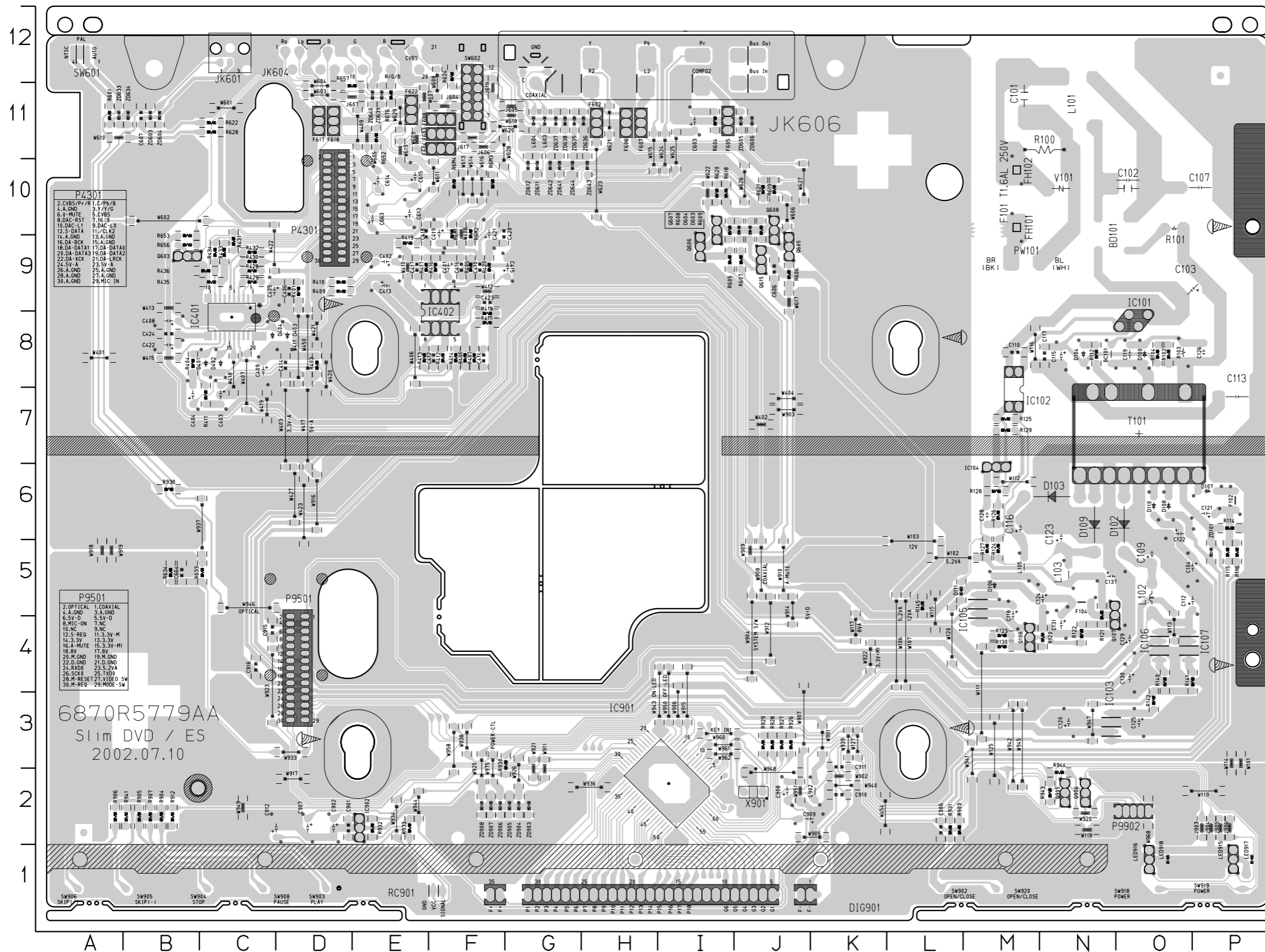


2. POWER, A/V, FRONT P.C.BOARD



LOCATION GUIDE

BC101	N8	D102	06	Q606	19	R633	C5
BD101	N9	D103	N6	Q607	110	R634	B5
C101	M11	D104	N8	Q608	J10	R652	E11
C102	010	D106	M5	Q615	J9	R653	B9
C103	P9	D107	P6	Q905	N2	R656	B9
C104	P5	D108	06	Q906	N2	R657	E11
C107	P10	D109	N6	R100	N11	R676	E11
C109	05	D110	06	R101	010	R6M1	F10
C110	M8	D111	L5	R102	08	R6M2	F10
C112	P5	D401	C8	R103	08	R6M3	F10
C113	P7	D402	C8	R104	08	R6M4	F10
C115	N8	D403	C8	R112	N8	R903	L2
C116	M6	D404	C8	R114	P6	R904	B2
C117	N8	D603	J10	R115	P5	R905	B2
C118	M5	D604	J10	R116	P5	R906	A2
C119	08	DIG901	J1	R120	N4	R907	B2
C120	N3	F102	P6	R121	N5	R912	B2
C121	P6	F104	N5	R122	N4	R926	J3
C122	06	F602	H11	R123	M4	R927	J3
C123	N6	F603	F11	R124	M5	R928	J3
C124	N5	F604	F11	R125	M7	R929	J3
C125	03	F605	I11	R126	M6	R930	G3
C126	P8	F606	H11	R127	M5	R931	L2
C128	M6	F607	H11	R128	M6	R932	E2
C129	04	F608	F11	R129	M7	R933	E2
C130	04	F617	D11	R130	M4	R938	B6
C131	N4	F618	D11	R140	04	R941	B2
C137	N5	F622	E11	R141	P4	R943	N2
C401	F9	FH101	M10	R142	03	R944	N2
C402	E9	FH102	M10	R145	L5	RC901	F1
C403	C7	IC101	08	R401	D9	SW601	A12
C404	B7	IC102	M7	R403	D8	SW602	F12
C405	C9	IC103	N3	R404	B8	SW902	L1
C406	D9	IC104	M6	R405	F9	SW903	D1
C408	B8	IC105	M5	R406	F8	SW904	B1
C409	C8	IC106	04	R407	F8	SW905	A1
C410	F9	IC107	04	R409	D9	SW906	A1
C411	F8	IC402	E9	R410	D9	SW908	C1
C412	F8	IC902	E2	R411	C7	SW918	01
C413	E9	J604	F11	R412	F8	SW919	P1
C414	D8	J605	G11	R413	E8	SW920	M1
C415	G9	J606	F11	R414	F8	T101	07
C416	F9	J607	E11	R415	F8	V101	N10
C417	E9	J617	F11	R416	F9	X901	J2
C418	E10	J618	F11	R417	E9	ZD101	P5
C419	F10	J903	P2	R418	F8	ZD603	B11
C420	F10	J904	P2	R419	E9	ZD604	B11
C421	F10	J905	P2	R420	F9	ZD605	J11
C422	B8	J906	P2	R428	C9	ZD606	J11
C423	F9	JK601	C12	R429	C9	ZD611	G10
C424	B8	JK604	C12	R430	C9	ZD612	G10
C603	I11	JK606	H12	R431	C9	ZD633	A11
C606	J9	L101	N11	R432	C9	ZD634	B11
C607	B11	L102	05	R433	C9	ZD635	G11
C613	E10	L103	N5	R434	C9	ZD636	H11
C614	E10	L105	M5	R435	C9	ZD637	G11
C615	E10	L603	G11	R436	C9	ZD638	G11
C663	E10	L604	G11	R601	A11	ZD639	E11
C664	B5	L902	K2	R604	I11	ZD640	E11
C901	D2	LED915	P1	R605	19	ZD641	G10
C902	D2	LED916	01	R606	J9	ZD642	G10
C906	L2	LED917	P1	R607	J9	ZD643	H10
C907	D2	LED918	01	R608	110	ZD644	G10
C908	J2	P4301	D10	R609	J10	ZD903	G2
C909	J2	P9501	D4	R618	110	ZD904	G2
C910	K2	P9902	02	R619	J10	ZD905	G2
C911	K3	PW101	M9	R620	110	ZD906	F2
C912	D2	Q107	N5	R621	J10	ZD907	F2
C915	C4	Q108	M4	R622	C11	ZD908	F2
C916	C4	Q603	B9	R624	F12		
D100	08	Q605	J9	R628	C11		

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

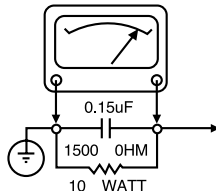
SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRECTED, A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD), AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECEIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUDING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES. DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS, HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLT-METER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMPS A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.

A.C. VOLTMETER



GOOD EARTH GROUND
SUCH AS THE WATER
PIPE, CONDUIT, ETC

PLACE THIS PROBE
ON EACH EXPOSED
METAL PART

SUBJECT: GRAPHIC SYMBOLS



THE LIGHTNING FLASH WITH APROWHEAD SYMBOL, WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.



THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSENTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRATION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED, THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDED ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCESSIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTEGRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.

2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBY-HOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the DVD covered by this service data and its supplements and addends, read and follow the **SAFETY PRECAUTIONS**. **NOTE :** if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publication, always follow the safety precautions.

Remembers Safety First:

General Servicing Precautions

1. Always unplug the DVD AC power cord from the AC power source before:
 - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
 - (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
 - (3) Connecting a test substitute in parallel with an electrolytic capacitor.

Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.
2. Do not spray chemicals on or near this DVD or any of its assemblies.
3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator. Unless specified otherwise in this service data, lubrication of contacts is not required.
4. Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
5. Do not apply AC power to this DVD and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an 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 (Note 1) should be more than 1M-ohm.

Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES 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 ES 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 ES devices.
4. Use only an anti-static solder removal device. Some solder removal devices not classified a "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES 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 ES devices. (Normally 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 ES device.)

DISASSEMBLY

CAUTION BEFORE STARTING SERVICING

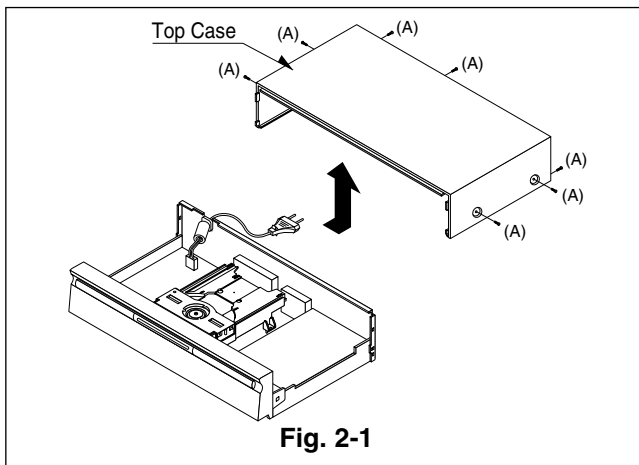
Electronic parts are susceptible to static electricity and may easily be damaged, so do not forget to take a proper grounding treatment as required.

Many screws are used inside the unit. To prevent missing, dropping, etc. of the screws, always use a magnetized screw driver in servicing. Several kinds of screws are used and some of them need special cautions. That is, take care of the tapping screws securing molded parts and fine pitch screws used to secure metal parts. If they are used improperly, the screw holes will be easily damaged and the parts can not be fixed.

CABINET DISASSEMBLY

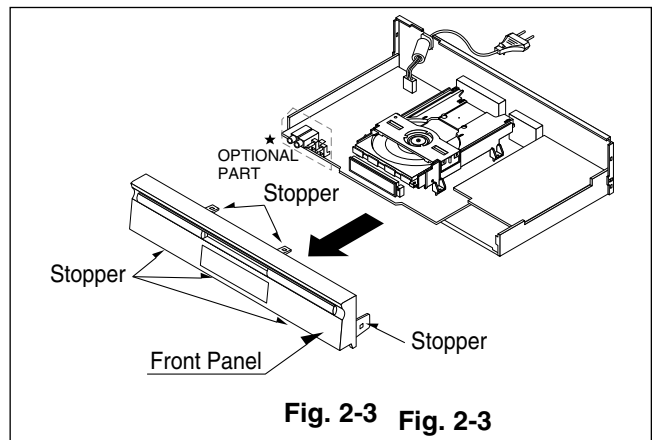
1. Top Case

1. Release 7 screws (A). (See Fig. 2-1)
2. Lift the top case with holding the back of it, and remove it in the direction of the arrow



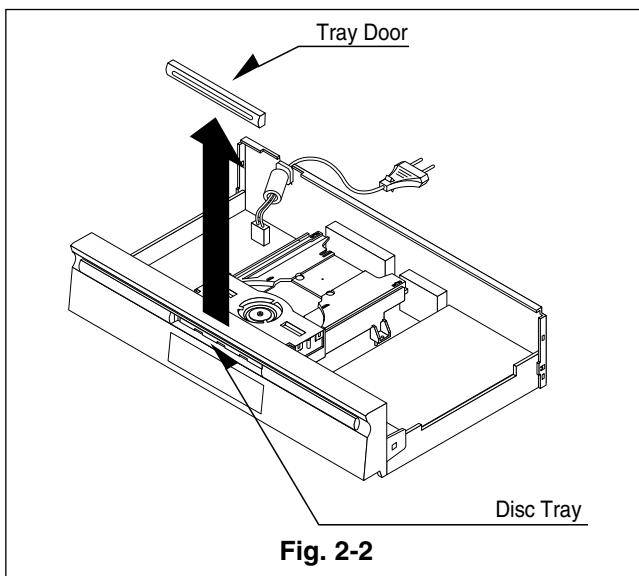
3. Front Panel

1. Eject the disc tray. (See Fig. 2-2)
2. Remove the tray door. (See Fig. 2-2)
3. Pull the front panel toward you while pressing 7 stoppers to disengage, and remove the front panel. (See Fig. 2-3)



2. Tray Door

1. Eject the disc tray.
2. Lift up the tray door in the direction of the arrow.

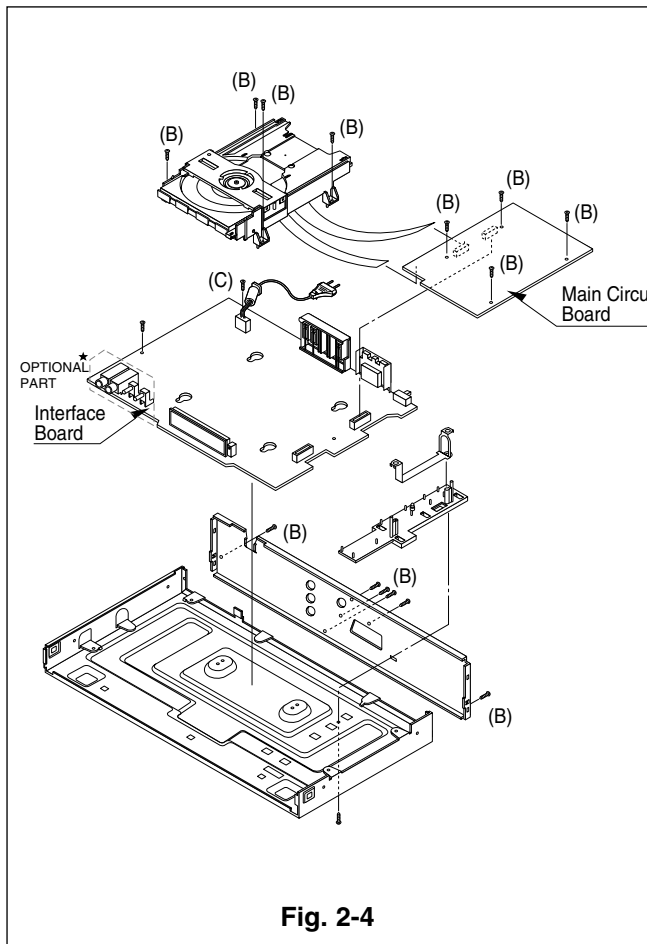


CIRCUIT BOARD DISASSEMBLY

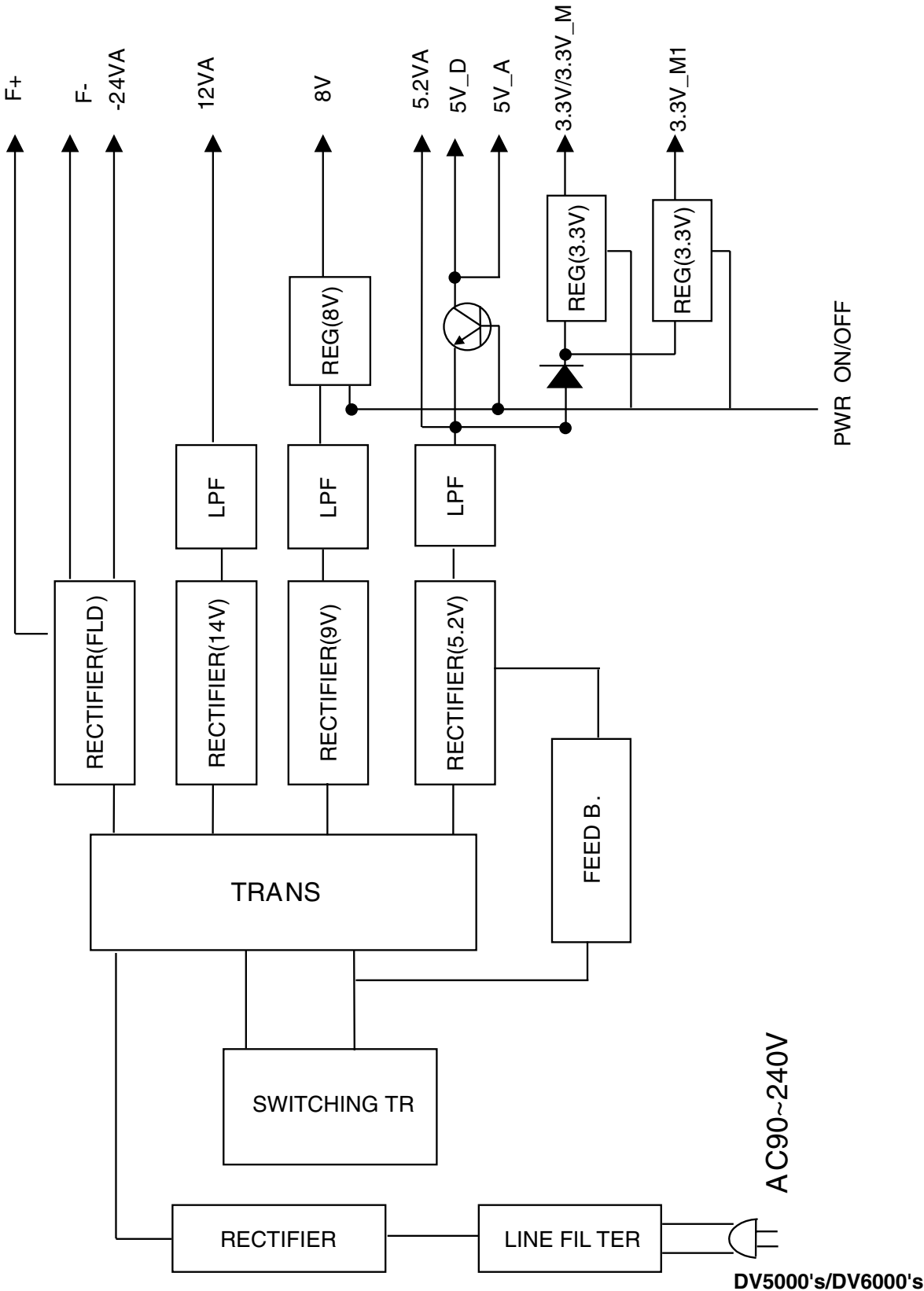
Note: Before removing the main circuit board, be sure to shortcircuit the laserdiode output land.
After replacing the main circuit board, open the land after inserting the flexible connector.
(Refer to Mechanism Disassembly)

1. Disassembling of Main Circuit Board and Interface Board

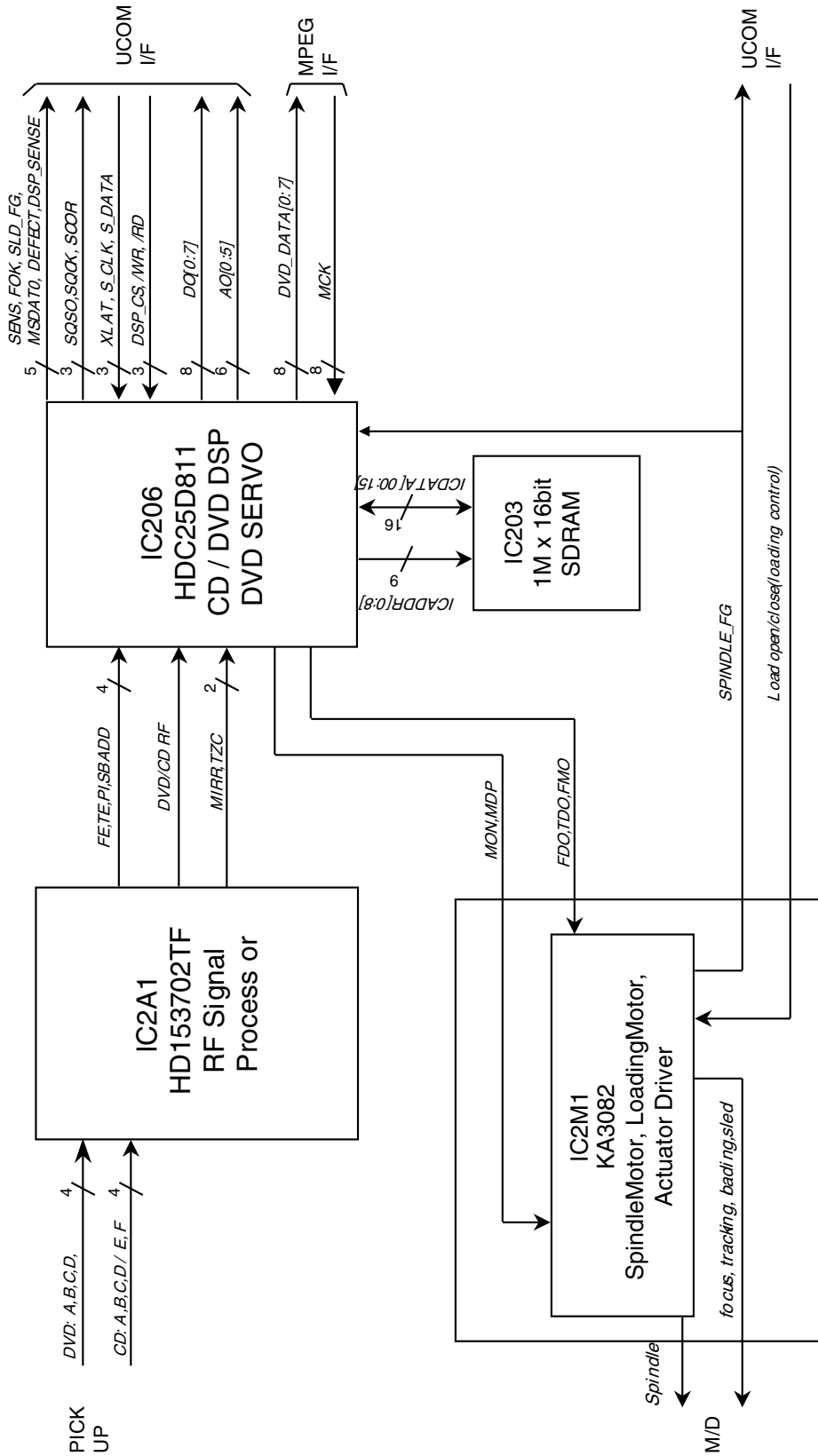
1. Remove the top case.(See Fig. 2-1)
2. Remove 14 screw (B).
3. Remove the Deck from Main Circuit Board.
4. Remove Main Circuit Board from Interface Board.
5. Remove 2 screw (C).
6. Remove Interface Board from the chassis.



2. Power(SMPS) Block Diagram

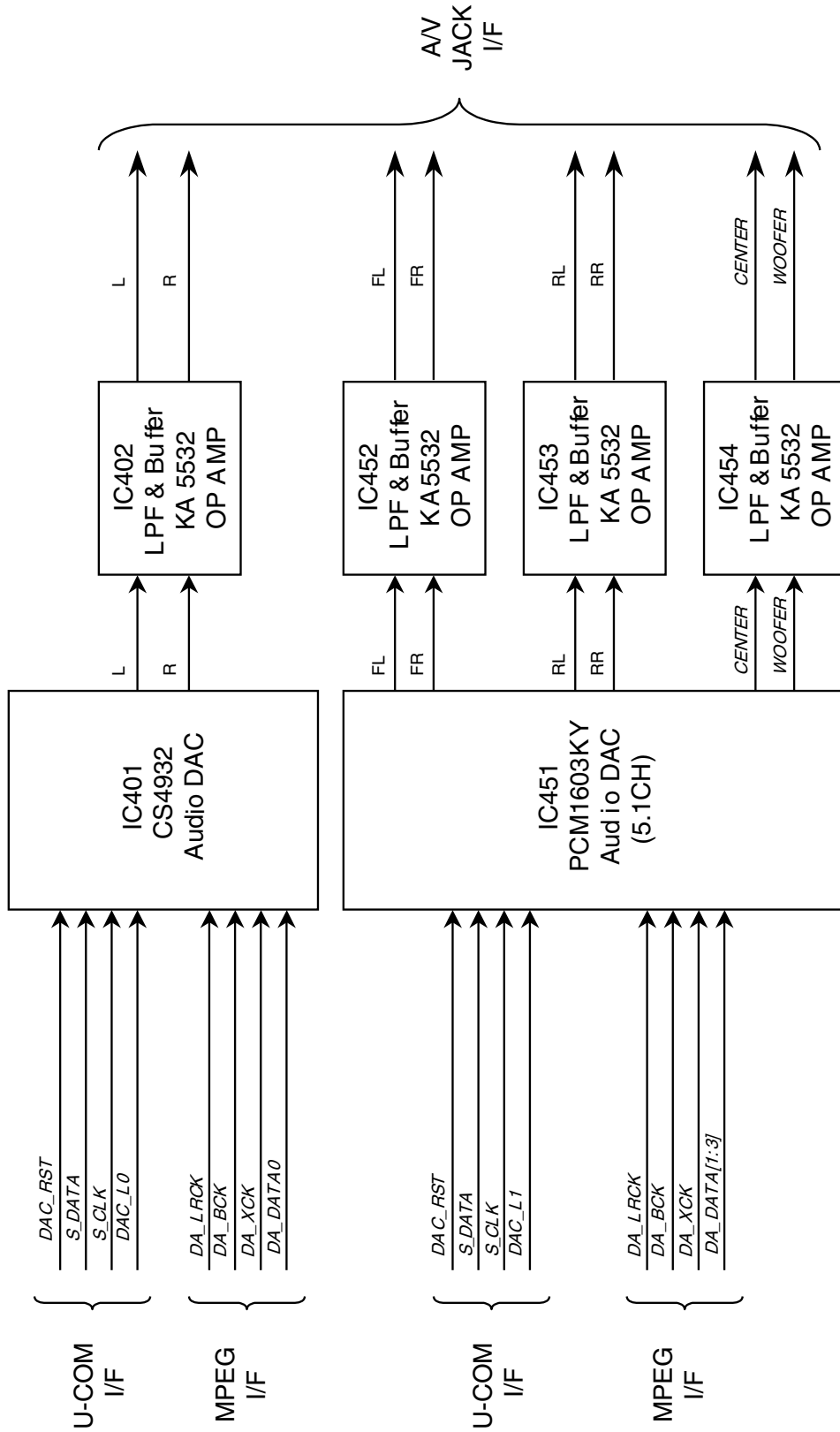


3. RF/CD DSP/DVD DSP/DVD SERVO Block Diagram



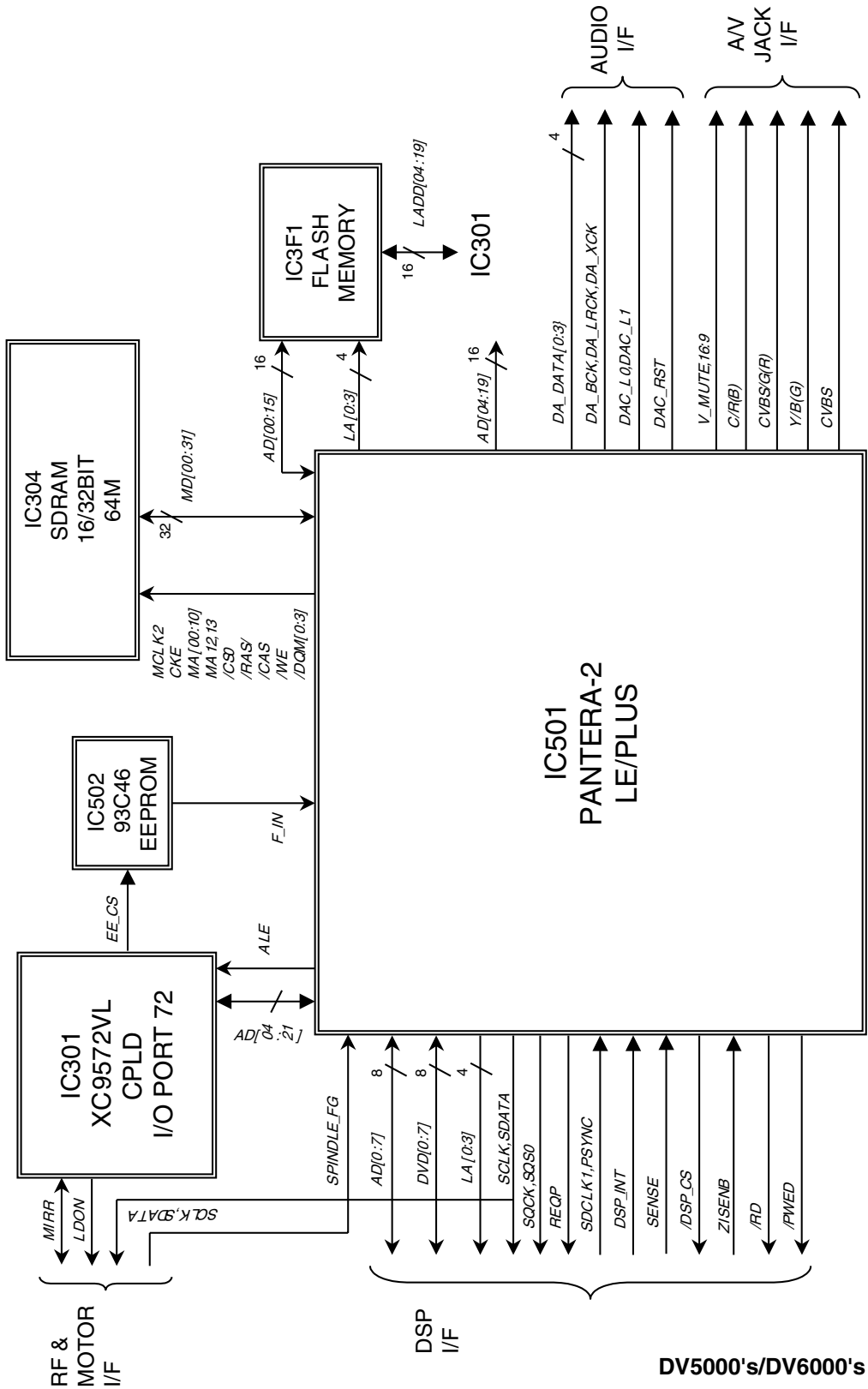
DV5000's/DV6000's

4. Audio Block Diagram



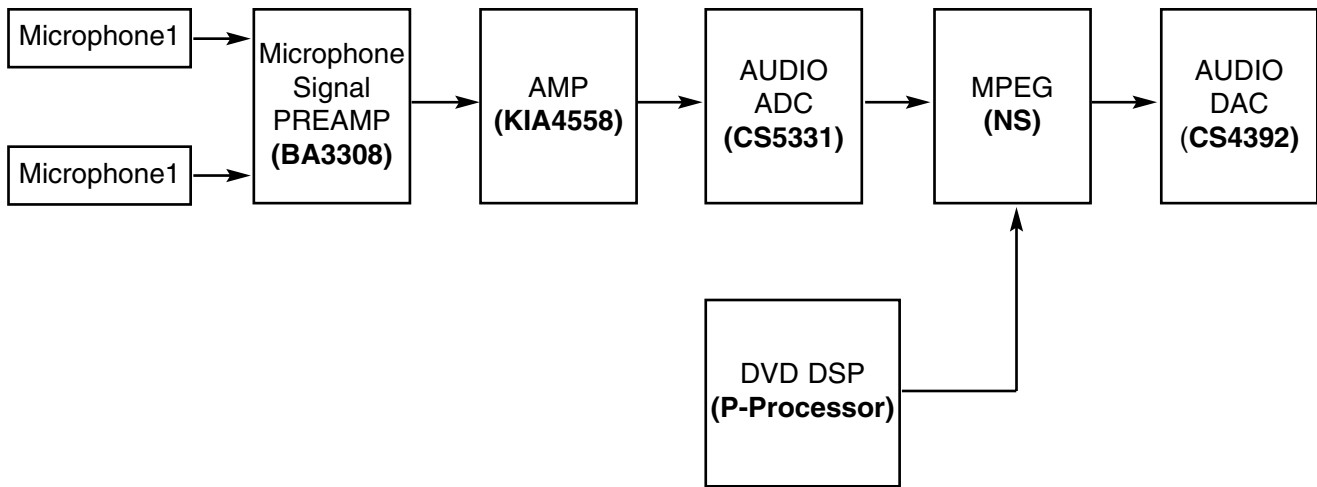
DV5000's/DV6000's

5. MPEG & MEMORY Block Diagram



DV5000's/DV6000's

6. KARAOKE Block Diagram(KARAOKE MODEL ONLY)



(Block Diagram)

- 1 The unit turns to KARAOKE MODE with on-screen lyrics display and melody sound when it plays back VCD or DVD KARAOKE DISC.
2. IF a microphone is connected at this time, MICON recognizes the connection and prepares the composition of external voice and internal melody.
3. The weak signal of the microphone is converted to the digital signal after voice output that has passed through PREAMP(BA3308) and AMP(KIA4558) passes through(CS5331) that is Audio ADC(Analog to Digital converter).
4. This digital signal enters NS that is MPEG IC and is added to the output of DVD DSP (Processor)
5. This mixed signal is output to AV JACK after passing through AUDIO DAC(CS4392).

CIRCUIT DIAGRAM

1. POWER(SMPS) CIRCUIT DIAGRAM

IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE LG ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIR-

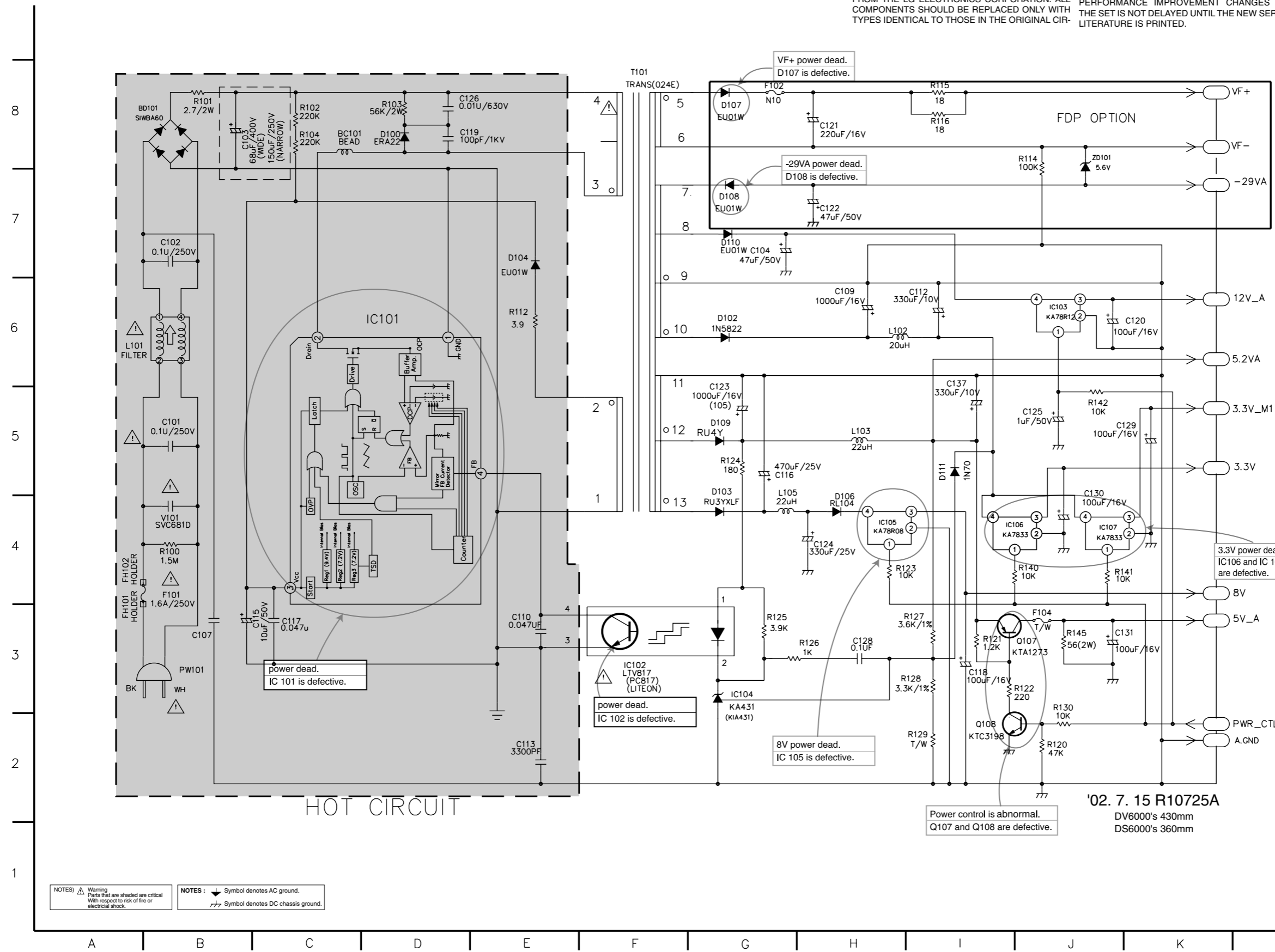
CUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION. THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded (■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.

LOCATION GUIDE

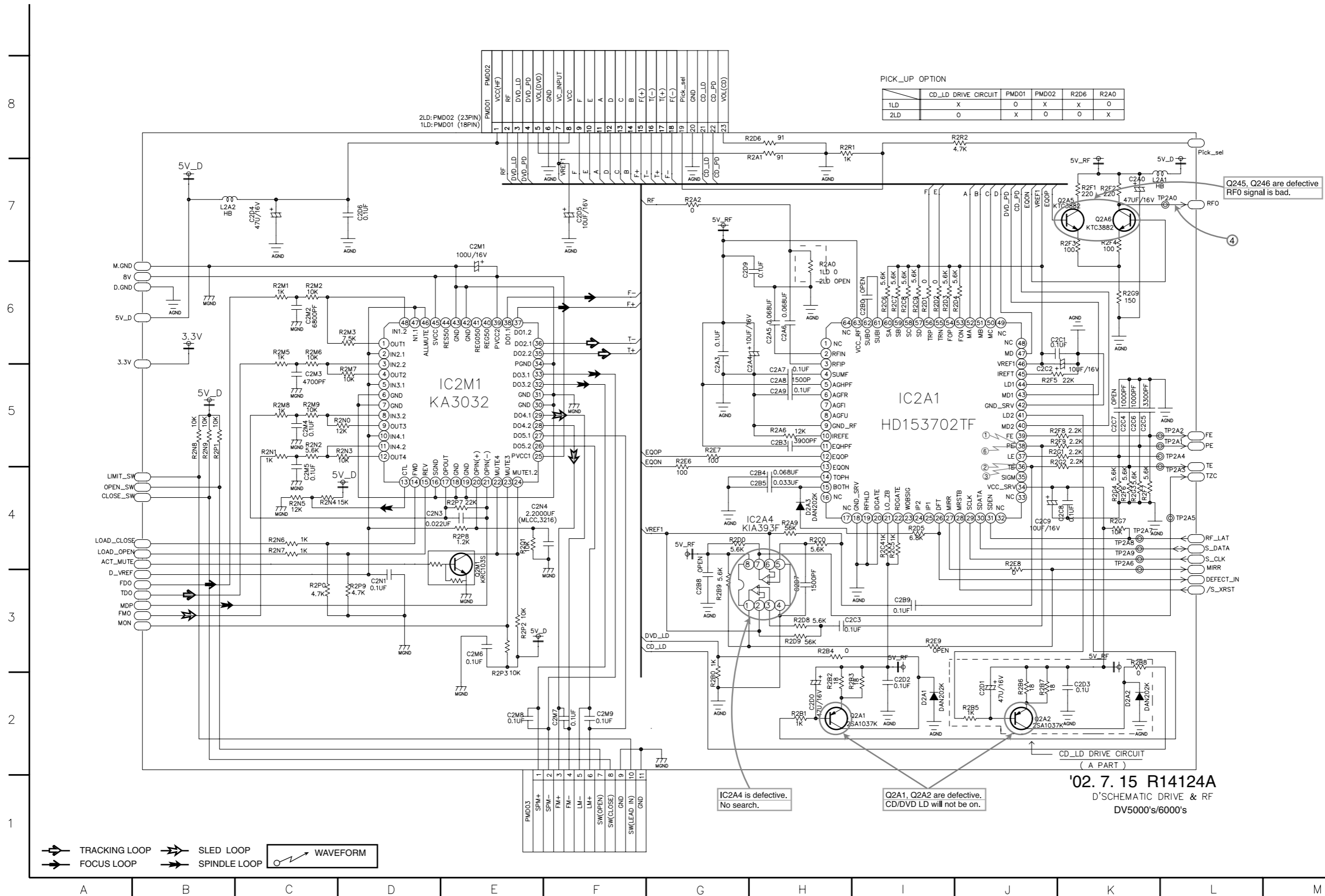
BC101	C8	R127	H3
BD101	A8	R128	H3
C101	B5	R129	I2
C102	B7	R130	J3
C103	B8	R140	J4
C104	G7	R141	J4
C107	B3	R142	J5
C109	H6	R145	J3
C110	E3	T101	F8
C112	I6	V101	B4
C113	E2	VF+	K8
C115	C3	VF-	K8
C116	G5	ZD101	J8
C117	C3		
C118	I3		
C119	D8		
C120	K6		
C121	H8		
C122	H7		
C123	G5		
C124	H4		
C125	J5		
C126	D8		
C128	H3		
C129	J5		
C130	J4		
C131	J3		
C137	I6		
D100	D8		
D102	G6		
D103	G5		
D104	E7		
D106	H4		
D107	G8		
D108	G7		
D109	G5		
D110	G7		
D111	I5		
F102	G8		
F104	J3		
FH101	A3		
FH102	A4		
IC101	D6		
IC102	F3		
IC103	J6		
IC104	G3		
IC105	H4		
IC106	I4		
IC107	J4		
L101	A6		
L102	H6		
L103	H5		
L105	G5		
PW101	B3		
PWR_CTL1	J3		
Q107	J3		
Q108	I2		
R100	B4		
R101	B8		
R102	C8		
R103	D8		
R104	C8		
R112	E6		
R114	J8		
R115	I8		
R116	I8		
R120	J2		
R121	I3		
R122	J3		
R123	H4		
R124	G5		
R125	G3		
R126	H3		



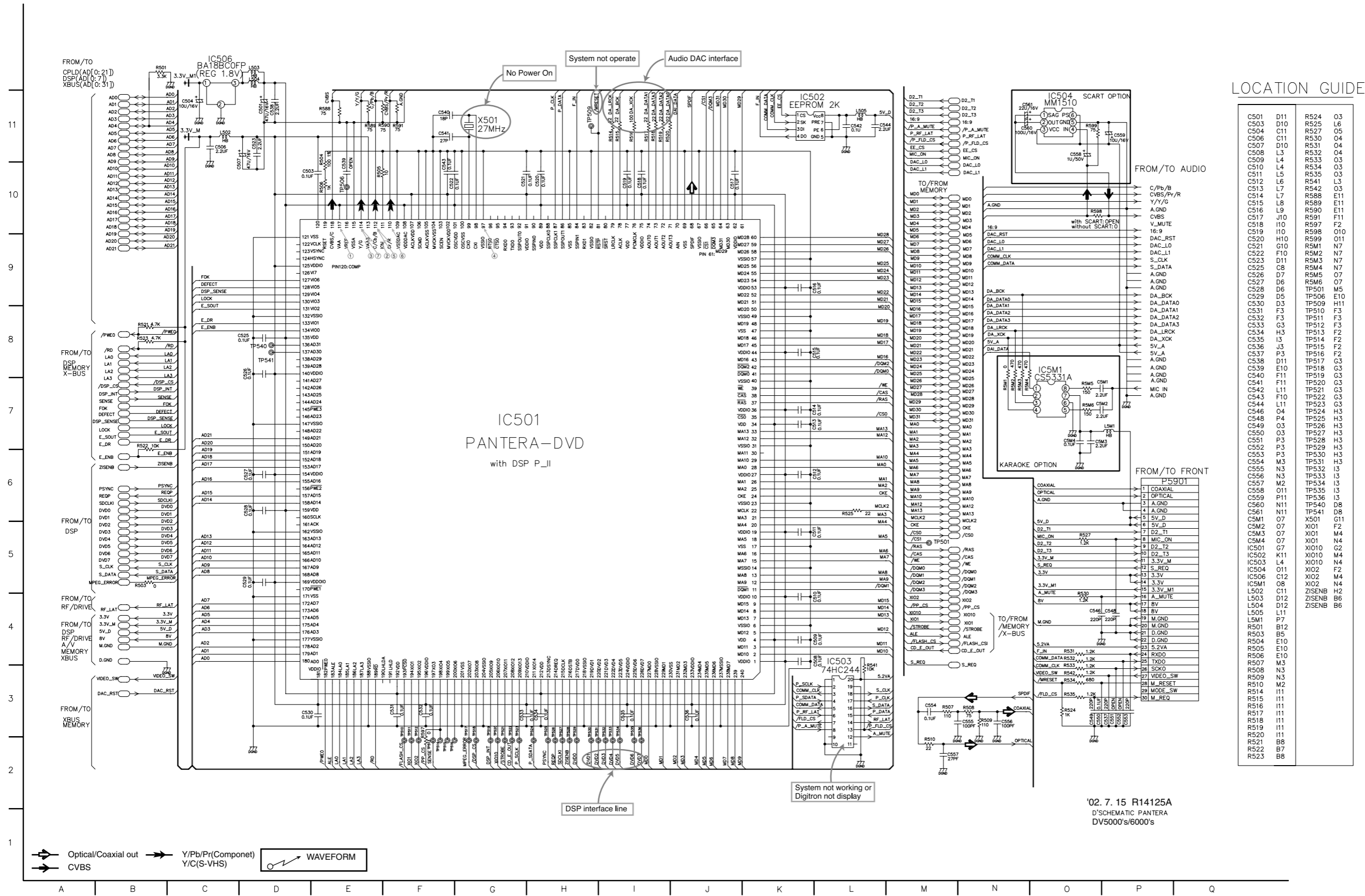
NOTES: ⚠ Warning Parts that are shaded are critical With respect to risk of fire or electrical shock.

NOTES: ⚡ Symbol denotes AC ground. ⚡ Symbol denotes DC chassis ground.

3. DRIVE & RF CIRCUIT DIAGRAM



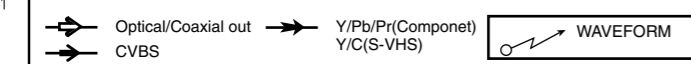
4. MPEG CIRCUIT DIAGRAM



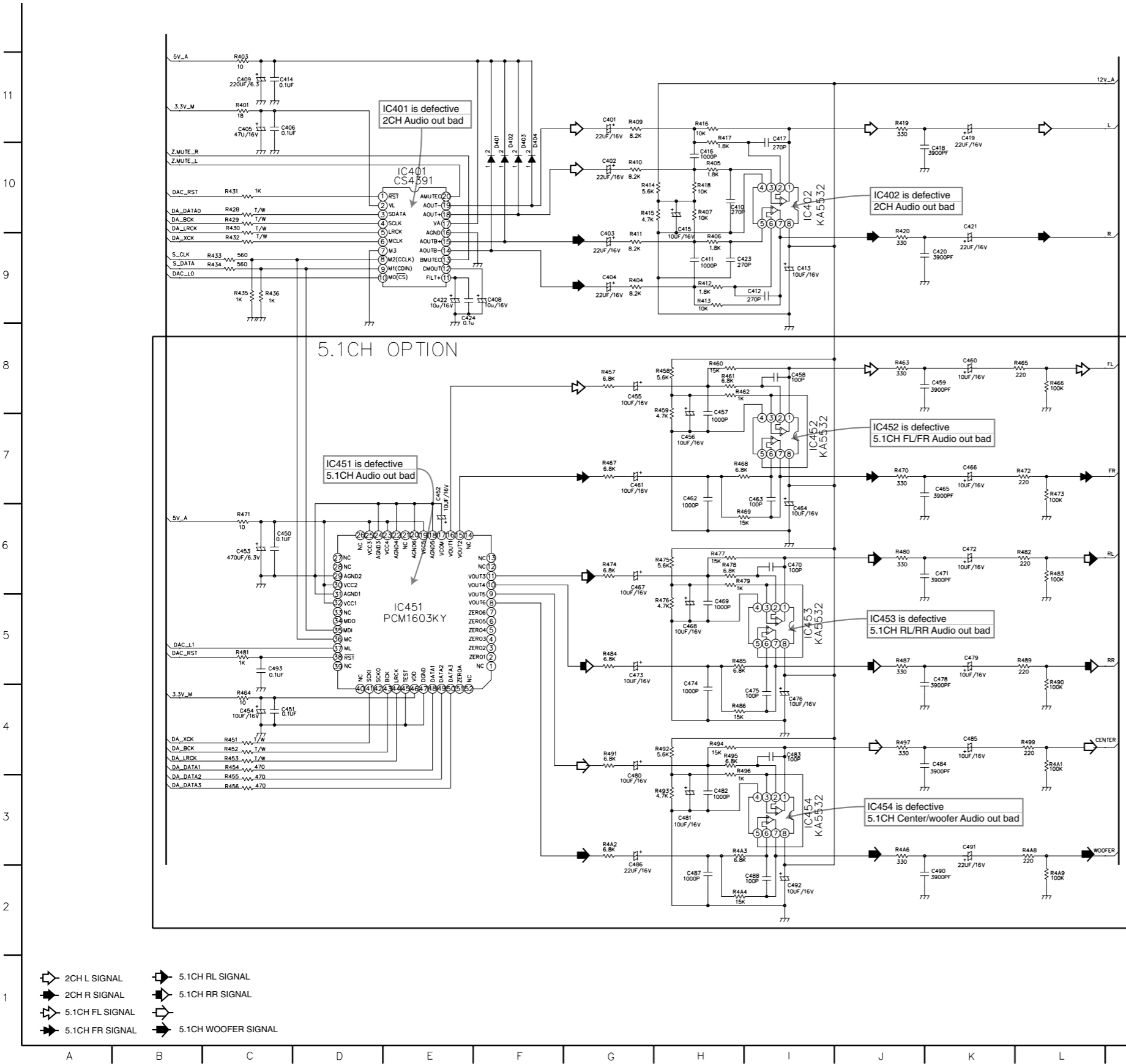
LOCATION GUIDE

C501	D11	R524	O3
C503	D10	R525	L6
C504	C11	R527	O5
C506	C11	R530	O4
C507	D10	R531	O4
C508	L3	R532	O4
C509	L4	R533	O3
C510	L4	R534	O3
C511	L5	R535	O3
C512	L6	R541	L3
C513	L7	R542	O3
C514	L7	R588	E11
C515	L8	R589	E11
C516	L9	R590	E11
C517	J10	R591	F11
C518	I01	R597	F2
C519	I10	R598	O10
C520	H10	R599	O11
C521	G10	R5M1	N7
C522	F10	R5M2	N7
C523	D11	R5M3	N7
C524	C8	R5M4	N7
C525	C8	R5M5	O7
C526	D7	R5M6	O7
C527	D6	R5M7	O7
C528	D6	TP501	M5
C529	D5	TP506	E10
C530	D3	TP509	H11
C531	F3	TP510	F3
C532	F3	TP511	F3
C533	G3	TP512	F3
C534	H3	TP513	F2
C535	I3	TP514	F2
C536	J3	TP515	F2
C537	F3	TP516	F2
C538	D11	TP517	G3
C539	E10	TP518	G3
C540	F11	TP519	G3
C541	F11	TP520	G3
C542	L11	TP521	G3
C543	F10	TP522	G3
C544	L11	TP523	G3
C546	O4	TP524	H3
C548	P4	TP525	H3
C549	O3	TP526	H3
C550	O3	TP527	H3
C551	P3	TP528	H3
C552	P3	TP529	H3
C553	P3	TP530	H3
C554	M3	TP531	H3
C555	N3	TP532	I3
C556	N3	TP533	I3
C557	M2	TP534	I3
C558	O11	TP535	I3
C559	P11	TP536	I3
C560	N11	TP540	D8
C561	N11	TP541	D8
C5M1	O7	X501	F11
C5M2	O7	X101	G2
C5M3	O7	X101	M4
C5M4	O7	X101	N4
IC501	G7	X1010	G2
IC502	K11	X1010	M4
IC503	L4	X1010	N4
IC504	O11	X102	F2
IC506	C12	X102	M4
IC5M1	O8	X102	N4
L502	C11	ZISENB	H2
L503	D12	ZISENB	B6
L504	D12	ZISENB	B6
L505	L11		
L5M1	P7		
R501	B12		
R503	B5		
R504	E10		
R505	E10		
R506	E10		
R507	M3		
R508	N3		
R509	N3		
R510	M2		
R514	I11		
R515	I11		
R516	I11		
R517	I11		
R518	I11		
R519	I11		
R520	I11		
R521	B8		
R522	B7		
R523	B8		

'02. 7. 15 R14125A
D'SCHEMATIC PANTERA
DV5000's/6000's

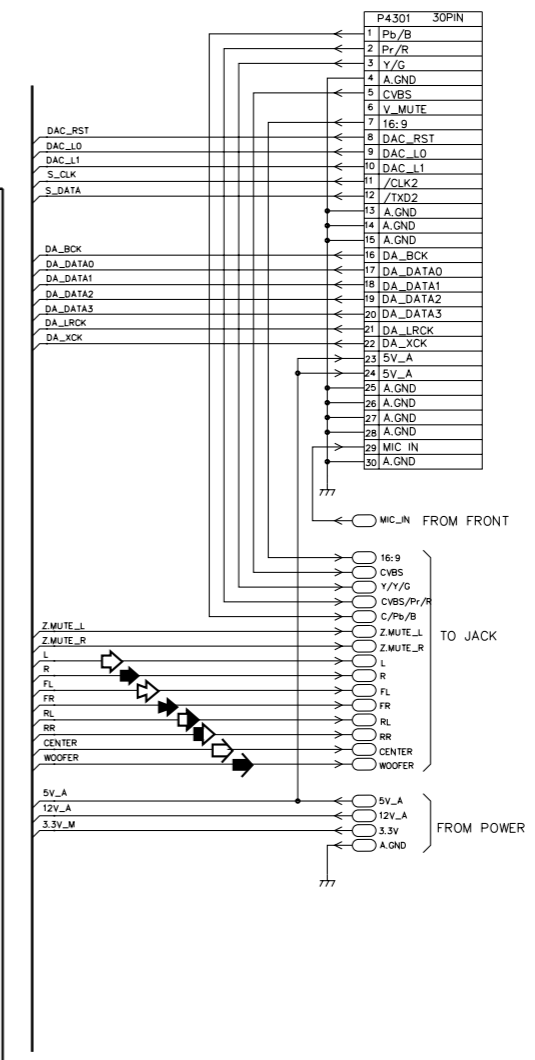


5. AUDIO CIRCUIT DIAGRAM



LOCATION GUIDE

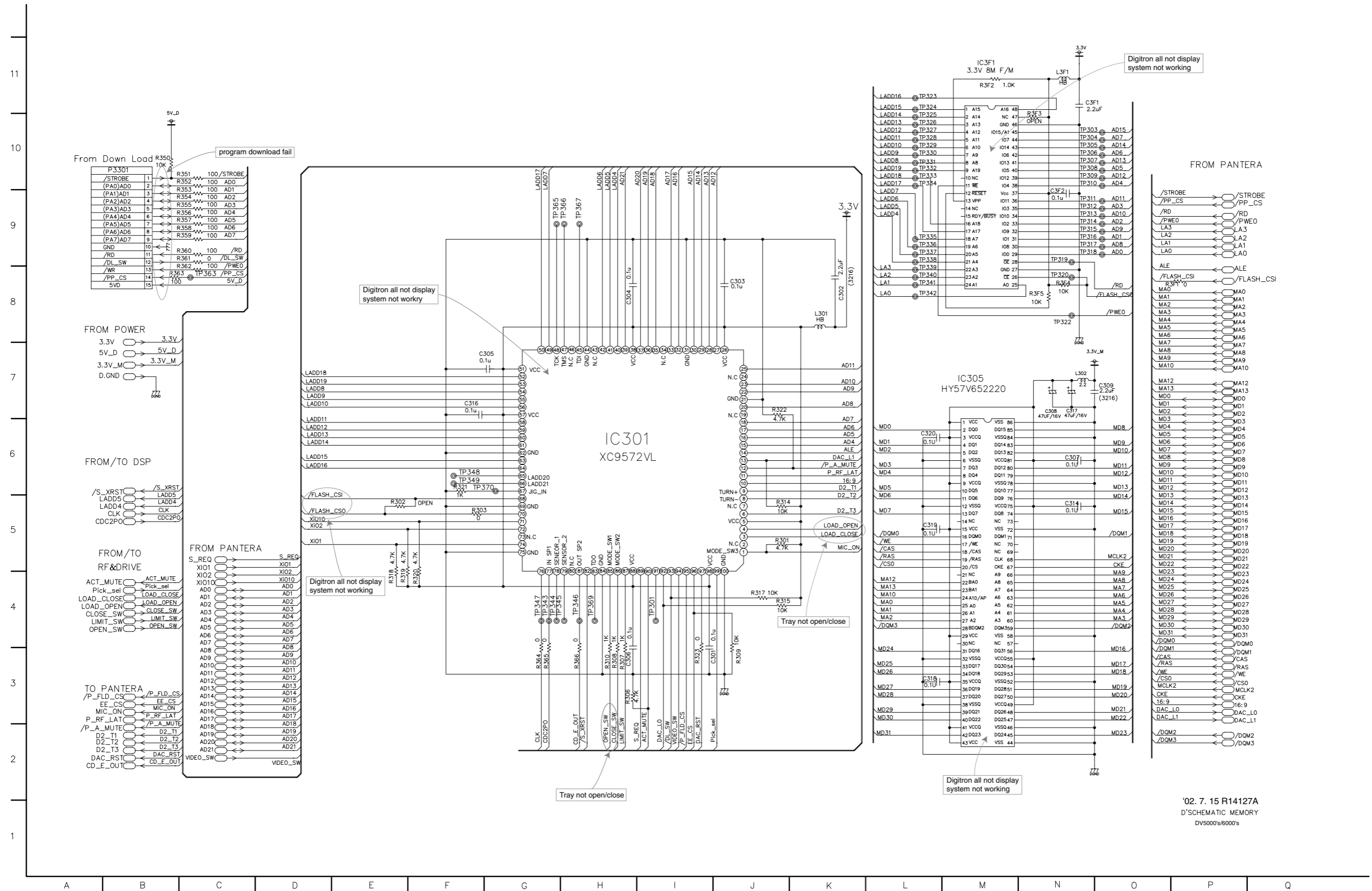
C401	G11	R407	H10
C402	G10	R409	G11
C403	G9	R410	G10
C404	G9	R411	G9
C405	C11	R412	H9
C406	C11	R413	H9
C408	F11	R414	G10
C409	C11	R415	G10
C410	H10	R416	H11
C411	H9	R417	H11
C412	I9	R418	H10
C413	I9	R419	J11
C414	C11	R420	J9
C415	H10	R428	C10
C416	H10	R429	C10
C417	I11	R430	C10
C418	K10	R431	C10
C419	K11	R432	C9
C420	K9	R433	C9
C421	K10	R434	C9
C422	E9	R435	C9
C423	H9	R436	C9
C424	E9	R451	C4
C450	C6	R452	C4
C451	C4	R453	C4
C452	E7	R454	C4
C453	C6	R455	C3
C454	C4	R456	C3
C455	G8	R457	G8
C456	H7	R458	H8
C457	H7	R459	H8
C458	I8	R460	H8
C459	K8	R461	H8
C460	K8	R462	H8
C461	G7	R463	J8
C462	H7	R464	C4
C463	I7	R465	K8
C464	I6	R466	L8
C465	K7	R467	G7
C466	K7	R468	H7
C467	G6	R469	H6
C468	H5	R470	J7
C469	H5	R471	C6
C470	I6	R472	L7
C471	K6	R473	L7
C472	K6	R474	G6
C473	G5	R475	H6
C474	H4	R476	H5
C475	I4	R477	H6
C476	I4	R478	H6
C478	K5	R479	H6
C479	K5	R480	J6
C480	G3	R481	C5
C481	H3	R482	L6
C482	H3	R483	L6
C483	I4	R484	G5
C484	K4	R485	H5
C485	K4	R486	H4
C486	G2	R487	J5
C487	H2	R489	L5
C488	I2	R490	L5
C490	K2	R491	G4
C491	K3	R492	H4
C492	I2	R493	H3
C493	C5	R494	H4
D401	F10	R495	H4
D402	F10	R496	H4
D403	F10	R497	J4
D404	F10	R499	L4
IC401	E10	R4A1	L4
IC402	I10	R4A2	G3
IC451	E5	R4A3	H3
IC452	I7	R4A4	H2
IC453	I5	R4A6	J3
IC454	I3	R4A8	L3
MIC_IN	O6	R4A9	L2
P4301	O9		
R401	C11		
R403	C11		
R404	G9		
R405	H10		
R406	H9		



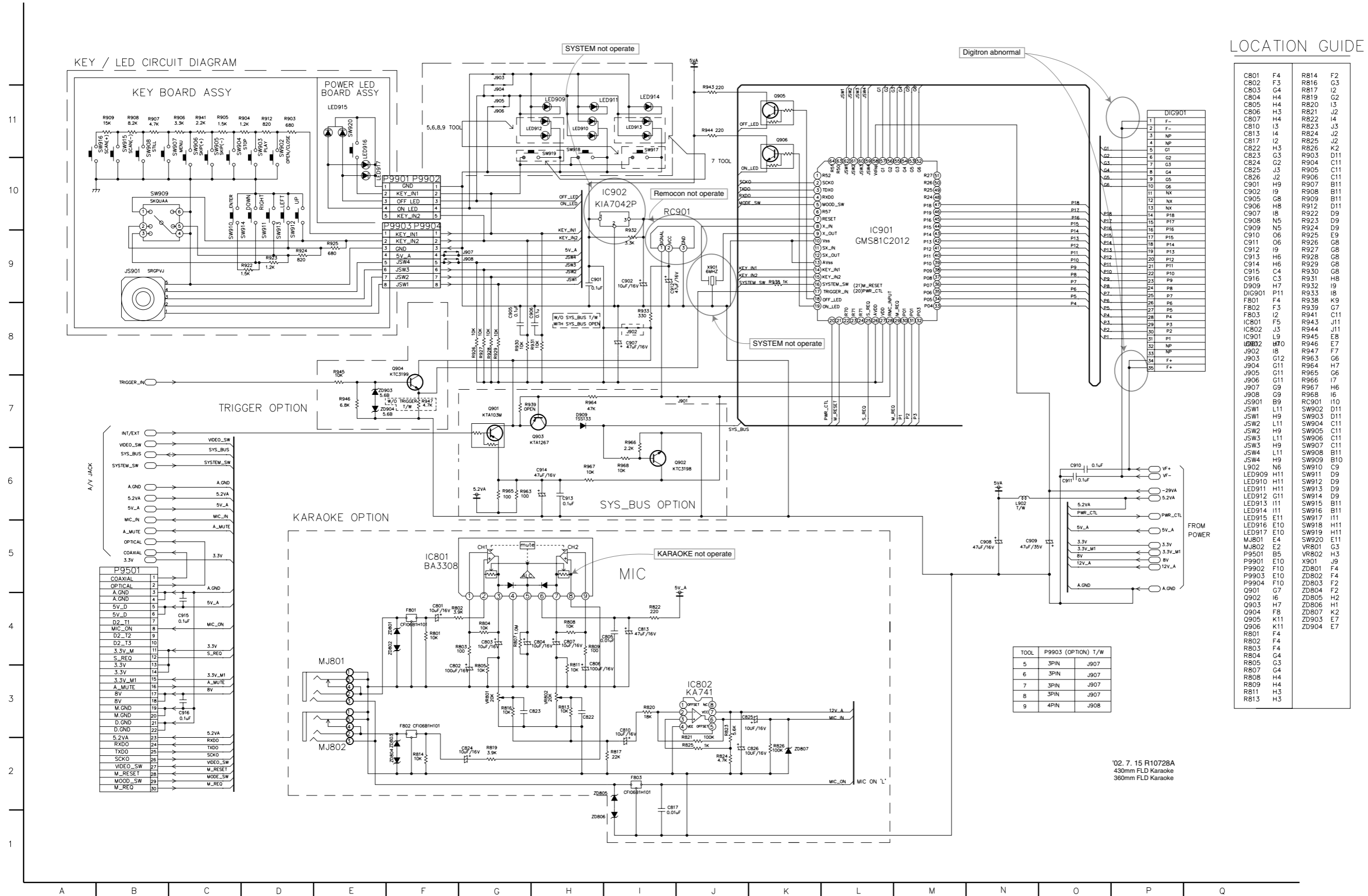
- ◁ 2CH L SIGNAL
- ◁ 2CH R SIGNAL
- ◁ 5.1CH FL SIGNAL
- ◁ 5.1CH FR SIGNAL
- ◁ 5.1CH RL SIGNAL
- ◁ 5.1CH RR SIGNAL
- ◁ 5.1CH WOOFER SIGNAL

'02. 7. 15 R10726A
DV6000's 430mm/DS6000's 360mm

6. MEMORY CIRCUIT DIAGRAM



7. FRONT & MIC CIRCUIT DIAGRAM



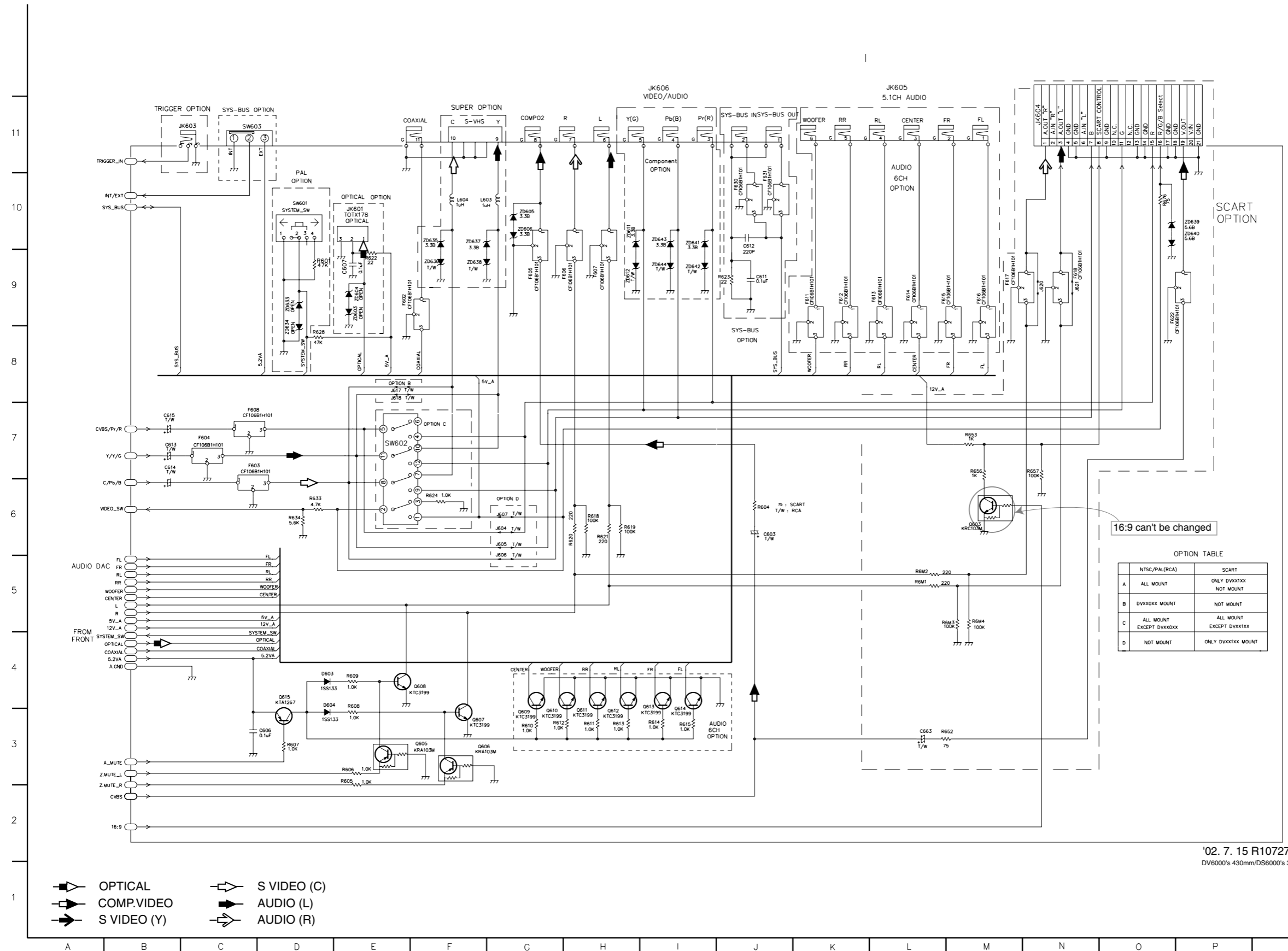
LOCATION GUIDE

C801	F4	R814	F2
C802	F3	R816	G3
C803	G4	R817	I2
C804	H4	R819	G2
C805	H4	R820	I3
C806	H3	R821	J2
C807	H4	R822	I4
C810	I3	R823	J3
C813	I4	R824	J2
C817	I2	R825	J2
C822	H3	R826	K2
C823	G3	R903	D11
C824	G2	R904	C11
C825	J3	R905	C11
C826	J2	R906	C11
C901	H9	R907	B11
C902	I9	R908	B11
C905	H8	R909	B11
C906	H8	R912	D11
C907	I8	R922	D9
C908	N5	R923	D9
C909	N5	R924	D9
C910	O6	R925	E9
C911	O6	R926	G8
C912	I9	R927	G8
C913	H6	R928	G8
C914	H6	R929	G8
C915	C4	R930	G8
C916	C3	R931	H8
D909	H7	R932	I9
DIG901	P11	R933	I8
F801	F4	R938	K9
F802	F3	R939	G7
F803	I2	R941	C11
IC801	F5	R943	J11
IC802	J3	R944	J11
IC901	L9	R945	E8
IC902	H70	R946	E7
J902	I8	R947	F7
J903	G12	R963	G6
J904	G11	R964	H7
J905	C11	R965	G6
J906	G11	R966	I7
J907	C9	R967	H6
J908	C9	R968	I6
JS901	B9	RC901	I10
JSW1	L11	SW902	D11
JSW1	H9	SW903	D11
JSW2	L11	SW904	C11
JSW2	H9	SW905	C11
JSW3	L11	SW906	C11
JSW3	H9	SW907	C11
JSW4	L11	SW908	B11
JSW4	H9	SW909	B10
L902	H6	SW910	C9
LED909	H11	SW911	D9
LED910	H11	SW912	D9
LED911	H11	SW913	D9
LED912	G11	SW914	D9
LED913	I11	SW915	B11
LED914	I11	SW916	B11
LED915	E11	SW917	I11
LED916	E10	SW918	H11
LED917	E10	SW919	H11
MJ801	E4	SW920	E11
MJ802	E2	VR801	G3
P9501	B5	VR802	H3
P9901	E10	X901	J9
P9902	F10	ZD801	F4
P9903	E10	ZD802	F4
P9904	F10	ZD803	F2
Q901	G7	ZD804	F2
Q902	I6	ZD805	H2
Q903	H7	ZD806	H1
Q904	F8	ZD807	K2
Q905	K11	ZD903	E7
Q906	K11	ZD904	E7
R801	F4		
R802	F4		
R803	F4		
R804	G4		
R805	G3		
R807	G4		
R808	H4		
R809	H4		
R811	H3		
R813	H3		

TOOL	P9903 (OPTION) T/W
5	3PIN J907
6	3PIN J907
7	3PIN J907
8	3PIN J907
9	4PIN J908

'02. 7. 15 R10728A
430mm FLD Karaoke
360mm FLD Karaoke

8. A/V JACK CIRCUIT DIAGRAM



LOCATION GUIDE

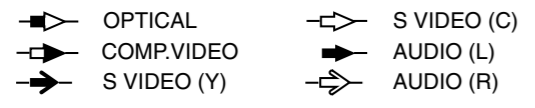
C603	J6	R656	M7
C606	D3	R657	N7
C607	E9	R676	O10
C611	J9	REM1	L5
C612	J10	REM2	L5
C613	B7	REM3	L5
C614	B7	REM4	M5
C615	B7	SW601	D10
C663	L3	SW602	E7
D603	D4	SW603	C11
D604	D4	ZD603	E9
F602	E9	ZD604	E9
F603	C7	ZD605	G10
F604	C7	ZD606	G10
F605	G9	ZD611	H10
F606	H9	ZD612	H9
F607	H9	ZD633	D9
F608	C7	ZD634	D8
F611	K9	ZD635	F10
F612	K9	ZD636	F9
F613	L9	ZD637	F10
F614	L9	ZD638	F9
F615	L9	ZD639	P10
F616	M9	ZD640	P10
F617	M9	ZD641	I10
F618	N9	ZD642	I9
F622	O9	ZD643	I10
F630	J10	ZD644	I9
F631	J10		
J604	G6		
J605	G6		
J606	C5		
J607	G6		
J617	E8		
J618	E8		
J620	N9		
J621	N9		
JK601	E10		
JK603	B11		
JK604	N11		
JK605	L12		
JK606	I12		
L603	F10		
L604	F10		
O603	M6		
Q605	F3		
Q606	F3		
Q607	F3		
Q608	F4		
Q609	G3		
Q610	G3		
Q611	H3		
Q612	H3		
Q613	I4		
Q614	I3		
Q615	D4		
R601	D9		
R604	J6		
R605	E3		
R606	E3		
R607	D3		
R608	E4		
R609	E4		
R610	G3		
R611	H3		
R612	G3		
R613	H3		
R614	I3		
R615	I3		
R618	H6		
R619	H6		
R620	H6		
R621	H6		
R622	E9		
R623	J9		
R624	F6		
R628	D8		
R633	D6		
R634	D6		
R652	L3		
R653	M7		

16:9 can't be changed

OPTION TABLE

	NTSC/PAL(RCA)	SCART
A	ALL MOUNT	ONLY DVXXXIXX NOT MOUNT
B	DVXXXIXX MOUNT	NOT MOUNT
C	ALL MOUNT EXCEPT DVXXXIXX	ALL MOUNT EXCEPT DVXXXIXX
D	NOT MOUNT	ONLY DVXXXIXX MOUNT

'02. 7. 15 R10727A
DV6000's 430mm/DS6000's 360mm

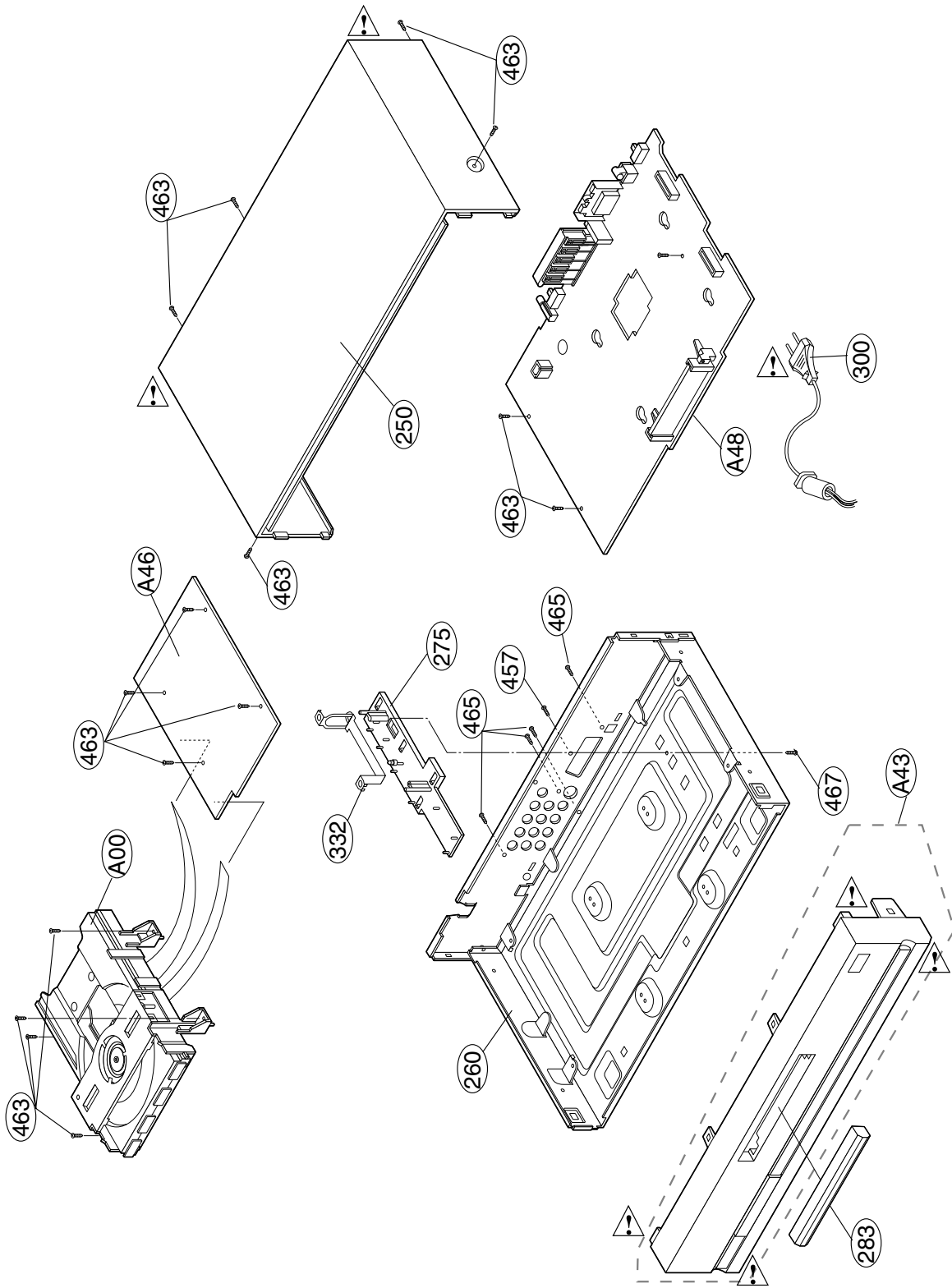


EXPLODED VIEWS

1. Cabinet and Main Frame Section

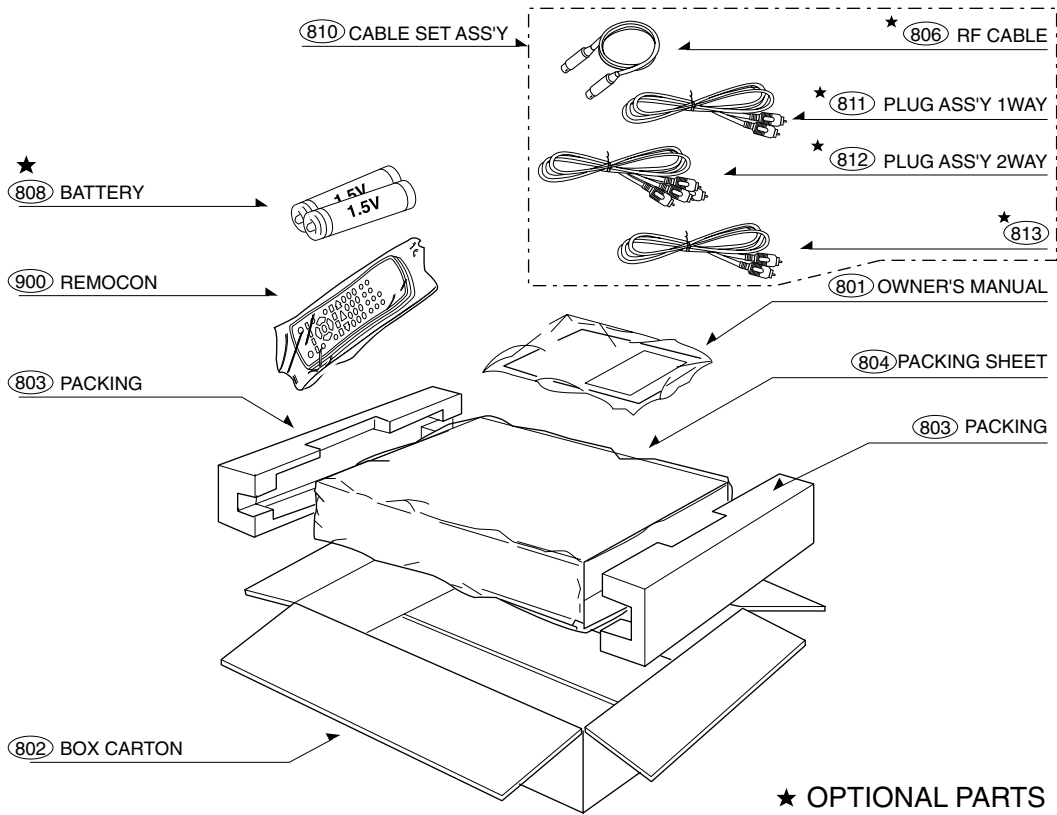
★ OPTIONAL PART

5
4
3
2
1



A B C D

2. Packing Accessory Section



• Packing Accessory Section Part List

MODEL:(A)DS6512E1

S	AL	LOCA.NO	PART NO(LG)	A	DESCRIPTION	SPECIFICATION	REMARKS
		801	3835RS0041M	O	INSTRUCTION ASSEMBLY	DS6512E1_HA3FLL	
		802	3890R-H796B	O	BOX	DS6512E1 HA3FLL SWW3-A 0.799 4	
		803	3920R-E060A	O	PACKING,CASING	DS6000 0.02 60 EPS 5 ? ?	
		804	292-053A	O	BAG	SOFT(VCP)	NSP
		808	841-0021	O	BATTERY,MN	ER03X HI WATT 1.5V .MA/H AAA	
		810	6851RP0003N	O	CABLE ASSY,RF	DVD CABLE ASSY,RCA USING AREA	
		811	6611R1G001A	O	PLUG ASSY	1WAY YELLOW GLOBAL	
		812	6611R2G001A	O	PLUG ASSY	2WAY RED/WHITE GLOBAL	
		900	6711R1P040A	O	REMOTE CONTROLLER ASSEMBLY	N6 UNIFIED DV5812E LG	

DECK MECHANISM DISASSEMBLY

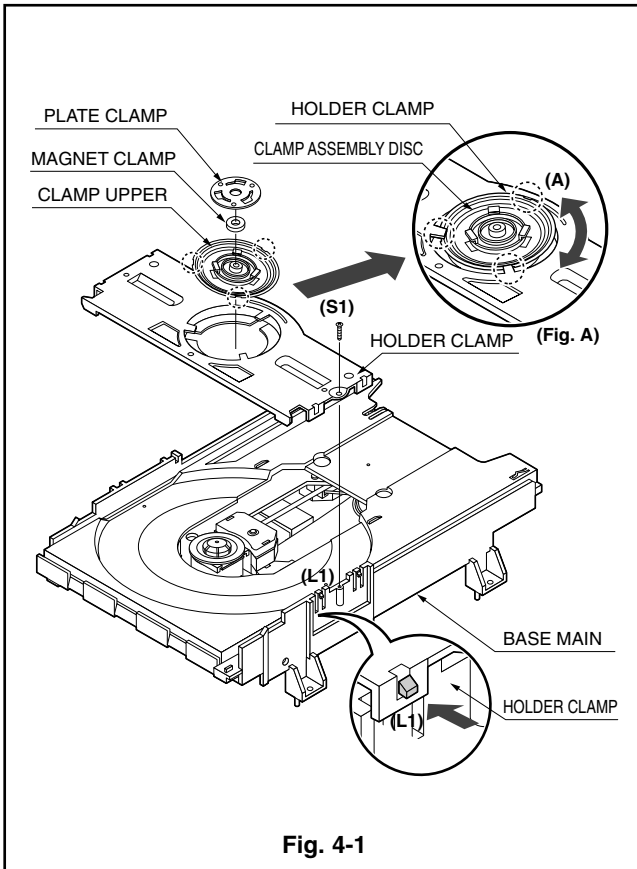


Fig. 4-1

1. Holder Clamp (Fig. 4-1)

- 1) Release 1 Screws(S1).
- 2) Unhook 2 Locking Tabs(L1).
- 3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

- 1) Place the Clamp Assembly Disc as Fig. (A)
- 2) Lift up the Clamp Assembly Disc in direction of arrow(A).
- 3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

- 1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

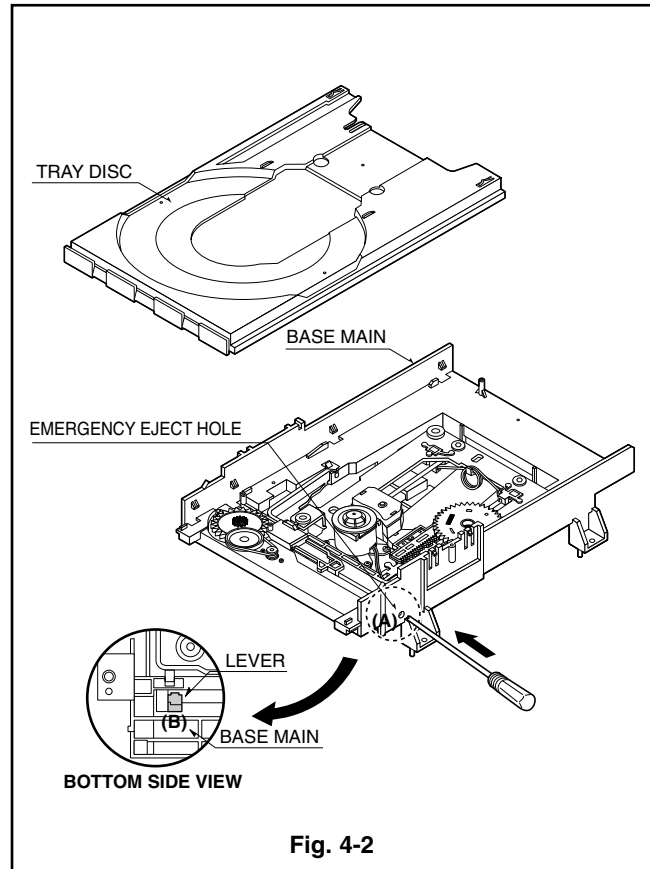


Fig. 4-2

2. Tray Disc (Fig. 4-2)

- 1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
- 2) Pull the Tray Disc until it is separated from the Base Main completely.

DECK MECHANISM DISASSEMBLY

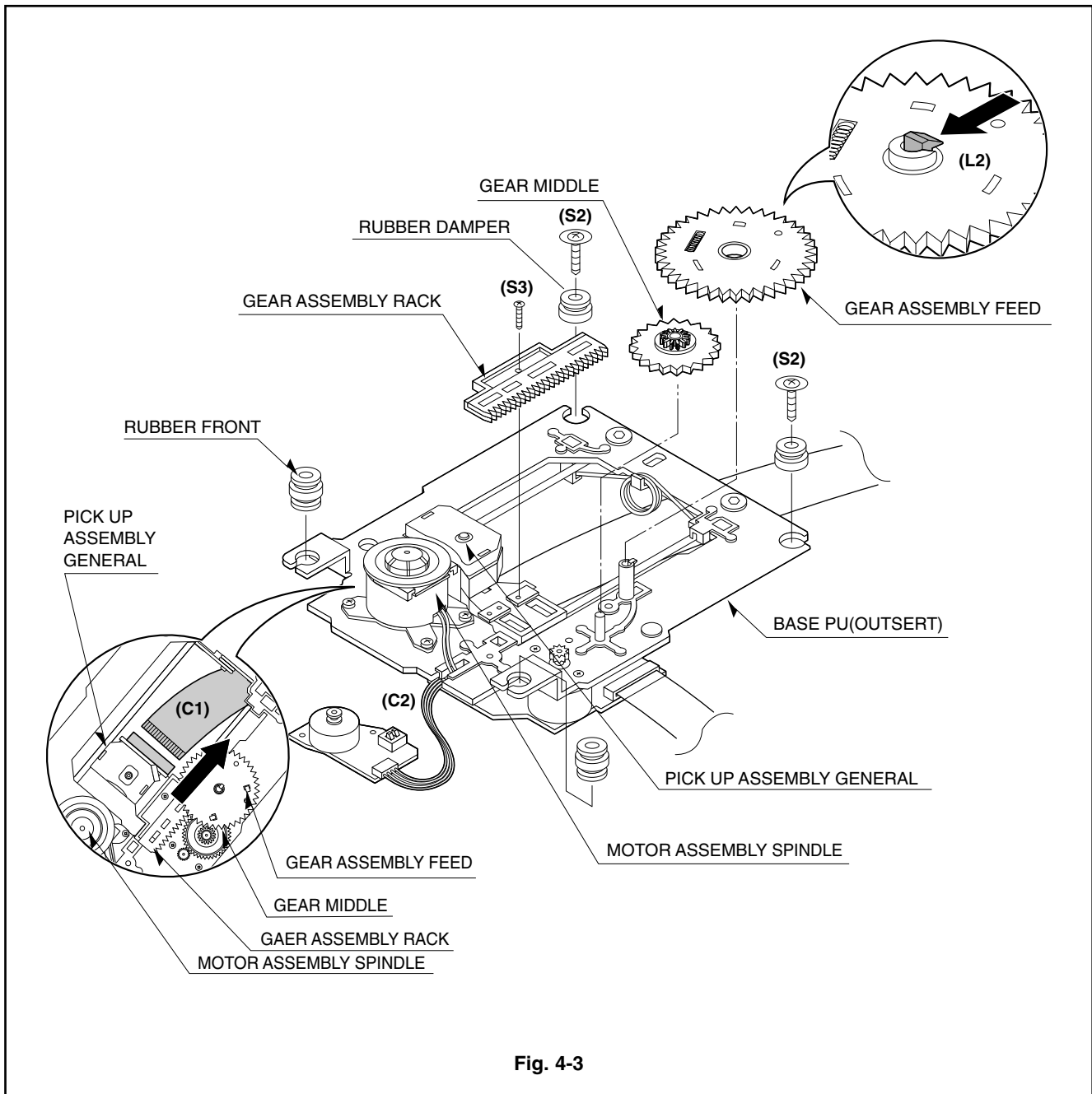


Fig. 4-3

3. Base Assembly Sled (Fig. 4-3)

- 1) Release 2 Screws.
- 2) Disconnect the Flat Cable(C1) and the Connector(C2).

3-1. Gear Assembly Feed

- 1) Unhook the Locking Tab(L2) in direction of arrow.

3-2. Gear Middle

3-3. Gear Assembly Rack

- 1) Release the Screw(S3)

4. Rubber (Fig. 4-3)

DECK MECHANISM DISASSEMBLY

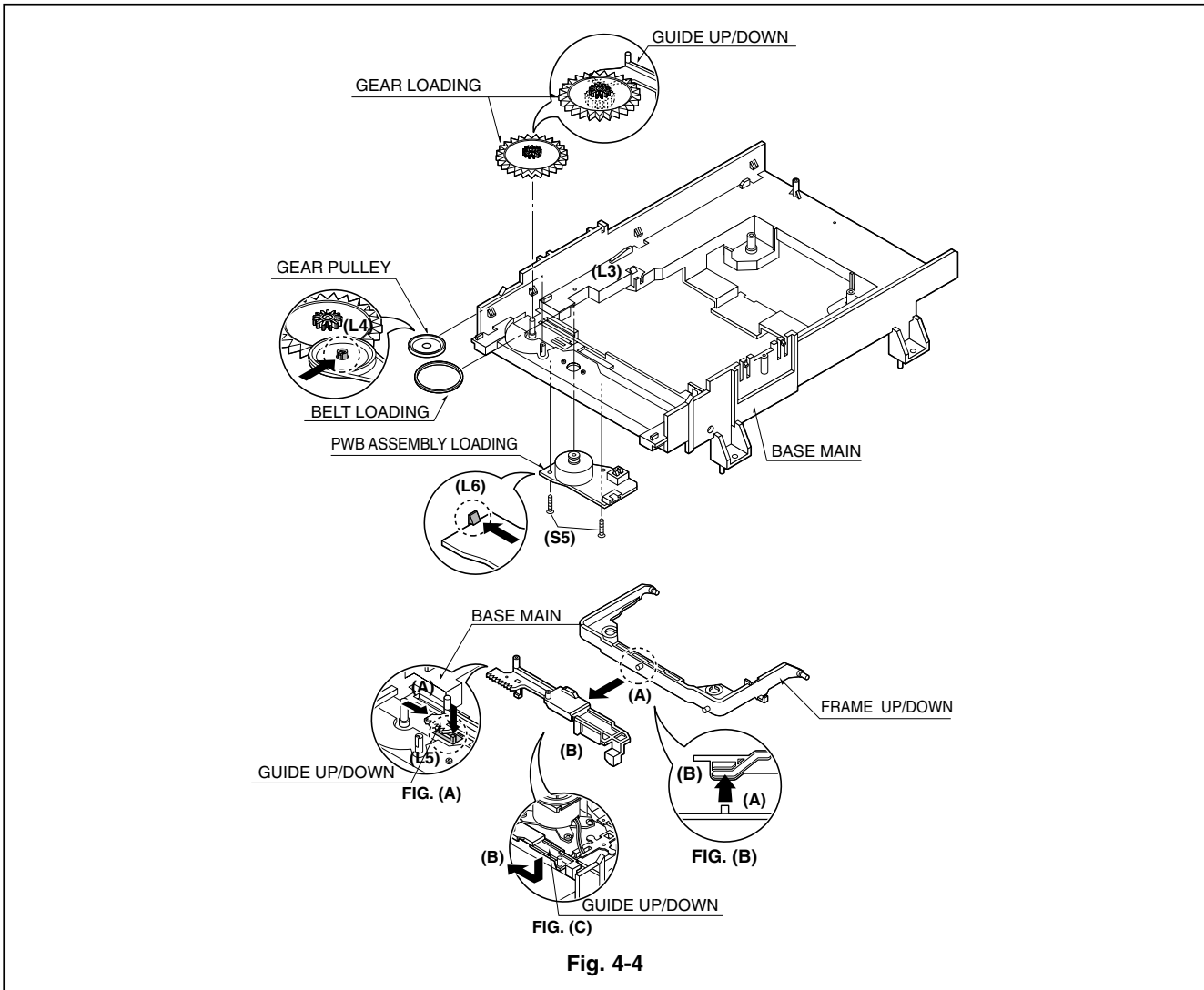


Fig. 4-4

5. Frame Up/Down

Note

- Put the Base Main face down(Bottom Side)
- Unlock the Locking Tab(L3) and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(B) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 4-4)

7. Gear pulley (Fig. 4-4)

- 1) Unlock the Locking Tab(L4) in direction of arrow and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 4-4)

9. Guide Up/Down (Fig. 4-4)

- 1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
- 2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading

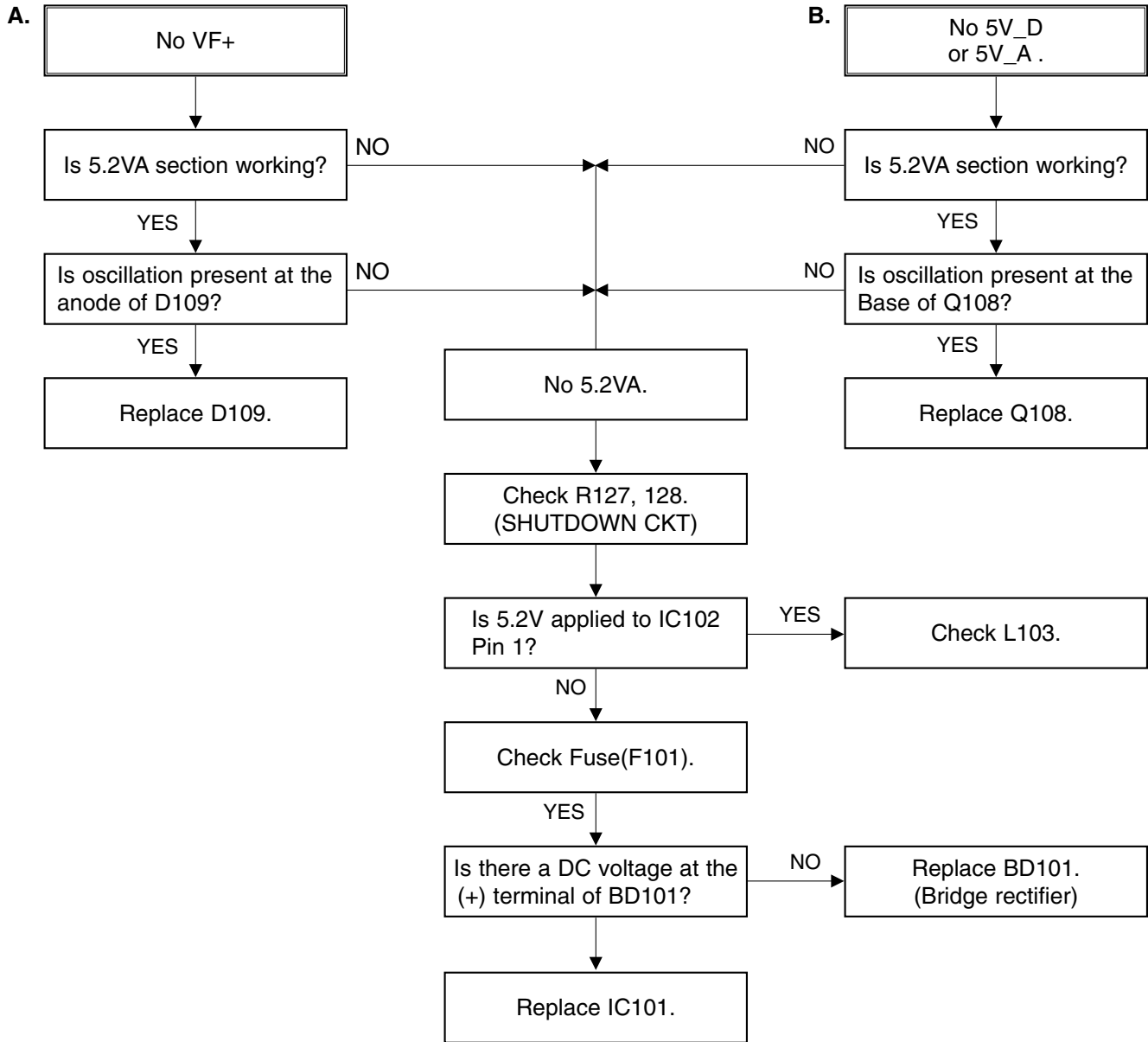
Note

- Put the Base Main face down(Bottom Side)
- 1) Release 2 Screws(S5)
 - 2) Unlock 1 Locking Tab(L6) and separate the PWB Assembly Loading from the Base Main.

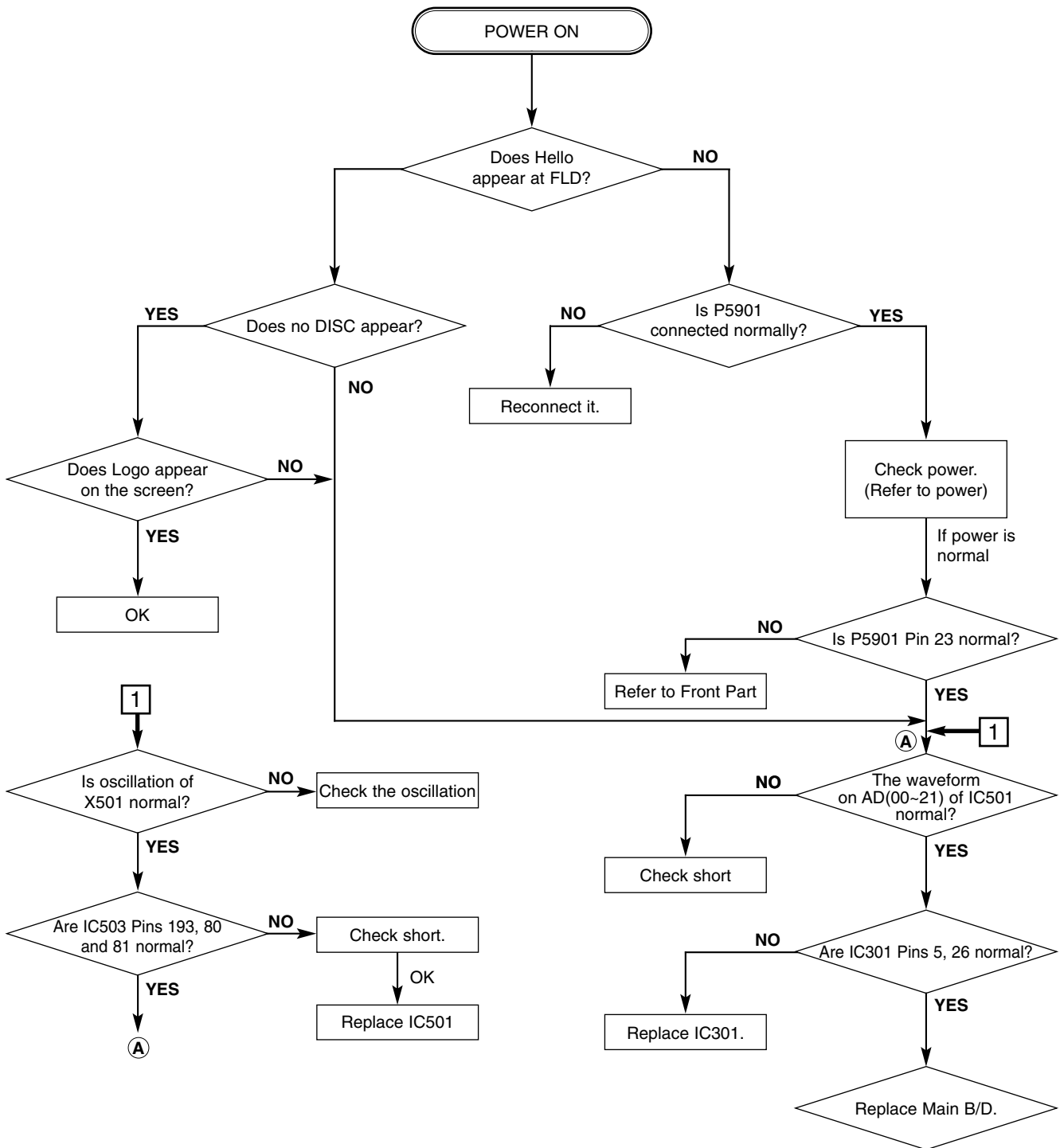
11. Base Main(Fig. 4-4)

ELECTRICAL TROUBLESHOOTING GUIDE

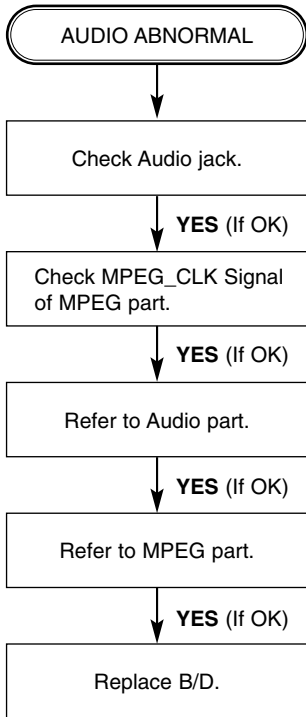
1. Power(SMPS) Circuit



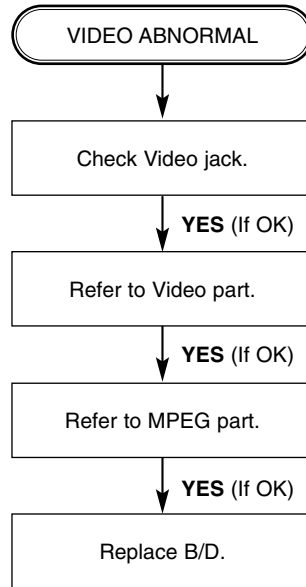
2. μ -COM Circuit
A. No Power



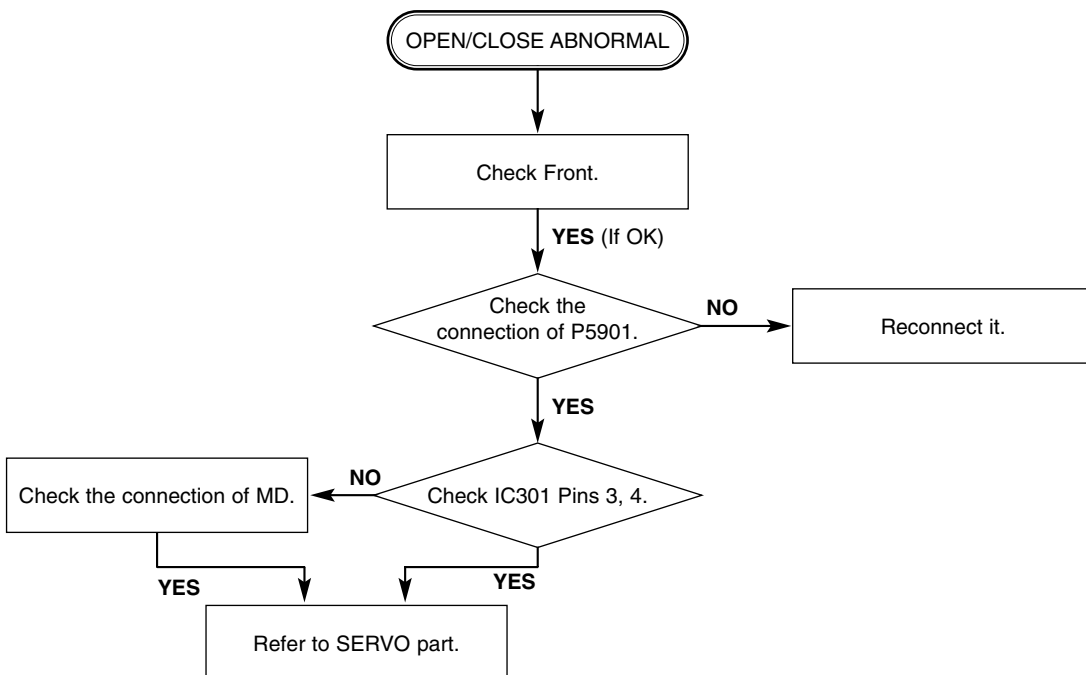
B. Audio abnormal



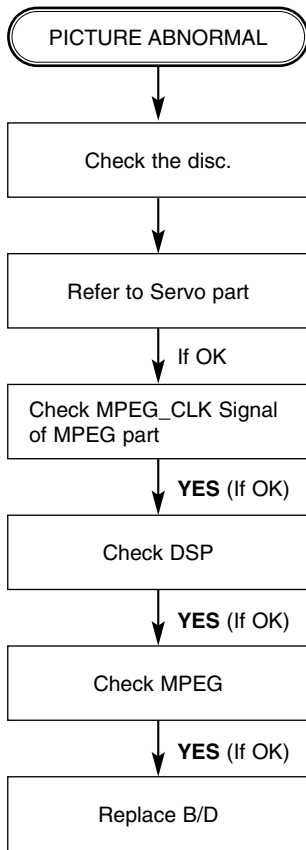
C. Video abnormal



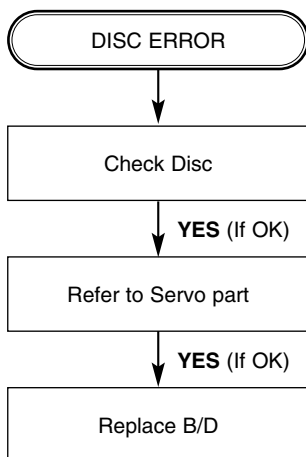
D. Open/Close abnormal



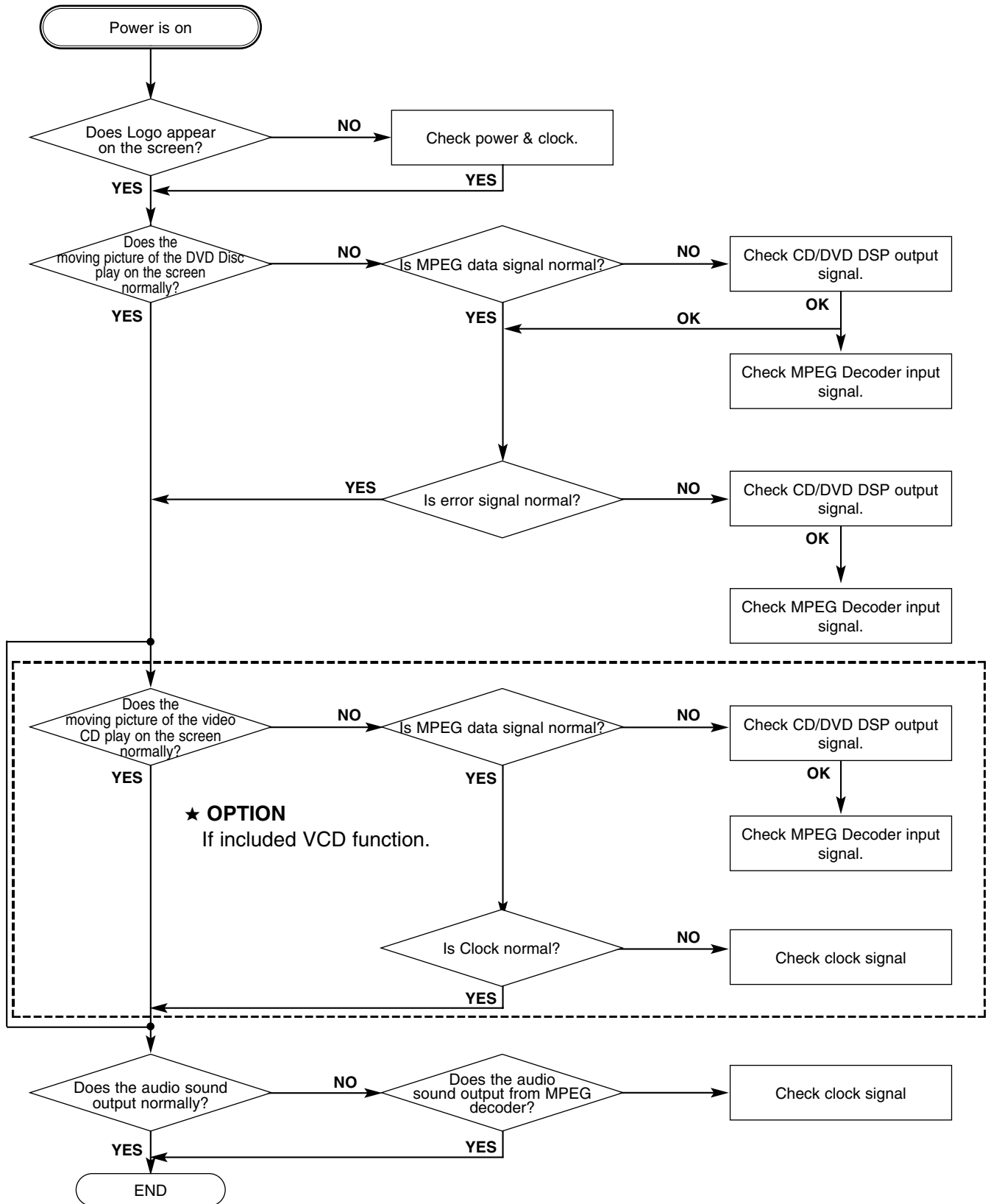
E. Picture abnormal



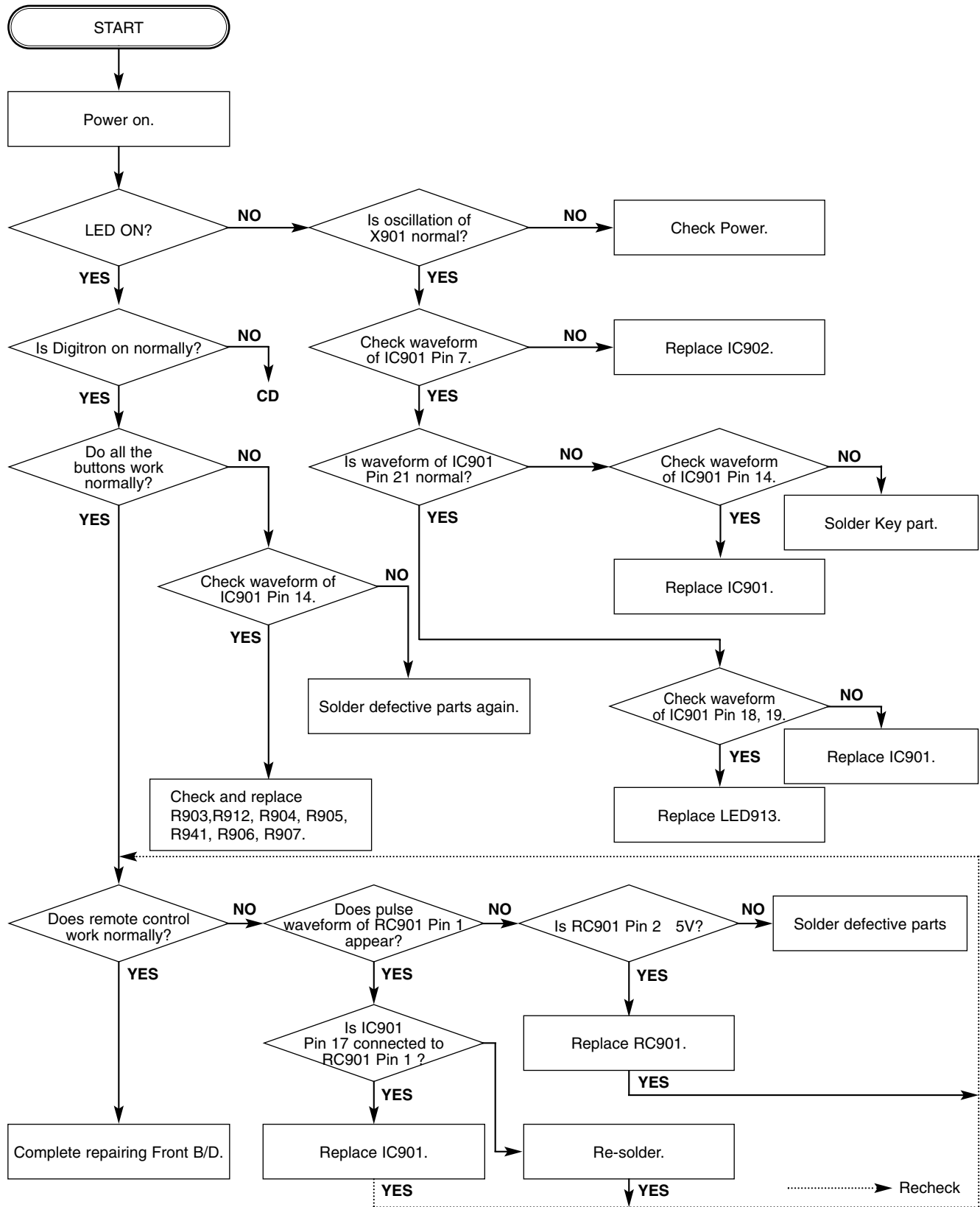
F. Disc Error



3. MPEG Circuit

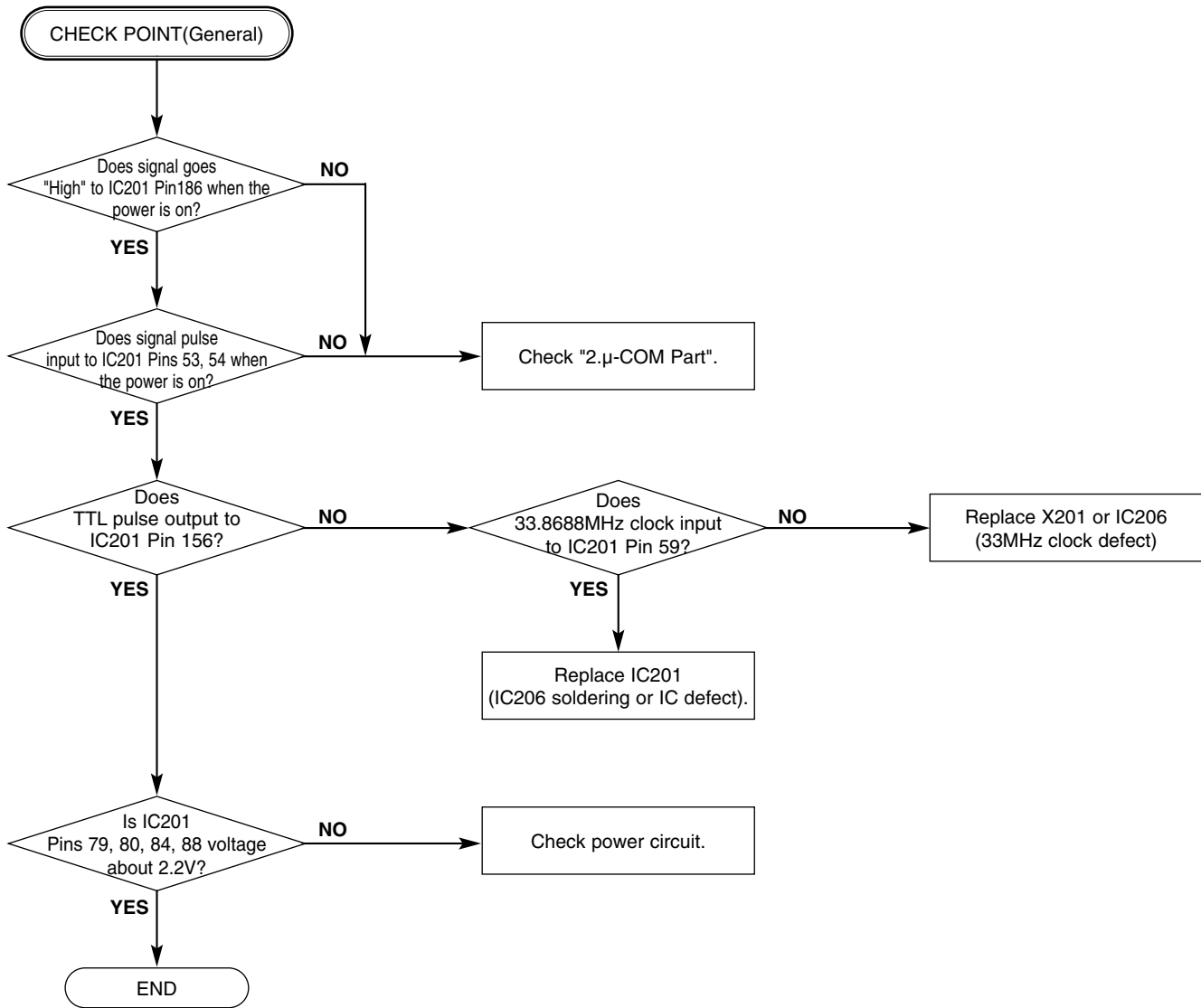


4. Front Circuit (Digitron & key)

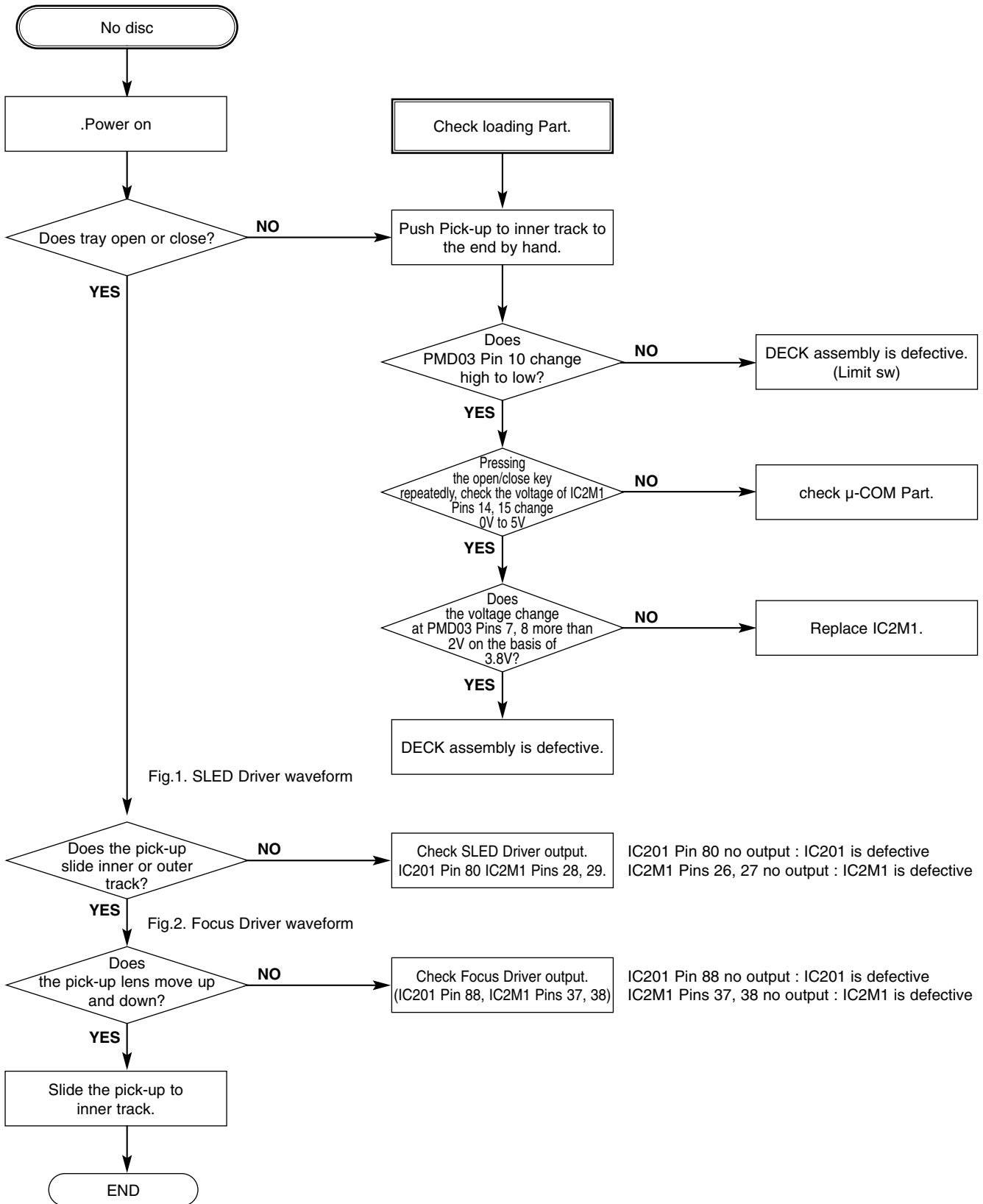


5. RF/Servo Circuit

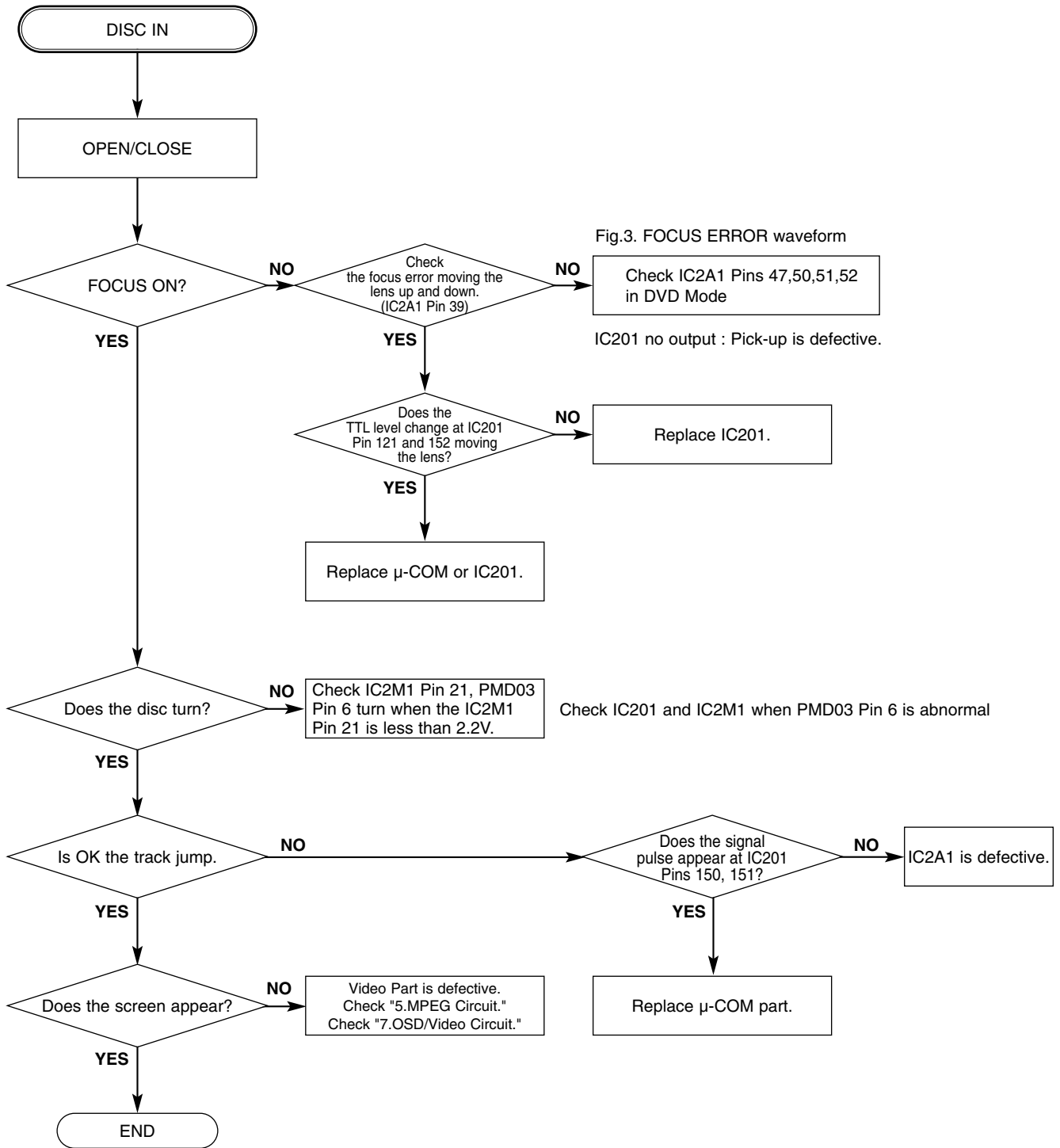
A.



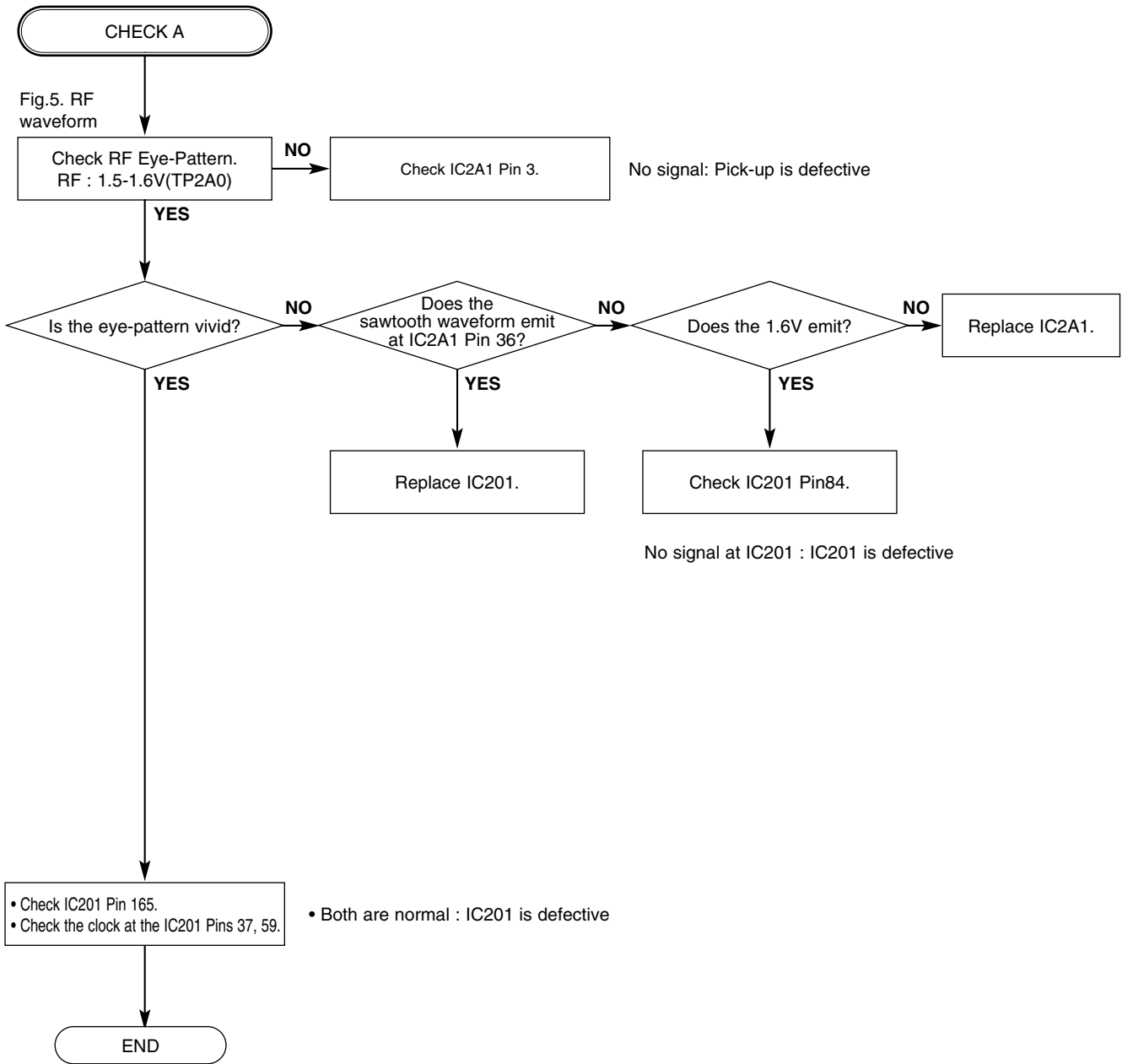
B.



C.



D.



6. KARAOKE Circuit (KARAOKE MODEL ONLY)

