HCD-H50/H55/H1100

SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model
HCD-H50
AEP Model
HCD-H55
HCD-H1100
UK Model
HCD-H1100

HCD-H50, HCD-H55 and HCD-H1100 are the tuner, deck, CD and amplifier section in FH-B50CD, FH-B55CD and MHC-1100 respectively.

PHOTO: HCD-H55

COMPACT DISC DIGITAL AUDIO

SPECIFICATIONS

AUDIO POWER SPECIFICATIONS (US model)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6 ohm loads, both channels driven, from 60Hz–20 kHz; rated 16 watts per channel minimum RMS power, with no more than 1% total harmonic distortion from 250 milliwatts to rated output.

Tuner Section

System — FM stereo, FM/AM superheterodyne tuner

FM tuner section
Tuning range — 87.5–108MHz
Antenna — Telescopic antenna (HCD-H50/H55)
FM lead antenna (HCD-H1100)
Antenna terminals — 75 ohms unbalanced
Intermediate frequency — 10.7MHz

AM tuner section
Tuning range
For US, Canadian model
MW: 530–1,710kHz
For IT model
MW: 522–1,611kHz
LW: 144–288kHz
For AEP, UK, G and EE model
MW: 531–1,602kHz
LW: 153–279kHz
For E, EA and AUS model
MW: 531–1,602kHz
SW: 5.95–17.9MHz
Antenna — AM loop antenna, External antenna terminals
Intermediate frequency — 450kHz

CD Section	Model Name Using Similar Mechanism		HCD-H5
	CD Mechanism Name		CDM13A-5BD3
	Base Unit Name		BU-5BD3
DECK Section	Model Name Using Similar Mechanism		HCD-H5
	Tape Transport Mechanism Type	DECK A	TCM-180VA-N2
		DECK B	TCM-180VB-N2

Amplifier Section

Continuous RMS power output
20+20watts (6 ohms at 1kHz, 5% THD)
Peak music power output
(E, EA and AUS model)
240 watts (6 ohms)
Inputs — MIX MIC (minijack): sensitivity 1mV, impedance 600 ohms
For HCD-H55/H1100
PHONO (Phono jack): sensitivity 5 mV, impedance 47 kilohms

— continued on next page —

COMPACT DISC DECK RECEIVER

SONY®

使用時は添付資料も参照のこと
Refer to the additional documents

For HCD-H50

Outputs
- VIDEO/AUX (phono jack): sensitivity 400 mV, impedance 47 kilohms
- HEADPHONES (stereo minijack): accepts headphones of 8 ohms or more.
- SPEAKER: accepts speakers of 6 to 16 ohms.

Compact Disc Player Section

System: Compact disc digital audio system

Laser: Semiconductor laser (λ=780 nm) Emission duraion: Continuous

Laser output: Max. 44.6 μW* * This output is the value measured at distace of about 200 mm from the objective lens surface on the Optical Pick-up Block.

Signal to noise ratio: More than 95 dB

Dynamic range: More than 90 dB

Cassette Deck Section

Recording system: 4-track 2-channel stereo

Frequency response (DOLBY NR OFF)
- 60—13,000 Hz (±3 dB), using TYPE I cassette (Sony HF-S)
- 60—14,000 Hz (±3 dB), using TYPE II cassette

Wow and flutter: 0.1% WRMS ±0.3% (DIN)

General

Destination	Power requirements	Power consumption
US	120 V AC, 60 Hz	60 watts
Canadian	120 V AC, 60 Hz	80 watts
AEP	220—230 V AC, 50/60 Hz	60 watts
G, IT EE	220—230 V AC, 50 Hz	60 watts
E, EA, AUS	110—120 V or 220—240 V AC, adjustable, 50/60 Hz	60 watts
UK	240V AC, 50Hz	120watts

Dimensions: Approx. 615×285×255mm (w/h/d) ($24^1/_4 \times 11^1/_4 \times 10^1/_8$ inches) incl. projecting parts and controls

Weight: Approx. 12.2kg (26 lb 14 oz)

Accessories supplied
- AM loop antenna (1)
- Remote commander (1)
- Sony SUM-3 (NS) batteries (2)
- FM lead antenna (1) (HCD-H1100 only)

Design and specifications subject to change without notice.

Note: G : Germany, IT: Italian, EA : Saudi Arabia, AUS: Australian, EE : East European

For HCD-H55/H1100

CLASS 1 LASER PRODUCT
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT

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

TABLE OF CONTENTS

SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

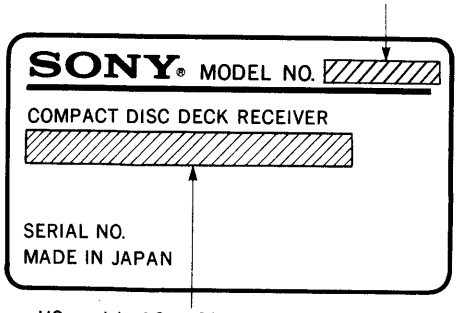
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1
SERVICING NOTES

MODEL IDENTIFICATION

— Specification Labels —

IT model: FH-B55CD
US, Canadian, E, EA, AUS model: HCD-H50
AEP, G, EE model: HCD-H55
AEP, UK model: HCD-H1100



US model: AC: 120V~60Hz 60W
Canadian model: AC: 120V~60Hz 80W
AEP model: AC: 220–230V~50/60Hz
G, IT model: AC: 220–230V~50Hz
EE model: AC: 220–230V~50Hz 60W
E, EA, AUS model: AC: 110–120/220–240V~50/60Hz 60W
UK model: AC: 240V~50Hz

On operating voltage

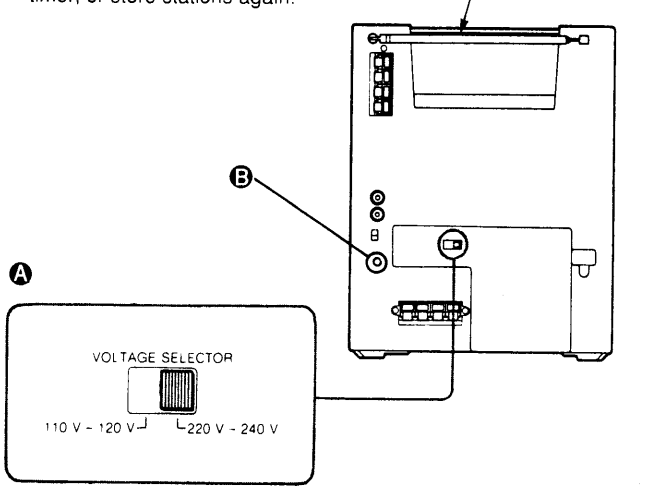
Before operating the stereo system, check that the operating voltage of your system is identical with the voltage of your local power supply. Ⓐ

US, Canadian model	120V AC, 60Hz
AEP model	220–230V AC, 50/60Hz
G, IT, EE model	220–230V AC, 50Hz
E, EA, AUS model	110–120, 220–240V AC adjustable, 50/60Hz
UK model	240V AC, 50Hz

On operation

- If the system do not operate due to power noise, press the system reset button at the rear. The system will resume operation. Ⓑ
  At this time, the system returns to the factory-set mode. Please set the clock, timer, or store stations again.

Telescopic antenna: Use on HCD-H50/H55.



SAFETY CHECK-OUT

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

LEAKAGE TEST

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

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

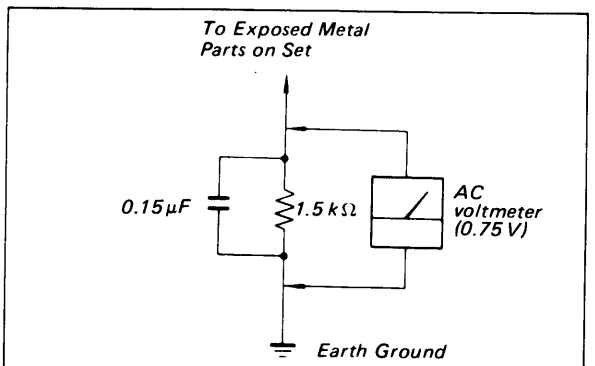
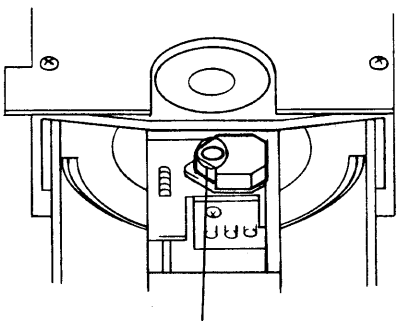


Fig. A. Using an AC voltmeter to check AC leakage.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the following operation is performed while observing the objecting lens.



❶ Confirm that laser beam is spread.
❷ Up and down motion of the objective lens. (3 times)

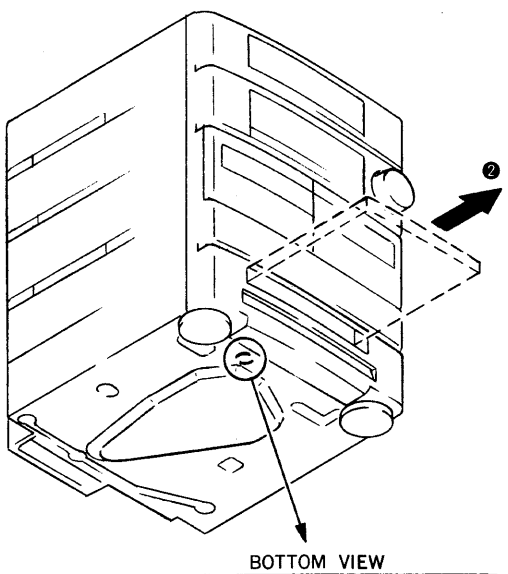
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

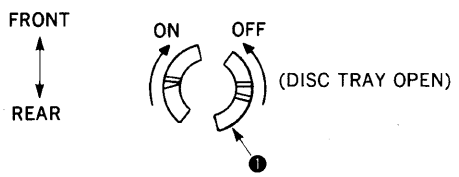
The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter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

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF





(1) Insert to ❶ for tapering driver, etc., and turn in the direction of arrow OFF. (Disc tray open)
(2) Tray as come out little of front panel, pull out in the direction of arrow ❷ by hand.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

CAUTION

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

1. Laser Diode Properties
   - Material: GaAlAs
   - Wavelength: 780 nm
   - Emission Duration: continuous
   - Laser Output Power: less than 44.6 μW*

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

2. During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optical Pick-up Block (including APC board).

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 25 cm fra den optiske pick-up.

1. Laser-didoe data
   - Materiale: GaAlAs
   - Bølgelængde: 780 nm
   - Udstråling: Kontinuerlig
   - Laseroutput: Max. 0,4 mW*

     * Målt i 1,6 mm afstand fra overfladen af objektiv-linsen pa den optiske pick-up enhed.

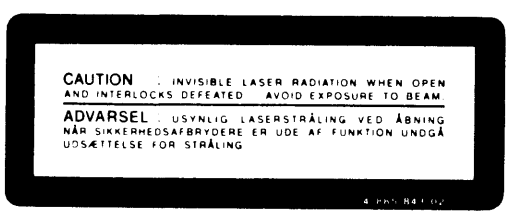
   - Klassifikation: Klasse IIIb.

2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laser-dioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning



VAROITUS: Laite sisältää, laserdiodin, joka lähettää (näkymätöntä) silmille vaarallista lasersateilyä.

2-1. PARTS IDENTIFICATIONS

Tuner Section A

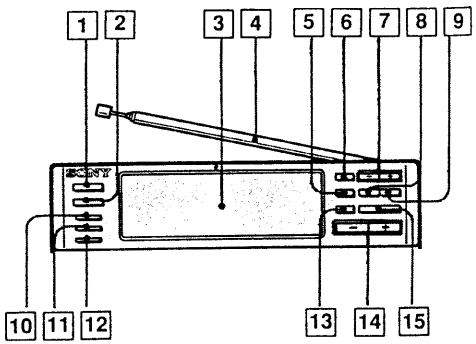
[1] TIMER CONTROL button ㊺
[2] SLEEP timer button ㊽
[3] Display window
[4] Telescopic antenna (HCD-H50/H55)
[5] AUTO tuning button ㉔
[6] BAND selector ㉔
[7] TUNING —/+ buttons ㉔
[8] MEMORY button ㉖
[9] ENTER button ㉖
[10] TIMER SET button ㊹
[11] CLOCK DISPLAY button ⑳
[12] CLOCK SET button ⑳
[13] NEXT button ⑳ ㊹
[14] PRESET/TIMER +/– (preset station scan/time set) buttons ⑳ ㉖ ㊹
[15] SHIFT (memory page select) button ㉖

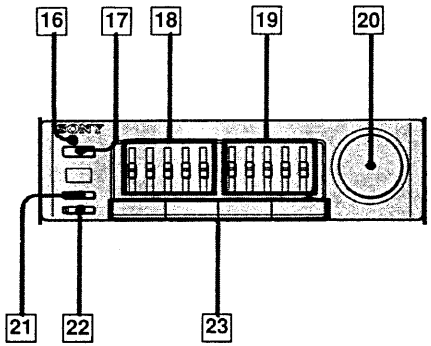
Amplifier Section B

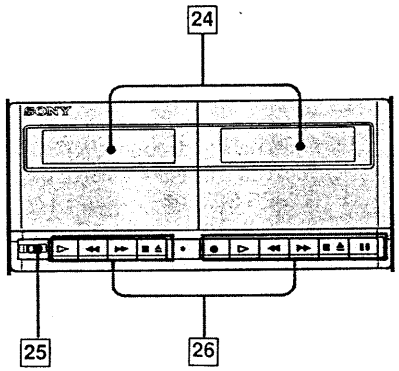
[16] STANDBY indicator
It is lit as long as the AC power cord is connected to a wall outlet.
[17] POWER switch
[18] 5-band graphic equalizer for left channel ㉒
[19] 5-band graphic equalizer for right channel ㉒
[20] VOLUME control ㉒
[21] DBFB (Dynamic Bass Feedback) button ㉒
[22] S-SUR effect button ㉒
[23] Function selectors ⑱ ㉔ ㉚ ㊷ ㊻

Cassette Deck Section C

[24] Cassette holders
[25] DOLBY NR (Dolby Noise Reduction) switch ㊷
[26] Tape operation buttons
▷ : PLAY (playback) button ㊷
◀◀ : REW (rewind) button ㊷
▶▶ : FF (fast forward) button ㊷
■ ≙ : STOP/EJECT button ㊷
● : REC (record) button and indicator ㊻
II : PAUSE button ㊻

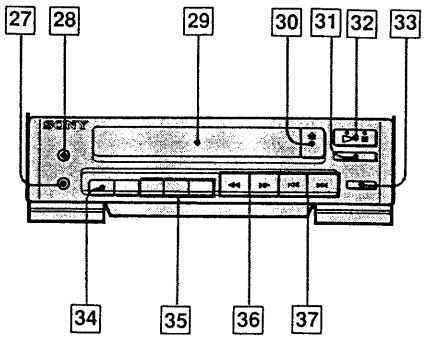






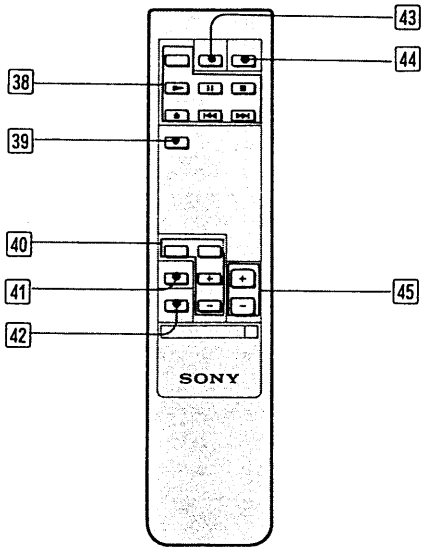
CD Player Section D

27 HEADPHONES jack (stereo minijack) 22
28 MIX MIC (microphone) jack (minijack) 60
29 Disc compartment
30 ⏏ OPEN/CLOSE button
31 ■ (stop) button
32 ▷II (play/pause) button and indicator
33 EDIT button 48
34 TIME display selector 40
35 PLAY MODE selectors
REPEAT play button 36
CONTINUE play button 36 38
SHUFFLE play button 36
PROGRAM play button 38
36 ◀◀ / ▶▶ (manual search) buttons 32
37 I◁◁ / ▷▷I (Automatic Music Sensor) buttons 32



Remote Commander E

38 CD player operation buttons
39 TAPE select button
40 Tuner operation buttons
41 PHONO select button
42 VIDEO/AUX select button
43 SLEEP timer button
44 POWER switch
45 VOL (volume) +/– control buttons



2-2. TUNER SECTION

Clock Setting

Setting the Clock

Exampl : Set to 9:25 in the morning.
When the AC power cord is connected, the display shows:
0 : 00 for AEP, G, IT and EE model
AM 0 : 00 for US, Canadian, E, EA and AUS model

1 **Pr ss CLOCK SET.**

2 **Set the hour with PRESET/TIMER +/– buttons**

3 **Press NEXT.**

4 **Set the minute with PRESET/TIMER +/– buttons.**

5 **Press NEXT.**
The clock starts operating.

Information on the time

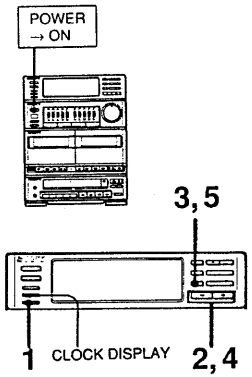
AEP, G, IT and EE model shows the time in 24-hour cycle.
US, Canadian, E, EA and AUS model shows the time in 12-hour cycle.

When a power interruption occurs

The power is backed up for approximately 1 day. If the power is recovered within 1 day, there is no need to reset the clock and timer. If it is longer than 1 day, both the clock and timer settings are erased, and "0:00" will flash on the display.

To check the present time while using the system

Press CLOCK DISPLAY.
The time display disappears after a few seconds.



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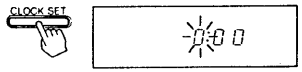

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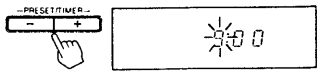

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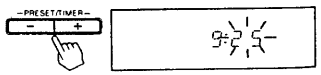

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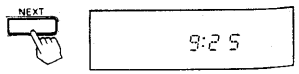


Radio

The automatic tuning allows you to receive stations whose signal is strong enough. When the signal is too weak, use the manual tuning.

Tuning in Automatically

1 **Press TUNER.**

2 **Press BAND repeatedly until the desired band appears.**
As you press BAND, the band changes as follows:
US, Canadian model:
FM → MW
AEP, G, IT and EE model:
FM → MW → LW
E, EA and AUS model:
FM → SW → MW

3 **Press AUTO.**
Make sure that AUTO appears in the display.

4 **Select the station with TUNING + or –.**

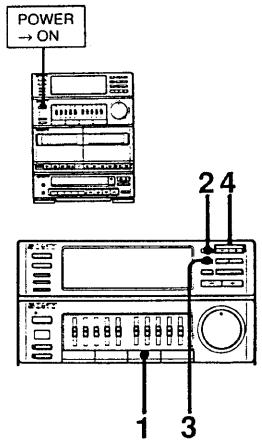
Tuning in Manually

1 **Press TUNER.**

2 **Select band by pressing BAND.**

3 **Press AUTO so that AUTO disappears from the display.**

4 **Select station with TUNING + or –.**



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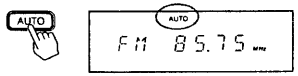

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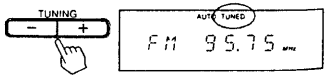


A total of 30 stations can be stored in any desired sequence, so that you can tune in the stored station directly by entering the memory page and number.

Storing Stations

1 **Tune in the desired station.**

2 **Press MEMORY.**
MEMORY appears for several second.

3 **While MEMORY is on, press SHIFT to select the memory page (A, B or C).**
The memory pages (A, B or C) can be classified according to the music category, station band, etc.

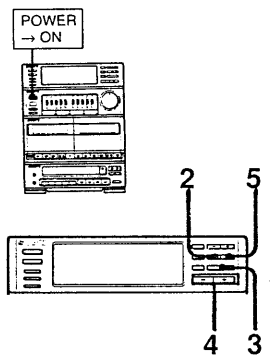
4 **While MEMORY is on, press PRESET/TIMER + or – to select the number (1 to 10).**

5 **Press ENTER.**
MEMORY disappears, and the station is stored.

6 **Repeat 1 to 5 for each stations to be stored.**

If you cannot store a station successfully
Press MEMORY again so that **MEMORY** appears, and then select the desired page and number.
Be sure to operate while MEMORY is on (approx. 4 seconds).

When you have selected the wrong page and number
Press MEMORY and then select the correct one.



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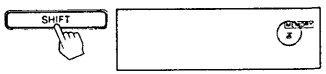

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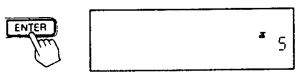


To Tune in a Preset Station

1 **Press SHIFT to select memory page.**

2 **Press PRESET/TIMER + or – to select the desired number.**

Indicator on the display

TUNED: Appears when a station of sufficient signal strength is tuned in.
STEREO: Appears when an FM stereo program of sufficient signal strength is received.

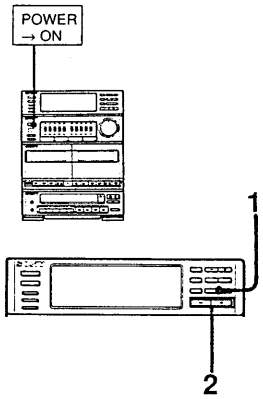
Antenna adjustment A

For FM reception, adjust the length and direction of the telescopic antenna.
(HCD-H50/H55)
For MW, LW, and SW reception, find the best location of the AM loop antenna.

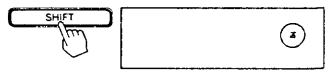
Can a previously stored station be erased?
No. Erasing only is not possible, but storing a new station erases the previous one.

Important

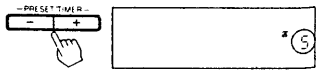
The stored stations remain for approximately 1 week even if no power is supplied (e.g. the power cord is disconnected, etc.). If they are erased, store the stations again.



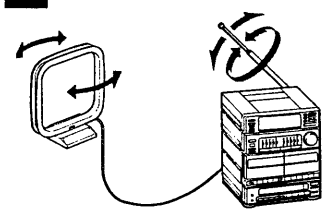
1



2



A



2-3. AMPLIFIER SECTION

Audio Adjustment

Volume Adjustment

Turn VOLUME **A** clockwise to increase the sound level, or counterclockwise to decrease it.

Sound Quality Adjustment

To reinforce bass

Press DBFB. **B**
The lower the sound level is, the more the bass is emphasized.

To adjust sound quality to your preference

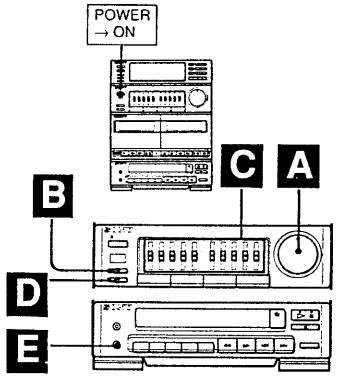
Adjust the graphic equalizer controls for the right and left speaker outputs individually.
C

100 Hz: Boost or cut heavy bass.
400 Hz: Adjust the power, spaciousness and warmth of the sound.
1 kHz: Increase the presence of vocals.
4 kHz: Enhance the brightness of sound, or reduce stridency.
12 kHz: Highlight the fine details of instrumental sound.

To activate surround effect for st reo sound

Press S-SUR (simulated surround) **D** during a stereo sound reproduction. This creates the atmosphere of a movie theater or concert hall.
This function is not effective for a monaural sound.

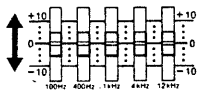
For personal listening
Connect headphones to HEADPHONES **E**
No sound comes from the speakers.



A

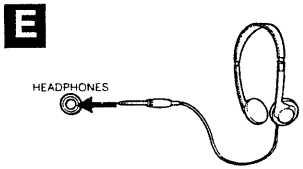
B

C



D

E



2-4. CD SECTION

Disc Playing

Playing the Entire Disc

1 Press CD.

2 Press ⏏ OPEN/CLOSE to open the tray.

3 Place the disc with the printed side up.

4 Press ▷II.
The tray closes and play starts.
The display shows **A** the track number, **B** elapsed playing time of the track and **C** track numbers.

Caution on adjusting volume
Do not turn up the volume while listening to the portion with very low level inputs or no audio signals. If you do, the speakers may be damaged when a peak level portion is played.

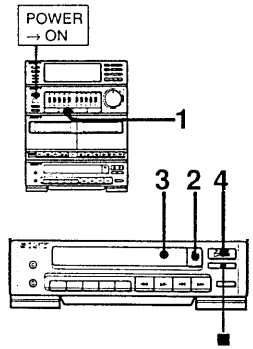
To stop play
Press ■.

To stop for a moment during play
Press ▷II.
To resume play, press it again.

To stop play and open the tray
Press ⏏ OPEN/CLOSE.

To play a 8 cm (3-inch) CD
Place it on the inner circle of the tray. If the disc is provided with an adaptor, first remove it. Do not put a normal CD (12 cm/ 5-inch) on top of an 8 cm (3-inch) CD.

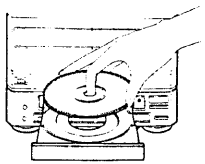
When the TUNER function is selected
The CD player section does not operate. This prevents interference to radio reception.



1

2

3



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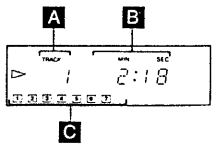


Locating a Particular Selection — Automatic Music Sensor (AMS)

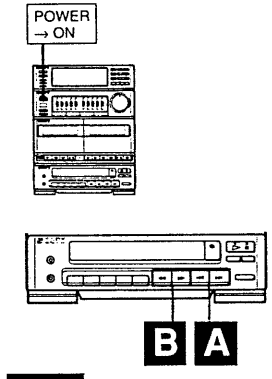
The AMS locates the beginning of a selection.
This function works during play or pause.

To locate the beginning of the current or preceding selection A-1

Press ⏮ as many times as required.
Keep ⏮ pressed to skip selection.

To locate the beginning of a succeeding selection A-2

Press ⏭ as many times as required.
Keep ⏭ pressed to skip selection.



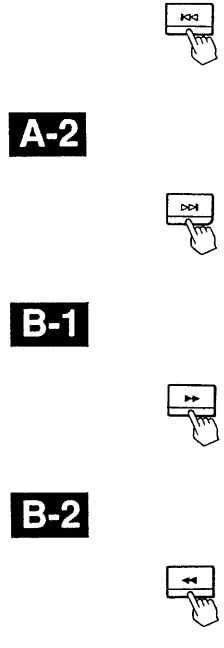
Locating a Particular Point in a Selection

You can locate any particular point in the disc during play.

To search while monitoring the sound

To move forward at high speed B-1
Keep ▶▶ pressed during play and release at the desired point.

To move backward at high speed B-2
Keep ◀◀ pressed during play and release at the desired point.



To search quickly

1 Press ⏯ to set the unit in pause mode.

2 Keep ◀◀ or ▶▶ pressed.
The search speed increases, but there is no sound. Find the desired point by observing the display.
Press ⏯ again at the desired point.

Information display

To change the time display, press TIME during play.
As you press TIME, the display changes to give you the following information.

- **A** Elapsed playing time
- **B** Remaining time in a selection. If the current selection number is over 20, "----" is displayed.
- **C** Remaining time of the disc

When TIME is pressed with a disc in the tray D

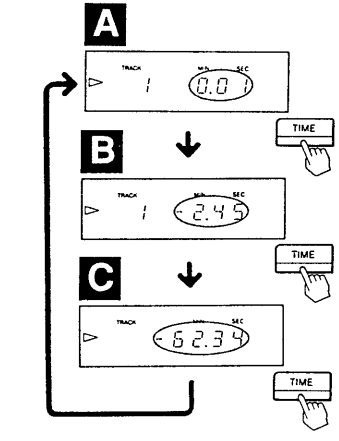
The followings appear for approx. 5 seconds.

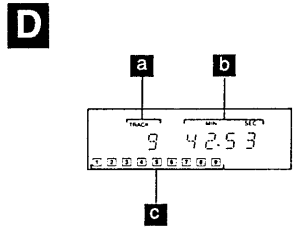
- **a** Last track number
- **b** Total play time of the disc
- **c** Track numbers

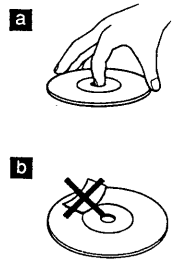
For the discs containing 17 selections or more, up to 17 appear and the rest does not appear.

Notes on handling discs E

- To keep the disc clean, handle the disc by its edge. Do not touch the surface. **a**
- Do not stick paper or tape on the disc. **b**
- Do not expose the disc to direct sunlight or heat sources such as hot air duct, nor leave it in a car parked in direct sunlight as there can be a considerable rise in the temperature.
- After playing, store the disc in its case.







Playing in a Random Order — Shuffle Play

Shuffle play function plays all the selections in a random order.

1 **Press ≜ OPEN/CLOSE to open the tray.**

2 **Place the disc.**

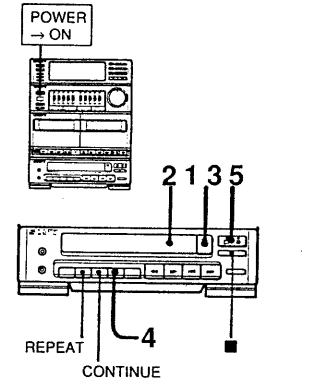
3 **Press ≜ OPEN/CLOSE to close the tray.**

4 **Press SHUFFLE.**
SHUFFLE appears.

5 **Press ▷II.**

To stop playing
Press ■.

To cancel shuffle play
Press CONTINUE.
SHUFFLE disappears, and play continues in the normal play mode.



Playing Repeatedly — Repeat Play

To repeat all selections A

Press REPEAT once during play so that REPEAT appears.

To repeat single section B

Press REPEAT twice while playing the desired section so that REPEAT 1 appears.

To cancel repeat play C

Press REPEAT so that neither REPEAT nor REPEAT 1 is on.

Playing in a Desired Order — Program Play

You can make a program for up to 24 selections in the order you want them to be played.

1 **Insert the disc.**

2 **Press PROGRAM.**
PGM appears in the display.

3 **Press ⏮ or ⏭ to display the desired selection.**

4 **Press PROGRAM.**

5 **Repeat steps 3 and 4 for the desired selections.**

- **A** Last programmed selection
- **B** Total playing time of selections
- **C** Programmed selection numbers

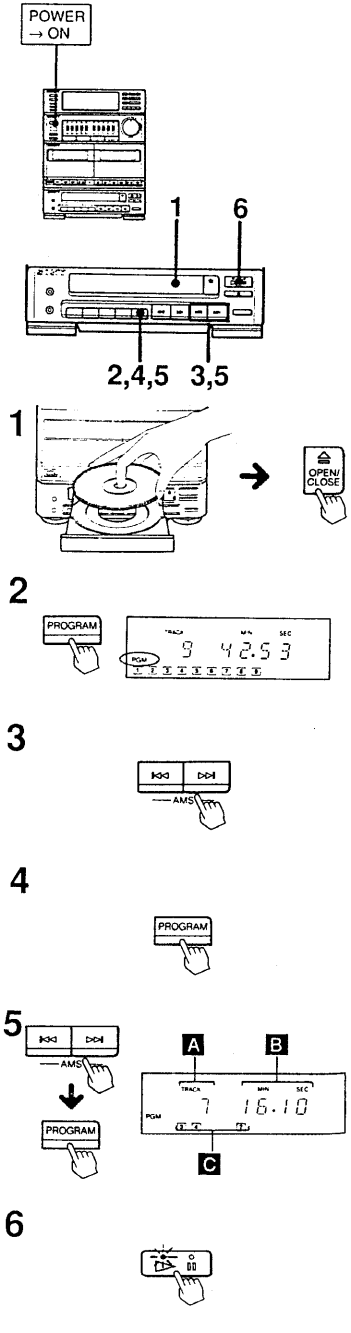
6 **Press ▷II.**

To stop playing
Press ■.
To restart the same program play, press ▷II.

To resume normal play
Press CONTINUE.
The program is erased and the play continues in the normal play mode.

If "----" is displayed instead of the actual time

- You have programmed a selection number over 20.
- The total time has exceeded 100 minutes.



To check your program

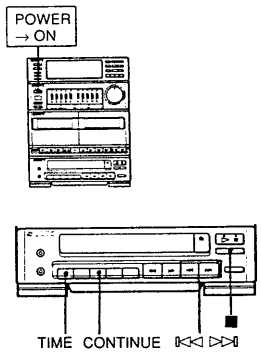
1 Press ▷II to enter the pause mode.
2 Press ▷▷I.
As you press ▷▷I, the track numbers appear in the order in which they are programmed.
When you finished checking, press ■ once. (Be sure that you press ■ only once. If you press it twice, the program will be erased.)

To add a selection to the end of the program

Follow the same procedures as "Playing in a Desired Order" while the unit is in the stop mode.
You cannot add selections during play.

To erase the entire program

Press ■ once during stop; twice during play. The program is also erased when you press ⏏ to open the tray or turn off the system.



To check the remaining time
Press TIME once to see the remaining time of the selection being played; twice to see the total remaining time of the programmed selections; once more to return to the initial display.

Tape Playback

Playback Operation

1 Press TAPE.
TAPE appears in the display.

2 Insert the tape.

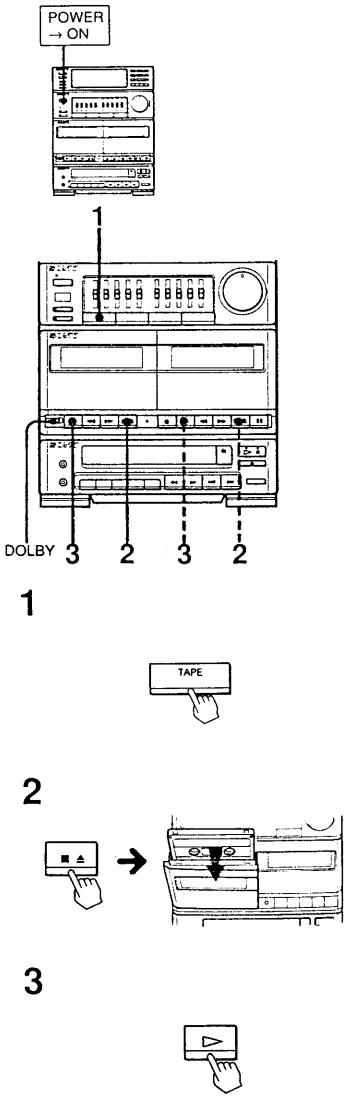
3 Depress ▷.

To stop playback
Press ■ ⏏.

When listening to the cassette recorded with Dolby noise reduction system*
Set DOLBY NR to ON.

What is the Dolby NR system?
Dolby NR (noise reduction) system reduces tape hiss noise in low-level high-frequency signals. The system boosts these signals in recording and lowers them in playback.

* Dolby noise reduction manufactured under license from Dolby Laboratories Licensing Corporation.
"DOLBY" and double-D symbol ⧈ are trademarks of Dolby Laboratories Licensing Corporation.



Playing from the Deck A to B in Succession – Relay Play

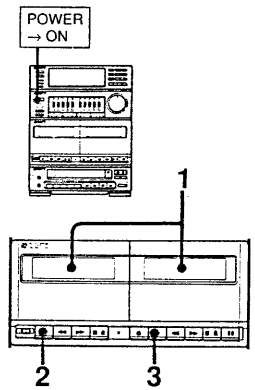
When the front side of the tape in deck A has been played back, the front side of the tape in deck B start playback automatically.

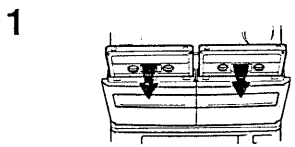
1 **Insert recorded cassettes in both decks.**

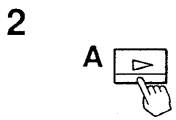
2 **Depress ▷ on deck A.**

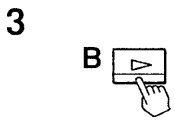
3 **Depress ▷ on deck B.**

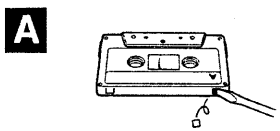
To stop relay play
Press ■ ≙ of the deck playing.

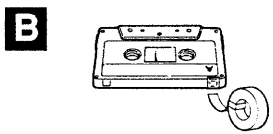


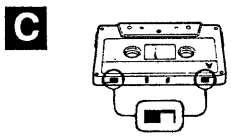












Notes on Cassettes

To protect recording A

Break out the tab on the left shoulder of the cassette side of which recording is to be protected.

To re-record the cassette B

Cover each slot with plastic tape.

When using a TYPE II ($Cr O_2$) cassette, be careful not to cover the detector slots which are necessary for automatic tape type detection. C

Recording (Deck B)

Recording Operation

Use only TYPE I (normal) or TYPE II ($Cr O_2$) tapes for recording.

1 **Insert the tape.**

2 **Select program source with the function selectors and play it.**
The display shows the selected program source.

3 **Set DOLBY NR.**
To use the Dolby NR system, set DOLBY NR to ON.
Otherwise, set it to OFF.

4 **Depress ●.**
▷ is depressed at the same time.
Recording starts.

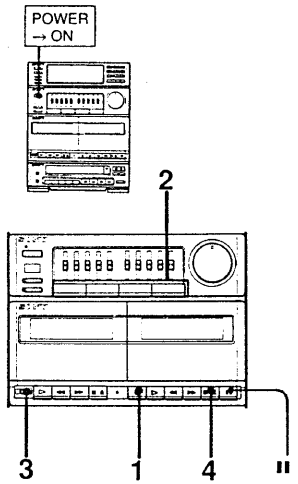
To stop recording
Press ■ ≙.

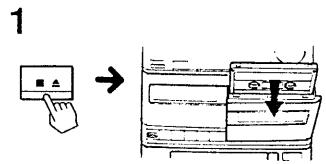
Notes
- Graphic equalizer controls are not effective for recording.
- The recording level is fixed and cannot be adjusted manually.

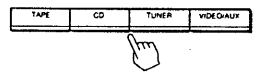
How to start recording precisely

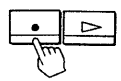
1 Depress **II** after step 3 in "Recording Operation" above.
2 Depress ●.
▷ is depressed at the same time.
3 Press **II** again at the desired point.

If whistling noise is heard during recording MW and LW recording (HCD-H55/H1100)
Slide the ISS (Interference Suppress Switch) at the rear to the position depending on which best reduces the noise.









Editing the CD for Recording

The CD player automatically edits the selections on a CD according to the tape length.

1 Insert the tape in deck B and the disc in the CD player.

2 Set DOLBY NR.
To use the Dolby NR system, set DOLBY NR to ON. Otherwise, set it to OFF.

3 Press CD of the function selector.

4 Press EDIT.
Make sure that EDIT and ---- appear in the display.

5 Designate the tape length of one side using ▶▶ and ◀◀, or ▷▷| and |◁◁ .
As you press ▶▶ or ◀◀, the minute display changes as follows:
23 ↔ 27 ↔ 30 ↔ 37 ↔ 45 ↔ --

As you press ▷▷| or |◁◁, the seconds increase or decrease by 10. After 50, the seconds show 00 and the minutes increase by 1.

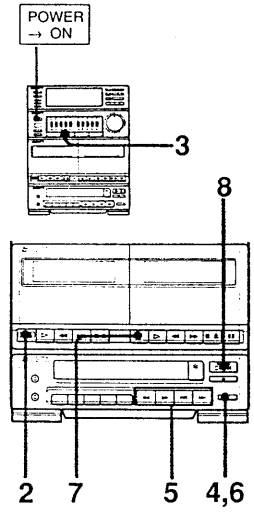
6 Press EDIT.
The selections to be recorded are determined automatically. For details, see page 50.
Then the display shows **A** the last selection to be recorded, **B** total playing time, and **C** selections to be recorded.

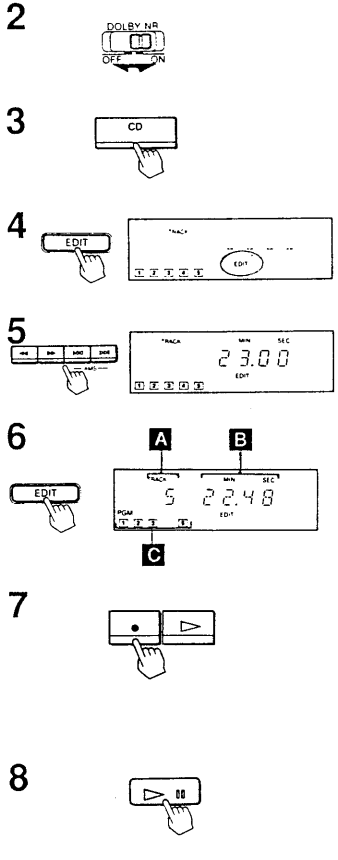
7 Depress .
▷ is depressed at the same time.

8 Press ▷II on the CD player.
The recording starts.

Note

- Up to 20th selection in the disc can be recorded. 21st selection cannot be recorded.
- In step 5, designate the total playing time shorter than the tape length.





To record on both sides

After step 6, press EDIT again for the reverse side, and then proceed with the remaining steps.
The CD player enters the pause mode after recording on the front side.
During pause, take out the cassette and reverse it. Then set the cassette deck in the recording mode and restart the CD playback.

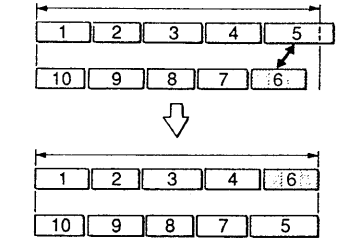
To record desired selections on the front side

Before pressing EDIT, program the desired selection. (See page 38.)

How the CD player determines the selections A

The CD player selects the selections from the first one in the CD, summing up each playing time. When the total playing time exceeds the specified tape length, the last selection is eliminated. Then, the CD player looks for a selection whose length is within the remaining tape and substitutes it for the eliminated one.

A



Tape Dubbing (from deck A to B)

Editing the Tape

1 Press TAPE of the function selector.

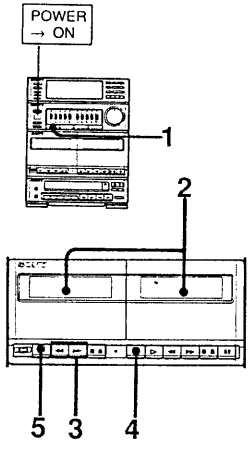
2 Insert the recorded tape in deck A and the blank tape in deck B.

3 Locate the beginning of the portion to be dubbed on deck A, using ◀◀ or ▶▶ and then stop the tape.
When dubbing the whole side of the tape, skip this step.

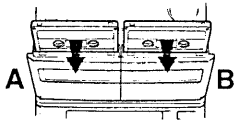
4 Depress .
▷ is depressed at the same time.

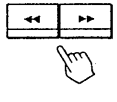
5 Press ▷ of deck A.
Dubbing of the desired portion starts.

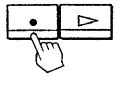
To stop dubbing
Press ■ ≙ on both decks.



1


2


3


4


5


Is it necessary to set DOLBY NR?
Yes. Set DOLBY NR according to the playback tape.

Is it possible to listen to program sources other than tape during dubbing?
No. The source changes to that of the function selector pressed and the tape playback cannot be dubbed.

Timer-activated Operation

The power can be turned on and off automatically so that you can wake up to music, etc.
Recording or tape playback cannot be activated by the timer.

The preset timer-on and -off time remain until you reset them or the power cord is disconnected.

Before setting the timer

• Make sure the clock is set correctly.

Timer Setting

The illustrations show an example that the system turns on at 9:30 and off at 10:15.

1 **Press TIMER SET.**
TIMER ON appears and a figure indicating hour blinks.

2 **Set the hour and minute of the timer-on time with PRESET/TIMER + or –, and NEXT.**
TIMER OFF appears and a figure indicating hour blinks.

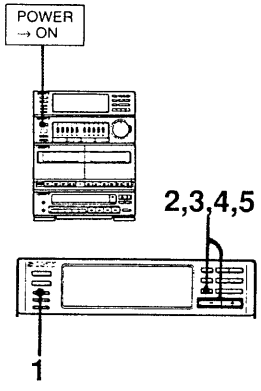
3 **Set the hour and minute of the timer-off time with PRESET/TIMER + or –, and NEXT.**
The program source blinks.

4 **Select the program source with PRESET/TIMER + or –.**
As you press + or –, the source changes:
TUNER ↔ CD

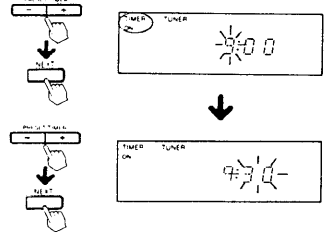
5 **Press NEXT.**

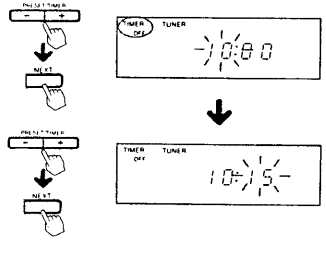
6 **Prepare for the source: selecting a preset station inserting the disc.**

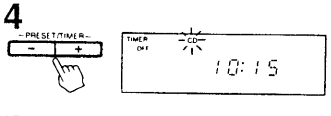
7 **Press POWER to turn off the system.**
Make sure that TIMER is on.
At the timer-on time, the system turns on automatically.

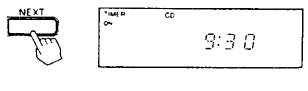


1


2


3


4


5


To change the time and program

1 Press TIMER SET.
The timer-on hour blinks.

2 Press NEXT until the item to be changed blinks.

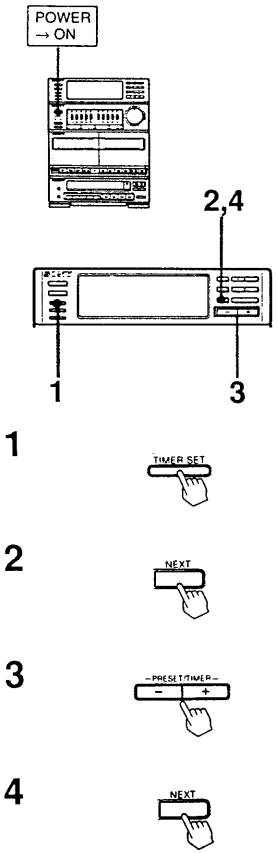
3 Press PRESET/TIMER + or – until the desired time or source appears.

4 Press NEXT until TIMER ON time appears.
The display, then shows TIMER OFF time, and returns to the previous display.

When you do not want to operate the timer program

Press TIMER CONTROL to turn off TIMER. To reactivate the timer, press TIMER CONTROL to display TIMER.

When the power is already on at the preset time
The function mode will be automatically changed to the preset one, even if you are playing a program of another function.



Sleep Timer Operation

By setting the sleep timer, the system power can be turned off after the preset duration.

Sleep Timer Setting

1 Play the desired program source.

2 Press SLEEP to select the desired duration in minute.
As you press SLEEP, the indication changes as follows:
90 → 80 → ... 10 →

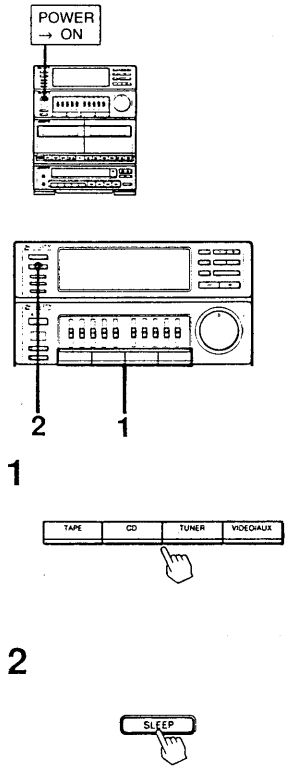
Note
For tape playback, be sure to select the duration longer than the tape length.

To turn off the system before the time of the sleep timer comes

Press POWER.

To check the remaining time of the sleep timer

Press SLEEP once, and the remaining time appears.
The display returns to the previous indication in several seconds.



Microphone Mixing

Mixing Operation

1 **Connect the microphone to MIX MIC jack.**

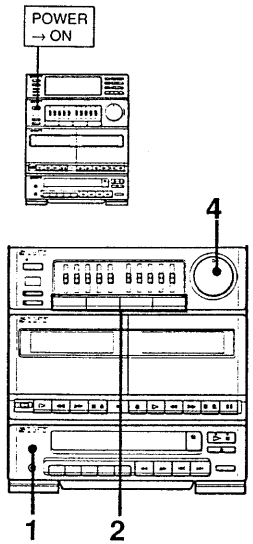
2 **Select program source with the function buttons and play it.**

3 **Sing or speak into the microphone.**

4 **Adjust the total volume.**

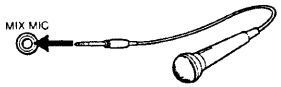
When the mixing is over

Be sure to disconnect the microphone.



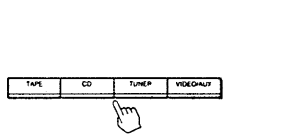
Recording the Sound Mixed with a Source

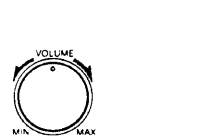
1 Mix the sound as described above.
2 Insert a tape in deck B.
3 Set deck B to the record mode.



Recording from a Microphone Only

1 Press CD.
2 Press ■ of the CD player.
3 Insert a tape in deck B.
4 Depress .
▷ is depressed at the same time.
Recording starts.
5 Speak or sing into the microphone.



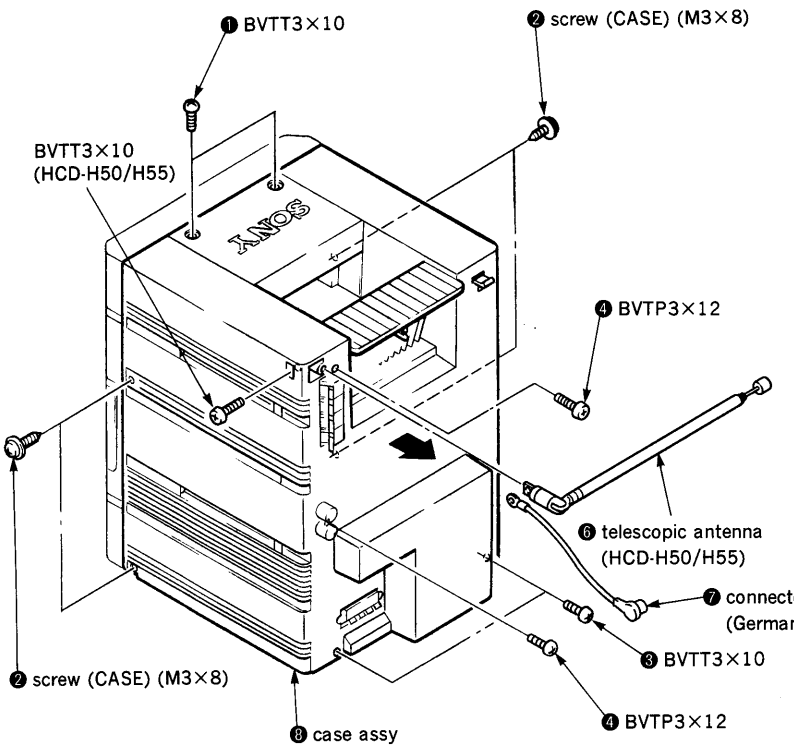


To stop howling (acoustic feedback)
Placing the microphone too close to the speakers may cause howling. Move the microphone away from the speakers or change the direction it faces.

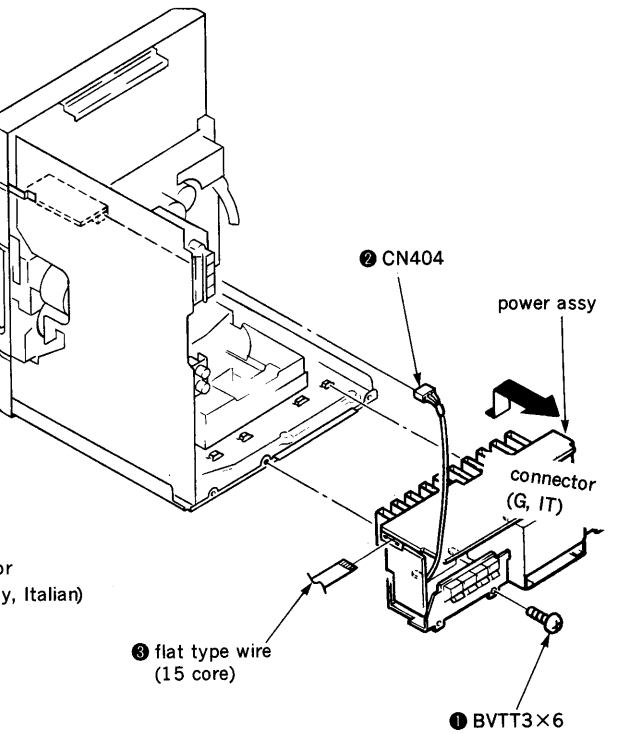
SECTION 3
DISASSEMBLY

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

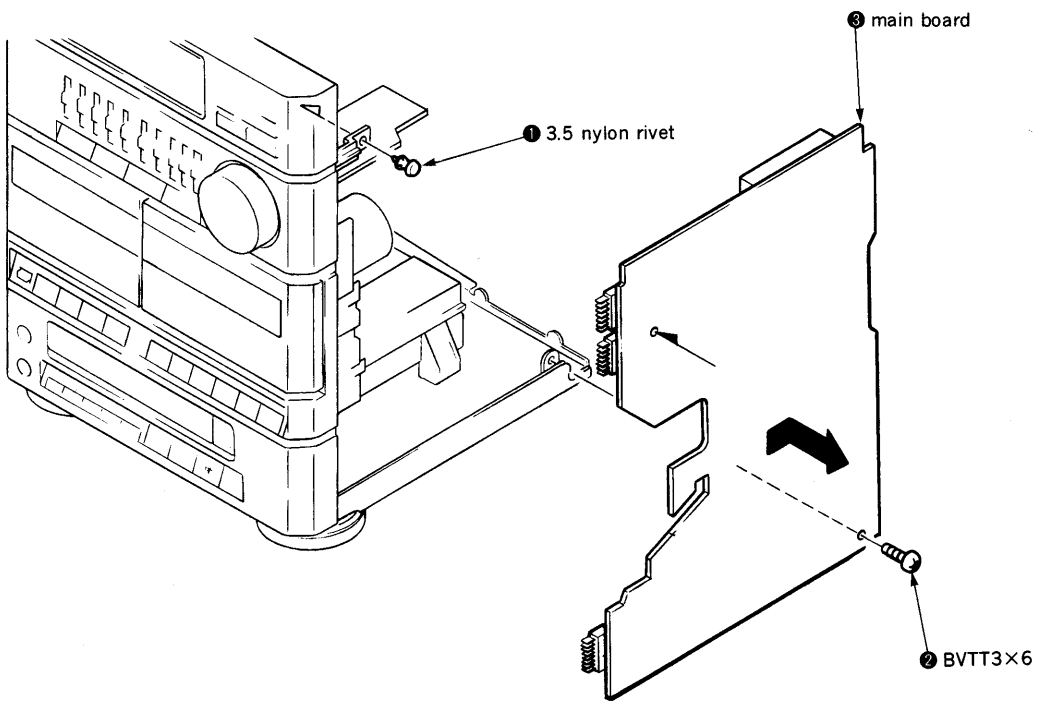
3-1. CASE ASSY



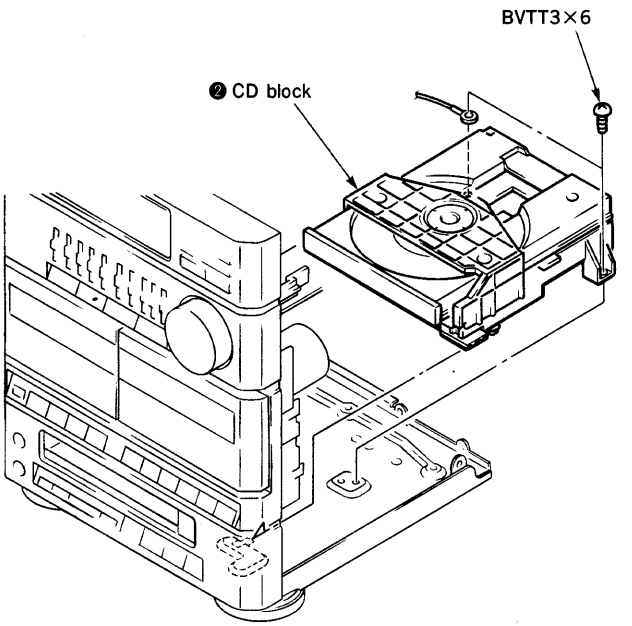
3-2. POWER ASSY



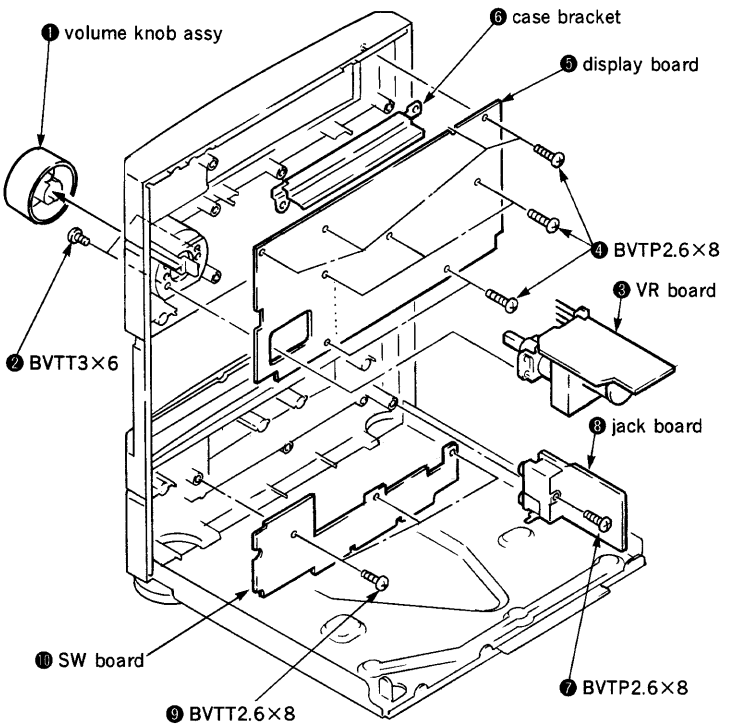
3-3. MAIN BOARD



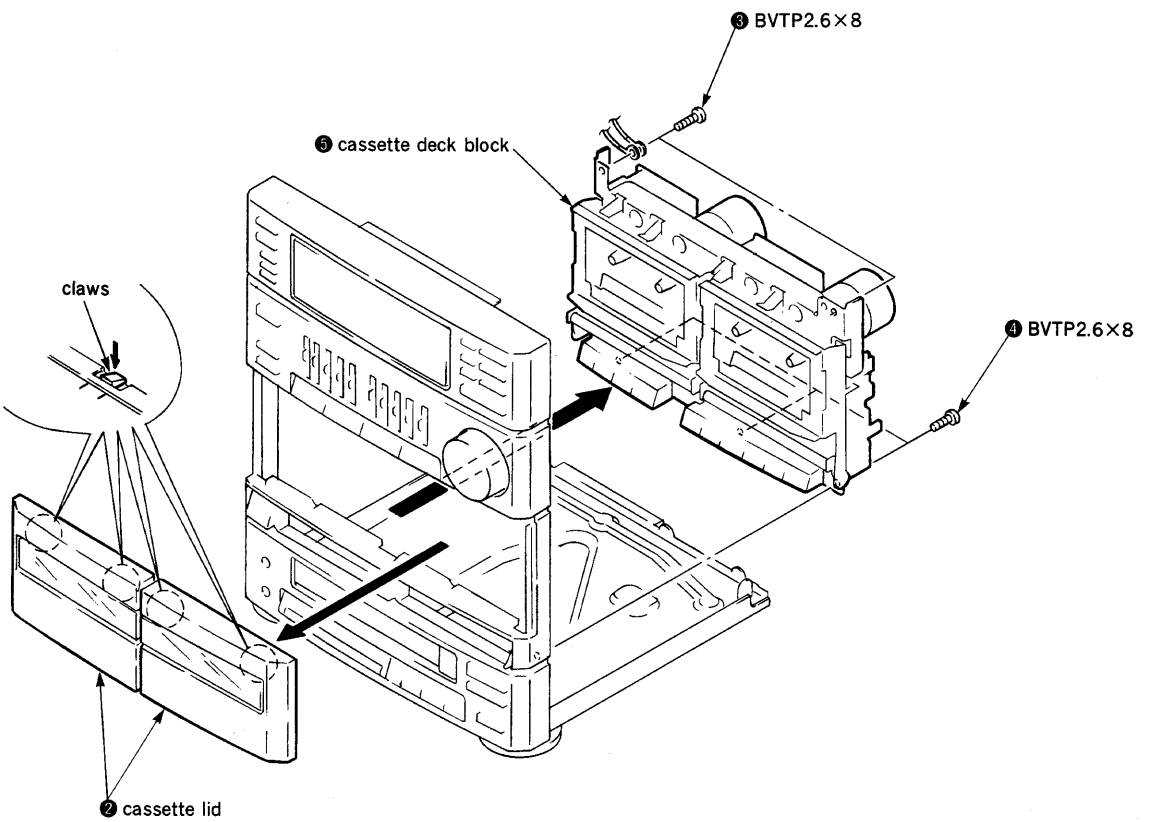
3-4. CD BLOCK



3-6. VR, DISPLAY, JACK, SW BOARDS



3-5. CASSETTE DECK BLOCK



SECTION 4
MECHANICAL ADJUSTMENTS

PRECAUTION

1. Clean the following parts with a denatured alcohol-moistened swab:
   record/playback head — pinch roller
   erase head — rubber belt
   capstan — idler
2. Demagnetize the record/playback head with a head demagnetizer.
   (Head demagnetizer do not approach for the erase head.)
3. Do not use a magnetized screwdriver for the adjustment.
4. After the adjustments, apply suitable locking compound to the parts adjusted.
5. The adjustment should be performed with the rated power supply voltage unless otherwise noted.

• Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	35 to 60g•cm (0.49 to 0.83oz•inch)
Forward back tension	CQ-102C	25 to 4.5g•cm (0.035 to 0.062oz•inch)
Forward, Reverse	CQ-102B	75 to 150g•cm (1.04 to 2.08oz•inch)

G: Germany, IT: Italian, EE: East European
EA: Saudi Arabia, AUS: Australian

SECTION 5
ELECTRICAL ADJUSTMENTS

DECK SECTION

1. The adjustment should be performed in the publication. (Be sure to make playback adjustment at first.)
2. The adjustment and measurement should be performed for both L-CH and R-CH.
   • Switch position
   DOLBY NR switch: OFF

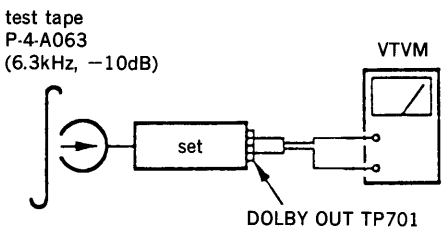
• Test Tape

Tape	Contents	Use
P-4-A063	6.3kHz, −10dB	Head Azimuth Adjustment
WS-48A	3kHz, 0dB	Tape Speed Adjustment

Record/Playback Head Azimuth Adjustment

Procedure:

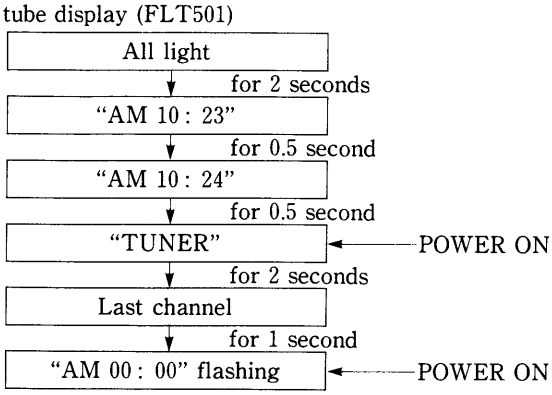
1. Mode: playback



Timer Test Mode

When BAND, SHIFT and PRESET/TIMER+buttons are pressed at the same time the following time test operation is performed. After the operation, it becomes in the system reset mode. Take care that the frequency preset to the tuner is initialized.

1) POWER OFF
2) Timer set
   Clock — AM10: 23
   Timer ON — AM10: 24
   Timer OFF — AM10: 31
   Function — TUNER
3) FL tube display (FLT501)



4) Finish

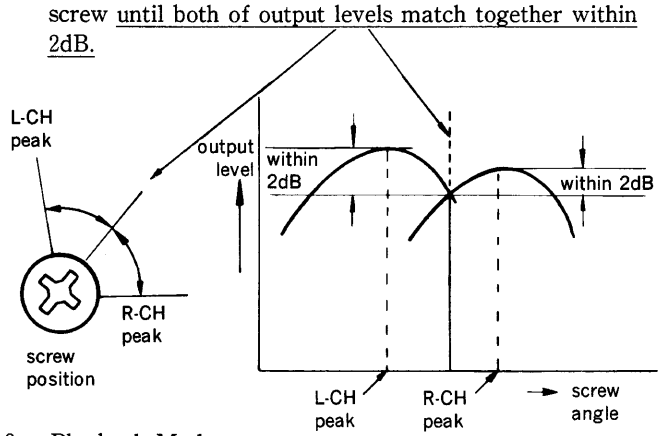
• Preset Frequency in Restting

When pressing the system reset button (S701) of the rear side of the unit, the following frequency is preset to the tuner part. When the system reset is performed in repairing, be sure to return to the frequency set by the user.

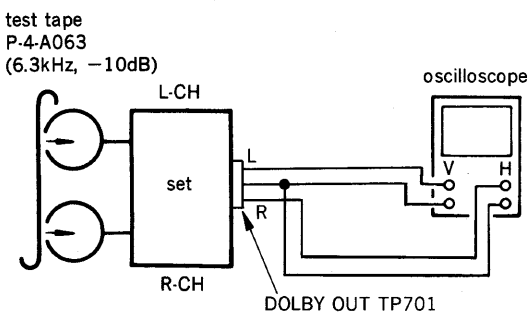
FM		US, Canadian model MW tuning interval: 10k (9k) AM		AEP, UK, G, EE model ( ): IT model MW		LW	
A1	87.5MHz	A6	530(531)kHz	A6	531(522)kHz	B1	153(144)kHz
A2	88.0MHz	A7	620(621)kHz	A7	603kHz	B2	162kHz
A3	98.0MHz	A8	1050(1053)kHz	A8	999kHz	B3	216kHz
A4	106.0MHz	A9	1490(1485)kHz	A9	1404kHz	B4	270kHz
A5	108.0MHz	A10	1710kHz	A10	1602(1611)kHz	B5	279(288)kHz

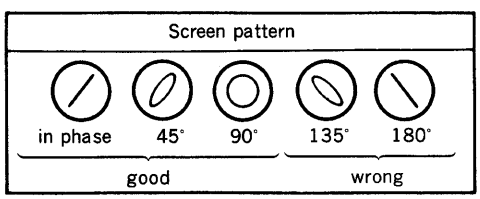
FM		E, EA, AUS model MW tuning interval: 9k (10k) MW		SW	
A1	87.5MHz	A6	531(530)kHz	B1	5.95MHz
A2	88.0MHz	A7	603(620)kHz	B2	7.00MHz
A3	98.0MHz	A8	999(1050)kHz	B3	12.00MHz
A4	106.0MHz	A9	1404(1490)kHz	B4	17.00MHz
A5	108.0MHz	A10	1602(1710)kHz	B5	17.90MHz

2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2dB.



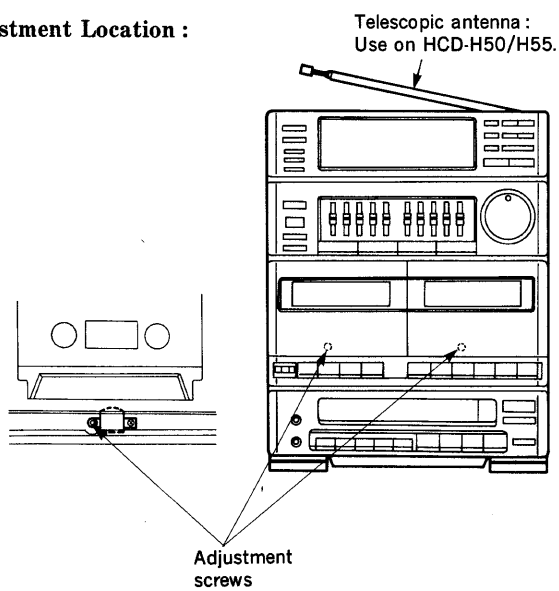
3. Playback Mode





4. Change the review playback mode and repeat the steps 1 to 3.
5. After the adjustment, lock the adjustment screw with suitable locking compound.

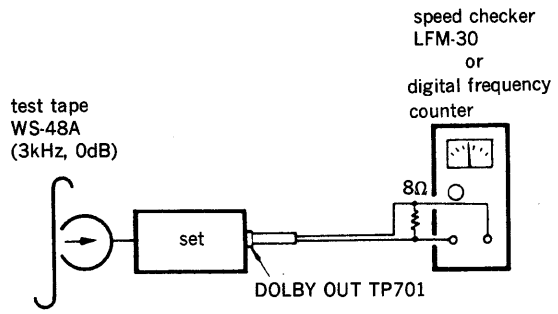
Adjustment Location :



Tape Speed Adjustment

Procedure :

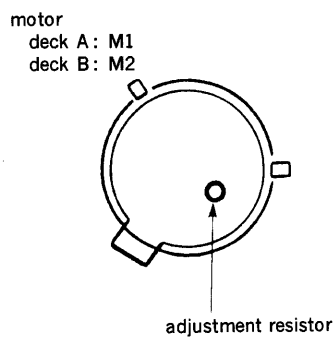
Mode : playback



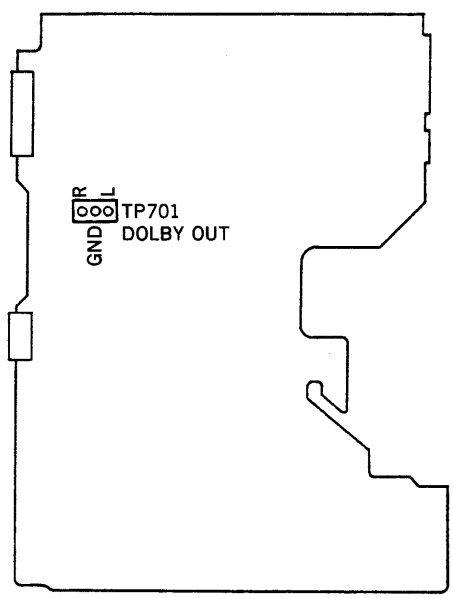
Speed checker	Digital frequency counter
±0.67%	2,980 to 3,020Hz

Frequency difference between the begining and the end of the tape should be within 1% (30Hz).

Adjustment Location :



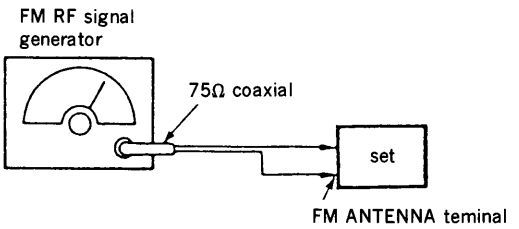
main board —component side—



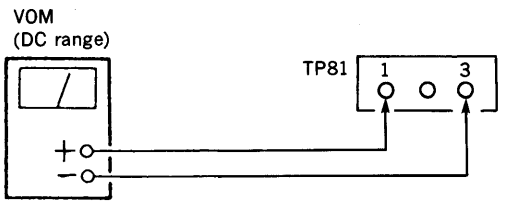
TUNER SECTION

FM SECTION ADJUSTMENTS

Setting :



Carrier frequency : 98MHz
Modulation : 1kHz, 75kHz deviation (US, Canadian, E, EA, AUS)
1kHz, 40kHz deviation (AEP, UK, G, IT, EE)



FM Discriminator Alignment (NULL Check)

Band : FM

Procedure :

1. Supply a 1mV (60dBμ) 98MHz signal from the ANTENNA terminal.
2. Tune the to 98MHz.
3. Adjust IFT82 for 0V reading on the VOM.

Note : FM tuned indication lighting level adjustment should be made after FM discriminator alignment.

FM Tuned Indication Lighting Level Adjustment

Band : FM

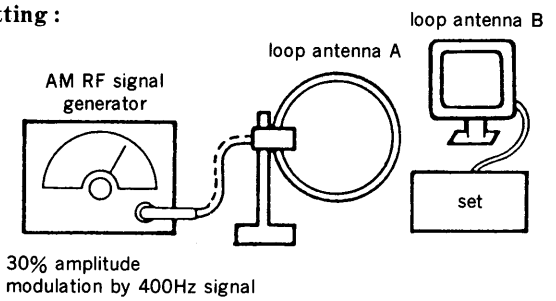
Procedure :

1. Supply a 32μV (30dBμ) 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98MHz.
3. Adjust RV81 so that the TUNED light up.

Adjustment Location : main board

AM SECTION ADJUSTMENTS

Setting :



MW (AM) Tuned Indication Lighting Level Adjustment

Band : MW or AM

Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 0.45mV (53dBμ).
2. Tune the set to 1,490kHz (US, Canadian) or 1,404kHz (AEP, UK, G, IT, EE, E, EA, AUS).
3. Adjust the RV82 so that the TUNED light up.

SW OSC Voltage Adjustment (E, EA, AUS model)

Band : SW

Procedure :

1. Connect the VOM to TP (OSC).
2. Tune the set to 5.95MHz.
3. Adjust T2 for 0.9 to 1.1V reading on the VOM.
4. Tune the set to 17.90MHz.
5. Adjust CT22 for 8.3 to 8.7V reading on the VOM.

SW Tracking Adjustment (E, EA, AUS model)

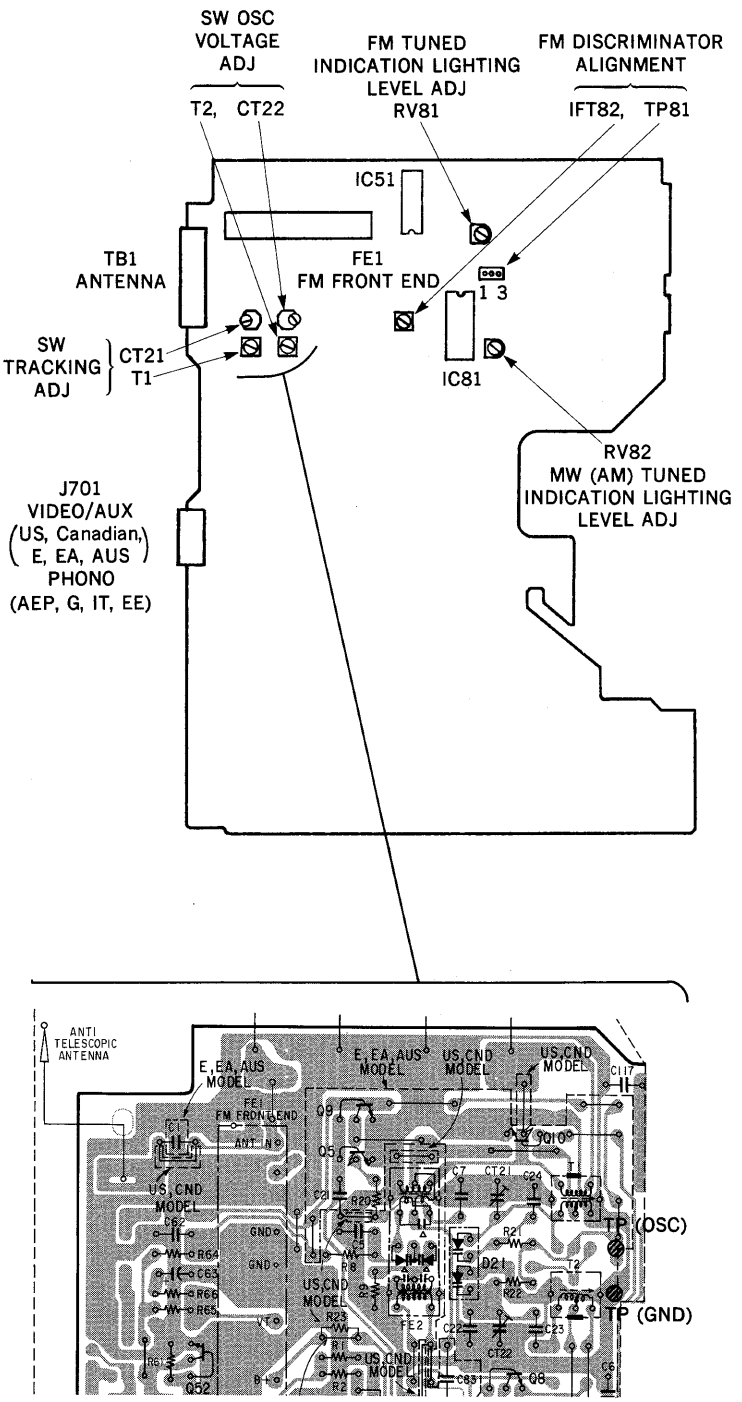
Band : SW

Procedure :

1. Connect the VOM to speaker terminal.
2. Adjust for a maximum reading on VTVM.

Signal generator and set frequency	Adjustment part
7.0MHz	T1
17.0MHz	CT21

Adjustment Location : main board —component side—

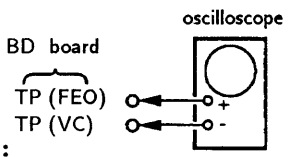


CD SECTION

Note :

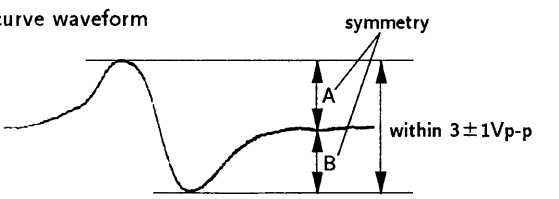
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal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

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within 3±1Vp-p.

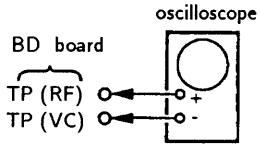


5. After check, remove the lead wire connected in step 2.

Note : • Try to mesure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.

• Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

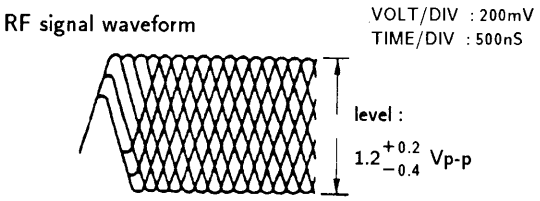


Procedure :

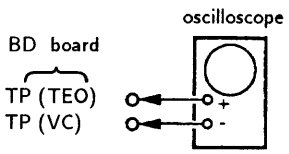
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

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

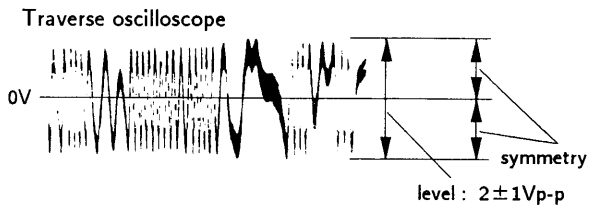


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the osilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

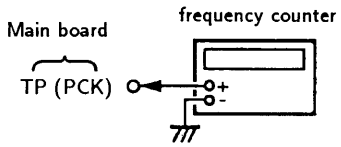


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PCK) with lead wire.



2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4. 3218MHz.

Focus/Tracking Gain

This gain has a margin, so even if it is slightly off. There is no problem.

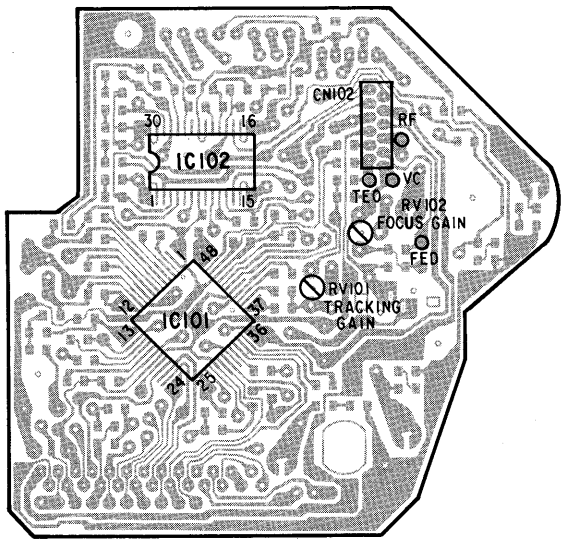
Therefore, do not perform, this adjustment.

Please note that it should be fixed to mechanical center position when you moved and do not know original position.

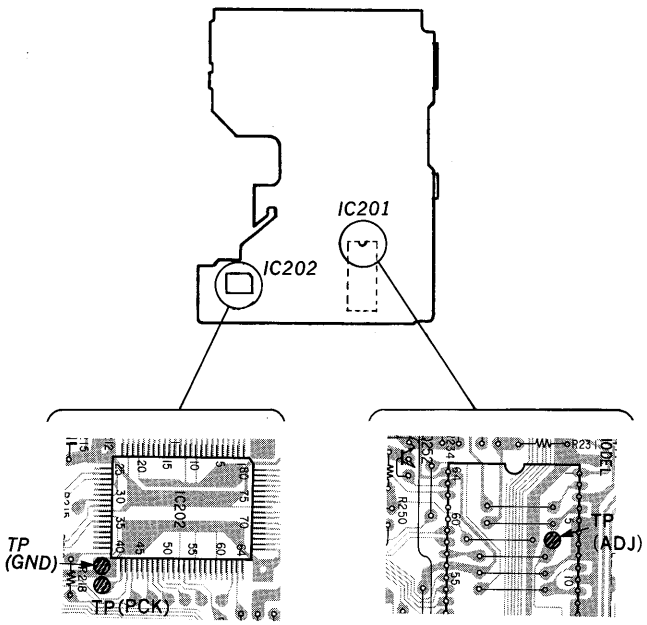
SECTION 6
DIAGRAMS

Adjustment Locations:

BD board — conductor side —

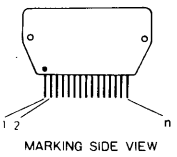


main board — component side —



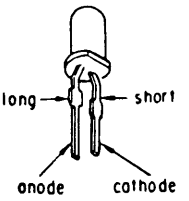
6-1. SEMICONDUCTOR LEAD LAYOUTS

STK-4122MK2



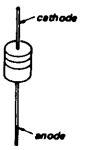
2SK246-GR3
2SK246-Y

SEL1210RM-LC05-CD
SEL1910DM-LC05-CD
SLR-34UW5

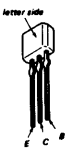


DTA114ES
DTA144ES
DTC114ES
DTC144ES
2SC2603-EF
2SC2724-CD
2SC3622A-LK

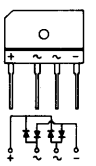
HZS6C2L
HZS7B3L
HZS7C2L
HZS9A2L
UZ-4.7BSC
UZL-24L
1SS120
11ES2



DTC114TS
2SA1175-HFE

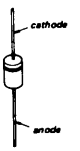


RBA-402



2SB1370-EF
2SD1761-EF

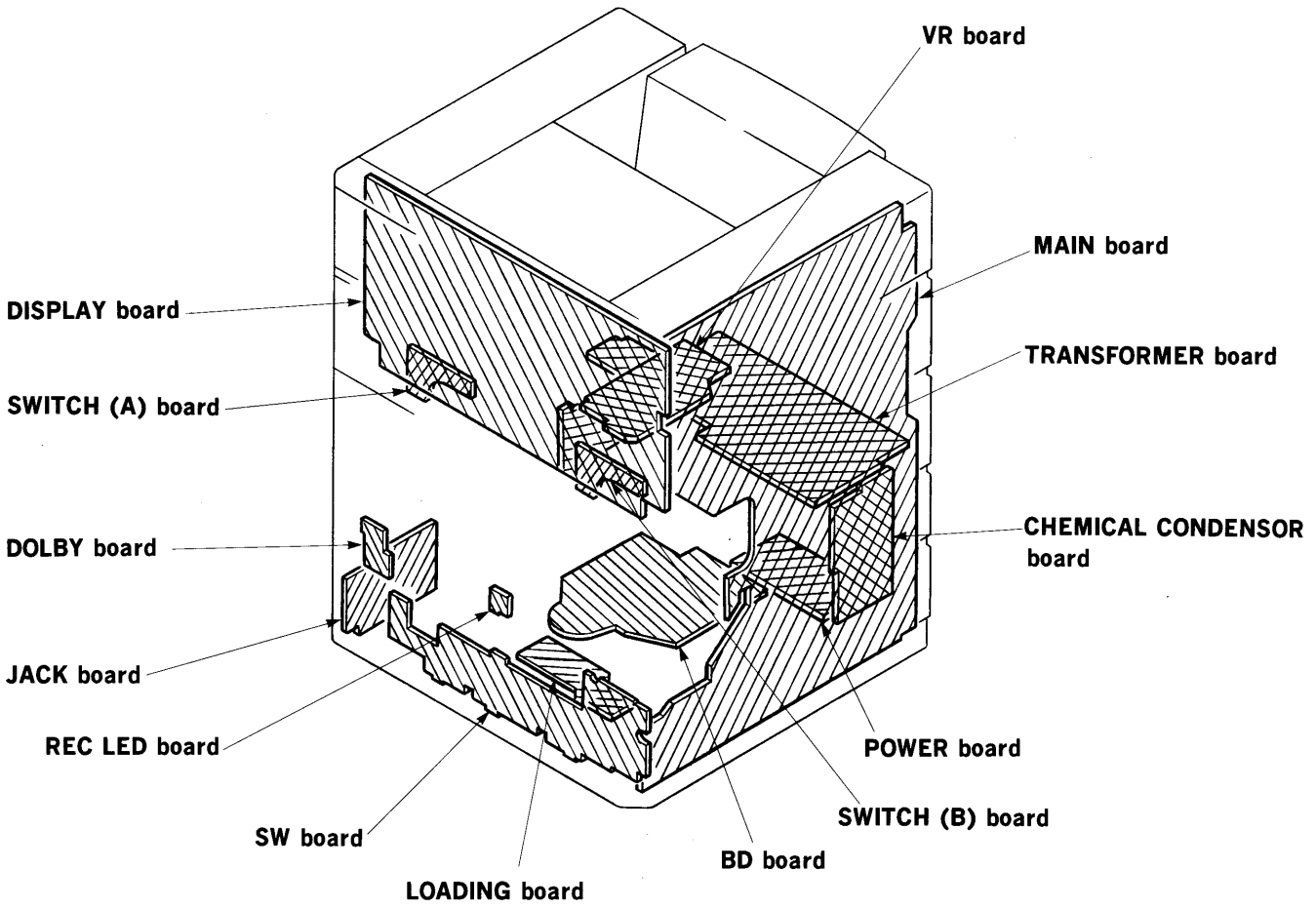
UZP-5.1BC



2SC3112-B
2SD1387
2SD1616A-K

GL-1EG112-CD
GL-1HY112-CD

6-2. CIRCUIT BOARDS LOCATION



HCD-H50/H55/H1100 HCD-H50/H55/H1100

Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D21(※1)	C-6	Q1(※3)	D-9	Q790	D-13
D201	F-16	Q2(※4)	E-9	Q791	D-14
D205	D-15	Q3(※2)	E-6	Q999	H-15
D206	H-19	Q3(※3)	E-10		
D207	H-20	Q4(※2)	E-6		
D208	I-21	Q4(※3)	E-10		
D209	I-21	Q5(※1)	B-5		
D210	J-21	Q5(※3)	B-9		
D211	J-23	Q6(※1)	E-6		
D300	I-6	Q6(※3)	E-10		
D601	C-16	Q7(※1)	D-6		
D701	D-13	Q7(※3)	D-10		
D721	C-18	Q8(※1)	D-6		
D735	H-11	Q8(※3)	D-10		
D736	G-15	Q9(※1)	B-5		
D737	G-15	Q9(※3)	B-9		
D738	G-15	Q10(※1)	B-6		
D739	G-15	Q51(※2)	D-4		
D785	E-13	Q51(※3)	D-8		
D786	E-13	Q52(※2)	D-4		
D787	E-13	Q52(※3)	D-8		
D788	D-14	Q53(※3)	D-7		
D789	D-13	Q54(※3)	D-7		
D790	C-14	Q101	I-8		
D791	D-13	Q101(BD)	F-21		
D792	D-13	Q102	H-8		
D793	F-13	Q103	G-10		
		Q201	E-15		
IC51(※2)	E-4	Q231	F-17		
IC51(※3)	E-8	Q232	E-17		
IC81	F-10	Q233	F-16		
IC101(BD)	E-21	Q234	F-17		
IC102(BD)	D-21	Q252	E-15		
IC201	D-17	Q253	E-16		
IC202	I-17	Q601	F-13		
IC221	G-17	Q603	C-16		
IC222	F-18	Q651	F-13		
IC223	F-17	Q721	B-17		
IC253	F-15	Q722	B-16		
IC601	C-15	Q723	B-18		
IC602	E-13	Q731	F-12		
IC621(※3)	C-12	Q732	E-12		
IC661	C-17	Q735	H-11		
IC701	E-12	Q736	H-11		
IC702	D-12	Q738	H-10		
IC703	E-12	Q739	G-15		
IC704	C-13	Q740	G-15		
IC705	F-12	Q781	F-12		
IC706	I-10	Q785	D-14		
IC785	D-13	Q786	E-14		
IC999	H-6	Q787	E-14		
Q1(※2)	D-5	Q789	D-13		

Note:

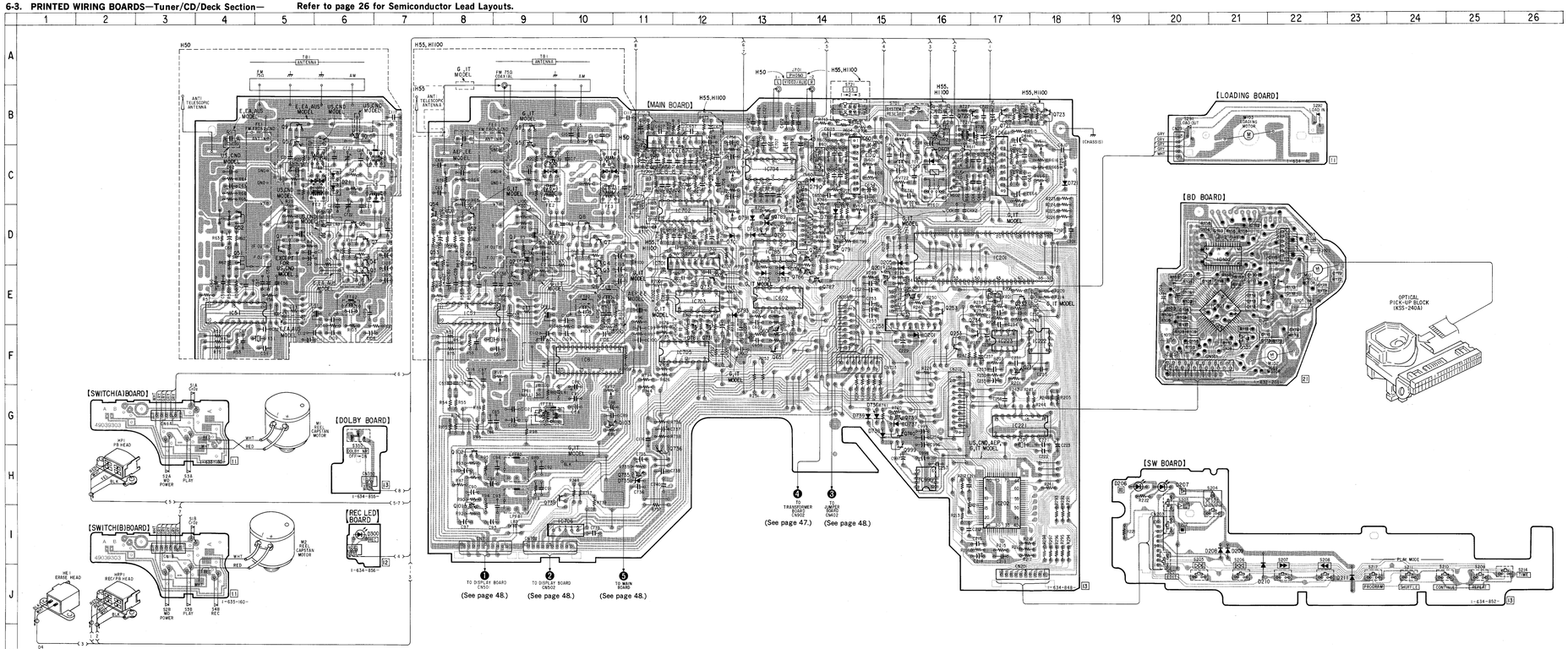
- ○—— : parts extracted from the component side.
- ●—— : parts extracted from the conductor side.
- ⊢ : indicates side identified with part number.
- : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

- ●CND : Canadian model
- G : Germany model
- IT : Italian model
- EE : East European model
- EA : Saudi Arabia model
- AUS : Australian model

※1 : Used on E, EA and AUS model.
※2 : Used on HCD-H50.
※3 : Used on HCD-H55/H1100.
BD : Used on BD board.
※4 : Used on G and IT model.

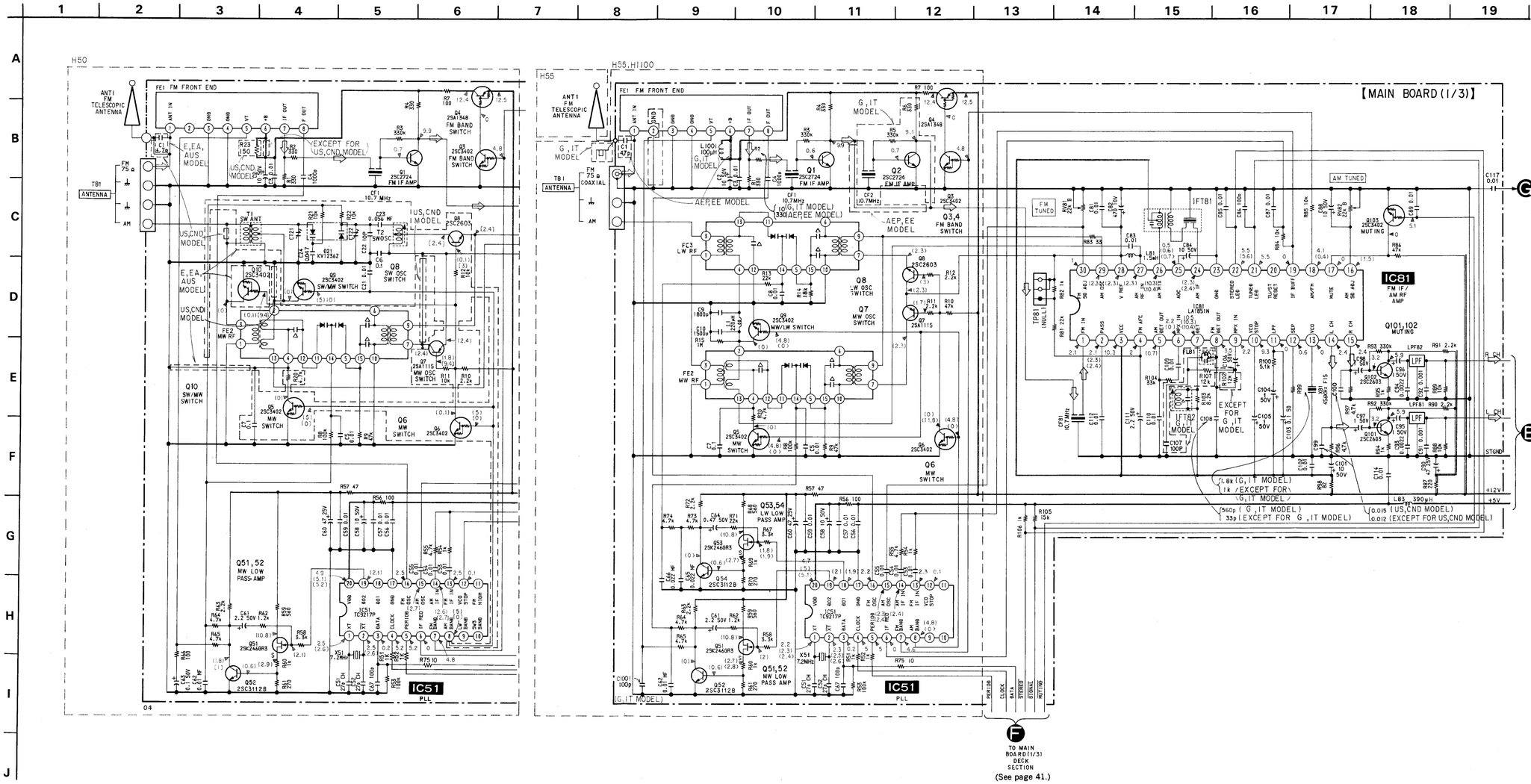
6-3. PRINTED WIRING BOARDS—Tuner/CD/Deck Section—

Refer to page 26 for Semiconductor Lead Layouts.



6-4. SCHEMATIC DIAGRAM—Tuner Section—

Refer to page 49 for IC Block Diagrams.
Refer to page 52 for FE1 FM Front End.

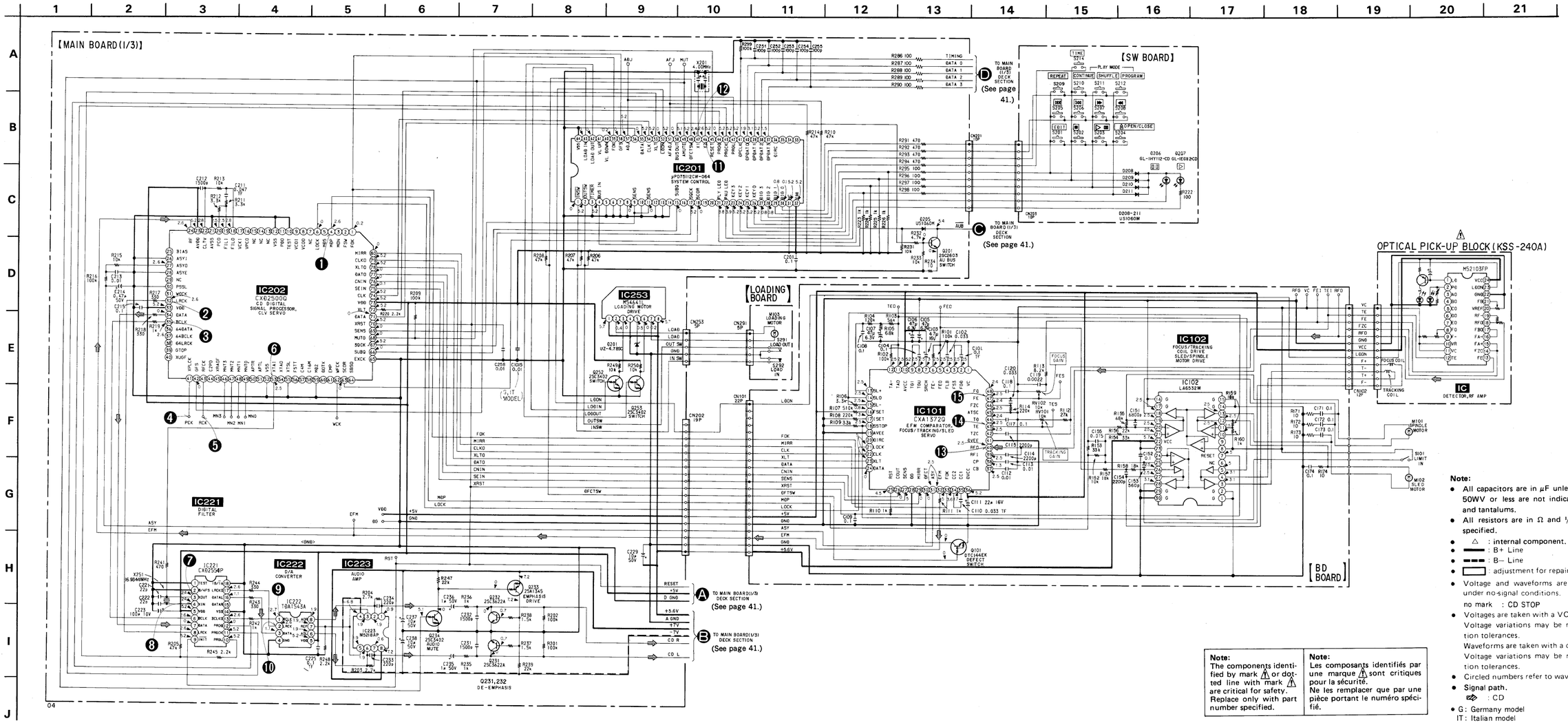


Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantaliums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ▬▬ : B+ Line
- ▬▬ : B− Line
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : LW
  [ ] : SW
- Voltages are taken with a VOM (input impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : FM
- CND : Canadian model
  G : Germany model
  IT : Italian model
  EE : East European model
  EA : Saudi Arabia model
  AUS : Australian model

HCD-H50/H55/H1100 HCD-H50/H55/H1100

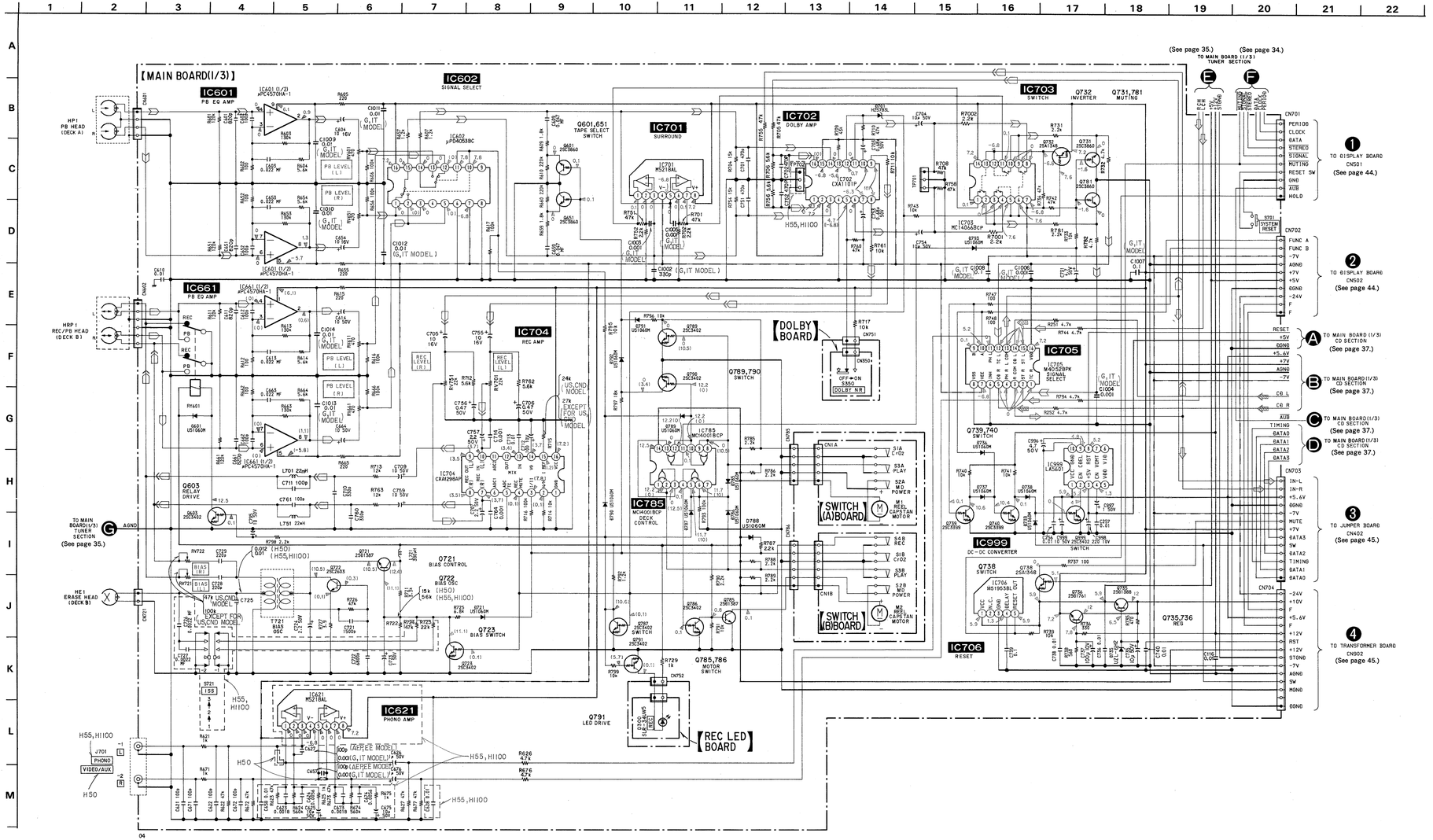
6-5. SCHEMATIC DIAGRAM—CD Section— Refer to page 49 for IC Block Diagrams.



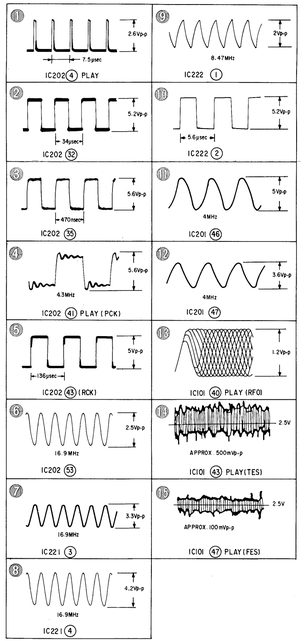
Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▬▬ : B+ Line
- ▬ ▬ : B− Line
- ▭ : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : CD STOP
- Voltages are taken with a VOM (Input Impedance 10MΩ).
  Voltage variations may be noted due to normal production tolerances.
  Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : CD
- G : Germany model
  IT : Italian model

Note:	**Note:**
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.

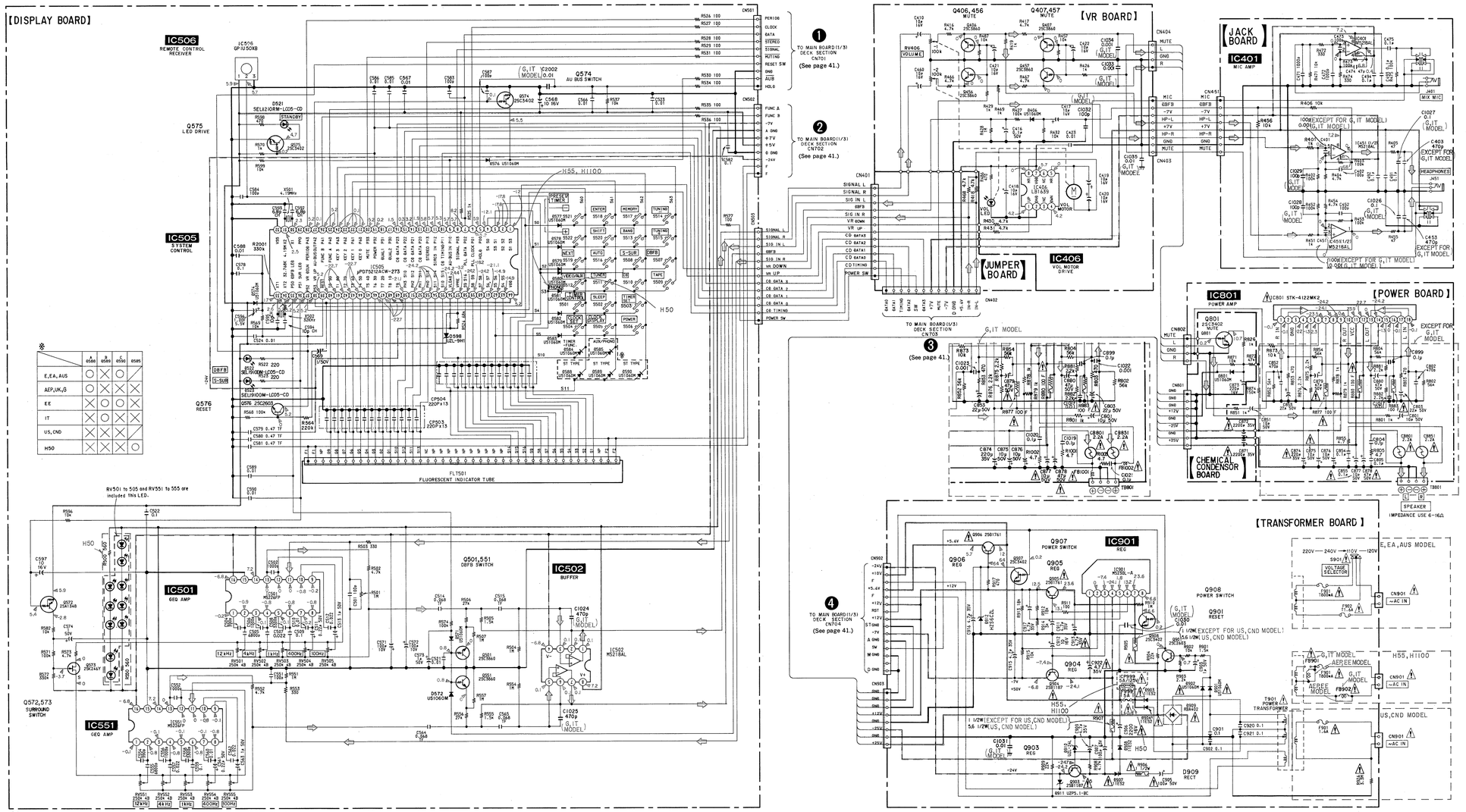


● Waveforms



Note:

- All capacitors are in μF unless otherwise noted. pF: μμF
  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- ⏚ : B+ Line
- ⏚ : B− Line
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal conditions.
  no mark : POWER ON
  ( ) : PLAY (DECK A)
  < > : REC
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- **Signal path.**
  ⇨ : FM
  ⇨ : PB (DECK A)
  ⇨ : CD
  ⇨ : PB (DECK B)
  ⇨ : REC
- ○GND : Canadian model
  G : Germany model
  IT : Italian model
  EE : East European model
  EA : Saudi Arabia model
  AUS : Australian model



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D406	G-13	IC502	G-9
D521	F-2	IC505	H-5
D522	E-2	IC506	F-2
D523	E-2	IC551	F-5
D571	G-4	IC801	C-14
D572	G-7	IC901	C-7
D574	I-7		
D576	I-6	Q406	H-13
D577	H-7	Q407	G-14
D578	H-7	Q456	H-13
D579	H-7	Q457	G-14
D580	H-3	Q501	G-8
D581	H-3	Q551	G-8
D582	H-3	Q572	G-4
D583	H-3	Q573	F-7
D584	H-4	Q574	I-4
D585(※1)	H-3	Q575	G-2
D588(※2)	H-3	Q576	H-4
D589(※3)	H-3	Q801	C-10
D590(※4)	H-3	Q901	A-8
D598	I-7	Q903	D-6
D801	C-10	Q904	D-6
D901	B-8	Q905	D-7
D902	B-8	Q906	D-8
D903	C-4	Q907	C-8
D904	C-5	Q908	C-8
D907	C-6		
D908	C-5		
D909	B-8		
D910	C-6		
D911	D-6		
D912	C-8		
IC401	I-13		
IC406	G-12		
IC451	J-13		
IC501	F-3		

※1 : Used on HCD-H50.
※2 : Used on AEP, G, E, EA and AUS model.
※3 : Used on IT and EE model.
※4 : Used on EE, E, EA and AUS model.

Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- : fusible resistor.

Note:	Note:
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.

- : B+ Line
- : B– Line
- Voltage is dc with respect to ground under no-signal conditions. no mark : POWER ON
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. : F-M

• CND : Canadian model
G : Germany model
IT : Italian model
EE : East European model
EA : Saudi Arabia model
AUS : Australian model

6-8. PRINTED WIRING BOARDS—Power/Amplifier/Display Section—

Refer to page 26 for Semiconductor Lead Layouts.

【TRANSFORMER BOARD】

【CHEMICAL CONDENSOR BOARD】

【POWER BOARD】

【DISPLAY BOARD】

【JUMPER BOARD】

【VR BOARD】

【JACK BOARD】

FLT501 FLUORESCENT INDICATOR TUBE

	US,CND	AEP, G	IT	EE	E,EA,AUS	H50
D585		X	X	X		O
D588	X	O	X	X	O	X
D589	X	X	O	O	X	X
D590	X	X	X	O	O	X

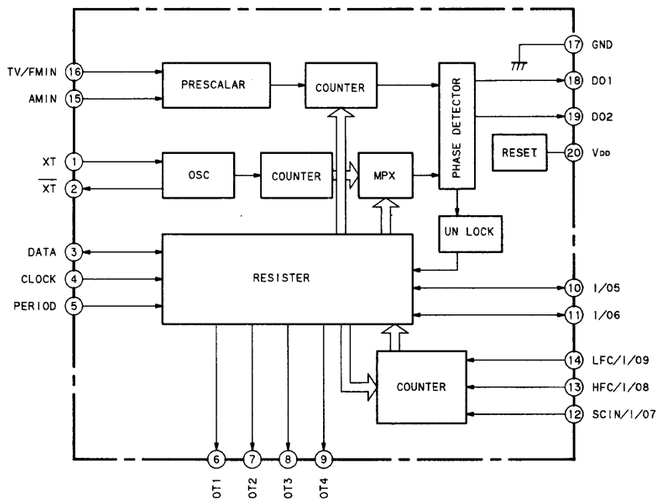
Not :

o—— : parts extracted from the component side.

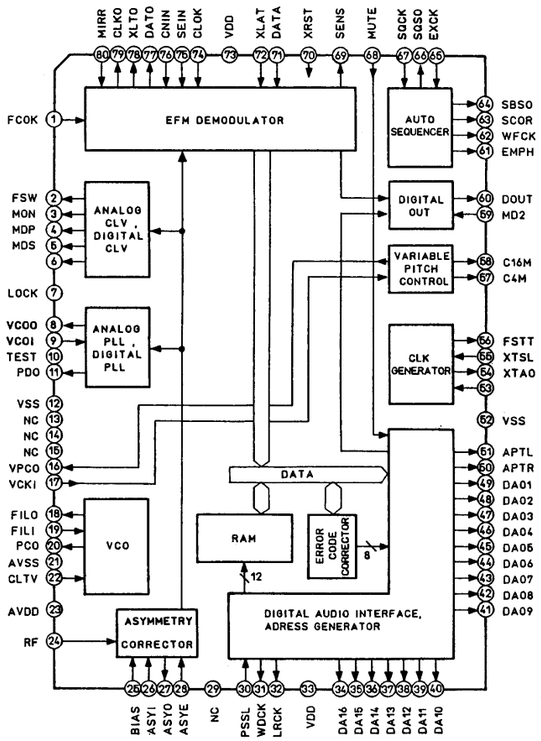
- ●CND : Canadian model
- G : Germany model
- IT : Italian model
- EE : East European model
- EA : Saudi Arabia model
- AUS : Australian model

IC Block Diagrams

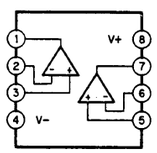
IC51 TC9217P



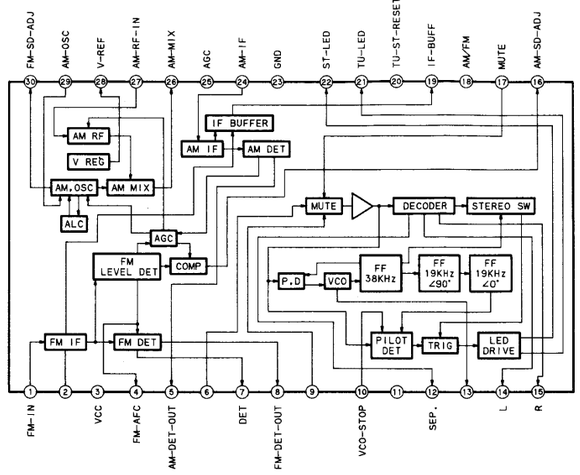
IC202 CXD2500Q



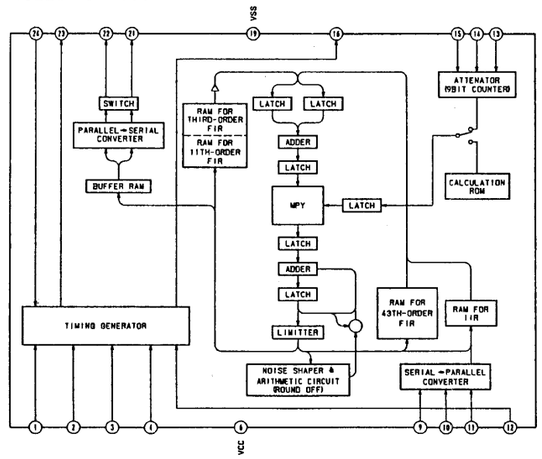
IC223 M5218AP



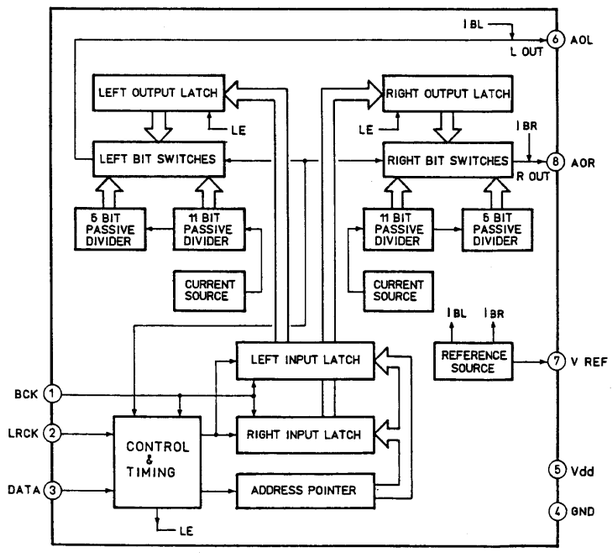
● IC81 LA1851N



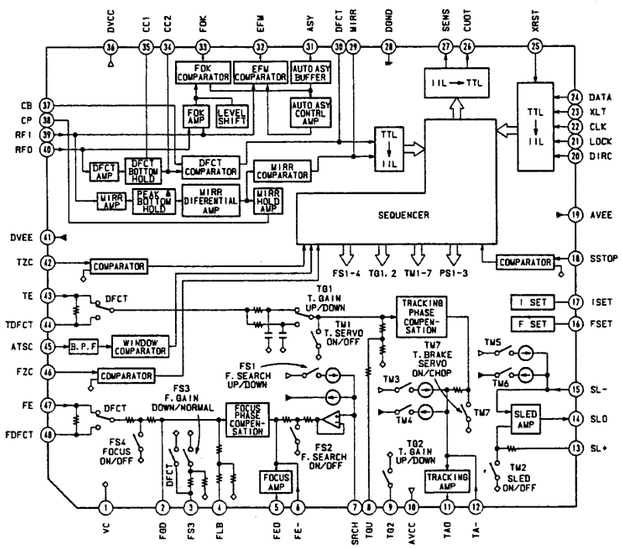
● IC221 CXD2554P



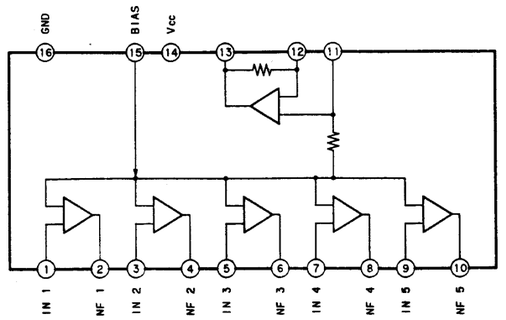
● IC222 TDA1543A



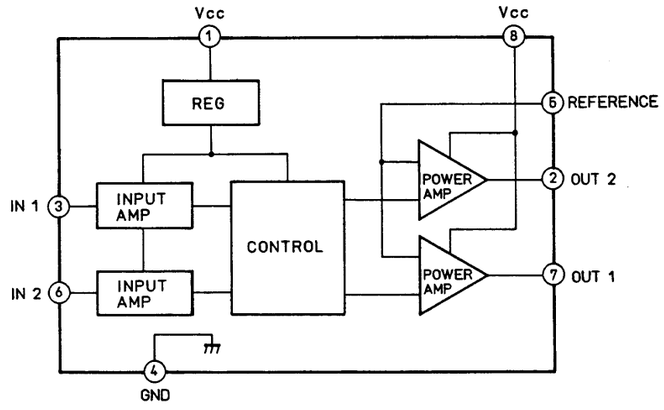
● IC101 CXA1372Q



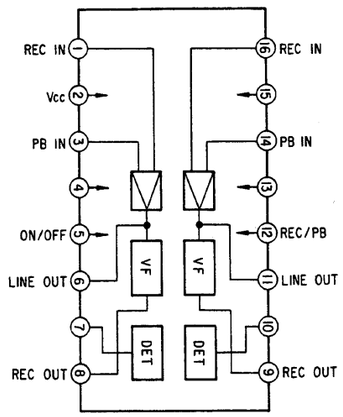
● IC501, IC551 M5226FP



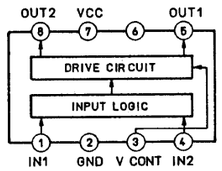
● IC253 M54641L



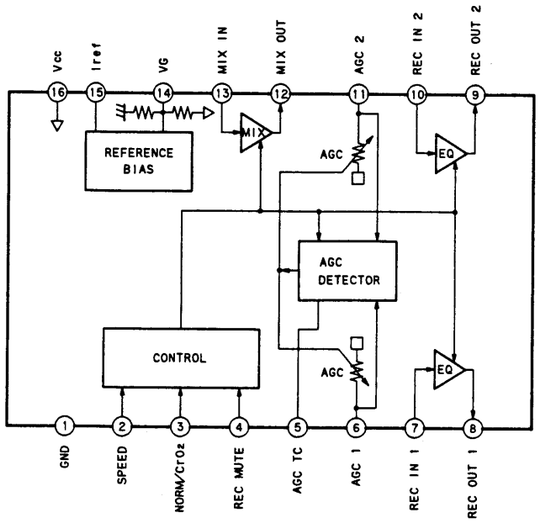
● IC702 CXA1101P



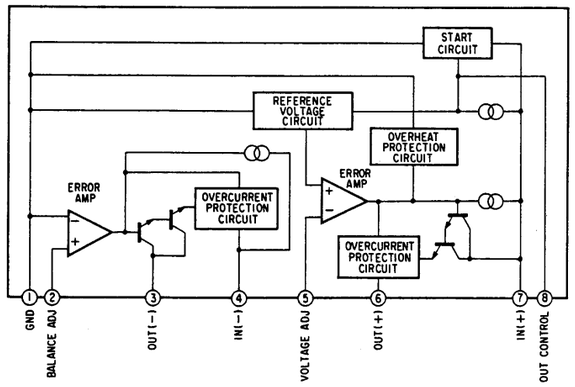
● IC406 LB1639



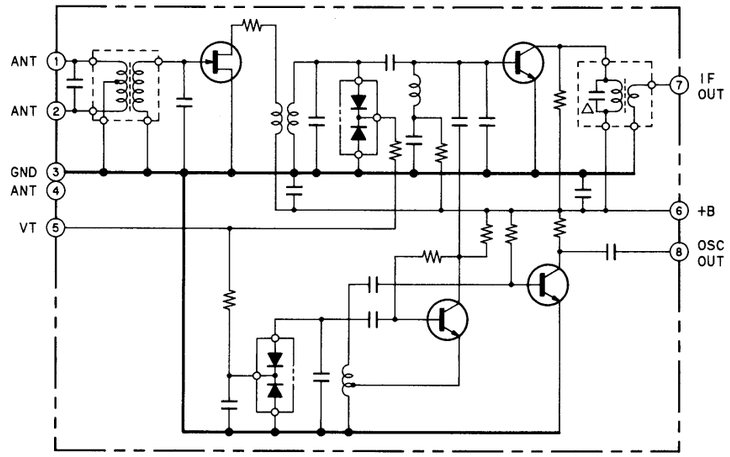
• IC704 CXA1298AP



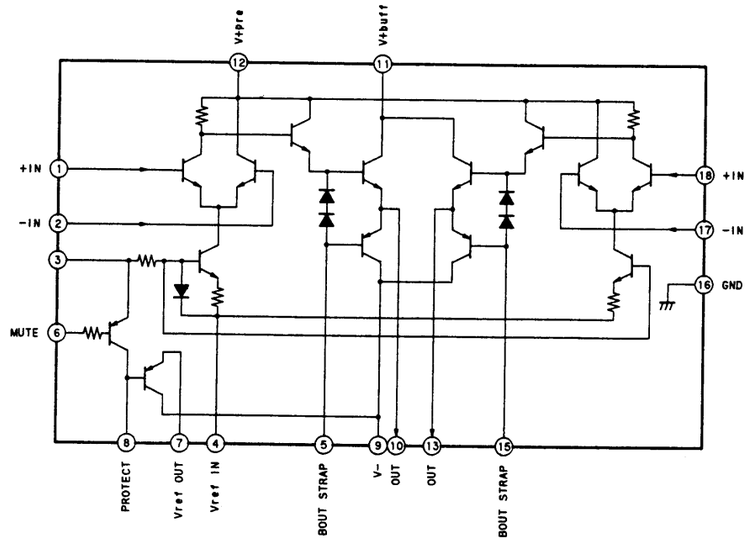
IC901 M5230L



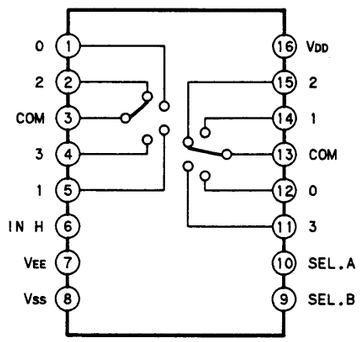
FE1 FM Front End (US, CND, AEP, EE, E,EA, AUS)



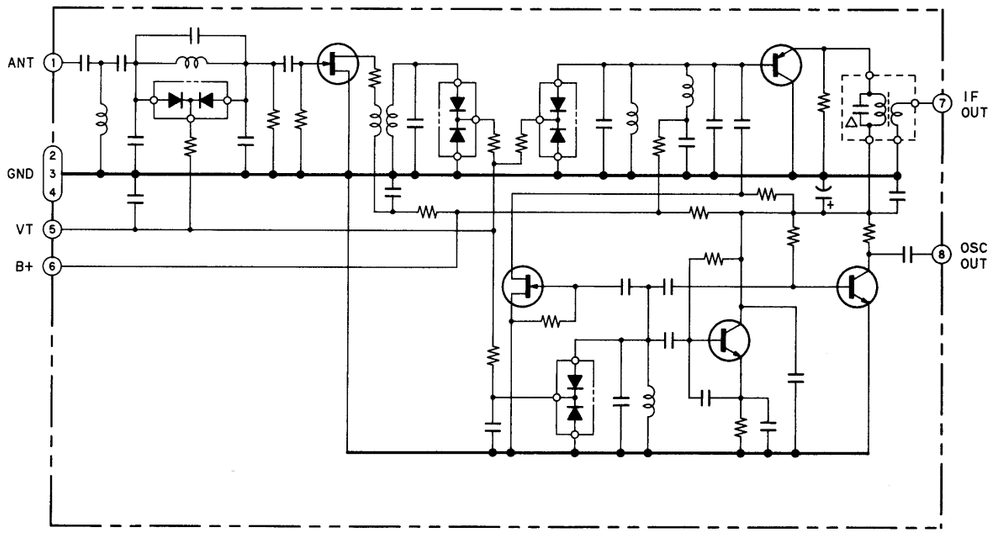
• IC801 STK-4122MK2



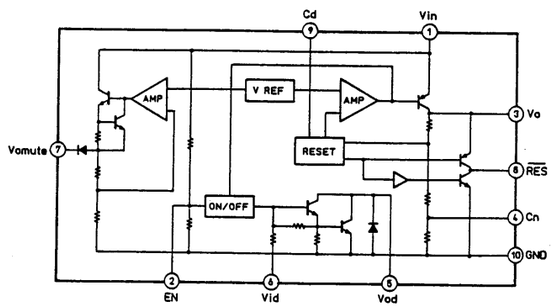
• IC705 M4052BPK



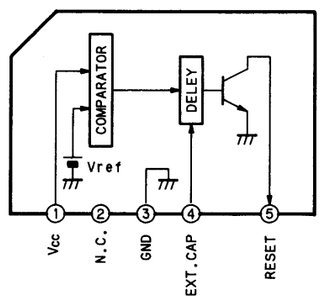
• FE1 FM Front End (G, IT)



IC999 LA5601



• IC706 M51953BL



6-9. PIN FUNCTIONS

IC505 Display Control (μPD75212ACW-273)

Pin No.	Pin Name	I/O	ACTIVE	Description	Hold
1	S3	O	H	Segment, keyscan output terminals	Low
2	S2				
3	S1				
4	S0				
5	INT4	I	L	HOLD input	input
6	SCK	O	—	CLOCK (TC9217P T-BUS)	
7	SO	I/O	—	DATA (TC9217P T-BUS)	
8	PO3	I	L	SIGNAL input	
9	INT0	I	L	AUDIO-BUS input	input
10	INT1	I	Down	CD display data, timng	
11	P12	I	L	Remote control input	
12	P13	I	L	STEREO input	
13	P20	I	—	CD display data	input
14	P21				
15	P22				
16	P23				
17	P30	I	L	DUAL 2 input	input
18	P31	I	L	DUAL 1 input	
19	P32	O	L	POWER port	
20	P33	O	L	MUTING	Low
21	P60	I	H	Keyscan input	input
22	P61				
23	P62				
24	P63				
25	P40	O	—	FUNCTION A output	Low
26	P41	O	—	FUNCTION B output	
27	P42	O	H	AUDIO-BUS output	
28	P43	O	L	PERIOD (TC9217P T-BUS)	
29	PP0	—	—	Not used (open)	—
30	X1	—	—	Main system clock 4.19MHz	—
31	X2				
32	V_{ss}	—	—	GND terminal (0V)	—
33	XT1	—	—	Sub system clock 32.768kHz	—
34	XT2				
35	P50	O	L	DBFB	Low
36	P51	O	L	SURROUND	
37	P52	O	L	Volume DOWN	
38	P53	O	L	Volume UP	
39	RESET	I	L	System reset input terminal	—
40	T0	O	H	Digit output	Low
41	T1				

Pin No.	Pin Name	I/O	ACTIVE	Description	Hold
42	T2	O	H	Digit output	Low
43	T3				
44	T4				
45	T5				
46	T6				
47	T7				
48	T8				
49	T9	O	—	Not used (open)	Low
50	S15	O	H	Segment output	Low
51	S14				
52	S13				
53	S12				
54	S11	O	H	Segment output, specification distinction diode output	Low
55	S10				
56	V_{LOAD}	—	—	Pull-down resistor connect terminal of FIP driver	—
57	V_{PRE}	—	—	Power supply terminal of FIP driver output buffer	—
58	S9	O	H	Segment output	Low
59	S8				
60	S7				
61	S6				
62	S5	O	H	Segment, keyscan output teminal	Low
63	S4				
64	V_{DD}	—	—	Power supply terminal (5V)	—

[KEY, DIODE MATRIX]

	Key						Diode	
	S5	S4	S3	S2	S1	S0	S10	S11
P60	CLOCK	TIMER CONTROL	VIDEO	DUAL	STATION UP	STATION DOWN	TIMER FUNCTION	A
P61	DISPLAY	SLEEP	TUNER	AUTO/ MANUAL	SHIFT	ENTER	VIDEO/ PHONO	B
P62	POWER	TIMER SET	CD	SURROUND	BAND	MERORY	IF+50kHz	C
P63	——	——	TAPE	DBFB	TUNING UP	TUNING DOWN	IF−50kHz	——

1) Pressing the key twice is not allowed. (First pressing is preceded)
2) The remote control precedes the input with the pey.
3) Input the diode in resetting and in releasing HOLD.

IC201 CD Controller (μPD75112CW-064)

Pin No.	Pin Name	I/O	Description
1	$\overline{\text{INSW}}$	I	Disk tray clamp-end input
2	$\overline{\text{OUTSW}}$	I	Disk tray open-end input
3	(TIMER)	I	Timer start input
4	BSIN	I	Audio bus input
5	Not Used	I	GND
6	Not Used	I	GND
7	Not Used	I	GND
8	Not Used	I	GND
9	SENS	I	SENS input, and the state input of every kind from CXD2500Q and CXA1372Q
10	Not Used	I	GND
11	SENS	I	SENS input, and the state input of every kind from CXD2500Q and CXA1372Q
12	Not Used	I	GND
13	Not Used	I	GND
14	Not Used	I	GND
15	SUBQ	I	Q data serial input from CXD2500Q
16	Not Used	O	OPEN
17	SQCLK	O	Sub-code Q data read-in clock output for CXD2500Q
18	SCOR	I	Sub-code synchro S0 and S1 detect input
19	Not Used	O	OPEN
20	Not Used	O	OPEN
21	PLAYL	O	Play LED ON/OFF output
22	PAUSL	O	Pause LED ON/OFF output
23	KEY3	I	Key data input
24	KEY2	I	Key data input
25	KEY1	I	Key data input
26	KEY0	I	Key data input
27	DG3	O	Key-scan digit output
28	DG2	O	Key-scan digit output
29	DG1	O	Key-scan digit output
30	DG0	O	Key-scan digit output
31	Not Used	I	+5V
32	VDD	I	+5V
33	Not Used	O	OPEN
34	Not Used	O	OPEN
35	Not Used	O	OPEN
36	Not Used	O	On time 1 track jump, tracking drive is inversed output for CXA1372Q
37	DPDAT3	O	Display data output for tuner amp micon
38	DPDAT2	O	Display data output for tuner amp micon
39	DPDAT1	O	Display data output for tuner amp micon
40	DPDAT0	O	Display data output for tuner amp micon
41	DPCLK	O	Display data transmission clock output for tuner amp micon
42	PRGL	O	Serial data latch pulse output for digital filter CXD2551P
43	PRGCK	O	Serial clock output for digital filter CXD2551P
44	PRGD	O	Serial clock output for digital filter CXD2551P

Pin No.	Pin Name	I/O	Description
45	$\overline{\text{RESET}}$	I	System reset input terminal (LOW ACTIVE)
46	X2	I	System clock input 4.19MHz
47	X1	I	System clock input 4.19MHz
48	DFCTSW	O	From focus in till spindle kick is ON except then is OFF.
49	AMUTE	O	Muting ON/OFF output
50	BSOUT	O	Audio bus output
51	AFADJ	I	Test mode input, and on time POWER "L" is test move ment of every kind
52	LDON	O	Laser diode ON/OFF output
53	XLT	O	Serial data latch pulse output for CXD2500Q
54	CLK	O	Serial clock output for CXD2500Q
55	DATA	O	Serial data output for CXD2500Q
56	Not Used	I	GND
57	ADJ	I	Test mode input, "L" is GFS no check.
58	GFS	I	GFS OK/NO Good input
59	FOK	I	Focus OK NO Good input
60	Not Used	O	OPEN
61	Not Used	O	OPEN
62	LODOUT	O	Disc tray loading-out output
63	LODIN	O	Disc tray loading-in output
64	VSS	I	GND

SECTION 7
EXPLODED VIEWS

NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.

Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

-XX, -X mean standardized parts, so they may have some differences from the original one.

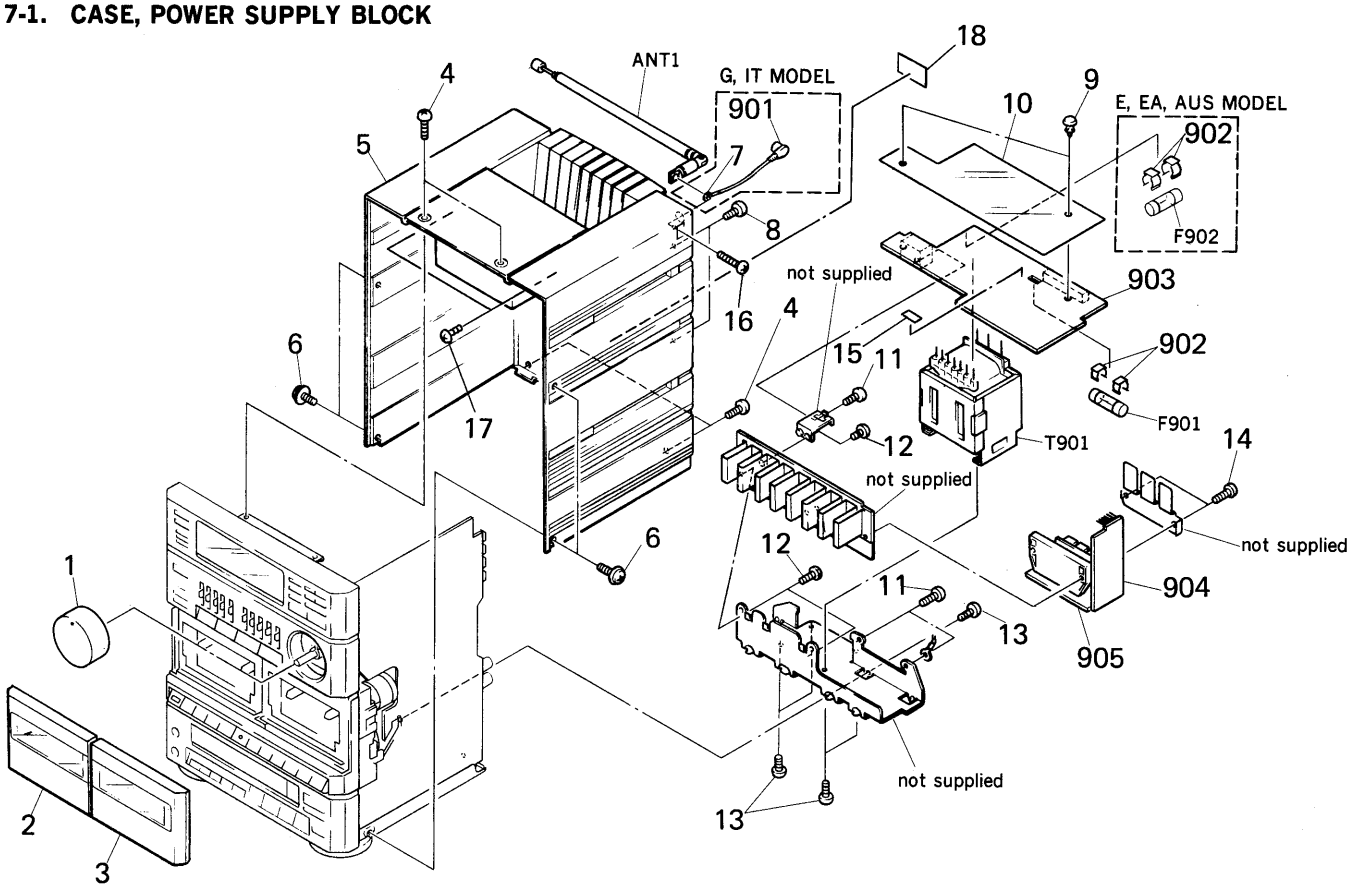
Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE)...(RED)
↑ Parts Color ↑ Cabinet's Color

- G : Germany model
- IT : Italian model
- EE : East European model
- EA : Saudi Arabia model
- AUS : Australian model

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

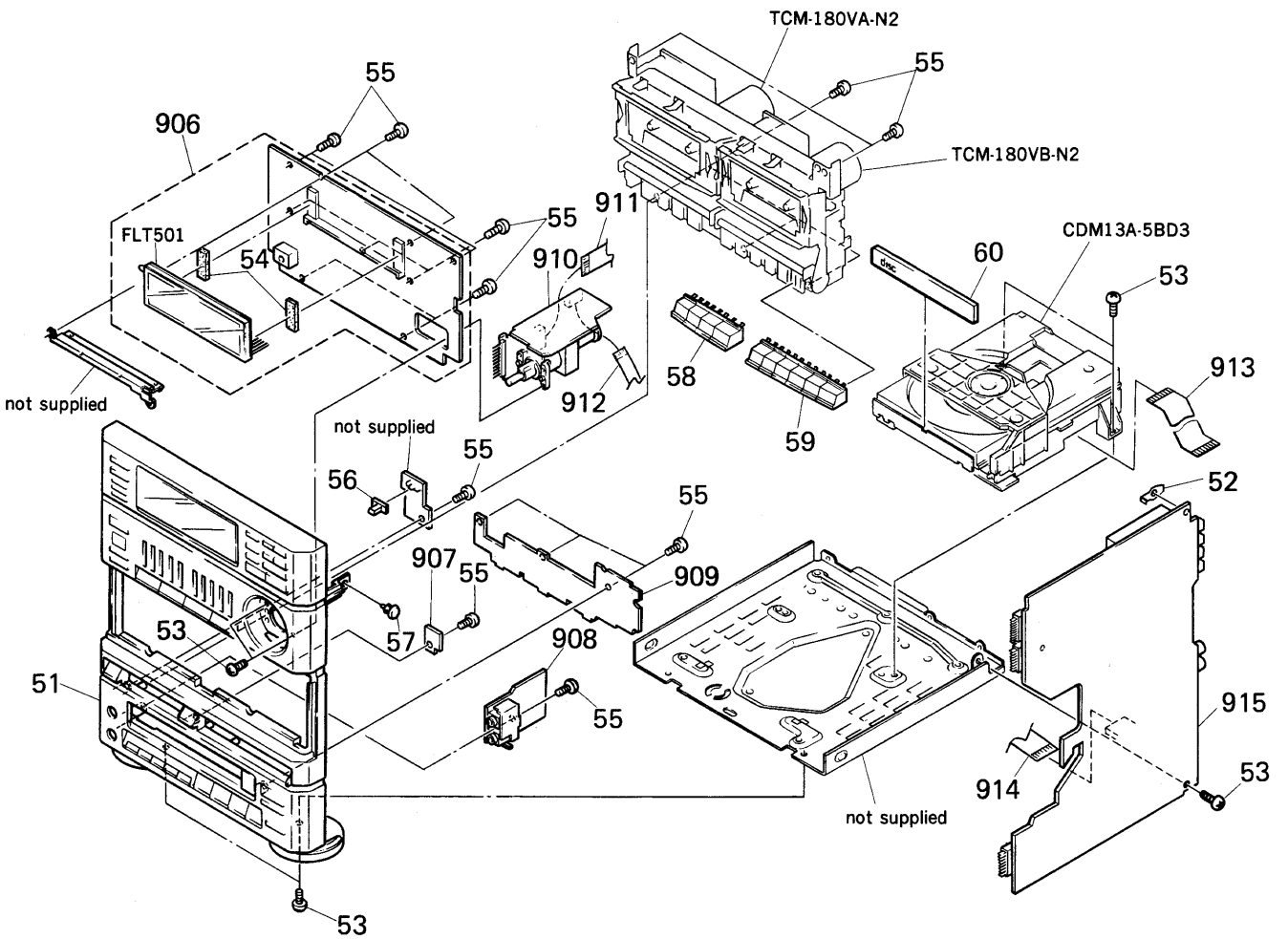
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

7-1. CASE, POWER SUPPLY BLOCK



Ref. No.	Part No.	Description	Remark
1	X-4936-803-1	KNOB (VOLUME) ASSY	
2	X-4941-502-1	LID (A) ASSY, CASSETTE	
3	X-4941-501-1	LID (B) ASSY, CASSETTE	
4	7-682-549-09	SCREW +BVTT 3X10 (S)	
5	X-4936-802-1	CASE ASSY (US, Canadian, H55)	
5	X-4936-804-1	CASE ASSY (E, EA, AUS)	
5	4-936-804-11	CASE (H1100)	
6	3-704-366-01	SCREW (CASE) (M3X8)	
7	7-623-508-11	EARTH, LUG 3 (G, IT)	
8	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
9	4-812-134-31	RIVET NYLON, 3.5	
10	* 4-936-816-11	COVER (INSULATING)	
11	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
12	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3	
13	7-682-547-04	SCREW +BVTT 3X6 (S)	
14	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3	
15	3-701-947-10	LABEL (T800MA), FUSE (E, AUS)	
16	7-682-549-09	SCREW +BVTP 3X10 (S) (H50, H55)	
17	7-685-649-79	SCREW +BVTP 3X14 TYPE2 N-S (H50, H55)	
18	* 4-941-548-01	LABEL, CLASS 1 (EXCEPT US, Canadian)	
901	* 1-562-908-11	CONNECTOR, FEMALE (NO SHIELD) (G, IT)	
902	1-533-213-31	HOLDER, FUSE	
903	* 1-634-853-11	TRANSFORMER BOARD	
904	* 1-634-850-11	CHEMICAL CONDENSOR BOARD	
905	* 1-634-849-11	POWER BOARD	
ANT1	1-501-270-00	ANTENNA, TELESCOPIC (H50, H55)	
F901	⚠ 1-532-215-00	FUSE, TIME-LAG (T0.8A) (EXCEPT US, Canadian)	
F901	⚠ 1-532-742-11	FUSE, GLASS TUBE (1.6A) (US, Canadian)	
F902	⚠ 1-532-259-00	FUSE, TIME-LAG (T1.6A) (E, EA, AUS)	
T901	⚠ 1-450-055-11	TRANSFORMER, POWER (E, EA, AUS)	
T901	⚠ 1-450-057-11	TRANSFORMER, POWER (US, Canadian)	
T901	⚠ 1-450-463-11	TRANSFORMER, POWER (H55, H1100)	

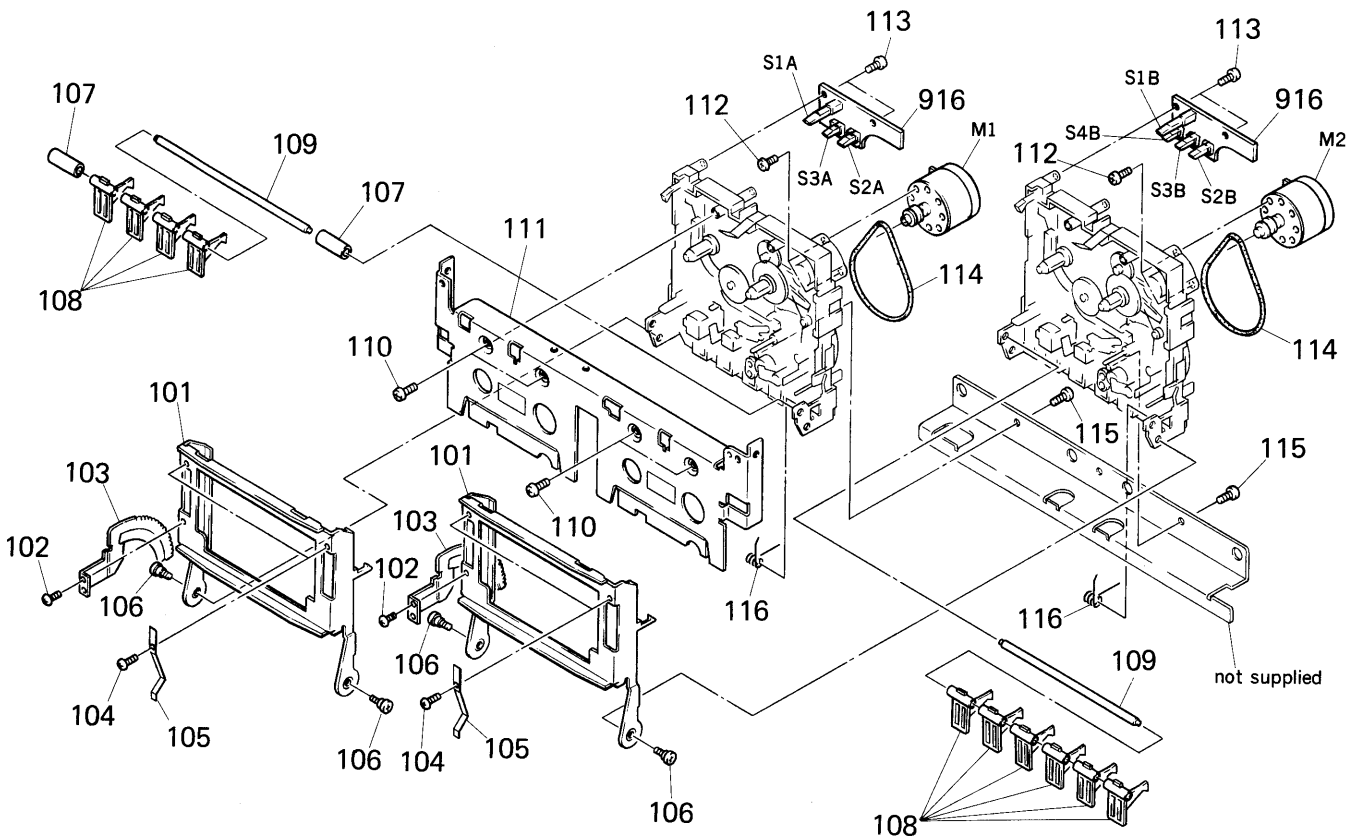
7-2. FRONT PANEL, MAIN BOARD BLOCK



Ref. No.	Part No.	Description	Remark
51	X-4941-509-1	PANEL ASSY, FRONT (H50)	
51	X-4941-503-1	PANEL ASSY, FRONT (H55)	
51	X-4941-504-1	PANEL ASSY, FRONT (H1100)	
52	* 4-925-530-01	PLATE, GROUND	
53	7-682-547-04	SCREW +BVTT 3X6 (S)	
54	* 4-932-810-11	CUSHION (FL)	
55	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
56	4-936-868-01	KNOB (DOLBY)	
57	4-812-134-31	RIVET NYLON, 3.5	
58	4-936-872-01	BUTTON (A)	
59	4-936-873-01	BUTTON (B)	
60	4-936-833-11	PANEL, LOADING	
906	* A-4341-551-A	DISPLAY BOARD, COMPLETE (E, EA, AUS)	
906	* A-4345-097-A	DISPLAY BOARD, COMPLETE (AEP, UK)	
906	* A-4345-102-A	DISPLAY BOARD, COMPLETE (US, Canadian)	
906	* A-4345-107-A	DISPLAY BOARD, COMPLETE (G)	
906	* A-4345-109-A	DISPLAY BOARD, COMPLETE (EE)	
906	* A-4345-110-A	DISPLAY BOARD, COMPLETE (IT)	

Ref. No.	Part No.	Description	Remark
907	* 1-634-856-11	REC LED BOARD	
908	* 1-634-857-11	JACK BOARD	
909	* 1-634-852-11	SW BOARD	
910	* 1-634-854-11	VR BOARD (INCLUDING JUMPER BOARD)	
911	1-575-672-11	WIRE, FLAT TYPE (13 CORE)	
912	1-575-674-11	WIRE, FLAT TYPE (8 CORE)	
913	1-535-832-12	JUMPER, FILM (WITH TERMINAL)	
914	1-575-673-11	WIRE, FLAT TYPE (15 CORE)	
915	* A-4345-096-A	MAIN BOARD, COMPLETE (AEP, UK)	
915	* A-4345-101-A	MAIN BOARD, COMPLETE (US, Canadian)	
915	* A-4345-106-A	MAIN BOARD, COMPLETE (G, IT)	
915	* A-4345-108-A	MAIN BOARD, COMPLETE (EE)	
915	* A-4345-111-A	MAIN BOARD, COMPLETE (E, EA, AUS)	
FLT501	1-519-577-11	INDICATOR TUBE, FLUORESCENT	

7-3. MD CHASSIS BLOCK

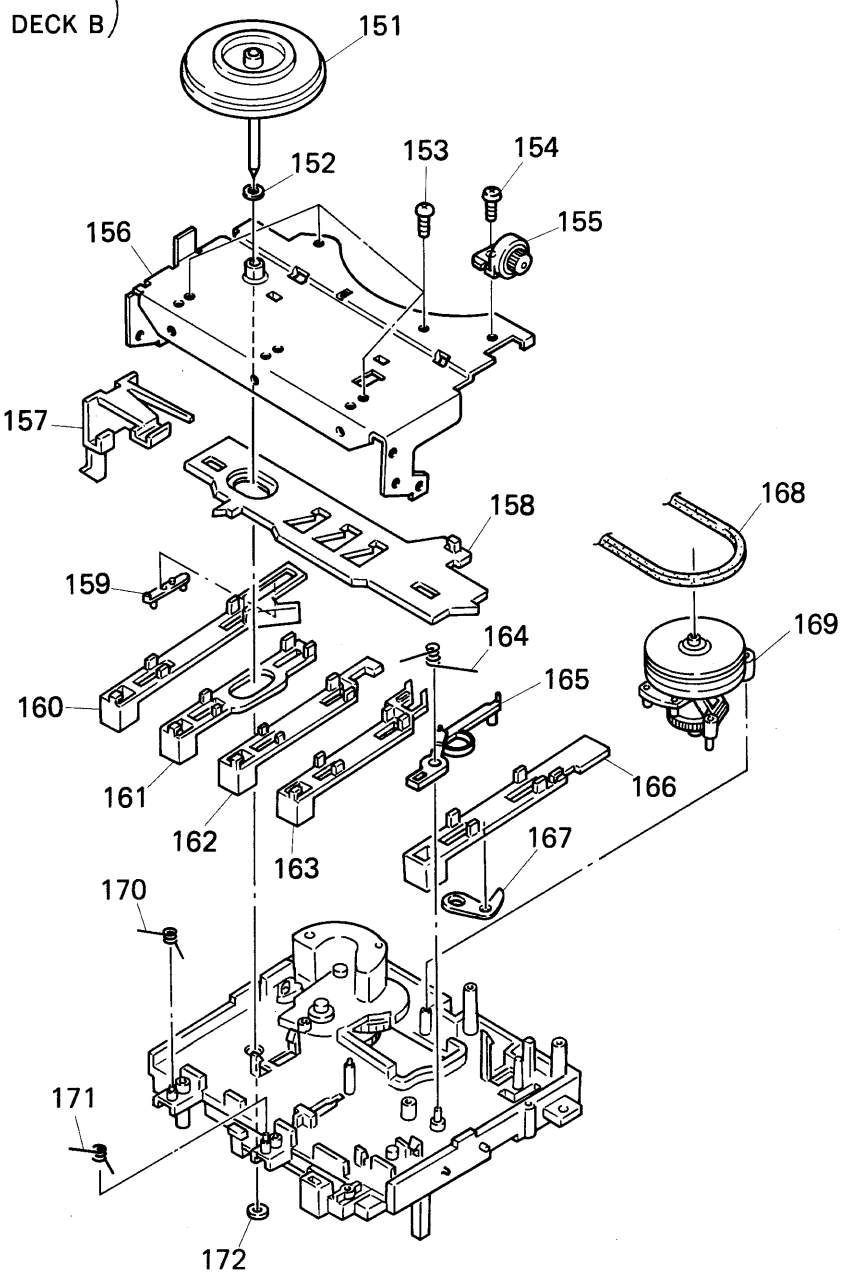


Ref. No.	Part No.	Description	Remark
101	3-358-282-01	HOLDER (FH), CASSETTE	
102	7-621-255-25	SCREW +PTT 2X4 (S)	
103	* 3-358-276-01	RACK, GEAR	
104	7-621-255-10	SCREW +PTT 2X3 (S)	
105	3-358-280-01	SPRING (CASSETTE HOLDER FH)	
106	3-358-277-01	SCREW, STEP	
107	* 3-358-216-01	COLLAR (DECK A)	
108	3-358-268-01	LEVER (BUTTON BASE B)	
109	3-358-242-01	SHAFT (BUTTON SHAFT)	
110	7-685-534-19	SCREW +BTP 2.6X8	
111	X-4936-821-1	JOINT (UPPER) ASSY	
112	7-621-775-20	SCREW +B 2.6X5	
113	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S	
114	3-358-230-01	BELT (A1)	
115	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
116	3-358-278-01	SPRING (LOADING FH), TORSION	

Ref. No.	Part No.	Description	Remark
916	* 1-635-160-11	SWITCH (A) BOARD (DECK A)	
916	* 1-635-160-11	SWITCH (B) BOARD (DECK B)	
M1	X-3358-211-1	MOTOR (A) ASSY (DECK A)	
M2	X-3358-211-1	MOTOR (B) ASSY (DECK B)	
S1A	1-572-335-11	SWITCH, LEAF (CrO2) (DECK A)	
S1B	1-572-335-11	SWITCH, LEAF (CrO2) (DECK B)	
S2A	1-571-736-11	SWITCH, LEAF (MD POWER) (DECK A)	
S2B	1-571-736-11	SWITCH, LEAF (MD POWER) (DECK B)	
S3A	1-571-736-11	SWITCH, LEAF (PLAY) (DECK A)	
S3B	1-571-736-11	SWITCH, LEAF (PLAY) (DECK B)	
S4B	1-571-736-11	SWITCH, LEAF (REC) (DECK B)	

7-4. MECHANISM DECK BLOCK (1)

(TCM-180VA-N2 : DECK A)
(TCM-180VB-N2 : DECK B)

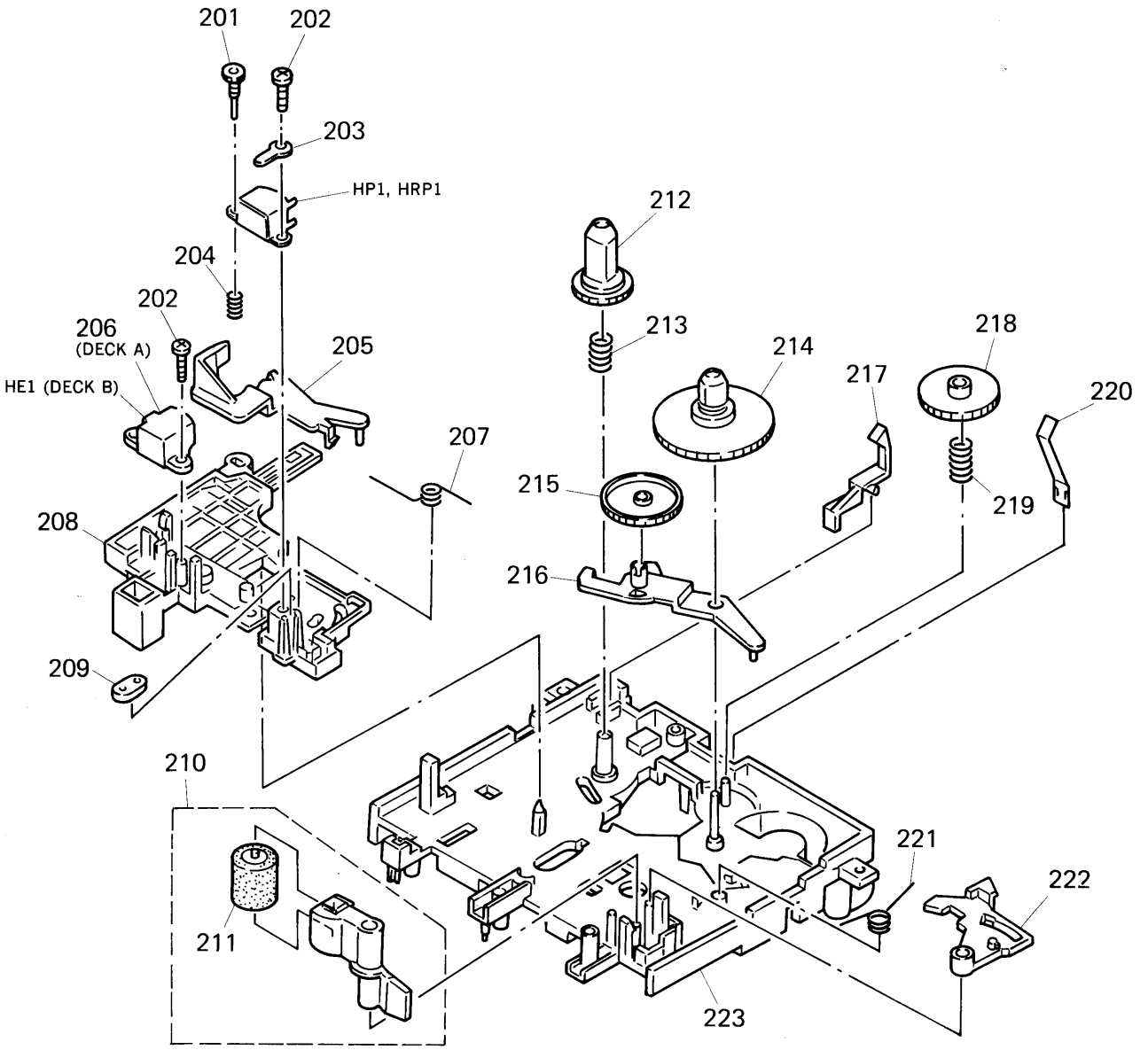


Ref. No.	Part No.	Description	Remark
151	X-3358-205-1	FLYWHEEL (A) ASSY	
152	3-701-437-01	WASHER	
153	7-685-133-19	SCREW +P 2.6X6 TYPE 1	
154	7-685-870-01	SCREW +BVTT 3X5 (S)	
155	4-919-393-01	DAMPER	
156	* X-3358-216-1	BRACKET (FH) ASSY	
157	3-358-281-01	SLIDER (HOLDER LOCK FH)	
158	* 3-358-249-01	SLIDER (LOCK PLATE)	
159	* 3-358-226-01	LEVER (PAUSE LEVER) (DECK B)	
160	3-358-260-01	SLIDER (PAUSE) (DECK B)	
161	3-358-256-01	SLIDER (STOP/EJECT)	
162	3-358-257-01	SLIDER (FF)	
163	3-358-258-01	SLIDER (REW)	

Ref. No.	Part No.	Description	Remark
164	3-358-214-01	SPRING (LOCK), TORSION (DECK A)	
164	3-358-233-01	SPRING (REC-LOCK), TORSION (DECK B)	
165	* 3-358-251-01	LEVER (TENSION DETECTION ARM)	
166	3-358-259-01	SLIDER (REC) (DECK B)	
167	* 3-358-204-01	LEVER (REC SAFETY) (DECK B)	
168	3-358-230-01	BELT (A1)	
169	X-3358-202-1	LEVER (FR ARM) ASSY	
170	3-358-232-01	SPRING (S-P F-R), TORSION (DECK B)	
170	3-358-279-01	SPRING (STOP), TORSION (DECK A)	
171	3-358-232-01	SPRING (S-P F-R), TORSION	
172	7-623-921-01	RING, RETAINING, CAPSTAN	

7-5. MECHANISM DECK BLOCK (2)

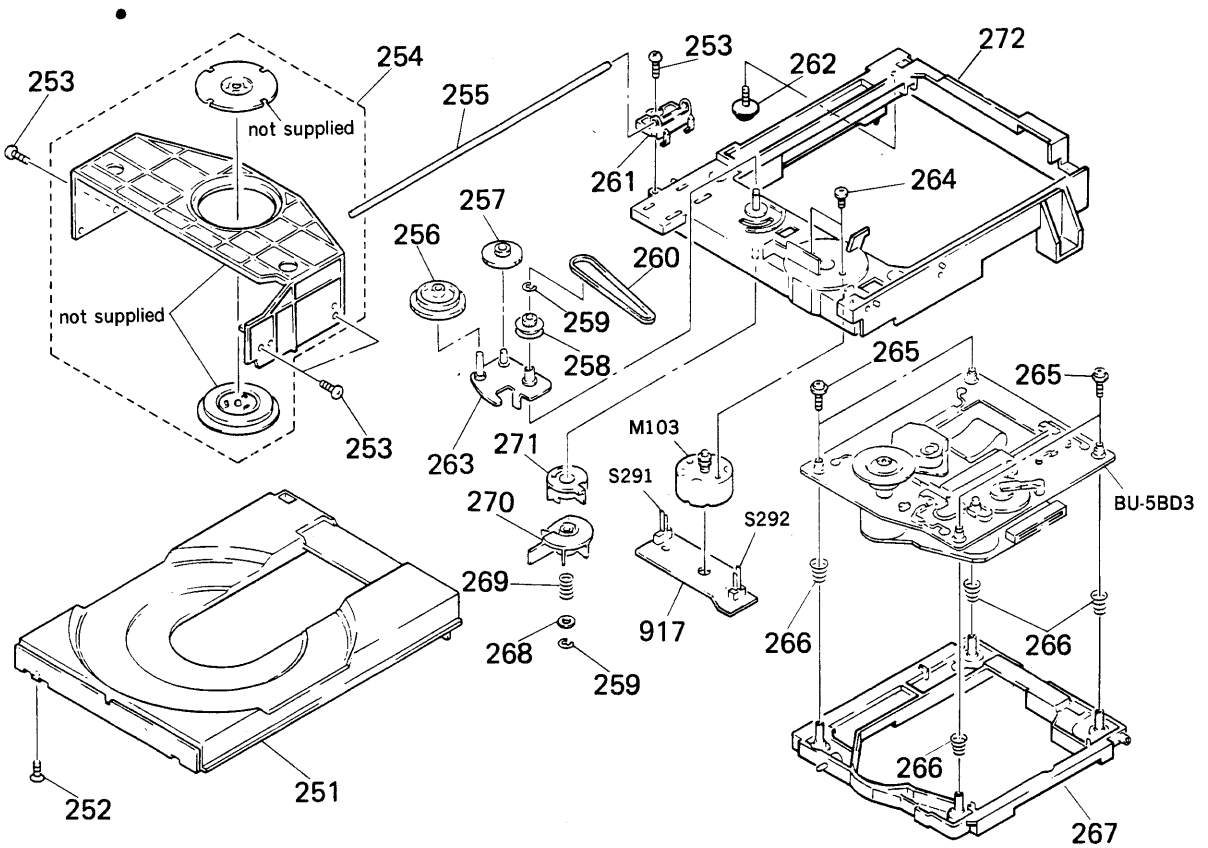
(TCM-180VA-N2 : DECK A
TCM-180VB-N2 : DECK B)



Ref. No.	Part No.	Description	Remark
201	3-358-288-01	SCREW (T), AZIMUTH	
202	3-358-288-11	SCREW (T), AZIMUTH	
203	7-623-505-01	LUG, 2	
204	3-358-234-01	SPRING (AZIMUTH), COMPRESSION	
205	3-358-286-01	LEVER (MOTOR LEVER)	
206	3-358-285-01	GUIDE, TAPE (DECK A)	
207	3-358-228-01	SPRING, TORSION	
208	3-358-265-01	SLIDER (HEAD PC BOARD A)	
209	* 3-358-215-01	BUSHING (WIRE KIT RETAINER)	
210	X-3358-204-1	LEVER (PINCH LEVER) ASSY	
211	3-578-143-11	PINCH ROLLER	
212	3-358-248-01	GEAR (SUPPLY REEL)	
213	3-358-208-01	SPRING (SUPPLY), COMPRESSION	
214	X-3358-203-1	TABLE (T) ASSY, REEL	

Ref. No.	Part No.	Description	Remark
215	* 3-358-284-01	GEAR (TU GEAR)	
216	* 3-358-252-01	LEVER (TU ARM)	
217	* 3-358-255-01	LEVER (GB LEVER) (DECK B)	
218	* 3-358-224-01	GEAR (FF GEAR)	
219	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
220	3-358-227-01	SPRING, LEAF	
221	3-358-243-01	SPRING (TU-SHUT), TORSION	
222	* 3-358-253-01	LEVER (SHUT-OFF LEVER)	
223	* X-3358-215-1	CHASSIS (B) ASSY	
HE1	1-543-673-11	HEAD, MAGNETIC (ERASE)	
HP1	1-543-319-11	HEAD, MAGNETIC (REC/PB)	
HRP1	1-543-319-11	HEAD, MAGNETIC (REC/PB)	

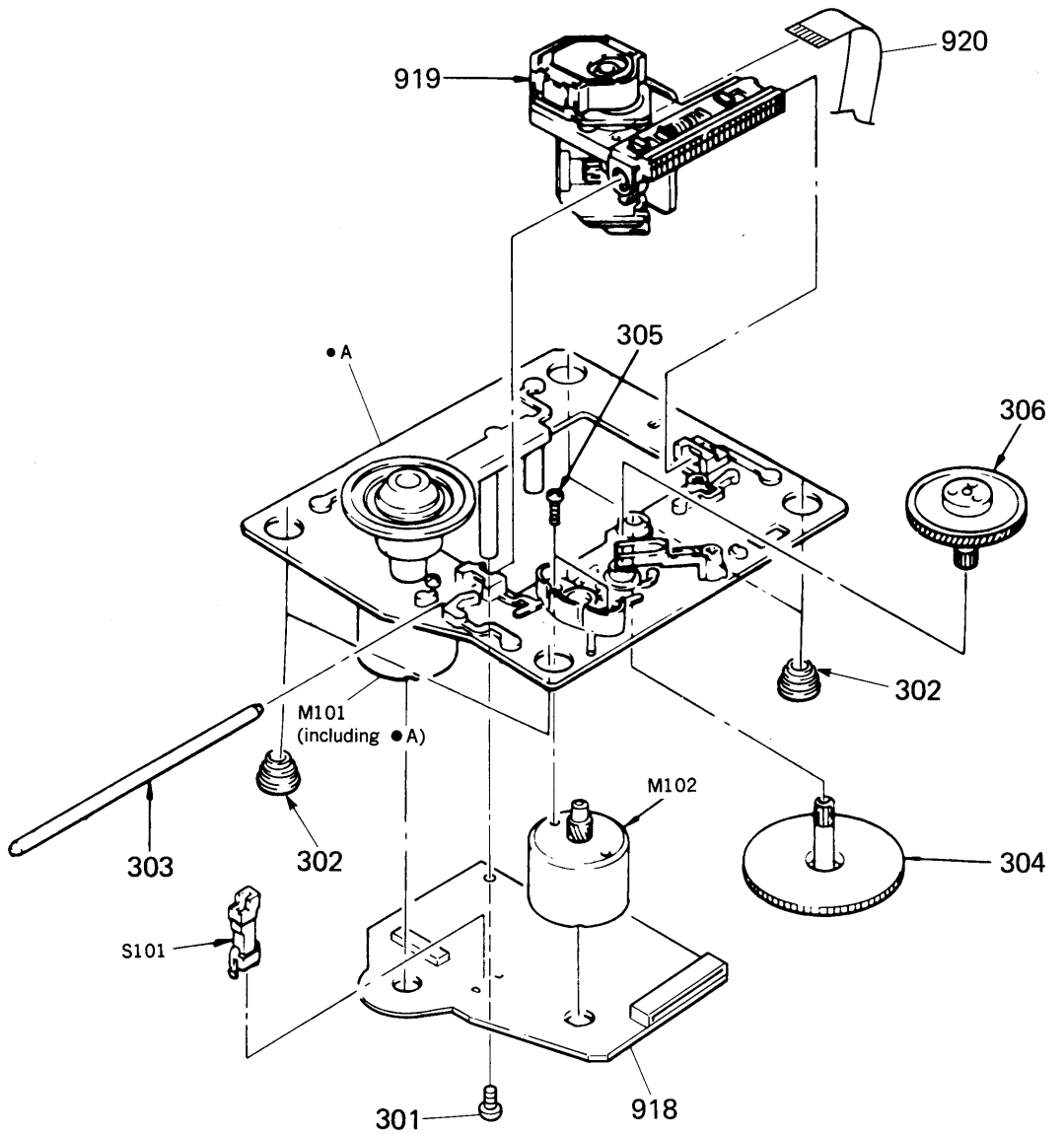
7-6. CD BLOCK (1) (CDM13A-5BD3)



Ref. No.	Part No.	Description	Remark
251	4-929-732-01	TABLE, DISK	
252	7-685-234-19	SCREW +KTP 2.6x8 TYPE 2 NON-SLIT	
253	7-685-646-79	SCREW +BVTP 3x8 TYPE 2 N-S	
254	A-4604-219-A	HOLDER (MG) ASSY	
255	4-929-764-01	SHAFT (TABLE GUIDE)	
256	4-927-620-01	GEAR (P)	
257	4-927-628-01	GEAR (C)	
258	4-929-724-01	PULLEY (B)	
259	7-624-105-04	STOP RING 2.3, TYPE-E	
260	4-927-649-01	BELT	
261	4-929-723-01	GUIDE (T)	
262	* 4-917-583-21	BRACKET, YOKE	
263	X-4929-703-1	ARM ASSY, SWING	

Ref. No.	Part No.	Description	Remark
264	7-621-775-10	SCREW +B 2.6X4	
265	4-933-134-01	SCREW (+PTPWH M2.6X6)	
266	4-917-541-01	SPRING (B)	
267	4-929-747-01	HOLDER (BU)	
268	4-927-654-01	WASHER (LIMITER)	
269	3-659-338-00	SPRING, COMPRESSION	
270	4-929-729-01	CAM (B)	
271	4-929-727-01	CAM (A)	
272	X-4929-709-2	CHASSIS (MD) ASSY	
917	* 1-634-461-11	LOADING BOARD	
M103	A-4608-362-A	MOTOR (L) ASSY (LOADING)	
S291	1-571-924-11	SWITCH, LEAF (LOAD OUT)	
S292	1-571-924-11	SWITCH, LEAF (LOAD IN)	

7-7. CD BLOCK (2) (BU-5BD3)



Note:	Note:
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.

Ref. No.	Part No.	Description	Remark
301	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
302	4-933-126-01	INSULATOR (A)	
303	4-917-565-01	SHAFT, SLED	
304	4-917-564-01	GEAR (P), FLATNESS	
305	7-621-255-15	SCREW +P 2X3	
306	4-917-567-01	GEAR (M)	
918	* A-4617-371-A	BD BOARD	
919	⚠ 8-848-144-11	DEVICE, OPTICAL KSS-240A	
920	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)	

BD

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.

Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- -XX, -X mean standardized parts, so they may have some differences from the original one.

CAPACITORS
uF: μF

- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F: nonflammable
- COILS
uH: μH
- SEMICONDUCTORS
In each case, u: μ, for example:
uA...: μA..., uPA...: μPA..., uPB...: μPB..., uPC...: μPC..., uPD...: μPD....

- G : Germany model
IT : Italian model
EE : East European model
EA : Saudi Arabia model
AUS: Australian model

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

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

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

Ref. No.	Part No.	Description			Remark
	* A-4617-371-A	BD BOARD			
		********			
		< CAPACITOR >			
C101	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C102	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C103	1-126-094-11	ELECT	4.7uF	20%	16V
C104	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C105	1-126-154-11	ELECT	47uF	20%	6.3V
C106	1-126-154-11	ELECT	47uF	20%	6.3V
C107	1-126-154-11	ELECT	47uF	20%	6.3V
C108	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C109	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C110	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C111	1-131-367-00	TANTALUM	22uF	20%	16V
C112	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V
C113	1-164-232-11	CERAMIC CHIP	0.01uF	10%	50V
C114	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	50V
C115	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	50V
C117	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C118	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C119	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	50V
C120	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V
C151	1-163-019-00	CERAMIC CHIP	0.0068uF	10%	50V
C152	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C153	1-163-006-11	CERAMIC CHIP	560PF	10%	50V
C154	1-164-161-11	CERAMIC CHIP	0.0022uF	10%	50V
C155	1-163-023-00	CERAMIC CHIP	0.015uF	10%	50V
C171	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C172	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C173	1-163-038-00	CERAMIC CHIP	0.1uF		25V
C174	1-163-038-00	CERAMIC CHIP	0.1uF		25V

Ref. No.	Part No.	Description				Remark
		< CONNECTOR >				
CN101	* 1-568-796-11	SOCKET, CONNECTOR 22P				
CN102	* 1-568-795-11	SOCKET, CONNECTOR 12P				
		< IC >				
IC101	8-752-037-33	IC CXA1372Q				
IC102	8-759-821-94	IC LA6532M				
		< JUMPER RESISTOR >				
J101	1-216-295-00	METAL GLAZE	0	5%	1/10W	
J102	1-216-295-00	METAL GLAZE	0	5%	1/10W	
		< TRANSISTOR >				
Q101	8-729-901-01	TRANSISTOR DTC144EK				
		< RESISTOR >				
R101	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R102	1-216-097-00	METAL GLAZE	100K	5%	1/10W	
R103	1-216-091-00	METAL GLAZE	56	5%	1/10W	
R104	1-216-099-00	METAL GLAZE	120K	5%	1/10W	
R105	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W	
R106	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R107	1-216-114-00	METAL GLAZE	510K	5%	1/10W	
R108	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R109	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W	
R110	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R111	1-216-049-00	METAL GLAZE	1K	5%	1/10W	
R112	1-216-083-00	METAL GLAZE	27K	5%	1/10W	
R113	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W	
R114	1-216-105-00	METAL GLAZE	220K	5%	1/10W	
R152	1-216-073-00	METAL GLAZE	10K	5%	1/10W	

BD DISPLAY, JACK, REC LED, SW, TRANSFORMER, VR

Ref. No.	Part No.	Description			Remark
R153	1-216-085-00	METAL GLAZE	33K	5% 1/10W	
R154	1-216-085-00	METAL GLAZE	33K	5% 1/10W	
R155	1-216-093-00	METAL GLAZE	68K	5% 1/10W	
R156	1-216-081-00	METAL GLAZE	22K	5% 1/10W	
R157	1-216-079-00	METAL GLAZE	18K	5% 1/10W	
R158	1-216-079-00	METAL GLAZE	18K	5% 1/10W	
R159	1-216-079-00	METAL GLAZE	18K	5% 1/10W	
R160	1-216-049-00	METAL GLAZE	1K	5% 1/10W	
R171	1-216-001-00	METAL GLAZE	10	5% 1/10W	
R172	1-216-001-00	METAL GLAZE	10	5% 1/10W	
R173	1-216-001-00	METAL GLAZE	10	5% 1/10W	
R174	1-216-001-00	METAL GLAZE	10	5% 1/10W	
		< VARIABLE RESISTOR >			
RV101	1-238-016-11	RES. ADJ. CARBON 10K			
RV102	1-238-016-11	RES. ADJ. CARBON 10K			
		< SWITCH >			
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)			
**********					
*	A-4341-551-A	DISPLAY BOARD, COMPLETE (E, EA, AUS)			
*	A-4345-097-A	DISPLAY BOARD, COMPLETE (AEP, UK)			
*	A-4345-102-A	DISPLAY BOARD, COMPLETE (US, Canadian)			
*	A-4345-107-A	DISPLAY BOARD, COMPLETE (G)			
*	A-4345-109-A	DISPLAY BOARD, COMPLETE (EE)			
*	A-4345-110-A	DISPLAY BOARD, COMPLETE (IT)			
*	1-634-852-11	SW BOARD			
*	1-634-853-11	TRANSFORMER BOARD			
*	1-634-854-11	VR BOARD			
*	1-634-856-11	REC LED BOARD			
*	1-634-857-11	JACK BOARD			
		**********			
*	1-533-213-31	HOLDER, FUSE			
*	4-932-810-11	CUSHION (FL)			
		< CAPACITOR >			
C401	1-162-282-31	CERAMIC	100PF	10% 50V (EXCEPT G, IT)	
C401	1-162-294-31	CERAMIC	0.001uF	10% 50V (G, IT)	
C402	1-162-282-31	CERAMIC	100PF	10% 50V	
C403	1-162-290-31	CERAMIC	470PF	10% 50V (EXCEPT G, IT)	
C410	1-126-157-11	ELECT	10uF	20% 16V	
C416	1-124-463-00	ELECT	0.1uF	20% 50V	
C417	1-126-157-11	ELECT	10uF	20% 16V	
C418	1-126-157-11	ELECT	10uF	20% 16V	
C419	1-126-157-11	ELECT	10uF	20% 16V	
C420	1-126-157-11	ELECT	10uF	20% 16V	

Ref. No.	Part No.	Description			Remark
C421	1-126-157-11	ELECT	10uF	20% 16V	
C422	1-126-157-11	ELECT	10uF	20% 16V	
C423	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C451	1-162-282-31	CERAMIC	100PF	10% 50V (EXCEPT G, IT)	
C451	1-162-294-31	CERAMIC	0.001uF	10% 50V (G, IT)	
C452	1-162-282-31	CERAMIC	100PF	10% 50V	
C453	1-162-290-31	CERAMIC	470PF	10% 50V (EXCEPT G, IT)	
C460	1-126-157-11	ELECT	10uF	20% 16V	
C471	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C472	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C473	1-162-282-31	CERAMIC	100PF	10% 50V	
C474	1-162-215-31	CERAMIC	47PF	5% 50V	
C475	1-164-159-11	CERAMIC	0.1uF	50V	
C491	1-164-159-11	CERAMIC	0.1uF	50V	
C492	1-164-159-11	CERAMIC	0.1uF	50V	
C493	1-164-159-11	CERAMIC	0.1uF	50V	
C494	1-164-159-11	CERAMIC	0.1uF	50V	
C501	1-162-282-31	CERAMIC	100PF	10% 50V	
C502	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C504	1-162-289-31	CERAMIC	390PF	10% 50V	
C505	1-161-329-00	CERAMIC	0.0068uF	30% 16V	
C506	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C507	1-161-494-00	CERAMIC	0.022uF	25V	
C508	1-161-327-00	CERAMIC	0.0033uF	30% 16V	
C509	1-164-159-11	CERAMIC	0.1uF	50V	
C510	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C511	1-124-464-11	ELECT	0.22uF	20% 50V	
C512	1-161-494-00	CERAMIC	0.022uF	25V	
C513	1-126-160-11	ELECT	1uF	20% 50V	
C514	1-136-163-00	FILM	0.068uF	5% 50V	
C515	1-136-163-00	FILM	0.068uF	5% 50V	
C521	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C522	1-164-159-11	CERAMIC	0.1uF	50V	
C523	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C524	1-161-379-00	CERAMIC	0.01uF	20% 25V	
C551	1-162-282-31	CERAMIC	100PF	10% 50V	
C552	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C554	1-162-289-31	CERAMIC	390PF	10% 50V	
C555	1-161-329-00	CERAMIC	0.0068uF	30% 16V	
C556	1-162-294-31	CERAMIC	0.001uF	10% 50V	
C557	1-161-494-00	CERAMIC	0.022uF	25V	
C558	1-161-327-00	CERAMIC	0.0033uF	30% 16V	
C559	1-164-159-11	CERAMIC	0.1uF	50V	
C560	1-161-379-00	CERAMIC	0.01uF	20% 25V	

DISPLAY, JACK, REC LED, SW, TRANSFORMER, VR

Ref. No.	Part No.	Description			Remark
C561	1-124-464-11	ELECT	0.22uF	20%	50V
C562	1-161-494-00	CERAMIC	0.022uF		25V
C563	1-126-160-11	ELECT	1uF	20%	50V
C564	1-136-163-00	FILM	0.068uF	5%	50V
C565	1-136-163-00	FILM	0.068uF	5%	50V
C566	1-161-379-00	CERAMIC	0.01uF	20%	25V
C567	1-161-379-00	CERAMIC	0.01uF	20%	25V
C568	1-126-157-11	ELECT	10uF	20%	16V
C569	1-126-160-11	ELECT	1uF	20%	50V
C571	1-124-584-00	ELECT	100uF	20%	10V
C572	1-124-584-00	ELECT	100uF	20%	10V
C573	1-126-160-11	ELECT	1uF	20%	50V
C574	1-126-160-11	ELECT	1uF	20%	50V
C578	1-164-159-11	CERAMIC	0.1uF		50V
C579	1-136-173-00	FILM	0.47uF	5%	50V
C580	1-136-173-00	FILM	0.47uF	5%	50V
C581	1-136-173-00	FILM	0.47uF	5%	50V
C582	1-164-159-11	CERAMIC	0.1uF		50V
C583	1-162-282-31	CERAMIC	100PF	10%	50V
C584	1-162-282-31	CERAMIC	100PF	10%	50V
C585	1-161-379-00	CERAMIC	0.01uF	20%	25V
C586	1-161-379-00	CERAMIC	0.01uF	20%	25V
C587	1-162-282-31	CERAMIC	100PF	10%	50V
C588	1-161-379-00	CERAMIC	0.01uF	20%	25V
C589	1-161-379-00	CERAMIC	0.01uF	20%	25V
C590	1-161-379-00	CERAMIC	0.01uF	20%	25V
C592	1-162-197-31	CERAMIC	6.8PF	10%	50V
C593	1-162-197-31	CERAMIC	6.8PF	10%	50V
C594	1-162-199-31	CERAMIC	10PF	5%	50V
C595	1-162-199-31	CERAMIC	10PF	5%	50V
C596	1-125-445-11	DOUBLE LAYERS	0.22F		5.5V (UK)
C596	1-125-447-11	DOUBLE LAYERS	1F		5.5V
C597	1-126-157-11	ELECT	10uF	20%	16V
C901	1-164-159-11	CERAMIC	0.1uF		50V
C902	1-164-159-11	CERAMIC	0.1uF		50V
C903	1-126-160-11	ELECT	1uF	20%	50V
C905 ⚠	1-124-122-11	ELECT	100uF	20%	50V
C906 ⚠	1-124-556-11	ELECT	2200uF	20%	16V
C907	1-124-572-11	ELECT	100uF	20%	63V
C909	1-126-163-11	ELECT	4.7uF	20%	50V
C911	1-126-163-11	ELECT	4.7uF	20%	50V
C912	1-126-157-11	ELECT	10uF	20%	16V
C913 ⚠	1-126-163-11	ELECT	4.7uF	20%	50V
C915	1-126-163-11	ELECT	4.7uF	20%	50V
C916	1-126-163-11	ELECT	4.7uF	20%	50V
C917	1-126-163-11	ELECT	4.7uF	20%	50V
C920	1-164-159-11	CERAMIC	0.1uF		50V
C921	1-164-159-11	CERAMIC	0.1uF		50V
C922 ⚠	1-126-163-11	ELECT	4.7uF	20%	50V
C1024	1-162-290-31	CERAMIC	470PF	10%	50V (G, IT)
C1025	1-162-290-31	CERAMIC	470PF	10%	50V (G, IT)
C1026	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1027	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1028	1-162-282-31	CERAMIC	100PF	10%	50V (G, IT)
C1029	1-162-282-31	CERAMIC	100PF	10%	50V (G, IT)
C1030	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1031	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1032	1-162-282-31	CERAMIC	100PF	10%	50V (G, IT)
C1033	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1034	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1035	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1036	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C2002	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)

< CONNECTOR >

CN203	*	1-569-156-11	SOCKET, CONNECTOR 10P
CN401	*	1-569-418-11	PIN, CONNECTOR 13P
CN402	*	1-568-856-11	SOCKET, CONNECTOR 13P
CN403	*	1-568-827-11	SOCKET, CONNECTOR 8P
CN404	*	1-564-720-11	PIN, CONNECTOR (SMALL TYPE) 4P
CN451	*	1-568-851-11	SOCKET, CONNECTOR 8P
CN501	*	1-569-156-11	SOCKET, CONNECTOR 10P
CN502	*	1-569-156-11	SOCKET, CONNECTOR 10P
CN503	*	1-509-931-11	SOCKET, CONNECTOR
CN901 ⚠		1-526-930-11	INLET, AC (~AC IN) (US, Canadian, E)
CN901 ⚠		1-526-931-11	INLET, AC (~AC IN) (EA, AUS, H55, H1100)
CN902	*	1-568-858-11	SOCKET, CONNECTOR 15P
CN903	*	1-565-484-11	CONNECTOR, BOARD TO BOARD 8P

< COMPOSITION CIRCUIT BLOCK >

CP503	*	1-233-216-11	COMPOSITION CIRCUIT BLOCK
CP504	*	1-233-216-11	COMPOSITION CIRCUIT BLOCK

< DIODE >

D206	8-719-984-16	LED GL-1HY112-CD (STOP)
D207	8-719-984-17	LED GL-1EG112-CD (PLAY)
D208	8-719-912-20	DIODE 1SS120
D209	8-719-912-20	DIODE 1SS120
D210	8-719-912-20	DIODE 1SS120
D211	8-719-912-20	DIODE 1SS120
D300	8-719-900-19	DIODE SLR-34UW5
D406	8-719-912-20	DIODE 1SS120
D521	8-719-313-38	LED SEL1210RM-LC05-CD (STANDBY)
D522	8-719-313-39	LED SEL1910DM-LC05-CD (DBFB)
D523	8-719-313-39	LED SEL1910DM-LC05-CD (S-SUR)
D571	8-719-912-20	DIODE 1SS120
D572	8-719-912-20	DIODE 1SS120
D574	8-719-912-20	DIODE 1SS120

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

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

DISPLAY, JACK, REC LED, SW, TRANSFORMER, VR

Ref. No.	Part No.	Description	Remark
D576	8-719-912-20	DIODE 1SS120	
D577	8-719-912-20	DIODE 1SS120	
D578	8-719-912-20	DIODE 1SS120	
D579	8-719-912-20	DIODE 1SS120	
D580	8-719-912-20	DIODE 1SS120	
D581	8-719-912-20	DIODE 1SS120	
D582	8-719-912-20	DIODE 1SS120	
D583	8-719-912-20	DIODE 1SS120	
D584	8-719-912-20	DIODE 1SS120	
D585	8-719-912-20	DIODE 1SS120	(H50)
D588	8-719-912-20	DIODE 1SS120	(AEP, UK, G, E, EA, AUS)
D589	8-719-912-20	DIODE 1SS120	(IT, EE)
D590	8-719-912-20	DIODE 1SS120	(EE, E, EA, AUS)
D598	8-719-933-54	DIODE HZS9A2L	
D901 ⚠·	8-719-912-20	DIODE 1SS120	
D902 ⚠·	8-719-912-20	DIODE 1SS120	
D903 ⚠·	8-719-200-82	DIODE 11ES2	
D904 ⚠·	8-719-200-82	DIODE 11ES2	
D907 ⚠·	8-719-200-82	DIODE 11ES2	
D908	8-719-200-82	DIODE 11ES2	
D909 ⚠·	8-719-312-09	DIODE RBA-402	
D910	8-719-002-33	DIODE UZL-24L	
D911	8-719-014-64	DIODE UZP-5.1BC	
D912	8-719-933-40	DIODE HZS6C2L	
		< FUSE >	
F999 ⚠·	1-532-783-21	FUSE, MICRO (SECONDARY) (5A/125V)	(H50)
		< INDUCTOR >	
FB901⚠·*	1-410-858-11	INDUCTOR (G, IT)	
FB902⚠·*	1-410-858-11	INDUCTOR (G, IT)	
		< FLUORESCENT INDICATOR TUBE >	
FLT501	1-519-577-11	INDICATOR TUBE, FLUORESCENT	
		< IC >	
IC401	8-759-634-50	IC M5218AL	
IC406	8-759-820-62	IC LB1639	
IC451	8-759-634-50	IC M5218AL	
IC501	8-759-630-99	IC M5226FP	
IC502	8-759-634-50	IC M5218AL	
IC505	8-759-153-84	IC uPD75212ACW-273	
IC506	8-749-922-36	IC GP1U50XB	
IC551	8-759-630-99	IC M5226FP	
IC901	8-759-602-66	IC M5230L-A	

Ref. No.	Part No.	Description			Remark
		< JACK >			
J401	1-562-837-21	JACK (MIX MIC)			
J451	1-562-837-21	JACK (HEADPHONES)			
		< TRANSISTOR >			
Q406	8-729-904-39	TRANSISTOR DTC114TS			
Q407	8-729-904-39	TRANSISTOR DTC114TS			
Q456	8-729-904-39	TRANSISTOR DTC114TS			
Q457	8-729-904-39	TRANSISTOR DTC114TS			
Q501	8-729-904-39	TRANSISTOR DTC114TS			
Q551	8-729-904-39	TRANSISTOR DTC114TS			
Q572	8-729-900-61	TRANSISTOR DTA114ES			
Q573	8-729-224-61	TRANSISTOR 2SK246-Y			
Q574	8-729-900-80	TRANSISTOR DTC114ES			
Q575	8-729-900-80	TRANSISTOR DTC114ES			
Q576	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q901	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q903 ⚠·	8-729-924-90	TRANSISTOR 2SB1370-EF			
Q904 ⚠·	8-729-924-90	TRANSISTOR 2SB1370-EF			
Q905 ⚠·	8-729-920-98	TRANSISTOR 2SD1761-EF			
Q906 ⚠·	8-729-920-98	TRANSISTOR 2SD1761-EF			
Q907	8-729-900-80	TRANSISTOR DTC114ES			
Q908	8-729-900-80	TRANSISTOR DTC114ES			
		< RESISTOR >			
R222	1-249-405-11	CARBON	100	5%	1/4W
R401	1-249-417-11	CARBON	1K	5%	1/4W
R402	1-249-441-11	CARBON	100K	5%	1/4W
R403	1-249-441-11	CARBON	100K	5%	1/4W
R404	1-249-425-11	CARBON	4.7K	5%	1/4W
R405	1-249-401-11	CARBON	47	5%	1/4W
R406	1-249-429-11	CARBON	10K	5%	1/4W
R416	1-249-425-11	CARBON	4.7K	5%	1/4W
R417	1-249-425-11	CARBON	4.7K	5%	1/4W
R418	1-249-425-11	CARBON	4.7K	5%	1/4W
R419	1-249-417-11	CARBON	1K	5%	1/4W
R426	1-249-417-11	CARBON	1K	5%	1/4W
R427	1-249-441-11	CARBON	100K	5%	1/4W
R428	1-247-903-00	CARBON	1M	5%	1/4W
R429	1-249-417-11	CARBON	1K	5%	1/4W
R430	1-249-425-11	CARBON	4.7K	5%	1/4W
R431	1-249-425-11	CARBON	4.7K	5%	1/4W
R432	1-249-429-11	CARBON	10K	5%	1/4W
R451	1-249-417-11	CARBON	1K	5%	1/4W
R452	1-249-441-11	CARBON	100K	5%	1/4W

N te:
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Note:
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Ne les remplacer que par une pièce portant le numéro spécifié.

DISPLAY, JACK, REC LED, SW, TRANSFORMER, VR

Ref. No.	Part No.	Description			Remark
R453	1-249-441-11	CARBON	100K	5%	1/4W
R454	1-249-425-11	CARBON	4.7K	5%	1/4W
R455	1-249-401-11	CARBON	47	5%	1/4W
R456	1-249-429-11	CARBON	10K	5%	1/4W
R457	1-249-429-11	CARBON	10K	5%	1/4W
R466	1-249-425-11	CARBON	4.7K	5%	1/4W
R467	1-249-425-11	CARBON	4.7K	5%	1/4W
R468	1-249-425-11	CARBON	4.7K	5%	1/4W
R469	1-249-417-11	CARBON	1K	5%	1/4W
R471	1-249-429-11	CARBON	10K	5%	1/4W
R472	1-249-411-11	CARBON	330	5%	1/4W
R473	1-249-441-11	CARBON	100K	5%	1/4W
R474	1-249-411-11	CARBON	330	5%	1/4W
R475	1-249-441-11	CARBON	100K	5%	1/4W
R486	1-249-413-11	CARBON	470	5%	1/4W
R487	1-249-429-11	CARBON	10K	5%	1/4W
R500	1-249-414-11	CARBON	560	5%	1/4W (H50)
R501	1-247-903-00	CARBON	1M	5%	1/4W
R502	1-249-425-11	CARBON	4.7K	5%	1/4W
R503	1-249-411-11	CARBON	330	5%	1/4W
R504	1-247-903-00	CARBON	1M	5%	1/4W
R505	1-249-419-11	CARBON	1.5K	5%	1/4W
R506	1-249-434-11	CARBON	27K	5%	1/4W
R507	1-247-903-00	CARBON	1M	5%	1/4W
R522	1-249-409-11	CARBON	220	5%	1/4W
R523	1-249-409-11	CARBON	220	5%	1/4W
R524	1-249-439-11	CARBON	68K	5%	1/4W
R525	1-249-417-11	CARBON	1K	5%	1/4W
R526	1-249-405-11	CARBON	100	5%	1/4W
R527	1-249-405-11	CARBON	100	5%	1/4W
R528	1-249-405-11	CARBON	100	5%	1/4W
R529	1-249-405-11	CARBON	100	5%	1/4W
R530	1-249-405-11	CARBON	100	5%	1/4W
R531	1-249-405-11	CARBON	100	5%	1/4W
R534	1-249-405-11	CARBON	100	5%	1/4W
R535	1-249-405-11	CARBON	100	5%	1/4W
R536	1-249-405-11	CARBON	100	5%	1/4W
R537	1-249-429-11	CARBON	10K	5%	1/4W
R550	1-249-414-11	CARBON	560	5%	1/4W (H50)
R551	1-247-903-00	CARBON	1M	5%	1/4W
R552	1-249-425-11	CARBON	4.7K	5%	1/4W
R553	1-249-411-11	CARBON	330	5%	1/4W
R554	1-247-903-00	CARBON	1M	5%	1/4W
R555	1-249-419-11	CARBON	1.5K	5%	1/4W
R556	1-249-434-11	CARBON	27K	5%	1/4W
R557	1-247-903-00	CARBON	1M	5%	1/4W
R564	1-247-887-00	CARBON	220K	5%	1/4W
R568	1-249-441-11	CARBON	100K	5%	1/4W
R569	1-249-429-11	CARBON	10K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R570	1-249-417-11	CARBON	1K	5%	1/4W
R571	1-249-441-11	CARBON	100K	5%	1/4W
R572	1-247-891-00	CARBON	330K	5%	1/4W
R573	1-249-425-11	CARBON	4.7K	5%	1/4W
R574	1-249-441-11	CARBON	100K	5%	1/4W
R577	1-249-405-11	CARBON	100	5%	1/4W
R582	1-249-429-11	CARBON	10K	5%	1/4W
R596	1-249-429-11	CARBON	10K	5%	1/4W
R598	1-249-413-11	CARBON	470	5%	1/4W
R599	1-249-429-11	CARBON	10K	5%	1/4W
R901	1-249-419-11	CARBON	1.5K	5%	1/4W
R902	1-249-429-11	CARBON	10K	5%	1/4W
R903	1-249-421-11	CARBON	2.2K	5%	1/4W
R904	1-249-433-11	CARBON	22K	5%	1/4W
R905 ⚠	1-212-934-00	FUSIBLE	1	5% 1/2W F	(EXCEPT US, Canadian)
R905 ⚠	1-212-952-00	FUSIBLE	5.6	5% 1/2W F	(US, Canadian)
R906 ⚠	1-212-934-00	FUSIBLE	1	5% 1/2W F	
R907 ⚠	1-212-934-00	FUSIBLE	1	5% 1/2W F	(EXCEPT US, Canadian)
R907 ⚠	1-212-952-00	FUSIBLE	5.6	5% 1/2W F	(US, Canadian)
R908	1-249-425-11	CARBON	4.7K	5%	1/4W
R909	1-249-433-11	CARBON	22K	5%	1/4W
R910	1-247-903-00	CARBON	1M	5%	1/4W
R911	1-249-405-11	CARBON	100	5%	1/4W
R912	1-249-432-11	CARBON	18K	5%	1/4W
R913	1-249-432-11	CARBON	18K	5%	1/4W
R914	1-247-842-11	CARBON	3K	5%	1/4W
R915	1-249-429-11	CARBON	10K	5%	1/4W
R917	1-249-413-11	CARBON	470	5%	1/4W
R926	1-202-725-00	SOLID	3.3M	10% 1/2W	(US, Canadian)
R2001	1-247-891-00	CARBON	330K	5%	1/4W

< VARIABLE RESISTOR >

RV406	1-238-865-11	RES, VAR, CARBON (MOTOR) 100KX2		(INCLUDING VOL LED)
RV501	1-238-457-11	RES, VAR, CARBON 250K/250K (12kHz) (H50)		
RV501	1-238-867-11	RES, VAR, SLIDE 250K (12kHz) (H55, H1100)		
RV502	1-238-457-11	RES, VAR, CARBON 250K/250K (4kHz) (H50)		
RV502	1-238-867-11	RES, VAR, SLIDE 250K (4kHz) (H55, H1100)		
RV503	1-238-457-11	RES, VAR, CARBON 250K/250K (1kHz) (H50)		
RV503	1-238-867-11	RES, VAR, SLIDE 250K (1kHz) (H55, H1100)		
RV504	1-238-457-11	RES, VAR, CARBON 250K/250K (400Hz) (H50)		
RV504	1-238-867-11	RES, VAR, SLIDE 250K (400Hz) (H55, H1100)		
RV505	1-238-457-11	RES, VAR, CARBON 250K/250K (100Hz) (H50)		
RV505	1-238-867-11	RES, VAR, SLIDE 250K (100Hz) (H55, H1100)		

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DISPLAY, JACK, REC LED, SW, TRANSFORMER, VR | DOLBY

LOADING | MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description	Remark
RV551	1-238-457-11	RES, VAR, CARBON 250K/250K (12kHz) (H50)	
RV551	1-238-867-11	RES, VAR, SLIDE 250K (12kHz) (H55, H1100)	
RV552	1-238-457-11	RES, VAR, CARBON 250K/250K (4kHz) (H50)	
RV552	1-238-867-11	RES, VAR, SLIDE 250K (4kHz) (H55, H1100)	
RV553	1-238-457-11	RES, VAR, CARBON 250K/250K (1kHz) (H50)	
RV553	1-238-867-11	RES, VAR, SLIDE 250K (1kHz) (H55, H1100)	
RV554	1-238-457-11	RES, VAR, CARBON 250K/250K (400Hz) (H50)	
RV554	1-238-867-11	RES, VAR, SLIDE 250K (400Hz) (H55, H1100)	
RV555	1-238-457-11	RES, VAR, CARBON 250K/250K (100Hz) (H50)	
RV555	1-238-867-11	RES, VAR, SLIDE 250K (100Hz) (H55, H1100)	
		< SWITCH >	
S201	1-572-184-11	SWITCH, KEYBOARD (EDIT)	
S202	1-572-184-11	SWITCH, KEYBOARD (■)	
S203	1-572-184-11	SWITCH, KEYBOARD (▷II)	
S204	1-572-184-11	SWITCH, KEYBOARD (⏏OPEN/CLOSE)	
S205	1-572-184-11	SWITCH, KEYBOARD (▷▷I)	
S206	1-572-184-11	SWITCH, KEYBOARD (I◁◁)	
S207	1-572-184-11	SWITCH, KEYBOARD (▶▶)	
S208	1-572-184-11	SWITCH, KEYBOARD (◀◀)	
S209	1-572-184-11	SWITCH, KEYBOARD (REPEAT)	
S210	1-572-184-11	SWITCH, KEYBOARD (CONTINUE)	
S211	1-572-184-11	SWITCH, KEYBOARD (SHUFFLE)	
S212	1-572-184-11	SWITCH, KEYBOARD (PROGRAM)	
S214	1-572-184-11	SWITCH, KEYBOARD (TIME)	
S501	1-572-184-11	SWITCH, KEYBOARD (TIMER CONTROL)	
S502	1-572-184-11	SWITCH, KEYBOARD (SLEEP)	
S503	1-572-184-11	SWITCH, KEYBOARD (TIMER SET)	
S504	1-572-184-11	SWITCH, KEYBOARD (CLOCK SET)	
S505	1-572-184-11	SWITCH, KEYBOARD (CLOCK DISPLAY)	
S506	1-572-184-11	SWITCH, KEYBOARD (POWER)	
S507	1-572-184-11	SWITCH, KEYBOARD (DBFB)	
S508	1-572-184-11	SWITCH, KEYBOARD (S-SUR)	
S509	1-572-184-11	SWITCH, KEYBOARD (TAPE)	
S510	1-572-184-11	SWITCH, KEYBOARD (CD)	
S511	1-572-184-11	SWITCH, KEYBOARD (TUNER)	
S512	1-572-184-11	SWITCH, KEYBOARD (VIDEO/AUX) (H50)	
S512	1-572-184-11	SWITCH, KEYBOARD (PHONO) (H55, H1100)	
S513	1-572-184-11	SWITCH, KEYBOARD (BAND)	
S514	1-572-184-11	SWITCH, KEYBOARD (TUNING -)	
S515	1-572-184-11	SWITCH, KEYBOARD (TUNING +)	
S516	1-572-184-11	SWITCH, KEYBOARD (AUTO)	
S517	1-572-184-11	SWITCH, KEYBOARD (MEMORY)	
S518	1-572-184-11	SWITCH, KEYBOARD (ENTER)	
S519	1-572-184-11	SWITCH, KEYBOARD (NEXT)	
S520	1-572-184-11	SWITCH, KEYBOARD (SHIFT)	
S521	1-572-184-11	SWITCH, KEYBOARD (PRESET/TIMER -)	
S522	1-572-184-11	SWITCH, KEYBOARD (PRESET/TIMER +)	
S901 ⚠	1-571-722-11	SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR) (E, EA, AUS)	
		< CRYSTAL >	
X501	1-567-821-21	VIBRATOR, CRYSTAL (4.19MHz)	
X502	1-527-997-21	VIBRATOR, CRYSTAL (32KHz)	
		**********	
	* 1-634-855-11	DOLBY BOARD	
		**********	
		< CONNECTOR >	
CN350	* 1-564-495-11	PIN, CONNECTOR 2P	
		< SWITCH >	
S350	1-553-977-00	SWITCH, SLIDE (DOLBY NR)	
		**********	
	* 1-634-461-11	LOADING BOARD	
		**********	
		< CONNECTOR >	
CN291	* 1-564-498-11	PIN, CONNECTOR 5P	
		< SWITCH >	
S291	1-571-924-11	SWITCH, LEAF (LOAD OUT)	
S292	1-571-924-11	SWITCH, LEAF (LOAD IN)	
		**********	
	* A-4345-096-A	MAIN BOARD, COMPLETE (AEP, UK)	
	* A-4345-101-A	MAIN BOARD, COMPLETE (US, Canadian)	
	* A-4345-106-A	MAIN BOARD, COMPLETE (G, IT)	
	* A-4345-108-A	MAIN BOARD, COMPLETE (EE)	
	* A-4345-111-A	MAIN BOARD, COMPLETE (E, EA, AUS)	
	* 1-634-849-11	POWER BOARD	
	* 1-634-850-11	CHAMICAL CONDENSOR BOARD	
		**********	
	* 4-925-530-01	PLATE, GROUND	

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MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description				Remark
		< CAPACITOR >				
C1	1-162-195-31	CERAMIC	4.7PF	10%	50V (AEP, EE, E, EA, AUS)	
C2	1-123-875-11	ELECT	10uF	20%	50V	
C3	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C4	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C5	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C6	1-164-159-11	CERAMIC	0.1uF		50V (E, EA, AUS)	
C7	1-164-159-11	CERAMIC	0.1uF		50V (EXCEPT US, Canadian)	
C8	1-161-379-00	CERAMIC	0.01uF	20%	25V (H55, H1100)	
C9	1-102-120-00	CERAMIC	0.0018uF	10%	50V (H55, H1100)	
C10	1-161-374-11	CERAMIC	0.0015uF	30%	16V (H55, H1100)	
C21	1-161-379-00	CERAMIC	0.01uF	20%	25V (E, EA, AUS)	
C22	1-102-947-00	CERAMIC	10PF	0.5PF	50V (E, EA, AUS)	
C23	1-136-162-00	FILM	0.056uF	5%	50V (E, EA, AUS)	
C24	1-136-161-00	FILM	0.047uF	5%	50V (E, EA, AUS)	
C51	1-164-056-11	CERAMIC	27PF	5%	50V	
C52	1-164-056-11	CERAMIC	27PF	5%	50V	
C53	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C54	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C55	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C56	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C57	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C58	1-123-875-11	ELECT	10uF	20%	50V	
C59	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C60	1-124-477-11	ELECT	47uF	20%	25V	
C61	1-124-925-11	ELECT	2.2uF	20%	100V	
C62	1-136-153-00	FILM	0.01uF	5%	50V	
C63	1-124-463-00	ELECT	0.1uF	20%	50V (H50)	
C64	1-124-902-00	ELECT	0.47uF	20%	50V (H50, H1100)	
C65	1-136-157-00	FILM	0.022uF	5%	50V (H50, H1100)	
C66	1-136-157-00	FILM	0.022uF	5%	50V (H50, H1100)	
C67	1-162-282-31	CERAMIC	100PF	10%	50V	
C81	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C82	1-124-472-11	ELECT	470uF	20%	10V	
C83	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C84	1-123-875-11	ELECT	10uF	20%	50V	
C85	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C86	1-162-282-31	CERAMIC	100PF	10%	50V	
C87	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C88	1-123-875-11	ELECT	10uF	20%	50V	
C89	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C90	1-124-477-11	ELECT	47uF	20%	25V	
C91	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C92	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C93	1-161-375-00	CERAMIC	0.0022uF	20%	50V	
C94	1-161-375-00	CERAMIC	0.0022uF	20%	50V	

Ref. No.	Part No.	Description				Remark
C95	1-124-791-11	ELECT	1uF	20%	50V	
C96	1-124-791-11	ELECT	1uF	20%	50V	
C97	1-124-791-11	ELECT	1uF	20%	50V	
C98	1-124-791-11	ELECT	1uF	20%	50V	
C99	1-136-154-00	FILM	0.012uF	5%	50V (EXCEPT US, Canadian)	
C99	1-136-155-00	FILM	0.015uF	5%	50V (US, Canadian)	
C100	1-136-154-00	FILM	0.012uF	5%	50V (EXCEPT US, Canadian)	
C100	1-136-155-00	FILM	0.015uF	5%	50V (US, Canadian)	
C101	1-123-875-11	ELECT	10uF	20%	50V	
C102	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C103	1-124-463-00	ELECT	0.1uF	20%	50V	
C104	1-124-791-11	ELECT	1uF	20%	50V	
C105	1-124-791-11	ELECT	1uF	20%	50V	
C106	1-124-791-11	ELECT	1uF	20%	50V	
C107	1-162-282-31	CERAMIC	100PF	10%	50V (G, IT)	
C108	1-162-211-31	CERAMIC	33PF	5%	50V (EXCEPT G, IT)	
C108	1-162-291-31	CERAMIC	560PF	10%	50V (G, IT)	
C109	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C110	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C111	1-124-925-11	ELECT	2.2uF	20%	100V	
C112	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C114	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C116	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C117	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C201	1-164-159-11	CERAMIC	0.1uF		50V	
C211	1-136-161-00	FILM	0.047uF	5%	50V	
C212	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C213	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C214	1-124-465-00	ELECT	0.47uF	20%	50V	
C215	1-164-159-11	CERAMIC	0.1uF		50V	
C221	1-162-207-31	CERAMIC	22PF	5%	50V	
C222	1-162-207-31	CERAMIC	22PF	5%	50V	
C223	1-124-443-00	ELECT	100uF	20%	10V	
C225	1-136-165-00	FILM	0.1uF	5%	50V	
C229	1-123-875-11	ELECT	10uF	20%	50V	
C231	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C232	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C233	1-162-286-31	CERAMIC	220PF	10%	50V	
C234	1-162-286-31	CERAMIC	220PF	10%	50V	
C235	1-124-791-11	ELECT	1uF	20%	50V	
C236	1-124-791-11	ELECT	1uF	20%	50V	
C237	1-123-875-11	ELECT	10uF	20%	50V	

MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description				Remark
C238	1-123-875-11	ELECT	10uF	20%	50V	
C251	1-162-282-31	CERAMIC	100PF	10%	50V	
C252	1-162-282-31	CERAMIC	100PF	10%	50V	
C253	1-162-282-31	CERAMIC	100PF	10%	50V	
C254	1-162-282-31	CERAMIC	100PF	10%	50V	
C255	1-162-282-31	CERAMIC	100PF	10%	50V	
C256	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C257	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C258	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C601	1-162-293-31	CERAMIC	820PF	10%	50V	
C602	1-162-282-31	CERAMIC	100PF	10%	50V	
C603	1-136-157-00	FILM	0.022uF	5%	50V	
C604	1-126-157-11	ELECT	10uF	20%	16V	
C609	1-136-161-00	FILM	0.047uF	5%	50V	
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C611	1-162-293-31	CERAMIC	820PF	10%	50V	
C612	1-162-282-31	CERAMIC	100PF	10%	50V	
C613	1-136-157-00	FILM	0.022uF	5%	50V	
C614	1-123-875-11	ELECT	10uF	20%	50V	
C621	1-162-282-31	CERAMIC	100PF	10%	50V	
C622	1-162-282-31	CERAMIC	100PF	10%	50V	
C623	1-130-474-00	MYLAR	0.0018uF	5%	50V (H55, H1100)	
C624	1-130-480-00	MYLAR	0.0056uF	5%	50V (H55, H1100)	
C625	1-123-875-11	ELECT	10uF	20%	50V (H55, H1100)	
C626	1-124-791-11	ELECT	1uF	20%	50V	
C627	1-162-282-31	CERAMIC	100PF	10%	50V (AEP, EE)	
C627	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)	
C628	1-161-379-00	CERAMIC	0.01uF	20%	25V (H55, H1100)	
C651	1-162-293-31	CERAMIC	820PF	10%	50V	
C652	1-162-282-31	CERAMIC	100PF	10%	50V	
C653	1-136-157-00	FILM	0.022uF	5%	50V	
C654	1-126-157-11	ELECT	10uF	20%	16V	
C657	1-162-282-31	CERAMIC	100PF	10%	50V (AEP, EE)	
C657	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)	
C658	1-161-379-00	CERAMIC	0.01uF	20%	25V (H55, H1100)	
C659	1-136-161-00	FILM	0.047uF	5%	50V	
C661	1-162-293-31	CERAMIC	820PF	10%	50V	
C662	1-162-282-31	CERAMIC	100PF	10%	50V	
C663	1-136-157-00	FILM	0.022uF	5%	50V	
C664	1-123-875-11	ELECT	10uF	20%	50V	
C671	1-162-282-31	CERAMIC	100PF	10%	50V	
C672	1-162-282-31	CERAMIC	100PF	10%	50V	
C673	1-130-474-00	MYLAR	0.0018uF	5%	50V (H55, H1100)	
C674	1-130-480-00	MYLAR	0.0056uF	5%	50V (H55, H1100)	
C675	1-123-875-11	ELECT	10uF	20%	50V (H55, H1100)	
C676	1-124-791-11	ELECT	1uF	20%	50V	
C701	1-162-290-31	CERAMIC	470PF	10%	50V	
C702	1-162-290-31	CERAMIC	470PF	10%	50V	

Ref. No.	Part No.	Description				Remark
C703	1-124-254-00	ELECT	0.68uF	20%	50V	
C704	1-123-875-11	ELECT	10uF	20%	50V	
C705	1-126-157-11	ELECT	10uF	20%	16V	
C706	1-124-902-00	ELECT	0.47uF	20%	50V	
C707	1-124-925-11	ELECT	2.2uF	20%	100V	
C709	1-123-875-11	ELECT	10uF	20%	50V	
C710	1-162-288-31	CERAMIC	330PF	10%	50V	
C711	1-162-282-31	CERAMIC	100PF	10%	50V	
C712	1-124-443-00	ELECT	100uF	20%	10V	
C713	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C714	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C721	1-161-374-11	CERAMIC	0.0015uF	20%	50V	
C722	1-161-329-00	CERAMIC	0.0068uF	30%	16V	
C723	1-124-791-11	ELECT	1uF	20%	50V	
C724	1-124-925-11	ELECT	2.2uF	20%	100V	
C725	1-136-153-00	FILM	0.01uF	5%	50V (H55, H1100)	
C725	1-136-154-00	FILM	0.012uF	5%	50V (H50)	
C726	1-130-457-00	MYLAR	0.0022uF	5%	50V (H55, H1100)	
C727	1-130-457-00	MYLAR	0.0022uF	5%	50V (H55, H1100)	
C728	1-162-286-31	CERAMIC	220PF	10%	50V	
C729	1-162-286-31	CERAMIC	220PF	10%	50V	
C731	1-124-927-11	ELECT	4.7uF	20%	100V	
C735	1-123-875-11	ELECT	10uF	20%	50V	
C736	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C737	1-124-443-00	ELECT	100uF	20%	10V	
C738	1-161-379-00	CERAMIC	0.01uF	20%	25V	
C739	1-164-159-11	CERAMIC	0.1uF		50V	
C740	1-161-379-00	CERAMIC	0.01uF	20%	25V (EXCEPT US, Canadian)	
C740	1-164-159-11	CERAMIC	0.1uF		50V (US, Canadian)	
C751	1-162-290-31	CERAMIC	470PF	10%	50V	
C752	1-162-290-31	CERAMIC	470PF	10%	50V	
C753	1-124-254-00	ELECT	0.68uF	20%	50V	
C754	1-123-875-11	ELECT	10uF	20%	50V	
C755	1-126-157-11	ELECT	10uF	20%	16V	
C756	1-124-902-00	ELECT	0.47uF	20%	50V	
C757	1-124-925-11	ELECT	2.2uF	20%	100V	
C759	1-123-875-11	ELECT	10uF	20%	50V	
C760	1-162-288-31	CERAMIC	330PF	10%	50V	
C761	1-162-282-31	CERAMIC	100PF	10%	50V	
C764	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C795	1-123-875-11	ELECT	10uF	20%	50V	
C801	1-123-875-11	ELECT	10uF	20%	50V	
C802	1-162-290-31	CERAMIC	470PF	10%	50V (EXCEPT G, IT)	
C803	1-126-233-11	ELECT	22uF	20%	50V	

MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description			Remark
C804	1-164-159-11	CERAMIC	0.1uF		50V (EXCEPT G, IT)
C805	1-164-159-11	CERAMIC	0.1uF		50V (EXCEPT G, IT)
C851	1-123-875-11	ELECT	10uF	20%	50V
C852	1-162-290-31	CERAMIC	470PF	10%	50V (EXCEPT G, IT)
C853	1-126-233-11	ELECT	22uF	20%	50V
C854	1-164-159-11	CERAMIC	0.1uF		50V (EXCEPT G, IT)
C855	1-164-159-11	CERAMIC	0.1uF		50V (EXCEPT G, IT)
C871 ⚠·	1-124-618-11	ELECT	2200uF	20%	35V
C872 ⚠·	1-124-618-11	ELECT	2200uF	20%	35V
C873	1-124-120-11	ELECT	220uF	20%	25V
C874 ⚠·	1-124-484-11	ELECT	220uF	20%	35V
C875 ⚠·	1-123-875-11	ELECT	10uF	20%	50V
C876	1-123-875-11	ELECT	10uF	20%	50V
C877 ⚠·	1-123-875-11	ELECT	10uF	20%	50V
C878 ⚠·	1-124-910-11	ELECT	47uF	20%	50V
C879 ⚠·	1-124-910-11	ELECT	47uF	20%	50V
C880	1-124-910-11	ELECT	47uF	20%	50V
C899	1-164-159-11	CERAMIC	0.1uF		50V
C996	1-124-927-11	ELECT	4.7uF	20%	100V
C997	1-124-791-11	ELECT	1uF	20%	50V
C998	1-126-176-11	ELECT	220uF	20%	10V
C999	1-123-875-11	ELECT	10uF	20%	50V
C1001	1-162-282-31	CERAMIC	100PF	10%	50V (G, IT)
C1002	1-162-288-31	CERAMIC	330PF	10%	50V (G, IT)
C1003	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1004	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1005	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1006	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1007	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1008	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1009	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1010	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1011	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1012	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1013	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1014	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1015	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1017	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C1019	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1020	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1021	1-164-159-11	CERAMIC	0.1uF		50V (G, IT)
C1022	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1023	1-162-294-31	CERAMIC	0.001uF	10%	50V (G, IT)
C1024	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
C2001	1-161-379-00	CERAMIC	0.01uF	20%	25V (G, IT)
		< CIRCUIT BREAKER >			
CB801 ⚠·	1-532-564-00	BREAKER, CIRCUIT (2.2A)			
CB851 ⚠·	1-532-564-00	BREAKER, CIRCUIT (2.2A)			
		< FILTER >			
CF1	1-567-389-11	FILTER, CERAMIC (10.7MHz)			
CF2	1-567-389-11	FILTER, CERAMIC (10.7MHz) (G, IT)			
CF81	1-567-389-11	FILTER, CERAMIC (10.7MHz)			
		< CONNECTOR >			
CN201 *	1-569-155-11	PLUG, CONNECTOR 10P			
CN202	1-568-802-11	SOCKET, CONNECTOR 19P			
CN253 *	1-564-339-71	PIN, CONNECTOR 5P			
CN601 *	1-564-507-11	PLUG, CONNECTOR 4P			
CN602 *	1-564-509-11	PLUG, CONNECTOR 6P			
CN701 *	1-569-155-11	PLUG, CONNECTOR 10P			
CN702 *	1-569-155-11	PLUG, CONNECTOR 10P			
CN703 *	1-568-832-11	SOCKET, CONNECTOR 13P			
CN704 *	1-568-834-11	SOCKET, CONNECTOR 15P			
CN721 *	1-564-505-11	PLUG, CONNECTOR 2P			
CN751 *	1-564-336-00	PIN, CONNECTOR 2P			
CN752 *	1-564-336-71	PIN, CONNECTOR 2P			
CN785 *	1-564-339-00	PIN, CONNECTOR 5P			
CN786 *	1-564-340-00	PIN, CONNECTOR 6P			
CN801 *	1-508-694-00	PIN, CONNECTOR 8P			
CN802 *	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
		< TRIMMER >			
CT21	1-141-227-00	TRIMMER (E, EA, AUS)			
CT22	1-141-227-00	TRIMMER (E, EA, AUS)			
		< DIODE >			
D21	8-719-902-79	DIODE KV1236Z (E, EA, AUS)			
D201	8-719-010-34	DIODE UZ-4.7BSC			
D205	8-719-912-20	DIODE 1SS120			
D601	8-719-912-20	DIODE 1SS120			
D701	8-719-933-48	DIODE HZS7B3L			
D721	8-719-912-20	DIODE 1SS120			
D735	8-719-933-40	DIODE HZS6C2L			
D736	8-719-912-20	DIODE 1SS120			
D737	8-719-912-20	DIODE 1SS120			
D738	8-719-912-20	DIODE 1SS120			
D739	8-719-912-20	DIODE 1SS120			
D785	8-719-912-20	DIODE 1SS120			
D786	8-719-912-20	DIODE 1SS120			
D787	8-719-912-20	DIODE 1SS120			

Note:
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Replace only with part number specified.

Note:
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Ne les remplacer que par une pièce portant le numéro spécifié.

MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description	Remark
D788	8-719-912-20	DIODE 1SS120	
D789	8-719-912-20	DIODE 1SS120	
D790	8-719-912-20	DIODE 1SS120	
D791	8-719-912-20	DIODE 1SS120	
D792	8-719-912-20	DIODE 1SS120	
D793	8-719-912-20	DIODE 1SS120	
D801	8-719-912-20	DIODE 1SS120	
		< INDUCTOR >	
⚠FB1001 ·*	1-410-858-11	INDUCTOR (G, IT)	
⚠FB1002 ·*	1-410-858-11	INDUCTOR (G, IT)	
		< FRONT END >	
FE1	1-465-007-11	FRONT END (FM) (4 GANG) (G, IT)	
FE1	1-465-283-11	FRONT END (2 GANG) (AEP, H50)	
FE1	1-465-396-11	FRONT END (3 GANG) (EE)	
FE1	1-465-637-11	FRONT END (2 BAND) (UK)	
		< ENCAPSULATED COMPONENT >	
FE2	1-236-461-11	ENCAPSULATED COMPONENT (US, Canadian)	
FE2	1-236-462-11	ENCAPSULATED COMPONENT (H55, H1100)	
FE2	1-236-777-11	ENCAPSULATED COMPONENT (E, EA, AUS)	
FE3	1-236-463-11	ENCAPSULATED COMPONENT (H55, H1100)	
FL81	1-236-465-11	ENCAPSULATED COMPONENT (G, IT)	
		< IC >	
IC51	8-759-239-29	IC TC9217P	
IC81	8-759-821-45	IC LA1851N	
IC201	8-759-150-19	IC uPD75112CW-064	
IC202	8-752-335-15	IC CXD2500Q	
IC221	8-752-337-09	IC CXD2554P	
IC222	8-759-990-13	IC TDA1543A	
IC223	8-759-634-51	IC M5218AP	
IC253	8-759-633-65	IC M54641L	
IC601	8-759-112-93	IC uPC4570HA-1	
IC602	8-759-140-53	IC uPD4053BC	
IC621	8-759-634-50	IC M5218AL (H55, H1100)	
IC661	8-759-112-93	IC uPC4570HA-1	
IC701	8-759-634-50	IC M5218AL	
IC702	8-752-034-26	IC CXA1101P	
IC703	8-759-000-49	IC MC14066BCP	
IC704	8-752-038-00	IC CXA1298AP	
IC705	8-759-630-42	IC M4052BPK	
IC706	8-759-605-16	IC M51953BL	
IC785	8-759-240-01	IC TC4001BP	
IC801⚠·	8-749-900-95	IC STK-4122MK2	
IC999	8-759-821-93	IC LA5601	

Ref. No.	Part No.	Description	Remark
		< IC LINK >	
⚠ICP999 ·	1-532-846-21	LINK, IC PRF5000 (5A) (H55, H1100)	
		< TRANSFORMER >	
IFT81	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)	
IFT82	1-404-807-11	TRANSFORMER, DISCRIMINATOR	
		< JACK >	
J701	1-569-181-11	JACK, PIN 2P (VIDEO/AUX) (H50)	
J701	1-569-181-11	JACK, PIN 2P (PHONO) (H55, H1100)	
		< COIL >	
L1	1-408-425-00	INDUCTOR 220uH (H55, H1100)	
L81	1-408-399-00	INDUCTOR 1.5uH	
L83	1-410-489-11	INDUCTOR 390uH	
L701	1-410-779-21	INDUCTOR 22mH	
L721	1-410-489-11	INDUCTOR 390uH	
L751	1-410-779-21	INDUCTOR 22mH	
L1001	1-410-521-11	INDUCTOR 100uH (G, IT)	
		< FILTER >	
LPF81	1-235-164-00	FILTER, LOW PASS	
LPF82	1-235-164-00	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-620-19	TRANSISTOR 2SC2724-CD	
Q2	8-729-620-19	TRANSISTOR 2SC2724-CD (G, IT)	
Q3	8-729-900-80	TRANSISTOR DTC114ES	
Q4	8-729-900-61	TRANSISTOR DTA114ES	
Q5	8-729-900-80	TRANSISTOR DTC114ES (EXCEPT US, Canadian)	
Q6	8-729-900-80	TRANSISTOR DTC114ES (EXCEPT US, Canadian)	
Q7	8-729-119-76	TRANSISTOR 2SA1175-HFE (EXCEPT US, Canadian)	
Q8	8-729-620-05	TRANSISTOR 2SC2603-EF (EXCEPT US, Canadian)	
Q9	8-729-900-80	TRANSISTOR DTC114ES (EXCEPT US, Canadian)	
Q10	8-729-900-80	TRANSISTOR DTC114ES (UK, E, EA, AUS)	
Q51	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q52	8-729-201-84	TRANSISTOR 2SC3112-B	
Q53	8-729-202-67	TRANSISTOR 2SK246-GR3 (H55, H1100)	
Q54	8-729-201-84	TRANSISTOR 2SC3112-B (H55, H1100)	
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q103	8-729-900-80	TRANSISTOR DTC114ES	
Q201	8-729-620-05	TRANSISTOR 2SC2603-EF	

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MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description	Remark
Q231	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q232	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q233	8-729-900-65	TRANSISTOR DTA144ES	
Q234	8-729-900-80	TRANSISTOR DTC114ES	
Q252	8-729-900-80	TRANSISTOR DTC114ES	
Q253	8-729-900-80	TRANSISTOR DTC114ES	
Q601	8-729-904-39	TRANSISTOR DTC114TS	
Q603	8-729-900-80	TRANSISTOR DTC114ES	
Q651	8-729-904-39	TRANSISTOR DTC114TS	
Q721	8-729-801-93	TRANSISTOR 2SD1387	
Q722	8-729-620-05	TRANSISTOR 2SC2603-EF	
Q723	8-729-900-80	TRANSISTOR DTC114ES	
Q731	8-729-904-39	TRANSISTOR DTC114TS	
Q732	8-729-900-61	TRANSISTOR DTA114ES	
Q735	8-729-111-29	TRANSISTOR 2SD1616A-K	
Q736	8-729-920-98	TRANSISTOR 2SD1761-EF	
Q738	8-729-900-61	TRANSISTOR DTA114ES	
Q739	8-729-900-89	TRANSISTOR DTC144ES	
Q740	8-729-900-89	TRANSISTOR DTC144ES	
Q781	8-729-904-39	TRANSISTOR DTC114TS	
Q785	8-729-801-93	TRANSISTOR 2SD1387	
Q786	8-729-900-80	TRANSISTOR DTC114ES	
Q787	8-729-900-80	TRANSISTOR DTC114ES	
Q789	8-729-900-80	TRANSISTOR DTC114ES	
Q790	8-729-900-80	TRANSISTOR DTC114ES	
Q791	8-729-900-80	TRANSISTOR DTC114ES	
Q801	8-729-900-80	TRANSISTOR DTC114ES	
Q999	8-729-900-80	TRANSISTOR DTC114ES	

< RESISTOR >

R1	1-249-411-11	CARBON	330	5%	1/4W	
R2	1-249-393-11	CARBON	10	5%	1/4W	(G, IT)
R2	1-249-411-11	CARBON	330	5%	1/4W	(EXCEPT G, IT)
R3	1-247-891-00	CARBON	330K	5%	1/4W	
R4	1-249-411-11	CARBON	330	5%	1/4W	
R5	1-247-891-00	CARBON	330K	5%	1/4W	(G, IT)
R6	1-249-411-11	CARBON	330	5%	1/4W	(G, IT)
R7	1-249-405-11	CARBON	100	5%	1/4W	
R8	1-249-441-11	CARBON	100K	5%	1/4W	
R9	1-249-437-11	CARBON	47K	5%	1/4W	
R10	1-249-421-11	CARBON	2.2K	5%	1/4W	(E, EA, AUS)
R10	1-249-437-11	CARBON	47K	5%	1/4W	(H55, H1100)
R11	1-249-421-11	CARBON	2.2K	5%	1/4W	(H55, H1100)
R11	1-249-429-11	CARBON	10K	5%	1/4W	(E, EA, AUS)
R12	1-249-421-11	CARBON	2.2K	5%	1/4W	(H55, H1100)
R12	1-249-429-11	CARBON	10K	5%	1/4W	(E, EA, AUS)

Ref. No.	Part No.	Description				Remark
R13	1-249-433-11	CARBON	22K	5%	1/4W	(H55, H1100)
R14	1-249-432-11	CARBON	18K	5%	1/4W	(H55, H1100)
R15	1-247-903-00	CARBON	1M	5%	1/4W	(H55, H1100)
R20	1-249-425-11	CARBON	4.7K	5%	1/4W	(EXCEPT US, Canadian)
R21	1-249-429-11	CARBON	10K	5%	1/4W	(E, EA, AUS)
R22	1-249-429-11	CARBON	10K	5%	1/4W	(E, EA, AUS)
R23	1-249-407-11	CARBON	150	5%	1/4W	(US, Canadian)
R51	1-249-417-11	CARBON	1K	5%	1/4W	
R52	1-249-417-11	CARBON	1K	5%	1/4W	
R53	1-249-441-11	CARBON	100K	5%	1/4W	
R54	1-249-417-11	CARBON	1K	5%	1/4W	
R55	1-249-425-11	CARBON	4.7K	5%	1/4W	
R56	1-249-405-11	CARBON	100	5%	1/4W	
R57	1-249-401-11	CARBON	47	5%	1/4W	
R58	1-249-423-11	CARBON	3.3K	5%	1/4W	
R59	1-249-414-11	CARBON	560	5%	1/4W	
R60	1-249-417-11	CARBON	1K	5%	1/4W	
R61	1-249-410-11	CARBON	270	5%	1/4W	
R62	1-249-418-11	CARBON	1.2K	5%	1/4W	
R63	1-249-421-11	CARBON	2.2K	5%	1/4W	
R64	1-249-425-11	CARBON	4.7K	5%	1/4W	
R65	1-249-425-11	CARBON	4.7K	5%	1/4W	
R66	1-249-405-11	CARBON	100	5%	1/4W	(H50)
R67	1-249-423-11	CARBON	3.3K	5%	1/4W	(H55, H1100)
R68	1-249-414-11	CARBON	560	5%	1/4W	(H55, H1100)
R69	1-249-417-11	CARBON	1K	5%	1/4W	(H55, H1100)
R70	1-249-410-11	CARBON	270	5%	1/4W	(H55, H1100)
R71	1-249-433-11	CARBON	22K	5%	1/4W	(H55, H1100)
R72	1-249-421-11	CARBON	2.2K	5%	1/4W	(H55, H1100)
R73	1-249-425-11	CARBON	4.7K	5%	1/4W	(H55, H1100)
R74	1-249-425-11	CARBON	4.7K	5%	1/4W	(H55, H1100)
R75	1-249-393-11	CARBON	10	5%	1/4W	
R81	1-249-433-11	CARBON	22K	5%	1/4W	
R82	1-249-417-11	CARBON	1K	5%	1/4W	
R83	1-249-399-11	CARBON	33	5%	1/4W	
R84	1-249-429-11	CARBON	10K	5%	1/4W	
R85	1-249-429-11	CARBON	10K	5%	1/4W	
R86	1-249-437-11	CARBON	47K	5%	1/4W	
R87	1-249-409-11	CARBON	220	5%	1/4W	
R88	1-249-429-11	CARBON	10K	5%	1/4W	
R89	1-249-429-11	CARBON	10K	5%	1/4W	
R90	1-249-421-11	CARBON	2.2K	5%	1/4W	
R91	1-249-421-11	CARBON	2.2K	5%	1/4W	
R92	1-247-891-00	CARBON	330K	5%	1/4W	
R93	1-247-891-00	CARBON	330K	5%	1/4W	
R94	1-249-417-11	CARBON	1K	5%	1/4W	
R95	1-249-417-11	CARBON	1K	5%	1/4W	
R96	1-249-425-11	CARBON	4.7K	5%	1/4W	

MAIN, POWER, CHAMICAL CONDENSOR

Ref. No.	Part No.	Description				Remark
R97	1-249-425-11	CARBON	4.7K	5%	1/4W	
R98	1-249-404-00	CARBON	82	5%	1/4W	
R99	1-249-417-11	CARBON	1K	5%	1/4W	(EXCEPT G, IT)
R99	1-249-420-11	CARBON	1.8K	5%	1/4W	(G, IT)
R100	1-247-848-11	CARBON	5.1K	5%	1/4W	
R102	1-249-430-11	CARBON	12K	5%	1/4W	(EXCEPT G, IT)
R103	1-249-428-11	CARBON	8.2K	5%	1/4W	
R104	1-249-435-11	CARBON	33K	5%	1/4W	
R105	1-249-431-11	CARBON	15K	5%	1/4W	
R106	1-249-417-11	CARBON	1K	5%	1/4W	
R107	1-249-430-11	CARBON	12K	5%	1/4W	(G, IT)
R201	1-249-441-11	CARBON	100K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R203	1-249-422-11	CARBON	2.7K	5%	1/4W	
R204	1-249-422-11	CARBON	2.7K	5%	1/4W	
R205	1-249-437-11	CARBON	47K	5%	1/4W	
R206	1-249-437-11	CARBON	47K	5%	1/4W	
R207	1-249-437-11	CARBON	47K	5%	1/4W	
R208	1-249-437-11	CARBON	47K	5%	1/4W	
R209	1-249-441-11	CARBON	100K	5%	1/4W	
R210	1-249-437-11	CARBON	47K	5%	1/4W	
R211	1-249-423-11	CARBON	3.3K	5%	1/4W	
R212	1-249-423-11	CARBON	3.3K	5%	1/4W	
R213	1-249-429-11	CARBON	10K	5%	1/4W	
R214	1-249-437-11	CARBON	47K	5%	1/4W	
R215	1-249-429-11	CARBON	10K	5%	1/4W	
R216	1-249-441-11	CARBON	100K	5%	1/4W	
R217	1-249-411-11	CARBON	330	5%	1/4W	
R218	1-249-411-11	CARBON	330	5%	1/4W	
R219	1-249-417-11	CARBON	1K	5%	1/4W	
R220	1-249-421-11	CARBON	2.2K	5%	1/4W	
R222	1-249-405-11	CARBON	100	5%	1/4W	
R223	1-249-417-11	CARBON	1K	5%	1/4W	
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R231	1-249-429-11	CARBON	10K	5%	1/4W	
R232	1-249-425-11	CARBON	4.7K	5%	1/4W	
R233	1-249-429-11	CARBON	10K	5%	1/4W	
R234	1-249-393-11	CARBON	10	5%	1/4W	
R235	1-249-417-11	CARBON	1K	5%	1/4W	
R236	1-249-417-11	CARBON	1K	5%	1/4W	
R237	1-249-419-11	CARBON	1.5K	5%	1/4W	
R238	1-249-419-11	CARBON	1.5K	5%	1/4W	
R239	1-249-433-11	CARBON	22K	5%	1/4W	
R241	1-249-413-11	CARBON	470	5%	1/4W	
R242	1-249-417-11	CARBON	1K	5%	1/4W	
R243	1-249-411-11	CARBON	330	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R244	1-249-411-11	CARBON	330	5%	1/4W	
R245	1-249-421-11	CARBON	2.2K	5%	1/4W	
R247	1-249-433-11	CARBON	22K	5%	1/4W	
R248	1-249-421-11	CARBON	2.2K	5%	1/4W	
R249	1-249-429-11	CARBON	10K	5%	1/4W	
R250	1-249-429-11	CARBON	10K	5%	1/4W	
R251	1-249-425-11	CARBON	4.7K	5%	1/4W	
R252	1-249-425-11	CARBON	4.7K	5%	1/4W	
R286	1-249-405-11	CARBON	100	5%	1/4W	
R287	1-249-405-11	CARBON	100	5%	1/4W	
R288	1-249-405-11	CARBON	100	5%	1/4W	
R289	1-249-405-11	CARBON	100	5%	1/4W	
R290	1-249-405-11	CARBON	100	5%	1/4W	
R291	1-249-413-11	CARBON	470	5%	1/4W	
R292	1-249-413-11	CARBON	470	5%	1/4W	
R293	1-249-413-11	CARBON	470	5%	1/4W	
R294	1-249-413-11	CARBON	470	5%	1/4W	
R295	1-249-405-11	CARBON	100	5%	1/4W	
R296	1-249-405-11	CARBON	100	5%	1/4W	
R297	1-249-405-11	CARBON	100	5%	1/4W	
R298	1-249-405-11	CARBON	100	5%	1/4W	
R299	1-249-441-11	CARBON	100K	5%	1/4W	
R601	1-247-881-00	CARBON	120K	5%	1/4W	
R602	1-249-405-11	CARBON	100	5%	1/4W	
R603	1-247-882-11	CARBON	130K	5%	1/4W	
R604	1-249-426-11	CARBON	5.6K	5%	1/4W	
R605	1-249-409-11	CARBON	220	5%	1/4W	
R606	1-249-441-11	CARBON	100K	5%	1/4W	
R607	1-249-418-11	CARBON	1.2K	5%	1/4W	
R609	1-249-420-11	CARBON	1.8K	5%	1/4W	
R610	1-247-887-00	CARBON	220K	5%	1/4W	
R611	1-247-881-00	CARBON	120K	5%	1/4W	
R612	1-249-405-11	CARBON	100	5%	1/4W	
R613	1-247-882-11	CARBON	130K	5%	1/4W	
R614	1-249-426-11	CARBON	5.6K	5%	1/4W	
R615	1-249-409-11	CARBON	220	5%	1/4W	
R616	1-249-441-11	CARBON	100K	5%	1/4W	
R617	1-249-441-11	CARBON	100K	5%	1/4W	
R621	1-249-417-11	CARBON	1K	5%	1/4W	
R622	1-249-437-11	CARBON	47K	5%	1/4W	
R623	1-249-437-11	CARBON	47K	5%	1/4W	(H55, H1100)
R624	1-247-897-11	CARBON	560K	5%	1/4W	(H55, H1100)
R625	1-249-417-11	CARBON	1K	5%	1/4W	(H55, H1100)
R626	1-249-425-11	CARBON	4.7K	5%	1/4W	
R627	1-249-437-11	CARBON	47K	5%	1/4W	
R651	1-247-881-00	CARBON	120K	5%	1/4W	
R652	1-249-405-11	CARBON	100	5%	1/4W	
R653	1-247-882-11	CARBON	130K	5%	1/4W	
R654	1-249-426-11	CARBON	5.6K	5%	1/4W	

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Ref. No.	Part No.	Description				Remark
R655	1-249-409-11	CARBON	220	5%	1/4W	
R656	1-249-441-11	CARBON	100K	5%	1/4W	
R657	1-249-418-11	CARBON	1.2K	5%	1/4W	
R659	1-249-420-11	CARBON	1.8K	5%	1/4W	
R660	1-247-887-00	CARBON	220K	5%	1/4W	
R661	1-247-881-00	CARBON	120K	5%	1/4W	
R662	1-249-405-11	CARBON	100	5%	1/4W	
R663	1-247-882-11	CARBON	130K	5%	1/4W	
R664	1-249-426-11	CARBON	5.6K	5%	1/4W	
R665	1-249-409-11	CARBON	220	5%	1/4W	
R666	1-249-441-11	CARBON	100K	5%	1/4W	
R671	1-249-417-11	CARBON	1K	5%	1/4W	
R672	1-249-437-11	CARBON	47K	5%	1/4W	
R673	1-249-437-11	CARBON	47K	5%	1/4W	(H55, H1100)
R674	1-249-897-11	CARBON	560K	5%	1/4W	(H55, H1100)
R675	1-249-417-11	CARBON	1K	5%	1/4W	(H55, H1100)
R676	1-249-425-11	CARBON	4.7K	5%	1/4W	
R677	1-249-437-11	CARBON	47K	5%	1/4W	
R701	1-249-437-11	CARBON	47K	5%	1/4W	
R702	1-249-421-11	CARBON	2.2K	5%	1/4W	
R704	1-249-431-11	CARBON	15K	5%	1/4W	
R705	1-249-437-11	CARBON	47K	5%	1/4W	
R706	1-249-426-11	CARBON	5.6K	5%	1/4W	
R708	1-249-437-11	CARBON	47K	5%	1/4W	
R709	1-247-870-11	CARBON	43K	5%	1/4W	
R710	1-249-437-11	CARBON	47K	5%	1/4W	
R711	1-249-429-11	CARBON	10K	5%	1/4W	
R712	1-249-426-11	CARBON	5.6K	5%	1/4W	
R713	1-249-430-11	CARBON	12K	5%	1/4W	
R714	1-249-429-11	CARBON	10K	5%	1/4W	
R715	1-247-864-11	CARBON	24K	5%	1/4W	(US, Canadian)
R715	1-249-434-11	CARBON	27K	5%	1/4W	(EXCEPT US, Canadian)
R716	1-249-441-11	CARBON	100K	5%	1/4W	
R717	1-249-429-11	CARBON	10K	5%	1/4W	
R721	1-249-423-11	CARBON	3.3K	5%	1/4W	
R722	1-249-431-11	CARBON	15K	5%	1/4W	(H50)
R722	1-249-438-11	CARBON	56K	5%	1/4W	(H55, H1100)
R723	1-249-433-11	CARBON	22K	5%	1/4W	(H55, H1100)
R724	1-249-437-11	CARBON	47K	5%	1/4W	(H55, H1100)
R725	1-249-427-11	CARBON	6.8K	5%	1/4W	
R726	1-249-437-11	CARBON	47K	5%	1/4W	
R727	1-249-388-11	CARBON	3.9	5%	1/6W	
R729	1-249-417-11	CARBON	1K	5%	1/4W	
R731	1-249-421-11	CARBON	2.2K	5%	1/4W	
R732	1-249-425-11	CARBON	4.7K	5%	1/4W	
R733	1-249-429-11	CARBON	10K	5%	1/4W	
R734	1-249-437-11	CARBON	47K	5%	1/4W	

Ref. No.	Part No.	Description				Remark
R735	1-249-413-11	CARBON	470	5%	1/4W	
R736	1-249-411-11	CARBON	330	5%	1/4W	
R737	1-249-405-11	CARBON	100	5%	1/4W	
R738	1-249-414-11	CARBON	560	5%	1/4W	
R739	1-249-429-11	CARBON	10K	5%	1/4W	
R740	1-249-429-11	CARBON	10K	5%	1/4W	
R741	1-249-429-11	CARBON	10K	5%	1/4W	
R742	1-249-437-11	CARBON	47K	5%	1/4W	
R743	1-249-429-11	CARBON	10K	5%	1/4W	
R744	1-249-425-11	CARBON	4.7K	5%	1/4W	
R747	1-249-405-11	CARBON	100	5%	1/4W	
R748	1-249-405-11	CARBON	100	5%	1/4W	
R751	1-249-437-11	CARBON	47K	5%	1/4W	
R752	1-249-421-11	CARBON	2.2K	5%	1/4W	
R754	1-249-431-11	CARBON	15K	5%	1/4W	
R755	1-249-437-11	CARBON	47K	5%	1/4W	
R756	1-249-426-11	CARBON	5.6K	5%	1/4W	
R758	1-249-437-11	CARBON	47K	5%	1/4W	
R760	1-249-437-11	CARBON	47K	5%	1/4W	
R761	1-249-429-11	CARBON	10K	5%	1/4W	
R762	1-249-426-11	CARBON	5.6K	5%	1/4W	
R763	1-249-430-11	CARBON	12K	5%	1/4W	
R781	1-249-421-11	CARBON	2.2K	5%	1/4W	
R782	1-249-425-11	CARBON	4.7K	5%	1/4W	
R785	1-249-421-11	CARBON	2.2K	5%	1/4W	
R786	1-249-421-11	CARBON	2.2K	5%	1/4W	
R787	1-249-421-11	CARBON	2.2K	5%	1/4W	
R788	1-249-421-11	CARBON	2.2K	5%	1/4W	
R789	1-249-421-11	CARBON	2.2K	5%	1/4W	
R790	1-249-421-11	CARBON	2.2K	5%	1/4W	
R791	1-249-429-11	CARBON	10K	5%	1/4W	
R792	1-249-418-11	CARBON	1.2K	5%	1/4W	
R793	1-249-441-11	CARBON	100K	5%	1/4W	
R794	1-249-425-11	CARBON	4.7K	5%	1/4W	
R795	1-249-429-11	CARBON	10K	5%	1/4W	
R796	1-249-429-11	CARBON	10K	5%	1/4W	
R797	1-249-432-11	CARBON	18K	5%	1/4W	
R798	1-249-421-11	CARBON	2.2K	5%	1/4W	
R799	1-249-429-11	CARBON	10K	5%	1/4W	
R801	1-249-417-11	CARBON	1K	5%	1/4W	
R802	1-249-438-11	CARBON	56K	5%	1/4W	
R803	1-249-413-11	CARBON	470	5%	1/4W	
R804	1-249-438-11	CARBON	56K	5%	1/4W	
R805	1-249-389-11	CARBON	4.7	5%	1/4W	(EXCEPT G, IT)
R826	1-249-417-11	CARBON	1K	5%	1/4W	
R851	1-249-417-11	CARBON	1K	5%	1/4W	
R852	1-249-438-11	CARBON	56K	5%	1/4W	
R853	1-249-413-11	CARBON	470	5%	1/4W	
R854	1-249-438-11	CARBON	56K	5%	1/4W	

MAIN, POWER, CHAMICAL CONDENSOR | SWITCH (A)

Ref. No.	Part No.	Description	Remark
R855	1-249-389-11	CARBON 4.7 5% 1/4W (EXCEPT G, IT)	
R871	1-249-429-11	CARBON 10K 5% 1/4W	
R872	1-249-437-11	CARBON 47K 5% 1/4W	
R873	1-249-429-11	CARBON 10K 5% 1/4W	
R874	1-247-883-00	CARBON 150K 5% 1/4W	
R875	1-249-421-11	CARBON 2.2K 5% 1/4W	
R876	1-249-421-11	CARBON 2.2K 5% 1/4W	
R877 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R878	1-249-417-11	CARBON 1K 5% 1/4W	
R879	1-249-417-11	CARBON 1K 5% 1/4W	
R880 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R881	1-249-421-11	CARBON 2.2K 5% 1/4W	
R882	1-249-421-11	CARBON 2.2K 5% 1/4W	
R883 ⚠	1-212-881-11	FUSIBLE 100 5% 1/4W	F
R1001	1-249-389-11	CARBON 4.7 5% 1/4W (G, IT)	
R1002	1-249-389-11	CARBON 4.7 5% 1/4W (G, IT)	
R1003	1-249-389-11	CARBON 4.7 5% 1/4W (G, IT)	
R7001	1-249-421-11	CARBON 2.2K 5% 1/4W	
R7002	1-249-421-11	CARBON 2.2K 5% 1/4W	
		< VARIABLE RESISTOR >	
RV81	1-238-017-11	RES, ADJ, CARBON 22K (US, Canadian)	
RV81	1-238-601-11	RES, ADJ, CARBON 22K (EXCEPT US, Canadian)	
RV82	1-238-017-11	RES, ADJ, CARBON 22K (US, Canadian)	
RV82	1-238-601-11	RES, ADJ, CARBON 22K (EXCEPT US, Canadian)	
RV601	1-238-011-11	RES, ADJ, CARBON 470 (US, Canadian)	
RV601	1-238-596-11	RES, ADJ, CARBON 470 (EXCEPT US, Canadian)	
RV611	1-238-011-11	RES, ADJ, CARBON 470 (US, Canadian)	
RV611	1-238-596-11	RES, ADJ, CARBON 470 (EXCEPT US, Canadian)	
RV651	1-238-011-11	RES, ADJ, CARBON 470 (US, Canadian)	
RV651	1-238-596-11	RES, ADJ, CARBON 470 (EXCEPT US, Canadian)	
RV661	1-238-011-11	RES, ADJ, CARBON 470 (US, Canadian)	
RV661	1-238-596-11	RES, ADJ, CARBON 470 (EXCEPT US, Canadian)	
RV701	1-238-017-11	RES, ADJ, CARBON 22K (US, Canadian)	
RV701	1-238-601-11	RES, ADJ, CARBON 22K (EXCEPT US, Canadian)	
RV721	1-238-019-11	RES, ADJ, CARBON 47K (US, Canadian)	
RV721	1-238-603-11	RES, ADJ, CARBON 100K (EXCEPT US, Canadian)	
RV722	1-238-019-11	RES, ADJ, CARBON 47K (US, Canadian)	
RV722	1-238-603-11	RES, ADJ, CARBON 100K (EXCEPT US, Canadian)	
RV751	1-238-017-11	RES, ADJ, CARBON 22K (US, Canadian)	
RV751	1-238-601-11	RES, ADJ, CARBON 22K (EXCEPT US, Canadian)	
		< RELAY >	
RY601	1-515-614-21	RELAY	
		< SWITCH >	
S701	1-554-088-00	SWITCH, KEYBOARD (SYSTEM RESET)	
S721	1-572-185-11	SWITCH, SLIDE (ISS) (H55, H1100)	
		< COIL >	
T1	1-402-424-11	COIL (ANT, SW3) (E, EA, AUS)	
T2	1-402-346-11	COIL (OSC, SW3) (E, EA, AUS)	
		< TRANSFORMER >	
T721	1-433-347-11	TRANSFORMER, BIAS OSCILLATION	
		< TERMINAL BOARD >	
TB1	* 1-537-138-31	TERMINAL BOARD (ANTENNA) (H55, H1100)	
TB1	1-537-238-21	TERMINAL BOARD (ANTENNA) (H50)	
TB801	1-537-238-11	TERMINAL BOARD (SPEAKER)	
		< TEST PIN >	
TP81	* 1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
TP701	* 1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
TP702	* 1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P (H55, H1100)	
		< CRYSTAL >	
X51	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)	
X81	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)	
X201	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	
X251	1-567-908-11	VIBRATOR, CRYSTAL (16.9344MHz)	

****

* 1-635-160-11 SWITCH (A) BOARD

****

< CONNECTOR >

CN1A * 1-564-498-11 PIN, CONNECTOR 5P

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

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

SWITCH (A) SWITCH (B)

Ref. No.	Part No.	Description	Remark
		< SWITCH >	
S1A	1-572-335-11	SWITCH, LEAF (Cr02)	
S2A	1-571-736-11	SWITCH, LEAF (MD POWER)	
S3A	1-571-736-11	SWITCH, LEAF (PLAY)	
**********			
*	1-635-160-11	SWITCH (B) BOARD	
		**********	
		< CONNECTOR >	
CN1B *	1-564-499-11	PIN, CONNECTOR 6P	
		< SWITCH >	
S1B	1-572-335-11	SWITCH, LEAF (Cr02)	
S2B	1-571-736-11	SWITCH, LEAF (MD POWER)	
S3B	1-571-736-11	SWITCH, LEAF (PLAY)	
S4B	1-571-736-11	SWITCH, LEAF (REC)	
**********			
		MISCELLANEOUS	
		**********	
901 *	1-562-908-11	CONNECTOR, FEMALE (NO SHIELD) (G, IT)	
902	1-533-213-31	HOLDER, FUSE	
904 *	1-634-850-11	CHEMICAL CONDENSOR	
910 *	1-634-854-11	VR BOARD (INCLUDING JUMPER BOARD)	
911	1-575-672-11	WIRE, FLAT TYPE (13 CORE)	
912	1-575-674-11	WIRE, FLAT TYPE (8 CORE)	
913	1-535-832-12	JUMPER, FILM (WITH TERMINAL)	
914	1-575-673-11	WIRE, FLAT TYPE (15 CORE)	
ANT1	1-501-270-00	ANTENNA, TELESCOPIC (H50, H55)	
F901 ⚠·	1-532-215-00	FUSE, TIME-LAG (T0.8A)	(EXCEPT US, Canadian)
F901 ⚠·	1-532-742-11	FUSE, GLASS TUBE (1.6A) (US, Canadian)	
F901 ⚠·	1-532-259-00	FUSE, TIME-LAG (T1.6A) (E, EA, AUS)	
HE1	1-543-673-11	HEAD, MAGNETIC (ERASE)	
HP1	1-543-319-11	HEAD, MAGNETIC (REC/PB)	
HRP1	1-543-319-11	HEAD, MAGNETIC (REC/PB)	
M1	X-3358-211-1	MOTOR (A) ASSY (DECK A)	
M2	X-3358-211-1	MOTOR (B) ASSY (DECK B)	
M101	X-4917-523-3	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M103	A-4608-362-A	MOTOR (L) ASSY (LOADING)	
T901 ⚠·	1-450-055-11	TRANSFORMER, POWER (E, EA, AUS)	
T901 ⚠·	1-450-057-11	TRANSFORMER, POWER (US, Canadian)	
T901 ⚠·	1-450-463-11	TRANSFORMER, POWER (H55, H1100)	

Ref. No.	Part No.	Description	Remark
		ACCESSORY & PACKING MATERIAL	
	1-465-343-11	REMOTE COMMANDER (RM-S6)	
	1-501-369-11	ANTENNA (H1100) (MHC)	
	1-501-374-11	ANTENNA, LOOP	
⚠·	1-555-074-00	CORD, POWER (AUS) (FH)	
⚠·	1-556-280-00	CORD, POWER (E) (FH)	
⚠·	1-575-131-11	CORD, POWER (EA, H55, H1100) (FH)	
⚠·	1-575-706-11	CORD, POWER (US, Canadian) (FH)	
⚠·	1-558-032-11	CORD, POWER (UK)	
	1-575-495-11	CORD, SPEAKER (H1100) (MHC)	
⚠·	1-569-007-11	ADAPTOR, CONVERSION 2P (E) (FH)	
⚠·	1-569-008-11	ADAPTOR, CONVERSION 2P (EA) (FH)	
	2-181-754-01	COVER, BATTERY	
	3-753-063-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, CHINESE) (AEP, UK, E, EA, AUS) (FH)	
	3-753-063-21	MANUAL, INSTRUCTION (ENGLISH, FRENCH) (US, Canadian) (FH)	
	3-753-063-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, PORTUGUESE, ITALIAN) (AEP, G, IT) (FH)	
	3-753-063-51	MANUAL, INSTRUCTION (ENGLISH, GERMAN, RUSSIAN, POLISH) (EE) (FH)	
*	3-795-629-11	INSTRUCTION (AEP) (FH)	
*	4-936-852-01	CUSHION (LOWER)	
*	4-936-853-01	CUSHION (UPPER)	
*	4-936-899-01	CUSHION	
*	4-944-534-01	INDIVIDUAL CARTON (E, EA) (FH)	
*	4-944-535-01	INDIVIDUAL CARTON (US, Canadian, AUS) (FH)	
*	4-944-536-01	INDIVIDUAL CARTON (H55) (FH)	
*	4-944-537-01	INDIVIDUAL CARTON (H1100) (MHC)	

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

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

9-956-245-12

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Audio Group

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Published by Customer Relations and Service Group

HCD-H50/H55/H1100

SONY®
SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model
HCD-H50
AEP Model
HCD-H55
HCD-H1100

SUPPLEMENT-1

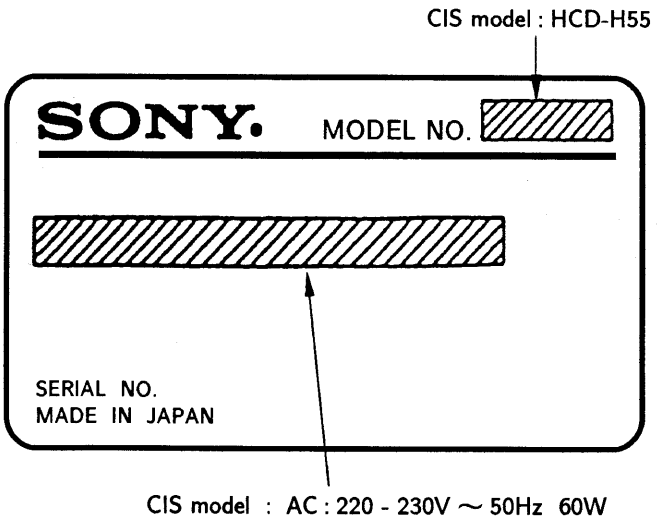
File this supplement with the Service Manual.

HCD-H55 CIS model has been added

- The CIS model has been designed based on the HCD-H55 AEP model. There for see the HCD-H50/H55/H1100 service manual for the information not contained in this supplement-1.

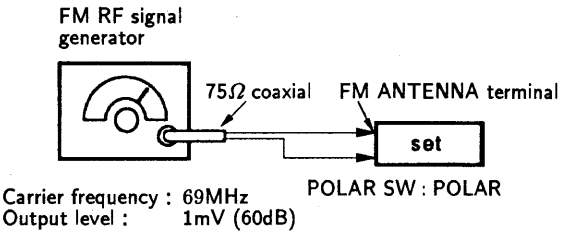
MODEL IDENTIFICATION

- Specification Label -



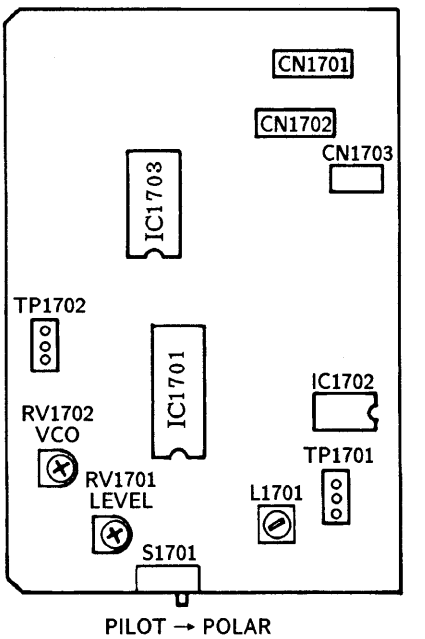
ELECTRICAL ADJUSTMENT

FM POLAR Adjustment

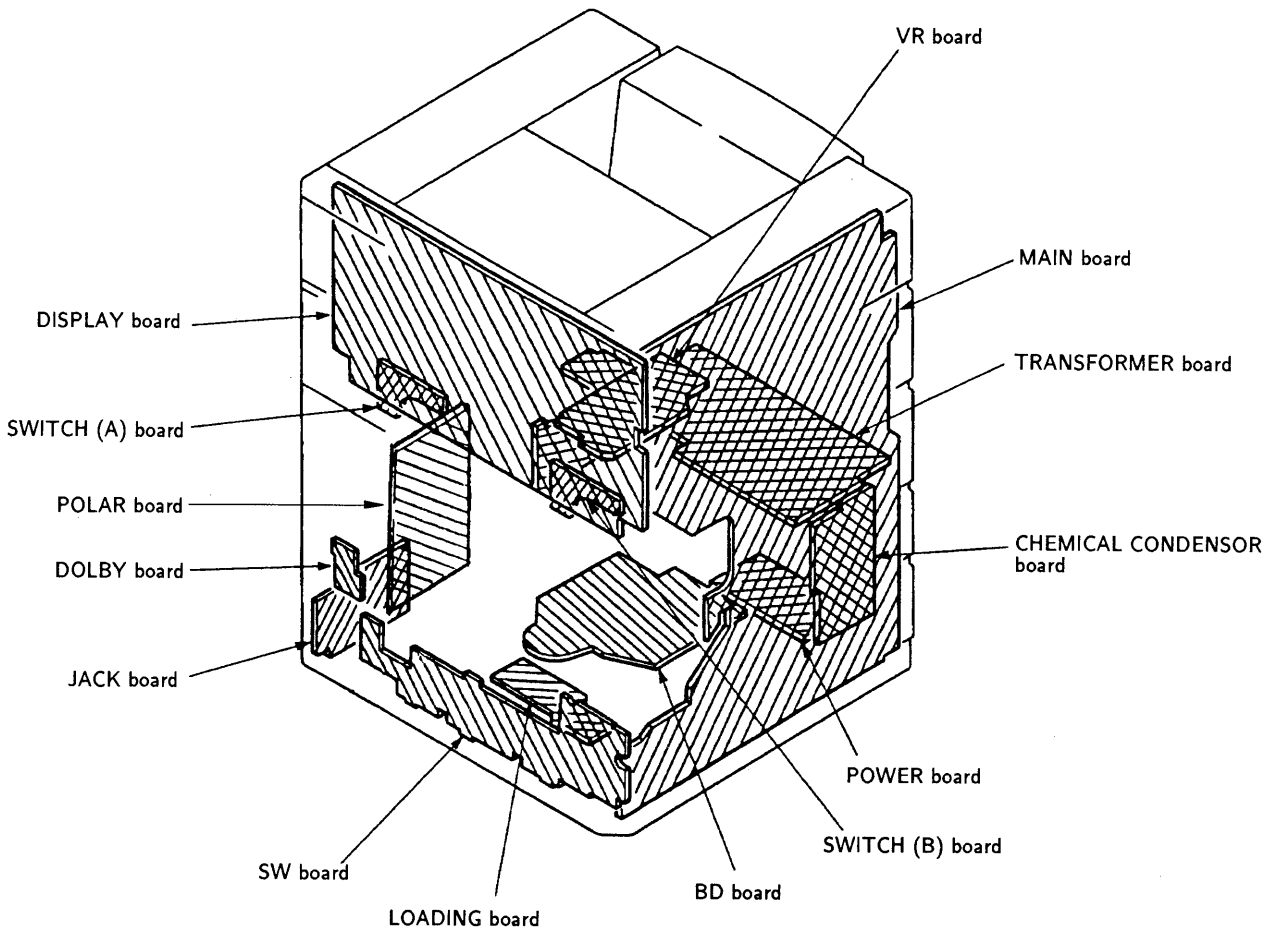


1. Connect the frequency counter to the TP-1702 and adjust the RV1702 for a frequency of 31.25±50MHz.
2. Connect the VTVM to the TP-1701.receive the signal of 89MHz±1kHz (10kHz dev.) and adjust the reading of the VTVM to 0dB.
3. Set the modulation frequency of the FM RF signal generator to 31.25kHz (10kHz dev.) and adjust the L 1701 so that the reading of the VTVM is 0dB.
4. Adjust the RV1701 so that the reading of the VTVM to 14dB.
5. Check that the separation between Pins 1 and 3 of the CN1701 is more than 18dB.
6. Select the Polar Switch to the pilot side and check that the "STEREO LAMP" goes out.

【POLAR BOARD】 – Component Side –

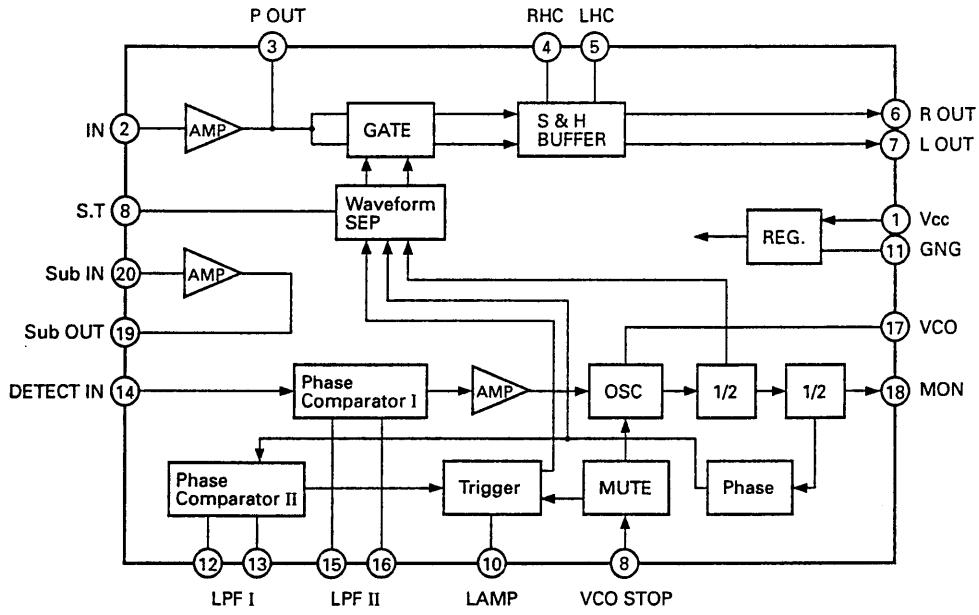


CIRCUIT BOARDS LOCATION

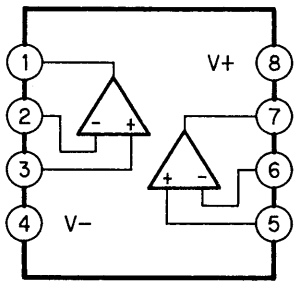


IC Block Diagrams

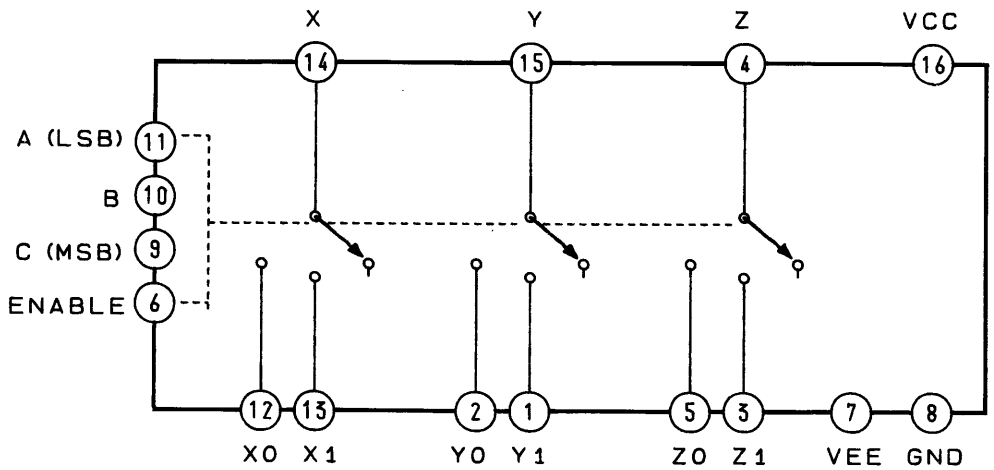
IC1701 IR3R42



IC1702 M5218AP

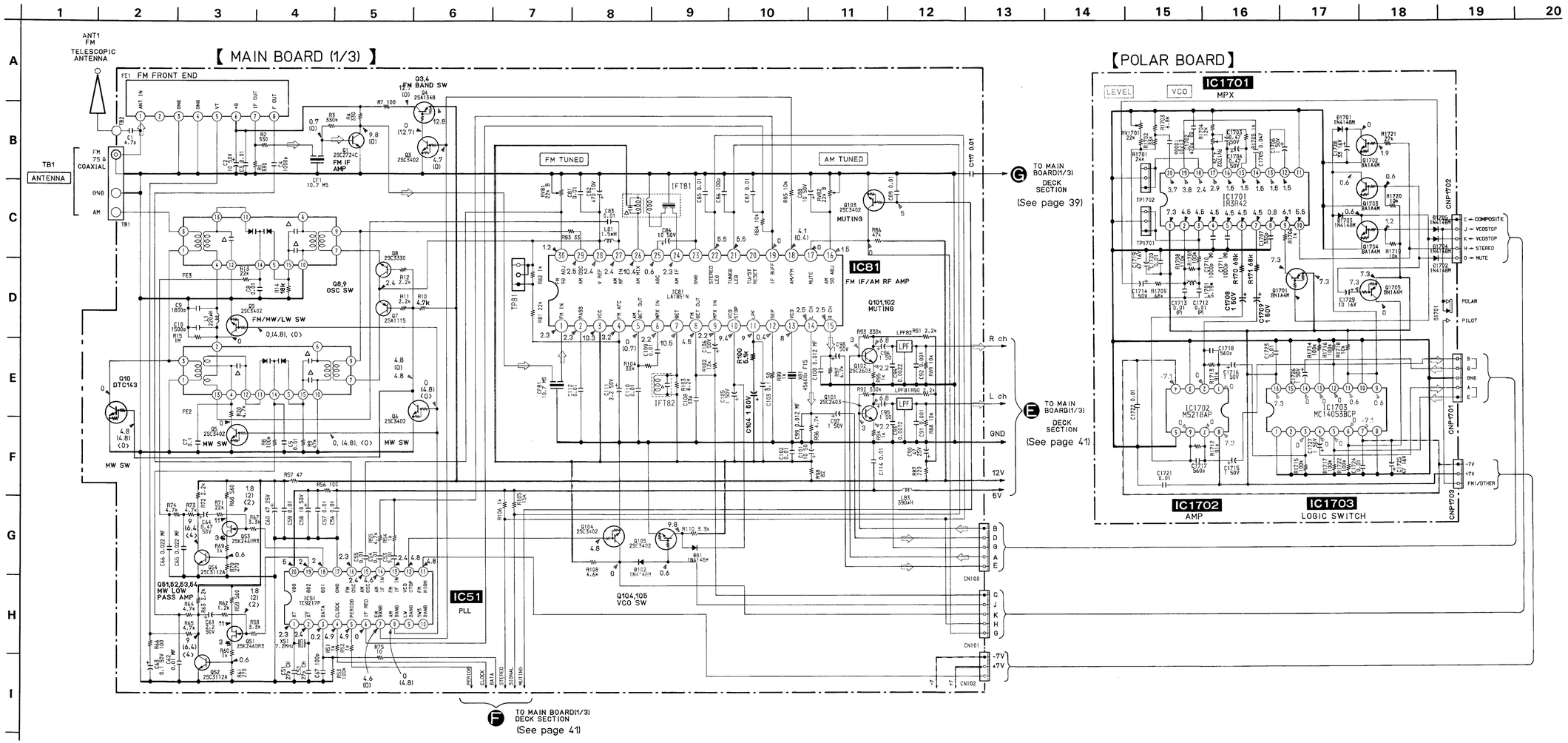


IC1703 MC14053BCP



HCD-H50/H55/H1100 HCD-H50/H55/H1100

SCHEMATIC DIAGRAM—TUNER SECTION— Refer to page 4 for IC Block Diagrams.



Note:

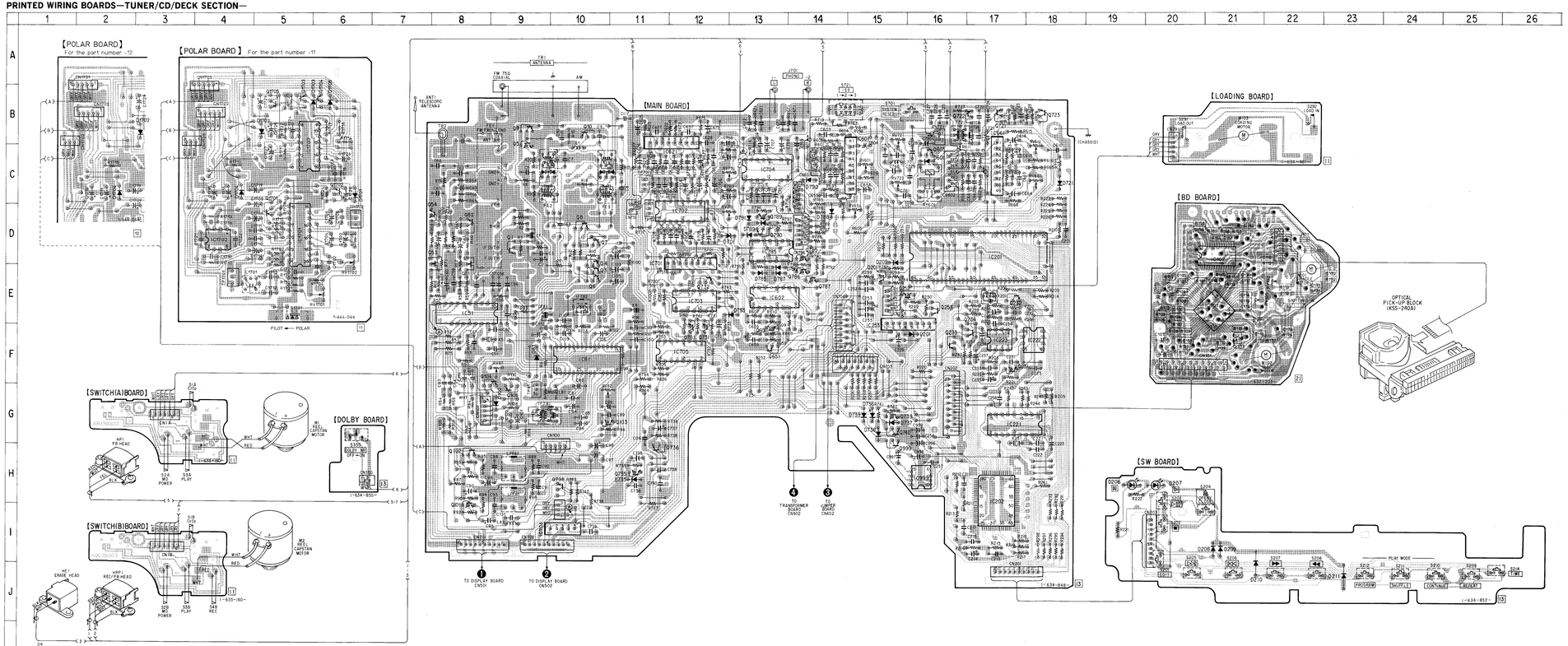
All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.

All resistors are in Ω and ¼W or less unless otherwise specified.

- ▬▬ : B+ Line
- ▬ ▬ : B− Line
- ▭ : adjustment for repair.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
  no mark : FM
  ( ) : MW
  < > : LW
- Voltages are taken with a VOM (Input Impedance 10MΩ). Voltage variations may be noted due to normal production tolerances.

Signal path.
⇨ : FM

PRINTED WIRING BOARDS—TUNER/CD/DECK SECTION—



—9—

—10—

—11—

—12—

Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D81	F-9	Q1	D-9
D102	G-9	Q3	E-10
D201	F-16	Q4	E-10
D205	D-15	Q5	B-9
D601	C-16	Q6	E-10
D701	D-13	Q7	D-10
D721	C-18	Q8	D-10
D735	H-11	Q9	B-9
D736	G-15	Q-10	B-6
D737	G-15	Q51	D-8
D738	G-15	Q52	D-8
D739	G-15	Q53	D-7
D785	E-13	Q54	D-7
D786	E-13	Q101	I-8
D787	E-13	Q101(BD)	F-21
D788	D-14	Q102	H-8
D789	D-13	Q103	G-10
D790	C-14	Q104	G-8
D791	D-13	Q105	G-9
D792	D-13	Q201	E-15
D793	F-13	Q231	F-17
D1701	C-6	Q232	E-17
D1702	B-5	Q233	F-16
D1703	B-5	Q234	F-17
D1704	C-4	Q252	E-15
D1705	B-6	Q253	E-16
		Q601	F-13
IC51	E-8	Q603	C-16
IC81	F-10	Q651	F-13
IC101(BD)	E-21	Q721	B-17
IC102(BD)	D-21	Q722	B-16
IC201	D-17	Q723	B-18
IC202	I-17	Q731	F-12
IC221	G-17	Q733	E-12
IC222	F-18	Q735	H-11
IC223	F-17	Q736	H-11
IC253	F-15	Q738	H-10
IC601	C-15	Q739	G-15
IC602	E-13	Q740	G-18
IC621	C-12	Q781	F-12
IC661	C-17	Q785	D-14
IC701	E-12	Q786	E-14
IC702	E-12	Q787	E-14
IC703	E-12	Q789	D-13
IC704	C-13	Q790	D-13
IC705	F-12	Q791	D-14
IC706	I-10	Q999	H-15
IC785	D-13	Q1701	D-5
IC999	H-16	Q1702	C-6
IC1701	D-5	Q1703	B-5
IC1702	D-4	Q1704	B-6
IC1703	B-5	Q1705	B-5

Note:

- ○——: parts extracted from the component side.
- ——○: parts extracted from the conductor side.
- ⊡: Indicates side identified with part number.
- : Through hole.
- : Pattern on the side which is seen.
- : Pattern of the rear side.

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 and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable

Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

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

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

Ref. No.	Part No.	Description			Remark
*	A-4347-819-A	MAIN BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C1	1-162-195-31	CERAMIC	4.7PF	10%	50V
C2	1-124-907-11	ELECT	10uF	20%	50V
C3	1-161-379-00	CERAMIC	0.01uF	20%	25V
C4	1-162-294-31	CERAMIC	0.001uF	10%	50V
C5	1-161-379-00	CERAMIC	0.01uF	20%	25V
C7	1-164-159-11	CERAMIC	0.1uF		50V
C8	1-161-379-00	CERAMIC	0.01uF	20%	25V
C9	1-102-120-00	CERAMIC	0.0018uF	10%	50V
C10	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C51	1-164-056-11	CERAMIC	27PF	5%	50V
C52	1-164-056-11	CERAMIC	27PF	5%	50V
C53	1-161-379-00	CERAMIC	0.01uF	20%	25V
C54	1-161-379-00	CERAMIC	0.01uF	20%	25V
C55	1-161-379-00	CERAMIC	0.01uF	20%	25V
C56	1-161-379-00	CERAMIC	0.01uF	20%	25V
C57	1-161-379-00	CERAMIC	0.01uF	20%	25V
C58	1-124-907-11	ELECT	10uF	20%	50V
C59	1-161-379-00	CERAMIC	0.01uF	20%	25V
C60	1-124-477-11	ELECT	47uF	20%	25V
C61	1-124-925-11	ELECT	2.2uF	20%	100V
C62	1-136-153-00	FILM	0.01uF	5%	50V
C63	1-124-463-00	ELECT	0.1uF	20%	50V
C64	1-124-902-00	ELECT	0.47uF	20%	50V
C65	1-136-157-00	FILM	0.022uF	5%	50V
C66	1-136-157-00	FILM	0.022uF	5%	50V
C67	1-162-282-31	CERAMIC	100PF	10%	50V
C81	1-161-379-00	CERAMIC	0.01uF	20%	25V
C82	1-124-472-11	ELECT	470uF	20%	10V
C83	1-161-379-00	CERAMIC	0.01uF	20%	25V
C84	1-124-907-11	ELECT	10uF	20%	50V
C85	1-161-379-00	CERAMIC	0.01uF	20%	25V
C86	1-162-282-31	CERAMIC	100PF	10%	50V
C87	1-161-379-00	CERAMIC	0.01uF	20%	25V
C88	1-124-907-11	ELECT	10uF	20%	50V
C89	1-161-379-00	CERAMIC	0.01uF	20%	25V
C90	1-124-477-11	ELECT	47uF	20%	25V
C91	1-162-294-31	CERAMIC	0.001uF	10%	50V
C92	1-162-294-31	CERAMIC	0.001uF	10%	50V
C93	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C94	1-161-375-00	CERAMIC	0.0022uF	20%	50V
C95	1-124-903-11	ELECT	1uF	20%	50V
C96	1-124-903-11	ELECT	1uF	20%	50V
C97	1-124-903-11	ELECT	1uF	20%	50V
C98	1-124-903-11	ELECT	1uF	20%	50V
C99	1-136-154-00	FILM	0.012uF	5%	50V
C100	1-136-154-00	FILM	0.012uF	5%	50V
C101	1-124-907-11	ELECT	10uF	20%	50V
C102	1-161-379-00	CERAMIC	0.01uF	20%	25V
C103	1-124-463-00	ELECT	0.1uF	20%	50V
C104	1-124-903-11	ELECT	1uF	20%	50V
C105	1-124-903-11	ELECT	1uF	20%	50V
C106	1-124-903-11	ELECT	1uF	20%	50V
C108	1-162-211-31	CERAMIC	33PF	5%	50V
C109	1-161-379-00	CERAMIC	0.01uF	20%	25V
C110	1-161-379-00	CERAMIC	0.01uF	20%	25V
C111	1-124-925-11	ELECT	2.2uF	20%	100V
C112	1-161-379-00	CERAMIC	0.01uF	20%	25V
C114	1-161-379-00	CERAMIC	0.01uF	20%	25V
C116	1-161-379-00	CERAMIC	0.01uF	20%	25V
C117	1-161-379-00	CERAMIC	0.01uF	20%	25V
C201	1-164-159-11	CERAMIC	0.1uF		50V
C211	1-136-161-00	FILM	0.047uF	5%	50V
C212	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C213	1-161-379-00	CERAMIC	0.01uF	20%	25V
C214	1-124-465-00	ELECT	0.47uF	20%	50V
C215	1-164-159-11	CERAMIC	0.1uF		50V
C221	1-162-207-31	CERAMIC	22PF	5%	50V
C222	1-162-207-31	CERAMIC	22PF	5%	50V
C223	1-124-443-00	ELECT	100uF	20%	10V
C225	1-136-165-00	FILM	0.1uF	5%	50V
C229	1-124-907-11	ELECT	10uF	20%	50V
C231	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C232	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C233	1-162-286-31	CERAMIC	220PF	10%	50V
C234	1-162-286-31	CERAMIC	220PF	10%	50V

MAIN

Ref. No.	Part No.	Description			Remark
C235	1-124-903-11	ELECT	1uF	20%	50V
C236	1-124-903-11	ELECT	1uF	20%	50V
C237	1-124-907-11	ELECT	10uF	20%	50V
C238	1-124-907-11	ELECT	10uF	20%	50V
C251	1-162-282-31	CERAMIC	100PF	10%	50V
C252	1-162-282-31	CERAMIC	100PF	10%	50V
C253	1-162-282-31	CERAMIC	100PF	10%	50V
C254	1-162-282-31	CERAMIC	100PF	10%	50V
C255	1-162-282-31	CERAMIC	100PF	10%	50V
C256	1-161-379-00	CERAMIC	0.01uF	20%	25V
C257	1-161-379-00	CERAMIC	0.01uF	20%	25V
C258	1-161-379-00	CERAMIC	0.01uF	20%	25V
C601	1-162-293-31	CERAMIC	820PF	10%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-136-157-00	FILM	0.022uF	5%	50V
C604	1-126-157-11	ELECT	10uF	20%	16V
C609	1-136-161-00	FILM	0.047uF	5%	50V
C610	1-161-379-00	CERAMIC	0.01uF	20%	25V
C611	1-162-293-31	CERAMIC	820PF	10%	50V
C612	1-162-282-31	CERAMIC	100PF	10%	50V
C613	1-136-157-00	FILM	0.022uF	5%	50V
C614	1-124-907-11	ELECT	10uF	20%	50V
C621	1-162-282-31	CERAMIC	100PF	10%	50V
C622	1-162-282-31	CERAMIC	100PF	10%	50V
C623	1-130-474-00	MYLAR	0.0018uF	5%	50V
C624	1-130-480-00	MYLAR	0.0056uF	5%	50V
C625	1-124-907-11	ELECT	10uF	20%	50V
C626	1-124-903-11	ELECT	1uF	20%	50V
C627	1-162-282-31	CERAMIC	100PF	10%	50V
C628	1-161-379-00	CERAMIC	0.01uF	20%	25V
C651	1-162-293-31	CERAMIC	820PF	10%	50V
C652	1-162-282-31	CERAMIC	100PF	10%	50V
C653	1-136-157-00	FILM	0.022uF	5%	50V
C654	1-126-157-11	ELECT	10uF	20%	16V
C657	1-162-282-31	CERAMIC	100PF	10%	50V
C658	1-161-379-00	CERAMIC	0.01uF	20%	25V
C659	1-136-161-00	FILM	0.047uF	5%	50V
C661	1-162-293-31	CERAMIC	820PF	10%	50V
C662	1-162-282-31	CERAMIC	100PF	10%	50V
C663	1-136-157-00	FILM	0.022uF	5%	50V
C664	1-124-907-11	ELECT	10uF	20%	50V
C671	1-162-282-31	CERAMIC	100PF	10%	50V
C672	1-162-282-31	CERAMIC	100PF	10%	50V
C673	1-130-474-00	MYLAR	0.0018uF	5%	50V
C674	1-130-480-00	MYLAR	0.0056uF	5%	50V
C675	1-124-907-11	ELECT	10uF	20%	50V
C676	1-124-903-11	ELECT	1uF	20%	50V
C701	1-162-290-31	CERAMIC	470PF	10%	50V
C702	1-162-290-31	CERAMIC	470PF	10%	50V
C703	1-124-254-00	ELECT	0.68uF	20%	50V
C704	1-124-907-11	ELECT	10uF	20%	50V
C705	1-126-157-11	ELECT	10uF	20%	16V
C706	1-124-902-00	ELECT	0.47uF	20%	50V
C707	1-124-925-11	ELECT	2.2uF	20%	100V
C709	1-124-907-11	ELECT	10uF	20%	50V
C710	1-162-288-31	CERAMIC	330PF	10%	50V
C711	1-162-282-31	CERAMIC	100PF	10%	50V
C712	1-124-443-00	ELECT	100uF	20%	10V
C713	1-161-379-00	CERAMIC	0.01uF	20%	25V
C714	1-162-294-31	CERAMIC	0.001uF	10%	50V
C721	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C722	1-161-329-00	CERAMIC	0.0068uF	30%	16V
C723	1-124-903-11	ELECT	1uF	20%	50V
C724	1-124-925-11	ELECT	2.2uF	20%	100V
C725	1-136-153-00	FILM	0.01uF	5%	50V
C726	1-130-475-00	MYLAR	0.0022uF	5%	50V
C727	1-130-475-00	MYLAR	0.0022uF	5%	50V
C728	1-162-286-31	CERAMIC	220PF	10%	50V
C729	1-162-286-31	CERAMIC	220PF	10%	50V
C731	1-124-927-11	ELECT	4.7uF	20%	100V
C735	1-124-907-11	ELECT	10uF	20%	50V
C736	1-161-379-00	CERAMIC	0.01uF	20%	25V
C737	1-124-443-00	ELECT	100uF	20%	10V
C738	1-161-379-00	CERAMIC	0.01uF	20%	25V
C739	1-164-159-11	CERAMIC	0.1uF		50V
C740	1-161-379-00	CERAMIC	0.01uF	20%	25V
C751	1-162-290-31	CERAMIC	470PF	10%	50V
C752	1-162-290-31	CERAMIC	470PF	10%	50V
C753	1-124-254-00	ELECT	0.68uF	20%	50V
C754	1-124-907-11	ELECT	10uF	20%	50V
C755	1-126-157-11	ELECT	10uF	20%	16V
C756	1-124-902-00	ELECT	0.47uF	20%	50V
C757	1-124-925-11	ELECT	2.2uF	20%	100V
C759	1-124-907-11	ELECT	10uF	20%	50V
C760	1-162-288-31	CERAMIC	330PF	10%	50V
C761	1-162-282-31	CERAMIC	100PF	10%	50V
C764	1-162-294-31	CERAMIC	0.001uF	10%	50V
C795	1-124-907-11	ELECT	10uF	20%	50V
C996	1-124-927-11	ELECT	4.7uF	20%	100V
C997	1-124-903-11	ELECT	1uF	20%	50V
C998	1-126-176-11	ELECT	220uF	20%	10V
C999	1-124-907-11	ELECT	10uF	20%	50V

< FILTER >

CF1	1-567-389-11	FILTER, CERAMIC (10.7MHz)
CF81	1-567-389-11	FILTER, CERAMIC (10.7MHz)

MAIN

Ref. No.	Part No.	Description	Remark
		< CONNECTOR >	
* CN100	1-564-339-00	PIN, CONNECTOR 5P	
* CN101	1-564-339-71	PIN, CONNECTOR 5P	
* CN102	1-564-337-00	PIN, CONNECTOR 3P	
* CN201	1-569-155-11	PLUG, CONNECTOR 10P	
CN202	1-568-802-11	SOCKET, CONNECTOR 19P	
* CN253	1-564-339-71	PIN, CONNECTOR 5P	
CN601	1-564-507-11	PLUG, CONNECTOR 4P	
* CN602	1-564-509-11	PLUG, CONNECTOR 6P	
* CN701	1-569-155-11	PLUG, CONNECTOR 10P	
* CN702	1-569-155-11	PLUG, CONNECTOR 10P	
* CN703	1-568-832-11	SOCKET, CONNECTOR 13P	
* CN704	1-568-834-11	SOCKET, CONNECTOR 15P	
* CN721	1-564-505-11	PLUG, CONNECTOR 2P	
* CN751	1-564-336-00	PIN, CONNECTOR 2P	
* CN752	1-564-336-71	PIN, CONNECTOR 2P	
* CN785	1-564-339-00	PIN, CONNECTOR 5P	
* CN786	1-564-340-00	PIN, CONNECTOR 6P	
		< DIODE >	
D81	8-719-987-63	DIODE 1N4148M	
D102	8-719-987-63	DIODE 1N4148M	
D201	8-719-010-34	DIODE UZ-4.7BSC	
D205	8-719-987-63	DIODE 1N4148M	
D601	8-719-987-63	DIODE 1N4148M	
D701	8-719-933-48	DIODE HZS7B3L	
D721	8-719-987-63	DIODE 1N4148M	
D735	8-719-933-40	DIODE HZS6C2L	
D736	8-719-987-63	DIODE 1N4148M	
D737	8-719-987-63	DIODE 1N4148M	
D738	8-719-987-63	DIODE 1N4148M	
D739	8-719-987-63	DIODE 1N4148M	
D785	8-719-987-63	DIODE 1N4148M	
D786	8-719-987-63	DIODE 1N4148M	
D787	8-719-987-63	DIODE 1N4148M	
D788	8-719-987-63	DIODE 1N4148M	
D789	8-719-987-63	DIODE 1N4148M	
D790	8-719-987-63	DIODE 1N4148M	
D791	8-719-987-63	DIODE 1N4148M	
D792	8-719-987-63	DIODE 1N4148M	
D793	8-719-987-63	DIODE 1N4148M	
		< FRONTEND >	
FE1	1-465-396-11	FRONT END (3 GANG) (FM)	
FE2	1-236-462-11	ENCAPSULATED COMPONENT	
FE3	1-236-463-11	ENCAPSULATED COMPONENT	

Ref. No.	Part No.	Description	Remark
		< IC >	
IC51	8-759-239-29	IC TC9217P	
IC81	8-759-821-45	IC LA1851N	
IC201	8-759-150-19	IC uPD75112CW-064	
IC202	8-752-337-26	IC CXD2500AQ	
IC221	8-752-337-09	IC CXD2554P	
IC222	8-759-990-13	IC TDA1543A	
IC223	8-759-634-51	IC M5218AP	
IC253	8-759-633-65	IC M54641L	
IC601	8-759-112-93	IC uPC4570HA-1	
IC602	8-759-140-53	IC MC14053BCP	
IC621	8-759-634-50	IC M5218AL	
IC661	8-759-112-93	IC uPC4570HA-1	
IC701	8-759-634-50	IC M5218AL	
IC702	8-752-057-19	IC CXA1101P	
IC703	8-759-000-49	IC uPD4066BC	
IC704	8-752-038-00	IC CXA1298AP	
IC705	8-759-000-48	IC uPD4052BC-A	
IC706	8-759-605-16	IC M51953BL	
IC785	8-759-040-01	IC MC14001BCP	
IC999	8-759-821-93	IC LA5601	
		< IFT >	
IFT81	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)	
IFT82	1-404-807-11	TRANSFORMER, DISCRIMINATOR	
		< JACK >	
J701	1-569-181-11	JACK, PIN 2P	
		< COIL >	
L1	1-408-425-00	INDUCTOR 220uH	
L81	1-408-399-00	INDUCTOR 1.5uH	
L83	1-410-489-11	INDUCTOR 390uH	
L701	1-410-779-21	INDUCTOR 22mH	
L721	1-410-489-11	INDUCTOR 390uH	
L751	1-410-779-21	INDUCTOR 22mH	
		< FILTER >	
LPF81	1-235-164-00	FILTER, LOW PASS	
LPF82	1-235-164-00	FILTER, LOW PASS	
		< TRANSISTOR >	
Q1	8-729-620-19	TRANSISTOR 2SC2724-CD	
Q3	8-729-900-80	TRANSISTOR DTC114ES	
Q4	8-729-900-61	TRANSISTOR DTA114ES	
Q5	8-729-900-80	TRANSISTOR DTC114ES	
Q6	8-729-900-80	TRANSISTOR DTC114ES	

MAIN

Ref. No.	Part No.	Description		Remark
Q7	8-729-119-76	TRANSISTOR	2SA1175-HFE	
Q8	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q9	8-729-900-80	TRANSISTOR	DTC114ES	
Q10	8-729-900-74	TRANSISTOR	DTC143TS	
Q51	8-729-202-67	TRANSISTOR	2SK246-GR3	
Q52	8-729-201-84	TRANSISTOR	2SC3112-B	
Q53	8-729-202-67	TRANSISTOR	2SK246-GR3	
Q54	8-729-201-84	TRANSISTOR	2SC3112-B	
Q101	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q102	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q103	8-729-900-80	TRANSISTOR	DTC114ES	
Q104	8-729-900-80	TRANSISTOR	DTC114ES	
Q105	8-729-900-80	TRANSISTOR	DTC114ES	
Q201	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q231	8-729-141-26	TRANSISTOR	2SC3622A-LK	
Q232	8-729-141-26	TRANSISTOR	2SC3622A-LK	
Q233	8-729-900-65	TRANSISTOR	DTA144ES	
Q234	8-729-900-80	TRANSISTOR	DTC114ES	
Q252	8-729-900-80	TRANSISTOR	DTC114ES	
Q253	8-729-900-80	TRANSISTOR	DTC114ES	
Q601	8-729-904-39	TRANSISTOR	DTC114TS	
Q603	8-729-900-80	TRANSISTOR	DTC114ES	
Q651	8-729-904-39	TRANSISTOR	DTC114TS	
Q721	8-729-801-93	TRANSISTOR	2SD1387	
Q722	8-729-620-05	TRANSISTOR	2SC2603-EF	
Q723	8-729-900-80	TRANSISTOR	DTC114ES	
Q731	8-729-904-39	TRANSISTOR	DTC114TS	
Q732	8-729-900-61	TRANSISTOR	DTA114ES	
Q735	8-729-111-29	TRANSISTOR	2SD1616A-K	
Q736	8-729-209-15	TRANSISTOR	2SD2012	
Q738	8-729-900-61	TRANSISTOR	DTA114ES	
Q739	8-729-900-89	TRANSISTOR	DTC144ES	
Q740	8-729-900-89	TRANSISTOR	DTC144ES	
Q781	8-729-904-39	TRANSISTOR	DTC114TS	
Q785	8-729-801-93	TRANSISTOR	2SD1387	
Q786	8-729-900-80	TRANSISTOR	DTC114ES	
Q787	8-729-900-80	TRANSISTOR	DTC114ES	
Q789	8-729-900-80	TRANSISTOR	DTC114ES	
Q790	8-729-900-80	TRANSISTOR	DTC114ES	
Q791	8-729-900-80	TRANSISTOR	DTC114ES	
Q999	8-729-900-80	TRANSISTOR	DTC114ES	

< RESISTOR >

R1	1-249-411-11	CARBON	330	5%	1/4W
R2	1-249-411-11	CARBON	330	5%	1/4W
R3	1-247-891-00	CARBON	330K	5%	1/4W
R4	1-249-411-11	CARBON	330	5%	1/4W
R7	1-249-405-11	CARBON	100	5%	1/4W
R8	1-249-441-11	CARBON	100K	5%	1/4W
R9	1-249-437-11	CARBON	47K	5%	1/4W
R10	1-249-425-11	CARBON	4.7K	5%	1/4W
R11	1-249-421-11	CARBON	2.2K	5%	1/4W
R12	1-249-421-11	CARBON	2.2K	5%	1/4W
R13	1-249-433-11	CARBON	22K	5%	1/4W
R14	1-249-432-11	CARBON	18K	5%	1/4W
R15	1-247-903-00	CARBON	1M	5%	1/4W
R20	1-249-425-11	CARBON	4.7K	5%	1/4W
R51	1-249-417-11	CARBON	1K	5%	1/4W
R52	1-249-417-11	CARBON	1K	5%	1/4W
R53	1-249-441-11	CARBON	100K	5%	1/4W
R54	1-249-417-11	CARBON	1K	5%	1/4W
R55	1-249-425-11	CARBON	4.7K	5%	1/4W
R56	1-249-405-11	CARBON	100	5%	1/4W
R57	1-249-401-11	CARBON	47	5%	1/4W
R58	1-249-423-11	CARBON	3.3K	5%	1/4W
R59	1-249-414-11	CARBON	560	5%	1/4W
R60	1-249-417-11	CARBON	1K	5%	1/4W
R61	1-249-410-11	CARBON	270	5%	1/4W
R62	1-249-418-11	CARBON	1.2K	5%	1/4W
R63	1-249-421-11	CARBON	2.2K	5%	1/4W
R64	1-249-425-11	CARBON	4.7K	5%	1/4W
R65	1-249-425-11	CARBON	4.7K	5%	1/4W
R66	1-249-405-11	CARBON	100	5%	1/4W
R67	1-249-423-11	CARBON	3.3K	5%	1/4W
R68	1-249-414-11	CARBON	560	5%	1/4W
R69	1-249-417-11	CARBON	1K	5%	1/4W
R70	1-249-410-11	CARBON	270	5%	1/4W
R71	1-249-433-11	CARBON	22K	5%	1/4W
R72	1-249-421-11	CARBON	2.2K	5%	1/4W
R73	1-249-425-11	CARBON	4.7K	5%	1/4W
R74	1-249-425-11	CARBON	4.7K	5%	1/4W
R75	1-249-393-11	CARBON	10	5%	1/4W
R81	1-249-433-11	CARBON	22K	5%	1/4W
R82	1-249-417-11	CARBON	1K	5%	1/4W
R83	1-249-399-11	CARBON	33	5%	1/4W
R84	1-249-429-11	CARBON	10K	5%	1/4W
R85	1-249-429-11	CARBON	10K	5%	1/4W
R86	1-249-437-11	CARBON	47K	5%	1/4W
R87	1-249-409-11	CARBON	220	5%	1/4W
R88	1-249-429-11	CARBON	10K	5%	1/4W
R89	1-249-429-11	CARBON	10K	5%	1/4W
R90	1-249-421-11	CARBON	2.2K	5%	1/4W
R91	1-249-421-11	CARBON	2.2K	5%	1/4W
R92	1-247-891-00	CARBON	330K	5%	1/4W
R93	1-247-891-00	CARBON	330K	5%	1/4W
R94	1-249-417-11	CARBON	1K	5%	1/4W
R95	1-249-417-11	CARBON	1K	5%	1/4W

Ref. No.	Part No.	Description				Remark
R96	1-249-425-11	CARBON	4.7K	5%	1/4W	
R97	1-249-425-11	CARBON	4.7K	5%	1/4W	
R98	1-249-404-00	CARBON	82	5%	1/4W	
R99	1-249-417-11	CARBON	1K	5%	1/4W	
R100	1-247-848-11	CARBON	5.1K	5%	1/4W	
R102	1-249-430-11	CARBON	12K	5%	1/4W	
R103	1-249-428-11	CARBON	8.2K	5%	1/4W	
R104	1-249-435-11	CARBON	33K	5%	1/4W	
R105	1-249-431-11	CARBON	15K	5%	1/4W	
R106	1-249-417-11	CARBON	1K	5%	1/4W	
R108	1-249-425-11	CARBON	4.7K	5%	1/4W	
R110	1-249-423-11	CARBON	3.3K	5%	1/4W	
R201	1-249-441-11	CARBON	100K	5%	1/4W	
R202	1-249-441-11	CARBON	100K	5%	1/4W	
R203	1-249-422-11	CARBON	2.7K	5%	1/4W	
R204	1-249-422-11	CARBON	2.7K	5%	1/4W	
R205	1-249-437-11	CARBON	47K	5%	1/4W	
R206	1-249-437-11	CARBON	47K	5%	1/4W	
R207	1-249-437-11	CARBON	47K	5%	1/4W	
R208	1-249-437-11	CARBON	47K	5%	1/4W	
R209	1-249-441-11	CARBON	100K	5%	1/4W	
R210	1-249-437-11	CARBON	47K	5%	1/4W	
R211	1-249-423-11	CARBON	3.3K	5%	1/4W	
R212	1-249-423-11	CARBON	3.3K	5%	1/4W	
R213	1-249-429-11	CARBON	10K	5%	1/4W	
R214	1-249-437-11	CARBON	47K	5%	1/4W	
R215	1-249-429-11	CARBON	10K	5%	1/4W	
R216	1-249-441-11	CARBON	100K	5%	1/4W	
R217	1-249-411-11	CARBON	330	5%	1/4W	
R218	1-249-411-11	CARBON	330	5%	1/4W	
R219	1-249-417-11	CARBON	1K	5%	1/4W	
R220	1-249-421-11	CARBON	2.2K	5%	1/4W	
R223	1-249-417-11	CARBON	1K	5%	1/4W	
R224	1-249-417-11	CARBON	1K	5%	1/4W	
R225	1-249-417-11	CARBON	1K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R231	1-249-429-11	CARBON	10K	5%	1/4W	
R232	1-249-425-11	CARBON	4.7K	5%	1/4W	
R233	1-249-429-11	CARBON	10K	5%	1/4W	
R234	1-249-393-11	CARBON	10	5%	1/4W	
R235	1-249-417-11	CARBON	1K	5%	1/4W	
R236	1-249-417-11	CARBON	1K	5%	1/4W	
R237	1-249-419-11	CARBON	1.5K	5%	1/4W	
R238	1-249-419-11	CARBON	1.5K	5%	1/4W	
R239	1-249-433-11	CARBON	22K	5%	1/4W	
R241	1-249-413-11	CARBON	470	5%	1/4W	
R242	1-249-417-11	CARBON	1K	5%	1/4W	
R243	1-249-411-11	CARBON	330	5%	1/4W	
R244	1-249-411-11	CARBON	330	5%	1/4W	
R245	1-249-421-11	CARBON	2.2K	5%	1/4W	
R247	1-249-433-11	CARBON	22K	5%	1/4W	
R248	1-249-421-11	CARBON	2.2K	5%	1/4W	
R249	1-249-429-11	CARBON	10K	5%	1/4W	
R250	1-249-429-11	CARBON	10K	5%	1/4W	
R251	1-249-425-11	CARBON	4.7K	5%	1/4W	
R252	1-249-425-11	CARBON	4.7K	5%	1/4W	
R286	1-249-405-11	CARBON	100	5%	1/4W	
R287	1-249-405-11	CARBON	100	5%	1/4W	
R288	1-249-405-11	CARBON	100	5%	1/4W	
R289	1-249-405-11	CARBON	100	5%	1/4W	
R290	1-249-405-11	CARBON	100	5%	1/4W	
R291	1-249-413-11	CARBON	470	5%	1/4W	
R292	1-249-413-11	CARBON	470	5%	1/4W	
R293	1-249-413-11	CARBON	470	5%	1/4W	
R294	1-249-413-11	CARBON	470	5%	1/4W	
R295	1-249-405-11	CARBON	100	5%	1/4W	
R296	1-249-405-11	CARBON	100	5%	1/4W	
R297	1-249-405-11	CARBON	100	5%	1/4W	
R298	1-249-405-11	CARBON	100	5%	1/4W	
R299	1-249-441-11	CARBON	100K	5%	1/4W	
R601	1-247-881-00	CARBON	120K	5%	1/4W	
R602	1-249-405-11	CARBON	100	5%	1/4W	
R603	1-247-882-11	CARBON	130K	5%	1/4W	
R604	1-249-426-11	CARBON	5.6K	5%	1/4W	
R605	1-249-409-11	CARBON	220	5%	1/4W	
R606	1-249-441-11	CARBON	100K	5%	1/4W	
R607	1-249-418-11	CARBON	1.2K	5%	1/4W	
R609	1-249-420-11	CARBON	1.8K	5%	1/4W	
R610	1-247-887-00	CARBON	220K	5%	1/4W	
R611	1-247-881-00	CARBON	120K	5%	1/4W	
R612	1-249-405-11	CARBON	100	5%	1/4W	
R613	1-247-882-11	CARBON	130K	5%	1/4W	
R614	1-249-426-11	CARBON	5.6K	5%	1/4W	
R615	1-249-409-11	CARBON	220	5%	1/4W	
R616	1-249-441-11	CARBON	100K	5%	1/4W	
R617	1-249-441-11	CARBON	100K	5%	1/4W	
R621	1-249-417-11	CARBON	1K	5%	1/4W	
R622	1-249-437-11	CARBON	47K	5%	1/4W	
R623	1-249-437-11	CARBON	47K	5%	1/4W	
R624	1-247-897-11	CARBON	560K	5%	1/4W	
R625	1-249-417-11	CARBON	1K	5%	1/4W	
R626	1-249-425-11	CARBON	4.7K	5%	1/4W	
R627	1-249-437-11	CARBON	47K	5%	1/4W	
R651	1-247-881-00	CARBON	120K	5%	1/4W	
R652	1-249-405-11	CARBON	100	5%	1/4W	
R653	1-247-882-11	CARBON	130K	5%	1/4W	

MAIN

Ref. No.	Part No.	Description			Remark
R654	1-249-426-11	CARBON	5.6K	5%	1/4W
R655	1-249-409-11	CARBON	220	5%	1/4W
R656	1-249-441-11	CARBON	100K	5%	1/4W
R657	1-249-418-11	CARBON	1.2K	5%	1/4W
R659	1-249-420-11	CARBON	1.8K	5%	1/4W
R660	1-247-887-00	CARBON	220K	5%	1/4W
R661	1-247-881-00	CARBON	120K	5%	1/4W
R662	1-249-405-11	CARBON	100	5%	1/4W
R663	1-247-882-11	CARBON	130K	5%	1/4W
R664	1-249-426-11	CARBON	5.6K	5%	1/4W
R665	1-249-409-11	CARBON	220	5%	1/4W
R666	1-249-441-11	CARBON	100K	5%	1/4W
R671	1-249-417-11	CARBON	1K	5%	1/4W
R672	1-249-437-11	CARBON	47K	5%	1/4W
R673	1-249-437-11	CARBON	47K	5%	1/4W
R674	1-247-897-11	CARBON	560K	5%	1/4W
R675	1-249-417-11	CARBON	1K	5%	1/4W
R676	1-249-425-11	CARBON	4.7K	5%	1/4W
R677	1-249-437-11	CARBON	47K	5%	1/4W
R701	1-249-437-11	CARBON	47K	5%	1/4W
R702	1-249-421-11	CARBON	2.2K	5%	1/4W
R704	1-249-431-11	CARBON	15K	5%	1/4W
R705	1-249-437-11	CARBON	47K	5%	1/4W
R706	1-249-426-11	CARBON	5.6K	5%	1/4W
R708	1-249-437-11	CARBON	47K	5%	1/4W
R709	1-247-870-11	CARBON	43K	5%	1/4W
R710	1-249-437-11	CARBON	47K	5%	1/4W
R711	1-249-429-11	CARBON	10K	5%	1/4W
R712	1-249-426-11	CARBON	5.6K	5%	1/4W
R713	1-249-430-11	CARBON	12K	5%	1/4W
R714	1-249-429-11	CARBON	10K	5%	1/4W
R715	1-249-434-11	CARBON	27K	5%	1/4W
R716	1-249-441-11	CARBON	100K	5%	1/4W
R717	1-249-429-11	CARBON	10K	5%	1/4W
R721	1-249-423-11	CARBON	3.3K	5%	1/4W
R722	1-249-431-11	CARBON	15K	5%	1/4W
R723	1-249-433-11	CARBON	22K	5%	1/4W
R724	1-249-437-11	CARBON	47K	5%	1/4W
R725	1-249-427-11	CARBON	6.8K	5%	1/4W
R726	1-249-437-11	CARBON	47K	5%	1/4W
R727	1-249-388-11	CARBON	3.9	5%	1/6W
R729	1-249-417-11	CARBON	1K	5%	1/4W
R731	1-249-421-11	CARBON	2.2K	5%	1/4W
R732	1-249-425-11	CARBON	4.7K	5%	1/4W
R733	1-249-429-11	CARBON	10K	5%	1/4W
R734	1-249-437-11	CARBON	47K	5%	1/4W
R735	1-249-413-11	CARBON	470	5%	1/4W
R736	1-249-411-11	CARBON	330	5%	1/4W
R737	1-249-405-11	CARBON	100	5%	1/4W

Ref. No.	Part No.	Description			Remark
R738	1-249-414-11	CARBON	560	5%	1/4W
R739	1-249-429-11	CARBON	10K	5%	1/4W
R740	1-249-429-11	CARBON	10K	5%	1/4W
R741	1-249-429-11	CARBON	10K	5%	1/4W
R742	1-249-437-11	CARBON	47K	5%	1/4W
R743	1-249-429-11	CARBON	10K	5%	1/4W
R744	1-249-425-11	CARBON	4.7K	5%	1/4W
R747	1-249-405-11	CARBON	100	5%	1/4W
R748	1-249-405-11	CARBON	100	5%	1/4W
R751	1-249-437-11	CARBON	47K	5%	1/4W
R752	1-249-421-11	CARBON	2.2K	5%	1/4W
R754	1-249-431-11	CARBON	15K	5%	1/4W
R755	1-249-437-11	CARBON	47K	5%	1/4W
R756	1-249-426-11	CARBON	5.6K	5%	1/4W
R758	1-249-437-11	CARBON	47K	5%	1/4W
R760	1-249-437-11	CARBON	47K	5%	1/4W
R761	1-249-429-11	CARBON	10K	5%	1/4W
R762	1-249-426-11	CARBON	5.6K	5%	1/4W
R763	1-249-430-11	CARBON	12K	5%	1/4W
R781	1-249-421-11	CARBON	2.2K	5%	1/4W
R782	1-249-425-11	CARBON	4.7K	5%	1/4W
R785	1-249-421-11	CARBON	2.2K	5%	1/4W
R786	1-249-421-11	CARBON	2.2K	5%	1/4W
R787	1-249-421-11	CARBON	2.2K	5%	1/4W
R788	1-249-421-11	CARBON	2.2K	5%	1/4W
R789	1-249-421-11	CARBON	2.2K	5%	1/4W
R790	1-249-421-11	CARBON	2.2K	5%	1/4W
R791	1-249-429-11	CARBON	10K	5%	1/4W
R792	1-249-418-11	CARBON	1.2K	5%	1/4W
R793	1-249-441-11	CARBON	100K	5%	1/4W
R794	1-249-425-11	CARBON	4.7K	5%	1/4W
R795	1-249-429-11	CARBON	10K	5%	1/4W
R796	1-249-429-11	CARBON	10K	5%	1/4W
R797	1-249-432-11	CARBON	18K	5%	1/4W
R798	1-249-421-11	CARBON	2.2K	5%	1/4W
R799	1-249-429-11	CARBON	10K	5%	1/4W
R7001	1-249-421-11	CARBON	2.2K	5%	1/4W
R7002	1-249-421-11	CARBON	2.2K	5%	1/4W

< VARIABLE RESISTOR >

RV81	1-238-601-11	RES, ADJ, CARBON 22K (FM TUNED)
RV82	1-238-601-11	RES, ADJ, CARBON 22K (AM TUNED)
RV601	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL, R) (DECK A)
RV611	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL, L) (DECK B)

Ref. No.	Part No.	Description	Remark
RV651	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL, L) (DECK A)	
RV661	1-238-596-11	RES, ADJ, CARBON 470 (PB LEVEL, R) (DECK B)	
RV701	1-238-601-11	RES, ADJ, CARBON 22K (REC LEVEL, L)	
RV721	1-238-603-11	RES, ADJ, CARBON 100K (BIAS, L)	
RV722	1-238-603-11	RES, ADJ, CARBON 100K (BIAS, R)	
RV751	1-238-601-11	RES, ADJ, CARBON 22K (REC LEVEL, R)	
		< RELAY >	
RY601	1-515-614-21	RELAY	
		< SWITCH >	
S701	1-554-088-00	SWITCH, KEY BOARD (SYSTEM RESET)	
S721	1-572-185-11	SWITCH, SLIDE (ISS)	
		< TRANSFORMER >	
T721	1-433-347-11	TRANSFORMER, BIAS OSCILLATION	
		< TERMINAL >	
* TB1	1-537-138-31	TERMINAL BOARD (ANT)	
* TB2	4-925-530-01	PLATE, GROUND	
		< TEST PIN >	
* TP81	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
* TP701	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
* TP702	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
		< VIBRATOR >	
X51	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)	
X81	1-577-075-11	OSCILLATOR, CERAMIC (456KHz)	
X201	1-577-358-21	VIBRATOR, CERAMIC (4MHz)	
X251	1-567-908-11	VIBRATOR, CRYSTAL (16.9344MHz)	

****

* A-4347-820-A POLAR BOARD, COMPLETE

****

< CAPACITOR >

C1701	1-162-294-31	CERAMIC	0.001uF	10% 50V
C1702	1-104-294-11	POLYSTYRENE	470PF	5% 50V
C1703	1-124-902-00	ELECT	0.47uF	20% 50V
C1704	1-124-902-00	ELECT	0.47uF	20% 50V
C1705	1-164-098-11	CERAMIC	0.047uF	12V
C1706	1-124-903-11	ELECT	1uF	20% 50V
C1707	1-162-288-31	CERAMIC	330PF	10% 50V
C1708	1-124-903-11	ELECT	1uF	20% 50V
C1709	1-124-903-11	ELECT	1uF	20% 50V
C1710	1-130-471-00	MYLAR	0.001uF	5% 50V
C1711	1-130-471-00	MYLAR	0.001uF	5% 50V
C1712	1-130-736-11	FILM	0.01uF	5% 50V
C1713	1-130-736-11	FILM	0.01uF	5% 50V
C1714	1-124-903-11	ELECT	1uF	20% 50V
C1715	1-124-903-11	ELECT	1uF	20% 50V
C1716	1-124-903-11	ELECT	1uF	20% 50V
C1717	1-162-291-31	CERAMIC	560PF	10% 50V
C1718	1-162-291-31	CERAMIC	560PF	10% 50V
C1719	1-124-477-11	ELECT	47uF	20% 25V
C1720	1-161-379-00	CERAMIC	0.01uF	20% 25V
C1721	1-161-379-00	CERAMIC	0.01uF	20% 25V
C1722	1-161-379-00	CERAMIC	0.01uF	20% 25V
C1723	1-161-379-00	CERAMIC	0.01uF	20% 25V
C1724	1-161-379-00	CERAMIC	0.01uF	20% 25V
C1725	1-124-477-11	ELECT	47uF	20% 25V
C1726	1-124-903-11	ELECT	1uF	20% 50V
C1727	1-124-903-11	ELECT	1uF	20% 50V
C1728	1-124-034-51	ELECT	33uF	20% 16V
C1729	1-124-907-11	ELECT	10uF	20% 50V

< CONNECTOR >

* CN1701	1-564-339-00	PIN, CONNECTOR 5P
* CN1702	1-564-339-71	PIN, CONNECTOR 5P
* CN1703	1-564-337-00	PIN, CONNECTOR 3P

< DIODE >

D1701	8-719-987-63	DIODE	1N4148M
D1702	8-719-987-63	DIODE	1N4148M
D1703	8-719-987-63	DIODE	1N4148M
D1704	8-719-987-63	DIODE	1N4148M
D1705	8-719-987-63	DIODE	1N4148M

< IC >

IC1701	8-759-063-04	IC	IR3R42
IC1702	8-759-634-51	IC	M5218AP
IC1703	8-759-140-53	IC	MC14053BCP

< COIL >

L1701	1-409-497-11	COIL (FILTER)

< TRANSISTOR >

Q1701	8-729-900-61	TRANSISTOR	DTA114ES
Q1702	8-729-900-80	TRANSISTOR	DTC114ES
Q1703	8-729-900-80	TRANSISTOR	DTC114ES
Q1704	8-729-900-80	TRANSISTOR	DTC114ES
Q1705	8-729-900-61	TRANSISTOR	DTA114ES

POLAR

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R1701	1-247-864-11	CARBON	24K	5%	1/4W
R1702	1-249-435-11	CARBON	33K	5%	1/4W
R1703	1-249-427-11	CARBON	6.8K	5%	1/4W
R1704	1-249-430-11	CARBON	12K	5%	1/4W
R1705	1-249-417-11	CARBON	1K	5%	1/4W
R1706	1-249-417-11	CARBON	1K	5%	1/4W
R1707	1-249-441-11	CARBON	100K	5%	1/4W
R1708	1-247-880-11	CARBON	110K	5%	1/4W
R1709	1-249-439-11	CARBON	68K	5%	1/4W
R1710	1-249-439-11	CARBON	68K	5%	1/4W
R1711	1-249-439-11	CARBON	68K	5%	1/4W
R1712	1-247-878-00	CARBON	91K	5%	1/4W
R1713	1-247-878-00	CARBON	91K	5%	1/4W
R1714	1-249-441-11	CARBON	100K	5%	1/4W
R1715	1-249-441-11	CARBON	100K	5%	1/4W
R1716	1-249-441-11	CARBON	100K	5%	1/4W
R1717	1-249-441-11	CARBON	100K	5%	1/4W
R1718	1-249-429-11	CARBON	10K	5%	1/4W
R1719	1-249-429-11	CARBON	10K	5%	1/4W
R1720	1-249-429-11	CARBON	10K	5%	1/4W
R1721	1-249-434-11	CARBON	27K	5%	1/4W
R1722	1-249-441-11	CARBON	100K	5%	1/4W
		< VARIABLE RESISTOR >			
RV1701	1-238-601-11	RES, ADJ, CARBON 22K (LEVEL)			
RV1702	1-238-599-11	RES, ADJ, CARBON 4.7K (VCO)			
		< SWITCH >			
S1701	1-571-303-11	SWITCH, SLIDE (POLAR/PILOT)			
		< TEST PIN >			
* TP1701	1-560-061-00	PIN, CONNECTOR 3P			
* TP1702	1-560-061-00	PIN, CONNECTOR 3P			

The Difference between AEP Model and CIS Model on Display Board

PAGE	AEP Model				CIS Model		
	Ref. No.	Part No.	Description	Remark	Part No.	Description	Remark
22		A-4345-097-A	DISPLAY BOARD, COMPLETE		A-4347-821-A	DISPLAY BOARD, COMPLETE	
66	C596	1-125-447-11	DOUBLE LAYERS 1F	5.5V	1-125-445-11	DOLBLE LAYERS 0.22F	5.5V

CIS: Common Independent States

9-956-245-81

Sony Corporation
Audio Group

English
92D0410-1
Printed in Japan

Published by Customer Relations and Service Group

HCD-H50/H55/H1100

SONY

SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model
HCD-H50

AEP Model
HCD-H55
HCD-H1100

SUPPLEMENT-2

File this Supplement with the Service Manual.

BLOCK DIAGRAMS

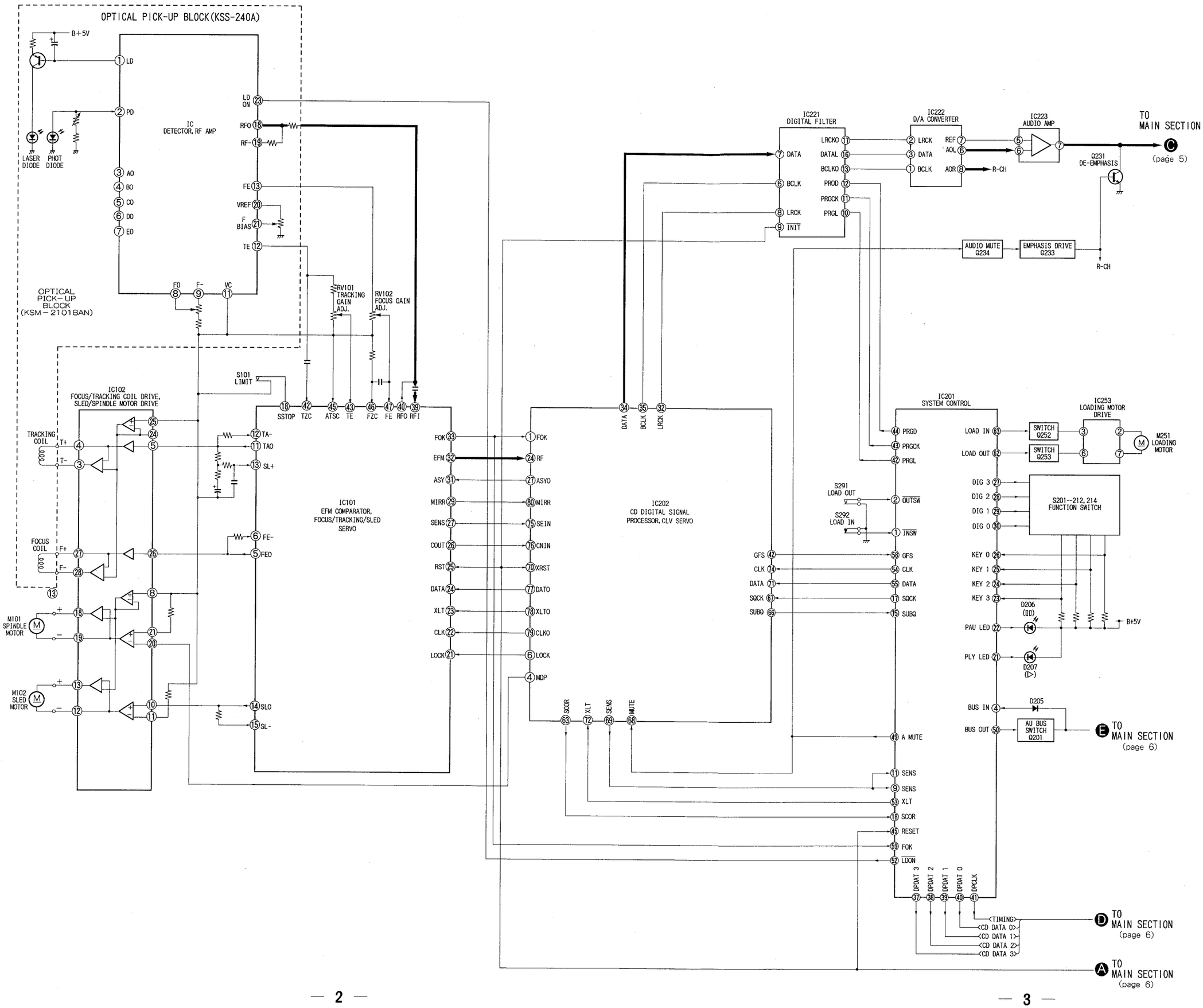
9-956-245-82

Sony Corporation
Audio Group

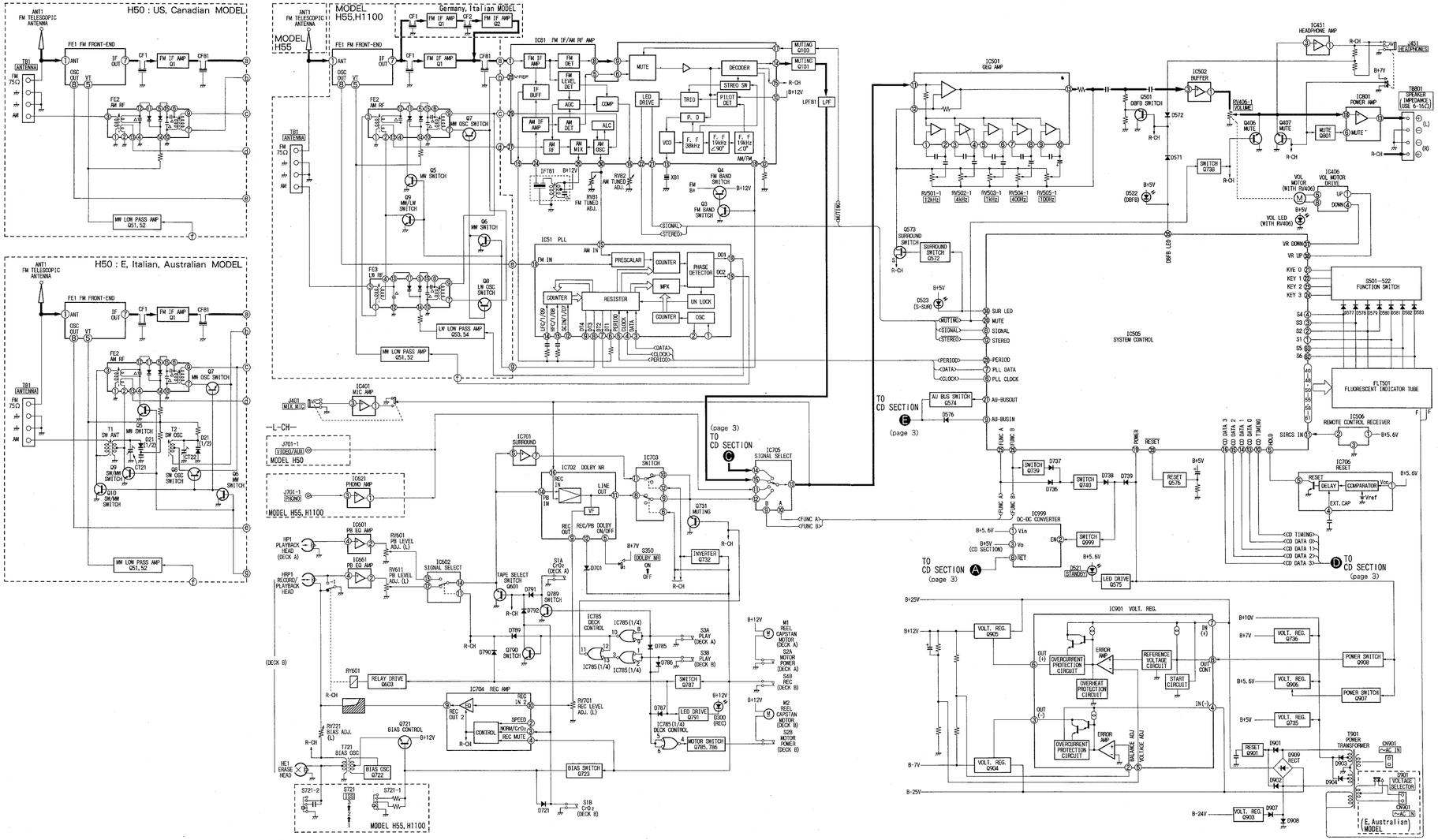
English
92E0290-1
Printed in Japan

Published by Customer Relations and Service Group

1. BLOCK DIAGRAM (CD SECTION)



2. BLOCK DIAGRAM (MAIN SECTION)



HCD-H50/H55/H1100

SONY
SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model
HCD-H50

AEP Model
HCD-H55
HCD-H1100

UK Model
HCD-H1100

SUPPLEMENT-3

File this Supplement with the Service Manual.

Subject :
Addition of Electrical Adjustments
(Deck Section)

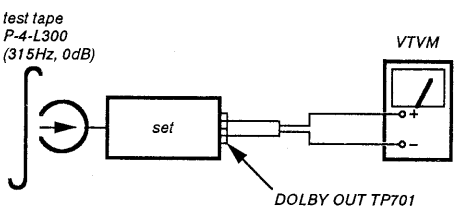
(SPM-95061)

Service Manual See page 22

Playback Level Adjustment DECK A DECK B

Procedure :

Mode : Playback



Deck A is RV601(L-CH), and RV651(R-CH), deck B is RV611 (L-CH), and RV661 (R-CH) so that adjustment within adjustment level as follows.

Adjustment Level :
DOLBY OUT level : − 5.7 ± 0.5dB
Level Difference between Channels : within 1dB

Confirm the DOLBY OUT level does not change in playback mode while changing the mode from playback to stop several times.

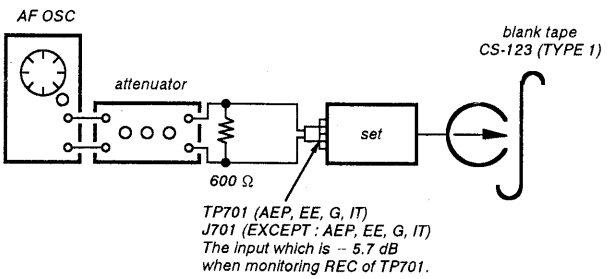
Adjustment Location : MAIN board.

Record Level Adjustment DECK B

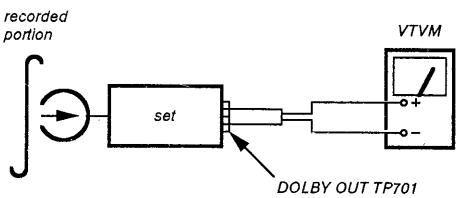
Procedure :

- Abbreviation
  G : German, EE : East European
  IT : Italian

1. Record mode



2. Playback mode



Confirm playback the signal recorded in step 1 become adjustment level as follows.
If these levels do not adjustment level, adjustment the RV701 (L-CH) and RV751 (R-CH) to repeat step 1 and 2.

Adjustment Level :
DOLBY OUT level : − 25.7 ± 1.0dB

Adjustment Location : MAIN board.

Record Bias Adjustment DECK B

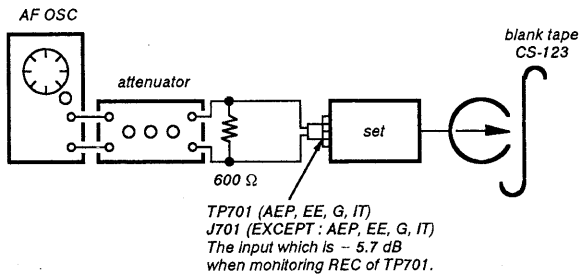
Procedure :

- Abbreviation

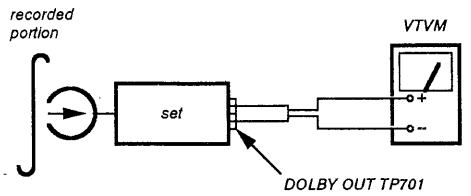
  G : German, EE : East European

  IT : Italian

1. Record mode



2. Playback mode



Confirm playback the signal recorded in step become adjustment level as follows.

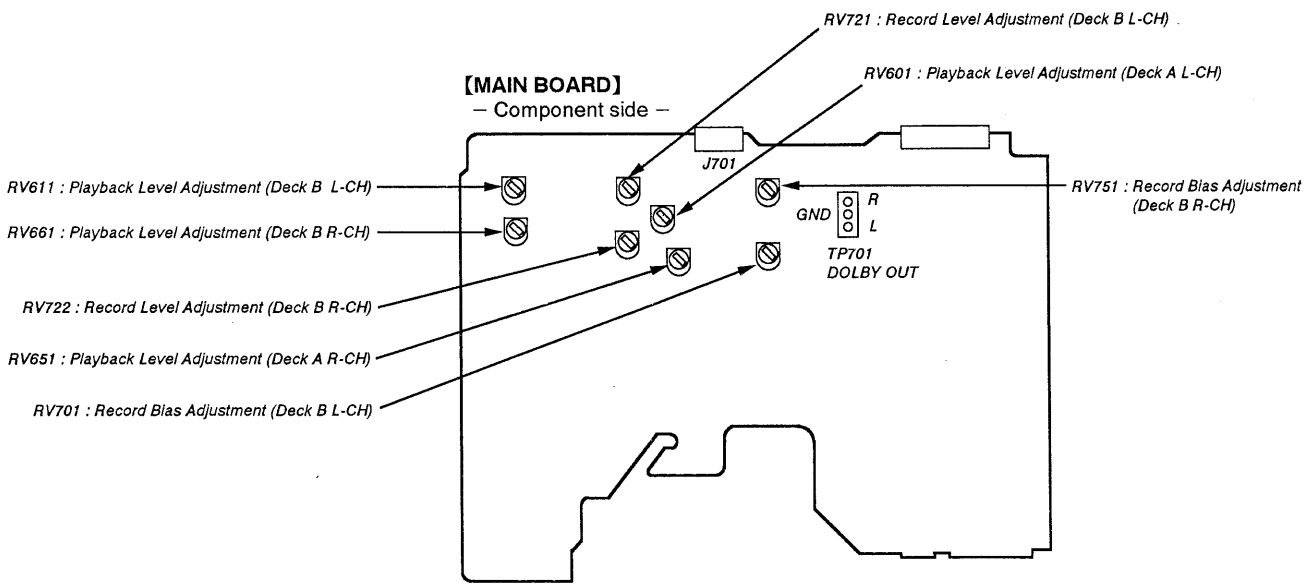
If these levels do not adjustment level, adjustment the RV721 (L-CH) and RV722 (R-CH) to repeat step 1 and 2.

Adjustment Level :

DOLBY OUT level : $-25.7^{+1.0}_{-0.5}$ dB

Adjustment Location : MAIN board.

Adjustment Location :



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HCD-H50/H55/H1100

SONY
SERVICE MANUAL

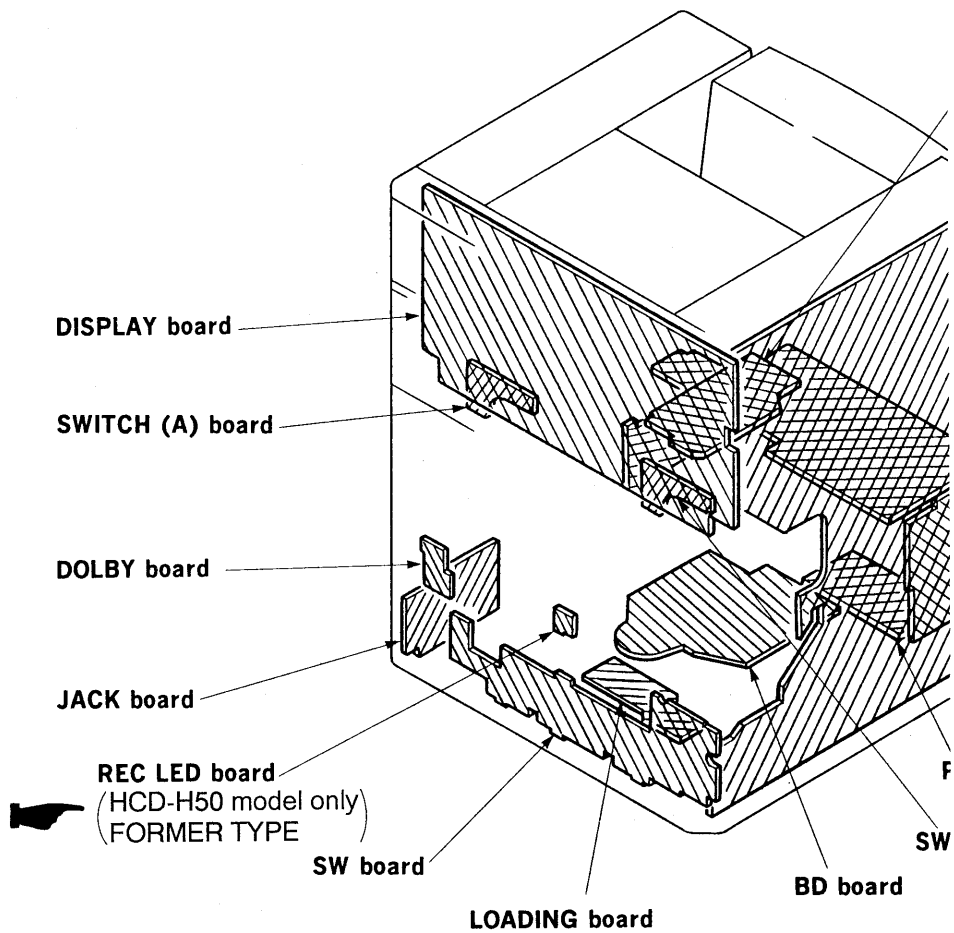
US Model
Canadian Model
E Model
Australian Model
HCD-H50
AEP Model
HCD-H55
HCD-H1100
UK Model
HCD-H1100

CORRECTION-1

File this Correction with the Service Manual.

☛: Correct Portion

CIRCUIT BOARDS LOCATION (Service Manual Page 27.)



9-956-245-91

Sony Corporation
Audio Group

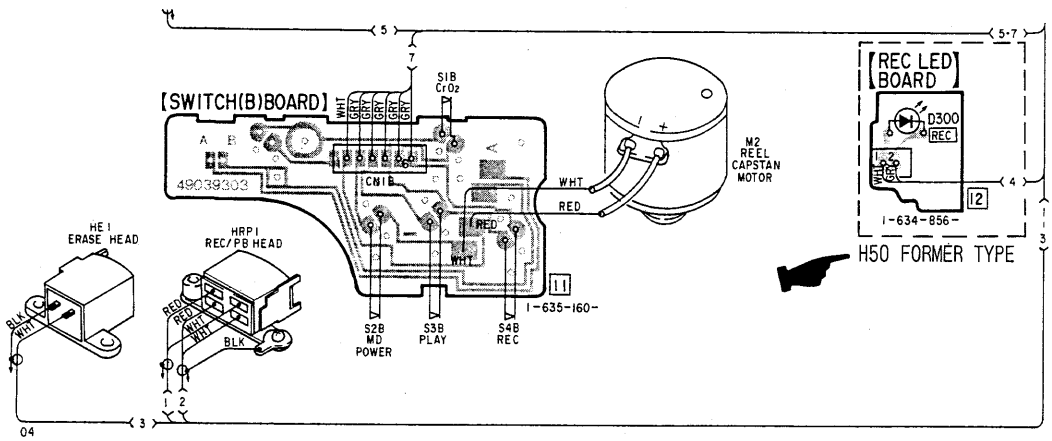
English
93E02101-1
Printed in Japan

Published by Audio Sector Quality Assurance Dept.

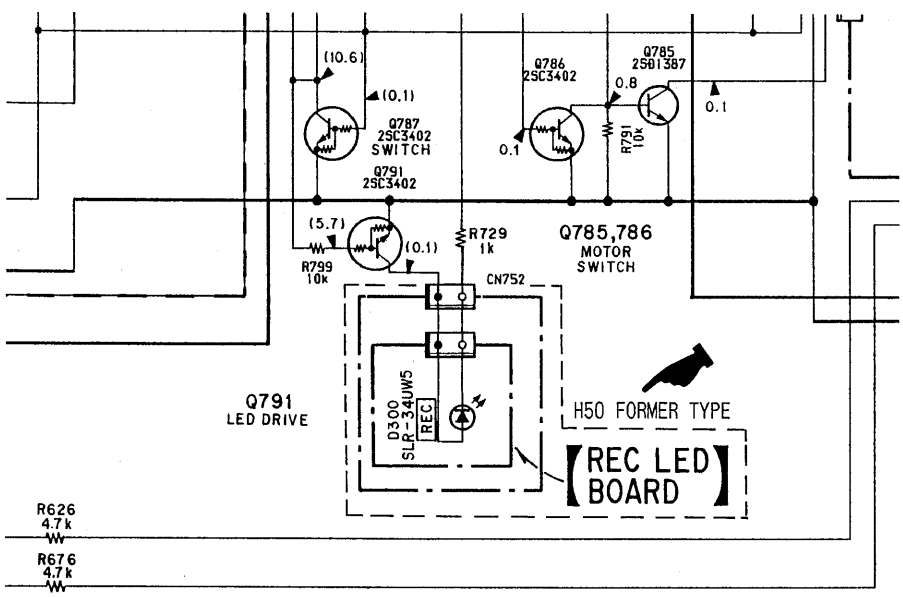
Semiconductor Location (Service Manual Page 29.)

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D21(※1)	C-6	Q1(※3)	D-9	Q790	D-13
D201	F-16	Q2(※4)	E-9	Q791	D-14
D205	D-15	Q3(※2)	E-6	Q999	H-15
D206	H-19	Q3(※3)	E-10		
D207	H-20	Q4(※2)	E-6		
D208	I-21	Q4(※3)	E-10		
D209	I-21	Q5(※1)	B-5		
D210	J-21	Q5(※3)	B-9		
D211	J-23	Q6(※1)	E-6		
D300(※2)	I-6	Q6(※3)	E-10		
D601	C-16	Q7(※1)	D-6		
D701	D-13	Q7(※3)	D-10		
D721	C-18	Q8(※1)	D-6		

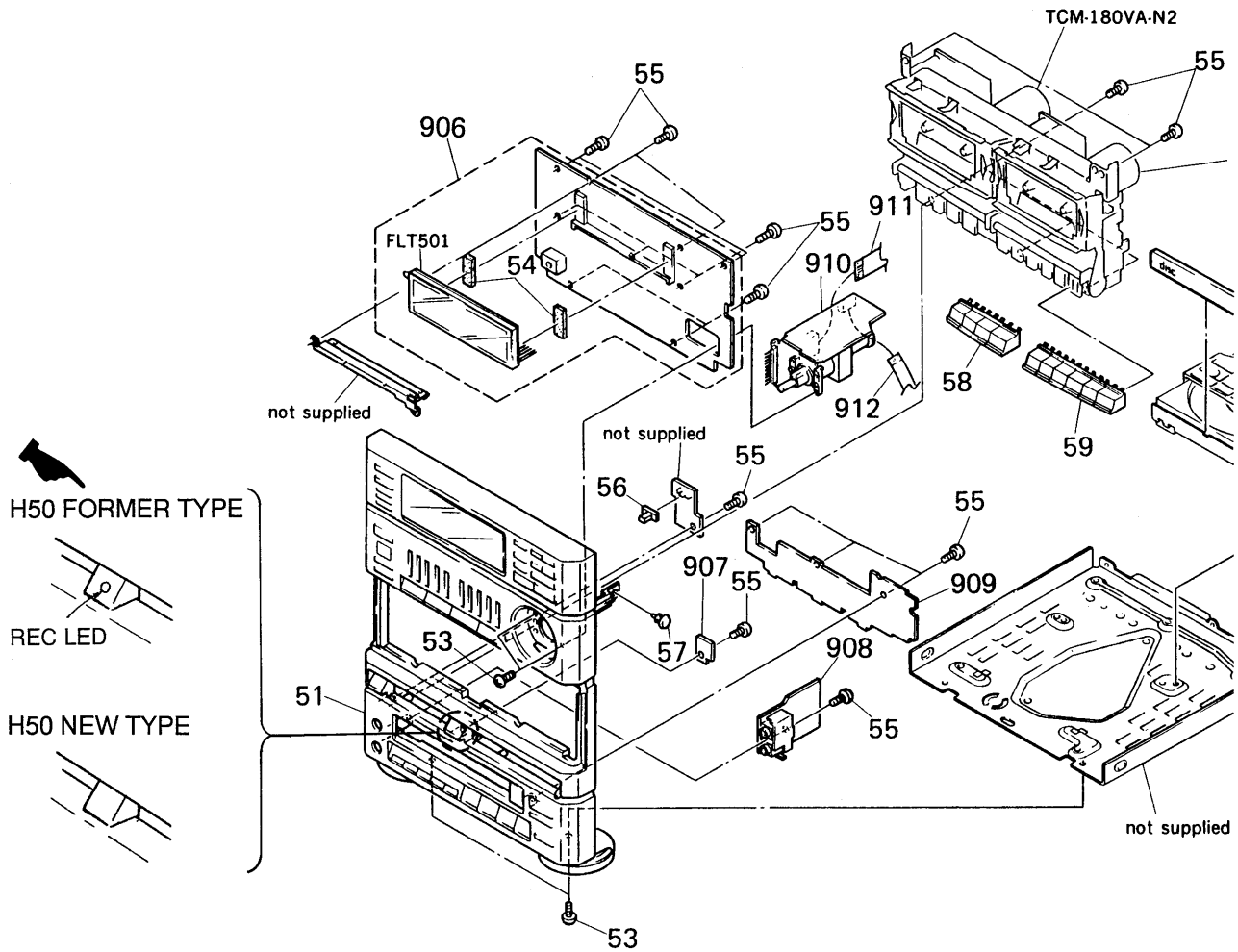
PRINTED WIRING BOARDS – Tuner/CD/Deck Section – (Service Manual Page 30.) (Location I – K , 1 – 7)



SCHEMATIC DIAGRAM – Deck Section – (Service Manual Page 40.) (Location J – M , 8 – 13)



• FRONT PANEL, MAIN BOARD BLOCK (Service Manual Page 58.)



Ref. No.	Part No.	Description	Remark
51	X-4941-509-1	PANEL ASSY, FRONT (H50) (FORMER TYPE)	
51	X-4941-509-3	PANEL ASSY, FRONT (H50) (NEW TYPE)	
51	X-4941-503-1	PANEL ASSY, FRONT (H55)	
51	X-4941-504-1	PANEL ASSY, FRONT (H1100)	

Ref. No.	Part No.	Description	Remark
907	* 1-634-856-11	REC LED BOARD (H50) (FORMER TYPE)	

ELECTRICAL PARTS LIST

(Service Manual Page 65.)

* 1-634-854-11 VR BOARD
* 1-634-856-11 REC LED BOARD (H50) (FORMER TYPE)
* 1-634-857-11 JACK BOARD

****

(Service Manual Page 66.)

< DIODE >

D206	8-719-984-16	LED GL-1HY112-CD (STOP)
D207	8-719-984-17	LED GL-1EG112-CD (PLAY)
D208	8-719-912-20	DIODE 1SS120
D209	8-719-912-20	DIODE 1SS120
D210	8-719-912-20	DIODE 1SS120
D211	8-719-912-20	DIODE 1SS120
D300	8-719-900-19	DIODE SLR-34UW5 (H50) (FORMER TYPE)

HCD-H50/H55/H1100

SONY®
SERVICE MANUAL

US Model
Canadian Model
E Model
Australian Model
HCD-H50
AEP Model
HCD-H55
HCD-H1100
UK Model
HCD-H1100

CORRECTION-2

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT			CORRECT	
	No.	Part No.	Description	Part No.	Description
60	165	3-358-251-01	LEVER (TENSION DETECTION ARM)	3-358-286-01	LEVER (MOTOR LEVER) ☛
61	205	3-358-286-01	LEVER (MOTOR LEVER)	3-358-251-01	LEVER (TENSION DETECTION ARM) ☛

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