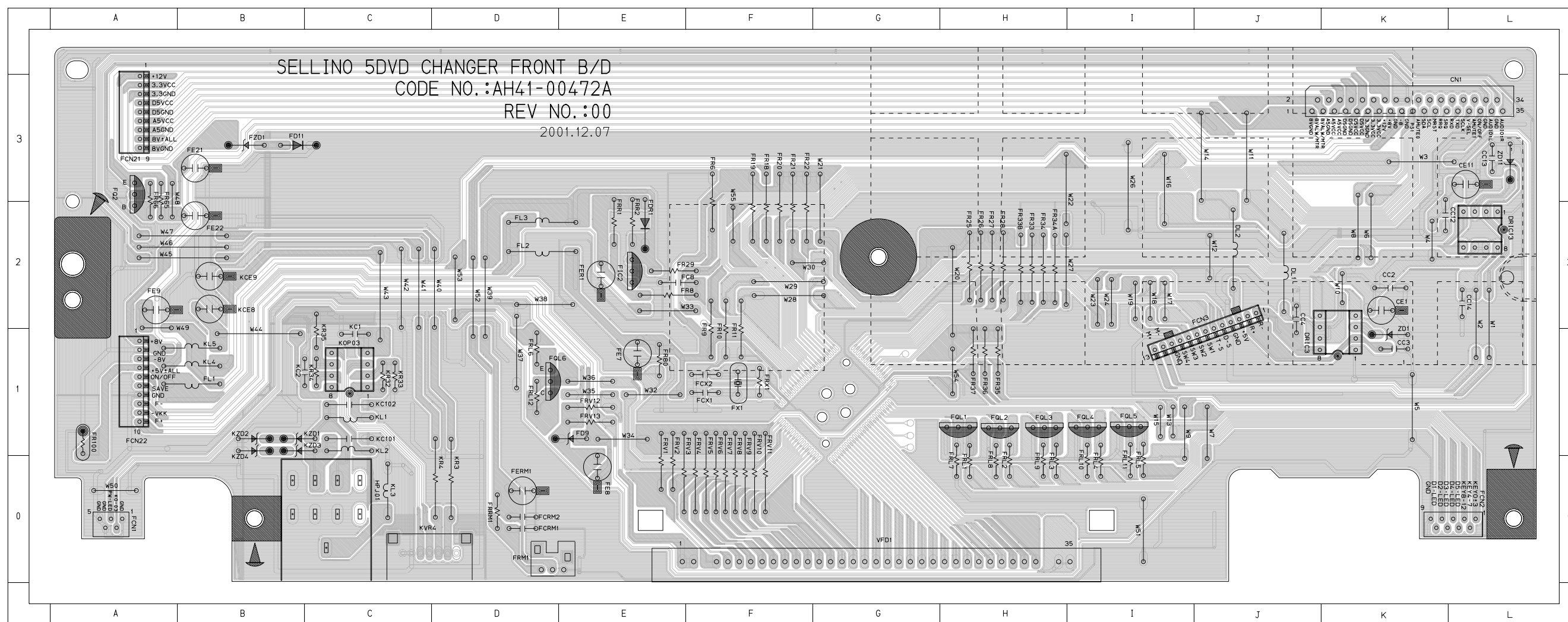


SOLDER SIDE

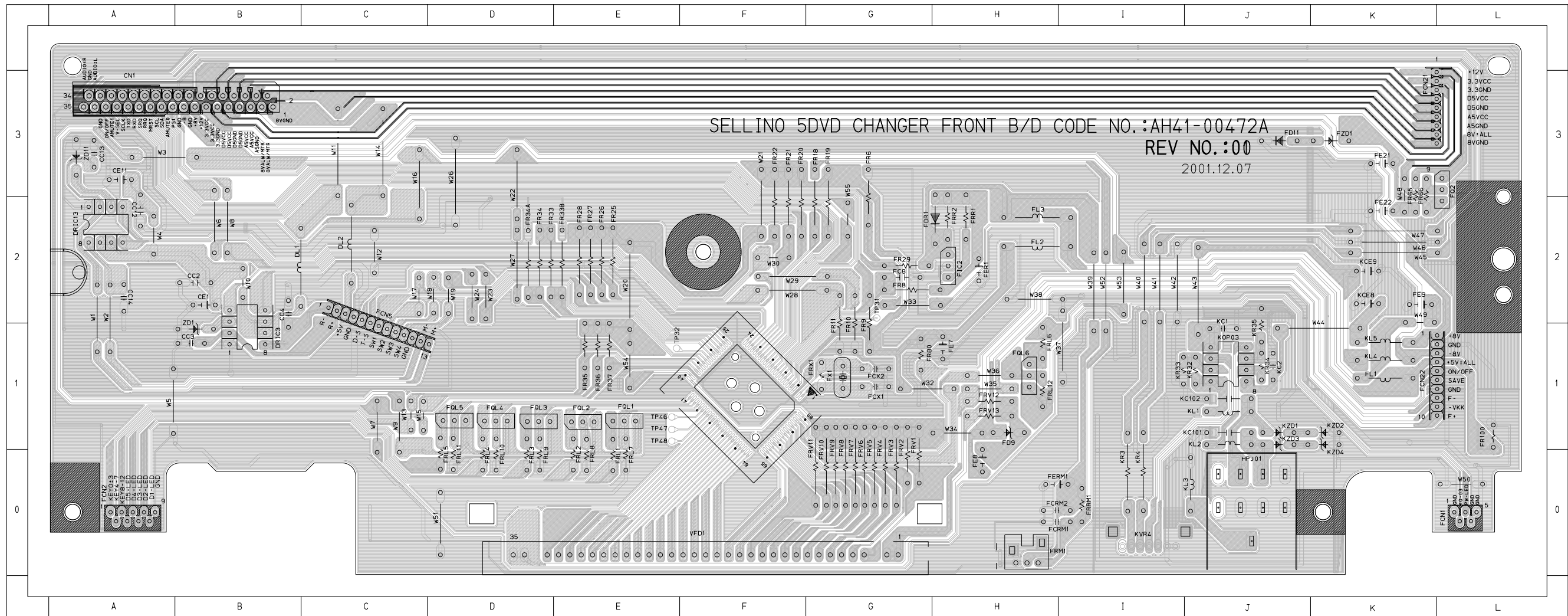


7-3 Front

COMPONENT SIDE

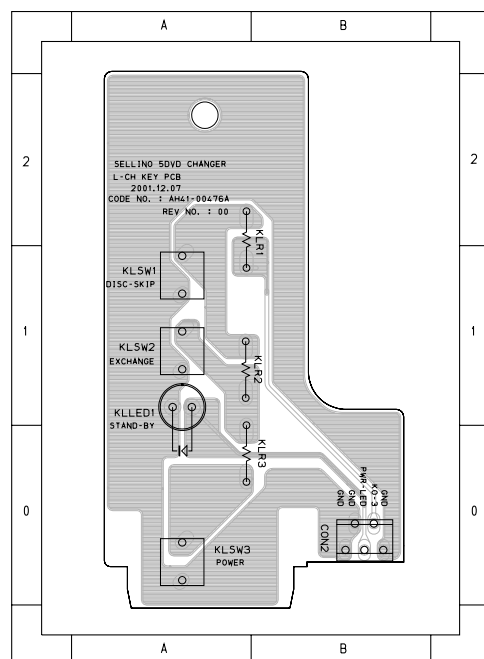


SOLDER SIDE

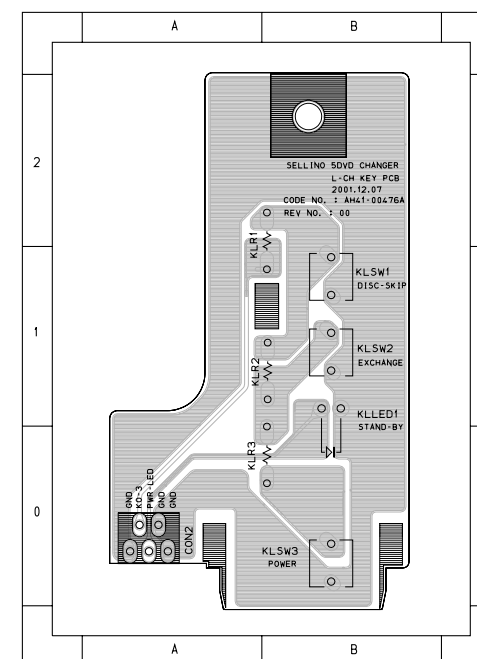


7-4 Key (Left)

COMPONENT SIDE

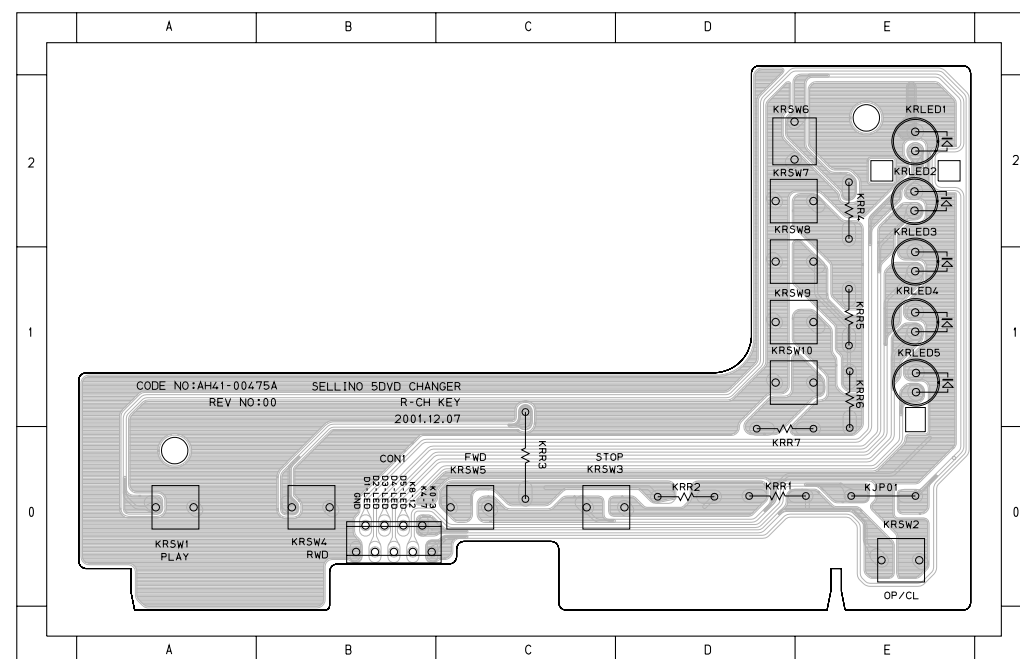


SOLDER SIDE

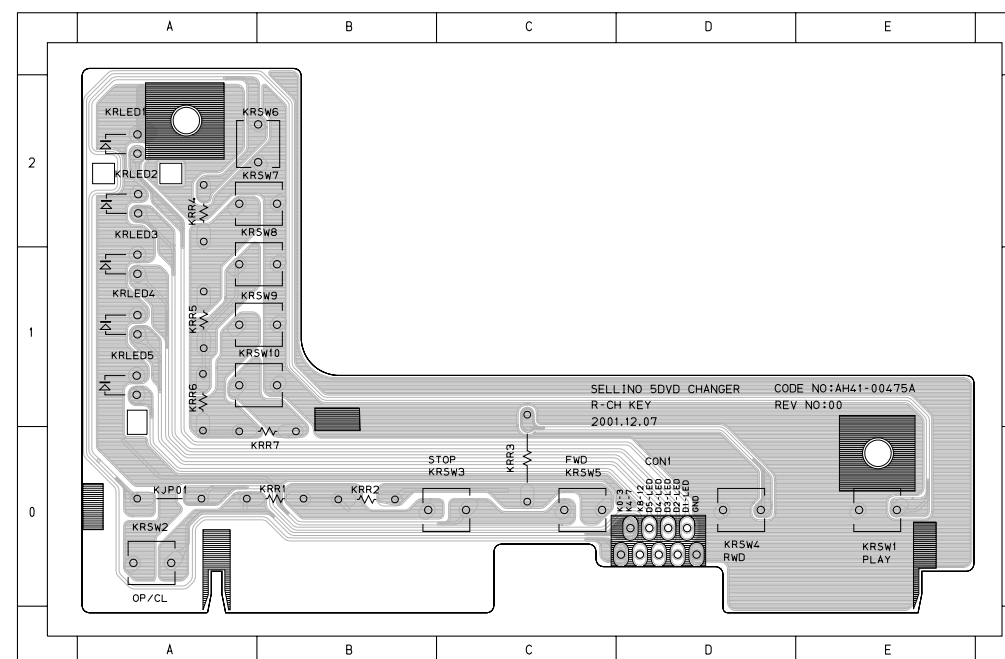


7-5 Key (Right)

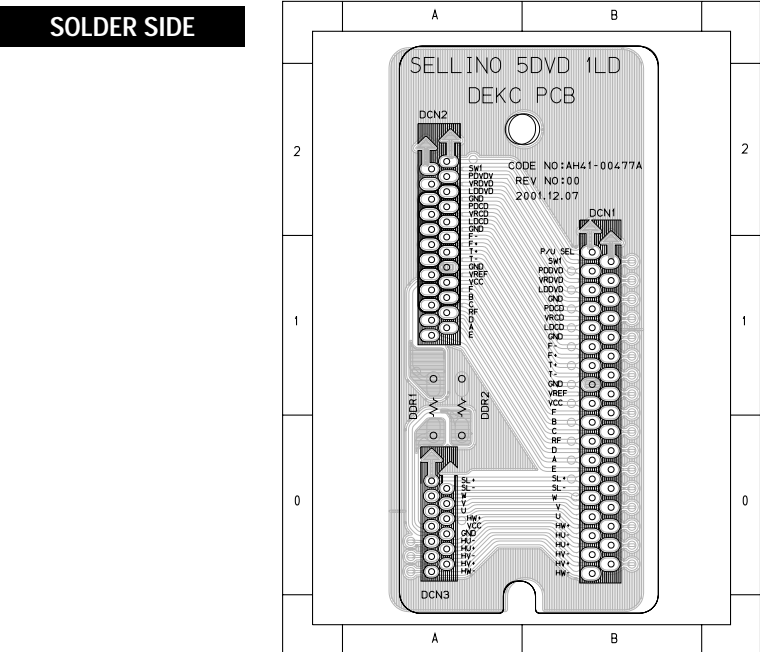
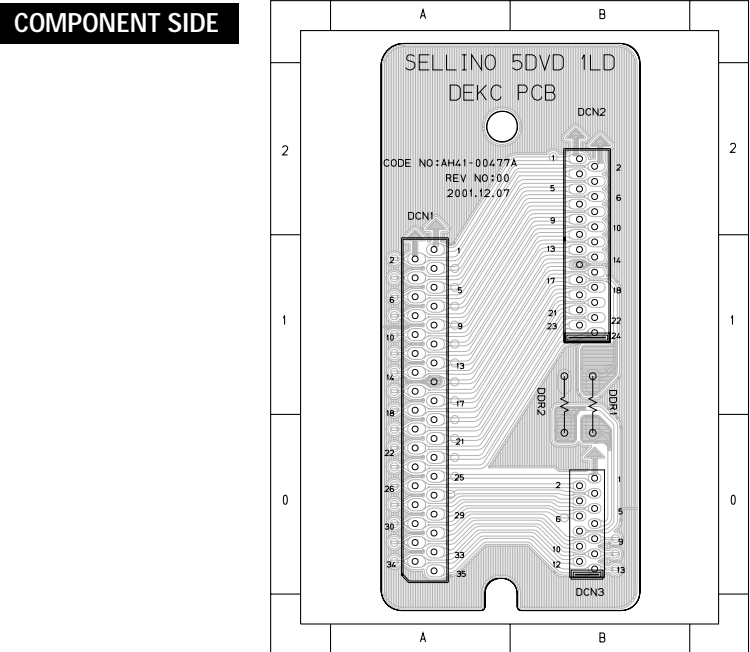
COMPONENT SIDE



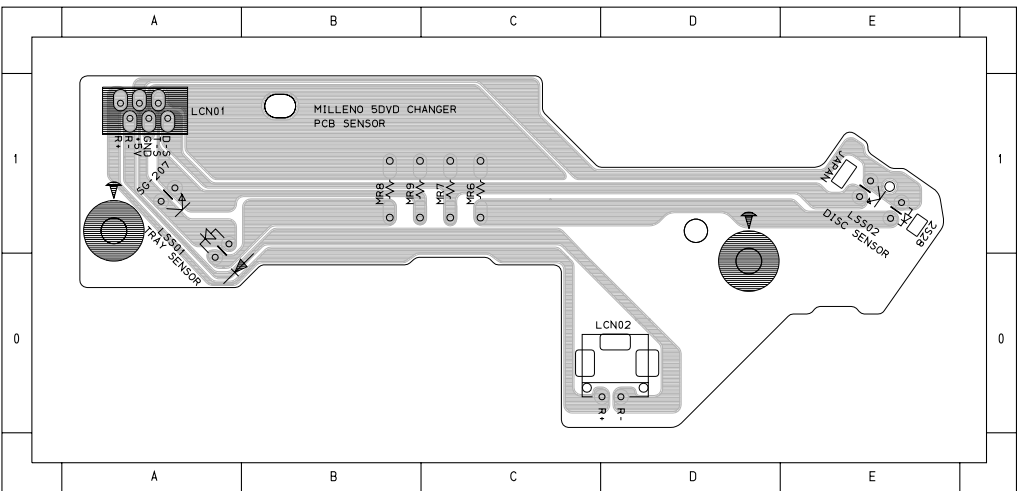
SOLDER SIDE



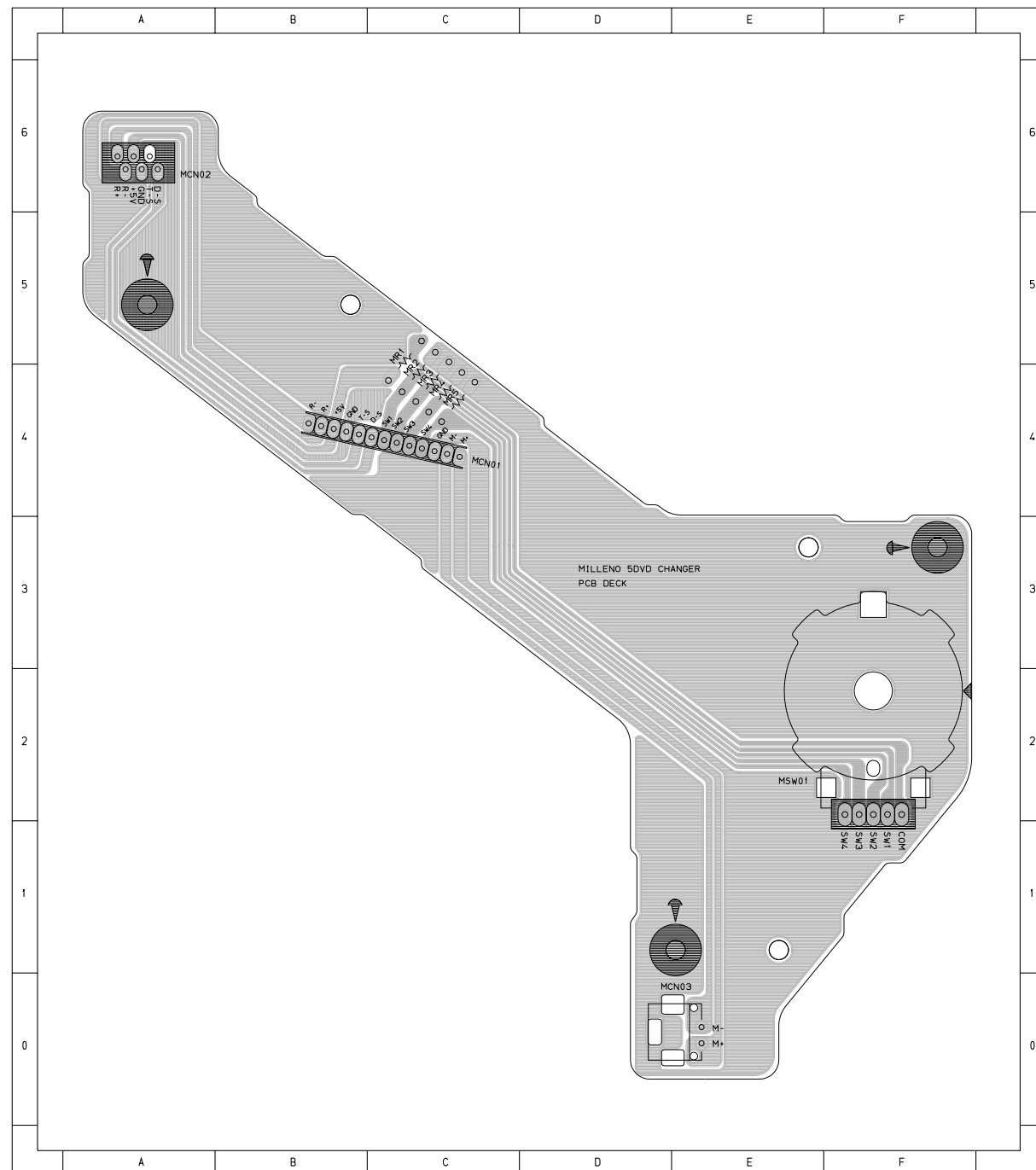
7-6 Deck



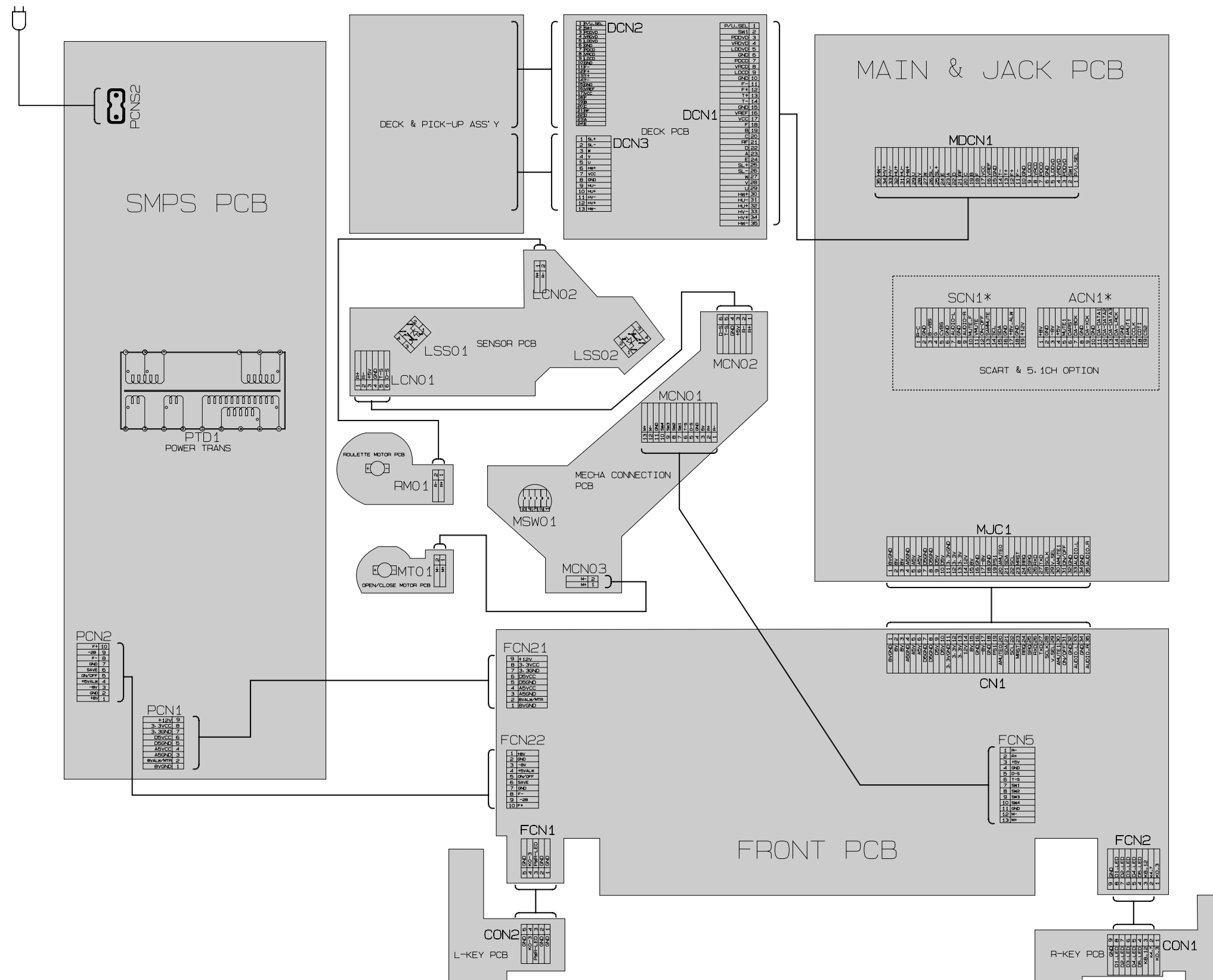
7-7 Sensor



7-8 Motor Connection



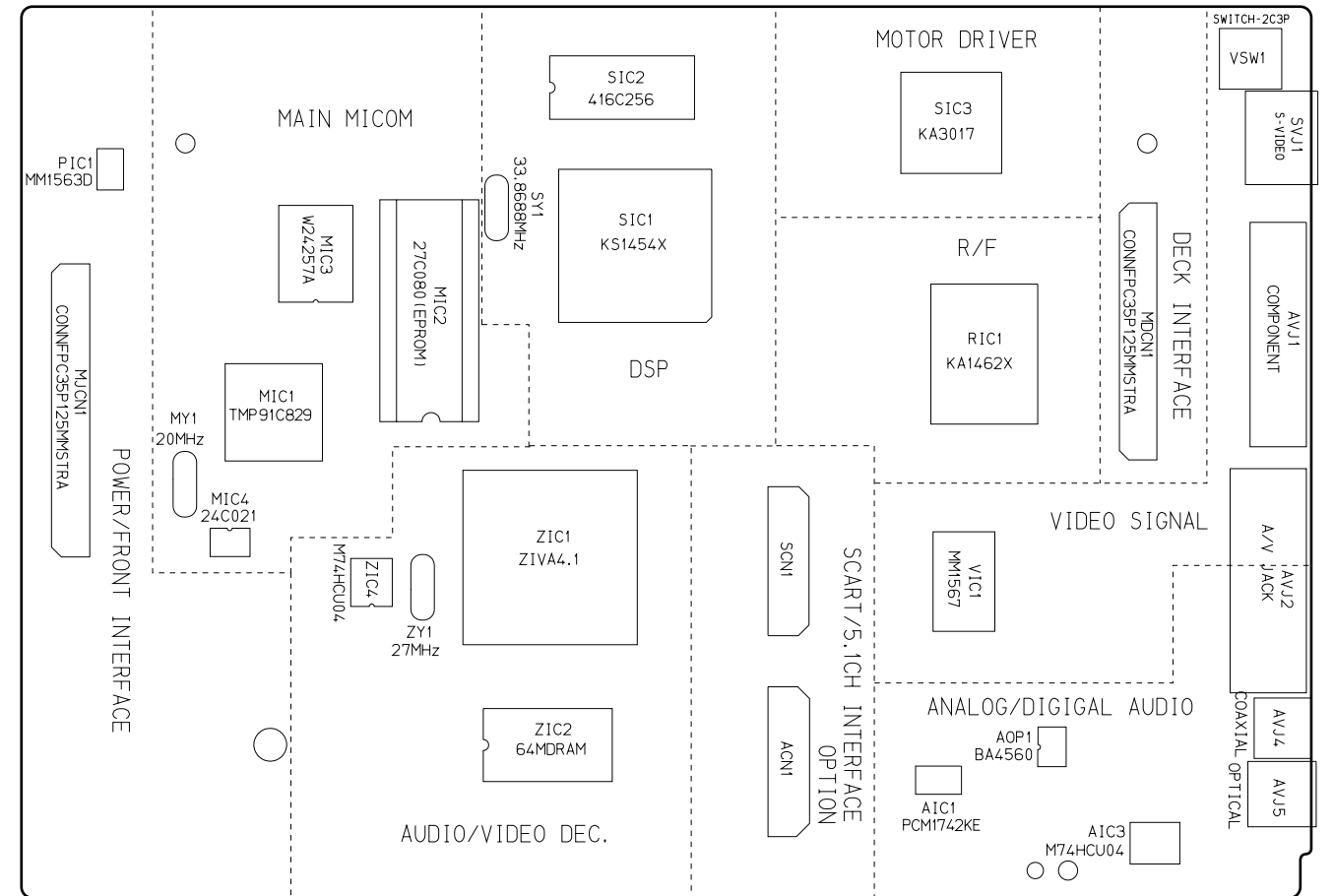
8. Wiring Diagram



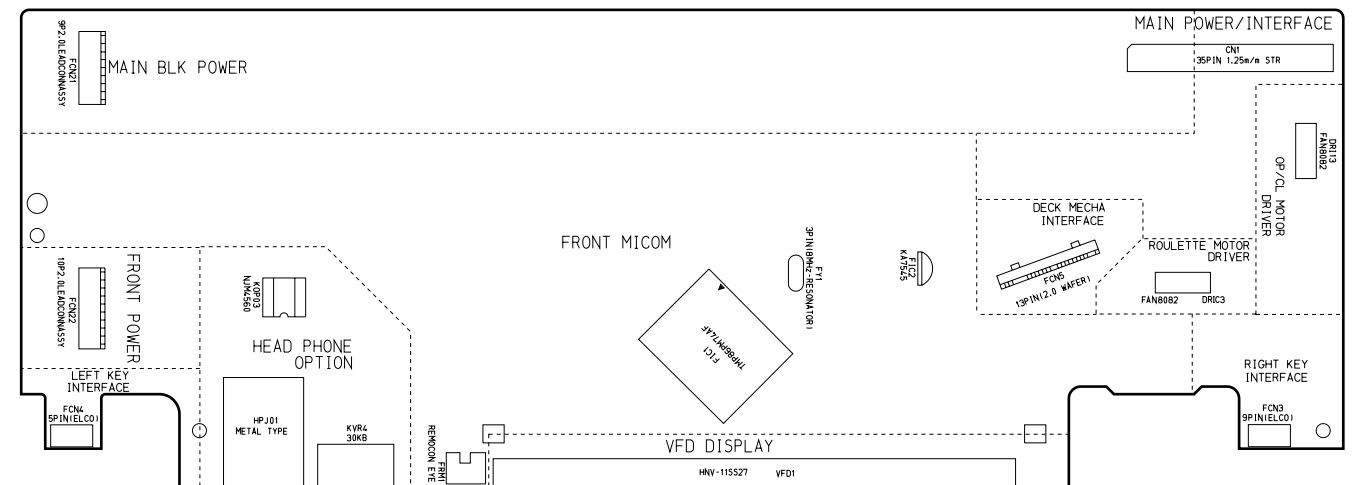
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Block Identification of PCB

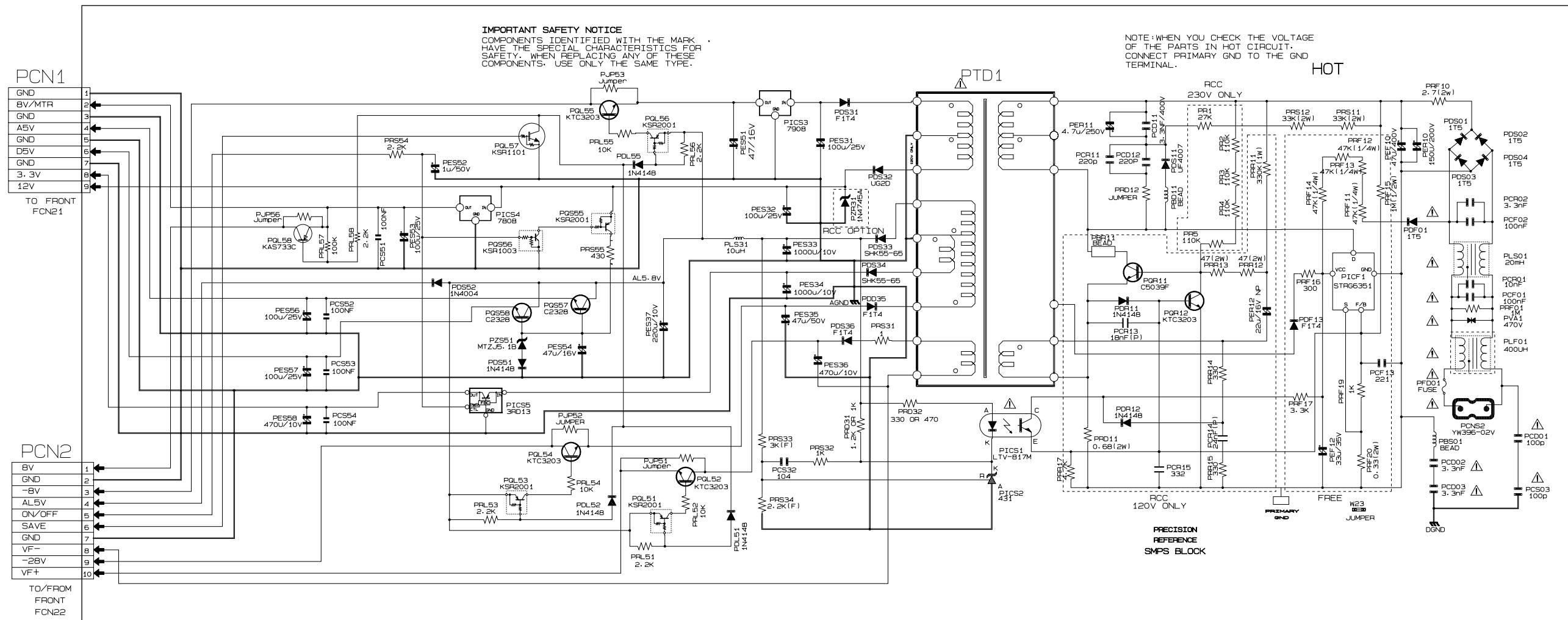


Main & Jack PCB (Component Side)

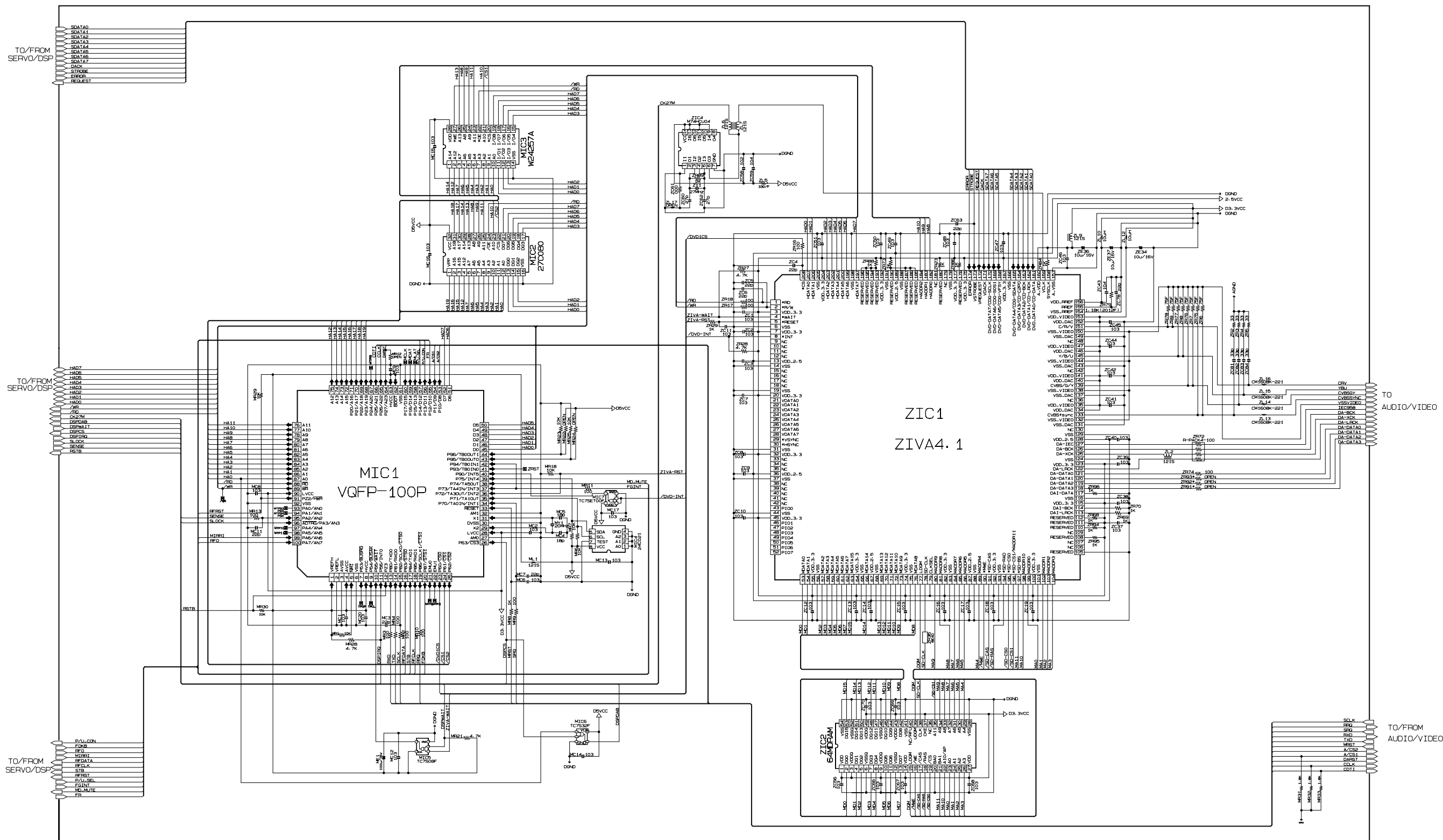


Front PCB (Component Side)

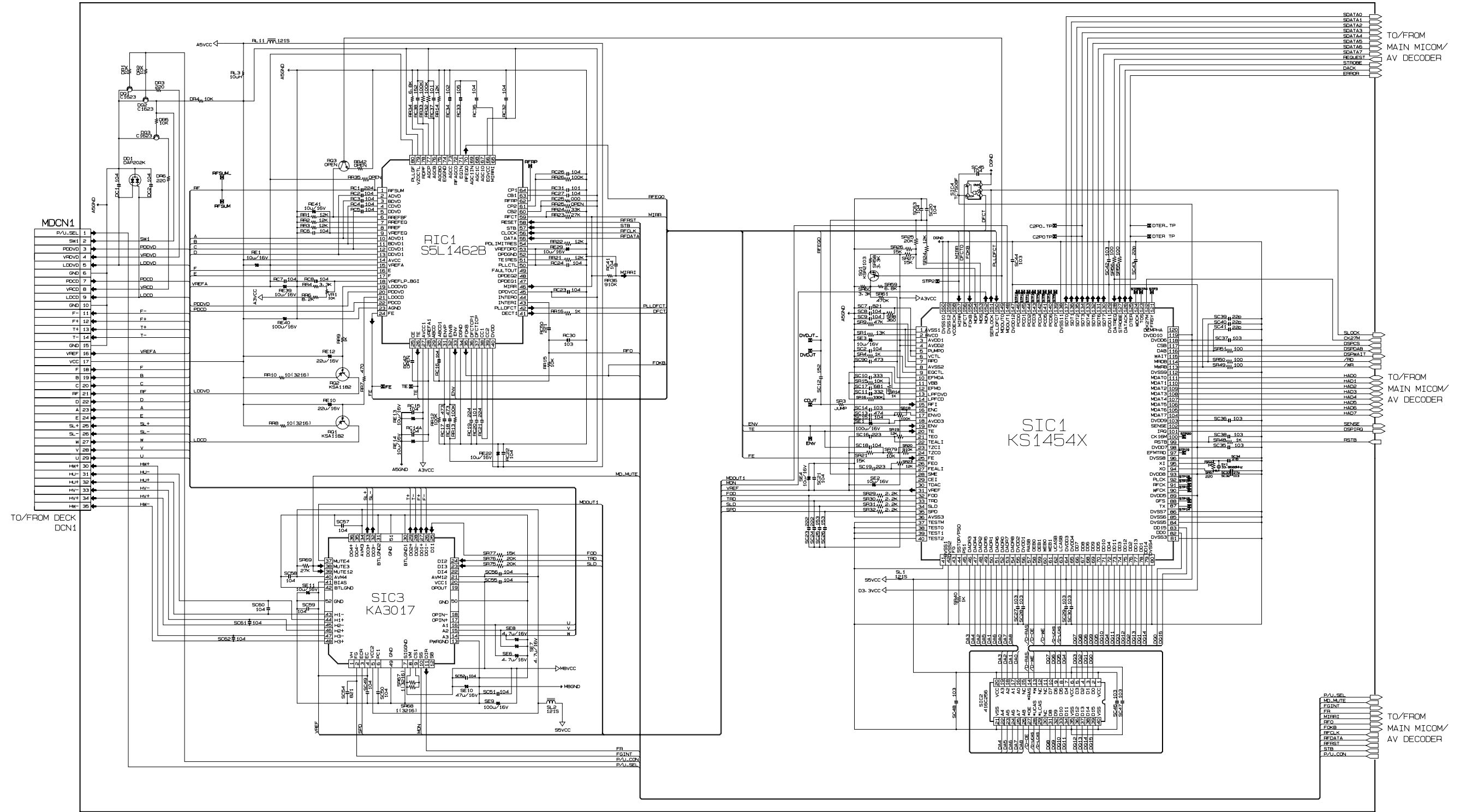
9-1 S.M.P.S.



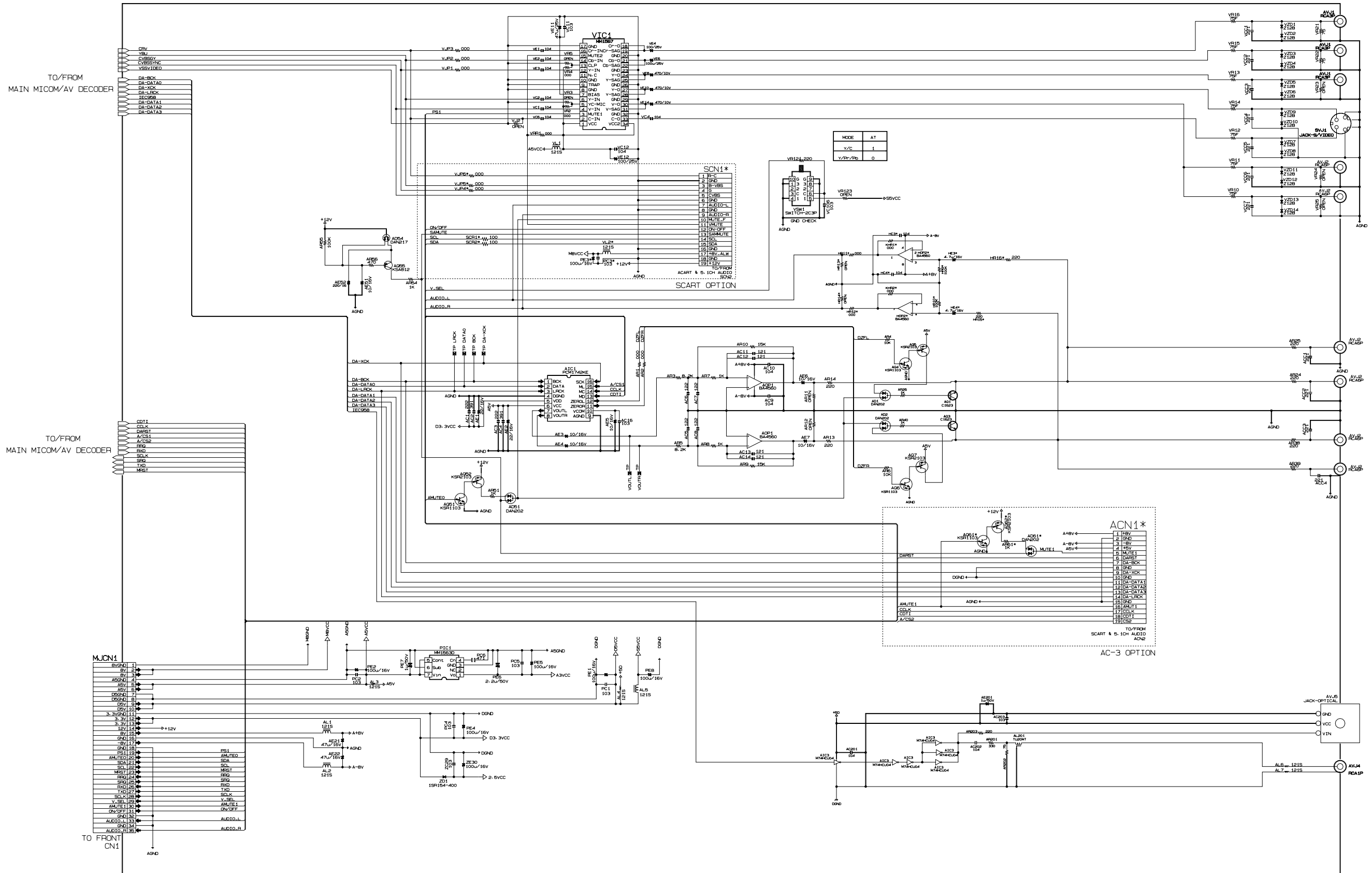
9-2 Main-Micom/AV Decoder



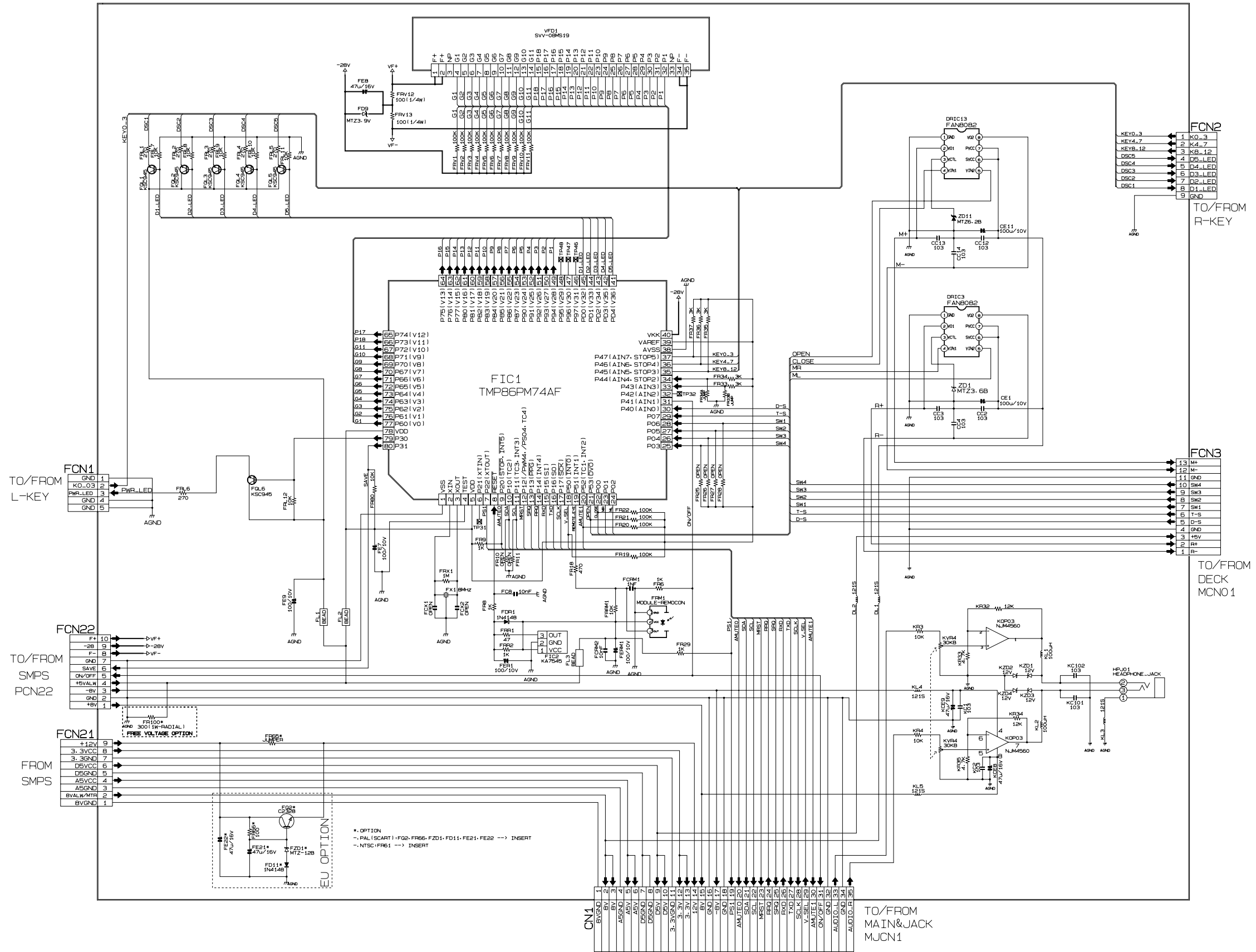
9-3 Servo/DSP



9-4 Audio/Video

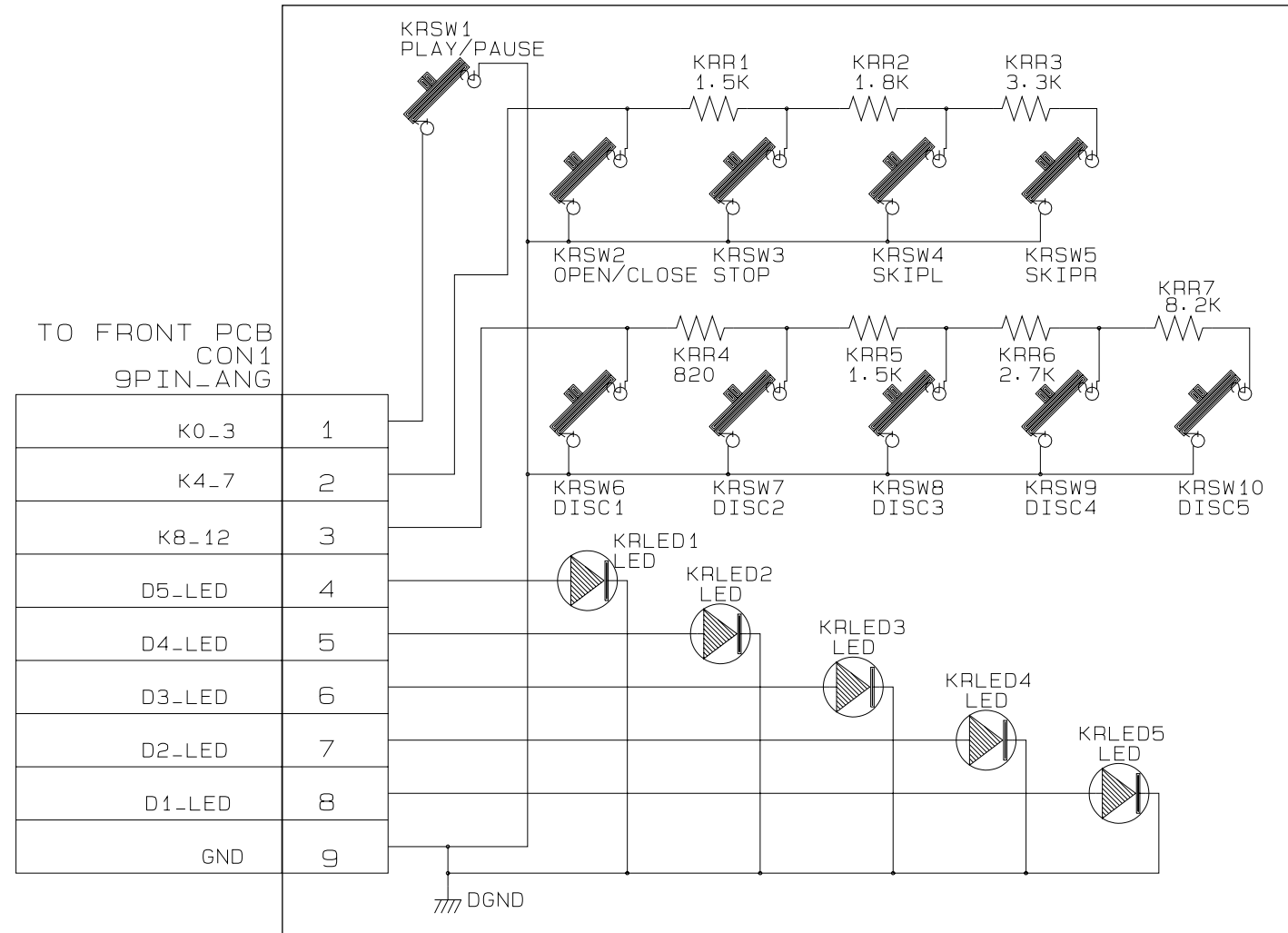


9-5 Front-Micom

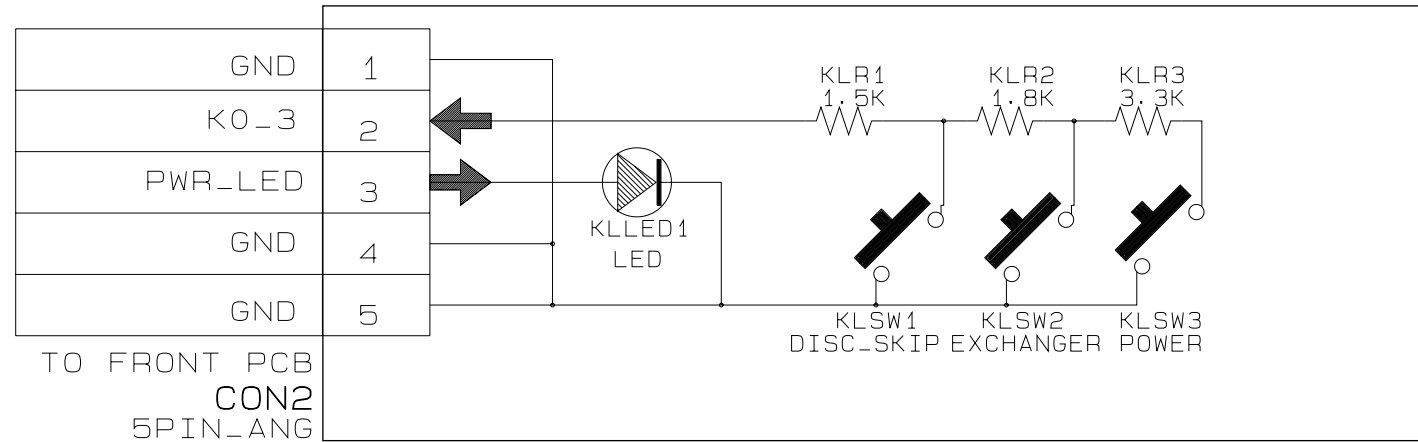


9-6 Key

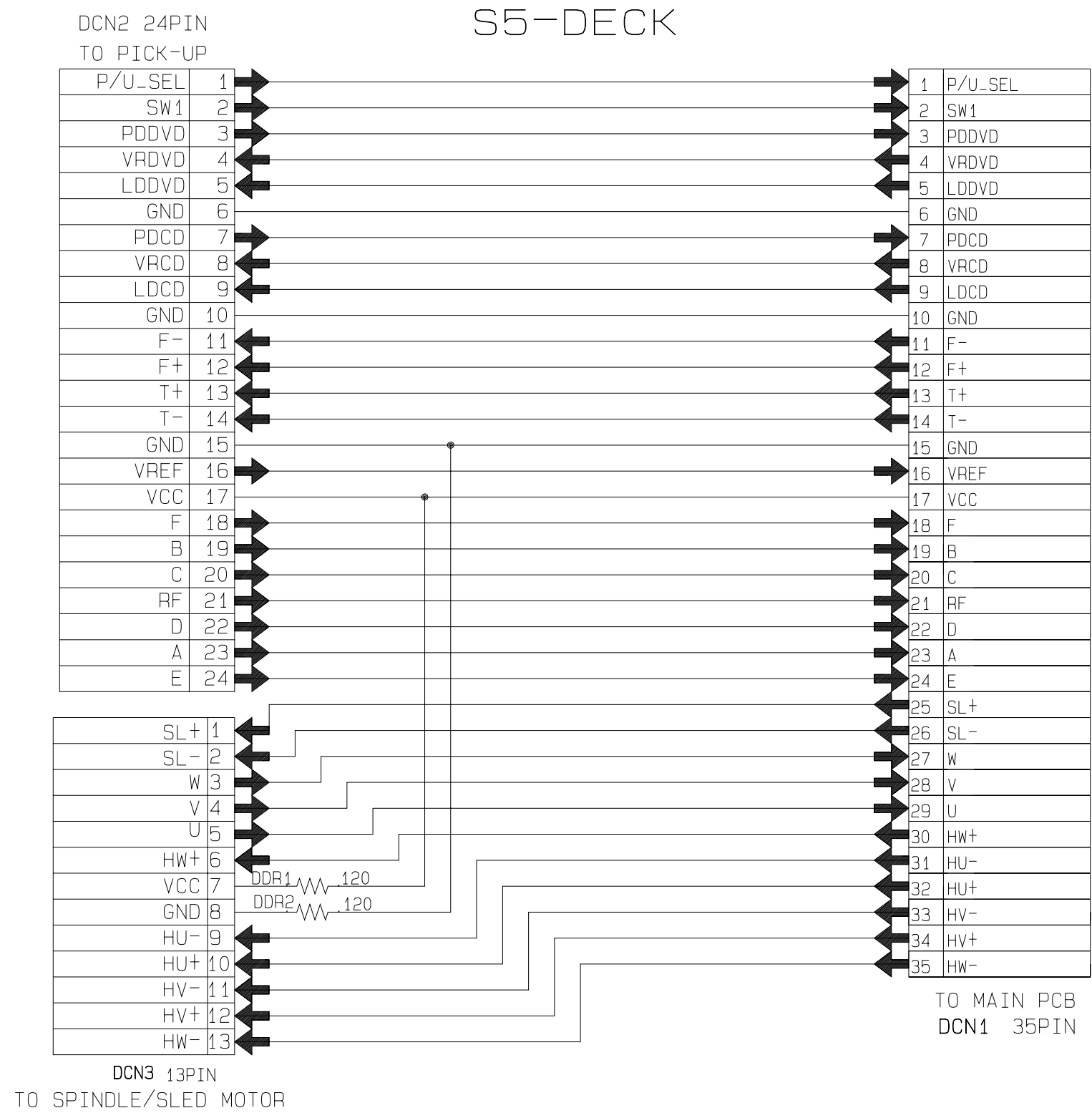
SELLINO_5CHANGER_RIGHT_KEY



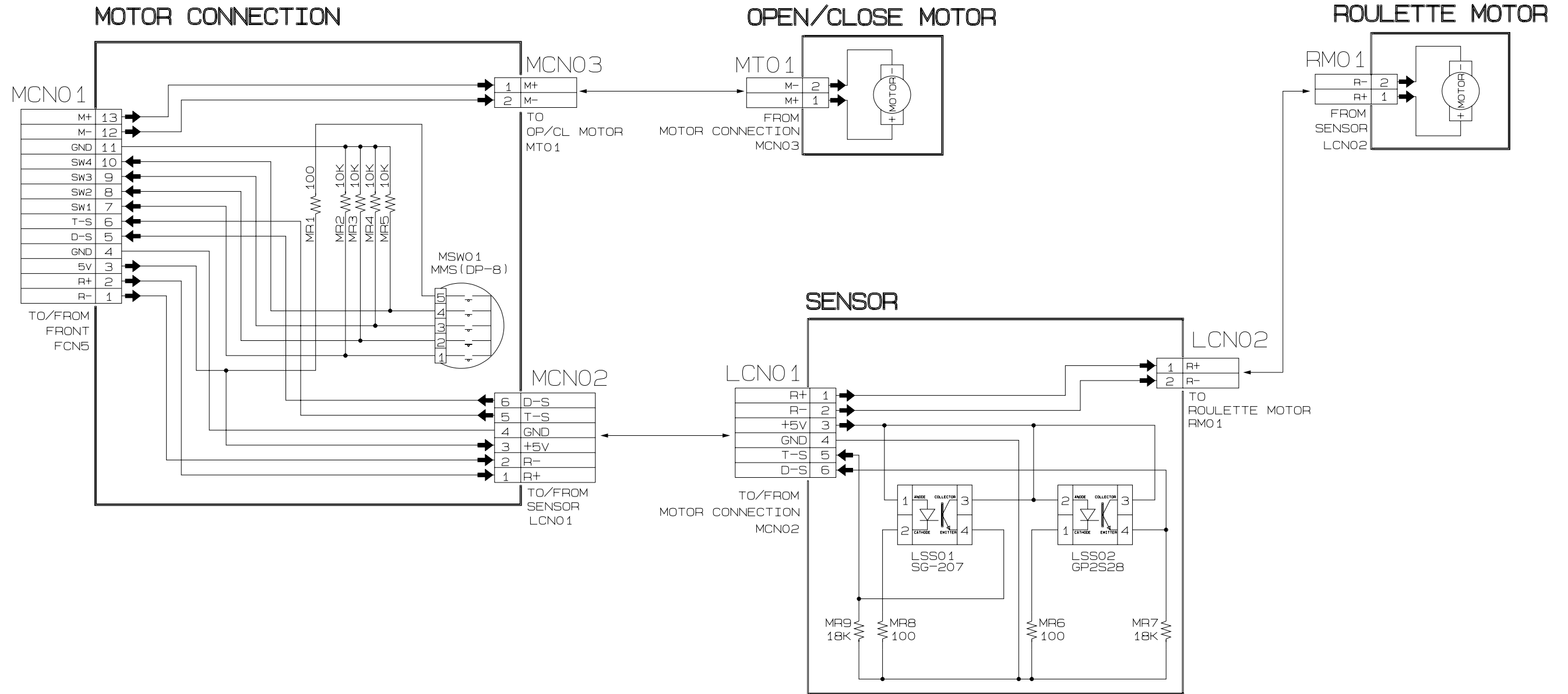
SELLINO_5CHANGER_LEFT_KEY



9-7 Deck



9-8 Motor Connection/Sensor



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MEMO