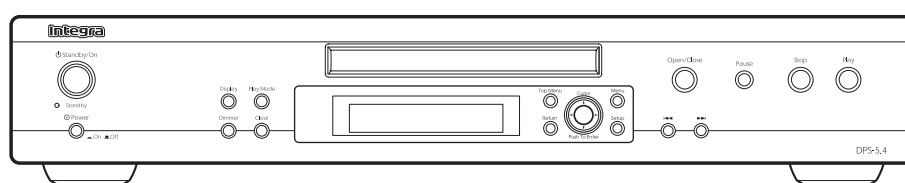


Integra SERVICE MANUAL

JUL, 2003

DVD PLAYER MODEL DPS-5.4



Black model

BMDD	120V AC, 60Hz
BMDC	
BMUA	100-240V AC, 50/60Hz

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  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.

EXPLODED VIEW PARTS LIST

! : Safety part

DPS-5.4

Exploded V	REF. NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
Exploded V	A1	CHASSIS	27100425B		
Exploded V	A3	LEG	27175316C	LEG	
Exploded V	A5	CUSHION	28141494		
Exploded V	A10	HOLDER	27190428A	KGLS-10RT	
Exploded V	A11	SCREW	838130088	3TTB+8B	
Exploded V	A11a	WASHER	87643010	W3*10F(BC)	
Exploded V	A12	HOLDER	27190657	KGLS-18RT	
Exploded V	A13	HOLDER	27190772	KGLS-22RT	
Exploded V	A15	LABEL(DVD2)	29362648		
Exploded V	A16	CLAMP	27301394	HL-18-0	
Exploded V	A20	F BRACKET	27111325A	(B)	
Exploded V	A21	KNOB	28325756	(STANDBY)	
Exploded V	A22	CLEAR PLT	28191993		
Exploded V	A23	B PLATE	28133410	DPS-5.4(B)	
Exploded V	A24	TAPE	29110161		
Exploded V	A27	ST SCREW	838126068	2.6TTB+6B	
Exploded V	A30	KNOB	28325753	(POW)	
Exploded V	A32	SCREW	82143010	3P+10FN(BC)	
Exploded V	A35	KNOB	28326078	(CRS)	
Exploded V	A51	DOOR	28148479A		
Exploded V	A52	PLATE	27262651	(DVD)	
Exploded V	A55	COVER	28184864	(B)	
Exploded V	A56	SCREW	838430088	3TTB+8B(BC)	
Exploded V	A57	CUSHION	28141542	HIME0.5*120*10	
Exploded V	A41	F PANEL	27212527	DPS-5.4(B)	
Exploded V	A43	BADGE	28135278		
Exploded V	A44	FACET	28198906	(S)	
Exploded V	A46	SCREW	838430088	3TTB+8B(BC)	
Exploded V	A47	REAR PANEL	27123125	5.4MDD1N	<MDD, MDC>
Exploded V	A47	REAR PANEL	27123126	5.4MUA4P	<MUA>
Exploded V	A48	SCREW	838430088	3TTB+8B(BC)	
Exploded V	A49	SCREW	838440089	4TTB+8C(BC)	
Exploded V	F1	FUSE	! 252252	1.6A-T/UL-ST2	<MDD, MDC>
Exploded V	F1 or	FUSE	! 252147	1.6A-TSC	<MDD, MDC>
Exploded V	F1	FUSE	! 252273	1.6A-SE-TL250V	<MUA>
Exploded V	F1 or	FUSE	! 252073	1.6A-SE-EAK IEC FUSE	<MUA>
Exploded V	P501	FFC	2045301512	NCFC5-301512	
Exploded V	P502	FFC	2045110612	NCFC5-110612	
Exploded V	P503	FFC	2045180712	NCFC5-180712	
Exploded V	P701	FFC	2045242012	NCFC5-242012	
Exploded V	P702	SOCKET AS	20044391025	NSAS-10P1160	
Exploded V	P901A	CORE	230945	NFY-25 BLACK	
Exploded V	P910	WIRE TIE	260208	(CLAMPER)UL	
Exploded V	S731	JOY STICK	25035710	NPS-115-S673	
Exploded V	Z1	DVD Main circuit PC board assy	24150042	DB-VPB501	
Exploded V	Z10	DVD Mechanism assy	24801018	DB-VLD501-007	
Exploded V	Z12	HOLDER	27191201	(ML)	
Exploded V	Z13	HOLDER	27191202	(MR)	
Exploded V	Z14	SCREW	801433	3SMS8W.SW+14B(BC)	
Exploded V	Z15	SCREW	838130088	3TTB+8B	
Exploded V	Z91A	SCREW	830440089	4TTC+8C(BC)	
Exploded V	U1	Output terminal PC board assy	1H505597-1G	NAAR-7997-1G	<MDD, MDC>
Exploded V	U1	Output terminal PC board assy	1H505597-1H	NAAR-7997-1H	<MUA>
Exploded V	U2	Display circuit PC board assy	1H505598-1G	NADIS-7998-1G	<MDD, MDC>
Exploded V	U2	Display circuit PC board assy	1H505598-1H	NADIS-7998-1H	<MUA>
Exploded V	U3	Standby switch PC boars assy	1H505599-1G	NADIS-7999-1G	<MDD, MDC>
Exploded V	U3	Standby switch PC boars assy	1H505599-1H	NADIS-7999-1H	<MUA>
Exploded V	U4	Power switch PC board assy	1H505500-1G	NASW-8000-1G	<MDD, MDC>
Exploded V	U4	Power switch PC board assy	1H505500-1H	NASW-8000-1H	<MUA>
Exploded V	U5	Inlet terminal PC board assy	1H505502-1G	NAPS-8002-1G	<MDD, MDC>

Exploded V	U5	Inlet terminal PC board assy	1H505502-1H	NAPS-8002-1H	<MUA>
Exploded V	U6	Support PC board	1H505503-1G	NAETC-8003-1G	<MDD, MDC>
Exploded V	U6	Support PC board	1H505503-1H	NAETC-8003-1H	<MUA>
Exploded V	U7	RS-232 terminal PC board assy	1H505505-1G	NAETC-8005-1G	<MDD, MDC>
Exploded V	U7	RS-232 terminal PC board assy	1H505505-1H	NAETC-8005-1H	<MUA>
Exploded V	U20	Power supply unit	! 24150040	NGPS-0040-100-120V	<MDD, MDC>
Exploded V	U20	Power supply unit	! 24150041	NGPS-0041-100-240V	<MUA>

NOTE: <MDD>: North American area
 <MDC>: Canadian area
 <MUA>: Australian area

PACKING PARTS LIST

DPS-5.4

	REF. NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
Packing V	A450	CARTON	29054065A	DPS-5.4MDD	<MDD, MDC, MUA>
Packing V	A451	LABEL	29363464	(RE)MUA4P	<MUA>
Packing V	A455	UPC LABEL	29363446	DPS-5.4(B)	
Packing V	A530	WARRANTY CARD	29365089	(INTEGRA)	<MDD, MDC>
					<MUA> supplied from Sales Dep.
Packing V	A601	PAD	29092099B	(AS)	
Packing V	A604	POLY BAG	29100037-1A	650*500	
Packing V	A605	POLY BAG	29100097-1A	350*250	
Packing V	A607	PP TAPE	29110148	W48 OPP TAPE	1.3MT
Packing V	A901	CORD AS	2010412	RCA3P(YWR)	
Packing V	A901 or	PIN CORD AS	2010379	RCA3P(YWR)	
Packing V	A902	BATTERY	3010054	R6/AA(UM-3)	
Packing V	A903	PLUG CORD	2010200	3.5-MINI PLUG (RI)	
Packing V	A905	REMO CON	24140536	RC-536DV	
Packing V	A906	CORD AS	2010380	(S CORD)	
Packing V	A906 or	CORD AS	2010360	TPX3000	
Packing V	A911	INS MANUAL	29343491	En(DPS-5.4)	
Packing V	P981	AC CORD	! 253352TES	AS-UC-2	<MDD, MDC>
Packing V	P981 or	AC CORD	! 253297KAW	AS-UC-2	<MDD, MDC>
Packing V	P981	AC CORD	! 253311VOL	AS-SAA	<MUA>

NOTE: <MDD>: North American area
 <MDC>: Canadian area
 <MUA>: Australian area

PRINTED CIRCUIT BOARD PARTS LIST

DPS-5.4

U1 : OUTPUT TERMINAL PC BOARD NAAR-7997

	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
AR-7997	Q352	IC	22274004HR2O	TC74VHCU04FT	
AR-7997	Q401	IC	22241448R2	NJM4580M-D	
AR-7997	Q402	IC	22241448R2	NJM4580M-D	
AR-7997	Q403	IC	22241448R2	NJM4580M-D	
AR-7997	Q404	IC	22241448R2	NJM4580M-D	
AR-7997	Q405	TR	2216141R2	HN1C03F-B	
AR-7997	Q406	TR	2216141R2	HN1C03F-B	
AR-7997	Q407	TR	2216141R2	HN1C03F-B	
AR-7997	Q460	TR	2216480R2	DTA114YKA	
AR-7997	Q460 or	TR	2216360R2	RN2407	
AR-7997	Q460 or	TR	2216350R2	KRA107S	
AR-7997	Q463	TR	2216470R2	DTC114YKA	
AR-7997	Q463 or	TR	2216260R2	RN1407	
AR-7997	Q463 or	TR	2216340R2	KRC107S	
AR-7997	Q806	TR	2216706R2	UMG9N	
AR-7997	Q920	TR	2216175R2	KTC3875-GR	
AR-7997	Q920 or	TR	2213145R2	2SC2712-GR	
AR-7997	Q351	PHT CP	24120102	TOTX179L	
AR-7997	Q801	PHT CP	24120043	ON3131	

AR-7997	D101	ZENER D	224550510R2	UDZS5.1B
AR-7997	D101 or	ZENER D	224490510R2	UDZ5.1B
AR-7997	D460	C-DIODE	223234R2	1SS352
AR-7997	D460 or	C-DIODE	223269R2	1SS355
AR-7997	D801	C-DIODE	223234R2	1SS352
AR-7997	D801 or	C-DIODE	223269R2	1SS355
AR-7997	D901	ZENER D	224550510R2	UDZS5.1B
AR-7997	D901 or	ZENER D	224490510R2	UDZ5.1B
AR-7997	D920	ZENER D	224551100R2	UDZS11B
AR-7997	D921	C-DIODE	223234R2	1SS352
AR-7997	D921 or	C-DIODE	223269R2	1SS355
AR-7997	D922	C-DIODE	223234R2	1SS352
AR-7997	D922 or	C-DIODE	223269R2	1SS355
AR-7997	D923	C-DIODE	223234R2	1SS352
AR-7997	D923 or	C-DIODE	223269R2	1SS355
AR-7997	D924	C-DIODE	223234R2	1SS352
AR-7997	D924 or	C-DIODE	223269R2	1SS355
AR-7997	L351	EMIFIL	230958R1	BK1608LM182-T
AR-7997	L351 or	EMIFIL	230968R1	FBM-10-160808-202T
AR-7997	L352	EMIFIL	230958R1	BK1608LM182-T
AR-7997	L352 or	EMIFIL	230968R1	FBM-10-160808-202T
AR-7997	L353	EMIFIL	230958R1	BK1608LM182-T
AR-7997	L353 or	EMIFIL	230968R1	FBM-10-160808-202T
AR-7997	L354	EMIFIL	230958R1	BK1608LM182-T
AR-7997	L354 or	EMIFIL	230968R1	FBM-10-160808-202T
AR-7997	P351A	SOCKET AS	2009990787UL	NSAS-4P1148
AR-7997	P901	SOCKET AS	2004C193060UL	NSAS-30P1102
AR-7997	CN901	SOCKET	25052524	NSCT-30P2421
AR-7997	CN901 or	SOCKET	25051954	NSCT-30P1741
AR-7997	CN901 or	SOCKET	25052330	NSCT-30P2227
AR-7997	CN902	SOCKET	25052505	NSCT-11P2402
AR-7997	CN902 or	SOCKET	25051935	NSCT-11P1822
AR-7997	CN902 or	SOCKET	25052311	NSCT-11P2208
AR-7997	CN903	SOCKET	25052512	NSCT-18P2409
AR-7997	CN903 or	SOCKET	25051942	NSCT-18P1729
AR-7997	CN903 or	SOCKET	25052318	NSCT-18P2215
AR-7997	P104	SOCKET	25052344	NSCT-7P2241
AR-7997	P104 or	SOCKET	25051889	NSCT-7P1676
AR-7997	P104 or	SOCKET	25052528	NSCT-7P2425
AR-7997	P701A	SOCKET	25052518	NSCT-24P2415
AR-7997	P701Aor	SOCKET	25051948	NSCT-24P1735
AR-7997	P701Aor	SOCKET	25052324	NSCT-24P2221
AR-7997	P201	PIN JACK	25045660	NPJ-10PDBY459
AR-7997	P203	PIN JACK	25045661	NPJ-3PDGLR460
AR-7997	P205	BNC JACK	25045634	P2298
AR-7997	P350	PIN JACK	25045592	NPJ-1PDOR403
AR-7997	P352	PIN JACK	25045589	NPJ-2PDB400
AR-7997	P401	PIN JACK	25045662	NPJ-3PDBRW461
AR-7997	P402	PIN JACK	25045593	NPJ-2PDWR404
AR-7997	P851A	PLUG	25055152	NPLG-8P136
AR-7997	C101	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C221	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C222	C-CERA C	332121045R1	CK725B1C-104K1
AR-7997	C223	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C224	VR C	394621027	CE04W6.3V-1000M(VR)
AR-7997	C225	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C226	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C227	VR C	394621027	CE04W6.3V-1000M(VR)
AR-7997	C228	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C229	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C251	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C252	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C253	C-CERA C	332121045R1	CK725B1C-104K1



AR-7997	C352	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C353	VR C	394621017	CE04W6.3V-100M(VR)
AR-7997	C357	C-CERA C	332121045R1	CK725B1C-104K1
AR-7997	C358	C-CERA C	342102204R1	CC725CH1H-220J1
AR-7997	C360	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C361	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C362	VR C	394621017	CE04W6.3V-100M(VR)
AR-7997	C363	C-CERA C	332152230R1	CK725F1H-223Z1
AR-7997	C364	C-CERA C	332152230R1	CK725F1H-223Z1
AR-7997	C401	VX C	393344707	CE04W16V-47M(VX)
AR-7997	C402	VX C	393344707	CE04W16V-47M(VX)
AR-7997	C403	TF C	374726814	ECQ-B50V-681J
AR-7997	C404	TF C	374726814	ECQ-B50V-681J
AR-7997	C405	TF C	374721524	ECQ-B50V-152J
AR-7997	C406	TF C	374721524	ECQ-B50V-152J
AR-7997	C407	TF C	374721024	ECQ-B50V-102J
AR-7997	C408	TF C	374721024	ECQ-B50V-102J
AR-7997	C409	C-CERA C	342104704R1	CC725CH1H-470J1
AR-7997	C410	C-CERA C	342104704R1	CC725CH1H-470J1
AR-7997	C411	VR C	394622217	CE04W6.3V-220M(VR)
AR-7997	C412	VR C	394622217	CE04W6.3V-220M(VR)
AR-7997	C413	VX C	393384707	CE04W50V-47M(VX)
AR-7997	C414	VX C	393384707	CE04W50V-47M(VX)
AR-7997	C415	VX C	393384707	CE04W50V-47M(VX)
AR-7997	C419	VX C	393384707	CE04W50V-47M(VX)
AR-7997	C420	VR C	394624717	CE04W6.3V-470M(VR)
AR-7997	C485	VR C	394642217	CE04W16V-220M(VR)
AR-7997	C486	VR C	394642217	CE04W16V-220M(VR)
AR-7997	C814	VR C	394621017	CE04W6.3V-100M(VR)
AR-7997	C815	TF C	374722234	ECQ-B50V-223J
AR-7997	C901	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C902	VR C	394642217	CE04W16V-220M(VR)
AR-7997	C903	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C904	VR C	394622217	CE04W6.3V-220M(VR)
AR-7997	C905	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C906	VR C	394642217	CE04W16V-220M(VR)
AR-7997	C907	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C908	VR C	394641027	CE04W16V-1000M(VR)
AR-7997	C909	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C910	VR C	394641027	CE04W16V-1000M(VR)
AR-7997	C911	VR C	394641017	CE04W16V-100M(VR)
AR-7997	C914	C-CERA C	332161040R1	CK725F1E-104Z1
AR-7997	C920	VR C	394641007	CE04W16V-10M(VR)
AR-7997	C921	VR C	394642217	CE04W16V-220M(VR)
AR-7997	C922	VR C	394642217	CE04W16V-220M(VR)
AR-7997	R1001	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1002	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1003	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1004	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1005	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1006	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1007	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1008	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1009	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R101	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R1010	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1012	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1013	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1015	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1016	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1017	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1018	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R1019	C-CARBON R	435030004R1	RN72K1J-000JE

AR-7997	R102	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R1020	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R103	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R104	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R106	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R107	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R108	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R115	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R117	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R118	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R119	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R121	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R122	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R123	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R124	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R125	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R126	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R127	C-CARBON R	435034704R1	RN72K1J-470JE
AR-7997	R134	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R135	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R136	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R137	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R221	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R222	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R223	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R224	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R225	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R227	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R229	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R231	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R232	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R233	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R234	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R235	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R236	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R241	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R242	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R243	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R244	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R245	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R246	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R251	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R252	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R253	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R254	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R255	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R256	C-CARBON R	435037504R1	RN72K1J-750JE
AR-7997	R257	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R351	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R353	C-CARBON R	435034744R1	RN72K1J-474JE
AR-7997	R354	C-CARBON R	435033314R1	RN72K1J-331JE
AR-7997	R355	C-CARBON R	435031814R1	RN72K1J-181JE
AR-7997	R356	C-CARBON R	435031814R1	RN72K1J-181JE
AR-7997	R357	C-CARBON R	435034714R1	RN72K1J-471JE
AR-7997	R401	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R402	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R405	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R406	C-CARBON R	435030004R1	RN72K1J-000JE
AR-7997	R407	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R408	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R409	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R410	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R411	C-CARBON R	435031524R1	RN72K1J-152JE

AR-7997	R412	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R413	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R414	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R415	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R416	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R417	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R418	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R419	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R420	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R421	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R422	C-CARBON R	435032234R1	RN72K1J-223JE
AR-7997	R423	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R424	C-CARBON R	435031524R1	RN72K1J-152JE
AR-7997	R427	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R428	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R429	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R430	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R431	C-CARBON R	435034714R1	RN72K1J-471JE
AR-7997	R432	C-CARBON R	435034714R1	RN72K1J-471JE
AR-7997	R433	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R434	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R435	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R441	C-CARBON R	435031044R1	RN72K1J-104JE
AR-7997	R442	C-CARBON R	435031044R1	RN72K1J-104JE
AR-7997	R443	C-CARBON R	435032714R1	RN72K1J-271JE
AR-7997	R444	C-CARBON R	435032714R1	RN72K1J-271JE
AR-7997	R445	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R446	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R447	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R448	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R449	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R450	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R452	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R453	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R454	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R455	C-CARBON R	435031044R1	RN72K1J-104JE
AR-7997	R456	C-CARBON R	435031044R1	RN72K1J-104JE
AR-7997	R457	C-CARBON R	435031044R1	RN72K1J-104JE
AR-7997	R458	C-CARBON R	435031544R1	RN72K1J-154JE
AR-7997	R459	C-CARBON R	435031544R1	RN72K1J-154JE
AR-7997	R460	C-CARBON R	435031544R1	RN72K1J-154JE
AR-7997	R461	C-CARBON R	435031544R1	RN72K1J-154JE
AR-7997	R462	C-CARBON R	435031024R1	RN72K1J-102JE
AR-7997	R463	C-CARBON R	435031024R1	RN72K1J-102JE
AR-7997	R481	NF CARBON R	415470224	R25J-2.2
AR-7997	R482	NF CARBON R	415470224	R25J-2.2
AR-7997	R820	C-CARBON R	435033324R1	RN72K1J-332JE
AR-7997	R821	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R822	C-CARBON R	435031034R1	RN72K1J-103JE
AR-7997	R823	C-CARBON R	435031014R1	RN72K1J-101JE
AR-7997	R902	C-CARBON R	435032224R1	RN72K1J-222JE
AR-7997	R920	C-CARBON R	435032214R1	RN72K1J-221JE

U2: DISPLAY CIRCUIT PC BOARD NADIS-7998

DIS-7998	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
DIS-7998	Q702	FL TUBE	212238	HNV-13SS12T	
DIS-7998	Q701	IC	22242005R3	MPD780232GC-092-8BT	N
DIS-7998	Q703	IC	22241924R2	S-80130CLMC-JIP-T2	
DIS-7998	Q704	TR	2216230R2	KRA103S	
DIS-7998	Q704 or	TR	2214540R2	RN2403	
DIS-7998	D701	C-DIODE	223234R2	1SS352	
DIS-7998	D701 or	C-DIODE	223269R2	1SS355	
DIS-7998	D702	ZENER D	224550560R2	UDZS5.6B	

DIS-7998	D703	C-DIODE	223234R2	1SS352
DIS-7998	D703 or	C-DIODE	223269R2	1SS355
DIS-7998	Q705	REMO SENS	241348	RPM7138-H9
DIS-7998	P701B	SOCKET	25052545	NSCT-24P2442
DIS-7998	P701Bor	SOCKET	25052361	NSCT-24P2258
DIS-7998	P701Bor	SOCKET	25051906	NSCT-24P1693
DIS-7998	P731	SOCKET	25052344	NSCT-7P2241
DIS-7998	P731 or	SOCKET	25051889	NSCT-7P1676
DIS-7998	P731 or	SOCKET	25052528	NSCT-7P2425
DIS-7998	JL703A	WIRE HOL	25051088	NSCT-4P875
DIS-7998	X701	CERA LOCK	3010242	CST5.00MGW
DIS-7998	C701	ELECT C	355721019	CE04W6.3V-100M
DIS-7998	C702	C-CERA C	332161040R1	CK725F1E-104Z1
DIS-7998	C703	C-CERA C	332161040R1	CK725F1E-104Z1
DIS-7998	C704	C-CERA C	332161040R1	CK725F1E-104Z1
DIS-7998	C705	ELECT C	355782209	CE04W50V-22M
DIS-7998	C706	ELECT C	355721019	CE04W6.3V-100M
DIS-7998	R701	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R702	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R703	C-CARBON R	435031014R1	RN72K1J-101JE
DIS-7998	R704	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R705	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R706	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R707	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R708	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R710	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R711	C-CARBON R	435031054R1	RN72K1J-105JE
DIS-7998	R712	C-CARBON R	435034734R1	RN72K1J-473JE
DIS-7998	R713	C-CARBON R	435032244R1	RN72K1J-224JE
DIS-7998	R714	C-CARBON R	435031014R1	RN72K1J-101JE
DIS-7998	R715	C-CARBON R	435031014R1	RN72K1J-101JE
DIS-7998	R716	C-CARBON R	435031014R1	RN72K1J-101JE
DIS-7998	R717	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R718	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R719	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R720	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R721	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R722	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R723	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	R726	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R727	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R733	C-CARBON R	435031024R1	RN72K1J-102JE
DIS-7998	R734	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R737	C-CARBON R	435031024R1	RN72K1J-102JE
DIS-7998	R738	C-CARBON R	435030004R1	RN72K1J-000JE
DIS-7998	R740	C-CARBON R	435030004R1	RN72K1J-000JE <MDD>
DIS-7998	R741	C-CARBON R	435031024R1	RN72K1J-102JE <MUA>
DIS-7998	R742	C-CARBON R	435030004R1	RN72K1J-000JE <MUA>
DIS-7998	R743	C-CARBON R	435031024R1	RN72K1J-102JE <MDD>
DIS-7998	R751	C-CARBON R	435032724R1	RN72K1J-272JE
DIS-7998	R752	C-CARBON R	435033914R1	RN72K1J-391JE
DIS-7998	R753	C-CARBON R	435034714R1	RN72K1J-471JE
DIS-7998	R754	C-CARBON R	435038214R1	RN72K1J-821JE
DIS-7998	R755	C-CARBON R	435031024R1	RN72K1J-102JE
DIS-7998	R756	C-CARBON R	435031824R1	RN72K1J-182JE
DIS-7998	R758	C-CARBON R	435032724R1	RN72K1J-272JE
DIS-7998	R759	C-CARBON R	435033914R1	RN72K1J-391JE
DIS-7998	R760	C-CARBON R	435034714R1	RN72K1J-471JE
DIS-7998	R761	C-CARBON R	435038214R1	RN72K1J-821JE
DIS-7998	R762	C-CARBON R	435031024R1	RN72K1J-102JE
DIS-7998	R763	C-CARBON R	435031824R1	RN72K1J-182JE
DIS-7998	R764	C-CARBON R	435033924R1	RN72K1J-392JE
DIS-7998	R765	C-CARBON R	435031034R1	RN72K1J-103JE



DIS-7998	R766	C-CARBON R	435032724R1	RN72K1J-272JE
DIS-7998	R767	C-CARBON R	435033914R1	RN72K1J-391JE
DIS-7998	R768	C-CARBON R	435034714R1	RN72K1J-471JE
DIS-7998	R769	C-CARBON R	435038214R1	RN72K1J-821JE
DIS-7998	R770	C-CARBON R	435031024R1	RN72K1J-102JE
DIS-7998	R771	C-CARBON R	435031824R1	RN72K1J-182JE
DIS-7998	R772	C-CARBON R	435033924R1	RN72K1J-392JE
DIS-7998	R773	C-CARBON R	435031034R1	RN72K1J-103JE
DIS-7998	S701	PUSH SW	25035718	NPS-111-S681
DIS-7998	S702	PUSH SW	25035718	NPS-111-S681
DIS-7998	S703	PUSH SW	25035718	NPS-111-S681
DIS-7998	S704	PUSH SW	25035718	NPS-111-S681
DIS-7998	S705	PUSH SW	25035718	NPS-111-S681
DIS-7998	S706	PUSH SW	25035718	NPS-111-S681
DIS-7998	S707	PUSH SW	25035718	NPS-111-S681
DIS-7998	S708	PUSH SW	25035718	NPS-111-S681
DIS-7998	S709	PUSH SW	25035718	NPS-111-S681
DIS-7998	S710	PUSH SW	25035718	NPS-111-S681
DIS-7998	S712	PUSH SW	25035718	NPS-111-S681
DIS-7998	S713	PUSH SW	25035718	NPS-111-S681
DIS-7998	S714	PUSH SW	25035718	NPS-111-S681
DIS-7998	S715	PUSH SW	25035718	NPS-111-S681
DIS-7998	Q702A	CUSHION	28141513	t3*10*25

U3 : STANDBY SWITCH PC BOARD NADIS-7999

DIS-7999	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
DIS-7999	Q708	TR	2216470R2	DTC114YKA	
DIS-7999	Q708 or	TR	2216340R2	KRC107S	
DIS-7999	Q708 or	TR	2216260R2	RN1407	
DIS-7999	D721	LED	225290	SEL4110R	
DIS-7999	JL703B	WIRE HOL	25051088	NSCT-4P875	
DIS-7999	R757	C-CARBON R	435033924R1	RN72K1J-392JE	
DIS-7999	R779	C-CARBON R	435034714R1	RN72K1J-471JE	
DIS-7999	S716	PUSH SW	25035718	NPS-111-S681	

U4 : POWER SWITCH PC BOARD NASW-8000

SW-8000	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
SW-8000	S991	PUSH SW	25035703	NPS-111-L666P	
SW-8000	S991 or	P SW	25035550	NPS-111-L512P	
SW-8000	C991	IS C	3500196S	RE275V-103M	

U5 : INLET TERMINAL PC BOARD NAPS-8002

PS-8002	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
PS-8002	P981B	AC INLET	25055960	NPLG-2P913	
PS-8002	P982B	SOCKET AS	2009990661UL	NSAS-2P0921	
PS-8002	P982A	CRIMP AS	2069943301UL	CRIMP AS	

U7 : RS-232C TERMINAL PC BOARD NAETC-8005

ETC-8005	CIRCUIT NO.	PART NAME	PART NO.	DESCRIPTION	REMARK
ETC-8005	Q802	IC	22241624R2	MPD789071MC-011-5A4	
ETC-8005	Q803	IC	22241537R2	MPD4721GS	
ETC-8005	L801	EMIFIL	230958R1	BK1608LM182-T	
ETC-8005	L801 or	EMIFIL	230968R1	FBM-10-160808-202T	
ETC-8005	L802	EMIFIL	230958R1	BK1608LM182-T	
ETC-8005	L802 or	EMIFIL	230968R1	FBM-10-160808-202T	
ETC-8005	L803	EMIFIL	230958R1	BK1608LM182-T	
ETC-8005	L803 or	EMIFIL	230968R1	FBM-10-160808-202T	
ETC-8005	L804	EMIFIL	230958R1	BK1608LM182-T	
ETC-8005	L804 or	EMIFIL	230968R1	FBM-10-160808-202T	
ETC-8005	L805	EMIFIL	230958R1	BK1608LM182-T	
ETC-8005	L805 or	EMIFIL	230968R1	FBM-10-160808-202T	
ETC-8005	X801	CERA LOCK	3010242	CST5.00MGW	
ETC-8005	P851B	SOCKET AS	2002341620	NSAS-16P0277	

ETC-8005	P801	SOCKET	25052379	NSCT-9P2277
ETC-8005	P802	ST JACK	25045647	HSJ1002-01-1020
ETC-8005	C801	VR C	394680107	CE04W50V-1M(VR)
ETC-8005	C802	VR C	394680107	CE04W50V-1M(VR)
ETC-8005	C803	VR C	394680107	CE04W50V-1M(VR)
ETC-8005	C804	VR C	394680107	CE04W50V-1M(VR)
ETC-8005	C810	VR C	394621017	CE04W6.3V-100M(VR)
ETC-8005	C811	C-CERA C	332161040R1	CK725F1E-104Z1
ETC-8005	C812	C-CERA C	332161040R1	CK725F1E-104Z1
ETC-8005	C813	VR C	394621017	CE04W6.3V-100M(VR)
ETC-8005	R8001	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R801	C-CARBON R	435031054R1	RN72K1J-105JE
ETC-8005	R802	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R803	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R804	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R805	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R806	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R807	C-CARBON R	435034704R1	RN72K1J-470JE
ETC-8005	R808	C-CARBON R	435030004R1	RN72K1J-000JE
ETC-8005	R809	C-CARBON R	435034704R1	RN72K1J-470JE
ETC-8005	R810	C-CARBON R	435034704R1	RN72K1J-470JE
ETC-8005	R811	C-CARBON R	435034704R1	RN72K1J-470JE
ETC-8005	R812	C-CARBON R	435034704R1	RN72K1J-470JE

NOTE: <MDD>: North American area
 <MDC>: Canadian area
 <MUA>: Australian area

SPECIFICATIONS

Video system		North American model: Standard NTSC, Australian model: PAL/AUTO
Region code		North American model: 1, Australian model: 4,
Laser		Semiconductor laser, wavelength 650 nm (DVD), 780 nm (CD)
Frequency response	DVD linear audio	4 Hz-20 kHz @ 48 kHz sampling rate 4 Hz-44 kHz @ 96 kHz sampling rate
	CD audio	4 Hz-20 kHz
Signal-to-noise ratio (digital audio)		106 dB
Audio dynamic range (digital audio)		96 dB
Harmonic distortion (digital audio)		0.008%
Wow and Flutter		Below measurable level (+/- 0.001% (W. PEAK) or less)
Operating conditions	Temperature	5° to 35° C (41° F to 95° F)
	Installation	Install horizontally
Video outputs	COMPONENT VIDEO	Y: 1.0 V (p-p), 75 ohm, negative sync, RCA/phono x1, BNC x1 PB/PR: 0.7 V (p-p), 75 ohm
	S VIDEO (S-Video)	Y: 1.0 V (p-p), 75 ohm, negative sync, 4-pin mini DIN x 2 C: 0.286 V (p-p), 75 ohm
	VIDEO (composite video)	1.0 V (p-p), 75 ohm, negative sync, RCA/phono x 2
Audio outputs	OPTICAL	-22.5 dBm, optical connector x 1
	COAXIAL	0.5 V (p-p), 75 ohm, RCA/phono x 1
	ANALOG	2.0 V rms, 470 ohm, RCA/phono x 1
General	Power supply	North American model: 120 V AC, 60 Hz Australian model: 100-240 V AC, 50/60 Hz
	Power consumption	15 W
	Power consumption in Standby mode	North American model: 1.6 W Other models: 2.5 W
	Weight	3.3 kg (7.3 lbs.)
	Dimensions (W x H x D)	435 X 81 X 307 mm (17-1/8" X 3-3/16" X 12-1/16")

Specifications and features subject to change without notice.

SERVICE PROCEDURES-1

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

WARNING!!

SERVICE WARNING : DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICKUP BLOCK.

Laser Diode Properties

Wavelength: 650/780nm (DVD/CD)

WARNING

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION:

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



WARNING
RISK OF ELECTRIC SHOCK
DO NOT OPEN

AVIS
RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR



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.

LASER WARNING

This unit contains a semiconductor laser system and is classified as a "CLASS 1 LASER PRODUCT". So, to use this model properly, read this Instruction Manual carefully. In case of any trouble, please contact the store where you purchased the unit. To prevent being exposed to the laser beam, do not try to open the enclosure.

CAUTION:

VISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. DO NOT STARE INTO BEAM.

CAUTION:

THIS PRODUCT UTILIZES A LASER. USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.

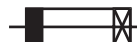
The label on the right is applied on the rear panel except for USA and Canadian models.

**"CLASS 1 LASER
PRODUCT"**

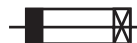
1. This unit is a CLASS 1 LASER PRODUCT and employs a laser inside the cabinet.
2. To prevent the laser from being exposed, do not remove the cover. Refer servicing to qualified personnel.

SERVICE PROCEDURE

1. Replacing the fuses



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



Ce symbole indique que le fusible utilise est e lent. Pour une protection permanente, n'utiliser que des fusibles de meme type. Ce demier est indique la qu le present symbol est appose.

REF. NO.	PART NO.	DESCRIPTION
F1	252252 or 	1.6A-TL/T-ST2 <MDD>, <MDC>
	252147 	1.6A-TSC
F1	252273 or 252073	1.6A-SE-TL250V <MUA>

<MDD> : North American model

<MDC> : Canadian model

<MUA> : Australian model

LASER BEAM CAUTION LABEL



WAVE LENGTH:650nm
MAX LASER POWER:0.5mW
波 長 : 650nm
最大レーザー出力 : 0.5mW

98764160



SERVICE PROCEDURES-2

2. Safety-check out

(Only U.S.A. model)

After correcting the original service problem perform the following safety check before releasing the set to the customer
Connect the insulating-resistance tester between the plug of power supply cord and terminal GND on the back panel.

Specifications: More than 10M ohm at 500V

INITIALIZING

Factory-shipped condition.

Push button "ON" (Mechanical SW)

Press the [STOP] and [STANDBY] same time with NO DISC condition.

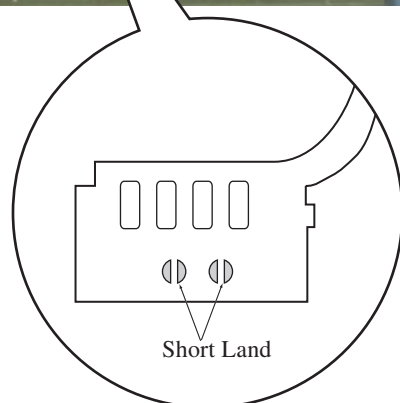
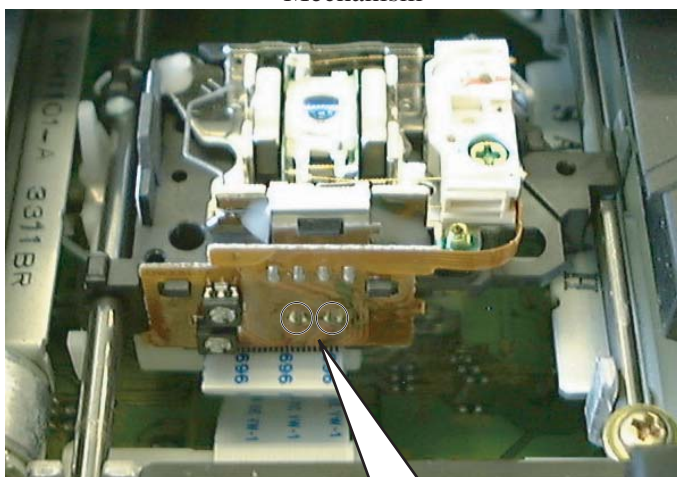
Push button "STANDBY".

REMOVE THE SOLDER OF LASER DIODE SHORT

When replace the mechanism or DVD main PC board.

Shorting the solder of Shot-circuit land. (2 positions)

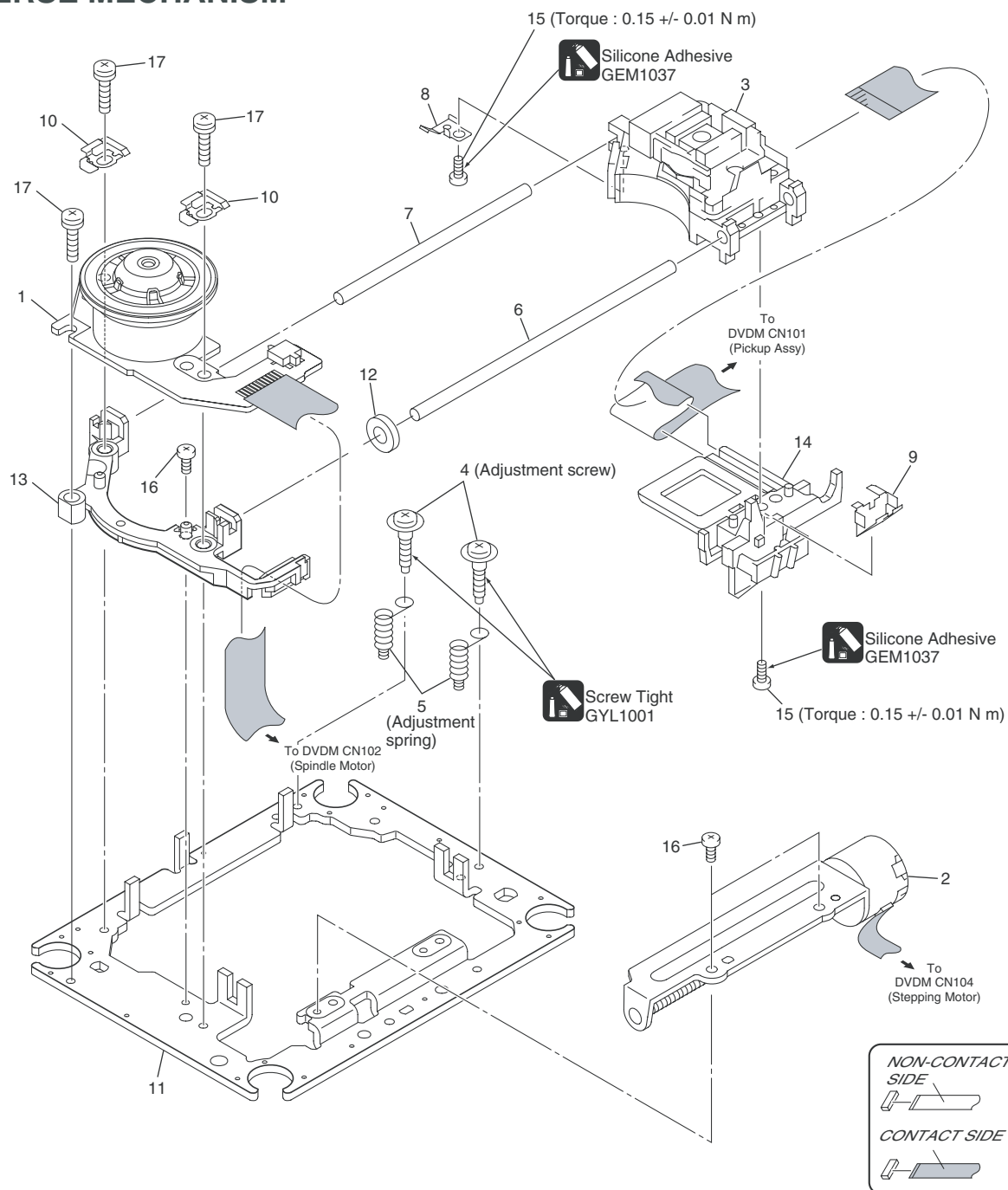
Mechanism



[illegible]

EXPLODED VIEW / PARTS LIST

TRAVERSE MECHANISM



TRAVERSE MECHA. ASSY parts List

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	Spindle Motor	VXM1099	9	Joint Spring	VNC1019
2	Stepping Motor	VXM1101	10	Support Spring	VNC1020
3	Pickup Assy-S	OXX8005	NSP 11	Mecha.Chassis	VNE2248
4	Skew Screw	VBA1080	12	Damper Sheet	VEB1335
5	Skew Spring	VBH1335	13	Spacer	VNL1913
6	Guide Bar	VLL1514	14	Joint 03	VNL1949
7	Sub Guide Bar	VLL1515	15	Tapping Screw	OBA8016
8	Leaf Spring	VNC1023	16	Screw	BBZ20P050FZK
			17	Screw	PMA26P100FMC

NSP : Not service parts

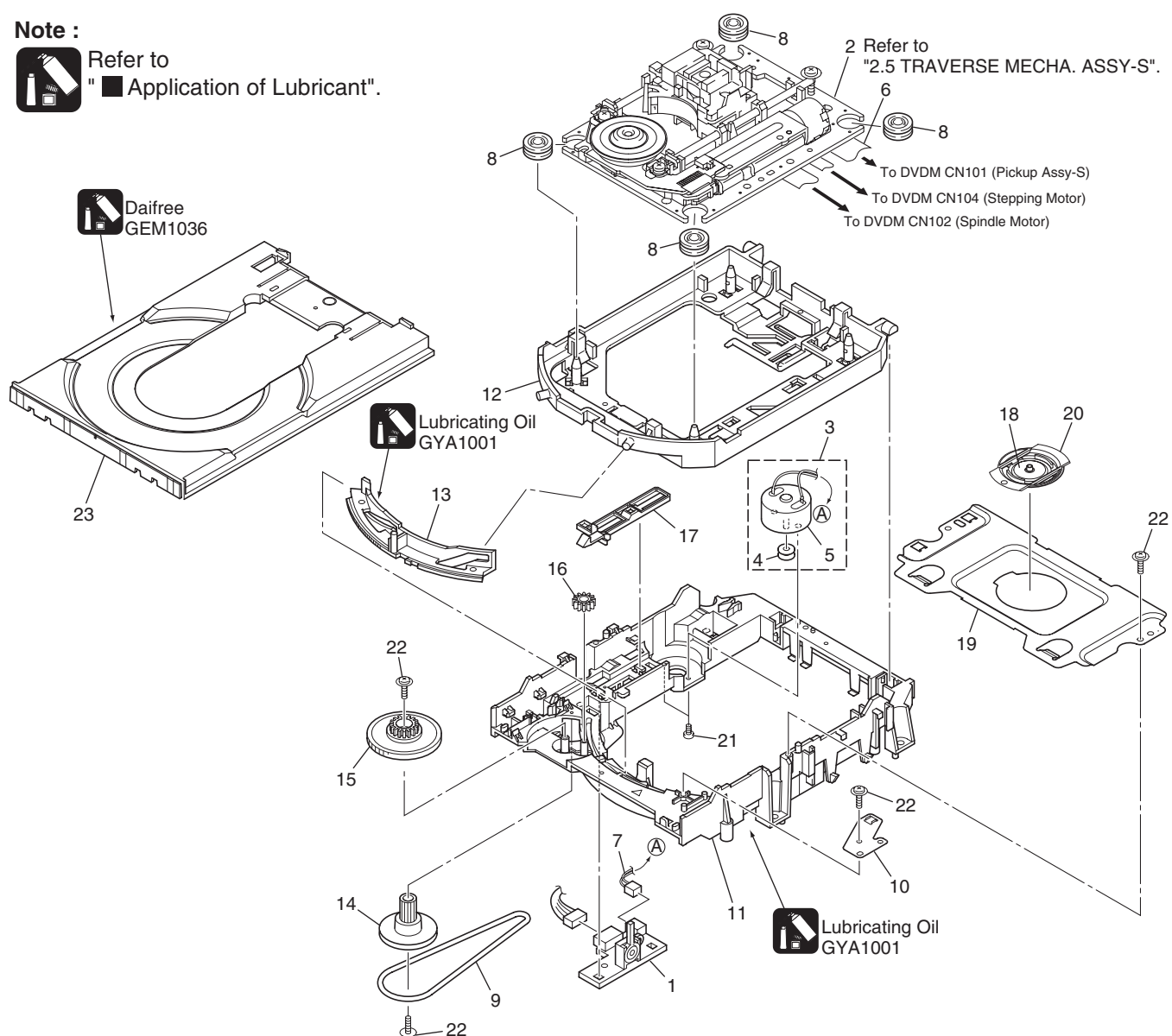
EXPLODED VIEW / PARTS LIST

LOADING MECHANISM

Note :



Refer to
" ■ Application of Lubricant".

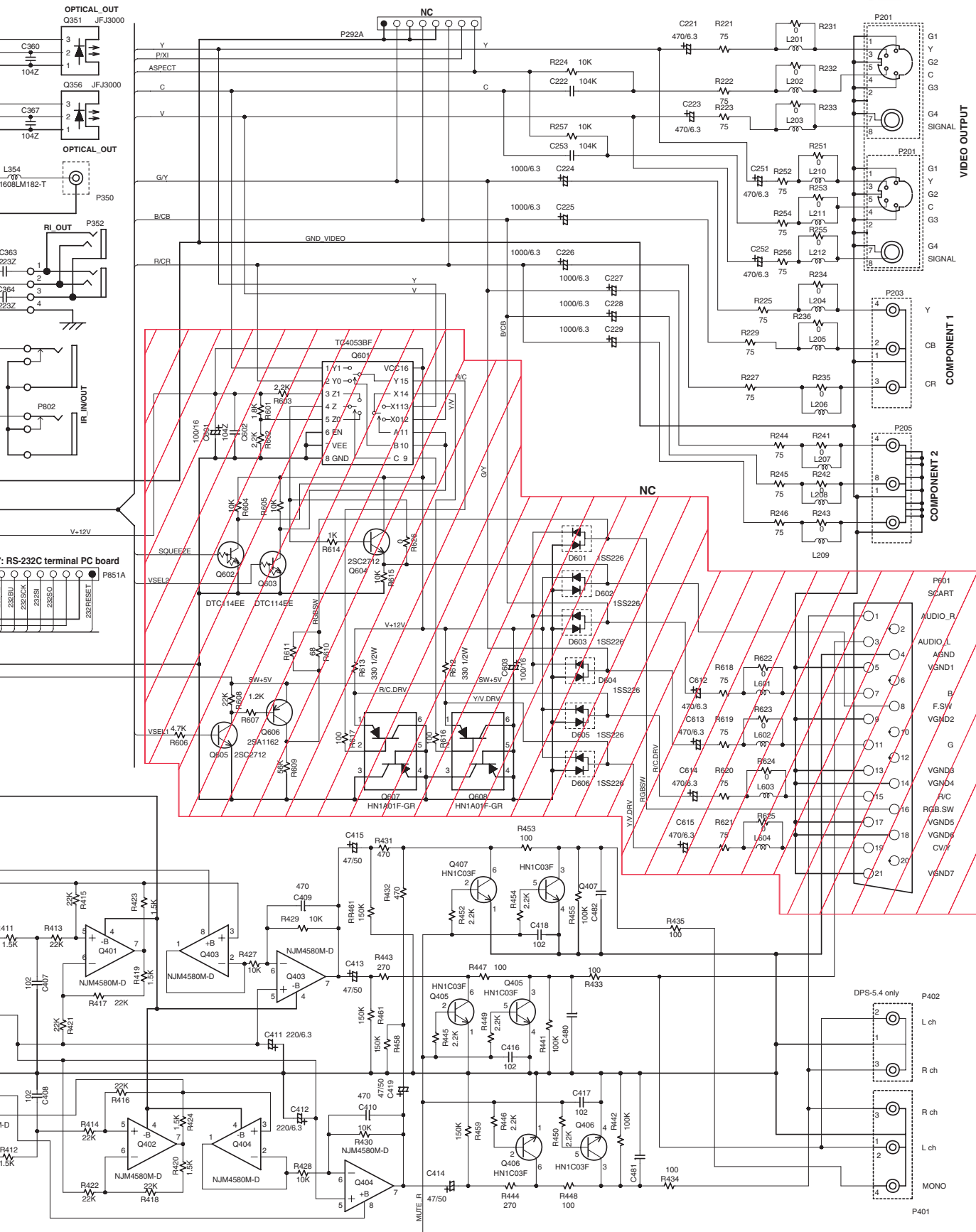


LOADING MECHA. ASSY parts List

Mark No.	Description	Part No.
NSP 1	LOAB Assy	—
2	Traverse Mecha. Assy-S	VXX2871
3	Loading Motor Assy	VXX2872
4	Motor Pulley	—
5	Motor	—
6	Flexible Cable (24P)	VDA1945
7	Connector Assy 2P	VKP2253
8	Floating Rubber	VEB1351
9	Belt	VEB1330
10	Stabilizer	VNE2253
11	Loading Base	VNL1917
12	Float Base DVD	VNL1918
13	Drive Cam	VNL1919
14	Gear Pulley	VNL1921
15	Loading Gear	VNL1922
16	Drive Gear	VNL1923

Mark No.	Description	Part No.
17	SW Lever	VNL1925
18	Clamper Plate	VNE2251
19	Bridge	VNE2252
20	Clamper	VNL1924
21	Screw	JGZ17P028FMC
22	Screw	801530
23	Tray	VNL1920

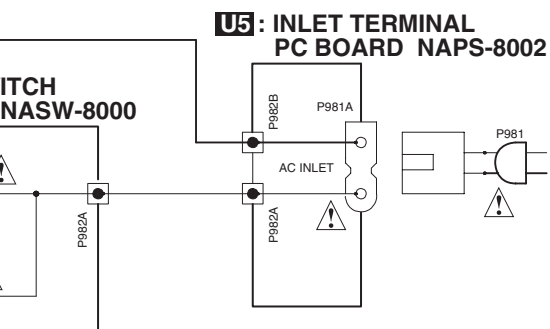
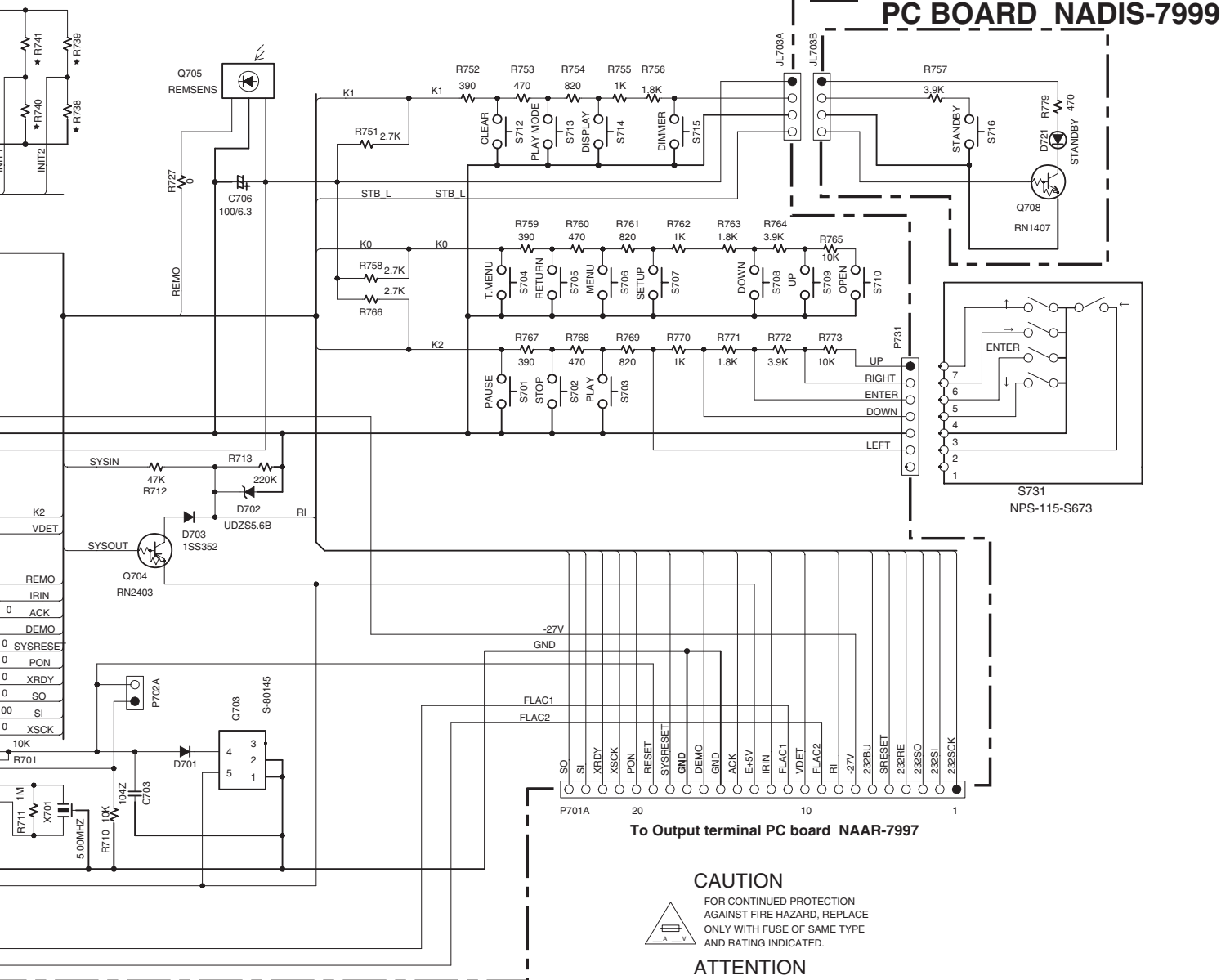
NSP: Not service parts



**U1 : OUTPUT TERMINAL PC BOARD
NAAR-7997**



	MDD	MUA
ion	1	4
8	0	0
9	NC	NC
0	0	NC
1	NC	1K
2	NC	0
3	1K	NC



To Output terminal PC board NAAR-7997

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.



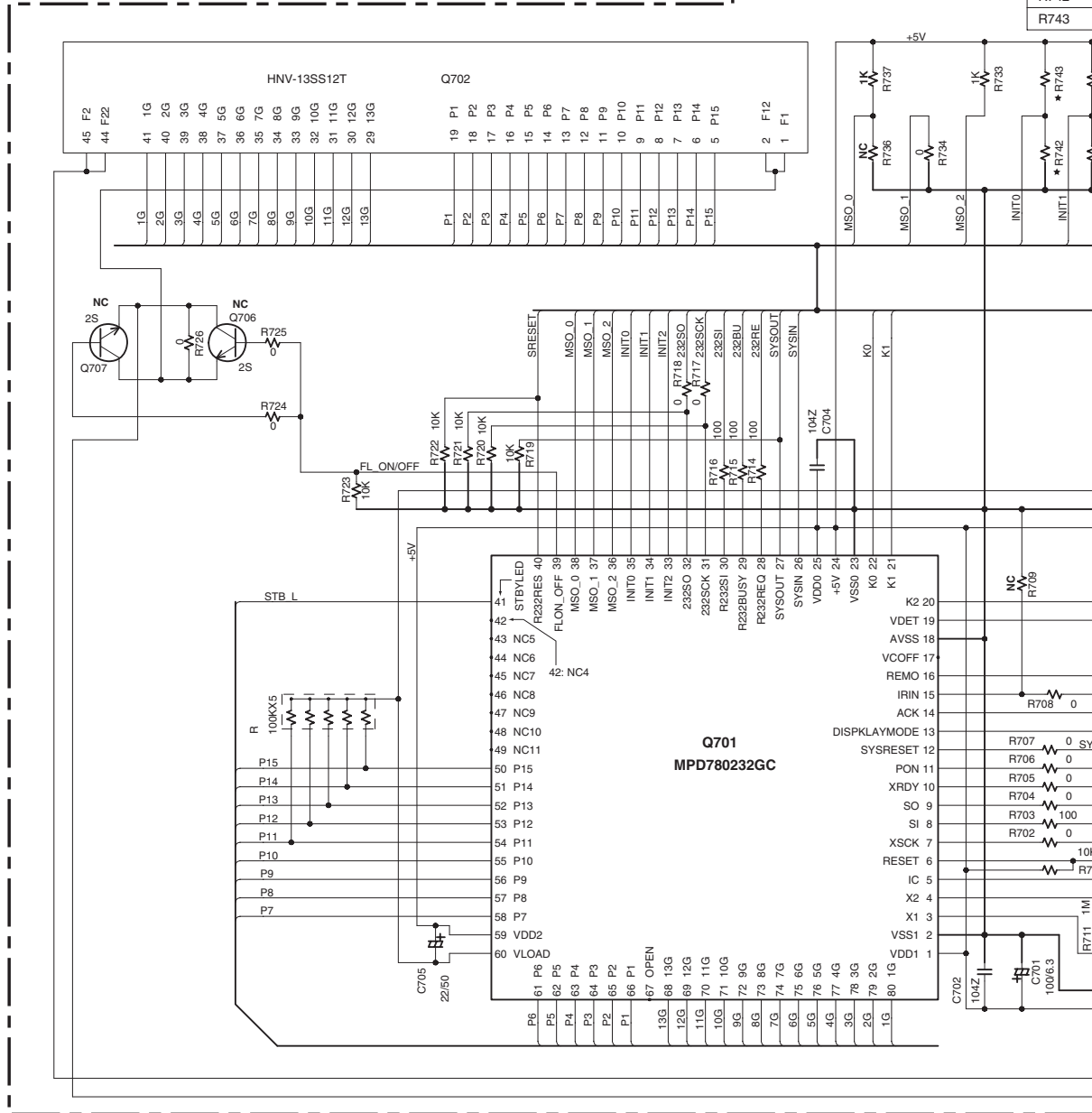
THIS SYMBOL LOCATED NEAR THE FUSE INDICATES THAT THE FUSE USED IS SLOW OPERATING TYPE FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE WITH SAME TYPE FUSE. FOR FUSE RATING REFER TO THE MARKING ADJACENT TO THE SYMBOL.



CE SYMBOLE INDIQUE QUE LE FUSIBLE UTILISE EST LENT. POUR UNE PROTECTION PERMANENTE, UTILISER QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST INDIQUE LA QU LE PRESENT SYMBOLE EST APPOSE.

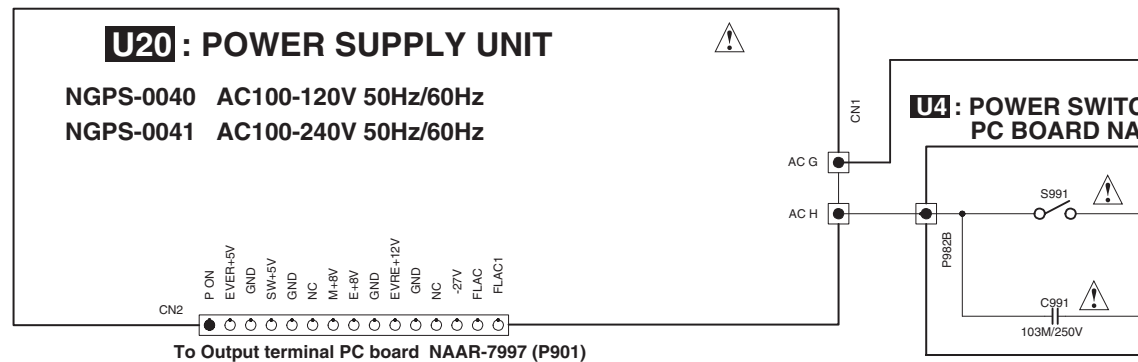
SCHEMATIC DIAGRAM-2

U2: DISPLAY CIRCUIT PC BOARD NADIS-7998

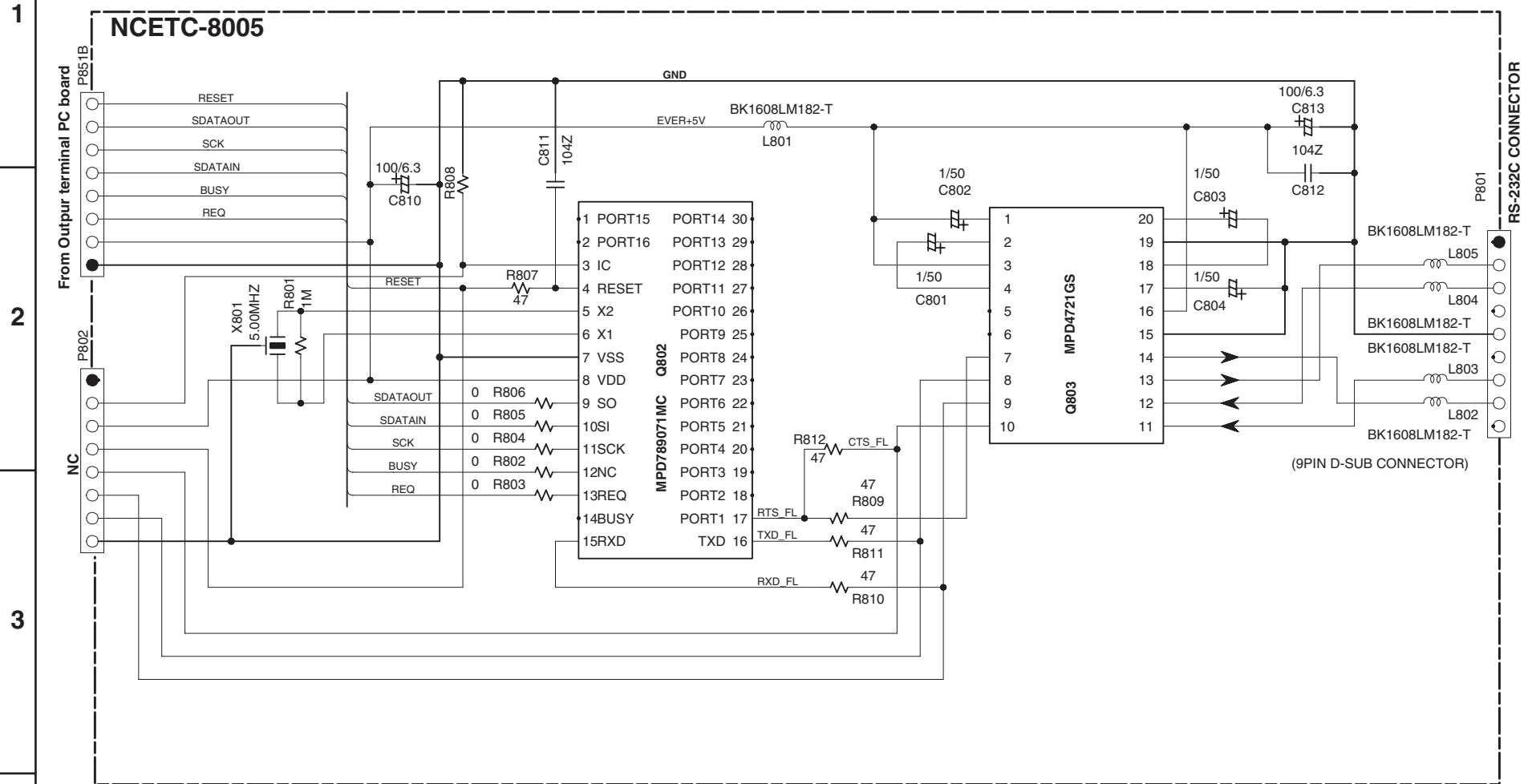


U20: POWER SUPPLY UNIT

NGPS-0040 AC100-120V 50Hz/60Hz
NGPS-0041 AC100-240V 50Hz/60Hz



SCHEMATIC DIAGRAM-6

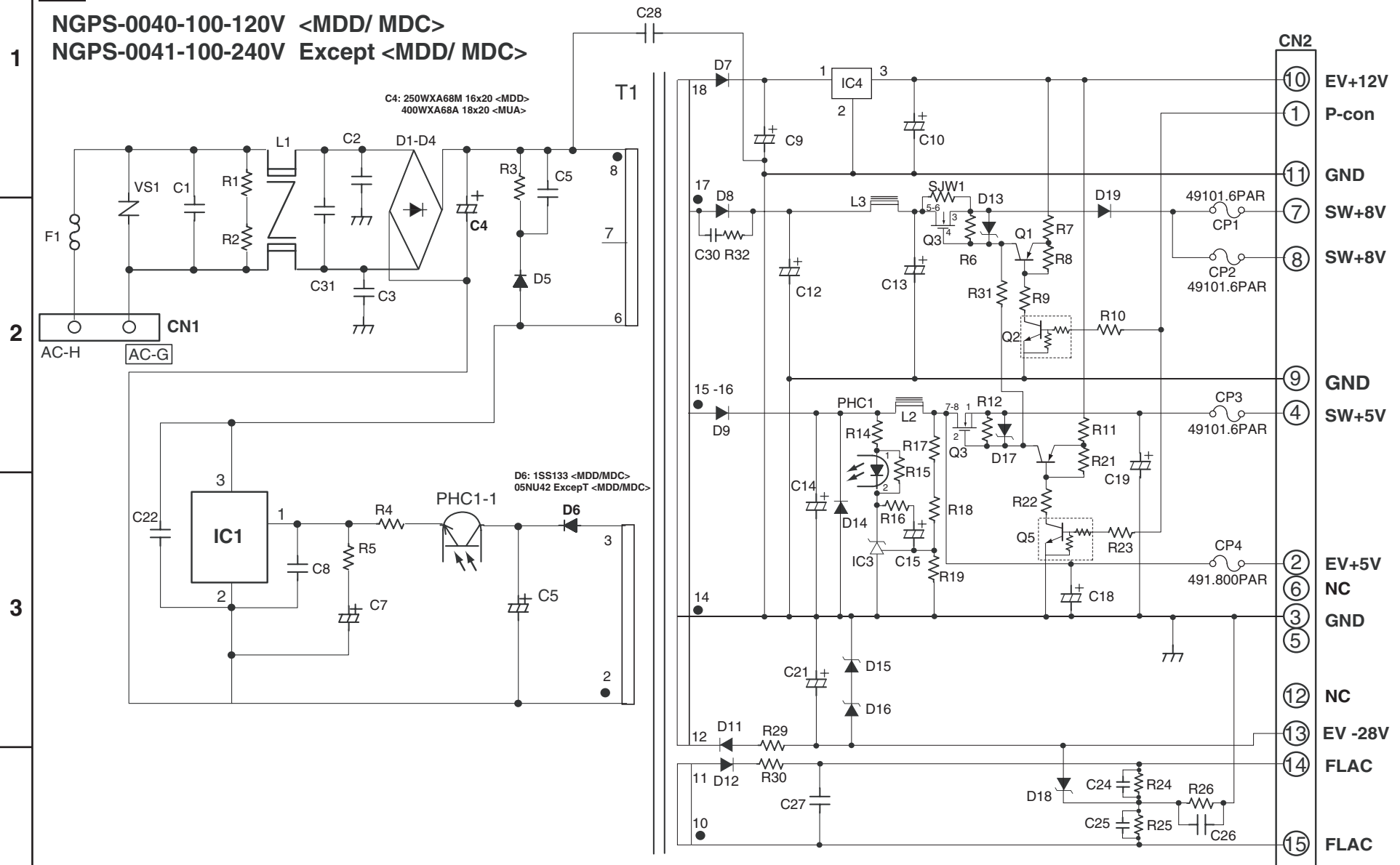
U7 : RS-232C TERMINAL PC BPARD NAETC-8005

SCHEMATIC DIAGRAM-7

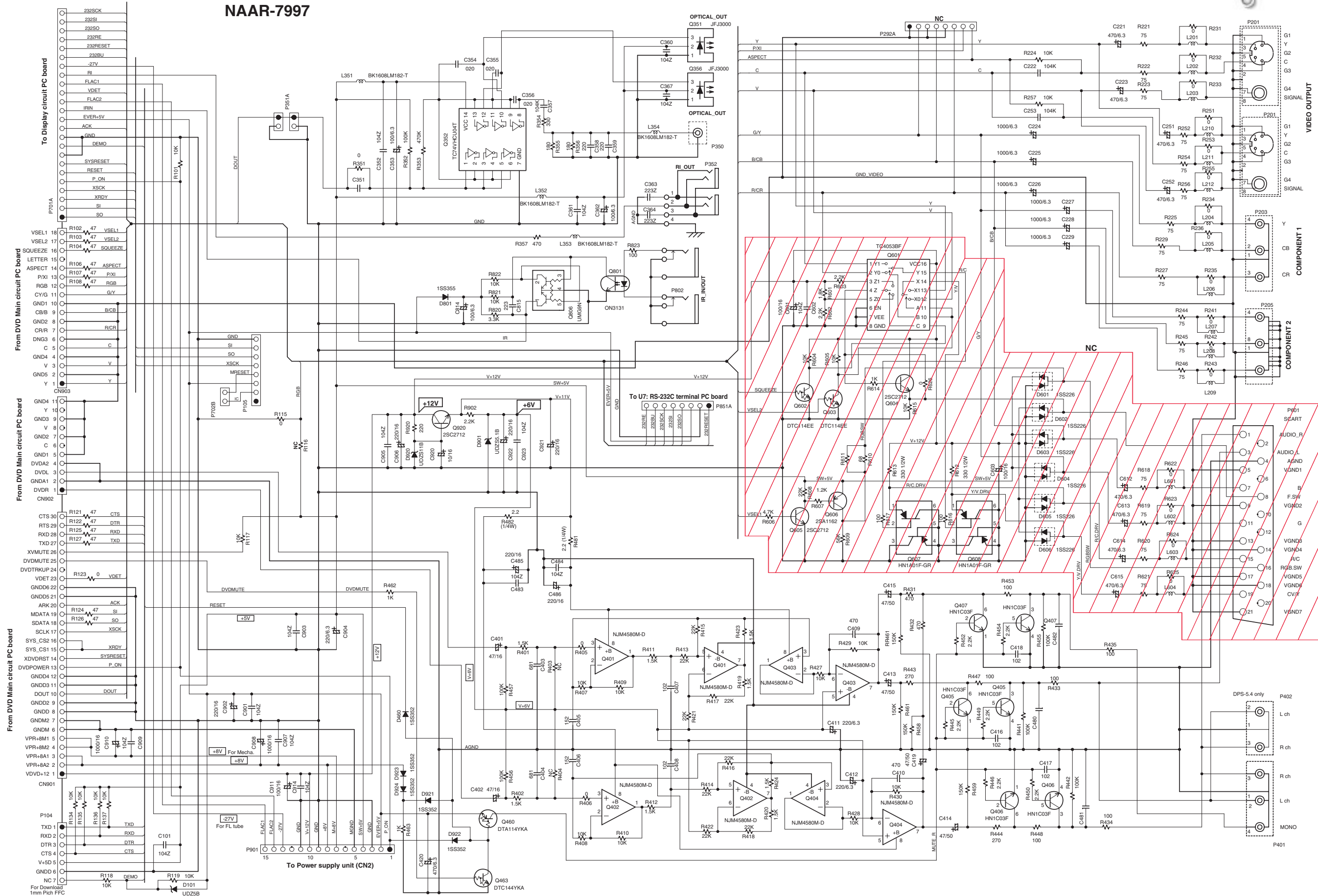
U20: POWER SUPPLY UNIT

NGPS-0040-100-120V <MDD/ MDC>

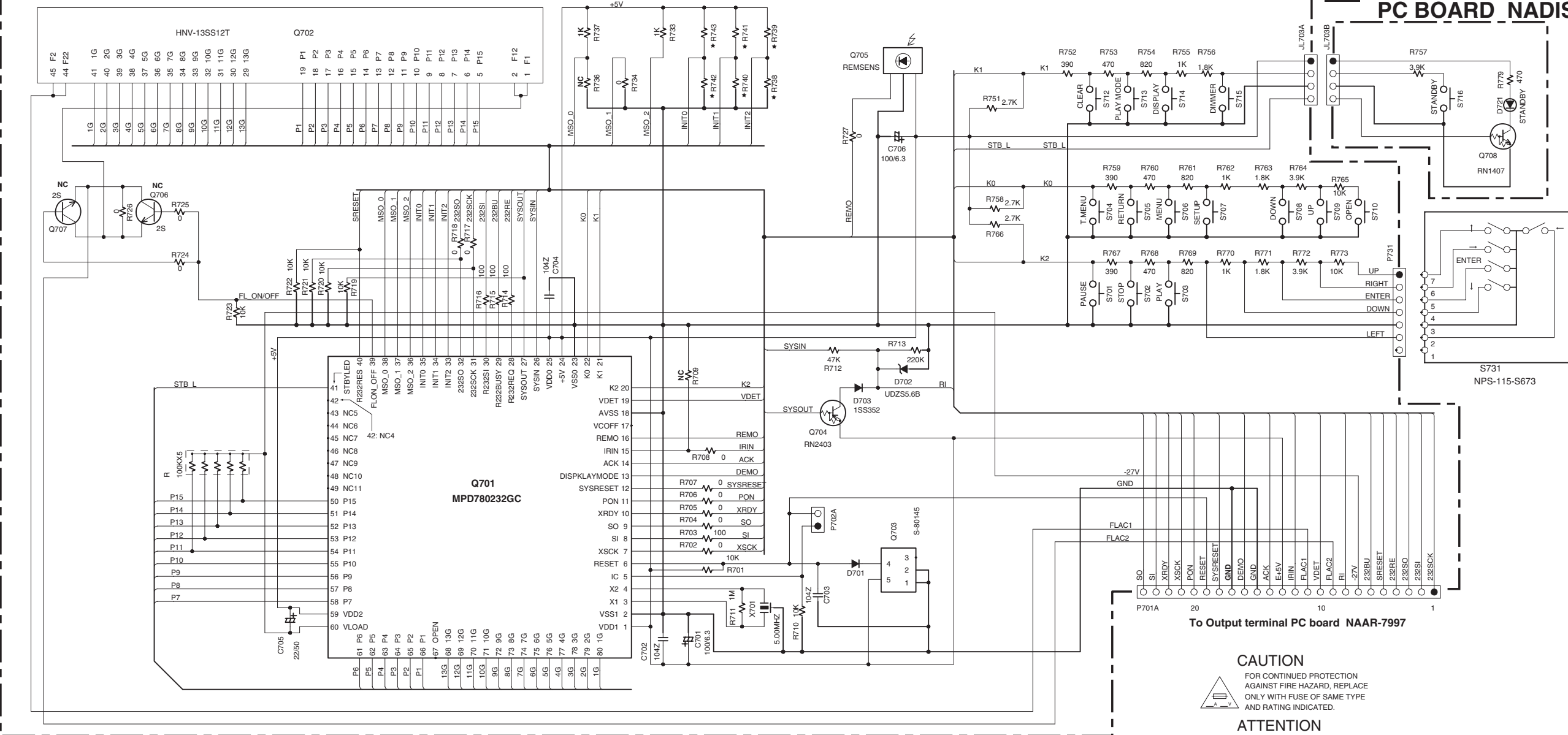
NGPS-0041-100-240V Except <MDD/ MDC>



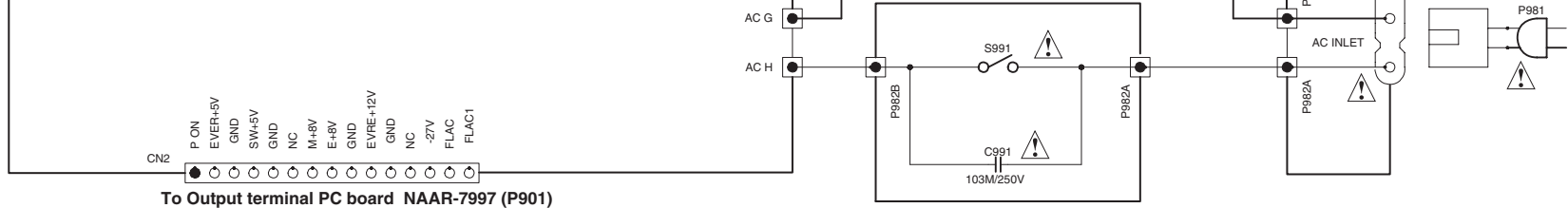
SCHEMATIC DIAGRAM-1

U1: OUTPUT TERMINAL PC BOARD
NAAR-7997


SCHEMATIC DIAGRAM-2

U2: DISPLAY CIRCUIT PC BOARD NADIS-7998**U3: STANDBY SWITCH PC BOARD NADIS-7999****U20: POWER SUPPLY UNIT**

NGPS-0040 AC100-120V 50Hz/60Hz
NGPS-0041 AC100-240V 50Hz/60Hz

U4: POWER SWITCH PC BOARD NASW-8000**U5: INLET TERMINAL PC BOARD NAPS-8002****CAUTION**

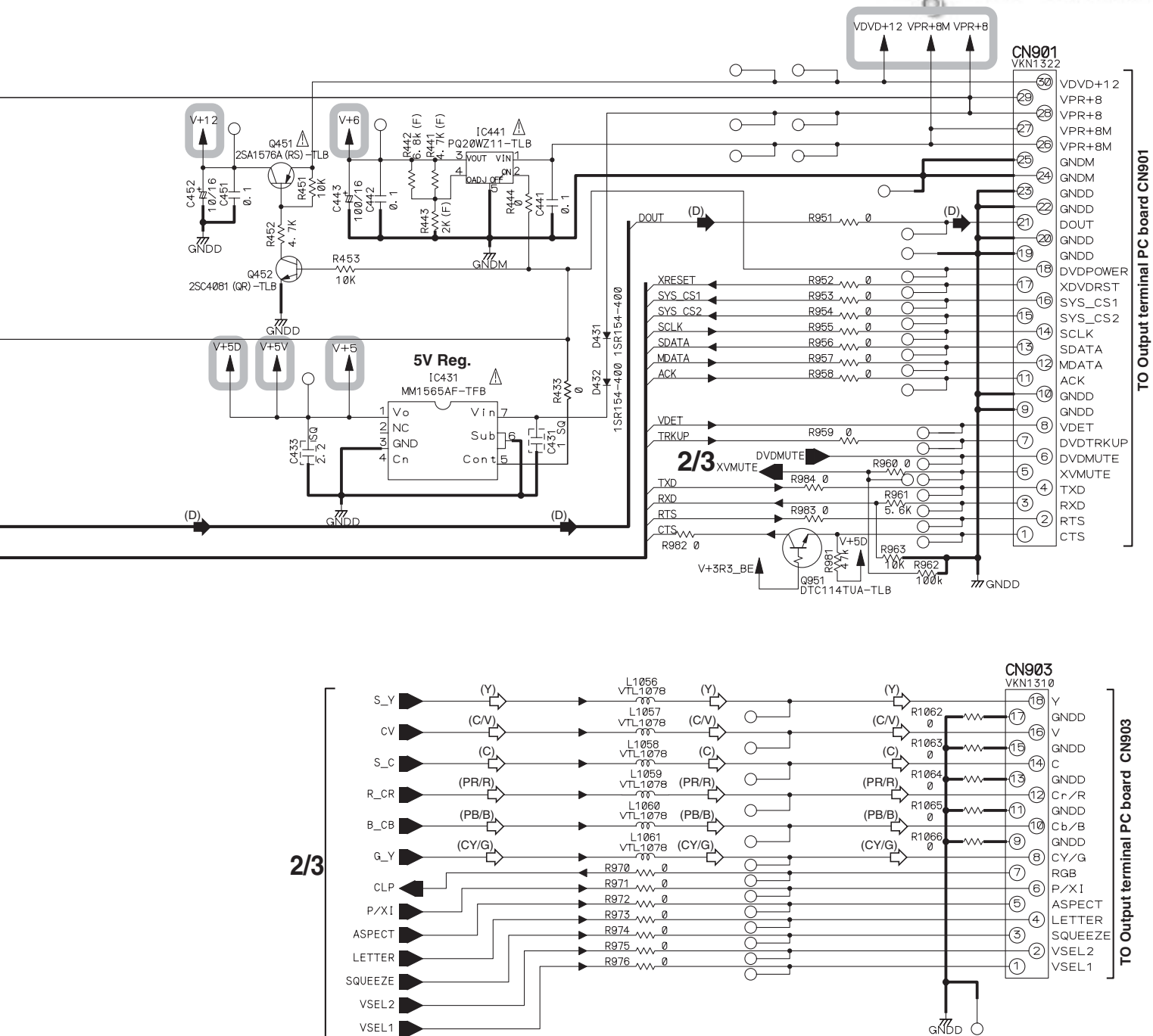
FOR CONTINUED PROTECTION
AGAINST FIRE HAZARD, REPLACE
ONLY WITH FUSE OF SAME TYPE
AND RATING INDICATED.

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
E LENT. POUR UNE PROTECTION PERMANENTE, UTILISER
QUE DES FUSIBLES DE MEME TYPE. CE DERNIER EST
INDIQUE LA QU LE PRESENT SYMBOLE EST APPOSE.



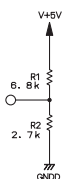
- (C/V) : VIDEO SIGNAL ROUTE (C/V)
 (Y) : S VIDEO SIGNAL ROUTE (Y)
 (C) : S VIDEO SIGNAL ROUTE (Y)
 (PR/R) : VIDEO SIGNAL ROUTE (PR/R)
 (CY/G) : VIDEO SIGNAL ROUTE (CY/G)
 (PB/B) : VIDEO SIGNAL ROUTE (PB/B)
 (D) : AUDIO SIGNAL ROUTE (DIGITAL)

SCHEMATIC DIAGRAM-5 DVD MAIN CIRCUIT PC BOARD (3/3) DB-VPB501/XJ

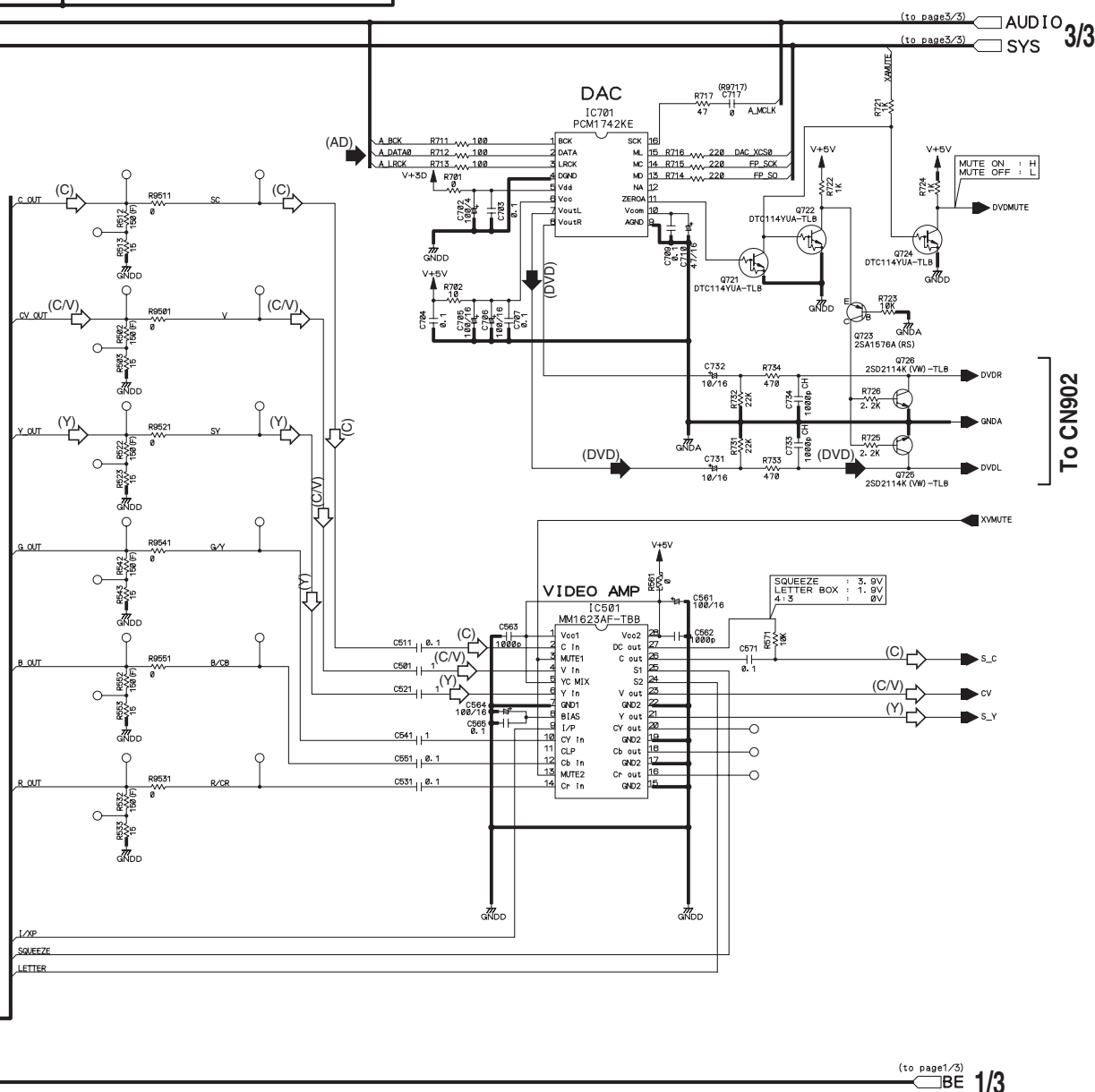


SCHEMATIC DIAGRAM-5





- : FE_DATA SIGNAL ROUTE
- (RF) ■: RF SIGNAL ROUTE
- (C/V) □: VIDEO SIGNAL ROUTE (C/V)
- (Y) □: S VIDEO SIGNAL ROUTE (Y)
- (C) □: S VIDEO SIGNAL ROUTE (C)
- (AD) ■: AUDIO DATA SIGNAL ROUTE
- (D) ■: AUDIO SIGNAL ROUTE (DIGITAL)
- (DVD) ■: AUDIO SIGNAL ROUTE (DVD_L ch)



DB-VPB501/XJ



SCHEMATIC DIAGRAM-4

DVD MAIN CIRCUIT PC BOARD (2/3) DB-VPB501/XJ

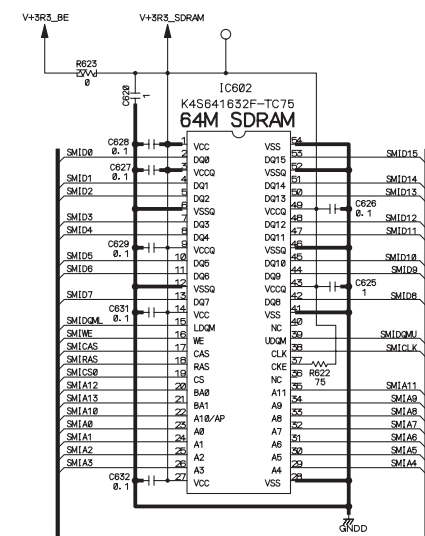
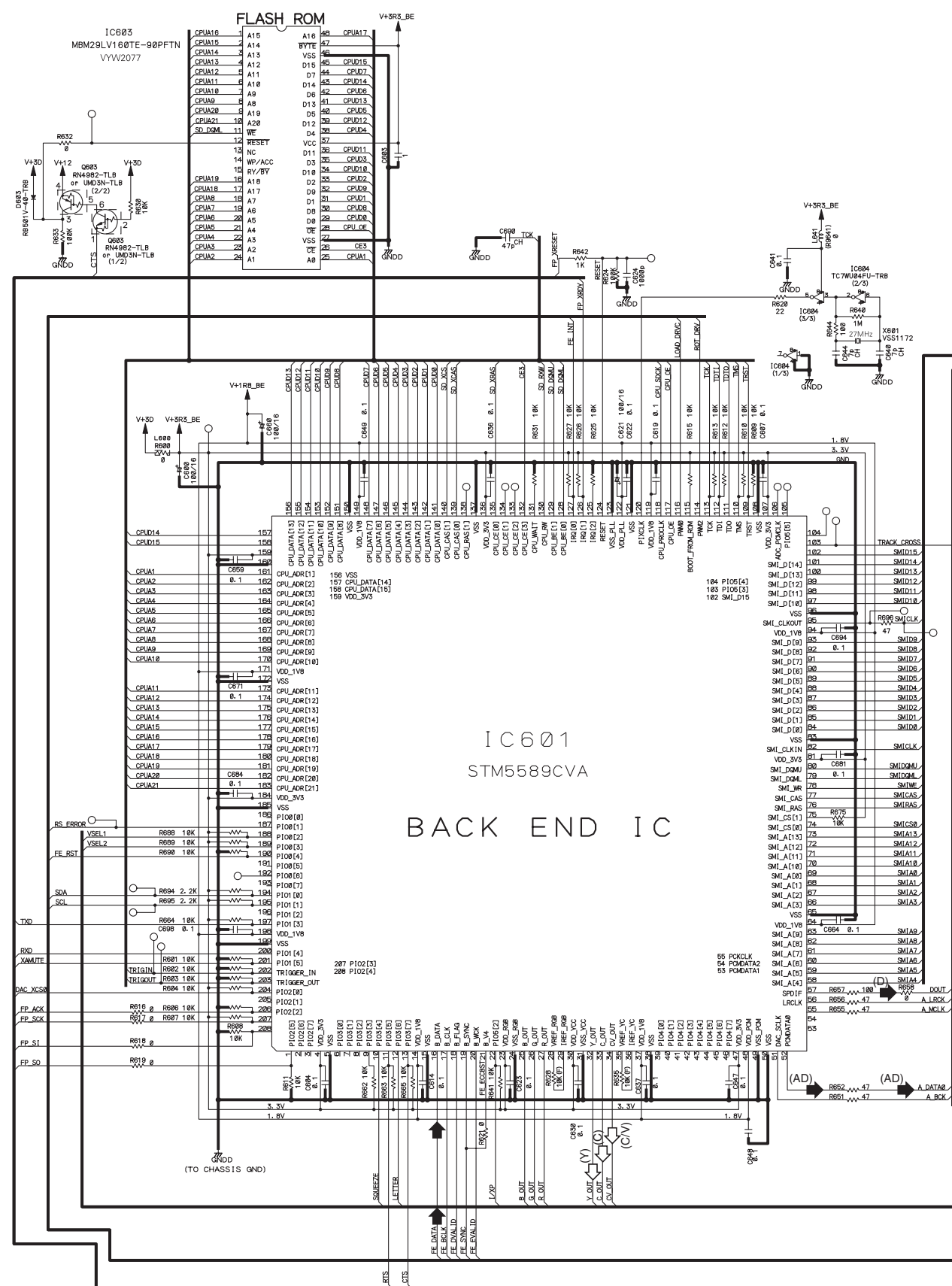
1

2

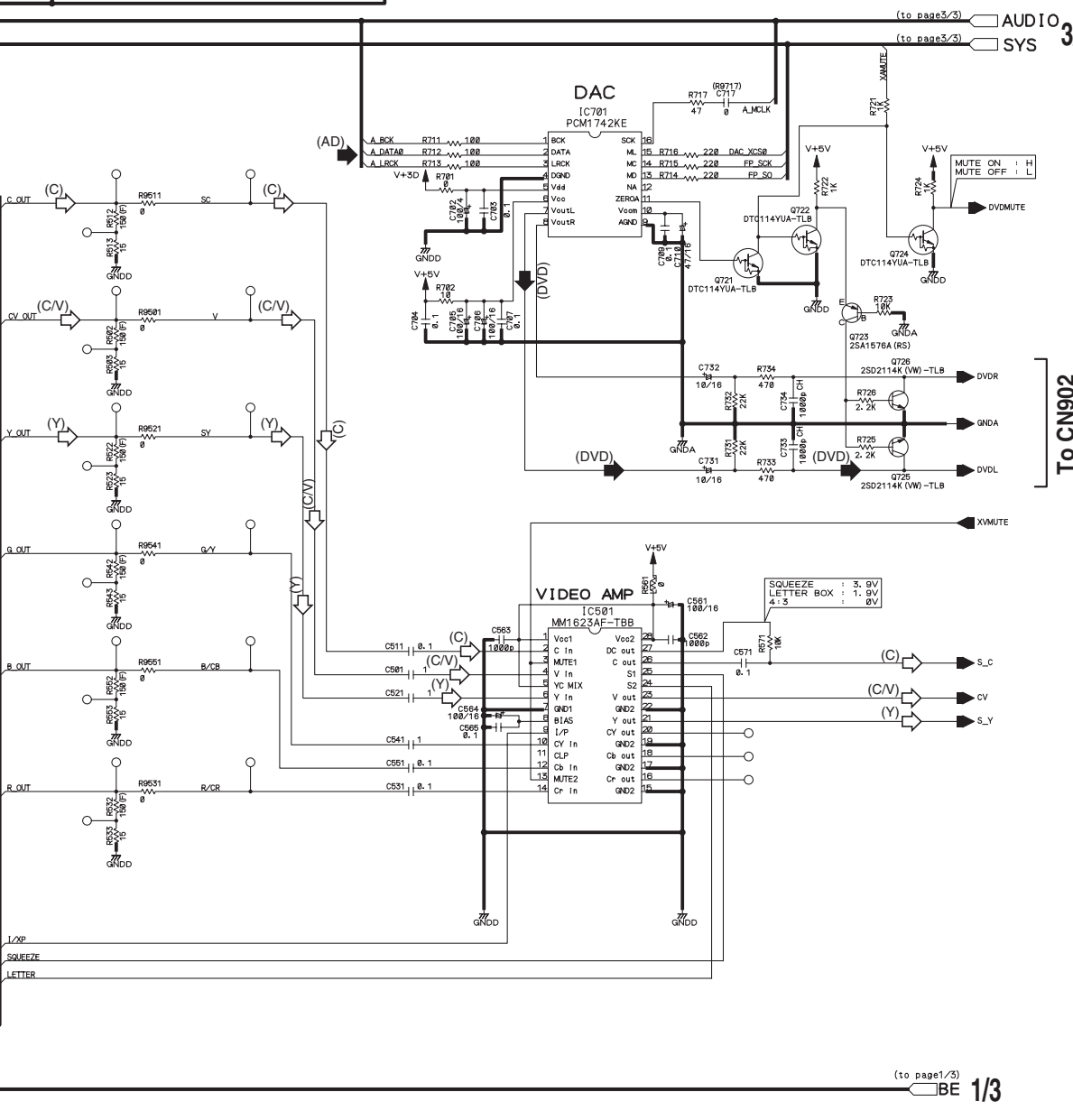
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4

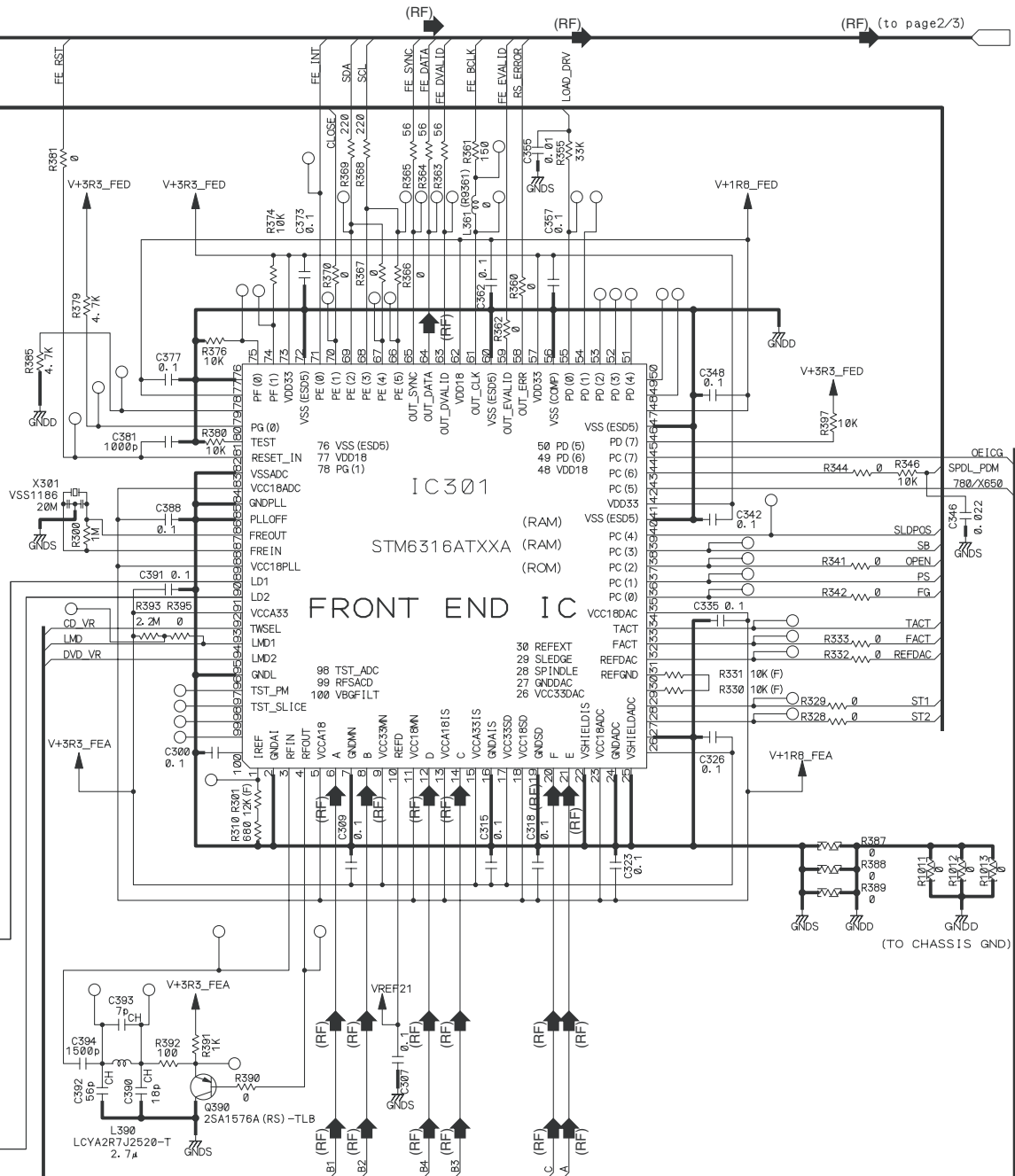
5



- FE_DATA SIGNAL ROUTE
- (RF) RF SIGNAL ROUTE
- (C/V) VIDEO SIGNAL ROUTE (C/V)
- (Y) S VIDEO SIGNAL ROUTE (Y)
- (C) S VIDEO SIGNAL ROUTE (C)
- (AD) AUDIO DATA SIGNAL ROUTE
- (D) AUDIO SIGNAL ROUTE (DIGITAL)
- (DVD) AUDIO SIGNAL ROUTE (DVD_L ch)



- (RF) : RF SIGNAL ROUTE
 (F) : FOCUS SERVO LOOP LINE
 (T) : TRACKING SERVO LOOP LINE
 (S) : STEPPING SERVO LOOP LINE



Free Schematics

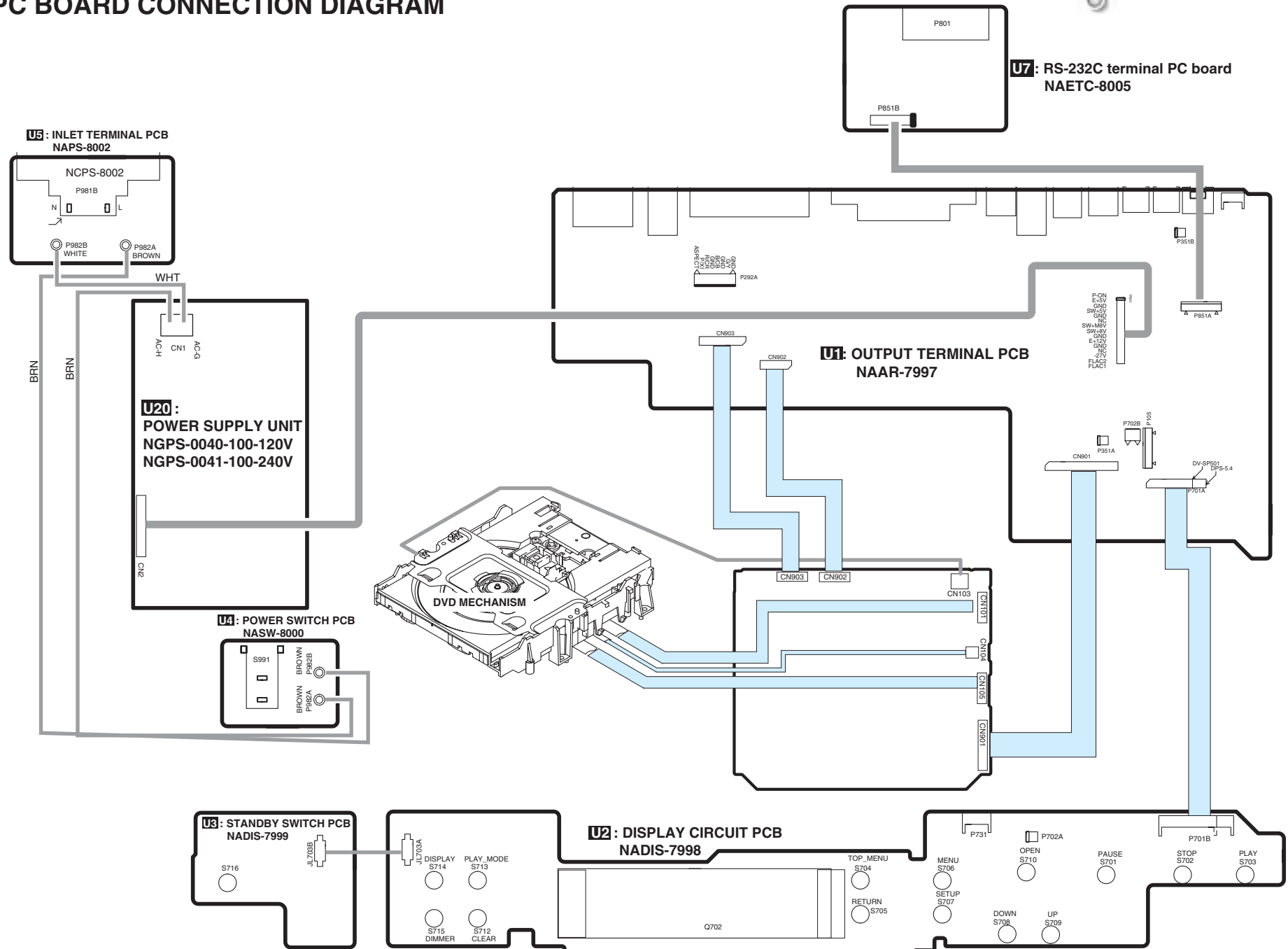


Wiring diagram for the 12VDC power supply section of the 12VDC/24VDC converter. The diagram shows the following connections:

- 12VDC input connected to CLAMP and UNCLAMP.
- OPENC and CLOSEC connected to the 12VDC supply.
- ROT DRV and LOAD DRV connected to the 12VDC supply.
- XDRV MUTE and XDRV MUTE2 connected to the 12VDC supply.



PC BOARD CONNECTION DIAGRAM

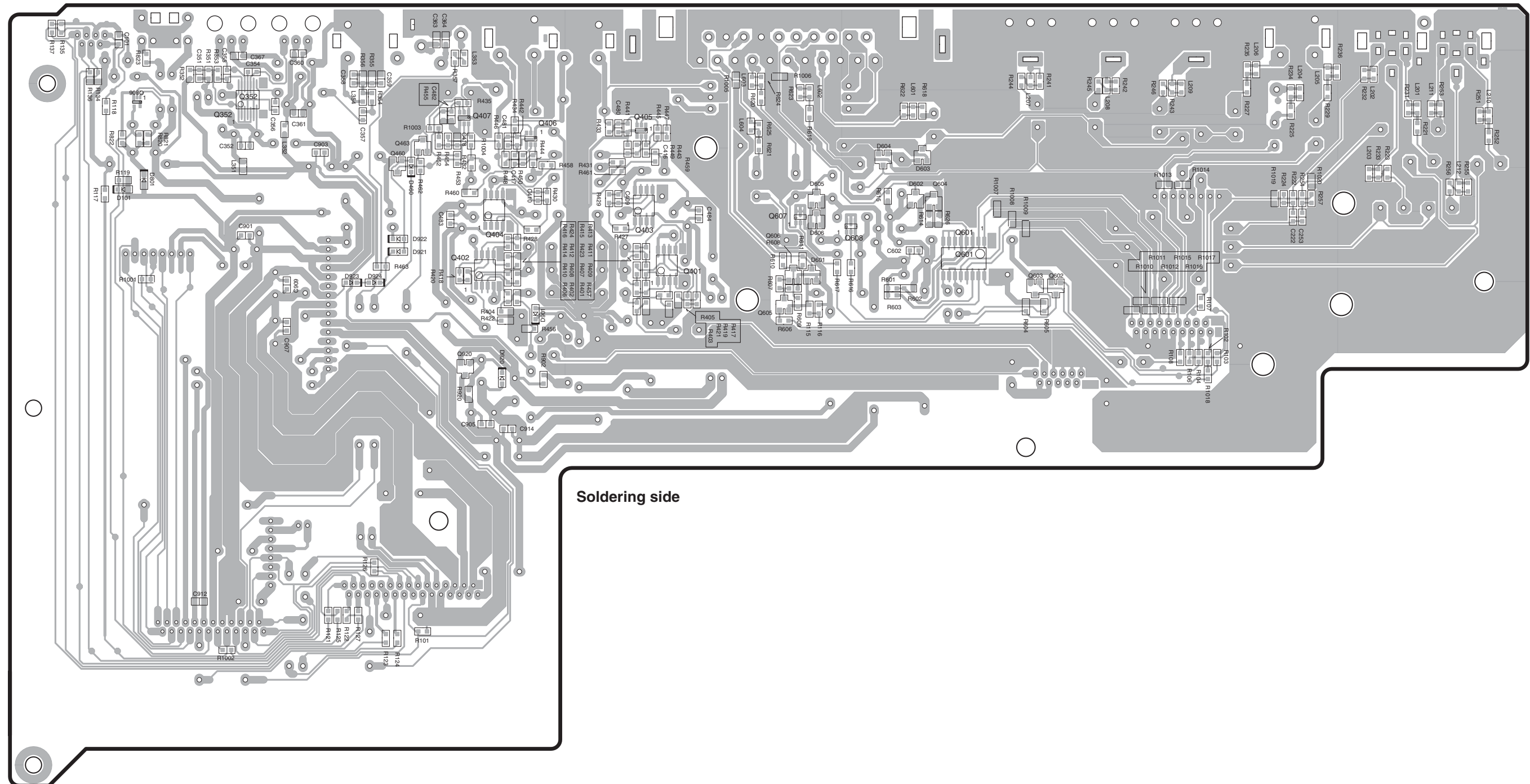


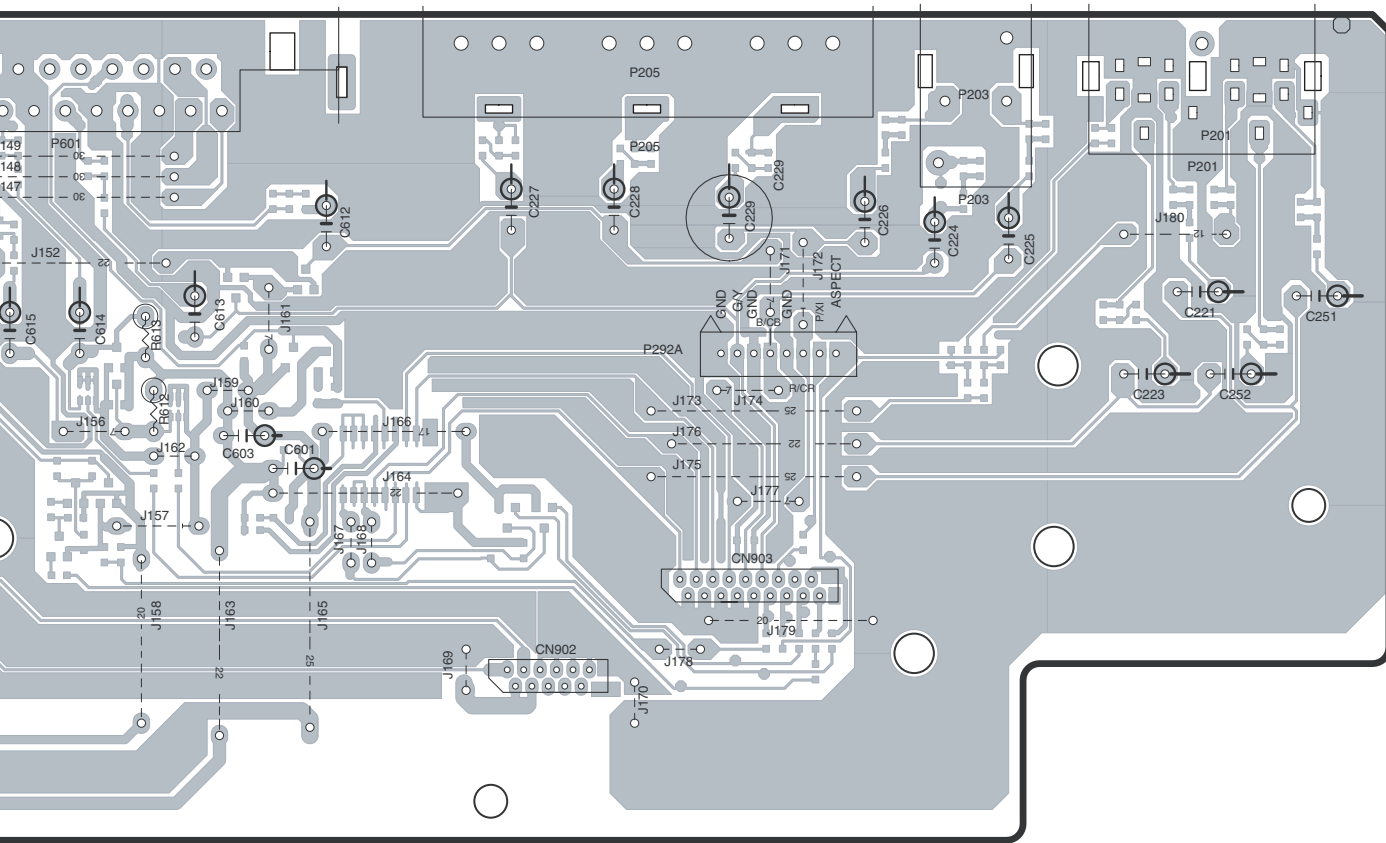
U1 : OUTPUT TERMINAL PC BOARD NAAR-7997



PRINTED CIRCUIT BOARD FROM SOLDERING SIDE VIEW

U1: OUTPUT TERMINAL PC BOARD NAAR-7997



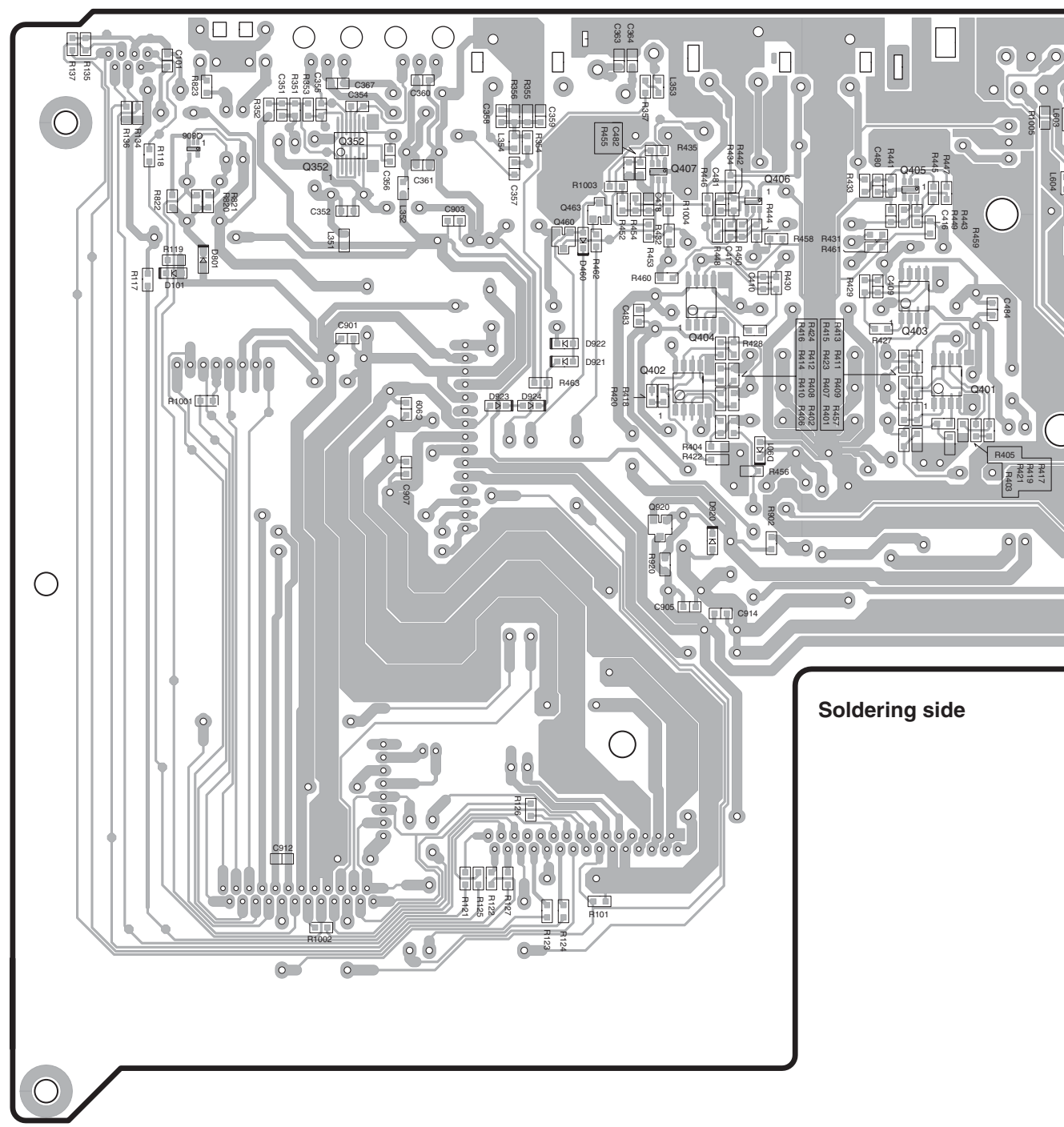


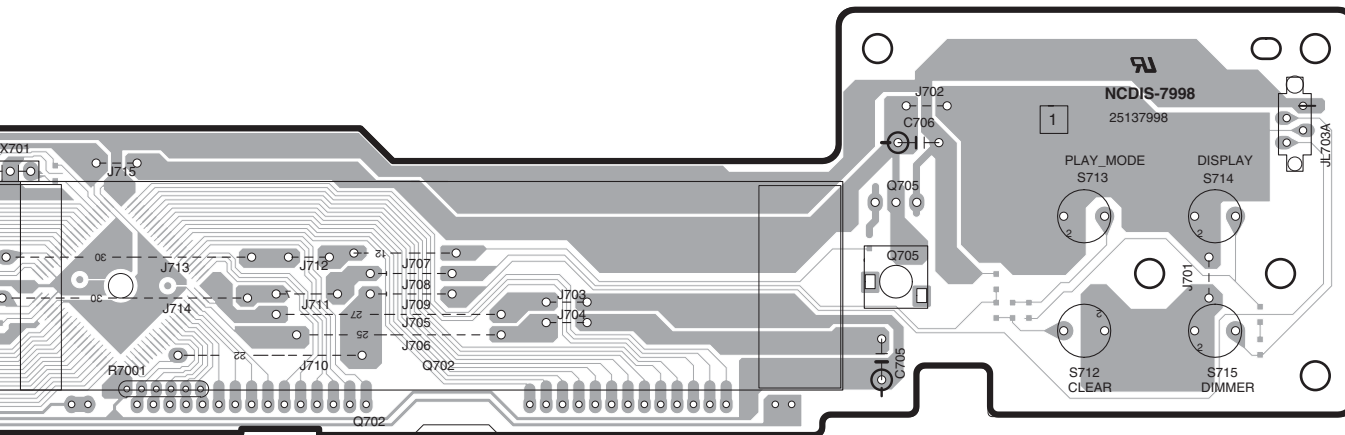




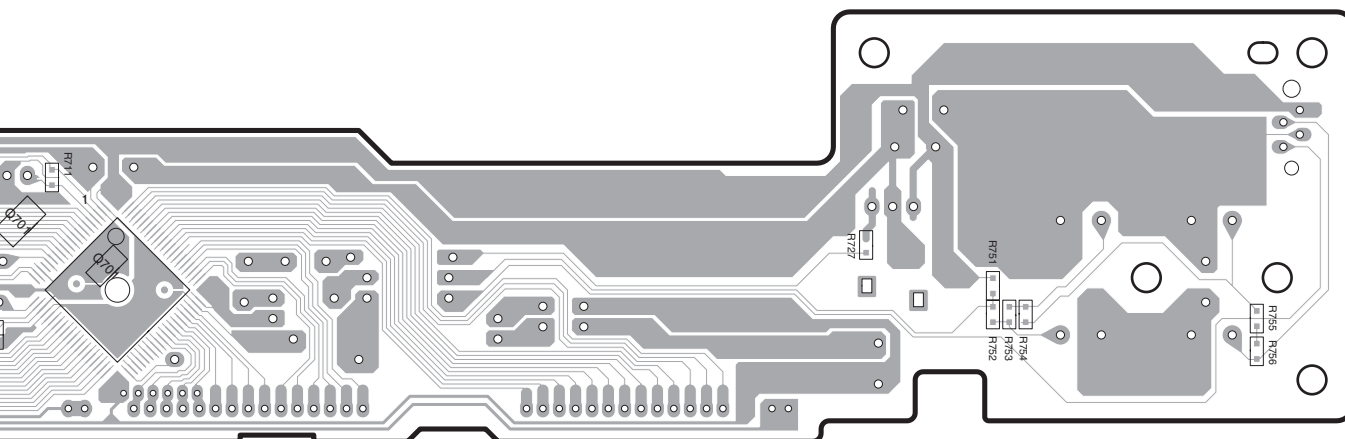
PRINTED CIRCUIT BOARD FROM SOLDERING SIDE VIEW

U1: OUTPUT TERMINAL PC BOARD NAAR-7997





Component side

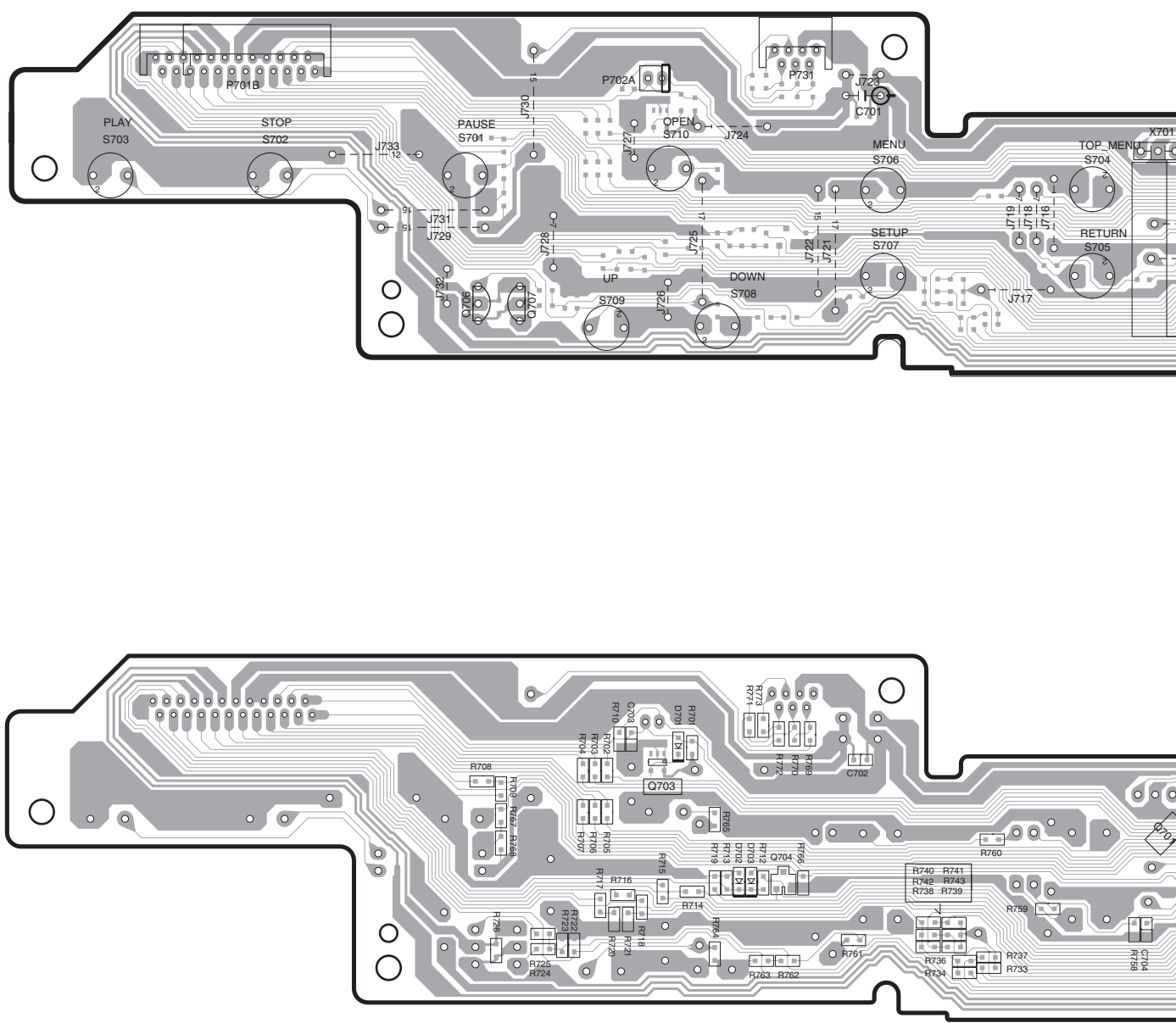


Soldering side



PRINTED CIRCUIT BOARD FROM SOLDERING SIDE VIEW

U2: DISPLAY CIRCUIT PC BOARD NADIS-7998

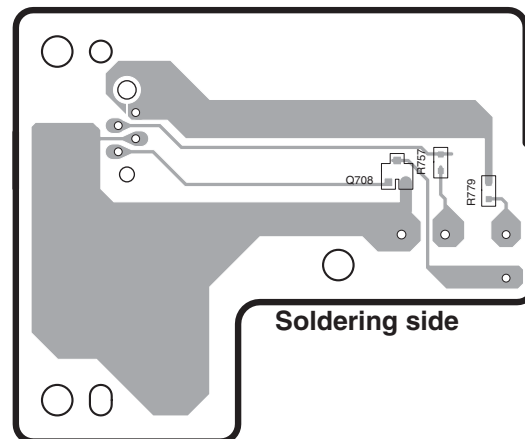
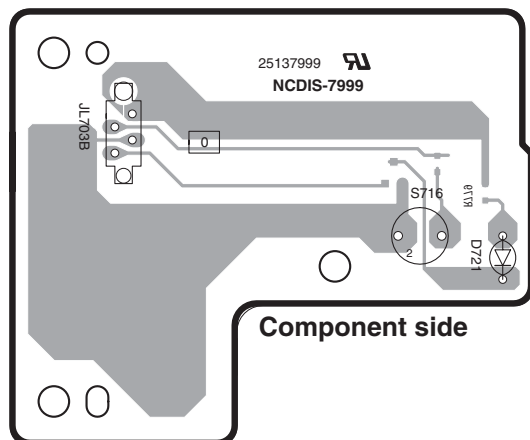


U2: DISPLAY CIRCUIT PC BOARD NADIS-7998

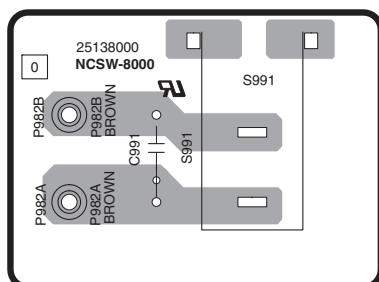


PRINTED CIRCUIT BOARD FROM BOTTOM VIEW

U3: STANDBY SWITCH PC BOARD NADIS-7999

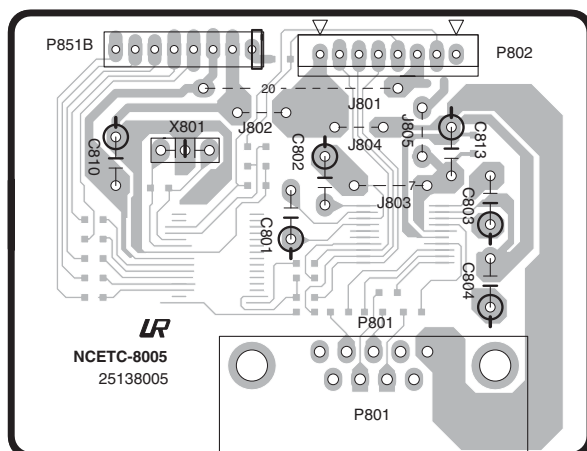


U4: POWER SWITCH PC BOARD NASW-8000

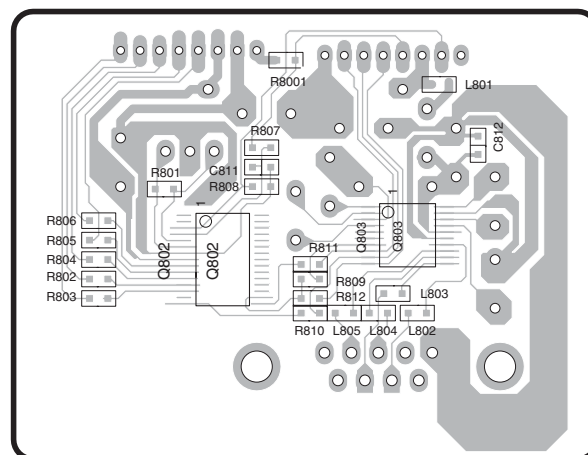


PRINTED CIRCUIT BOARD FROM SOLDERING SIDE VIEW

U7 : RS-232C terminal PC board NAETC-8005

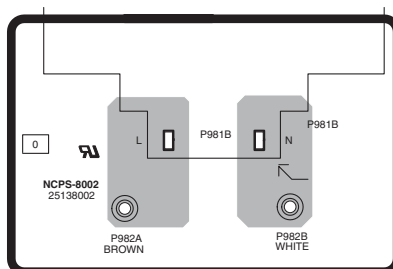


Component side



Soldering side

U5 : Inlet terminal PC board NAPS-8002



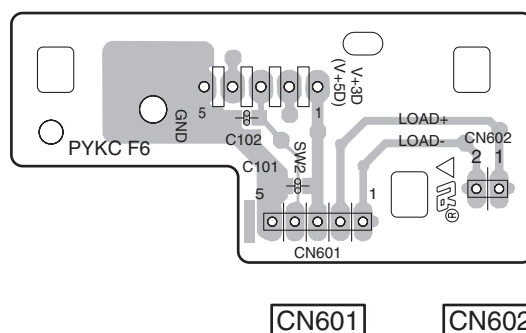
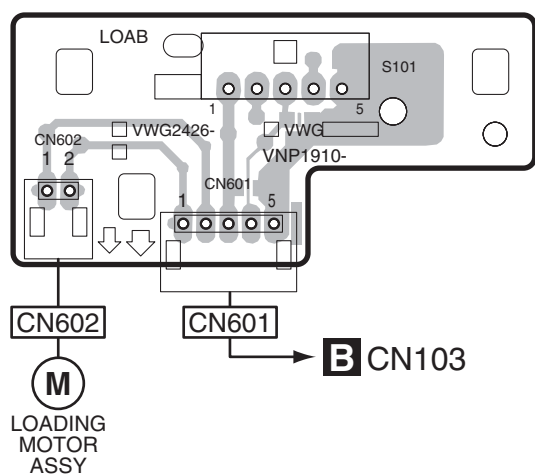
Soldering side

PRINTED CIRCUIT BOARD VIEW

LOAB ASSY

SIDE A

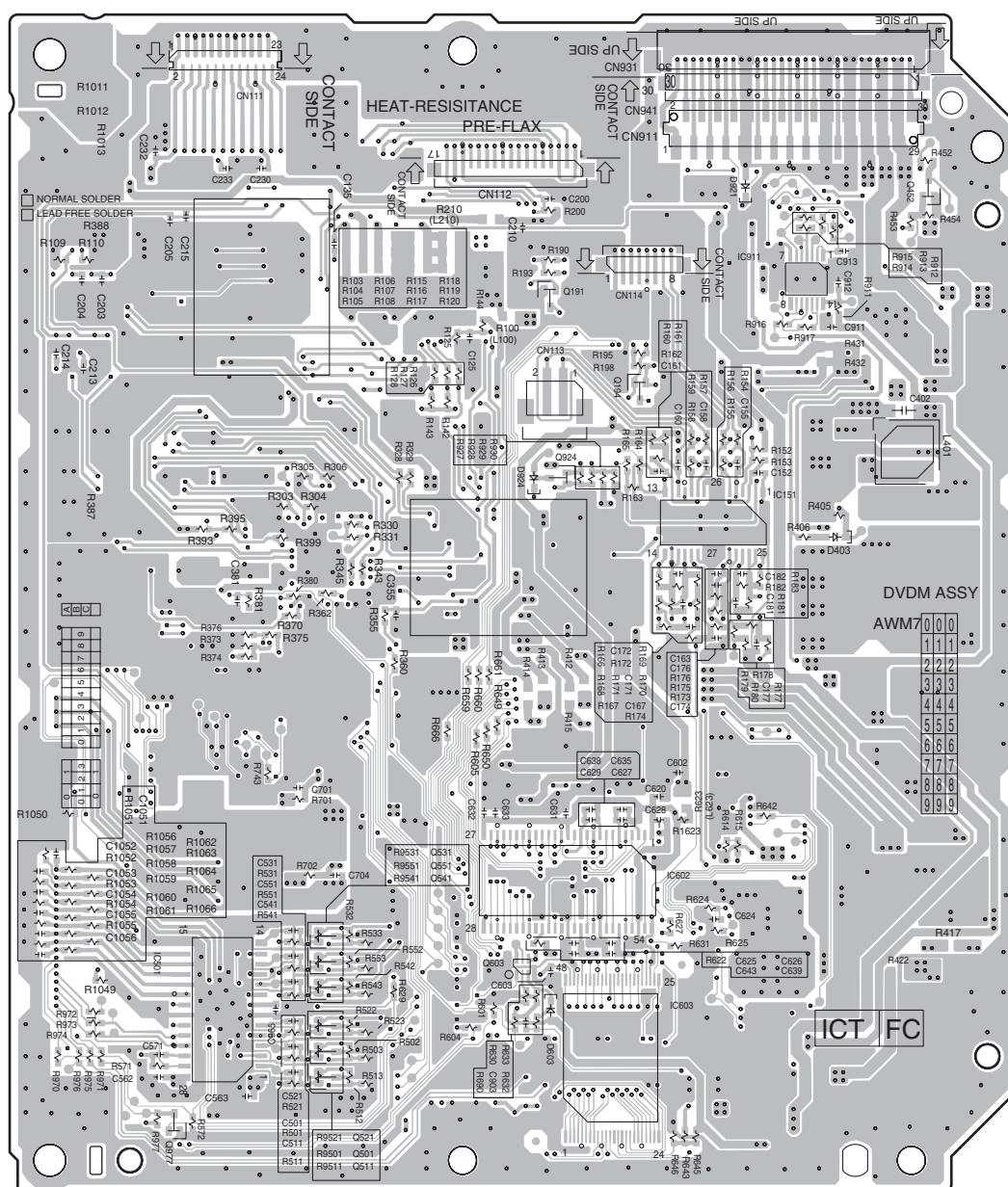
SIDE B



PRINTED CIRCUIT BOARD VIEW DVD MAIN CIRCUIT PC BOARD (DB-VPB501/XJ)

SIDE B

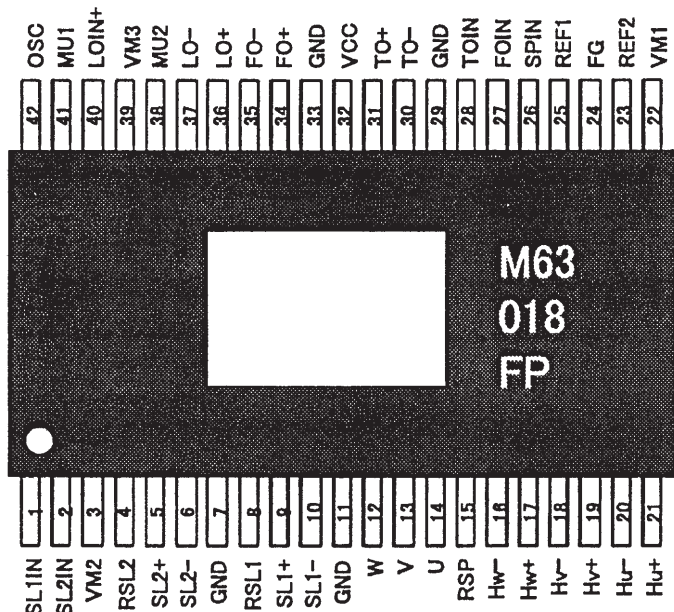
SIDE B



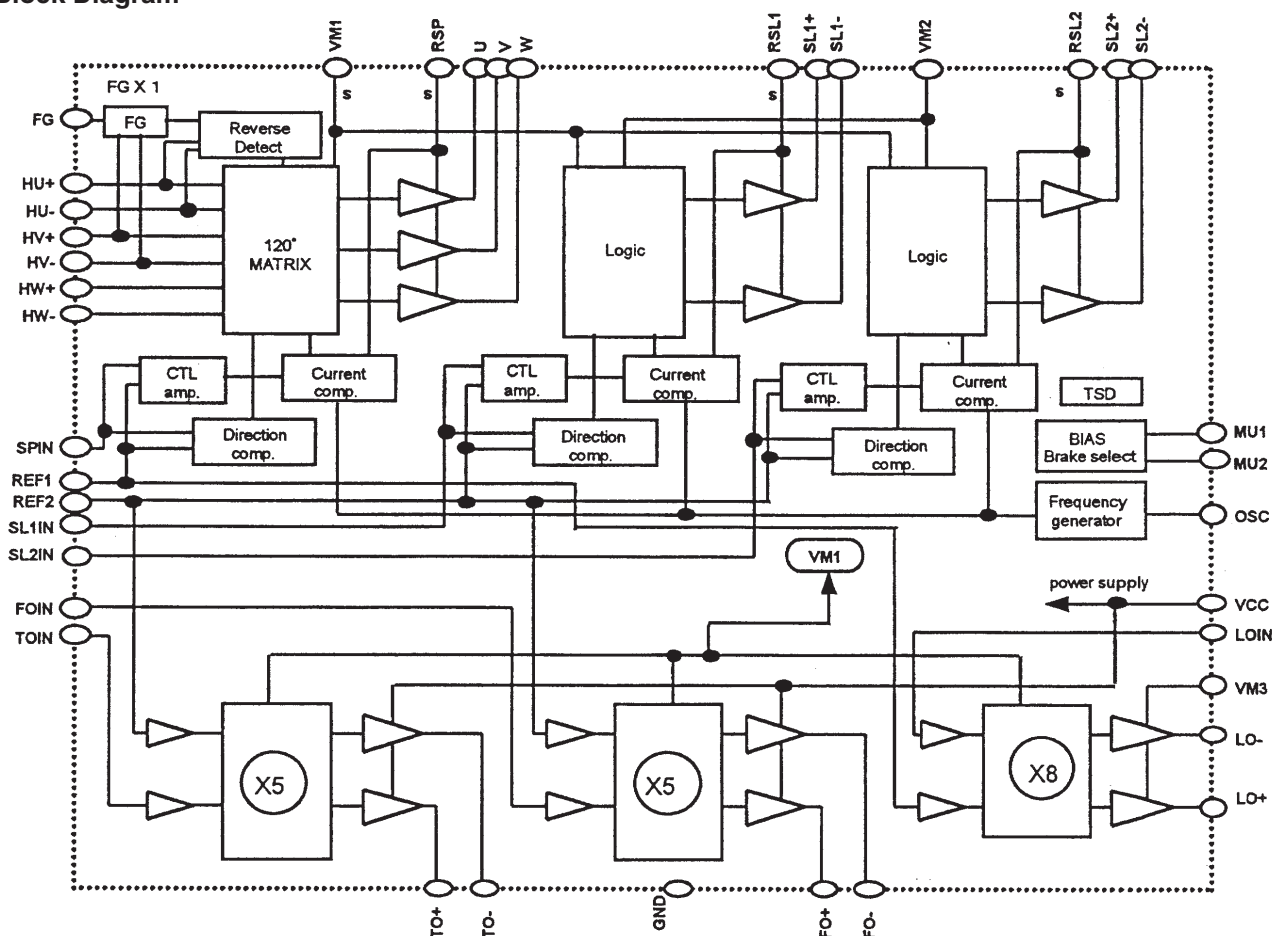
IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC101 : M63018FP (BTL DRIVER)-1

Pin Arrangement



Block Diagram



IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC101 : M63018FP (BTL DRIVER)-2

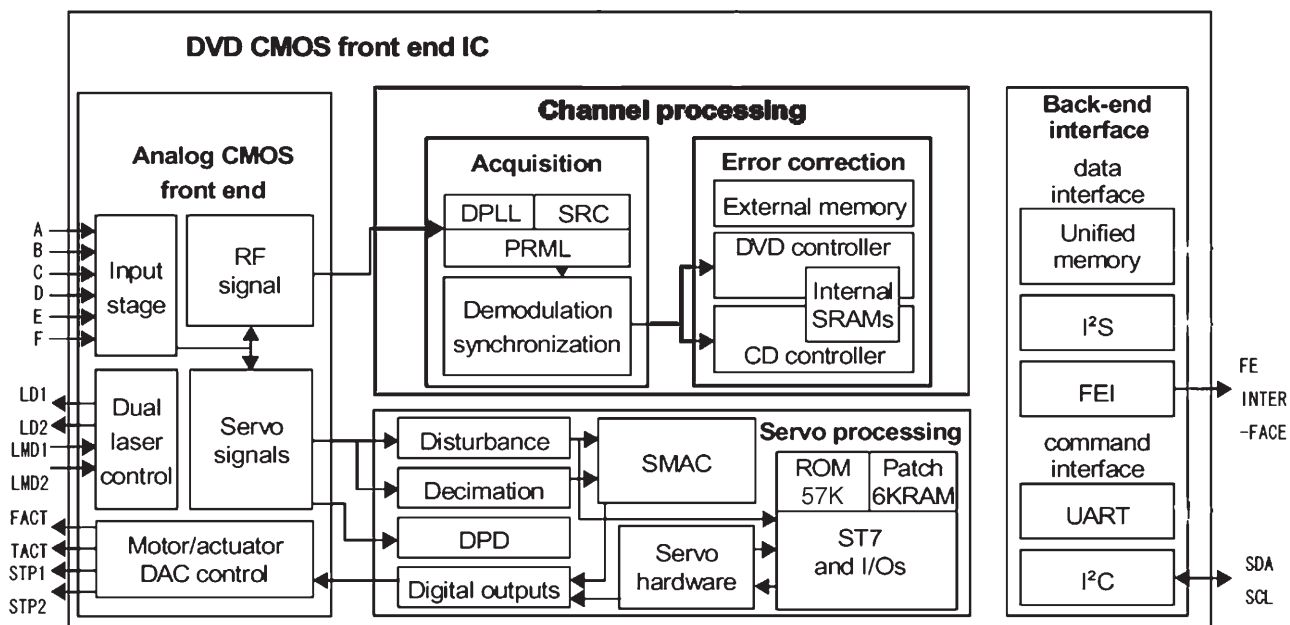
Pin Function

TERMINAL	SYMBOL	TERMINAL FUNCTION	TERMINAL	SYMBOL	TERMINAL FUNCTION
1	SL1IN	Slide control voltage input 1	4 2	OSC	PWM carrier oscillation set
2	SL2IN	Slide control voltage input 2	4 1	MU1	mute / brake select terminal 1
3	VM2	Motor Power Supply 2 (for Slide)	4 0	LOIN+	Loading control input(+)
4	RSL2	Slide current sense 2	3 9	VM3	Power Supply3 (for Loading)
5	SL2+	Slide non-inverted output 2	3 8	MU2	mute / brake select terminal 2
6	SL2-	Slide inverted output 2	3 7	LO-	Loading inverted output
7	GND	GND	3 6	LO+	Loading non-inverted output
8	RSL1	Slide current sense 1	3 5	FO-	Focus inverted output
9	SL1+	Slide non-inverted output 1	3 4	FO+	Focus non-inverted output
1 0	SL1-	Slide inverted output 1	3 3	GND	GND
1 1	GND	GND	3 2	VCC	Power Supply (for FS ,TS)
1 2	W	Motor drive output W	3 1	TO+	Tracking non-inverted output
1 3	V	Motor drive output V	3 0	TO-	Tracking inverted output
1 4	U	Motor drive output U	2 9	GND	GND
1 5	RSP	Spindle current sense	2 8	TOIN	Tracking control voltage input
1 6	HW-	HW- sensor amp. input	2 7	FOIN	Focus control voltage input
1 7	HW+	HW+ sensor amp. input	2 6	SPIN	Spindle control voltage input
1 8	HV-	HV- sensor amp. input	2 5	REF1	Reference voltage input1 (for Spindle,Loading)
1 9	HV+	HV+ sensor amp. input	2 4	FG	Frequency generator output
2 0	HU-	HU- sensor amp. input	2 3	REF2	Reference voltage input2 (for Slide,Focus,Tracking)
2 1	HU+	HU+ sensor amp. input	2 2	VM1	Motor Power Supply 1 (for Spindle)

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC301 : STM6316ATXXA FRONT END IC

Block Diagram



IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC301 : STM6316AT

No.	Pin Name	description	detail
1	IREF	12.7k	Analog block reference part
2	GNDAI	GND	analog gnd
3	RFIN	capacitor	RF signal C association input to a demodulation block
4	RFOUT	capacitor	B1+B2+B3+B4 mixture listing from an analog block
5	VCCA18	1V8	analog 1V
6	A	B1	PU - B1 input
7	GNDMN	GND	analog gnd
8	B	B2	PU - B2 input
9	VCC33MN	3V3	analog 3V
10	REFD	to pick up	2V1 output for PU
11	VCC18MN	1V8	analog 1V
12	D	B4	PU - B4 input
13	VCCA18IS	1V8	analog 1V
14	C	B3	PU - B3 input
15	VCCA33IS	3V3	analog 3V
16	GND AIS	GND	analog gnd
17	VCC33SD	3V3	analog 3V
18	VCC18SD	1V8	analog 1V
19	GNDSD	GND	analog gnd
20	F	C	PU-3 beam C input
21	E	A	PU-3 beam A input
22	VSHIELDIS	GND	analog gnd
23	VCC18ADC	1V8	analog 1V
24	GNDADC	GND	analog gnd
25	VSHIELDADC	GND	analog gnd
26	VCC33DAC	3V3	analog 3V
27	GNDDAC	GND	analog gnd
28	SPINDLE	560ohm(st2)	DAC current listing for stepper drive
29	SLEDGE	560ohm(st1)	DAC current listing for stepper drive
30	REFEXT	20K1	Reference for DAC
31	REFGND	refex	analog gnd
32	REFDAC	560ohm1%	DAC reference
33	FACT	560ohm1%	DAC current listing for focus
34	TACT	560ohm1%	DAC current listing for tracking
35	VCC18DAC	1V8	analog 1V
36	PG0	F	FG pulse input
37	PC1	P	Driver control signal
38	PC2	tray SW1(open)	SW input for tray OPEN position
39	PC3	SI	Driver control signal
40	PC4	SLD position	Inside SW input

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC301 : STM6316AT

No.	Pin Name	description	detail
41	VSS	GND	digital gnd
42	VDD33	3V3	digital 3V3
43	PC5	780/X65	780nm/650nmLD change control signal
44	PC6	spinde PD	Control PDM listing for spindle drive
45	PC7	opicgai	OEIC gain control signal
46	PD7	03PU/X02P	Pull-up settlemen
47	VSS	GND	digital gnd
48	VDD18	1V8	digital 1V8
49	PD6	(debug)	test
50	PD5	(debug)	test
51	PD4	(DSPclk)	test
52	PD3	(DSPdata)	test
53	PD2	(DSPstrb1)	test
54	PD1	error monitor	Terminal for TRKG error monitor (30KHzLPF add need)
55	PD0	tray PDM drive	Control PDM signal for tray drive
56	VSS	GND	digital gnd
57	VDD33	3V3	digital 3V3
58	OUT_ERR	RS_ERRO	BE DATA I/F
59	OUT_EVALID	RS_ERR_E	BE DATA I/F
60	VSS	GND	digital gnd
61	OUT_CLK	RS_BCL	BE DATA I/F
62	VDD18	1V8	digital 1V8
63	OUT_DVALID	RS_DVALI	BE DATA IF
64	OUT_DATA	RS_DAT	BE DATA I/F
65	OUT_SYNC	RS_ECCBS	BE DATA IF
66	PE5	SCL(DMA)	FE routine download input
67	PE4	SDA(DMA)	FE routine download input
68	PE2	SC	BE command I/F
69	PE2	SD	BE command I/
70	PE1	tray SW2(close)	SW input for tray CLOSE position
71	PE0	DXXIN	FE status propagation signal
72	VSS	GNDD	digital gnd
73	VDD3	3V3	digital 3V3
74	PF1	10K-pullup	Built-in facility setting terminal
75	PF0	10K-pulldown	Built-in facility setting terminal
76	VSS	GND	digital gnd
77	VDD18	1V8	digital 1V8
78	PG1	to EMULATO	Built-in facility setting terminal
79	PG0	to EMULATO	Built-in facility setting terminal
80	TEST	10K-pulldown	test

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC301 : STM6316AT

No.	Pin Name	description	detail
81	RESET_N	RESET	RESET input
82	VSSADC	GND	analog gnd
83	VDD18ADC	1V8	analog 1V8
84	GNDPLL	GND	analog gnd
85	PLLOFF	GND	analog gnd
86	FREOUT	20MXtal	SYSTEMCLK oscillating circuit
87	FREIN	20MXtal	SYSTEMCLK oscillating circuit
88	VCC18PLL	1V8	analog 1V8
89	LD1	650nmLD	650nmLD driving signal
90	LD2	780nmLD	780nmLD driving signal
91	VCCA33	3V3	digital 3V3
92	TWSEL	CD_VR/GN	Monitor diodes VR junction terminal for CD
93	LMD1	LMD/LMD	Monitor voltage junction terminal
94	LMD2	DVD_VR/LMD2	Monitor diodes VR junction terminal for DVD
95	GNDL	GND	analog gnd
96	TST_PM	n	tset
97	TST_SLICE	n	test
98	TST_ADC	n	test
99	RFSACD	SACD_I	RF signal output
100	VBGFILT	capacitor	Condenser junction terminal for inside reference stability

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
1	FP_SO	OUT	Front Panel / DAC interface. Serial transfer data output.
2	A_DATA3	OUT	reserve
3	VCLK	OUT	reserve
4	VDD_3V3	-	3.3 V Power supply
5	VSS	-	Ground
6	BTDATA	OUT	reserve
7	BTBCLK	OUT	reserve
8	BTFLAG	OUT	reserve
9	TRYPOS	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Tray rotation pulse input. CAPTURE_IN0 can be used.
10	SQUEEZE	OUT	Output signal for S-Video output S1/S2 control. 'H' : squeeze output mode.
11	RTS	OUT	UART(RS-232C) Request To Send signal output
12	LETTER	OUT	Output signal for S-Video output S1/S2 control & EURO(SCART) connector (FUNCTION SWITCHING) signal. 'H' : letter-box output mode.
13	CTS	IN	UART(RS-232C) Clear To Send signal input
14	VDD_1V8	-	1.8 V Power supply
15	VSS	-	Ground
16	FE_DATA	IN	Front-End L6316 stream interface. Serial data input.
17	FE_BCLK	IN	Front-End L6316 stream interface. Serial clock input.
18	FE_DVALID	IN	Front-End L6316 stream interface. Data valid flag input.
19	FE_SYNC	IN	Front-End L6316 stream interface. Serial synchronize flag input.
20	FE_EVALID	IN	Front-End L6316 stream interface. Error valid flag for RS_split.
21	FE_ECCBST	IN	Front-End L6316 stream interface. ECC block start flag for RS_split.
22	I/XP	OUT	Output signal for a change of interlace/Progressive output for video driver. 'L' : progressive 'H' : interlace
23	VDD_RGB	-	RGB circuit 3.3 V Power supply
24	VSS_RGB	-	RGB circuit Ground
25	B_OUT	OUT	B / Cb
26	G_OUT	OUT	G / Y
27	R_OUT	OUT	R / Cr
28	VREF_RGB	IN	RGB DAC reference
29	IREF_RGB	IN	RGB DAC current reference
30	VDD_YCC	-	YC circuit 3.3 V Power supply
31	VSS_YCC	-	YC circuit Ground
32	Y_OUT	OUT	Y
33	C_OUT	OUT	C
34	CV_OUT	OUT	CV
35	VREF_YCC	IN	YCC DAC reference
36	IREF_YCC	IN	YCC DAC current reference
37	VDD_1V8	-	1.8 V Power supply
38	VSS	-	Ground

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
39	XDRVMUTE	OU	It is not connected except 5 Disc Changer. Only 5 Disc Changer. Output signal for motor driver muting. 'L' : muting
40	OPEN	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Input signal for tray position. 'H' : complete OPEN position.
41	CLOSE	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Input signal for tray position. 'H' : complete CLOSE position.
42	CLAMP	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Input signal for showing disc clamp position. 'H' : complete disc clamp position.
43	UNCLAMP	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Input signal for showing disc un-clamp position. 'H' : complete disc clamp position.
44	DISC_SNS	OUT	It is not connected except 5 Disc Changer
		IN	Only 5 Disc Changer. Input signal for disc existing. 'L' : existing
45	XDRVMUTE2	OUT	reserved
46	TP-x	OUT	reserved
47	VDD_3V3	-	3.3 V Power supply
48	VDD_PCM	-	1.8 V Power supply
49	VSS_PCM	-	Ground
50	VSS	-	Ground
51	A_BCK	OUT	Audio DAC clock
52	A_DATA0	OUT	Audio DAC Front L,R data
53	A_DATA1	OUT	reserved
54	A_DATA2	OUT	reserved
55	A_MCLK	OUT	Audio DAC Master clock
56	A_LRCK	OUT	Audio DAC L/R clock
57	A_DOUT	OUT	S/PDIF(IEC60958) digital audio output
58	SMI_A4	OUT	SMI SDRAM Address
59	SMI_A5		
60	SMI_A6		
61	SMI_A7		
62	SMI_A8		
63	SMI_A9		
64	VDD_1V8	-	1.8 V Power supply
65	VSS	-	Ground
66	SMI_A3	OUT	SMI SDRAM Address
67	SMI_A2		
68	SMI_A1		
69	SMI_A0		
70	SMI_A10		
71	SMI_A11		
72	SMI_A12		
73	SMI_A13		

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
74	SMI_CS0	OUT	SMI SDRAM chip select 'L'
75	SMI_CS1	OUT	reserve
76	SMI_RAS	OUT	SMI SDRAM RAS 'L'
77	SMI_CAS	OUT	SMI SDRAM CAS 'L'
78	SMI_WE	OUT	SMI SDRAM Write Enable 'L'
79	SMI_DQML	OUT	SMI SDRAM Lower DQM 'L': Lower select
80	SMI_DQMU	OUT	SMI SDRAM Upper DQM 'L': Upper select
81	VDD_3V3	-	3.3 V Power supply
82	SMI_CLKIN	IN	External SDRAM clock input
83	VSS	-	Ground
84	SMI_D0	I/O	SMI SDRAM Data
85	SMI_D1		
86	SMI_D2		
87	SMI_D3		
88	SMI_D4		
89	SMI_D5		
90	SMI_D6		
91	SMI_D7		
92	SMI_D8		
93	SMI_D9		
94	VDD_1V8	-	1.8 V Power supply
95	SMI_CLKOUT	OUT	SDRAM clock output
96	VSS	-	Ground
97	SMI_D10	I/O	SMI SDRAM Data
98	SMI_D11		
99	SMI_D12		
100	SMI_D13		
101	SMI_D14		
102	SMI_D15		
103	TRACK_CROSS	OUT	reserved
104	DSD_XPCM	OUT	reserved
105	DAC_XRST	OUT	reserved
106	ADC_PCMCLK	OUT	reserved
107	VDD_3V3	-	3.3 V Power supply
108	VSS	-	Ground
109	XTRST	IN	Diagnostic Control Unit interface
110	TMS	IN	Diagnostic Control Unit interface
111	TDO	OUT	Diagnostic Control Unit interface
112	TDI	IN	Diagnostic Control Unit interface
113	TCK	IN	Diagnostic Control Unit interface
114	ROTDRV	OUT	Only 5 disc changer. PWM output for tray rotation.
115	BOOT_FROM_ROM	IN	Boot select 'L' : Boot from DCU. 'H' : Boot form ROM.
116	LOAD_DRV	OUT	Only 5 disc changer. PWM output for tray Open/Close drive.
117	CPU_OE	OUT	OE signal for 16M bits FLASH memory for firmware. 'L': enable

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
118	CPU_SDCK	OUT	CLOCK for 64M bits SDRAM for debugging firmware
119	VDD_1V8	-	1.8 V Power supply
120	PIXCLK	IN	Master 27MHz system clock input
121	VSS	-	Ground
122	VDD_PLL	-	Clock PLL circuit 1.8 V Power supply
123	VSS_PLL	-	Clock PLL circuit Ground
124	XRESET	IN	Power ON system RESET signal. 'L': reset
125	SACD_IRQ	IN	reserved
126	FP_XRDY	IN	Front Panel interface. Hand-shake input.
127	FE_INT	IN	Interrupt input signal from Front-End L6316
128	F_XWE, SD_DQML	OUT	Flash memory write enable. Debug SDRAM/SRAM Lower DQM. 'L': enable, Lower select.
129	SD_DQMU	OUT	Debug SDRAM/SRAM Upper DQM 'L':upper select
130	SD_RXW	OUT	Debug SDRAM Read/Write 'L':write, 'H':read
131	CPU_WAIT	IN	CPU wait 'H' input
132	CE_FLASH	OUT	Flash memory Chip Enable 'L'
133	CPU_CE2	OUT	reserved
134	CPU_CE1	OUT	reserved
135	SD_XRAS	OUT	Debug SDRAM RAS 'L' Debug SRAM chip enable 'L'
136	VDD_3V3	-	3.3 V Power supply
137	VSS	-	Ground
138	CPU_RAS1	OUT	reserved
139	SD_XCAS	OUT	Debug SDRAM CAS 'L'
140	SD_XCS	OUT	Debug SDRAM Chip Select 'L'
141	CPU_D0	I/O	FLASH, Debug SDRAM/SRAM data
142	CPU_D1		
143	CPU_D2		
144	CPU_D3		
145	CPU_D4		
146	CPU_D5		
147	CPU_D6		
148	CPU_D7		
149	VDD_1V8	-	1.8 V Power supply
150	VSS	-	Ground
151	CPU_D8	I/O	FLASH, Debug SDRAM/SRAM data
152	CPU_D9		
153	CPU_D10		
154	CPU_D11		
155	CPU_D12		
156	CPU_D13		
157	CPU_D14		
158	CPU_D15		
159	VDD_3V3	-	3.3 V Power supply
160	VSS	-	Ground

IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
161	CPU_A1	OUT	FLASH, Debug SDRAM/SRAM Address
162	CPU_A2		
163	CPU_A3		
164	CPU_A4		
165	CPU_A5		
166	CPU_A6		
167	CPU_A7		
168	CPU_A8		
169	CPU_A9		
170	CPU_A10		
171	VDD_1V8	-	1.8 V Power supply
172	VSS	-	Ground
173	CPU_A11	OUT	FLASH, Debug SDRAM/SRAM Address
174	CPU_A12		
175	CPU_A13		
176	CPU_A14		
177	CPU_A15		
178	CPU_A16		
179	CPU_A17		
180	CPU_A18		
181	CPU_A19		
182	CPU_A20		
183	CPU_A21		
184	VDD_3V3		3.3 V Power supply
185	VSS		Ground
186	XEXPE	OUT	reserved
187	FE_ERROR	IN	Front-End L6316 stream interface. ECC Error flag
188	VSEL1	OUT	EURO(SCART) connector (BLINKING) output signal 'L' : RGB output disable 'H' : RGB output enable
189	VSEL2	OUT	EURO(SCART) connector V/Y, R/C signal. 'L' : VRGB output = YCGB 'H' : VRGB output = VRGB
190	FE_RST	OUT	Front-End L6316. Hardware reset output. 'L' : reset
191	SACD_XRST	OUT	reserved
192	XMMUTE	OUT	reserved
193	B_SYNC	OUT	reserved
194	SDA	I/O	Front-End L6316 command interface I2C bus serial data line.
195	SCL	OUT	Front-End L6316 command interface I2C bus serial clock line.
196	B_WCLK	OUT	reserved
197	TXD	OUT	UART(RS-232C) data output
198	VDD_1V8	-	1.8 V Power supply
199	VSS	-	Ground
200	RXD	IN	UART(RS-232C) data input

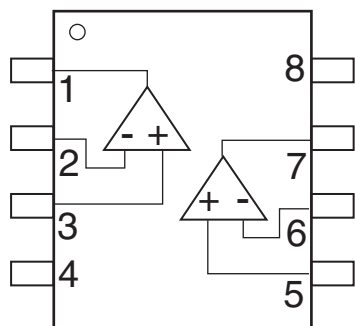
IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

IC601 : STM5589CVA BACK END IC

No.	Pin Name	Dir.	Pin Function
201	XAMUTE	OUT	Output signal for analog audio output line muting. 'L' : muting
202	TRIGIN	IN	Diagnostic Control Unit interface
203	TRIGOUT	OUT	Diagnostic Control Unit interface
204	DAC_XCS0	OUT	Chip enable for audio DAC serial control. 'L' : enable
205	DAC_XCS1	OUT	reserved
206	FP_ACK	OUT	Front Panel / DAC interface. Hand-shake (acknowledge) output 'H'.
207	FP_SCK	OUT	Front Panel / DAC interface. Serial transfer clock output.
208	FP_SI	IN	Front Panel interface. Serial transfer data input.

IC BLOCK DIAGRAM/ TERMINAL DESCRIPTION

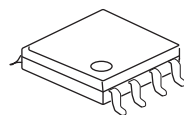
Q401,Q402,Q403,Q404 NJM4580M-D (2-ch Ope. amp.)



(Top view)

Pin description

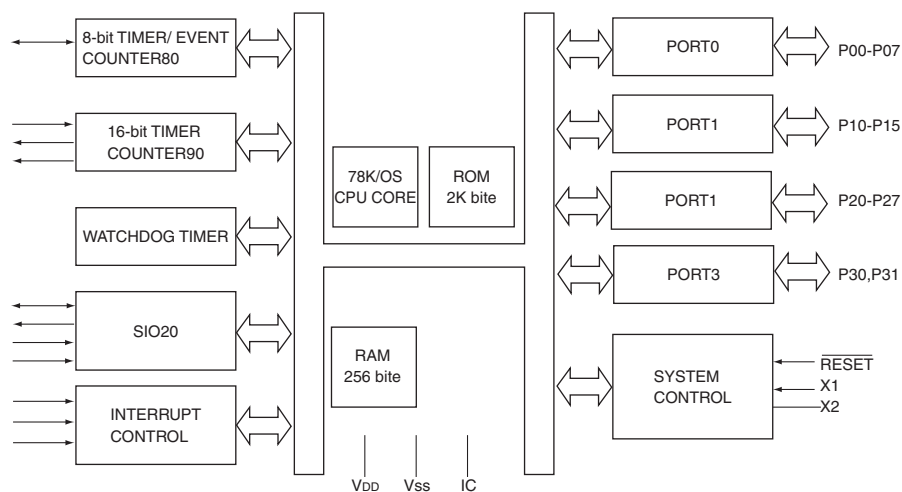
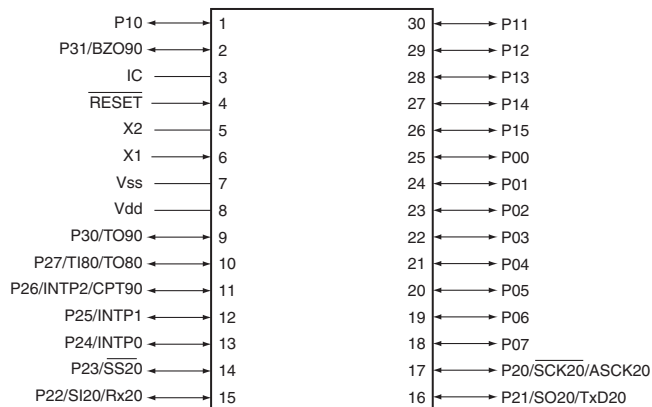
1. A OUTPUT
2. A -INPUT
3. A +INPUT
4. V-
5. B +INPUT
6. B -INPUT
7. B OUTPUT
8. V+



IC BLOCK DIAGRAM/TERMINAL DESCRIPTION

Q802 : MPD789071MC 8-Bit Microprocessor

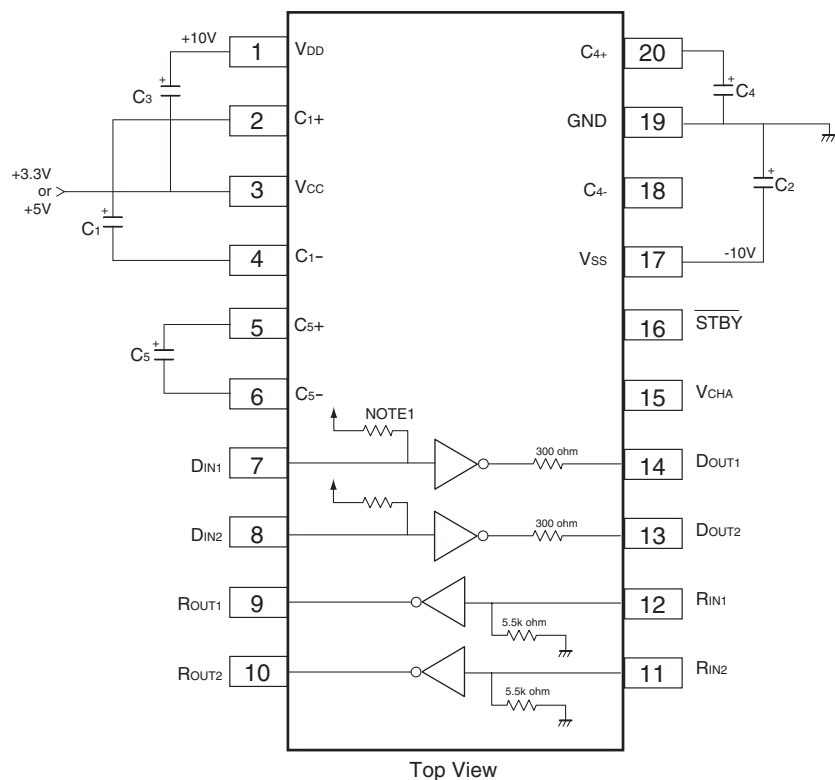
PIN LAYOUT



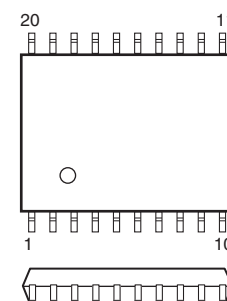
IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

Q803: MPD4721GS RS-232C LINE DRIVER/ RECEIVER

BLOCK DIAGRAM



20 Pin Plastic Shrink SOP



Truth table

Driver

STBY	DIN	DOUT	Remarks
L	x	Z	Standby mode
H	L	H	Space level output
H	H	L	Mark level output

Receiver

STBY	RIN	ROUT	Remarks
L	x	H	Standby mode
H	L	H	Mark level input
H	H	L	Space level input

3V — 5V switching

VCHA	Operating mode
L	5 V mode (double step-up)
H	3 V mode (3 times step-up)

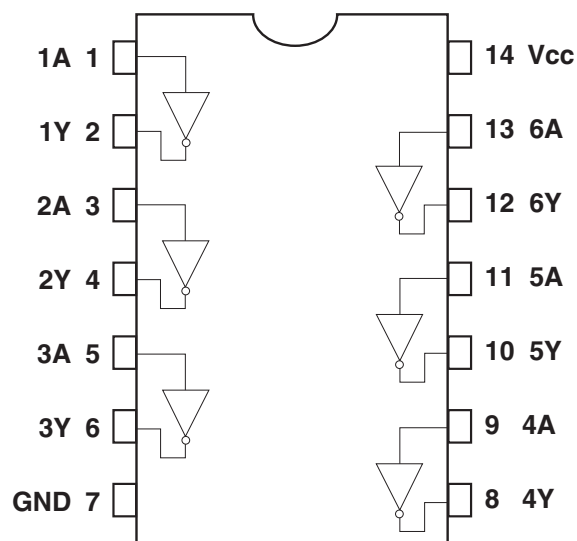
H : high-level, L : low-level, Z : high-impedance, x : H or L



IC BLOCK DIAGRAM / TERMINAL DESCRIPTION

Q352 : TC74VHCU04FT Hex inverter

Pin layout



Truth table

A	Y
L	H
H	L

Q701 : MPD780232GC



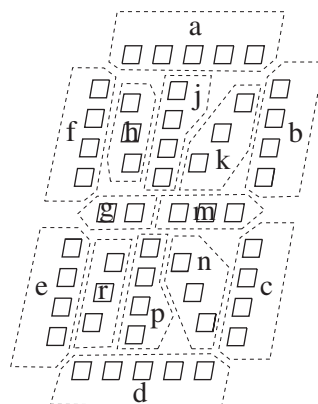
MICROPROCESSOR TERMINAL DESCRIPTION

No.	PIN NAME	SIGNAL	I/O	DESCRIPTION
1	VDD1	VDD1		Power supply port
2	VSS1	VSS1		Ground port
3	X1	X1		Connect to clock oscillator of main micro processor
4	X2	X2		Connect to clock oscillator of main micro processor
5	IC	IC	I	Connect to VSS1
6	~RESET	~RESET	I	System reset input port
7	P27/~SCK1	XSCK	I	Clock output port for writing in FLASH ROM
8	P26/SI1	SI	I	Data input port for writing in FLASH ROM
9	P25/SO1	SO	O	Data output port for writing in FLASH ROM
10	P24/BUSY	XRDY	O	XRDY output port
11	P23	PON	O	POWER ON/OFF control output port to a system processor. "H": Power ON
12	P22	SYSRESET	O	System reset control output port
13	P21/SO3	DISPLAY_MOI	I	Exhibition mode. Active "L":Exhibition mode
14	P20/~SCK3	ACK	I	ACK input port.
15	P00/INTP0	~IRIN	I	IR remote control input port. Active "L": IR mode
16	P01/INTP1	~REMO	I	Remote control signal input port. Active "L": Remote control mode
17	P02/TI	VCOFF	O	Video circuit off control output port.
18	AVSS	AVSS		Ground pin of A/D converter.
19	ANI3	VDET	I	VDET input port
20	ANI2	ANI2	I	Analog input port for A/D converter
21	ANI1	ANI1	I	Analog input port for A/D converter
22	ANI0	ANI0	I	Analog input port for A/D converter
23	VSS0	VSS0		Ground pin
24	AVDD	AVDD		Reference analog power supply of A/D converter. VDD1
25	VDD0	VDD0		Power supply pin
26	P64/FIP52	SYSIN	I	Input port for system buss
27	P63/FIP51	~SYSOUT	O	Output port for system buss
28	P62/FIP50	R232REQ	I	Open pin.
29	P61/FIP49	R232BUSY	I	Open pin.
30	P60/FIP48	R232SI	I	Open pin.
31	P57/FIP47	R232SCK	O	Open pin.
32	P56/FIP46	R232SO	O	Open pin.
33	P55/FIP45	INIT2	I	Initialized setting port of analog input 2
34	P54/FIP44	INIT1	I	Initialized setting port of analog input 1
35	P53/FIP43	INIT0	I	Initialized setting port of analog input 0
36	P52/FIP42	MSO_2	I	Model select input port 2
37	P51/FIP41	MSO_1	I	Model select input port 1
38	P50/FIP40	MSO_0	I	Model select input port 0
39	P47/FIP39	FLON_OFF	O	FL filament control output port
40	P46/FIP38	R232RES	O	Open pin.
41	P45/FIP37	STBYLED	O	STANDBY LED control output port
42	P44/FIP36	NC	O	Open pin.
43	P43/FIP35	NC	O	Open pin.
44	P42/FIP34	NC	O	Open pin.
45	P41/FIP33	NC	O	Open pin.
46	P40/FIP32	NC	O	Open pin.
47	P37/FIP31	NC	O	Open pin.
48	P36/FIP30	NC	O	Open pin.
49	P35/FIP29	NC	O	Open pin.
50	P34/FIP28	P15	O	Segment (P15) control output port for FL tube
51	P33/FIP27	P14	O	Segment (P14) control output port for FL tube
52	P32/FIP26	P13	O	Segment (P13) control output port for FL tube
53	P31/FIP25	P12	O	Segment (P12) control output port for FL tube
54	P30/FIP24	P11	O	Segment (P11) control output port for FL tube
55	FIP23	P10	O	Segment (P10) control output port for FL tube
56	FIP22	P9	O	Segment (P9) control output port for FL tube
57	FIP21	P8	O	Segment (P8) control output port for FL tube
58	FIP20	P7	O	Segment (P7) control output port for FL tube
59	VDD2	VDD2		Power supply port of FIP
60	VLOAD	VLOAD		Connect to a pull down resistor
61	FIP19	P6	O	Segment (P6) control output port for FL tube
62	FIP18	P5	O	Segment (P5) control output port for FL tube
63	FIP17	P4	O	Segment (P4) control output port for FL tube
64	FIP16	P3	O	Segment (P3) control output port for FL tube
65	FIP15	P2	O	Segment (P2) control output port for FL tube
66	FIP14	P1	O	Segment (P1) control output port for FL tube
67	FIP13	NOT USE	O	Open pin.
68	FIP12	13G	O	Grid (13G) control output port for FL tube
69	FIP11	12G	O	Grid (12G) control output port for FL tube
70	FIP10	11G	O	Grid (11G) control output port for FL tube
71	FIP9	10G	O	Grid (10G) control output port for FL tube
72	FIP8	9G	O	Grid (9G) control output port for FL tube
73	FIP7	8G	O	Grid (8G) control output port for FL tube
74	FIP6	7G	O	Grid (7G) control output port for FL tube
75	FIP5	6G	O	Grid (6G) control output port for FL tube
76	FIP4	5G	O	Grid (5G) control output port for FL tube
77	FIP3	4G	O	Grid (4G) control output port for FL tube
78	FIP2	3G	O	Grid (3G) control output port for FL tube
79	FIP1	2G	O	Grid (2G) control output port for FL tube
80	FIP0	1G	O	Grid (1G) control output port for FL tube

FL TUBE VIEW

Q702:14-BT-68GNK

11G				12G						
DVD -AUDIO SACD V CD VIDEO OFF				[GUI] PBC RANDOM MEMORY ↻ A-B						
[D] D PROLOGIC II TITLE GROUP				TRACK CHP PROGRAM TOTAL REMAIN [icon]						
PROGRESSIVE [DTS] [MP3] MP3 ▶										
13G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G



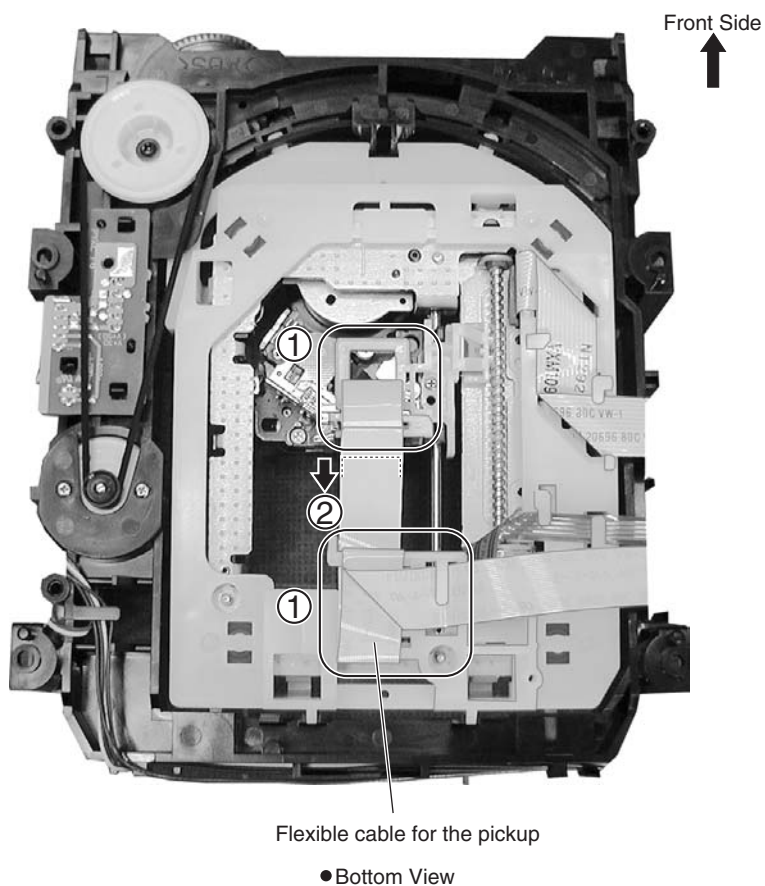
(1G-10G)

	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G
P1	a	a	a	a	a	a	a	a	a	a	GROUP	REMAIN	-
P2	h	h	h	h	h	h	h	h	h	h	TITLE	TOTAL	-
P3	l	j	j	j	j	j	j	j	j	j	PRO LOGIC		-
P4	k	k	k	k	k	k	k	k	k	k	D	TRACK	-
P5	b	b	b	b	b	b	b	b	b	b		CHP	-
P6	f	f	f	f	f	f	f	f	f	f	CD	GUI	-
P7	m	m	m	m	m	m	m	m	m	m	V	-B	-
P8	g	g	g	g	g	g	g	g	g	g	SACD	A	-
P9	c	c	c	c	c	c	c	c	c	c	-AUDIO	PROGRAM	-
P10	e	e	e	e	e	e	e	e	e	e	DVD		
P11	r	r	e	r	r	r	r	r	r	r	II	MEMORY	
P12	p	p	p	p	p	p	p	p	p	p	VIDEO OFF	RANDOM	PROGRESSIVE
P13	n	n	n	n	n	n	n	n	n	n	-	PBC	MP3
P14	d	d	d	d	d	d	d	d	d	d	-	-	
P15	-	-	col	-	col	Hp	-	-	Hp	-	-	-	

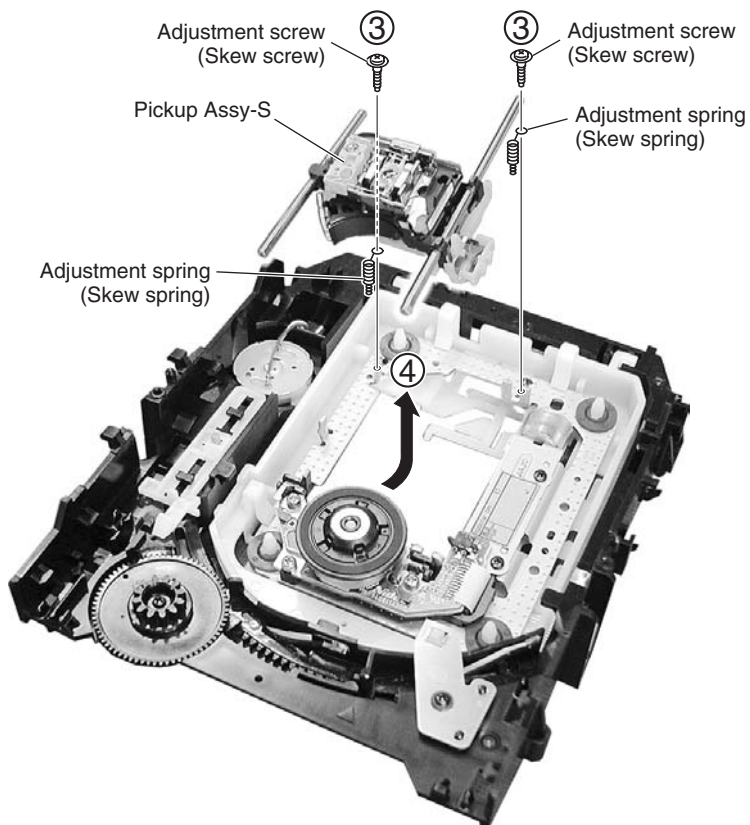
DISASSEMBLY DVD MECHANISM-3

Pickup Assy-S

- ① Dislodge the flexible cable for the pickup from its packaged placement.
- ② Remove the flexible cable for the pickup.



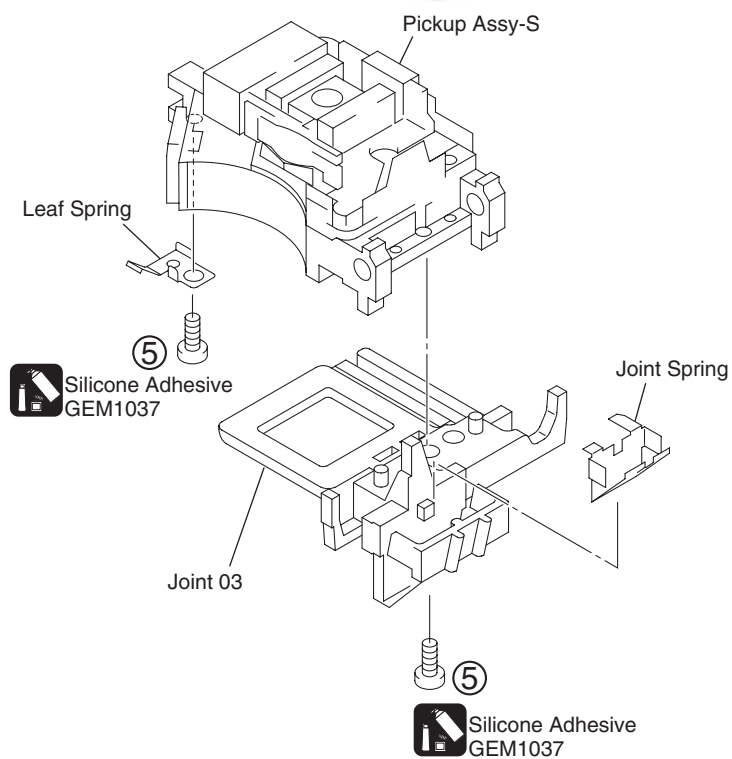
- ③ Remove the two adjustment screws and two adjustment springs.
- ④ Remove the Pickup Assy-S.



DISASSEMBLY DVD MECHANISM-4

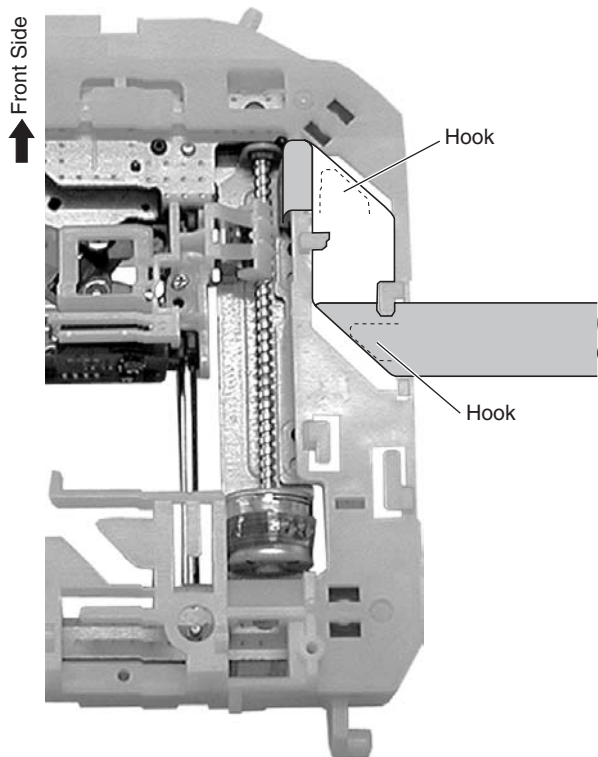
- ⑤ Remove the two screws.

Note: The screws are secured with epoxy.
Make sure to apply epoxy after reattaching the screws.



Arrangement of the flexible cable for the spindle motor

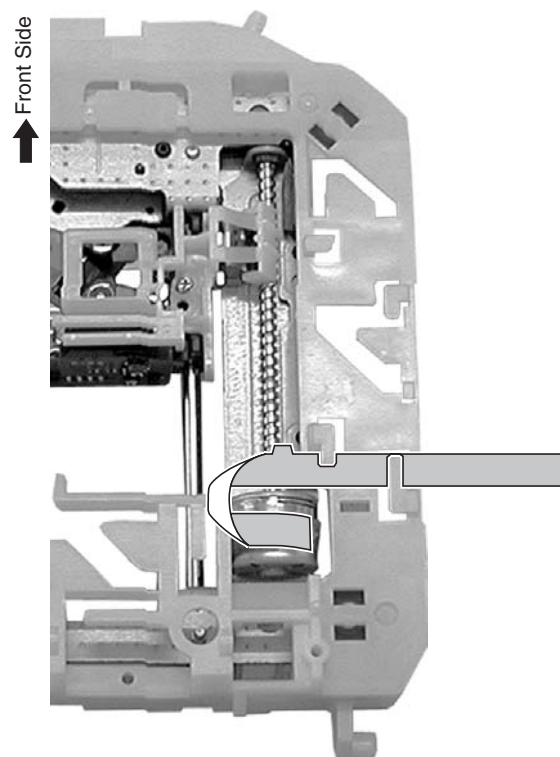
■ : Conductive surface



● Bottom View

Arrangement of the flexible cable for the stepping motor

■ : Conductive surface



● Bottom View

DISASSEMBLY DVD MECHANISM-5

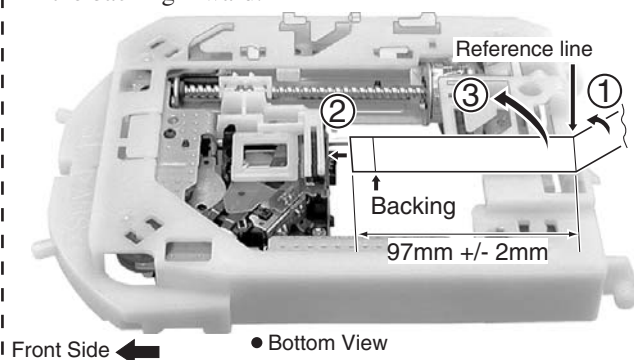
Arrangement of the flexible cable for the pickup

 : Conductive surface

Note:

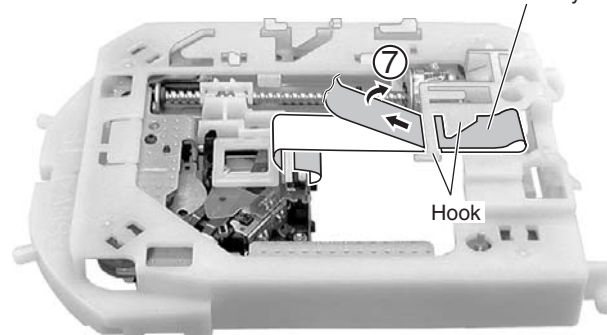
Be sure to move the Pickup Assy-S to the innermost perimeter.

- ① Fold the flexible cable inward at the position of the reference line.
- ② Attach the flexible cable of the pickup to the connector.
- ③ Fold the flexible cable of the pickup with the backing inward.



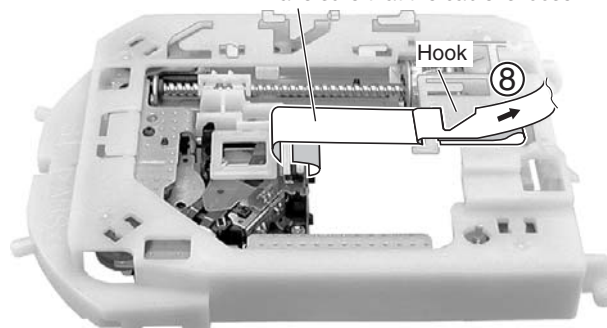
- ⑦ Pass the flexible cable below the hook, and fold it back.

Make sure that the cable does not have any slack

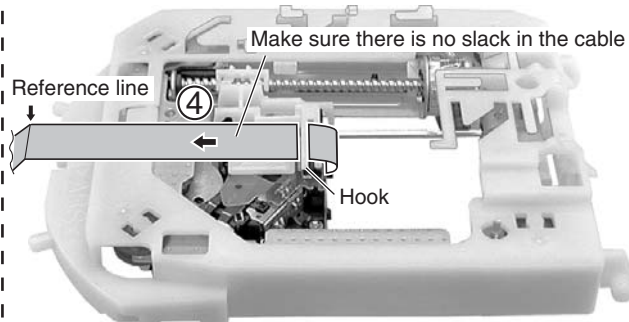


- ⑧ Fold the flexible cable back at the hook.

Make sure that the cable is loose

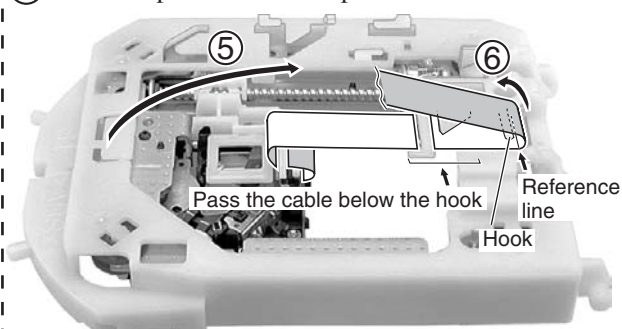


- ④ Pass the flexible cable through the hook not allowing any slack.

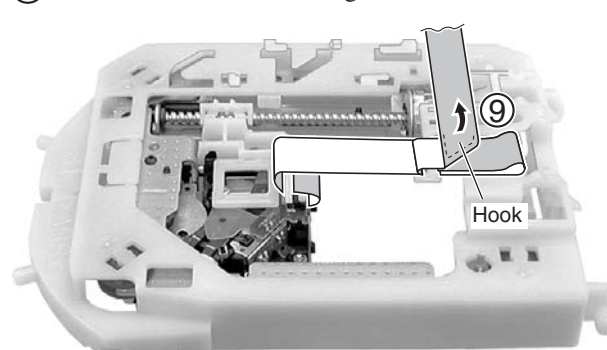


- ⑤ Fold the flexible cable as indicated in the photo.

- ⑥ Hook the part folded in Step 1 to the hook.



- ⑨ Fold the flexible cable along the hook.



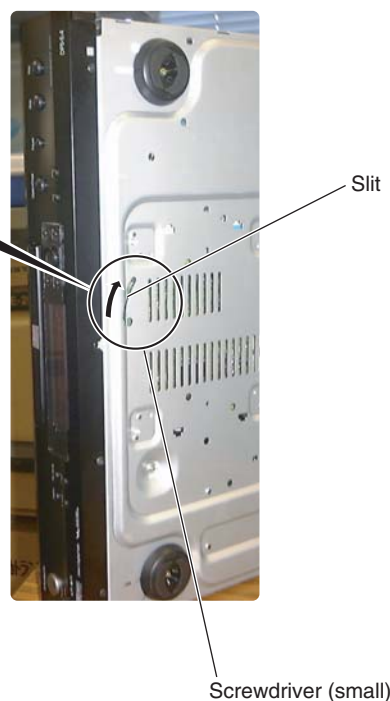
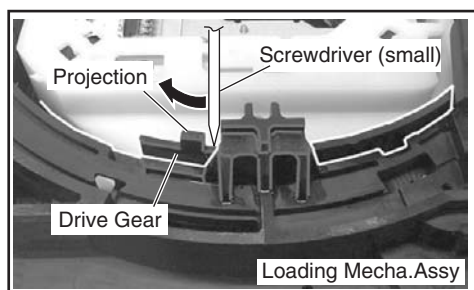
DISASSEMBLY DVD MECHANISM-1

Bonnet

1. Remove the Bonnet by removing the six screws.

How to open the Tray when the power cannot be on

Insert a screwdriver (small) into the slit located at the bottom of the unit, and slide the projection of the Drive Gear in the Loading Mecha. Assy in the direction of the arrow, as



Remove the mechanism assembly

1. Remove three screws (Black 3TT+8B(BC)) from bottom side. Remove the front panel.
2. Remove two screws on front bracket. And release the FFC (P71).
3. Remove two screws on the power switch PC board and wire holder.
4. Remove four screw (3SMS8W.SW+14B(BC)) from DVD mechanism.
5. Soldering the short lands. It is required because of static electricity protection.
6. Remove sex FFCs and one connector assy.
7. Remove the DVD mechanism assembly.

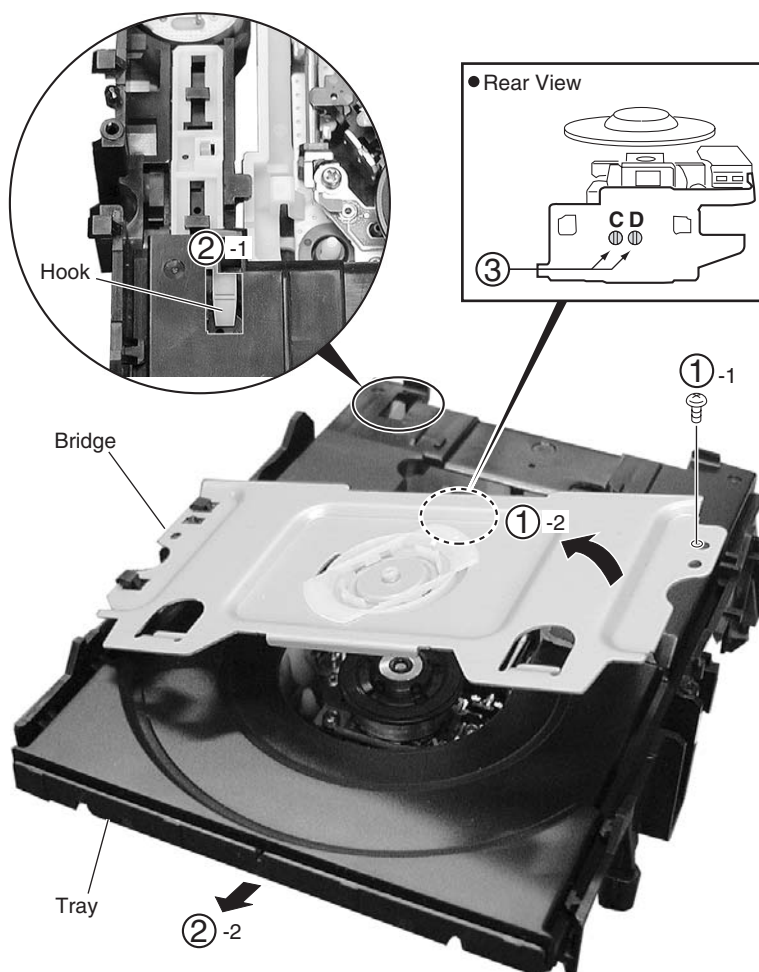
Removing the Traverse Mecha. Assy-S and Pickup Assy-S

1 Loading Mecha. Assy

- ① Remove the bridge by removing the one screw.
- ② Pull out the tray, then remove it by pressing the hook.
- ③ Short-circuit two points of C and D by soldering.

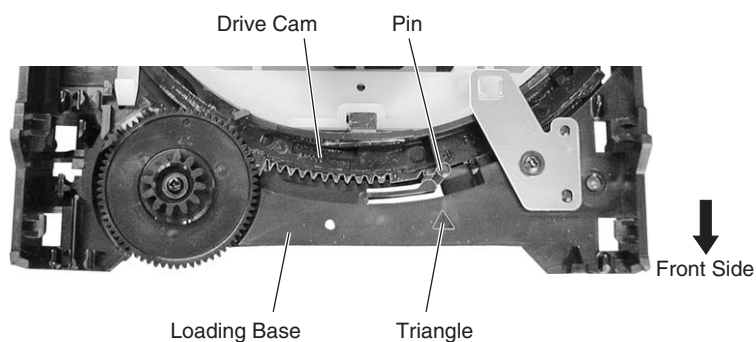
Note: After replacement, connect the flexible cable, then remove the soldered joint (open).

- ④ Remove the four connectors from the Loading Mecha. Assy.
- ⑤ Remove the four screws that secure the Loading Mecha. Assy to the unit.



Note : when reinserting the Tray

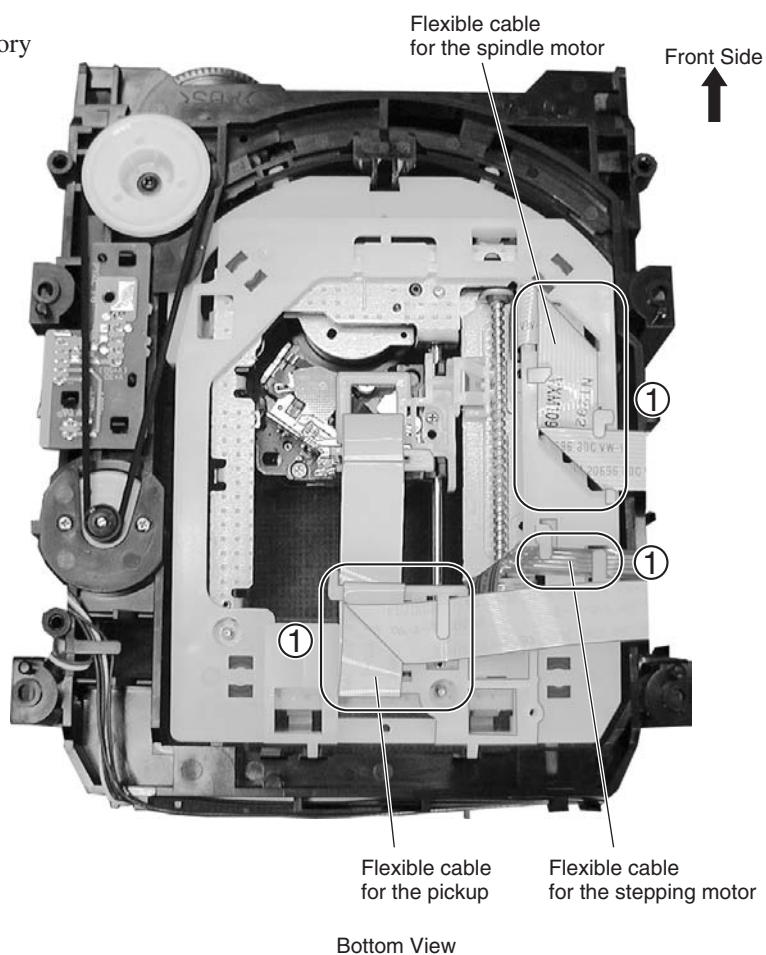
When reinserting the Tray, first align the triangle printed on the Loading Base and the pin of the Drive Cam, then insert the Tray.



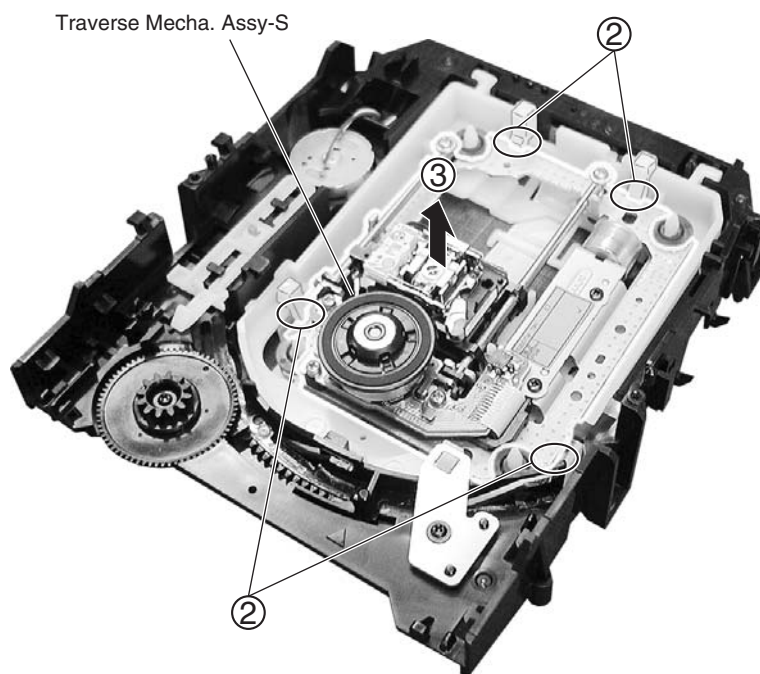
DISASSEMBLY DVD MECHANISM-2

Traverse Mecha. Assy-S

- ① Dislodge the flexible cables from their factory placement.



- ② Remove the four hooks.
- ③ Remove the Traverse Mecha. Assy-S.



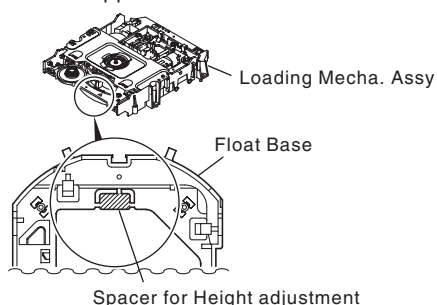
ADJUSTMENT OF MECHANISM-4

5. MECHANISM ADJUSTMENT

1 Tangential and Radial Height Coarse Adjustment

START

Remove the Loading Mecha. Assy.
Remove a Spacer for height adjustment
attached to the back side (shaded area)
of the Loading Mecha. Assy (Float Base)
with nippers.

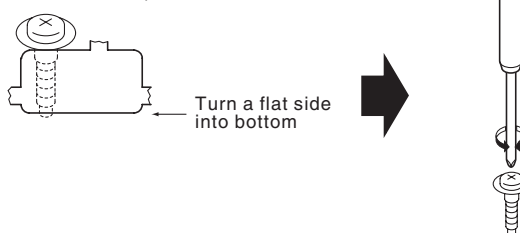


Cautions:

Because there is not a Spacer for height adjustment in adjustment after the second time, will keep it at need.
(This parts is Traverse mechanism exclusive use of a model for 2003 years)



Put a spacer between a Tangential (or Radial) adjustment screw and Mechanism Base and turn each screw to adjust the height. (Refer to "6.1 ADJUSTMENT ITEMS AND LOCATION".)

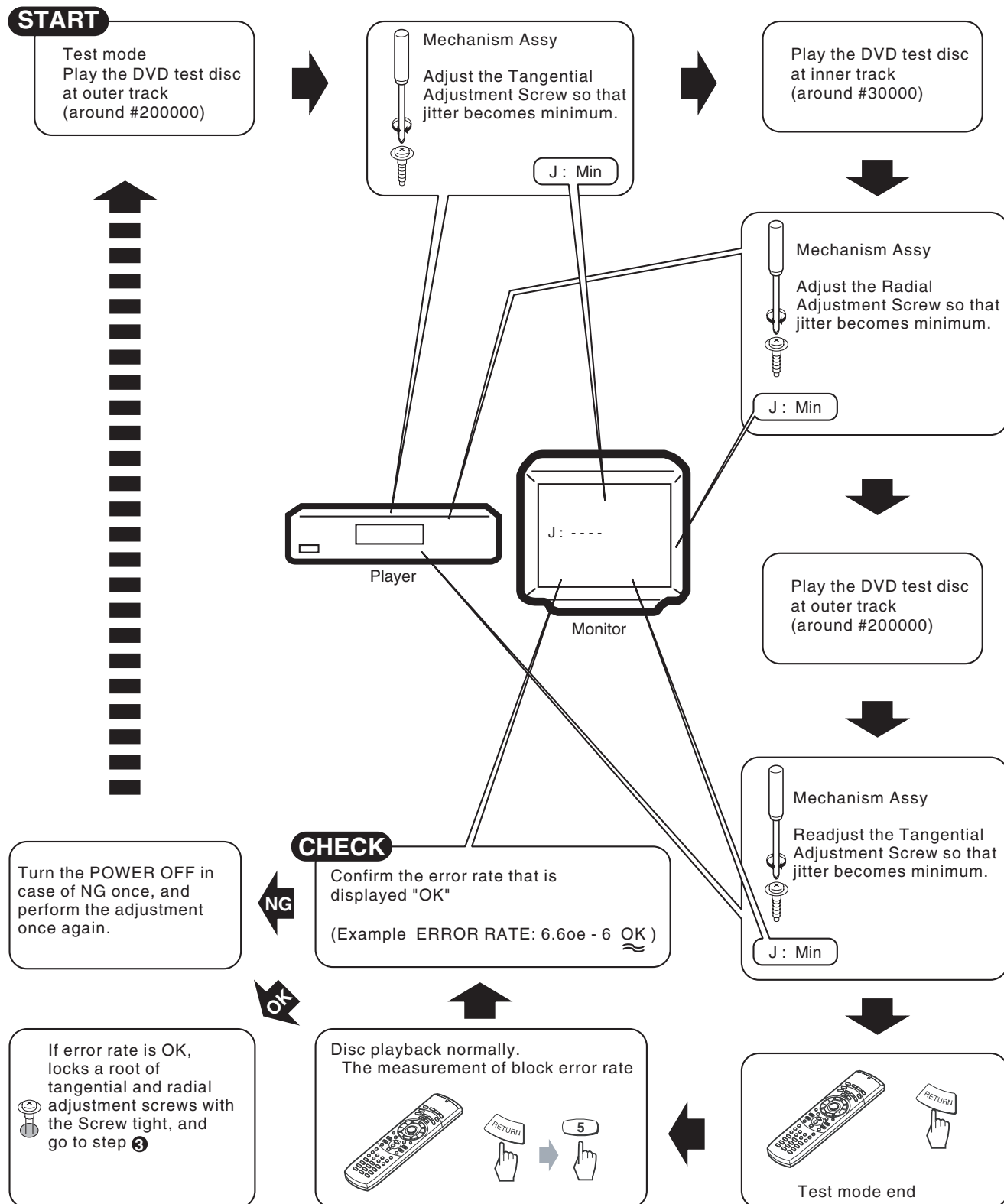


ADJUSTMENT OF MECHANISM-5

2 DVD Jitter Adjustment

Playback method of inner and outer address for the purpose is referred to "TEST MODE".
Jitter indication of the monitor is referred to "DISPLAY SPECIFICATION OF THE TEST MODE".

Use disc: GGV1025



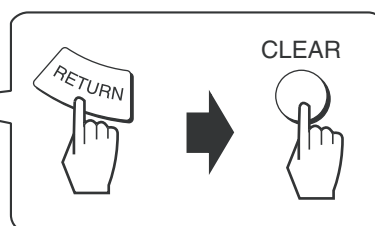
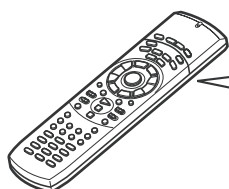
ADJUSTMENT OF MECHANISM-6

③ Initialize the Focus Sweep Setting

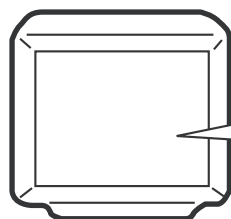
Purpose: To set the sweep which was correct with the individual Traverse mechanism.

Push the power switch

STANDBY/ON



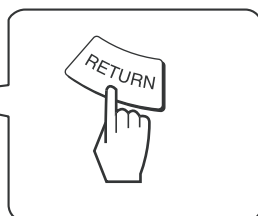
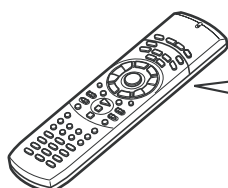
Note: Be sure to perform this step when replaced the Pickup or Traverse mechanism.



Memory Clear!!!

PL Region : 2
ROM Version : 1.118

Clear the confirm-mode



ADJUSTMENT OF MECHANISM-7

Self-diagnosis functions of pickup

Setting the test mode.

Press "RETURN" and "SETUP/TV/VCR" key of remote controller RC-484M.

1. Set a TEST MODE by the RC-484M.
2. When diagnosis 650nm (laser diode),



3. When diagnosis 780nm (laser diode),



Lighting the laser diode is about 9 seconds.

After performing step 2., lighting the laser diode again.

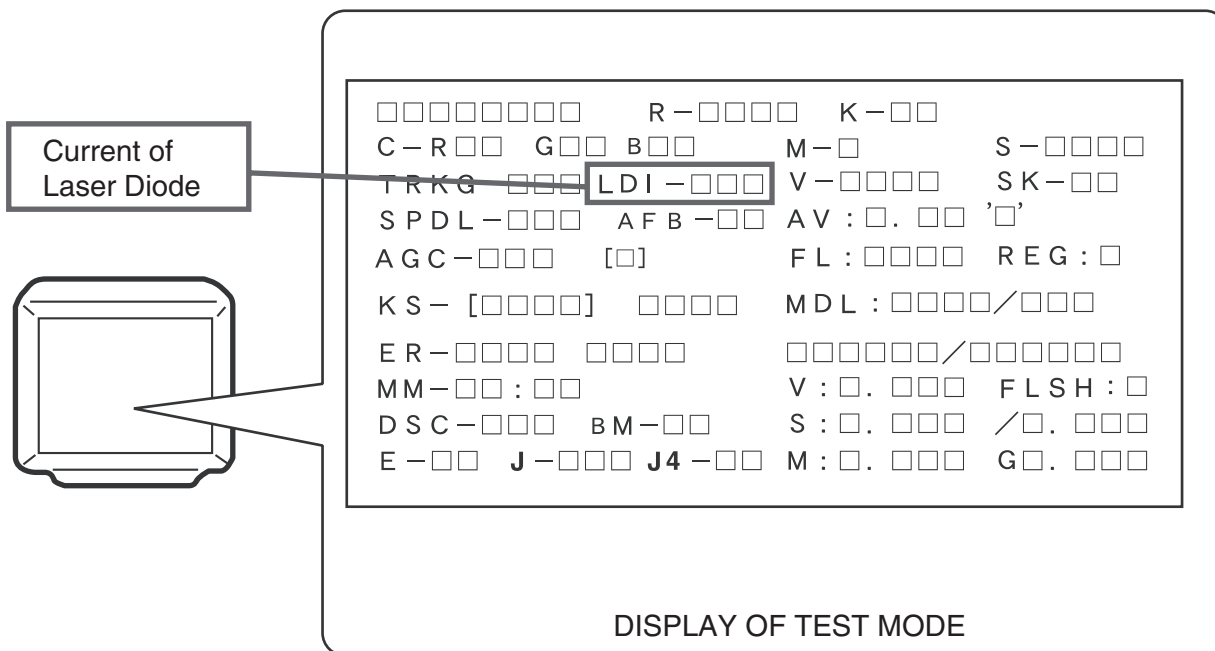
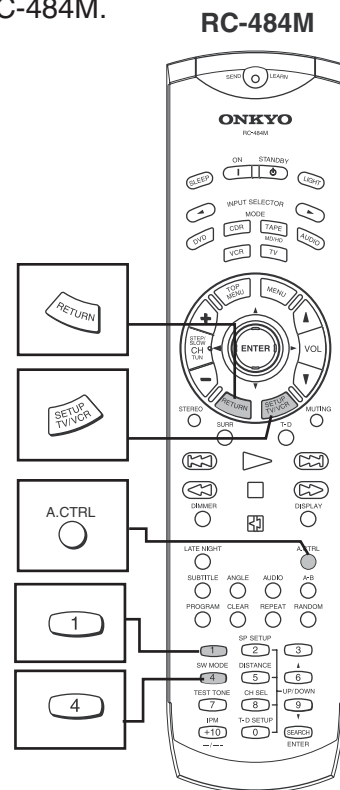
Press "A.CTRL" key once

650nm ————— "SETUP/TV/VCR" → "1"

780nm ————— "SETUP/TV/VCR" → "4"

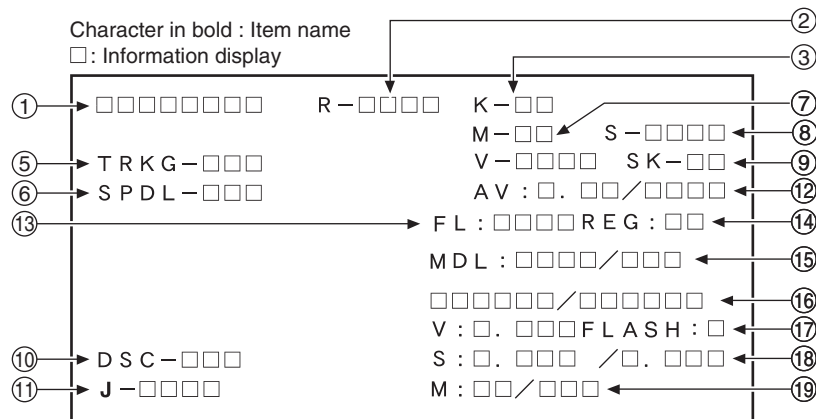
Confirm LDI (Current of Laser Diode)

Display value is 100 more , replace the pickup.



ADJUSTMENT OF MECHANISM-8

DISPLAY SPECIFICATION OF THE TEST MODE



① Address indication

The address being traced is displayed in number.
 (as for the DVD, indication of decimal number is possible.)
 DVD : ID indication (hexadecimal number, 8 digits)

CD : A-TIME (min. sec.) [0 0 0 0*****]

② Code indication of remote control unit [R - ****]

In case of double code, display a 2nd code.

③ Main unit keycode indication [K - **]

⑤ Tracking status [TRKG - ****]

Tracking on : [ON]

Tracking off : [OFF]

⑥ Spindle status [SPDL - ****]

[OFF], [ACC/BRK], [CAV], [CLV]

⑦ Mechanism (loading) position value [M - *]

Unknown : [01] or [41]

Open state : [04]

Close state : [08]

During opening : [12]

During closing : [22]

⑧ Slider position [S - ****]

In Side Switch ON : [01]

In Side Switch OFF : [00]

⑨ Output video system [V - ****]

NTSC system : [NTSC]

PAL system : [PAL]

Automatic setting : [AUTO]

Scart terminal output [SK - **]

(Display only the WY model which can do the output setting of scart terminal.)

VIDEO : [00]

S-VIDEO : [01]

RGB : [02]

⑩ Disc sensing [DSC - ***]

The type of discs loaded is displayed.
 [DVD], [CD], [VCD], []

⑪ Jitter value [J - ****]

⑫ Version of the AV-1 chip / version of firmware [AV: ** / *****)

⑬ Version of the FL controller [FL: ****]

⑭ Region setting of the player [REG:*)

Setting value : [1] to [6]

⑮ Destination setting of the FL controller [MDL: **** / ****]

Four characters in the front represent the type of model.

Three characters in the back represent the destination code.

J: /J, K: /KU, /KC, /KU/KC, R: /RL/RD, RAM: /RAM,

LB: /LB, WY: /WY

⑯ Part number of the flash ROM and system controller [**** / *****)

⑰ Version of the flash ROM [V:*.***]

Flash ROM size [FLASH = **]

⑱ Revision of the system controller [S:*.*** / *.***]

version . revision / build number of the ST core

⑲ Revision of the DVD mechanism controller [M: ** / **]

Kinds of version / firmware of the FE.

RAM or ROM

ADJUSTMENT OF MECHANISM-1

1. ADJUSTMENT ITEMS AND LOCATION

Adjustment Items

[Mechanism Part]

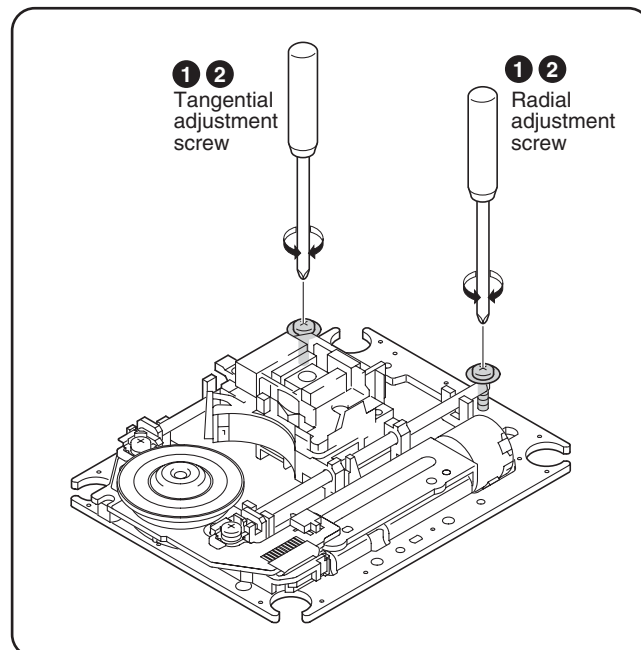
- ❶ Tangential and Radial Height Coarse Adjustment
- ❷ DVD Jitter Adjustment
- ❸ Initialize the Focus Sweep Setting

[Electrical Part]

Electrical adjustments are not required.

Adjustment Points (Mechanism Part)

Cautions: After adjustment, adjustment screw locks with the Screw tight.



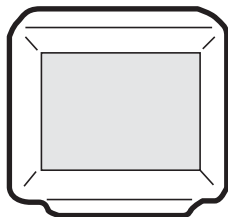
2. JIGS AND MEASURING INSTRUMENTS



DVD test disc
(GGV1025)

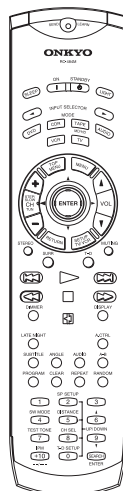


⊕ Screwdriver (medium)

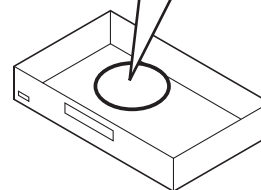


TV monitor

Screw lock



Remote controller
RC-484M
Part number: 24140484

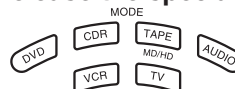


Setting the special mode

DVD + 1

Press "DVD" key and press "1" at same time.

Release the special mode



Press the either key of the MODE keys.

ADJUSTMENT OF MECHANISM-2

3. NECESSARY ADJUSTMENT POINTS

When

Adjustment Points

Exchange Parts of Mechanism Assy

Exchange the Pickup

Mechanical point

① → ② → ③

After adjustment, screw locks with the Screw tight.

Electric point

Exchange the Traverse Mechanism

Mechanical point

③

Electric point

Exchange the Spindle Motor

Mechanical point

② → ③

After adjustment, screw locks with the Screw tight.

Electric point

Exchange PCB Assy

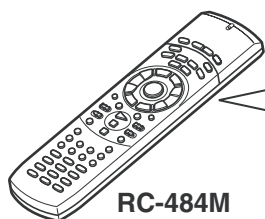
Exchange PC Board
LOAB and DVDM ASSYS

Mechanical point

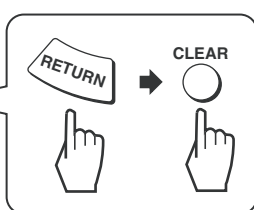
Electric point

Purpose: To set the sweep which was correct with the individual Traverse mechanism.

Be sure to perform the following step finally when replaced Pickup, Traverse Mechanism and Spindle Motor.



RC-484M

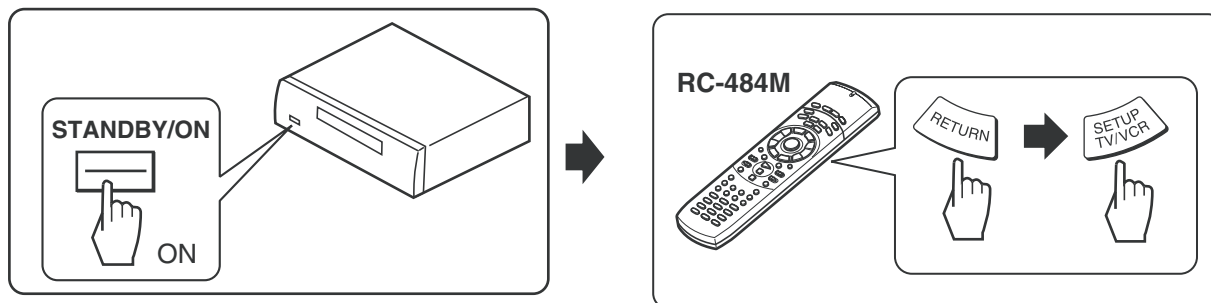


ADJUSTMENT OF MECHANISM-3

4. TEST MODE

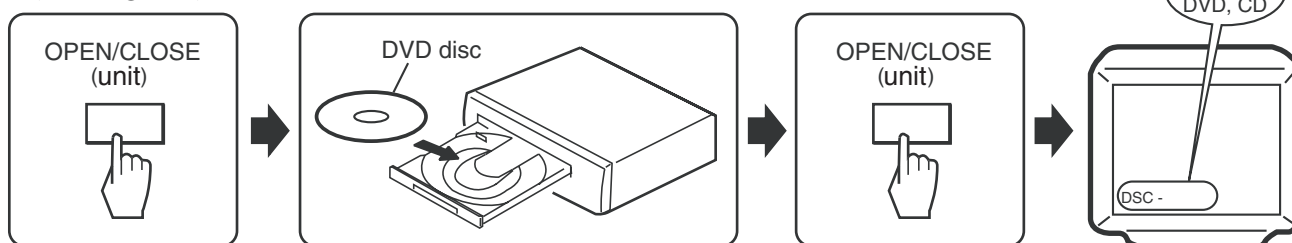
Setting the special mode of the RC-484M

TEST MODE: ON



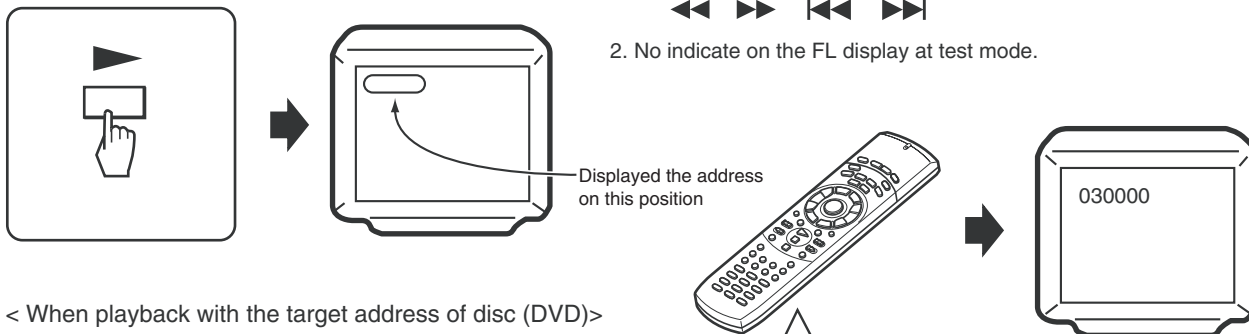
TEST MODE: DISC SET

<TRAY OPEN>

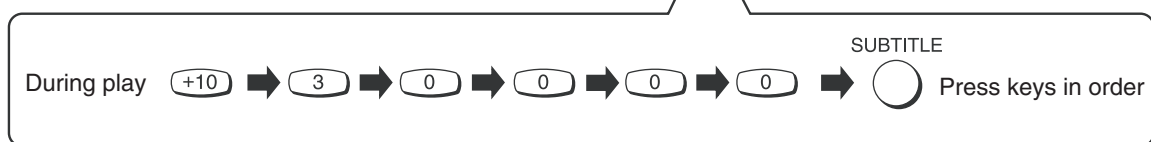


TEST MODE: PLAY

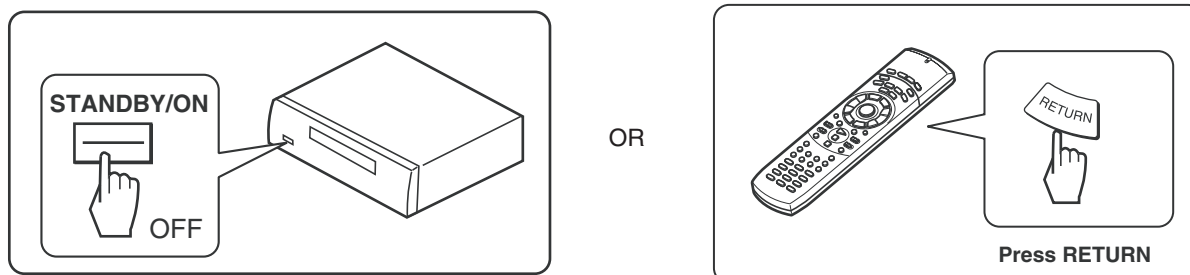
<PLAY>



< When playback with the target address of disc (DVD)>
 For example, when playback with # 30000



TEST MODE: OFF



UPGRADE FIRMWARE-1

Confirm the Regional code and Firmware version.

1. Connect the TV monitor to the DPS-5.4.
2. Turn ON the power switch and standby switch ON. (No Disc)
3. Press the "SETUP" key on the front panel.

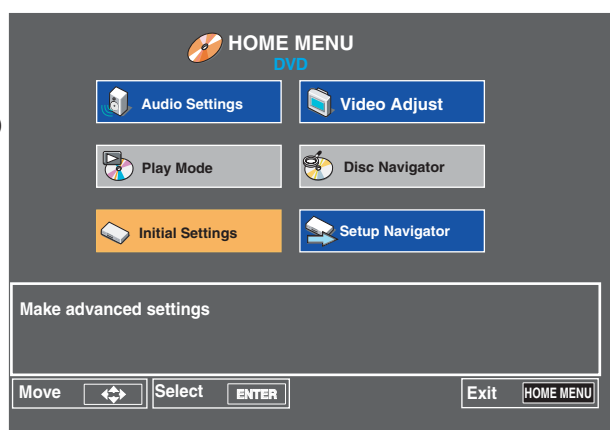
Appear a HOME MENU. (Photo-1)

4. Select "Initial Settings" menu and press "ENTER".
5. Select "Options" menu, and press the "DISPLAY" button.

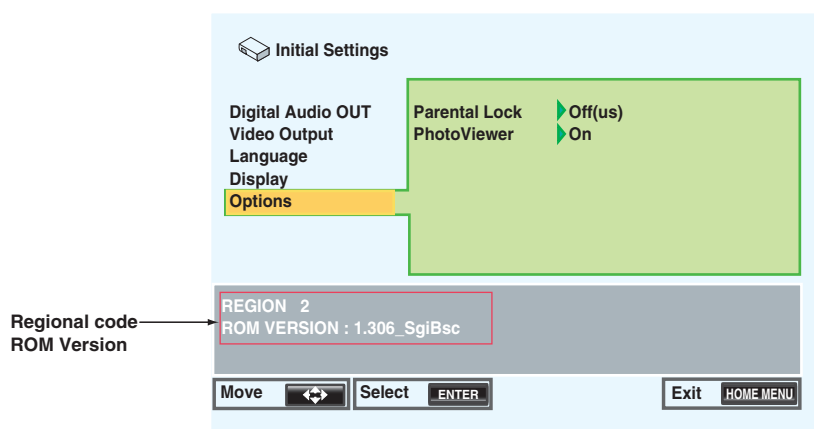
6. Appear regional code and firmware ROM number.

Confirm the regional cord and firmware version.

When close the menu, press "RETURN" button of the unit. (Photo-2)



(Photo-1)



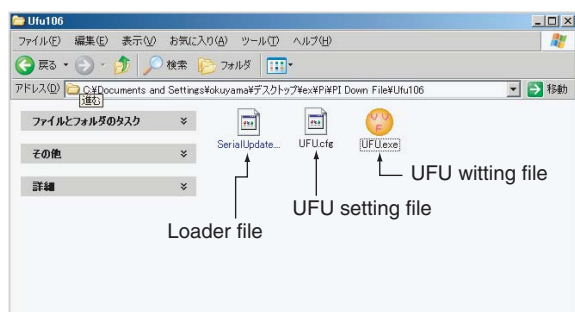
(Photo-2)

UPGRADE FIRMWARE-2

Using for Window tool

1 Writing the firmware as below.

1. Prepare three data on a hard disk of the personal computer.

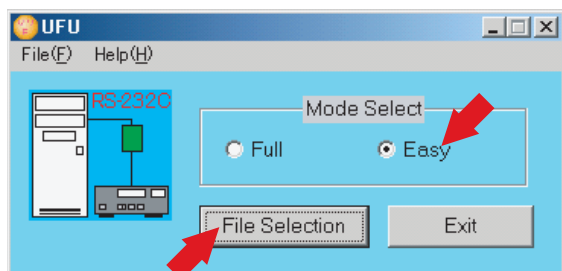


2. Start the UFU.exe file.

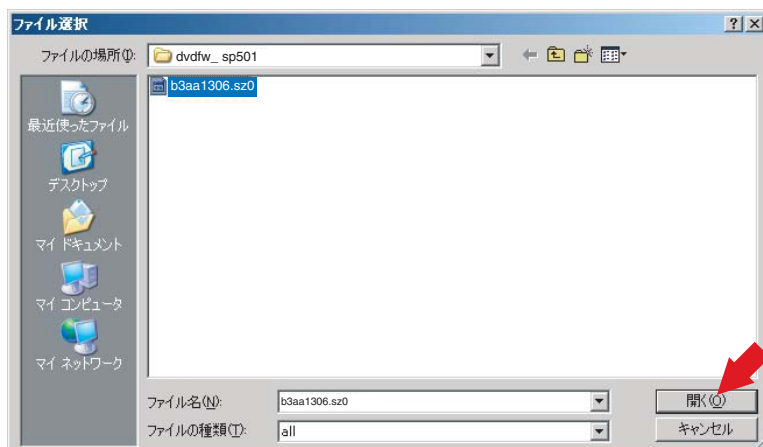
Double click the UFU.exe.

3. Select "Easy" mode.

4. Select "File Selection" mode.



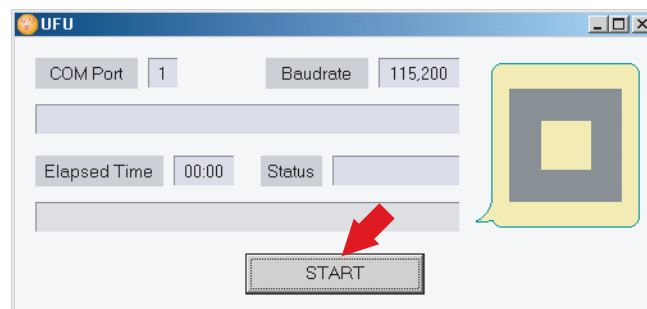
5. Select a program file and open the file.



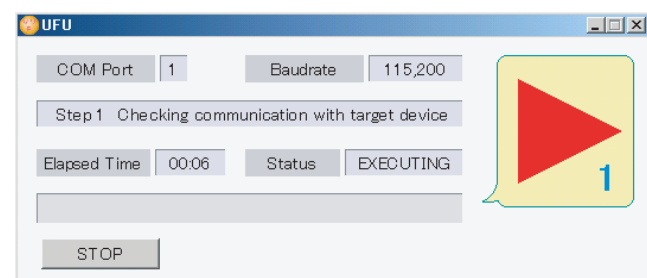
6. Connect the JIG (0J13), FFC and connection cable (RS-232C straight type).

7. Turn the power switch and standby "ON" of the DV-SP501.
No disc condition.

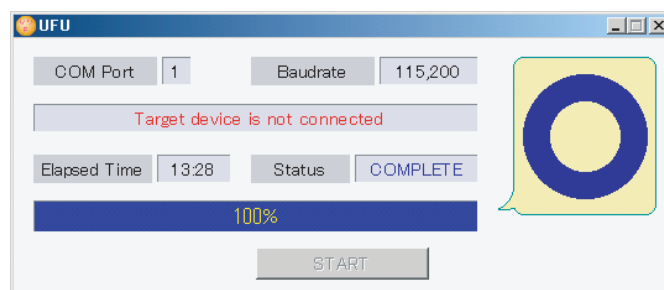
8. Press the start key.



9. Wait for about 10 minutes.



10. Complete the upgrade firmware.



Next step.

Please continue work ID number and ID data set up.

ID NUMBER AND DATA SETTING

Caution: It is necessary to enter individual ID number and ID data to each player when you repair it.

Note: When previous ID number and ID data, such as a factory present ID number and ID data, are maintained, the unit enters ID Number Confirmation Mode when the above keys are pressed. However, if only an ID number is maintained, the unit enters ID Data Input Mode.

Preparations: ① Remote controller RC-484M
② TV monitor
③ ID Data DVD Disc. (Part No. 0R118)

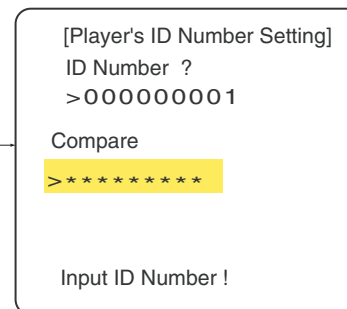
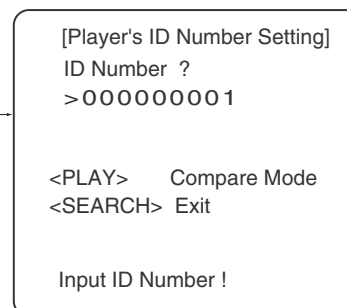
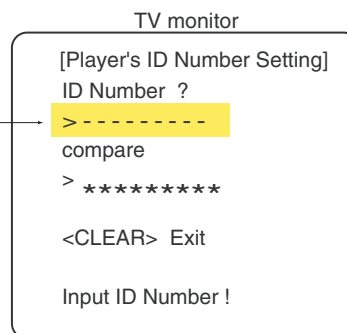
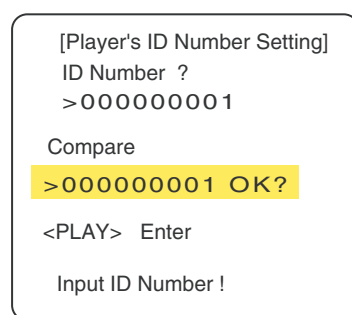
A: ID number Input Mode

[Remote controller RC-484M]

1. Press "DVD" and "1" at the same time.
2. Press "RETURN" key and "STEREO" key.
3. Enter a 9-digit ID number and ID number is also displayed on the FL display.
4. After entering all 9 digits, when you press the "PLAY" key the unit enters Compare mode.

Note: When you press the PLAY key before inputting a 9- digit ID number, the unit returns to Step 2.

5. After entering all 9 digits, when you press the "SEARCH" key, the unit unconditionally sets the input number as the ID number. Then the unit automatically enters Player's Data input Mode.
6. This display appears when the "PLAY" key is pressed in step 4. Enter a 9- digit number to compare.
7. After entering all 9 digits, you press the "PLAY" key.



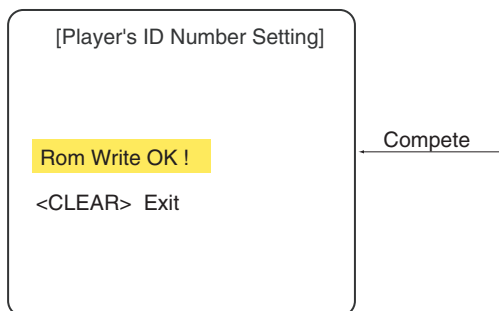
ID NUMBER AND DATA SETTING

B : ID DATA Input Mode

[Remote controller RC-484M]

1. Press "DVD" and "1" at the same time.
2. Press "RETURN" key and "STEREO" key.
3. Enter a 9-digit ID data.

4. After entering all 9 digits, when you press the "PLAY" key, the unit enters Compare mode.
5. Entering 9- digits again, and press the "PLAY" key.
6. Insert the data disc on the tray of the unit.
7. Writing the data, automatically.
About 2 minutes.



8. Press open the tray of the unit, and take out a disc.
9. Push the power switch off (Mechanical switch) .
Push the power switch, standby switch on and close the tray.

TV monitor

[Player's ID Number Setting]
ID Number ?
> 0 0 1 5 1 * * * *
compare

> * * * * * * * * *

<STEREO> ID Data Setting Mode
Input ID Number !

[Player's ID Number Setting]
ID Number ?
> 0 0 1 5 1 * * * *
compare

> * * * * * * * * * OK?

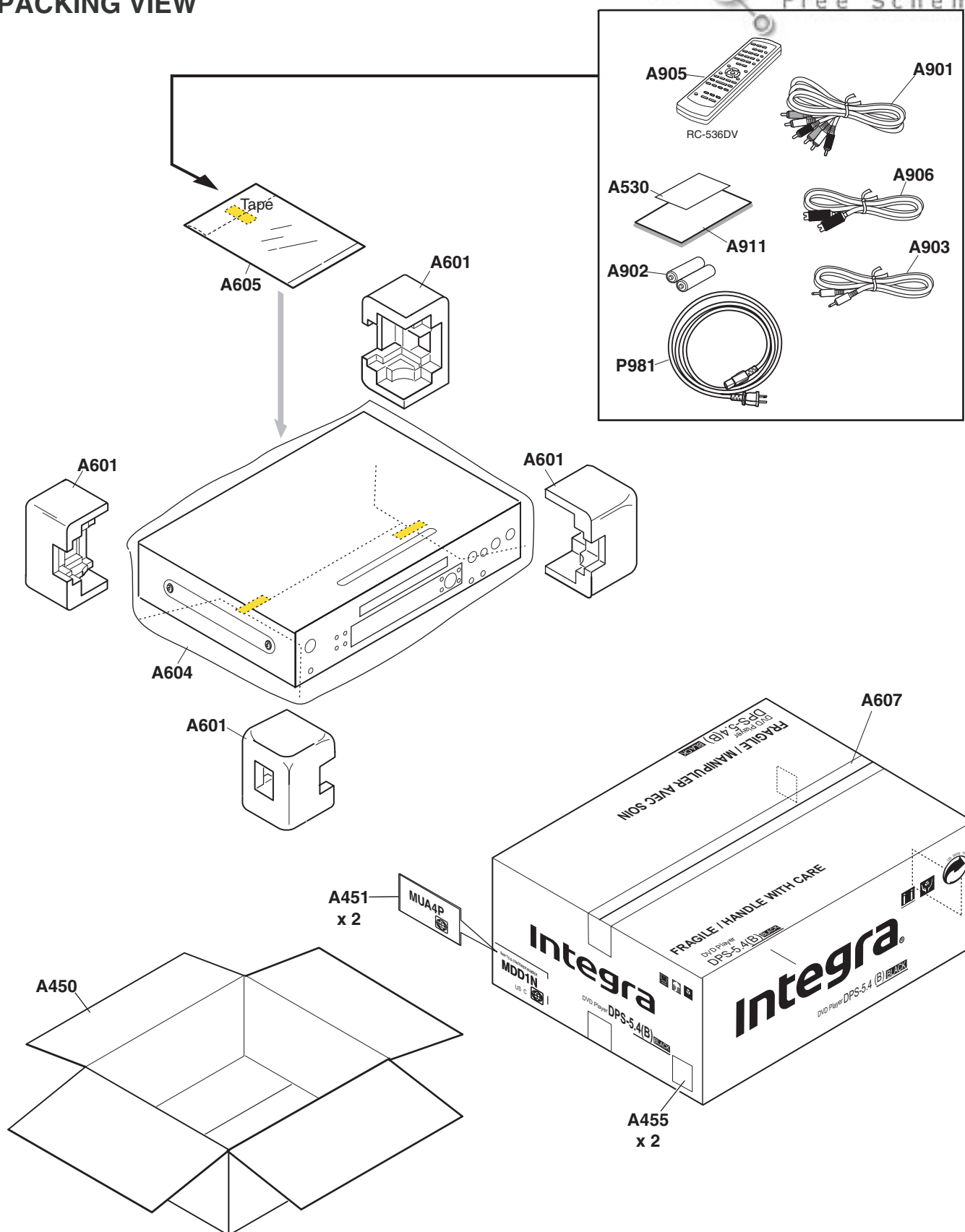
<PLAY> Enter
<STOP> Memory Clear
<STEREO> ID Data Setting Mode
Input ID Number !

[Player's ID Number Setting]

<CLEAR> Exit

Insert The Data Disc !

PACKING VIEW



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