

# HCD-DX10/RG4SR/RG20/RG30T

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Photo : HCD-DX10

- HCD-DX10/RG4SR/RG20/RG30T is the tuner, deck, CD and amplifier section in MHC-DX10/RG4SR/RG20/RG30T.

*US Model*  
HCD-RG4SR/RG20/RG30T  
*Canadian Model*  
HCD-RG20/RG30T  
*AEP Model*  
*UK Model*  
HCD-RG20  
*E Model*  
*Australian Model*  
HCD-DX10

CD Section	Model Name Using Similar Mechanism	NEW
	CD Mechanism Type	CDM58F-K6
	Optical Pick-up Name	KSM-213DCP/Z-NP
Tape deck Section	Model Name Using Similar Mechanism	NEW
	Tape Transport Mechanism Type	CWL44FF29

## SPECIFICATIONS

AUDIO POWER SPECIFICATIONS:  
(HCD-RG4SR USA model only)

POWER OUTPUT AND TOTAL  
HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from  
120 – 10,000 Hz; rates 100 watts per channel  
minimum RMS power, with no more than 10%  
total harmonic distortion from 250 milliwatts to  
rated output.

Total harmonic distortion less than 0.07%  
(6 ohms at 1 kHz, 50 W)

(HCD-RG30T USA model only)

POWER OUTPUT AND TOTAL  
HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from  
120 – 10,000 Hz; rates 75 watts per channel  
minimum RMS power, with no more than 10%  
total harmonic distortion from 250 milliwatts to  
rated output.

Total harmonic distortion less than 0.07%  
(6 ohms at 1 kHz, 30 W)

(HCD-RG20 USA model only)

POWER OUTPUT AND TOTAL  
HARMONIC DISTORTION:

with 6 ohm loads both channels driven, from  
120 – 10,000 Hz; rates 60 watts per channel  
minimum RMS power, with no more than 10%  
total harmonic distortion from 250 milliwatts to  
rated output.

Total harmonic distortion less than 0.07%  
(6 ohms at 1 kHz, 30 W)

Amplifier section

**Canadian models:**  
**HCD-RG30T**

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, 50 W)

**HCD-RG20**

Continuous RMS power output (reference)  
60 + 60 watts (6 ohms at 1  
kHz, 10% THD)  
Total harmonic distortion less than 0.07%  
(6 ohms at 1 kHz, 30 W)

**European model:**  
**HCD-RG20**

DIN power output (rated) 40 + 40 watts  
(6 ohms at 1 kHz, DIN)  
Continuous RMS power output (reference)  
50 + 50 watts (6 ohms at 1  
kHz, 10% THD)  
Music power output (reference)  
95 + 95 watts (6 ohms  
at 1 kHz, 10% THD)

**Other model:**  
**HCD-DX10**

The following measured at AC 120, 220, 240 V  
50/60 Hz  
DIN power output (rated) 40 + 40 watts  
(6 ohms at 1 kHz, DIN)  
Continuous RMS power output (reference)  
50 + 50 watts (6 ohms at 1  
kHz, 10% THD)

Inputs

GAME (AUDIO) IN (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  
Surround speaker (HCD-RG4SR only):  
accepts impedance of 6 to  
16 ohms

CD player section

System Compact disc and digital  
audio system  
Laser Semiconductor laser  
( $\lambda=780$  nm)  
Emission duration:  
continuous  
Frequency response 2 Hz – 20 kHz ( $\pm 0.5$  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 40 – 13,000 Hz ( $\pm 3$  dB),  
using Sony TYPE I  
cassette

— Continued on next page —

## MINI HIFI COMPONENT SYSTEM

9-873-225-01

2001F1600-1

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**Sony Corporation**

**Home Audio Company**

**Shinagawa Tec Service Manual Production Group**

# SONY®

# HCD-DX10/RG4SR/RG20/RG30T

## 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 ohm unbalanced
Intermediate frequency	10.7 MHz

### AM tuner section

Tuning range	
Pan-American models:	530 – 1,710 kHz (with the interval set at 10 kHz) 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:	531 – 1,602 kHz (with the interval set at 9 kHz) 530 – 1,710 kHz (with the interval set at 10 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 models:	230 – 240 V AC, 50/60 Hz
Mexican models:	120 V AC, 50/60 Hz
Other models:	120 V, 220 V or 230 – 240 V AC, 50/60 Hz Adjustable with voltage selector

### Power consumption

USA models:	
HCD-RG4SR:	160 watts
HCD-RG30T:	115 watts
HCD-RG20:	95 watts
Canadian models:	
HCD-RG30T:	115 watts
HCD-RG20:	95 watts
European model:	
HCD-RG20:	85 watts 1.0 watts (at the Power Saving Mode)
Other model:	
HCD-DX10:	85 watts

Dimensions (w/h/d)	Approx. 280 × 325 × 421 mm
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### Mass

North American models:	
HCD-RG4SR:	Approx. 8.7 kg
HCD-RG30T:	Approx. 8.2 kg
HCD-RG20:	Approx. 7.8 kg
European model:	
HCD-RG20:	Approx. 8.1 kg
Other model:	
HCD-DX10:	Approx. 8.2 kg

Design and specifications are subject to change without notice.

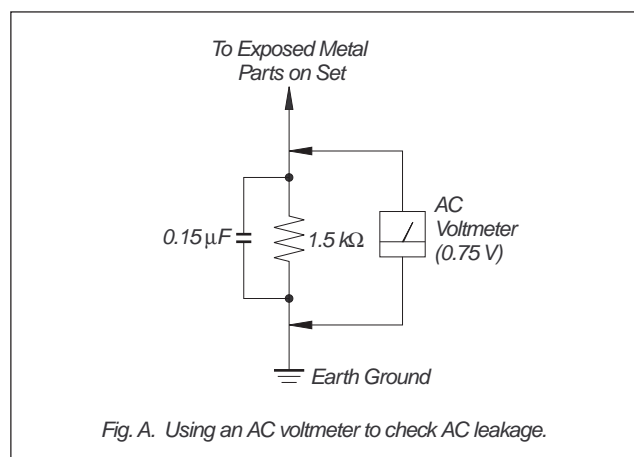
## SAFETY CHECK-OUT

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)



## SAFETY-RELATED COMPONENT WARNING!!

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

## ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

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

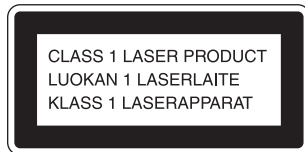
The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter 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.

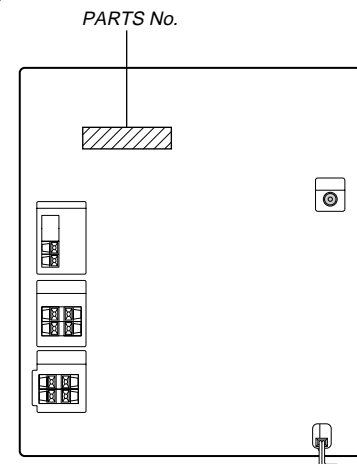
- Abbreviation
  - CND : Canadian model
  - AUS : Australian model
  - AR : Argentina model
  - SP : Singapore model
  - TW : Taiwan model
  - MX : Mexican model
  - MY : Malaysia model
  - E2 : 120V AC Area in E model
  - E3 : 240V AC Area in E model
  - E51 : Chilean and Peruvian model

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### MODEL IDENTIFICATION

— BACK PANEL —

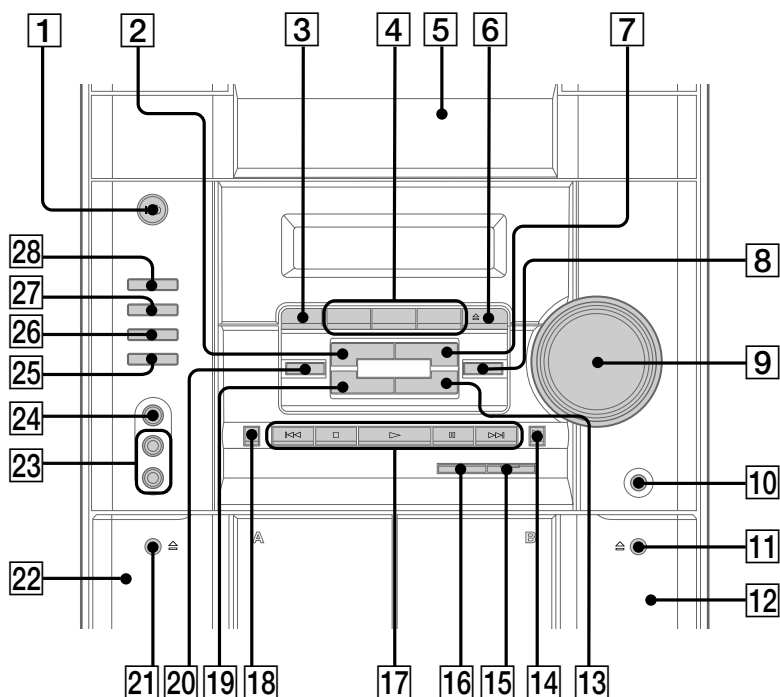


MODEL	PARTS No.
RG20: US, CND models	4-234-701-0□
RG20: AEP, UK models	4-234-701-1□
DX10: E2, E3, E51, TW models	4-234-701-2□
DX10: AUS, AR, MX models	4-234-701-3□
RG30T	4-234-701-4□
RG4SR	4-234-701-5□
DX10: MY, SP models	4-234-701-6□

## SECTION 1 GENERAL

This section is extracted  
from instruction manual.

### Main unit

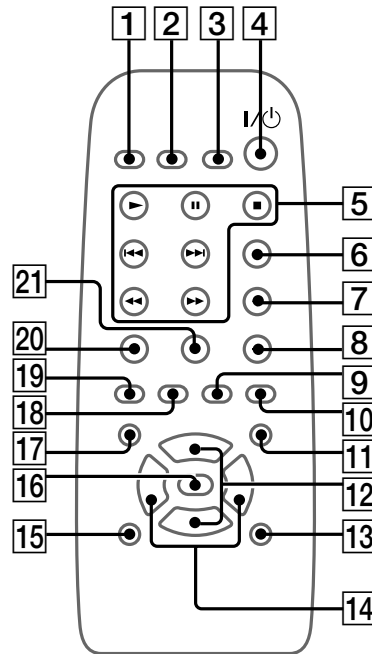


- AUDIO jacks **23** (19)  
 CD **28** (10 – 12, 15)  
 CD SYNC **16** (15)  
 Deck A **22** (14)  
 Deck B **12** (14 – 16)  
 DISC 1 – 3 **4** (10, 11)  
 DISC SKIP EX-CHANGE **3**  
 (10, 11)  
 Disc tray **5** (10)  
 DISPLAY **20** (12)  
 EFFECT ON/OFF **13**  
 (17)  
 GAME **25** (18 – 20)  
 GAME EQ **19** (17, 18, 20)  
 GROOVE **8** (17)  
 MOVIE EQ **7** (17)  
 MUSIC EQ **2** (17)  
 PHONES jack **10**  
 REC PAUSE/START **15** (15)  
 TAPE A/B **26** (14, 15)  
 TUNER/BAND **27** (12, 13, 15)  
 VIDEO jack **24** (19, 20)  
 VOLUME control **9**

#### BUTTON DESCRIPTIONS

- I/⏻ (power) **1**  
 ▲ OPEN/CLOSE **6**  
 ▲ (deck B) **11**  
 ►► (fast forward) **14**  
 ◀◀ (go back) **17**  
 ►► (go forward) **17**  
 || (pause) **17**  
 ▷ (play) **17**  
 ■ (stop) **17**  
 ◀◀ (rewind) **18**  
 ▲ (deck A) **21**

## Remote Control



CD **19** (10 – 12, 15)  
 CLEAR **20** (11)  
 CLOCK/TIMER SELECT **2**  
 (16, 19)  
 CLOCK/TIMER SET **3** (9, 16,  
 18)  
 DISPLAY **6** (12)  
 D.SKIP **7** (10)  
 ENTER **15** (9, 11 – 13, 16, 18,  
 19)  
 EQ +/- **14** (17)  
 GAME **10** (18 – 20)  
 GROOVE **13** (17)

ON/OFF **16** (17)  
 PLAY MODE **21** (10, 11)  
 PRESET +/- **5** (13)  
 REPEAT **8** (11)  
 SLEEP **1** (18)  
 STEREO/MONO **8** (13)  
 SURROUND **11** (17)  
 TAPE A/B **9** (14, 15)  
 TUNER MEMORY **17** (12, 13)  
 TUNER/BAND **18** (12, 13)  
 TUNING +/- **5** (12, 13)  
 VOL +/- **12**

### BUTTON DESCRIPTIONS

I/⏻ (power) **4**  
 ►► (fast forward) **5**  
 ◀◀ (go back) **5**  
 ►► (go forward) **5**  
 || (pause) **5**  
 ► (play) **5**  
 ◀◀ (rewind) **5**  
 ■ (stop) **5**

## Setting the time

- 1 Press I/⏻ to turn on the system.**
- 2 Press CLOCK/TIMER SET on the remote.**  
 Proceed to step 5 when “CLOCK” appears in the display.
- 3 Press ◀◀ or ►► repeatedly to select “SET CLOCK”.**
- 4 Press ENTER on the remote.**
- 5 Press ◀◀ or ►► repeatedly to set the hour.**

- 6 Press ENTER on the remote.**

The minute indication flashes.

- 7 Press ◀◀ or ►► repeatedly to set the minute.**

- 8 Press ENTER on the remote.**

### Tip

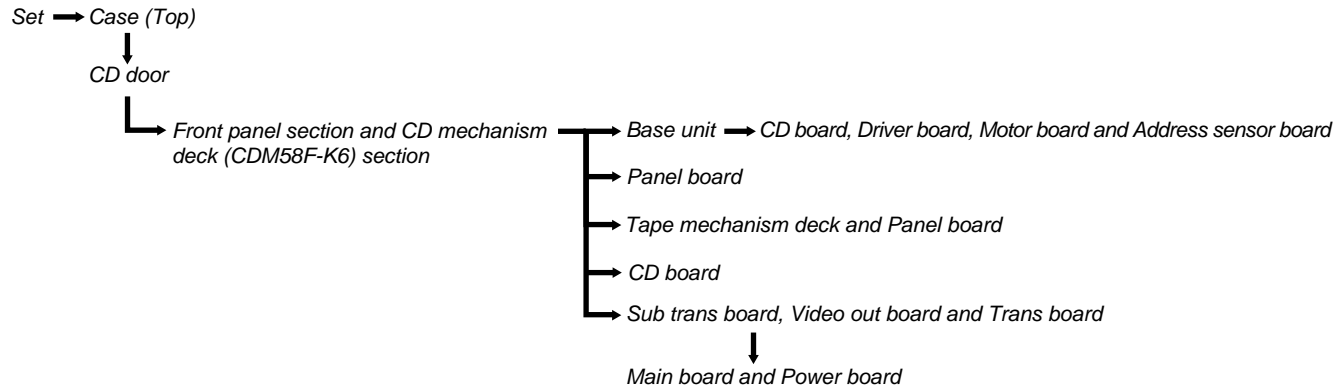
If you made a mistake or want to change the time, start over from step 2.

### Note

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

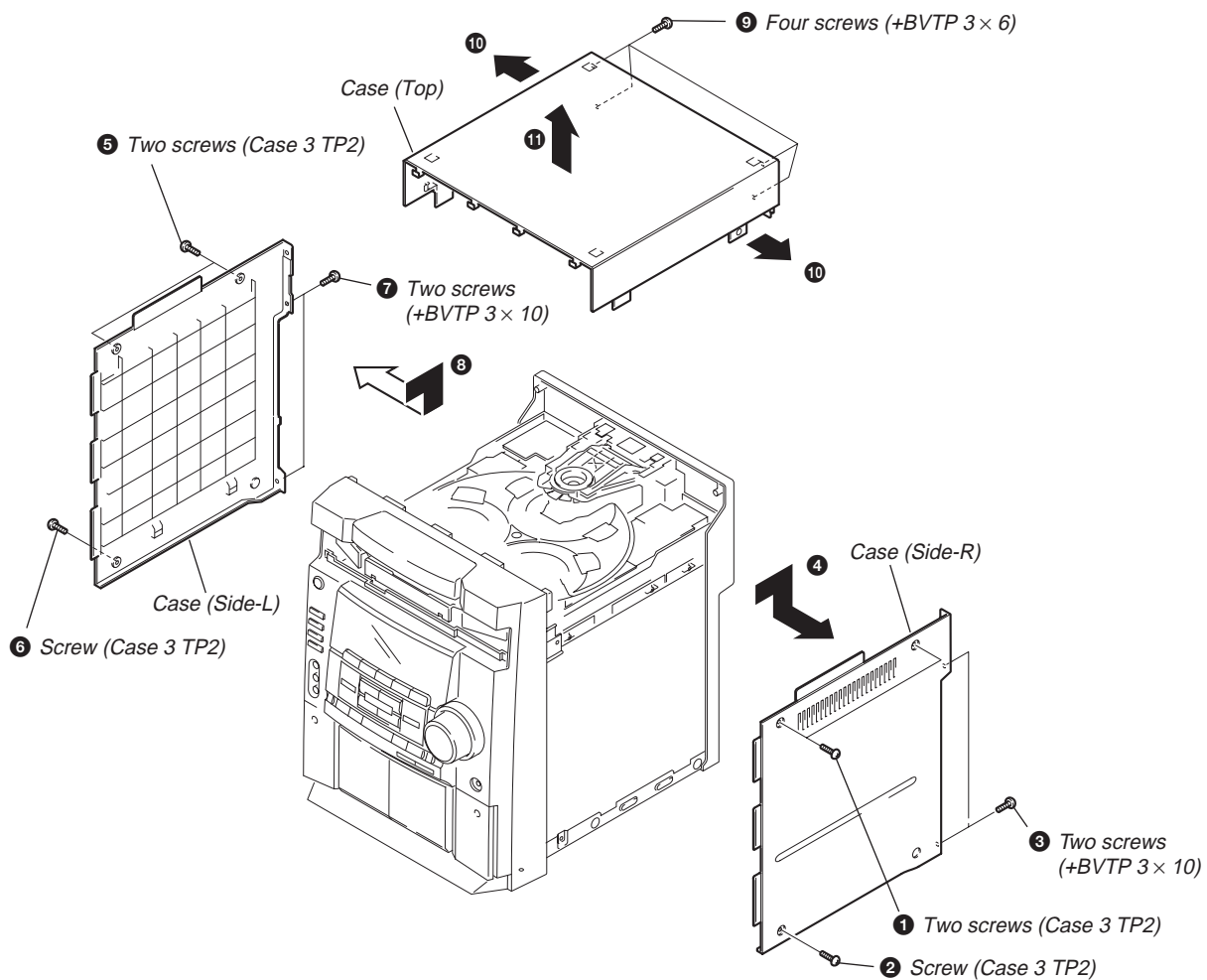
## SECTION 2 DISASSEMBLY

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

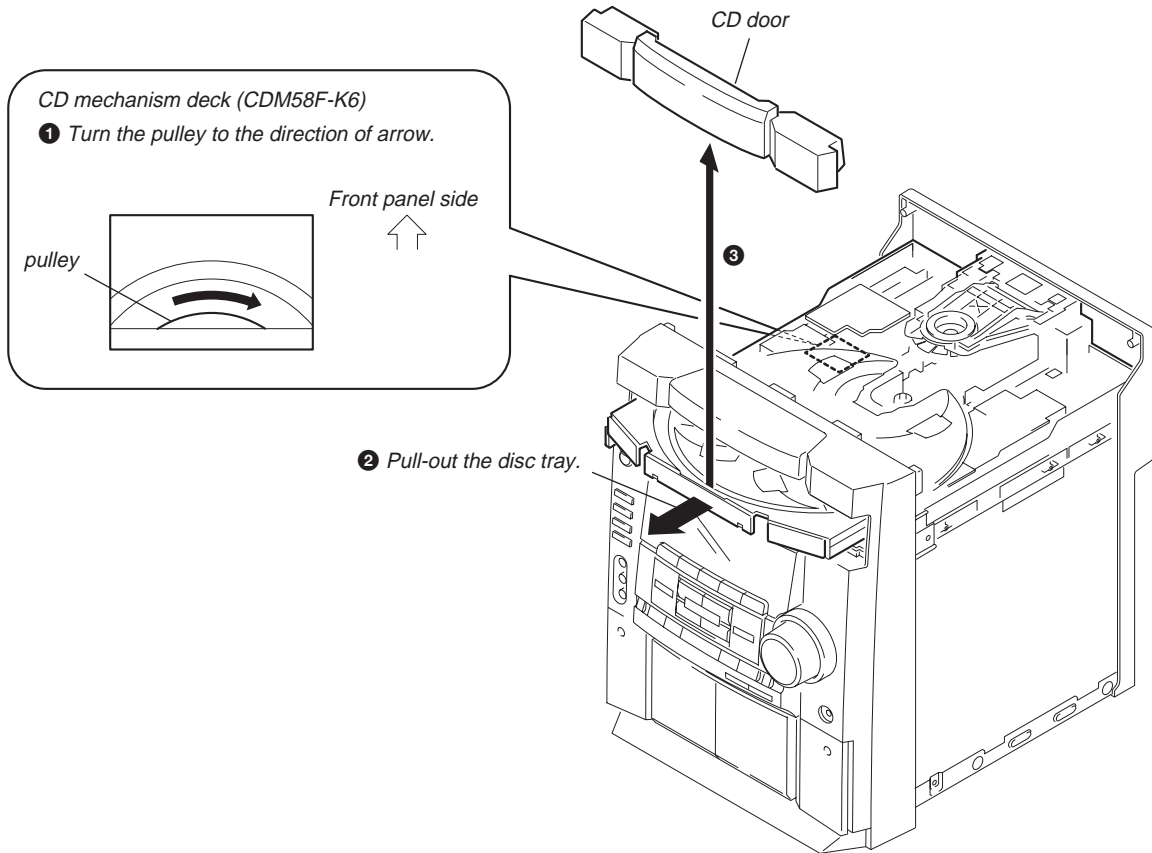


**Note :** Follow the disassembly procedure in the numerical order given.

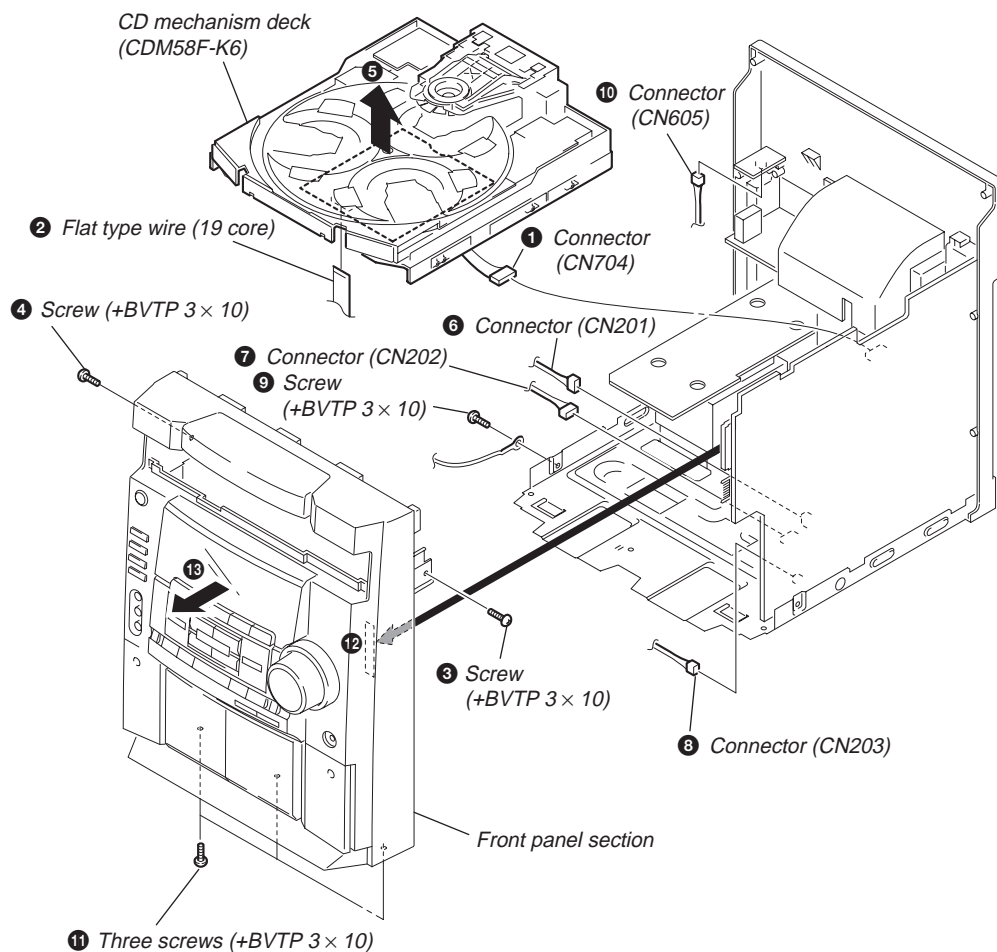
### 2-1. CASE (TOP)



## 2-2. CD DOOR

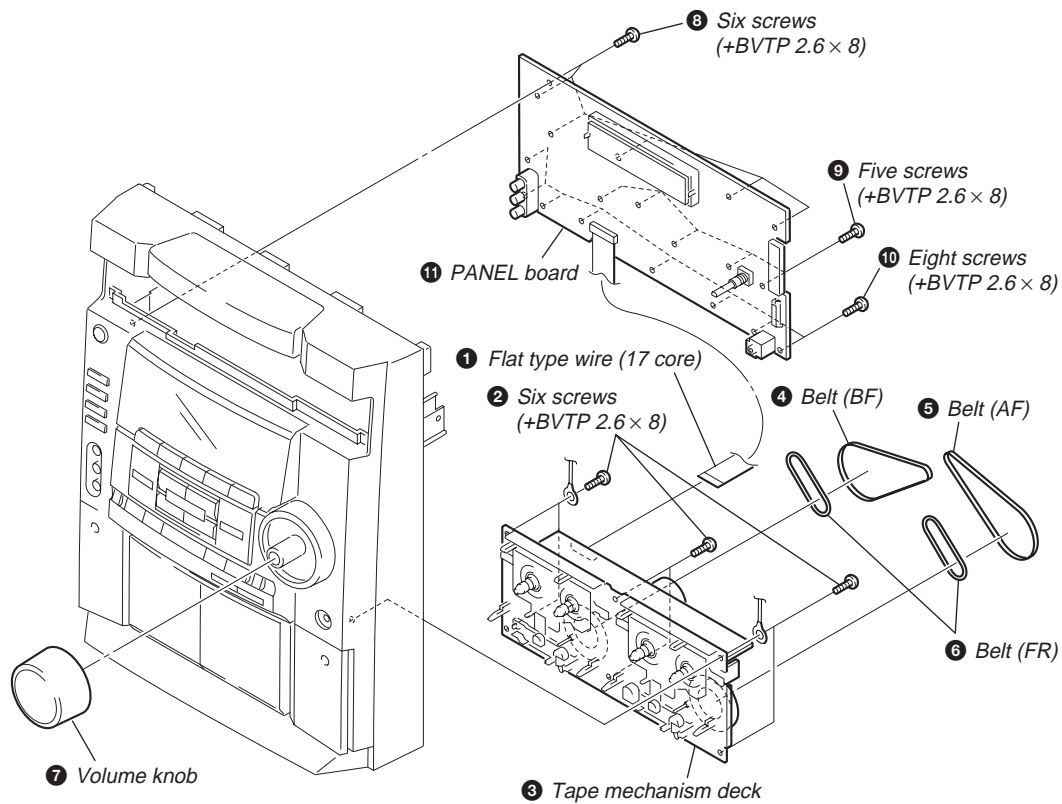


## 2-3. FRONT PANEL SECTION AND CD MECHANISM DECK (CDM58F-K6) SECTION

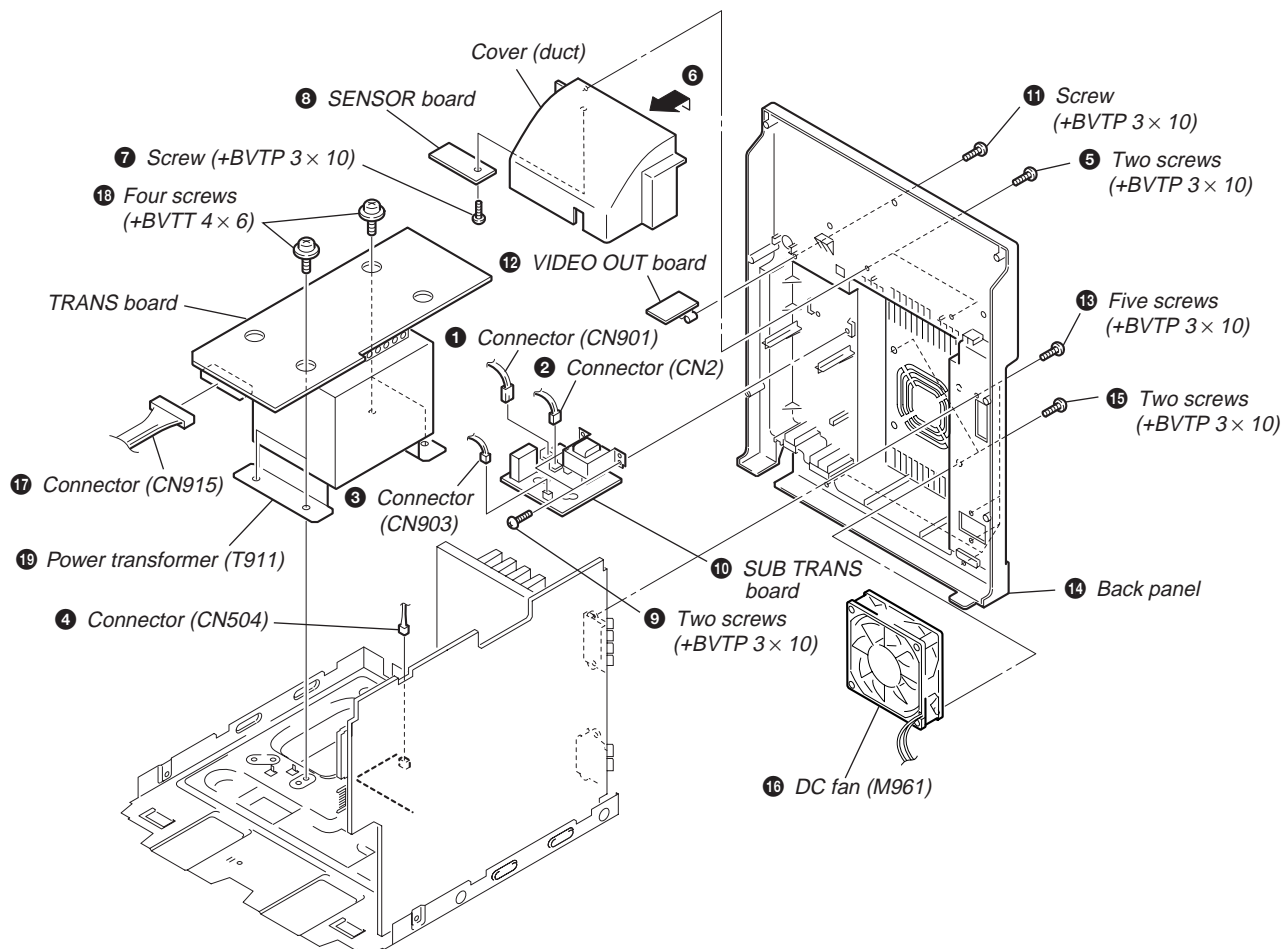




## 2-4. TAPE MECHANISM DECK AND PANEL BOARD

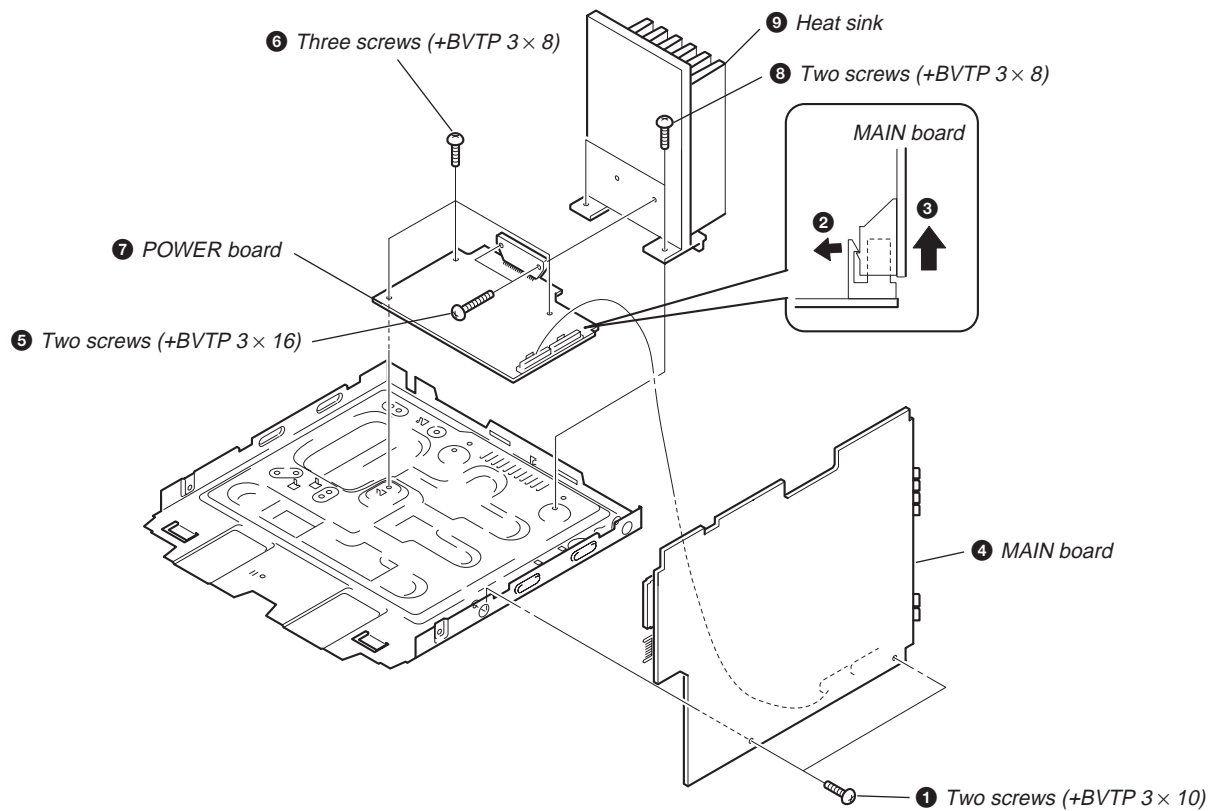


## 2-5. SUB TRANS BOARD, VIDEO OUT BOARD AND TRANS BOARD

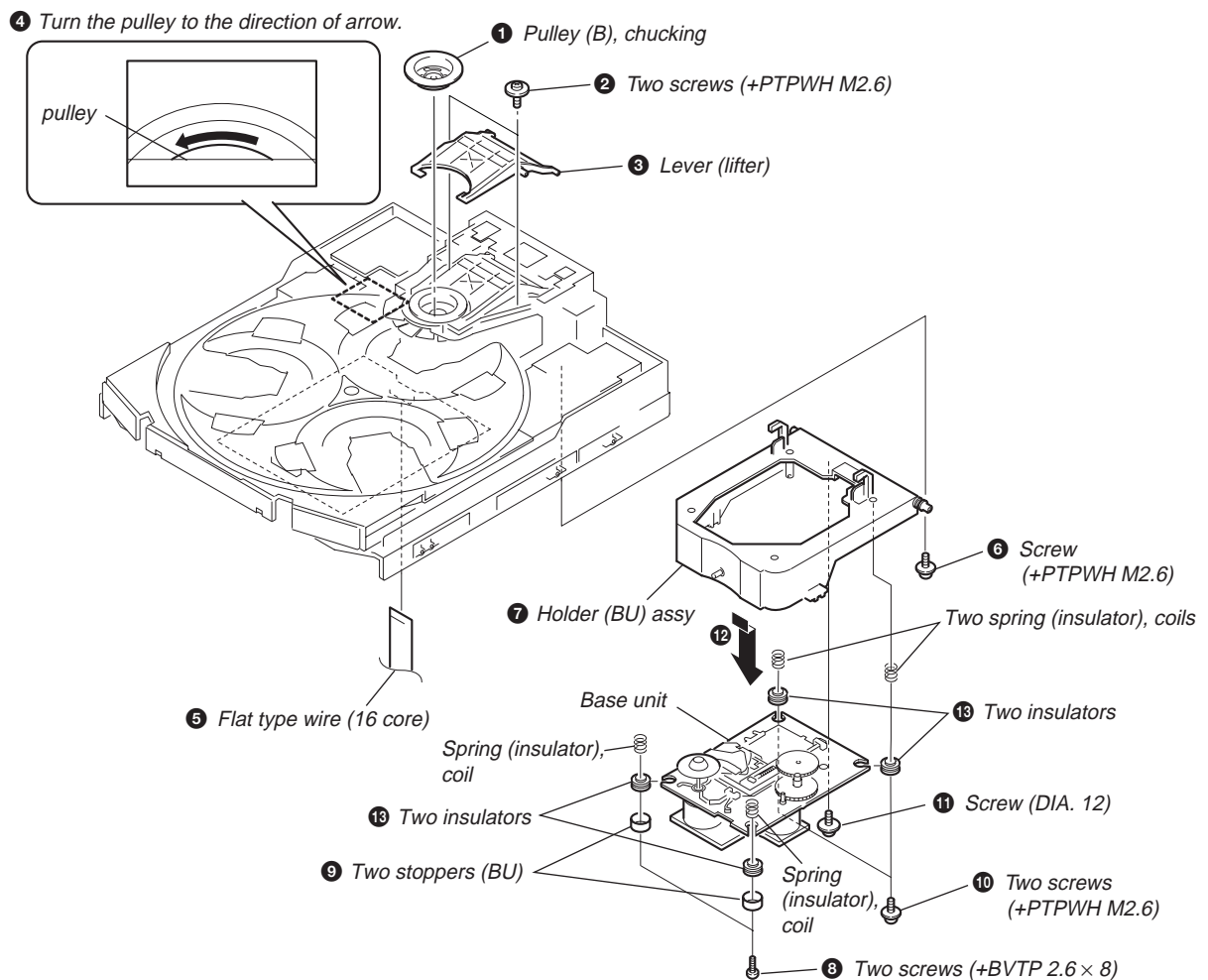




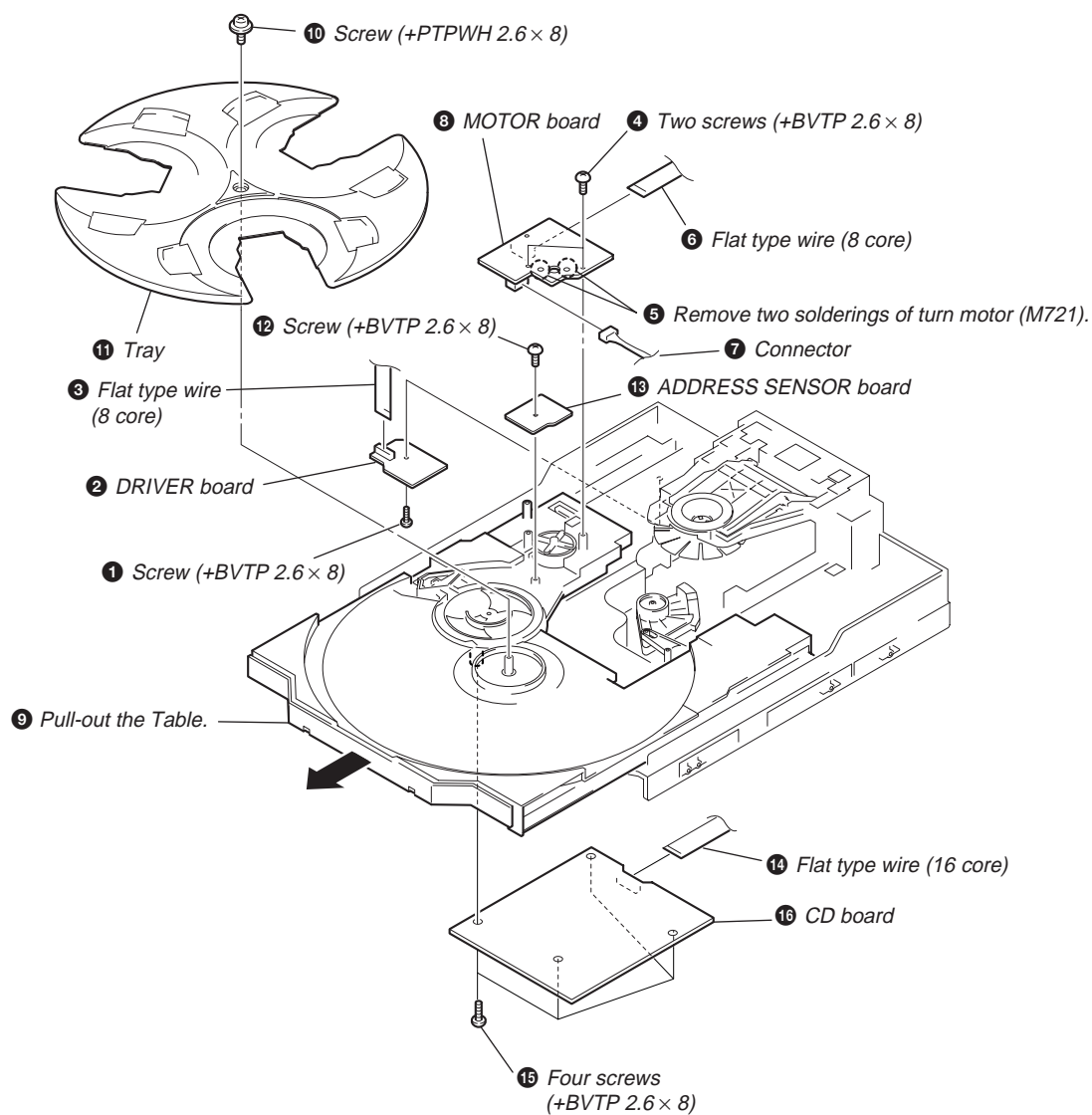
## 2-6. MAIN BOARD AND POWER BOARD



## 2-7. BASE UNIT



## 2-8. CD BOARD, DRIVER BOARD, MOTOR BOARD AND ADDRESS SENSOR BOARD








## 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.




##### Procedure:

- Press  button to turn the set ON.
- Select the function "TUNER", and press  button to select the BAND "AM".
- Press  button to turn the set OFF.
- Press  and  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:

- Press three buttons , , and  simultaneously.
- 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.

- Set three discs in tray. Select ALL DISCS, and REPEAT OFF.
- Load the tapes recording use into both decks.
- Press three buttons , , and  simultaneously.
- Aging operations of CD and tape are started at the same time.
- To exit the aging mode, perform [Cold Reset].

##### 2. Aging mode in CD section

###### 1) Operation during aging mode

- In the aging mode, the program is executed in the following sequence.
  - The disc tray opens and closes.
  - The disc tray turns to select a disc 3.
  - The pickup accesses to the first track, and plays 3 seconds.
  - The pickup accesses to the last track, and plays 3 seconds.
  - The disc tray opens and closes.
  - The disc tray turns to select a disc 1.
  - The same operation starts like step (3).
  - After a disc 1 aging operation, a disc 2 is selected.
  - When an aging operation of a disc 3 is completed, the display "AGING \*\*\*" value increases.
  - 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 aging mode, the program is executed 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.

## [FL Tube Test Mode]

- All fluorescent segments and LEDs are tested.










### Procedure:

1. Press  button to turn the set ON.
2. To enter the test mode, press the three buttons , , and  simultaneously.
3. Press  and  buttons simultaneously.
4. All segments and LEDs (without STANDBY LED) are turned on.
5. To exit from this mode, press  button to turn the set OFF.

## [Version and Destination Display Mode]

- The version or destination is displayed.









### Procedure:

1. Press  button to turn the set ON.
2. To enter the test mode, press the three buttons , , and  simultaneously.
3. Press  and  buttons simultaneously.
4. The version is displayed.
5. Press  and  buttons simultaneously.
6. The destination is displayed.
7. To exit from this mode, press  button to turn the set OFF.

## [Key Check Mode]

- Keyboard check.










### Procedure:

1. Press  button to turn the set ON.
2. To enter the test mode, press the three buttons , , and  simultaneously.
3. Press  and  buttons simultaneously, and the key check mode is activated.
4. In the key check mode, the fluorescent indicator displays "KEY 0 VOL 0". Each time a button is pressed, "KEY 0" value increases. However, once a button is pressed, it is no longer taken into account.  
"VOL 0" value increases like 1, 2, 3 ... if rotating  knob clockwise, or it decreases like 0, 9, 8, ... if rotating counter-clockwise.
5. To exit from this mode, press  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  button to turn the set ON.
2. Select the function "CD".
3. To enter the test mode, press three buttons , , and  simultaneously.
4. Press  and  buttons simultaneously.
5. The CD service mode is selected.
6. With the CD in stop status, press  button to move the pickup to outside track, or press  button to inside track.
7. To exit from this mode, perform as follows:
  - 1) Move the pickup to the most inside track.
  - 2) Press  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.

## [VACS ON/OFF Mode]

- This mode is used to switch ON and OFF the VACS (Variable Attenuation Control System).
















### Procedure:

1. Press  button to turn the set ON.
2. To enter the test mode, press the three buttons , , and  simultaneously.
3. Press  button while pressing  button. The message "VACS OFF" or "VACS ON" appears.
4. To exit from this mode, press  button to turn the set OFF.

## [Equalizer Test Mode]

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




### Procedure:

1. Press  button to turn the set ON.
2. To enter the test mode, press the three buttons , , and  simultaneously.
3. Press  button while pressing  button. The message "BASS + 0" is displayed.
4. The value increases like + 2, + 4 ... if pressing  button while  button is still depressed, or it decreases like - 2, - 4 ... if pressing  button.
5. Press  button while pressing  button. The message "TRE + 0" is displayed.
6. The value increases like + 2, + 4 ... if pressing  button while  button is still depressed, or it decreases like - 2, - 4 ... if pressing  button.
7. To exit from this mode, press  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.

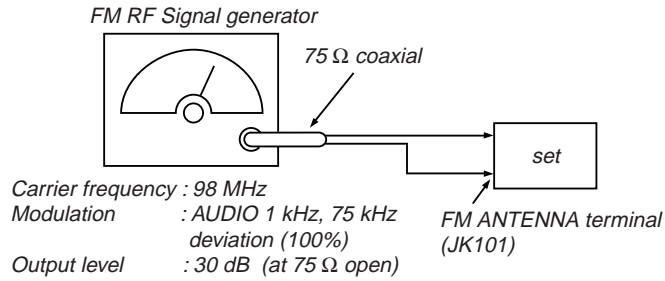
### Procedure:

1. Press  button to turn the set ON.
2. Press  button and  button simultaneously.
3. The "STANDBY" display blinks instantaneously, and the CD ship mode is set.

## SECTION 4 ELECTRICAL ADJUSTMENTS

### TUNER SECTION

#### FM Tuned Level Adjustment

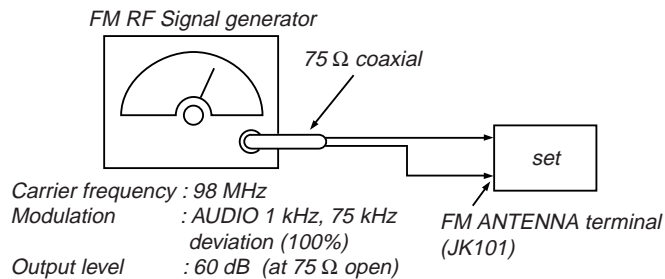


#### Procedure:

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

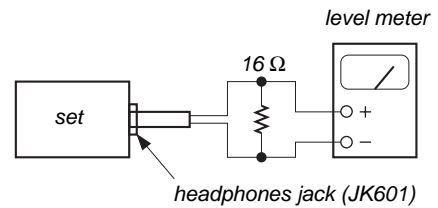
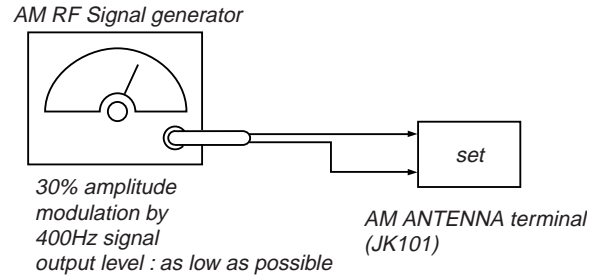


#### Procedure:

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

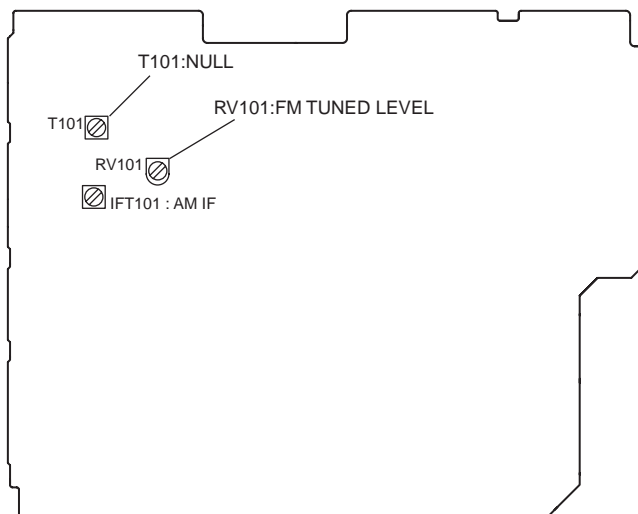
#### AM IF Adjustment



#### 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.

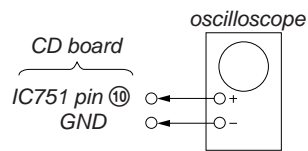
#### [MAIN BOARD] Component side



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.

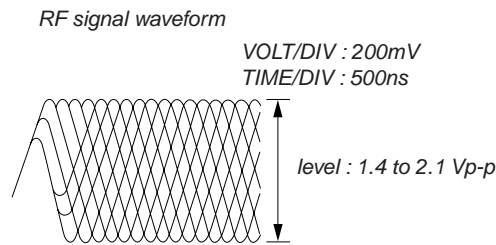
RF Level Check



Procedure :

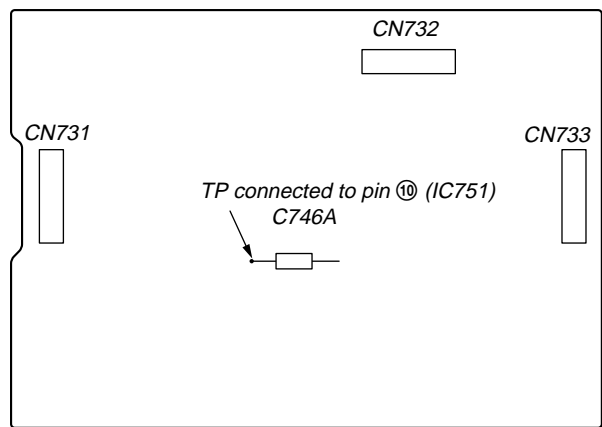
- 1. Connect oscilloscope to pin ⑩ (IC751).
- 2. Turned Power switch on.
- 3. Load a disc (YEDS-18) and playback.
- 4. Confirm that oscilloscope waveform is clear and check RF signal  
level is correct or not.

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  $\mu\text{F}$  unless otherwise noted.  $\text{pF}$ :  $\mu\text{F}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}W$  or less unless otherwise specified.
- $\triangle$  : internal component.
- $\square$  : panel designation.

Note:

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

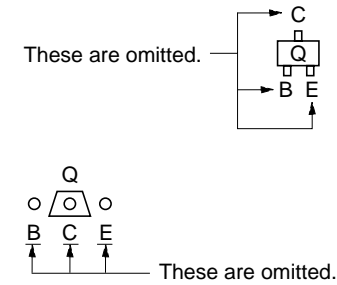
Note:

Les composants identifiés par une marque  $\triangle$  sont critiques pour la sécurité.  
Ne les remplacer que par une pièce 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 M $\Omega$ ). Voltage variations may be noted due to normal production tolerances.  
no mark : FM  
< : CD  
> : 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

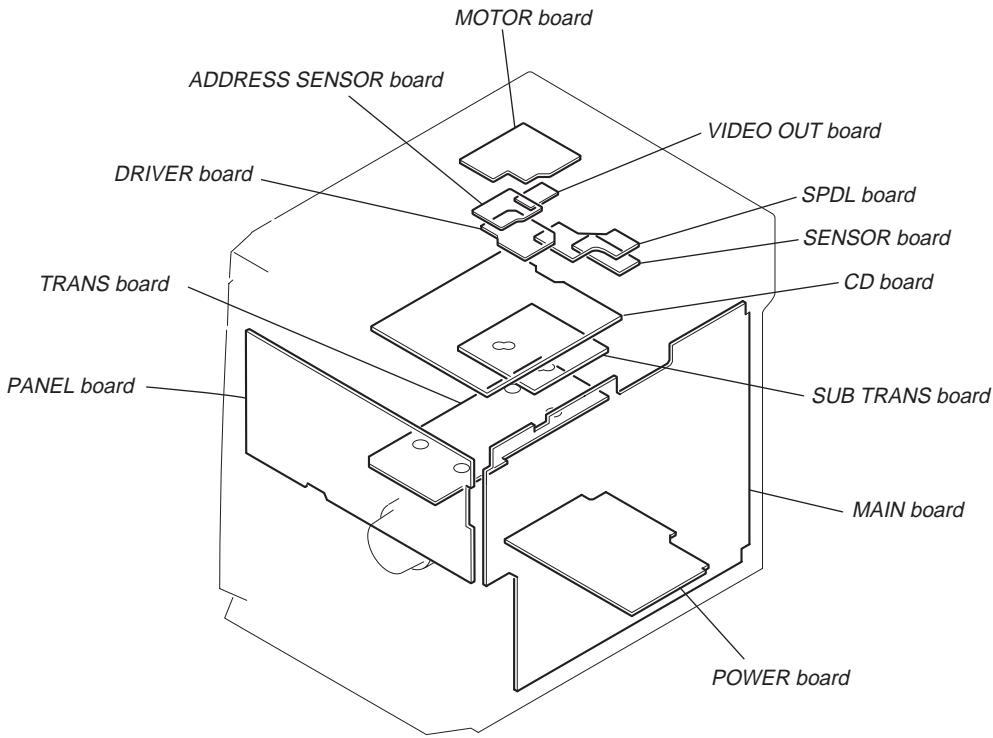
Note on Printed Wiring Boards:

- $\circ$  : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Indication of transistor.



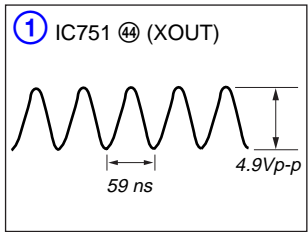
- Abbreviation  
CND : Canadian model  
AUS : Australian model  
AR : Argentina model  
SP : Singapore model  
TW : Taiwan model  
MX : Mexican model  
MY : Malaysia model  
E2 : 120V AC Area in E model  
E3 : 240V AC Area in E model  
E51 : Chilean and Peruvian model

5-1. CIRCUIT BOARD LOCATION

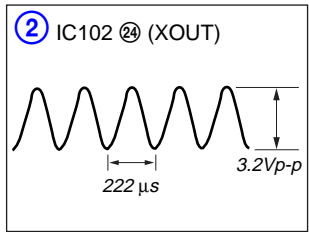


• WAVEFORMS

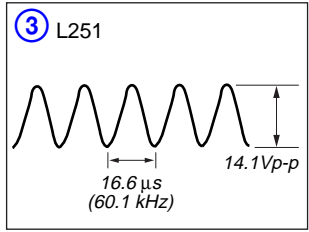
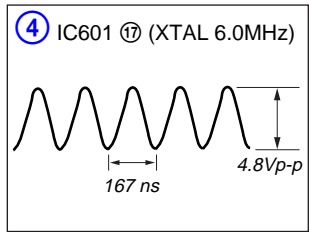
– CD BOARD –



– MAIN BOARD –

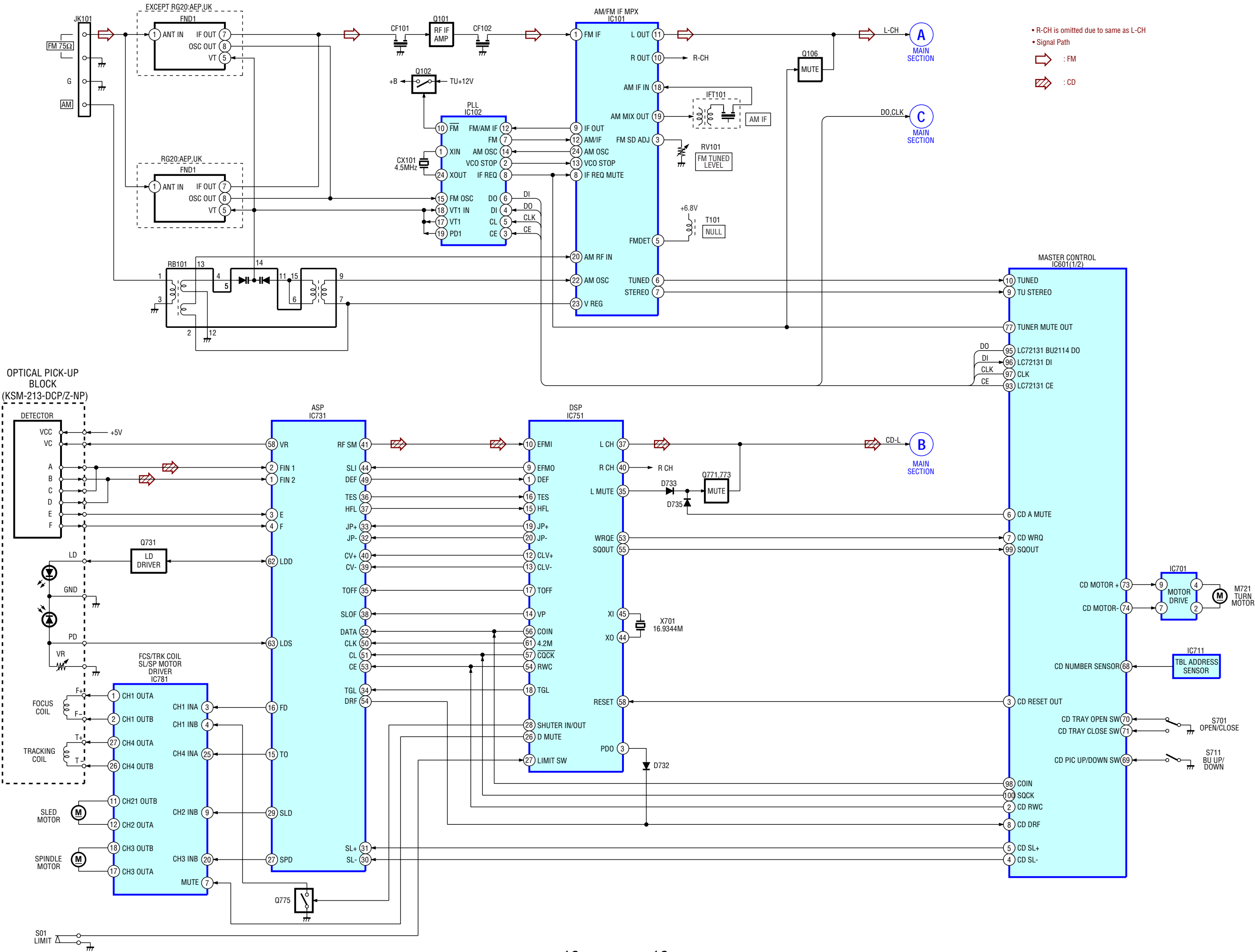


– PANEL BOARD –

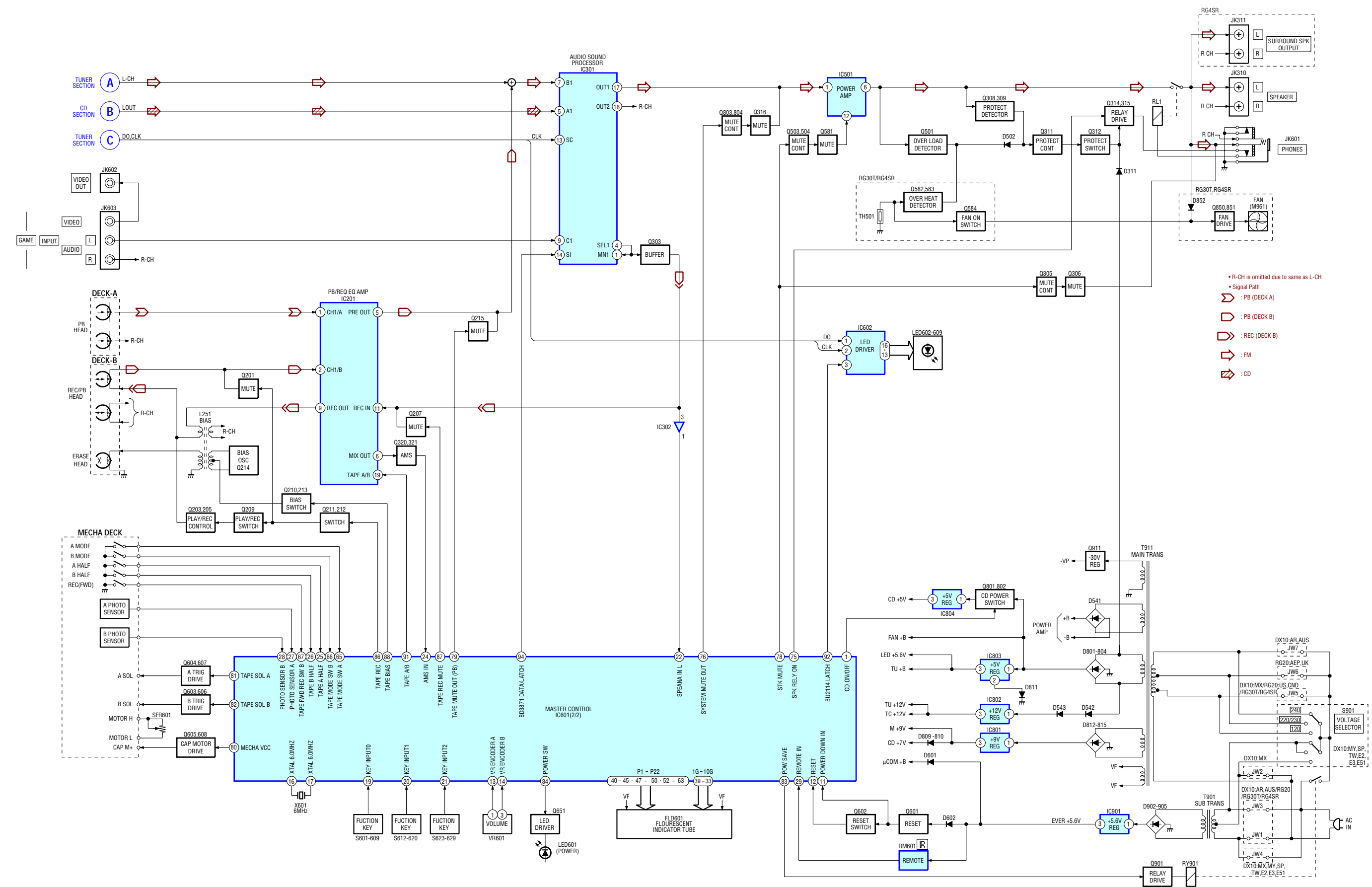


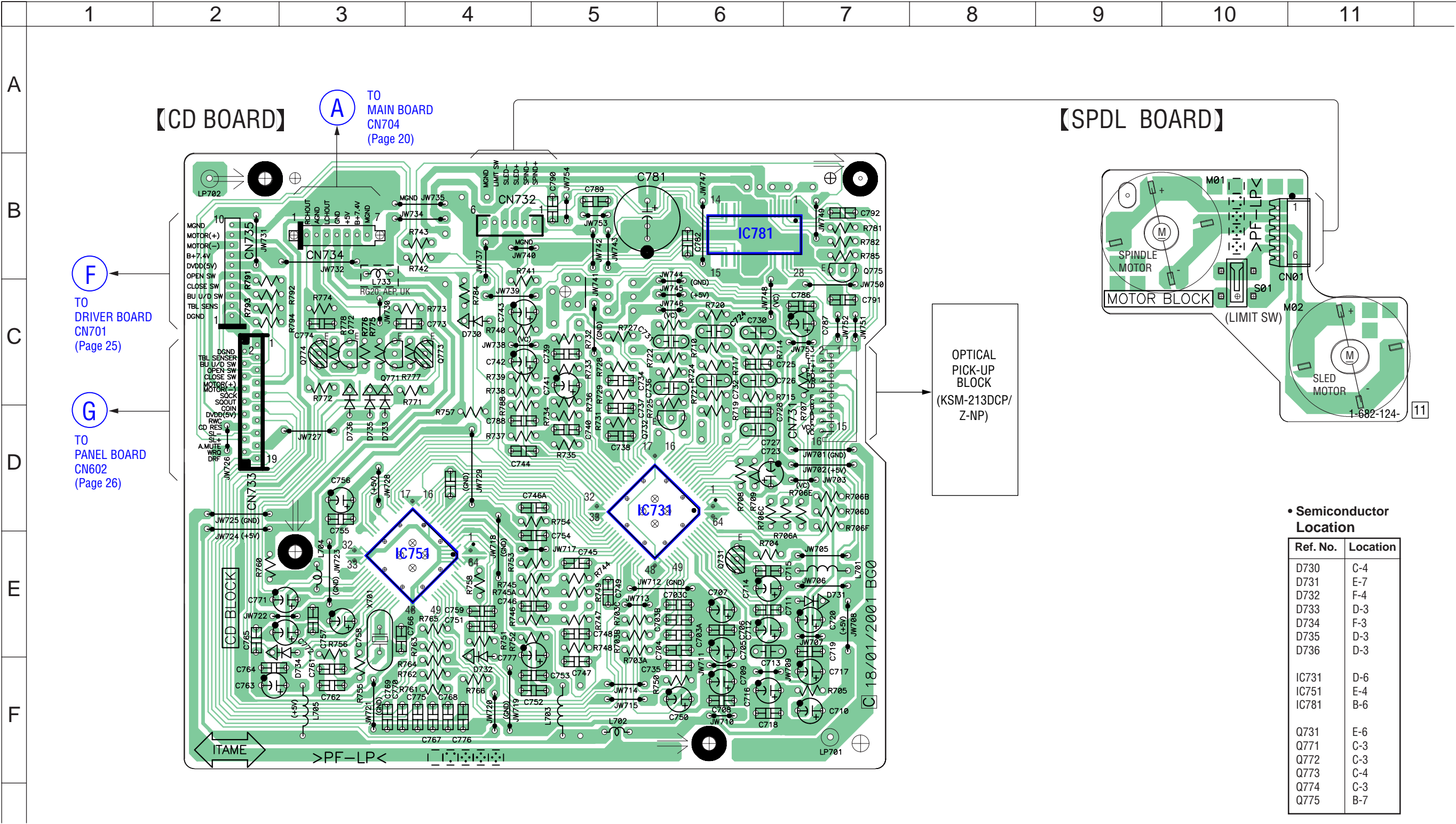


5-2. BLOCK DIAGRAMS  
TUNER/CD SECTION

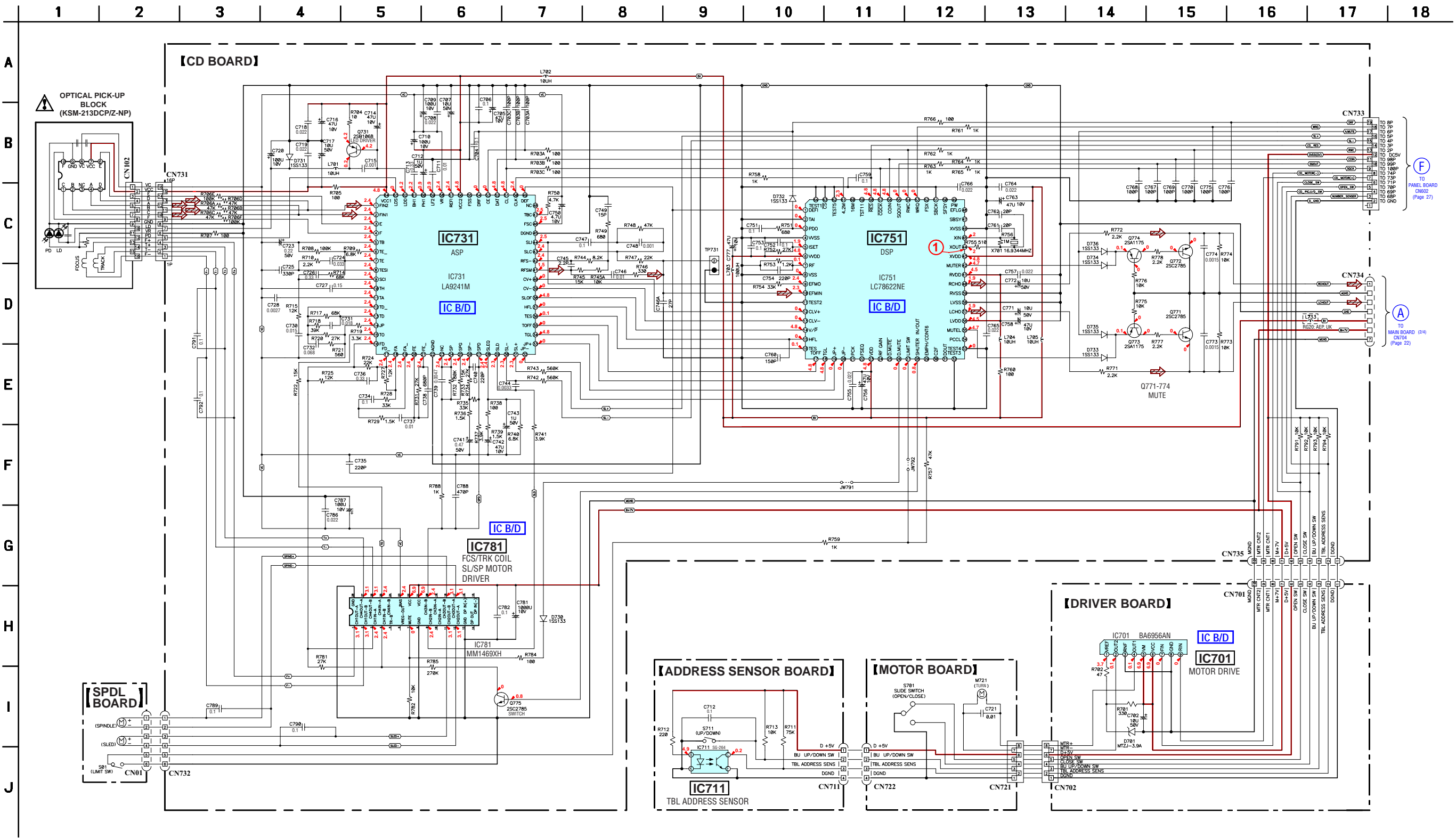


MAIN SECTION





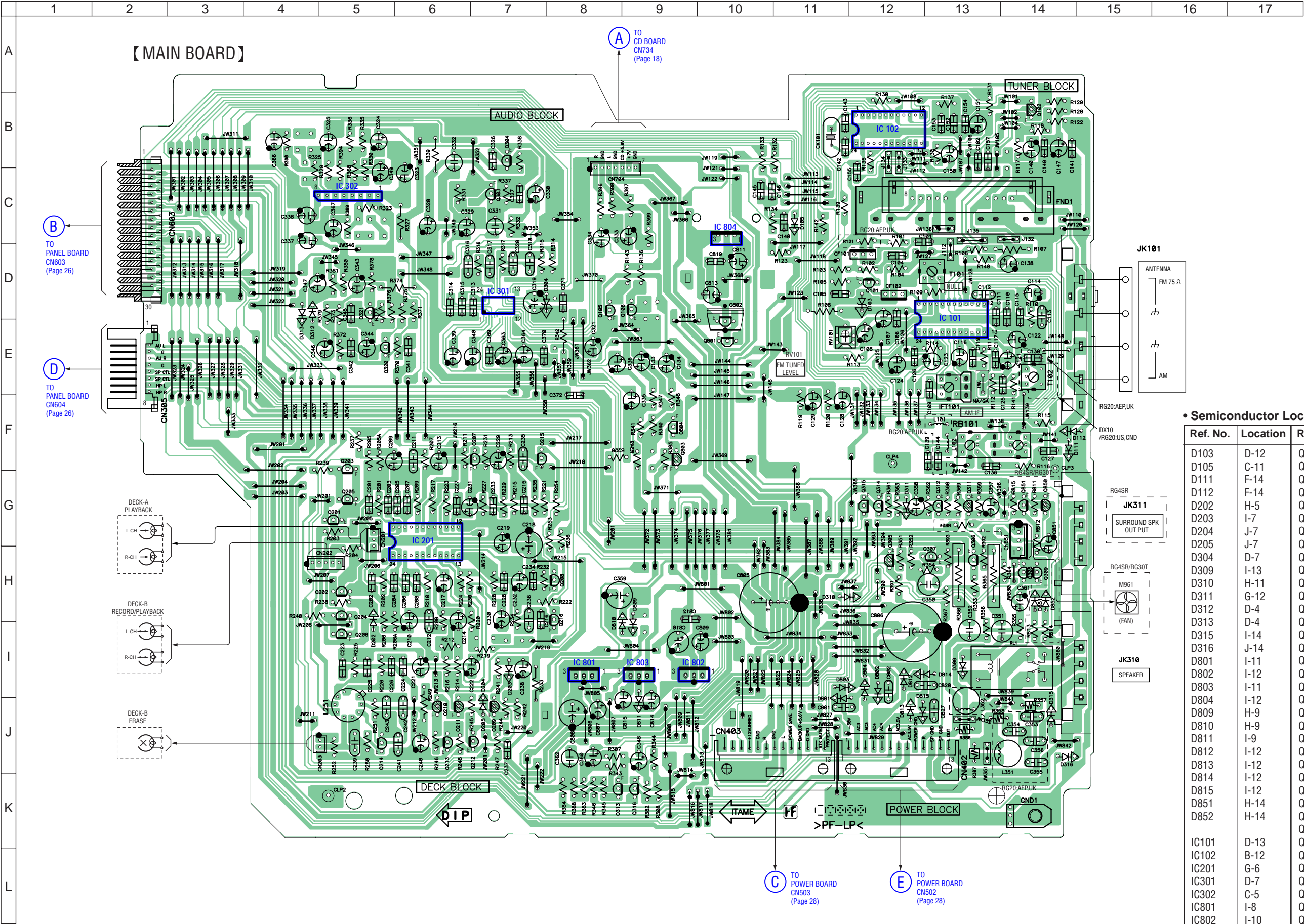
5-4. SCHEMATIC DIAGRAM CD SECTION • See page 15 for Waveform. • See page 31, 32 for IC Block Diagrams. • See page 25 for printed wiring boards of ADDRESS SENSOR, DRIVER and MOTOR boards.





HCD-DX10/RG4SR/RG20/RG30T

5-5. PRINTED WIRING BOARD MAIN SECTION • See page 15 for Circuit Boards Location.



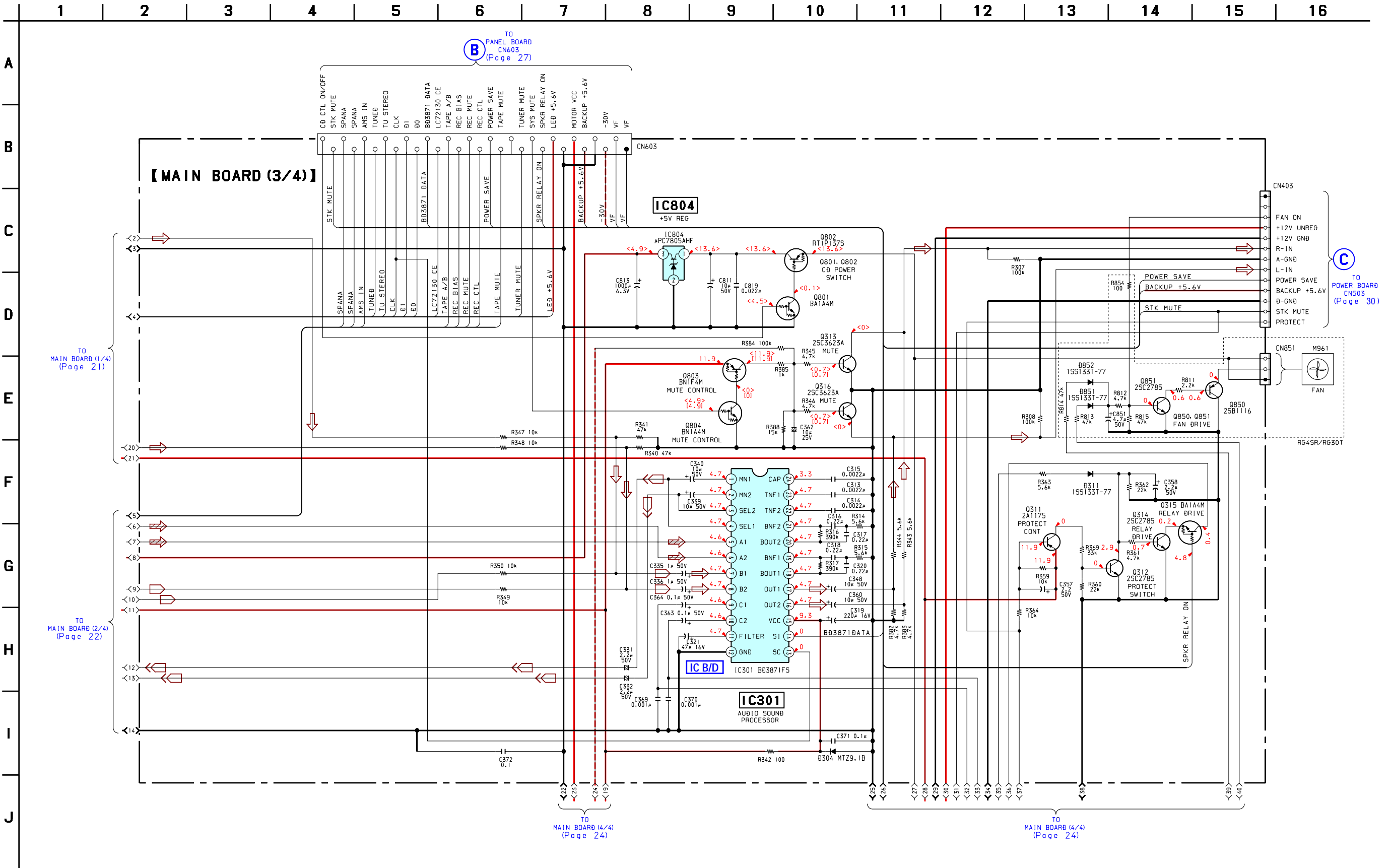
• Semiconductor Location			
Ref. No.	Location	Ref. No.	Location
D103	D-12	Q105	D-8
D105	C-11	Q106	D-9
D111	F-14	Q201	G-5
D112	F-14	Q202	H-5
D202	H-5	Q203	F-5
D203	I-7	Q204	H-5
D204	J-7	Q205	G-5
D205	J-7	Q206	I-5
D304	D-7	Q207	F-6
D309	I-13	Q208	H-8
D310	H-11	Q209	I-7
D311	G-12	Q210	I-6
D312	D-4	Q211	J-6
D313	D-4	Q212	J-6
D315	I-14	Q213	J-5
D316	J-14	Q214	F-7
D801	I-11	Q215	H-8
D802	I-12	Q303	C-7
D803	I-11	Q304	B-7
D804	I-12	Q305	G-12
D809	H-9	Q306	H-13
D810	H-9	Q307	G-12
D812	I-12	Q308	G-14
D813	I-12	Q309	G-14
D814	I-12	Q311	G-13
D815	I-12	Q312	G-13
D851	H-14	Q313	K-8
D852	H-14	Q314	G-12
		Q315	G-12
		Q316	K-9
IC101	D-13	Q320	E-5
IC102	B-12	Q321	D-5
IC201	G-6	Q801	D-10
IC301	D-7	Q802	D-10
IC302	C-5	Q803	F-9
IC801	I-8	Q804	F-9
IC802	I-10	Q850	G-14
IC803	I-9	Q851	G-14
IC804	C-10		
Q101	D-12		
Q102	B-14		





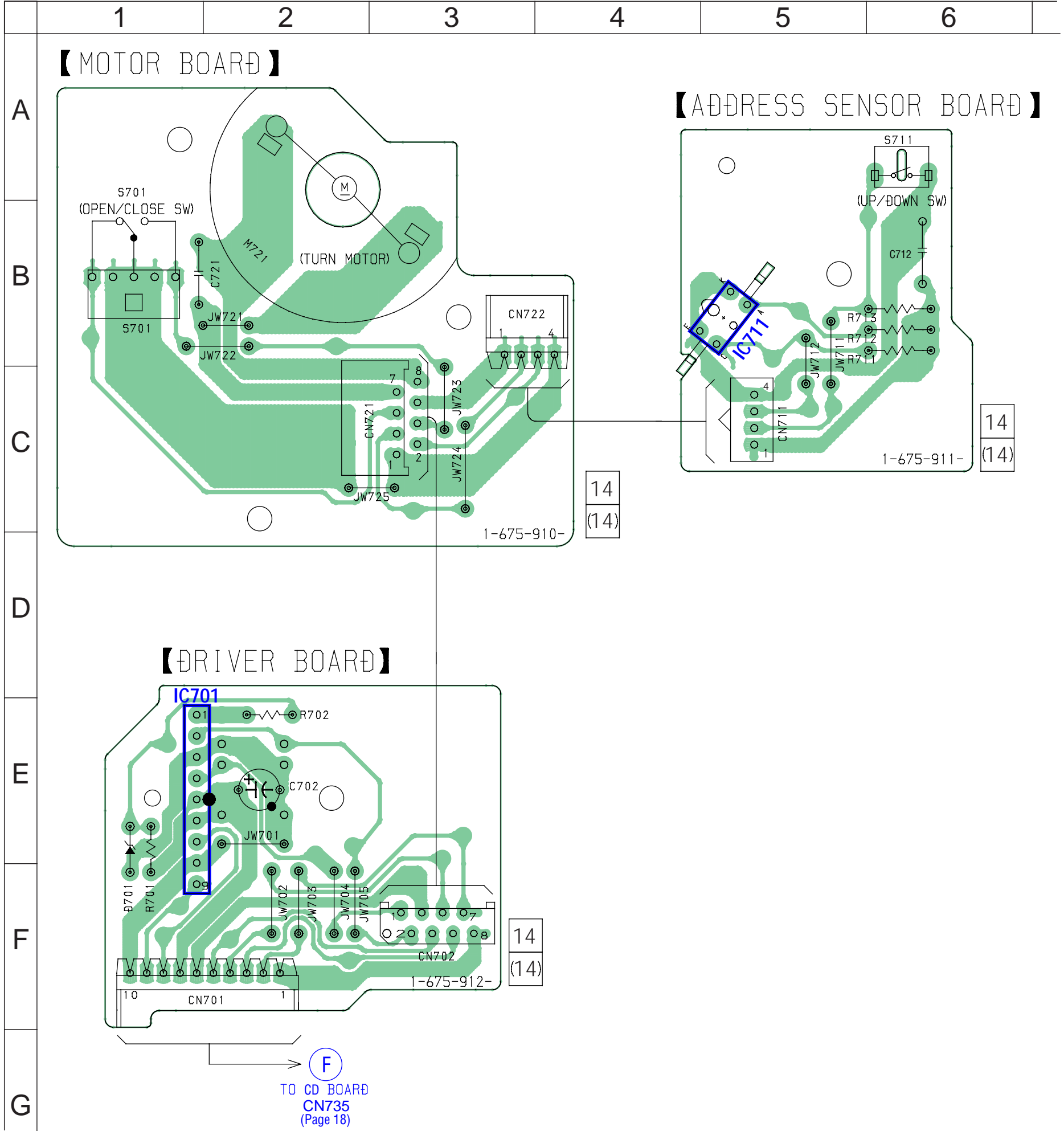


5-8. SCHEMATIC DIAGRAM MAIN SECTION (3/4) • See page 33 for IC Block Diagram.



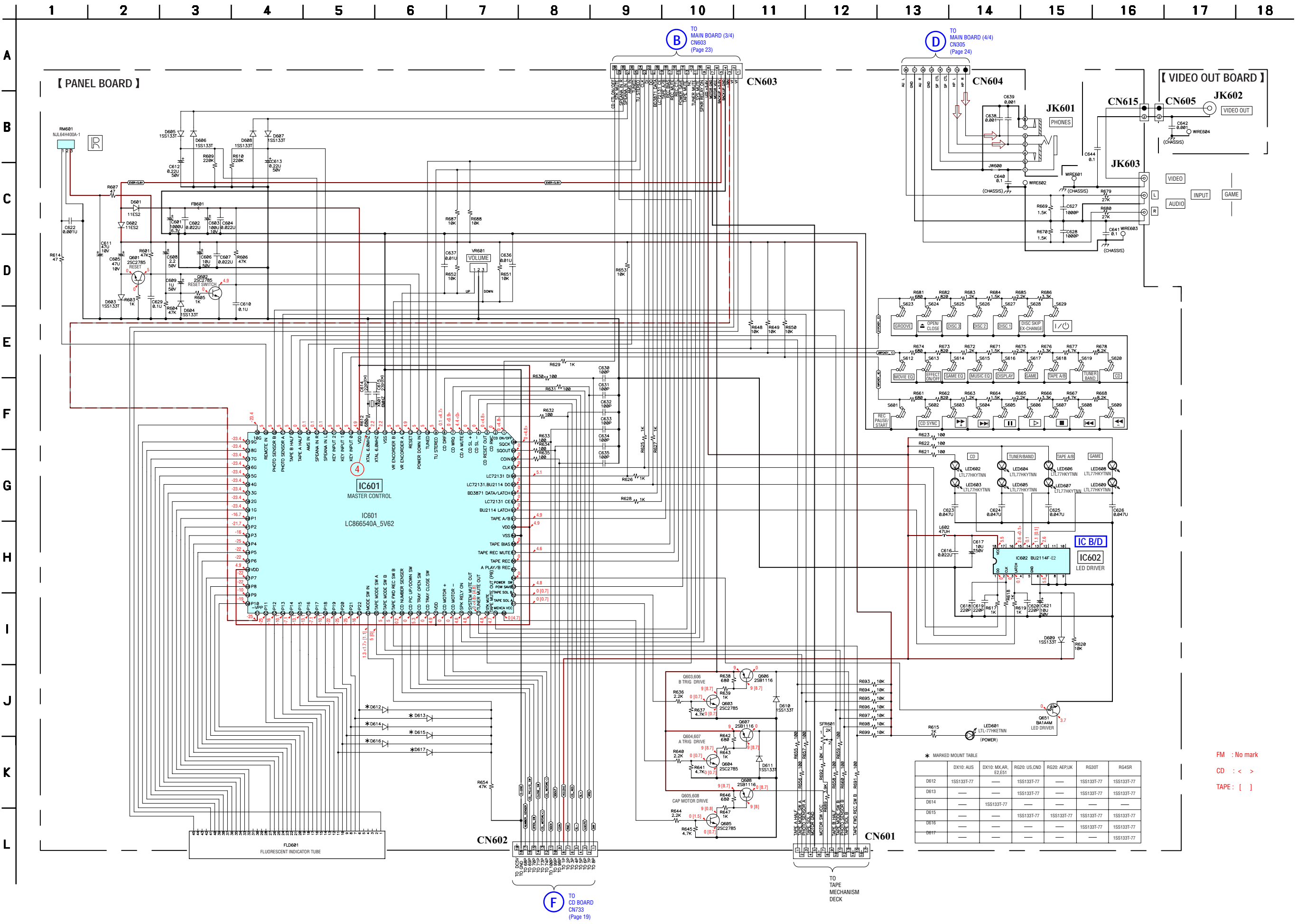


5-10. PRINTED WIRING BOARD ADDRESS SENSOR, DRIVER MOTOR SECTION • See page 15 for Circuit Boards Location.

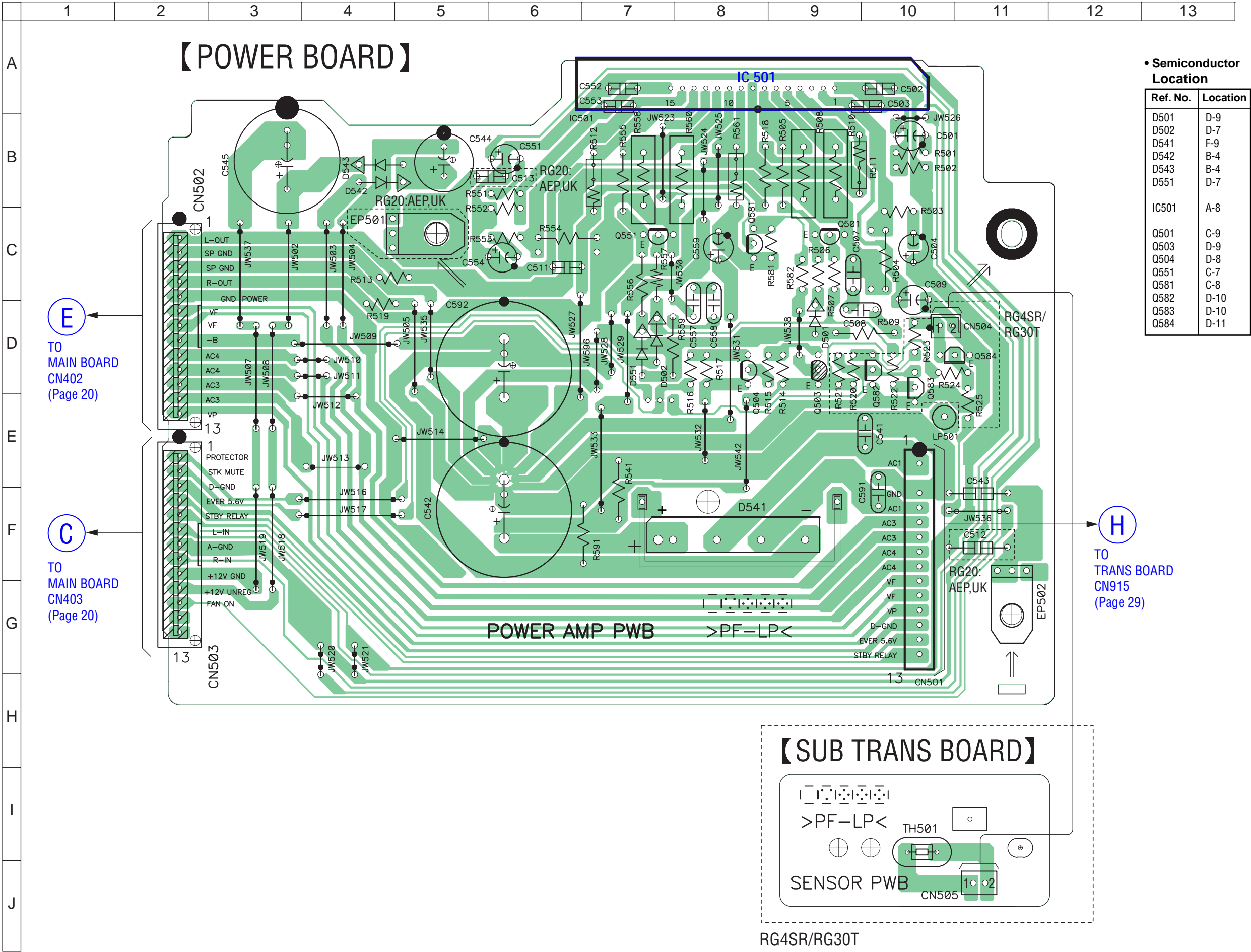


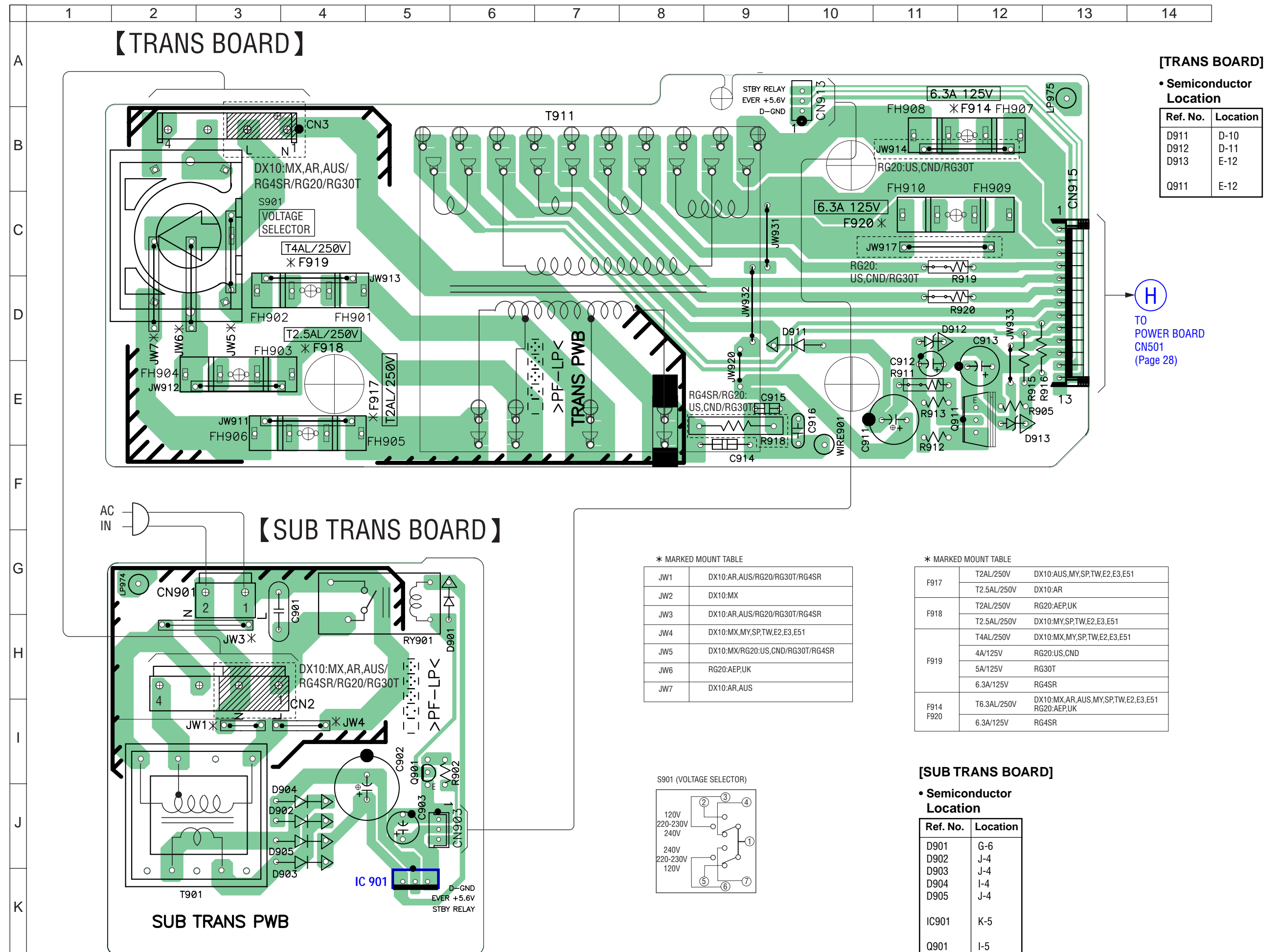


5-12. SCHEMATIC DIAGRAM PANEL SECTION • See page 15 for Waveform.

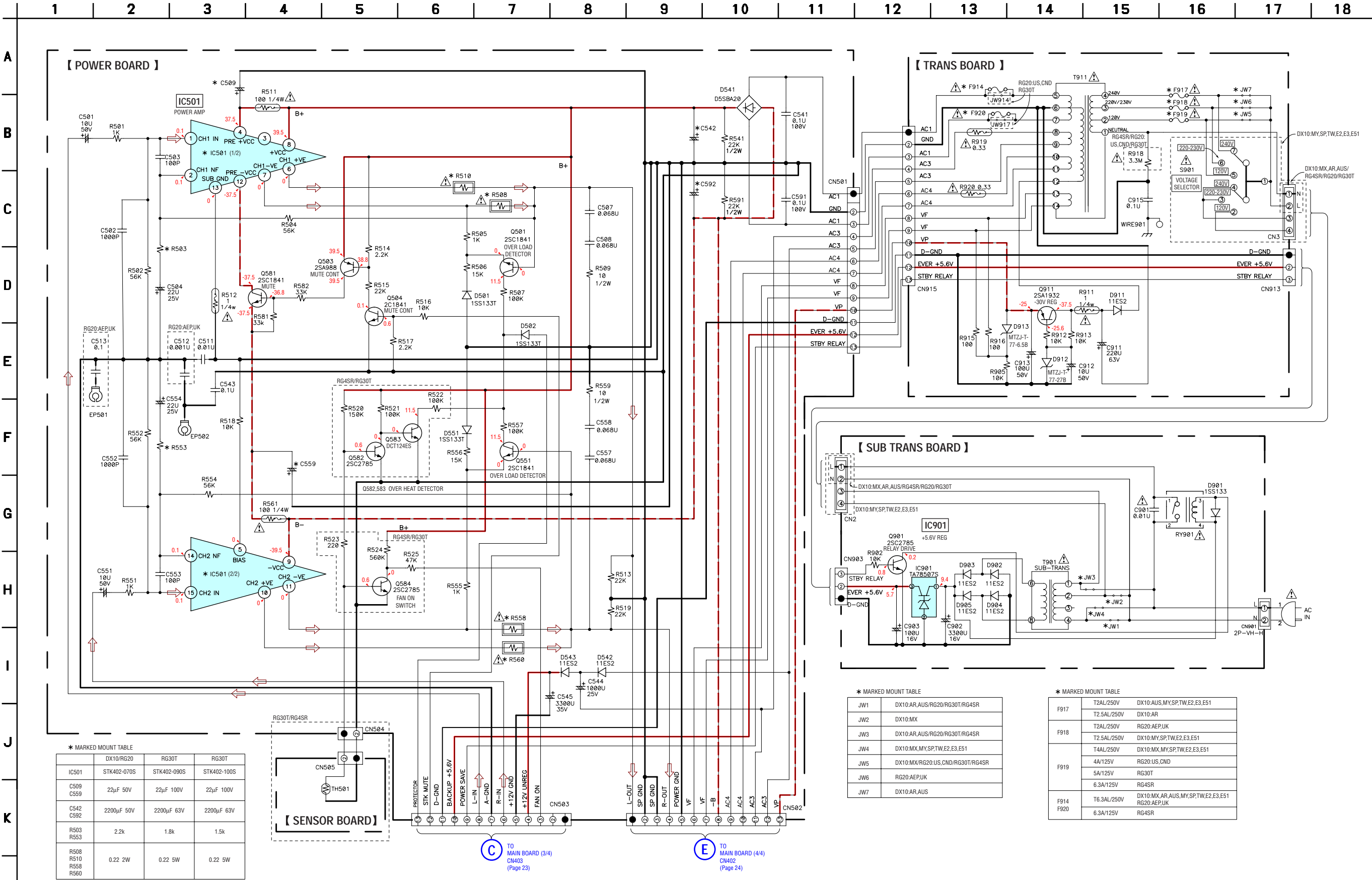






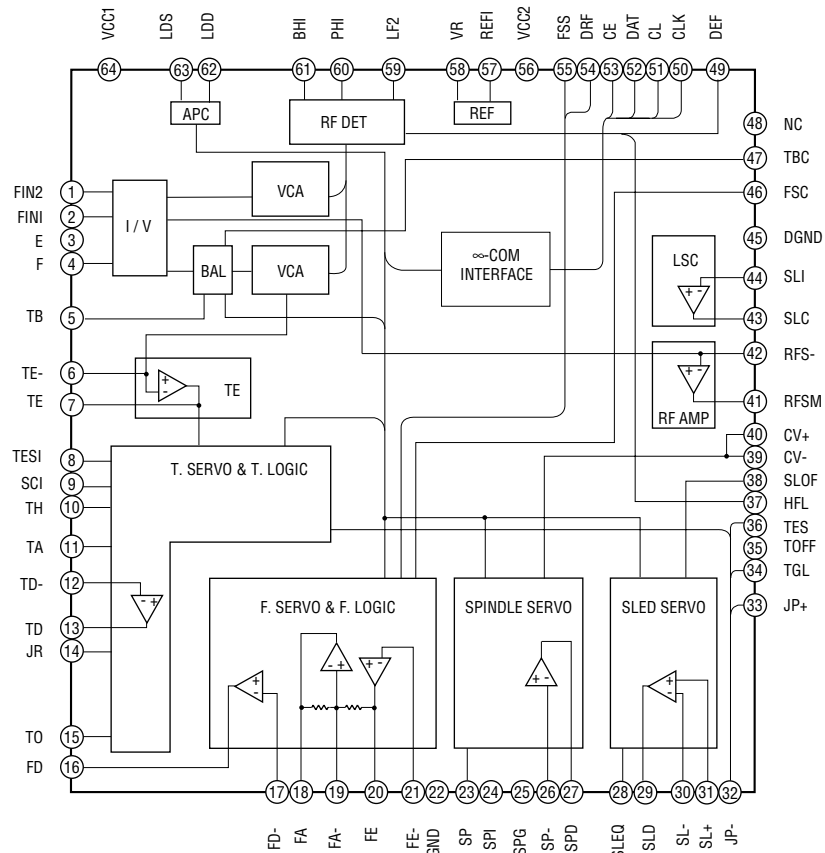




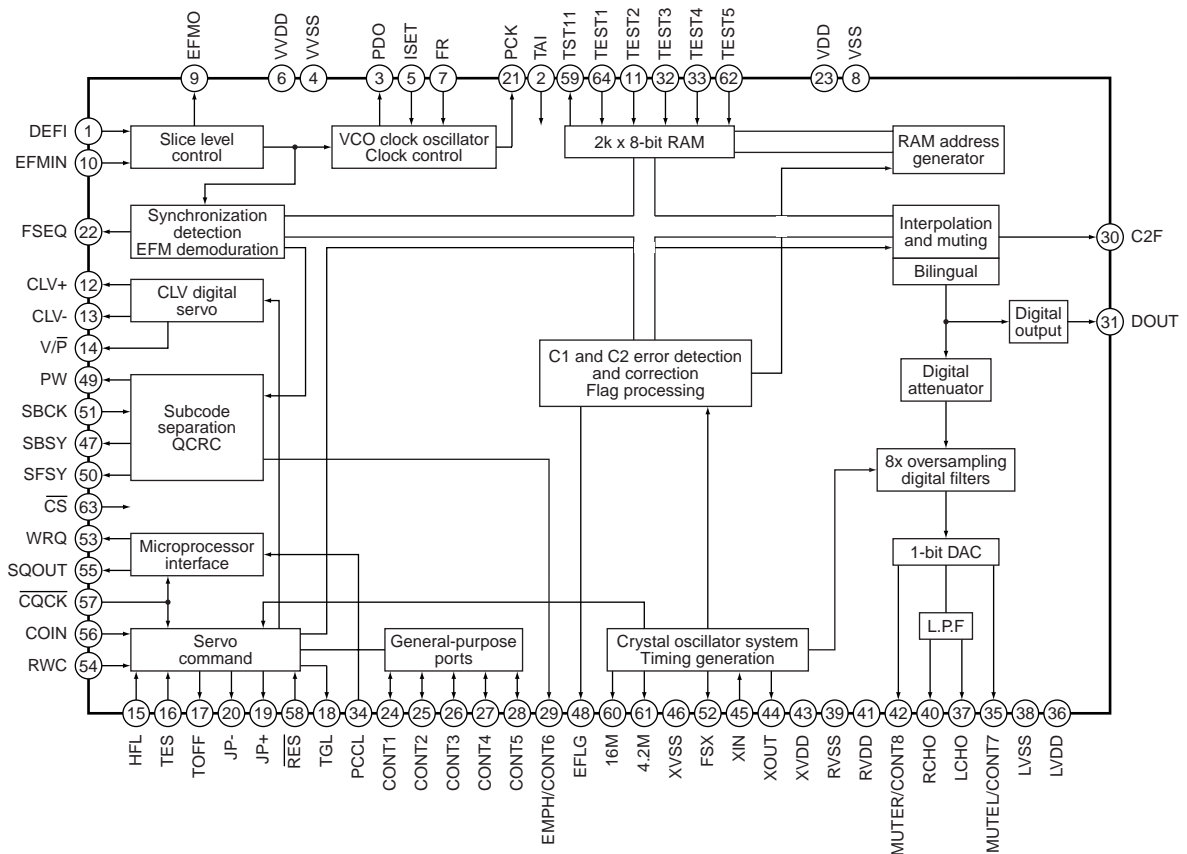


## 5-16. IC BLOCK DIAGRAMS

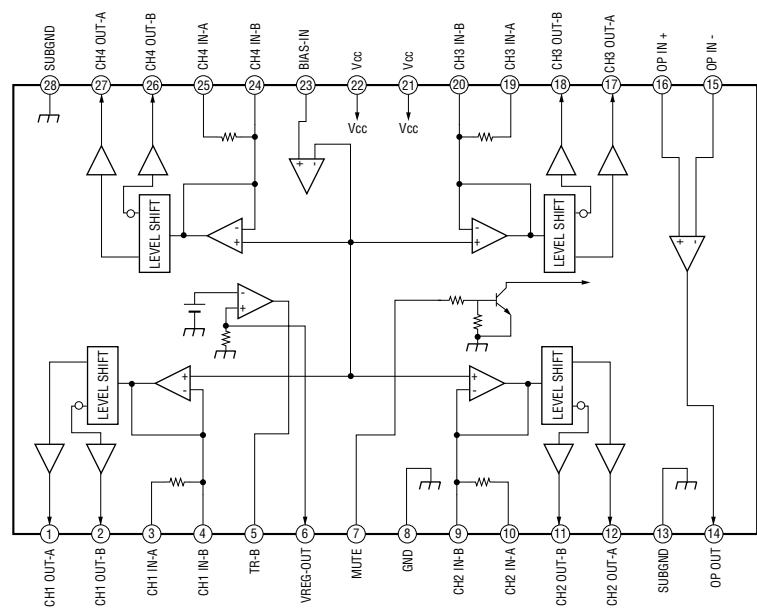
## IC731 LA9241M (CD BOARD)



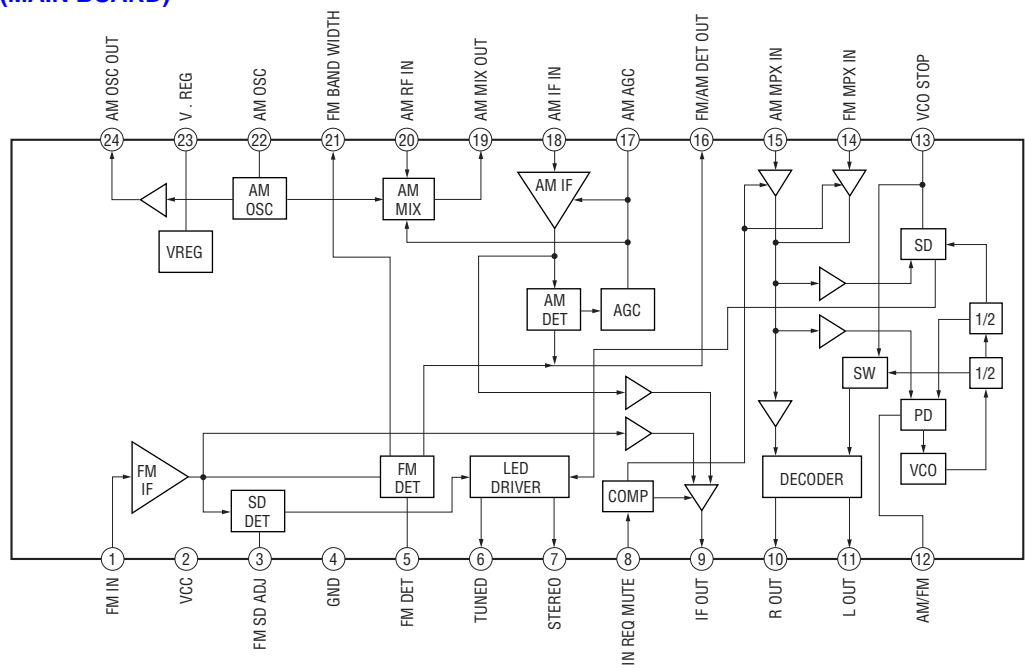
## IC751 LC78622NE (CD BOARD)



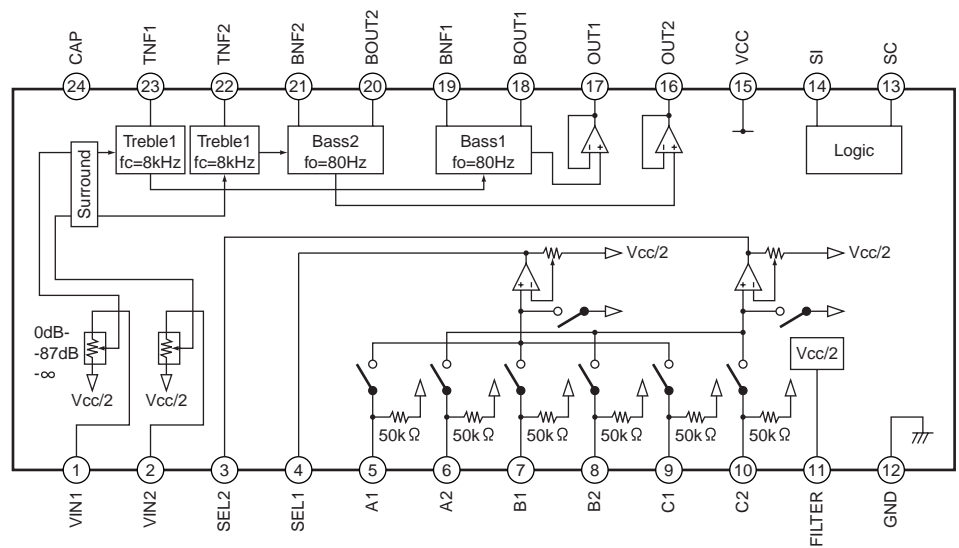
IC781 MN1469XH (CD BOARD)

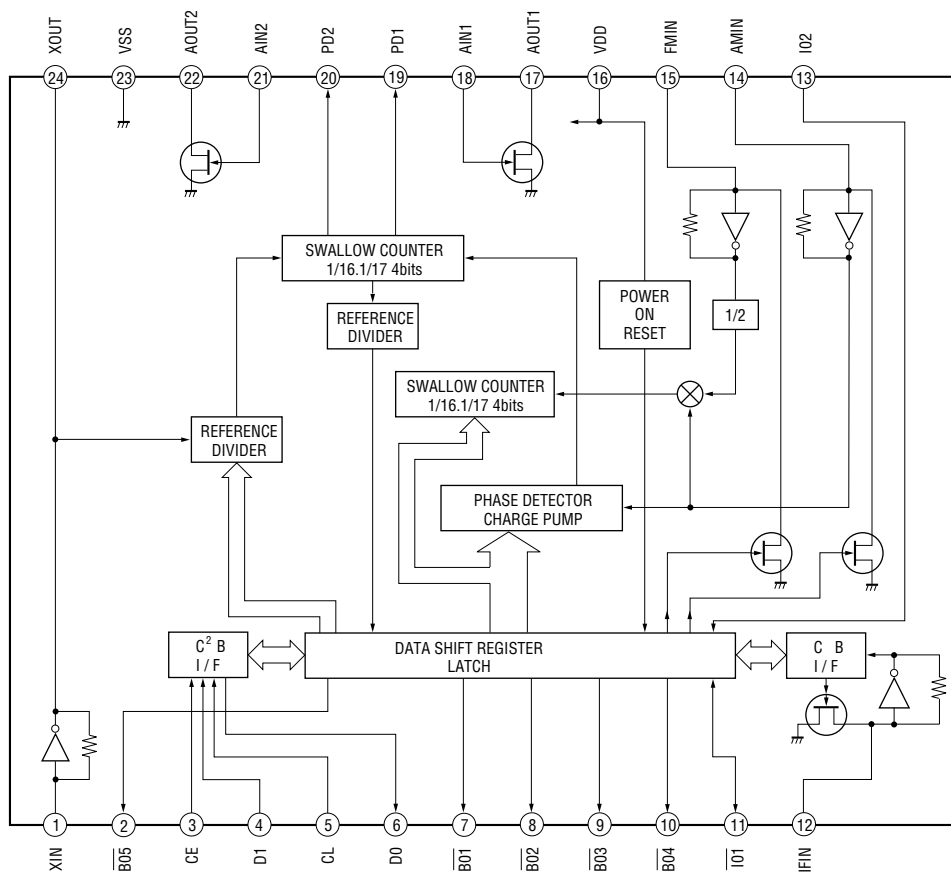
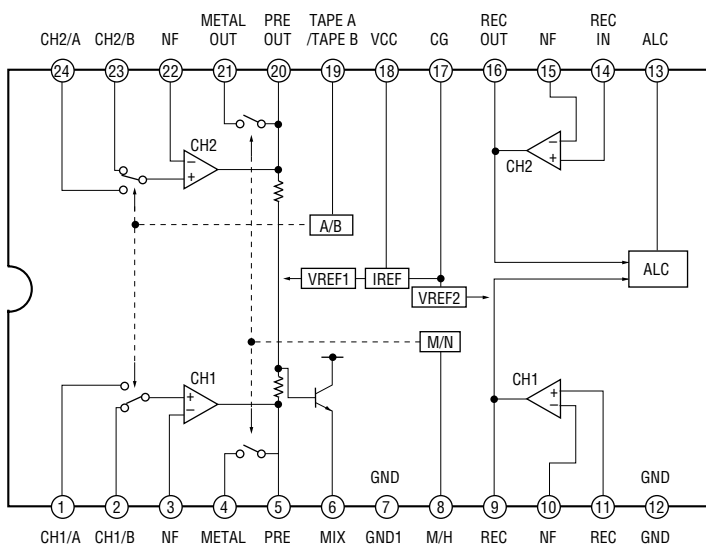
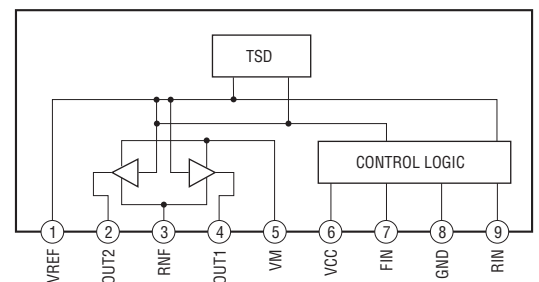
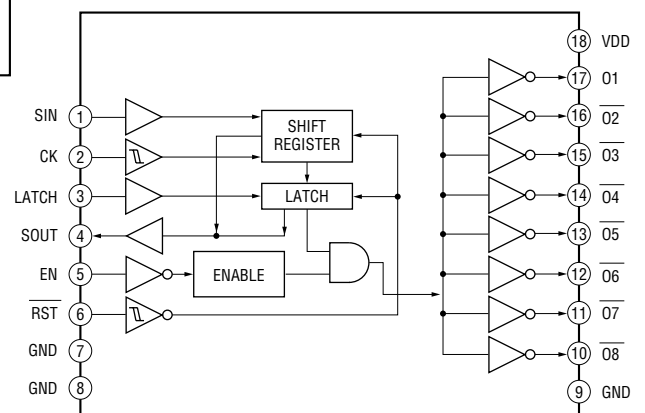


IC101 BA1450 (MAIN BOARD)



IC301 BD3871FS (MAIN BOARD)



**IC102 LC72130 (MAIN BOARD)****IC201 TA8189N (MAIN BOARD)****IC701 BA6956AN (DRIVER BOARD)****IC602 BU2114F-E2 (PANEL BOARD)**

## 5-17. IC PIN FUNCTION DESCRIPTION

## • IC601 LC866540A-5V62 (MASTER CONTROL)

Pin No.	Pin Name	I/O	Description
1	CD ON/OFF	O	CD power on/off control signal output
2	CD RWC	O	Read/write control signal output
3	CD RESET OUT	O	CD reset signal output
4	CD SL –	O	Sled movement control signal output
5	CD SL +	O	Sled movement control signal output
6	CD A MUTE	O	CD audio mute signal output
7	CD WRQ	I	Subcode Q standby signal input
8	CD DRF	I	RF level detection signal input
9	TU STEREO	I	Stereo tuning signal input
10	TUNED	I	Tuning a frequency signal input
11	POWER DOWN IN	I	Power down signal input
12	RESET	–	Reset
13	VR ENCODER A	I	Volume signal input from the rotary encoder
14	VR ENCODER B	I	Volume signal input from the rotary encoder
15	VSS	–	Ground
16	XTAL 6.0MHZ	–	Connection for a crystal resonator
17	XTAL 6.0MHZ	–	Connection for a crystal resonator
18	VDD	–	Power supply
19	KEY INPUT 0	I	Function key input
20	KEY INPUT 1	I	Function key input
21	KEY INPUT 2	I	Function key input
22	SPEANA IN L	I	Spectrum analyzer signal input
23	SPEANA IN R	I	Spectrum analyzer signal input
24	AMS IN	I	AMS signal input
25	TAPE A HALF	I	A deck half detect signal input
26	TAPE B HALF	I	B deck half detect signal input
27	PHOTO SENSOR A	I	A deck photo sensor signal input
28	PHOTO SENSOR B	I	B deck photo sensor signal input
29	REMOTE IN	I	Data signal input from the remote control sensor
30 - 39	10G - 1G	O	FL tube grid signal output
40 - 41	P1 - P2	O	FL tube grid signal output
42 - 45	P3 - P6	O	FL tube segment signal output
46	VDD	–	Power supply
47 - 50	P7 - P10	O	FL tube segment signal output
51	–VPP	–	FL tube pull-down voltage supply
52 - 63	P11 - P22	O	FL tube segment signal output
64	MODE SW IN	I	Pull-down
65	TAPE MODE SW A	I	Tape mode switch signal input
66	TAPE MODE SW B	I	Tape mode switch signal input
67	TAPE FWD REC SW B	I	Tape B REC switch detect signal input
68	CD NUMBER SENSOR	I	Table address sensor signal input
69	CD PIC UP/DOWN SW	I	CD BU up/down switch signal input
70	CD TRAY OPEN SW	I	CD tray open switch signal input
71	CD TRAY CLOSE SW	I	CD tray close switch signal input
72	VDD	–	Power supply
73	CD MOTOR +	O	CD changer motor control signal output
74	CD MOTOR –	O	CD changer motor control signal output
75	SPK RELY ON	O	Speaker relay control signal output
76	SYSTEM MUTE OUT	O	system mute signal output
77	TUNER MUTE OUT	O	Tuner mute signal output

Pin No.	Pin Name	I/O	Description
78	STK MUTE	O	Power amplifier mute signal output
79	TAPE MUTE OUT(PB)	O	Tape mute signal output
80	MECHA VCC	O	Tape motor control signal output
81	TAPE SOL A	O	Solenoid control signal output
82	TAPE SOL B	O	Solenoid control signal output
83	POW SAVE	O	Standby relay control signal output
84	POWER SW	O	Power switch LED control signal output
85	A PLAY/B REC	–	N.C.
86	TAPE REC	O	Tape REC control signal output
87	TAPE REC MUTE	O	Tape REC mute signal output
88	TAPE BIAS	O	Tape bias control signal output
89	VSS	–	Ground
90	VDD	–	Power supply
91	TAPE A/B	O	Deck A/B selection control signal output
92	BU2114 LATCH	O	LED driver IC latch signal output
93	LC72131 CE	O	PLL tuner IC chip select signal output
94	BD3871 DATA/LATCH	O	Sound processor data/latch signal output
95	LC72131 BU2114 DO	O	Data signal output for PLL synthesizer IC and LED driver IC
96	LC72131 DI	I	Data signal input from PLL synthesizer IC
97	CLK	O	Clock signal output for PLL synthesizer IC, sound processor and LED driver IC
98	COIN	O	CD command data signal output
99	SQOUT	I	CD subcode Q signal input
100	SQCK	O	CD command clock signal output

## SECTION 6

### EXPLODED VIEWS

## NOTE:

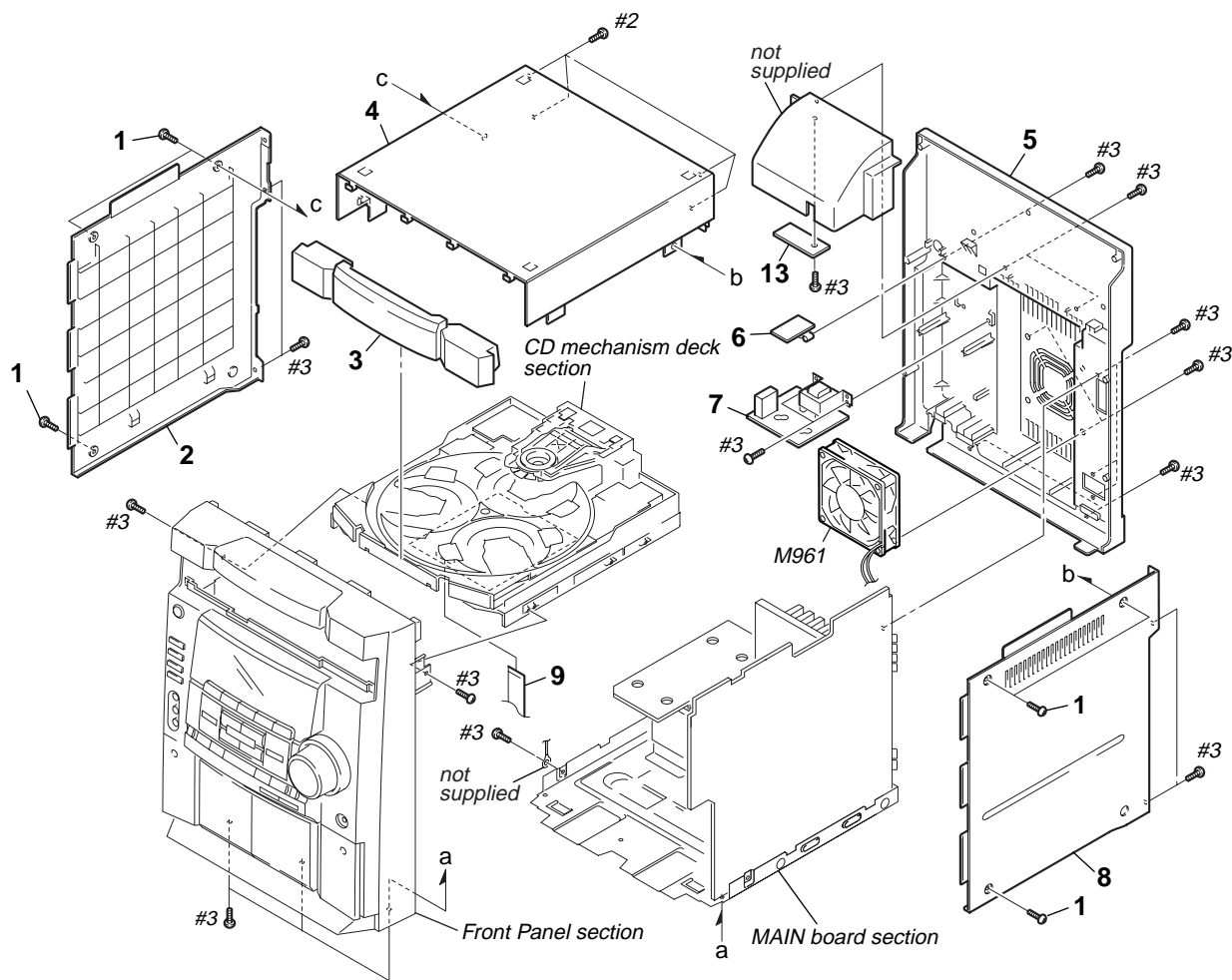
- XX, -X mean standardized parts, so they may have some differences from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
- CND : Canadian model
- AUS : Australian model
- AR : Argentina model
- SP : Singapore model
- TW : Taiwan model
- MX : Mexican model
- MY : Malaysia model
- E2 : 120V AC Area in E model
- E3 : 240V AC Area in E model
- E51 : Chilean and Peruvian model

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

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

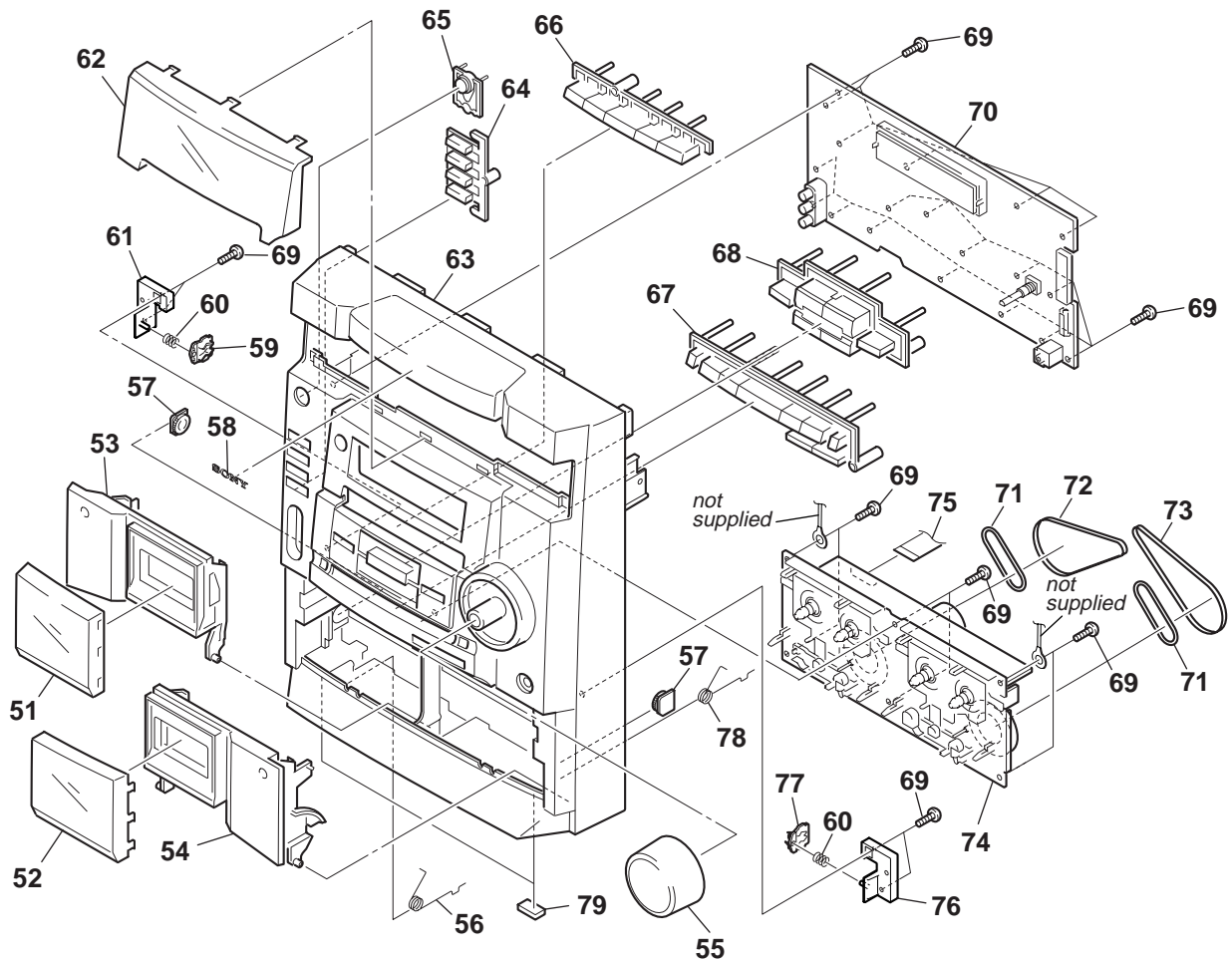
#### 6-1. MAIN SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	3-363-099-41	SCREW (CASE 3 TP2)		6	A-4726-511-A	VIDEO OUT BOARD, COMPLETE	
2	4-224-549-21	CASE (SIDE-L)		7	A-4726-513-A	SUB TRANS BOARD, COMPLETE	
3	4-234-702-01	CD DOOR (RG20)				(RG4SR/RG20:US, CND/RG30T)	
3	4-234-702-11	CD DOOR (DX10)		7	A-4726-772-A	SUB TRANS BOARD, COMPLETE	
3	4-234-702-21	CD DOOR (RG30T)				(RG20:AEP, UK)	
3	4-234-702-31	CD DOOR (RG4SR)		7	A-4726-922-A	SUB TRANS BOARD, COMPLETE (DX10:AUS)	
4	4-224-550-41	CASE (TOP)		7	A-4726-925-A	SUB TRANS BOARD, COMPLETE	
		(DX10/RG20:CND, AEP, UK/RG30T:CND)				(DX10:MY, SP, TW, E2, E3, E51)	
4	4-224-550-81	CASE (TOP) (RG4SR/RG20:US/RG30T:US)		7	A-4726-928-A	SUB TRANS BOARD, COMPLETE (DX10:MX)	
5	4-234-701-01	BACK PANEL (RG20:US, CND)		7	A-4726-929-A	SUB TRANS BOARD, COMPLETE (DX10:AR)	
5	4-234-701-11	BACK PANEL (RG20:AEP, UK)		8	4-224-548-61	CASE (SIDE-R) (DX10/RG20/RG30T)	
5	4-234-701-21	BACK PANEL (DX10:TW, E2, E3, E51)		8	4-224-548-71	CASE (SIDE-R) (RG4SR)	
5	4-234-701-31	BACK PANEL (DX10:MX, AR, AUS)		9	1-791-897-11	WIRE (FLAT TYPE) (19 CORE)	
5	4-234-701-41	BACK PANEL (RG30T)					
5	4-234-701-51	BACK PANEL (RG4SR)		13	1-681-442-11	SENSOR BOARD	
5	4-234-701-61	BACK PANEL (DX10:MY, SP)		M961	1-763-072-11	FAN, DC (RG4SR/RG30T)	

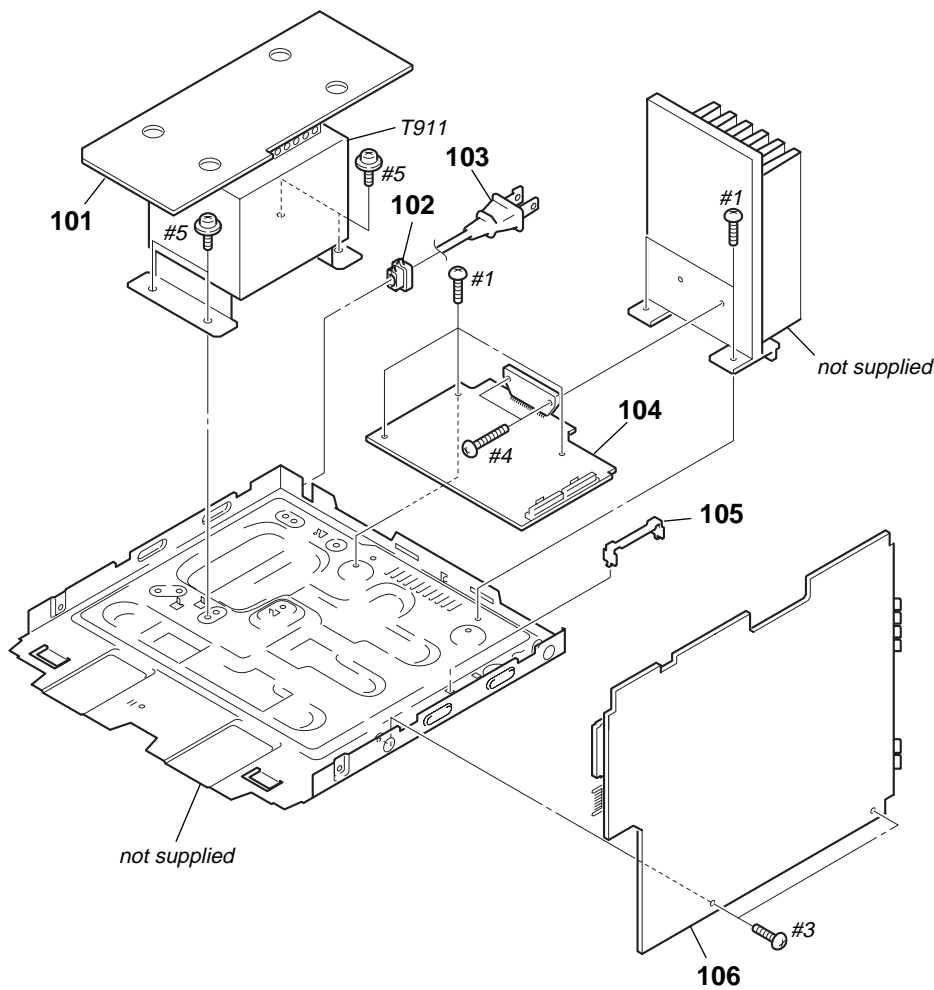


## 6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
51	4-235-533-01	CASS WINDOW (L)		67	4-234-709-01	FUNCTION BUTTON	
52	4-235-534-01	CASS WINDOW (R)		68	4-234-710-01	MUSIC BUTTON (RG4SR/RG20/RG30T)	
53	4-234-704-01	CASS DOOR (L) (RG4SR/RG20/RG30T)		68	4-234-710-11	MUSIC BUTTON (DX10)	
53	4-234-704-11	CASS DOOR (L) (DX10)		69	4-951-620-01	SCREW (2.6X8), +BVTP	
54	4-234-705-01	CASS DOOR (R) (RG4SR/RG20/RG30T)		70	A-4726-509-A	PANEL BOARD, COMPLETE (RG20:US, CND)	
54	4-234-705-11	CASS DOOR (R) (DX10)		70	A-4726-769-A	PANEL BOARD, COMPLETE (RG20:AEP, UK)	
55	4-235-535-01	VOLUME KNOB (RG4SR/RG20/RG30T)		70	A-4726-776-A	PANEL BOARD, COMPLETE (RG30T)	
55	4-235-535-11	VOLUME KNOB (DX10)		70	A-4726-780-A	PANEL BOARD, COMPLETE (RG4SR)	
56	4-233-981-01	CASSETTE DOOR SPRING L		70	A-4726-920-A	PANEL BOARD, COMPLETE (DX10:AUS)	
57	4-224-104-11	DAMPER		70	A-4726-923-A	PANEL BOARD, COMPLETE (DX10:MY, SP, TW, E3)	
58	4-235-398-01	EMBLEM, SONY		70	A-4726-926-A	PANEL BOARD, COMPLETE (DX10:MX, AR, E2, E51)	
59	4-224-560-01	CAM (L), HEART		71	4-235-777-01	BELT (FR)	
60	4-224-803-01	SPRING (PUSH), COMPRESSION		72	4-235-775-01	BELT (BF)	
61	4-224-562-21	BRACKET (HEART CAM L)		73	4-235-776-01	BELT (AF)	
62	4-234-703-01	DISPLAY WINDOW		74	1-796-122-11	DECK, MECH	
63	4-234-700-01	FRONT PANEL (RG4SR/RG20/RG30T)		75	1-823-058-11	WIRE (FLAT TYPE) (17 CORE)	
63	4-234-700-11	FRONT PANEL (DX10)		76	4-224-561-01	BRACKET (HEART CAM R)	
64	4-234-711-01	CD CONTROL BUTTON (RG4SR/RG20/RG30T)		77	4-224-559-01	CAM (R), HEART	
64	4-234-711-11	CD CONTROL BUTTON (DX10)		78	4-233-982-01	CASSETTE DOOR SPRING R	
65	X-4953-968-1	POWER BUTTON ASSY (RG4SR/RG20/RG30T)		79	4-233-980-01	RUBBER FOOT	
65	X-4954-153-1	POWER BUTTON ASSY (DX10)					
66	4-234-708-01	DISC BUTTON (RG4SR/RG20/RG30T)					
66	4-234-708-11	DISC BUTTON (DX10)					

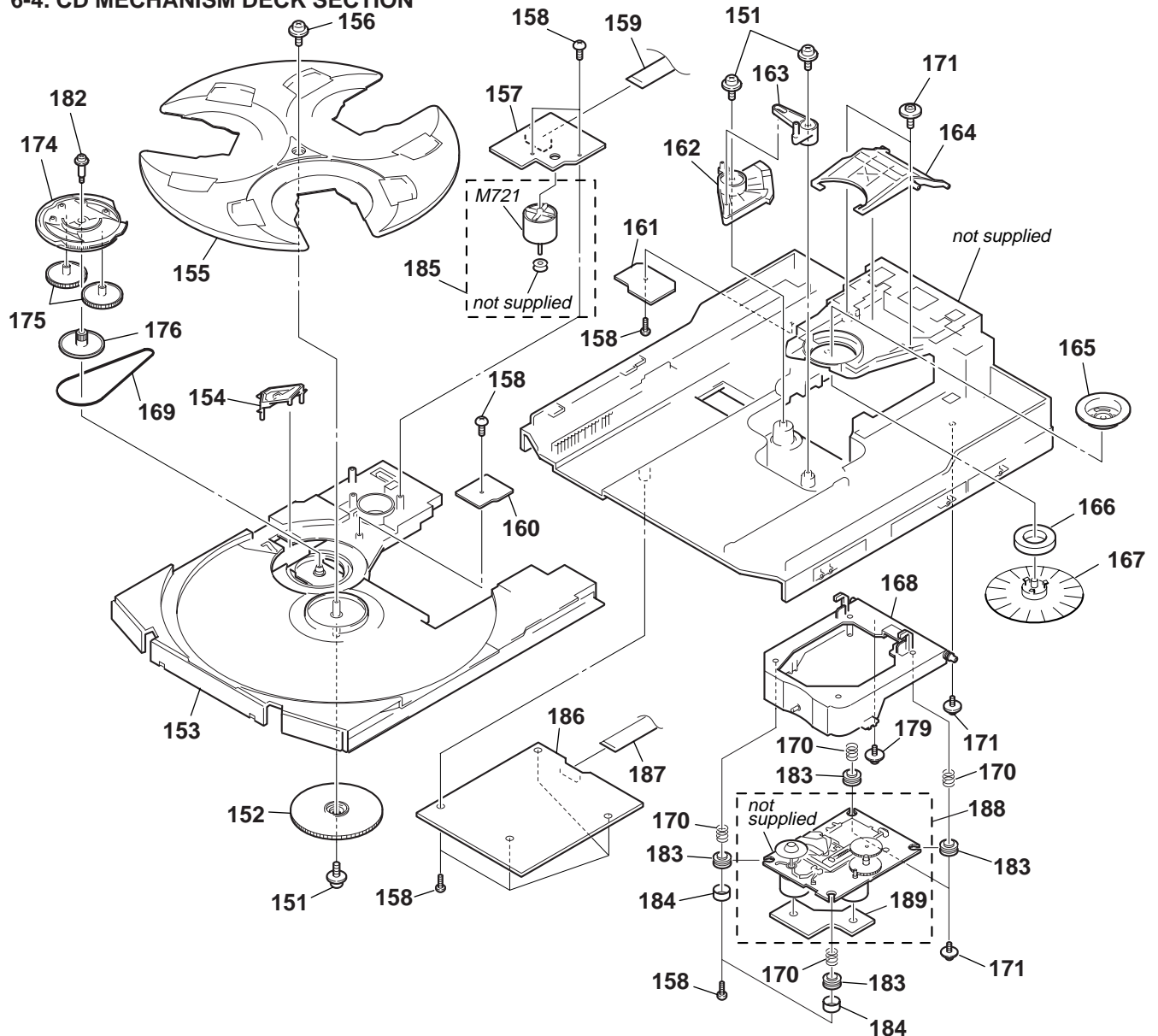
6-3. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
101	A-4726-512-A	TRANS BOARD, COMPLETE (RG20:US, CND/RG30T)		△ 103	1-783-941-22	CORD, POWER (DX10:AR)	
101	A-4726-771-A	TRANS BOARD, COMPLETE (RG20:AEP, UK)		104	A-4726-510-A	POWER BOARD, COMPLETE (DX10/RG20:US, CND)	
101	A-4726-782-A	TRANS BOARD, COMPLETE (RG4SR)		104	A-4726-770-A	POWER BOARD, COMPLETE (RG20:AEP, UK)	
101	A-4726-921-A	TRANS BOARD, COMPLETE (DX10:AR, AUS)		104	A-4726-777-A	POWER BOARD, COMPLETE (RG30T)	
101	A-4726-924-A	TRANS BOARD, COMPLETE (DX10:MY, SP, TW, E2, E3, E51)		104	A-4726-781-A	POWER BOARD, COMPLETE (RG4SR)	
101	A-4726-927-A	TRANS BOARD, COMPLETE (DX10:MX)		105	4-988-533-01	HOLDER, PWB	
102	4-966-266-01	BUSHING (S) (FBS002), CORD (DX10:MX, E2, E3)		106	A-4440-407-A	MAIN BOARD, COMPLETE (DX10/RG20:US, CND)	
* 102	3-703-244-00	BUSHING (2104), CORD (DX10:MY, SP, TW, AR, AUS, E51/RG4SR/RG20/RG30T)		106	A-4440-486-A	MAIN BOARD, COMPLETE (RG20:AEP, UK)	
△ 103	1-791-901-21	CORD, POWER (DX10:MX, E2, E3)		106	A-4440-488-A	MAIN BOARD, COMPLETE (RG30T)	
△ 103	1-690-608-11	CORD, POWER (DX10:AUS)		106	A-4440-490-A	MAIN BOARD, COMPLETE (RG4SR)	
△ 103	1-777-071-81	CORD, POWER (DX10:MY, SP, TW, E51/RG20:AEP, UK)		△ T911	1-437-385-11	TRANSFORMER, POWER (RG20:US, CND)	
△ 103	1-783-532-11	CORD, POWER (RG4SR/RG20:US, CND/RG30T)		△ T911	1-437-386-11	TRANSFORMER, POWER (RG20:AEP, UK)	
				△ T911	1-437-387-11	TRANSFORMER, POWER (DX10)	
				△ T911	1-437-388-11	TRANSFORMER, POWER (RG4SR)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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## 6-4. CD MECHANISM DECK SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
151	4-218-254-21	SCREW (M2.6), +PTPWH		169	4-222-095-01	BELT	
152	4-231-187-01	CAM (RELAY)		170	4-227-045-11	SPRING (INSULATOR), COIL	
153	4-231-177-01	TABLE (NEW)		171	4-985-672-01	SCREW (+PTPWH M2.6), FLOATING	
154	4-231-181-01	LEVER (CHANGE)		174	4-231-180-01	CAM (CONTROL)	
155	4-231-178-01	TRAY		175	4-231-182-01	GEAR (U)	
156	4-933-134-51	SCREW (+PTPWH 2.6X8)		176	4-231-183-01	PULLEY (S)	
157	1-675-910-14	MOTOR BOARD		179	4-227-899-01	SCREW (DIA. 12), FLOATING	
158	4-951-620-01	SCREW (2.6X8), +BVTP		182	4-222-097-01	SCREW, STEP	
159	1-791-983-11	WIRE (FLAT TYPE) (8 CORE)		183	4-227-549-11	INSULATOR	
160	1-675-911-14	ADDRESS SENSOR BOARD		184	4-231-151-01	STOPPER (BU)	
161	1-675-912-14	DRIVER BOARD		185	A-4672-826-A	MOTOR ASSY	
162	X-4953-283-2	CAM (U/D) ASSY		186	A-4726-517-A	CD BOARD, COMPLETE (DX10/RG4SR/RG20:US, CND/RG30T)	
163	4-231-186-01	LEVER (EX)		186	A-4726-775-A	CD BOARD, COMPLETE (RG20:AEP, UK)	
164	4-231-190-01	LEVER (LIFTER)		187	1-823-059-11	WIRE (FLAT TYPE) (16 CORE)	
165	4-231-189-01	PULLEY (B), CHUCKING		△ 188	8-820-116-01	OPTICAL PICK-UP KSM-213DCP/Z-NP	
166	1-471-035-11	MAGNET ASSY		189	1-682-124-11	SPDL BOARD	
167	X-4953-282-1	PULLEY (A) ASSY, CHUCKING		M721	1-541-632-11	MOTOR, DC (TURN)	
168	X-4953-281-1	HOLDER (BU) ASSY					

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.

ADDRESS SENSOR

CD

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:  $\mu$ F
  - COILS
    - uH:  $\mu$ H
- RESISTORS
    - All resistors are in ohms.
    - METAL: metal-film resistor
    - METAL OXIDE: Metal Oxide-film resistor
    - F: nonflammable
  - SEMICONDUCTORS
    - In each case, u:  $\mu$ , for example:
      - uA...:  $\mu$ A..., uPA...,  $\mu$ PA...,
      - uPB...,  $\mu$ PB..., uPC...,  $\mu$ PC...,
      - uPD...,  $\mu$ PD...
    - Abbreviation
      - CND : Canadian model
      - AUS : Australian model
      - AR : Argentina model
      - SP : Singapore model
      - TW : Taiwan model

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

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

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

- MX : Mexican model
- MY : Malaysia model
- E2 : 120V AC Area in E model
- E3 : 240V AC Area in E model
- E51 : Chilean and Peruvian model

Ref. No.	Part No.	Description	Remarks			
	1-675-911-14	ADDRESS SENSOR BOARD	*****			
		< CAPACITOR >				
C712	1-164-159-11	CERAMIC	0.1uF		50V	
		< IC >				
IC711	8-749-014-38	PHOTO INTERRUPTER SG-264				
IC711	8-749-016-76	IC RPI-321				
		< 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 SW)	*****			
	A-4726-517-A	CD BOARD, COMPLETE	(DX10/RG4SR/RG20:US, CND/RG30T)			
		*****				
	A-4726-775-A	CD BOARD, COMPLETE (RG20:AEP, UK)	*****			
		< CAPACITOR >				
C704	1-164-159-11	CERAMIC	0.1uF		50V	
C705	1-126-947-11	ELECT	47uF	20%	10V	
C706	1-164-159-21	CERAMIC	0.1uF		50V	
C707	1-126-964-11	ELECT	10uF	20%	50V	
C708	1-161-494-00	CERAMIC	0.022uF		25V	
C709	1-104-665-11	ELECT	100uF	20%	10V	
C710	1-104-665-11	ELECT	100uF	20%	10V	
C711	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C712	1-126-960-11	ELECT	1uF	20%	50V	
C713	1-136-171-00	FILM	0.33uF	5%	50V	
C714	1-126-947-11	ELECT	47uF	20%	10V	
C715	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C716	1-126-947-11	ELECT	47uF	20%	10V	
C717	1-126-964-11	ELECT	10uF	20%	50V	
C718	1-161-494-00	CERAMIC	0.022uF		25V	

Ref. No.	Part No.	Description	Remarks			
C719	1-161-494-00	CERAMIC	0.022uF	25V		
C720	1-104-665-11	ELECT	100uF	20%	10V	
C723	1-126-957-11	ELECT	0.22uF	20%	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%	50V	
C727	1-136-167-00	FILM	0.15uF	5%	50V	
C728	1-127-869-11	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	1-164-159-11	CERAMIC	0.1uF	50V		
C735	1-162-286-31	CERAMIC	220PF	10%	50V	
C736	1-136-171-00	FILM	0.33uF	5%	50V	
C737	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C738	1-162-292-31	CERAMIC	680PF	10%	50V	
C739	1-162-600-11	CERAMIC	0.0047uF	10%	16V	
C740	1-162-286-31	CERAMIC	220PF	10%	50V	
C741	1-126-959-11	ELECT	0.47uF	20%	50V	
C742	1-126-947-11	ELECT	47uF	20%	10V	
C743	1-126-960-11	ELECT	1uF	20%	50V	
C744	1-127-870-31	CERAMIC	3300PF	10%	50V	
C745	1-162-191-31	CERAMIC	2.2PF	10%	50V	
C746	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C747	1-164-159-11	CERAMIC	0.1uF	50V		
C748	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C749	1-162-203-31	CERAMIC	15PF	5%	50V	
C750	1-126-963-11	ELECT	4.7uF	20%	50V	
C751	1-164-159-11	CERAMIC	0.1uF	50V		
C752	1-164-159-11	CERAMIC	0.1uF	50V		
C753	1-164-159-11	CERAMIC	0.1uF	50V		
C754	1-162-286-31	CERAMIC	220PF	10%	50V	
C755	1-161-494-00	CERAMIC	0.022uF	25V		
C756	1-126-947-11	ELECT	47uF	20%	10V	
C757	1-161-494-00	CERAMIC	0.022uF	25V		
C758	1-126-947-11	ELECT	47uF	20%	10V	
C759	1-164-159-11	CERAMIC	0.1uF	50V		
C760	1-162-284-31	CERAMIC	150PF	10%	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%	10V	
C764	1-161-494-00	CERAMIC	0.022uF	25V		
C765	1-161-494-00	CERAMIC	0.022uF	25V		
C766	1-161-494-00	CERAMIC	0.022uF	25V		
C767	1-162-282-31	CERAMIC	100PF	10%	50V	

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C768	1-162-282-31	CERAMIC	100PF 10% 50V	Q775	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	
C769	1-162-282-31	CERAMIC	100PF 10% 50V			< RESISTOR >	
C770	1-162-282-31	CERAMIC	100PF 10% 50V				
C771	1-126-964-11	ELECT	10uF 20% 50V	R704	1-249-393-11	CARBON 10 5% 1/4W F	
C772	1-126-964-11	ELECT	10uF 20% 50V	R705	1-247-807-31	CARBON 100 5% 1/4W	
				R707	1-247-807-31	CARBON 100 5% 1/4W	
C773	1-127-866-11	CERAMIC	1500PF 10% 50V	R708	1-249-441-11	CARBON 100K 5% 1/4W	
C774	1-127-866-11	CERAMIC	1500PF 10% 50V	R709	1-249-427-11	CARBON 6.8K 5% 1/4W F	
C775	1-162-282-31	CERAMIC	100PF 10% 50V				
C776	1-162-282-31	CERAMIC	100PF 10% 50V	R710	1-249-421-11	CARBON 2.2K 5% 1/4W F	
C777	1-126-947-11	ELECT	47uF 20% 10V	R714	1-249-439-11	CARBON 68K 5% 1/4W	
				R715	1-249-430-11	CARBON 12K 5% 1/4W	
C781	1-126-926-11	ELECT	1000uF 20% 10V	R717	1-249-439-11	CARBON 68K 5% 1/4W	
C782	1-164-159-11	CERAMIC	0.1uF 50V	R718	1-249-436-11	CARBON 39K 5% 1/4W	
C786	1-161-494-00	CERAMIC	0.022uF 25V				
C787	1-104-665-11	ELECT	100uF 20% 10V	R719	1-247-843-11	CARBON 3.3K 5% 1/4W	
C788	1-162-290-31	CERAMIC	470PF 10% 50V	R720	1-249-434-11	CARBON 27K 5% 1/4W	
				R721	1-249-414-11	CARBON 560 5% 1/4W F	
C789	1-164-159-11	CERAMIC	0.1uF 50V	R722	1-249-431-11	CARBON 15K 5% 1/4W	
C790	1-164-159-11	CERAMIC	0.1uF 50V	R724	1-249-433-11	CARBON 22K 5% 1/4W	
C791	1-164-159-11	CERAMIC	0.1uF 50V				
C792	1-164-159-11	CERAMIC	0.1uF 50V	R725	1-249-430-11	CARBON 12K 5% 1/4W	
C703A	1-162-282-31	CERAMIC	100PF 10% 50V	R727	1-249-430-11	CARBON 12K 5% 1/4W	
				R728	1-249-435-11	CARBON 33K 5% 1/4W	
C703B	1-162-282-31	CERAMIC	100PF 10% 50V	R729	1-249-419-11	CARBON 1.5K 5% 1/4W F	
C703C	1-162-282-31	CERAMIC	100PF 10% 50V	R731	1-249-434-11	CARBON 27K 5% 1/4W	
C746A	1-162-209-31	CERAMIC	27PF 5% 50V				
		< CONNECTOR >		R732	1-247-885-00	CARBON 180K 5% 1/4W	
CN731	1-779-553-11	CONNECTOR,FFC(LIF(NON-ZIF))16P		R733	1-249-431-11	CARBON 15K 5% 1/4W	
* CN732	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P		R734	1-249-434-11	CARBON 27K 5% 1/4W	
CN733	1-784-780-11	CONNECTOR, FFC 19P		R735	1-249-435-11	CARBON 33K 5% 1/4W	
CN735	1-785-336-11	PIN, CONNECTOR(LIGHT ANGLE)10P		R736	1-249-419-11	CARBON 1.5K 5% 1/4W F	
		< DIODE >					
D730	8-719-991-33	DIODE 1SS133T-77		R737	1-249-424-11	CARBON 3.9K 5% 1/4W F	
D731	8-719-991-33	DIODE 1SS133T-77		R738	1-247-807-31	CARBON 100 5% 1/4W	
D732	8-719-991-33	DIODE 1SS133T-77		R739	1-249-419-11	CARBON 1.5K 5% 1/4W F	
D733	8-719-991-33	DIODE 1SS133T-77		R740	1-249-427-11	CARBON 6.8K 5% 1/4W F	
D734	8-719-991-33	DIODE 1SS133T-77		R741	1-249-424-11	CARBON 3.9K 5% 1/4W F	
D735	8-719-991-33	DIODE 1SS133T-77		R742	1-247-897-11	CARBON 560K 5% 1/4W	
D736	8-719-991-33	DIODE 1SS133T-77		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	
		< IC >		R747	1-249-433-11	CARBON 22K 5% 1/4W	
IC731	8-759-498-93	IC LA9241M		R748	1-249-437-11	CARBON 47K 5% 1/4W	
IC751	6-700-355-01	IC LC78622NE		R749	1-249-415-11	CARBON 680 5% 1/4W F	
IC781	6-700-304-01	IC MM1469XH		R750	1-249-425-11	CARBON 4.7K 5% 1/4W F	
				R751	1-249-415-11	CARBON 680 5% 1/4W F	
		< COIL >					
L701	1-410-509-11	INDUCTOR 10uH		R752	1-249-434-11	CARBON 27K 5% 1/4W	
L702	1-410-509-11	INDUCTOR 10uH		R753	1-249-418-11	CARBON 1.2K 5% 1/4W F	
L703	1-410-521-11	INDUCTOR 100uH		R754	1-249-435-11	CARBON 33K 5% 1/4W	
L704	1-410-509-11	INDUCTOR 10uH		R755	1-249-442-11	CARBON 510 5% 1/4W	
L705	1-410-509-11	INDUCTOR 10uH		R756	1-247-903-00	CARBON 1M 5% 1/4W	
L733	1-408-080-00	INDUCTOR 100uH (RG20:AEP, UK)		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	
		< TRANSISTOR >		R760	1-247-807-31	CARBON 100 5% 1/4W	
				R761	1-249-417-11	CARBON 1K 5% 1/4W F	
Q731	8-729-116-57	TRANSISTOR 2SB1068TP-K					
Q771	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R762	1-249-417-11	CARBON 1K 5% 1/4W F	
Q772	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R763	1-249-417-11	CARBON 1K 5% 1/4W F	
Q773	8-729-119-76	TRANSISTOR 2SA1175TP-HFE		R764	1-249-417-11	CARBON 1K 5% 1/4W F	
Q774	8-729-119-76	TRANSISTOR 2SA1175TP-HFE		R765	1-249-417-11	CARBON 1K 5% 1/4W F	
				R766	1-247-807-31	CARBON 100 5% 1/4W	



HCD-DX10/RG4SR/RG20/RG30T

CD

DRIVER

MAIN

Ref. No.	Part No.	Description			Remarks
R771	1-249-421-11	CARBON	2.2K	5%	1/4W F
R772	1-249-421-11	CARBON	2.2K	5%	1/4W F
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
R781	1-249-434-11	CARBON	27K	5%	1/4W
R782	1-249-429-11	CARBON	10K	5%	1/4W
R784	1-247-807-31	CARBON	100	5%	1/4W
R785	1-247-889-00	CARBON	270K	5%	1/4W
R788	1-249-417-11	CARBON	1K	5%	1/4W F
R791	1-249-429-11	CARBON	10K	5%	1/4W
R792	1-249-429-11	CARBON	10K	5%	1/4W
R793	1-249-429-11	CARBON	10K	5%	1/4W
R794	1-249-429-11	CARBON	10K	5%	1/4W
R703A	1-247-807-31	CARBON	100	5%	1/4W
R703B	1-247-807-31	CARBON	100	5%	1/4W
R703C	1-247-807-31	CARBON	100	5%	1/4W
R706A	1-249-437-11	CARBON	47K	5%	1/4W
R706B	1-249-437-11	CARBON	47K	5%	1/4W
R706C	1-249-437-11	CARBON	47K	5%	1/4W
R706D	1-249-437-11	CARBON	47K	5%	1/4W
R706E	1-249-441-11	CARBON	100K	5%	1/4W
R706F	1-249-441-11	CARBON	100K	5%	1/4W
R745A	1-249-429-11	CARBON	10K	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	1-126-964-11	ELECT	10uF	20%	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
*****					

Ref. No.	Part No.	Description	Remarks		
	A-4440-407-A	MAIN BOARD, COMPLETE	(DX10/RG20:US, CND)		
		*****			
	A-4440-486-A	MAIN BOARD, COMPLETE (RG20:AEP, UK)			
		*****			
	A-4440-488-A	MAIN BOARD, COMPLETE (RG30T)			
		*****			
	A-4440-490-A	MAIN BOARD, COMPLETE (RG4SR)			
		*****			
		< CAPACITOR >			
C101	1-162-306-11	CERAMIC	0.01uF	30%	16V
C102	1-162-306-11	CERAMIC	0.01uF	30%	16V
C104	1-162-306-11	CERAMIC	0.01uF	30%	16V
C105	1-162-306-11	CERAMIC	0.01uF	30%	16V
C106	1-162-306-11	CERAMIC	0.01uF	30%	16V
C107	1-126-947-11	ELECT	47uF	20%	16V
C108	1-126-960-11	ELECT	1uF	20%	50V
C109	1-162-306-11	CERAMIC	0.01uF	30%	16V
C110	1-162-306-11	CERAMIC	0.01uF	30%	16V
C111	1-162-306-11	CERAMIC	0.01uF	30%	16V
C112	1-130-487-00	MYLAR	0.022uF	5%	50V
					(RG20:AEP, UK)
C112	1-130-485-00	MYLAR	0.015uF	5%	50V
					(DX10/RG4SR/RG20:US, CND/RG30T)
C113	1-130-487-00	MYLAR	0.022uF	5%	50V
					(RG20:AEP, UK)
C113	1-130-485-00	MYLAR	0.015uF	5%	50V
					(DX10/RG4SR/RG20:US, CND/RG30T)
C114	1-126-957-11	ELECT	0.22uF	20%	50V
C115	1-127-884-21	CERAMIC	0.047uF	10%	50V
C116	1-126-965-11	ELECT	22uF	20%	50V
C117	1-162-290-31	CERAMIC	470PF	10%	50V
					(RG20:AEP, UK)
C117	1-162-282-31	CERAMIC	100PF	10%	50V
					(DX10/RG4SR/RG20:US, CND/RG30T)
C119	1-127-884-21	CERAMIC	0.047uF	10%	50V
C121	1-126-960-11	ELECT	1uF	20%	50V
C122	1-126-964-11	ELECT	10uF	20%	50V
C123	1-126-964-11	ELECT	10uF	20%	50V
C124	1-126-933-11	ELECT	100uF	20%	16V
C125	1-162-292-31	CERAMIC	680PF	10%	50V
					(RG20:AEP, UK)
C125	1-162-286-21	CERAMIC	220PF	10%	50V
					(DX10/RG4SR/RG20:US, CND/RG30T)
C126	1-162-306-11	CERAMIC	0.01uF	30%	16V
C127	1-162-306-11	CERAMIC	0.01uF	30%	16V
C128	1-126-963-11	ELECT	4.7uF	20%	50V
C129	1-126-963-11	ELECT	4.7uF	20%	50V
C130	1-162-286-21	CERAMIC	220PF	10%	50V
					(RG20:AEP, UK)
C133	1-126-961-11	ELECT	2.2uF	20%	50V
C134	1-126-961-11	ELECT	2.2uF	20%	50V
C136	1-162-194-31	CERAMIC	3.9PF	10%	50V
C138	1-126-947-11	ELECT	47uF	20%	16V
C139	1-162-306-11	CERAMIC	0.01uF	30%	16V
C140	1-126-959-11	ELECT	0.47uF	20%	50V
C141	1-162-306-11	CERAMIC	0.01uF	30%	16V
C142	1-128-801-11	CERAMIC	22PF	5%	50V
C143	1-128-803-11	CERAMIC	33PF	5%	50V



Ref. No.	Part No.	Description	Remarks			Ref. No.	Part No.	Description	Remarks		
C144	1-162-211-31	CERAMIC	33PF	5%	50V	C244	1-126-956-11	ELECT	0.1uF	20%	50V
					(RG20:AEP, UK)	C313	1-127-868-31	CERAMIC	2200PF	10%	50V
C145	1-162-286-31	CERAMIC	220PF	10%	50V	C314	1-127-868-31	CERAMIC	2200PF	10%	50V
C146	1-162-286-31	CERAMIC	220PF	10%	50V	C315	1-127-868-31	CERAMIC	2200PF	10%	50V
C147	1-126-947-11	ELECT	47uF	20%	16V	C316	1-136-169-00	FILM	0.22uF	5%	50V
C148	1-162-286-31	CERAMIC	220PF	10%	50V						
						C317	1-136-169-00	FILM	0.22uF	5%	50V
C149	1-162-306-11	CERAMIC	0.01uF	30%	16V	C318	1-136-169-00	FILM	0.22uF	5%	50V
C150	1-126-961-11	ELECT	2.2uF	20%	50V	C319	1-126-934-11	ELECT	220uF	20%	16V
C151	1-126-947-11	ELECT	47uF	20%	16V	C320	1-136-169-00	FILM	0.22uF	5%	50V
C152	1-162-306-11	CERAMIC	0.01uF	30%	16V	C321	1-126-947-11	ELECT	47uF	20%	16V
C153	1-162-294-31	CERAMIC	0.001uF	10%	50V						
						C323	1-126-947-11	ELECT	47uF	20%	16V
C154	1-162-294-31	CERAMIC	0.001uF	10%	50V	C324	1-126-961-11	ELECT	2.2uF	20%	50V
C155	1-162-306-11	CERAMIC	0.01uF	30%	16V	C325	1-126-961-11	ELECT	2.2uF	20%	50V
C157	1-162-306-11	CERAMIC	0.01uF	30%	16V	C326	1-162-199-31	CERAMIC	10PF	5%	50V
C201	1-162-292-31	CERAMIC	680PF	10%	50V	C327	1-162-199-31	CERAMIC	10PF	5%	50V
C202	1-162-292-31	CERAMIC	680PF	10%	50V						
						C328	1-126-933-11	ELECT	100uF	20%	16V
C203	1-162-292-31	CERAMIC	680PF	10%	50V	C329	1-126-961-11	ELECT	2.2uF	20%	50V
C204	1-162-292-31	CERAMIC	680PF	10%	50V	C330	1-126-961-11	ELECT	2.2uF	20%	50V
C205	1-162-286-31	CERAMIC	220PF	10%	50V	C331	1-109-953-11	ELECT	2.2uF	20%	50V
C206	1-162-286-31	CERAMIC	220PF	10%	50V	C332	1-109-953-11	ELECT	2.2uF	20%	50V
C207	1-162-286-31	CERAMIC	220PF	10%	50V						
						C333	1-126-961-11	ELECT	2.2uF	20%	50V
C208	1-162-286-31	CERAMIC	220PF	10%	50V	C334	1-126-961-11	ELECT	2.2uF	20%	50V
C209	1-126-967-11	ELECT	47uF	20%	50V	C335	1-126-960-11	ELECT	1uF	20%	50V
C210	1-126-967-11	ELECT	47uF	20%	50V	C336	1-126-960-11	ELECT	1uF	20%	50V
C211	1-130-486-00	MYLAR	0.018uF	10%	50V	C337	1-126-960-11	ELECT	1uF	20%	50V
C212	1-130-486-00	MYLAR	0.018uF	10%	50V						
						C338	1-126-960-11	ELECT	1uF	20%	50V
C213	1-126-960-11	ELECT	1uF	20%	50V	C339	1-126-964-11	ELECT	10uF	20%	50V
C214	1-126-960-11	ELECT	1uF	20%	50V	C340	1-126-964-11	ELECT	10uF	20%	50V
C215	1-127-870-31	CERAMIC	3300PF	10%	50V	C341	1-161-494-00	CERAMIC	0.022uF		25V
C216	1-127-870-31	CERAMIC	3300PF	10%	50V	C342	1-162-215-31	CERAMIC	47PF	5%	50V
C217	1-126-947-11	ELECT	47uF	20%	16V						
						C343	1-126-933-11	ELECT	100uF	20%	16V
C218	1-104-661-91	ELECT	330uF	20%	16V	C344	1-126-960-11	ELECT	1uF	20%	50V
C219	1-126-962-11	ELECT	3.3uF	20%	50V	C345	1-162-215-31	CERAMIC	47PF	5%	50V
C221	1-126-962-11	ELECT	3.3uF	20%	50V	C346	1-126-956-11	ELECT	0.1uF	20%	50V
C222	1-126-962-11	ELECT	3.3uF	20%	50V	C347	1-126-960-11	ELECT	1uF	20%	50V
C223	1-162-290-31	CERAMIC	470PF	10%	50V						
						C348	1-126-964-11	ELECT	10uF	20%	50V
C224	1-162-290-31	CERAMIC	470PF	10%	50V	C349	1-126-947-11	ELECT	47uF	20%	16V
C225	1-127-866-11	CERAMIC	1500PF	10%	50V	C350	1-107-717-11	ELECT	47uF	20%	50V
C226	1-127-866-11	CERAMIC	1500PF	10%	50V	C351	1-107-721-11	ELECT	4.7uF	20%	100V
C227	1-162-286-31	CERAMIC	220PF	10%	50V	C352	1-107-721-11	ELECT	4.7uF	20%	100V
C228	1-162-286-31	CERAMIC	220PF	10%	50V						
						C353	1-136-165-00	FILM	0.1uF	5%	50V
C229	1-126-933-11	ELECT	100uF	20%	16V						(RG20:AEP, UK)
C230	1-126-933-11	ELECT	100uF	20%	16V	C354	1-136-165-00	FILM	0.1uF	5%	50V
C231	1-124-252-00	ELECT	0.33uF	20%	50V						(RG20:AEP, UK)
C232	1-124-252-00	ELECT	0.33uF	20%	50V	C355	1-136-165-00	FILM	0.1uF	5%	50V
C233	1-162-294-31	CERAMIC	0.001uF	10%	50V						(RG20:AEP, UK)
						C356	1-136-165-00	FILM	0.1uF	5%	50V
C234	1-162-294-31	CERAMIC	0.001uF	10%	50V						(RG20:AEP, UK)
C235	1-130-491-00	MYLAR	0.047uF	5%	50V	C357	1-126-961-11	ELECT	2.2uF	20%	50V
C236	1-130-491-00	MYLAR	0.047uF	5%	50V						
C237	1-161-494-00	CERAMIC	0.022uF		25V	C358	1-126-961-11	ELECT	2.2uF	20%	50V
C238	1-126-961-11	ELECT	2.2uF	20%	50V	C359	1-126-935-11	ELECT	470uF	20%	16V
						C360	1-126-964-11	ELECT	10uF	20%	50V
C239	1-130-485-00	MYLAR	0.015uF	5%	50V	C361	1-126-933-11	ELECT	100uF	20%	16V
C240	1-126-967-11	ELECT	47uF	20%	50V	C362	1-107-698-11	ELECT	10uF	20%	25V
C241	1-130-479-00	MYLAR	0.0047uF	5%	50V						
C242	1-130-485-00	MYLAR	0.015uF	5%	50V	C363	1-126-956-11	ELECT	0.1uF	20%	50V
C243	1-130-485-00	MYLAR	0.015uF	5%	50V	C364	1-126-956-11	ELECT	0.1uF	20%	50V
						C366	1-126-947-11	ELECT	47uF	20%	16V
						C367	1-126-947-11	ELECT	47uF	20%	16V
						C369	1-162-294-31	CERAMIC	0.001uF	10%	50V

# HCD-DX10/RG4SR/RG20/RG30T

## MAIN

Ref. No.	Part No.	Description	Remarks
C370	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C371	1-164-159-11	CERAMIC 0.1uF 50V	
C372	1-164-159-11	CERAMIC 0.1uF 50V	
C801	1-136-165-00	FILM 0.1uF 5% 50V	
C802	1-136-165-00	FILM 0.1uF 5% 50V	
C805	1-126-768-11	ELECT 2200uF 20% 16V	
C806	1-126-943-11	ELECT 2200uF 20% 25V	
C807	1-126-964-11	ELECT 10uF 20% 50V	
C808	1-126-916-11	ELECT 1000uF 20% 6.3V	
C809	1-126-964-11	ELECT 10uF 20% 50V	
C810	1-126-933-11	ELECT 100uF 20% 16V	
C811	1-126-964-11	ELECT 10uF 20% 50V	
C812	1-161-494-00	CERAMIC 0.022uF 25V	
C813	1-126-916-11	ELECT 1000uF 20% 6.3V	
C814	1-126-964-11	ELECT 10uF 20% 50V	
C815	1-126-933-11	ELECT 100uF 20% 16V	
C819	1-161-494-00	CERAMIC 0.022uF 25V	
C827	1-130-483-00	MYLAR 0.01uF 5% 50V	
C828	1-130-483-00	MYLAR 0.01uF 5% 50V	
C851	1-126-963-11	ELECT 4.7uF 20% 50V	(RG4SR/RG30T)
< FILTER >			
CF101	1-579-185-21	FILTER, CERAMIC (RG20:AEP, UK)	
CF101	1-760-023-11	FILTER, CERAMIC (DX10/RG4SR/RG20:US, CND/RG30T)	
CF102	1-579-185-21	FILTER, CERAMIC (RG20:AEP, UK)	
CF102	1-760-023-11	FILTER, CERAMIC (DX10/RG4SR/RG20:US, CND/RG30T)	
< CONNECTOR >			
* CN201	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P	
CN202	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
* CN203	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
* CN305	1-770-392-11	PIN, CONNECTOR (PC BOARD) 8P	
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	
* CN704	1-564-709-11	PIN, CONNECTOR (SMALL TYPE) 7P	
CN851	1-564-506-11	PLUG, CONNECTOR 3P (RG4SR/RG30T)	
< CRYSTAL VIBRATOR >			
CX101	1-760-549-31	VIBRATOR, CRYSTAL 4.5MHz	
< DIODE >			
D103	8-719-109-97	DIODE MTZJ-6.8B	
D105	8-719-991-33	DIODE 1SS133T-77	
D111	8-719-991-33	DIODE 1SS133T-77	
D112	8-719-991-33	DIODE 1SS133T-77	
D202	8-719-991-33	DIODE 1SS133T-77	
D203	8-719-991-33	DIODE 1SS133T-77	
D204	8-719-991-33	DIODE 1SS133T-77	
D205	8-719-991-33	DIODE 1SS133T-77	
D304	8-719-929-15	DIODE MTZJ-9.1B	
D309	8-719-991-33	DIODE 1SS133T-77	
D310	8-719-991-33	DIODE 1SS133T-77	
D311	8-719-991-33	DIODE 1SS133T-77	
D312	8-719-991-33	DIODE 1SS133T-77	
D313	8-719-991-33	DIODE 1SS133T-77	
D315	8-719-200-82	DIODE 11ES2-TB5	

Ref. No.	Part No.	Description	Remarks
D316	8-719-200-82	DIODE 11ES2-TB5	
D801	8-719-200-82	DIODE 11ES2-TB5	
D802	8-719-200-82	DIODE 11ES2-TB5	
D803	8-719-200-82	DIODE 11ES2-TB5	
D804	8-719-200-82	DIODE 11ES2-TB5	
D809	8-719-200-82	DIODE 11ES2-TB5	
D810	8-719-200-82	DIODE 11ES2-TB5	
D811	8-719-991-33	DIODE 1SS133T-77	
D812	8-719-200-82	DIODE 11ES2-TB5	
D813	8-719-200-82	DIODE 11ES2-TB5	
D814	8-719-200-82	DIODE 11ES2-TB5	
D815	8-719-200-82	DIODE 11ES2-TB5	
D851	8-719-991-33	DIODE 1SS133T-77 (RG4SR/RG30T)	
D852	8-719-991-33	DIODE 1SS133T-77 (RG4SR/RG30T)	
< FRONT END >			
FE101	1-693-477-11	FRONT END (3 GANGS) (DX10/RG4SR/RG20:US, CND/RG30T)	
FE103	1-693-496-11	FRONT END (4 GANG)(RG20:AEP, UK)	
< TERMINAL >			
* GND1	1-537-738-21	TERMINAL, EARTH	
< IC >			
IC101	8-759-652-00	IC BA1450	
IC102	8-759-288-54	IC LC72130	
IC201	8-759-242-58	IC TA8189N	
IC301	6-700-305-01	IC BD3871FS	
IC302	8-759-505-55	IC NJM4558L	
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	1-435-295-11	TRANSFORMER, IF	
< TERMINAL BOARD >			
JK101	1-694-556-21	TERMINAL BOARD (ANT.PAL)(ANTENNA) (RG20:AEP, UK)	
JK101	1-694-555-11	TERMINAL BOARD (4P)(ANTENNA) (DX10/RG4SR/RG20:US, CND/RG30T)	
JK310	1-694-635-11	TERMINAL BOARD (4P)(SPEAKER)	
JK311	1-694-635-11	TERMINAL BOARD (4P) (SURROUND SPK OUTPUT) (RG4SR)	
< COIL >			
L101	1-414-186-31	INDUCTOR 33uH (RG20:AEP, UK)	
L102	1-414-177-11	INDUCTOR 1uH (RG20:AEP, UK)	
L251	1-424-849-11	COIL, OSCILLATION (BIAS)	
L351	1-420-872-00	COIL, AIR-CORE (RG20:AEP, UK)	
L352	1-420-872-00	COIL, AIR-CORE (RG20:AEP, UK)	
< TRANSISTOR >			
Q101	8-729-015-41	TRANSISTOR 2SC1675-T1	
Q102	8-729-422-57	TRANSISTOR BN1A4M-TP	
Q105	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q106	8-729-141-30	TRANSISTOR 2SC3623ATP-LK	
Q201	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	

Ref. No.	Part No.	Description	Remarks				Ref. No.	Part No.	Description	Remarks			
Q202	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R116	1-249-441-11	CARBON	100K	5%	1/4W	
Q203	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R117	1-247-807-31	CARBON	100	5%	1/4W	
Q204	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R118	1-249-425-11	CARBON	4.7K	5%	1/4W	F
Q205	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R119	1-249-429-11	CARBON	10K	5%	1/4W	
Q206	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R120	1-249-429-11	CARBON	10K	5%	1/4W	
Q207	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R121	1-249-415-11	CARBON	680	5%	1/4W	F
Q208	8-729-141-30	TRANSISTOR	2SC3623ATP-LK									(RG20:AEP, UK)	
Q209	8-729-140-04	TRANSISTOR	2SB1116-TP-LK				R122	1-249-425-11	CARBON	4.7K	5%	1/4W	F
Q210	8-729-140-04	TRANSISTOR	2SB1116-TP-LK				R123	1-249-425-11	CARBON	4.7K	5%	1/4W	F
Q211	8-729-140-04	TRANSISTOR	2SB1116-TP-LK				R128	1-249-425-11	CARBON	4.7K	5%	1/4W	F
							R129	1-247-807-31	CARBON	100	5%	1/4W	
Q212	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R130	1-249-425-11	CARBON	4.7K	5%	1/4W	F
Q213	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R131	1-247-807-31	CARBON	100	5%	1/4W	
Q214	8-729-142-46	TRANSISTOR	2SC2001TP-LK				R132	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q215	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R133	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q216	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R134	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q303	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R135	1-247-843-11	CARBON	3.3K	5%	1/4W	
Q304	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R136	1-249-431-11	CARBON	15K	5%	1/4W	
Q305	8-729-900-63	TRANSISTOR	BN1F4M-TP				R137	1-249-429-11	CARBON	10K	5%	1/4W	
Q306	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R138	1-249-429-11	CARBON	10K	5%	1/4W	
Q307	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R139	1-249-417-11	CARBON	1K	5%	1/4W	F
Q308	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R140	1-249-429-11	CARBON	10K	5%	1/4W	
Q309	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R141	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q311	8-729-119-78	TRANSISTOR	2SA1175TP-HFE				R142	1-249-429-11	CARBON	10K	5%	1/4W	
Q312	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R143	1-249-431-11	CARBON	15K	5%	1/4W	
Q313	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R201	1-249-393-11	CARBON	10	5%	1/4W	F
Q314	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R202	1-249-393-11	CARBON	10	5%	1/4W	F
Q315	8-729-900-80	TRANSISTOR	BA1A4M-TP				R203	1-249-393-11	CARBON	10	5%	1/4W	F
Q316	8-729-141-30	TRANSISTOR	2SC3623ATP-LK				R204	1-249-393-11	CARBON	10	5%	1/4W	F
Q320	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R205	1-249-401-11	CARBON	47	5%	1/4W	F
Q321	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R206	1-249-401-11	CARBON	47	5%	1/4W	F
Q801	8-729-900-80	TRANSISTOR	BA1A4M-TP				R207	1-249-428-11	CARBON	8.2K	5%	1/4W	F
Q802	8-729-049-79	TRANSISTOR	RT1P137S-TP				R208	1-249-428-11	CARBON	8.2K	5%	1/4W	F
Q803	8-729-900-63	TRANSISTOR	BN1F4M-TP				R209	1-247-889-00	CARBON	270K	5%	1/4W	
Q804	8-729-900-80	TRANSISTOR	BA1A4M-TP				R210	1-247-889-00	CARBON	270K	5%	1/4W	
Q850	8-729-140-04	TRANSISTOR	2SB1116-TP-LK				R211	1-247-891-00	CARBON	330K	5%	1/4W	
			(RG4SR/RG30T)										
Q851	8-729-119-78	TRANSISTOR	2SC2785TP-HFE				R212	1-247-891-00	CARBON	330K	5%	1/4W	
			(RG4SR/RG30T)				R213	1-249-425-11	CARBON	4.7K	5%	1/4W	F
							R214	1-249-425-11	CARBON	4.7K	5%	1/4W	F
		< RESISTOR >					R215	1-247-891-00	CARBON	330K	5%	1/4W	
							R216	1-247-891-00	CARBON	330K	5%	1/4W	
R101	1-249-407-11	CARBON	150	5%	1/4W	F	R217	1-249-429-11	CARBON	10K	5%	1/4W	
R102	1-249-415-11	CARBON	680	5%	1/4W	F	R219	1-249-437-11	CARBON	47K	5%	1/4W	
R103	1-249-415-11	CARBON	680	5%	1/4W	F	R220	1-249-433-11	CARBON	22K	5%	1/4W	
R104	1-249-411-11	CARBON	330	5%	1/4W		R221	1-247-881-00	CARBON	120K	5%	1/4W	
R105	1-249-419-11	CARBON	1.5K	5%	1/4W	F	R222	1-247-881-00	CARBON	120K	5%	1/4W	
R106	1-249-401-11	CARBON	47	5%	1/4W	F	R223	1-247-885-00	CARBON	180K	5%	1/4W	
R107	1-249-401-11	CARBON	47	5%	1/4W	F	R224	1-247-885-00	CARBON	180K	5%	1/4W	
R108	1-249-409-11	CARBON	220	5%	1/4W	F	R225	1-249-433-11	CARBON	22K	5%	1/4W	
R109	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R226	1-249-433-11	CARBON	22K	5%	1/4W	
R110	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R227	1-247-881-00	CARBON	120K	5%	1/4W	
R111	1-249-429-11	CARBON	10K	5%	1/4W		R228	1-247-881-00	CARBON	120K	5%	1/4W	
R112	1-249-430-11	CARBON	12K	5%	1/4W		R229	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R113	1-249-429-11	CARBON	10K	5%	1/4W		R230	1-249-422-11	CARBON	2.7K	5%	1/4W	F
R114	1-249-429-11	CARBON	10K	5%	1/4W		R231	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R115	1-249-429-11	CARBON	10K	5%	1/4W		R232	1-249-421-11	CARBON	2.2K	5%	1/4W	F

## HCD-DX10/RG4SR/RG20/RG30T

## MAIN

Ref. No.	Part No.	Description				Remarks	Ref. No.	Part No.	Description				Remarks
R233	1-249-409-11	CARBON	220	5%	1/4W	F	R355	1-249-437-11	CARBON	47K	5%	1/4W	
R234	1-247-843-11	CARBON	3.3K	5%	1/4W		R356	1-249-438-11	CARBON	56K	5%	1/4W	
R235	1-247-843-11	CARBON	3.3K	5%	1/4W		R357	1-260-076-11	CARBON	10	5%	1/2W	
R236	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R358	1-260-076-11	CARBON	10	5%	1/2W	
R237	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R359	1-249-429-11	CARBON	10K	5%	1/4W	
R238	1-249-429-11	CARBON	10K	5%	1/4W		R360	1-249-433-11	CARBON	22K	5%	1/4W	
R239	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R361	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R240	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R362	1-249-433-11	CARBON	22K	5%	1/4W	
R241	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R363	1-249-426-11	CARBON	5.6K	5%	1/4W	
R242	1-249-434-11	CARBON	27K	5%	1/4W		R364	1-249-429-11	CARBON	10K	5%	1/4W	
R244	1-249-430-11	CARBON	12K	5%	1/4W		R365	1-215-891-11	METAL OXIDE	680	5%	2W	
R245	1-249-429-11	CARBON	10K	5%	1/4W		R366	1-215-891-11	METAL OXIDE	680	5%	2W	
R246	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R367	1-249-437-11	CARBON	47K	5%	1/4W	
R247	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R368	1-249-441-11	CARBON	100K	5%	1/4W	
R248	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R369	1-249-435-11	CARBON	33K	5%	1/4W	
R249	1-249-413-11	CARBON	470	5%	1/4W	F	R370	1-249-429-11	CARBON	10K	5%	1/4W	
R250	1-249-393-11	CARBON	10	5%	1/4W	F	R371	1-247-885-00	CARBON	180K	5%	1/4W	
R251	1-249-434-11	CARBON	27K	5%	1/4W		R372	1-247-899-11	CARBON	680K	5%	1/4W	
R252	1-249-381-11	CARBON	1	5%	1/4W	F	R373	1-249-429-11	CARBON	10K	5%	1/4W	
R253	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R374	1-249-409-11	CARBON	220	5%	1/4W	F
R253	1-249-437-11	CARBON	47K	5%	1/4W		R375	1-249-411-11	CARBON	330	5%	1/4W	
R254	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R376	1-247-885-00	CARBON	180K	5%	1/4W	
R307	1-249-441-11	CARBON	100K	5%	1/4W		R377	1-247-899-11	CARBON	680K	5%	1/4W	
R308	1-249-441-11	CARBON	100K	5%	1/4W		R378	1-249-411-11	CARBON	330	5%	1/4W	
R314	1-249-426-11	CARBON	5.6K	5%	1/4W		R379	1-249-429-11	CARBON	10K	5%	1/4W	
R315	1-249-426-11	CARBON	5.6K	5%	1/4W		R380	1-249-441-11	CARBON	100K	5%	1/4W	
R316	1-247-893-11	CARBON	390K	5%	1/4W		R381	1-249-429-11	CARBON	10K	5%	1/4W	
R317	1-247-893-11	CARBON	390K	5%	1/4W		R382	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R323	1-249-437-11	CARBON	47K	5%	1/4W		R383	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R325	1-249-437-11	CARBON	47K	5%	1/4W		R384	1-249-441-11	CARBON	100K	5%	1/4W	
R327	1-249-413-11	CARBON	470	5%	1/4W	F	R385	1-249-417-11	CARBON	1K	5%	1/4W	F
R329	1-249-437-11	CARBON	47K	5%	1/4W		R386	1-260-076-11	CARBON	10	5%	1/2W	
R330	1-249-437-11	CARBON	47K	5%	1/4W		R387	1-260-076-11	CARBON	10	5%	1/2W	
R331	1-249-429-11	CARBON	10K	5%	1/4W		R388	1-249-431-11	CARBON	15K	5%	1/4W	
R332	1-249-429-11	CARBON	10K	5%	1/4W		R389	1-249-437-11	CARBON	47K	5%	1/4W	
R335	1-249-429-11	CARBON	10K	5%	1/4W		R390	1-249-437-11	CARBON	47K	5%	1/4W	
R336	1-249-429-11	CARBON	10K	5%	1/4W		R391	1-249-441-11	CARBON	100K	5%	1/4W	
R337	1-259-880-11	CARBON	2.2M	5%	1/4W		R392	1-249-402-11	CARBON	56	5%	1/4W	F
R338	1-259-880-11	CARBON	2.2M	5%	1/4W		R393	1-249-402-11	CARBON	56	5%	1/4W	F
R339	1-249-413-11	CARBON	470	5%	1/4W	F	R394	1-249-441-11	CARBON	100K	5%	1/4W	
R340	1-249-437-11	CARBON	47K	5%	1/4W		R396	1-249-429-11	CARBON	10K	5%	1/4W	
R341	1-249-437-11	CARBON	47K	5%	1/4W		R397	1-249-429-11	CARBON	10K	5%	1/4W	
R342	1-247-807-31	CARBON	100	5%	1/4W		R398	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R343	1-249-426-11	CARBON	5.6K	5%	1/4W		R399	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R344	1-249-426-11	CARBON	5.6K	5%	1/4W		R811	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R345	1-249-425-11	CARBON	4.7K	5%	1/4W	F							(RG4SR/RG30T)
R346	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R812	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R347	1-249-429-11	CARBON	10K	5%	1/4W								(RG4SR/RG30T)
R348	1-249-429-11	CARBON	10K	5%	1/4W		R813	1-249-437-11	CARBON	47K	5%	1/4W	
R349	1-249-429-11	CARBON	10K	5%	1/4W								(RG4SR/RG30T)
R350	1-249-429-11	CARBON	10K	5%	1/4W		R814	1-249-437-11	CARBON	47K	5%	1/4W	
R351	1-249-417-11	CARBON	1K	5%	1/4W	F							(RG4SR/RG30T)
R352	1-249-426-11	CARBON	5.6K	5%	1/4W		R815	1-249-437-11	CARBON	47K	5%	1/4W	
R353	1-249-417-11	CARBON	1K	5%	1/4W	F							(RG4SR/RG30T)
R354	1-249-417-11	CARBON	1K	5%	1/4W	F							(RG4SR/RG30T)
							R205A	1-249-409-11	CARBON	220	5%	1/4W	F
							R206A	1-249-409-11	CARBON	220	5%	1/4W	F

MAIN

MOTOR

PANEL

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< COMPOSITION CIRCUIT BLOCK >					
RB101	1-234-457-11	ENCAPSULATED COMPONENT		C611	1-126-947-11	ELECT 47uF 20%	10V
		< RELAY >		C612	1-126-957-11	ELECT 0.22uF 20%	50V
RL1	1-755-373-11	RELAY		C613	1-126-957-11	ELECT 0.22uF 20%	50V
		< VARIABLE RESISTOR >		C614	1-128-801-11	CERAMIC 22PF 5%	50V
RV101	1-241-765-11	RES, ADJ, CARBON 22K		C615	1-128-802-11	CERAMIC 27PF 5%	50V
		< TRANSFORMER >		C616	1-161-494-00	CERAMIC 0.022uF	25V
T101	1-435-195-31	TRANSFORMER, DISCRIMINATOR		C617	1-126-964-11	ELECT 10uF 20%	50V
T102	1-234-477-11	ENCAPSULATED COMPONENT (RG20:AEP, UK)		C618	1-162-286-31	CERAMIC 220PF 10%	50V
*****				C619	1-162-286-31	CERAMIC 220PF 10%	50V
	1-675-910-14	MOTOR BOARD		C620	1-162-286-31	CERAMIC 220PF 10%	50V
		*****		C621	1-126-964-11	ELECT 10uF 20%	50V
		< CAPACITOR >		C622	1-162-294-31	CERAMIC 0.001uF 10%	50V
C721	1-162-306-11	CERAMIC 0.01uF 30% 16V		C623	1-110-671-31	CERAMIC 47000PF	50V
		< CONNECTOR >		C624	1-110-671-31	CERAMIC 47000PF	50V
CN721	1-770-516-31	CONNECTOR, FFC 8P		C625	1-110-671-31	CERAMIC 47000PF	50V
CN722	1-785-330-11	PIN, CONNECTOR (LIGHT ANGLE)4P		C626	1-110-671-31	CERAMIC 47000PF	50V
		< SWITCH >		C627	1-162-294-31	CERAMIC 0.001uF 10%	50V
S701	1-771-822-11	SWITCH, LEVER (SLIDE)(OPEN/CLOSE SW)		C628	1-162-294-31	CERAMIC 0.001uF 10%	50V
*****				C629	1-164-159-11	CERAMIC 0.1uF	50V
A-4726-509-A		PANEL BOARD, COMPLETE (RG20:US, CND)		C630	1-162-282-31	CERAMIC 100PF 10%	50V
		*****		C631	1-162-282-31	CERAMIC 100PF 10%	50V
A-4726-769-A		PANEL BOARD, COMPLETE (RG20:AEP, UK)		C632	1-162-282-31	CERAMIC 100PF 10%	50V
		*****		C633	1-162-282-31	CERAMIC 100PF 10%	50V
A-4726-776-A		PANEL BOARD, COMPLETE (RG30T)		C634	1-162-282-31	CERAMIC 100PF 10%	50V
		*****		C635	1-162-282-31	CERAMIC 100PF 10%	50V
A-4726-780-A		PANEL BOARD, COMPLETE (RG4SR)		C636	1-162-306-11	CERAMIC 0.01uF 30%	16V
		*****		C637	1-162-306-11	CERAMIC 0.01uF 30%	16V
A-4726-920-A		PANEL BOARD, COMPLETE (DX10:AUS)		C638	1-162-294-31	CERAMIC 0.001uF 10%	50V
		*****		C639	1-162-294-31	CERAMIC 0.001uF 10%	50V
A-4726-923-A		PANEL BOARD, COMPLETE		C640	1-164-159-11	CERAMIC 0.1uF	50V
		(DX10:MY, SP, TW, E3)		C641	1-164-159-11	CERAMIC 0.1uF	50V
		*****		C644	1-164-159-11	CERAMIC 0.1uF	50V
A-4726-926-A		PANEL BOARD, COMPLETE				< CONNECTOR >	
		(DX10:MX, AR, E2, E51)		CN601	1-784-739-11	CONNECTOR, FFC 17P	
		*****		CN602	1-784-741-11	CONNECTOR, FFC 19P	
1-791-897-11		WIRE (FLAT TYPE) (19 CORE)		CN603	1-793-767-11	CONNECTOR, BOARD TO BOARD 30P	
1-823-058-11		WIRE (FLAT TYPE) (17 CORE)		CN604	1-770-401-11	HOUSING, CONNECTOR (PC BOARD)8P	
4-234-712-01		FL HOLDER				< DIODE >	
		< CAPACITOR >		D601	8-719-200-82	DIODE 11ES2-NTA1B	
C601	1-126-916-11	ELECT 1000uF 20% 6.3V		D602	8-719-200-82	DIODE 11ES2-NTA1B	
C602	1-161-494-00	CERAMIC 0.022uF	25V	D603	8-719-991-33	DIODE 1SS133T-77	
C603	1-104-665-11	ELECT 100uF 20%	10V	D604	8-719-991-33	DIODE 1SS133T-77	
C604	1-161-494-00	CERAMIC 0.022uF	25V	D605	8-719-991-33	DIODE 1SS133T-77	
C605	1-126-947-11	ELECT 47uF 20%	10V	D606	8-719-991-33	DIODE 1SS133T-77	
C606	1-126-964-11	ELECT 10uF 20%	50V	D607	8-719-991-33	DIODE 1SS133T-77	
C607	1-161-494-00	CERAMIC 0.022uF	25V	D608	8-719-991-33	DIODE 1SS133T-77	
C608	1-126-961-11	ELECT 2.2uF 20%	50V	D609	8-719-991-33	DIODE 1SS133T-77	
C609	1-126-960-11	ELECT 1uF 20%	50V	D610	8-719-991-33	DIODE 1SS133T-77	
C610	1-164-159-11	CERAMIC 0.1uF	50V	D611	8-719-991-33	DIODE 1SS133T-77	
				D612	8-719-991-33	DIODE 1SS133T-77	
						(DX10:AUS/RG4SR/RG20:US, CND/RG30T)	
				D613	8-719-991-33	DIODE 1SS133T-77	
						(RG4SR/RG20:US, CND/RG30T)	
				D614	8-719-991-33	DIODE 1SS133T-77 (DX10:MX, AR, E2, E51)	
				D615	8-719-991-33	DIODE 1SS133T-77 (RG4SR/RG20/RG30T)	
				D616	8-719-991-33	DIODE 1SS133T-77 (RG4SR/RG30T)	
				D617	8-719-991-33	DIODE 1SS133T-77 (RG4SR)	



## HCD-DX10/RG4SR/RG20/RG30T

## PANEL

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
		< FERRITE BEAD >					
FB601	1-412-473-41	INDUCTOR 0uH		R621	1-247-807-31	CARBON 100 5%	1/4W
		< FLUORESCENT INDICATOR >		R622	1-247-807-31	CARBON 100 5%	1/4W
		< IC >		R623	1-247-807-31	CARBON 100 5%	1/4W
IC601	6-800-240-02	IC LC866540A-5V62		R625	1-249-417-11	CARBON 1K 5%	1/4W F
IC602	8-759-355-22	IC BU2114F-E2		R626	1-249-417-11	CARBON 1K 5%	1/4W F
		< JACK >		R627	1-249-417-11	CARBON 1K 5%	1/4W F
JK601	1-691-293-21	JACK (PHONES)		R628	1-249-417-11	CARBON 1K 5%	1/4W F
JK603	1-815-684-11	JACK, PIN 3P (GAME INPUT)		R629	1-249-417-11	CARBON 1K 5%	1/4W F
		< COIL >		R630	1-247-807-31	CARBON 100 5%	1/4W
L602	1-414-187-11	INDUCTOR 47uH		R631	1-247-807-31	CARBON 100 5%	1/4W
		< LED >		R632	1-247-807-31	CARBON 100 5%	1/4W
LED601	8-719-084-69	DIODE LTL-77HKETNN (POWER)		R633	1-247-807-31	CARBON 100 5%	1/4W
LED602	8-719-084-19	DIODE LTL77HKYTNN (CD)		R634	1-247-807-31	CARBON 100 5%	1/4W
LED603	8-719-084-19	DIODE LTL77HKYTNN (CD)		R635	1-247-807-31	CARBON 100 5%	1/4W
LED604	8-719-084-19	DIODE LTL77HKYTNN (TUNER/BAND)		R636	1-249-421-11	CARBON 2.2K 5%	1/4W F
LED605	8-719-084-19	DIODE LTL77HKYTNN (TUNER/BAND)		R637	1-249-425-11	CARBON 4.7K 5%	1/4W F
LED606	8-719-084-19	DIODE LTL77HKYTNN (TAPE A/B)		R638	1-249-415-11	CARBON 680 5%	1/4W F
LED607	8-719-084-19	DIODE LTL77HKYTNN (TAPE A/B)		R639	1-249-417-11	CARBON 1K 5%	1/4W F
LED608	8-719-084-19	DIODE LTL77HKYTNN (GAME)		R640	1-249-421-11	CARBON 2.2K 5%	1/4W F
LED609	8-719-084-19	DIODE LTL77HKYTNN (GAME)		R641	1-249-425-11	CARBON 4.7K 5%	1/4W F
		< TRANSISTOR >		R642	1-249-415-11	CARBON 680 5%	1/4W F
Q601	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R643	1-249-417-11	CARBON 1K 5%	1/4W F
Q602	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R644	1-249-421-11	CARBON 2.2K 5%	1/4W F
Q603	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R645	1-249-425-11	CARBON 4.7K 5%	1/4W F
Q604	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R646	1-249-415-11	CARBON 680 5%	1/4W F
Q605	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		R647	1-249-417-11	CARBON 1K 5%	1/4W F
Q606	8-729-140-04	TRANSISTOR 2SB1116-TP-LK		R648	1-249-429-11	CARBON 10K 5%	1/4W
Q607	8-729-140-04	TRANSISTOR 2SB1116-TP-LK		R649	1-249-429-11	CARBON 10K 5%	1/4W
Q608	8-729-140-04	TRANSISTOR 2SB1116-TP-LK		R650	1-249-429-11	CARBON 10K 5%	1/4W
Q651	8-729-900-80	TRANSISTOR BA1A4M-TP		R651	1-249-429-11	CARBON 10K 5%	1/4W
		< RESISTOR >		R652	1-249-429-11	CARBON 10K 5%	1/4W
R601	1-249-437-11	CARBON 47K 5%	1/4W	R653	1-249-429-11	CARBON 10K 5%	1/4W
R603	1-249-417-11	CARBON 1K 5%	1/4W F	R654	1-249-437-11	CARBON 47K 5%	1/4W
R604	1-249-437-11	CARBON 47K 5%	1/4W	R655	1-247-807-31	CARBON 100 5%	1/4W
R605	1-249-417-11	CARBON 1K 5%	1/4W F	R656	1-247-807-31	CARBON 100 5%	1/4W
R606	1-249-437-11	CARBON 47K 5%	1/4W	R657	1-247-807-31	CARBON 100 5%	1/4W
R607	1-249-401-11	CARBON 47 5%	1/4W F	R658	1-247-807-31	CARBON 100 5%	1/4W
R609	1-247-887-00	CARBON 220K 5%	1/4W	R659	1-247-807-31	CARBON 100 5%	1/4W
R610	1-247-887-00	CARBON 220K 5%	1/4W	R660	1-247-807-31	CARBON 100 5%	1/4W
R612	1-249-415-11	CARBON 680 5%	1/4W F	R661	1-249-415-11	CARBON 680 5%	1/4W F
R614	1-249-401-11	CARBON 47 5%	1/4W F	R662	1-249-416-11	CARBON 820 5%	1/4W F
R615	1-249-417-11	CARBON 1K 5%	1/4W F	R663	1-249-418-11	CARBON 1.2K 5%	1/4W F
R617	1-249-417-11	CARBON 1K 5%	1/4W F	R664	1-249-419-11	CARBON 1.5K 5%	1/4W F
R618	1-249-417-11	CARBON 1K 5%	1/4W F	R665	1-249-421-11	CARBON 2.2K 5%	1/4W F
R619	1-249-417-11	CARBON 1K 5%	1/4W F	R666	1-247-843-11	CARBON 3.3K 5%	1/4W
R620	1-249-429-11	CARBON 10K 5%	1/4W	R667	1-249-425-11	CARBON 4.7K 5%	1/4W F
				R668	1-249-428-11	CARBON 8.2K 5%	1/4W F
				R669	1-249-419-11	CARBON 1.5K 5%	1/4W F
				R670	1-249-419-11	CARBON 1.5K 5%	1/4W F
				R671	1-249-419-11	CARBON 1.5K 5%	1/4W F
				R672	1-249-418-11	CARBON 1.2K 5%	1/4W F
				R673	1-249-416-11	CARBON 820 5%	1/4W F
				R674	1-249-415-11	CARBON 680 5%	1/4W F
				R675	1-249-421-11	CARBON 2.2K 5%	1/4W F
				R676	1-247-843-11	CARBON 3.3K 5%	1/4W



PANEL

POWER

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R677	1-249-425-11	CARBON	4.7K 5% 1/4W F			< ROTARY ENCODER >	
R678	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R679	1-249-434-11	CARBON	27K 5% 1/4W				
R680	1-249-434-11	CARBON	27K 5% 1/4W	VR601	1-418-725-11	ENCODER, ROTARY (12 TYPE)(VOLUME)	
R681	1-249-415-11	CARBON	680 5% 1/4W F			< VIBRATOR >	
R682	1-249-416-11	CARBON	820 5% 1/4W F	X601	1-795-398-11	VIBRATOR, CRYSTAL 6MHz	
R683	1-249-418-11	CARBON	1.2K 5% 1/4W F			*****	
R684	1-249-419-11	CARBON	1.5K 5% 1/4W F				
R685	1-249-421-11	CARBON	2.2K 5% 1/4W F	A-4726-510-A		POWER BOARD, COMPLETE	
R686	1-247-843-11	CARBON	3.3K 5% 1/4W			(DX10/RG20:US, CND)	
						*****	
R687	1-249-429-11	CARBON	10K 5% 1/4W	A-4726-770-A		POWER BOARD, COMPLETE (RG20:AEP, UK)	
R688	1-249-429-11	CARBON	10K 5% 1/4W			*****	
R689	1-249-424-11	CARBON	3.9K 5% 1/4W F	A-4726-777-A		POWER BOARD, COMPLETE (RG30T)	
R691	1-247-807-31	CARBON	100 5% 1/4W			*****	
R692	1-249-429-11	CARBON	10K 5% 1/4W	A-4726-781-A		POWER BOARD, COMPLETE (RG4SR)	
						*****	
R693	1-249-429-11	CARBON	10K 5% 1/4W			< CAPACITOR >	
R694	1-249-429-11	CARBON	10K 5% 1/4W				
R695	1-249-429-11	CARBON	10K 5% 1/4W	C501	1-126-964-11	ELECT	10uF 20% 50V
R696	1-249-429-11	CARBON	10K 5% 1/4W	C502	1-162-294-31	CERAMIC	0.001uF 10% 50V
R697	1-249-429-11	CARBON	10K 5% 1/4W	C503	1-162-282-31	CERAMIC	100PF 10% 50V
R698	1-249-429-11	CARBON	10K 5% 1/4W	C504	1-128-551-11	ELECT	22uF 20% 25V
R699	1-249-429-11	CARBON	10K 5% 1/4W	C507	1-130-493-00	MYLAR	0.068uF 5% 50V
		< IC >					
RM601	8-759-827-70	IC NJL64H400A-1 (■)		C508	1-130-493-00	MYLAR	0.068uF 5% 50V
		< SWITCH >		C509	1-128-560-11	ELECT	22uF 20% 100V
S601	1-762-196-21	SWITCH, TACT (REC PAUSE/START)					(RG4SR/RG30T)
S602	1-762-196-21	SWITCH, TACT (CD SYNC)		C509	1-126-965-11	ELECT	22uF 20% 50V
S603	1-762-196-21	SWITCH, TACT (▶▶+)					(DX10/RG20)
S604	1-762-196-21	SWITCH, TACT (▶▶I)		C511	1-162-306-11	CERAMIC	0.01uF 30% 16V
S605	1-762-196-21	SWITCH, TACT (II)		C512	1-162-294-31	CERAMIC	0.001uF 10% 50V
							(RG20:AEP, UK)
S606	1-762-196-21	SWITCH, TACT (▷)		C513	1-164-159-11	CERAMIC	0.1uF 50V
S607	1-762-196-21	SWITCH, TACT (■)					(RG20:AEP, UK)
S608	1-762-196-21	SWITCH, TACT (I◀◀)		C541	1-130-777-00	MYLAR	0.1uF 10% 100V
S609	1-762-196-21	SWITCH, TACT (◀◀I)		C542	1-135-928-11	ELECT	2200uF 20% 63V
S612	1-762-196-21	SWITCH, TACT (MOVIE EQ)					(RG4SR/RG30T)
				C542	1-135-832-11	ELECT	2200uF 20% 50V
							(DX10/RG20)
S613	1-762-196-21	SWITCH, TACT (EFFECT ON/OFF)		C543	1-164-159-11	CERAMIC	0.1uF 50V
S614	1-762-196-21	SWITCH, TACT (GAME EQ)					
S615	1-762-196-21	SWITCH, TACT (MUSIC EQ)		C544	1-126-942-61	ELECT	1000uF 20% 25V
S616	1-762-196-21	SWITCH, TACT (DISPLAY)		C545	1-128-549-11	ELECT	3300uF 20% 35V
S617	1-762-196-21	SWITCH, TACT (GAME)		C551	1-126-964-11	ELECT	10uF 20% 50V
				C552	1-162-294-31	CERAMIC	0.001uF 10% 50V
				C553	1-162-282-31	CERAMIC	100PF 10% 50V
S618	1-762-196-21	SWITCH, TACT (TAPE A/B)					
S619	1-762-196-21	SWITCH, TACT (TUNER/BAND)		C554	1-128-551-11	ELECT	22uF 20% 25V
S620	1-762-196-21	SWITCH, TACT (CD)		C557	1-130-493-00	MYLAR	0.068uF 5% 50V
S623	1-762-196-21	SWITCH, TACT (GROOVE)		C558	1-130-493-00	MYLAR	0.068uF 5% 50V
S624	1-762-196-21	SWITCH, TACT (▲OPEN/CLOSE)		C559	1-128-560-11	ELECT	22uF 20% 100V
							(RG4SR/RG30T)
S625	1-762-196-21	SWITCH, TACT (DISC3)		C559	1-126-965-11	ELECT	22uF 20% 50V
S626	1-762-196-21	SWITCH, TACT (DISC2)					(DX10/RG20)
S627	1-762-196-21	SWITCH, TACT (DISC1)					
S628	1-762-196-21	SWITCH, TACT (DISC SKIP EX-CHANGE)		C591	1-130-777-00	MYLAR	0.1uF 10% 100V
S629	1-762-196-21	SWITCH, TACT (I/⌂)		C592	1-135-928-11	ELECT	2200uF 20% 63V
							(RG4SR/RG30T)
		< VARIABLE RESISTOR >		C592	1-135-832-11	ELECT	2200uF 20% 50V
							(DX10/RG20)
SFR601	1-241-762-11	RES, ADJ, CARBON 2.2K					

HCD-DX10/RG4SR/RG20/RG30T

POWER

SENSOR

Ref. No.	Part No.	Description	Remarks
< CONNECTOR >			
CN502	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
CN503	1-778-981-21	CONNECTOR, BOARD TO BOARD 13P	
* CN504	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	(RG4SR/RG30T)
< DIODE >			
D501	8-719-991-33	DIODE 1SS133T-77	
D502	8-719-991-33	DIODE 1SS133T-77	
D541	8-719-510-68	DIODE D5SBA204101	
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 >			
* EP501	1-537-738-21	TERMINAL, EARTH (RG20:AEP, UK)	
* EP502	1-537-738-21	TERMINAL, EARTH	
< IC >			
IC501	8-749-016-95	IC STK402-100S (RG4SR)	
IC501	8-749-016-94	IC STK402-090S (RG30T)	
IC501	8-749-016-93	IC STK402-070S (DX10/RG20)	
< TRANSISTOR >			
Q501	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q503	8-729-140-82	TRANSISTOR 2SA988TP-PAFAEA	
Q504	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q551	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q581	8-729-140-84	TRANSISTOR 2SC1841TP-PAFAEA	
Q582	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	(RG4SR/RG30T)
Q583	8-729-029-86	TRANSISTOR DTC124ES (RG4SR/RG30T)	
Q584	8-729-119-78	TRANSISTOR 2SC2785TP-HFE	(RG4SR/RG30T)
< RESISTOR >			
R501	1-249-417-11	CARBON 1K 5% 1/4W F	
R502	1-249-438-11	CARBON 56K 5% 1/4W	
R503	1-249-420-11	CARBON 1.8K 5% 1/4W F	(RG30T)
R503	1-249-419-11	CARBON 1.5K 5% 1/4W F	(RG4SR)
R503	1-249-421-11	CARBON 2.2K 5% 1/4W F	(DX10/RG20)
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	(RG4SR/RG30T)
△ R508	1-217-151-00	METAL 0.22 10% 2W	(DX10/RG20)
R509	1-260-076-11	CARBON 10 5% 1/2W	
△ R510	1-217-156-00	METAL 0.22 10% 5W	(RG4SR/RG30T)
△ R510	1-217-151-00	METAL 0.22 10% 2W	(DX10/RG20)
△ R511	1-212-881-11	FUSIBLE 100 5% 1/4W	

Ref. No.	Part No.	Description	Remarks
△ 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	
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	(RG4SR/RG30T)
R521	1-249-441-11	CARBON 100K 5% 1/4W	(RG4SR/RG30T)
R522	1-249-441-11	CARBON 100K 5% 1/4W	(RG4SR/RG30T)
R523	1-249-409-11	CARBON 220 5% 1/4W F	(RG4SR/RG30T)
R524	1-247-897-11	CARBON 560K 5% 1/4W	(RG4SR/RG30T)
R525	1-249-437-11	CARBON 47K 5% 1/4W	(RG4SR/RG30T)
R541	1-260-115-11	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	1-249-420-11	CARBON 1.8K 5% 1/4W F	(RG30T)
R553	1-249-419-11	CARBON 1.5K 5% 1/4W F	(RG4SR)
R553	1-249-421-11	CARBON 2.2K 5% 1/4W F	(DX10/RG20)
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	(RG4SR/RG30T)
△ R558	1-217-151-00	METAL 0.22 10% 2W	(DX10/RG20)
R559	1-260-076-11	CARBON 10 5% 1/2W	
△ R560	1-217-156-00	METAL 0.22 10% 5W	(RG4SR/RG30T)
△ R560	1-217-151-00	METAL 0.22 10% 2W	(DX10/RG20)
△ 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	1-260-115-11	CARBON 22K 5% 1/2W	

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1-681-442-11 SENSOR BOARD (RG4SR/RG30T)  
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< THERMISTOR >

TH501 1-807-796-11 THERMISTOR (RG4SR/RG30T)  
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The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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## HCD-DX10/RG4SR/RG20/RG30T

SPDL

SUB TRANS

TRANS

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	1-682-124-11	SPDL BOARD *****				< TRANSFORMER >	
		< CONNECTOR >		△ T901	1-435-824-21	TRANSFORMER, POWER (RG20:AEP, UK)	
				△ T901	1-435-823-21	TRANSFORMER, POWER (RG4SR/RG20:US, CND/RG30T)	
CN01	1-564-722-11	PIN, CONNECTOR (SMALL TYPE) 6P		△ T901	1-435-825-21	TRANSFORMER, POWER (DX10)	*****
		< SWITCH >					
S01	1-771-853-11	SWITCH, DETECTION (LIMIT SW)	*****		A-4726-921-A	TRANS BOARD, COMPLETE (DX10:AR, AUS)	*****
					A-4726-927-A	TRANS BOARD, COMPLETE (DX10:MX)	*****
	A-4726-513-A	SUB TRANS BOARD, COMPLETE (RG4SR/RG20:US, CND/RG30T)	*****		A-4726-924-A	TRANS BOARD, COMPLETE (DX10:MY, SP, TW, E2, E3, E51)	*****
	A-4726-772-A	SUB TRANS BOARD, COMPLETE (RG20:AEP, UK)	*****		A-4726-771-A	TRANS BOARD, COMPLETE (RG20:AEP, UK)	*****
	A-4726-922-A	SUB TRANS BOARD, COMPLETE (DX10:AUS)	*****		A-4726-512-A	TRANS BOARD, COMPLETE (RG20:US, CND/RG30T)	*****
	A-4726-925-A	SUB TRANS BOARD, COMPLETE (DX10:MY, SP, TW, E2, E3, E51)	*****		A-4726-782-A	TRANS BOARD, COMPLETE (RG4SR)	*****
	A-4726-928-A	SUB TRANS BOARD, COMPLETE (DX10:MX)	*****			< CAPACITOR >	
	A-4726-929-A	SUB TRANS BOARD, COMPLETE (DX10:AR)	*****	C911	1-128-553-11	ELECT 220uF 20% 63V	
		< CAPACITOR >		C912	1-126-964-11	ELECT 10uF 20% 50V	
△ C901	1-113-925-11	CERAMIC 0.01uF 20% 250V		C913	1-126-968-11	ELECT 100uF 20% 50V	
C902	1-126-936-11	ELECT 3300uF 20% 16V		C915	1-164-159-11	CERAMIC 0.1uF 50V	
C903	1-126-933-11	ELECT 100uF 20% 16V				< CONNECTOR >	
		< CONNECTOR >		CN915	1-564-528-11	PLUG, CONNECTOR 13P	
						< DIODE >	
CN2	1-568-106-11	PIN, CONNECTOR 4P (DX10:MY, SP, TW, E2, E3, E51)		D911	8-719-200-82	DIODE 11ES2-NTA1B	
* CN2	1-564-321-21	PIN, CONNECTOR 2P (DX10:MX, AR, AUS/RG4SR/RG20/RG30T)		D912	8-719-982-15	DIODE MTZJ-T-77-27B	
CN901	1-564-321-00	PIN, CONNECTOR 2P		D913	8-719-109-89	DIODE MTZJ-T-77-5.6B	
* CN903	1-564-705-11	PIN, CONNECTOR (SMALL TYPE) 3P				< FUSE >	
		< DIODE >		△ F914	1-532-506-31	FUSE 6.3A/250V (RG20:AEP, UK)	
D901	8-719-991-33	DIODE 1SS133T-77		△ F914	1-533-473-11	FUSE, GLASS TUBE (DIA. 5) 6.3A/250V (DX10)	
D902	8-719-200-82	DIODE 11ES2-NTA1B		△ F917	1-533-468-11	FUSE, GLASS TUBE 2A/250V (DIA. 5) (DX10:MY, SP, TW, E2, E3, E51, AUS/RG20:AEP, UK)	
D903	8-719-200-82	DIODE 11ES2-NTA1B		△ F917	1-533-468-11	FUSE, GLASS TUBE (DIA. 5) 2.5A/250V (DX10:MY, SP, TW, AR, E2, E3, E51)	
D904	8-719-200-82	DIODE 11ES2-NTA1B		△ F918	1-533-468-11	FUSE, GLASS TUBE 2A/250V (DIA. 5) (DX10:MY, SP, TW, E2, E3, E51, AUS/RG20:AEP, UK)	
D905	8-719-200-82	DIODE 11ES2-NTA1B					
		< IC >		△ F918	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) 2.5A/250V (DX10:MY, SP, TW, AR, E2, E3, E51)	
IC901	8-759-158-62	IC TA78057S		△ F919	1-533-452-11	FUSE, GLASS TUBE (DIA. 5) 4A/125V (RG20:US, CND)	
		< TRANSISTOR >		△ F919	1-533-453-11	FUSE, GLASS TUBE (DIA. 5) 5A/125V (RG30T)	
Q901	8-729-119-78	TRANSISTOR 2SC2785TP-HFE		△ F919	1-533-454-11	FUSE, GLASS TUBE (DIA. 5) 6.3A/125V (RG4SR)	
		< RESISTOR >		△ F919	1-533-471-11	FUSE, GLASS TUBE (DIA. 5) 4A/250V (DX10:MY, SP, TW, MX, E2, E3, E51)	
R902	1-249-429-11	CARBON 10K 5% 1/4W		△ F920	1-533-454-11	FUSE, GLASS TUBE (DIA. 5) 6.3A/125V (RG4SR)	
		< RELAY >					
△ RY901	1-755-276-11	RELAY, POWER					

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.

HCD-DX10/RG4SR/RG20/RG30T

TRANS

VIDEO OUT

Ref. No.	Part No.	Description	Remarks
< FUSE HOLDER >			
* FH901	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, MX, E2, E3, E51/RG4SR/RG20/RG30T)	
* FH902	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, MX, E2, E3, E51/RG4SR/RG20/RG30T)	
* FH903	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, E2, E3, E51)	
* FH904	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, E2, E3, E51)	
* FH905	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, AR, E2, E3, E51, AUS)	
* FH906	1-533-213-31	HOLDER, FUSE (DX10:MY, SP, TW, AR, E2, E3, E51, AUS)	
* FH907	1-533-213-31	HOLDER, FUSE (DX10/RG4SR)	
* FH908	1-533-213-31	HOLDER, FUSE (DX10/RG4SR)	
* FH909	1-533-213-31	HOLDER, FUSE (DX10/RG4SR)	
* FH910	1-533-213-31	HOLDER, FUSE (DX10/RG4SR)	
< 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	1-219-777-11	CARBON	3.3M 10% 1/2W (RG4SR/RG20:US, CND/RG30T)
R918	1-219-237-11	SOLID	3.3M 20% 1/2W (RG4SR/RG20:US, CND/RG30T)
△ R919	1-219-122-91	FUSIBLE	0.33 5% 1/4W
△ R920	1-219-122-91	FUSIBLE	0.33 5% 1/4W
< SWITCH >			
△ S901	1-786-055-11	SELECTOR, VOLTAGE (VOLTAGE SELECTOR) (DX10:MY, SP, TW, E2, E3, E51)	
*****			
A-4726-511-A		VIDEO OUT BOARD, COMPLETE *****	
< CAPACITOR >			
C642	1-162-294-31	CERAMIC	0.001uF 10% 50V
< CONNECTOR >			
CN605	1-564-505-11	PLUG, CONNECTOR 2P	
< JACK >			
JK602	1-774-227-11	JACK, PIN 1P (VIDEO OUT)	
*****			

Ref. No.	Part No.	Description	Remarks
MISCELLANEOUS *****			
9	1-791-897-11	WIRE (FLAT TYPE) (19 CORE)	
74	1-796-122-11	DECK, MECH	
75	1-823-058-11	WIRE (FLAT TYPE) (17 CORE)	
△ 103	1-791-901-21	CORD, POWER (DX10:MX, E2, E3)	
△ 103	1-690-608-11	CORD, POWER (DX10:AUS)	
△ 103	1-777-071-81	CORD, POWER (DX10:MY, SP, TW, E51/RG20:AEP, UK)	
△ 103	1-783-532-11	CORD, POWER (RG4SR/RG20:US, CND/RG30T)	
△ 103	1-783-941-22	CORD, POWER (DX10:AR)	
159	1-791-983-11	WIRE (FLAT TYPE) (8 CORE)	
166	1-471-035-11	MAGNET ASSY	
187	1-823-059-11	WIRE (FLAT TYPE) (16 CORE)	
△ 188	8-820-116-01	OPTICAL PICK-UP KSM-213DCP/Z-NP	
M721	1-541-632-11	MOTOR, DC (TURN)	
M961	1-763-072-11	FAN, DC (RG4SR/RG30T)	
△ T911	1-437-385-11	TRANSFORMER, POWER (RG20:US, CND)	
△ T911	1-437-386-11	TRANSFORMER, POWER (RG20:AEP, UK)	
△ T911	1-437-387-11	TRANSFORMER, POWER (DX10)	
△ T911	1-437-388-11	TRANSFORMER, POWER (RG4SR)	
***** HARDWARE LIST *****			
#1	7-685-872-09	SCREW +BVTT 3X8 (S)	
#2	7-685-871-01	SCREW +BVTT 3X6 (S)	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
#5	7-685-880-09	SCREW +BVTT 4X6 (S)	
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MEMO

## REVISION HISTORY

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