# HCD-GX30/RG22/RG33

# SERVICE MANUAL

**Ver 1.2 2003. 11**

*Canadian Model*
*HCD-GX30*
*AEP Model*
*UK Model*
*E Model*
*HCD-RG22/RG33*
*Australian Model*
*HCD-RG22*

- HCD-GX30/RG22/RG33 are the tuner, deck, CD and amplifier section in MHC-GX30/RG22/RG33.

| | | |
|---|---|---|
| CD Section | Model Name Using Similar Mechanism | HCD-DX10 |
| | CD Mechanism Type | CDM58F-K6 |
| | Optical Pick-up Name | KSM-213D |
| Tape deck Section | Model Name Using Similar Mechanism | NEW |
| | Tape Transport Mechanism Type | CWL43FF48 |

## SPECIFICATIONS

### Amplifier section

**North American models:**
**HCD-GX30**
Continuous RMS power output (reference)
75 + 75 watts (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07%
(6 ohms at 1 kHz, 40 W)

**European models:**
**HCD-RG33**
DIN power output (rated) 60 + 60 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
75 + 75 watts (6 ohms at 1 kHz, 10% THD)
Music power output (reference)
150 + 150 watts (6 ohms at 1 kHz, 10% THD)
**HCD-RG22**
DIN power output (rated) 50 + 50 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
60 + 60 watts (6 ohms at 1 kHz, 10% THD)
Music power output (reference)
120 + 120 watts (6 ohms at 1 kHz, 10% THD)

**Other models:**
**HCD-RG33**
The following measured at AC 120, 220, 240 V, 50/60 Hz
DIN power output (rated) 60 + 60 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
75 + 75 watts (6 ohms at 1 kHz, 10% THD)

**HCD-RG22**
The following measured at AC 120, 220, 240 V 50/60 Hz
DIN power output (rated) 50 + 50 watts
(6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference)
60 + 60 watts (6 ohms at 1 kHz, 10% THD)

Inputs
AUDIO INPUT (phono jack):
voltage 450 mV, impedance 47 kilohms
Outputs
PHONES (stereo mini jack):
accepts headphones of 8 ohms or more
Front speaker: accepts impedance of 6 to 16 ohms
Sub woofer speaker (MHC-GX40 only):
accepts impedance of 12 to 16 ohms

### CD player section

System: Compact disc and digital audio system
Laser: Semiconductor laser (λ=780 nm)
Emission duration: continuous
Frequency response: 2 Hz – 20 kHz (±0.5 dB)
Wavelength: 780 – 790 nm
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB

### Tape deck section

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

### Tuner section

FM stereo, FM/AM superheterodyne tuner

### FM tuner section

Tuning range: 87.5 – 108.0 MHz
Antenna: FM lead antenna
Antenna terminals: 75 ohms unbalanced
Intermediate frequency: 10.7 MHz

— Continued on next page —

## MINI HI-FI COMPONENT SYSTEM

**9-874-001-03**
2003K16-1
© 2003.11
**Sony Corporation**
**Home Audio Company**
**Published by Sony Engineering Corporation**

SONY®

AM tuner section

| | |
|---|---|
| Tuning range | |
| Pan-American models: | 530 – 1,710 kHz (with the interval set at 10 kHz)<br>531 – 1,710 kHz (with the interval set at 9 kHz) |
| European and Middle Eastern models: | 531 – 1,602 kHz (with the interval set at 9 kHz) |
| Other models: | 530 – 1,710 kHz (with the interval set at 10 kHz)<br>531 – 1,602 kHz (with the interval set at 9 kHz) |
| Antenna | AM loop antenna |
| Antenna terminals | External antenna terminal |
| Intermediate frequency | 450 kHz |

General

| | |
|---|---|
| Power requirements | |
| North American models: | 120 V AC, 60 Hz |
| European models: | 230 V AC, 50/60 Hz |
| Australian model: | 230 – 240 V AC, 50/60 Hz |
| Argentine models: | 220 V AC, 50/60 Hz |
| Mexican models: | 120 V AC, 60 Hz |
| Other models: | 120 V, 220 V or 230 – 240 V AC, 50/60 Hz<br>Adjustable with voltage selector |
| Power consumption | |
| Canadian models: | |
| MHC-GX30: | 125 watts |
| European models: | |
| MHC-RG33: | 125 watts<br>0.5 watts (at the Power Saving Mode) |
| MHC-RG22: | 105 watts<br>0.5 watts (at the Power Saving Mode) |
| Other models: | |
| MHC-RG33: | 125 watts |
| MHC-RG22: | 105 watts |
| Dimensions (w/h/d) | Approx. 280 × 325 × 412 mm |
| Mass | |
| North American models: | |
| HCD-GX30: | Approx. 9.0 kg |
| European models: | |
| HCD-RG33: | Approx. 9.0 kg |
| HCD-RG22: | Approx. 8.5 kg |
| Other models: | |
| HCD-RG33: | Approx. 9.5 kg |
| HCD-RG22: | Approx. 9.0 kg |
| Supplied accessories: | Remote Commander (1)<br>Batteries (2)<br>AM loop antenna (1)<br>FM lead antenna (1)<br>Front speaker pads (8) |

Design and specifications are subject to change without notice.

# SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer: Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

## LEAKAGE

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

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.

2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.

3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

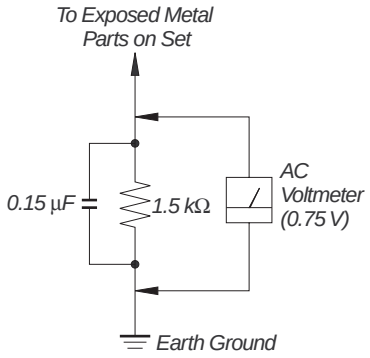


*Fig. A. Using an AC voltmeter to check AC leakage.*

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

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

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

**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 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.

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**SAFETY-RELATED COMPONENT WARNING!!**

**COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ 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 IDENTIFÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈSES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPÉMENTS PUBLIÉS PAR SONY.**

# SECTION 1
# GENERAL

This section is extracted from instruction manual.

## Main unit

ALPHABETICAL ORDER

A – E

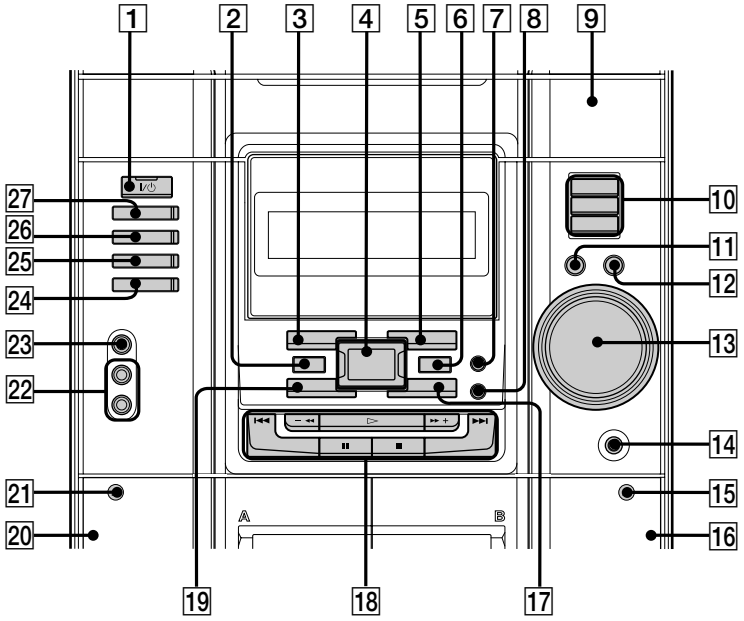
AUDIO jacks 22 (24)
CD 27 (11, 12, 18)
CD SYNC 7 (18)
Deck A 20 (16, 17)
Deck B 16 (16 – 19)
DISC 1 – 3 10 (11, 12)
DISC SKIP/EX-CHANGE 11 (10, 11)
Disc tray 9 (10)
DISPLAY 2 (16, 21)
EFFECT ON/OFF 17 (20)

G – Z

GAME 24 (22, 24)
GAME EQ 19 (20, 24)
GAME MIXING 4 (22)
GROOVE 6 (20)
MOVIE EQ 5 (20)
MUSIC EQ 9 (20)
PHONES jack 14
REC PAUSE/START 8 (18)
TAPE A/B 25 (16, 18)
TUNER/BAND 26 (13 – 15, 18)
VIDEO jack 23 (24)
VOLUME control 13

BUTTON DESCRIPTIONS

I/⏻ (power) 1
⏏ OPEN/CLOSE 12
⏏ (deck B) 15
▶▶ 18
I◀◀ 18
▶▶I 18
II 18
▶ 18
■ 18
◀◀ 18
⏏ (deck A) 21



## Remote Control

ALPHABETICAL ORDER

A – G

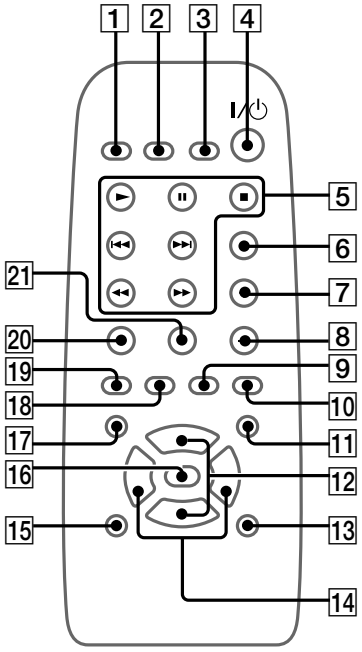
CD 19 (11, 12, 18)
CLEAR 20 (12)
CLOCK/TIMER SELECT 2 (19, 23)
CLOCK/TIMER SET 9 (10, 19, 23)
DISPLAY 6 (16, 21)
D.SKIP 7 (11)
ENTER 15 (10, 12 – 14, 19, 23)
EQ +/– 14 (20)
GAME 10 (22, 24)
GROOVE 13 (20)

O – Z

ON/OFF 16 (20)
PLAY MODE 21 (11, 12, 17)
PRESET +/– 5 (13 – 15)
REPEAT 8 (11)
SLEEP 1 (22)
STEREO/MONO 8 (15)
SURROUND 11 (20)
TAPE A/B 9 (16, 18)
TUNER MEMORY 17 (13, 14)
TUNER/BAND 18 (13 – 15, 18)
TUNING +/– 5 (13 – 15)
VOL +/– 12

BUTTON DESCRIPTIONS

I/⏻ (power) 4
▶▶ 5
I◀◀ 5
▶▶I 5
⏸ 5
▶ 5
◀◀ 5
■ 5




## Setting the clock

1 **Press I/⏻ to turn on the system.**

2 **Press CLOCK/TIMER SET on the remote.**

3 **Press I◀◀ or ▶▶I on the remote repeatedly to set the hour.**

4 **Press ENTER on the remote.**
The minute indication flashes.

5 **Press I◀◀ or ▶▶I on the remote repeatedly to set the minute.**

6 **Press ENTER on the remote.**
The clock starts working.

To adjust the clock

1 Press CLOCK/TIMER SET on the remote.

2 Press I◀◀ or ▶▶I on the remote to select "CLOCK SET", then press ENTER on the remote.

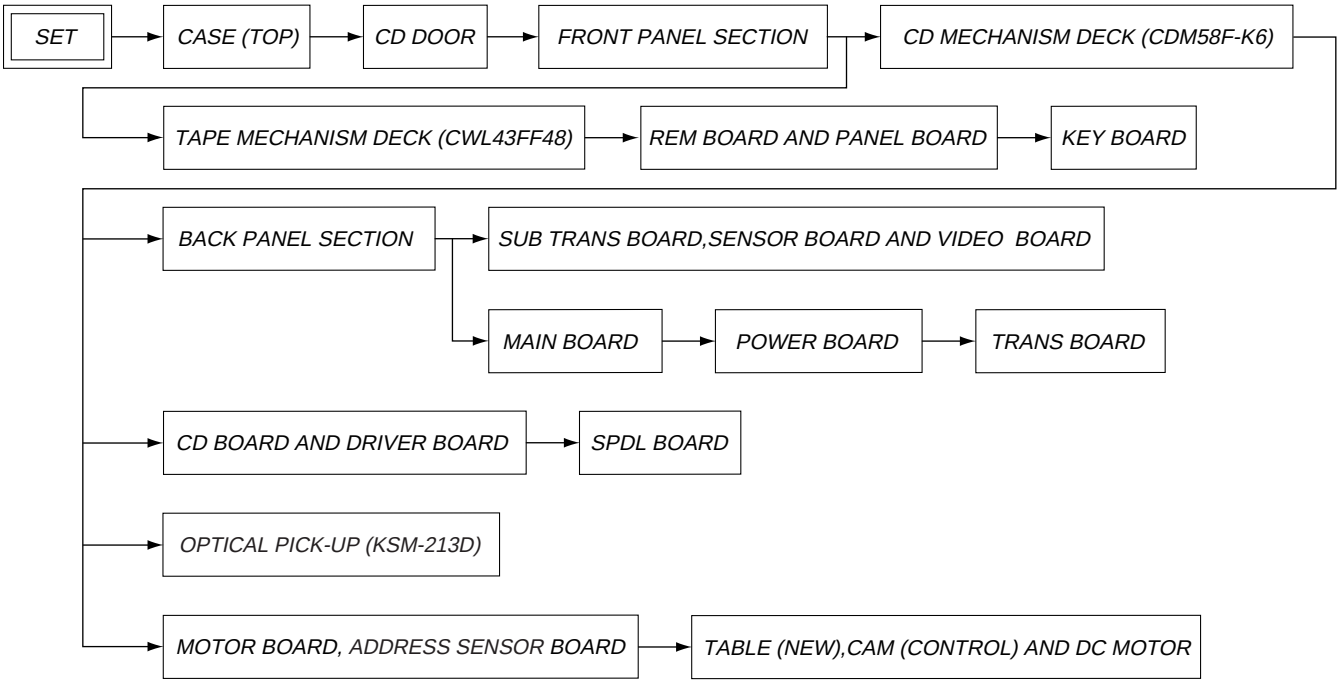
3 Do the same procedures as step 3 to 6 above.

Note

The clock settings are canceled when you disconnect the power cord or if a power failure occurs.

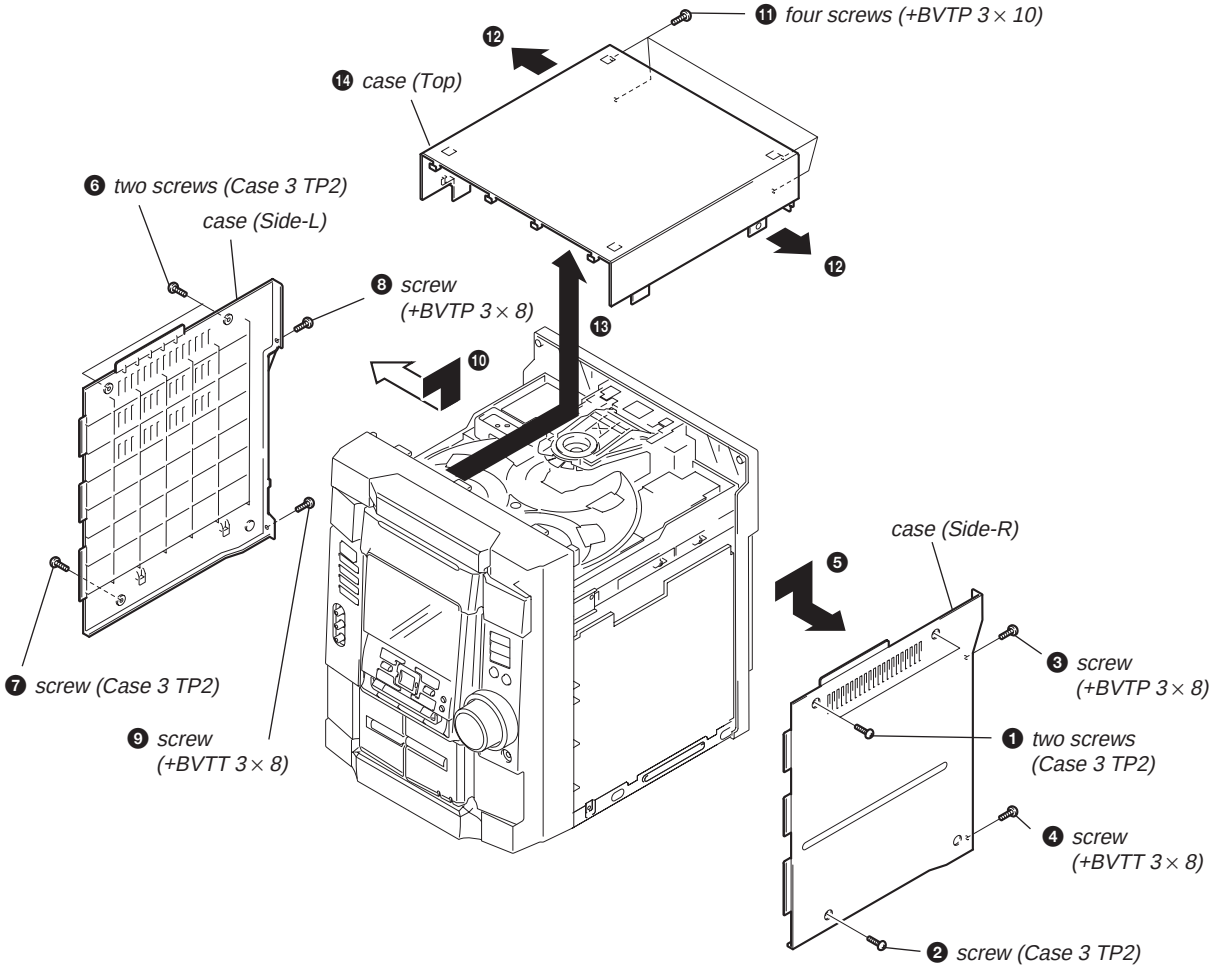
# SECTION 2
# DISASSEMBLY

**Note :** Disassemble the unit in the order as shown below.

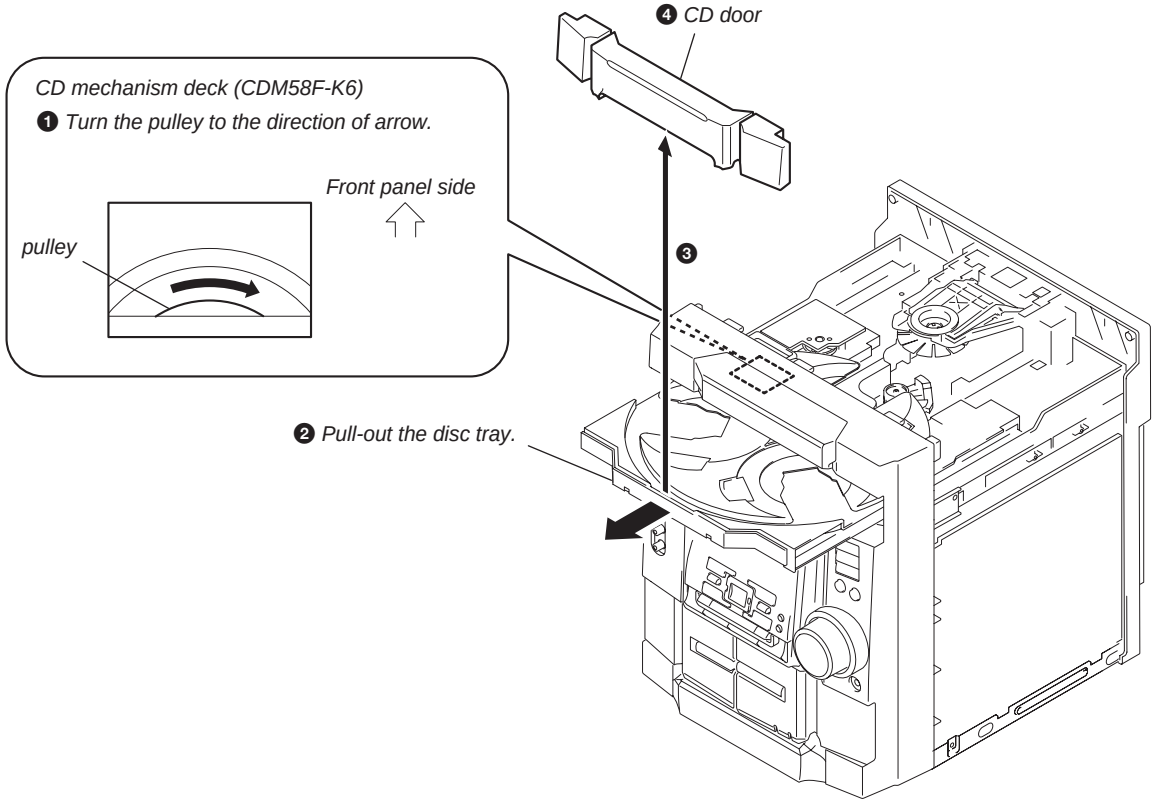



**Note :** Follow the disassembly procedure in the numerical order given.

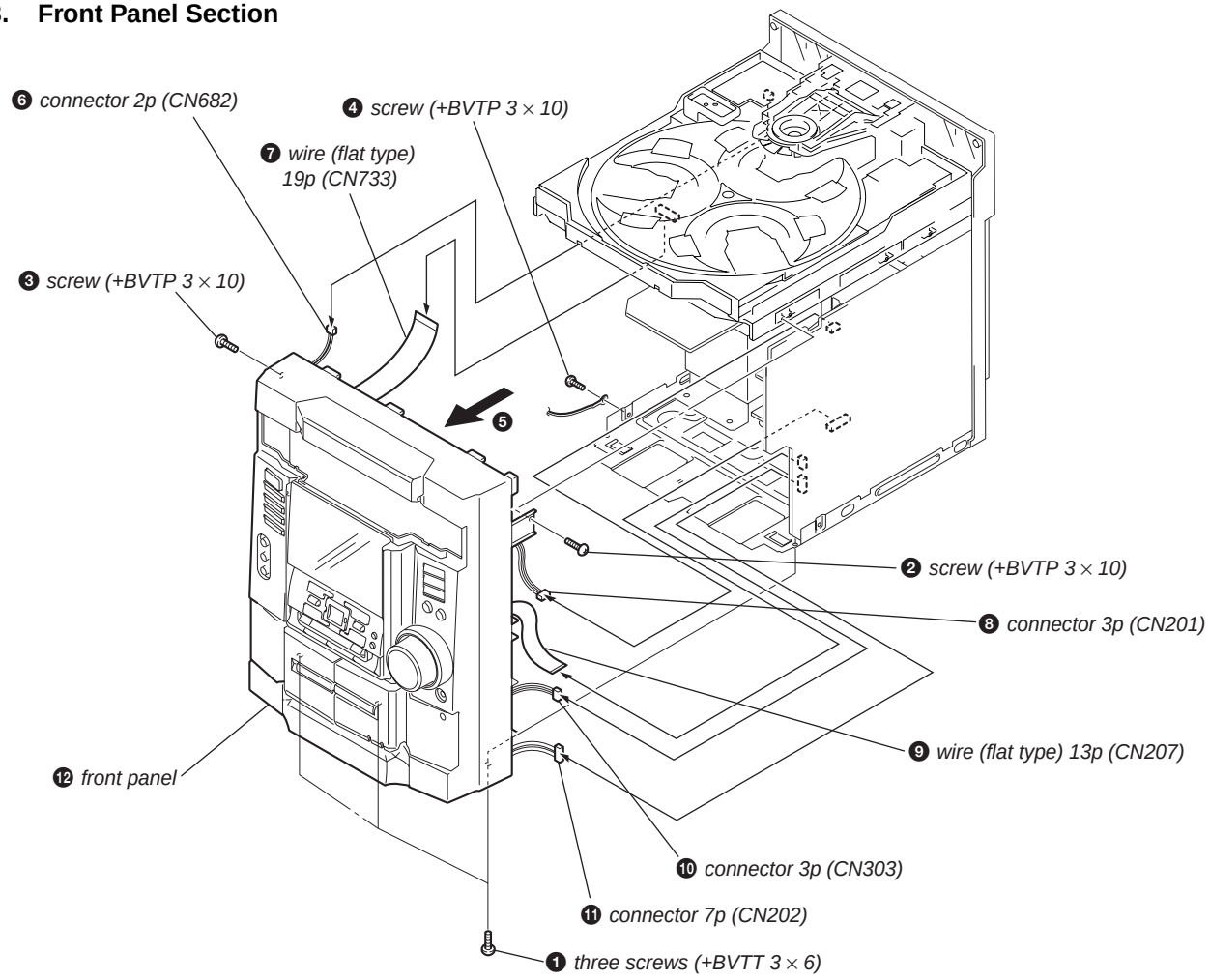
## 2-1. Case (Top)



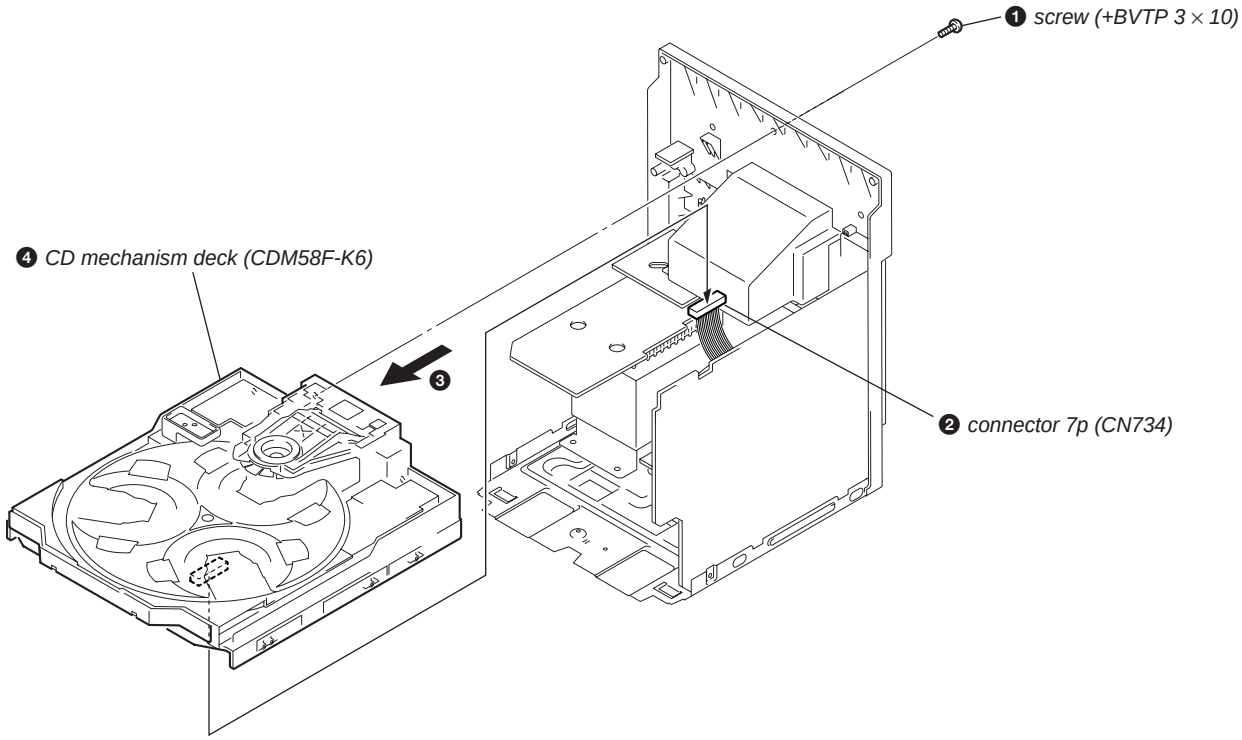
## 2-2. CD Door



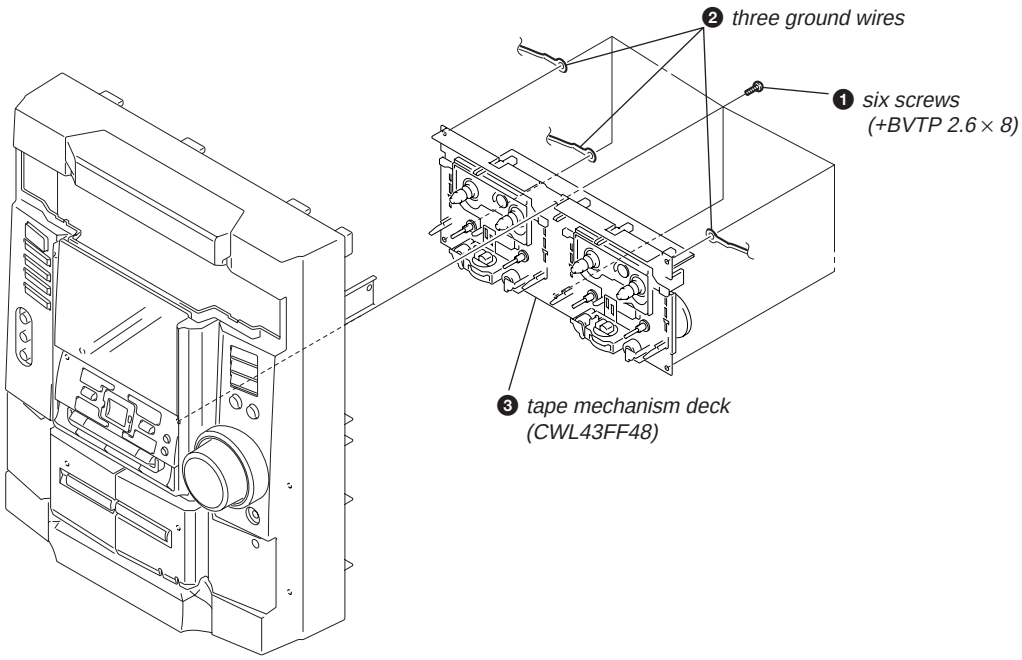

## 2-3. Front Panel Section



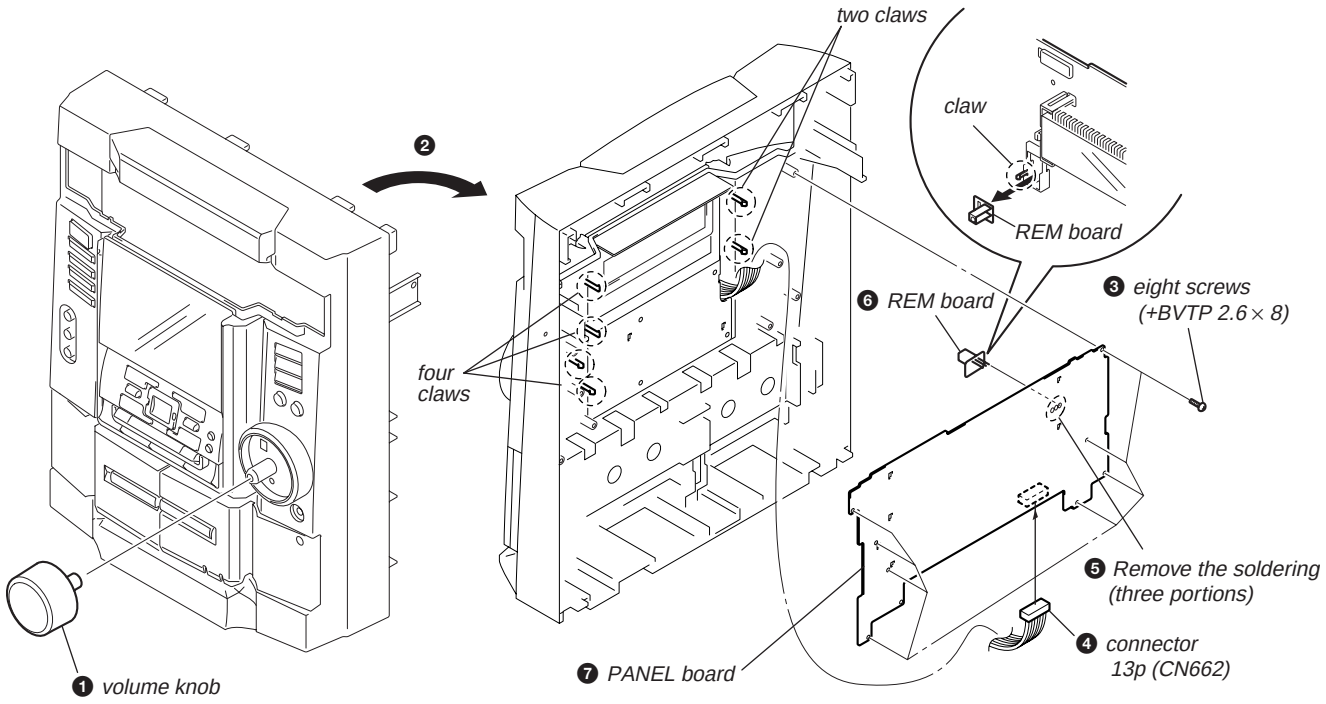
## 2-4. CD Mechanism Deck (CDM58F-K6)



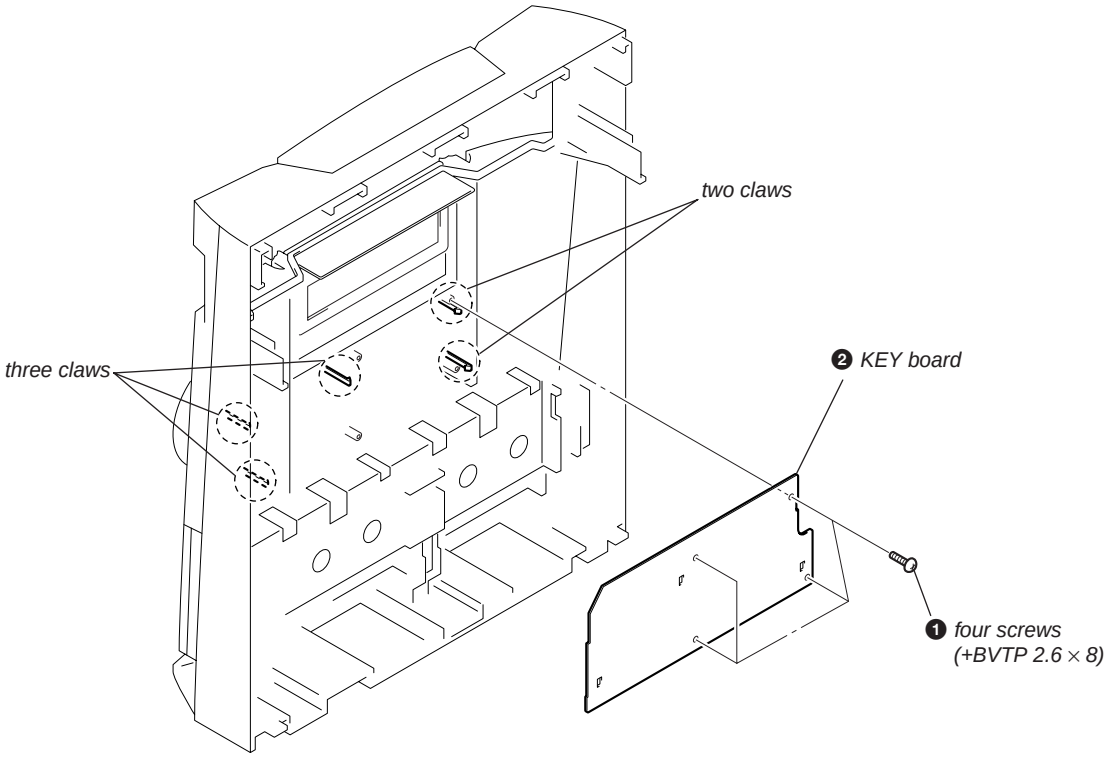

## 2-5. Tape Mechanism Deck (CWL43FF48)



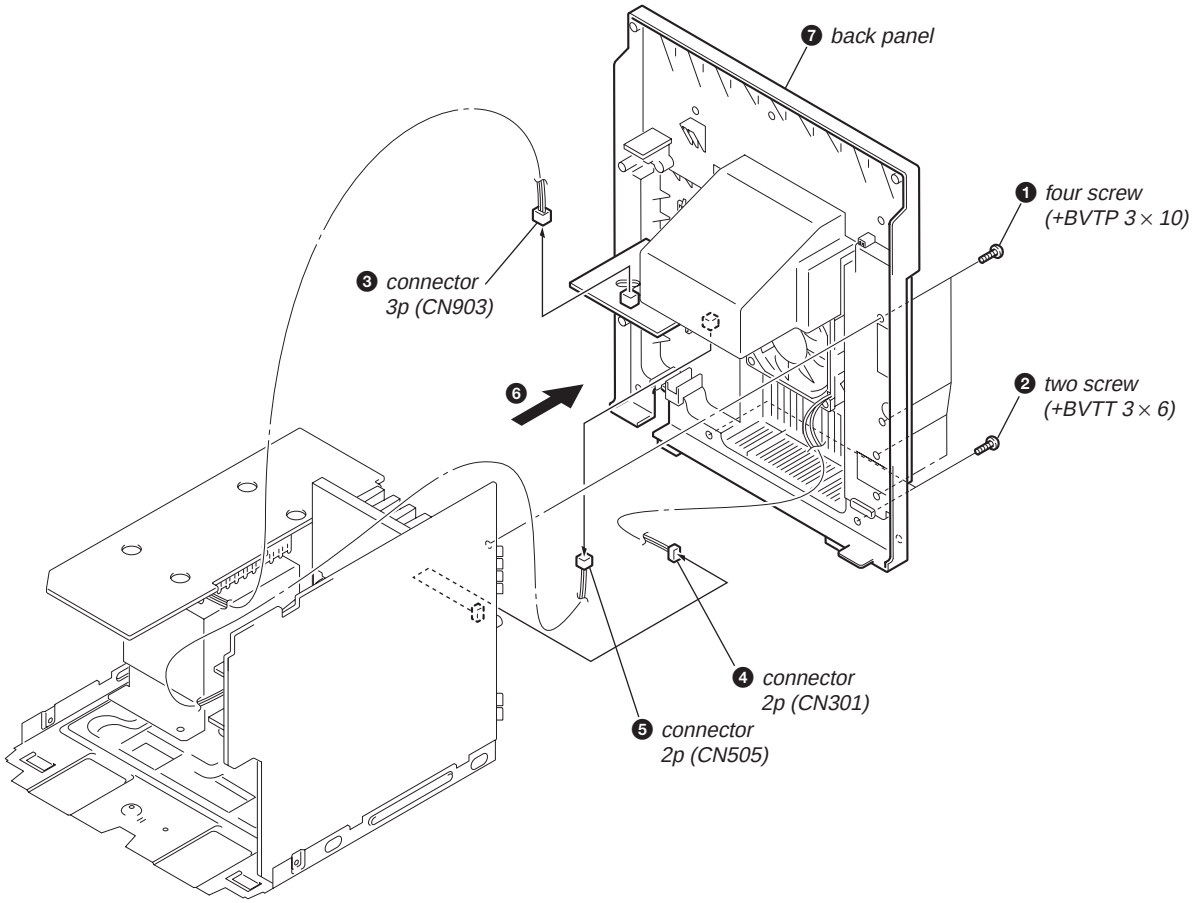
## 2-6. REM Board and PANEL Board



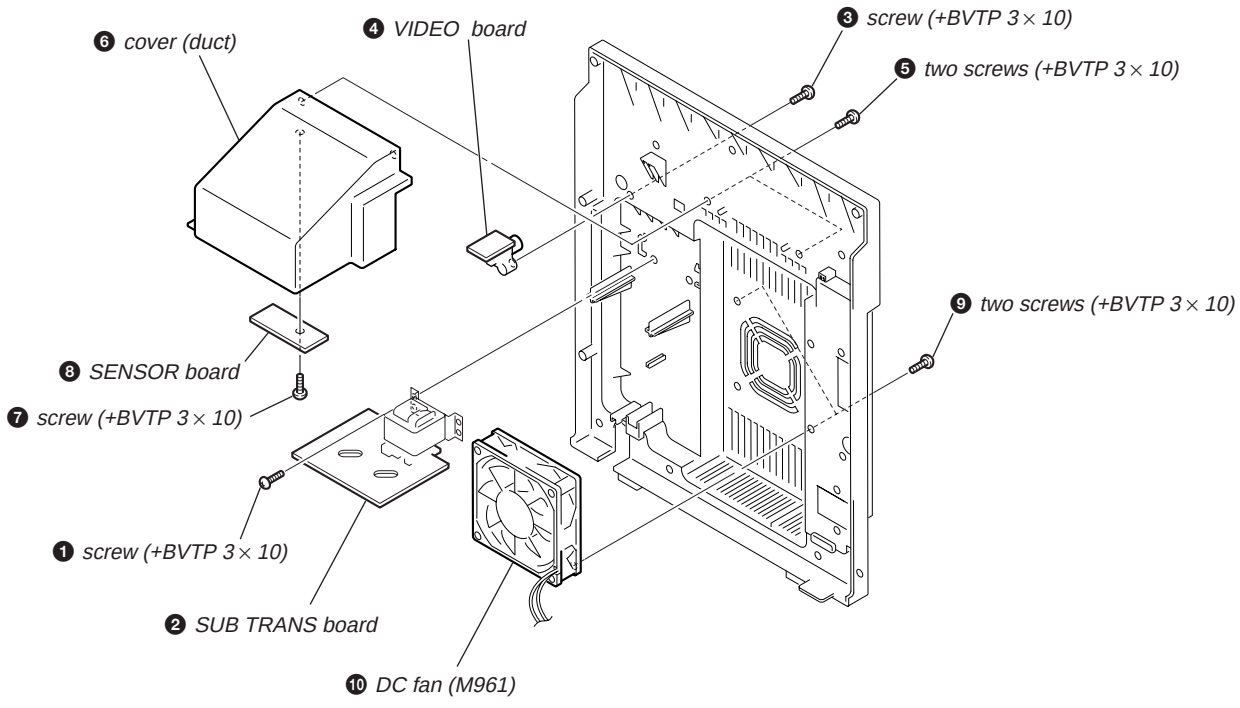

## 2-7. KEY Board



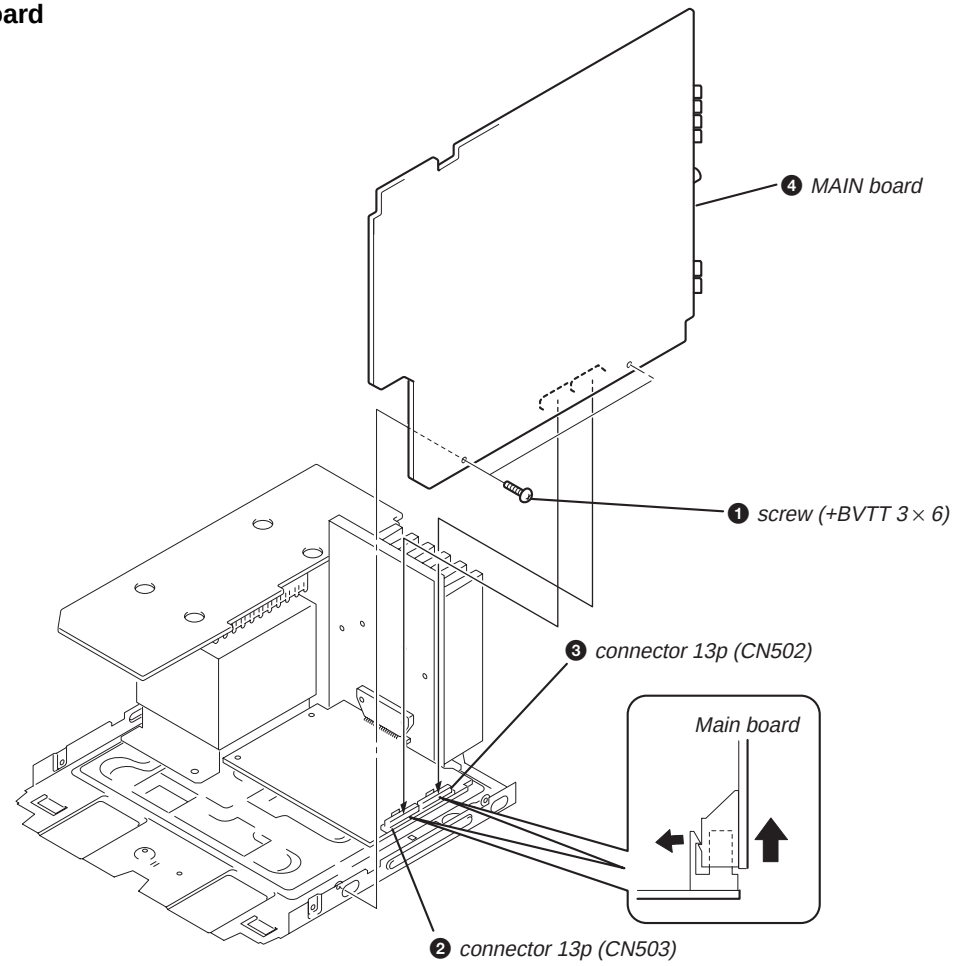
## 2-8. Back Panel Section



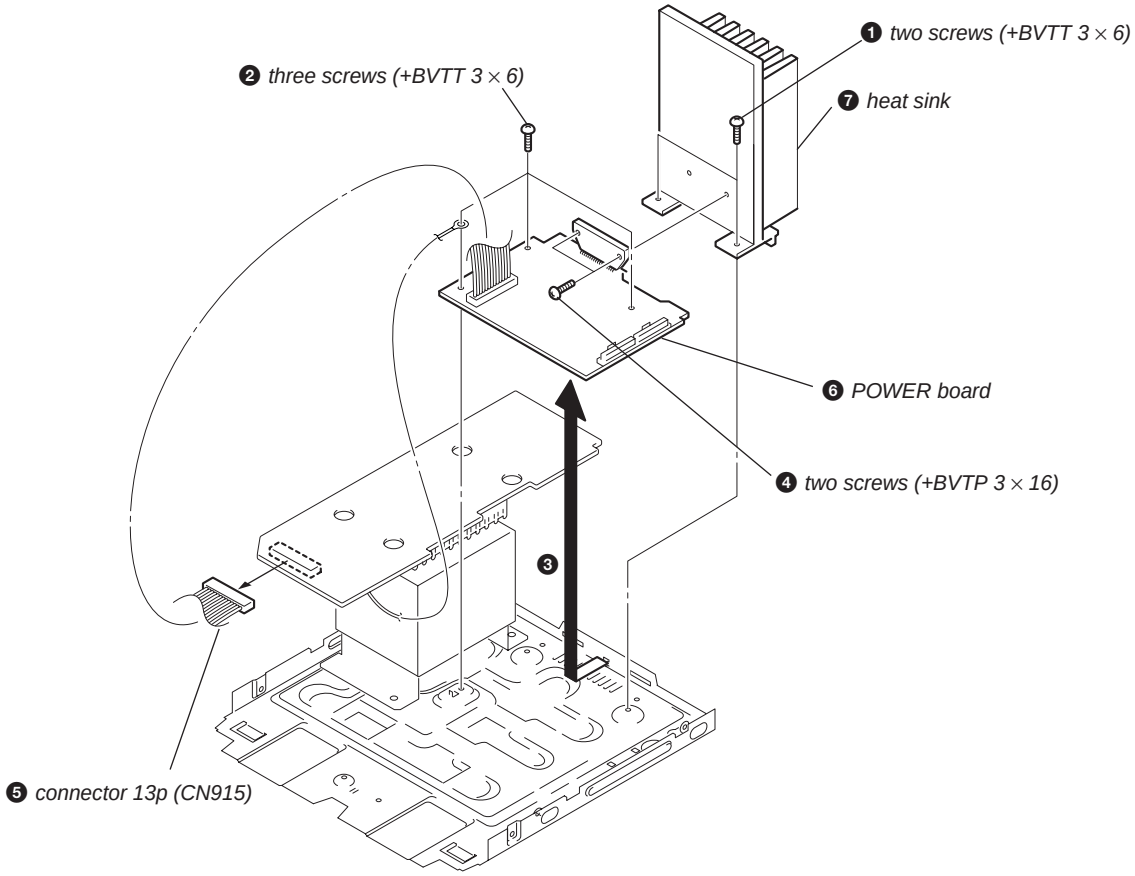

## 2-9. SUB TRANS Board, VIDEO OUT Board and SENSOR Board



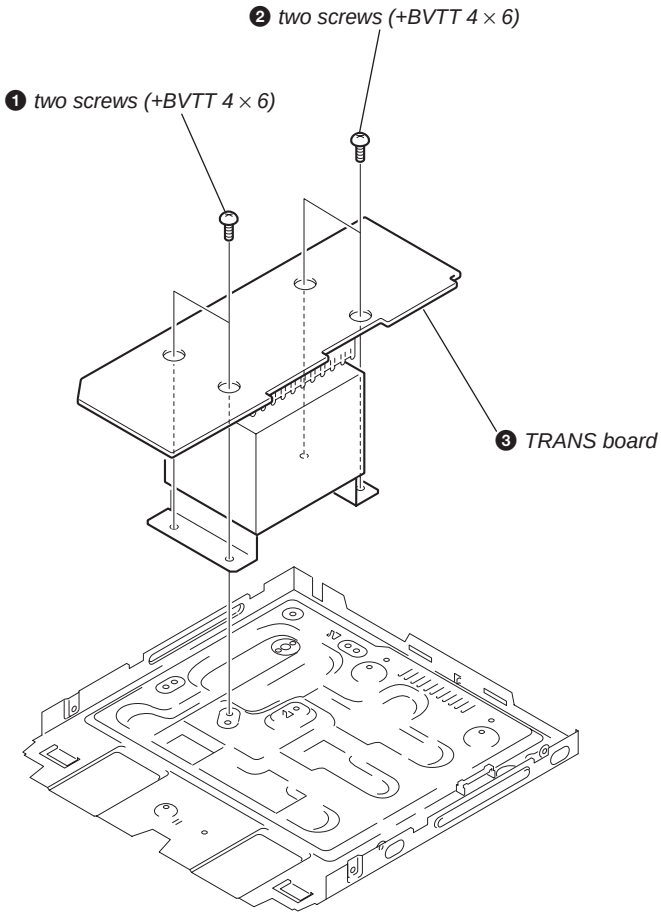
## 2-10. MAIN Board



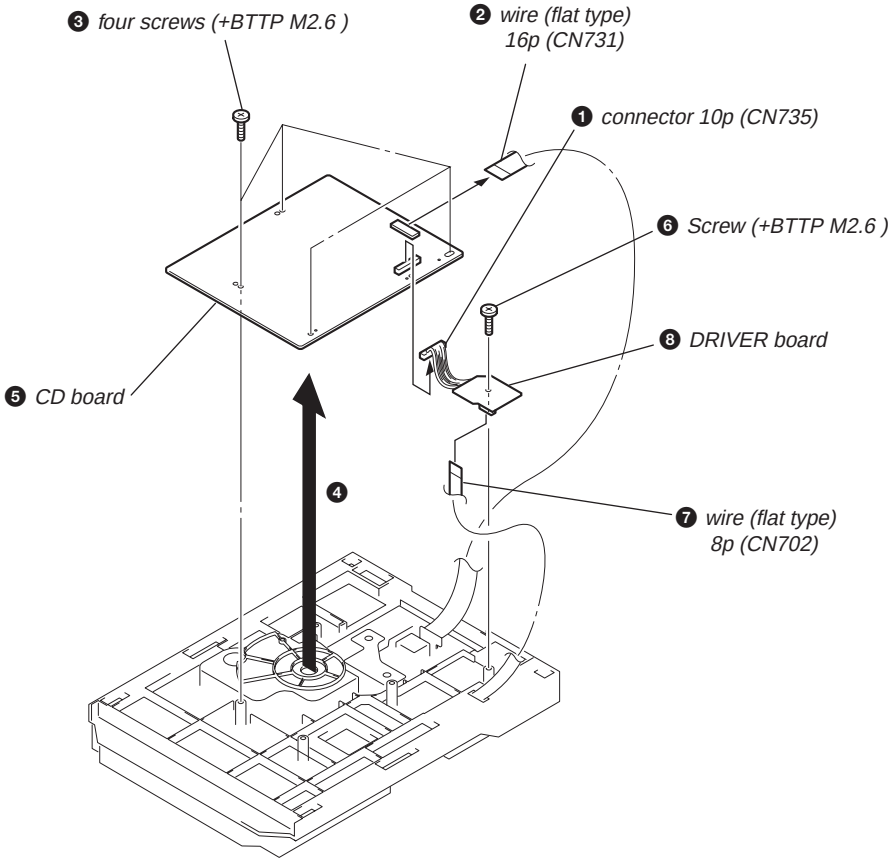

## 2-11. POWER Board



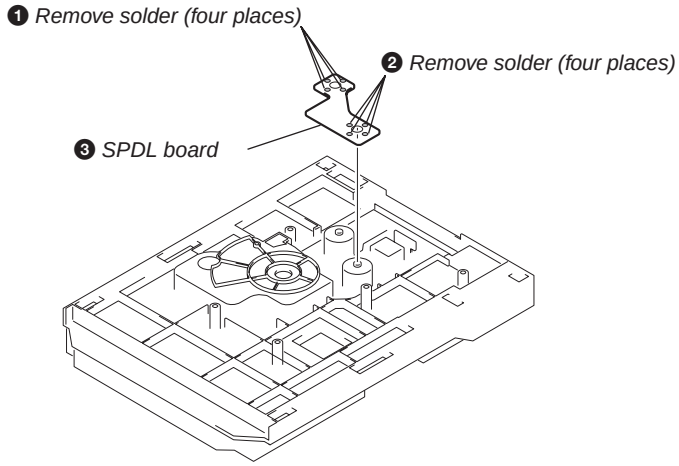
## 2-12. TRANS Board



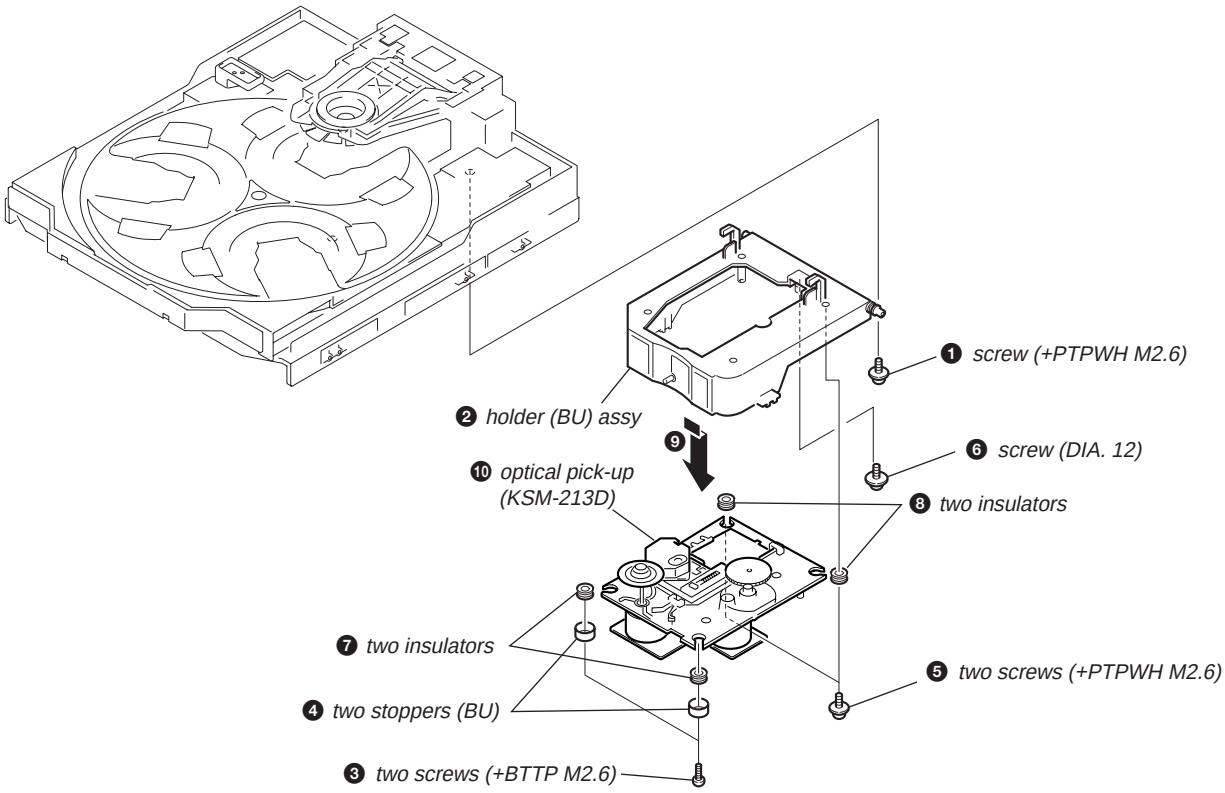

## 2-13. CD Board and DRIVER Board



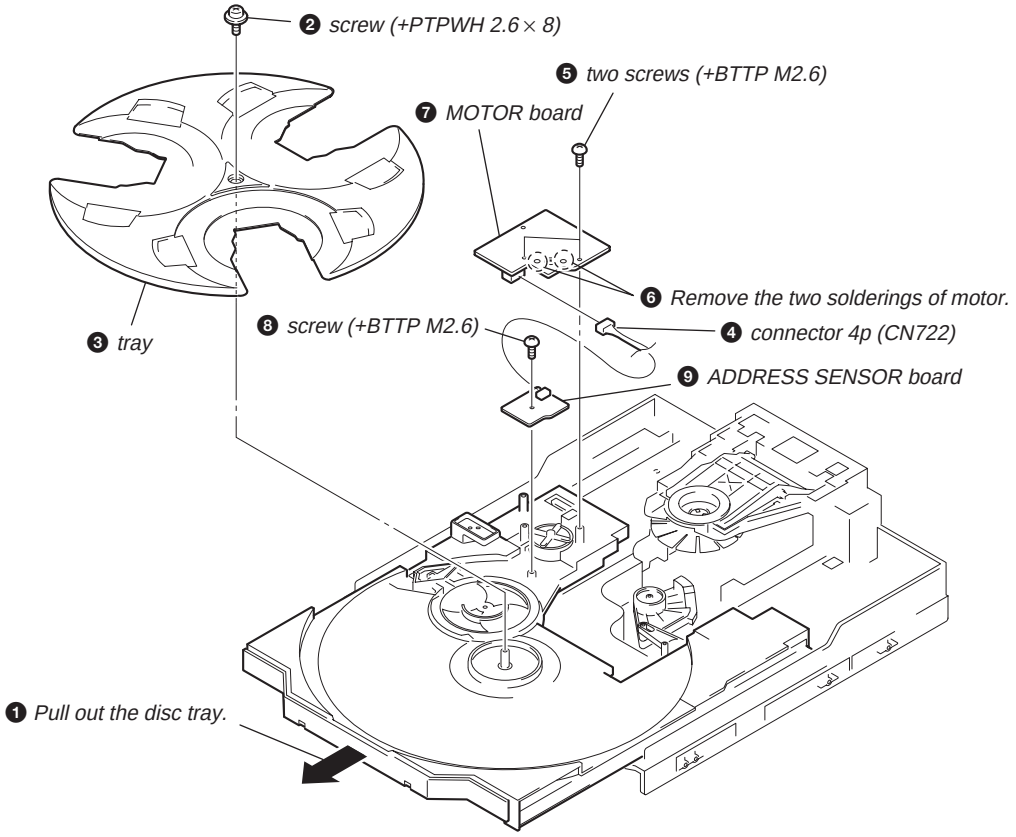
## 2-14. SPDL Board



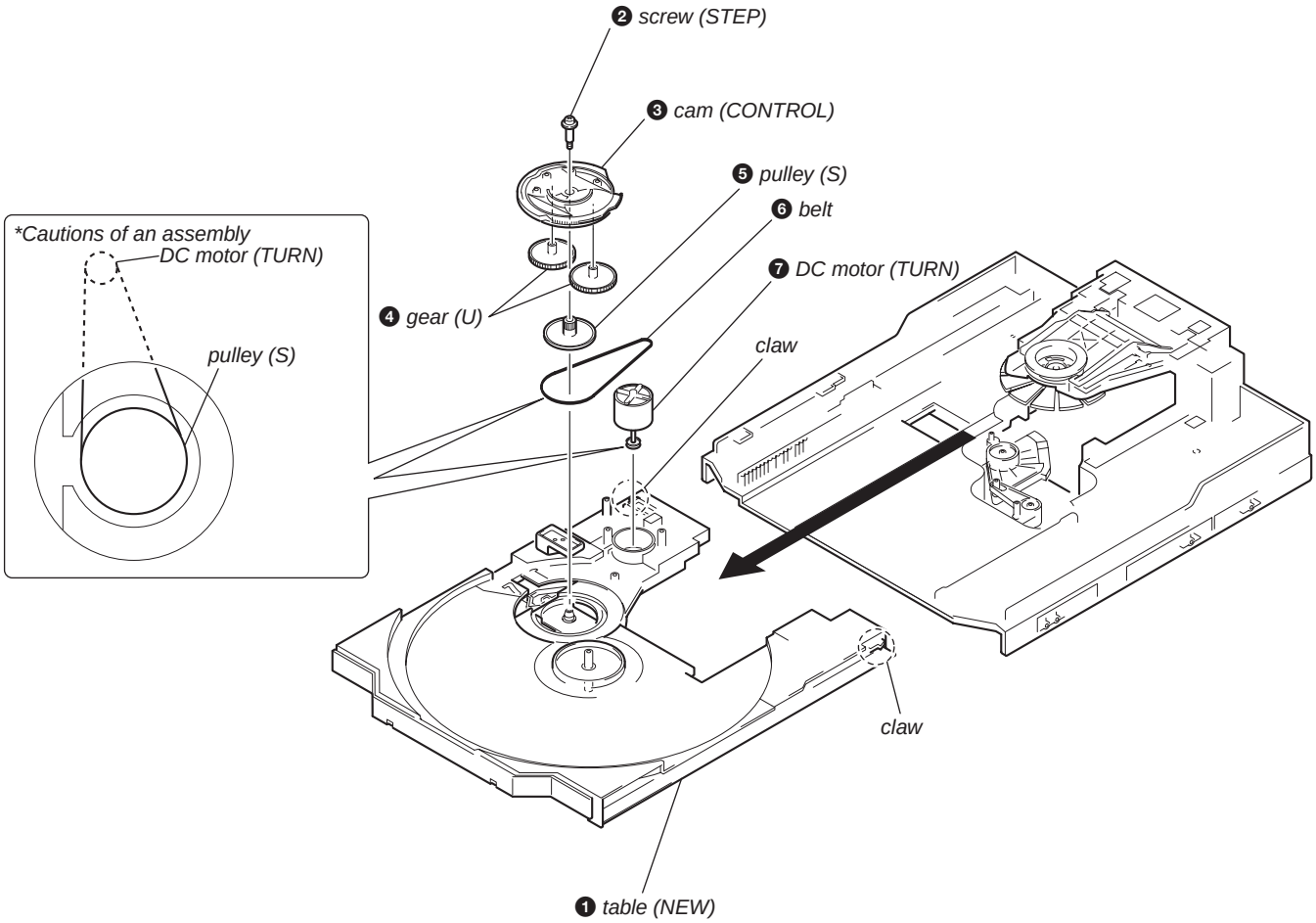

## 2-15. Optical Pick-up (KSM-213D)



### 2-16. MOTOR Board, ADDRESS SENSOR Board




### 2-17. Table (New), Cam (Control) and DC Motor



# SECTION 3
# TEST MODE

### [Change-over of AM Tuner Step between 9 kHz and 10 kHz]

- A step of AM channels can be changed over between 9 kHz and 10 kHz. (Except AEP/UK models)

**Procedure:**

1. Press I/⏻ button to turn the set ON.
2. Select the function "TUNER", and press TUNER/BAND button to select the BAND "AM".
3. Press I/⏻ button to turn the set OFF.
4. Press TUNER/BAND and I/⏻ buttons simultaneously, and the display of fluorescent indicator tube changes to "AM 9 k STEP" or "AM 10 k STEP", and thus the channel step is changed over.

### [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 ■, GROOVE, and I/⏻ simultaneously.
2. The fluorescent indicator tube displays "COLD RESET" and the set is reset.

### [Aging Mode]

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

- If an error occurred:
  The aging operation stops and is displayed status.
- If no error occurs:
  The aging operation continues repeatedly.

1. Operating method of Aging Mode

Turn on the main power and select "CD" of the function.

1) Set three discs in tray. Select ALL DISCS, and REPEAT OFF.
2) Load the tapes recording use into both decks.
3) Press three buttons ■, GAME EQ, and DISC SKIP/EX-CHANGE simultaneously.
4) Aging operations of CD and tape are started at the same time.
5) To exit the aging mode, perform [Cold Reset].

2. Aging mode in CD section

1) Operation during aging mode

- In the agining mode ,the program is excuted in the following sequence.

(1) The disc tray opens and closes.
(2) The disc tray turns to select a disc 3.
(3) The pickup accesses to the first track, and plays 3 seconds.
(4) The pickup accesses to the last track, and plays 3 seconds.
(5) The disc tray opens and closes.
(6) The disc tray turns to select a disc 1.
(7) The same operation starts like step (3).
(8) After a disc 1 aging operation, a disc 2 is selected.
(9) When an aging operation of a disc 3 is completed, the display "AGING ****" value increases.
(10) If no error occurs, the aging operation continues repeatedly.

2) Error display

| Disc error | |
|---|---|
| Display | Error |
| E00D01022 | Focus error (No disc) |
| E00D02022 | Sub Q error (Focus is good) |
| E00D02023 | TOC reading error |
| E00D02014 | Access error (Unable within regular time) |

| Mechanism error | |
|---|---|
| Display | Error |
| E00M__E_0 | Error during opening tray |
| E00M__C_2 | EX-CHANGE disc error |
| E00M__D_0 | Error during closing tray |
| E00M__F_3 | EX-OPEN error |
| E00M__D_5 | EX-CLOSE error |
| E00M__C_2 | Chuck-up error |
| E00M__C_3 | Unchucking error |

3. Aging mode in Tape Deck section

1) Operation during aging mode

- In the agining mode, the program is excuted in the following sequence.

| Step | Operation | Display |
|---|---|---|
| 1 | Rewind the TAPE A | TAPE AAG-1 |
| 2 | Rewind the TAPE B | TAPE BAG-2 |
| 3 | Play the TAPE A (1 minute) | TAPE AAG-2 |
| 4 | Stop the TAPE A (1 second) | TAPE AAG-3 |
| 5 | Play the TAPE A (3 minutes) | TAPE AAG-4 |
| 6 | Rewind(AMS) the TAPE A | TAPE AAG-5 |
| 7 | F.F.(AMS) the TAPE A | TAPE AAG-6 |
| 8 | Play the TAPE B (1 minute) | TAPE BAG-2 |
| 9 | Stop the TAPE B (1 second) | TAPE BAG-3 |
| 10 | Record the TAPE B (3 minutes) | TAPE BAG-4 |
| 11 | Rewind(AMS) the TAPE B | TAPE BAG-5 |
| 12 | F.F.(AMS) the TAPE B | TAPE BAG-6 |

2) Error display

- If error occurred, the display remains like "TAPE BAG-2".

4. Exiting from the aging mode

- Be sure to perform Cold Reset to exit from the aging mode.

### [GC Test Mode]

- All fluorecent segments and LEDs are tested.
- Keyboard check.

**Procedure:**

1. Press I/⏻ button to turn the set ON.
2. To enter the test mode, press the three buttons ■, GAME EQ and DISC 2 simultaneously.
3. All segments and LEDs (without STANDBY LED) are turned on.
4. Press GAME EQ and DISC 2 buttons simultaneously, and the key check mode is activated.
5. The message “KEY 0 0 0 0” is displayed.
   Each time a button is pressed, the key code number is displayed.
6. Press GAME EQ and DISC 2 buttons simultaneously, and the key count mode is activated.
7. The message “KEYCNT 0 1” is displayed.
   Each time a button is pressed, “KEYCNT 0 1” value increased. However, once a button is pressed, it is no longer taken into account.
8. Press GAME EQ and DISC 2 buttons simultaneously, and the head phone detect mode is activated.
9. The message “H_P OFF” is displayed when a headphone jack is not inserted.
   “H_P ON ” is displayed when a headphone jack is inserted.
10. Press GAME EQ and DISC 2 buttons simultaneously, and the volume control detect mode is activated.
11. The message “VOLUME FLAT” is displayed.
    “VOLUME UP” is displayed if rotating VOLUME knob clockwise, or “VOLUME DOWN” is displayed if rotating counterclockwise.
12. To exit from the GC test mode after the volume control detect mode, press GAME EQ and DISC 2 buttons simultaneously.

### [Version and Destination Display Mode]

- The version or destination is displayed.

**Procedure:**

1. Press I/⏻ button to turn the set ON.
2. To enter the test mode, press the three buttons ■, GAME EQ and MOVIE EQ simultaneously.
3. The destination is displayed.
4. Press STOP and GROOVE buttons simultaneously.
5. The version is displayed.
6. To exit from this mode, press I/⏻ button to turn the set OFF.

### [CD Service Mode]

- This mode can run the CD sled motor freely. Use this mode, for instance, when cleaning the pickup.

**Procedure:**

1. Press I/⏻ button to turn the set ON.
2. Select the function “CD”.
3. To enter the test mode, press three buttons ■, GAME EQ, and OPEN/CLOSE simultaneously.
4. The CD service mode is selected.
5. With the CD in stop status, press ⏭ button to move the pickup to outside track, or press ⏮ button to inside track.
6. To exit from this mode, perform as follows:
   1) Move the pickup to the most inside track.
   2) Press I/⏻ button to turn the set OFF.

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

### [MC Test Mode]

- This mode is used to test the function of the equalizer.

**Procedure:**

1. Press I/⏻ button to turn the set ON.
2. To enter the test mode, press the three buttons ■, GAME EQ and DISC 3 simultaneously.
3. Press the MOVIE EQ button.
   The function of the equalizer is set to “MIN”.
4. Press the MUSIC EQ button.
   The function of the equalizer is set to “MAX”.
5. Press the P.FILE button.
   The function of the equalizer is set to “FLAT”.
6. To exit from this mode, press I/⏻ button to turn the set OFF.

### [CD Ship Mode (No Memory Clear) ]

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

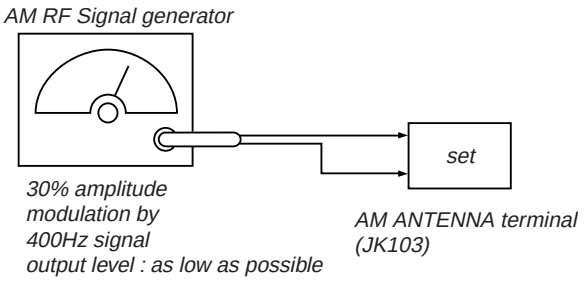
**Procedure:**

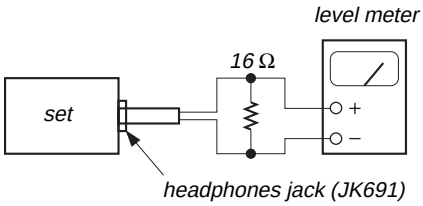
1. Press I/⏻ button to turn the set ON.
2. Select the function “CD”.
3. Press I/⏻ button to turn the set OFF.
4. Press CD button and I/⏻ button simultaneously.
5. The "STANDBY" display blinks instantaneously, and the CD ship mode is set.

# SECTION 4
# ELECTRICAL ADJUSTMENTS

## TUNER SECTION

### AM IF Adjustment

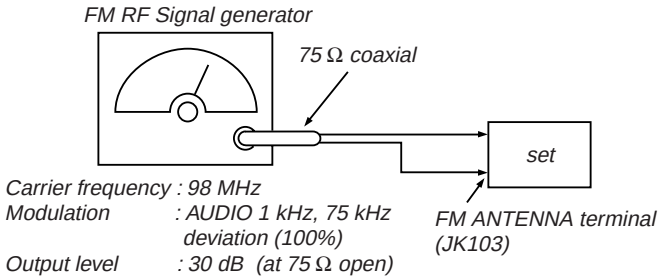



**Procedure:**

1. Set the frequency of the AM RF signal generator to 1000 kHz (at 10 kHz step) or 999 kHz (at 9 kHz step).
2. Tune the set to AM 1000 kHz (at 10 kHz step) or 999 kHz (at 9 kHz step).
3. Adjust IFT101 so that the reading on level meter becomes in maximum.

### FM Tuned Level Adjustment

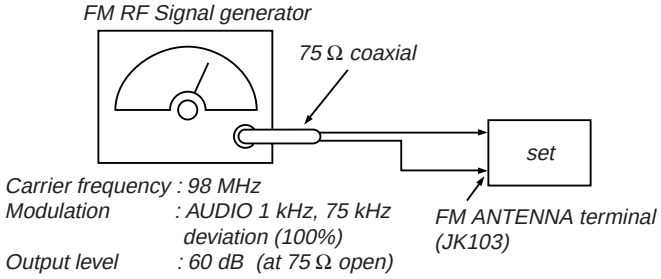



**Procedure:**

1. Supply a 98 MHz signal at 28 dB from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV101 to the point (moment) when the TUNED indicator will change from going off to going on.

**Adjustment Location:** MAIN board

### Null Adjustment

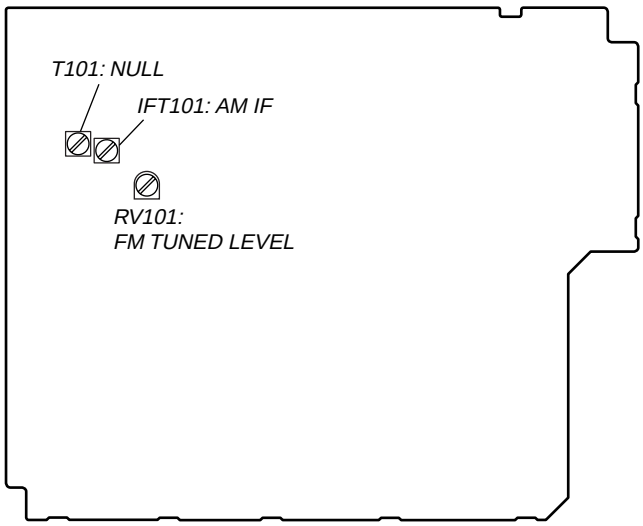



**Procedure:**

1. Supply a 98 MHz signal at 60 dB from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Measure voltage between pin 21 and pin 23 of IC 101. Adjust T101 until the voltage becomes 0 V.

**Adjustment Location:** MAIN board

**[MAIN BOARD] Component side**

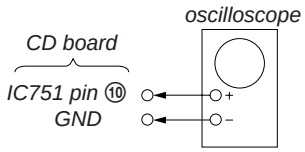


## CD SECTION

Note :

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

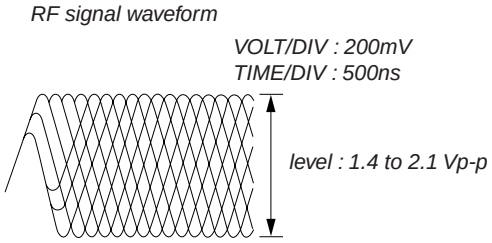
### RF Level Check




**Procedure :**

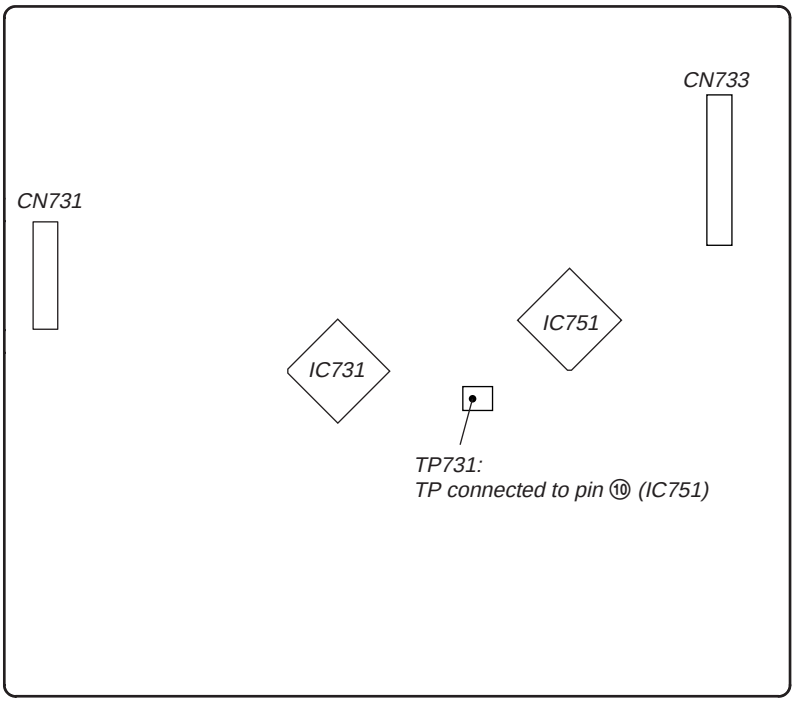
1. Connect oscilloscope to pin ⑩ (IC751).
2. Turned Power switch on.
3. Load a disc (YEDS-18) and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note : Clear RF signal waveform means that the shape " ◊ " can be clearly distinguished at the center of the waveform.




**Adjustment Location:** CD board

**[CD BOARD]** (Component Side)



# SECTION 5
# DIAGRAMS

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

**Note on Schematic Diagram:**

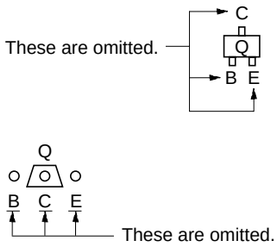
- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

| **Note:** | **Note:** |
|---|---|
| The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.<br>Replace only with part number specified. | Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.<br>Ne les remplacer que par une piéce portant le numéro spécifié. |

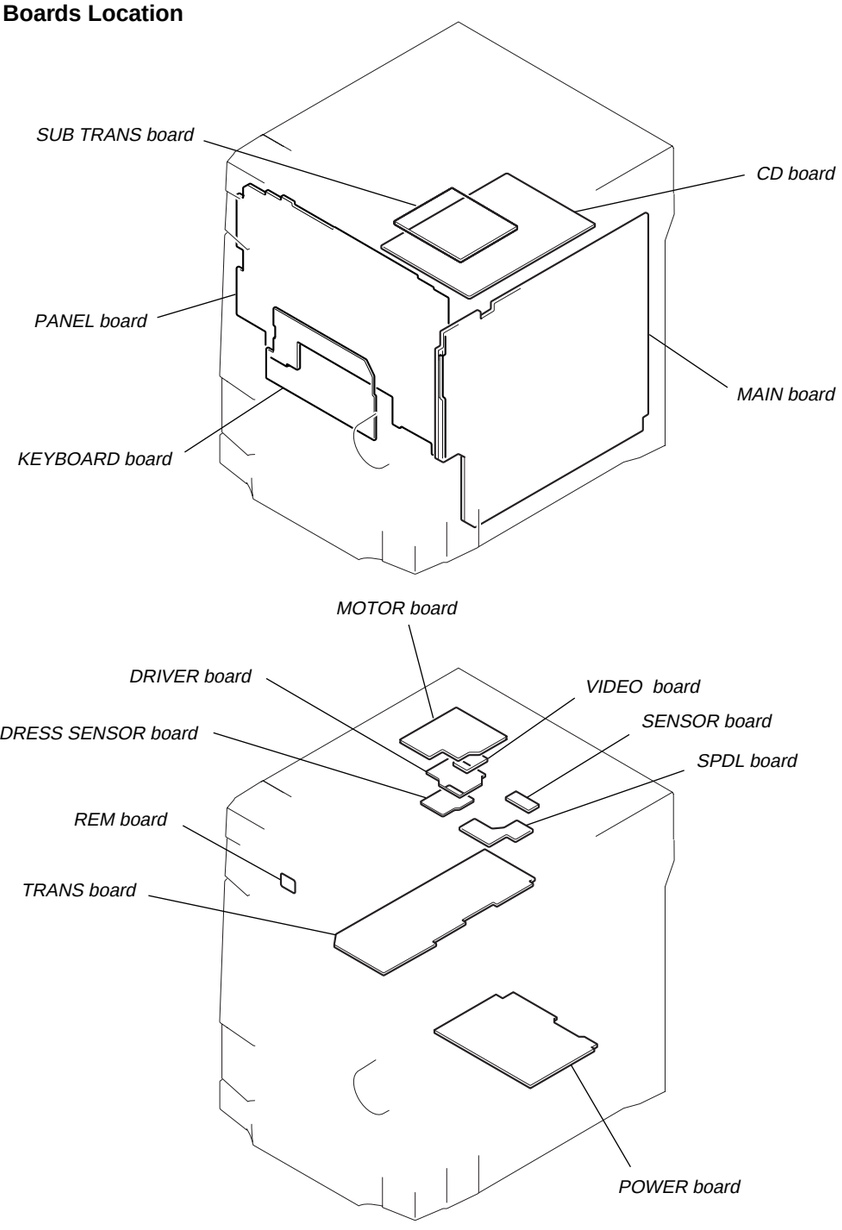
- ▬▬ : B+ Line.
- ▬ ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
  no mark : FM
  < > : CD
  [ ] : TAPE
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : FM
  : PB (DECK A)
  : PB (DECK B)
  : REC (DECK B)
  : CD
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : 220V AC area in E model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

**Note on Printed Wiring Boards:**

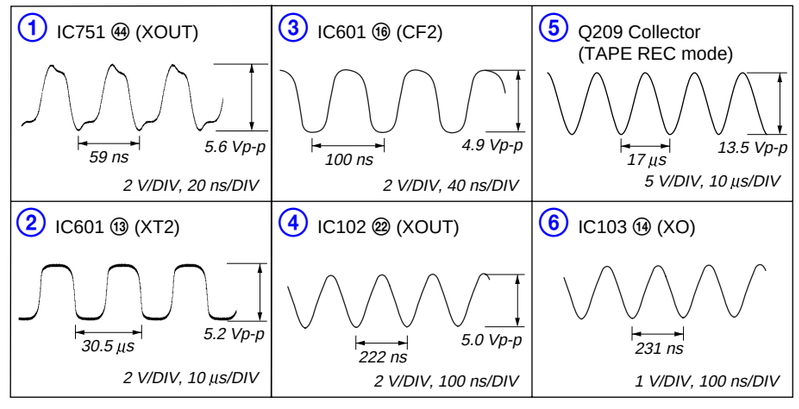
- ○——— : parts extracted from the component side.
- ▒▒▒ : Pattern from the side which enables seeing.
- Indication of transistor.




## 5-1. Circuit Boards Location



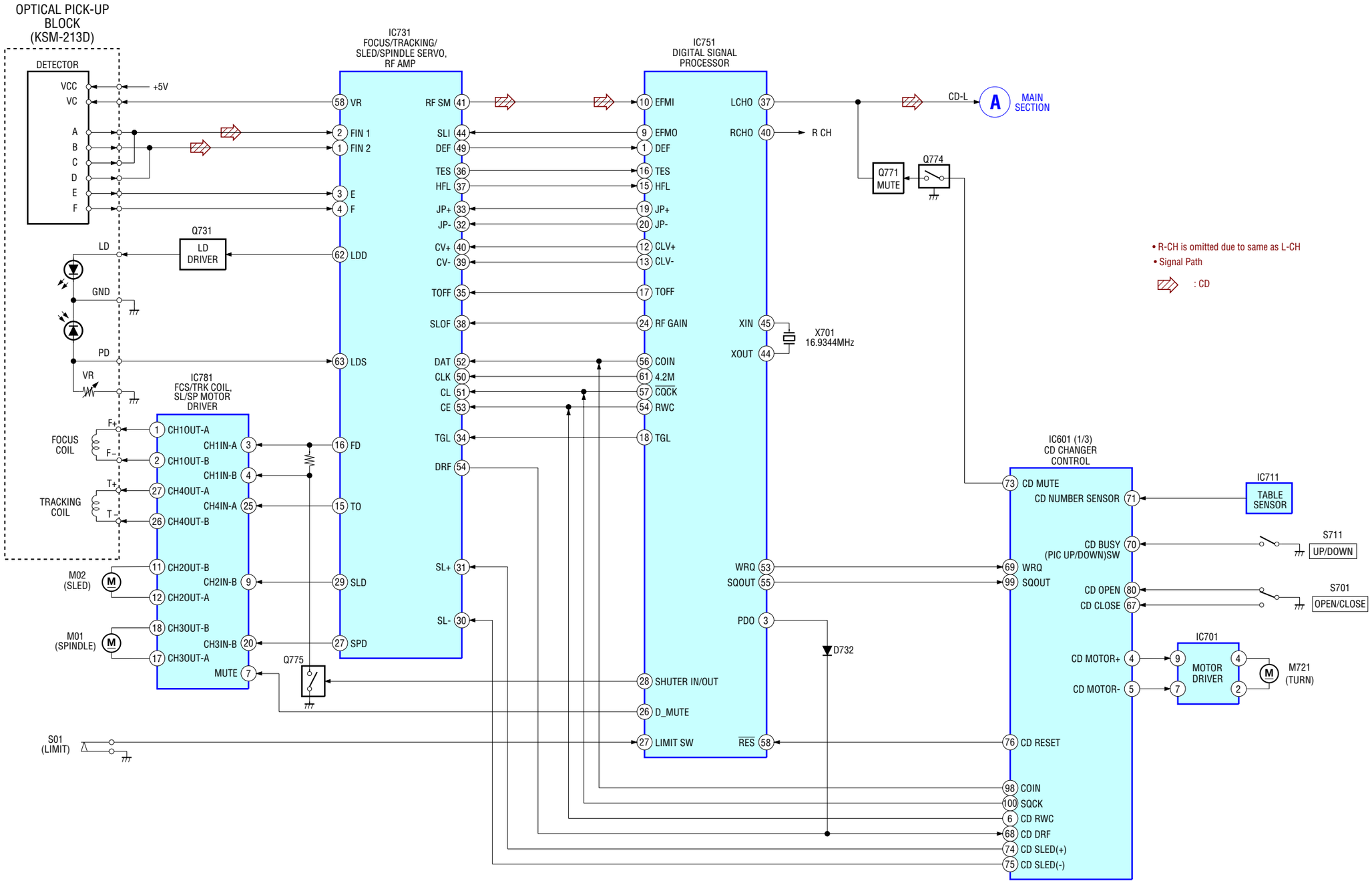

**• Waveforms**





19

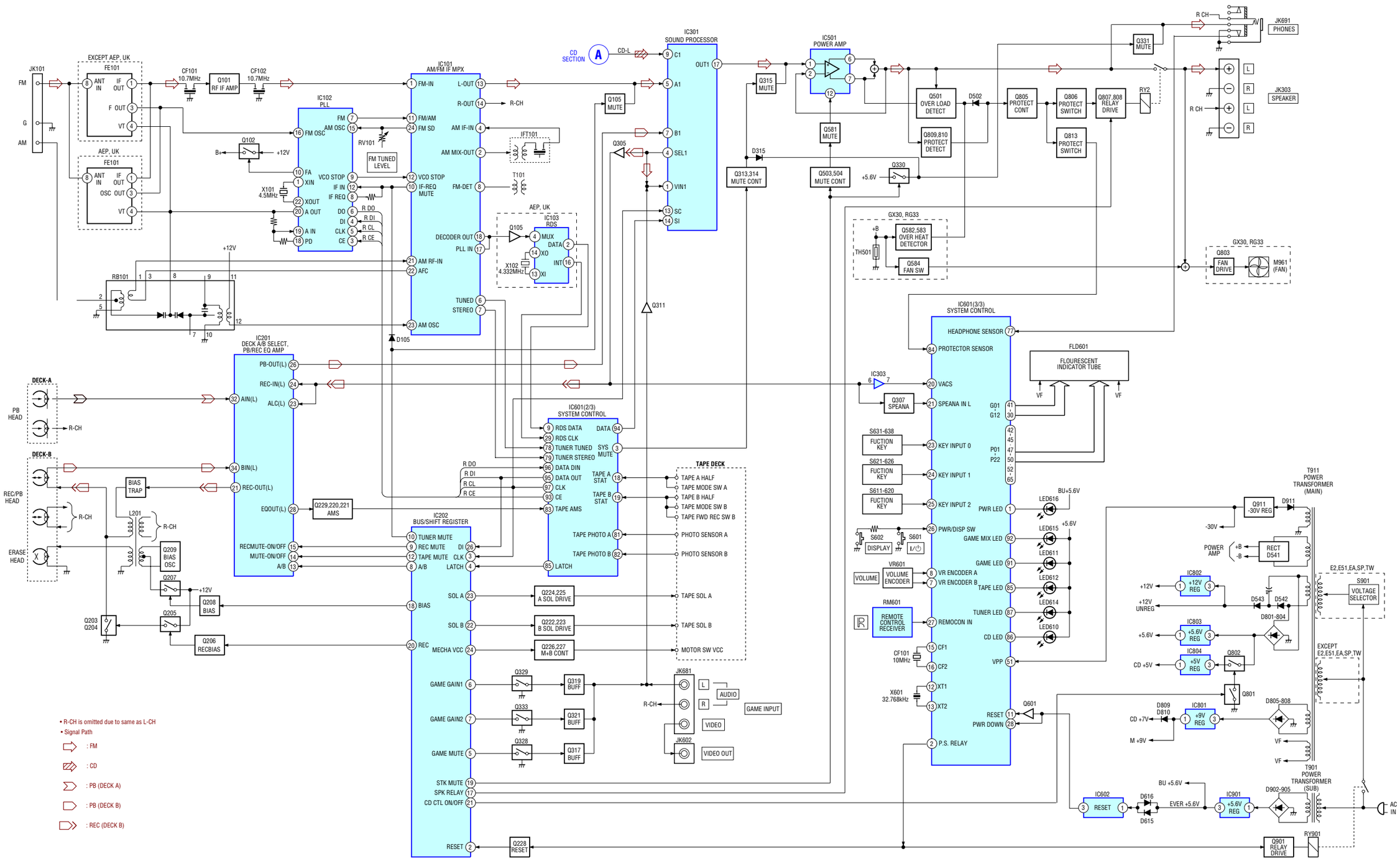
## 5-2. Block Diagrams
### CD Section




- R-CH is omitted due to same as L-CH
- Signal Path

: CD

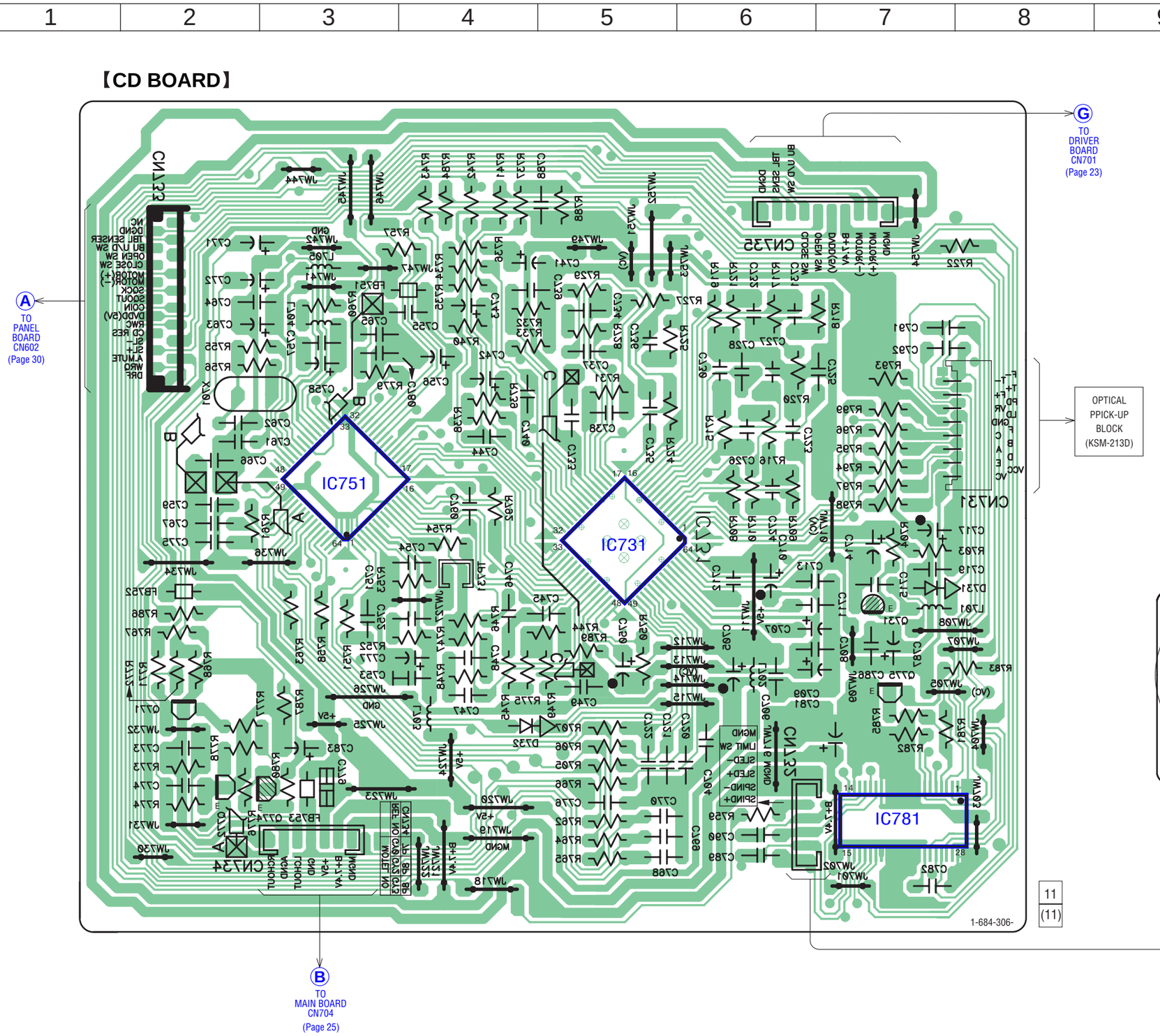
## MAIN Section



## 5-3. Printed Wiring Boards – CD Section (1/2) –

• See page 19 for Circuit Boards Location.

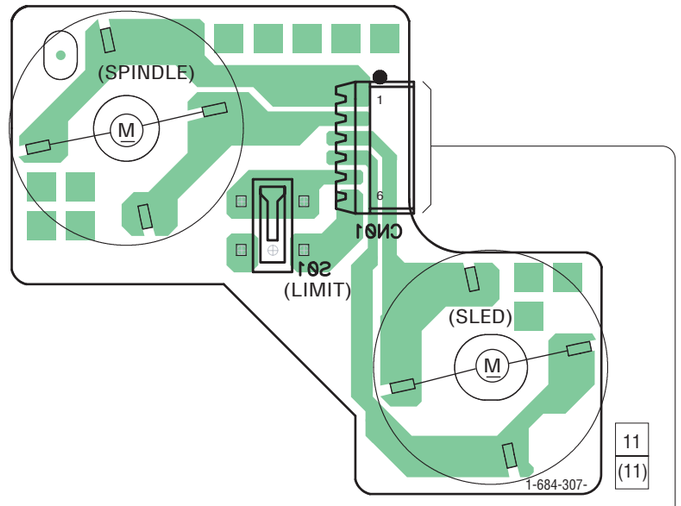
【CD BOARD】



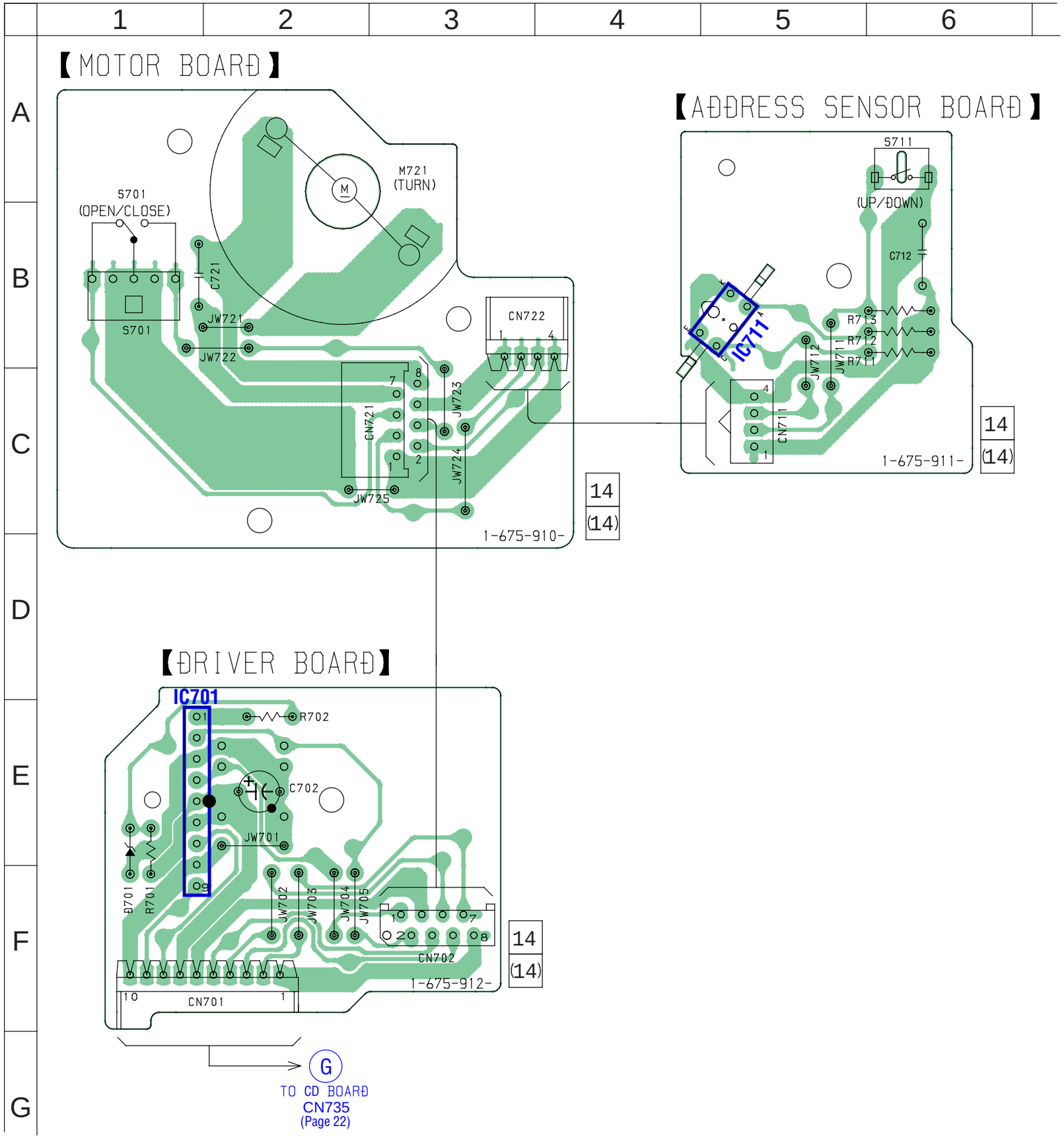

• **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D731 | D-8 |
| D732 | F-4 |
| IC731 | D-5 |
| IC751 | D-3 |
| IC781 | F-7 |
| Q731 | F-7 |
| Q771 | E-2 |
| Q772 | F-2 |
| Q774 | F-3 |
| Q775 | E-7 |

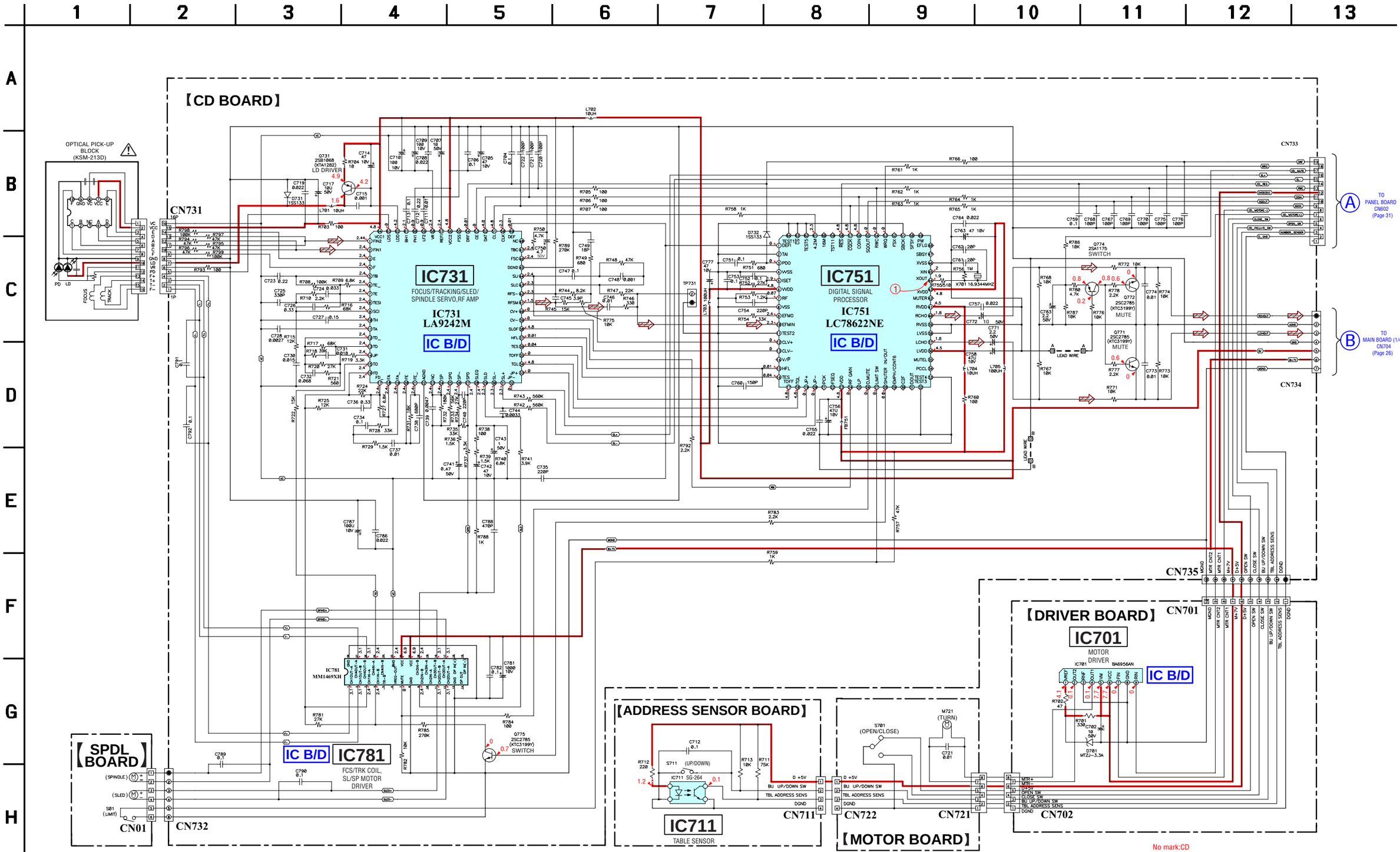
【SPDL BOARD】



**5-4. Printed Wiring Boards – CD Section (2/2) –** • See page 19 for Circuit Boards Location.



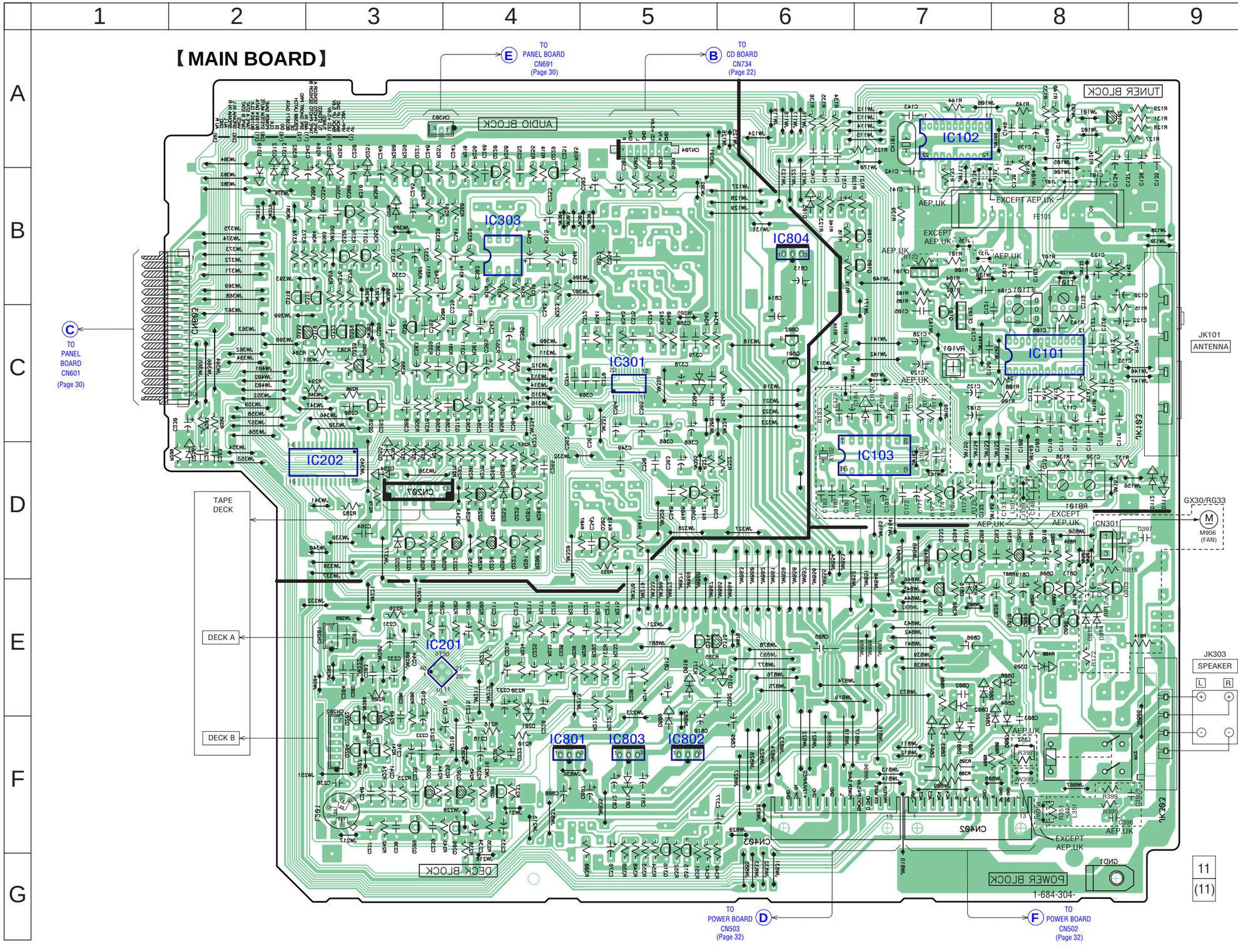
**5-5. Schematic Diagram – CD Section –** • See page 34,35 for IC Block Diagrams. • See page 19 for Waveforms.



## 5-6. Printed Wiring Board – MAIN Board –

• See page 19 for Circuit Boards Location.

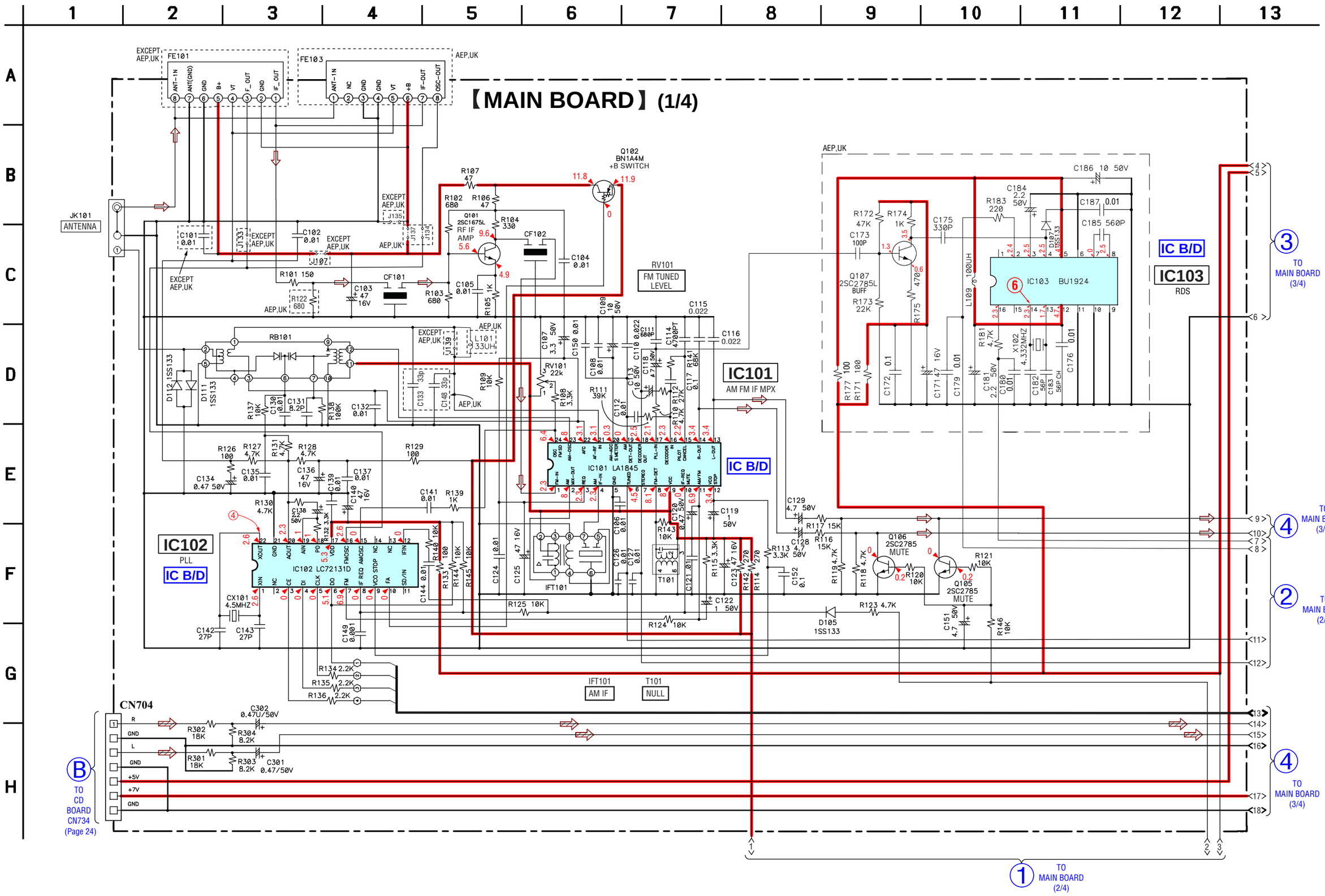
【MAIN BOARD】




• Semiconductor Location

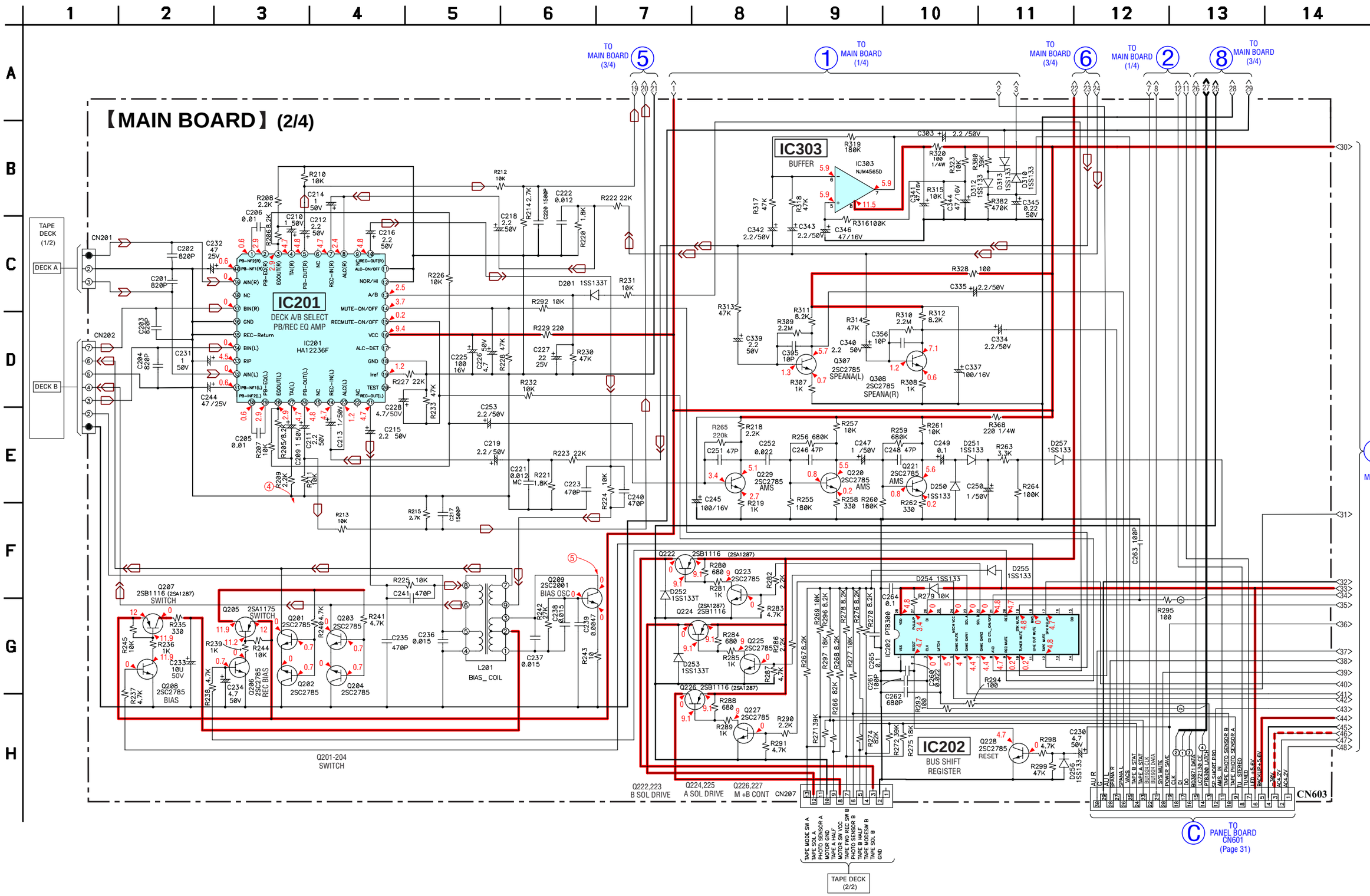
| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D105 | B-6 | Q202 | E-3 |
| D111 | D-9 | Q203 | F-3 |
| D112 | D-9 | Q204 | F-3 |
| D201 | F-4 | Q205 | F-3 |
| D250 | B-3 | Q206 | F-4 |
| D251 | A-3 | Q207 | F-4 |
| D252 | D-3 | Q208 | F-4 |
| D253 | D-4 | Q209 | F-3 |
| D254 | D-3 | Q220 | A-4 |
| D255 | D-3 | Q221 | A-3 |
| D256 | D-2 | Q222 | D-4 |
| D257 | A-3 | Q223 | D-3 |
| D304 | C-5 | Q224 | D-4 |
| D309 | E-8 | Q225 | D-4 |
| D310 | A-2 | Q226 | D-4 |
| D312 | A-2 | Q227 | D-4 |
| D313 | A-2 | Q228 | C-3 |
| D315 | E-6 | Q229 | A-4 |
| D801 | F-7 | Q305 | D-5 |
| D802 | E-7 | Q306 | D-5 |
| D803 | E-7 | Q307 | C-3 |
| D804 | F-7 | Q308 | B-3 |
| D805 | E-8 | Q311 | C-4 |
| D806 | E-8 | Q312 | C-4 |
| D807 | F-8 | Q313 | E-6 |
| D808 | E-8 | Q314 | E-5 |
| D809 | E-5 | Q315 | G-5 |
| D810 | E-5 | Q316 | G-5 |
| D811 | F-5 | Q317 | B-3 |
| D814 | E-8 | Q318 | B-2 |
| D815 | E-8 | Q319 | C-3 |
| D816 | D-7 | Q320 | B-3 |
| | | Q321 | B-3 |
| IC101 | C-8 | Q322 | C-3 |
| IC102 | A-7 | Q328 | C-3 |
| IC103 | D-7 | Q329 | C-3 |
| IC201 | E-4 | Q330 | E-7 |
| IC202 | D-3 | Q331 | D-7 |
| IC301 | C-5 | Q332 | D-7 |
| IC303 | B-4 | Q333 | C-2 |
| IC801 | F-4 | Q801 | C-6 |
| IC802 | F-5 | Q802 | C-6 |
| IC803 | F-5 | Q803 | E-8 |
| IC804 | B-6 | Q805 | D-8 |
| | | Q806 | D-8 |
| Q101 | C-7 | Q807 | E-8 |
| Q102 | A-8 | Q808 | E-8 |
| Q105 | B-7 | Q809 | E-8 |
| Q106 | B-7 | Q810 | E-8 |
| Q107 | D-7 | Q813 | D-8 |
| Q201 | E-3 | | |

**5-7. Schematic Diagram – MAIN Board (1/4) –** • See page 34 for IC Block Diagrams. • See page 19 for Waveforms.

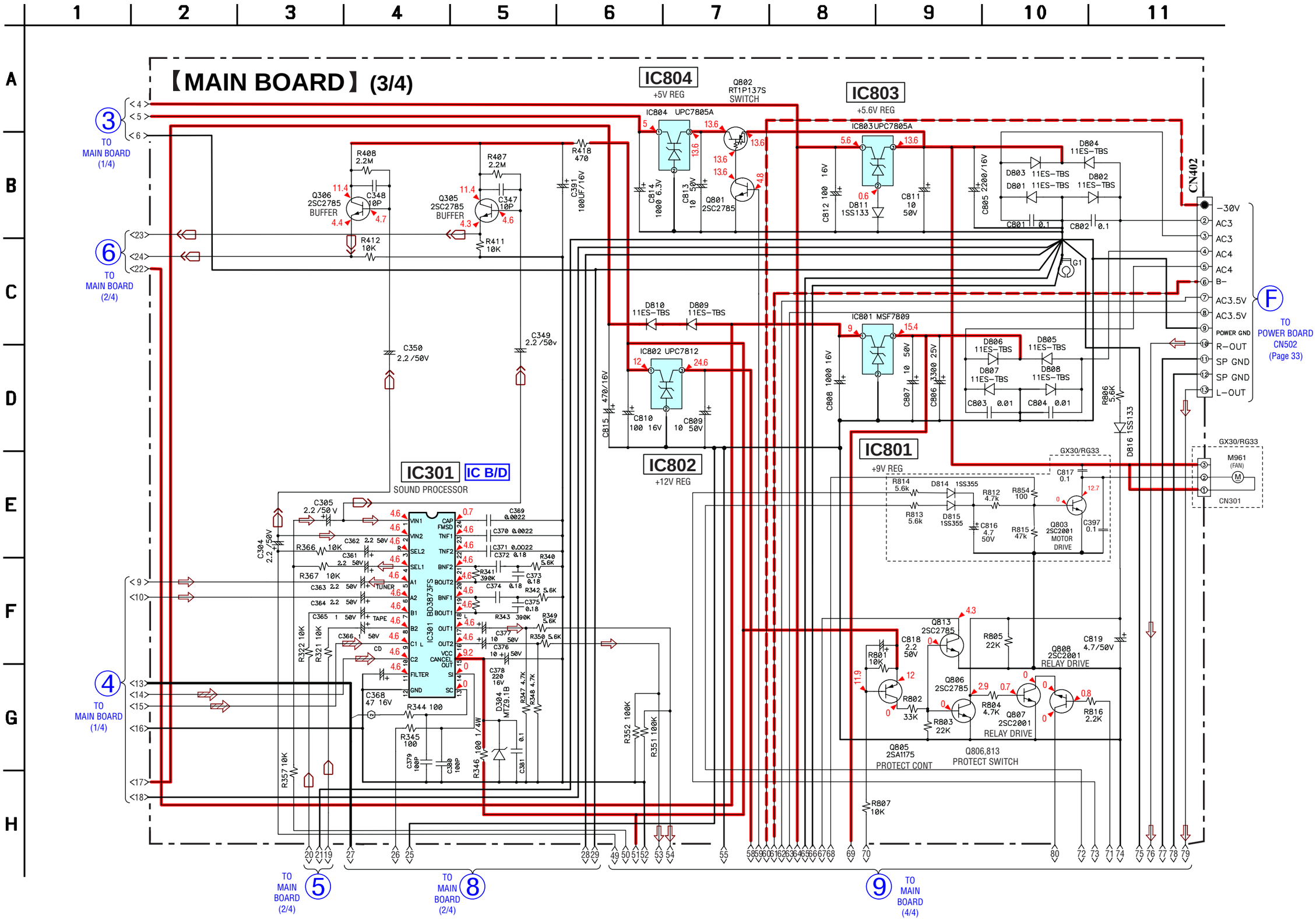


**5-8. Schematic Diagram – MAIN Board (2/4) –**

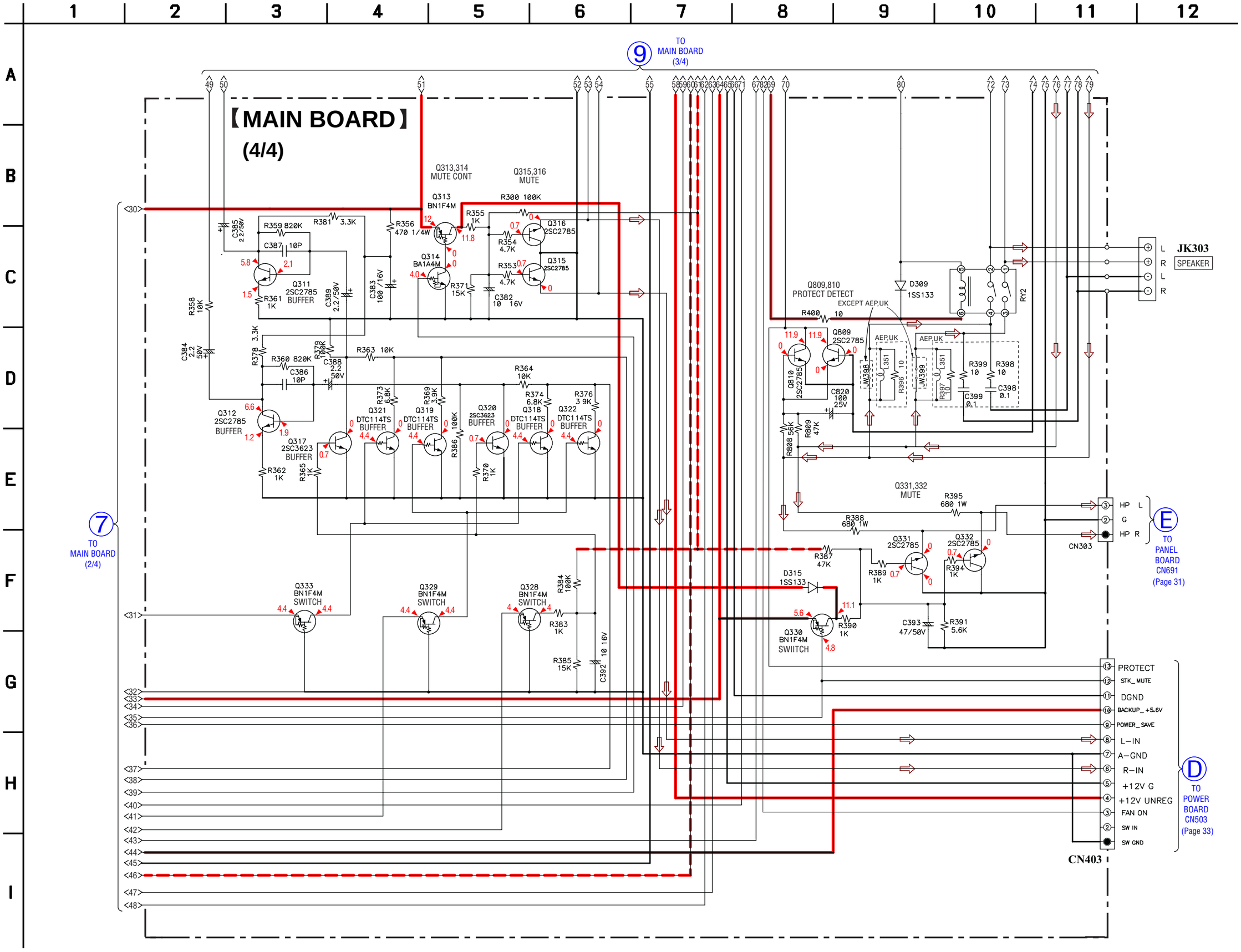
• See page 19 for Waveforms.



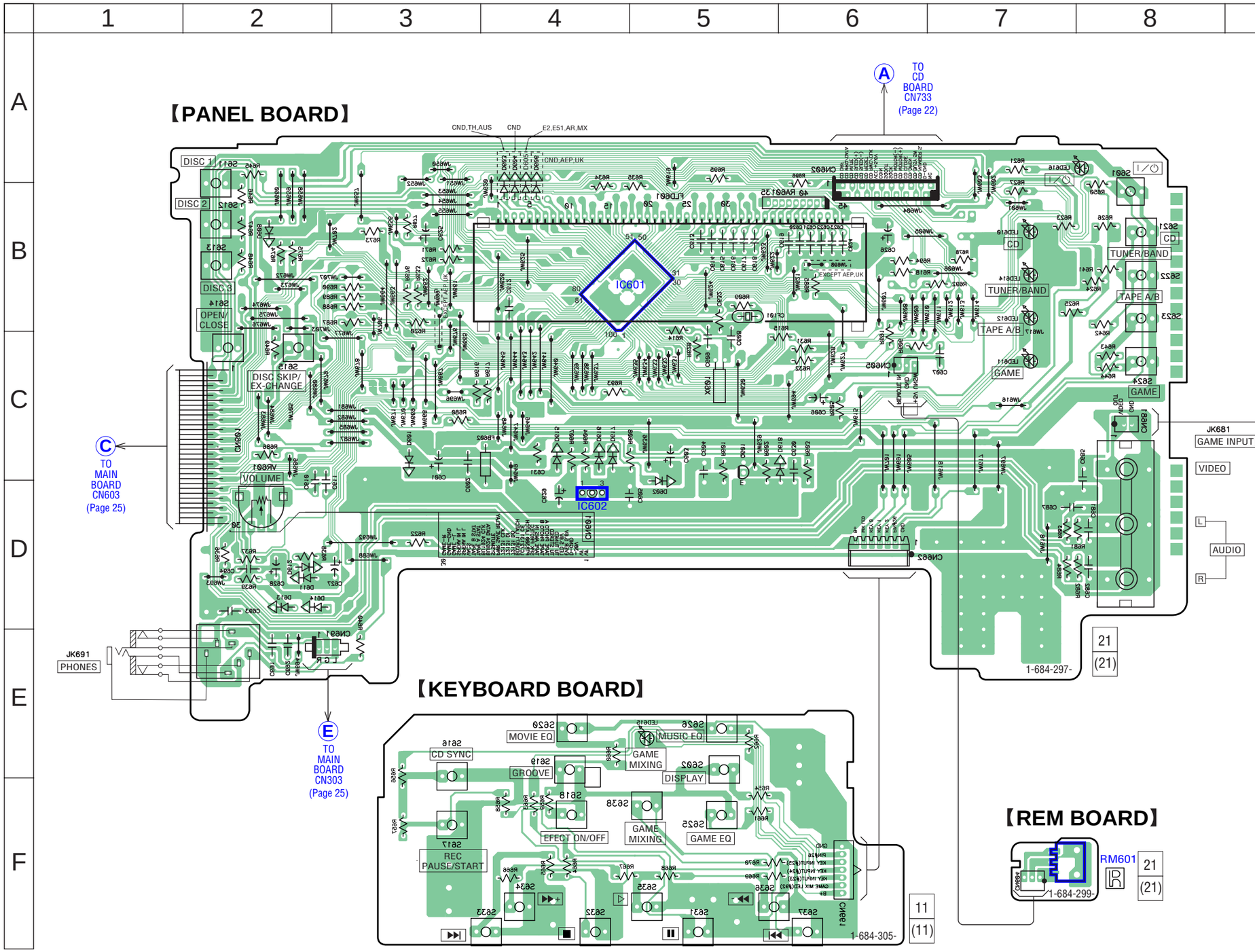
**5-9. Schematic Diagram – MAIN Board (3/4) –** • See page 34 for IC Block Diagrams.



## 5-10. Schematic Diagram – MAIN Board (4/4) –



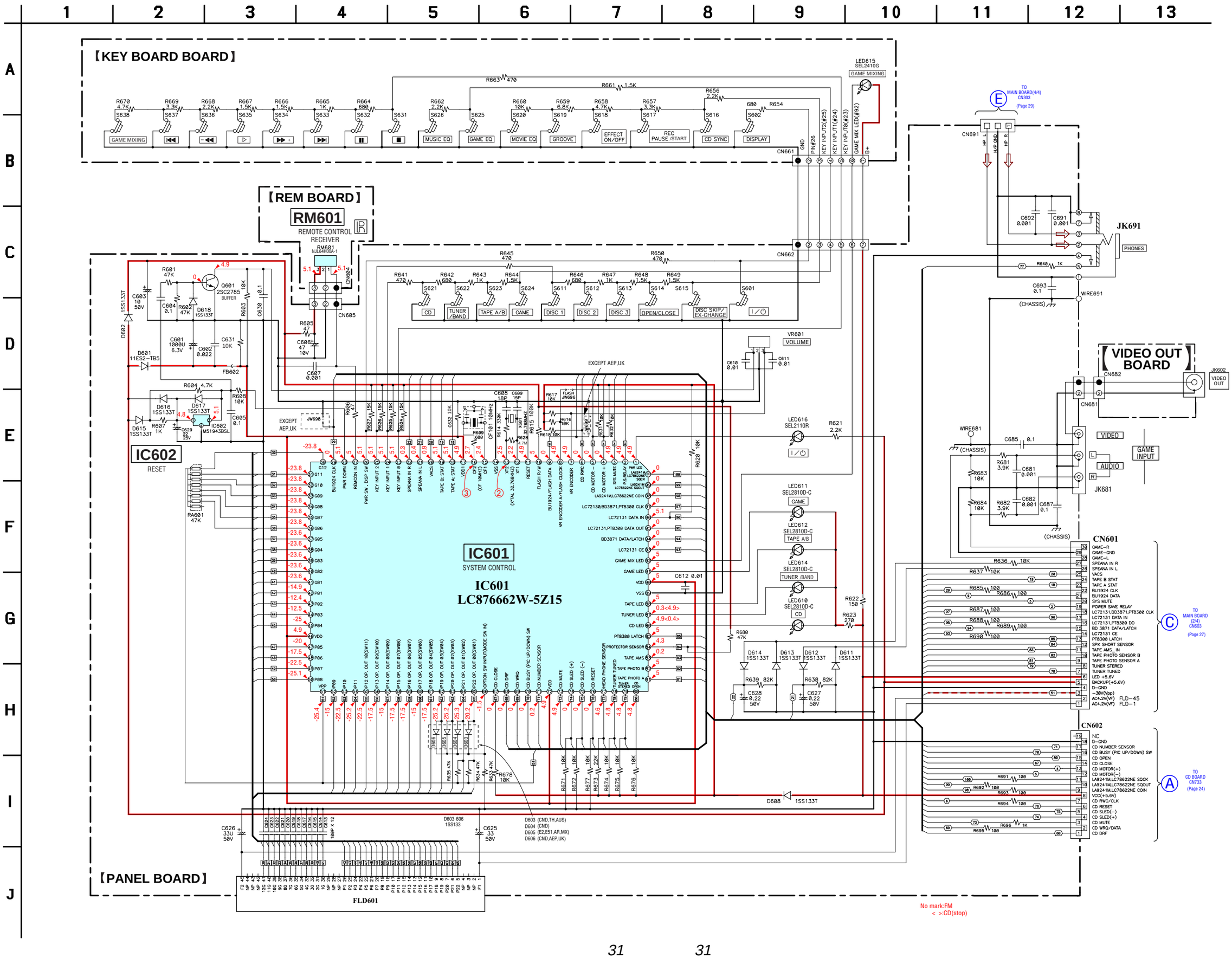
**5-11. Printed Wiring Boards – PANEL Section –** • See page 19 for Circuit Boards Location.



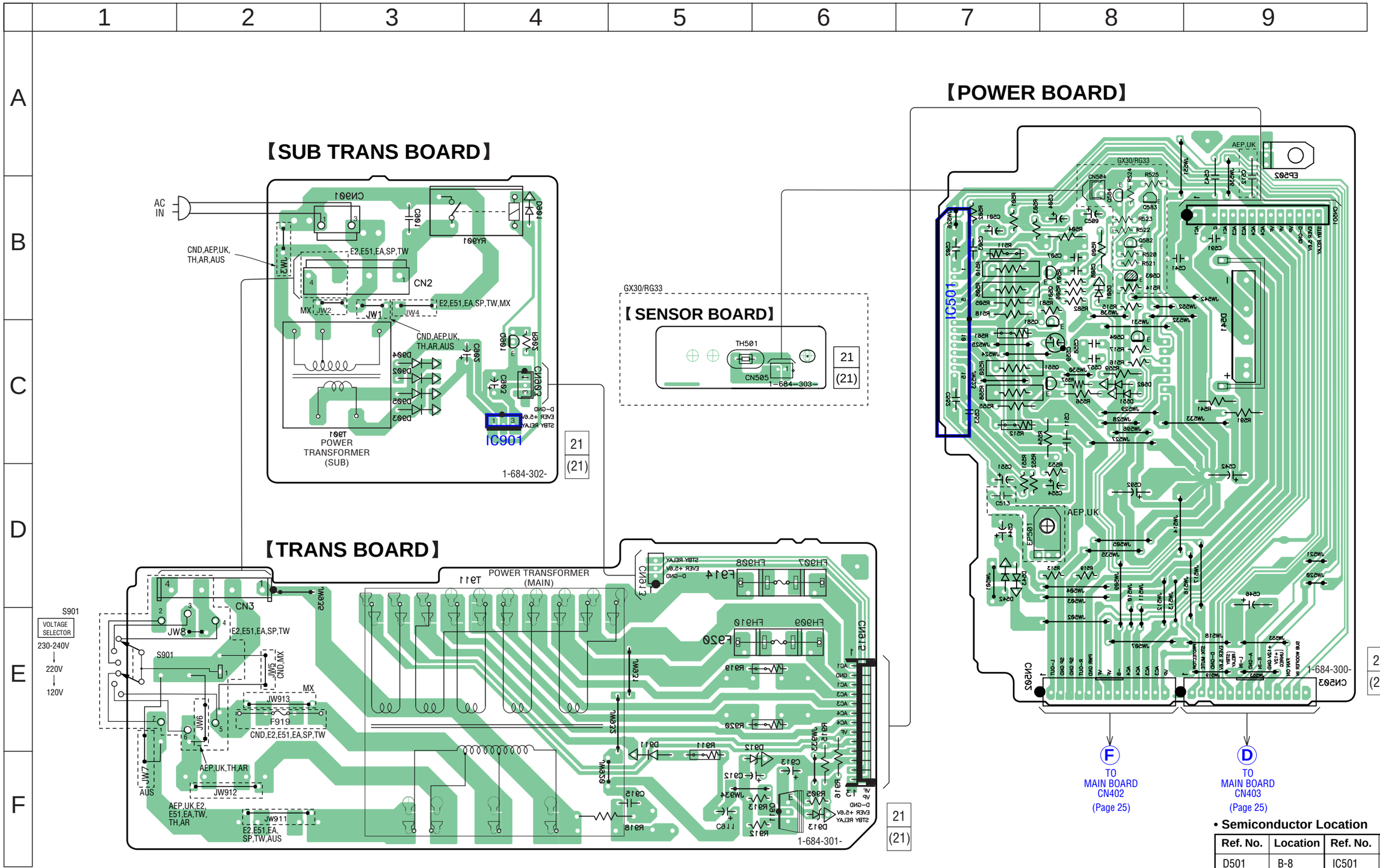

- **Semiconductor Location**

| Ref. No. | Location |
|---|---|
| D601 | C-3 |
| D602 | C-5 |
| D603 | A-4 |
| D604 | A-4 |
| D605 | A-4 |
| D606 | A-4 |
| D608 | B-2 |
| D611 | D-2 |
| D612 | D-2 |
| D613 | D-2 |
| D614 | D-2 |
| D615 | C-4 |
| D616 | C-4 |
| D617 | C-4 |
| D618 | C-6 |
| IC601 | B-4 |
| IC602 | D-4 |
| LED610 | B-7 |
| LED611 | C-7 |
| LED612 | B-7 |
| LED614 | B-7 |
| LED615 | E-5 |
| LED616 | A-7 |
| Q601 | C-5 |
| RM601 | F-8 |

**5-12. Schematic Diagram – PANEL Section –** • See page 36 for IC Pin Function Description. • See page 19 for Waveforms.



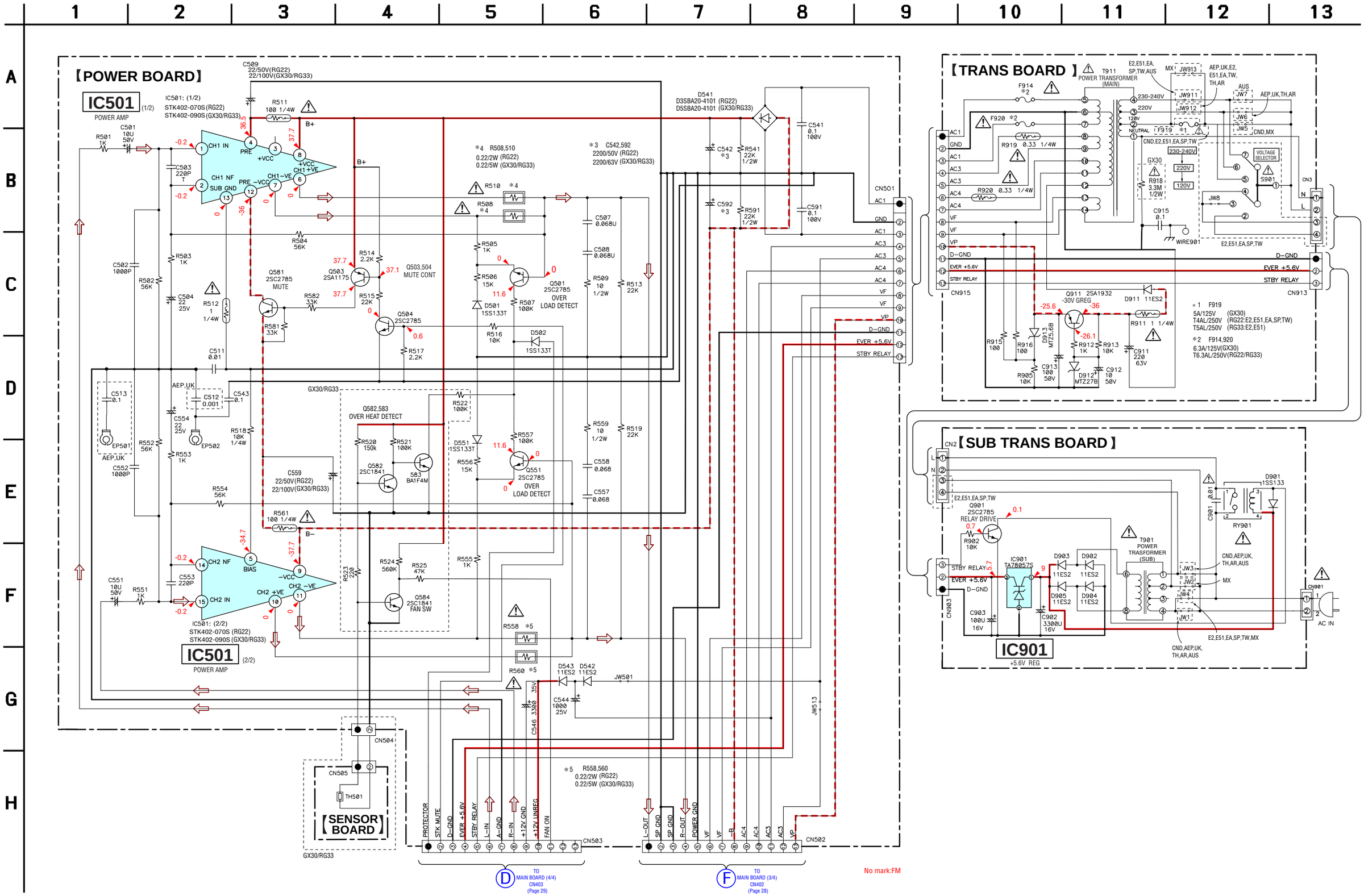
**5-13. Printed Wiring Boards – POWER/TRANS Section –** • See page 19 for Circuit Boards Location.




• **Semiconductor Location**

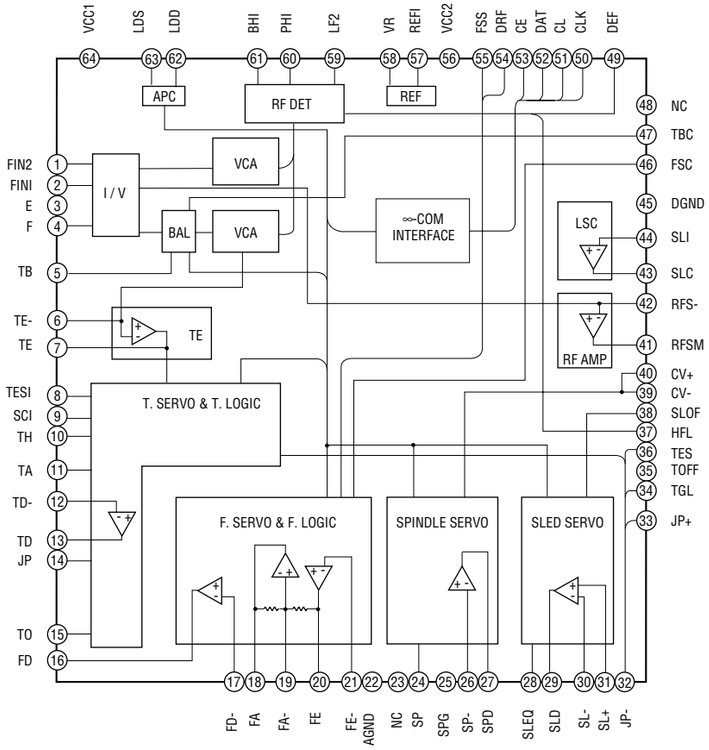
| Ref. No. | Location | Ref. No. | Location |
|---|---|---|---|
| D501 | B-8 | IC501 | C-7 |
| D502 | C-8 | IC901 | C-4 |
| D541 | B-9 | | |
| D542 | D-7 | Q501 | B-8 |
| D543 | D-7 | Q503 | B-8 |
| D551 | C-8 | Q504 | C-8 |
| D901 | B-4 | Q551 | C-8 |
| D902 | C-3 | Q581 | B-7 |
| D903 | C-3 | Q582 | B-8 |
| D904 | C-3 | Q583 | B-8 |
| D905 | C-3 | Q584 | B-8 |
| D911 | E-5 | Q901 | C-4 |
| D912 | E-5 | Q911 | F-5 |
| D913 | F-6 | | |

## 5-14. Schematic Diagram – POWER/TRANS Section –

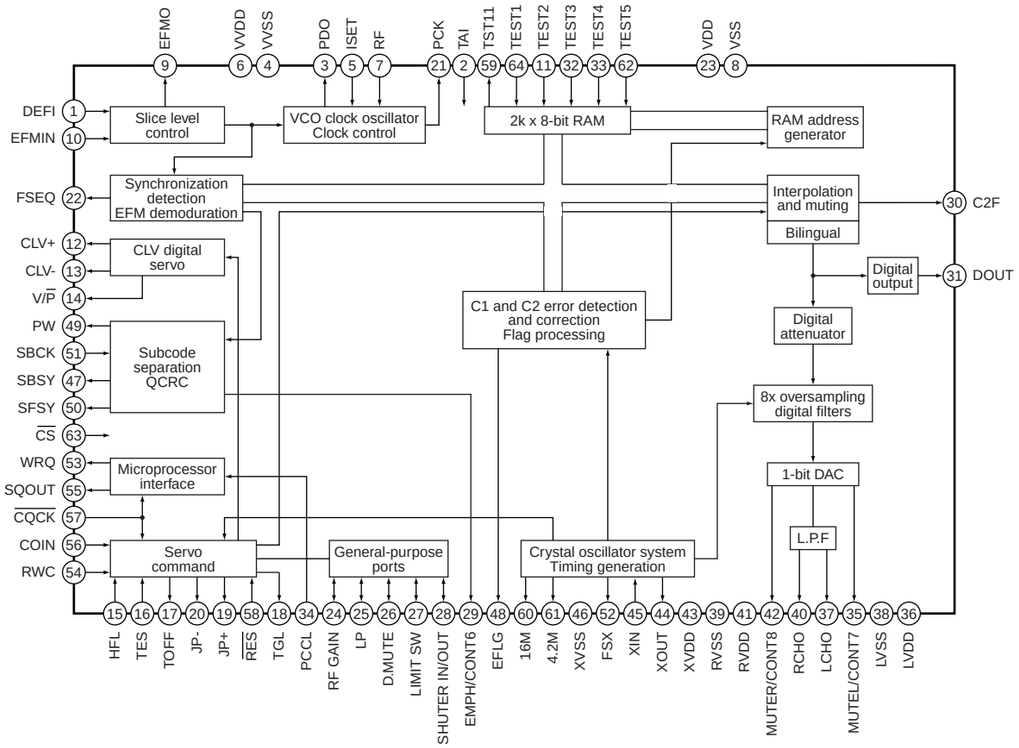


## • IC Block Diagrams

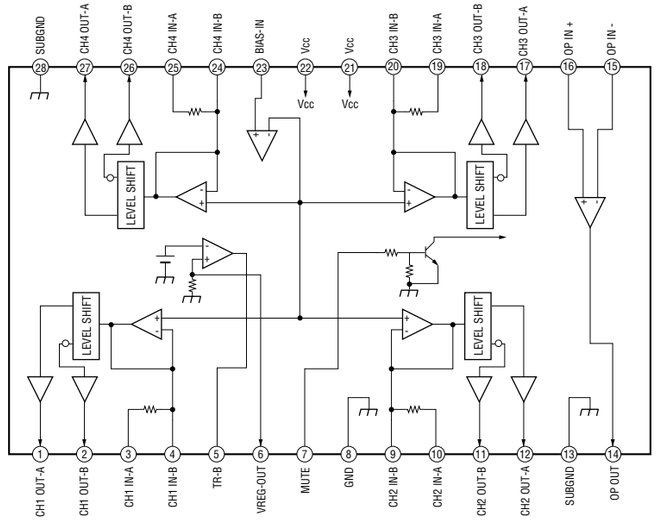
### IC731 LA9242M (CD BOARD)



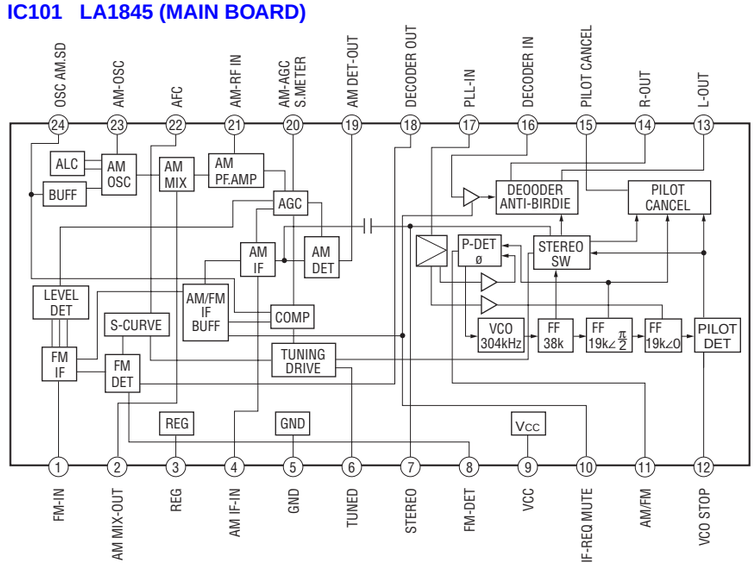

### IC751 LC78622NE (CD BOARD)



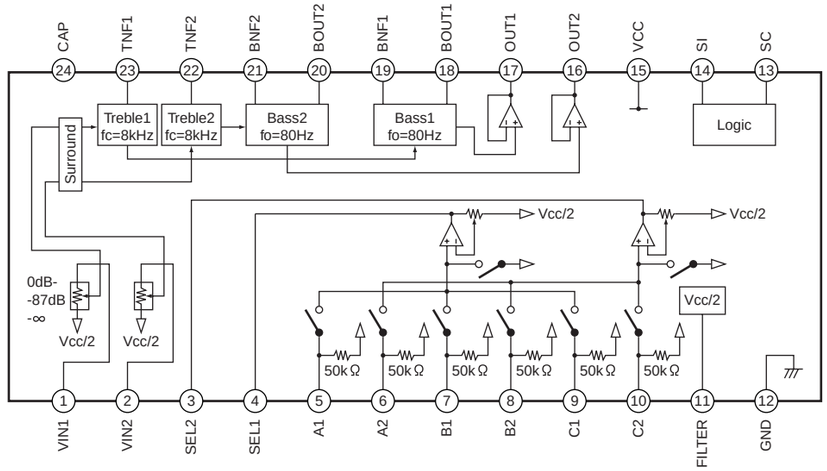

### IC781 MN1469XH (CD BOARD)



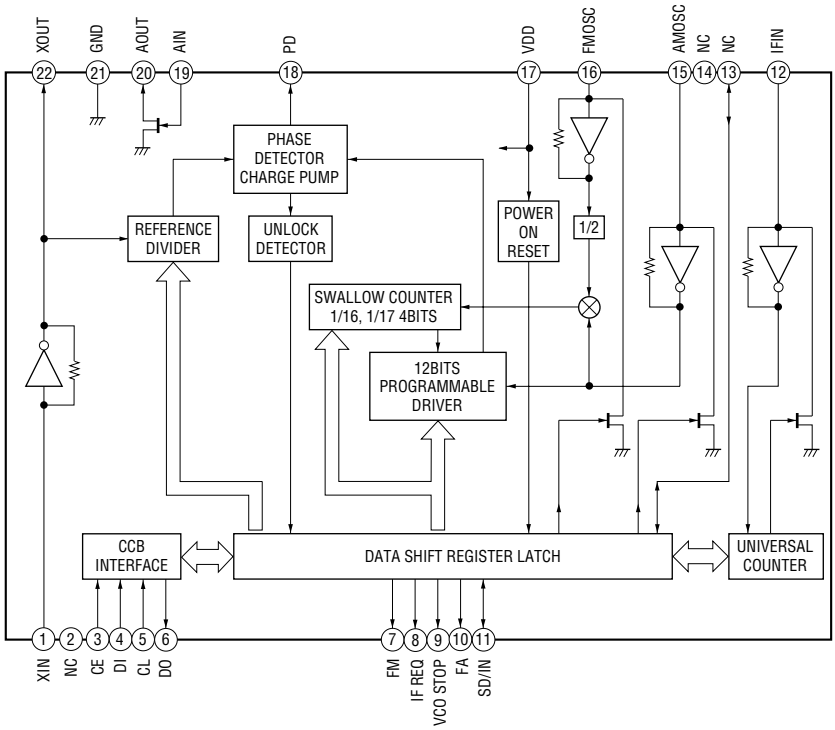

### IC101 LA1845 (MAIN BOARD)



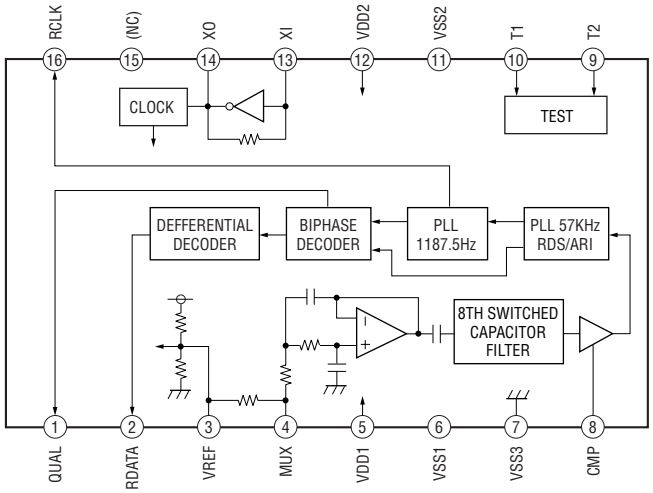

### IC301 BD3873FS (MAIN BOARD)



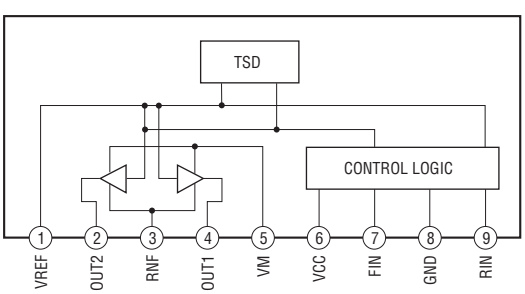
## IC102 LC72131D (MAIN BOARD)




## IC103 BU1924




## IC701 BA6956AN (DRIVER BOARD)



## 5-15. IC Pin Function Description

### • IC601 LC876662W-5Z15 Master Control (PANEL Board)

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 1 | PWR LED | O | PWR LED control signal output |
| 2 | P.S.RELAY | O | Standby relay control signal output |
| 3 | SYS MUTE | O | System muting signal output |
| 4 | CD MOTOR + | O | CD changer motor control signal output |
| 5 | CD MOTOR – | O | CD changer motor control signal output |
| 6 | CD RWC | O | Read/write control signal output |
| 7 | VR ENCODER B | I | Volume signal input from the rotary encoder |
| 8 | VR ENCODER A | I | Volume signal input from the rotary encoder |
| 9 | BU1924/FLASH DATA | I | Data input from the RDS decoder IC |
| 10 | FLASH R/W | – | Fixed at “H” |
| 11 | RESET | I | Reset input |
| 12 | XT1 | I | Connection for a crystal resonator |
| 13 | XT2 | O | Connection for a crystal resonator |
| 14 | VSS | – | Ground |
| 15 | CF1 | I | Connection for a ceramic resonator |
| 16 | CF2 | O | Connection for a ceramic resonator |
| 17 | VDD1 | – | Power sypply |
| 18 | TAPE A: STAT | I | TAPE A switches signal input |
| 19 | TAPE B: STAT | I | TAPE B switches signal input |
| 20 | VACS | O | VACS control signal output |
| 21 | SPEANA IN L | I | Spectrum analyzer signal input |
| 22 | SPEANA IN R | I | Spectrum analyzer signal input |
| 23 | KEY INPUT 0 | I | Function key input |
| 24 | KEY INPUT 1 | I | Function key input |
| 25 | KEY INPUT 2 | I | Function key input |
| 26 | PWR SW, DISP SW | I | POWER switch or DISP switch key input |
| 27 | REMOCON IN | I | Data input from the remote control receiver |
| 28 | PWR DOWN | I | Power down signal input |
| 29 | BU1924 CLK | I | Clock input from the RDS decoder IC |
| 30 to 41 | G12 to G01 | O | FL tube grid signal ouput |
| 42 to 45 | P01 to P04 | O | FL tube segment signal ouput |
| 46 | VDD | – | Power supply |
| 47 to 54 | P05 to P11 | O | FL tube segment signal ouput |
| 55 to 65 | P12 OP. OUT 10(SW11) to P22 OP. OUT 00(SW01) | O | FL tube segment signal ouput or switch signal output |
| 66 | OPTION SW INPUT | I | Switch signal input |
| 67 | CD CLOSE | I | CD tray close switch signal input |
| 68 | CD DRF | I | RF level detection signal input |
| 69 | CD WRQ | I | Subcode Q standby signal input |
| 70 | CD BUSY (PIC UP/DOWN)SW | I | CD BU up/down switch signal input |
| 71 | CD NUMBER SENSOR | I | Table address sensor switch signal input |
| 72 | VDD | – | Power supply |
| 73 | CD MUTE | O | CD audio muting signal output |
| 74 | CD SLED (+) | O | Sled motor control signal output |
| 75 | CD SLED (–) | O | Sled motor control signal output |
| 76 | CD RESET | O | CD reset signal output |
| 77 | HEAD PHONE SENSOR | I | Headphone detection signal input |
| 78 | TUNER TUNED | I | Tuning a frequency signal input |

| Pin No. | Pin Name | I/O | Description |
|---|---|---|---|
| 79 | TUNER STEREO | I | Stereo tuning signal input |
| 80 | CD OPEN | I | CD tray open switch signal input |
| 81 | TAPE PHOTO A | I | A deck photo sensor singanl input |
| 82 | TAPE PHOTO B | I | B deck photo sensor singanl input |
| 83 | TAPE AMS | I | AMS signal input |
| 84 | PROTECTOR SENSOR | I | Power amplifier circuit protection signal input |
| 85 | PT8300 LATCH | O | Latch signal output to the I/O expander |
| 86 | CD LED | O | CD LED control signal output |
| 87 | TUNER LED | O | TUNER LED control signal output |
| 88 | TAPE LED | O | TAPE LED control signal output |
| 89 | VSS | – | Ground |
| 90 | VDD | – | Power supply |
| 91 | GAME LED | O | GAME LED control signal output |
| 92 | GAME MIX LED | O | GAME MIX LED control signal output |
| 93 | LC72131 CE | O | Chip select signal output to the PLL tuner IC |
| 94 | BD3871 DATA/LATCH | O | Data/latch signal output to the sound processor |
| 95 | LC72131,PT8300 DATA OUT | O | Data output to the PLL tuner IC and the I/O expander |
| 96 | LC72131 DATA IN | I | Data input from the the PLL tuner IC |
| 97 | LC72131,BD3871, PT8300 CLK | O | Clock output to the PLL tuner IC, the sound processor and the I/O expander |
| 98 | LA9241M,LC78622NE COIN | O | CD command data signal output |
| 99 | LA9241M,LC78622NE SQOUT | I | CD subcode Q signal input |
| 100 | LA9241M,LC78622NE SQCK | O | CD command clock signal output |

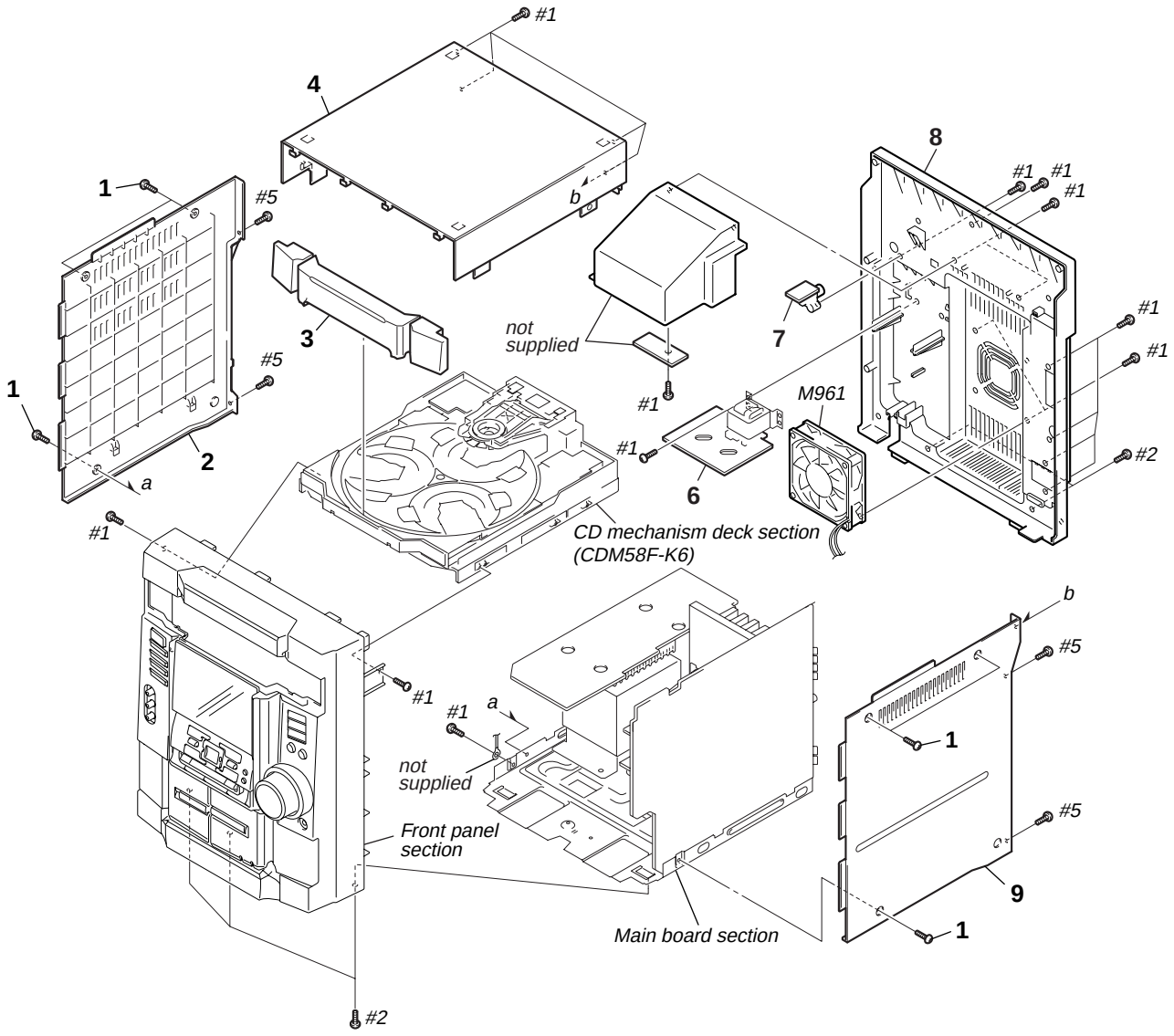
# SECTION 6
# EXPLODED VIEWS

NOTE:
- -XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : 220V AC area in E model
  EA : Saudi Arabia model
  MX : Mexican model
  SP : Singapore model
  TH : Thai model
  TW : Taiwan model

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

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

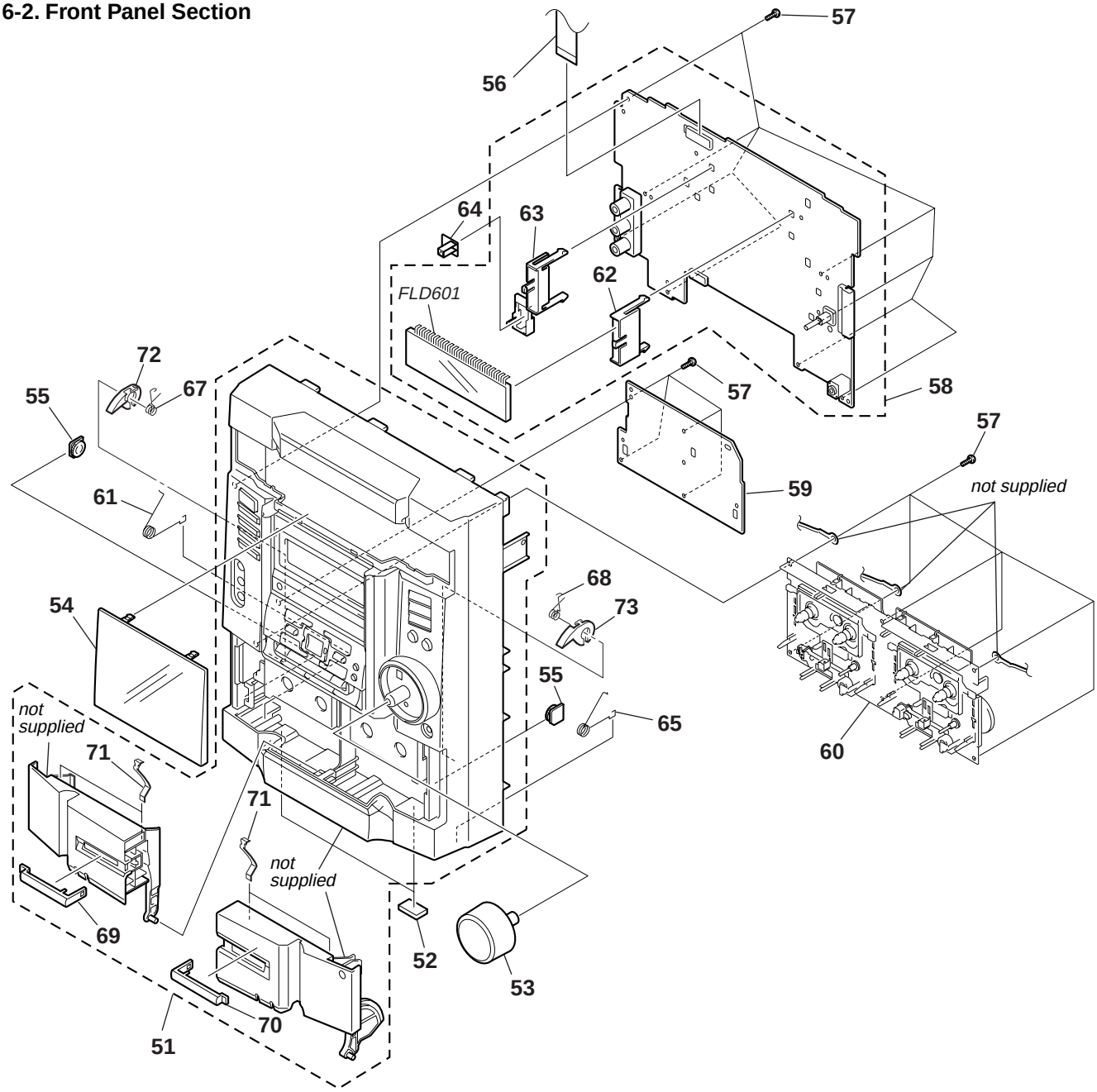
## 6-1. Main Section




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 1 | 3-363-099-41 | SCREW (CASE 3 TP2) | |
| 2 | 4-224-549-21 | CASE (SIDE-L) | |
| 3 | 4-238-616-01 | CD DOOR | |
| 4 | 4-224-550-41 | CASE (TOP) (RG22:AEP,UK/RG33:AEP,UK) | |
| 4 | 4-224-550-81 | CASE (TOP) (GX30/RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51,MX,AR) | |
| 6 | 1-684-302-21 | SUB TRANS BOARD | |
| 7 | 1-684-298-21 | VIDEO OUT | |
| 8 | 4-234-701-11 | BACK PANEL (RG22:AEP,UK/RG33:AEP,UK) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 8 | 4-234-701-21 | BACK PANEL (RG22:E2,E51,SP,EA,TH,TW/RG33:E2,E51) | |
| 8 | 4-234-701-31 | BACK PANEL (RG22:AUS,MX,AR) | |
| 8 | 4-234-701-41 | BACK PANEL (GX30/RG33:MX,AR) | |
| 9 | 4-224-548-61 | CASE (SIDE-R) | |
| M961 | 1-763-738-21 | FAN, DC (GX30/RG33) | |
| #1 | 7-685-647-79 | SCREW +BVTP 3X10 TYPE2 N-S | |
| #2 | 7-685-871-01 | SCREW +BVTT 3X6 (S) | |
| #5 | 7-685-872-09 | SCREW +BVTT 3X8 (S) | |

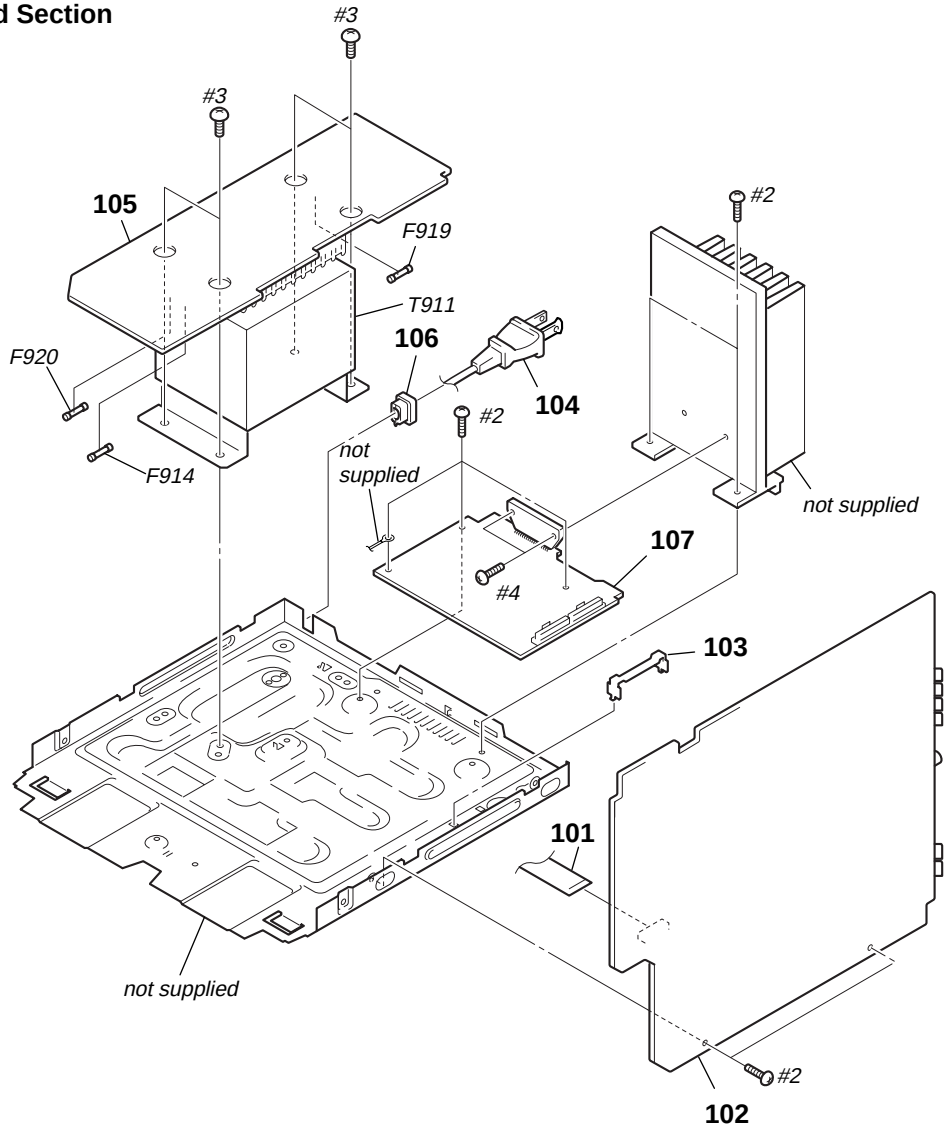
## 6-2. Front Panel Section




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 51 | A-4722-475-A | PANEL ASSY, FRONT (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51) | |
| 51 | A-4746-787-A | PANEL ASSY, FRONT (GX30/RG22:AEP,UK/RG33:AEP,UK,MX,AR) | |
| 52 | 4-233-980-01 | RUBBER FOOT | |
| 53 | 4-234-019-01 | VOLUME KNOB (GX30/RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51,MX,AR) | |
| 53 | 4-234-019-21 | VOLUME KNOB (RG22:AEP,UK/RG33:AEP,UK) | |
| 54 | 4-238-609-01 | DISPLAY WINDOW (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW) | |
| 54 | 4-238-609-21 | DISPLAY (WINDOW) (RG22:AEP,UK) | |
| 54 | 4-238-609-31 | DISPLAY (WINDOW) (RG33:AEP,UK) | |
| 54 | 4-238-609-41 | DISPLAY (WINDOW) (RG33:E2,E51) | |
| 54 | 4-238-609-51 | DISPLAY (WINDOW) (GX30/RG33:MX,AR) | |
| 55 | 4-224-104-41 | DAMPER | |
| 56 | 1-773-119-11 | WIRE (FLAT TYPE) (19 CORE) | |
| 57 | 4-218-254-21 | SCREW (M2.6), +PTPWH | |
| 58 | A-4729-718-A | PANEL BOARD, COMPLETE (RG22:AEP,UK/RG33:AEP,UK) | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 58 | A-4729-766-A | PANEL BOARD, COMPLETE (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51) | |
| 58 | A-4676-626-A | PANEL BOARD, COMPLETE (GX30/RG33:MX,AR) | |
| 59 | 1-684-305-21 | KEYBOARD BOARD | |
| 60 | 1-796-360-11 | DECK, MECH (CWL43FF48) | |
| 61 | 4-239-346-01 | CASSETTE DOOR SPRING (L) | |
| 62 | 4-238-614-01 | FL HOLDER R | |
| 63 | 4-238-613-01 | FL HOLDER L | |
| 64 | 1-684-299-21 | REM BOARD | |
| 65 | 4-239-347-01 | CASSETTE DOOR SPRING (R) | |
| 67 | 4-231-836-01 | SPRING (HEART CAM-A) | |
| 68 | 4-231-841-01 | SPRING (HEART CAM-B) | |
| 69 | 4-238-619-01 | CASS WINDOW A | |
| 70 | 4-238-620-01 | CASS WINDOW B | |
| 71 | 4-238-631-01 | TAPE SPRING | |
| 72 | 4-231-824-01 | HEART CAM (A) | |
| 73 | 4-231-825-01 | HEART CAM (B) | |
| FLD601 | 1-518-792-11 | INDICATOR TUBE, FLUORESCENT | |

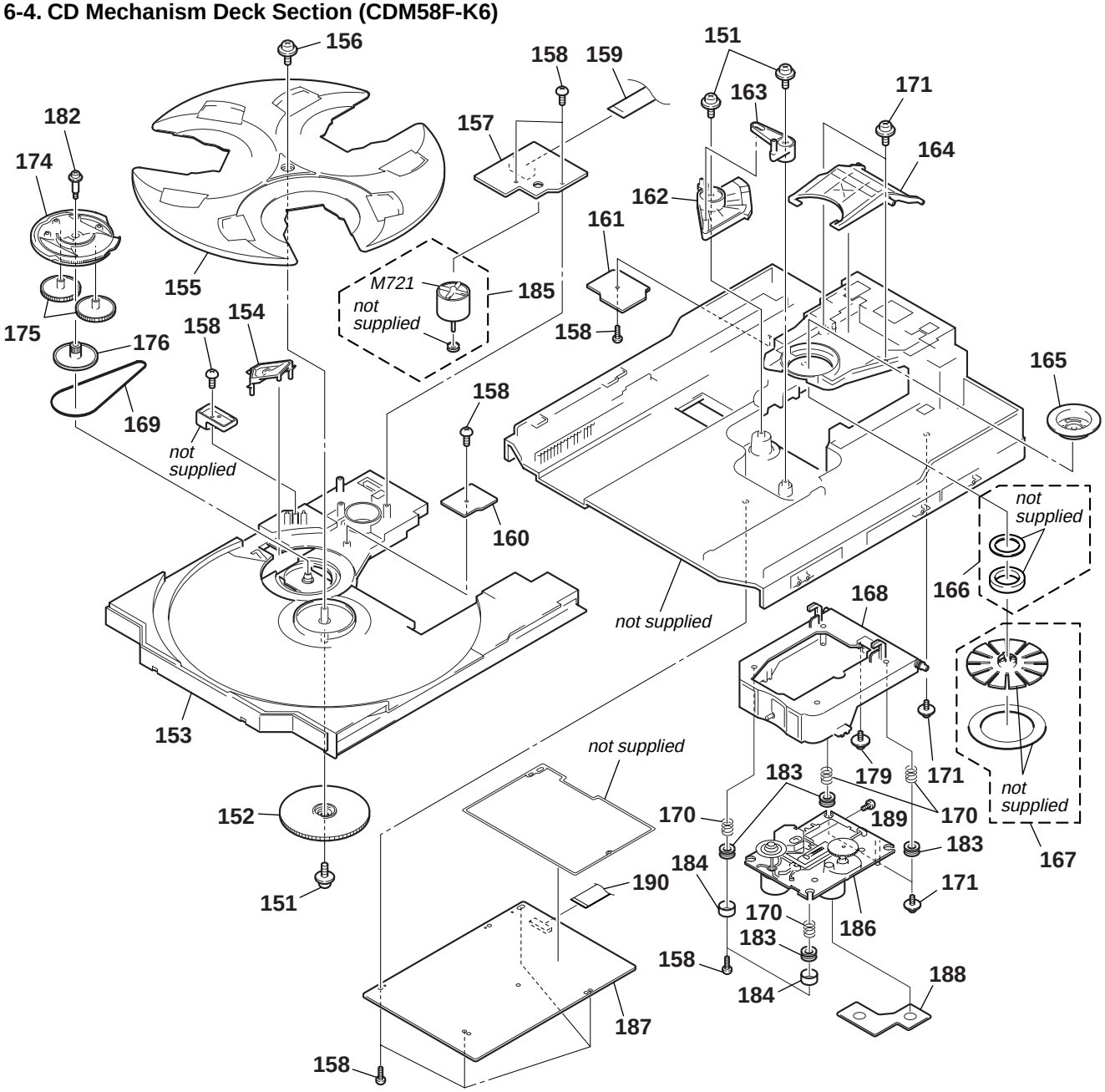
## 6-3. MAIN Board Section




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 101 | 1-751-688-11 | WIRE (FLAT TYPE) (13 CORE) | |
| 102 | A-4729-727-A | MAIN BOARD, COMPLETE (RG22:AEP,UK) | |
| 102 | A-4729-942-A | MAIN BOARD, COMPLETE (GX30/RG33:MX,AR) | |
| 102 | A-4729-966-A | MAIN BOARD, COMPLETE (RG33:AEP,UK) | |
| 102 | A-4729-979-A | MAIN BOARD, COMPLETE (RG33:E2,E51) | |
| 102 | A-4676-636-A | MAIN BOARD, COMPLETE (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW) | |
| 103 | 4-988-533-01 | HOLDER, PWB | |
| ⚠104 | 1-690-608-11 | CORD, POWER (RG22:AUS) | |
| ⚠104 | 1-777-071-82 | CORD, POWER (RG22:AEP,E51,EA/RG33:AEP,E51) | |
| ⚠104 | 1-783-528-11 | CORD, POWER (TRACKING) (RG22:SP,TH,TW) | |
| ⚠104 | 1-783-532-11 | CORD, POWER (GX30) | |
| ⚠104 | 1-783-941-22 | CORD, POWER (RG22:AR/RG33:AR) | |
| ⚠104 | 1-790-226-12 | CORD, POWER (RG22:UK/RG33:UK) | |
| ⚠104 | 1-791-901-11 | CORD, POWER (RG22:E2,MX/RG33:E2,MX) | |
| 105 | 1-684-301-21 | TRANS BOARD | |
| * 106 | 3-703-244-00 | BUSHING (2104), CORD | |
| 107 | A-4729-719-A | POWER BOARD, COMPLETE (RG22:AEP,UK) | |
| 107 | A-4729-939-A | POWER BOARD, COMPLETE (GX30/RG33:MX,AR) | |
| 107 | A-4729-962-A | POWER BOARD, COMPLETE (RG33:AEP,UK) | |
| 107 | A-4729-982-A | POWER BOARD, COMPLETE (RG33:E2,E51) | |
| 107 | A-4676-627-A | POWER BOARD, COMPLETE (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW) | |
| ⚠F914 | 1-533-454-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F914 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (RG22/RG33) | |
| ⚠F919 | 1-533-453-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F919 | 1-533-471-11 | FUSE, GLASS TUBE (DIA. 5) (RG22:E2,E51,SP,EA,TW) | |
| ⚠F919 | 1-533-472-11 | FUSE, GLASS TUBE (DIA. 5) (RG33:E2,E51) | |
| ⚠F920 | 1-533-454-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F920 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (RG22/RG33) | |
| ⚠T911 | 1-437-389-11 | TRANSFORMER, POWER (GX30/RG33:MX,AR) | |
| ⚠T911 | 1-437-678-11 | TRANSFORMER, POWER (RG22:AUS,MX,AR) | |
| ⚠T911 | 1-437-679-11 | TRANSFORMER, POWER (RG22:AEP,UK) | |
| ⚠T911 | 1-437-680-11 | TRANSFORMER, POWER (RG22:E2,E51,SP,TH,TW) | |
| ⚠T911 | 1-437-762-11 | TRANSFORMER, POWER (RG33:AEP,UK) | |
| ⚠T911 | 1-437-763-11 | TRANSFORMER, POWER (RG33:E2,E51) | |
| ⚠T911 | 1-437-830-11 | TRANSFORMER, POWER (RG22:EA) | |
| #2 | 7-685-871-01 | SCREW +BVTT 3X6 (S) | |
| #3 | 7-685-880-09 | SCREW +BVTT 4X6 (S) | |
| #4 | 7-685-650-79 | SCREW +BVTP 3X16 TYPE2 IT-3 | |

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

## 6-4. CD Mechanism Deck Section (CDM58F-K6)




| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 151 | 4-218-254-21 | SCREW (M2.6), +PTPWH | |
| 152 | 4-231-187-01 | CAM (RELAY) | |
| 153 | 4-231-177-04 | TABLE (NEW) | |
| 154 | 4-231-181-01 | LEVER (CHANGE) | |
| 155 | 4-231-178-02 | TRAY | |
| 156 | 4-933-134-51 | SCREW (+PTPWH 2.6X8) | |
| 157 | 1-675-910-14 | MOTOR BOARD | |
| 158 | 4-218-253-31 | SCREW (M2.6), +BTTP | |
| 159 | 1-791-983-12 | WIRE (FLAT TYPE) (8 CORE) | |
| 160 | 1-675-911-14 | ADDRESS SENSOR BOARD | |
| 161 | 1-675-912-14 | DRIVER BOARD | |
| 162 | X-4953-283-2 | CAM (U/D) ASSY | |
| 163 | 4-231-186-01 | LEVER (EX) | |
| 164 | 4-231-190-01 | LEVER (LIFTER) | |
| 165 | 4-231-189-01 | PULLEY (B), CHUCKING | |
| 166 | 1-471-035-11 | MAGNET ASSY | |
| 167 | X-4953-232-1 | PULLY (A) ASSY, CHUCKING | |
| 168 | X-4953-281-1 | HOLDER (BU) ASSY | |
| 169 | 4-222-095-01 | BELT | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| 170 | 4-227-045-11 | SPRING (INSULATOR), COIL | |
| 171 | 4-985-672-01 | SCREW (+PTPWH M2.6), FLOATING | |
| 174 | 4-231-180-04 | CAM (CONTROL) | |
| 175 | 4-231-182-01 | GEAR (U) | |
| 176 | 4-231-183-01 | PULLEY (S) | |
| 179 | 4-227-899-01 | SCREW (DIA.12) FROATING | |
| 182 | 4-222-097-01 | SCREW, STEP | |
| 183 | 4-227-549-11 | INSULATOR | |
| 184 | 4-231-151-01 | STOPPER (BU) | |
| 185 | A-4672-826-A | MOTOR ASSY (SLED) | |
| ⚠186 | A-4735-357-A | BASE ASSY, OP (KSM-213D) | |
| 187 | A-4676-639-A | CD BOARD, COMPLETE | |
| 188 | 1-684-307-11 | SPDL BOARD | |
| 189 | 4-951-620-01 | SCREW (2.6X8), +BVTP | |
| 190 | 1-823-859-11 | WIRE (FLAT TYPE) (16 CORE) | |
| M721 | 1-763-790-11 | MOTOR, DC (TURN) | |

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

# ADDRESS SENSOR | CD

# SECTION 7 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS:
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA...: µA... , uPA... , µPA... ,
  uPB... , µPB... , uPC... , µPC... ,
  uPD..., µPD...
- Abbreviation
  AR : Argentina model
  AUS : Australian model
  E2 : 120V AC area in E model
  E51 : 220V AC area in E model

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

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

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

EA : Saudi Arabia model
MX : Mexican model
SP : Singapore model
TH : Thai model
TW : Taiwan model

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | 1-675-911-14 | ADDRESS SENSOR BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C712 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < PHOTO INTERRUPTER > | | | |
| IC711 | 8-749-014-38 | PHOTO INTERRUPTER SG-264 | | | |
| | | < RESISTOR > | | | |
| R711 | 1-247-876-11 | CARBON | 75K | 5% | 1/4W |
| R712 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R713 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| | | < SWITCH > | | | |
| S711 | 1-771-821-11 | SWITCH, PUSH (1 KEY) (UP/DOWN) | | | |
| | A-4676-639-A | CD BOARD, COMPLETE | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C704 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C705 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C706 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C707 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C708 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C709 | 1-104-665-11 | ELECT | 100uF | 20.00% | 10V |
| C710 | 1-104-665-11 | ELECT | 100uF | 20.00% | 10V |
| C711 | 1-162-306-11 | CERAMIC | 0.01uF | 20.00% | 16V |
| C712 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C713 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C714 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C715 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C717 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C719 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C720 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C721 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C722 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C723 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C724 | 1-130-489-00 | MYLAR | 0.033uF | 5% | 50V |
| C725 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V |
| C726 | 1-136-171-00 | FILM | 0.33uF | 5.00% | 50V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C727 | 1-136-167-00 | FILM | 0.15uF | 5.00% | 50V |
| C728 | 1-127-869-21 | CERAMIC | 2700PF | 10% | 50V |
| C730 | 1-130-485-00 | MYLAR | 0.015uF | 5% | 50V |
| C731 | 1-130-486-00 | MYLAR | 0.018uF | 10% | 50V |
| C732 | 1-130-493-00 | MYLAR | 0.068uF | 5% | 50V |
| C734 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C735 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C736 | 1-136-171-00 | FILM | 0.33uF | 5.00% | 50V |
| C737 | 1-162-306-11 | CERAMIC | 0.01uF | 20.00% | 16V |
| C738 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C739 | 1-162-600-11 | CERAMIC | 0.0047uF | 10.00% | 16V |
| C740 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C741 | 1-126-959-11 | ELECT | 0.47uF | 20.00% | 50V |
| C742 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C743 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C744 | 1-127-870-21 | CERAMIC | 3300PF | 10% | 50V |
| C745 | 1-162-194-31 | CERAMIC | 3.9PF | 10.00% | 50V |
| C746 | 1-162-306-11 | CERAMIC | 0.01uF | 20.00% | 16V |
| C747 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C748 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C749 | 1-162-205-31 | CERAMIC | 18PF | 5% | 50V |
| C750 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C751 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C752 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C753 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C754 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C755 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C756 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C757 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C758 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C759 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C760 | 1-162-284-31 | CERAMIC | 150PF | 10.00% | 50V |
| C761 | 1-162-206-31 | CERAMIC | 20PF | 5% | 50V |
| C762 | 1-162-206-31 | CERAMIC | 20PF | 5% | 50V |
| C763 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C764 | 1-161-494-00 | CERAMIC | 0.022uF | 25V | |
| C765 | 1-162-280-31 | CERAMIC | 82PF | 10% | 50V |
| C767 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C768 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C769 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C770 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C771 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C772 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C773 | 1-162-300-11 | CERAMIC | 0.01uF | 30% | 16V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C774 | 1-126-300-11 | CERAMIC | 0.01uF | 30% | 16V |
| C775 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C776 | 1-162-282-31 | CERAMIC | 100PF | 10% | 50V |
| C777 | 1-126-947-11 | ELECT | 47uF | 20.00% | 10V |
| C781 | 1-126-926-11 | ELECT | 1000uF | 20.00% | 10V |
| C782 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C783 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C786 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C787 | 1-104-665-11 | ELECT | 100uF | 20.00% | 10V |
| C788 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V |
| C789 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C790 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C791 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| C792 | 1-164-159-21 | CERAMIC | 0.1uF | | 50V |
| | | < CONNECTOR > | | | |
| CN731 | 1-779-553-11 | CONNECTOR,FFC(LIF(NON-ZIF))16P | | | |
| * CN732 | 1-564-708-11 | PIN, CONNECTOR (SMALL TYPE) 6P | | | |
| CN733 | 1-784-780-11 | CONNECTOR, FFC 19P | | | |
| * CN734 | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P | | | |
| * CN735 | 1-564-712-11 | PIN, CONNECTOR (SMALL TYPE)10P | | | |
| | | < DIODE > | | | |
| D731 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D732 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| | | < FERRITE BEAD > | | | |
| FB751 | 1-410-397-21 | FERRITE BEAD INDUCTOR | | | |
| | | < IC > | | | |
| IC731 | 6-702-016-01 | IC LA9242M | | | |
| IC751 | 6-700-355-01 | IC LC78622NE | | | |
| IC781 | 6-700-304-01 | IC MM1469XH | | | |
| | | < COIL > | | | |
| L701 | 1-410-509-11 | INDUCTOR | 10uH | | |
| L702 | 1-410-509-11 | INDUCTOR | 10uH | | |
| L703 | 1-410-521-11 | INDUCTOR | 100uH | | |
| L704 | 1-410-509-11 | INDUCTOR | 10uH | | |
| L705 | 1-410-521-11 | INDUCTOR | 100uH | | |
| | | < TRANSISTOR > | | | |
| Q731 | 8-729-116-57 | TRANSISTOR | 2SB1068TP-K | | |
| Q771 | 8-729-119-78 | TRANSISTOR | 2SC2785TP-HFE | | |
| Q772 | 8-729-119-78 | TRANSISTOR | 2SC2785TP-HFE | | |
| Q774 | 8-729-119-76 | TRANSISTOR | 2SA1175TP-HFE | | |
| Q775 | 8-729-119-78 | TRANSISTOR | 2SC2785TP-HFE | | |
| | | < RESISTOR > | | | |
| R703 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R704 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W F |
| R705 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R706 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R707 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R708 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R709 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W F |
| R710 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R715 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R716 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R717 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R718 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R719 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R720 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R721 | 1-249-414-11 | CARBON | 560 | 5% | 1/4W F |
| R722 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R724 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R725 | 1-249-430-11 | CARBON | 12K | 5% | 1/4W |
| R727 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W F |
| R728 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R729 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R731 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R732 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W |
| R733 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R734 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R735 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R736 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R737 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R738 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R739 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R740 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W F |
| R741 | 1-249-424-11 | CARBON | 3.9K | 5% | 1/4W F |
| R742 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W |
| R743 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W |
| R744 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R745 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R746 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R747 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R748 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R749 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R750 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R751 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R752 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R753 | 1-249-418-11 | CARBON | 1.2K | 5% | 1/4W F |
| R754 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R755 | 1-249-442-11 | CARBON | 510 | 5% | 1/4W |
| R756 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R757 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R758 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R759 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R760 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R761 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R762 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R763 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R764 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R765 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R766 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R767 | 1-247-855-11 | CARBON | 10K | 5% | 1/4W |
| R768 | 1-247-855-11 | CARBON | 10K | 5% | 1/4W |
| R771 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R772 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R773 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R774 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R775 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R776 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R777 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R778 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R780 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |

**CD** **DRIVER** **KEYBOARD** **MAIN**

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R781 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R782 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R783 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R784 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R785 | 1-247-889-00 | CARBON | 270K | 5% | 1/4W |
| R786 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R787 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R788 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R789 | 1-247-889-00 | CARBON | 270K | 5% | 1/4W |
| R792 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R793 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R794 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R795 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R796 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R797 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R798 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R799 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| | | < TEST PIN > | | | |
| * TP731 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | | | |
| | | < VIBRATOR > | | | |
| X701 | 1-579-280-11 | VIBRATOR, CRYSTAL (16.9344MHz) | | | |
| ********** | | | | | |
| | 1-675-912-14 | DRIVER BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C702 | 1-126-964-51 | ELEC | 10uF | 20.00% | 50V |
| | | < CONNECTOR > | | | |
| CN702 | 1-785-550-11 | CONNECTOR, FFC/FPC 8P | | | |
| | | < DIODE > | | | |
| D701 | 8-719-983-15 | DIODE MTZJ-T-77-3.9A | | | |
| | | < IC > | | | |
| IC701 | 8-759-598-69 | IC BA6956AN | | | |
| | | < RESISTOR > | | | |
| R701 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R702 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F |
| ********** | | | | | |
| | 1-684-305-21 | KEYBOARD BOARD | | | |
| | | ********** | | | |
| | | < DIODE > | | | |
| LED615 | 8-719-304-83 | DIODE SEL2410G (GAME MIXING) | | | |
| | | < RESISTOR > | | | |
| R654 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R656 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R657 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R658 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R659 | 1-249-427-11 | CARBON | 6.8K | 5% | 1/4W F |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R660 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R661 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R662 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R663 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R664 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R665 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R666 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R667 | 1-249-419-11 | CARBON | 1.5K | 5% | 1/4W F |
| R668 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R669 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R670 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| | | < SWITCH > | | | |
| S602 | 1-762-196-21 | SWITCH, TACT (DISPLAY) | | | |
| S616 | 1-762-196-21 | SWITCH, TACT (CD SYNC) | | | |
| S617 | 1-762-196-21 | SWITCH, TACT (REC PAUSE/START) | | | |
| S618 | 1-762-196-21 | SWITCH, TACT (EFECT ON/OFF) | | | |
| S619 | 1-762-196-21 | SWITCH, TACT (GROOVE) | | | |
| S620 | 1-762-196-21 | SWITCH, TACT (MOVIE EQ) | | | |
| S625 | 1-762-196-21 | SWITCH, TACT (GAME EQ) | | | |
| S626 | 1-762-196-21 | SWITCH, TACT (MUSIC EQ) | | | |
| S631 | 1-762-196-21 | SWITCH, TACT (pause) | | | |
| S632 | 1-762-196-21 | SWITCH, TACT (stop) | | | |
| S633 | 1-762-196-21 | SWITCH, TACT (fff) | | | |
| S634 | 1-762-196-21 | SWITCH, TACT (ff+) | | | |
| S635 | 1-762-196-21 | SWITCH, TACT (play) | | | |
| S636 | 1-762-196-21 | SWITCH, TACT (-fr) | | | |
| S637 | 1-762-196-21 | SWITCH, TACT (ffr) | | | |
| S638 | 1-762-196-21 | SWITCH, TACT (GAME MIXING) | | | |
| ********** | | | | | |
| | A-4676-636-A | MAIN BOARD, COMPLETE (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW) | | | |
| | A-4729-727-A | MAIN BOARD, COMPLETE (RG22:AEP,UK) | | | |
| | A-4729-979-A | MAIN BOARD, COMPLETE (RG33:E2,E51) | | | |
| | A-4729-966-A | MAIN BOARD, COMPLETE (RG33:AEP,UK) | | | |
| | A-4729-942-A | MAIN BOARD, COMPLETE (GX30/RG33:MX,AR) | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C101 | 1-162-306-11 | CERAMIC (EXCEPT RG22:AEP,UK/RG33:AEP,UK) | 0.01uF | 30.00% | 16V |
| C102 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C103 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C104 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C105 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C106 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C107 | 1-126-962-11 | ELECT | 3.3uF | 20.00% | 50V |
| C108 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C109 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C110 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C111 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C112 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C113 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C114 | 1-162-600-11 | CERAMIC | 0.0047uF | 30.00% | 16V |
| C115 | 1-130-487-00 | MYLAR | 0.022uF | 5% | 50V |
| C116 | 1-130-487-00 | MYLAR | 0.022uF | 5% | 50V |
| C117 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C118 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C119 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C120 | 1-126-959-11 | ELECT | 0.47uF | 20.00% | 50V |
| C121 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C122 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C123 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C124 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C125 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C126 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C127 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C128 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C129 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C130 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C131 | 1-162-198-31 | CERAMIC | 8.2PF | 10.00% | 50V |
| C132 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C133 | 1-162-211-31 | CERAMIC | 33PF | 5% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C134 | 1-126-959-11 | ELECT | 0.47uF | 20.00% | 50V |
| C135 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C136 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C137 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C138 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C139 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C140 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C141 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C142 | 1-128-802-21 | CERAMIC | 27PF | 5% | 50V |
| C143 | 1-128-802-21 | CERAMIC | 27PF | 5% | 50V |
| C144 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C148 | 1-162-211-31 | CERAMIC | 33PF | 5% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C149 | 1-162-294-31 | CERAMIC | 0.001uF | 10% | 50V |
| C150 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| C151 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C152 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C171 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C172 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C173 | 1-162-291-31 | CERAMIC | 560PF | 10.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C175 | 1-162-288-31 | CERAMIC | 330PF | 10% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C176 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C179 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C180 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C181 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C182 | 1-128-806-21 | CERAMIC | 56PF | 5% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C183 | 1-128-806-21 | CERAMIC | 56PF | 5% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C184 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C185 | 1-162-291-31 | CERAMIC | 560PF | 10.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C186 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C187 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% | 16V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C201 | 1-162-293-31 | CERAMIC | 820PF | 10.00% | 50V |
| C202 | 1-162-293-31 | CERAMIC | 820PF | 10.00% | 50V |
| C203 | 1-162-293-31 | CERAMIC | 820PF | 10.00% | 50V |
| C204 | 1-162-293-31 | CERAMIC | 820PF | 10.00% | 50V |
| C205 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C206 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C209 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C210 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C211 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C212 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C213 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C214 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C215 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C216 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C217 | 1-127-866-21 | CERAMIC | 1500PF | 10% | 50V |
| C218 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C219 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C220 | 1-127-866-21 | CERAMIC | 1500PF | 10% | 50V |
| C221 | 1-136-967-11 | MYLAR | 0.012uF | 5.00% | 50V |
| C222 | 1-136-967-11 | MYLAR | 0.012uF | 5.00% | 50V |
| C223 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V |
| C224 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C225 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C226 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C227 | 1-128-551-11 | ELECT | 22uF | 20.00% | 25V |
| C228 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C230 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C231 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C232 | 1-126-947-11 | ELECT | 47uF | 20.00% | 25V |
| C233 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C233 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C234 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C235 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V |
| C236 | 1-130-485-00 | MYLAR | 0.015uF | 5% | 50V |
| C237 | 1-130-485-00 | MYLAR | 0.015uF | 5% | 50V |
| C238 | 1-130-485-00 | MYLAR | 0.015uF | 5% | 50V |
| C239 | 1-130-479-00 | MYLAR | 0.0047uF | 5% | 50V |
| C240 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V |
| C241 | 1-162-290-31 | CERAMIC | 470PF | 10% | 50V |
| C244 | 1-126-947-11 | ELECT | 47uF | 20.00% | 25V |
| C245 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C246 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V |
| C247 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C248 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V |
| C249 | 1-126-956-91 | ELECT | 0.1uF | 20.00% | 50V |
| C250 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C251 | 1-162-215-31 | CERAMIC | 47PF | 5% | 50V |
| C252 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C253 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C260 | 1-161-494-00 | CERAMIC | 0.022uF | | 25V |
| C261 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C262 | 1-162-292-31 | CERAMIC | 680PF | 10% | 50V |
| C263 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C264 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C265 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C301 | 1-126-959-11 | ELECT | 0.47uF | 20.00% | 50V |
| C302 | 1-126-959-11 | ELECT | 0.47uF | 20.00% | 50V |
| C303 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |

## MAIN

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C304 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C305 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C334 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C335 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C337 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C339 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C340 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C341 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C342 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C343 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C344 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C345 | 1-126-957-11 | ELECT | 0.22uF | 20.00% | 50V |
| C346 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C347 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C348 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C349 | 1-109-953-11 | ELECT | 2.2uF | 20.00% | 50V |
| C350 | 1-109-953-11 | ELECT | 2.2uF | 20.00% | 50V |
| C356 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C361 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C362 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C363 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C364 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C365 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C366 | 1-126-960-11 | ELECT | 1uF | 20.00% | 50V |
| C368 | 1-126-947-11 | ELECT | 47uF | 20.00% | 16V |
| C369 | 1-127-868-21 | CERAMIC | 2200PF | 10% | 50V |
| C370 | 1-127-868-21 | CERAMIC | 2200PF | 10% | 50V |
| C371 | 1-127-868-21 | CERAMIC | 2200PF | 10% | 50V |
| C372 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C373 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C374 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C375 | 1-136-169-00 | FILM | 0.22uF | 5.00% | 50V |
| C376 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C377 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C378 | 1-126-934-11 | ELECT | 220uF | 20.00% | 16V |
| C379 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C380 | 1-162-286-21 | CERAMIC | 220PF | 10.00% | 50V |
| C381 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C382 | 1-107-714-11 | ELECT | 10uF | 20.00% | 16V |
| C383 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C384 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C385 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C386 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C387 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C388 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C389 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C391 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C392 | 1-107-714-11 | ELECT | 10uF | 20.00% | 16V |
| C393 | 1-107-717-11 | ELECT | 47uF | 20.00% | 50V |
| C395 | 1-162-199-31 | CERAMIC | 10PF | 5% | 50V |
| C397 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| C398 | 1-136-165-00 | FILM | 0.1uF | 5.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C399 | 1-136-165-00 | FILM | 0.1uF | 5.00% | 50V |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| C801 | 1-136-165-00 | FILM | 0.1uF | 5.00% | 50V |
| C802 | 1-136-165-00 | FILM | 0.1uF | 5.00% | 50V |
| C803 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |
| C804 | 1-130-483-00 | MYLAR | 0.01uF | 5% | 50V |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| C805 | 1-126-768-11 | ELECT | 2200uF | 20.00% | 16V |
| C806 | 1-126-944-11 | ELECT | 3300uF | 20.00% | 25V |
| C807 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C808 | 1-126-767-11 | ELECT | 1000uF | 20.00% | 16V |
| C809 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C810 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C811 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C812 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| C813 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C814 | 1-126-916-11 | ELECT | 1000uF | 20.00% | 6.3V |
| C815 | 1-126-935-11 | ELECT | 470uF | 20.00% | 16V |
| C816 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| | | | | | (GX30/RG33) |
| C817 | 1-136-165-00 | FILM | 0.1uF | 5.00% | 50V |
| | | | | | (GX30/RG33) |
| C818 | 1-126-961-11 | ELECT | 2.2uF | 20.00% | 50V |
| C819 | 1-126-963-11 | ELECT | 4.7uF | 20.00% | 50V |
| C820 | 1-104-665-11 | ELECT | 100uF | 20.00% | 25V |
| | | < FILTER > | | | |
| CF101 | 1-760-023-11 | FILTER, CERAMIC | | | |
| | (GX30/RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51,MX,AR) | | | | |
| CF101 | 1-795-426-11 | FILTER, CERAMIC (RG22:AEP,UK/RG33:AEP,UK) | | | |
| CF102 | 1-760-023-11 | FILTER, CERAMIC | | | |
| | (GX30/RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51,MX,AR) | | | | |
| CF102 | 1-795-426-11 | FILTER, CERAMIC (RG22:AEP,UK/RG33:AEP,UK) | | | |
| | | < CONNECTOR > | | | |
| * CN201 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | |
| * CN202 | 1-564-709-11 | PIN, CONNECTOR (SMALL TYPE) 7P | | | |
| CN207 | 1-784-774-11 | CONNECTOR, FFC 13P | | | |
| CN301 | 1-564-506-11 | PLUG, CONNECTOR 3P (GX30/RG33) | | | |
| * CN303 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | |
| CN402 | 1-778-982-21 | CONNECTOR, BOARD TO BOARD 13P | | | |
| CN403 | 1-778-982-21 | CONNECTOR, BOARD TO BOARD 13P | | | |
| CN603 | 1-793-766-11 | CONNECTOR, BOARD TO BOARD 30P | | | |
| | | < VIBRATOR > | | | |
| CX101 | 1-760-549-31 | VIBRATOR, CRYSTAL (4.5MHz) | | | |
| | | < DIODE > | | | |
| D105 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D107 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| | | | | | (RG22:AEP,UK/RG33:AEP,UK) |
| D111 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D112 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D201 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D250 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D251 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D252 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D253 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D254 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D255 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D256 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D257 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D304 | 8-719-929-15 | DIODE MTZJ-T-77-9.1B | | | |
| D309 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D310 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D312 | 8-719-991-33 | DIODE 1SS133T-77 | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| D313 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D315 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D801 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D802 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D803 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D804 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D805 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D806 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D807 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D808 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D809 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D810 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D811 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D814 | 8-719-991-33 | DIODE 1SS133T-77 (GX30/RG33) | |
| D815 | 8-719-991-33 | DIODE 1SS133T-77 (GX30/RG33) | |
| D816 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | | < FRONT END > | |
| FE101 | 1-693-478-11 | FRONT END (3 GANG) (GX30/RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51,MX,AR) | |
| FE103 | 1-693-496-11 | FRONT END (4 GANG) (RG22:AEP,UK/RG33:AEP,UK) | |
| | | < TERMINAL > | |
| * GND1 | 1-537-738-21 | TERMINAL, EARTH | |
| | | < IC > | |
| IC101 | 8-759-828-33 | IC LA1845 | |
| IC102 | 8-759-590-13 | IC LC72131D | |
| IC103 | 8-759-541-48 | IC BU1924 (RG22:AEP,UK/RG33:AEP,UK) | |
| IC201 | 6-702-130-01 | IC HA12237F | |
| IC202 | 8-759-828-32 | IC PT8300 | |
| IC301 | 6-701-758-01 | IC BD3873FS | |
| IC303 | 8-759-167-88 | IC NJM4565D | |
| IC801 | 8-759-701-59 | IC M5F7809L | |
| IC802 | 8-759-088-08 | IC uPC7812AHF | |
| IC803 | 8-759-039-69 | IC uPC7805AHF | |
| IC804 | 8-759-039-69 | IC uPC7805AHF | |
| | | < IFT > | |
| IFT101 | 1-435-848-12 | TRANSFORMER,IF(CERAMIC FILTER) | |
| | | < TERMINAL > | |
| JK101 | 1-694-555-12 | TERMINAL BOARD (4P) (ANTENNA) | |
| JK303 | 1-694-635-12 | TERMINAL BOARD (4P) (SPEAKER) | |
| | | < COIL > | |
| L101 | 1-414-186-31 | INDUCTOR 33uH (RG22:AEP,UK/RG33:AEP,UK) | |
| L109 | 1-414-189-31 | INDUCTOR 100uH (RG22:AEP,UK/RG33:AEP,UK) | |
| L201 | 1-424-849-11 | COIL, OSCILLATION (BIAS) | |
| L351 | 1-422-009-13 | COIL, AIR-CORE (RG22:AEP,UK/RG33:AEP,UK) | |
| L352 | 1-422-009-13 | COIL, AIR-CORE (RG22:AEP,UK/RG33:AEP,UK) | |
| | | < TRANSISTOR > | |
| Q101 | 8-729-015-41 | TRANSISTOR 2SC1675-T1 | |
| Q102 | 8-729-422-57 | TRANSISTOR BN1A4M-TP | |
| Q105 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q106 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q107 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE (RG22:AEP,UK/RG33:AEP,UK) | |
| Q201 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q202 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q203 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q204 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q205 | 8-729-119-76 | TRANSISTOR 2SA1175TP-HFE | |
| Q206 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q207 | 8-729-140-04 | TRANSISTOR 2SB1116-TP-LK | |
| Q208 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q209 | 8-729-142-46 | TRANSISTOR 2SC2001TP-LK | |
| Q220 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q221 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q222 | 8-729-140-04 | TRANSISTOR 2SB1116-TP-LK | |
| Q223 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q224 | 8-729-140-04 | TRANSISTOR 2SB1116-TP-LK | |
| Q225 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q226 | 8-729-140-04 | TRANSISTOR 2SB1116-TP-LK | |
| Q227 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q228 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q229 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q305 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q306 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q307 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q308 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q311 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q312 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q313 | 8-729-900-63 | TRANSISTOR BN1F4M-TP | |
| Q314 | 8-729-116-02 | TRANSISTOR BA1A4M-TP | |
| Q315 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q316 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q317 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q318 | 8-729-029-68 | TRANSISTOR BA1A4Z-TP | |
| Q319 | 8-729-029-68 | TRANSISTOR BA1A4Z-TP | |
| Q320 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q321 | 8-729-029-68 | TRANSISTOR BA1A4Z-TP | |
| Q322 | 8-729-029-68 | TRANSISTOR BA1A4Z-TP | |
| Q328 | 8-729-900-63 | TRANSISTOR BN1F4M-TP | |
| Q329 | 8-729-900-63 | TRANSISTOR BN1F4M-TP | |
| Q330 | 8-729-900-63 | TRANSISTOR BN1F4M-TP | |
| Q331 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q332 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q333 | 8-729-900-63 | TRANSISTOR BN1F4M-TP | |
| Q801 | 8-729-116-02 | TRANSISTOR BA1A4M-TP | |
| Q802 | 8-729-049-79 | TRANSISTOR RT1P137S-TP | |
| Q803 | 8-729-142-46 | TRANSISTOR 2SC2001TP-LK (GX30/RG33) | |
| Q805 | 8-729-119-76 | TRANSISTOR 2SA1175TP-HFE | |
| Q806 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q807 | 8-729-142-46 | TRANSISTOR 2SC2001TP-LK | |
| Q808 | 8-729-142-46 | TRANSISTOR 2SC2001TP-LK | |
| Q809 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q810 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q813 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| | | < RESISTOR > | |
| R101 | 1-249-407-11 | CARBON 150 5% 1/4W F | |

## MAIN

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R102 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R103 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R104 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R105 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R106 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F |
| R107 | 1-249-401-11 | CARBON | 47 | 5% | 1/4W F |
| R108 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R109 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R110 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R111 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R112 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R113 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R114 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W F |
| R115 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R116 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R117 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R118 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R119 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R120 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R121 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R122 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R123 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R124 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R125 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R126 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R127 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R128 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R129 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R130 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R131 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R132 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R133 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R134 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R135 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R136 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R137 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R138 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R139 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R140 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R141 | 1-249-439-11 | CARBON | 68K | 5% | 1/4W |
| R142 | 1-249-410-11 | CARBON | 270 | 5% | 1/4W F |
| R143 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R144 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R145 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R146 | 1-247-855-11 | CARBON | 10K | 5% | 1/4W |
| R171 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R172 | 1-247-891-00 | CARBON | 330K | 5% | 1/4W |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R174 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R175 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R177 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R181 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |
| R183 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| | | | (RG22:AEP,UK/RG33:AEP,UK) | | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R205 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R206 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R207 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R208 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R209 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R210 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R211 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R212 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R213 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R214 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R215 | 1-249-422-11 | CARBON | 2.7K | 5% | 1/4W F |
| R218 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R219 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R220 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R221 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R222 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R223 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R224 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R225 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R226 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R227 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R228 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R229 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R230 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R231 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R232 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R233 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R234 | 1-247-903-00 | CARBON | 1M | 5% | 1/4W |
| R235 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R236 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R237 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R238 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R239 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R240 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R241 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R242 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R243 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W F |
| R244 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R245 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R255 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W |
| R256 | 1-247-899-11 | CARBON | 680K | 5% | 1/4W |
| R257 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R258 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R259 | 1-247-899-11 | CARBON | 680K | 5% | 1/4W |
| R260 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W |
| R261 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R262 | 1-249-411-11 | CARBON | 330 | 5% | 1/4W |
| R263 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R264 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R265 | 1-247-887-11 | CARBON | 220K | 5% | 1/4W |
| R266 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W |
| R267 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R268 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R269 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R270 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R271 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R272 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R274 | 1-249-440-11 | CARBON | 82K | 5% | 1/4W |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R275 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R276 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R277 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R278 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R279 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R280 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R281 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R282 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R283 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R284 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R285 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R286 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R287 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R288 | 1-249-415-11 | CARBON | 680 | 5% | 1/4W F |
| R289 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R290 | 1-249-421-11 | CARBON | 2.2K | 5% | 1/4W F |
| R291 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R292 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R293 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R294 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R295 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R296 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R297 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R298 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R299 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R300 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R301 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R302 | 1-249-432-11 | CARBON | 18K | 5% | 1/4W |
| R303 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R304 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R307 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R308 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R309 | 1-259-880-11 | CARBON | 2.2M | 5% | 1/4W |
| R310 | 1-259-880-11 | CARBON | 2.2M | 5% | 1/4W |
| R311 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R312 | 1-249-428-11 | CARBON | 8.2K | 5% | 1/4W F |
| R313 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R314 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R315 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R316 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R317 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R318 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R319 | 1-247-885-00 | CARBON | 180K | 5% | 1/4W |
| R320 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R321 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R322 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R323 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R328 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R340 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R341 | 1-247-893-11 | CARBON | 390K | 5% | 1/4W |
| R342 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R343 | 1-247-893-11 | CARBON | 390K | 5% | 1/4W |
| R344 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R345 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R346 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R347 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R348 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R349 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R350 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R351 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R352 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R353 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R354 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R355 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R356 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R357 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R358 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R359 | 1-247-901-11 | CARBON | 820K | 5% | 1/4W |
| R360 | 1-247-901-11 | CARBON | 820K | 5% | 1/4W |
| R361 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R362 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R363 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R364 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R365 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R366 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R367 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R368 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F |
| R369 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R370 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |
| R371 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R372 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W |
| R373 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R374 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R376 | 1-249-434-11 | CARBON | 27K | 5% | 1/4W |
| R378 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R379 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R380 | 1-249-436-11 | CARBON | 39K | 5% | 1/4W |
| R381 | 1-247-843-11 | CARBON | 3.3K | 5% | 1/4W |
| R382 | 1-247-895-91 | CARBON | 470K | 5% | 1/4W |
| R383 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R384 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R385 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R386 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| R387 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W |
| R388 | 1-215-868-00 | METAL OXIDE | 680 | 5% | 1W |
| R389 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R390 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R391 | 1-249-426-11 | CARBON | 5.6K | 5% | 1/4W |
| R394 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R395 | 1-215-868-00 | METAL OXIDE | 680 | 5% | 1W |
| R396 | 1-260-304-51 | CARBON | 10 | 5% | 1/2W (RG22:AEP,UK/RG33:AEP,UK) |
| R397 | 1-260-304-51 | CARBON | 10 | 5% | 1/2W (RG22:AEP,UK/RG33:AEP,UK) |
| R398 | 1-260-304-51 | CARBON | 10 | 5% | 1/2W (RG22:AEP,UK/RG33:AEP,UK) |
| R399 | 1-260-304-51 | CARBON | 10 | 5% | 1/2W (RG22:AEP,UK/RG33:AEP,UK) |
| R400 | 1-249-393-11 | CARBON | 10 | 5% | 1/4W F |
| R407 | 1-259-880-11 | CARBON | 2.2M | 5% | 1/4W |
| R408 | 1-259-880-11 | CARBON | 2.2M | 5% | 1/4W |
| R411 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R412 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R418 | 1-249-413-11 | CARBON | 470 | 5% | 1/4W F |
| R801 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R802 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R803 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R804 | 1-249-425-11 | CARBON | 4.7K | 5% | 1/4W F |

**MAIN** **MOTOR** **PANEL**

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R805 | 1-249-433-11 | CARBON | 22K | 5% 1/4W | |
| R806 | 1-249-426-11 | CARBON | 5.6K | 5% 1/4W | |
| R807 | 1-249-429-11 | CARBON | 10K | 5% 1/4W | |
| R808 | 1-249-438-11 | CARBON | 56K | 5% 1/4W | |
| R809 | 1-249-437-11 | CARBON | 47K | 5% 1/4W | |
| R812 | 1-249-425-11 | CARBON | 4.7K | 5% 1/4W | F (GX30/RG33) |
| R813 | 1-249-426-11 | CARBON | 5.6K | 5% 1/4W | (GX30/RG33) |
| R814 | 1-249-426-11 | CARBON | 5.6K | 5% 1/4W | (GX30/RG33) |
| R815 | 1-249-437-11 | CARBON | 47K | 5% 1/4W | (GX30/RG33) |
| R816 | 1-249-421-11 | CARBON | 2.2K | 5% 1/4W | F |
| R854 | 1-247-807-31 | CARBON | 100 | 5% 1/4W | |
| | | < COMPOSITION CIRCUIT BLOCK > | | | |
| RB101 | 1-234-575-11 | ENCAPSULATED COMPONENT | | | |
| | | < VARIABLE RESISTOR > | | | |
| RV101 | 1-241-765-11 | RES, ADJ, CARBON 22K | | | |
| | | < RELAY > | | | |
| RY2 | 1-755-373-11 | RELAY | | | |
| | | < TRANSFORMER > | | | |
| T101 | 1-435-792-11 | TRANSFORMER, DISCRIMINATOR | | | |
| | | < VIBRATOR > | | | |
| X102 | 1-579-900-21 | VIBRATOR, CRYSTAL (4.332MHz) | | | (RG22:AEP,UK/RG33:AEP,UK) |
| ********** | | | | | |
| | 1-675-910-14 | MOTOR BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| C721 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% 16V | |
| | | < CONNECTOR > | | | |
| CN721 | 1-770-516-31 | CONNECTOR, FFC 8P | | | |
| CN722 | 1-785-330-11 | PIN, CONNECTOR (LIGHT ANGLE)4P | | | |
| | | < SWITCH > | | | |
| S701 | 1-771-822-11 | SWITCH, LEVER (SLIDE) (OPEN/CLOSE) | | | |
| ********** | | | | | |
| | A-4676-626-A | PANEL BOARD, COMPLETE (GX30/RG33:MX,AR) | | | |
| | A-4729-718-A | PANEL BOARD, COMPLETE | | | (RG22:AEP,UK/RG33:AEP,UK) |
| | A-4729-766-A | PANEL BOARD, COMPLETE (RG22:AUS,E2,E51, SP,MX,AR,EA,TH,TW/RG33:E2,E51) | | | |
| | | ********** | | | |
| | 4-238-614-01 | FL HOLDER R | | | |
| | 4-238-613-01 | FL HOLDER L | | | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | | < CAPACITOR > | | | |
| C601 | 1-126-916-11 | ELECT | 1000uF | 20.00% 6.3V | |
| C602 | 1-161-494-00 | CERAMIC | 0.022uF | 25V | |
| C603 | 1-126-964-11 | ELECT | 10uF | 20.00% 50V | |
| C604 | 1-136-165-00 | FILM | 0.1uF | 5.00% 50V | |
| C605 | 1-136-165-00 | FILM | 0.1uF | 5.00% 50V | |
| C606 | 1-126-947-11 | ELECT | 47uF | 20.00% 10V | |
| C607 | 1-162-294-31 | CERAMIC | 0.001uF | 10% 50V | |
| C608 | 1-162-205-31 | CERAMIC | 18PF | 5% 50V | |
| C609 | 1-162-203-31 | CERAMIC | 15PF | 5.00% 50V | |
| C610 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% 16V | |
| C611 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% 16V | |
| C612 | 1-162-306-11 | CERAMIC | 0.01uF | 30.00% 16V | |
| C613 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C614 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C615 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C616 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C617 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C618 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C619 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C620 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C621 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C622 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C623 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C624 | 1-162-282-31 | CERAMIC | 100PF | 10% 50V | |
| C625 | 1-126-618-11 | ELECT | 33uF | 20.00% 50V | |
| C626 | 1-126-618-11 | ELECT | 33uF | 20.00% 50V | |
| C627 | 1-126-957-11 | ELECT | 0.22uF | 20.00% 50V | |
| C628 | 1-126-957-11 | ELECT | 0.22uF | 20.00% 50V | |
| C629 | 1-128-551-11 | ELECT | 22uF | 20.00% 25V | |
| C630 | 1-164-159-21 | CERAMIC | 0.1uF | 50V | |
| C631 | 1-247-855-11 | CARBON | 10K | 5% 1/4W | |
| C632 | 1-247-855-11 | CARBON | 10K | 5% 1/4W | |
| C681 | 1-162-294-31 | CERAMIC | 0.001uF | 10% 50V | |
| C682 | 1-162-294-31 | CERAMIC | 0.001uF | 10% 50V | |
| C685 | 1-164-159-21 | CERAMIC | 0.1uF | 50V | |
| C687 | 1-164-159-21 | CERAMIC | 0.1uF | 50V | |
| C691 | 1-162-294-31 | CERAMIC | 0.001uF | 10% 50V | |
| C692 | 1-162-294-31 | CERAMIC | 0.001uF | 10% 50V | |
| C693 | 1-164-159-21 | CERAMIC | 0.1uF | 50V | |
| C699 | 1-126-963-11 | ELECT | 4.7uF | 20.00% 50V | |
| | | < FILTER > | | | |
| CF101 | 1-579-175-11 | VIBRATOR, CERAMIC | | | |
| | | < CONNECTOR > | | | |
| CN601 | 1-793-767-11 | CONNECTOR, BOARD TO BOARD 30P | | | |
| CN602 | 1-784-780-11 | CONNECTOR, FFC 19P | | | |
| CN605 | 1-816-422-11 | PIN, CONNECTOR 3P | | | |
| CN662 | 1-564-723-11 | PIN, CONNECTOR (SMALL TYPE) 7P | | | |
| CN691 | 1-816-423-11 | SOCKET, CONNECTOR 3P | | | |
| | | < DIODE > | | | |
| D601 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| D602 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| D603 | 8-719-991-33 | DIODE 1SS133T-77 (GX30/RG22:TH,AUS) | | | |
| D604 | 8-719-991-33 | DIODE 1SS133T-77 (GX30/RG22:TH,AUS) | | | |
| D605 | 8-719-991-33 | DIODE 1SS133T-77 | | | (RG22:E2,E51,AR,MX/RG33:E2,E51,AR,MX) |

## PANEL

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| D606 | 8-719-991-33 | DIODE 1SS133T-77 (GX30/RG22:AEP,UK/RG33:AEP,UK) | |
| D608 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D611 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D612 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D613 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D614 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D615 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D616 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D617 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D618 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | | < FERRITE BEAD > | |
| FB602 | 1-412-473-21 | INDUCTOR 0UH | |
| | | < FLUORESCENT INDICATOR > | |
| FLD601 | 1-518-792-11 | INDICATOR TUBE, FLUORESCENT | |
| | | < IC > | |
| IC601 | 6-801-216-01 | IC LC876662W-5Z15 | |
| IC602 | 8-759-635-63 | IC M51943BSL-TP | |
| | | < JACK > | |
| JK681 | 1-815-684-11 | JACK, PIN 3P (GAME INPUT) | |
| JK691 | 1-691-293-21 | JACK (PHONES) | |
| | | < DIODE > | |
| LED610 | 8-719-311-60 | DIODE SEL2810D-C (CD) | |
| LED611 | 8-719-311-60 | DIODE SEL2810D-C (GAME) | |
| LED612 | 8-719-311-60 | DIODE SEL2810D-C (TAPE A/B) | |
| LED614 | 8-719-311-60 | DIODE SEL2810D-C (TUNER/BAND) | |
| LED616 | 8-719-812-41 | DIODE SEL2110R (dengen) | |
| | | < TRANSISTOR > | |
| Q601 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| | | < RESISTOR > | |
| R601 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R602 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R603 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R604 | 1-249-425-11 | CARBON 4.7K 5% 1/4W | F |
| R605 | 1-249-401-11 | CARBON 47 5% 1/4W | F |
| R606 | 1-249-401-11 | CARBON 47 5% 1/4W | F |
| R607 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R608 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R609 | 1-249-415-11 | CARBON 680 5% 1/4W | F |
| R614 | 1-247-891-00 | CARBON 330K 5% 1/4W | |
| R615 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| R616 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R617 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R618 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R620 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R621 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | F |
| R622 | 1-249-407-11 | CARBON 150 5% 1/4W | F |
| R623 | 1-249-410-11 | CARBON 270 5% 1/4W | F |
| R624 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| R625 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| R626 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| R627 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| R628 | 1-259-884-11 | CARBON 4.7M 5% 1/4W | |
| R631 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R632 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R633 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R634 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R635 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R636 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R637 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R638 | 1-249-440-11 | CARBON 82K 5% 1/4W | |
| R639 | 1-249-440-11 | CARBON 82K 5% 1/4W | |
| R640 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R641 | 1-249-413-11 | CARBON 470 5% 1/4W | F |
| R642 | 1-249-415-11 | CARBON 680 5% 1/4W | F |
| R643 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R644 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | F |
| R645 | 1-249-413-11 | CARBON 470 5% 1/4W | F |
| R646 | 1-249-415-11 | CARBON 680 5% 1/4W | F |
| R647 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R648 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | F |
| R649 | 1-249-419-11 | CARBON 1.5K 5% 1/4W | F |
| R650 | 1-249-413-11 | CARBON 470 5% 1/4W | F |
| R671 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R672 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R673 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R674 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R675 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R676 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R677 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R678 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R680 | 1-249-437-11 | CARBON 47K 5% 1/4W | |
| R681 | 1-249-434-11 | CARBON 27K 5% 1/4W | |
| R682 | 1-249-434-11 | CARBON 27K 5% 1/4W | |
| R683 | 1-247-855-11 | CARBON 10K 5% 1/4W | |
| R684 | 1-247-855-11 | CARBON 10K 5% 1/4W | |
| R685 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R686 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R687 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R688 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R689 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R690 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R691 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R692 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R693 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R694 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R695 | 1-247-807-31 | CARBON 100 5% 1/4W | |
| R696 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| | | < SWITCH > | |
| S601 | 1-762-196-21 | SWITCH, TACT (dengen) | |
| S611 | 1-762-196-21 | SWITCH, TACT (DISC 1) | |
| S612 | 1-762-196-21 | SWITCH, TACT (DISC 2) | |
| S613 | 1-762-196-21 | SWITCH, TACT (DISC 3) | |
| S614 | 1-762-196-21 | SWITCH, TACT (OPEN/CLOSE) | |
| S615 | 1-762-196-21 | SWITCH, TACT (DISC SKIP/EX-CHANGE) | |
| S621 | 1-762-196-21 | SWITCH, TACT (CD) | |
| S622 | 1-762-196-21 | SWITCH, TACT (TUNER/BAND) | |

## PANEL POWER

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| S623 | 1-762-196-21 | SWITCH, TACT (TAPE A/B) | |
| S624 | 1-762-196-21 | SWITCH, TACT (GAME) | |
| | | < ROTARY ENCODER > | |
| VR601 | 1-477-194-11 | ENCODER, ROTARY (VOLUME) | |
| | | < VIBRATOR > | |
| X601 | 1-567-098-41 | VIBRATOR, CRYSTAL (32.768MHz) | |
| ********** | | | |
| | A-4676-627-A | POWER BOARD, COMPLETE (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW) | |
| | A-4729-719-A | POWER BOARD, COMPLETE (RG22:AEP,UK) | |
| | A-4729-939-A | POWER BOARD, COMPLETE (GX30/RG33:MX,AR) | |
| | A-4729-962-A | POWER BOARD, COMPLETE (RG33:AEP,UK) | |
| | A-4729-982-A | POWER BOARD, COMPLETE (RG33:E2,E51) | |
| | ********** | | |
| | | < CAPACITOR > | |
| C501 | 1-126-964-11 | ELECT 10uF 20.00% 50V | |
| C502 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V | |
| C503 | 1-162-286-21 | CERAMIC 220PF 10.00% 50V | |
| C504 | 1-128-551-11 | ELECT 22uF 20.00% 25V | |
| C507 | 1-130-493-00 | MYLAR 0.068uF 5% 50V | |
| C508 | 1-130-493-00 | MYLAR 0.068uF 5% 50V | |
| C509 | 1-128-560-11 | ELECT 22uF 20.00% 100V | (GX30/RG33) |
| C509 | 1-126-965-91 | ELECT 22uF 20.00% 50V | (RG22) |
| C511 | 1-162-306-11 | CERAMIC 0.01uF 30.00% 16V | |
| C512 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V | (RG22:AEP,UK/RG33:AEP,UK) |
| C513 | 1-164-159-21 | CERAMIC 0.1uF 50V | (RG22:AEP,UK/RG33:AEP,UK) |
| C541 | 1-130-777-00 | MYLAR 0.1uF 10.00% 100V | |
| C542 | 1-135-928-21 | ELECT 2200uF 20% 63V | (GX30/RG33) |
| C542 | 1-135-832-11 | ELECT 2200uF 20% 50V | (RG22) |
| C543 | 1-164-159-21 | CERAMIC 0.1uF 50V | |
| C544 | 1-126-942-61 | ELECT 1000uF 20.00% 25V | |
| C546 | 1-128-549-11 | ELECT 3300uF 20.00% 35V | |
| C551 | 1-126-964-11 | ELECT 10uF 20.00% 50V | |
| C552 | 1-162-294-31 | CERAMIC 0.001uF 10% 50V | |
| C553 | 1-162-286-21 | CERAMIC 220PF 10.00% 50V | |
| C554 | 1-128-551-11 | ELECT 22uF 20.00% 25V | |
| C557 | 1-130-493-00 | MYLAR 0.068uF 5% 50V | |
| C558 | 1-130-493-00 | MYLAR 0.068uF 5% 50V | |
| C559 | 1-128-560-11 | ELECT 22uF 20.00% 100V | (GX30/RG33) |
| C559 | 1-126-965-91 | ELECT 22uF 20.00% 50V | (RG22) |
| C591 | 1-130-777-00 | MYLAR 0.1uF 10.00% 100V | |
| C592 | 1-135-928-21 | ELECT 2200uF 20% 63V | (GX30/RG33) |
| C592 | 1-135-832-11 | ELECT 2200uF 20% 50V | (RG22) |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | < CONNECTOR > | |
| * CN504 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | (GX30/RG33) |
| | | < DIODE > | |
| D501 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D502 | 8-719-991-33 | DIODE 1SS133T-77 | |
| D541 | 8-719-510-68 | DIODE D5SBA204101 (GX30/RG33) | |
| D541 | 8-719-028-23 | DIODE D3SBA20-4101 (RG22) | |
| D542 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D543 | 8-719-200-82 | DIODE 11ES2-NTA1B | |
| D551 | 8-719-991-33 | DIODE 1SS133T-77 | |
| | | < TERMINAL > | |
| * EP502 | 1-537-738-21 | TERMINAL, EARTH (RG33:AEP) | |
| * EP501 | 1-537-738-21 | TERMINAL, EARTH | (RG22:AEP,UK/RG33:AEP,UK) |
| | | < IC > | |
| IC501 | 8-749-016-94 | IC STK402-090S (GX30/RG33) | |
| IC501 | 8-749-016-93 | IC STK402-070S (RG22) | |
| | | < TRANSISTOR > | |
| Q501 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q503 | 8-729-119-76 | TRANSISTOR 2SA1175TP-HFE | |
| Q504 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q551 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q581 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE | |
| Q582 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE (GX30/RG33) | |
| Q583 | 8-729-029-86 | TRANSISTOR DTC124ES (GX30/RG33) | |
| Q584 | 8-729-119-78 | TRANSISTOR 2SC2785TP-HFE (GX30/RG33) | |
| | | < RESISTOR > | |
| R501 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R502 | 1-249-438-11 | CARBON 56K 5% 1/4W | |
| R503 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R504 | 1-249-438-11 | CARBON 56K 5% 1/4W | |
| R505 | 1-249-417-11 | CARBON 1K 5% 1/4W | F |
| R506 | 1-249-431-11 | CARBON 15K 5% 1/4W | |
| R507 | 1-249-441-11 | CARBON 100K 5% 1/4W | |
| ⚠R508 | 1-217-156-00 | METAL 0.22 10% 5W | (GX30/RG33) |
| ⚠R508 | 1-217-151-00 | METAL 0.22 10% 2W | (RG22) |
| R509 | 1-260-076-11 | CARBON 10 5% 1/2W | |
| ⚠R510 | 1-217-156-00 | METAL 0.22 10% 5W | (GX30/RG33) |
| ⚠R510 | 1-217-151-00 | METAL 0.22 10% 2W | (RG22) |
| ⚠R511 | 1-212-881-11 | FUSIBLE 100 5% 1/4W | |
| ⚠R512 | 1-202-972-61 | FUSIBLE 1 5% 1/4W | |
| R513 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R514 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | F |
| R515 | 1-249-433-11 | CARBON 22K 5% 1/4W | |
| R516 | 1-249-429-11 | CARBON 10K 5% 1/4W | |
| R517 | 1-249-421-11 | CARBON 2.2K 5% 1/4W | F |

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|---|---|
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| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| R518 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| R519 | 1-249-433-11 | CARBON | 22K | 5% | 1/4W |
| R520 | 1-247-883-00 | CARBON | 150K | 5% | 1/4W (GX30/RG33) |
| R521 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W (RG33:AEP,UK) |
| R522 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W (GX30/RG33) |
| R523 | 1-249-409-11 | CARBON | 220 | 5% | 1/4W F (GX30/RG33) |
| R524 | 1-247-897-11 | CARBON | 560K | 5% | 1/4W (GX30/RG33) |
| R525 | 1-249-437-11 | CARBON | 47K | 5% | 1/4W (GX30/RG33) |
| R541 | 1-260-344-51 | CARBON | 22K | 5% | 1/2W |
| R551 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R552 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R553 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R554 | 1-249-438-11 | CARBON | 56K | 5% | 1/4W |
| R555 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W F |
| R556 | 1-249-431-11 | CARBON | 15K | 5% | 1/4W |
| R557 | 1-249-441-11 | CARBON | 100K | 5% | 1/4W |
| ⚠R558 | 1-217-156-00 | METAL | 0.22 | 10% | 5W (GX30/RG33) |
| ⚠R558 | 1-217-151-00 | METAL | 0.22 | 10% | 2W (RG22) |
| R559 | 1-260-076-11 | CARBON | 10 | 5% | 1/2W |
| ⚠R560 | 1-217-156-00 | METAL | 0.22 | 10% | 5W (GX30/RG33) |
| ⚠R560 | 1-217-151-00 | METAL | 0.22 | 10% | 2W (RG22) |
| ⚠R561 | 1-212-881-11 | FUSIBLE | 100 | 5% | 1/4W |
| R581 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R582 | 1-249-435-11 | CARBON | 33K | 5% | 1/4W |
| R591 | 1-260-344-51 | CARBON | 22K | 5% | 1/2W |
| ********** | | | | | |
| | 1-684-299-21 | REM BOARD | | | |
| | | ********** | | | |
| | | < IC > | | | |
| RM601 | 8-759-827-70 | IC NJL64H400A-1 (R) | | | |
| ********** | | | | | |
| | | SENSOR BOARD (GX30/RG33) | | | |
| | | ********** | | | |
| | | < THERMISTOR > | | | |
| TH501 | 1-807-796-11 | THERMISTOR | | | |
| ********** | | | | | |
| | 1-684-307-11 | SPDL BOARD | | | |
| | | ********** | | | |
| | | < SWITCH > | | | |
| S01 | 1-771-853-11 | SWITCH, DETECTION (LIMIT) | | | |
| ********** | | | | | |

| Ref. No. | Part No. | Description | | | Remarks |
|---|---|---|---|---|---|
| | 1-684-302-21 | SUB TRANS BOARD | | | |
| | | ********** | | | |
| | | < CAPACITOR > | | | |
| ⚠C901 | 1-113-925-11 | CERAMIC | 0.01uF | 20.00% | 250V |
| C902 | 1-126-936-11 | ELECT | 3300uF | 20.00% | 16V |
| C903 | 1-126-933-11 | ELECT | 100uF | 20.00% | 16V |
| | | < CONNECTOR > | | | |
| * CN2 | 1-564-321-21 | PIN, CONNECTOR(3.96MM PITCH)2P (GX30/RG22:AEP,UK/RG33:AEP,UK,MX,AR) | | | |
| CN2 | 1-568-106-11 | PIN, CONNECTOR(3.96MM PITCH)4P (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51) | | | |
| CN901 | 1-564-321-00 | PIN, CONNECTOR(3.96MM PITCH)2P | | | |
| * CN903 | 1-564-705-11 | PIN, CONNECTOR (SMALL TYPE) 3P | | | |
| | | < DIODE > | | | |
| D901 | 8-719-991-33 | DIODE 1SS133T-77 | | | |
| D902 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| D903 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| D904 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| D905 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | |
| | | < IC > | | | |
| IC901 | 8-759-158-62 | IC TA78057S | | | |
| | | < TRANSISTOR > | | | |
| Q901 | 8-729-119-78 | TRANSISTOR | 2SC2785TP-HFE | | |
| | | < RESISTOR > | | | |
| R902 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W |
| | | < RELAY > | | | |
| ⚠RY901 | 1-755-276-11 | RELAY, POWER | | | |
| | | < TRANSFORMER > | | | |
| ⚠T901 | 1-435-823-21 | TRANSFORMER, POWER (GX30/RG33:MX,AR) | | | |
| ⚠T901 | 1-435-824-21 | TRANSFORMER, POWER (RG22:AEP,UK/RG33:AEP,UK) | | | |
| ⚠T901 | 1-435-825-21 | TRANSFORMER, POWER (RG22:AUS,E2,E51,SP,MX,AR,EA,TH,TW/RG33:E2,E51) | | | |
| ********** | | | | | |
| | 1-684-301-21 | TRANS BOARD | | | |
| | | ********** | | | |
| * | 1-533-213-11 | HOLDER, FUSE | | | |
| | | < CAPACITOR > | | | |
| C911 | 1-128-553-11 | ELECT | 220uF | 20.00% | 63V |
| C912 | 1-126-964-11 | ELECT | 10uF | 20.00% | 50V |
| C913 | 1-126-968-11 | ELECT | 100uF | 20.00% | 50V |
| C915 | 1-164-159-11 | CERAMIC | 0.1uF | | 50V |
| | | < CONNECTOR > | | | |
| CN502 | 1-778-981-21 | CONNECTOR, BOARD TO BOARD 13P | | | |
| CN503 | 1-778-981-21 | CONNECTOR, BOARD TO BOARD 13P | | | |
| CN915 | 1-564-528-11 | PLUG, CONNECTOR 13P | | | |

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# TRANS VIDEO OUT

| Ref. No. | Part No. | Description | | | | Remarks |
|---|---|---|---|---|---|---|
| | | < DIODE > | | | | |
| D911 | 8-719-200-82 | DIODE 11ES2-NTA1B | | | | |
| D912 | 8-719-982-15 | DIODE MTZJ-T-77-27B | | | | |
| D913 | 8-719-109-89 | DIODE MTZJ-T-77-5.6B | | | | |
| | | < TRANSISTOR > | | | | |
| Q911 | 8-729-048-52 | TRANSISTOR | 2SA1932(TP) | | | |
| | | < RESISTOR > | | | | |
| R905 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| ⚠R911 | 1-217-637-00 | FUSIBLE | 1 | 5% | 1/4W | |
| R912 | 1-249-417-11 | CARBON | 1K | 5% | 1/4W | F |
| R913 | 1-249-429-11 | CARBON | 10K | 5% | 1/4W | |
| R915 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| R916 | 1-247-807-31 | CARBON | 100 | 5% | 1/4W | |
| ⚠R918 | 1-219-237-91 | SOLID | 3.3M | 20% | 1/2W (GX30/RG33:MX,AR) | |
| ⚠R919 | 1-219-122-91 | FUSIBLE | 0.33 | 5% | 1/4W | |
| ⚠R920 | 1-219-122-91 | FUSIBLE | 0.33 | 5% | 1/4W | |
| | | < SWITCH > | | | | |
| ⚠S901 | 1-786-055-21 | SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (RG22:E2,E51,SP,EA,TW/RG33:E2,E51) | | | | |
| ********** | | | | | | |
| | 1-684-298-21 | VIDEO OUT BOARD | | | | |
| | | ********** | | | | |
| | | < CONNECTOR > | | | | |
| * CN682 | 1-564-704-11 | PIN, CONNECTOR (SMALL TYPE) 2P | | | | |
| | | < JACK > | | | | |
| JK602 | 1-774-227-31 | JACK, PIN 1P (VIDEO OUT) | | | | |
| ********** | | | | | | |

| Ref. No. | Part No. | Description | Remarks |
|---|---|---|---|
| | | MISCELLANEOUS | |
| | | ********** | |
| 56 | 1-773-119-11 | WIRE (FLAT TYPE) (19 CORE) | |
| 60 | 1-796-360-11 | DECK, MECH | |
| 101 | 1-751-688-11 | WIRE (FLAT TYPE) (13 CORE) | |
| ⚠104 | 1-690-608-11 | CORD, POWER (RG22:AUS) | |
| ⚠104 | 1-777-071-82 | CORD, POWER (RG22:AEP,E51,EA/RG33:AEP,E51) | |
| ⚠104 | 1-783-528-11 | CORD, POWER (TRACKING) (RG22:SP,TH,TW) | |
| ⚠104 | 1-783-532-11 | CORD, POWER (GX30) | |
| ⚠104 | 1-783-941-22 | CORD, POWER (RG22:AR/RG33:AR) | |
| ⚠104 | 1-790-226-12 | CORD, POWER (RG22:UK/RG33:UK) | |
| ⚠104 | 1-791-901-11 | CORD, POWER (RG22:E2,MX/RG33:E2,MX) | |
| 159 | 1-791-983-12 | WIRE (FLAT TYPE) (8 CORE) | |
| 166 | 1-471-035-11 | MAGNET ASSY | |
| ⚠186 | A-4735-357-A | BASE ASSY, OP (KSM-213D) | |
| 190 | 1-823-859-11 | WIRE (FLAT TYPE) (16 CORE) | |
| ⚠F914 | 1-533-454-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F914 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (RG22/RG33) | |
| ⚠F919 | 1-533-453-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F919 | 1-533-471-11 | FUSE, GLASS TUBE (DIA. 5) (RG22:E2,E51,SP,EA,TW) | |
| ⚠F919 | 1-533-472-11 | FUSE, GLASS TUBE (DIA. 5) (RG33:E2,E51) | |
| ⚠F920 | 1-533-454-11 | FUSE, GLASS TUBE (DIA. 5) (GX30) | |
| ⚠F920 | 1-533-473-11 | FUSE, GLASS TUBE (DIA. 5) (RG22/RG33) | |
| FLD601 | 1-518-792-11 | INDICATOR TUBE, FLUORESCENT | |
| M721 | 1-763-790-11 | MOTOR, DC (TURN) | |
| M961 | 1-763-738-21 | FAN, DC (GX30/RG33:MX,AR) | |
| ⚠T911 | 1-437-389-11 | TRANSFORMER, POWER (GX30/RG33:MX,AR) | |
| ⚠T911 | 1-437-678-11 | TRANSFORMER, POWER (RG22:AUS,MX,AR) | |
| ⚠T911 | 1-437-679-11 | TRANSFORMER, POWER (RG22:AEP,UK) | |
| ⚠T911 | 1-437-680-11 | TRANSFORMER, POWER (RG22:E2,E51,SP,TH,TW) | |
| ⚠T911 | 1-437-762-11 | TRANSFORMER, POWER (RG33:AEP,UK) | |
| ⚠T911 | 1-437-763-11 | TRANSFORMER, POWER (RG33:E2,E51) | |
| ⚠T911 | 1-437-830-11 | TRANSFORMER, POWER (RG22:EA) | |

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*MEMO*

# REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

| Ver. | Date | Description of Revision |
|---|---|---|
| 1.0 | 2002.04 | New |
| 1.1 | 2003.10 | Addition of Ref.No.72 and 73 for exploded views (SPM-03091) |
| 1.2 | 2003.11 | Change of Part No. for Ref. No. 186 (KSM-213D) (SPM-03061) |
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