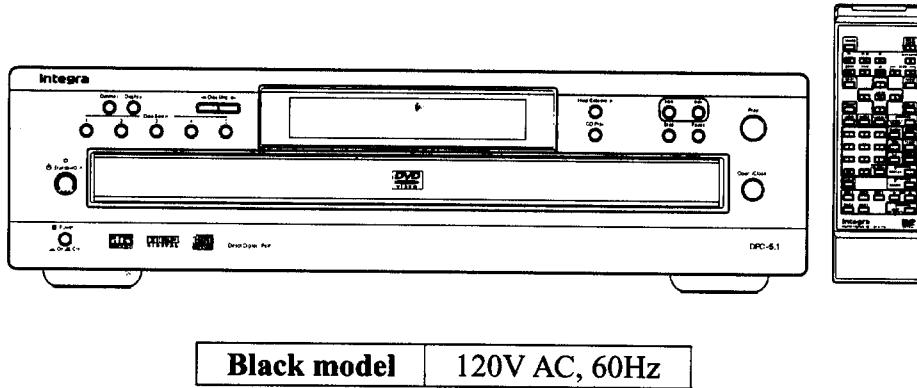


Ref. No. 3656

May, 2000

Integra® SERVICE MANUAL

DVD CHANGER DPC-5.1



SAFETY-RELATED COMPONENT WARNING!!

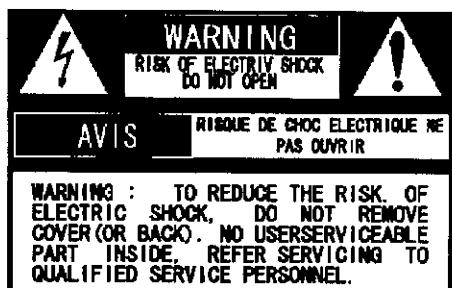
COMPONENTS IDENTIFIED BY MARK Δ ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

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SAFETY PRECAUTIONS



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



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

WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. DANGEROUS HIGH VOLTAGES ARE PRESENT INSIDE THE ENCLOSURE. DO NOT OPEN THE CABINET. REFER SERVICING TO QUALIFIED PERSONNEL ONLY.

CAUTION : TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

ATTENTION : POUR EVITER LES CHOCS ELECTRIQUE, INTRODUIRE LA LAME LA PLUS LARGE DA LA FICHE DANS LA BORNE CORRESPONDANTE DA LA PRISE ET POUSSER JUSQU' AU FOND.

PRECAUTIONS

Replacing the fuses

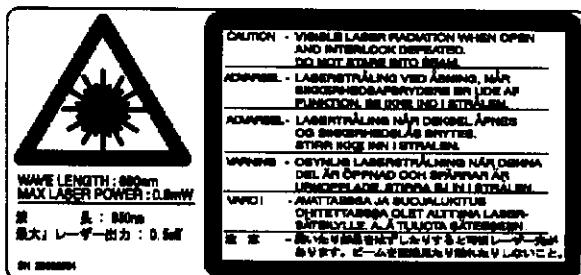
For continued protection against risk fire, replace only with same type and same rating fuse.

CIRCUIT No.	P ART No.	DESCRIPTION
F901 <MD01N,MU04N,MU04P>	252157	1.25A-UL/T -237

 This symbol located near the fuse indicates that the fuse used is fast operating type. For continued protection against fire hazard, replace with same type fuse. For fuse rating refer to the marking adjacent to the symbol.

 Ce symbole indique que le fusible utilise est a rapide. Pour une protection permanente, n'utiliser que des fusibles de même type. Ce damier est indique la qu le present symbol est appose.

LASER BEAM CAUTION LABEL



When the power supply is being turned on, you may not remove this laser caution label, radiation of a laser may be received.

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

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

SPECIFICATIONS

DVD Changer

Power supply	AC 120 V, 60 Hz (U.S. & Canadian models) AC 100 – 240V, 50/60 Hz (Other area models)
Power consumption	19 W
Weight	6.6 kg, 14.6 lbs
External dimensions (W/H/D)	435 X 121 X 400 mm, 17-1/8" X 4-3/4" X 15-3/4"
Signal system	Standard NTSC (U.S. & Canadian models) PAL/3.58 NTSC (Other area models)
Laser	Semiconductor laser, wavelength 650 nm
Frequency range (digital audio)	DVD linear sound : 48 kHz sampling 4 Hz to 22 kHz 96 kHz sampling 4 Hz to 44 kHz Audio CD : 4 Hz to 20 kHz
Signal-to-noise ratio (digital audio)	More than 96 dB (EIAJ)
Audio dynamic range (digital audio)	More than 90 dB (EIAJ)
Harmonic distortion (digital audio)	Less than 0.01 %
Wow and flutter	Below measurable level (less than ±0.001 % (W.PEAK)) (EIAJ)
Operating conditions	Temperature: 5°C to 35°C (41 to 95 degrees), Operation status: Horizontal

Outputs

Video output	1.0 V (p-p), 75 ohm, negative sync., pin jack X 1
S video output	(Y) 1.0 V (p-p), 75 ohm, negative sync., Mini DIN 4-pin X 1 (C) 0.286 V (p-p), 75 ohm
Component Video output	(Y) 1.0 V (p-p), 75 ohm, negative sync., pin jack X 1 (Pb)/(Pr) 0.7 V (p-p), 75 ohm
Digital Audio output (optical)	Optical connector X 1
Digital Audio output (coaxial)	0.5 V (p-p), 75 ohm, pin jack X 1
Audio output (analog audio)	2.0 V (rms), 470 ohm, pin jack (L, R) X 1

- Design and specifications are subject to change without notice.

Your DVD Changer can play back the following discs:

	Disc mark	Contents	Disc size	Maximum playback time
DVD videos		Audio + Video (moving pictures)	12 cm	Approx. 4 hours (single sided disc)
				Approx. 8 hours (double-sided disc)
			8 cm	Approx. 80 minutes (single-sided disc)
				Approx. 160 minutes (double-sided disc)
VIDEO CDs		Audio + Video (moving pictures)	12 cm	Approx. 74 minutes
			8 cm	Approx. 20 minutes
Audio CDs		Audio	12 cm	Approx. 74 minutes
			8 cm (CD single)	Approx. 20 minutes

- You cannot play back discs other than those listed.
- You cannot play back discs such as CD-R, CD-RW, CD-ROM, DVD-RAM, DVD-RW, etc., even though they may be labelled with one of the above logos.
- U.S. & Canadian models:**
This DVD Changer uses the NTSC color system, and cannot play back DVD videos recorded in any other color system (PAL, SECAM, etc.).
- Other area models:**
This DVD Changer uses the PAL/NTSC color system, and cannot play back DVD videos recorded in any other color system (SECAM, etc.).
- Avoid using heart-shaped or octagonal discs. Playing irregularly shaped discs may damage the DVD Changer's internal mechanism.

REPLACEMENT OF MECHANICAL PARTS

1-1. Cabinet Replacement

1-1-1. Top Cover

1. Remove five screws (1) and remove the top cover (2).

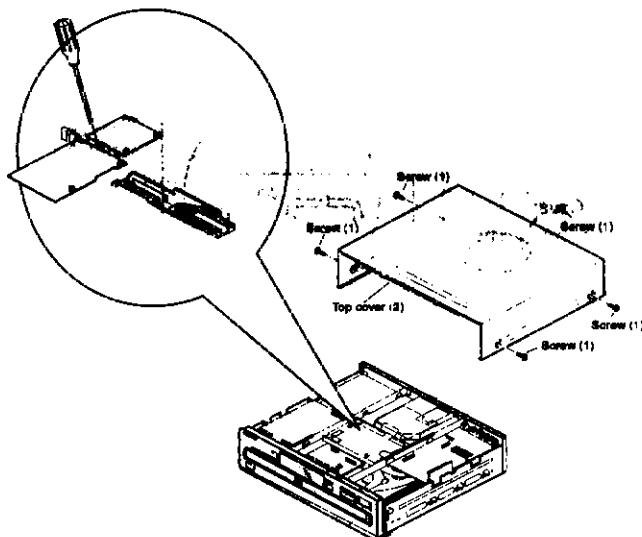


Fig. 2-1-1.

1-1-2. Tray Panel

1. Eject the tray (1).
2. Twist the tray panel (2) a little in the arrow A direction with the tray (1) held to release four claws and lift up the tray panel (2) in the arrow B direction, then the tray panel (2) is removed.
3. When mounting the tray panel (2), insert the tray panel (2) along the groove of the both sides of the tray (1) until it clicks.

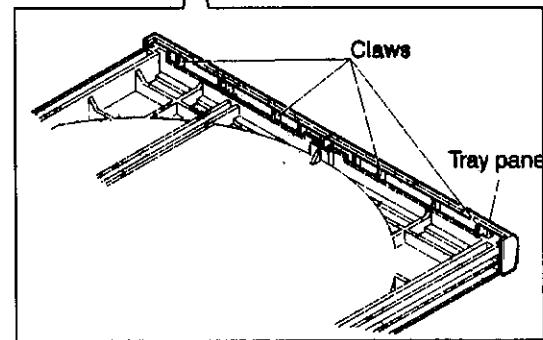
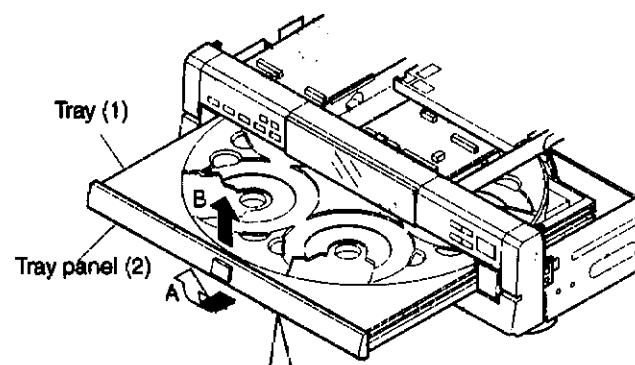


Fig. 2-1-2.

1-1-3. Front Panel and Front Bracket

1. Pull out the tray and remove three screws, holding the front panel.
2. Remove the front panel (1).
2. Disconnect two FFCs (2).
3. Remove three screws (3) and remove the front bracket (4).
4. Release three claws of both sides the front bracket.

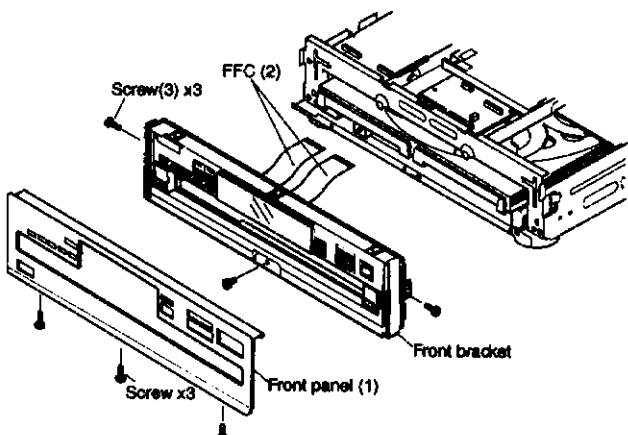


Fig. 2-1-3

1-1-4. Rear Panel

1. Remove 16 screws (1) and remove the rear panel (2).

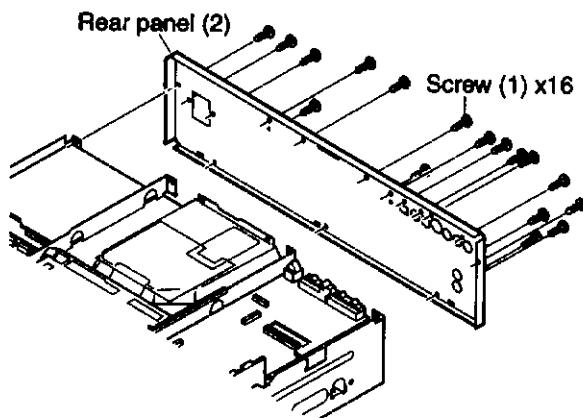


Fig. 2-1-4

1-2. PC Board Replacement

1-2-1. Main PC Board

1. Peel off the three tapes (1).
2. Disconnect six FFCs (2) and one connector (3).

Note

* Before disconnecting the FFC from the main PC board, pull out the round bottom cover (attached with both-side adhesive tape) and be sure to short-circuit the LD-SHORT J001 by a clip or soldering.

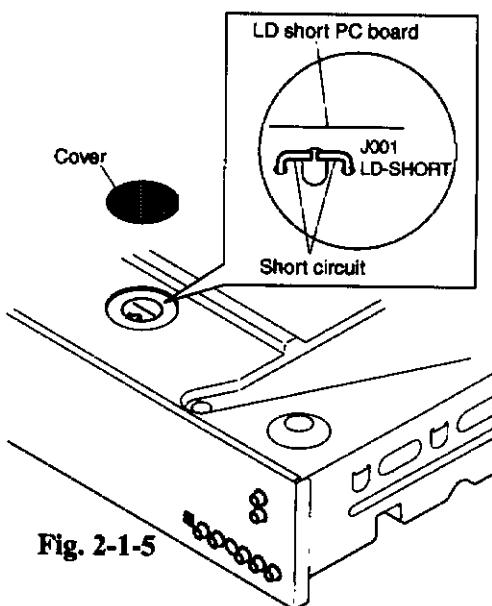


Fig. 2-1-5

3. Remove four screws (4) and remove the shield cover (4) and main PC board (5).

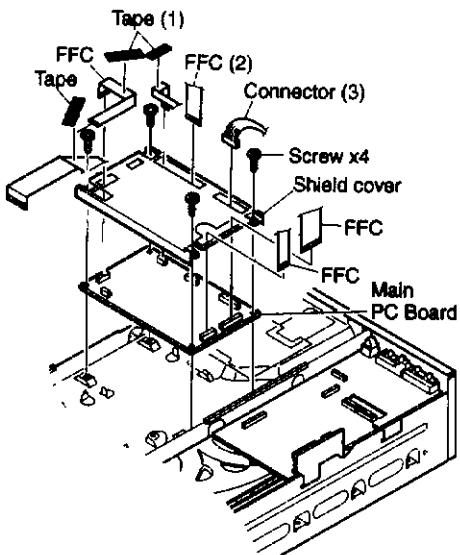


Fig. 2-1-6

1-2-2. Video Output PC Board

1. Disconnect four FFCs (1) and three connectors (2) and one junction connector (P703) (3).
2. Remove three screws (4).
3. Remove four screws (5) and remove the video output PC board (6).

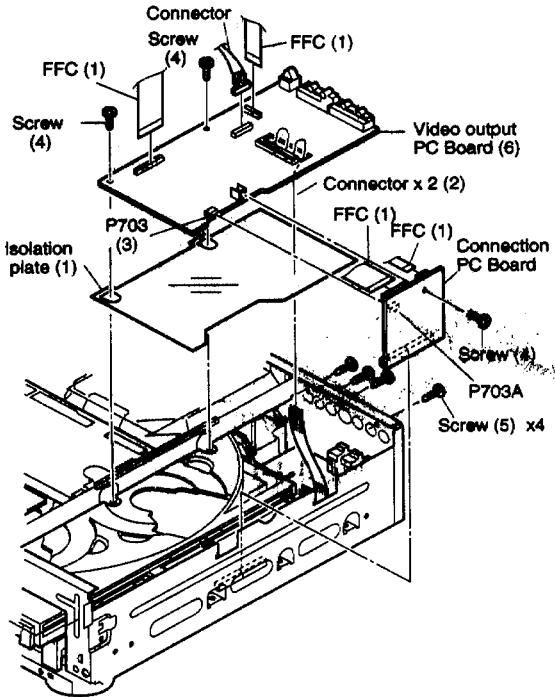


Fig. 2-1-7

1-2-3. 5.1ch Output PC Board

1. Remove the isolation plate (1).
(Refer to Fig. 2-1-7)
2. Disconnect two connectors (2).
3. Remove three screws (3).
4. Remove two screws (4).
5. Remove the audio output PC board (5).

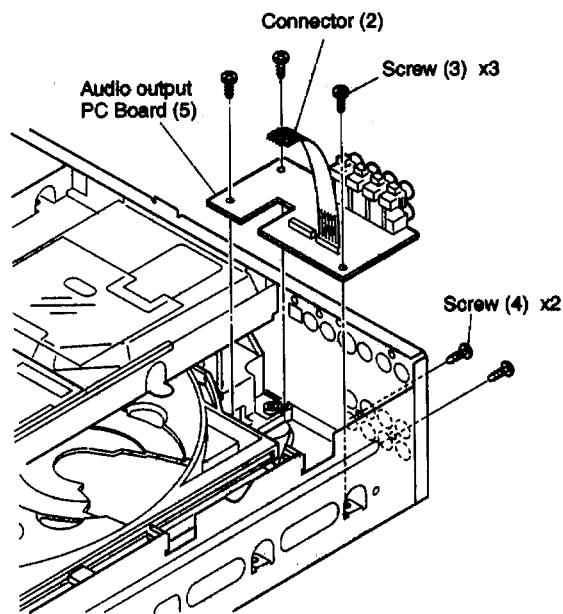


Fig. 2-1-8

1-2-4. Microprocessor PC Board

1. Disconnect four FFCs (1) and one connector (2).
2. Remove three screws (3).
3. Remove the microprocessor PC board (4).

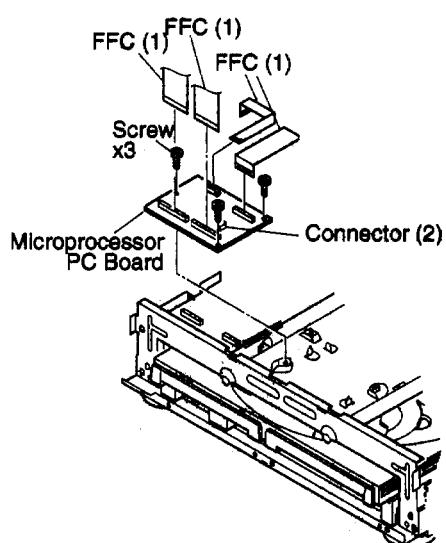


Fig. 2-1-9

1-2-5. Power Supply PC Board

1st Power Supply PC Board

1. Remove six screws (1).
2. Remove two screws (2) and three screws (3).
3. Remove the 1st power supply PC board (4) and disconnect two connectors (5).

2nd Power Supply PC Board

4. Remove two screws (6).
5. Disconnect three connectors (7).
6. Remove the 2nd power supply PC board (8).

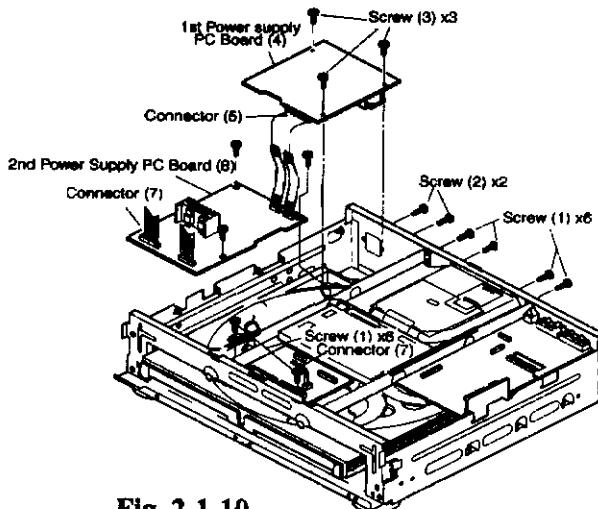


Fig. 2-1-10

1-2-6. Display PC Board and Switch PC Board

1. Remove the front panel. (Refer to Fig. 2-1-3.)
2. Disconnect two FFCs (1) and peel off the tape (2).
3. Remove eight screws (3) and the display PC board (4).
4. Remove three screws (5) and the switch PC board (6).

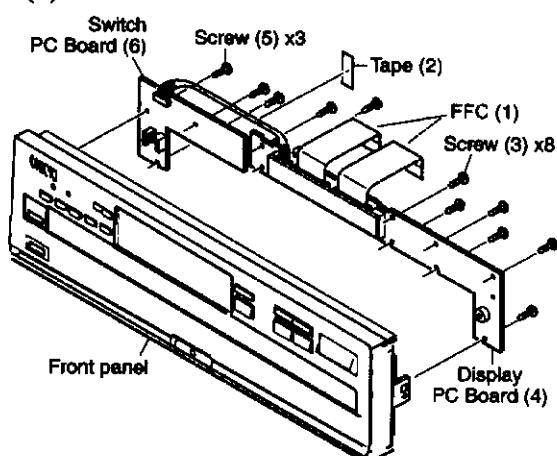


Fig. 2-1-11

1-3. Tray Replacement

1-3-1. Tray

1. Remove the front panel. (Refer to Fig. 2-1-3.)
2. Pull out the tray (1) until it stops.
3. Disconnect one FFC (2).
4. Pull the claw (3) and pull out the tray (1) to this side.

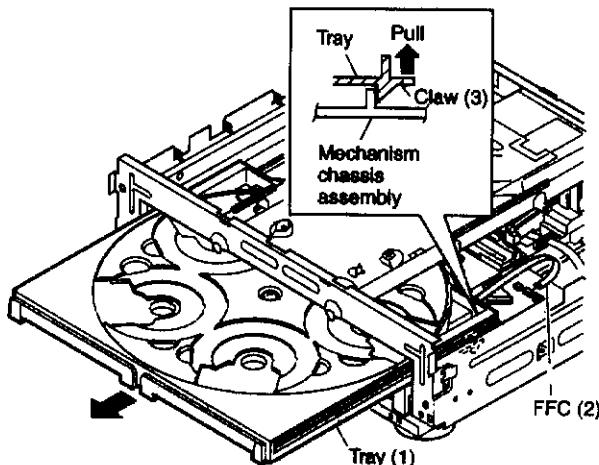


Fig. 3-1-1

1-3-2. Roulette

1. Remove the tray. (Refer to item 1-3-1.)
2. Remove one screw (1), one spring (2) and remove one washer (3).
3. Remove the roulette (4).

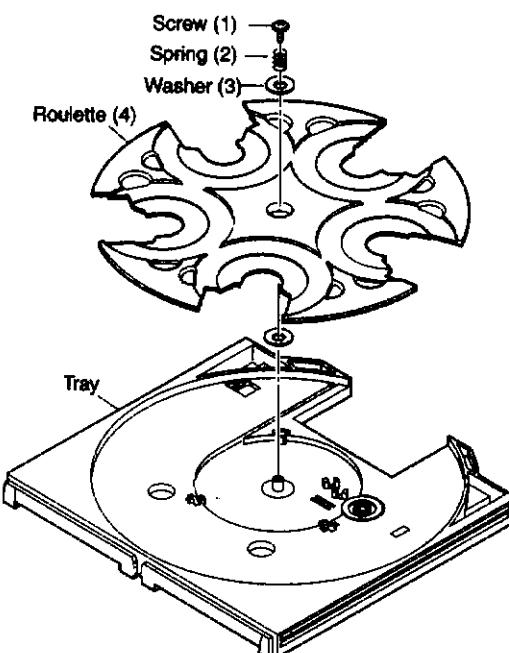


Fig. 3-1-2.

1-3-3. Gear Wheel, Tray loading Motor Ass'y, Sensor PC Board

1. Remove the roulette. (Refer to item 1-3-2.)
2. Remove one screw (1) and gear wheel (2).

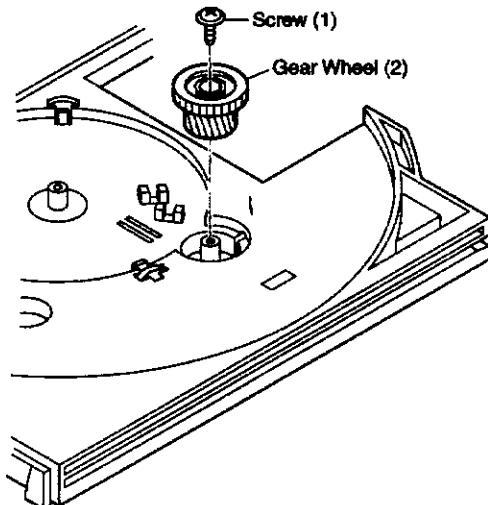


Fig. 3-1-3.

3. Turn over the tray.
4. Remove two screws (3) and the bracket (Motor).
5. Remove two screws (4) and tray loading motor (5).
6. Release six claws (6) and remove the sensor PC board (7).

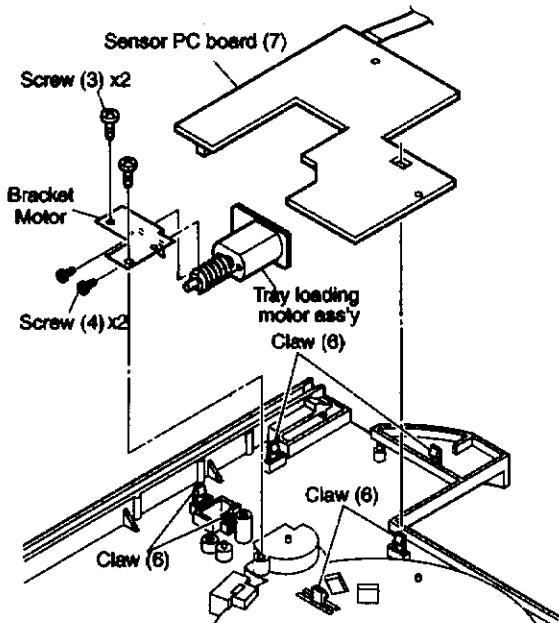


Fig. 3-1-4.

1-4. Mechanism Parts Replacement

1-4-1. Mechanism Chassis Assembly

1. Remove the tray. (Refer to item 1-3-1.)
2. Remove six screws (1) and the bracket (2).
3. Remove one connector (3) and two FFCs (4).
4. Remove four screws (5).
5. Remove the motor driver PC board (6) and the connection PC board (7).
6. Remove two screws (8) and three screws (9).
7. Remove the 5.1ch output PC board (10).

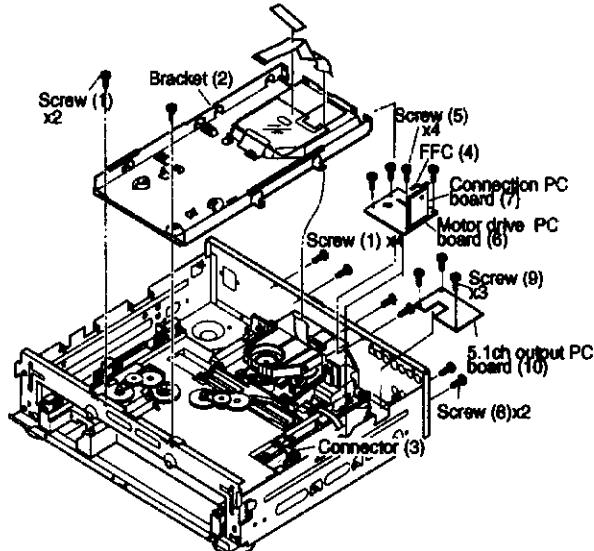


Fig. 4-1-1.

8. Remove six screws (11).
9. Remove the rail mechanism ass'y (12).

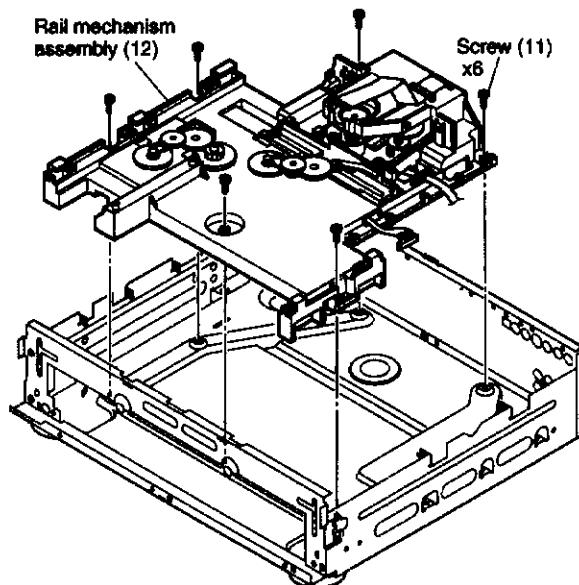


Fig. 4-1-2.

1-4-2. Loading Motor Ass'y and Chucking Motor Ass'y

1. Remove the belt (1) and remove two screws (2).
2. Turn over the Rail (3).
3. Release four claws (4).
4. Remove the loading motor ass'y with loading motor PC board assembly.
5. Remove the belt (5) and two screws (6).
6. Release four claws (7).
7. Remove the chucking motor ass'y with chucking motor assembly.

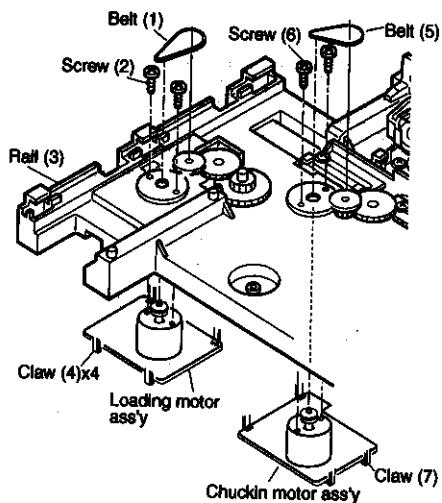


Fig. 4-1-3.

1-4-3. Gear Load, Gear Pulley, Gear A and Plate Cam.

1. Remove the chucking motor ass'y and loading motor ass'y. (Refer to item 1-4-2.)
2. Remove one washer B (1) and gear pulley (2).
3. Remove one gear A (3) and one gear load (4).
4. Remove one washer B (5) and one gear A (6).
5. Remove two screws (7), two springs (8) and two washers (9).
6. Remove the plate cam (10).

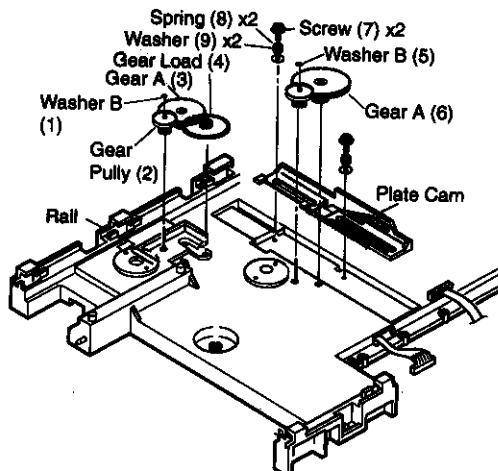


Fig. 4-1-4.

1-4-4. Chassis Sub. and DVD Mechanism.

1. Remove the FFC (1) from pass through the slit of the rail.
2. Turn over the rail assembly.
3. Remove two screws (2) and one washer (3).
4. Release the boss from a groove of the plate cam (4).
5. Remove the chassis sub (5) and remove the DVD mechanism assembly (6).

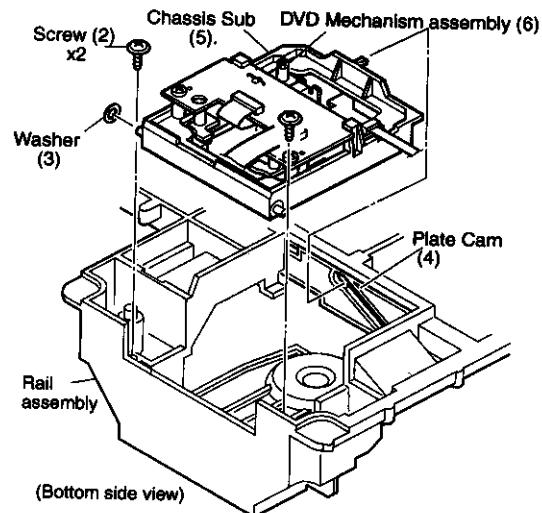
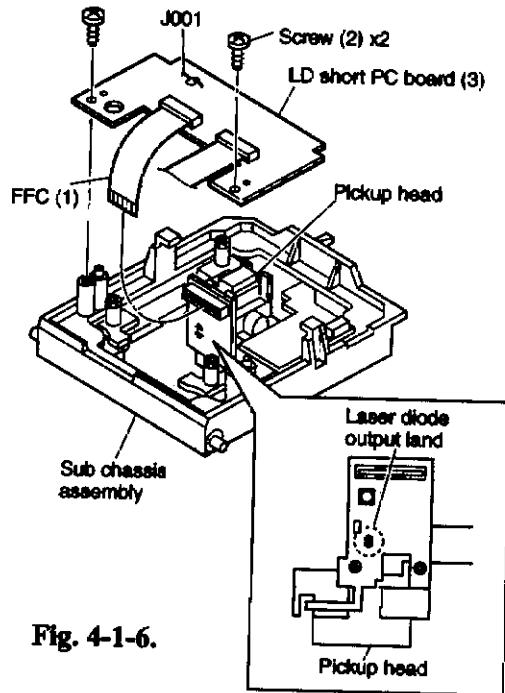


Fig. 4-1-5.

1-4-5. LD Short PC Board Ass'y.

1. Remove the chassis sub. (Refer to item 1-4-4.)
2. Disconnect one FFC (1) and remove two screws (2).
3. Remove the LD short PC board (3).



NOTE:

- * The dampers' color differs when used for the front side and the rear.
- * When mounting the pickup mechanism assembly (3) with the screws (1), push the pickup mechanism assembly (2) downward without being caught and tighten the screws (1) after placing the washer with the damper bent.

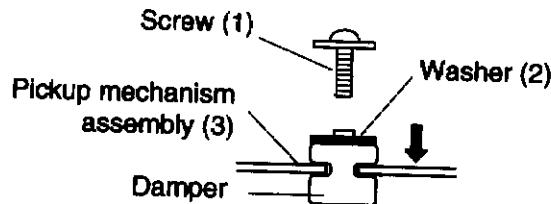


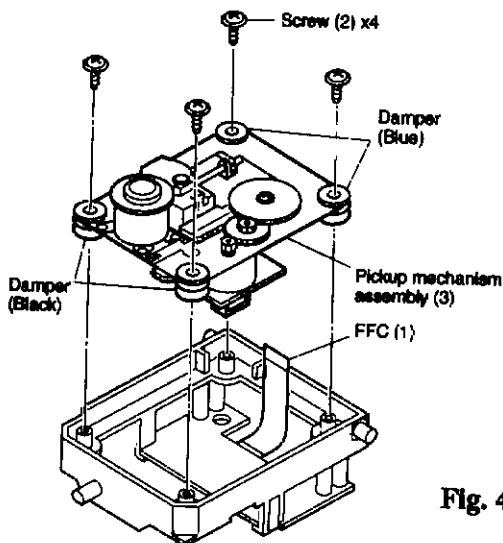
Fig. 4-1-8.

NOTE:

- * When remove the DVD mechanism, be sure to short-circuit the laser diode output land of the pickup head before and after disconnecting and connecting the FFC (1).

1-4-6. Pickup Mechanism Assembly

1. Remove the chassis sub. (Refer to item 1-4-4.)
2. Disconnect the FFC (1).
3. Remove four screws (2) and remove the pickup mechanism assembly (3).



1-4-7. Gear B Assembly, Gear A and Rack Gear Assembly

Removal

1. Release one claw and remove the gear B assembly (1).
2. Remove the gear A (2).
3. Remove one screw (3) and remove the rack gear assembly (4).

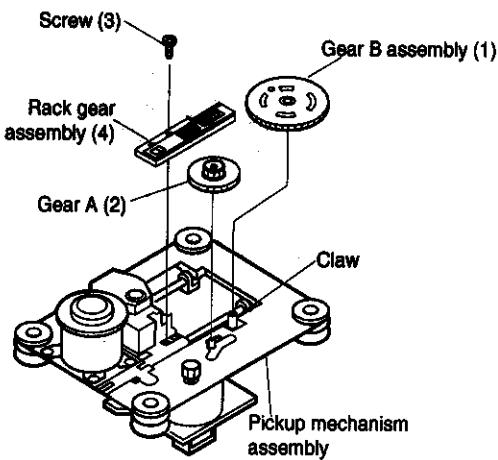


Fig. 4-1-9

Note

Mount the gear B assembly (1) and the gear A (2) with their gear teeth placed more than one tooth at least inside the shaded portion.

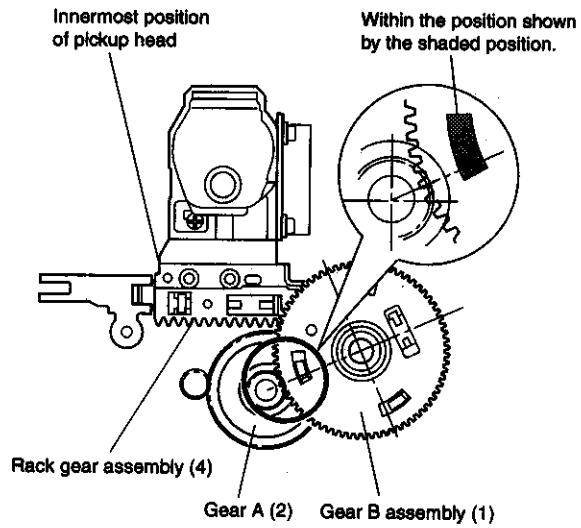


Fig. 4-1-11

Mounting

1. When mounting, perform the reverse order of the removal.
2. Mount the gear B assembly (1) by pushing the pickup head (5) to the disc motor side (arrow A direction) and shifting the upper gear of the rack gear assembly (4) in the arrow B direction. Refer to Fig. 4-1-10.

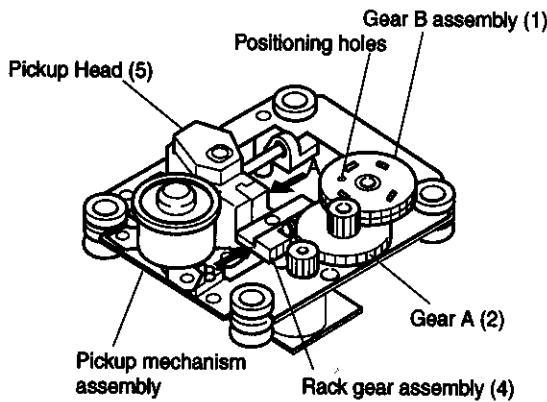


Fig. 4-1-10

1-5.Apply the Grease and Replacement the Tray lock

1-5-1. Apply the grease.

1. Use the following grease (white).

Grease : Floil G90S

2. See the applicable figure.

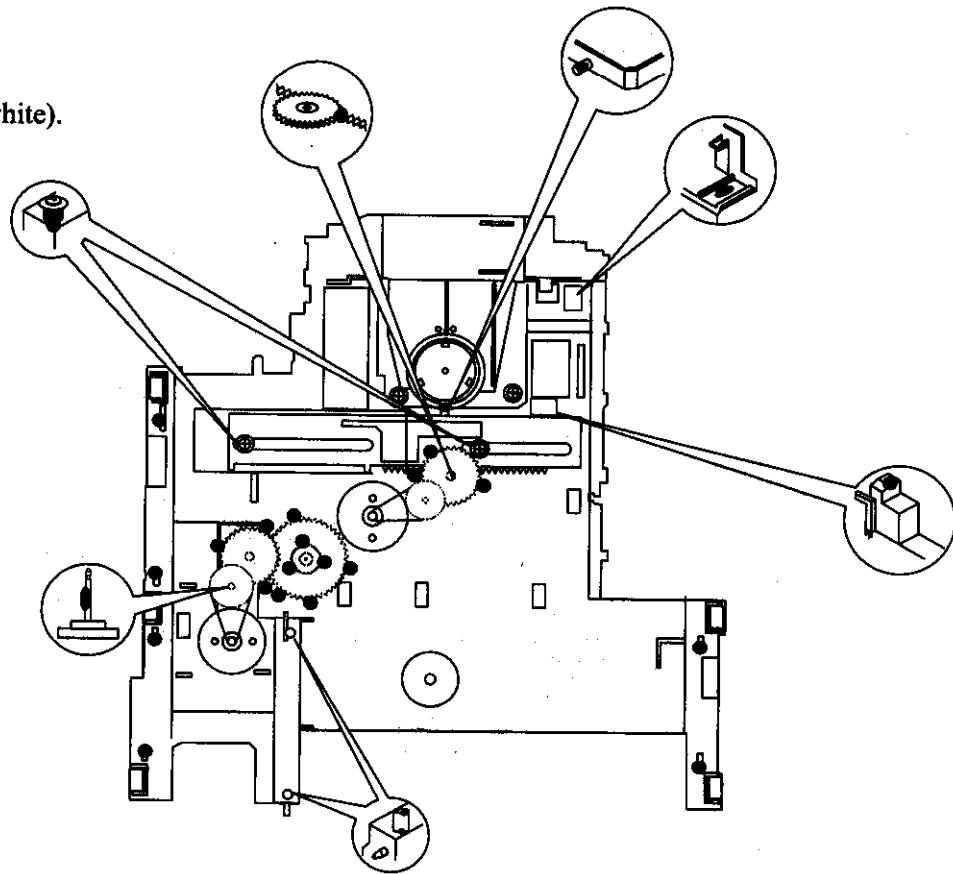
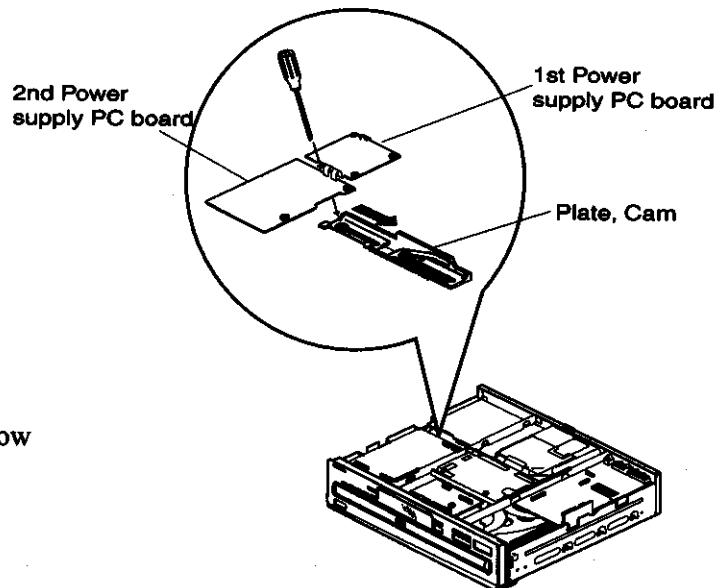


Fig.5-1-1.

1-5-2. Release the tray lock

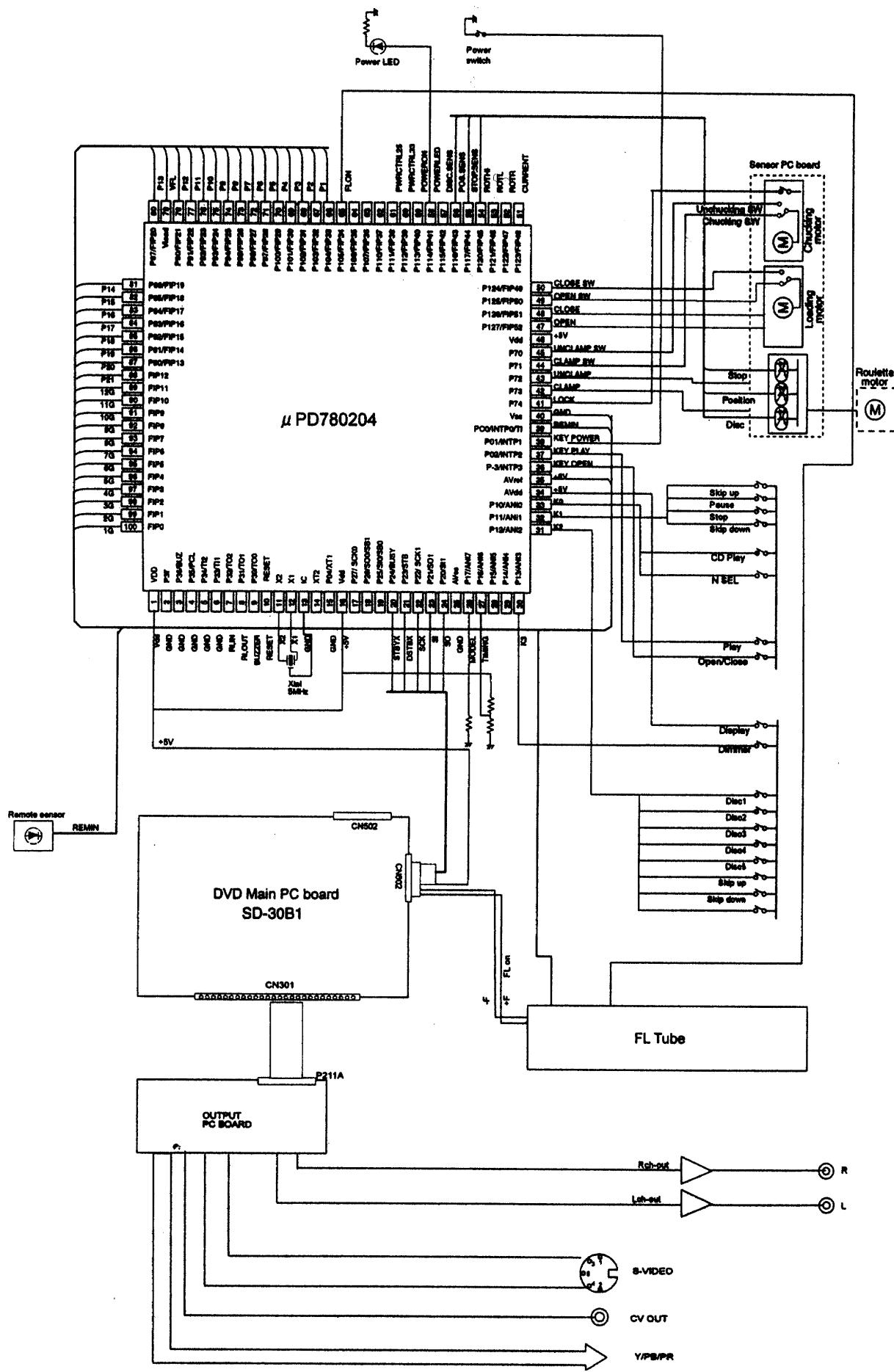


When the product breaks down, and the tray does not go out.

- 1) Remove the top cover. (Refer to item 1-1-1.)
- 2) The plate cam is moved in the direction of the arrow to release the lock by the screw driver.
- 3) Pull out the tray by hand.

Fig.5-1-2.

MICROPROCESSOR CONNECTION DIAGRAM



MICROPROCESSOR TERMINAL DESCRIPTION

DPC-5.1

μ PD780204GF

PIN No.	TERMINAL	I/O	Description
1	Vdd	I	Power supply terminal. (+5V)
2-6		I	Not used. (To connect to the ground pin.)
7	RLIN	I	Input terminal of the RI signal.
8	RLOUT	O	Output terminal of the RI signal.
9	BUZZER	O	Buzzer signal output terminal.
10	RESET	I	Reset terminal for the system microprocessor.
11	X2	O	Master clock output terminal. (5MHz)
12	X1	I	Master clock input terminal. (5MHz)
13	IC	I	To connect to the ground pin.
14		O	Not used. (Open terminal)
15	GND	I	Not used. (To connect to the ground pin.)
16	+5V	I	Power supply terminal. (+5V)
17-19		O	Not used. (Open terminal)
20	<u>STBYX</u>	O	Standby signal data output terminal to the main microprocessor.
21	<u>DSTBX</u>	O	Strobe signal data input terminal from the main microprocessor.
22	SCK	I	Serial clock signal data input terminal from the main microprocessor.
23	SI	O	Serial data output terminal to the main microprocessor.
24	SO	I	Serial data input terminal from the main microprocessor.
25	GND	I	Ground terminal.
26	MODEL	I	Model select input terminal.
27	TIMING	I	Set up terminal of the roulette.
28-29		O	Not used. (Open terminal)
30	K3	I	Key input terminal.
31	K2	I	Key input terminal.
32	K1	I	Key input terminal.
33	K0	I	Key input terminal.
34	+5V	I	Power supply terminal. (+5V)
35	+5V	I	Reference power supply pin. (+5V)
36	<u>KEYOPEN</u>	I	Input control signal for open/close of the tray.
37	<u>KEYPLAY</u>	I	Key input terminal at the play.
38	<u>KEYPOWER</u>	I	Power switch key input terminal.
39	<u>REMIN</u>	I	Remote control input terminal.
40	GND	I	Ground terminal.
41	<u>LOCK</u>	I	Detection switch of the tray loading. L= Clamped
42	<u>CLAMP</u>	O	Clamp motor control terminal. L= Clamp
43	<u>UNCLAMP</u>	O	Clamp motor control terminal. L= Un clamp
44	<u>CLAMP.SW</u>	I	Chuck close detection input terminal. L= Lock
45	<u>UNCLAMP.SW</u>	I	Chuck close detection input terminal. L= Unlock
46	+5V	I	Power supply terminal. (+5V)
47	<u>OPEN</u>	O	Loading motor control output terminal. L= Open the tray.
48	<u>CLOSE</u>	O	Loading motor control output terminal. L= Close the tray.
49	<u>OPEN.SW</u>	I	Detection input terminal for tray open switch. L= Open the tray.
50	<u>CLOSE.SW</u>	I	Detection input terminal for tray close switch. L= Close the tray.
51	<u>CURRENT</u>	I	Detection input signal of over current for the loading motor.
52	<u>ROTR</u>	O	Roulette motor control terminal. L= Clockwise direction.
53	<u>ROTL</u>	O	Roulette motor control terminal. L= Counter clockwise direction.
54	<u>ROTHI</u>	O	Roulette motor speed control terminal.
55	<u>STOP.SENS</u>	I	Detection input terminal of the carousel rotation at stop position.
56	<u>POS.SENS</u>	I	Detection input terminal of the carousel rotation.
57	<u>DISC.SENS</u>	I	Detection input terminal of the disc sensor.
58	<u>POWERLED</u>	O	Power LED control terminal. H= Power on
59	<u>POWERON</u>	I	Power control terminal from the main PC board. H= Power on
60	<u>PWRCTRL33</u>	O	Power supply (3.3V) control terminal. H= Power on
61	<u>PWRCTRL25</u>	O	Power supply (2.5V) control terminal. H= Power on
62-64		O	Not used. (Open terminal)
65	FLON	O	Power supply terminal for the FL tube.
66		O	Not used. (Open terminal)
67-78	P1-P12	O	Segment output terminals.
79	VFL	I	Power supply for the FL tube.
80-86	P13-P19	O	Segment output terminals.
87-100	20G-1G	O	Grid output terminals.

4. Confirmation of content of writing (all destinations)
 - 4-1. The power supply is turned on, and press the STANDBY/ON button to turn on the DVD player.
 - 4-2. The "STOP" key and the "SKIP-DOWN" key are pushed at the same time in the state of No Disc.
 - 4-3. It is confirmed that the display of monitor is as follow.

MDD1N area

ROM1	Version V*.**	-R1
ROM2	Version V*.**	
OSD	Eng/Fre/spa	
VCD	On	BUZZER Off
A.3D	On	RANDOM On
KARA	Off	DTS On
VOCAL	Setup	DIMMER 3typ
V.3D	Off	V-FMT Ntsc
JOG	Off	MPEG-A On

MUS4P area

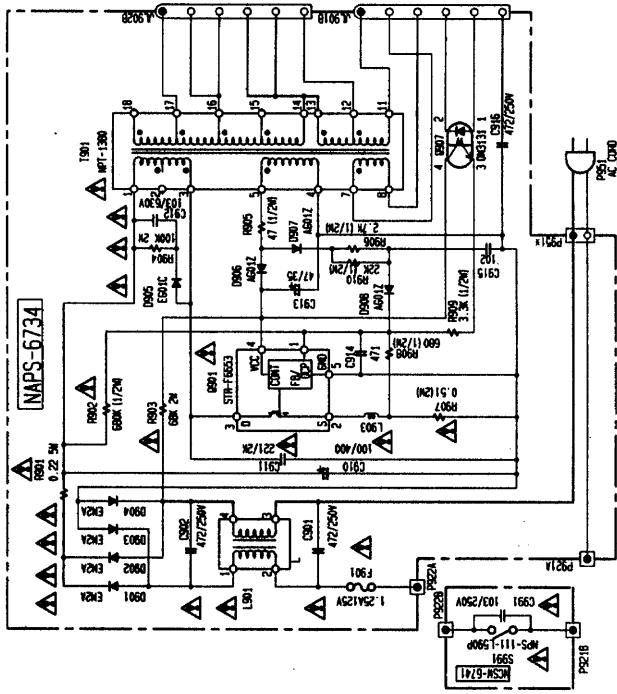
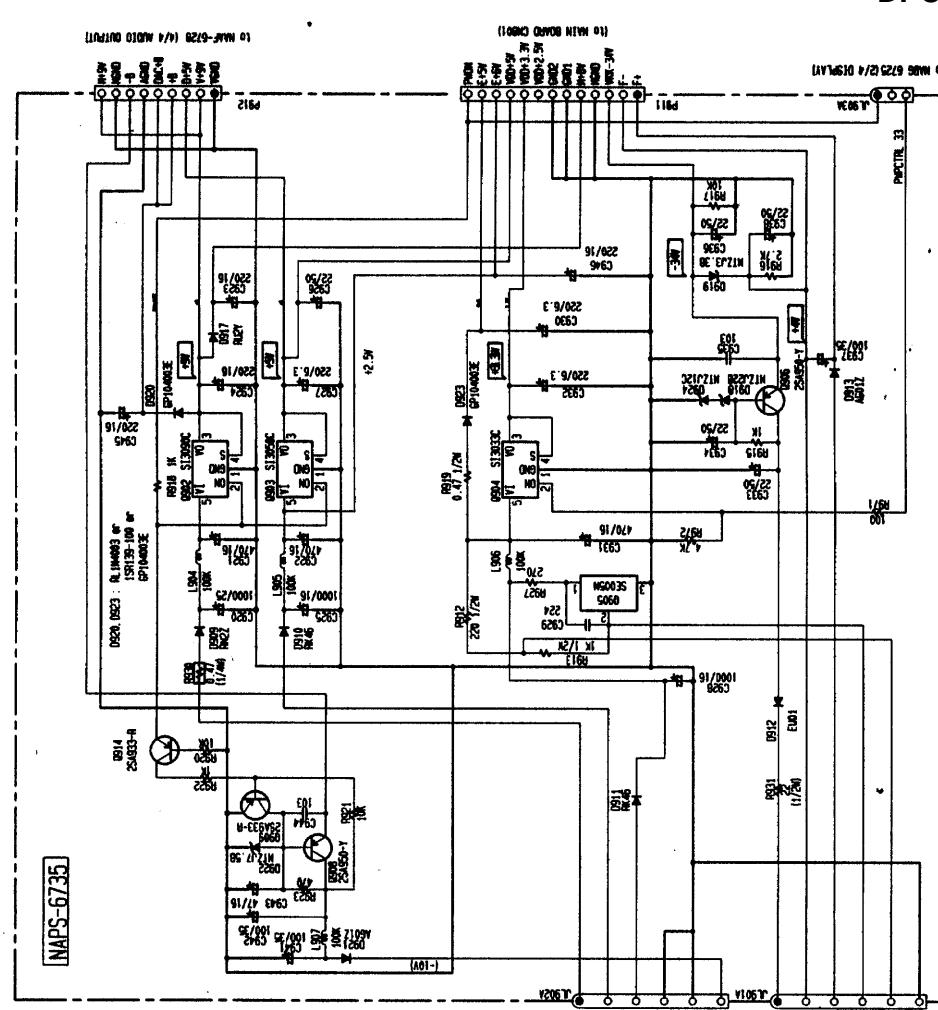
ROM1	Version V*.**	-R4
ROM2	Version V*.**	
OSD	Eng/Fre/spa	
VCD	On	BUZZER Off
A.3D	Off	RANDOM On
KARA	Off	DTS On
VOCAL	Setup	DIMMER 2typ
V.3D	Off	V-FMT Ntsc
JOG	Off	MPEG-A On

..* : Shown ROM version

5. Display confirmation of FL tube
All lighting of the FL tube only while "STOP" is being pushed when "STOP" key is pushed while pushing "SKIP-UP" key to the main body key.
6. Setting of the first setup screen mode
 - 6-1. The "STOP" key and the "DIMMER" key on the main body key are pushed at the same time in the state of No Disc.
 - 6-2. It is confirmed that the Setup screen goes out, and the character of "First Setup ON" has come out in lower right.
 - 6-3. The power supply again by On after turning off the power supply, and it is confirmed that the first setup screen goes out by Standby/ON mode. (Never push the Setup key here)
 - 6-4. The power supply is turned off, and the AC cord is pulled out.
7. Initialized of mechanism
 - 7-1. Press the DISC-5 key while pushing STANDBY/ON at standby condition.
 - 7-2. It is confirmed that the character of "First Setup ON" appears in the lower right of the display.
 - 7-3. It is confirmed to be displayed that the display of FL is "COMPLETE".
 - 7-4. The AC code is pulled out.

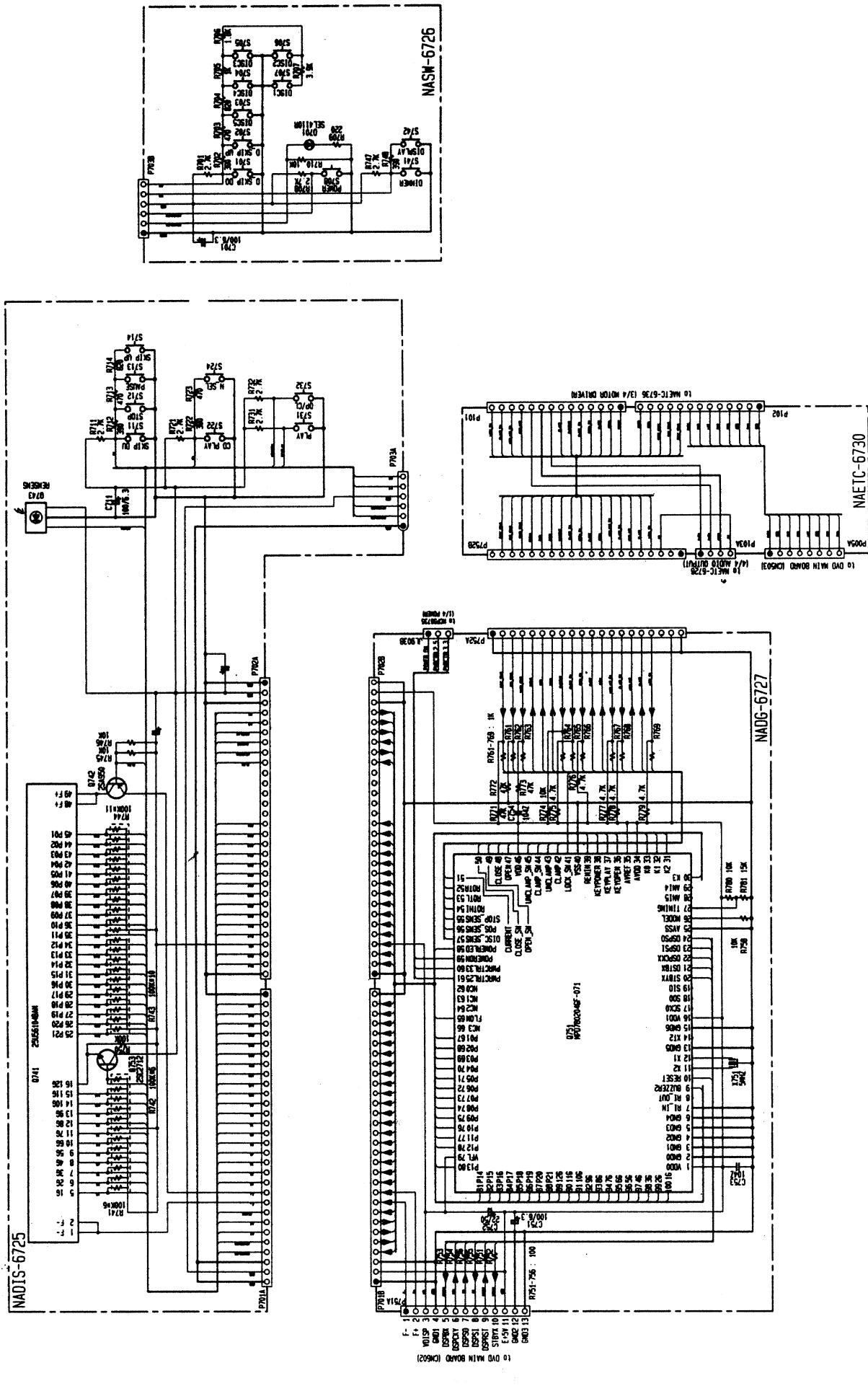
SCHEMATIC DIAGRAM 1

A B C D E F G

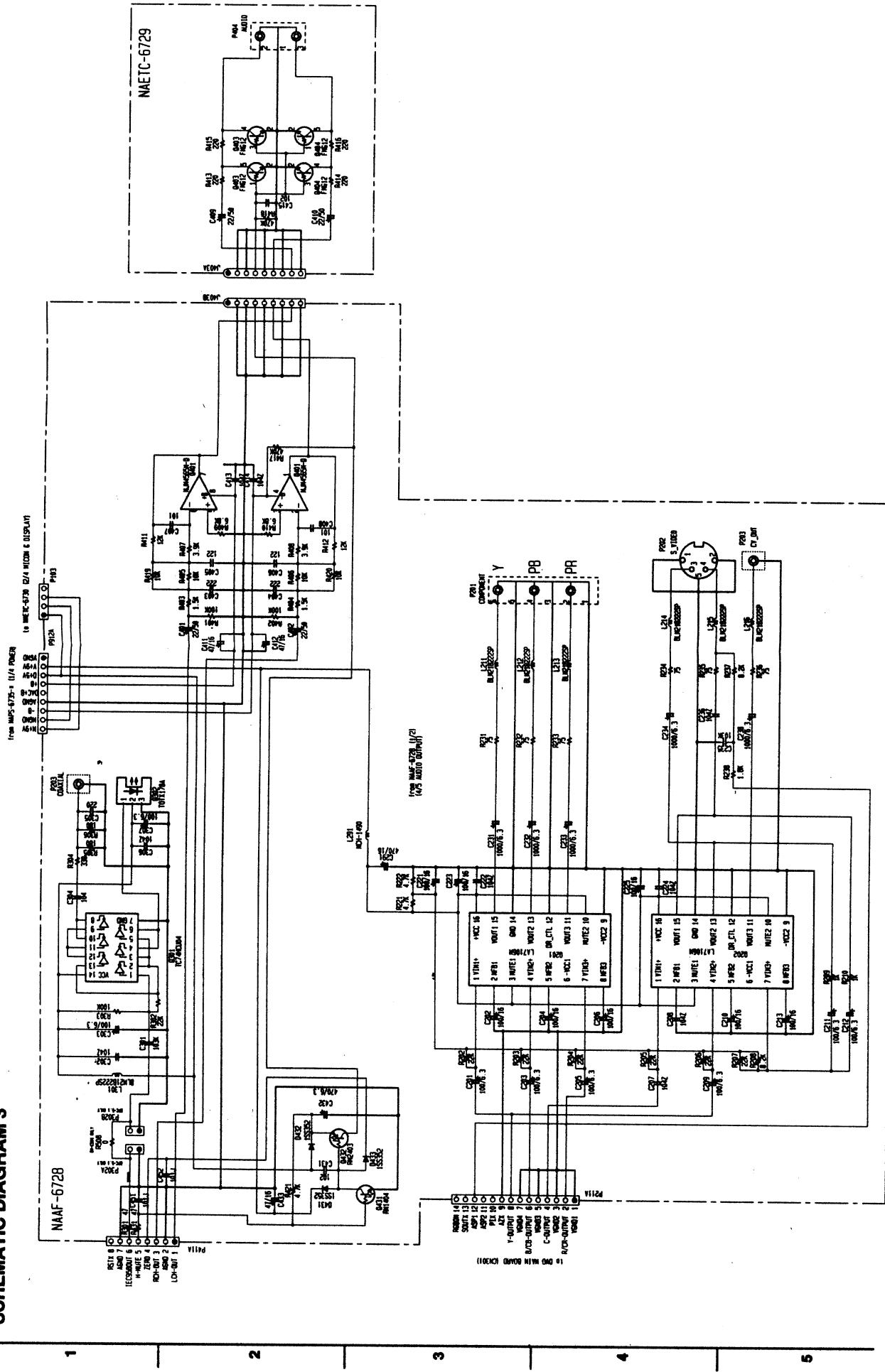


A B C D E F G

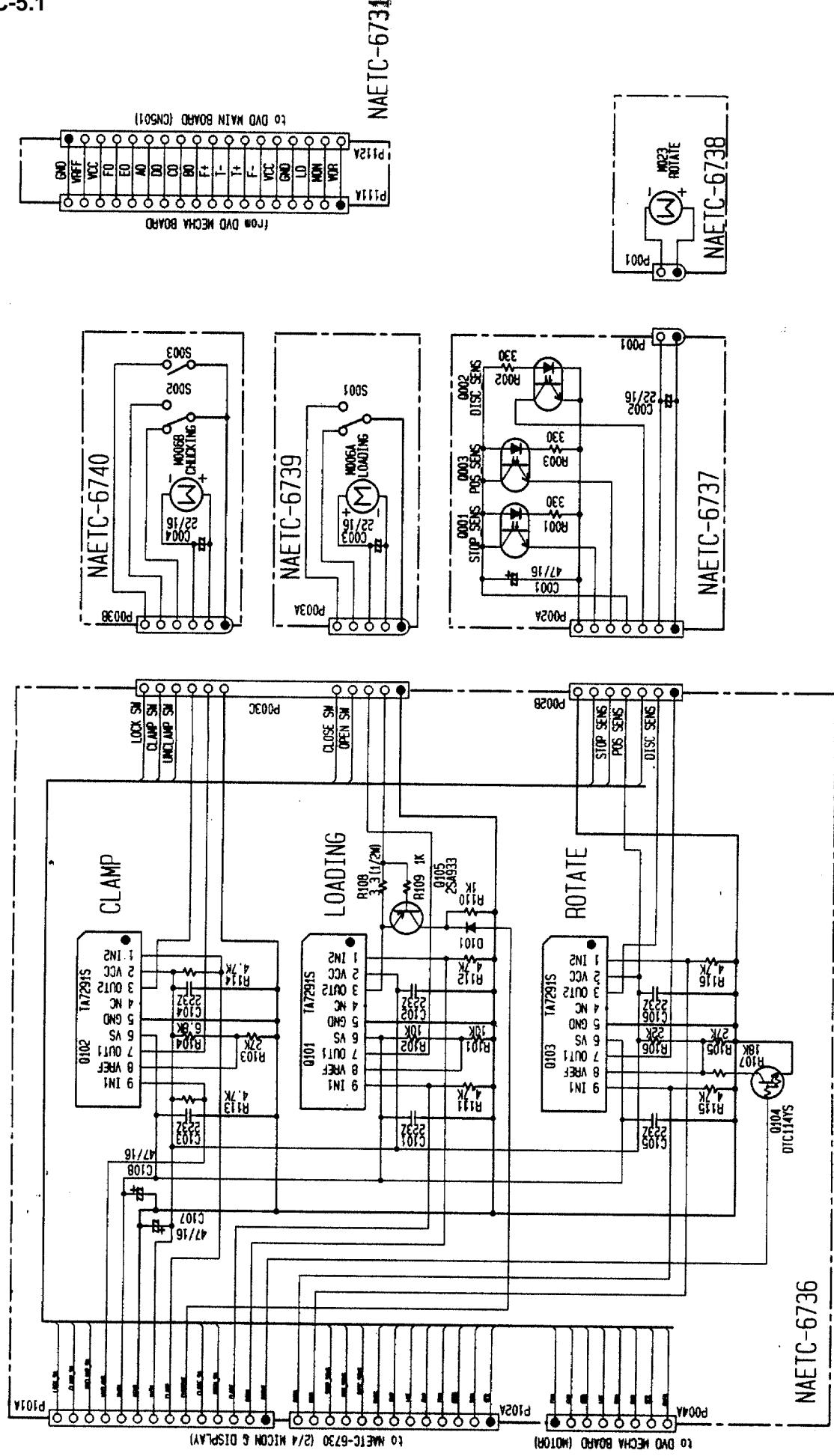
SCHEMATIC DIAGRAM 2



SCHEMATIC DIAGRAM 3



SCHEMATIC DIAGRAM 4

A
B
C
D
E
F
G

PRINTED CIRCUIT BOARD PARTS LIST

DISPLAY CIRCUIT PC BOARD (NADIS-6725-2A/2C)			MICROPROCESSOR PC BOARD (NADG-6727-2A/2C)		
CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube			IC	
Q741	212209	25U56104BAN	Q751	22241425R3	MPD780208GF-071
	Remote sensor			Transistor	
Q743	241329	PIC-26043TH2	Q753	2213143R2	2SC2712-O
	Transistor			Cera lock	
Q742	2211504	2SA950-Y	X751	3010242	CST5.00MGW
	Capacitor			Capacitors	
C711	355721019	100 μF,6.3V, Elect	C751	354782209	22 μF,50V, Elect.
	Socket AS		C752	354721019	100 μF,6.3V, Elect.
P703	200EE391220-1	NSAS-12P0801-1			
	Sockets				
P701A,P702A	25052226 or 25051874 or 25052076	NSCT-30P2123 or NSCT-30P1661 or NSCT-30P1863	Q201,Q202	22241465R2	LA7106MFP
	Switches		Q301	222740046R2	74HCU04F
S711-S714, S-722,S724, S731,S732, S741,S742	25035652 or 25035704	NPS-111-S604 or NPS-111-S667	Q401	22241383R2	NJM4565M-D
	Holder		Q302	24120031	TOTX178A
Q741A	27191091A	FL Tube	Q431	2214490R2	RN1404
			Q432	2214540R2	RN2403
				Diodes	
SWITCH PC BOARD (NASW-6726-2A/2C)			D431-D433	223234R2 or 223233R1	1SS352 or 1SS355
				Choke coils	
D701	225290 or 225373	SEL4110R or LH2140 TBF-5 <<MD>	L301	230921R2 or 230952R2	BLM21B222SPT or BK2125LM182-T
			L291	231253K100 or 231295K100	NCH-1490 or NCH-1575
P701B,P702B	25052263 or 25050970 or 25051296 or 25051837 or 25052039	NSCT-30P2160 or NSCT-30P757 or NSCT-30P1085 or NSCT-30P1624 or NSCT-30P1826	P103	25052287	NSCT-4P2184
			P202	25051750	NSCT-4P1537
P751A	25051937 or 25051728 or 25052313	NSCT-13P1724 or NSCT-13P1515 or NSCT-13P2210	P211A	25051938 or 25051729 or 25052314	NSCT-14P1725 or NSCT-14P1516 or NSCT-14P2211
P752A	25052216 or 25050960 or 25051286 or 25051827 or 25052029	NSCT-20P2113 or NSCT-20P747 or NSCT-20P1075 or NSCT-20P1614 or NSCT-20P1816	P411A	25051932 or 25052308 or 25052308 or 25052502	NSCT-8P1719 or NSCT-8P2205 or NSCT-8P2205 or NSCT-8P2399
			JL403B	25055630	NPLG-9P592
			P405	200BB190415UL	NSAS-4P0816 <MD>
S701-S708	25035652 or 25035704	NPS-111-S604 or NPS-111-S667	P201	25045590	NPJ-3PDB401
			P203	25045621	NPJ-2PDOY428 <MD>
C701	355721019	100 μF,6.3V, Elect	P912A	25055153	NPLG-9P137
D701A	27191103	(LED)	C201,C203,C205, C209,C211,C212, C303,C307,C307	354721019	100 μF,6.3V, Elect.
JL903B	25055624	NPLG-3P586			

CIRCUIT NO.	PART NO.	DESCRIPTION	1ST POWER SUPPLY PC BOARD (NAPS-6734-2A /2C)		
CIRCUIT NO.	PART NO.	DESCRIPTION	IC		
C231-C234,C238	354721029	1000 μ F,6.3V, Elect.	Q901	22241229	STR-F6653
C202,C204,C206,	354741019	100 μ F,16V, Elect.	Q907	Photo coupler	
C210,C213,C221,				24120044	ON3131-R
C225				Diodes	
C291	354744719	470 μ F,16V, Elect.	D901-D904	22380287F	Δ EM2A
C401,C402	354782209	22 μ F,50V, Elect.	D905	22380291	Δ EG01C
C411,C412,C433	354744709	47 μ F,16V, Elect.	D906-D908	22380294	AG01Z
C432	354722229S	2200 μ F,6.3V, Elect.		Coils	
		Wire holder	L903	230906	BL02RN2-R62, FR core
JL403A	25051093	NSCT-9P880	L901	231280	NCH-3561, Choke coil
5.1CH OUTPUT PC BOARD (NAETC-6729-2A/2C)				Capacitors	
CIRCUIT NO. PART NO. DESCRIPTION					
		Transistors	C901,C902,	3500077	Δ 4700pF \pm 5%, Plastic
Q403,Q404	2215940R2	FMG12	C916		
		Pin jack	C910	3500199S	Δ 100 μ F,400V, Elect.
P404	25045371	NPJ-2PDRW214	C911	3000115	Δ 220pF \pm 5%,2000V, Plastic
		Capacitors	C912	3000114	Δ 0.01 μ F,630V, Plastic
C409,C410	354782209	22 μ F,50V, Elect.	C913	354764709	47 μ F35V, Elect.
CONNECTION PC BOARD (NAETC-6730-2A/2C)				Resistors	
CIRCUIT NO. PART NO. DESCRIPTION			R901	4500018	Δ BPR58FK-0.22 or
		Sockets		4000076	Δ MPC74-5WK-0.22, Metal plate
P005A	25051932 or	NSCT-8P1719 or	R902	411566844 or	Δ 680k Ω \pm 5%,1/2W,Carbon
	25051723 or	NSCT-8P1510 or		411516844	Δ
	25052308 or	NSCT-8P2205 or	R903	441726834	Δ 68k Ω \pm 5%,2W,Metal oxide
	25052502	NSCT-8P2399 or	R904	441721044	Δ 100k Ω \pm 5%,2W,Metal oxide
P101	25052297	NSCT-14P2194	R905	443524704	47 Ω \pm 5%,1/2W,Metal oxide
P102	25052296	NSCT-13P2193	R906	443522724	2.7k Ω \pm 5%,1/2W,Metal oxide
P752B	25052216 or	NSCT-20P2113 or	R907	451735194F	Δ 0.51 Ω \pm 5%,2W,Metal
	25050960 or	NSCT-20P747 or	R908	443526814	680 Ω \pm 5%,1/2W,Metal oxide
	25051286 or	NSCT-20P1075 or	R909	443523324	3.3k Ω \pm 5%,1/2W,Metal oxide
	25051827 or	NSCT-20P1614 or	R910	443522234	22k Ω \pm 5%,1/2W,Metal oxide
	25052029	NSCT-20P1816			Power transformer
		Plug	T901	2301432	Δ NPT-1380
P103A	25056009	NPLG-4P0959			Fuse holders
LD SHORT PC BOARD (NAETC-6731-2A/2C)			F901A,F901B	25052133	Δ NSCT-1P2031
CIRCUIT NO. PART NO. DESCRIPTION					Sockets
P111A,P112A	25051900 or	NSCT-18P1687 or	JL901A,JL902A	25051110	NSCT-6P897
	25052355 or	NSCT-18P2252 or	JL901B,JL902B	25050283	NSCT-6P111
	25052539	NSCT-18P2436			Jumper leads
POWER SWITCH PC BOARD (NASW-3741-2A/2C)			JL901,JL902	6J100606H	JL6 100 H
CIRCUIT NO. PART NO. DESCRIPTION			JL903	3J200606B15	JL3 200 B
		Switches			AC inlet
S991	25035703 or	Δ NPS-111-L666P or	P951A	25056006	Δ NPLG-2P956 <MD>
	25035550	Δ NPS-111-L512P	P951A	25056027	Δ NPLG-2P977 <SA>
		Capacitor	C910	3500199S or	Δ 100 μ F,400V, Elect.<MD>
C991	3500196S	Δ 0.01 μ F \pm 5%, 250V, ISC <D>	E902	29362309	1.25A/125V <MD>
C991	3500077	Δ 0.047 μ F \pm 5%, 250V, ISC <SA>		29361580	T1.25AL250V <SA>
			Q901B	838430107	Screw 3TTB+10S(BC)

CIRCUIT NO.	PART NO.	DESCRIPTION	CIRCUIT NO.	PART NO.	DESCRIPTION
SENSOR PC BOARD (NAETC-3737-2A/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION	C107,C108	Capacitors	47 μ F,16V, Elect.
Photo interrupters					
Q001,Q003	24190041	SG-207	R108	Resistor	$3.3 \Omega \pm 5\%, 1/2W$, Metal
Q002	24190046	GP2S28	P002B	Sockets	NSCT-7P16381 or NSCT-7P7001 or NSCT-7P1840
Capacitors					
C001	354744709	47 μ F,16V, Elect.	P004A	Plugs	NSCT-8P16771 or NSCT-8P22421 or NSCT-8P2242
C002	352942206	22 μ F,16V, Elect.			
Sockets					
P002A	25051851 or 25050913	NSCT-7P1638 or NSCT-7P700	P101A	25056019	NPLG-14P0969
			P102A	25056018	NPLG-13P0968
			P003C	25055375	NPLG-11P358
ROULETTE MOTOR PC BOARD (NAETC-3738-2A/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION	2ND POWER SUPPLY PC BOARD (NAPS-6735-2A/2C)		
P001	200EE390205 or 200EE390205-1	NSAS-4P0777 or NSAS-4P0777-1, Socket	CIRCUIT NO.	PART NO.	DESCRIPTION
LOADING MOTOR PC BOARD (NAETC-6739-2A/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION	ICs		
	Switch		Q902	22241230	SI3090C
S001	25065375	NMS-1219, Micro switch	Q903	22241231	SI3050C
Capacitor					
C003	352942206	22 μ F,16V, Elect.	Q904	22241232	SI3033C
	Socket AS		Q905	22241233	SE005N
P003	2009990576	NSAS-22P0785	Q906,Q908	2211504	2SA950-Y
			Q909,Q914	2215995 or 2213354 or 2213355	KTA1267-GR or 2SA933S-R or 2SA933S-S
CHUCKING MOTOR PC BOARD (NAETC-3740-2A/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION	Diodes		
	Switches		D909	22380295F	RN2Z
S002	25065375	NMS-1219, Micro	D910,D911	22380296F	RK46
S003	25065592	NMS-22045, Micro	D912	22380297	EU01
Capacitor			D913,D921	22380294	AG01Z
C004	352942206	22 μ F,16V, Elect.	D917	22380300F	RU2YX
MOTOR DRIVE PC BOARD (NAETC-6736-2A/2C)					
CIRCUIT NO.	PART NO.	DESCRIPTION	D918	224472204	MTZJ22D, Zener
	ICs		D919	224470332	MTZJ3.3B, Zener
Q101-Q103	22240239	TA7291S	D920,D923	22380260 or 22380032 or 22380035	RLIN4003 or 1SR139-100 or GP104003E
Transistors					
Q104	221281 or 2213570 or 2216050	DTC114YS or RN1207 or KRC107M	D922	224470753	MTZJ7.5C, Zener
			D924	224471202	MTZJ12B, Zener
Coils					
Q105	2215995 or 2213354 or 2213355	KTA1267-GR or 2SA933S-R or 2SA933S-S	L904-L907	231253K100	NCH-1490, Choke
Diode					
D101	223163 or 223205	ISS133 or ISS270A			

CIRCUIT NO.	PART NO.	DESCRIPTION
Capacitors		
C920	393751027S	1000 μ F,25V, Elect.
C921,C922,C931354744719		470 μ F,16V, Elect.
C923,C924, C94. 354742219		220 μ F,16V, Elect.
C925,C928	393741027S	1000 μ F,16V, Elect.
C926,C927,C930354722219		220 μ F,6.3V, Elect.
C932,C946		
C929	374722244	0.22 μ F \pm 5%,50V, Plastic
C933,C934,C936354782209		22 μ F,50V, Elect.
C938		
C935,C944	374721034	0.01 μ F \pm 5%,50V, Plastic
C937,C941,C942354761019		100 μ F,35V, Elect.
C943	354744709	47 μ F,16V, Elect.
Resistors		
R912	443522214	220 Ω \pm 5%,1/2W, Metal oxide
R913	443521024	1k Ω \pm 5%,1/2W, Metal oxide
R919	453534794	0.47 Ω \pm 5%,1/2W, Metal
R930	4500163	0.47 Ω \pm 5%,1/4W, Metal
R931	443522204	22 Ω \pm 5%,1/2W, Metal oxide
Socket AS		
P911B	2002A392640-1	NSAS-26P0800-1
P912	2002A391850	NSAS-18P0778
P981	2009990610	NSAS-2P0830
Plug		
P981C	25055675	NPLG-2P631
Wire holder		
JL903A	25051087	NSCT-3P874
Heat sinks		
Q901A	27160412 or 27160428	RAD-111 or 17PB23L30
Heat sinks		
Q902A	27160145-1	RAD-51
Q903A	27160459	RAD-130
Screws		
Q903B,Q904B	801433	3SMS8W.SW+14B(BC)
Q902B	838430107	3TTB+10S(BC)

NOTE:

THE COMPONENT IDENTIFIED BY MARK Δ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

NOTE:

<MD>: 120V model only
<SA> : South America model only

EXPLODED VIEW PARTS LIST

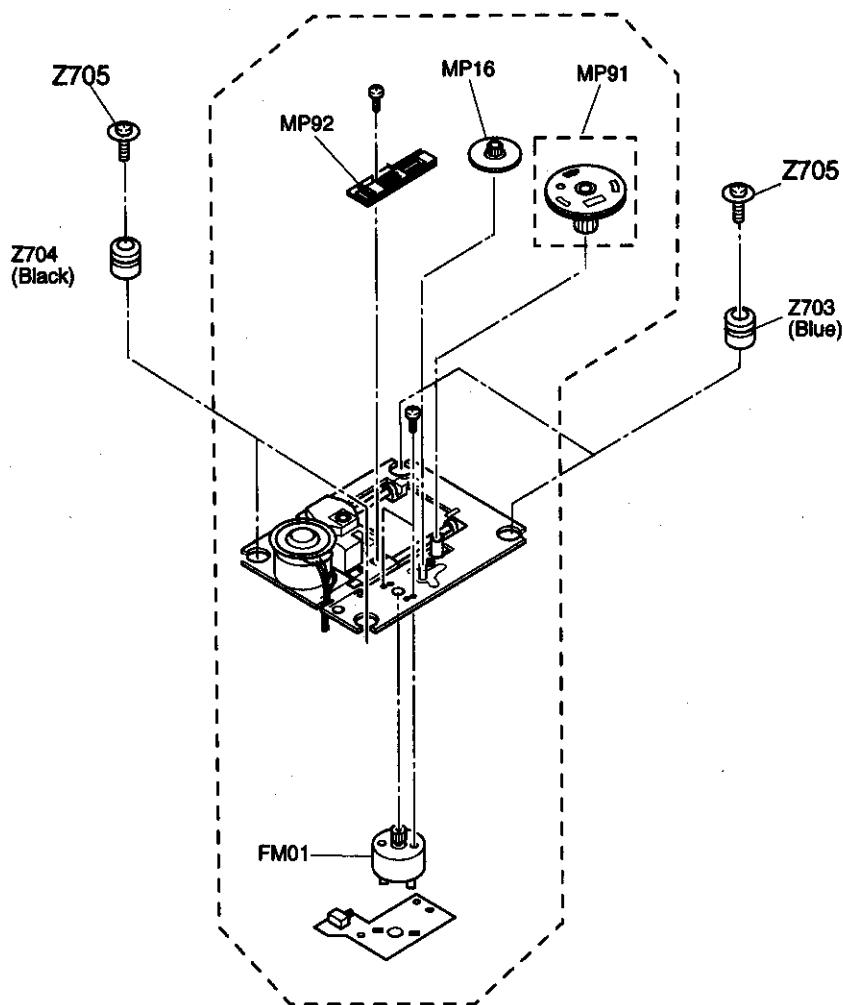
REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A001	27111160	Front bracket	U1-0	1H434525-2D	NADIS-6725-2D, Display circuit PC board ass'y
A002	27150451	Shield plate	U1-1	1H434526-2D	NASW-6726-2D, Switch PC board ass'y
A004	838130088	3TTB+8B, Tapping screw	U1-2	1H434527-2D	NADG-6727-2D, Microprocessor PC board ass'y
A007	838426088	2.6TTB+8B(BC), Tapping screw	U1-3	1H434528-2D	NAAF-6728-2D, Output PC board ass'y
A010	27100380B	Chassis	U1-4	1H434529-2D	NAETC-6729-2D, 5.1ch output PC board ass'y
A013	29362584	Label (DVD)	U1-5	1H434530-2D	NAETC-6730-2D, Connection PC board ass'y
A016	28141410	Cushion	U1-6	1H434531-2D	NAETC-6731-2D, LD short PC board ass'y
A020	831430088	3TTW+8B(BC), Tapping screw	U2-0	1H434534-2D	NAPS-6734-2D, 1st Power supply PC board ass'y
A022	27130830B	Bracket (F)	U2-1	1H434535-2D	NAPS-6735-2D, 2nd Power supply PC board ass'y
A025	838430167	3TTB+16S(BC), Tapping screw	U2-2	1H434536-2D	NAETC-6736-2D, Motor drive PC board ass'y
A034	27130831	Bracket (PC)	U2-3	1H434537-2D	NAETC-3737-2D, Sensor PC board ass'y
A035	28141428	Cushion	U2-4	1H434538-2D	NAETC-3738-2D, Roulette motor PC board ass'y
A037	27225143E	Shield case	U2-5	1H434539-2D	NAETC-6739-2D, Loading motor PC board ass'y
A040	28175258A	Isolation plate (A)	U2-6	1H434540-2D	NAETC-3740-2D, Chucking motor PC board ass'y
A043	28175259	Isolation plate (B)	U2-7	1H434541-2D	NASW-3741-2D, Power switch PC board ass'y
A046	27268003	Guide (EDGING)	U3-0	24150014	Main circuit PC board ass'y, SD-30B1
A049	27268004	Guide (EDGING)			
A051	27212200	Front panel			
A055	28191880	Clear plate			
A057	28135244	Badge			
A058	28325753	Knob (POW)			
A59	28141414	Cushion (LED)			
A060	27122724A	Rear panel			
A061	28198905	Facet			
A063	834430088	3TTB+8B, Tapping screw			
A064	△ 29360626-1	Fuse label			
A068	29110083	Cloth tape			
A101	28184770	Top cover			
A104	838430088	3TTB+8B(BC), Tapping screw			
A106	27270397	Spacer			
A107	28148429	Door			
A110	27262651	Plate (DVD)			
A113	27175316B	Leg			
A116	28141332	Cushion			
E801	260208	Wire tie			
F901	△ 252157	Fuse, 1.25A-UL/T-237			
P002	2046071722	NCFC6-071722, Flexible flat cable			
P004	2042081512	NCFC2-081512, Flexible flat cable			
P005	2045082712	NCFC5-082712, Flexible flat cable			
P111	2042180512	NCFC2-180512, Flexible flat cable			
P112	2042183012	NCFC2-183012, Flexible flat cable			
P211	2045142212	NCFC5-142212, Flexible flat cable			
P411	2045081012	NCFC5-081012, Flexible flat cable			
P701	2043300102	NCFC7-301012, Flexible flat cable			
P702	2043300102	NCFC7-301012, Flexible flat cable			
P751	2045131012	NCFC5-131012, Flexible flat cable			
P752	2047202512	NCFC7-202512, Flexible flat cable			
E981	△ 230910 or E981	△ 230945	ESD-R-25DB or NFY-25 BLACK, Core		

NOTE:
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REF. NO.	PART NO.	DESCRIPTION
M01	24840138B	Rail
M02	28141337	Cushion
M03	24824028	Cap (CHD)
M04	24832028	Magnet (CHC)
M05	24830028	Yoke (CHC)
M06	1H432901	Chucking motor ass'y
M07	1H432902	Tray loading motor ass'y
M08	833126047	2.6TTP+4S, Tapping screw
M09	24816036	Rubber belt
M10	24828029	Shaft (PULLEY)
M11	24834040	Washer (B)
M12	24810071	Gear (PULLEY)
M13	24810070	Gear (A)
M14	24810069	Gear (LOAD)
M15	24840140	Plate (CAM)
M16	24840111	Tapping screw
M17	24802046A	Chassis (SUB)
M18	24801003	SD-2109K1-ZX, DVD mechanism
M19	24818013	Insulator (A)
M20	24818036	Insulator (C)
M22	24840137A	Tray
M23	1H432903	Roulette motor ass'y
M24	24840139	Bracket (M)
M25	82142003	2P+3F(BC), Tapping screw
M30	24810067	Gear (WHEEL)
M32	24840110	Roller
M33	24840136A	Roulette
M34	24834016	Washer (A)
M35	24820033	Spring (A)
M37	24834041	Washer (C)
M38	24836041	Cushion t=0.5
M40	24834042	Washer (D)
M41	24820033	Spring (A)
M42	24834043	Washer (E)
M43	27141761	Retainer (RAIL)
M44	24834041	Washer (C)
M45	838130088	3TTB+8B, Tapping screw

DVD MECHANISM EXPLODED VIEW AND PARTS LIST

Z701 Traverse mechanism



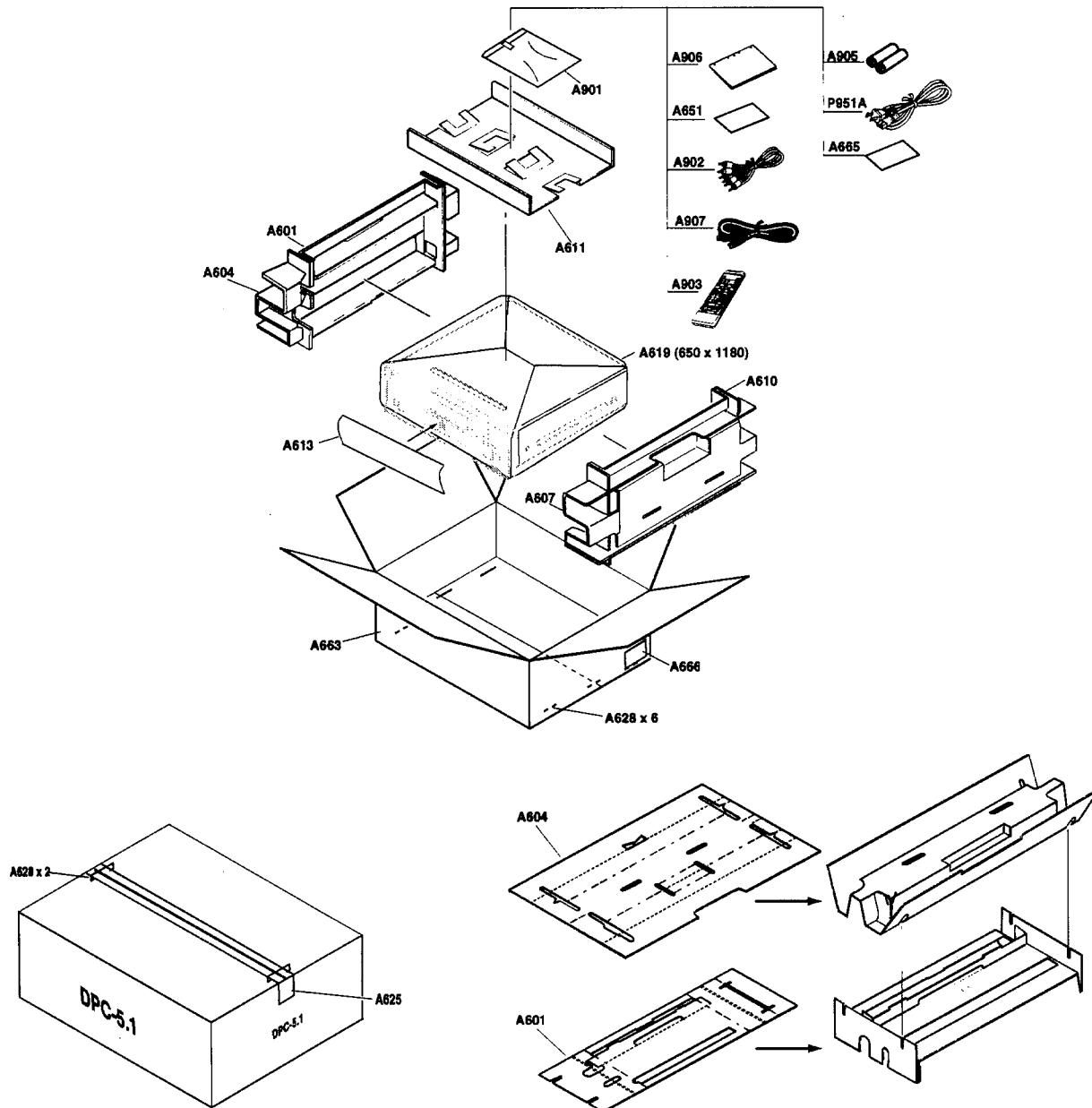
PARTS LIST

REF No.	PART No.	DESCRIPTION
MP91	79070419	Gear ass'y kit B
MP92	79070420	Gear ass'y rack
FM01	79070421	Motor ass'y feed
MP16	79070422	Gear A
Z703	24818038A	Insulator, (A)
Z704	24818039A	Insulator, (B)
Z705	801589	Special screw, (A)

MAIN PC BOARD PARTS LIST

Ref. No.	Part No.	Description
IC202	79040154	IC, TC203G08AF-0103(Z)
IC301	79040122	IC, MD36710X
IC303	79040096	IC, ADV7170KS
IC401	79040224	IC, TC9489F(BS,DRY)
IC502	79040225	IC, TA1313F(DRY)
IC503	79040150	IC, KA3032
IC601	79040226	IC, S-24C01BFJ-TB-0
IC604	79040230	IC, TMP94CS40AF-1A73
IC606	79040153	IC, MBM29F800BA55TN
IC608	79040159	IC, MBM29F400BC55TN
IC903	79040227	IC, PLL1700E-T
IC906	79040228	IC, PCM1716E-T

PACKING VIEW



PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
A601	29091896	Pad (L)A	A666	29362617	UPC Label assy
A604	29091897	Pad (L)B	A906	29342902	Instruction manual E
A607	29091898	Pad (R)A	A901	29100097-1A	Poly bag (350*250)
A610	29091899	Pad (R)B	A902	2010379	Connection cord assy, RCA3P(YWR)
A611	29091917	Pad(TOP)	A903	24140422	Remote controller, RC-422DV
A613	29095886	Sheet (Door)	A905	3010054	Battery, UM-3
A619	29095886	Sheet (650 x 1180)	A907	2010380	Cord assy (S Cord)
A628	282301	Staple, 8pcs	P951A	△ 253297KAW	AC-UC-2,Power cord
A651	29365080B	Warranty card	A625	29110071	Tape
A654	29355328	Instruction sheet (PAC)			
A663	29053581	Carton box			
A665	29095865	Sheet, INTEGRA			

NOTE:

THE COMPONENT IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

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