

CX-LEM330

SERVICE MANUAL

Ver 1.0 2004.06

*AEP Model
UK Model
E Model
Australian Model*



CX-LEM330 is the Amplifier, CD player, Tape Deck and Tuner section in XR-EM330.

CD Section	Model Name Using Similar Mechanism	HCD-NE5
	Base Unit Name	BU-K7BD81B
	Optical Pick-up Name	KSM-213EDP/C2NP
Tape deck Section	Model Name Using Similar Mechanism	HCD-NE5
	Tape Transport Mechanism Type	CMAL5Z220A

SPECIFICATIONS

Main unit

Amplifier section

European model:

DIN power output (rated): 11 + 11 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
15 + 15 W
(6 ohms at 1 kHz, 10% THD)

Music power output (reference):
25 + 25 W

Other models:

The following measured at AC 230 V or AC 120 V, 50/60 Hz

DIN power output (rated): 11 + 11 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
15 + 15 W
(6 ohms at 1 kHz, 10% THD)

Inputs

MD (phono jacks): Sensitivity 450 mV,
impedance 47 kilohms

Outputs

PHONES: Accepts headphones with
an impedance of 8 ohms or
more

SPEAKER:

Accepts impedance of 6 to
16 ohms.

Other models:

530 – 1,710 kHz
(with the tuning interval
set at 10 kHz)
531 – 1,602 kHz
(with the tuning interval
set at 9 kHz)

CD player section

Laser

Semiconductor laser
($\lambda=780$ nm)
Emission duration:
continuous

Frequency response

20 Hz – 20 kHz

Antenna

Intermediate frequency

AM loop antenna, external
antenna terminal
450 kHz

Tape deck section

Recording system

4-track 2-channel, stereo
50 – 13,000 Hz (± 3 dB),
using Sony TYPE I
cassettes

Frequency response

General

Power requirements

European model: 230 V AC, 50/60 Hz
Korean model: 220 V AC, 60 Hz
Australian model: 230 – 240 V AC, 50/60 Hz
Taiwanese model: 120 V AC, 50/60 Hz
Mexican model: 120 V AC, 60 Hz
Other models: 110 – 120 V or 220 – 240 V
AC, 50/60 Hz

Adjustable with voltage
selector

Power consumption

50 W
0.3 W (in Power Saving
Mode)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

87.5 – 108.0 MHz

Antenna

FM lead antenna

Antenna terminals

75 ohms unbalanced

Intermediate frequency

10.7 MHz

AM tuner section

European model:

531 – 1,602 kHz
(with the tuning interval
set at 9 kHz)

— Continued on next page —

COMPACT DISC DECK RECEIVER



Dimensions (w/h/d)	Approx. 164 × 230.5 × 266 mm incl. projecting parts and controls
Mass	Approx. 3.5 kg

Design and specifications are subject to change without notice.

Notes on chip component replacement

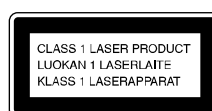
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 °C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.



This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.

UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.

(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)



: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 °C higher than ordinary solder.
Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
Soldering irons using a temperature regulator should be set to about 350 °C.
Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
Unleaded solder is more viscous (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

TABLE OF CONTENTS

1. SERVICING NOTES	4	7. DIAGRAMS	
2. GENERAL	6	7-1. Block Diagram – CD Servo Section –	16
3. DISASSEMBLY		– MAIN Section –	17
3-1. Rear Cabinet	8	7-2. Printed Wiring Board – CD Board –	18
3-2. Top Panel Assy	9	7-3. Schematic Diagram – CD Board –	19
3-3. Front Panel Assy	9	7-4. Printed Wiring Board – MAIN Board –	20
3-4. Base Unit (BU-K7BD81B)	10	7-5. Schematic Diagram – MAIN Board –	21
3-5. Mechanical Deck	10	7-6. Printed Wiring Board – AMP Section –	22
3-6. MAIN Board	11	7-7. Schematic Diagram – AMP Section –	23
3-7. AMP Board	11	7-8. Printed Wiring Board – CONTROL Board –	24
4. TEST MODE	12	7-9. Schematic Diagram – CONTROL Board –	25
5. MECHANICAL ADJUSTMENTS	13	7-10. Printed Wiring Board – POWER Board –	26
6. ELECTRICAL ADJUSTMENTS		7-11. Schematic Diagram – POWER Board –	27
Deck Section	13	8. EXPLODED VIEWS	
CD Section	14	8-1. Overall Section	34
		8-2. Front Panel Assy-1	35
		8-3. Front Panel Assy-2	36
		8-4. Top Panel Assy	37
		9. ELECTRICAL PARTS LIST	38

SECTION 1
SERVICING NOTES

NOTES ON HANDLING THE OPTICAL PICK-UP
BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

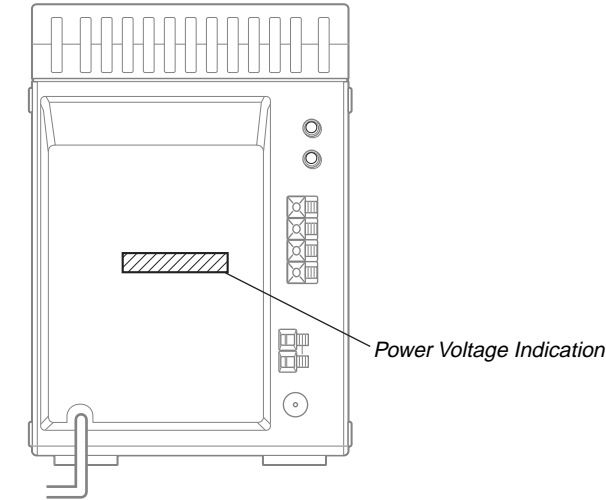
NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION
CHECK

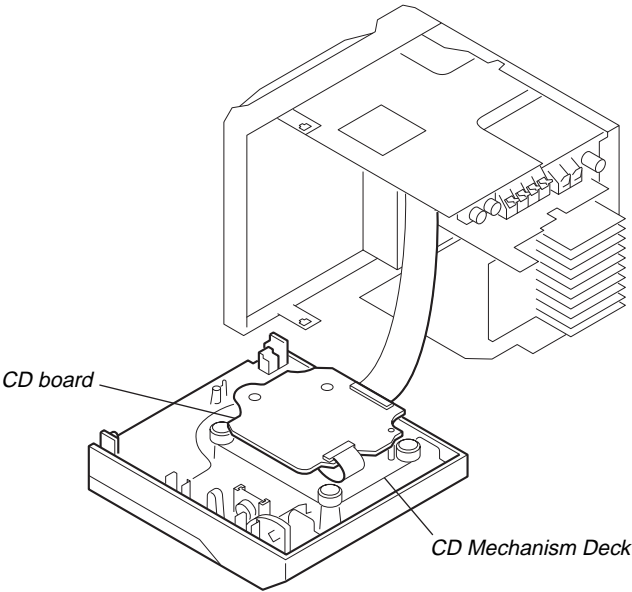
Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

MODEL IDENTIFICATION
– Back Panel –

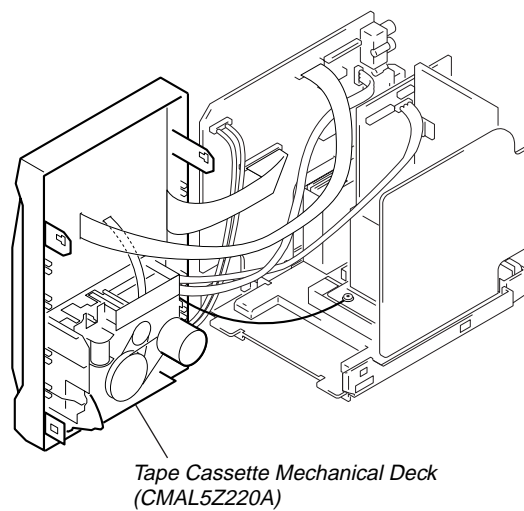


Model Name	Power Voltage Indication
Mexican model	120 V AC, 60 Hz 50W
AEP and UK models	230 V AC, 50/60 Hz 50W
Korean model	220 V AC, 50/60 Hz 50W
Australian model	230 – 240 V AC, 50/60 Hz 50W
Taiwan model	120 V AC, 50/60 Hz 50W
Other models (E, Singapore, Argentine, Chilean and peruvian models)	110 – 120 V or 220 – 240 V AC, 50/60Hz 50W

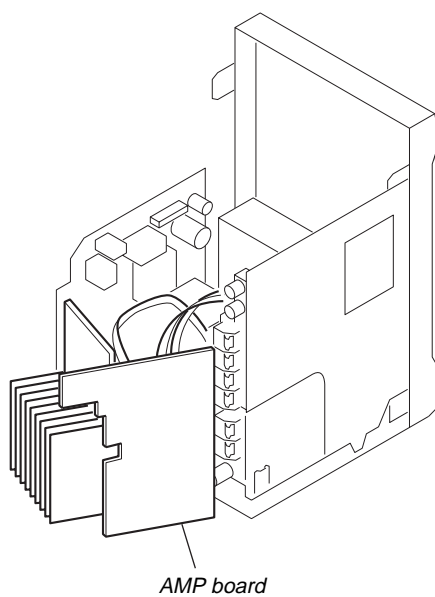
SERVICE POSITION OF THE CD MECHANISM DECK



SERVICE POSITION OF THE TAPE CASSETTE MECHANICAL DECK



SERVICE POSITION OF THE AMP BOARD

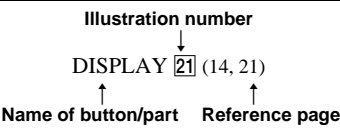


This section is extracted from instruction manual.

List of button locations and reference pages

How to use this page

Use this page to find the location of buttons and other parts of the system that are mentioned in the text.



Main unit

ALPHABETICAL ORDER

A – O

- ALBUM +/- 15 (10, 11, 16)
- BASS/TREBLE 5 (18)
- Cassette compartment 11
- CD SYNCHRO 13 (16)
- DISPLAY 20 (14, 21)
- Display window 2
- i-Bass 6 (18)
- OPEN (CD open/close) 4 (10)

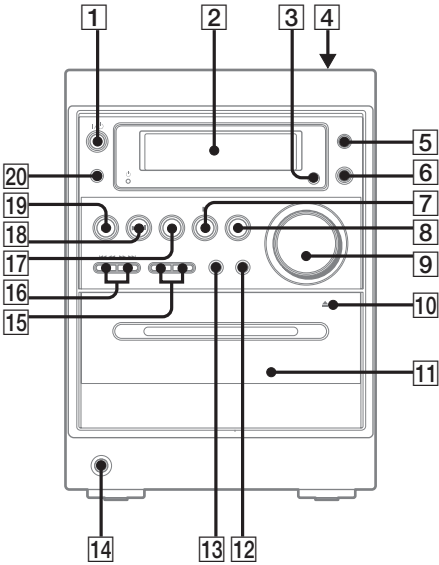
P – Z

- PHONES jack 14
- PLAY MODE 8 (9, 11, 16)
- Remote sensor 3
- TUNER/BAND 17 (12, 13)
- TUNING +/- 16 (12, 13, 18)
- TUNING MODE 8 (12, 13)
- VOLUME 9 (19, 23, 25)

BUTTON DESCRIPTIONS

- I/⏻ (power) 1 (7, 19, 20, 25)
- ⏮⏮⏮/⏭⏭⏭ (skip back/skip forward, rewind/fast forward) 16 (10, 11, 15)
- (stop) 7 (10, 16, 17, 25)
- REC PAUSE/START 12 (16, 17)
- CD/⏮⏮ (play/pause) 18 (10, 11, 23)
- TAPE/⏮ (play) 19 (15)
- ▲ PUSH (tape open/close) 10 (15)

- 1) XR-EM220/XR-EM330 only.
- 2) XR-EM550 only.
- 3) XR-EM550/XR-EM330 only.
- 4) XR-EM220 only.



Remote control

ALPHABETICAL ORDER

A - O

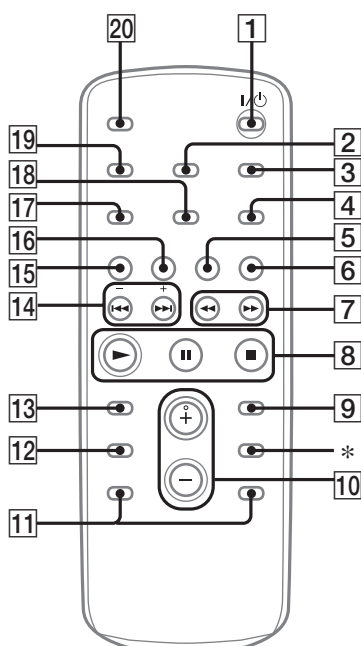
ALBUM +/- **[11]** (10, 11, 16)
 CD **[16]** (9, 11)
 CLEAR **[13]** (11)
 CLOCK/TIMER SELECT **[2]**
 (19, 20, 23)
 CLOCK/TIMER SET **[3]** (8, 19,
 20)
 DISPLAY **[19]** (14, 21)
 ENTER **[9]** (8, 11, 12, 19, 20)
 EQ **[12]** (18)
 FM MODE **[4]** (13, 24)
 FUNCTION **[6]** (22, 24)

P - Z

PLAY MODE **[18]** (9, 11, 24)
 REPEAT **[4]** (10)
 SLEEP **[20]** (18)
 TAPE **[15]** (15)
 TUNER/BAND **[5]** (12, 13)
 TUNER MEMORY **[17]** (12)
 TUNING MODE **[18]** (12, 13)
 VOLUME +/- **[10]** (19, 23)

BUTTON DESCRIPTIONS

I/⏻ (power) **[1]** (7, 19, 20, 25)
 ◀◀/▶▶ (rewind/fast forward)
[7] (10, 15)
 ◀◀/▶▶ (go back/go forward)
[14] (8, 10, 11, 19, 20)
 ■ (stop) **[8]** (10, 16, 17, 25)
 || (pause) **[8]** (10, 15)
 ▶ (play) **[8]** (9, 11, 20)
 +/- (tuning) **[14]** (12, 13)



Setting the clock

Use buttons on the remote for the operation.

- 1** Press I/⏻ to turn on the system.
- 2** Press CLOCK/TIMER SET.
- 3** Press ◀◀/▶▶ repeatedly to set the hour.
- 4** Press ENTER.
- 5** Press ◀◀/▶▶ repeatedly to set the minute.
- 6** Press ENTER.
The clock starts working.

To adjust the clock

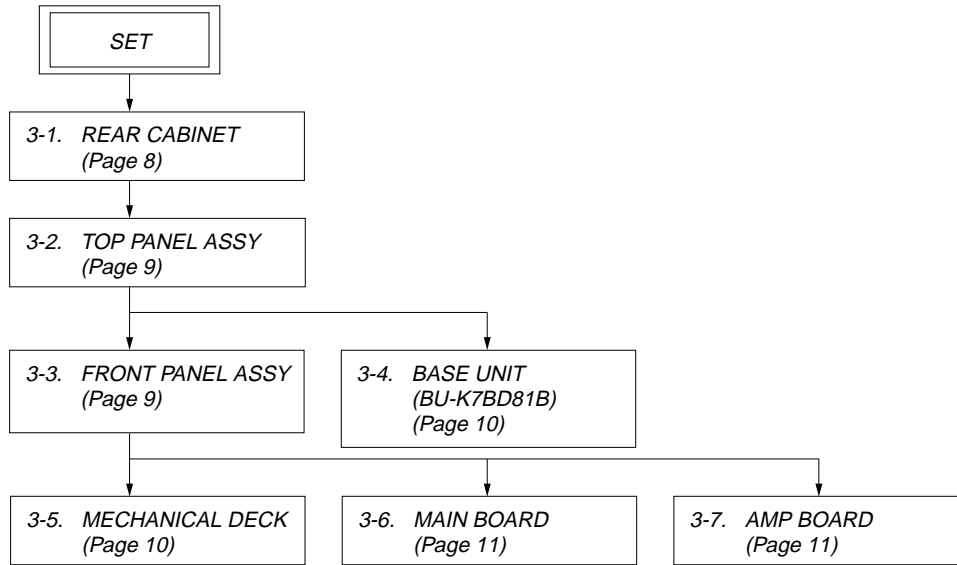
- 1** Press CLOCK/TIMER SET.
- 2** Press ◀◀/▶▶ until "CLOCK" appears, then press ENTER.
- 3** Do the same procedures as step 3 to 6 above.

Note

The clock is not displayed in Power Saving Mode (page 21).

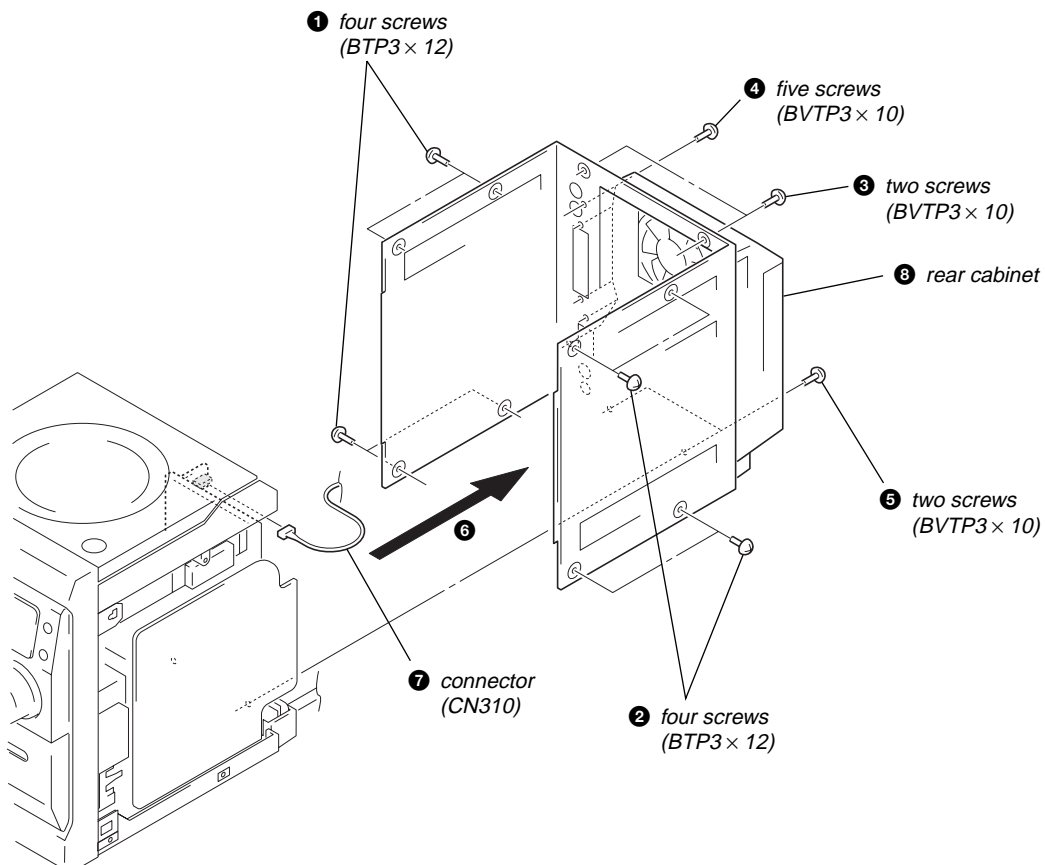
SECTION 3 DISASSEMBLY

- This set can be disassembled in the order shown below.

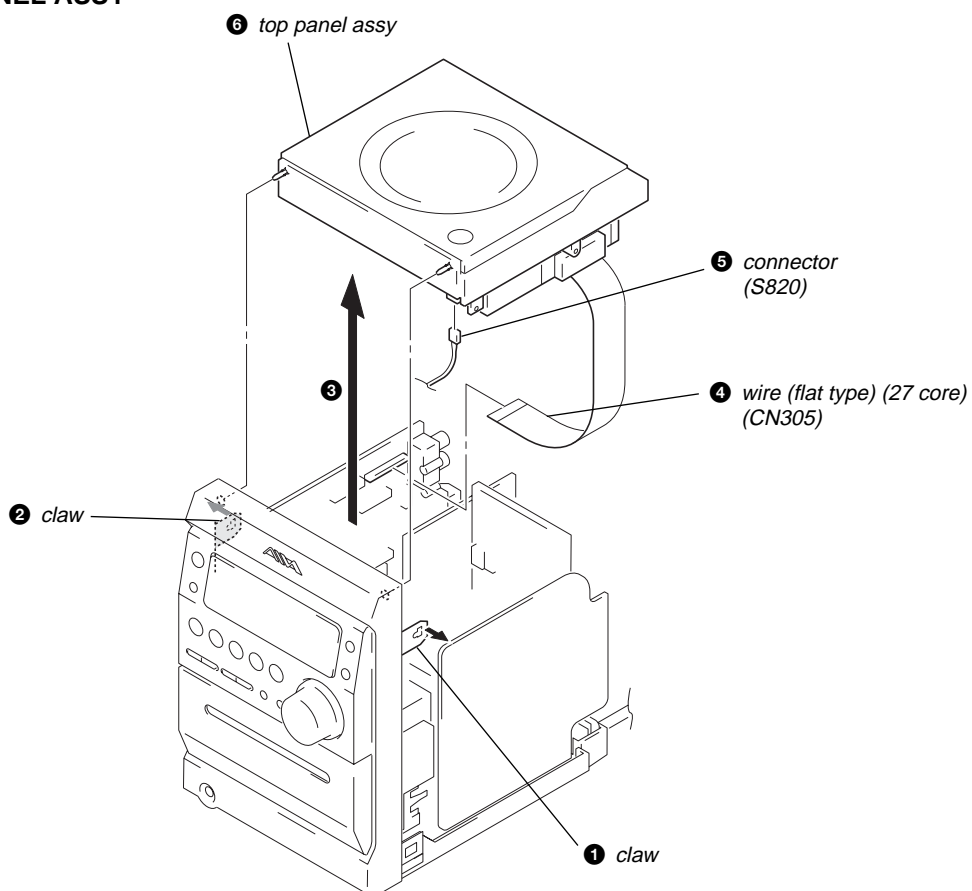


Note: Follow the disassembly procedure in the numerical order given.

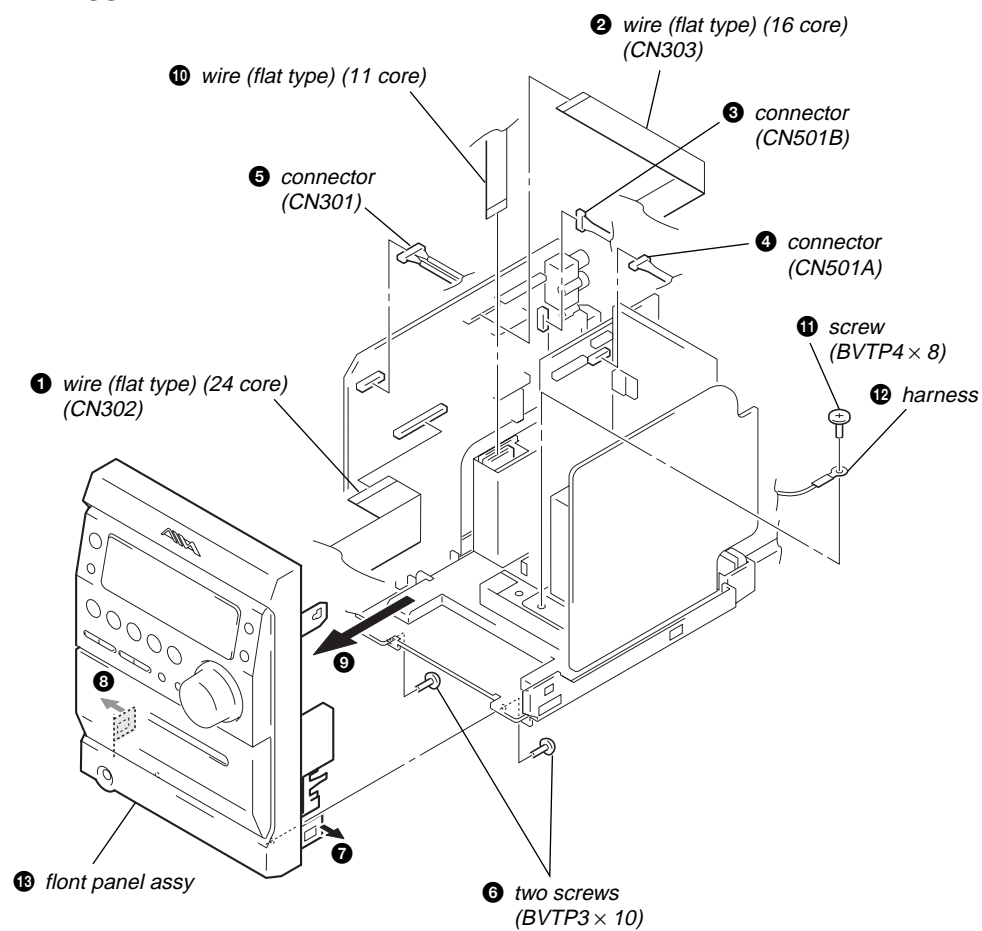
3-1. REAR CABINET



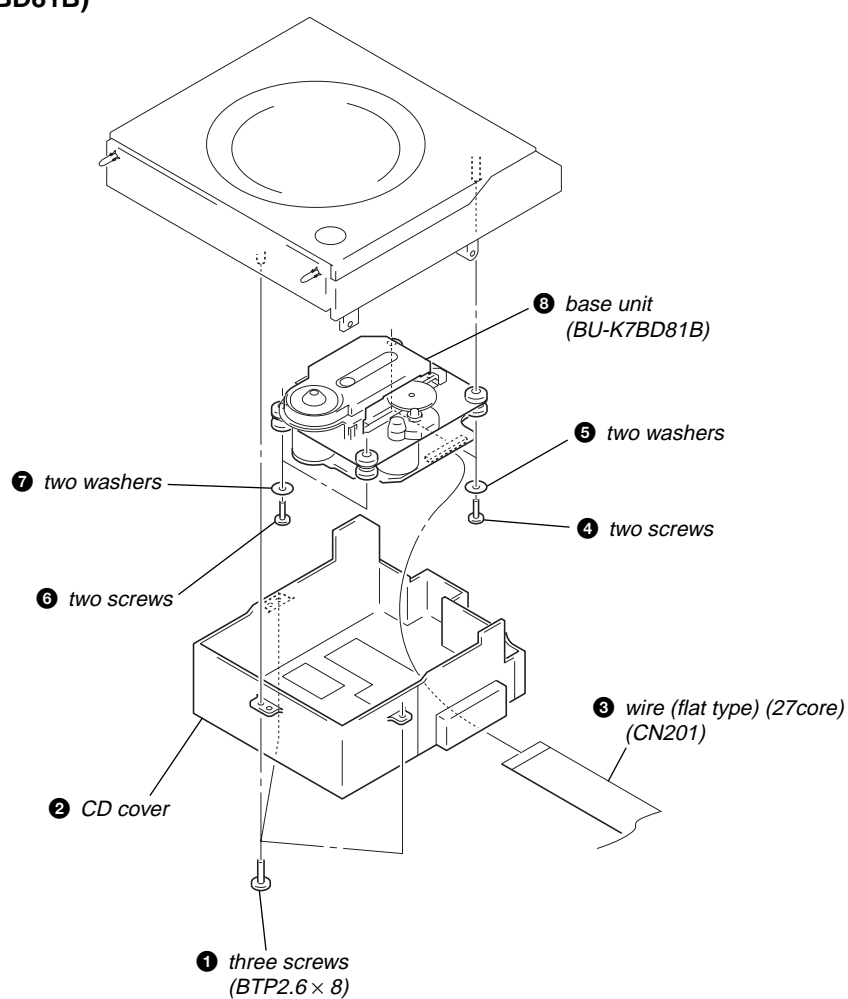
3-2. TOP PANEL ASSY



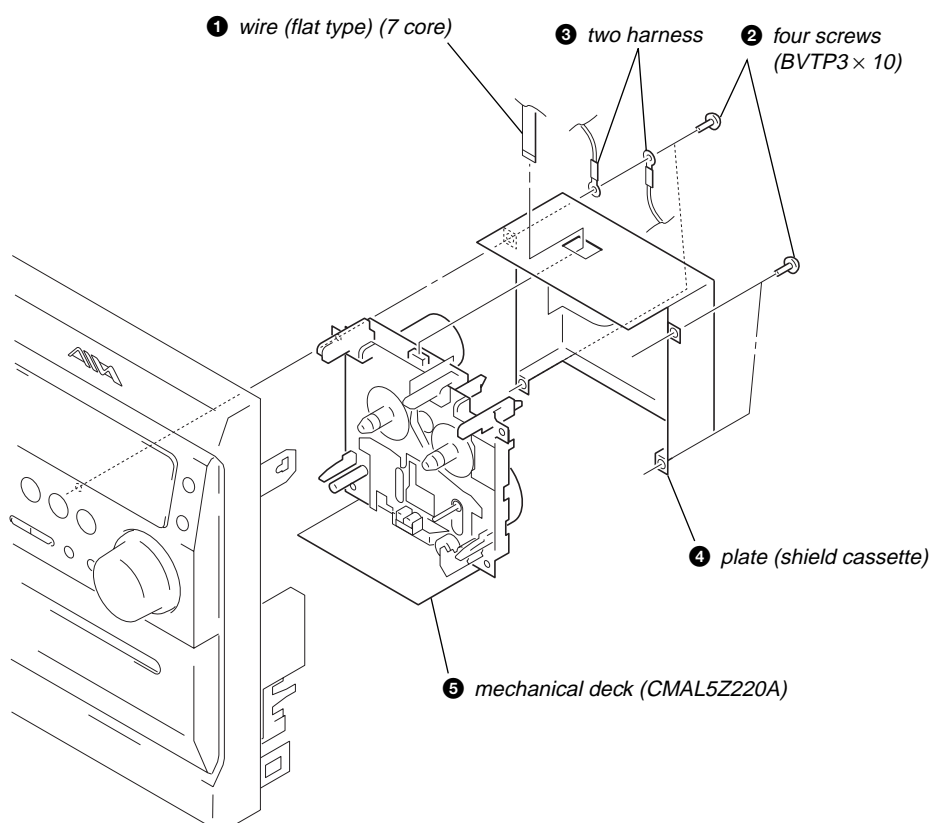
3-3. FRONT PANEL ASSY



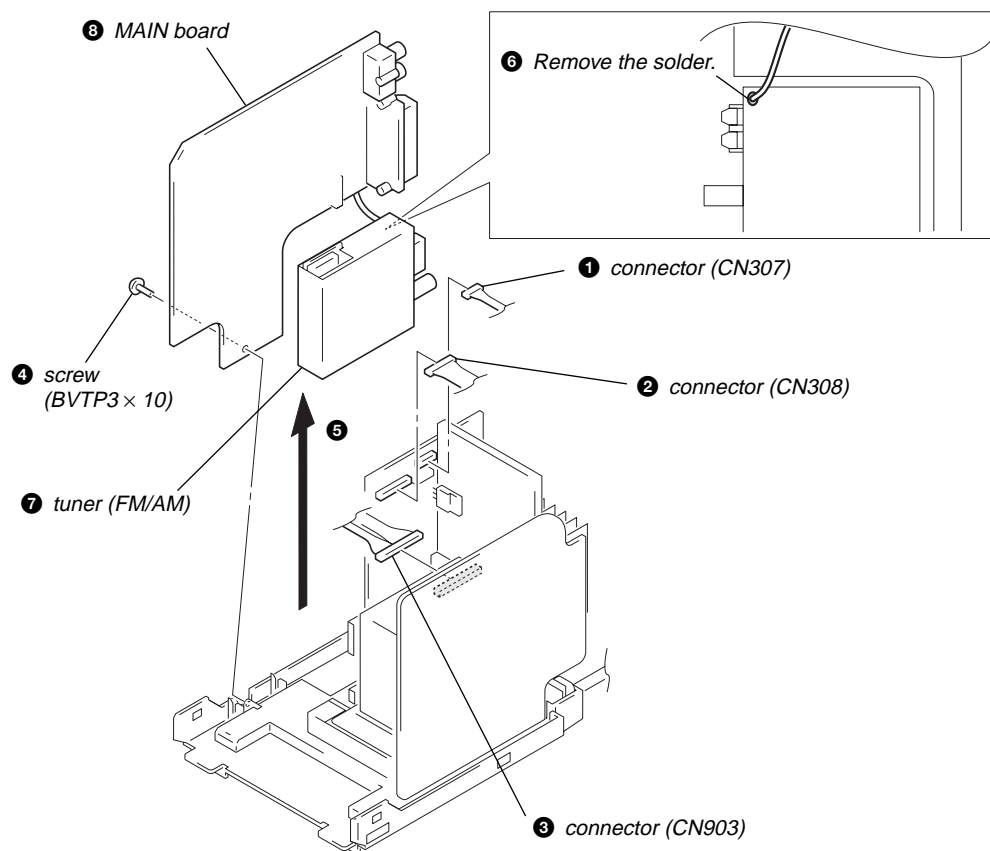
3-4. BASE UNIT (BU-K7BD81B)



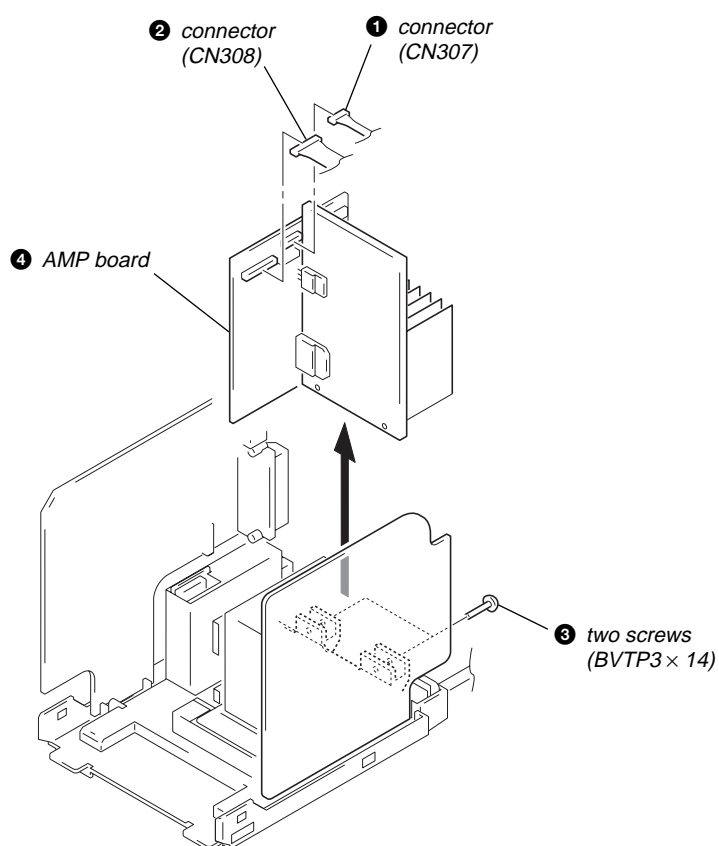
3-5. MECHANICAL DECK



3-6. MAIN BOARD



3-7. AMP BOARD






SECTION 4

TEST MODE

COLD RESET

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.



Procedure:

- Press the  button to turn the power on.
- While pressing the  button, press the  button and turn the **VOLUME** knob in the counter-clock wise.
- The message “RESET” is displayed and the set is reset.

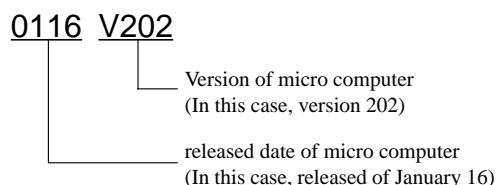
PANEL TEST

- All segments of liquid crystal display are tested, and the version and released date of the micro computer are displayed.

Procedure:

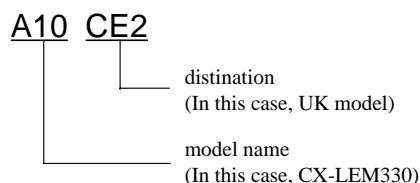
- Press the  button to turn the power on.
- While pressing the **DISPLAY** button, press the  button and turn the **VOLUME** knob in the counter-clock wise.
Then all segments of liquid crystal display are turned on.
- Press the **BASS** button, the version and released date of the micro computer are displayed.

example of display:



- Press the **BASS/TREBLE** button, the model name and destination are displayed.

example of display:






- To exit from this mode, perform the “COLD RESET”.

TUNER STEP CHANGE-OVER (EXCEPT FOR AEP, UK MODEL)

- Either the 9 kHz step or 10 kHz step can be selected for the AM channel step.

Procedure:

- Set the FUNCTION to AM, and press the  button to turn the power off.
- While depressing the **TUNING +**  button, press the  button.
- The message “9K STEP” or “10K STEP” is displayed on the liquid crystal display, and thus the channel step is changed over.

SECTION 5 MECHANICAL ADJUSTMENTS

TAPE MECHANISM DECK SECTION

Precaution

1. Clean the following parts with a denatured alcohol-moistened swab:
 record/playback heads pinch rollers
 erase head rubber belts
 capstan idlers
2. Demagnetize the record/playback head with a head demagnetizer.
3. Do not use a magnetized screwdriver for the adjustments.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Mode	Torque meter	Meter reading
FWD	CQ-102C	2.94 mN • m to 7.84 mN • m 31 to 71 g • cm (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	0.14 mN • m to 0.59 mN • m 2 to 6 g • cm (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	6.86 mN • m to 17.64 mN • m 71 to 143 g • cm (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	more than 0.98 N • m 100 g or more (3.53 oz or more)

SECTION 6 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB = 0.775 V

Precaution

1. Demagnetize the record/playback head with a head demagnetizer.
2. Do not use a magnetized screwdriver for the adjustments.
3. After the adjustments, apply suitable locking compound to the parts adjust.
4. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
5. The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
6. The adjustments should be performed for both L-CH and R-CH.
7. Switches and controls should be set as follows unless otherwise specified.

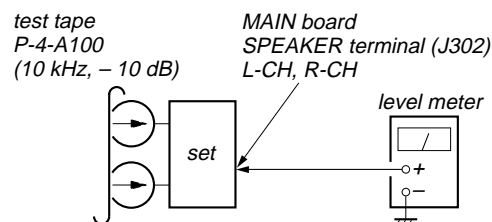
Test Tape

Tape	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Check

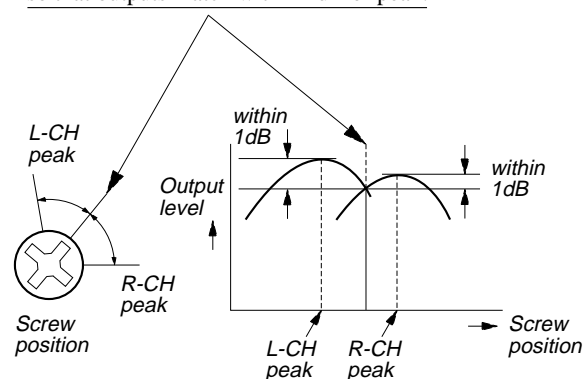
Record/Playback Head Azimuth Adjustment

Procedure:

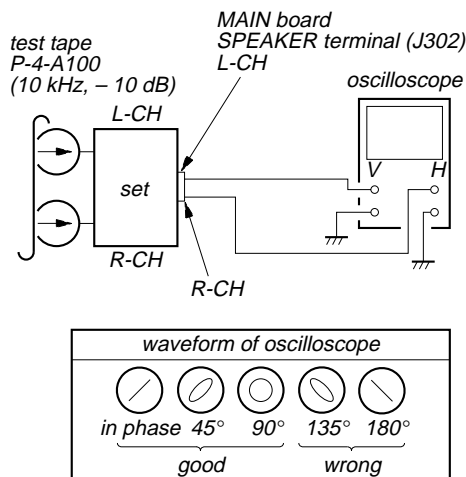
1. Mode: Playback



2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1dB of peak.



3. Mode: Playback

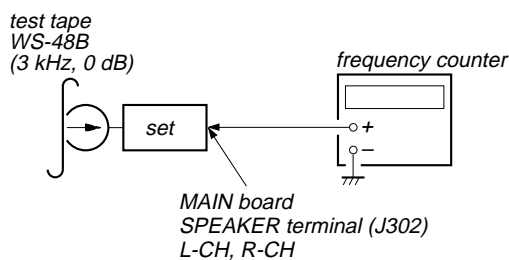


- After the adjustments, apply suitable locking compound to the parts adjusted.

Adjustment Location: Record/Playback/Erase Head

Tape Speed Check

Mode: Playback



- Insert the WS-48B into the deck.
- Press the button on the deck.
- Confirm that the frequency counter reads $3,000 \pm 90$ Hz.

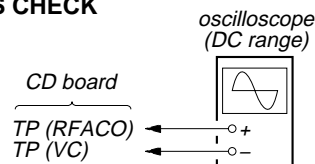
Sample value of Wow and Flutter: 0.3% or less W.RMS (JIS)
(WS-48B)

CD SECTION

Note:

- CD Block is basically constructed to operate without adjustment.
- Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
- Use an oscilloscope with more than 10 MΩ impedance.
- Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.
- Check the focus bias check when optical block is replaced.

FOCUS BIAS CHECK

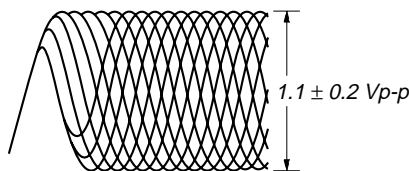


Procedure :

- Connect the oscilloscope to TP (RFACO) and TP (VC) on the CD board.
- Insert the disc (YEDS-18). (Part No. : 3-702-101-01)
- Press the button.
- Confirm that the oscilloscope waveform is as shown in the figure below. (eye pattern)
A good eye pattern means that the diamond shape (◇) in the center of the waveform can be clearly distinguished.

• RF signal reference waveform (eye pattern)

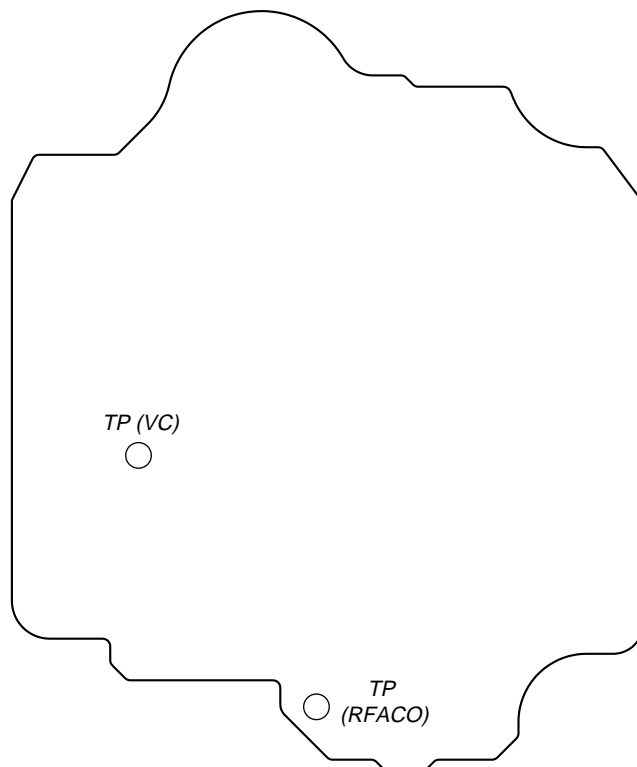
VOLT/DIV: 0.2 V (with the 10: 1 probe in use.)
TIME/DIV: 500 ns



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

Checking Location:



– CD BOARD (Conductor Side) –











SECTION 7
DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)





For Schematic Diagrams.

- Note:**
- All capacitors are in μF unless otherwise noted. (p: pF).
50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
 -  : fusible resistor.
 -  : panel designation.

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety.
Replace only with part number specified.

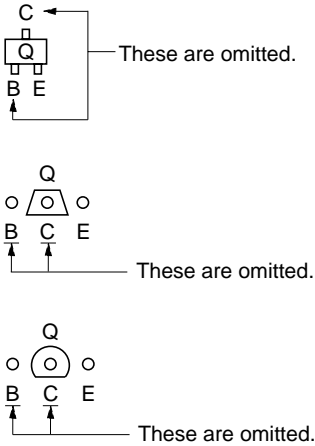
-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark: TUNER (FM)
() : CD PLAY
() : TAPE REC
- Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
 : TUNER (FM/AM)
 : CD PLAY
 : TAPE PLAY
 : TAPE REC
 : MD (AUX) IN
- Abbreviation
AUS : Australian model
AR : Argentine model
E51 : Chilean and peruvian models
KR : Korea model
MX : Mexican model
SP : Singapore model
TW : Taiwan model

For Printed Wiring Boards.

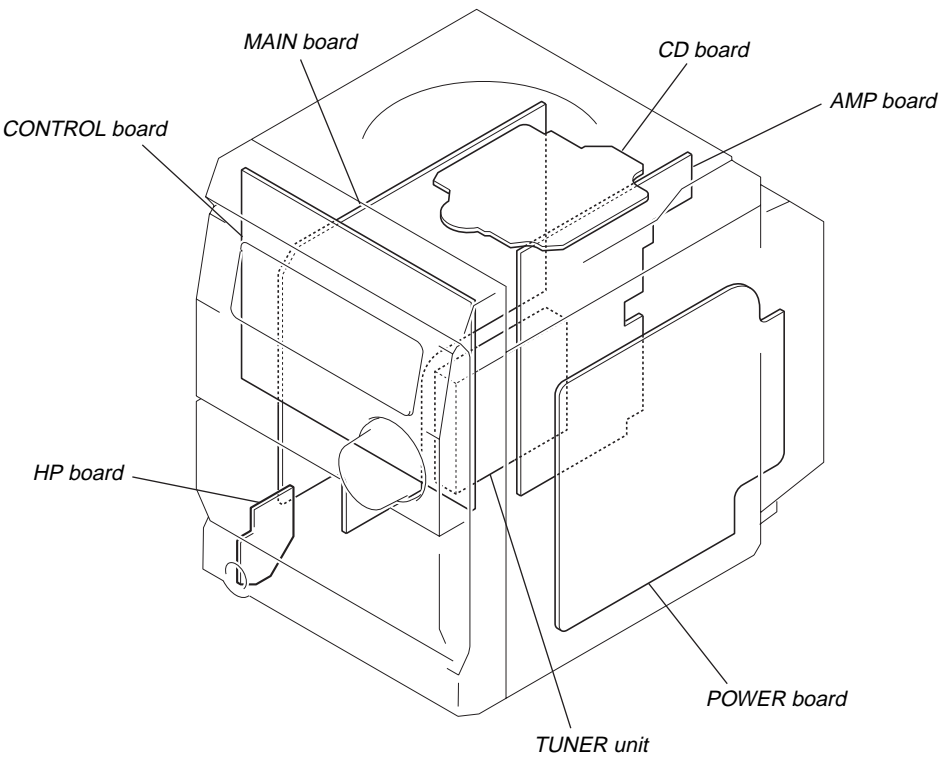
- Note:**
-  : parts extracted from the component side.
 -  : parts extracted from the conductor side.
 -  : indicates side identified with part number.
 - Δ : internal component.
 -  : Pattern from the side which enables seeing.
(The other layers' patterns are not indicated.)

Caution:
Pattern face side : Parts on the pattern face side seen from (Conductor side) the pattern face are indicated.
Parts face side : Parts on the parts face side seen from (Component side) the parts face are indicated.

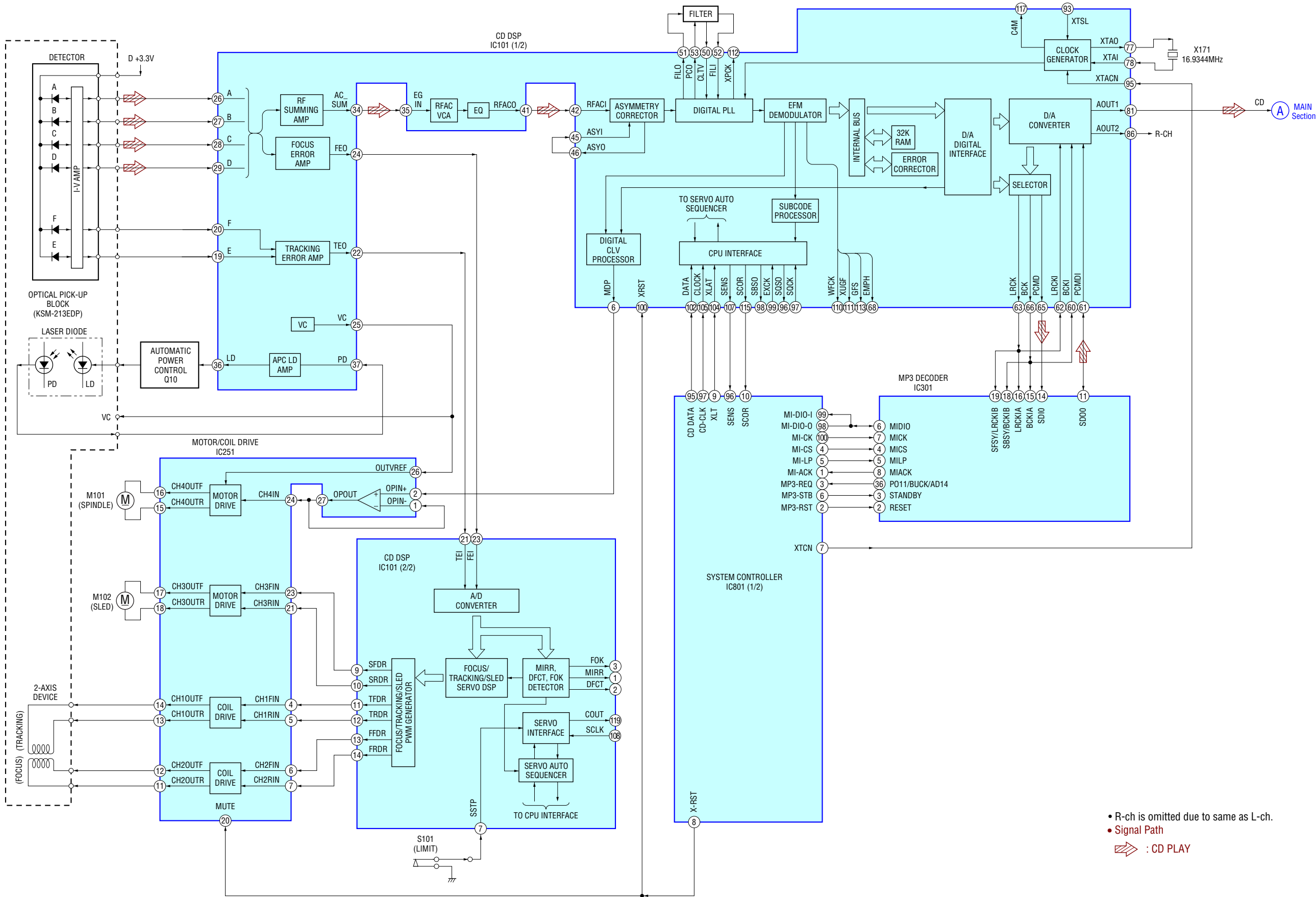
• Indication of transistor.



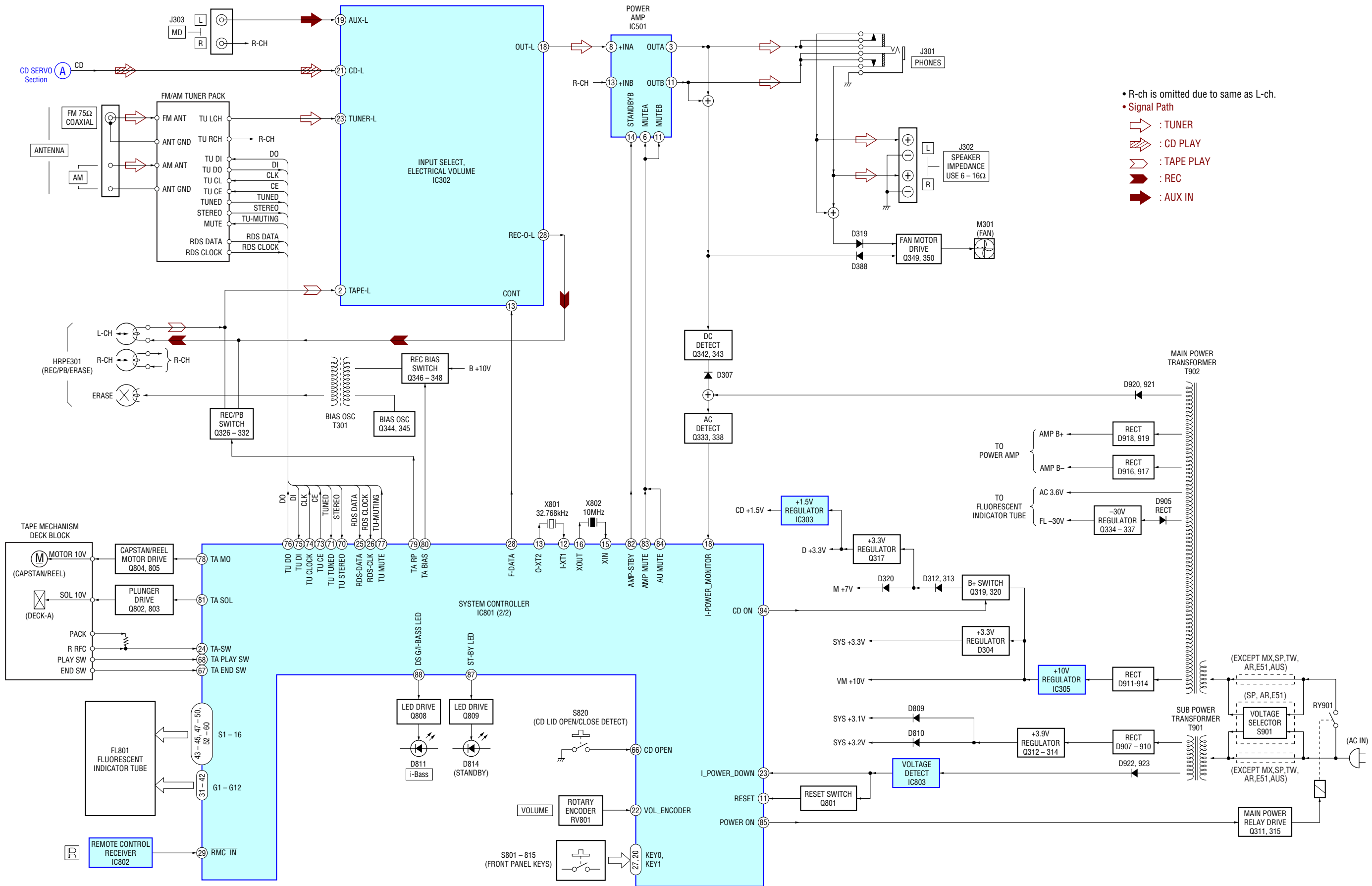
• Circuit Boards Location

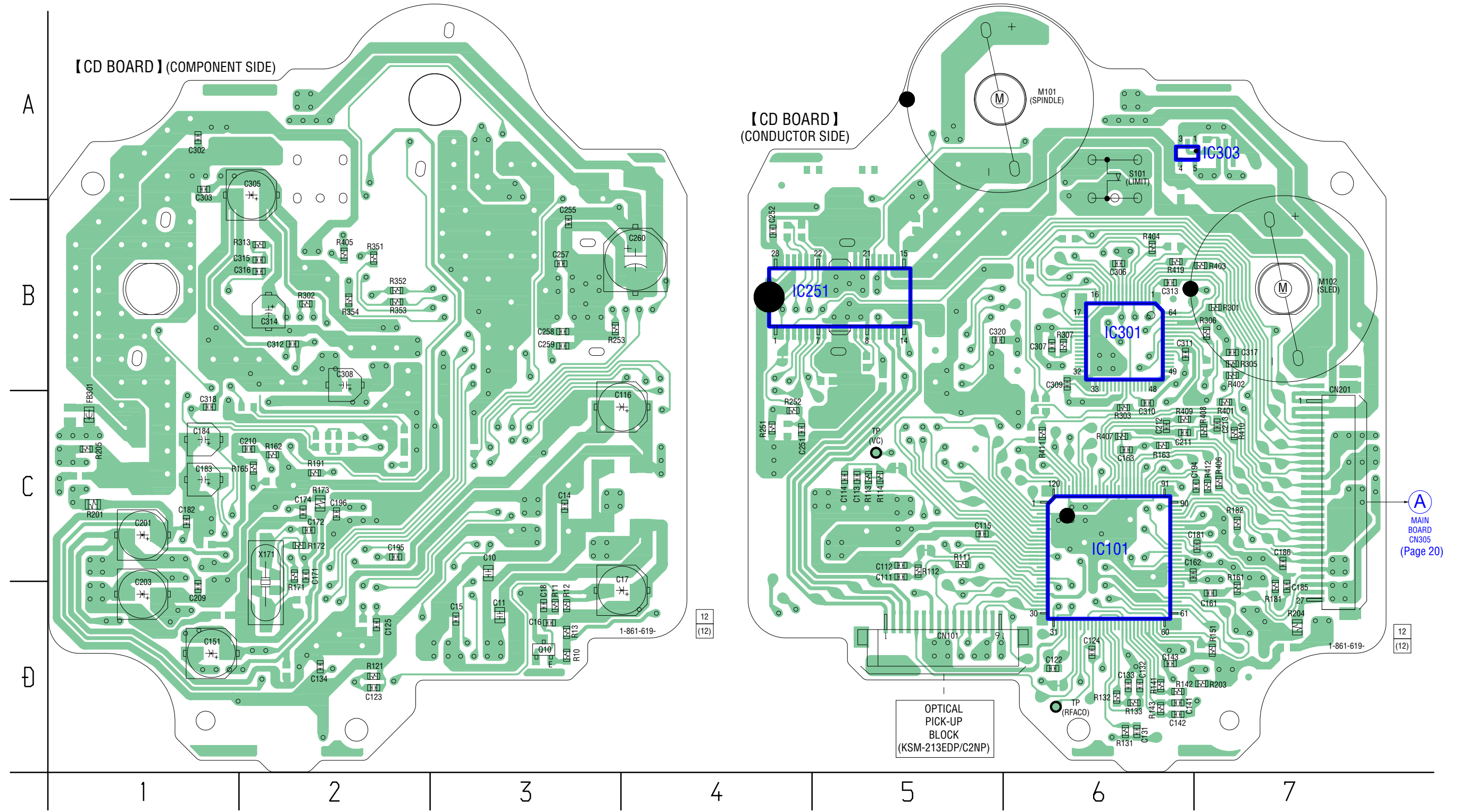


7-1. BLOCK DIAGRAM — CD SERVO SECTION —



— MAIN SECTION —

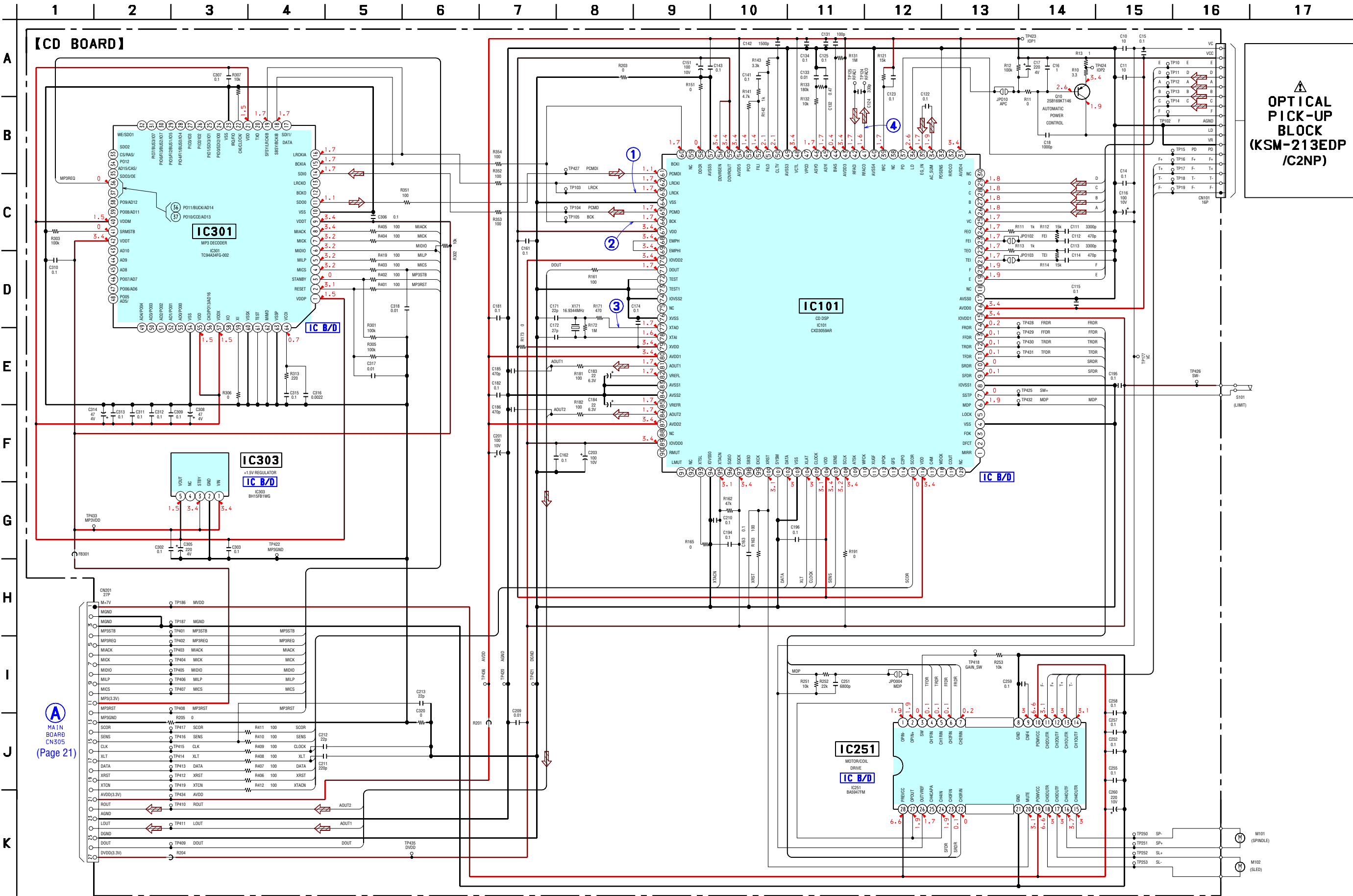


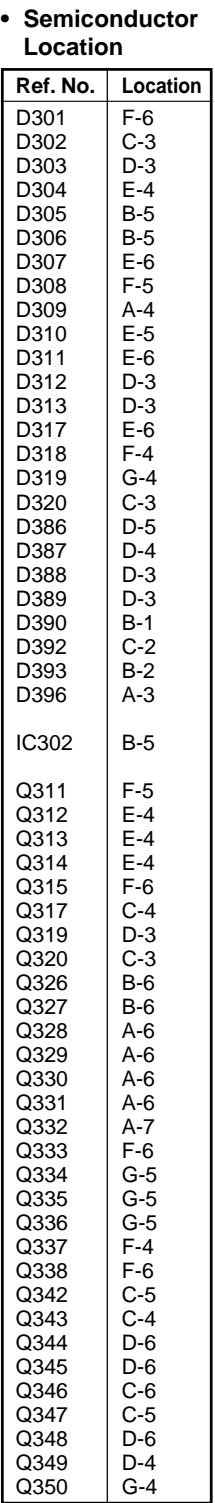


• Semiconductor Location

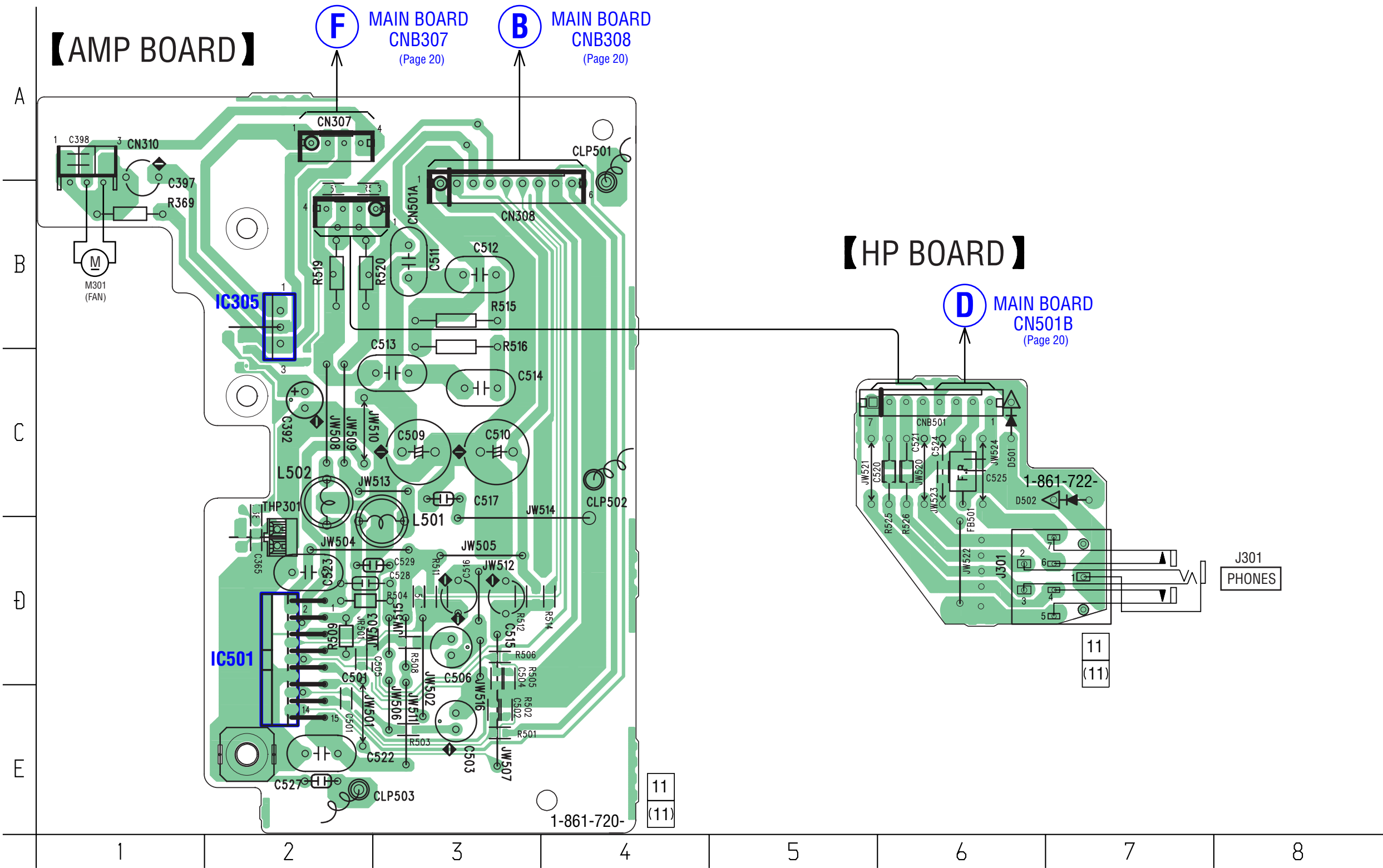
Ref. No.	Location
IC101	C-6
IC251	B-4
IC301	B-6
IC303	A-6
Q10	D-3

7-3. SCHEMATIC DIAGRAM — CD BOARD — • See page 28 for Waveforms. • See page 28 to 30 for IC Block diagrams.





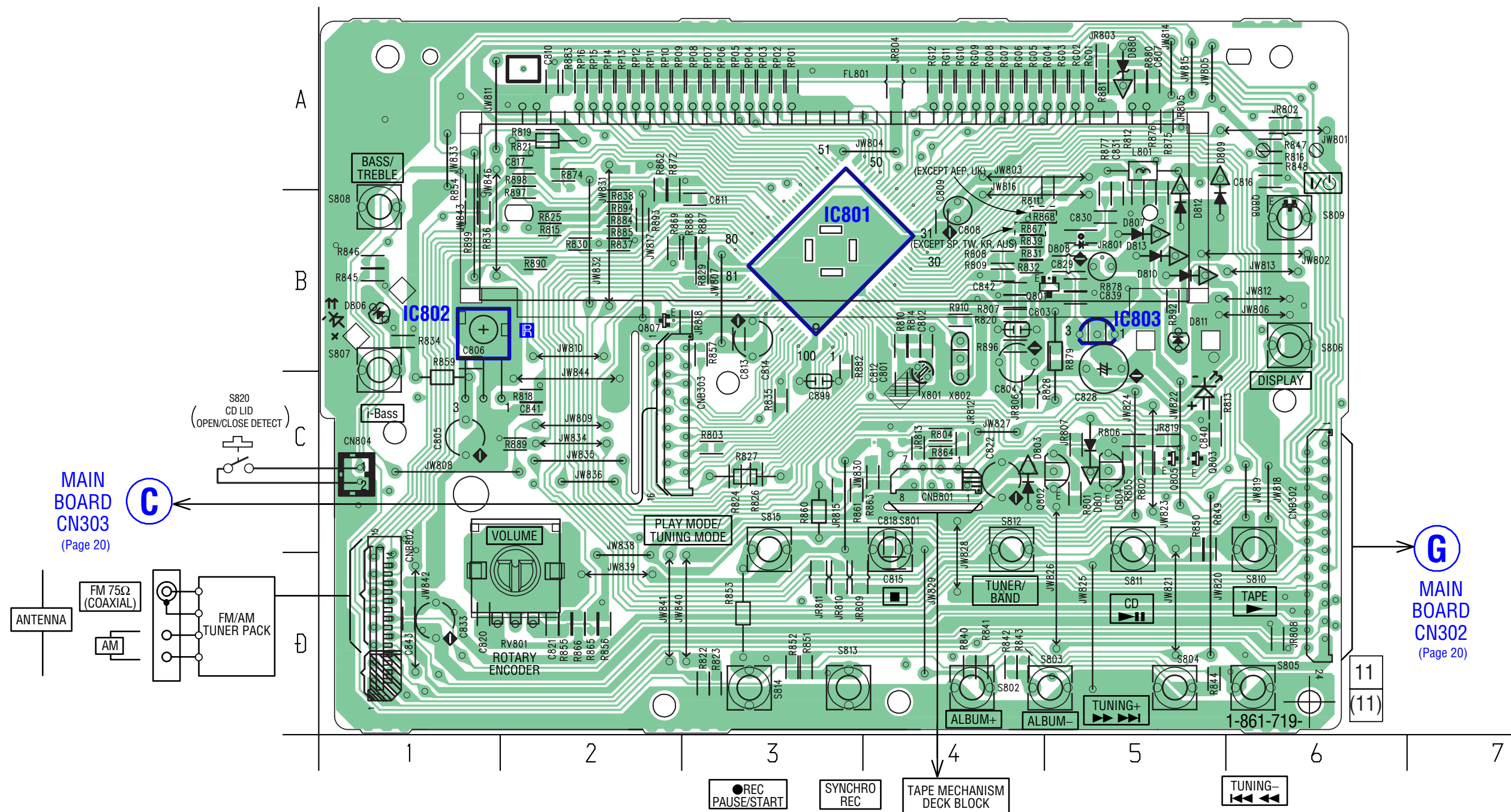




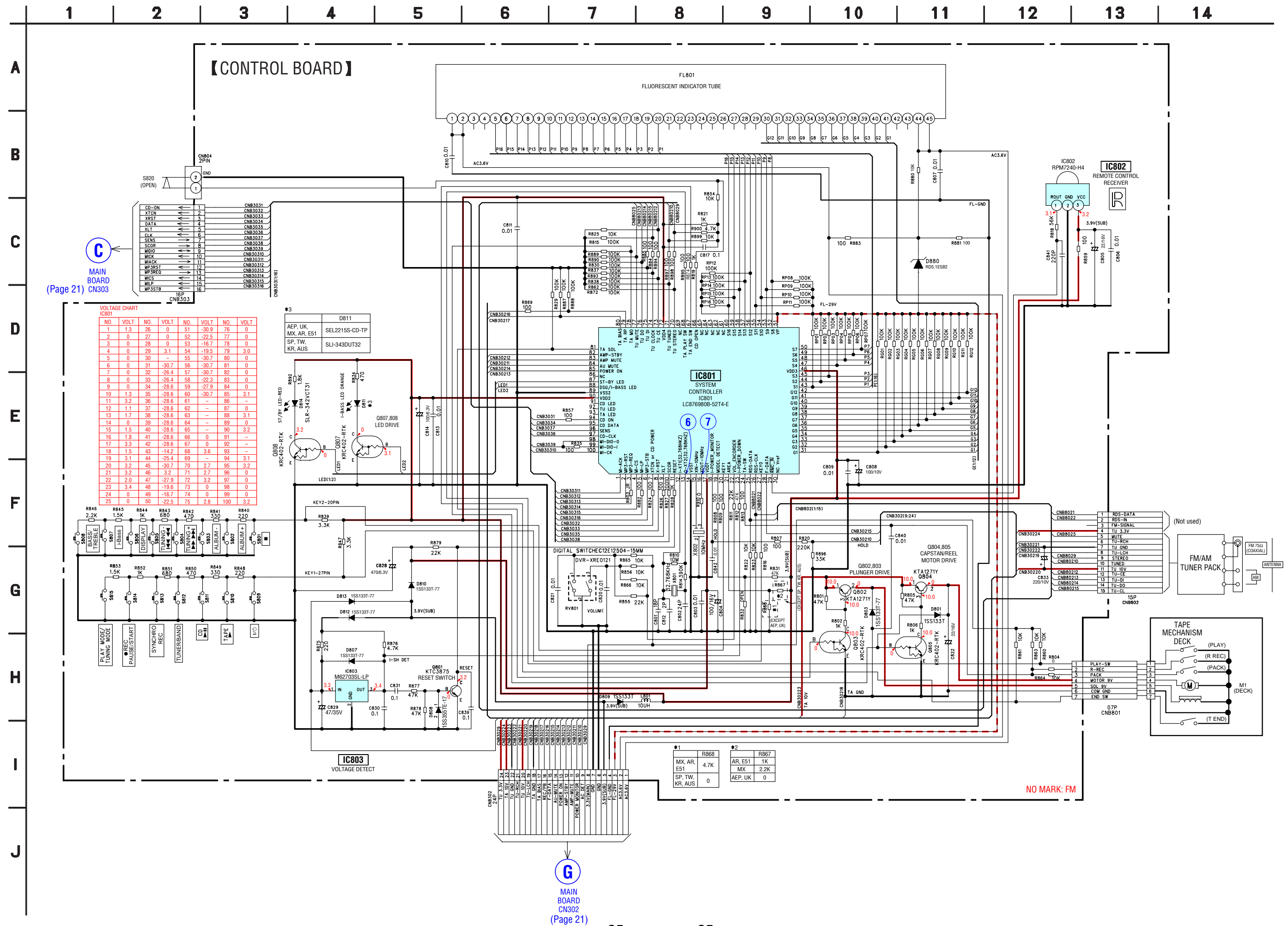


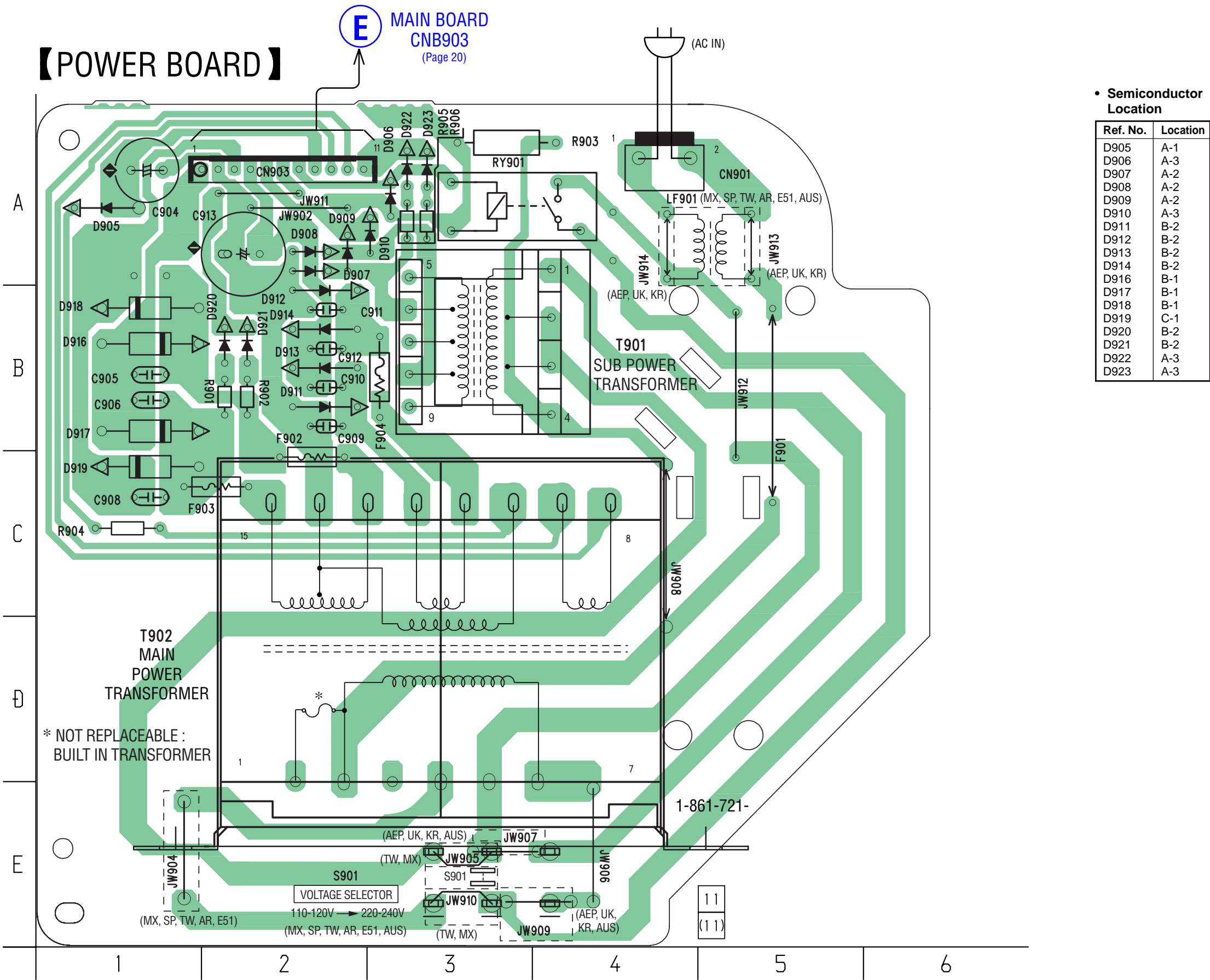
- **Semiconductor Location**

Ref. No.	Location
D803	C-4
D807	B-5
D808	B-5
D809	A-5
D810	B-5
D811	B-5
D812	B-5
D813	B-5
D880	A-5
IC801	B-3
IC802	B-1
IC803	B-5
Q801	B-4
Q802	C-5
Q803	C-5
Q804	C-5
Q805	C-5
Q807	B-5
Q808	B-6

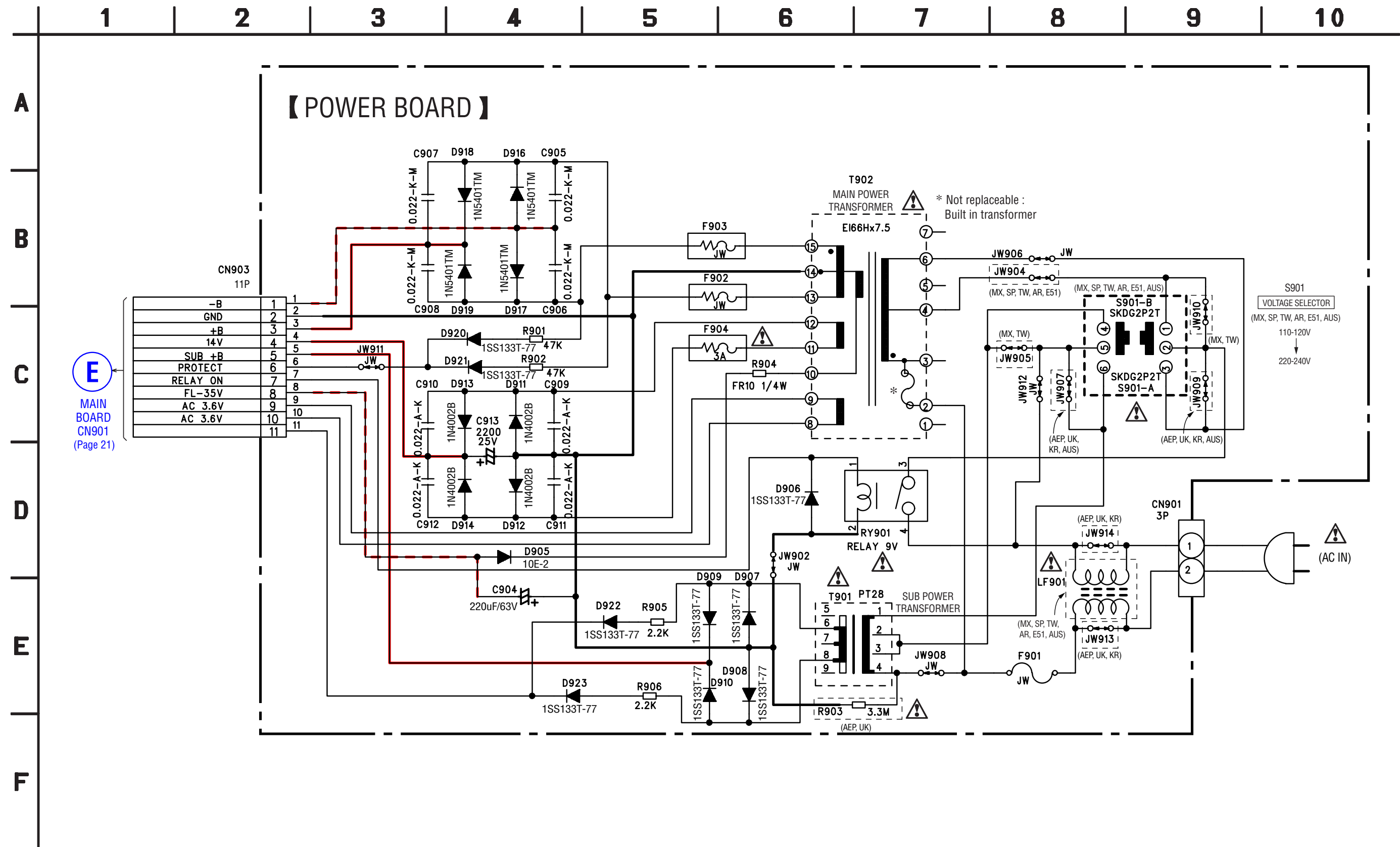


7-9. SCHEMATIC DIAGRAM — CONTROL BOARD — • See page 28 for Waveforms. • See page 32 for IC Pin Function Description.

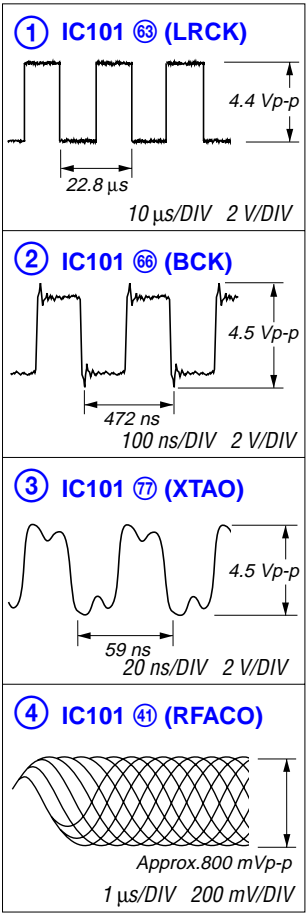




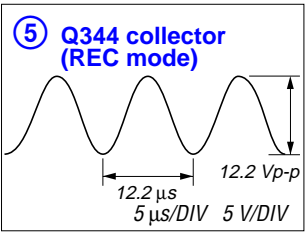
7-11. SCHEMATIC DIAGRAM — POWER BOARD —



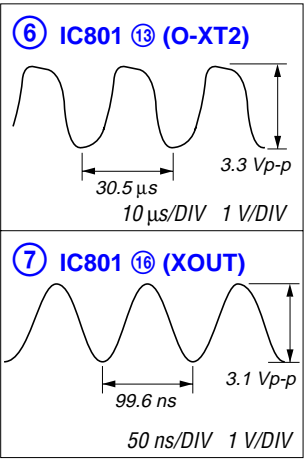
• Waveforms
– CD Board –



– MAIN Board –



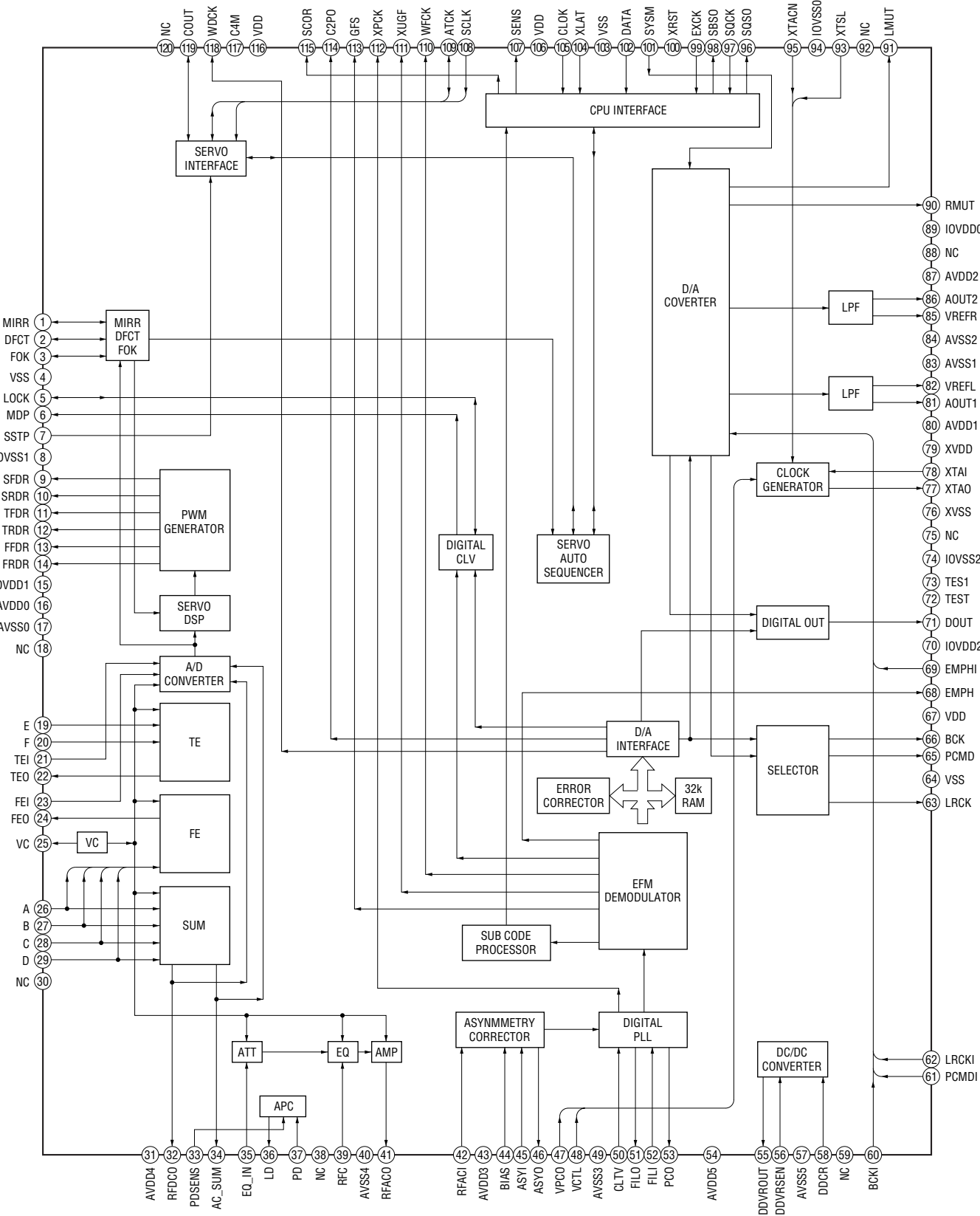
– CONTROL Board –

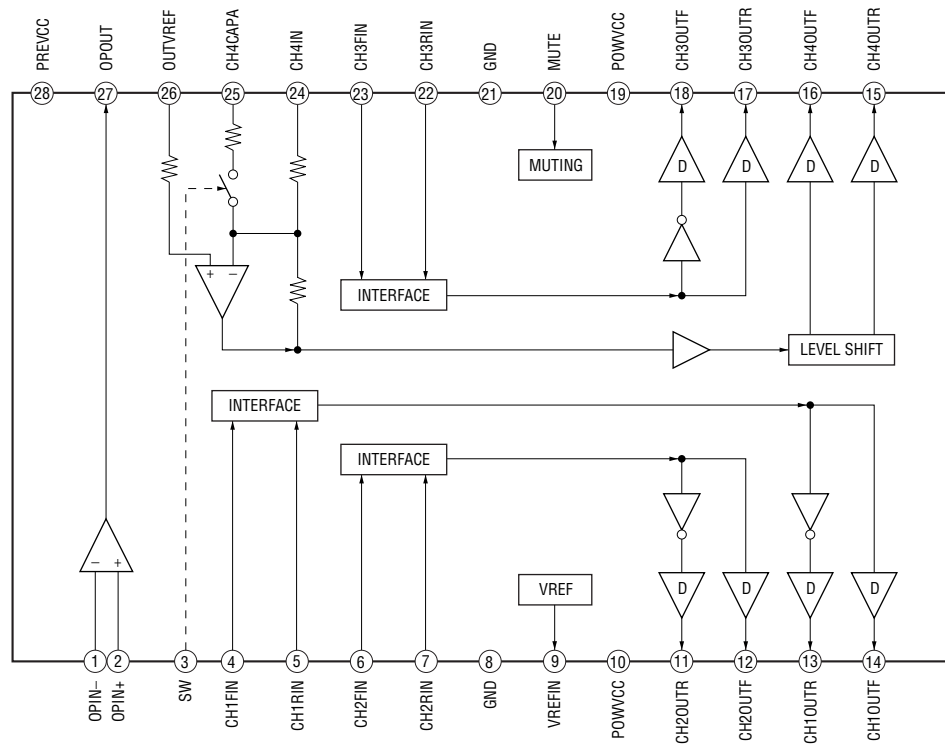
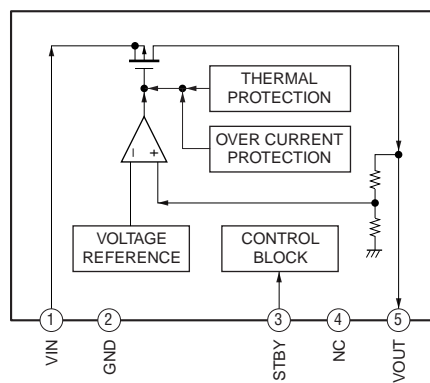


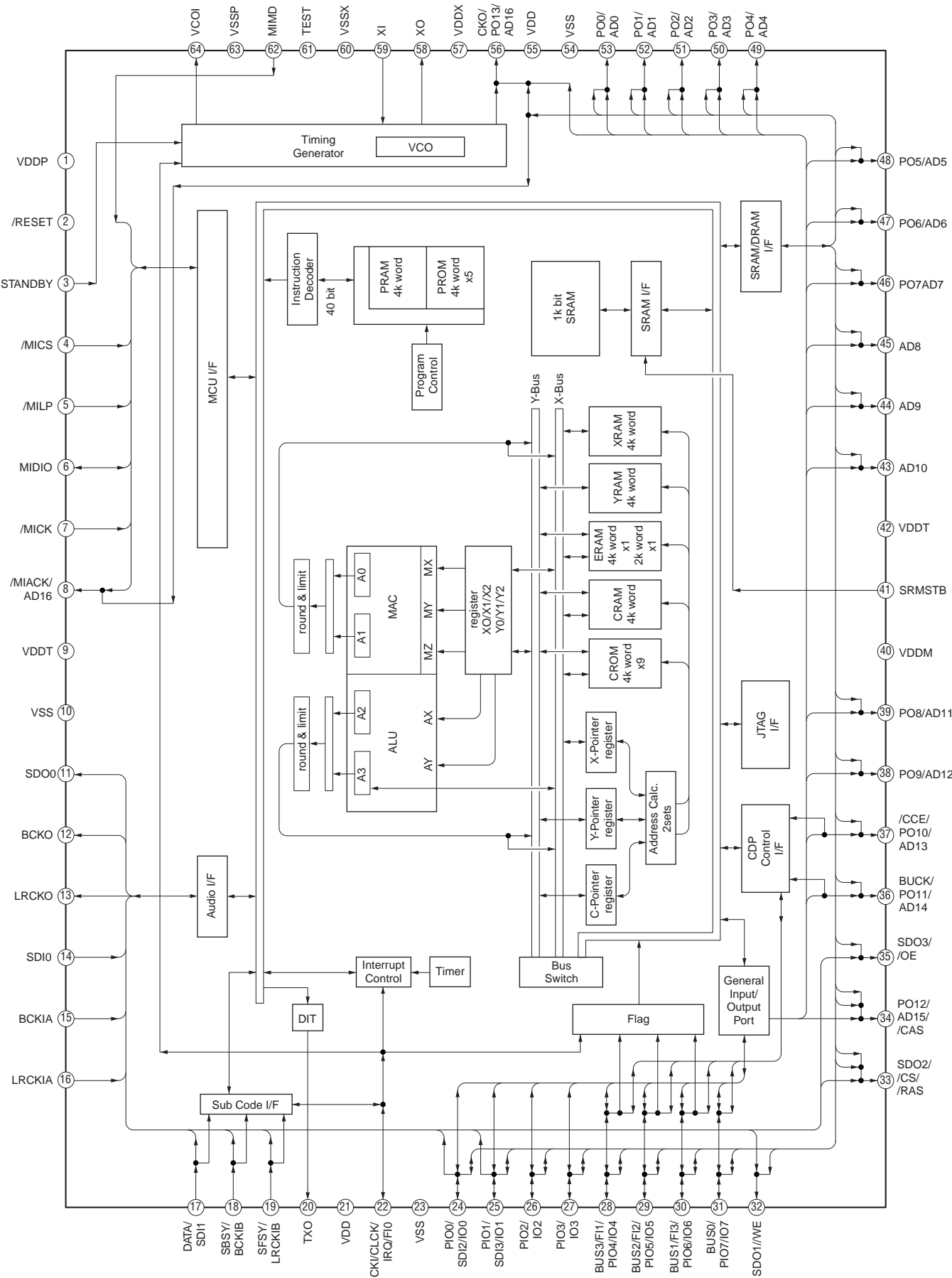
• IC Block Diagrams

– CD Board –

IC101 CXD3059AR

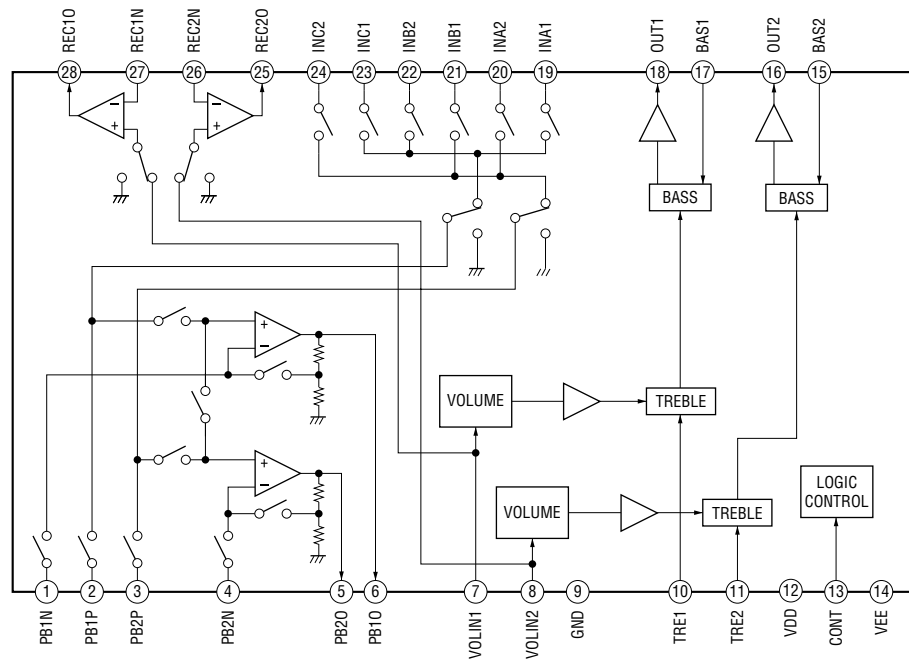


IC251 BA5947FM**IC303 BH15FB1WG**



– MAIN Board –

IC302 BD3881FV



- IC Pin Function Description
- CONTROL BOARD IC801 LC876980B-52T4-E (SYSTEM CONTROLLER)



Pin No.	Pin Name	I/O	Description
1	MI-ACK	I	Acknowledge signal input from the MP3 decoder
2	MP3-RST	O	Reset signal output to the MP3 decoder
3	MP3-REQ	I	Request signal input from the MP3 decoder
4	MI-CS	O	Chip select signal output to the MP3 decoder
5	MI-LP	O	Serial data latch pulse output to the MP3 decoder
6	MP3-STB	O	Standby control signal output to the MP3 decoder
7	XTCN	O	Oscillation circuit control signal output to the CD DSP “H”: auto oscillation, “L”: oscillation off
8	X-RST	O	Reset signal output to the CD DSP
9	XLT	O	Serial data latch pulse output to the CD DSP
10	SCOR	I	Subcode sync (S0+S1) detection signal input from the CD DSP
11	RESET	I	Reset signal input from the reset switch “L”: reset For several hundreds msec. after the power supply rises, “L” is input, then it changes to “H”
12	I-XT1	I	Sub system clock input terminal (32.768 kHz)
13	O-XT2	O	Sub system clock output terminal (32.768 kHz)
14	VSS1	—	Ground terminal
15	XIN	I	Main system clock input terminal (10 MHz)
16	XOUT	O	Main system clock output terminal (10 MHz)
17	VDD1	—	Power supply terminal (+3.2V)
18	I-POWER_MONITOR	I	Power monitor input terminal
19	MODEL DETECT	I	Model destination setting terminal
20	KEY1	I	Front panel key input terminal (A/D input)
21	AREA	I	Model destination setting terminal
22	VOL_ENCODER	I	Dial pulse input of the rotary encoder (for VOLUME control)
23	I_POWER_DOWN	I	Power down detection signal input terminal “L”: power down, normally : “H”
24	TA-SW	I	Cassette in/out detect switch signal input from the tape mechanism deck “L”: cassette in
25	RDS-DATA	I	RDS serial data input from the FM/AM tuner unit
26	RDS-CLK	I	RDS serial data transfer clock signal input from the FM/AM tuner unit
27	KEY0	I	Front panel key input terminal (A/D input)
28	F-DATA	O	Serial data output to the electrical volume
29	RMC_IN	I	Remote control signal input from the remote control receiver
30	NC VREF	—	Not used
31 to 42	G1 to G12	O	Grid drive signal output to the fluorescent indicator tube
43 to 45	S1 to S3	O	Segment drive signal output to the fluorescent indicator tube
46	VDD3	—	Power supply terminal (+3.1V)
47 to 50	S4 to S7	O	Segment drive signal output to the fluorescent indicator tube
51	VP	—	Power supply terminal (−29V)
52 to 60	S8 to S16	O	Segment drive signal output to the fluorescent indicator tube
61 to 65	NC	—	Not used
66	CD OPEN	I	CD lid open/close detection switch input terminal
67	TA END SW	I	END switch signal input from the tape mechanism deck
68	TA PLAY SW	I	PLAY switch signal input from the tape mechanism deck
69	NC	—	Not used
70	TU STEREO	I	FM stereo detection signal input from the FM/AM tuner unit
71	TU TUNED	I	Tuning detection signal input from the FM/AM tuner unit
72	VDD4	—	Power supply terminal (+3.1V)

Pin No.	Pin Name	I/O	Description
73	TU CE	O	Chip enable signal output to the FM/AM tuner unit
74	TU CLOCK	O	Serial data transfer clock signal output to the FM/AM tuner unit
75	TU DI	I	Serial data input from the FM/AM tuner unit
76	TU DO	O	Serial data output to the FM/AM tuner unit
77	TU MUTE	O	Tuner muting on/off control signal output to the FM/AM tuner unit
78	TA MO	O	Capstan/reel motor on/off control signal output terminal "H": motor on
79	TA RP	O	Recording/playback selection signal output terminal "H": playback mode, "L": recording mode
80	TA BIAS	O	Recording bias on/off selection signal output terminal "H": bias on, "L": bias off
81	TA SOL	O	Trigger plunger on/off control signal output terminal "H": plunger on
82	AMP-STBY	O	Standby control signal output to the power amplifier
83	AMP MUTE	O	Tuner muting on/off control signal output to the power amplifier
84	AU MUTE	O	Line muting on/off control signal output terminal
85	POWER ON	O	Power relay drive signal output terminal "H": on
86	NC	—	Not used
87	ST-BY LED	O	LED drive signal output terminal
88	DSG/I-BASS LED	O	LED drive signal output terminal
89	VSS2	—	Ground terminal
90	VDD2	—	Power supply terminal (+3.1V)
91	CD LED	—	Not used
92	TU LED	—	Not used
93	TA LED	—	Not used
94	CD ON	O	Power on/off control signal output for the CD mechanism section
95	CD DATA	O	Serial data output to the CD DSP
96	SENS	I	Internal status (SENSE) signal input from the CD DSP
97	CD-CLK	O	Serial data transfer clock signal output to the CD DSP
98	MI-DIO-O	O	Serial data output to the MP3 decoder
99	MI-DIO-I	I	Serial data input from the MP3 decoder
100	MI-CK	O	Serial data transfer clock signal output to the MP3 decoder

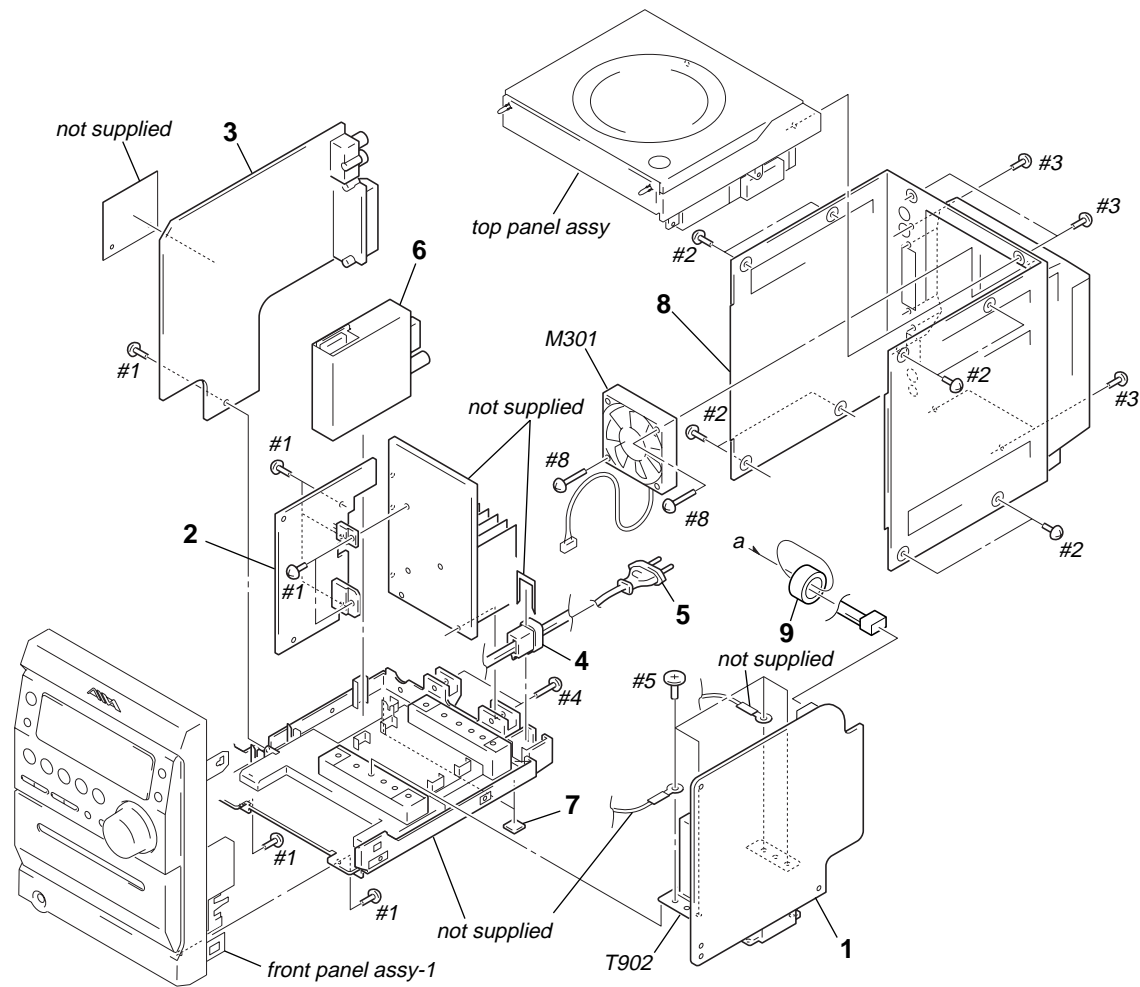
SECTION 8
EXPLODED VIEWS









- NOTE:**
- XX and -X mean standardized parts, so they may have some difference from the original one.
 - Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
 - The mechanical parts with no reference number in the exploded views are not supplied.

- Abbreviation
- AUS : Australian model
 - AR : Argentine model
 - E51 : Chilean and peruvian models
 - KR : Korea model
 - MX : Mexican model
 - SP : Singapore model
 - TW : Taiwan model

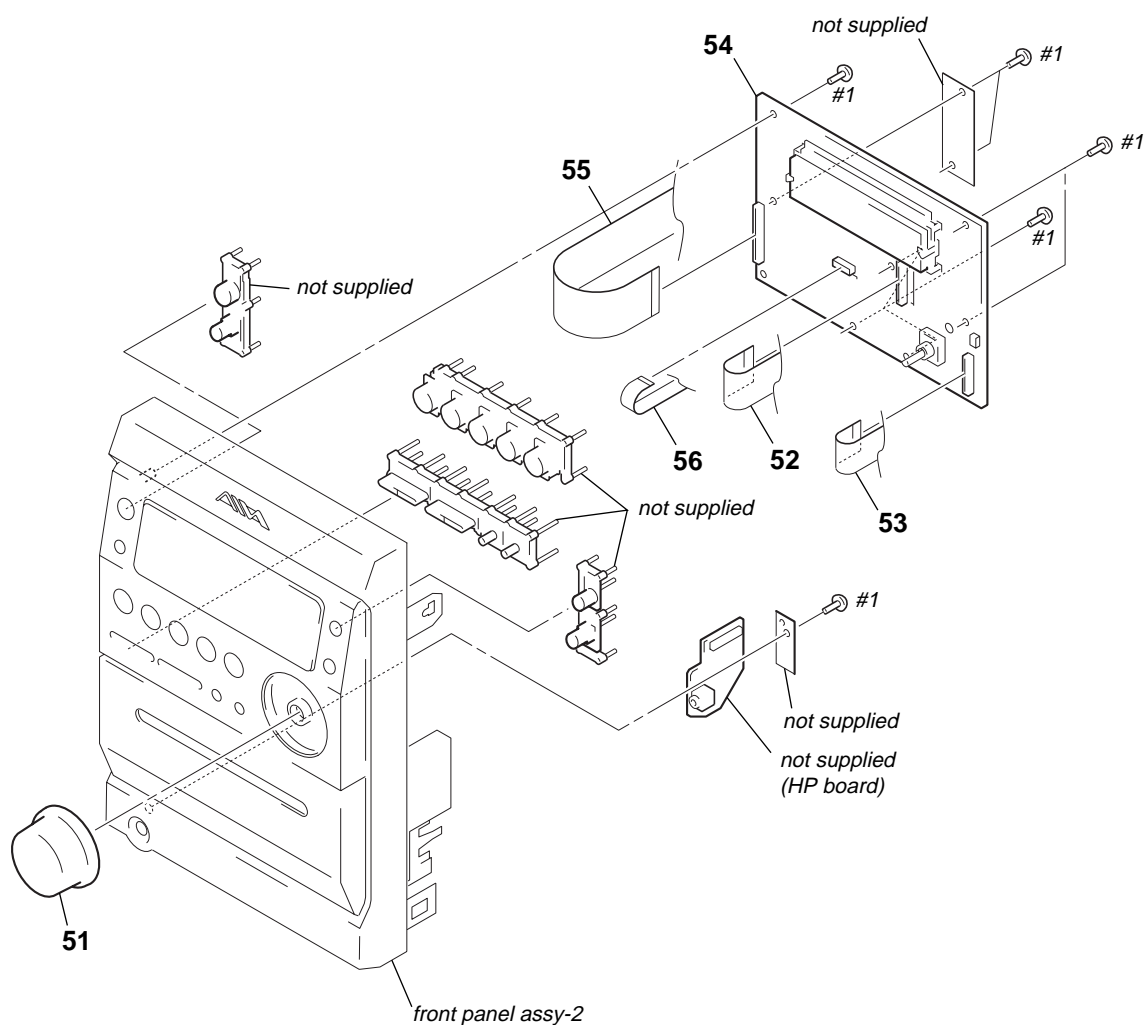
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

8-1. OVERALL SECTION



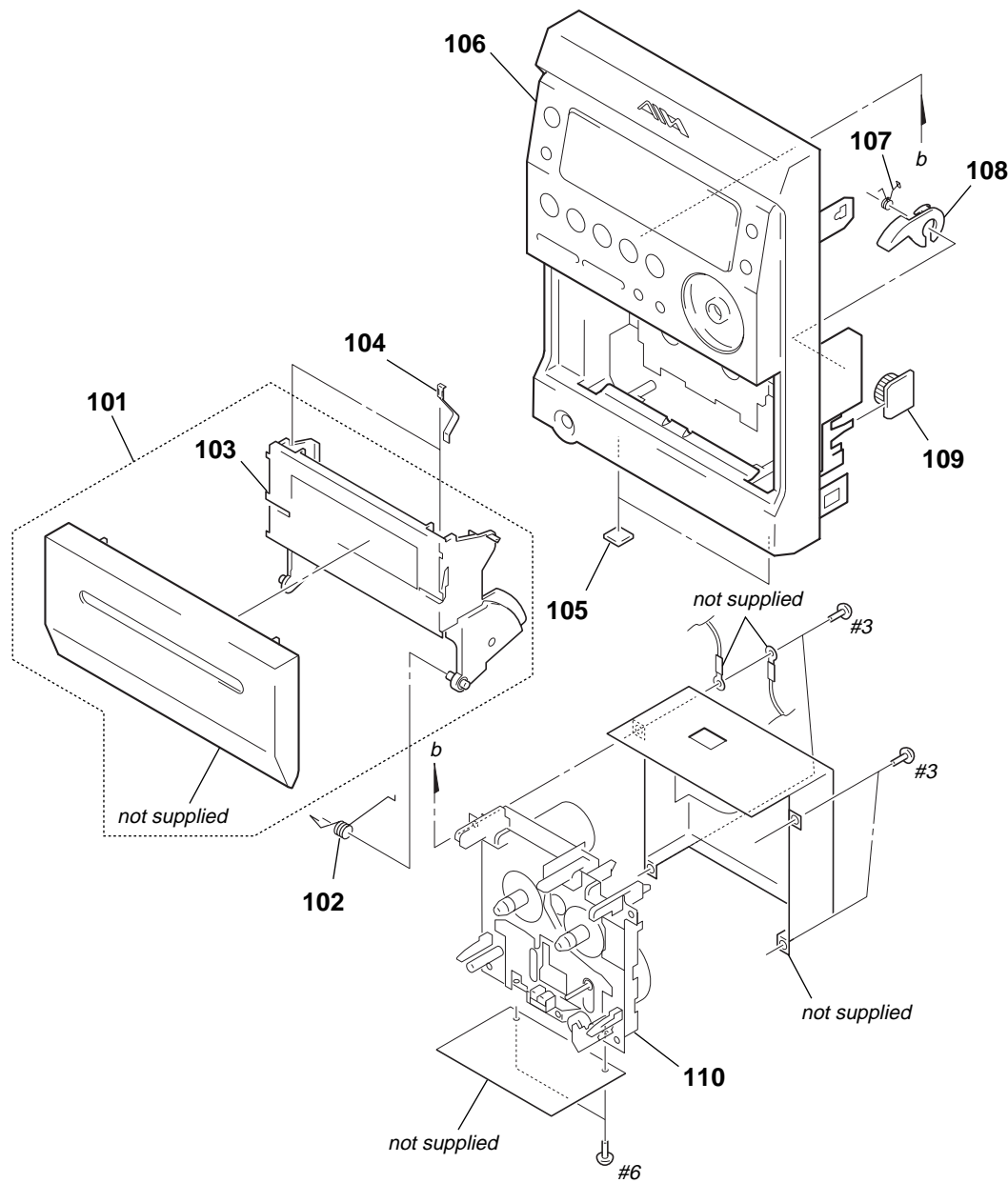
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	A-1059-097-A	POWER BOARD, COMPLETE (KR)		8	4-253-221-41	CABINET, REAR	
1	A-4752-018-A	POWER BOARD, COMPLETE (SP, E51)		9	1-469-636-11	CORE, FERRITE (ESD-R-25SD) (AEP, UK, KR)	
1	A-4752-042-A	POWER BOARD, COMPLETE (AUS)		M301	1-787-103-11	FAN, DC	
2	A-4750-621-A	AMP BOARD, COMPLETE		 T902	1-443-273-11	TRANSFORMER, POWER (AEP, UK)	
3	A-4750-619-A	MAIN BOARD, COMPLETE		 T902	1-443-304-11	TRANSFORMER, POWER (MX, TW, SP, AR, E51, AUS)	
4		not supplied		 T902	1-443-364-11	TRANSFORMER, POWER (KR)	
 5	1-696-848-12	CORD, POWER (AUS)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
 5	1-769-079-23	CORD, POWER (KR)		#2	7-685-548-14	SCREW +BTP 3X12 TYPE2 N-S	
 5	1-769-744-52	CORD, POWER (AEP, UK, MX, SP, E51)		#3	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S	
 5	1-783-940-73	CORD, POWER (AR)		#4	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S	
 5	1-827-597-41	CORD, POWER (TW)		#5	7-685-659-79	SCREW +BVTP 4X8 TYPE2 IT-3	
6	1-693-628-11	TUNER (FM/AM) (MX, SP, TW, AR, E51, AUS)		#8		not supplied	
6	1-693-629-11	TUNER (FM/AM) (AEP, UK, KR)					
7	4-247-752-01	RUBBER, FOOT					

8-2. FRONT PANEL ASSY-1



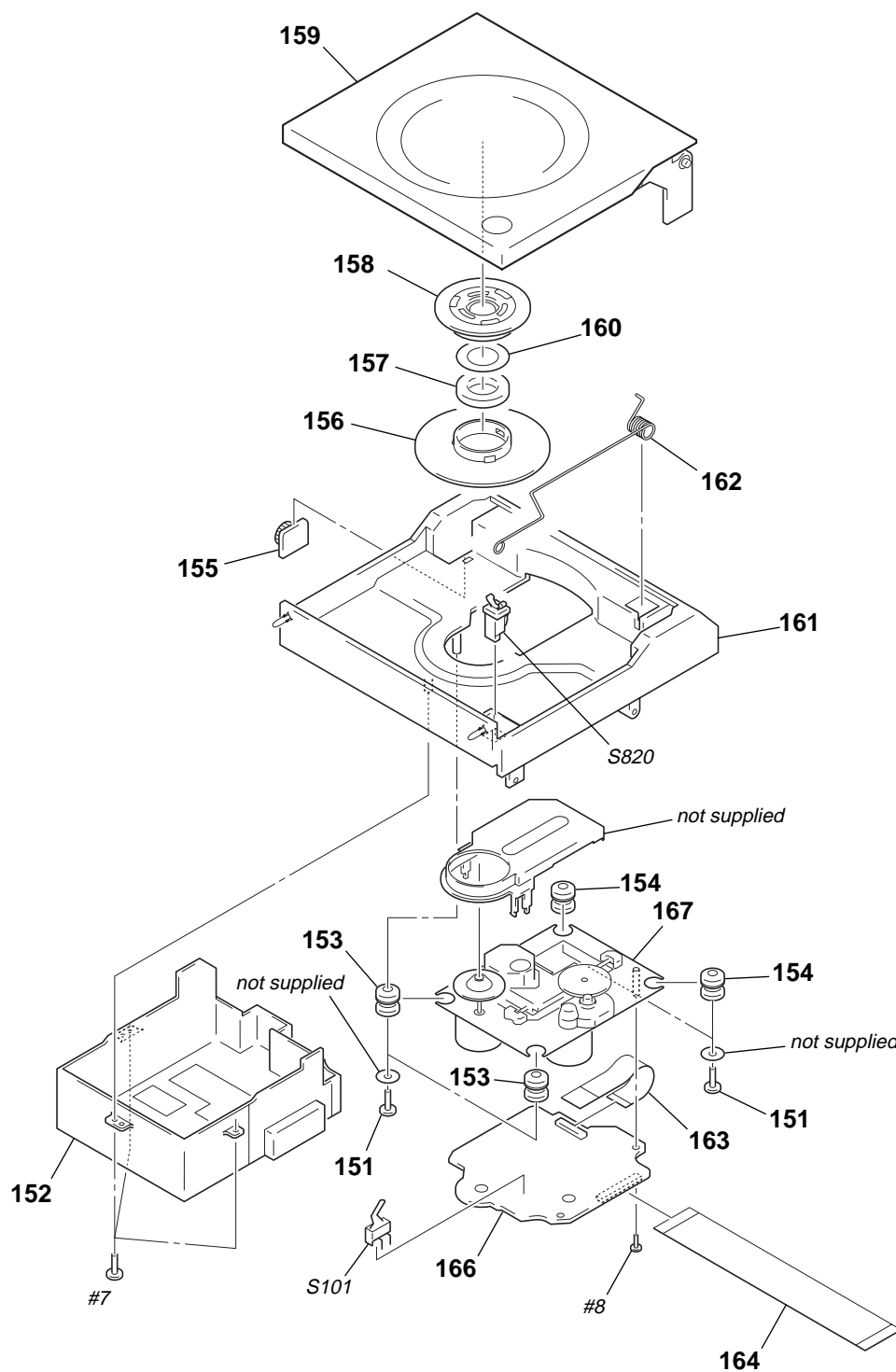
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-249-079-01	KNOB, VOL (RTRY VOL)		54	A-4752-016-A	CONTROL BOARD, COMPLETE (AR, E51)	
52	1-757-791-11	WIRE (FLAT TYPE) (16 CORE)		54	A-4752-040-A	CONTROL BOARD (SP, TW, KR, AUS)	
53	1-828-965-11	WIRE (FLAT TYPE) (11 CORE)		55	1-773-220-11	WIRE (FLAT TYPE) (25 CORE)	
54	A-4752-010-A	CONTROL BOARD, COMPLETE (MX)		56	1-828-944-11	WIRE (FLAT TYPE) (7 CORE)	
54	A-4750-613-A	CONTROL BOARD, COMPLETE (AEP, UK)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	

8-3. FRONT PANEL ASSY-2



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	X-4956-356-1	LID, CASS ASSY (X)		107	4-231-841-01	SPRING (HEART CAM-B)	
102	4-254-949-01	SPRING, CASSETTE		108	4-231-825-01	CAM (B), HEART	
103	4-245-018-01	HOLDER (CASSETTE)		109	4-242-318-01	OIL-DMPR, 70	
103	4-245-018-11	HOLDER (CASSETTE)		110	1-796-352-41	DECK, MECHANICAL (CMAL5Z220A)	
104	4-238-631-01	TAPE SPRING		#3	7-685-647-14	SCREW +BVTP 3X10 TYPE2 N-S	
105	4-247-752-01	RUBBER, FOOT		#6	7-685-862-09	SCREW +BVTT 2.6X6 (S)	
106	X-4956-355-1	FRONT (PANEL) ASSY (X)					

8-4. TOP PANEL ASSY





Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151		not supplied		161	4-246-194-21	CHASSIS, CD	
152	4-247-493-01	COVER, CD		162	4-248-711-01	SPRING (CD)	
153	3-931-379-31	RUBBER, VIBRATION PROOF (GREEN)		163	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
154	3-931-379-21	RUBBER, VIBRATION PROOF (RED)		164	1-824-048-12	WIRE (FLAT TYPE) (27 CORE) (EXCEPT AR)	
155	4-242-171-01	DAMPER 150 N		166	A-4751-434-A	CD BOARD, COMPLETE	
156	4-246-193-01	HOLDER, CHUCK A		167	8-820-221-01	DEVICE, OPTICAL PICK-UP	
157	4-249-238-01	MAGNET (18-30-5)				(KSM-213EDP/C2NP)	
158	4-246-192-01	BASE, CHUCK N		S101	1-771-853-11	SWITCH, DETECTION	
159	4-246-195-21	LID, CD		#7	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S	
160	4-246-191-11	PLATE, MAGNET					

SECTION 9

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable
- CAPACITORS
uF: μF
- COILS
uH: μH

- Items marked “**” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u : μ , for example:
 $uA. . : \mu A. .$ $uPA. . : \mu PA. .$
 $uPB. . : \mu PB. .$ $uPC. . : \mu PC. .$
 $uPD. . : \mu PD. .$
- Abbreviation
AUS : Australian model
AR : Argentine model
E51 : Chilean and peruvian models
KR : Korea model
MX : Mexican model
SP : Singapore model
TW : Taiwan model

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

38

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
C125	1-164-360-11	CERAMIC CHIP	0.1uF			16V			< CONNECTOR >				
C131	1-162-927-11	CERAMIC CHIP	100PF	5%		50V							
C132	1-117-863-11	CERAMIC CHIP	0.47uF	10%		6.3V	CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P				
C133	1-162-970-11	CERAMIC CHIP	0.01uF	10%		25V	CN201	1-818-350-11	CONNECTOR (FFC) 27P				
C134	1-164-360-11	CERAMIC CHIP	0.1uF			16V			< FERRITE BEAD >				
C141	1-107-826-11	CERAMIC CHIP	0.1uF	10%		16V							
C142	1-162-965-11	CERAMIC CHIP	0.0015uF	10%		50V	FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)				
C143	1-164-360-11	CERAMIC CHIP	0.1uF			16V							
C151	1-128-995-21	ELECT CHIP	100uF	20%		10V			< IC >				
C161	1-164-360-11	CERAMIC CHIP	0.1uF			16V	IC101	8-752-425-12	IC CXD3059AR				
C162	1-164-360-11	CERAMIC CHIP	0.1uF			16V	IC251	6-705-808-01	IC BA5947FM				
C163	1-164-360-11	CERAMIC CHIP	0.1uF			16V	IC301	6-705-365-01	IC TC94A34FG-002				
C171	1-162-919-11	CERAMIC CHIP	22PF	5%		50V	IC303	6-705-807-01	IC BH15FB1WG				
C172	1-162-920-11	CERAMIC CHIP	27PF	5%		50V							
C174	1-164-360-11	CERAMIC CHIP	0.1uF			16V			< TRANSISTOR >				
C181	1-164-360-11	CERAMIC CHIP	0.1uF			16V	Q10	6-550-363-01	TRANSISTOR	2SB1690KT146			
C182	1-164-360-11	CERAMIC CHIP	0.1uF			16V							
C183	1-124-778-00	ELECT CHIP	22uF	20%		6.3V			< RESISTOR >				
C184	1-124-778-00	ELECT CHIP	22uF	20%		6.3V							
C185	1-164-315-11	CERAMIC CHIP	470PF	5%		50V	R10	1-216-791-11	METAL CHIP	3.3	5%	1/10W	
C186	1-164-315-11	CERAMIC CHIP	470PF	5%		50V	R11	1-216-864-11	SHORT CHIP	0			
C194	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R12	1-216-845-11	METAL CHIP	100K	5%	1/10W	
C195	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R13	1-218-446-11	METAL CHIP	1	5%	1/10W	
C196	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R111	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C201	1-128-995-21	ELECT CHIP	100uF	20%		10V	R112	1-216-835-11	METAL CHIP	15K	5%	1/10W	
C203	1-128-995-21	ELECT CHIP	100uF	20%		10V	R113	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C209	1-162-970-11	CERAMIC CHIP	0.01uF	10%		25V	R114	1-216-835-11	METAL CHIP	15K	5%	1/10W	
C210	1-107-826-11	CERAMIC CHIP	0.1uF	10%		16V	R121	1-216-835-11	METAL CHIP	15K	5%	1/10W	
C211	1-164-230-11	CERAMIC CHIP	220PF	5%		50V	R131	1-216-857-11	METAL CHIP	1M	5%	1/10W	
C212	1-162-919-11	CERAMIC CHIP	22PF	5%		50V	R132	1-216-833-11	METAL CHIP	10K	5%	1/10W	
C213	1-162-919-11	CERAMIC CHIP	22PF	5%		50V	R133	1-216-848-11	METAL CHIP	180K	5%	1/10W	
C251	1-162-969-11	CERAMIC CHIP	0.0068uF	10%		25V	R141	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
C252	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R142	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C255	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R143	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	
C257	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R151	1-216-864-11	SHORT CHIP	0			
C258	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R161	1-216-809-11	METAL CHIP	100	5%	1/10W	
C259	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R162	1-216-841-11	METAL CHIP	47K	5%	1/10W	
C260	1-128-394-11	ELECT CHIP	220uF	20%		10V	R163	1-216-809-11	METAL CHIP	100	5%	1/10W	
C302	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R165	1-216-864-11	SHORT CHIP	0			
C303	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R171	1-216-817-11	METAL CHIP	470	5%	1/10W	
C305	1-126-246-11	ELECT CHIP	220uF	20%		4V	R172	1-216-857-11	METAL CHIP	1M	5%	1/10W	
C306	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R173	1-216-295-91	SHORT CHIP	0			
C307	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R181	1-216-809-11	METAL CHIP	100	5%	1/10W	
C308	1-126-208-21	ELECT CHIP	47uF	20%		4V	R182	1-216-809-11	METAL CHIP	100	5%	1/10W	
C309	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R191	1-216-864-11	SHORT CHIP	0			
C310	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R201	1-500-445-21	FERRITE, EMI (SMD) (2012)				
C311	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R203	1-216-864-11	SHORT CHIP	0			
C312	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R204	1-500-445-21	FERRITE, EMI (SMD) (2012)				
C313	1-164-360-11	CERAMIC CHIP	0.1uF			16V	R205	1-216-864-11	SHORT CHIP	0			
C314	1-126-208-21	ELECT CHIP	47uF	20%		4V	R251	1-216-833-11	METAL CHIP	10K	5%	1/10W	
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%		16V	R252	1-216-837-11	METAL CHIP	22K	5%	1/10W	
C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10%		50V	R253	1-216-833-11	METAL CHIP	10K	5%	1/10W	
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%		25V	R301	1-216-845-11	METAL CHIP	100K	5%	1/10W	
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%		25V	R302	1-216-833-11	METAL CHIP	10K	5%	1/10W	
C320	1-216-864-11	SHORT CHIP	0				R303	1-216-845-11	METAL CHIP	100K	5%	1/10W	
							R305	1-216-845-11	METAL CHIP	100K	5%	1/10W	
							R306	1-216-864-11	SHORT CHIP	0			
							R307	1-216-833-11	METAL CHIP	10K	5%	1/10W	

CD

CONTROL

Ref. No.	Part No.	Description	Remark		
R313	1-216-813-11	METAL CHIP	220	5%	1/10W
R351	1-216-809-11	METAL CHIP	100	5%	1/10W
R352	1-216-809-11	METAL CHIP	100	5%	1/10W
R353	1-216-809-11	METAL CHIP	100	5%	1/10W
R354	1-216-809-11	METAL CHIP	100	5%	1/10W
R401	1-216-809-11	METAL CHIP	100	5%	1/10W
R402	1-216-809-11	METAL CHIP	100	5%	1/10W
R403	1-216-809-11	METAL CHIP	100	5%	1/10W
R404	1-216-809-11	METAL CHIP	100	5%	1/10W
R405	1-216-809-11	METAL CHIP	100	5%	1/10W
R406	1-216-809-11	METAL CHIP	100	5%	1/10W
R407	1-216-809-11	METAL CHIP	100	5%	1/10W
R408	1-216-809-11	METAL CHIP	100	5%	1/10W
R409	1-216-809-11	METAL CHIP	100	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-809-11	METAL CHIP	100	5%	1/10W
R412	1-216-809-11	METAL CHIP	100	5%	1/10W
R419	1-216-809-11	METAL CHIP	100	5%	1/10W
< VIBRATOR >					
X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9344 MHz)			

		A-4750-613-A	CONTROL BOARD, COMPLETE (AEP, UK)		
		A-4752-010-A	CONTROL BOARD, COMPLETE (MX)		
		A-4752-016-A	CONTROL BOARD, COMPLETE (AR, E51)		
		A-4752-040-A	CONTROL BOARD, COMPLETE		
			(SP, TW, KR, AUS)		

		4-249-151-01	HOLDER, FL TUBE		
< CAPACITOR >					
C801	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C802	1-162-975-11	CERAMIC CHIP	24PF	5%	50V
C803	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C804	1-126-933-11	ELECT	100uF	20%	16V
C805	1-124-234-00	ELECT	22uF	20%	16V
C806	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C807	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C808	1-104-658-91	ELECT	100uF	20%	10V
C809	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C810	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C811	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C813	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C814	1-124-584-00	ELECT	100uF	20%	6.3V
C817		not supplied			
C820	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C821	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C822	1-124-234-00	ELECT	22uF	20%	16V
C828	1-104-655-91	ELECT	470uF	20%	6.3V
C829	1-126-947-11	ELECT	47uF	20%	35V
C830	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C831	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C833	1-126-923-91	ELECT	220uF	20%	10V
C839	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C840	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V
C841	1-162-960-11	CERAMIC CHIP	220PF	10%	50V

Ref. No.	Part No.	Description	Remark		
C842	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
< CONNECTOR >					
CN804	1-564-505-11	PLUG, CONNECTOR 2P			
* CNB302	1-784-785-11	CONNECTOR, FFC 24P			
CNB303		not supplied			
CNB801	1-568-826-11	CONNECTOR, FFC 7P			
CNB802	1-568-830-11	CONNECTOR, FFC 11P			
< DIODE >					
D803	8-719-991-33	DIODE	1SS133T-77		
D807	8-719-991-33	DIODE	1SS133T-77		
D808	8-719-988-61	DIODE	1SS355TE-17		
D809	8-719-991-33	DIODE	1SS133T-77		
D810	8-719-991-33	DIODE	1SS133T-77		
D811	8-719-062-12	DIODE	SEL2215S-CD-TP		
				(AEP, UK, MX, AR, E51)	
D811	8-719-083-10	DIODE	SLI-343DUT32	(SP, TW, KR, AUS)	
D812	8-719-991-33	DIODE	1SS133T-77		
D813	8-719-991-33	DIODE	1SS133T-77		
D880	8-719-109-85	DIODE	RD5.1ESB2		
< FILTER >					
FL801	1-518-965-11	INDICATOR TUBE, FLUORESCENT			
< IC >					
IC801	6-804-040-01	IC	LC876980B-52T4-E		
IC802	6-600-174-01	IC	RPM7240-H4 (H)		
IC803	8-759-532-64	IC	M62703SL-TP		
< SHORT >					
JR802		not supplied			
JR803		not supplied			
JR804		not supplied			
JR805	1-216-295-91	SHORT CHIP	0		
JR807	1-216-295-91	SHORT CHIP	0		
JR808	1-216-295-91	SHORT CHIP	0		
JR809		not supplied			
JR810		not supplied			
JR811		not supplied			
JR813	1-216-295-91	SHORT CHIP	0		
JR815	1-216-295-91	SHORT CHIP	0		
JR817	1-216-295-91	SHORT CHIP	0		
JR818	1-216-295-91	SHORT CHIP	0		
JR819	1-216-295-91	SHORT CHIP	0		
JR863	1-216-833-11	METAL CHIP	10K	5%	1/10W
< COIL >					
L801	1-410-509-11	INDUCTOR	10uH		
< TRANSISTOR >					
Q801	8-729-034-51	TRANSISTOR	KTC3875		
Q802	8-729-037-13	TRANSISTOR	KTA1271Y		
Q803	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q804	8-729-037-13	TRANSISTOR	KTA1271Y		
Q805	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q807	8-729-054-16	TRANSISTOR	KRC402-RTK		
Q808	8-729-054-16	TRANSISTOR	KRC402-RTK		

CONTROL

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
< RESISTOR >						R861	1-216-833-11	METAL CHIP	10K	5%	1/10W
R801	1-216-841-11	METAL CHIP	47K	5%	1/10W	R862	1-216-845-11	METAL CHIP	100K	5%	1/10W
	1-216-821-11	METAL CHIP	1K	5%	1/10W	R863	1-216-833-11	METAL CHIP	10K	5%	1/10W
	1-216-809-11	METAL CHIP	100	5%	1/10W	R864	1-216-833-11	METAL CHIP	10K	5%	1/10W
	1-216-864-11	SHORT CHIP	0			R865	1-216-833-11	METAL CHIP	10K	5%	1/10W
	1-216-841-11	METAL CHIP	47K	5%	1/10W	R866	1-216-833-11	METAL CHIP	10K	5%	1/10W
R806	1-216-821-11	METAL CHIP	1K	5%	1/10W	R867	1-216-821-11	METAL CHIP	1K	5%	1/10W
R807	1-216-809-11	METAL CHIP	100	5%	1/10W	R867	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (AR, E51) (MX)
R808	1-216-809-11	METAL CHIP	100	5%	1/10W						
R809	1-216-809-11	METAL CHIP	100	5%	1/10W	R867	1-216-864-11	SHORT CHIP	0 (AEP, UK)		
R810	1-219-570-11	METAL CHIP	10M	5%	1/10W	R868	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (MX, AR, E51)
R811	1-216-837-11	METAL CHIP	22K	5%	1/10W	R868	1-216-864-11	SHORT CHIP	0 (SP, TW, KR, AUS)		
R812	1-216-841-11	METAL CHIP	47K	5%	1/10W	R869	1-216-809-11	METAL CHIP	100	5%	1/10W
R813	1-216-809-11	METAL CHIP	100	5%	1/10W	R872	1-216-845-11	METAL CHIP	100K	5%	1/10W
R814	1-216-852-11	METAL CHIP	390K	5%	1/10W	R874	1-216-833-11	METAL CHIP	10K	5%	1/10W
R815	1-216-845-11	METAL CHIP	100K	5%	1/10W	R875	1-216-813-11	METAL CHIP	220	5%	1/10W
R816	1-216-809-11	METAL CHIP	100	5%	1/10W	R876	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R818	1-216-842-11	METAL CHIP	56K	5%	1/10W	R877	1-216-841-11	METAL CHIP	47K	5%	1/10W
R819	1-216-821-11	METAL CHIP	1K	5%	1/10W	R878	1-216-841-11	METAL CHIP	47K	5%	1/10W
R820	1-216-849-11	METAL CHIP	220K	5%	1/10W	R879	1-216-837-11	METAL CHIP	22K	5%	1/10W
R821	1-216-821-11	METAL CHIP	1K	5%	1/10W	R880	1-216-833-11	METAL CHIP	10K	5%	1/10W
R822	1-216-833-11	METAL CHIP	10K	5%	1/10W	R881	1-216-809-11	METAL CHIP	100	5%	1/10W
R823	1-216-833-11	METAL CHIP	10K	5%	1/10W	R882	1-216-833-11	METAL CHIP	10K	5%	1/10W
R824	1-216-809-11	METAL CHIP	100	5%	1/10W	R883	1-216-809-11	METAL CHIP	100	5%	1/10W
R825	1-216-833-11	METAL CHIP	10K	5%	1/10W	R884	1-216-809-11	METAL CHIP	100	5%	1/10W
R826	1-216-809-11	METAL CHIP	100	5%	1/10W	R885	1-216-809-11	METAL CHIP	100	5%	1/10W
R827	1-216-809-11	METAL CHIP	100	5%	1/10W	R887	1-216-845-11	METAL CHIP	100K	5%	1/10W
R828	1-216-821-11	METAL CHIP	1K	5%	1/10W	R888	1-216-845-11	METAL CHIP	100K	5%	1/10W
R829	1-216-845-11	METAL CHIP	100K	5%	1/10W	R889	1-216-845-11	METAL CHIP	100K	5%	1/10W
R830	1-216-845-11	METAL CHIP	100K	5%	1/10W	R890	1-216-845-11	METAL CHIP	100K	5%	1/10W
R831	1-216-841-11	METAL CHIP	47K	5%	1/10W	R892	1-216-824-11	METAL CHIP	1.8K	5%	1/10W (UK)
R834	1-216-817-11	METAL CHIP	470	5%	1/10W	R893	1-216-845-11	METAL CHIP	100K	5%	1/10W
R835	1-216-809-11	METAL CHIP	100	5%	1/10W	R894	1-216-809-11	METAL CHIP	100	5%	1/10W
R837	1-216-845-11	METAL CHIP	100K	5%	1/10W	R895	1-216-809-11	METAL CHIP	100	5%	1/10W
R838	1-216-845-11	METAL CHIP	100K	5%	1/10W	R896	1-216-839-11	METAL CHIP	33K	5%	1/10W
R839	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	R897	1-216-809-11	METAL CHIP	100	5%	1/10W
R840	1-216-813-11	METAL CHIP	220	5%	1/10W	R898	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-815-11	METAL CHIP	330	5%	1/10W	R899	1-216-833-11	METAL CHIP	10K	5%	1/10W
R842	1-216-817-11	METAL CHIP	470	5%	1/10W	R900	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R843	1-216-819-11	METAL CHIP	680	5%	1/10W	R901	1-216-809-11	METAL CHIP	100	5%	1/10W
R844	1-216-821-11	METAL CHIP	1K	5%	1/10W	R907	1-216-295-91	SHORT CHIP	0 (AEP, UK)		
R845	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	R910	1-216-864-11	SHORT CHIP	0		
R846	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	RG01	1-216-845-11	METAL CHIP	100K	5%	1/10W
R847	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	RG02	1-216-845-11	METAL CHIP	100K	5%	1/10W
R848	1-216-813-11	METAL CHIP	220	5%	1/10W	RG03	1-216-845-11	METAL CHIP	100K	5%	1/10W
R849	1-216-815-11	METAL CHIP	330	5%	1/10W	RG04	1-216-845-11	METAL CHIP	100K	5%	1/10W
R850	1-216-817-11	METAL CHIP	470	5%	1/10W	RG05	1-216-845-11	METAL CHIP	100K	5%	1/10W
R851	1-216-819-11	METAL CHIP	680	5%	1/10W	RG06	1-216-845-11	METAL CHIP	100K	5%	1/10W
R852	1-216-821-11	METAL CHIP	1K	5%	1/10W	RG07	1-216-845-11	METAL CHIP	100K	5%	1/10W
R853	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	RG08	1-216-845-11	METAL CHIP	100K	5%	1/10W
R854	1-216-833-11	METAL CHIP	10K	5%	1/10W	RG09	1-216-845-11	METAL CHIP	100K	5%	1/10W
R855	1-216-837-11	METAL CHIP	22K	5%	1/10W	RG10	1-216-845-11	METAL CHIP	100K	5%	1/10W
R856	1-216-833-11	METAL CHIP	10K	5%	1/10W	RG11	1-216-845-11	METAL CHIP	100K	5%	1/10W
R857	1-216-809-11	METAL CHIP	100	5%	1/10W	RG12	1-216-845-11	METAL CHIP	100K	5%	1/10W
R859	1-216-809-11	METAL CHIP	100	5%	1/10W	RP01	1-216-845-11	METAL CHIP	100K	5%	1/10W
R860	1-216-833-11	METAL CHIP	10K	5%	1/10W	RP02	1-216-845-11	METAL CHIP	100K	5%	1/10W

CONTROL

HP

MAIN

Ref. No.	Part No.	Description	Remark			
RP03	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP04	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP05	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP06	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP07	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP08	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP09	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP10	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP11	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP12	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP13	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP14	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP15	1-216-845-11	METAL CHIP	100K	5%	1/10W	
RP16	1-216-845-11	METAL CHIP	100K	5%	1/10W	
< VARIABLE RESISTOR >						
RV801	1-477-823-11	ENCODER, ROTARY				
< SWITCH >						
S801	1-771-410-21	SWITCH, TACTILE (■)				
S802	1-771-410-21	SWITCH, TACTILE (ALBUM +)				
S803	1-771-410-21	SWITCH, TACTILE (ALBUM -)				
S804	1-771-410-21	SWITCH, TACTILE (TUNING + ▶▶▶▶▶)				
S805	1-771-410-21	SWITCH, TACTILE (TUNING - ◀◀◀◀◀)				
S806	1-771-410-21	SWITCH, TACTILE (DISPLAY)				
S807	1-771-410-21	SWITCH, TACTILE (i-Bass)				
S808	1-771-410-21	SWITCH, TACTILE (BASS/TREBLE)				
S809	1-771-410-21	SWITCH, TACTILE (I/⏻)				
S810	1-771-410-21	SWITCH, TACTILE (TAPE ▶)				
S811	1-771-410-21	SWITCH, TACTILE (CD ▶▶▶)				
S812	1-771-410-21	SWITCH, TACTILE (TUNER/BAND)				
S813	1-771-410-21	SWITCH, TACTILE (SYNCHRO REC)				
S814	1-771-410-21	SWITCH, TACTILE (● REC PAUSE/START)				
S815	1-771-410-21	SWITCH, TACTILE	(PLAY MODE/TUNING MODE)			
< VIBRATOR >						
X801	1-760-252-12	VIBRATOR, CRYSTAL (32.768 kHz)				
X802	1-795-004-21	VIBRATOR, CERAMIC (10 MHz)				

HP BOARD						

< CAPACITOR >						
C520	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C521	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C525	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V	
C526	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V	
< CONNECTOR >						
CNB501		not supplied				
< DIODE >						
D501	8-719-991-33	DIODE 1SS133T-77				
D502	8-719-991-33	DIODE 1SS133T-77				

Ref. No.	Part No.	Description	Remark			
< FERRITE BEAD >						
FB501	1-410-396-41	FERRITE	0.45uH			
< JACK >						
J301	1-815-325-11	JACK (PHONES)				
< RESISTOR >						
R525	1-249-407-11	CARBON	150	5%	1/4W	
R526	1-249-407-11	CARBON	150	5%	1/4W	

A-4750-619-A	MAIN BOARD, COMPLETE					

< CAPACITOR >						
C101	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	
C102	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	
C103	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
C104	1-126-947-11	ELECT	47uF	20%	35V	
C106	1-162-995-11	CERAMIC CHIP	0.022uF		50V	
C107	1-126-961-11	ELECT	2.2uF	20%	50V	
C108	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	
C109	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C110	1-164-218-11	CERAMIC CHIP	180PF	5%	50V	
C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	
C112	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C113	1-126-957-11	ELECT	0.22uF	20%	50V	
C114	1-126-959-11	ELECT	0.47uF	20%	50V	
C115	1-130-497-00	MYLAR	0.15uF	5%	50V	
C116	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C117	1-164-730-11	CERAMIC CHIP	0.0012uF	10%	50V	
C118	1-164-373-11	CERAMIC CHIP	0.033uF		25V	
C119	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	
C127	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C132	1-126-963-11	ELECT	4.7uF	20%	50V	
C133	1-130-492-11	MYLAR	0.056uF	5%	50V	
C134	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C136	1-126-964-11	ELECT	10uF	20%	50V	
C137	1-162-995-11	CERAMIC CHIP	0.022uF		50V	
C201	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	
C202	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V	
C203	1-162-927-11	CERAMIC CHIP	100PF	5%	50V	
C204	1-126-947-11	ELECT	47uF	20%	35V	
C206	1-162-995-11	CERAMIC CHIP	0.022uF		50V	
C207	1-126-961-11	ELECT	2.2uF	20%	50V	
C208	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	
C209	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V	
C210	1-164-218-11	CERAMIC CHIP	180PF	5%	50V	
C211	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V	
C212	1-164-676-11	CERAMIC CHIP	2200PF	5%	16V	
C213	1-126-957-11	ELECT	0.22uF	20%	50V	
C214	1-126-959-11	ELECT	0.47uF	20%	50V	
C215	1-130-497-00	MYLAR	0.15uF	5%	50V	
C216	1-162-962-11	CERAMIC CHIP	470PF	10%	50V	
C217	1-164-730-11	CERAMIC CHIP	0.0012uF	10%	50V	
C218	1-164-373-11	CERAMIC CHIP	0.033uF		25V	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark
C219	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V			< CONNECTOR >	
C227	1-162-962-11	CERAMIC CHIP	470PF	10%	50V				
C232	1-126-963-11	ELECT	4.7uF	20%	50V				
C233	1-130-492-11	MYLAR	0.056uF	5%	50V				
C234	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V				
C236	1-126-964-11	ELECT	10uF	20%	50V				
C237	1-162-995-11	CERAMIC CHIP	0.022uF		50V				
C301	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V				
C302	1-126-923-91	ELECT	220uF	20%	10V				
C305	1-126-923-91	ELECT	220uF	20%	10V				
C309	1-126-767-11	ELECT	1000uF	20%	16V				
C312	1-162-960-11	CERAMIC CHIP	220PF	10%	50V				
C313	1-126-933-11	ELECT	100uF	20%	16V				
C314	1-136-967-11	FILM	0.012uF	5%	100V				
C319	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C320	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C324	1-126-934-11	ELECT	220uF	20%	16V				
C326	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V				
C327	1-126-947-11	ELECT	47uF	20%	35V				
C328	1-126-933-11	ELECT	100uF	20%	16V				
C329	1-126-933-11	ELECT	100uF	20%	16V				
C330	1-126-923-91	ELECT	220uF	20%	10V				
C331	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C332	1-126-923-91	ELECT	220uF	20%	10V				
C335	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C336	1-126-965-91	ELECT	22uF	20%	50V				
C337	1-126-965-91	ELECT	22uF	20%	50V				
C338	1-104-658-91	ELECT	100uF	20%	10V				
C339	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C340	1-165-621-91	CERAMIC CHIP	0.1uF		50V				
C341	1-165-621-91	CERAMIC CHIP	0.1uF		50V				
C345	1-126-964-11	ELECT	10uF	20%	50V				
C346	1-126-768-11	ELECT	2200uF	20%	16V				
C347	1-165-621-91	CERAMIC CHIP	0.1uF		50V				
C350	1-126-964-11	ELECT	10uF	20%	50V				
C351	1-126-947-11	ELECT	47uF	20%	35V				
C352	1-126-953-11	ELECT	2200uF	20%	35V				
C353	1-126-953-11	ELECT	2200uF	20%	35V				
C354	1-126-961-11	ELECT	2.2uF	20%	50V				
C355	1-130-485-00	MYLAR	0.015uF	5%	50V				
C356	1-130-481-00	MYLAR	0.0068uF	5%	50V				
C357	1-130-481-00	MYLAR	0.0068uF	5%	50V				
C358	1-130-486-00	MYLAR	0.018uF	5%	50V				
C360	1-126-964-11	ELECT	10uF	20%	50V				
C361	1-126-947-11	ELECT	47uF	20%	35V				
C362	1-126-964-11	ELECT	10uF	20%	50V				
C363		not supplied							
C364	1-107-726-91	CERAMIC CHIP	0.01uF	10%	16V				
C384	1-162-974-11	CERAMIC CHIP	0.01uF		50V				
C390	1-164-360-11	CERAMIC CHIP	0.1uF		16V				
C391	1-164-360-11	CERAMIC CHIP	0.1uF		16V				
C393	1-164-315-11	CERAMIC CHIP	470PF	5%	50V				
C394	1-164-159-21	CERAMIC	0.1uF		50V				
C395	1-126-933-11	ELECT	100uF	20%	16V				
C396	1-126-923-91	ELECT	220uF	20%	10V				
C399	1-126-947-11	ELECT	47uF	20%	35V				
* CN301	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P							
* CN302	1-784-785-11	CONNECTOR, FFC 24P							
CN303	1-784-777-11	CONNECTOR, FFC 16P							
CN305	1-784-835-21	CONNECTOR, FFC (LIF (NON-ZIF)) 27P							
CN501B	1-564-507-11	PLUG, CONNECTOR 4P							
CNB307	1-564-507-11	PLUG, CONNECTOR 4P							
* CNB308	1-564-512-11	PLUG, CONNECTOR 9P							
CNB903		not supplied							
CNB903A		not supplied							
CNB903B		not supplied							
		< DIODE >							
D301	8-719-991-33	DIODE 1SS133T-77							
D302	8-719-991-33	DIODE 1SS133T-77							
D303	8-719-109-72	DIODE RD3.9ESB2							
D304	8-719-109-66	DIODE RD3.3ESB2							
D305	8-719-056-78	DIODE UDZ-TE-17-4.3B							
D306	8-719-056-78	DIODE UDZ-TE-17-4.3B							
D307	8-719-991-33	DIODE 1SS133T-77							
D308	8-719-991-33	DIODE 1SS133T-77							
D309	8-719-991-33	DIODE 1SS133T-77							
D310	8-719-109-72	DIODE RD3.9ESB2							
D311	8-719-109-66	DIODE RD3.3ESB2							
D312	8-719-063-79	DIODE 1N4002B							
D313	8-719-063-79	DIODE 1N4002B							
D317	8-719-991-33	DIODE 1SS133T-77							
D318	8-719-982-27	DIODE MTZJ-33C							
D319	8-719-991-33	DIODE 1SS133T-77							
D320	8-719-063-79	DIODE 1N4002B							
D386	8-719-991-33	DIODE 1SS133T-77							
D387	8-719-991-33	DIODE 1SS133T-77							
D388	8-719-991-33	DIODE 1SS133T-77							
D389	8-719-991-33	DIODE 1SS133T-77							
D390	8-719-109-85	DIODE RD5.1ESB2							
D392	8-719-109-54	DIODE RD2.2ESB2							
D393	8-719-991-33	DIODE 1SS133T-77							
D396	8-719-991-33	DIODE 1SS133T-77							
		< FERRITE BEAD >							
FB301	1-410-396-41	FERRITE 0.45uH							
FB302	1-410-396-41	FERRITE 0.45uH							
		< IC >							
IC302	6-702-895-01	IC BD3881FV							
		< JACK >							
J302	1-536-708-81	TERMINAL BOARD, PUSH (4P) (SPEAKER IMPEDANCE USE 6-16Ω)							
* J303	1-750-178-31	JACK, PIN 2P (MD)							
		< SHORT >							
JR101	1-216-864-11	SHORT CHIP 0							
JR201	1-216-864-11	SHORT CHIP 0							
JR302	1-216-296-11	SHORT CHIP 0							
JR303	1-216-296-11	SHORT CHIP 0							

MAIN

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
							R118	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
							R119	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	
JW323	1-410-509-11	INDUCTOR	10uH				R120	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	
							R121	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
							R122	1-216-843-11	METAL CHIP	68K	5%	1/10W	
L101	1-422-009-13	COIL, AIR-CORE					R123	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
L201	1-422-009-13	COIL, AIR-CORE					R124	1-216-835-11	METAL CHIP	15K	5%	1/10W	
							R125	1-216-837-11	METAL CHIP	22K	5%	1/10W	
							R126	1-216-837-11	METAL CHIP	22K	5%	1/10W	
Q311	8-729-037-13	TRANSISTOR	KTA1271Y				R128	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	
Q312	8-729-212-02	TRANSISTOR	2SC2120-Y				R131	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
Q313	8-729-212-02	TRANSISTOR	2SC2120-Y				R132	1-216-821-11	METAL CHIP	1K	5%	1/10W	
Q314	8-729-037-13	TRANSISTOR	KTA1271Y				R136	1-216-833-11	METAL CHIP	10K	5%	1/10W	
Q315	8-729-054-16	TRANSISTOR	KRC402-RTK				R137	1-216-822-11	METAL CHIP	1.2K	5%	1/10W	
Q317	8-729-043-89	TRANSISTOR	KTC3205Y				R138	1-260-093-11	CARBON	330	5%	1/2W	
Q319	8-729-040-76	TRANSISTOR	KTA1273-Y-AT				R143	1-216-834-11	METAL CHIP	12K	5%	1/10W	
Q320	8-729-054-16	TRANSISTOR	KRC402-RTK				R144	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	
Q326	8-729-034-50	TRANSISTOR	KTA1504				R201	1-216-833-11	METAL CHIP	10K	5%	1/10W	
Q327	8-729-034-50	TRANSISTOR	KTA1504				R202	1-216-840-11	METAL CHIP	39K	5%	1/10W	
Q328	8-729-045-62	TRANSISTOR	2SK2158-T2B				R203	1-216-817-11	METAL CHIP	470	5%	1/10W	
Q329	8-729-045-62	TRANSISTOR	2SK2158-T2B				R204	1-216-806-11	METAL CHIP	56	5%	1/10W	
Q330	8-729-045-62	TRANSISTOR	2SK2158-T2B				R205	1-216-852-11	METAL CHIP	390K	5%	1/10W	
Q331	8-729-054-03	TRANSISTOR	KRA303-RTK				R206	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	
Q332	8-729-054-03	TRANSISTOR	KRA303-RTK				R207	1-216-847-11	METAL CHIP	150K	5%	1/10W	
Q333	8-729-054-16	TRANSISTOR	KRC402-RTK				R208	1-216-835-11	METAL CHIP	15K	5%	1/10W	
Q334	8-729-037-03	TRANSISTOR	KTA1266GR-AT				R209	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
Q335	8-729-037-03	TRANSISTOR	KTA1266GR-AT				R211	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
Q336	8-729-037-03	TRANSISTOR	KTA1266GR-AT				R212	1-216-839-11	METAL CHIP	33K	5%	1/10W	
Q337	8-729-037-03	TRANSISTOR	KTA1266GR-AT				R213	1-216-817-11	METAL CHIP	470	5%	1/10W	
Q338	8-729-054-16	TRANSISTOR	KRC402-RTK				R214	1-216-818-11	METAL CHIP	560	5%	1/10W	
Q342	8-729-120-28	TRANSISTOR	2SC1623-L5L6				R215	1-216-827-11	METAL CHIP	3.3K	5%	1/10W	
Q343	8-729-120-28	TRANSISTOR	2SC1623-L5L6				R216	1-216-832-11	METAL CHIP	8.2K	5%	1/10W	
Q344	8-729-100-19	TRANSISTOR	2SC2001				R217	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
Q345	8-729-100-19	TRANSISTOR	2SC2001				R218	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
Q346	8-729-801-93	TRANSISTOR	2SD1387-3				R219	1-216-823-11	METAL CHIP	1.5K	5%	1/10W	
Q347	8-729-037-03	TRANSISTOR	KTA1266GR-AT				R220	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	
Q348	8-729-036-58	TRANSISTOR	KRC102M-AT				R221	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
Q349	8-729-037-13	TRANSISTOR	KTA1271Y				R222	1-216-843-11	METAL CHIP	68K	5%	1/10W	
Q350		not supplied				R223	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		
							R224	1-216-835-11	METAL CHIP	15K	5%	1/10W	
							R225	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R101	1-216-833-11	METAL CHIP	10K	5%	1/10W		R226	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R102	1-216-840-11	METAL CHIP	39K	5%	1/10W		R228	1-216-826-11	METAL CHIP	2.7K	5%	1/10W	
R103	1-216-817-11	METAL CHIP	470	5%	1/10W		R231	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R104	1-216-806-11	METAL CHIP	56	5%	1/10W								
R105	1-216-852-11	METAL CHIP	390K	5%	1/10W		R232	1-216-821-11	METAL CHIP	1K	5%	1/10W	
							R236	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R106	1-216-830-11	METAL CHIP	5.6K	5%	1/10W		R237	1-216-822-11	METAL CHIP	1.2K	5%	1/10W	
R107	1-216-847-11	METAL CHIP	150K	5%	1/10W		R243	1-216-834-11	METAL CHIP	12K	5%	1/10W	
R108	1-216-835-11	METAL CHIP	15K	5%	1/10W		R244	1-216-830-11	METAL CHIP	5.6K	5%	1/10W	
R109	1-216-825-11	METAL CHIP	2.2K	5%	1/10W								
R111	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		R301	1-216-841-11	METAL CHIP	47K	5%	1/10W	
							R302	1-216-835-11	METAL CHIP	15K	5%	1/10W	
R112	1-216-839-11	METAL CHIP	33K	5%	1/10W		R303	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R113	1-216-817-11	METAL CHIP	470	5%	1/10W		R315	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R114	1-216-818-11	METAL CHIP	560	5%	1/10W		R316		not supplied				
R115	1-216-827-11	METAL CHIP	3.3K	5%	1/10W								
R116	1-216-832-11	METAL CHIP	8.2K	5%	1/10W		R317	1-216-841-11	METAL CHIP	47K	5%	1/10W	
							R318	1-216-817-11	METAL CHIP	470	5%	1/10W	
R117	1-216-825-11	METAL CHIP	2.2K	5%	1/10W		R319	1-216-857-11	METAL CHIP	1M	5%	1/10W	

MAIN

POWER

Ref. No.	Part No.	Description	Remark		
R320	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R321	1-216-845-11	METAL CHIP	100K	5%	1/10W
R322	1-216-816-11	METAL CHIP	390	5%	1/10W
R323	1-216-821-11	METAL CHIP	1K	5%	1/10W
R324	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R325	1-216-845-11	METAL CHIP	100K	5%	1/10W
R326	1-216-845-11	METAL CHIP	100K	5%	1/10W
R327	1-216-833-11	METAL CHIP	10K	5%	1/10W
R328	1-249-409-11	CARBON	220	5%	1/4W
R331	1-249-409-11	CARBON	220	5%	1/4W
R332	1-249-409-11	CARBON	220	5%	1/4W
R336	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R337	1-216-845-11	METAL CHIP	100K	5%	1/10W
R338	1-249-393-11	CARBON	10	5%	1/4W
R339	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R340	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R341	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R342	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R343	1-249-385-11	CARBON	2.2	5%	1/4W
R348	1-216-821-11	METAL CHIP	1K	5%	1/10W
R349	1-216-842-11	METAL CHIP	56K	5%	1/10W
R350	1-216-833-11	METAL CHIP	10K	5%	1/10W
R351	1-216-833-11	METAL CHIP	10K	5%	1/10W
R352	1-249-409-11	CARBON	220	5%	1/4W
△ R353	1-215-857-71	METAL OXIDE	10	5%	1W
R358	1-216-842-11	METAL CHIP	56K	5%	1/10W
R359	1-260-095-11	CARBON	470	5%	1/2W
△ R360	1-219-787-17	FUSIBLE	5.6	5%	1/4W
△ R361	1-219-787-17	FUSIBLE	5.6	5%	1/4W
R362	1-216-836-11	METAL CHIP	18K	5%	1/10W
R363	1-216-836-11	METAL CHIP	18K	5%	1/10W
R364	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W
R365	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R366	1-216-837-11	METAL CHIP	22K	5%	1/10W
R367	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R368	1-216-833-11	METAL CHIP	10K	5%	1/10W
R370	1-216-833-11	METAL CHIP	10K	5%	1/10W
R371	1-216-833-11	METAL CHIP	10K	5%	1/10W
R372	1-247-807-31	CARBON	100	5%	1/4W
R373		not supplied			
R374		not supplied			
R387	1-216-833-11	METAL CHIP	10K	5%	1/10W
R388		not supplied			
R389	1-216-821-11	METAL CHIP	1K	5%	1/10W
R390	1-216-821-11	METAL CHIP	1K	5%	1/10W
R391	1-260-298-51	CARBON	3.3	5%	1/2W
R392	1-216-809-11	METAL CHIP	100	5%	1/10W
R393	1-249-393-11	CARBON	10	5%	1/4W
R394	1-216-833-11	METAL CHIP	10K	5%	1/10W
R395	1-216-845-11	METAL CHIP	100K	5%	1/10W
R396	1-216-837-11	METAL CHIP	22K	5%	1/10W
R397	1-216-833-11	METAL CHIP	10K	5%	1/10W
< TRANSFORMER >					
T301	1-423-980-11	TRANSFORMER, BIAS OSCILLATION			

Ref. No.	Part No.	Description	Remark		
	A-1059-097-A	POWER BOARD, COMPLETE (KR)			
	A-4752-018-A	POWER BOARD, COMPLETE (SP, E51)			
	A-4752-042-A	POWER BOARD, COMPLETE (AUS)			
	1-861-721-11	POWER BOARD			

		< CAPACITOR >			
C904	1-128-553-11	ELECT	220uF	20%	63V
C905	1-161-055-00	CERAMIC	0.022uF	10%	25V
C906	1-161-055-00	CERAMIC	0.022uF	10%	25V
C907	1-161-055-00	CERAMIC	0.022uF	10%	25V
C908	1-161-055-00	CERAMIC	0.022uF	10%	25V
C909	1-161-055-00	CERAMIC	0.022uF	10%	25V
C910	1-161-055-00	CERAMIC	0.022uF	10%	25V
C911	1-161-055-00	CERAMIC	0.022uF	10%	25V
C912	1-161-055-00	CERAMIC	0.022uF	10%	25V
C913	1-126-943-11	ELECT	2200uF	20%	25V
		< CONNECTOR >			
* CN901	1-793-660-11	PIN, CONNECTOR (PC BOARD) 3P			
* CN903	1-764-334-11	PLUG, CONNECTOR 11P			
		< DIODE >			
D905	8-719-200-02	DIODE 10E-2			
D906	8-719-991-33	DIODE 1SS133T-77			
D907	8-719-991-33	DIODE 1SS133T-77			
D908	8-719-991-33	DIODE 1SS133T-77			
D909	8-719-991-33	DIODE 1SS133T-77			
D910	8-719-991-33	DIODE 1SS133T-77			
D911	8-719-063-79	DIODE 1N4002B			
D912	8-719-063-79	DIODE 1N4002B			
D913	8-719-063-79	DIODE 1N4002B			
D914	8-719-063-79	DIODE 1N4002B			
D916	8-719-046-47	DIODE 1N5401TM			
D917	8-719-046-47	DIODE 1N5401TM			
D918	8-719-046-47	DIODE 1N5401TM			
D919	8-719-046-47	DIODE 1N5401TM			
D920	8-719-991-33	DIODE 1SS133T-77			
D921	8-719-991-33	DIODE 1SS133T-77			
D922	8-719-991-33	DIODE 1SS133T-77			
D923	8-719-991-33	DIODE 1SS133T-77			
		< FUSE >			
△ F904	1-245-420-11	IC LINK	3A	60V	
		< LINE FILTER >			
△ LF901	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)			
		(MX, SP, TW, AR, E51, AUS)			
		< RESISTOR >			
R901	1-249-437-11	CARBON	47K	5%	1/4W
R902	1-249-437-11	CARBON	47K	5%	1/4W
R903	1-259-882-11	CARBON	3.3M	5%	1/4W
					(AEP, UK)
R904	1-249-393-11	CARBON	10	5%	1/4W
R905	1-249-421-11	CARBON	2.2K	5%	1/4W
R906	1-249-421-11	CARBON	2.2K	5%	1/4W

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

CX-LEM330

POWER

Ref. No.	Part No.	Description	Remark
		< RELAY >	
△ RY901	1-755-276-11	RELAY, POWER	
		< SWITCH >	
△ S901	1-571-309-11	SWITCH (VOLTAGE SELECTOR) (MX, SP, TW, AR, E51, AUS)	
		< TRANSFORMER >	
△ T901	1-443-410-11	TRANSFORMER, POWER (AEP, UK, KR)	
△ T901	1-443-412-11	TRANSFORMER, POWER (MX, SP, TW, AR, E51, AUS)	

		MISCELLANEOUS	

△ 5	1-696-848-12	CORD, POWER (AUS)	
△ 5	1-769-079-23	CORD, POWER (KR)	
△ 5	1-769-744-52	CORD, POWER (AEP, UK, MX, SP, E51)	
△ 5	1-783-940-73	CORD, POWER (AR)	
△ 5	1-827-597-41	CORD, POWER (TW)	
6	1-693-628-11	TUNER (FM/AM) (MX, SP, TW, AR, E51, AUS)	
6	1-693-629-11	TUNER (FM/AM) (AEP, UK, KR)	
52	1-757-791-11	WIRE (FLAT TYPE) (16 CORE)	
53	1-828-965-11	WIRE (FLAT TYPE) (11 CORE)	
55	1-773-220-11	WIRE (FLAT TYPE) (25 CORE)	
56	1-828-944-11	WIRE (FLAT TYPE) (7 CORE)	
110	1-796-352-41	DECK, MECHANICAL (CMAL5Z220A)	
163	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
164	1-824-048-12	WIRE (FLAT TYPE) (27 CORE) (EXCEPT AR)	
167	8-820-221-01	DEVICE, OPTICAL PICK-UP (KSM-213EDP/C2NP)	
LF901	1-469-636-11	CORE, FERRITE (ESD-R-25SD) (AEP, UK, KR)	
M301	1-787-103-11	FAN, DC	
S101	1-771-853-11	SWITCH, DETECTION	
△ T902	1-443-273-11	TRANSFORMER, POWER (AEP, UK)	
△ T902	1-443-304-11	TRANSFORMER, POWER (MX, TW, SP, AR, E51, AUS)	
△ T902	1-443-364-11	TRANSFORMER, POWER (KR)	

The components identified by mark △ or dotted line with mark △ are critical for safety.
Replace only with part number specified.

MEMO

REVISION HISTORY

Clicking the version allows you to jump to the revised page.

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