Service Manual

ORDER NO.
RRV2340

STEREO DVD CASSETTE DECK RECEIVER

XR-VS500D
XR-VS300D

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Region No.	The voltage can be converted by the following method.
	XR-VS500D	XR-VS300D			
DBXJ	◯	◯	AC110-127V/220-230V/240V	3	With the voltage selector
DDXJ/RA	◯	◯	AC110-127V/220-230V/240V	1	With the voltage selector
DDXJ/RB	◯	◯	AC110-127V/220-230V/240V	2	With the voltage selector
DDXJ/RD	◯	–	AC110-127V/220-230V/240V	4	With the voltage selector
DLXJ/NC	◯	◯	AC110-127V/220-230V/240V	3	With the voltage selector

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Remarks
XR-A9800D/KUCXJ	RRV2329	

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1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

LABEL CHECK (For DLXJ/NC Type)

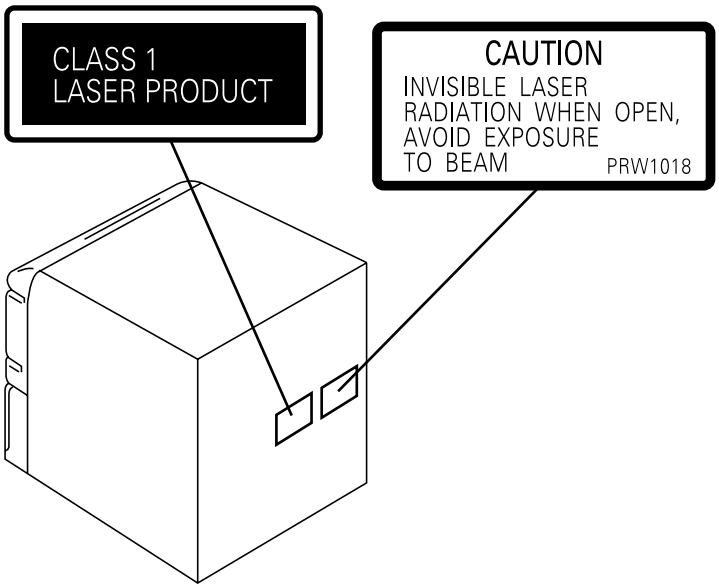
WARNING !

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

LASER DIODE CHARACTERISTICS

FOR DVD :	MAXIMUM OUTPUT POWER : 5 mW
	WAVELENGTH : 655 nm
FOR CD :	MAXIMUM OUTPUT POWER : 5mW
	WAVELENGTH : 785 nm

Printed on the Rear Panel



Additional Laser Caution

1. Inside detection switch (S201 on the SMEB assy) and loading-status detection switch (S9503 on the MOTOR assy) are detected by the microprocessor (IC11 in the DVDM assy).
   • To permit the laser diode to oscillate, it is required to set the inside detection switch for the inside position (S201 : ON) and to set the loading-status detection switch for the clamp position (the center terminal of S9503 is shorted to +5V). The 655 nm laser diode for DVD oscillation will continue if pin 19 of IC1 is shorted to +5V (fault condition) in the DVDM assy.
   The 785 nm laser diode for CD oscillates if pin 20 of IC1 is shorted to +5V in the DVDM assy.
   In the test mode ∗ , the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (S5931 ON in the DISPLAY assy), with the above requirements satisfied.

2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

∗ : Refer to page 82 on the service manual RRV2329.

2. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on product are used for disassembly.*
● *Reference Nos. indicate the pages and Nos. in the service manual for the base model.*
● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 → 56 x 10^1 → 561 ····· RD1/4PU 5 6 1 J
47k → 47 x 10^3 → 473 ····· RD1/4PU 4 7 3 J
0.5 → R50 ····· RN2H R 5 0 K
1 → 1R0 ····· RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k → 562 x 10^1 → 5621 ····· RN1/4PC 5 6 2 1 F

■ CONTRAST TABLE for XR-VS500D

XR-VS500D/DBXJ, DDXJ/RA, DDXJ/RB, DDXJ/RD, DLXJ/NC and XR-A9800D/KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.						Remarks
			XR-A9800D /KUCXJ	XR-VS500D /DBXJ	XR-VS500D /DDXJ/RA	XR-VS500D /DDXJ/RB	XR-VS500D /DDXJ/RD	XR-VS500D /DLXJ/NC	
		PCB ASSEMBLIES							
		MAIN ASSY	XWM3174	XWM3172	XWM3172	XWM3172	XWM3172	XWM3172	
P5- 1		└ AF ASSY	XWZ3330	XWZ3322	XWZ3322	XWZ3322	XWZ3322	XWZ3322	
		COMPLEX ASSY	XWM3178	XWM3176	XWM3176	XWM3176	XWM3176	XWM3176	
P5- 4		├ PRIMARY ASSY	XWZ3332	XWZ3326	XWZ3326	XWZ3326	XWZ3326	XWZ3326	
P7- 1		└ DISPLAY ASSY	XWZ3331	XWZ3324	XWZ3324	XWZ3324	XWZ3324	XWZ3324	
		PACKING SECTION							
P3- 1	⚠	Power Cord	ADG7022	ADG1158	ADG1158	ADG1158	ADG1158	ADG1154	
P3- 5		Remote Control Unit	XZN3109	XZN3110	XZN3110	XZN3110	XZN3110	XZN3110	
P3-11		Packing Case	XHD3144	XHD3138	XHD3138	XHD3138	XHD3138	XHD3139	
P3-12	NSP	Warranty Card	ARY7045	Not used	Not used	Not used	Not used	Not used	
P3-14		Operating Instructions (English/French)	XRE3036	Not used	Not used	Not used	Not used	Not used	
		Operating Instructions (English/Chinese)	Not used	XRE3035	XRE3035	XRE3035	XRE3035	XRE3035	
		Operating Instructions (Spanish/Arabian)	Not used	Not used	XRC3022	XRC3022	XRC3022	Not used	
		Region Label	Not used	Not used	VRW1708	VRW1701	VRW1705	Not used	For Packing Case
		Caution Sheet	Not used	Not used	XRH3001	Not used	XRH3001	Not used	Accessories
		EXTERIOR SECTION							
P5-12	⚠	Power Transformer (T1) (AC120V)	XTS3042	Not used	Not used	Not used	Not used	Not used	
P5-12	⚠	Power Transformer (T1) (AC110-127V/220-230V/240V)	Not used	XTS3038	XTS3038	XTS3038	XTS3038	XTS3038	
P5-13	⚠	Fuse (FU1 : 6.3A)	REK1085	Not used	Not used	Not used	Not used	Not used	
P5-13	⚠	Fuse (FU1 : T5A)	Not used	AEK1061	AEK1061	AEK1061	AEK1061	AEK1061	
P5-25		Rear Panel	XNC3065	XNC3066	XNC3066	XNC3066	XNC3066	XNC3067	
P5-41	NSP	Fuse Card	AAX2374	Not used	Not used	Not used	Not used	Not used	
P5-42	NSP	Getter	XAX3175	XAX3176	XAX3176	XAX3176	XAX3176	XAX3176	
P5-43		65 Label	ARW7050	Not used	Not used	Not used	Not used	Not used	
	⚠	Fuse (FU2, FU3 : T3.15A)	Not used	AEK1059	AEK1059	AEK1059	AEK1059	AEK1059	*1
	NSP	Name Label	Not used	Not used	XAL3051	XAL3051	XAL3051	Not used	*2
	NSP	Region Label	Not used	Not used	XAX3183	XAX3184	XAX3185	Not used	For Rear Panel
		Caution Label	Not used	Not used	Not used	Not used	Not used	PRW1018	*3
	NSP	SISIR Label	Not used	Not used	Not used	Not used	Not used	XAX3181	For Rear Panel
		FRONT PANEL SECTION							
P7-26		Display Panel	XAK3135	XAK3136	XAK3136	XAK3136	XAK3136	XAK3136	
P7-33		FL Cover	XAK3164	XAK3163	XAK3163	XAK3163	XAK3163	XAK3163	
P7-42		Sub Panel S	XAK3203	XAK3202	XAK3202	XAK3202	XAK3202	XAK3202	
		Mic Knob	Not used	XAB3007	XAB3007	XAB3007	XAB3007	XAB3007	No. 1

Notes : For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES” and “3. SCHEMATIC DIAGRAM”.
The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.
*1 Refer to “3. SCHEMATIC DIAGRAM”. *2 Stick Name Label on the Rear Panel. *3 Refer to “LABEL CHECK”.

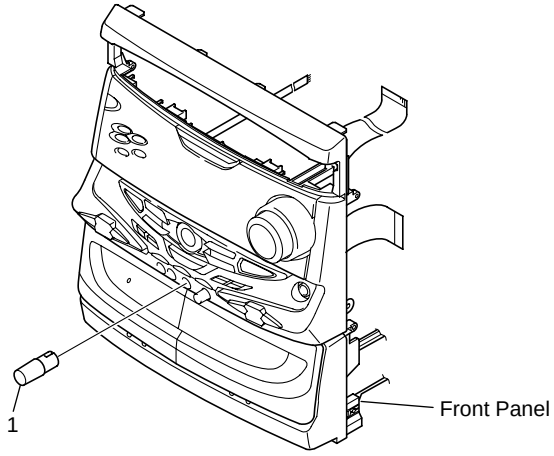
■ CONTRAST TABLE for XR-VS300D

XR-VS300D/DBXJ, DDXJ/RA, DDXJ/RB, DLXJ/NC and XR-A9800D/KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			XR-A9800D /KUCXJ	XR-VS300D /DBXJ	XR-VS300D /DDXJ/RA	XR-VS300D /DDXJ/RB	XR-VS300D /DLXJ/NC	
		PCB ASSEMBLIES						
		MAIN ASSY	XWM3174	XWM3171	XWM3171	XWM3171	XWM3171	
P5- 1		├─ AF ASSY	XWZ3330	XWZ3316	XWZ3316	XWZ3316	XWZ3316	
P5- 2		└─ SECONDARY ASSY	XWZ3323	XWZ3317	XWZ3317	XWZ3317	XWZ3317	
		COMPLEX ASSY	XWM3178	XWM3175	XWM3175	XWM3175	XWM3175	
P5- 3		├─ REAR AMP ASSY	XWZ3325	XWZ3319	XWZ3319	XWZ3319	XWZ3319	
P5- 4		├─ PRIMARY ASSY	XWZ3332	XWZ3320	XWZ3320	XWZ3320	XWZ3320	
P7- 1		└─ DISPLAY ASSY	XWZ3331	XWZ3318	XWZ3318	XWZ3318	XWZ3318	
		PACKING SECTION						
P3- 1	⚠	Power Cord	ADG7022	ADG1158	ADG1158	ADG1158	ADG1154	
P3- 5		Remote Control Unit	XZN3109	XZN3108	XZN3108	XZN3108	XZN3108	
P3-11		Packing Case	XHD3144	XHD3135	XHD3135	XHD3135	XHD3136	
P3-12	NSP	Warranty Card	ARY7045	Not used	Not used	Not used	Not used	
P3-14		Operating Instructions (English/French)	XRE3036	Not used	Not used	Not used	Not used	
		Operating Instructions (English/Chinese)	Not used	XRE3035	XRE3035	XRE3035	XRE3035	
		Operating Instructions (Spanish/Arabian)	Not used	Not used	XRC3022	XRC3022	Not used	
		Region Label	Not used	Not used	VRW1708	VRW1701	Not used	For Packing Case
		Caution Sheet	Not used	Not used	XRH3001	Not used	Not used	Accessories
		EXTERIOR SECTION						
P5-12	⚠	Power Transformer (T1) (AC120V)	XTS3042	Not used	Not used	Not used	Not used	
P5-12	⚠	Power Transformer (T1) (AC110-127V/220-230V/240V)	Not used	XTS3039	XTS3039	XTS3039	XTS3039	
P5-13	⚠	Fuse (FU1 : 6.3A)	REK1085	Not used	Not used	Not used	Not used	
P5-13	⚠	Fuse (FU1 : T5A)	Not used	AEK1061	AEK1061	AEK1061	AEK1061	
P5-15		Power Bracket	XNG3033	Not used	Not used	Not used	Not used	
P5-25		Rear Panel	XNC3065	XNC3063	XNC3063	XNC3063	XNC3064	
P5-26		SEC Holder	XMR3032	XMR3033	XMR3033	XMR3033	XMR3033	
P5-41	NSP	Fuse Card	AAX2374	Not used	Not used	Not used	Not used	
P5-42	NSP	Getter	XAX3175	XAX3174	XAX3174	XAX3174	XAX3174	
P5-43		65 Label	ARW7050	Not used	Not used	Not used	Not used	
P5-44	NSP	$M Mecha. DVD (5p)	XXA3019	Not used	Not used	Not used	Not used	
P5-44	NSP	$M Mecha. DVD (2p)	Not used	XXA3018	XXA3018	XXA3018	XXA3018	
	⚠	Fuse (FU2, FU3 : T3.15A)	Not used	AEK1059	AEK1059	AEK1059	AEK1059	*1
	NSP	Name Label	Not used	Not used	XAL3049	XAL3049	Not used	*2
	NSP	Region Label	Not used	Not used	XAX3183	XAX3184	Not used	For Rear Panel
		Caution Label	Not used	Not used	Not used	Not used	PRW1018	*3
	NSP	SISIR Label	Not used	Not used	Not used	Not used	XAX3181	For Rear Panel
		FRONT PANEL SECTION						
P7-26		Display Panel	XAK3135	XAK3134	XAK3134	XAK3134	XAK3134	
P7-33		FL Cover	XAK3164	XAK3163	XAK3163	XAK3163	XAK3163	
P7-42		Sub Panel S	XAK3203	XAK3202	XAK3202	XAK3202	XAK3202	
P7-50		DV Button L	XAD3057	XAD3058	XAD3058	XAD3058	XAD3058	
		Mic Knob	Not used	XAB3007	XAB3007	XAB3007	XAB3007	No. 1

Notes : For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES” and “3. SCHEMATIC DIAGRAM”.
The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.
*1 Refer to “3. SCHEMATIC DIAGRAM”.
*2 Stick Name Label on the Rear Panel.
*3 Refer to “LABEL CHECK”.

■ EXPLODED VIEWS



■ CONTRAST OF $M MECHA. DVD

XXA3018 and XXA3019 are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			XXA3019 (XR-A9800D)	XXA3018 (XR-VS300D)	
P5-10		CONNECT ASSY (6CH)	XWX3023	Not used	
P5-10		CONNECT ASSY (2CH)	Not used	XWX3019	
P5-14		25P Flexible Cable	XDD3046	Not used	
P5-14		15P Flexible Cable	Not used	XDD3049	
P5-18		30P Flexible Cable	XDD3044	Not used	
P5-18		16P Flexible Cable	Not used	XDD3043	
P5-21		7P Flexible Cable/30V	XDD3053	ADD7197	
P5-23		DVD Base	XNG3034	ANG7262	
P5-24		DVD Shield	XNK3006	ANK7066	
P5-55		21P Flexible Cable	XDD3052	Not used	
P5-55		7P Flexible Cable	Not used	XDD3045	

Notes : For PCB ASSEMBLIES, Refer to “PCB PARTS LIST”, “3. SCHEMATIC DIAGRAM” and “4. PCB CONNECTION DIAGRAM”.

■ CONTRAST OF PCB ASSEMBLIES

JF SECONDARY ASSY

XWZ3317 and XWZ3323 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3323	XWZ3317	
⚠	C33, C34 (4700µF/80V)	ACH7071	Not used	
⚠	C33, C34 (4700µF/71V)	Not used	XCH3001	

IF AF ASSY

XWZ3322, XWZ3316 and XWZ3330 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3330	XWZ3322	XWZ3316	
⚠	IC3301	STK407-070B	STK407-070B	STK407-090B	
⚠	IC3305, IC3306 (5A)	AEK7019	AEK7019	Not used	
⚠	IC3305, IC3306 (7A)	Not used	Not used	AEK7021	
	IC3835	Not used	M65847AFP	M65847AFP	
⚠	Q3351	IRFI9Z34G	IRFI9Z34G	IRF9540A	
⚠	Q3352	IRFIZ34G	IRFIZ34G	IRF540A	
	Q3803	Not used	2SD1858X	2SD1858X	
	D3002	1SS133	1SS133	Not used	
	D3803	Not used	MTZJ5.6B	MTZJ5.6B	
	F2201, F2202	RTF1209	XTF3002	XTF3002	
	L3065 CHIP BEAD	VTL1081	VTL1081	Not used	
	L3065	Not used	Not used	LCTB4R7K1608	
	C3011, C3012	Not used	Not used	CEAT100M50	
	C3042, C3991	CKSRYB103K50	CKSRYB103K50	Not used	
	C3623, C3624	CKSRYB471K50	CKSRYB471K50	Not used	
	C3625	CEAT330M16	CEAT330M16	Not used	
	C3815	Not used	CEAT100M50	CEAT100M50	
	C3816, C3819	Not used	CEAT470M16	CEAT470M16	
	C3817	Not used	CCSRYB473K16	CCSRYB473K16	
	C3818	Not used	CCSRCH101J50	CCSRCH101J50	
	C3828–C3830	Not used	CKSRYB683K16	CKSRYB683K16	
	C3831	Not used	CKSRYB102K50	CKSRYB102K50	
	C3832	Not used	CKSRYB122K50	CKSRYB122K50	
	C3833–C3836	Not used	CKSRYB103K50	CKSRYB103K50	
	C3837	Not used	CCSRCH471J50	CCSRCH471J50	
	C3838	Not used	CKSRYB472K50	CKSRYB472K50	
	C3839, C3840	Not used	CKSRYB224K10	CKSRYB224K10	
	C3842, C3843	Not used	CEAT2R2M50	CEAT2R2M50	
	C3858	CEAT100M50	Not used	Not used	
	C3890	Not used	CKSRYB822K50	CKSRYB822K50	
	R3010	RS1/16S822J	RS1/16S822J	RS1/16S472J	
	R3026	RD1/4PU822J	RS1/4PU822J	RD1/4PU472J	
	R3627	RS1/16S471J	RS1/16S471J	Not used	
	R3831	Not used	RS1/4PU102J	RD1/4PU102J	
	R3832–R3834	Not used	RS1/16S102J	RS1/16S102J	
	R3835, R3839	Not used	RS1/16S682J	RS1/16S682J	
	R3836, R3837	Not used	RS1/16S472J	RS1/16S472J	
	R3838, R3846	Not used	RS1/16S153J	RS1/16S153J	
	R3840–R3842, R3844, R3845	Not used	RS1/16S103J	RS1/16S103J	
	R3843	Not used	RS1/16S562J	RS1/16S562J	
	R3855	Not used	RS1/16S680J	RS1/16S680J	
	CN3601 4P SPEAKER TERMINAL	AKE7018	XKE3004	XKE3004	
	CN3603 9P JUMPER CONNECTOR	KPE9	KPE9	Not used	
	CN5104 30P FFC CONNECTOR	HLEM30R-1	HLEM30R-1	Not used	
	CN5104 16P FFC CONNECTOR	Not used	Not used	HLEM16R-1	
	JA3441 2P PIN JACK	Not used	Not used	VKB1060	
	JA3991 HEADPHONE JACK	XKN3007	XKN3007	XKN3004	
	SCREW	Not used	Not used	BBZ30P140FMC	
	MICA SHEET	Not used	Not used	XEE3003	
	FET BRACKET	Not used	Not used	XNG3016	

KF REAR AMP ASSY

XWZ3319 and XWZ3325 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3325	XWZ3319	
⚠	IC3401	STK402-230	Not used	
	Q3401–Q3404	2SD2114K	Not used	
	Q3405, Q3410	DTA124EK	Not used	
	Q3406–Q3409, Q3411–Q3413, Q3415	2SC2412K	Not used	
	Q3414, Q3471, Q3472	2SA1037K	Not used	
	D50, D3425, D3426, D3471, D3472	1SS355	Not used	
	D61, D62, D3403–D3408, D3427, D3428	1SS133	Not used	
	D3409	MTZJ12C	Not used	
	D3429	MTZJ4.7B	Not used	
	L3401–L3403 AF CHOKE COIL	ATH-133	Not used	
	L3404 CHIP BEAD	VTL1081	Not used	
	RY3401, RY3402	ASR7017	Not used	
	C3401–C3403	CEANP2R2M50	Not used	
	C3404–C3406	CKSRYB222K50	Not used	
	C3407–C3409	CCSRCH221J50	Not used	
	C3410–C3412	CEANP100M35	Not used	
	C3413–C3415	CCSRCJ3R0C50	Not used	
	C3416, C3417, C3431	CEAT101M50	Not used	
	C3419	CEATR47M50	Not used	
	C3420	CEAT101M10	Not used	
	C3421	CEAT100M50	Not used	
	C3422, C3471, C3472	CCSRCH100D50	Not used	
	C3423, C3424, C3429	CKSRYB103K50	Not used	
	C3425–C3428	CKSRYF104Z25	Not used	
	C3432	CEAT221M16	Not used	
	R3401–R3404	RS1/16S332J	Not used	
	R3405–R3408	RS1/16S102J	Not used	
	R3409–R3411	RS1/10S273J	Not used	
	R3412	RS1/10S104J	Not used	
	R3413–R3415	RS1/16S563J	Not used	
	R3416–R3418	RS1/10S561J	Not used	
	R3419–R3421	RD1/4PU563J	Not used	
	R3422	RS1/10S223J	Not used	
	R3424	RS1/16S102J	Not used	
	R3425–R3428	RS1/10S823J	Not used	
	R3429, R3430, R3432	RS1/10S153J	Not used	
	R3433	RS1/16S273J	Not used	
	R3434, R3475, R3476	RS1/10S392J	Not used	
	R3435	RS1/16S104J	Not used	
	R3436–R3437, R3439, R3440	RS1/16S223J	Not used	
	R3438	RS1/16S103J	Not used	
	R3441	RS1/16S224J	Not used	
	R3442–R3444	RD1/4LMF100J	Not used	
	R3445–R3447	RS1/16S100J	Not used	
	R3448	RS3LMF102J	Not used	
	R3449	RD1/4PU681J	Not used	
	R3471–R3473	RS1LMFR22J	Not used	
	R3477–R3478	RD1/4MUF101J	Not used	
	CN3401 1P PIN JACK	AKB7042	Not used	
	CN3404 FFC CONNECTOR 25P	HLEM25R-1	Not used	
	CN3404 FFC CONNECTOR 15P	Not used	HLEM15R-1	
	J3401 JUMPER WIRE	D15A09-100-2651	Not used	
	JA3403 AUDIO 3P PIN JACK	XKB3007	Not used	
	9P CABLE HOLDER	51063-0905	Not used	

LF PRIMARY ASSY

XWZ3326, XWZ3320 and XWZ3332 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3332	XWZ3326	XWZ3320	
⚠	S1 VOLTAGE SELECTOR	Not used	XKX3001	XKX3001	
⚠	R1 (2.2MΩ/ 1/2W)	RCN1080	Not used	Not used	
⚠	AN1 1P AC INLET	XKP3042	XKP3041	XKP3041	
⚠	CN2 4P VH CONNECTOR	Not used	B4P7-VH	B4P7-VH	
	H3–H6 FUSE CLIP	Not used	AKR7001	AKR7001	

MF DISPLAY ASSY

XWZ3324, XWZ3318 and XWZ3331 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3331	XWZ3324	XWZ3318	
	IC3931	Not used	M65855FP	M65855FP	
	IC5601	HEF4794BT	HEF4794BT	Not used	
	Q5822–Q5824, Q5827	Not used	Not used	DTC143EK	
	D3931	Not used	MTZJ5.1B	MTZJ5.1B	
	D5592	1SS133	Not used	Not used	
	D5593	1SS133	1SS133	Not used	
	D5595	1SS181	1SS181	Not used	
	L3921, L3922 CHIP BEAD	VTL1081	VTL1081	Not used	
	L3931	Not used	LCTB100K2125	LCTB100K2125	
	C3931, C3934, C3940	Not used	CKSRYB103K50	CKSRYB103K50	
	C3932	Not used	CEJAR47M50	CEJAR47M50	
	C3933	Not used	CEJQ220M10	CEJQ220M10	
	C3935	Not used	CKSRYB473K16	CKSRYB473K16	
	C3937	Not used	CEJA4R7M50	CEJA4R7M50	
	C3938	Not used	CKSRYB472K50	CKSRYB472K50	
	C3939	Not used	CKSRYB123K50	CKSRYB123K50	
	C3942	Not used	CKSRYF104Z25	CKSRYF104Z25	
	C3943	Not used	CEJQ101M10	CEJQ101M10	
	C5601	CCSRCH101J50	CCSRCH101J50	Not used	
	C5603, C5604	CCSRCH100D50	CCSRCH100D50	Not used	
	R3931	Not used	RS1/16S472J	RS1/16S472J	
	R3932, R3937, R3938	Not used	RS1/16S123J	RS1/16S123J	
	R3933	Not used	RS1/16S153J	RS1/16S153J	
	R3934	Not used	RS1/16S124J	RS1/16S124J	
	R3935	Not used	RS1/16S822J	RS1/16S822J	
	R3936	Not used	RS1/16S103J	RS1/16S103J	
	R3939	RS1/16S0R0J	Not used	Not used	
	R3940	Not used	RD1/4PU121J	RD1/4PU121J	
	R5590, R5984, R5985, R5987, R5990	RS1/16S473J	RS1/16S473J	Not used	
	R5591	RS1/16S152J	RS1/16S152J	Not used	
	R5610	Not used	Not used	RS1/16S0R0J	
	R5619	RS1/16S221J	RS1/16S221J	Not used	
	R5620, R5621, R5626	RS1/16S102J	RS1/16S102J	Not used	
	R5986, R5988, R5989	RS1/16S103J	RS1/16S103J	Not used	
	VR3931 (10kΩ-B)	Not used	XCS3002	XCS3002	
	CN5502 FFC CONNECTOR 21P	52492-2120	52492-2120	Not used	
	CN5502 FFC CONNECTOR 7P	Not used	Not used	52492-0720	

Mark	No.	Description	Part No.

● PCB PARTS LIST for XR-VS300D

GF CONNECT ASSY (2CH)

SEMICONDUCTORS

	IC8202	LA7137M
	IC8203	NJM78L08A
	IC8301	PCM1716E
	IC8201	TA7302P
	Q8203, Q8204	2PB709A
	Q8205, Q8206	2SD2114K
	Q8302	DTA124EK
	Q8201	DTC114YK
	Q8301	DTC124EK
	Q8202	PDTA124EK
	D8304, D8305	1SS355

COILS AND FILTERS

	L8201		LCTA470J2520
	L8241–L8245	CHIP BEADS	VTL1081
	L8103	CHIP BEADS	VTL1095
	L8205	CHIP SOLID INDUCTOR	VTL1145

CAPACITORS

	C8104	CCSRCH101J50
	C8105, C8106, C8109, C8110, C8316	CCSRCH221J50
	C8201	CCSRCH390J50
	C8111	CEAT102M10
	C8311, C8312	CEJA100M16
	C8209, C8210, C8217, C8226, C8227	CEJA101M10
	C8235	CEJA101M10
	C8212, C8223	CEJA331M6R3
	C8301, C8302, C8305, C8306, C8309	CEJA470M10
	C8315, C8317	CGCYX104K25
	C8101, C8232, C8233, C8304	CKSRYB103K50
	C8202–C8206, C8208, C8211	CKSRYB104K16
	C8213, C8214, C8216, C8221, C8222	CKSRYB104K16
	C8228, C8236, C8237, C8308	CKSRYB104K16
	C8313, C8314	CKSRYB681K50

RESISTORS

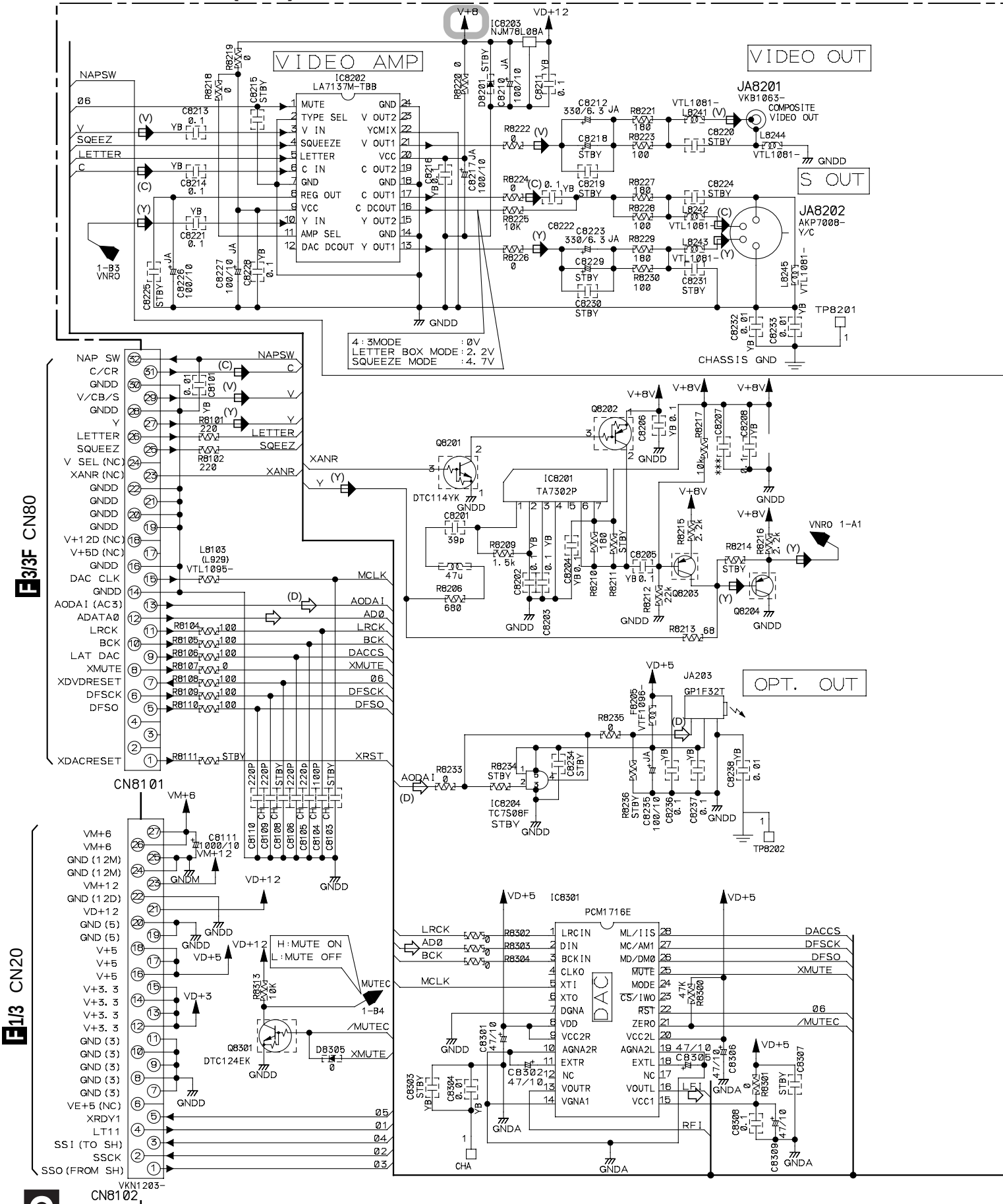
	All Resistors	RS1/16S□□□J

OTHERS

	CN8202	4P MINI DIN SOCKET	AKP7008
	JA8203	OPTICAL LINK OUT	GP1F32T
	CN8105	FFC CONNECTOR 15P	HLEM15S-1
	CN8103	FFC CONNECTOR 16P	HLEM16S-1
	CN8104	FFC CONNECTOR 7P	HLEM7S-1
	JA8201	1P PIN JACK	VKB1063
	CN8106	7P FFC CONNECTOR	VKN1183
	CN8102	27P FFC CONNECTOR	VKN1203
	CN8107	7P FFC CONNECTOR	VKN1211
	CN8101	32P FFC CONNECTOR	VKN1263
	KN8301	EARTH METAL FITTING	VNF1084
	S8201	SLIDE SWITCH	VSH1020

3. SCHEMATIC DIAGRAM

3.1 CONNECT ASSY (2CH) for XR-VS300D

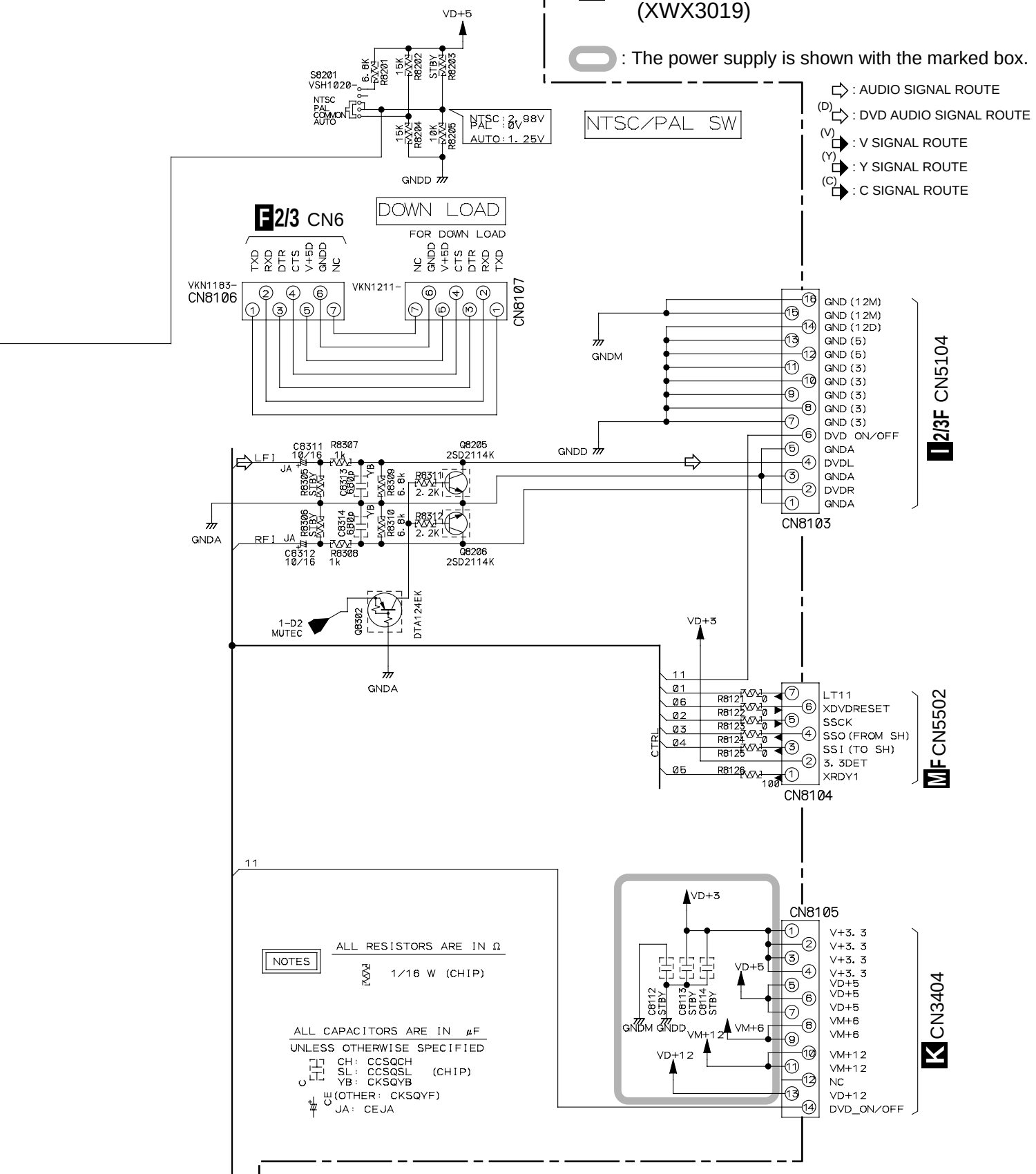


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

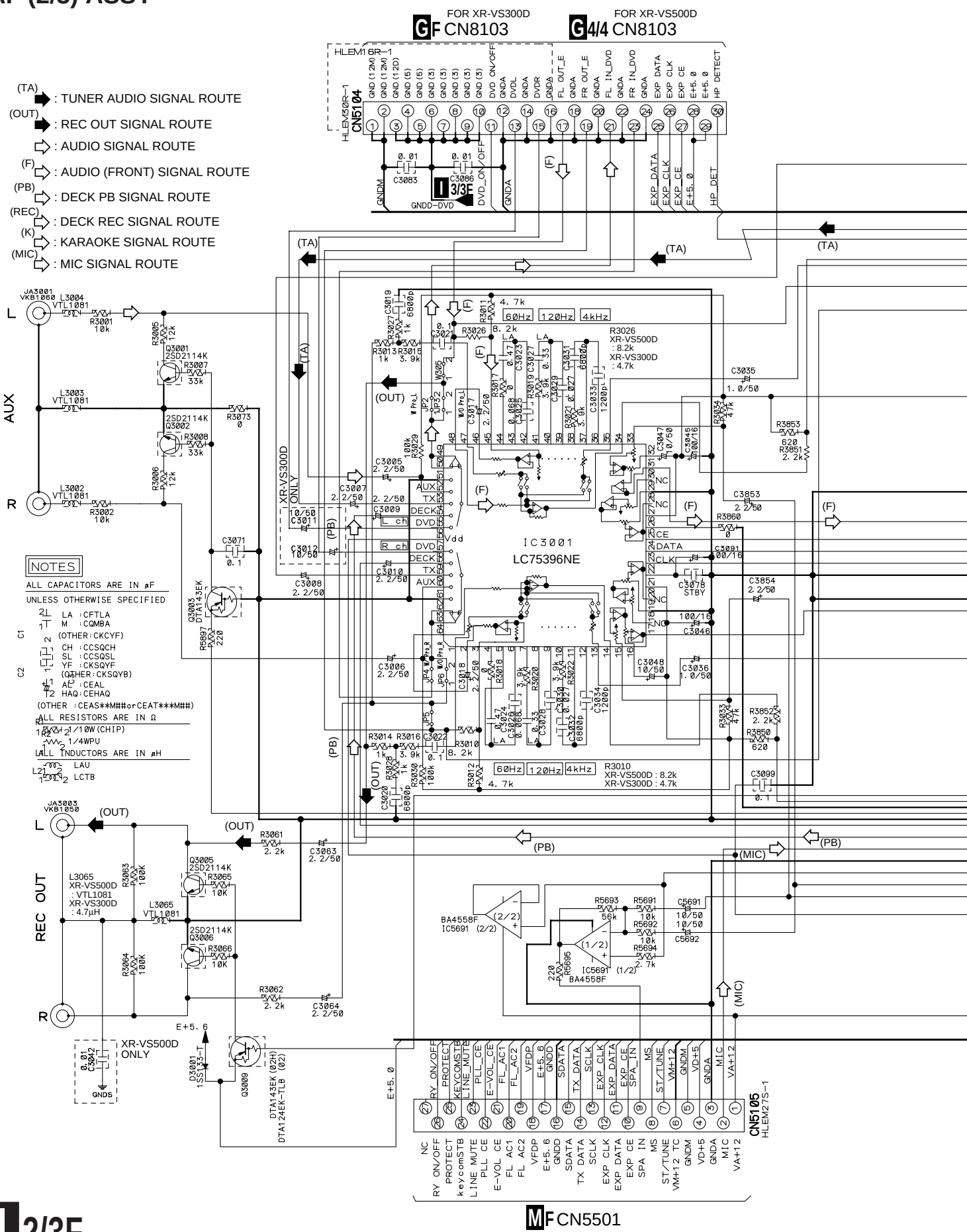
GF CONNECT ASSY (2 CH) (XWX3019)

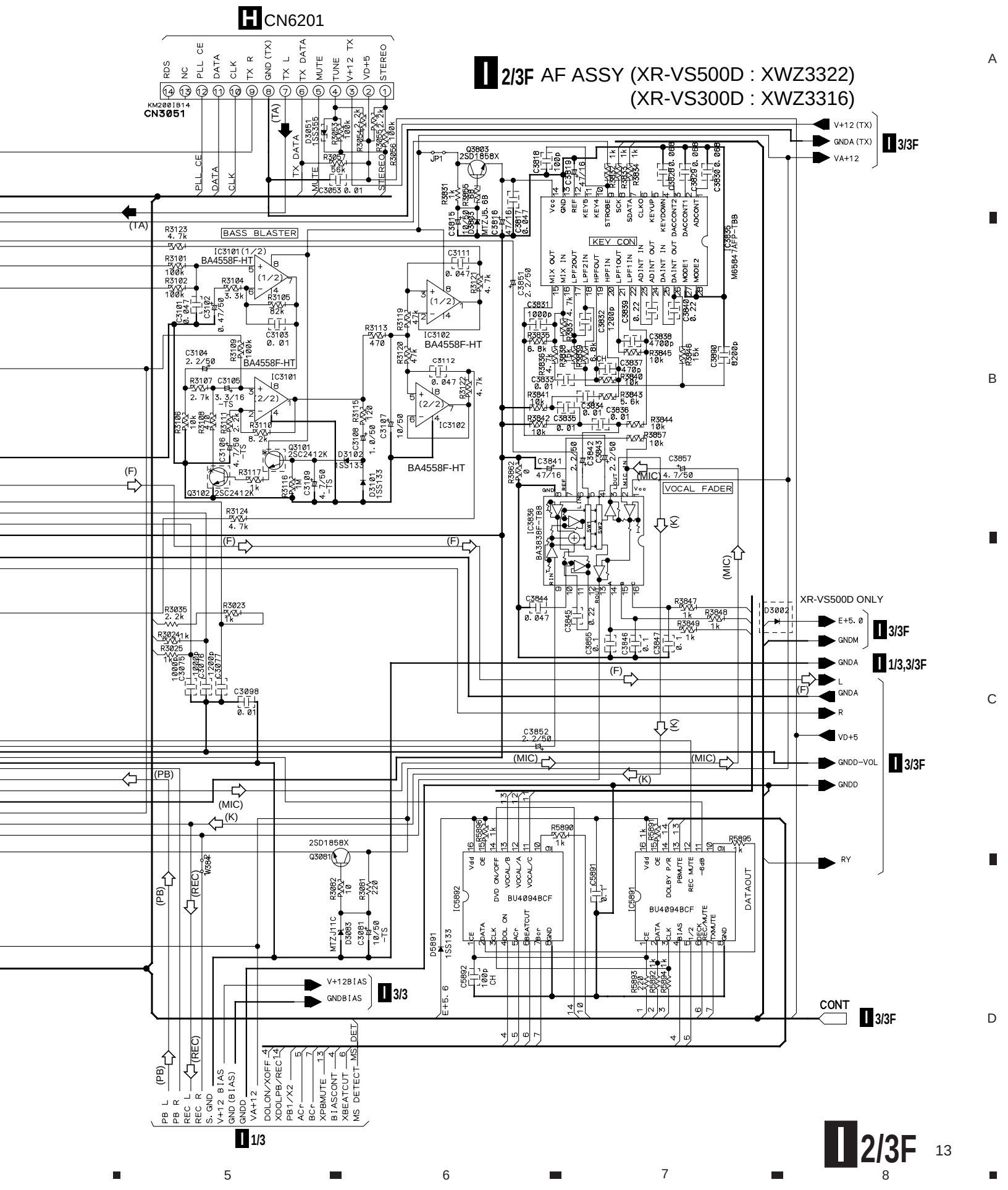
: The power supply is shown with the marked box.

: AUDIO SIGNAL ROUTE
(D) : DVD AUDIO SIGNAL ROUTE
(V) : V SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE

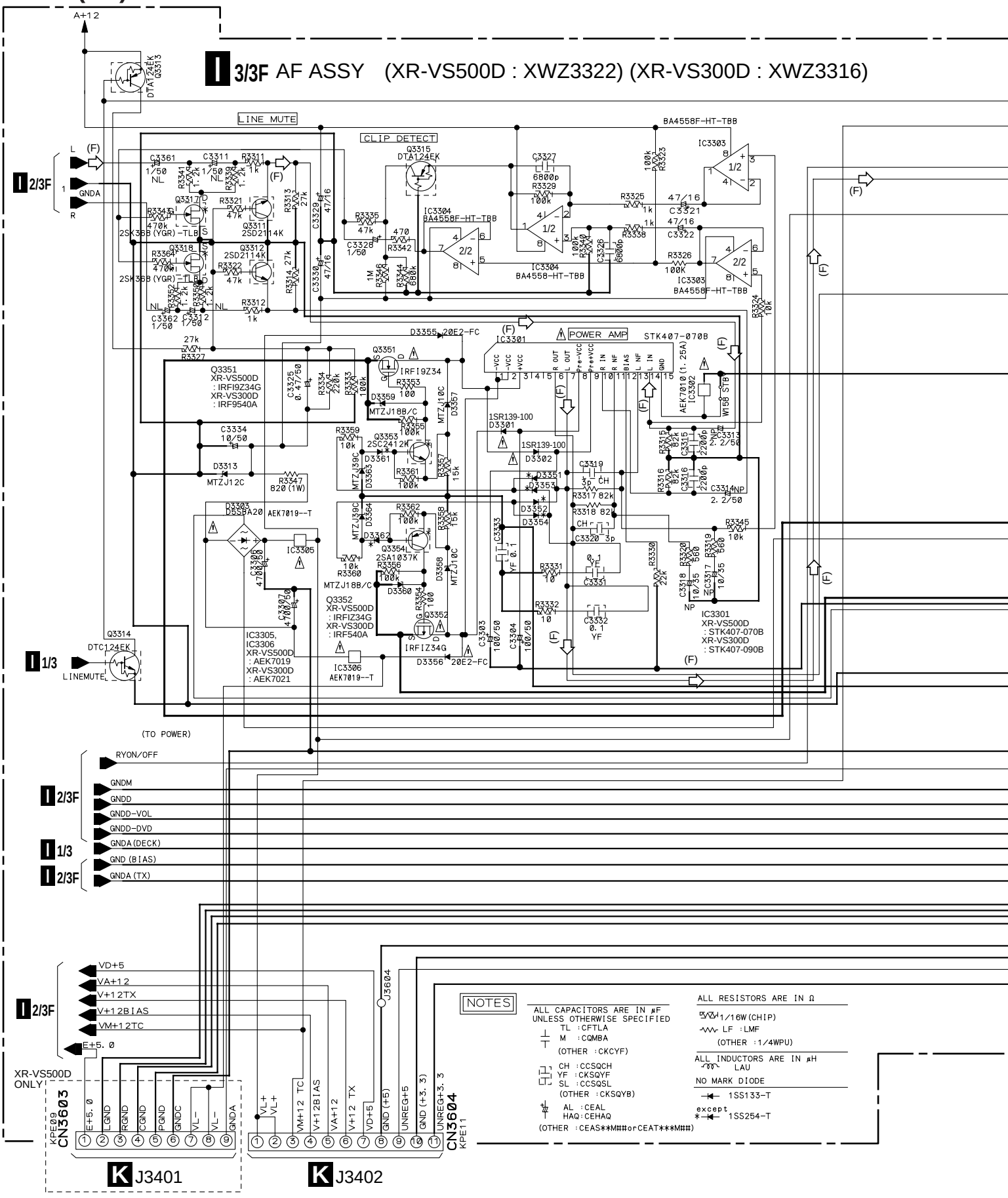


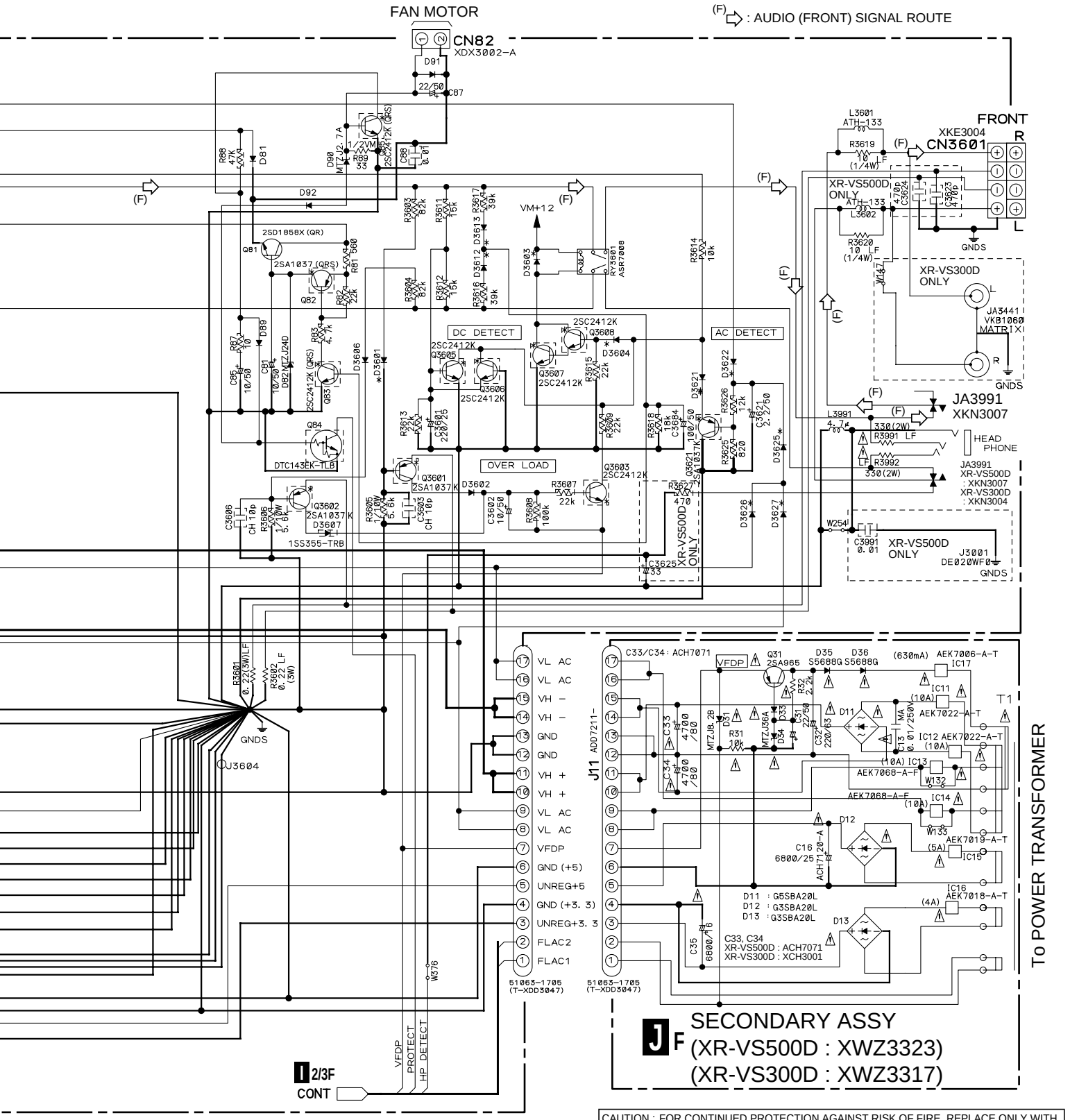
3.2 AF (2/3) ASSY


FOR XR-VS300D
GF CN8103
FOR XR-VS500D
G4/4 CN8103
(TA) : TUNER AUDIO SIGNAL ROUTE
(OUT) : REC OUT SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(F) : AUDIO (FRONT) SIGNAL ROUTE
(PB) : DECK PB SIGNAL ROUTE
(REC) : DECK REC SIGNAL ROUTE
(K) : KARAOKE SIGNAL ROUTE
(MIC) : MIC SIGNAL ROUTE
HLEM16R-1
CN5104
HLEM30R-1
GND (12M)
GND (12M)
GND (12D)
GND (5)
GND (5)
GND (3)
GND (3)
GND (3)
GND (3)
GND (3)
DVD ON/OFF
GNDA
DVDL
GNDA
DVDR
GNDA
FL OUT_LE
GNDA
FR OUT_LE
GNDA
FL IN_DVD
GNDA
FR IN_DVD
GNDA
EXP DATA
EXP CLK
EXP CE
E+5. 0
E+5. 0
HP DETECT
GNDM
C3083
0.01
C3086
0.01
DVD_ON/OFF
GNDA
GNDD-DVD
I 3/3F
EXP_DATA
EXP_CLK
EXP_CE
E+5. 0
HP_DET
JA3001
VKB1060
L3004
VTL1081
R3001
10k
R3005
12k
Q3001
2SD2114K
R3007
33k
L3003
VTL1081
AUX
2SD2114K
Q3002
R3008
33k
R3073
0
R3006
12k
L3002
VTL1081
R
R3002
10k
C3071
0.1
Q3003
DTA143EK
R5697
220
XR-VS300D ONLY
C3007
2.2/50
C3009
C3011
10/50
C3012
10/50
C3008
2.2/50
C3005
2.2/50
C3010
2.2/50
AUX
TX
DECK
DVD
Vdd
IC3001
LC75396NE
C3078
STBY
C3046
100/16
C3048
10/50
C3036
1.0/50
C3035
1.0/50
C3047
1.0/50
C3045
100/16
C3853
2.2/50
C3854
2.2/50
C3091
100/16
R3860
0
R3853
620
R3851
2.2k
R3852
2.2k
R3850
620
R3034
4.7k
R3033
47k
C3099
0.1
R3011
4.7k
R3026
8.2k
R3010
8.2k
R3012
4.7k
60Hz
120Hz
4kHz
R3026
XR-VS500D
: 8.2k
XR-VS300D
: 4.7k
R3010
XR-VS500D : 8.2k
XR-VS300D : 4.7k
NOTES
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
LA :CFTLA
M :CQMBA
(OTHER:CKCYF)
CH :CCSQCH
SL :CCSQSL
YF :CKSQYF
(OTHER:CKSQYB)
AE :CEAL
HAQ:CEHAQ
(OTHER :CEAS**M##orCEAT***M##)
ALL RESISTORS ARE IN Ω
1/10W(CHIP)
1/4WPU
ALL INDUCTORS ARE IN μH
LAU
LCTB
JA3003
VKB1050
(OUT)
L
R
REC OUT
L3065
XR-VS500D
: VTL1081
XR-VS300D
: 4.7μH
L3065
VTL1081
R3063
100K
R3064
100K
Q3005
2SD2114K
R3065
10K
2SD2114K
Q3006
R3066
10K
R3061
2.2k
R3062
2.2k
C3063
2.2/50
C3064
2.2/50
E+5. 6
XR-VS500D
ONLY
C3042
0.01
GNDS
D3001
1SS133-T
Q3009
DTA143EK (02H)
DTA124EK-TLB (02)
(PB)
(MIC)
BA4558F
IC5691 (2/2)
(1/2)
IC5691
BA4558F
R5693
56k
R5691
10k
R5692
10k
R5694
2.7k
R5695
220
C5691
10/50
C5692
10/50
E+5. 0
CN5105
HLEM27S-1
RY ON/OFF
PROTECT
KEYCOMSTB
LINE_MUTE
PLL_CE
E-VOL_CE
FL_AC1
FL_AC2
VFDP
E+5. 6
GNDD
SDATA
TX_DATA
SCLK
EXP_CLK
EXP_DATA
EXP_CE
SPA_IN
MS
ST/TUNE
VM+12
GNDM
VD+5
GNDA
M1C
VA+12
NC
RY ON/OFF
PROTECT
keycomSTB
LINE MUTE
PLL CE
E-VOL CE
FL AC1
FL AC2
VFDP
E+5. 6
GND
SDATA
TX DATA
SCLK
EXP CLK
EXP DATA
EXP CE
SPA IN
MS
ST/TUNE
VM+12 TC
GNDM
VD+5
GNDA
M1C
VA+12
MF CN5501


H CN6201
I 2/3F AF ASSY (XR-VS500D : XWZ3322)
(XR-VS300D : XWZ3316)
KM2001B14
CN3051
RDS
NC
PLL CE
DATA
CLK
TX R
GND (TX)
TX L
TX DATA
MUTE
TUNE
V+12 TX
VD+5
STEREO
BASS BLASTER
KEY CON
VOCAL FADER
XR-VS500D ONLY
V+12 (TX)
GNDA (TX)
VA+12
E+5. 0
GNDM
GNDA
L
R
VD+5
GNDD-VOL
GNDD
RY
CONT
V+12BIAS
GNDBIAS
PB L
PB R
REC L
REC R
S. GND
V+12 BIAS
GND (BIAS)
GNDD
VA+12
DOLON/XOFF
XDOLPB/REC
PB1/X2
ACr
BCr
XPBMUTE
BIASCONT
XBEATCUT
MS DETECT
I 3/3F
I 1/3,3/3F
I 3/3
I 1/3

3.3 AF (3/3) and SECONDARY ASSYS





CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4911.25 MFD, BY LITTELFUSE INC. FOR IC3302 (AEK7010).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 MFD, BY LITTELFUSE INC. FOR IC15, IC3305 AND IC3306 (AEK7019).

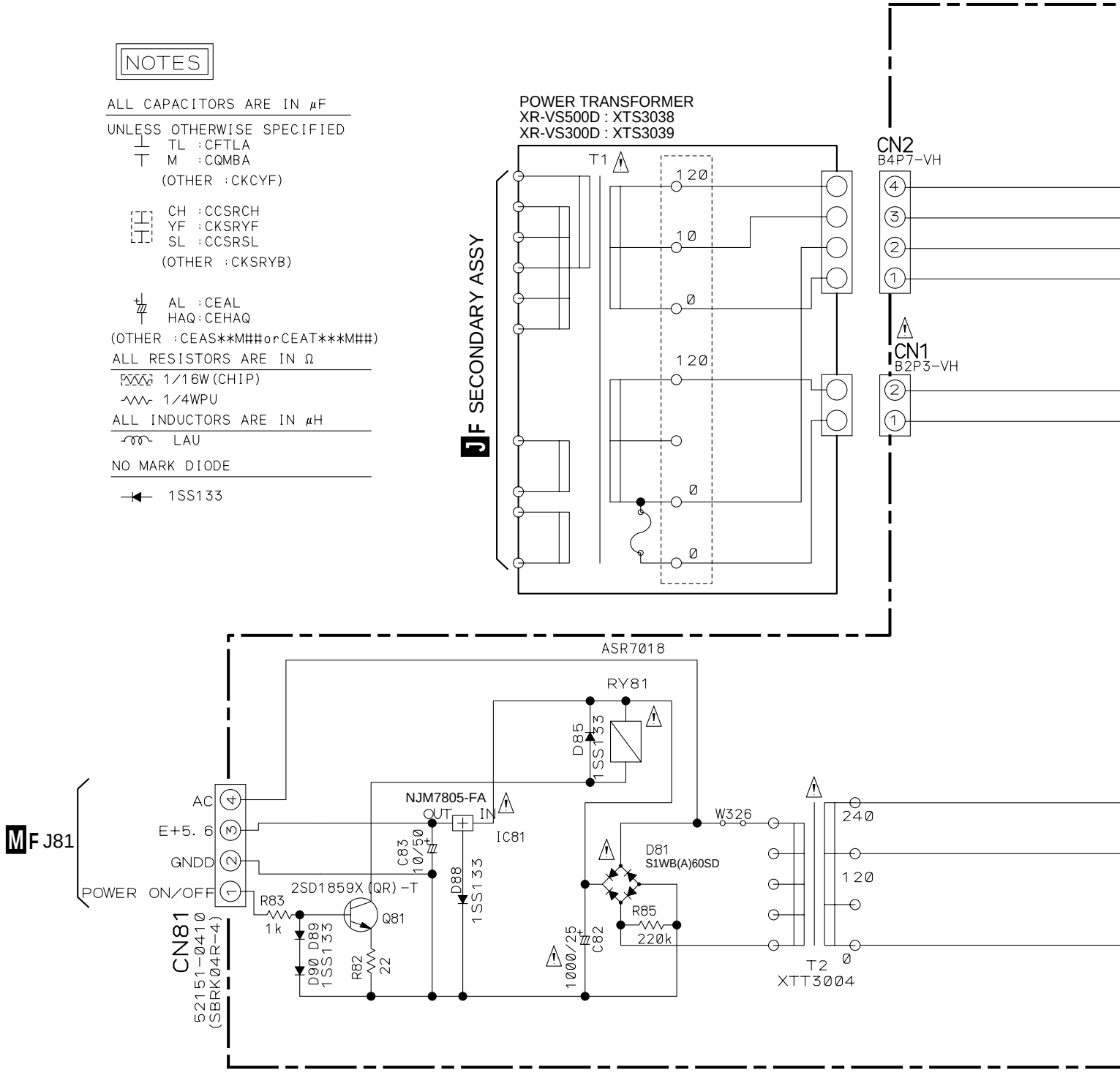
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.630 MFD, BY LITTELFUSE INC. FOR IC17 (AEK7006).

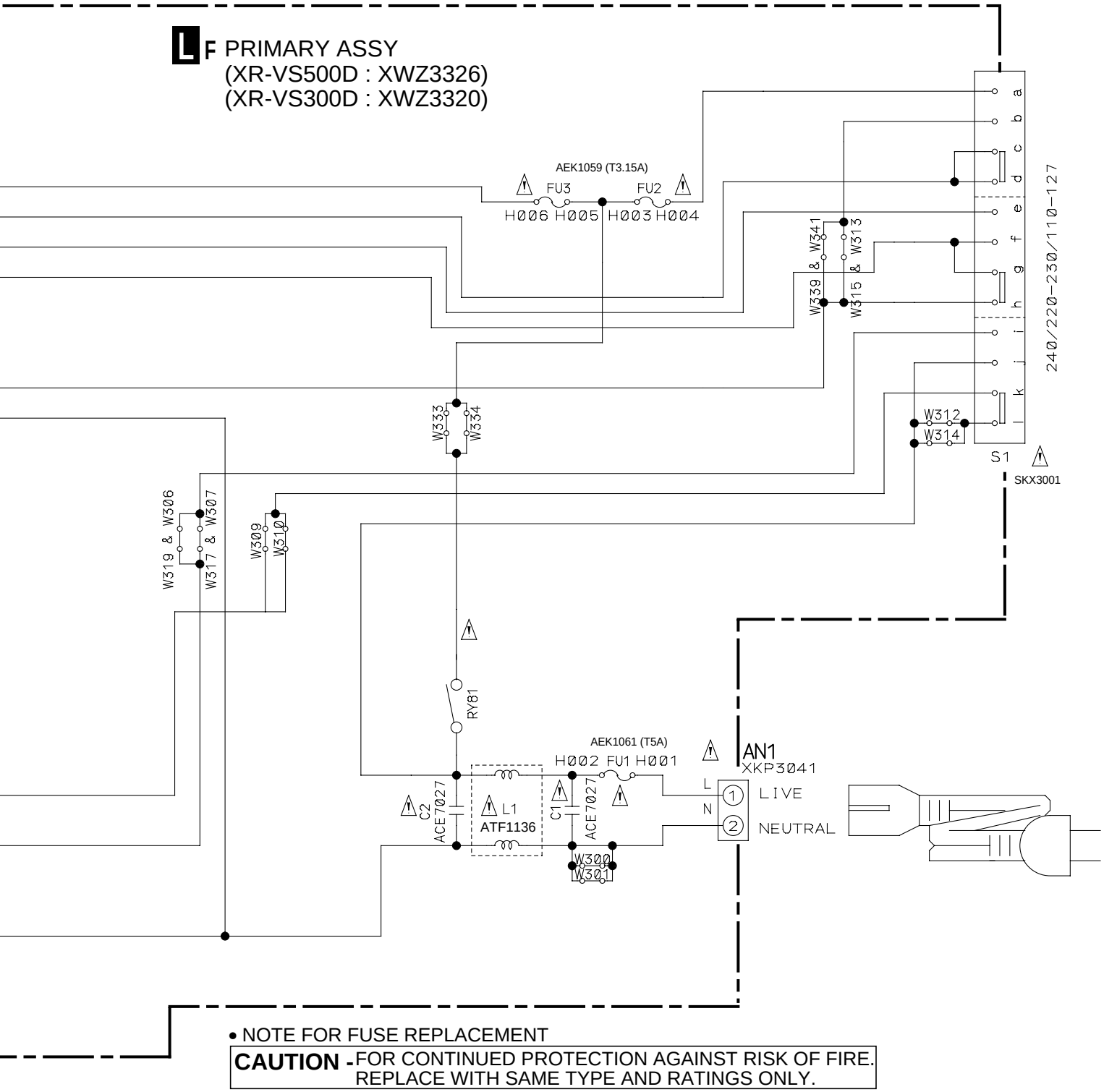
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491004 MFD, BY LITTELFUSE INC. FOR IC16 (AEK7018).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010 MFD, BY LITTELFUSE INC. FOR IC11 AND IC12 (AEK7022).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010F MFD, BY LITTELFUSE INC. FOR IC13 AND IC14 (AEK7068).

3.4 PRIMARY ASSY

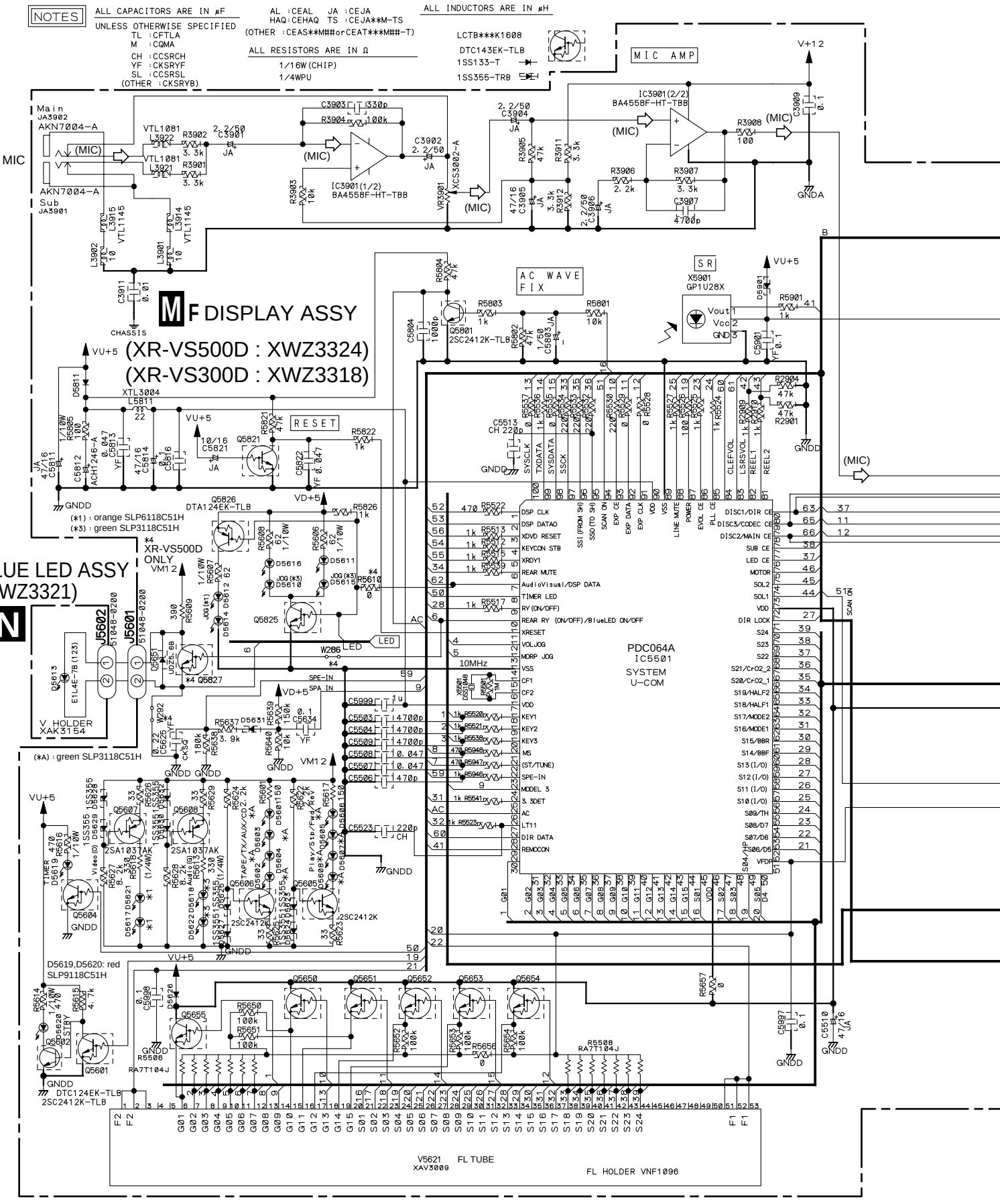


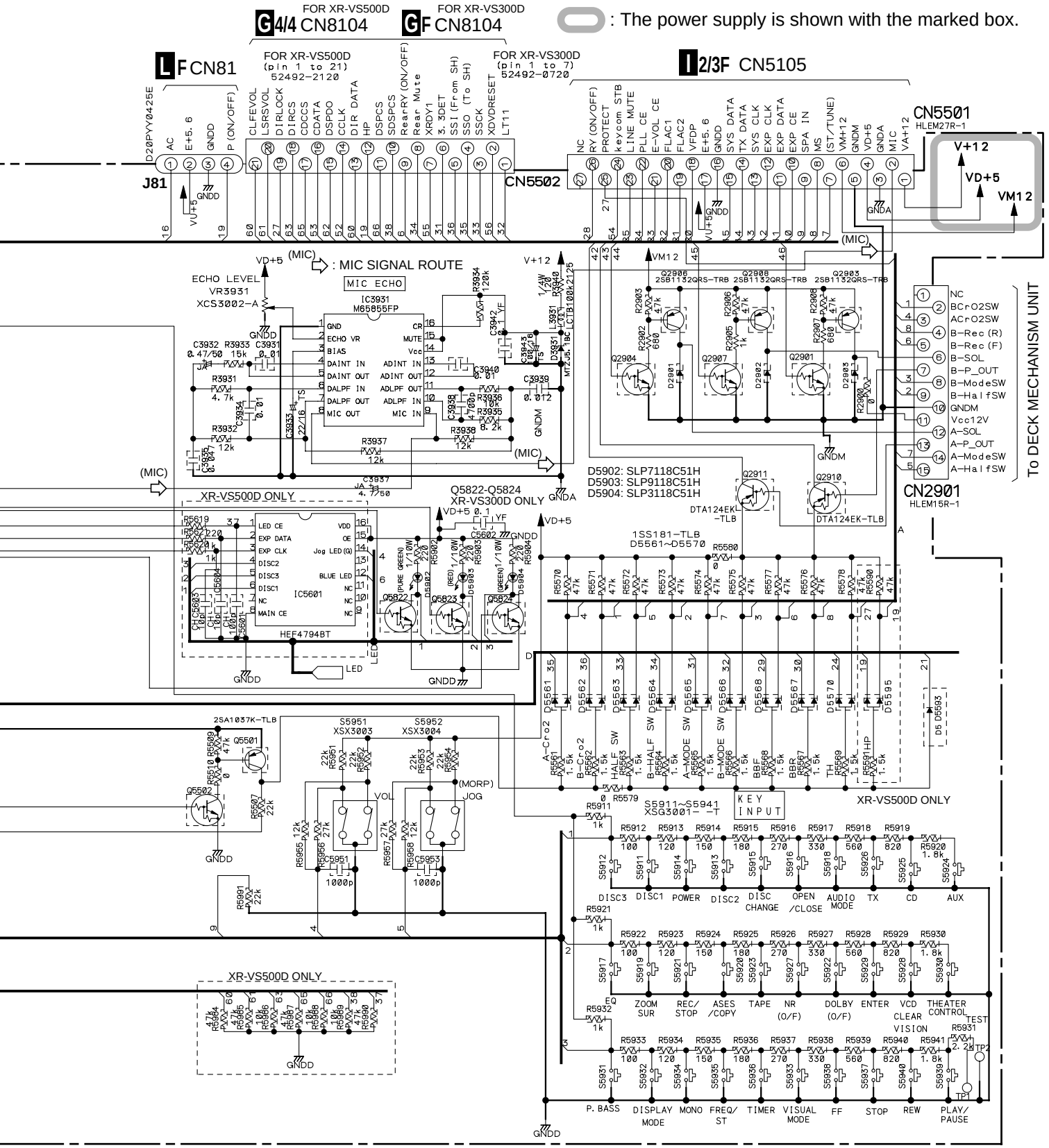


• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.5 DISPLAY and BLUE LED ASSYS

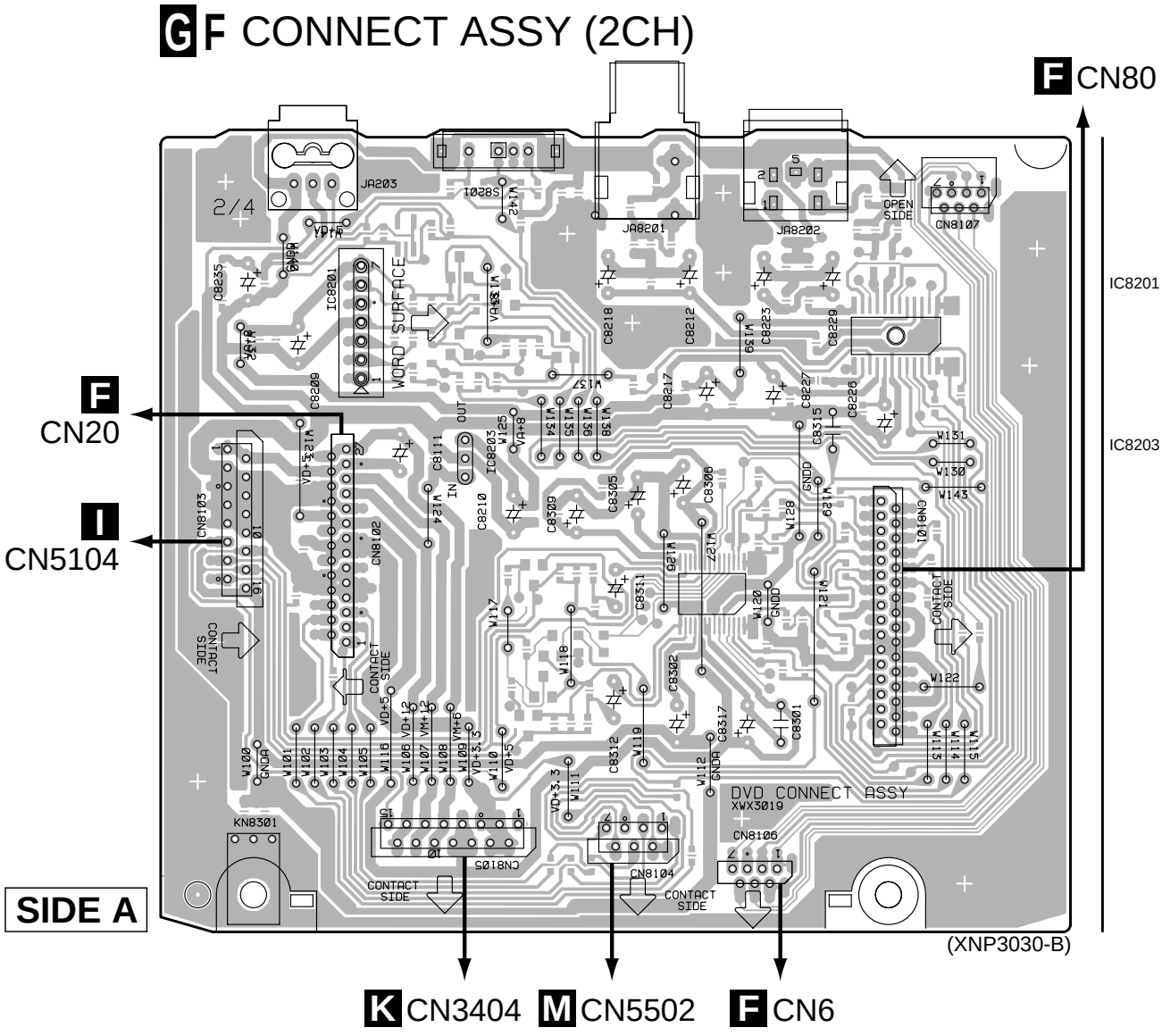




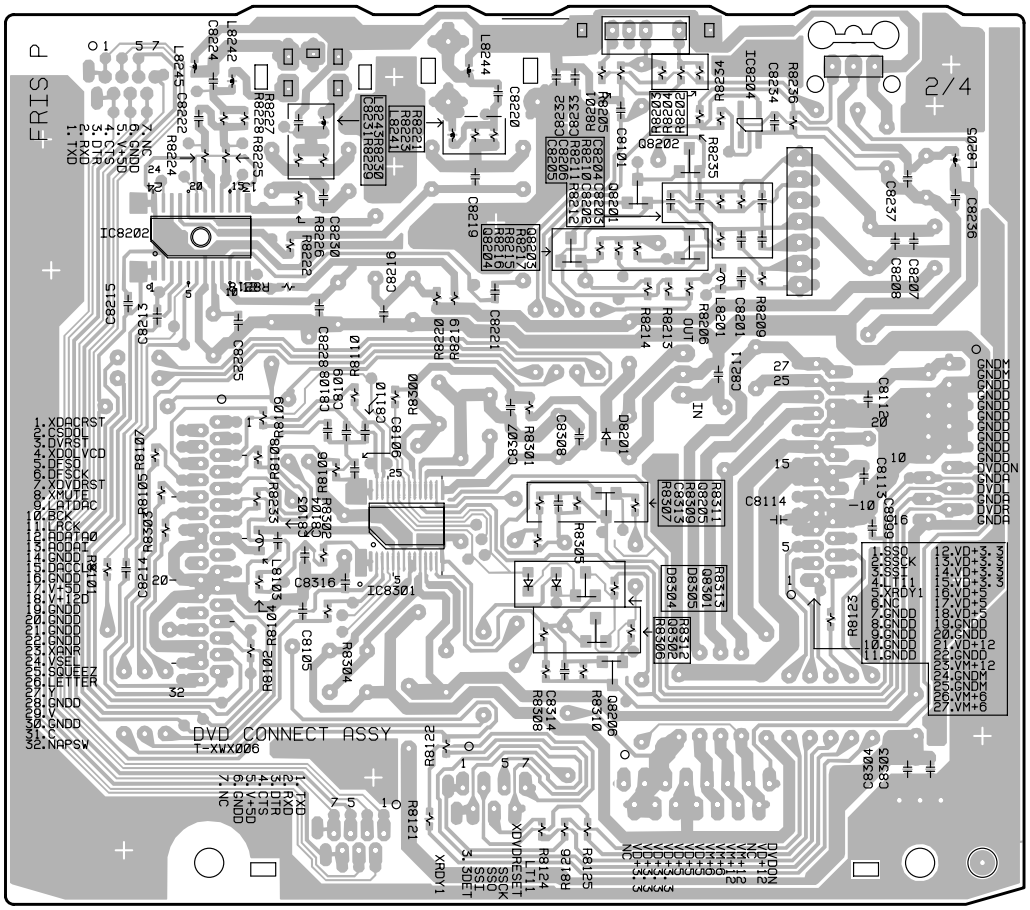
S5911 : DISC 1
S5912 : DISC 3
S5913 : DISC 2
S5914 : STANDBY/ON
S5915 : DISC CHANGE
S5916 : OPEN/CLOSE
S5917 : EQUALIZER
S5918 : AUDIO MODE
S5919 : ZOOM SURROUND
S5920 : ASES/COPY
S5921 : REC/STOP
S5922 : DOLBY/DTS
S5923 : TAPE I/II
S5924 : AUX
S5925 : DVD/CD
S5926 : TUNER BAND
S5927 : □□NR ON/OFF
S5928 : VIDEO NR
S5929 : SET
S5930 : THEATER CONTROL
S5931 : P.BASS(DEMO)
S5932 : DISPLAY MODE
S5933 : VISUAL MODE
S5934 : MONO
S5935 : FREQ/STATION
S5936 : TIMER/CLOCK ADJ
S5937 : ■ (STOP/ST.MEMORY)
S5938 : ►►I/►►• + (TUNING+)
S5939 : ◄► /II (PLAY/PAUSE)
S5940 : – •◄◄/I◄◄ (TUNING–)
S5951 : VOLUME UP/DPWN
S5952 : JOG dial

4. PCB CONNECTION DIAGRAM

4.1 CONNECT ASSY (2CH) for XR-VS300D



GF CONNECT ASSY (2CH)



SIDE B

(XNP3030-B)

5. GENERAL INFORMATION

5.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC064A (DISPLAY ASSY : IC5501) for XR-VS300D

• System Control Microcomputer

● Pin Function

No.	Pin Name	I/O	Function
1	– –	O	
2	– –	O	
3	XDVDRESET	O	Reset output of DVD microcomputer
4	KYC STB	O	Strobe output of Keycom IC (M65847AFP)
5	XRDY1	O	Communication ready output of DVD microcomputer
6	– –	O	
7	A/V MODE LED	O	AUDIO/VISUAL mode LED output
8	TIMER LED	O	Timer LED output
9	RY ON/OFF	O	Relay ON/OFF
10	BLUE LED	O	BLUE LED output
11	XRESET	–	
12	VOL JOG	I	Volume JOG input
13	MORP JOG	I	Sound Morphing JOG input
14	VSS	–	Ground
15	CF1	–	
16	CF2	–	
17	VDD	–	Power supply
18	KEY1	I	Key input 1 (A/D)
19	KEY2	I	Key input 2 (A/D)
20	KEY3	I	Key input 3 (A/D)
21	MS	I	Deck MS input
22	ST/TUNE	I	Tuner STEREO/TUNE input
23	SPE-IN	I	Spectrum analyzer signal input
24	3.3DETECT	I	DVD 3.3V detection input
25	MODEL3	I	Model distinguish input 3
26	AC	I	AC pulse interrupt input
27	LT11	I	Communication latch input of DVD microcomputer
28	– –	O	
29	REMOCON	I	Remote control interrupt input
30	G01	O	Grid 1 output
31	G02		Grid 2 output
32	G03		Grid 3 output
33	G04		Grid 4 output
34	G05		Grid 5 output
35	G06		Grid 6 output
36	G07		Grid 7 output
37	G08		Grid 8 output
38	G09		Grid 9 output
39	G10		Grid 10 output
40	G11		Grid 11 output
41	G12		Grid 12 output
42	G13		Grid 13 output
43	G14		Grid 14 output
44	G15		Grid 15 output
45	S01	O	Segment 1 output
46	VDD	–	Power supply
47	S02/D5597	I/O	Segment 2 output
48	S03/D5596		Segment 3 output
49	S04/D5595		Segment 4 output
50	S05/D5594	I/O	Segment 5 output/Destination SW4 input

No.	Pin Name	I/O	Function
51	VFDP	–	
52	S06/D5593	I/O	Segment 6 output/Destination SW3 input
53	S07/D5592		Segment 7 output/Destination SW2 input
54	S08/D5591		Segment 8 output/Destination SW1 input
55	S09/TH		Segment 9 output/Protection input
56	S10		Segment 10 output
57	S11		Segment 11 output
58	S12		Segment 12 output
59	S13		Segment 13 output
60	S14/ARF		Segment 14 output/DECK ARF SW input
61	S15/ARR		Segment 15 output/DECK ARR SW input
62	S16/MODE1		Segment 16 output/DECK MODE SW1 input
63	S17/MODE2		Segment 17 output/DECK MODE SW2 input
64	S18/HALF1		Segment 18 output/DECK HALF SW1 input
65	S19/HALF2		Segment 19 output/DECK HALF SW2 input
66	S20/CrO2_1		Segment 20 output/DECK CrO2 SW1 input
67	S21/CrO2_2		Segment 21 output/DECK CrO2 SW2 input
68	S22	O	Segment 22 output
69	S23		Segment 23 output
70	S24		Segment 24 output
71	– –	I	Pull-up/Down
72	VDD	–	Power supply
73	SOL2	O	DECK solenoid output 2
74	SOL1		DECK solenoid output 1
75	MOTOR	O	DECK motor output
76	– –	O	
77	– –	O	
78	LED DISC3	O	DISC3 LED output
79	LED DISC2	O	DISC2 LED output
80	LED DISC1	O	DISC1 LED output
81	REEL1	I	DECK reel pulse input 1
82	REEL2		DECK reel pulse input 2
83	– –	O	
84	– –	O	
85	PLL CE	O	Chip enable output of Tuner PLL
86	EVOL CE	O	Chip enable output of electronic volume IC
87	POWER	O	Power output
88	LINE MUTE	O	Line mute output
89	VSS	–	Ground
90	VDD	–	Power supply
91	EXP CLK	O	Clock output for EXP IC
92	EXP DATA	O	Data output for EXP IC
93	EXP CE	O	Chip enable output of EXP IC (BU4094BCF)
94	SCAN ON	O	Outputs for SW reading
95	SSI(SSO)	O	Communication data output of DVD microcomputer (outputs at AMP side)
96	SSO(SSI)	I	Communication data input of DVD microcomputer (inputs at AMP side)
97	SSCK	O	Communication clock output of DVD microcomputer
98	SYSDATA	O	Data output of the Tuner PLL data/electronic volume IC
99	TXDATA	I	Tuner data input
100	SYSCLK	O	Clock output of the Tuner PLL data/electronic volume IC

Pioneer

Service Manual

ORDER NO.
RRV2390

STEREO DVD CASSETTE DECK RECEIVER

XR-VS500D
XR-VS300D

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model		Power Requirement	Region No.	The voltage can be converted by the following method.
	XR-VS500D	XR-VS300D			
DBXJN	◯	◯	AC110-127V/220-230V/240V	3	With the voltage selector
DDXJN/RA	◯	◯	AC110-127V/220-230V/240V	1	With the voltage selector
DDXJN/RB	◯	◯	AC110-127V/220-230V/240V	2	With the voltage selector
DDXJN/RD	◯	–	AC110-127V/220-230V/240V	4	With the voltage selector
DLXJN/NC	◯	◯	AC110-127V/220-230V/240V	3	With the voltage selector

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Remarks
XR-A9800D/KUCXJ	RRV2329	

CONTENTS

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
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PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

T – ZZK SEPT. 2000 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

LABEL CHECK (For DLXJN/NC Type)

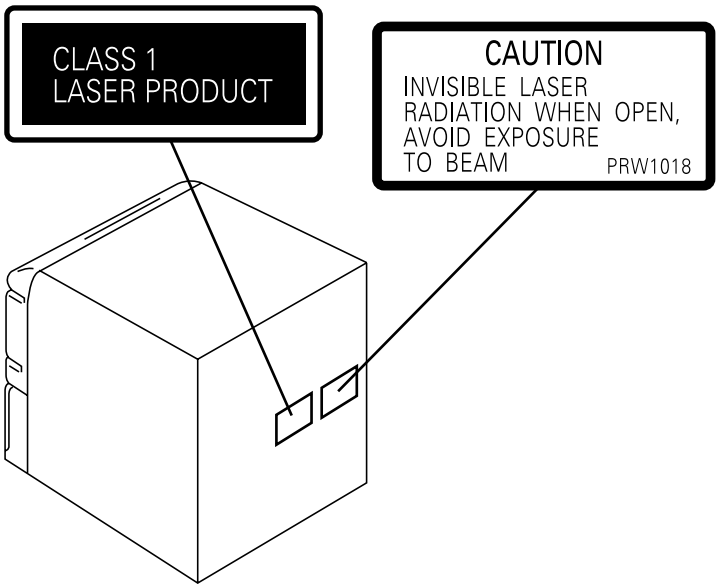
WARNING !

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

LASER DIODE CHARACTERISTICS

FOR DVD :	MAXIMUM OUTPUT POWER : 5 mW
	WAVELENGTH : 655 nm
FOR CD :	MAXIMUM OUTPUT POWER : 5mW
	WAVELENGTH : 785 nm

Printed on the Rear Panel



Additional Laser Caution

1. Inside detection switch (S201 on the SMEB assy) and loading-status detection switch (S9503 on the MOTOR assy) are detected by the microprocessor (IC11 in the DVDM assy).
   • To permit the laser diode to oscillate, it is required to set the inside detection switch for the inside position (S201 : ON) and to set the loading-status detection switch for the clamp position (the center terminal of S9503 is shorted to +5V). The 655 nm laser diode for DVD oscillation will continue if pin 19 of IC1 is shorted to +5V (fault condition) in the DVDM assy.
   The 785 nm laser diode for CD oscillates if pin 20 of IC1 is shorted to +5V in the DVDM assy.
   In the test mode ∗ , the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (S5931 ON in the DISPLAY assy), with the above requirements satisfied.

2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

∗ : Refer to page 82 on the service manual RRV2329.

2. CONTRAST OF MISCELLANEOUS PARTS

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *Reference Nos. indicate the pages and Nos. in the service manual for the base model.*
- *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 → 56 x 10^1 → 561 ..... RD1/4PU 5 6 1 J
47k → 47 x 10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 → R50 ..... RN2H R 5 0 K
1 → 1R0 ..... RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k → 562 x 10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

■ CONTRAST TABLE for XR-VS500D

XR-VS500D/DBXJN, DDXJN/RA, DDXJN/RB, DDXJN/RD, DLXJN/NC and XR-A9800D/KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.						Remarks
			XR-A9800D /KUCXJ	XR-VS500D /DBXJN	XR-VS500D /DDXJN/RA	XR-VS500D /DDXJN/RB	XR-VS500D /DDXJN/RD	XR-VS500D /DLXJN/NC	
		PCB ASSEMBLIES							
		MAIN ASSY	XWM3174	XWM3172	XWM3172	XWM3172	XWM3172	XWM3172	
P5- 1		└ AF ASSY	XWZ3330	XWZ3322	XWZ3322	XWZ3322	XWZ3322	XWZ3322	
		COMPLEX ASSY	XWM3178	XWM3176	XWM3176	XWM3176	XWM3176	XWM3176	
P5- 4		├ PRIMARY ASSY	XWZ3332	XWZ3326	XWZ3326	XWZ3326	XWZ3326	XWZ3326	
P7- 1		└ DISPLAY ASSY	XWZ3331	XWZ3324	XWZ3324	XWZ3324	XWZ3324	XWZ3324	
		PACKING SECTION							
P3- 1	⚠	Power Cord	ADG7022	ADG1158	ADG1158	ADG1158	ADG1158	ADG1154	
P3- 5		Remote Control Unit	XZN3109	XZN3110	XZN3110	XZN3110	XZN3110	XZN3110	
P3-11		Packing Case	XHD3144	XHD3166	XHD3166	XHD3166	XHD3166	XHD3167	
P3-12	NSP	Warranty Card	ARY7045	Not used	Not used	Not used	Not used	Not used	
P3-14		Operating Instructions (English/French)	XRE3036	Not used	Not used	Not used	Not used	Not used	
		Operating Instructions (English/Chinese)	Not used	XRE3035	XRE3035	XRE3035	XRE3035	XRE3035	
		Operating Instructions (Spanish/Arabian)	Not used	Not used	XRC3022	XRC3022	XRC3022	Not used	
		Region Label	Not used	Not used	VRW1708	VRW1701	VRW1705	Not used	For Packing Case
		Caution Sheet	Not used	Not used	XRH3001	Not used	XRH3001	Not used	Accessories
		EXTERIOR SECTION							
P5-12	⚠	Power Transformer (T1) (AC120V)	XTS3042	Not used	Not used	Not used	Not used	Not used	
P5-12	⚠	Power Transformer (T1) (AC110-127V/220-230V/240V)	Not used	XTS3038	XTS3038	XTS3038	XTS3038	XTS3038	
P5-13	⚠	Fuse (FU1 : 6.3A)	REK1085	Not used	Not used	Not used	Not used	Not used	
P5-13	⚠	Fuse (FU1 : T5A)	Not used	AEK1061	AEK1061	AEK1061	AEK1061	AEK1061	
P5-25		Rear Panel	XNC3065	XNC3066	XNC3066	XNC3066	XNC3066	XNC3067	
P5-26		SEC Holder	XMR3032	XMR3035	XMR3035	XMR3035	XMR3035	XMR3035	
P5-38		Tray Cap	XAK3157	XAK3210	XAK3210	XAK3210	XAK3210	XAK3210	
P5-41	NSP	Fuse Card	AAX2374	Not used	Not used	Not used	Not used	Not used	
P5-42	NSP	Getter	XAX3175	XAX3176	XAX3176	XAX3176	XAX3176	XAX3176	
P5-43		65 Label	ARW7050	Not used	Not used	Not used	Not used	Not used	
	⚠	Fuse (FU2, FU3 : T3.15A)	Not used	AEK1059	AEK1059	AEK1059	AEK1059	AEK1059	*1
	NSP	Name Label	Not used	XAL3067	XAL3068	XAL3068	XAL3068	Not used	*2
	NSP	Region Label	Not used	Not used	XAX3183	XAX3184	XAX3185	Not used	For Rear Panel
		Caution Label	Not used	Not used	Not used	Not used	Not used	PRW1018	*3
	NSP	SISIR Label	Not used	Not used	Not used	Not used	Not used	XAX3181	For Rear Panel
		FRONT PANEL SECTION							
P7-19		JOG Knob	XAA3015	XAA3019	XAA3019	XAA3019	XAA3019	XAA3019	
P7-21		FUNC Button L	XAD3061	XAD3089	XAD3089	XAD3089	XAD3089	XAD3089	
P7-22		FUNC Button R	XAD3051	XAD3090	XAD3090	XAD3090	XAD3090	XAD3090	
P7-23		FUNC Frame L	XAD3052	XAD3091	XAD3091	XAD3091	XAD3091	XAD3091	
P7-24		FUNC Frame R	XAD3053	XAD3092	XAD3092	XAD3092	XAD3092	XAD3092	

Ref. No.	Mark	Symbol and Description	Part No.						Remarks
			XR-A9800D /KUCXJ	XR-VS500D /DBXJN	XR-VS500D /DDXJN/RA	XR-VS500D /DDXJN/RB	XR-VS500D /DDXJN/RD	XR-VS500D /DLXJN/NC	
P7-25		DV ENT Button	XAD3056	XAD3085	XAD3085	XAD3085	XAD3085	XAD3085	
P7-26		Display Panel	XAK3135	XAK3207	XAK3207	XAK3207	XAK3207	XAK3207	
P7-33		FL Cover	XAK3164	XAK3163	XAK3163	XAK3163	XAK3163	XAK3163	
P7-42		Sub Panel	XAK3203	XAK3208	XAK3208	XAK3208	XAK3208	XAK3208	
P7-50		DV Button L	XAD3057	XAD3086	XAD3086	XAD3086	XAD3086	XAD3086	
P7-51		DV Button R	XAD3059	XAD3088	XAD3088	XAD3088	XAD3088	XAD3088	
		Mic Knob	Not used	XAB3007	XAB3007	XAB3007	XAB3007	XAB3007	No. 1

Notes : For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES” and “3. SCHEMATIC DIAGRAM”.
The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.
*1 Refer to “3. SCHEMATIC DIAGRAM”. *2 Stick Name Label on the Rear Panel. *3 Refer to “LABEL CHECK”.

■ CONTRAST TABLE for XR-VS300D

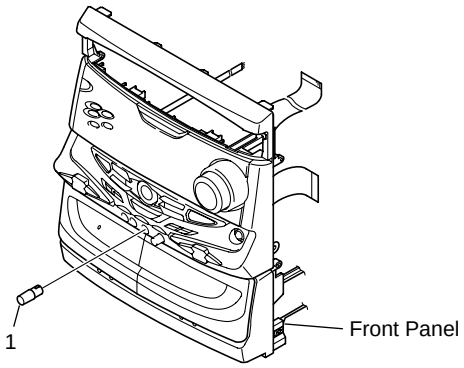
XR-VS300D/DBXJN, DDXJN/RA, DDXJN/RB, DLXJN/NC and XR-A9800D/KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			XR-A9800D /KUCXJ	XR-VS300D /DBXJN	XR-VS300D /DDXJN/RA	XR-VS300D /DDXJN/RB	XR-VS300D /DLXJN/NC	
		PCB ASSEMBLIES						
		MAIN ASSY	XWM3174	XWM3171	XWM3171	XWM3171	XWM3171	
P5- 1		├ AF ASSY	XWZ3330	XWZ3316	XWZ3316	XWZ3316	XWZ3316	
P5- 2		└ SECONDARY ASSY	XWZ3323	XWZ3317	XWZ3317	XWZ3317	XWZ3317	
		COMPLEX ASSY	XWM3178	XWM3175	XWM3175	XWM3175	XWM3175	
P5- 3		├ REAR AMP ASSY	XWZ3325	XWZ3319	XWZ3319	XWZ3319	XWZ3319	
P5- 4		├ PRIMARY ASSY	XWZ3332	XWZ3320	XWZ3320	XWZ3320	XWZ3320	
P7- 1		└ DISPLAY ASSY	XWZ3331	XWZ3318	XWZ3318	XWZ3318	XWZ3318	
		PACKING SECTION						
P3- 1	⚠	Power Cord	ADG7022	ADG1158	ADG1158	ADG1158	ADG1154	
P3- 5		Remote Control Unit	XZN3109	XZN3108	XZN3108	XZN3108	XZN3108	
P3-11		Packing Case	XHD3144	XHD3163	XHD3163	XHD3163	XHD3164	
P3-12	NSP	Warranty Card	ARY7045	Not used	Not used	Not used	Not used	
P3-14		Operating Instructions (English/French)	XRE3036	Not used	Not used	Not used	Not used	
		Operating Instructions (English/Chinese)	Not used	XRE3035	XRE3035	XRE3035	XRE3035	
		Operating Instructions (Spanish/Arabian)	Not used	Not used	XRC3022	XRC3022	Not used	
		Region Label	Not used	Not used	VRW1708	VRW1701	Not used	For Packing Case
		Caution Sheet	Not used	Not used	XRH3001	Not used	Not used	Accessories
		EXTERIOR SECTION						
P5-12	⚠	Power Transformer (T1) (AC120V)	XTS3042	Not used	Not used	Not used	Not used	
P5-12	⚠	Power Transformer (T1) (AC110-127V/220-230V/240V)	Not used	XTS3039	XTS3039	XTS3039	XTS3039	
P5-13	⚠	Fuse (FU1 : 6.3A)	REK1085	Not used	Not used	Not used	Not used	
P5-13	⚠	Fuse (FU1 : T5A)	Not used	AEK1061	AEK1061	AEK1061	AEK1061	
P5-15		Power Bracket	XNG3033	Not used	Not used	Not used	Not used	
P5-25		Rear Panel	XNC3065	XNC3063	XNC3063	XNC3063	XNC3064	
P5-26		SEC Holder	XMR3032	XMR3036	XMR3036	XMR3036	XMR3036	
P5-38		Tray Cap	XAK3157	XAK3210	XAK3210	XAK3210	XAK3210	
P5-41	NSP	Fuse Card	AAX2374	Not used	Not used	Not used	Not used	
P5-42	NSP	Getter	XAX3175	XAX3174	XAX3174	XAX3174	XAX3174	
P5-43		65 Label	ARW7050	Not used	Not used	Not used	Not used	
P5-44	NSP	$M Mecha. DVD (5p)	XXA3019	Not used	Not used	Not used	Not used	
P5-44	NSP	$M Mecha. DVD (2p)	Not used	XXA3018	XXA3018	XXA3018	XXA3018	
	⚠	Fuse (FU2, FU3 : T3.15A)	Not used	AEK1059	AEK1059	AEK1059	AEK1059	*1
	NSP	Name Label	Not used	XAL3064	XAL3065	XAL3065	Not used	*2
	NSP	Region Label	Not used	Not used	XAX3183	XAX3184	Not used	For Rear Panel
		Caution Label	Not used	Not used	Not used	Not used	PRW1018	*3
	NSP	SISIR Label	Not used	Not used	Not used	Not used	XAX3181	For Rear Panel

Ref. No.	Mark	Symbol and Description	Part No.					Remarks
			XR-A9800D /KUCXJ	XR-VS300D /DBXJN	XR-VS300D /DDXJN/RA	XR-VS300D /DDXJN/RB	XR-VS300D /DLXJN/NC	
		FRONT PANEL SECTION						
P7-19		JOG Knob	XAA3015	XAA3019	XAA3019	XAA3019	XAA3019	
P7-21		FUNC Button L	XAD3061	XAD3089	XAD3089	XAD3089	XAD3089	
P7-22		FUNC Button R	XAD3051	XAD3090	XAD3090	XAD3090	XAD3090	
P7-23		FUNC Frame L	XAD3052	XAD3091	XAD3091	XAD3091	XAD3091	
P7-24		FUNC Frame R	XAD3053	XAD3092	XAD3092	XAD3092	XAD3092	
P7-25		DV ENT Button	XAD3056	XAD3085	XAD3085	XAD3085	XAD3085	
P7-26		Display Panel	XAK3135	XAK3205	XAK3205	XAK3205	XAK3205	
P7-33		FL Cover	XAK3164	XAK3163	XAK3163	XAK3163	XAK3163	
P7-42		Sub Panel	XAK3203	XAK3208	XAK3208	XAK3208	XAK3208	
P7-50		DV Button L	XAD3057	XAD3087	XAD3087	XAD3087	XAD3087	
P7-51		DV Button R	XAD3059	XAD3088	XAD3088	XAD3088	XAD3088	
		Mic Knob	Not used	XAB3007	XAB3007	XAB3007	XAB3007	No. 1

Notes : For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES” and “3. SCHEMATIC DIAGRAM”.
The numbers in the remarks column correspond to the numbers on the “ EXPLODED VIEWS ”.
*1 Refer to “3. SCHEMATIC DIAGRAM”. *2 Stick Name Label on the Rear Panel. *3 Refer to “LABEL CHECK”.

■ EXPLODED VIEWS



■ CONTRAST OF $M MECHA. DVD

XXA3018 and XXA3019 are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			XXA3019 (XR-A9800D)	XXA3018 (XR-VS300D)	
P5-10		CONNECT ASSY (6CH)	XWX3023	Not used	
P5-10		CONNECT ASSY (2CH)	Not used	XWX3019	
P5-14		25P Flexible Cable	XDD3046	Not used	
P5-14		15P Flexible Cable	Not used	XDD3049	
P5-18		30P Flexible Cable	XDD3044	Not used	
P5-18		16P Flexible Cable	Not used	XDD3043	
P5-21		7P Flexible Cable/30V	XDD3053	ADD7197	
P5-23		DVD Base	XNG3034	ANG7262	
P5-24		DVD Shield	XNK3006	ANK7066	
P5-55		21P Flexible Cable	XDD3052	Not used	
P5-55		7P Flexible Cable	Not used	XDD3045	

Notes : For PCB ASSEMBLIES, Refer to “PCB PARTS LIST”, “3. SCHEMATIC DIAGRAM” and “4. PCB CONNECTION DIAGRAM”.

■ CONTRAST OF PCB ASSEMBLIES

JF SECONDARY ASSY

XWZ3317 and XWZ3323 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3323	XWZ3317	
⚠	C33, C34 (4700µF/80V)	ACH7071	Not used	
⚠	C33, C34 (4700µF/71V)	Not used	XCH3001	

IF AF ASSY

XWZ3322, XWZ3316 and XWZ3330 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3330	XWZ3322	XWZ3316	
⚠	IC3301	STK407-070B	STK407-070B	STK407-090B	
⚠	IC3305, IC3306 (5A)	AEK7019	AEK7019	Not used	
⚠	IC3305, IC3306 (7A)	Not used	Not used	AEK7021	
	IC3835	Not used	M65847AFP	M65847AFP	
⚠	Q3351	IRFI9Z34G	IRFI9Z34G	IRF9540A	
⚠	Q3352	IRFIZ34G	IRFIZ34G	IRF540A	
	Q3803	Not used	2SD1858X	2SD1858X	
	D3002	1SS133	1SS133	Not used	
	D3803	Not used	MTZJ5.6B	MTZJ5.6B	
	F2201, F2202	RTF1209	XTF3002	XTF3002	
	L3065 CHIP BEAD	VTL1081	VTL1081	Not used	
	L3065	Not used	Not used	LCTB4R7K1608	
	C3011, C3012	Not used	Not used	CEAT100M50	
	C3042, C3991	CKSRYB103K50	CKSRYB103K50	Not used	
	C3623, C3624	CKSRYB471K50	CKSRYB471K50	Not used	
	C3625	CEAT330M16	CEAT330M16	Not used	
	C3815	Not used	CEAT100M50	CEAT100M50	
	C3816, C3819	Not used	CEAT470M16	CEAT470M16	
	C3817	Not used	CCSRYB473K16	CCSRYB473K16	
	C3818	Not used	CCSRCH101J50	CCSRCH101J50	
	C3828–C3830	Not used	CKSRYB683K16	CKSRYB683K16	
	C3831	Not used	CKSRYB102K50	CKSRYB102K50	
	C3832	Not used	CKSRYB122K50	CKSRYB122K50	
	C3833–C3836	Not used	CKSRYB103K50	CKSRYB103K50	
	C3837	Not used	CCSRCH471J50	CCSRCH471J50	
	C3838	Not used	CKSRYB472K50	CKSRYB472K50	
	C3839, C3840	Not used	CKSRYB224K10	CKSRYB224K10	
	C3842, C3843	Not used	CEAT2R2M50	CEAT2R2M50	
	C3858	CEAT100M50	Not used	Not used	
	C3890	Not used	CKSRYB822K50	CKSRYB822K50	
	R3010	RS1/16S822J	RS1/16S822J	RS1/16S472J	
	R3026	RD1/4PU822J	RS1/4PU822J	RD1/4PU472J	
	R3627	RS1/16S471J	RS1/16S471J	Not used	
	R3831	Not used	RS1/4PU102J	RD1/4PU102J	
	R3832–R3834	Not used	RS1/16S102J	RS1/16S102J	
	R3835, R3839	Not used	RS1/16S682J	RS1/16S682J	
	R3836, R3837	Not used	RS1/16S472J	RS1/16S472J	
	R3838, R3846	Not used	RS1/16S153J	RS1/16S153J	
	R3840–R3842, R3844, R3845	Not used	RS1/16S103J	RS1/16S103J	
	R3843	Not used	RS1/16S562J	RS1/16S562J	
	R3855	Not used	RS1/16S680J	RS1/16S680J	
	CN3601 4P SPEAKER TERMINAL	AKE7018	XKE3004	XKE3004	
	CN3603 9P JUMPER CONNECTOR	KPE9	KPE9	Not used	
	CN5104 30P FFC CONNECTOR	HLEM30R-1	HLEM30R-1	Not used	
	CN5104 16P FFC CONNECTOR	Not used	Not used	HLEM16R-1	
	JA3441 2P PIN JACK	Not used	Not used	VKB1060	
	JA3991 HEADPHONE JACK	XKN3007	XKN3007	XKN3004	
	SCREW	Not used	Not used	BBZ30P140FMC	
	MICA SHEET	Not used	Not used	XEE3003	
	FET BRACKET	Not used	Not used	XNG3016	

KF REAR AMP ASSY

XWZ3319 and XWZ3325 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3325	XWZ3319	
⚠	IC3401	STK402-230	Not used	
	Q3401–Q3404	2SD2114K	Not used	
	Q3405, Q3410	DTA124EK	Not used	
	Q3406–Q3409, Q3411–Q3413, Q3415	2SC2412K	Not used	
	Q3414, Q3471, Q3472	2SA1037K	Not used	
	D50, D3425, D3426, D3471, D3472	1SS355	Not used	
	D61, D62, D3403–D3408, D3427, D3428	1SS133	Not used	
	D3409	MTZJ12C	Not used	
	D3429	MTZJ4.7B	Not used	
	L3401–L3403 AF CHOKE COIL	ATH-133	Not used	
	L3404 CHIP BEAD	VTL1081	Not used	
	RY3401, RY3402	ASR7017	Not used	
	C3401–C3403	CEANP2R2M50	Not used	
	C3404–C3406	CKSRYB222K50	Not used	
	C3407–C3409	CCSRCH221J50	Not used	
	C3410–C3412	CEANP100M35	Not used	
	C3413–C3415	CCSRCJ3R0C50	Not used	
	C3416, C3417, C3431	CEAT101M50	Not used	
	C3419	CEATR47M50	Not used	
	C3420	CEAT101M10	Not used	
	C3421	CEAT100M50	Not used	
	C3422, C3471, C3472	CCSRCH100D50	Not used	
	C3423, C3424, C3429	CKSRYB103K50	Not used	
	C3425–C3428	CKSRYF104Z25	Not used	
	C3432	CEAT221M16	Not used	
	R3401–R3404	RS1/16S332J	Not used	
	R3405–R3408	RS1/16S102J	Not used	
	R3409–R3411	RS1/10S273J	Not used	
	R3412	RS1/10S104J	Not used	
	R3413–R3415	RS1/16S563J	Not used	
	R3416–R3418	RS1/10S561J	Not used	
	R3419–R3421	RD1/4PU563J	Not used	
	R3422	RS1/10S223J	Not used	
	R3424	RS1/16S102J	Not used	
	R3425–R3428	RS1/10S823J	Not used	
	R3429, R3430, R3432	RS1/10S153J	Not used	
	R3433	RS1/16S273J	Not used	
	R3434, R3475, R3476	RS1/10S392J	Not used	
	R3435	RS1/16S104J	Not used	
	R3436–R3437, R3439, R3440	RS1/16S223J	Not used	
	R3438	RS1/16S103J	Not used	
	R3441	RS1/16S224J	Not used	
	R3442–R3444	RD1/4LMF100J	Not used	
	R3445–R3447	RS1/16S100J	Not used	
	R3448	RS3LMF102J	Not used	
	R3449	RD1/4PU681J	Not used	
	R3471–R3473	RS1LMFR22J	Not used	
	R3477–R3478	RD1/4MUF101J	Not used	
	CN3401 1P PIN JACK	AKB7042	Not used	
	CN3404 FFC CONNECTOR 25P	HLEM25R-1	Not used	
	CN3404 FFC CONNECTOR 15P	Not used	HLEM15R-1	
	J3401 JUMPER WIRE	D15A09-100-2651	Not used	
	JA3403 AUDIO 3P PIN JACK	XKB3007	Not used	
	9P CABLE HOLDER	51063-0905	Not used	

LF PRIMARY ASSY

XWZ3326, XWZ3320 and XWZ3332 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3332	XWZ3326	XWZ3320	
⚠	S1 VOLTAGE SELECTOR	Not used	XKX3001	XKX3001	
⚠	R1 (2.2MΩ/ 1/2W)	RCN1080	Not used	Not used	
⚠	AN1 1P AC INLET	XKP3042	XKP3041	XKP3041	
⚠	CN2 4P VH CONNECTOR	Not used	B4P7-VH	B4P7-VH	
	H3–H6 FUSE CLIP	Not used	AKR7001	AKR7001	

MF DISPLAY ASSY

XWZ3324, XWZ3318 and XWZ3331 are constructed the same except for the following :

Mark	Symbol and Description	Part No.			Remarks
		XWZ3331	XWZ3324	XWZ3318	
	IC3931	Not used	M65855FP	M65855FP	
	IC5601	HEF4794BT	HEF4794BT	Not used	
	Q5822–Q5824, Q5827	Not used	Not used	DTC143EK	
	D3931	Not used	MTZJ5.1B	MTZJ5.1B	
	D5592	1SS133	Not used	Not used	
	D5593	1SS133	1SS133	Not used	
	D5595	1SS181	1SS181	Not used	
	L3921, L3922 CHIP BEAD	VTL1081	VTL1081	Not used	
	L3931	Not used	LCTB100K2125	LCTB100K2125	
	C3931, C3934, C3940	Not used	CKSRYB103K50	CKSRYB103K50	
	C3932	Not used	CEJAR47M50	CEJAR47M50	
	C3933	Not used	CEJQ220M10	CEJQ220M10	
	C3935	Not used	CKSRYB473K16	CKSRYB473K16	
	C3937	Not used	CEJA4R7M50	CEJA4R7M50	
	C3938	Not used	CKSRYB472K50	CKSRYB472K50	
	C3939	Not used	CKSRYB123K50	CKSRYB123K50	
	C3942	Not used	CKSRYF104Z25	CKSRYF104Z25	
	C3943	Not used	CEJQ101M10	CEJQ101M10	
	C5601	CCSRCH101J50	CCSRCH101J50	Not used	
	C5603, C5604	CCSRCH100D50	CCSRCH100D50	Not used	
	R3931	Not used	RS1/16S472J	RS1/16S472J	
	R3932, R3937, R3938	Not used	RS1/16S123J	RS1/16S123J	
	R3933	Not used	RS1/16S153J	RS1/16S153J	
	R3934	Not used	RS1/16S124J	RS1/16S124J	
	R3935	Not used	RS1/16S822J	RS1/16S822J	
	R3936	Not used	RS1/16S103J	RS1/16S103J	
	R3939	RS1/16S0R0J	Not used	Not used	
	R3940	Not used	RD1/4PU121J	RD1/4PU121J	
	R5590, R5984, R5985, R5987, R5990	RS1/16S473J	RS1/16S473J	Not used	
	R5591	RS1/16S152J	RS1/16S152J	Not used	
	R5610	Not used	Not used	RS1/16S0R0J	
	R5619	RS1/16S221J	RS1/16S221J	Not used	
	R5620, R5621, R5626	RS1/16S102J	RS1/16S102J	Not used	
	R5986, R5988, R5989	RS1/16S103J	RS1/16S103J	Not used	
	VR3931 (10kΩ-B)	Not used	XCS3002	XCS3002	
	CN5502 FFC CONNECTOR 21P	52492-2120	52492-2120	Not used	
	CN5502 FFC CONNECTOR 7P	Not used	Not used	52492-0720	

Mark	No.	Description	Part No.

● PCB PARTS LIST for XR-VS300D

GF CONNECT ASSY (2CH)

SEMICONDUCTORS

	IC8202	LA7137M
	IC8203	NJM78L08A
	IC8301	PCM1716E
	IC8201	TA7302P
	Q8203, Q8204	2PB709A
	Q8205, Q8206	2SD2114K
	Q8302	DTA124EK
	Q8201	DTC114YK
	Q8301	DTC124EK
	Q8202	PDTA124EK
	D8304, D8305	1SS355

COILS AND FILTERS

	L8201		LCTA470J2520
	L8241–L8245	CHIP BEADS	VTL1081
	L8103	CHIP BEADS	VTL1095
	L8205	CHIP SOLID INDUCTOR	VTL1145

CAPACITORS

	C8104	CCSRCH101J50
	C8105, C8106, C8109, C8110, C8316	CCSRCH221J50
	C8201	CCSRCH390J50
	C8111	CEAT102M10
	C8311, C8312	CEJA100M16
	C8209, C8210, C8217, C8226, C8227	CEJA101M10
	C8235	CEJA101M10
	C8212, C8223	CEJA331M6R3
	C8301, C8302, C8305, C8306, C8309	CEJA470M10
	C8315, C8317	CGCYX104K25
	C8101, C8232, C8233, C8304	CKSRYB103K50
	C8202–C8206, C8208, C8211	CKSRYB104K16
	C8213, C8214, C8216, C8221, C8222	CKSRYB104K16
	C8228, C8236, C8237, C8308	CKSRYB104K16
	C8313, C8314	CKSRYB681K50

RESISTORS

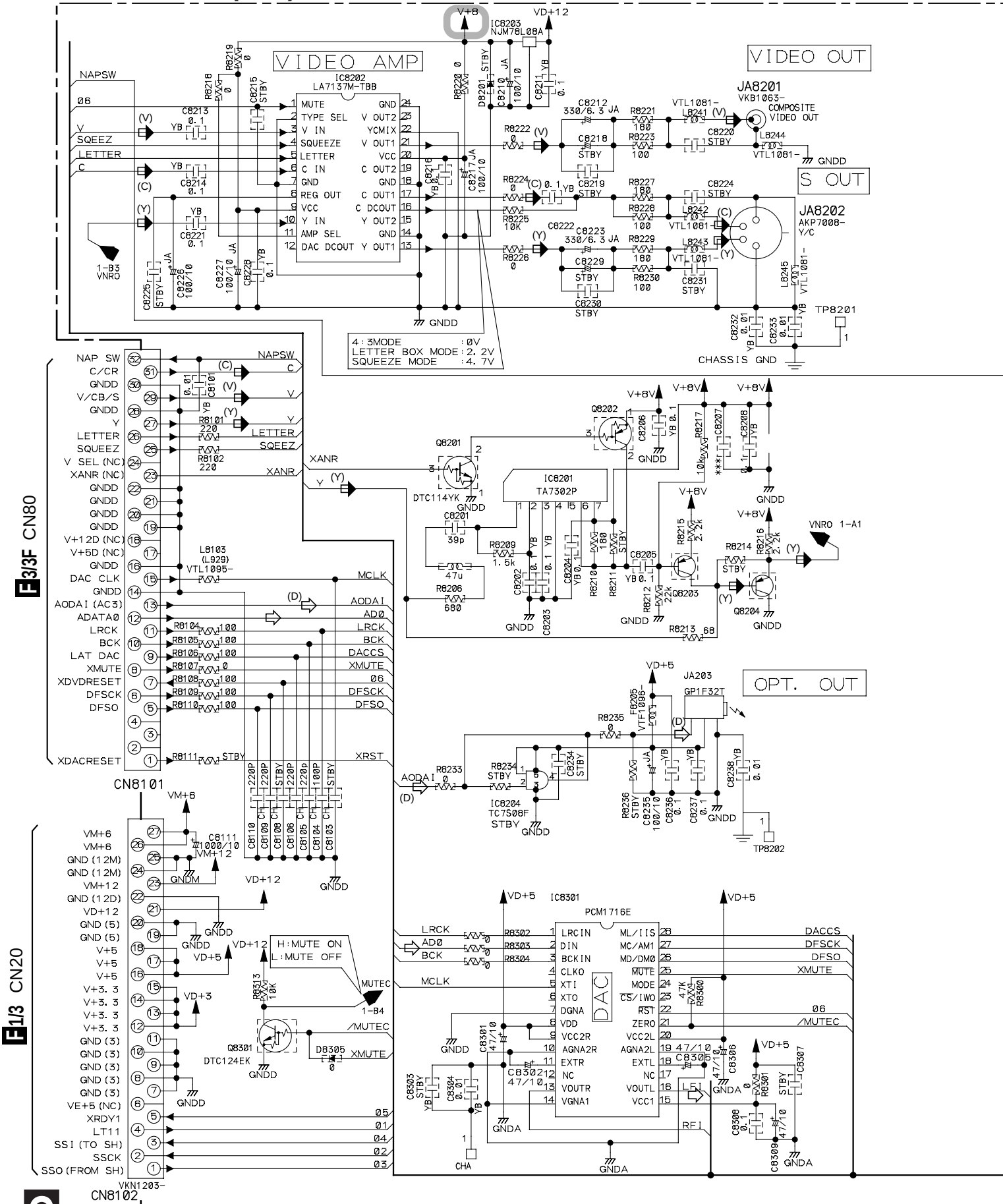
	All Resistors	RS1/16S□□□J

OTHERS

	CN8202	4P MINI DIN SOCKET	AKP7008
	JA8203	OPTICAL LINK OUT	GP1F32T
	CN8105	FFC CONNECTOR 15P	HLEM15S-1
	CN8103	FFC CONNECTOR 16P	HLEM16S-1
	CN8104	FFC CONNECTOR 7P	HLEM7S-1
	JA8201	1P PIN JACK	VKB1063
	CN8106	7P FFC CONNECTOR	VKN1183
	CN8102	27P FFC CONNECTOR	VKN1203
	CN8107	7P FFC CONNECTOR	VKN1211
	CN8101	32P FFC CONNECTOR	VKN1263
	KN8301	EARTH METAL FITTING	VNF1084
	S8201	SLIDE SWITCH	VSH1020

3. SCHEMATIC DIAGRAM

3.1 CONNECT ASSY (2CH) for XR-VS300D

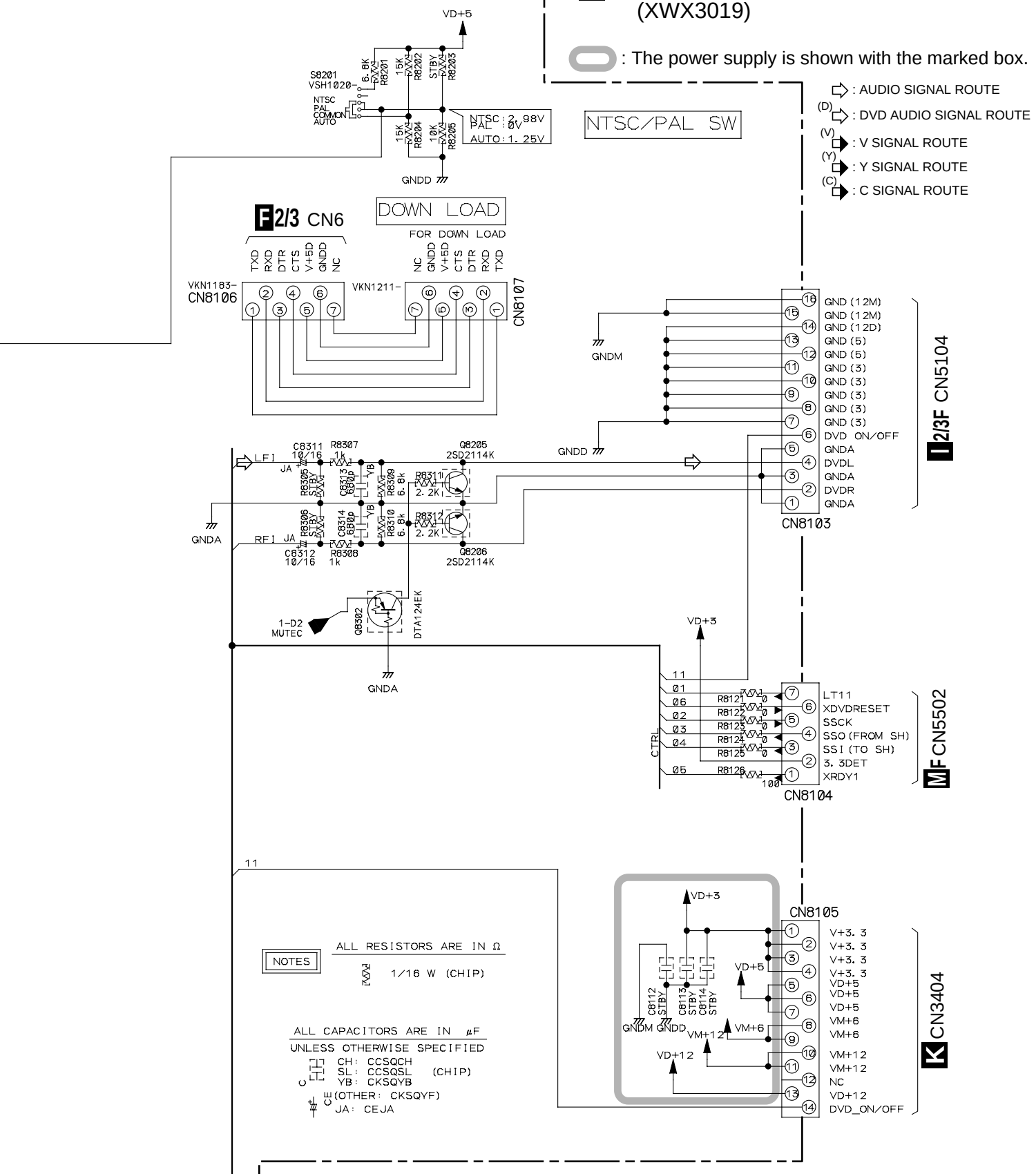


Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

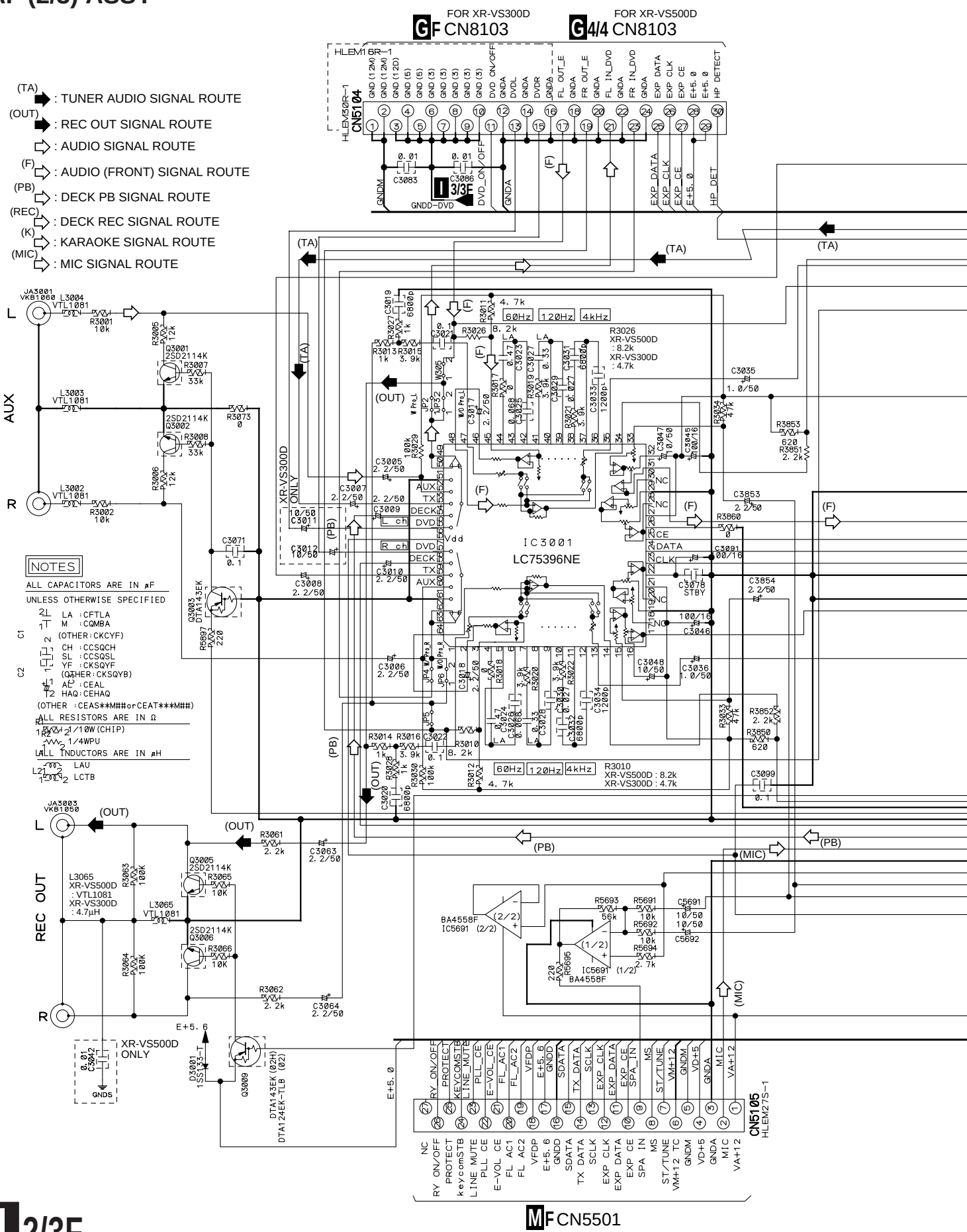
GF CONNECT ASSY (2 CH) (XWX3019)

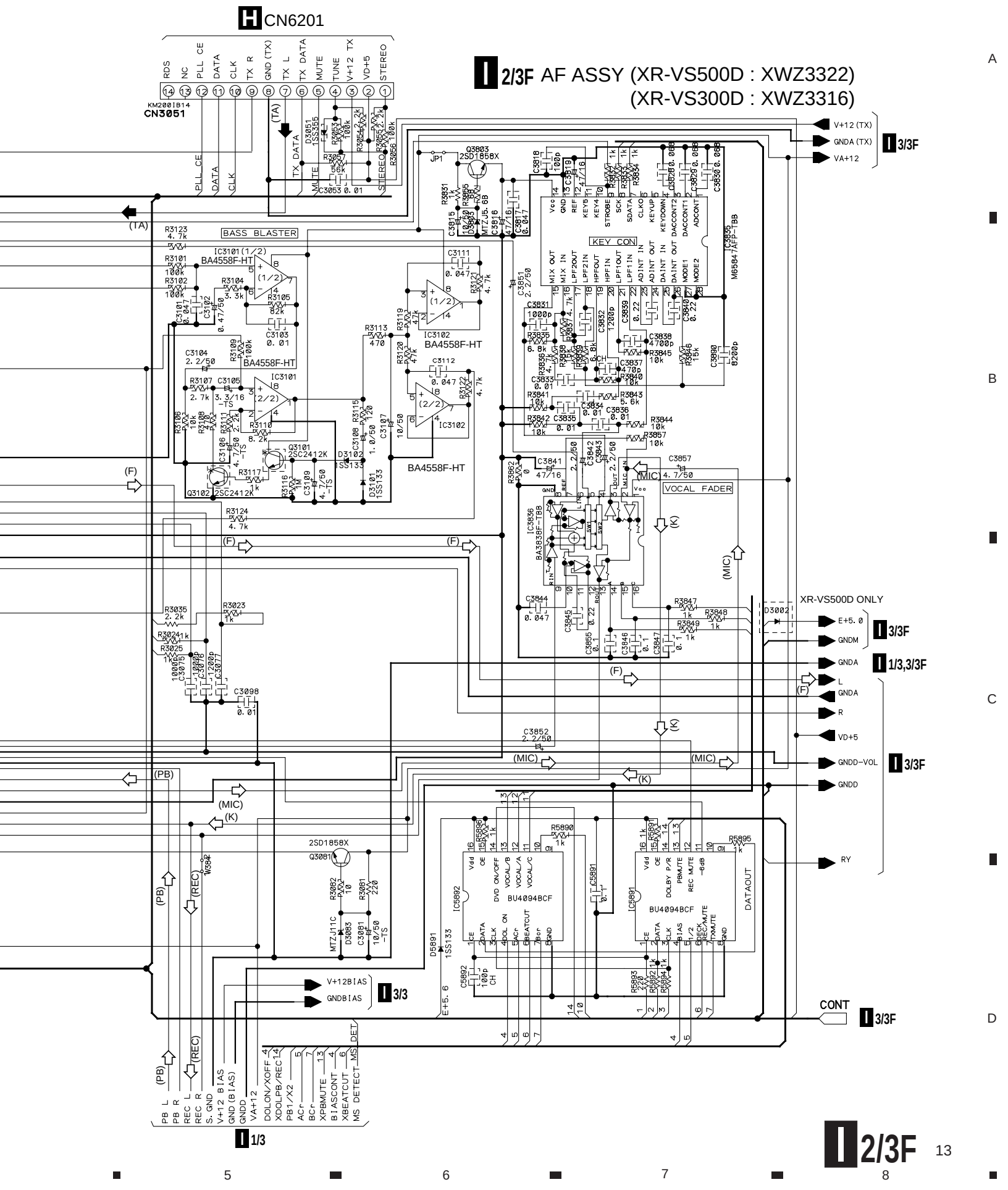
: The power supply is shown with the marked box.

: AUDIO SIGNAL ROUTE
(D) : DVD AUDIO SIGNAL ROUTE
(V) : V SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE

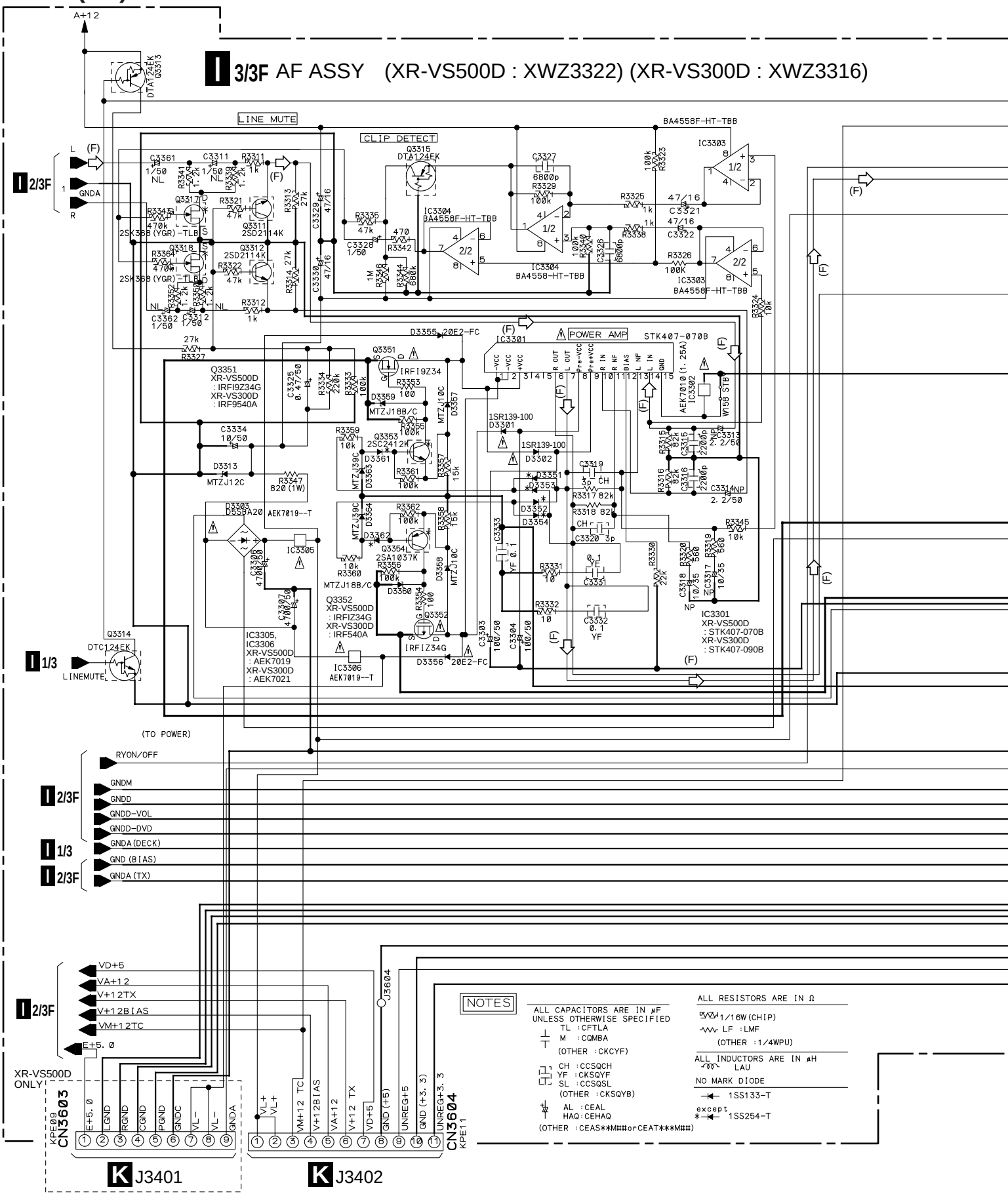


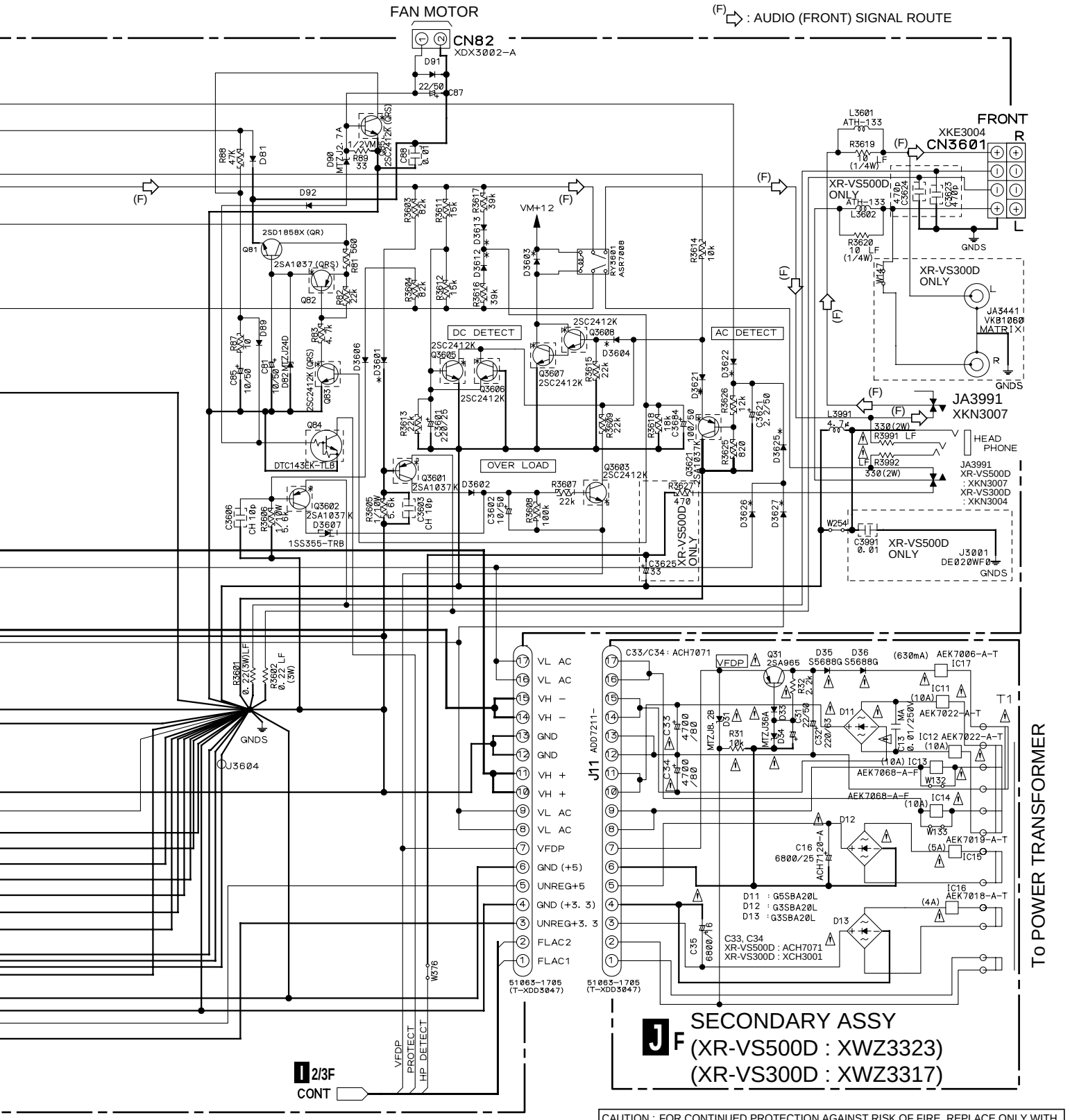
3.2 AF (2/3) ASSY


FOR XR-VS300D
GF CN8103
FOR XR-VS500D
G4/4 CN8103
(TA) : TUNER AUDIO SIGNAL ROUTE
(OUT) : REC OUT SIGNAL ROUTE
: AUDIO SIGNAL ROUTE
(F) : AUDIO (FRONT) SIGNAL ROUTE
(PB) : DECK PB SIGNAL ROUTE
(REC) : DECK REC SIGNAL ROUTE
(K) : KARAOKE SIGNAL ROUTE
(MIC) : MIC SIGNAL ROUTE
HLEM16R-1
CN5104
HLEM30R-1
GND (12M)
GND (12M)
GND (12D)
GND (5)
GND (5)
GND (3)
GND (3)
GND (3)
GND (3)
GND (3)
DVD ON/OFF
GNDA
DVDL
GNDA
DVDR
GNDA
FL OUT_LE
GNDA
FR OUT_LE
GNDA
FL IN_DVD
GNDA
FR IN_DVD
GNDA
EXP DATA
EXP CLK
EXP CE
E+5. 0
E+5. 0
HP DETECT
GNDM
C3083
0.01
C3086
0.01
DVD_ON/OFF
GNDA
GNDD-DVD
I 3/3F
EXP_DATA
EXP_CLK
EXP_CE
E+5. 0
HP_DET
JA3001
VKB1060
L3004
VTL1081
R3001
10k
R3005
12k
Q3001
2SD2114K
R3007
33k
L3003
VTL1081
AUX
2SD2114K
Q3002
R3008
33k
R3073
0
R3006
12k
L3002
VTL1081
R
R3002
10k
C3071
0.1
Q3003
DTA143EK
R5697
220
XR-VS300D ONLY
C3007
2.2/50
C3009
C3011
10/50
C3012
10/50
C3008
2.2/50
C3005
2.2/50
C3010
2.2/50
AUX
TX
DECK
DVD
Vdd
IC3001
LC75396NE
C3078
STBY
C3046
100/16
C3048
10/50
C3036
1.0/50
C3035
1.0/50
C3047
1.0/50
C3045
100/16
C3853
2.2/50
C3854
2.2/50
C3091
100/16
R3860
0
R3853
620
R3851
2.2k
R3852
2.2k
R3850
620
R3034
4.7k
R3033
47k
C3099
0.1
R3011
4.7k
R3026
8.2k
R3010
8.2k
R3012
4.7k
60Hz
120Hz
4kHz
R3026
XR-VS500D
: 8.2k
XR-VS300D
: 4.7k
R3010
XR-VS500D : 8.2k
XR-VS300D : 4.7k
NOTES
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED
LA :CFTLA
M :CQMBA
(OTHER:CKCYF)
CH :CCSQCH
SL :CCSQSL
YF :CKSQYF
(OTHER:CKSQYB)
AE :CEAL
HAQ:CEHAQ
(OTHER :CEAS**M##orCEAT***M##)
ALL RESISTORS ARE IN Ω
1/10W(CHIP)
1/4WPU
ALL INDUCTORS ARE IN μH
LAU
LCTB
JA3003
VKB1050
(OUT)
L
R
REC OUT
L3065
XR-VS500D
: VTL1081
XR-VS300D
: 4.7μH
L3065
VTL1081
R3063
100K
R3064
100K
Q3005
2SD2114K
R3065
10K
2SD2114K
Q3006
R3066
10K
R3061
2.2k
R3062
2.2k
C3063
2.2/50
C3064
2.2/50
E+5. 6
XR-VS500D
ONLY
C3042
0.01
GNDS
D3001
1SS133-T
Q3009
DTA143EK (02H)
DTA124EK-TLB (02)
(PB)
(MIC)
BA4558F
IC5691 (2/2)
(1/2)
IC5691
BA4558F
R5693
56k
R5691
10k
R5692
10k
R5694
2.7k
R5695
220
C5691
10/50
C5692
10/50
E+5. 0
CN5105
HLEM27S-1
RY ON/OFF
PROTECT
KEYCOMSTB
LINE_MUTE
PLL_CE
E-VOL_CE
FL_AC1
FL_AC2
VFDP
E+5. 6
GNDD
SDATA
TX_DATA
SCLK
EXP_CLK
EXP_DATA
EXP_CE
SPA_IN
MS
ST/TUNE
VM+12
GNDM
VD+5
GNDA
M1C
VA+12
NC
RY ON/OFF
PROTECT
keycomSTB
LINE MUTE
PLL CE
E-VOL CE
FL AC1
FL AC2
VFDP
E+5. 6
GND
SDATA
TX DATA
SCLK
EXP CLK
EXP DATA
EXP CE
SPA IN
MS
ST/TUNE
VM+12 TC
GNDM
VD+5
GNDA
M1C
VA+12
MF CN5501


H CN6201
I 2/3F AF ASSY (XR-VS500D : XWZ3322)
(XR-VS300D : XWZ3316)
KM2001B14
CN3051
RDS
NC
PLL CE
DATA
CLK
TX R
GND (TX)
TX L
TX DATA
MUTE
TUNE
V+12 TX
VD+5
STEREO
BASS BLASTER
KEY CON
VOCAL FADER
XR-VS500D ONLY
V+12 (TX)
GNDA (TX)
VA+12
E+5. 0
GNDM
GNDA
L
R
VD+5
GNDD-VOL
GNDD
RY
CONT
V+12BIAS
GNDBIAS
PB L
PB R
REC L
REC R
S. GND
V+12 BIAS
GND (BIAS)
GNDD
VA+12
DOLON/XOFF
XDOLPB/REC
PB1/X2
ACr
BCr
XPBMUTE
BIASCONT
XBEATCUT
MS DETECT
I 3/3F
I 1/3,3/3F
I 3/3
I 1/3

3.3 AF (3/3) and SECONDARY ASSYS





CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4911.25 MFD, BY LITTELFUSE INC. FOR IC3302 (AEK7010).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 MFD, BY LITTELFUSE INC. FOR IC15, IC3305 AND IC3306 (AEK7019).

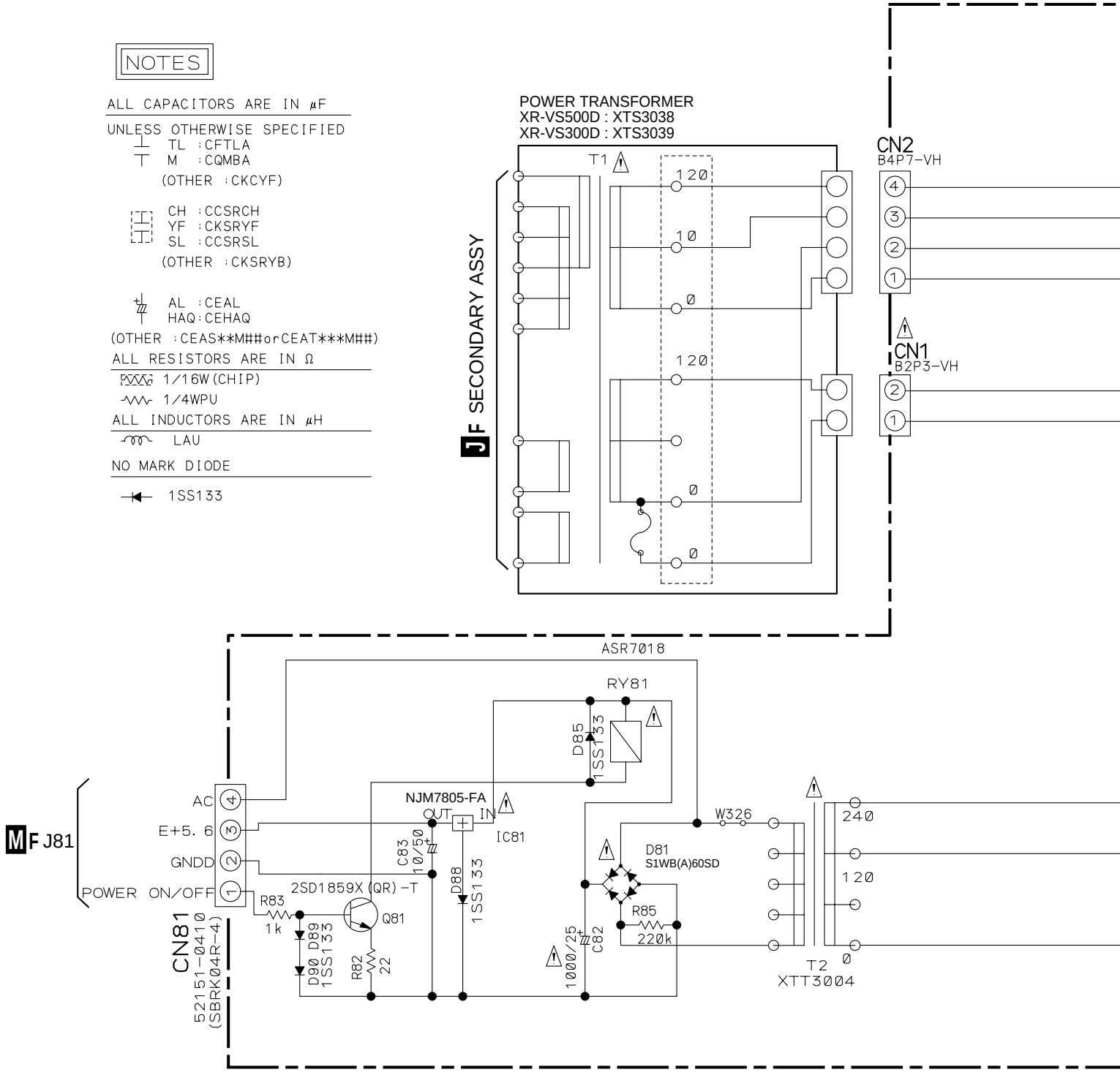
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.630 MFD, BY LITTELFUSE INC. FOR IC17 (AEK7006).

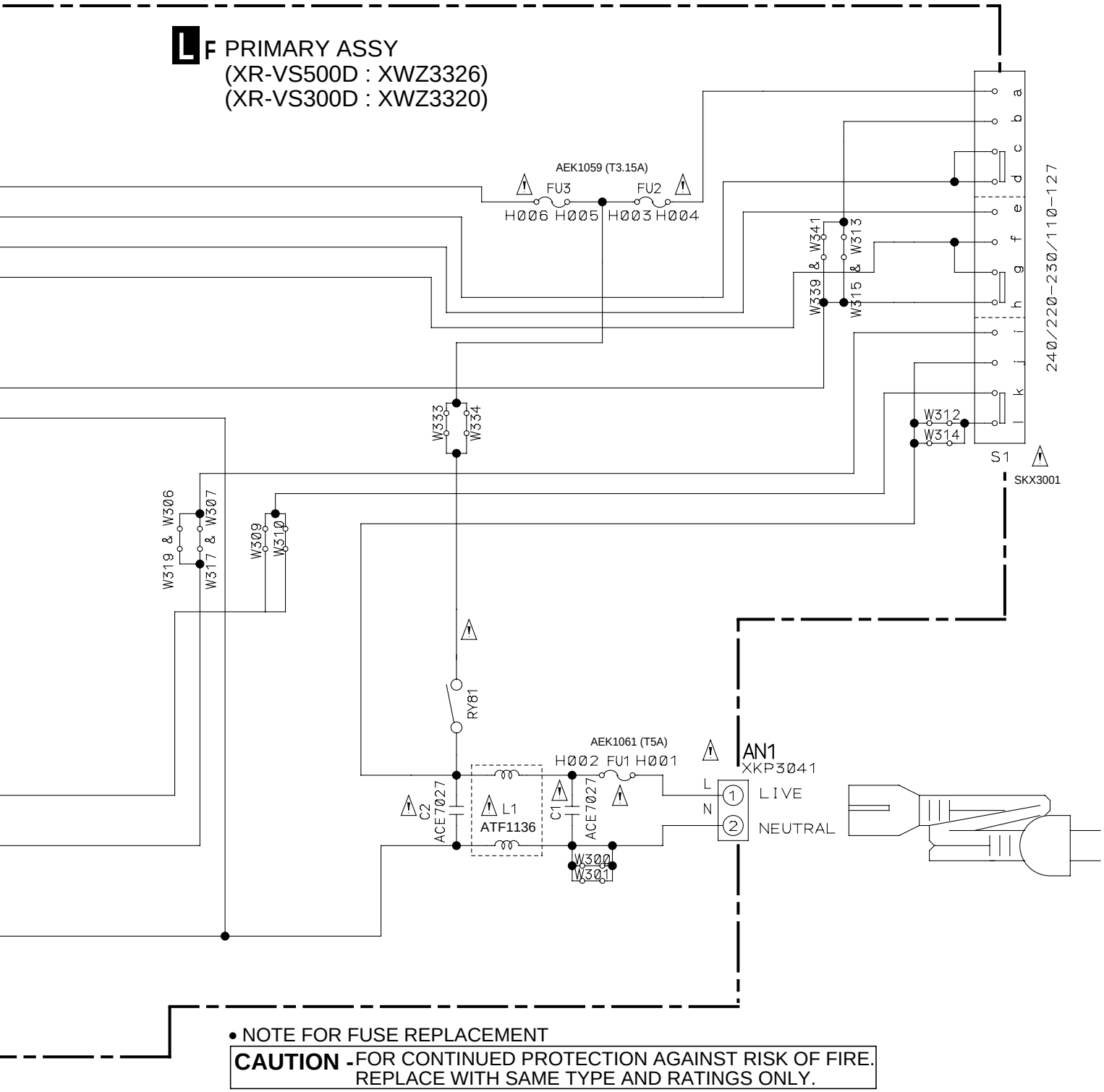
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491004 MFD, BY LITTELFUSE INC. FOR IC16 (AEK7018).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010 MFD, BY LITTELFUSE INC. FOR IC11 AND IC12 (AEK7022).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010F MFD, BY LITTELFUSE INC. FOR IC13 AND IC14 (AEK7068).

3.4 PRIMARY ASSY

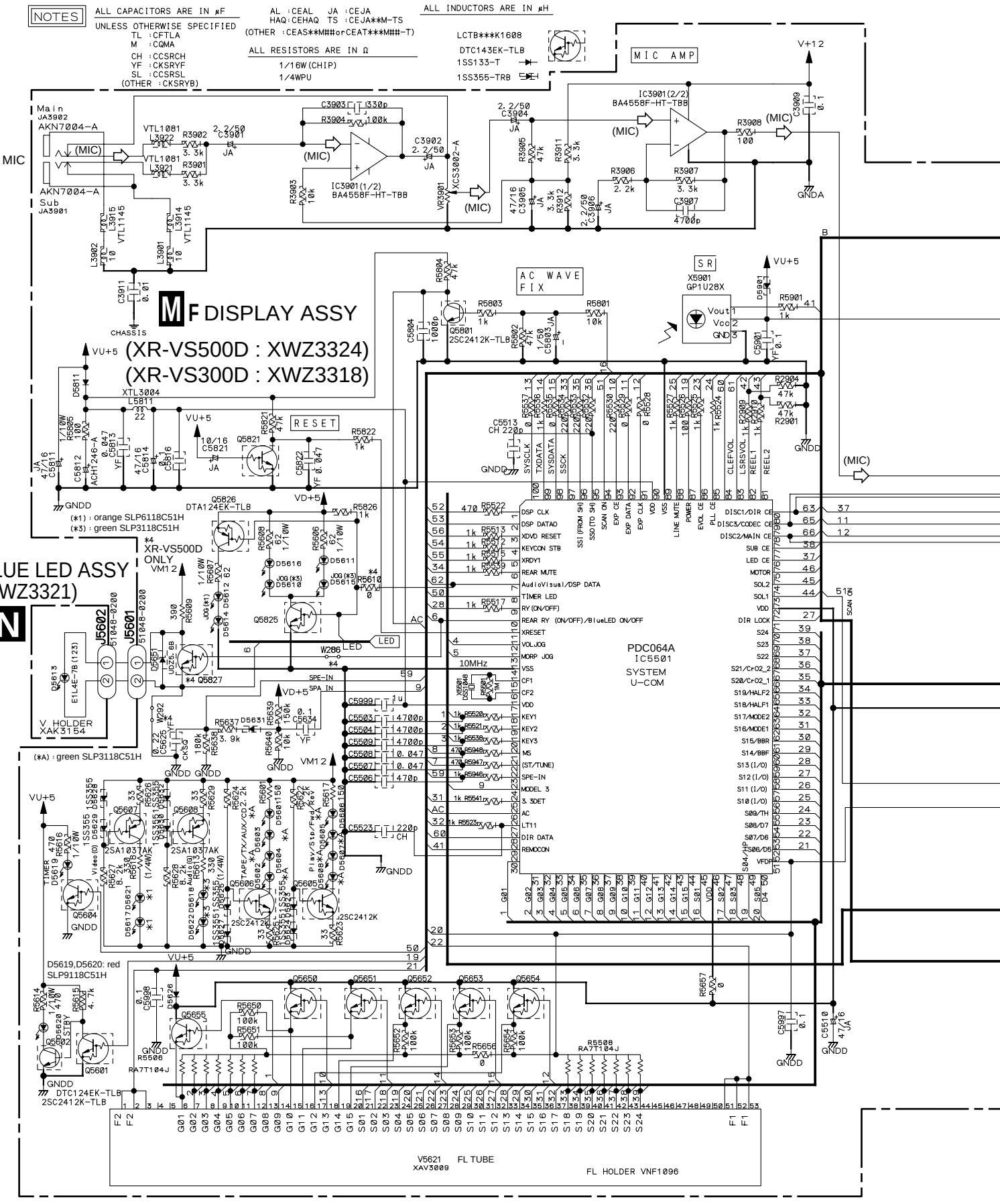


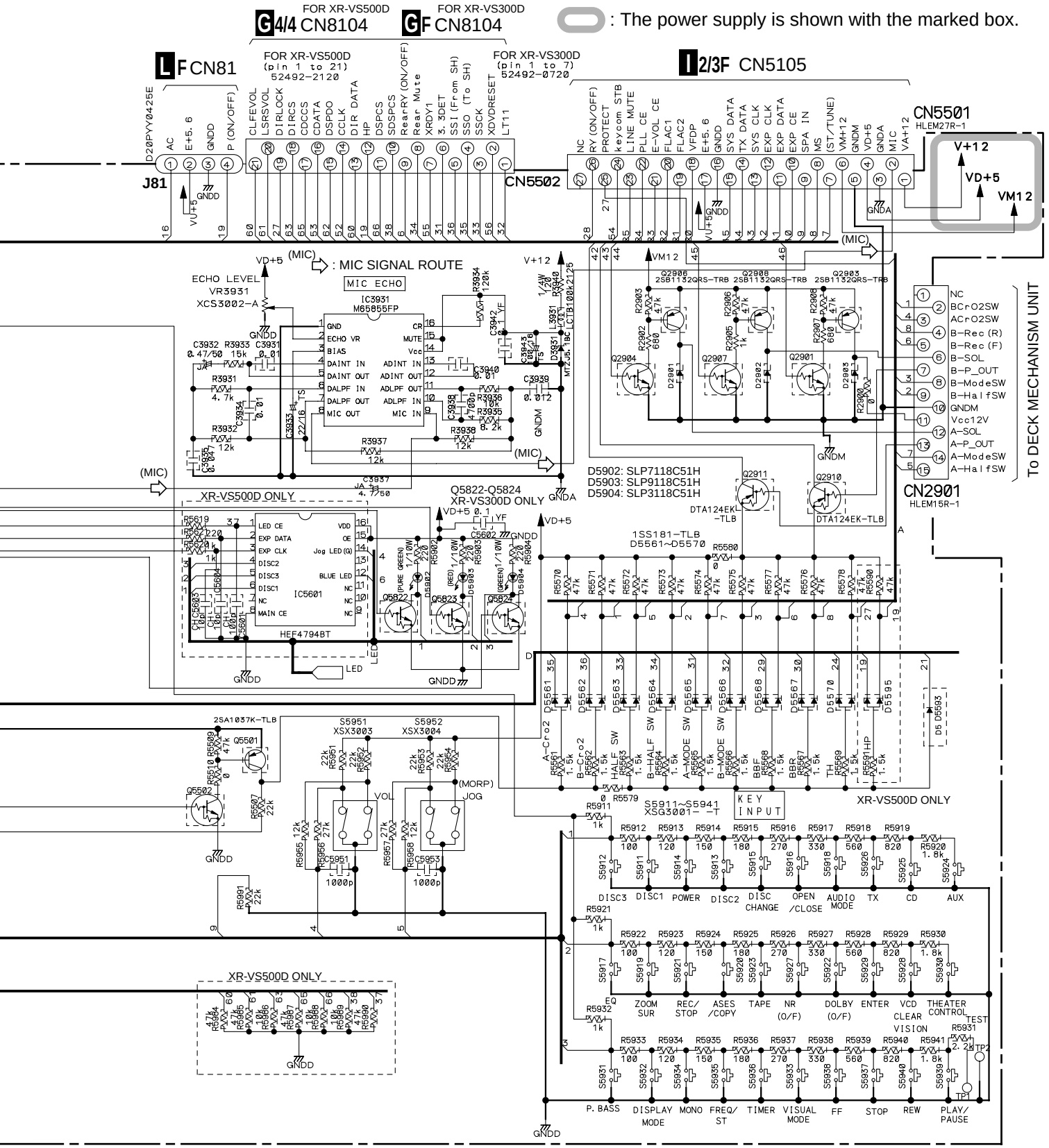


• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.5 DISPLAY and BLUE LED ASSYS

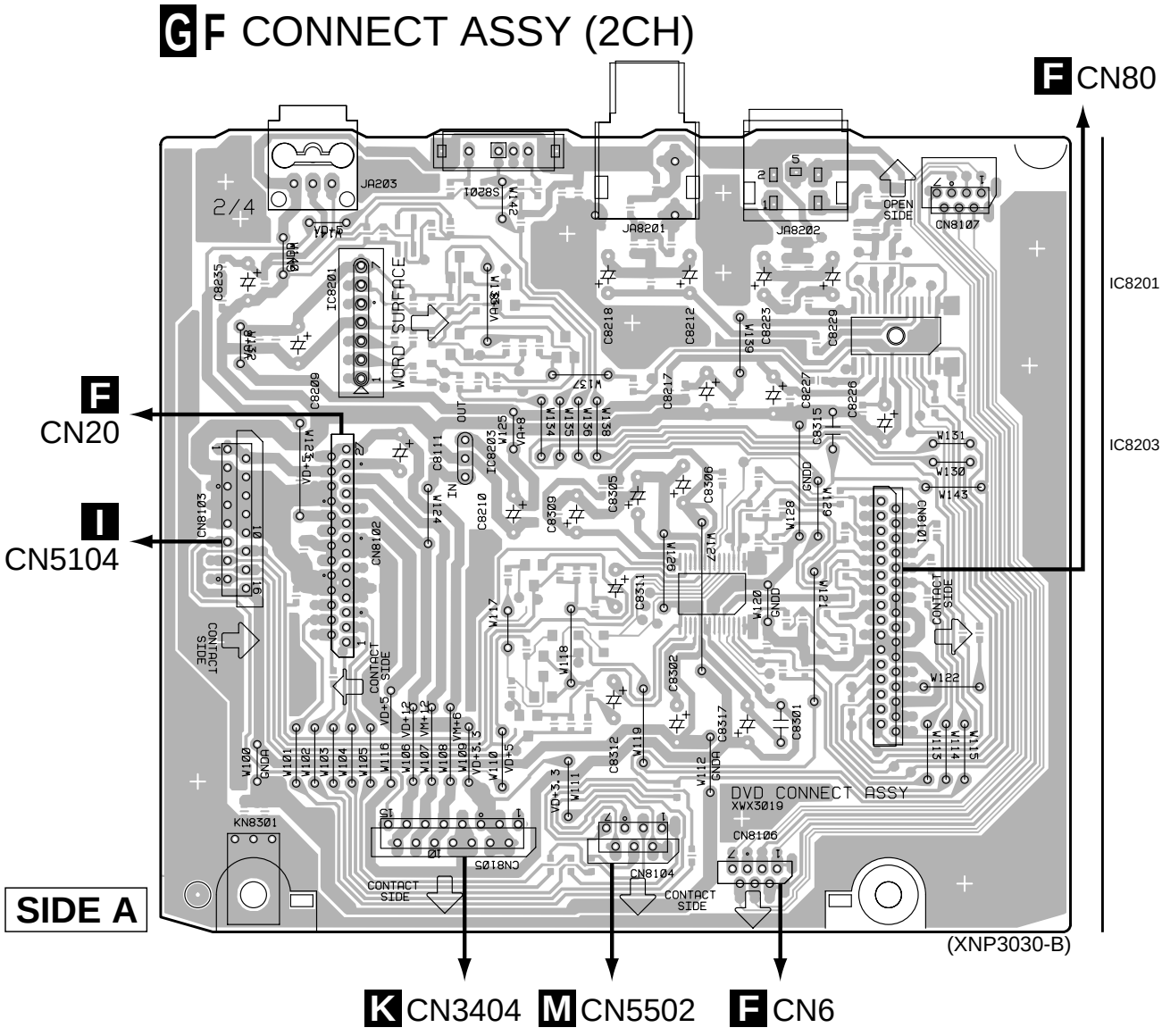




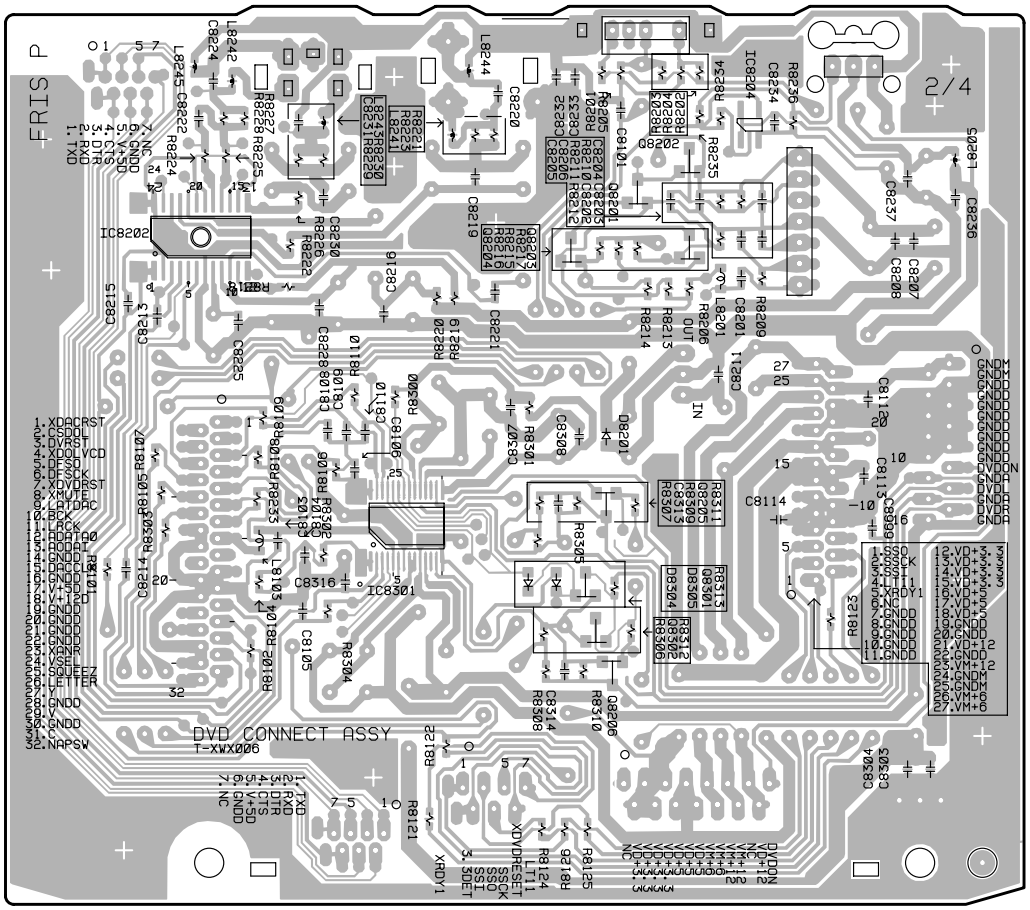
S5911 : DISC 1
S5912 : DISC 3
S5913 : DISC 2
S5914 : STANDBY/ON
S5915 : DISC CHANGE
S5916 : OPEN/CLOSE
S5917 : EQUALIZER
S5918 : AUDIO MODE
S5919 : ZOOM SURROUND
S5920 : ASES/COPY
S5921 : REC/STOP
S5922 : DOLBY/DTS
S5923 : TAPE I/II
S5924 : AUX
S5925 : DVD/CD
S5926 : TUNER BAND
S5927 : □□NR ON/OFF
S5928 : VIDEO NR
S5929 : SET
S5930 : THEATER CONTROL
S5931 : P.BASS(DEMO)
S5932 : DISPLAY MODE
S5933 : VISUAL MODE
S5934 : MONO
S5935 : FREQ/STATION
S5936 : TIMER/CLOCK ADJ
S5937 : ■ (STOP/ST.MEMORY)
S5938 : ►►I/►►• + (TUNING+)
S5939 : ◄► /II (PLAY/PAUSE)
S5940 : – •◄◄/I◄◄ (TUNING–)
S5951 : VOLUME UP/DPWN
S5952 : JOG dial

4. PCB CONNECTION DIAGRAM

4.1 CONNECT ASSY (2CH) for XR-VS300D



GF CONNECT ASSY (2CH)



SIDE B

(XNP3030-B)

5. GENERAL INFORMATION

5.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC064A (DISPLAY ASSY : IC5501) for XR-VS300D

• System Control Microcomputer

● Pin Function

No.	Pin Name	I/O	Function
1	– –	O	
2	– –	O	
3	XDVDRESET	O	Reset output of DVD microcomputer
4	KYC STB	O	Strobe output of Keycom IC (M65847AFP)
5	XRDY1	O	Communication ready output of DVD microcomputer
6	– –	O	
7	A/V MODE LED	O	AUDIO/VISUAL mode LED output
8	TIMER LED	O	Timer LED output
9	RY ON/OFF	O	Relay ON/OFF
10	BLUE LED	O	BLUE LED output
11	XRESET	–	
12	VOL JOG	I	Volume JOG input
13	MORP JOG	I	Sound Morphing JOG input
14	VSS	–	Ground
15	CF1	–	
16	CF2	–	
17	VDD	–	Power supply
18	KEY1	I	Key input 1 (A/D)
19	KEY2	I	Key input 2 (A/D)
20	KEY3	I	Key input 3 (A/D)
21	MS	I	Deck MS input
22	ST/TUNE	I	Tuner STEREO/TUNE input
23	SPE-IN	I	Spectrum analyzer signal input
24	3.3DETECT	I	DVD 3.3V detection input
25	MODEL3	I	Model distinguish input 3
26	AC	I	AC pulse interrupt input
27	LT11	I	Communication latch input of DVD microcomputer
28	– –	O	
29	REMOCON	I	Remote control interrupt input
30	G01	O	Grid 1 output
31	G02		Grid 2 output
32	G03		Grid 3 output
33	G04		Grid 4 output
34	G05		Grid 5 output
35	G06		Grid 6 output
36	G07		Grid 7 output
37	G08		Grid 8 output
38	G09		Grid 9 output
39	G10		Grid 10 output
40	G11		Grid 11 output
41	G12		Grid 12 output
42	G13		Grid 13 output
43	G14		Grid 14 output
44	G15		Grid 15 output
45	S01	O	Segment 1 output
46	VDD	–	Power supply
47	S02/D5597	I/O	Segment 2 output
48	S03/D5596		Segment 3 output
49	S04/D5595		Segment 4 output
50	S05/D5594	I/O	Segment 5 output/Destination SW4 input

No.	Pin Name	I/O	Function
51	VFDP	–	
52	S06/D5593	I/O	Segment 6 output/Destination SW3 input
53	S07/D5592		Segment 7 output/Destination SW2 input
54	S08/D5591		Segment 8 output/Destination SW1 input
55	S09/TH		Segment 9 output/Protection input
56	S10		Segment 10 output
57	S11		Segment 11 output
58	S12		Segment 12 output
59	S13		Segment 13 output
60	S14/ARF		Segment 14 output/DECK ARF SW input
61	S15/ARR		Segment 15 output/DECK ARR SW input
62	S16/MODE1		Segment 16 output/DECK MODE SW1 input
63	S17/MODE2		Segment 17 output/DECK MODE SW2 input
64	S18/HALF1		Segment 18 output/DECK HALF SW1 input
65	S19/HALF2		Segment 19 output/DECK HALF SW2 input
66	S20/CrO2_1		Segment 20 output/DECK CrO2 SW1 input
67	S21/CrO2_2		Segment 21 output/DECK CrO2 SW2 input
68	S22	O	Segment 22 output
69	S23		Segment 23 output
70	S24		Segment 24 output
71	– –	I	Pull-up/Down
72	VDD	–	Power supply
73	SOL2	O	DECK solenoid output 2
74	SOL1		DECK solenoid output 1
75	MOTOR	O	DECK motor output
76	– –	O	
77	– –	O	
78	LED DISC3	O	DISC3 LED output
79	LED DISC2	O	DISC2 LED output
80	LED DISC1	O	DISC1 LED output
81	REEL1	I	DECK reel pulse input 1
82	REEL2		DECK reel pulse input 2
83	– –	O	
84	– –	O	
85	PLL CE	O	Chip enable output of Tuner PLL
86	EVOL CE	O	Chip enable output of electronic volume IC
87	POWER	O	Power output
88	LINE MUTE	O	Line mute output
89	VSS	–	Ground
90	VDD	–	Power supply
91	EXP CLK	O	Clock output for EXP IC
92	EXP DATA	O	Data output for EXP IC
93	EXP CE	O	Chip enable output of EXP IC (BU4094BCF)
94	SCAN ON	O	Outputs for SW reading
95	SSI(SSO)	O	Communication data output of DVD microcomputer (outputs at AMP side)
96	SSO(SSI)	I	Communication data input of DVD microcomputer (inputs at AMP side)
97	SSCK	O	Communication clock output of DVD microcomputer
98	SYSDATA	O	Data output of the Tuner PLL data/electronic volume IC
99	TXDATA	I	Tuner data input
100	SYSCLK	O	Clock output of the Tuner PLL data/electronic volume IC

Service Manual

ORDER NO.
RRV2409

STEREO DVD CASSETTE DECK RECEIVER

XR-VS500D

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Region No.	Remarks
	XR-VS500D			
YPWXJ	◯	AC240V	4	
YPWXJN	◯	AC240V	4	

● **This service manual should be used together with the following manual(s):**

Model No.	Order No.	Remarks
XR-A9800D/KUCXJ	RRV2329	

CONTENTS

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

T – ZZK NOV. 2000 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

LABEL CHECK

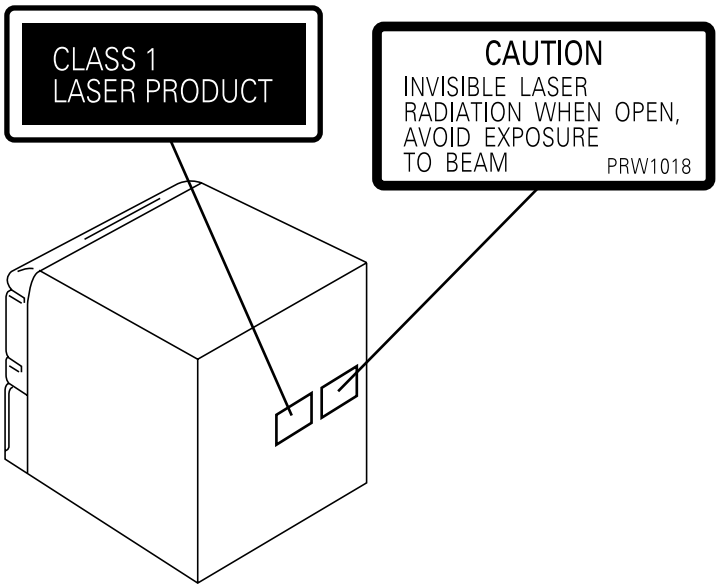
WARNING !

THE AEL (ACCESSIBLE EMISSION LEVEL) OF THE LASER POWER OUTPUT IS LESS THAN CLASS 1 BUT THE LASER COMPONENT IS CAPABLE OF EMITTING RADIATION EXCEEDING THE LIMIT FOR CLASS 1.
A SPECIALLY INSTRUCTED PERSON SHOULD DO SERVICING OPERATION OF THE APPARATUS.

LASER DIODE CHARACTERISTICS

FOR DVD :	MAXIMUM OUTPUT POWER : 5 mW
	WAVELENGTH : 655 nm
FOR CD :	MAXIMUM OUTPUT POWER : 5mW
	WAVELENGTH : 785 nm

Printed on the Rear Panel



Additional Laser Caution

1. Inside detection switch (S201 on the SMEB assy) and loading-status detection switch (S9503 on the MOTOR assy) are detected by the microprocessor (IC11 in the DVDM assy).
   • To permit the laser diode to oscillate, it is required to set the inside detection switch for the inside position (S201 : ON) and to set the loading-status detection switch for the clamp position (the center terminal of S9503 is shorted to +5V). The 655 nm laser diode for DVD oscillation will continue if pin 19 of IC1 is shorted to +5V (fault condition) in the DVDM assy.
   The 785 nm laser diode for CD oscillates if pin 20 of IC1 is shorted to +5V in the DVDM assy.
   In the test mode ∗ , the laser diode oscillates when microprocessor detects a PLAY signal, or when the PLAY key is pressed (S5931 ON in the DISPLAY assy), with the above requirements satisfied.

2. When the cover is open, close viewing through the objective lens with the naked eye will cause exposure to the laser beam.

∗ : Refer to page 82 on the service manual RRV2329.

2. CONTRAST OF MISCELLANEOUS PARTS

NOTES: ● *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
● *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
● *Screws adjacent to ▼ mark on product are used for disassembly.*
● *Reference Nos. indicate the pages and Nos. in the service manual for the base model.*
● *When ordering resistors, first convert resistance values into code form as shown in the following examples.*

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560 → 56 x 10^1 → 561 ····· RD1/4PU 5 6 1 J
47k → 47 x 10^3 → 473 ····· RD1/4PU 4 7 3 J
0.5 → R50 ····· RN2H R 5 0 K
1 → 1R0 ····· RS1P 1 R 0 K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62k → 562 x 10^1 → 5621 ····· RN1/4PC 5 6 2 1 F

■ CONTRAST TABLE

XR-VS500D/YPWXJ, YPWXJN and XR-A9800D/KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.			Remarks
			XR-A9800D /KUCXJ	XR-VS500D /YPWXJ	XR-VS500D /YPWXJN	
		PCB ASSEMBLIES				
		MAIN ASSY	XWM3174	XWM3173	XWM3173	
P5- 1		└ AF ASSY	XWZ3330	XWZ3327	XWZ3327	
		COMPLEX ASSY	XWM3178	XWM3177	XWM3177	
P5- 4		├ PRIMARY ASSY	XWZ3332	XWZ3329	XWZ3329	
P7- 1		└ DISPLAY ASSY	XWZ3331	XWZ3328	XWZ3328	
		PACKING SECTION				
P3- 1	⚠	Power Cord	ADG7022	ADG1160	ADG1160	
P3-11		Packing Case	XHD3144	XHD3140	XHD3168	
P3-12	NSP	Warranty Card	ARY7045	ARY7027	ARY7027	
	NSP	Polyethylene Bag	Not used	AHG7033	AHG7033	For Power Cord
		Carton Spacer	Not used	Not used	XHB3007	For Packing
		EXTERIOR SECTION				
P5-12	⚠	Power Transformer (T1) (AC120V)	XTS3042	Not used	Not used	
P5-12	⚠	Power Transformer (T1) (AC110-127V/220-230V/240V)	Not used	XTS3038	XTS3038	
P5-13	⚠	Fuse (FU1 : 6.3A)	REK1085	Not used	Not used	
P5-13	⚠	Fuse (FU1 : T5A)	Not used	AEK1061	AEK1061	
P5-25		Rear Panel	XNC3065	XNC3068	XNC3068	
P5-26		SEC Holder	XMR3032	XMR3032	XMR3035	
P5-38		Tray Cap	XAK3157	XAK3157	XAK3210	
P5-41	NSP	Fuse Card	AAX2374	Not used	Not used	
P5-42	NSP	Getter	XAX3175	XAX3177	XAX3177	
P5-43		65 Label	ARW7050	Not used	Not used	
	NSP	Name Label	Not used	XAL3051	XAL3051	*1
	NSP	Name Label	Not used	Not used	XAL3069	*1
		Caution Label	Not used	PRW1018	PRW1018	*2
		FRONT PANEL SECTION				
P7-19		JOG Knob	XAA3015	XAA3015	XAA3019	
P7-21		FUNC Button L	XAD3061	XAD3061	XAD3089	
P7-22		FUNC Button R	XAD3051	XAD3051	XAD3090	
P7-23		FUNC Frame L	XAD3052	XAD3052	XAD3091	
P7-24		FUNC Frame R	XAD3053	XAD3053	XAD3092	
P7-25		DV ENT Button	XAD3056	XAD3056	XAD3085	
P7-26		Display Panel	XAK3135	XAK3136	XAK3207	
P7-33		FL Cover	XAK3164	XAK3163	XAK3163	
P7-42		Sub Panel	XAK3203	XAK3203	XAK3209	
P7-50		DV Button L	XAD3057	XAD3057	XAD3086	
P7-51		DV Button R	XAD3059	XAD3059	XAD3088	
P7-52	NSP	Front Panel Assy	XXG3066	XXG3066	XXG3069	

Notes : For PCB ASSEMBLIES, Refer to “CONTRAST OF PCB ASSEMBLIES” and “3. SCHEMATIC DIAGRAM”.
*1 Stick Name Label on the Rear Panel.
*2 Refer to “LABEL CHECK”.

■ CONTRAST OF PCB ASSEMBLIES

IF AF ASSY

XWZ3327 and XWZ3330 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3330	XWZ3327	
	CN3601 4P SPEAKER TERMINAL	AKE7018	XKE3004	

LF PRIMARY ASSY

XWZ3329 and XWZ3332 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3332	XWZ3329	
⚠	R1 (2.2MΩ/ 1/2W)	RCN1080	Not used	
⚠	AN1 1P AC INLET	XKP3042	XKP3041	
⚠	CN2 4P VH CONNECTOR	Not used	B4P7-VH	

MF DISPLAY ASSY

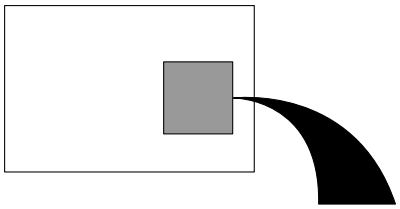
XWZ3328 and XWZ3331 are constructed the same except for the following :

Mark	Symbol and Description	Part No.		Remarks
		XWZ3331	XWZ3328	
	D5591	Not used	1SS133	

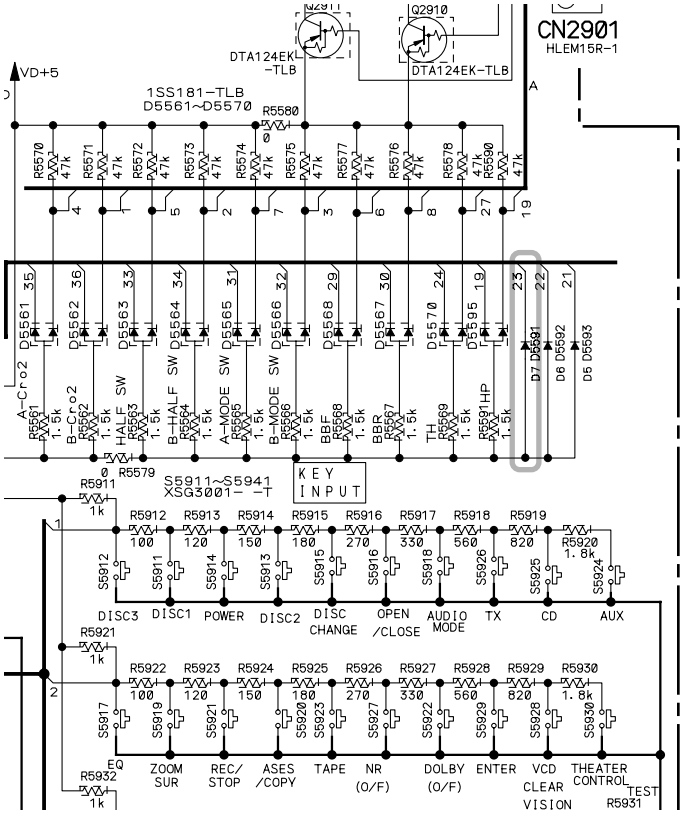
3. SCHEMATIC DIAGRAM

3.1 DISPLAY ASSY

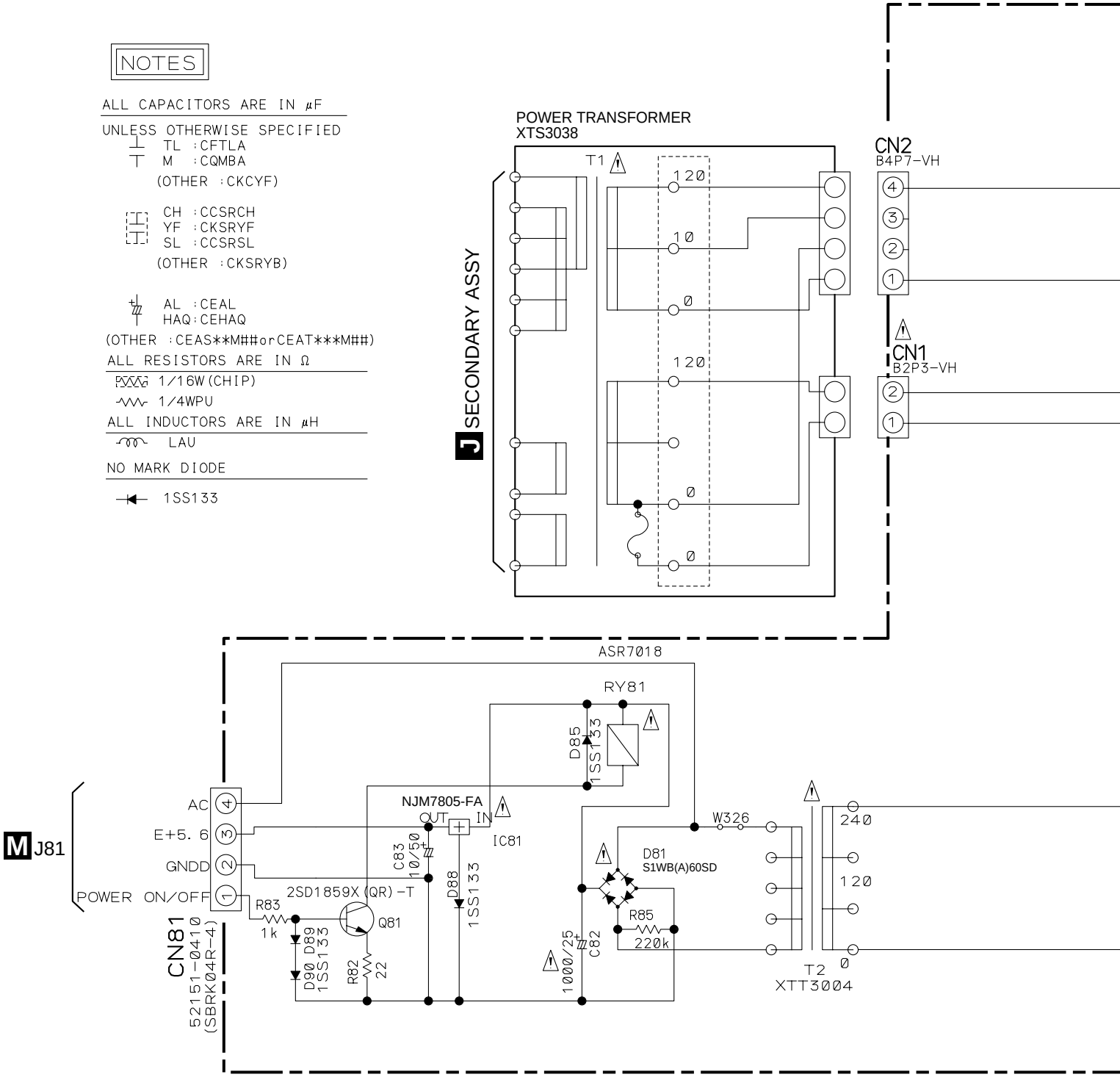
Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST"

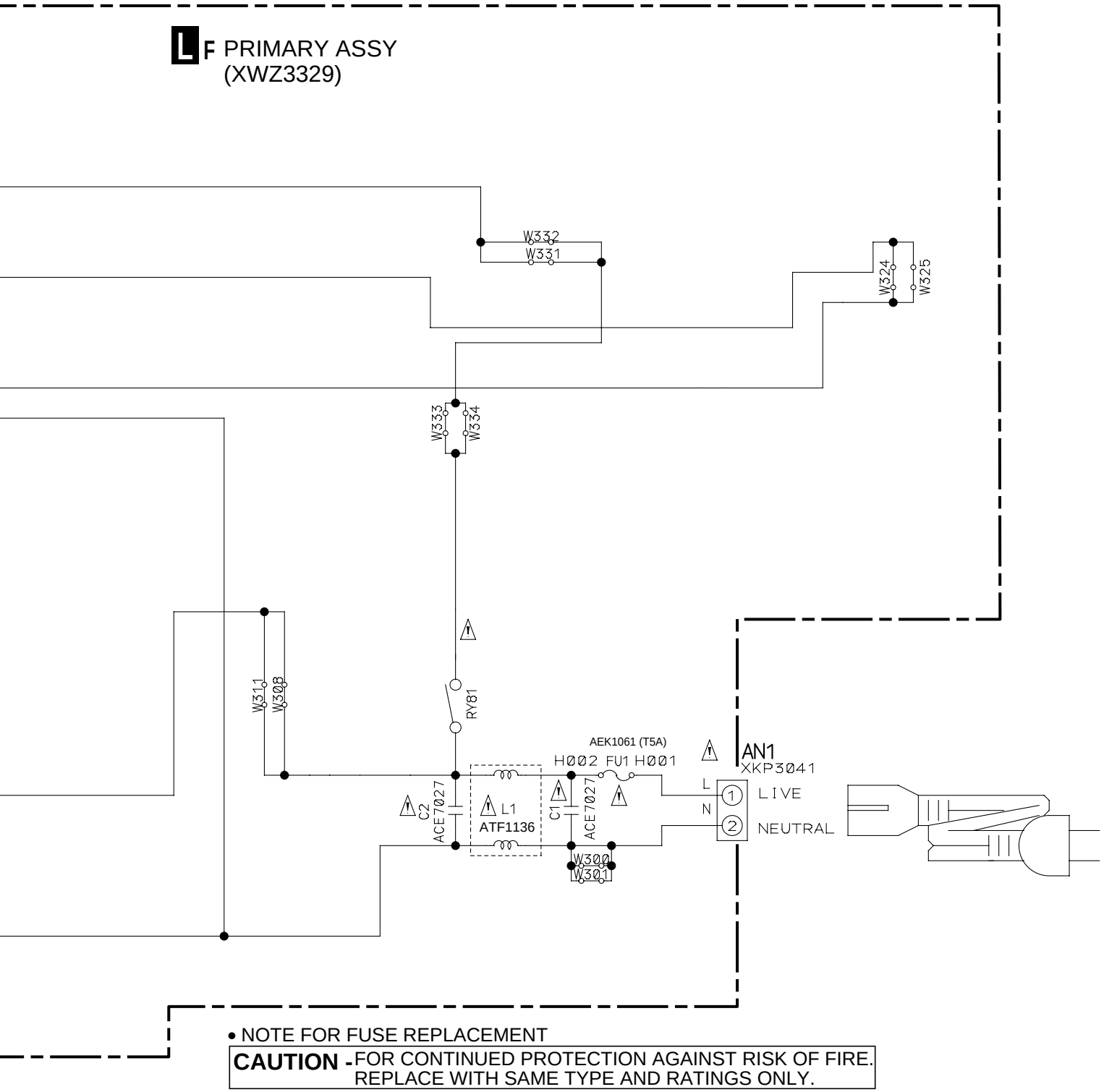


MF
DISPLAY ASSY
(XWZ3328)



3.2 PRIMARY ASSY

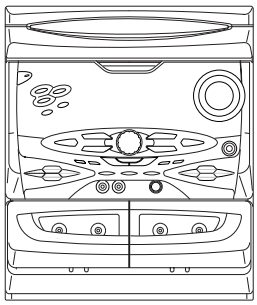




• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE.
REPLACE WITH SAME TYPE AND RATINGS ONLY.

Service Manual



ORDER NO.
RRV2329

STEREO DVD CASSETTE DECK RECEIVER

XR-A9800D

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Region No.	Remarks
	XR-A9800D			
KUCXJ	◯	AC120V	1	

CONTENTS

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

T – IZK AUG. 2000 Printed in Japan

1. SAFETY INFORMATION

This service manual is intended for qualified service technicians ; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.
Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING
This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65

NOTICE
(FOR CANADIAN MODEL ONLY)
Fuse symbols (fast operating fuse) and/or (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE
(POUR MODÈLE CANADIEN SEULEMENT)
Les symboles de fusible (fusible de type rapide) et/ou (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

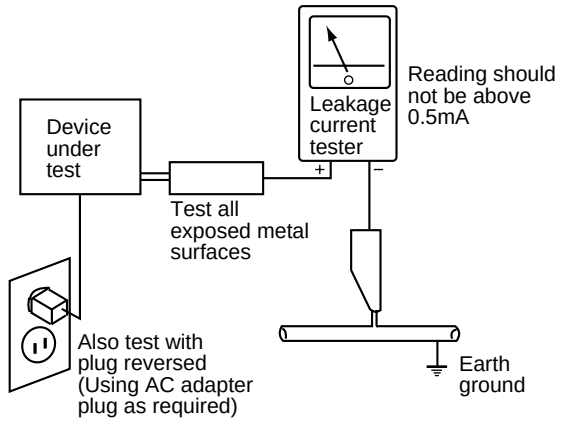
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a ⚠ on the schematics and on the parts list in this Service Manual.

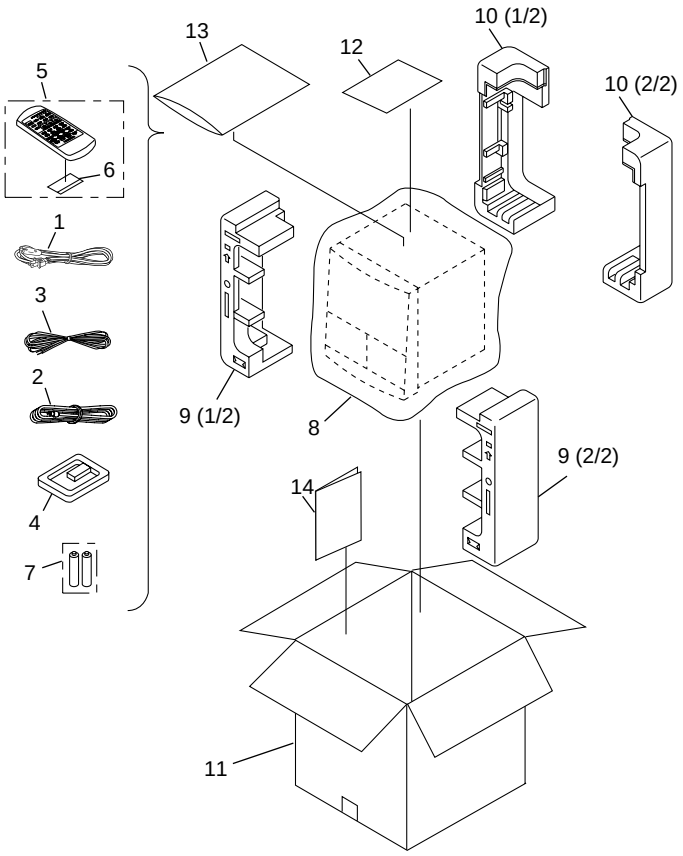
The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

2. EXPLODED VIEWS AND PARTS LIST

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on the product are used for disassembly.*

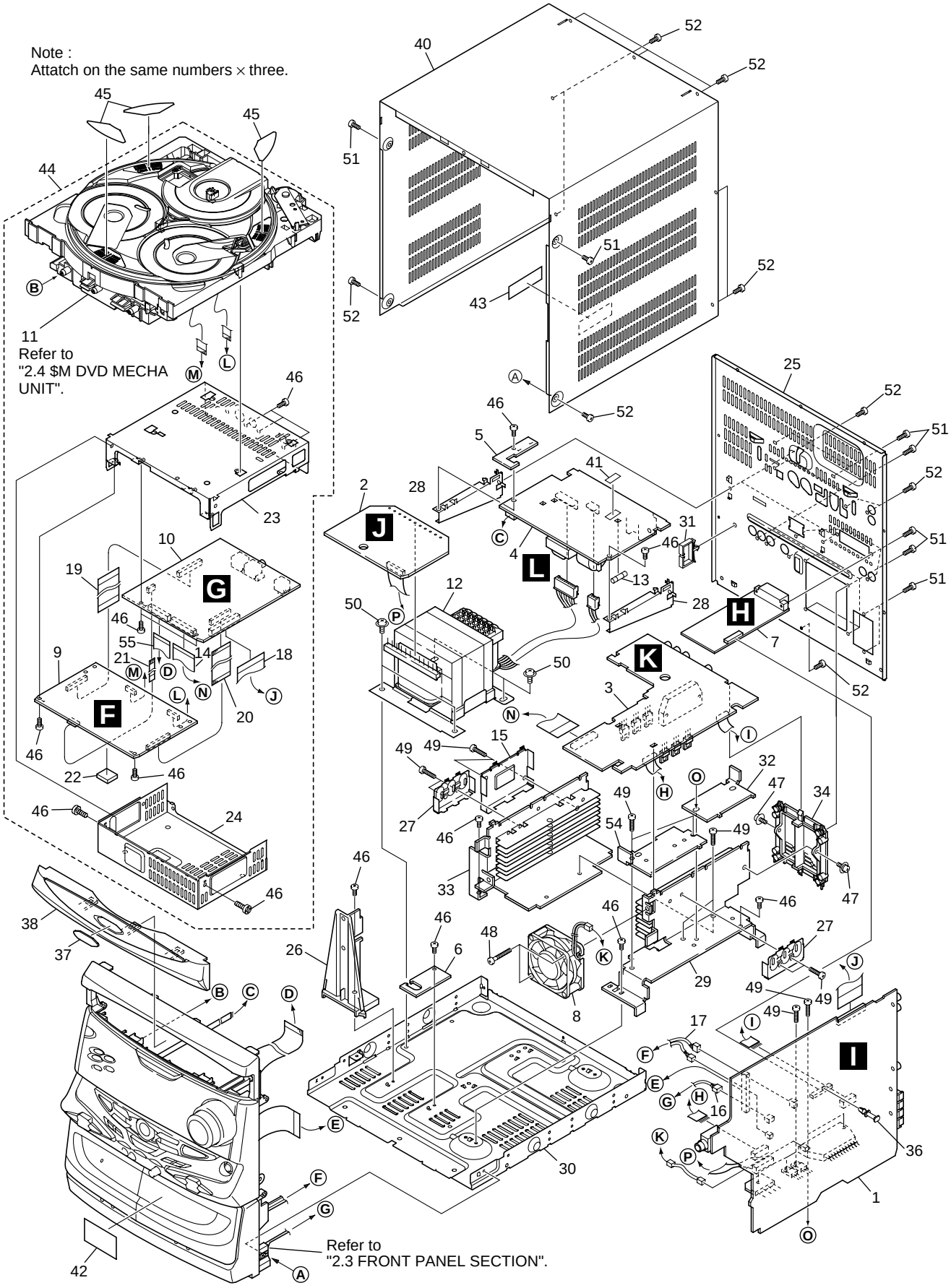
2.1 PACKING



● PACKING PARTS LIST

Mark	No.	Description	Part No.
⚠	1	Power Cord	ADG7022
	2	Video Cord (L=1.5m)	VDE1034
	3	FM Antenna	ADH7004
	4	AM Loop Antenna	XTB3001
	5	Remote Control Unit	XZN3109
	6	Battery Cover	XZN3105
NSP	7	Dry Cell Battery (R6P, AA)	VEM-013
	8	Packing Sheet	AHG7049
	9	Front Pad	XHA3020
	10	Rear Pad	XHA3021
	11	Packing Case	XHA3144
NSP	12	Warranty Card PA/DC	ARY7045
	13	Polyethylene Bag ($0.03 \times 230 \times 340$)	Z21-038
	14	Operating Instructions (English/French)	XRE3036

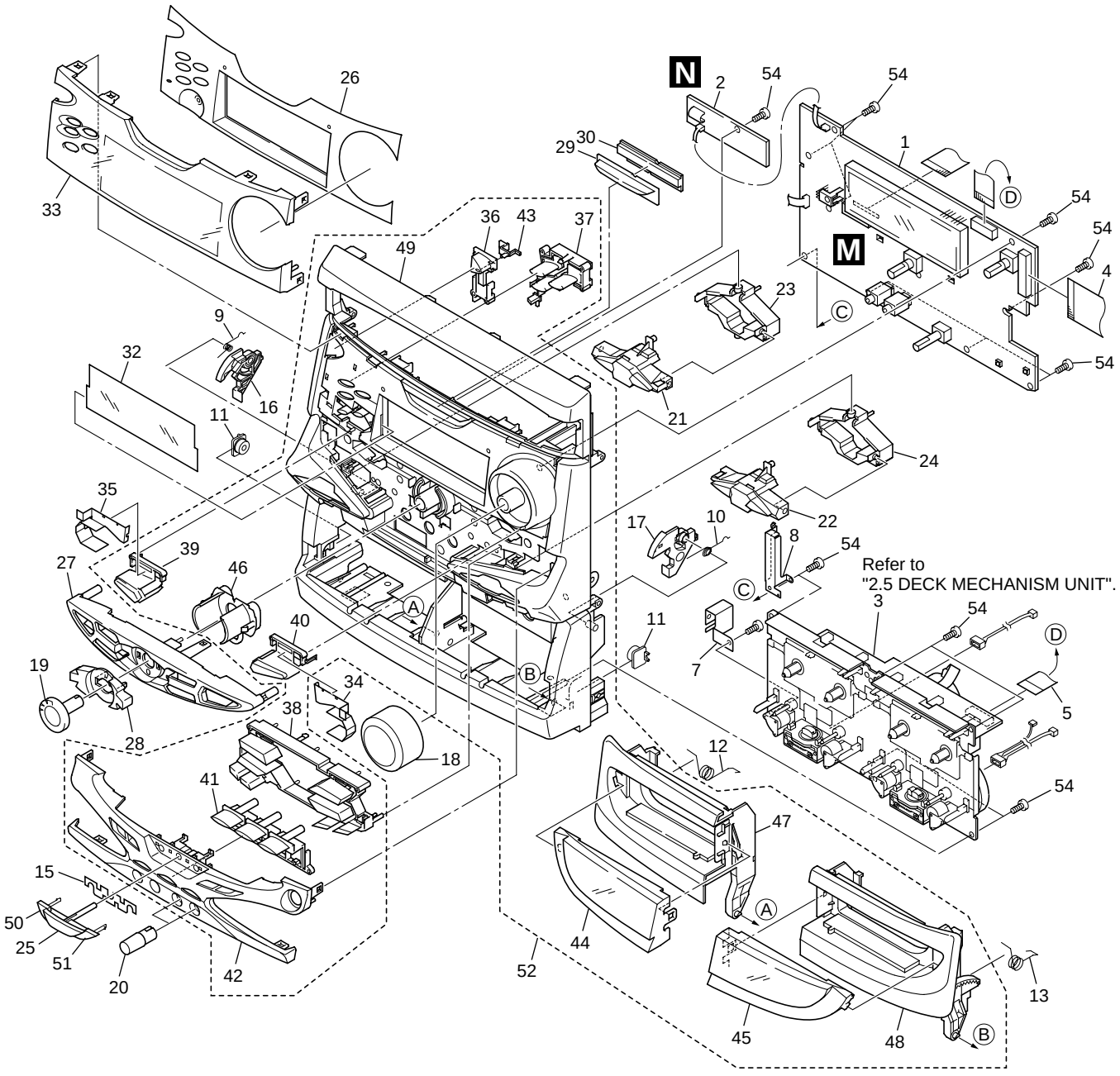
2.2 EXTERIOR SECTION



● EXTERIOR SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	AF Assy	XWZ3330
	2	SECONDARY Assy	XWZ3323
	3	REAR AMP Assy	XWZ3325
	4	PRIMARY Assy	XWZ3332
	5	BIND 1 Assy	• • • • •
	6	BIND 2 Assy	• • • • •
	7	FM/AM TUNER Module	AXQ7065
	8	DC Fan Motor	AXM7014
	9	DVD MAIN Assy	XWX3014
	10	CONNECT Assy (6 CH)	XWX3023
NSP	11	$M DVD Mecha Unit	AXA7083
⚠	12	Power Transformer (T1)	XTS3042
⚠	13	Fuse (FU1, 6.3A)	REK1085
	14	25P Flexible Cable (CONNECT CN8105 ↔ AF CN3404)	XDD3046
	15	Power Bracket	XNG3033
	16	Connector Assy 3P (AF CN2303 ↔ DECK I)	XDE3037
	17	Connector Assy 5P (AF CN2301, CN2302 ↔ DECK II)	XDE3038
	18	30P Flexible Cable (CONNECT CN8103 ↔ AF CN5104)	XDD3044
	19	32P Flexible Cable/30V (CONNECT CN8101 ↔ DVDM CN80)	ADD7195
	20	27P Flexible Cable/30V (CONNECT CN8102 ↔ DVDM CN20)	ADD7196
	21	7P Flexible Cable/30V (CONNECT CN8106 ↔ DVDM CN6)	ADD7197
	22	Radiation Sheet	AEB7173
	23	DVD Base	XNG3034
	24	DVD Shield	XNK3006
	25	Rear Panel	XNC3065
	26	SEC Holder	XMR3013
	27	FET Bracket B	XNG3032
	28	PCB Bracket	ANG7263
	29	Heat Sink C	XNH3015
NSP	30	Chassis	XNA3006
	31	Wire Clip A	XEC3003
	32	Sub Heat Sink	XNH3013
	33	Heat Sink D	XNH3016
	34	Mold B	AMR7006
	35	• • • • • •	
	36	Card Spacer	XEC3008
	37	DVD Badge	XAM3002
	38	Tray Cap	XAK3157
	39	• • • • • •	
	40	Bonnet Case	XZN3098
NSP	41	Fuse Card	AAX2374
NSP	42	Getter	XAX3175
	43	65 Label	ARW7050
NSP	44	$M Mecha. DVD (5P)	XXA3019
	45	Disc Label	XAX3127
	46	Screw	BBZ30P080FMC
	47	Screw	ABA1021
	48	Screw	BPZ30P350FZK
	49	Screw	BBZ30P180FMC
	50	Screw	ASZ40P060FMC
	51	Screw	BPZ30P100FZK
	52	Screw	VBT30P080FZK
	53	Screw	BPZ30P080FMC
	54	Sub Heat Sink	XNH3014
	55	Flexible Cable 21P (DISPLAY CN5502 ↔ CONNECT CN8104)	XDD3052

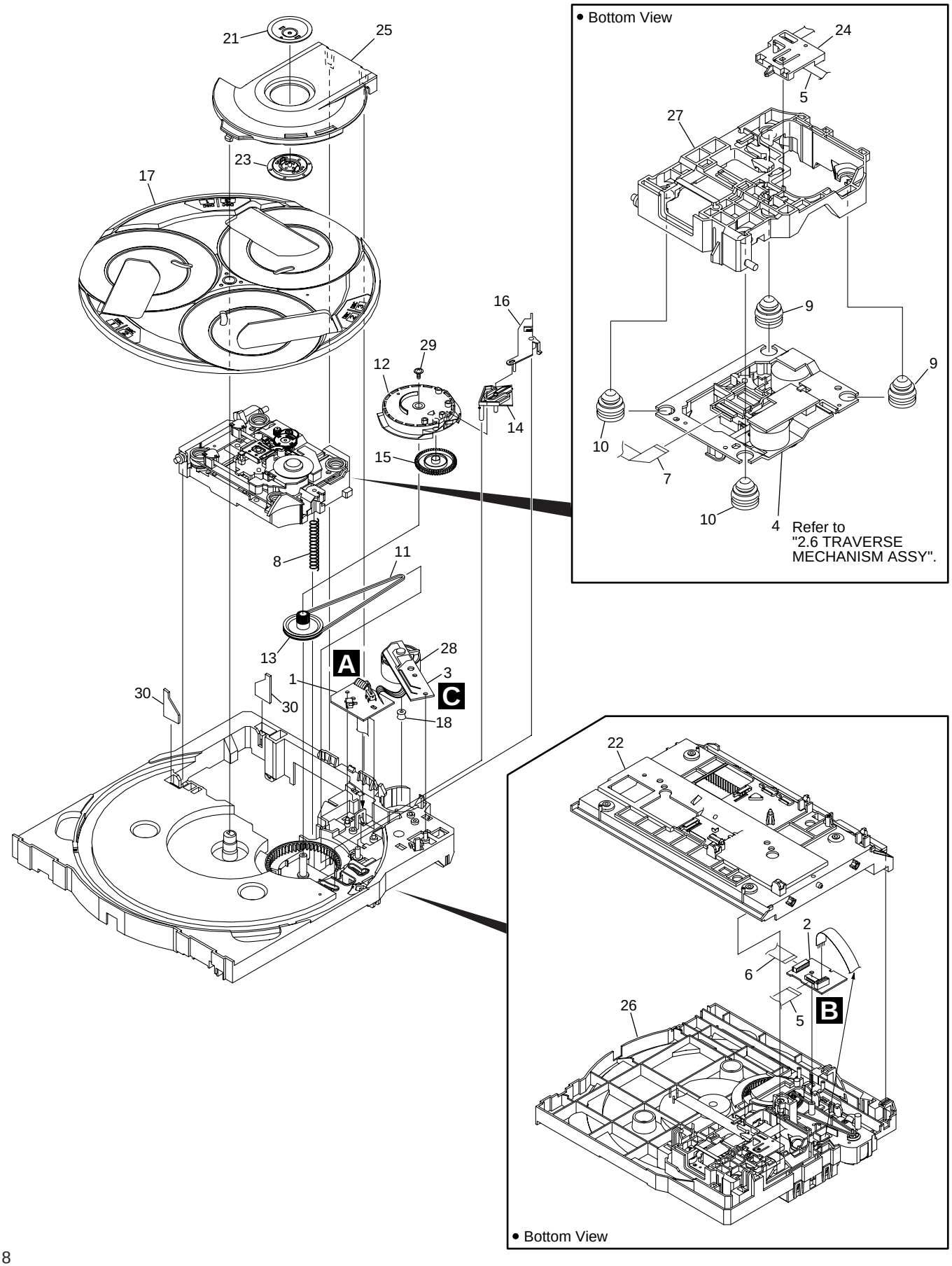
2.3 FRONT PANEL SECTION



● FRONT PANEL SECTION PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY Assy	XWZ3331
	2	BLUE LED Assy	XWZ3321
	3	Deck Mechanism Unit	XYM3012
	4	Flexible Cable 27P (DISPLAY CN5501 ↔ AF CN5105)	XDD3041
	5	Flexible Cable 15P (DISPLAY CN2901 ↔ DECK MECHA)	XDD3050
	6	• • • • • •	
	7	GND Plate B	XNG3031
	8	GND Plate C	XNG3047
	9	Ratch Spring_L	ABH7130
	10	Ratch Spring_R	ABH7131
	11	Damper Assy	XXA3025
	12	Door Spring_L	XBH3010
	13	Door Spring_R	XBH3011
	14	• • • • • •	
	15	Cushion Spring	XEB3010
	16	Ratch Mold_L	XMR3001
	17	Ratch Mold_R	XMR3002
	18	Volume Knob	XAA3013
	19	JOG Knob	XAA3015
	20	MIC Knob	XAB3007
	21	FUNC Button L	XAD3061
	22	FUNC Button R	XAD3051
	23	FUNC Frame L	XAD3052
	24	FUNC Frame R	XAD3053
	25	DV ENT Button	XAD3056
	26	Display Panel	XAK3135
	27	EQ Panel S	XAK3150
	28	JOG Lens S	XAK3152
	29	V Lens S	XAK3153
	30	LT Conductor S	XAK3155
	31	• • • • • •	
	32	FL Filter	XAK3162
	33	FL Cover	XAK3164
	34	Cover Sheet L	XAK3184
	35	Cover Sheet R	XAK3185
	36	Power Button	XAD3044
	37	CD Button	XAD3045
	38	SC Button	XAD3060
	39	SC Button L	XAD3047
	40	SC Button R	XAD3049
	41	DOLBY Button	XAD3054
	42	Sub Panel S	XAK3168
	43	ST Lens S	XAK3151
	44	Deck Lens L S	XAK3159
	45	Deck Lens R S	XAK3160
	46	JOG Conductor	XAK3165
	47	Deck Door_L	XAN3022
	48	Deck Door_R	XAN3026
	49	Front Panel	XMB3027
	50	DV Button L	XAD3057
	51	DV Button R	XAD3059
NSP	52	Front Panel Assy	XXG3058
	53	Screw	BPZ30P100FZK
	54	Screw	BPZ30P080FMC

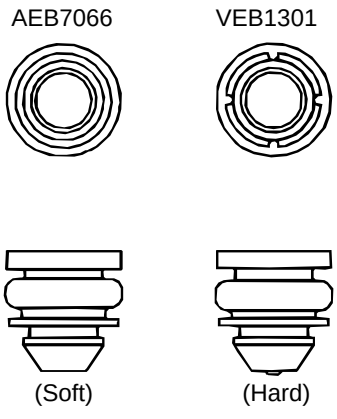
2.4 $M DVD MECHA UNIT



● $M DVD MECHA UNIT PARTS LIST

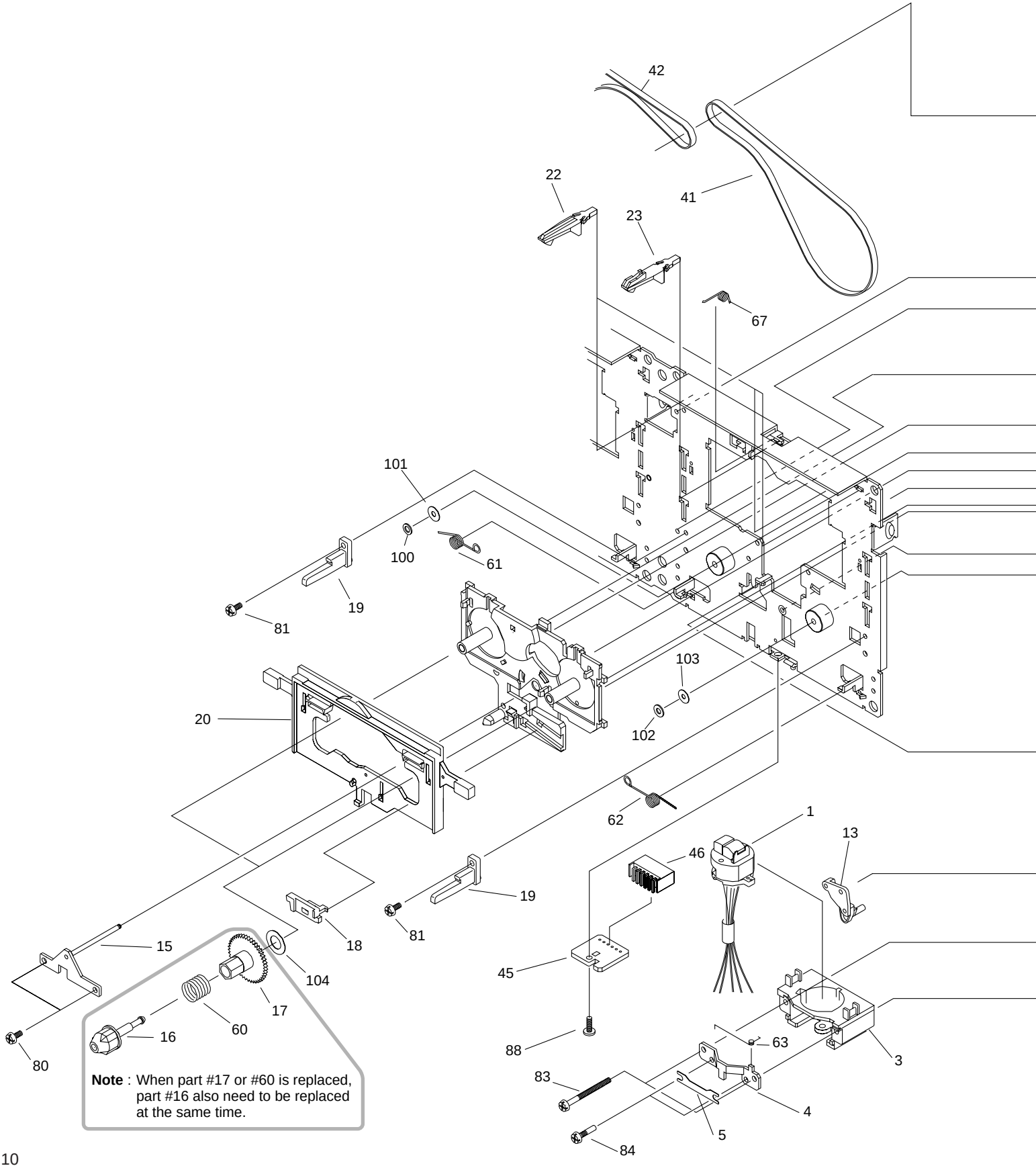
Mark	No.	Description	Part No.
NSP	1	SW Assy	VWG2002
NSP	2	TRADE Assy	VWG2003
NSP	3	MOTOR Assy	VWG2004
	4	TRAVERSE Mechanism Assy-S	VXX2653
	5	Flexible Cable (8P) (TRADE CN9001 ↔ SMEB CN202)	VDA1715
	6	Flexible Cable (13P) (TRADE CN9002 ↔ DVDM CN3)	ADD7199
	7	Flexible Cable (24P) (Pickup Assy ↔ DVDM CN4)	ADD7198
	8	Servo Spring	ABH7126
	9	Float Rubber C	VEB1301
	10	Float Rubber B	AEB7066
	11	Belt	AEB7072
	12	Main Cam	ANW7093
	13	Gear Pulley	ANW7094
	14	Lock Lever	ANW7095
	15	Planet Gear	ANW7096
	16	Actuator	ANW7097
	17	Rotary Tray	ANW7113
	18	Motor Pulley	PNW1634
	19	• • • • •	
	20	• • • • •	
	21	Clamper Plate	VNE2162
	22	Mecha Base	XNW3011
	23	Clamper	VNL1738
	24	FFC Holder	VNL1803
	25	Clamper Holder	VNL1804
	26	Loading Tray	XNW3002
	27	Servo Base	XNW3010
	28	Slider Motor (LOADING)	VXM1033
	29	Screw	IPZ30P080FMC
	30	Shaft Press Rubber	VEB1300

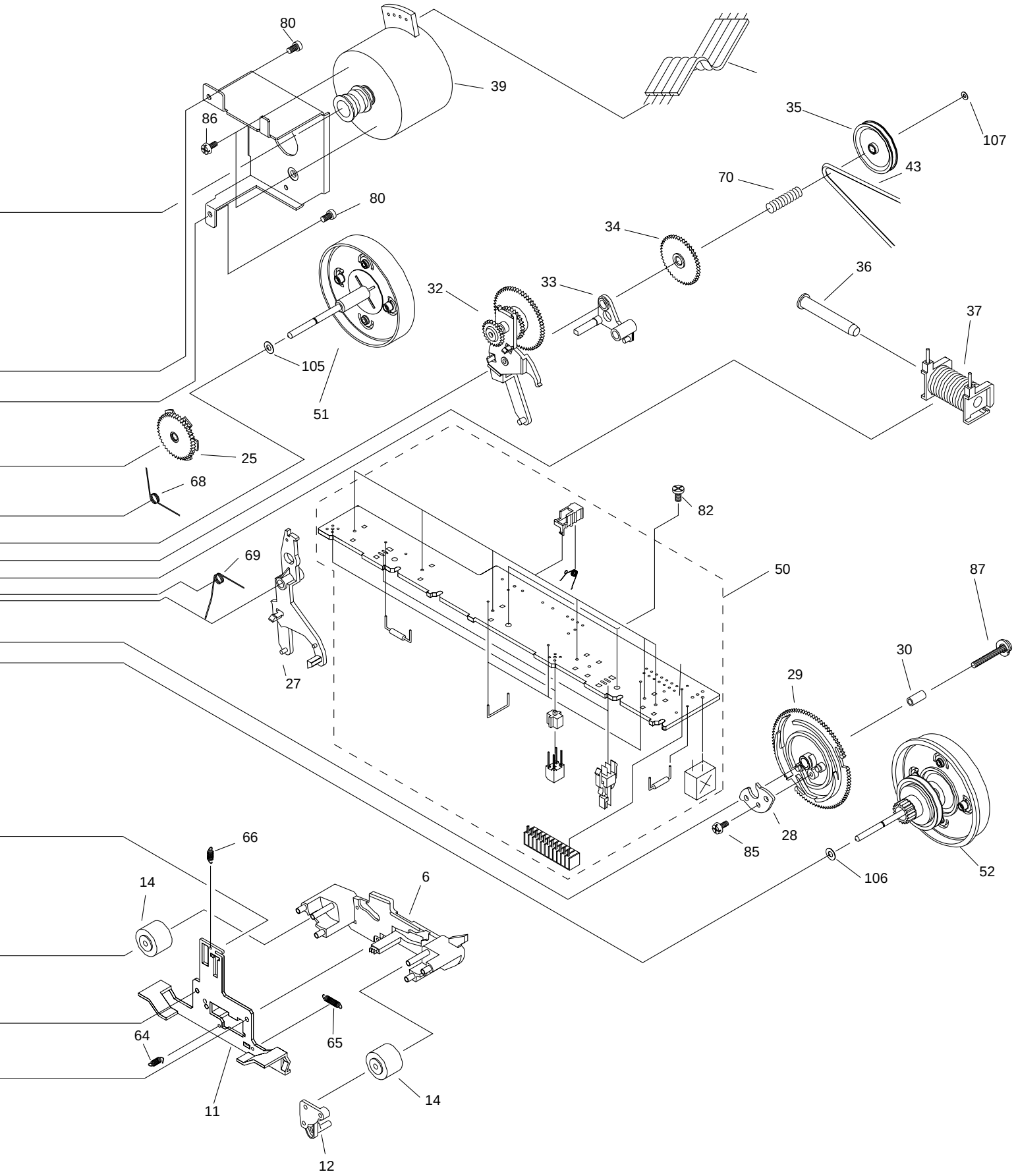
Detail of Float Rubber (No.9, No.10)



2.5 DECK MECHANISM UNIT

• DECK MECHANISM UNIT (1/2)

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107
43
70
80
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36
32
33
37
105
51
25
68
82
69
50
87
27
30
29
28
85
52
106
66
14
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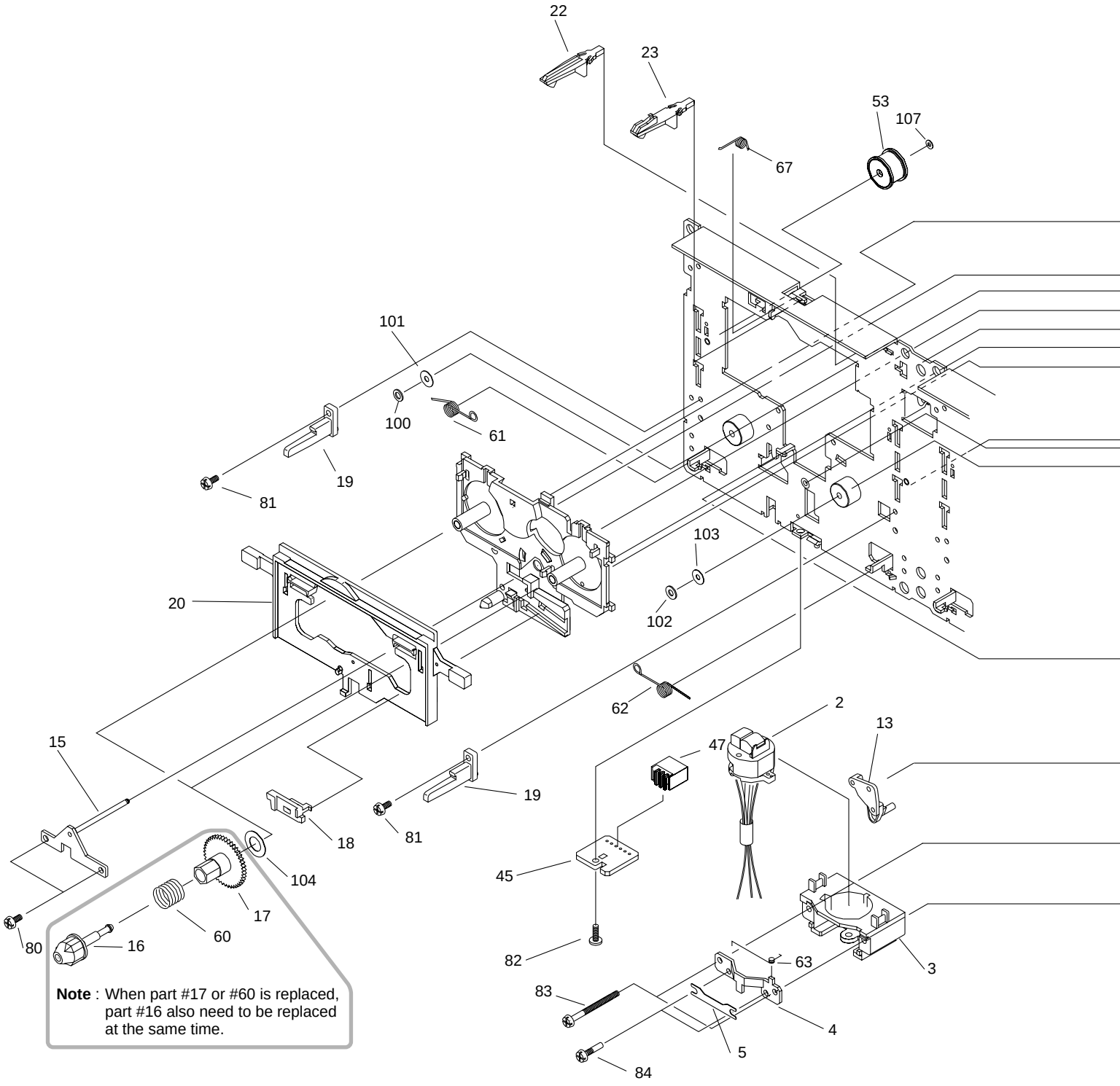
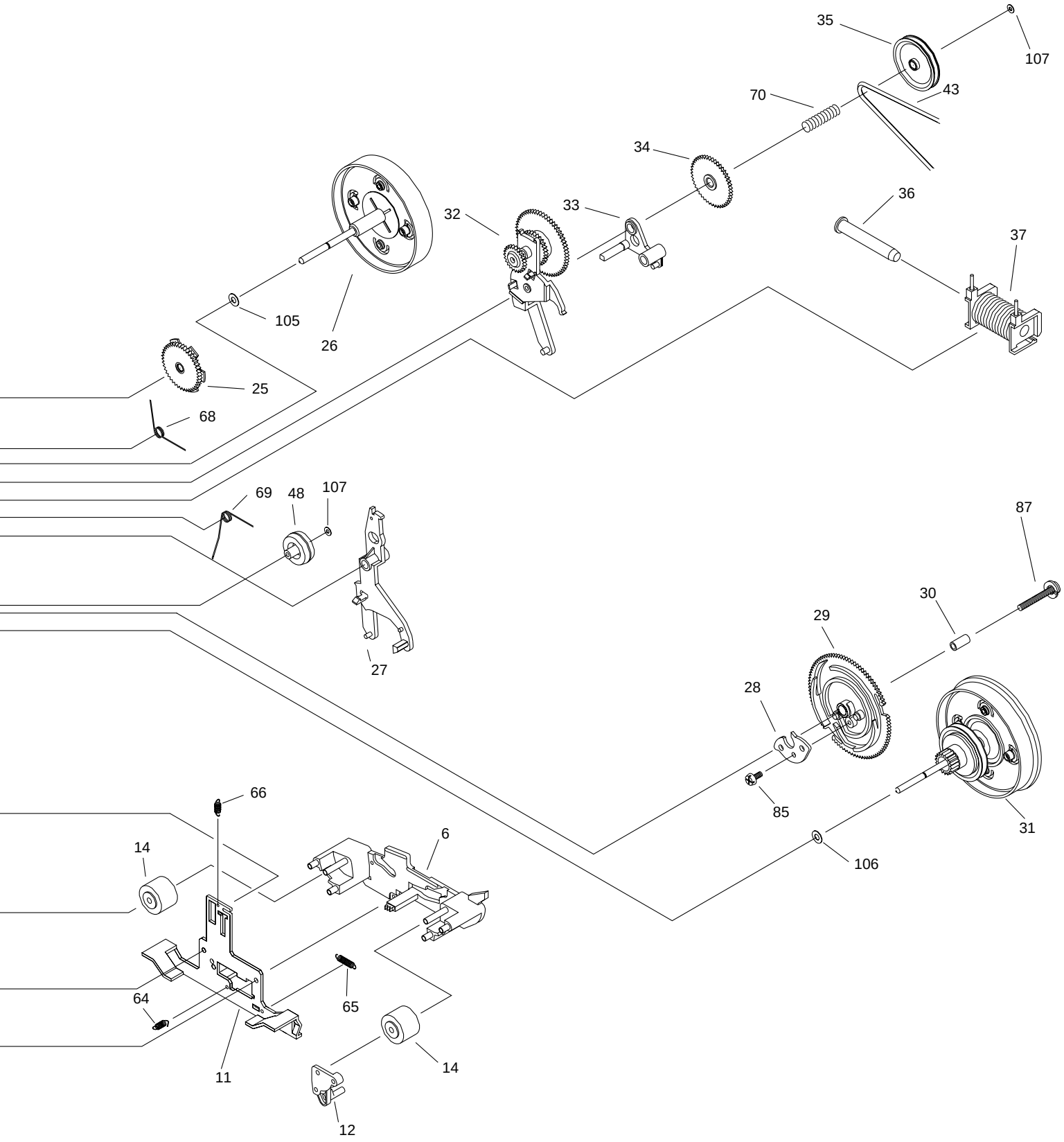
64
65
11
14
12

• DECK MECHANISM UNIT (2/2)




35
107
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34
33
32
36
37
105
26
25
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69
48
107
27
87
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29
28
85
31
106
66
14
6
64
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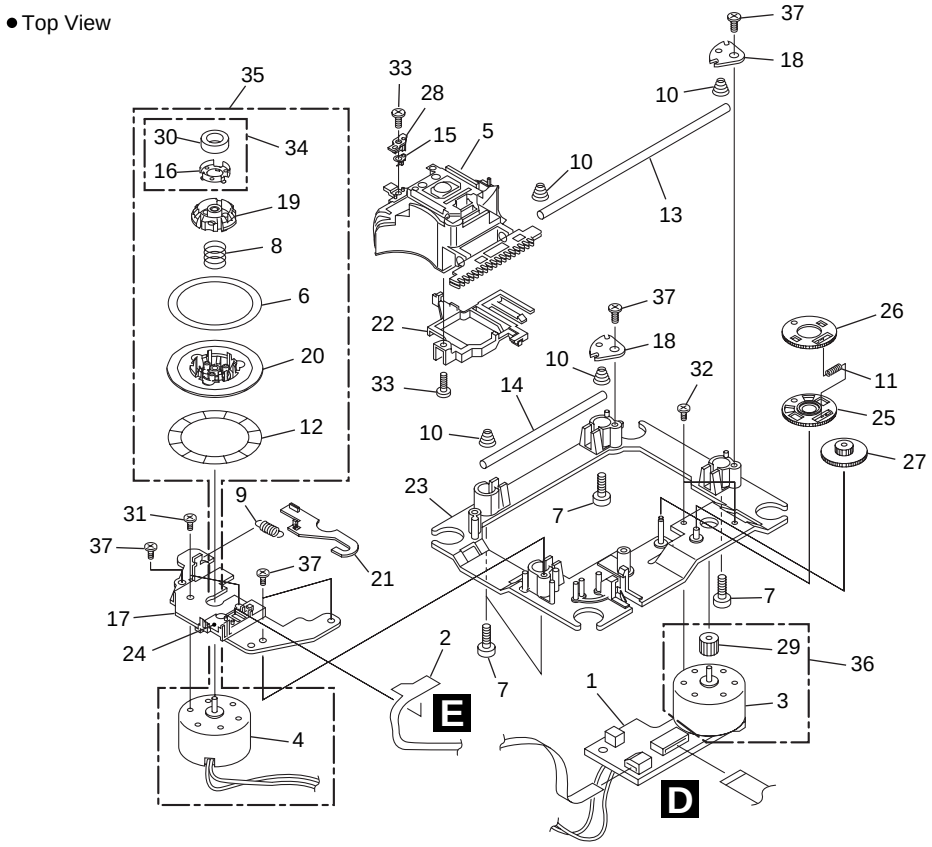
11
14
12

● DECK MECHANISM UNIT PARTS LIST

Mark	No.	Description	Part No.
	1	Assy'y HD Holder	50-093-4373
	2	Assy'y HD Holder	50-093-4104
	3	Frame HD	50-219-3024
	4	Plate AZ	50-119-4046
	5	Spring AZ	50-160-4108
	6	Lever HD	50-259-3342
	11	Chassis HD	50-112-3045
	12	Cap Pinch R	50-219-4033
	13	Cap Pinch L	50-219-4034
	14	Roller Pinch	50-027-41054
	15	Ass'y Plate D	50-219-4311
	16	Cap Reel	50-228-4020
	17	Gear Reel	50-222-4006
	18	Lever ST	50-259-4041
	19	Guide C	50-219-4014
	20	Lever Brake	50-259-3251
	22	Arm SW	50-239-4027
	23	Arm CS	50-239-4026
	25	Ass'y Cover	50-093-4063
	26	Ass'y Flywheel LA	50-093-3366
	27	Arm Trigger	50-268-3016
	28	Arm Cam	50-139-4292
	29	Gear Cam	50-221-3009
	30	Coller	03-300-4455
	31	Ass'y Flywheel RA	50-093-3360
	32	Ass'y Clutch	50-093-4069
	33	Arm UD A	50-239-4017
	34	Gear UD	50-222-4007
	35	Pulley D	50-223-4254
	36	Plunger	03-300-4442
	37	Ass'y Bobbin	50-093-4125
	39	Ass'y Motor	50-093-4316
	41	Belt BR	02-084-4205
	42	Belt AR	02-084-4203
	43	Belt FR	02-083-4188
	45	PCB HD	50-070-4057
	46	Housing	S5BPHKS
	47	Housing	S3BPHKS
	48	Pulley IDL	50-223-4023
	50	Ass'y PCB	50-093-4363
	51	Ass'y Flywheel L	50-093-3367
	52	Ass'y Flywheel RB	50-093-3361
	53	Pulley	33-229-4264

Mark	No.	Description	Part No.
	60	Spring	01-081-4601
	61	Spring	01-082-4652
	62	Spring	01-082-4651
	63	Spring	01-082-4650
	64	Spring	01-080-4649
	65	Spring	01-080-4607
	66	Spring	01-080-4635
	67	Spring	01-082-4654
	68	Spring	01-082-4598
	69	Spring	01-082-4597
	70	Spring	01-081-4657
	80	Screw	GSE10A2003
	81	Screw	GSE20A2005
	82	Screw	GSE10A2004
	83	Screw	GSD10A2018
	84	Screw	03-300-4056
	85	Screw	GSL10A1704
	86	Screw	GSP10A2603
	87	Screw	GSP11A2012
	88	Screw	GSE20A2004
	100	Washer	GWN21X040040
	101	Washer	GWM19X055035S
	102	Washer	GWM19S035035
	103	Washer	GWM17S050035S
	104	Washer	GWM48X075010
	105	Washer	GWP23X040020
	106	Washer	GWP21X045020
	107	Washer	GWP12X030040S

2.6 TRAVERSE MECHANISM ASSY-S

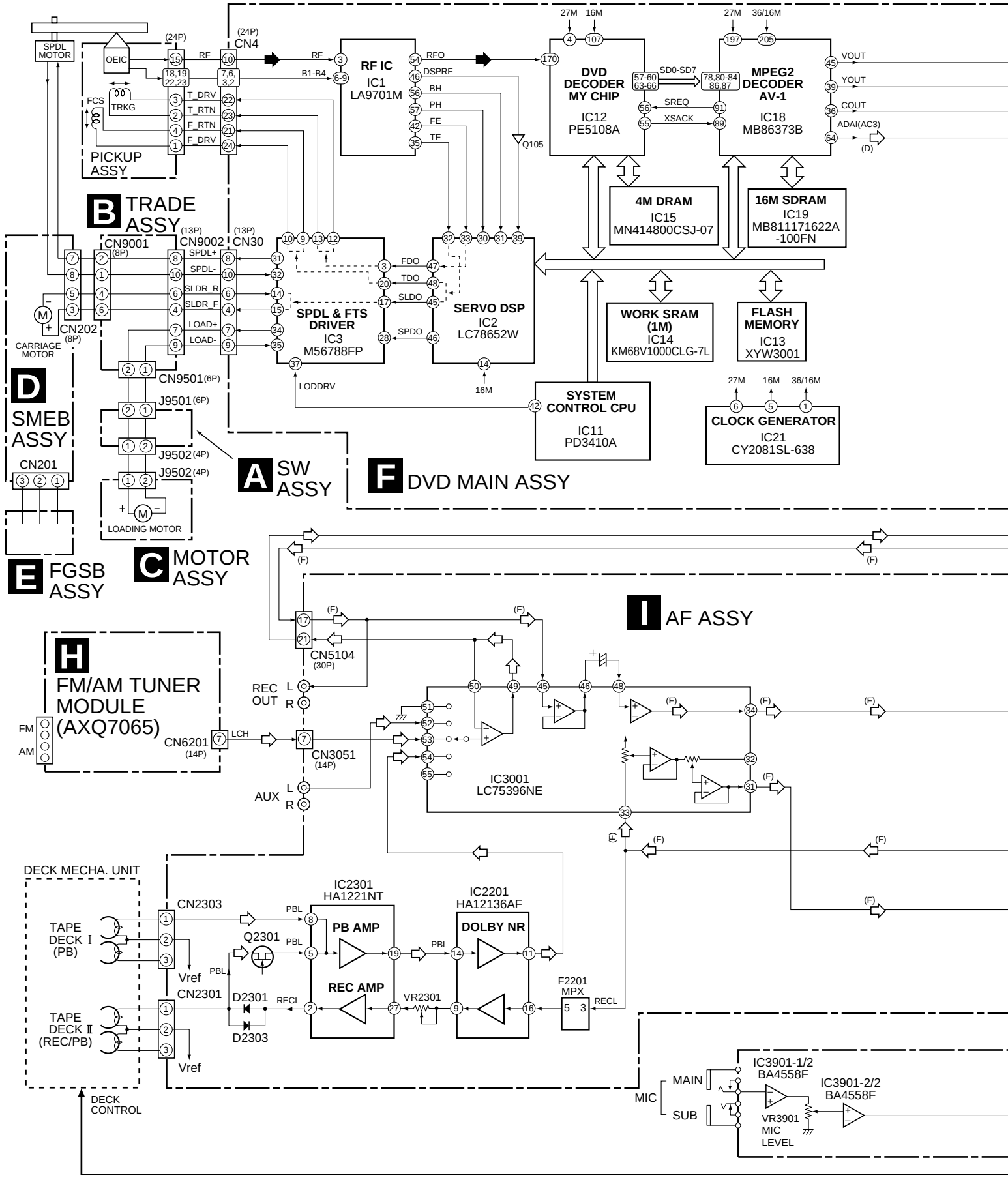


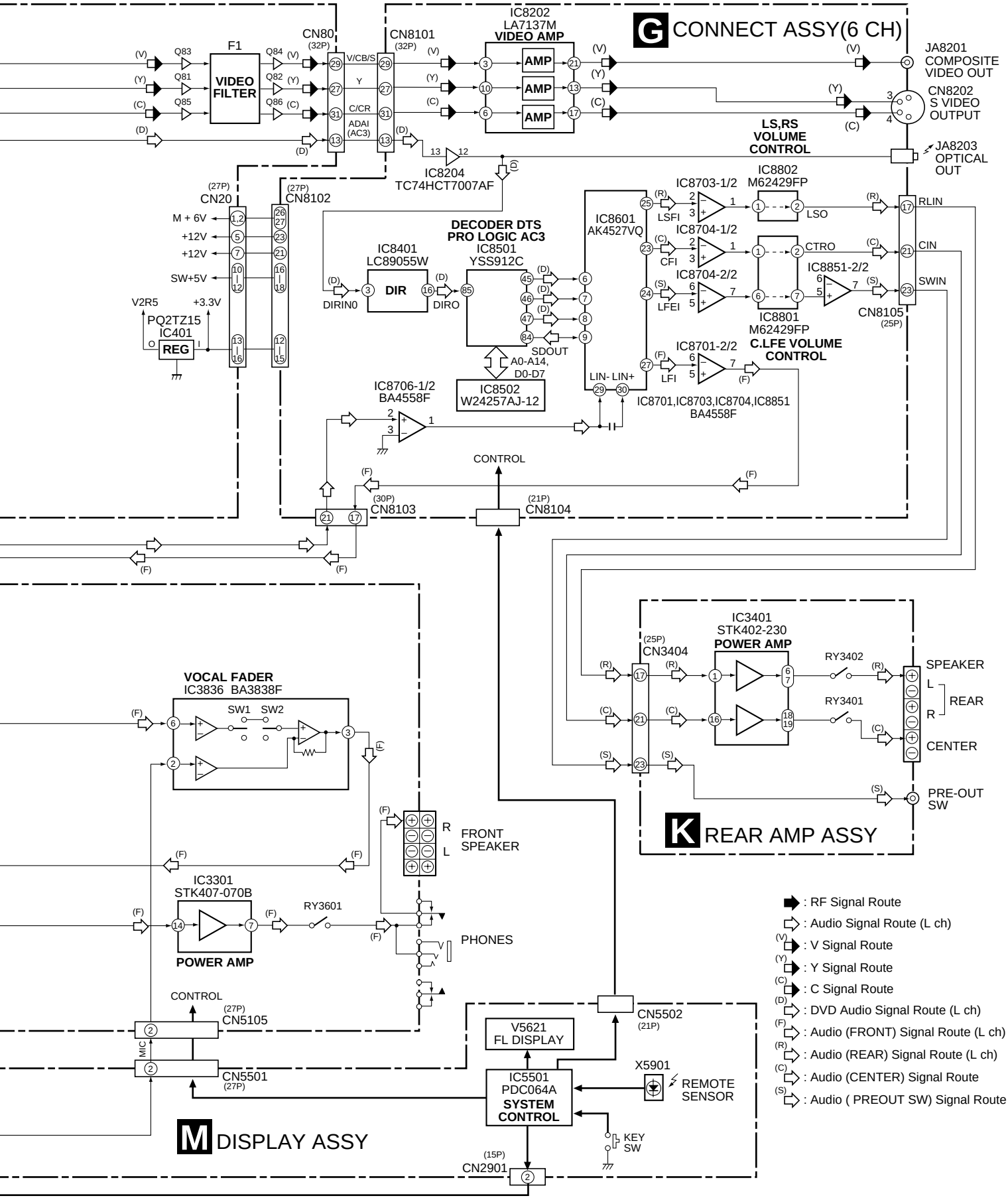
● TRAVERSE MECHANISM ASSY-S PARTS LIST

Mark	No.	Description	Part No.
NSP	1	SMEB Assy	VWG2048
NSP	2	FGSB Assy	VWG2009
NSP	3	Motor	VXM1079
NSP	4	Motor	VXM1078
NSP ⚠	5	Pickup Assy	VWY1055
	6	Table Sheet	DEC2040
	7	Screw	VBA1058
	8	Centering Spring	VBH1278
	9	Hook Spring	VBH1317
	10	Skew Spring	VBH1303
	11	Gear Spring	VBH1308
NSP	12	Reflected Sheet	VEC1959
	13	Guide Bar	VLL1504
	14	Sub-guide Bar	VLL1505
	15	Hold Spring	VNC1017
NSP	16	Magnet Holder	VNE2070
NSP	17	Motor Base	VNE2154
NSP	18	Cover	VNE2155
	19	Centering Ring	VNL1746
NSP	20	Disc Table	VNL1747
	21	Hook	VNL1770
	22	FFC Holder	VNL1802
	23	Mechanism Base	VNL1806
	24	FG Holder	VNL1807
	25	Gear A	VNL1808
	26	Gear B	VNL1809
	27	Gear C	VNL1810
	28	Slider	VNL1811
	29	Gear D	VNL1814
NSP	30	Magnet	VYM1024
	31	Screw	JFZ17P025FZK
	32	Screw	JGZ17P028FMC
	33	Screw	VBA1051
	34	Magnet Holder Assy	VXX2507
	35	Spindle Motor Assy	VXX2649
	36	Carriage Motor Assy	VXX2650
NSP	37	Screw	PBA1069

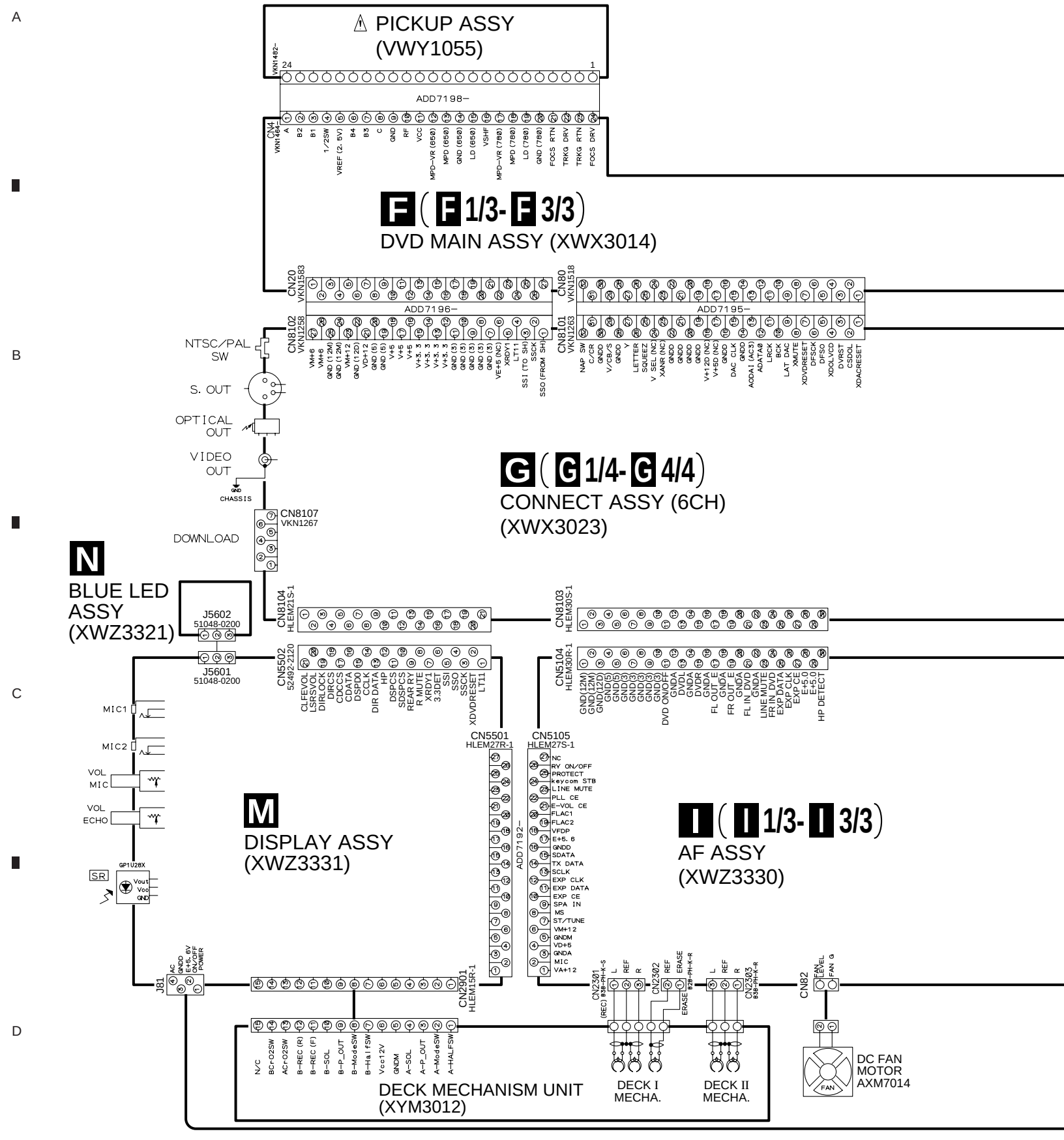
3. BLOCKDIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

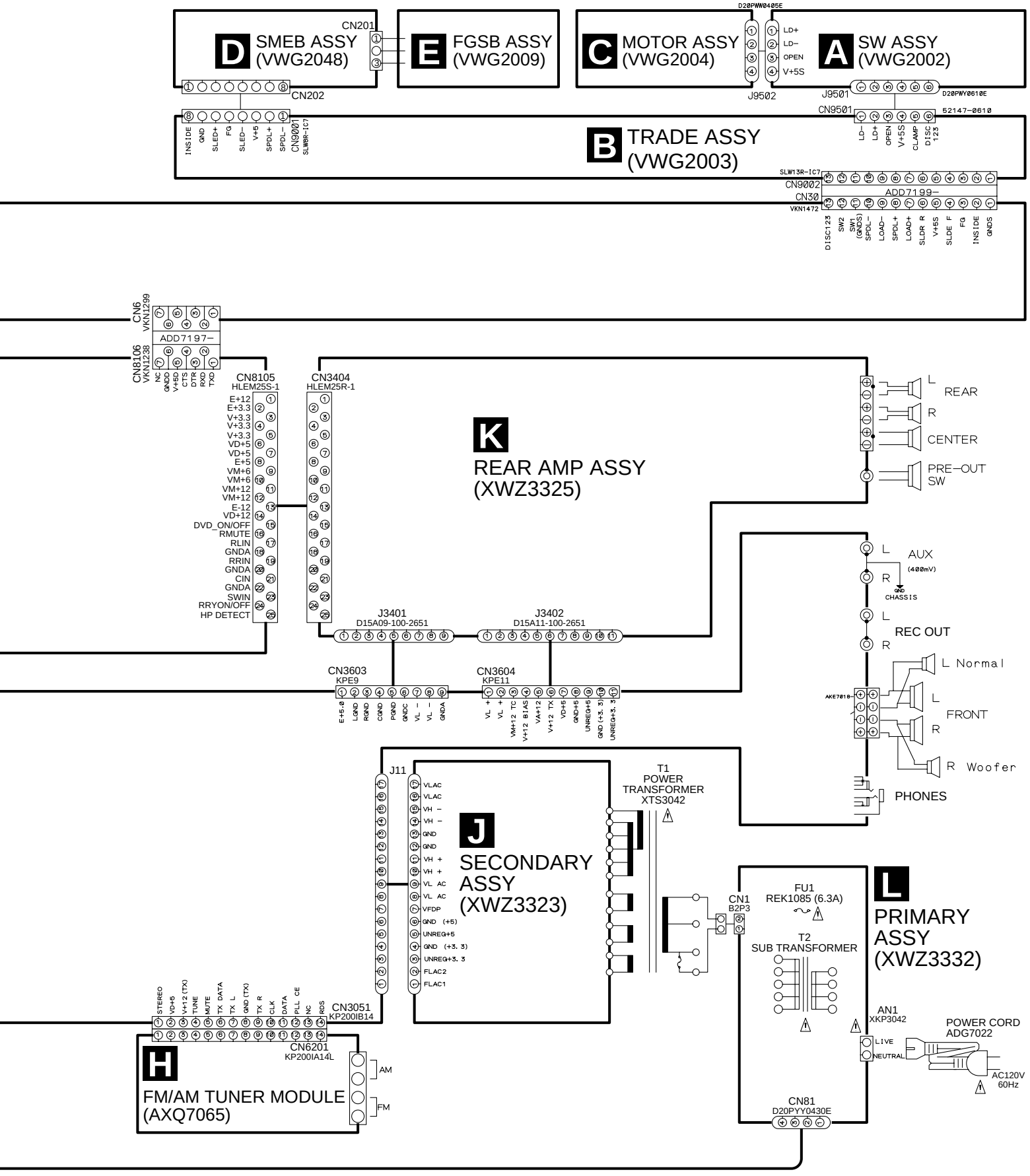



G CONNECT ASSY(6 CH)
IC8202
LA7137M
VIDEO AMP
AMP
AMP
AMP
CN80
(32P)
CN8101
(32P)
F1
VIDEO FILTER
V/CB/S
Y
C/CR
ADAI (AC3)
JA8201
COMPOSITE VIDEO OUT
CN8202
S VIDEO OUTPUT
LS,RS VOLUME CONTROL
JA8203
OPTICAL OUT
IC8204
TC74HCT7007AF
(27P)
CN20
(27P)
CN8102
M + 6V
+12V
+12V
SW+5V
V2R5
+3.3V
PQ2TZ15
IC401
REG
DECODER DTS
PRO LOGIC AC3
IC8401
LC89055W
DIR
DIRIN0
DIRO
IC8501
YSS912C
SDOUT
A0-A14,
D0-D7
IC8502
W24257AJ-12
IC8601
AK4527VQ
LIN-
LIN+
IC8703-1/2
LSFI
IC8704-1/2
CFI
IC8704-2/2
LFEI
IC8701-2/2
LFI
IC8802
M62429FP
LSO
CTRO
IC8851-2/2
IC8801
M62429FP
C.LFE VOLUME CONTROL
RLIN
CIN
SWIN
CN8105
(25P)
IC8701,IC8703,IC8704,IC8851
BA4558F
IC8706-1/2
BA4558F
CONTROL
(30P)
CN8103
(21P)
CN8104
K REAR AMP ASSY
IC3401
STK402-230
POWER AMP
(25P)
CN3404
RY3402
RY3401
SPEAKER
L
R
REAR
CENTER
PRE-OUT
SW
VOCAL FADER
IC3836 BA3838F
SW1
SW2
R
L
FRONT
SPEAKER
IC3301
STK407-070B
POWER AMP
RY3601
PHONES
CONTROL
(27P)
CN5105
MIC
CN5501
(27P)
V5621
FL DISPLAY
CN5502
(21P)
X5901
REMOTE
SENSOR
IC5501
PDC064A
SYSTEM CONTROL
KEY
SW
(15P)
CN2901
M DISPLAY ASSY
: RF Signal Route
: Audio Signal Route (L ch)
: V Signal Route
: Y Signal Route
: C Signal Route
: DVD Audio Signal Route (L ch)
: Audio (FRONT) Signal Route (L ch)
: Audio (REAR) Signal Route (L ch)
: Audio (CENTER) Signal Route
: Audio (PREOUT SW) Signal Route

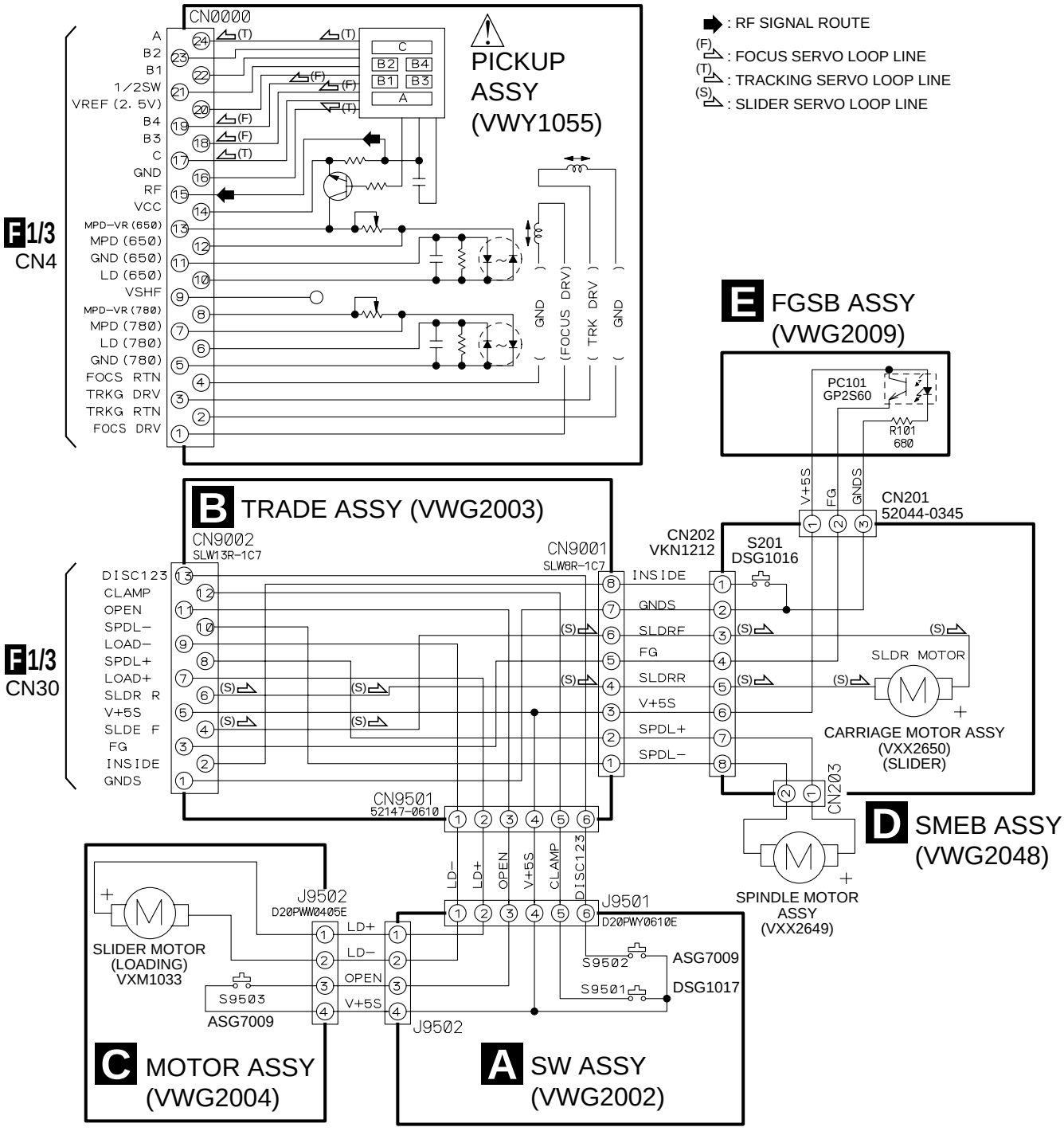
3.2 OVERALL CONNECTION DIAGRAM



Note : When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB PARTS LIST".



3.3 PICKUP, SW, TRADE, MOTOR, SMEB and FGSB ASSYS

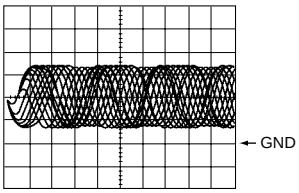


WAVEFORMS for DVD MAIN ASSY

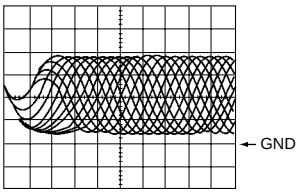
Note : The encircled numbers denote measuring point in the schematic diagram.

Measurement condition : No. 1 to 4 and 6 to 11 : Disc MA1, Title 1-chp 1
No. 5 : CD, ABEX-784 Track 1
No. 12 to 14 : MJK1, Title 1-chp 4
No. 15 to 17 : MJK1, Title 1-chp 5

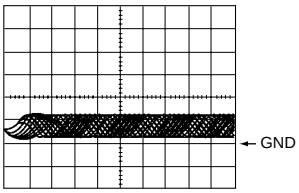
1 **Foot of R169 (RF)**
V: 100mV/div. H: 0.2µsec/div.



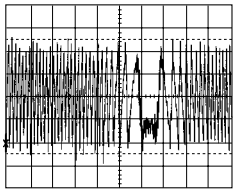
2 **CN7 - pin 5, 6 (RFO)**
V: 500mV/div. H: 0.1µsec/div.



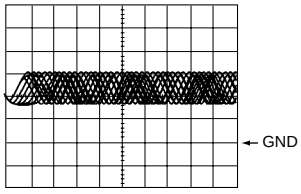
3 **IC12 - pin 170 (MY CHIP input)**
V: 1V/div. H: 0.2µsec/div.



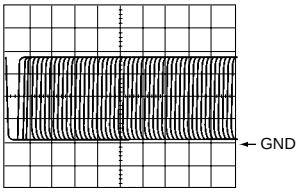
4 **CN7 - pin 9, 10 (Tracking Error) (AI-Inner Tracking Off)**
V: 500mV/div. H: 2msec/div.



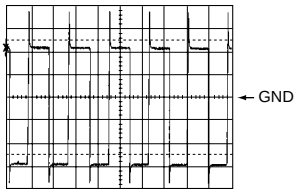
5 **IC2 - pin 39 (EFM before slice)**
V: 1V/div. H: 1µsec/div.



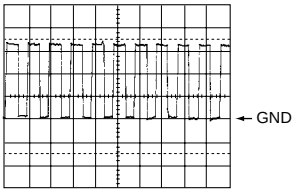
6 **IC2 - pin 1 (EFM)**
V: 1V/div. H: 0.2µsec/div.



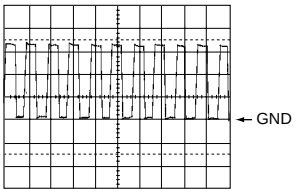
7 **Q281 - Collector (FG)**
V: 1V/div. H: 5msec/div.



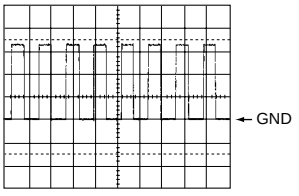
8 **Foot of R261 (FPWM)**
V: 1V/div. H: 5msec/div.



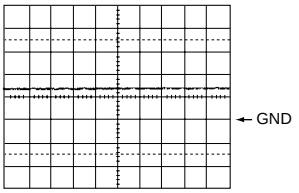
9 **Foot of R262 (VPWM)**
V: 1V/div. H: 5msec/div.



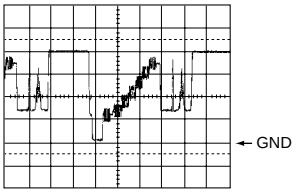
10 **Foot of R263 (PPWM)**
V: 1V/div. H: 5msec/div.



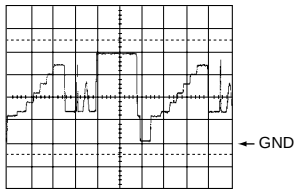
11 **Foot of R264 (RPWM)**
V: 1V/div. H: 5msec/div.



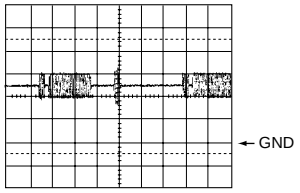
12 **IC18 - pin 45 (Composite Video output)**
V: 2V/div. H: 1msec/div.



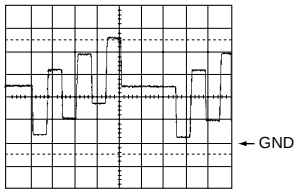
13 **IC18 - pin 39 (Y output)**
V: 0.2V/div. H: 5msec/div.



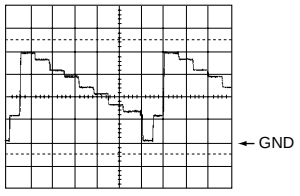
14 **IC18 - pin 36 (C output)**
V: 0.2V/div. H: 5msec/div.



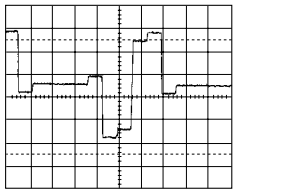
15 **IC18 - pin 45 (C_B output when selecting color difference output)**
V: 0.2V/div. H: 5msec/div.



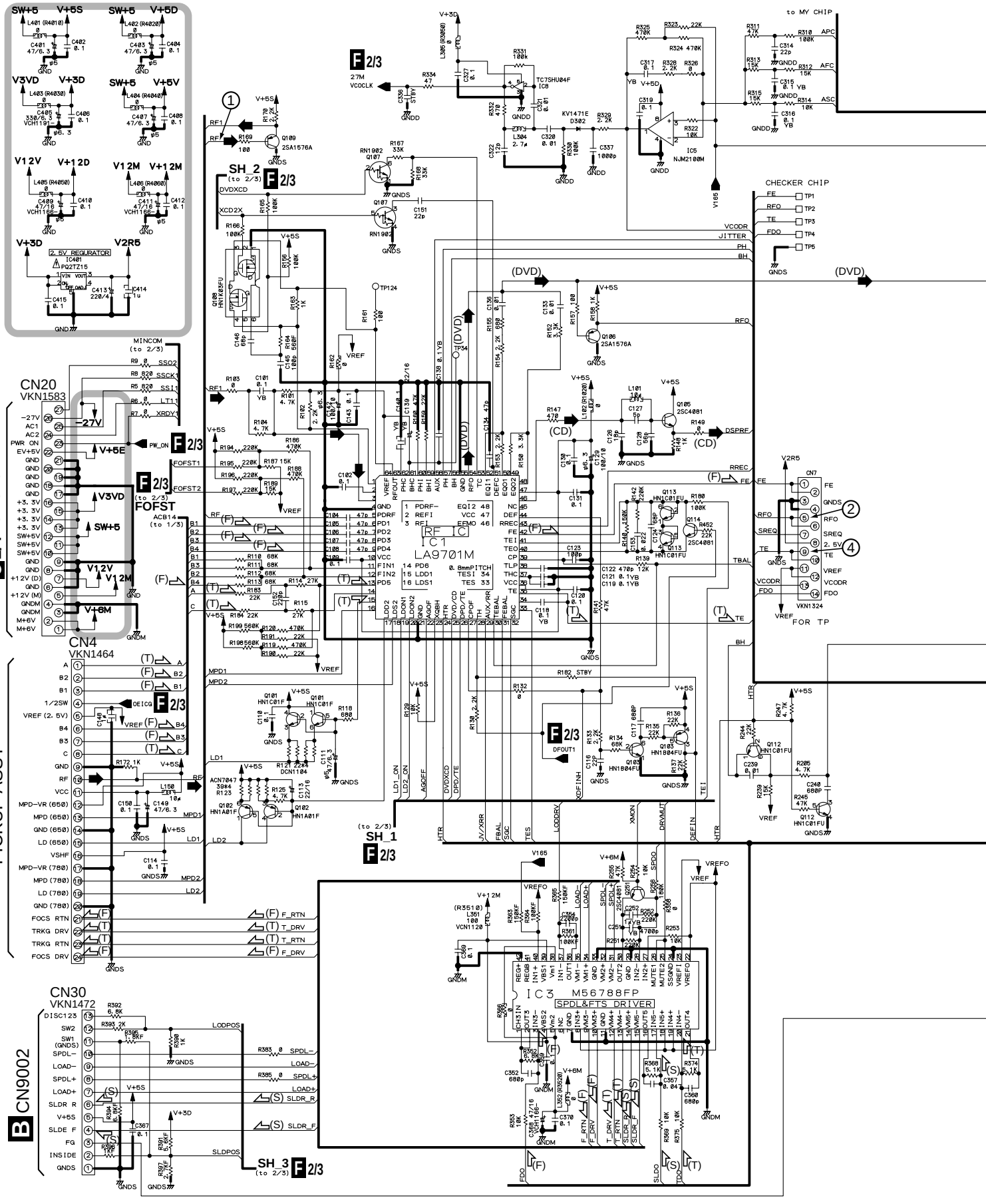
16 **IC18 - pin 39 (Y output when selecting color difference output)**
V: 0.2V/div. H: 5msec/div.



17 **IC18 - pin 36 (C_R output when selecting color difference output)**
V: 2V/div. H: 5msec/div.

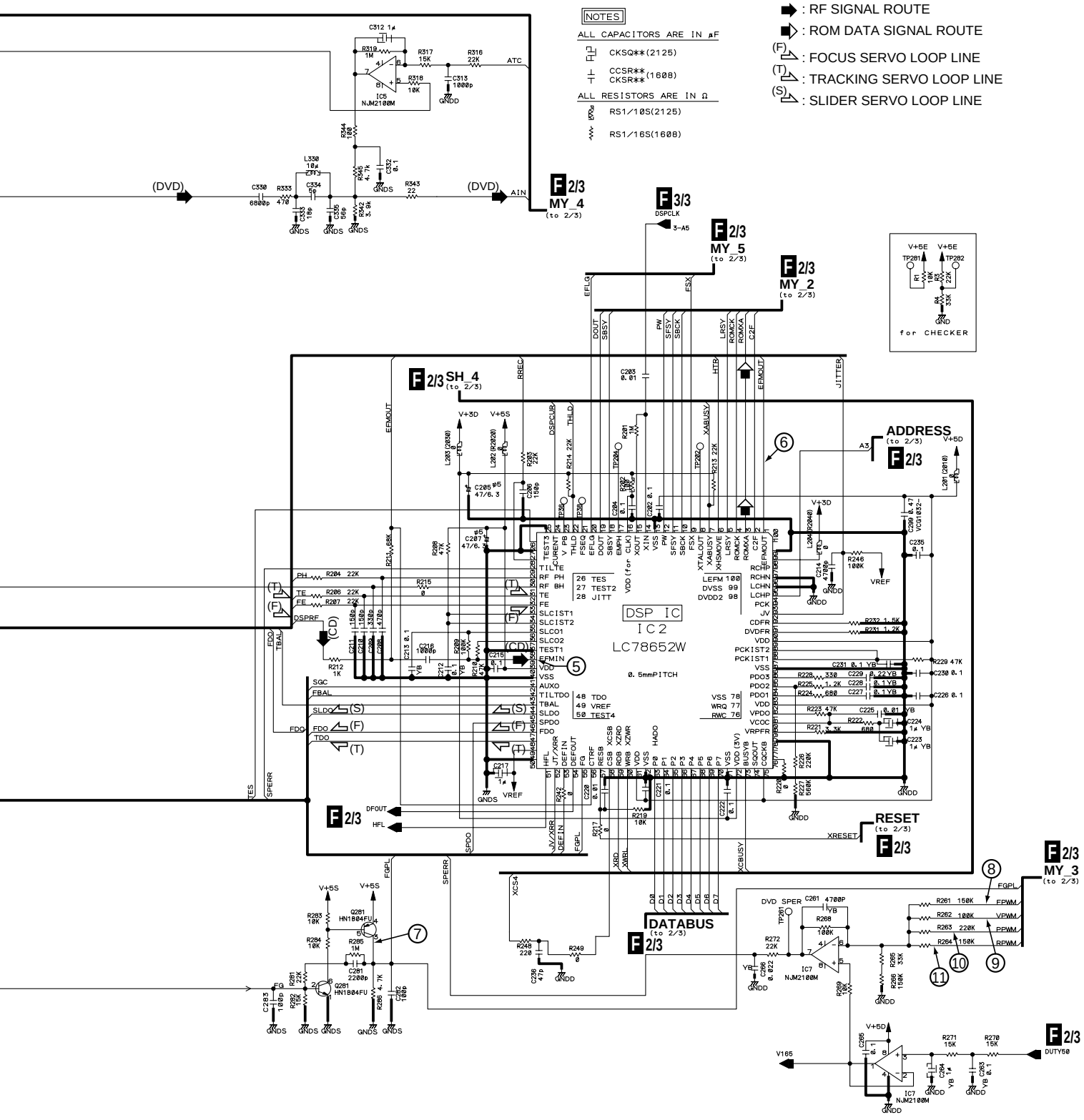


3.4 DVD MAIN ASSY (1/3)

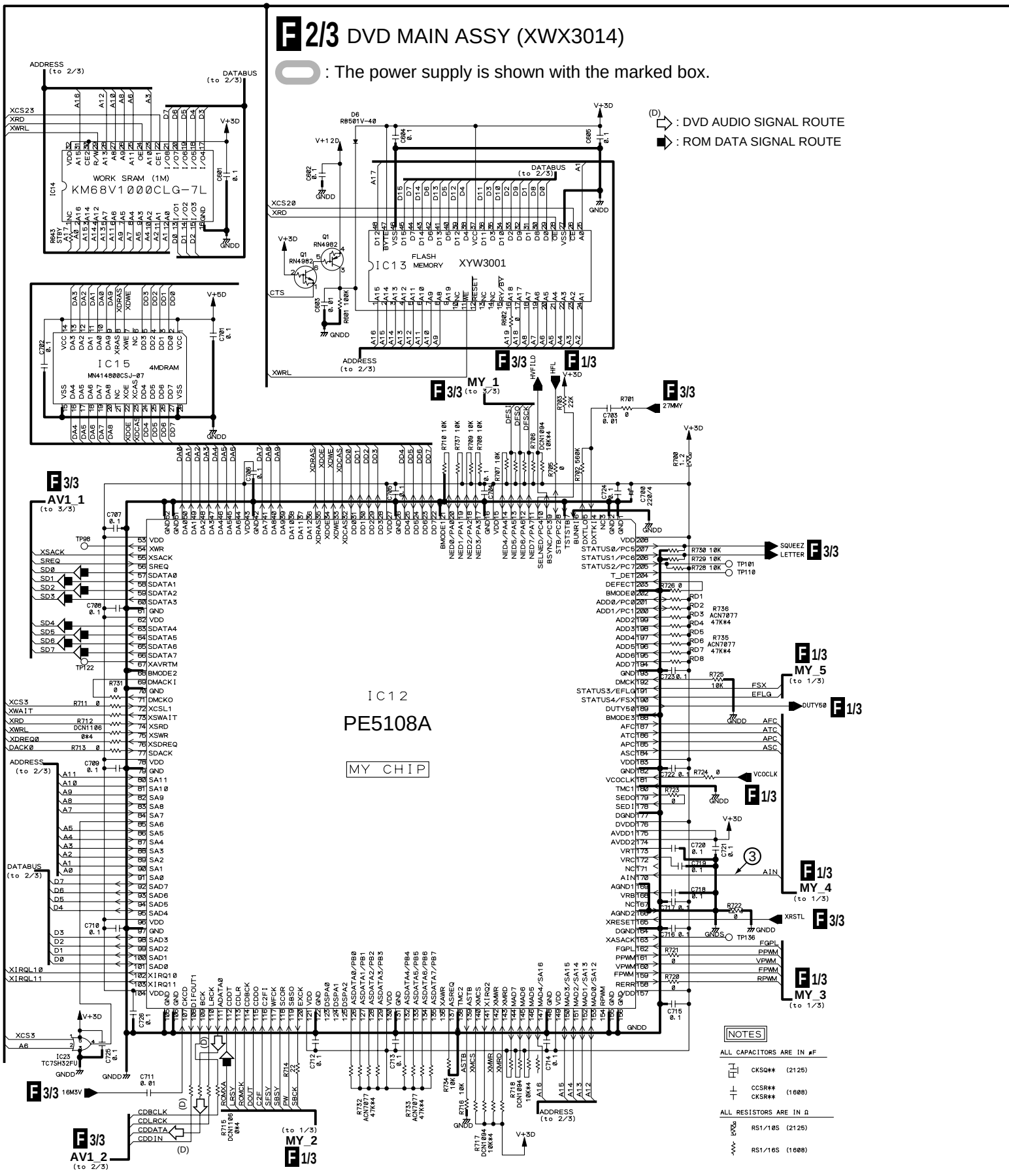


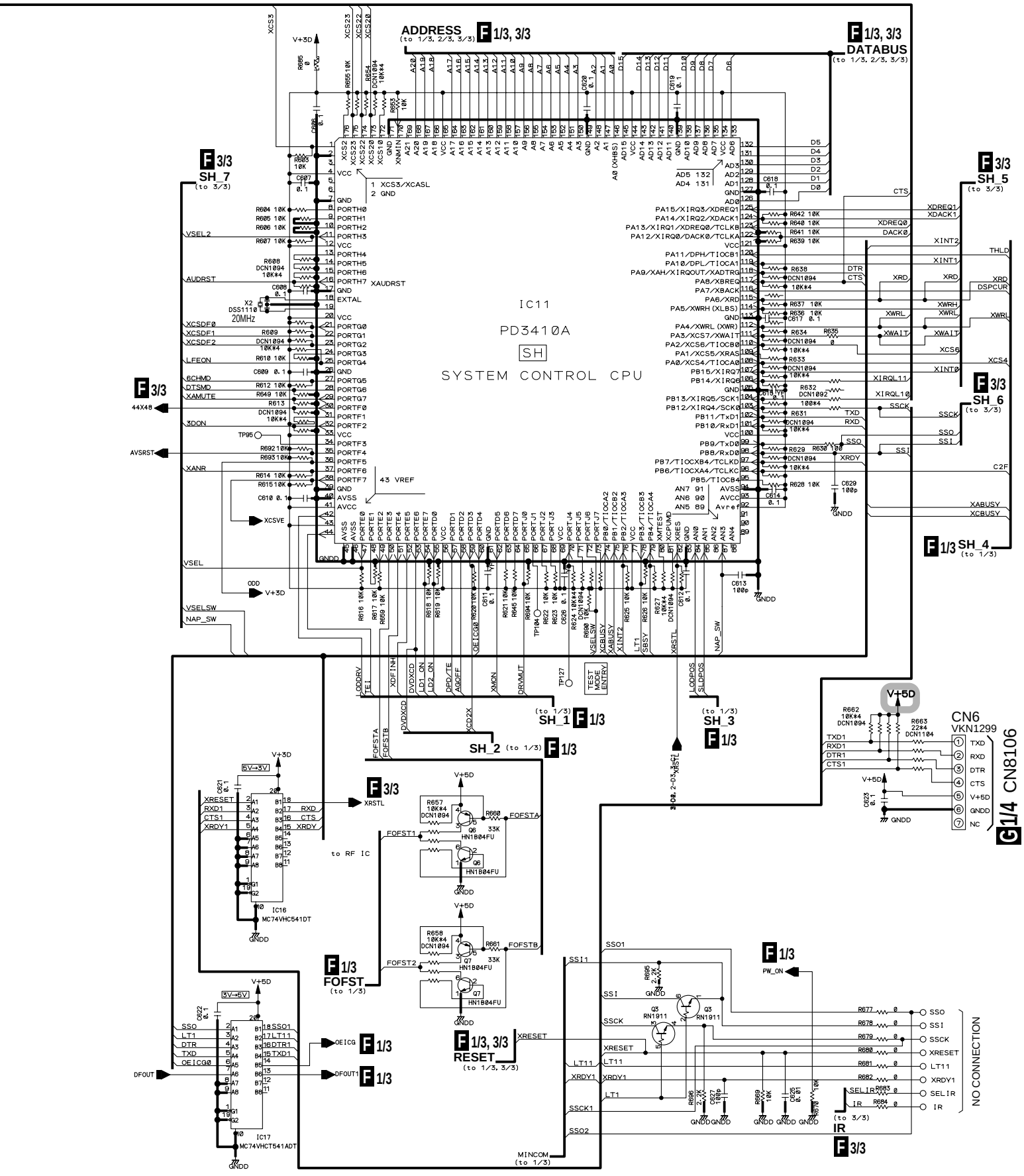
F 1/3 DVD MAIN ASSY (XWX3014)

: The power supply is shown with the marked box.



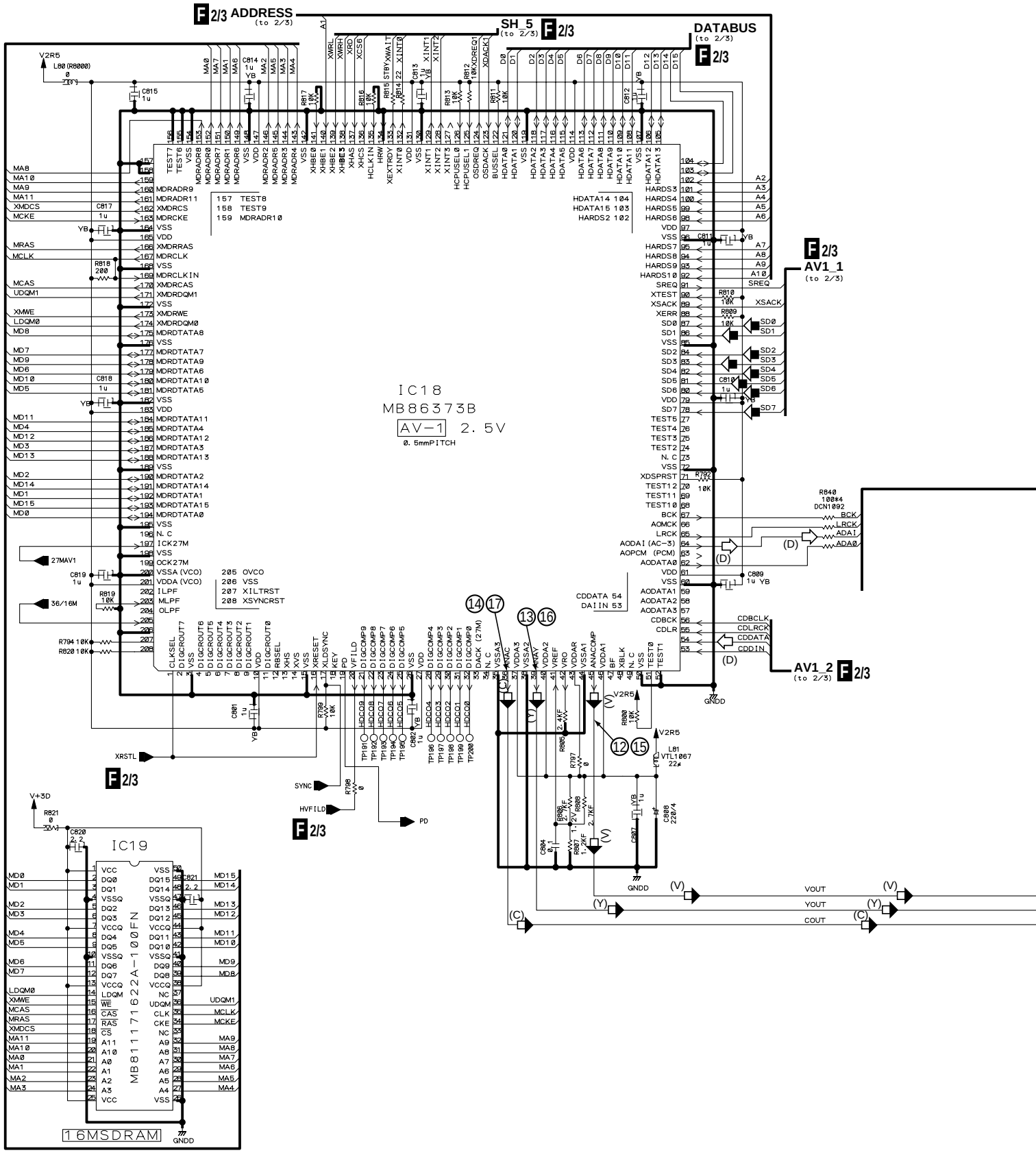
3.5 DVD MAIN ASSY (2/3)

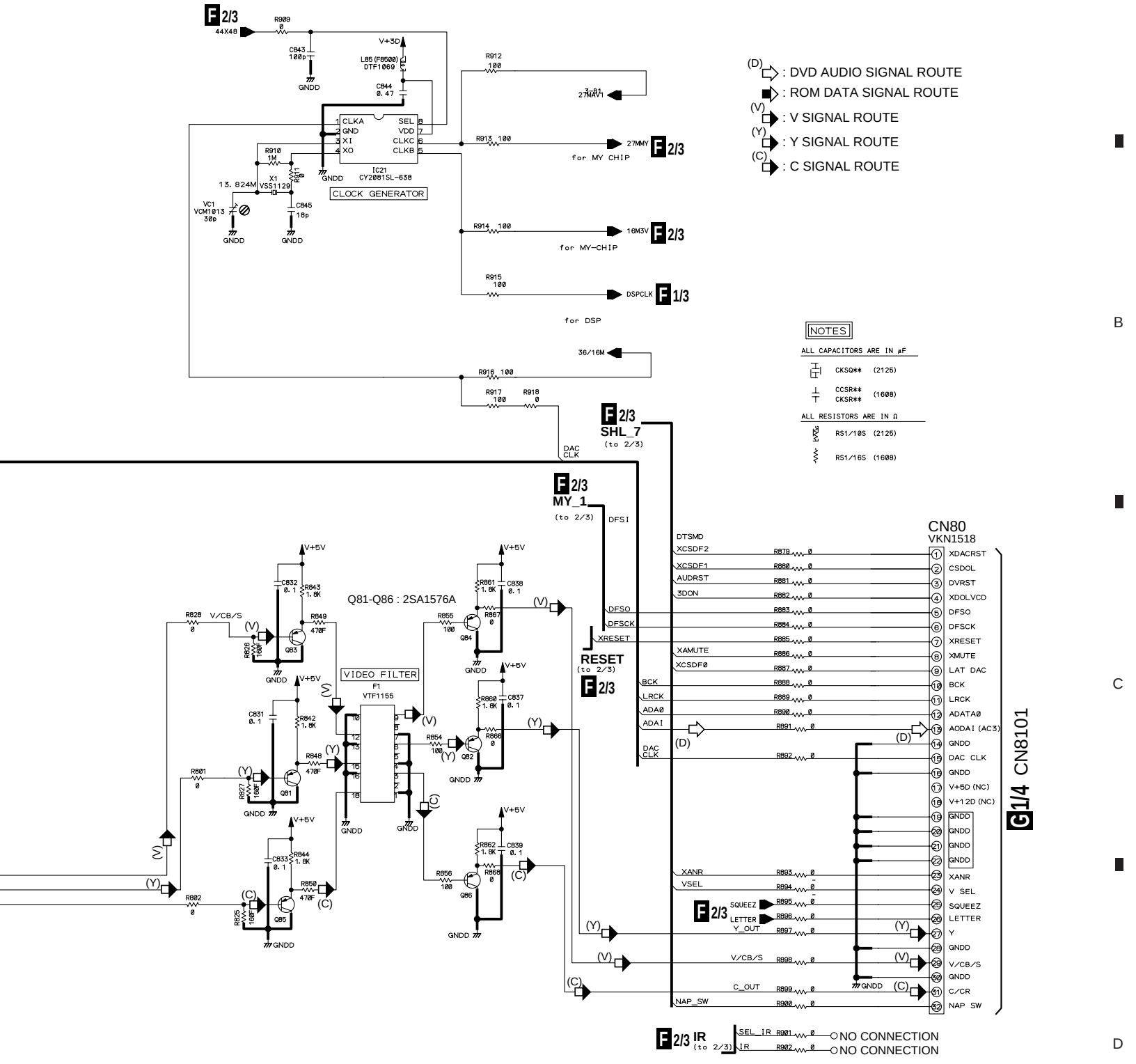



IC11
PD3410A
SH
SYSTEM CONTROL CPU
ADDRESS
DATABUS
SH_1
SH_2
SH_3
SH_4
SH_5
SH_6
SH_7
RESET
FOFST
IR
CN6
VKN1299
CN8106
IC16
MC74VHC541DT
IC17
MC74VHCT541ADT
to RF IC
NO CONNECTION

3.6 DVD MAIN ASSY (3/3)

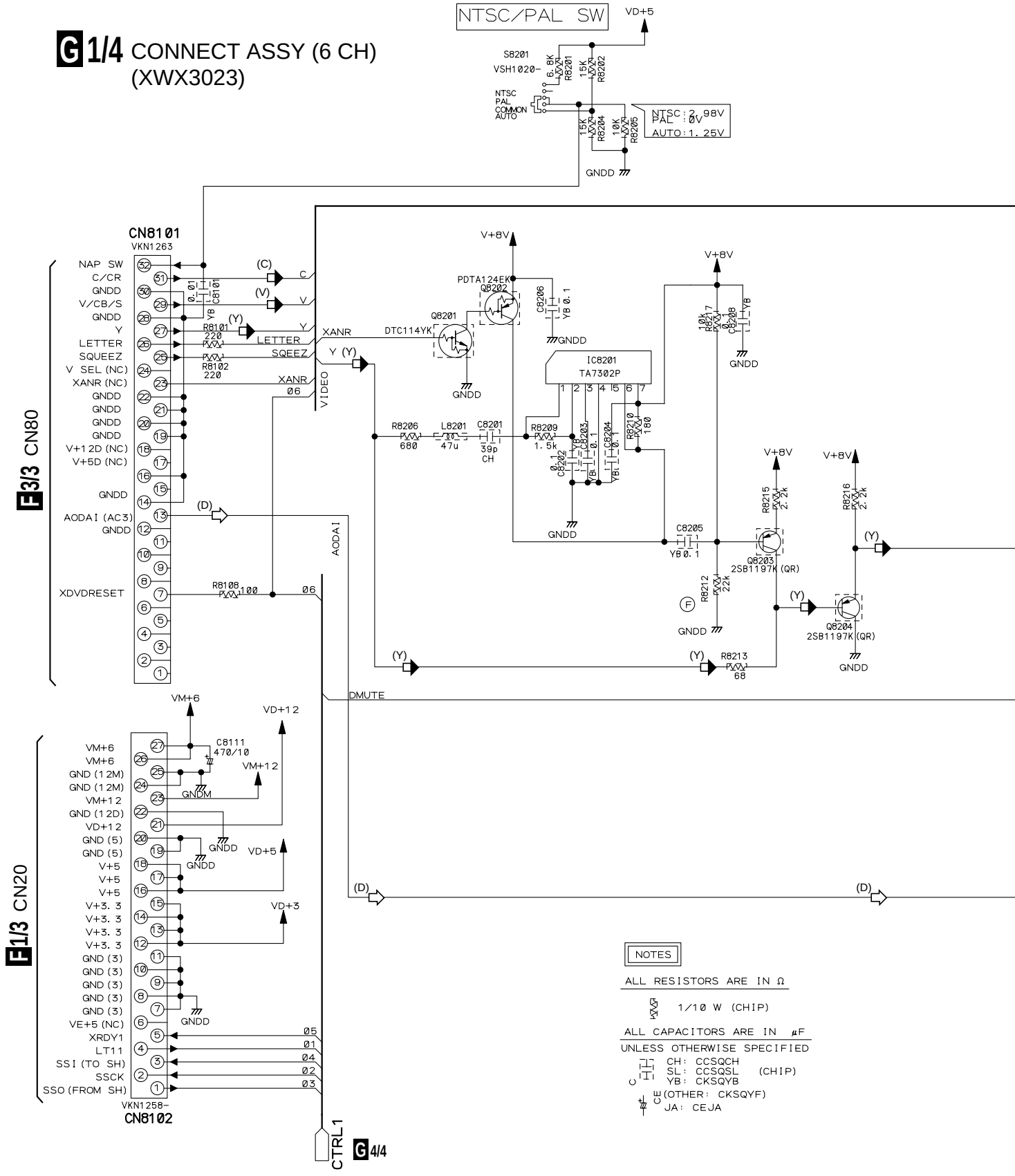
F 3/3 DVD MAIN ASSY (XWX3014)



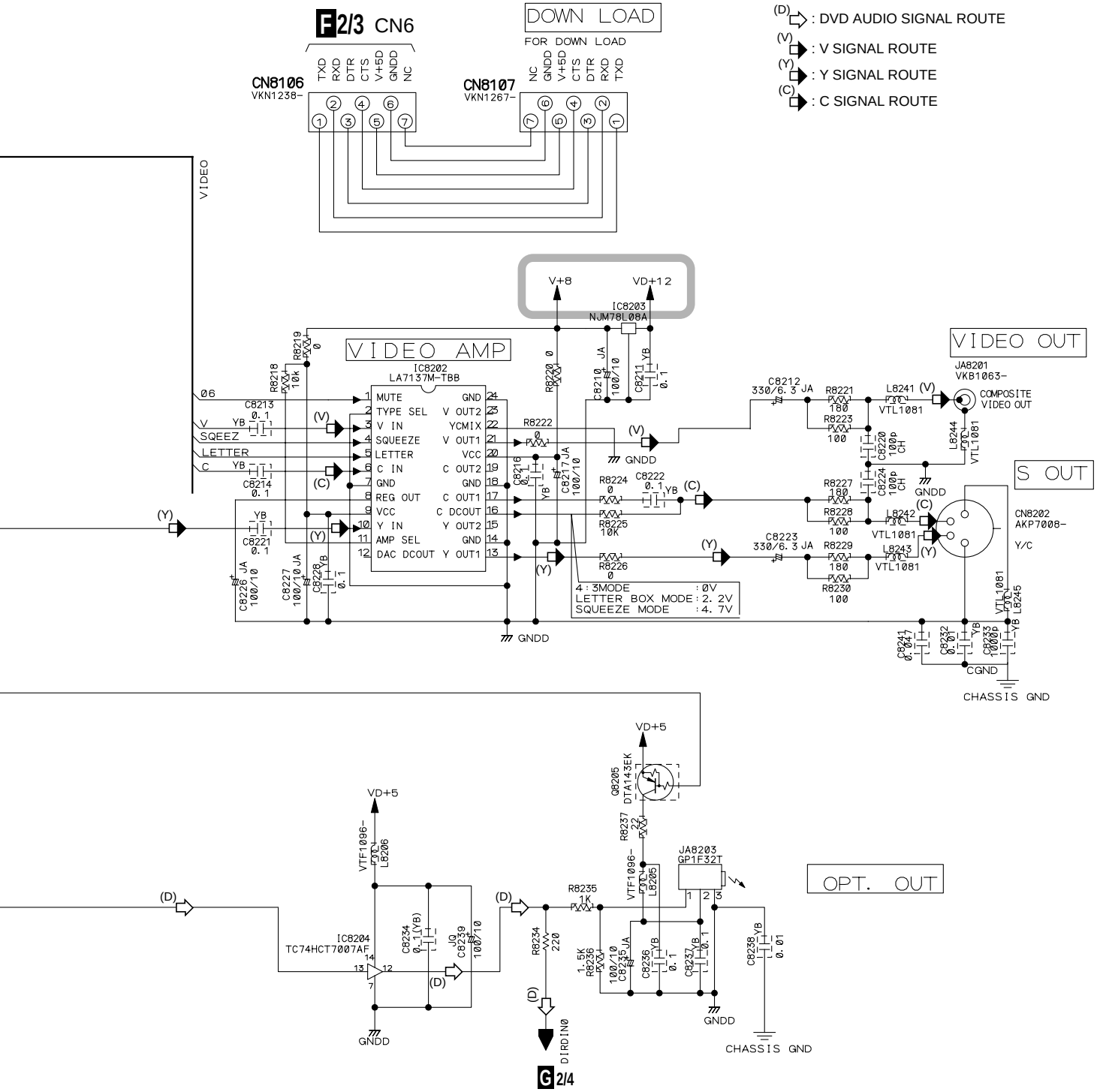

(D) : DVD AUDIO SIGNAL ROUTE
: ROM DATA SIGNAL ROUTE
(V) : V SIGNAL ROUTE
(Y) : Y SIGNAL ROUTE
(C) : C SIGNAL ROUTE
F 2/3
44X48
R909 0
C843 100p
GNDD
V+3D
L85 (F8500) DTF1069
C844 0.47
R912 100
27MAV1
IC21 CY2081SL-638
CLOCK GENERATOR
CLKA
GND
XI
XO
SEL
VDD
CLKC
CLKB
R913 100
27MMY
for MY CHIP
R910 1M
R911
R908
X1 13.824M VSS1129
VC1 VCM1013 30p
C845 18p
R914 100
16M3V
for MY-CHIP
R915 100
DSPCLK
F 1/3
for DSP
36/16M
R916 100
R917 100
R918 0
DAC CLK
SHL_7
(to 2/3)
MY_1
DFSI
NOTES
ALL CAPACITORS ARE IN µF
CKSQ** (2125)
CCSR** CKSR** (1608)
ALL RESISTORS ARE IN Ω
RS1/10S (2125)
RS1/16S (1608)
Q81-Q86 : 2SA1576A
VIDEO FILTER
F1
VTF1155
V+5V
V/CB/S
Q83
Q84
Q82
Q81
Q86
Q85
DFSO
DFSCK
XRESET
RESET
BCK
LRCK
ADA0
ADA1
DTSMD
XCSDF2
XCSDF1
AUDRST
3DON
XAMUTE
XCSDF0
XANR
VSEL
SQUEEZ
LETTER
Y_OUT
C_OUT
NAP_SW
CN80
VKN1518
XDACRST
CSDOL
DVRST
XDOLVCD
DFSO
DFSCK
XRESET
XMUTE
LAT DAC
BCK
LRCK
ADATA0
AODAI (AC3)
GNDD
DAC CLK
V+5D (NC)
V+12D (NC)
XANR
V SEL
SQUEEZ
LETTER
Y
V/CB/S
C/CR
NAP SW
G 1/4 CN8101
F 2/3 IR (to 2/3)
SEL_IR
IR
NO CONNECTION
NO CONNECTION

3.7 CONNECT ASSY (6 CH) (1/4)

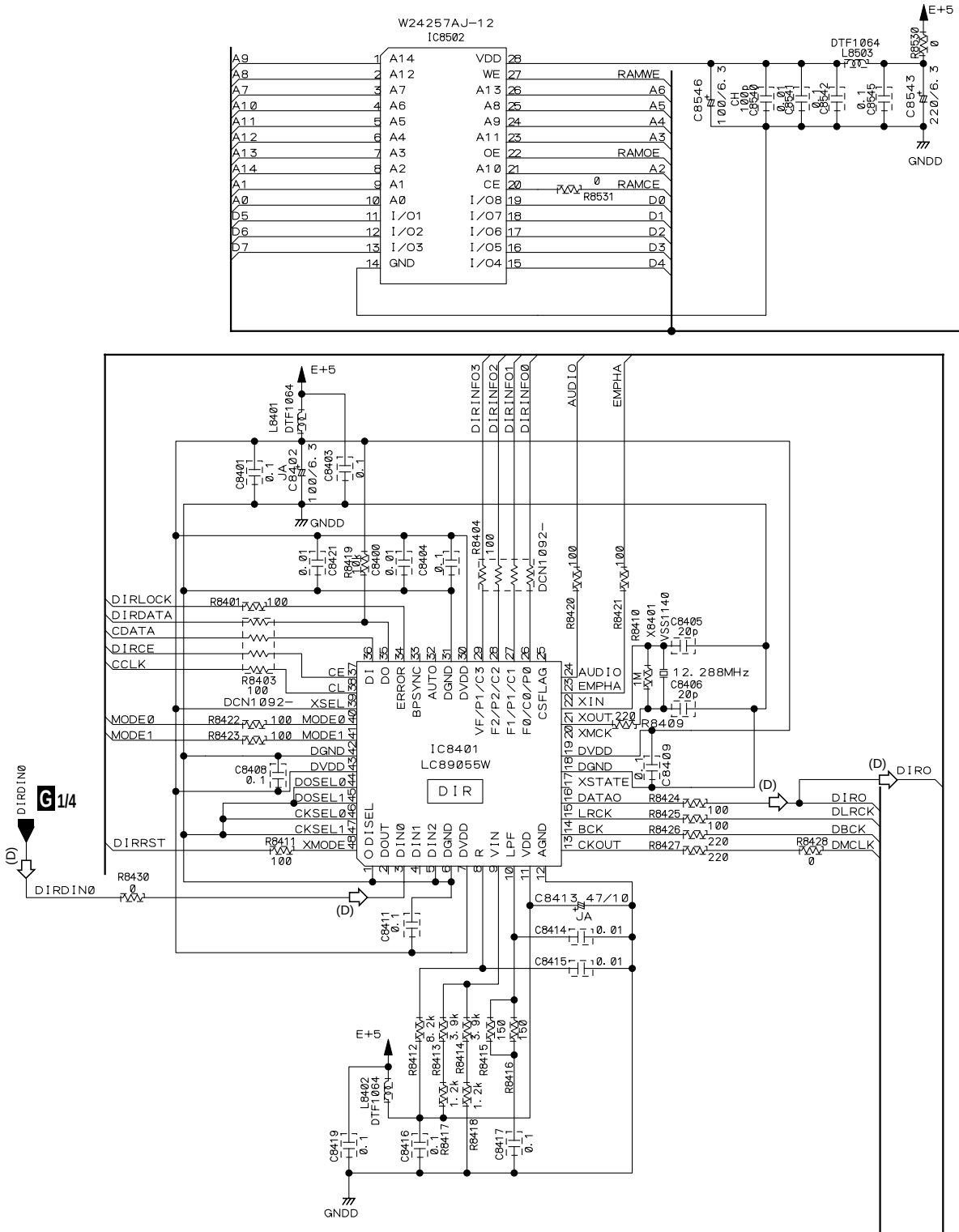
G 1/4 CONNECT ASSY (6 CH)
(XWX3023)



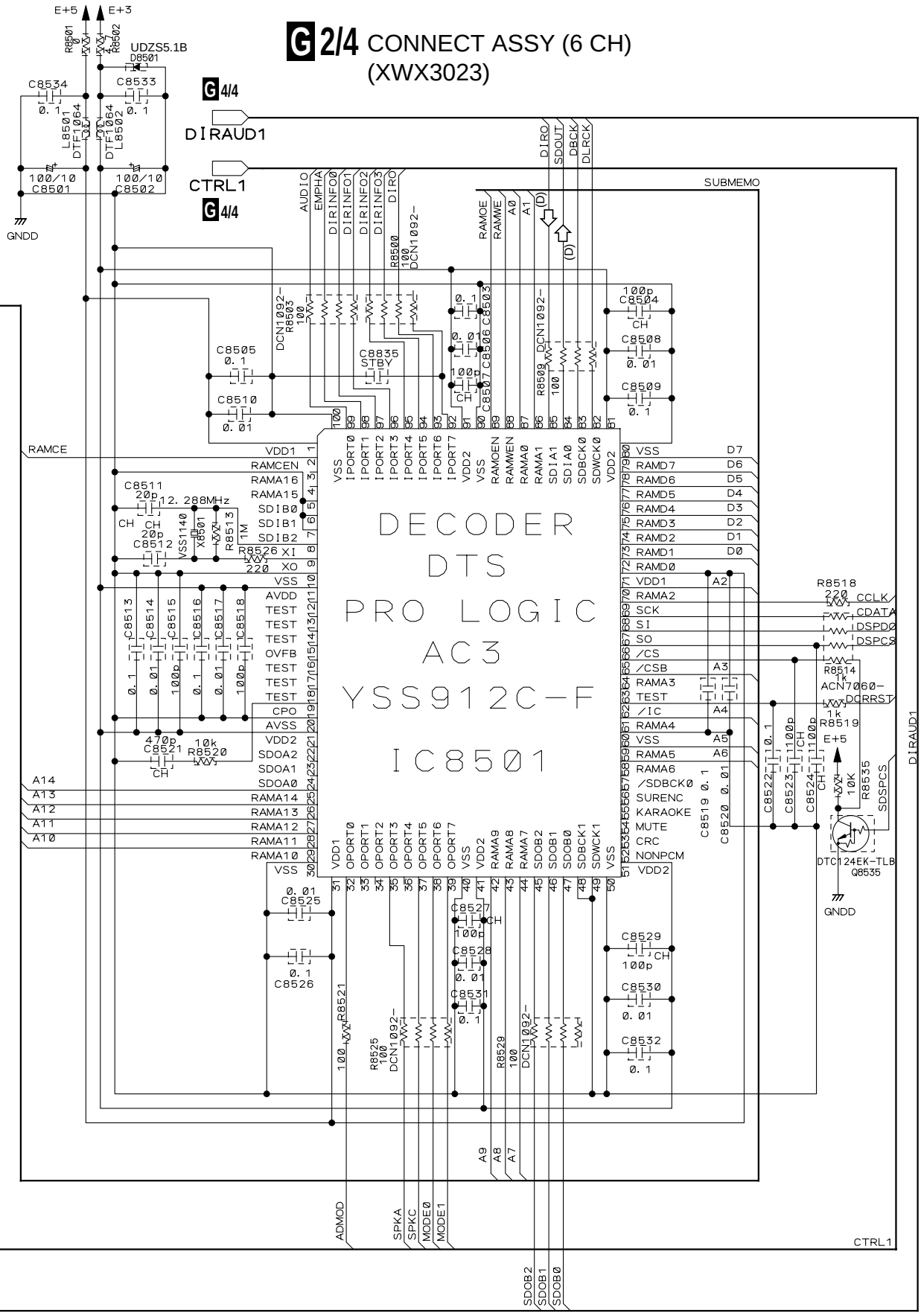
: The power supply is shown with the marked box.



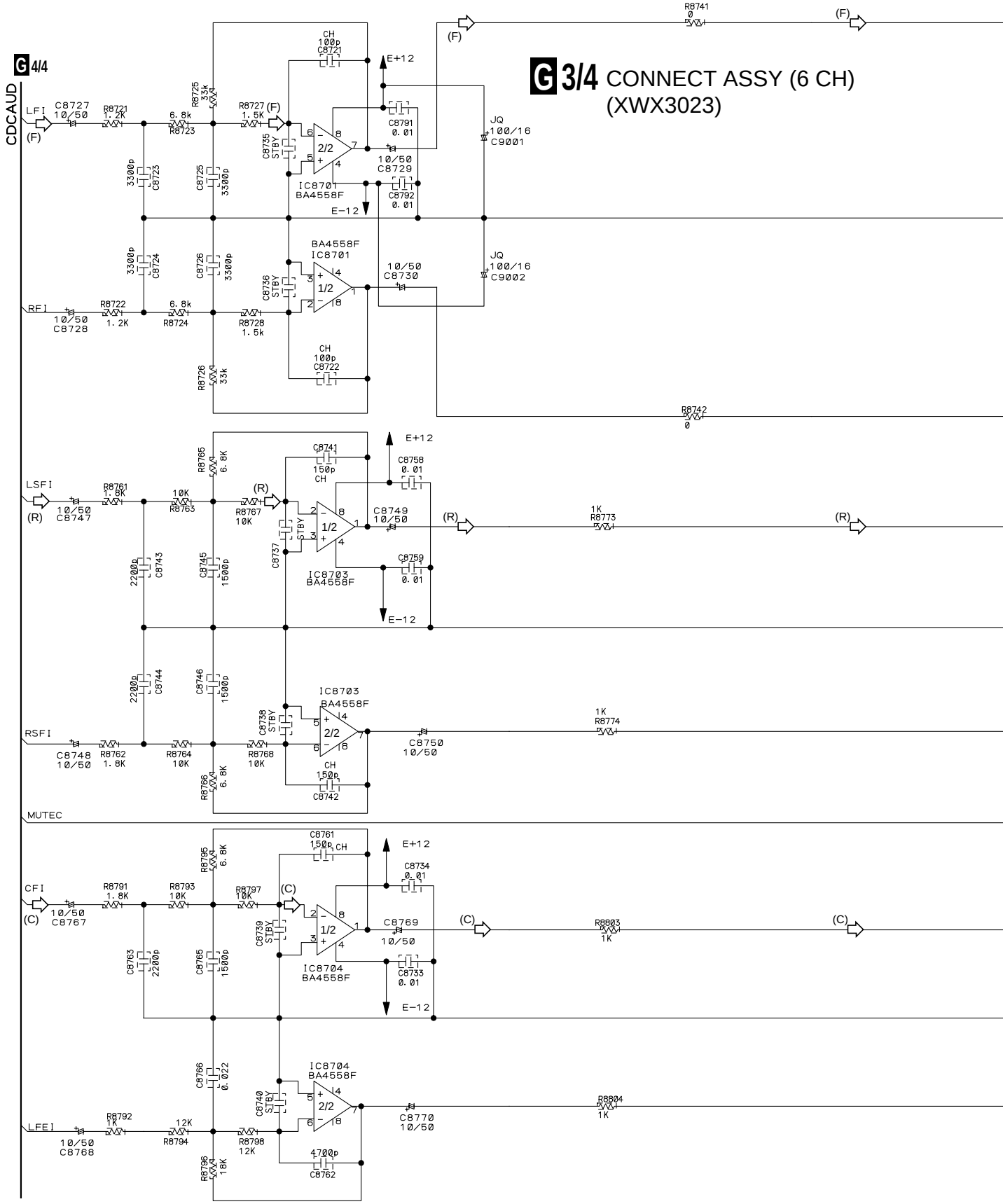
3.8 CONNECT ASSY (6 CH) (2/4)

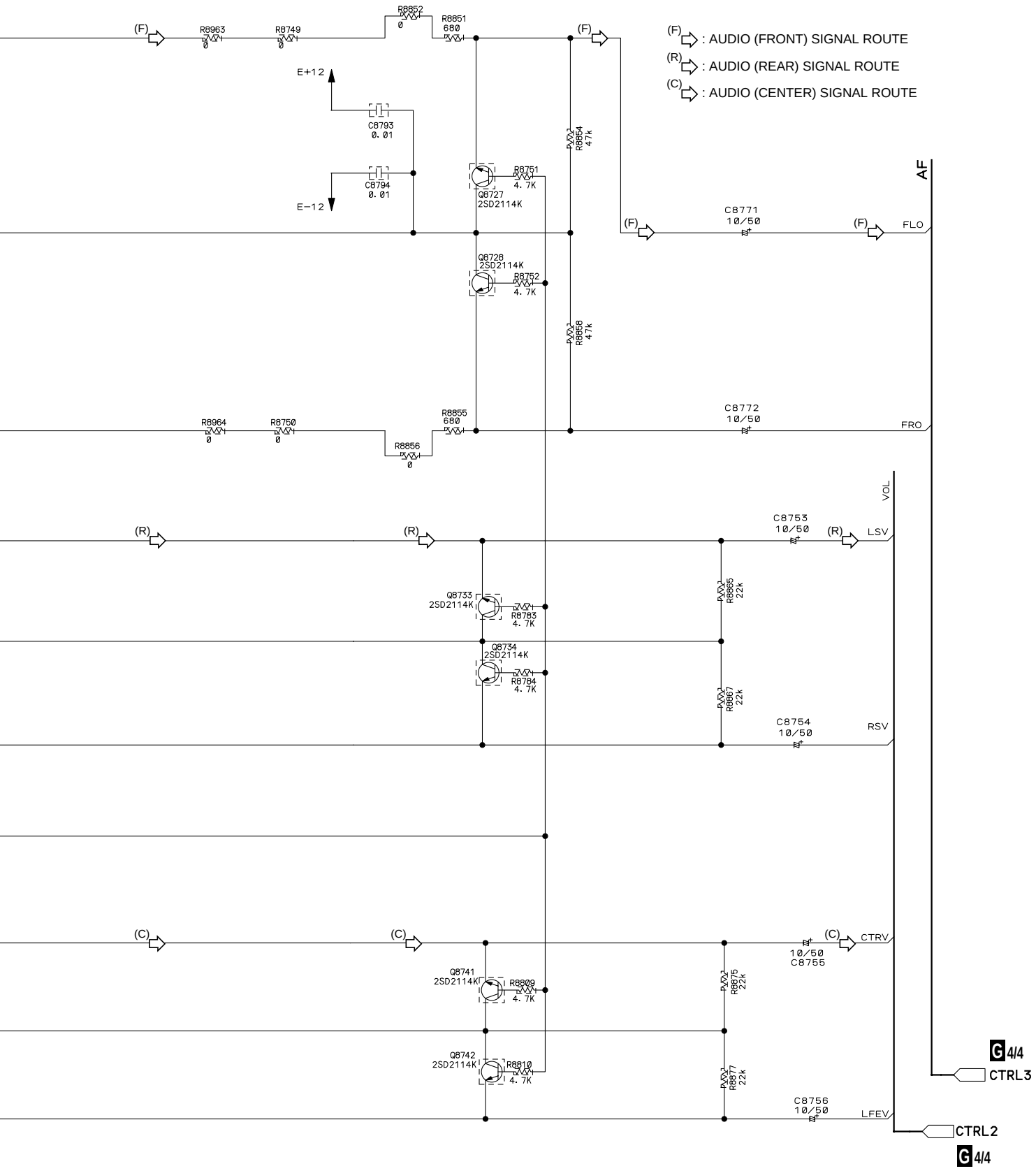


G 2/4 CONNECT ASSY (6 CH)
(XWX3023)

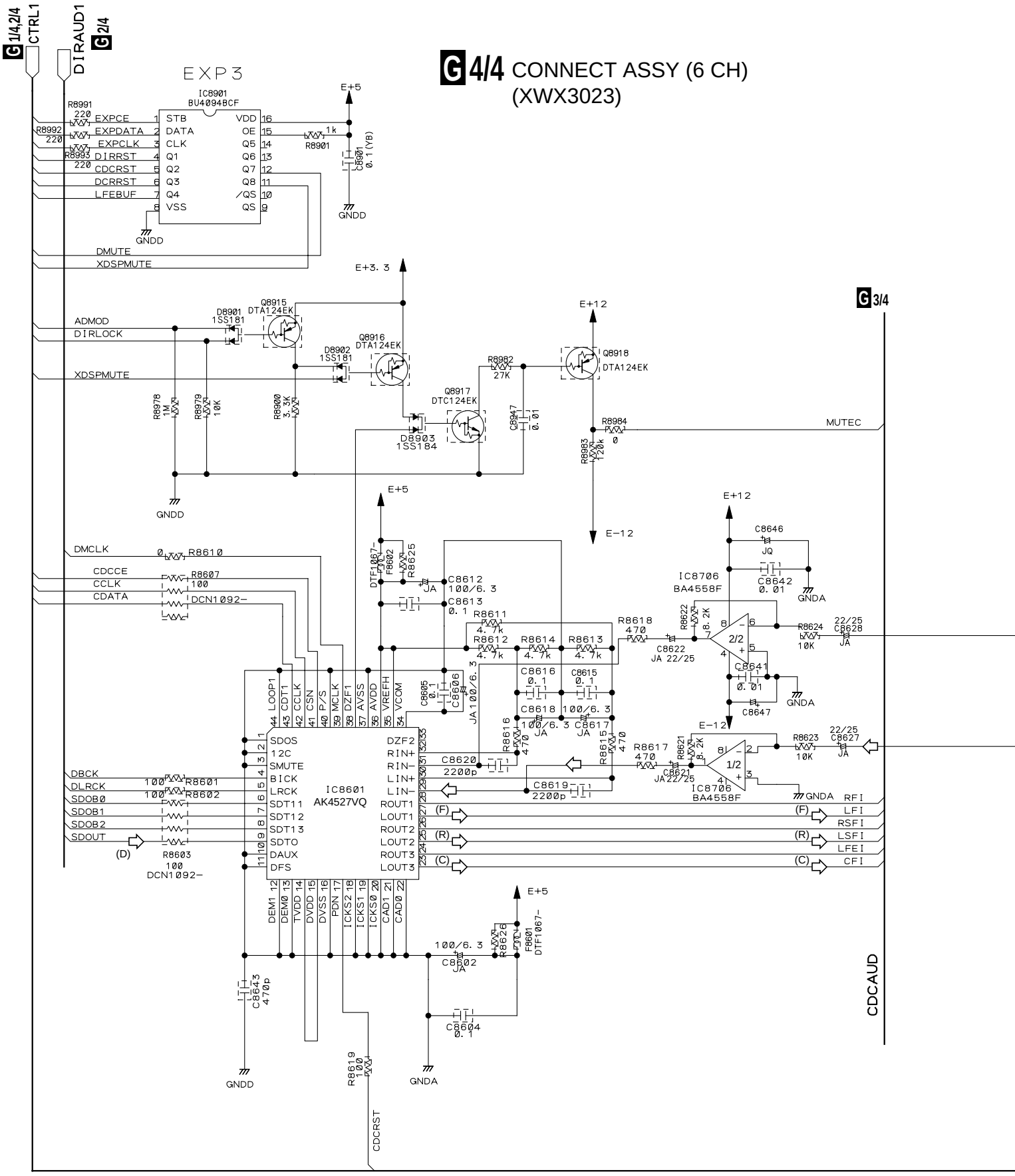


3.9 CONNECT ASSY (6 CH) (3/4)



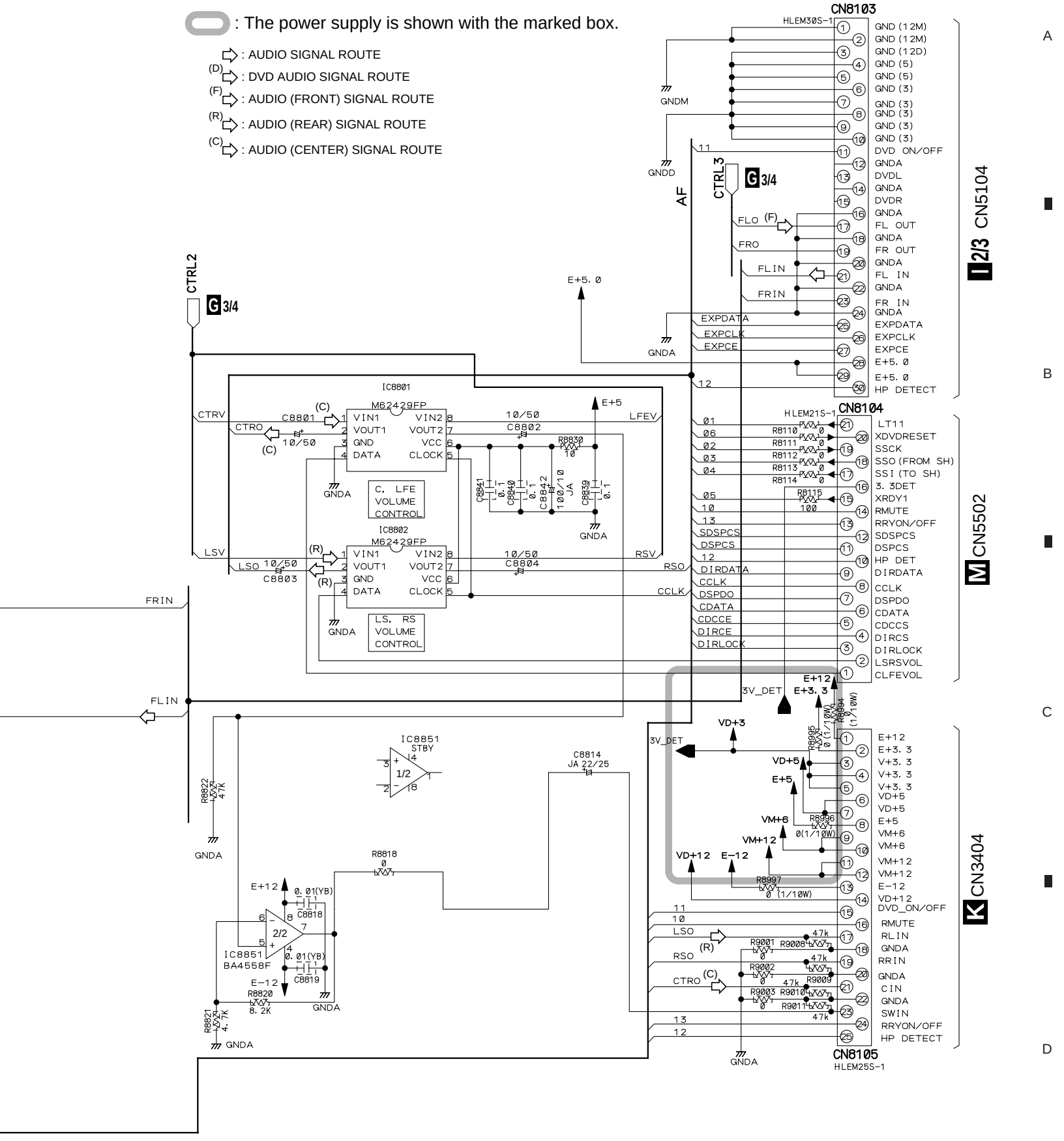

(F) : AUDIO (FRONT) SIGNAL ROUTE
(R) : AUDIO (REAR) SIGNAL ROUTE
(C) : AUDIO (CENTER) SIGNAL ROUTE
R8963 0
R8749 0
R8852 0
R8851 680
E+12
E-12
C8793 0.01
C8794 0.01
R8854 4.7k
R8751 4.7K
Q8727 2SD2114K
Q8728 2SD2114K
R8752 4.7K
R8858 4.7k
C8771 10/50
AF
FLO
R8964 0
R8750 0
R8855 680
R8856 0
C8772 10/50
FRO
VOL
C8753 10/50
LSV
Q8733 2SD2114K
R8783 4.7K
R8865 22k
Q8734 2SD2114K
R8784 4.7K
R8867 22k
C8754 10/50
RSV
CTRV
C8755 10/50
Q8741 2SD2114K
R8809 4.7K
R8875 22k
Q8742 2SD2114K
R8810 4.7K
R8877 22k
C8756 10/50
LFEV
G 4/4
CTRL3
CTRL2
G 4/4

3.10 CONNECT ASSY (6 CH) (4/4)

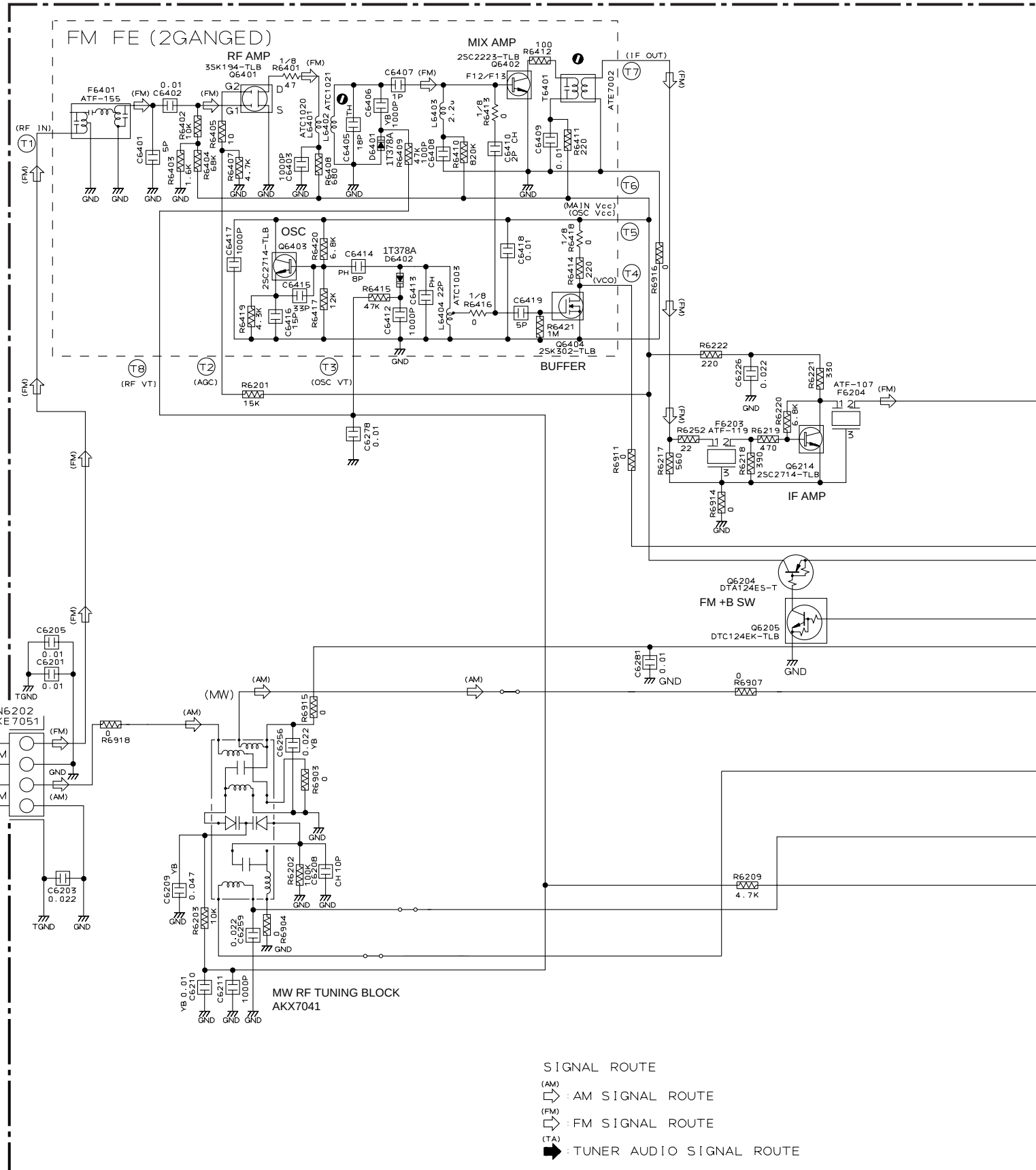


: The power supply is shown with the marked box.

: AUDIO SIGNAL ROUTE
(D) : DVD AUDIO SIGNAL ROUTE
(F) : AUDIO (FRONT) SIGNAL ROUTE
(R) : AUDIO (REAR) SIGNAL ROUTE
(C) : AUDIO (CENTER) SIGNAL ROUTE



3.11 FM/AM TUNER MODULE

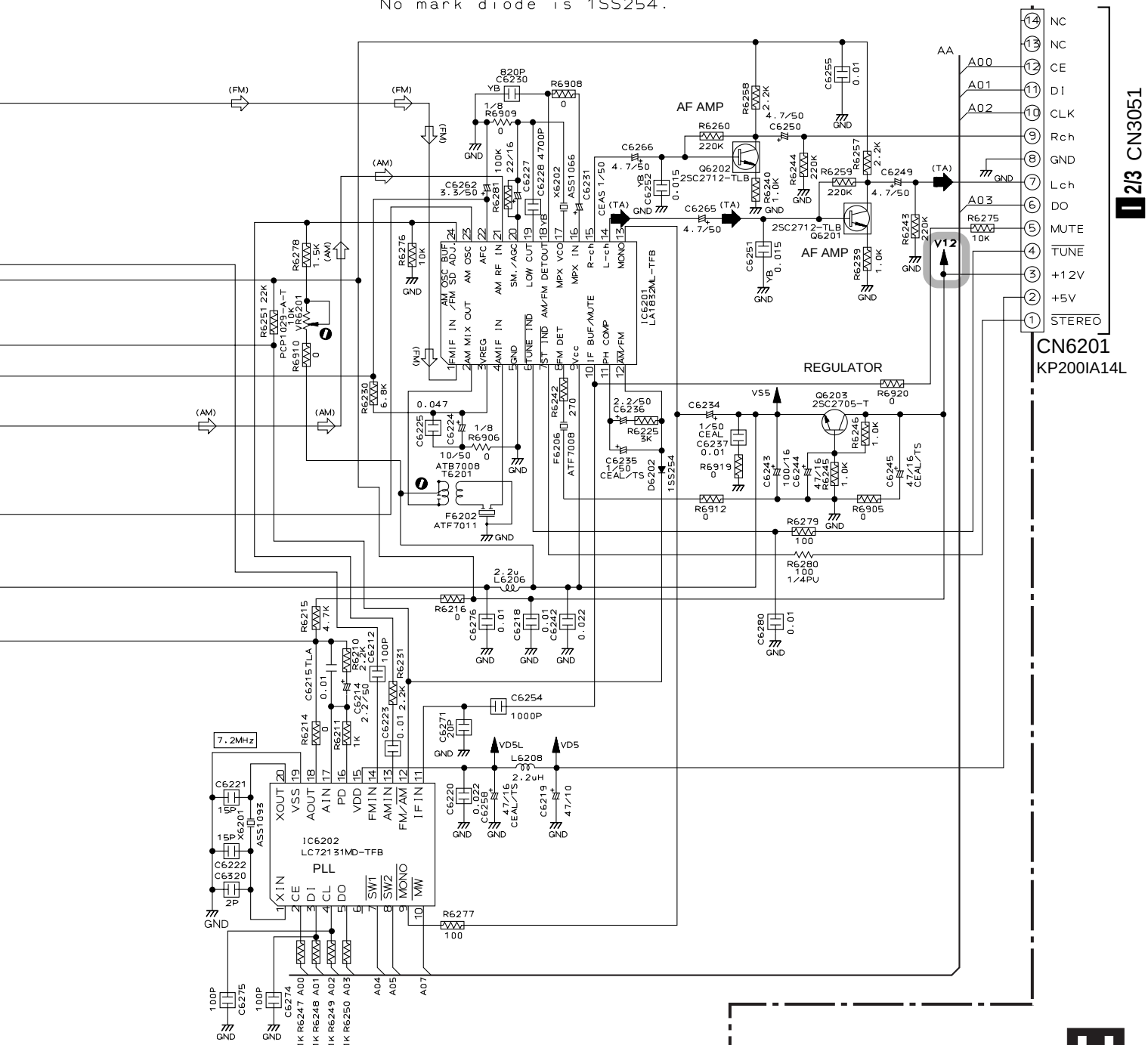


H FM/AM TUNER MODULE (AXQ7065)

: The power supply is shown with the marked box.

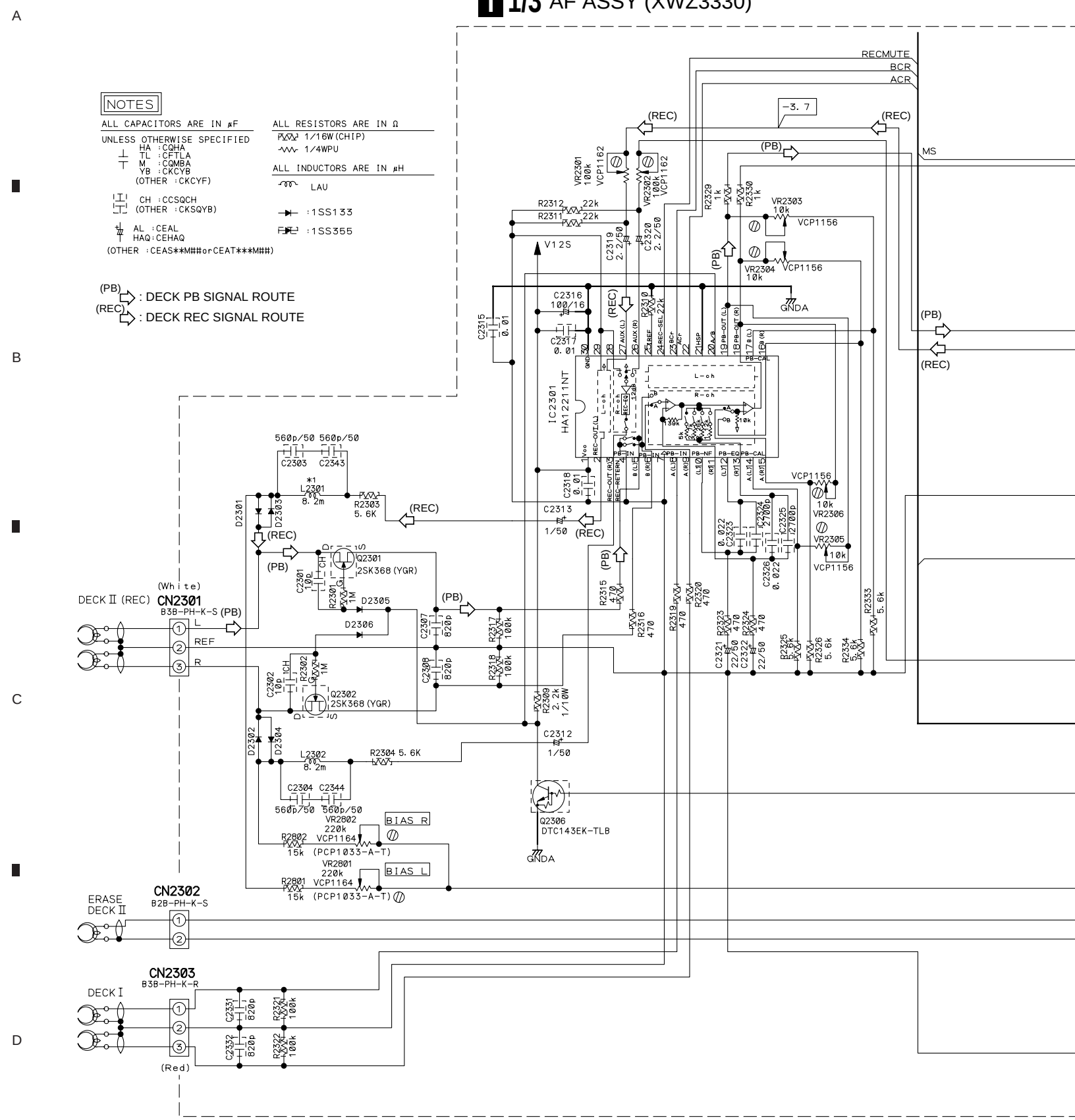
Notes

1. RESISTORS
   Indicated in Ω, 1/10W±5% Tolerance unless otherwise noted K:KΩ, M:MΩ.
2. CAPACITORS
   Indicated in Capacity(μF)/VOLTAGE(V) unless otherwise noted P:PF.
3. DIODES
   No mark diode is 1SS254.

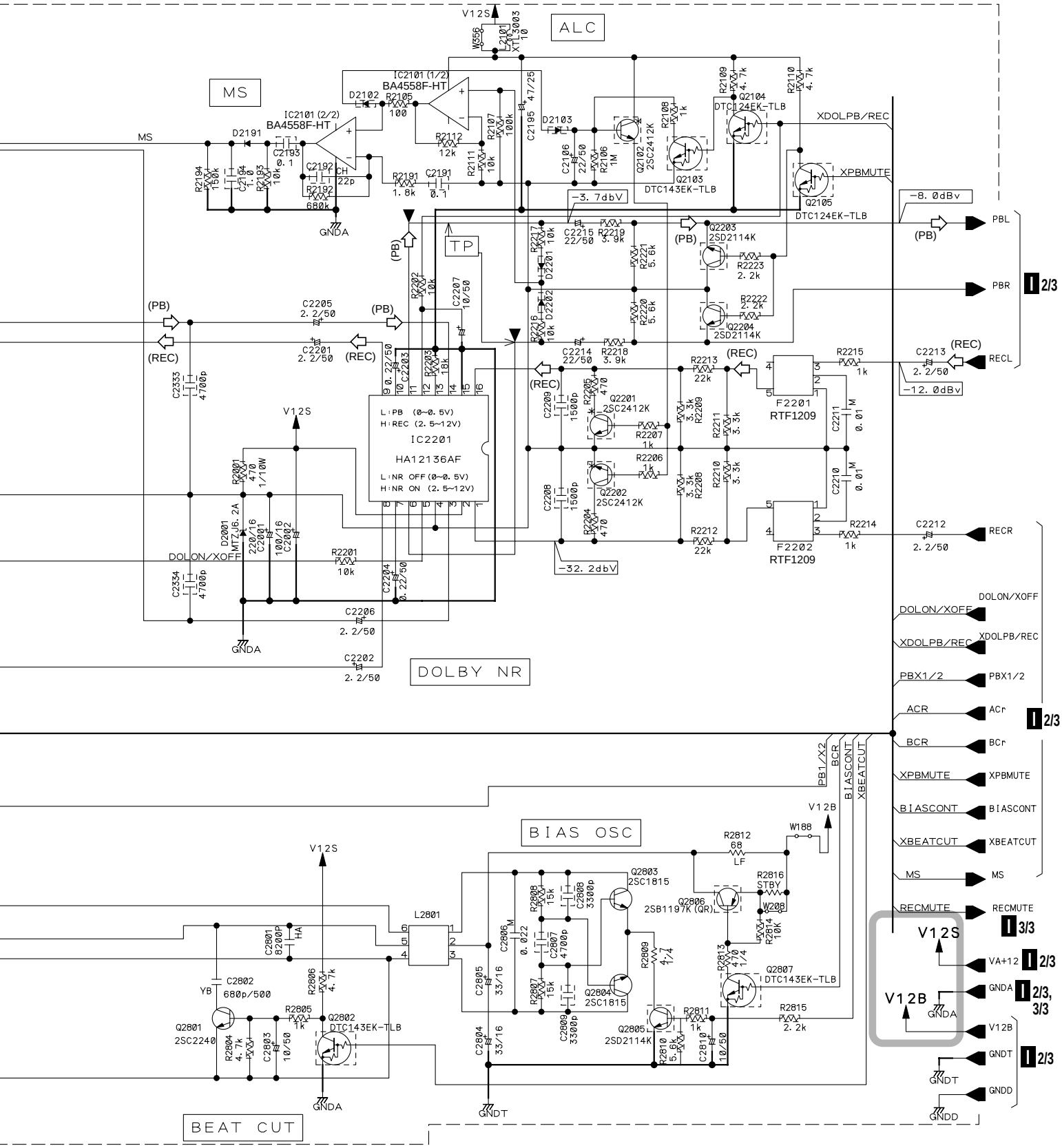


3.12 AF ASSY (1/3)

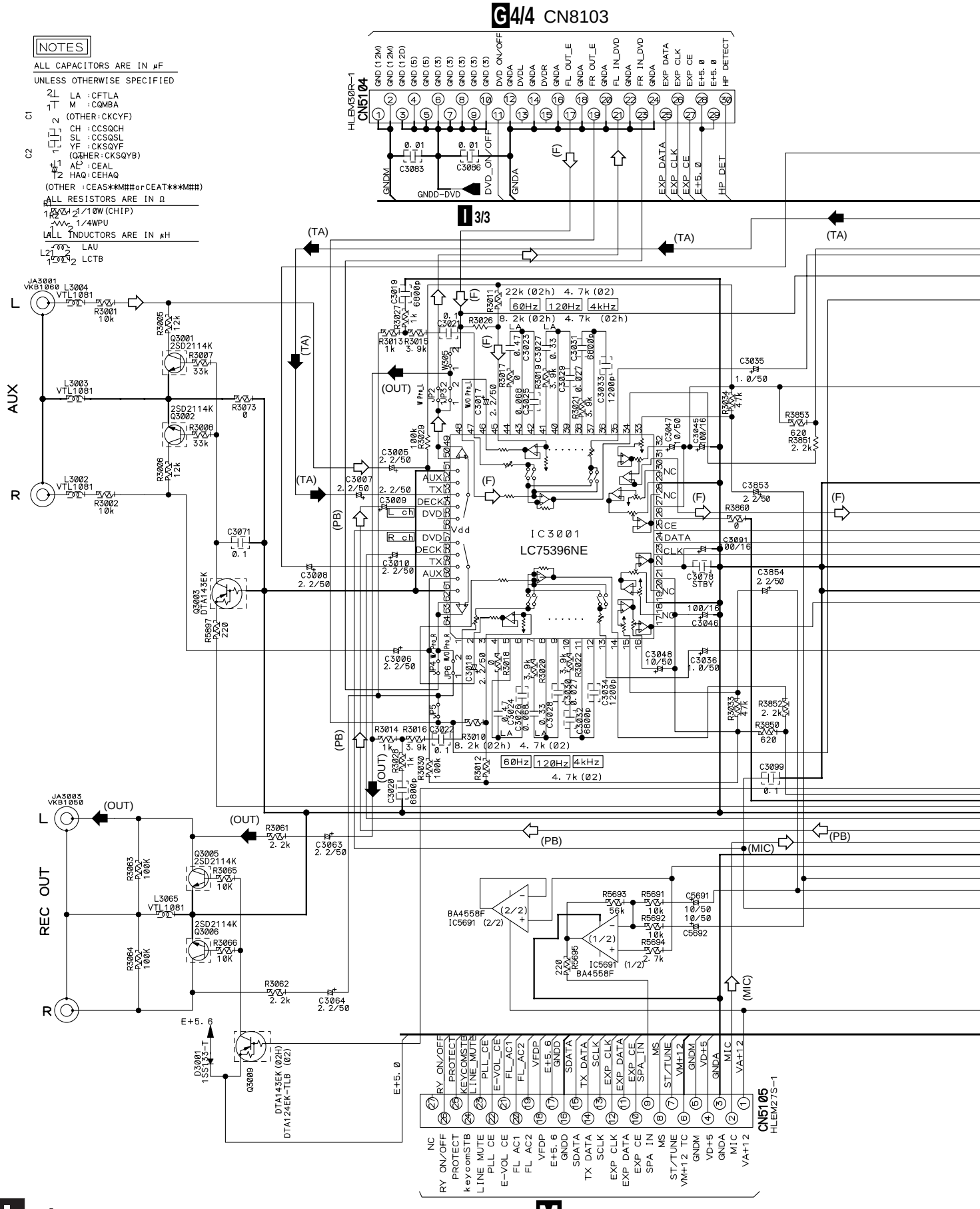
1/3 AF ASSY (XWZ3330)



: The power supply is shown with the marked box.

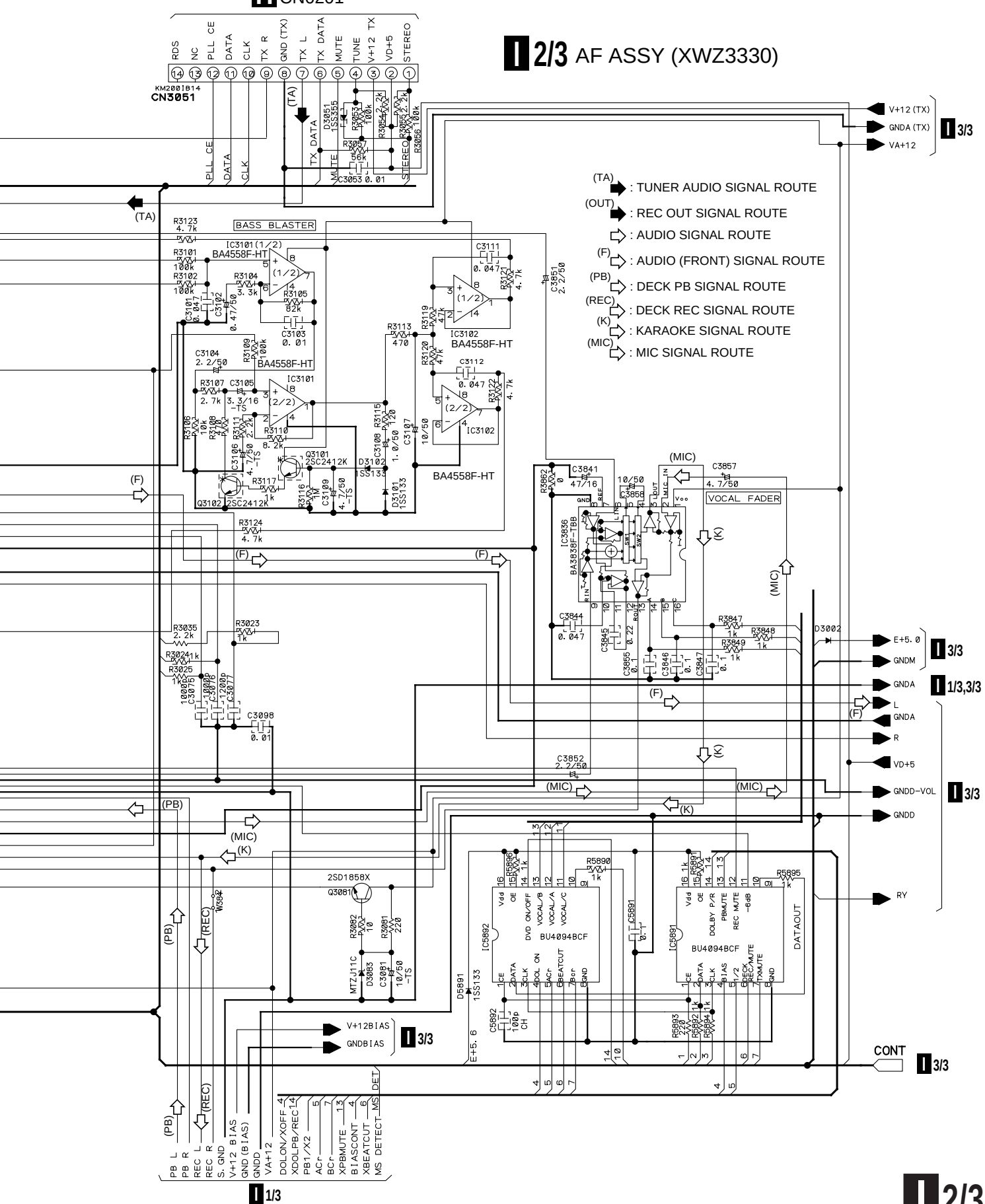


3.13 AF ASSY (2/3)

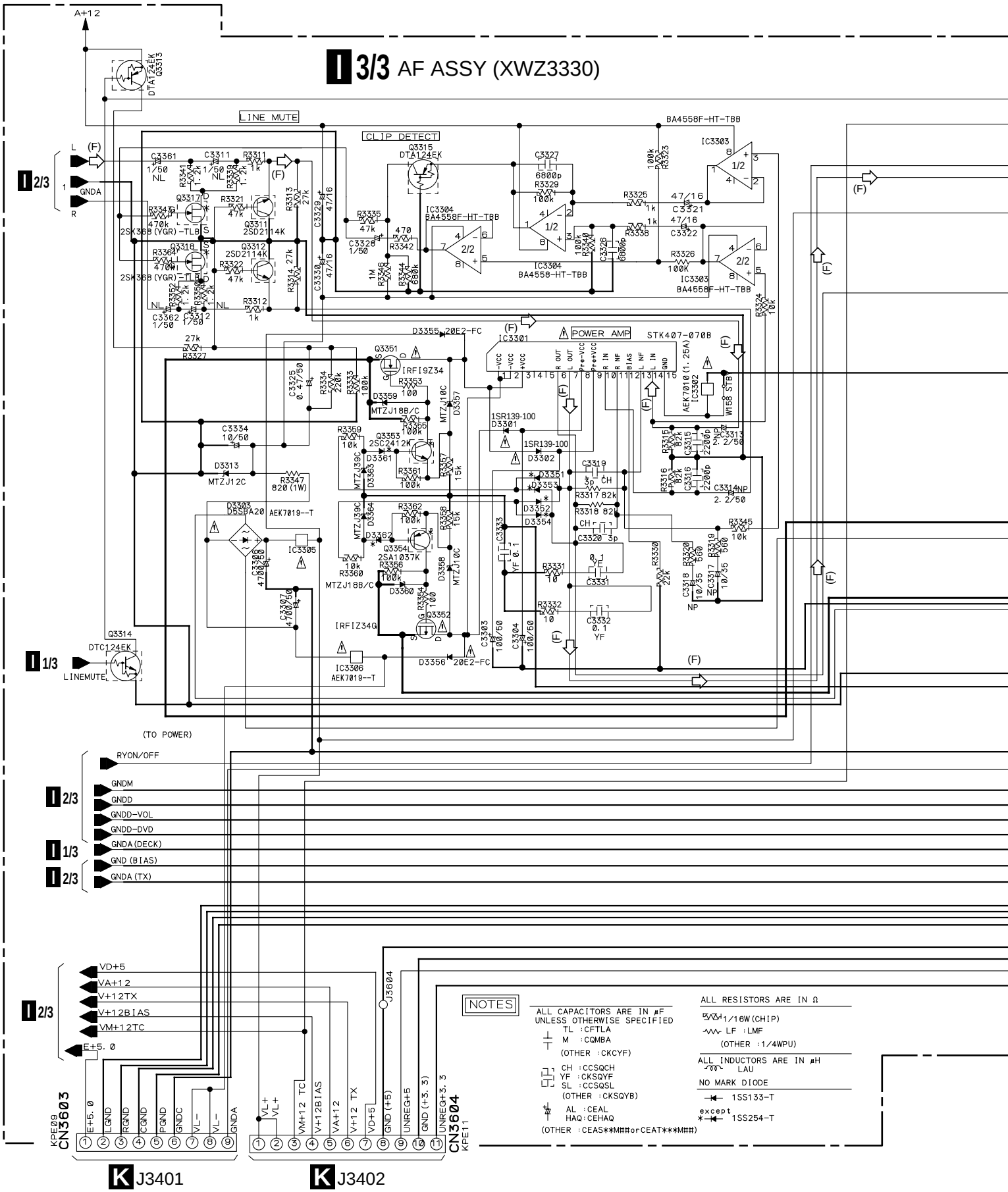


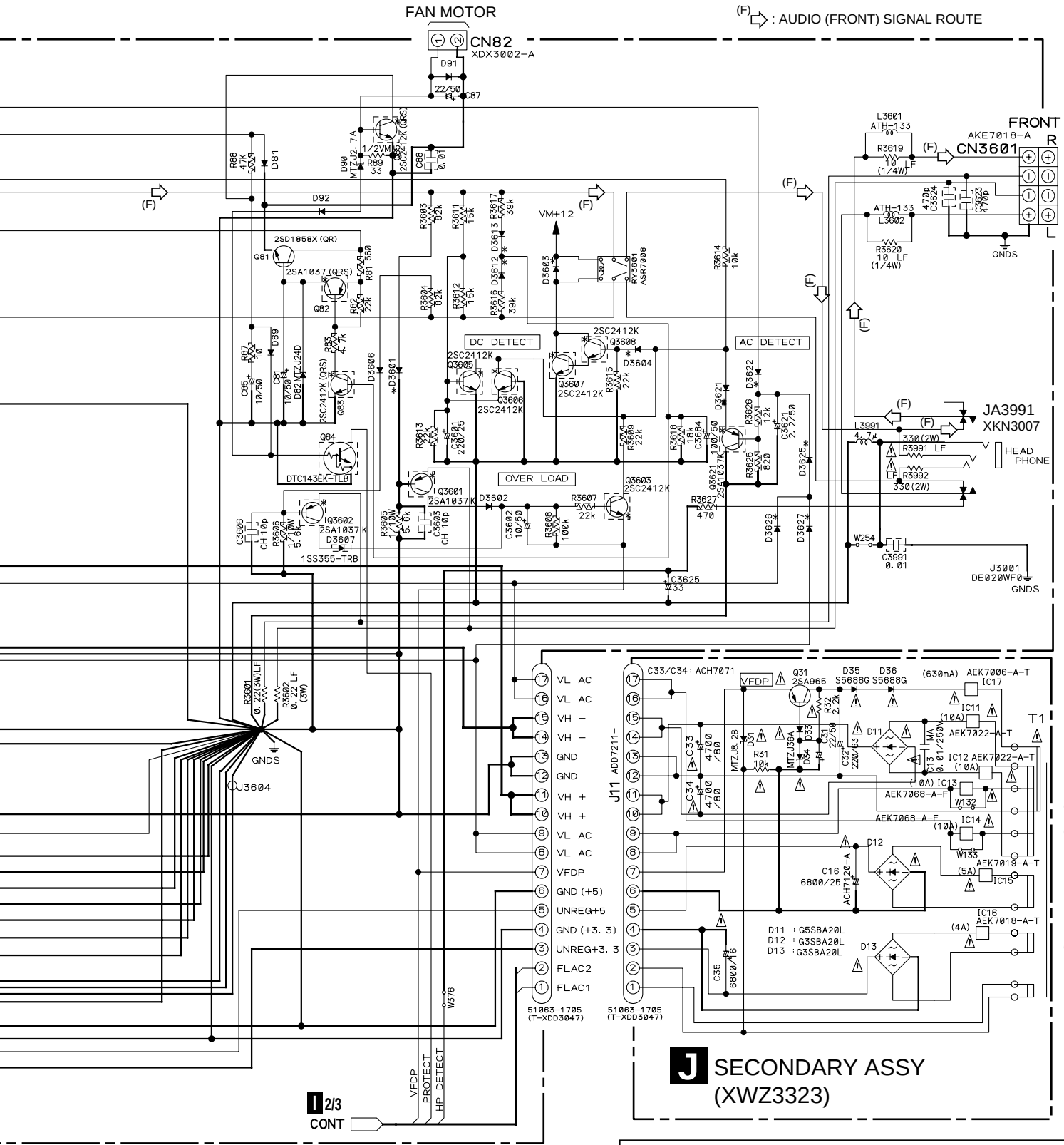
H CN6201

I 2/3 AF ASSY (XWZ3330)



3.14 AF ASSY (3/3) and SECONDARY ASSY





CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 4911.25 MFD, BY LITTELFUSE INC. FOR IC3302 (AEK7010).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491005 MFD, BY LITTELFUSE INC. FOR IC15, IC3305 AND IC3306 (AEK7019).

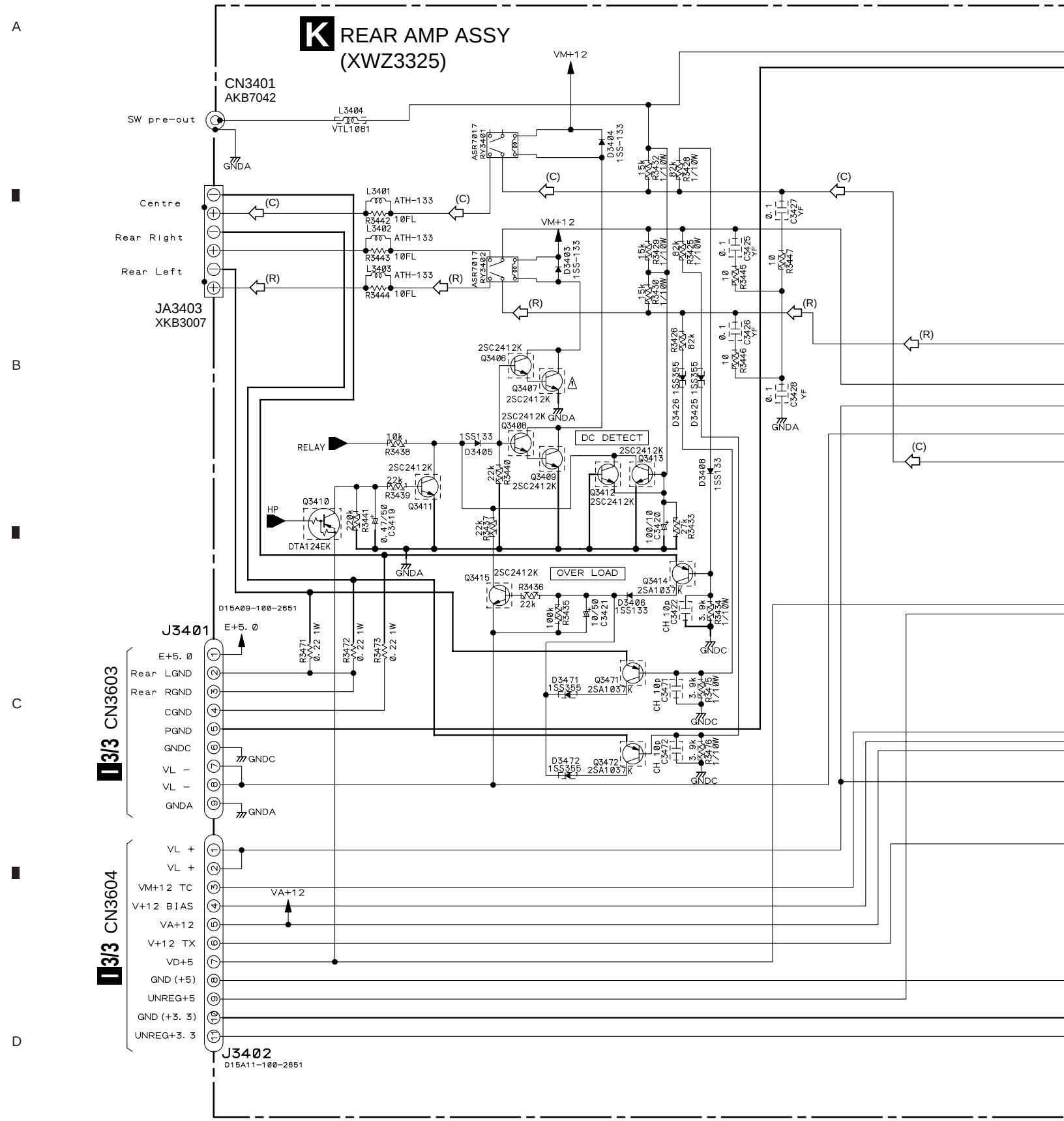
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491.630 MFD, BY LITTELFUSE INC. FOR IC17 (AEK7006).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491004 MFD, BY LITTELFUSE INC. FOR IC16 (AEK7018).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010 MFD, BY LITTELFUSE INC. FOR IC11 AND IC12 (AEK7022).

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. 491010F MFD, BY LITTELFUSE INC. FOR IC13 AND IC14 (AEK7068).

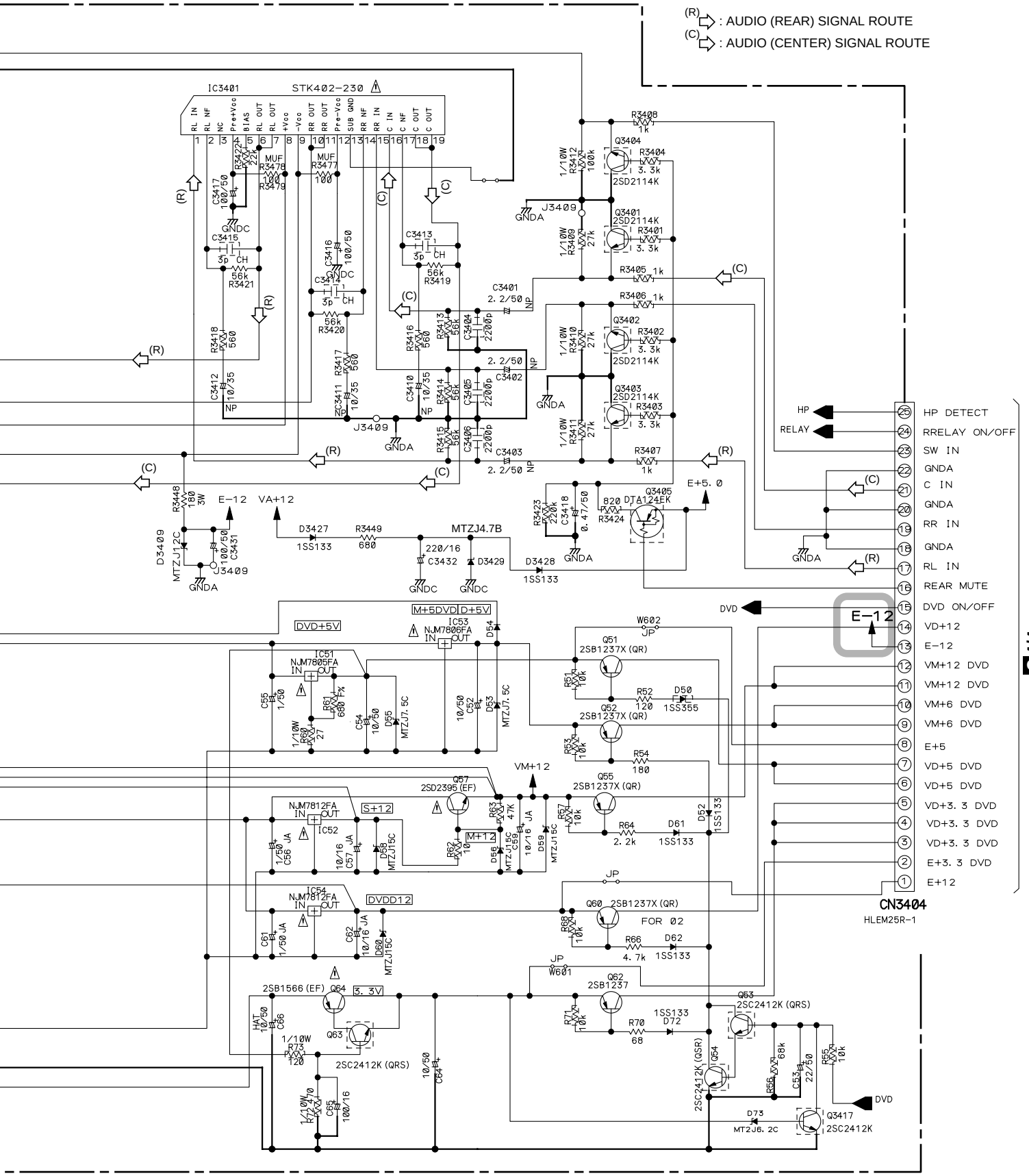
3.15 REAR AMP ASSY



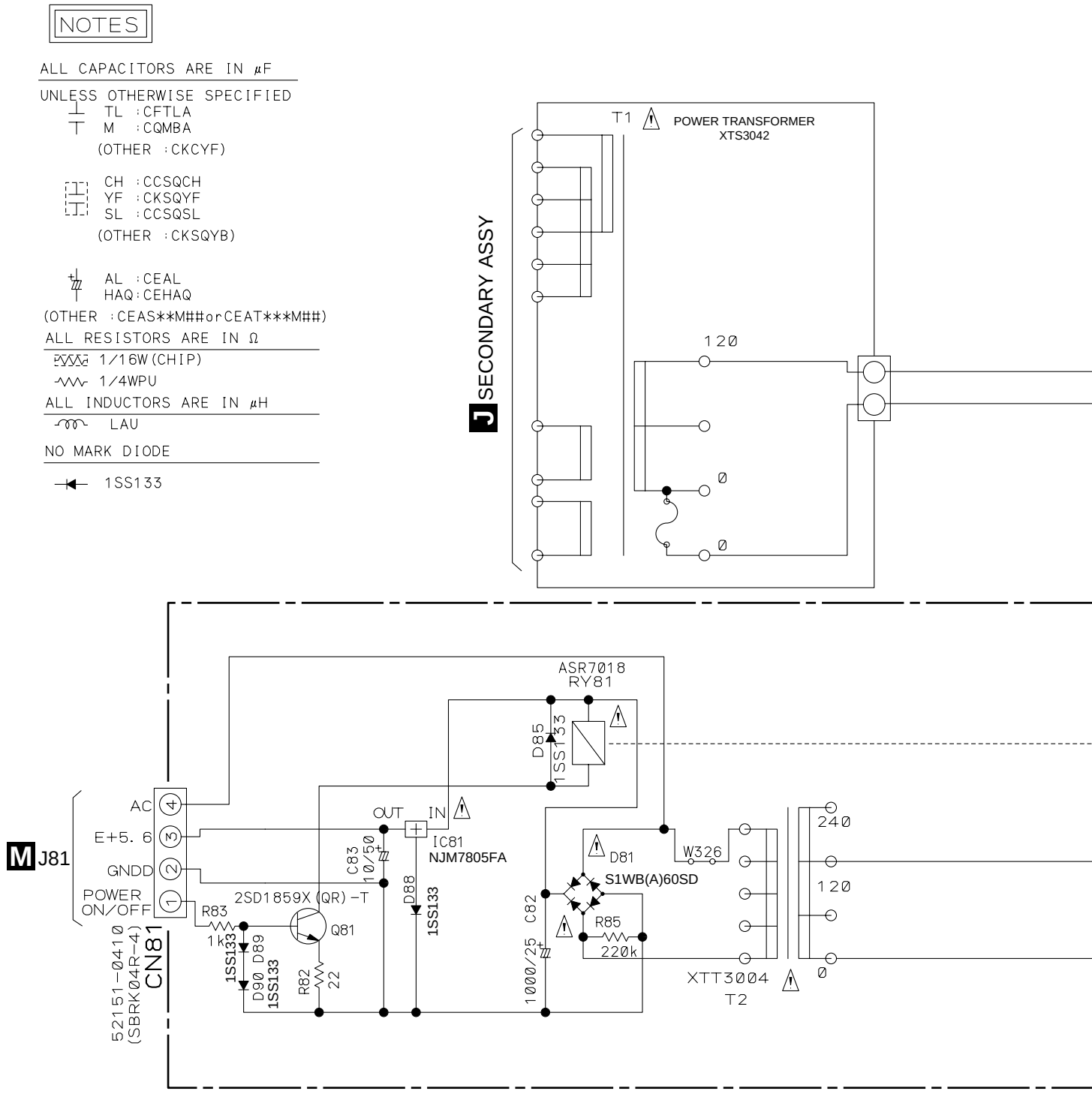
: The power supply is shown with the marked box.

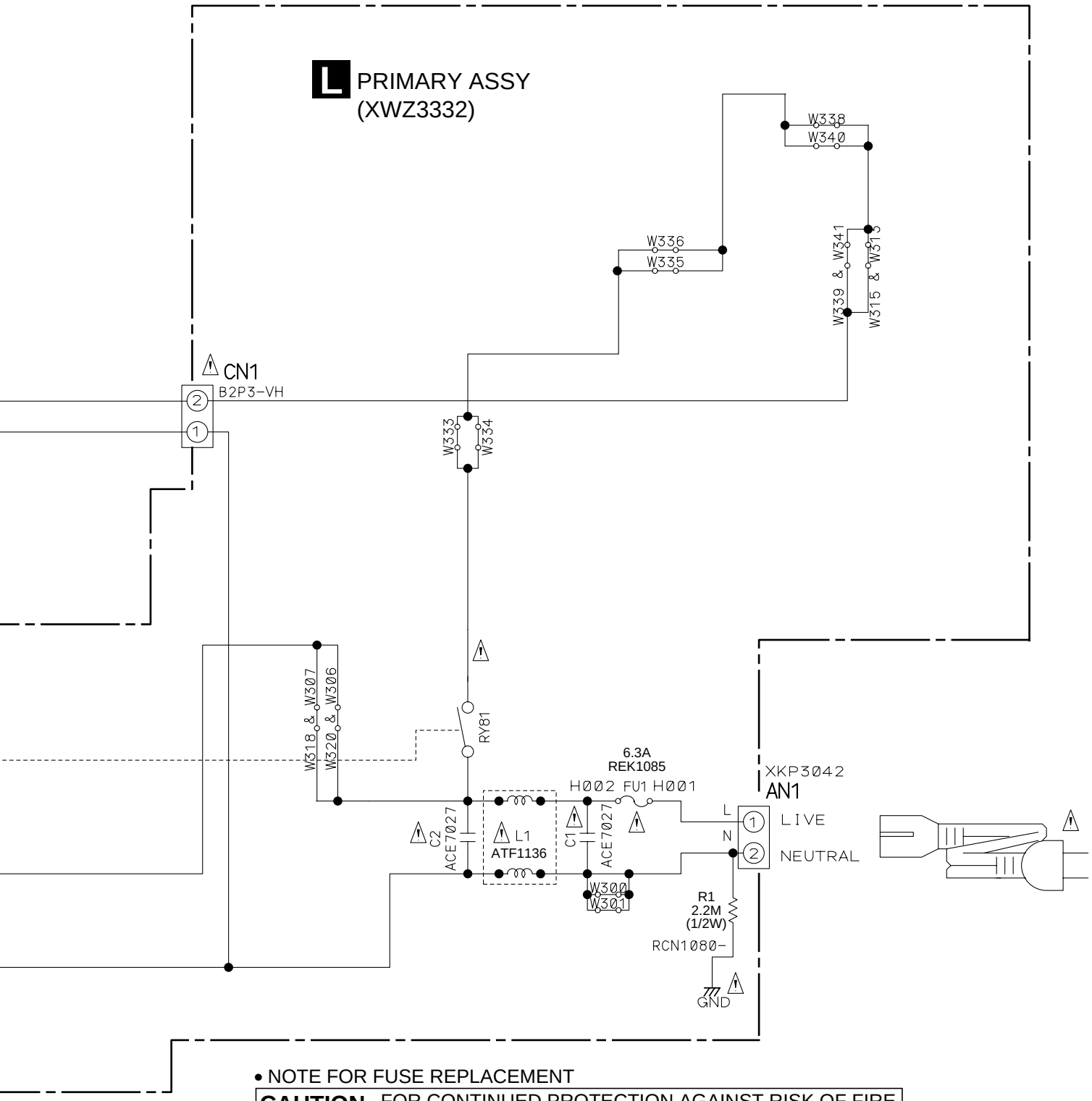
(R) : AUDIO (REAR) SIGNAL ROUTE

(C) : AUDIO (CENTER) SIGNAL ROUTE



3.16 PRIMARY ASSY

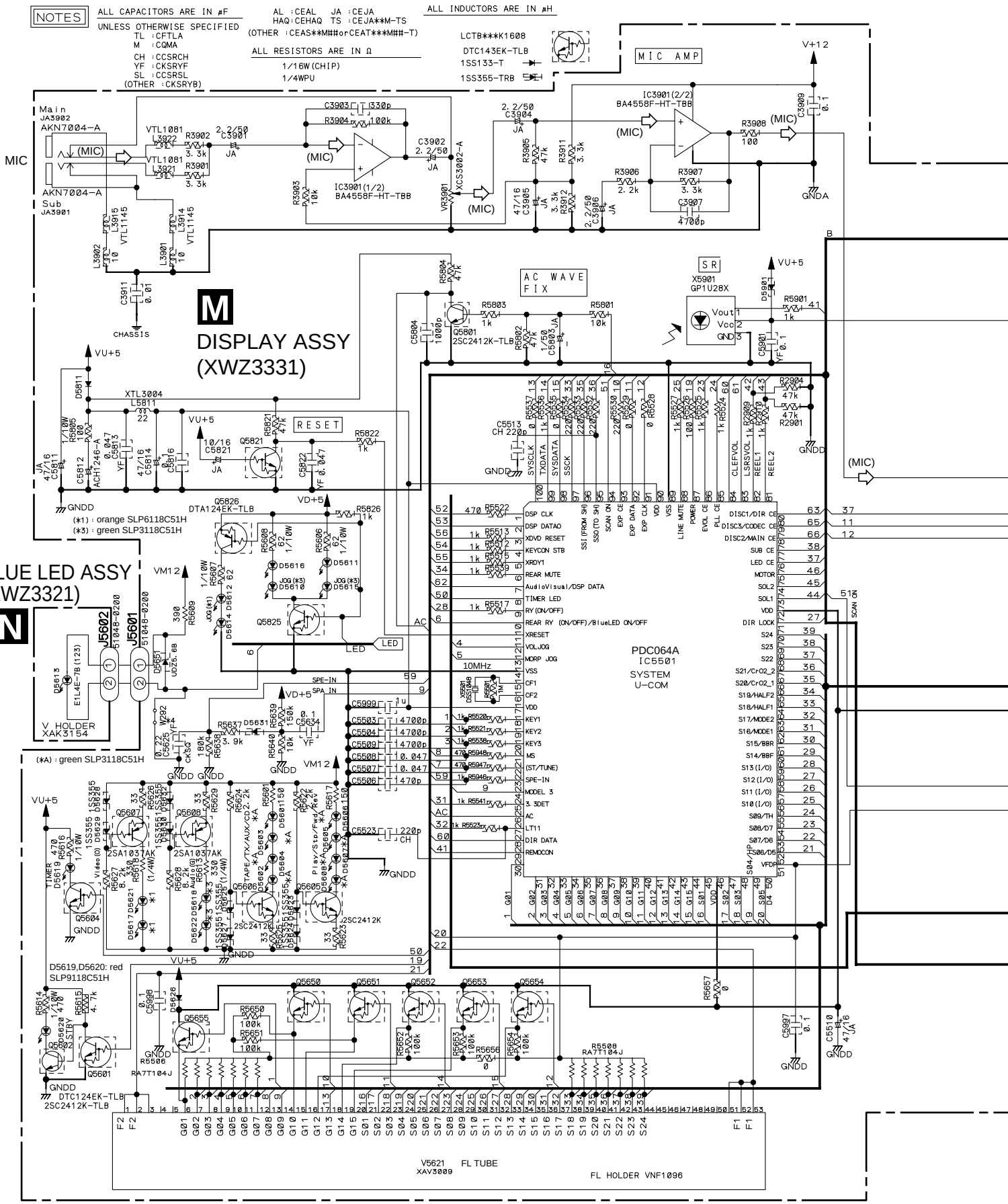


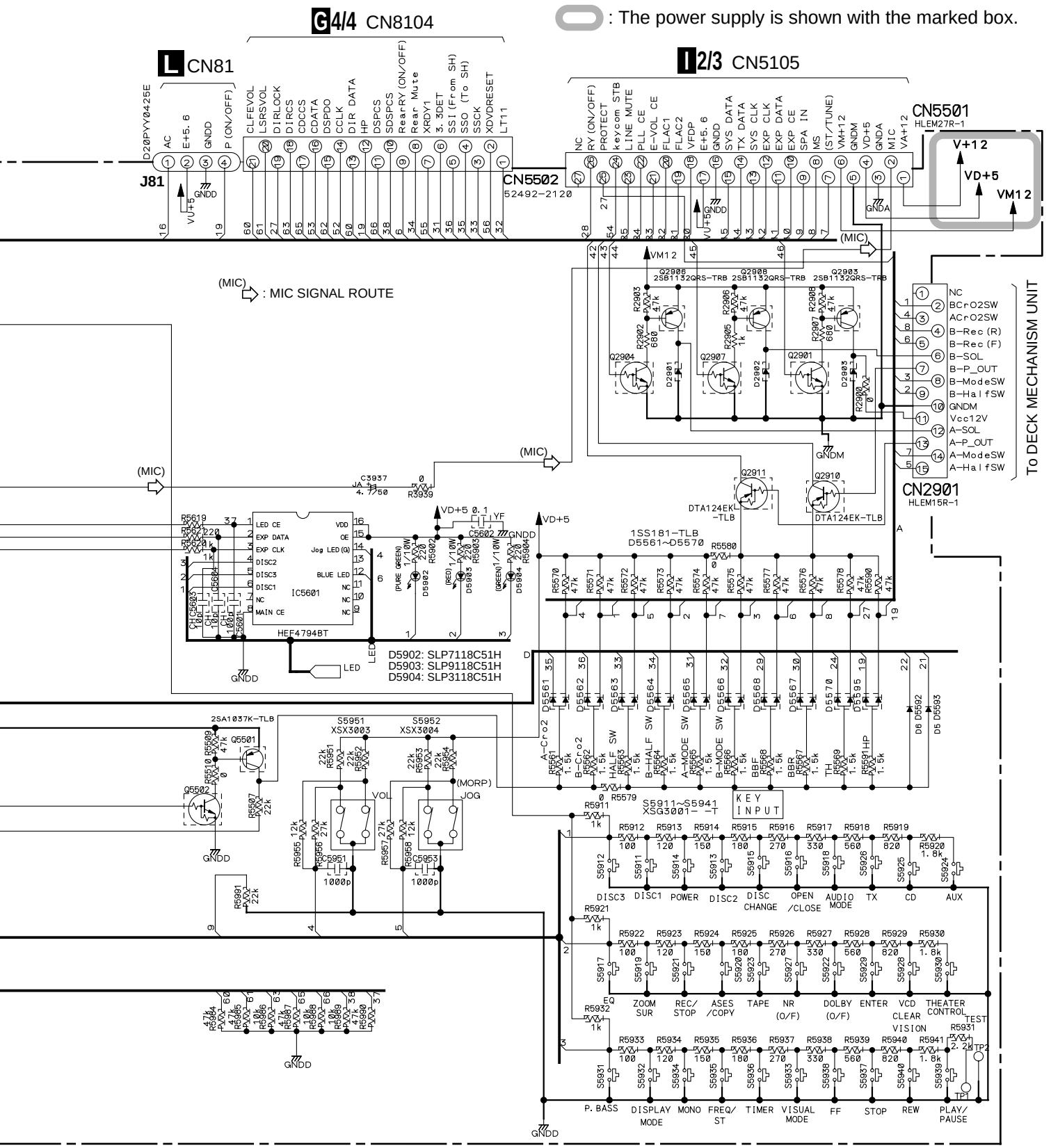


• NOTE FOR FUSE REPLACEMENT

CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE WITH SAME TYPE AND RATINGS ONLY.

3.17 DISPLAY and BLUE LED ASSYS





S5911 : DISC 1
S5912 : DISC 3
S5913 : DISC 2
S5914 : STANDBY/ON
S5915 : DISC CHANGE
S5916 : OPEN/CLOSE
S5917 : EQUALIZER
S5918 : AUDIO MODE
S5919 : ZOOM SURROUND
S5920 : ASES/COPY
S5921 : REC/STOP
S5922 : DOLBY/DTS
S5923 : TAPE I/II
S5924 : AUX
S5925 : DVD/CD
S5926 : TUNER BAND
S5927 : NR ON/OFF
S5928 : VIDEO NR
S5929 : SET
S5930 : THEATER CONTROL
S5931 : P.BASS(DEMO)
S5932 : DISPLAY MODE
S5933 : VISUAL MODE
S5934 : MONO
S5935 : FREQ/STATION
S5936 : TIMER/CLOCK ADJ
S5937 : ■ (STOP/ST.MEMORY)
S5938 : ►►I/►►• + (TUNING+)
S5939 : ◄► /II (PLAY/PAUSE)
S5940 : – •◄◄/I◄◄ (TUNING–)
S5951 : VOLUME UP/DPWN
S5952 : JOG dial

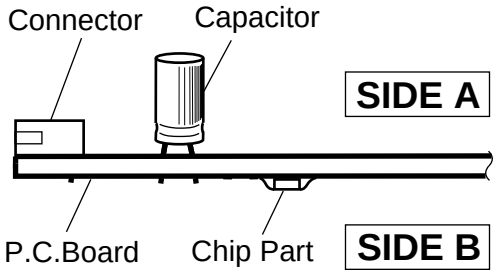
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

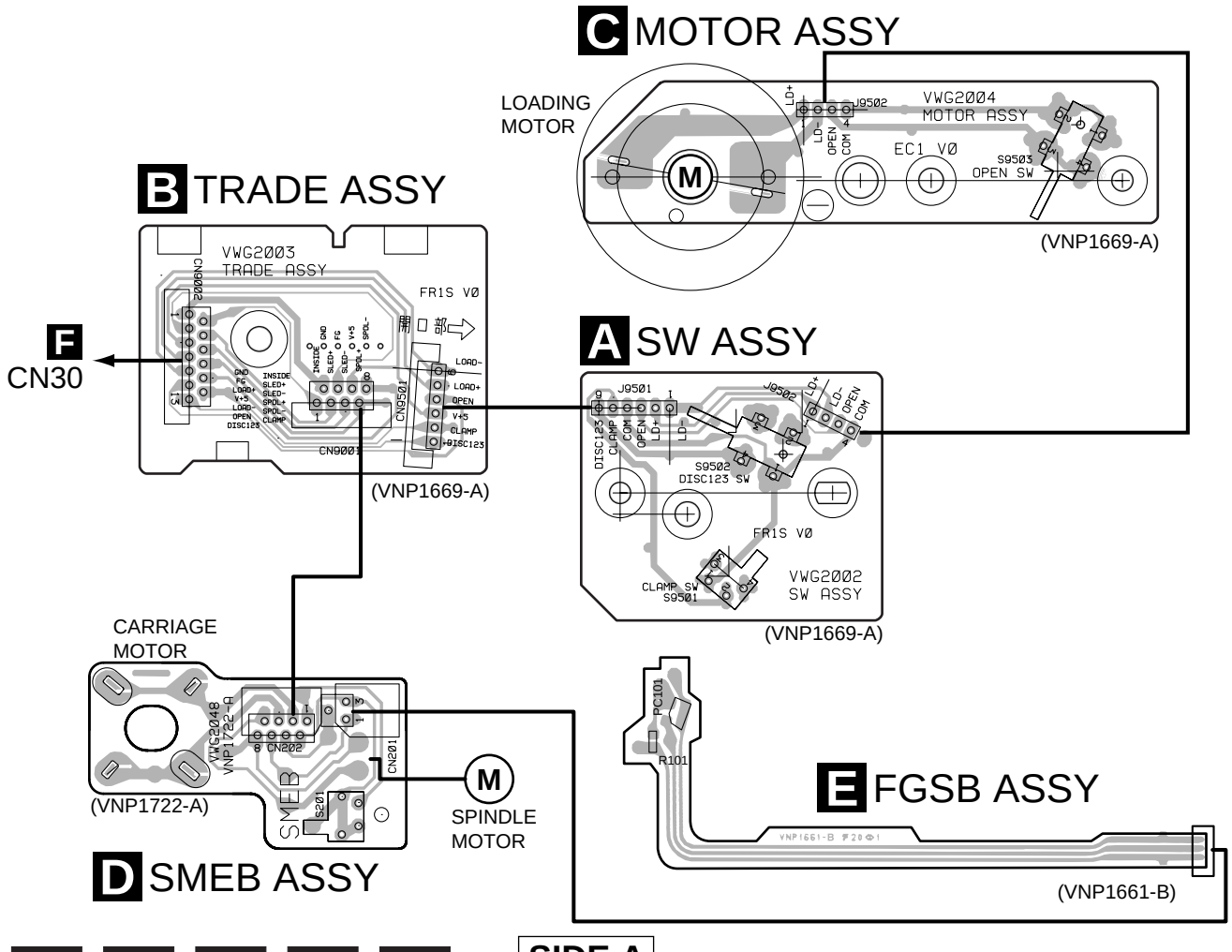
1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
B C E	B C E B C E	Transistor
B C E	B C E B C E	Transistor with resistor
D G S	D G S D G S	Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
   For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



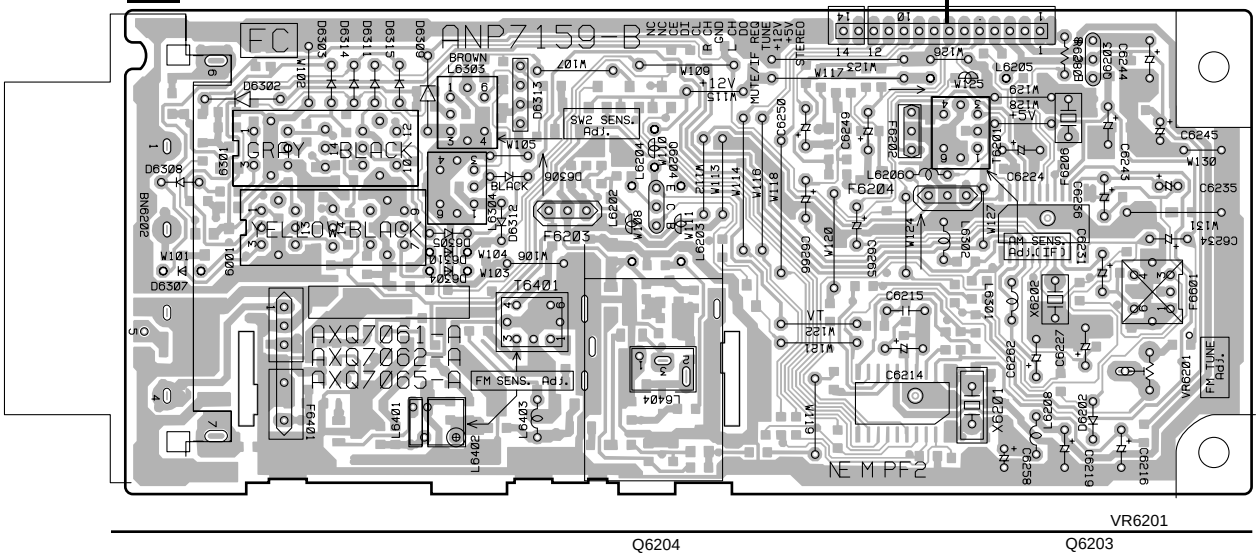
4.1 SW, TRADE, MOTOR, SMEB and FGSB ASSYS



4.2 FM/AM TUNER MODULE

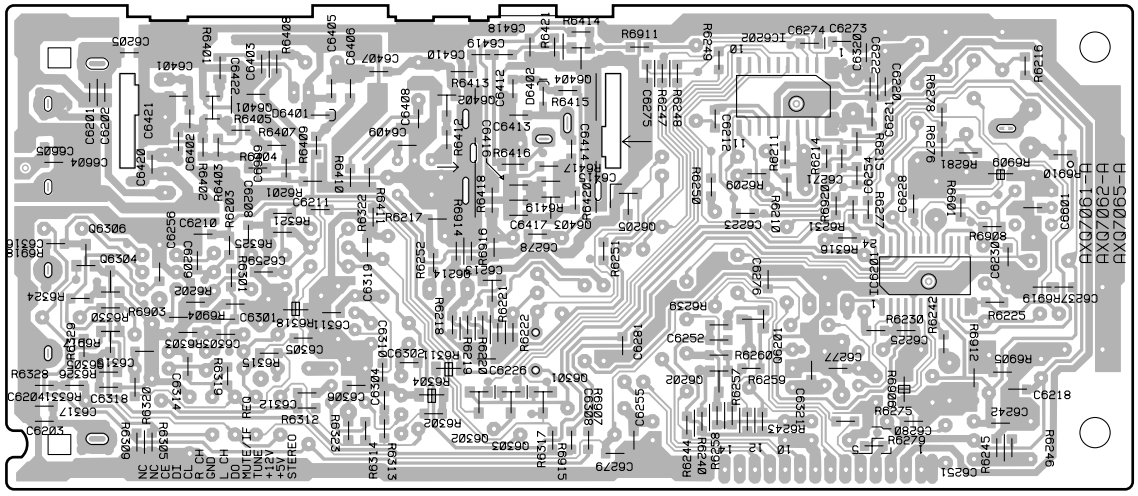
I CN3051

H FM/AM TUNER MODULE



SIDE A

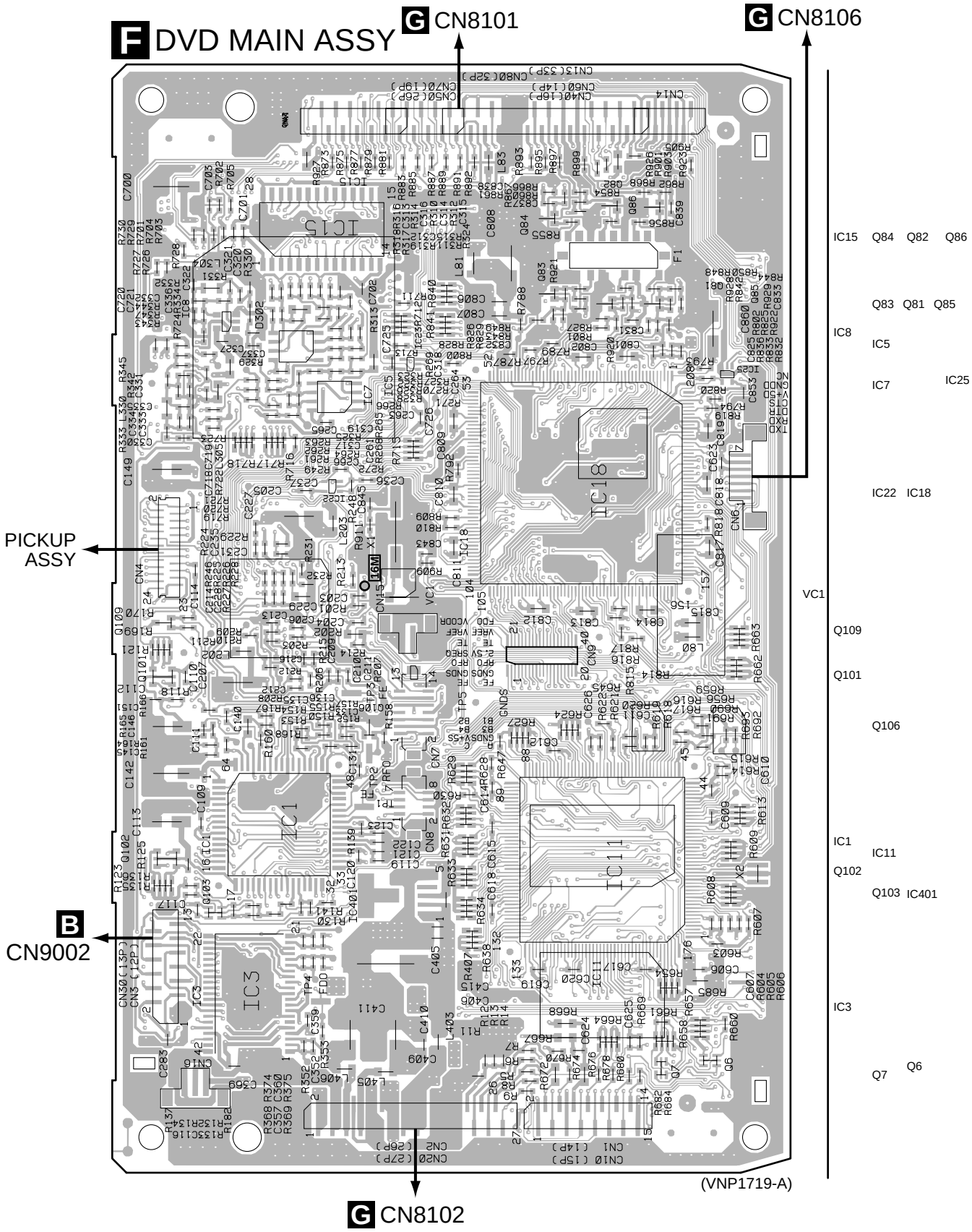
H FM/AM TUNER MODULE



SIDE B

4.3 DVD MAIN ASSY

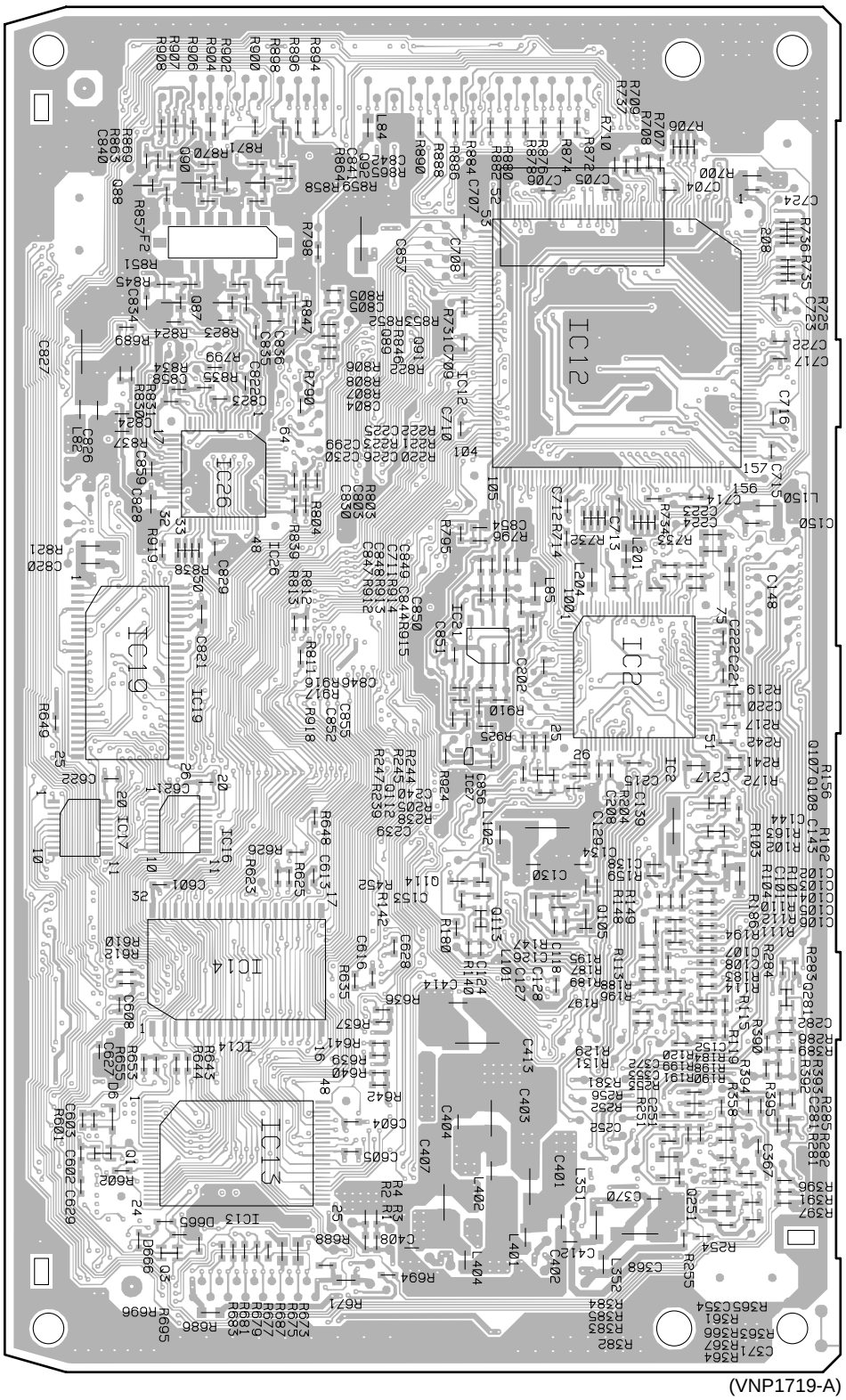
• This diagram has four layers.
In the two middle layers, mainly Vcc and GND are Connected.



SIDE A

• This diagram has four layers.
In the two middle layers, mainly Vcc and GND are Connected.

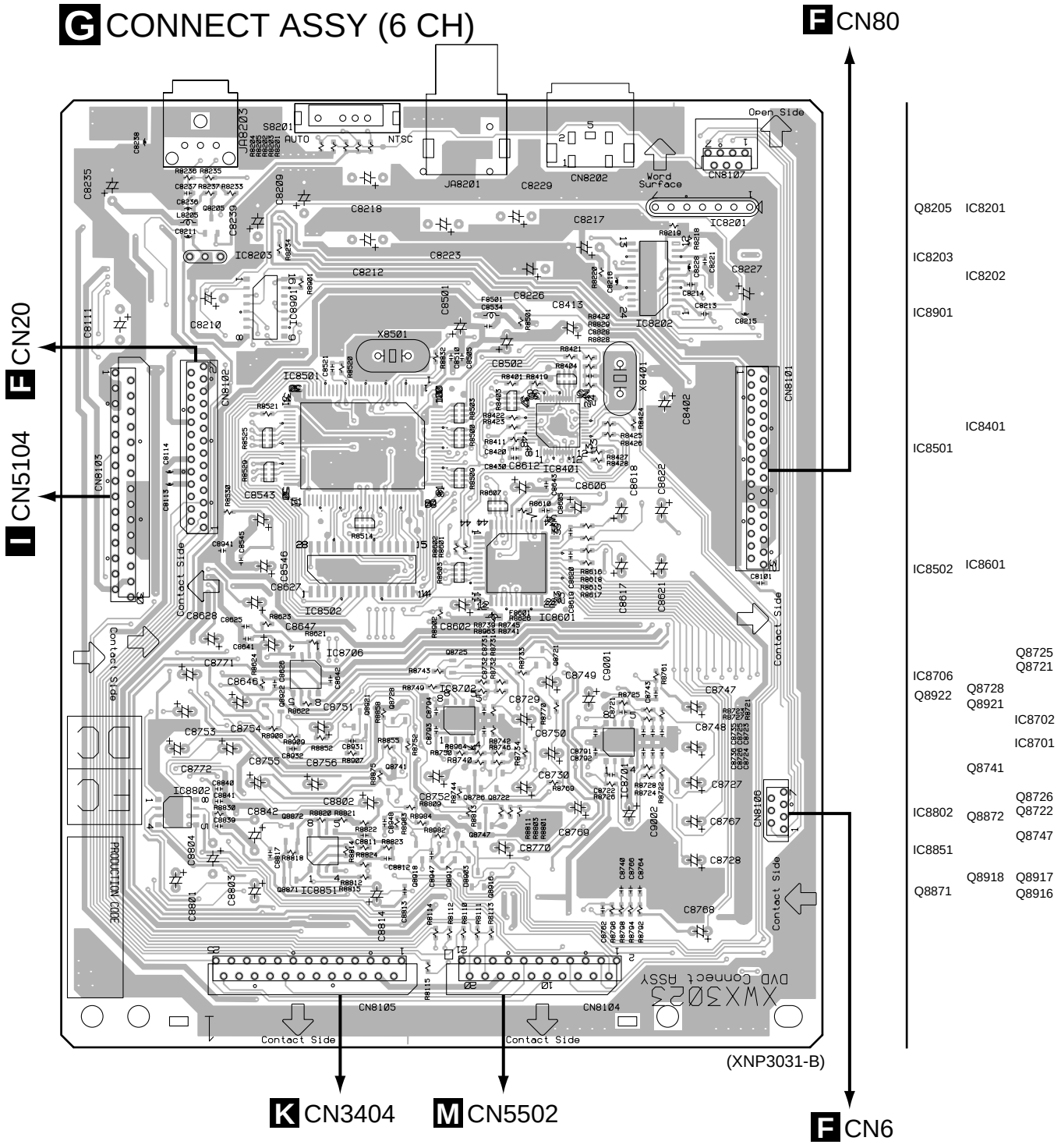
F DVD MAIN ASSY



(VNP1719-A)

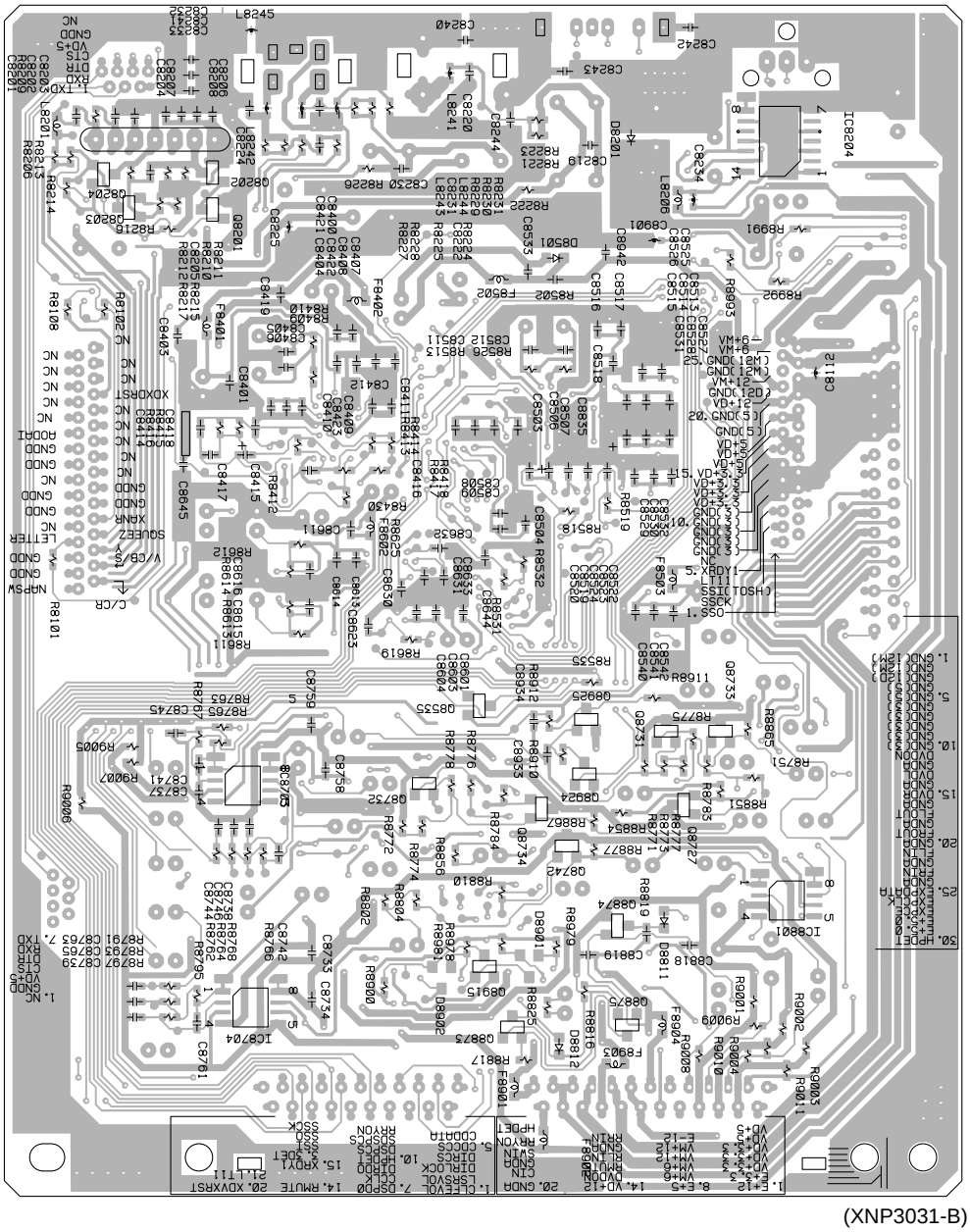
SIDE B

4.4 CONNECT ASSY (6CH)



SIDE A

G CONNECT ASSY (6 CH)



(XNP3031-B)

IC8204

Q8201-Q8204

Q8535
Q8925

Q8731
Q8733

Q8924
IC8703 Q8732

Q8734 Q8727

Q8742

IC8801

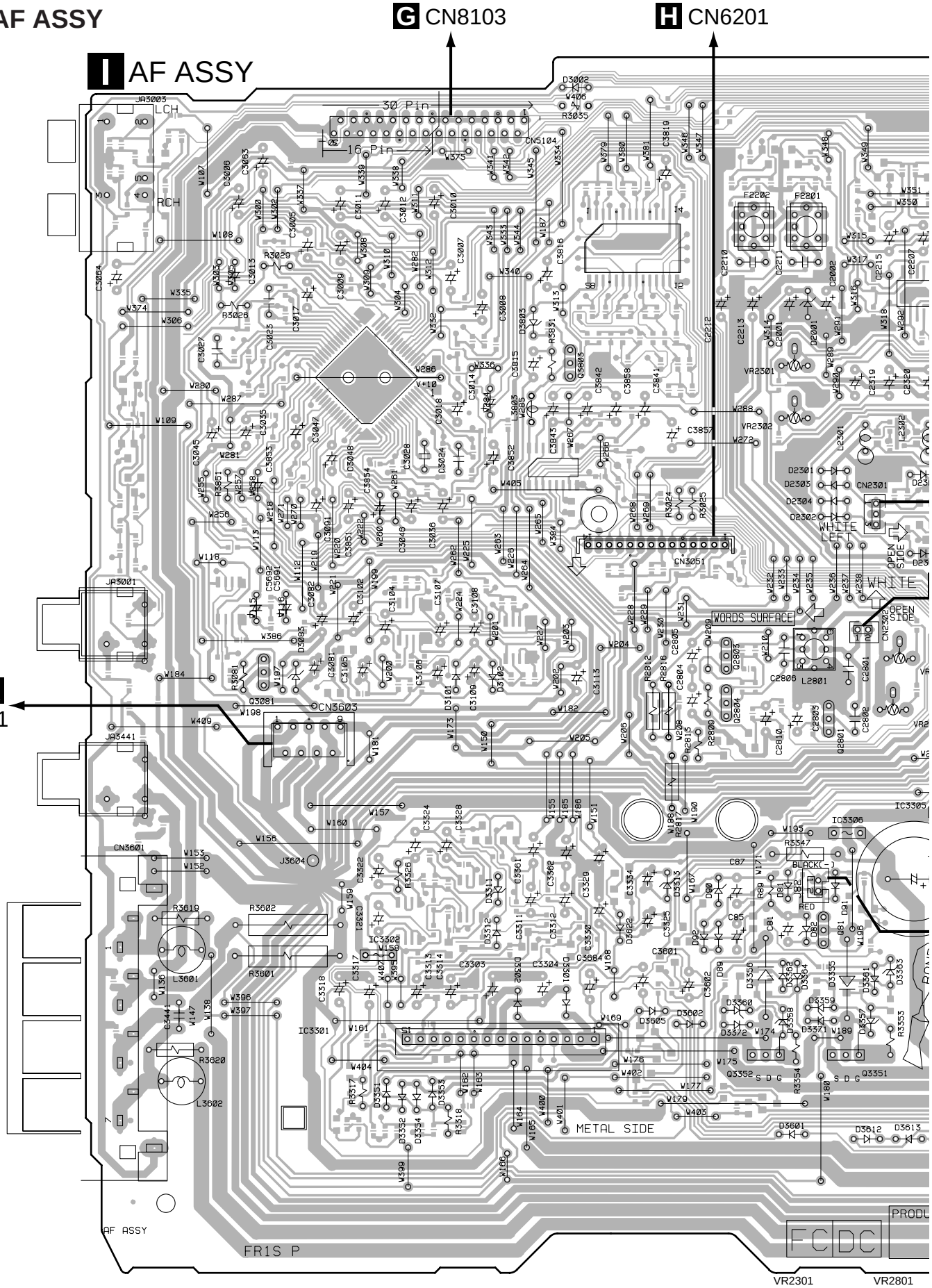
Q8874

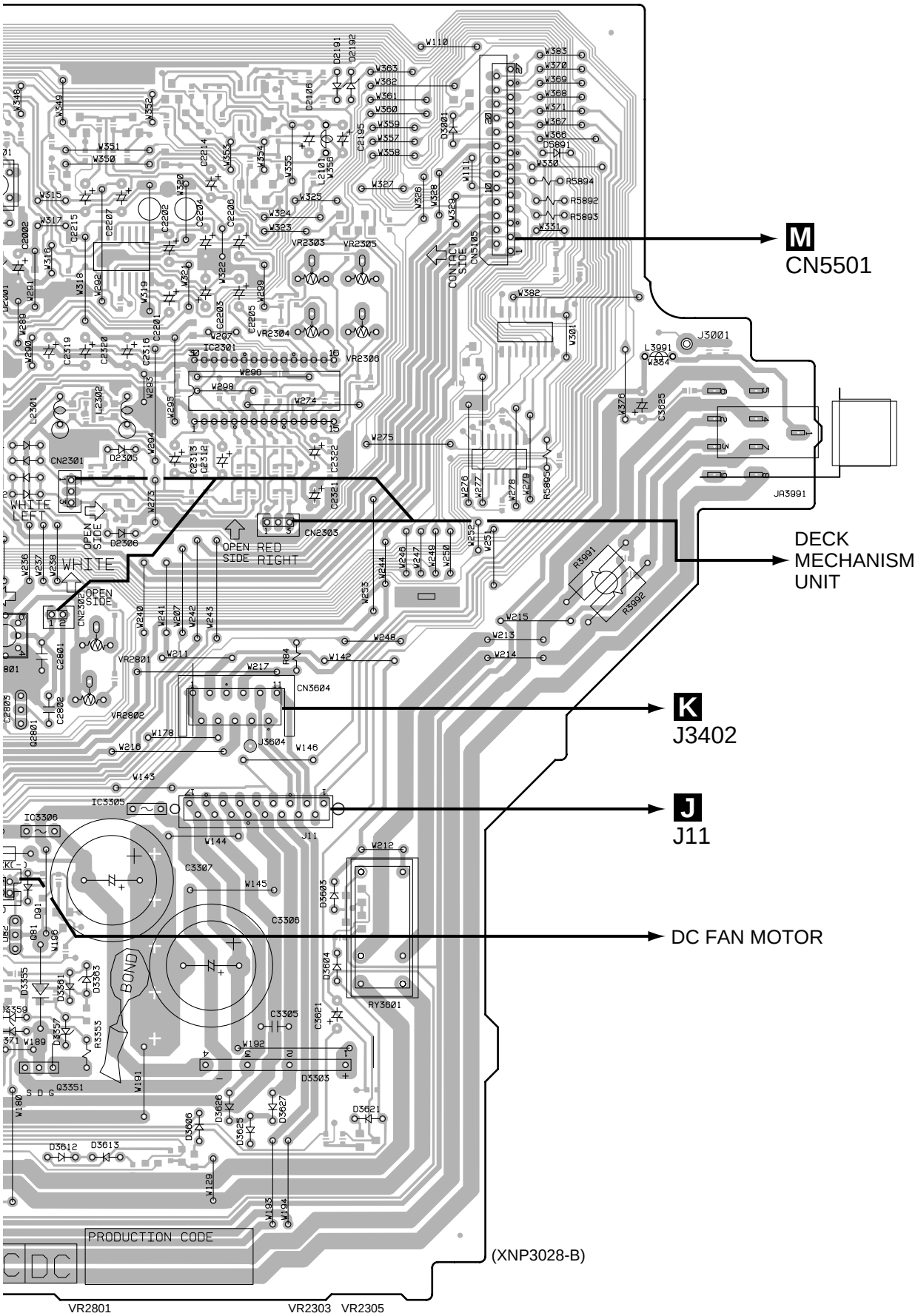
Q8915

IC8704
Q8873 Q8875

SIDE B

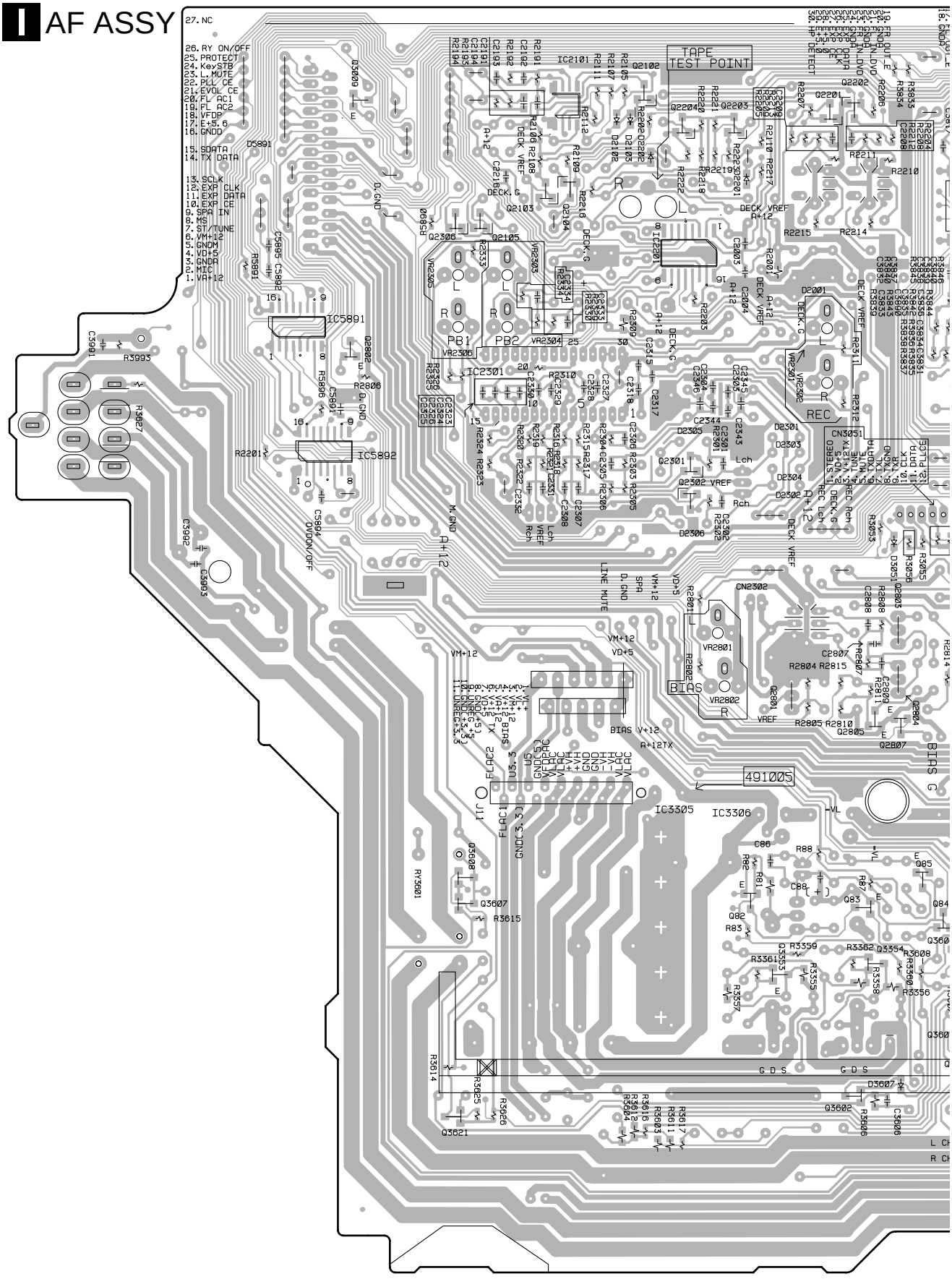
4.5 AF ASSY


G CN8103
H CN6201
I AF ASSY
K J3401
30 Pin
16 Pin
CN5104
JA3003
LCH
RCH
JA3001
JA3441
CN3601
CN3603
CN3051
CN2301
F2202
F2201
VR2301
VR2302
WORDS SURFACE
OPEN SIDE
WHITE
BLACK
RED
METAL SIDE
AF ASSY
FR1S P
IC3301
IC3302
IC3305
IC3306
Q3081
Q3803
Q2803
Q2804
Q3352
Q3351
Q81
L3601
L3602
L2801
L2301
L2302
VR2801
VR2802

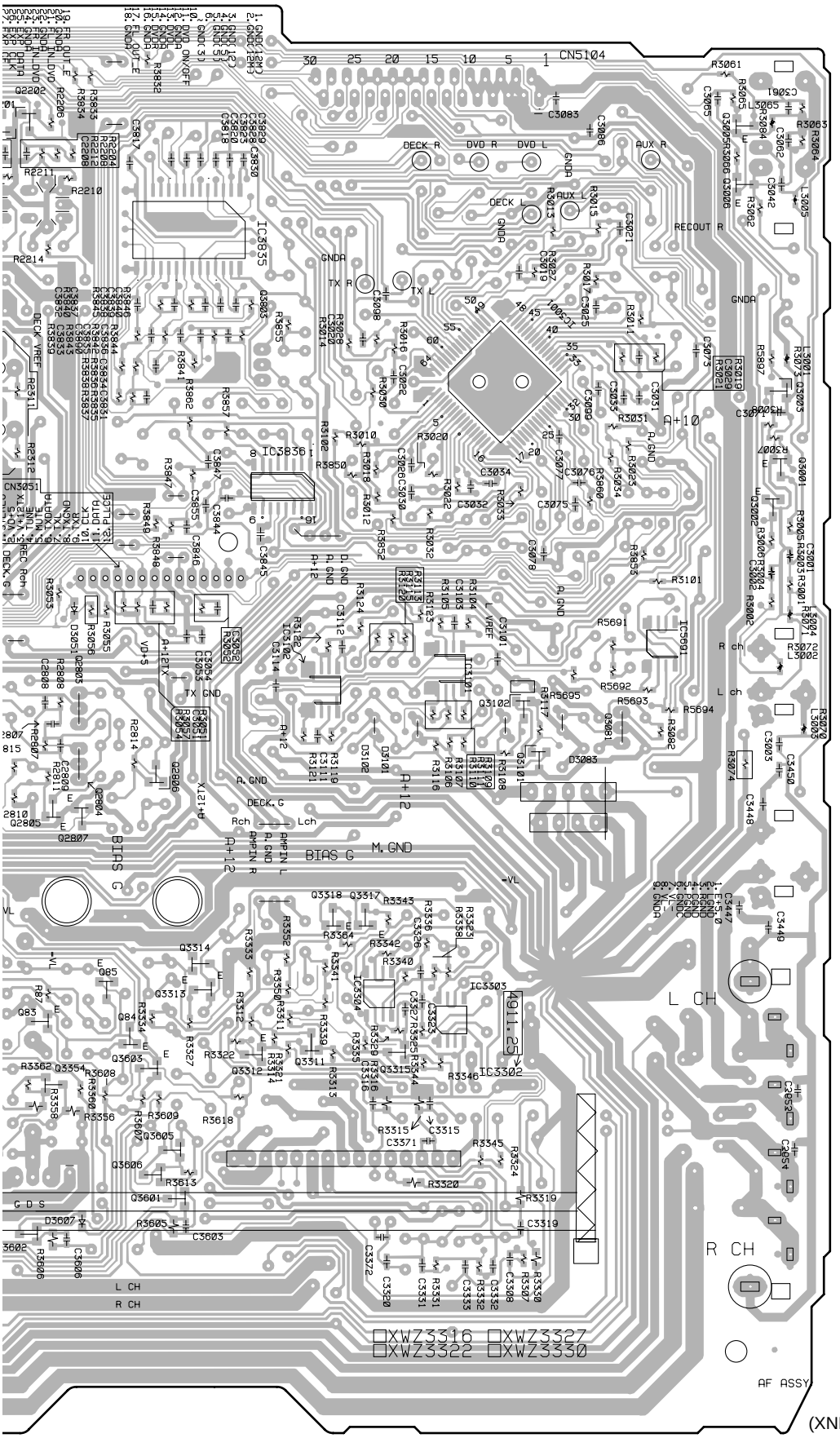


VR2801
VR2802
VR2303 VR2305
VR2304 VR2306
Q2803
IC3306
Q81
Q3351
IC3305
IC2301

I AF ASSY



IC5891 Q3009 Q2306 Q2103-Q2105 Q2102 IC2201 Q2201-Q2204 Q2805
Q2802 Q2301 Q3353 Q82-Q65 Q2807
IC5892 Q3608 Q2302 Q3354
Q3607 Q3602
Q3621

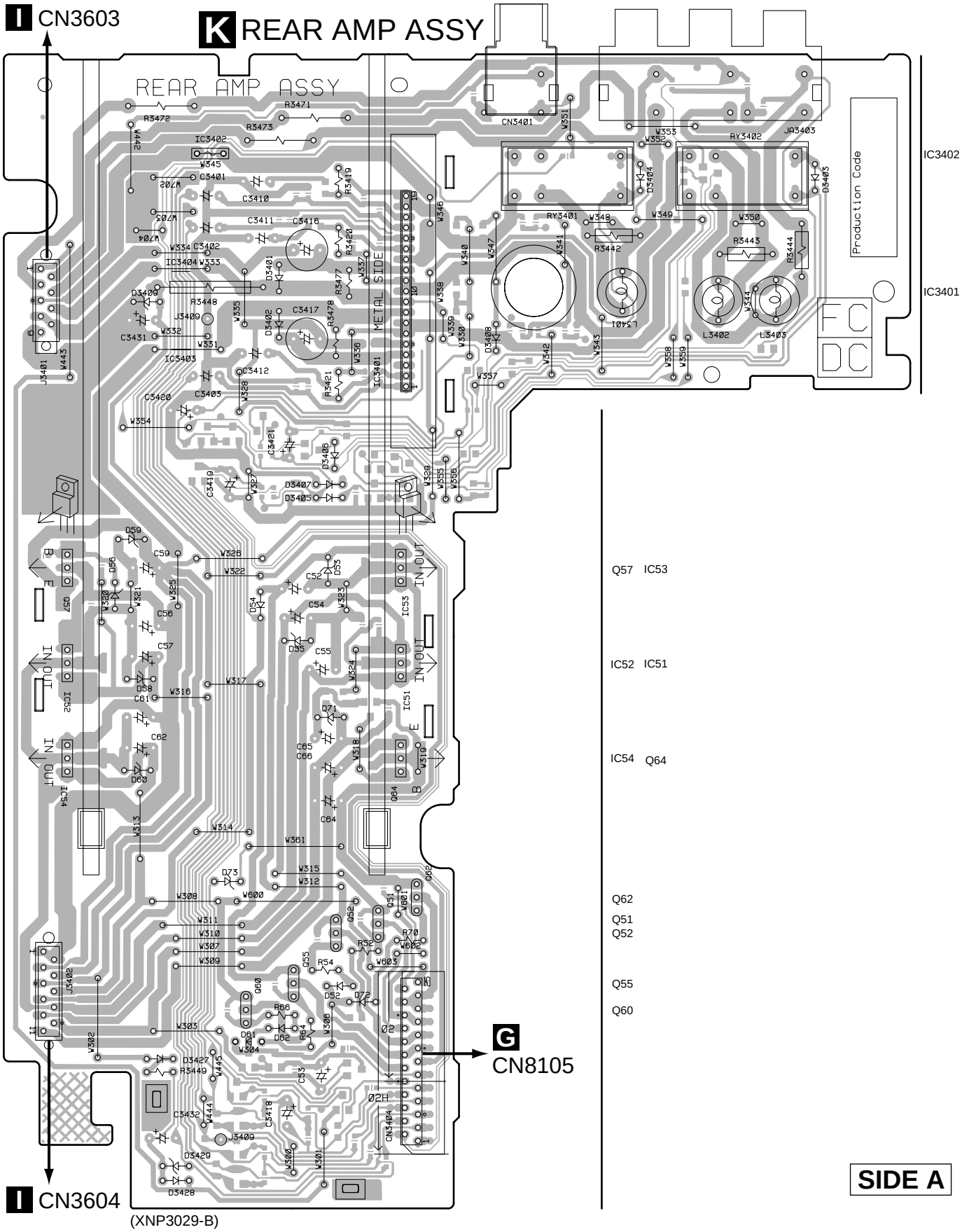


(XNP3028-B)

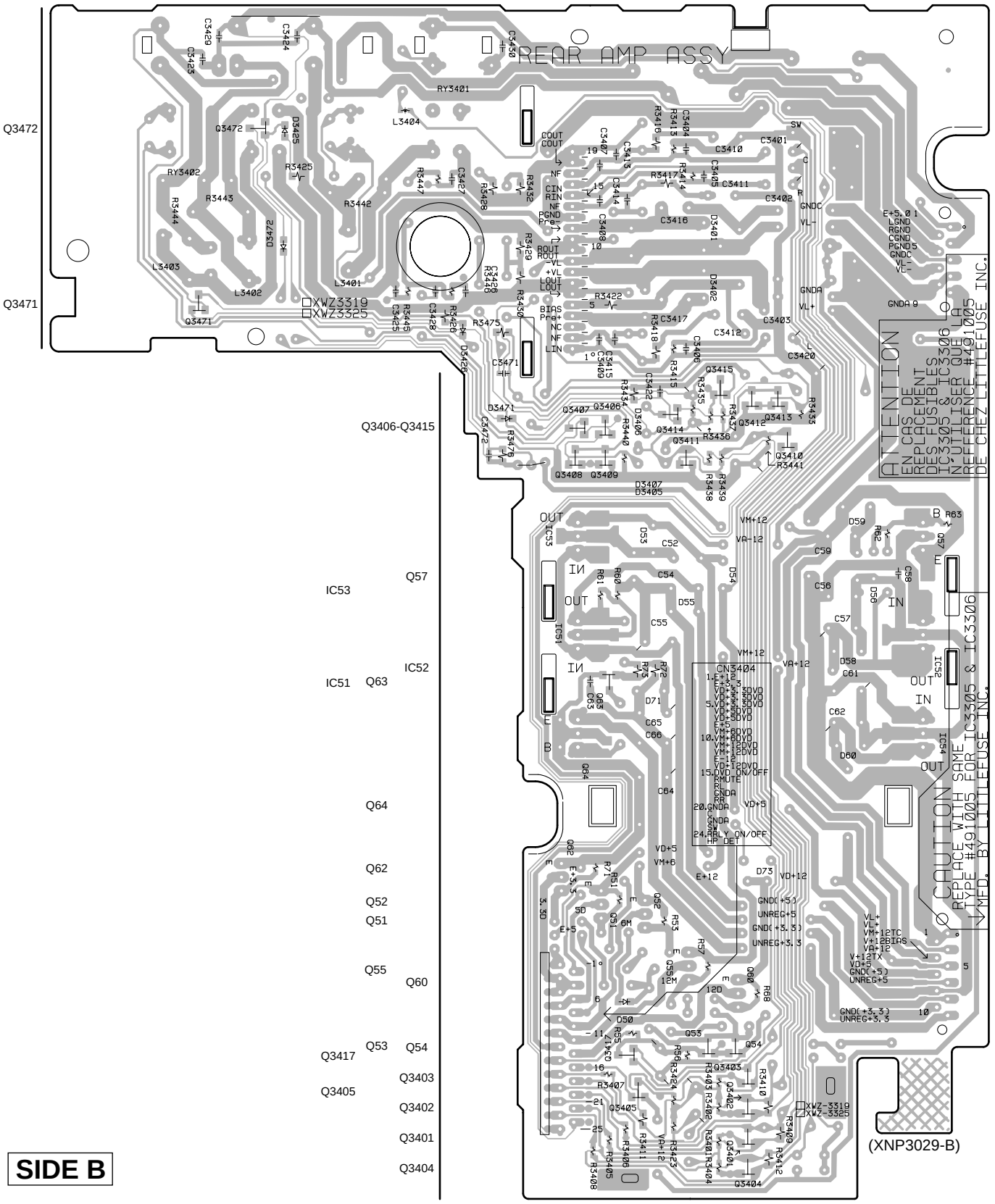
SIDE B

Q2804 Q2805 IC3835 IC3836 Q3318 Q3317 IC3001 IC5691 Q3001-Q3003
Q2807-Q2809 Q2807 Q3603 Q3311-Q3314 IC3304 IC3303 Q3102 Q3005
Q3354 Q3605 Q3315 Q3101 Q3006
Q3602 Q3606 Q3601

4.6 REAR AMP ASSY

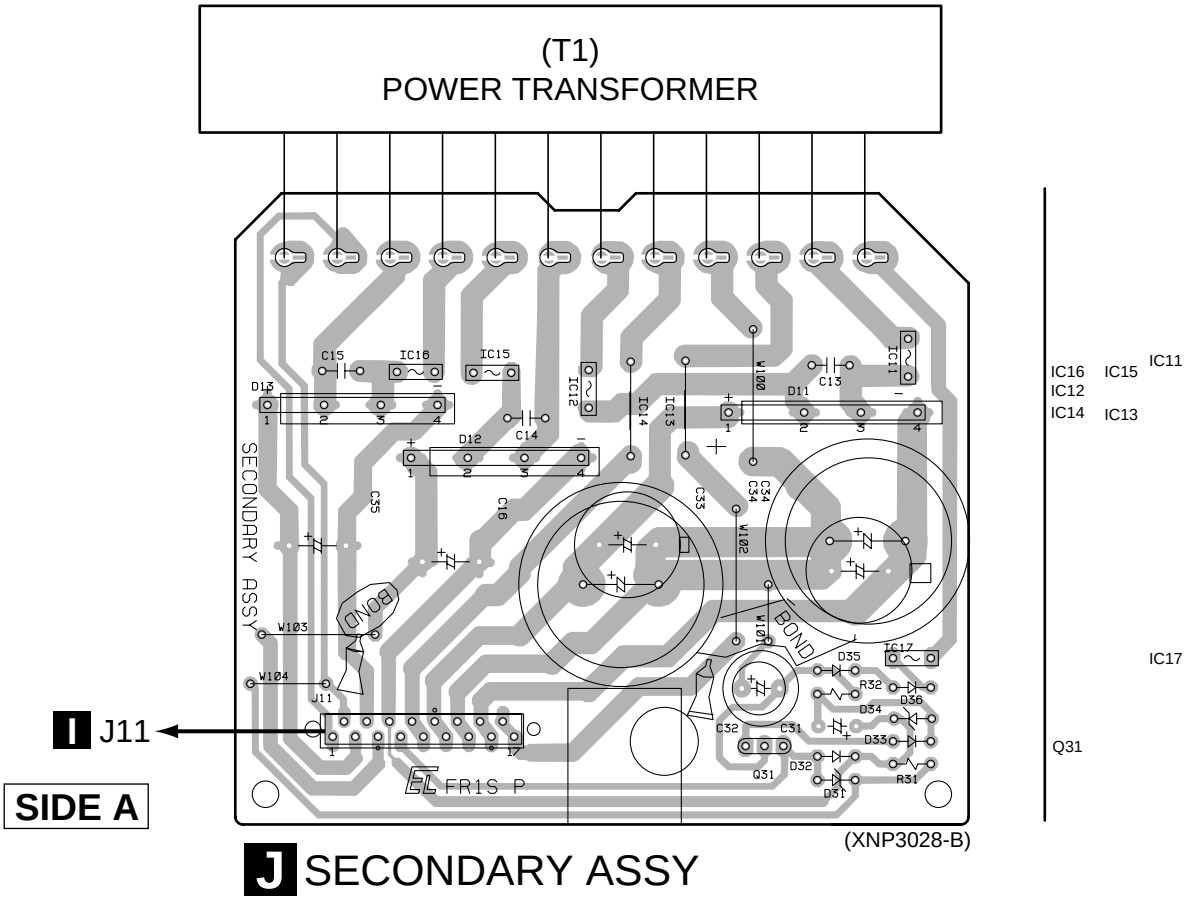


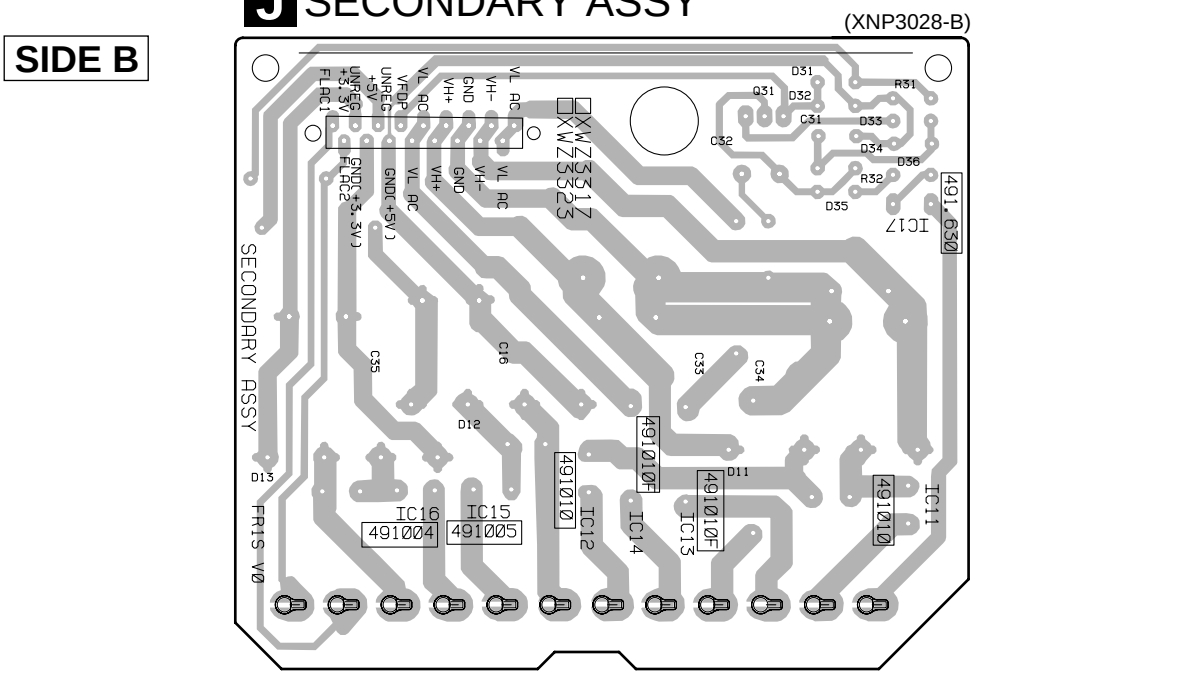
K REAR AMP ASSY



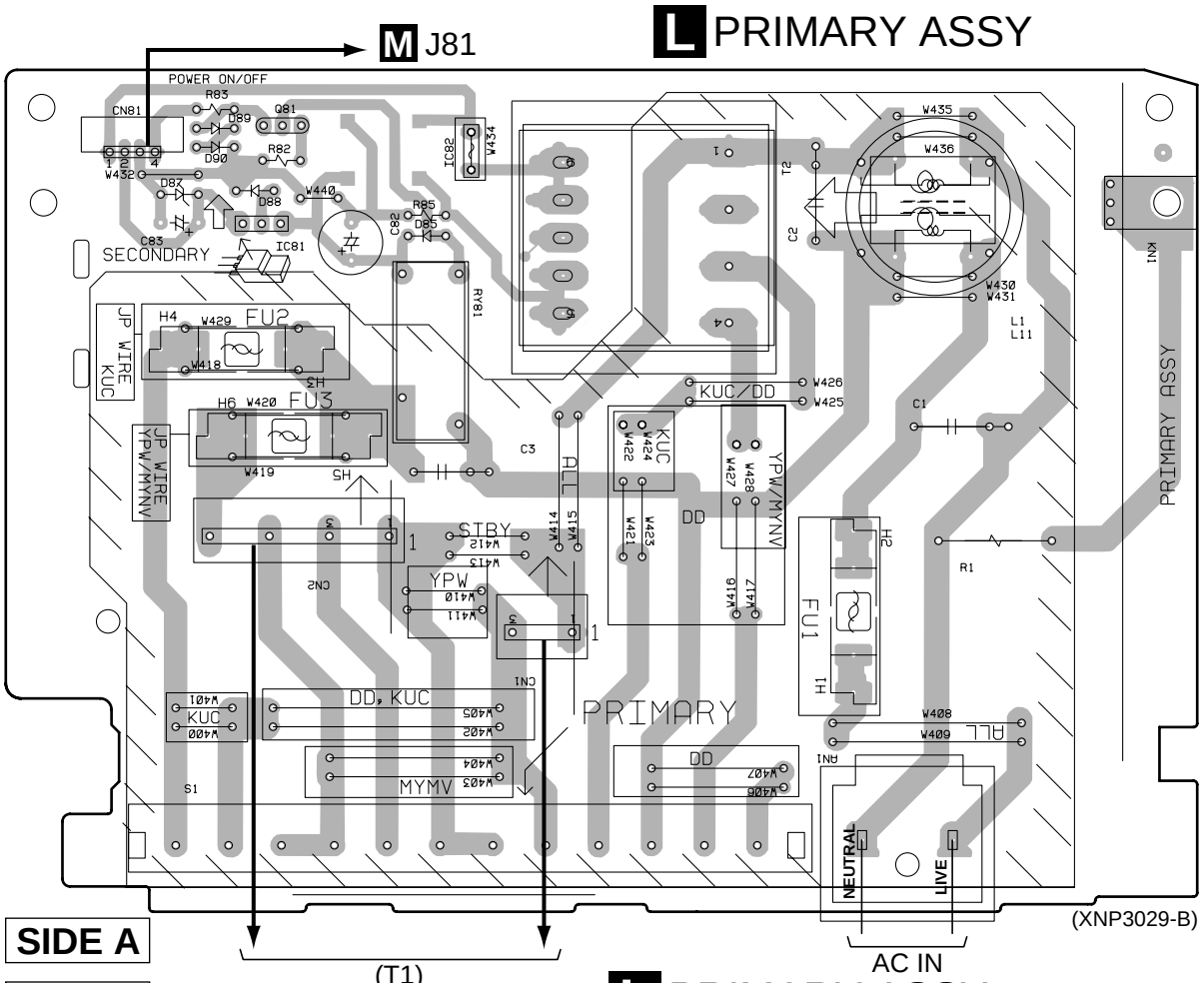
SIDE B

4.7 SECONDARY ASSY



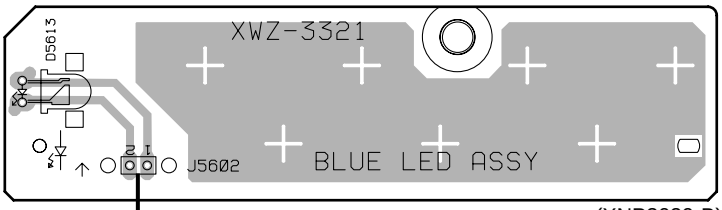


4.8 PRIMARY ASSY



4.9 DISPLAY and BLUE LED ASSYS

N BLUE LED ASSY

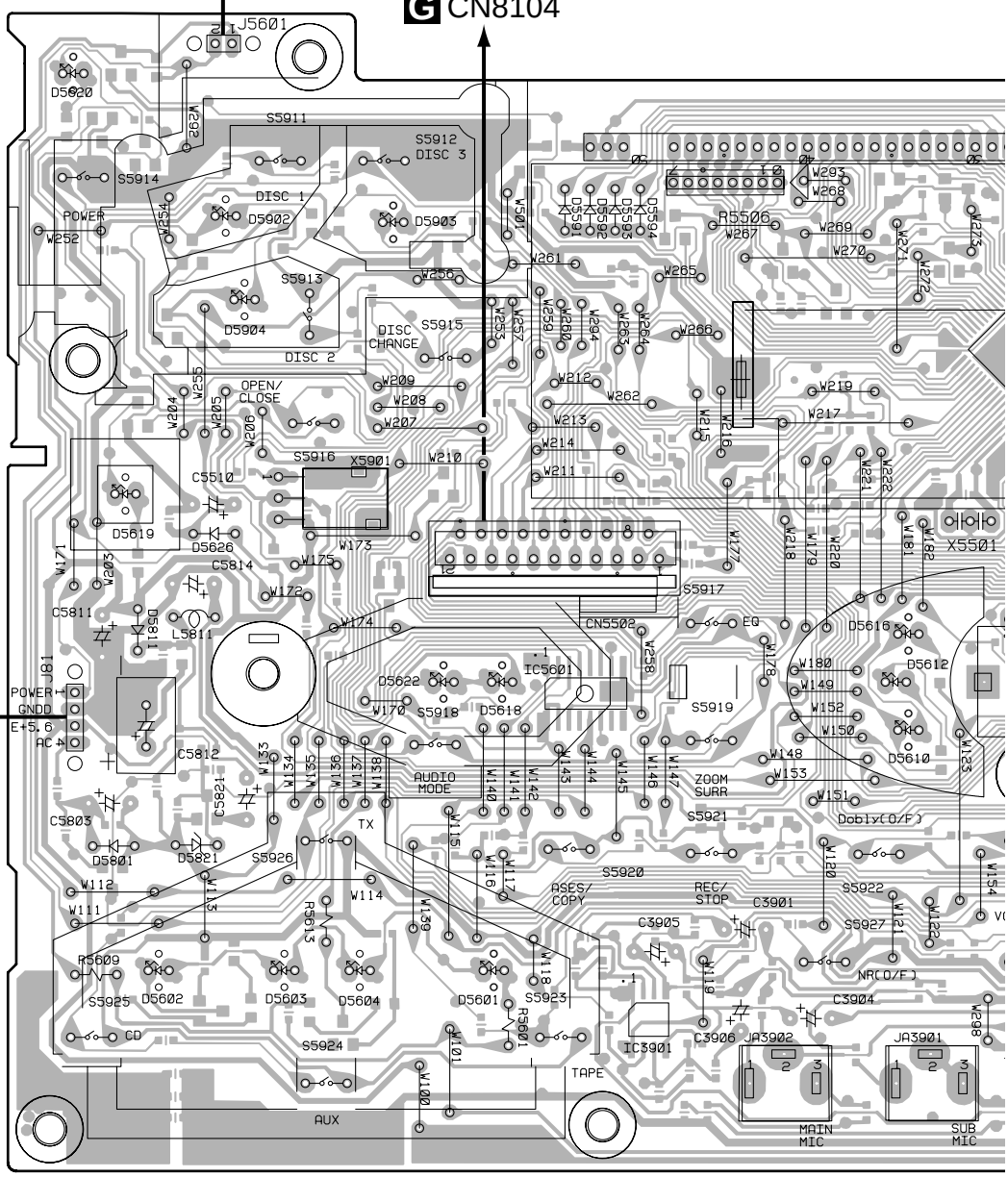


(XNP3029-B)

M DISPLAY ASSY

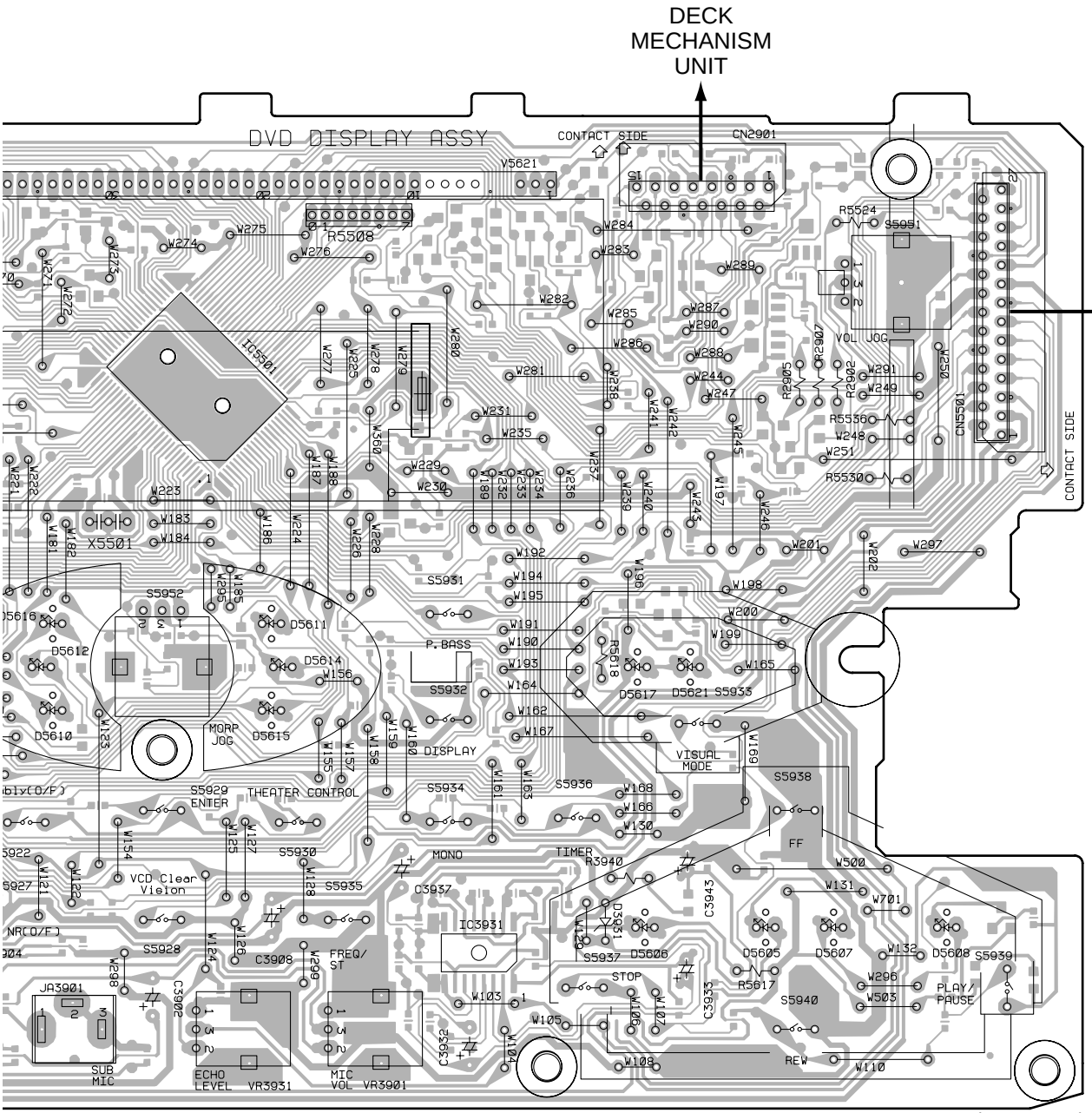
G CN8104

L CN81



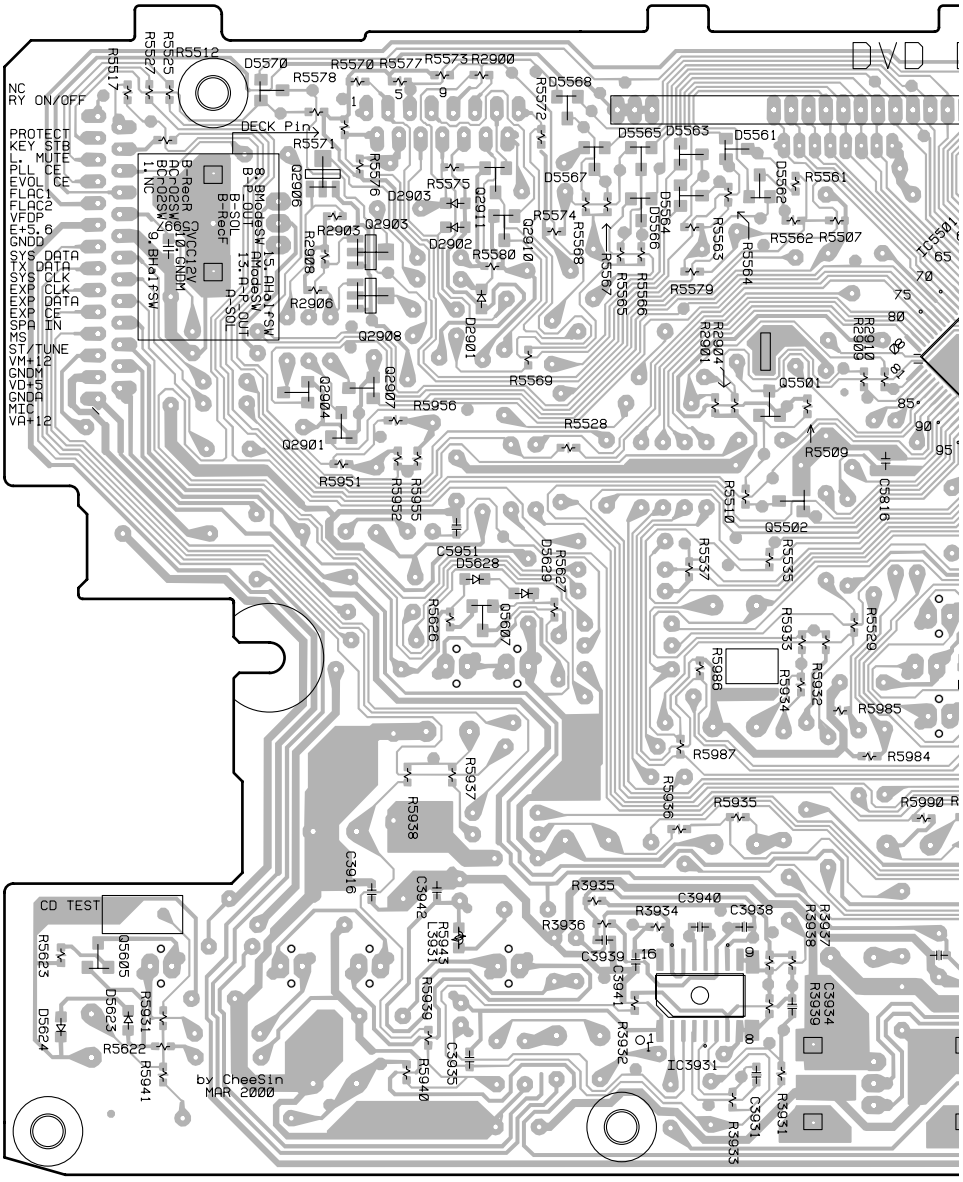
IC5601 IC3901

SIDE A



IC5501 IC3931

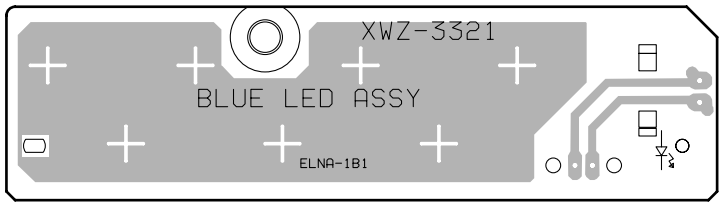
M DISPLAY ASSY



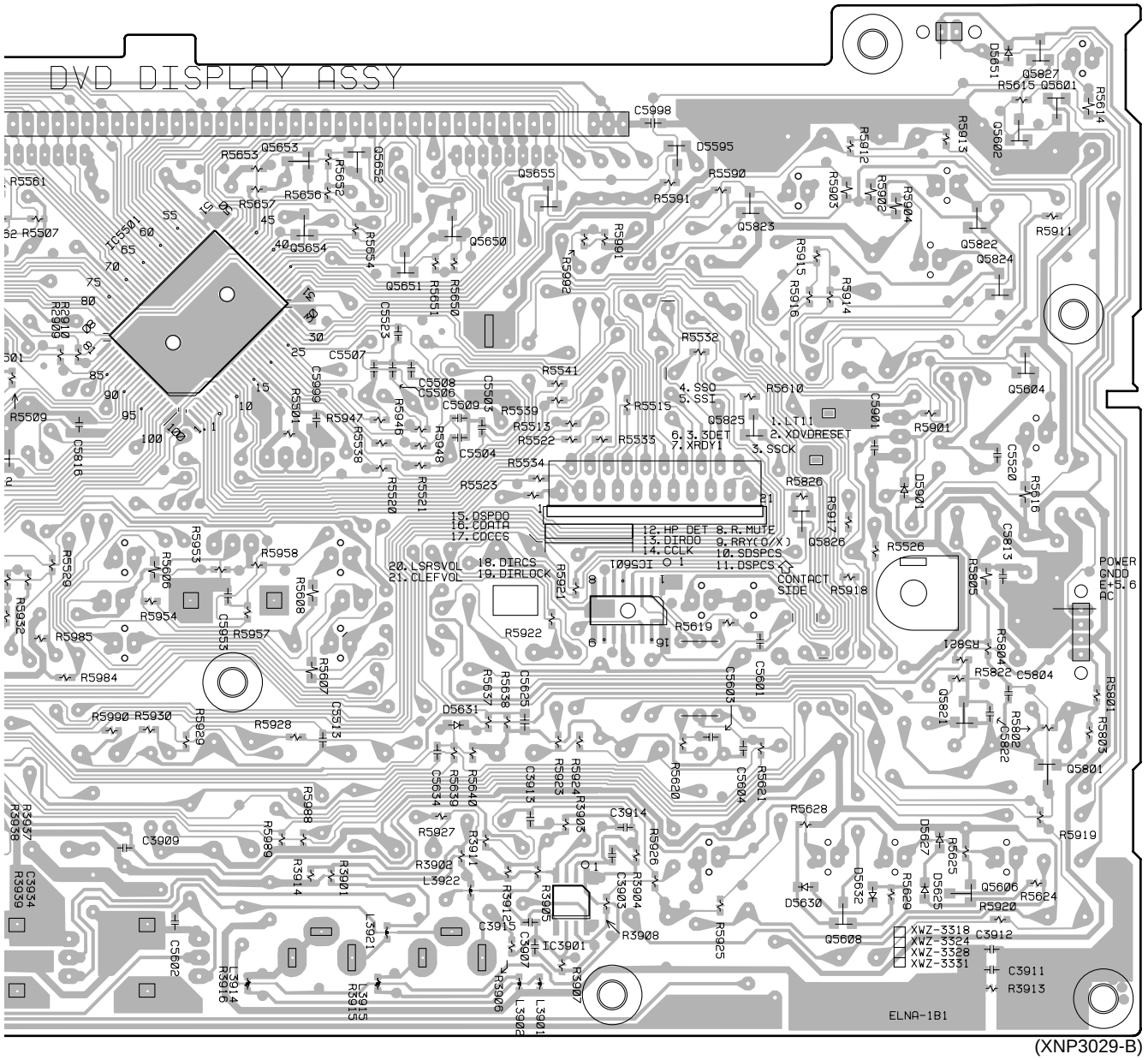
SIDE B

Q5605 Q2906 Q2904 Q2903 Q2908 Q2907 Q2901 Q2911 Q2910 Q5607 IC3931 Q5501 Q5502

N BLUE LED ASSY



(XNP3029-B)



(XNP3029-B)

IC5501 Q5653 Q5652 Q5651 Q5650 Q5654 Q5655 IC3901 IC5601 Q5823 Q5825 Q5826 Q5608 Q5822 Q5827 Q5601 Q5821 Q5602 Q5824 Q5801 Q5606 Q5604

5. PCB PARTS LIST

NOTES: ●*Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
●*The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
●*When ordering resistors, first convert resistance values into code form as shown in the following examples.*
Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).
560 Ω → 56×10^1 → 561 ..... RD1/4PU 5 6 1 J
47k Ω → 47×10^3 → 473 ..... RD1/4PU 4 7 3 J
0.5 Ω → R50 ..... RN2H R 5 0 K
1 Ω → 1R0 ..... RS1P 1 R 0 K
Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).
5.62k Ω → 562×10^1 → 5621 ..... RN1/4PC 5 6 2 1 F

Mark	No.	Description	Part No.

LIST OF ASSEMBLIES

NSP	$M MECHA PCB ASSY	VWM1878
NSP	├ SW ASSY	VWG2002
NSP	├ TRADE ASSY	VWG2003
NSP	└ MOTOR ASSY	VWG2004
NSP	TRAVERSE MECHANISM ASSY	VWT1161
NSP	├ SMEB ASSY	VWG2048
NSP	└ FGSB ASSY	VWG2009
	DVD MAIN ASSY	XWX3014
	CONNECT ASSY (6CH)	XWX3023
	FM/AM TUNER MODULE	AXQ7065
	MAIN ASSY	XWM3174
	├ AF ASSY	XWZ3330
	└ SECONDARY ASSY	XWZ3323
	COMPLEX ASSY	XWM3178
	├ REAR AMP ASSY	XWZ3325
	├ PRIMARY ASSY	XWZ3332
	├ DISPLAY ASSY	XWZ3331
	└ BLUE LED ASSY	XWZ3321

A SW ASSY

SWITCHES

S9502		ASG7009
S9501		DSG1017

OTHERS

J9501	JUMPER WIRE 6P	D20PWY0610E

B TRADE ASSY

OTHERS

CN9501	6P JUMPER CONNECTOR	52147-0610
CN9002	FFC CONNECTOR 13P	SLW13R-1C7
CN9001	FFC CONNECTOR 8P	SLW8R-1C7

C MOTOR ASSY

SWITCH

S9503		ASG7009

OTHERS

J9502	JUMPER WIRE 4P	D20PWW0405E

Mark	No.	Description	Part No.

D SMEB ASSY

SWITCH

S201		DSG1016

OTHERS

CN201	3P FFC CONNECTOR	52044-0345
CN202	8P FFC CONNECTOR	VKN1212
	PC BOARD SMEB	VNP1722

E FGSB ASSY

SEMICONDUCTOR

PC101	GP2S60

RESISTORS

All Resistors	RS1/10S□□□J

F DVD MAIN ASSY

SEMICONDUCTORS

	IC21	CY2081SL-638
	IC14	KM68V1000CLG-7L
	IC1	LA9701M
	IC2	LC78652W
	IC3	M56788FP
	IC19	MB811171622A-100FN
	IC18	MB86373B
	IC16	MC74VHC541DT
	IC17	MC74VHCT541ADT
	IC15	MN414800CSJ-07
	IC5,IC7	NJM2100M
	IC11	PD3410A
	IC12	PE5108A
⚠	IC401	PQ2TZ15
	IC23	TC7SH32FU
	IC8	TC7SHU04F
	IC13	XYW3001
	Q106,Q109,Q81-Q86	2SA1576A
	Q105,Q114,Q251	2SC4081
	Q102	HN1A01F

Mark	No.	Description	Part No.
	Q103,Q281,Q6,Q7		HN1B04FU
	Q101		HN1C01F
	Q112,Q113		HN1C01FU
	Q108		HN1K03FU
	Q107		RN1902
	Q3		RN1911
	Q1		RN4982
	D302		KV1471E
	D6		RB501V-40

COILS AND FILTERS

	F8500	CHIP BEAD	DTF1069
	L101,L150,L330		LCYA100J2520
	L304		LCYA2R7J2520
	F1	VIDEO FILTER	VTF1155
	L81	CHIP COIL	VTL1067

CAPACITORS

	C123,C145,C282,C283,C613	CCSRCH101J50
	C627,C629,C843	CCSRCH101J50
	C322	CCSRCH120J50
	C206,C210,C211	CCSRCH151J50
	C126,C333,C845	CCSRCH180J50
	C116,C151,C314	CCSRCH220J50
	C152	CCSRCH221J50
	C209	CCSRCH331J50
	C104-C108,C134,C236	CCSRCH470J50
	C122,C208	CCSRCH471J50
	C128,C335	CCSRCH560J50
	C127,C334	CCSRCH5R0C50
	C124,C146	CCSRCH680J50
	C117,C240,C352,C360	CCSRCH681J25
	C129,C142	CEV101M10
	C113,C139	CEV220M16
	C413,C700,C808	CEV221M4
	C111,C149,C205,C207,C401	CEV470M6R3
	C403,C407	CEV470M6R3
	C140,C223,C224,C252,C264	CKSQYB105K10
	C312,C801,C802,C807	CKSQYB105K10
	C809-C815,C817-C819	CKSQYB105K10
	C229	CKSQYB224K16
	C148,C217,C414	CKSQYF105Z16
	C216,C313,C337	CKSRYB102K50
	C133,C136,C203,C220,C225	CKSRYB103K50
	C239,C320,C321,C603,C625	CKSRYB103K50
	C703,C711	CKSRYB103K50
	C101,C102,C114,C118,C119	CKSRYB104K16
	C121,C138,C204,C212,C213	CKSRYB104K16
	C227,C228,C231,C263	CKSRYB104K16
	C315-C317,C332,C804	CKSRYB104K16
	C281,C354	CKSRYB222K50
	C153,C266	CKSRYB223K25
	C214,C251,C261	CKSRYB472K50
	C357	CKSRYB473K16
	C330	CKSRYB682K50
	C109,C110,C120,C130,C131	CKSRYF104Z16
	C143,C150,C202,C215	CKSRYF104Z16
	C221,C222,C226,C230,C235	CKSRYF104Z16
	C265,C319,C327,C359,C367	CKSRYF104Z16
	C369,C370,C402,C404,C406	CKSRYF104Z16
	C408,C410,C412,C415	CKSRYF104Z16
	C601,C602,C604-C612	CKSRYF104Z16
	C614,C615,C617-C623,C626	CKSRYF104Z16

Mark	No.	Description	Part No.
	C701,C702,C704-C710		CKSRYF104Z16
	C712-C726,C831-C833		CKSRYF104Z16
	C837-C839		CKSRYF104Z16
	C820,C821 (2.2µF)		VCG1030
	C299,C844 (0.47µF)		VCG1032
	C368,C409,C411 (47µF/6.3V)		VCH1166
	C405 (330µF)		VCH1191
	VC1 (30pF)		VCM1013

RESISTORS

	R123 (39Ω×4)	ACN7047
	R732,R733,R735,R736 (47Ω×4)	ACN7077
	R632,R840 (100Ω×4)	DCN1092
	R608,R609,R613,R624,R627 (100kΩ×4)	DCN1094
	R629,R631,R633,R634,R638 (100kΩ×4)	DCN1094
	R654,R657,R658,R662,R706 (100kΩ×4)	DCN1094
	R717,R718 (100kΩ×4)	DCN1094
	R121,R663 (22Ω×4)	DCN1104
	R712,R715 (0Ω×4)	DCN1106
	R1020,R162,R2010,R2020,R2030	RS1/10S0R0J
	R2040,R3050,R3520,R366,R4010	RS1/10S0R0J
	R4020,R4030,R4040,R4050,R4060	RS1/10S0R0J
	R685,R722,R8000,R821	RS1/10S0R0J
	R202	RS1/10S101J
	R700	RS1/10S1R2J
	R396	RS1/16S1001F
	R361,R364	RS1/16S1003F
	R807	RS1/16S1201F
	R363,R365	RS1/16S1503F
	R825-R827	RS1/16S1600F
	R395	RS1/16S1801F
	R805	RS1/16S2401F
	R397,R806,R808	RS1/16S2701F
	R848-R850	RS1/16S4700F
	R164	RS1/16S5600F
	R391	RS1/16S5601F
	R394	RS1/16S6801F
	R3510 (100Ω)	VCN1120
	Other Resistors	RS1/16S□□□J

OTHERS

X2	CHIP CERALOCK (20MHz)	DSS1110
	FLEXIBLE CABLE 07P	VDA1681
CN6	7P FFC CONNECTOR	VKN1299
CN7	B TO B CONNECTOR 14P	VKN1324
CN4	24P FFC CONNECTOR	VKN1464
CN30	13P FFC CONNECTOR	VKN1472
CN80	32P FFC CONNECTOR	VKN1518
CN20	27P FFC CONNECTOR	VKN1583
X1	CRYSTAL (13.824MHz)	VSS1129

G CONNECT ASSY (6 CH)

SEMICONDUCTORS

IC8601	AK4527VQ
IC8701,IC8703,IC8704,IC8706,IC8851	BA4558F-HT
IC8901	BU4094BCF
IC8202	LA7137M
IC8401	LC89055W

Mark	No.	Description	Part No.
	IC8801,IC8802		M62429FP
	IC8203		NJM78L08A
	IC8201		TA7302P
	IC8204		TC74HCT7007AF
	IC8502		W24257AJ-12
	IC8501		YSS912C
	Q8203,Q8204		2SB1197K
	Q8727,Q8728,Q8733,Q8734		2SD2114K
	Q8741,Q8742		2SD2114K
	Q8915,Q8916,Q8918		DTA124EK
	Q8205		DTA143EK
	Q8201		DTC114YK
	Q8535,Q8917		DTC124EK
	Q8202		PDTA124EK
	D8901,D8902		1SS181
	D8903		1SS184
	D8501		UDZS5.1B

COILS AND FILTERS

	L8401,L8402,L8501-L8503		DTF1064
		CHIP BEAD	
	L8201		LCTA470J2520
	L8205,L8206		VTF1096
		CHIP SOLID INDUCTOR	
	L8241-L8244	CHIP BEAD	VTL1081

SWITCH

	S8201		VSH1020

CAPACITORS

	C8220,C8224,C8504,C8507,C8515		CCSRCH101J50
	C8518,C8523,C8524,C8527,C8529		CCSRCH101J50
	C8540,C8721,C8722		CCSRCH101J50
	C8741,C8742,C8761		CCSRCH151J50
	C8405,C8406,C8511,C8512		CCSRCH200J50
	C8201		CCSRCH390J50
	C8521		CCSRCH471J50
	C8111		CEAT102M10
	C8727-C8730,C8747-C8750		CEJQ100M50
	C8753-C8756,C8767-C8772		CEJQ100M50
	C8801-C8804		CEJQ100M50
	C8209,C8210,C8217,C8226,C8227		CEJQ101M10
	C8235,C8239,C8502,C8842		CEJQ101M10
	C9001,C9002		CEJQ101M16
	C8402,C8501,C8546,C8602,C8606		CEJQ101M6R3
	C8612,C8617,C8618		CEJQ101M6R3
	C8621,C8622,C8627,C8628,C8814		CEJQ220M25
	C8543		CEJQ221M6R3
	C8212,C8223		CEJQ331M6R3
	C8413		CEJQ470M10
	C8101,C8232,C8242,C8244,C8400		CKSRYB103K50
	C8414,C8415,C8421,C8506,C8508		CKSRYB103K50
	C8510,C8514,C8517,C8520,C8525		CKSRYB103K50
	C8528,C8530,C8541,C8641,C8642		CKSRYB103K50
	C8733,C8734,C8758,C8759		CKSRYB103K50
	C8791-C8794,C8818,C8819,C8947		CKSRYB103K50
	C8202-C8206,C8208,C8211		CKSRYB104K16
	C8213,C8214,C8216,C8221,C8222		CKSRYB104K16
	C8228,C8233,C8234,C8236,C8237		CKSRYB104K16
	C8243,C8401,C8403,C8404		CKSRYB104K16
	C8408,C8409,C8411,C8416,C8417		CKSRYB104K16
	C8419,C8503,C8505,C8509,C8513		CKSRYB104K16
	C8516,C8519,C8522,C8526		CKSRYB104K16
	C8531-C8534,C8542,C8545,C8601		CKSRYB104K16
	C8604,C8605,C8613,C8615,C8616		CKSRYB104K16
	C8839-C8841,C8901		CKSRYB104K16
	C8745,C8746,C8765		CKSRYB152K50
	C8619,C8620,C8743,C8744,C8763		CKSRYB222K50
	C8766		CKSRYB223K50
	C8723-C8726		CKSRYB332K50
	C8643		CKSRYB471K50
	C8762		CKSRYB472K50
	C8241		CKSRYB473K16

RESISTORS

	R8514 (1kΩ×4)		ACN7060
	R8403,R8404,R8500,R8503,R8509		DCN1092
		(100Ω×4)	
	R8525,R8529,R8603,R8607		DCN1092
		(100Ω×4)	
	R8994-R8997		RS1/10S0R0J
	R8625		RS1/10S100J
	R8626		RS1/10S180J
	Other Resistors		RS1/16S□□□J

OTHERS

	X8401,X8501		VSS1140
		CRYSTAL RESONATOR (12.288MHz)	
	CN8202	4P MINI DIN SOCKET	AKP7008
	JA8203	OPTICAL LINK OUT	GP1F32T
	CN8104	FFC CONNECTOR 21P	HLEM21S-1
	CN8105	FFC CONNECTOR 25P	HLEM25S-1
	CN8103	FFC CONNECTOR 30P	HLEM30S-1
	JA8201	1P PIN JACK	VKB1063
	CN8106	7P FFC CONNECTOR	VKN1238
	CN8102	27P FFC CONNECTOR	VKN1258
	CN8101	32P FFC CONNECTOR	VKN1263
	CN8107	7P FFC CONNECTOR	VKN1267

H FM/AM TUNER MODULE

SEMICONDUCTORS

	IC6201		LA1832ML
	IC6202		LC72131MD
	Q6402		2SC2223
	Q6203		2SC2705
	Q6201,Q6202		2SC2712
	Q6214,Q6403		2SC2714
	Q6404		2SK302
	Q6401		3SK194
	Q6204		DTA124ES
	Q6205		DTC124EK
	D6202		1SS254
	D6401,D6402		1T378A

COILS AND FILTERS

	L6404	FM COIL	ATC1003
	L6401	FM RF COIL	ATC1020
	L6402	FM RF COIL	ATC1021
	F6204	FM CERAMIC FILTER	ATF-107
	F6203	FM CERAMIC FILTER	ATF-119

Mark	No.	Description	Part No.
	F6401	FM BAND PASS FILTER	ATF-155
	F6206	FM CERAMIC DISCRIMINATOR	ATF7008
	F6202	AM CERAMIC FILTER	ATF7011
	L6206,L6208,L6403		LAU2R2J

TRANSFORMERS

T6201		ATB7008
T6401		ATE7002

CAPACITORS

C6208	CCSQCH100D50
C6212,C6274,C6275,C6408	CCSQCH101J50
C6412	CCSQCH102J50
C6221,C6222,C6416	CCSQCH150J50
C6271	CCSQCH200J50
C6415	CCSQCH330J50
C6406	CCSQCH331J50
C6401,C6419	CCSQCH5R0C50
C6407	CCSQCK1R0C50
C6410	CCSQCK2R0C50
C6413	CCSQRH180J50
C6414	CCSQRH8R0D50
C6405	CCSQTH150J50
C6234,C6235	CEAL1R0M50
C6245	CEAL470M16
C6224	CEAT100M50
C6243	CEAT101M16
C6231	CEAT1R0M50
C6227	CEAT220M25
C6214,C6236	CEAT2R2M50
C6262	CEAT3R3M50
C6219	CEAT470M10
C6244	CEAT470M16
C6249,C6250,C6265,C6266	CEAT4R7M50
C6258	CEJA470M16
C6215	CFTLA103J50
C6211,C6254,C6403,C6417	CKSQYB102K50
C6201,C6205,C6210,C6237,C6276	CKSQYB103K50
C6278,C6280,C6281,C6402,C6409	CKSQYB103K50
C6418	CKSQYB103K50
C6251,C6252	CKSQYB153K50
C6203,C6259	CKSQYB223K50
C6228	CKSQYB472K50
C6209	CKSQYB473K50
C6230	CKSQYB821K50
C6218,C6223,C6255	CKSQYF103Z50
C6220,C6226,C6242,C6256	CKSQYF223Z50
C6225	CKSQYF473Z50

RESISTORS

R6280	RD1/4PU101J
R6413,R6416,R6418,R6906,R6909	RS1/8S0R0J
R6401	RS1/8S470J
VR6201 (10kΩ)	PCP1029
Other Resistors	RS1/10S□□□J

OTHERS

BN6202	4P ANTENNA TERMINAL	AKE7051
X6202	CERAMIC RESONATOR (456kHz)	ASS1066
X6201	CRYSTAL RESONATOR (7.2000MHz)	ASS1093
CN6201	14P SOCKET	KP200IA14L
	MW RF TUNING BLOCK	AXX7041

Mark	No.	Description	Part No.

AF ASSY

SEMICONDUCTORS

⚠	IC3302 (1.25A)	AEK7010
⚠	IC3305,IC3306 (5A)	AEK7019
	IC3836	BA3838F
	IC2101,IC3101,IC3102,IC3303,IC3304	BA4558F-HT
	IC5691	BA4558F-HT
	IC5891,IC5892	BU4094BCF
	IC2201	HA12136AF
	IC2301	HA12211NT
	IC3001	LC75396NE
⚠	IC3301	STK407-070B
	Q3354,Q3601,Q3602,Q3621,Q82	2SA1037K
	Q2806	2SB1197K
	Q2803,Q2804	2SC1815
	Q2801	2SC2240
	Q2102,Q2201,Q2202,Q3101,Q3102	2SC2412K
	Q3353,Q3603,Q3605-Q3608,Q83	2SC2412K
	Q85	2SC2412K
	Q3081,Q81	2SD1858X
	Q2203,Q2204,Q2805,Q3001,Q3002	2SD2114K
	Q3005,Q3006,Q3311,Q3312	2SD2114K
	Q2301,Q2302,Q3317,Q3318	2SK368
	Q3313,Q3315	DTA124EK
	Q3003,Q3009	DTA143EK
	Q2104,Q2105,Q3314	DTC124EK
	Q2103,Q2306,Q2802,Q2807,Q84	DTC143EK
⚠	Q3351	IRFI9Z34G
⚠	Q3352	IRFIZ34G
⚠	D3301,D3302	1SR139-100
	D2191,D2301-D2306,D3001,D3002	1SS133
	D3101,D3102,D3351-D3354	1SS133
	D3361,D3362,D3601-D3604,D3606	1SS133
	D3612,D3613,D3621,D3622	1SS133
	D3625-D3627,D5891,D81,D89	1SS133
	D91,D92	1SS133
	D2102,D2103,D2201,D2202,D3051	1SS355
	D3607	1SS355
	D3355,D3356	20E2-FC
⚠	D3303	D5SBA20
	D3357,D3358	MTZJ10C
	D3083	MTZJ11C
	D3313	MTZJ12C
	D3359,D3360	MTZJ18B
	D90	MTZJ2.7A
	D82	MTZJ24D
	D3363,D3364	MTZJ39C
	D2001	MTZJ6.2A

COILS AND FILTERS

L3601,L3602	AF CHOKE COIL	ATH-133
L2801	OSC COIL	ATX7002
L2301,L2302		LTA822J
F2201,F2202	MPX FILTER	RTF1209
L3002-L3004,L3065	CHIP BEAD	VTL1081
L3991	AXIAL INDUCTOR	XTL3001
L2101	AXIAL INDUCTOR	XTL3003

RELAY

RY3601	ASR7008

Mark	No.	Description	Part No.
CAPACITORS			
	C2301,C2302,C3603,C3606		CCSRCH100D50
	C5892		CCSRCH101J50
	C2192		CCSRCH220J50
	C3319,C3320		CCSRCJ3R0C50
	C3311,C3312,C3361,C3362		CEANL1R0M50
	C3317,C3318		CEANP100M35
	C3313,C3314		CEANP2R2M50
	C2207,C2803,C2810,C3047,C3048		CEAT100M50
	C3063,C3064,C3081,C3107,C3334		CEAT100M50
	C3602,C3858,C81,C85		CEAT100M50
	C2002,C2316,C3045,C3046,C3091		CEAT101M16
	C3303,C3304,C3684		CEAT101M50
	C2312,C2313,C3035,C3036,C3108		CEAT1R0M50
	C3328		CEAT1R0M50
	C2106,C2214,C2215,C2321,C2322		CEAT220M50
	C87		CEAT220M50
	C2001		CEAT221M16
	C3601		CEAT221M25
	C2201,C2202,C2205,C2206		CEAT2R2M50
	C2212,C2213,C2319,C2320		CEAT2R2M50
	C3005-C3010,C3017,C3018,C3104		CEAT2R2M50
	C3621,C3851-C3854,C5691,C5692		CEAT2R2M50
	C2804,C2805,C3625		CEAT330M16
	C3105		CEAT3R3M50
	C3321,C3322,C3329,C3330,C3841		CEAT470M16
	C2195		CEAT470M25
	C3106,C3109,C3857		CEAT4R7M50
	C2203,C2204		CEATR22M50
	C3102,C3325		CEATR47M50
	C3027,C3028		CFTLA334J50
	C3023,C3024		CFTLA474J50
	C2802		CKCYB681K2H
	C5891		CKSQYB104K25
	C2194		CKSQYB105K10
	C3845		CKSQYB224K16
	C3075,C3076		CKSRYB102K50
	C2315,C2317,C2318,C3042,C3053		CKSRYB103K50
	C3083,C3086,C3098,C3103,C3991		CKSRYB103K50
	C88		CKSRYB103K50
	C2191,C2193,C3021,C3022,C3071		CKSRYB104K16
	C3099,C3846,C3847,C3855		CKSRYB104K16
	C3033,C3034,C3077		CKSRYB122K50
	C2208,C2209		CKSRYB152K50
	C3315,C3316		CKSRYB222K50
	C2323,C2326		CKSRYB223K50
	C2324,C2325		CKSRYB272K50
	C3029,C3030		CKSRYB273K16
	C2808,C2809		CKSRYB332K50
	C3623,C3624		CKSRYB471K50
	C2333,C2334,C2807		CKSRYB472K50
	C3101,C3111,C3112,C3844		CKSRYB473K16
	C2303,C2304,C2343,C2344		CKSRYB561K50
	C3019,C3020,C3031,C3032		CKSRYB682K50
	C3326,C3327		CKSRYB682K50
	C3025,C3026		CKSRYB683K16
	C2307,C2308,C2331,C2332		CKSRYB821K50
	C3331-C3333		CKSRYF104Z50
	C2801		CQHA822J2A
	C2210,C2211		CQMBA103J50
	C2806		CQMBA223J50
	C3306,C3307 (4700µF/50V)		XCH3004

Mark	No.	Description	Part No.
RESISTORS			
	R2812		RD1/2LMF680J
	R89		RD1/2VM330J
	R3619,R3620		RD1/4LMF100J
	R3353,R3354		RD1/4PU101J
	R3024,R3025,R5892,R5894,R5895		RD1/4PU102J
	R3029,R3317,R3318,R3326		RD1/4PU104J
	R3081,R5893		RD1/4PU221J
	R3035,R3851		RD1/4PU222J
	R2813		RD1/4PU471J
	R2809		RD1/4PU4R7J
	R3026		RD1/4PU822J
	R3355,R3356		RS1/10S104J
	R3357,R3358,R3611,R3612		RS1/10S153J
	R2309		RS1/10S222J
	R3330		RS1/10S223J
	R2001		RS1/10S471J
	R3319,R3320,R81		RS1/10S561J
	R3605,R3606		RS1/10S562J
	R3603,R3604		RS1/10S823J
	R3347		RS1LMF821J
⚠	R3991,R3992		RS2LMF331J
	R3601,R3602		RS3LMFR22J
	VR2303-VR2306 (10kΩ)		VCP1156
	VR2301,VR2302 (100kΩ)		VCP1162
	VR2801,VR2802 (220kΩ)		VCP1164
	Other Resistors		RS1/16S□□□J
OTHERS			
		17P CABLE HOLDER	51063-1705
	CN3601	4P SPEAKER TERMINAL	AKE7018
	CN2302	KR CONNECTOR	B2B-PH-K-S
	CN2303	KR CONNECTOR	B3B-PH-K-R
	CN2301	KR CONNECTOR 3P	B3B-PH-K-S
	CN5105	27P FFC CONNECTOR	HLEM27S-1
	CN5104	30P FFC CONNECTOR	HLEM30R-1
	CN3051	14P PLUG	KM200IB14
	CN3604	11P JUMPER CONNECTOR	KPE11
	CN3603	9P JUMPER CONNECTOR	KPE9
	JA3003	2P PIN JACK	VKB1046
	JA3001	2P PIN JACK	VKB1060
	J82	CONNECTOR ASSY 2P	XDX3002
	JA3991	HEADPHONE JACK	XKN3007

J SECONDARY ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC17 (630mA)		AEK7006
⚠	IC16 (4A)		AEK7018
⚠	IC15 (5A)		AEK7019
⚠	IC11,IC12 (10A)		AEK7022
⚠	IC13,IC14 (10A)		AEK7068
⚠	Q31		2SA965
⚠	D33		1SS133
⚠	D12,D13		G3SBA20L
⚠	D11		G5SBA20L
⚠	D34		MTZJ36A
⚠	D31		MTZJ8.2B
⚠	D35,D36		S5688G

Mark	No.	Description	Part No.
CAPACITORS			
⚠	C33,C34 (4700µF/80V)		ACH7071
⚠	C16 (6800µF/25V)		ACH7120
⚠	C31		CEAT220M50
⚠	C32		CEAT221M63
⚠	C35		CEAT682M16
⚠	C13		CQMA103K2E
RESISTORS			
⚠	R31		RD1/4PU103J
⚠	R32		RD1/4PU222J
OTHERS			
		17P CABLE HOLDER	51063-1705

K REAR AMP ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC51		NJM7805FA
⚠	IC53		NJM7806FA
⚠	IC52,IC54		NJM7812FA
⚠	IC3401		STK402-230
	Q3414,Q3471,Q3472		2SA1037K
	Q51,Q52,Q55,Q60,Q62		2SB1237X
⚠	Q64		2SB1566
	Q3406		2SC2412K
⚠	Q3407		2SC2412K
	Q3408,Q3409,Q3411-Q3413,Q3415		2SC2412K
	Q3417,Q53,Q54,Q63		2SC2412K
	Q3401-Q3404		2SD2114K
⚠	Q57		2SD2395
	Q3405,Q3410		DTA124EK
	D3403-D3406,D3408,D3427,D3428		1SS133
	D52,D54,D61,D62,D72		1SS133
	D3425,D3426,D3471,D3472,D50		1SS355
	D3409		MTZJ12C
	D56,D58-D60		MTZJ15C
	D3429		MTZJ4.7B
	D73		MTZJ6.2C
	D53,D55		MTZJ7.5C
COILS			
	L3401-L3403	AF CHOKE COIL	ATH-133
	L3404	CHIP BEAD	VTL1081
RELAYS			
	RY3401,RY3402		ASR7017
CAPACITORS			
	C3422,C3471,C3472		CCSRCH100D50
	C3407-C3409		CCSRCH221J50
	C3413-C3415		CCSRCJ3R0C50
	C3410-C3412		CEANP100M35
	C3401-C3403		CEANP2R2M50
	C3421,C52,C54,C64		CEAT100M50
	C3420		CEAT101M10
	C65		CEAT101M16
	C3416,C3417,C3431		CEAT101M50
	C55		CEAT1R0M50
	C53		CEAT220M50
	C3432		CEAT221M16
	C3419		CEATR47M50
	C66		CEHAT100M50
	C57,C59,C62		CEJA100M16
	C56,C61		CEJA1R0M50
	C3423,C3424,C3429		CKSRYB103K50
	C3404-C3406		CKSRYB222K50
	C3425-C3428		CKSRYF104Z50
RESISTORS			
	R3442-R3444		RD1/4LMF100J
	R3477,R3478		RD1/4MUF101J
	R52		RD1/4PU121J
	R54		RD1/4PU181J
	R64		RD1/4PU222J
	R66		RD1/4PU472J
	R3419-R3421		RD1/4PU563J
	R70		RD1/4PU680J
	R3449		RD1/4PU681J
	R3412		RS1/10S104J
	R73		RS1/10S121J
	R3429,R3430,R3432		RS1/10S153J
	R3422		RS1/10S223J
	R3409-R3411		RS1/10S273J
	R60		RS1/10S27R0F
	R3434,R3475,R3476		RS1/10S392J
	R72		RS1/10S471J
	R3416-R3418		RS1/10S561J
	R3425,R3426,R3428		RS1/10S823J
	R61		RS1/16S6800F
	R3471-R3473		RS1LMFR22J
	R3448		RS3LMF102J
	Other Resistors		RS1/16S□□□J
OTHERS			
		9P CABLE HOLDER	51063-0905
		11P CABLE HOLDER	51063-1105
	CN3401	1P PIN JACK	AKB7042
	J3401	JUMPER WIRE	D15A09-100-2651
	J3402	JUMPER WIRE	D15A11-100-2651
	CN3404	FFC CONNECTOR 25P	HLEM25R-1
		PCB BINDER	VEF1040
	JA3403	AUDIO 3P PIN JACK	XKB3007

L PRIMARY ASSY

Mark	No.	Description	Part No.
SEMICONDUCTORS			
⚠	IC81		NJM7805FA
	Q81		2SD1859X
	D85,D88-D90		1SS133
⚠	D81		S1WB(A)60SD
COIL			
	L1	LINE FILTER	ATF1136
TRANSFORMER			
⚠	T2		XTT3004
RELAYS			
⚠	RY81		ASR7018

Mark	No.	Description	Part No.
CAPACITORS			
⚠	C1,C2 (0.01μF)		ACE7027
	C83		CEAT100M50
⚠	C82		CEAT102M25
RESISTORS			
⚠	R1 (2.2MΩ, 1/2W)		RCN1080
	Other Resistors		RD1/4PU□□□J
OTHERS			
	H1,H2	FUSE CLIP	AKR7001
⚠	CN1	2P VH CONNECTOR	B2P3-VH
⚠	AN1	1P AC INLET	XKP3042

M DISPLAY ASSY

SEMICONDUCTORS			
	IC3901		BA4558F-HT
	IC5601		HEF4794BT
	IC5501		PDC064A
	Q5501,Q5607,Q5608		2SA1037K
	Q2903,Q2906,Q2908		2SB1132
	Q5602,Q5605,Q5606,Q5801		2SC2412K
	Q2910,Q2911,Q5826		DTA124EK
	Q5601		DTC124EK
	Q2901,Q2904,Q2907,Q5502,Q5604		DTC143EK
	Q5650-Q5655,Q5821,Q5825		DTC143EK
	D5592,D5593,D5626,D5811		1SS133
	D5561-D5568,D5570,D5595		1SS181
	D2901-D2903,D5623-D5625		1SS355
	D5627-D5632,D5901		1SS355
	D5601-D5608,D5610,D5611		SLP3118C51H
	D5615,D5616,D5618,D5622,D5904		SLP3118C51H
	D5612,D5614,D5617,D5621		SLP6118C51H
	D5902		SLP7118C51H
	D5619,D5620,D5903		SLP9118C51H
	D5651		UDZS5.6B
COILS			
	L3901,L3902		LCTB100K1608
	L3921,L3922	CHIP BEAD	VTL1081
	L3914,L3915	CHIP SOLID INDUCTOR	VTL1145
	L5811	AXIAL INDUCTOR	XTL3004
SWITCHES			
	S5911-S5940		XSG3001
	S5951		XSX3003
	S5952		XSX3004
CAPACITORS			
	C5812 (0.047F/5.5V)		ACH1246
	C5603,C5604		CCSRCH100D50
	C5601		CCSRCH101J50
	C5513,C5523		CCSRCH221J50
	C3903		CCSRCH331J50
	C5821		CEJA100M16
	C5803		CEJA1R0M50
	C3901,C3902,C3904,C3906		CEJA2R2M50
	C3905,C5510,C5811,C5814		CEJA470M16
	C5997,C5998		CKSQYB104K25
	C5999		CKSQYB105K10
	C5625		CKSQYF224Z25
	C5804,C5951,C5953		CKSRYB102K50
	C3911		CKSRYB103K50
	C3909,C5816		CKSRYB104K16
	C5506		CKSRYB471K50
	C3907,C5503,C5504,C5509		CKSRYB472K50
	C5507,C5508		CKSRYB473K16
	C5602		CKSRYF104Z25
	C5634,C5901		CKSRYF104Z50
	C5813,C5822		CKSRYF473Z50
RESISTORS			
	R5506,R5508		RA7T104J
	R2905,R5524,R5536		RD1/4PU102J
	R5601,R5617		RD1/4PU151J
	R5530		RD1/4PU221J
	R5613,R5618		RD1/4PU331J
	R5609		RD1/4PU391J
	R2902,R2907		RD1/4PU681J
	R5805		RS1/10S101J
	R5902-R5904		RS1/10S221J
	R5614,R5616		RS1/10S471J
	R5606-R5608		RS1/10S620J
	VR3901 (10kΩ-B)		XCS3002
	Other Resistors		RS1/16S□□□J
OTHERS			
	X5501	CERAMIC RESONATOR (10MHz)	DSS1048
		2P CABLE HOLDER	51048-0200
		4P CABLE HOLDER	51048-0400
	CN5502	FFC CONNECTOR 21P	52492-2120
	JA3901,JA3902	SR JACK	AKN7004
	J5601	JUMPER WIRE 2P	D20PYY0210E
	J81	JUMPER WIRE 4P	D20PYY0425E
	X5901	REMOTE RECEIVER UNIT	GP1U28X
	CN2901	FFC CONNECTOR 15P	HLEM15R-1
	CN5501	27P FFC CONNECTOR	HLEM27R-1
	5621	FL HOLDER	VNF1096
	V5621	FL TUBE	XAV3009

N BLUE LED ASSY

SEMICONDUCTOR			
	D5613		E1L4E-7B(123)
OTHERS			
		2P CABLE HOLDER	51048-0200
		LED HOLDER	XAK3154

6. ADJUSTMENT

6.1 TUNER SECTION

■ FM Tuner Section

• Set the mode selector to FM BAND.
• Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	FM SG (1kHz, ± 75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Front End Sensitivity	98	0 to 30	98MHz	L6402 T6401	Adjust so that the DC voltage between the IC6201 - pin 20 and GND becomes at maximum level.
2	TUNED IND. Lighting Level	98	18 ± 2	98MHz	VR6201	Adjust so that the indicator of TUNED IND. strats to light up.

Note:
Before adjusting, make sure there is no gap between L6401 and L6402. If there is a gap between them, bring them into contact with each other first, and then make adjustments.

■ AM Tuner Section

• Set the mode selector to AM BAND.
• Connect the wiring as shown in Fig. 1.

Step No.	Adjustment Title	AM SG (400Hz, 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	Front End Sensitivity	999 (∗1)	35 to 45	999kHz (∗1)	T6201	Adjust so that the DC voltage between the IC6201 - pin 20 and GND becomes at maximum level.

Note (∗1) : For the area using 10kHz step, frequency should be 1000kHz.

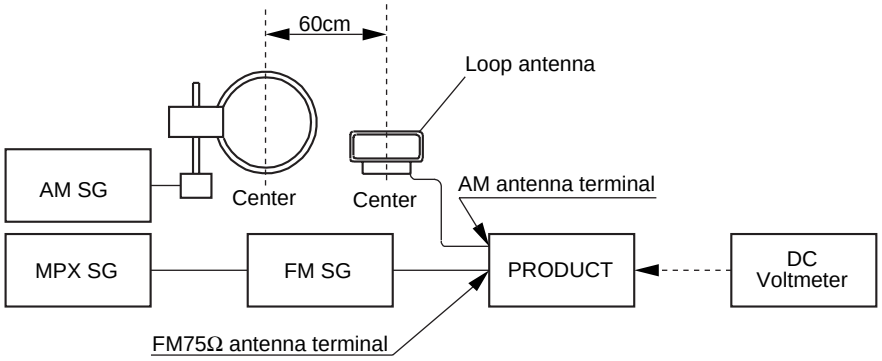


Fig.1 AM and FM Adjustment Wiring Diagram

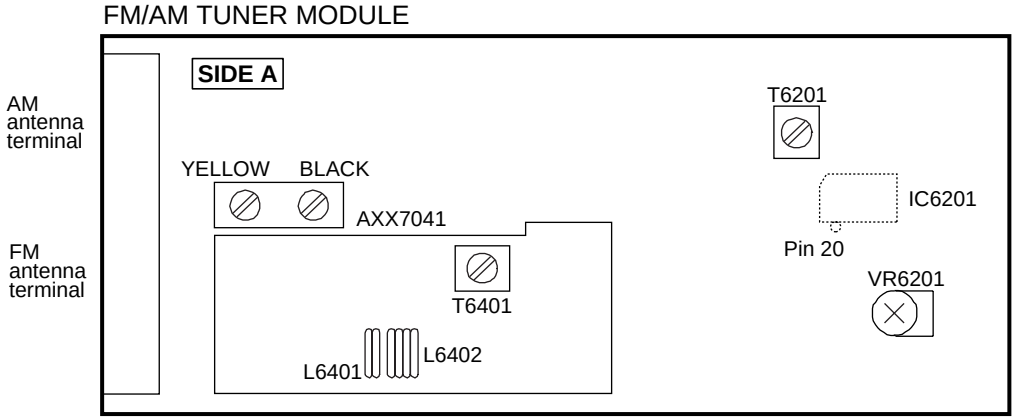


Fig.2 Adjustment Point

6.2 CASSETTE DECK SECTION

• Adjustment points and test points are shown in Fig.3, Fig.5 and Fig.7.

■ Mechanical Adjustment

• Test tape : NCT-111 (3kHz, 30min).

1. Tape Speed Adjustment

No.	Mode	Test Tape	Adjusting Points	Measurement Points	Adjustment Procedure	Remarks
1	Deck I PLAY	NCT-111 (Playback : 3kHz)	ADJ. VR on CASSETTE MECHA (Fig. 3)	TAPE TEST POINT (Rch) (AF Assy)	Press the PLAY SW and adjust so that the reading becomes 3000Hz ± 20Hz. Confirm that wow & flutter level is below 0.3% (in the reverse direction, confirm that the reading is within 2940Hz to 3090Hz).	

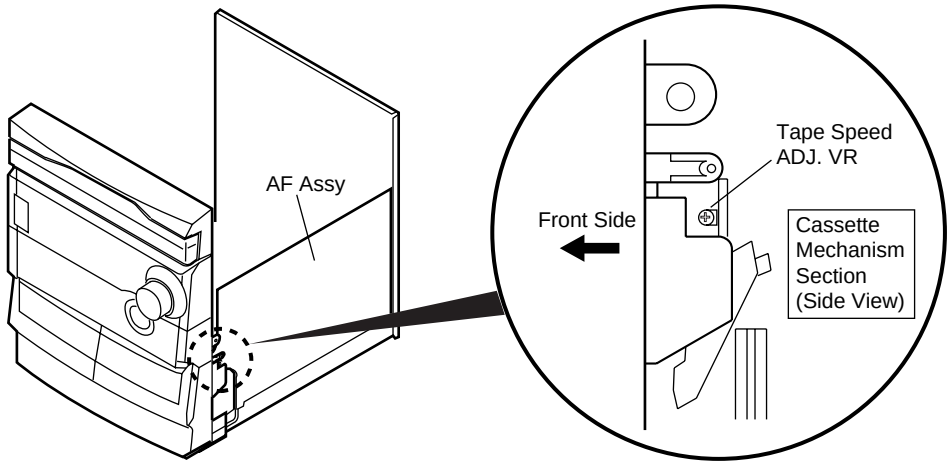


Fig.3 Tape Speed ADJ. Point

■ Electrical Adjustment

Check the following before starting.

(1) Confirm that the tape speed adjustment has been completed.
(2) Clean the heads and demagnetize them using a head eraser.
(3) Set the measurement level to 0 dBV = 1 Vrms.
(4) Use the specified tape for adjustment. Use the labeled (A) side of the test tape.
STD-331E : For playback check
STD-633 : Normal blank tape
(5) Provide yourself with the following measuring devides:
• AC millivoltmeter
• Low-frequency oscillator
• Attenuator
• Oscilloscope
(6) Adjust both right and left channels unless otherwise specified.
(7) Turn the DOLBY NR switch off unless otherwize specified.
(8) Warm up the unit for several minutes before adjustment.
In particular, be sure to warm up the unit in the REC/PLAY mode for 3 to 5 minutes before starting recording/playback frequency characteristics adjustment.
(9) Always follow the indicated adjustment order.
Otherwise, a complete adjustment may not be achieved.

Playback Adjustment (Decks I and II)

(1) Head Azimuth Adjustment
(2) Playback Level Adjustment

Recording Adjustment (Deck I)

(1) Bias Oscillation Frequency Adjustment
(2) Recording Bias Adjustment
(3) Recording Level Adjustment.
(4) ALC Operation Check

∗ As the reference recording level is 250nwb/m for STD-331E, the recording level will be higher by 4 dB for STD-331B (160nwb/m). When adjusting, pay carefull attention to the type of tape used.

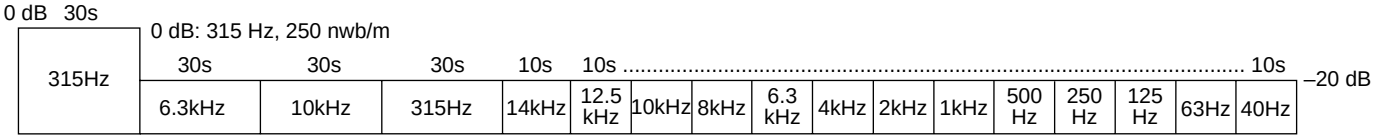


Fig.4 STD-331E Test Tape

■ Playback Adjustment

(1) Head Azimuth Adjustment

• Do not switch between forward and reverse operation with the screwdriver inserted.

Step	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	PLAY	STD-331E test tape (Playback: 10kHz, –20dB)	Deck I	Head azimuth adjustment screw (Fig. 5)	TAPE TEST POINT (L, Rch) (AF Assy)	Max. playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.
			Deck II				

(2) Playback Level Adjustment

• Since this adjustment determines playback dolby NR level, perform it carefully.

Step	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	PLAY	STD-331E test tape (Playback: 315Hz, 0dB)	Deck I	VR2303 (L ch) VR2304 (R ch)	TAPE TEST POINT (L, Rch) (AF Assy)	– 3.7dBV ± 2dB	
			Deck II	VR2305 (L ch) VR2306 (R ch)			

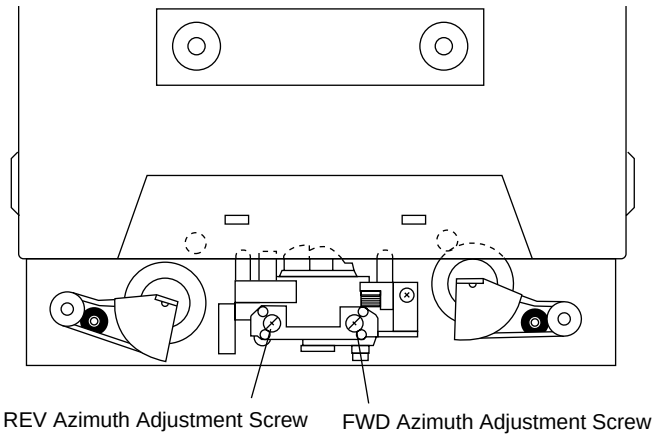


Fig. 5 Head Azimuth Adjustment Screw

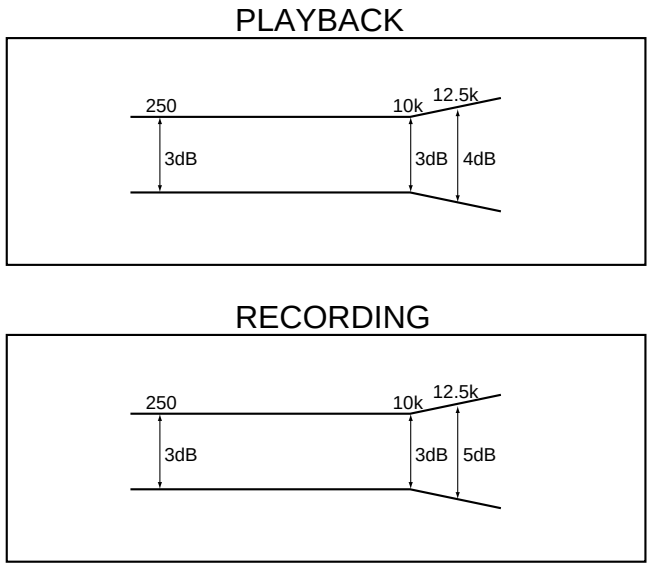


Fig. 6 Frequency Characteristics

■ Recording Adjustment

(1) Bias Oscillation Frequency Adjustment

Step	Mode	Input Signal/ Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	REC	Load the STD-633 test tape and set the recording mode.	Deck II	————	————	Oscillation frequency to be 105.0kHz ± 2kHz.	If the REC/STOP button for four seconds while the power is in STAND BY mode, the frequency will decrease 2 to 3 kHz.
			Deck I	L2801 (AF Assy)	Between Ⓐ point Fig. 7 and GND		

(2) Recording Bias Adjustment

• Since this adjustment affects recording bias, prevent distortion from increasing due to underbias.

Step	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	REC	Input a 315 Hz signal to the AUX terminal and set the input selector to AUX.	Deck II	————	TAPE TEST POINT (L, Rch) (AF Assy)	– 26dBV	
			Deck I	Input signal level			
2	REC → PLAY	Load the STD-633 test tape and record/playback the 315Hz and 10kHz signals (see the Note below)	Deck II	————	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat adjustment until playback level of the 10kHz signal is within 0 ± 0.5 dB from that of the 315Hz signal.	
			Deck I	VR2801 (L ch) VR2802 (R ch)			

Note : Set the 10 kHz input signal level to the same value as the 315 Hz input signal level of step 1.

(3) Recording Level Adjustment

Step	Mode	Input Signal/Test Tape	Adjusting Points		Measurement Points	Adjustment Value	Remarks
1	REC	Input a 315 Hz signal to the AUX terminal and set the input selector to AUX.	Deck II	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 7.7 dBV ± 0.5dB	
			Deck I				
2	REC → PLAY	Load the STD-633 test tape and record/playback the 315Hz signal.	Deck II	————	TAPE TEST POINT (L, Rch) (AF Assy)	Repeat recording, playback and adjustment until playback level of the 315 Hz signal becomes – 7.7 dBV.	
			Deck I	VR2301 (L ch) VR2302 (R ch)			

(4) ALC Operation Check

Step	Mode	Input Signal/Test Tape	Adjusting Points	Measurement Points	Adjustment Value	Remarks
1	REC/ PAUSE	Input a 315 Hz signal to the AUX terminal and set the input selector to AUX.	Input signal level	TAPE TEST POINT (L, Rch) (AF Assy)	– 8.2 dBV	
2			Set to a level + 10dB above the input level at step 1.		Confirm that the reading is – 2.2 ± 2.5 dBV.	

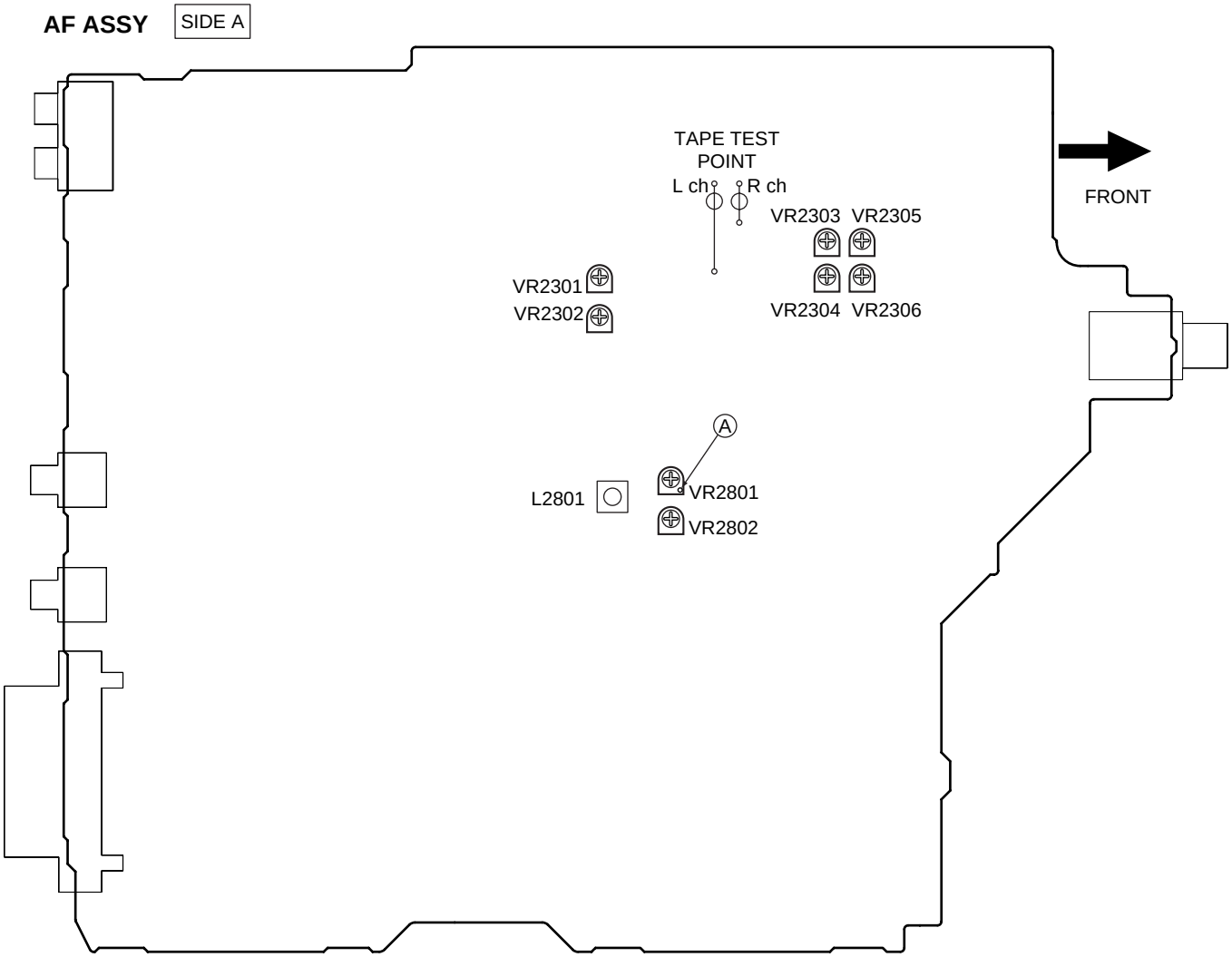


Fig.7 Adjustment and Measurement Points

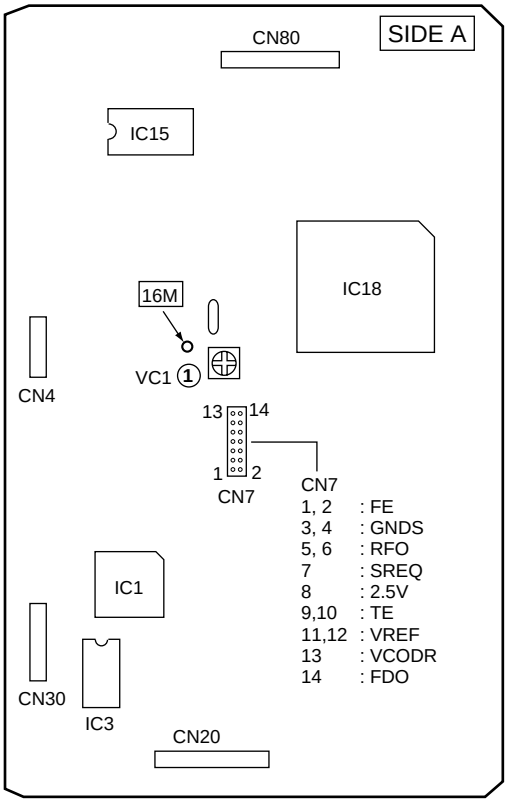
6.3 DVD SECTION

6.3.1 ADJUSTMENT ITEMS AND LOCATION

Note : When the Traverse mechanism adjustment is not properly adjusted, jitter, error rate and play ability are defective. The noise may come out by the case.

■ Adjustment Points (PCB Part)

DVD MAIN ASSY

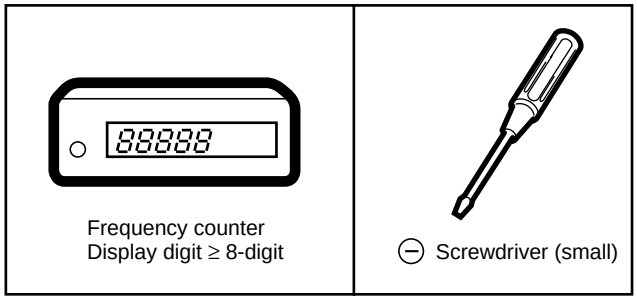


■ Adjustment Items

[Electrical Part]

① Master Clock Adjustment

6.3.2 JIGS AND MEASURING INSTRUMENTS



6.3.3 NECESSARY ADJUSTMENT POINTS

When → Adjustment Points

■ EXCHANGE PCB ASSY

Exchange board
DVD MAIN ASSY

→ **Mechanical point** _____

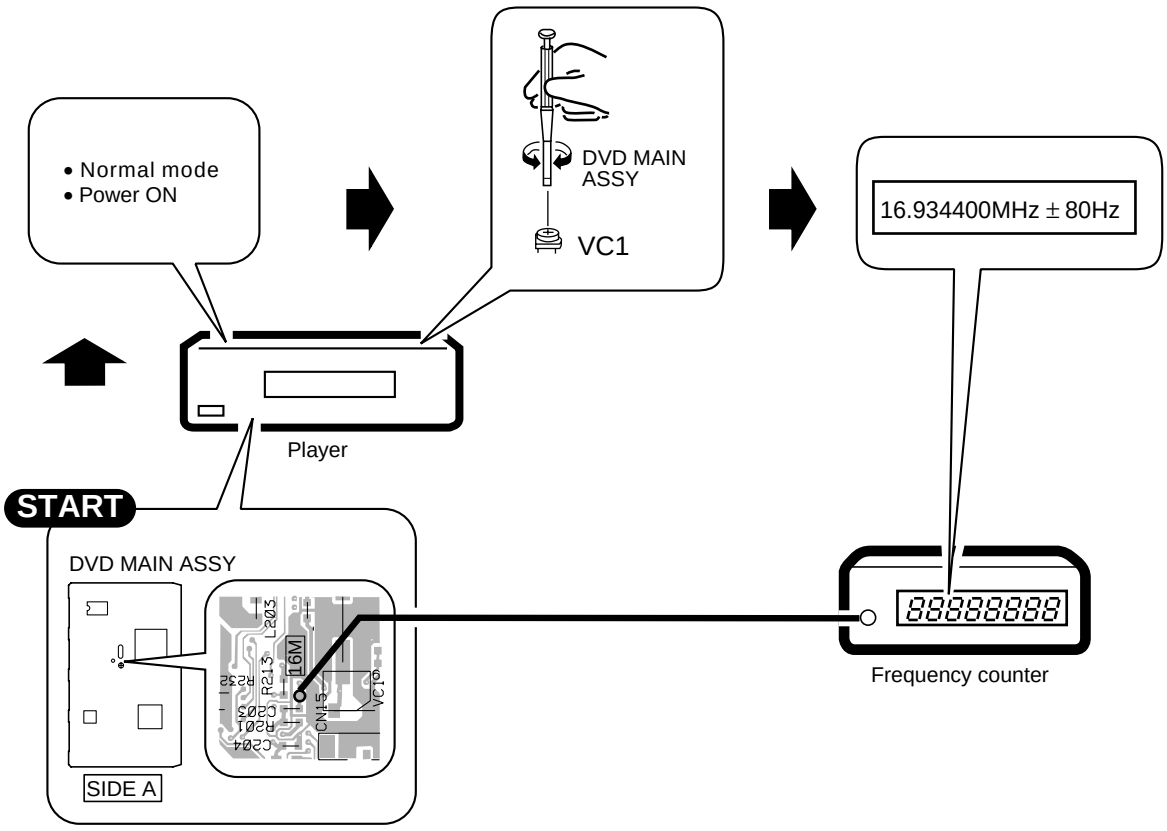
→ **Electric point** _____

Note : ① is adjusted already.

6.3.4 ELECTRICAL ADJUSTMENT

① Master Clock Adjustment

• When not properly adjusted : Uneven color



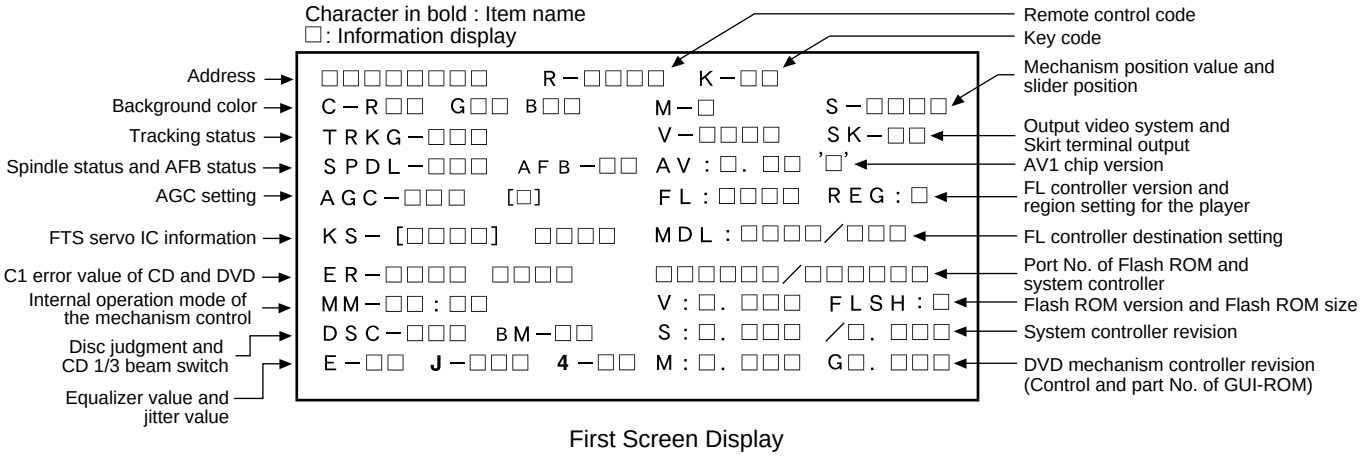
7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 TEST MODE SCREEN DISPLAY

Consecutive double-OSD display is supported during test mode. The screen is composed 10 lines with a maximum of 32 characters per line. It can't be used with the debugging display mode together.

• Screen Composition



First Screen Display

Caution :
The first screen and second screen switch by pressing [DISPLAY] key of the remote control unit.
It is only a version display part on the lower right of the screen those contents of display change.
ATB : ON/OFF information display and AGC manual setting display deleted with the second generation.
The displays of Tilt error value, Tilt servo status and pickup DVD/CLD display deleted with the third generation becomes LD part is deleted.

• Description of Each Item on the Display

(1) Address indication

The address being traced is displayed in number.

DVD : ID indication (hexadecimal number, 8 digits) [＊＊＊＊＊＊＊＊]
CD : A-TIME (min. sec.) [0 0 0 0 ＊＊＊＊]

(Note : For DVDs, decimal-number indication is possible.)

(2) Code indication of the remote control unit [R – ＊＊＊＊]

The code for the key pressed on the remote control unit, which is received by the FL controller, is displayed while the key is pressed. In the case of the double code, the second code will be displayed.

(3) Key code indication for the main unit [K – ＊＊]

The code for the key pressed on the main unit, which is received by the system controller, is displayed while the key is pressed.

(4) Background color indication [C – R＊＊ G＊＊ B＊＊]

(5) Tracking status [TRKG – ＊＊＊]

Tracking on	[ON]
Tracking off	[OFF]

(6) ① Spindle status [SPDL – ＊＊＊]

Spindle accelerator and brake, free-runnimg	[A/B]
FG servo	[FG]
Rough, velocity phase servo	[SRV]
Offset addition, rough, velocity phase servo	[O_S]

② AFB status [AFB – ＊＊]

ON	[ON]
OFF	[OFF]

(7) Mechanism position value [M – ＊]

Position code	[1] to [3]

(8) Slider position [S – ＊＊＊＊]

CD TOC area	[IN]
CD active area	[CD]

(9) AGC setting [AGC – ＊＊]

AGC on	[AGC-ON]
AGC off	[AGC-OFF]

(10) Output video system [V – ＊＊＊＊]

NTSC system	[NTSC]
PAL system	[PAL]
Auto-setting	[AUTO]

Skirt terminal output [SK – ＊＊]

VIDEO	[00]
S-VIDEO	[01]
RGB	[02]

＊: Display only the model which can do the output setting of skirt terminal.

(11) FTS servo IC information

DSP coefficient indication [KS – [＊＊＊＊] ＊＊＊＊]
Displays the address (four digits) of the specified coefficient and the setting value (four digits) with [TEST] and [9] keys.

(12) Error rate indication

① C1 error value of CD [ER – C1 ＊＊＊＊]
② C1 error value of DVD [ER – ＊＊＊＊ ＊＊＊＊]

(13) Internal operation mode of mechanism controller [MM – ＊＊ : ＊＊]

Internal mechanism mode (2 digits) and internal mechanism step (2 digits) of the mechanism controller

(14) ① Disk sensing [DSC – ＊＊＊]

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

② CD 1/3 beam switch [BM – ＊＊]

(15) ① Equalizer value [E – ＊＊]

② Jitter value [J – ＊＊]

nake the jitter four times, and renew it in every one second.
[4 – ＊＊]
CD is effective only in the jitter value.

(16) Version of the AV-1 chip [AV : ＊ . ＊＊' ＊']

(17) ① Version of the FL controller [FL : ＊＊＊＊]

② Region setting of the player [REG : ＊]

Setting value [1] to [6]

(18) Destination setting of the FL controller [MDL : ＊＊＊＊ / ＊＊＊]

For charactors in front represent the type of model :
There charactors that follow represent the destination code.
J : /J, K : /KU, /KC, /KU/KC, R : /RAM, /RL, /RD, /LB,
WY : /WY

(19) The part number of the flash ROM and system controller [＊＊＊＊＊＊ / ＊＊＊＊＊＊＊]

① Part number of the flash ROM <Front>
(Example) VYW1536-A → W1536A
(Example) PD6256A9 → 6256A9
② Part number of the system controller <Rear>
(Example) PD3381T1 → 3381T1

(20) ① Version of the flash ROM [V : ＊ . ＊＊＊]

② Flash ROM size [FLSH = ＊]

(21) Revision of the system controller [S : ＊ . ＊＊＊ / ＊ . ＊＊]

① Revision number of the external ROM part (flash ROM) of the system controller <Front>
② Revision of the internal ROM part of the system controller <Rear>

(22) Revision of the DVD mechanism controller [M : ＊ . ＊＊＊]

Revision number of the external ROM part (flash ROM) of the DVD mechanism controller

(23) Control and part numbers of the GUI-ROM [GUI : ＊＊＊＊]

No GUI model displays as "—— / ——".
OEM model displays the part number of GUI-ROM [GUI : ＊＊＊＊]

7.1.2 TROUBLE SHOOTING

XR-A9800D microcomputer troubleshooting

Symptom of problem	Thought cause	Check method
• The power supply does not enter though the power supply outlet is put, standby LED lit even if the POWER key is pushed.	• The microcomputer is not reset.	• Whether terminal RESET (11Pin) is "H" is confirmed. The operation of the RESET circuit is confirmed if not becoming "H".
	• The AC pulse is not input.	• Whether the AC pulse is input to AC input terminal (26Pin) is confirmed. If the AC pulse is not input, the AC pulse generation circuit is confirmed.
	• The oscillation circuit of the microcomputer does not oscillate.	• The microcomputer or the oscillation circuit is broken. The microcomputer or the oscillation circuit is exchanged.
• It enters the state of POWER OFF soon even in case of the POWER ON.	• The PROTECT input does not become "H".	• Whether "H" is input to PROTECT input (55Pin) when "H" is output to the terminal of SCAN ON is confirmed. If "H" is not input, diode D5570 etc. are confirmed.
	• If the function is DVD, the 3.3DETECT input is 2.9V or less.	• If the voltage of the 3.3DETECT (24Pin) terminal of the microcomputer is 2.9V or less, the voltage is adjusted to 2.9V or more.
• DVD does not operate at all. • Time is not displayed in FL DISPLAY at the DVD function.	• It does not communicate with the DVD microcomputer.	• Whether terminal (5,27Pin,95-97Pin) for the communication with the DVD microcomputer does the communication operation is confirmed. If the communication operation is not done, whether the FFC cable etc. are disconnected is confirmed. • Whether "H" is output to terminal DVDRESET (3Pin) is confirmed.
• KEY is not accepted at all.	• It is recognized that other KEY has already been pushed.	• When KEY is not pushed, whether KEY input terminal (18-20Pin) is 5V is confirmed. If the KEY input terminal is not 5V, whether KEY SW on the line breaks is confirmed.
• The Spectrum analyzer display does not displayed.	• The Spectrum analyzer input is not input.	• Whether Spectrum analyzer input terminal (23Pin) is 0.3V or more is confirmed. Whether DISPLAY MODE is DISP6 when it is 0.3V or more is confirmed. Whether Spectrum analyzer IC control terminal (8-10Pin) was changeable when it is 0.3V or less is confirmed. If it was changeable, whether Spectrum analyzer IC breaks is confirmed.

7.1.3 ERROR CODE

Error codes that are displayed on the FL display without using the remote control unit

FL Display	Possible causes	Operation of the unit
AV1 VER	AV-1 chip is not a match with the program of system controller	The sound may not out with the specific audio.
CPU AERR	CPU address error (Hardware is unusual.)	No operation
DMA AERR	DMA address error (Hardware is unusual.)	No operation
FLASH ID	Difference in versions of the internal ROM of the system controller and of the flash ROM, or bus line failure or reverse installation	No operation
FLASH WR	Write protect error of the flash ROM	No operation
FLASH SI	Difference in part number of the flash ROM (When the ROM which could't be used was used.) Or size error of the flash ROM (Use 4 or 8 M-bit.)	No operation
FLASH SU	Check sum error of the flash ROM (It exceeds the regular size.) or reverse installation (Hardware is unusual.)	No operation
ILLGAL	The system controller fetched a code other than an operation code (Hardware is unusual.)	No operation
RESERVE	Undefined interrupt (Hardware is unusual.)	No operation
SLOT	Inappropriate slot command issued (Hardware is unusual.)	No operation

Error codes that are displayed on the FL display by using the remote control unit (Mechanism controller error)

To display: ESC + DISPLAY + DISPLAY; Location of the display: □_□□▨▨□□

At the two digits of six digit display part at center of the FL display

To display the error history: ESC + DISPLAY + One shot; Location of the display: TV screen

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
11	Search timeout	Search could not be complete within 7 seconds.	Search could not be complete within 7 seconds, and it could not enter the target area within 7 seconds by VCD scan.	CD : Stops, DVD: Continues operation
12	Search retry error	A search could not be completed after 3 retries, search backup was executed 4 times, or in a case of timeout (6 seconds) while the unit was tracing 11 tracks or more beyond the target while the search operation was converging.	Backup against slider skip was executed 4 times during a search, or slider skip twice resulted in starting from the read-in point.	CD: Stops, DVD: Continues operation
19	Tracing timeout while converging	Timeout (10.5 seconds) while tracing at the stage of convergence of a search.		Stop
1B	Index 0 search error		During Track (Index) Search, the search for the beginning of a program could not be completed within 3 seconds (20 seconds in the case of Index Search) after positioning based on the TOC data was completed.	Stop
22	Timeout of slider inner circumference	Inside switch could not ON within 3 seconds.		Stop
23	Timeout of slider outer circumference	Inside switch could not OFF within 2 seconds.		Stop
33	No FOK pulse during playback CLVA	When the focus was deviated continuously 20 times.		Adjusts focus at the innermost circumference and tries to return to its position where the error was generated (for 3 times),then opens. If the same error persists after one retry, the tray opens. (No FOK pulse)
38	Disc-type-sensing error	If normal starting was impossible in the following three cases, disc-type sensing will be retried if other errors occure excepting C5 error. However, when the focus error "33" was occured continuously 3 times, it is finished as "38 error" at the moment: (1) startup with the first disc-type-sensing result, (2) forced startup with another disc by designating the disc type, (3) forced startup with the original disc by designating the disc type.		Open

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
39	SGC converge timeout	SGC could not converge during detects the peak		Open
41	Spindle timeout	The unit did not enter Stop mode within 10 seconds of issuance of a Stop command.		Stop
48	Spindle FG transition timeout	The spindle could not converge into within ± 12% of the target FG rotation speed within 10 seconds after spindle kick. The first time after startup (the first time after disc distinction), it doesn't become the number of the target rotation within five seconds. The first time after startup, detects the abnormal rotation number of high-speed continuously 3 loops. DVD: 5 to 9 mS , CD: 40 to 60 mS		Stops. (FG timeout)
49	Spindle PLL transition timeout	After the second times after startup, it doesn't become the number of the target rotation within five seconds. Detects the abnormal high-speed or low-speed rotations. DVD: 5 to 9 mS , CD: 40 to 60 mS		Stops. ("73" is displayed during starting process.)
4A	Spindle lock timeout	Spindle could not lock more than 1.5 seconds before start the AFB.		Stops. ("73" is displayed during starting process.)
51	Auto sequence timeout of peak detection	ABUSY did not return within 1 second after the DDTCT (peak detection) command was sent.		Stop
52	Auto sequence timeout of focus jump down	ABUSY did not return within 30 mS after the FJMPD (Focus jump 1 to 0) command was sent.		Stop
53	Auto sequence timeout of focus jump up	ABUSY did not return within 30 mS after the FJMPU (Focus jump 0 to 1) command was sent.		Stop
54	Auto sequence timeout of play AGC	ABUSY did not return within 50 mS after the GSUMON (play-AGC-measuring) command was sent.		Stop
55	Auto sequence timeout of disc-type-sensing	ABUSY did not return within 2 seconds after the DJSRT (disc-sensing) command was sent.		Stop
56	Auto sequence timeout of ATB2	ABUSY did not return within 1 second after the TBLOFS (Internal ATB after the completion of external ATB) command was sent.		Stop
57	Auto sequence timeout of tracking servo ON	ABUSY did not return within 500 mS after the TSON (tracking servo ON) command was sent.		Stop
58	Auto sequence timeout of ATB1	ABUSY did not return within 200 mS after the TBL (external ATB) command was sent.		Stop
59	Auto sequence timeout of focus gain adjustment	ABUSY did not return within 2 seconds after the FGN (focus gain adjustment) command was sent.		Stop
5A	Auto sequence timeout of tracking gain adjustment	ABUSY did not return within 2 seconds after TGN (tracking gain adjustment) command was sent.		Stop
5B	Auto sequence timeout of offset adjustment	ABUSY did not return within 1 second after the CMDAVE (offset adjustment) command was sent.		Stop
5C	Auto sequence timeout of modulation factor measurement	ABUSY did not return within 200 mS after the ADJMIR (modulation factor measurement) command was sent.		Stop
5D	Auto sequence timeout of auto focus bias	ABUSY did not return within 2 seconds after the AFB (auto focus bias) command was sent.		Stop
5F	Auto sequence already busy	A command could not be sent because ABUSY was low. ABUSY did not return within 200 mS after TLV command was sent.		Stop
62	Pause retry error	Pause mode could not be restored within three retries after it had been released.		Continues operation

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
71	ID can not read during tracing	An ID could not be read for 1 second or more.		Stop
72	Subcode check failure during playback		No frame could be read for 3 seconds or more.	Stop
73	ID can not read at the startup	An ID could not be read within 1 second after the AFB adjustment had been finished.		Opens (ID readout failure)
74	Subcode check failure during startup		No subcode could be read within 3 seconds after AFB adjustment had been finished.	Opens (Subcode readout failure).
81	Timeout for reading TOC of the mechanism controller		TOC readout took 30 seconds or more.	Stop
82	Timeout for reading TOC of the system controller		Reading TOC of the system controller took 30 seconds or more.	Stop
97	Switching error at currousel loading	Clamping could not be completed during loading.		Retry clamp operation
9A	Stop error of currousel tray	Currousel tray rotation could not be completed within 10 seconds.		Stop
9B	Push error of currousel tray	Push in the tray from the loading tray open state.		Close the tray
9C	Pull error of currousel tray	Pull out the tray from the loading tray close state.		Open the tray
9D	Stop error of currousel loading tray	Loading tray movement could not be completed within 10 seconds.		Open the tray
9E	Abnormal error of currousel switch	Tray switch error was detected with the currousel tray.		Stop (Initialize the mechanism in the mechanism controller.)
9F	Currousel initialize error	Initialization could not be achieved with the currousel tray.		Turn off the power instantly (no indication on the FL display and no writing to flash memory.)
A1	Communication timeout of DSP command	A command could not be issued to DSP because Command Busy (XCBUSY) was in force (XCBUSY = L) for a specified time (about 200 µS).		No operation
A2	Communication timeout for reading DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 200 µS) before and after a coefficient read command was issued to DSP, or the address echo-back after command issuance did not match the setup address.		No operation
A3	Communication timeout for writing DSP coefficient	Command Busy (XCBUSY) was in force for a specified time (about 1024 mS) before and after the coefficient write command was issued to DSP.		No operation
A4	Communication timeout for continuously writing DSP coefficient	Command Busy (XCBUSY) was in force for 200 µS during continuous coefficient writing, or before and after a continuous write command was issued to DSP.		No operation
B1	Timeout error for backup	In the tracing state during the backup sequence, codes could not be read for 1 second or more. In the backup sequence, tracking ON sequence of the servo DSP could not be completed even if more than 500 mS after the tracking ON command was issued.		Stops
B2	Retry error for backup	Tracing impossible after retring the tracking ON for 3 times in the backup sequence.		Stops
B3	Retry error for trace	During tracing, runaway was detected after three iterations of backup operations for detecting runaway.		Stops
C3	Detection of tracking overcurrent	During playback, the overcurrent detection port was at L for 300 ms or more continuously.		Stops (the mechanical controller operates independently).

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
(C5)	Short-circuit test corresponding error	While the power was on, the overcurrent detection port was at L for 40 ms or more continuously.		Turns off the power instantly (No indication on the FL display and no writing to flash memory)
E3	Violation against digital copy guard			Stops
F5	Tray being pushed	The tray switch that had been Open mode was forcibly changed to a mode other than Open by an external force.		Closes
F8	Loading timeout	Loading, unloading or clamping could not be completed within a specified time (about 5 seconds).		Reverses the loading direction. It timeout is repeated upon retry, the unit stops.
FC	Focus	The following error occured eight times. (1) Focus ON sequence could not be completed even if more than two seconds after the focus ON command (to the servo DSP) was sent. (2) Focus IN sequence was finished, actually focus IN was not completed.		Stops wherever possible then opens (stops in the case of side B).

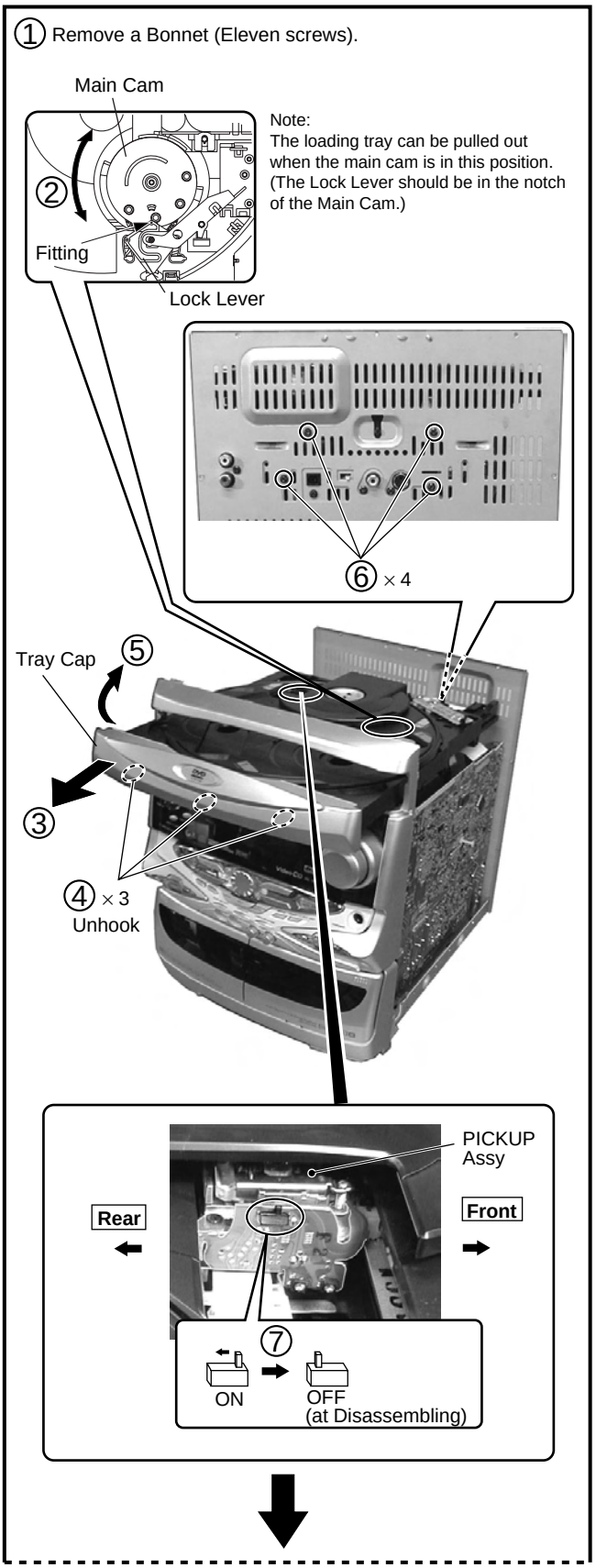
Error codes that are displayed on the FL display by using the remote control unit (Device error)

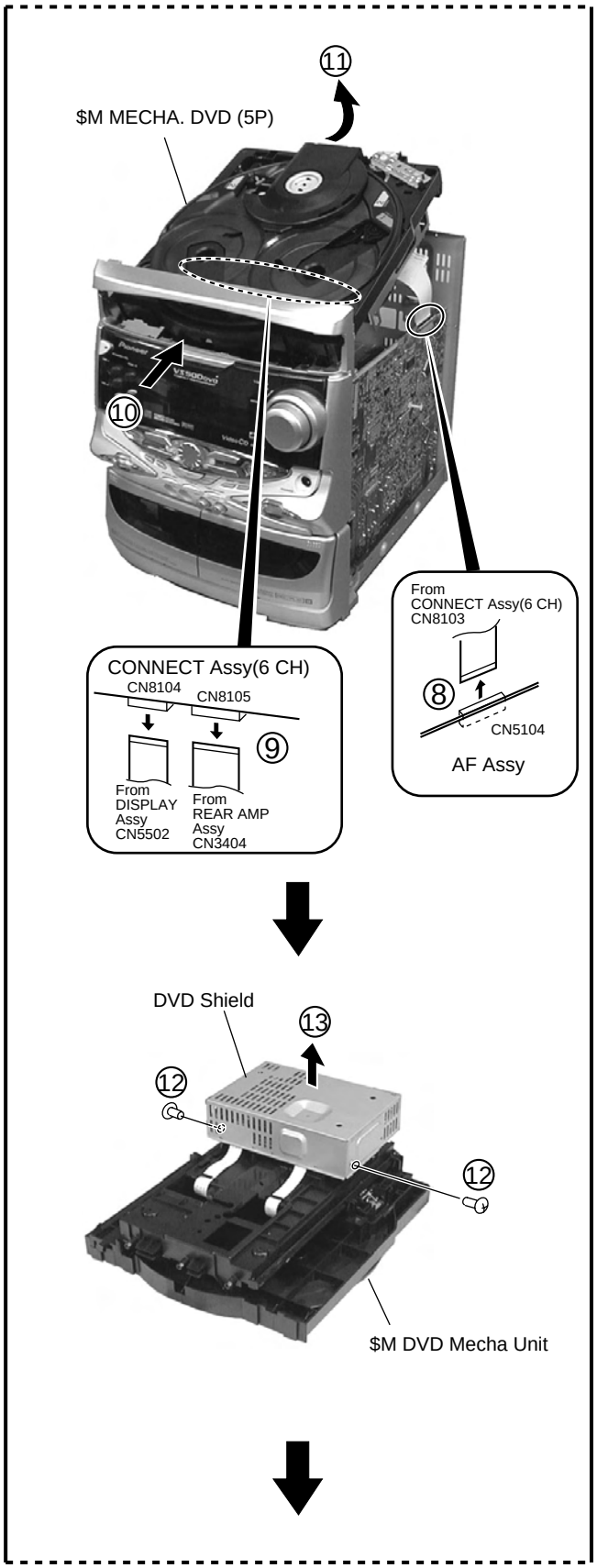
To display: ESC + DISPLAY + DISPLAY; Location of the display: At the two digits of left of the FL display

FL	Description of Error	Causes if with a DVD	Causes if with a CD	Operation of the Unit
bit3=1 08 etc.	AV1 access error (read, write NG)			No operation or it becomes debugging indication if the power is able to ON.
bit2=1 04 etc.	MY CHIP access error			
bit1=1 01 etc.	SRAM access error			

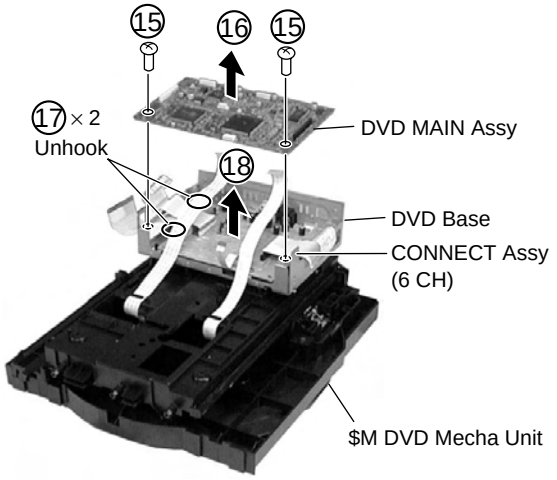
7.1.4 DISASSEMBLY

■ DVD MAIN ASSY





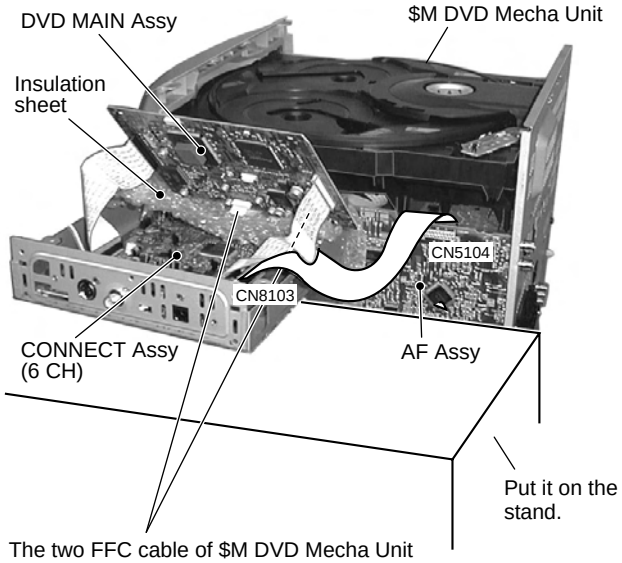
⑭ Release the All Connectors from DVD MAIN Assy.



⑲ Return the $M DVD Mecha Unit only to the body.

⑳ Connect the connectors which disconnecting from the connectors as step 14 excepting CN6.

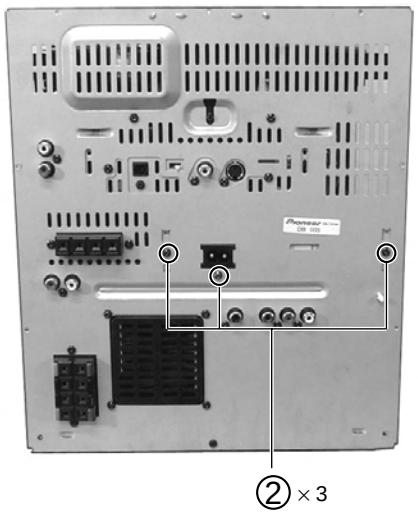
㉑ Perform the wiring as follows, and perform the diagnosis.



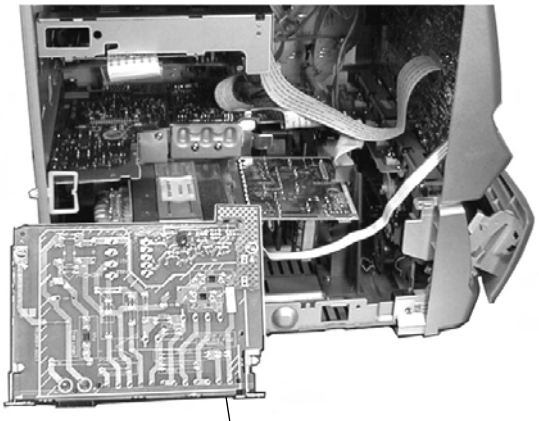
The two FFC cable of $M DVD Mecha Unit interferes with Loading Tray when it is movable. Please fixes the FFC cable to AF Assy with the tape so as not to interfere.

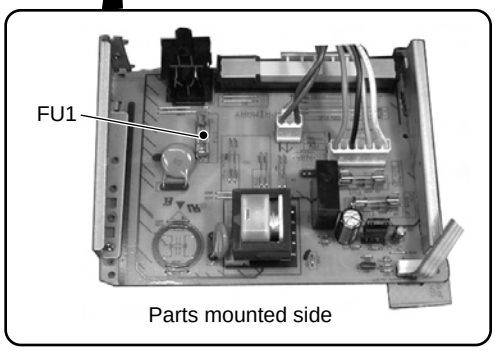
■ HOW TO EXCHANGE THE FUSE (PRIMARY ASSY)

① Remove a Bonnet (Eleven screws).



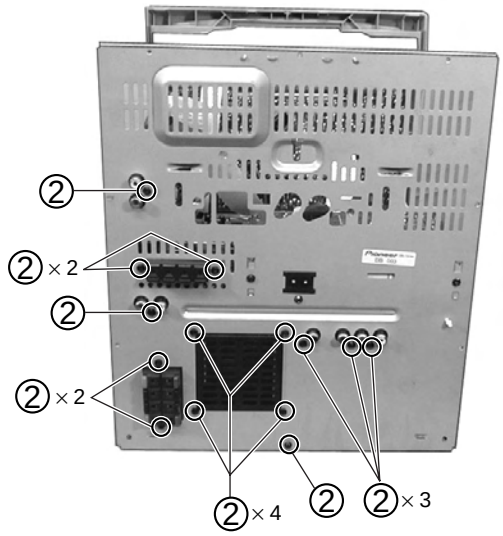
③ Remove the PRIMARY Assy.

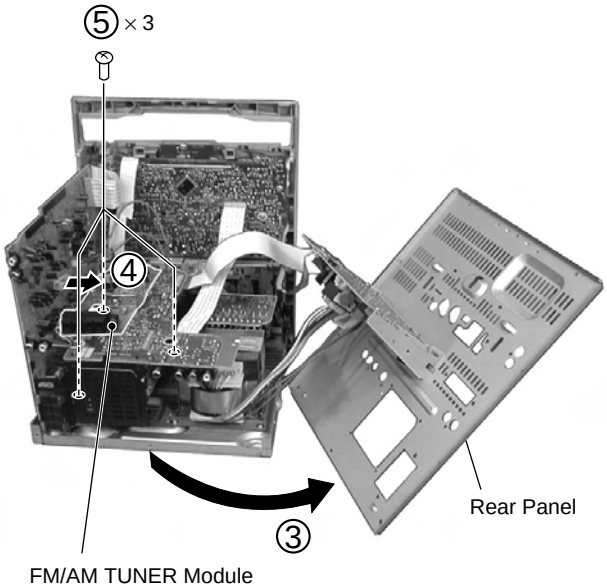




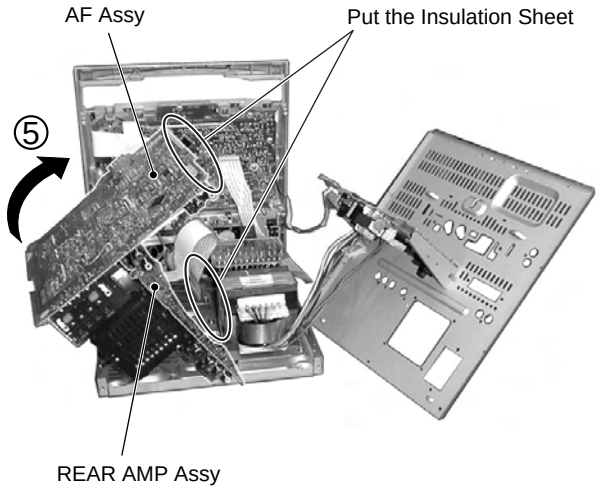
■ DIAGNOSIS of AF and REAR AMP ASSYS

① Remove a Bonnet (Eleven screws).
and remove the $M Mecha DVD (5P).





④ Please be useless in this case
and remove FM/AM TUNER Module.

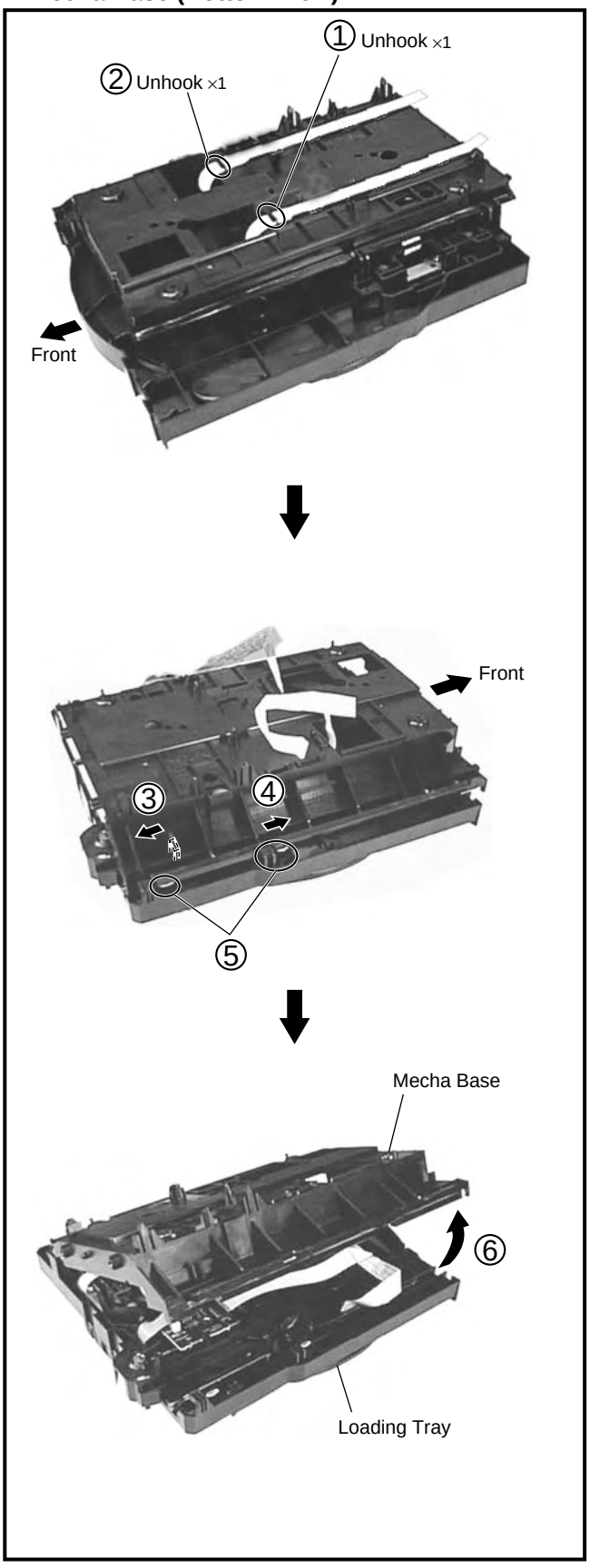


The product operates even if $M DVD Mecha. is not connected.

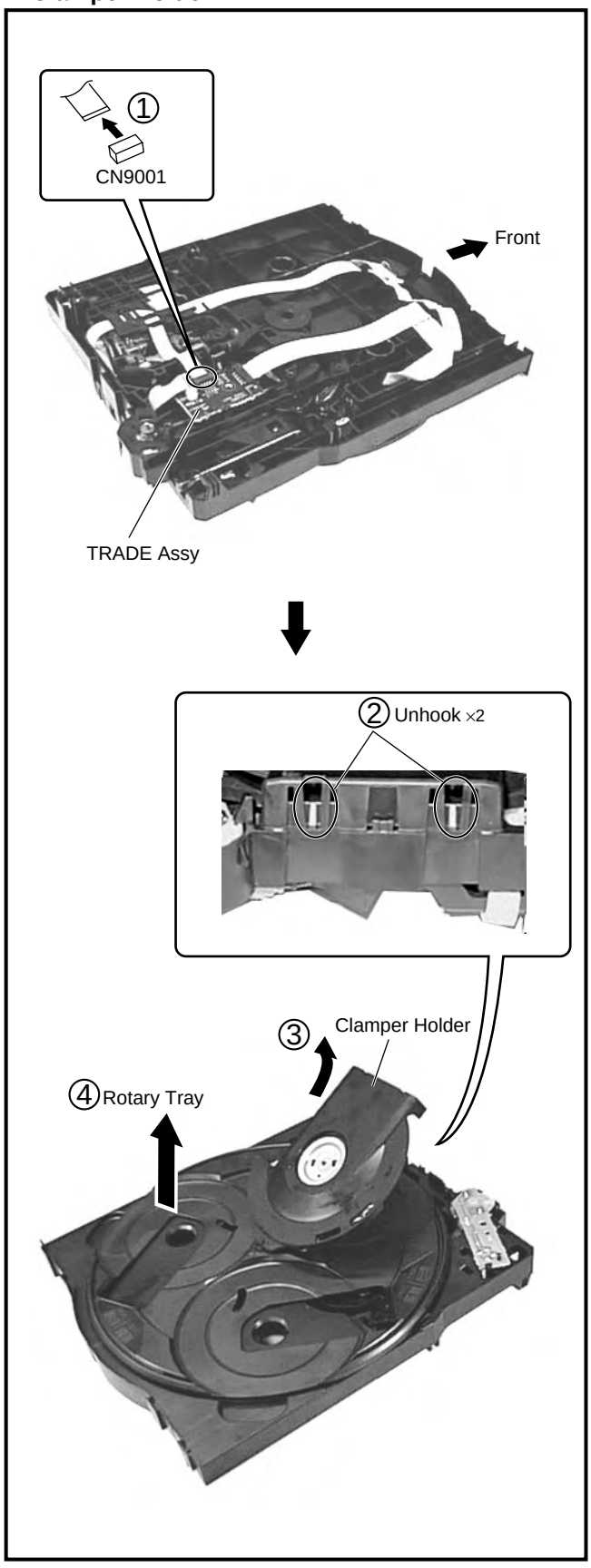
Diagnosis

■ $M DVD MECHA UNIT ADDITIONAL TO JOB

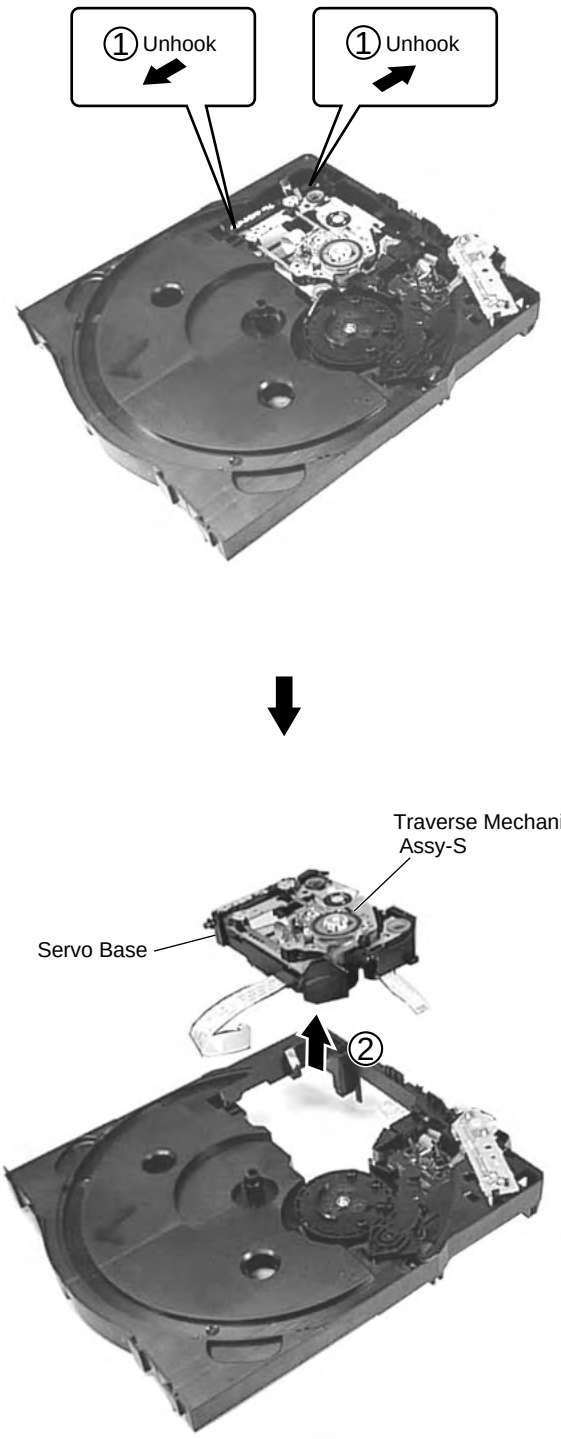
● **Mecha Base (Bottom View)**



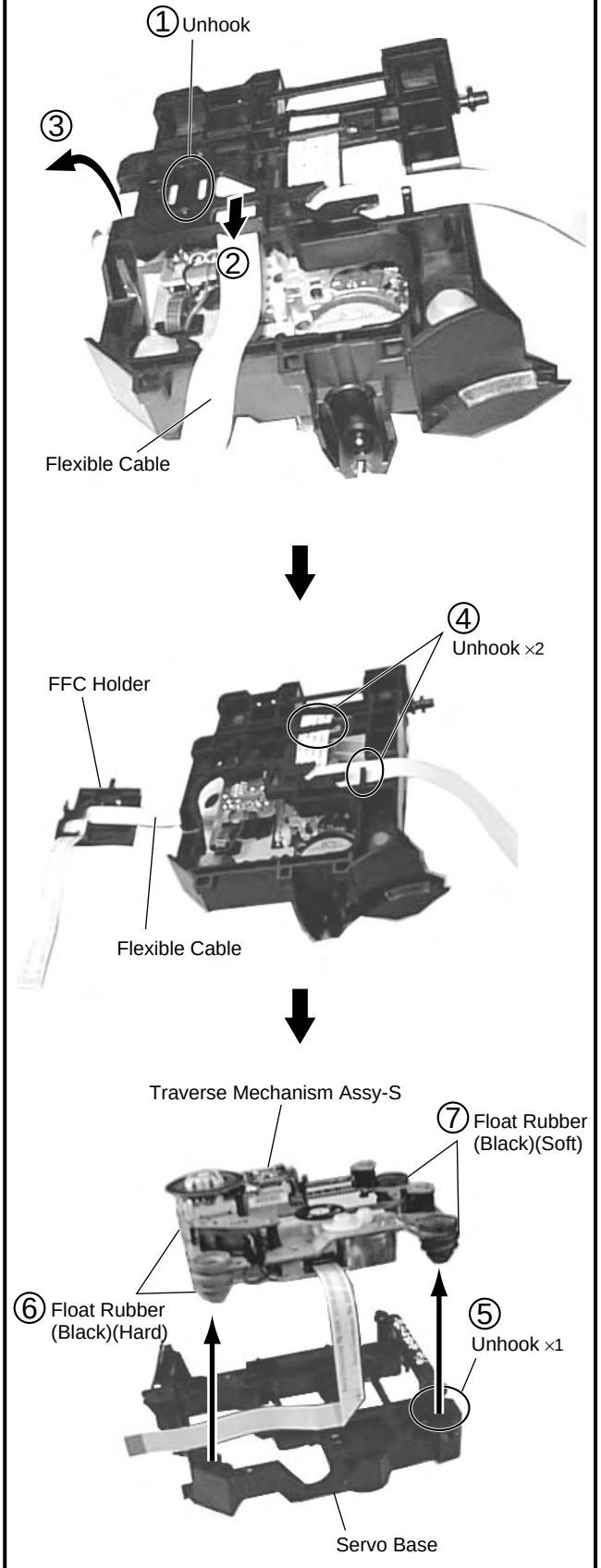
● **Clamper Holder**



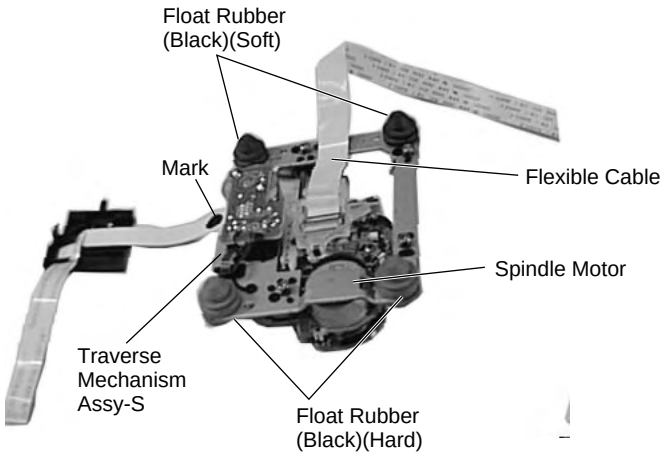
● **Servo Base**



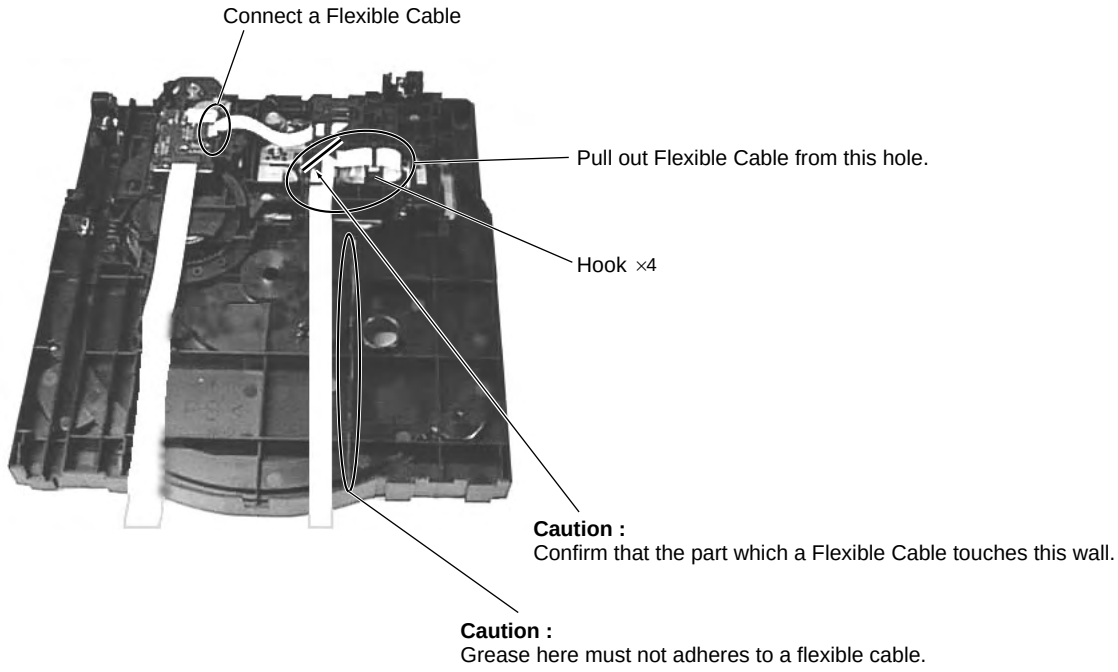
● **Traverse Mechanism Assy-S**



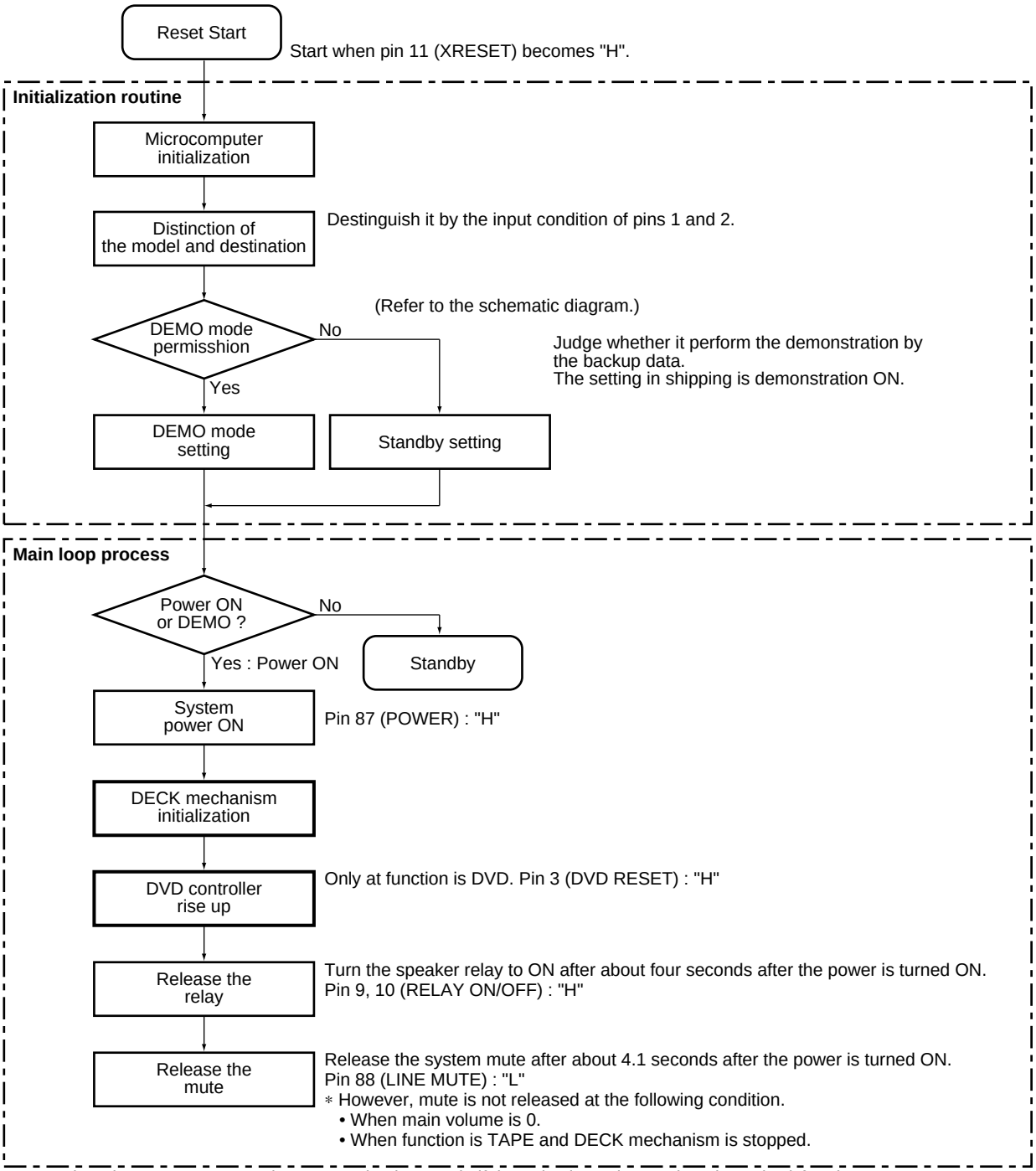
● **Style the Flexible Cable and Float Rubber Position in the Traverse Mechanism Assy-S**



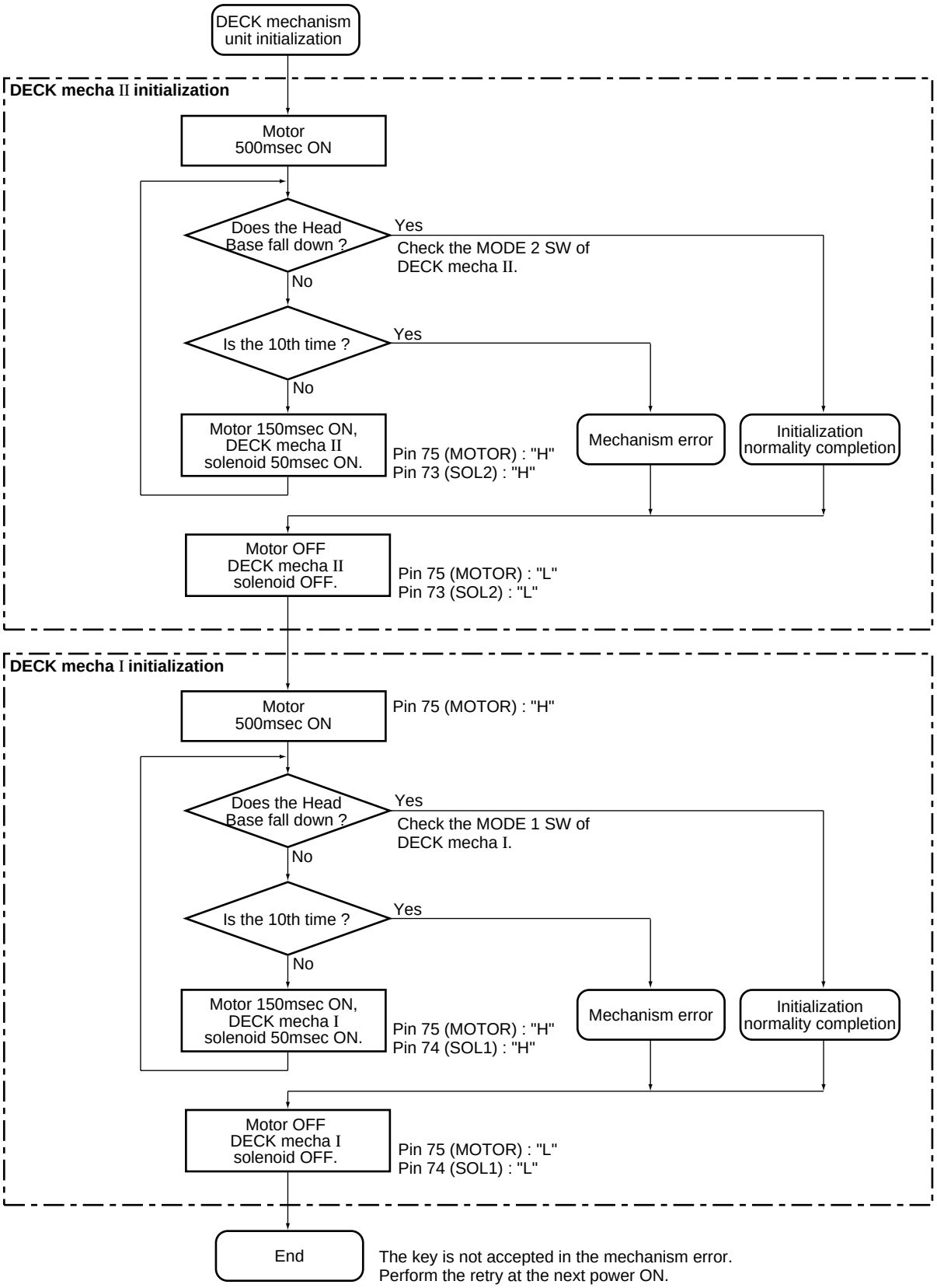
● **Style the Flexible Cable in the $M MECHA DVD Assy and Preparation before Installing the Mecha Base**



7.1.5 POWER ON SEQUENCE



Note : The microcomputer enter the memory backup mode if the pulse is not inputted to pin 26 (AC) for about 60 msec.
While the memory is backupped, all the process is not done.
It is revert from the memory backup mode when there is rising edge (↑) input at the pin 11 (XRESET).


DECK mechanism unit initialization
DECK mecha II initialization
Motor 500msec ON
Does the Head Base fall down ?
Yes
Check the MODE 2 SW of DECK mecha II.
No
Is the 10th time ?
Yes
No
Motor 150msec ON, DECK mecha II solenoid 50msec ON.
Pin 75 (MOTOR) : "H"
Pin 73 (SOL2) : "H"
Mechanism error
Initialization normality completion
Motor OFF DECK mecha II solenoid OFF.
Pin 75 (MOTOR) : "L"
Pin 73 (SOL2) : "L"
DECK mecha I initialization
Motor 500msec ON
Pin 75 (MOTOR) : "H"
Does the Head Base fall down ?
Yes
Check the MODE 1 SW of DECK mecha I.
No
Is the 10th time ?
Yes
No
Motor 150msec ON, DECK mecha I solenoid 50msec ON.
Pin 75 (MOTOR) : "H"
Pin 74 (SOL1) : "H"
Mechanism error
Initialization normality completion
Motor OFF DECK mecha I solenoid OFF.
Pin 75 (MOTOR) : "L"
Pin 74 (SOL1) : "L"
End
The key is not accepted in the mechanism error.
Perform the retry at the next power ON.

7.2 PARTS

7.2.1 IC

• The information shown in the list is basic information and may not correspond exactly to that shown in the schematic diagrams.

■ PDC064A (DISPLAY ASSY : IC5501)

• System Control Microcomputer

● Pin Function

No.	Pin Name	I/O	Function
1	DSP CLK	O	Clock output for DSP, CODEC and DIR controls
2	DSP DATAO	O	Data output for DSP, CODEC and DIR controls
3	XDVDRESET	O	Reset output of DVD microcomputer
4	KYC STB	O	Strobe output of Keycon IC (M65847AFP)
5	XRDY1	O	Communication ready output of DVD microcomputer
6	REAR MUTE	O	Rear mute output
7	DSP DATAI	I	Data input for DSP
8	TIMER LED	O	Timer LED output
9	RY ON/OFF	O	Relay ON/OFF
10	REAR RY	O	Rear relay ON/OFF
11	XRESET	–	
12	VOL JOG	I	Volume JOG input
13	MORP JOG	I	Sound Morphing JOG input
14	VSS	–	Ground
15	CF1	–	
16	CF2	–	
17	VDD	–	Power supply
18	KEY1	I	Key input 1 (A/D)
19	KEY2	I	Key input 2 (A/D)
20	KEY3	I	Key input 3 (A/D)
21	MS	I	Deck MS input
22	ST/TUNE	I	Tuner STEREO/TUNE input
23	SPE-IN	I	Spectrum analyzer signal input
24	3.3DETECT	I	DVD 3.3V detection input
25	MODEL3	I	Model distinguish input 3
26	AC	I	AC pulse interrupt input
27	LT11	I	Communication latch input of DVD microcomputer
28	DIRDATAIN	I	DIR data input
29	REMOCON	I	Remote control interrupt input
30	G01	O	Grid output
31	G02		
32	G03		
33	G04		
34	G05		
35	G06		
36	G07		
37	G08		
38	G09		
39	G10		
40	G11		
41	G12		
42	G13		
43	G14		
44	G15		
45	S01	O	Segment 1 output
46	VDD	–	Power supply
47	S02/D5597	I/O	Segment 2 output
48	S03/D5596		Segment 3 output
49	S04/D5595		Segment 4 output
50	S05/D5594	I/O	Segment 5 output/Destination SW4 input

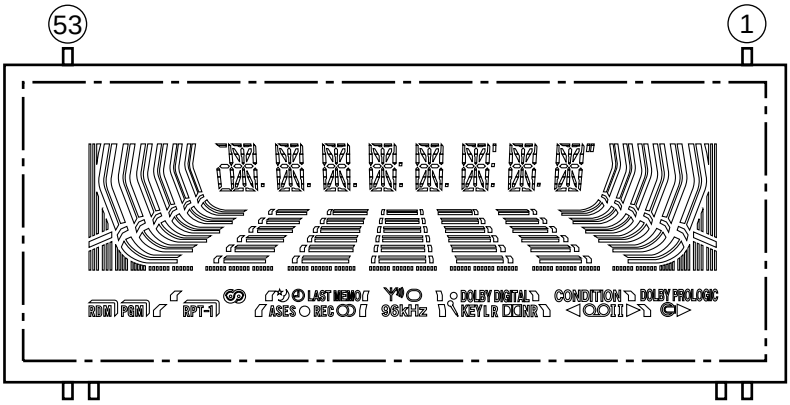
No.	Pin Name	I/O	Function
51	VFDP	–	
52	S06/D5593	I/O	Segment 6 output/Destination SW3 input
53	S07/D5592		Segment 7 output/Destination SW2 input
54	S08/D5591		Segment 8 output/Destination SW1 input
55	S09/TH		Segment 9 output/Protection input
56	S10/H.P.DET		Segment 10 output/Headphone insert/pull-out check input
57	S11		Segment 11 output
58	S12		Segment 12 output
59	S13		Segment 13 output
60	S14/ARF		Segment 14 output/DECK ARF SW input
61	S15/ARR		Segment 15 output/DECK ARR SW input
62	S16/MODE1		Segment 16 output/DECK MODE SW1 input
63	S17/MODE2		Segment 17 output/DECK MODE SW2 input
64	S18/HALF1		Segment 18 output/DECK HALF SW1 input
65	S19/HALF2		Segment 19 output/DECK HALF SW2 input
66	S20/CrO2_1		Segment 20 output/DECK CrO2 SW1 input
67	S21/CrO2_2		Segment 21 output/DECK CrO2 SW2 input
68	S22	O	Segment 22 output
69	S23		Segment 23 output
70	S24		Segment 24 output
71	DIR LOCK	I	DIR lock detection
72	VDD	–	Power supply
73	SOL2	O	DECK solenoid output 2
74	SOL1		DECK solenoid output 1
75	MOTOR	O	DECK motor output
76	LED CE	O	Chip enable output of LED driver (pull-down)
77	SUB CE	O	Chip enable output of YSS912C SUB DSP (pull-down)
78	MAIN CE	O	Chip enable output of YSS912C MAIN DSP (pull-down)
79	CODEC CE	O	Chip enable output of CODEC (pull-down)
80	DIR CE	O	Chip enable output of DIR (pull-down)
81	REEL1	I	DECK reel pulse input 1
82	REEL2		DECK reel pulse input 2
83	LSRSVOL	O	Rear volume data (pull-down)
84	CLFEVOL	O	Center volume data (pull-down)
85	PLL CE	O	Chip enable output of Tuner PLL
86	EVOL CE	O	Chip enable output of electronic volume IC
87	POWER	O	Power output
88	LINE MUTE	O	Line mute output
89	VSS	–	Ground
90	VDD	–	Power supply
91	EXP CLK	O	Clock output for EXP IC
92	EXP DATA	O	Data output for EXP IC
93	EXP CE	O	Chip enable output of EXP IC (BU4094BCF)
94	SCAN ON	O	Outputs for SW reading
95	SSI(SSO)	O	Communication data output of DVD microcomputer (outputs at AMP side)
96	SSO(SSI)	I	Communication data input of DVD microcomputer (inputs at AMP side)
97	SSCK	O	Communication clock output of DVD microcomputer
98	SYSDATA	O	Data output of the Tuner PLL data/electronic volume IC
99	TXDATA	I	Tuner data input
100	SYSCLK	O	Clock output of the Tuner PLL data/electronic volume IC

7.2.2 DISPLAY

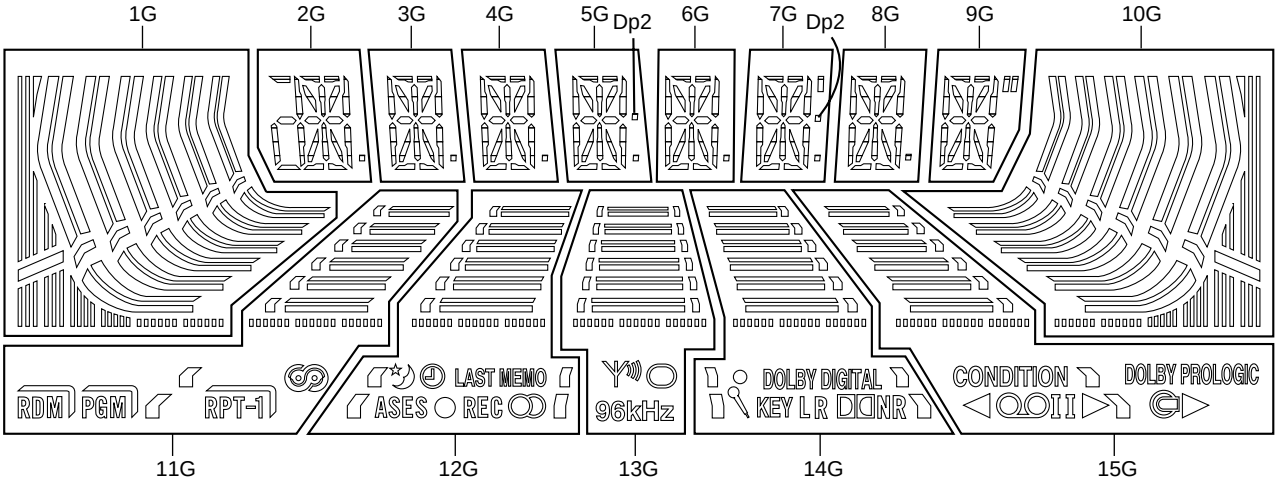
■ XAV3009 (DISPLAY ASSY :V5621)

- **FL Display**

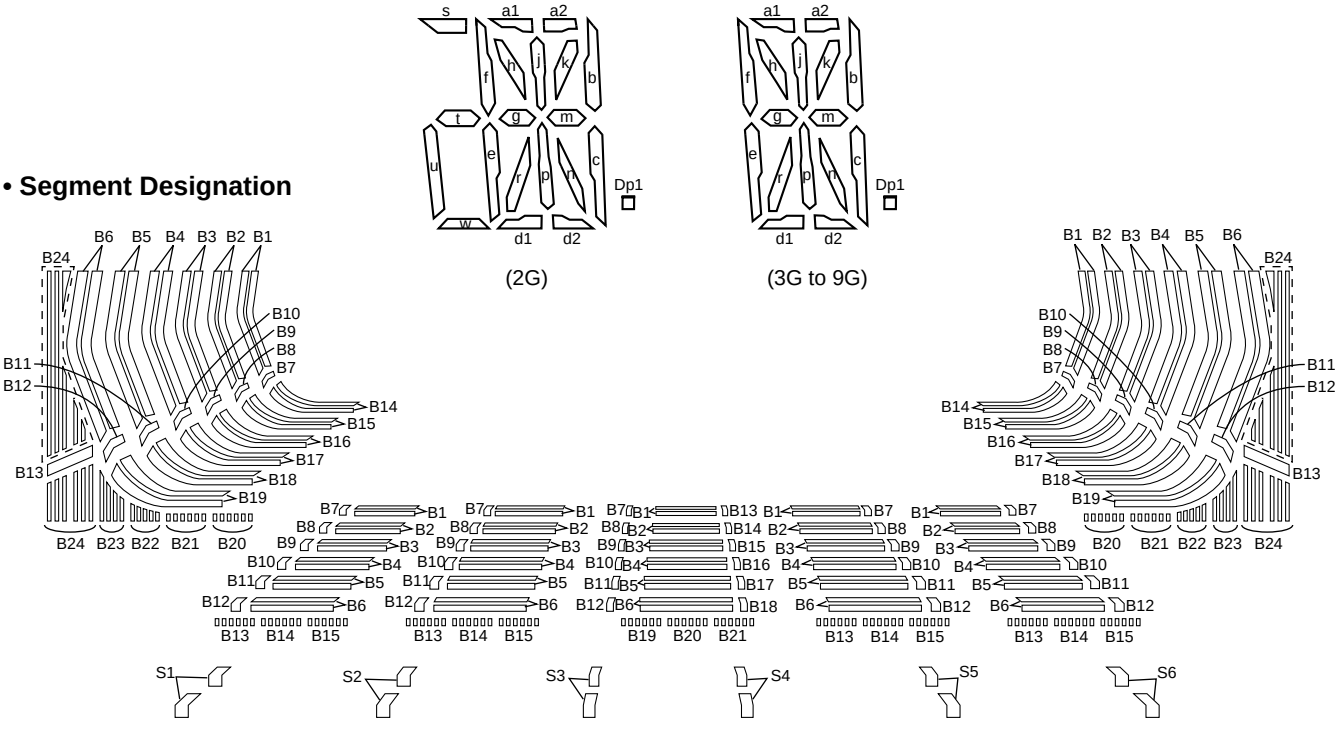
• Pin Assignment



• Grid Assignment



• Segment Designation



• Pin Connection

Pin No.	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27
Connection	F2	F2	F2	NP	NP	1G	2G	3G	4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G	P1	P2	P3	P4	P5	P6	P7
Pin No.	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	
Connection	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	P21	P22	P23	P24	NX	NX	NX	NX	NP	NP	F1	F1	F1	

NOTE 1) F1, F2..... Filament
2) NP..... No pin
3) NX..... No extend pin
4) DL..... Datum Line
5) 1G to 15G..... Grid
6) Field of vision is a minimum of 29° from the lower side.

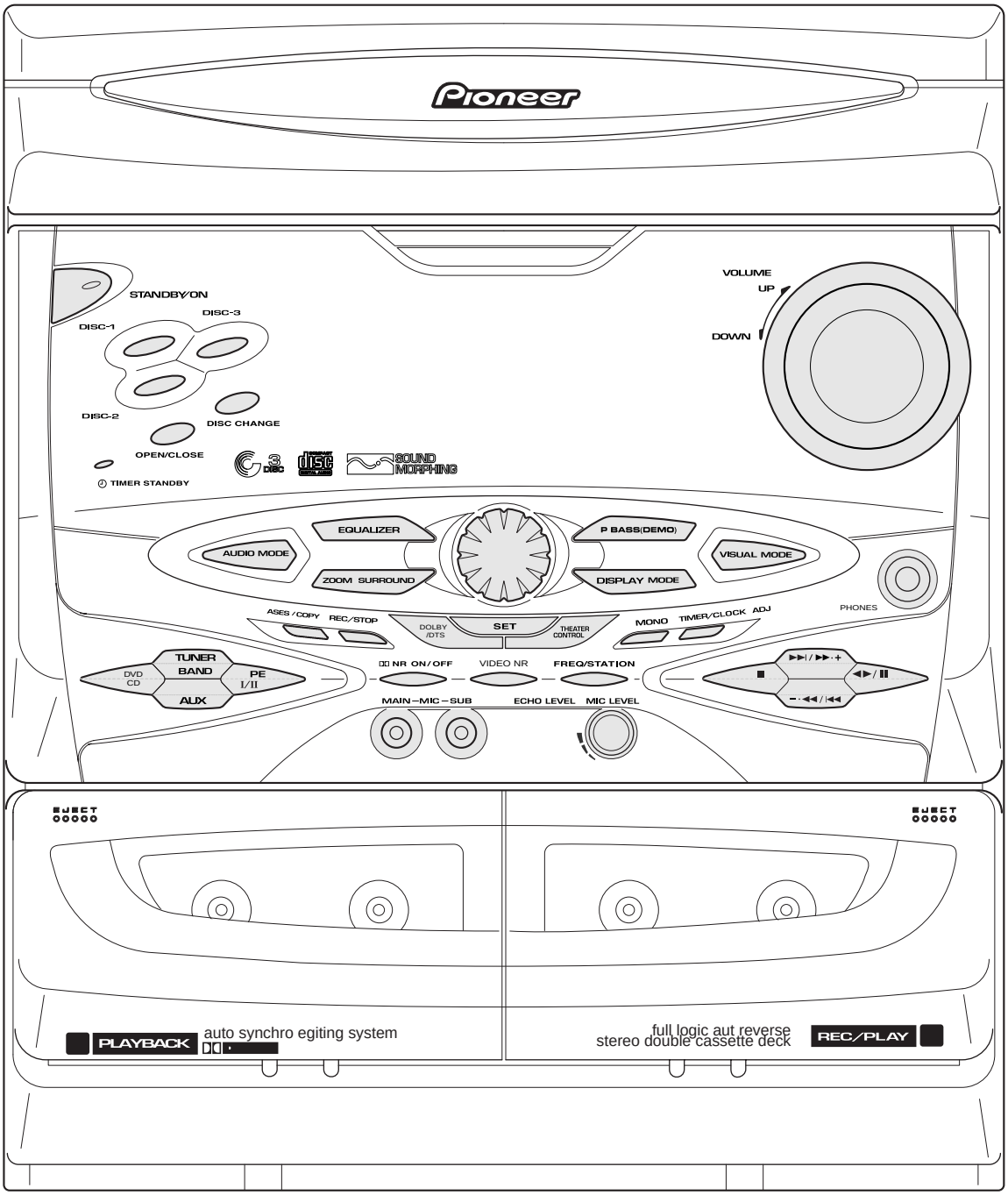
• Anode Connection

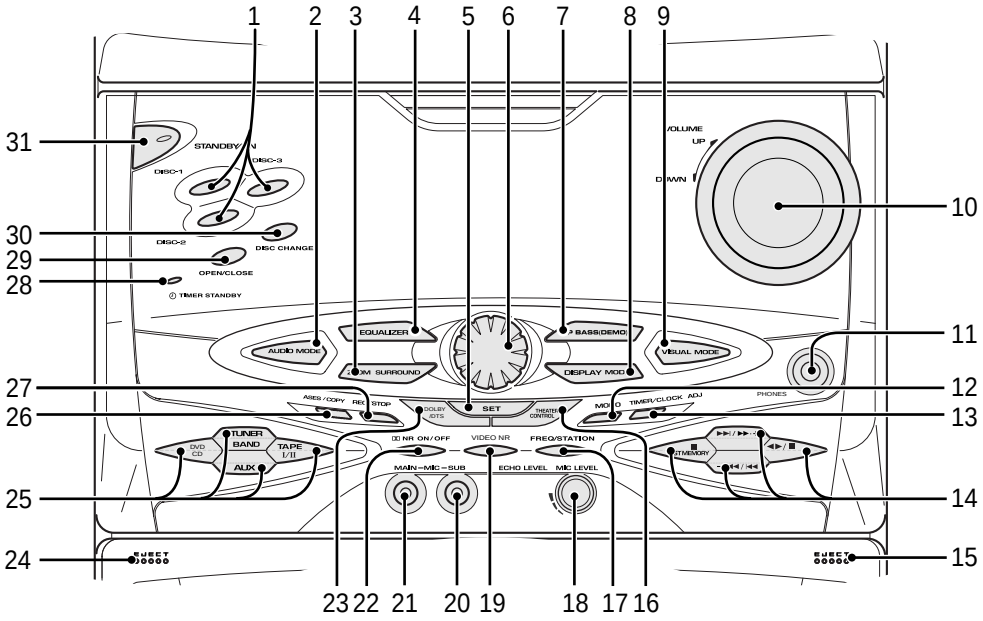
	1G	2G	3G,4G	5G	6G	7G	8G	9G	10G	11G	12G	13G	14G	15G
P1	B24	—	—	—	—	—	—	—	B24	RDM	S2	96kHz	S4	▷(RIGHT)
P2	B23	a1	a1	a1	a1	a1	a1	a1	B23		ASES			
P3	B22	a2	a2	a2	a2	a2	a2	a2	B22	PGM	○		KEY	S6
P4	B21	h	h	h	h	h	h	h	B21		REC	B21	L	▷ (LEFT)
P5	B19	j	j	j	j	j	j	j	B19	RPT	S3	B19	R	
P6	B17	k	k	k	k	k	k	k	B17			B17	DCNR	DOLBY PROLOGIC
P7	B15	b	b	b	b	b	b	b	B15	B15	B15	B15	B15	B15
P8	B14	f	f	f	f	f	f	f	B14	B14	B14	B14	B14	B14
P9	B13	g	g	g	g	g	g	g	B13	B13	B13	B13	B13	B13
P10	B6	m	m	m	m	m	m	m	B6	B6	B6	B6	B6	B6
P11	B11	c	c	c	c	c	c	c	B11	B11	B11	B11	B11	B11
P12	B10	e	e	e	e	e	e	e	B10	B10	B10	B10	B10	B10
P13	B4	r	r	r	r	r	r	r	B4	B4	B4	B4	B4	B4
P14	B9	p	p	p	p	p	p	p	B9	B9	B9	B9	B9	B9
P15	B8	n	n	n	n	n	n	n	B8	B8	B8	B8	B8	B8
P16	B2	d1	d1	d1	d1	d1	d1	d1	B2	B2	B2	B2	B2	B2
P17	B3	d2	d2	d2	d2	d2	d2	d2	B3	B3	B3	B3	B3	B3
P18	B12	dp1	dp1	dp1	dp1	dp1	dp1	—	B12	B12	B12	B12	B12	B12
P19	B18	—	—	dp2	—	dp2	—	—	B18	-1		B18	DOLBY DIGITAL	◁
P20	B20	—	—	—	—		—		B20	S1		B20	○	
P21	B16	s	—	—	—	—	—	—	B16		LAST MEMO	B16	S5	CONDITION
P22	B5	t	—	—	—	—	—	—	B5	B5	B5	B5	B5	B5
P23	B1	u	—	—	—	—	—	—	B1	B1	B1	B1	B1	B1
P24	B7	w	—	—	—	—	—	—	B7	B7	B7	B7	B7	B7

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Panel Section





1 DISC-1/2/3
Press to select discs in the player directly.

2 AUDIO MODE
Press to switch between the preset audio settings (use the **JOG** dial for smooth adjustment).

3 ZOOM SURROUND
Press to switch between Zoom Surround modes (use the **JOG** dial for smooth adjustment).

4 EQUALIZER
Press to switch between the preset Equalizer settings (use the **JOG** dial for smooth adjustment).

5 SET
Use to enter timer and other settings made with the **JOG** dial.

6 JOG dial
Use to morph between sound settings and when setting the clock or timer.

7 P.BASS (DEMO)
Press to switch between P.Bass modes (use the **JOG** dial for smooth adjustment).

8 DISPLAY MODE
Use to switch the sound level display pattern.

9 VISUAL MODE
Press to switch between the preset visual settings (use the **JOG** dial for smooth adjustment).

10 VOLUME UP/DOWN
Use to adjust the overall volume.

11 PHONES jack (Headphones)
Plug in a pair of headphones to this jack.

12 MONO
Press to listen to a stereo FM broadcast in mono (sound quality is usually improved).

13 TIMER / CLOCK ADJ
Use to start setting the clock/timer.

14 Playback/tuning controls

■ ST. MEMORY
When playing tapes or discs, press to stop a disc or tape currently playing. When in the tuner mode, press to change from manual tuning to the station presets.

►►I/►►· +
Use for forward scanning and track skip when playing a disc. Use for forward music search and fast-forward when playing a tape. When listening to the radio, use to select a preset station, or tune manually to a station.

–·◀◀/I◀◀
Use for reverse scanning and track skip when playing a disc. Use for reverse music search and rewind when playing a tape. When listening to the radio, use to select a preset station, or tune manually to a station.

◀▶/II
Press to start playback of a disc or tape. When playing a disc, press to pause playback (press again to restart). When playing a tape, press to start playing the other side.

15 EJECT (tape II)
Press to open the cassette door of deck II.

16 THEATER CONTROL
Press to change the picture mode. There are three modes: Cinema, Animation, and Standard.

17 FREQ / STATION
Press to switch between tuning and preset station modes.

18 MIC LEVEL
Use to adjust the volume of the microphone relative to the backing track when singing karaoke.

19 VIDEO NR
Press to switch on Video NR and improve the picture quality of Video CDs and DVDs.

20 MIC SUB
Plug in a second microphone into this jack for karaoke.

21 MIC MAIN
Plug in a microphone into this jack for karaoke.

22 ◻◻ NR* ON/OFF
Press to switch Dolby Noise Reduction on/off for tape playback and recording.

23 DOLBY/DTS
Press to switch Dolby Digital / Dolby Pro-Logic / DTS surround sound on/off.

24 EJECT (tape I)
Press to open the cassette door of deck I.

25 Function select buttons
DVD/CD
Press to change the system function to DVD/CD.

TUNER BAND
Press to switch to tuner function and to switch between AM and FM.

AUX
Press to change the system function to auxiliary.

TAPE I/II
Press to switch the system function to tape and to switch between tape decks I and II.

26 ASES / COPY
Press to start automatic CD/tape recording.

27 REC / STOP
Press to start/stop tape recording.

28 TIMER indicator
Lights when the timer has been set.

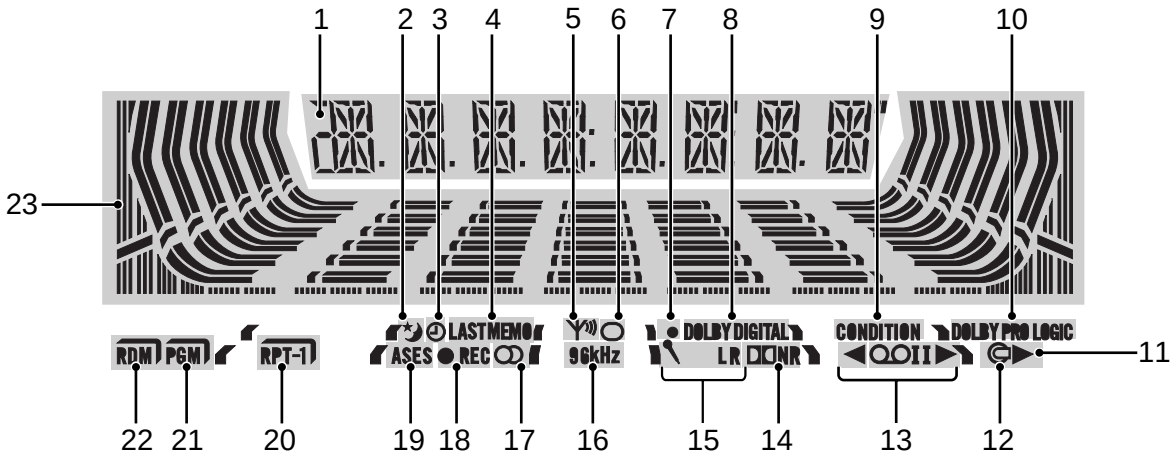
29 OPEN/CLOSE
Press to open and close the disc tray.

30 DISC CHANGE
Press to select the next disc in the player.

31 STANDBY/ON and standby indicator
Press to switch the unit between standby and on. Indicator lights in standby.

* Manufactured under licence from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.

■ Display Section



1 Character display

2 Sleep indicator
Lights when sleep timer has been set.

3 Timer indicator
Lights when either the record timer or the wake up timer has been set.

4 LAST MEMO
Lights when a bookmark was set for the DVD disc loaded.

5 Tuned indicator
Lights when the tuner is receiving a broadcast.

6 Mono indicator
Lights when the tuner is set to mono FM mode.

7 Beat cut 2 indicator
Lights when in beat cut 2 mode.

8 DOLBY DIGITAL
Lights when a Dolby Digital DVD disc is playing.

9 CONDITION
Lights when a DVD disc is loaded that has had preferences set for language, screen, etc.

10 DOLBY PRO LOGIC
Lights when Dolby Pro Logic is switched on.

11 Disc play indicator
Lights when a DVD/CD/Video CD is playing.

12 Disc indicator
Lights when the system is in DVD/CD/Video CD mode.

13 Tape indicators
◄ and ► – Indicates the current tape play/record direction.

I or II – Indicates the current tape deck, I or II.

14 NR
Lights when Dolby Noise Reduction is switched on.

15 Karaoke indicators
L R – Indicates which channels of the karaoke track you're hearing.

– Lights when in the karaoke mode.

16 96kHz
Lights when a DVD disc is playing that contains 96kHz audio.

17 STEREO
Lights when the tuner is receiving a stereo FM broadcast in auto stereo mode.

18 REC
Lights when recording to tape.

19 ASES
Lights during automatic recording of a CD.

20 RPT / RPT-1
Highlights during repeat play mode.

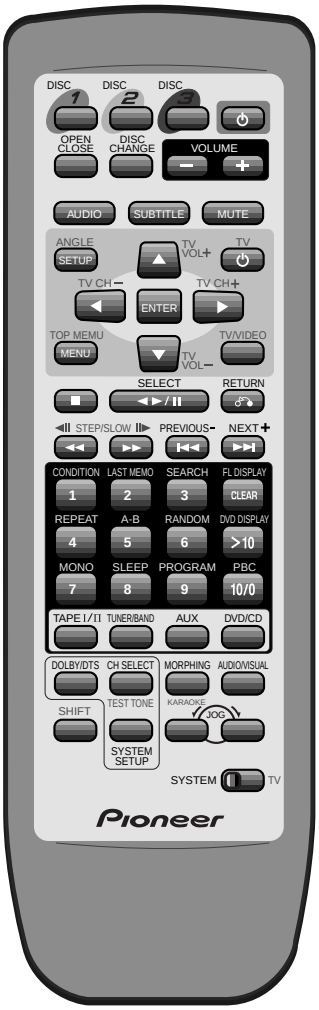
21 PGM
Highlights during program playback mode.

22 RDM
Highlights during random playback mode.

23 Sound morphing / sound level display

■ Remote Control Unit

To learn about the function of a particular button, look up the name of the button in the following alphabetical list (buttons marked with symbols appear first).



⏻
Press to switch the system on or into standby.

◄▲▼►
Use to navigate the on-screen menus.

■
Press to stop a disc or tape currently playing.

◄ ►/II
Press to start playing a disc or tape, or pause one already playing.

◄◄
Use to scan backward on a disc, or fast-rewind a tape. When listening to the radio, use for tuning to stations.

►►
Use to scan forward on a disc, or fast-forward a tape. When listening to the radio, use for tuning to stations.

◄II
Use with the **SHIFT** button for reverse frame-advance and slow motion reverse playback of a DVD disc.

II►
Use with the **SHIFT** button for frame advance and slow motion forward playback of a DVD or Video CD.

I◄◄
Use to skip back tracks/chapters on a disc or tape. When listening to the radio, use to change the station preset.

►►I
Use to skip forward tracks/chapters on a disc or tape. When listening to the radio, use to change the station preset.

>10
Use to select numbers over 10 (press this button, then input the number using the other number buttons).

10/0
Use as zero or 10 when entering numbers (for track numbers, station presets, TV channels, etc.).

1–9
Number buttons (for track numbers, station presets, TV channels, etc.).

A A-B (SHIFT & 5)
Press to mark the start and end points of a loop to repeat when playing discs.

ANGLE (SHIFT & SETUP)
Press to switch camera angle on DVD discs recorded with multiple camera angles.

AUDIO
Press to switch the audio language of DVD discs.

AUDIO/VISUAL
Press to switch between Audio Preset and Visual Preset sound modes.

AUX
Press to change the system function to auxiliary.

C CH SELECT
Use to select a speaker when adjusting channel levels.

CLEAR
Press to clear or cancel various operations.

CONDITION (SHIFT & 1)
Press to memorize the current DVD disc preferences.

D DISC-1/2/3
Use to select discs in the player directly.

DISC CHANGE
Press to select the next disc in the player.

DOLBY/DTS
Press to switch Dolby Digital / Dolby Pro-Logic / DTS surround sound on/off.

DVD DISPLAY (SHIFT & >10)
Press to display disc information on-screen.

DVD/CD
Press to change the system function to DVD/CD/ Video CD.

E ENTER
Use to select items from on-screen menus.

F FL DISPLAY (SHIFT & CLEAR)
Press to switch the display mode.

J JOG
Use to morph between sound settings and when setting the clock or timer.

K KARAOKE (SHIFT & MORPHING)
Press to switch the karaoke mode.

L LAST MEMO (SHIFT & 2)
Press to memorize the current position on a DVD disc.

M MENU
Press to display the disc menu of a DVD disc.

MONO (SHIFT & 7)
Press to listen to a stereo FM broadcast in mono (sound quality is usually improved).

MORPHING
Press to switch the sound morphing mode (adjust using the **JOG** buttons).

MUTE
Press to mute all sound from the speakers. Press again to restore the sound.

N NEXT +
Press to display the next menu screen on a PBC Video CD.

O OPEN/CLOSE
Press to open/close the disc tray.

P PBC (SHIFT & 10/0)
Press to switch Video CD playback control on or off.

PREVIOUS –
Press to display the previous menu screen on a PBC Video CD.

PROGRAM (SHIFT & 9)
Press to start programming a playlist.

R RANDOM (SHIFT & 6)
Press to start random playback of tracks/discs loaded.

REPEAT (SHIFT & 4)
Use to select a repeat mode for discs.

RETURN
Press to leave a menu screen without making changes. During PBC playback at a Video CD, press to display the PBC menu.

S SEARCH (SHIFT & 3)
Use to select the disc search mode (track, chapter, title or time).

SELECT
Press to start playing the selected track from a Video CD PBC menu.

SETUP
Press to display the DVD Setup menu for access to various sound, picture and language options.

SHIFT
Use to access secondary functions printed in red or orange on the remote control.

SLEEP (SHIFT & 8)
Press to set up the sleep timer.

STEP/SLOW
See **◄II** and **II►** above.

SUBTITLE
Press to switch the subtitle language of DVD discs during playback.

SYSTEM SETUP
Press to display the menu for setting up surround sound.

SYSTEM / TV switch
When set to system the remote controls the system unit; when set to tv, the remote controls your TV.

T TAPE I/II
Press to switch to the tape function and to switch between tape decks I and II.

TEST TONE (SHIFT & CH SELECT)
Press to output a test tone when adjusting channel levels.

TOP MENU (SHIFT & MENU)
Press to display the top menu of a DVD disc.

TUNER/BAND
Press to switch to the tuner, and use to switch between FM and AM bands.

TV ⏻
Press to switch your TV on or into standby.

TV CH +
Press to change the TV channel.

TV CH –
Press to change the TV channel.

TV VOL +
Press to turn up the TV volume.

TV VOL –
Press to turn down the TV volume.

TV/VIDEO
Press to switch the TVs input between the built in TV tuner and an external video source.

V **VOLUME +/–**
Use to adjust the overall volume level.

8.2 SPECIFICATIONS

Amplifier Section

Continuous Power Output – Stereo (XR-A9800D)
Continuous average power output of 70 watts* per channel, min., at 6 ohms, from 60 Hz to 15,000 Hz with no more than 5%** total harmonic distortion (front L/R).

* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claim's for Amplifiers.

** Measured by Audio Spectrum Analyzer.

Surround
XR-A9800D, XR-VS500D (RMS)
Front ..... 100 W per channel (1 kHz, 10% T.H.D., 6 Ω)
Center, Rear R, L ..... 33 W per channel (1 kHz, 10% T.H.D., 8 Ω)

Disc section

Digital audio characteristics ..... DVD fs: 96 kHz, 24-bit
Type ..... DVD system, Video CD system and Compact Disc digital audio system
Frequency response ..... 4 Hz to 44 kHz
S/N ratio ..... 95 dB
Dynamic range ..... 95 dB
Total harmonic distortion ..... 0.005 %
Wow and Flutter ..... Limit of measurement ..... (±0.001 % W.PEAK) or less (EIAJ)

Cassette deck section

Systems ..... 4 track, 2-channel stereo
Heads ..... Recording/playback head × 1
Playback head × 1
Motor ..... DC servo motor × 1
Tape types ..... TYPE I (Normal)/TYPE II (HIGH/CrO_2) tape

FM tuner section

FrequencyRange ..... 87.5 MHz to 108 MHz
Antenna input ..... 75 Ω unbalanced

AM tuner section

FrequencyRange
With 9 kHz step ..... 531 kHz to 1,602 kHz
With 10 kHz step ..... 530 kHz to 1,700 kHz
Antenna input ..... Loop antenna

Miscellaneous

Power Requirements
US and Canadian models ..... AC 120 V, 60 Hz
Australian models ..... AC 240 V, 50/60 Hz
Power Consumption ..... 170 W
Power Consumption in Standby mode ..... 1 W
Dimensions ..... 270 (W) x 320 (H) x 339 (D) mm ..... 10 5/8 (W) x 12 5/8 (H) x 13 3/8 (D) in.
Weight (without package) ..... 10.2kg (22 lbs. 8oz.)

Accessories

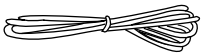
Operating instructions 1
Remote control unit 1
Size AA/R6P dry cell batteries 2
FM antenna 1
AM loop antenna 1
Power Cord 1
Video Cord 1
Warranty card 1

• Specifications and design subject to possible modification without notice, due to improvements.

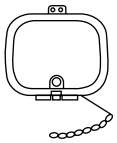
■ **Accessories**

① Remote Control Unit × 1
(XZN3109)

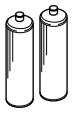
② FM Antenna × 1
(ADH7004)



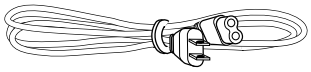
③ AM Loop Antenna × 1
(XTB3001)



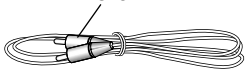
④ AA/R6P
Dry Cell Batteries × 2



⑤ Power Cord × 1
(ADG7022)



⑥ Video Cord × 1
(VDE1034) (L=1.5m)
Yellow



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POWER-CORD CAUTION

Handle the power cord by the plug. Do not pull out the plug by tugging the cord and never touch the power cord when your hands are wet as this could cause a short circuit or electric shock. Do not place the unit, a piece of furniture, etc., on the power cord, or pinch the cord. Never make a knot in the cord or tie it with other cords. The power cords should be routed such that they are not likely to be stepped on. A damaged power cord can cause a fire or give you an electrical shock. Check the power cord once in a while. When you find it damaged, ask your nearest PIONEER authorized service center or your dealer for a replacement.

Pioneer

Service Manual

ORDER NO.
RRV2389

STEREO DVD CASSETTE DECK RECEIVER

XR-A9800D

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Type	Model	Power Requirement	Region No.	Remarks
	XR-A9800D			
KUCXJN	◯	AC120V	1	

● This service manual should be used together with the following manual(s):

Model No.	Order No.	Remarks
XR-A9800D/KUCXJ	RRV2329	

PIONEER CORPORATION 4-1, Meguro 1-chome, Meguro-ku, Tokyo 153-8654, Japan
PIONEER ELECTRONICS SERVICE, INC. P.O. Box 1760, Long Beach, CA 90801-1760, U.S.A.
PIONEER EUROPE NV Haven 1087, Keetberglaan 1, 9120 Melsele, Belgium
PIONEER ELECTRONICS ASIACENTRE PTE. LTD. 253 Alexandra Road, #04-01, Singapore 159936

T – ZZK SEPT. 2000 Printed in Japan

1. CONTRAST OF MISCELLANEOUS PARTS

NOTES:
- *Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.*
- *The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.*
- *Screws adjacent to ▼ mark on product are used for disassembly.*
- *Reference Nos. indicate the pages and Nos. in the service manual for the base model.*

■ CONTRAST TABLE

XR-A9800D/KUCXJN and KUCXJ are constructed the same except for the following :

Ref. No.	Mark	Symbol and Description	Part No.		Remarks
			XR-A9800D /KUCXJ	XR-A9800D /KUCXJN	
		PACKING SECTION			
P3-11		Packing Case	XHD3144	XHD3165	
		EXTERIOR SECTION			
P5-26		SEC Holder	XMR3032	XMR3035	
P5-38		Tray Cap	XAK3157	XAK3210	
	NSP	Name Label	Not used	XAL3066	*1
		FRONT PANEL SECTION			
P7-19		JOG Knob	XAA3015	XAA3019	
P7-21		FUNC Button L	XAD3061	XAD3089	
P7-22		FUNC Button R	XAD3051	XAD3090	
P7-23		FUNC Frame L	XAD3052	XAD3091	
P7-24		FUNC Frame R	XAD3053	XAD3092	
P7-25		DV ENT Button	XAD3056	XAD3085	
P7-26		Display Panel	XAK3135	XAK3206	
P7-42		Sub Panel	XAK3203	XAK3209	
P7-50		DV Button L	XAD3057	XAD3086	
P7-51		DV Button R	XAD3059	XAD3088	

*1 Stick Name Label on the Rear Panel.