

Service Manual

Pioneer



ORDER NO.
RRV2470

STEREO CD TUNER

XC-L11

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

Type	Model	Power Requirement	Remarks
	XC-L11		
ZVYXJ	○	DC power supplied from other system component	

- This products are component of systems. This product does not operate normally by itself. Please connect it to the STEREO CD TUNER XC-L11 and the STEREO POWER AMPLIFIER M-L11, for adjustment and operation inspection.
- This product is a system(s) component.
Be sure to connect it to the prescribed system component(s), otherwise damage may result.

Component	Model		Service manual	Remarks
STEREO CD TUNER	XC-L11		RRV2470	This manual.
STEREO POWER AMPLIFIER	M-L11		RRV2479	
SPEAKER SYSTEM	S-L11-LRW	—	RRV2483	
	—	S-L11-Q-LRW	RRV2484	
STEREO CASSETTE DECK	CT-L11		RRV2471	
MINIDISC RECORDER	MJ-L11		RRV2472	

CONTENTS

1. SAFETY INFORMATION	2	7. GENERAL INFORMATION	37
2. EXPLODED VIEWS AND PARTS LIST	3	7.1 DISASSEMBLY	37
3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM ...	10	7.2 PARTS	40
4. PCB CONNECTION DIAGRAM	22	7.2.1 IC	40
5. PCB PARTS LIST	30	7.2.2 DISPLAY	43
6. ADJUSTMENT	34	8. PANEL FACILITIES AND SPECIFICATIONS	44

1. SAFETY INFORMATION

LITHIUM BATTERY NOTICE

WARNING!

Lithium batteries. Danger of explosion. Replacement must be done by qualified personnel and only by following the instructions given in the service manual.

This warning is stated on the product or in the operating instructions. When replacing the lithium batteries, follow the note below. Dispose of the used battery promptly. Keep away from children. Do not disassemble and do not dispose of in fire. The battery used in this device may present a fire or chemical hazard if mistreated. Do not recharge, disassemble, heat above 100°C or incinerate. Replace only with the same Part Number. Use of another battery may present a risk of fire or explosion.

Note: The lithium battery installation position is shown in the exploded views.

ADVARSEL!

Lithiumbatteri – Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

Denne advarsel er angivet på produktet eller i brugsvejledningen. Ved udskiftning af lithium batterierne følges nedenstående anvisning. Batterierne må kun udskiftes med batterier af samme type og mærke.

LABEL CHECK

CAUTION

INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM

PRW1018

VARO!

Avattaessa ja suojalukitus ohitettessa olet alttiina näkymättömälle lasersträlylle. Älä katso säteeseen.

WARNING!

Ovynlig laserstrålning när denna del är öppnad och spärren är urkopplad. Beträkta ej strålen.

PRW1233

ADVARSEL

USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSafbrydere ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

VORSICHT!

UNSICHTBARE LASERSTRÄHLUNG TRITZ AUS, WENN SICHERHEITSBRYDERE (ODER KLAPPE) GEÖFFNET IST! NICHT DEM STRAHL AUSSETZEN!

VRW1094

Additional Laser Caution

1. Laser Interlock Mechanism

The loading position detect switch (in CD mechanism assembly) is set to "CLMP ON(CD CLOSE)" (ON:low level,OFF:high level) position, the system control IC(IC5501) get the "CLMP" signal, and hand the laser "LDON" signal to IC1101.

Then a laser diode can be lighted except when the level of signal CLMP is low.

The interlock also does not function in the test mode*.

Laser diode oscillation will continue, if pin 1 of TA2150FN (IC1101) on the RF AMP is connected to GND, or pin 19 is connected to low level (ON), or else the terminals of Q1101 are shorted to each other (fault condition).

2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

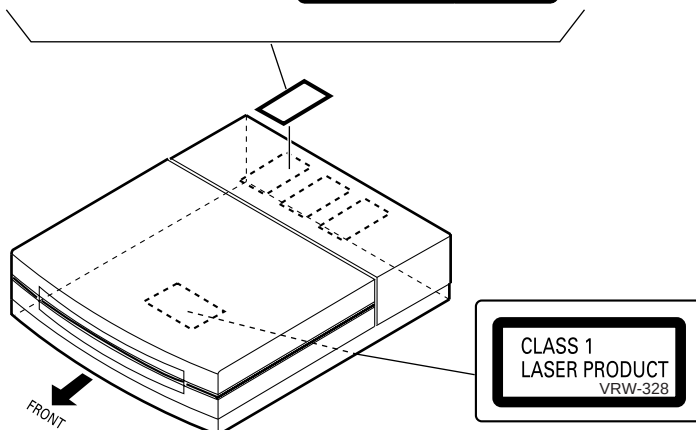
* : Refer to page 34.

IMPORTANT

THIS PIONEER APPARATUS CONTAINS LASER OF CLASS 1. SERVICING OPERATION OF THE APPARATUS SHOULD BE DONE BY A SPECIALLY INSTRUCTED PERSON.

LASER DIODE CHARACTERISTICS

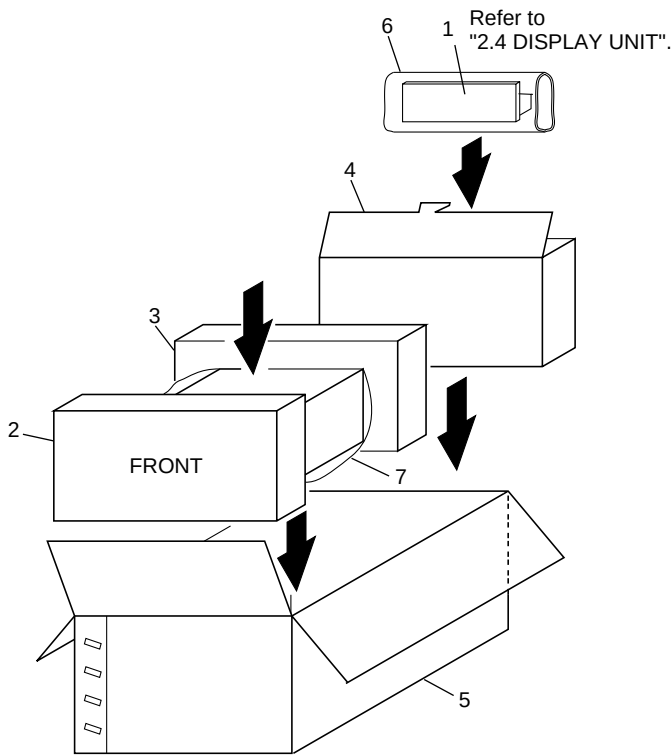
MAXIMUM OUTPUT POWER: 5 mW
WAVELENGTH: 780 – 785 nm



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 Δ 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.

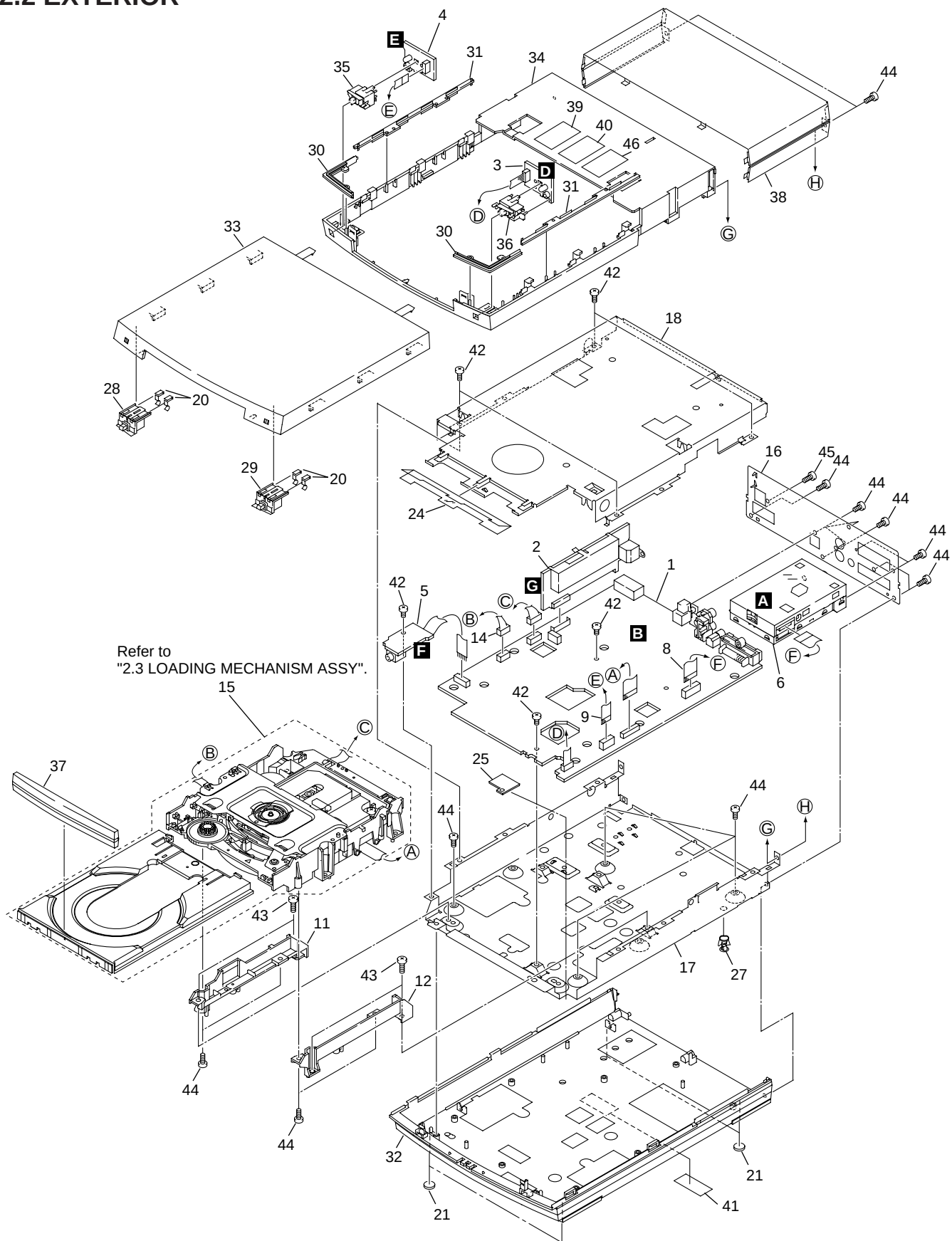
2.1 PACKING



● PACKING PARTS LIST

Mark	No.	Description	Part No.
	1	DISPLAY UNIT	AXX7107
	2	Front Pad	AHA7340
	3	Rear Pad	AHA7341
	4	Spacer NS2001	AHB7056
	5	Packing Case CD/Y	AHD7988
	6	Packing Sheet	AHG7073
	7	Seat	Z23-007

2.2 EXTERIOR



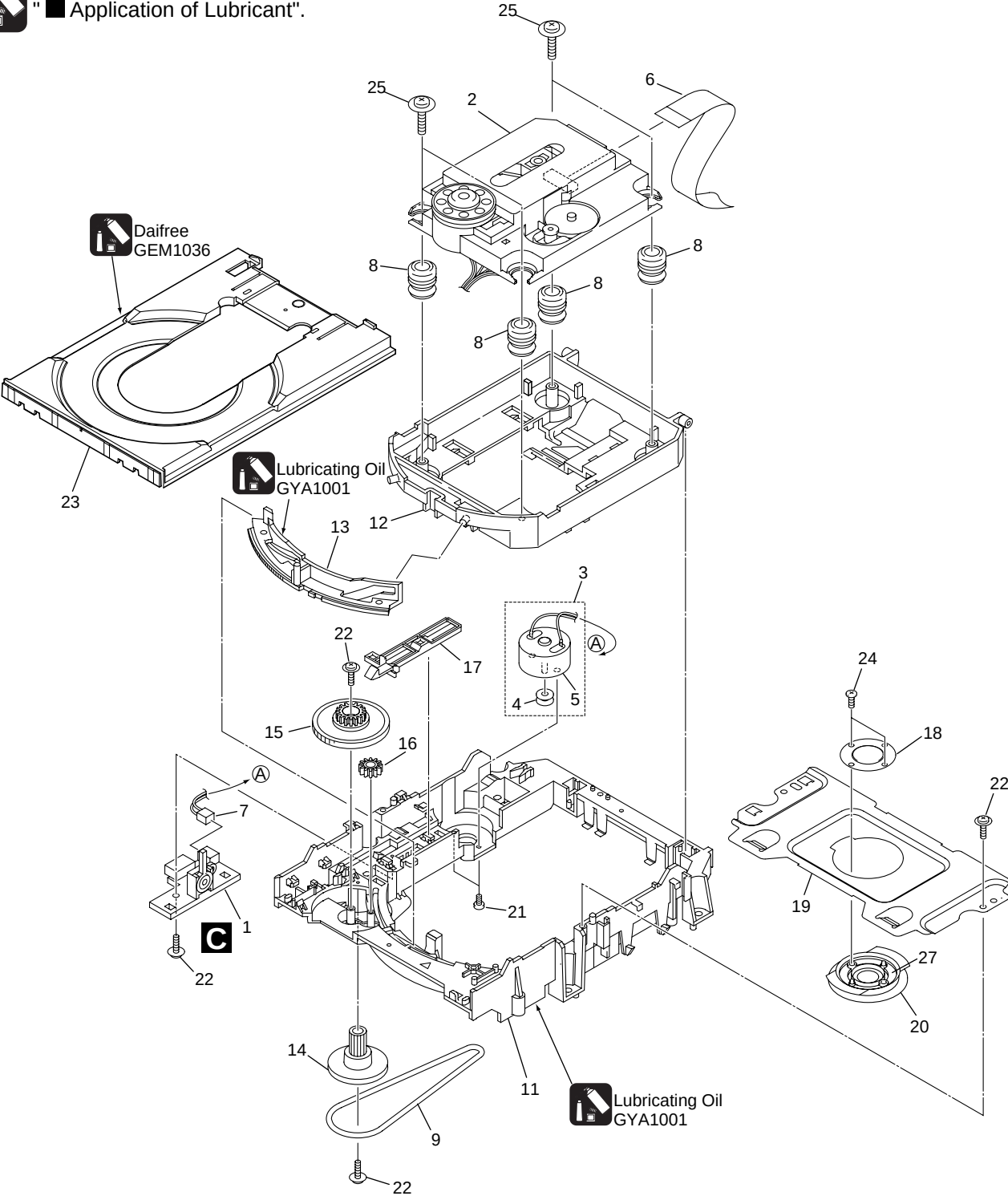
• EXTERIOR PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
	1	MOTHER ASSY	AWU7836		31	Side Line	AAP7088
	2	FLAC ASSY	AWU7837		32	Bottom Base	AMA7025
	3	KEYR ASSY	AWU7838		33	Top Panel 1	AMB7779
	4	KEYL ASSY	AWU7839		34	Top Panel 2	AMB7755
	5	HP ASSY	AWU7840		35	Button L Assy	AXG7110
	6	FM/AM TUNER MODULE	AXQ7229		36	Button R Assy	AXG7111
	7	•••••			37	Tray Cap Assy	AXG7112
	8	13P FFC/60V	ADD7319		38	Bonnet	ANE7270
	9	9P FFC/60V	ADD7321		39	Caution Label	PRW1018
	10	•••••			40	Caution Label	PRW1233
	11	Adapter12 L	ANW7231				
	12	Adapter12 R	ANW7232				
	13	•••••					
NSP	14	Connector Ass'y	PG05KK-E07	NSP	41	Caution Label	VRW-328
	15	Loading Mecha. Ass'y	AXA7101		42	Screw	BBZ30P060FMC
					43	Screw	BBZ30P100FMC
					44	Screw	BPZ30P080FZK
					45	Screw	PSC30P080FNI
NSP	16	Rear Panel	ANC8001		46	Caution Label	VRW1094
NSP	17	Bottom Plate	ANF7027				
NSP	18	Top Plate	ANF7028				
	19	•••••					
	20	Sensor Plate	ANG7360				
	21	Leg	AEB7090				
	22	•••••					
	23	•••••					
	24	Lead Barrier	AEC7361				
	25	Wire Barrier	AEC7379				
	26	•••••					
NSP	27	PC Support	VEC1749				
	28	Sensor Button L	AAD7622				
	29	Sensor Button R	AAD7623				
	30	Illuminate Lens	AAK7896				

2.3 LOADING MECHANISM ASSY

Note :

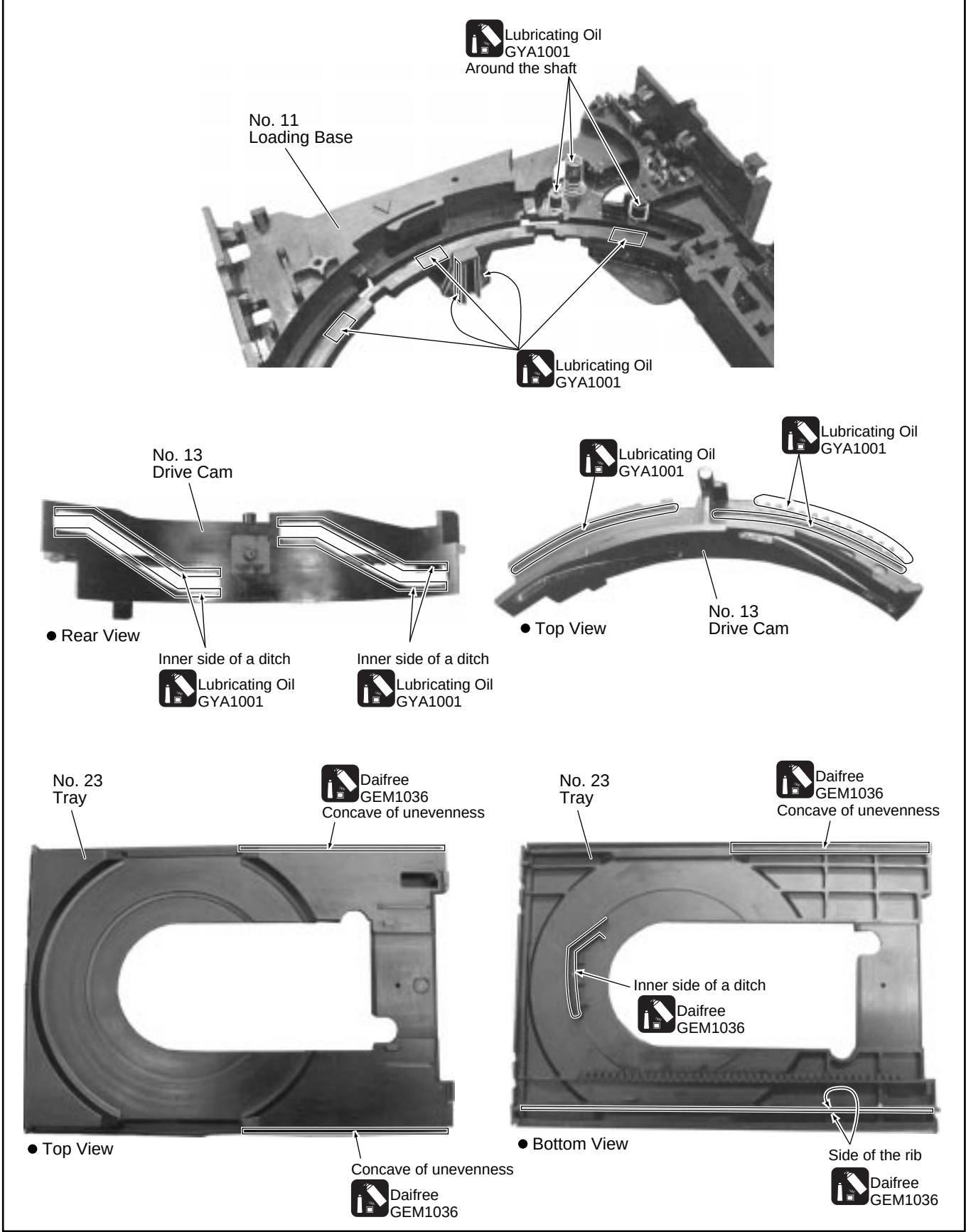
 Refer to
" ■ Application of Lubricant".



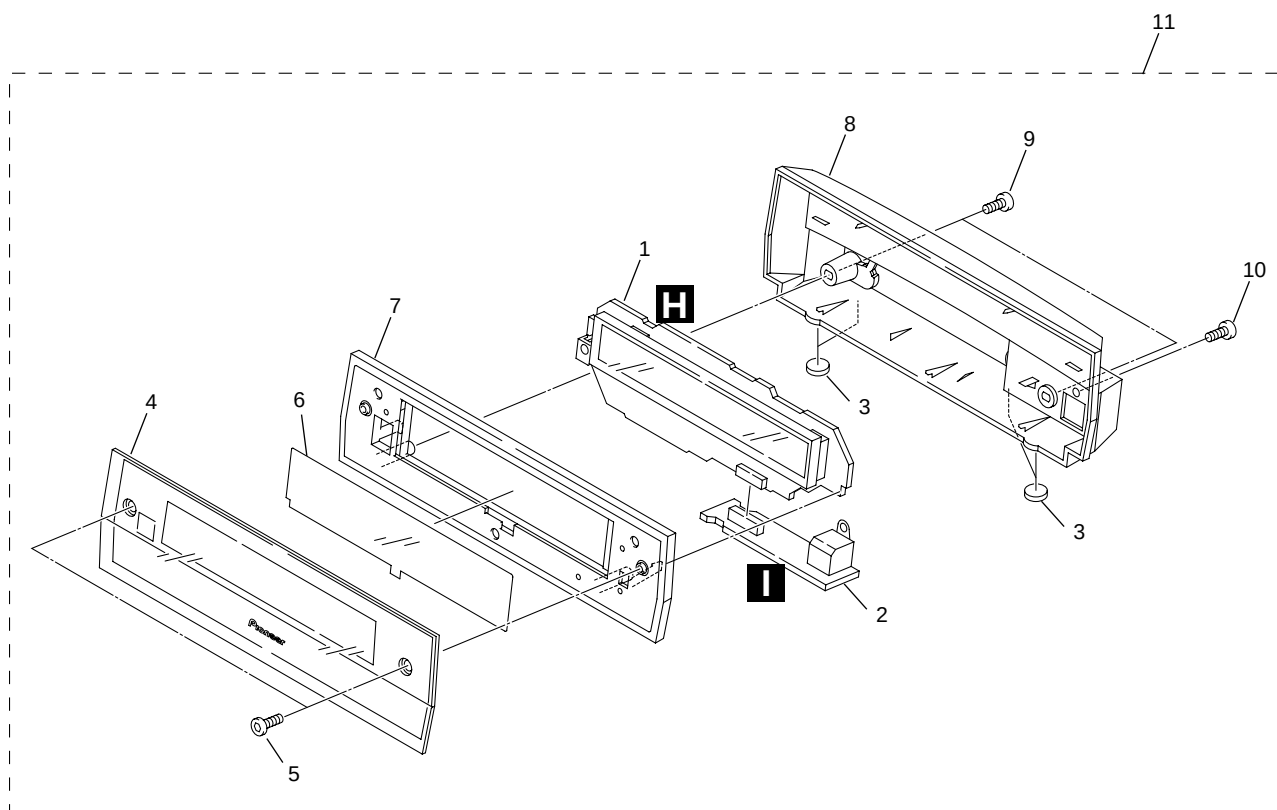
• LOADING MECHANISM ASSY PARTS LIST

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
NSP	1	LOAB Assy	VWG2279		16	Drive Gear	VNL1923
	2	CD Traverse Mechanism	VAM2202/03		17	SW Lever	VNL1925
	3	Loading Motor Assy	VXX2505		18	Clamper Plate CD	ANB7261
	4	Motor Pulley	PNW1634		19	Bridge	VNE2252
	5	Carriage DC Motor / 0.3W	PXM1027		20	Clamper CD	ANW7234
	6	Flexible Cable (15P)	ADD7317		21	Screw	JGZ17P028FMC
	7	Connector Assy 2P	VKP2253		22	Screw	Z39-019
	8	Float Rubber	AEB7227		23	Tray	VNL1920
	9	Belt	VEB1330		24	Screw	PBA1069
	10	•••••			25	Screw	ABA7069
	11	Loading Base	VNL1917		26	•••••	
	12	Float Base CD	ANW7233		27	Clamp Magnet	AMG7006
	13	Drive Cam	VNL1919				
	14	Gear Pulley	VNL1921				
	15	Loading Gear	VNL1922				

Application of Lubricant



2.4 DISPLAY UNIT

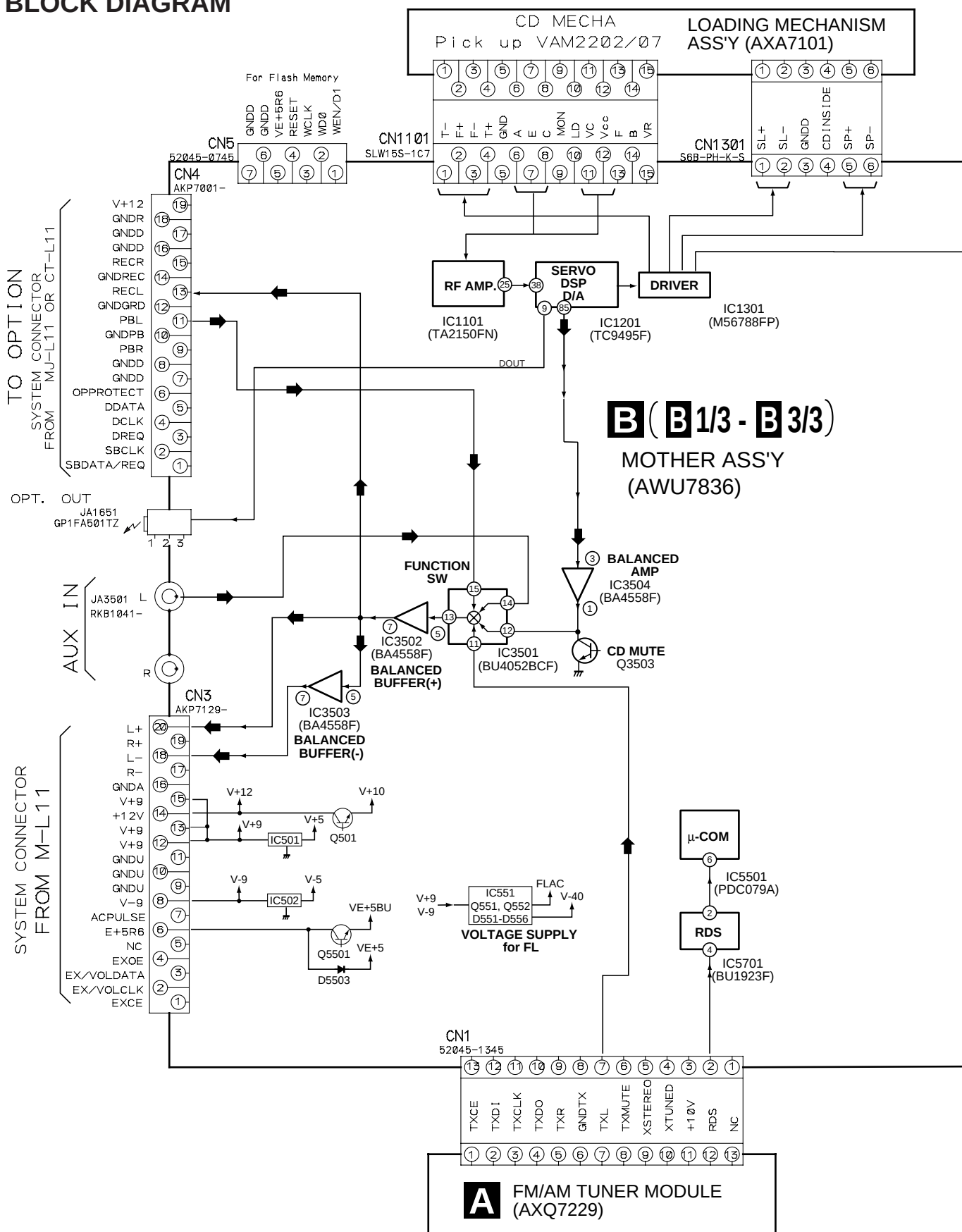


• DISPLAY UNIT PARTS LIST

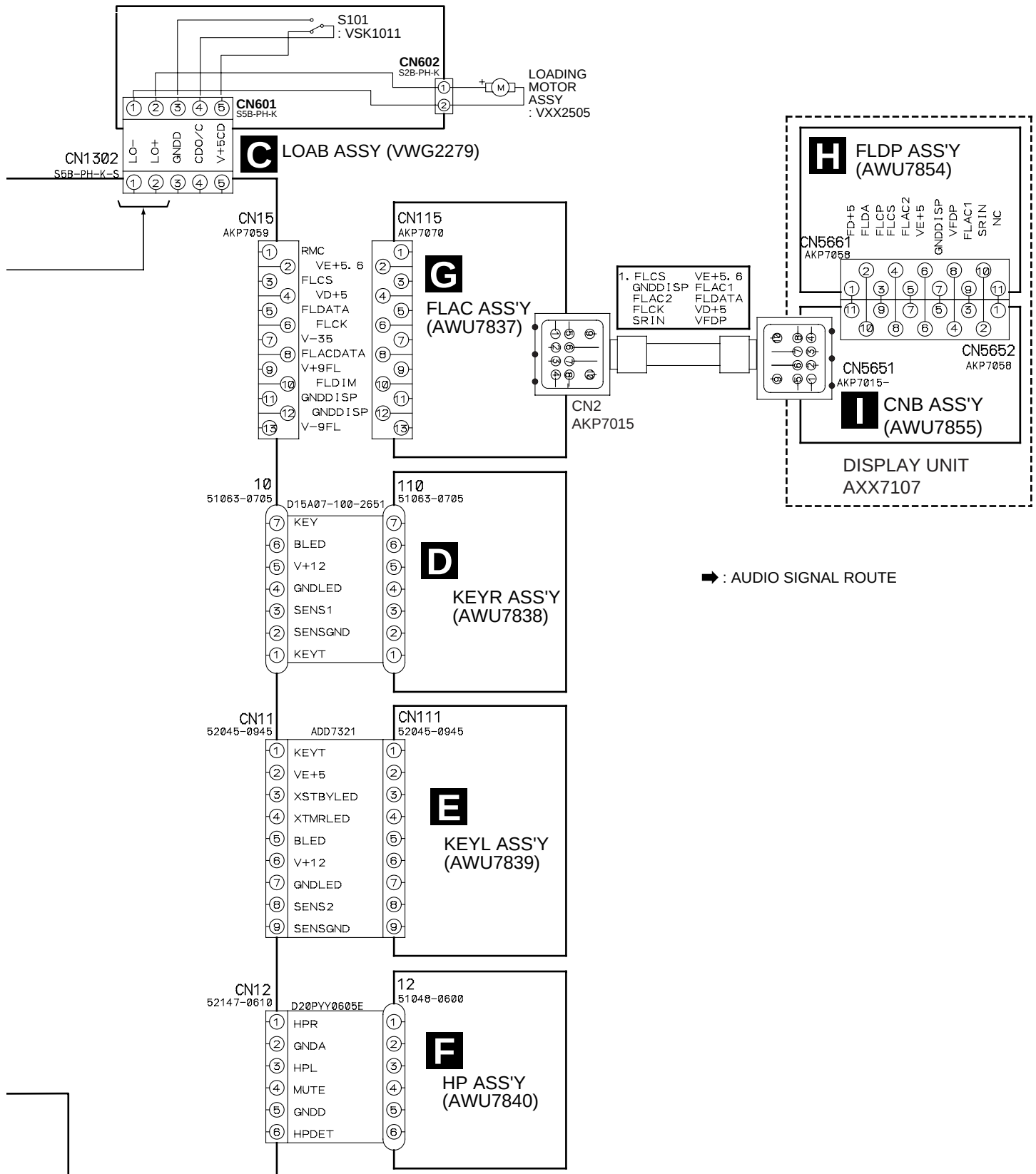
Mark	No.	Description	Part No.
	1	FLDP ASSY	AWU7854
	2	CNB ASSY	AWU7855
	3	Leg	AEB7090
	4	Window	AAK7889
	5	Deco Screw	ABA7072
	6	FL Filter	AEC7195
	7	Display Panel	AMB7750
	8	Display Cover	AMC7048
	9	Screw	BPZ30P080FZK
	10	Screw	PSC30P080FNI
	11	DISPLAY UNIT	AXX7107

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM



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



Notes

1. RESISTORS

Indicated in Ω , $1/16W \pm 5\%$ Tolerance unless otherwise noted K:K Ω , M:M Ω .

2. CAPACITORS

Indicated in Capacity (μF)/VOLTAGE (V) unless otherwise noted P:PF.

3. DIODES

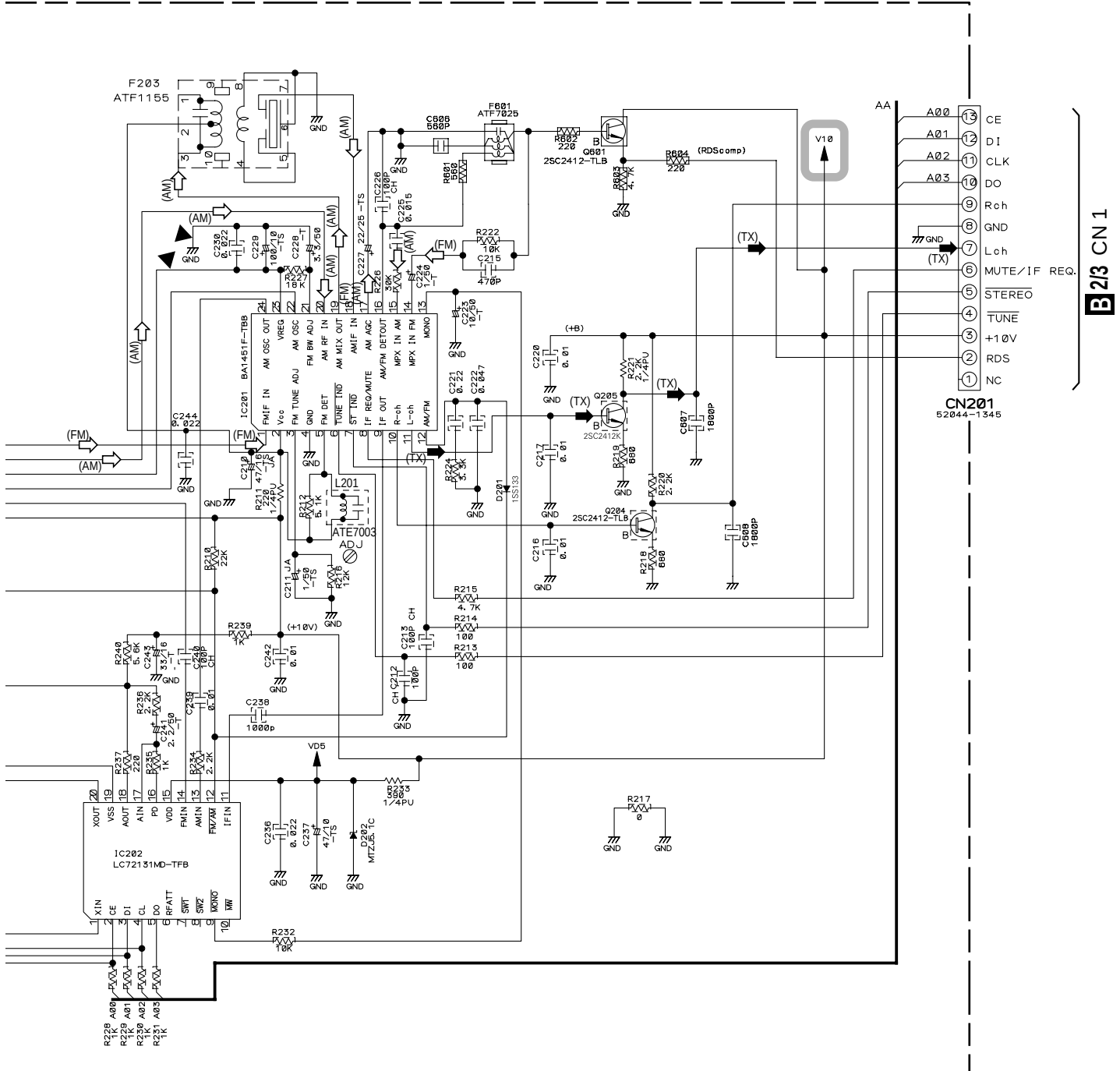
No mark diode is 1SS133.

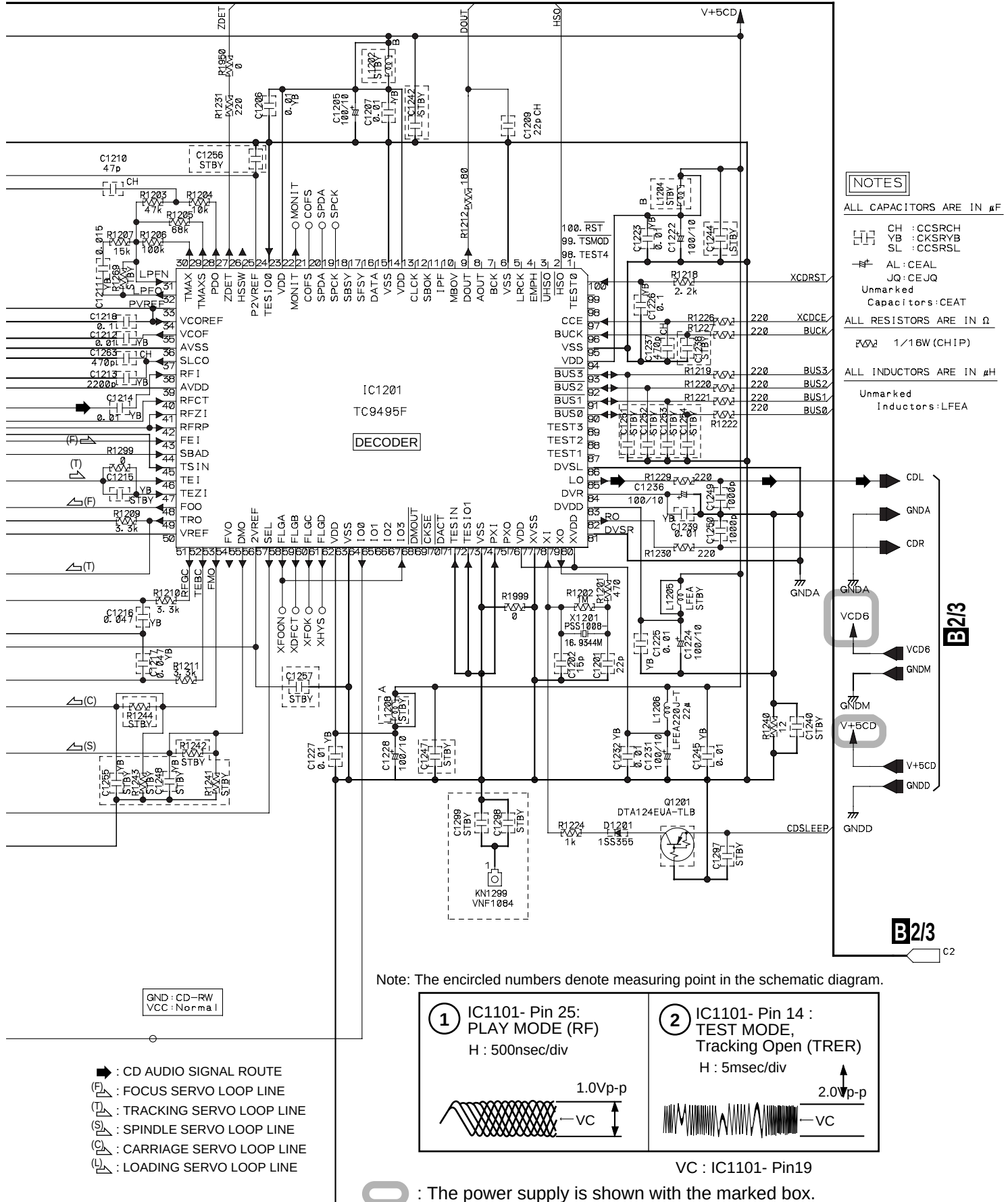
 : The power supply is shown with the marked box.

 : AUDIO SIGNAL ROUTE (TUNER)

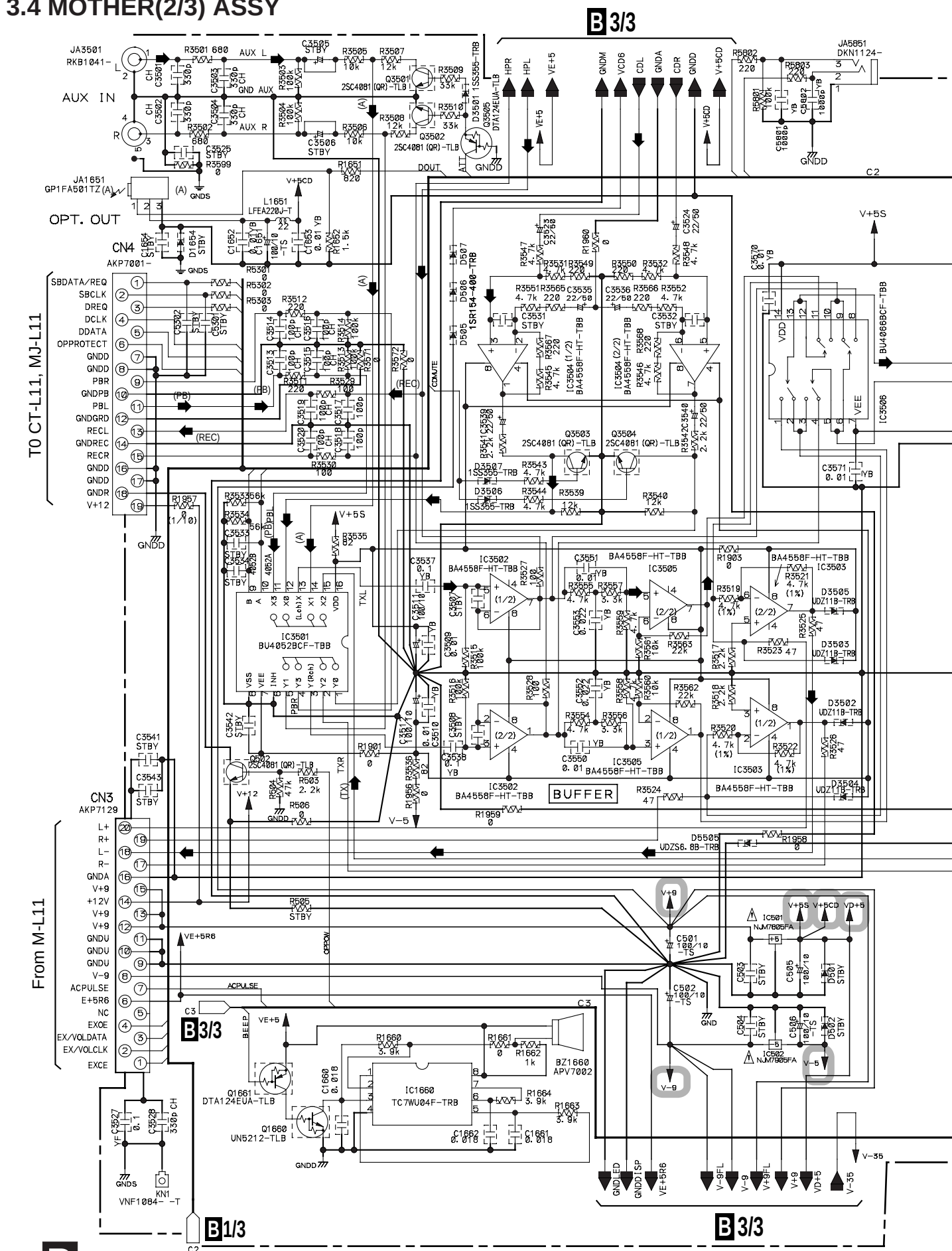
 : AM SIGNAL ROUTE

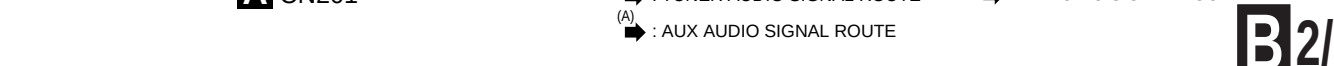
 : FM SIGNAL ROUTE



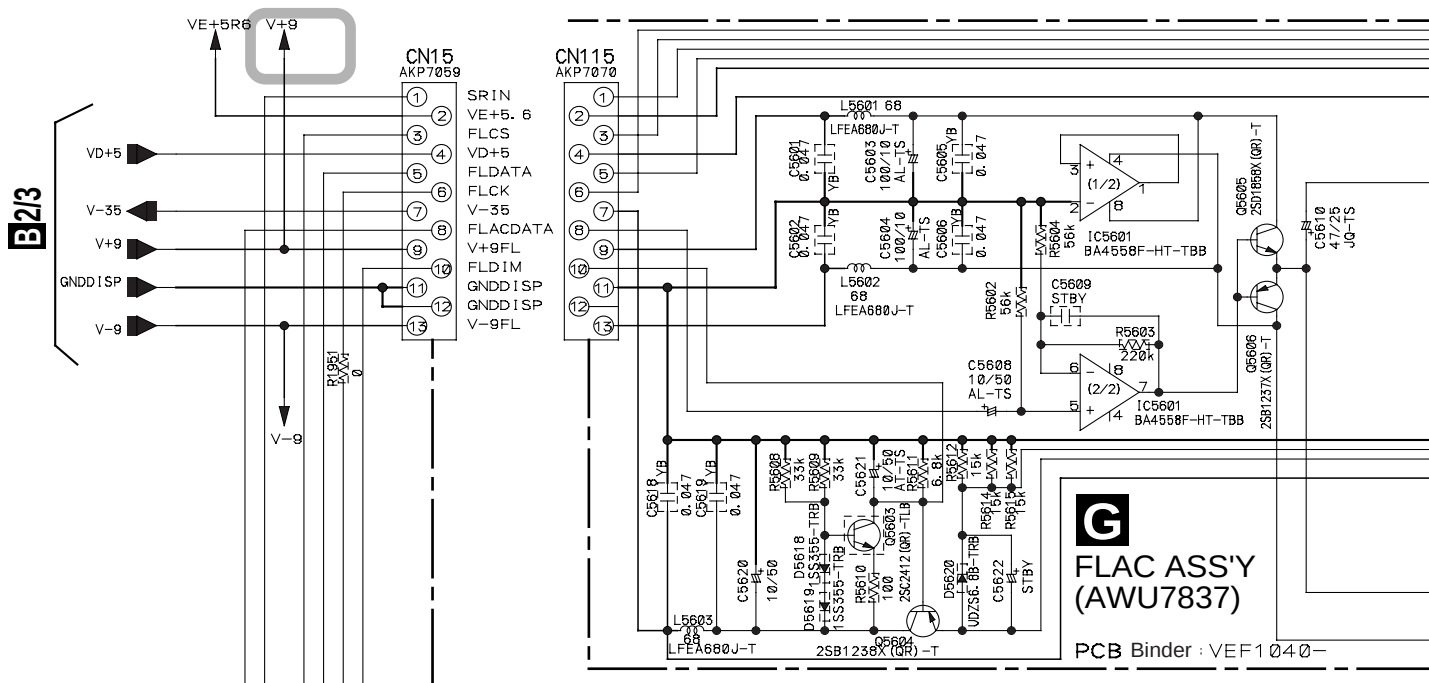


3.4 MOTHER(2/3) ASSY

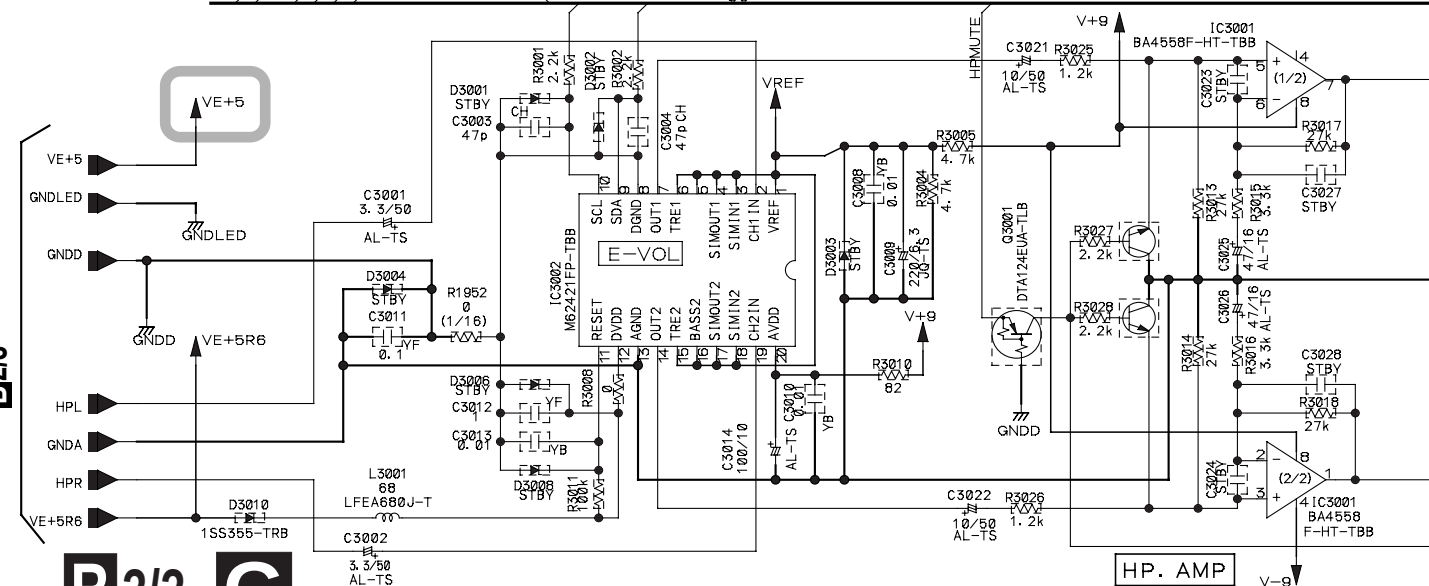
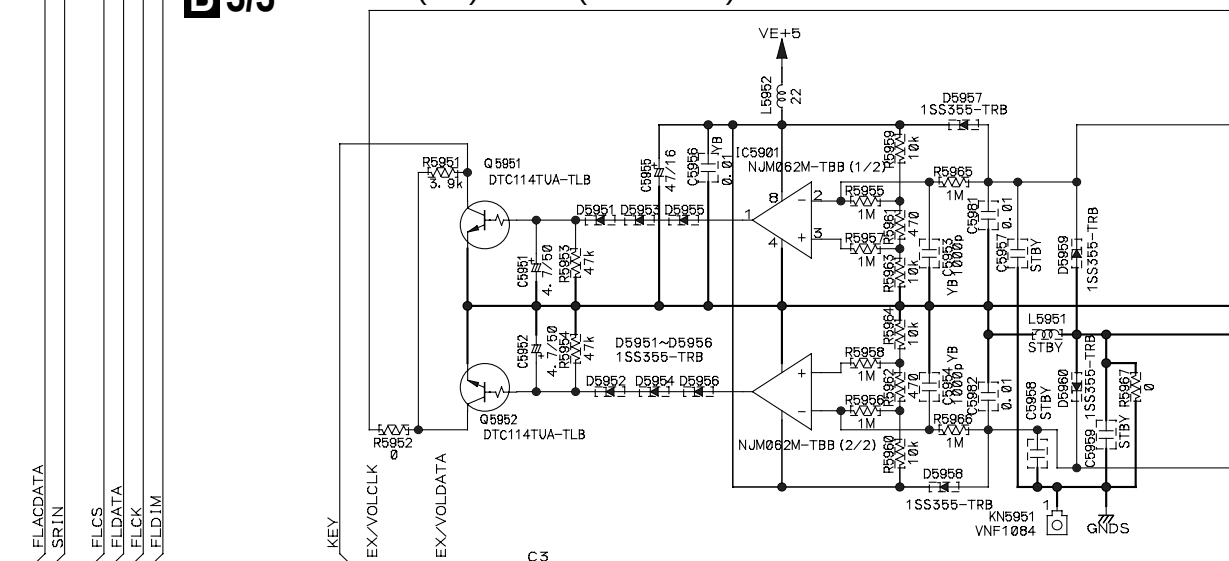




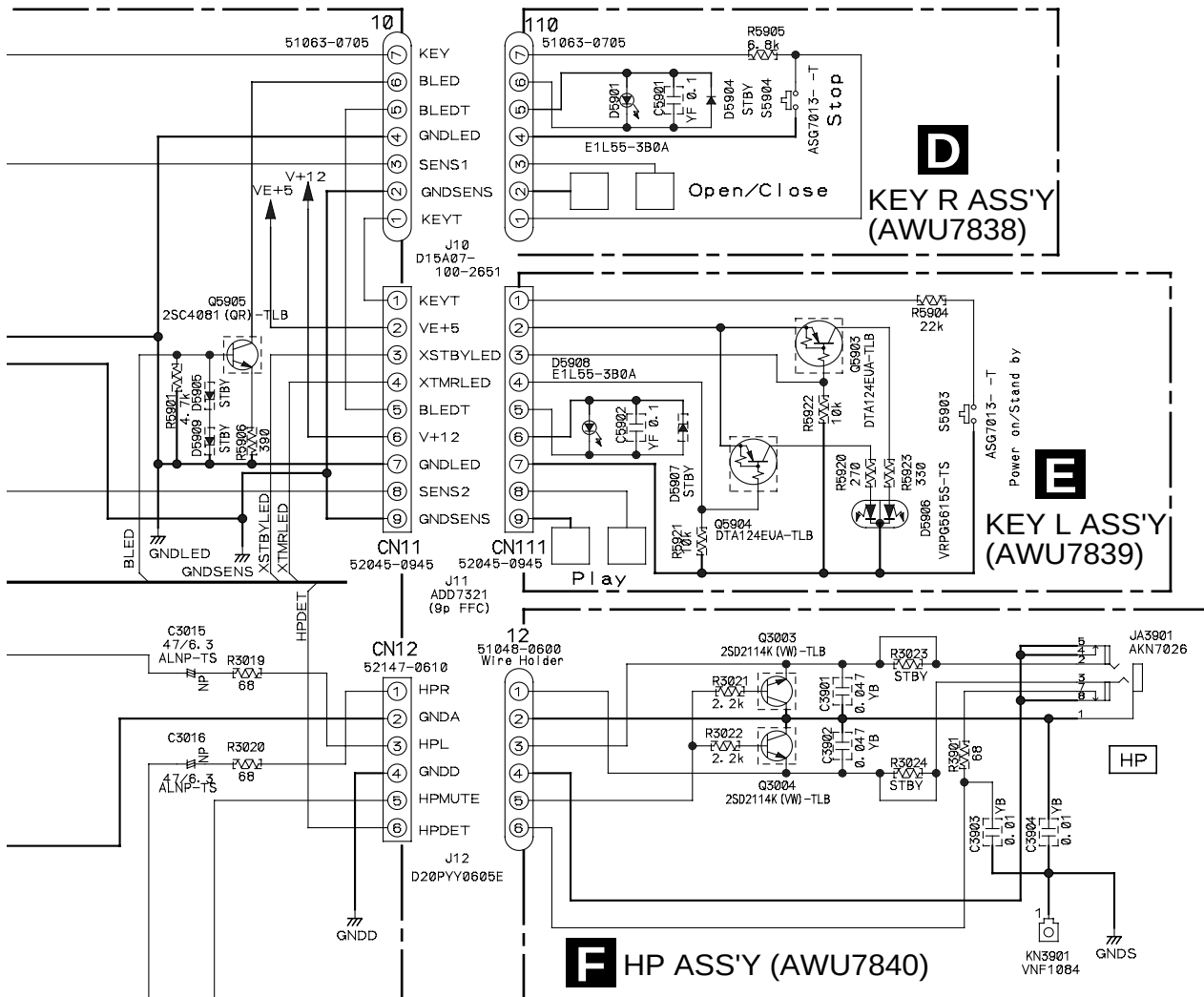
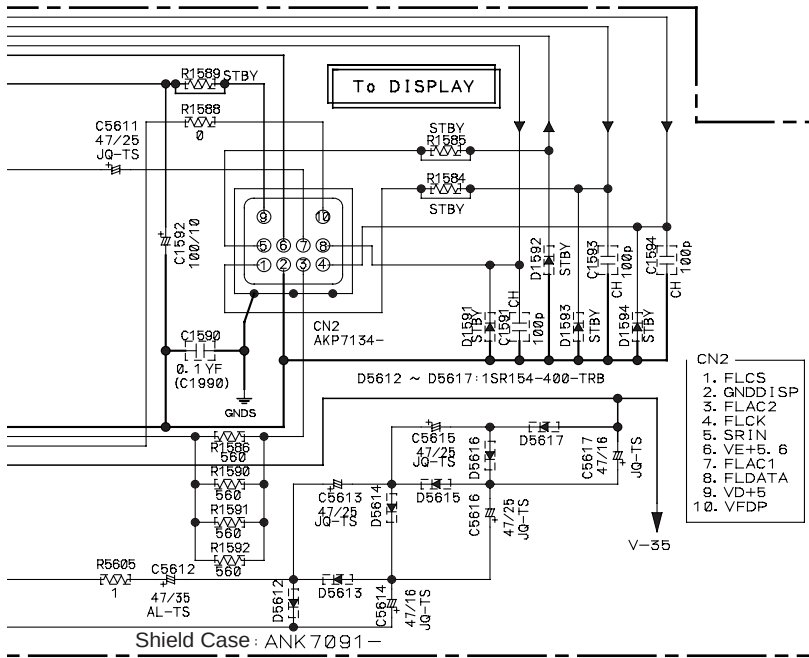
3.5 MOTHER(3/3), FLAC, KEY R, KEY L and HP ASSYS



B 3/3 MOTHER(3/3) ASSY (AWU7836)

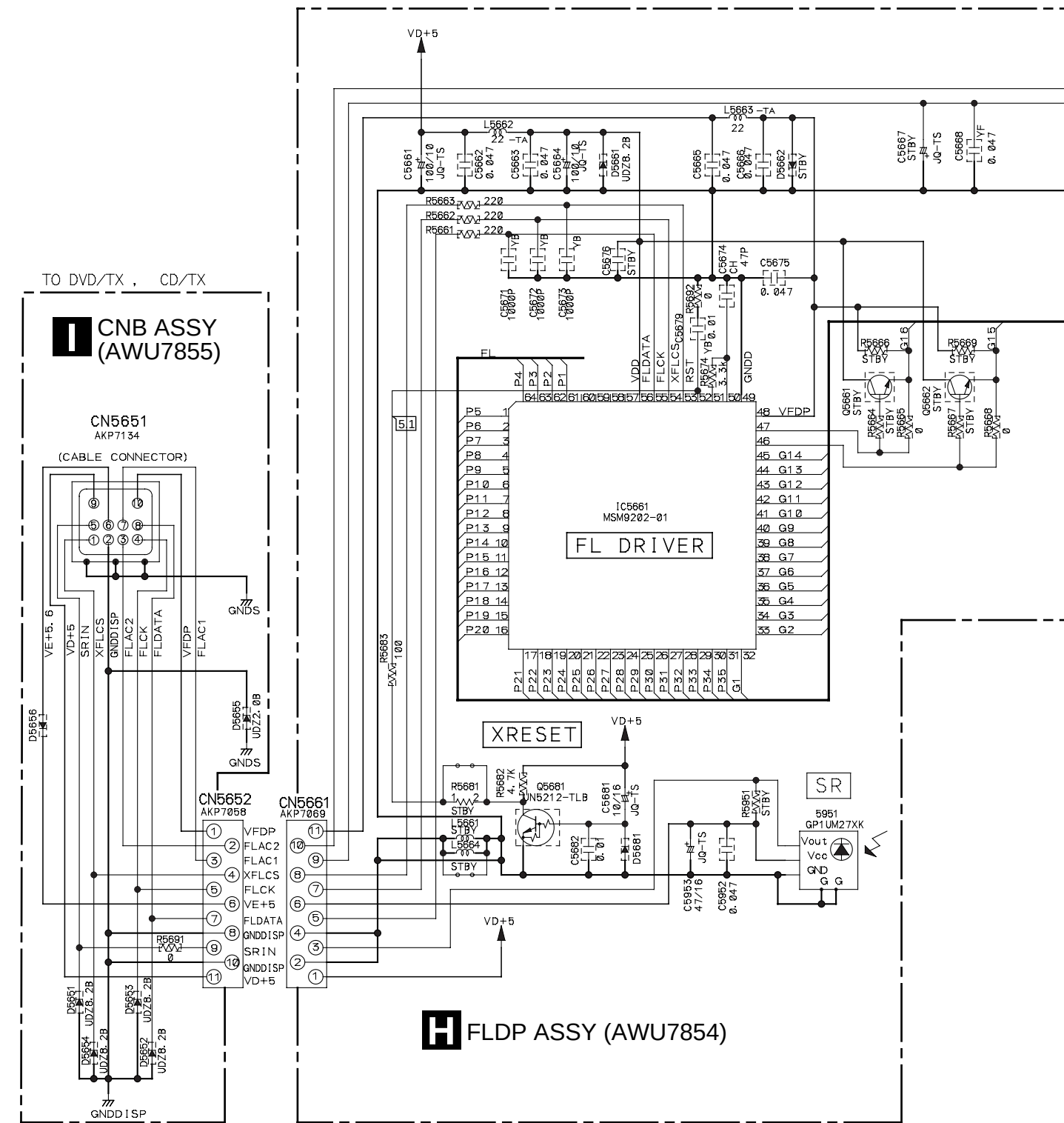


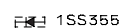
HP. AMP



○ : The power supply is shown with the marked box.

3.6 FLDP and CNB ASSYS

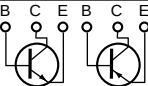
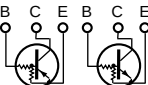
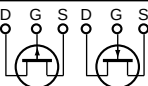
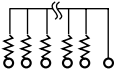




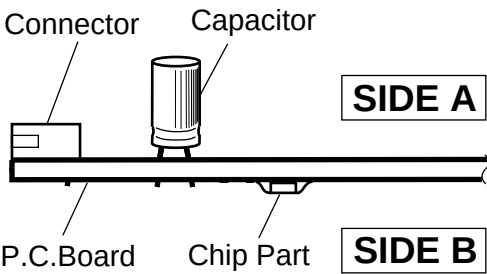
4. PCB CONNECTION DIAGRAM

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
		Transistor
		Transistor with resistor
		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.



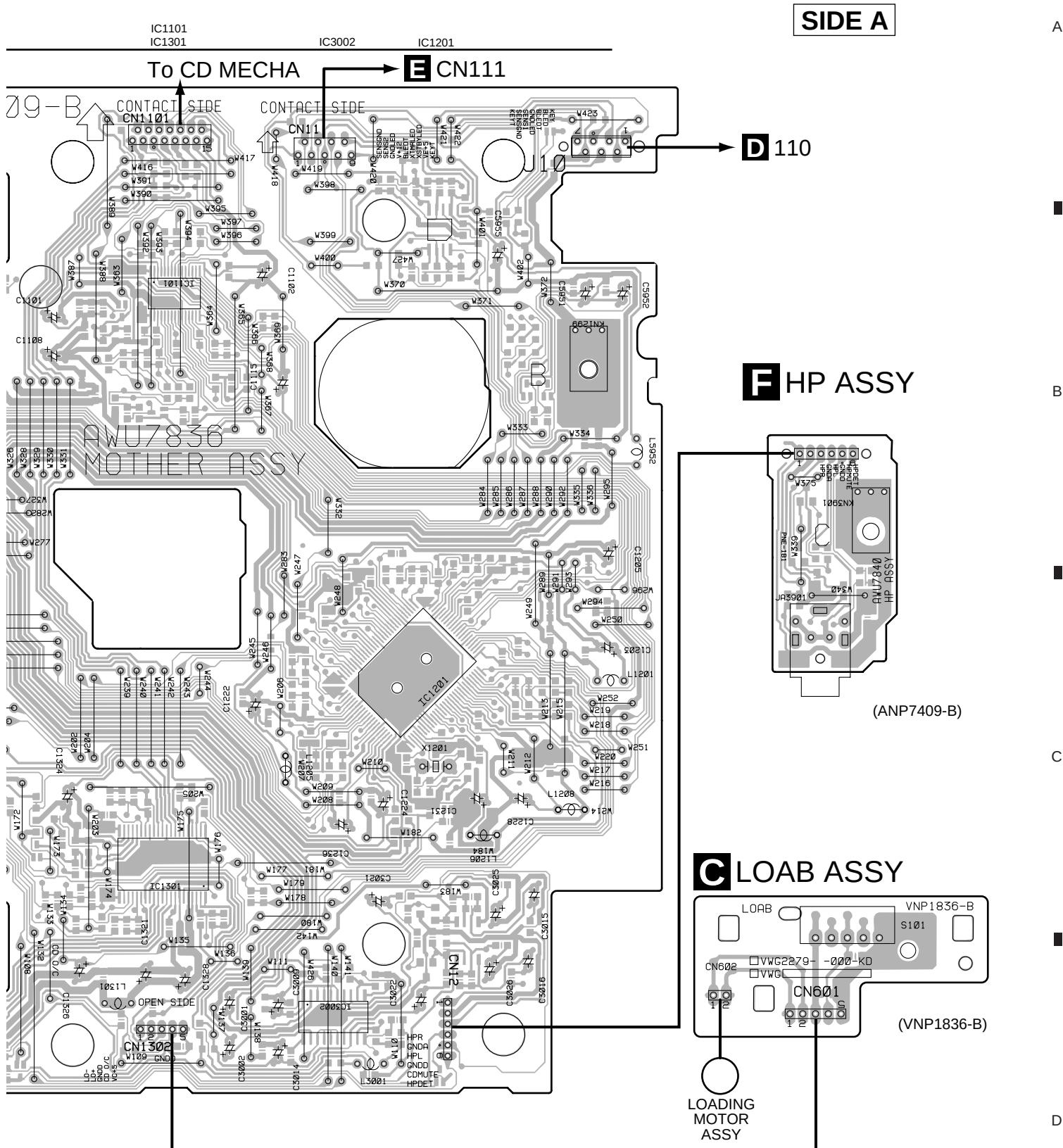
AFM/AM TUNER MODULE

SIDE A

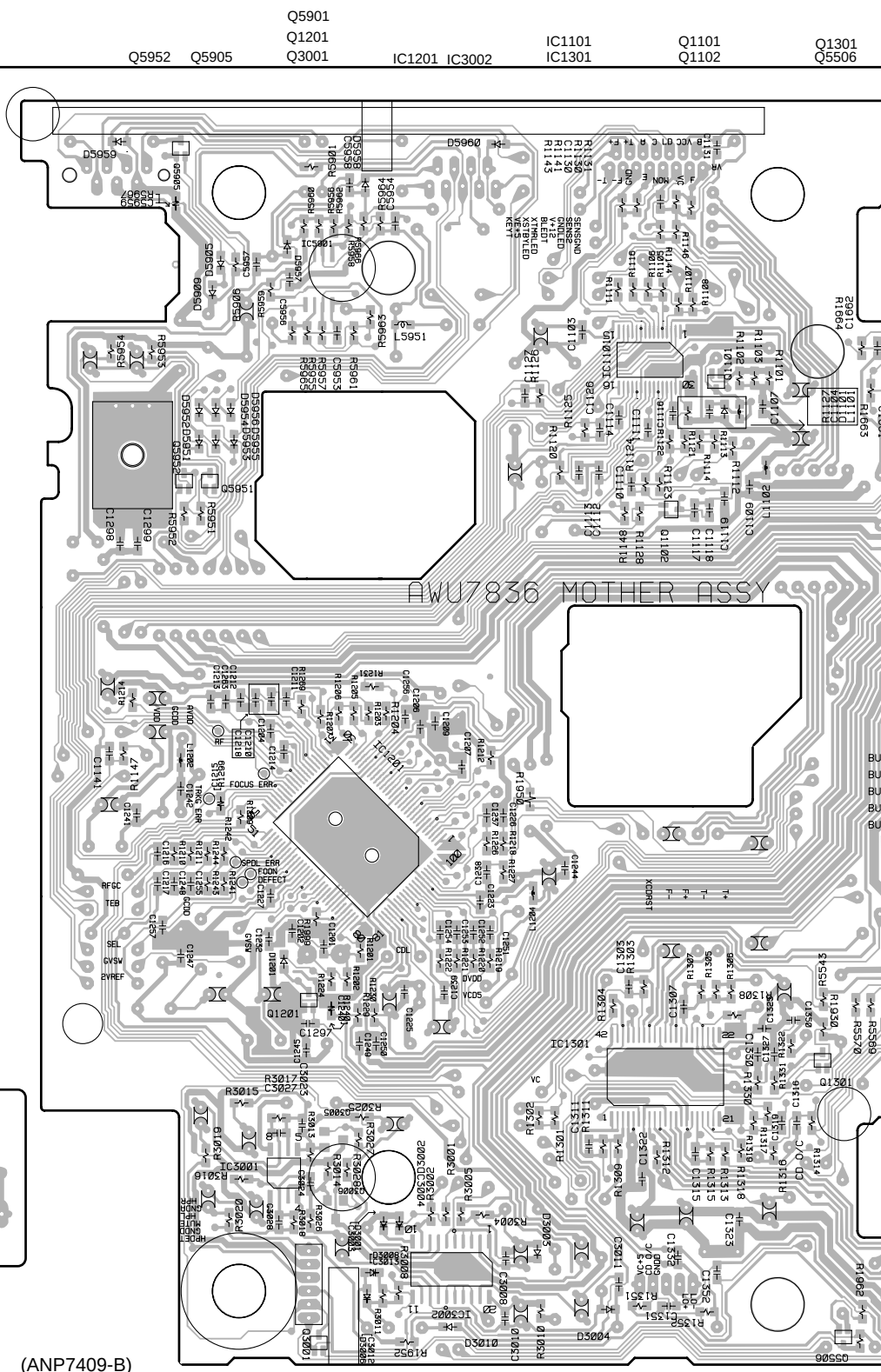
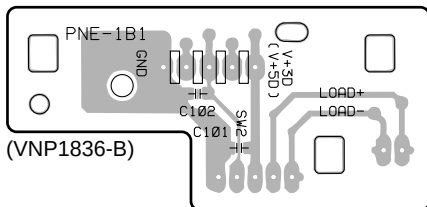
A FM/AM TUNER MODULE

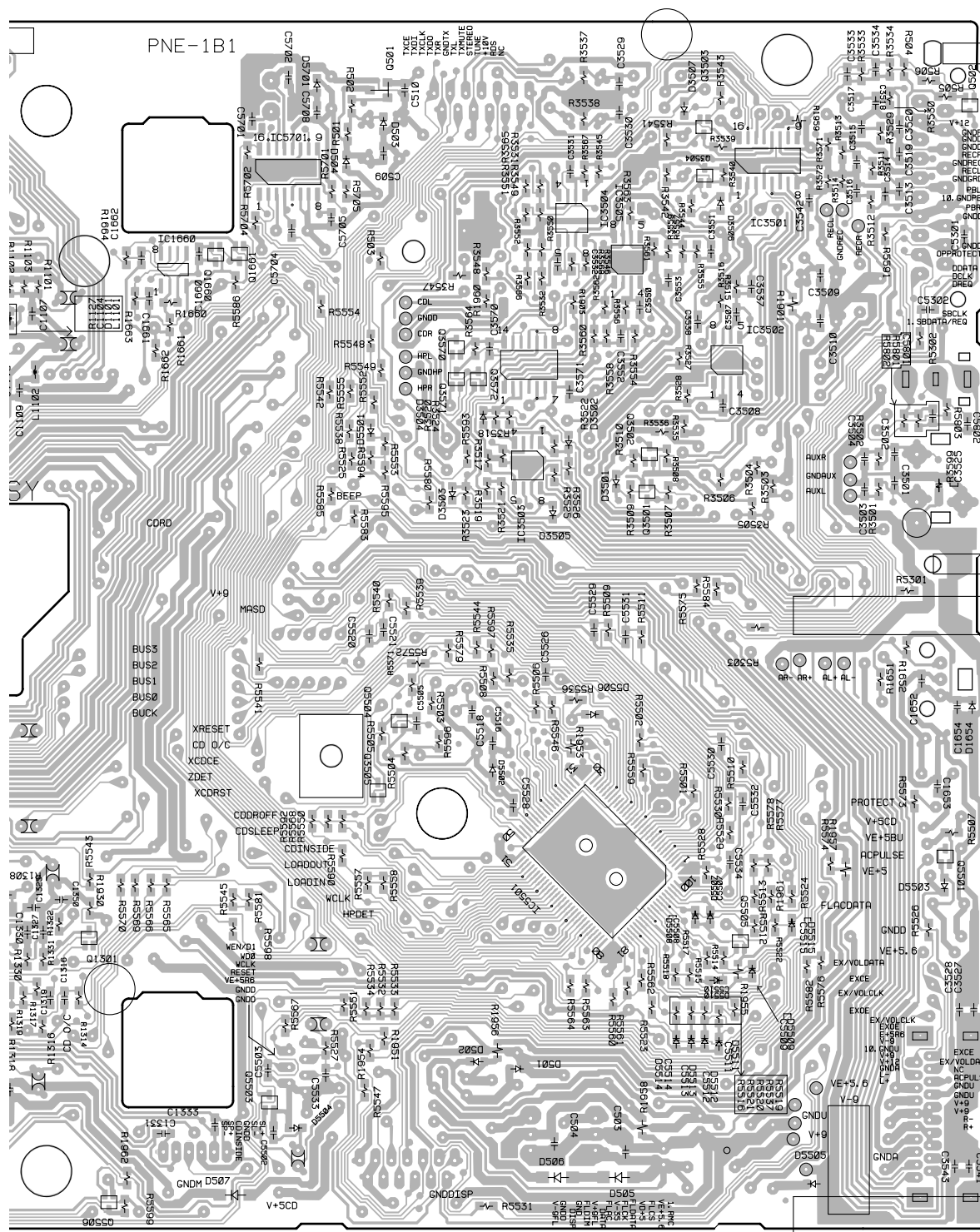
SIDE B





C LOAB ASSY





H FLDP ASSY

(ANP7412-B)

(ANP7412-B)

SIDE B

(ANP7412-B)

(ANP7412-B)

5. PCB PARTS LIST

NOTES: ● The Δ 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 $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU 5 6 1 J
 47k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU 4 7 3 J
 0.5 Ω $\rightarrow$ R50 RN2H R 5 0 K
 1 Ω $\rightarrow$ 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 $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC 5 6 2 1 F

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
LIST OF PCB ASSEMBLIES							
		FM/AM TUNER MODULE	AXQ7229		C243		CEAT330M16
					C228		CEAT3R3M50
					C237		CEAT470M10
					C211		CEJA1R0M50
					C210		CEJA470M16
NSP	CD COMP		AWM7629		C103, C104, C204, C238		CKSRYB102K50
	└ MOTHER ASSY		AWU7836		C102, C208, C216, C217, C220		CKSRYB103K50
	└ FLAC ASSY		AWU7837		C239, C242, C604, C615		CKSRYB103K50
	└ KEYR ASSY		AWU7838		C225		CKSRYB153K50
	└ KEYL ASSY		AWU7839		C607, C608		CKSRYB182K50
	└ HP ASSY		AWU7840				
	DISPLAY		AWM7633		C201, C205, C214, C230, C236		CKSRYB223K50
	└ FLDP ASSY		AWU7854		C244		CKSRYB223K50
	└ CNB ASSY		AWU7855		C221		CKSRYB224K10
NSP	LOADING MECHAISM ASSY		AXA7101		C603		CKSRYB392K50
NSP	└ LOAB ASSY		AWG2279		C215		CKSRYB471K50
					C202, C222		CKSRYB473K16
					C606		CKSRYB561K50

A FM/AM TUNER MODULE SEMICONDUCTORS

IC201	BA1451F
IC202	LC72131MD-TFB
Q201, Q204, Q205, Q601	2SC2412K
Q202	DTA124ES
Q203	DTC124EK
D201	1SS133
D202	MTZJ5.1C
D101	UDZS6.8B

COILS AND FILTERS

L201	FM DETECTOR COIL	ATE7003
F202	CERAMIC FILTER	ATF-107
F201	CERAMIC FILTER	ATF-119
F203	AM CERAMIC FILTER	ATF1155
F601	ANTIBIRDY FILTER	ATF7025
L601		LCTA270J2520

CAPACITORS

C605	CCSQCH680J50
C212, C213, C226, C233-C235	CCSRCH101J50
C240, C614	CCSRCH101J50
C206	CCSRCH120J50
C231, C232	CCSRCH150J50
C223	CEAT100M50
C229	CEAT101M10
C224	CEAT1R0M50
C227	CEAT220M25
C241	CEAT2R2M50

RESISTORS

R211	RD1/4PU221J
R221	RD1/4PU222J
R233	RD1/4PU391J
R103, R104	RS1/10S221J
Other Resistors	RS1/16S□□□J

OTHERS

CN201	13P CONNECTOR	52044-1345
BN201	2P TERMINAL WITHPAL	AKA7002
0	SHIELD CASE T	ANK7072
0	SHIELD CASE B	ANK7073
X201	CRYSTAL RES.(7.2MHz)	ASS1093
0	FM FRONT END	AXF7004
	AM RF TUNING BLOCK	AXX7072

B MOTHER ASSY SEMICONDUCTORS

Δ IC3001	BA4558F-HT
IC3502-IC3505	BA4558F-HT
IC5701	BU1923F
IC3501	BU4052BCF
IC3506	BU4066BCF
Δ IC1301	M56788AFP
Δ IC3002	M62421FP
IC5901	NJM062M
Δ IC501	NJM7805FA
Δ IC502	NJM7905FA
IC5501	PDC079A
Δ IC1101	TA2150FN

Mark	No.	Description	Part No.
△	IC1660		TC7WU04F
△	IC1201		TC9495F
	Q1101		2SA1577
	Q501		2SC2412K
	Q3501-Q3504, Q502, Q5501, Q5504		2SC4081
	Q5905		2SC4081
	Q3005, Q3006		2SD2114K
	Q1201, Q1661, Q3505, Q3570		DTA124EUA
	Q5951, Q5952		DTC114TUA
	Q5503		DTC143EUA
	Q1301, Q1660, Q3571, Q3572		UN5212
	Q5505, Q5506		UN5212
	D505-D507		1SR154-400
	D1201, D3010, D3501, D3506, D3507		1SS355
	D504, D5501, D5503, D5504, D5506		1SS355
	D5951-D5960		1SS355
	D3502-D3505, D503		UDZ11B
	D5701		UDZS5.1B
	D5505		UDZS6.8B

COILS AND FILTERS

X5701	CRYSTAL RES.(4.3MHz)	ASS7004
X5501	CERAMIC RES.(10MHz)	DSS1048
L1206, L1651, L5501, L5952		LFEA220J
L1201		LFEA2R2J
L3001		LFEA680J
X1201	CRYSTAL RES.	PSS1008

CAPACITORS

C5519		BCH1072
C1119, C3513-C3520, C5511-C5514		CCSRCH101J50
C5520, C5521, C5529-C5533		CCSRCH101J50
C1201		CCSRCH150J50
C1307		CCSRCH151J50
C1202, C1209		CCSRCH220J50
C5509		CCSRCH221J50
C5701, C5702		CCSRCH270J50
C5704		CCSRCH271J50
C3501-C3504, C3528		CCSRCH331J50
C1117		CCSRCH390J50
C1210, C1303, C3003, C3004		CCSRCH470J50
C1237, C1263		CCSRCH471J50
C5705		CCSRCH561J50
C5534		CCSRCH681J25
C1116		CCSRCK2R0C50
C3021, C3022		CEAL100M50
C1101, C1102, C1108, C1115, C1203		CEAL101M10
C1205, C1222, C1224, C1228, C1231		CEAL101M10
C1236, C1321, C1328, C3014		CEAL101M10
C3001, C3002		CEAL3R3M50
C3025, C3026, C5955		CEAL470M16
C5951, C5952		CEAL4R7M50
C3015, C3016		CEALNP470M6R3
C5703		CEAT100M50
C1651, C3511, C3512, C501, C502		CEAT101M10
C505, C506, C5506, C5517, C5707		CEAT101M10
C5504		CEAT1R0M50
C3523, C3524, C3535, C3536		CEAT220M50
C3539, C3540		CEAT220M50
C3521, C3522		CEAT2R2M50
C508		CEAT470M16
C5501		CEJQ100M50

Mark	No.	Description	Part No.
	C3009		CEJQ221M6R3
	C3537, C3538		CKSQYB104K25
	C1241, C1249, C1250, C5507, C5508		CKSRYB102K50
	C5801, C5802, C5953, C5954		CKSRYB102K50
	C1103, C1107, C1114, C1130, C1204		CKSRYB103K50
	C1206, C1207, C1212, C1214, C1223		CKSRYB103K50
	C1225, C1227, C1232, C1239, C1245		CKSRYB103K50
	C1315, C1316, C1330, C1652, C1653		CKSRYB103K50
	C3008, C3010, C3013, C3509, C3510		CKSRYB103K50
	C3550, C3551, C3570, C3571, C509		CKSRYB103K50
	C5502, C5526, C5708, C5956		CKSRYB103K50
	C5981, C5982		CKSRYB103K50
	C1104, C1110, C1111, C1131, C1218		CKSRYB104K16
	C1226, C1322, C1325, C1327, C1350		CKSRYB104K16
	C5510, C5515		CKSRYB152K50
	C1211		CKSRYB153K50
	C1660-C1662		CKSRYB183K25
	C1213		CKSRYB222K50
	C3552, C3553		CKSRYB223K25
	C1112, C1113		CKSRYB224K10
	C1216, C1217		CKSRYB473K25
	C1141, C1311, C1319		CKSRYB682K50
	C3011, C3527, C5503, C5505, C5516		CKSRYF104Z25
	C5518, C5528		CKSRYF104Z25
	C3012		CKSRYF105Z10

RESISTORS

△	R1901, R1950, R1953, R1955-R1959	RS1/10S0R0J
	R5573	RS1/16S103J
	R1318	RS1/16S1202F
	R3549, R3550, R3565-R3568	RS1/16S2200F
	R1319	RS1/16S2202F
	R1317	RS1/16S2702F
	R3519-R3522, R3531, R3532	RS1/16S4701F
	R3545-R3548, R3551, R3552	RS1/16S4701F
	Other Resistors	RS1/16S□□□J

OTHERS

10	7P CABLE HOLDER	51063-0705
CN11	9P FFC CONNECTOR	52045-0945
CN1	13P FFC CONNECTOR	52045-1345
CN12	6P JUMPER CONN.	52147-0610
CN4	19P SOCKET	AKP7001
CN15	13P PLUG	AKP7059
CN3	20P SOCKET	AKP7129
BZ1660	BUZZER	APV7002
CN1302	KR CONNECTOR	B5B-PH-K
CN1301	KR CONNECTOR	B6B-PH-K
JA5851	MINI JACK	DKN1124
JA1651	OPTICAL LINK JACK	GP1FA501TZ
JA3501	2P PIN JACK	RKB1041
CN1101	FCC CONNECTOR	SLW15S-1C7
KN1299	EARH METAL FITTING	VNF1084

FLAC ASSY SEMICONDUCTORS

IC5601	BA4558F-HT
Q5606	2SB1237X
Q5604	2SB1238X
Q5603	2SC2412K
Q5605	2SD1858X

XC-L11

Mark	No.	Description	Part No.
	D5612-D5617 D5618, D5619 D5620		1SR154-400 1SS355 UDZS6.8B
COILS AND FILTERS			
	L5601-L5603		LFEA680J
CAPACITORS			
	C1591, C1593, C1594 C5608 C5603, C5604 C5612 C5620, C5621		CCSRCH101J50 CEAL100M50 CEAL101M10 CEAL470M35 CEAT100M50
	C1592 C5610, C5611, C5613-C5617 C5601, C5602, C5605, C5606 C5618, C5619 C1590		CEAT101M10 CEJQ470M25 CKSRYB473K25 CKSRYB473K25 CKSRYF104Z25
RESISTORS			
	R5605 Other Resistors		RS1/10S1R0J RS1/16S□□□J
OTHERS			
	CN115 13P SOCKET CN2 10P CONNECTOR 1 SHIELD CASE CD 2 PCB BINDER		AKP7070 AKP7134 ANK7091 VEF1040
D KEYR ASSY			
SEMICONDUCTORS			
	D5901 LED(BLUE)		E1L55-3B0A
SWITCHES AND RELAYS			
	S5904		ASG7013
CAPACITORS			
	C5901		CKSRYF104Z25
RESISTORS			
	R5905		RS1/16S682J
OTHERS			
	110 7P JUMPER WIRE J 10 7P CABLE HOLDER		51063-0705 D15A07-100-2651
E KEYL ASSY			
SEMICONDUCTORS			
	Q5903, Q5904 D5908 LED(BLUE) D5906 LED(RED, GREEN)		DTA124EUA E1L55-3B0A VRPG5615S
SWITCHES AND RELAYS			
	S5903		ASG7013
CAPACITORS			
	C5902		CKSRYF104Z25
RESISTORS			
	Other Resistors		RS1/16S□□□J
OTHERS			
	CN111 9P FFC CONNECTOR		52045-0945

Mark	No.	Description	Part No.
F HP ASSY			
SEMICONDUCTORS			
	Q3003, Q3004 Q3001		2SD2114K DTA124EUA
CAPACITORS			
	C3903, C3904 C3901, C3902		CKSRYB103K50 CKSRYB473K25
RESISTORS			
	Other Resistors		RS1/16S□□□J
OTHERS			
	112 6P CABLE HOLDER 3901 MINI JACK J 12 6P JUMPER WIRE KN3901 EARTH METAL FITTING		51048-0600 AKN7026 D20PYY0605E VNF1084
H FLDP ASSY			
SEMICONDUCTORS			
	IC5661 Q5681 D5681 D5661		MSM9202-01 UN5212 1SS355 UDZS8.2B
COILS AND FILTERS			
	L5663 L5662		LAU100J LAU220J
CAPACITORS			
	C5674 C5681 C5661, C5664 C5669 C5953		CCSRCH470J50 CEJQ100M16 CEJQ101M10 CEJQ330M35 CEJQ470M16
	C5671-C5673 C5679, C5682 C5662, C5663, C5665, C5666, C5668 C5670, C5675, C5952		CKSRYB102K50 CKSRYB103K50 CKSRYF473Z50 CKSRYF473Z50
RESISTORS			
	Other Resistors		RS1/16S□□□J
OTHERS			
	V5661 FL TUBE CN5661 11P SOCKET 5951 REMOTE RECEIVER UNIT		AAV7082 AKP7069 GP1UM27XK
I CNB ASSY			
SEMICONDUCTORS			
	D5656 D5655 D5651-D5654		1SS355 UDZ2.0B UDZS8.2B
RESISTORS			
	Other Resistors		RS1/16S□□□J
OTHERS			
	CN5652 11P PLUG CN5651 10P CONNECTOR		AKP7058 AKP7134

Mark	No.	Description	Part No.
J		LOAB ASSY	
		SWITCHES AND RELAYS	
	S101		VSK1011
		OTHERS	
	CN602	CONNECTOR POST	S2B-PH-K
	CN601	CONNECTOR POST	S5B-PH-K
		PC BOARD LOAB	VNP1836

6. ADJUSTMENT

6.1 TEST MODE

Kind of test mode

The following four modes exist.

There is no information to be shown in this CD adjustment .

1-1. TEST mode. : For adjustment in main body distance of production line

1-2. Unit TEST mode. : For inspection by the function checker of production line

1-3. Service TEST mode. : For inspection by service

It is not possible to operate at all by recognition because of there is no AC pulse if it is CD tuner alone and there is no part AMP as the power failure.

Then, to be able to move the CD tuner, mode yet in the inconvenience without the part AMP.

It is possible to operate only in the CD tuner even if the part AMP is not connected.

An initial function becomes CD if the product starts in this mode, and CD becomes CD TEST mode different from a usual operation.

Even if the function is returned to the CD function again, the product does not become CD TEST mode when the function is made functions other than CD once. The product becomes a usual CD operation.

To put the product from the state in the CD TEST mode, the remote control code of A25F is received.

1-4. CD TEST mode. : For inspection by service

When the remote control code of A25F is received at the CD function when it is on, power becomes CDTEST mode.

The CD tuner is effective to this even the ordinary mode.

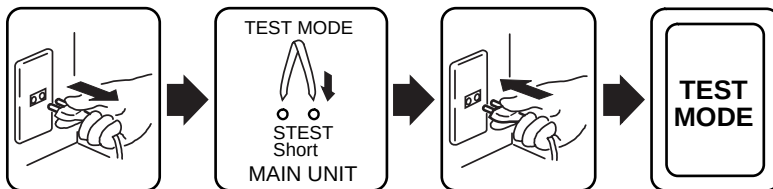
However, the product becomes off this mode when the function is changed besides CD.

The step in the part CD can operate. From LD ON to SPDL LOCK , TRKG ON/OFF and etc.

6.1.1 How to Start/Cancel Service Test Mode

NOTE: There is no information to be shown in this CD adjustment.

TEST MODE : ON



An initial function becomes CD, then becomes CD TEST MODE. And becomes a blank display [:].

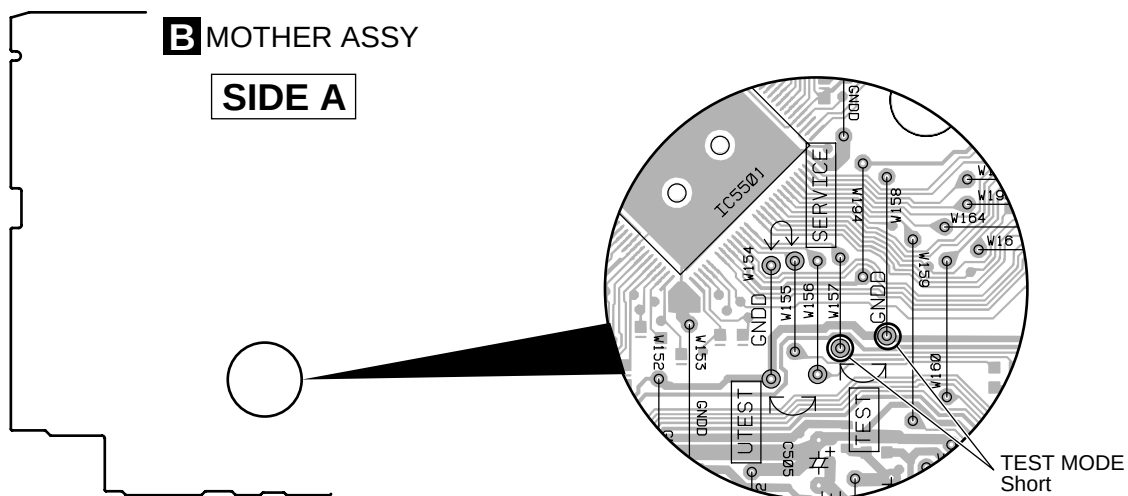
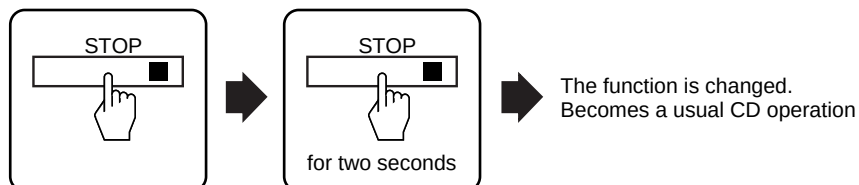


Fig. 1 Test Mode Point Location

CD TEST MODE : CANCEL



TEST MODE : STOP



6.1.2 Function And Operation In CD Test Mode

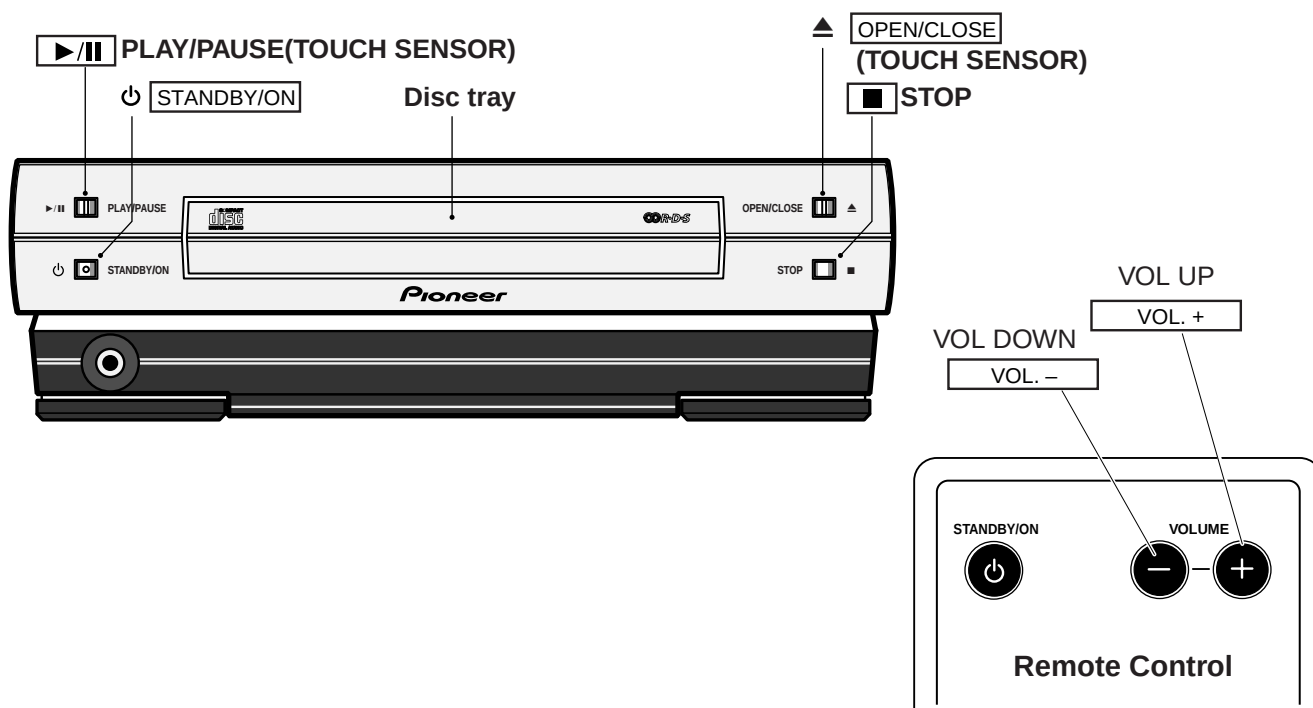
Main body key	Single goods CD remote control unit	Operation condition	Content of operation	FL display
OPEN/CLOSE	(None)	When CD STOP	The CD tray opens and close.	
STOP	STOP	When CD STOP	The function is changed.	
		When Servo ON	All servos are turned off.	CD : ↓
POWER (*1)	RANDOM (A24A)	When CD STOP	LD is turned on, and auto focus is done.	FOCUS ON
PLAY/PAUSE	PLAY (A217)	After FOK	The spindle is kicked. And, the self adjustment processing tracking servo is turned on and MUTE is released. (*2)	SPNDL KICK ↓ SERVO ON
PLAY/PAUSE	PLAY (A217)	When TRK SERVO OFF	The tracking servo is turned on, and MUTE is released.	SERVO ON
PLAY/PAUSE	PLAY (A217) PAUSE (A218)	When TRK SERVO ON	The tracking servo is turned off, and MUTE is put.	SERVO OFF
VOL UP	TRK UP (A210)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of FWD.	CD XX : XX ↓ SERVO OFF
VOL DOWN	TRK DOWN (A211)	When TRK SERVO ON	The tracking servo is turned off, MUTE is put, and the slider is moved in the direction of RVS.	CD XX : XX ↓ SERVO OFF
(None) (*3)	PGM (A20D)	When CD has Stopped	LDON → Auto focus → Spindle kick → Self adjustment → TOC lead → The 2th search → Tracking servo ON → MUTE release	FOCUS ON ↓ SPNDL KICK ↓ SERVO ON

*1 Method of making POWER OFF when there is no remote control.

The function is changed besides CD keeping pushing the STOP key again for two seconds after CD is stopped with the STOP key.
And, please push the POWER key.

*2 If the slider is not sent to outer a little to turn on the servo by surroundings the in DISC, the sound is not occasionally emitted.

*3 It is possible to operate only by remote control for the unit check mode.



6.2 TUNER SECTION

■ AM Tuner Section

- There is no adjustment in the AM tuner.

■ FM Tuner Section

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

Step No.	Adjustment Title	ANT. Input level and signal condition			Adjustment	
		Frequency (MHz)	Modulation	Input Level (dBμV)	Adjust point	Contents
1	T-METER Adjustment	98	OFF	80	L201	Adjust L201 so that the DC voltage between Pin 21 and Pin 23 of IC201 (Test point V _{tm}) gets within 0 ± 50mV.

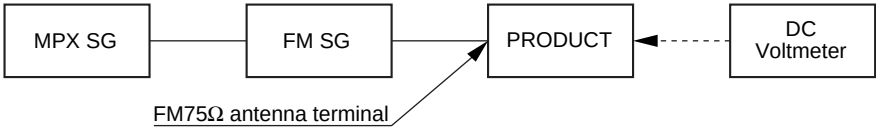


Fig.1 Adjustment Wiring Diagram

A FM/AM TUNER MODULE

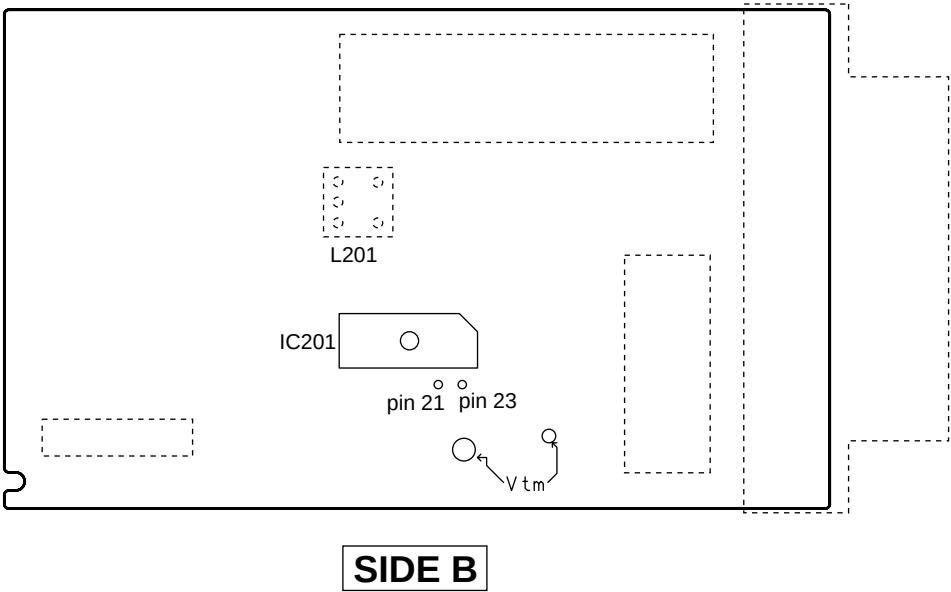


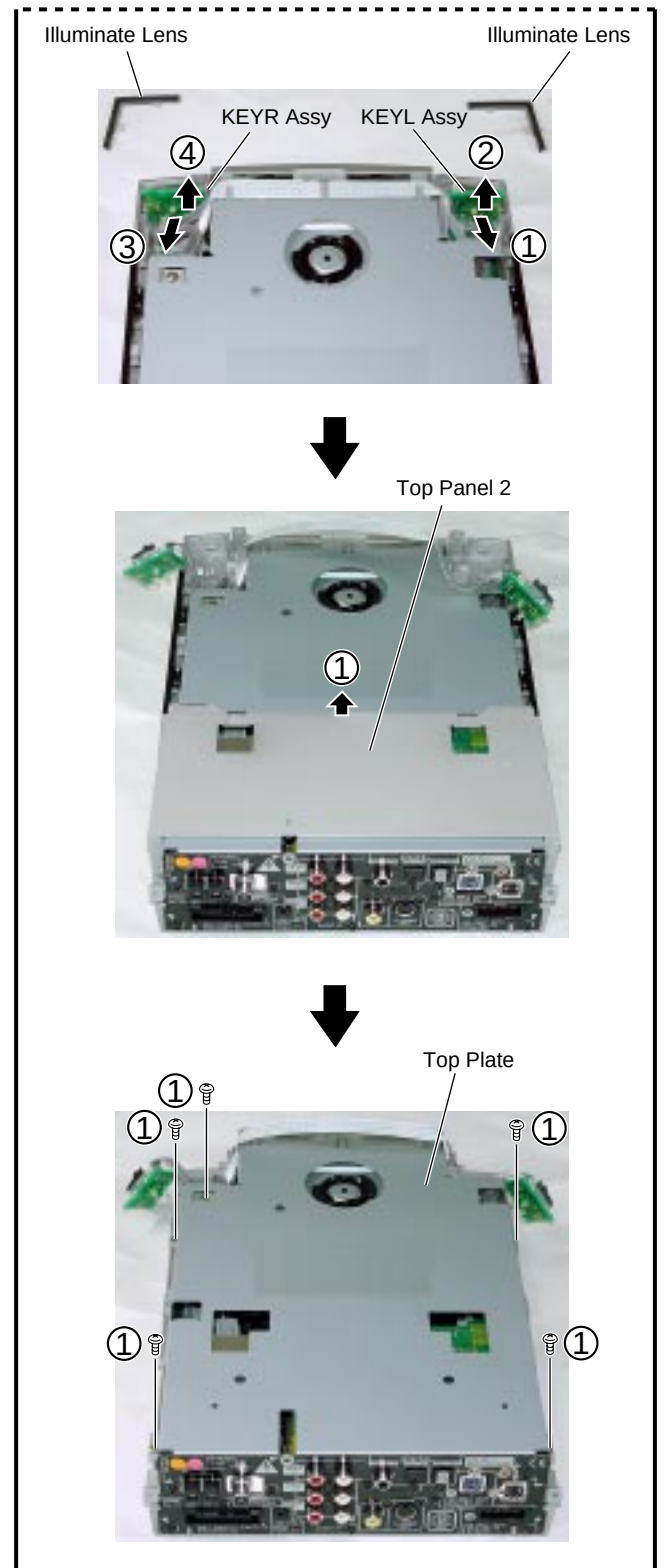
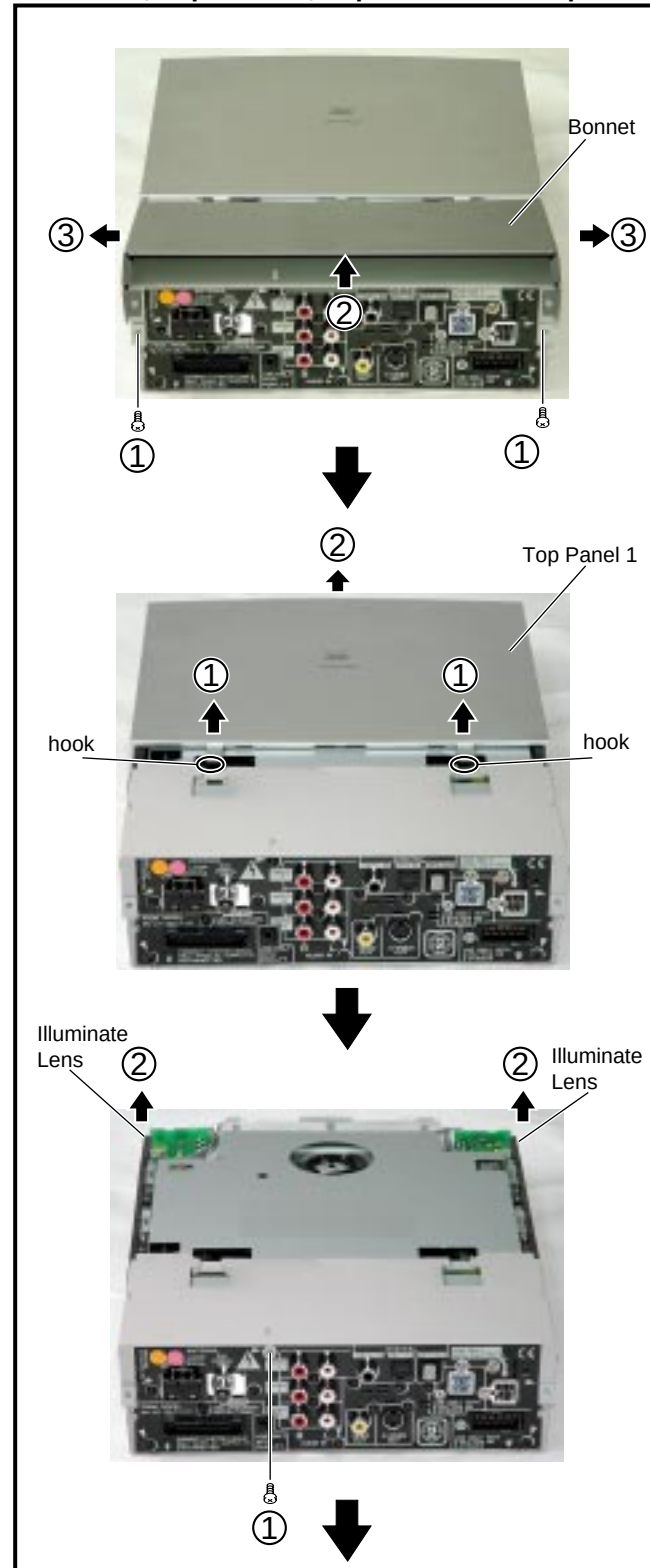
Fig.2 Adjustment Point

7. GENERAL INFORMATION

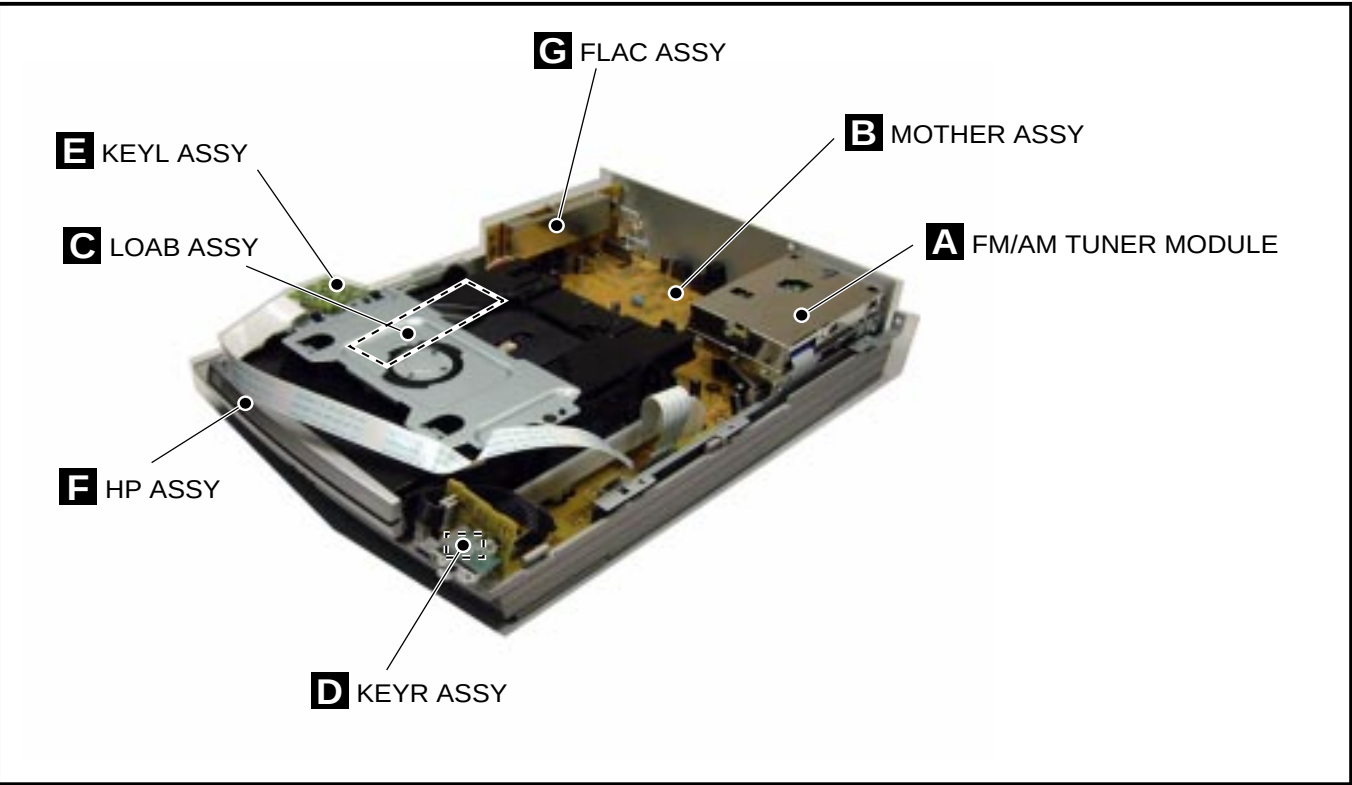
7.1 DISASSEMBLY

■ DIAGNOSIS OF PCBs

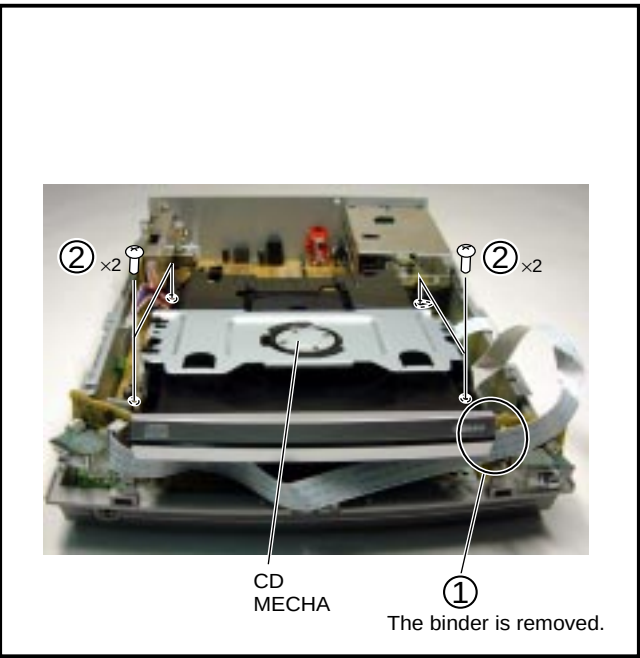
■ Bonnet, Top Panel 1, Top Panel 2 and Top Plate



PCB Location



CD MECHA



■ Display Unit

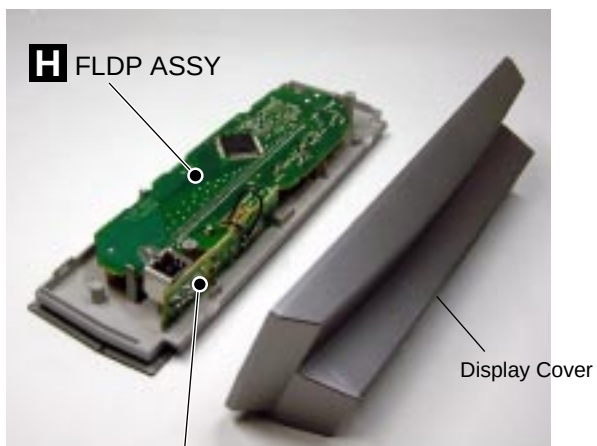
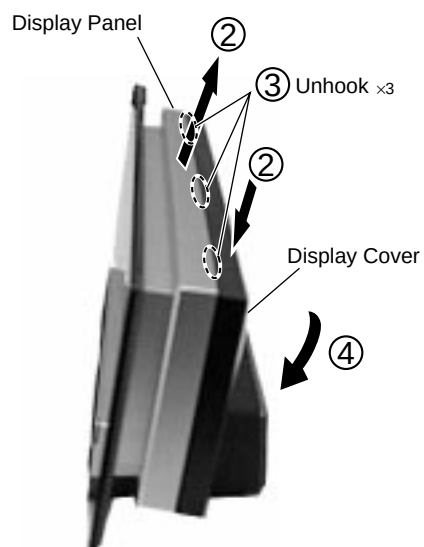


① ①

①



- ② Display Panel and Display Cover are vertically moved.
- ③ The hook three places of the upper part are removed.
- ④ Removes while rotating Display Cover in the direction of the arrow.



H FLDP ASSY

Display Cover

I CNB ASSY

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.

■ PDC079A (MOTHER ASSY : IC5501)

• System Control IC

● Pin Function

No.	Pin Name	I/O	MOS	Function	Pin Function	Active
1	FLACDATA	O	C	Port	FL AC Control Data	-
2	BUS0	I/O	C	Port	CD LSI Communication Bus	-
3	BUCK	O	C	Port	CD LSI Communication Bus Clock	-
4	BEEP	O	C	Port	BEEP Output	
5	TXMUTE	O	C	Port	FM/AM Tuner module Mute	
6	TXCLK	O	C	Port	FM/AM Tuner module Control Clock	-
7	TXDI	O	C	Port	FM/AM Tuner module Control Data	
8	TXCE	O	C	Port	FM/AM Tuner module Control CE	
9	XRDSON	O	C	Port	RDS Decoder Control (H : Stop)	L
10	XFLCS	O	C	Port	FL Connect Signal	-
11	XRESET	I	-	RESET	RESET	L
12	(NC)	-	-		Connect VDD1 for Not used	-
13	(NC)	-	-		Open for Not used	-
14	GND	-	-	GND	GND	-
15	CF1	-	-	SERALOCK	Seramic resonator Connected terminal	-
16	CF2	-	-	SERALOCK	Seramic resonator Connected terminal	-
17	VDD1	-	-	VDD	VDD	-
18	ST/TUNE	O	N	Port	FL Driver Hardware Reset	L
19	KEY	I	N	Analog Input	KEY Input	-
20	CD O/C	I	N	Analog Input	CD DOOR SW Input	-
21	OPPROTECT	O	N	Port	Not used	-
22	(NC)	O	N	Port	Not used	-
23	XCDRST	O	N	Port	CD LSI Hardware Reset	L
24	PROTECT	I	N	Analog Input	Measures of short test with Summing circuit	-
25	DSTN	I	N	Analog Input	Destination Switch	-
26	ACPULSE	I	N	INT0 Port	AC Pulse Input	-
27	XCDCE	O	C	INT1 Port	CD LSI CE	
28	RDSCLK	I	C	INT2 Port	Clock Input from RDS Decoder (Without RDS : Low Output)	-
29	SR IN	I	C	INT3 Port	System Remote Control Signal Input	-
30	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
31	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
32	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
33	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
34	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
35	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
36	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
37	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
38	(NC)	O	P	VFD Controller	Prohibition of use only for VFD	-
39	(NC)	O	P	Port	Not used	-
40	(NC)	O	P	Port	Not used	-
41	(NC)	O	P	Port	Not used	-
42	(NC)	O	P	Port	Not used	-
43	(NC)	O	P	Port	Not used	-
44	(NC)	O	P	Port	Not used	-
45	(NC)	O	P	Port	Not used	-
46	VDD	-	-	VDD	VDD	-
47	(NC)	O	P	Port	Not used	-
48	(NC)	O	P	Port	Not used	-
49	XCDDROFF	O	P	Port	CD Door Driver Control ON/OFF (0 : OFF, 1 : Drive ON)	L
50	CDSLEEP	O	P	Port	CD LSI Function Stop (0 : OFF, LSI Stop : LSI Operation)	H

No.	Pin Name	I/O	MOS	Function	Pin Function	Active
51	GND	-	-	GND	GND	-
52	ZDET	I	P	Port	CD Zero Detection Input	
53	CDINSIDE	I	P	Port	CD INSIDE SW Input	
54	LOADIN	O	P	Port	CD Door Driver Control (Direction where door is closed)	H
55	LOADOUT	O	P	Port	CD Door Driver Control (Direction where door is opened)	H
56	ATT	O	P	Port	LINE Input ATT Control	L
57	WCLK	O	P	Port	For Flash Rewrite	L
58	SBD1	O	P	Port	DISC LED Control, lights brightly *3	H
59	NC	O	P	Port	DISC LED Control, lights a little darkly *3	H
60	OPPWR	O	P	Port	DISC LED Control, lights considerably darkly *3	H
61	HP DET	O	P	Port	Infrared RadiationControl for Sensor	L
62	FLDIMA	O	P	Port	FL Dimmer Control A	
63	FLDIMB	O	P	Port	FL Dimmer Control B	
64	CDRD	O	P	Port	Not used	
65	TXDO	I	P	Port	Data Input from FM/AM Tuner module	-
66	RDSDATA	I	P	Port	Data Input from RDS Decoder	-
67	TEST	I	P	Port	CD Core Checker Mode Detection Jumper	
68	UTEST	I	P	Port	Unit Test Mode Detection Jumper	L
69	SERVICE	O	P	Port	Service Mode Detection Jumper	H
70	TXSW	O	P	Port	TX SW Output	H
71	4052B	O	P	Port	BU4052BCF Control A *1	-
72	VDD	-	-	VDD	VDD	-
73	4052A	O	P	Port	BU4052BCF Control B *1	-
74	MA SD	O	P	Port	Not used	-
75	CD MUTE	O	P	Port	CD Mute Output	L
76	HP MUTE	O	P	Port	H.P AMP Mute	L
77	(NC)	O	P	Port	Not used	L
78	(NC)	O	P	Port	Not used	L
79	XTMRLED	O	P	Port	Timer Standby Display LED Control	-
80	XSTBYLED	I	P	Port	Standby Display LED Control	-
81	BULLEDL	O	P	Port	Not used	-
82	BULLEDM	O	P	Port	Not used	-
83	BULLEDH	O	P	Port	System Bus Received Data	-
84	XEMR	I	P	Port	Signal of emergency generation from amplifier	L
85	EXOE	O	C	Port	BU4094BCF Output E , Using combinedly with WD0 for Flash Rewrite *3	H
86	EX/V DATA	O	C	Port	BU4094BCF / VOL-IC Control Data *3	-
87	EX/V CLK	O	C	Port	BU4094BCF / VOL-IC Control Clock *3	-
88	EXCE	O	C	Port	BU4094BCF CE , Using combinedly with WEN/D1 for Flash Rewrite *3	H
89	GND	-	-	GND	GND	-
90	VDD	-	-	VDD	VDD	-
91	FL DATA	O	C	Port	FL Driver Control Data	-
92	FL CLK	O	C	Port	FL Driver Control Clock	-
93	SBDO/REQ	O	C	Port	System Bus Sending Data / Request	-
94	SBCLK	O	C	Port	System Bus Clock	-
95	DREQ	O	C	Port	Display Data Communication Request	-
96	DDATA	I	C	Hard Serial	Display Data Communication Received Data	-
97	DCLK	I	C	Hard Serial	Display Data Communication Clock	-
98	BUS3	I/O	C	Port	CD LSI Communication Bus	-
99	BUS2	I/O	C	Port	CD LSI Communication Bus	-
100	BUS1	I/O	C	Port	CD LSI Communication Bus	-

XC-L11

***1 : Change of function. The truth value table of BU4052BCF.**

A	B	Switch turned on	Function
L	L	X0, Y0	CD
H	L	X1, Y1	AUX
L	H	X2, Y2	PB
H	H	X3, Y3	TX

***2 : The truth value table of Expander IC (BU4094BCF / M-L11 COMPLEX ASSY IC5801).**

Function Name	Port Kind	Active
OE	C-MOS	H
ACRY	C-MOS	H
SPRY	C-MOS	H
XMUTE	C-MOS	L
IND	C-MOS	H
HPPOW	C-MOS	(Not used)
WF1*	C-MOS	L
WF2*	C-MOS	L

*

Woofers Level	WF1	WF2
HIGH	H	H
MID	H	L
LOW	L	H

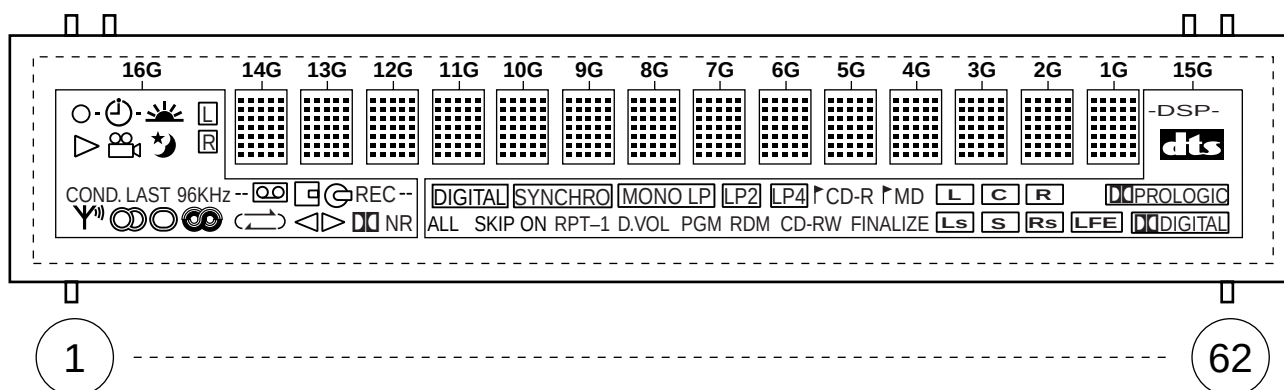
***3 : The truth value table of PLAY LED brightness.**

Brightness	DISCLED	LEDDIMA	LEDDIMB
OFF	L	L	L
LOW	L	L	H
MID	L	H	L
HIGH	H	L	L

7.2.2 DISPLAY

■ AAV7082 (FLDP ASSY : V5661)

• FL DISPLAY



● Anode Connection

	16G	15G	14G - 1G
P1	L R	-DSP-	1-1
P2		dt	2-1
P3	-⊖-	DPROLOGIC	3-1
P4	○	DIGITAL	4-1
P5		LFE	5-1
P6		Rs	1-2
P7	Y)	S	2-2
P8	COND.	Ls	3-2
P9	○	R	4-2
P10	○	C	5-2
P11	LAST	L	1-3
P12		FINALIZE	2-3
P13	◀	▶MD	3-3
P14	⏮	▶CD-R	4-3
P15	⏭	W	5-3
P16	96KHz	-R	1-4
P17	◀	CD	2-4
P18	▶	RDM	3-4
P19	NR	PGM	4-4
P20	-- REC --	LP4	5-4
P21		LP2	1-5
P22		D.VOL	2-5
P23		MONO LP	3-5
P24	▷	-1	4-5
P25	-	RPT	5-5
P26	-	SYNCHRO	1-6
P27	-	ON	2-6
P28	-	SKIP	3-6
P29	-	DIGITAL	4-6
P30	-	ALL	5-6
P31	-	-	1-7
P32	-	-	2-7
P33	-	-	3-7
P34	-	-	4-7
P35	-	-	5-7

1-1	2-1	3-1	4-1	5-1
1-2	2-2	3-2	4-2	5-2
1-3	2-3	3-3	4-3	5-3
1-4	2-4	3-4	4-4	5-4
1-5	2-5	3-5	4-5	5-5
1-6	2-6	3-6	4-6	5-6
1-7	2-7	3-7	4-7	5-7

(14G - 1G)

● Pin Connection

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Connection	F1	F1	NP	NP	NX	NX	NX	P4	P3	P2	P1	16G	15G	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	P35	P34	P33	P32
Pin No.	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62
Connection	P31	P30	P29	P28	P27	P26	P25	P24	P23	P22	P21	P20	P19	P18	P17	916	P15	P14	913	P12	P11	P10	P9	P8	P7	P6	P5	NP	NP	F2	F2

F1, F2 : Filament

1G~16G : Grid

NP : No Pin

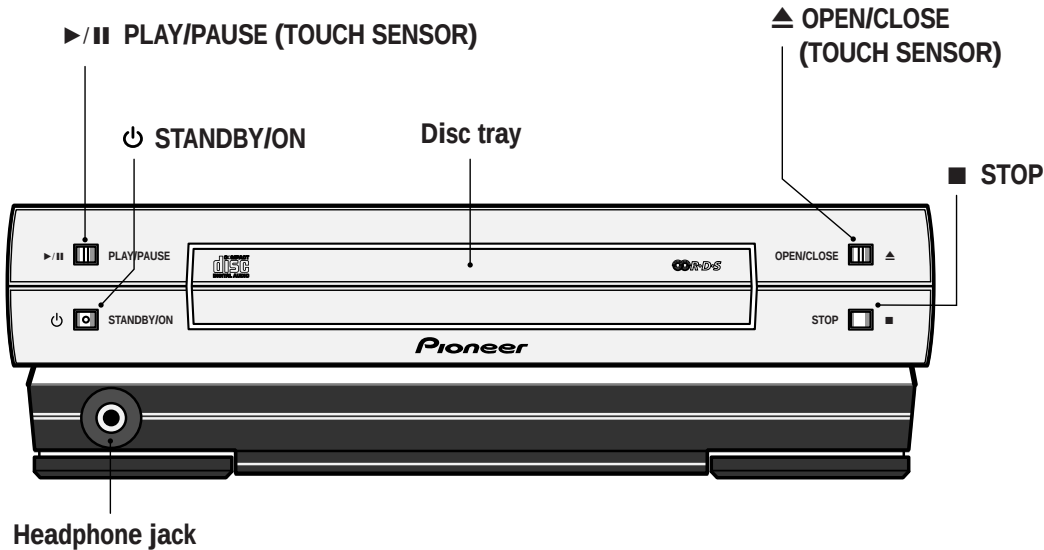
NX : No extend pin

DL : Datum Line

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

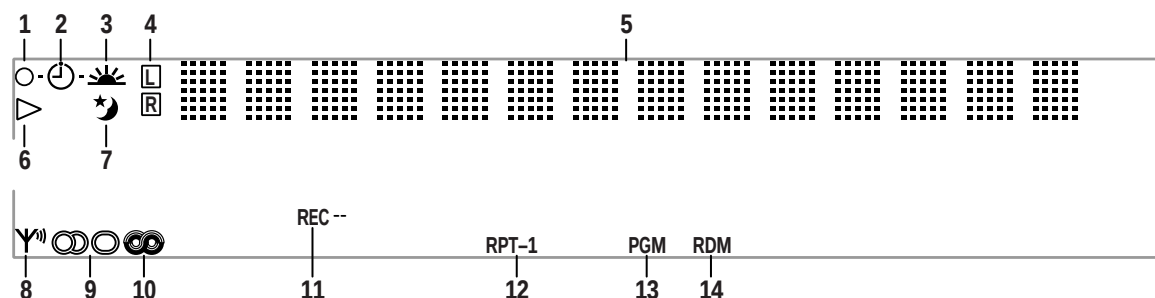
Front Panel



CD Tuner

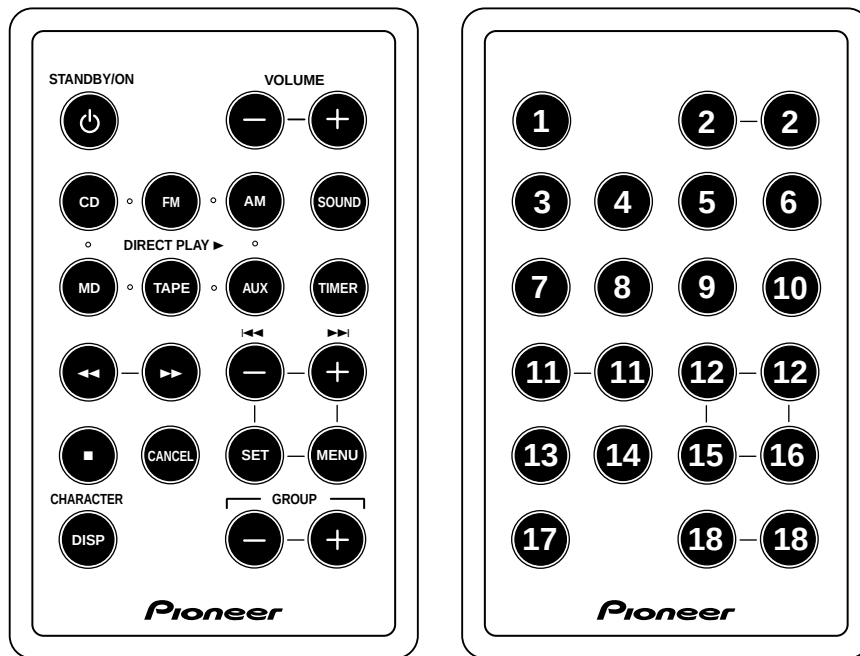
- 1 **CD tray**
- 2 **Power light** – Lights when the unit is switched on.
- 3 **▶/|| button** – Press to play a disc, or pause a disc that's already playing (press again to restart playback).
- 4 **△ button** – Press to open or close the CD tray.
- 5 **Play light** – Lights when a CD is playing
- 6 **Standby/On button** – Press to switch the unit between standby and on modes. Indicator lights in standby mode. **Note:** this unit consumes a small amount of electricity in standby mode (0.9W).
- 7 **HeadPphone jack** – Connect a pair of headphones for private listening. When plugged in, the speakers are automatically switched off.

Display



- 1 ○ **Record timer** – Lights when setting the timer; flashes once set.
- 2 ⌚ **Timer** – Lights when setting the timer; flashes once set.
- 3 🌅 **Wake up timer** – Lights when the wake up timer is set; flashes during wake up timer playback.
- 4 **STEREO Indicator** – Stereo channel indicators.
- 5 **Character display**
- 6 ▷ **Indicator** – Lights when a tape or a disc is playing mode.
- 7 🌙 **Sleep timer** – Lights when the sleep timer is set.
- 8 📶 **Indicator** – Indicates strength of broadcast signal.
- 9 🔄 **Stereo to Mono** – Auto stereo/mono mode.
- 10 🔗 **RDS** – Lights when the tuner is in an RDS mode.
- 11 **REC** – Lights when recording to the optional tape or MD mode.
- 12 **RPT-1** – Lights during repeat play.
- 13 **PGM** – Lights during Program play.
- 14 **RDM** – Lights during Random play, the tape.

Remote Control



- 1 STANDBY/ON** – Press to switch the unit between standby and on modes.
Note: this unit consumes about 1W of electricity in standby mode.
- 2 + –** Use to raise the volume.
– – Use to lower the volume.
- 3 CD mode** – Press to switch the sound to CD and start the disc playing (if there's one loaded).
- 4 FM Tuner mode** – Press to switch the sound to tuner, switch between FM and switch between preset station memories.
- 5 AM Tuner mode** – Press to switch the sound to tuner, switch between AM and switch between preset station memories.
- 6 SOUND** – Press to put the $\lll$ and $\ggg$ buttons into tone, subwoofer level and balance control mode.
- 7 MD mode** – Press to switch the sound to MD and start the disc playing (if there's one loaded).
- 8 Tape deck mode** – Press to switch the sound to tape deck and start the tape playing (if there's one loaded).
- 9 AUX mode** – Press to switch the sound to the component connected to the AUX inputs.
- 10 TIMER/CHARACTER** – Press to start setting the timer. Also use to select characters when naming tuner station memories, etc.
- 11 $\lll$ $\ggg$ buttons** – Press to fast-reverse / fast-forward scanning.
- 12 $\lll$ $\ggg$ buttons** – Press to fast-reverse / fast-forward the CD/MD/tape.
- 13 $\square$ STOP** – Press to stop playback (or recording) of the CD/MD/tape.
- 14 CANCEL** – Also use to cancel operations, such as setting the clock, before the **SET** button has been pressed.
- 15 SET** – Press to finish operations such as setting the clock, setting the reverse mode, and so on.
- 16 MENU** – Press to access various features, including station memory naming, changing the tape reverse mode, and so on.
- 17 CHARACTER/DISP** – Press to change the kind of information that the display shows. The choices available depend on the current function (CD, tape, etc.).
- 18 GUOUP +/-** – Use to switch +/- remote locator.

8.2 SPECIFICATIONS

Stereo CD Tuner: XC-L11

FM Tuner Section

Frequency Range 87.5 - 108MHz
 Antenna 75 Ω , unbalanced

AM Tuner Section

Frequency Range 522 kHz - 1,602 kHz(9 kHz step)
 Antenna Loop antenna
 (supplied)

Compact Disc Player Section

Type Compact disc digital audio system
 Usable discs Compact discs
 Channels 2 (stereo)
 Frequency Response 4 Hz–20 kHz
 Signal-to-Noise Ratio 110 dB (EIAJ)
 Dynamic range 96 dB (EIAJ)
 Wow and Flutter Below measurable levels
 ($\pm 0.001\%$ W.PEAK)
 Dimensions 220 (W) $\times$ 317 (H) $\times$ 65 (D) mm
 (without stands and door closed)
 Weight 2.2 kg

Display Unit

Dimensions 206 (W) $\times$ 50 (H) $\times$ 65 (D) mm
 Weight 0.2 kg

Accessories

Remote control unit	1
Lithium battery (CR2025)	1
AM loop antenna	1
FM wire antenna	1
AC power cord	1
10P cable	1
20P cable	1
Operating instructions	1
Warranty card	1

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

• ACCESSORIES

