

MANUAL SERVICE

DVD/VIDEO CD/CE

LS6

DVD/VIDEO CD/CD
PLAYER

SECTION 1

SUMMARY

CONTENTS

PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS	. 1-3
SERVICING PRECAUTIONS	. 1-4
•General Servicing Precautions	
•Insulation Checking Prodedure	
•Electrostatically Sensitive Devices	
SPECIFICATIONS	. 1-5
LOCATION OF CUSTOMER CONTROLS	. 1-6
EXPLODED VIEWS	. 1-9

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

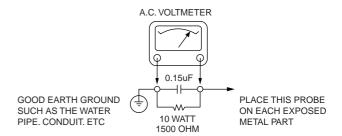
- 1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
- 2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, 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.
- 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 SAFETY TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, 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

REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART.

VOLTAGE MEASURE MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.



SUBJECT: GRAPHIC SYMBOLS



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.



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.

SUBJECT: TIPS ON PROPER INSTALLATION

- NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE 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 PLACEMENT 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 COMMERCAL 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.
- 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 player 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. *Remember Safety First:*

General Servicing Precautions

- 1. Always unplug the DVD player's AC power cord from the AC power source before:
 - (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
 - (2) Disconnecting 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.

- Do not spray chemicals on or near this DVD player or any of its assemblies.
- Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cottontipped swab, or comparable soft applicator.
 - Unless specified otherwise in this service data, lubrication of contacts is not required.
- Do not defeat any plug/socket B+ voltage interlocks with which instruments covered by this service manual might be equipped.
- Do not apply AC power to this DVD player and/or any of its electrical assemblies unless all solid-state device heat sinks are correctly installed.
- Always connect test instrument ground lead to the appropriate ground before connecting 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.

- 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.
- 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.
- Use only a grounded-tip soldering iron to solder or unsolder ES devices.
- Use only an antistatic 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 freonpropelled 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).
- 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 handing 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.)

SPECIFICATIONS

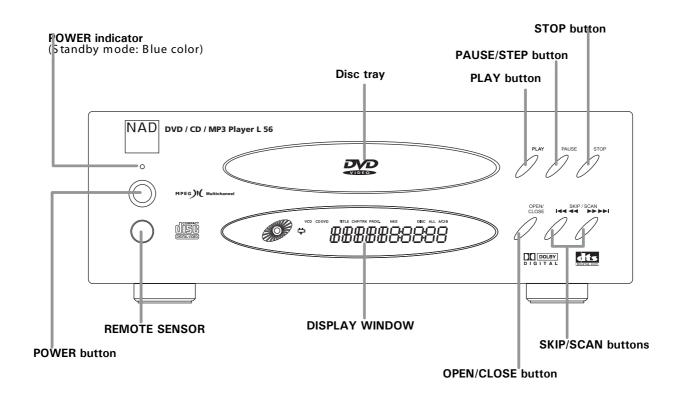
DVD player/Outputs/Supplied Accessories

·	Power supply	AC 230V / 50 Hz (EUROPE), AC 110V/60Hz (USA / CANADA)		
	Power consumption	15 W		
	Mass	3.3 kg		
	External dimensions (W X H X D)	285 x 103x 291 mm		
	Signal system	PAL (EUR) , NTSC (USA / CANADA)		
olaye	Laser	Semiconductor laser, wavelength 650 nm		
[DVD player]	Frequency range (audio)	4 Hz to 20 kHz		
	Signal-to-noise ratio (audio)	More than 100 dB (EIAJ)		
	Dynamic range (audio)	More than 95 dB (EIAJ)		
	Harmonic distortion (audio)	0.008 %		
	Wow and flutter	Below measurable level (less than + 0.001 % (W.PEAK)) (EIAJ)		
	Operating conditions	Temperature: 41°F to 95°F, Operation status: Horizontal		
	Video output	1.0 V (p-p), 75 Ω , negative sync., RCA jack x 1		
uts]	S-video output	(Y) 1.0 V (p-p), 75 Ω , negative sync., Mini DIN 4-pin x 1		
		(C) 0.286 V (p-p), 75 Ω ,		
	SCART video output	CVBS 1.0 V (p-p), 75 Ω , negative sync., RCA jack x 1		
[Outputs]		(RGB) 0.63 V (p-p), 75 Ω		
)]	Audio output (digital audio)	0.5 V (p-p), 75 Ω , RCA jack x 1		
	Audio output (optical audio)	Optical connector x 1		
	Audio output (analog audio)	2.0 Vrms(1 KHz, 0 dB), 330 Ω , RCA jack (L, R) x 1		
	Video cable	1		
ed 'ies]	Audio cable1			
[Supplied Accessories]				
St Acce				
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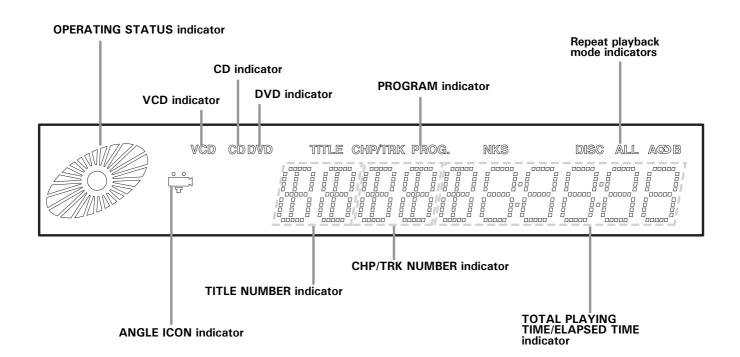
^{*} Designs and specifications are subject to change without notice.

LOCATION OF CUSTOMER CONTROLS

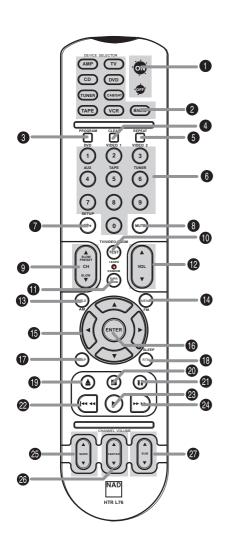
Front Panel



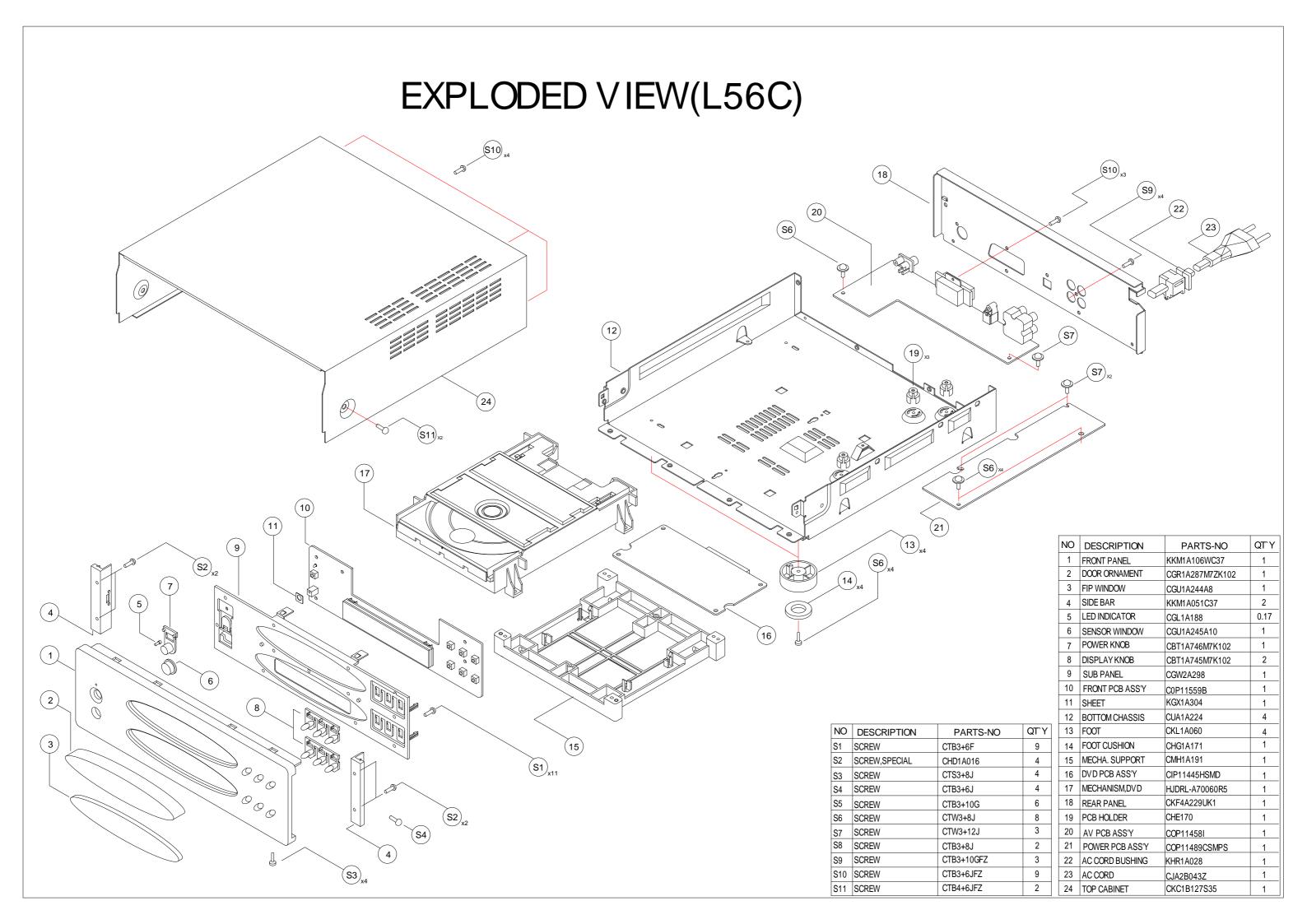
Display Window



REMOTE CONTROL



- 1. POWER ON/OFF button (L76/L56)
- 2. DEVICE SELECTOR buttons
- 3. PROGRAM buttons (L56)
- 4. CLEAR button (L56)
- 5. REPEAT button (L56)
- 6. INPUT SOURCE SELECTOR buttons(L76), NUMERIC buttons (L76/L56)
- 7. OSD ON/OFF buttons (L76), DVD SET UP button (L56)
- 8. MUTE button (L76)
- 9. PRESET UP/DOWN buttons (L76), SLOW buttons (L56)
- 10. TEST TONE button (L76), ZOOM button (L56)
- 11. SURROUND MODE button (L76), RANDOM button (L56)
- 12. VOLUME UP/DOWN buttons (L76)
- 13. AM button (L76), TITLE button (L56)
- 14. FM button (L76), MENU button (L56)
- **15.** ARROW buttons (L76/L56)
- 16. ENTER button (L76/L56)
- 17. DIGITAL INPUT/ RDS button (L76), DVD DISPLAY button (L56)
- 18. SLEEP button (L76), RETURN button (L56)
- 19. OPEN/CLOSE button (L56)
- 20. STOP button (L56)
- 21. PAUSE button (L56)
- 22. REV SCAN/SKIP button (L56)
- 23. PLAY button (L56)
- 24. FOR SCAN/ SKIP button (L56)
- 25. SURROUND LEVEL UP/DOWN buttons (L76)
- 26. CENTER LEVEL UP/DOWN buttons (L76)
- 27. SUBWOOFER LEVEL UP/DOWN buttons (L76)



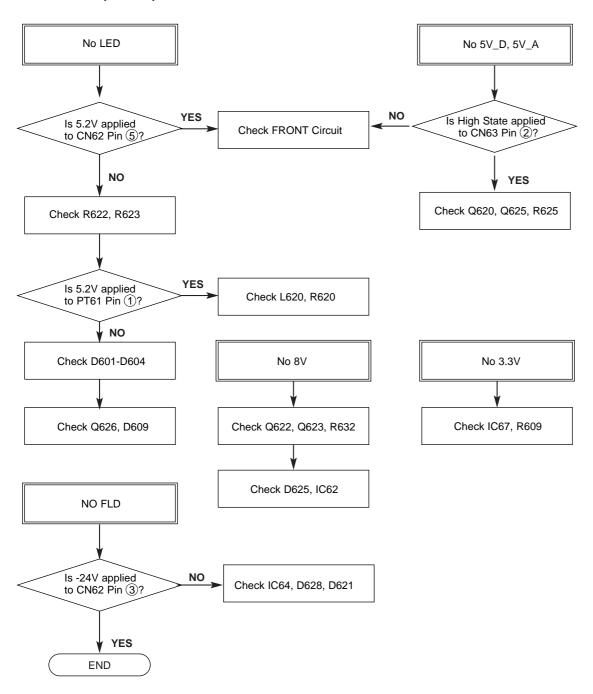
SECTION 2 ELECTRICAL

CONTENTS

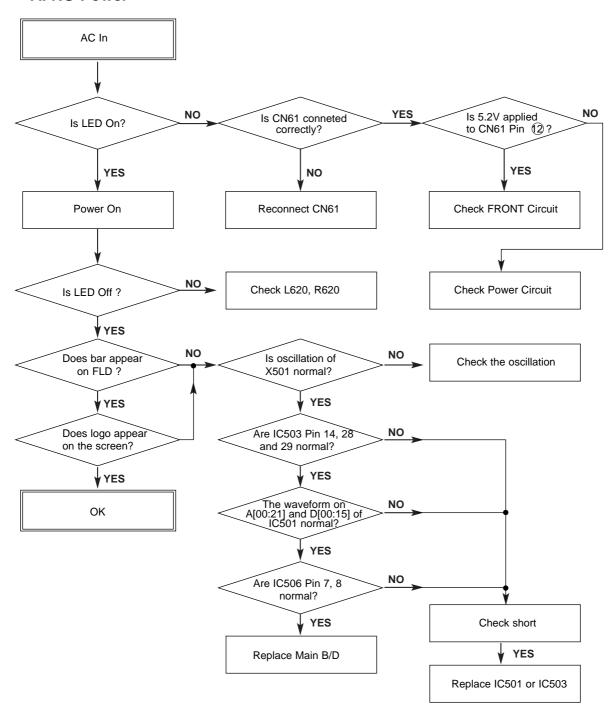
ELECTRICAL TROUBLESHOOTING GUIDE	2-2
1. Power (SMPS) Circuit	2-2
2. <i>μ</i> -com Circuit	2-3
3. MPEG Circuit	2-6
4. Front Circuit (Digitron & Key)	2-7
5. RF/Servo Circuit	
BLOCK DIAGRAMS	2-12
1. Overall Block Diagram	2-12
2. Power (SMPS) Block Diagram	2-13
3. RF/CD DSP/DVD DSP/DVD servo Block Diagram	2-14
4. Audio Block Diagram	
5. MPEG Block Diagram	
6. μ-COM Block Diagram	2-17
CIRCUIT DIAGRAMS	
1. Power (SMPS) Circuit Diagram	2-18
2. DVD DSP Circuit Diagram	2-20
3. Drive & RF Circuit Diagram	2-22
4. MPEG Circuit Diagram	2-24
4-1. WAVEFORMS	2-26
5. Audio DM & 5.1CH Circuit Diagram	2-28
6. <i>μ</i> -COM/Expander	2-30
7. DIGITRON & Key Circuit Diagram	2-32
8. Jack Circuit Diagram	2-34
PRINTED CIRCUIT DIAGRAMS	2-36
1. MAIN P.C.BOARD	2-36
2. POWER P.C.BOARD	2-38
3. AV P.C.BOARD	
4. FRONT P.C.BOARD	

ELECTRICAL TROUBLESHOOTING GUIDE

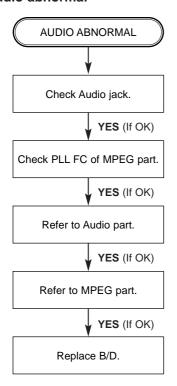
1. POWER (SMPS) Circuit



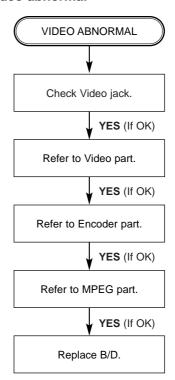
2. u-COM Circuit A. NO Power



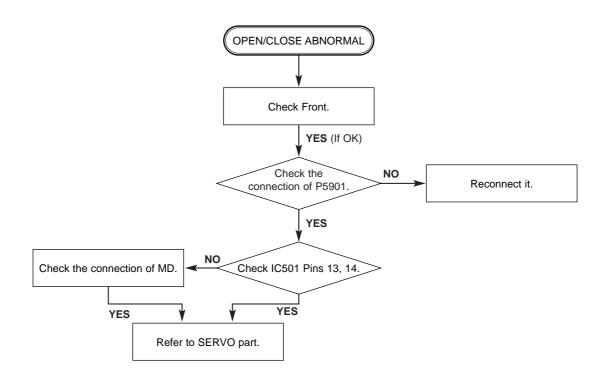
B. Audio abnormal



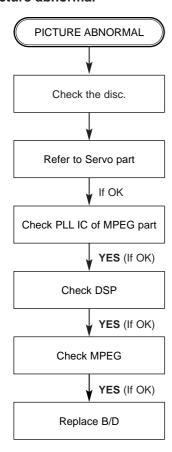
C. Video abnormal



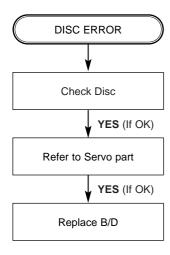
D. Open/Close abnormal



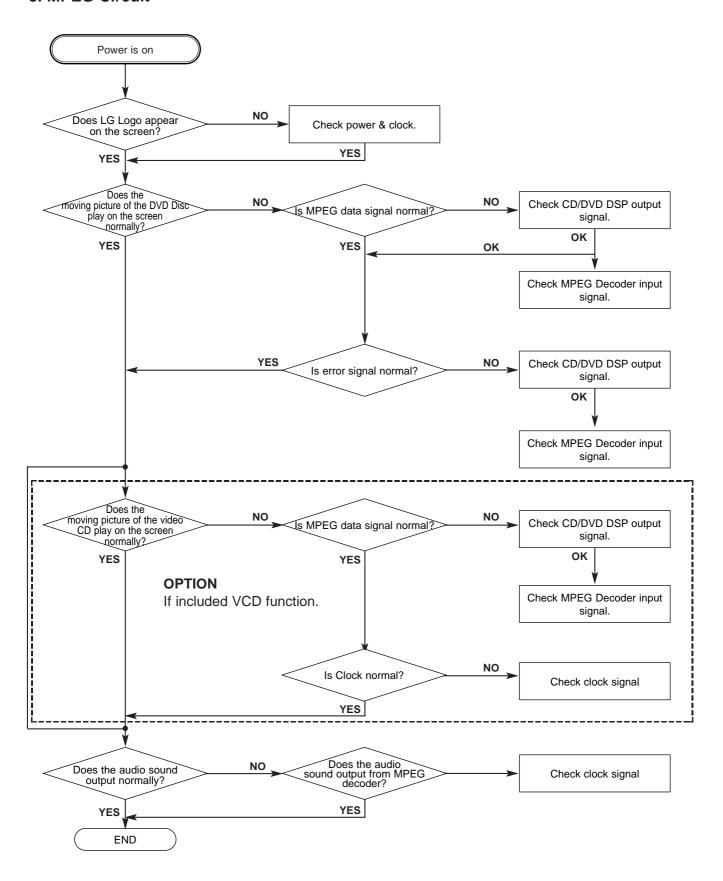
E. Picture abnormal



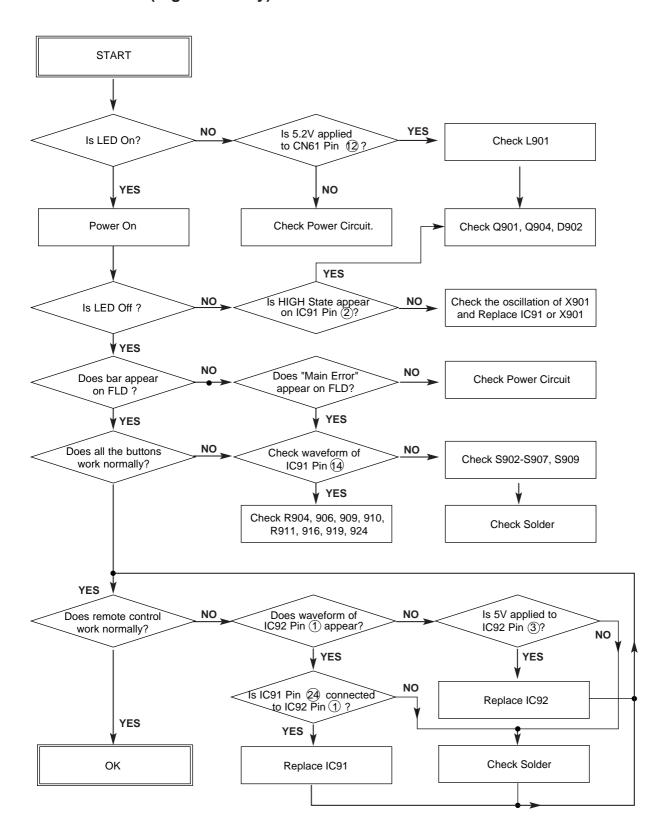
F. Disc Error



3. MPEG Circuit

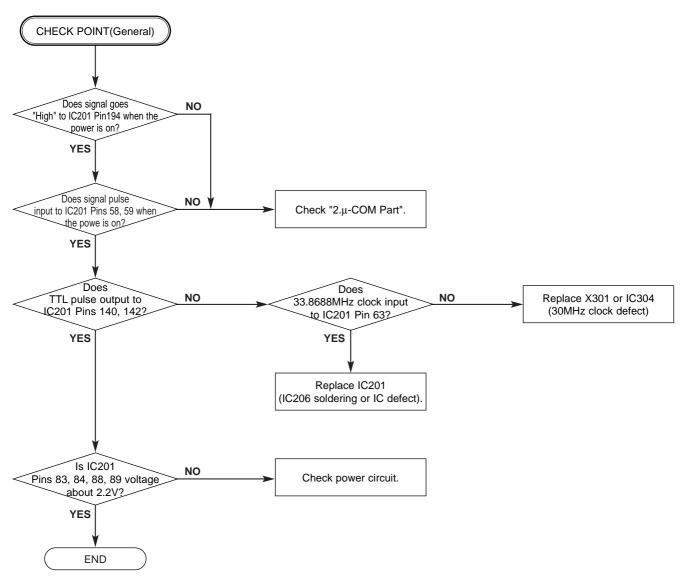


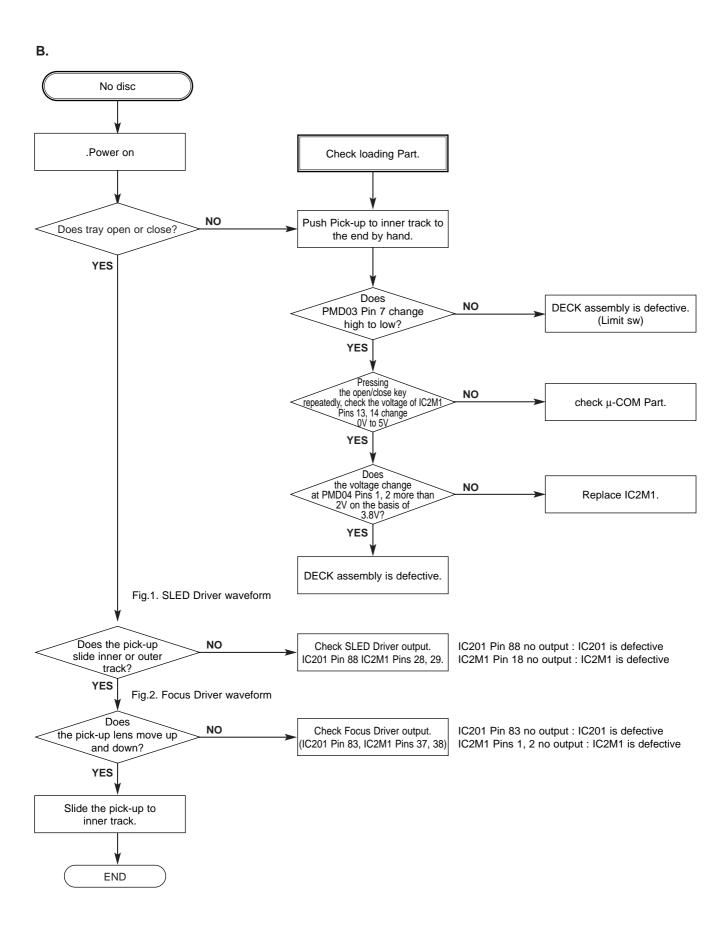
4. Front Circuit (Digitron & Key)



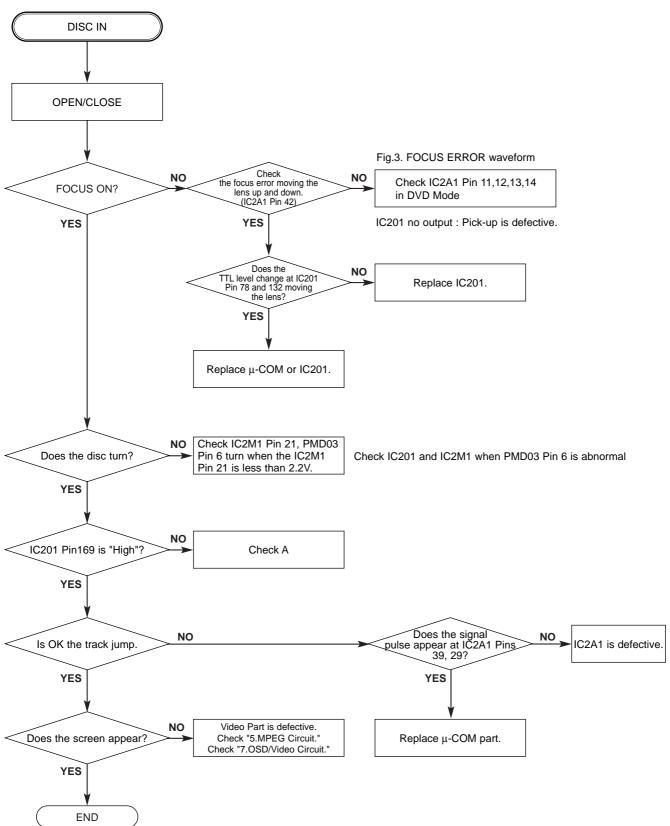
5. RF/Servo Circuit

A.

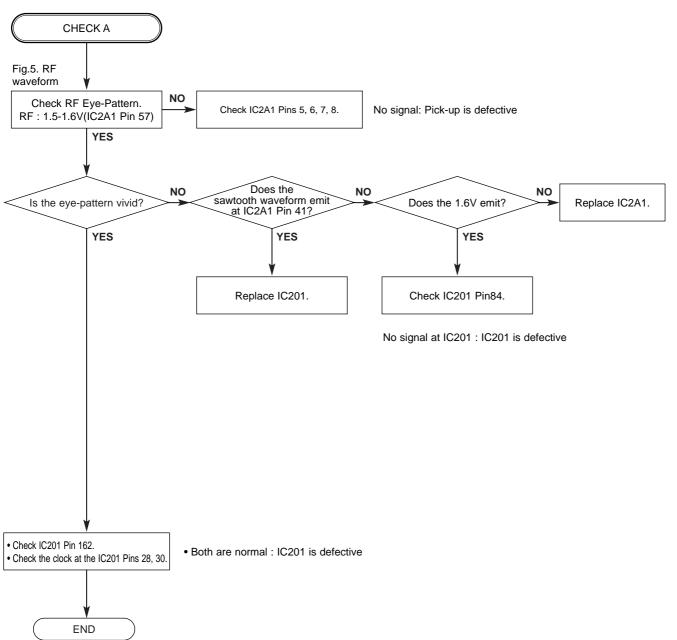




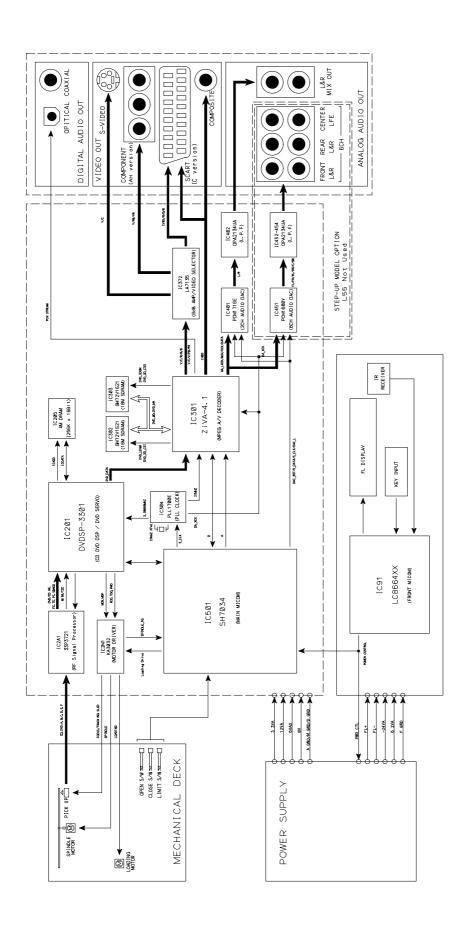




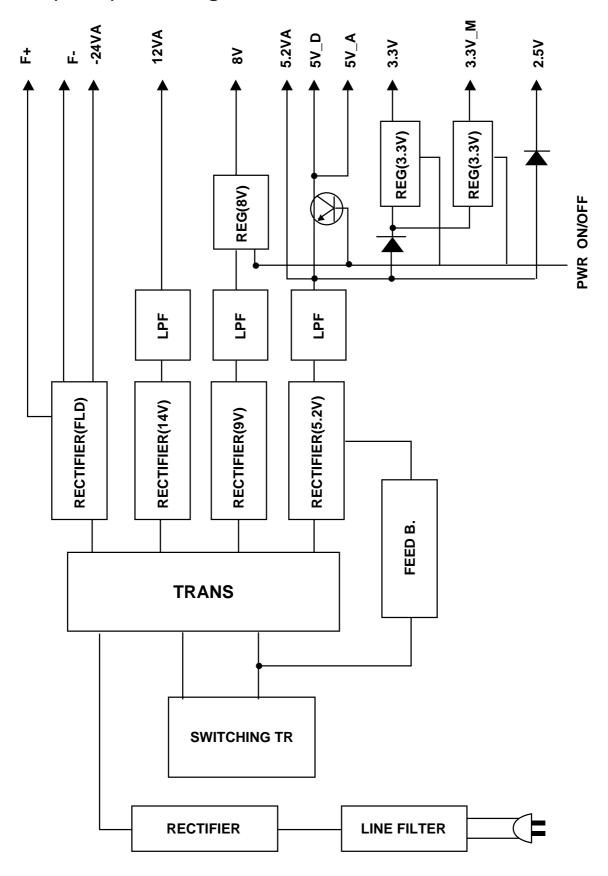




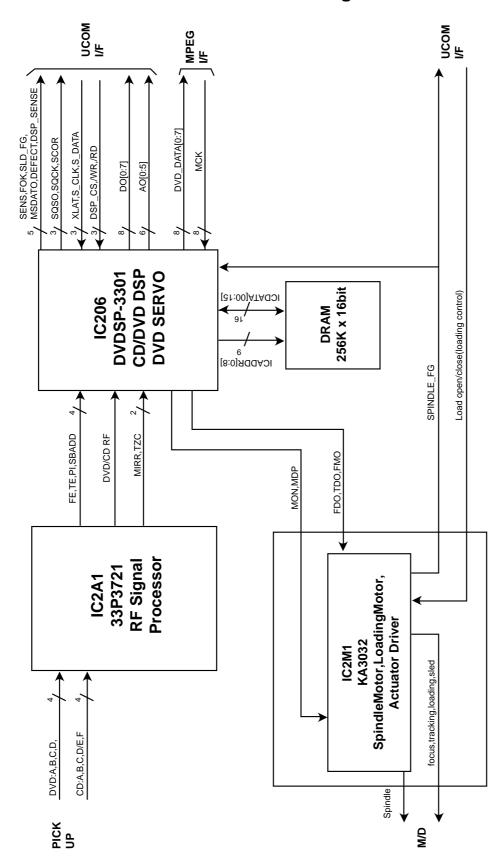
BLOCK DIAGRAM



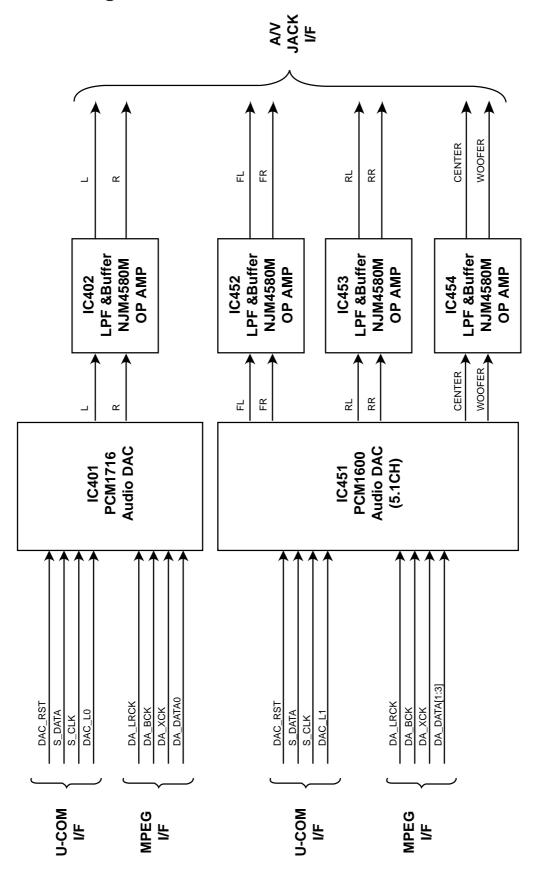
2. Power(SMPS) Block Diagram



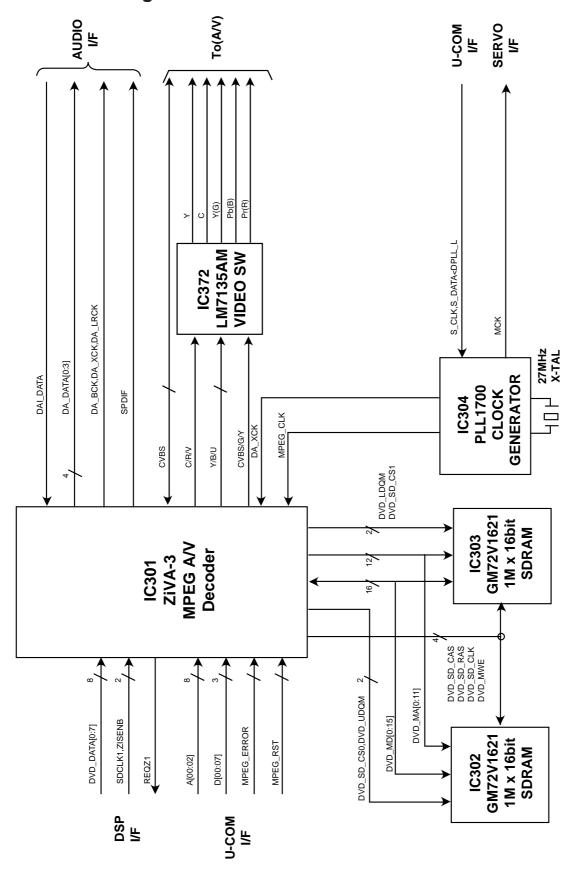
3. RF/CD DSP/DVD DSP/DVD SERVO Block Diagram



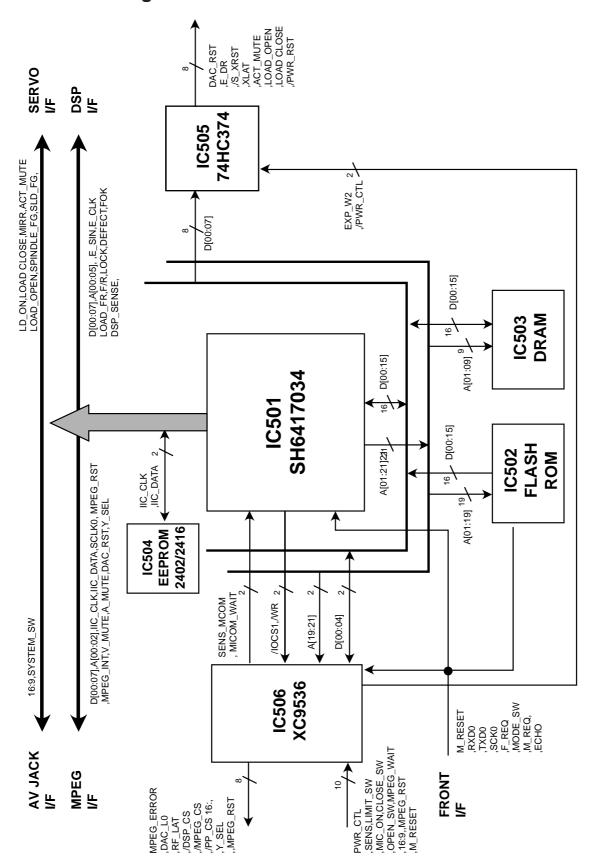
4. Audio Block Diagram



5. MPEG Block Diagram

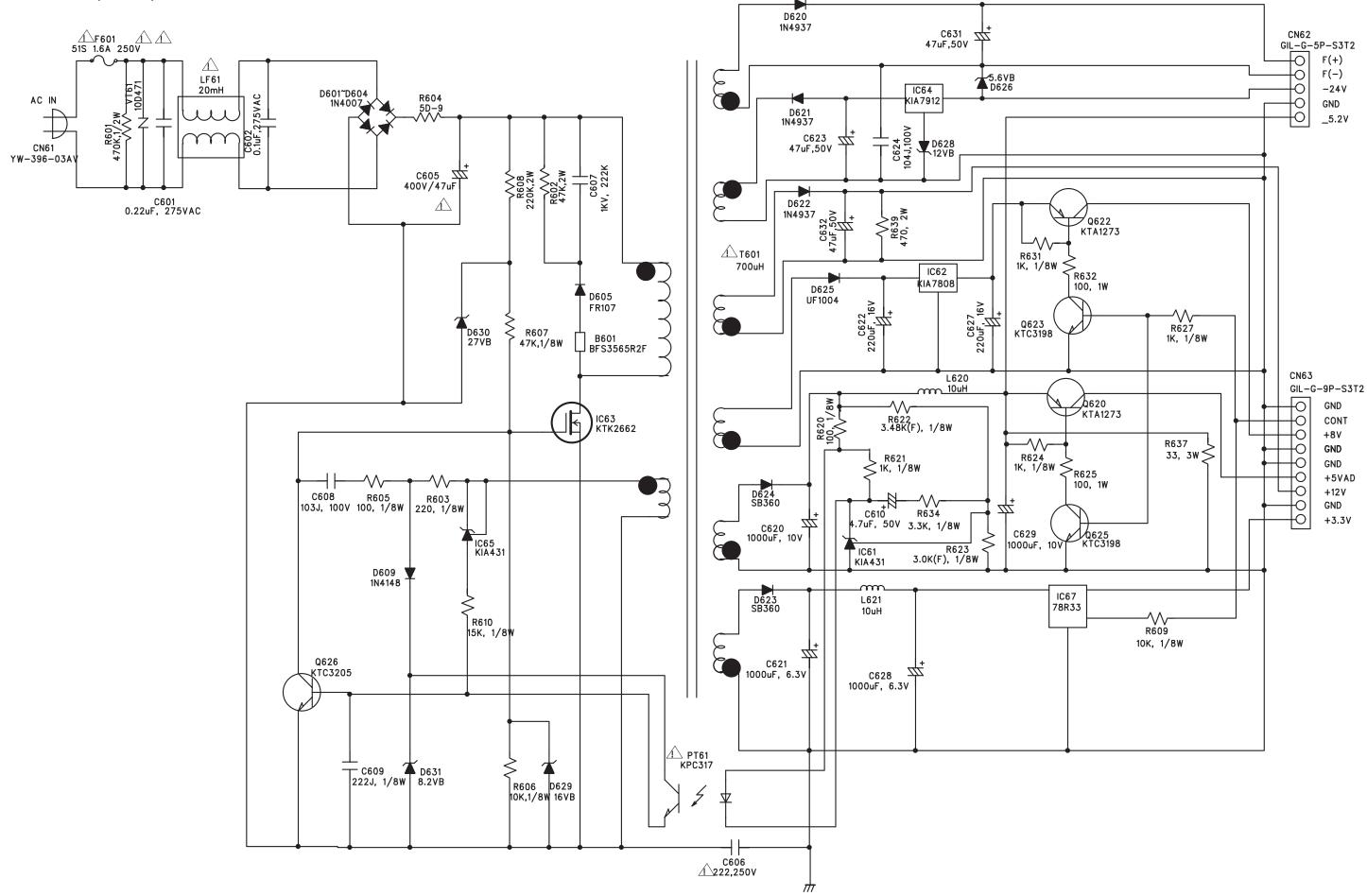


6. μ-COM Block Diagram

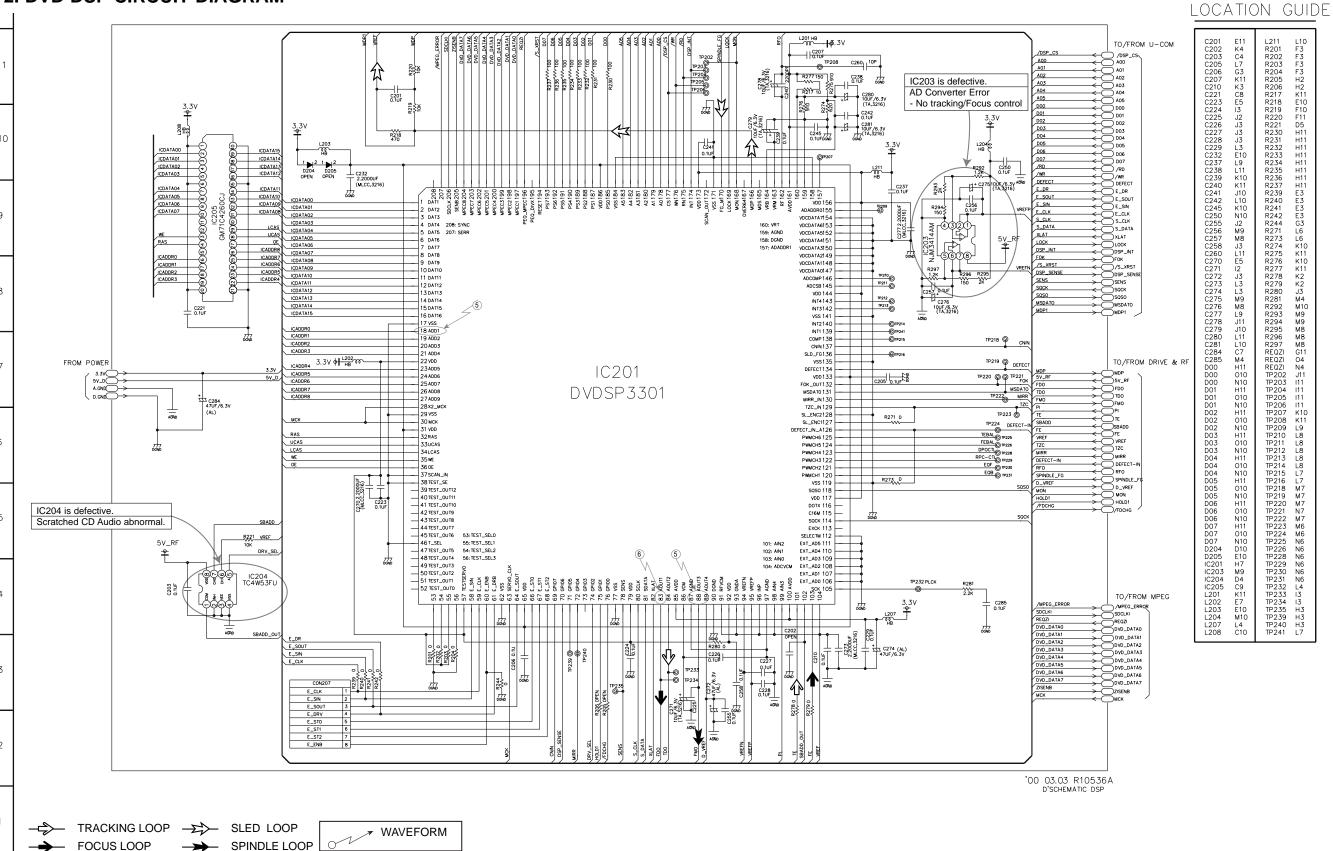


CIRCUIT DIAGRAM

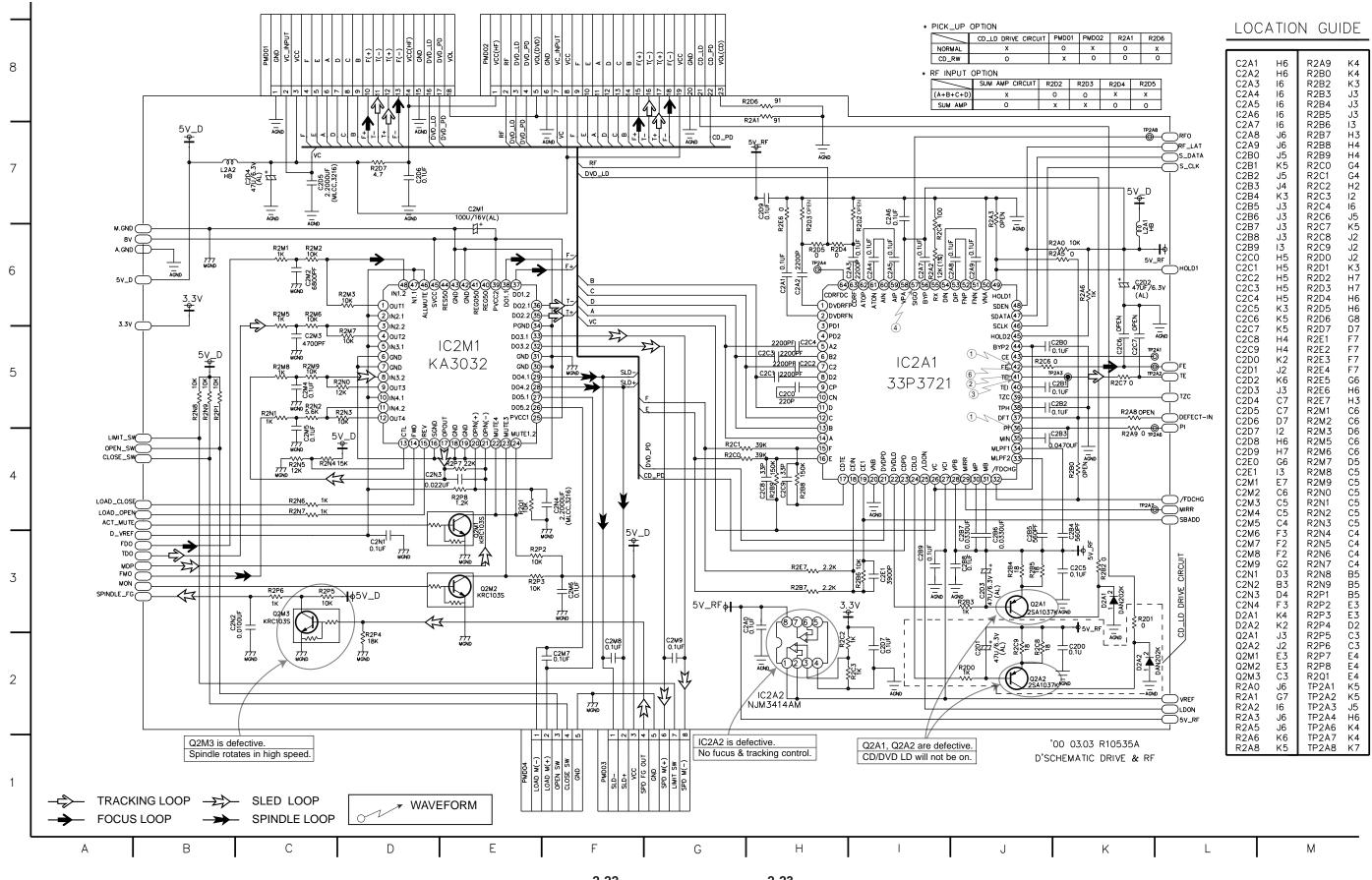
1. POWER (SMPS) CIRCUIT DIAGRAM



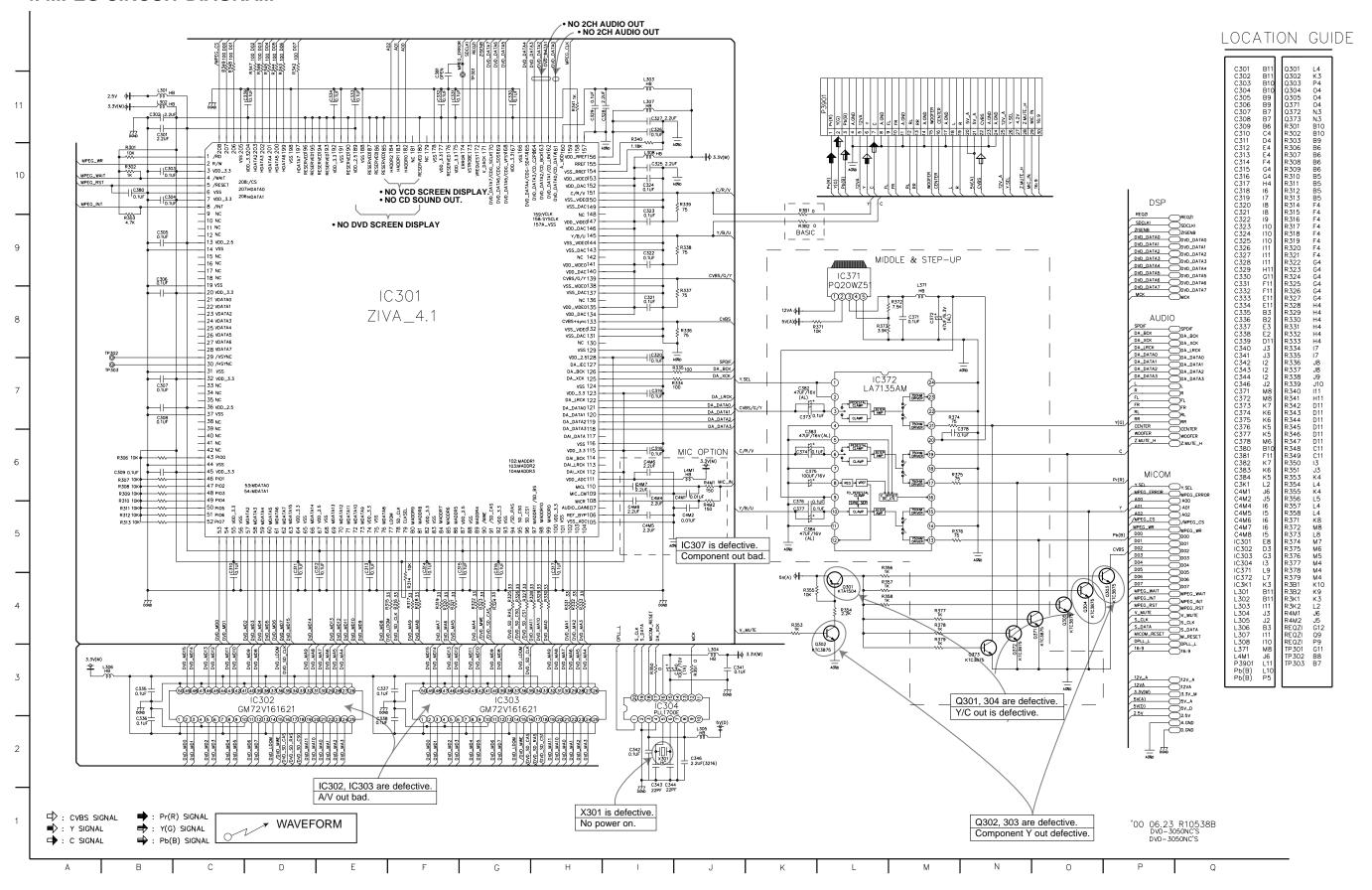
2. DVD DSP CIRCUIT DIAGRAM 5 8 8 8 8 8 8 8 L201 HB C207 11 IC203 is defective. AD Converter Error C201 0.1UF



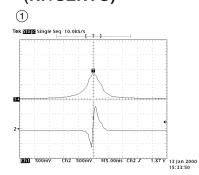
3. DRIVE & RF CIRCUIT DIAGRAM



4. MPEG CIRCUIT DIAGRAM

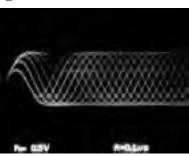


4-1. WAVEFORMS (RF/SERVO)

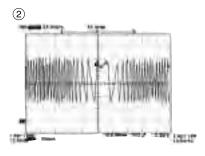


IC2A1 Pin 42, Focus Error IC2A1 Pin 36, Pi

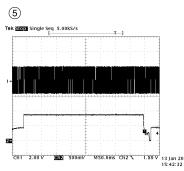




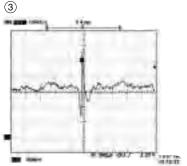
IC2A1 Pin 57, RF



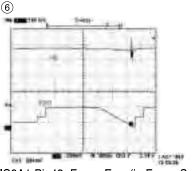
IC2A1 Pin 41 Tracking Error



IC201 Pin 88, SLED Drive(FMO) IC201 Pin 18, SLED FG

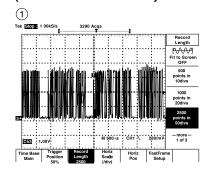


IC2A1 Pin 41 **VBR TRACKING Error**

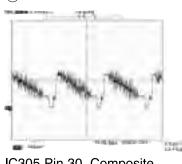


IC2A1 Pin42, Focus Error(in Focus Search) IC201 Pin 83, Focus Drive(FDO)

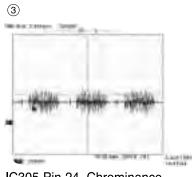
(VIDEO ENCODER)



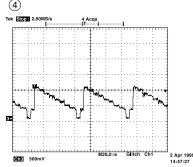
IC305 Pins 9~16, MPEG Data



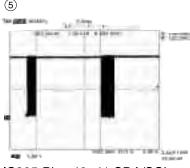
IC305 Pin 30, Composite



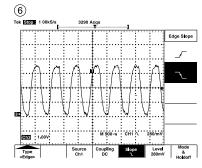
IC305 Pin 24, Chrominance



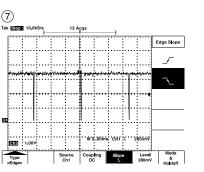
IC305 Pin 27, Luminance



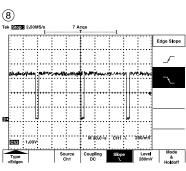
IC305 Pins 40, 41 SDA/SCL



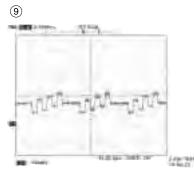
IC305 Pin 4, MPEG Clock(27MHz)



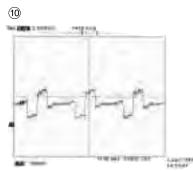
IC305 Pin 7, Vertical SYNC



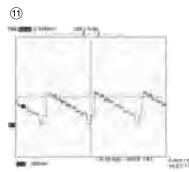
IC305 Pin 8 Horizontal SYNC



IC305 Pin 29 Component Pb

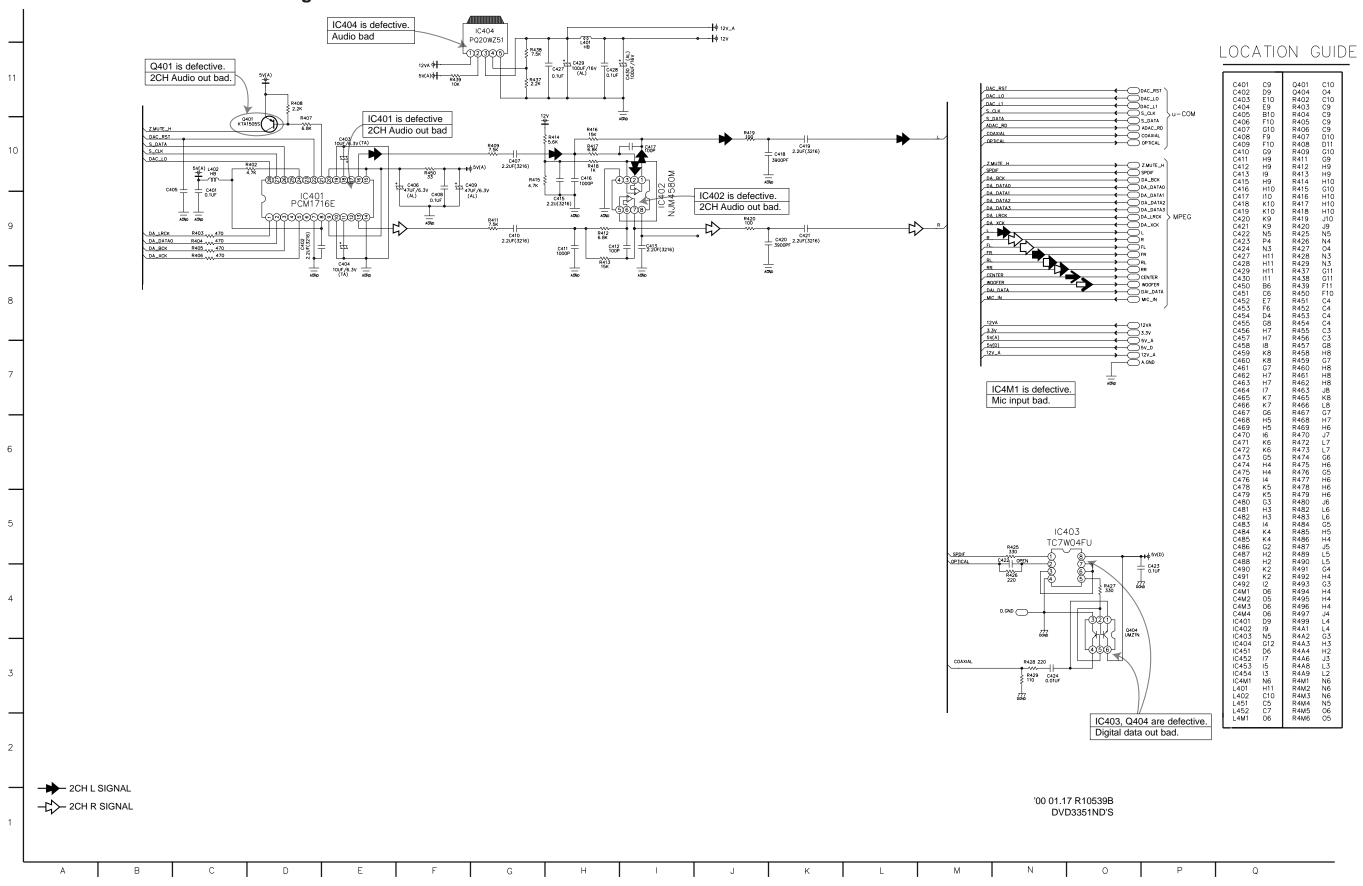


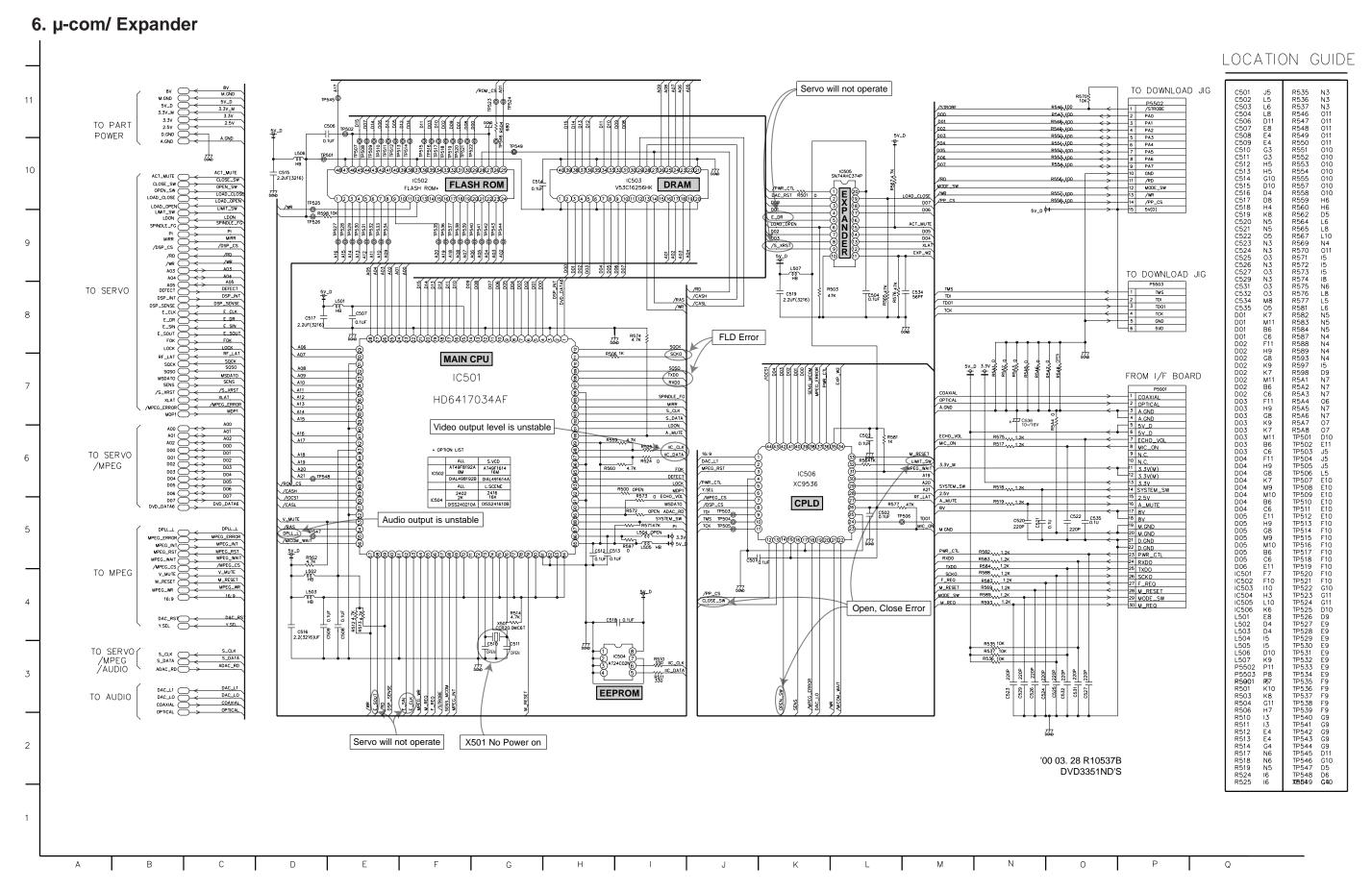
IC305 Pin 23 Component Pr



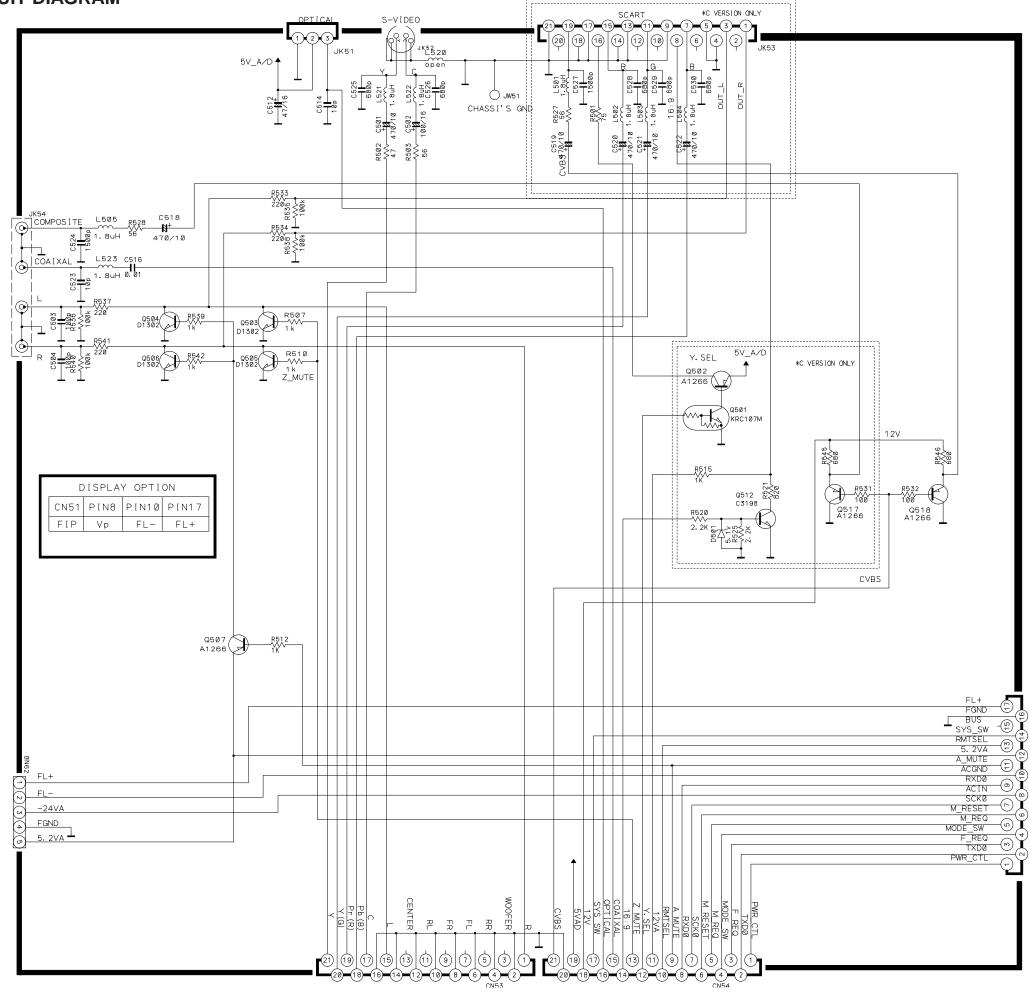
IC305 Pin 27 Component Y

5. Audio DM & 5.1CH Circuit Diagram

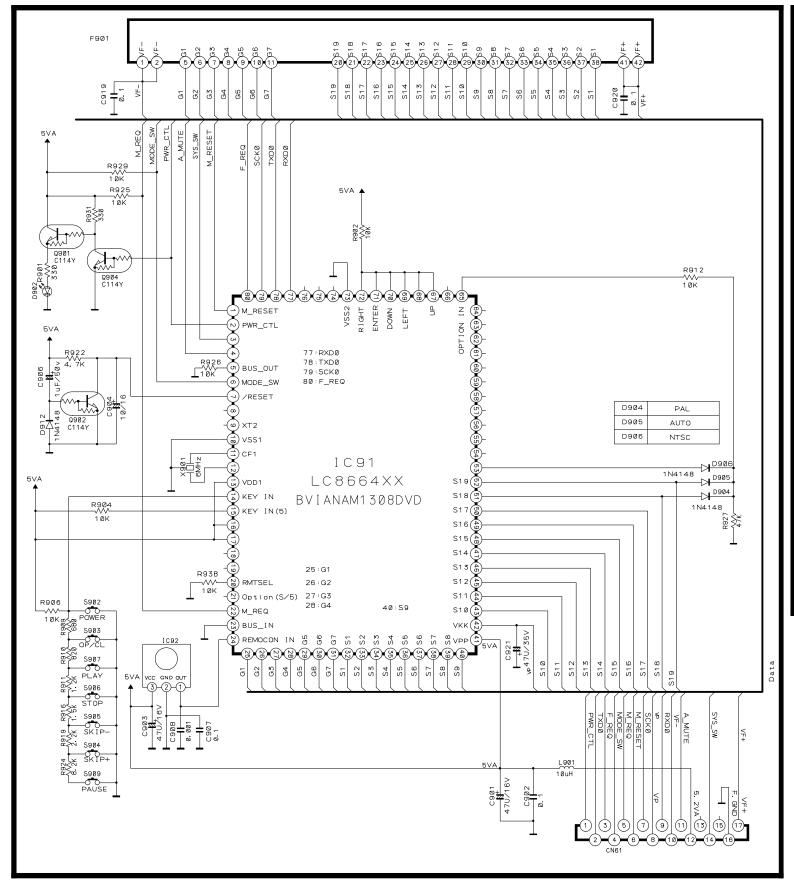


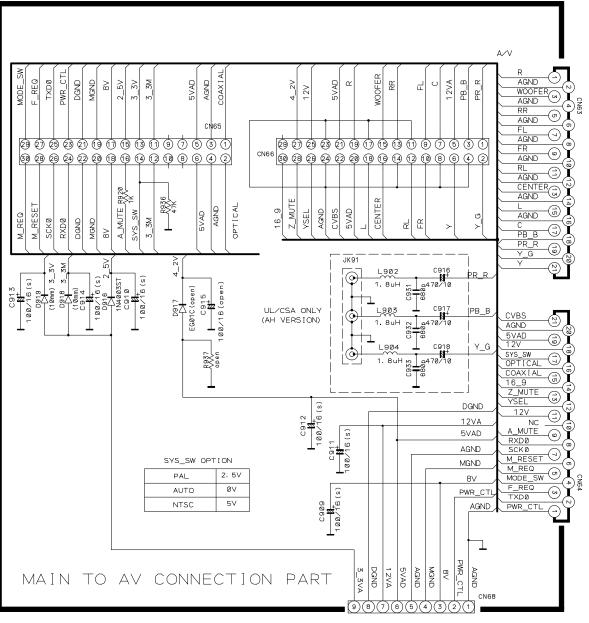


7. DIGITRON & KEY CIRCUIT DIAGRAM



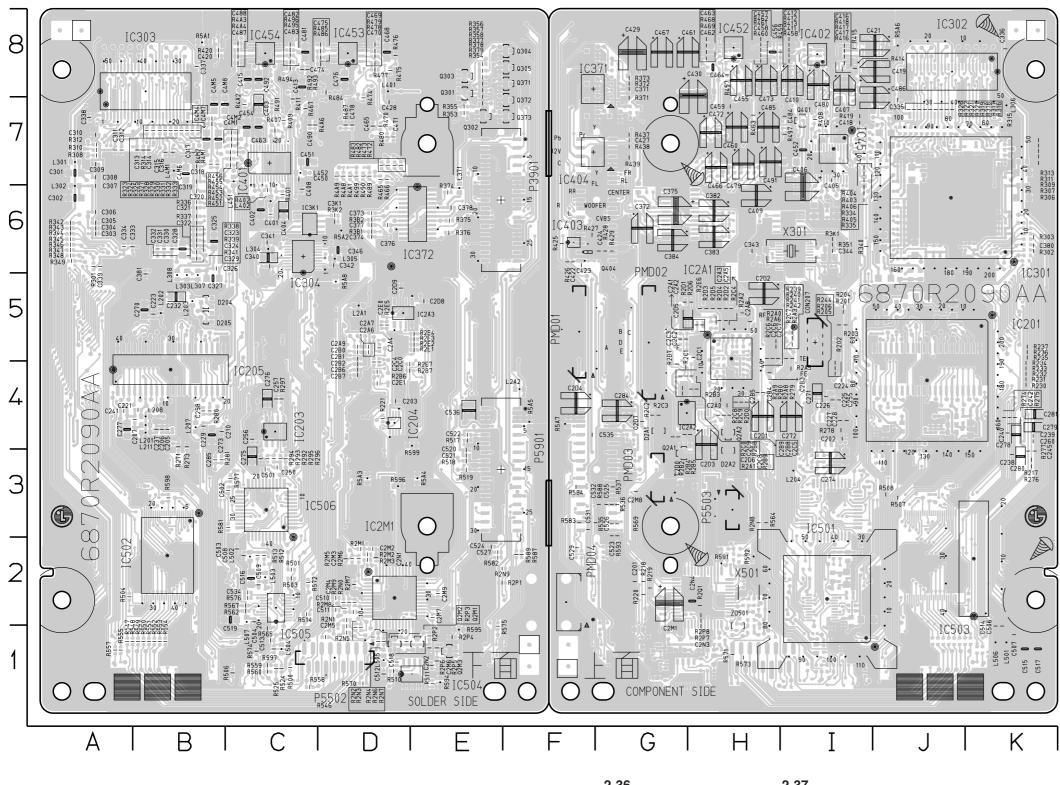
8. JACK CIRCUIT DIAGRAM





PRINTED CIRCUIT LAYOUTS

1. MAIN P.C.BOARD



LOCATION GUIDE

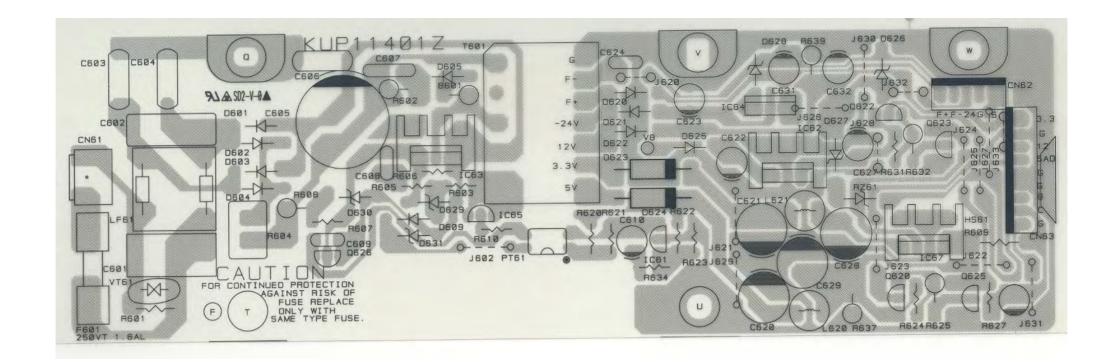
(BOTTOM SIDE)

C203 C206 C206 C207 C210 C207 C210 C222 C223 C237 C241 C250 C250 C250 C270 C250 C270 C270 C270 C270 C270 C270 C270 C27
01 88 81 81 81 81 81 81 81 81 81 81 81 81
G306 G307 G308 G310 G312 G312 G312 G312 G312 G312 G312 G312
A66A77A7A77BBB77G66B666B666BBBBBBBBBBBAAABA7ACC6BBBBBBBBBB
CA20 CA50 CA51 CA51 CA53 CA66 CA60 CA70 CA71 CA71 CA75 CA76 CA78 CA76 CA78 CA76 CA78 CA76 CA78 CA76 CA78 CA76 CA78 CA76 CA76 CA78 CA76 CA76 CA76 CA76 CA76 CA76 CA76 CA76
88 DC7 CC7 DD8 DD8 DD8 DD8 DD8 DD8 DD8 DD8 DD8 DD
D205 (1203) (1204) (1205) (1204) (1205) (1204) (1205) (1204) (1207) (120
85 C D L B L D D D D D D D D D D D D D D D D
03013 0303 03045 03711 0372 0373 R280 R273 R281 R273 R281 R295 R296 R296 R297 R281 R281 R281 R281 R281 R281 R281 R281
E7888 F88 F77 D4444333 CCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
R308 R314 R327 R328 R327 R338 R336 R337 R338 R336 R357 R358 R377 R338 R357 R358 R377 R338 R357 R358 R377 R378 R377 R377
A777A877B8777B8B866666666666668B87B8666666666
RA552 RA554 RA556 RA565 RA566 RA667 RA477 RA477 RA478 RA478 RA478 RA478 RA482 RA484 RA484 RA484 RA481
C77C77C7DD77DD88BBBBDD77DBBBBBDD77C78BBCCC7DD77BBTCCC224C1D1EC2
R513 R514 R518 R518 R518 R518 R524 R524 R526 R546 R547 R550 R551 R550 R551 R551 R551 R551 R551
C2 C24 E3 E C C D A A A B B B B B B B B A A C C C C C C C

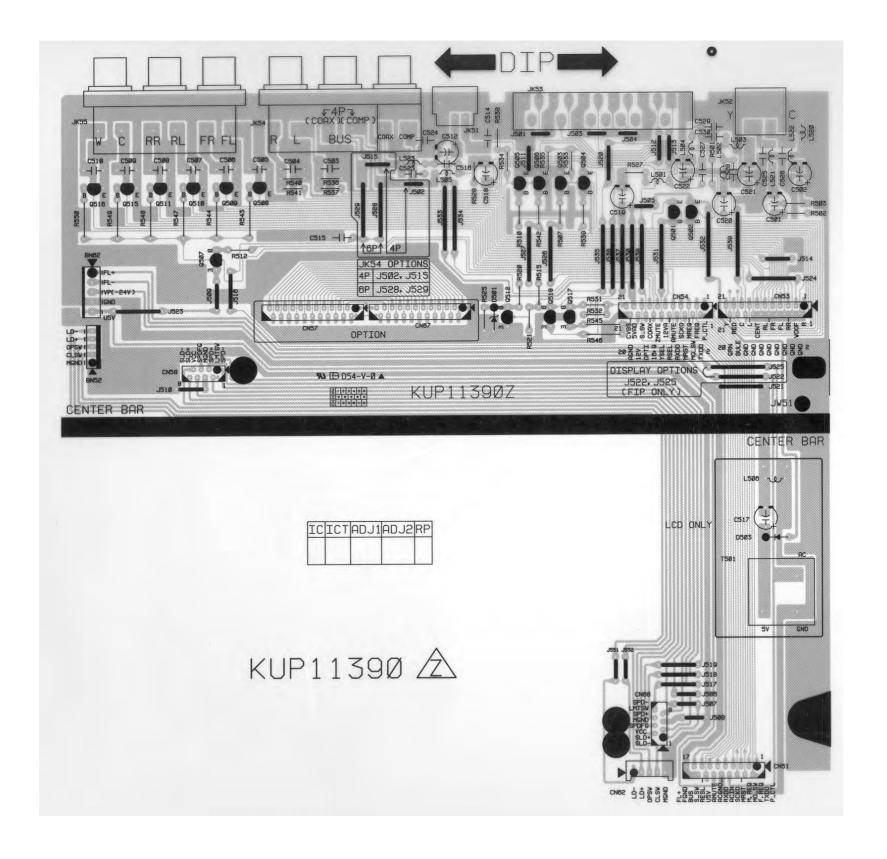
(TOP SIDE)

G4 (C.73 G2) (C.73 G3) (C.80 H1 (C.84 G4) (C.91 H6 (C.91 | 177 | 172 | 173 | 174 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 | 175 15 R2C6
15 R2C8
15 R2C8
14 R2C9
14 R2C9
14 R2D0
62 R2D2
62 R2D2
62 R2D2
62 R2D2
62 R2D4
64 R2E6
65 R2P7
64 R32
15 R303
15 R306
15 R307
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18 R317

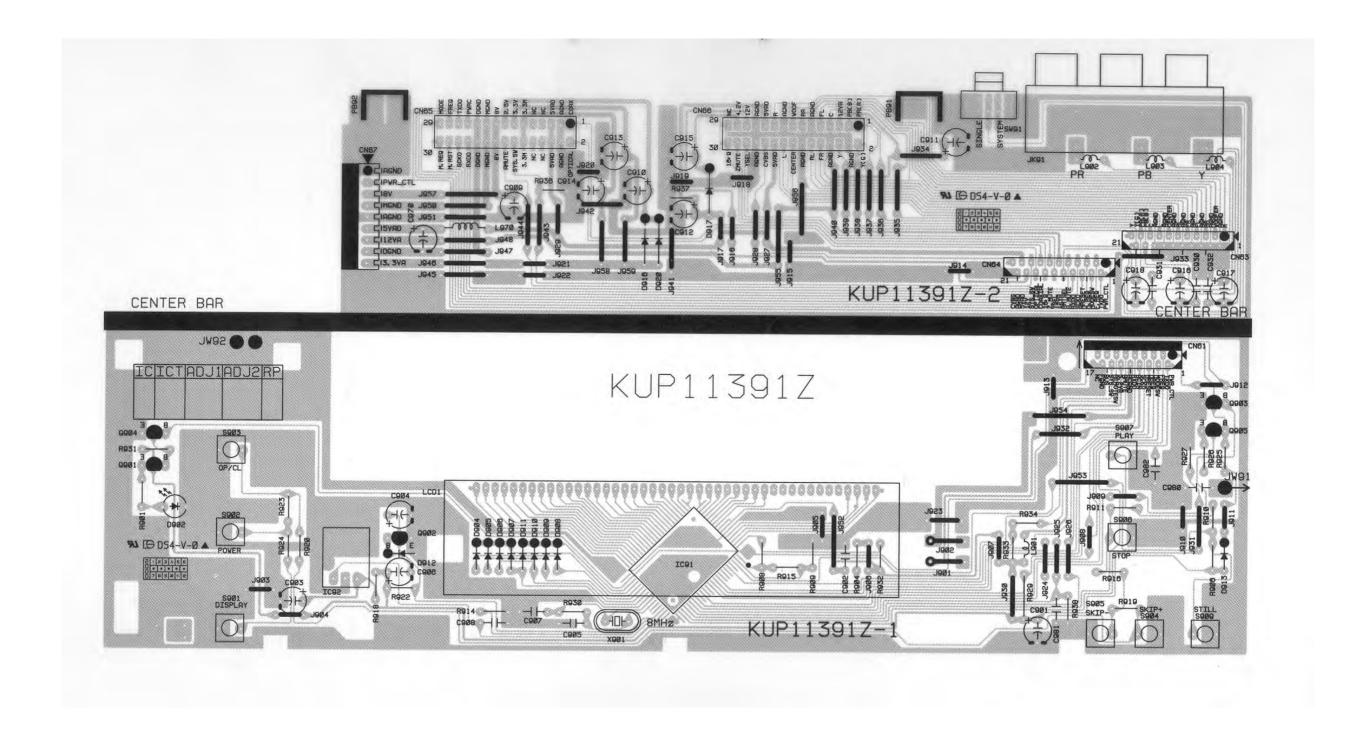
2. POWER P.C.BOARD



3. AV P.C.BOARD



4. FRONT P.C.BOARD



SECTION 4 MECHANISM

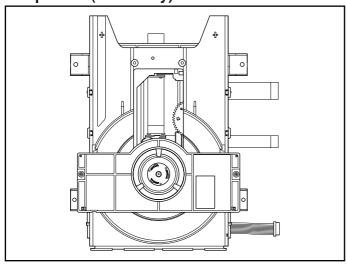
CONTENTS

DECK MECHANISM PARTS LOCATIONS
 Top View4-2 Top View(without Tray Disc)4-2 Bottom View4-2
DECK MECHANISM DISASSEMBLY
1. Holder Clamp4-2
1-1. Clamp Assembly Disc 4-2 1-1-1. Plate Clamp 4-2 1-1-2. Magnet Clamp 4-2 1-1-3. Clamp Upper 4-2
2. Tray Disc4-2
3. Base Assembly Sled4-3
3-1. Gear Assembly Feed4-3 3-2. Gear Assembly Middle4-3 3-3. Gear Assembly Rack4-3
4. Rubber Rear4-3

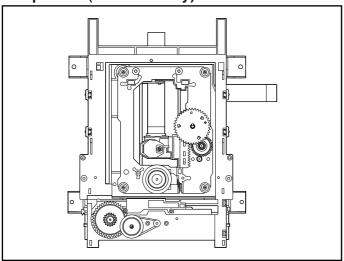
5. Frame Assembly Up/Down	4-4
6. Belt Loading	4 - 4
7. Gear Pulley	4-4
8. Gear Loading	4-4
9. Guide Up/Down	4-4
10. PWB Assembly Loading	4-4
11. Base Main	

DECK MECHANISM PARTS LOCATION

Top View (With Tray)

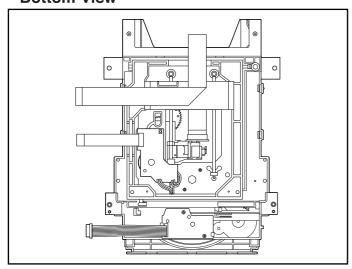


Top View (Without Tray)



Procedure		Parts	Fixing Type	Disass	Fig-
Starting No.		Faits	Fixing Type	embly	ure
	1	Holder	2 Screws,		4-1
		Clamp	2 Locking Tabs		
1	2	Clamp Assembly			4-1
		Disc			
1, 2	3	Plate Clamp			4-1
1, 2, 3	4	Magnet Clamp			4-1
1, 2, 3, 4	5	Clamp Upper			4-1
1	6	Tray Disc			4-2
1, 6	7	Base Assembly Sled			4-3
			4 Screws,		
1, 2, 6	8	Gear Assembly	1 Connector		4-3
		Feed	1 Locking Tabs		
1, 2, 6, 8	9	Gear			4-3
		Middle			
1, 2, 6, 8,	10	Gear Assembly	1 Screw		4-3
9		Rack			
1, 2, 7	11	Rubber Rear			4-3
1, 2, 7	12	Frame Assembly	1 Screw	Bottom	4-4
		Up/Down			
1, 2	13	Belt Loading	1 Locking Tab		4-4
1, 2 ,13	14	Gear Pulley			4-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		4-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			4-4
1, 2, 13	17	PWB Assembly	1 Locking Tab	Bottom	4-4
		Loading	1 Hook		
			2Screw		
1, 2, 7, 12, 13,	18	Base Main	2 Locking Tabs		4-4
14, 15, 16, 17					

· Bottom View

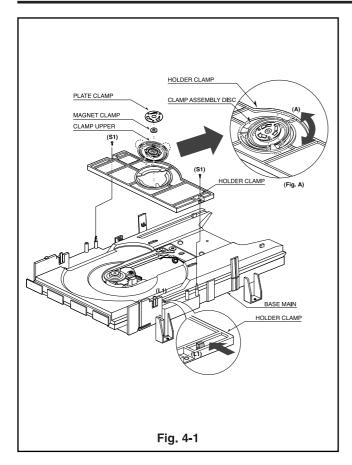


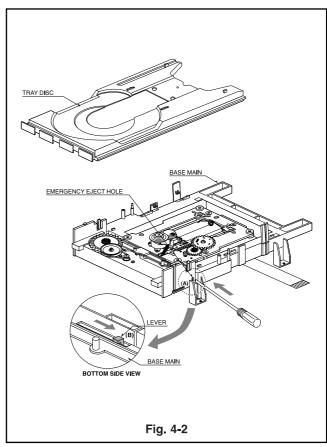
Note

When reassembling, perform the procedure in reverse order.

The "Bottom" on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY





1. Holder Clamp (Fig. 4-1)

- 1) Release 2 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.

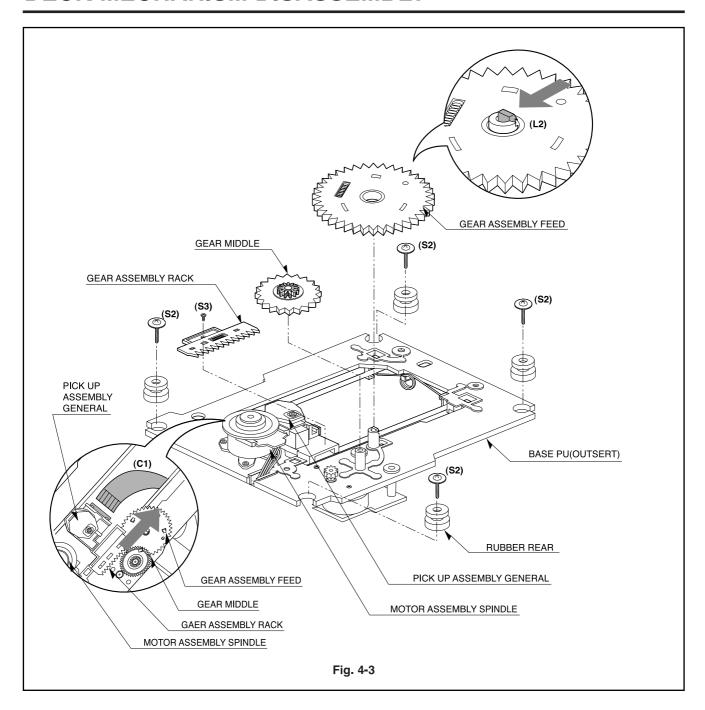
1-1-2. Magnet Clamp

1-1-3. Clamp Upper

2. Tray Disc (Fig. 4-2)

- 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.

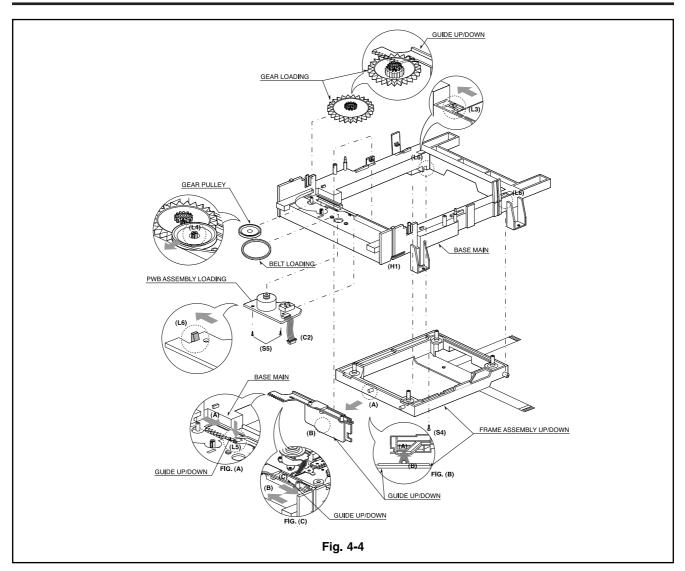
DECK MECHANISM DISASSEMBLY



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

- 1) Release 4 Screw(S2).
- 2) Disconnect the FFC Connector(C1)
- 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 Scerw(S3)
- 4. Rubber Rear (Fig. 4-3)

DECK MECHANISM DISASSEMBLY



5. Frame Assembly Up/Down

Note

Put the Base Main face down(Bottom Side)

- 1) Release the Screw(S4)
- Unlock the Locking Tab(L3) in direction of arrow 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(C) 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)

Note

Put the Base Assembly Main on original position(Top Side)

7. Gear pulley (Fig. 4-4)

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

8. Gear Loading (Fig. 4-4)

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

- 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) Unkool the Loading Motor Connector (C2) from the Hook (H1) on the Base Main.
- 3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 4-4)

SERVICE MANUAL

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