

HCD-GP5

SERVICE MANUAL

Ver 1.5 2004.10



*US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model*

HCD-GP5 is the Amplifier, CD player, Tape Deck and Tuner section in CMT-GP5.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM55A-K6BD44B
	Base Unit Name	BU-K1BD44B
	Optical Pick-up Name	KSM-213D
TAPE Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CMAL1Z240A

SPECIFICATIONS

Amplifier section

AUDIO POWER SPECIFICATIONS:
(U.S.A. model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 6-ohm loads, both channels driven, from 120 - 10,000 Hz; rated 35 watts per channel minimum RMS power, with no more than 10% total harmonic distortion from 250 milliwatts to rated output.

North American model:

Continuous RMS power output (reference):
35 + 35 W
(6 ohms at 1 kHz, 10% THD)

European model:

DIN power output (rated): 30 + 30 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
30 + 30 W
(6 ohms at 1 kHz, 10% THD)

Music power output (reference):
60 + 60 W

Other models:

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

DIN power output (rated): 30 + 30 W
(6 ohms at 1 kHz, DIN)

Continuous RMS power output (reference):
30 + 30 W
(6 ohms at 1 kHz, 10% THD)

Inputs
MD IN (phono jacks):

Sensitivity 500 mV,
impedance 47 kilohms

Outputs
PHONES (stereo minijack):

Accepts headphones with
an impedance of 8 ohms or
more

SPEAKERS:
Accepts impedance of 6 to
16 ohms.

CD player section

System
Compact disc and digital
audio system

Laser
Semiconductor laser
($\lambda=780$ nm)

Emission duration:
continuous

Frequency response
2 Hz - 20 kHz (± 0.5 dB)

Tape deck section

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

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range
87.5 - 108.0 MHz (50-kHz
step)

Antenna
Antenna terminals
Intermediate frequency
10.7 MHz

AM tuner section

Tuning range
Pan-American model:
530 - 1,710 kHz
(with the tuning interval
set at 10 kHz)
531 - 1,710 kHz
(with the tuning interval
set at 9 kHz)

European model:
531 - 1,602 kHz
(with the tuning interval
set at 9 kHz)

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)

Antenna
AM loop antenna, external
antenna terminal
Intermediate frequency
450 kHz

— Continued on next page —

MICRO HI-FI COMPONENT SYSTEM

9-877-380-06

2004J16-1

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Sony Corporation

Personal Audio Company

Published by Sony Engineering Corporation

SONY®

General

Power requirements

North American model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
Australian model:	230 - 240 V AC, 50/60 Hz
Hong Kong model:	220 - 240 V AC, 50/60 Hz
Singaporean model:	220 - 240 V AC, 50/60 Hz
Other models:	110 - 120 V or 220 - 240 V AC, 50/60 Hz Adjustable with voltage selector

Power consumption

North American model:	60 watts
European model:	60 watts 0.3 watts (in the standby mode)
Other models:	60 watts
Dimensions (w/h/d)	Approx. 190 × 250 × 270 mm
Mass	Approx. 4.6 kg

Design and specifications are subject to change without notice.

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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.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE \triangle SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 SERVICING NOTES

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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

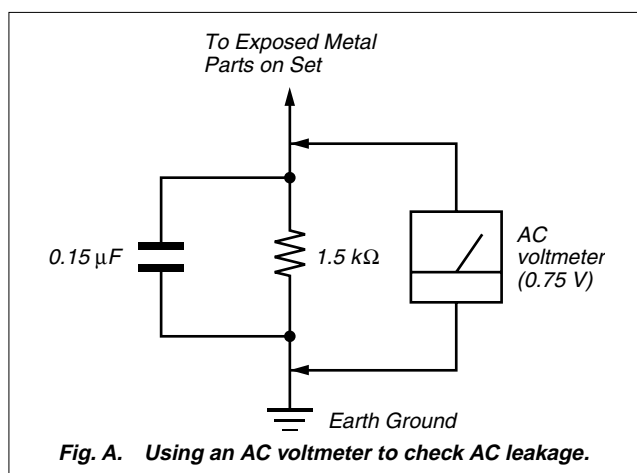
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.

Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

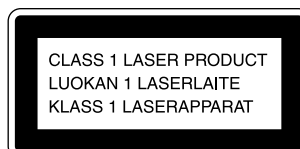
1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)



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. The CLASS 1 LASER PRODUCT MARKING is located on the exterior.



Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.

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

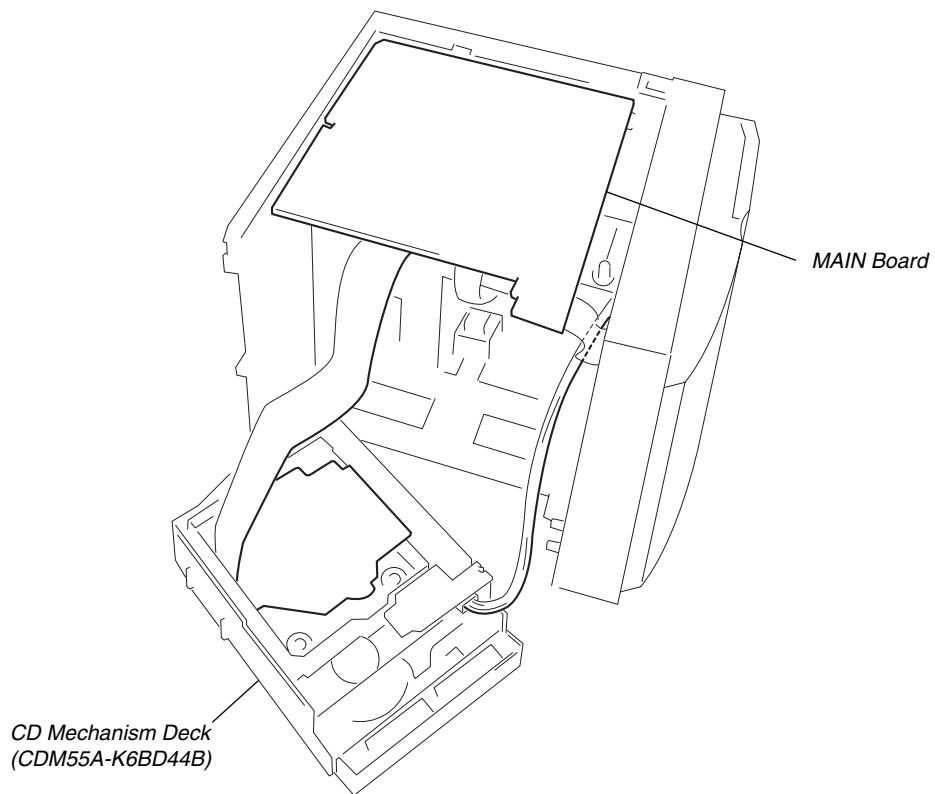
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

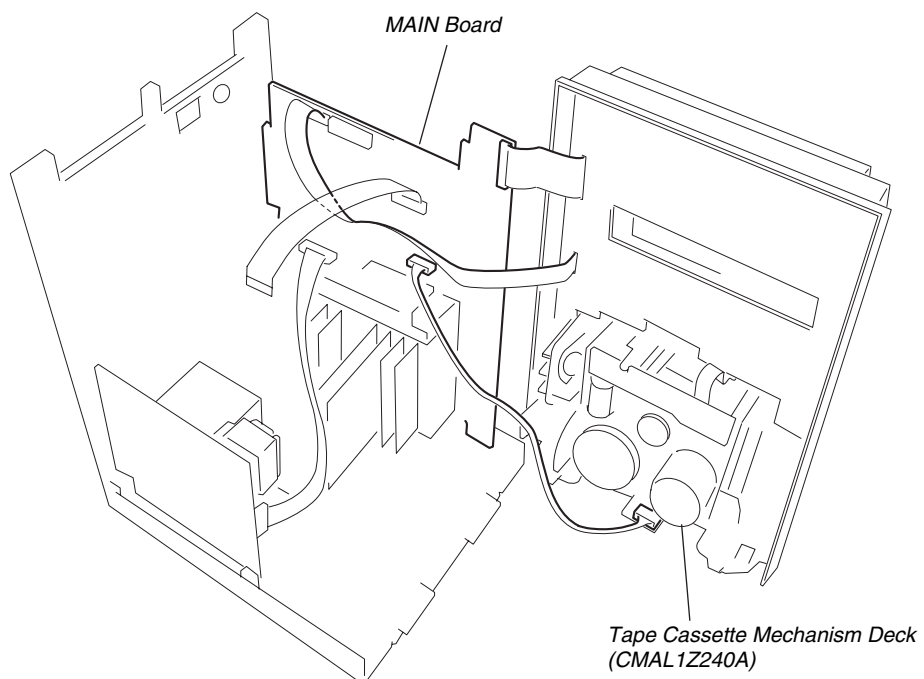
Carry out the “S curve check” in “CD section adjustment” and check that the S curve waveforms is output three times.

HCD-GP5

Service Position of the CD Mechanism Deck



Service Position of the Tape Cassette Mechanism Deck



SECTION 2 GENERAL

This section is extracted from instruction manual.

List of button locations and reference pages

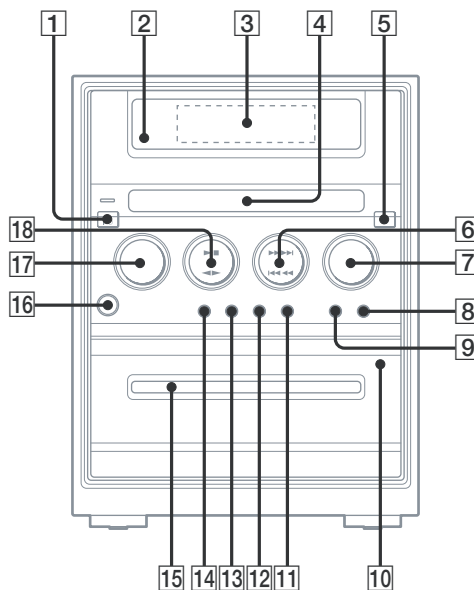
How to use this page

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

Name of button/part	Illustration number	Reference page
DISPLAY	8	(9, 10, 16)

Main unit

ALPHABETICAL ORDER		BUTTON DESCRIPTIONS
<p>A - M</p> <p>Cassette compartment 15</p> <p>CD SYNC 13 (12)</p> <p>DIRECTION 9 (11, 12, 15)</p> <p>Disc tray 4</p> <p>DISPLAY 8 (9, 10, 16)</p> <p>Display window 3</p> <p>DSG 11 (13)</p> <p>MD 17 (17)</p>	<p>P - Z</p> <p>PHONES jack 16</p> <p>PLAY MODE/TUNING MODE 9 (6, 7)</p> <p>Remote sensor 2</p> <p>TUNER/BAND 17 (8, 9)</p> <p>TUNING +/- 6 (8, 9)</p> <p>VOLUME +/- 7 (14, 15)</p>	<p>I/⏻ (power) 1 (5, 9, 14, 15)</p> <p>◀◀◀/▶▶▶ (go back/go forward or fast forward/rewind) 6 (5, 6, 7, 11, 12, 14, 15, 16)</p> <p>■ (stop) 12 (6, 7, 11, 12, 20)</p> <p>REC PAUSE/START ● 14 (12, 15)</p> <p>CD ▶▶ (play/pause) 18 (6, 7)</p> <p>TAPE ◀▶ (play) 18 (11, 12, 15)</p> <p>▲ (CD open/close) 5 (6)</p> <p>▲ PUSH (tape open/close) 10 (11)</p>



Remote control

ALPHABETICAL ORDER

A - M

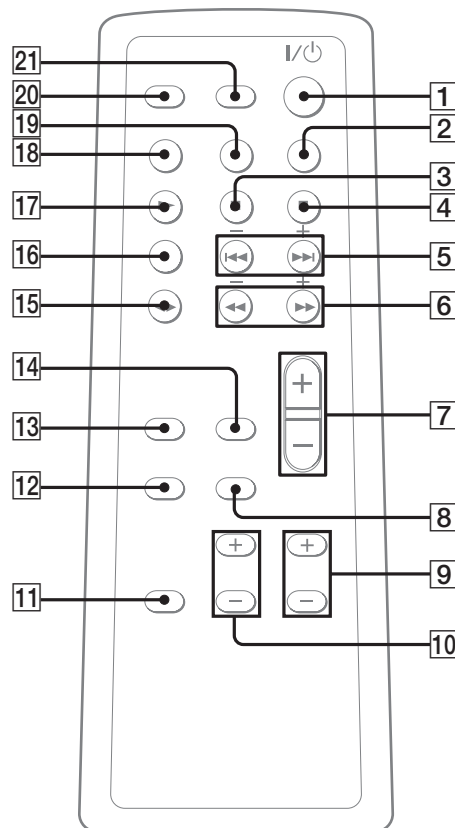
BASS +/- **10** (13)
 CLEAR **8** (8, 9)
 CLOCK/TIMER SELECT **20**
 (14, 15)
 CLOCK/TIMER SET **21** (5, 14,
 15)
 DISPLAY **2** (9, 10, 16)
 DSG **11** (13)
 MD **18** (17)

P - Z

PLAY MODE/DIRECTION **13**
 (6, 7, 11, 12, 15)
 PRESET +/- **5** (9)
 REPEAT/FM MODE **14** (7, 9)
 SLEEP **19** (13)
 TREBLE +/- **9** (13)
 TUNER BAND **16** (8, 9)
 TUNER MEMORY **12** (8)
 TUNING +/- **6** (8, 9)
 VOL +/- **7** (14, 15)

BUTTON DESCRIPTIONS

I/⏻ (power) **1** (5, 9, 14, 15)
 ⏮/⏭ (fast forward/rewind)
6 (6, 11)
 ⏪/⏩ (go back/go forward)
5 (5, 6, 7, 12, 14, 15, 16)
 ■ (stop) **4** (6, 7, 11, 12, 20)
 ⏸ (pause) **3** (6, 11)
 CD ▶ (play) **17** (6, 7)
 TAPE ◀▶ (play) **15** (11, 12,
 15)



Setting the clock

Use buttons on the remote for the operation.

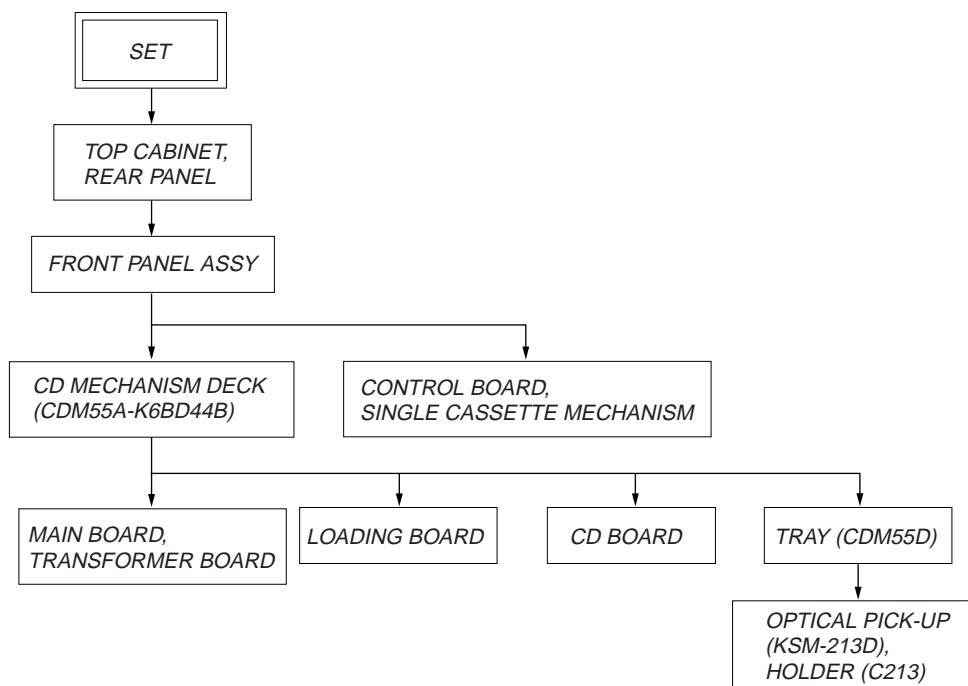
- 1** Press I/⏻ to turn on the system.
- 2** Press CLOCK/TIMER SET.
- 3** Press ⏪/⏩ repeatedly to set the hour.
- 4** Press CLOCK/TIMER SET.
- 5** Press ⏪/⏩ repeatedly to set the minute.
- 6** Press CLOCK/TIMER SET.
The clock starts working.

To adjust the clock

- 1** Press CLOCK/TIMER SET.
- 2** Press ⏪/⏩ to select "CLOCK", then press CLOCK/TIMER SET.
- 3** Do the same procedures as step 3 to 6 above.

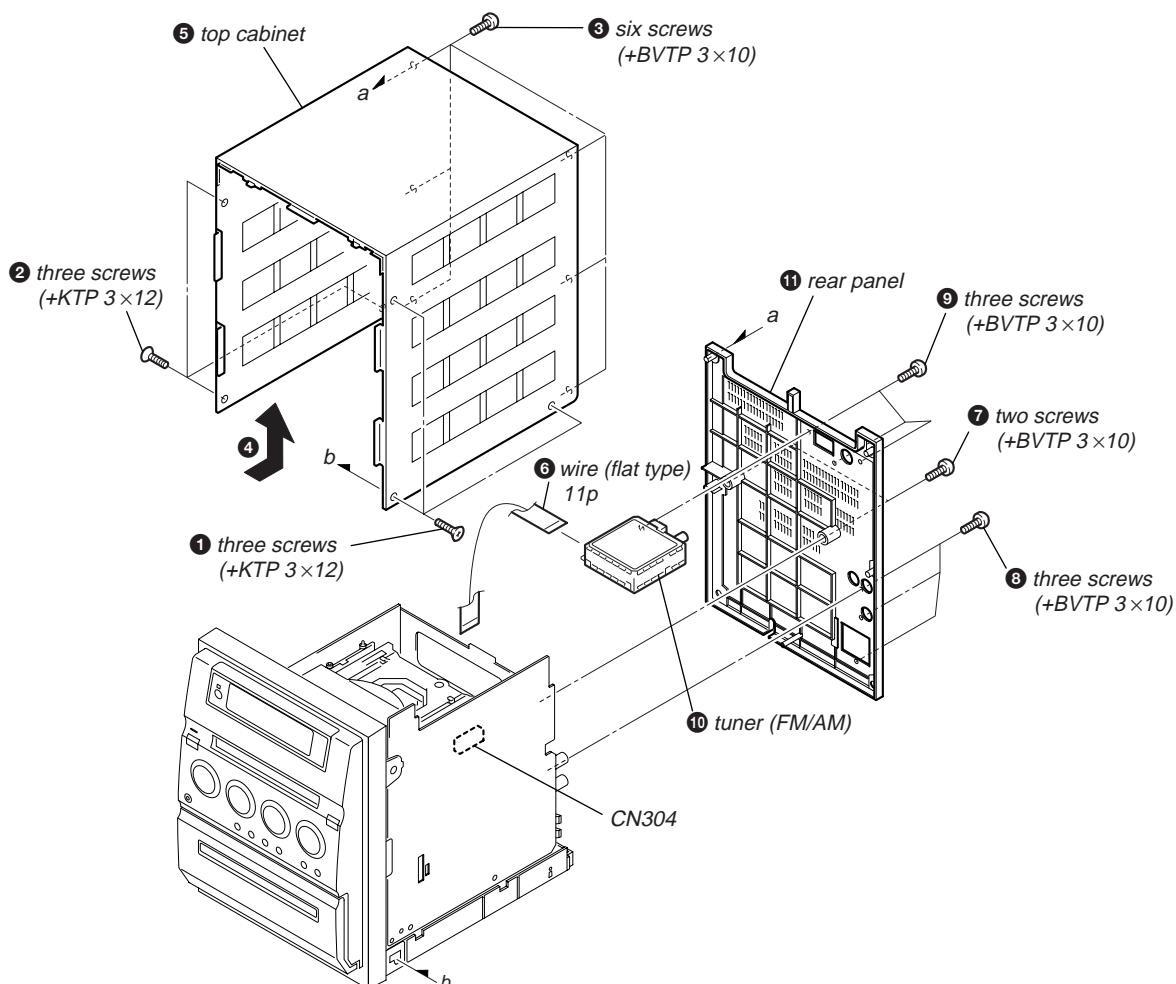
SECTION 3 DISASSEMBLY

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

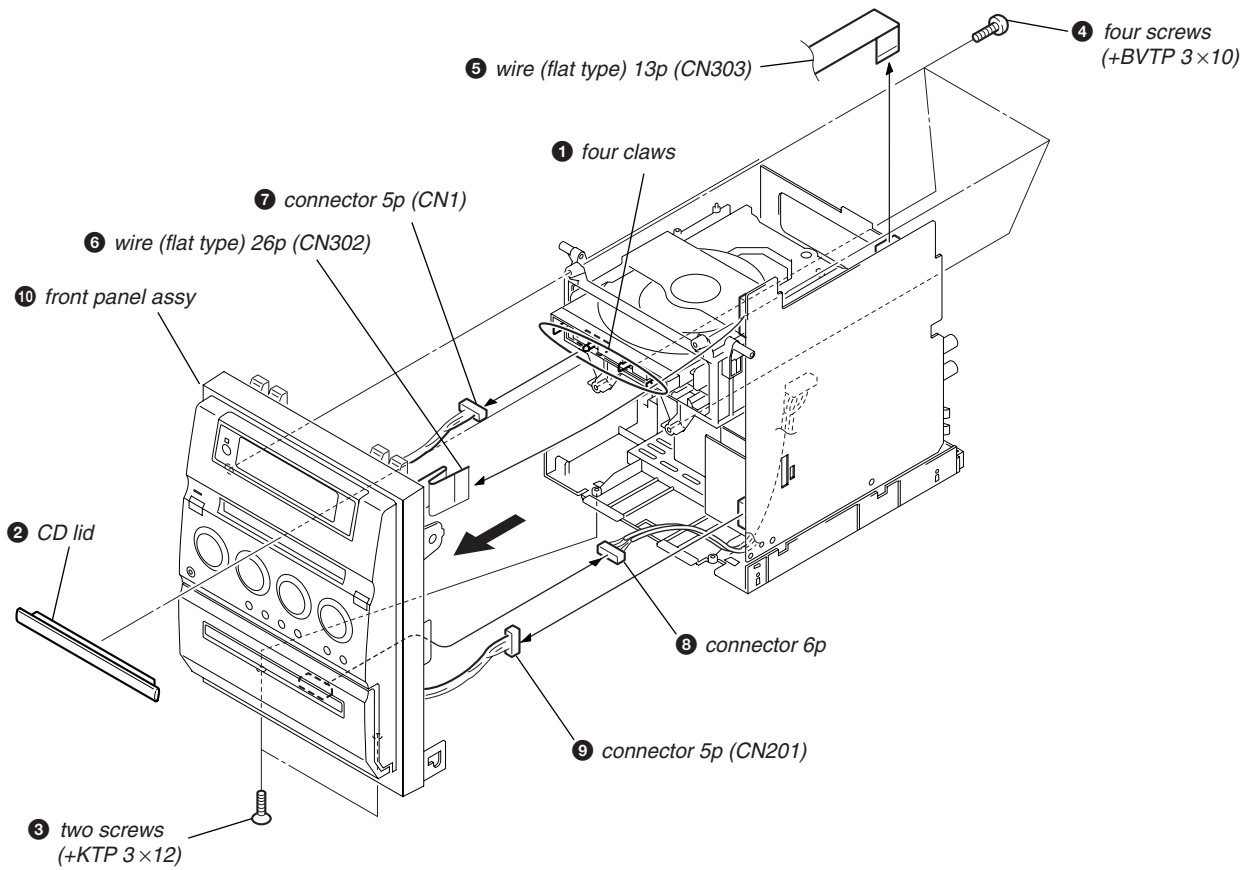


Note: Follow the disassembly procedure in the numerical order given.

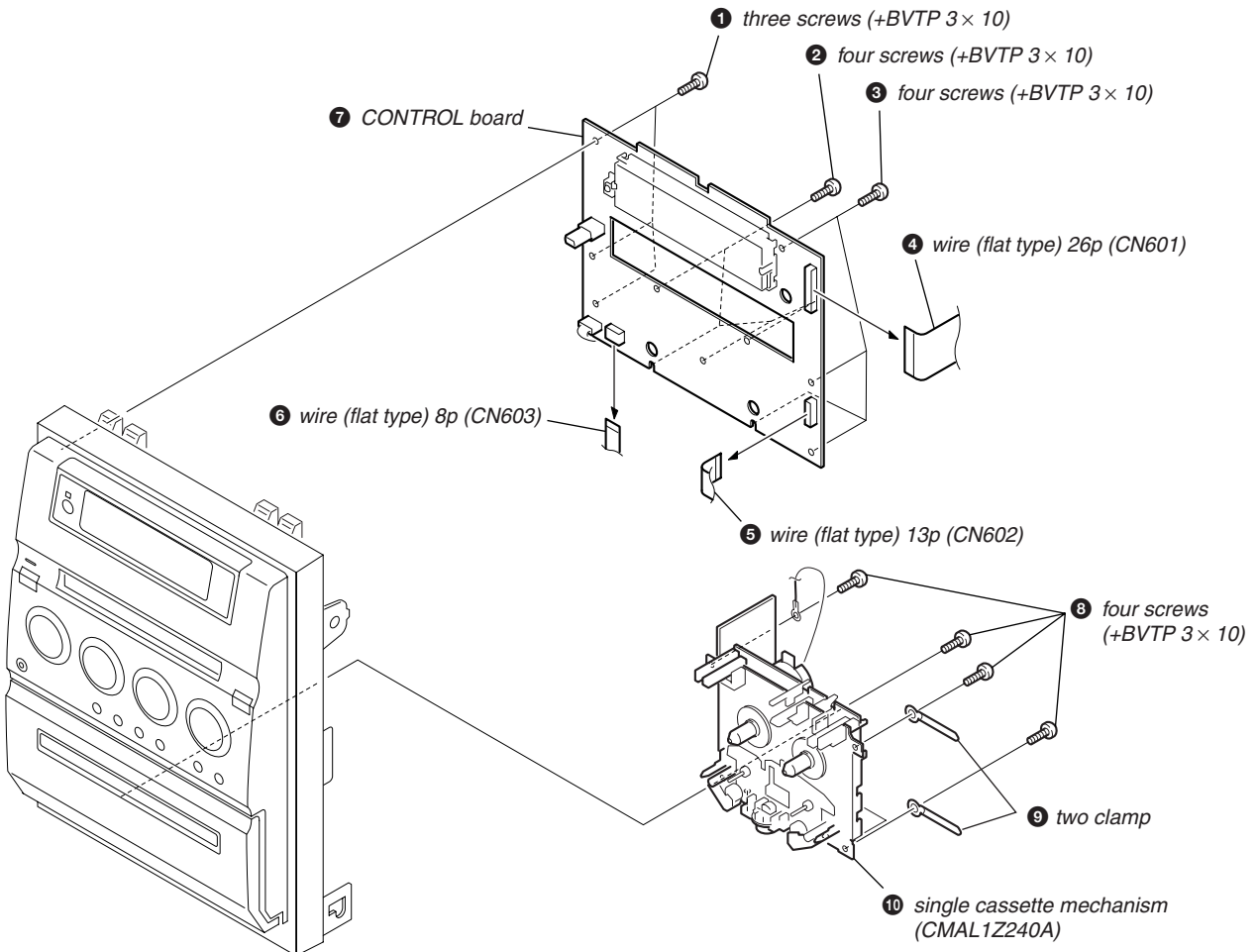
3-1. Top Cabinet, Rear Panel



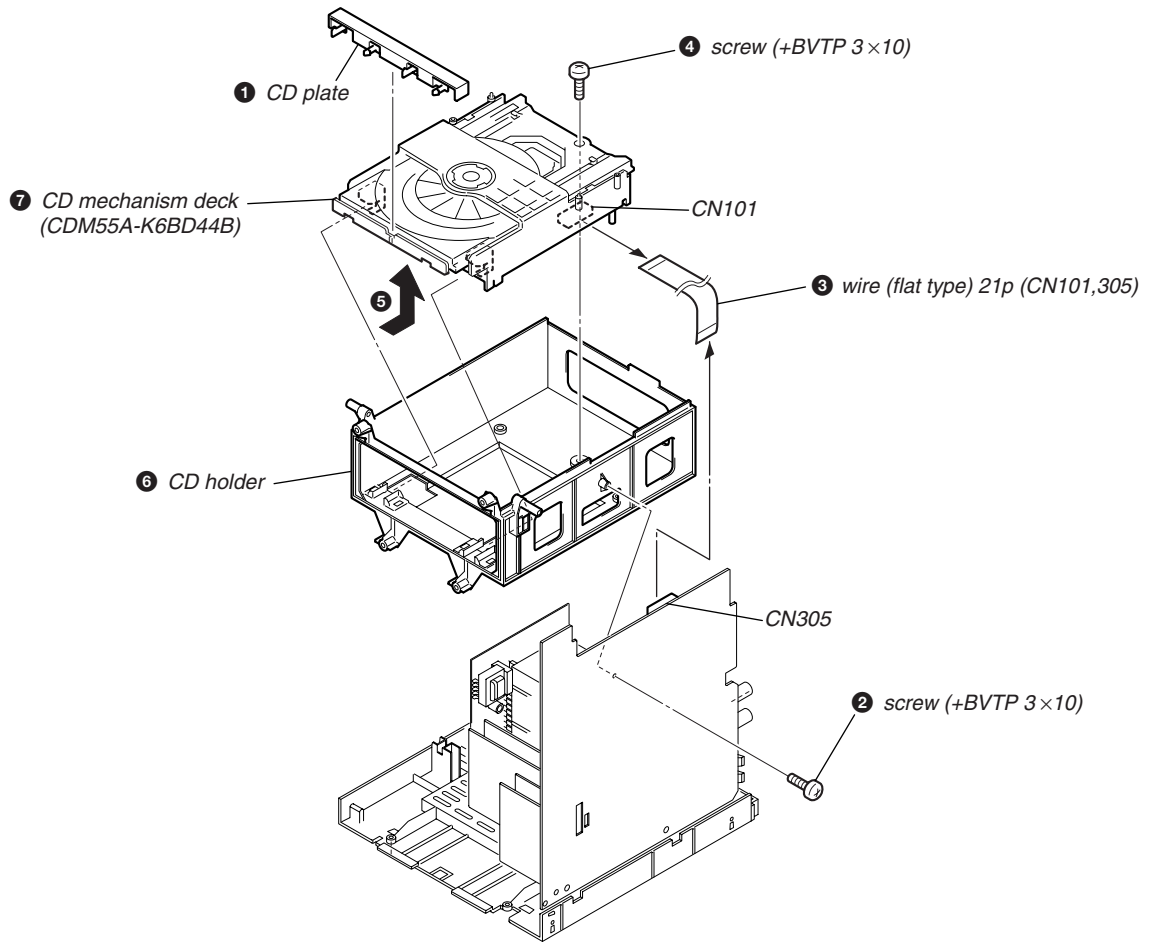
3-2. Front Panel Assy



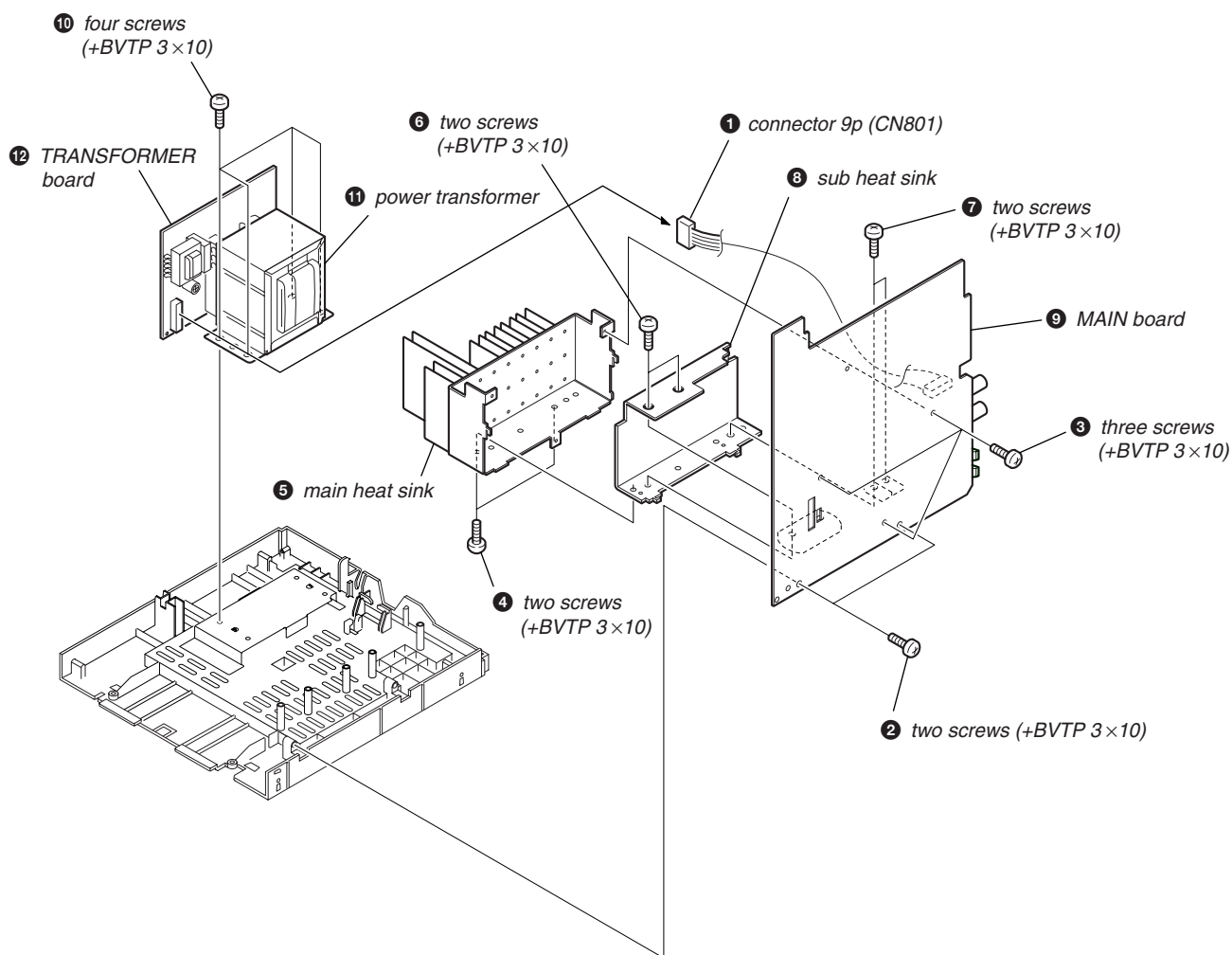
3-3. CONTROL Board, Single Cassette Mechanism



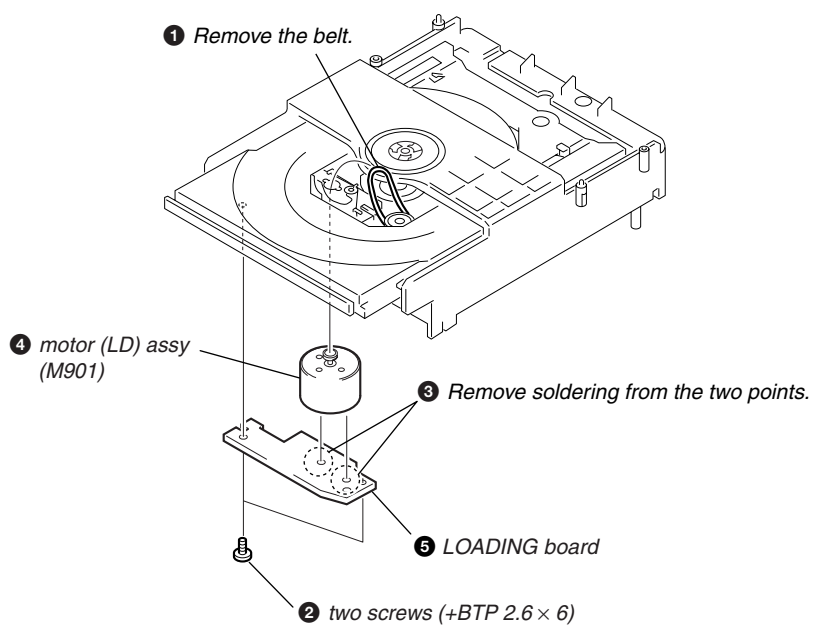
3-4. CD Mechanism Deck (CDM55A-K6BD44B)



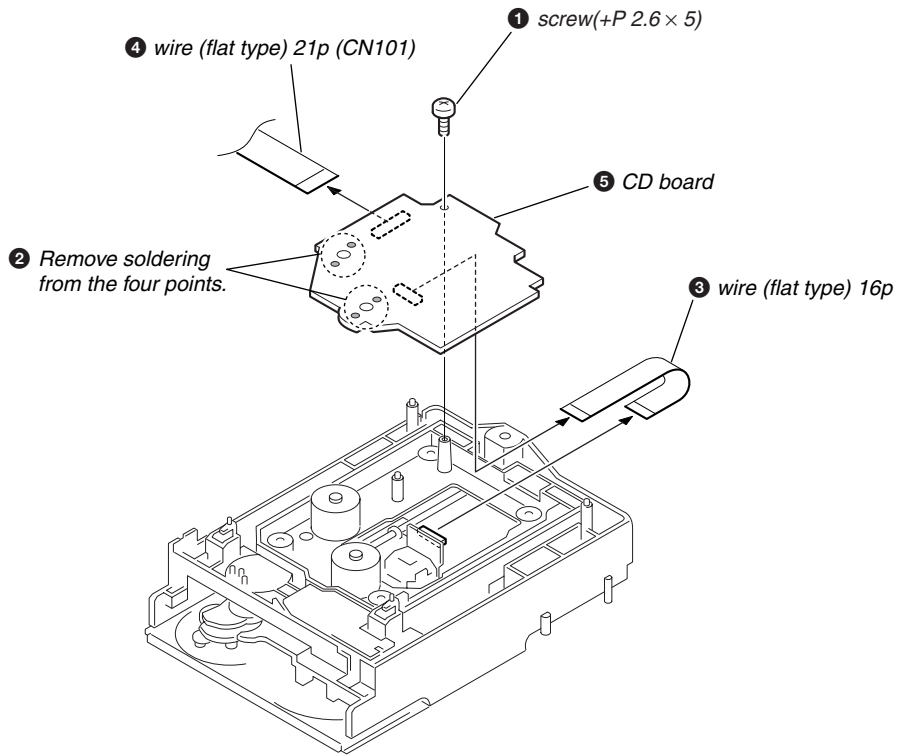
3-5. MAIN Board, TRANSFORMER Board



3-6. LOADING Board

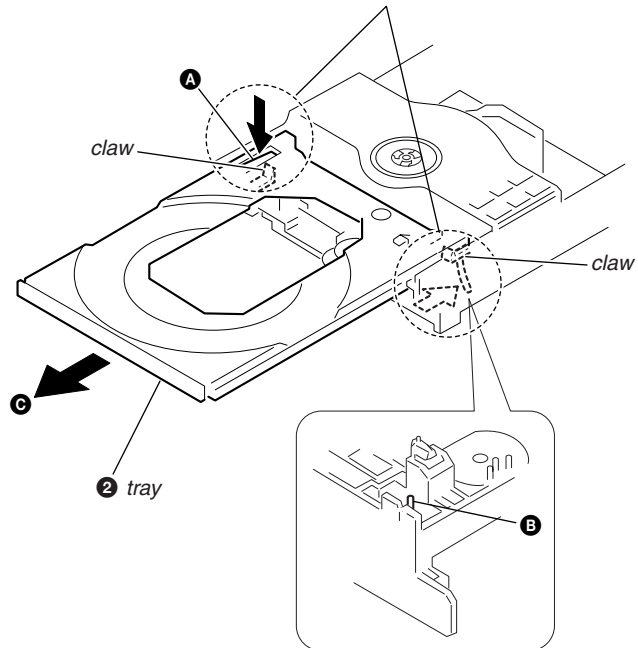


3-7. CD Board

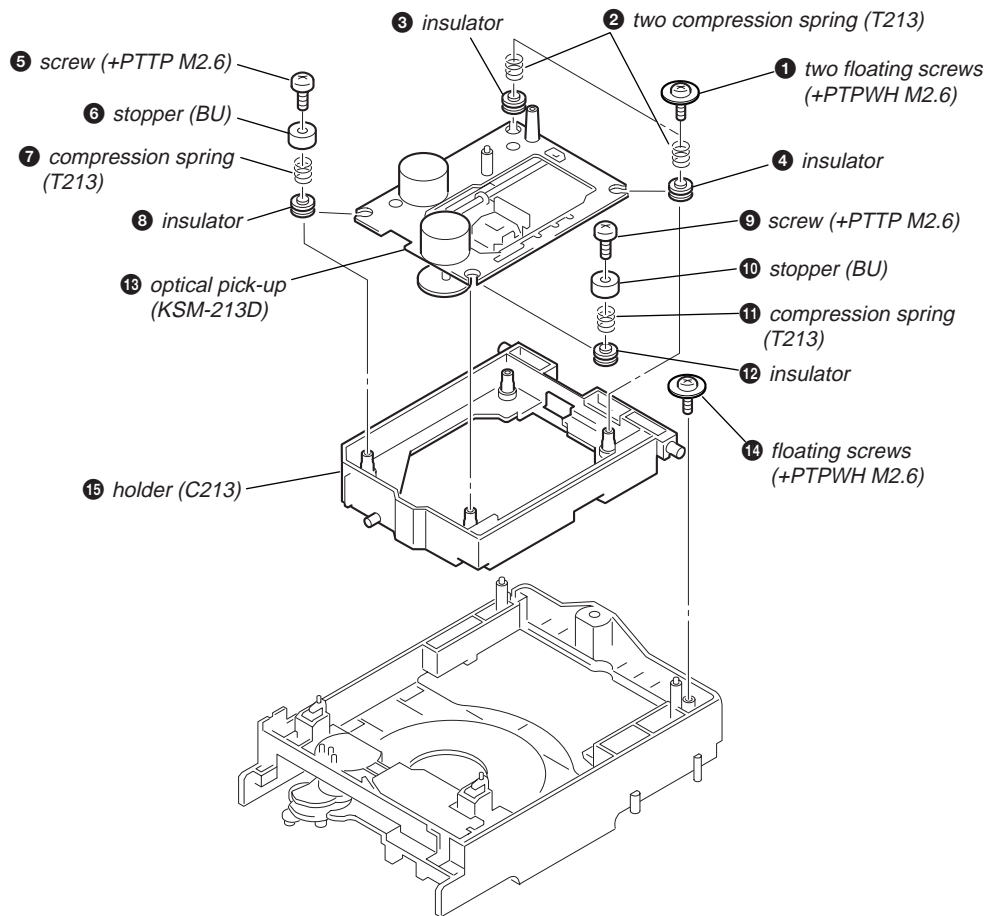


3-8. Tray (CDM55D)

- ① While pressing the two protrusions **A** and **B** to unlock the two claws as shown, pull the tray in the direction of the arrow **C**. (Be careful of the claws.)



3-9. Optical Pick-up (KSM-213D), Holder (C213)



SECTION 4 MECHANICAL ADJUSTMENTS

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	3.04 – 6.96 mN • m (31 to 71 g • cm) (0.43 – 0.98 oz • inch)
FWD back tension	CQ-102C	0.20 – 0.58 mN • m (2 to 6 g • cm) (0.02 – 0.08 oz • inch)
REV	CQ-102RC	3.04 – 6.96 mN • m (31 to 71 g • cm) (0.43 – 0.98 oz • inch)
REV back tension	CQ-102RC	0.20 – 0.58 mN • m (2 to 6 g • cm) (0.02 – 0.08 oz • inch)
FF/REW	CQ-201B	6.97 – 14.02 mN • m (71 to 143 g • cm) (0.98 – 1.99 oz • inch)
FWD tension	CQ-403A	9.8 mN • m or more (100 g • cm or more) (1.4 oz • inch or more)
REV tension	CQ-403R	9.8 mN • m or more (100 g • cm or more) (1.4 oz • inch or more)

SECTION 5 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB=0.775V

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 adjusted.
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.

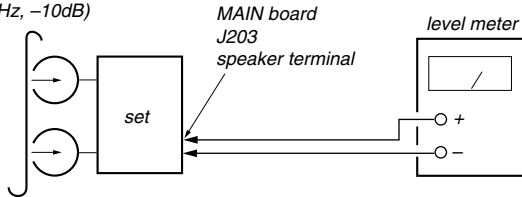
Tape	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment

[Record/Playback Head Azimuth Adjustment]

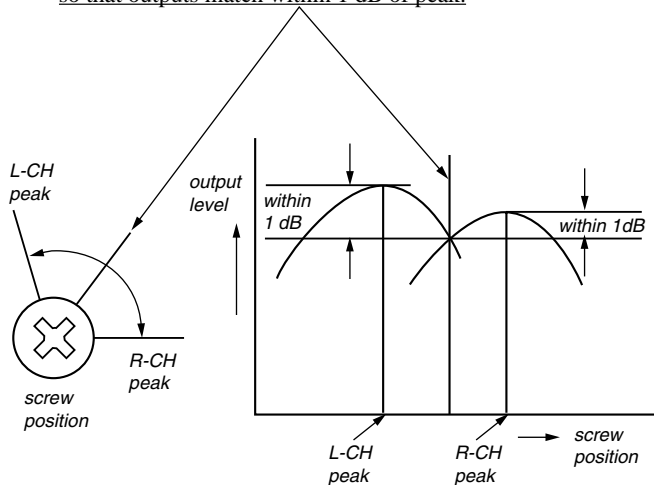
Procedure:

1. Mode : Playback

*test tape
P-4-A100
(10kHz, -10dB)*

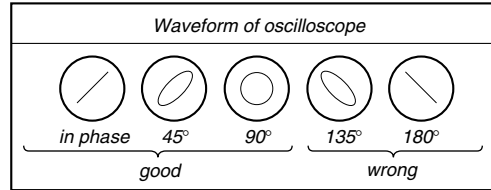
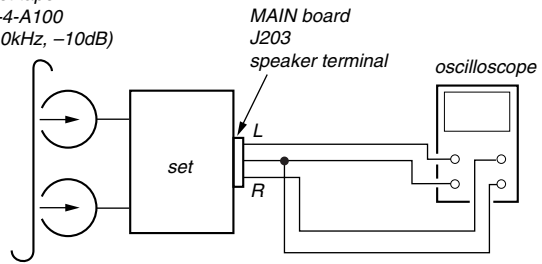


2. Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.



3. Mode: Playback

*test tape
P-4-A100
(10kHz, -10dB)*



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

Adjustment Location: Record/Playback/Erase Head

[Tape Speed Check]

Procedure:

1. Turn the power on.
2. Insert the WS-48B into deck.
3. Press the button of deck.
4. Check the reading of frequency counter becomes 3000 ± 90 Hz.

Sample Value of Wow and flutter

W.RMS (JIS) less than 0.3%
(test tape: WS-48B)

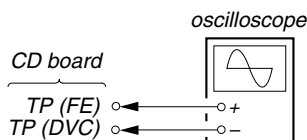
CD SECTION

Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10MΩ impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S-curve Check

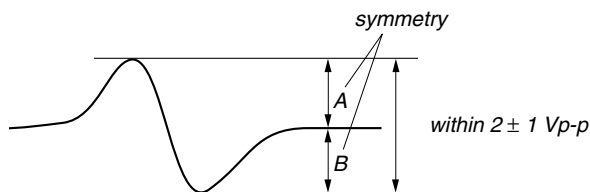
Connection:



Procedure:

1. Connect an oscilloscope to test point TP (FE) and TP (DVC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in and turned power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out)
4. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 2 ± 1 Vp-p.

S-curve waveform

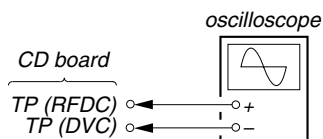


- Note:**
- Try to measure several times to make sure than the ratio of A : B or B : A is more than 10 : 7.
 - Take sweep time as long as possible and light up the brightness to obtain best waveform.

Checking Location: CD board (Conductor side)

RFDC Level Check

Connection:

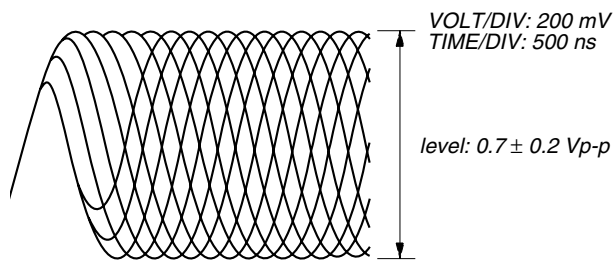


Procedure:

1. Connect an oscilloscope to test point TP (RFDC) and TP (DVC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFDC signal level is correct or not.

Note: A clear RFDC signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.

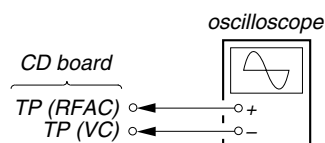
RFDC signal waveform



Checking Location: CD board (Conductor side)

RFAC Level Check

Connection:

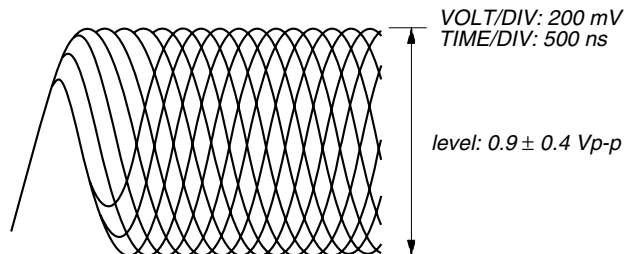


Procedure:

1. Connect an oscilloscope to test point TP (RFAC) and TP (VC) on the CD board.
2. Turn the power on.
3. Put the disc (YEDS-18) in to playback the number five track.
4. Confirm that oscilloscope waveform is clear and check RFAC signal level is correct or not.

Note: A clear RFAC signal waveform means that the shape “◊” can be clearly distinguished at the center of the waveform.

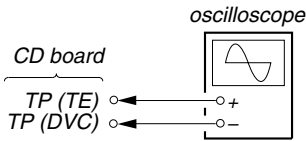
RFAC signal waveform



Checking Location: CD board (Conductor side)

E-F Balance Check

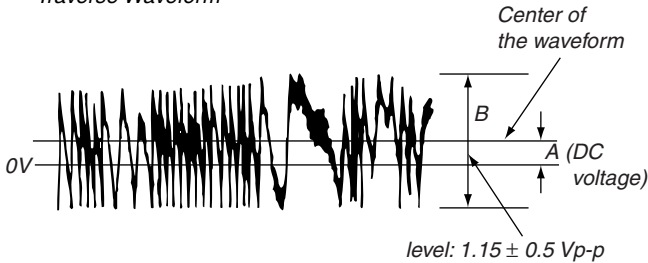
Connection:



Procedure:

1. Connect an oscilloscope to test point TP (TE) and TP (DVC) on the CD board.
2. AC is put in pushing **[CD ▶||]** button.
3. FL tube carries out all lights and goes into CD test mode.
4. Put the disc (YEDS-18) in to playback the number five track.
5. Press the **[CD ▶||]** button. (The tracking servo and the sledding servo are turned OFF)
6. Check the level B of the oscilliscope's waveform and the A (DC voltage) of the center of the Traverse waveform.
Confirm the following :
 $A/B \times 100 = \text{less than } \pm 22\%$

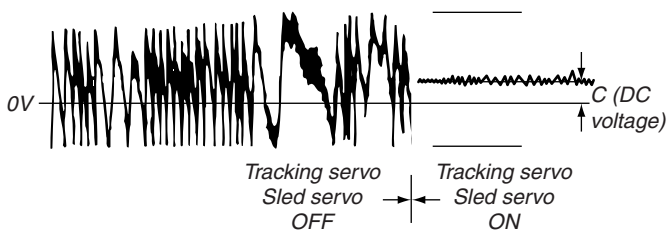
Traverse Waveform



7. Press the **[CD ▶||]** button. (The tracking servo and sledding servo are turned ON)
Confirm the C (DC voltage) is almost equal to the A (DC voltage) is step 4.
8. To exit from this mode, turn the power off.

- Notes:**
- Always move the optical pick-up to most inside track when exiting from this mode. Otherwise, a disc will not be unloaded.
 - Do not run the sled motor excessively, otherwise the gear can be chipped.

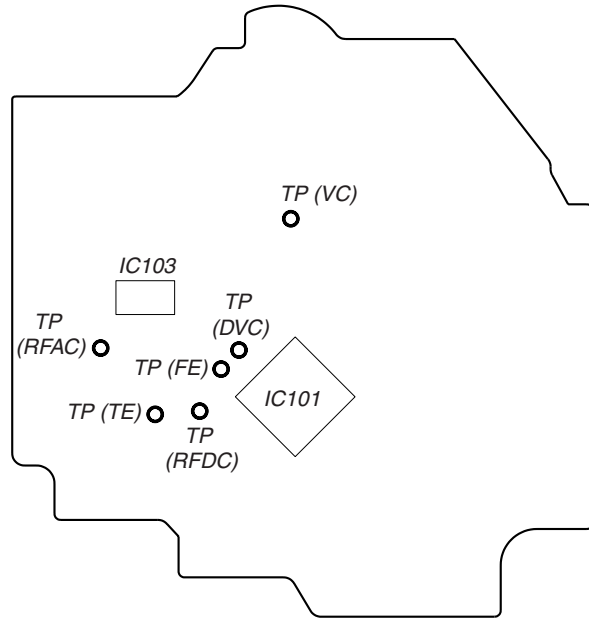
Traverse Waveform



Checking Location: CD board (Conductor side)

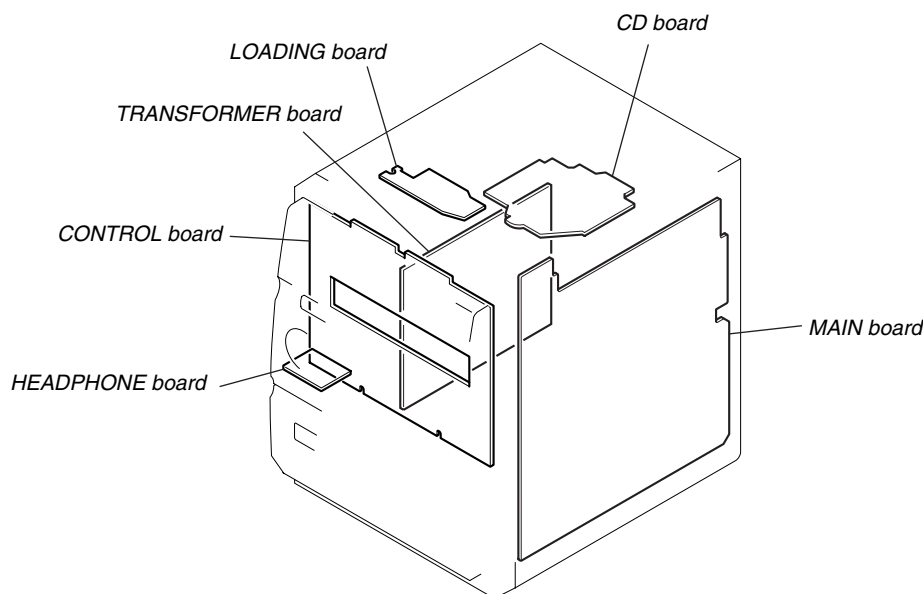
Checking Location:

– CD BOARD (Conductor Side) –



SECTION 6 DIAGRAMS




• Circuit Boards Location



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. pF : $\mu\mu\text{F}$
50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{ W}$ or less unless otherwise specified.
- Δ : internal component.
-  : nonflammable resistor.
-  : 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.






Note:

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

-  : B+ Line.
-  : B- Line.

- 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 an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.

• Signal path.




-  : TUNER
-  : CD
-  : MD
-  : PB (TAPE)
-  : REC (TAPE)

• Abbreviation

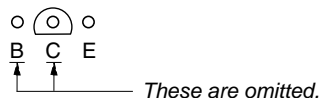
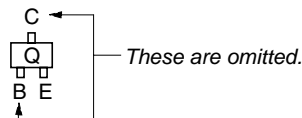
- AUS : Australian model
- CND : Canadian model
- E51 : Chilean and Peruvian models
- HK : Hong Kong model
- KR : Korean model
- SP : Singapore model
- TW : Taiwan model

For printed wiring boards.

Note:

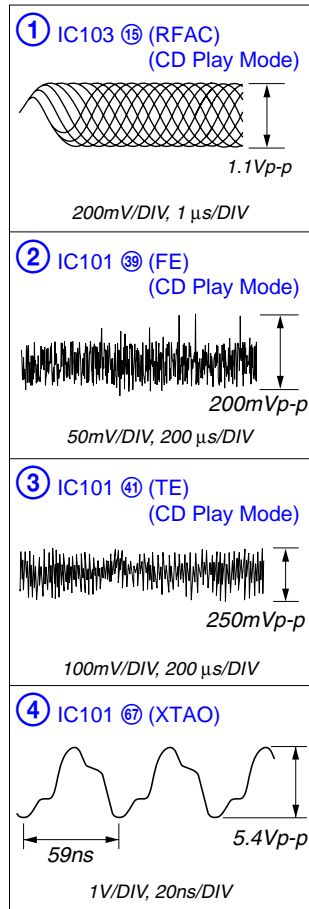
-  : parts extracted from the component side.
-  : parts extracted from the conductor side.
- Δ : internal component.
-  : Pattern from the side which enables seeing.

• Indication of transistor

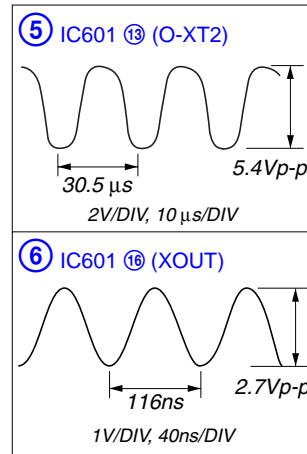


HCD-GP5

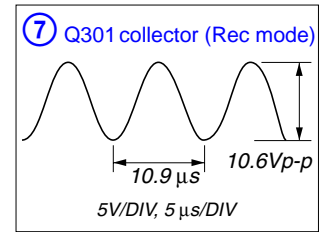
• Waveforms – CD Board –



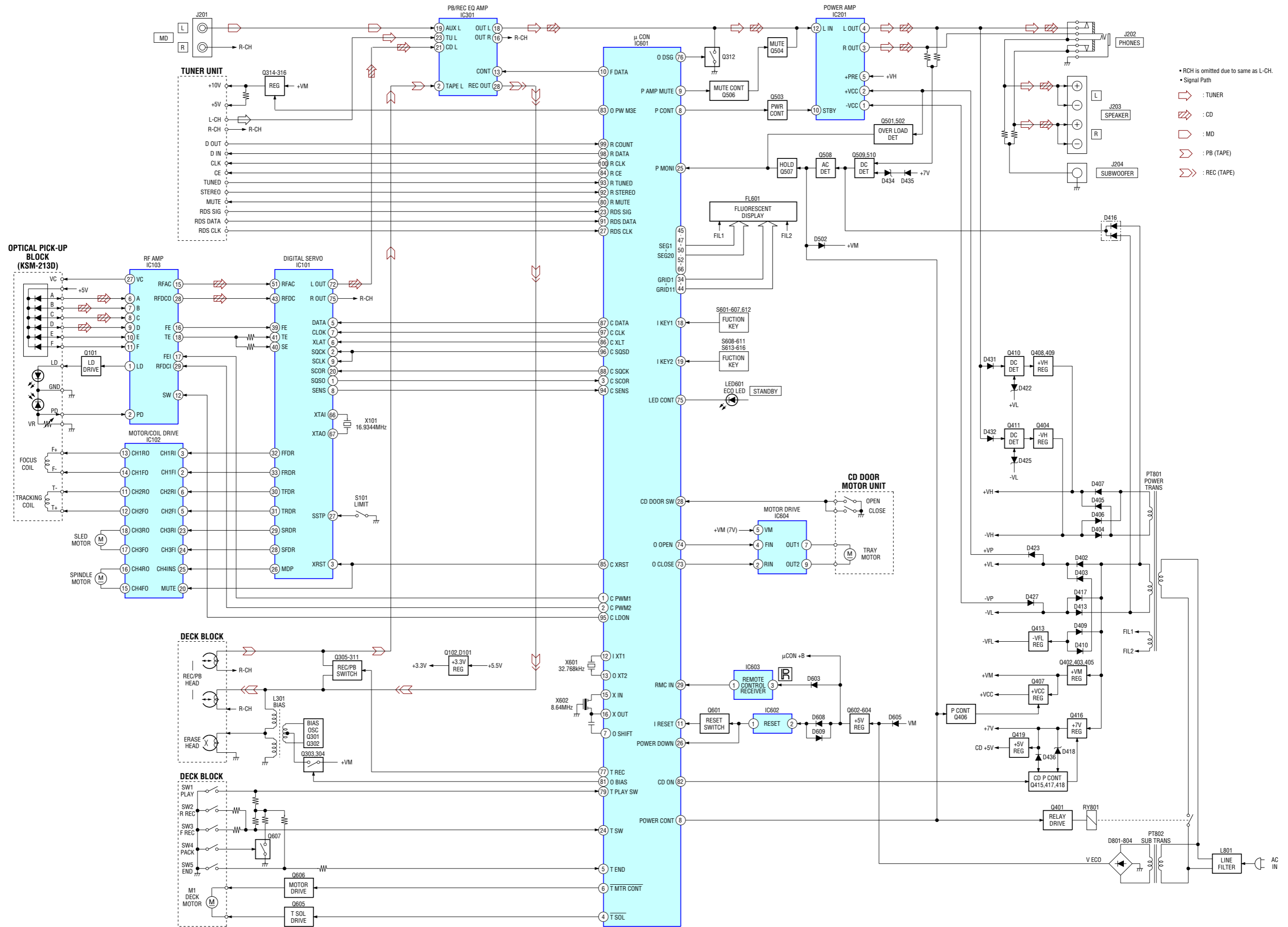
– CONTROL Board –

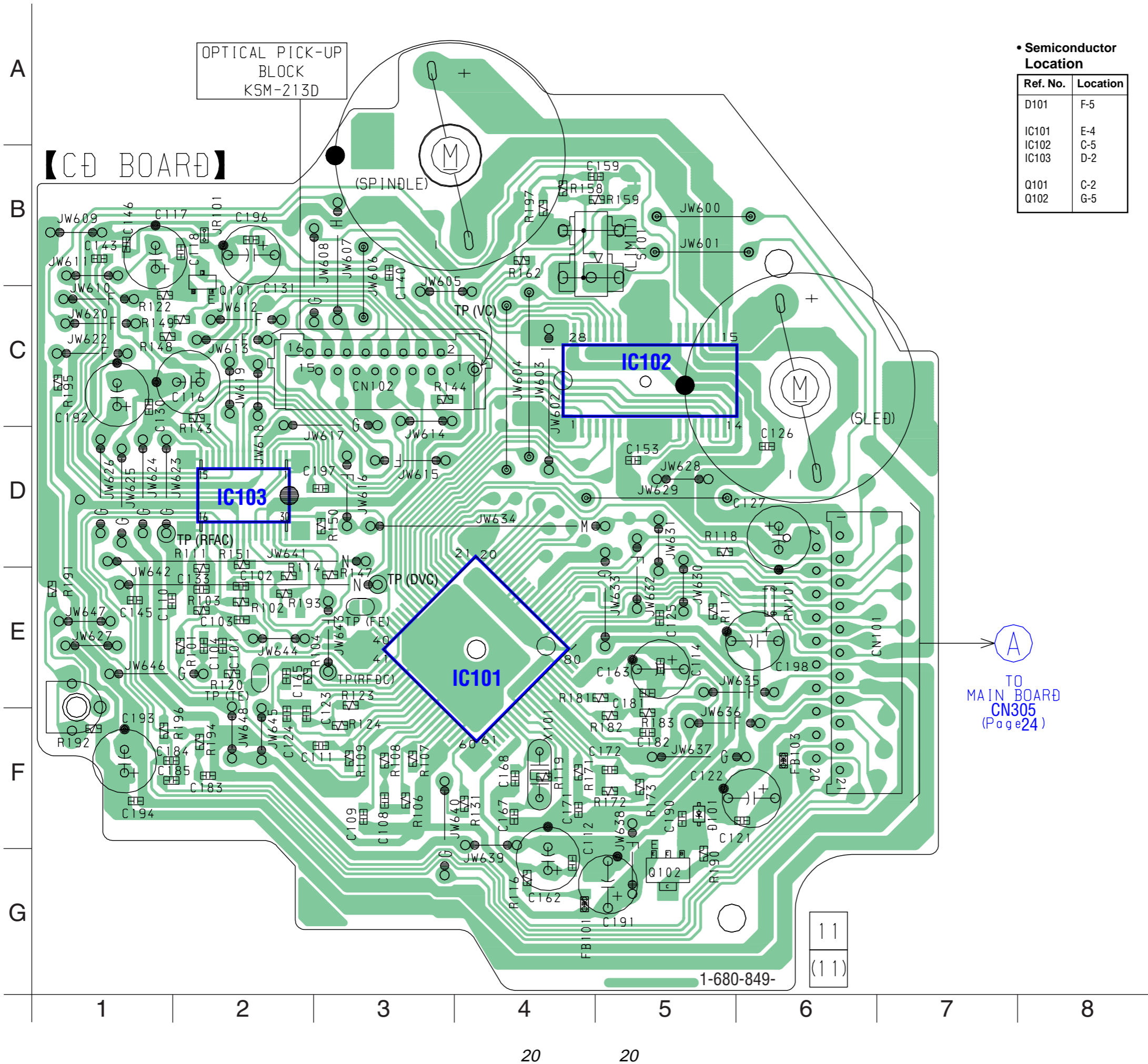


– MAIN Board –

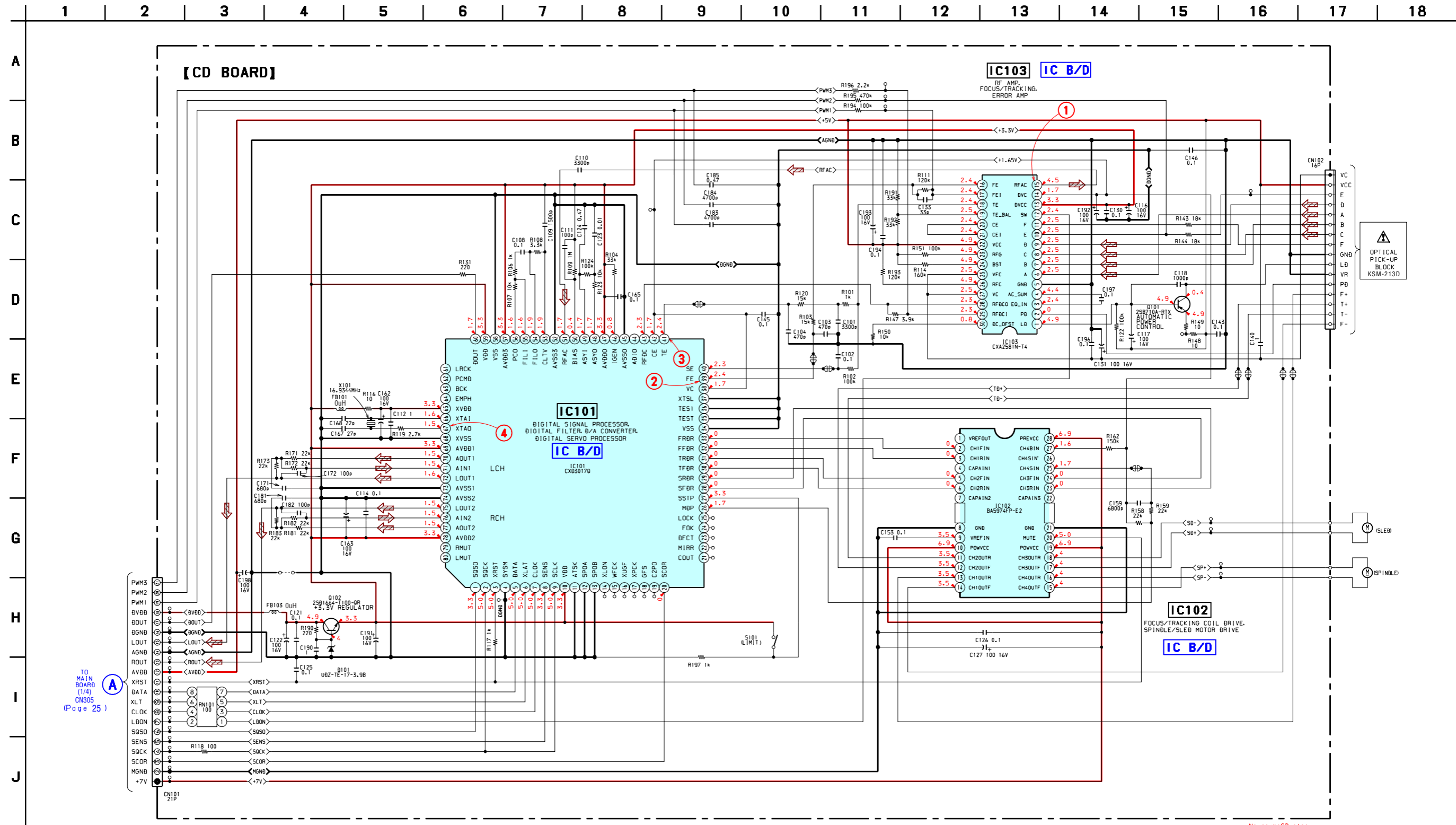


6-1. Block Diagram





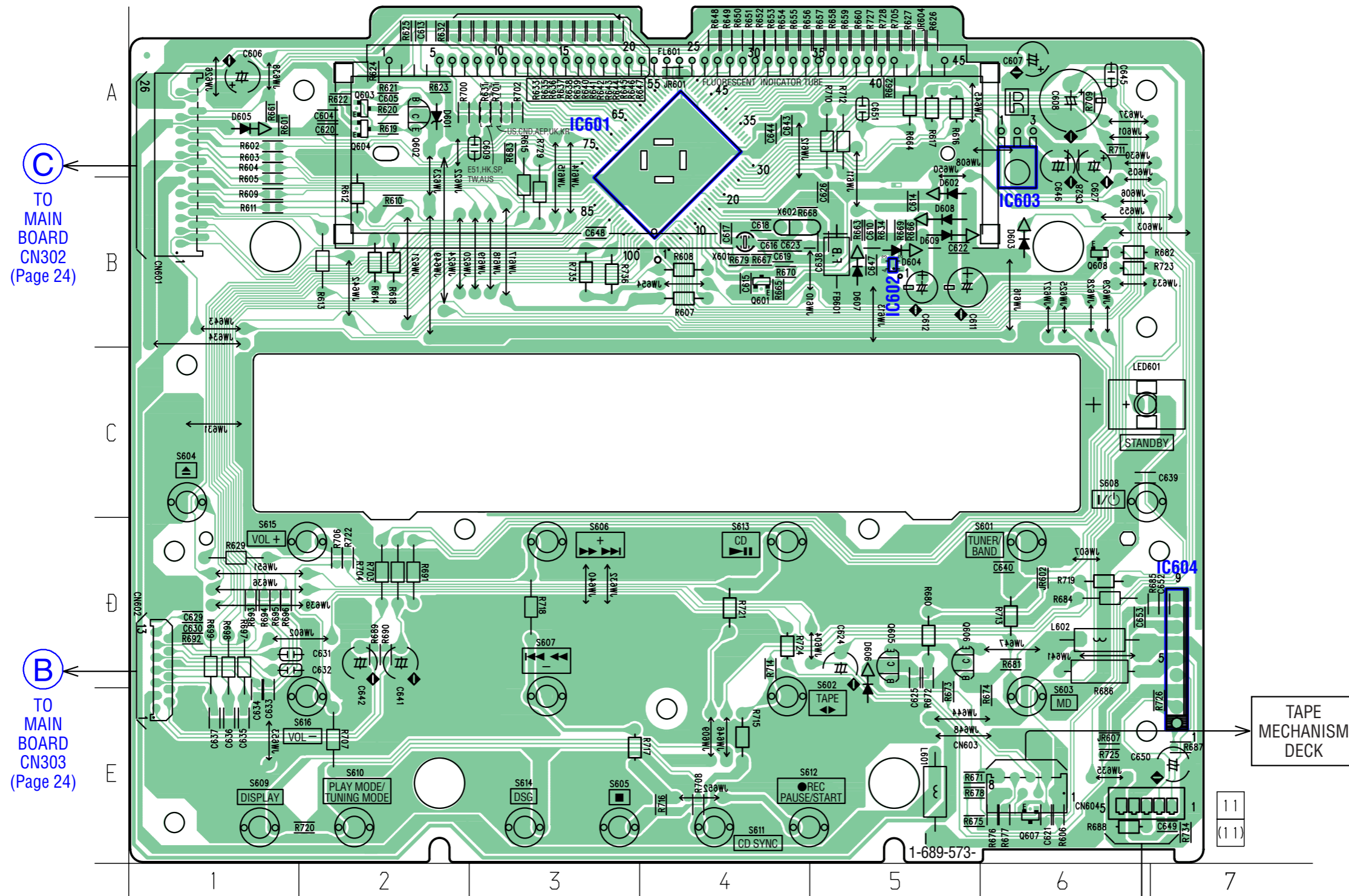
6-3. Schematic Diagram – CD Section – • See page 18 for Waveforms. • See page 31, 32 for IC Block Diagrams.



TO MAIN BOARD (14) CN305 (Page 25)

No work: CD stop

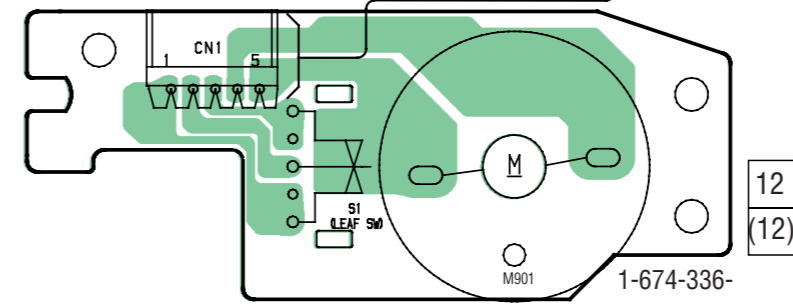
【CONTROL BOARD】



• Semiconductor Location

Ref. No.	Location
D601	A-2
D602	B-5
D603	B-6
D604	B-5
D605	A-1
D606	D-5
D607	B-5
D608	B-5
D609	B-5
IC601	A-3
IC602	B-5
IC603	B-6
IC604	D-7
Q601	B-4
Q602	A-2
Q603	A-2
Q604	A-2
Q605	D-5
Q606	D-5
Q607	E-6
Q608	B-6

【LOADING BOARD】

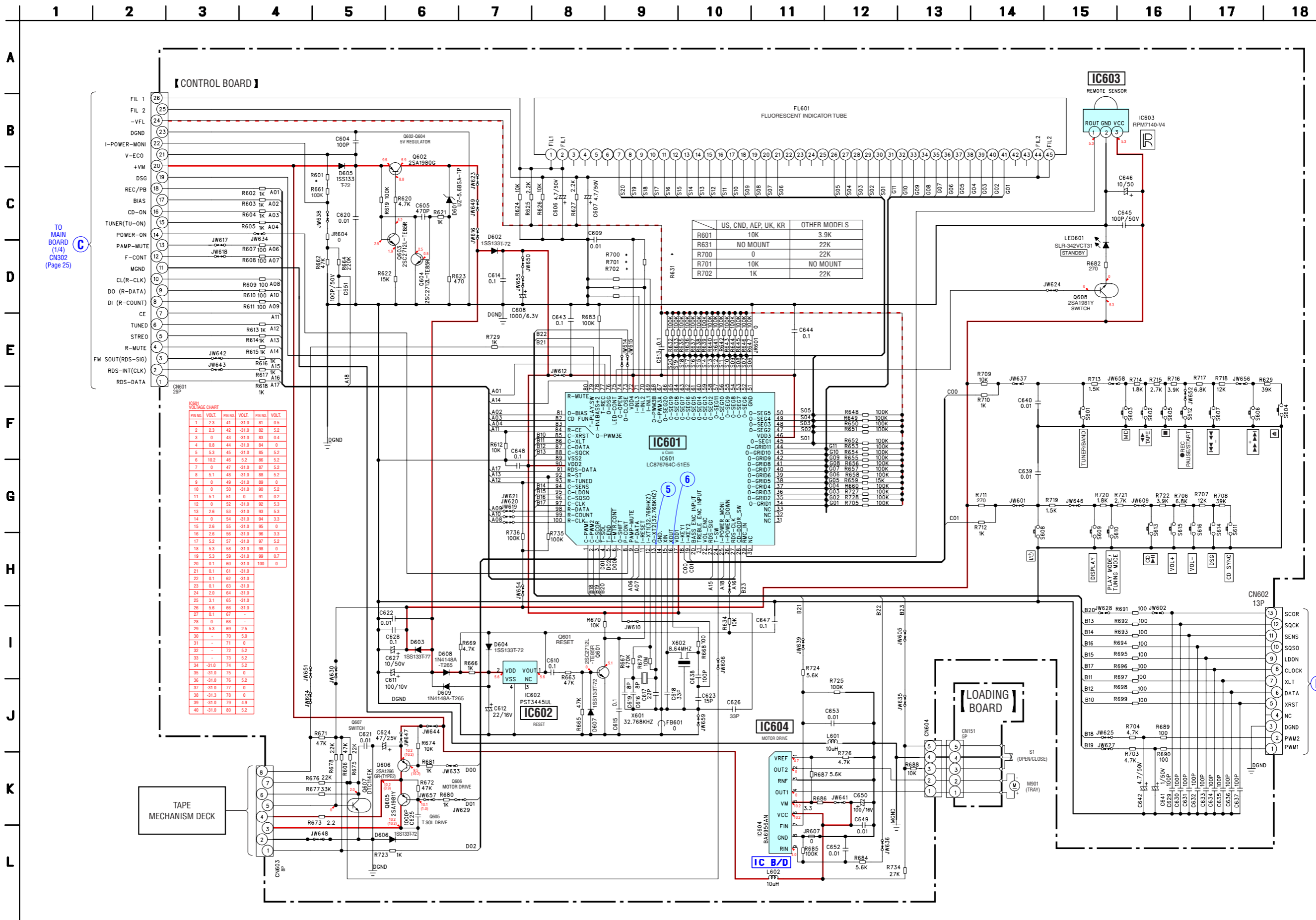


C
TO MAIN BOARD
CN302
(Page 24)

B
TO MAIN BOARD
CN303
(Page 24)

TAPE MECHANISM DECK

6-5. Schematic Diagram – Control Section – • See page 18 for Waveforms. • See page 33 for IC Block Diagram. • See page 35 for IC Pin Function Description.



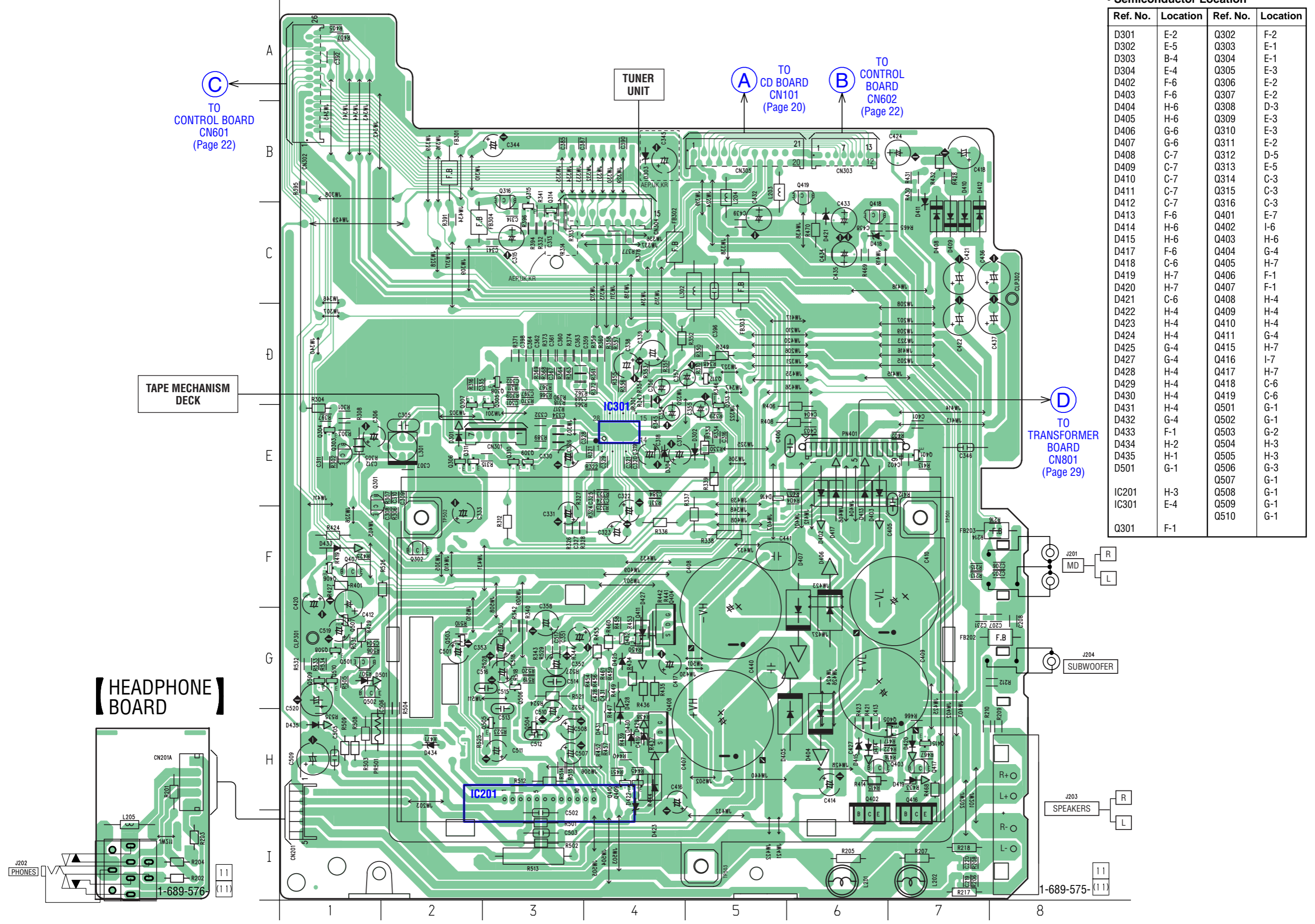
【CONTROL BOARD】

	US, CND, AEP, UK, KR	OTHER MODELS
R601	10K	3.9K
R631	NO MOUNT	22K
R700	0	22K
R701	10K	NO MOUNT
R702	1K	22K

IC601 VOLTAGE CHART

PH NO.	VOLT.	PH NO.	VOLT.	PH NO.	VOLT.
1	2.3	41	-31.0	81	0.5
2	2.3	42	-31.0	82	5.2
3	0	43	-31.0	83	0.4
4	0.8	44	-31.0	84	0
5	5.3	45	-31.0	85	5.2
6	10.2	46	-31.0	86	5.2
7	0	47	-31.0	87	5.2
8	5.1	48	-31.0	88	5.2
9	0	49	-31.0	89	0
10	0	50	-31.0	90	5.2
11	5.1	51	0	91	0.2
12	0	52	-31.0	92	5.3
13	2.6	53	-31.0	93	5.3
14	0	54	-31.0	94	3.3
15	2.6	55	-31.0	95	0
16	2.6	56	-31.0	96	3.3
17	5.2	57	-31.0	97	5.2
18	5.3	58	-31.0	98	0
19	5.3	59	-31.0	99	0.7
20	0.1	60	-31.0	100	0
21	0.1	61	-31.0		
22	0.1	62	-31.0		
23	0.1	63	-31.0		
24	2.0	64	-31.0		
25	3.1	65	-31.0		
26	5.6	66	-31.0		
27	0.1	67	-		
28	0	68	-		
29	5.3	69	2.5		
30	-	70	5.0		
31	-	71	0		
32	-	72	5.2		
33	-	73	5.2		
34	-31.0	74	5.2		
35	-31.0	75	0		
36	-31.0	76	5.2		
37	-31.0	77	0		
38	-31.3	78	0		
39	-31.0	79	4.9		
40	-31.0	80	5.2		

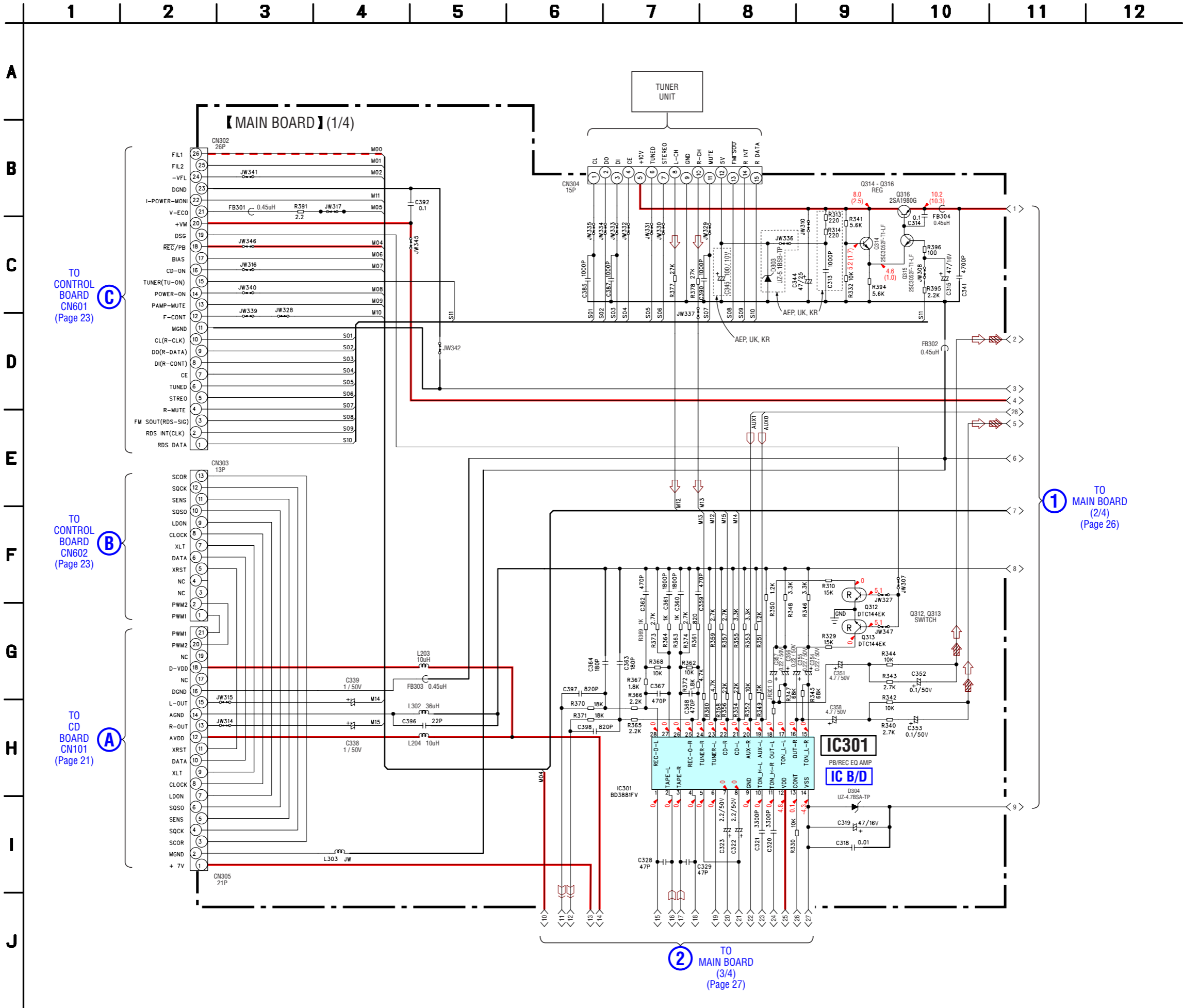
[MAIN BOARD]

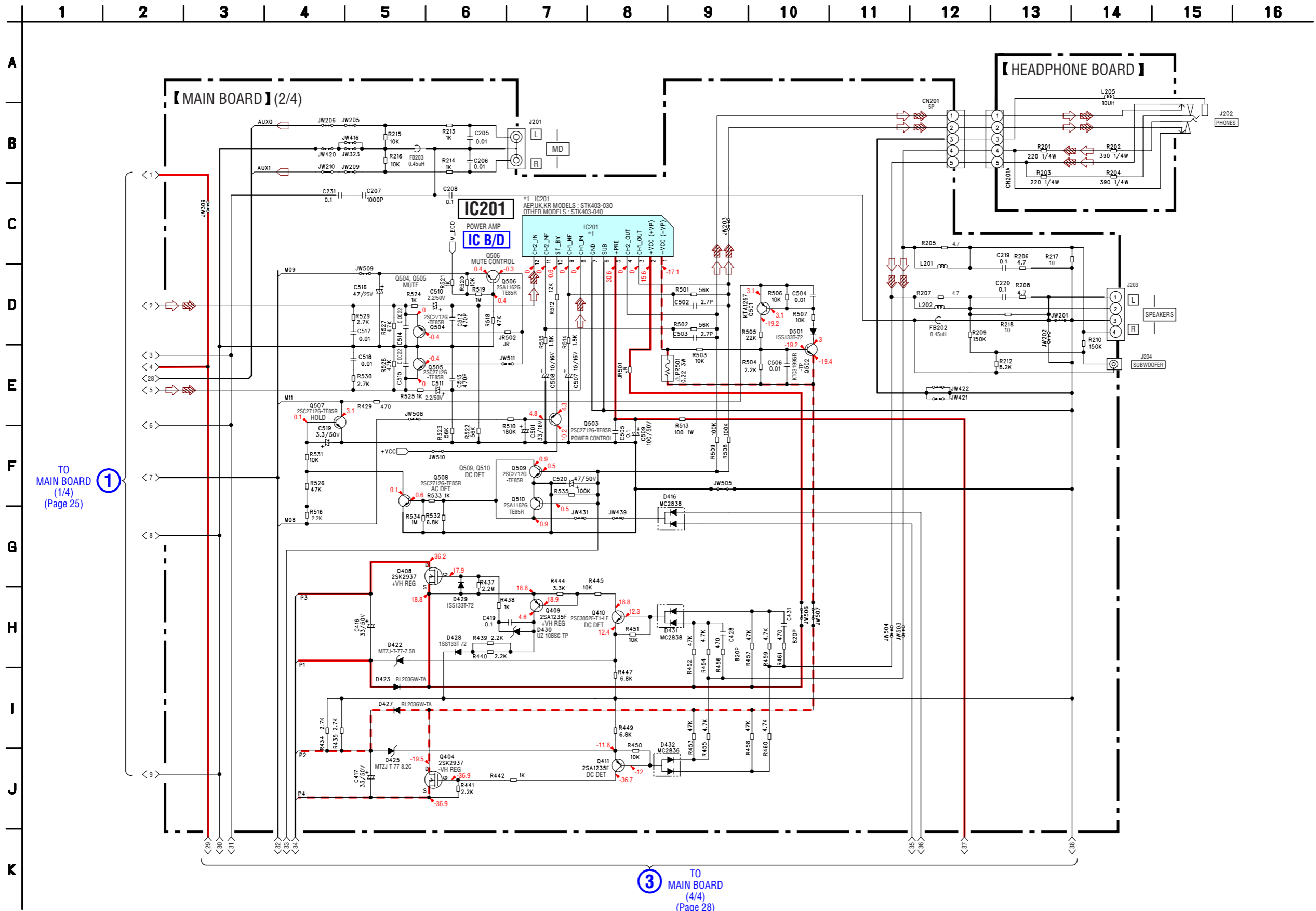


• Semiconductor Location

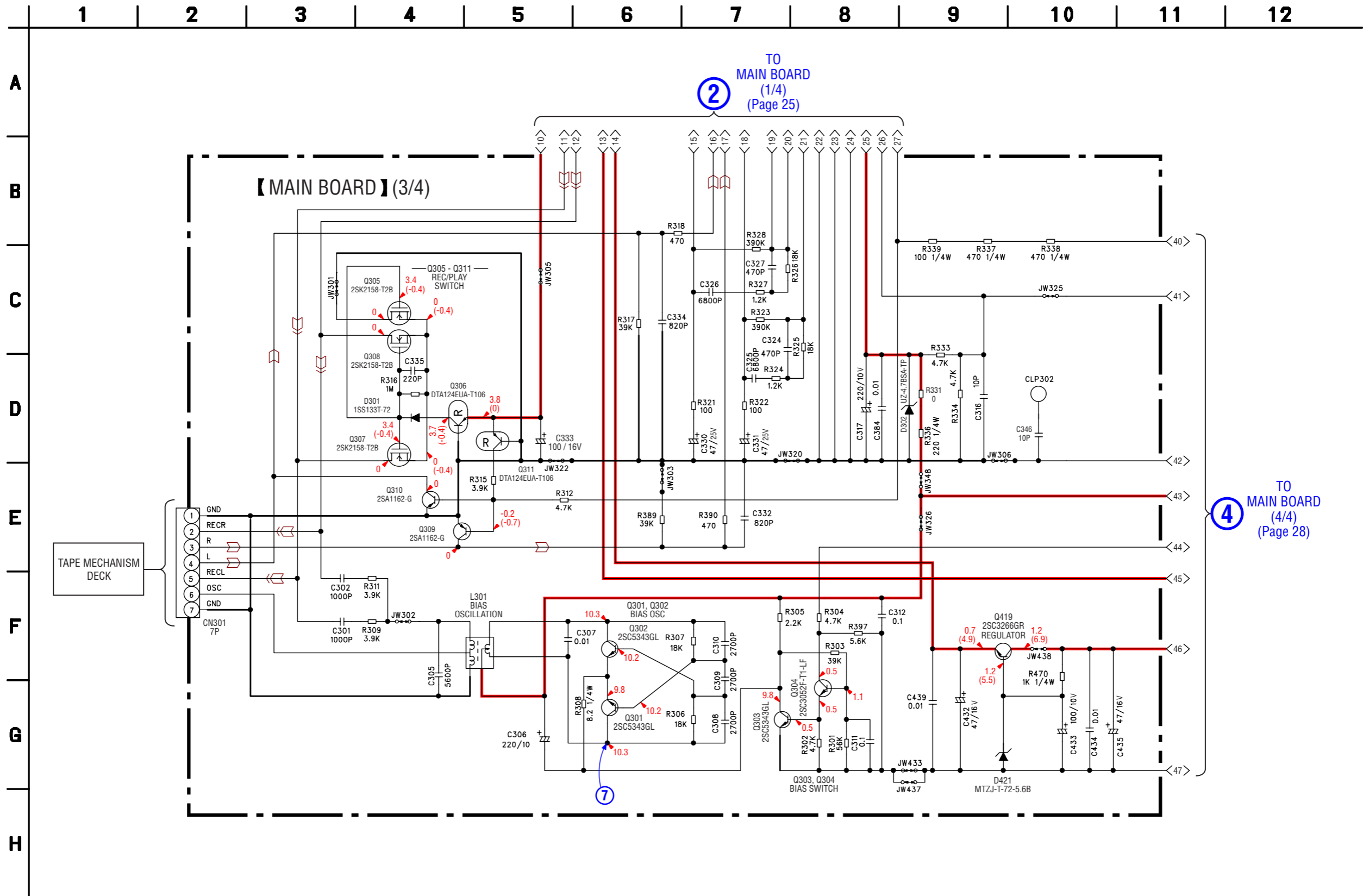
Ref. No.	Location	Ref. No.	Location
D301	E-2	Q302	F-2
D302	E-5	Q303	E-1
D303	B-4	Q304	E-1
D304	E-4	Q305	E-3
D402	F-6	Q306	E-2
D403	F-6	Q307	E-2
D404	H-6	Q308	D-3
D405	H-6	Q309	E-3
D406	G-6	Q310	E-3
D407	G-6	Q311	E-2
D408	C-7	Q312	D-5
D409	C-7	Q313	E-5
D410	C-7	Q314	C-3
D411	C-7	Q315	C-3
D412	C-7	Q316	C-3
D413	F-6	Q401	E-7
D414	H-6	Q402	I-6
D415	H-6	Q403	H-6
D417	F-6	Q404	G-4
D418	C-6	Q405	H-7
D419	H-7	Q406	F-1
D420	H-7	Q407	F-1
D421	C-6	Q408	H-4
D422	H-4	Q409	H-4
D423	H-4	Q410	H-4
D424	H-4	Q411	G-4
D425	G-4	Q415	H-7
D427	G-4	Q416	I-7
D428	H-4	Q417	H-7
D429	H-4	Q418	C-6
D430	H-4	Q419	C-6
D431	H-4	Q501	G-1
D432	G-4	Q502	G-1
D433	F-1	Q503	G-2
D434	H-2	Q504	H-3
D435	H-1	Q505	H-3
D501	G-1	Q506	G-3
		Q507	G-1
IC201	H-3	Q508	G-1
IC301	E-4	Q509	G-1
		Q510	G-1

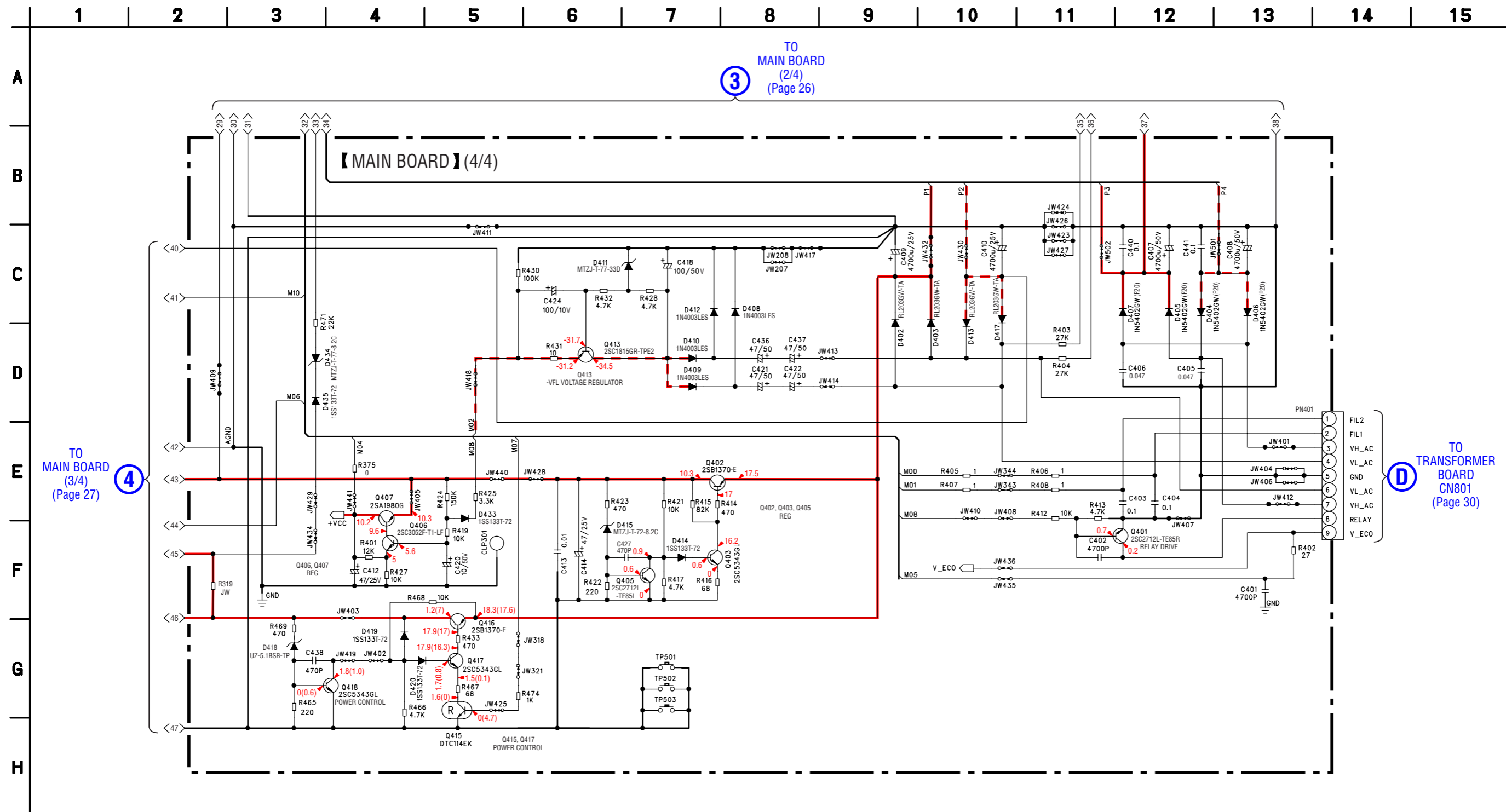
6-7. Schematic Diagram – Main Section (1/4) – • See page 33 for IC Block Diagram.



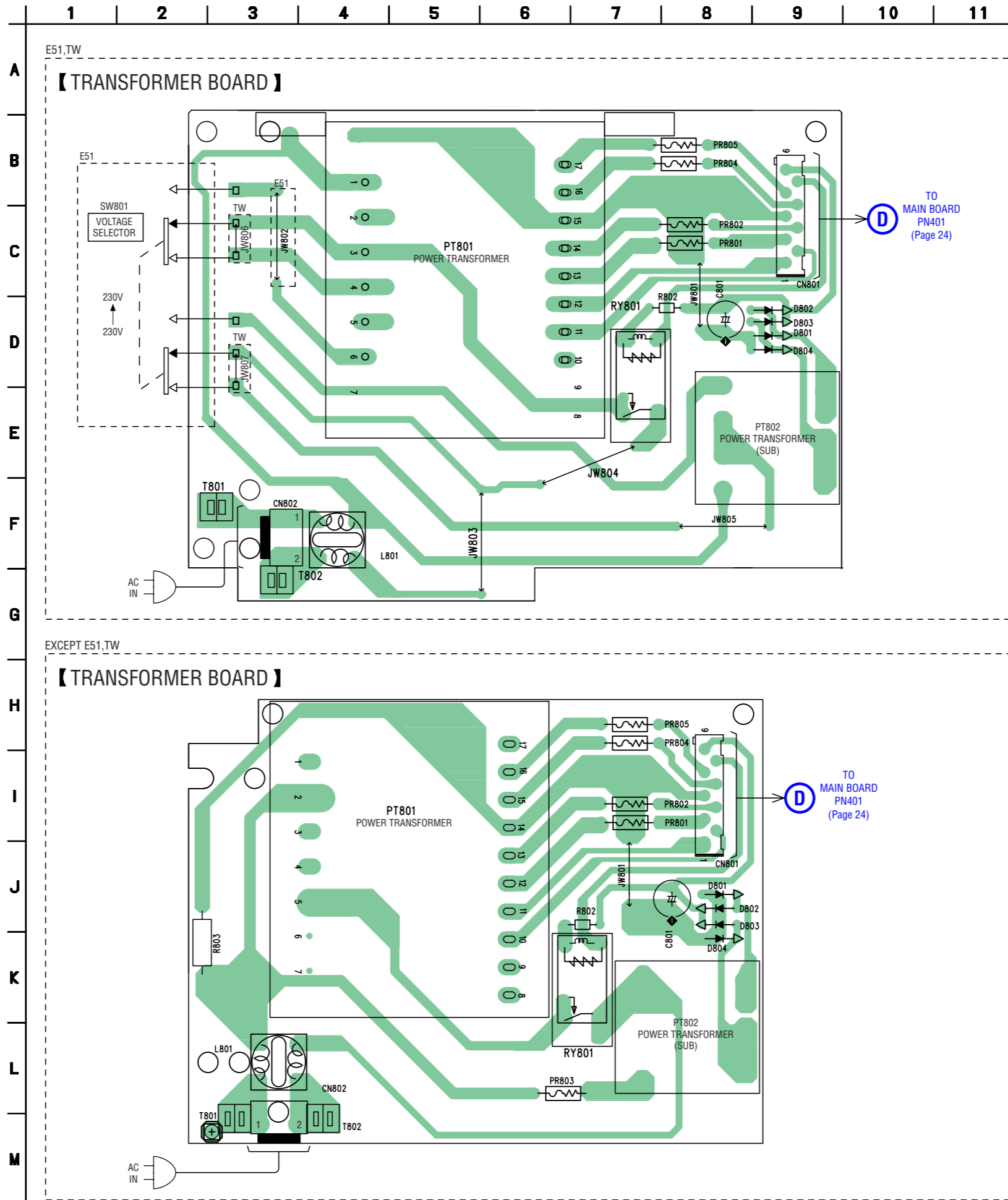


6-9. Schematic Diagram – Main Section (3/4) – • See page 18 for Waveform.

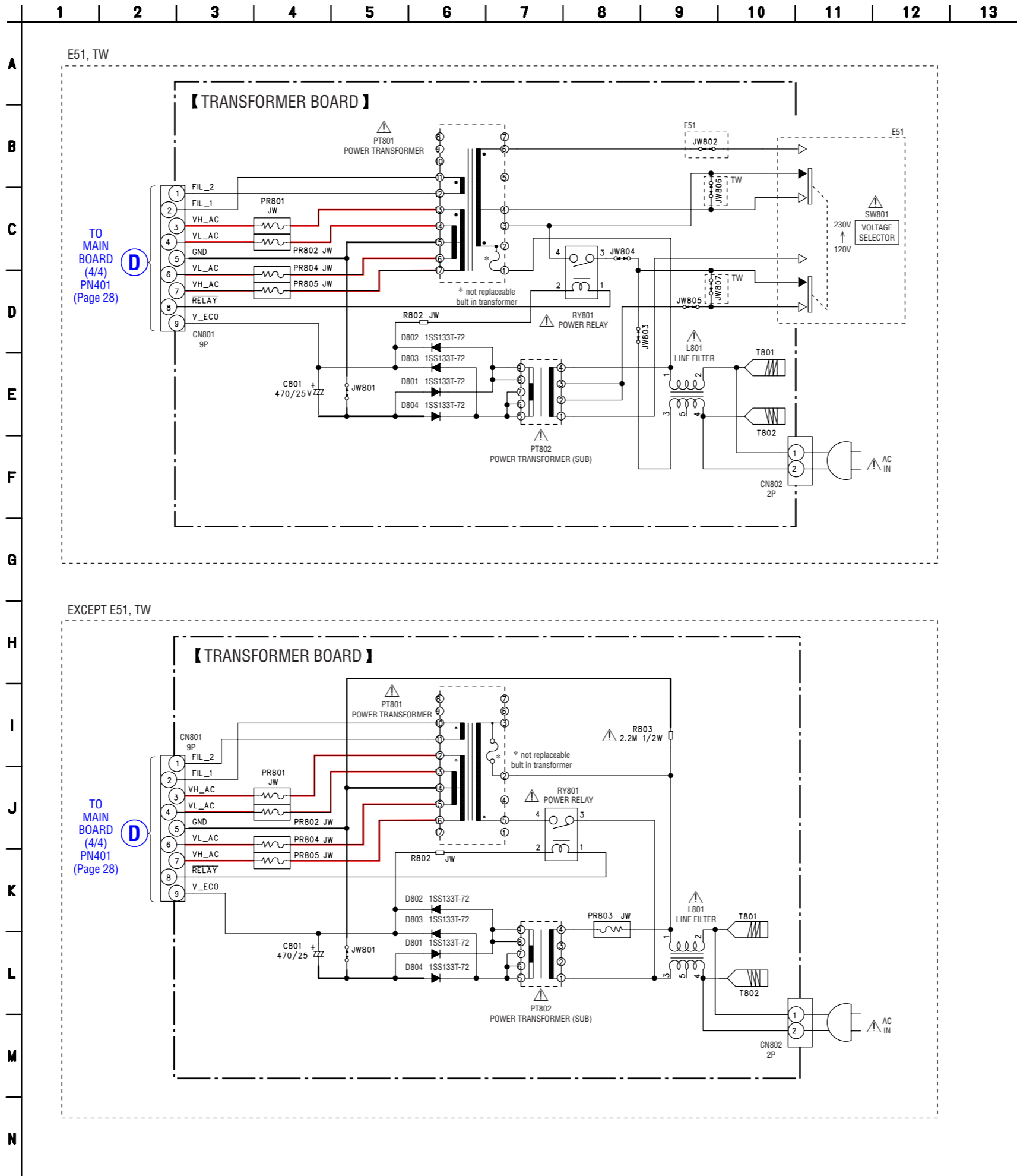




6-11. Printed Wiring Board – Power Section – • See page 17 for Circuit Boards Location.

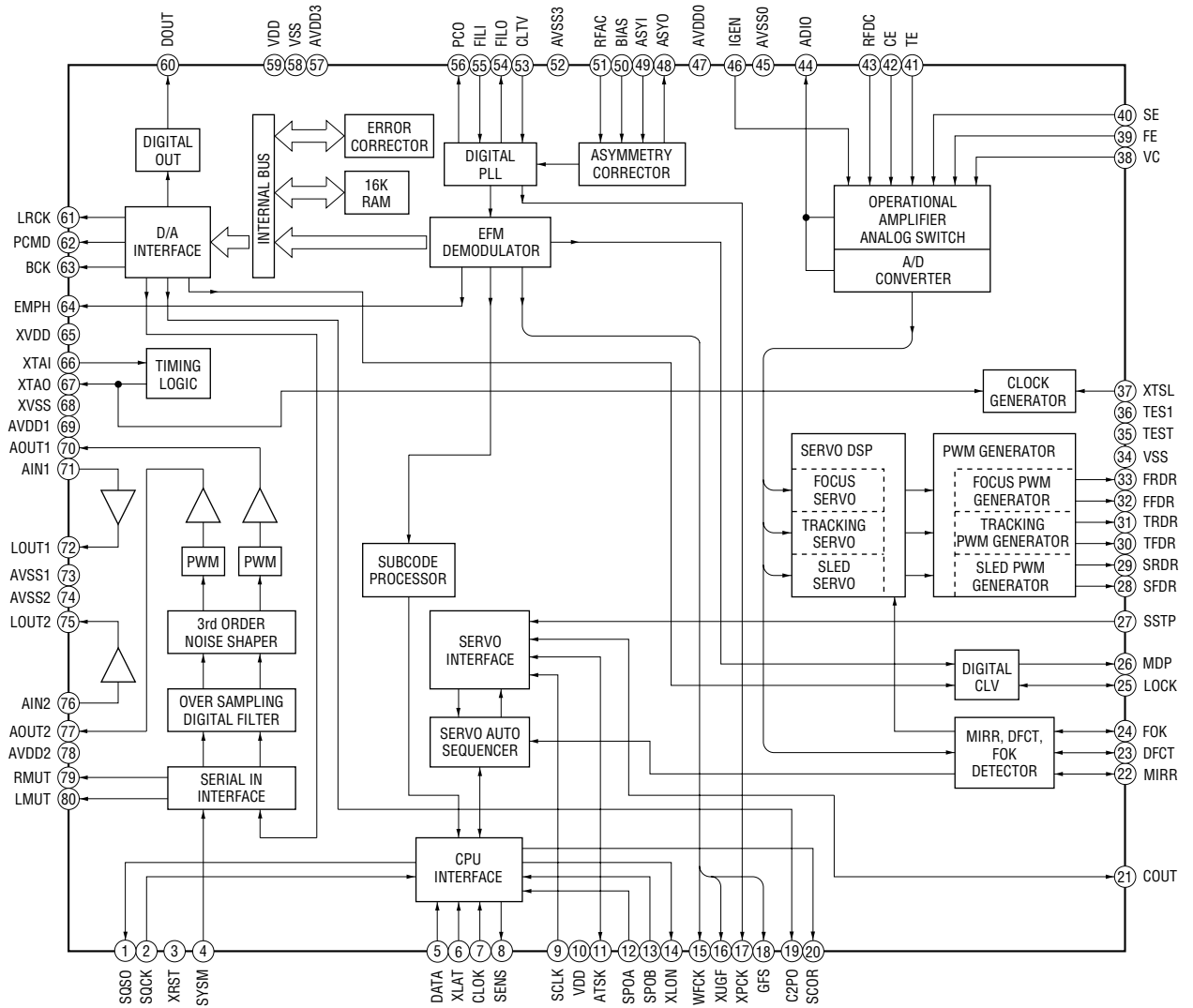


6-12. Schematic Diagram – Power Section –

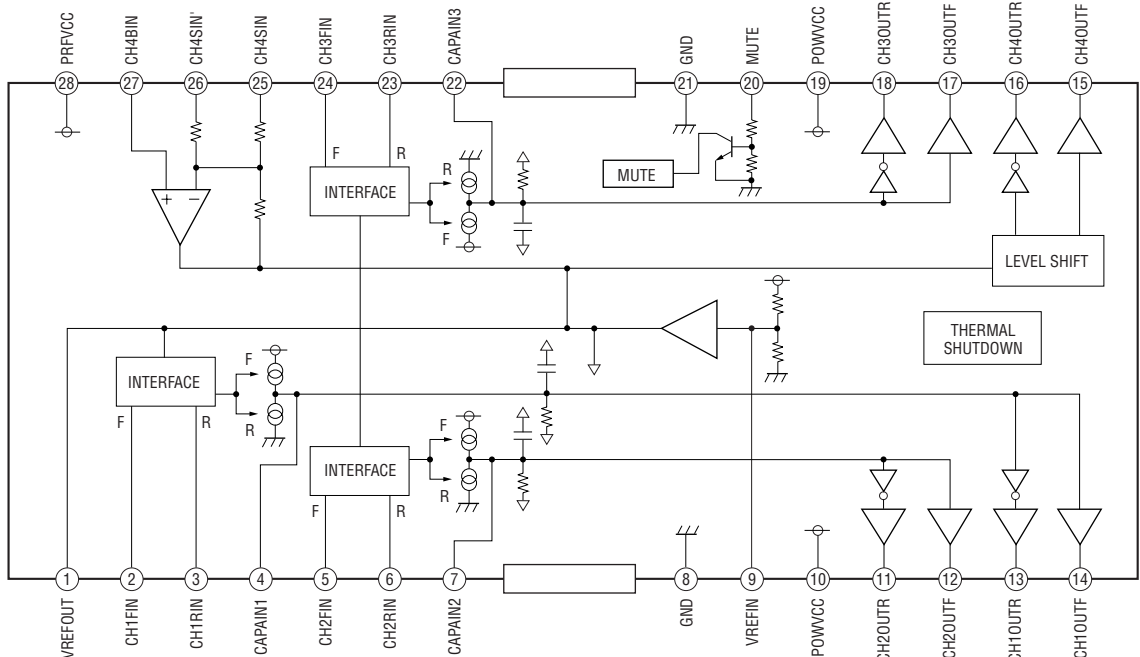


• IC Block Diagrams
 – CD Board –

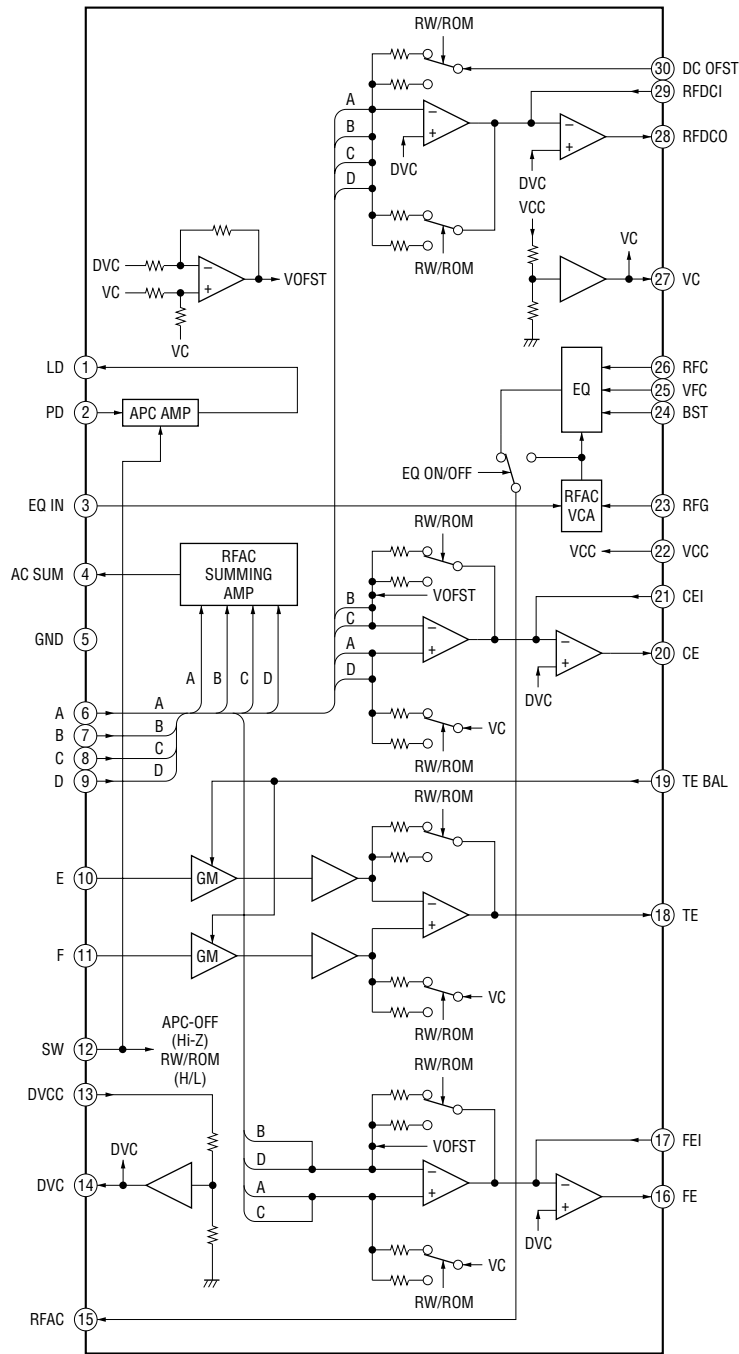
IC101 CXD3017Q



IC102 BA5974FP-E2

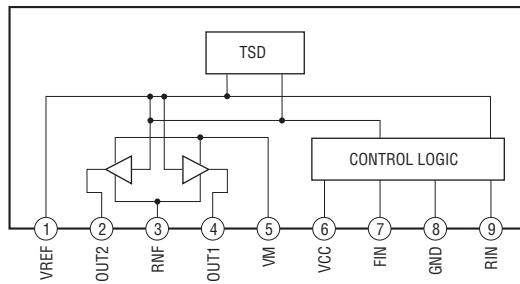


IC103 CXA2581N-T4



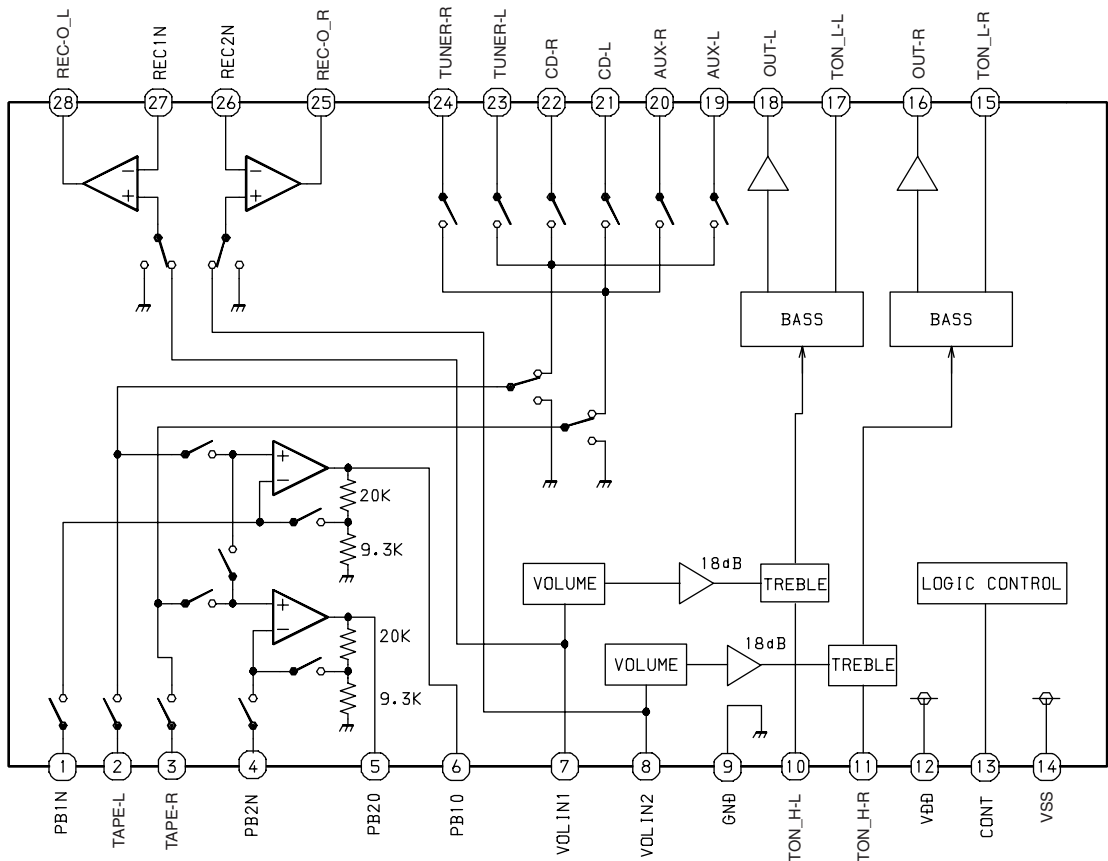
- CONTROL Board -

IC604 BA6956AN

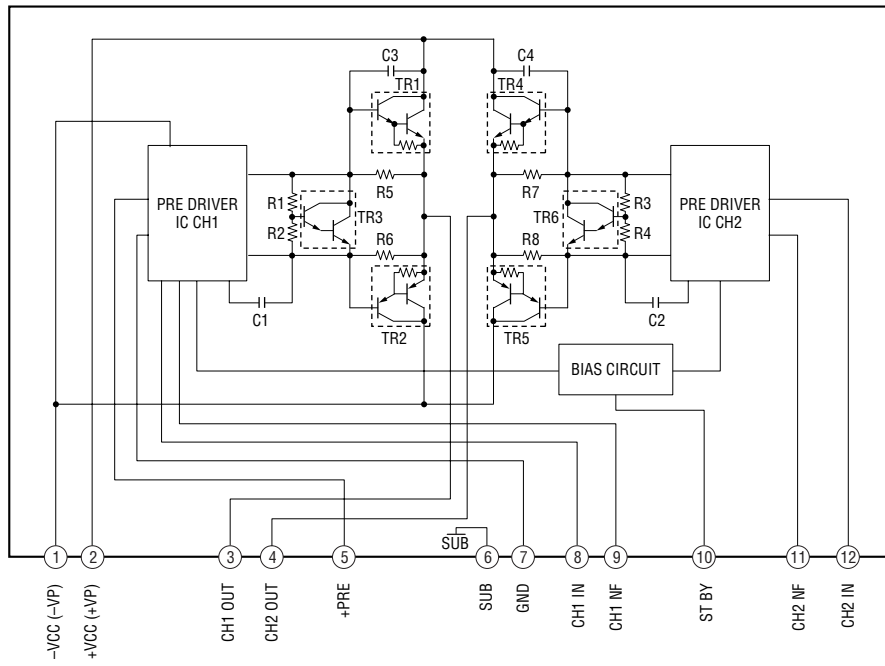


- MAIN Board -

IC301 BD3881FV



IC201 STK403-040



6-13. IC Pin Function Description

IC601 LC876764A-51E5 System Control (CONTROL Board)

Pin No.	Pin Name	I/O	Description
1	C-PWM1	O	PWM1 signal output to the CD unit
2	C-PWM2	O	PWM2 signal output to the CD unit
3	C-SCOR	I	SCOR (SUBQ request) signal output to the CD unit
4	T-SOL	O	Solenoid control signal output to the tape deck
5	T-END	I	Tape deck reel switch signal input
6	T-MTR.CONT	O	Motor control signal output to the tape deck
7	O-SHIFT	O	Clock shift control signal output
8	P-CON	O	Power relay control signal output
9	PAMP-MUTE	O	Muting control signal output to the power amplifier
10	F-DATA	O	Control signal output to the sound processor
11	I-RESET	I	Reset signal input from the reset IC (IC603)
12	I-XT1	I	Resonator terminal (32.768kHz)
13	O-XT2	O	Resonator terminal (32.768kHz)
14	GND.	—	Ground terminal
15	XIN	I	Resonator terminal (8.64MHz)
16	XOUT	O	Resonator terminal (8.64MHz)
17	VDD1	—	Power supply terminal
18	I-KEY1	I	Key AD input 1
19	I-KEY2	I	Key AD input 2
20	BASS ENC INPUT	I	Encoder signal input from the bass encoder
21	TRBLE ENC INPUT	I	Encoder signal input from the treble encoder
22	VOL-ENC	I	Encoder signal input from the volume encoder
23	RDS-SIG	I	RDS signal level input from the tuner
24	T-SW	I	Tape switch status signal input from the tape deck (SW2 to 4)
25	I-POWER MONI	I	Power amplifier overload monitoring signal input
26	I-POWER DOWN	I	Power down detection signal input
27	RDS-CLK	I	RDS clock input from the tuner
28	CD-DOOR-SW	I	CD door open/close switch signal input
29	RMC-IN	I	Remote sensor signal input
30 to 33	NC	—	Not used (open)
34 to 44	O-GRID1 to 11	O	Grid signal output to the fluorescent indicator tube
45	O-SEG1	O	Segment signal output to the fluorescent indicator tube
46	VDD3	—	Power supply terminal
47 to 50	O-SEG2 to 5	O	Segment signal output to the fluorescent indicator tube
51	GND.	—	Ground terminal
52 to 66	O-SEG6 to 20	O	Segment signal output to the fluorescent indicator tube
67, 68	NC	—	Not used (open)
69 to 71	I-INI-1 to 3	I	Initial selection signal input
72	VDD4	—	Power supply terminal
73	O-CLOSE	O	CD tray close control signal output
74	O-OPEN	O	CD tray open control signal output
75	LED-CONT	O	Standby LED control signal output
76	O-DSG	O	Not used (open)
77	T-REC	O	REC/PLAY control signal output to the REC/PLAY switch circuit
78	I-INI.BASS+2	—	Not used (fixed at "L")
79	T-PLAY.SW	I	Play switch signal input from the tape deck
80	R-MUTE	O	Muting signal output to the tuner
81	O-BIAS	O	Bias control signal output to the bias oscillation circuit
82	CD-FUN	O	CD power supply control signal output
83	O-PWM3E	O	Tuner power supply control signal output

Pin No.	Pin Name	I/O	Description
84	R-CE	O	Tuner chip enable signal output to the tuner
85	C-XRST	O	Reset signal output to the CD unit
86	C-XLT	O	Latch signal output to the CD unit
87	C-DATA	O	Data output to the CD unit
88	C-SQCK	O	SUBQ clock output to the CD unit
89	VSS2	—	Ground terminal
90	VDD2	—	Power supply terminal
91	RDS-DATA	I	RDS data input from the tuner
92	R-ST	I	Stereo/mono detection signal input from the tuner
93	R-TUNED	I	Tuner tuned status signal input
94	C-SENS	I	SENS signal input from the CD unit
95	C-LDON	O	LD ON signal output to the CD unit
96	C-SQSO	I	SUB-Q data input from the CD unit
97	C-CLK	O	Clock output to the CD unit
98	R-DATA	O	Data output to the tuner
99	R-COUNT	I	IF count signal input from the tuner
100	R-CLK	O	Clock signal output to the tuner

SECTION 7 EXPLODED VIEWS

NOTE:

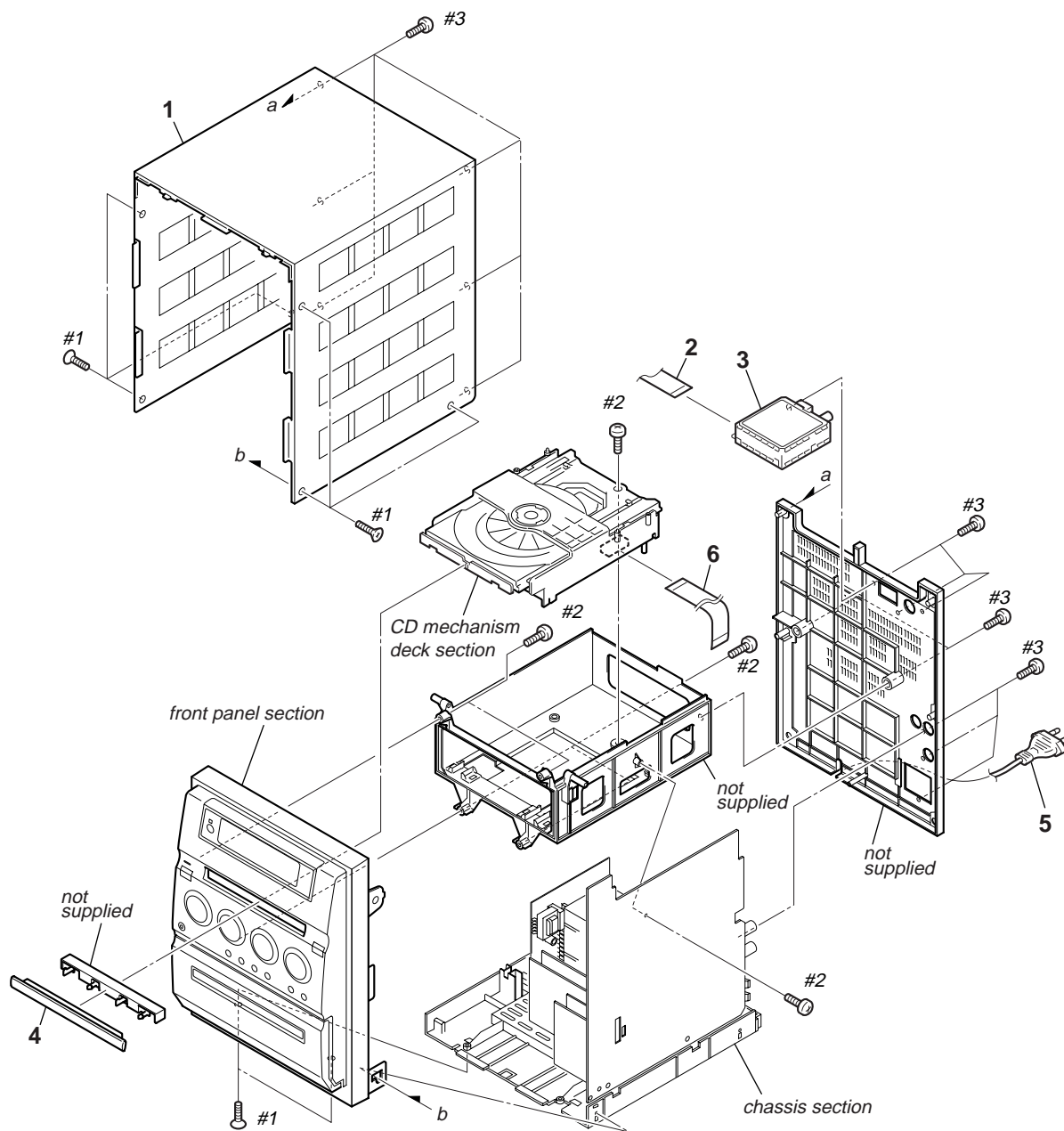
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded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

- Abbreviation
 AUS : Australian model
 CND : Canadian model
 E51 : Chilean and Peruvian models
 HK : Hong Kong model
 KR : Korean model
 SP : Singapore model
 TW : Taiwan model

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

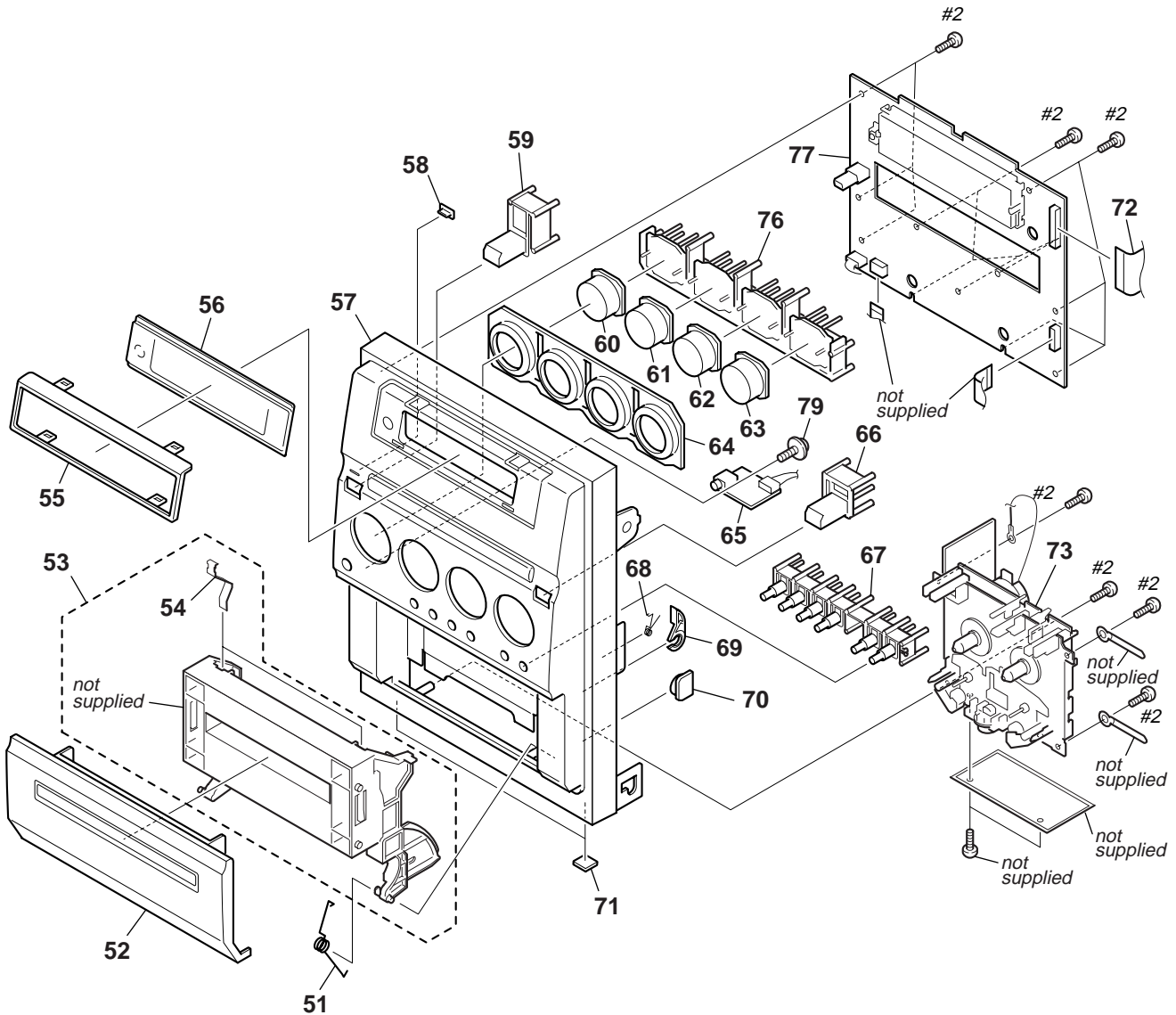
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. Overall Section



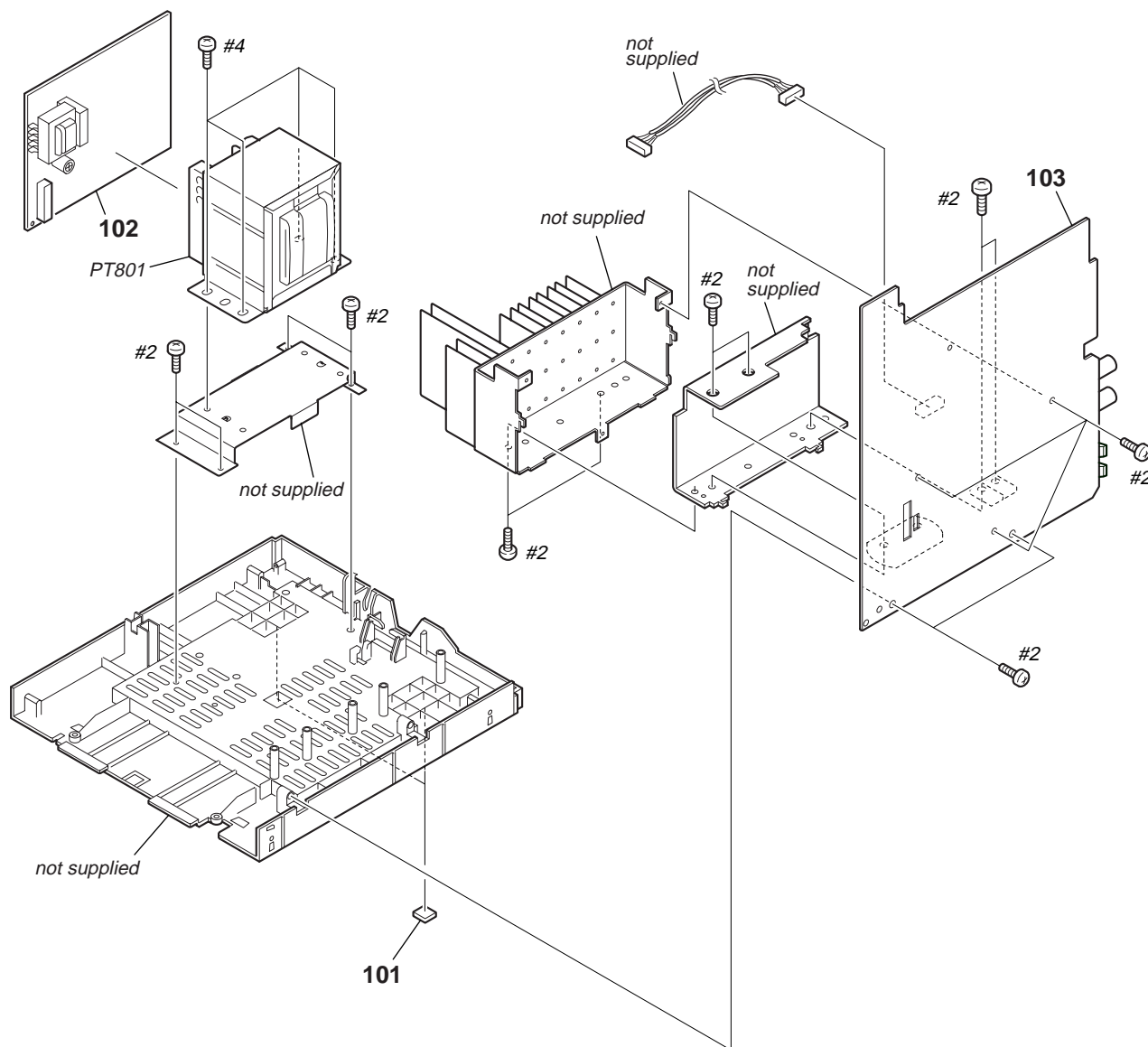
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-247-756-01	CABINET, TOP (US,CND,AEP,UK,KR)		Δ 5	1-555-795-00	CORD, POWER (EXCEPT US,CND,TW,KR)	
1	4-247-756-21	CABINET, TOP (AUS,E51,HK,SP,TW)		Δ 5	1-769-079-22	CORD, POWER (KR)	
2	1-827-731-11	WIRE (FLAT TYPE)(11 CORE)(EXCEPT AEP,UK)		Δ 5	1-783-532-11	CORD, POWER (US,CND,TW)	
2	1-828-984-11	WIRE (FLAT TYPE)(15 CORE)(AEP,UK)		6	1-827-714-11	WIRE (FLAT TYPE)(21 CORE)	
3	1-693-619-11	TUNER (FM/AM)(AEP,UK,KR)		#1	7-685-248-14	SCREW +KTP 3X12 TYPE2 NON-SLIT	
3	1-693-620-11	TUNER (FM/AM)(AUS,E51,HK,SP,TW)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 NON-S	
3	1-693-624-11	TUNER (FM/AM)(US,CND)		#3	7-685-647-14	SCREW +BVTP 3X10 TYPE2 NON-S	
4	4-247-367-01	LID,CD					

7-2. Front Panel Section



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-247-757-01	SPR-T,CASS		66	4-247-369-01	BUTTON,OPEN/CLOSE	
52	X-4955-860-1	LID TC ASSY		67	4-247-368-01	BUTTON,FUNCTION	
53	X-4955-859-1	HOLDER CASSETTE ASSY		68	4-231-841-01	SPRING (HEART CAM-B)	
54	4-238-631-01	TAPE SPRING		69	4-231-825-01	CAM (B), HEART	
55	4-247-361-01	COVER, DISPLAY		70	4-242-318-01	OIL-DMPR, 70	
56	4-247-374-01	WINDOW,DISPLAY		71	4-247-752-01	RUBBER, FOOT	
57	4-247-366-01	CABINET, FRONT (AEP,UK)		72	1-829-747-11	WIRE (FLAT TYPE)(26 CORE)	
57	4-247-366-21	CABINET, FRONT (EXCEPT AEP,UK)		73	1-796-351-51	MECHANISM, SINGLE CASSETTE	
58	4-247-376-01	POWER,INDICATER		76	4-247-371-01	BUTTON,CD	
59	4-247-370-01	BUTTON,POWER		77	A-4747-954-A	CONTROL BOARD, COMPLETE (AEP,UK,KR)	
60	4-247-357-01	CAP, AUX		77	A-4747-960-A	CONTROL BOARD, COMPLETE (US,CND)	
61	4-247-358-01	CAP, CD		77	A-4748-774-A	CONTROL BOARD, COMPLETE (E51,HK,SP,TW,AUS)	
62	4-247-359-01	CAP, TUNING		79	3-229-336-01	SCREW +BVVH TAPPING	
63	4-247-356-01	CAP, VOL		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 NON-S	
64	4-247-360-01	COVER, RING					
65	1-689-576-11	HEADPHONE BOARD					

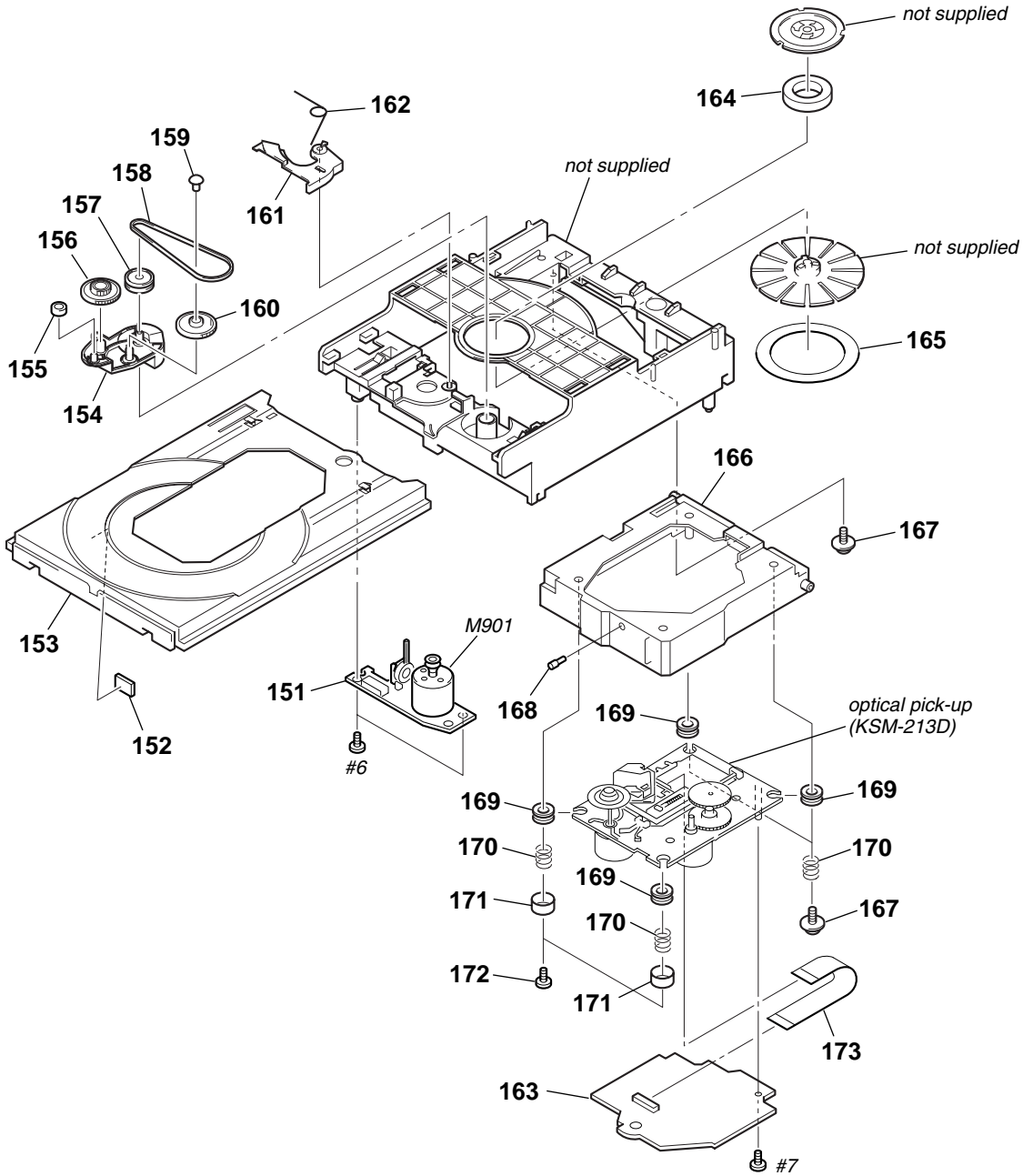
7-3. Chassis Section



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	4-247-752-01	RUBBER, FOOT		△ PT801	1-443-033-11	TRANSFORMER, POWER (AEP,UK)	
102	1-689-574-11	TRANSFORMER BOARD		△ PT801	1-443-034-11	TRANSFORMER, POWER (HK,SP,AUS)	
103	A-4747-957-A	MAIN BOARD, COMPLETE (AEP,UK,KR)		△ PT801	1-443-036-11	TRANSFORMER, POWER (KR)	
103	A-4747-962-A	MAIN BOARD, COMPLETE (US,CND)		△ PT801		TRANSFORMER, POWER (E51,TW)	
103	A-4748-777-A	MAIN BOARD, COMPLETE (E51,HK,SP,TW,AUS)		#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 NON-S	
△ PT801	1-443-032-11	TRANSFORMER, POWER (US,CND)		#4	7-682-561-09	SCREW +B 4X8P	

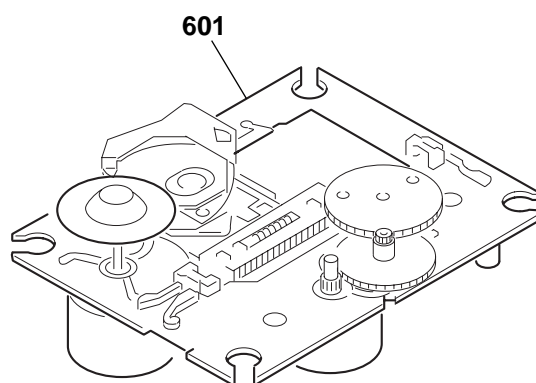
<p>The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.</p>	<p>Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.</p>
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7-4. CD Mechanism Deck Setion



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
151	1-674-336-12	LOADING BOARD		164	A-473-508-2A	MAGNET	
152	4-925-315-31	DAMPER		165	4-231-777-02	SHEET (KH2)	
153	4-224-894-22	TRAY (CDM55D)		166	4-244-962-01	HOLDER (C213)	
154	4-220-233-01	CAM (CDM55)		167	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
155	4-221-815-11	ROLLER		168	4-229-358-01	SHAFT (BU21)	
156	4-220-237-01	GEAR (A)		169	4-227-549-11	INSULATOR	
157	4-220-234-01	PULLEY (LDG)		170	4-244-959-01	SPRING (T213), COMPRESSION	
158	4-221-816-01	BELT (CDM55)		171	4-231-151-01	STOPPER (BU)	
159	4-227-598-01	SPACER (55)		172	4-218-253-31	SCREW (M2.6), +BTTP	
160	4-220-238-01	GEAR (B)		173	1-757-055-11	WIRE, PARALLEL (FFC) (16 CORE)	
161	4-220-229-02	LEVER (SW)		M901	A-4735-337-A	MOTOR (LD) ASSY (TRAY)	
162	4-220-239-01	SPRING, TORSION		#6	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
163	A-4728-536-A	CD BOARD, COMPLETE		#7	7-621-255-32	SCREW +P 2X5	

7-5. KSM-213D



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remarks</u>
△ 601	A-4735-357-A	BASE ASSY, OP (KSM-213D)	

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

Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

SECTION 8 ELECTRICAL PARTS LIST

NOTE:

- 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, -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.
- RESISTORS
All resistors are in ohms.
METAL: metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable

- CAPACITORS:
uF: μ F
• COILS
uH: μ H
• SEMICONDUCTORS
In each case, u: μ , for example:
uA... : μ A... , uPA... , μ PA... ,
uPB... , μ PB... , uPC... , μ PC... ,
uPD... , μ PD...
• Abbreviation
AUS : Australian model
CND: Canadian model
E51 : Chilean and Peruvian models

- HK : Hong Kong model
- KR : Korean model
- SP : Singapore model
- TW : Taiwan model

When indicating parts by reference number, please include the board name.

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

Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	A-4728-536-A	CD BOARD, COMPLETE *****		C190	1-115-156-11	CERAMIC CHIP	1uF 10V
		< CAPACITOR >		C191	1-126-933-11	ELECT	100uF 20.00% 16V
C101	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	C192	1-126-382-11	ELECT	100uF 20.00% 16V
C102	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	C193	1-126-382-11	ELECT	100uF 20.00% 16V
C103	1-162-962-11	CERAMIC CHIP	470PF 10% 50V			< CONNECTOR >	
C104	1-162-962-11	CERAMIC CHIP	470PF 10% 50V	C194	1-164-360-11	CERAMIC CHIP	0.1uF 16V
C108	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	C196	1-164-360-11	CERAMIC CHIP	0.1uF 16V
				C197	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V
C109	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V	C198	1-126-933-11	ELECT	100uF 20.00% 16V
C110	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V			< DIODE >	
C111	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CN101	1-770-528-31	CONNECTOR, FFC/FPC 21P	
C112	1-115-156-11	CERAMIC CHIP	1uF 10V	CN102	1-779-466-11	CONNECTOR, FFC (LIF (NON-ZIF)) 16P	
C114	1-164-360-11	CERAMIC CHIP	0.1uF 16V			< DIODE >	
				D101	8-719-056-77	DIODE UDZ-TE-17-3.9B	
C116	1-126-382-11	ELECT	100uF 20.00% 16V			< FERRITE BEAD >	
C117	1-126-382-11	ELECT	100uF 20.00% 16V	FB101	1-469-144-21	FERRITE	0uH
C118	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	FB103	1-469-144-21	FERRITE	0uH
C121	1-164-360-11	CERAMIC CHIP	0.1uF 16V			< IC >	
C122	1-126-933-11	ELECT	100uF 20.00% 16V	IC101	8-752-402-31	IC CXD3017Q	
				IC102	8-759-549-28	IC BA5974FP-E2	
C123	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	IC103	8-752-089-74	IC CXA2581N-T4	
C124	1-125-891-11	CERAMIC CHIP	0.47uF 10.00% 10V			< JUMPER RESISTOR >	
C125	1-164-360-11	CERAMIC CHIP	0.1uF 16V	JR101	1-216-864-11	METAL CHIP	0
C126	1-164-360-11	CERAMIC CHIP	0.1uF 16V			< TRANSISTOR >	
C127	1-126-382-11	ELECT	100uF 20.00% 16V	Q101	8-729-049-31	TRANSISTOR	2SB710A-RTX
				Q102	8-729-920-85	TRANSISTOR	2SD1664-T100-QR
C130	1-164-360-11	CERAMIC CHIP	0.1uF 16V			< RESISTOR >	
C131	1-126-933-11	ELECT	100uF 20.00% 16V	R101	1-216-821-11	METAL CHIP	1K 5% 1/10W
C133	1-162-921-11	CERAMIC CHIP	33PF 5% 50V	R102	1-216-845-11	METAL CHIP	100K 5% 1/10W
C140	1-115-156-11	CERAMIC CHIP	1uF 10V	R103	1-216-835-11	METAL CHIP	15K 5% 1/10W
C143	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R104	1-216-839-11	METAL CHIP	33K 5% 1/10W
				R106	1-216-821-11	METAL CHIP	1K 5% 1/10W
C145	1-164-360-11	CERAMIC CHIP	0.1uF 16V				
C146	1-107-826-11	CERAMIC CHIP	0.1uF 10.00% 16V	R107	1-216-833-11	METAL CHIP	10K 5% 1/10W
C153	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R108	1-216-827-11	METAL CHIP	3.3K 5% 1/10W
C159	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V	R109	1-216-857-11	METAL CHIP	1M 5% 1/10W
C162	1-126-382-11	ELECT	100uF 20.00% 16V	R111	1-216-846-11	METAL CHIP	120K 5% 1/10W
				R114	1-218-745-11	METAL CHIP	160K 5% 1/10W
C163	1-126-933-11	ELECT	100uF 20.00% 16V				
C165	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R116	1-216-797-11	METAL CHIP	10 5% 1/10W
C167	1-162-920-11	CERAMIC CHIP	27PF 5% 50V				
C168	1-162-919-11	CERAMIC CHIP	22PF 5% 50V				
C171	1-115-412-11	CERAMIC CHIP	680PF 5.00% 25V				
C172	1-162-927-11	CERAMIC CHIP	100PF 5% 50V				
C181	1-115-412-11	CERAMIC CHIP	680PF 5.00% 25V				
C182	1-162-927-11	CERAMIC CHIP	100PF 5% 50V				
C183	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V				
C184	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V				
C185	1-125-891-11	CERAMIC CHIP	0.47uF 10.00% 10V				

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R117	1-216-821-11	METAL CHIP	1K 5% 1/10W	C607	1-126-963-11	ELECT 4.7uF	20.00% 50V
R118	1-216-809-11	METAL CHIP	100 5% 1/10W	C608	1-126-916-11	ELECT 1000uF	20.00% 6.3V
R119	1-216-826-11	METAL CHIP	2.7K 5% 1/10W	C609	1-127-876-21	CERAMIC 0.01uF	10% 50V
R120	1-216-835-11	METAL CHIP	15K 5% 1/10W	C610	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
R122	1-216-845-11	METAL CHIP	100K 5% 1/10W	C611	1-124-584-00	ELECT 100uF	20% 10V
R123	1-216-833-11	METAL CHIP	10K 5% 1/10W	C612	1-124-234-00	ELECT 22uF	20% 16V
R124	1-216-845-11	METAL CHIP	100K 5% 1/10W	C613	1-164-156-11	CERAMIC CHIP 0.1uF	25V
R131	1-216-813-11	METAL CHIP	220 5% 1/10W	C614	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
R143	1-216-836-11	METAL CHIP	18K 5% 1/10W	C615	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
R144	1-216-836-11	METAL CHIP	18K 5% 1/10W	C616	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V
R147	1-216-828-11	METAL CHIP	3.9K 5% 1/10W	C617	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
R148	1-216-797-11	METAL CHIP	10 5% 1/10W	C618	1-162-921-11	CERAMIC CHIP 33PF	5% 50V
R149	1-216-797-11	METAL CHIP	10 5% 1/10W	C619	1-162-913-11	CERAMIC CHIP 8PF	0.50PF 50V
R150	1-216-833-11	METAL CHIP	10K 5% 1/10W	C620	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
R151	1-216-845-11	METAL CHIP	100K 5% 1/10W	C621	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
R158	1-216-837-11	METAL CHIP	22K 5% 1/10W	C622	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
R159	1-216-837-11	METAL CHIP	22K 5% 1/10W	C623	1-162-917-11	CERAMIC CHIP 15PF	5% 50V
R162	1-216-847-11	METAL CHIP	150K 5% 1/10W	C624	1-126-947-11	ELECT 47uF	20.00% 25V
R171	1-216-837-11	METAL CHIP	22K 5% 1/10W	C625	1-162-964-11	CERAMIC CHIP 0.001uF	10% 50V
R172	1-216-837-11	METAL CHIP	22K 5% 1/10W	C626	1-162-921-11	CERAMIC CHIP 33PF	5% 50V
R173	1-216-837-11	METAL CHIP	22K 5% 1/10W	C627	1-126-964-11	ELECT 10uF	20.00% 50V
R181	1-216-837-11	METAL CHIP	22K 5% 1/10W	C628	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
R182	1-216-837-11	METAL CHIP	22K 5% 1/10W	C629	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R183	1-216-837-11	METAL CHIP	22K 5% 1/10W	C630	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R190	1-216-813-11	METAL CHIP	220 5% 1/10W	C631	1-162-282-31	CERAMIC 100PF	10% 50V
R191	1-216-839-11	METAL CHIP	33K 5% 1/10W	C632	1-162-282-31	CERAMIC 100PF	10% 50V
R192	1-216-839-11	METAL CHIP	33K 5% 1/10W	C633	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R193	1-216-846-11	METAL CHIP	120K 5% 1/10W	C634	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R194	1-216-845-11	METAL CHIP	100K 5% 1/10W	C635	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R195	1-216-853-11	METAL CHIP	470K 5% 1/10W	C636	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R196	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	C637	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
R197	1-216-821-11	METAL CHIP	1K 5% 1/10W	C638	1-162-927-11	CERAMIC CHIP 100PF	5% 50V
		< NETWORK >		C639	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
RN101	1-233-576-11	RES, CHIP NETWORK 100		C640	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
		< SWITCH >		C641	1-126-960-11	ELECT 1uF	20.00% 50V
S101	1-771-853-11	SWITCH, DETECTION (LIMIT)		C642	1-126-963-11	ELECT 4.7uF	20.00% 50V
		< VIBRATOR >		C643	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
X101	1-767-226-11	VIBRATOR, CRYSTAL (16.9344)		C644	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
*****				C645	1-162-282-31	CERAMIC 100PF	10% 50V
A-4747-954-A		CONTROL BOARD, COMPLETE (AEP, UK, KR)		C646	1-126-964-11	ELECT 10uF	20.00% 50V
		*****		C647	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
A-4747-960-A		CONTROL BOARD, COMPLETE (US, CND)		C648	1-115-339-11	CERAMIC CHIP 0.1uF	10.00% 50V
		*****		C649	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
A-4748-774-A		CONTROL BOARD, COMPLETE		C650	1-126-933-11	ELECT 100uF	20.00% 16V
		(E51, HK, SP, TW, AUS)		C651	1-162-282-31	CERAMIC 100PF	10% 50V
		*****		C652	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
				C653	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
				< CONNECTOR >			
				CN601	1-779-294-11	CONNECTOR, FFC (LIF (NON-ZIF)) 26P	
				CN602	1-779-550-21	CONNECTOR, FFC (LIF (NON-ZIF)) 13P	
				* CN603	1-770-516-31	CONNECTOR, FFC/FPC 8P	
				< DIODE >			
				D601	8-719-010-41	DIODE UZ-5.6BSA-TP	
				D602	8-719-991-33	DIODE 1SS133T-72	
				D603	8-719-991-33	DIODE 1SS133T-77	
				D604	8-719-991-33	DIODE 1SS133T-72	
C604	1-162-927-11	CERAMIC CHIP	100PF 5% 50V				
C605	1-162-962-11	CERAMIC CHIP	470PF 10% 50V				
C606	1-126-963-11	ELECT	4.7uF 20.00% 50V				

CONTROL

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
D605	8-719-991-33	DIODE 1SS133T-72		R613	1-247-831-91	CARBON 1K 5%	1/4W
D606	8-719-991-33	DIODE 1SS133T-72		R614	1-247-831-91	CARBON 1K 5%	1/4W
D607	8-719-991-33	DIODE 1SS133T-72		R615	1-247-831-91	CARBON 1K 5%	1/4W
D608	8-719-989-91	DIODE 1N4148A-T265		R616	1-247-831-91	CARBON 1K 5%	1/4W
D609	8-719-989-91	DIODE 1N4148A-T265		R617	1-247-831-91	CARBON 1K 5%	1/4W
		< FERRITE BEAD >		R618	1-247-831-91	CARBON 1K 5%	1/4W
FB601	1-412-473-21	INDUCTOR 0uH		R619	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< FLUORESCENT INDICATOR TUBE >		R620	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
FL601	1-518-908-11	INDICATOR TUBE, FLUORESCENT		R621	1-216-821-11	METAL CHIP 1K 5%	1/16W
		< IC >		R622	1-216-835-11	METAL CHIP 15K 5%	1/16W
IC601	6-803-170-01	IC LC876764C-51E5		R623	1-216-817-11	METAL CHIP 470 5%	1/16W
IC602	6-700-250-01	IC PST3445UL		R624	1-216-833-11	METAL CHIP 10K 5%	1/16W
IC603	6-701-681-01	IC RPM7140-V4 (■)		R625	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
IC604	8-759-598-69	IC BA6956AN		R626	1-216-833-11	METAL CHIP 10K 5%	1/16W
		< JUMPER RESISTOR >		R627	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
JR601	1-216-864-11	METAL CHIP 0 5%	1/16W	R629	1-249-436-11	CARBON 39K 5%	1/4W
JR602	1-216-864-11	METAL CHIP 0 5%	1/16W	R631	1-216-837-11	METAL CHIP 22K 5%	1/16W
JR604	1-216-864-11	METAL CHIP 0 5%	1/16W			(E51, HK, SP, TW, AUS)	
JR607	1-216-864-11	METAL CHIP 0 5%	1/16W	R632	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< COIL >		R633	1-216-845-11	METAL CHIP 100K 5%	1/16W
L601	1-410-509-11	INDUCTOR 10uH		R634	1-216-833-11	METAL CHIP 10K 5%	1/16W
L602	1-410-509-11	INDUCTOR 10uH		R635	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< DIODE >		R636	1-216-845-11	METAL CHIP 100K 5%	1/16W
LED601	8-719-059-98	DIODE SLR-342VCT31		R637	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< TRANSISTOR >		R638	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q601	8-729-230-49	TRANSISTOR 2SC2712L-TE85R		R639	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q602	6-550-296-01	TRANSISTOR 2SA1980G		R640	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q603	8-729-230-49	TRANSISTOR 2SC2712L-TE85R		R641	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q604	8-729-230-49	TRANSISTOR 2SC2712L-TE85R		R642	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q605	6-550-297-01	TRANSISTOR 2SA1981Y		R643	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q606	6-550-305-01	TRANSISTOR 2SA1296GR- (TPE2)		R644	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q607	8-729-900-53	TRANSISTOR DTC114EK		R645	1-216-845-11	METAL CHIP 100K 5%	1/16W
Q608	6-550-297-01	TRANSISTOR 2SA1981Y		R646	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< RESISTOR >		R647	1-216-845-11	METAL CHIP 100K 5%	1/16W
R601	1-216-828-11	METAL CHIP 3.9K 5%	1/16W	R648	1-216-845-11	METAL CHIP 100K 5%	1/16W
		(E51, HK, SP, TW, AUS)		R649	1-216-845-11	METAL CHIP 100K 5%	1/16W
R601	1-216-833-11	METAL CHIP 10K 5%	1/16W	R650	1-216-845-11	METAL CHIP 100K 5%	1/16W
		(US, CND, AEP, UK, KR)		R651	1-216-845-11	METAL CHIP 100K 5%	1/16W
R602	1-216-821-11	METAL CHIP 1K 5%	1/16W	R652	1-216-845-11	METAL CHIP 100K 5%	1/16W
R603	1-216-821-11	METAL CHIP 1K 5%	1/16W	R653	1-216-845-11	METAL CHIP 100K 5%	1/16W
R604	1-216-821-11	METAL CHIP 1K 5%	1/16W	R654	1-216-845-11	METAL CHIP 100K 5%	1/16W
R605	1-216-821-11	METAL CHIP 1K 5%	1/16W	R655	1-216-845-11	METAL CHIP 100K 5%	1/16W
R606	1-216-841-11	METAL CHIP 47K 5%	1/16W	R656	1-216-845-11	METAL CHIP 100K 5%	1/16W
R607	1-247-807-31	CARBON 100 5%	1/4W	R657	1-216-845-11	METAL CHIP 100K 5%	1/16W
R608	1-247-807-31	CARBON 100 5%	1/4W	R658	1-216-845-11	METAL CHIP 100K 5%	1/16W
R609	1-216-809-11	METAL CHIP 100 5%	1/16W	R659	1-216-835-11	METAL CHIP 15K 5%	1/16W
R610	1-216-809-11	METAL CHIP 100 5%	1/16W	R660	1-216-845-11	METAL CHIP 100K 5%	1/16W
R611	1-216-809-11	METAL CHIP 100 5%	1/16W	R661	1-216-845-11	METAL CHIP 100K 5%	1/16W
R612	1-249-429-11	CARBON 10K 5%	1/4W	R662	1-216-841-11	METAL CHIP 47K 5%	1/16W
				R663	1-216-841-11	METAL CHIP 47K 5%	1/16W
				R664	1-247-887-00	CARBON 220K 5%	1/4W
				R665	1-216-841-11	METAL CHIP 47K 5%	1/16W
				R666	1-216-821-11	METAL CHIP 1K 5%	1/16W
				R667	1-216-853-11	METAL CHIP 470K 5%	1/16W
				R668	1-216-809-11	METAL CHIP 100 5%	1/16W
				R669	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
				R670	1-216-833-11	METAL CHIP 10K 5%	1/16W
				R671	1-216-841-11	METAL CHIP 47K 5%	1/16W

CONTROL

HEADPHONE

LOADING

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R672	1-216-841-11	METAL CHIP	47K 5% 1/16W	R725	1-216-845-11	METAL CHIP	100K 5% 1/16W
R673	1-216-298-00	METAL CHIP	2.2 5% 1/10W	R726	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R674	1-216-833-11	METAL CHIP	10K 5% 1/16W	R727	1-216-845-11	METAL CHIP	100K 5% 1/16W
R675	1-216-837-11	METAL CHIP	22K 5% 1/16W	R728	1-216-845-11	METAL CHIP	100K 5% 1/16W
R676	1-216-837-11	METAL CHIP	22K 5% 1/16W	R729	1-247-831-91	CARBON	1K 5% 1/4W
R677	1-216-839-11	METAL CHIP	33K 5% 1/16W	R734	1-216-838-11	METAL CHIP	27K 5% 1/16W
R678	1-216-837-11	METAL CHIP	22K 5% 1/16W	R735	1-247-879-91	CARBON	100K 5% 1/4W
R679	1-218-179-11	RES-CHIP	10M 5% 1/10W	R736	1-247-879-91	CARBON	100K 5% 1/4W
R680	1-247-831-91	CARBON	1K 5% 1/4W			< SWITCH >	
R681	1-216-821-11	METAL CHIP	1K 5% 1/16W				
R682	1-249-410-11	CARBON	270 5% 1/4W F	S601	1-786-050-21	SWITCH, KEY BOARD (TUNER/BAND)	
R683	1-216-845-11	METAL CHIP	100K 5% 1/16W	S602	1-786-050-21	SWITCH, KEY BOARD (◀▶ TAPE)	
R684	1-249-426-11	CARBON	5.6K 5% 1/4W	S603	1-786-050-21	SWITCH, KEY BOARD (MD)	
R685	1-216-845-11	METAL CHIP	100K 5% 1/16W	S604	1-786-050-21	SWITCH, KEY BOARD (▲)	
R686	1-218-817-11	RES-CHIP	3.3 10% 1/2W	S605	1-786-050-21	SWITCH, KEY BOARD (■)	
R687	1-249-426-11	CARBON	5.6K 5% 1/4W	S606	1-786-050-21	SWITCH, KEY BOARD (+ ▶▶▶▶▶)	
R688	1-249-429-11	CARBON	10K 5% 1/4W	S607	1-786-050-21	SWITCH, KEY BOARD (◀◀◀◀◀)	
R689	1-216-809-11	METAL CHIP	100 5% 1/16W	S608	1-786-050-21	SWITCH, KEY BOARD (I/⏻)	
R690	1-216-809-11	METAL CHIP	100 5% 1/16W	S609	1-786-050-21	SWITCH, KEY BOARD (DISPLAY)	
R691	1-247-807-31	CARBON	100 5% 1/4W	S610	1-786-050-21	SWITCH, KEY BOARD (PLAY MODE/TUNING MODE)	
R692	1-216-809-11	METAL CHIP	100 5% 1/16W	S611	1-786-050-21	SWITCH, KEY BOARD (CD SYNC)	
R693	1-216-809-11	METAL CHIP	100 5% 1/16W	S612	1-786-050-21	SWITCH, KEY BOARD (● REC PAUSE/START)	
R694	1-216-809-11	METAL CHIP	100 5% 1/16W	S613	1-786-050-21	SWITCH, KEY BOARD (CD ▶▶▶)	
R695	1-216-809-11	METAL CHIP	100 5% 1/16W	S614	1-786-050-21	SWITCH, KEY BOARD (DSG)	
R696	1-216-809-11	METAL CHIP	100 5% 1/16W	S615	1-786-050-21	SWITCH, KEY BOARD (VOL+)	
R697	1-247-807-31	CARBON	100 5% 1/4W				
R698	1-247-807-31	CARBON	100 5% 1/4W	S616	1-786-050-21	SWITCH, KEY BOARD (VOL-)	
R699	1-247-807-31	CARBON	100 5% 1/4W			< VIBRATOR >	
R700	1-216-837-11	METAL CHIP	22K 5% 1/16W				
			(E51, HK, SP, TW, AUS)	X601	9-300-001-87	VIB, XTAL 32.768KHZ CFS-308 CT 32.768KHz	
R700	1-216-295-91	SHORT CHIP	0 (US, CND, AEP, UK, KR)	X602	1-795-880-11	VIBRATOR, CERAMIC 8.64MHZ	
R701	1-216-833-11	METAL CHIP	10K 5% 1/16W				*****
			(US, CND, AEP, UK, KR)		1-689-576-11	HEADPHONE BOARD	*****
R702	1-216-837-11	METAL CHIP	22K 5% 1/16W			< JACK >	
			(E51, HK, SP, TW, AUS)				
R702	1-247-831-91	CARBON	1K 5% 1/4W				
			(US, CND, AEP, UK, KR)	J202	1-816-219-11	JACK, HEADPHONE (PHONES)	
R703	1-249-425-11	CARBON	4.7K 5% 1/4W F			< COIL >	
R704	1-249-425-11	CARBON	4.7K 5% 1/4W F	L205	1-408-117-00	INDUCTOR 10uH	
R705	1-216-845-11	METAL CHIP	100K 5% 1/16W			< RESISTOR >	
R706	1-218-867-11	METAL CHIP	6.8K 5% 1/10W	R201	1-249-409-11	CARBON	220 5% 1/4W F
R707	1-249-430-11	CARBON	12K 5% 1/4W	R202	1-249-412-11	CARBON	390 5% 1/4W F
R708	1-216-840-11	METAL CHIP	39K 5% 1/16W	R203	1-249-409-11	CARBON	220 5% 1/4W F
R709	1-216-833-11	METAL CHIP	10K 5% 1/16W	R204	1-249-412-11	CARBON	390 5% 1/4W F
R710	1-247-831-91	CARBON	1K 5% 1/4W				*****
R711	1-218-833-11	METAL CHIP	270 0.5% 1/10W		1-674-336-12	LOADING BOARD	*****
R712	1-247-831-91	CARBON	1K 5% 1/4W			< CONNECTOR >	
R713	1-249-419-11	CARBON	1.5K 5% 1/4W F	* CN151	1-568-943-11	PIN, CONNECTOR 5P	
R714	1-216-824-11	METAL CHIP	1.8K 5% 1/16W			< SWITCH >	
R715	1-249-422-11	CARBON	2.7K 5% 1/4W F				
R716	1-216-828-11	METAL CHIP	3.9K 5% 1/16W	S1	1-786-203-11	SWITCH, LEVER (SLIDE)(OPEN/CLOSE)	
R717	1-249-427-11	CARBON	6.8K 5% 1/4W F				*****
R718	1-249-430-11	CARBON	12K 5% 1/4W				
R719	1-249-419-11	CARBON	1.5K 5% 1/4W F				
R720	1-216-824-11	METAL CHIP	1.8K 5% 1/16W				
R721	1-249-422-11	CARBON	2.7K 5% 1/4W F				
R722	1-216-828-11	METAL CHIP	3.9K 5% 1/16W				
R723	1-247-831-91	CARBON	1K 5% 1/4W				
R724	1-249-426-11	CARBON	5.6K 5% 1/4W				

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
A-4747-957-A	MAIN BOARD, COMPLETE (AEP, UK, KR)			C353	1-126-956-91	ELECT	0.1uF 20.00% 50V
	*****			C354	1-124-464-11	ELECT	0.22uF 20% 50V
A-4747-962-A	MAIN BOARD, COMPLETE (US, CND)			C355	1-124-464-11	ELECT	0.22uF 20% 50V
	*****			C356	1-124-464-11	ELECT	0.22uF 20% 50V
A-4748-777-A	MAIN BOARD, COMPLETE (E51, HK, SP, TW, AUS)			C357	1-126-957-11	ELECT	0.22uF 20.00% 50V
	*****			C358	1-126-963-11	ELECT	4.7uF 20.00% 50V
	< CAPACITOR >			C359	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C205	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C360	1-162-977-11	CERAMIC CHIP	0.0018uF 10.00% 50V
C206	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C361	1-162-977-11	CERAMIC CHIP	0.0018uF 10.00% 50V
C207	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C362	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C208	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C363	1-164-218-11	CERAMIC CHIP	180PF 0.25PF 50V
C219	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C364	1-164-218-11	CERAMIC CHIP	180PF 0.25PF 50V
C220	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C367	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C231	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C368	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C301	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C384	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C302	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C385	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C305	1-106-361-00	MYLAR	0.0056uF 5.00% 100V	C387	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C306	1-126-923-91	ELECT	220uF 20.00% 10V	C390	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C307	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C392	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C308	1-162-979-11	CERAMIC CHIP	0.0027uF 10.00% 50V	C396	1-128-801-21	CERAMIC	22PF 5% 50V
C309	1-162-979-11	CERAMIC CHIP	0.0027uF 10.00% 50V	C397	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V
C310	1-162-979-11	CERAMIC CHIP	0.0027uF 10.00% 50V	C398	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V
C311	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C401	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C312	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C402	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V
C313	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, UK, KR)	C403	1-115-339-11	CERAMIC CHIP	0.1uF 10.00% 50V
C314	1-164-156-11	CERAMIC CHIP	0.1uF 25V	C404	1-115-339-11	CERAMIC CHIP	0.1uF 10.00% 50V
C315	1-124-589-11	ELECT	47uF 20% 16V	C405	1-137-420-11	FILM	0.047uF 5.00% 100V
C316	1-162-915-11	CERAMIC CHIP	10PF 0.5PF 50V	C406	1-137-420-11	FILM	0.047uF 5.00% 100V
C317	1-126-923-91	ELECT	220uF 20.00% 10V	C407	1-119-940-51	ELECT	4700uF 20.00% 50V
C318	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	C408	1-119-940-51	ELECT	4700uF 20.00% 50V
C319	1-126-947-11	ELECT	47uF 20.00% 16V	C409	1-128-548-11	ELECT	4700uF 20.00% 25V
C320	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	C410	1-128-548-11	ELECT	4700uF 20.00% 25V
C321	1-162-967-11	CERAMIC CHIP	0.0033uF 10% 50V	C412	1-126-947-11	ELECT	47uF 20.00% 25V
C322	1-126-961-11	ELECT	2.2uF 20.00% 50V	C413	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C323	1-126-961-11	ELECT	2.2uF 20.00% 50V	C414	1-126-947-11	ELECT	47uF 20.00% 25V
C324	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V	C416	1-126-966-11	ELECT	33uF 20.00% 50V
C325	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V	C417	1-126-966-11	ELECT	33uF 20.00% 50V
C326	1-162-969-11	CERAMIC CHIP	0.0068uF 10% 25V	C418	1-126-968-11	ELECT	100uF 20.00% 50V
C327	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V	C419	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C328	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	C420	1-124-261-00	ELECT	10uF 20% 50V
C329	1-162-923-11	CERAMIC CHIP	47PF 5% 50V	C421	1-126-967-11	ELECT	47uF 20.00% 50V
C330	1-126-947-11	ELECT	47uF 20.00% 25V	C422	1-126-967-11	ELECT	47uF 20.00% 50V
C331	1-126-947-11	ELECT	47uF 20.00% 25V	C424	1-124-584-00	ELECT	100uF 20% 10V
C332	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V	C427	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C333	1-126-933-11	ELECT	100uF 20.00% 16V	C428	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V
C334	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V	C431	1-164-733-11	CERAMIC CHIP	820PF 10.00% 50V
C335	1-164-230-11	CERAMIC CHIP	220PF 5.00% 50V	C432	1-124-589-11	ELECT	47uF 20% 16V
C338	1-126-160-11	ELECT	1uF 20% 50V	C433	1-124-584-00	ELECT	100uF 20% 10V
C339	1-126-160-11	ELECT	1uF 20% 50V	C434	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C341	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V	C435	1-124-589-11	ELECT	47uF 20% 16V
C344	1-126-947-11	ELECT	47uF 20.00% 25V	C436	1-126-967-11	ELECT	47uF 20.00% 50V
C345	1-104-658-91	ELECT	100uF 20.00% 10V (AEP, UK, KR)	C437	1-126-967-11	ELECT	47uF 20.00% 50V
C346	1-162-199-31	CERAMIC	10PF 5% 50V	C438	1-164-315-11	CERAMIC CHIP	470PF 5.00% 50V
C351	1-126-963-11	ELECT	4.7uF 20.00% 50V	C439	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V
C352	1-126-956-91	ELECT	0.1uF 20.00% 50V	C440	1-130-321-11	FILM	0.1uF 5.00% 100V
				C441	1-130-321-11	FILM	0.1uF 5.00% 100V
				C501	1-126-966-11	ELECT	33uF 20.00% 16V

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C502	1-162-192-31	CERAMIC	2.7PF 10.00% 50V	D429	8-719-991-33	DIODE 1SS133T-72	
C503	1-162-192-31	CERAMIC	2.7PF 10.00% 50V	D430	8-719-048-55	DIODE UZ-10BSC-TP	
C504	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	D431	6-500-335-01	DIODE MC2838	
C505	1-113-342-11	CERAMIC	0.1uF 50V	D432	6-500-334-01	DIODE MC2836	
C506	1-163-021-91	CERAMIC CHIP	0.01uF 10.00% 50V	D433	8-719-991-33	DIODE 1SS133T-72	
C507	1-126-157-11	ELECT	10uF 20% 16V	D434	8-719-110-09	DIODE MTZJ-T-77-8.2C	
C508	1-126-157-11	ELECT	10uF 20% 16V	D435	8-719-991-33	DIODE 1SS133T-72	
C509	1-126-968-11	ELECT	100uF 20.00% 50V	D501	8-719-991-33	DIODE 1SS133T-72	
C510	1-126-961-11	ELECT	2.2uF 20.00% 50V			< FERRITE BEAD >	
C511	1-126-961-11	ELECT	2.2uF 20.00% 50V				
C512	1-128-817-21	CERAMIC	470PF 5% 50V	FB202	1-410-396-41	FERRITE	0.45uH
C513	1-128-817-21	CERAMIC	470PF 5% 50V	FB203	1-410-396-41	FERRITE	0.45uH
C514	1-136-230-00	FILM	0.0022uF 5.00% 100V	FB301	1-410-396-41	FERRITE	0.45uH
C515	1-136-230-00	FILM	0.0022uF 5.00% 100V	FB302	1-410-396-41	FERRITE	0.45uH
C516	1-126-947-11	ELECT	47uF 20.00% 25V	FB303	1-410-396-41	FERRITE	0.45uH
C517	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	FB304	1-410-396-41	FERRITE	0.45uH
C518	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V			< IC >	
C519	1-126-962-11	ELECT	3.3uF 20.00% 50V	IC201	6-703-084-01	IC STK403-030 (AEP, UK, KR)	
C520	1-126-967-11	ELECT	47uF 20.00% 50V	IC201	6-704-106-01	IC STK403-040 (EXCEPT AEP, UK, KR)	
		< CONNECTOR >		IC301	6-702-895-01	IC BD3881FV	
* CN201	1-564-520-11	PLUG, CONNECTOR 5P				< JACK >	
* CN301	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P		J201	1-793-478-11	JACK, PIN 2P (MD)	
CN302	1-779-294-11	CONNECTOR, FFC (LIF (NON-ZIF)) 26P		J203	1-537-240-31	TERMINAL BOARD (CHECKER PIN)(SPEAKERS)	
CN303	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P		J204	1-774-785-21	JACK, PIN 1P (SUBWOOFER)	
CN304	1-784-776-11	CONNECTOR, FFC 15P				< JUMPER RESISTOR >	
CN305	1-568-838-11	CONNECTOR, FFC 21P		JR301	1-216-295-91	SHORT CHIP	0
		< DIODE >				< COIL >	
D301	8-719-991-33	DIODE 1SS133T-72		L201	1-456-107-11	COIL, AIR-CORE	
D302	8-719-010-32	DIODE UZ-4.7BSA-TP		L202	1-456-107-11	COIL, AIR-CORE	
D303	8-719-923-38	DIODE UZ-5.1BSB-TP (AEP, UK, KR)		L203	1-408-117-00	INDUCTOR	10uH
D304	8-719-010-32	DIODE UZ-4.7BSA-TP		L204	1-408-117-00	INDUCTOR	10uH
D402	6-500-382-01	DIODE RL203GW-TA		L301	1-456-094-11	TRANSFORMER, BIAS OSCILLATION	
D403	6-500-382-01	DIODE RL203GW-TA		L302	1-408-032-31	INDUCTOR	36uH
D404	6-500-378-01	DIODE 1N5402GW (F20)				< CABLE HOLDER >	
D405	6-500-378-01	DIODE 1N5402GW (F20)		PN401	1-784-584-11	HOLDER, CABLE (2.5mm PITCH)	
D406	6-500-378-01	DIODE 1N5402GW (F20)				< RESISTOR >	
D407	6-500-378-01	DIODE 1N5402GW (F20)		PR501	1-220-890-11	METAL	0.22 10% 3W
D408	6-500-376-01	DIODE 1N4003LES				< TRANSISTOR >	
D409	6-500-376-01	DIODE 1N4003LES		Q301	6-550-333-01	TRANSISTOR	2SC5343GL
D410	6-500-376-01	DIODE 1N4003LES		Q302	6-550-333-01	TRANSISTOR	2SC5343GL
D411	8-719-983-35	DIODE MTZJ-T-77-33D		Q303	6-550-333-01	TRANSISTOR	2SC5343GL
D412	6-500-376-01	DIODE 1N4003LES		Q304	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF
D413	6-500-382-01	DIODE RL203GW-TA		Q305	8-729-045-62	TRANSISTOR	2SK2158-T2B
D414	8-719-991-33	DIODE 1SS133T-72		Q306	8-729-028-83	TRANSISTOR	DTA124EUA-T106
D415	8-719-110-09	DIODE MTZJ-T-72-8.2C		Q307	8-729-045-62	TRANSISTOR	2SK2158-T2B
D416	6-500-335-01	DIODE MC2836		Q308	8-729-045-62	TRANSISTOR	2SK2158-T2B
D417	6-500-382-01	DIODE RL203GW-TA		Q309	8-729-216-22	TRANSISTOR	2SA1162-G
D418	8-719-923-38	DIODE UZ-5.1BSB-TP		Q310	8-729-216-22	TRANSISTOR	2SA1162-G
D419	8-719-991-33	DIODE 1SS133T-72					
D420	8-719-991-33	DIODE 1SS133T-72					
D421	8-719-109-89	DIODE MTZJ-T-72-5.6B					
D422	8-719-921-63	DIODE MTZJ-T-77-7.5B					
D423	6-500-382-01	DIODE RL203GW-TA					
D425	8-719-110-09	DIODE MTZJ-T-77-8.2C					
D427	6-500-382-01	DIODE RL203GW-TA					
D428	8-719-991-33	DIODE 1SS133T-72					

MAIN

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
Q311	8-729-028-83	TRANSISTOR	DTA124EUA-T106	R312	1-247-847-91	CARBON	4.7K 5% 1/4W
Q312	1-801-806-11	TRANSISTOR	DTC144EK	R313	1-216-813-11	METAL CHIP	220 5% 1/16W (AEP, UK, KR)
Q313	1-801-806-11	TRANSISTOR	DTC144EK	R314	1-216-813-11	METAL CHIP	220 5% 1/16W (AEP, UK, KR)
Q314	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF	R315	1-216-828-11	METAL CHIP	3.9K 5% 1/16W
Q315	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF	R316	1-216-857-11	METAL CHIP	1M 5% 1/16W
Q316	6-550-296-01	TRANSISTOR	2SA1980G	R317	1-216-840-11	METAL CHIP	39K 5% 1/16W
Q401	8-729-230-49	TRANSISTOR	2SC2712L-TE85R	R318	1-216-817-11	METAL CHIP	470 5% 1/16W
Q402	8-729-024-93	TRANSISTOR	2SB1370-E	R321	1-216-809-11	METAL CHIP	100 5% 1/16W
Q403	6-550-333-01	TRANSISTOR	2SC5343GL	R322	1-216-809-11	METAL CHIP	100 5% 1/16W
Q404	6-550-293-01	TRANSISTOR	2SK2937	R323	1-216-852-11	METAL CHIP	390K 5% 1/16W
Q405	8-729-230-49	TRANSISTOR	2SC2712L-TE85R	R324	1-216-822-11	METAL CHIP	1.2K 5% 1/16W
Q406	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF	R325	1-216-836-11	METAL CHIP	18K 5% 1/16W
Q407	6-550-296-01	TRANSISTOR	2SA1980G	R326	1-216-836-11	METAL CHIP	18K 5% 1/16W
Q408	6-550-293-01	TRANSISTOR	2SK2937	R327	1-216-822-11	METAL CHIP	1.2K 5% 1/16W
Q409	6-550-289-01	TRANSISTOR	2SA1235F	R328	1-216-852-11	METAL CHIP	390K 5% 1/16W
Q410	8-729-120-28	TRANSISTOR	2SC3052F-T1-LF	R329	1-216-835-11	METAL CHIP	15K 5% 1/16W
Q411	6-550-289-01	TRANSISTOR	2SA1235F	R330	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q415	8-729-900-53	TRANSISTOR	DTC114EK	R331	1-216-864-11	METAL CHIP	0 5% 1/16W
Q416	8-729-024-93	TRANSISTOR	2SB1370-E	R332	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q417	6-550-333-01	TRANSISTOR	2SC5343GL	R333	1-247-847-91	CARBON	4.7K 5% 1/4W
Q418	6-550-333-01	TRANSISTOR	2SC5343GL	R334	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
Q419	6-550-344-01	TRANSISTOR	2SC3266GR	R336	1-249-409-11	CARBON	220 5% 1/4W F
Q501	6-550-640-01	TRANSISTOR	KTA1267	R337	1-249-413-11	CARBON	470 5% 1/4W F
Q502	8-729-016-42	TRANSISTOR	KTC3199GR-TP	R338	1-249-413-11	CARBON	470 5% 1/4W F
Q503	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R339	1-247-807-31	CARBON	100 5% 1/4W
Q504	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R340	1-216-826-11	METAL CHIP	2.7K 5% 1/16W
Q505	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R341	1-216-830-11	METAL CHIP	5.6K 5% 1/16W
Q506	8-729-216-22	TRANSISTOR	2SA1162G-TE85R	R342	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q507	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R343	1-216-826-11	METAL CHIP	2.7K 5% 1/16W
Q508	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R344	1-216-833-11	METAL CHIP	10K 5% 1/16W
Q509	8-729-230-49	TRANSISTOR	2SC2712G-TE85R	R345	1-216-843-11	METAL CHIP	68K 5% 1/16W
Q510	8-729-216-22	TRANSISTOR	2SA1162G-TE85R	R346	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
< RESISTOR >				R347	1-216-843-11	METAL CHIP	68K 5% 1/16W
R205	1-249-389-11	CARBON	4.7 5% 1/4W F	R348	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R206	1-216-793-11	METAL CHIP	4.7 5% 1/10W	R349	1-249-429-11	CARBON	10K 5% 1/4W
R207	1-249-389-11	CARBON	4.7 5% 1/4W F	R350	1-216-822-11	METAL CHIP	1.2K 5% 1/16W
R208	1-216-793-11	METAL CHIP	4.7 5% 1/10W	R351	1-216-822-11	METAL CHIP	1.2K 5% 1/16W
R209	1-216-847-11	METAL CHIP	150K 5% 1/16W	R352	1-249-429-11	CARBON	10K 5% 1/4W
R210	1-216-847-11	METAL CHIP	150K 5% 1/16W	R353	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R212	1-216-832-11	METAL CHIP	8.2K 5% 1/16W	R354	1-216-837-11	METAL CHIP	22K 5% 1/16W
R213	1-216-821-11	METAL CHIP	1K 5% 1/16W	R355	1-216-827-11	METAL CHIP	3.3K 5% 1/16W
R214	1-216-821-11	METAL CHIP	1K 5% 1/16W	R356	1-216-837-11	METAL CHIP	22K 5% 1/16W
R215	1-216-833-11	METAL CHIP	10K 5% 1/16W	R357	1-216-826-11	METAL CHIP	2.7K 5% 1/16W
R216	1-216-833-11	METAL CHIP	10K 5% 1/16W	R358	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R217	1-249-393-11	CARBON	10 5% 1/4W F	R359	1-216-826-11	METAL CHIP	2.7K 5% 1/16W
R218	1-249-393-11	CARBON	10 5% 1/4W F	R360	1-216-829-11	METAL CHIP	4.7K 5% 1/16W
R301	1-216-842-11	METAL CHIP	56K 5% 1/16W	R361	1-216-820-11	METAL CHIP	820 5% 1/16W
R302	1-216-829-11	METAL CHIP	4.7K 5% 1/16W	R362	1-216-833-11	METAL CHIP	10K 5% 1/16W
R303	1-216-840-11	METAL CHIP	39K 5% 1/16W	R363	1-216-821-11	METAL CHIP	1K 5% 1/16W
R304	1-247-847-91	CARBON	4.7K 5% 1/4W	R364	1-216-821-11	METAL CHIP	1K 5% 1/16W
R305	1-216-825-11	METAL CHIP	2.2K 5% 1/16W	R365	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R306	1-216-836-11	METAL CHIP	18K 5% 1/16W	R366	1-216-825-11	METAL CHIP	2.2K 5% 1/16W
R307	1-216-836-11	METAL CHIP	18K 5% 1/16W	R367	1-216-824-11	METAL CHIP	1.8K 5% 1/16W
R308	1-249-392-11	CARBON	8.2 5% 1/4W F	R368	1-216-833-11	METAL CHIP	10K 5% 1/16W
R309	1-216-828-11	METAL CHIP	3.9K 5% 1/16W	R369	1-216-821-11	METAL CHIP	1K 5% 1/16W
R310	1-216-835-11	METAL CHIP	15K 5% 1/16W	R370	1-216-836-11	METAL CHIP	18K 5% 1/16W
R311	1-216-828-11	METAL CHIP	3.9K 5% 1/16W				

MAIN

TRANSFORMER

Ref. No.	Part No.	Description	Quantity	Unit	Remarks	Ref. No.	Part No.	Description	Quantity	Unit	Remarks
R371	1-216-836-11	METAL CHIP	18K	5%	1/16W	R454	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R372	1-216-824-11	METAL CHIP	1.8K	5%	1/16W	R455	1-247-847-91	CARBON	4.7K	5%	1/4W
R373	1-216-826-11	METAL CHIP	2.7K	5%	1/16W						
R374	1-216-826-11	METAL CHIP	2.7K	5%	1/16W	R456	1-216-817-11	METAL CHIP	470	5%	1/16W
R375	1-216-864-11	METAL CHIP	0	5%	1/16W	R457	1-216-841-11	METAL CHIP	47K	5%	1/16W
						R458	1-216-841-11	METAL CHIP	47K	5%	1/16W
R377	1-249-434-11	CARBON	27K	5%	1/4W	R459	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R378	1-249-434-11	CARBON	27K	5%	1/4W	R460	1-247-847-91	CARBON	4.7K	5%	1/4W
R389	1-216-840-11	METAL CHIP	39K	5%	1/16W						
R390	1-216-817-11	METAL CHIP	470	5%	1/16W	R461	1-216-817-11	METAL CHIP	470	5%	1/16W
R391	1-216-789-11	METAL CHIP	2.2	5%	1/16W	R465	1-216-813-11	METAL CHIP	220	5%	1/16W
						R466	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R394	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	R467	1-216-807-11	METAL CHIP	68	5%	1/16W
R395	1-216-825-11	METAL CHIP	2.2K	5%	1/16W	R468	1-249-429-11	CARBON	10K	5%	1/4W
R396	1-216-809-11	METAL CHIP	100	5%	1/16W						
R397	1-216-830-11	METAL CHIP	5.6K	5%	1/16W	R469	1-216-817-11	METAL CHIP	470	5%	1/16W
R401	1-249-430-11	CARBON	12K	5%	1/4W	R470	1-247-831-91	CARBON	1K	5%	1/4W
						R471	1-216-837-11	METAL CHIP	22K	5%	1/16W
R402	1-216-802-11	METAL CHIP	27	5%	1/10W	R474	1-216-821-11	METAL CHIP	1K	5%	1/16W
R403	1-216-083-00	METAL CHIP	27K	5%	1/10W	R501	1-247-873-91	CARBON	56K	5%	1/4W
R404	1-216-083-00	METAL CHIP	27K	5%	1/10W						
R405	1-218-446-11	METAL CHIP	1	5%	1/10W	R502	1-247-873-91	CARBON	56K	5%	1/4W
R406	1-249-381-11	CARBON	1	5%	1/4W F	R503	1-249-429-11	CARBON	10K	5%	1/4W
						R504	1-216-057-00	METAL CHIP	2.2K	5%	1/10W
R407	1-218-446-11	METAL CHIP	1	5%	1/10W	R505	1-216-837-11	METAL CHIP	22K	5%	1/16W
R408	1-249-381-11	CARBON	1	5%	1/4W F	R506	1-216-833-11	METAL CHIP	10K	5%	1/16W
R412	1-216-833-11	METAL CHIP	10K	5%	1/16W						
R413	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R507	1-216-833-11	METAL CHIP	10K	5%	1/16W
R414	1-249-413-11	CARBON	470	5%	1/4W F	R508	1-247-879-91	CARBON	100K	5%	1/4W
						R509	1-247-879-91	CARBON	100K	5%	1/4W
R415	1-216-844-11	METAL CHIP	82K	5%	1/16W	R510	1-216-848-11	METAL CHIP	180K	5%	1/16W
R416	1-216-807-11	METAL CHIP	68	5%	1/16W	R512	1-249-430-11	CARBON	12K	5%	1/4W
R417	1-216-829-11	METAL CHIP	4.7K	5%	1/16W						
R419	1-216-833-11	METAL CHIP	10K	5%	1/16W	R513	1-215-863-11	METAL OXIDE	100	5%	1W
R421	1-216-833-11	METAL CHIP	10K	5%	1/16W	R514	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
						R515	1-216-824-11	METAL CHIP	1.8K	5%	1/16W
R422	1-216-813-11	METAL CHIP	220	5%	1/16W	R516	1-216-825-11	METAL CHIP	2.2K	5%	1/16W
R423	1-216-817-11	METAL CHIP	470	5%	1/16W	R518	1-216-841-11	METAL CHIP	47K	5%	1/16W
R424	1-247-883-00	CARBON	150K	5%	1/4W						
R425	1-216-827-11	METAL CHIP	3.3K	5%	1/16W	R519	1-216-857-11	METAL CHIP	1M	5%	1/16W
R427	1-216-833-11	METAL CHIP	10K	5%	1/16W	R520	1-216-833-11	METAL CHIP	10K	5%	1/16W
						R521	1-247-831-91	CARBON	1K	5%	1/4W
R428	1-216-829-11	METAL CHIP	4.7K	5%	1/16W	R522	1-216-842-11	METAL CHIP	56K	5%	1/16W
R429	1-249-413-11	CARBON	470	5%	1/4W F	R523	1-216-842-11	METAL CHIP	56K	5%	1/16W
R430	1-216-845-11	METAL CHIP	100K	5%	1/16W						
R431	1-216-797-11	METAL CHIP	10	5%	1/16W	R524	1-216-821-11	METAL CHIP	1K	5%	1/16W
R432	1-247-847-91	CARBON	4.7K	5%	1/4W	R525	1-216-821-11	METAL CHIP	1K	5%	1/16W
						R526	1-247-871-91	CARBON	47K	5%	1/4W
R433	1-216-817-11	METAL CHIP	470	5%	1/16W	R527	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R434	1-249-422-11	CARBON	2.7K	5%	1/4W F	R528	1-216-829-11	METAL CHIP	4.7K	5%	1/16W
R435	1-249-422-11	CARBON	2.7K	5%	1/4W F						
R436	1-216-797-11	METAL CHIP	10	5%	1/16W	R529	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
R437	1-216-861-11	METAL CHIP	2.2M	5%	1/16W	R530	1-216-826-11	METAL CHIP	2.7K	5%	1/16W
						R531	1-216-833-11	METAL CHIP	10K	5%	1/16W
R438	1-216-049-11	RES-CHIP	1K	5%	1/10W	R532	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R439	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R533	1-216-821-11	METAL CHIP	1K	5%	1/16W
R440	1-216-057-00	METAL CHIP	2.2K	5%	1/10W						
R441	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	R534	1-216-857-11	METAL CHIP	1M	5%	1/16W
R442	1-216-049-11	RES-CHIP	1K	5%	1/10W	R535	1-216-845-11	METAL CHIP	100K	5%	1/16W

R444	1-216-827-11	METAL CHIP	3.3K	5%	1/16W						
R445	1-216-073-91	RES-CHIP	10K	5%	1/10W		1-689-574-11	TRANSFORMER BOARD			
R447	1-216-218-91	RES-CHIP	6.8K	5%	1/8W			*****			
R449	1-216-218-91	RES-CHIP	6.8K	5%	1/8W						
R450	1-216-833-11	METAL CHIP	10K	5%	1/16W			< CAPACITOR >			
R451	1-216-833-11	METAL CHIP	10K	5%	1/16W	C801	1-126-941-11	ELECT	470uF	20.00%	25V
R452	1-216-841-11	METAL CHIP	47K	5%	1/16W						
R453	1-216-841-11	METAL CHIP	47K	5%	1/16W						

HCD-GP5

Ver 1.5

TRANSFORMER

Ref. No.	Part No.	Description	Remarks
		< CONNECTOR >	
* CN801	1-564-512-11	PLUG, CONNECTOR 9P	
CN802	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
		< DIODE >	
D801	8-719-991-33	DIODE 1SS133T-72	
D802	8-719-991-33	DIODE 1SS133T-72	
D803	8-719-991-33	DIODE 1SS133T-72	
D804	8-719-991-33	DIODE 1SS133T-72	
		< COIL >	
△ L801	1-402-663-11	TRANSFORMER, LINE FILTER (LFT)	
		< TRANSFORMER >	
△ PT802	1-439-772-11	TRANSFORMER, POWER (E51, HK, SP, TW, AUS)	
△ PT802	1-439-781-11	TRANSFORMER, POWER (US, CND)	
△ PT802	1-443-041-11	TRANSFORMER, POWER (AEP, UK, KR)	
		< RESISTOR >	
△ R803	1-219-776-11	CARBON 2.2M 10% 1/2W (EXCEPT E51, TW)	
		< RELAY >	
△ RY801	1-755-276-11	RELAY, POWER	
		< SWITCH >	
△ SW801	1-786-404-11	SELECTOR, VOLTAGE (SWS-2201)(E51)	

MISCELLANEOUS *****			
2	1-827-731-11	WIRE (FLAT TYPE)(11 CORE)(EXCEPT AEP,UK)	
2	1-828-984-11	WIRE (FLAT TYPE)(15 CORE)(AEP,UK)	
3	1-693-619-11	TUNER (FM/AM)(AEP, UK, KR)	
3	1-693-620-11	TUNER (FM/AM)(AUS, E51, HK, SP, TW)	
3	1-693-624-11	TUNER (FM/AM)(US, CND)	
△ 5	1-555-795-00	CORD, POWER (EXCEPT US, CND, TW, KR)	
△ 5	1-769-079-22	CORD, POWER (KR)	
△ 5	1-783-532-11	CORD, POWER (US, CND, TW)	
6	1-827-714-11	WIRE (FLAT TYPE)(21 CORE)	
72	1-829-747-11	WIRE (FLAT TYPE)(26 CORE)	
73	1-796-351-51	MECHANISM, SINGLE CASSETTE	
173	1-757-055-11	WIRE, PARALLEL (FFC)(16 CORE)	
△ 601	A-4735-357-A	BASE ASSY, OP (KSM-213D)	
△ PT801	1-443-032-11	TRANSFORMER, POWER (US, CND)	
△ PT801	1-443-033-11	TRANSFORMER, POWER (AEP, UK)	
△ PT801	1-443-034-11	TRANSFORMER, POWER (HK, SP, AUS)	
△ PT801	1-443-036-11	TRANSFORMER, POWER (KR)	
△ PT801	_____	TRANSFORMER, POWER (E51,TW)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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MEMO

