

ONKYO® SERVICE MANUAL**DVD CHANGER
DV-C601**

BMDD1N	120V AC, 60Hz
BMUP2P	100-240V AC, 50/60Hz

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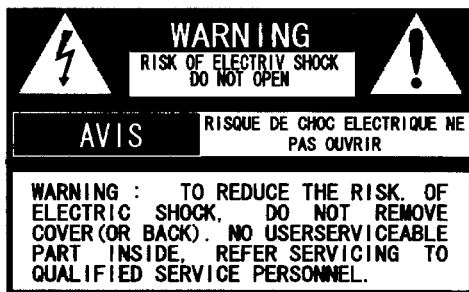
SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle 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.

ONKYO®
AUDIO COMPONENTS

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) instructions 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 CHOCES 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

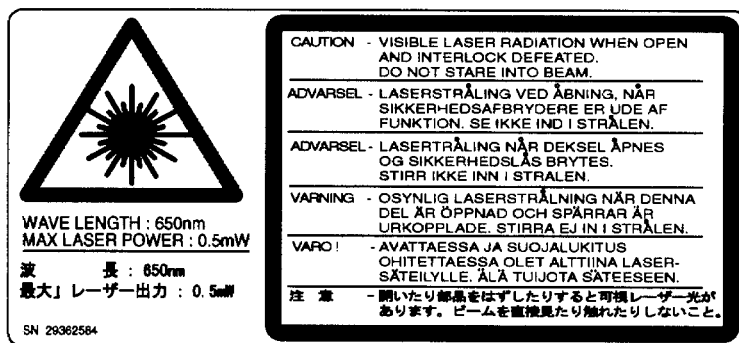
For continued protection against risk fire, replace only with same type and same rating fuse.

CIRCUIT No.	PART No.	DESCRIPTION
F901 <MDD1N>	252157	1.25A-UL/T-237
F901 <MUP2P>	252071	1.25A-SE-EAWK

 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 meme type. Ce dernier 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 cautions 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.

REPLACEMENT OF OPTICAL PICKUP

The laser diode in the optical pickup block is so sensitive to static electricity, surge current and etc. That the components are liable to be broken down or its reliability remarkable deteriorated. During repair , carefully take the following precautions. Do not touch the optical pickup object lens with the hands.

1. Remove the spacer on bottom side of the chassis.

When replacing the optical pickup, first short J001 on Connector PC Board (NAETC-6894)

2. Solder the LD terminal on the DVD optical pickup.

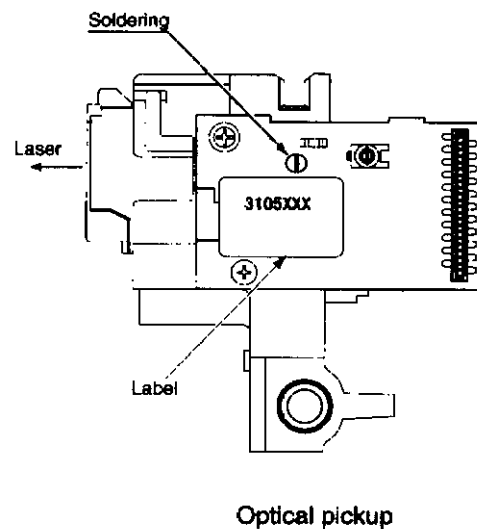
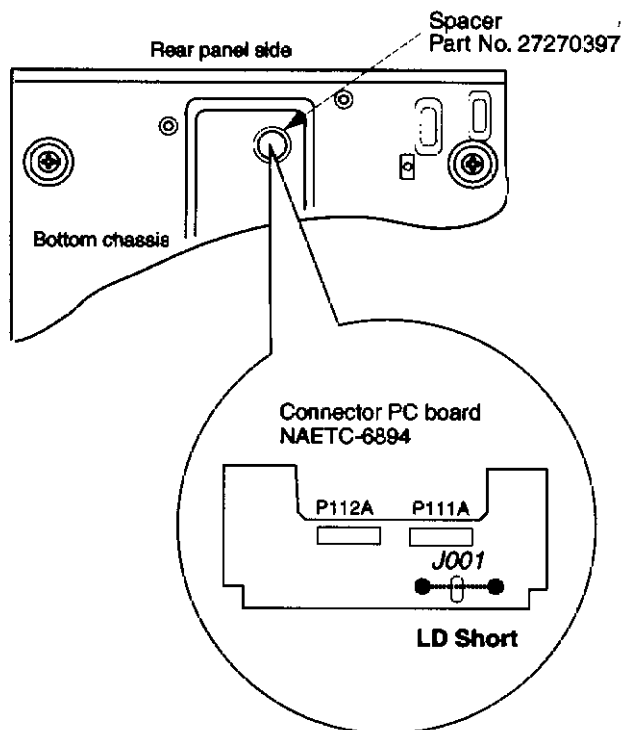
3. Disconnect the FFC P111A and P112A.

4. Replace the optical pickup.

5. Connect the FFC P111A and P112A.

6. Un-solder the LD terminal on mechanism.

7. Cutting the J001.



SPECIFICATIONS

DVD Changer/Outputs

DVD Changer

Power supply	AC 120 V, 60 Hz (U.S.A. / Canadian Models only) AC 100V- 240V, 50/60Hz (European model only)
Power consumption	19 W
Weight	7.0 kg, 15.4 lbs
External dimensions (W/H/D)	435 x 131 x 433 mm, 17-1/8" x 5-3/16" x 17-1/16"
Signal system	Standard NTSC (MDD1N) PAL / 3.58 NTSC (MUP2P)
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)	96 dB
Audio dynamic range (digital audio)	90 dB
Harmonic distortion (digital audio)	0.01 %
Wow and flutter	Below measurable level (± 0.001 % (W.PEAK))
Operating conditions	Temperature: 5°C to 35°C (41°F to 95°F), Operation status: Horizontal
Regional restriction code	1: (U.S.A./ Canadian area) 2: (European area)

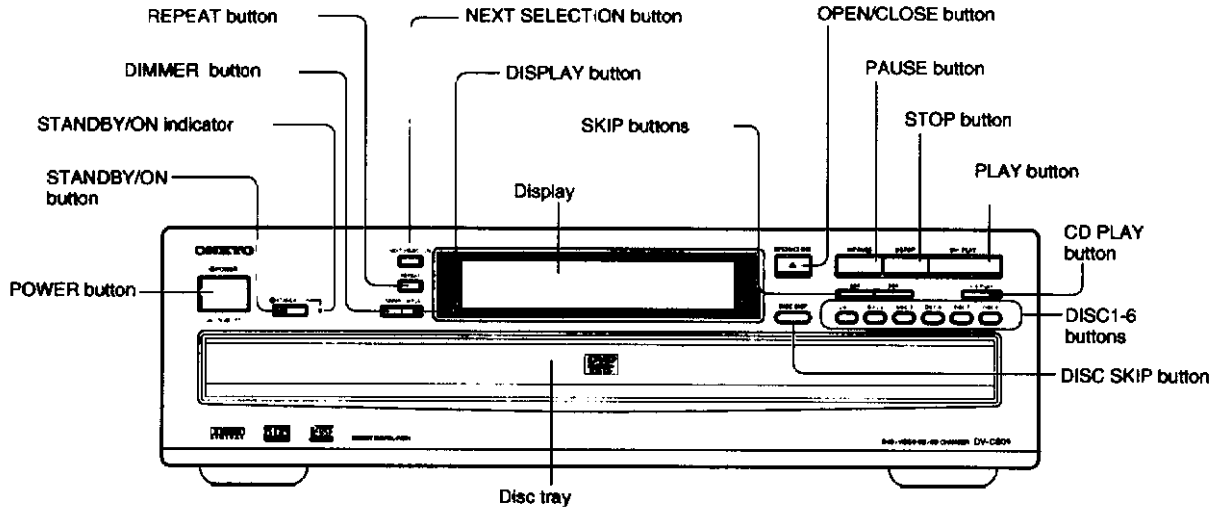
Outputs

Video output (Pin jack)	1.0 V (p-p), 75 ohm, negative sync., pin jack X 1 (U.S.A / Canadian models only)
Video output (SCART)	1.0 V (p-p), 75 ohm, SCART socket x 1 (European model only)
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 (U.S.A / Canadian models only) (P _B)/(P _R) 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

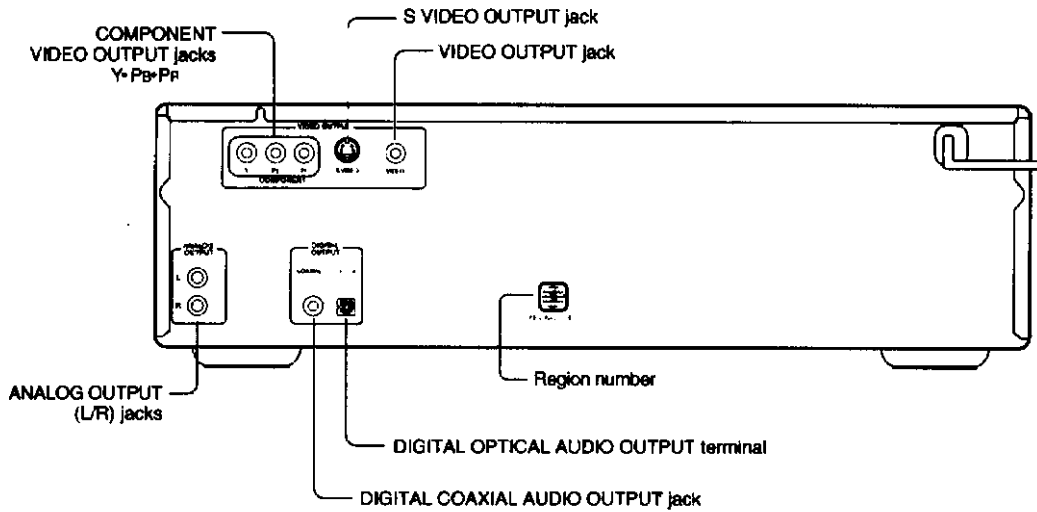
*Design and specifications are subject to change without notice.

FRONT PANEL/ REAR PANEL VIEW

Front panel



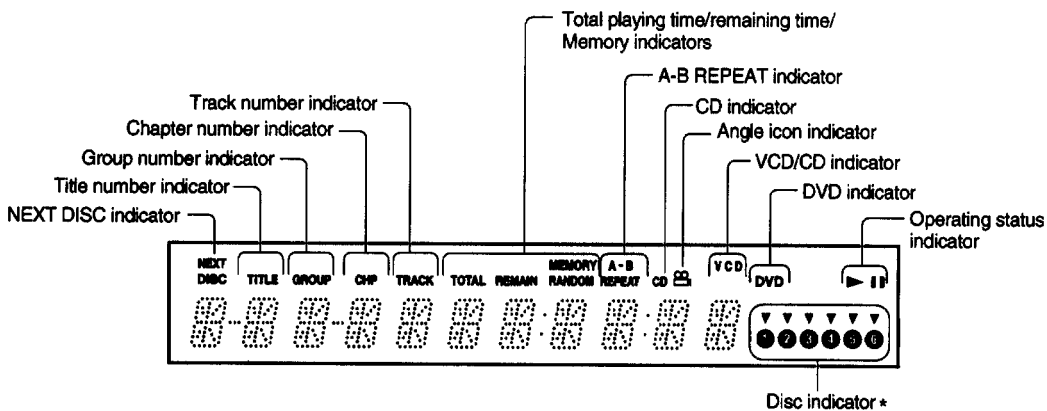
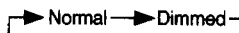
Rear panel



DISPLAY VIEW

FL Display

Pressing of the DIMMER button changes the brightness of the Display.



*DISC INDICATORS ATTENTION:

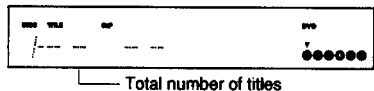
When the tray is closed, the unit will search to play the first disc loaded; all Disc Indicator will be illuminated. As the unit accesses the disc locations the indicators will either go out or stay lit to indicate the presence of a disc. An indicator may stay lit even if there is no disc loaded until the player has accessed that location. This is not malfunction.

■ The indicators vary depending on the kinds of discs you play.

■ DVD video

• When closing the disc tray:

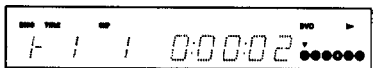
Example



Total number of titles

• During playback:

Example



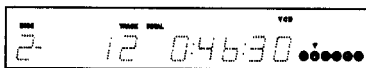
Playing chapter 3 in title 2 Elapsed time of the current title

Some DVD videos may not display the chapter numbers or elapsed time.

■ VIDEO CD

• When closing the disc tray:

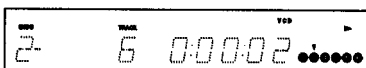
Example



Total number of tracks Total playing time of the disc

• During playback:

Example



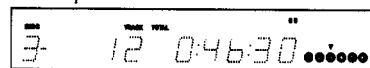
Playing track 6 Elapsed time of the current title

Some VIDEO CDs may not display the track numbers or elapsed time.

■ Audio CD

• When closing the disc tray:

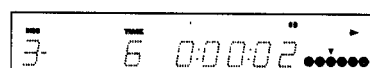
Example



Total number of tracks Total playing time of the disc

• During playback:

Example



Playing track 6 Elapsed time of the current title

1. REPLACEMENT OF MECHANICAL PARTS

1-1. Cabinet Replacement

1-1-1. Top Cover

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

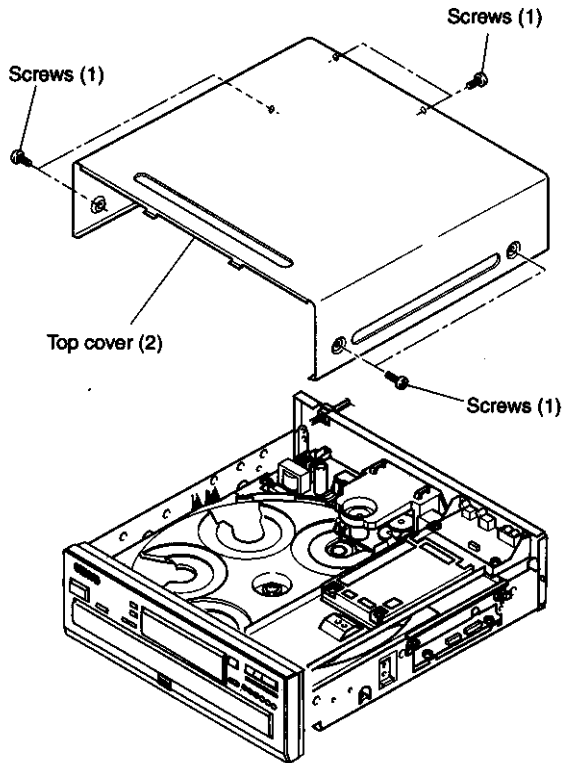


Fig.2-1-1

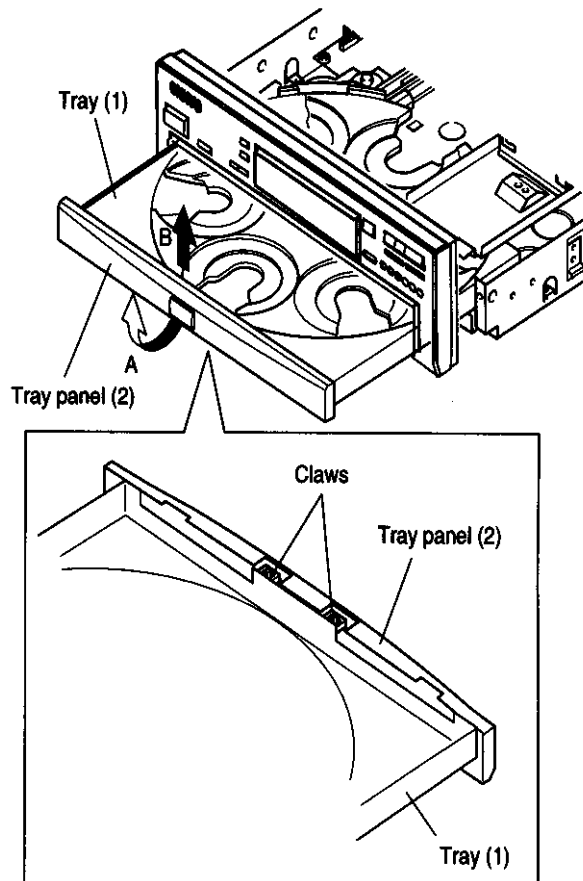


Fig.2-1-2

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 two claws and lift up the 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.

1-1-3. Front Panel and Front Bracket

1. Remove three screws (4) of aluminum front panel (9).
2. Pull out the tray and remove the tray panel.
3. Remove three screws (6) of the front bracket.
4. Peel off the tape (1) and disconnect the FFC(2).
5. Disconnect the FFC (3).

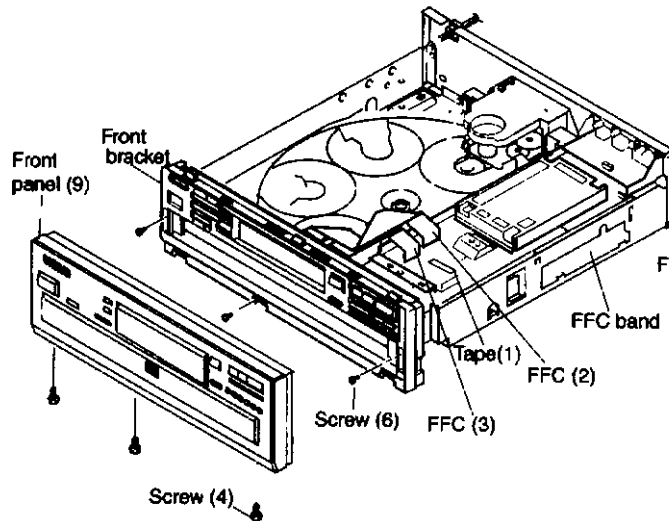


Fig. 2-1-3

1-1-4. Rear Panel

1. Remove the AC cord bushing (1).
2. Remove the 16 screws (2) and remove the rear panel (3).

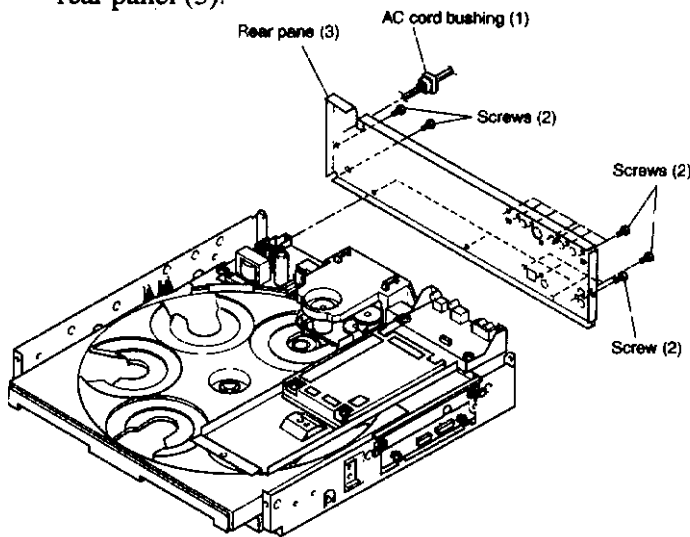


Fig. 2-1-4

1-2. PC Board Replacement

1-2-1. Main PC Board

1. Peel off the cloth tape (1).
2. Disconnect five FFCs (2) and one connector (3).
3. Remove four screws (4) and the shield cover (5).
4. Remove the main PC board (6).

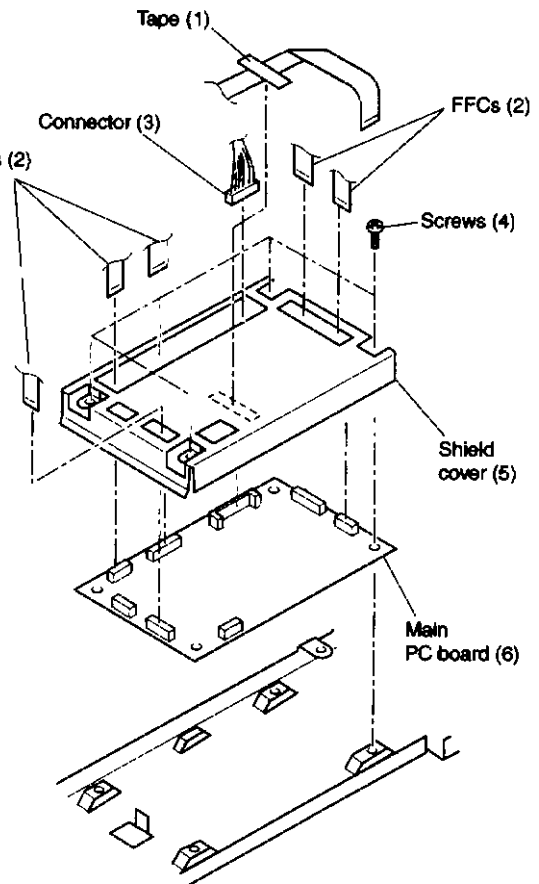


Fig. 2-1-5

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 J019 by a clip or soldering.

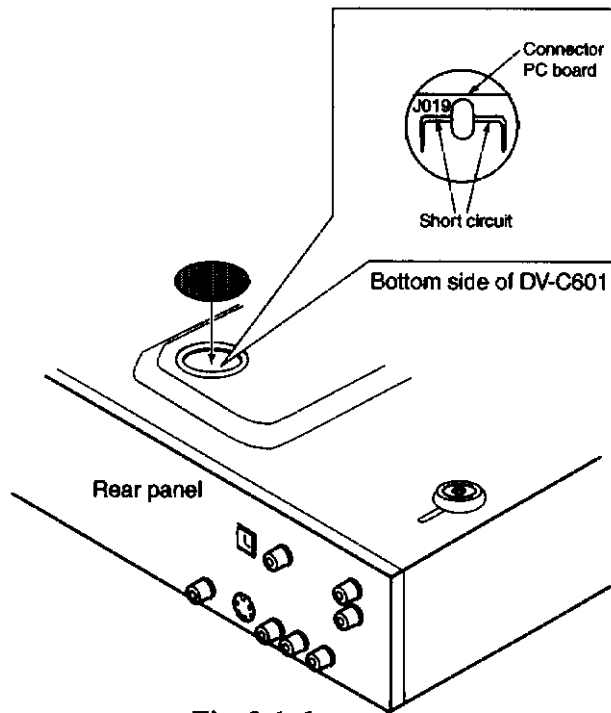


Fig. 2-1-6

1-2-2. Video Output PC Board

1. Disconnect one FFC (1) and one connector (2).
2. Remove two screws (3).
3. Remove four screws (4) and remove the video output PC board (5).

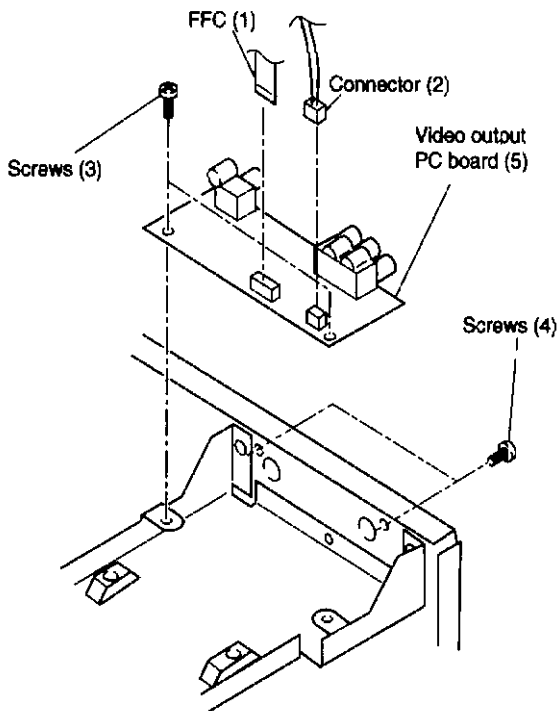


Fig. 2-1-7

1-2-3. Mechanism Driver/ Audio Output PC Board

1. Peel off the tape (1).
2. Disconnect five FFCs (2) and two connectors (3).
3. Remove one screw (4) and three screws of the rear panel.
4. Remove four screws (6) and remove the stay (7).
5. Pull out the tray (8) to arrow side until it stops.
6. Disconnect two FFCs (9) and three connectors (10).
7. Remove four screws (11) and three screws (12) and remove mechanism driver/audio output PC board (13).

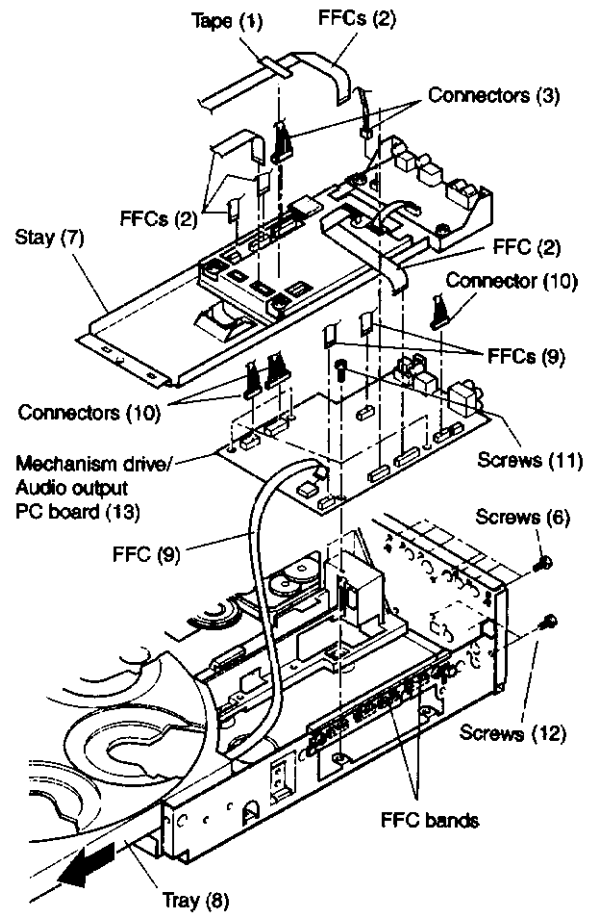


Fig. 2-1-8

1-2-4. 2nd Power Supply Circuit PC Board

1. Pull out the tray to this side until it stops.
(Refer to Fig. 2-1-8)
2. Remove the connector (6) and remove the PC board clip (3).
3. Remove the 2nd power supply PC board (4).

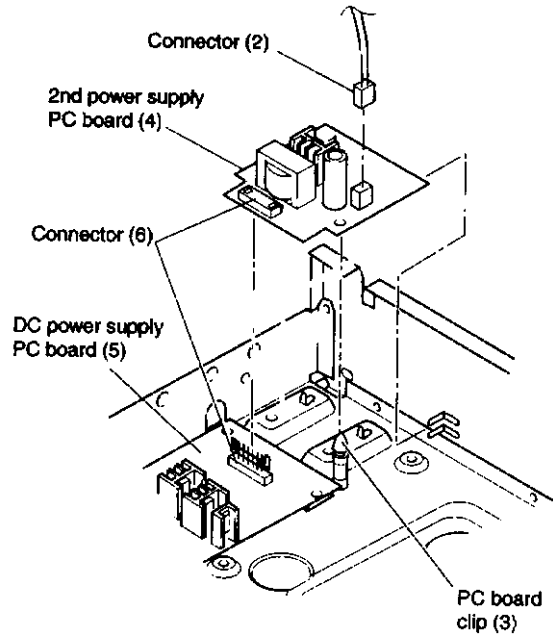


Fig. 2-1-9

1-2-5. 1st Power Supply Circuit PC Board

1. Remove the 2nd power supply PC board .
(Refer to item 1-2-4)
2. Cut off three wire bands (1).
3. Remove four screws (2) and remove the 1st power supply PC board (3).

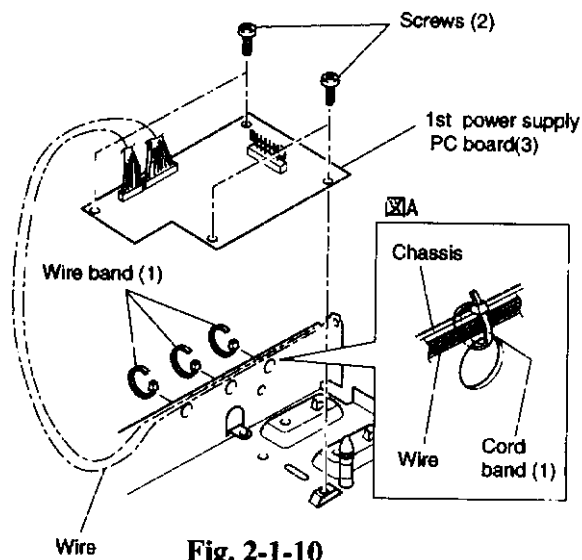


Fig. 2-1-10

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

1. Remove the front panel and remove the front bracket. (Refer to item 1-1-3)
2. Remove two screws (1) and remove the retainer (2).
3. Remove four screws (3) and remove the display PC board (4).
4. Remove two screws (5) and remove the LED indicator PC board (6).
5. Remove two screws (7) and remove the PC board (8) which supports the power switch.
6. Remove the power switch PC board assembly.

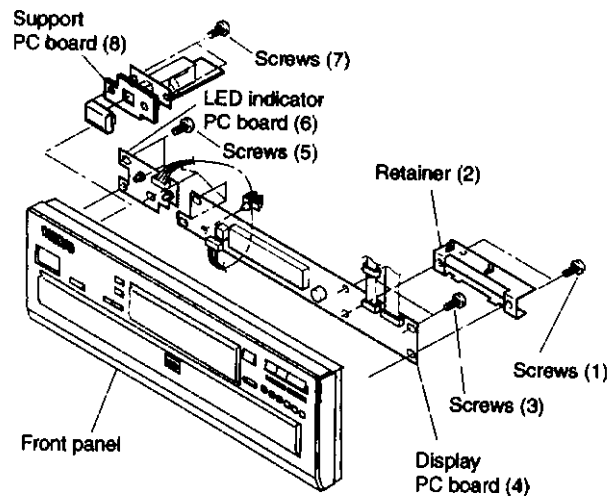


Fig. 2-1-11

1-4. Rail, Sub Chassis Parts Replacement

1-4-1. Rail

1. Remove the tray and roulette.
2. Remove two connectors (1) from the cord clamp.
3. Disconnect one FFC (2) and two connectors (3).
4. Remove seven screws (4) .
5. Remove two screws (5) and remove the rail assembly (6).

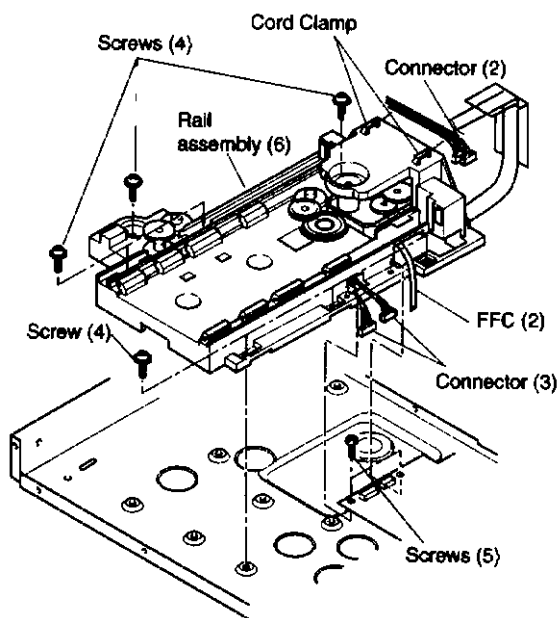


Fig. 4-1-1

1-4-2. Sub Chassis

1. Remove rail assembly.
(Refer to item 1-4-1)
2. Turn over the rail assembly.
3. Remove one screw (1) and remove the sub chassis (2).

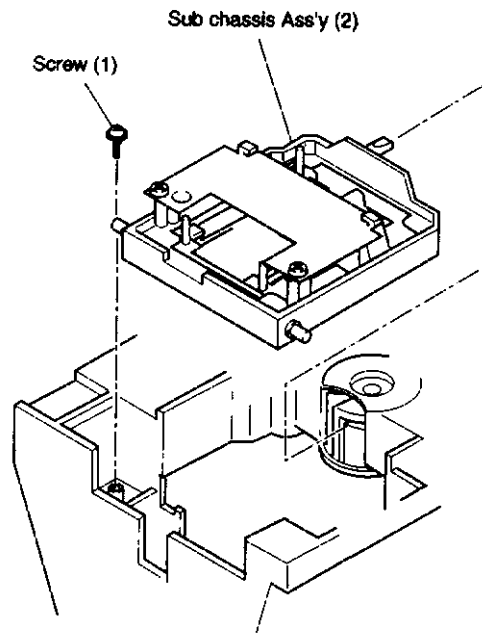


Fig. 4-1-2

1-4-3. Connector PC board

1. Remove the sub chassis assembly. (Refer to item 1-4-2)
2. Remove two screws (1) and remove the connector PC board (2).

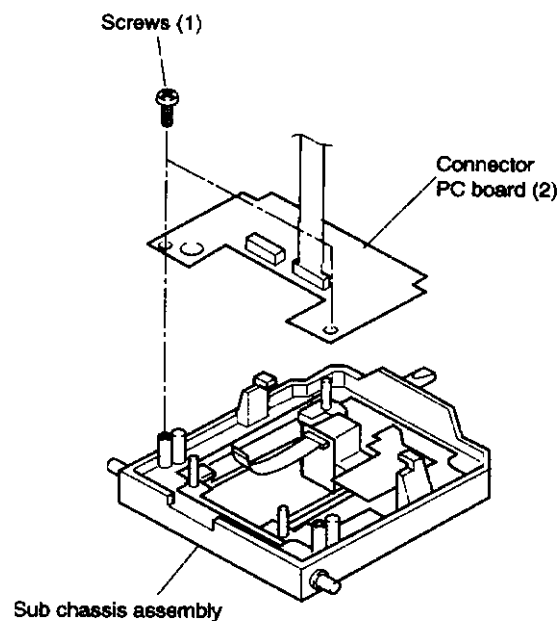


Fig. 4-1-3

1-4-4. LD Short PC board

1. Remove the sub chassis assembly.
2. Disconnect the FFC (1).
3. Remove four screws (2) and remove the pickup mechanism assembly (3).

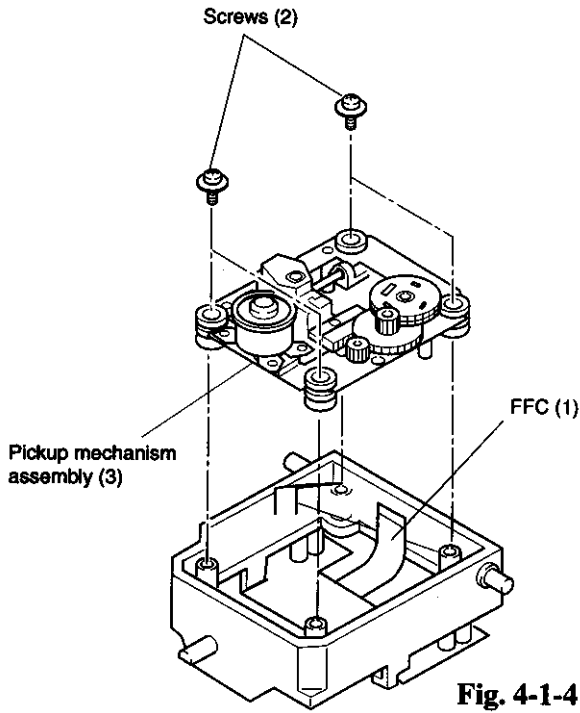


Fig. 4-1-4

Note:

The dampers color differ when for the front side and the rear side.

When mounting the pickup mechanism assembly (3) with the screws (1), push the pickup mechanism assembly (3) downward without being caught and tighten the screw (1) after placing the washer with the damper bent.

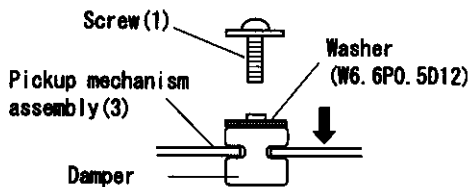


Fig. 4-1-5

1-4-5. Chucking Switch PC Board

1. Turn over the mechanism chassis assembly.
2. Remove one screw (1) and remove the chucking switch PC board (2).

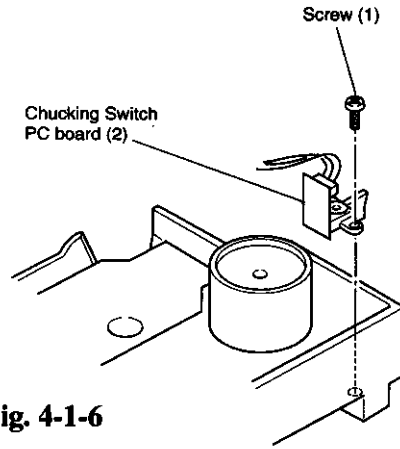


Fig. 4-1-6

1-4-6. Loading Motor PC Board

1. Remove the belt (1).
2. Remove one screw (2) and remove the pulley (3).
3. Remove one screw (4) and remove the cam gear (5).
4. Turn over the mechanism chassis.
5. Remove one screw (6).
6. De-solder and remove the loading motor PC board (7).
8. Release two claws and remove the loading motor (8).

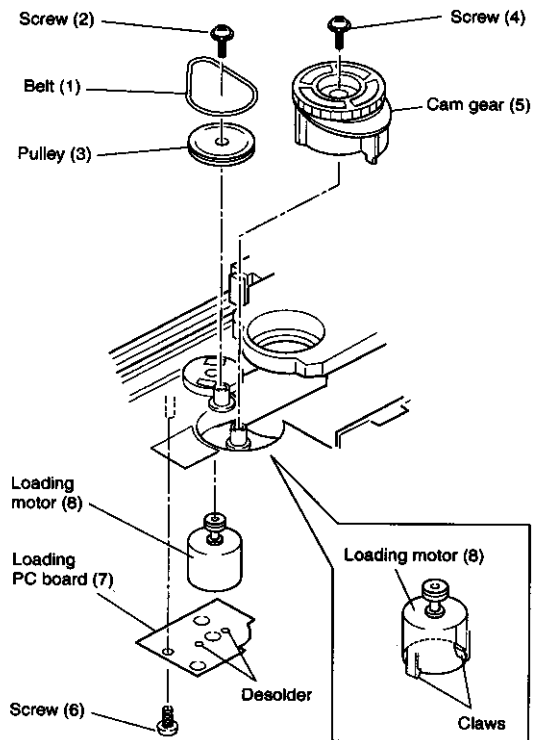
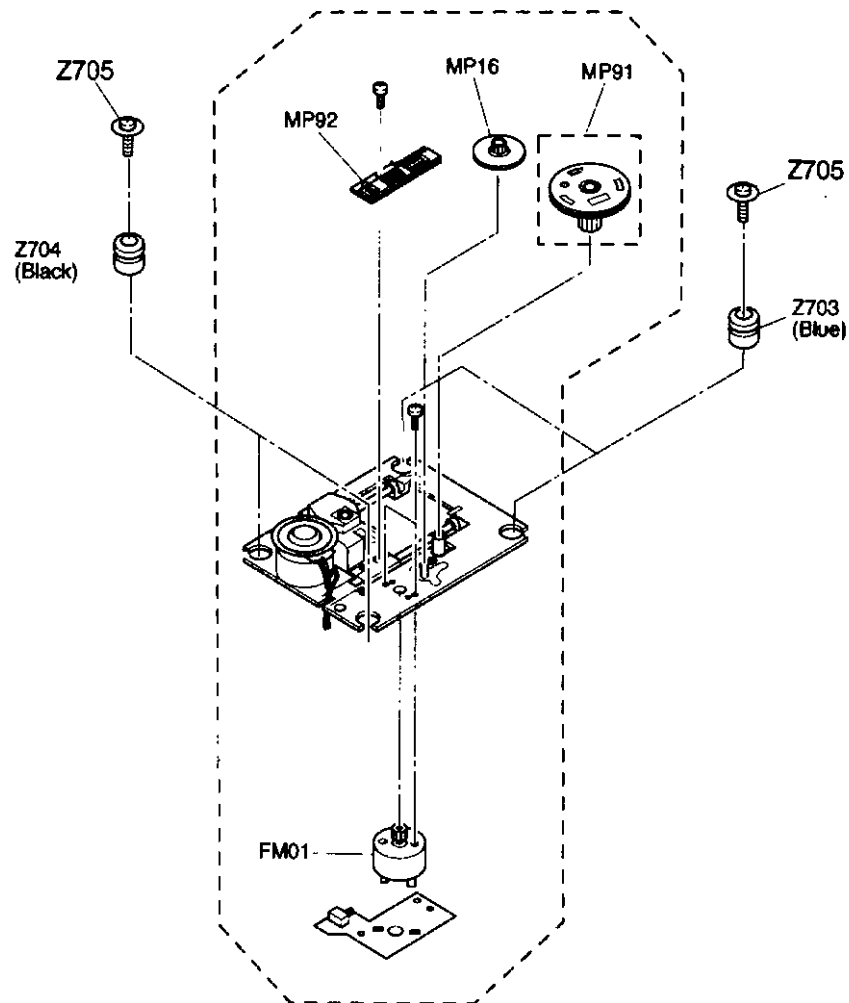


Fig. 4-1-7

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

2. Confirmation of content of writing (all destinations)

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

Item	MDD1N area	MUP2P area
ROM1	Version V*.**R1	Version V*.**R2
ROM2	V*.**	
OSD	Eng/Frc/Spa	Eng/Frc/Spa/Ger/Ita
VCD	On	
BUZZER	Off	
A.3D	Off	
RANDOM	On	
KARA	Off	
DTS	On	
VOCAL	Setup	
DIMMER	2typ	
V.3D	Off	
V-FMT	Ntsc	Pal
JOG	Off	
MPEG-A	On	

*.** : Shown ROM version

3. 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.

4. Setting of the first setup screen mode

- 4-1. The "STOP" key and the "DIMMER" key on the main body key are pushed at the same time in the state of No Disc.
- 4-2. It is confirmed that the Setup screen goes out, and the character of "First Setup ON" has come out in lower right.
- 4-3. 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)
- 4-4. The power supply is turned off, and the AC cord is pulled out.

		MDD1N	MUP2P
Language	On Screen Language	Eng	
	Dis Menu Language	Eng	
	Audio Language	Eng	
	Subtitle Language	--	
Picture	TV Shape	4:3LB	
	Black Level	Normal	
Audio	Audio Out Select	Analog 2ch	

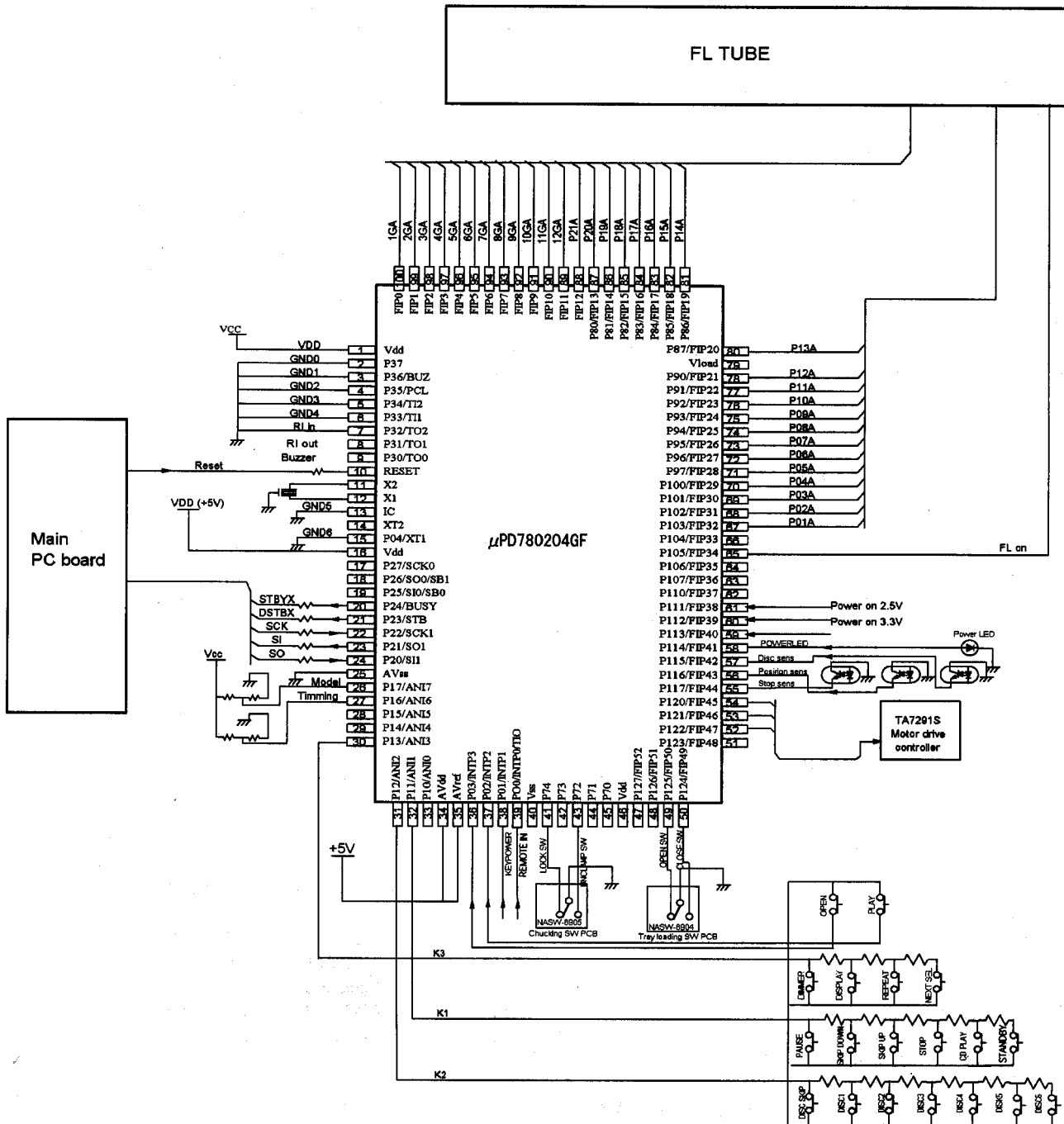
5. Initialized of mechanism

- 5-1. Press the DISC-6 key while pushing STANDBY/ON at standby condition.
- 5-2. It is confirmed that the character of "First Setup ON" appears in the lower right of the display.
- 5-3. It is confirmed to be displayed that the display of FL is "COMPLETE".
- 5-4. The AC code is pulled out.

MICROPROCESSOR TERMINAL DESCRIPTION

PIN No.	TERMINAL	I/O	DESCRIPTION
1	Vdd	I	Power supply terminal. (+5V)
2-7	GND	I	Not used. (To connect to the ground pin.)
8		O	Not used. (Open terminal)
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	GND	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	STBYX	O	Standby signal data output terminal to the main microprocessor.
21	DSTBX	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	KEYOPEN	I	Input control signal for open/close of the tray.
37	KEYPLAY	I	Key input terminal at the play.
38	KEYPOWER	I	Power switch key input terminal.
39	REMIN	I	Remote control input terminal.
40	GND	I	Ground terminal.
41	LOCK	I	Detection switch of the tray loading. L= Clamped and locked.
42	CLAMP	O	Clamp motor control terminal. L= Clamp
43	UNCLAMP	O	Clamp motor control terminal. L= Un clamp
44			Not used.
45	UNCLAMP.SW	I	Chucking close detection input terminal. L= Unlock
46	+5V	I	Power supply terminal. (+5V)
47	OPEN	O	Loading motor control output terminal. L= Open the tray.
48	CLOSE	O	Loading motor control output terminal. L= Close the tray.
49	OPEN.SW	I	Detection input terminal for tray open switch. L= Open the tray.
50	CLOSE.SW	I	Detection input terminal for tray close switch. L= Close the tray.
51	CURRENT	I	Detection input signal of over current for the loading motor.
52	ROTR	O	Roulette motor control terminal. L= Clockwise direction.
53	ROTL	O	Roulette motor control terminal. L= Counter clockwise direction.
54	ROTHI	O	Roulette motor speed control terminal.
55	STOP.SENS	I	Detection input terminal of the carousel rotation at stop position.
56	POS.SENS	I	Detection input terminal of the carousel rotation.
57	DISC.SENS	I	Detection input terminal of the disc sensor.
58	POWERLED	O	Power led control terminal. H= Power on
59	POWERON	I	Power control terminal from the main PC board. H= Power on

PIN No.	TERMINAL	I/O	DESCRIPTION
60	PWRCTRL33	O	Power supply (3.3V) control terminal. H= Power on
61	PWRCTRL25	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.
80-88	P13-P19	O	Segment output terminals.
89-100	20G-1G	O	Grid output terminals.



DV-C601

DISPLAY CIRCUIT PC BOARD (NADIS-6892-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	FL tube	
Q741	212209	25U56104BAN
	Remote sensor	
Q744	241330 or 24130011	PIC-26043TE2 or PIC-12043TE2
	Transistors	
Q742	2211504	2SA950-Y
Q743	2213143R2	2SC2712-O
	Switches	
S701-S714, S722-S724, S731,S732, S742,S743	25035652 or 25035704	NPS-111-S604 or NPS-111-S667, Tact
	Sockets	
P701A, P702A	25052260	NSCT-27P2157
	Socket AS	
P703	2002A390815	NSAS-08P0825
	Capacitors	
C711,C742	354721019	100 μ F,6.3V, Elect.
C741	354782209	22 μ F,50V, Elect.
	Holder	
Q741A	27191091A	FL

LED INDICATOR PC BOARD (NADIS-6893-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diode	
D701	225255B	SEL3110S-B, LED
	Plug	
P703A	25055148	NPLG-4P132
	Switches	
S708	25035652 or 25035704	NPS-111-S604 or NPS-111-S667, Tact

CONNECTION PC BOARD (NAETC-6894-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	Sockets	
P111A	25051900 or 25052355	NSCT-18P1687 or NSCT-18P2252
P112A	25051942 or 25052318	NSCT-18P1729 or NSCT-18P2215

1ST POWER SUPPLY CIRCUIT PC BOARD (NAPS-6884-1A/1B)

CIRCUIT NO.	PART NO.	DESCRIPTION
	ICs	
Q905	22241233	SE005N
Q902	22241496	PQ09RD11
Q903	22241495	PQ05RD11
Q904	22241510	PQ3RD13
	Transistors	
Q906,Q908	2211504	2SA950-Y
Q909,Q914	2215995 or 2213354 or 2213355	KTA1267-GR or 2SA933S-R or 2SA933S-S
Q912	2211945	2SK246-GR <MUP2P>
Q913	2211164	2SC2120-Y <MUP2P>
Q960	2211255	2SC1815-GR <MUP2P>
Q961	221281	DTC114YS <MUP2P>

CIRCUIT NO.	PART NO.	DESCRIPTION
	Diodes	
D909	22380295F	RN2Z
D910,D911	22380296F	RK46
D912	22380297	EU01
D913,D921	22380294	AG01Z
D917	22380300F	RU2YX
D918	224472204	MTZJ22D, Zener
D919	224470332	MTZJ3.3B, Zener
D920,D923	22380260 or 22380032 or 22380035	RLIN4003 or 1SR139-100 or GP104003E
D922	224470753	MTZJ7.5C, Zener
D924	224471202	MTZJ12B, Zener
D925	22380294	AG01Z <MUP2P>
D926	224471303	MTZJ13C <MUP2P>
	Coils	
L904-L907	231253K100 or 231295K100	NCH-1490 or NCH-1575, Choke
L960	231253K100 or 231295K100	NCH-1490 or NCH-1575, Choke <MUP2P>
	Socket AS	
P911	2002A392655	NSAS-26P0831
P912	2002A392265	NSAS-22P0832
	Plug	
P920B	25055858	NPLG-14P814
	Capacitors	
C920,C928	393751027S	1000 μ F,25V, Elect.
C921-C923, C931	354744719	470 μ F16V, Elect.
C924,C946	354742219	220 μ F16V, Elect.
C925	393741027S	1000 μ F,16V, Elect.
C926,C927, C930,C933, C932	354722219	220 μ F6.3V, Elect.
C929	374722244	0.22 μ F \pm 5%, 50V, Plastic
C934,C936, C938,C945	354782209	22 μ F50V, Elect.
C935,C944	374721034	0.01 μ F \pm 5%, 50V, Plastic
C937,C941, C942	354761019	100 μ F35V, Elect.
C939,C940	354751019	100 μ F25V, Elect. <MUP2P>
C943	354744709	47 μ F16V, Elect.
C965	354744709	47 μ F16V, Elect. <MUP2P>
C966	374721044	0.1 μ F \pm 5%, 50V, Plastic <MUP2P>
C967	354782209	22 μ F50V, Elect. <MUP2P>
	Resistors	
R930	4500163	0.47 Ω \pm 5%, 1/4W, Metal
R931	443522204	22 Ω \pm 5%, 1/2W, Metal oxide
	Heat sinks	
Q902A	27160459	RAD-130
Q904A	27160176	
	Screws	
Q902B, Q903A Q904B	801433 838430107	3SMS8W.SW+14B(BC), Tapping 3TTB+10S(BC), Tapping

2ND POWER SUPPLY PC BOARD (NAPS-6885-1A/1B)

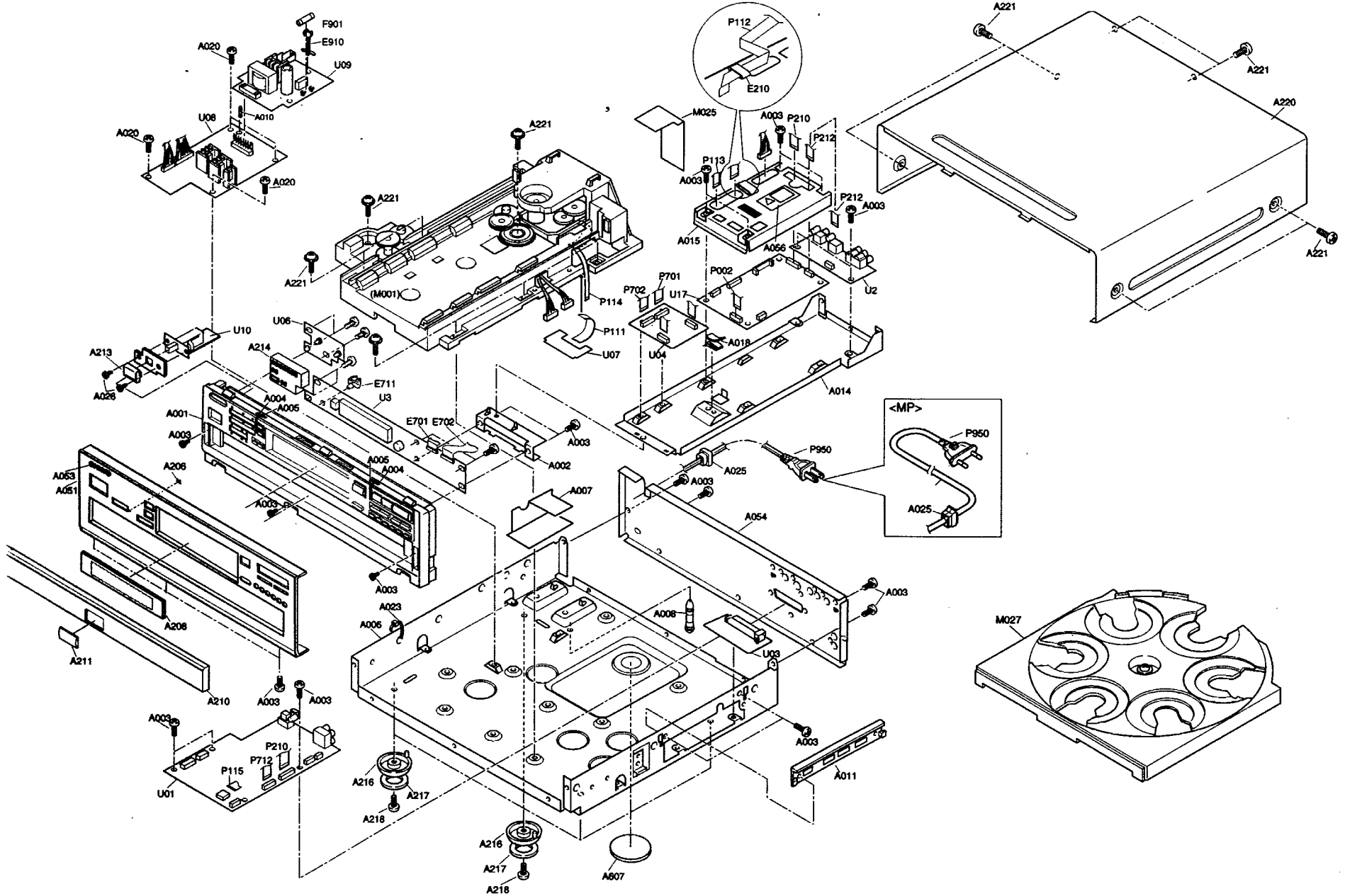
CIRCUIT NO.	PART NO.	DESCRIPTION
	IC	
Q901	22241229	STR-F6653

CIRCUIT NO.	PART NO.	DESCRIPTION	POWER SWITCH PC BOARD (NASW-6887-1A/1B)		
	Diodes		CIRCUIT NO.	PART NO.	DESCRIPTION
D901-D904	△22380287F	EM2A		Switches	
D905	△22380291	EG01C	S990	25035550 or	NPS-111-L512P or
D906-D908	22380294	AG01Z		25035703	NPS-111-L666P, Push
	Coils			Capacitors	
L901	△231280	NCH-3561, Choke	C990	△3500196S	RE275V-103M, IS <MDD1N>
L903	△230906	BL02RN2-R62, FR Core	C990	△3500077	DE7150F-472M, IS <MUP2P>
	Socket		ROULETTE MOTOR PC BOARD (NASW-6902-1A/1B)		
P920A	25051554	NSCT-14P1341	CIRCUIT NO.	PART NO.	DESCRIPTION
	Plug			Photo sensors	
P951A	25056028 or	NPLG-2P0978 or			
P951Aor	25055675	NPLG-2P631	Q002	24190041	SG-207, Photo interrupter
	Capacitors		Q003	24190046	GP2S28, Photo interrupter
C901	△3500077	DE7150F-472M, ISC <MDD1N>		Socket AS	
	3000117F	QXE2E473K-TP7FL, ISC	P001	2002390605UL	NSAS-6P0597
		<MUP2P>		Sockets	
C902	3500077	DE7150F-472M, ISC	P002A	25051851 or	NSCT-7P1638 or
C910	△3500199S	100 μ F, 400V, Elect.		25050913	NSCT-7P700
C911	△3000115	220 μ F±5%, 2000V, Plastic (HR)		Capacitors	
C912	△3000114	0.01 μ F±10%, 630V, Plastic (XJ)	C001,C003	354744709	47 μ F, 16V, Elect.
C913	354764709	47 μ F, 35V, Elect.	C002	352942206	22 μ F, 16V, Elect.
C916	△3500077	DE7150F-472M, ISC <MDD1N>	DISC SENSOR PC BOARD (NASW-6903-1A/1B)		
C916	△3300053S	DE0910-1E102MKX, Ceramic	CIRCUIT NO.	PART NO.	DESCRIPTION
		<MUP2P>	Q001	24190041	SG-207, Photo interrupter
	Resistors		P001B	25055367	NPLG-3P350, Plug
R901	△4500018	0.22 Ω±10%, 5W,	TRAY LOADING SWITCH PC BOARD (NASW-6904-1A/1B)		
		Metal plate <MDD1N>	CIRCUIT NO.	PART NO.	DESCRIPTION
	△4500026	1 Ω±10%, 5W, Metal plate	S001	25065491	NMS-1223, Switch
		<MUP2P>	P103	2009990447UL or	NSAS-10P0596 or
R902	△411566844 or	680k Ω±5%, 1/2W, Carbon		2009990594UL	NSAS-10P-0807, Socket AS
	△411516844		CHUCKING SWITCH PC BOARD (NASW-6905-1A/1B)		
R903	△441726834F	68k Ω±5%, 2W, Metal oxide	CIRCUIT NO.	PART NO.	DESCRIPTION
R904	△441721044F	100 Ω±5%, 2W, Metal oxide	S002	25065375	NMS-1219, Switch
R905	443524704	47 Ω±5%, 1/2W, Metal oxide	P104	2009990446UL or	NSAS-11P0595 or
R906	443522724	2.7 Ω±5%, 1/2W, Metal oxide		2009990593UL	NSAS-11P-0806, Socket AS
R907	△451735194F	0.51 Ω±5%, 2W, Metal	TRAY LOADING MOTOR PC BOARD (NASW-6906-1A/1B)		
R908	443526814	680 Ω±5%, 1/2W, Metal oxide	CIRCUIT NO.	PART NO.	DESCRIPTION
R909	443523324	3.3k Ω±5%, 1/2W, Metal oxide	C004	352942206	22 μ F, 16V, Electric capacitor
R910	443522234	22k Ω±5%, 1/2W, Metal oxide			
R912	443522214	22 Ω±5%, 1/2W, Metal oxide			
R913	443521024	1k Ω±5%, 1/2W, Metal oxide			
R919	453534794	0.47 Ω±5%, 1/2W, Metal			
	Fuse holders				
F901A,F901B	△25050065	YSH403T			
	Fuse label				
E902	△29362309	1.25A/125V <MDD1N>			
	△29361580	T1.25AL250V <MUP2P>			
	Power transformer				
T901	△2301432	NPT-1380			
	Heat sink				
Q901A	27160412 or	RAD-111 or 17PB23L30			
	27160428				
	Others				
C902A	△27301216	SB1925A, Capacitor cover			
Q901B	838430107	3TTB+10S(BC), Self tapping screw			

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

NOTE:
<MDD1N> : U.S.A., Canadian model only
<MUP2P> : European model only

CHASSIS EXPLODED VIEW



CHASSIS EXPLODED VIEW PARTS LIST

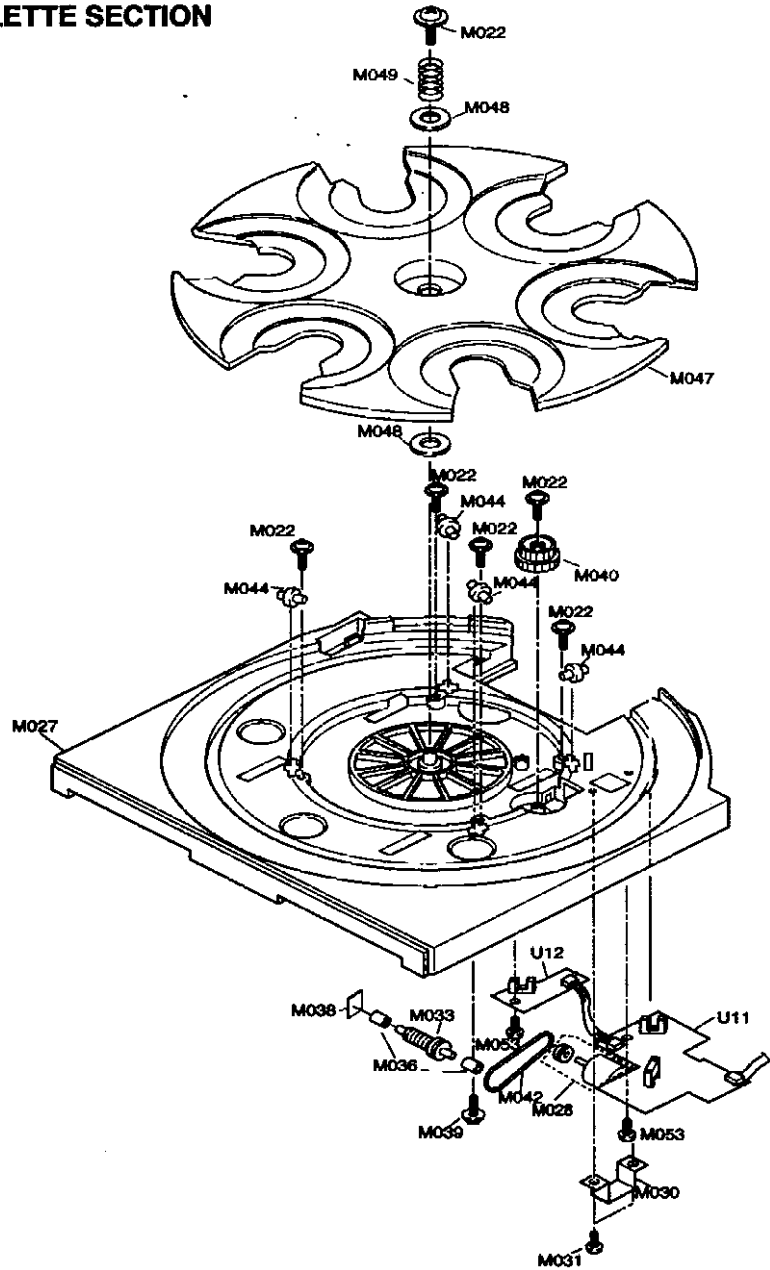
REF. NO.	PART NO.	DESCRIPTION
A001	27111129B	Front bracket
A002	27141746	Retainer, Front
A003	838130088	3TTB+8B, Self-tapping screw
A004	29110138	Tape, copper
A005	28141400	Cushion
A006	27100327B	Chassis
A007	28175252B	Isolation plate
A008	27190511	KGLS-16RF, Holder
A010	27191089	WLS-10-0, Holder
A011	27191084	Holder, FFC
A014	27130828A	Bracket PC
A015	27225143E	Shield case
A016	28141387	Cushion
A018	27191000	MFS-1000, Holder
A020	831430088	3TTW+8B(BC), Self-tapping screw
A023	260208	Wire tie
A025	27300750	△ Bushing cord
A026	838430107	3TTB+10S(BC)), Self-tapping screw
A051	27212208	Front panel <MDD1N>
	27212209	Front panel <MUP2P>
A053	28135244	Badge
A054	27122728	Rear panel <MDD1N>
	27122729	Rear panel <MUP2P>
A055	834430088	3TTS+8B(BC), Self-tapping screw
A056	29362584	Label, DVD <MDD1N>
A205	28198897	Facet 1
A208	28191887	Clear plate
A210	28148446	Door
A211	27262655	Plate DVD
A213	28325465	Knob, POWER
A214	28325686	Knob, ST
A216	27175316B	Leg
A217	28141332	Cushion (Leg)
A218	838130088	3TTB+8B, Self-tapping screw
A220	28184680A	Top cover
A221	838430088	3TTWB+8B(BC), Self-tapping screw
A607	27270397	Spacer
P002	2043070112	NCFC7-070112, Flexible flat cable
P111	2042180512	NCFC2-180512, Flexible flat cable
P112	2042183512	NCFC2-183512, Flexible flat cable
P113	2045082012	NCFC5-082012, Flexible flat cable
P114	2042080812	NCFC2-080812, Flexible flat cable
P210	2045082012	NCFC5-082012, Flexible flat cable
P212	2045140512	NCFC5-140512, Flexible flat cable
P701	2047272512	NCFC7-272512, Flexible flat cable
P702	2047272012	NCFC7-272012, Flexible flat cable
P712	2045213512	NCFC5-213512, Flexible flat cable
P751	2045131012	NCFC5-131012, Flexible flat cable
P210	2045161012	NCFC5-161012, Flexible flat cable <MUP2P>
E210	230951 or 230957	FSOC250RT01 or FPC-25-12, Core
E711	27190608-1	UA-0 V0, Holder
E910	27301396	HL-28-0, Clamper

REF. NO.	PART NO.	DESCRIPTION
P950	253279HIT or	△ AS-UC-2#18, Power supply cord <MDD1N>
	253280VOL	△
	253193HIT or	△ AS-CEE, Power supply cord <MUP2P>
	253195MAR	△
F901	252157	△ 1.25A-UL/T-237, Fuse <MDD1N>
	252071	△ 1.25A-SE-EAWK, Fuse <MUP2P>
U01	1H446588-1A	NAAF-6888-1A, Output terminal PC board ass'y <MDD1N>
	1H446588-1B	NAAF-6888-1B, Output terminal PC board ass'y <MUP2P>
U02	1H446589-1A	NAVD-6889-1A, Video amplifier PC board ass'y <MDD1N>
	1H446589-1B	NAVD-6889-1B, Video amplifier PC board ass'y <MUP2P>
U03	1H446590-1B	NAVD-6890-1B, SCART terminal PC board ass'y <MUP2P>
U04	1H446591-1A	NADG-6891-1A, Microprocessor circuit PC board ass'y <MDD1N>
	1H446591-1B	NADG-6891-1B, Microprocessor circuit PC board ass'y <MUP2P>
U05	1H446592-1A	NADIS-6892-1A, Display circuit PC board ass'y <MDD1N>
	1H446592-1B	NADIS-6892-1B, Display circuit PC board ass'y <MUP2P>
U06	1H446593-1A	NADIS-6893-1A, LED indicator PC board ass'y <MDD1N>
	1H446593-1B	NADIS-6893-1B, LED indicator PC board ass'y <MUP2P>
U07	1H446594-1A	NAETC-6894-1A, Connection PC board ass'y <MDD1N>
	1H446594-1B	NAETC-6894-1B, Connection PC board ass'y <MUP2P>
U08	1H446584-1A	NAPS-6884-1A, 1st power supply circuit PC board ass'y <MDD1N>
	1H446584-1B	NAPS-6884-1B, 1st power supply circuit PC board ass'y <MUP2P>
U09	1H446585-1A	NAPS-6885-1A, 2nd power supply circuit PC board ass'y <MDD1N>
	1H446585-1B	NAPS-6885-1B, 2nd power supply circuit PC board ass'y <MUP2P>
U10	1H446587-1A	NASW-6887-1A, Power switch PC board ass'y <MDD1N>
	1H446587-1B	NASW-6887-1B, Power switch PC board ass'y <MUP2P>
U11	1H446502-1A	NASW-6902-1A, Roulette motor PC board ass'y <MDD1N>
	1H446502-1B	NASW-6902-1B, Roulette motor PC board ass'y <MUP2P>
U12	1H446503-1A	NASW-6903-1A, Disc sensor PC board ass'y <MDD1N>
	1H446503-1B	NASW-6903-1B, Disc sensor PC board ass'y <MUP2P>
U13	1H446504-1A	NASW-6904-1A,
		Tray loading switch PC board ass'y <MDD1N>
	1H446504-1B	NASW-6904-1B,
U14	1H446505-1A	Tray loading switch PC board ass'y <MUP2P>
		NASW-6905-1A,
	1H446505-1B	Chucking switch PC board ass'y <MDD1N>
U15	1H446506-1A	NASW-6906-1A,
		Tray loading motor PC board ass'y <MDD1N>
	1H446506-1B	NASW-6906-1B,
U16	1H446507-1A	Tray loading motor PC board ass'y <MUP2P>
		NASW-6907-1A,
	1H446507-1B	Chucking motor PC board ass'y <MDD1N>
U17	24150013	NASW-6907-1B,
		Chucking motor PC board ass'y <MUP2P>
		Main PC board ass'y, SD-30B1S

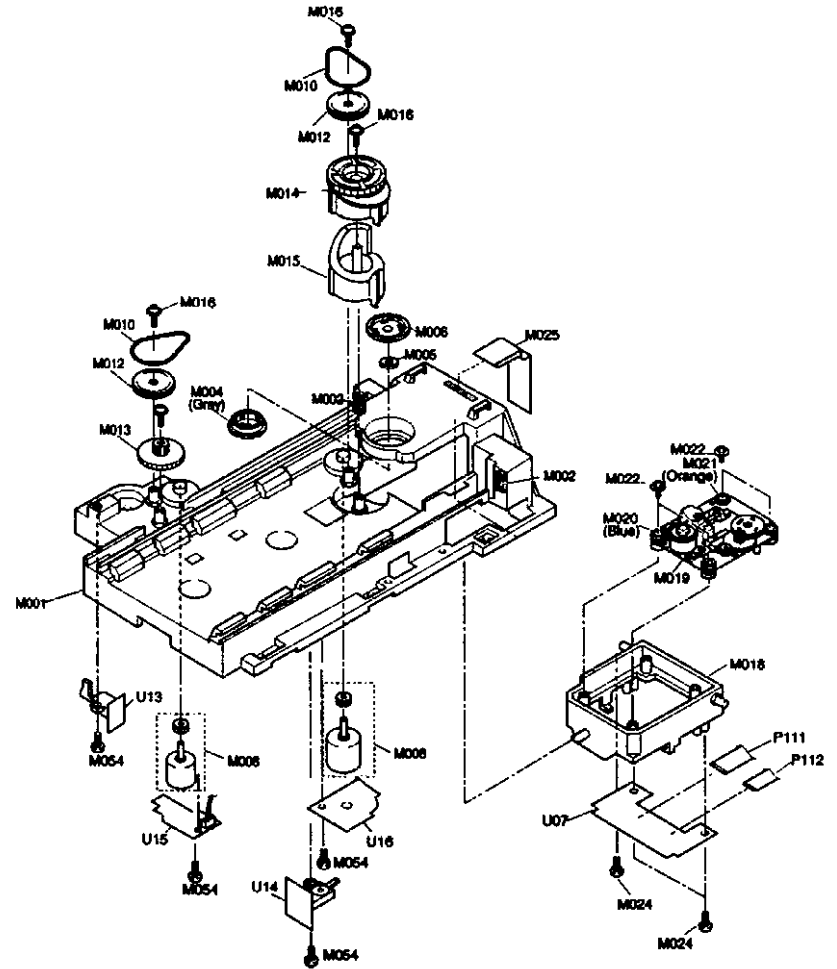
NOTE: THE COMPONENTS IDENTIFIED BY MARK
 △ ARE CRITICAL FOR RISK OF FIRE AND
 ELECTRIC SHOCK. REPLACE ONLY WITH
 PART NUMBER SPECIFIED.

NOTE:
 <MDD1N> : U.S.A., Canadian models only
 <MUP2P> : European model only

ROULETTE SECTION



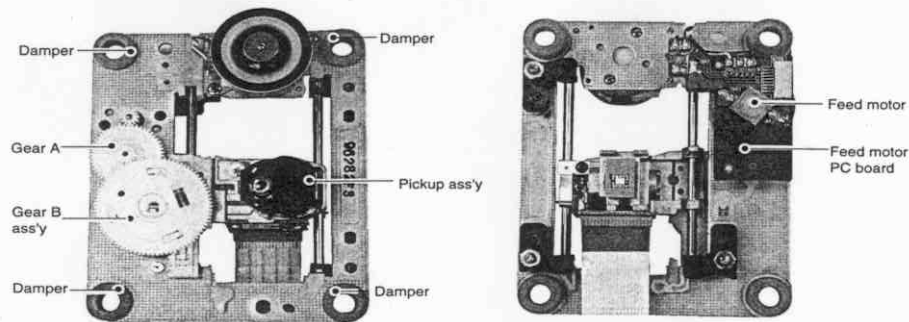
RAIL SECTION



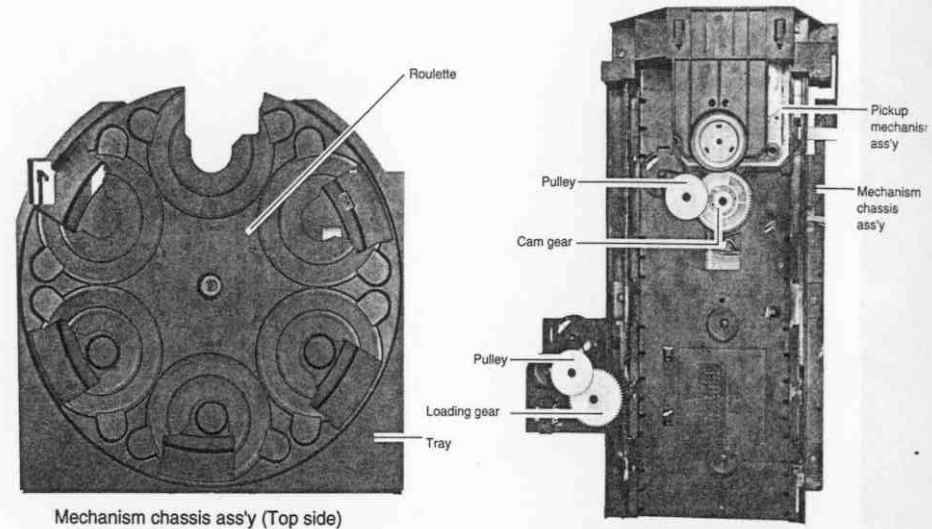
EXPLODED VIEW (MECHANISM) PARTS LIST

REF. No.	PART No.	DESCRIPTION
M001	24840109B	Rail
M002	28141337	Cushion
M004	24824028	Cap (CHD)
M005	24832028	Magnet (CHD)
M006	24830028	Yoke (CHD)
M008	1H4126021	Loading / Chucking motor assy, RF-500TB-14415
M010	24816010A	Rubber belt
M012	24810040	Gear (Pulley)
M013	24810039A	Gear (Load)
M014	24810041	Cam gear (A)
M015	24810042	Cam gear (B)
M016	831430088	3TTW+8B(BC), Self tapping screw
M018	24802046A	Chassis (Sub)
M019	24801003	DVD Mechanism, SD-2109K1-ZX
M020	24818013	Insulator (A), Black
M021	24818036	Insulator (A), Blue
M022	24840111	Special screw
M024	838130088	3TTB+8B, Self tapping screw
M025	28175255	Isolation plate
M027	24840142	Tray
M028	1H4126023	Roulette motor assy, RF-310TA-114C
M030	24822018	Retainer
M031	838130088	3TTB+8B, Self tapping screw
M033	24810045A	Worm gear assy
M036	24834017A	Spacer
M038	28141340	Cushion
M040	24810043	Wheel gear
M042	24816035	Rubber belt (G)
M044	24840110	Roller
M047	24840108A	Roulette
M048	24834016	Washer
M049	24820033	Spring
M053	838130088	3TTB+8B, Self tapping screw
M054	838426088	2.6TTB+8B(BC), Self tapping

LOCATION OF MECHANISM PARTS

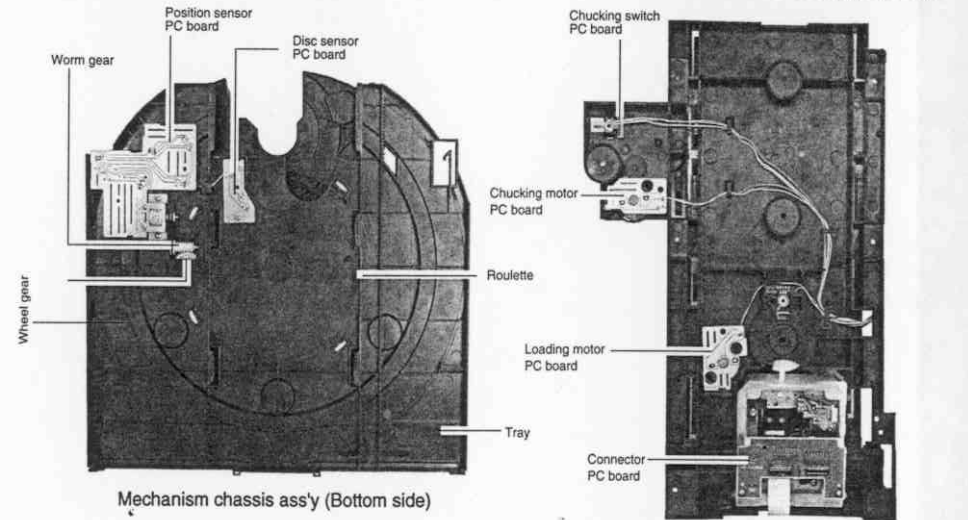


DVD pickup mechanism chassis ass'y (Top side) DVD pickup mechanism chassis ass'y (Bottom side)



Mechanism chassis ass'y (Top side)

Mechanism chassis ass'y (Top side)



Mechanism chassis ass'y (Bottom side)

Mechanism chassis ass'y (Bottom side)

SCHEMATIC DIAGRAM 1

CAUTION

FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH FUSE OF SAME TYPE AND RATING INDICATED.

ATTENTION

AFIN D'ASSURER UNE PROTECTION PERMANENTE CONTRE LES RISQUES D'INCENDIE, REMPLACER UNIQUEMENT PAR UN FUSIBLE DE MEME TYPE ET CALIBRATION COMME INDIQUE.



THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD. REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.

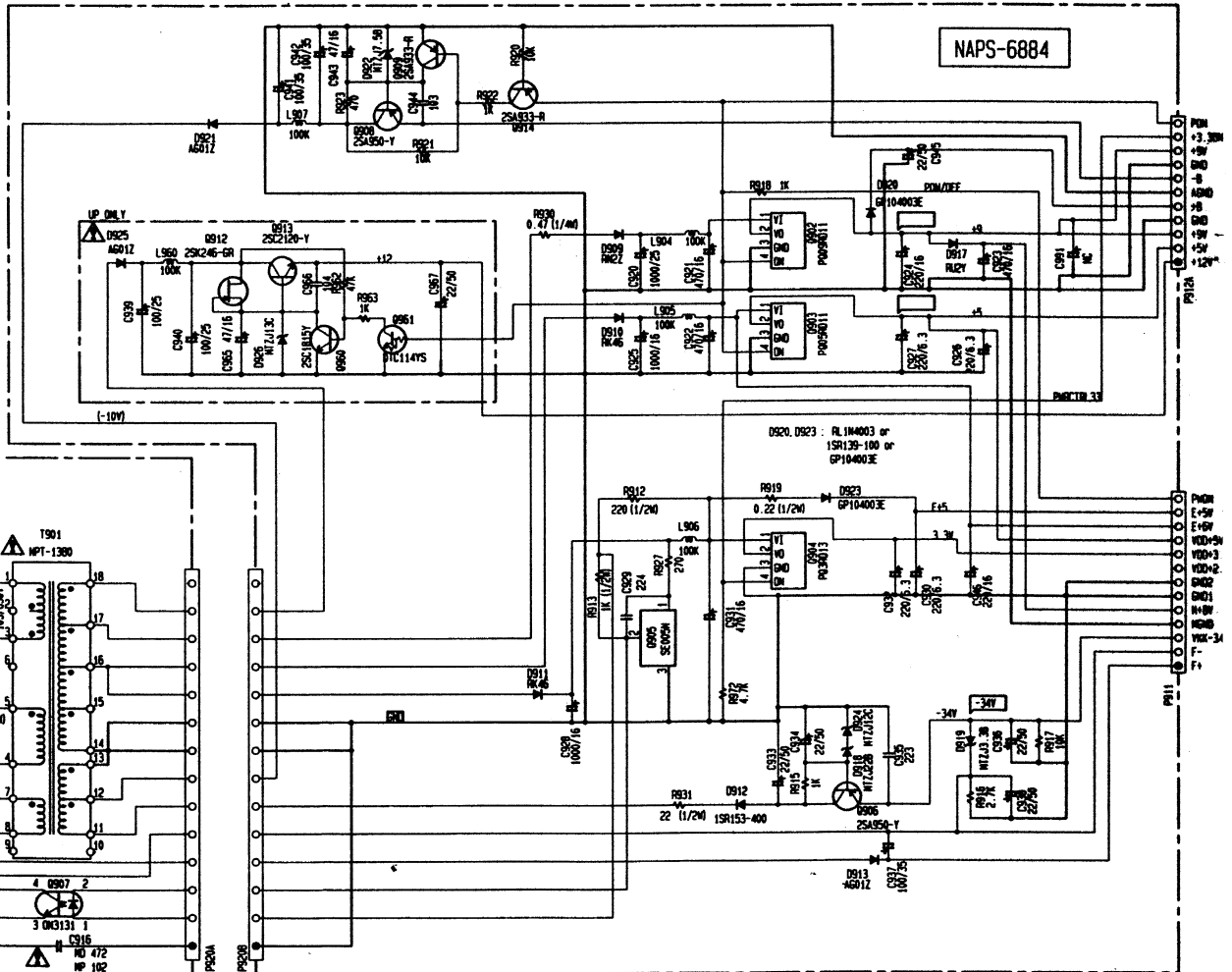


CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST A LENT. E POUR UNE PROTECTION PERMANENTE N'UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DANGER EST INDIQUE LA OU LE PRESENT SYMBOLE EST APPRIS.

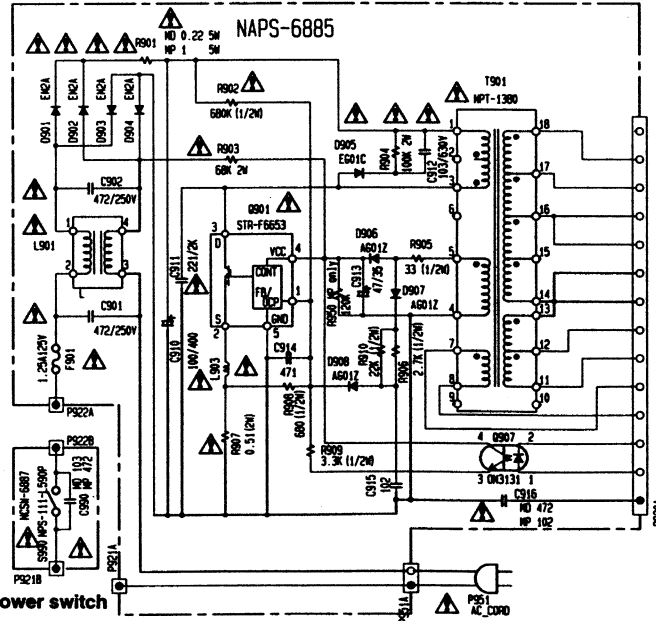
NOTE

THE COMPONENTS IDENTIFIED BY MARK Δ ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
 VOLTAGE MEASURED WITH VOLTMETER (V) IS DC VOLTAGE, NO INPUT SIGNAL.
 ALL PNP TRANSISTORS ARE EQUIVALENT TO 2N1015-GR UNLESS OTHERWISE NOTED.
 ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
 ALL DIODES ARE EQUIVALENT TO 1S5133 UNLESS OTHERWISE NOTED.
 ELECTROLYTIC CAPACITORS (E) ARE IN μ F/V.
 ALL CAPACITORS ARE IN pF/500V UNLESS OTHERWISE NOTED.
 EX1 030-30F 330-300F 331-300F 333-0.0330F
 ALL RESISTORS ARE IN OHMS 1/4Watts UNLESS OTHERWISE NOTED.
 THE THICK LINES ON PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
 EX1 () PRINTING SIDE
 CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

U08 1st power supply circuit PC board



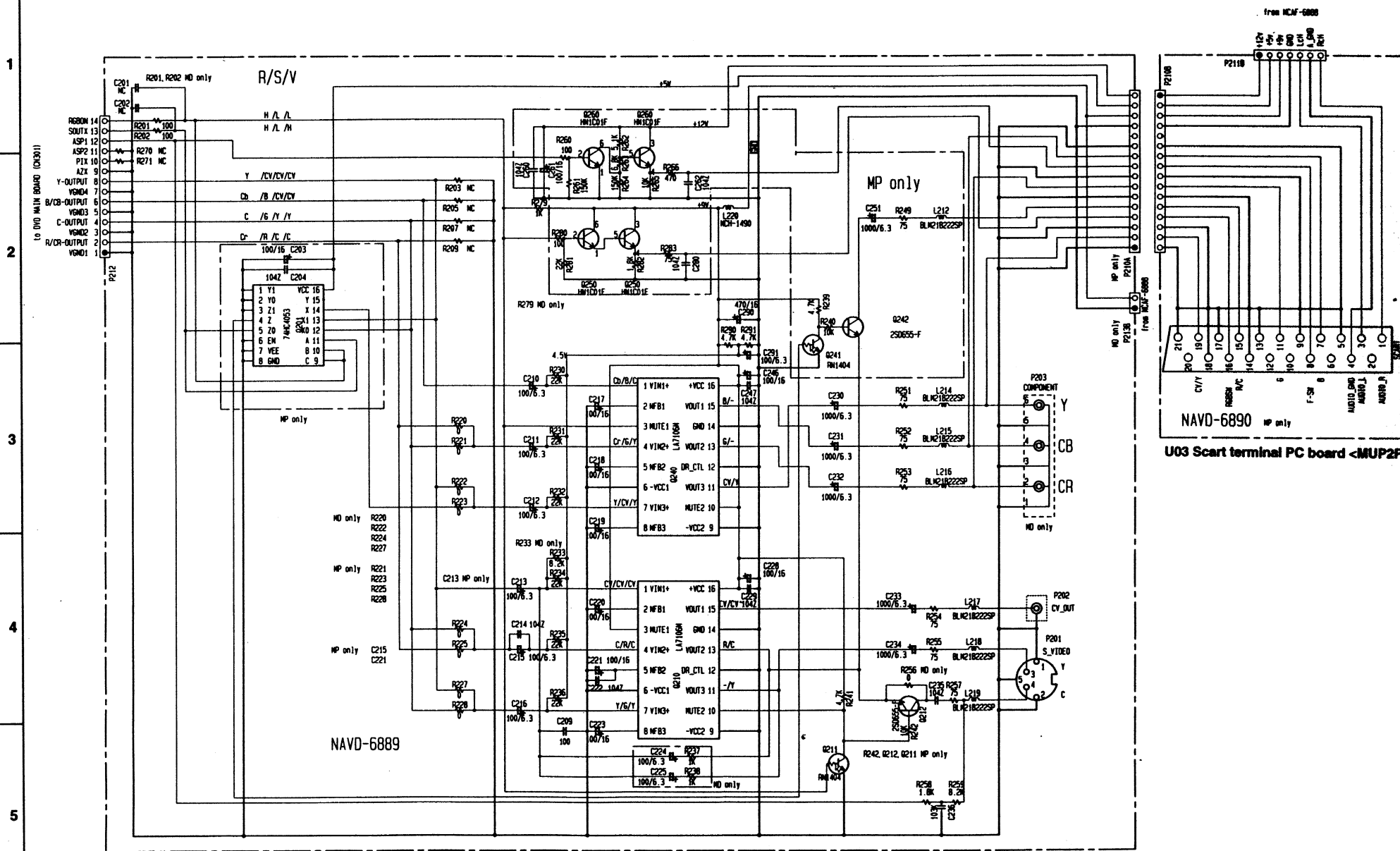
U09 2nd power supply circuit PC board



U10 Power switch PC board

DY-C501 ND	AS-UC-2118	AC120V/50Hz
DY-C501 NP	AS-CEE	AC100-240/50, 60Hz

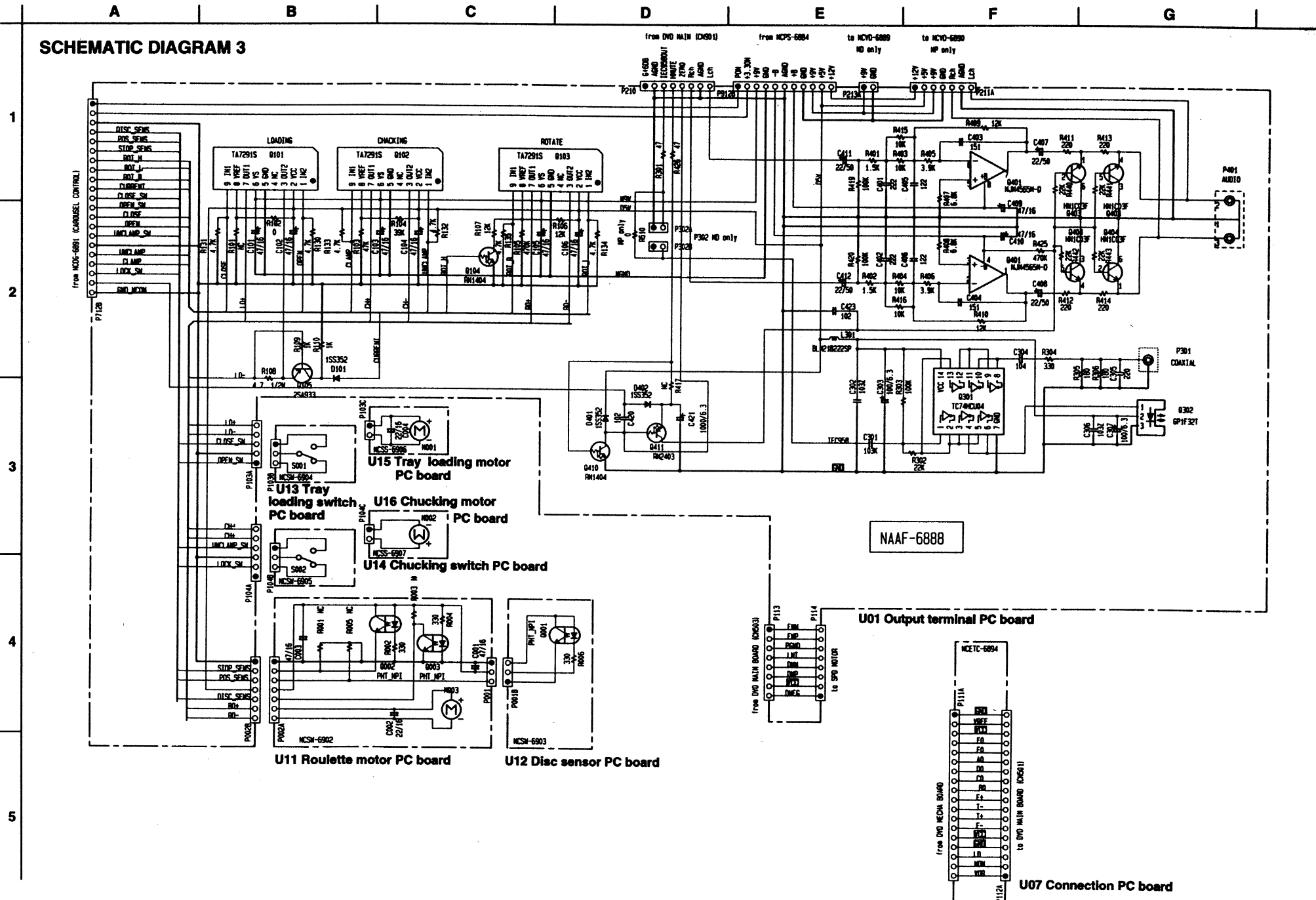
SCHEMATIC DIAGRAM 2



U02 Video amplifier PC board

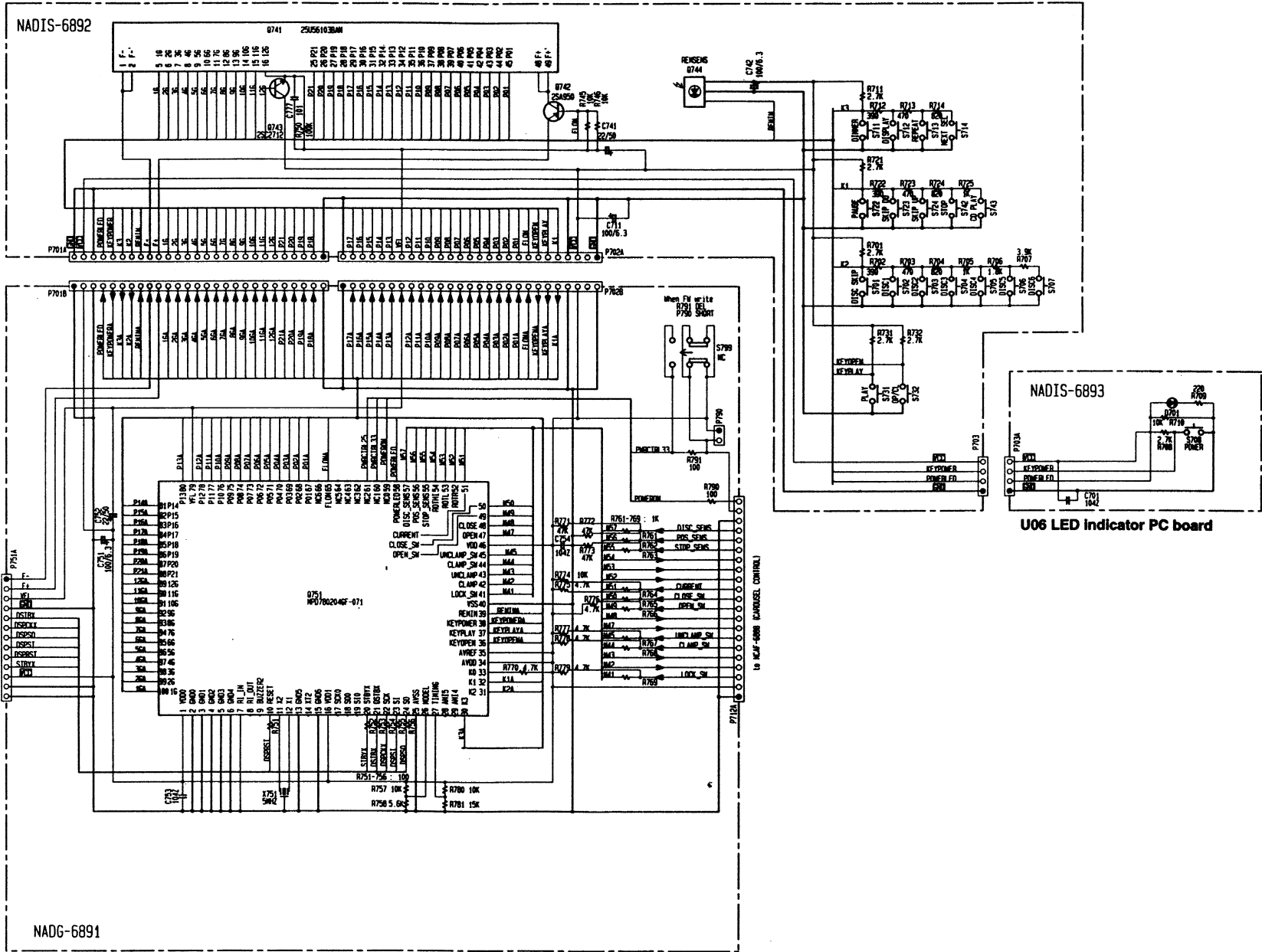
U03 Scart terminal PC board <MUP2P

SCHEMATIC DIAGRAM 3

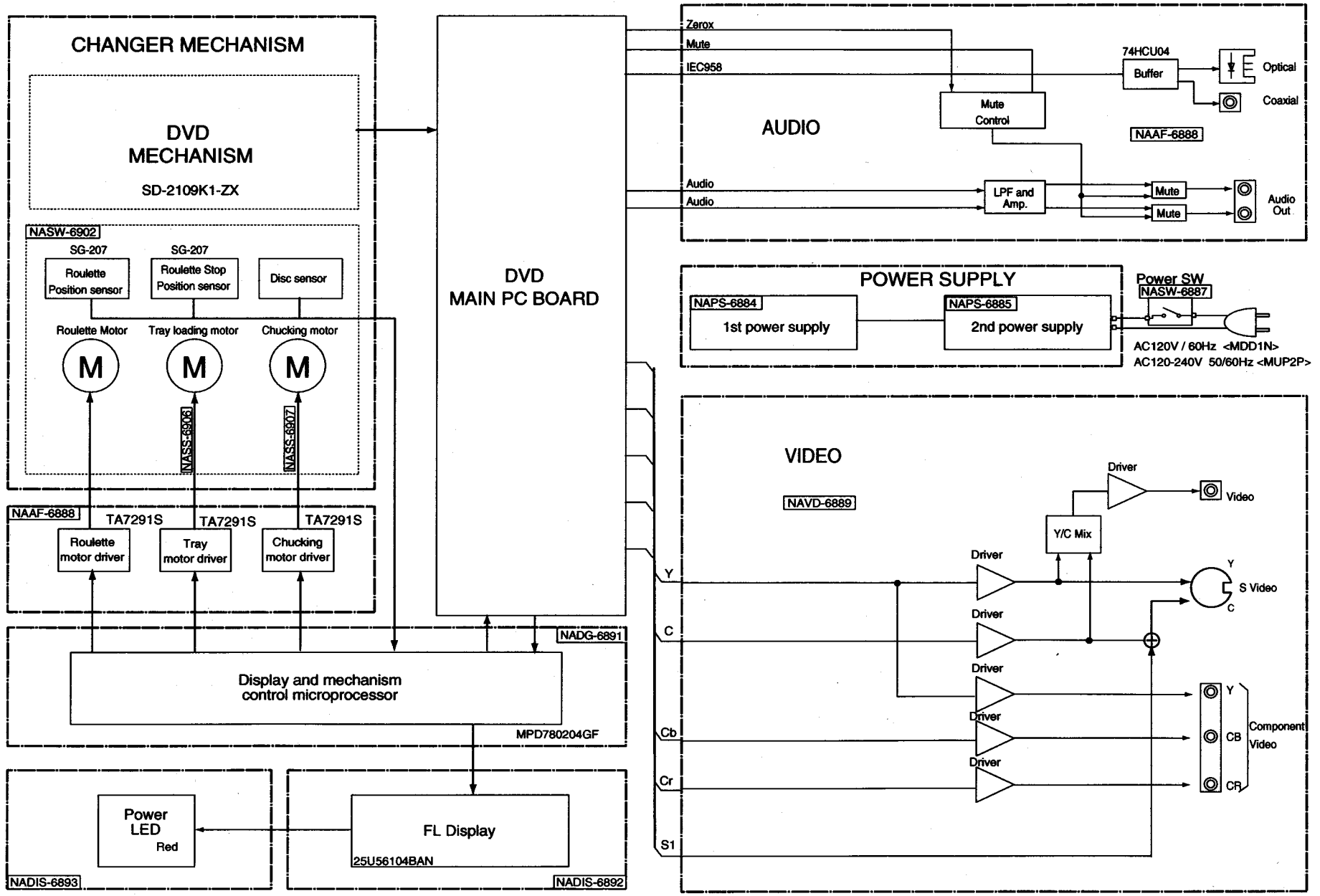


SCHEMATIC DIAGRAM 4

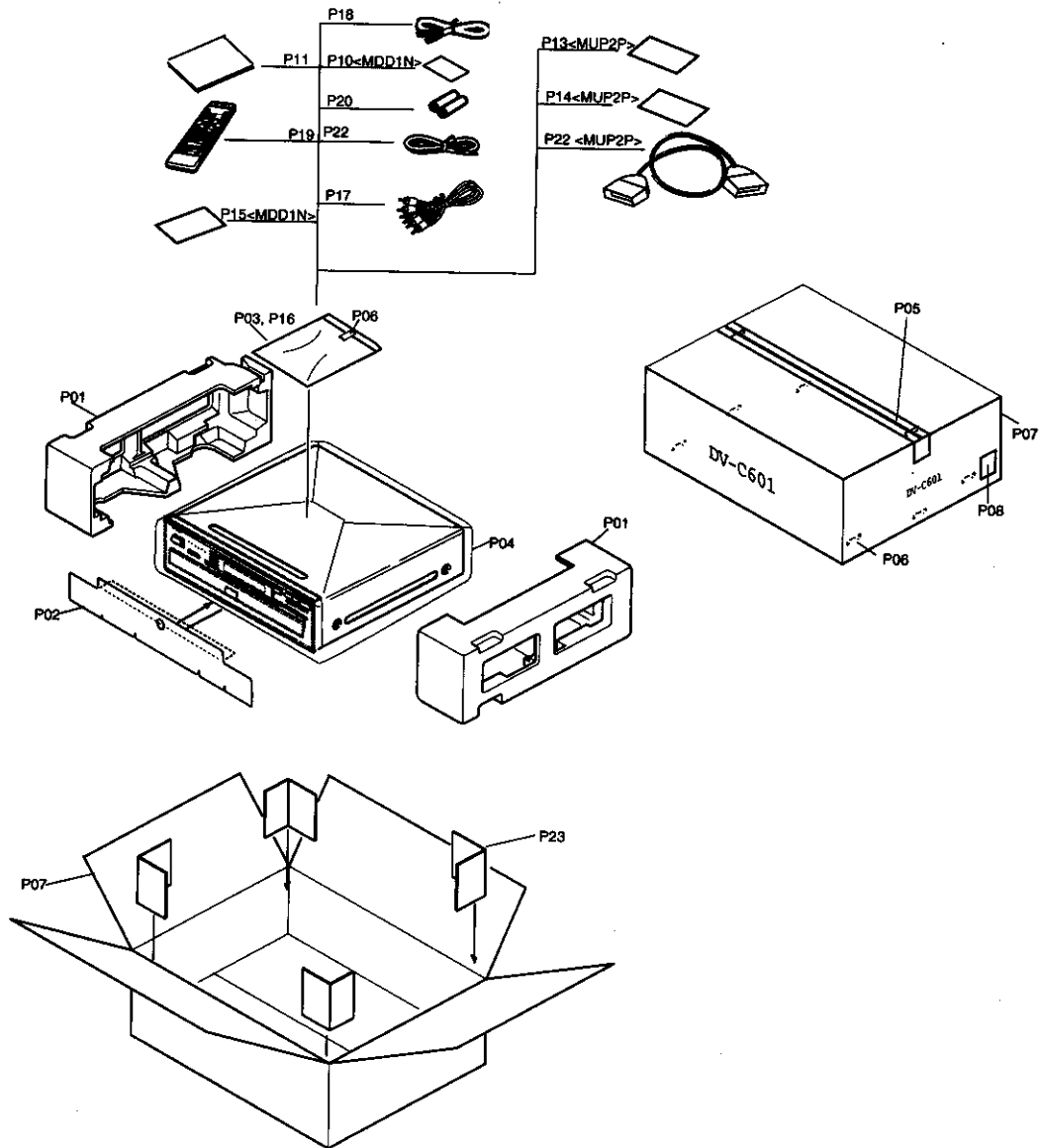
U05 Display circuit PC board



BLOCK DIAGRAM



PACKING VIEW/ PARTS LIST



PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
P01	29091774A	Pad ass'y	P16	29100097-1A	350*250, Poly bag <MUP2P>
P02	29095795	Sheet, Door	P17	2010379	RCA3P(YWR), Pin cord ass'y
P03	29100097-1A	350*250, Poly bag	P18	2010380	S- Cord
P04	29100153	1020x720, Sheet	P19	24140425	RC-425DV, Remote controller
P05	29110098	W50 3M NO 371, PP tape	P20	3010054	UM-3, Battery
P06	282301	Staple, 8pcs			
P07	29053671	Carton box <MDD1N>	P22	2010368	YAF11-0697, RGB cord <MUP2P>
	29053672	Carton box <MUP2P>		29095866	Customer service sheet <MDD1N>
P08	29362627	UPC Label <MDD1N>		29360840	Label product <MDD1N>
	29362629	EAN Label <MUP2P>	P23	29095892	Sheet
P10	29365083A	Warranty card <MDD1N>			
P11	29342921	E, Instruction manual <MDD1N>			
	29342922	E, Instruction manual <MUP2P>			
P13	29342923	U3(GSwD), Instruction manual <MUP2P>			
P14	29342924	U3(FSI), Instruction manual <MUP2P>			
P15	29355299	Instruction sheet <MDD1N>			

NOTE:

<MDD1N> : U.S.A., Canadian model only
 <MUP2P> : European model only