

HCD-GX255/RG170/RG470

SERVICE MANUAL

Ver. 1.1 2005.05



Photo: HCD-GX255

Canadian Model
HCD-GX255
AEP Model
E Model
HCD-RG170/RG470
Australian Model
HCD-RG170

HCD-GX255 is the amplifier, CD player, tape deck and tuner section in MHC-GX255.
HCD-RG170 is the amplifier, CD player, tape deck and tuner section in MHC-RG170.
HCD-RG470 is the amplifier, CD player, tape deck and tuner section in MHC-RG470.

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM74KFS-F1BD81C (Except Mexican model)/CDM74KFS-F1BD84 (Mexican model)
	Base Unit Name	BU-F1BD81C (Except Mexican model)/BU-F1BD84 (Mexican model)
	Optical Pick-up Block Name	KSM-215DCP
TAPE Section	Model Name Using Similar Mechanism	HCD-GX355/RG270
	Tape Transport Mechanism Type	CWM43FF13

SPECIFICATIONS

Amplifier section

Canadian model:

HCD-GX255

Continuous RMS power output (reference):
65 + 65 watts (6 ohms at
1 kHz, 10% THD)
Total harmonic distortion less than 0.07% (6 ohms at
1 kHz, 40 W)

European and Russian models:

HCD-RG470

DIN power output (rated): 110 + 110 watts (6 ohms at
1 kHz, DIN)
Continuous RMS power output (reference):
140 + 140 watts (6 ohms at
1 kHz, 10% THD)
Music power output (reference):
280 + 280 watts (6 ohms at
1 kHz, 10% THD)

HCD-RG170

DIN power output (rated): 20 + 20 watts (6 ohms at
1 kHz, DIN)
Continuous RMS power output (reference):
25 + 25 watts (6 ohms at
1 kHz, 10% THD)
Music power output (reference):
50 + 50 watts (6 ohms at
1 kHz, 10% THD)

Other models:

HCD-RG470

The following measured at AC 120, 127, 220, 240 V
50/60 Hz
DIN power output (rated): 130 + 130 watts (6 ohms at
1 kHz, DIN)
Continuous RMS power output (reference):
160 + 160 watts (6 ohms at
1 kHz, 10% THD)

HCD-RG170

The following measured at AC 120, 127, 220, 240 V
50/60 Hz
DIN power output (rated): 50 + 50 watts (6 ohms at
1 kHz, DIN)
Continuous RMS power output (reference):
65 + 65 watts (6 ohms at
1 kHz, 10% THD)

Inputs

AUDIO IN (stereo mini jack):
voltage 250 mV,
impedance 47 kilohms
MIC (phone jack) (Latin American model only):
sensitivity 1 mV,
impedance 10 kilohms

Outputs

PHONES (stereo mini jack):
accepts headphones of
8 ohms or more
VIDEO OUT (phono jack) (Mexican model only):
max. output level 1Vp-p,
unbalanced, Sync
negative, load impedance
75 ohms
SPEAKER:
accepts impedance of 6 to
16 ohms

CD player section

System Compact disc and digital
audio system
Laser Diode Properties Emission duration:
continuous
Laser Output*:
Less than 44.6μW

* This output is the value measurement at a distance of
200mm from the objective lens surface on the
Optical Pick-up Block with 7mm aperture.

Frequency response 2 Hz – 20 kHz (±0.5 dB)
Signal-to-noise ratio More than 90 dB
Dynamic range More than 90 dB

– Continued on next page –

COMPACT DISC DECK RECEIVER

9-879-612-02
2005E05-1
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Sony Corporation
Personal Audio Group
Published by Sony Engineering Corporation

SONY®

HCD-GX255/RG170/RG470

Tape deck section

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

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range

North American model: 87.5 – 108.0 MHz
(100 kHz step)

Other models: 87.5 – 108.0 MHz
(50 kHz step)

Antenna FM lead antenna

Antenna terminals 75 ohms unbalanced

Intermediate frequency 10.7 MHz

AM tuner section

Tuning range

Pan-American models: 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, Russian and Saudi Arabian models:
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

Intermediate frequency 450 kHz

General

Power requirements

North American model: 120 V AC, 60 Hz

European and Russian models:

230 V AC, 50/60 Hz

Australian model: 230 – 240V AC, 50/60 Hz

Argentine model: 220 V AC, 50/60 Hz

Mexican model: 127 V AC, 60 Hz

Saudi Arabian model: 120 – 127, 220 or
230 – 240V AC, 50/60 Hz

Adjustable with voltage

selector

Other models: 120 V, 220 V or

230 – 240V AC, 50/60 Hz

Adjustable with voltage

selector

Power consumption

Canadian model:

HCD-GX255: 110 watts

European and Russian models:

HCD-RG470: 240 watts

0.25 watts (at the Power
Saving Mode)

HCD-RG170: 70 watts

0.25 watts (at the Power
Saving Mode)

Other models:

HCD-RG470: 170 watts

HCD-RG170: 125 watts

Dimensions (w/h/d) (excl. speakers)

Approx. 280 × 325 ×

430 mm

Mass (excl. speakers)

Canadian model:

HCD-GX255: Approx. 8.5 kg

European and Russian models:

HCD-RG470: Approx. 10.0 kg

HCD-RG170: Approx. 7.2 kg

Other models:

HCD-RG470: Approx. 10.4 kg

HCD-RG170: Approx. 8.5 kg

Design and specifications are subject to change
without notice.

Notes on chip component replacement

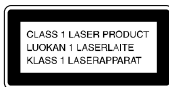
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

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 marking is located on the rear exterior.

DANGER

INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.

DANGER

RADIATION DE LESER INVISIBLE LORS D'OUVERTURE. AVEC L'ENCLÈCHEMENT DE SECURITE ANNULÉ. ÉVITER L'EXPOSITION DIRECTE AU RAYON.

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 COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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.

TABLE OF CONTENTS

1. SERVICING NOTES	5	6-24. Schematic Diagram – POWER Board – (RG470: E2, E51, AR, MX)	45
2. GENERAL	6	6-25. Printed Wiring Boards – AUDIO, MIC, HEADPHONE Boards –	46
3. DISASSEMBLY		6-26. Schematic Diagram – AUDIO, MIC, HEADPHONE Boards –	47
3-1. Disassembly Flow	8	6-27. Printed Wiring Boards – CD-G Section – (MX model only)	48
3-2. Case (Top)	9	6-28. Schematic Diagram – CD-G Section – (MX model only)	49
3-3. Door (CD)	9	6-29. Printed Wiring Board – PANEL Section (1/2)	50
3-4. Front Panel Section	10	6-30. Printed Wiring Board – PANEL Section (2/2)	51
3-5. Mechanical Deck (CWM43FF13)	10	6-31. Schematic Diagram – PANEL Section (1/2)	52
3-6. CD Mechanism Deck (CDM74KFS-F1BD81C (Except MX model)/CDM74KFS-F1BD84 (MX model))	11	6-32. Schematic Diagram – PANEL Section (2/2)	53
3-7. Back Panel Section	11	6-33. Printed Wiring Boards – TRANS Section – (GX255/RG170)	54
3-8. MAIN Board	12	6-34. Schematic Diagram – TRANS Section – (GX255/RG170)	55
3-9. BD Board/CD Board	12	6-35. Printed Wiring Boards – TRANS Section – (RG470: AEP, EE, RU)	56
3-10. DRIVER Board, SW Board	13	6-36. Schematic Diagram – TRANS Section – (RG470: AEP, EE, RU)	57
3-11. Optical Pick-up (KSM-215DCP)	13	6-37. Printed Wiring Boards – TRANS Section – (RG470: E2, E51, AR, MX)	58
3-12. SENSOR Board	14	6-38. Schematic Diagram – TRANS Section – (RG470: E2, E51, AR, MX)	59
3-13. MOTOR (TB) Board	14		
3-14. MOTOR (LD) Board	15		
4. TEST MODE	16		
5. ELECTRICAL ADJUSTMENT	20		
6. DIAGRAMS		7. EXPLODED VIEWS	
6-1. Block Diagram – CD SERVO Section –	21	7-1. Overall Section	77
6-2. Block Diagram – AUDIO/VIDEO Section –	22	7-2. Back Panel Section	78
6-3. Block Diagram – AMP Section –	23	7-3. Front Panel Section	79
6-4. Block Diagram – PANEL, POWER SUPPLY Section –	24	7-4. Key Section	80
6-5. Printed Wiring Board – CD Board – (Except MX model)	26	7-5. Chassis Section	81
6-6. Schematic Diagram – CD Board – (Except MX model)	27	7-6. Transformer Section	82
6-7. Printed Wiring Board – BD Board – (MX model)	28	7-7. CD Mechanism Deck Section-1 (CDM74KFS-F1BD81C (Except MX model)/ CDM74KFS-F1BD84 (MX model))	83
6-8. Schematic Diagram – BD Board – (MX model)	29	7-8. CD Mechanism Deck Section-2 (CDM74KFS-F1BD81C (Except MX model)/ CDM74KFS-F1BD84 (MX model))	84
6-9. Printed Wiring Boards – CHANGER Section –	30		
6-10. Schematic Diagram – CHANGER Section –	31		
6-11. Printed Wiring Board – MAIN Board – (Suffix-11)	32		
6-12. Schematic Diagram – MAIN Board (1/3) – (Suffix-11)	33	8. ELECTRICAL PARTS LIST	85
6-13. Schematic Diagram – MAIN Board (2/3) – (Suffix-11)	34	• Abbreviation	
6-14. Schematic Diagram – MAIN Board (3/3) – (Suffix-11)	35	AR : Argentina model	
6-15. Printed Wiring Board – MAIN Board – (Suffix-12)	36	E2 : 120V AC Area in E model	
6-16. Schematic Diagram – MAIN Board (1/3) – (Suffix-12)	37	E51 : Chilean and Peruvian model	
6-17. Schematic Diagram – MAIN Board (2/3) – (Suffix-12)	38	EE : East European model	
6-18. Schematic Diagram – MAIN Board (3/3) – (Suffix-12)	39	MX : Mexican model	
6-19. Printed Wiring Board – POWER Board – (GX255/RG170)	40	RU : Russian model	
6-20. Schematic Diagram –POWER Board – (GX255/RG170)	41		
6-21. Printed Wiring Board – POWER Board – (RG470: AEP, EE, RU)	42		
6-22. Schematic Diagram – POWER Board – (RG470: AEP, EE, RU)	43		
6-23. Printed Wiring Board – POWER Board – (RG470: E2, E51, AR, MX)	44		

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.

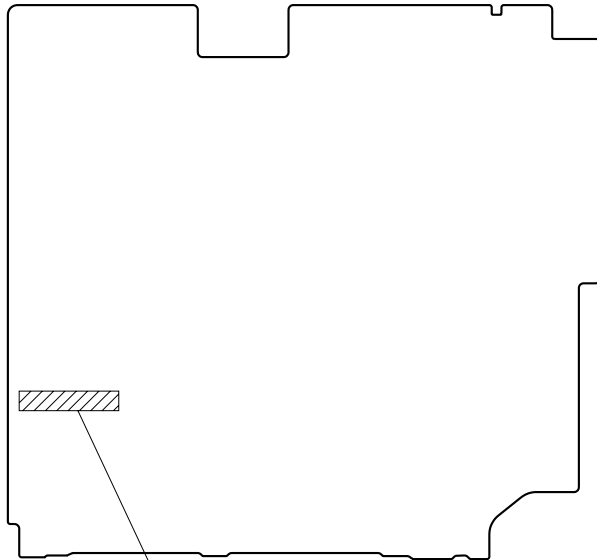
LASER DIODE AND FOCUS SEARCH OPERATION CHECK

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

DISCRIMINATION OF THE MAIN BOARD

There are two types of suffix-11 and suffix-12 of the MAIN boards used in set as follows.

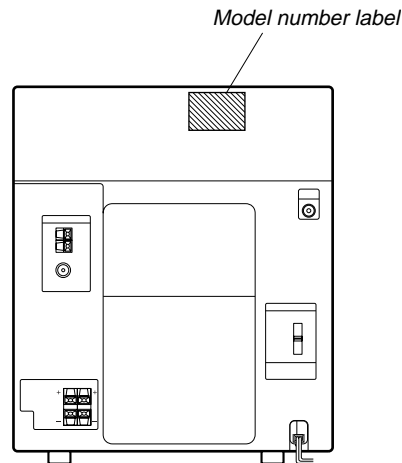
- MAIN BOARD (Component Side) -



Part Number
AEP, EE, RU models : 1-865-919-12 only
Other models : 1-865-919-11 or 1-865-919-12

• MODEL IDENTIFICATION

- Back Panel -



Label indication	Model
2-560-990-01	GX255
2-560-991-01	RG170: AEP, EE, RU
2-560-993-01	RG470: E2, E3
2-560-994-01	RG170: EA
2-560-996-01	RG170: AUS
2-560-997-01	RG170: E51
2-560-998-01	RG170: AR
2-580-000-01	RG470: AEP, EE, RU
2-580-001-01	RG470: E2
2-580-002-01	RG470: E51
2-580-003-01	RG470: MX
2-580-004-01	RG470: AR

• Abbreviation

- AR : Argentina model
- AUS : Australian model
- CND : Canadian model
- E2 : 120V AC Area in E model
- E3 : 240V AC Area in E model
- E51 : Chilean and Peruvian models
- EA : Saudi Arabia model
- EE : East European model
- MX : Mexican model
- RU : Russian model

SECTION 2 GENERAL

This section is extracted from instruction manual.

• Location of Controls

Main unit

ALPHABETICAL ORDER

A - O

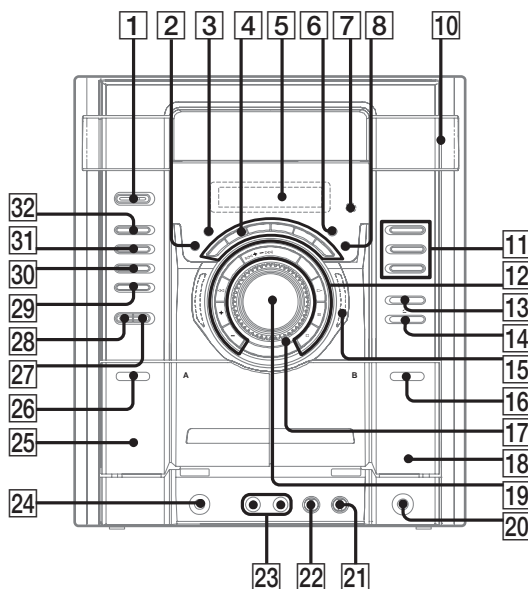
- ALBUM +/- 12
- AUDIO IN 29
- AUDIO IN jack 24
- CD 32
- CD SYNC 27
- Deck A 25
- Deck B 18
- DISC 1 - 3 11
- DISC SKIP/EX-CHANGE 13
- Disc tray 10
- DISPLAY 3
- Display window 5
- ECHO LEVEL¹⁾ 21
- EFFECT ON/OFF 4
- ENTER 4
- EQ BAND 12
- GROOVE 4
- ILLUMINATION 2
- MIC jack²⁾ 23
- MIC LEVEL²⁾ 22
- MULTIPLY¹⁾ 6
- Operation Dial
 (- EQ +/|<<< >>>|/ - TUNING +) 17

P - Z

- P FILE 4
- PHONES jack 20
- PLAY MODE 8
- Power illuminator 15
- PRESET EQ 4
- REC PAUSE/START 29
- Remote sensor 7
- SURROUND 4
- TAPE A/B 30
- TUNER/BAND 31
- TUNING MODE 8
- VOLUME control 19

BUTTON DESCRIPTIONS

- I/⏻ (power) 1
- ⏸ (pause) 12
- (stop) 12
- ▶▶ (fast forward) 12
- ▶ (play) 12
- ◀◀ (rewind) 12
- ▲ (eject) 14
- PUSH ▲ (deck B) (eject) 16
- ▲ PUSH (deck A) (eject) 26
- 1) Mexican model only
- 2) Latin American model only (Mexican model comes with 2 microphone jacks)



Remote control

ALPHABETICAL ORDER

A - E

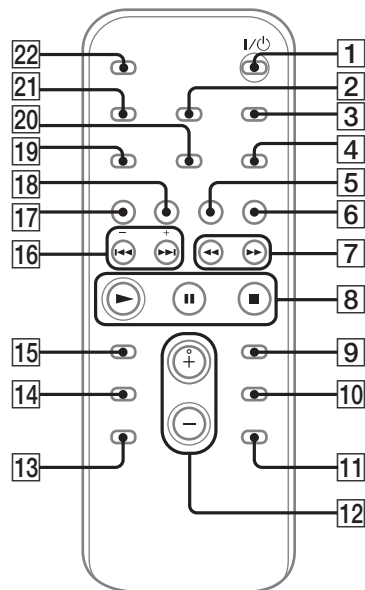
- ALBUM + **11**
- ALBUM - **13**
- CD **18**
- CLEAR **15**
- CLOCK/TIMER SELECT **2**
- CLOCK/TIMER SET **3**
- DISC SKIP **10**
- DISPLAY **21**
- ENTER **9**
- EQ **14**

F - Z

- FM MODE **4**
- FUNCTION **6**
- PLAY MODE **20**
- REPEAT **4**
- SLEEP **22**
- TAPE **17**
- TUNER BAND **5**
- TUNER MEMORY **19**
- TUNING MODE **20**
- VOLUME +/- **12**

BUTTON DESCRIPT

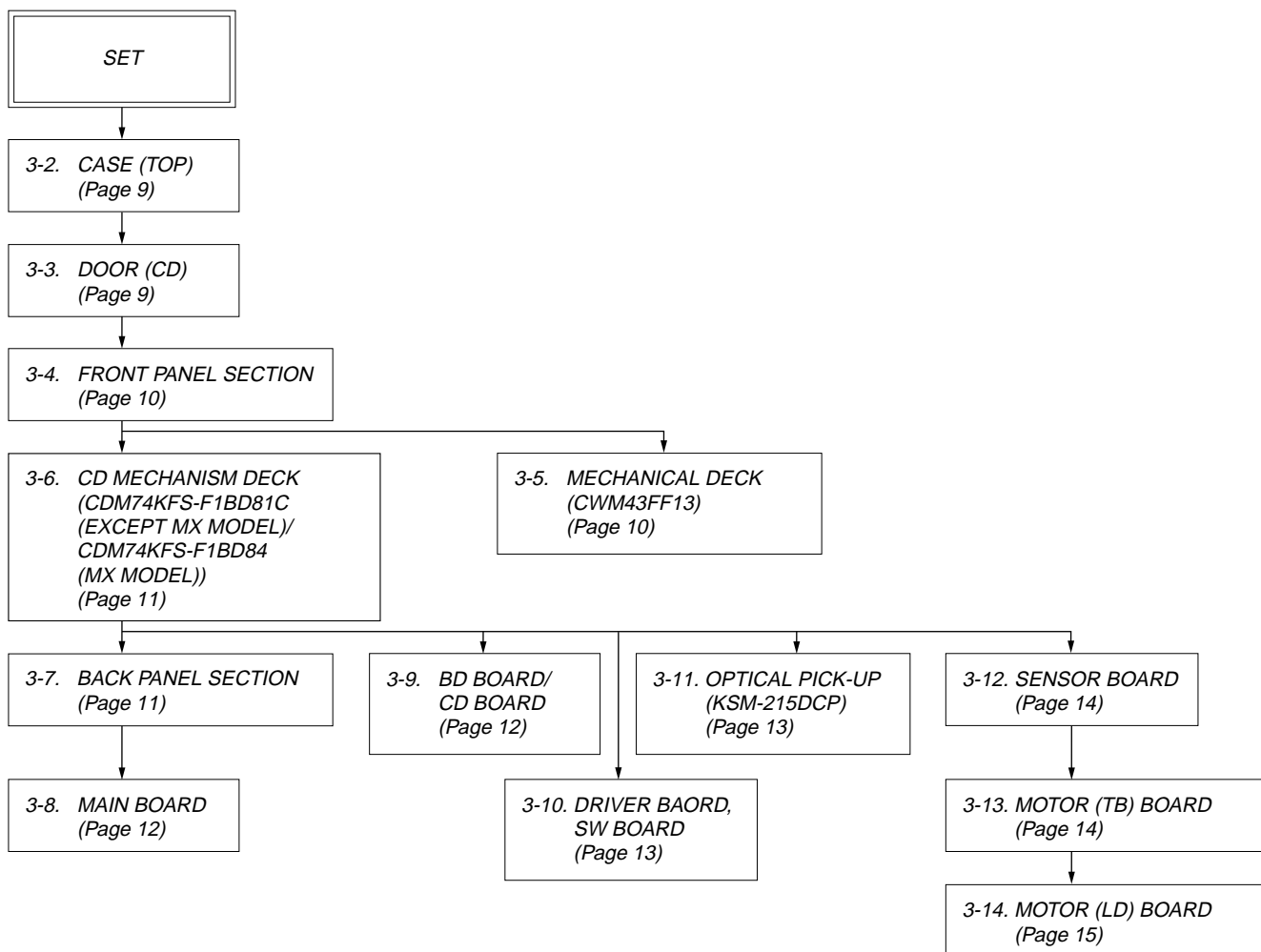
- I/⏻ (power) **1**
- ⏮/⏭ (rewind/fast forward) **7**
- ▶ (play) **8**
- ⏸ (pause) **8**
- (stop) **8**
- +/- (tuning) **16**
- ⏮/⏭ (go back/go forward) **16**



SECTION 3 DISASSEMBLY

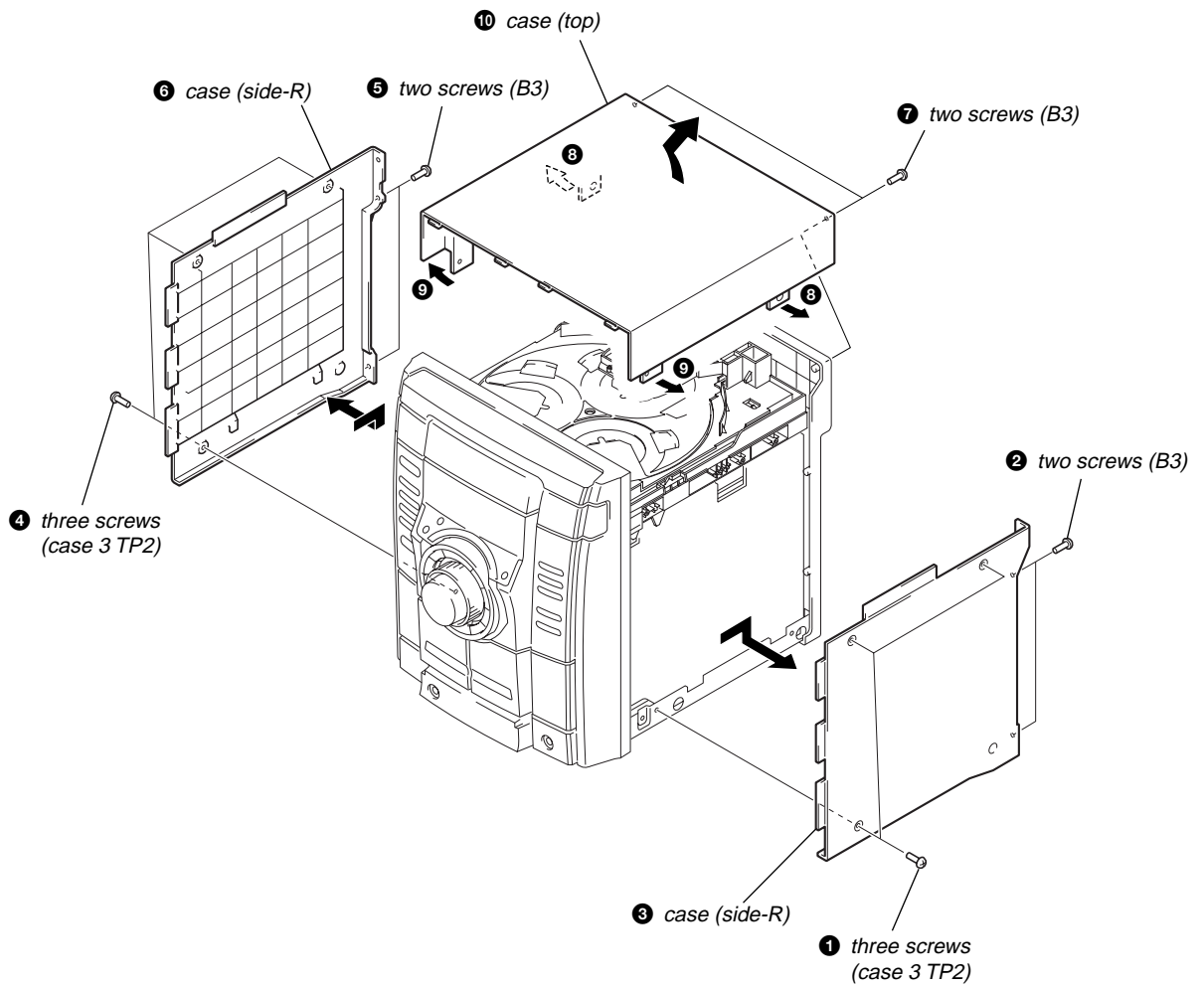
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

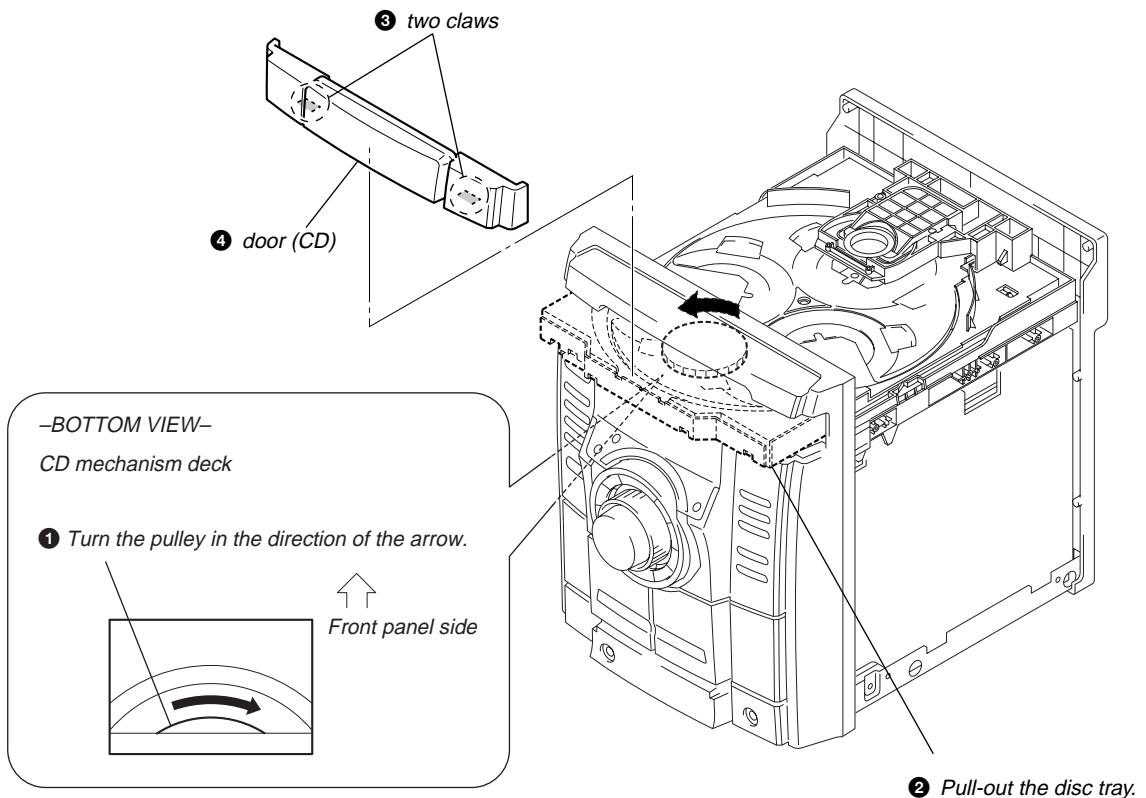


Note: Follow the disassembly procedure in the numerical order given.

3-2. CASE (TOP)

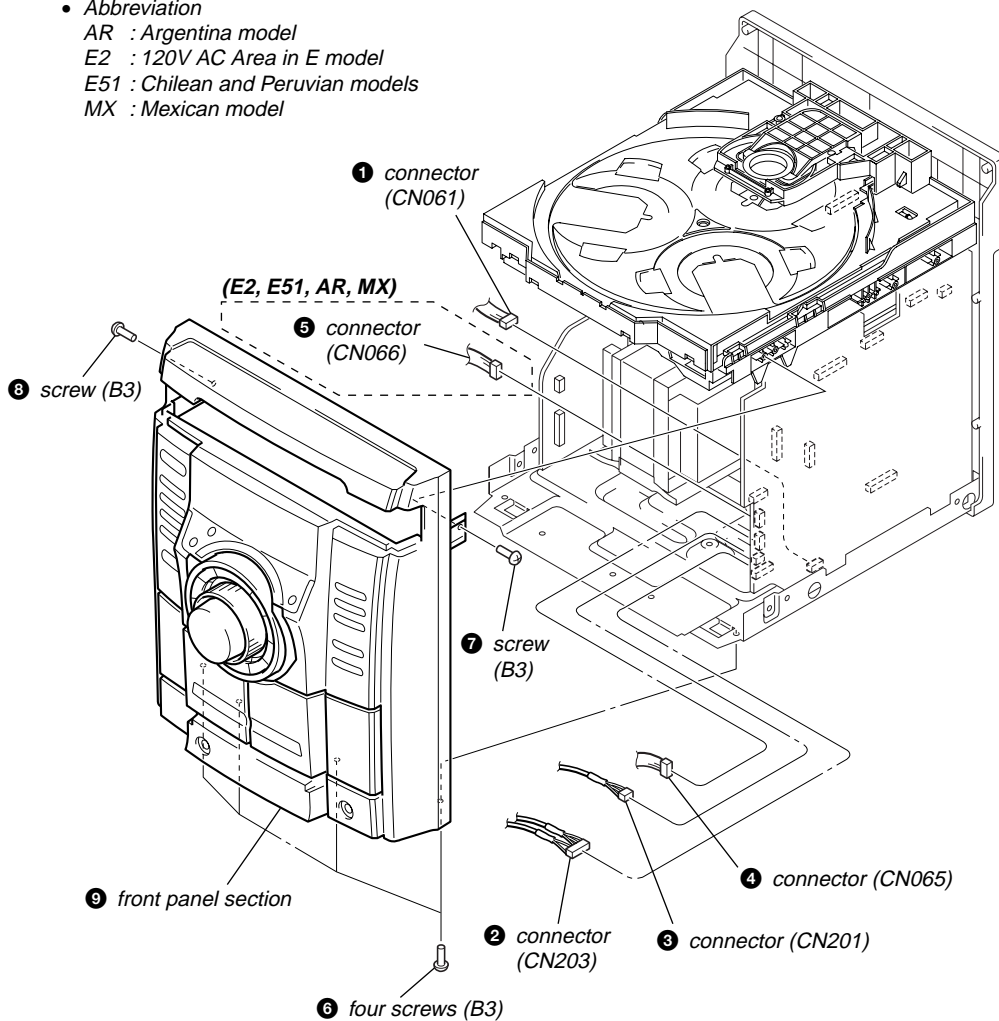


3-3. DOOR (CD)



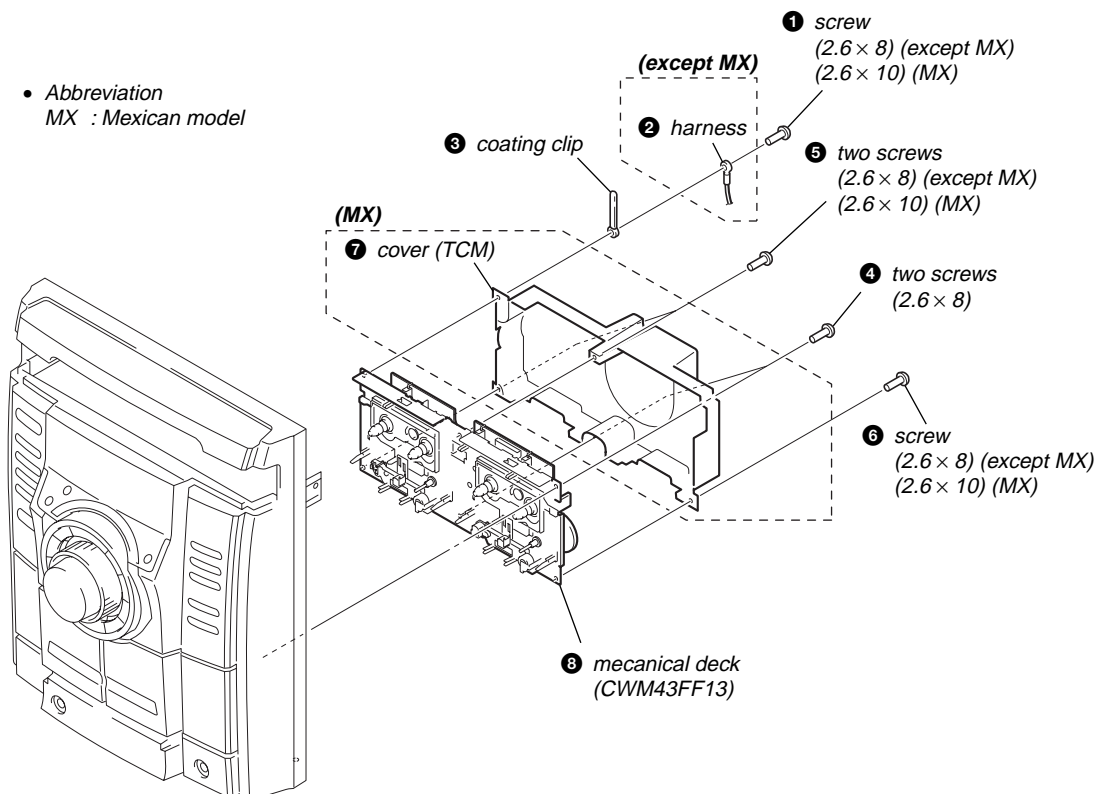
3-4. FRONT PANEL SECTION

- Abbreviation
 AR : Argentina model
 E2 : 120V AC Area in E model
 E51 : Chilean and Peruvian models
 MX : Mexican model

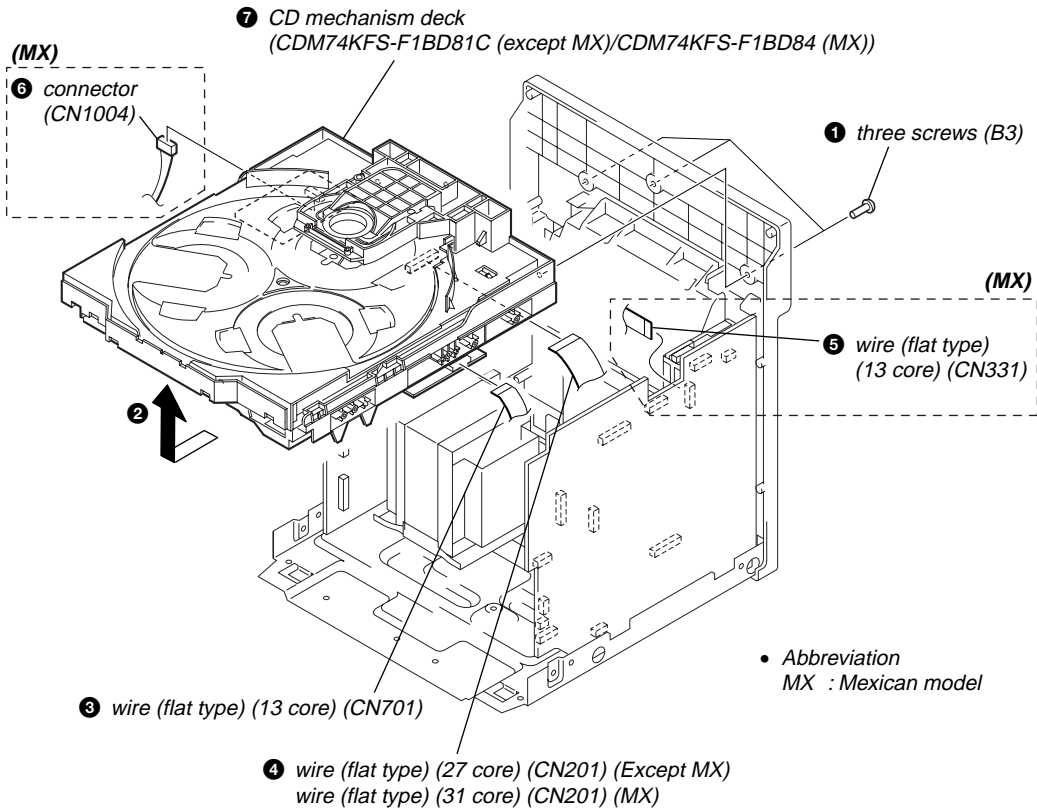


3-5. MECHANICAL DECK (CWM43FF13)

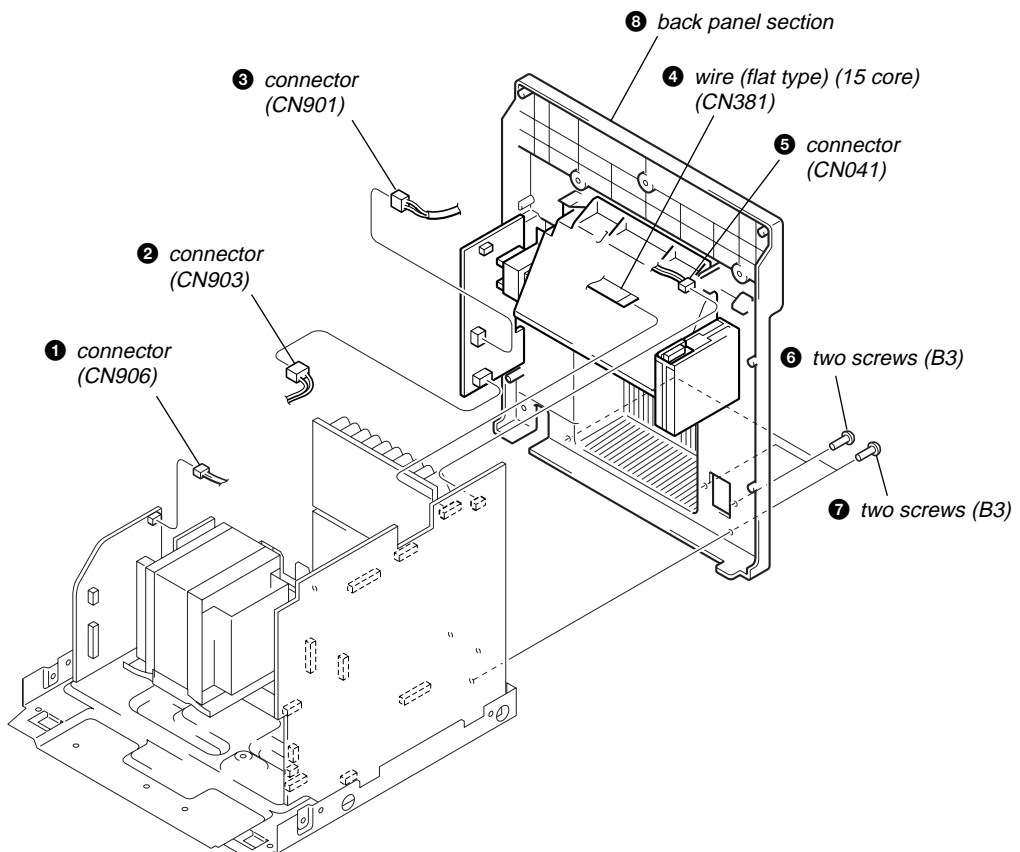
- Abbreviation
 MX : Mexican model



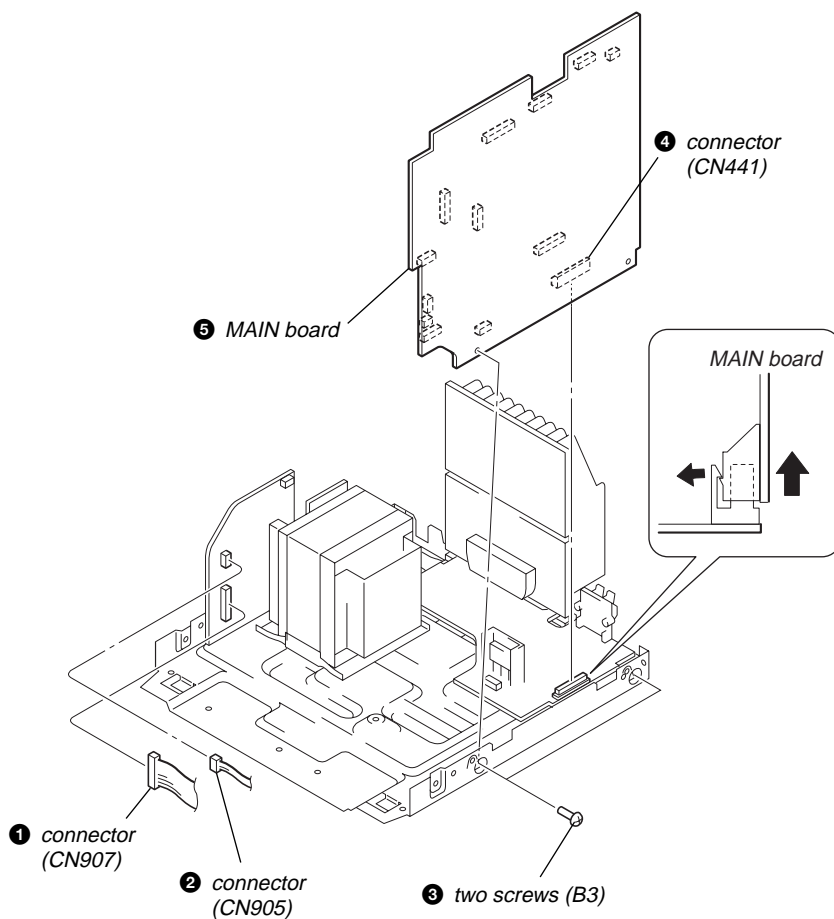
**3-6. CD MECHANISM DECK
(CDM74KFS-F1BD81C (EXCEPT MX MODEL)/CDM74KFS-F1BD84 (MX MODEL))**



3-7. BACK PANEL SECTION

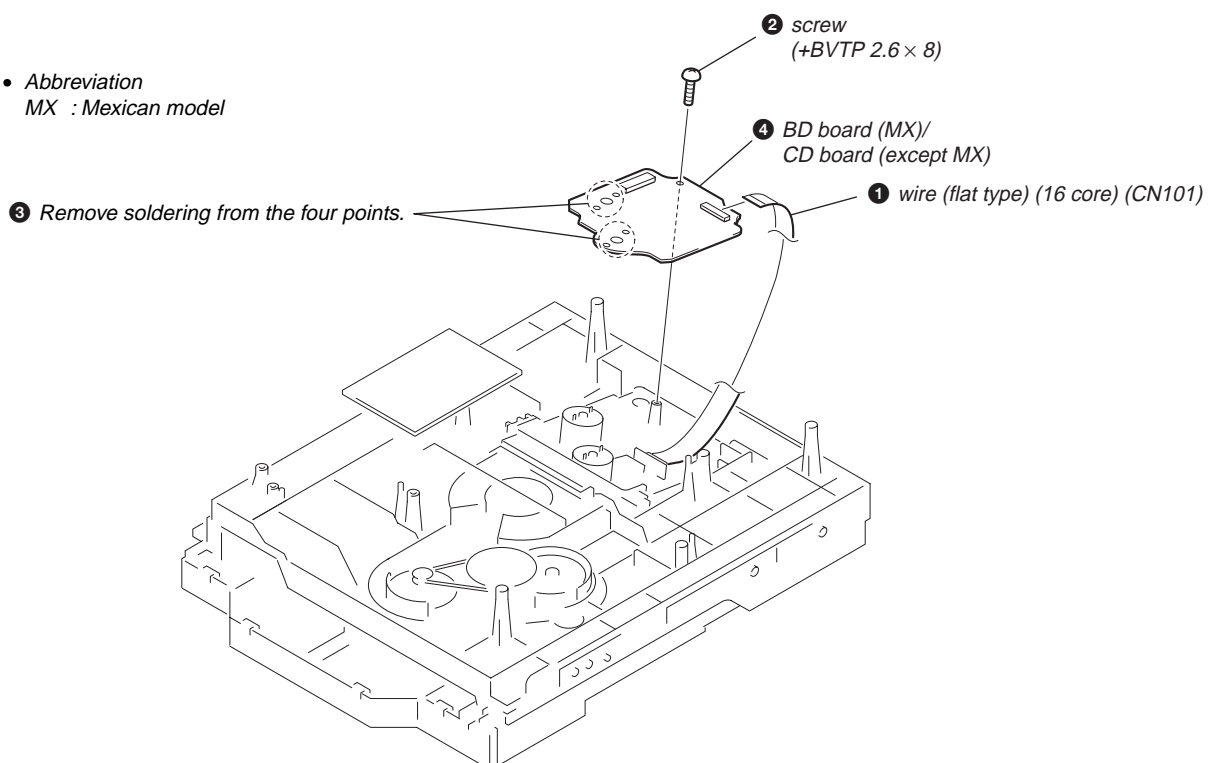


3-8. MAIN BOARD

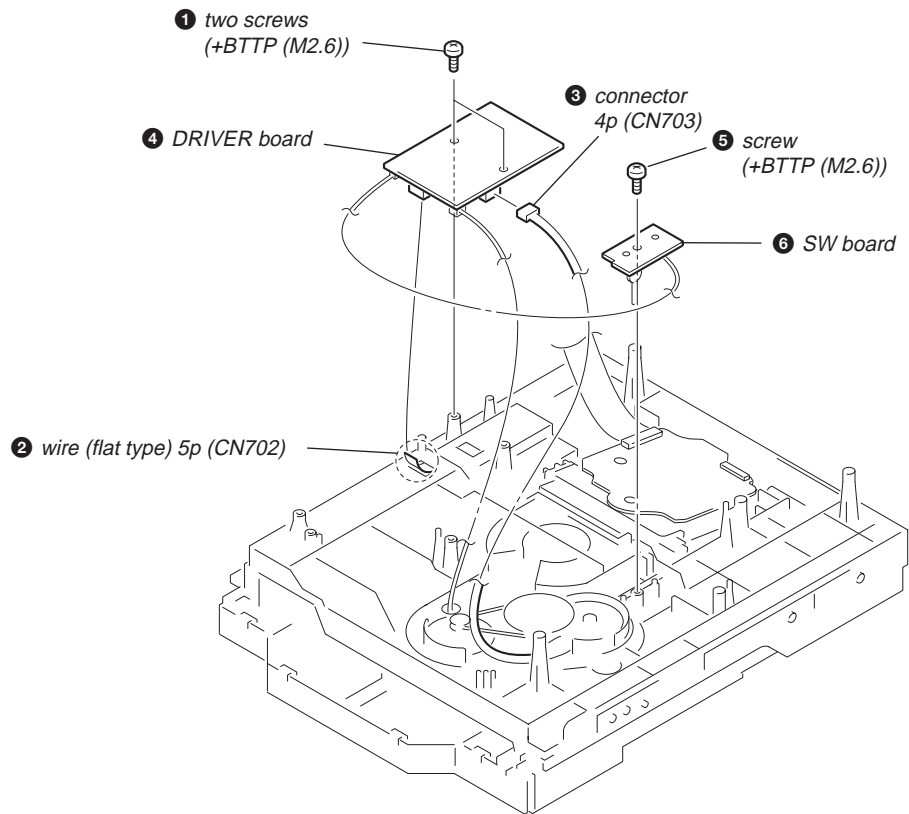


3-9. BD BOARD/CD BOARD

- Abbreviation
MX : Mexican model

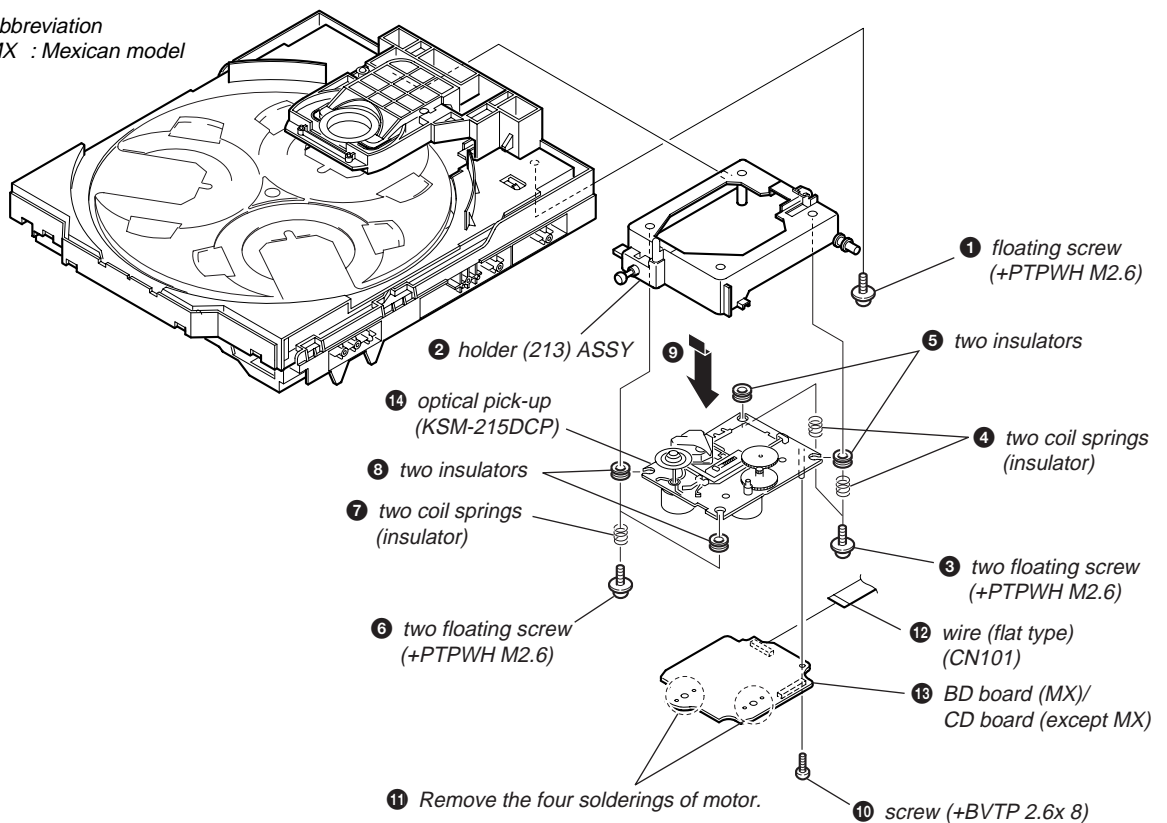


3-10. DRIVER BOARD, SW BOARD

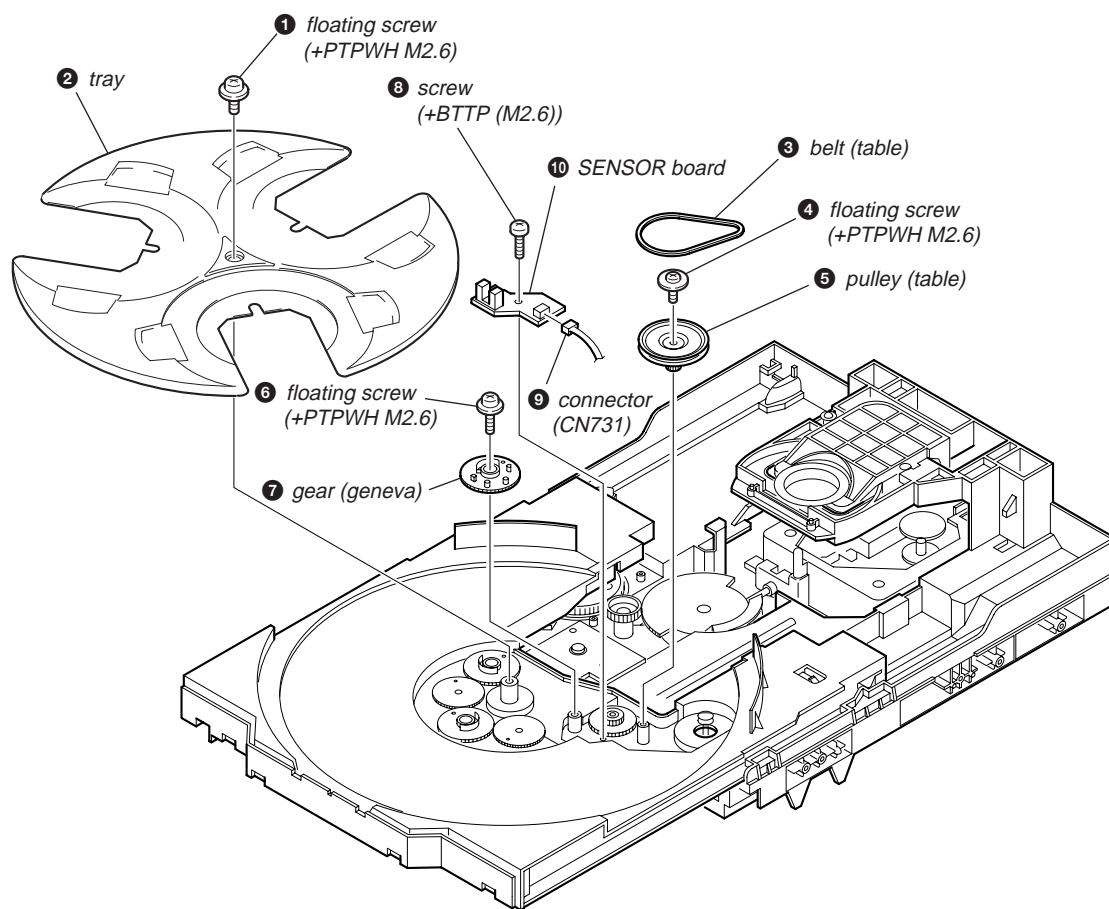


3-11. OPTICAL PICK-UP (KSM-215DCP)

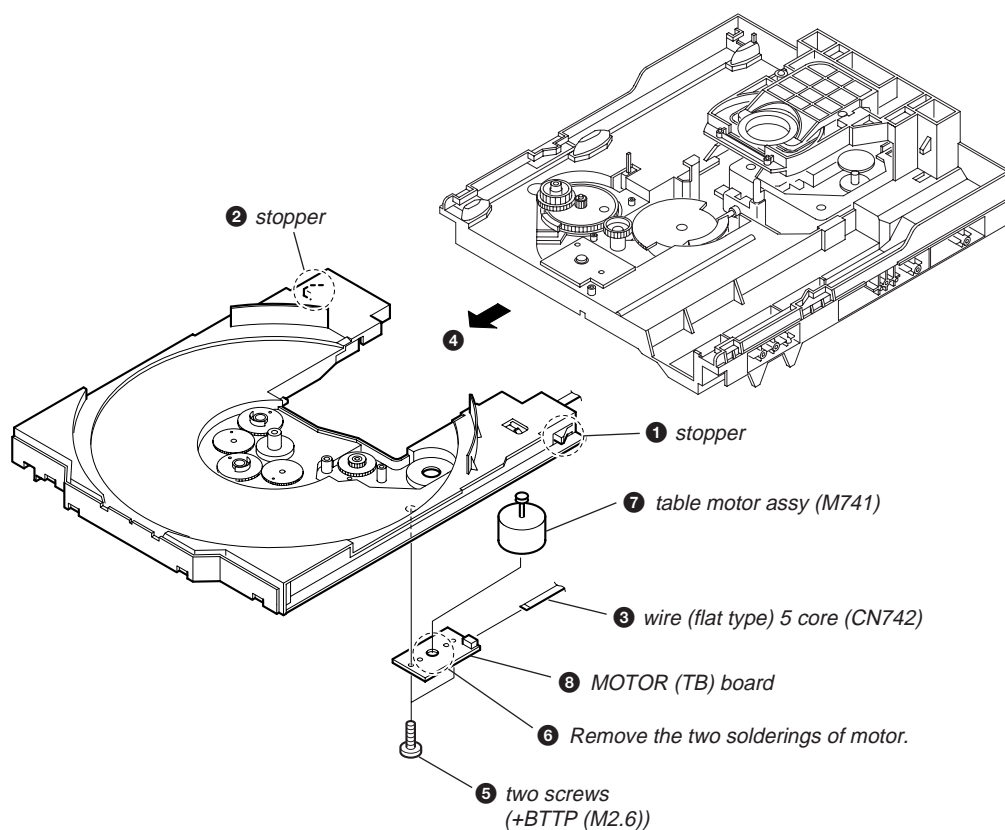
- Abbreviation
MX : Mexican model



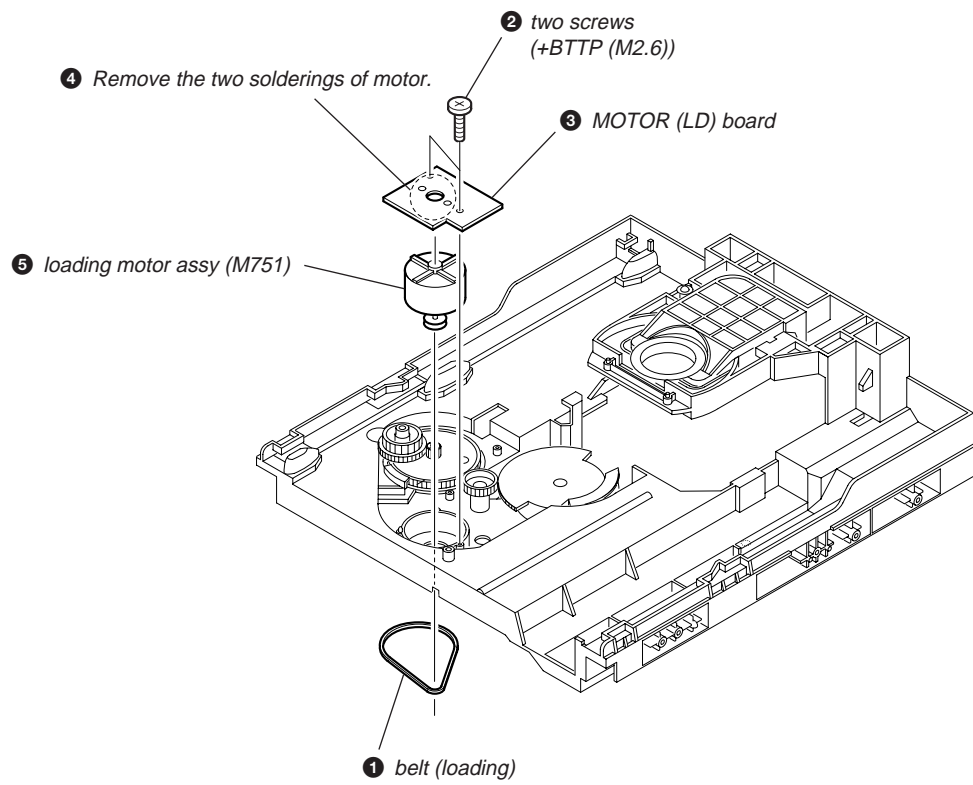
3-12. SENSOR BOARD



3-13. MOTOR (TB) BOARD



3-14. MOTOR (LD) BOARD



SECTION 4 TEST MODE

MC 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:

1. Press three buttons of **[■]**, **[ILLUMINATION]** and **[DISC 1]** simultaneously.
2. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

AM TUNING INTERVAL CHANGE-OVER (Except AEP, East European, Russian model)

A step of AM tuning interval can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[TUNER/BAND]** button to select "AM".
3. Press the **[I/O]** button to turn the power off.
4. Press two buttons of **[PLAY MODE/TUNING MODE]** and **[I/O]** simultaneously.
5. The message "AM 9K STEP" or "AM 10K STEP" is displayed on the fluorescent indicator tube, and thus the channel step is changed over.

CD SHIP (LOCK) MODE

This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[CD]** button to select "CD".
3. Press two buttons of **[CD]** and **[POWER]** simultaneously.
4. The message "LOCK" is displayed on the fluorescent indicator tube, and the CD ship mode is set.

CD SHIP (LOCK) MODE & COLD RESET

This mode is used to perform CD chip (lock) mode and cold reset simultaneously.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[CD]** button to select "CD".
3. Press three buttons of **[■]**, **[CD]** and **[DISPLAY]** simultaneously.
4. The message "COLD RESET" is displayed on the fluorescent indicator tube momentarily, then becomes standby states.

CD TRAY LOCK MODE

This mode is used to unable to take sample disc out of tray in the shop.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[CD]** button to select "CD".
3. Load a disc and press two buttons of **[■]** and **[▲]** for 5 seconds.
4. The message "LOCKED" is displayed on the fluorescent indicator tube and the CD tray is locked. (Even if pressing the **[▲]** button, the message "LOCKED" is displayed on the fluorescent indicator tube and the CD tray is locked)
5. To release this mode, press two buttons of **[■]** and **[▲]** for 5 seconds.
6. The message "UNLOCKED" is displayed on the fluorescent indicator tube and the CD tray is unlocked.

AMP TEST MODE

This mode is used to display the parameter of amplifier IC and display the VACS status.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press three buttons of **[■]**, **[ILLUMINATION]** and **[PRESET EQ]** simultaneously.
3. When the AMP test mode is activated, the message "AMP TEST IN" is displayed on the fluorescent indicator tube momentarily, then amplifier adjustment mode is displayed on the fluorescent indicator tube.
4. Press the **[DISPLAY]** button to changed over between VACS status display mode and the amplifier IC parameter display mode.
5. In this mode, press the **[GROOVE]** button to changed over DBFB on/off, and "DBFB ON" or "DBFB OFF" is displayed on the fluorescent indicator tube.
6. In this mode, press the **[SURROUND]** button to changed over surround on/off, and "SURROUND ON" or "SURROUND OFF" is displayed on the fluorescent indicator tube.
7. In this mode, press the **[EQ BAND]** button to enter the equalizer adjustment mode.
In the equalizer adjustment mode, press the **[EQ BAND]** button to change over the adjustment band as LOW/MID/HIGH. And turn the **[◀◀- EQ +▶▶]** knob to adjust the equalizer level of each bands.
8. To release the amplifier IC parameter display mode or equalizer adjustment mode, press the **[I/O]** button to the power off.

AGING MODE

This mode can be used for operation check of CD section and tape deck section.

CD section and tape deck section work in parallel.

If an error occurred:

The aging operation stops only an error occurred sections and display then status.

If no error occurs:

The aging operation continues repeatedly.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[CD]** button to select "CD".
3. Load three discs and insert two tape to the deck A and B.
4. Press three buttons of **[■]**, **[ILLUMINATION]** and **[DISC SKIP/EX-CHANGE]** simultaneously.
5. Aging operations of CD and tape are started at the same time.
6. To release this mode, press the **[I/O]** button to turn the power off or press the function buttons to change the function.

1. Display at the Aging Mode

Display operating state of CD section and tape deck section alternately.

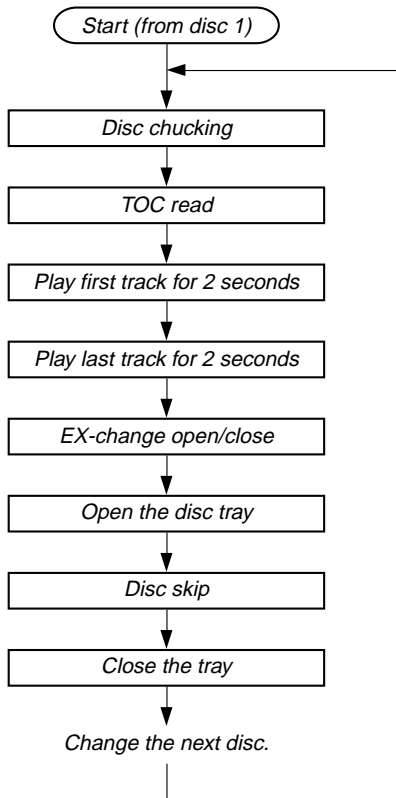
If an error occurred, stop display which that section.

2. CD Section

The sequence during the aging mode is following as below.

Display at the aging mode is the same as the normal operation.

Aging mode sequence (CD section) :

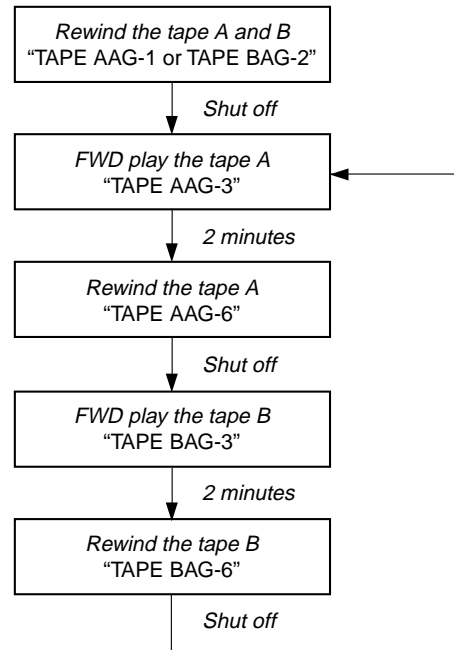


3. Tape Deck Section

The sequence during the aging mode is following as below.

If an error occurred, stop display that step.

Aging mode sequence (tape deck section) :



Note: "TAPE *AG-*" is display of each step.

PANEL TEST MODE

This mode is used to check the fluorescent indicator tube, LEDs and buttons.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press three buttons of **[■]**, **[ILLUMINATION]** and **[GROOVE]** simultaneously.
3. Fluorescent indicator tube and LEDs are all turned on.
4. Press two buttons of **[ALBUM-]** and **[ENTER]** simultaneously, mode is changed over.
5. In the key check mode, press each key, the defined key number of every each key list is displayed on the fluorescent indicator tube.
6. In the key count check mode, "KEYCNT 0" is displayed on the fluorescent indicator tube. Each time a key is pressed, "K" value increases. However, once a key is pressed, it is no longer taken into account.
7. In the headphone input check mode, connect the headphone, the message "H_P ON" is displayed on the fluorescent indicator tube, and disconnect the headphone, the message "H_P OFF" is displayed on the fluorescent indicator tube.
8. In the volume check mode, "VOLUME FLAT" is displayed on the fluorescent indicator tube. Turn the **[MASTER VOLUME]** knob clockwise, the message "VOLUME UP" is displayed on the fluorescent indicator tube momentarily and turn the **[MASTER VOLUME]** knob counterclockwise, the message "VOLUME DOWN" is displayed on the fluorescent indicator tube momentarily.

MC TEST MODE

This mode is used to check operations of microprocessor.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press three buttons of **[■]**, **[ILLUMINATION]** and **[DISC 3]** simultaneously.
3. When the MC test mode is activated, VACS level is displayed on the fluorescent indicator tube momentarily.
4. Turn the **[◀◀-EQ+▶▶]** knob clockwise, the message "ALL EQ MAX" is displayed on the fluorescent indicator tube momentarily and turn the **[◀◀-EQ+▶▶]** knob counter-clockwise, the message "ALL EQ MIN" is displayed on the fluorescent indicator tube momentarily.
5. Press the **[PRESET EQ]** button, the message "ALL EQ FLAT" is displayed on the fluorescent indicator tube momentarily.
6. Turn the **[MASTER VOLUME]** knob clockwise, the message "VOLUME MAX" is displayed on the fluorescent indicator tube momentarily and turn the **[MASTER VOLUME]** knob counterclockwise, the message "VOLUME MIN" is displayed on the fluorescent indicator tube momentarily.
7. Press the **[GROOVE]** button to changed over VACS on/off.
8. When the **[CD SYNC]** key is pressed with the test tape (AMS-100, AMS-110A) in the deck, number of space between tunes is counted, then if AMS-110A is set, "OK" is displayed on the fluorescent indicator tube and if AMS-100 is set, "NG" is displayed on the fluorescent indicator tube.
9. Press the **[I/O]** button to release from this mode, then cold reset is performed.

VERSION DISPLAY MODE

This mode is used to check the model, destination and software version.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press three buttons of **[■]**, **[ILLUMINATION]** and **[DISC 2]** simultaneously.
3. When this mode is activated, model and destination is displayed on the fluorescent indicator tube.
4. Press the **[DISPLAY]** button to changed over between software version and year, month, day of the software creation display mode and model and destination display mode.
5. To release this mode, press three buttons of **[■]**, **[ILLUMINATION]** and **[DISC 2]** simultaneously.

CD ERROR CODE DISPLAY MODE

This mode can be used for error code display of CD section.

Procedure:

1. Press the **[I/O]** button to turn the power on.
2. Press the **[CD]** key to select "CD".
3. Press three buttons of **[■]**, **[CD]** and **[DISC 1]** simultaneously.
4. When this mode is activated, mechanism deck error code is displayed on the fluorescent indicator tube.
5. Press the **[GROOVE]** button to changed over between optical pick-up error code display mode and mechanism deck error code mode.
6. Turn the **[◀◀-EQ+▶▶]** knob to change over display of error history.
7. To release this mode, press the **[I/O]** button to turn the power off.

1. Mechanism Deck Error Code Mode

When this mode is entered, mechanism deck error code is displayed with the 10-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the mechanism deck error code mode, "M" is displayed on the fluorescent indicator tube.

The second digit from the left indicates:

(Error history number display)

The second digit from the left indicates which order the error history is. "1" indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

The third and 4th digit from the left indicates:

(Error status display)

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 0	No error
0 8	Table operation time-out (Table does not move to the target position within the specified time)
1 6	In the chucking down operation, the operation was retried by the maximum number of times but the operation could not be completed
1 7	In the chucking up and down operation, the reverse recovery processing was attempted but it could not be recovered
1 8	In the chucking up operation, the operation was retried by the maximum number of times but the operation could not be completed
2 0	Loading operation time-out (Table does not move to the target position within the specified time)
2 2	As the chuck was in the ex-open status at the initialization, the closing was attempted but could not be completed

The 5th and 6th digit from the left indicates:

(Present status display)

The 5th and 6th digit from the left indicates which operating status when an error occurred is indicated.

Display	Status
0 1	Open completion status
0 2	From open status, the movement to chucking down position is under way
0 3	From chucking down position, the open operation is under way
0 4	Chucking down completion status
1 0	The chucking down operation is under way
1 1	The chucking up operation is under way
1 2	Close completion status
1 3	From close status, the ex-open operation is under way
1 4	From ex-open status, the close operation is under way
1 8	Ex-pen completion status

**The 7th and 8th digit from the left indicates:
(Motor status display)**

The 7th and 8th digit from the left indicates which motor output status when an error occurred is indicated.

Display	Status
× 0	No table motor output
× 1	Table motor forward output
× 2	Table motor backward output
× 3	Table motor break output
0 ×	No loading motor output
1 ×	Loading motor forward output
2 ×	Loading motor backward output
3 ×	Loading motor break output

**The 9th and 10 th digit from the left indicates:
(Tray status display)**

The 9th and 10th digit from the left indicates which target processing when an error occurred is indicated.

Display	Status
0 1	Open operation
1 2	Close operation
1 8	Ex-open operation

2. Optical Pick-up Error Code Mode

When this mode is entered, optical pick-up error code is displayed with the 8-character format on the fluorescent indicator tube.

The first digit from the left indicates:

The first digit from the left indicates which mode the error history is. In the optical pick-up error code mode, “D” is displayed on the fluorescent indicator tube.

**The second digit from the left indicates:
(Error history No. display)**

The second digit from the left indicates which order the error history is. “1” indicates the latest error history, and each time the number increases by one, the error history goes back to one-previous error.

**The third and 4th digit from the left indicates:
(Error status display)**

The third and 4th digit from the left indicates which error status is indicated.

Display	Status
0 1	Not focused (TOC read without a disc)
0 2	GFS NG (TOC read with a disc chucked)
0 3	Start operation time-over
0 4	Defocused continuously (Defocused during TOC reading)
0 5	Q code not entered for specified time
0 6	Tracking not turned ON
0 7	Blank disc (Blank disc TOC read)

**The 5th and 6th digit from the left indicates:
(Error step display)**

The 5th and 6th digit from the left indicates which processing when a trouble occurred

Display	Contents
0 1	Power OFF in progress
0 2	Initialize in progress
0 3	Oscillation stopping
0 4	From oscillation stop, oscillation starting
0 5	Stopping
0 6	Stop operation is under way
0 7	Start operation in progress
0 8	TOC read in progress
0 9	Search operation is under way
0 A	Playback operation is under way
0 B	Pause operation is under way
0 C	Playback manual search operation is under way
0 D	Pause manual search operation is under way
0 E	—






The 7th and 8th digit from the left indicates:

The 7th and 8th digit from the left indicates which operation in progress when a trouble occurred. (Step of each processing of the 5th and 6th digits is indicated)

5 REPEAT LIMIT CANCEL MODE

Number of repeat for CD playback is 5 times when the repeat mode is “REPEAT”. This mode is used to enables CD to repeat playback for limitless times.

Procedure:

1. Press the  button to turn the power on.
2. Press the  button to select “CD”.
3. Press three buttons of ,  and  simultaneously.
4. The message “LIMIT OFF” is displayed on the fluorescent indicator tube momentarily, CD repeat 5 limit is cancelled.

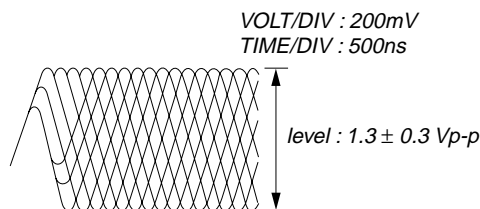
SECTION 5 ELECTRICAL ADJUSTMENTS

CD SECTION

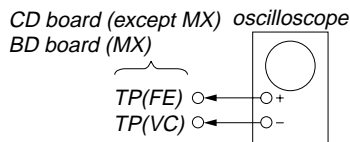
Note:

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 (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.
 - Abbreviation
MX: Mexican model

RF signal waveform

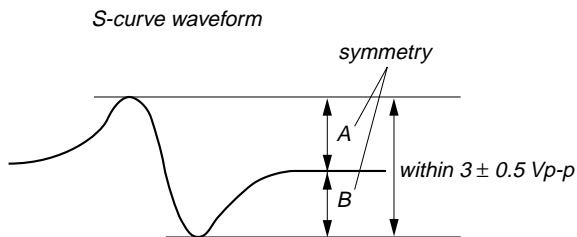


S-CURVE CHECK



Procedure:

1. Connect an oscilloscope to TP (FE) and TP (VC) on the CD board (except MX) or BD board (MX).
2. Press the button to turn the power on.
3. Load the disc (YEDS-18) and actuate the focus search. (In consequence of open and close the disc tray, actuate the focus search)
4. Confirm that the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 ± 0.5 Vp-p.



- 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.

Connecting Location: CD board (except MX)
BD board (MX)

RFAC LEVEL CHECK



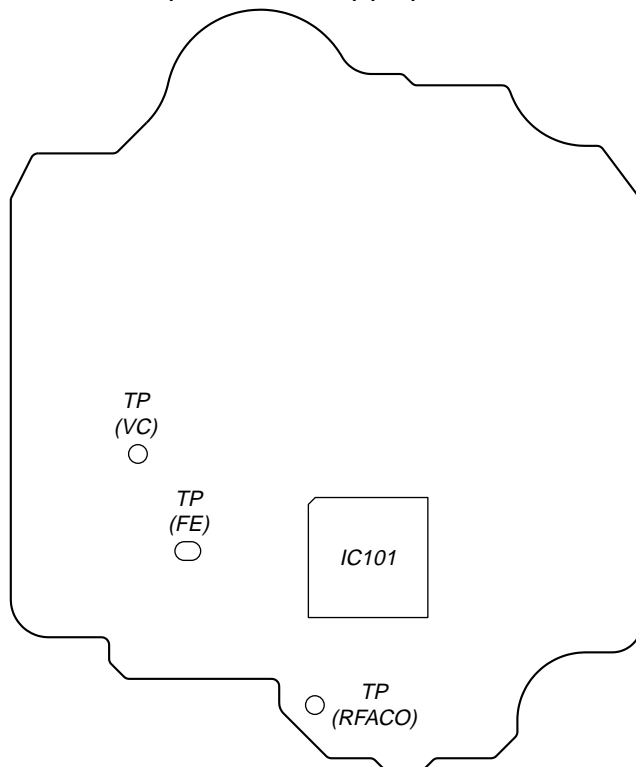
Procedure:

1. Connect an oscilloscope to TP (RFACO) and TP (VC) on the CD board (except MX) or BD board (MX).
2. Press the button to turn the power on.
3. Load the disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check if RFAC signal level is correct or not.

Note: Clear RFAC signal waveform means that the shape “ \diamond ” can be clearly distinguished at the center of the waveform.

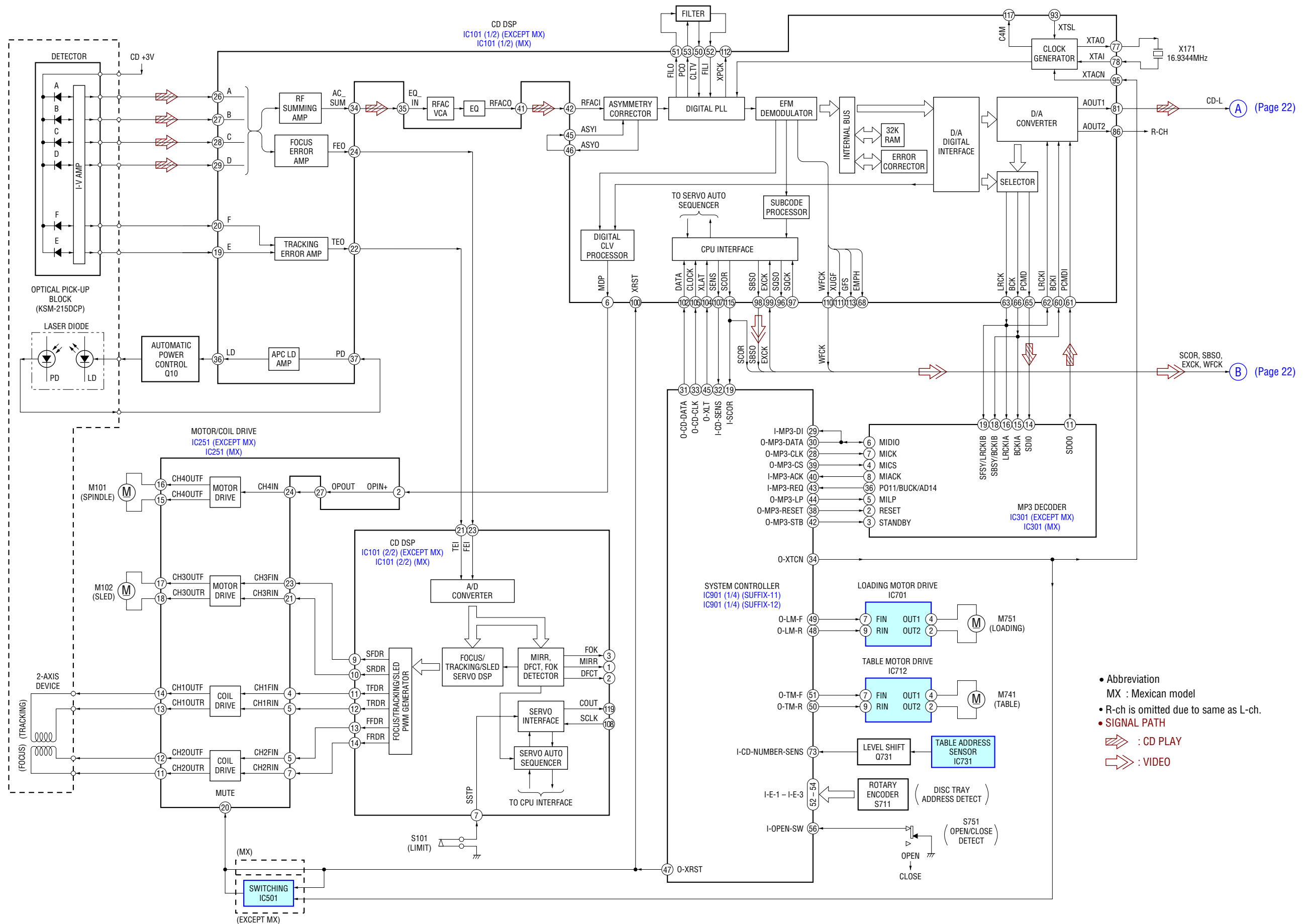
Connecting Location: CD board (except MX)
BD board (MX)

– CD BOARD (Conductor Side) (except MX) –
– BD BOARD (Conductor Side) (MX) –

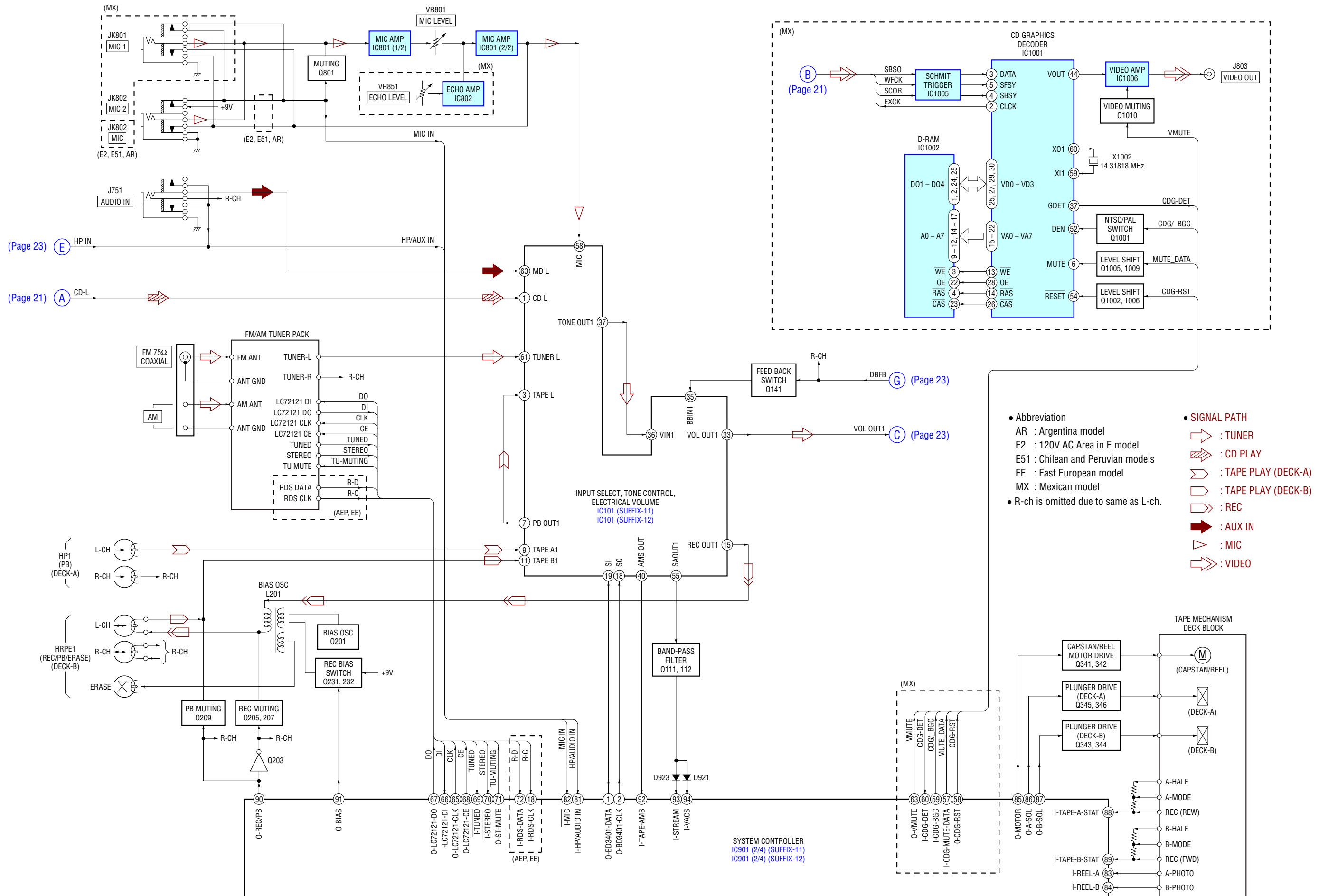


SECTION 6
DIAGRAMS

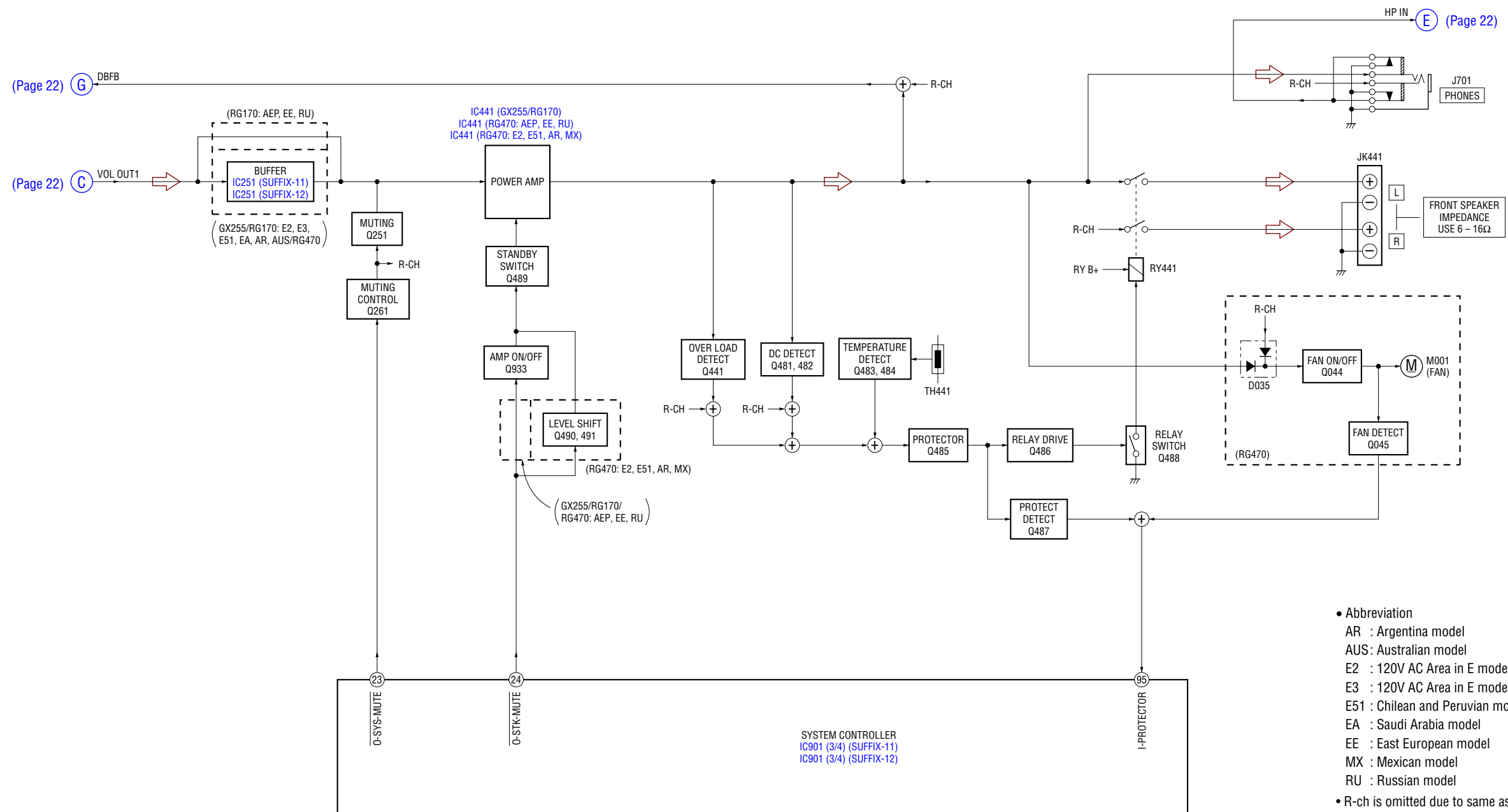
6-1. BLOCK DIAGRAM – CD SERVO Section –



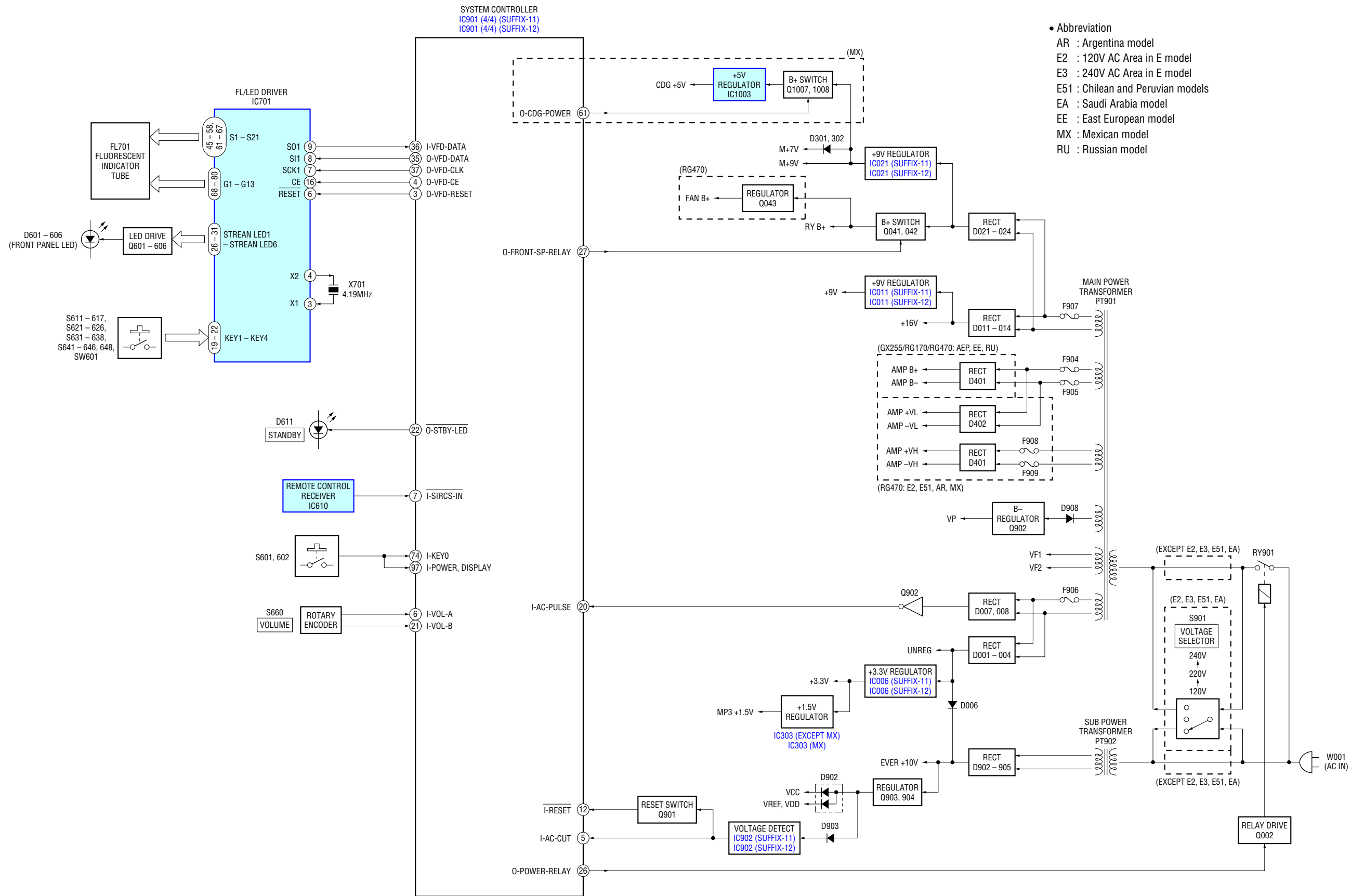
6-2. BLOCK DIAGRAM – AUDIO/VIDEO Section –



6-3. BLOCK DIAGRAM – AMP Section –



6-4. BLOCK DIAGRAM – PANEL, POWER SUPPLY Section –



• Note For Printed Wiring Boards and Schematic Diagrams

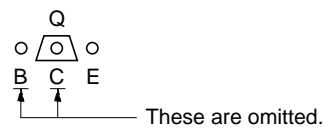
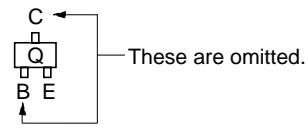
Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- △ : 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 the pattern face are indicated. (Conductor Side)
 Parts face side: Parts on the parts face side seen from the parts face are indicated. (Component Side)

Caution:
 Pattern face side: Parts on the pattern face side seen from the pattern face are indicated. (Side B)
 Parts face side: Parts on the parts face side seen from the parts face are indicated. (Side A)

• Indication of transistor



Note on Schematic Diagram:

- 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 $1/4 W$ or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note:

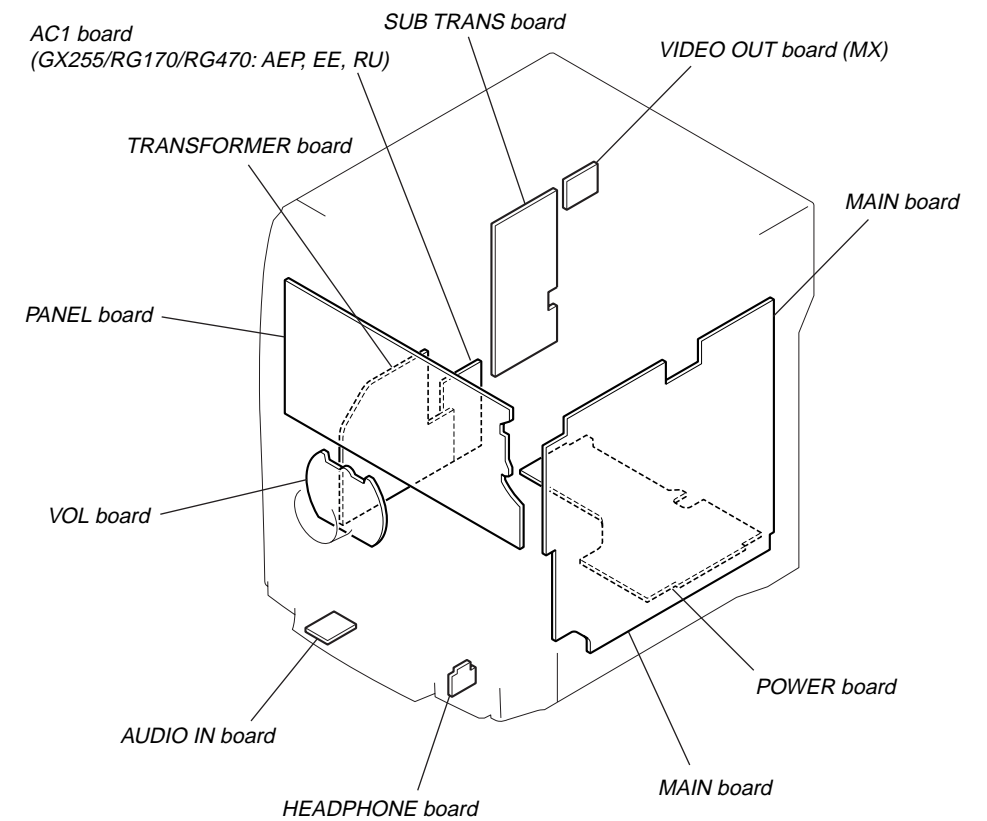
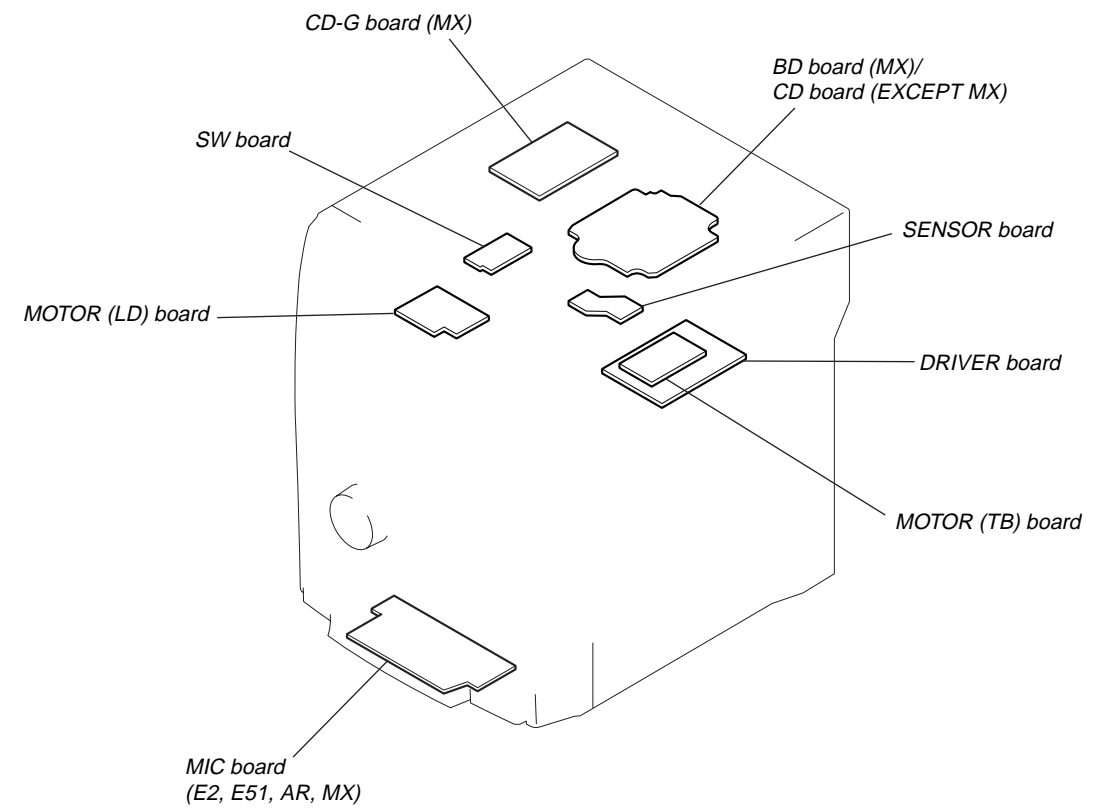
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Note:

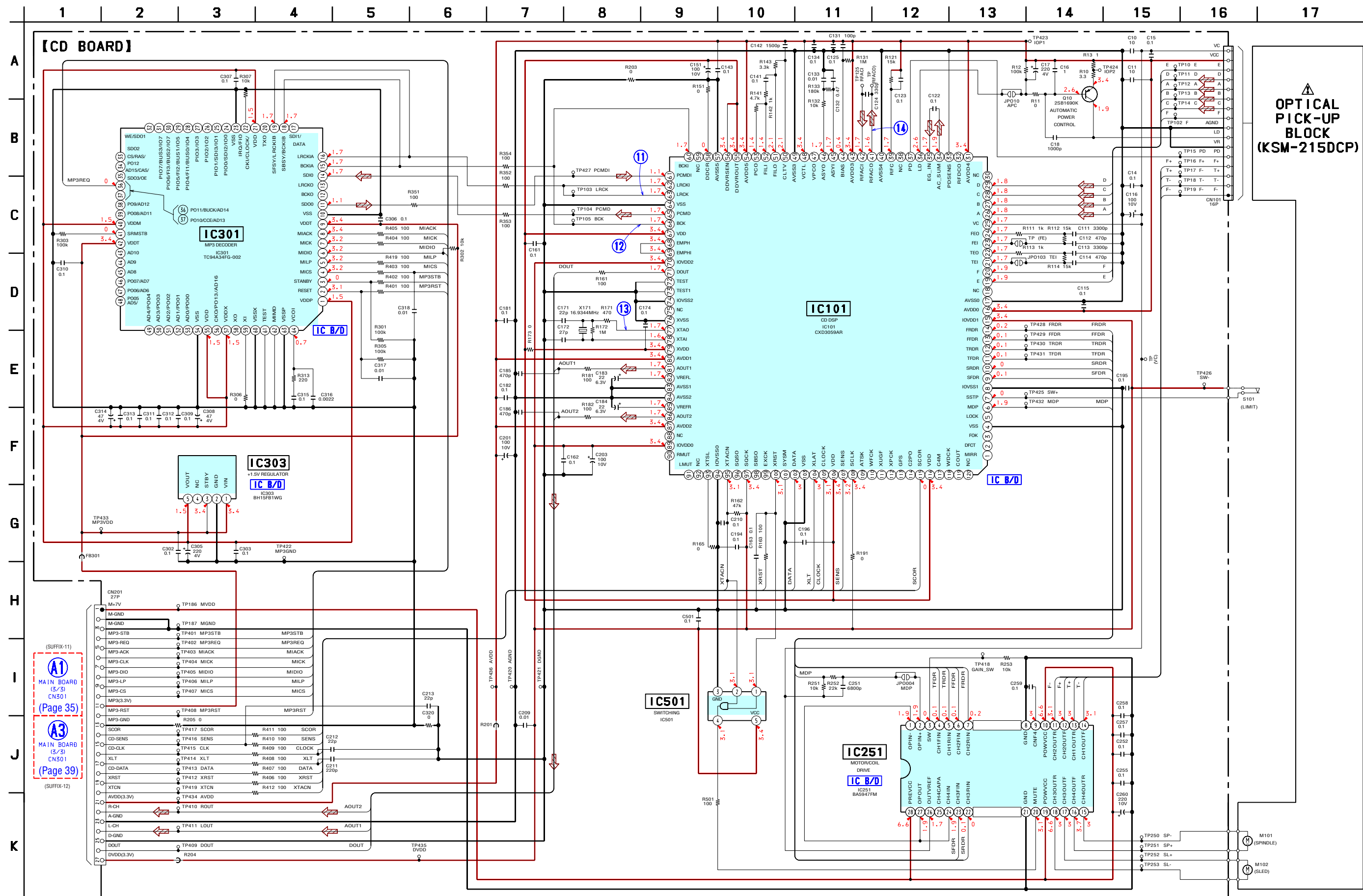
Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- : B+ Line.
- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
 - CD/BD Section — no mark : CD PLAY
 - CD-G Section — no mark : CD-G PLAY
 - Other Sections — no mark : FM
 - () : CD PLAY
 - << >> : TAPE PLAY
 - [] : TAPE REC
 - * : Impossible to measure
- Voltages are taken with a VOM (Input impedance 10 M Ω). 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)
 - ↘ : TAPE PLAY (DECK A)
 - ↘ : TAPE PLAY (DECK B)
 - ↘ : REC
 - ↘ : CD PLAY
 - ↘ : AUX IN
 - ↘ : MIC
 - ↘ : VIDEO
- Abbreviation
 - AR : Argentina model
 - AUS : Australian model
 - CND : Canadian model
 - E2 : 120 V AC Area in E model
 - E3 : 240 V AC Area in E model
 - E51 : Chilean and Peruvian models
 - EA : Saudi Arabia model
 - EE : East European model
 - MX : Mexican model
 - RU : Russian model

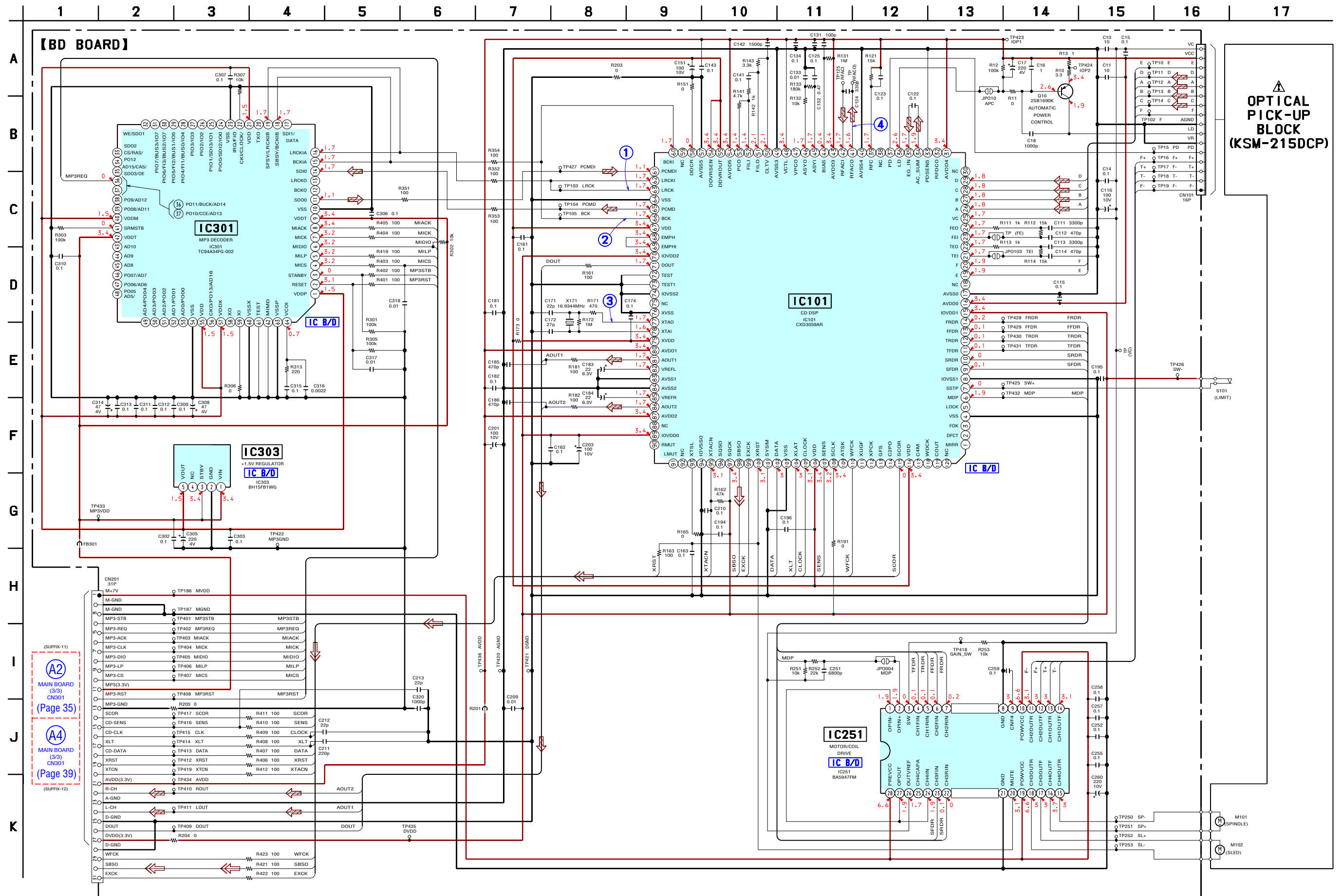
• Circuit Boards Location



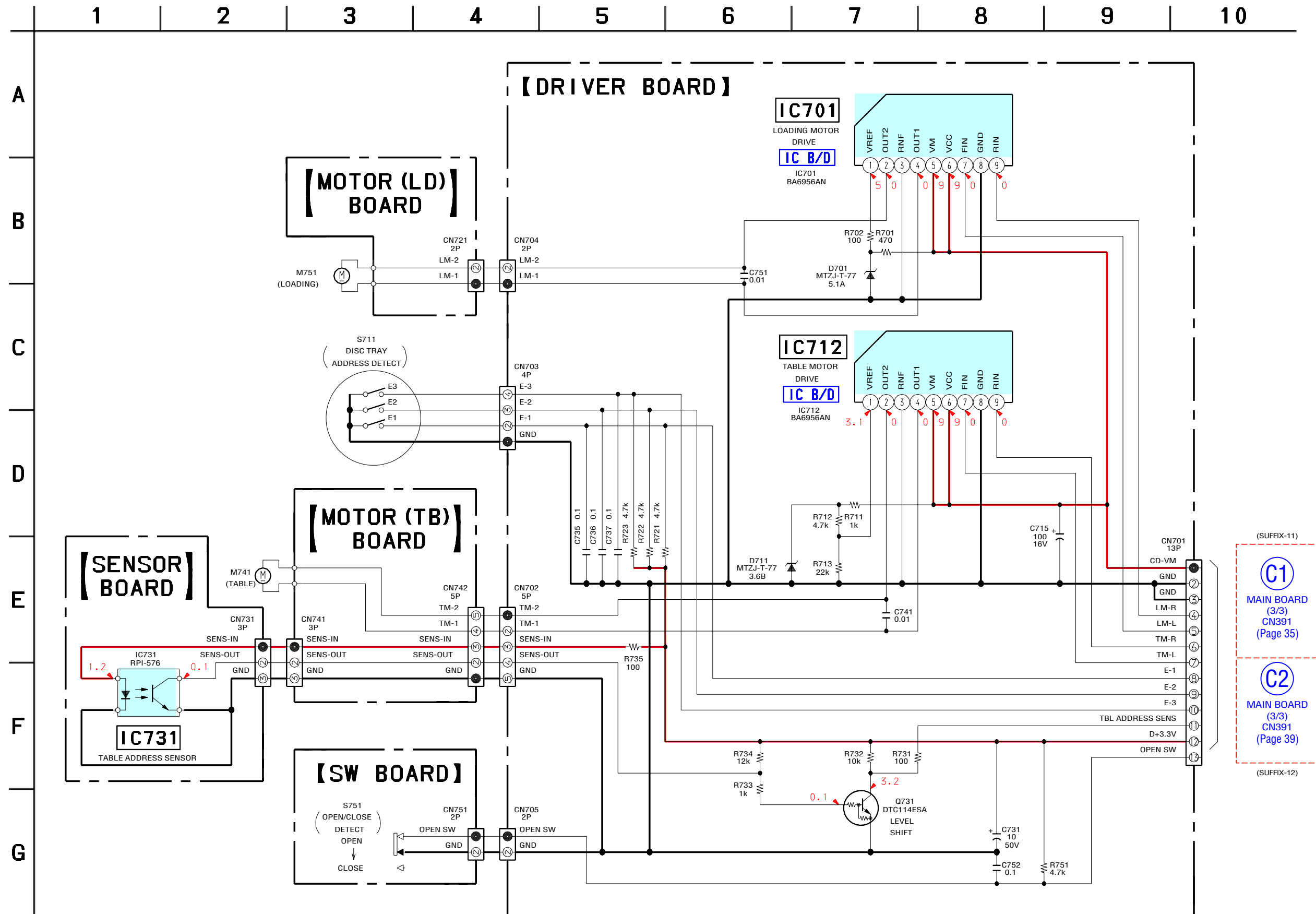
6-6. SCHEMATIC DIAGRAM – CD Board – (Except MX model) • See page 60 for Waveforms. • See page 61 for IC Block Diagrams.



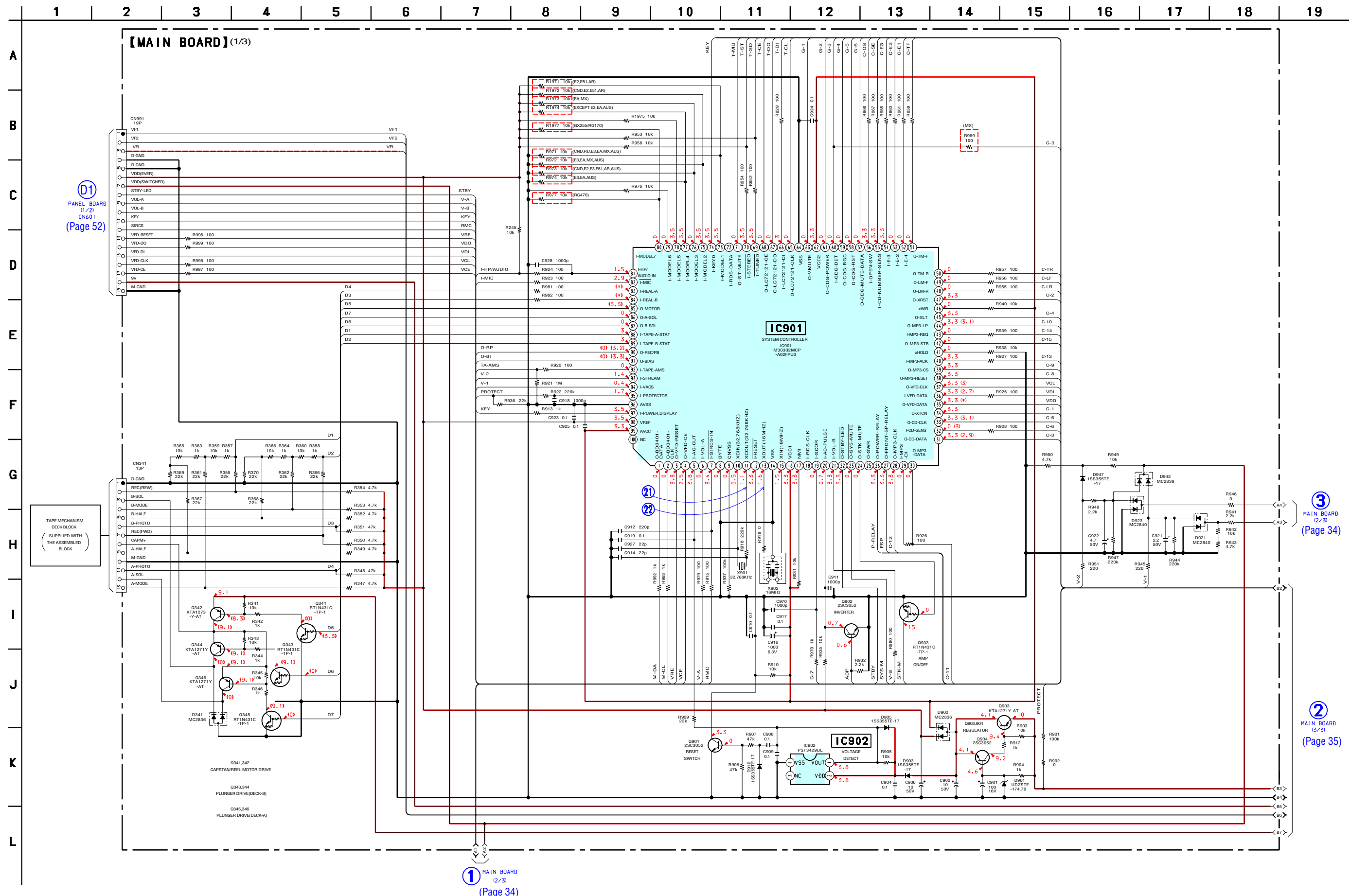
6-8. SCHEMATIC DIAGRAM – BD Board – (MX model) • See page 60 for Waveforms. • See page 61 for IC Block Diagrams.



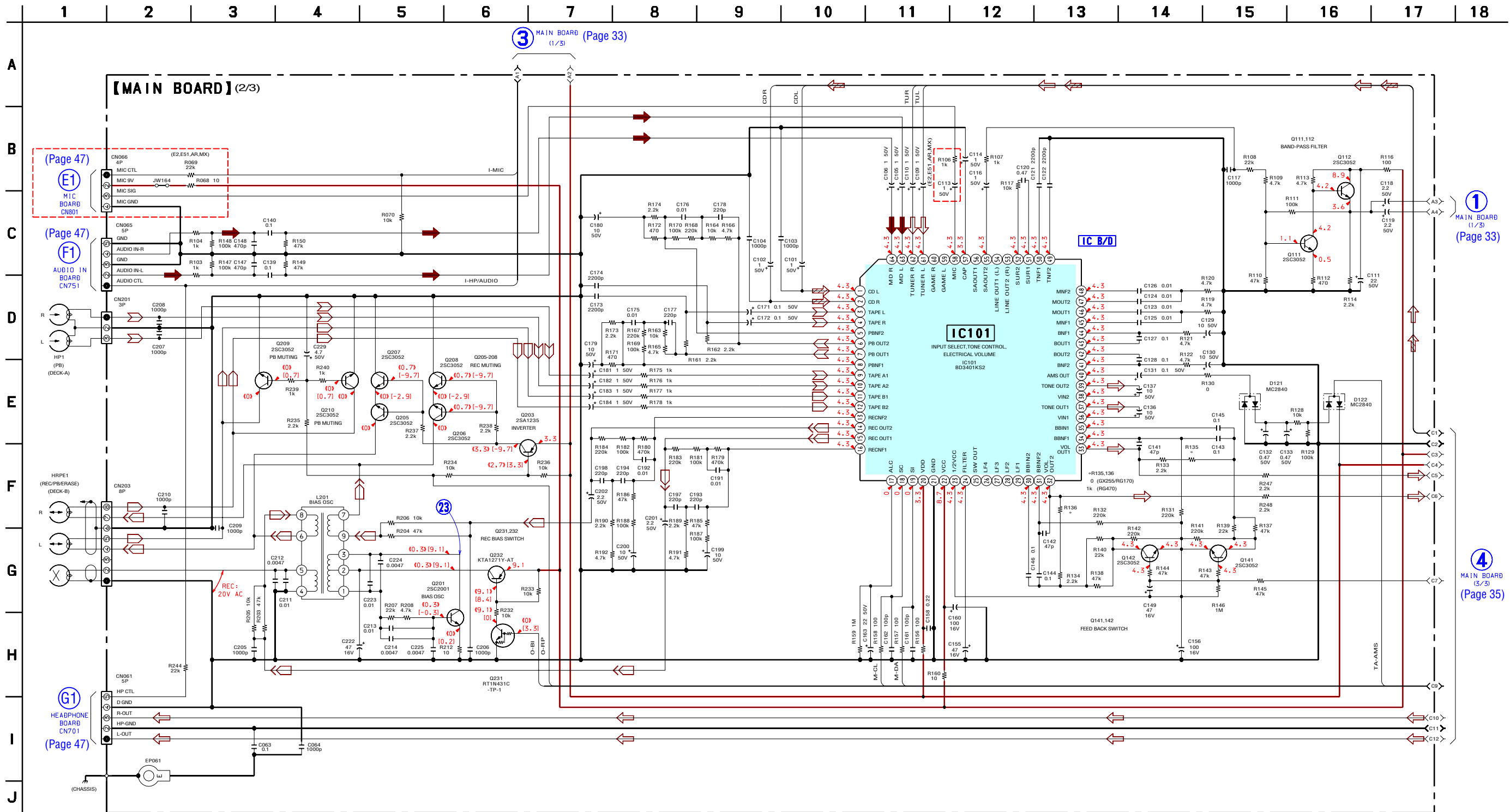
6-10. SCHEMATIC DIAGRAM – CHANGER Section – • See page 61 for IC Block Diagrams.



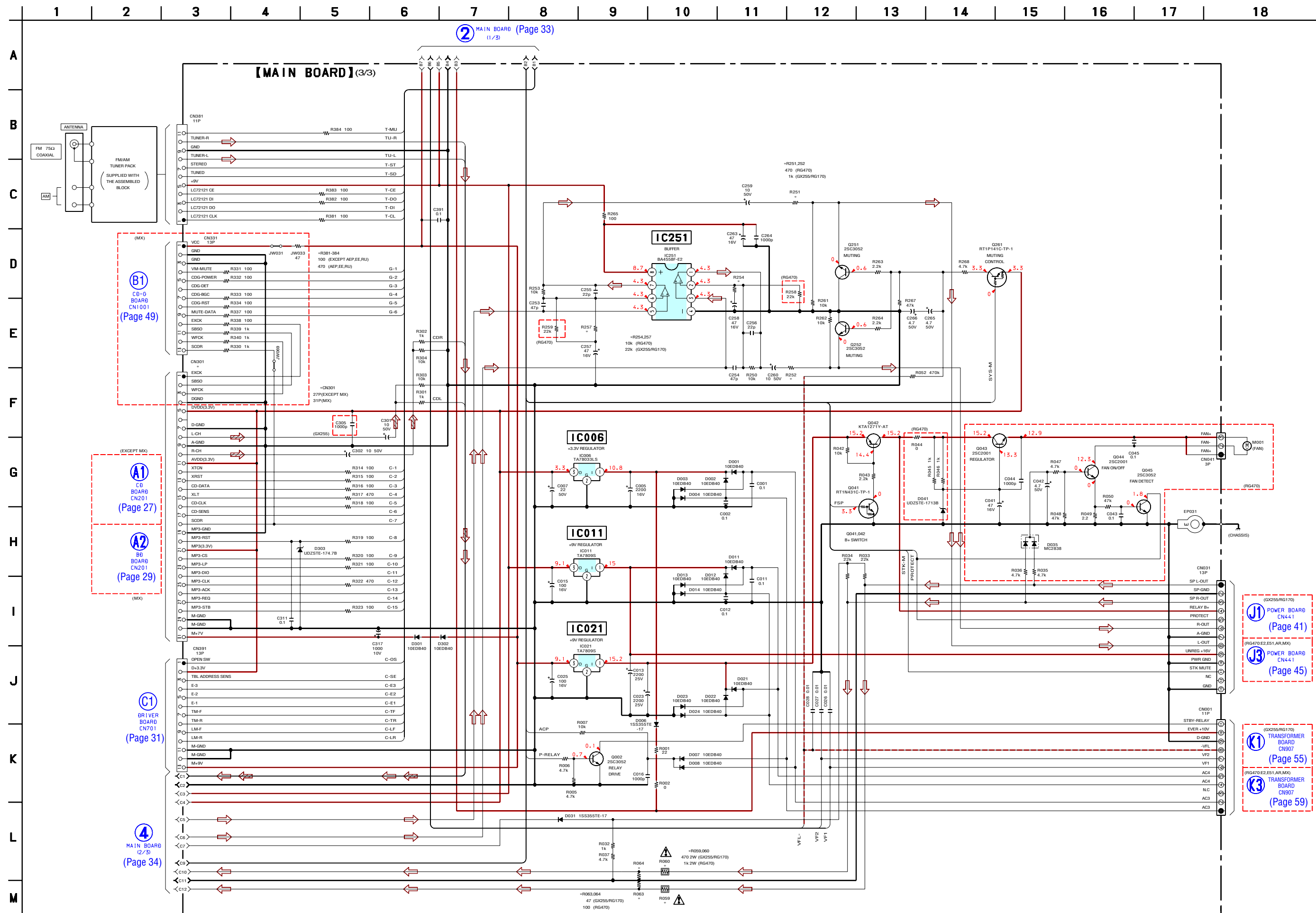
6-12. SCHEMATIC DIAGRAM – MAIN Board (1/3) – (Suffix-11) • See page 60 for Waveforms. • See page 71 for IC Pin Function Description.



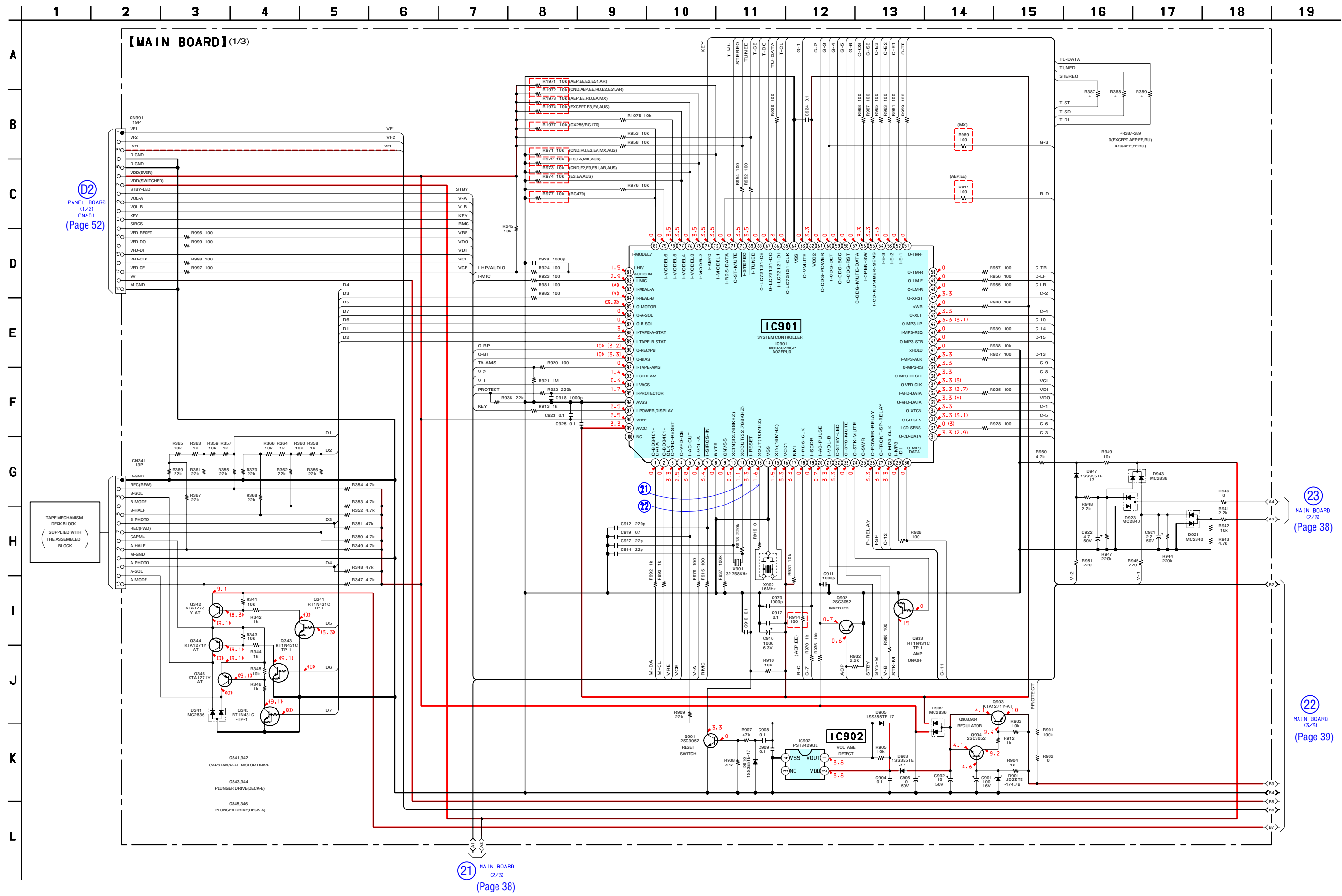
6-13. SCHEMATIC DIAGRAM – MAIN Board (2/3) – (Suffix-11) • See page 60 for Waveform. • See page 61 for IC Block Diagram.



6-14. SCHEMATIC DIAGRAM – MAIN Board (3/3) – (Suffix-11)



6-16. SCHEMATIC DIAGRAM – MAIN Board (1/3) – (Suffix-12) • See page 60 for Waveforms. • See page 71 for IC Pin Function Description.

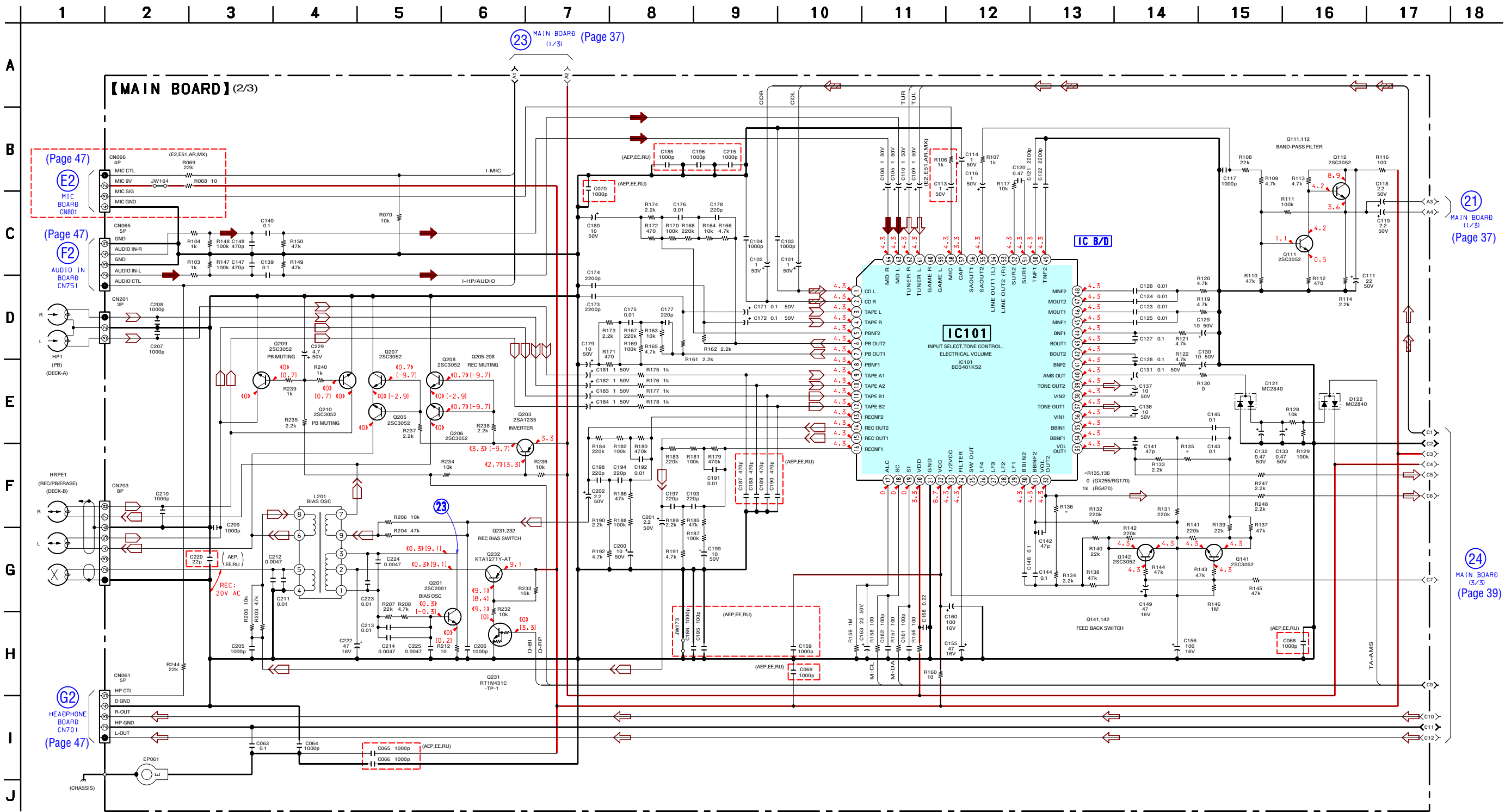


21 MAIN BOARD (2/3) (Page 38)

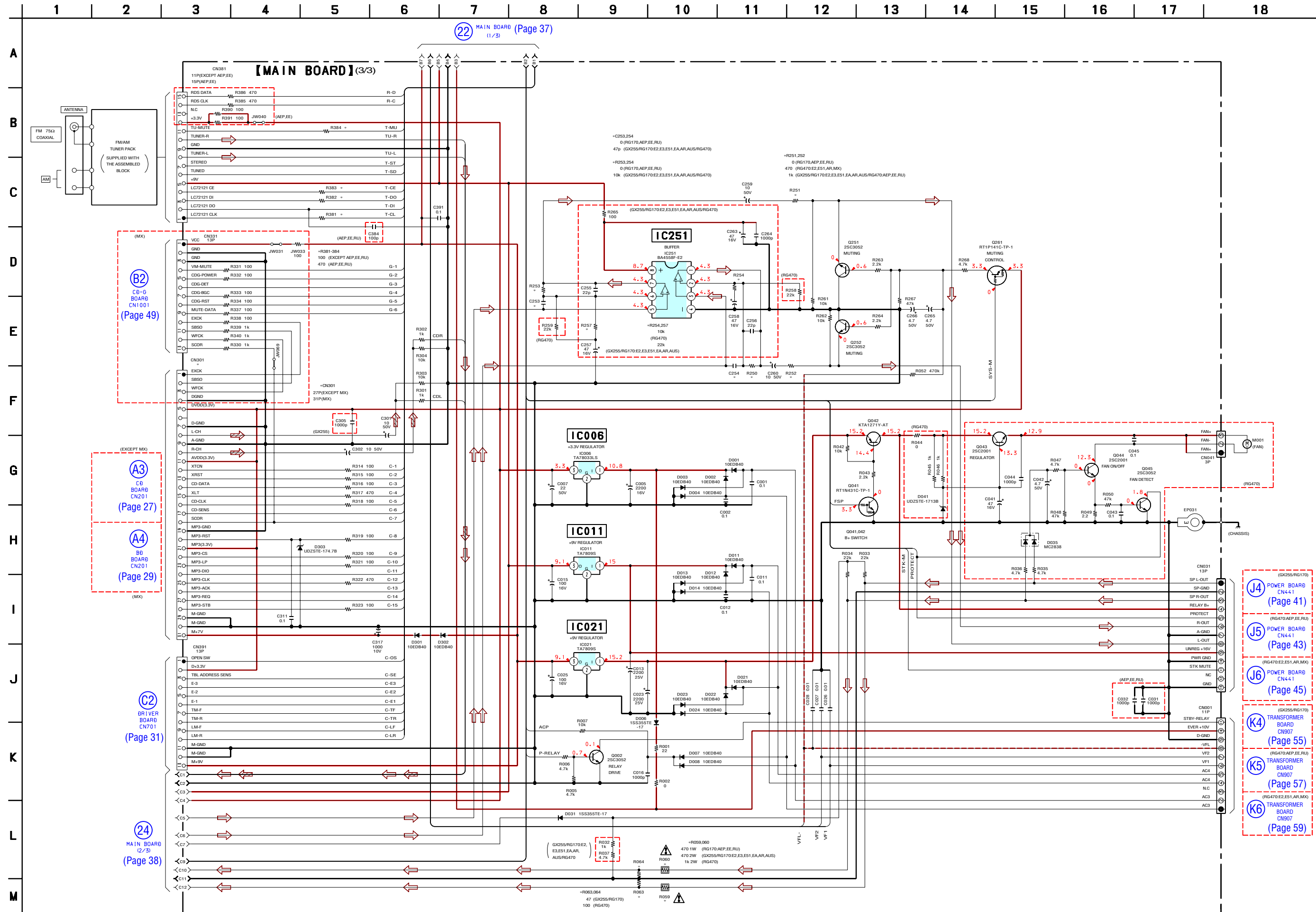
23 MAIN BOARD (2/3) (Page 38)

22 MAIN BOARD (3/3) (Page 39)

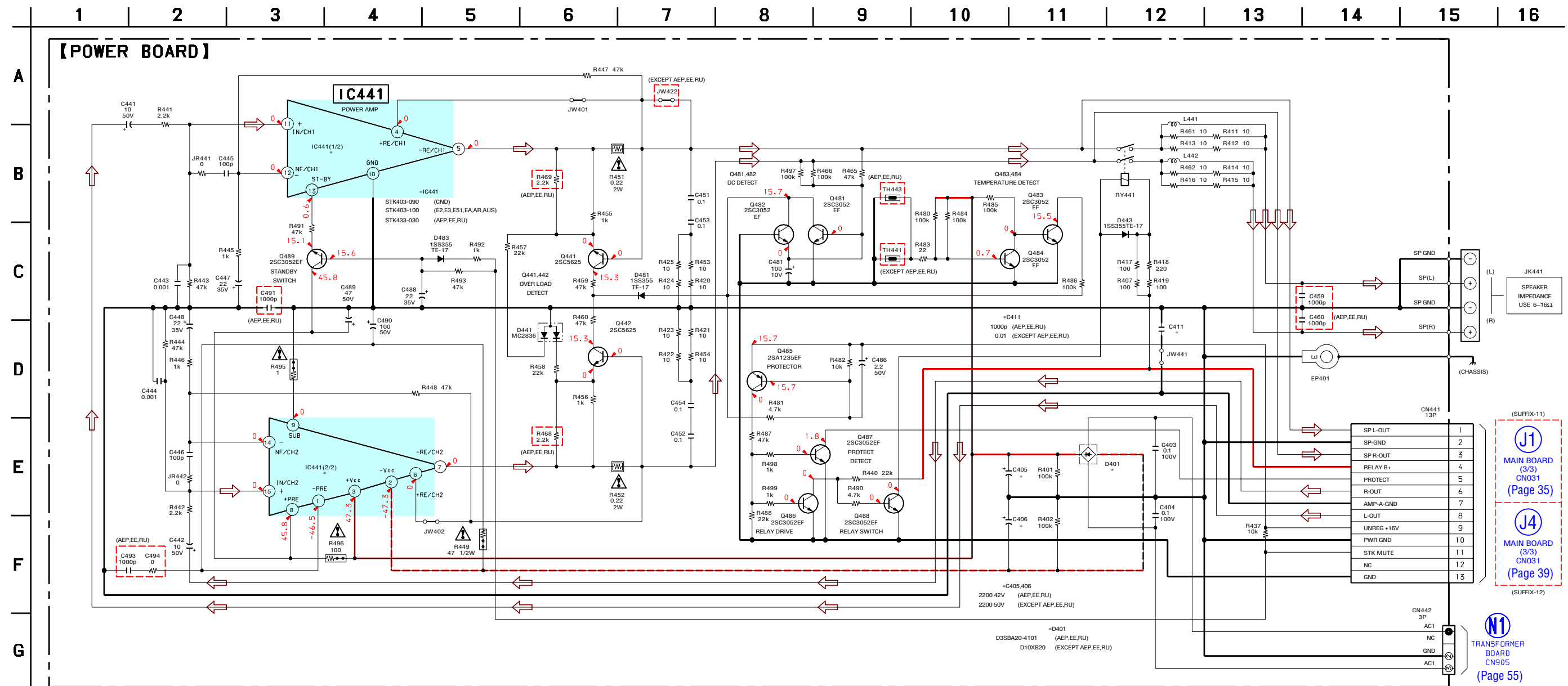
6-17. SCHEMATIC DIAGRAM – MAIN Board (2/3) – (Suffix-12) • See page 60 for Waveform. • See page 61 for IC Block Diagram.



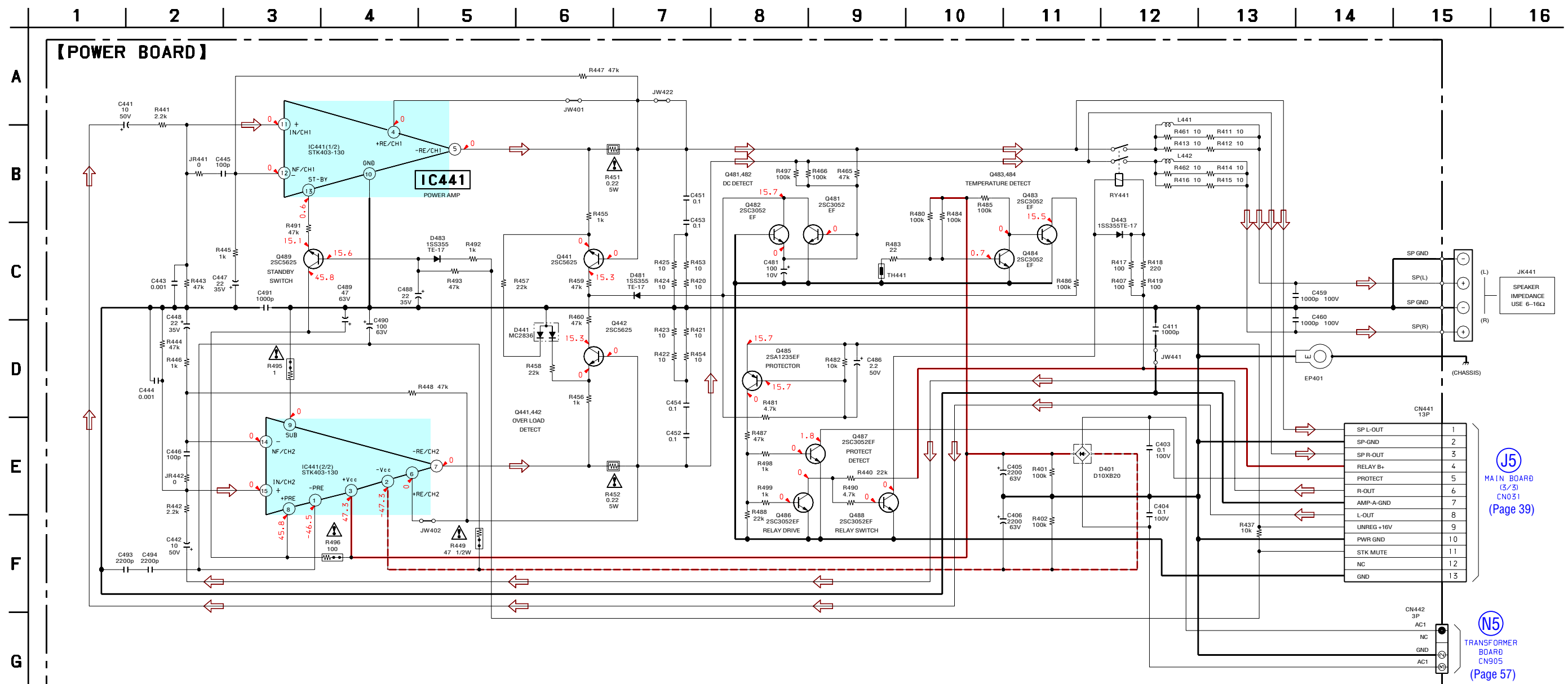
6-18. SCHEMATIC DIAGRAM – MAIN Board (3/3) – (Suffix-12)



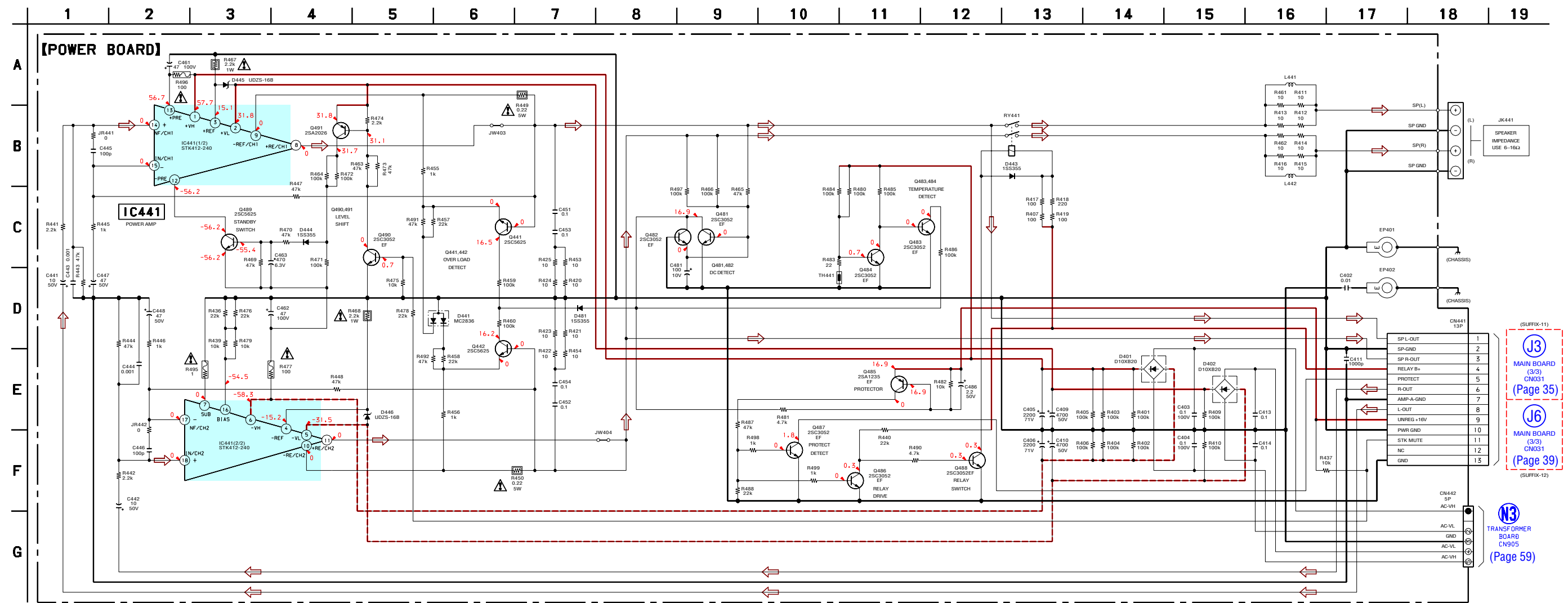
6-20. SCHEMATIC DIAGRAM – POWER Board – (GX255/RG170)



6-22. SCHEMATIC DIAGRAM – POWER Board – (RG470: AEP, EE, RU)



6-24. SCHEMATIC DIAGRAM – POWER Board – (RG470: E2, E51, AR, MX)



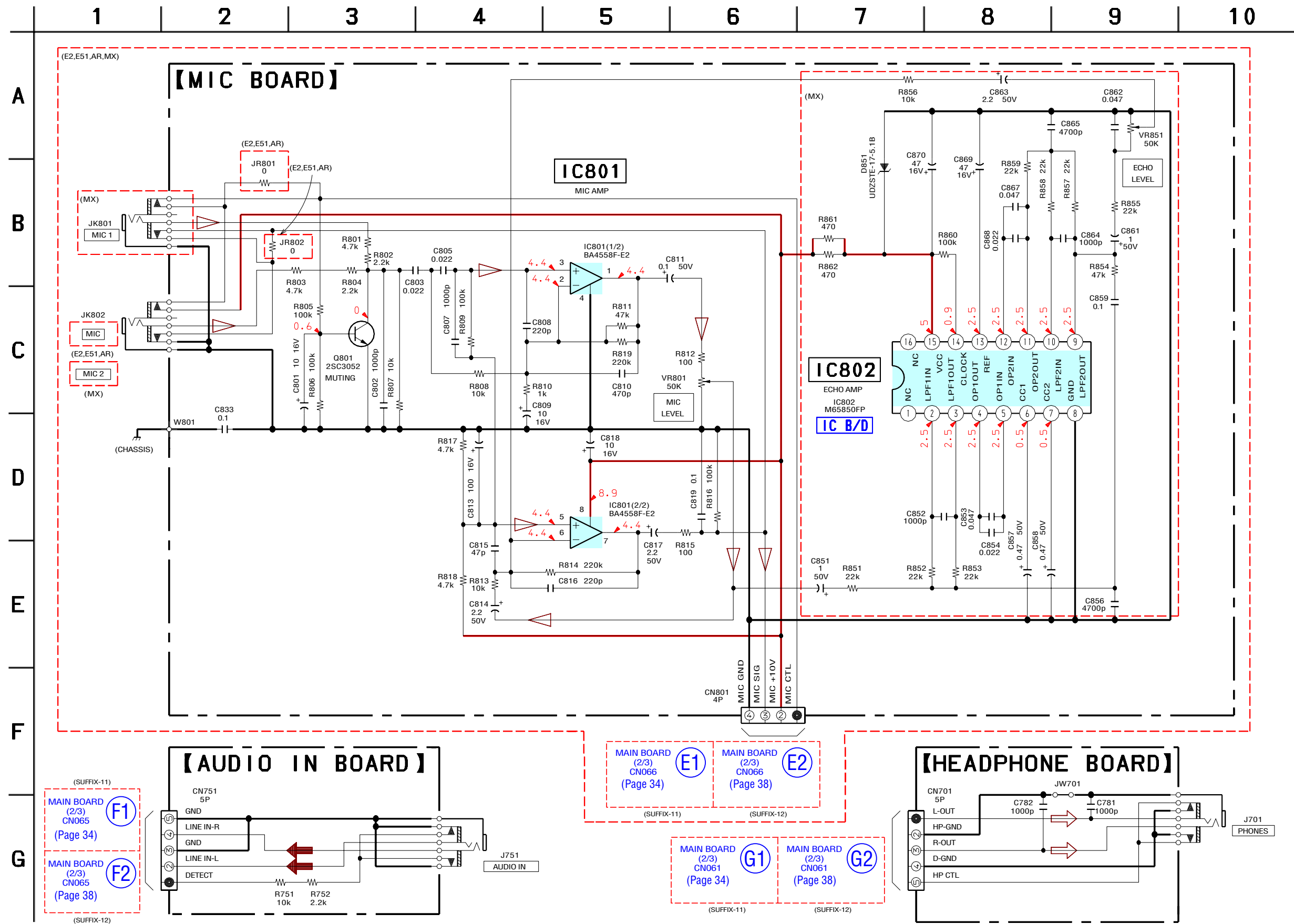
(SUFFIX-11)
J3
 MAIN BOARD
 (3/3)
 CN031
 (Page 35)

(SUFFIX-12)
J6
 MAIN BOARD
 (3/3)
 CN031
 (Page 39)

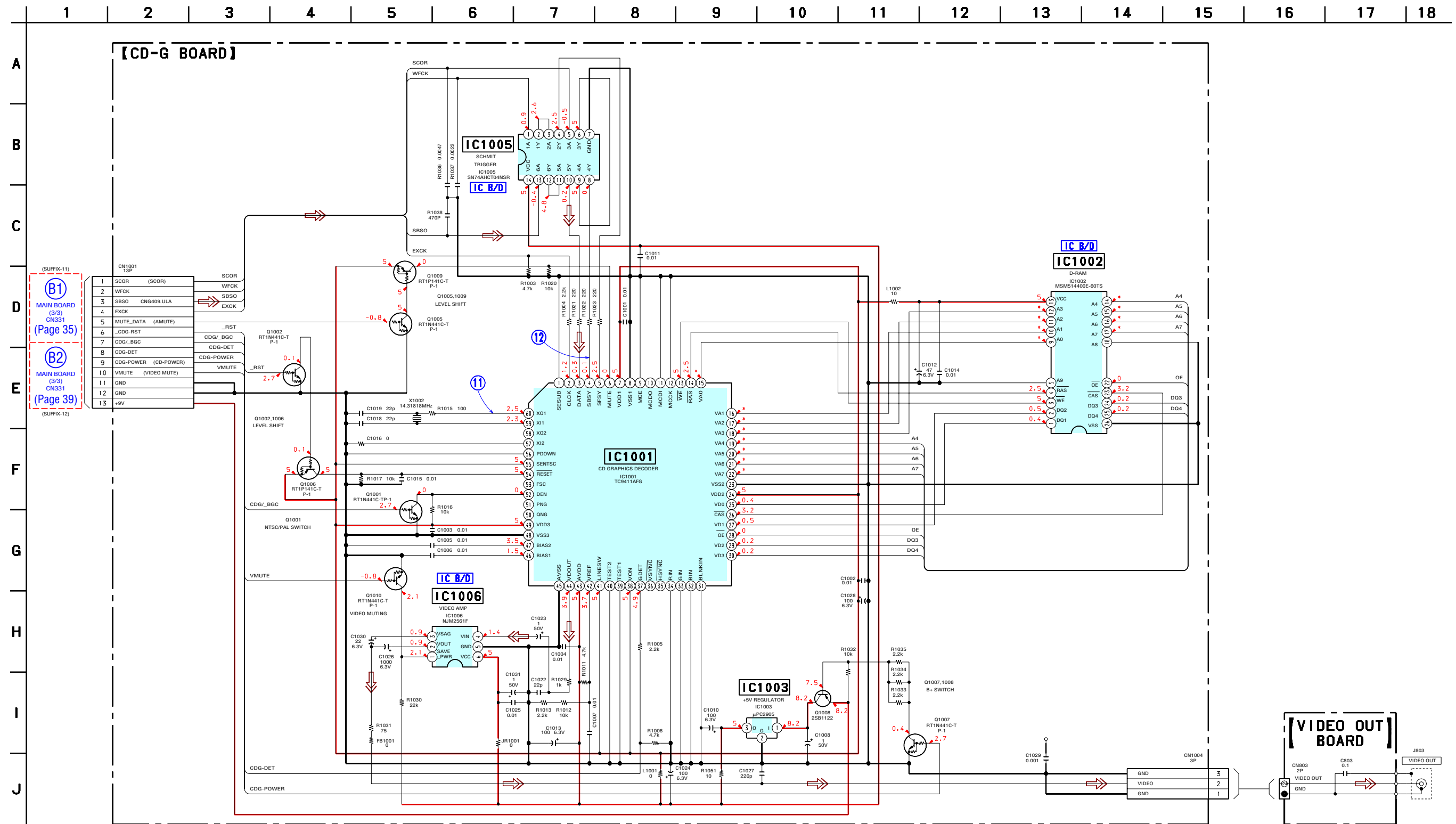
N3
 TRANSFORMER
 BOARD
 CN905
 (Page 59)

1	SP L-OUT
2	SP-R-OUT
3	RELAY B+
4	PROTECT
5	R-OUT
6	AMP-A-GND
7	L-OUT
8	UNREG +16V
9	PMR GND
10	STK MUTE
11	NC
12	GND
13	GND

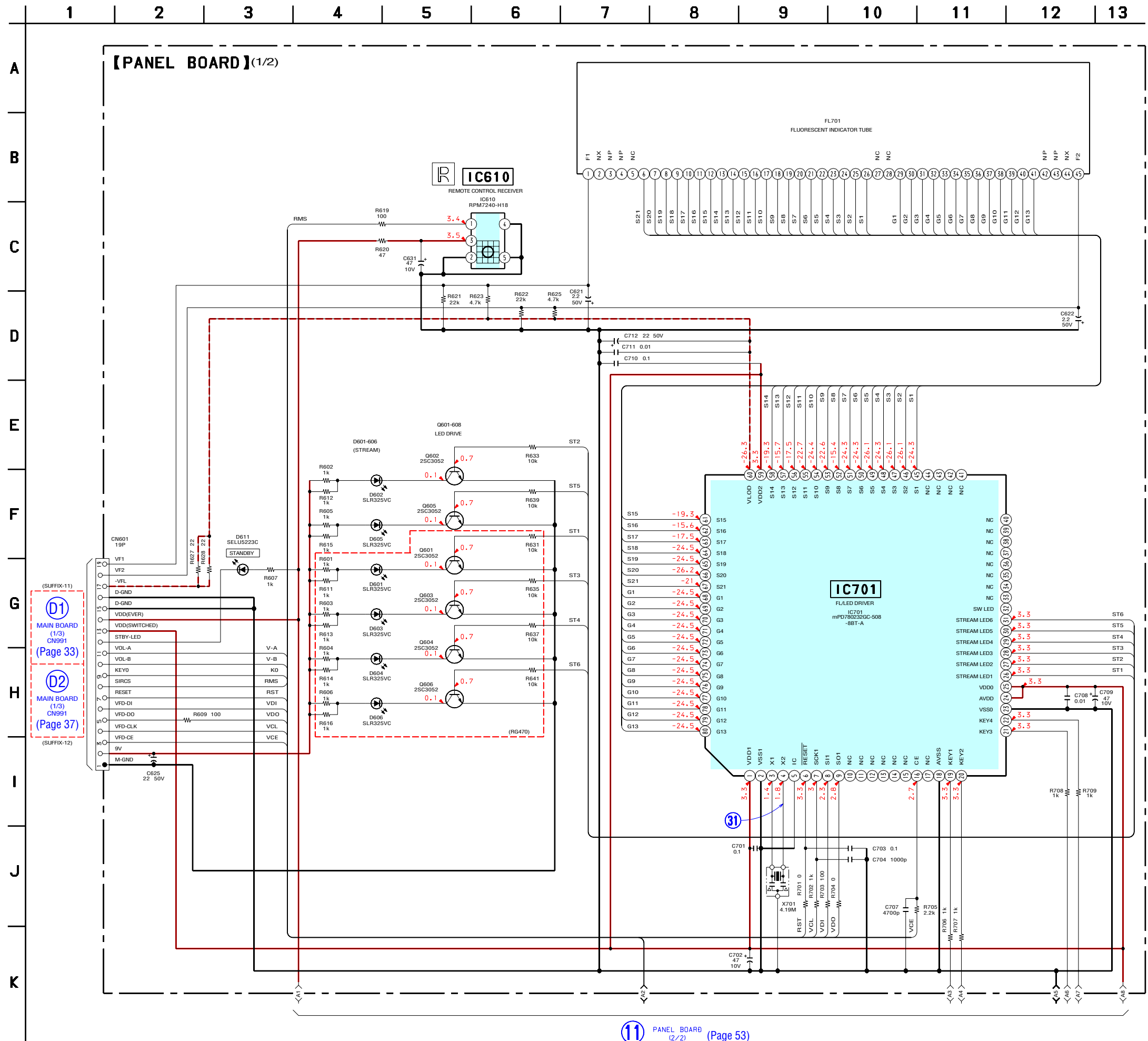
6-26. SCHEMATIC DIAGRAM – AUDIO IN, MIC, HEADPHONE Boards – • See page 61 for IC Block Diagrams.



6-28. SCHEMATIC DIAGRAM – CD-G Section – (MX model only) • See page 60 for Waveforms. • See page 61 for IC Block Diagrams. • See page 71 for IC Pin Function Description.

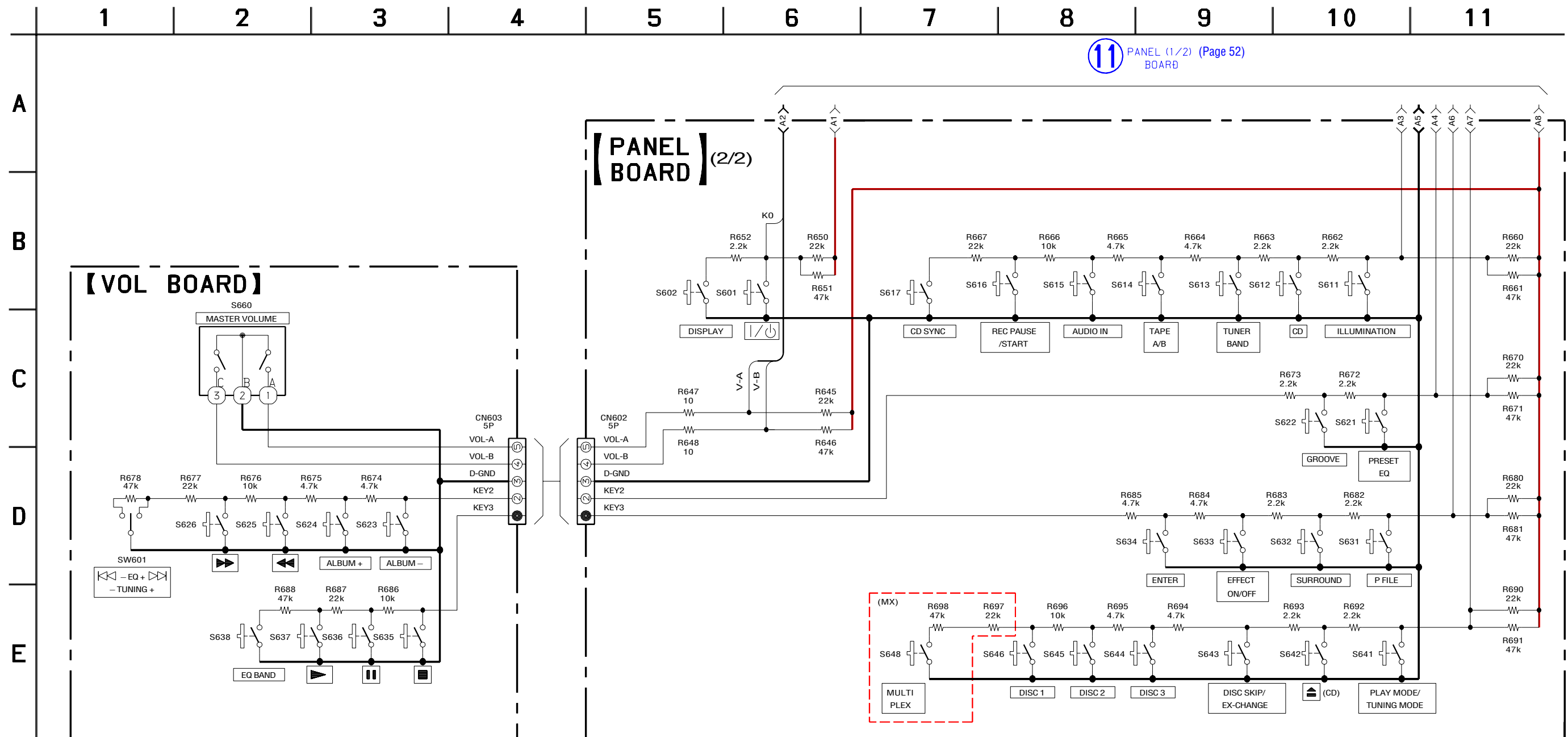


6-31. SCHEMATIC DIAGRAM – PANEL Section (1/2) – • See page 60 for Waveform. • See page 71 for IC Pin Function Description.

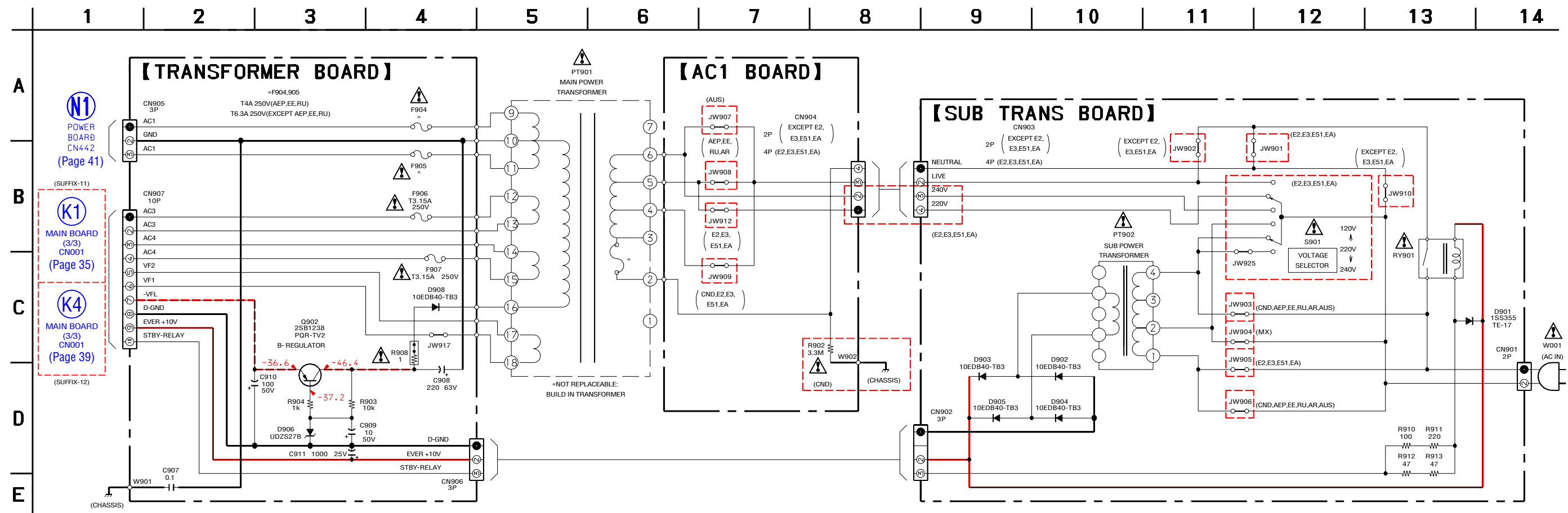


11 PANEL BOARD (2/2) (Page 53)

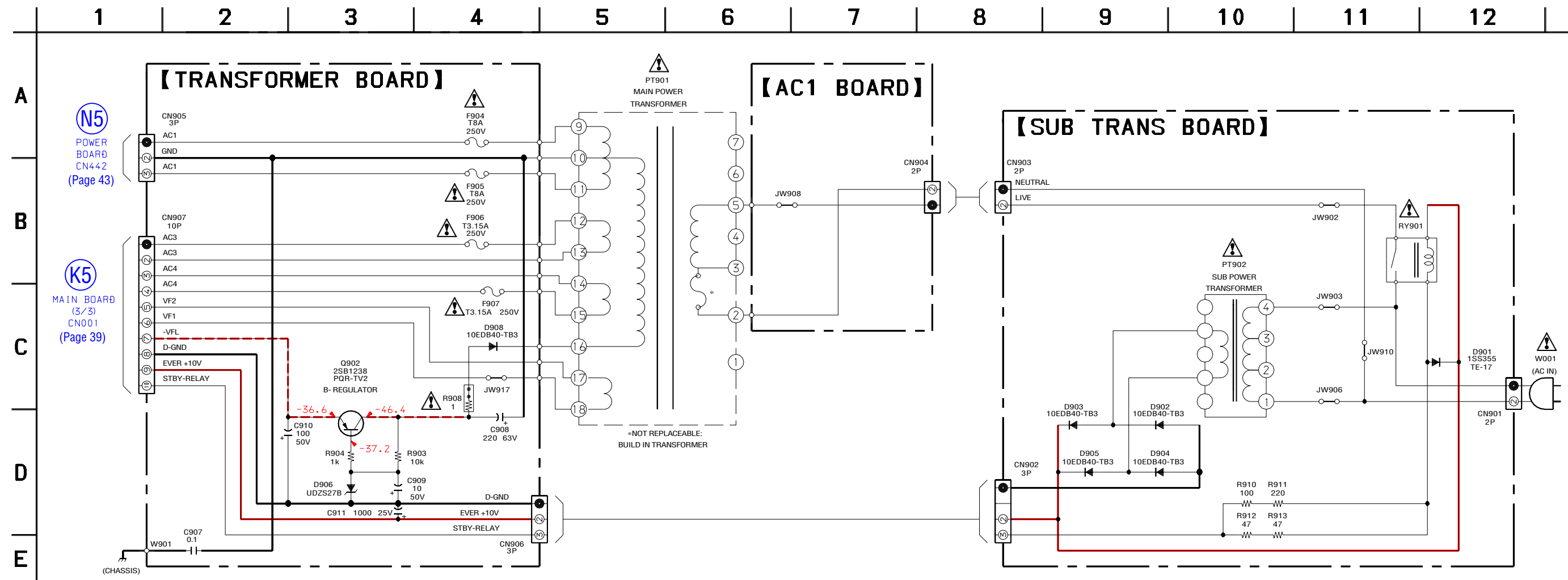
6-32. SCHEMATIC DIAGRAM – PANEL Section (2/2) –



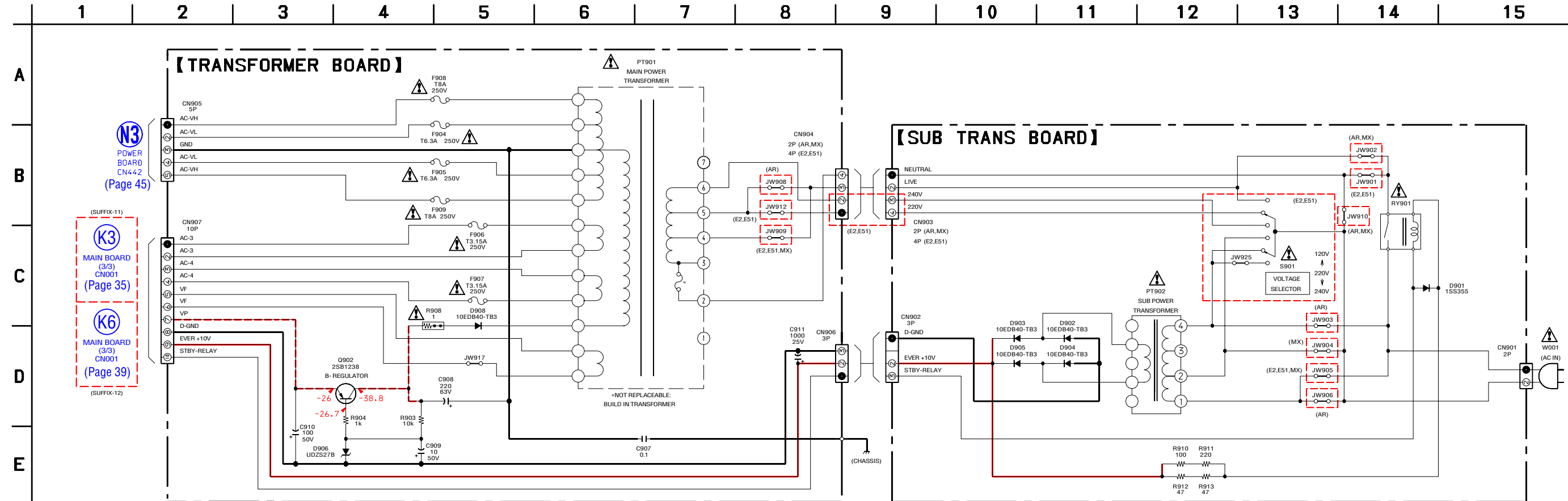
6-34. SCHEMATIC DIAGRAM – TRANS Section – (GX255/RG170)



6-36. SCHEMATIC DIAGRAM – TRANS Section – (RG470: AEP, EE, RU)

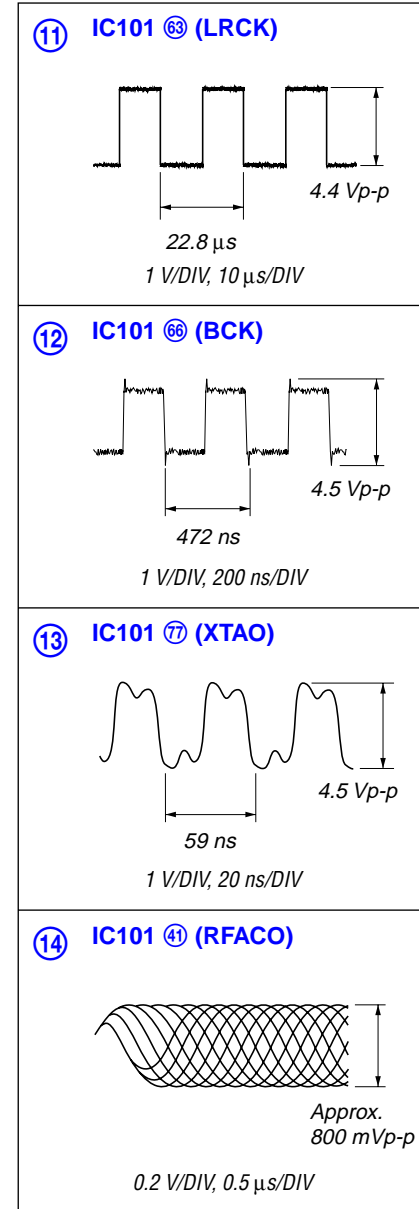


6-38. SCHEMATIC DIAGRAM – TRANS Section – (RG470: E2, E51, AR, MX)

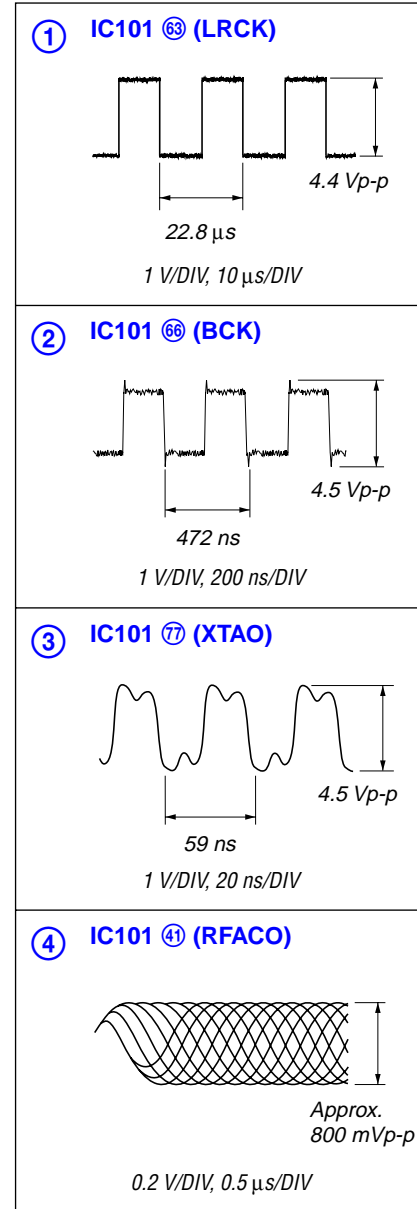


• Waveforms

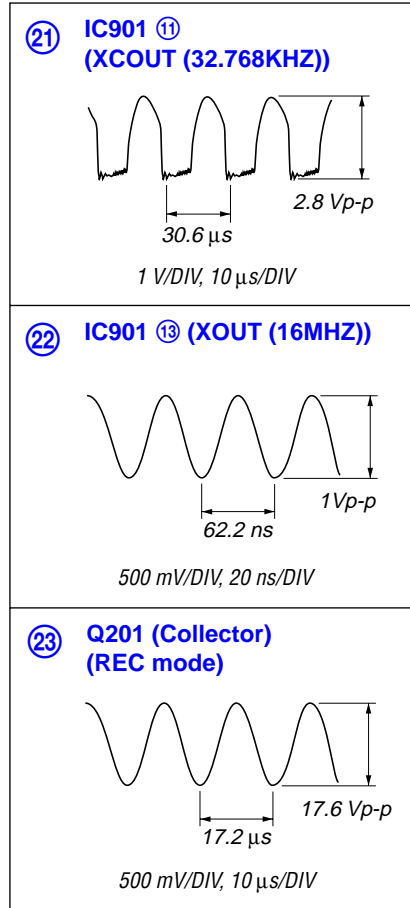
– CD Board – (Except MX model)



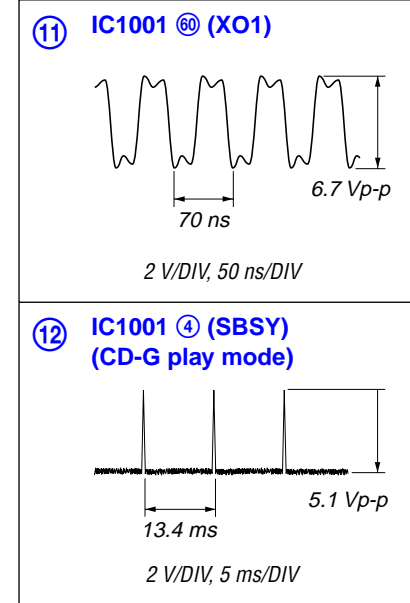
– BD Board – (MX model only)



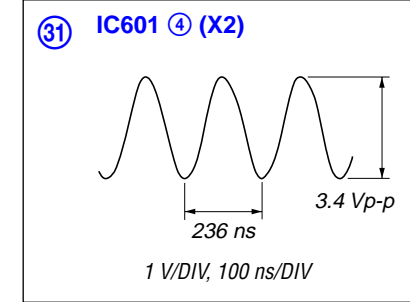
– MAIN Board –



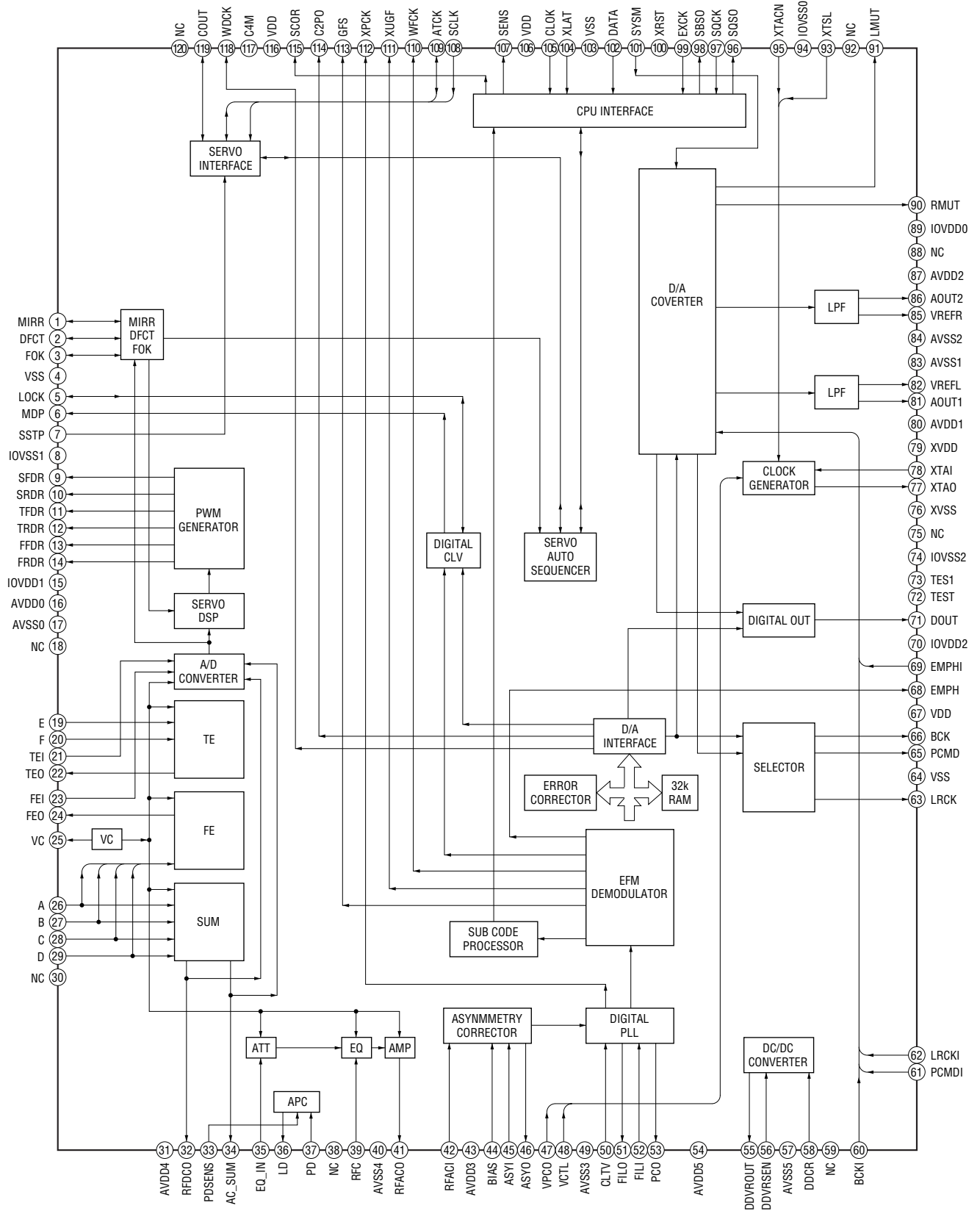
– CD-G Board –



– PANEL Board –

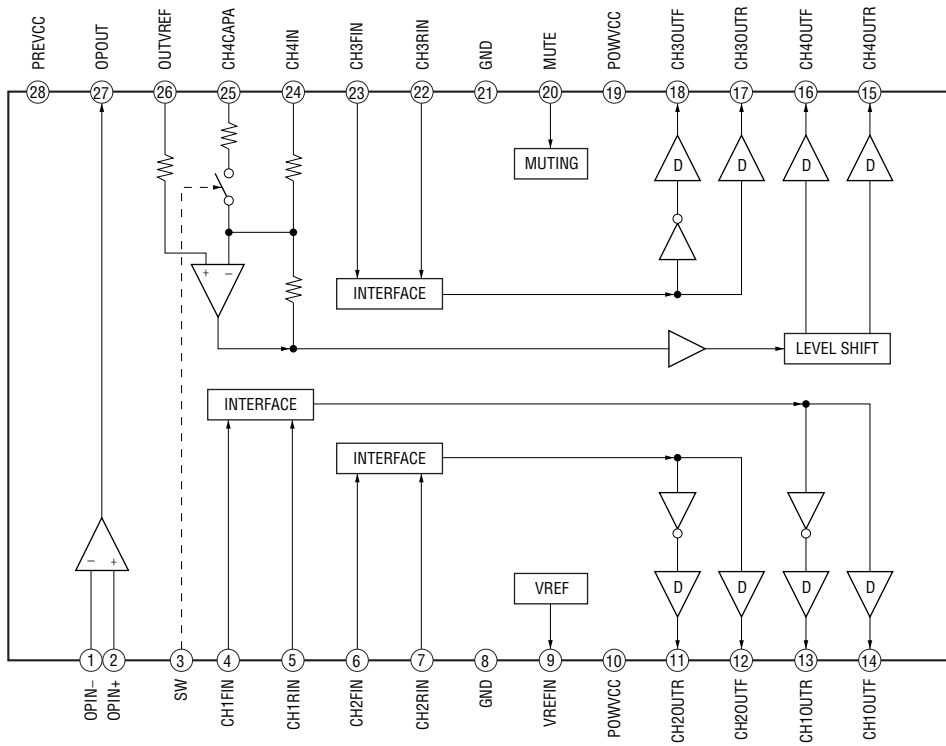


• IC Block Diagrams
 – CD Board –
 IC101 CXD3059AR

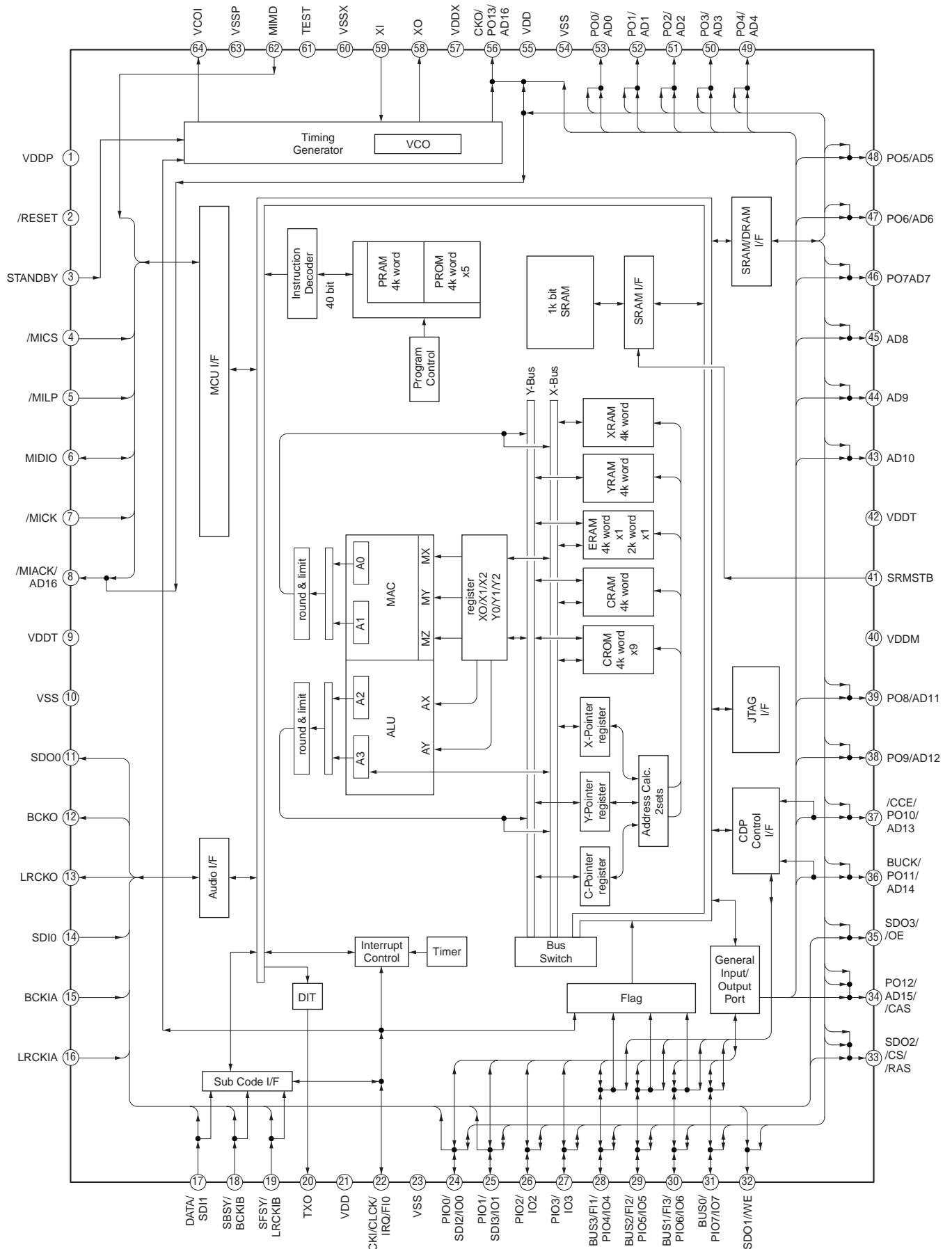


HCD-GX255/RG170/RG470

IC251 BA5947FM-E2

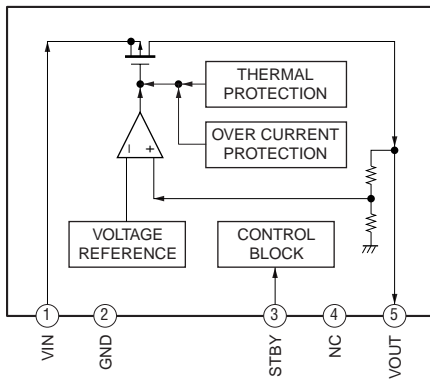


IC301 TC94A34FG-002



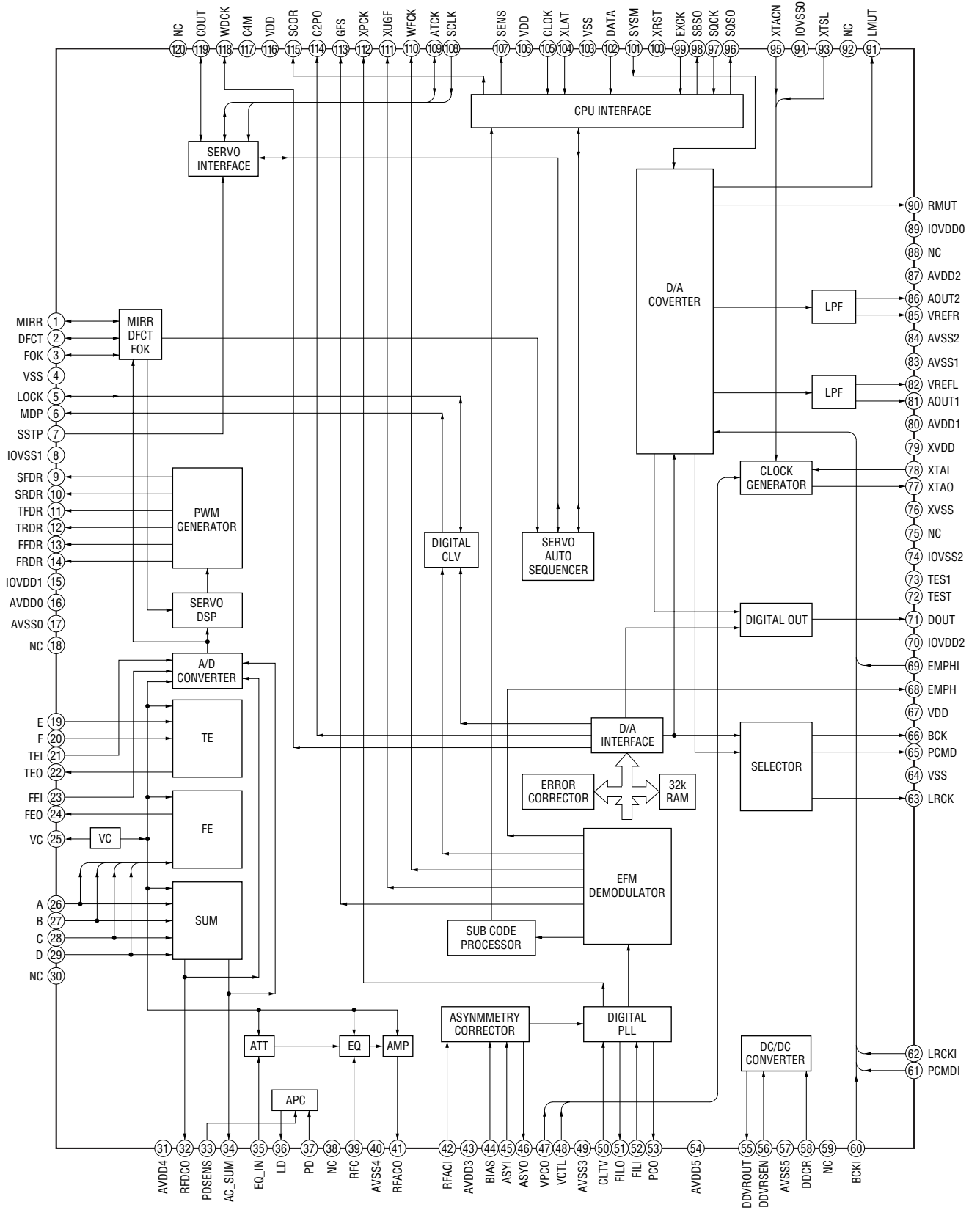
HCD-GX255/RG170/RG470

IC303 BH15FB1WG

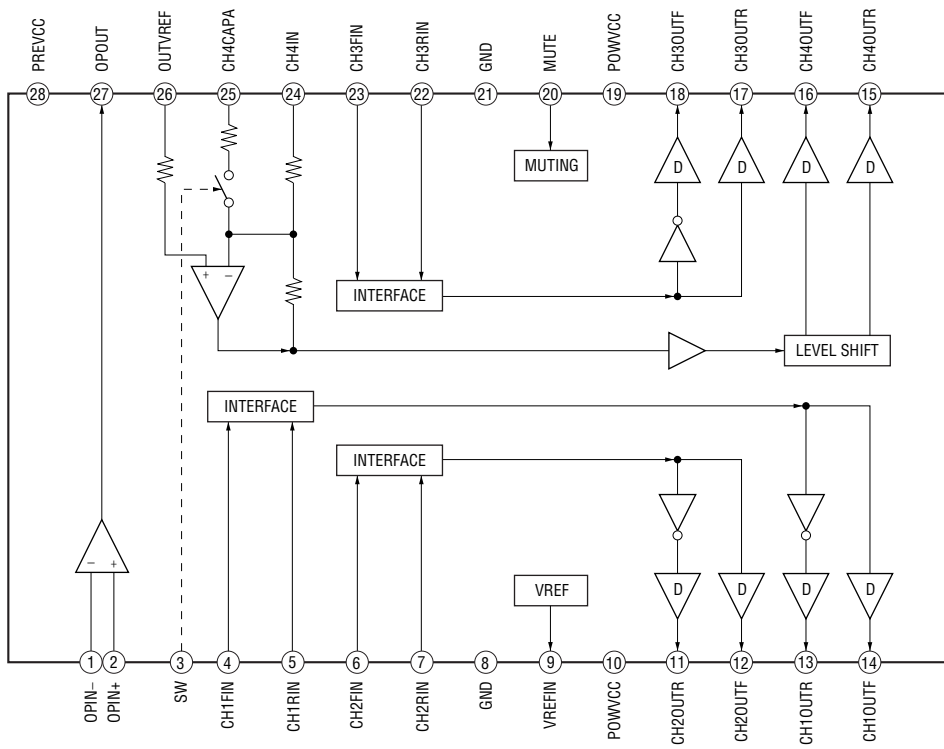


- BD Board -

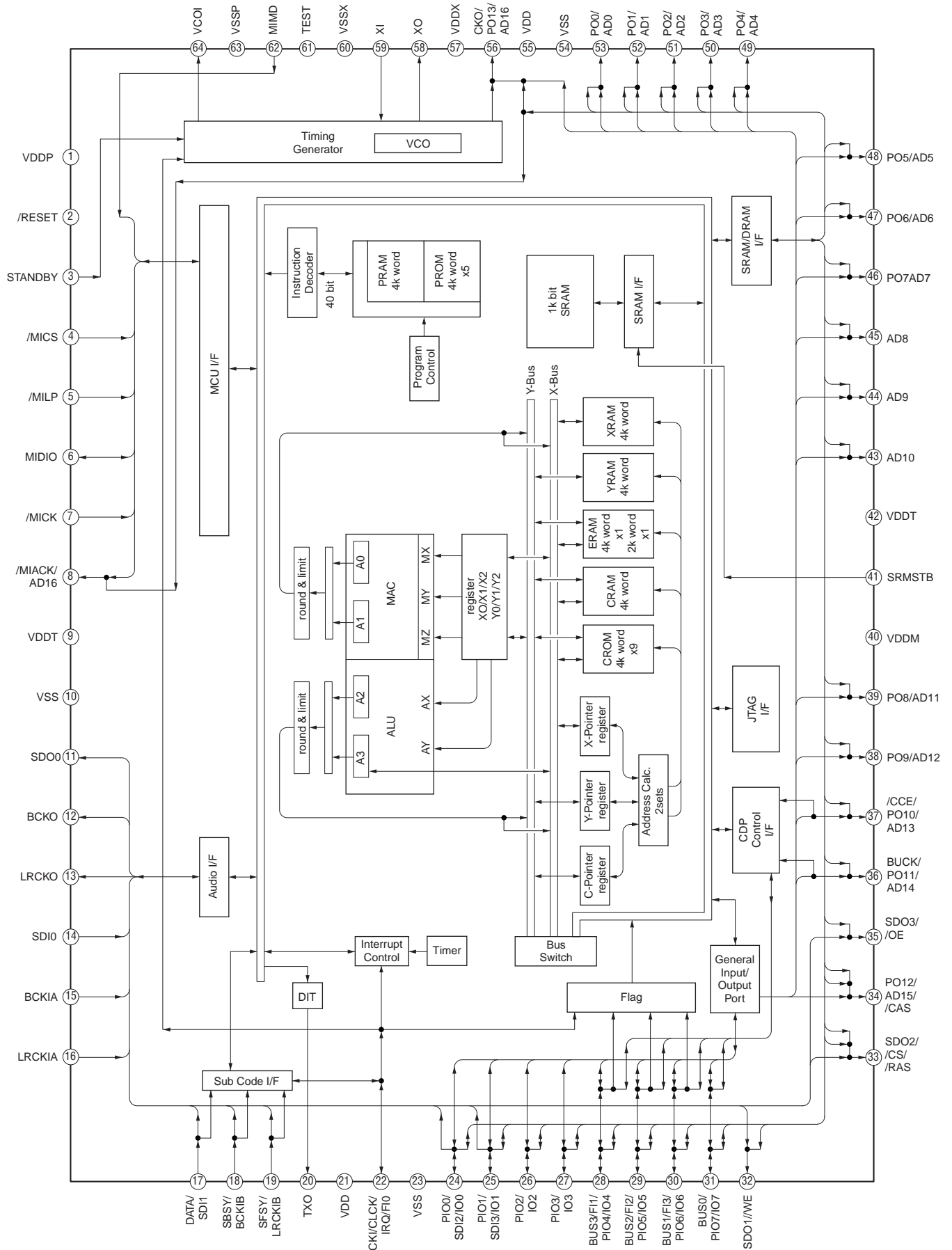
IC101 CXD3059AR



IC251 BA5947FM-E2

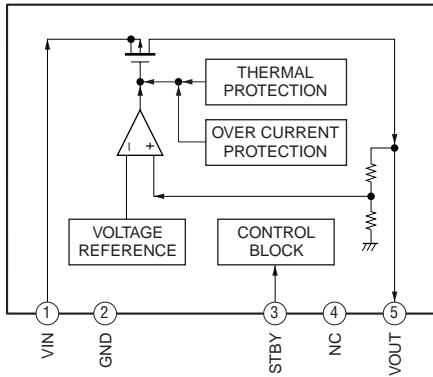


IC301 TC94A34FG-002

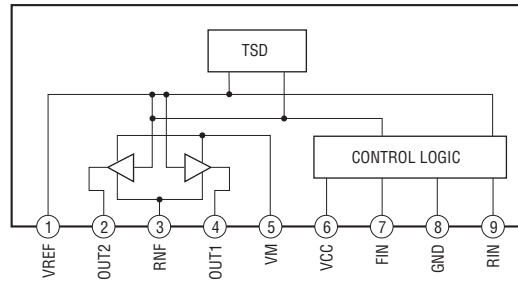


- DRIVER Board -

IC303 BH15FB1WG

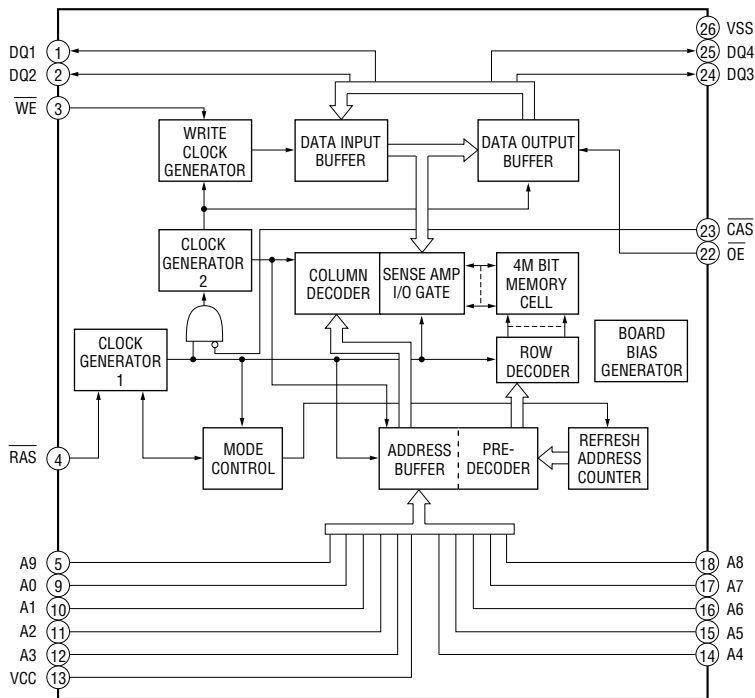


IC701, 712 BA6956AN

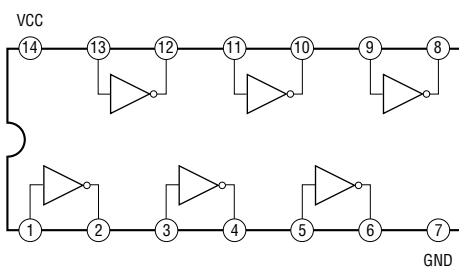


- CD-G Board -

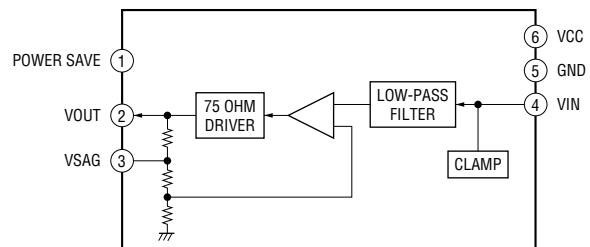
IC1002 MSM514400E-60TS-K



IC1005 SN74AHCT04NSR

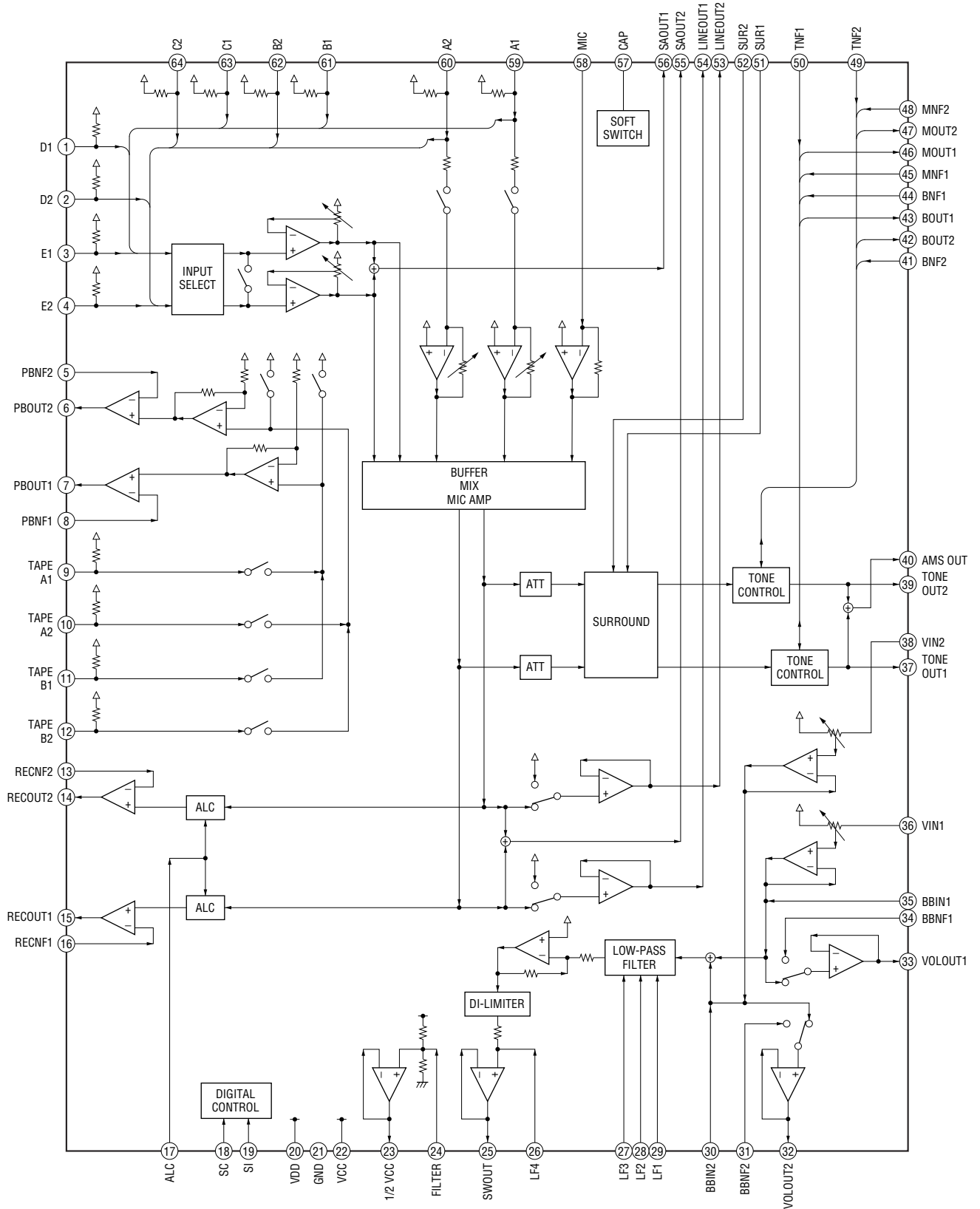


IC1006 NJM2561F1-TE2



- MAIN Board -

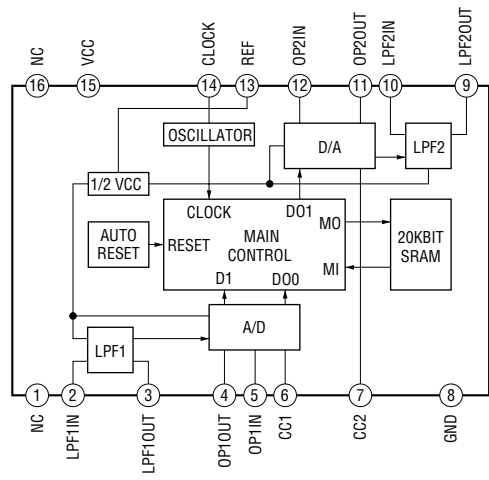
IC101 BD3401KS2



HCD-GX255/RG170/RG470

– MIC Board –

IC802 M65850FP-E1



• IC Pin Function Description

MAIN BOARD IC901 M30302MCP-A02FPU0 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1	O-BD3401-DATA	O	Serial data output to the electrical volume
2	O-BD3401-CLK	O	Serial data transfer clock signal output to the electrical volume
3	O-VFD-RESET	O	System reset signal output to the FL/LED driver
4	O-VFD-CE	O	Chip enable signal output to the FL/LED driver
5	I-AC-CUT	I	AC power detection signal input terminal
6	I-VOL-A	I	Jog dial pulse input terminal
7	I-SIRCS-IN	I	SIRCS signal input terminal
8	BYTE	I	Mode setting terminal Normally not used
9	CNVSS	I	Mode setting terminal Normally not used
10	XCIN (32.768KHZ)	I	Sub system clock input terminal (32.768 kHz)
11	XCOUT (32.768KHZ)	O	Sub system clock output terminal (32.768 kHz)
12	I-RESET	I	System reset signal input from the reset signal generator "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
13	XOUT (16MHZ)	O	Main system clock output terminal (16 MHz)
14	VSS	-	Ground terminal
15	XIN (16MHZ)	I	Main system clock input terminal (16 MHz)
16	VCC1	-	Power supply terminal (+3.3V)
17	NMI	I	Non-maskable interrupt signal input terminal
18	I-RDS-CLK	I	RDS data transfer clock signal input terminal (AEP, East European models)
19	I-SCOR	I	Subcode Q sync (SCOR) input from the CD DSP
20	I-AC-PULSE	I	AC main power detection signal input terminal
21	I-VOL-B	I	Jog dial pulse input terminal
22	O-STBY-LED	O	LED drive signal output terminal
23	O-SYS-MUTE	O	Muting on/off control signal output terminal
24	O-STK-MUTE	O	Standby signal output to the power amplifier (for front speaker output)
25	O-SWR	O	Relay drive signal output for surround output Not used
26	O-POWER-RELAY	O	Relay drive signal output for main power
27	O-FRONT-SP-RELAY	O	Power on/off control signal output for the fan motor and amplifier section
28	O-MP3-CLK	O	Serial data transfer clock signal output to the MP3 decoder
29	I-MP3-DI	I	Serial data input from the MP3 decoder
30	O-MP3-DATA	O	Serial data output to the MP3 decoder
31	O-CD-DATA	O	Serial data output to the CD DSP
32	I-CD-SENS	I	Internal status (SENSE) input from the CD DSP
33	O-CD-CLK	O	Serial data transfer clock signal output to the CD DSP
34	O-XTCN	O	Oscillator control signal output to the CD DSP
35	O-VFD-DATA	O	Serial data output to the FL/LED driver
36	I-VFD-DATA	I	Serial data input from the FL/LED driver
37	O-VFD-CLK	O	Serial data transfer clock signal output to the FL/LED driver
38	O-MP3-RESET	O	System reset signal output to the MP3 decoder
39	O-MP3-CS	O	Chip select signal output to the MP3 decoder
40	I-MP3-ACK	I	Acknowledge signal input from the MP3 decoder
41	xHOLD	I/O	Not used

Pin No.	Pin Name	I/O	Description
42	O-MP3-STB	O	Standby signal output to the MP3 decoder
43	I-MP3-REQ	I	Data send request signal input from the MP3 decoder
44	O-MP3-LP	O	Latch pulse signal output to the MP3 decoder
45	O-XLT	O	Latch pulse signal output to the CD DSP
46	xWR	I/O	Not used
47	O-XRST	O	System reset signal output to the CD DSP and motor/coil driver
48, 49	O-LM-R, O-LM-F	O	Loading motor control signal output terminal
50, 51	O-TM-R, O-TM-F	O	Table motor control signal output terminal
52 to 54	I-E-1 to I-E-3	I	Disc tray address sensor (rotary encoder) input terminal
55	I-CD NUMBER SENS	I	Table address sensor input terminal
56	I-OPEN-SW	I	Disc tray open/close detection switch input terminal
57	O-CDG-MUTE- DATA	O	Muting control signal output to the CD graphics decoder (Mexican model)
58	O-CDG-RST	O	System reset signal output to the CD graphics decoder (Mexican model)
59	O-CDG-BGC	O	NTSC/PAL switching control signal output terminal (Mexican model)
60	I-CDG-DET	I	CD-G detection signal input terminal (Mexican model)
61	O-CDG-POWER	O	Power on/off control signal output for CD-G section (Mexican model)
62	VCC2	-	Power supply terminal (+3.3V)
63	O-VMUTE	O	Video muting on/off control signal output terminal (Mexican model)
64	VSS	-	Ground terminal
65	O-LC72121-CLK	O	Serial data transfer clock signal output to the FM/AM tuner pack
66	I-LC72121-DI	I	Serial data input from the FM/AM tuner pack
67	O-LC72121-DO	O	Serial data output to the FM/AM tuner pack
68	O-LC72121-CE	O	Chip enable signal output to the FM/AM tuner pack
69	I-TUNED	I	Tuning detection signal input from the FM/AM tuner pack
70	I-STEREO	I	FM stereo detection signal input from the FM/AM tuner pack
71	O-ST-MUTE	O	Muting on/off control signal output to the FM/AM tuner pack
72	I-RDS-DATA	I	RDS data input from the terminal (AEP, East European models)
73	I-MODEL1	I	Setting terminal for the destination and model type
74	I-KEY0	I	Front panel key input terminal (A/D input)
75 to 80	I-MODEL2 to I-MODEL7	I	Setting terminal for the destination and model type
81	I-HP/AUDIO IN	I	Headphone plug and audio in plug insert detection signal input
82	I-MIC	I	MIC plug insert detection signal input terminal (120 V AC area in E, Chilean, Peruvian, Argentina, Mexican models)
83	I-REAL-A	I	Deck-A tape reel rotating detection signal input terminal
84	I-REAL-B	I	Deck-B tape reel rotating detection signal input terminal
85	O-MOTOR	O	Capstan/reel motor drive signal output terminal
86	O-A-SOL	O	Deck-A plunger drive signal output terminal
87	O-B-SOL	O	Deck-B plunger drive signal output terminal
88	I-TAPE-A-STAT	I	Deck-A cassette detection signal, deck-A mode detection signal and recording (reverse direction) detection signal input terminal (A/D input)
89	I-TAPE-B-STAT	I	Deck-B cassette detection signal, deck-B mode detection signal and recording (forward direction) detection signal input terminal (A/D input)
90	O-REC/PB	O	REC/PB switching control signal output terminal

Pin No.	Pin Name	I/O	Description
91	O-BIAS	O	REC bias on/off control signal output terminal
92	I-TAPE-AMS	I	Auto music sensor detection signal input from the electrical volume "L": music is present, "H": music is not present
93	I-STREAM	I	Audio signal input for stream LED (A/D input)
94	I-VACS	I	VACS signal input terminal (A/D input)
95	I-PROTECTOR	I	Protector operating detection signal input terminal
96	AVSS	-	Ground terminal
97	I-POWER, DISPLAY	I	Front panel key input terminal (A/D input)
98	VREF	I	Reference voltage input terminal
99	AVCC	-	Power supply terminal (+3.3V)
100	NC	O	Not used

HCD-GX255/RG170/RG470

CD-G BOARD IC1001 TC9411AFG (BS, K) (CD GRAPHICS DECODER)

Pin No.	Pin Name	I/O	Description
1	SESUB	I	Not used
2	CLCK	O	Serial data transfer clock signal output to the CD DSP
3	DATA	I	Serial data input from the CD DSP
4	SBSY	I	Subcode Q sync (SCOR) input from the CD DSP
5	SFSY	I	WFCK signal input from the CD DSP
6	MUTE	I	Muting control signal input from the system controller
7	VDD1	-	Power supply terminal (+5V)
8	VSS1	-	Ground terminal
9	MCE	I	Chip enable signal input terminal Not used
10	MCDO	O	Serial data output terminal Not used
11	MCDI	I	Serial data input terminal Not used
12	MCCK	I	Serial data transfer clock signal input terminal Not used
13	$\overline{\text{WE}}$	O	Write enable signal output to the D-RAM
14	$\overline{\text{RAS}}$	O	Row address strobe signal output to the D-RAM
15 to 22	VA0 to VA7	O	Address signal output to the D-RAM
23	VSS2	-	Ground terminal
24	VDD2	-	Power supply terminal (+5V)
25	VD0	I/O	Two-way data bus with the D-RAM
26	$\overline{\text{CAS}}$	O	Column address strobe signal output to the D-RAM
27	VD1	I/O	Two-way data bus with the D-RAM
28	$\overline{\text{OE}}$	O	Data read strobe signal output to the D-RAM
29, 30	VD2, VD3	I/O	Two-way data bus with the D-RAM
31	BLANKIN	I	Blank signal input terminal Not used
32	BIN	I	RGB (B) signal input terminal Not used
33	GIN	I	RGB (G) signal input terminal Not used
34	RIN	I	RGB (R) signal input terminal Not used
35	$\overline{\text{HSYNC}}$	O	Horizontal synchronize signal output terminal Not used
36	$\overline{\text{VSYNC}}$	O	Vertical synchronize signal output terminal Not used
37	CDET	O	CD-G detection signal output terminal
38	VON	I	Video on control signal input terminal Not used
39, 40	TEST1, TEST2	I	Test mode setting terminal
41	LINESW	I	Line switch input terminal Not used
42	VREF	I	Reference voltage input terminal
43	AVDD	-	Power supply terminal (+5V)
44	VDOUT	O	Video signal output terminal
45	AVSS	-	Ground terminal
46, 47	BIAS1, BIAS2	I	For bias setting terminal
48	VSS3	-	Ground terminal
49	VDD3	-	Power supply terminal (+5V)
50	QNG	O	Not used
51	PNG	O	Not used
52	DEN	I	NTSC/PAL switching control signal input terminal
53	FSC	O	Not used
54	$\overline{\text{RESET}}$	I	System reset signal input from the system controller
55	SENTSC	I	Mode setting terminal
56	PDOWN	I	Mode setting terminal

Pin No.	Pin Name	I/O	Description
57	XI2	I	System clock input terminal (17.734475 MHz) (for PAL) Not used
58	XO2	O	System clock output terminal (17.734475 MHz) (for PAL) Not used
59	XI1	I	System clock input terminal (14.31818 MHz) (for NTSC)
60	XO1	O	System clock output terminal (14.31818 MHz) (for NTSC)

PANEL BOARD IC701 μ PD780232GC-508-8BT-A (FL/LED DRIVER)

Pin No.	Pin Name	I/O	Description
1	VDD1	-	Power supply terminal (+3.3V)
2	VSS1	-	Ground terminal
3	X1	I	System clock input terminal (4.19 MHz)
4	X2	O	System clock output terminal (4.19 MHz)
5	IC	I	Not used
6	$\overline{\text{RESET}}$	I	System reset signal input from the system controller "L": reset
7	SCK1	I	Serial data transfer clock signal input from the system controller
8	SI1	O	Serial data output to the system controller
9	SO1	I	Serial data input from the system controller
10 to 15	NC	I	Not used
16	CE	I	Chip select signal input from the system controller
17	NC	I	Not used
18	AVSS	-	Ground terminal
19 to 22	KEY1 to KEY4	I	Front panel key input terminal (A/D input)
23	VSS0	-	Ground terminal
24	AVDD	-	Power supply terminal (+5V)
25	VDD0	-	Power supply terminal (+5V)
26 to 31	STREAM LED1 to STREAM LED6	O	LED drive signal output terminal
32	SW LED	O	LED drive signal output terminal Not used
33 to 44	NC	I	Not used
45 to 58	S1 to S14	O	Segment drive signal output to the fluorescent indicator tube
59	VDD2	-	Power supply terminal (+5V)
60	VLOD	-	Power supply terminal (for fluorescent indicator tube drive)
61 to 67	S15 to S21	O	Segment drive signal output to the fluorescent indicator tube
68 to 80	G1 to G13	O	Grid drive signal output to the fluorescent indicator tube

SECTION 7 EXPLODED VIEWS

NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

↑	↑
Parts Color	Cabinet's Color
- Abbreviation

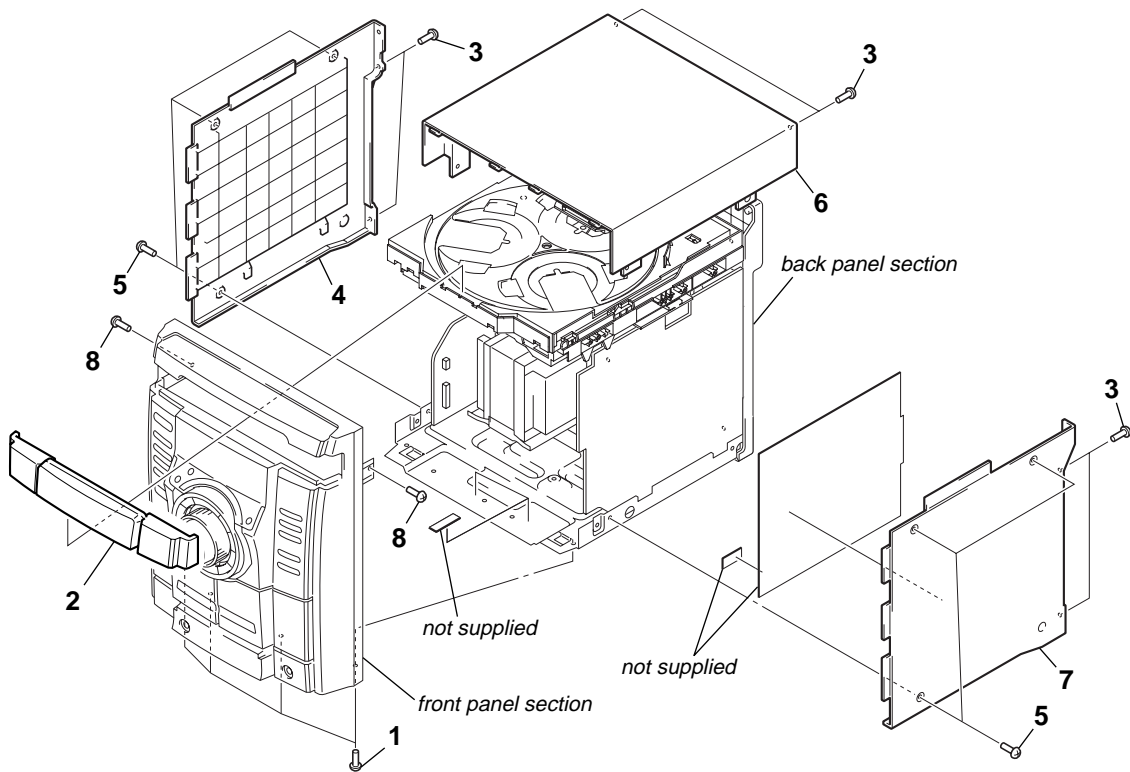
AR : Argentina model	E2 : 120V AC Area in E model	EA : Saudi Arabia model
AUS : Australian model	E3 : 240V AC Area in E model	EE : East European model
CND: Canadian model	E51 : Chilean and Peruvian models	MX : Mexican model
		RU : Russian model

- 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.
- Accessories are given in the last of the electrical parts list.

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

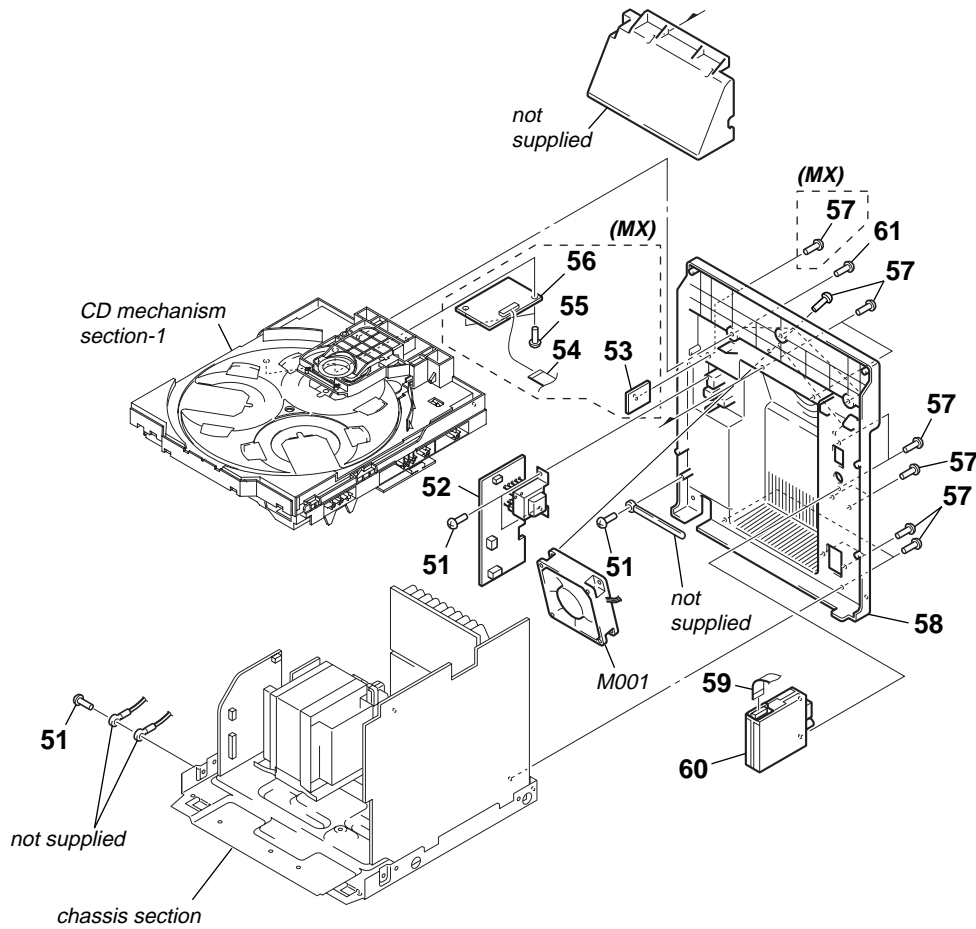
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. OVERALL SECTION



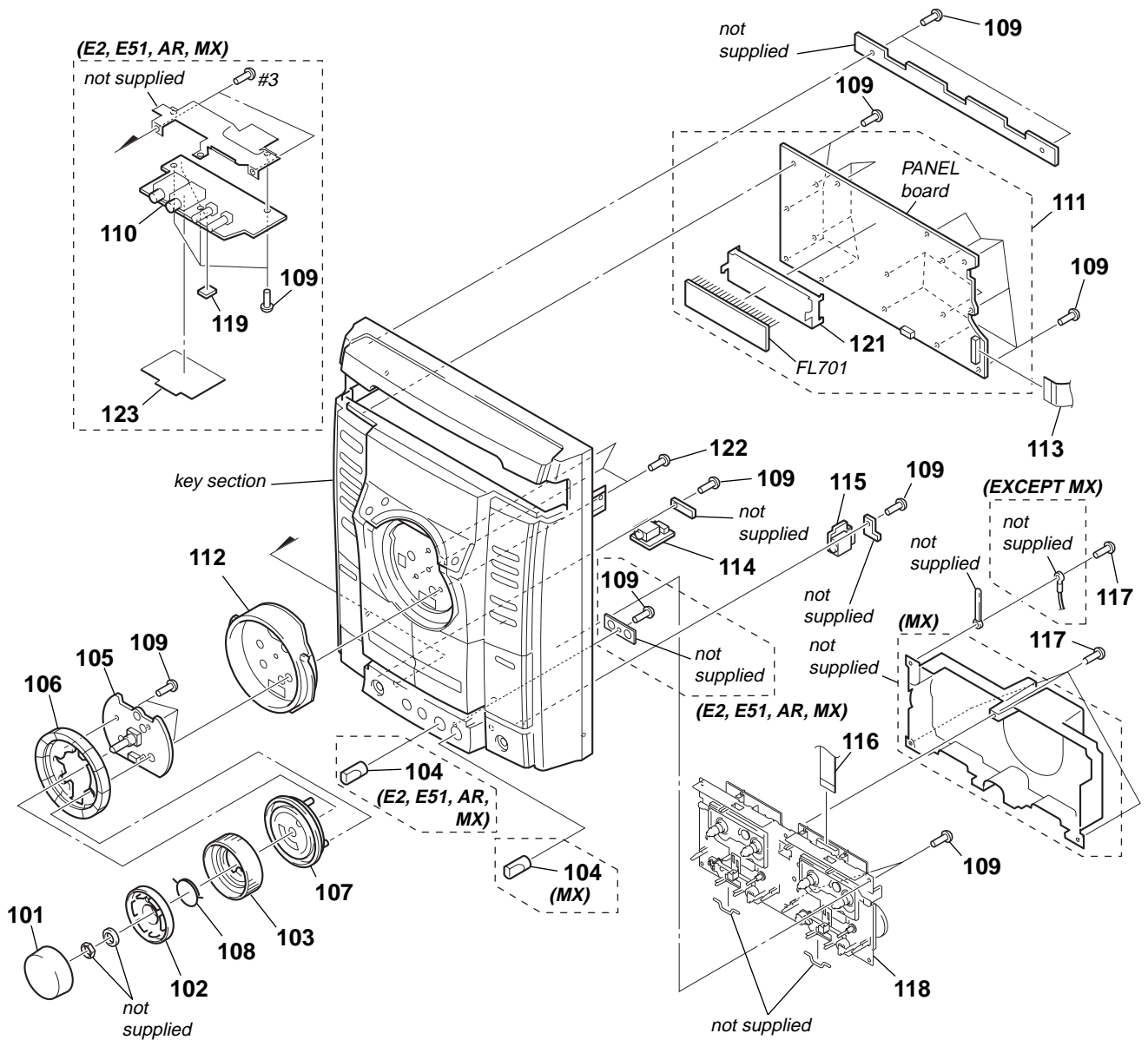
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-252-829-01	SCREW (B3), (+) BV TAPPING		3	3-254-143-11	SCREW (B3), (+) BV TAPPING	
2	2-348-866-61	DOOR (CD) (GX255)		4	2-599-855-11	CASE (SIDE-L)	
2	2-348-866-71	DOOR (CD) (RG170: AEP, EE, RU, E3, EA, AUS)		5	3-363-099-32	SCREW (CASE 3 TP2)	
2	2-348-866-81	DOOR (CD) (RG170: E2, E51, AR)		6	2-599-854-11	CASE (TOP)	
2	2-348-866-91	DOOR (CD) (RG470: AEP, EE, RU)		7	2-599-856-11	CASE (SIDE-R)	
2	2-580-021-01	DOOR (CD) (RG470: E2, E51, AR, MX)		8	3-254-143-01	SCREW (B3), (+) BV TAPPING	

7-2. BACK PANEL SECTION



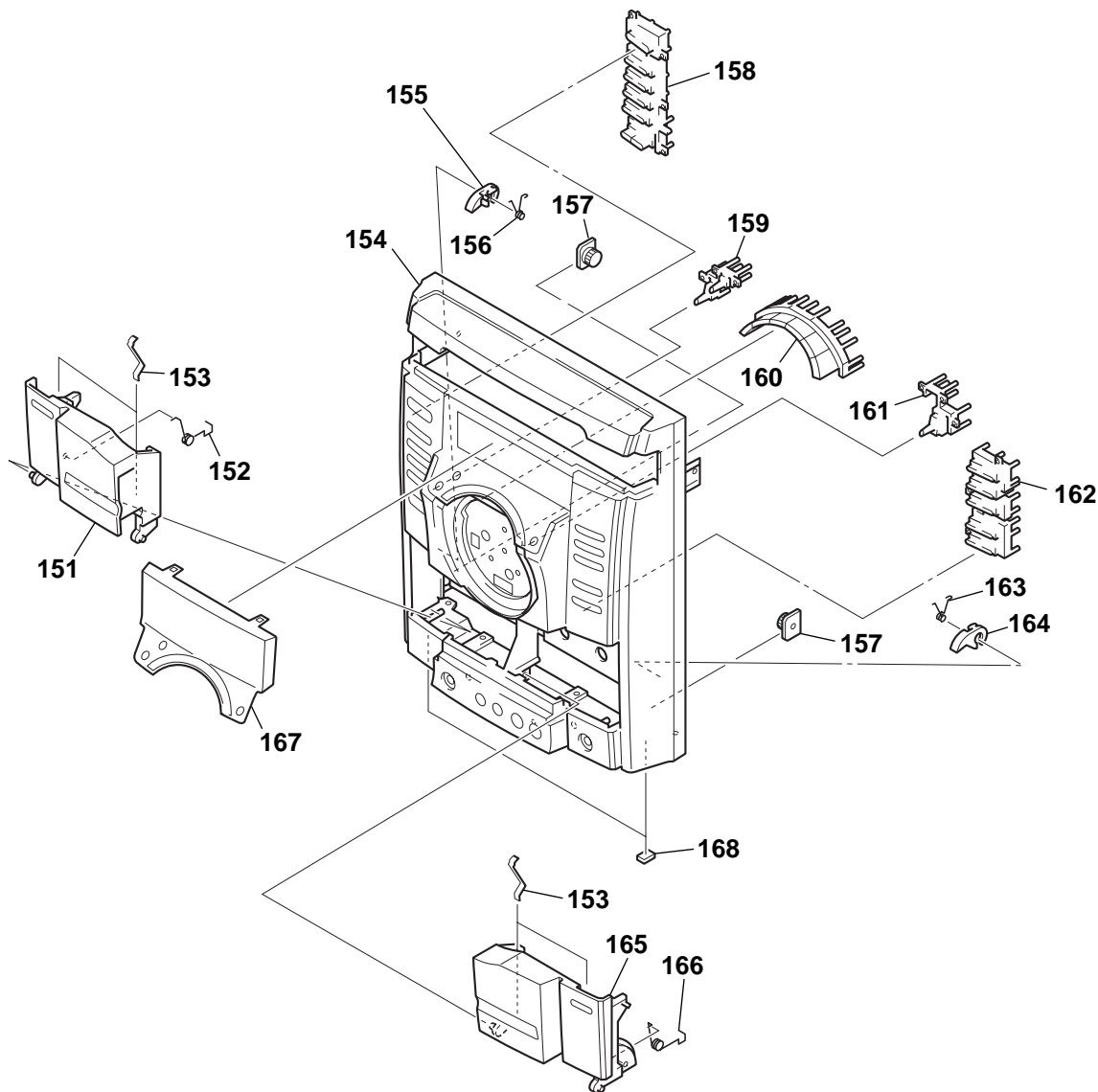
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-254-142-01	SCREW (B3), (+) BV TAPPING		57	3-254-143-11	SCREW (B3), (+) BV TAPPING	
52	A-1093-877-A	SUB TRANS BOARD, COMPLETE		58	2-549-976-41	PANEL, BACK (RG470: AEP, EE, RU, AR)	
52	A-1094-116-A	SUB TRANS BOARD, COMPLETE (GX255)	(RG470: AEP, EE, RU)	58	2-549-976-51	PANEL, BACK (RG470: E2, E51)	
52	A-1094-117-A	SUB TRANS BOARD, COMPLETE	(RG170: AEP, EE, RU)	58	2-549-976-71	PANEL, BACK (MX)	
52	A-1094-118-A	SUB TRANS BOARD, COMPLETE	(RG170: E2, E3, E51)	58	2-549-977-01	PANEL, BACK	(GX255/RG170: AEP, EE, RU, AR, AUS)
52	A-1094-119-A	SUB TRANS BOARD, COMPLETE (EA)		58	2-549-977-11	PANEL, BACK (RG170: E2, E3, E51)	
52	A-1094-120-A	SUB TRANS BOARD, COMPLETE (AUS)		58	2-549-977-21	PANEL, BACK (RG170: EA)	
52	A-1094-121-A	SUB TRANS BOARD, COMPLETE (RG170: AR)		59	1-828-963-11	WIRE (FLAT TYPE) (11 CORE)	
52	A-1094-123-A	SUB TRANS BOARD, COMPLETE	(RG470: E2, E51)			(GX255/RG170: RU, E2, E3, E51, EA, AR, AUS/ RG470: RU, E2, E51, AR, MX)	
52	A-1094-124-A	SUB TRANS BOARD, COMPLETE (MX)		59	1-828-980-11	WIRE (FLAT TYPE) (15 CORE) (AEP, EE)	
52	A-1094-125-A	SUB TRANS BOARD, COMPLETE (RG470: AR)		60	1-693-615-11	TUNER (FM/AM)	(E2, E3, E51, EA, AR, AUS, MX)
53	A-1094-122-A	VIDEO OUT BOARD, COMPLETE (MX)		60	1-693-616-11	TUNER (FM/AM) (AEP, EE)	
54	1-828-975-11	WIRE (FLAT TYPE) (13 CORE) (MX)		60	1-693-617-11	TUNER (FM/AM) (RU)	
55	4-951-620-01	SCREW (2.6X8), +BVTP (MX)		60	1-693-631-31	TUNER (FM/AM) (GX255)	
56	A-1094-204-A	CD-G BOARD, COMPLETE (MX)		61	3-254-143-01	SCREW (B3), (+) BV TAPPING	
				M001	1-787-319-11	FAN, DC (RG470)	

7-3. FRONT PANEL SECTION



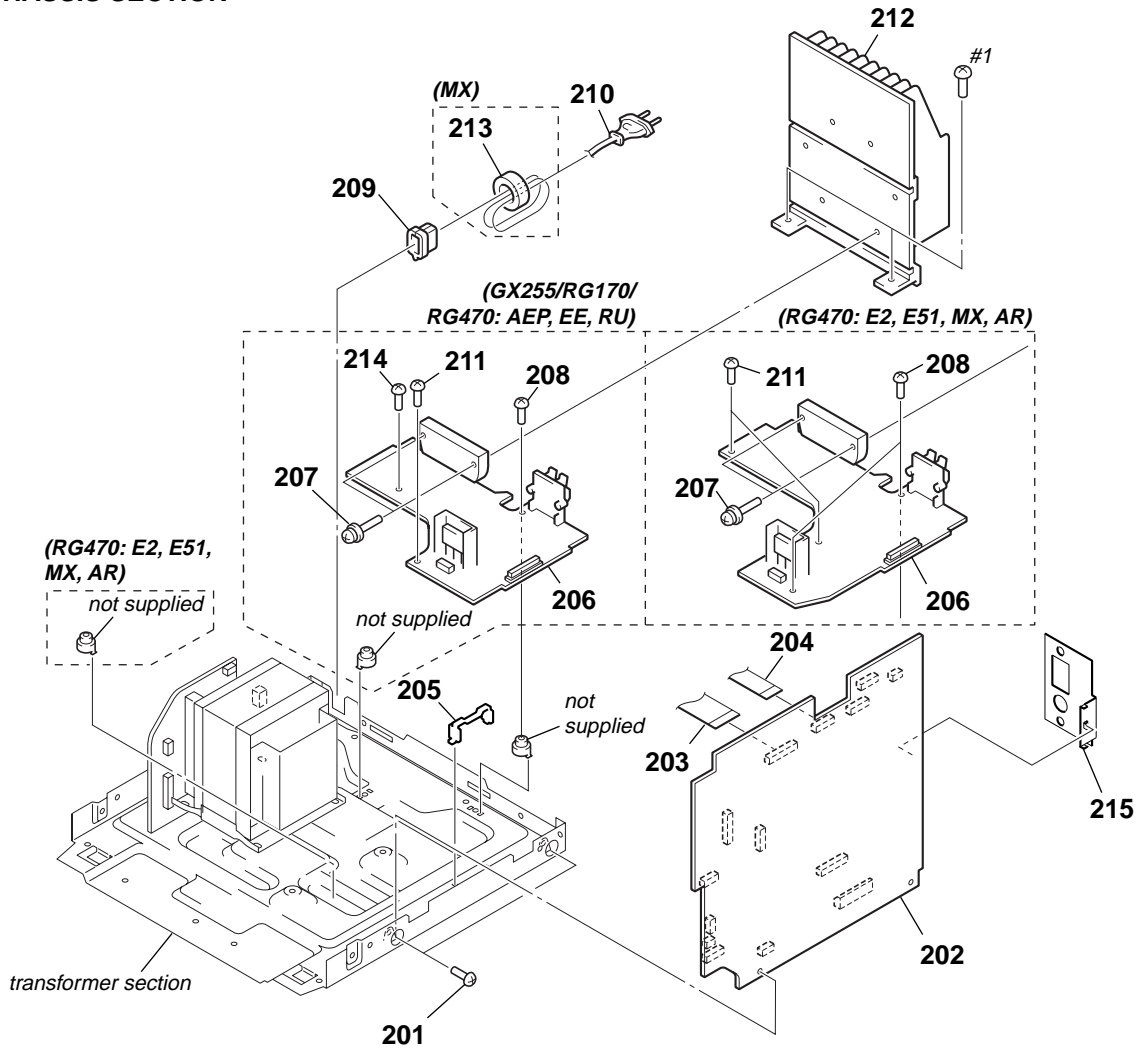
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-252-214-01	KNOB, VOLUME		112	X-2067-233-1	WINDOW (CENTER) ASSY (RG470)	
102	2-348-884-01	RING (JOG)		112	X-2067-234-1	WINDOW (CENTER) ASSY (GX255/RG170)	
103	2-348-875-11	KNOB (JOG)		113	1-829-003-11	WIRE (FLAT TYPE) (19 CORE)	
104	2-586-559-01	KNOB (MIC) (E2, E51, AR, MX)		114	A-1094-031-A	AUDIO IN BOARD, COMPLETE	
105	A-1093-878-A	VOL BOARD, COMPLETE		115	A-1094-407-A	HEADPHONE BOARD, COMPLETE	
106	2-348-870-01	KEY (PLAY) (ALBUM -, ALBUM +, <<<, >>>, <<< - EQ + >>> - TUNING +, EQ BAND, >>, >>>)		116	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)	
107	2-348-874-01	COVER (CENTER)		117	4-951-620-01	SCREW (2.6X8), +BVTP (EXCEPT MX)	
108	4-252-223-01	SPRING, KNOB		117	4-951-620-11	SCREW (2.6X10), +BVTP (MX)	
109	4-951-620-01	SCREW (2.6X8), +BVTP		118	1-796-485-51	DECK, MECHANICAL (CWM43FF13)	
110	A-1094-199-A	MIC BOARD, COMPLETE (E2, E51, AR)		119	4-233-372-02	FOOT (FELT) (E2, E51, AR, MX)	
110	A-1094-200-A	MIC BOARD, COMPLETE (MX)		121	2-348-856-01	FL GUIDE	
111	A-1093-854-A	PANEL BOARD, COMPLETE (GX255/RG170)		122	3-254-142-01	SCREW (B3), (+) BV TAPPING	
111	A-1093-856-A	PANEL BOARD, COMPLETE (RG470: AEP, EE, RU, E2, E51, AR)		123	2-632-080-01	SHEET (MIC), SHIELD (E2, E51, AR, MX)	
111	A-1093-857-A	PANEL BOARD, COMPLETE (MX)		FL701	1-518-976-31	INDICATOR TUBE, FLUORESCENT	
				#3	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

7-4. KEY SECTION



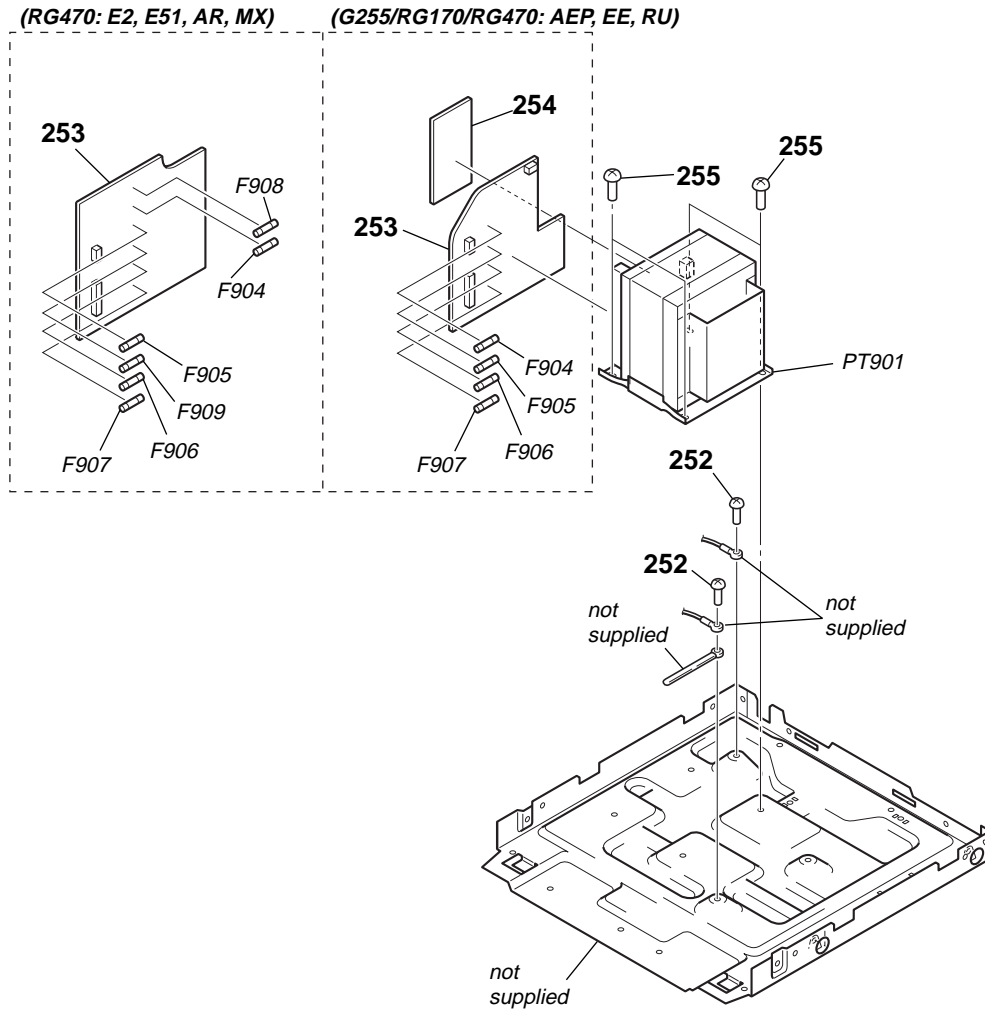
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	2-348-864-02	DOOR (A), CASSETTE		162	2-348-871-12	KEY (CD)	
152	2-549-974-01	SPRING (C-DOOR-L)		163	4-231-841-01	SPRING (HEART CAM-B)	
153	4-238-631-11	TAPE SPRING		164	4-231-825-01	CAM (B), HEART	
154	X-2067-227-1	PANEL (S) ASSY, FRONT (GX255/RG170: AEP, EE, RU, E3, EA, AUS/RG470: AEP, EE, UK)		165	2-348-865-02	DOOR (B), CASSETTE	
154	X-2067-228-1	PANEL (S) ASSY, FRONT (E51, AR, E2)		165	2-348-865-12	DOOR (B), CASSETTE (E2, E51, AR, MX)	
154	X-2067-229-1	PANEL (S) ASSY, FRONT (MX)		166	2-549-975-01	SPRING (C-DOOR-R)	
155	4-231-824-01	CAM (A), HEART		167	2-348-859-01	WINDOW (DISPLAY-B) (MX)	
156	4-231-836-01	SPRING (HEART CAM-A)		167	2-348-862-01	WINDOW (DISPLAY-A)	
157	4-224-104-41	DAMPER				(GX255/RG170: RU, E2, E3, E51, EA, AR, AUS/RG470: E2, E51, RU)	
158	X-2067-231-1	KEY (POWER) ASSY		167	2-348-862-11	WINDOW (DISPLAY-A)	
159	2-348-868-01	KEY (DISPLAY)				(RG170: AEP, EE/RG470: AEP, EE)	
160	2-348-872-01	KEY (EQ)		168	4-225-252-01	CUSHION (FOOT)	
161	2-348-869-01	KEY (MODE) (MX)					
161	2-348-869-11	KEY (MODE) (EXCEPT MX)					

7-5. CHASSIS SECTION



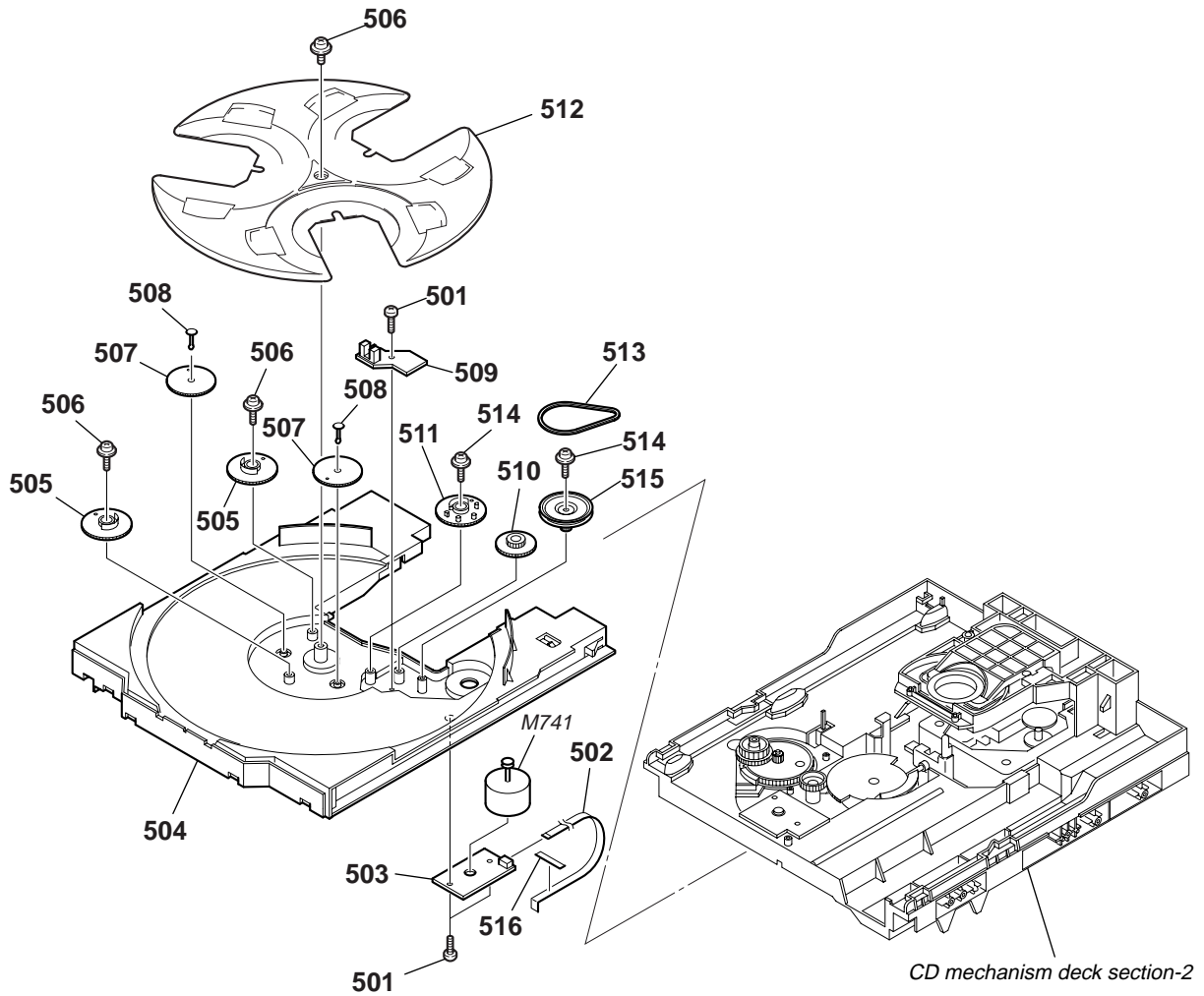
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
201	3-254-142-01	SCREW (B3), (+) BV TAPPING		206	A-1094-146-A	POWER BOARD, COMPLETE	
202	A-1093-944-A	MAIN BOARD, COMPLETE (GX255)				(RG470: E2, E51, AR, MX)	
202	A-1093-945-A	MAIN BOARD, COMPLETE (RG170: AEP, EE)		207	3-905-609-41	SCREW (TRANSISTOR)	
202	A-1093-946-A	MAIN BOARD, COMPLETE (RG170: RU)		208	3-254-145-01	SCREW (B3), (+) BV TAPPING	
202	A-1093-947-A	MAIN BOARD, COMPLETE (E3, AUS)		209	3-703-244-00	BUSHING (2104), CORD (EXCEPT E2, E3, MX)	
202	A-1093-948-A	MAIN BOARD, COMPLETE (EA)		* 209	3-703-571-12	BUSHING (S) (4516), CORD (E2, E3, MX)	
202	A-1093-949-A	MAIN BOARD, COMPLETE		△ 210	1-769-744-81	CORD, POWER (EA)	
		(RG170: E2, E51, AR)		△ 210	1-775-790-71	CORD, POWER (AUS)	
202	A-1093-951-A	MAIN BOARD, COMPLETE (RG470: AEP, EE)		△ 210	1-827-226-31	CORD, POWER (E2, E3, MX)	
202	A-1093-953-A	MAIN BOARD, COMPLETE		△ 210	1-829-387-11	CORD, POWER (AR)	
		(RG470: E2, E51, AR)		△ 210	1-830-188-11	CORD, POWER (AEP, EE, RU, E51)	
202	A-1093-954-A	MAIN BOARD, COMPLETE (MX)		△ 210	1-830-190-11	CORD, POWER (GX255)	
202	A-1123-427-A	MAIN BOARD, COMPLETE (RG470: RU)		211	3-077-331-01	+BV3 (3-CR)	
203	1-775-251-11	WIRE (FLAT TYPE) (27 CORE) (EXCEPT MX)		212	2-549-972-01	HEAT SINK (H) (GX255/RG470: AEP, EE, RU)	
203	1-775-285-11	WIRE (FLAT TYPE) (31 CORE) (MX)		212	2-549-972-11	HEAT SINK (H) (RG170: AEP, EE, RU)	
204	1-828-970-11	WIRE (FLAT TYPE) (13 CORE)		212	4-252-219-31	HEAT SINK (RG170: E2, E3, E51, EA, AR, AUS)	
205	4-988-533-01	HOLDER, PWB		212	4-252-219-51	HEAT SINK (RG470: E2, E51, AR, MX)	
206	A-1094-141-A	POWER BOARD, COMPLETE (GX255)		213	1-500-868-11	CORE, FERRITE (MX)	
206	A-1094-142-A	POWER BOARD, COMPLETE		214	3-254-146-01	SCREW (B3), (+) BV TAPPING	
		(RG170: AEP, EE, RU)		215	2-549-969-01	PLATE (TU), SHIELD (RG170: AEP, EE, RU, EA, AUS/RG470: AEP, EE, RU)	
206	A-1094-143-A	POWER BOARD, COMPLETE		#1	7-685-881-09	SCREW +BVTT 4X8 (S)	
		(RG170: E2, E3, E51, EA, AR, AUS)					
206	A-1094-145-A	POWER BOARD, COMPLETE					
		(RG470: AEP, EE, RU)					

7-6. TRANSFORMER SECTION



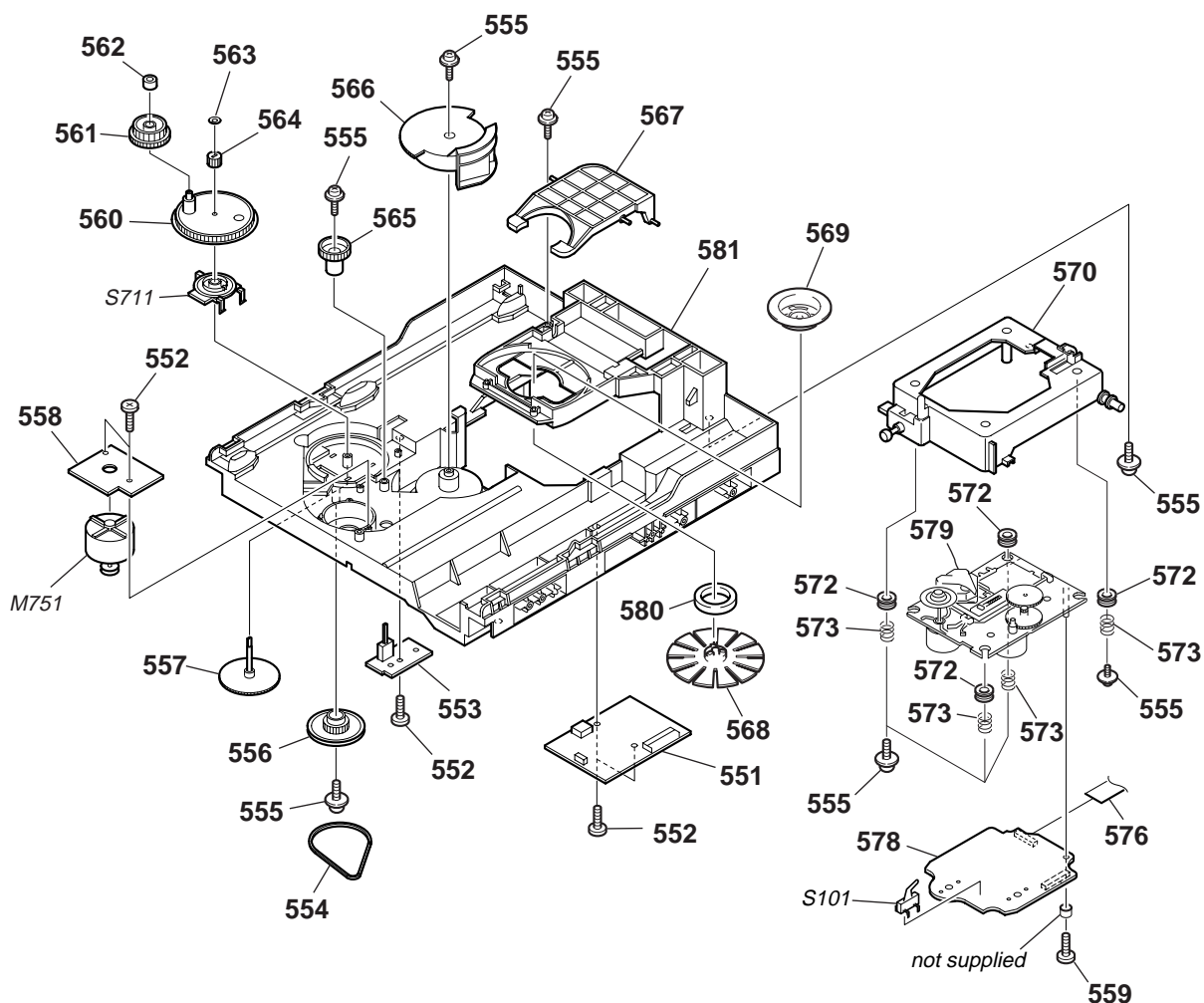
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
252	3-077-331-01	+BV3 (3-CR)		△ F904	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)	
253	A-1094-082-A	TRANSFORMER BOARD, COMPLETE (GX255)					(RG170: AEP, EE, RU)
253	A-1094-083-A	TRANSFORMER BOARD, COMPLETE (RG170: AEP, EE, RU)		△ F904	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3A/250V)	(EXCEPT AEP, EE, RU)
253	A-1094-084-A	TRANSFORMER BOARD, COMPLETE (RG170: E2, E3, E51)		△ F904	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V)	(RG470: AEP, EE, RU)
253	A-1094-085-A	TRANSFORMER BOARD, COMPLETE (EA)		△ F905	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V)	
253	A-1094-086-A	TRANSFORMER BOARD, COMPLETE (AUS)		△ F905	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3A/250V)	(EXCEPT AEP, EE, RU)
253	A-1094-087-A	TRANSFORMER BOARD, COMPLETE (RG170: AR)		△ F905	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V)	(RG470: AEP, EE, RU)
253	A-1094-089-A	TRANSFORMER BOARD, COMPLETE (RG470: AEP, EE, RU)		△ F906	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	
253	A-1094-090-A	TRANSFORMER BOARD, COMPLETE (RG470: E2, E51)		△ F907	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)	
253	A-1094-091-A	TRANSFORMER BOARD, COMPLETE (MX)		△ F908	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V)	(RG470: E2, E51, AR, MX)
253	A-1094-092-A	TRANSFORMER BOARD, COMPLETE (RG470: AR)		△ F909	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V)	(RG470: E2, E51, AR, MX)
254	A-1102-779-A	AC1 BOARD, COMPLETE (GX255)		△ PT901	1-443-602-11	TRANSFORMER, POWER (GX255)	
254	A-1102-780-A	AC1 BOARD, COMPLETE (RG170: AEP, EE, RU)		△ PT901	1-443-604-11	TRANSFORMER, POWER (RG170: AEP, EE, RU)	
254	A-1102-781-A	AC1 BOARD, COMPLETE (RG170: E2, E3, E51)		△ PT901	1-443-606-11	TRANSFORMER, POWER (RG470: AEP, EE, RU)	
254	A-1102-782-A	AC1 BOARD, COMPLETE (EA)					
254	A-1102-783-A	AC1 BOARD, COMPLETE (AUS)					
254	A-1102-784-A	AC1 BOARD, COMPLETE (RG170: AR)		△ PT901	1-443-607-11	TRANSFORMER, POWER (RG170: E2, E3, E51, AR, AUS)	
254	A-1102-786-A	AC1 BOARD, COMPLETE (RG470: AEP, EE, RU)		△ PT901	1-443-609-11	TRANSFORMER, POWER (RG470: E2, E51, AR)	
255	4-900-386-01	SCREW		△ PT901	1-443-611-11	TRANSFORMER, POWER (MX)	
				△ PT901	1-443-612-11	TRANSFORMER, POWER (EA)	

**7-7. CD MECHANISM DECK SECTION-1
(CDM74KFS-F1BD81C (EXCEPT MX MODEL)/
CDM74KFS-F1BD84 (MX MODEL))**



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
501	4-218-253-62	SCREW (M2.6), +BTTP		510	4-243-820-01	GEAR (TABLE)	
502	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)		511	4-243-819-01	GEAR (GENEVA)	
503	1-687-134-12	MOTOR (TB) BOARD		512	4-243-816-11	TRAY	
504	4-243-815-01	TABLE (LOADING)		513	4-243-823-01	BELT (TABLE)	
505	4-245-571-02	GEAR (STOPPER)		514	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
506	4-218-252-61	SCREW (+PTPWH M2.6), FLOATING		515	4-243-821-01	PULLEY (TABLE)	
507	4-245-570-01	GEAR (JOINT)		516	3-231-598-01	SHEET (BA)	
508	4-245-572-01	BUSHING (GEAR)		M741	A-4723-963-A	MOTOR ASSY, TABLE	
509	1-687-132-12	SENSOR BOARD					

7-8. CD MECHANISM DECK SECTION-2 (CDM74KFS-F1BD81C (EXCEPT MX MODEL)/ CDM74KFS-F1BD84 (MX MODEL))



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
551	A-1103-756-A	DRIVER BOARD, COMPLETE		567	4-243-822-02	LEVER (LIFTER)	
552	4-218-253-52	SCREW (M2.6), +BTTP		568	X-2025-123-1	CHUCKING PULLEY (KH) ASSY	
553	1-687-669-12	SW BOARD		569	4-231-189-01	PULLEY (B), CHUCKING	
554	4-244-034-01	BELT (LOADING)		570	X-4955-536-1	HOLDER (213) ASSY	
555	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING					
556	4-225-844-01	GEAR (LOADING A)		572	4-227-549-11	INSULATOR	
557	4-224-613-11	GEAR (SHAFT)		573	4-227-045-31	SPRING (INSULATOR), COIL	
558	1-687-133-12	MOTOR (LD) BOARD		576	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)	
559	3-087-053-01	+BVTP2.6 (3CR)		578	A-1095-982-A	BD BOARD, COMPLETE (MX)	
560	4-244-108-01	GEAR, SWING		578	A-1091-086-A	CD BOARD, COMPLETE (EXCEPT MX)	
561	4-224-609-01	GEAR (LOADING C)		△ 579	8-820-244-01	DEVICE, OPTICAL KSM-215DCP/C2NP	
562	4-224-608-01	COLLAR, SWING		580	1-471-035-11	MAGNET ASSY	
563	3-016-533-11	WASHER (FR), STOPPER		581	4-243-817-22	CHASSIS	
564	4-224-611-01	GEAR (LOADING B)		M751	A-4736-655-A	MOTOR ASSY, LOADING	
565	4-224-606-01	GEAR (RV)		S711	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS DETECT)	
566	4-243-818-01	GEAR (U/D)		S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	

**SECTION 8
ELECTRICAL PARTS LIST**

AC1 **AUDIO IN** **BD**

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 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
- **Abbreviation**
AR : Argentina model E3 : 240V AC Area in E model EE : East European model
AUS : Australian model E51 : Chilean and Peruvian models MX : Mexican model
CND : Canadian model EA : Saudi Arabia model RU : Russian model
E2 : 120V AC Area in E model
- 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... : μ A... uPA... : μ PA...
uPB... : μ PB... uPC... : μ PC...
uPD... : μ PD...
- **CAPACITORS**
uF: μ F
- **COILS**
uH: μ H

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.

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
	A-1102-779-A	AC1 BOARD, COMPLETE (GX255)		C123	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
	A-1102-780-A	AC1 BOARD, COMPLETE (RG170: AEP, EE, RU)		C124	1-162-959-11	CERAMIC CHIP 330PF 5%	50V
	A-1102-781-A	AC1 BOARD, COMPLETE (RG170: E2, E3, E51)		C125	1-164-360-11	CERAMIC CHIP 0.1uF	16V
	A-1102-782-A	AC1 BOARD, COMPLETE (EA)		C131	1-162-927-11	CERAMIC CHIP 100PF 5%	50V
	A-1102-783-A	AC1 BOARD, COMPLETE (AUS)		C132	1-117-863-11	CERAMIC CHIP 0.47uF 10%	6.3V
	A-1102-784-A	AC1 BOARD, COMPLETE (RG170: AR)		C133	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
	A-1102-786-A	AC1 BOARD, COMPLETE (RG470: AEP, EE, RU)		C134	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		*****		C141	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
		< RESISTOR >		C142	1-162-965-11	CERAMIC CHIP 0.0015uF 10%	50V
Δ R902	1-202-723-00	SOLID 2.2M 20% 1/2W (CND)		C143	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		*****		C151	1-128-995-21	ELECT CHIP 100uF 20%	10V
	A-1094-031-A	AUDIO IN BOARD, COMPLETE		C161	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		*****		C162	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		< JACK >		C163	1-164-360-11	CERAMIC CHIP 0.1uF	16V
J751	1-785-448-21	JACK (AUDIO IN)		C171	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
		< RESISTOR >		C172	1-162-920-11	CERAMIC CHIP 27PF 5%	50V
R751	1-216-833-11	METAL CHIP 10K 5% 1/10W		C174	1-164-360-11	CERAMIC CHIP 0.1uF	16V
R752	1-216-825-11	METAL CHIP 2.2K 5% 1/10W		C181	1-164-360-11	CERAMIC CHIP 0.1uF	16V
		*****		C182	1-164-360-11	CERAMIC CHIP 0.1uF	16V
	A-1095-982-A	BD BOARD, COMPLETE (MX)		C183	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
		*****		C184	1-124-778-00	ELECT CHIP 22uF 20%	6.3V
		< CAPACITOR >		C185	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C10	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V		C186	1-162-962-11	CERAMIC CHIP 470PF 10%	50V
C11	1-165-989-11	CERAMIC CHIP 10uF 10% 6.3V		C194	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C14	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C195	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C15	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C196	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C16	1-115-156-11	CERAMIC CHIP 1uF 10V		C201	1-128-995-21	ELECT CHIP 100uF 20%	10V
C17	1-126-246-11	ELECT CHIP 220uF 20% 4V		C203	1-128-995-21	ELECT CHIP 100uF 20%	10V
C18	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		C209	1-162-970-11	CERAMIC CHIP 0.01uF 10%	25V
C111	1-162-967-11	CERAMIC CHIP 0.0033uF 10% 50V		C210	1-107-826-11	CERAMIC CHIP 0.1uF 10%	16V
C112	1-162-962-11	CERAMIC CHIP 470PF 10% 50V		C211	1-164-230-11	CERAMIC CHIP 220PF 5%	50V
C113	1-162-967-11	CERAMIC CHIP 0.0033uF 10% 50V		C212	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C114	1-162-962-11	CERAMIC CHIP 470PF 10% 50V		C213	1-162-919-11	CERAMIC CHIP 22PF 5%	50V
C115	1-164-360-11	CERAMIC CHIP 0.1uF 16V		C251	1-162-969-11	CERAMIC CHIP 0.0068uF 10%	25V
C116	1-128-995-21	ELECT CHIP 100uF 20% 10V		C252	1-164-360-11	CERAMIC CHIP 0.1uF	16V
C122	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V		C255	1-164-360-11	CERAMIC CHIP 0.1uF	16V
				C257	1-164-360-11	CERAMIC CHIP 0.1uF	16V
				C258	1-164-360-11	CERAMIC CHIP 0.1uF	16V
				C259	1-164-360-11	CERAMIC CHIP 0.1uF	16V
				C260	1-128-394-11	ELECT CHIP 220uF 20%	10V
				C302	1-164-360-11	CERAMIC CHIP 0.1uF	16V

HCD-GX255/RG170/RG470

BD **CD**

Ref. No.	Part No.	Description		Remark	Ref. No.	Part No.	Description		Remark
C303	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R181	1-216-809-11	METAL CHIP	100	5% 1/10W
C305	1-126-246-11	ELECT CHIP	220uF	20% 4V	R182	1-216-809-11	METAL CHIP	100	5% 1/10W
C306	1-164-360-11	CERAMIC CHIP	0.1uF	16V					
C307	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R191	1-216-864-11	SHORT CHIP	0	
C308	1-126-208-21	ELECT CHIP	47uF	20% 4V	R201	1-500-445-21	FERRITE, EMI (SMD) (2012)		
					R203	1-216-864-11	SHORT CHIP	0	
C309	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R204	1-216-864-11	SHORT CHIP	0	
C310	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R205	1-216-864-11	SHORT CHIP	0	
C311	1-164-360-11	CERAMIC CHIP	0.1uF	16V					
C312	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R251	1-216-833-11	METAL CHIP	10K	5% 1/10W
C313	1-164-360-11	CERAMIC CHIP	0.1uF	16V	R252	1-216-837-11	METAL CHIP	22K	5% 1/10W
					R253	1-216-833-11	METAL CHIP	10K	5% 1/10W
C314	1-126-208-21	ELECT CHIP	47uF	20% 4V	R301	1-216-845-11	METAL CHIP	100K	5% 1/10W
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	R302	1-216-833-11	METAL CHIP	10K	5% 1/10W
C316	1-162-966-11	CERAMIC CHIP	0.0022uF	10% 50V					
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	R303	1-216-845-11	METAL CHIP	100K	5% 1/10W
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10% 25V	R305	1-216-845-11	METAL CHIP	100K	5% 1/10W
					R306	1-216-864-11	SHORT CHIP	0	
C320	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V	R307	1-216-833-11	METAL CHIP	10K	5% 1/10W
		< CONNECTOR >			R313	1-216-813-11	METAL CHIP	220	5% 1/10W
CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P							
CN201	1-784-879-21	CONNECTOR, FFC (LIF (NON-ZIF)) 31P			R351	1-216-809-11	METAL CHIP	100	5% 1/10W
		< FERRITE BEAD >			R352	1-216-809-11	METAL CHIP	100	5% 1/10W
FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)			R353	1-216-809-11	METAL CHIP	100	5% 1/10W
		< IC >			R354	1-216-809-11	METAL CHIP	100	5% 1/10W
IC101	8-752-425-12	IC CXD3059AR			R401	1-216-809-11	METAL CHIP	100	5% 1/10W
IC251	6-705-808-01	IC BA5947FM-E2			R402	1-216-809-11	METAL CHIP	100	5% 1/10W
IC301	6-705-365-01	IC TC94A34FG-002			R403	1-216-809-11	METAL CHIP	100	5% 1/10W
IC303	6-705-807-01	IC BH15FB1WG			R404	1-216-809-11	METAL CHIP	100	5% 1/10W
		< TRANSISTOR >			R405	1-216-809-11	METAL CHIP	100	5% 1/10W
Q10	6-550-363-01	TRANSISTOR	2SB1690KT146		R406	1-216-809-11	METAL CHIP	100	5% 1/10W
		< RESISTOR/FERRITE BEAD >			R407	1-216-809-11	METAL CHIP	100	5% 1/10W
R10	1-216-791-11	METAL CHIP	3.3	5% 1/10W	R408	1-216-809-11	METAL CHIP	100	5% 1/10W
R11	1-216-864-11	SHORT CHIP	0		R409	1-216-809-11	METAL CHIP	100	5% 1/10W
R12	1-216-845-11	METAL CHIP	100K	5% 1/10W	R410	1-216-809-11	METAL CHIP	100	5% 1/10W
R13	1-218-446-11	METAL CHIP	1	5% 1/10W	R411	1-216-809-11	METAL CHIP	100	5% 1/10W
R111	1-216-821-11	METAL CHIP	1K	5% 1/10W					< VIBRATOR >
					X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)		
R112	1-216-835-11	METAL CHIP	15K	5% 1/10W	*****				
R113	1-216-821-11	METAL CHIP	1K	5% 1/10W	A-1091-086-A	CD BOARD, COMPLETE (EXCEPT MX)			
R114	1-216-835-11	METAL CHIP	15K	5% 1/10W	*****				
R121	1-216-835-11	METAL CHIP	15K	5% 1/10W	< CAPACITOR >				
R131	1-216-857-11	METAL CHIP	1M	5% 1/10W	C10	1-165-989-11	CERAMIC CHIP	10uF	10% 6.3V
					C11	1-165-989-11	CERAMIC CHIP	10uF	10% 6.3V
R132	1-216-833-11	METAL CHIP	10K	5% 1/10W	C14	1-164-360-11	CERAMIC CHIP	0.1uF	16V
R133	1-216-848-11	METAL CHIP	180K	5% 1/10W	C15	1-164-360-11	CERAMIC CHIP	0.1uF	16V
R141	1-216-829-11	METAL CHIP	4.7K	5% 1/10W	C16	1-115-156-11	CERAMIC CHIP	1uF	10V
R142	1-216-821-11	METAL CHIP	1K	5% 1/10W					
R143	1-216-827-11	METAL CHIP	3.3K	5% 1/10W	C17	1-126-246-11	ELECT CHIP	220uF	20% 4V
					C18	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V
R151	1-216-864-11	SHORT CHIP	0		C111	1-162-967-11	CERAMIC CHIP	0.0033uF	10% 50V
R161	1-216-809-11	METAL CHIP	100	5% 1/10W	C112	1-164-315-11	CERAMIC CHIP	470PF	5% 50V
R162	1-216-841-11	METAL CHIP	47K	5% 1/10W	C113	1-162-967-11	CERAMIC CHIP	0.0033uF	10% 50V
R163	1-216-809-11	METAL CHIP	100	5% 1/10W					
R165	1-216-864-11	SHORT CHIP	0		C114	1-164-315-11	CERAMIC CHIP	470PF	5% 50V
					C115	1-164-360-11	CERAMIC CHIP	0.1uF	16V
R171	1-216-817-11	METAL CHIP	470	5% 1/10W					
R172	1-216-857-11	METAL CHIP	1M	5% 1/10W					
R173	1-216-295-00	SHORT CHIP	0						

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C116	1-128-995-21	ELECT CHIP	100uF 20% 10V				
C122	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C320	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C123	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< CONNECTOR >	
C124	1-162-959-11	CERAMIC CHIP	330PF 5% 50V				
C125	1-164-360-11	CERAMIC CHIP	0.1uF 16V	CN101	1-770-425-11	CONNECTOR, FFC/FPC 16P	
C131	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CN201	1-818-350-11	CONNECTOR (FFC) 27P	
C132	1-117-863-11	CERAMIC CHIP	0.47uF 10% 6.3V			< FERRITE BEAD >	
C133	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C134	1-164-360-11	CERAMIC CHIP	0.1uF 16V	FB301	1-500-445-21	FERRITE, EMI (SMD) (2012)	
C141	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V			< IC >	
C142	1-162-965-11	CERAMIC CHIP	0.0015uF 10% 50V				
C143	1-164-360-11	CERAMIC CHIP	0.1uF 16V	IC101	8-752-425-12	IC CXD3059AR	
C151	1-128-995-21	ELECT CHIP	100uF 20% 10V	IC251	6-705-808-01	IC BA5947FM-E2	
C161	1-164-360-11	CERAMIC CHIP	0.1uF 16V	IC301	6-705-365-01	IC TC94A34FG-002	
C162	1-164-360-11	CERAMIC CHIP	0.1uF 16V	IC303	6-705-807-01	IC BH15FB1WG	
C163	1-164-360-11	CERAMIC CHIP	0.1uF 16V	IC501	8-759-058-62	IC TC7S08FU (TE85R)	
C171	1-162-919-11	CERAMIC CHIP	22PF 5% 50V			< TRANSISTOR >	
C172	1-162-920-11	CERAMIC CHIP	27PF 5% 50V				
C174	1-164-360-11	CERAMIC CHIP	0.1uF 16V	Q10	6-551-120-01	TRANSISTOR 2SA2119K	
C181	1-164-360-11	CERAMIC CHIP	0.1uF 16V			< RESISTOR/FERRITE BEAD >	
C182	1-164-360-11	CERAMIC CHIP	0.1uF 16V				
C183	1-124-778-00	ELECT CHIP	22uF 20% 6.3V	R10	1-216-791-11	METAL CHIP 3.3 5% 1/10W	
C184	1-124-778-00	ELECT CHIP	22uF 20% 6.3V	R11	1-216-864-11	SHORT CHIP 0	
C185	1-164-315-11	CERAMIC CHIP	470PF 5% 50V	R12	1-216-845-11	METAL CHIP 100K 5% 1/10W	
C186	1-164-315-11	CERAMIC CHIP	470PF 5% 50V	R13	1-218-446-11	METAL CHIP 1 5% 1/10W	
C194	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R111	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C195	1-164-360-11	CERAMIC CHIP	0.1uF 16V				
C196	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R112	1-216-835-11	METAL CHIP 15K 5% 1/10W	
C201	1-128-995-21	ELECT CHIP	100uF 20% 10V	R113	1-216-821-11	METAL CHIP 1K 5% 1/10W	
C203	1-128-995-21	ELECT CHIP	100uF 20% 10V	R114	1-216-835-11	METAL CHIP 15K 5% 1/10W	
C209	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	R121	1-216-835-11	METAL CHIP 15K 5% 1/10W	
C210	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	R131	1-216-857-11	METAL CHIP 1M 5% 1/10W	
C211	1-164-230-11	CERAMIC CHIP	220PF 5% 50V				
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				
C258	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R151	1-216-864-11	SHORT CHIP 0	
C259	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R161	1-216-809-11	METAL CHIP 100 5% 1/10W	
C260	1-128-394-11	ELECT CHIP	220uF 20% 10V	R162	1-216-841-11	METAL CHIP 47K 5% 1/10W	
C302	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R163	1-216-809-11	METAL CHIP 100 5% 1/10W	
C303	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R165	1-216-864-11	SHORT CHIP 0	
C305	1-126-246-11	ELECT CHIP	220uF 20% 4V				
C306	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R171	1-216-817-11	METAL CHIP 470 5% 1/10W	
C307	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R172	1-216-857-11	METAL CHIP 1M 5% 1/10W	
C308	1-126-208-21	ELECT CHIP	47uF 20% 4V	R173	1-216-295-00	SHORT CHIP 0	
C309	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R181	1-216-809-11	METAL CHIP 100 5% 1/10W	
C310	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R182	1-216-809-11	METAL CHIP 100 5% 1/10W	
C311	1-164-360-11	CERAMIC CHIP	0.1uF 16V				
C312	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R191	1-216-864-11	SHORT CHIP 0	
C313	1-164-360-11	CERAMIC CHIP	0.1uF 16V	R201	1-500-445-21	FERRITE, EMI (SMD) (2012)	
C314	1-126-208-21	ELECT CHIP	47uF 20% 4V	R203	1-216-864-11	SHORT CHIP 0	
C315	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	R204	1-216-864-11	SHORT CHIP 0	
C316	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	R205	1-216-864-11	SHORT CHIP 0	
C317	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V				
C318	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V	R251	1-216-833-11	METAL CHIP 10K 5% 1/10W	
				R252	1-216-837-11	METAL CHIP 22K 5% 1/10W	
				R253	1-216-833-11	METAL CHIP 10K 5% 1/10W	
				R301	1-216-845-11	METAL CHIP 100K 5% 1/10W	
				R302	1-216-833-11	METAL CHIP 10K 5% 1/10W	
				R303	1-216-845-11	METAL CHIP 100K 5% 1/10W	

HCD-GX255/RG170/RG470

CD **CD-G**

Ref. No.	Part No.	Description	Remark
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
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
R501	1-216-809-11	METAL CHIP 100	5% 1/10W
< VIBRATOR >			
X171	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHz)	

A-1094-204-A	CD-G BOARD, COMPLETE (MX)		

< CAPACITOR/JUMPER RESISTOR >			
C1001	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1002	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1003	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1004	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1005	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1006	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1007	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1008	1-126-193-11	ELECT CHIP 1uF	20% 50V
C1010	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C1011	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1012	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
C1013	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C1014	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1015	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1016	1-216-864-11	SHORT CHIP 0	
C1018	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C1019	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C1022	1-162-919-11	CERAMIC CHIP 22PF	5% 50V
C1023	1-126-193-11	ELECT CHIP 1uF	20% 50V
C1024	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C1025	1-162-970-11	CERAMIC CHIP 0.01uF	10% 25V
C1026	1-110-530-11	ELECT CHIP 1000uF	20% 6.3V
C1027	1-162-957-11	CERAMIC CHIP 220PF	5% 50V
C1028	1-126-206-11	ELECT CHIP 100uF	20% 6.3V
C1029	1-164-357-11	CERAMIC CHIP 0.001uF	5% 50V
C1030	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
C1031	1-126-193-11	ELECT CHIP 1uF	20% 50V

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
CN1001	1-779-416-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P	
< JUMPER RESISTOR >			
FB1001	1-216-864-11	SHORT CHIP 0	
< IC >			
IC1001	6-707-420-01	IC TC9411AFG (BS, K)	
IC1002	6-704-474-01	IC MSM514400E-60TS-K	
IC1003	8-759-473-95	IC uPC2905T-E1	
IC1005	8-759-584-98	IC SN74AHCT04NSR	
IC1006	6-706-369-01	IC NJM2561F1-TE2	
< JUMPER RESISTOR >			
JR1001	1-216-864-11	SHORT CHIP 0	
< RESISTOR >			
L1001	1-216-864-11	SHORT CHIP 0	
L1002	1-216-797-11	METAL CHIP 10	5% 1/10W
< TRANSISTOR >			
Q1001	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1002	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1005	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1006	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q1007	8-729-027-59	TRANSISTOR DTC144EKA-T146	
Q1008	8-729-804-41	TRANSISTOR 2SB1122-S	
Q1009	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q1010	8-729-027-59	TRANSISTOR DTC144EKA-T146	
< RESISTOR/CAPACITOR >			
R1003	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R1004	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1005	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1006	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R1011	1-216-829-11	METAL CHIP 4.7K	5% 1/10W
R1012	1-216-833-11	METAL CHIP 10K	5% 1/10W
R1013	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1015	1-216-809-11	METAL CHIP 100	5% 1/10W
R1016	1-216-833-11	METAL CHIP 10K	5% 1/10W
R1017	1-216-833-11	METAL CHIP 10K	5% 1/10W
R1020	1-216-833-11	METAL CHIP 10K	5% 1/10W
R1021	1-216-813-11	METAL CHIP 220	5% 1/10W
R1022	1-216-813-11	METAL CHIP 220	5% 1/10W
R1023	1-216-813-11	METAL CHIP 220	5% 1/10W
R1029	1-216-821-11	METAL CHIP 1K	5% 1/10W
R1030	1-216-837-11	METAL CHIP 22K	5% 1/10W
R1031	1-218-285-11	METAL CHIP 75	5% 1/10W
R1032	1-216-833-11	METAL CHIP 10K	5% 1/10W
R1033	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1034	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1035	1-216-825-11	METAL CHIP 2.2K	5% 1/10W
R1036	1-162-968-11	CERAMIC CHIP 0.0047uF	10% 50V
R1037	1-162-966-11	CERAMIC CHIP 0.0022uF	10% 50V
R1038	1-162-962-11	CERAMIC CHIP 470PF	10% 50V
R1051	1-216-797-11	METAL CHIP 10	5% 1/10W

Ref. No.	Part No.	Description	Remark
		< VIBRATOR >	
X1002	1-813-555-11	VIBRATOR, CRYSTAL (14.31818MHz)	

	A-1103-756-A	DRIVER BOARD, COMPLETE	

		< CAPACITOR >	
C715	1-126-933-11	ELECT	100uF 20% 16V
C731	1-126-964-11	ELECT	10uF 20% 50V
C735	1-164-159-21	CERAMIC	0.1uF 50V
C736	1-164-159-21	CERAMIC	0.1uF 50V
C737	1-164-159-21	CERAMIC	0.1uF 50V
C741	1-162-306-11	CERAMIC	0.01uF 20% 16V
C751	1-162-306-11	CERAMIC	0.01uF 20% 16V
C752	1-164-159-21	CERAMIC	0.1uF 50V
		< CONNECTOR >	
CN701	1-784-735-11	CONNECTOR, FFC 13P	
CN702	1-784-766-11	CONNECTOR, FFC 5P	
* CN703	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P	
CN704	1-785-328-11	PIN, CONNECTOR (LIGHT ANGRE) 2P	
		< DIODE >	
D701	8-719-921-42	DIODE MTZJ-5.1A	
D711	8-719-109-69	DIODE RD3.6ESB2	
		< IC >	
IC701	8-759-598-69	IC BA6956AN	
IC712	8-759-598-69	IC BA6956AN	
		< TRANSISTOR >	
Q731	8-729-029-66	TRANSISTOR DTC114ESA	
		< RESISTOR >	
R701	1-249-413-11	CARBON	470 5% 1/4W
R702	1-247-807-31	CARBON	100 5% 1/4W
R711	1-249-417-11	CARBON	1K 5% 1/4W
R712	1-249-425-11	CARBON	4.7K 5% 1/4W
R713	1-249-433-11	CARBON	22K 5% 1/4W
R721	1-249-425-11	CARBON	4.7K 5% 1/4W
R722	1-249-425-11	CARBON	4.7K 5% 1/4W
R723	1-249-425-11	CARBON	4.7K 5% 1/4W
R731	1-247-807-31	CARBON	100 5% 1/4W
R732	1-249-429-11	CARBON	10K 5% 1/4W
R733	1-249-417-11	CARBON	1K 5% 1/4W
R734	1-249-430-11	CARBON	12K 5% 1/4W
R735	1-247-807-31	CARBON	100 5% 1/4W
R751	1-249-425-11	CARBON	4.7K 5% 1/4W

	A-1094-407-A	HEADPHONE BOARD, COMPLETE	

		< CAPACITOR >	
C781	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C782	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V

Ref. No.	Part No.	Description	Remark
		< JACK >	
J701	1-785-448-21	JACK (PHONES)	

A-1093-944-A		MAIN BOARD, COMPLETE (GX255)	
A-1093-945-A		MAIN BOARD, COMPLETE (RG170: AEP, EE)	
A-1093-946-A		MAIN BOARD, COMPLETE (RG170: RU)	
A-1093-947-A		MAIN BOARD, COMPLETE (E3, AUS)	
A-1093-948-A		MAIN BOARD, COMPLETE (EA)	
A-1093-949-A		MAIN BOARD, COMPLETE	(RG170: E2, E51, AR)
A-1093-951-A		MAIN BOARD, COMPLETE (RG470: AEP, EE)	
A-1093-953-A		MAIN BOARD, COMPLETE	(RG470: E2, E51, AR)
A-1093-954-A		MAIN BOARD, COMPLETE (MX)	
A-1123-427-A		MAIN BOARD, COMPLETE (RG470: RU)	

7-685-872-09		SCREW +BVTT 3X8 (S)	
		< CAPACITOR >	
C001	1-136-165-00	FILM	0.1uF 5% 50V
C002	1-136-165-00	FILM	0.1uF 5% 50V
C005	1-126-768-11	ELECT	2200uF 20% 16V
C007	1-126-965-11	ELECT	22uF 20% 50V
C011	1-136-165-00	FILM	0.1uF 5% 50V
C012	1-136-165-00	FILM	0.1uF 5% 50V
C013	1-126-943-11	ELECT	2200uF 20% 25V
C015	1-126-933-11	ELECT	100uF 20% 16V
C016	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C023	1-126-943-11	ELECT	2200uF 20% 25V
C025	1-126-933-11	ELECT	100uF 20% 16V
C026	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C027	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C028	1-162-974-11	CERAMIC CHIP	0.01uF 50V
C031	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C032	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C041	1-126-947-11	ELECT	47uF 20% 35V
(RG470)			
C042	1-126-963-11	ELECT	4.7uF 20% 50V
(RG470)			
C043	1-164-156-11	CERAMIC CHIP	0.1uF 25V
(RG470)			
C044	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(RG470)			
C045	1-164-156-11	CERAMIC CHIP	0.1uF 25V
(RG470)			
C063	1-164-156-11	CERAMIC CHIP	0.1uF 25V
C064	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
C065	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C066	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C068	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C069	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			
C070	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V
(AEP, EE, RU)			

HCD-GX255/RG170/RG470

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C101	1-126-960-11	ELECT	1uF 20% 50V	C177	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C102	1-126-960-11	ELECT	1uF 20% 50V	C178	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C103	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C179	1-126-964-11	ELECT 10uF 20% 50V	
C104	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C180	1-126-964-11	ELECT 10uF 20% 50V	
C105	1-126-960-11	ELECT	1uF 20% 50V	C181	1-126-960-11	ELECT 1uF 20% 50V	
C106	1-126-960-11	ELECT	1uF 20% 50V	C182	1-126-960-11	ELECT 1uF 20% 50V	
C109	1-126-960-11	ELECT	1uF 20% 50V	C183	1-126-960-11	ELECT 1uF 20% 50V	
C110	1-126-960-11	ELECT	1uF 20% 50V	C184	1-126-960-11	ELECT 1uF 20% 50V	
C111	1-126-965-11	ELECT	22uF 20% 50V	C185	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	(AEP, EE, RU)
C113	1-126-960-11	ELECT	1uF 20% 50V	C186	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	(AEP, EE, RU)
C114	1-126-960-11	ELECT	1uF 20% 50V	C187	1-164-362-11	CERAMIC CHIP 470PF 5% 50V	(AEP, EE, RU)
C116	1-126-960-11	ELECT	1uF 20% 50V	C188	1-164-362-11	CERAMIC CHIP 470PF 5% 50V	(AEP, EE, RU)
C117	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C189	1-164-362-11	CERAMIC CHIP 470PF 5% 50V	(AEP, EE, RU)
C118	1-126-961-11	ELECT	2.2uF 20% 50V	C190	1-164-362-11	CERAMIC CHIP 470PF 5% 50V	(AEP, EE, RU)
C119	1-126-961-11	ELECT	2.2uF 20% 50V	C191	1-107-726-91	CERAMIC CHIP 0.01uF 10% 16V	
C120	1-125-891-11	CERAMIC CHIP	0.47uF 10% 10V	C192	1-107-726-91	CERAMIC CHIP 0.01uF 10% 16V	
C121	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	C193	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C122	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V	C194	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C123	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V	C195	1-162-953-11	CERAMIC CHIP 100PF 5% 50V	(AEP, EE, RU)
C124	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V	C196	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	(AEP, EE, RU)
C125	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V	C197	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C126	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V	C198	1-162-960-11	CERAMIC CHIP 220PF 10% 50V	
C127	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C199	1-126-964-11	ELECT 10uF 20% 50V	
C128	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C200	1-126-964-11	ELECT 10uF 20% 50V	
C129	1-126-964-11	ELECT	10uF 20% 50V	C201	1-126-961-11	ELECT 2.2uF 20% 50V	
C130	1-126-964-11	ELECT	10uF 20% 50V	C202	1-126-961-11	ELECT 2.2uF 20% 50V	
C131	1-126-960-11	ELECT	1uF 20% 50V	C205	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C132	1-126-959-11	ELECT	0.47uF 20% 50V	C206	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C133	1-126-957-11	ELECT	0.22uF 20% 50V	C207	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C136	1-126-964-11	ELECT	10uF 20% 50V	C208	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C137	1-126-964-11	ELECT	10uF 20% 50V	C209	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C139	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C210	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C140	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V	C211	1-131-679-31	FILM 0.01uF 5% 50V	
C141	1-162-949-11	CERAMIC CHIP	47PF 5% 50V	C212	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C142	1-162-949-11	CERAMIC CHIP	47PF 5% 50V	C213	1-131-679-31	FILM 0.01uF 5% 50V	
C143	1-136-165-00	FILM	0.1uF 5% 50V	C214	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C144	1-136-165-00	FILM	0.1uF 5% 50V	C215	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	(AEP, EE, RU)
C145	1-136-165-00	FILM	0.1uF 5% 50V	C220	1-162-945-11	CERAMIC CHIP 22PF 5% 50V	(AEP, EE, RU)
C146	1-136-165-00	FILM	0.1uF 5% 50V	C222	1-126-947-11	ELECT 47uF 20% 35V	
C147	1-164-362-11	CERAMIC CHIP	470PF 5% 50V	C223	1-131-679-31	FILM 0.01uF 5% 50V	
C148	1-164-362-11	CERAMIC CHIP	470PF 5% 50V	C224	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C149	1-126-947-11	ELECT	47uF 20% 35V	C225	1-130-479-00	MYLAR 0.0047uF 5% 50V	
C155	1-126-947-11	ELECT	47uF 20% 35V	C229	1-126-963-11	ELECT 4.7uF 20% 50V	
C156	1-126-933-11	ELECT	100uF 20% 16V	C253	1-162-949-11	CERAMIC CHIP 47PF 5% 50V	(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)
C158	1-115-467-11	CERAMIC CHIP	0.22uF 10% 10V	C253	1-216-864-11	SHORT CHIP 0 (RG170: AEP, EE, RU)	
C159	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C254	1-162-949-11	CERAMIC CHIP 47PF 5% 50V	(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)
C160	1-126-933-11	ELECT	100uF 20% 16V	C254	1-216-864-11	SHORT CHIP 0 (RG170: AEP, EE, RU)	
C161	1-162-953-11	CERAMIC CHIP	100PF 5% 50V				
C162	1-162-953-11	CERAMIC CHIP	100PF 5% 50V				
C163	1-126-965-11	ELECT	22uF 20% 50V				
C171	1-126-956-11	ELECT	0.1uF 20% 50V				
C172	1-126-956-11	ELECT	0.1uF 20% 50V				
C173	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V				
C174	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V				
C175	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V				
C176	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C255	1-162-945-11	CERAMIC CHIP 22PF 5% 50V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		CN331	1-784-774-11	CONNECTOR, FFC 13P (MX)	
C256	1-162-945-11	CERAMIC CHIP 22PF 5% 50V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		CN341	1-784-774-11	CONNECTOR, FFC 13P	
C257	1-126-947-11	ELECT 47uF 20% 35V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		CN381	1-568-830-11	CONNECTOR, FFC 11P (EXCEPT AEP, EE)	
C258	1-126-947-11	ELECT 47uF 20% 35V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		CN381	1-784-776-11	CONNECTOR, FFC 15P (AEP, EE)	
C259	1-126-964-11	ELECT 10uF 20% 50V		CN391	1-784-774-11	CONNECTOR, FFC 13P	
C260	1-126-964-11	ELECT 10uF 20% 50V		CN991	1-784-780-11	CONNECTOR, FFC 19P	
C263	1-126-947-11	ELECT 47uF 20% 35V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		< DIODE >			
C264	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		D001	6-500-522-21	DIODE 10EDB40-TB3	
C265	1-126-963-11	ELECT 4.7uF 20% 50V		D002	6-500-522-21	DIODE 10EDB40-TB3	
C266	1-126-963-11	ELECT 4.7uF 20% 50V		D003	6-500-522-21	DIODE 10EDB40-TB3	
C301	1-126-964-11	ELECT 10uF 20% 50V		D004	6-500-522-21	DIODE 10EDB40-TB3	
C302	1-126-964-11	ELECT 10uF 20% 50V		D006	8-719-988-61	DIODE 1SS355TE-17	
C305	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V (GX255)		D007	6-500-522-21	DIODE 10EDB40-TB3	
C311	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D008	6-500-522-21	DIODE 10EDB40-TB3	
C317	1-126-926-11	ELECT 1000uF 20% 10V		D011	6-500-522-21	DIODE 10EDB40-TB3	
C384	1-162-953-11	CERAMIC CHIP 100PF 5% 50V (AEP, EE, RU)		D012	6-500-522-21	DIODE 10EDB40-TB3	
C391	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D013	6-500-522-21	DIODE 10EDB40-TB3	
C901	1-126-933-11	ELECT 100uF 20% 16V		D014	6-500-522-21	DIODE 10EDB40-TB3	
C902	1-126-964-11	ELECT 10uF 20% 50V		D021	6-500-522-21	DIODE 10EDB40-TB3	
C904	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D022	6-500-522-21	DIODE 10EDB40-TB3	
C906	1-126-964-11	ELECT 10uF 20% 50V		D023	6-500-522-21	DIODE 10EDB40-TB3	
C908	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D024	6-500-522-21	DIODE 10EDB40-TB3	
C909	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D031	8-719-988-61	DIODE 1SS355TE-17	
C910	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D035	8-719-000-08	DIODE MC2838 (RG470)	
C911	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		D041	8-719-083-63	DIODE UJZSTE-1713B (RG470)	
C912	1-162-960-11	CERAMIC CHIP 220PF 10% 50V		D121	6-500-848-01	DIODE MC2840-T112-1	
C914	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		D122	6-500-848-01	DIODE MC2840-T112-1	
C916	1-126-916-11	ELECT 1000uF 20% 6.3V		D301	6-500-522-21	DIODE 10EDB40-TB3	
C917	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D302	6-500-522-21	DIODE 10EDB40-TB3	
C918	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		D303	8-719-083-60	DIODE UJZSTE-174.7B	
C919	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D341	8-719-000-07	DIODE MC2836	
C921	1-126-961-11	ELECT 2.2uF 20% 50V		D901	8-719-083-60	DIODE UJZSTE-174.7B	
C922	1-126-963-11	ELECT 4.7uF 20% 50V		D902	8-719-000-07	DIODE MC2836	
C923	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D903	8-719-988-61	DIODE 1SS355TE-17	
C924	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D905	8-719-988-61	DIODE 1SS355TE-17	
C925	1-164-156-11	CERAMIC CHIP 0.1uF 25V		D910	8-719-988-61	DIODE 1SS355TE-17	
C927	1-162-919-11	CERAMIC CHIP 22PF 5% 50V		D921	6-500-848-01	DIODE MC2840-T112-1	
C928	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		D923	6-500-848-01	DIODE MC2840-T112-1	
C970	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		D943	8-719-000-08	DIODE MC2838	
< CONNECTOR >				D947	8-719-988-61	DIODE 1SS355TE-17	
CN031	1-778-982-21	CONNECTOR, BOARD TO BOARD 13P		< EARTH TERMINAL >			
CN041	1-564-506-11	PLUG, CONNECTOR 3P (RG470)		EP031	1-537-770-21	TERMINAL BOARD, GROUND	
CN061	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		EP061	1-537-770-21	TERMINAL BOARD, GROUND	
CN065	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		< IC >			
* CN066	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P (E2, E51, AR, MX)		IC006	6-702-771-01	IC TA78033LS	
* CN201	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P		IC011	8-759-701-59	IC NJM78M09FA	
* CN203	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P		IC021	8-759-701-59	IC NJM78M09FA	
CN301	1-779-295-11	CONNECTOR, FFC (LIF (NON-ZIF)) 27P (EXCEPT MX)		IC101	6-705-852-01	IC BD3401KS2	
CN301	1-779-299-11	CONNECTOR, FFC (LIF (NON-ZIF)) 31P (MX)		IC251	8-759-909-71	IC BA4558F (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)	
				IC901	6-805-528-01	IC M30302MCP-A02FPU0	
				IC902	8-759-713-61	IC PST3429UL	

HCD-GX255/RG170/RG470

MAIN

Ref. No.	Part No.	Description	Remark		
< JUMPER RESISTOR >					
JR001	1-216-864-11	SHORT CHIP	0		
JR005	1-216-864-11	SHORT CHIP	0		
JR006	1-216-864-11	SHORT CHIP	0		
JR009	1-216-864-11	SHORT CHIP	0		
JR010	1-216-864-11	SHORT CHIP	0		
JR171	1-216-864-11	SHORT CHIP	0		
JR172	1-216-864-11	SHORT CHIP	0		
JR174	1-216-864-11	SHORT CHIP	0		
< RESISTOR >					
JW033	1-249-401-11	CARBON	47	5%	1/4W (MX)
< COIL >					
L201	1-424-849-11	COIL, OSCILLATION (BIAS)			
< TRANSISTOR >					
Q002	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q041	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q042	8-729-037-13	TRANSISTOR	KTA1271Y		
Q043	8-729-142-46	TRANSISTOR	2SC2001-LK (RG470)		
Q044	8-729-142-46	TRANSISTOR	2SC2001-LK (RG470)		
Q045	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (RG470)		
Q111	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q112	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q141	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q142	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q201	8-729-142-46	TRANSISTOR	2SC2001-LK		
Q203	8-729-600-22	TRANSISTOR	2SA1235-F		
Q205	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q206	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q207	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q208	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q209	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q210	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q231	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q232	8-729-037-13	TRANSISTOR	KTA1271Y		
Q251	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q252	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q261	8-729-027-23	TRANSISTOR	DTA114EKA-T146		
Q341	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q342	8-729-040-76	TRANSISTOR	KTA1273-Y-AT		
Q343	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q344	8-729-037-13	TRANSISTOR	KTA1271Y		
Q345	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
Q346	8-729-037-13	TRANSISTOR	KTA1271Y		
Q901	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q902	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q903	8-729-037-13	TRANSISTOR	KTA1271Y		
Q904	8-729-120-28	TRANSISTOR	2SC1623-L5L6		
Q933	6-551-276-01	TRANSISTOR	RT1N431C-TP-1		
< RESISTOR >					
R001	1-216-801-11	METAL CHIP	22	5%	1/10W
R002	1-216-864-11	SHORT CHIP	0		
R005	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description	Remark			
R006	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	
R007	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R032	1-216-821-11	METAL CHIP	1K	5%	1/10W (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)	
R033	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R034	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R035	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (RG470)	
R036	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (RG470)	
R037	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)	
R042	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R043	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	
R044	1-216-864-11	SHORT CHIP	0 (RG470)			
R045	1-216-821-11	METAL CHIP	1K	5%	1/10W (RG470)	
R046	1-216-821-11	METAL CHIP	1K	5%	1/10W (RG470)	
R047	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (RG470)	
R048	1-216-841-11	METAL CHIP	47K	5%	1/10W (RG470)	
R049	1-216-789-11	METAL CHIP	2.2	5%	1/10W (RG470)	
R050	1-216-841-11	METAL CHIP	47K	5%	1/10W (RG470)	
R052	1-216-853-11	METAL CHIP	470K	5%	1/10W	
△R059	1-215-867-00	METAL OXIDE	470	5%	1W F (RG170: AEP, EE, RU)	
△R059	1-215-890-11	METAL OXIDE	470	5%	2W F (GX255/RG170: E2, E3, E51, EA, AR, AUS)	
△R059	1-215-892-11	METAL OXIDE	1K	5%	2W F (RG470)	
△R060	1-215-867-00	METAL OXIDE	470	5%	1W F (RG170: AEP, EE, RU)	
△R060	1-215-890-11	METAL OXIDE	470	5%	2W F (GX255/RG170: E2, E3, E51, EA, AR, AUS)	
△R060	1-215-892-11	METAL OXIDE	1K	5%	2W F (RG470)	
R063	1-216-805-11	METAL CHIP	47	5%	1/10W (GX255/RG170)	
R063	1-216-809-11	METAL CHIP	100	5%	1/10W (RG470)	
R064	1-216-805-11	METAL CHIP	47	5%	1/10W (GX255/RG170)	
R064	1-216-809-11	METAL CHIP	100	5%	1/10W (RG470)	
R068	1-216-797-11	METAL CHIP	10	5%	1/10W (E2, E51, AR, MX)	
R069	1-216-837-11	METAL CHIP	22K	5%	1/10W (E2, E51, AR, MX)	
R070	1-216-833-11	METAL CHIP	10K	5%	1/10W	
R103	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R104	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W (E2, E51, AR, MX)	
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W	
R108	1-216-837-11	METAL CHIP	22K	5%	1/10W	
R109	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R110	1-216-841-11	METAL CHIP	47K 5% 1/10W	R175	1-216-821-11	METAL CHIP	1K 5% 1/10W
R111	1-216-845-11	METAL CHIP	100K 5% 1/10W	R176	1-216-821-11	METAL CHIP	1K 5% 1/10W
R112	1-216-817-11	METAL CHIP	470 5% 1/10W	R177	1-216-821-11	METAL CHIP	1K 5% 1/10W
R113	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R178	1-216-821-11	METAL CHIP	1K 5% 1/10W
R114	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R179	1-216-853-11	METAL CHIP	470K 5% 1/10W
R116	1-216-809-11	METAL CHIP	100 5% 1/10W	R180	1-216-853-11	METAL CHIP	470K 5% 1/10W
R117	1-216-833-11	METAL CHIP	10K 5% 1/10W	R181	1-216-845-11	METAL CHIP	100K 5% 1/10W
R119	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R182	1-216-845-11	METAL CHIP	100K 5% 1/10W
R120	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R183	1-216-849-11	METAL CHIP	220K 5% 1/10W
R121	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R184	1-216-849-11	METAL CHIP	220K 5% 1/10W
R122	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R185	1-216-841-11	METAL CHIP	47K 5% 1/10W
R128	1-216-833-11	METAL CHIP	10K 5% 1/10W	R186	1-216-841-11	METAL CHIP	47K 5% 1/10W
R129	1-216-845-11	METAL CHIP	100K 5% 1/10W	R187	1-216-845-11	METAL CHIP	100K 5% 1/10W
R130	1-216-864-11	SHORT CHIP	0	R188	1-216-845-11	METAL CHIP	100K 5% 1/10W
R131	1-216-849-11	METAL CHIP	220K 5% 1/10W	R189	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R132	1-216-849-11	METAL CHIP	220K 5% 1/10W	R190	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R133	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R191	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R134	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R192	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R135	1-216-821-11	METAL CHIP	1K 5% 1/10W	R203	1-216-841-11	METAL CHIP	47K 5% 1/10W
R135	1-216-864-11	SHORT CHIP	0 (GX255/RG170)	R204	1-216-841-11	METAL CHIP	47K 5% 1/10W
R136	1-216-821-11	METAL CHIP	1K 5% 1/10W	R205	1-216-833-11	METAL CHIP	10K 5% 1/10W
R136	1-216-864-11	SHORT CHIP	0 (GX255/RG170)	R206	1-216-833-11	METAL CHIP	10K 5% 1/10W
R137	1-216-841-11	METAL CHIP	47K 5% 1/10W	R207	1-216-837-11	METAL CHIP	22K 5% 1/10W
R138	1-216-841-11	METAL CHIP	47K 5% 1/10W	R208	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R139	1-216-837-11	METAL CHIP	22K 5% 1/10W	R212	1-216-797-11	METAL CHIP	10 5% 1/10W
R140	1-216-837-11	METAL CHIP	22K 5% 1/10W	R232	1-216-833-11	METAL CHIP	10K 5% 1/10W
R141	1-216-849-11	METAL CHIP	220K 5% 1/10W	R233	1-216-833-11	METAL CHIP	10K 5% 1/10W
R142	1-216-849-11	METAL CHIP	220K 5% 1/10W	R234	1-216-833-11	METAL CHIP	10K 5% 1/10W
R143	1-216-841-11	METAL CHIP	47K 5% 1/10W	R235	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R144	1-216-841-11	METAL CHIP	47K 5% 1/10W	R236	1-216-833-11	METAL CHIP	10K 5% 1/10W
R145	1-216-841-11	METAL CHIP	47K 5% 1/10W	R237	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R146	1-216-857-11	METAL CHIP	1M 5% 1/10W	R238	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R147	1-216-845-11	METAL CHIP	100K 5% 1/10W	R239	1-216-821-11	METAL CHIP	1K 5% 1/10W
R148	1-216-845-11	METAL CHIP	100K 5% 1/10W	R240	1-216-821-11	METAL CHIP	1K 5% 1/10W
R149	1-216-841-11	METAL CHIP	47K 5% 1/10W	R244	1-216-837-11	METAL CHIP	22K 5% 1/10W
R150	1-216-841-11	METAL CHIP	47K 5% 1/10W	R245	1-216-833-11	METAL CHIP	10K 5% 1/10W
R156	1-216-809-11	METAL CHIP	100 5% 1/10W	R247	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R157	1-216-809-11	METAL CHIP	100 5% 1/10W	R248	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R158	1-216-809-11	METAL CHIP	100 5% 1/10W	R250	1-216-833-11	METAL CHIP	10K 5% 1/10W
R159	1-216-857-11	METAL CHIP	1M 5% 1/10W				(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)
R160	1-216-797-11	METAL CHIP	10 5% 1/10W	R250	1-216-864-11	SHORT CHIP	0 (RG170: AEP, EE, RU)
R161	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R251	1-216-817-11	METAL CHIP	470 5% 1/10W
R162	1-216-825-11	METAL CHIP	2.2K 5% 1/10W				(RG470: E2, E51, AR, MX)
R163	1-216-833-11	METAL CHIP	10K 5% 1/10W	R251	1-216-821-11	METAL CHIP	1K 5% 1/10W
R164	1-216-833-11	METAL CHIP	10K 5% 1/10W				(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470: AEP, EE, RU)
R165	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R251	1-216-864-11	SHORT CHIP	0 (RG170: AEP, EE, RU)
R166	1-216-829-11	METAL CHIP	4.7K 5% 1/10W	R252	1-216-817-11	METAL CHIP	470 5% 1/10W
R167	1-216-849-11	METAL CHIP	220K 5% 1/10W				(RG470: E2, E51, AR, MX)
R168	1-216-849-11	METAL CHIP	220K 5% 1/10W	R252	1-216-821-11	METAL CHIP	1K 5% 1/10W
R169	1-216-845-11	METAL CHIP	100K 5% 1/10W				(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470: AEP, EE, RU)
R170	1-216-845-11	METAL CHIP	100K 5% 1/10W	R252	1-216-864-11	SHORT CHIP	0 (RG170: AEP, EE, RU)
R171	1-216-817-11	METAL CHIP	470 5% 1/10W	R253	1-216-833-11	METAL CHIP	10K 5% 1/10W
R172	1-216-817-11	METAL CHIP	470 5% 1/10W				(GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)
R173	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R253	1-216-864-11	SHORT CHIP	0 (RG170: AEP, EE, RU)
R174	1-216-825-11	METAL CHIP	2.2K 5% 1/10W	R254	1-216-833-11	METAL CHIP	10K 5% 1/10W
							(RG470)

HCD-GX255/RG170/RG470

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R254	1-216-837-11	METAL CHIP 22K 5% 1/10W (GX255/RG170: E2, E3, E51, EA, AR, AUS)		R350	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
				R351	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R257	1-216-833-11	METAL CHIP 10K 5% 1/10W (RG470)		R352	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R257	1-216-837-11	METAL CHIP 22K 5% 1/10W (GX255/RG170: E2, E3, E51, EA, AR, AUS)		R353	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R258	1-216-837-11	METAL CHIP 22K 5% 1/10W (RG470)		R354	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R259	1-216-837-11	METAL CHIP 22K 5% 1/10W (RG470)		R355	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R261	1-216-833-11	METAL CHIP 10K 5% 1/10W		R356	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R262	1-216-833-11	METAL CHIP 10K 5% 1/10W		R357	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R263	1-216-825-11	METAL CHIP 2.2K 5% 1/10W		R358	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R264	1-216-825-11	METAL CHIP 2.2K 5% 1/10W		R359	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R265	1-216-809-11	METAL CHIP 100 5% 1/10W (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)		R360	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R267	1-216-841-11	METAL CHIP 47K 5% 1/10W		R361	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R268	1-216-829-11	METAL CHIP 4.7K 5% 1/10W		R362	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R301	1-216-821-11	METAL CHIP 1K 5% 1/10W		R363	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R302	1-216-821-11	METAL CHIP 1K 5% 1/10W		R364	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R303	1-216-833-11	METAL CHIP 10K 5% 1/10W		R365	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R304	1-216-833-11	METAL CHIP 10K 5% 1/10W		R366	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R314	1-216-809-11	METAL CHIP 100 5% 1/10W		R367	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R315	1-216-809-11	METAL CHIP 100 5% 1/10W		R368	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R316	1-216-809-11	METAL CHIP 100 5% 1/10W		R369	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R317	1-216-817-11	METAL CHIP 470 5% 1/10W		R370	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R318	1-216-809-11	METAL CHIP 100 5% 1/10W		R381	1-216-809-11	METAL CHIP 100 5% 1/10W (EXCEPT AEP, EE, RU)	
R319	1-216-809-11	METAL CHIP 100 5% 1/10W		R381	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R320	1-216-809-11	METAL CHIP 100 5% 1/10W		R382	1-216-809-11	METAL CHIP 100 5% 1/10W (EXCEPT AEP, EE, RU)	
R321	1-216-809-11	METAL CHIP 100 5% 1/10W		R382	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R322	1-216-817-11	METAL CHIP 470 5% 1/10W		R383	1-216-809-11	METAL CHIP 100 5% 1/10W (EXCEPT AEP, EE, RU)	
R323	1-216-809-11	METAL CHIP 100 5% 1/10W		R383	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R330	1-216-821-11	METAL CHIP 1K 5% 1/10W (MX)		R384	1-216-809-11	METAL CHIP 100 5% 1/10W (EXCEPT AEP, EE, RU)	
R331	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R384	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R332	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R385	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R333	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R386	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R334	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R387	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R337	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R387	1-216-864-11	SHORT CHIP 0 (EXCEPT AEP, EE, RU)	
R338	1-216-809-11	METAL CHIP 100 5% 1/10W (MX)		R388	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R339	1-216-821-11	METAL CHIP 1K 5% 1/10W (MX)		R388	1-216-864-11	SHORT CHIP 0 (EXCEPT AEP, EE, RU)	
R340	1-216-821-11	METAL CHIP 1K 5% 1/10W (MX)		R389	1-216-817-11	METAL CHIP 470 5% 1/10W (AEP, EE, RU)	
R341	1-216-833-11	METAL CHIP 10K 5% 1/10W		R389	1-216-864-11	SHORT CHIP 0 (EXCEPT AEP, EE, RU)	
R342	1-216-821-11	METAL CHIP 1K 5% 1/10W		R390	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP, EE, RU)	
R343	1-216-833-11	METAL CHIP 10K 5% 1/10W		R390	1-216-864-11	SHORT CHIP 0 (EXCEPT AEP, EE, RU)	
R344	1-216-821-11	METAL CHIP 1K 5% 1/10W		R391	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP, EE, RU)	
R345	1-216-833-11	METAL CHIP 10K 5% 1/10W		R391	1-216-864-11	SHORT CHIP 0 (EXCEPT AEP, EE, RU)	
R346	1-216-821-11	METAL CHIP 1K 5% 1/10W		R901	1-216-845-11	METAL CHIP 100K 5% 1/10W	
R347	1-216-829-11	METAL CHIP 4.7K 5% 1/10W		R902	1-216-864-11	SHORT CHIP 0	
R348	1-216-841-11	METAL CHIP 47K 5% 1/10W		R903	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R349	1-216-829-11	METAL CHIP 4.7K 5% 1/10W		R904	1-216-821-11	METAL CHIP 1K 5% 1/10W	

Ref. No.	Part No.	Description	Quantity	Percentage	Remark	Ref. No.	Part No.	Description	Quantity	Percentage	Remark
R905	1-216-833-11	METAL CHIP	10K	5%	1/10W	R970	1-216-821-11	METAL CHIP	1K	5%	1/10W
R907	1-216-841-11	METAL CHIP	47K	5%	1/10W	R971	1-216-833-11	METAL CHIP	10K	5%	1/10W (CND, RU, E3, EA, MX, AUS)
R908	1-216-841-11	METAL CHIP	47K	5%	1/10W	R972	1-216-833-11	METAL CHIP	10K	5%	1/10W (E3, EA, MX, AUS)
R909	1-216-837-11	METAL CHIP	22K	5%	1/10W	R973	1-216-833-11	METAL CHIP	10K	5%	1/10W (CND, E2, E3, E51, AR, AUS)
R910	1-216-833-11	METAL CHIP	10K	5%	1/10W	R974	1-216-833-11	METAL CHIP	10K	5%	1/10W (E3, EA, AUS)
R911	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, EE)	R976	1-216-833-11	METAL CHIP	10K	5%	1/10W
R912	1-216-821-11	METAL CHIP	1K	5%	1/10W	R977	1-216-833-11	METAL CHIP	10K	5%	1/10W (RG470)
R913	1-216-821-11	METAL CHIP	1K	5%	1/10W	R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R914	1-216-809-11	METAL CHIP	100	5%	1/10W (AEP, EE)	R980	1-216-809-11	METAL CHIP	100	5%	1/10W
R915	1-216-809-11	METAL CHIP	100	5%	1/10W	R981	1-216-809-11	METAL CHIP	100	5%	1/10W
R918	1-216-849-11	METAL CHIP	220K	5%	1/10W	R982	1-216-809-11	METAL CHIP	100	5%	1/10W
R919	1-216-864-11	SHORT CHIP	0			R992	1-216-821-11	METAL CHIP	1K	5%	1/10W
R920	1-216-809-11	METAL CHIP	100	5%	1/10W	R993	1-216-821-11	METAL CHIP	1K	5%	1/10W
R921	1-216-857-11	METAL CHIP	1M	5%	1/10W	R996	1-216-809-11	METAL CHIP	100	5%	1/10W
R922	1-216-849-11	METAL CHIP	220K	5%	1/10W	R997	1-216-809-11	METAL CHIP	100	5%	1/10W
R923	1-216-809-11	METAL CHIP	100	5%	1/10W	R998	1-216-809-11	METAL CHIP	100	5%	1/10W
R924	1-216-809-11	METAL CHIP	100	5%	1/10W	R999	1-216-809-11	METAL CHIP	100	5%	1/10W
R925	1-216-809-11	METAL CHIP	100	5%	1/10W	R1971	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, EE, E2, E51, AR)
R926	1-216-809-11	METAL CHIP	100	5%	1/10W	R1972	1-216-833-11	METAL CHIP	10K	5%	1/10W (CND, AEP, EE, RU, E2, E51, AR)
R927	1-216-809-11	METAL CHIP	100	5%	1/10W	R1973	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, EE, RU, EA, MX)
R928	1-216-809-11	METAL CHIP	100	5%	1/10W	R1974	1-216-833-11	METAL CHIP	10K	5%	1/10W (EXCEPT E3, EA, AUS)
R929	1-216-809-11	METAL CHIP	100	5%	1/10W	R1975	1-216-833-11	METAL CHIP	10K	5%	1/10W
R931	1-216-833-11	METAL CHIP	10K	5%	1/10W	R1977	1-216-833-11	METAL CHIP	10K	5%	1/10W (GX255/RG170)
R932	1-216-825-11	METAL CHIP	2.2K	5%	1/10W			< VIBRATOR >			
R935	1-216-833-11	METAL CHIP	10K	5%	1/10W	X901	1-760-252-12	VIBRATOR, CRYSTAL (32.768kHz)			
R936	1-216-837-11	METAL CHIP	22K	5%	1/10W	X902	1-795-482-11	VIBRATOR, CERAMIC (16MHz)			
R937	1-216-845-11	METAL CHIP	100K	5%	1/10W	*****					
R938	1-216-833-11	METAL CHIP	10K	5%	1/10W	A-1094-199-A	MIC BOARD, COMPLETE (E2, E51, AR)				
R939	1-216-809-11	METAL CHIP	100	5%	1/10W	A-1094-200-A	MIC BOARD, COMPLETE (MX)				
R940	1-216-833-11	METAL CHIP	10K	5%	1/10W	*****					
R941	1-216-825-11	METAL CHIP	2.2K	5%	1/10W			< CAPACITOR >			
R942	1-216-833-11	METAL CHIP	10K	5%	1/10W	C801	1-126-157-11	ELECT	10uF	20%	16V (E2, E51, AR, MX)
R943	1-216-829-11	METAL CHIP	4.7K	5%	1/10W	C802	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V (E2, E51, AR, MX)
R944	1-216-849-11	METAL CHIP	220K	5%	1/10W	C803	1-136-157-00	FILM	0.022uF	5%	50V (E2, E51, AR, MX)
R945	1-216-813-11	METAL CHIP	220	5%	1/10W	C805	1-136-157-00	FILM	0.022uF	5%	50V (E2, E51, AR, MX)
R946	1-216-864-11	SHORT CHIP	0			C807	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V (E2, E51, AR, MX)
R947	1-216-849-11	METAL CHIP	220K	5%	1/10W	C808	1-164-816-11	CERAMIC CHIP	220PF	2%	50V (E2, E51, AR, MX)
R948	1-216-825-11	METAL CHIP	2.2K	5%	1/10W	C809	1-126-157-11	ELECT	10uF	20%	16V (E2, E51, AR, MX)
R949	1-216-833-11	METAL CHIP	10K	5%	1/10W	C810	1-164-315-11	CERAMIC CHIP	470PF	5%	50V (E2, E51, AR, MX)
R950	1-216-829-11	METAL CHIP	4.7K	5%	1/10W						
R951	1-216-813-11	METAL CHIP	220	5%	1/10W						
R952	1-216-809-11	METAL CHIP	100	5%	1/10W						
R953	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R954	1-216-809-11	METAL CHIP	100	5%	1/10W						
R955	1-216-809-11	METAL CHIP	100	5%	1/10W						
R956	1-216-809-11	METAL CHIP	100	5%	1/10W						
R957	1-216-809-11	METAL CHIP	100	5%	1/10W						
R958	1-216-833-11	METAL CHIP	10K	5%	1/10W						
R959	1-216-809-11	METAL CHIP	100	5%	1/10W						
R961	1-216-809-11	METAL CHIP	100	5%	1/10W						
R963	1-216-809-11	METAL CHIP	100	5%	1/10W						
R965	1-216-809-11	METAL CHIP	100	5%	1/10W						
R967	1-216-809-11	METAL CHIP	100	5%	1/10W						
R968	1-216-809-11	METAL CHIP	100	5%	1/10W						
R969	1-216-809-11	METAL CHIP	100	5%	1/10W (MX)						

HCD-GX255/RG170/RG470

MIC

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C811	1-124-463-00	ELECT	0.1uF 20% 50V (E2, E51, AR, MX)			< JACK >	
C813	1-119-774-11	ELECT	100uF 20% 16V (E2, E51, AR, MX)	JK801	1-770-226-11	JACK (LARGE TYPE) (MIC 1) (MX)	
				JK802	1-770-226-11	JACK (LARGE TYPE) (MIC 2) (MX)	
				JK802	1-770-226-11	JACK (LARGE TYPE) (MIC) (E2, E51, AR)	
C814	1-124-257-00	ELECT	2.2uF 20% 50V (E2, E51, AR, MX)			< JUMPER RESISTOR >	
C815	1-162-923-11	CERAMIC CHIP	47PF 5% 50V (E2, E51, AR, MX)	JR801	1-216-864-11	SHORT CHIP 0 (E2, E51, AR)	
C816	1-164-816-11	CERAMIC CHIP	220PF 2% 50V (E2, E51, AR, MX)	JR802	1-216-864-11	SHORT CHIP 0 (E2, E51, AR)	
C817	1-124-257-00	ELECT	2.2uF 20% 50V (E2, E51, AR, MX)			< TRANSISTOR >	
C818	1-126-157-11	ELECT	10uF 20% 16V (E2, E51, AR, MX)	Q801	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (E2, E51, AR, MX)	
C819	1-164-156-11	CERAMIC CHIP	0.1uF 25V (E2, E51, AR, MX)			< RESISTOR >	
C833	1-164-156-11	CERAMIC CHIP	0.1uF 25V (E2, E51, AR, MX)	R801	1-216-829-11	METAL CHIP 4.7K 5% 1/10W (E2, E51, AR, MX)	
C851	1-126-160-11	ELECT	1uF 20% 50V (MX)	R802	1-216-825-11	METAL CHIP 2.2K 5% 1/10W (E2, E51, AR, MX)	
C852	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (MX)	R803	1-216-829-11	METAL CHIP 4.7K 5% 1/10W (E2, E51, AR, MX)	
C853	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V (MX)	R804	1-216-825-11	METAL CHIP 2.2K 5% 1/10W (E2, E51, AR, MX)	
C854	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V (MX)	R805	1-216-845-11	METAL CHIP 100K 5% 1/10W (E2, E51, AR, MX)	
C856	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V (MX)	R806	1-216-845-11	METAL CHIP 100K 5% 1/10W (E2, E51, AR, MX)	
C857	1-124-465-00	ELECT	0.47uF 20% 50V (MX)	R807	1-216-833-11	METAL CHIP 10K 5% 1/10W (E2, E51, AR, MX)	
C858	1-124-465-00	ELECT	0.47uF 20% 50V (MX)	R808	1-216-833-11	METAL CHIP 10K 5% 1/10W (E2, E51, AR, MX)	
C859	1-107-826-11	CERAMIC CHIP	0.1uF 10% 16V (MX)	R809	1-216-845-11	METAL CHIP 100K 5% 1/10W (E2, E51, AR, MX)	
C861	1-126-160-11	ELECT	1uF 20% 50V (MX)	R810	1-216-821-11	METAL CHIP 1K 5% 1/10W (E2, E51, AR, MX)	
C862	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V (MX)	R811	1-216-841-11	METAL CHIP 47K 5% 1/10W (E2, E51, AR, MX)	
C863	1-124-257-00	ELECT	2.2uF 20% 50V (MX)	R812	1-216-809-11	METAL CHIP 100 5% 1/10W (E2, E51, AR, MX)	
C864	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (MX)	R813	1-216-833-11	METAL CHIP 10K 5% 1/10W (E2, E51, AR, MX)	
C865	1-162-968-11	CERAMIC CHIP	0.0047uF 10% 50V (MX)	R814	1-216-849-11	METAL CHIP 220K 5% 1/10W (E2, E51, AR, MX)	
C867	1-165-176-11	CERAMIC CHIP	0.047uF 10% 16V (MX)	R815	1-216-809-11	METAL CHIP 100 5% 1/10W (E2, E51, AR, MX)	
C868	1-164-227-11	CERAMIC CHIP	0.022uF 10% 25V (MX)	R816	1-216-845-11	METAL CHIP 100K 5% 1/10W (E2, E51, AR, MX)	
C869	1-124-589-11	ELECT	47uF 20% 16V (MX)	R817	1-216-829-11	METAL CHIP 4.7K 5% 1/10W (E2, E51, AR, MX)	
C870	1-124-589-11	ELECT	47uF 20% 16V (MX)	R818	1-216-829-11	METAL CHIP 4.7K 5% 1/10W (E2, E51, AR, MX)	
		< DIODE >		R819	1-216-849-11	METAL CHIP 220K 5% 1/10W (E2, E51, AR, MX)	
D851	8-719-069-54	DIODE	UDZSTE-175.1B (MX)	R851	1-216-837-11	METAL CHIP 22K 5% 1/10W (MX)	
		< IC >		R852	1-216-837-11	METAL CHIP 22K 5% 1/10W (MX)	
IC801	8-759-909-71	IC	BA4558F (E2, E51, AR, MX)	R853	1-216-837-11	METAL CHIP 22K 5% 1/10W (MX)	
IC802	8-759-496-41	IC	M65850FP-E1 (MX)	R854	1-216-841-11	METAL CHIP 47K 5% 1/10W (MX)	

HCD-GX255/RG170/RG470

MIC
MOTOR (LD)
MOTOR (TB)
PANEL

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark	
R855	1-216-837-11	METAL CHIP	22K	5%	1/10W				< CONNECTOR >					
					(MX)									
R856	1-216-833-11	METAL CHIP	10K	5%	1/10W		CN601	1-784-741-11	CONNECTOR, FFC 19P					
					(MX)		CN602	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P					
R857	1-216-837-11	METAL CHIP	22K	5%	1/10W				< DIODE >					
					(MX)									
R858	1-216-837-11	METAL CHIP	22K	5%	1/10W		D601	8-719-063-93	LED SLR325VC-N-T32 (STREAM) (RG470)					
					(MX)		D602	8-719-063-93	LED SLR325VC-N-T32 (STREAM)					
R859	1-216-837-11	METAL CHIP	22K	5%	1/10W		D603	8-719-063-93	LED SLR325VC-N-T32 (STREAM) (RG470)					
					(MX)		D604	8-719-063-93	LED SLR325VC-N-T32 (STREAM) (RG470)					
R860	1-216-845-11	METAL CHIP	100K	5%	1/10W		D605	8-719-063-93	LED SLR325VC-N-T32 (STREAM)					
					(MX)									
R861	1-216-817-11	METAL CHIP	470	5%	1/10W		D606	8-719-063-93	LED SLR325VC-N-T32 (STREAM) (RG470)					
					(MX)		D611	6-500-809-01	LED SELU5223C-STP15 (STANDBY)					
R862	1-216-817-11	METAL CHIP	470	5%	1/10W				< FLUORESCENT INDICATOR TUBE >					
					(MX)									
		< VARIABLE RESISTOR >						FL701	1-518-976-21	INDICATOR TUBE, FLUORESCENT				
VR801	1-223-983-11	RES, VAR, CARBON				50K (MIC LEVEL)			< IC >					
						(E2, E51, AR, MX)								
VR851	1-223-983-11	RES, VAR, CARBON				50K (ECHO	IC610	6-600-446-01	IC RPM7240-H18					
						LEVEL) (MX)	IC701	6-708-011-01	IC uPD780232GC-508-8BT-A					

	1-687-133-12	MOTOR (LD) BOARD								< TRANSISTOR >				
		*****						Q601	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (RG470)				
		*****						Q602	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
		*****						Q603	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (RG470)				
		*****						Q604	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (RG470)				
		*****						Q605	8-729-120-28	TRANSISTOR 2SC1623-L5L6				
	1-687-134-12	MOTOR (TB) BOARD						Q606	8-729-120-28	TRANSISTOR 2SC1623-L5L6 (RG470)				
		*****								< RESISTOR >				
		< CONNECTOR >						R601	1-216-821-11	METAL CHIP	1K	5%	1/10W	
		< CONNECTOR >											(RG470)	
CN742	1-784-727-11	CONNECTOR, FFC 5P						R602	1-216-821-11	METAL CHIP	1K	5%	1/10W	
		*****						R603	1-216-821-11	METAL CHIP	1K	5%	1/10W	
	A-1093-854-A	PANEL BOARD, COMPLETE (GX255/RG170)						R604	1-216-821-11	METAL CHIP	1K	5%	1/10W	
	A-1093-856-A	PANEL BOARD, COMPLETE											(RG470)	
		(RG470: AEP, EE, RU, E2, E51, AR)						R605	1-216-821-11	METAL CHIP	1K	5%	1/10W	
	A-1093-857-A	PANEL BOARD, COMPLETE (MX)											(RG470)	
		*****						R606	1-216-821-11	METAL CHIP	1K	5%	1/10W	
	2-348-856-01	FL GUIDE											(RG470)	
		< CAPACITOR >						R607	1-216-821-11	METAL CHIP	1K	5%	1/10W	
C621	1-124-257-00	ELECT	2.2uF	20%	50V		R609	1-216-809-11	METAL CHIP	100	5%	1/10W		
C622	1-124-257-00	ELECT	2.2uF	20%	50V		R611	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C625	1-128-131-11	ELECT	22uF	20%	50V							(RG470)		
C631	1-124-589-11	ELECT	47uF	20%	16V		R612	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C701	1-164-156-11	CERAMIC CHIP	0.1uF		25V							(RG470)		
C702	1-124-589-11	ELECT	47uF	20%	16V		R613	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C703	1-164-156-11	CERAMIC CHIP	0.1uF		25V							(RG470)		
C704	1-164-357-11	CERAMIC CHIP	0.001uF	5%	50V		R614	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C707	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V							(RG470)		
C708	1-162-974-11	CERAMIC CHIP	0.01uF		50V		R615	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C709	1-124-589-11	ELECT	47uF	20%	16V		R616	1-216-821-11	METAL CHIP	1K	5%	1/10W		
C710	1-164-156-11	CERAMIC CHIP	0.1uF		25V							(RG470)		
C711	1-162-974-11	CERAMIC CHIP	0.01uF		50V		R619	1-216-809-11	METAL CHIP	100	5%	1/10W		
C712	1-128-131-11	ELECT	22uF	20%	50V							(RG470)		
							R620	1-216-805-11	METAL CHIP	47	5%	1/10W		
							R621	1-216-837-11	METAL CHIP	22K	5%	1/10W		
							R622	1-216-837-11	METAL CHIP	22K	5%	1/10W		
							R623	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		
							R625	1-216-829-11	METAL CHIP	4.7K	5%	1/10W		

HCD-GX255/RG170/RG470

PANEL **POWER**

Ref. No.	Part No.	Description	Remark
R627	1-216-801-11	METAL CHIP	22 5% 1/10W
R628	1-216-801-11	METAL CHIP	22 5% 1/10W
R631	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470)
R633	1-216-833-11	METAL CHIP	10K 5% 1/10W
R635	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470)
R637	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470)
R639	1-216-833-11	METAL CHIP	10K 5% 1/10W
R641	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470)
R645	1-216-837-11	METAL CHIP	22K 5% 1/10W
R646	1-216-841-11	METAL CHIP	47K 5% 1/10W
R647	1-216-797-11	METAL CHIP	10 5% 1/10W
R648	1-216-797-11	METAL CHIP	10 5% 1/10W
R650	1-216-837-11	METAL CHIP	22K 5% 1/10W
R651	1-216-841-11	METAL CHIP	47K 5% 1/10W
R652	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R660	1-216-837-11	METAL CHIP	22K 5% 1/10W
R661	1-216-841-11	METAL CHIP	47K 5% 1/10W
R662	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R663	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R664	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R665	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R666	1-216-833-11	METAL CHIP	10K 5% 1/10W
R667	1-216-837-11	METAL CHIP	22K 5% 1/10W
R670	1-216-837-11	METAL CHIP	22K 5% 1/10W
R671	1-216-841-11	METAL CHIP	47K 5% 1/10W
R672	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R673	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R680	1-216-837-11	METAL CHIP	22K 5% 1/10W
R681	1-216-841-11	METAL CHIP	47K 5% 1/10W
R682	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R683	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R684	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R685	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R690	1-216-837-11	METAL CHIP	22K 5% 1/10W
R691	1-216-841-11	METAL CHIP	47K 5% 1/10W
R692	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R693	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R694	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R695	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R696	1-216-833-11	METAL CHIP	10K 5% 1/10W
R697	1-216-837-11	METAL CHIP	22K 5% 1/10W (MX)
R698	1-216-841-11	METAL CHIP	47K 5% 1/10W (MX)
R701	1-216-864-11	SHORT CHIP	0
R702	1-216-821-11	METAL CHIP	1K 5% 1/10W
R703	1-216-809-11	METAL CHIP	100 5% 1/10W
R704	1-216-864-11	SHORT CHIP	0
R705	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R706	1-216-821-11	METAL CHIP	1K 5% 1/10W
R707	1-216-821-11	METAL CHIP	1K 5% 1/10W
R708	1-216-821-11	METAL CHIP	1K 5% 1/10W
R709	1-216-821-11	METAL CHIP	1K 5% 1/10W

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S601	1-762-875-21	SWITCH, KEYBOARD (I/⏻)	
S602	1-762-875-21	SWITCH, KEYBOARD (DISPLAY)	
S611	1-762-875-21	SWITCH, KEYBOARD (ILLUMINATION)	
S612	1-762-875-21	SWITCH, KEYBOARD (CD)	
S613	1-762-875-21	SWITCH, KEYBOARD (TUNER BAND)	
S614	1-762-875-21	SWITCH, KEYBOARD (TAPE A/B)	
S615	1-762-875-21	SWITCH, KEYBOARD (AUDIO IN)	
S616	1-762-875-21	SWITCH, KEYBOARD (REC PAUSE/START)	
S617	1-762-875-21	SWITCH, KEYBOARD (CD SYNC)	
S621	1-762-875-21	SWITCH, KEYBOARD (PRESET EQ)	
S622	1-762-875-21	SWITCH, KEYBOARD (GROOVE)	
S631	1-762-875-21	SWITCH, KEYBOARD (P FILE)	
S632	1-762-875-21	SWITCH, KEYBOARD (SURROUND)	
S633	1-762-875-21	SWITCH, KEYBOARD (EFFECT ON/OFF)	
S634	1-762-875-21	SWITCH, KEYBOARD (ENTER)	
S641	1-762-875-21	SWITCH, KEYBOARD (PLAY MODE/TUNING MODE)	
S642	1-762-875-21	SWITCH, KEYBOARD (▲ (CD))	
S643	1-762-875-21	SWITCH, KEYBOARD (DISC SKIP/EX-CHANGE)	
S644	1-762-875-21	SWITCH, KEYBOARD (DISC 3)	
S645	1-762-875-21	SWITCH, KEYBOARD (DISC 2)	
S646	1-762-875-21	SWITCH, KEYBOARD (DISC 1)	
S648	1-762-875-21	SWITCH, KEYBOARD (MULTI PLEX) (MX)	
< VIBRATOR >			
X701	1-795-054-21	VIBRATOR, CERAMIC (4.19MHz)	

A-1094-141-A	POWER BOARD, COMPLETE (GX255)		
A-1094-142-A	POWER BOARD, COMPLETE (RG170: AEP, EE, RU)		
A-1094-143-A	POWER BOARD, COMPLETE (RG170: E2, E3, E51, EA, AR, AUS)		
A-1094-145-A	POWER BOARD, COMPLETE (RG470: AEP, EE, RU)		
A-1094-146-A	POWER BOARD, COMPLETE (RG470: E2, E51, AR, MX)		

7-685-872-09	SCREW +BVTT 3X8 (S)		
< CAPACITOR/JUMPER RESISTOR >			
C402	1-107-726-91	CERAMIC CHIP	0.01uF 10% 16V (RG470: E2, E51, AR, MX)
C403	1-137-749-11	MYLAR	0.1uF 100V
C404	1-137-749-11	MYLAR	0.1uF 100V
C405	1-135-832-11	ELECT	2200uF 20% 50V (GX255)
C405	1-135-928-21	ELECT	2200uF 20% 63V (RG470: AEP, EE, RU)
C405	1-137-839-11	ELECT	2200uF 20% 50V (RG170: E2, E3, E51, EA, AR, AUS)
C405	1-137-841-11	ELECT	2200uF 20% 71V (RG470: E2, E51, AR, MX)
C405	1-137-844-11	ELECT	2200uF 20% 42V (RG170: AEP, EE, RU)
C406	1-135-832-11	ELECT	2200uF 20% 50V (GX255)
C406	1-135-928-21	ELECT	2200uF 20% 63V (RG470: AEP, EE, RU)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C406	1-137-839-11	ELECT	2200uF 20% 50V (RG170: E2, E3, E51, EA, AR, AUS)	C481	1-104-665-11	ELECT	100uF 20% 25V
C406	1-137-841-11	ELECT	2200uF 20% 71V (RG470: E2, E51, AR, MX)	C486	1-126-961-11	ELECT	2.2uF 20% 50V
C406	1-137-844-11	ELECT	2200uF 20% 42V (RG170: AEP, EE, RU)	C488	1-126-965-11	ELECT	22uF 20% 50V (GX255/RG170/RG470: AEP, EE, RU)
C409	1-112-035-11	ELECT	4700uF 20% 50V (RG470: E2, E51, AR, MX)	C489	1-126-967-11	ELECT	47uF 20% 50V (GX255/RG170)
C410	1-112-035-11	ELECT	4700uF 20% 50V (RG470: E2, E51, AR, MX)	C489	1-128-552-51	ELECT	47uF 20% 63V (RG470: AEP, EE, RU)
C411	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (RG170: AEP, EE, RU/RG470)	C490	1-126-968-11	ELECT	100uF 20% 50V (GX255/RG170)
C411	1-162-970-11	CERAMIC CHIP	0.01uF 10% 25V (GX255/RG170: E2, E3, E51, EA, AR, AUS)	C490	1-128-576-11	ELECT	100uF 20% 63V (RG470: AEP, EE, RU)
C413	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	C491	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (AEP, EE, RU)
C414	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	C493	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V (RG170: AEP, EE, RU)
C441	1-126-964-11	ELECT	10uF 20% 50V	C493	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V (RG470: AEP, EE, RU)
C442	1-126-964-11	ELECT	10uF 20% 50V	C494	1-162-966-11	CERAMIC CHIP	0.0022uF 10% 50V (RG470: AEP, EE, RU)
C443	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V	C494	1-216-864-11	SHORT CHIP	0 (RG170: AEP, EE, RU)
C444	1-162-964-11	CERAMIC CHIP	0.001uF 10% 50V			< CONNECTOR >	
C445	1-162-927-11	CERAMIC CHIP	100PF 5% 50V	CN441	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
C446	1-162-927-11	CERAMIC CHIP	100PF 5% 50V			< DIODE >	
C447	1-126-965-11	ELECT	22uF 20% 50V (GX255/RG170/RG470: AEP, EE, RU)	D401	6-500-360-01	DIODE D10XB20 (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)	
C447	1-126-967-11	ELECT	47uF 20% 50V (RG470: E2, E51, AR, MX)	D401	8-719-028-23	DIODE D3SBA20-4101 (RG170: AEP, EE, RU)	
C448	1-126-965-11	ELECT	22uF 20% 50V (GX255/RG170/RG470: AEP, EE, RU)	D402	6-500-360-01	DIODE D10XB20 (RG470: E2, E51, AR, MX)	
C448	1-126-967-11	ELECT	47uF 20% 50V (RG470: E2, E51, AR, MX)	D441	8-719-000-07	DIODE MC2836	
C451	1-136-165-00	FILM	0.1uF 5% 50V (GX255/RG170/RG470: AEP, EE, RU)	D443	8-719-988-61	DIODE 1SS355TE-17	
C451	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	D444	8-719-988-61	DIODE 1SS355TE-17 (RG470: E2, E51, AR, MX)	
C452	1-136-165-00	FILM	0.1uF 5% 50V (GX255/RG170/RG470: AEP, EE, RU)	D445	8-719-083-52	DIODE UDZSTE-1716B (RG470: E2, E51, AR, MX)	
C452	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	D446	8-719-083-52	DIODE UDZSTE-1716B (RG470: E2, E51, AR, MX)	
C453	1-136-165-00	FILM	0.1uF 5% 50V (GX255/RG170/RG470: AEP, EE, RU)	D481	8-719-988-61	DIODE 1SS355TE-17	
C453	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	D483	8-719-988-61	DIODE 1SS355TE-17 (GX255/RG170/RG470: AEP, EE, RU)	
C454	1-136-165-00	FILM	0.1uF 5% 50V (GX255/RG170/RG470: AEP, EE, RU)			< EARTH TERMINAL >	
C454	1-130-495-00	MYLAR	0.1uF 5% 50V (RG470: E2, E51, AR, MX)	* EP401	1-537-738-21	TERMINAL, EARTH	
C459	1-102-074-00	CERAMIC	0.001uF 10% 50V (RG170: AEP, EE, RU)	* EP402	1-537-738-21	TERMINAL, EARTH (RG470: E2, E51, AR, MX)	
C459	1-104-987-11	MYLAR	0.001uF 5% 200V (RG470: AEP, EE, RU)			< IC >	
C460	1-102-074-00	CERAMIC	0.001uF 10% 50V (RG170: AEP, EE, RU)	IC441	6-600-169-01	IC STK412-240 (RG470: E2, E51, AR, MX)	
C460	1-104-987-11	MYLAR	0.001uF 5% 200V (RG470: AEP, EE, RU)	IC441	6-600-221-01	IC STK403-130 (RG470: AEP, EE, RU)	
C461	1-128-562-11	ELECT	47uF 20% 100V (RG470: E2, E51, AR, MX)	IC441	6-704-107-01	IC STK403-100 (RG170: E2, E3, E51, EA, AR, AUS)	
C462	1-128-562-11	ELECT	47uF 20% 100V (RG470: E2, E51, AR, MX)	IC441	6-705-845-01	IC STK403-090 (GX255)	
C463	1-104-655-91	ELECT	470uF 20% 6.3V (RG470: E2, E51, AR, MX)	IC441	6-705-854-01	IC STK433-030 (RG170: AEP, EE, RU)	
						< JACK >	
				JK441	1-694-884-11	TERMINAL BOARD (4P) (SPEAKER, IMPEDANCE USE 6-16Ω)	

HCD-GX255/RG170/RG470

POWER

Ref. No.	Part No.	Description	Remark
< JUMPER RESISTOR >			
JR441	1-216-864-11	SHORT CHIP	0
JR442	1-216-864-11	SHORT CHIP	0
< COIL >			
L441	1-422-009-13	COIL, AIR-CORE	
L442	1-422-009-13	COIL, AIR-CORE	
< TRANSISTOR >			
Q441	6-551-268-01	TRANSISTOR	2SC5625
Q442	6-551-268-01	TRANSISTOR	2SC5625
Q481	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q482	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q483	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q484	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q485	8-729-600-22	TRANSISTOR	2SA1235-F
Q486	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q487	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q488	8-729-120-28	TRANSISTOR	2SC1623-L5L6
Q489	6-551-268-01	TRANSISTOR	2SC5625 (RG470)
Q489	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (GX255/RG170)
Q490	8-729-120-28	TRANSISTOR	2SC1623-L5L6 (RG470: E2, E51, AR, MX)
Q491	6-551-270-01	TRANSISTOR	2SA2026 (RG470: E2, E51, AR, MX)
< RESISTOR >			
R401	1-216-845-11	METAL CHIP	100K 5% 1/10W
R402	1-216-845-11	METAL CHIP	100K 5% 1/10W
R403	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R404	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R405	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R406	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R407	1-216-809-11	METAL CHIP	100 5% 1/10W
R409	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R410	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R411	1-216-797-11	METAL CHIP	10 5% 1/10W
R412	1-216-797-11	METAL CHIP	10 5% 1/10W
R413	1-216-797-11	METAL CHIP	10 5% 1/10W
R414	1-216-797-11	METAL CHIP	10 5% 1/10W
R415	1-216-797-11	METAL CHIP	10 5% 1/10W
R416	1-216-797-11	METAL CHIP	10 5% 1/10W
R417	1-216-809-11	METAL CHIP	100 5% 1/10W
R418	1-216-813-11	METAL CHIP	220 5% 1/10W
R419	1-216-809-11	METAL CHIP	100 5% 1/10W
R420	1-216-797-11	METAL CHIP	10 5% 1/10W
R421	1-216-797-11	METAL CHIP	10 5% 1/10W
R422	1-216-797-11	METAL CHIP	10 5% 1/10W
R423	1-216-797-11	METAL CHIP	10 5% 1/10W
R424	1-216-797-11	METAL CHIP	10 5% 1/10W
R425	1-216-797-11	METAL CHIP	10 5% 1/10W
R436	1-216-837-11	METAL CHIP	22K 5% 1/10W

Ref. No.	Part No.	Description	Remark
(RG470: E2, E51, AR, MX)			
R437	1-216-833-11	METAL CHIP	10K 5% 1/10W
R439	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470: E2, E51, AR, MX)
R440	1-216-837-11	METAL CHIP	22K 5% 1/10W
R441	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R442	1-216-825-11	METAL CHIP	2.2K 5% 1/10W
R443	1-216-841-11	METAL CHIP	47K 5% 1/10W
R444	1-216-841-11	METAL CHIP	47K 5% 1/10W
R445	1-216-821-11	METAL CHIP	1K 5% 1/10W
R446	1-216-821-11	METAL CHIP	1K 5% 1/10W
R447	1-216-841-11	METAL CHIP	47K 5% 1/10W
R448	1-216-841-11	METAL CHIP	47K 5% 1/10W
R449	1-212-974-00	FUSIBLE	47 5% 1/2W (GX255/RG170/RG470: AEP, EE, RU)
△R449	1-217-156-00	METAL	0.22 10% 5W F (RG470: E2, E51, AR, MX)
△R450	1-217-156-00	METAL	0.22 10% 5W F (RG470: E2, E51, AR, MX)
△R451	1-217-151-00	METAL	0.22 10% 2W F (GX255/RG170)
△R451	1-217-156-00	METAL	0.22 10% 5W F (RG470: AEP, EE, RU)
△R452	1-217-151-00	METAL	0.22 10% 2W F (GX255/RG170)
△R452	1-217-156-00	METAL	0.22 10% 5W F (RG470: AEP, EE, RU)
R453	1-216-797-11	METAL CHIP	10 5% 1/10W
R454	1-216-797-11	METAL CHIP	10 5% 1/10W
R455	1-216-821-11	METAL CHIP	1K 5% 1/10W
R456	1-216-821-11	METAL CHIP	1K 5% 1/10W
R457	1-216-837-11	METAL CHIP	22K 5% 1/10W
R458	1-216-837-11	METAL CHIP	22K 5% 1/10W
R459	1-216-841-11	METAL CHIP	47K 5% 1/10W (GX255/RG170/RG470: AEP, EE, RU)
R459	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R460	1-216-841-11	METAL CHIP	47K 5% 1/10W (GX255/RG170/RG470: AEP, EE, RU)
R460	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R461	1-216-797-11	METAL CHIP	10 5% 1/10W
R462	1-216-797-11	METAL CHIP	10 5% 1/10W
R463	1-216-841-11	METAL CHIP	47K 5% 1/10W (RG470: E2, E51, AR, MX)
R464	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R465	1-216-841-11	METAL CHIP	47K 5% 1/10W
R466	1-216-845-11	METAL CHIP	100K 5% 1/10W
△R467	1-215-871-11	METAL OXIDE	2.2K 5% 1W F (RG470: E2, E51, AR, MX)
△R468	1-215-871-11	METAL OXIDE	2.2K 5% 1W F (RG470: E2, E51, AR, MX)
R468	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (RG170: AEP, EE, RU)
R469	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (RG170: AEP, EE, RU)
R469	1-216-841-11	METAL CHIP	47K 5% 1/10W (RG470: E2, E51, AR, MX)
R470	1-216-841-11	METAL CHIP	47K 5% 1/10W (RG470: E2, E51, AR, MX)

Ref. No.	Part No.	Description	Remark
R471	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R472	1-216-845-11	METAL CHIP	100K 5% 1/10W (RG470: E2, E51, AR, MX)
R473	1-216-841-11	METAL CHIP	47K 5% 1/10W (RG470: E2, E51, AR, MX)
R474	1-216-825-11	METAL CHIP	2.2K 5% 1/10W (RG470: E2, E51, AR, MX)
R475	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470: E2, E51, AR, MX)
R476	1-216-837-11	METAL CHIP	22K 5% 1/10W (RG470: E2, E51, AR, MX)
△R477	1-212-881-11	FUSIBLE	100 5% 1/4W F (RG470: E2, E51, AR, MX)
R478	1-216-837-11	METAL CHIP	22K 5% 1/10W (RG470: E2, E51, AR, MX)
R479	1-216-833-11	METAL CHIP	10K 5% 1/10W (RG470: E2, E51, AR, MX)
R480	1-216-845-11	METAL CHIP	100K 5% 1/10W
R481	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R482	1-216-833-11	METAL CHIP	10K 5% 1/10W
R483	1-216-801-11	METAL CHIP	22 5% 1/10W
R484	1-216-845-11	METAL CHIP	100K 5% 1/10W
R485	1-216-845-11	METAL CHIP	100K 5% 1/10W
R486	1-216-845-11	METAL CHIP	100K 5% 1/10W
R487	1-216-841-11	METAL CHIP	47K 5% 1/10W
R488	1-216-837-11	METAL CHIP	22K 5% 1/10W
R490	1-216-829-11	METAL CHIP	4.7K 5% 1/10W
R491	1-216-841-11	METAL CHIP	47K 5% 1/10W
R492	1-216-821-11	METAL CHIP	1K 5% 1/10W (GX255/RG170/RG470: AEP, EE, RU)
R492	1-216-841-11	METAL CHIP	47K 5% 1/10W (RG470: E2, E51, AR, MX)
R493	1-216-841-11	METAL CHIP	47K 5% 1/10W (GX255/RG170/RG470: AEP, EE, RU)
△R495	1-202-972-61	FUSIBLE	1 5% 1/4W F
△R496	1-212-881-11	FUSIBLE	100 5% 1/4W F
R497	1-216-845-11	METAL CHIP	100K 5% 1/10W
R498	1-216-821-11	METAL CHIP	1K 5% 1/10W
R499	1-216-821-11	METAL CHIP	1K 5% 1/10W
< RELAY >			
RY441	1-755-372-11	RELAY (RG470: E2, E51, AR, MX)	
RY441	1-755-373-11	RELAY (GX255/RG170/RG470: AEP, EE, RU)	
< THERMISTOR >			
TH441	1-807-796-11	THERMISTOR (GX255/RG170: E2, E3, E51, EA, AR, AUS/RG470)	
TH443	1-807-796-11	THERMISTOR (RG170: AEP, EE, RU)	

	1-687-132-12	SENSOR BOARD *****	
< CONNECTOR >			
CN731	1-785-329-21	PIN, CONNECTOR (LIGHT ANGLE) 3P	
< IC >			
IC731	6-600-022-01	IC RPI-576	

Ref. No.	Part No.	Description	Remark
	A-1093-877-A	SUB TRANS BOARD, COMPLETE (RG470: AEP, EE, RU)	
	A-1094-116-A	SUB TRANS BOARD, COMPLETE (GX255)	
	A-1094-117-A	SUB TRANS BOARD, COMPLETE (RG170: AEP, EE, RU)	
	A-1094-118-A	SUB TRANS BOARD, COMPLETE (RG170: E2, E3, E51)	
	A-1094-119-A	SUB TRANS BOARD, COMPLETE (EA)	
	A-1094-120-A	SUB TRANS BOARD, COMPLETE (AUS)	
	A-1094-121-A	SUB TRANS BOARD, COMPLETE (RG170: AR)	
	A-1094-123-A	SUB TRANS BOARD, COMPLETE (RG470: E2, E51)	
	A-1094-124-A	SUB TRANS BOARD, COMPLETE (MX)	
	A-1094-125-A	SUB TRANS BOARD, COMPLETE (RG470: AR)	

< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P	
CN903	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P (GX255/RG170: AEP, EE, RU, AR, AUS/RG470: AEP, EE, RU, MX)	
CN903	1-568-106-11	PIN, CONNECTOR (3.96mm PITCH) 4P (RG170: E2, E3, E51, EA/RG470: E2, E51, AR)	
< DIODE >			
D901	8-719-988-61	DIODE 1SS355TE-17	
D902	6-500-522-21	DIODE 10EDB40-TB3	
D903	6-500-522-21	DIODE 10EDB40-TB3	
D904	6-500-522-21	DIODE 10EDB40-TB3	
D905	6-500-522-21	DIODE 10EDB40-TB3	
< TRANSFORMER >			
△PT902	1-443-614-11	TRANSFORMER, POWER (GX255)	
△PT902	1-443-615-11	TRANSFORMER, POWER (AEP, EE, RU)	
△PT902	1-443-616-11	TRANSFORMER, POWER (E2, E3, E51, EA, AR, AUS)	
△PT902	1-443-617-11	TRANSFORMER, POWER (MX)	
< RESISTOR >			
R910	1-216-809-11	METAL CHIP 100 5% 1/10W	
R911	1-216-813-11	METAL CHIP 220 5% 1/10W	
R912	1-216-805-11	METAL CHIP 47 5% 1/10W	
R913	1-216-805-11	METAL CHIP 47 5% 1/10W	
< RELAY >			
△RY901	1-755-276-11	RELAY, POWER	
< SWITCH >			
△S901	1-786-055-21	SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (E2, E3, E51, EA)	

	1-687-669-12	SW BOARD *****	
< SWITCH >			
S751	1-786-514-11	SWITCH, LEVER (SLIDE) (OPEN/CLOSE DETECT)	

HCD-GX255/RG170/RG470

TRANSFORMER

VIDEO OUT

VOL

Ref. No.	Part No.	Description	Remark
	A-1094-082-A	TRANSFORMER BOARD, COMPLETE (GX255)	
	A-1094-083-A	TRANSFORMER BOARD, COMPLETE (RG170: AEP, EE, RU)	
	A-1094-084-A	TRANSFORMER BOARD, COMPLETE (RG170: E2, E3, E51)	
	A-1094-085-A	TRANSFORMER BOARD, COMPLETE (EA)	
	A-1094-086-A	TRANSFORMER BOARD, COMPLETE (AUS)	
	A-1094-087-A	TRANSFORMER BOARD, COMPLETE (RG170: AR)	
	A-1094-089-A	TRANSFORMER BOARD, COMPLETE (RG470: AEP, EE, RU)	
	A-1094-090-A	TRANSFORMER BOARD, COMPLETE (RG470: E2, E51)	
	A-1094-091-A	TRANSFORMER BOARD, COMPLETE (MX)	
	A-1094-092-A	TRANSFORMER BOARD, COMPLETE (RG470: AR)	

	1-533-233-11	FUSE HOLDER	
< CAPACITOR >			
C907	1-136-165-00	FILM 0.1uF 5% 50V (GX255/RG170/RG470: AEP, EE, RU)	
C907	1-130-495-00	MYLAR 0.1uF 5% 50V (RG470: E2, E51, AR, MX)	
C908	1-128-553-11	ELECT 220uF 20% 63V	
C909	1-126-964-11	ELECT 10uF 20% 50V	
C910	1-126-968-11	ELECT 100uF 20% 50V	
C911	1-126-942-61	ELECT 1000uF 20% 25V	
< CONNECTOR >			
CN905	1-564-506-11	PLUG, CONNECTOR 3P (GX255/RG170/RG470: AEP, EE, RU)	
* CN905	1-564-508-11	PLUG, CONNECTOR 5P (RG470: E2, E51, AR, MX)	
* CN906	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
* CN907	1-764-333-11	PLUG, CONNECTOR 10P	
< DIODE >			
D906	8-719-083-70	DIODE UDZSTE-1727B	
D908	6-500-522-21	DIODE 10EDB40-TB3	
< TRANSISTOR >			
Q902	8-729-048-66	TRANSISTOR 2SB1238-PQR-TV2	
< RESISTOR >			
R903	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R904	1-216-821-11	METAL CHIP 1K 5% 1/10W	
△R908	1-202-972-61	FUSIBLE 1 5% 1/4W F	

	A-1094-122-A	VIDEO OUT BOARD, COMPLETE (MX)	

< CAPACITOR >			
C803	1-100-566-91	CERAMIC CHIP 0.1uF 10% 25V	
< JACK >			
J803	1-774-227-11	JACK, PIN 1P (VIDEO OUT)	

Ref. No.	Part No.	Description	Remark
	A-1093-878-A	VOL BOARD, COMPLETE *****	
< RESISTOR >			
R674	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R675	1-216-829-11	METAL CHIP 4.7K 5% 1/10W	
R676	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R677	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R678	1-216-841-11	METAL CHIP 47K 5% 1/10W	
R686	1-216-833-11	METAL CHIP 10K 5% 1/10W	
R687	1-216-837-11	METAL CHIP 22K 5% 1/10W	
R688	1-216-841-11	METAL CHIP 47K 5% 1/10W	
< SWITCH >			
S623	1-762-875-21	SWITCH, KEYBOARD (ALBUM -)	
S624	1-762-875-21	SWITCH, KEYBOARD (ALBUM +)	
S625	1-762-875-21	SWITCH, KEYBOARD (◀◀)	
S626	1-762-875-21	SWITCH, KEYBOARD (▶▶)	
S635	1-762-875-21	SWITCH, KEYBOARD (■)	
S636	1-762-875-21	SWITCH, KEYBOARD (▣)	
S637	1-762-875-21	SWITCH, KEYBOARD (▶)	
S638	1-762-875-21	SWITCH, KEYBOARD (EQ BAND)	
S660	1-478-473-11	ENCODER, ROTARY (MASTER VOLUME)	
SW601	1-786-289-31	SWITCH, DETECTION (◀◀ - EQ + ▶▶ , - TUNING +)	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS *****		S101	1-771-853-11	SWITCH, DETECTION (LIMIT)	

54	1-828-975-11	WIRE (FLAT TYPE) (13 CORE) (MX)				ACCESSORIES	
59	1-828-963-11	WIRE (FLAT TYPE) (11 CORE) (GX255/RG170: RU, E2, E3, E51, EA, AR, AUS/ RG470: RU, E2, E51, AR, MX)				*****	
59	1-828-980-11	WIRE (FLAT TYPE) (15 CORE) (AEP, EE)		△	1-770-019-51	ADAPTOR, CONVERSION PLUG (EA)	
60	1-693-615-11	TUNER (FM/AM) (E2, E3, E51, EA, AR, AUS, MX)		△	1-573-856-12	ADAPTOR, CONVERSION 2P (E3)	
60	1-693-616-11	TUNER (FM/AM) (AEP, EE)		△	1-569-007-11	ADAPTOR, CONVERSION 2P (E51)	
60	1-693-617-11	TUNER (FM/AM) (RU)					
60	1-693-631-31	TUNER (FM/AM) (GX255)					
113	1-829-003-11	WIRE (FLAT TYPE) (19 CORE)					
116	1-828-973-11	WIRE (FLAT TYPE) (13 CORE)					
118	1-796-485-51	DECK, MECHANICAL (CWM43FF13)					
203	1-775-251-11	WIRE (FLAT TYPE) (27 CORE) (EXCEPT MX)					
203	1-775-285-11	WIRE (FLAT TYPE) (31 CORE) (MX)					
204	1-828-970-11	WIRE (FLAT TYPE) (13 CORE)					
△ 210	1-769-744-81	CORD, POWER (EA)					
△ 210	1-775-790-71	CORD, POWER (AUS)					
△ 210	1-827-226-31	CORD, POWER (E2, E3, MX)					
△ 210	1-829-387-11	CORD, POWER (AR)					
△ 210	1-830-188-11	CORD, POWER (AEP, EE, RU, E51)					
△ 210	1-830-190-11	CORD, POWER (GX255)					
213	1-500-868-11	CORE, FERRITE (MX)					
502	1-776-182-11	WIRE (FLAT TYPE) (5 CORE)					
576	1-827-992-11	WIRE (FLAT TYPE) (16 CORE)					
△ 579	8-820-244-01	DEVICE, OPTICAL KSM-215DCP/C2NP					
580	1-471-035-11	MAGNET ASSY					
△ F904	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V) (RG170: AEP, EE, RU)					
△ F904	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3A/250V) (EXCEPT AEP, EE, RU)					
△ F904	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V) (RG470: AEP, EE, RU)					
△ F905	1-533-471-12	FUSE, GLASS TUBE (DIA. 5) (T4A/250V) (RG170: AEP, EE, RU)					
△ F905	1-533-473-12	FUSE, GLASS TUBE (DIA. 5) (T6.3A/250V) (EXCEPT AEP, EE, RU)					
△ F905	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V) (RG470: AEP, EE, RU)					
△ F906	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)					
△ F907	1-533-470-12	FUSE, GLASS TUBE (DIA. 5) (T3.15A/250V)					
△ F908	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V) (RG470: E2, E51, AR, MX)					
△ F909	1-576-655-12	FUSE, GLASS TUBE (DIA. 5) (T8A/250V) (RG470: E2, E51, AR, MX)					
M001	1-787-319-11	FAN, DC (RG470)					
M741	A-4723-963-A	MOTOR ASSY, TABLE					
M751	A-4736-655-A	MOTOR ASSY, LOADING					
△ PT901	1-443-602-11	TRANSFORMER, POWER (GX255)					
△ PT901	1-443-604-11	TRANSFORMER, POWER (RG170: AEP, EE, RU)					
△ PT901	1-443-606-11	TRANSFORMER, POWER (RG470: AEP, EE, RU)					
△ PT901	1-443-607-11	TRANSFORMER, POWER (RG170: E2, E3, E51, AR, AUS)					
△ PT901	1-443-609-11	TRANSFORMER, POWER (RG470: E2, E51, AR)					
△ PT901	1-443-611-11	TRANSFORMER, POWER (MX)					
△ PT901	1-443-612-11	TRANSFORMER, POWER (EA)					
S711	1-477-680-12	ENCODER, ROTARY (DISC TRAY ADDRESS-DETECT)					

