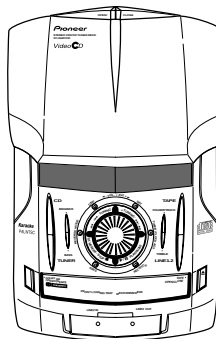


Service Manual

Pioneer



ORDER NO.
RRV2477

CD/VCD TUNER DECK XC-IS22VCD

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

Type	Model	Power Requirement	Remarks
	XC-IS22VCD		
ZBDXJ	O	DC power supply from other system	
ZLXJ/NC	O	DC power supply from other system	

● This product is a system(s) component.

This product does not function properly when independent; to avoid malfunctions, be sure to connect it to the prescribed system component(s), otherwise damage may result.

Component	System		Service Manual	Remarks
CD/VCD TUNER DECK	XC-IS22VCD	—	RRV2477	This service manual
DVD TUNER DECK	—	XV-IS22DVD	RRV2475	
STEREO POWER AMPLIFIER	M-IS22		RRV2482	
SPEAKER SYSTEM	S-IS22		RRV2461, RRV2487	

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		8. PANEL FACILITIES AND SPECIFICATIONS	78

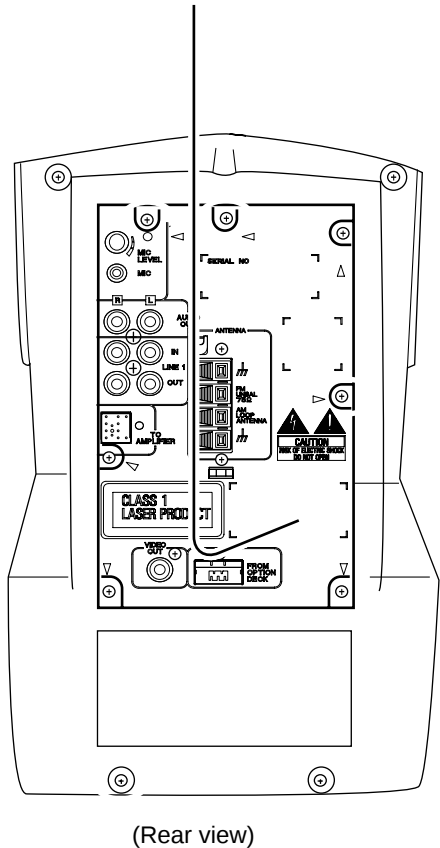
1. SAFETY INFORMATION

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.

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

— LASER DIODE CHARACTERISTICS —
MAXIMUM OUTPUT POWER: 5 mW
WAVELENGTH: 708-785 nm

LABEL CHECK



— 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 CD ASSY is connected to GND, or pin 10 is connected to low level (ON), or else the terminals of Q1101 are shorted to each other (fault condition).

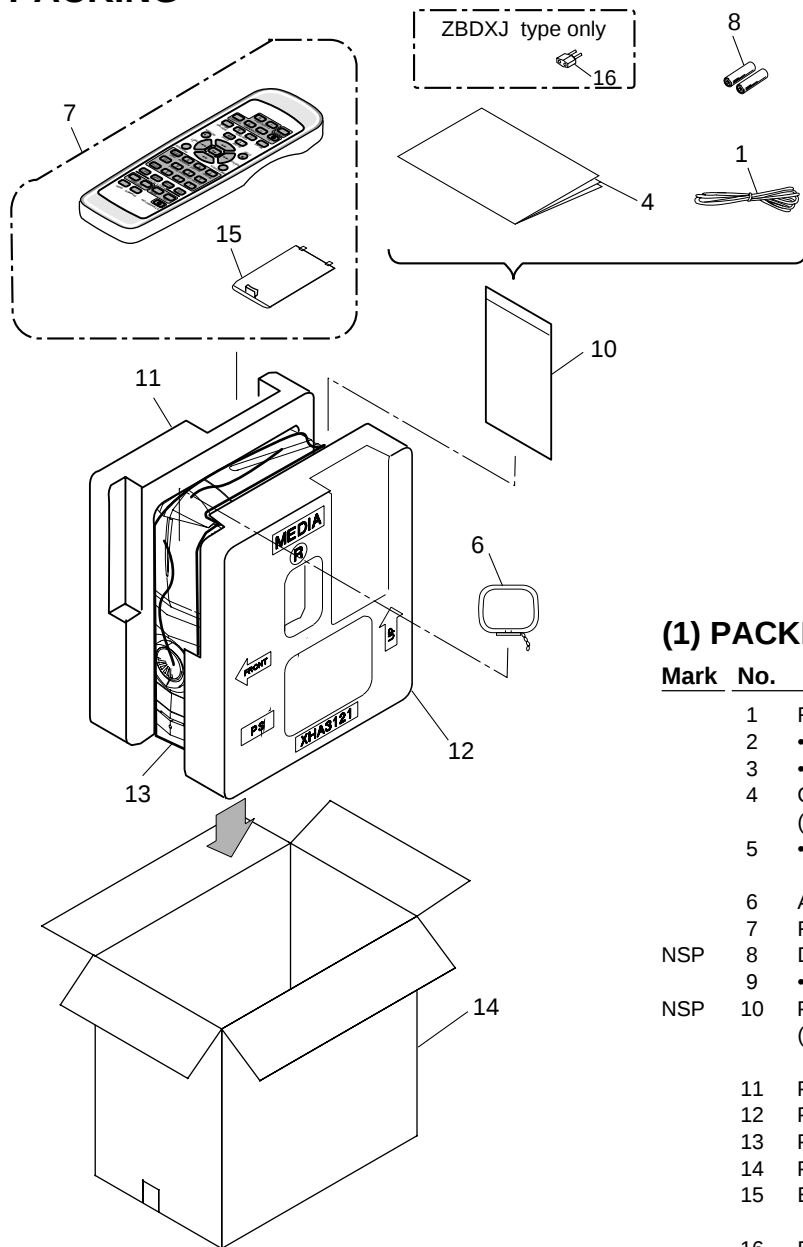
2. When the cover is opened, close viewing of the objective lens with the naked eye will cause exposure to a Class 1 laser beam.

* : Refer to page 54.

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



(1) PACKING PARTS LIST

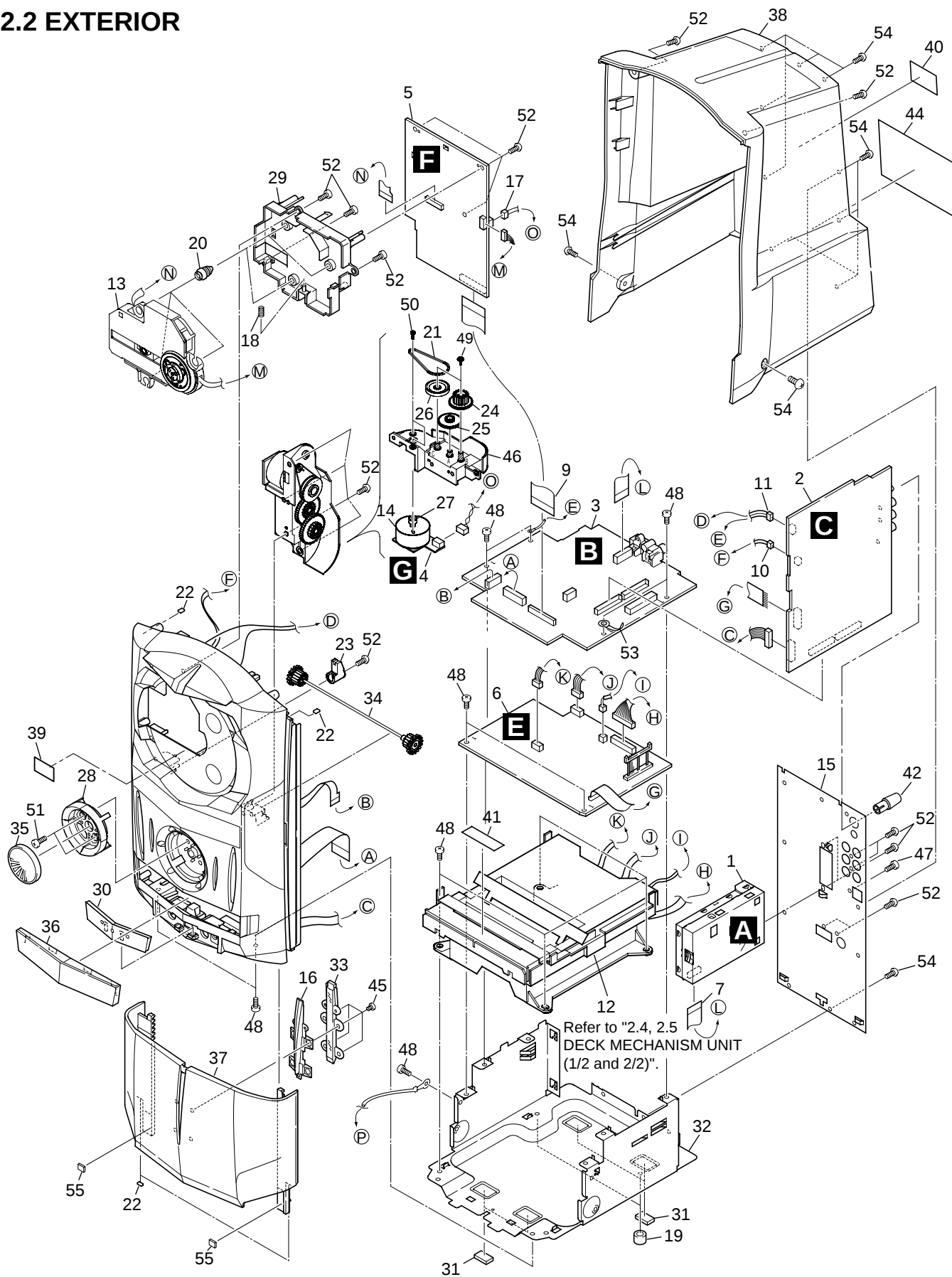
Mark	No.	Description	Part No.
	1	FM Antenna	ADH7004
	2		
	3		
	4	Operating Instructions (English/ Chinese/ Spanish)	XRE3043
	5		
	6	AM Loop Antenna	ATB7009
	7	Remote Control Unit	XXD3035
NSP	8	Dry Cell Batteries(AA/R6)	VEM-013
	9		
NSP	10	Polyethylene Bag (0.03 x 230 x 340)	Z21-038
	11	Protector L	XHA3120
	12	Protector R	XHA3121
	13	Packing Sheet	AHG7053
	14	Packing Case M	See Contrast table (2)
	15	Battery Cover	XZN3116
	16	Power Plug Adapter	See Contrast table (2)

(2) CONTRAST TABLE

XC-IS22VCD/ZBDXJ and XC-IS22VCD/ZLXJ/NC are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.		Remarks
			ZBDXJ type	ZLXJ/NC type	
	14	Packing Case M	XHD3176	XHD3177	
	16	Power Plug Adapter	XKM3002	Not used	

2.2 EXTERIOR



(1) EXTERIOR PARTS LIST

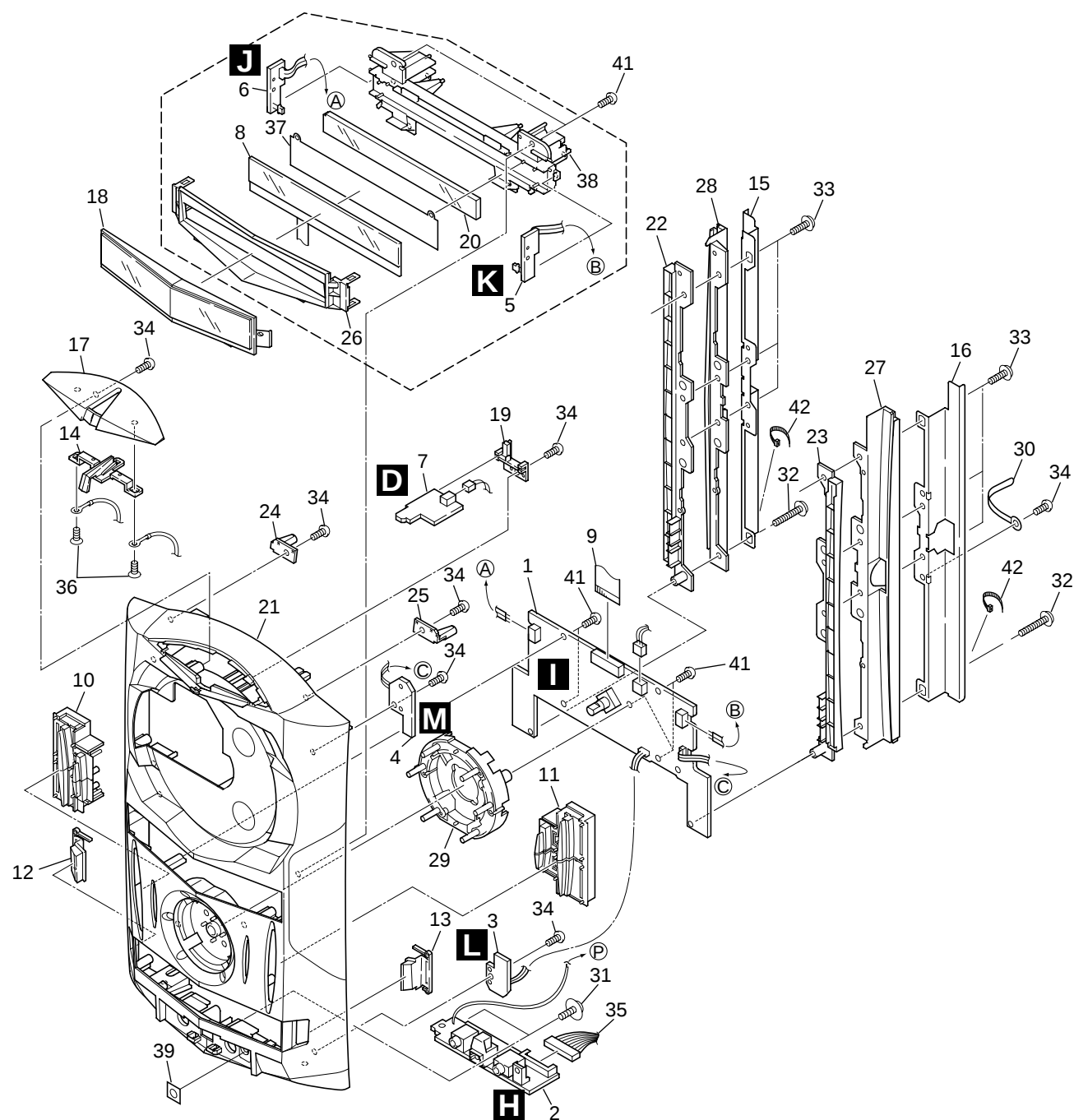
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	FM/AM TUNER MODULE	AXQ7228		26	Gear Pulley A	ANW7066
NSP	2	AF ASSY	XWZ3464		27	Motor Pulley	PNW1634
NSP	3	IF ASSY	XWZ3465		28	Play Button (Pls)	XAD3097
NSP	4	CD MOTOR ASSY	XWZ3410		29	Float Base CD (Pls)	XMR3020
	5	CD ASSY	XWP3002		30	Jack Door(Pls)	XAN3030
NSP	6	DECK ASSY	XWX3038		31	Rubber Sheet	AEB1111
	7	13p F.F.C/30V	XDD3081	NSP	32	Chassis M(Mtl)	XNA3007
	8	•••••			33	LT Conductor M (Pls)	XAK3217
	9	Flexible Cable 30p	XDD3079		34	Shaft Assy	XXG3076
	10	Connector Assy	PG02KK-F15		35	Jog Knob(Pls)	XAA3018
	11	Connector Assy 3p	XDX3016		36	Tray Cap (Pls)	XAK3191
	12	Deck Mechanism Unit	AXA7075		37	CD Door(Pls)	XAN3039
	13	CD Mecha	KSM-900AAA		38	Rear Cover (Pls)	XMC3001
	14	Slider Motor	VXM1033		39	Pu Caution Label	ARW7059
	15	Rear Panel(Mtl)	XNC3095		40	Caution Label	PRW1018
	16	CD Door Lens	XAK3188	NSP	41	Tray Seal	RRW1162
	17	Connector Ass'y	PG02KK2F07		42	Mic Knob (Pls)	XAB3007
	18	Float Spring	ABH7170	NSP	43	Label	VRW1629
NSP	19	Spacer	AEB7092		44	Name Label	See Contrast table (2)
	20	Float Rubber	AEB7129		45	Screw M3 (Steel)	XBA3005
	21	Belt	AEB7171		46	Gear Holder (Pls)	AMR7240
	22	Cussion Rubber	AEB7154		47	Screw	BMZ30P060FZK
	23	Shaft Holder (Pls)	AMR7237		48	Screw	BBZ30P080FMC
	24	Gear B	AMR7260		49	Screw	Z39-019
	25	Gear A	ANW7063		50	Screw	PMZ26P040FMC
					51	Screw	PPZ30P080FMC
					52	Screw	VPZ30P080FZK
					53	Cord Clamper (steel)	RNH-184
					54	Screw	BBZ30P080FZK
					55	Spacer	XEB3023

(2) CONTRAST TABLE

XC-IS22VCD/ZBDXJ and C-IS22VCD/ZLXJ/NC are constructed the same except for the following:

Mark	No.	Symbol and Description	Part No.		Remarks
			ZBDJ type	ZLXJ/NC type	
	44	Name Label	XAL3080	XAL3081	

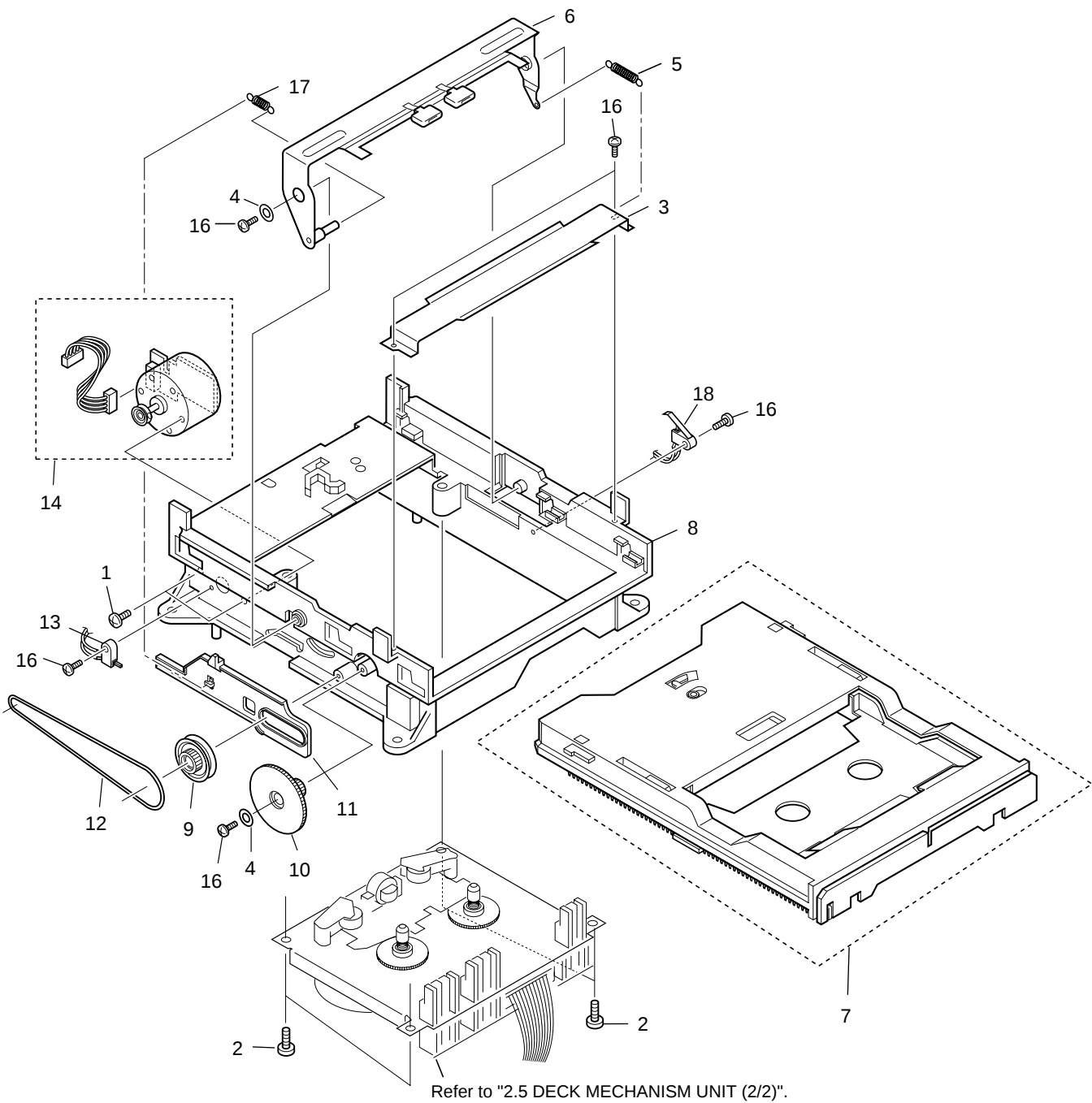
2.3 FRONT PANEL ASSY



● FRONT PANEL ASSY PARTS LIST

Mark	No.	Description	Parts No.
NSP	1	FRONT PANEL ASSY	XWZ3408
NSP	2	F-TERMINAL ASSY	XWZ3487
NSP	3	CD OPEN SW ASSY	XWZ3411
NSP	4	CD CLOSE SW ASSY	XWZ3412
NSP	5	LIGHT- L ASSY	XWZ3413
NSP	6	LIGHT- R ASSY	XWZ3414
NSP	7	MEDIA BLUE LED ASSY	XWZ3415
	8	LCD ASSY	XAV3012
	9	17p F.F.C/30V	XDD3082
	10	Func. Button L (Pls)	XAD3080
	11	Func. Button R (Pls)	XAD3081
	12	Side Button L (Pls)	XAD3082
	13	Side Button R (Pls)	XAD3083
	14	O/C Key(Pls)	XAD3084
	15	Frame L (Mtl)	XNG3048
	16	Frame R (Mtl)	XNG3049
	17	O/C Key Base (Pls)	XAK3189
	18	Display Window (Pls)	XAK3190
	19	PCB Holder(Pls)	XMR3030
	20	Lens M(Pls)	XAK3192
	21	Front Panel CD (Pls)	XMB3054
	22	Blind L(Pls)	XMR3023
	23	Blind R(Pls)	XMR3025
	24	R.C. Holder L (Pls)	XMR3039
	25	R.C. Holder R (Pls)	XMR3040
	26	LCD Cover (Pls)	XAK3233
	27	Rail R(Pls)	XMR3024
	28	Rail L(Pls)	XMR3022
	29	Ring Button (Pls)	XAD3098
	30	Cord Clamper (Steel)	RNH-184
	31	Screw With Washer	ABA1005
	32	Screw (P3 x 20)	XBA3006
	33	Screw	IPZ30P100FMC
	34	Screw	VPZ30P080FZK
	35	Connector Assy 12p	XDX3014
	36	Screw	BPZ30P060FZK
	37	Diffusion Sheet	XAK3234
	38	Lens Holder	XMR3028
	39	Sensor Cover	XAK3270
	40	Screw	BBZ30P060FZK
	41	Screw	VPZ30P100FMC
	42	Binder	ZCA-SKB90BK

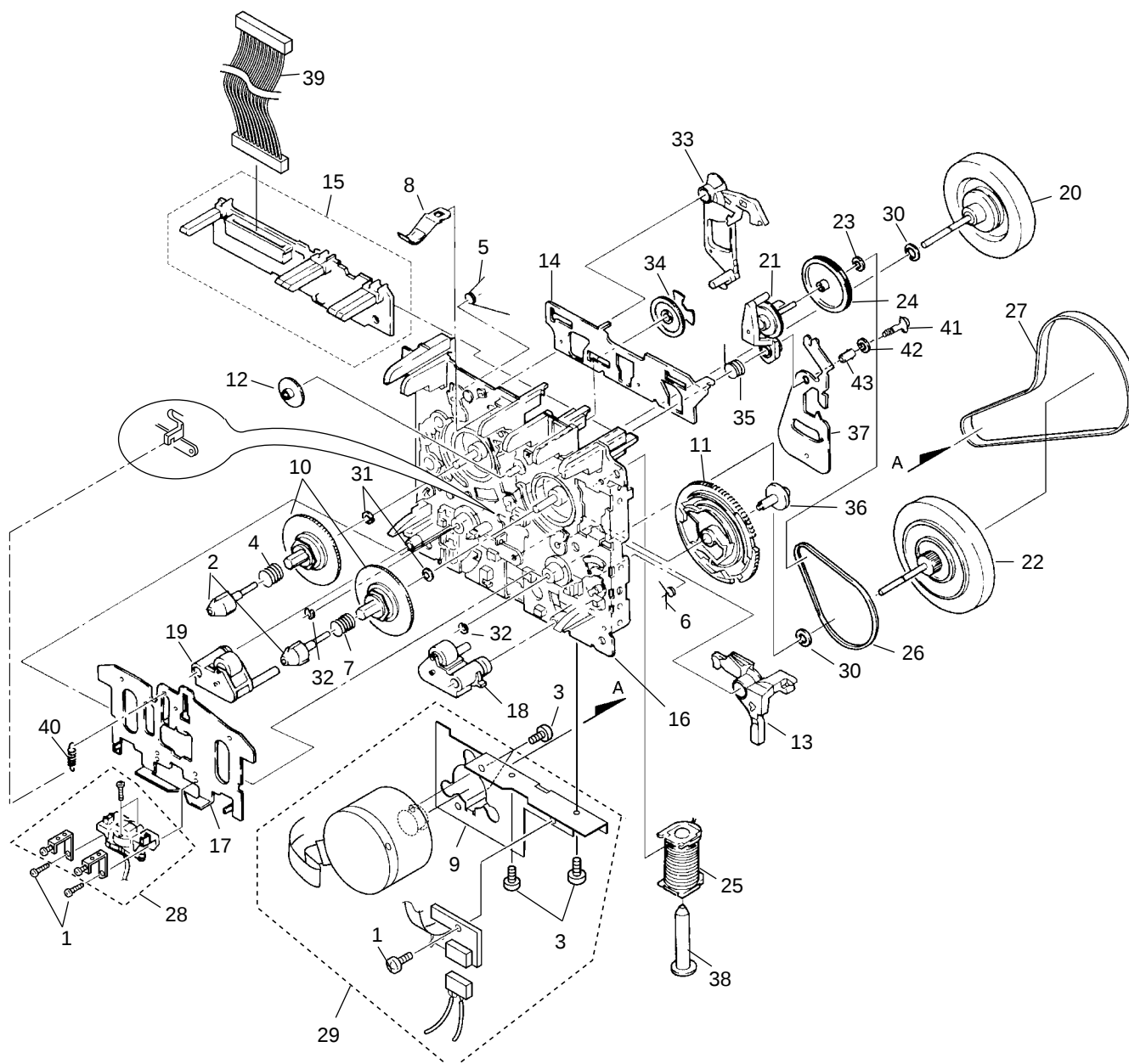
2.4 DECK MECHANISM UNIT (1/2)



● DECK MECHANISM UNIT (1/2) PARTS LIST

Mark	No.	Description	Parts No.
	1	Screw	FG114-14
	2	Screw	UG12H-15
	3	Front BKT	FC64K-11
	4	Washer	MJ112-22
	5	SP Return	FK34N-11
	6	Plate Hold BLK	F573-258
	7	Holder CST BLK	F527-078
	8	LDG Base	FD56R-12
	9	Pulley	FD56T-11
	10	LDG Gear	FD56U-11
	11	Slider	FD57E-11
	12	LDG Belt	FF19L-12
	13	Switch	UE15S-14
	14	MTR Reel BLK	F564-313
	15		
	16	Screw	UG12H-28
	17	SP Clamper	FK34M-11
	18	Switch	UE18P-21

2.5 DECK MECHANISM UNIT (2/2)



● DECK MECHANISM UNIT (2/2) PARTS

LIST

Mark	No.	Description	Parts No.
	1	Screw	KG194-36
	2	Reel Feather	FD57D-13
	3	Screw	UG11S-14
	4	SP Reel(L)	FK32U-12
	5	SP Brake	FK33B-13
	6	SP Arm Play	FK33P-11
	7	SP Reel(R)	FK32V-12
	8	Spring Cassette	FC65M-11
	9	BKT MTR	FC64M-12
	10	Reel Base	FD52W-12
	11	Cam Gear	FD52Y-23
	12	Play Gear (A)	FD53K-12
	13	Arm Play	FD53D-19
	14	Plate Slide	FC61L-19
	15	PCB Control BLK	F567-617
	16	Chassis base BLK	F612-231
	17	Head Base	FC61K-32
	18	Roller Pinch BLK R	F514-129
	19	Roller Pinch BLK L	F514-130
	20	Assy F/W	FR24S-21
	21	Clutch Assy BLK	F522-037
	22	Clutch Assy BLK	F522-048
	23	Washer	FJ111-13
	24	F/R Pulley	FD53F-15
	25	Solenoid BLK	F765-279
	26	F/R Belt	FF18W-12
	27	Belt Main	FF19H-11
	28	Plate HD BLK	F513-824
	29	MTR MAIN BLK	F525-321
	30	Washer	FJ111-30
	31	Washer	FJ111-35
	32	Washer	UJ16F-11
	33	Lever Brake	FD53P-17
	34	FF Gear(A)	FD53L-12
	35	Cam SP	FK32S-14
	36	Screw	UJ14A-12
	37	Lever F/R	FC62G-14
	38	Plunger	FL41S-21
	39	Mecha-Cable	WH65N-11
	40	Spring HB	FK32T- 31
	41	Screw	UG15V-13
	42	Washer	MJ112- 22
	43	Spacer	UJ15V- 13

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

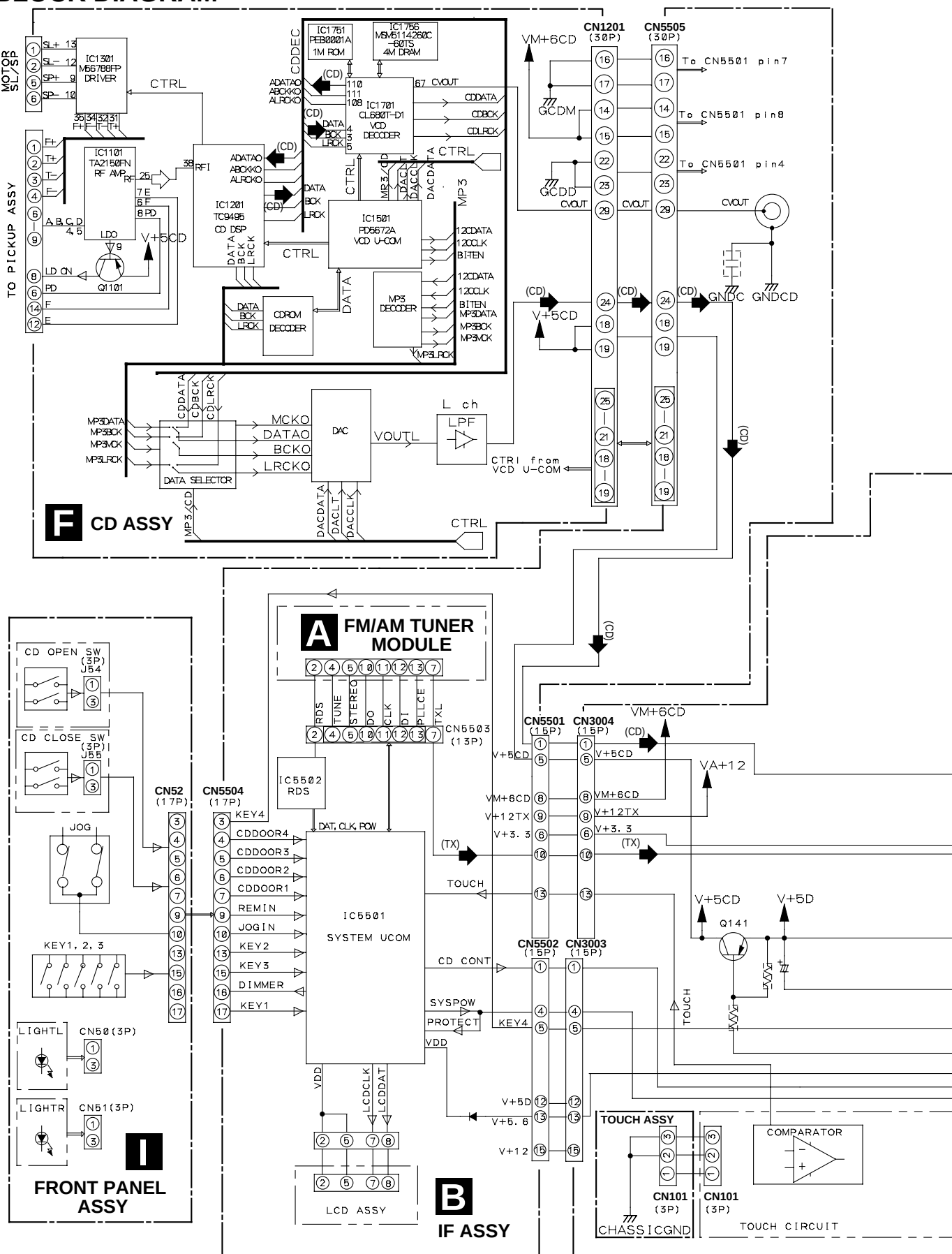
3.1 BLOCK DIAGRAM

A

B

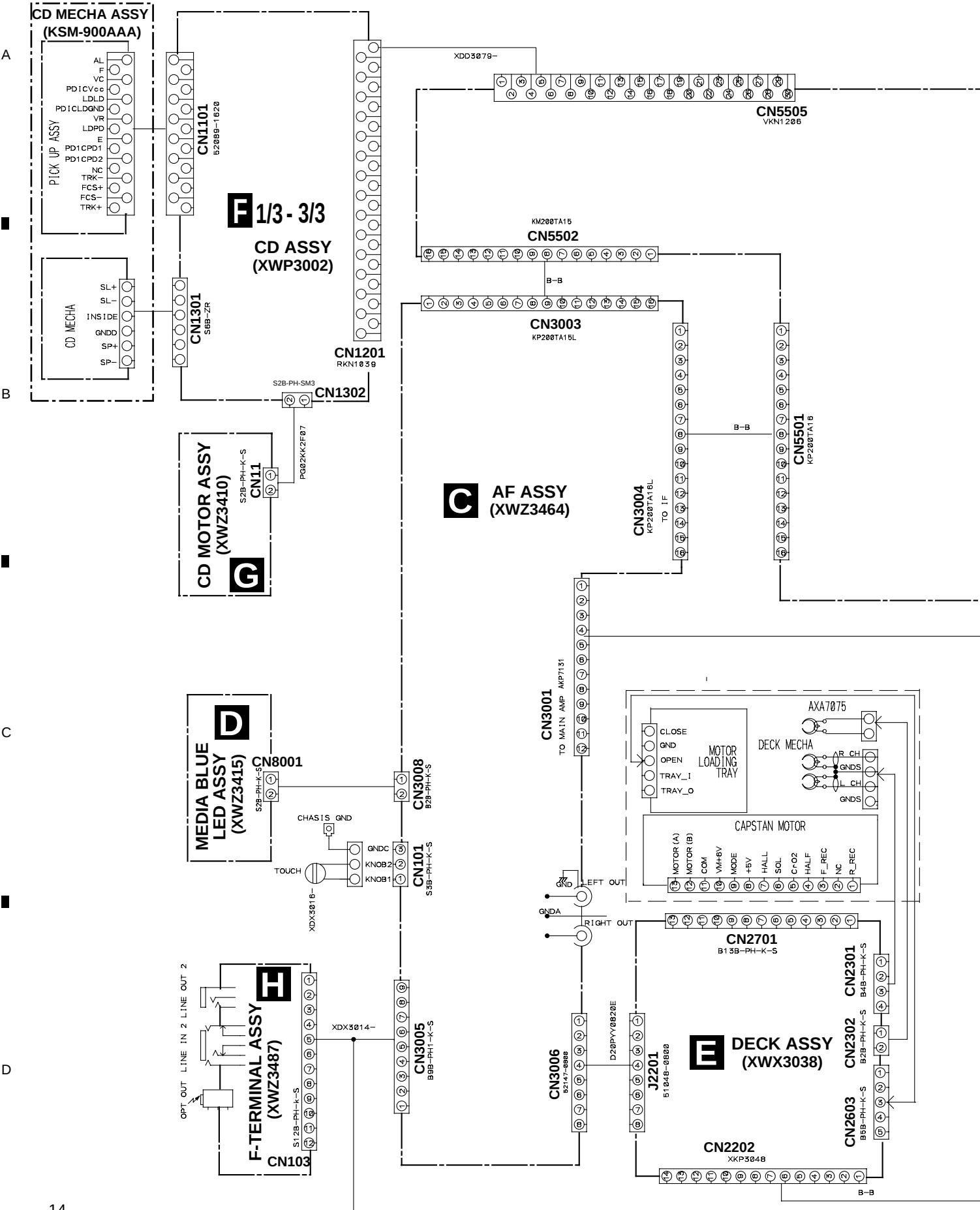
C

D

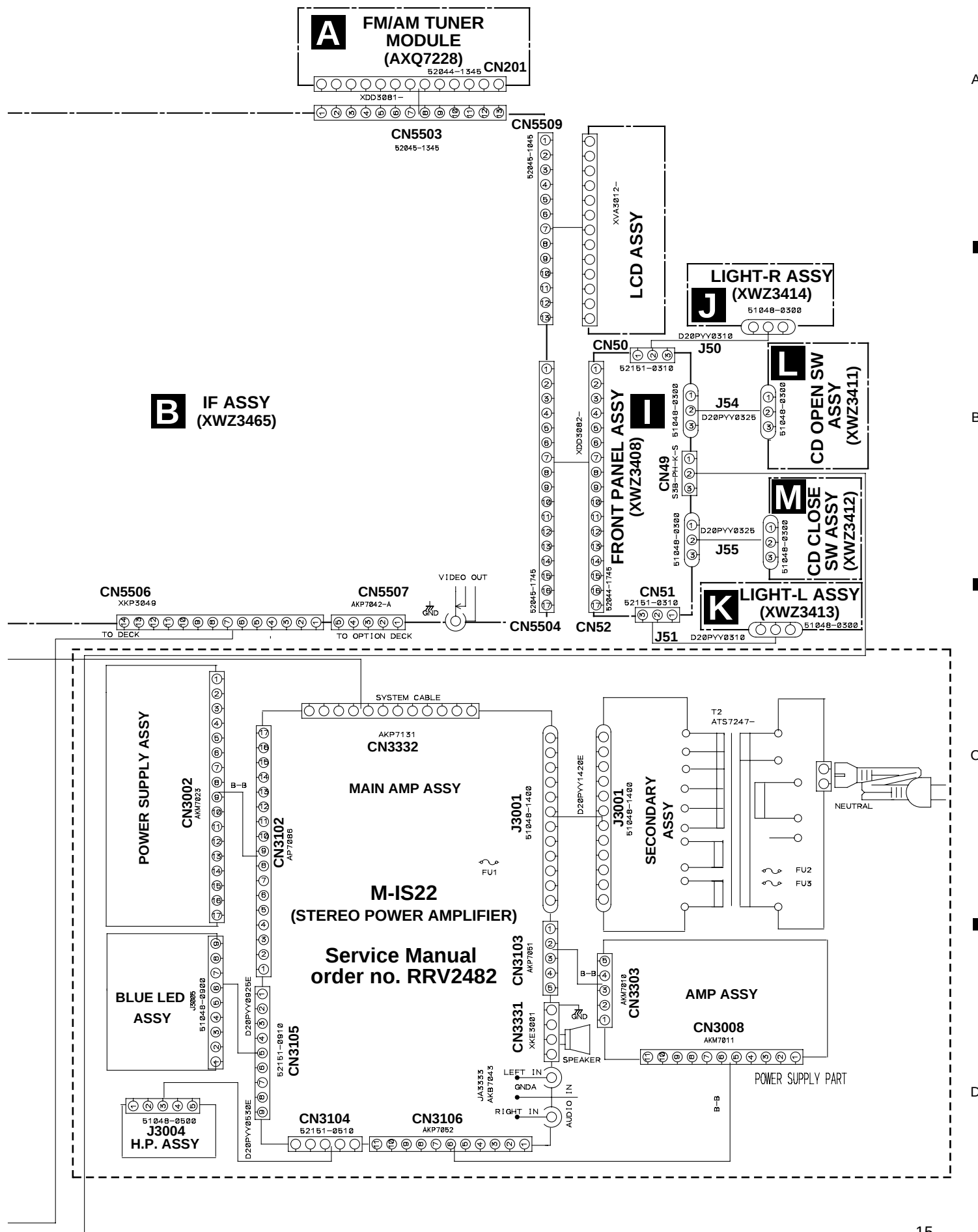




3.2 OVERALL CONNECTION DIAGRAM



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



3.4 IF ASSY

A

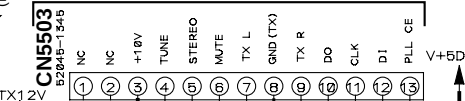
B

C

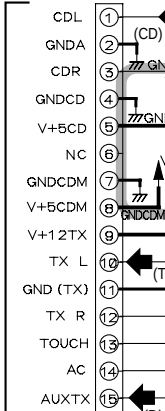
D

B IF ASSY
(XWZ3465)

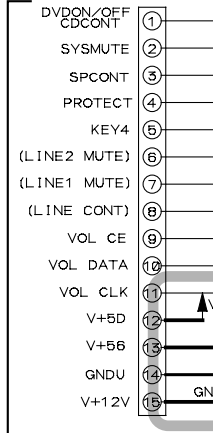
A CN201



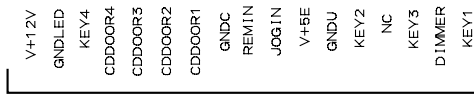
CN5501
KM200TA15



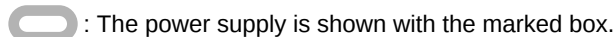
CN5502
KM200TA15



CN5504
52045-1745



I CN52



E CN2202

To. Option Deck

SIGNAL ROUTE

(CD)  : CD AUDIO SIGNAL ROUTE

(TX)  : AUDIO SIGNAL ROUTE (TUNER)

(D)  : DIGITAL SIGNAL ROUTE

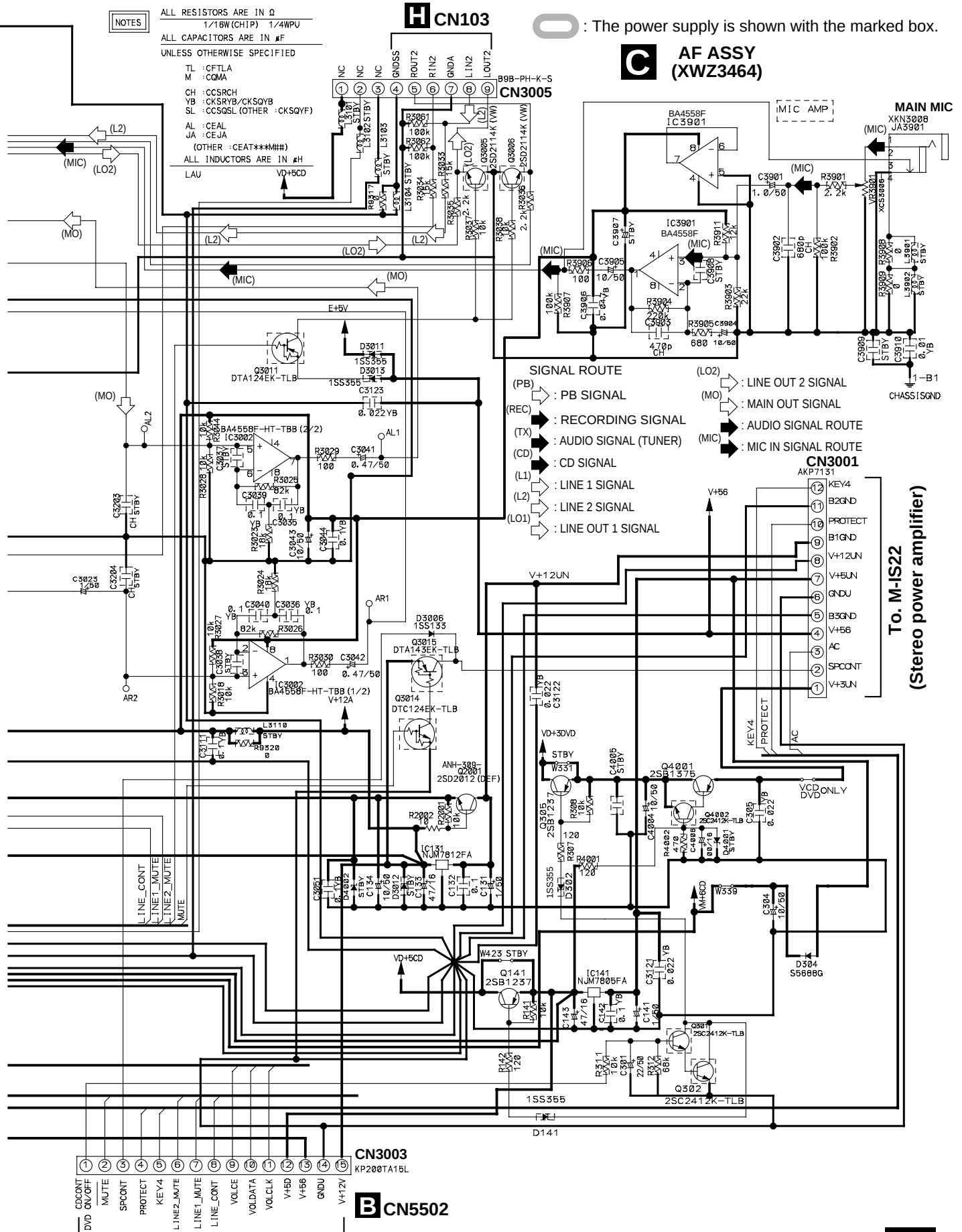
 : VIDEO SIGNAL ROUTE

ALL RESISTORS ARE IN Ω , 1/16W, 5%.
ALL CAPACITORS ARE IN μF
UNLESS OTHERWISE SPECIFIED.

CH:CCSRCH***J##
YB:CKSRYB/CKSQYB***K##
OTHER:CEAT***M##

ALL INDUCTORS ARE IN LAU
UNLESS OTHERWISE SPECIFIED.

ALL DIODES ARE 1S133
UNLESS OTHERWISE SPECIFIED.



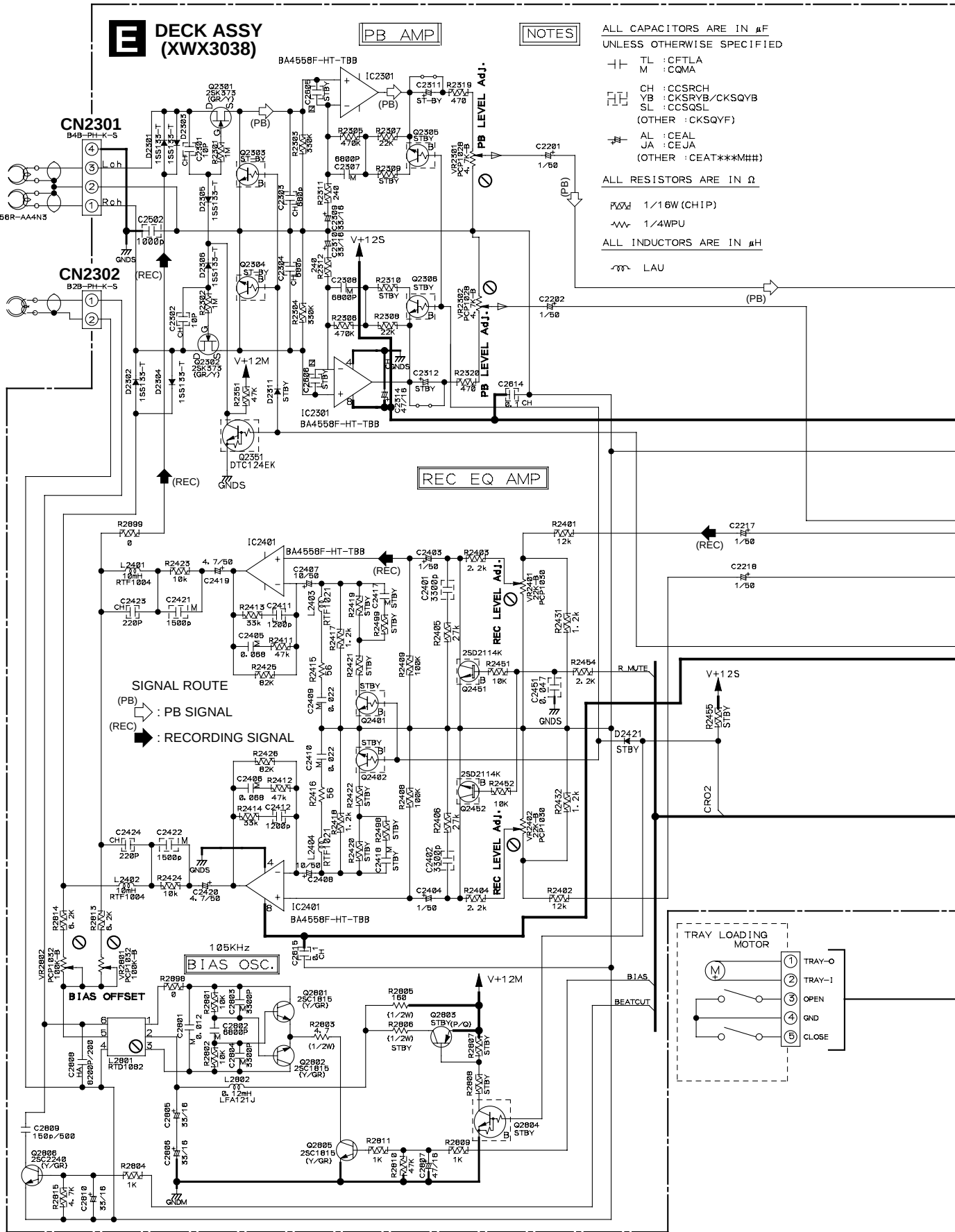
3.6 DECK ASSY

A

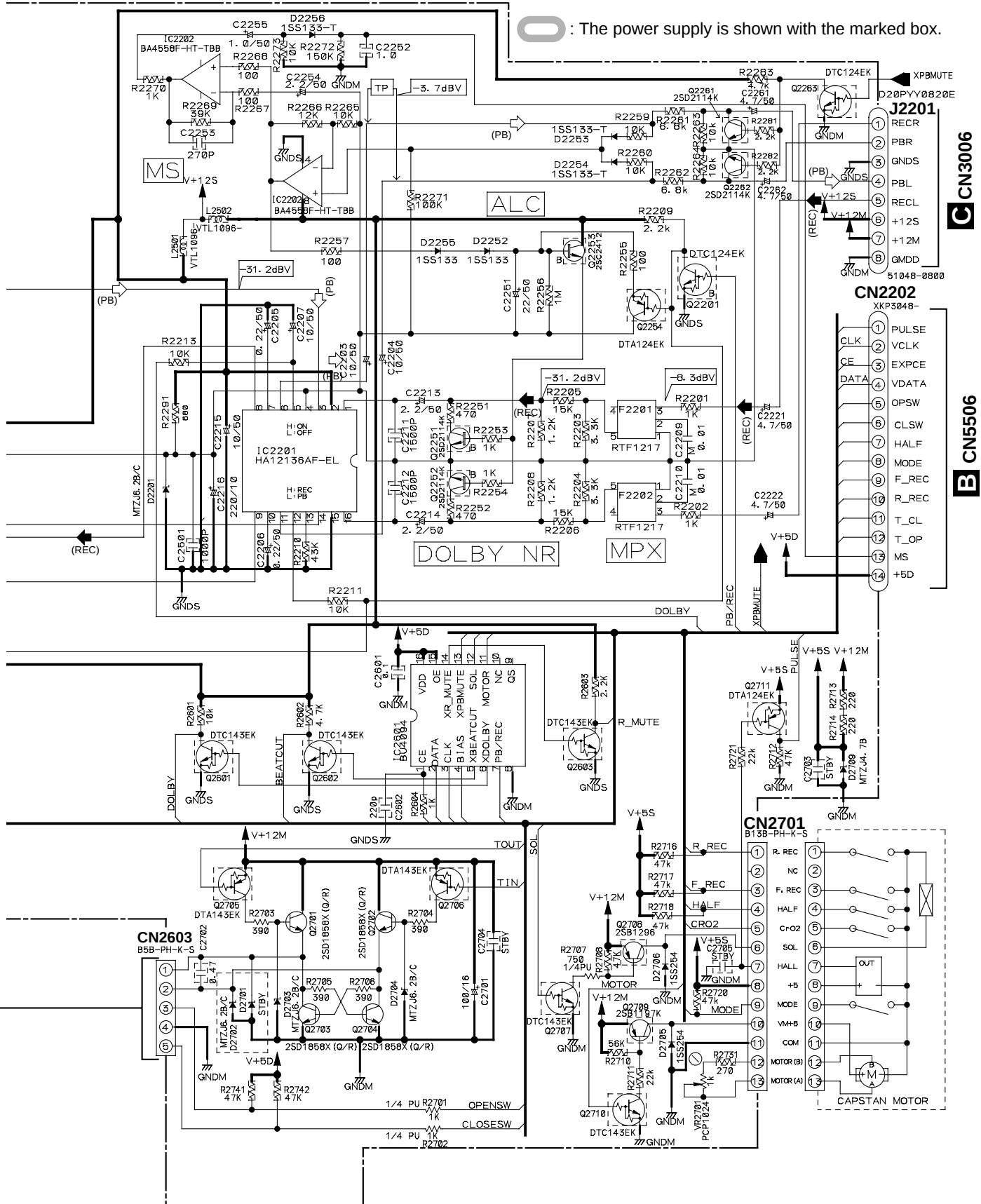
B

C

D



 : The power supply is shown with the marked box.



A

B

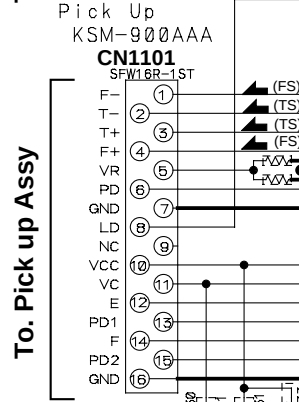
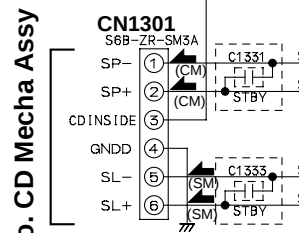
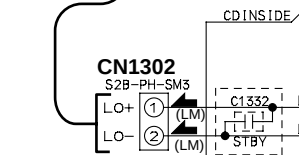
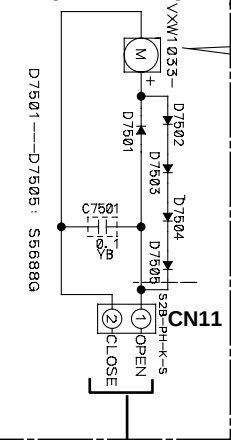
C

D

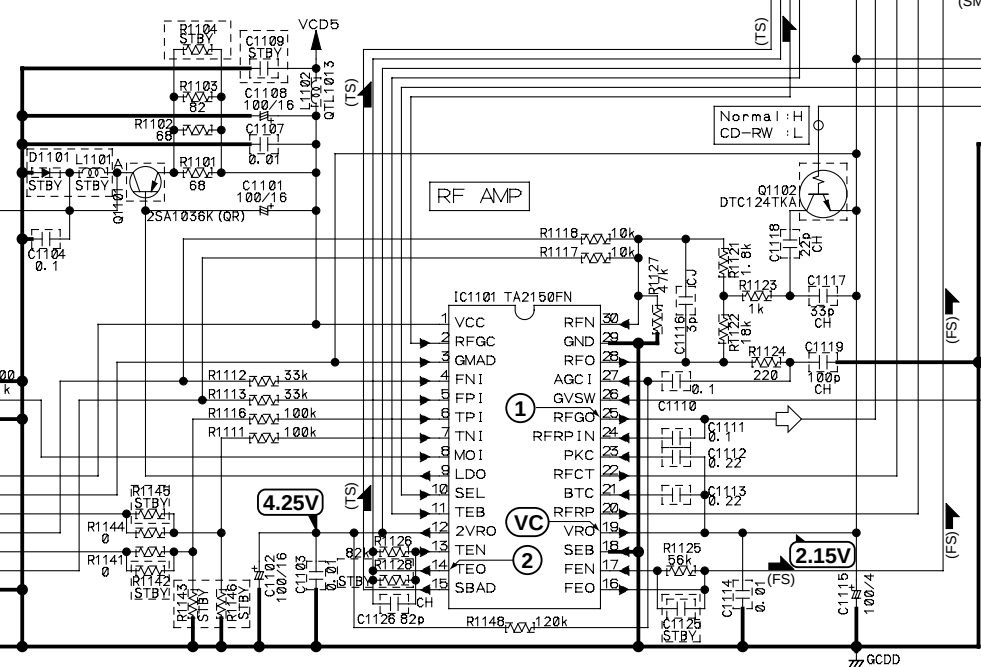
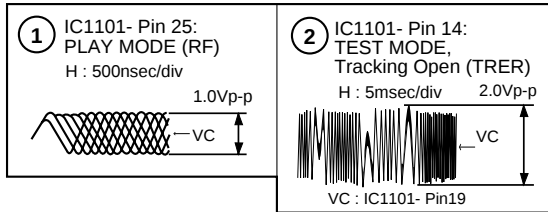
3.7 CD (1/3) and CD MOTOR ASSYS

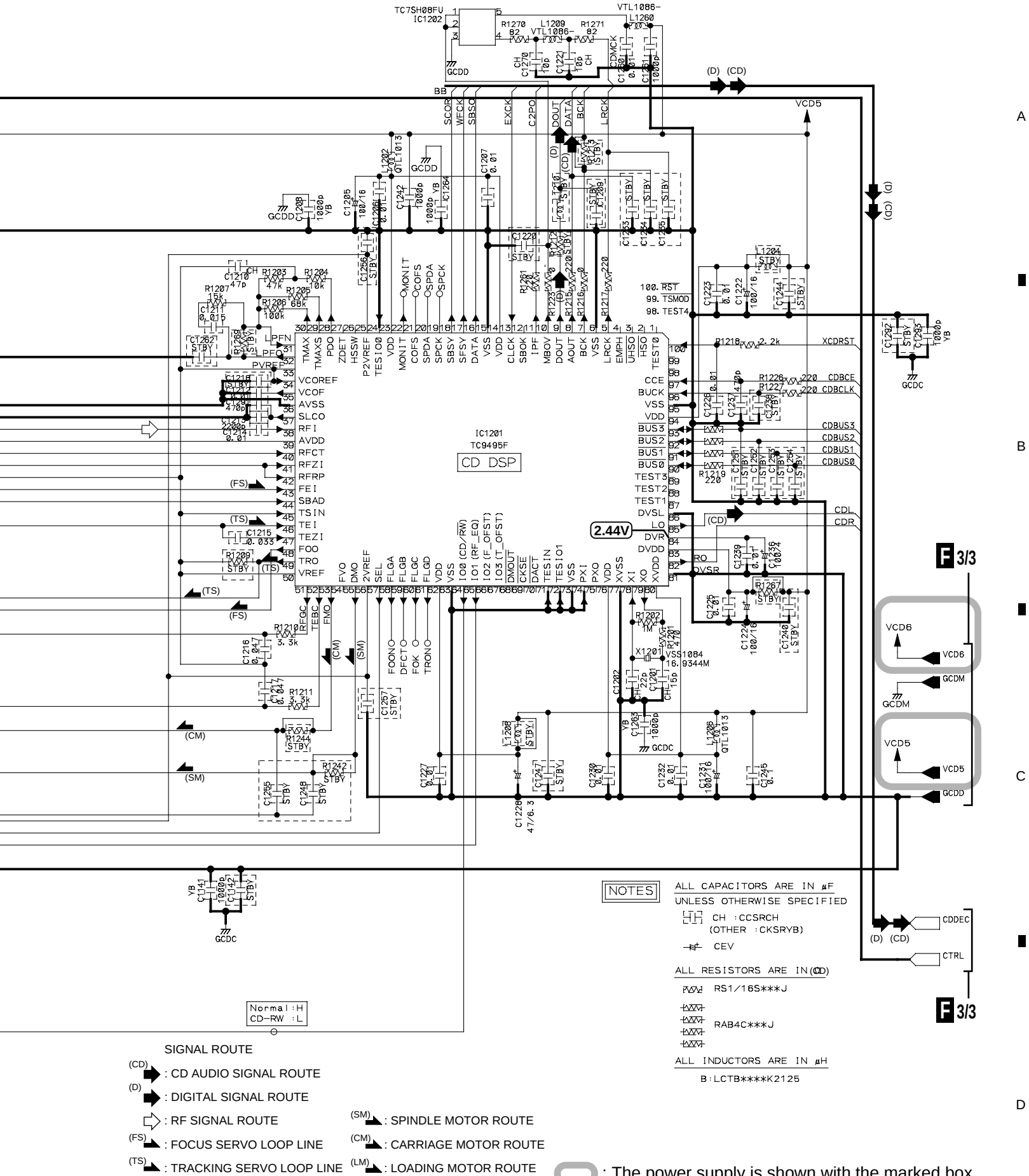
F 1/3 CD ASSY (XWP3002)

G CD MOTOR ASSY (XWZ3410)



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





The power supply is shown with the marked box.

3.8 CD (2/3) ASSY

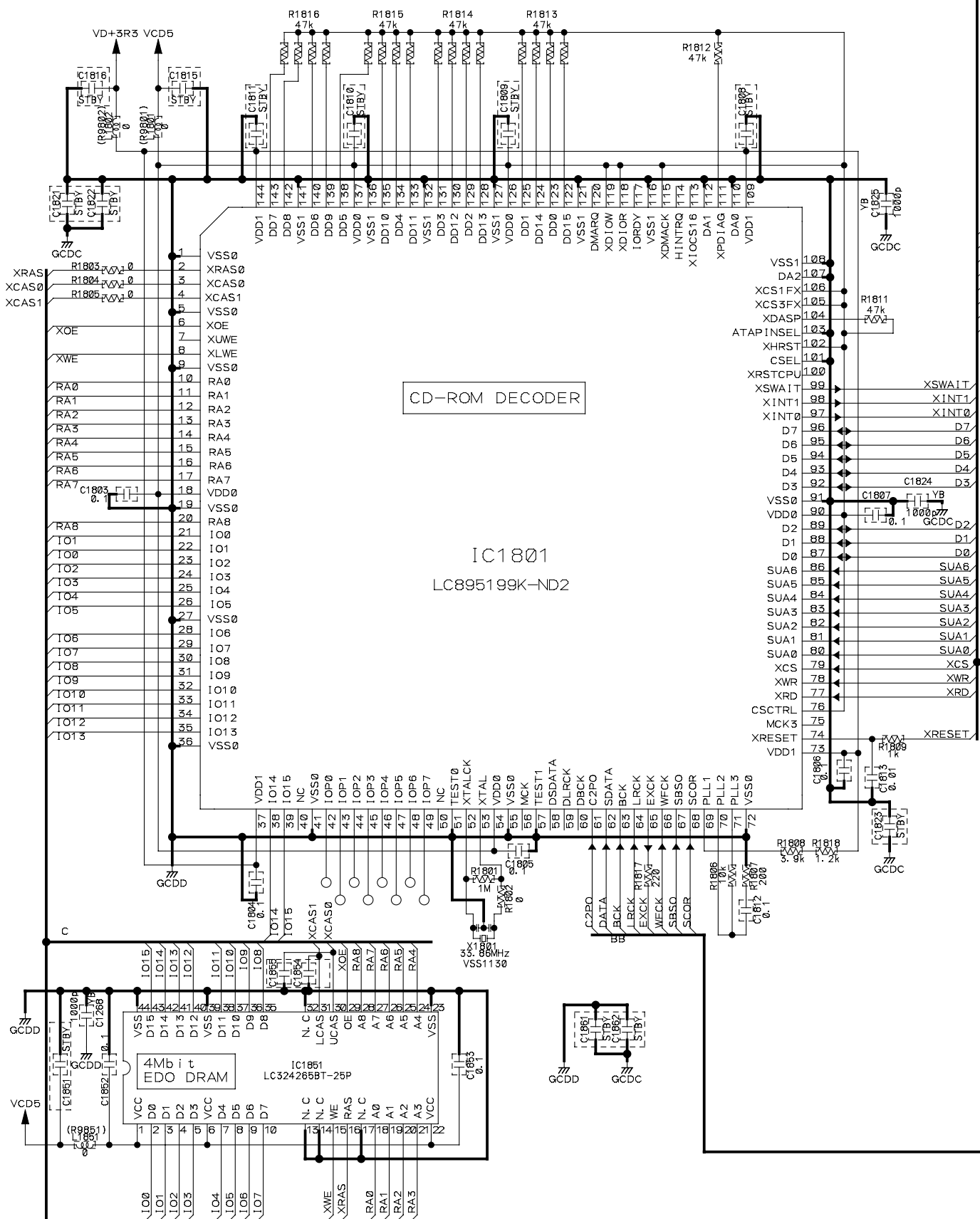
F 2/3 CD ASSY (XWP3002)

A

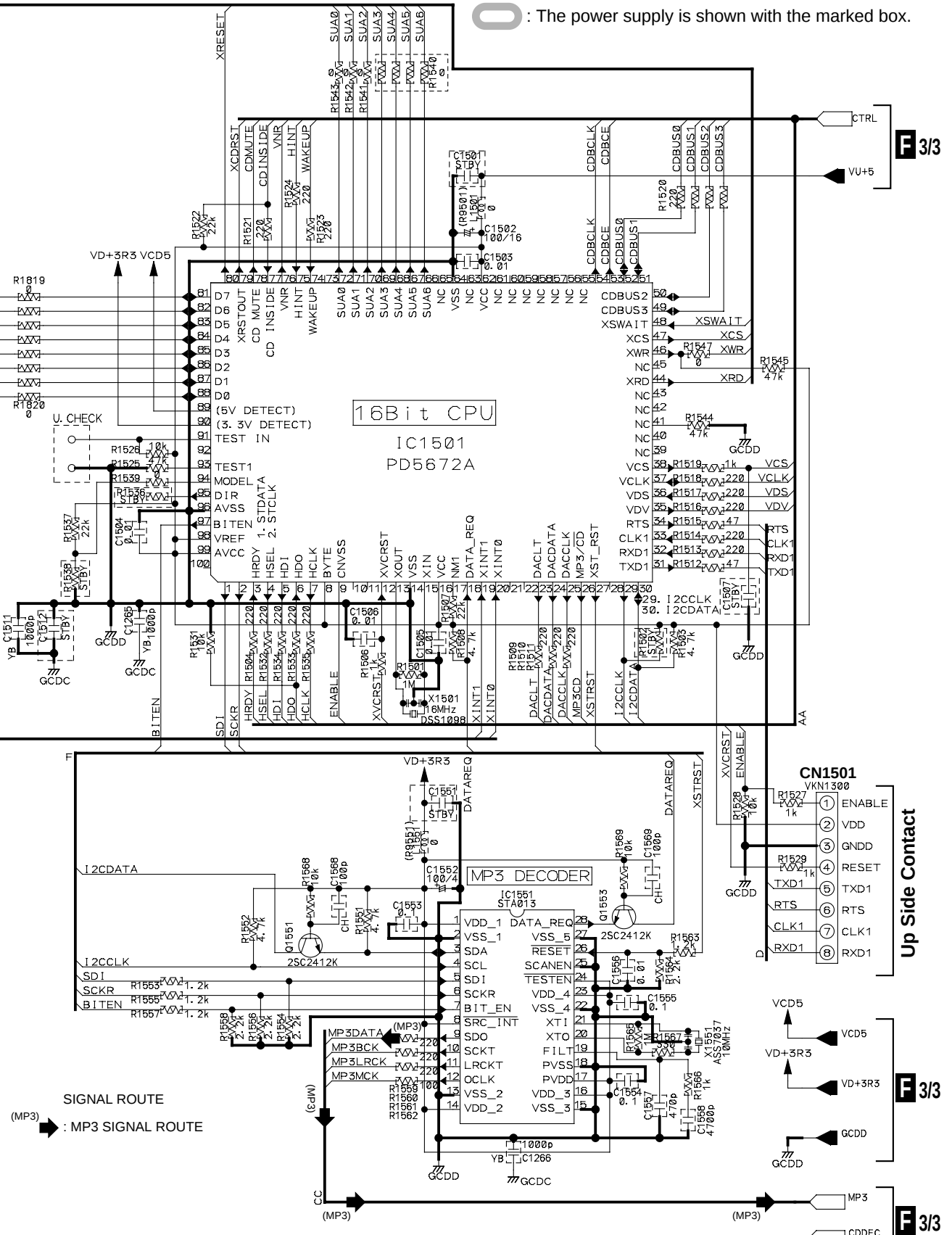
B

C

D

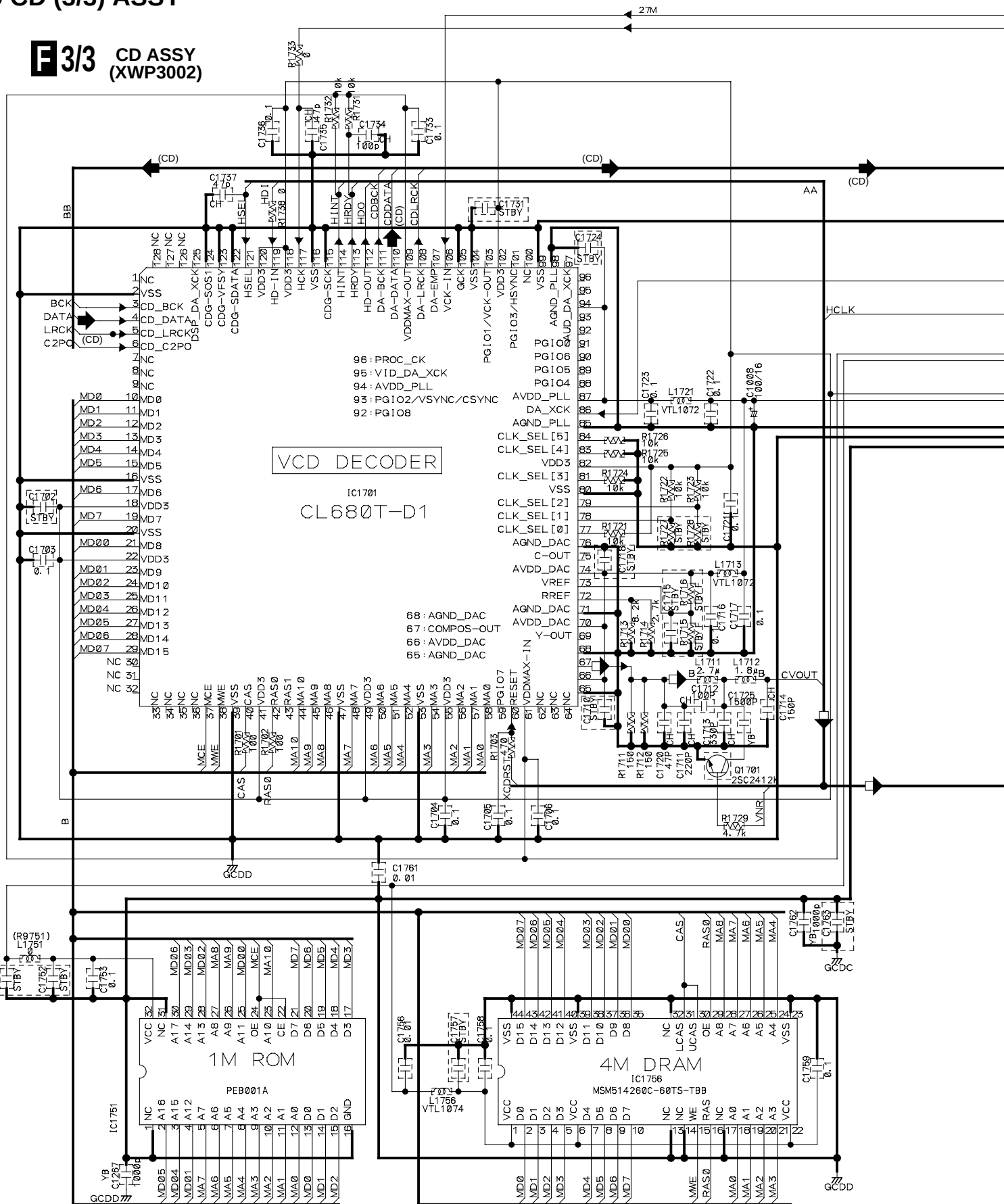


 : The power supply is shown with the marked box.



3.9 CD (3/3) ASSY

F 3/3 CD ASSY (XWP3002)



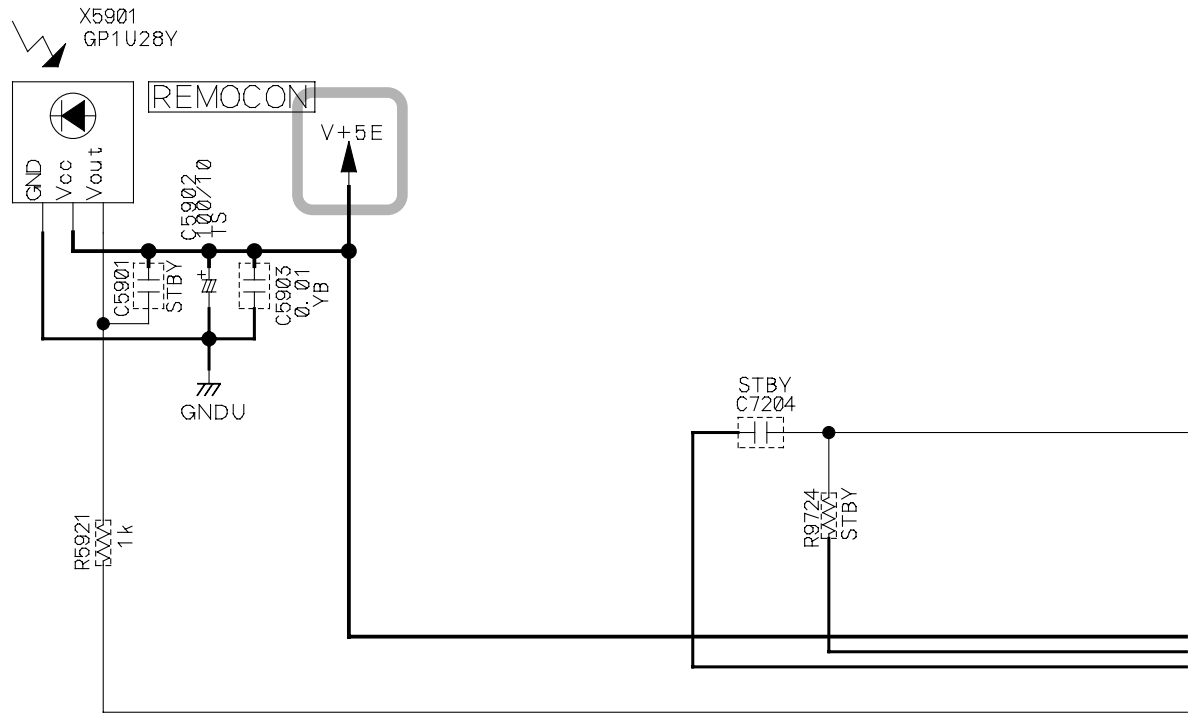


3.10 F-TERMINAL ASSY

NOTES

ALL RESISTORS ARE IN Ω
 1/16W (CHIP)
 1/4WPU
ALL INDUCTORS ARE IN μ H
 LAU

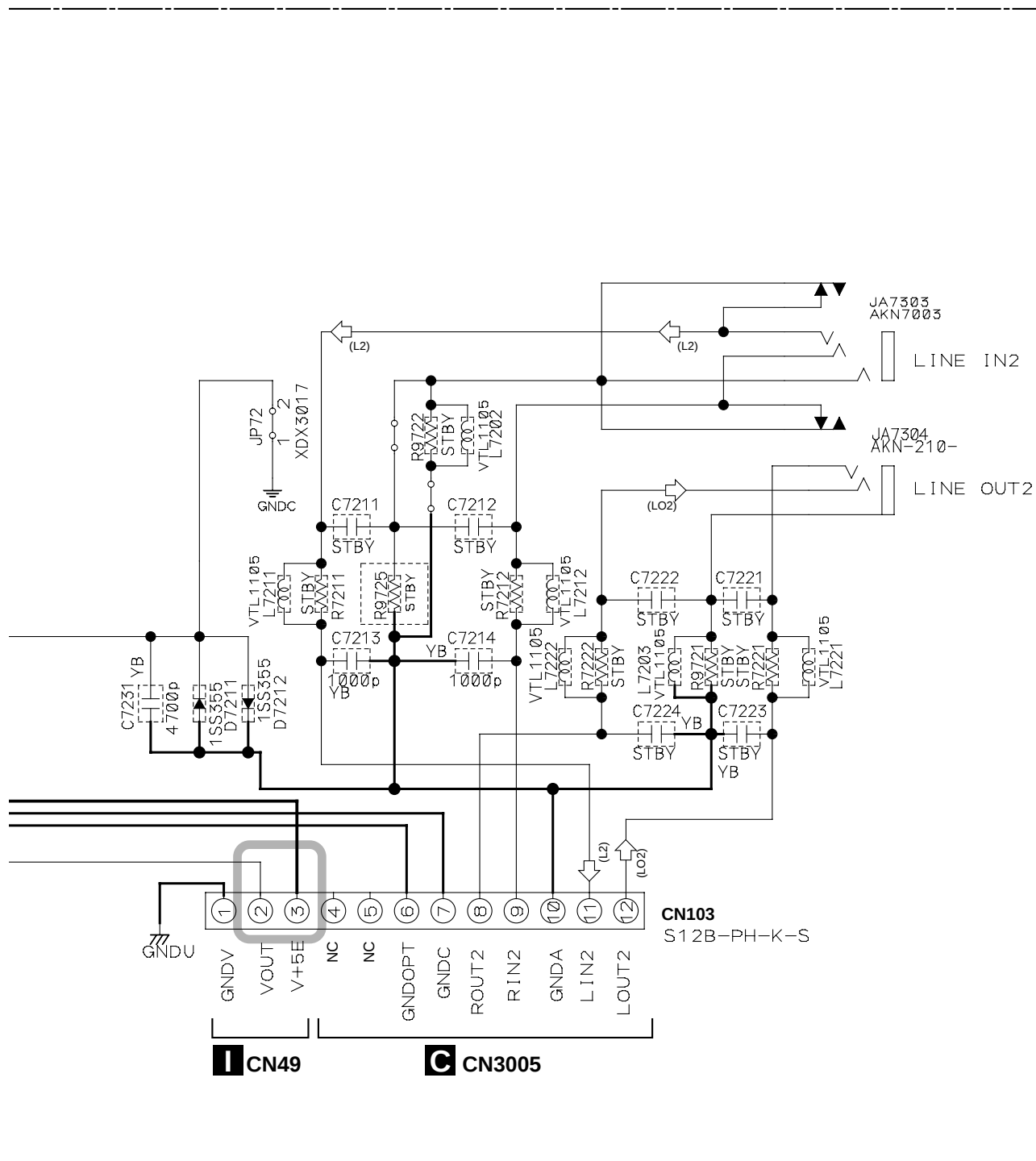
ALL CAPACITORS ARE IN μ F
UNLESS OTHERWISE SPECIFIED
 TL : CFTLA
M : CQMA
 CH : CCSRCH
YB : CKSRYB/CKSQYB
SL : CCSQSL
(OTHER : CKSQYF)
 AL : CEAL
JA : CEJA
(OTHER : CEAT***M###)
ALL DIODES ARE 1S355 UNLESS OTHERWISE SPECIFIED



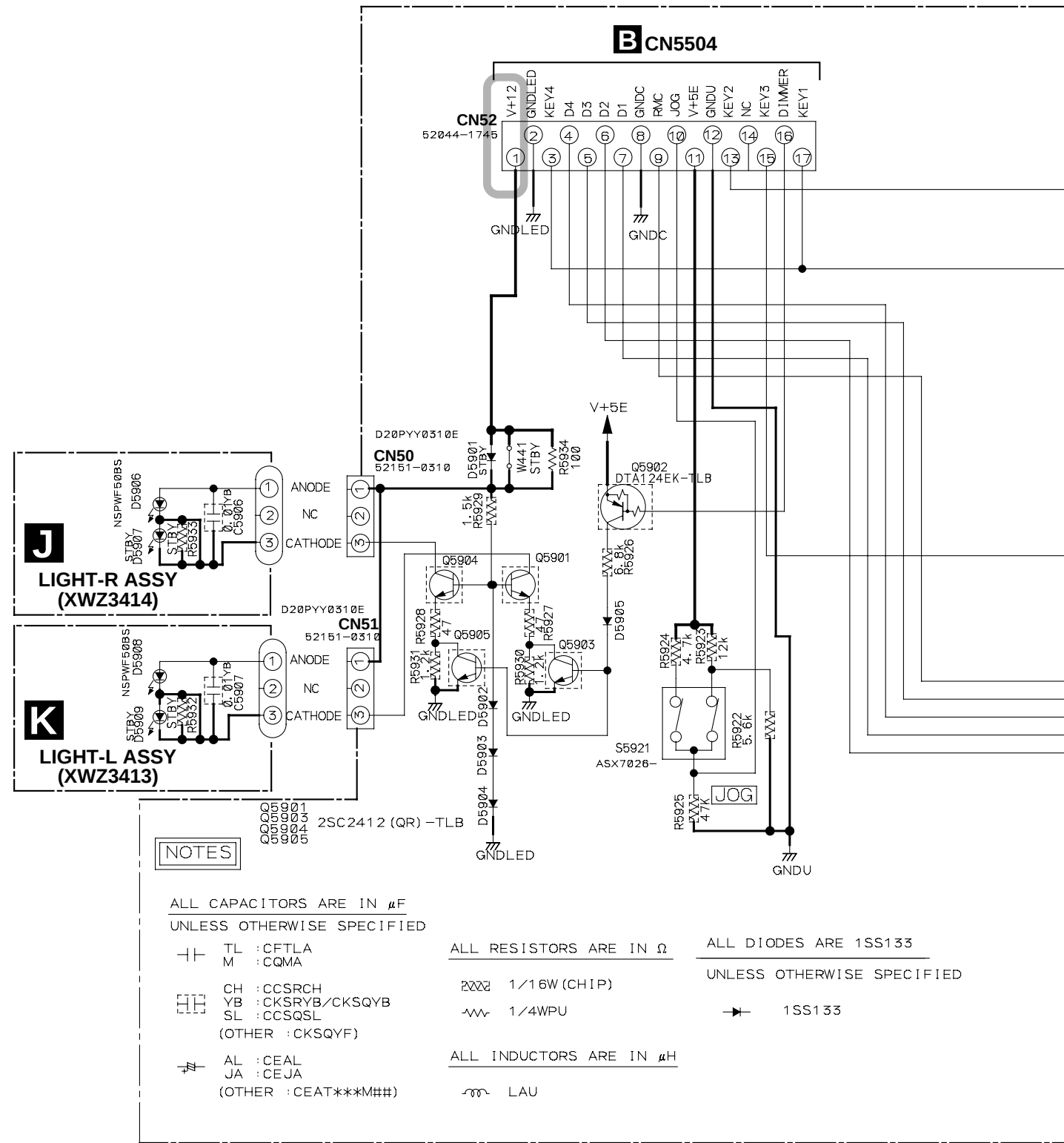
F-TERMINAL ASSY
(XWZ3487)

SIGNAL ROUTE
 (L2) : LINE 2 SIGNAL
 (LO2) : LINE OUT 2 SIGNAL

 : The power supply is shown with the marked box.



3.11 FRONT PANEL, LIGHT-L, LIGHT-R, CD OPEN SW and CD CLOSE SW ASSYS



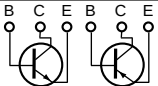
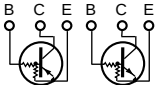
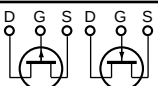
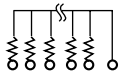
B



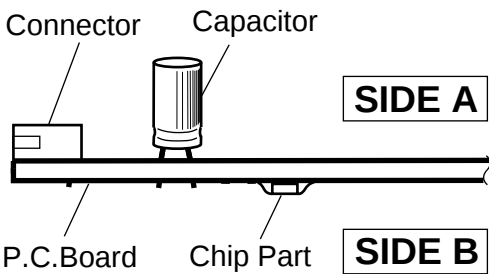
4. PCB CONNECTION DIAGRAM

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.

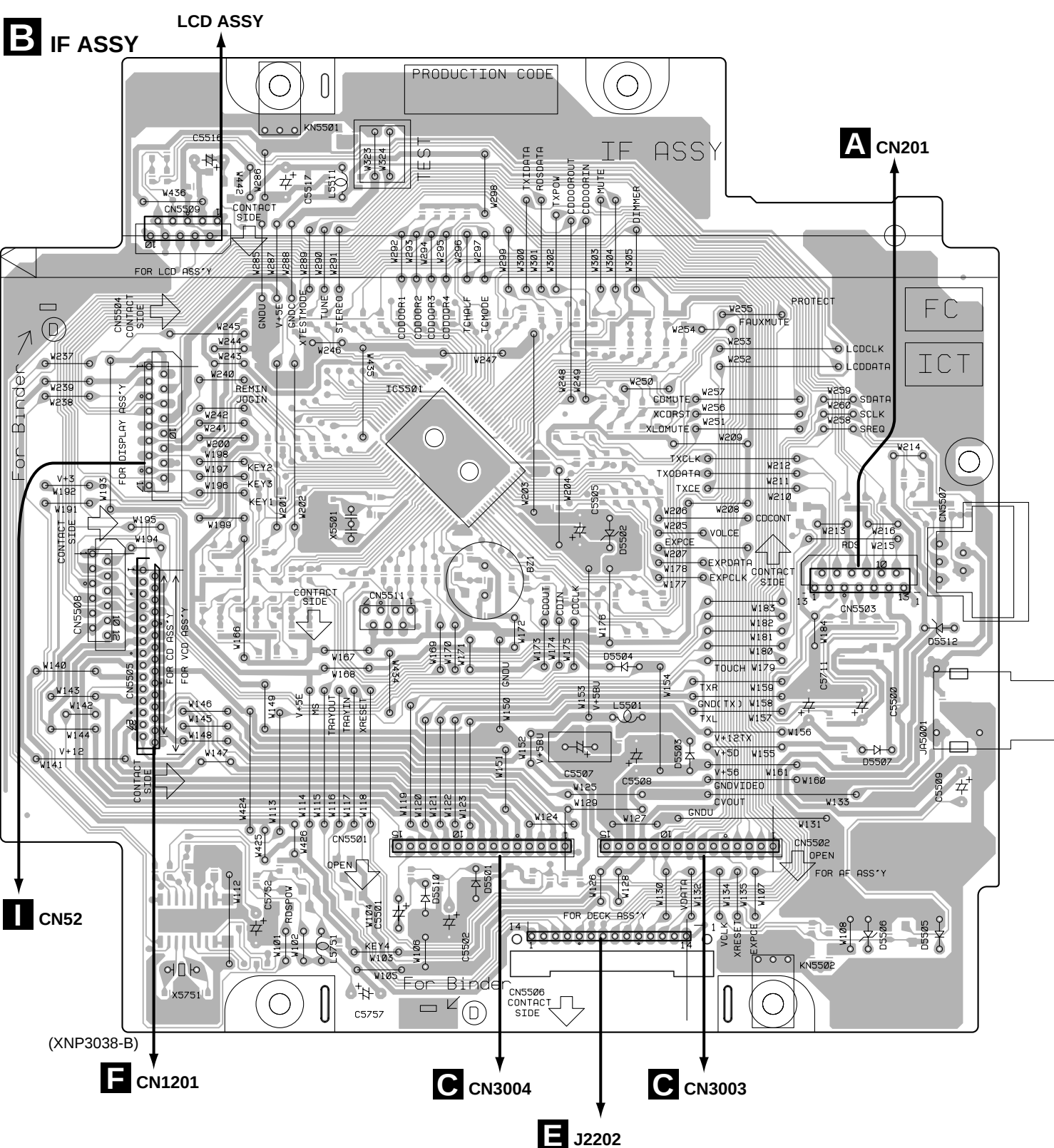
Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

- 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.



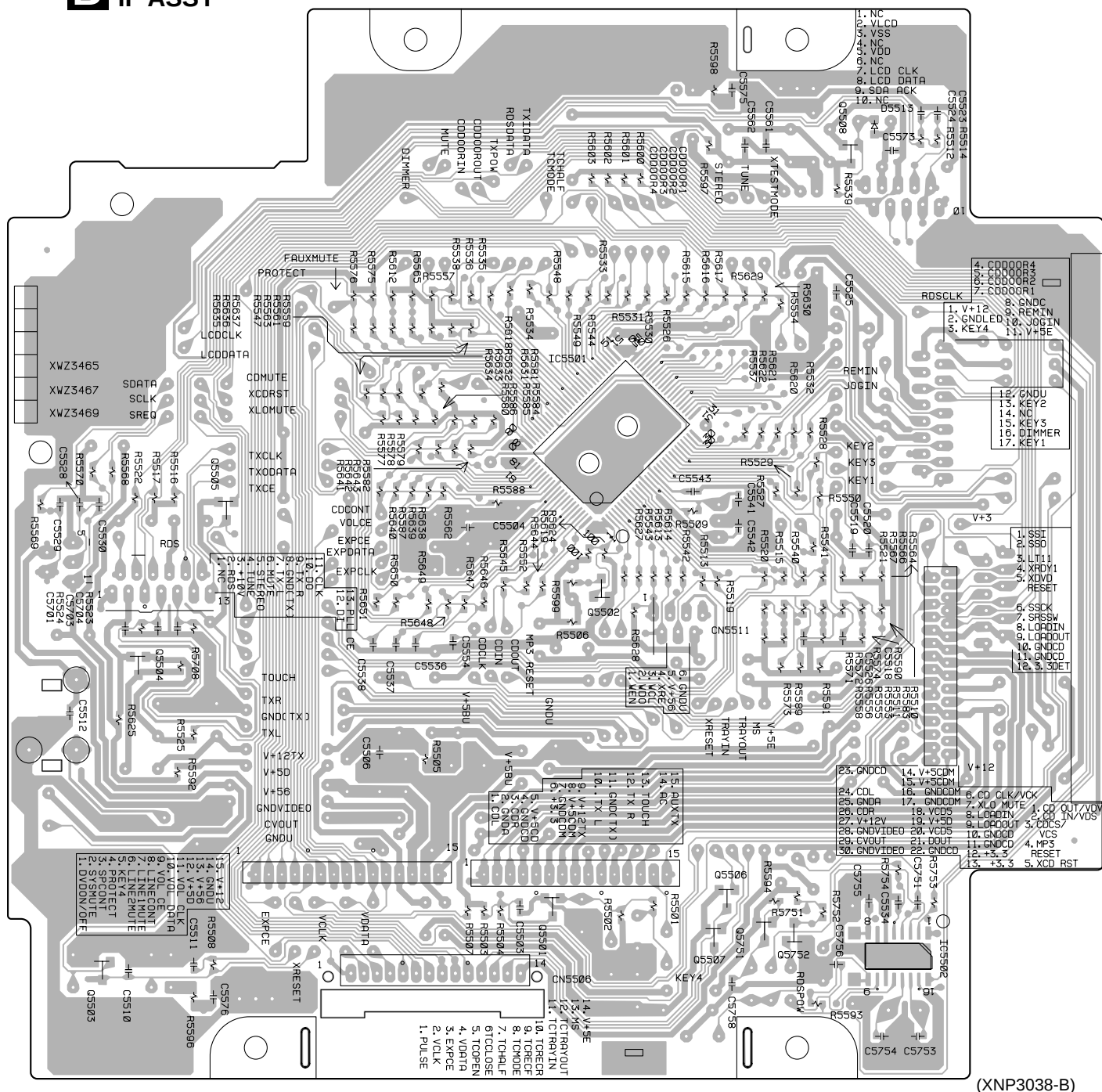
4.2 IF ASSY

SIDE A



SIDE B

B IF ASSY



(XNP3038-B)

Q5503 Q5504 Q5505 Q5506 Q5507 Q5508 Q5509 Q5510 Q5511 Q5512 Q5513 Q5514 Q5515 Q5516 Q5517 Q5518 Q5519 Q5520 Q5521 Q5522 Q5523 Q5524 Q5525 Q5526 Q5527 Q5528 Q5529 Q5530 Q5531 Q5532 Q5533 Q5534 Q5535 Q5536 Q5537 Q5538 Q5539 Q5540 Q5541 Q5542 Q5543 Q5544 Q5545 Q5546 Q5547 Q5548 Q5549 Q5550 Q5551 Q5552 Q5553 Q5554 Q5555 Q5556 Q5557 Q5558 Q5559 Q5560 Q5561 Q5562 Q5563 Q5564 Q5565 Q5566 Q5567 Q5568 Q5569 Q5570 Q5571 Q5572 Q5573 Q5574 Q5575 Q5576 Q5577 Q5578 Q5579 Q5580 Q5581 Q5582 Q5583 Q5584 Q5585 Q5586 Q5587 Q5588 Q5589 Q5590 Q5591 Q5592 Q5593 Q5594 Q5595 Q5596 Q5597 Q5598 Q5599



(XNP3038-B)

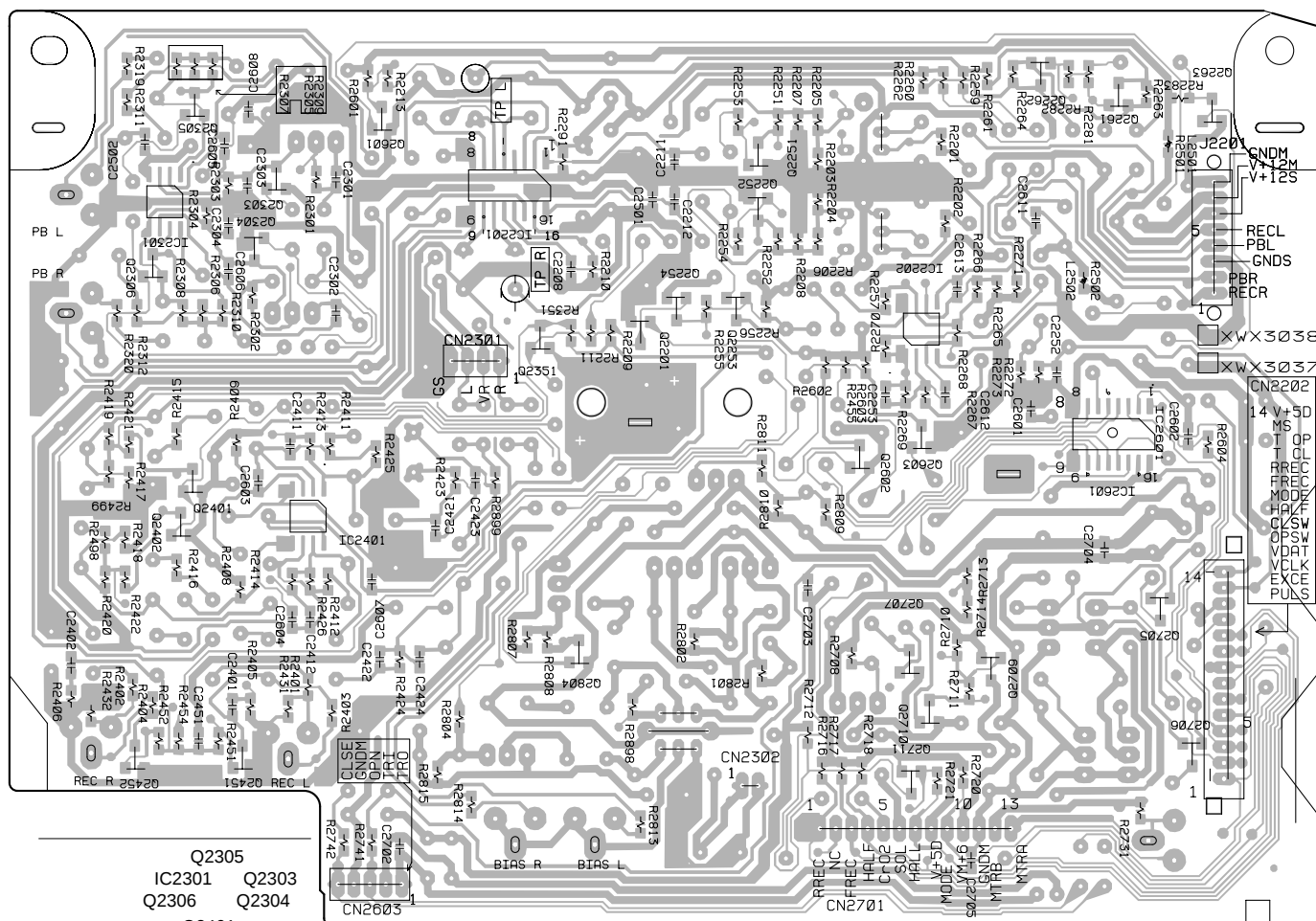


Q3015 Q3014

Q3015 Q3014

SIDE B

C D

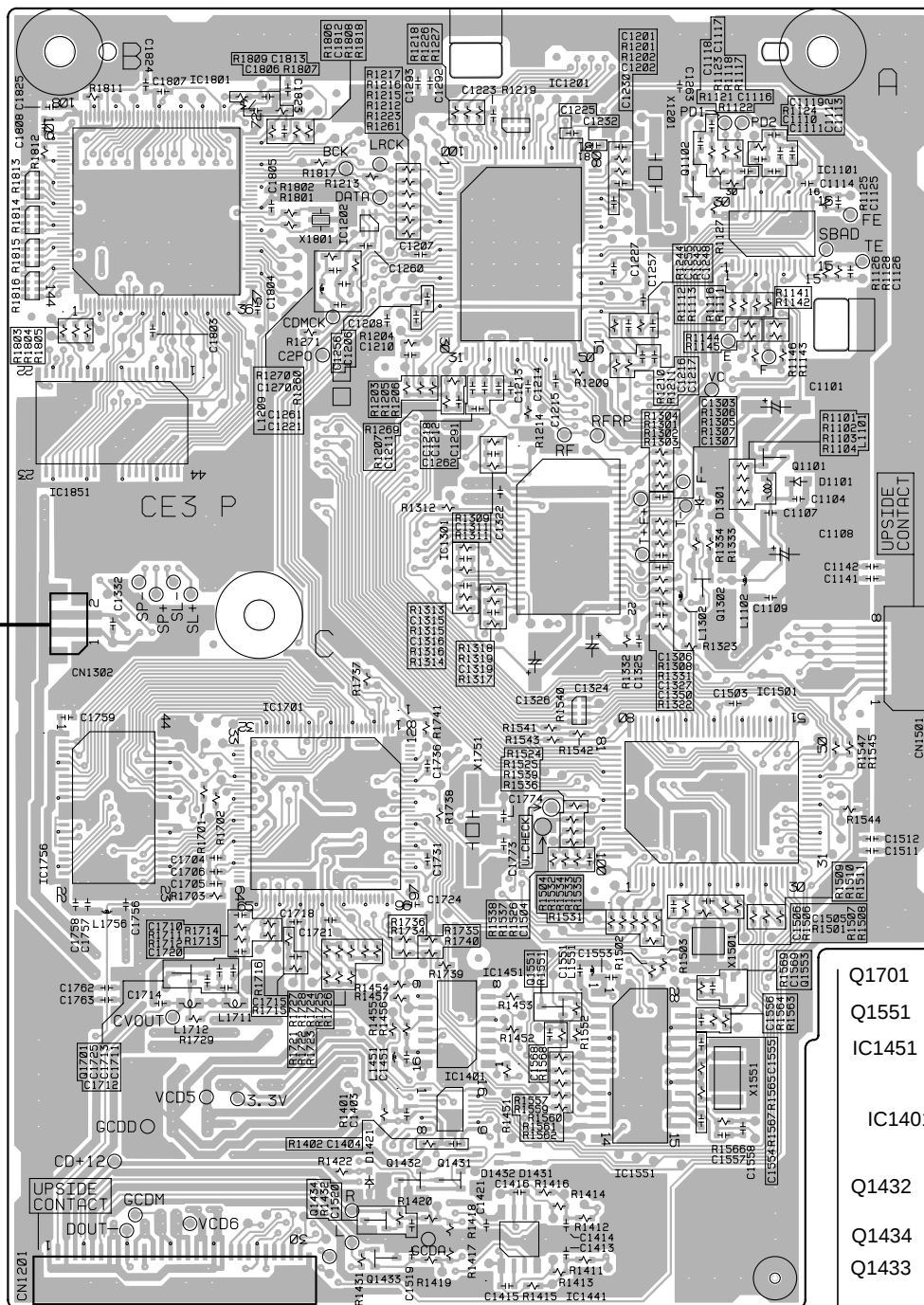
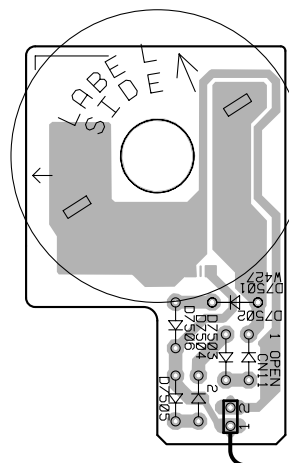


SIDE B

SIDE B

F CD ASSY

G CD MOTOR ASSY



B CN5505

(XNP3046-B)

Q1102
IC1201
IC1801
IC1202
IC1101

IC1851
Q1101

IC1301
Q1302

IC1701
IC1501
IC1756

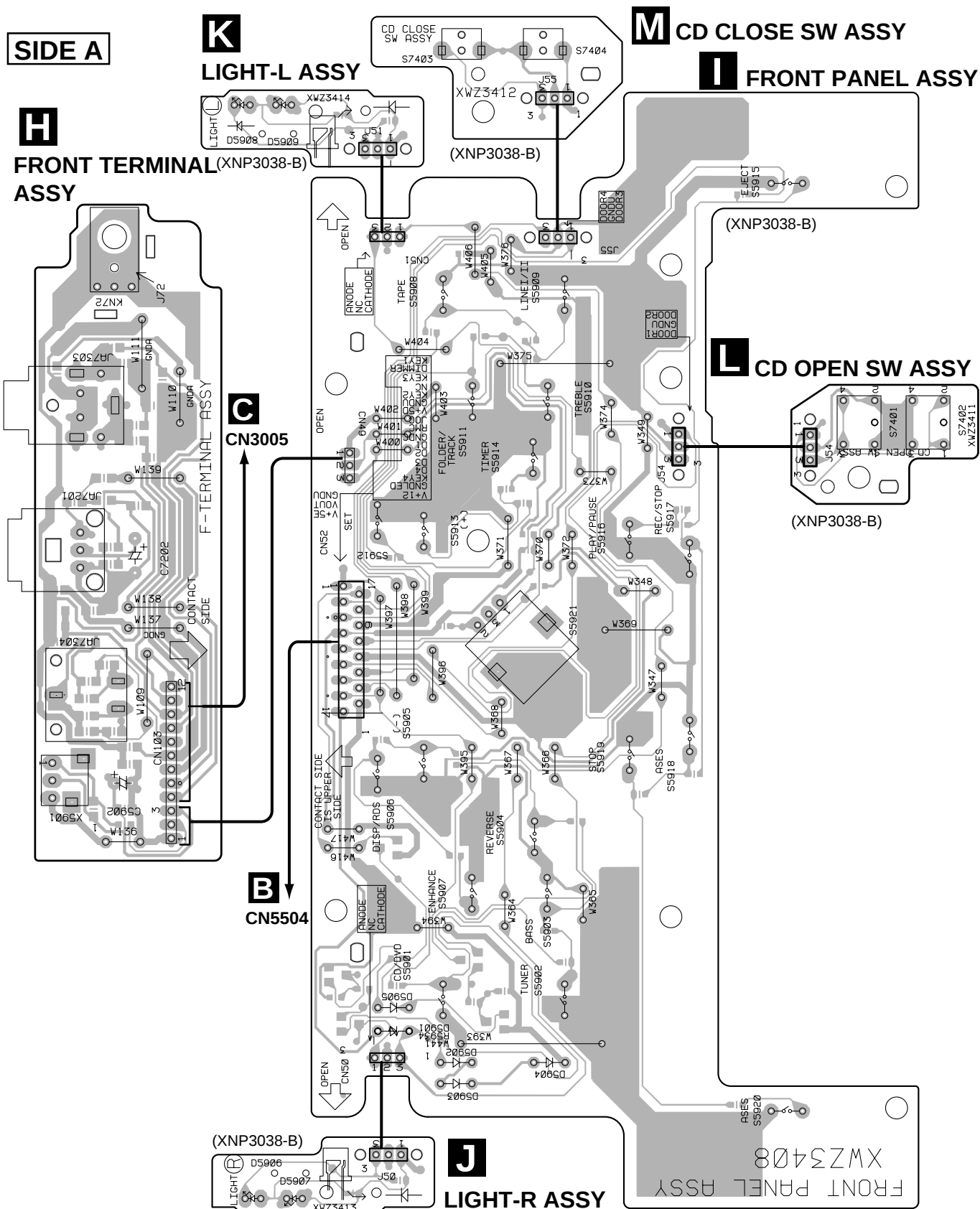
Q1701
Q1551
IC1451

IC1401 IC1551

Q1432 Q1431
Q1434 IC1441
Q1433

F

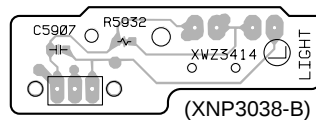
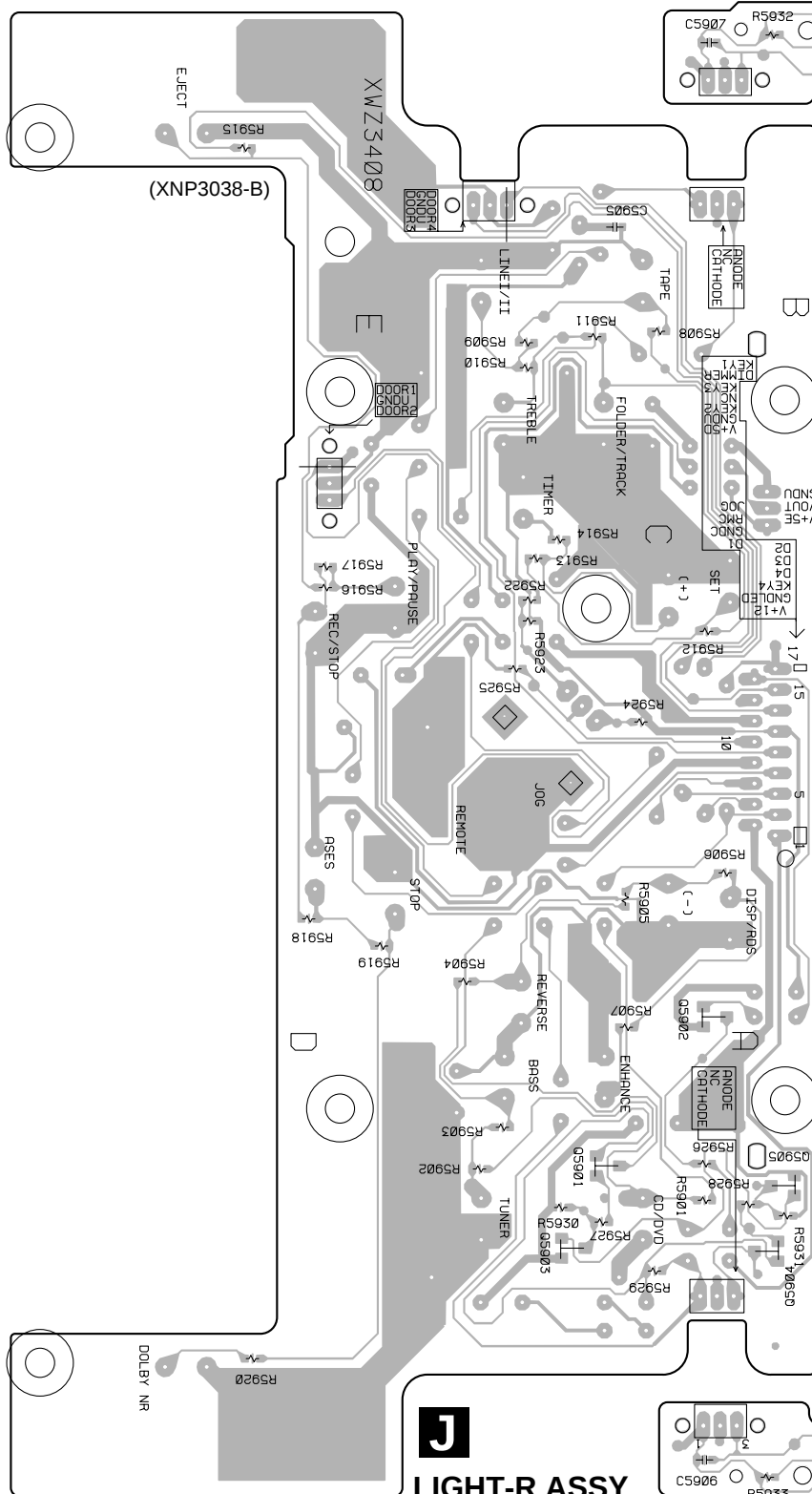
4.6 FRONT TERMINAL, FRONT PANEL, LIGHT-L, LIGHT-R, CD CLOSE SW and CD OPEN SW ASSYS



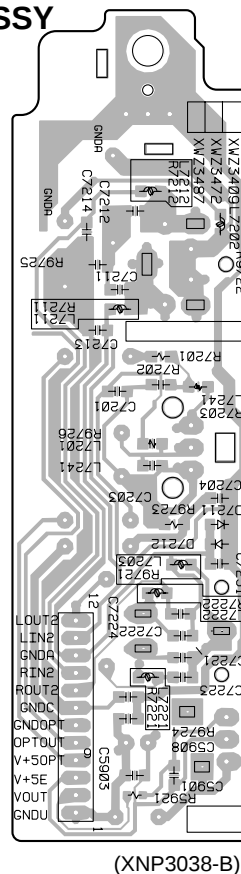
1 FRONT PANEL ASSY

K
LIGHT-L ASSY

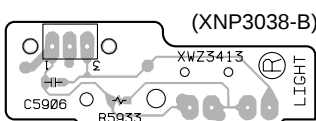
SIDE B



FRONT TERMINAL ASSY



J
LIGHT-R ASSY



5. PCB 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.
●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 × 10¹ → 561 RD1/4PU 5 6 1 J
47k Ω → 47 × 10³ → 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 × 10¹ → 5621 RN1/4PC 5 6 2 1 F

Mark	No.	Description	Part No.	Mark	No.	Description	Part No.
LIST OF ASSEMBLIES							
		FM/AM TUNER MODULE	AXQ7228	C 229			CEAT101M10
				C 224			CEAT1R0M50
				C 227			CEAT220M25
NSP		MEDIA ASSY	XWM3182	C 241			CEAT2R2M50
NSP	—	AF ASSY	XWZ3464	C 243			CEAT330M16
NSP	—	IF ASSY	XWZ3465				
NSP	—	FRONT PANEL ASSY	XWZ3408	C 228			CEAT3R3M50
NSP	—	F-TERMINAL ASSY	XWZ3487	C 237			CEAT470M10
NSP	—	CD MOTOR ASSY	XWZ3410	C 211			CEJA1R0M50
NSP	—	CD OPEN SW ASSY	XWZ3411	C 210			CEJA470M16
NSP	—	CD CLOSE SW ASSY	XWZ3412	C 204, C 238, C 602			CKSRYB102K50
NSP	—	LIGHT- L ASSY	XWZ3413				
NSP	—	LIGHT- R ASSY	XWZ3414	C 101, C 102, C 208, C 220, C 239			CKSRYB103K50
NSP	—	MEDIA BLUE LED ASSY	XWZ3415	C 242, C 601			CKSRYB103K50
		CD ASSY	XWP3002	C 216, C 217			CKSRYB123K50
NSP		DECK ASSY	XWX3038	C 225			CKSRYB153K50
				C 201, C 205, C 209, C 214, C 230			CKSRYB223K50
				C 236, C 603			CKSRYB223K50
				C 221			CKSRYB224K10
				C 202, C 222			CKSRYB473K16
				C 215			CKSRYB681K50

FM/AM TUNER MODULE
SEMICONDUCTORS

IC201	BA1451F
IC202	LC72131MD-TFB
Q 201, Q 204, Q 205	2SC2412K
Q 202	DTA124ES
Q 203	DTC124EK
D 201	1SS133
D 202	MTZJ5.1C

COILS AND FILTERS

L 201	ATE7003
F 202	ATF-107
F 201	ATF-119
F 203	ATF1155

CAPACITORS

C 206	CCSRCH100D50
C 212, C 213, C 226, C 233–C 235	CCSRCH101J50
C 240	CCSRCH101J50
C 231, C 232	CCSRCH150J50
C 223	CEAT100M50

RESISTORS

R 211	RD1/4PU221J
R 221	RD1/4PU222J
R 233	RD1/4PU391J
R 243	RS1/10S0R0J
R 103	RS1/10S331J
R 104	RS1/10S391J
Other Resistors	RS1/16S□□□ J

OTHERS

CN201	(13P FFC CONNECTOR)	52044-1345
BN201	(4P TERMINAL)	AKA7003
0	(SHIELD CASE T (Mtl))	ANK7072
0	(SHIELD CASE B (Mtl))	ANK7073
X 201	(F= 7.2000 MHz)	ASS1093

Mark	No.	Description	Part No.
B IF ASSY			
SEMICONDUCTORS			
	IC5501		PDC075B
	Q5501, Q5504		2SC2412K
	Q5503, Q5506, Q5507		DTC143EK
	D5501, D5503-D5505, D5507		1SS133
	D5506		MTZJ6.8B
COILS AND FILTERS			
	L5501, L5511		LAU220J
	L5652		VTL1084
CAPACITORS			
	C5507 (0.047F/5.5V)		ACH1246
	C5523		CCSRCH100D50
	C5577		CCSRCH101J50
	C5524		CCSRCH220J50
	C5525		CCSRCH221J50
	C5509		CEAT100M50
	C5500		CEAT101M50
	C5502		CEAT1R0M50
	C5505, C5508, C5517		CEAT470M16
	C5503, C5562		CKSRYB102K50
	C5518-C5520, C5701		CKSRYB103K50
	C5504, C5506, C5511, C5512, C5543		CKSRYB104K25
	C5573, C5575		CKSRYB104K25
	C5526		CKSRYB473K50
RESISTORS			
	Other Resistors		RS1/16S□□□ J
OTHERS			
	CN5511 (7P FFC CONNECTOR)		52045-0745
	CN5509 (10P FFC CONNECTOR)		52045-1045
	CN5503 (13P FFC CONNECTOR)		52045-1345
	CN5504 (17P FFC CONNECTOR)		52045-1745
	CN5507 (5P SOCKET)		AKP7042
	X 5501 (F= 10MHz)		DSS1048
	CN5501, CN5502 (15P PLUG)		KM200TA15
	0 (PCB BINDER)		VEF1040
	JA5001 (1P JACK)		VKB1063
	CN5505 (30P CONNECTOR)		VKN1206
	KN5501 (EARTH METAL FITTING)		VNF1084
	CN5506 (14P PLUG)		XKP3049
C AF ASSY			
SEMICONDUCTORS			
	IC3002-IC3004, IC3901		BA4558F-HT
	IC3001		LC75343M
	IC7301		NJM062M
	IC141		NJM7805FA
	IC131		NJM7812FA
	Q141, Q305		2SB1237X
	Q4001		2SB1375
	Q301, Q302, Q4002		2SC2412K
	Q3004		2SD1858X
	Q2001		2SD2012
	Q3001, Q3002, Q3005, Q3006		2SD2114K
	Q3009, Q3010		2SD2114K
	Q3003, Q3011, Q3013		DTA124EK
	Q3015		DTA143EK
	Q7301		DTC114EK

Mark	No.	Description	Part No.
	Q3014		DTC124EK
	D3006		1SS133
	D141, D3011, D3013, D3016, D302		1SS355
	D3049, D7301-D7304		1SS355
	D3004		MTZJ10C
	D304		S5688G
COILS AND FILTERS			
	L7301		LAU220J
CAPACITORS			
	C3057-C3059		CCSRCH101J50
	C7102, C7104, C7301		CCSRCH221J50
	C3205, C3206		CCSRCH271J50
	C3903		CCSRCH471J50
	C3902		CCSRCH681J50
	C134, C3011-C3013, C3025, C3026		CEAT100M50
	C3029, C3043, C3904, C3905, C4004		CEAT100M50
	C4006		CEAT101M16
	C131, C141, C3023, C3024, C3901		CEAT1R0M50
	C301		CEAT220M50
	C3001-C3010, C3014, C3016, C3027		CEAT2R2M50
	C3055, C3056		CEAT2R2M50
	C133, C143, C3033, C3096, C7302		CEAT470M16
	C7307		CEAT4R7M50
	C3041, C3042		CEATR47M50
	C3910, C7131		CKSRYB103K50
	C132, C142, C3015, C3019-C3022		CKSRYB104K25
	C3034-C3036, C3039, C3040, C3044		CKSRYB104K25
	C3047-C3049, C3051, C3052, C3099		CKSRYB104K25
	C3111, C7305, C7306, C901		CKSRYB104K25
	C3065		CKSRYB222K50
	C305, C3121-C3123		CKSRYB223K50
	C3906		CKSRYB473K50
	C3053		CKSRYB474K10
	C3017, C3018		CKSRYB822K50

RESISTORS			
	R2002		RD1/4PU100J
	R3205		RD1/4PU223J
	VR3901 (10KΩ- B)		XCS3006
	Other Resistors		RS1/16S□□□ J

OTHERS			
	CN3006 (8P JUMPER CONNECTOR)		52147-0810
	7105 (6P PIN JACK)		AKB7012
	CN3001 (12P CONNECTOR)		AKP7131
	CN3008 (2P CONNECTOR)		B2B-PH-K
	CN101 (3P CONNECTOR)		B3B-PH-K
	CN3005 (9P CONNECTOR)		B9B-PH-K
	CN3003, CN3004 (15P SOCKET)		KP200TA15L
	0 (PCB BINDER)		VEF1040
	JA3901 (MINI JACK)		XKN3008

XC-IS22VCD

Mark	No.	Description	Part No.
D	MEDIA BLUE LED ASSY		
	SEMICONDUCTORS		
	Q 8001		2SC2412K
	D 8003-D 8006		1SS355
RESISTORS	D 8001		E1S02-4B0A7
	D 8002		MTZJ5.6B
	Other Resistors		RS1/16S□□□ J
OTHERS			
	CN8001 (2P CONNECTOR)		S2B-PH-K
E	DECK ASSY		
	SEMICONDUCTORS		
	IC2202,IC2301,IC2401		BA4558F-HT
	IC2601		BU4094BCF
RESISTORS	IC2201		HA12136AF
	Q 2709		2SB1197K
	Q 2708		2SB1296
OTHERS	Q 2801,Q 2802,Q 2805		2SC1815
	Q 2806		2SC2240
	Q 2253		2SC2412K
	Q 2701-Q 2704		2SD1858X
RESISTORS	Q 2251,Q 2252,Q 2261,Q 2262		2SD2114K
	Q 2451,Q 2452		2SD2114K
	Q 2301,Q 2302		2SK373
OTHERS	Q 2254,Q 2711		DTA124EK
	Q 2705,Q 2706		DTA143EK
	Q 2201,Q 2263,Q 2351		DTC124EK
COILS AND FILTERS	Q 2601-Q 2603,Q 2707,Q 2710		DTC143EK
	D 2252-D 2256,D 2301-D 2306		1SS133
	D 2705,D 2706		1SS133
	D 2709		MTZJ4.7B/C
OTHERS	D 2201,D 2703,D 2704		MTZJ6.2B/C
COILS AND FILTERS	L 2802		LFA121J
	L 2801		RTD1082
	L 2401,L 2402		RTF1004
	L 2403,L 2404		RTF1021
OTHERS	F 2201,F 2202		RTF1217
	L 2501,L 2502		VTL1096
CAPACITORS	C 2809		CCCSL151K2H
	C 2301,C 2302		CCSRCH100D50
	C 2423,C 2424,C 2602		CCSRCH221J50
	C 2253		CCSRCH271J50
OTHERS	C 2303,C 2304		CCSRCH681J50
	C 2203,C 2204,C 2207,C 2215		CEAT100M50
	C 2407,C 2408		CEAT100M50
OTHERS	C 2701		CEAT101M16
	C 2201,C 2202,C 2217,C 2218,C 2255		CEAT1R0M50
	C 2403,C 2404		CEAT1R0M50
OTHERS	C 2251		CEAT220M50
	C 2216		CEAT221M10
	C 2213,C 2214,C 2254		CEAT2R2M50
	C 2309,C 2310,C 2805,C 2806,C 2810		CEAT330M16
OTHERS	C 2314,C 2807		CEAT470M16

Mark	No.	Description	Part No.
	C 2221,C 2222,C 2261,C 2262		CEAT4R7M50
	C 2419,C 2420		CEAT4R7M50
	C 2205,C 2206		CEATR22M50
	C 2252		CKSQYB105K10
	C 2702		CKSQYB474K16
	C 2501,C 2502		CKSRYB102K50
	C 2601		CKSRYB104K25
	C 2411,C 2412		CKSRYB122K50
	C 2211,C 2212,C 2421,C 2422		CKSRYB152K50
	C 2401,C 2402		CKSRYB332K50
	C 2451		CKSRYB473K50
	C 2808		CQHA822J2A
	C 2209,C 2210		CQMA103J50
	C 2801		CQMA123J50
	C 2409,C 2410		CQMA223J50
	C 2803,C 2804		CQMA332J50
	C 2307,C 2308,C 2802		CQMA682J50
RESISTORS	C 2405,C 2406		CQMA683J50
	R 2805		RD1/2PM161J
	R 2703-R 2706		RD1/2PM391J
	R 2803		RD1/2PM4R7J
	R 2701,R 2702		RD1/4PU102J
	R 2707		RD1/4PU751J
	VR2701	(1kΩ)	PCP1024
	VR2301,VR2302	(4.7kΩ)	PCP1028
	VR2401,VR2402	(22kΩ)	PCP1030
	VR2801,VR2802	(100kΩ)	PCP1032
	Other Resistors		RS1/16S□□□ J
OTHERS	102	(8P CABLE HOLDER)	51048-0800
	CN2701	(13P CONNECTOR)	B13B-PH-K
	CN2302	(2P CONNECTOR)	B2B-PH-K
	CN2301	(4P CONNECTOR)	B4B-PH-K
	CN2603	(5P CONNECTOR)	B5B-PH-K
	J2201	(8P FLAT CABLE)	D20PYY0825E
	0, 1	(PCB BINDER)	VEF1040
	CN2202	(14P CONNECTOR)	XKP3048
F	CD ASSY		
	SEMICONDUCTORS		
	IC1701		CL680T-D1
	IC1851		LC324265BT-25P
	IC1801		LC895199K-ND2
	IC1301		M56788AFP
	IC1756		MSM514260C-60TS
	IC1401		PCM1742KE
	IC1501		PD5672B
	IC1751		PEB001A
	IC1551		STA013
	IC1101		TA2150FN
	IC1451		TC74HCT157AF
	IC1202		TC7SH08FU
	IC1776		TC7W14FU
	IC1771		TC7WU04FU
	IC1201		TC9495F
	Q1101		2SA1036K
	Q1302		2SA1037K
	Q1551, Q1553, Q1701		2SC2412K
	Q1433, Q1434		2SD2114K
	Q1431, Q1432		DTA124EK

Mark	No.	Description	Part No.
	Q1102 D1431, D1432 D1301		DTC124TKA DAN202K UDZ2.0B
COILS AND FILTERS			
	L1712 L1711 L1102, L1202, L1206 L1713, L1721 L1756		LCTB1R8K2125 LCTB2R7K2125 QTL1013 VTL1072 VTL1074
	L1209, L1260, L1777 L1771, L1776		VTL1086 VTL1087
CAPACITORS			
	C1221, C1270 C1119, C1568, C1569, C1712, C1734 C1773, C1774 C1201 C1307, C1714		CCSRCH100D50 CCSRCH101J50 CCSRCH120J50 CCSRCH150J50 CCSRCH151J50
	C1118, C1202 C1711 C1117 C1713 C1210, C1303, C1720, C1735, C1737		CCSRCH220J50 CCSRCH221J50 CCSRCH330J50 CCSRCH331J50 CCSRCH470J50
	C1126 C1116 C1401, C1402, C1405, C1417, C1418 C1001, C1008, C1101, C1102, C1108 C1205, C1222, C1224, C1231, C1328		CCSRCH820J50 CCSRCJ3R0C50 CEV100M16 CEV101M16 CEV101M16
	C1502 C1002, C1115, C1236, C1552 C1203, C1228 C1141, C1208, C1242, C1261 C1263-C1268, C1293, C1511, C1762		CEV101M16 CEV101M4 CEV470M6R3 CKSRYB102K50 CKSRYB102K50
	C1771, C1776, C1824, C1825 C1103, C1107, C1114, C1130, C1204 C1206, C1207, C1212, C1214, C1223 C1225-C1227, C1230, C1232, C1239 C1260, C1315, C1316, C1406		CKSRYB102K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50 CKSRYB103K50
	C1503-C1506, C1556, C1756, C1761 C1813 C1104, C1110, C1111, C1131, C1245 C1322, C1325, C1350, C1403, C1404 C1451, C1553-C1555, C1703-C1706		CKSRYB103K50 CKSRYB103K50 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16
	C1716, C1717, C1721-C1723, C1733 C1736, C1753, C1758, C1759, C1772 C1777, C1803-C1807, C1812 C1852, C1853 C1725		CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB104K16 CKSRYB152K50
	C1211 C1213, C1519, C1520 C1112, C1113 C1215		CKSRYB153K25 CKSRYB222K50 CKSRYB224K10 CKSRYB333K16
	C1237, C1291, C1557 C1558 C1216, C1217 C1311, C1319		CKSRYB471K50 CKSRYB472K50 CKSRYB473K16 CKSRYB682K50

Mark	No.	Description	Part No.
RESISTORS			
	R1540, R1819, R1820 R1219, R1520 R1546, R1813-R1816 R1318 R1319		RAB4C0R0J RAB4C221J RAB4C473J RS1/16S1202F RS1/16S2202F
	R1317 Other Resistors		RS1/16S2702F RS1/16S□□□ J
OTHERS			
	X1551 (F=10.00MHz) X1501 (F=10 MHz) X1201 (F= 16.93MHz) X1751 (F= 27.00MHz) X1801 (F=33.86MHz)		ASS7037 DSS1098 VSS1084 VSS1086 VSS1130
	CN1302 (2P CONNECTOR) CN1201 (30P CONNECTOR) CN1301 (6P CONNECTOR) CN1101 (16P FFC CONNECTOR) CN1501 (8P CONNECTOR)		B2B-PH-SM3 RKN1039 S6B-ZR-SM3A-TFB SFW16R-1ST-TFB VKN1300
CD MOTOR ASSY			
SEMICONDUCTORS			
	D 7506 D 7501-D 7505		11EQS04 S5688G
CAPACITORS			
	C 7501		CKSRYB104K25
OTHERS			
	CN11 (2P CONNECTOR)		S2B-PH-K
H F-TERMINAL ASSY			
SEMICONDUCTORS			
	D7211, D7212		1SS355
COILS AND FILTERS			
	L7202, L7203, L7211, L7212 L7221, L7222		VTL1105 VTL1105
CAPACITORS			
	C5902 C7213, C7214 C5903 C7231		CEAT101M10 CKSRYB102K50 CKSRYB103K50 CKSRYB472K50
RESISTORS			
	Other Resistors		RS1/16S□□□ J
OTHERS			
	7304 (MINI JACK) 7303 (MINI JACK) 5901 (REMOTE RECEIVER UNIT)		AKN-210 AKN7003 GP1U28Y

XC-IS22VCD

Mark	No.	Description	Part No.
------	-----	-------------	----------

I FRONT PANEL ASSY

SEMICONDUCTORS

Q 5901,Q 5903-Q 5905	2SC2412K
Q 5902	DTA124EK
D 5902-D 5905	1SS133

SWITCHES

S 5901-S 5920	ASG7013
S 5921	ASX7026

RESISTORS

R 5934	RD1/4PU101J
Other Resistors	RS1/16S□□□ J

OTHERS

54,55 (3P CABLE HOLDER)	51048-0300
CN52 (17P CONNECTOR)	52044-1745
CN50, CN51(3PJUMPER CONNECTOR)	52151-0310
J 54, J 55 (JUMPER WIRE)	D20PYY0325E
CN49 (3P CONNECTOR)	S3B-PH-K

J LIGHT- R ASSY

SEMICONDUCTORS

D 5908	NSPWF50BS-9706
--------	----------------

CAPACITORS

C 5907	CKSRYB103K50
--------	--------------

OTHERS

53 (3P CABLE HOLDER)	51048-0300
J 51 (JUMPER WIRE9	D20PYY0310E

K LIGHT- L ASSY

SEMICONDUCTORS

D 5906	NSPWF50BS-9706
--------	----------------

CAPACITORS

C 5906	CKSRYB103K50
--------	--------------

OTHERS

52 (3P CABLE HOLDER)	51048-0300
J 50 (JUMPER WIRE)	D20PYY0310E

L CD OPEN SW ASSY

SWITCHES

S 7401,S 7402	VSH1019
---------------	---------

OTHERS

57 (CABLE HOLDER)	51048-0300
-------------------	------------

M CD CLOSE SW ASSY

SWITCHES

S 7403,S 7404	ASG7015
---------------	---------

OTHERS

56 (CABLE HOLDER)	51048-0300
-------------------	------------

6. ADJUSTMENT

For adjustment, use the stereo power amplifier (M-IS21).

6.1 DECK SECTION

6.1.1 Adjustment Condition

- (1) The ground at the time of adjustment shall be W166.
(Refer to Fig. 6-3).
- (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.

NCT-111 : For Tape Speed adjustment
 STD-331E : For Playback adjustment
 STD-632 : Normal blank tape

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

- (5) Provide yourself with the following measuring devices:
 - AC millivoltmeter
 - Low-frequency oscillator
 - Attenuator
 - Oscilloscope
- (6) Adjust both right and left channels unless other wise specified.
- (7) Turn the DOLBY NR switch off unless otherwise 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.

■ List of Adjustments

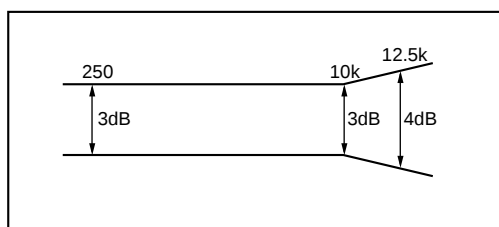
● Playback Section

- (1) Tape Speed Confirmation
- (2) Head Azimuth Adjustment
- (3) Playback Level Adjustment

● Recording Section

- (1) Recording Bias Adjustment
- (2) Recording Level Adjustment

PLAY BACK



RECORDING

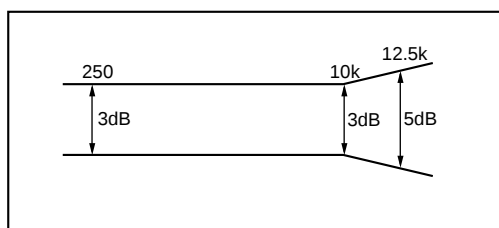


Fig. 6-1 Frequency Characteristics

Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
 "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

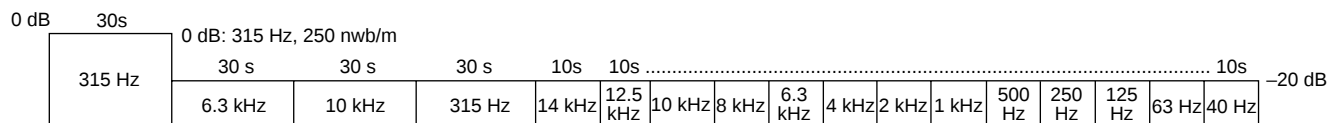


Fig. 6-2 Test Tape STD- 331E

6.1.2 Playback Section

(1) Tape Speed Confirmation

No.	Mode	Input Signal/Test Tape	Adjustment Points	Measurement Points	Adjustment Value	Remarks
1	PLAY	NCT-111 (3 kHz)	VR2701 (DECK ASSY) (Refer to Fig. 6-3)	TP R (C2204) (DECK ASSY)	3000 Hz $\begin{smallmatrix} +10 \\ -10 \end{smallmatrix}$ Hz	FWD adjustment REV Confirmation (3000 Hz $\begin{smallmatrix} +60 \\ -60 \end{smallmatrix}$ Hz)

(2) Head Azimuth Adjustment

- This unit is equipped with auto tape selector.
- Do not switch between forward and reverse operation with the screwdriver inserted.

No.	Mode	Input Signal/Test Tape	Adjustment Points	Measurement Points	Adjustment Value	Remarks
1	PLAY	STD-331E test tape (Playback: 10 kHz, -20 dB)	Head azimuth adjustment Screw (Refer to Fig. 6-3)	TP L (C2203) TP R (C2204) (DECK ASSY)	Max. Playback signal level	After adjustment, apply silicon bond to the head azimuth adjustment screw.

(3) Playback Level Adjustment

- Since this adjustment determines playback DolbyNR level, Perform it carefully.

No.	Mode	Input Signal/Test Tape	Adjustment Points		Measurement Points	Adjustment Value	Remarks
1	PLAY	STD-331E test tape (Playback: 315 Hz, 0 dB)	L ch	VR2301	TP L (C2203) TP R (C2204) (DECK ASSY)	-3.7 dBV	
			R ch	VR2302			

6.1.3 Recording Section

(1) Recording Bias Adjustment

- After the adjustment, caution should be exercised so as not to become under bias by checking the distortion rate.

No.	Mode	Input Signal/Test Tape	Adjustment Points		Measurement Points	Adjustment Value	Remarks
1	REC/ PAUSE	Input a 315Hz signal to the LINE - IN terminal. *	Input signal level		TP L (C2203) TP R (C2204) (DECK ASSY)	-23.7 dBV	
2	REC → PLAY	Load the STD-632 test tape and record/playback the 315Hz and 10kHz signals. (see the Note below)	L ch	VR2801		Repeat adjustment until playback level of the 10kHz signal is within 0.5dBV ±0.5dB from that of the 315Hz signal.	
			R ch	VR2802			

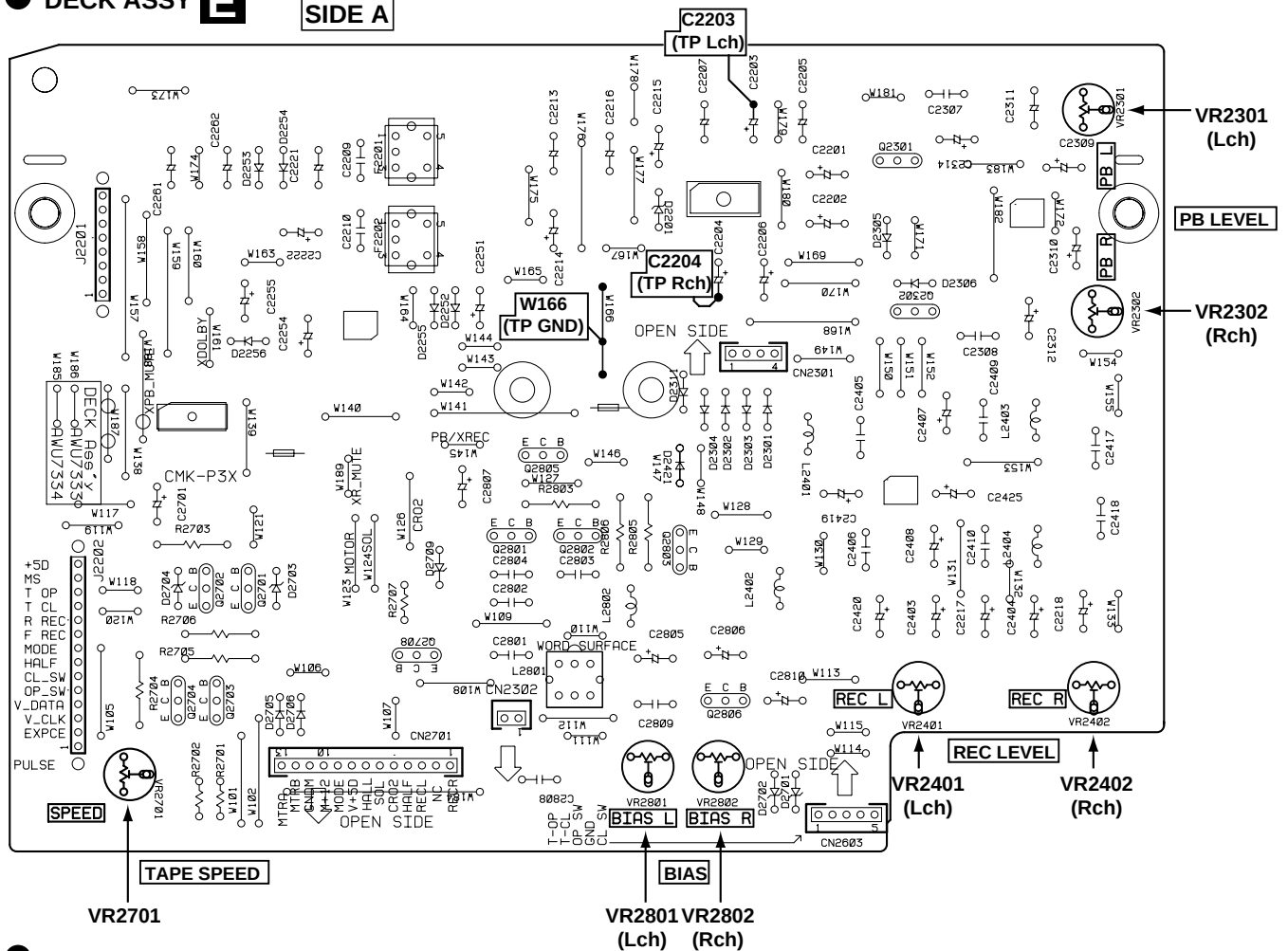
Note: Set the 10kHz input signal level to the same value as the 315Hz input signal level of step 1.

(2) Recording Level Adjustment

No.	Mode	Input Signal/Test Tape	Adjustment Points		Measurement Points	Adjustment Value	Remarks
1	REC/ PAUSE	Input a 315Hz signal to the LINE-IN terminal.*	Input signal level		TP L (C2203) TP R (C2204) (DECK ASSY)	-7.7 dBV	
2	REC → PLAY	STD-632 test tape and record/playback the 315Hz signal.	L ch	VR2401		Repeat recording, playback and adjustment until playback level of the 315Hz signal becomes -7.7dBV±0.5dB.	
			R ch	VR2402			

● DECK ASSY

SIDE A



● MECHANISM UNIT

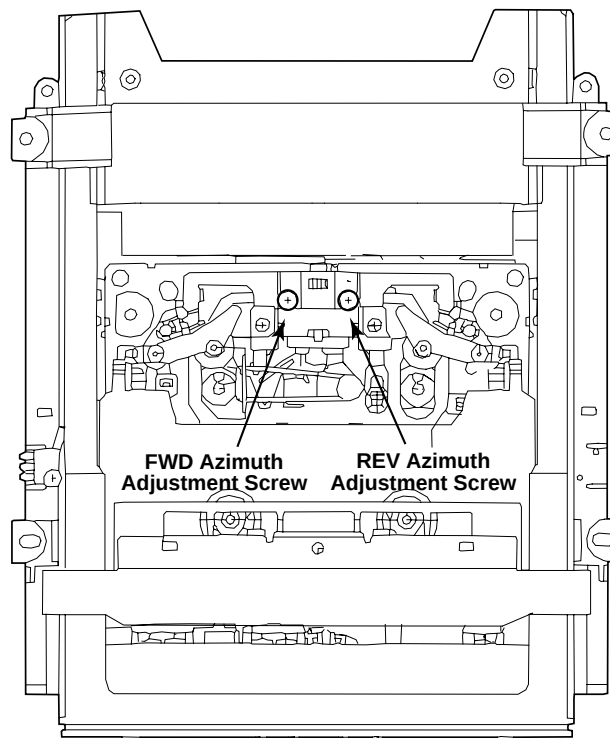


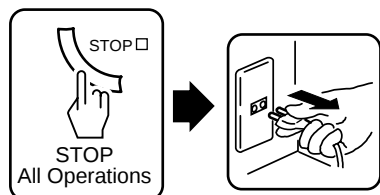
Fig. 6-3 Adjustment and Measurement Points

6.2.1 HOW TO START / CANCEL TEST MODE

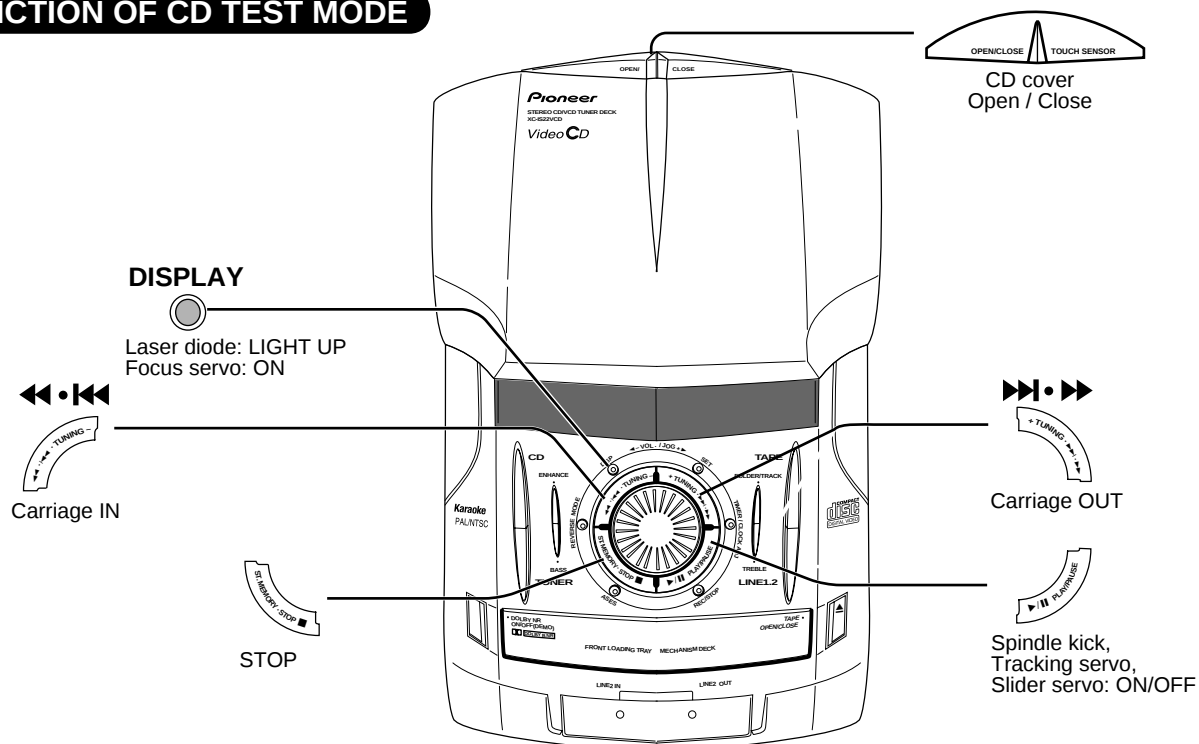
TEST MODE : ON



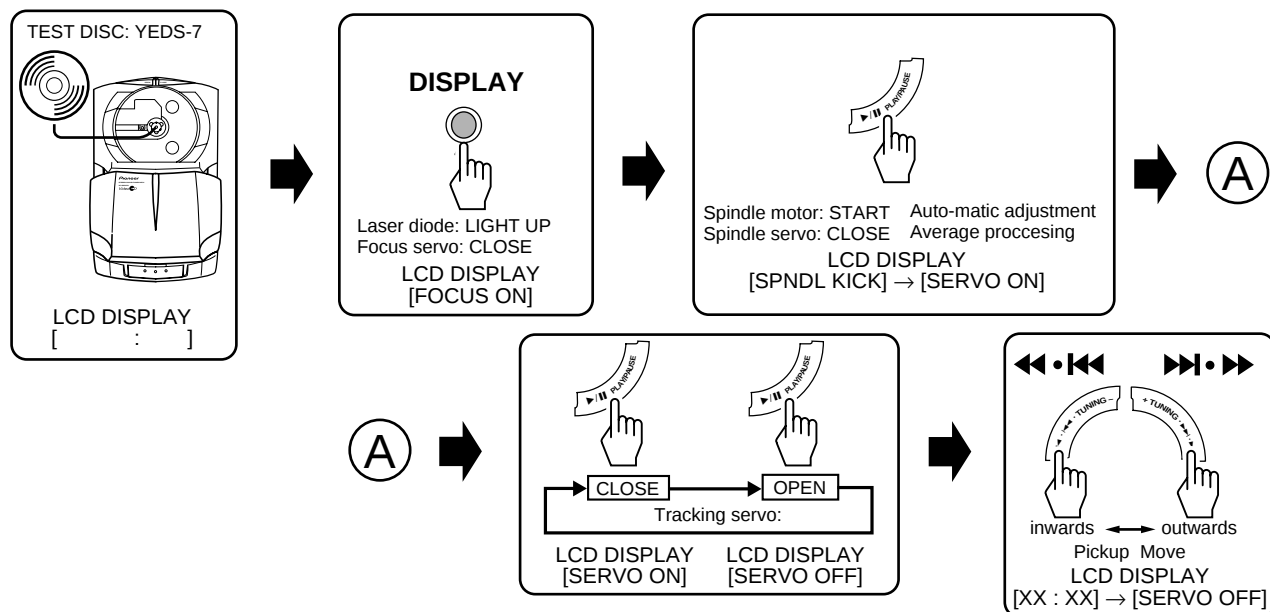
TEST MODE : STOP → CANCEL



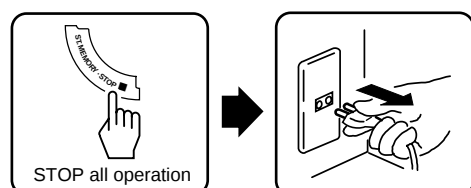
FUNCTION OF CD TEST MODE



TEST MODE : PLAY



TEST MODE : STOP → CANCEL



6.3 TUNER SECTION

6.3.1 AM TUNER SECTION

- There is no adjustment in the AM tuner.

6.3.2 FM TUNER SECTION

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 6-5.

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.

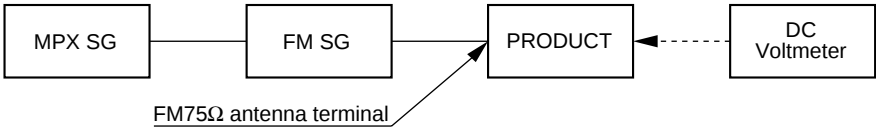


Fig.6.5 Adjustment Wiring Diagram

A FM/AM TUNER UNIT

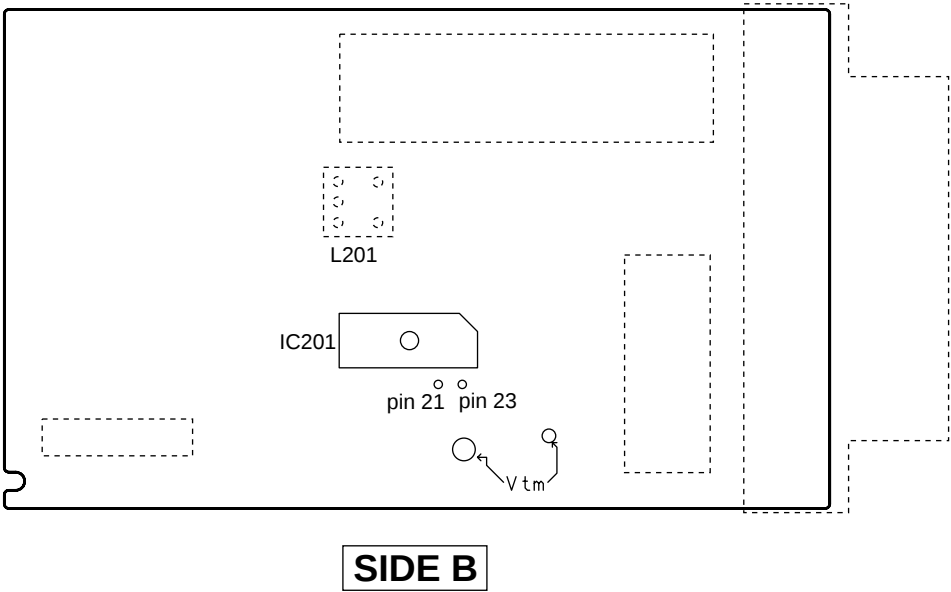


Fig.6.6 Adjustment Point

7. GENERAL INFORMATION

7.1 DIAGNOSIS

7.1.1 SEQUENCE AFTER THE POWER ON

Note 1 : IC No. or P** without name indicate the pin No. of microcomputer (IC5501).

Note ;

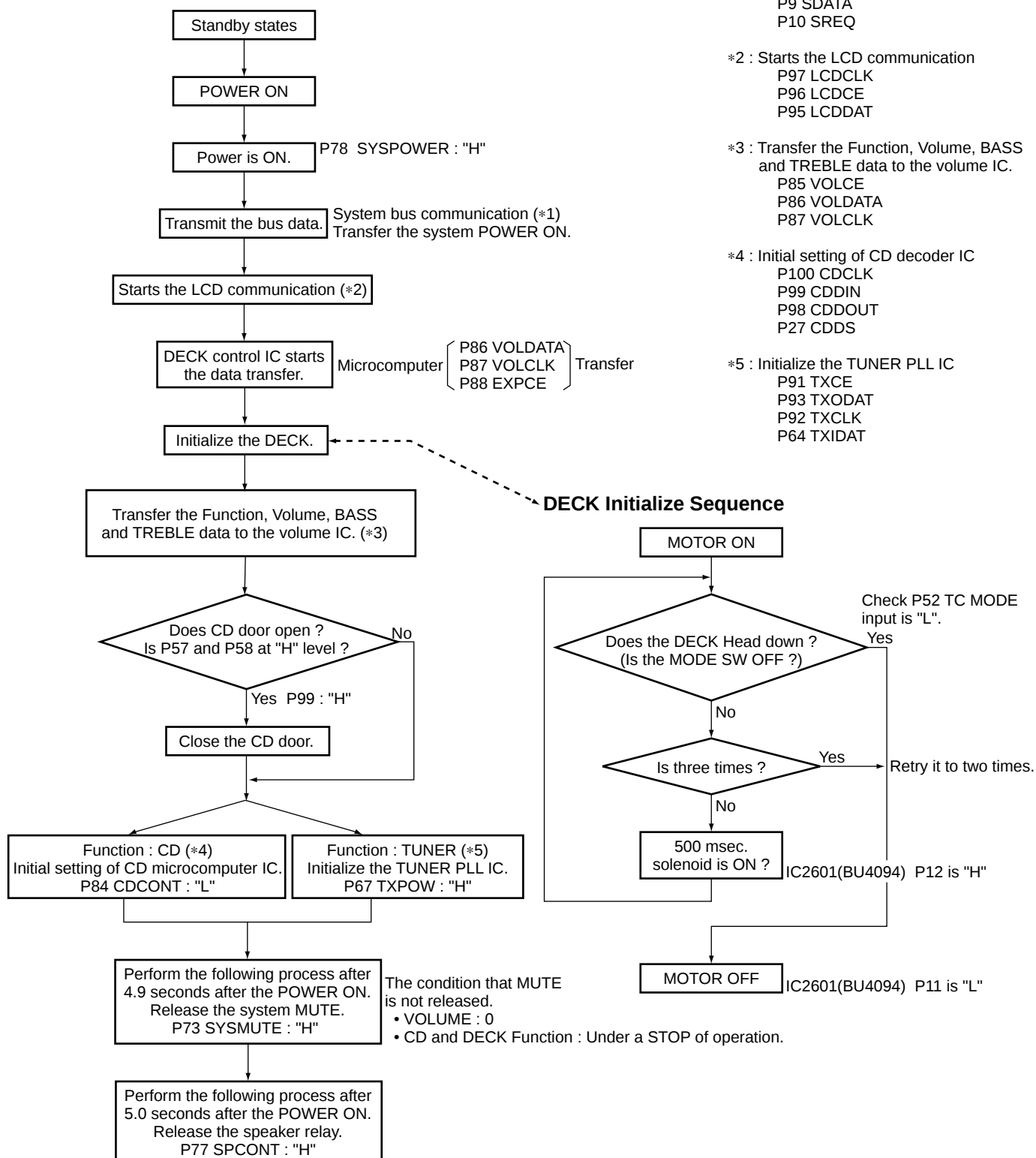
*1 : System bus communication
P8 SCLK
P9 SDATA
P10 SREQ

*2 : Starts the LCD communication
P97 LCDCLK
P96 LCDCE
P95 LCDDAT

*3 : Transfer the Function, Volume, BASS and TREBLE data to the volume IC.
P85 VOLCE
P86 VOLDATA
P87 VOLCLK

*4 : Initial setting of CD decoder IC
P100 CDCLK
P99 CDDIN
P98 CDDOUT
P27 CDDS

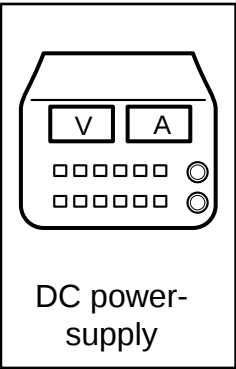
*5 : Initialize the TUNER PLL IC
P91 TXCE
P93 TXODAT
P92 TXCLK
P64 TXIDAT



7.1.2 SINGLE OPERATION METHOD

Single purpose operation test mode specification for IS22CD service.

Jigs and Measuring instruments



Single purpose operation method.

① Connect point ① of the AF ASSY [+8V, +15V, GND] and DC power-supply.
(Refer to Fig. 7-1.)

Connect point ①	DC power-supply	
	Voltage (V)	Remarks
AF ASSY: (+8V)	+8V	
AF ASSY: (+15V)	+15V	
AF ASSY: (GND)	GND	

② It keeps pushing main body "BASS key" and the "TREBLE" key together.
(Refer to Fig. 7-2.)

③ AF ASSY [Connect point ②: +5.6V] are connected under the condition (With doing a key 2-fold push.) of ②.
(Refer to Fig. 7-2.)

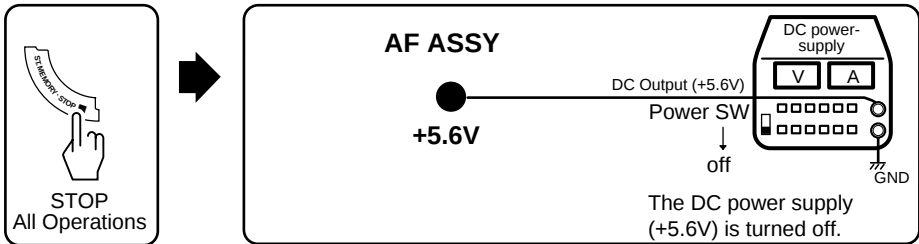
Connect point ②	DC power-supply	
	Voltage (V)	Remarks
AF ASSY: (+5.6V)	+5.6V	
AF ASSY: (GND)	GND	

④ It starts works.
Stop pushing "BASS" and "TREBLE" keys.

Note:

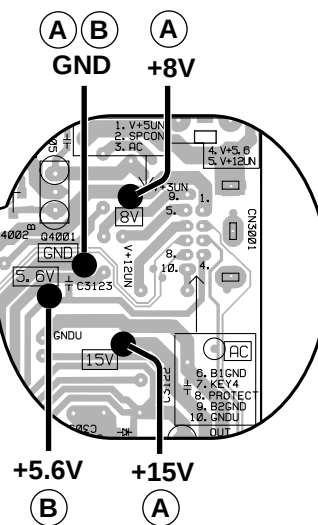
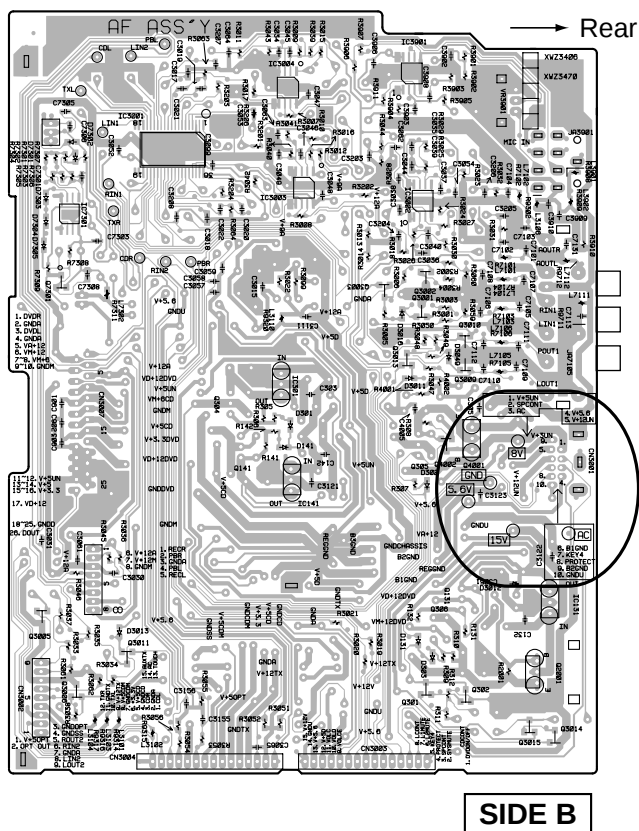
- The test mode is finished when a STANDBY/ON key is pushed during on or the power supply is cut off.
Again, do the above operation when you make it work.
- It doesn't work only to connect a power supply. Do the above operation.
- A microcomputer does not perform AC CHECK at this time.

TEST MODE : STOP → CANCEL



CONNECTED POINT

C AF ASSY



STEP 1

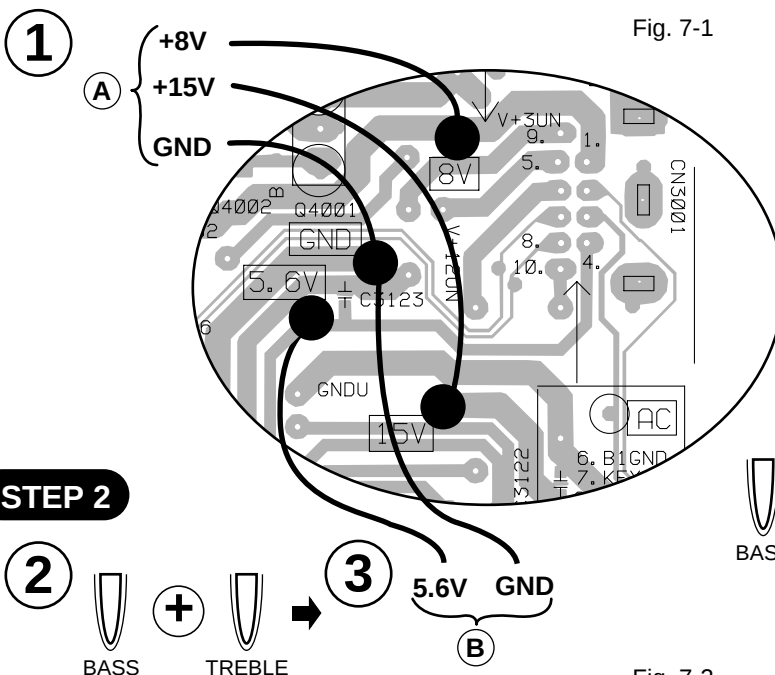


Fig. 7-1

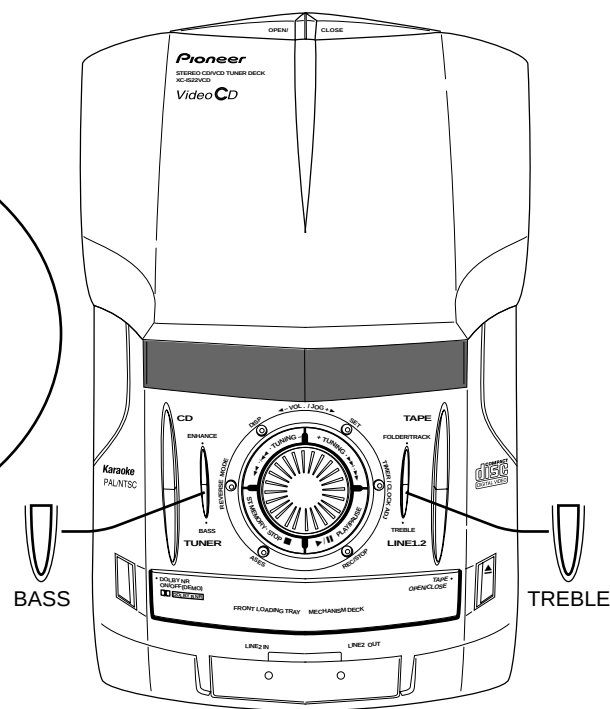


Fig. 7-2

7.1.3 TROUBLE SHOOTING

XC-IS22CD microcomputer trouble shooting.

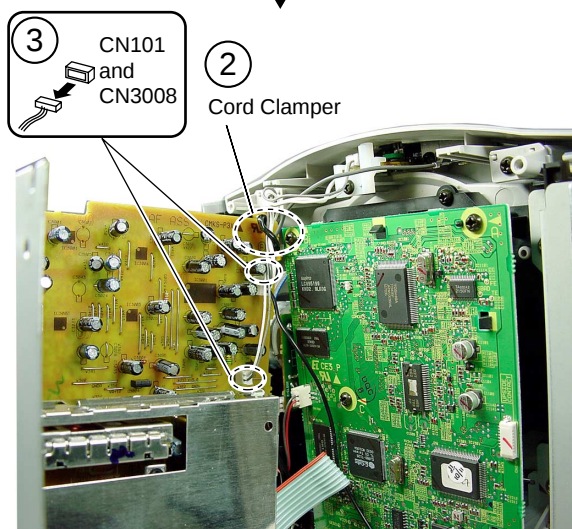
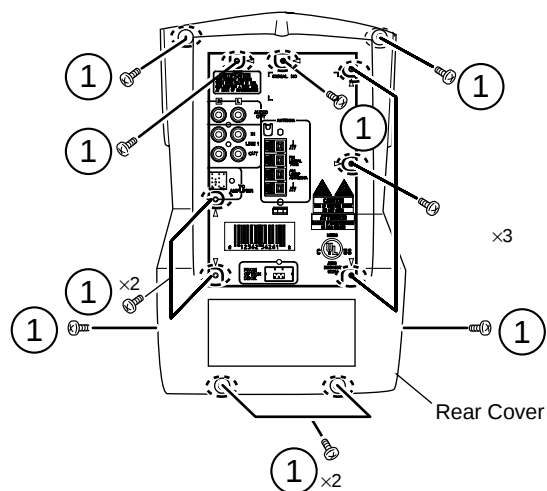
Symptom of problem	Thought cause	Check method
The power supply does not enter . The standby LED lights even if the POWER key is pushed.	The microcomputer is not reset.	Whether terminal RESET (11Pin) is "H" is confirmed. The operation of the RESET circuit is confirmed if not becoming "H".
	The AC pulse 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 input of protection (18pin) is Low.	Operation of a power supply circuit is checked.
CD does not operate at all. Time is not displayed in LCD DISPLAY at the CD function.	It does not communicate with the CD microcomputer.	Whether terminal (27Pin, 98 -100Pin) for the communication with the CD microcomputer does the communication operation is confirmed. If the communication operation is not done, whether the B to B connector etc. are disconnected is confirmed. Whether "H" is output to terminal CD RESET(83Pin)is confirmed.
The operation 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 (19 - 21Pin) is 5V is confirmed. If the KEY input terminal is not 5V, whether KEY SW on the line breaks is confirmed.

7.1.4 DISASSEMBLY

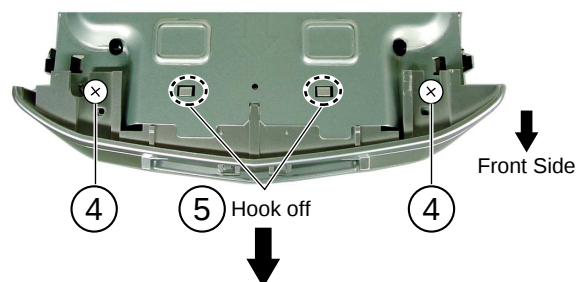
Note: The disassembly is the same although this photograph is XC-IS22VCD

1 Front Panel Assy

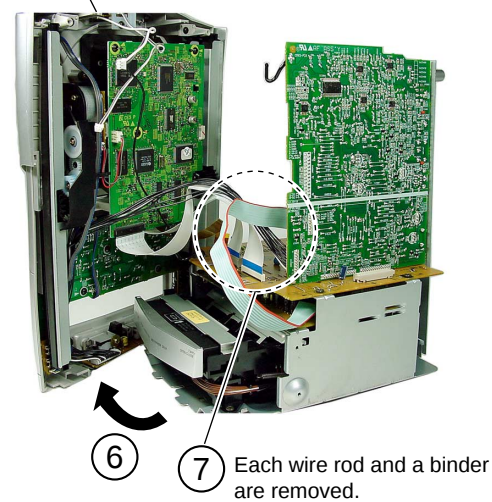
Note : Flexible cables are not removed in the case of the adjustment, but remove the Flexible cables to apply in the case of the exchange or repair.



• Bottom View

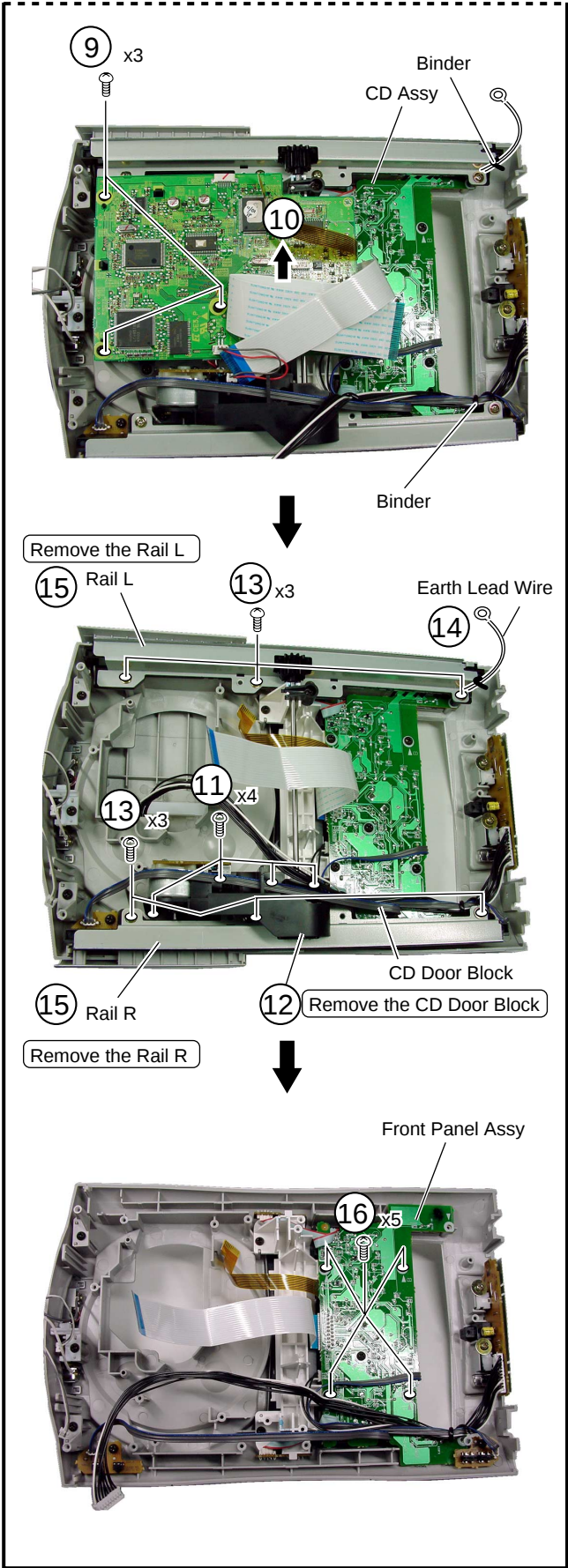


Front Panel Assy

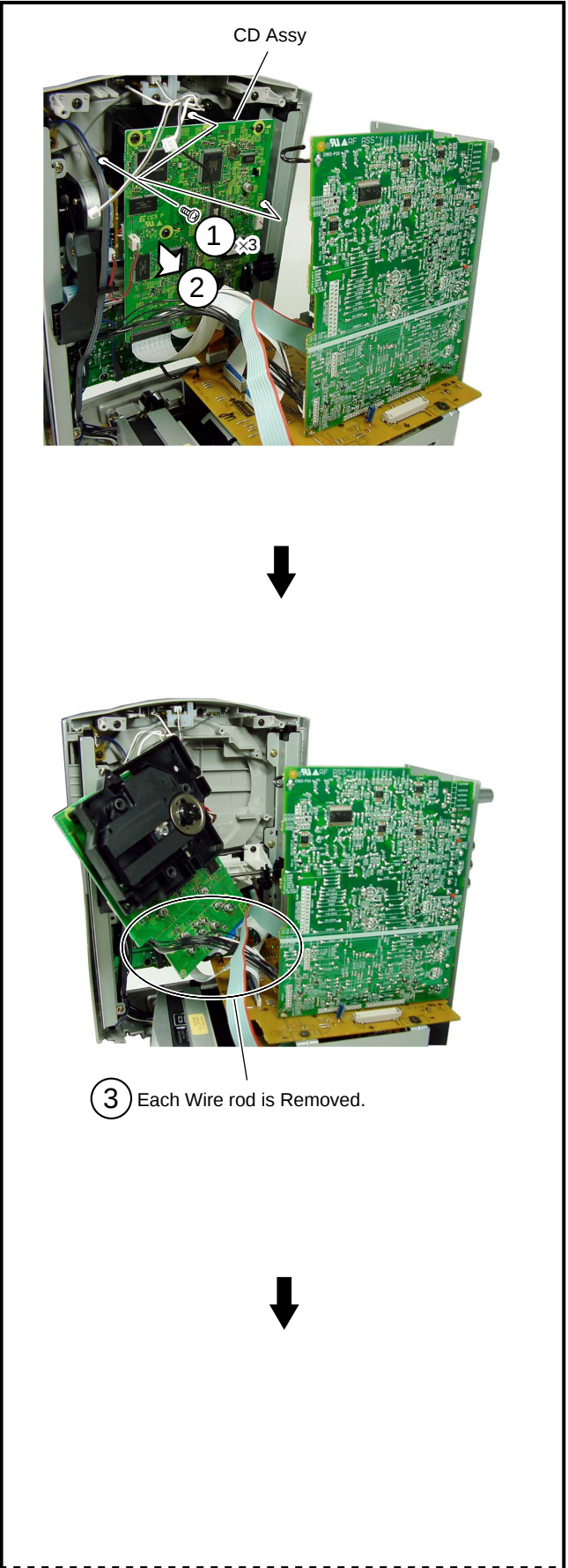


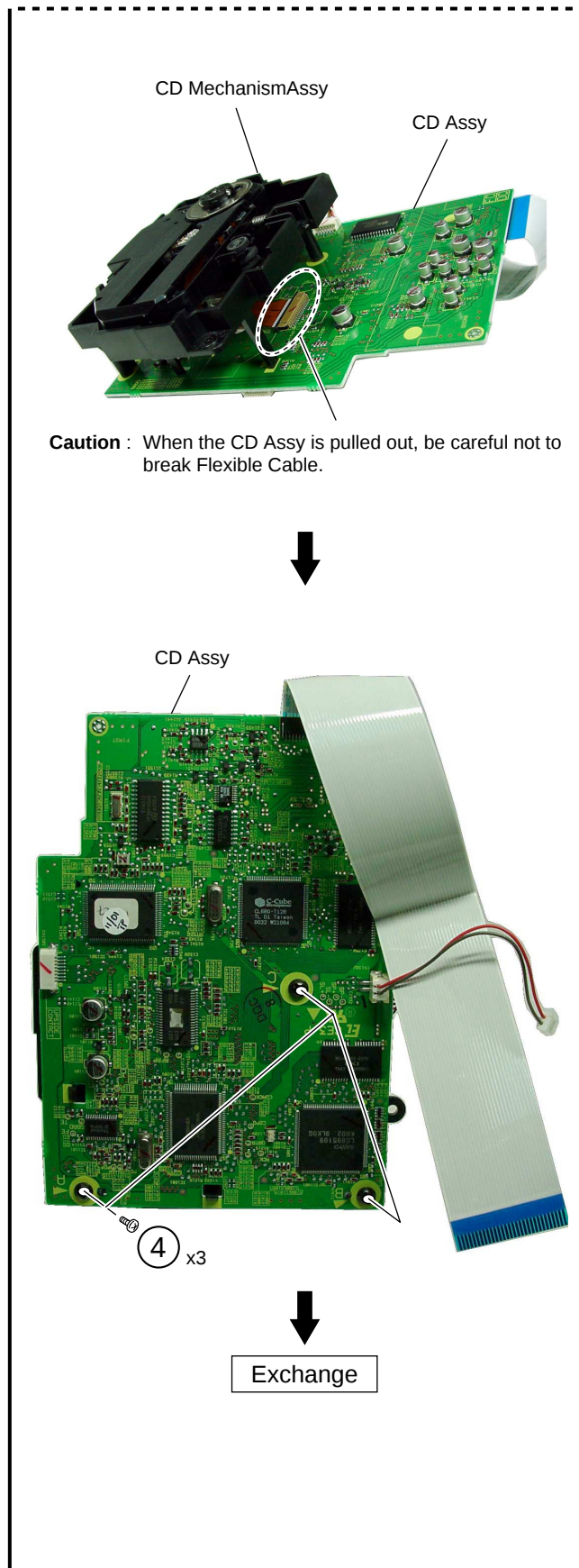
Front Panel Assy



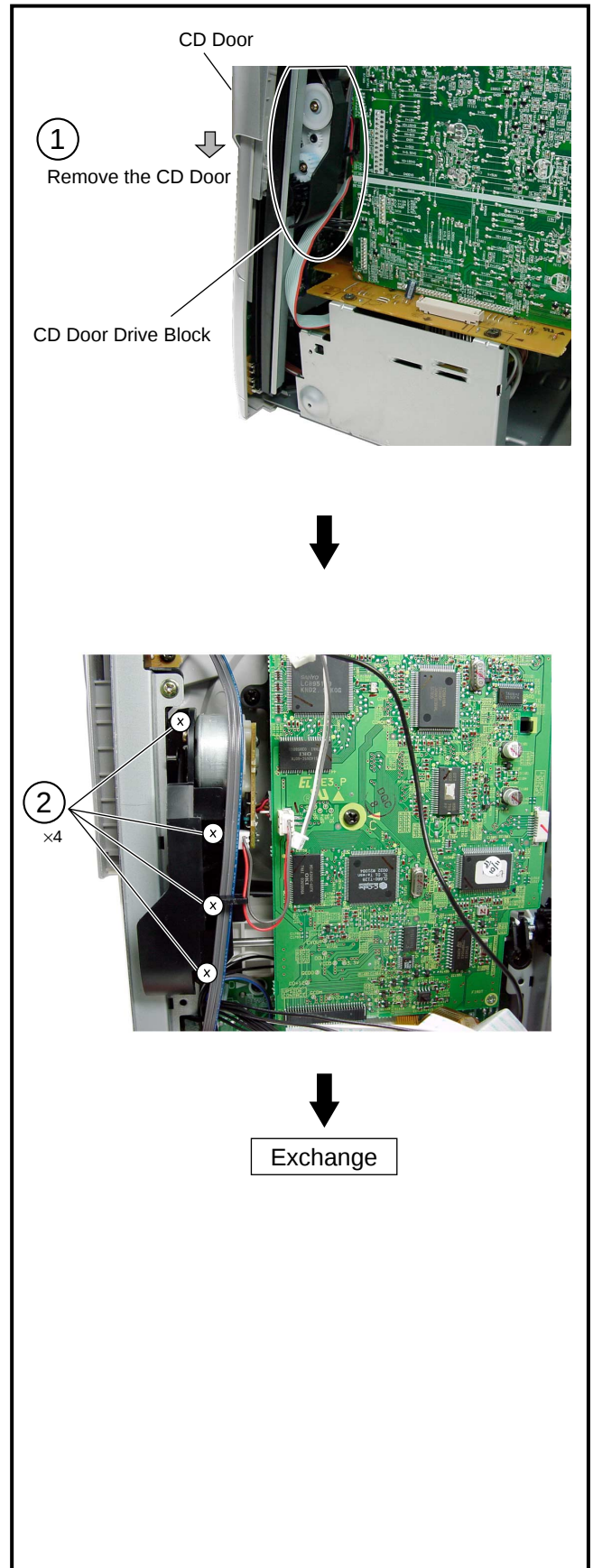


2 CD Mechanism Assy



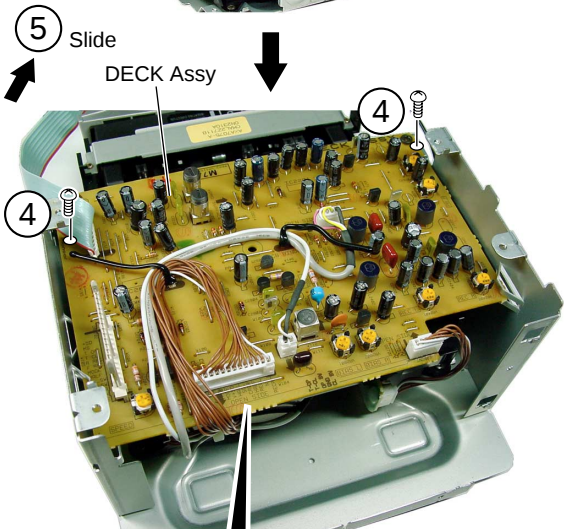
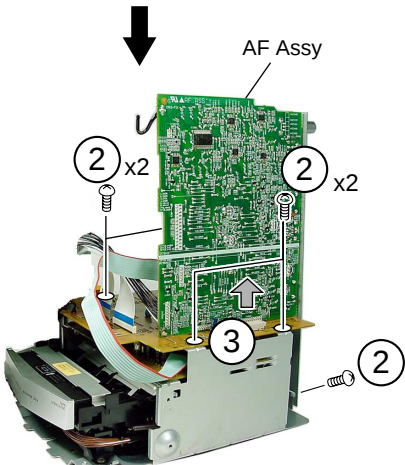


3 CD Door Drive Block

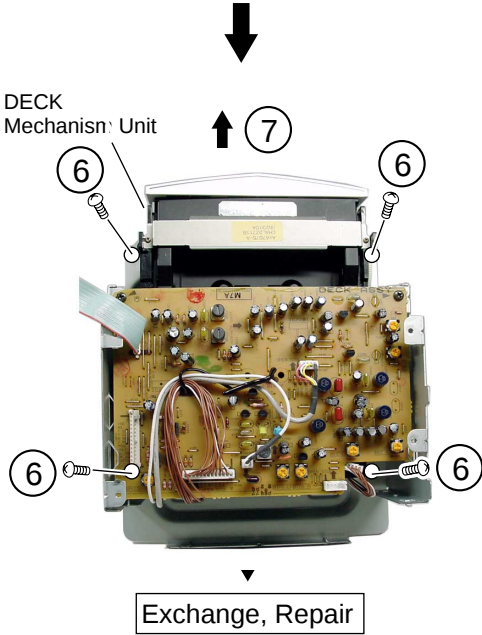
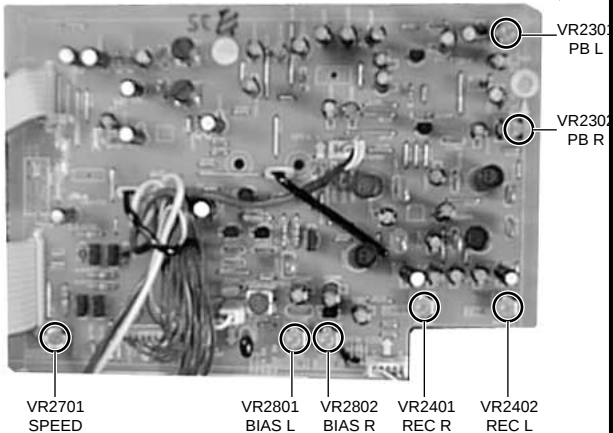


4 Deck Mechanism Unit

① Remove the Front panel Assy
(Refer to Front panel Assy)

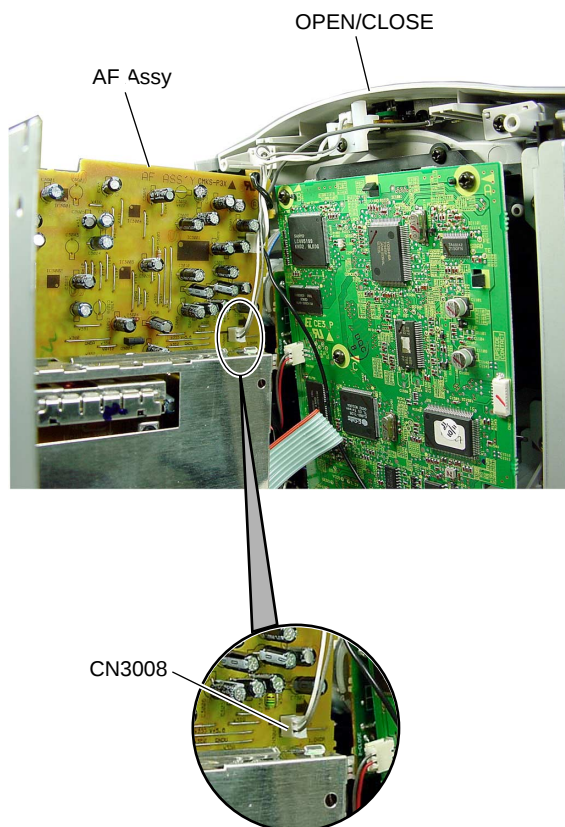


DECK Assy Adjustment Point



Note**① CD Door OPEN/CLOSE**

When a connector CN3008 of AF Assy is removed from the touch sensor system, sensor does not work and CD Door can't open and close. CD Door can open when the land of CN3008 at the foil side is short-circuited with the finger.



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.

•List of IC

PDC075B, PD5672B, STA013, LC75343M

■ PDC075B (IF ASSY : IC5501)

• System Control IC

•Pin Function (1/3)

No.	Mark	Pin Name	Type	Function
1	P16/T1PWML	NC	O	MP3 Model check
2	P17/T1PWMH/BUZ	BEEP	O	Buzzer Control
3	P30	TC TRAY IN	O	TAPE tray Load in
4	P31	TC TRAY OUT	O	TAPE tray Load out
5	P32	FLASH E/D	I/O	For FLASH Writing
6	P33	FLASH D0	I/O	For FLASH Writing
7	P34	FLASH CLK	O	For FLASH Writing
8	P35	SCLK	O	System bus Clock
9	P36	SDATA	I/O	System bus Data
10	P37	SREQ	I/O	System bus Request
11	RES	XRESET	-	Microcomputer Reset terminal
12	XT1/AN10	XTESTMODE	I	Test Mode Input
13	XT2/AN11	MS	I	MS Signal Input
14	VSS1	VSS	-	GND
15	CF1	CF1	-	OSC Input
16	CF2	CF2	-	OSC Output
17	VDD1	VDD	-	Power supply
18	P80/AN0	PROTECT	I	Protection and detection Input
19	P81/AN1	KEY1	I	Key Input
20	P82/AN2	KEY2	I	Key Input
21	P83/AN3	KEY3	I	Key Input
22	P84/AN4	SIMUKE	I	Model type select Input
23	P85/AN5	NC	O	-
24	P86/AN6	JOGIN	I	Multi-Jog Input
25	P87/AN7	NC	O	-
26	P70/INT0/TOLCP/AN8	ACPULS	I	AC Pulse Input
27	P70/INT0/TOLCP/AN9	CDCS	I	CD Microcomputer DATA Request
28	P70/INT2/TOIN	RDSCLK	I	RDS Clock Input
29	P70/INT3/TOIN	REMIN	I	Remote Control Input
30	SO/TO	NC	O	-
31	S1/T1	NC	O	-
32	S2/T2	NC	O	-
33	S3/T3	NC	O	-
34	S4/T4	NC	O	-
35	S5/T5	NC	O	-
36	S6/T6	NC	O	-
37	S7/T7	NC	O	-
38	S8/T8	NC	O	-
39	S9/T9	NC	O	-
40	S10/T10	NC	O	-

●Pin Function (2/3)

No.	Mark	Pin Name	Type	Function
41	S11/T11	NC	-	-
42	S12/T12	NC	-	-
43	S13/T13	NC	-	-
44	S14/T14	NC	-	-
45	S15/T15	NC	-	-
46	VDD3	NC	-	-
47	S16//PC0	NC	-	-
48	S17/PC1	NC	-	-
49	S18/PC2	TUNE	I	TX TUNED Input
50	S19/PC3	STEREO	I	TX STEREO Input
51	VP	GND	-	GND
52	S20/PC4	TCMODE	I	Mechanism MODE SW
53	S21/PC5	TCHALF	I	Mechanism HALF SW
54	S20/PC6	PULSE	I	TC Reel pulse
55	S21/PC7	CD DOOR1	I	CD door detection Input 1 (OPEN completion SW)
56	S22/PD0	CD DOOR2	I	CD door detection Input 2 (OPEN slowdown SW)
57	S23/PD1	CD DOOR3	I	CD door detection Input 3 (CLOSE slowdown SW)
58	S24/PD2	CD DOOR4	I	CD door detection Input 4 (CLOSE completion SW)
59	S25/PD3	TC OPEN	I	Tray OPEN SW
60	S26/PD4	TC CLOSE	I	Tray CLOSE SW
61	S27/PD5	TC RECR	I	Mechanism RECR SW
62	S28/PD6	TC RECL	I	Mechanism RECF SW
63	S29/PD7	TOUCH	I	Touch sensor Input
64	S30/PE0	TXIDAT	I	TX LSI data Input
65	S31/PE1	RDSDATA	I	RDS data Input
66	S32/PE2	TXMUTE	O	TX mute control
67	S33/PE3	TXPOW	O	TX power supply control
68	S34/PE4	RDSPOW	O	RDS power supply control
69	S35/PE5	NC	O	-
70	S36/PE6	LCDRESET	O	LCD driver RESET
71	S39/PE7	DIMMER	O	DIMA control
72	VDD4	VDD	-	VDD
73	S40/PF0	SYSMUTE	O	System mute control
74	S41/PF1	FAUXMUTE	O	Front mute control
75	S42/PF2	RAUXMUTE	O	Rear mute control
76	S43/PF3	AUXCONT	O	Digital Input change
77	S44/PF4	SPCONT	O	Speaker reay control
78	S45/PF5	SYSPOW	O	System power supply cotrol
79	S46/PF6	CD DOOR OUT	O	CD Door OPEN drive output
80	S47/PF7	CD DOOR IN	O	CD Door CLOSE drive output

●Pin Function (3/3)

No.	Mark	Pin Name	Type	Function
81	S48/PG0	XLOMUTE	O	CD Door driver-IC MUTE ON/OFF
82	S49/PG1	MP3RESET	O	CD/MP3 microcomputer oscillation control
83	S50/PG2	XCDRST	O	CD microcomputer reset output
84	S51/PG3	CDCONT	O	CD LSI power supply control
85	P00	VOLCE	O	Electronic volume IC chip enable
86	P01	VOLDATA	O	Electronic volume IC data
87	P02	VOLCLK	O	Electronic volume IC clock
88	P03	EXPCE	O	Extended IC chip enable
89	VSS2	VSS	-	GND
90	VDD2	VDD	-	Power supply
91	P04	TXCE	O	TX LSI chip enable
92	P05	TXCLK	O	TX LSI clock
93	P06	TXODAT	O	TX LSI data output
94	P07	NC	O	-
95	P10/SO0	LCDDAT	O	LCD driver DATA
96	P11/SIO/SBO	LCDCE	O	LCD driver CE (general-purpose pore)
97	P12/SCK0	LCDCLK	O	LCD driver CLOCK
98	P13/SO1	CDDOUT	O	CD microcomputer DATA OUT
99	P14/S11/SB1	CDDIN	I	CD microcomputer DATA IN
100	P15/SCK1	CDCLK	O	CD microcomputer DATA CLOCK

PD5672B (CD ASSY : IC1501)

- CD micro computer

●Pin Function (1/3)

No.	Mark	Pin Name	Type	Function
1	P96/ANEX1/Sout4	SDI	I/O	STA013 bit stream Communication data output
2	P95/ANEX0/CLK4	SCKR	I/O	STA013 bit stream Communication clock output
3	P94/DA1/TB4in	HRDY	I/O	VCD IC communication permission input
4	P93/DA0/TB3in	HSEL	I/O	VCD IC communication data selection output
5	P92/TB2in/Sout3	HDI	I/O	VCD IC communication data output
6	P91/TB1in/Sin3	HDO	I/O	VCD IC communication data input
7	P90/TB0in/CLK3	HCLK	I/O	VCD IC communication clock output
8	BYTE	BYTE	I	External data bus change terminal
9	CNVss	CNVSS	I	The terminal for rewriting distinction
10	P87/Xcin	NC	I/O	-
11	P86/Xcout	NC	I/O	-
12	RESET	XVCRST	I	Reset input
13	Xout	XOUT	O	Main clock oscillation output
14	Vss	VSS	I	GND
15	Xin	XIN	I	Main clock oscillation input
16	Vcc	VCC	I	Power supply voltage (2.7-5.5V)
17	P85/NMI	NM1	I	Power supply voltage (2.7-5.5V)
18	P84/INT2	DATA_REQ	I/O	The data transmission demand from STA013
19	P84/INT2	XINT1	I/O	The interruption demand from LC895199
20	P82/INT0	XINT0	I/O	The interruption demand from LC895199
21	P81/TA4in/U	NC	I/O	-
22	P80/TA4out/U	NC	I/O	-
23	P77/TA3in	DACL	I/O	PCM1716E latch output
24	P76/TA3out	DACDATA	I/O	PCM1716E data output
25	P75/TA2in/W	DACLK	I/O	PCM1716E clock output
26	P74/TA2out/W	MP3/CD	I/O	DAC (PCM1742) incoming signal selection output
27	P73/CTS2/RTS2/TA1in/V	XST_EST	I/O	STA013 reset output
28	P72/CLK2/TA1out/V	NC	I/O	-
29	P71/RxD2/SCL/TA0in/TB5in	I2CCLK	I/O	The I2C clock output for STA013
30	P70/TxD2/SDA/TA0out	I2CDATA	I/O	The I2C data output for STA013
31	P67/TxD1	TXD1	I/O	The time data output of flash writing
32	P66/RxD1	RXD1	I/O	The time data input of flash writing
33	P65/CLK1	CLK1	I/O	The time clock input of flash writing
34	P64/CTS1/RTS1/CLKS1	RTS	I/O	The reset output of flash writing
35	P63/TxD0	VDV	I/O	The communication data output with a system microcomputer
36	P62/RxD0	VDS	I/O	The communication data input with a system microcomputer
37	P61/CLK0	VCLK	I/O	The communication clock input with a system microcomputer
38	P60/CTS0/RTS0	VCS	I/O	A communication chip selection with a system microcomputer
39	P57/RDY/CLKout	NC	I/O	-
40	P56/ALE	NC	I/O	-

●Pin Function (2/3)

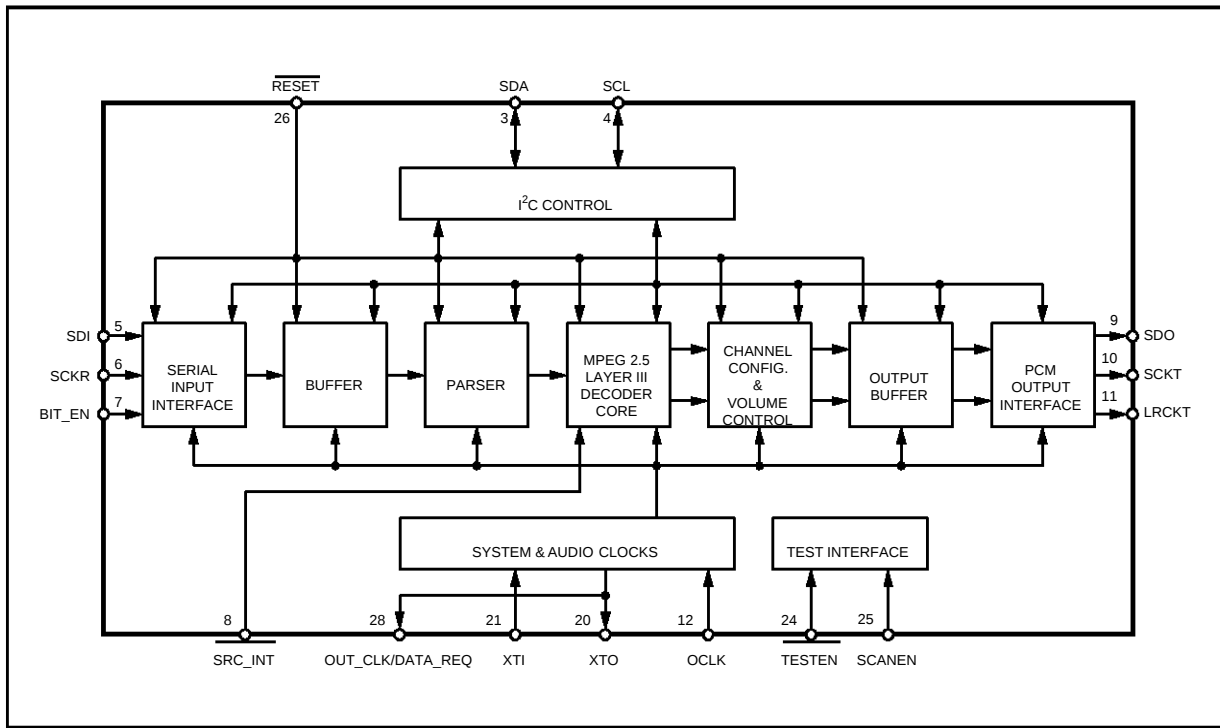
No.	Mark	Pin Name	Type	Function
41	P54/HOLD	NC	I/O	-
42	P54/HLDA	NC	I/O	-
43	P53/BCLK	NC	I/O	-
44	P52/RD	XRD	I/O	The data read-out signal output of LC895199
45	P51/WRH/BHE	NC	I/O	-
46	P50/WRL/WR	XWR	I/O	The data write-in signal output of LC895199
47	P47/CS3	XCS	I/O	LC895199 chip selection
48	P46/CS2	ZSWAIT	I/O	WAIT signal from LC895199
49	P45/CS1	CDBUS3	I/O	TC9495F data BUS communication data input and output
50	P44/CS0	CUBUS2	I/O	TC9495F data BUS communication data input and output
51	P43/A19	CUBUS1	I/O	TC9495F data BUS communication data input and output
52	P43/A18	CUBUS0	I/O	TC9495F data BUS communication data input and output
53	P43/A17	CDBCE	I/O	TC9495F data BUS communication data input and output
54	P43/A16	CDBCLK	I/O	TC9495F data BUS communication data input and output
55	P43/A15	NC	I/O	-
56	P43/A14	NC	I/O	-
57	P43/A13	NC	I/O	-
58	P43/A12	NC	I/O	-
59	P43/A11	NC	I/O	-
60	P43/A10	NC	I/O	-
61	P43/A9	NC	I/O	-
62	Vcc	VCC	I	Power supply voltage (2.7-5.5V)
63	P30/A8(I-/I7)	NC	I/O	-
64	Vss	VSS	I	gnd
65	P27/A7(/D7/D6)	NC	I/O	-
66	P26/A6(/D6/D5)	SUA6	I/O	LC895199 adressshingu output
67	P25/A5(/D5/D4)	SUA5	I/O	LC895199 adressshingu output
68	P24/A4(/D4/D3)	SUA4	I/O	LC895199 adressshingu output
69	P24/A4(/D4/D2)	SUA3	I/O	LC895199 adressshingu output
70	P24/A4(/D4/D1)	SUA2	I/O	LC895199 adressshingu output
71	P24/A4(/D4/D0)	SUA1	I/O	LC895199 adressshingu output
72	P20/A0(/D0/-)	SUA0	I/O	LC895199 adressshingu output
73	P17/D15/INT5	NC	I/O	-
74	P17/D14/INT5	WAKEUP	I/O	-
75	P17/D13/INT5	HINT	I/O	VCD IC communication interruption demand
76	P14/D12	VNR	I/O	VNR ON/OFF output
77	P14/D11	CD INSIDE	I/O	CD INSIDE SW input
78	P14/D10	CD MUTE	I/O	CD MUTE output
79	P11/D9	XRSTOUT	I/O	CD DSP and MPEG DECODER reset output
80	P10/D8	XRESET	I/O	LC895199 reset output

●Pin Function (3/3)

No.	Mark	Pin Name	Type	Function
81	P07/D7	D7	I/O	The data bus with LC895199
82	P06/D6	D6	I/O	The data bus with LC895199
83	P05/D5	D5	I/O	The data bus with LC895199
84	P04/D4	D4	I/O	The data bus with LC895199
85	P03/D3	D3	I/O	The data bus with LC895199
86	P02/D2	D2	I/O	The data bus with LC895199
87	P01/D1	D1	I/O	The data bus with LC895199
88	P00/D0	D0	I/O	The data bus with LC895199
89	P107/AN7/KI3	5V DETECT	I/O	-
90	P106/AN6/KI2	3.3V DETECT	I/O	-
91	P105/AN5/KI1	TEST KEY IN	I/O	The input for a unit check
92	P104/AN4/KI0	NC	I/O	-
93	P103/AN3	TEST1	I/O	-
94	P102/AN2	MODEL	I/O	-
95	P101/AN1	DIR	I/O	-
96	AVss	AVSS	I	A-D conversion machine power supply voltage (Vss)
97	P100/AN0	BITEN	I/O	STA013 bit sutorumu DATA Permission output
98	Vref	VREF	I	A-D conversion machine standard voltage input
99	AVcc	AVCC	I	A-D conversion machine power supply voltage (Vcc)
100	P97/ADtrg/Sin4	NC	I/O	-

■ STA013 (CD ASSY : IC1551)

- Mpeg 2.5 Layer 3 Audio Decoder
- Block Diagram

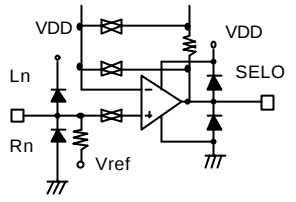
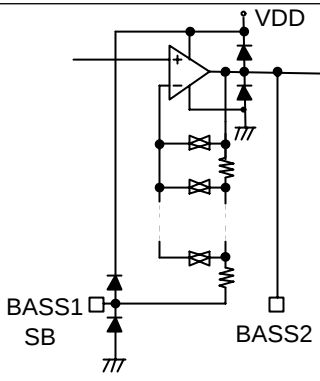
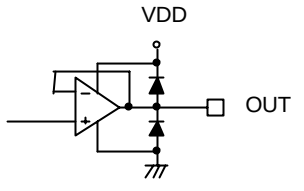
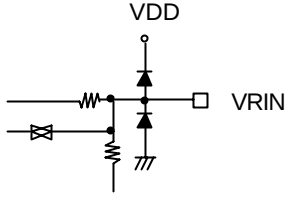


●Pin Function

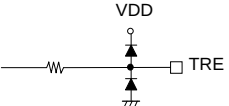
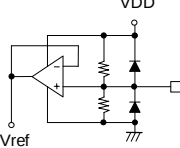
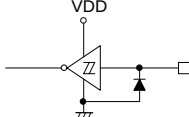
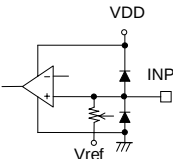
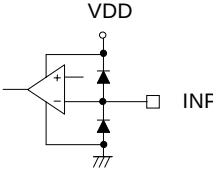
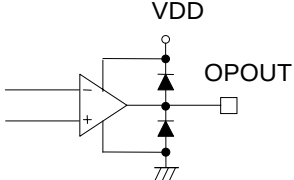
SO28	TQFP44	LFBGA64	Pin Name	Type	Function	PAD Description
1	29	B5	VDD_1		Supply Voltage	
2	30	B4	VSS_1		Ground	
3	31	A4	SDA	I/O	I ² C Serial Data + Acknowledge	CMOS Input Pad Buffer CMOS 4mA Output Drive
4	32	B3	SCL	I	I ² C Serial Clock	CMOS Input Pad Buffer
5	34	A1	SDI	I	Receiver Serial Data	CMOS Input Pad Buffer
6	36	B2	SCKR	I	Receiver Serial Clock	CMOS Input Pad Buffer
7	38	D4	BIT_EN	I	Bit Enable	CMOS Input Pad Buffer with pull up
8	40	D1	$\overline{\text{SRC_INT}}$	I	Interrupt Line For S.R. Control	CMOS Input Pad Buffer
9	42	E2	SDO	O	Transmitter Serial Data (PCM Data)	CMOS 4mA Output Drive
10	44	F2	SCKT	O	Transmitter Serial Clock	CMOS 4mA Output Drive
11	2	H1	LRCKT	O	Transmitter Left/Right Clock	CMOS 4mA Output Drive
12	3	H3	OCLK	I/O	Oversampling Clock for DAC	CMOS Input Pad Buffer CMOS 4mA Output Drive
13	5	F3	VSS_2		Ground	
14	6	E4	VDD_2		Supply Voltage	
15	7	G4	VSS_3		Ground	
16	8	G5	VDD_3		Supply Voltage	
17	10	F5	PVDD		PLL Power	
18	11	G6	PVSS		PLL Ground	
19	12	G7	FILT	O	PLL Filter Ext. Capacitor Conn.	
20	13	G8	XTO	O	Crystal Output	CMOS 4mA Output Drive
21	15	F7	XTI	I	Crystal Input (Clock Input)	Specific Level Input Pad (see paragraph 2.1)
22	19	E7	VSS_4		Ground	
23	21	C8	VDD_4		Supply Voltage	
24	22	D7	$\overline{\text{TESTEN}}$	I	Test Enable	CMOS Input Pad Buffer with pull up
25	24	A7	SCANEN	I	Scan Enable	CMOS Input Pad Buffer
26	25	B6	$\overline{\text{RESET}}$	I	System Reset	CMOS Input Pad Buffer with pull up
27	26	A5	VSS_5		Ground	
28	27	C5	OUT_CLK/ DATA_REQ	O	Buffered Output Clock/ Data Request Signal	CMOS 4mA Output Drive

Note: SRC_INT signal is used by STA013 internal software in Broadcast Mode only; in Multimedia mode SRC_INT must be connected to V_{DD}. In functional mode TESTEN must be connected to VDD, SCANEN to ground.

●Pin Function (1/2)

Pin Name	Pin No.	Function	Remarks
L1 L2 L3 L4 L5 R1 R2 R3 R4 R5	18 17 16 15 14 20 21 22 23 24	• Input signal terminal	
LSELO RSELO	13 25	• Input selector output terminal	
LBASS1 LBASS2 RBASS1 RBASS2 LSB RSB	10 9 28 29 8 30	• For BASS and SUPER BASS band use or MID and BASS use Connection terminal of capacitor and resistor which compose a filter.	
LOUT ROUT	7 31	• ATT+ Equalizer output terminal / capacitor connection terminal which compose a SUPER BASS filter	
LVRIN RVRIN	12 26	• Volume input terminal	

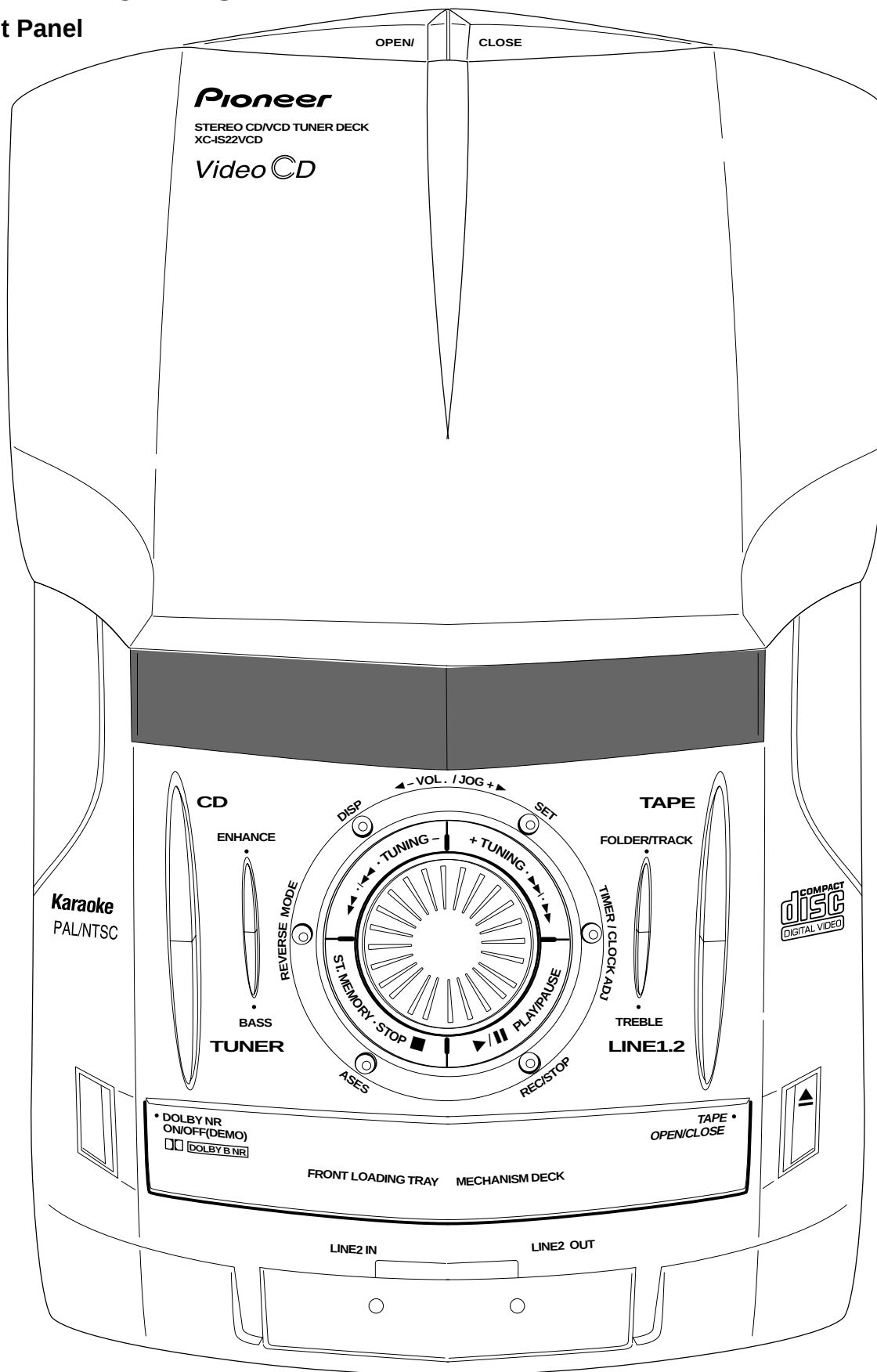
●Pin Function (2/2)

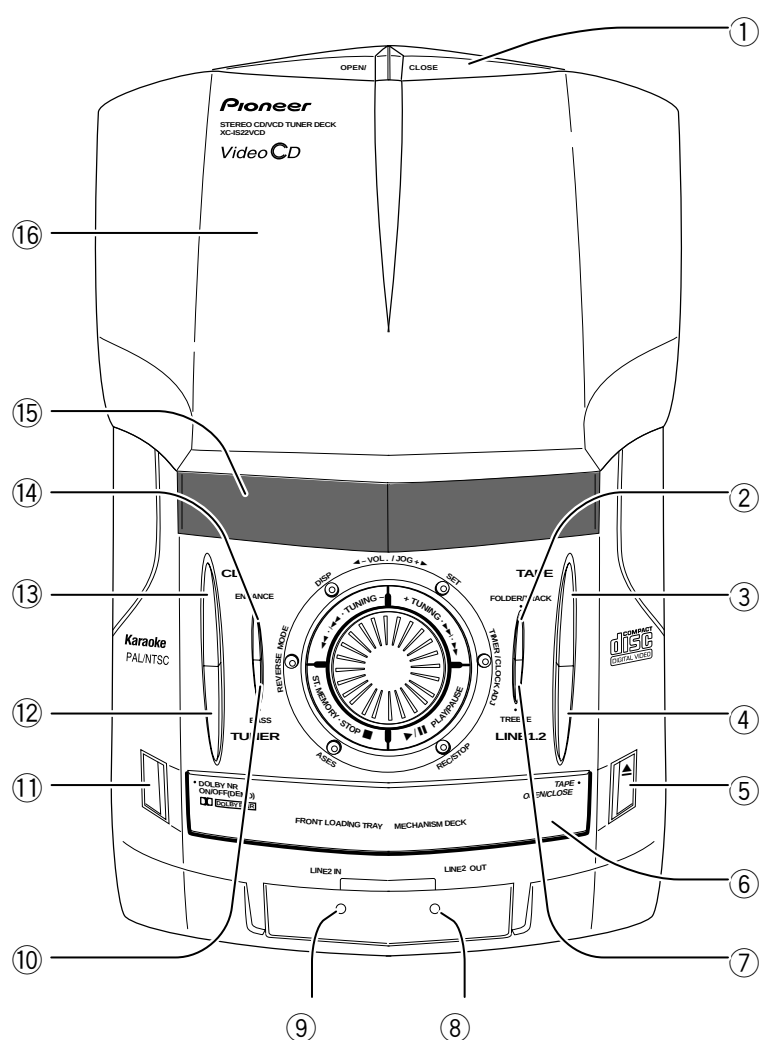
Pin Name	Pin No.	Function	Remarks
LTRE RTRE	11 27	Capacitor connection terminal which compose a filter for TREBLE band.	
Vref	19	0.5 x VDD voltage generation section for analog ground	
VSS	3	Ground terminal	
VDD	35	Power supply terminal	
CE	2	- Chip enable terminal - Data are written in the internal latch by a timing that it becomes "L" from "H", and each analog switch works. - Data transfer enables by "H" level.	
DI CL	1 36	Data transfer enables with serial data and clock level for control.	
LINP RINP	6 32	- General purpose op-amp specification Non-inverting input terminal of general purpose op-amp. - ATT control specification Non-inverting input terminal of op-amp for ATT. 3 bands specification Non-inverting input terminal of op-amp for ATT.	
LINM RINM	5 33	- General purpose op-amp specification Non-inverting input terminal of general purpose op-amp. Connect to L (R) OPOUT terminal when this terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33) - ATT control specification Inverting input terminal of op-amp for ATT. Connect to L (R) OPOUT terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33) 3 bands specification Inverting input terminal of op-amp for ATT. Connect to L (R) OPOUT terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33)	
LOPOUT ROPOUT	4 34	- General purpose op-amp specification inverting output terminal of general purpose op-amp. Connect to L (R) INM terminal when this terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33) - ATT control specification Inverting output terminal of op-amp for ATT. Connect to L (R) INM terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33) 3 bands specification Inverting output terminal of op-amp for ATT. Connect to L (R) INM terminal is not used. (connect between pin 4 and pin 5) , (connect between pin 34 and pin 33)	

8. PANEL FACILITIES AND SPECIFICATIONS

8.1 PANEL FACILITIES

■ Front Panel

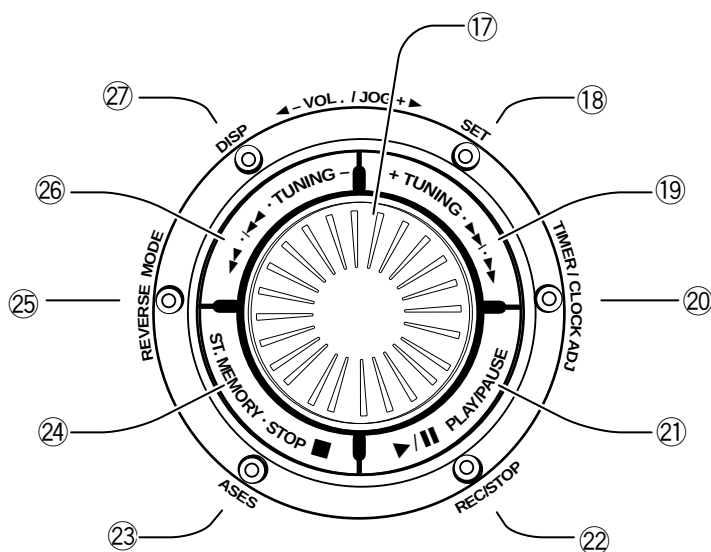




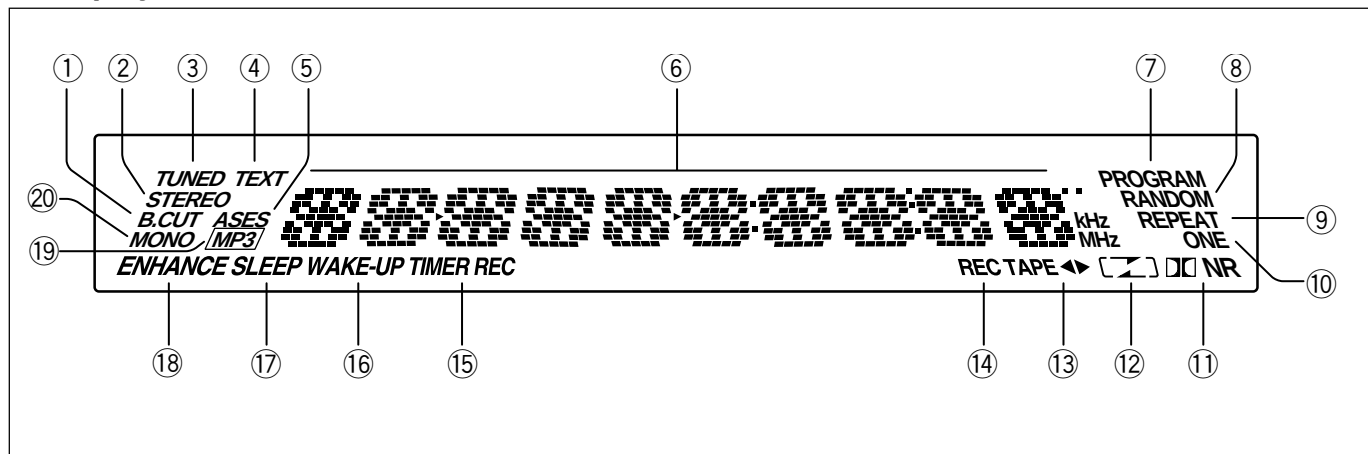
- ① OPEN/CLOSE touch sensor
- ② FOLDER/TRACK
- ③ TAPE
- ④ LINE 1.2
- ⑤ TAPE OPEN/CLOSE ▲
- ⑥ Cassette tray
- ⑦ TREBLE
- ⑧ LINE 2 OUT jack
- ⑨ LINE 2 IN jack
- ⑩ BASS
- ⑪ DOLBY NR ON/OFF (DEMO)
- ⑫ TUNER
- ⑬ CD
- ⑭ ENHANCE
- ⑮ Display
- ⑯ CD cover
- ⑰ ◀ - VOL. / JOG + ▶
- ⑱ SET
- ⑲ + TUNING • ▶▶▶I•▶▶▶
- ⑳ TIMER/CLOCK ADJ
- ㉑ ▶/|| PLAY/PAUSE
- ㉒ REC/STOP
- ㉓ ASSES
- ㉔ ST.MEMORY • STOP ■
- ㉕ REVERSE MODE
- ㉖ ◀◀◀I◀◀◀TUNING -
- ㉗ DISP

* *Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.*

* "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.



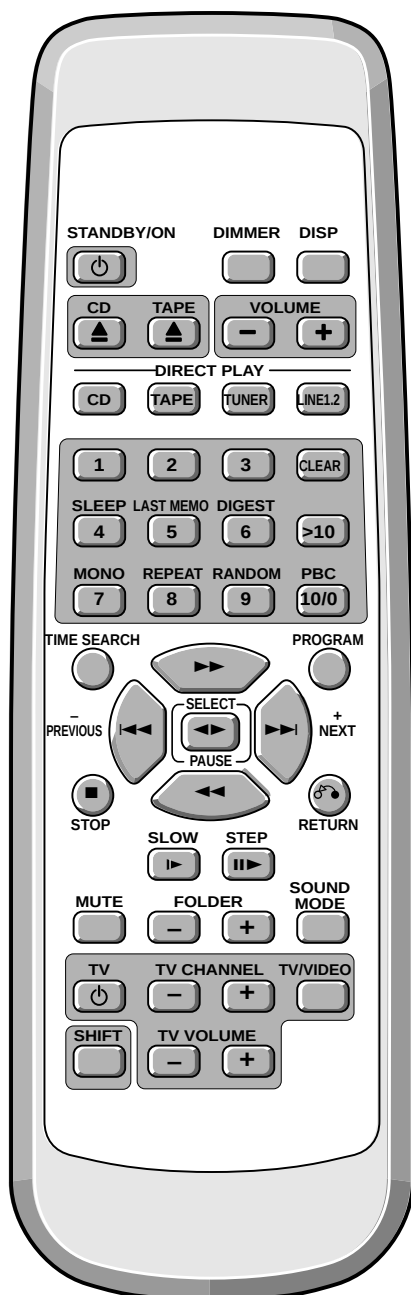
■ Display



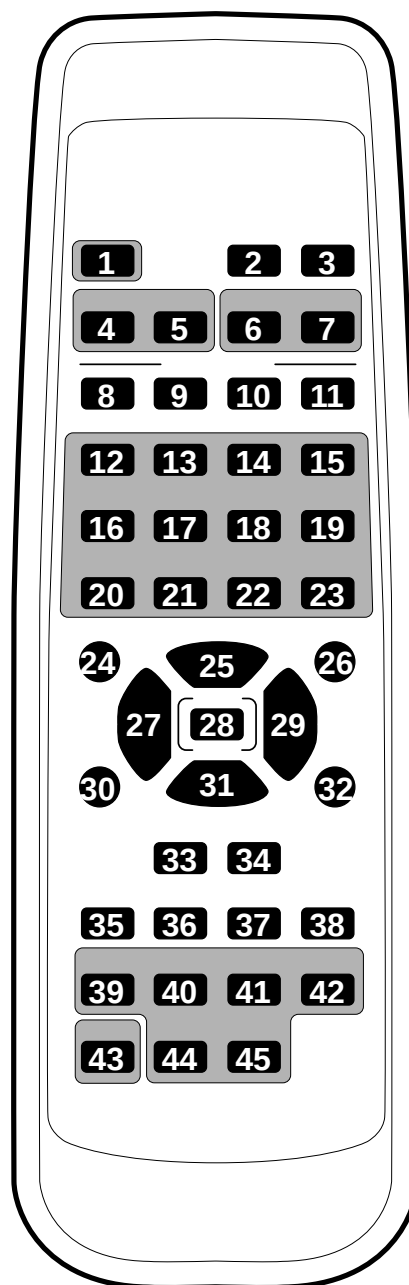
Display window

- ① B.CUT Lights when beat cut 2 is active
- ② STEREO Lights when listening to FM stereo radio
- ③ TUNED Lights when tuned to a radio broadcast
- ④ TEXT Lights when a CD Text disc is loaded
- ⑤ ASES Lights during ASES (Auto Synchro Editing System) recording
- ⑥ Character display
- ⑦ PROGRAM Lights in program play
- ⑧ RANDOM Lights in random play
- ⑨ REPEAT Lights in repeat play
- ⑩ ONE Lights in repeat one-track play
- ⑪ 2 NR Lights when Dolby B Noise Reduction is on
- ⑫ ⇄ Indicates the reverse mode (⇄, ⇄ or ⇄)
- ⑬ TAPE ⇄ Indicates the direction of tape travel (⇄ (reverse) or ⇄ (forward))
- ⑭ REC Lights during tape recording
- ⑮ TIMER REC Lights when the record timer is active
- ⑯ WAKE UP Lights when the wake up timer is active
- ⑰ SLEEP Lights when the sleep timer is active
- ⑱ ENHANCE Lights when one of the Enhance modes is on
- ⑲ MP3 Lights when an MP3 disc is loaded
- ⑳ MONO Lights when FM mono mode is on

■ Remote Control Unit



- ① STANDBY/ON
- ② DIMMER
- ③ DISP
- ④ CD ▲
- ⑤ TAPE ▲
- ⑥ VOLUME -
- ⑦ VOLUME +
- ⑧ CD
- ⑨ TAPE
- ⑩ TUNER
- ⑪ LINE 1.2
- ⑫- ⑳ Number buttons, CLEAR, >10, 10/0
- ⑯ SLEEP
- ⑰ LAST MEMO
- ⑱ DIGEST



- ⑳ MONO
- ㉑ REPEAT
- ㉒ RANDOM
- ㉓ PBC
- ㉔ TIME SEARCH
- ㉕ ►►
- ㉖ PROGRAM
- ㉗ ◀◀ / PREVIOUS -
- ㉘ ◀ / SELECT / PAUSE
- ㉙ ► / NEXT +
- ㉚ STOP ■
- ㉛ ◀◀
- ㉜ RETURN ►►
- ㉝ SLOW
- ㉞ STEP ►►
- ㉟ MUTE
- ㊱ FOLDER -
- ㊲ FOLDER +
- ㊳ SOUND MODE
- ㊴ TV
- ㊵ TV CHANNEL -
- ㊶ TV CHANNEL +
- ㊷ TV/VIDEO
- ㊸ SHIFT
- ㊹ TV VOLUME -
- ㊺ TV VOLUME +

8.2 SPECIFICATIONS

FM Tuner Section
Frequency Range 87.5 - 108MHz
Antenna 75 Ω, unbalanced

AM Tuner Section
Frequency Range 531 kHz - 1,602 kHz (9 kHz step);
530 kHz - 1,700 kHz (10 kHz step)
Antenna Loop antenna

Compact Disc Player Section
Type Video CD system and Compact disc
digital audio system
Frequency Response 20 Hz -20 kHz
Wow and Flutter Limit of measurement
(0.001%) or less (EIAJ)

Cassette Deck Section
System 4-track, 2-channel stereo
Heads Recording/playback head x 1
Erasing head x 1
Motor DC Servo motor x 1
Tape type TYPE I (Normal)

Dimensions:
CD/VCD Tuner Deck ... 204 (W) x 300 (H) x 237 (D) mm

Weight:
CD/VCD Tuner Deck 2.7 kg

Accessories (CD/VCD Tuner Deck)	
Operating Instructions	1
Remote control unit	1
FM antenna	1
AM loop antenna	1
Dry cell batteries (AA/R6P)	2
Warranty Card	1
Power Plug Adapter (ZBDXJ type only)	1

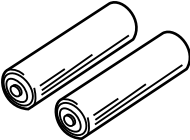
Note
Specifications and design subject to possible modification without
notice, due to improvements.

■ Accessories

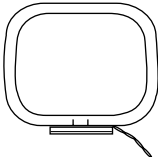
Remote control unit x1
(XXD3035)



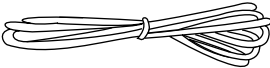
dry cell batteries (AA/R6P) x2
(VEM-013)



AM Loop antenna x1
(ATB7009)



FM antenna x1
(ADH7004)



Power Plug Adapter x1
ZBDXJ type only
(XKM3002)

