

HCD-D90AV/GR10AV/ RX100AV

SERVICE MANUAL




Photo : HCD-RX100AV : US model

US Model
HCD-D90AV/RX100AV
Canadian Model
AEP Model
UK Model
HCD-RX100AV
E Model
Australian Model
Tourist Model
HCD-GR10AV

HCD-D90AV/GR10AV/RX100AV is the tuner, deck, CD and amplifier section in MHC-D90AV/GR10AV/RX100AV.

This stereo system is equipped with the Dolby Pro Logic Surround system* and the Dolby B-type noise reduction system.

* Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY, the double-D symbol  and "PRO LOGIC" are trademarks of Dolby Laboratories Licensing Corporation.

CD SECTION	Model Name Using Similar Mechanism	HCD-H991AV
	CD Mechanism Type	CDM38L-5BD29AL
	Base Unit Type	BU-5BD29AL
	Optical Pick-up Type	KSS-213D/Q-NP
TAPE DECK SECTION	Model Name Using Similar Mechanism	HCD-H991AV
	Tape Transport Mechanism Type	TCM-220WR2

SPECIFICATIONS

For the U.S. model

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:

With 8 ohm loads, both channels driven, from 70 - 20,000 Hz; rated 100 watts per channel minimum RMS power, with no more than 0.9 % total harmonic distortion from 250 milliamps to rated output (FRONT SPEAKER).

Amplifier section

(AEP, UK, German, East European, CIS models)

DIN power output

FRONT SPEAKER:
50 + 50 watts (8 ohms, at 1 kHz)
REAR SURROUND
SPEAKER:
10 + 10 watts (16 ohms, at 1 kHz)
CENTER SURROUND
SPEAKER:
20 watts (8 ohms, at 1 kHz)

Continuous RMS power output

FRONT SPEAKER:
70 + 70 watts (8 ohms, at 1 kHz, 10% THD)
REAR SURROUND
SPEAKER:
12.5 + 12.5 watts (16 ohms, at 1 kHz, 10% THD)
CENTER SURROUND
SPEAKER:
25 watts (8 ohms, at 1 kHz, 10% THD)

Music power output

FRONT SPEAKER:
105 + 105 watts (8 ohms, at 1 kHz, 10% THD)
REAR SURROUND
SPEAKER:
20 + 20 watts (16 ohms, at 1 kHz, 10% THD)
CENTER SURROUND
SPEAKER:
45 watts (8 ohms, at 1 kHz, 10% THD)

Amplifier section (Other models)

Continuous RMS power output (U.S. and Canadian models)

FRONT SPEAKER:
120 + 120 watts (8 ohms, at 1 kHz, 5% THD)
REAR SURROUND
SPEAKER:
12.5 + 12.5 watts (16 ohms, at 1 kHz, 5% THD)
CENTER SURROUND
SPEAKER:
25 watts (8 ohms, at 1 kHz, 5% THD)

(Other models)

FRONT SPEAKER:
100 + 100 watts (8 ohms, at 1 kHz, 10% THD)
REAR SURROUND
SPEAKER:
12.5 + 12.5 watts (16 ohms, at 1 kHz, 10% THD)
CENTER SURROUND
SPEAKER:
25 watts (8 ohms, at 1 kHz, 10% THD)

Peak music power output (except for U.S. and Canadian models)
Inputs

1500 watts
VIDEO/MD IN (phono jacks): voltage 250 mV, impedance 47 kilohms
MIX MIC (phone jack): sensitivity 1 mV, impedance 10 kilohms

— Continued on next page —

COMPACT DISC DECK RECEIVER



SONY®

Outputs	VIDEO/MD OUT (phono jacks): voltage 250 mV impedance 1 kilohms PHONES (stereo phone jack): accepts headphones of 8 ohms or more. FRONT SPEAKER: accepts impedance of 8 to 16 ohms. REAR SURROUND SPEAKER: accepts impedance of 8 ohms. CENTER SURROUND SPEAKER: accepts impedance of 8 ohms. SUPER WOOFER (except for MHC-D90AV): voltage 1 V impedance 1 kilohms
---------	--

CD player section

System	Compact disc and digital audio system
Laser	Semiconductor laser ($\lambda=780\text{nm}$) Emission duration: continuous
Laser output	Max. 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 with 7 mm aperture.
Frequency response	2 Hz – 20 kHz (± 0.5 dB)
Wavelength	780 – 790 nm
Signal-to-noise ratio	More than 90 dB
Dynamic range	More than 90 dB
CD OPTICAL DIGITAL OUT	(Square optical connector jack, rear panel)
Wavelength	600 nm
Output Level	-18 dBm

Tape player section

Recording system	4-track 2-channel stereo
Frequency response (DOLBY NR OFF)	60 – 13,000 Hz (± 3 dB), using Sony TYPE I cassette 60 – 14,000 Hz (± 3 dB), using Sony TYPE II cassette
Wow and flutter	$\pm 0.15\%$ W.Peak (IEC) 0.1% W.RMS (NAB) $\pm 0.2\%$ W.Peak (DIN)

Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section (European models)

Tuning range	87.5 – 108.0 MHz
AEP, UK, German models:	(50 kHz step)
East European, CIS models:	65.0 – 74.0 MHz (10 kHz step)
	87.5 – 108.0 MHz (50 kHz step)
Aerial	FM lead aerial
Aerial terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

UKV tuner section

(East European, CIS model only)

Tuning range	65.0 – 74.0 MHz (10kHz step) Polar stereo
--------------	--

FM tuner section (Other models)

Tuning range	87.5 – 108.0 MHz
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz

AM tuner section (European models)

Tuning range	MW: 531 – 1,602 kHz (with interval set at 9 kHz) LW: 153 – 279 kHz (with interval set at 3 kHz)
--------------	--

AM tuner section (Other models)

Tuning range	US, Canadian models: 530 – 1,710 kHz (with the AM tuning interval set at 10 kHz) 531 – 1,710 kHz (with the AM tuning interval set at 9 kHz)
E2, Australian, Thailand models:	(E2: Without sw tuner E model) 531 – 1,602 kHz (with the AM tuning interval set at 9 kHz) 530 – 1,710 kHz (with the AM tuning interval set at 10 kHz)
Other models:	MW 531 – 1,602 kHz (with the MW tuning interval set at 9 kHz) 530 – 1,710 kHz (with the MW tuning interval set at 10 kHz) SW 5.95 – 17.90 MHz (with the SW tuning interval set at 5 kHz)
Intermediate frequency	450 kHz
Antenna	AM loop antenna External antenna terminal

General

Power requirements	US, Canadian models: 120 V AC, 60 Hz AEP, UK, German, East European, CIS, Malaysia models: 220-230 V AC, 50/60 Hz Australian model: 220-240 V AC, 50/60 Hz Thailand model: 220 V AC, 50/60 Hz Other models: 110-120 V or 220-240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	U.S. model: 250 watts Canadian model: 270 VA
AEP, UK, German, East European, CIS, Malaysia models:	170 watts
Other models:	240 watts
Dimensions (w/h/d)	Approx. 280 x 330 x 366 mm
Mass	European models: Approx. 10 kg Other models: Approx. 10.3 kg

Design and specifications are subject to change without notice.

SAFETY-RELATED COMPONENT WARNING !!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

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

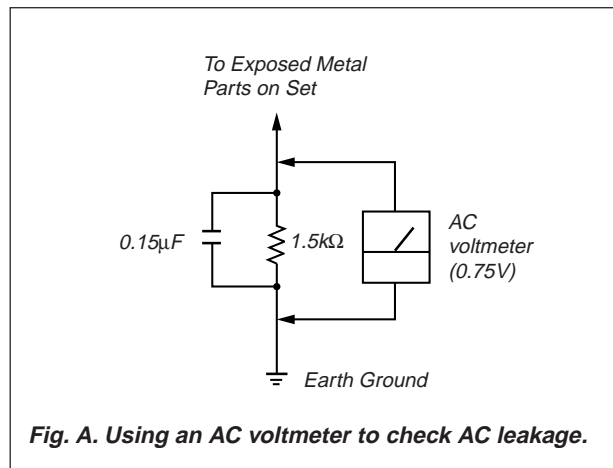
SAFETY CHECK-OUT

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

LEAKAGE

The AC leakage from any exposed metal part to earth Ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamps). 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)



CAUTION

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

Notes on chip component replacement

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

Flexible Circuit Board Repairing

- Keep the temperature of soldering iron around 270°C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

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

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 MARKING is located on the rear exterior.

CAUTION	; INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.
ADVARSEL	; USYNLIG LASERSTRÅLING VED ÅBNING NÅR SIKKERHEDSAFBRYDEDE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO!	; AVATTAESSA JA SUOJALUKITUS OHITETTAESSA DLET ALTTIINA LASERSÄTELYLLE.
VARNING	; LASERSTRÅLING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD.
ADVARSEL	; USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN.

This caution label is located inside the unit.

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

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.

During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.

The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

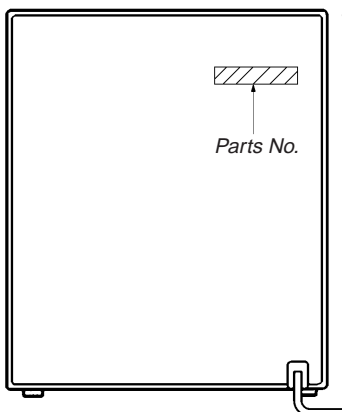
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

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

MODEL IDENTIFICATION

— BACK PANEL —



- Abbreviation
- CND: Canadian model
- G : German model
- EE : East European model
- EA : Saudi Arabia model
- HK : Hong Kong model
- SP : Singapore model
- JE : Tourist model
- MY : Malaysia model
- AUS : Australian model
- TH : Thailand model
- IA : Indonesian model
- E2 : Without SW tuner E model
- E3 : With SW tuner E model

PARTS No.	MODEL	PRODUCT COUNTRY
4-986-846-0□	RX100AV: US model	INDONESIA
4-986-846-1□	RX100AV: CND model	INDONESIA
4-986-846-2□	RX100AV: AEP, UK, G model	INDONESIA
4-986-846-3□	RX100AV: EE, CIS model	INDONESIA
4-986-846-4□	D90AV : US model	INDONESIA
4-988-023-0□	GR10AV : E3, IA model	INDONESIA
4-988-023-1□	GR10AV : E2 model	INDONESIA
4-988-023-2□	GR10AV : SP model	INDONESIA
4-988-023-3□	GR10AV : JE model	INDONESIA
4-988-023-4□	GR10AV : HK model	INDONESIA
4-988-023-5□	GR10AV : AUS model	INDONESIA
4-988-023-7□	GR10AV : TH model	THAILAND
4-988-275-0□	RX100AV: AEP model	MALAYSIA
4-988-275-1□	GR10AV : EA model	MALAYSIA
4-988-275-2□	GR10AV : MY model	MALAYSIA

TABLE OF CONTENTS

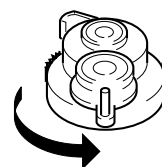
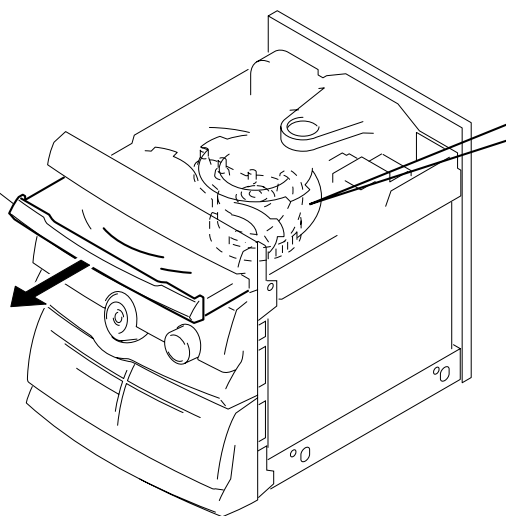
1. SERVICING NOTE	5
2. GENERAL	6
3. DISASSEMBLY	
3-1. Loading Panel	8
3-2. Front Panel	8
3-3. TC Mechanism Deck and Deco Board (Except US, CND)	9
3-4. HP/MIC Board, Display Board and TC SW Board	9
3-5. Disc Tray	10
4. SERVICE MODE	11
5. MECHANICAL ADJUSTMENTS	13
6. ELECTRICAL ADJUSTMENTS	13
7. DIAGRAMS	
7-1. Circuit Boards Location	19
7-2. Block Diagrams	
• Tuner Section (AEP, UK, German model)	21
• Tuner Section (East European, CIS model)	23
• CD Section	25
• Deck Section	27
• Main Section	29
• Power Section	31
7-3. Printed Wiring Board — CD Section —	33
7-4. Schematic Diagram — CD Section —	35
7-5. Printed Wiring Board — Tuner (AEP, UK, German model) Section —	38
7-6. Schematic Diagram — Tuner (AEP, UK, German model) Section —	39
7-7. Schematic Diagram — Tuner (East European, CIS model) Section —	41
7-8. Printed Wiring Board — Tuner (East European, CIS model) Section —	43
7-9. Printed Wiring Board — Main Section —	44
7-10. Schematic Diagram — Main Section —	47
7-11. Schematic Diagram — Deck Section —	51
7-12. Printed Wiring Board — Deck Section —	55
7-13. Schematic Diagram — Panel Section —	58
7-14. Printed Wiring Board — Panel Section —	61
7-15. Schematic Diagram — Power Section —	65
7-16. Printed Wiring Board — Power Section —	69
7-17. Schematic Diagram — CD Motor Section —	72
7-18. Printed Wiring Board — CD Motor Section —	73
7-19. IC Block Diagrams	75
7-20. IC Pin Functions	82
8. EXPLODED VIEWS	
8-1. Case Section	91
8-2. Main Board Section	92
8-3. Panel Board Section	94
8-4. Front Panel Section	96
8-5. TC Mechanism Section 1 (TCM-220WR2)	97
8-6. TC Mechanism Section 2 (TCM-220WR2)	98
8-7. CD Mechanism Section 1 (CDM38L-5BD29AL)	99
8-8. CD Mechanism Section 2 (CDM38L-5BD29AL)	100
8-9. Base Unit Section (BU-5BD29AL)	101
9. ELECTRICAL PARTS LIST	102

SECTION 1 SERVICING NOTE

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF

❶ Remove the Case.

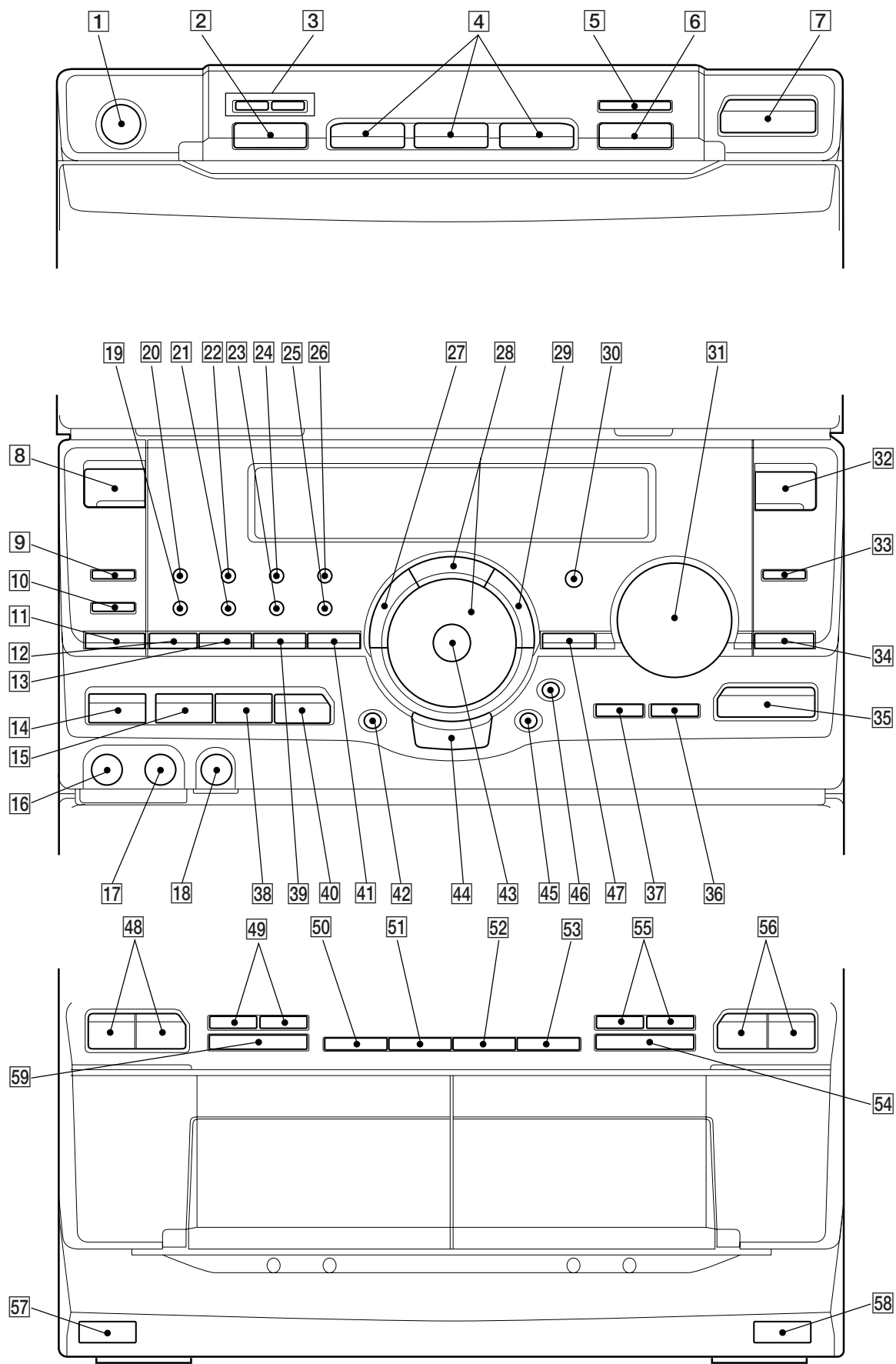
❸ Pull-out the disc tray.



❷ Turn the cam to the
direction of arrow.

SECTION 2 GENERAL

Front Panel



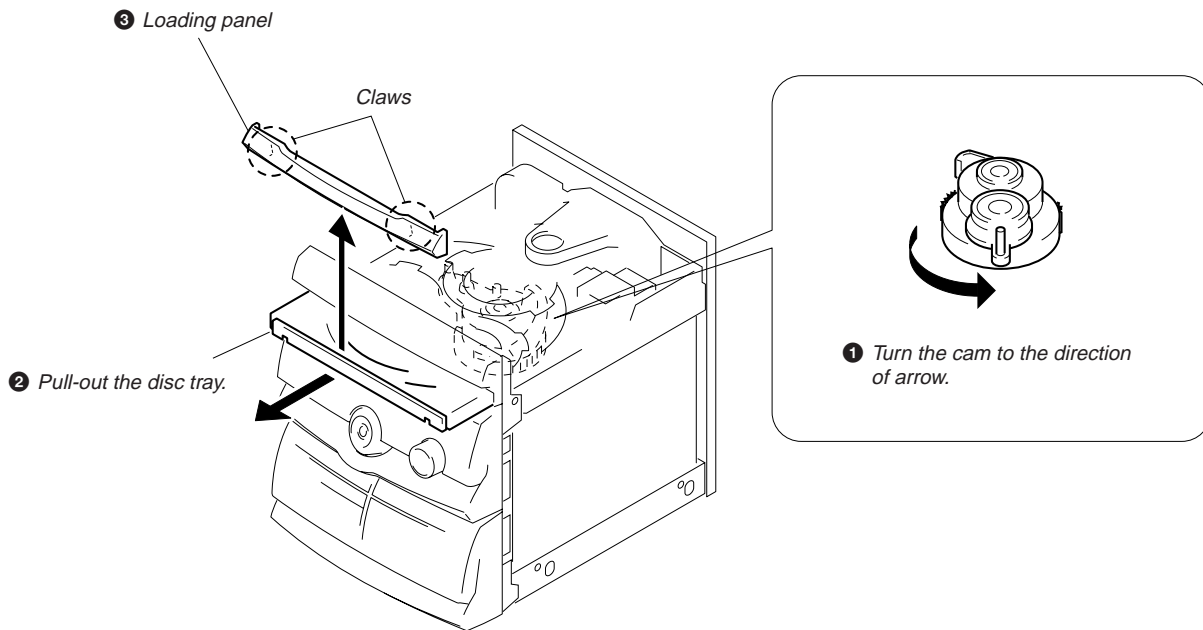
LOCATION OF PARTS AND CONTROLS

- 1 POWER button
- 2 DISC SKIP EX-CHANGE button
- 3 CD ◀▶ button
- 4 DISC1-DISC3 buttons
- 5 CD ■ button
- 6 ≡ OPEN/CLOSE button
- 7 CD ▷◁ button
- 8 TIMER SELECT button
- 9 CLOCK/TIMER SET button
- 10 SLEEP button
- 11 P FILE MEMORY button
- 12 P FILE button
- 13 MUSIC button
- 14 NON-STOP button
- 15 WAVE button
- 16 PHONES jack
- 17 MIX MIC jack
- 18 MIC LEVEL knob
- 19 1/ALL DISCS button
- 20 DISPLAY/DEMO button
- 21 PLAY MODE button
- 22 SPECTRUM ANALYZER button
- 23 REPEAT button
- 24 DOLBY NR button
- 25 EDIT button
- 26 DIRECTION button
- 27 LOW FREQUENCY button
- 28 JOG dial, indicator
- 29 HIGH FREQUENCY button
- 30 KARAOKE PON/MPX button
- 31 VOLUME control
- 32 FUNCTION button
- 33 PTY button (AEP, UK, German)
- 34 TUNER MEMORY button
- 35 TUNER/BAND button
- 36 STEREO/MONO button
- 37 TUNING MODE button
- 38 LOOP button
- 39 MOVIE button
- 40 FLASH button
- 41 GAME button
- 42 GROOVE button
- 43 ENTER/NEXT button
- 44 PRO LOGIC button
- 45 DSP button
- 46 DBFB button
- 47 EFFECT ON/OFF button
- 48 Deck A ◁▷ button
- 49 Deck A ◀▶ button
- 50 HIGH SPEED DUBBING button
- 51 CD SYNCHRO button
- 52 ● REC button
- 53 || button
- 54 Deck B ■ button
- 55 Deck B ◀▶ button
- 56 Deck B ◁▷ button
- 57 Deck A ▲ button
- 58 Deck B ▲ button
- 59 Deck A ■ button

SECTION 3 DISASSEMBLY

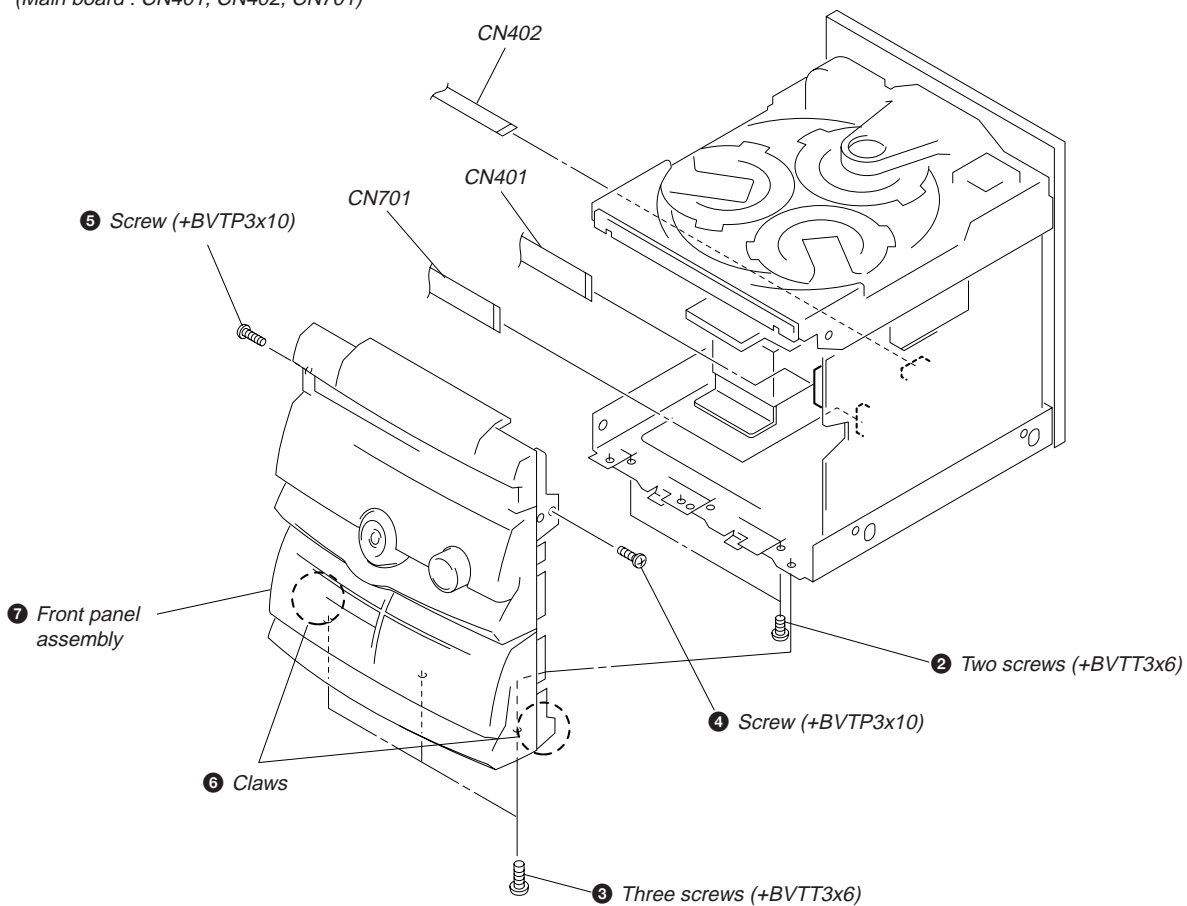
Note: Follow the disassembly procedure in the numerical order given.

3-1. LOADING PANEL



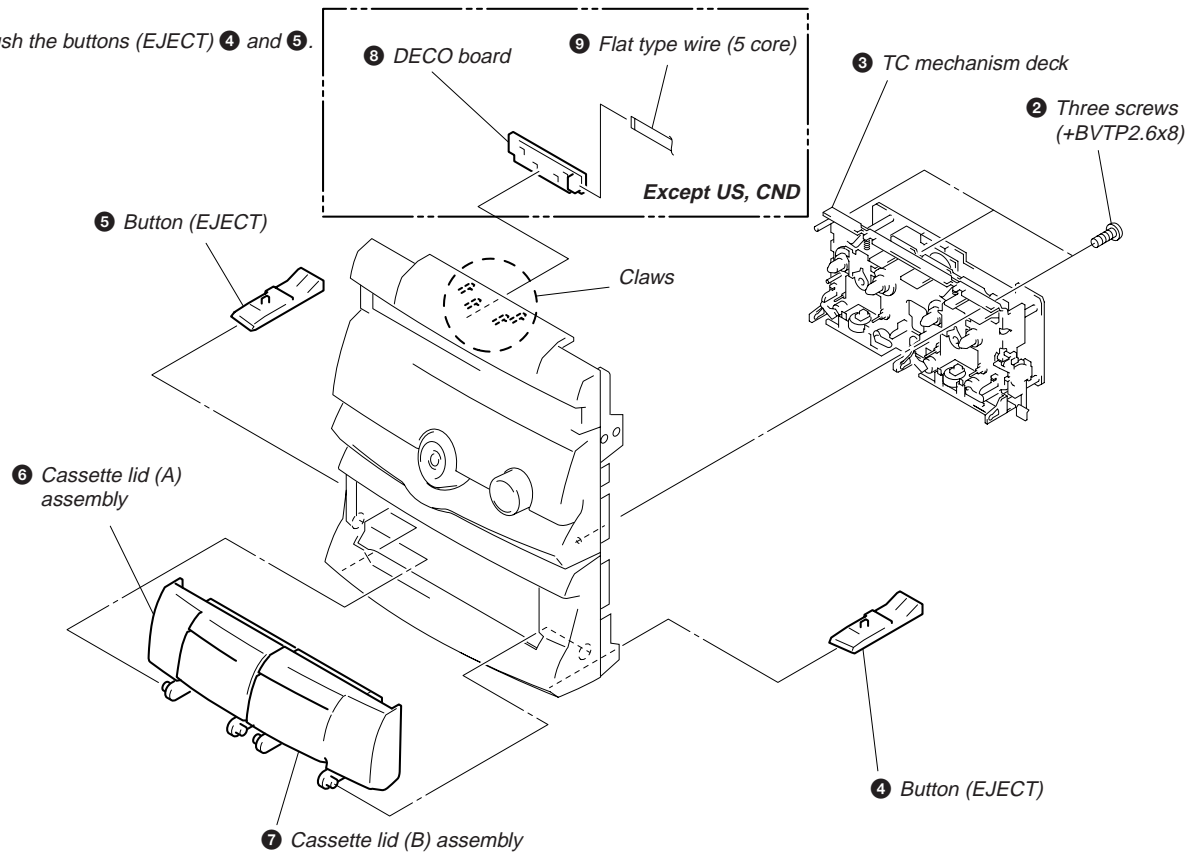
3-2. FRONT PANEL

- ① Remove the connectors.
(Main board : CN401, CN402, CN701)

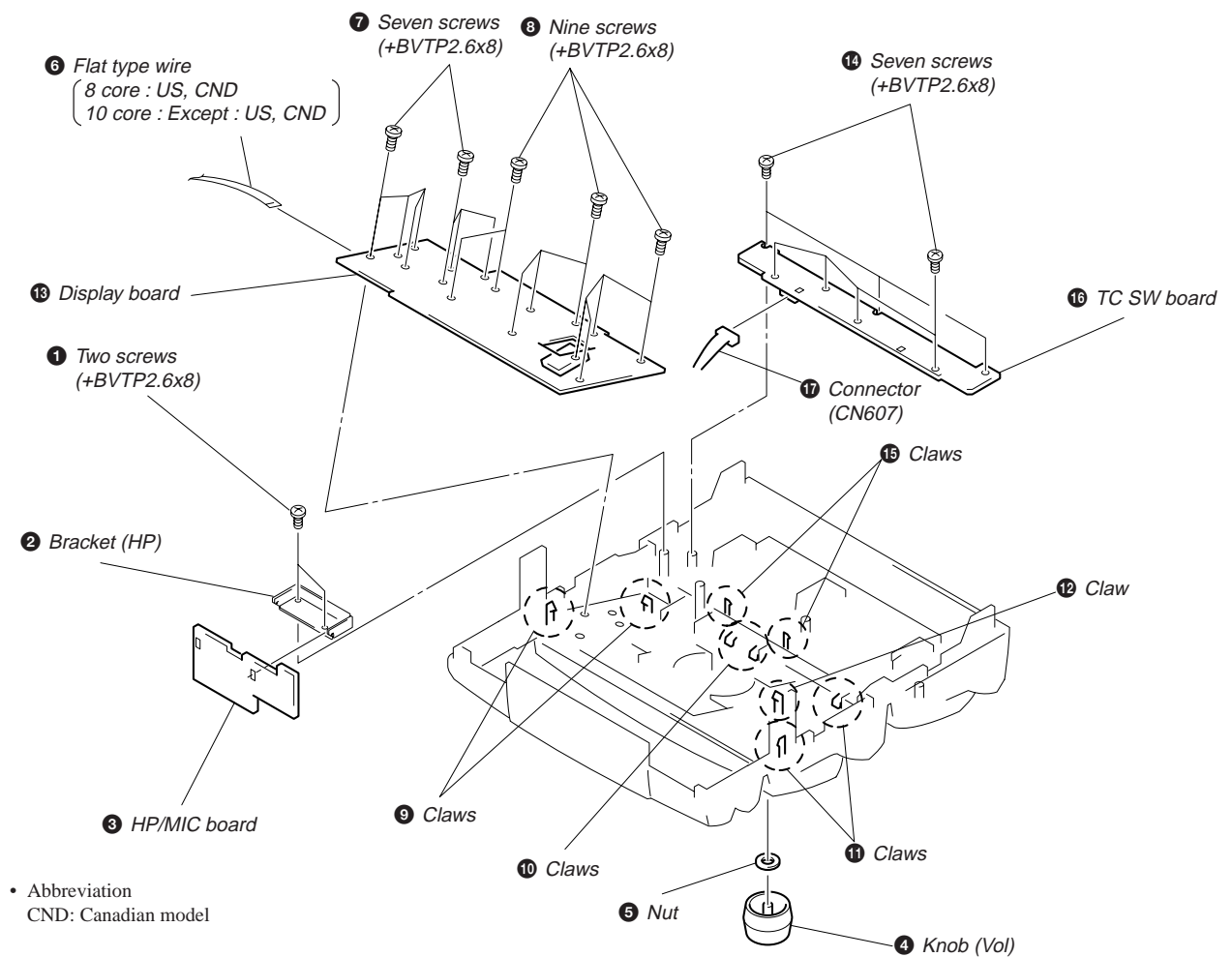


3-3. TC MECHANISM DECK AND DECO BOARD (Except US, CND)

1 Push the buttons (EJECT) 4 and 5.



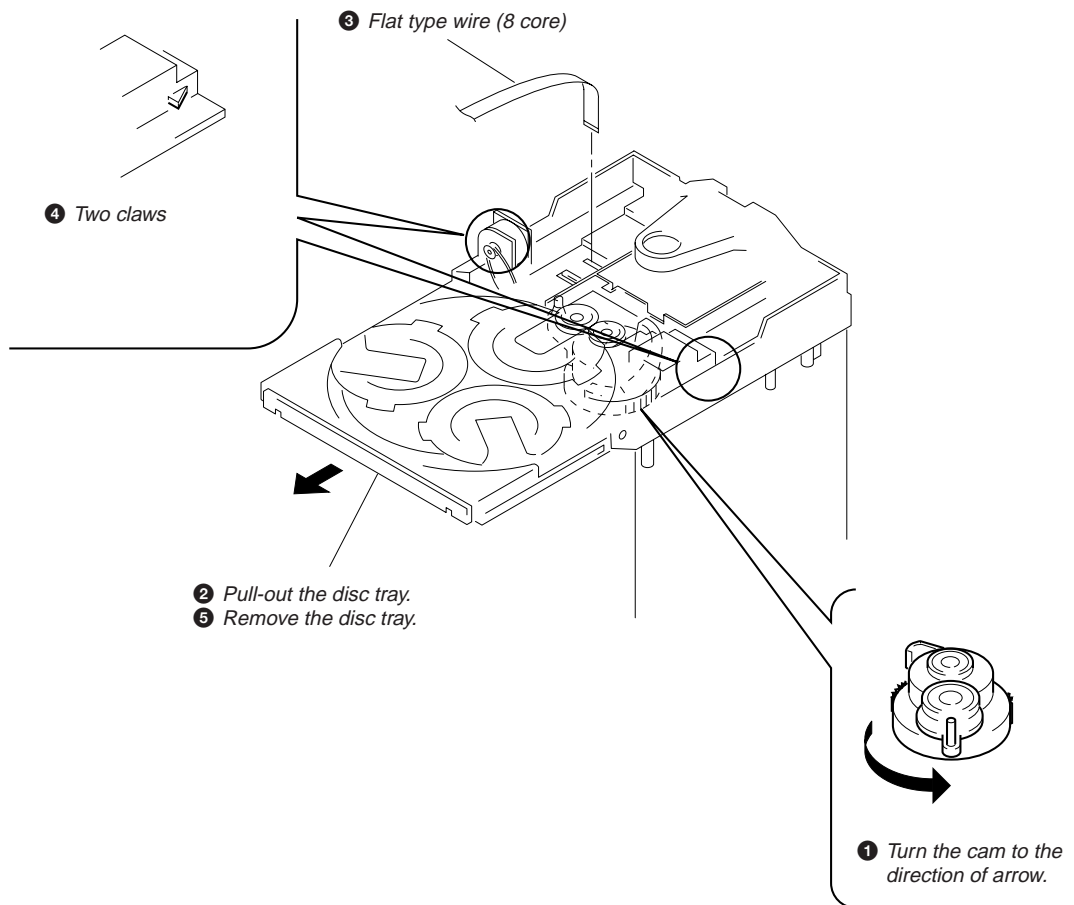
3-4. HP/MIC BOARD, DISPLAY BOARD AND TC SW BOARD



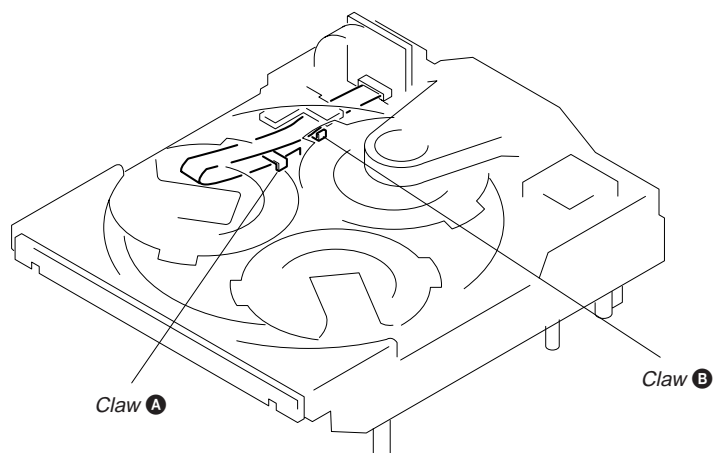
• Abbreviation
CND: Canadian model

3-5. DISC TRAY

(Perform after removing the front panel.)



Note: When installing the Disc tray, pull around the flat type wire to pass through the claw **A** and claw **B**, as shown in the figure.



SECTION 4

SERVICE MODE

MC Cold Reset

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [DISC 1] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

CD Delivery Mode

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

Procedure:

1. Press [POWER] button to turn the set ON.
2. Press [PLAY MODE] button and [POWER] button simultaneously.
3. A message "LOCK" is displayed on the fluorescent indicator tube, and the CD delivery mode is set.

MC Hot Reset

- This mode resets the set with the preset data kept stored in the memory. The hot reset mode functions same as if the power cord is plugged in and out.

Procedure:

1. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [DISC 2] simultaneously.
2. The fluorescent indicator tube becomes blank instantaneously, and the set is reset.

Sled Servo Mode

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

Procedure:

1. Select the function "CD".
2. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [FUNCTION] simultaneously.
3. The Sled Servo mode is selected, if "CD" is blanking on the fluorescent indicator tube.
4. With the CD in stop status, press [▶▶] button in CD section to move the pick-up to outside track, or [◀◀] button to inside track.
5. To exit from this mode, perform as follows:
 - 1) Move the pick-up to the most inside track.
 - 2) Press three buttons in the same manner as step 2.

Note:

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

Change-over of FUNCTION Name

- The FUNCTION name of external input terminal can be changed over to VIDEO or MD. With the FUNCTION selected to "MD", about 5dB mute is applied to the input gain.

Procedure:

1. Press [POWER] button to turn the set OFF.
2. Press [POWER] button together with [FUNCTION] button, and the power is turned on, the display of fluorescent indicator tube changes to "MD" or "VIDEO" instantaneously, and thus the FUNCTION is changed over.

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

- A step of AM channels can be changed over between 9kHz and 10kHz.

Procedure:

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

LED and Fluorescent Indicator Tube All Lit, Key Check Mode

Procedure:

1. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [DISC 3] simultaneously.
2. LEDs and fluorescent indicator tube are all turned on.
Press [DISC 2] button, and the key check mode is activated.
3. In the key check mode, the fluorescent indicator tube displays "K 1 V0 J0". Each time a button is pressed, "K" value increases. However, once a button is pressed, it is no longer taken into account.
"J" Value increases like 1, 2, 3 ... if rotating JOG knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
"V" Value increases like 1, 2, 3 ... if rotating [VOLUME] knob in "+" direction, or it decreases like 0, 9, 8 ... if rotating in "-" direction.
4. To exit from this mode, press three buttons in the same manner as step 1, or disconnect the power cord.

Aging Mode

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

- If an error occurred:
The aging operation stops.
- If no error occurs:
The aging operation continues repeatedly.

1. Aging Mode in CD Section

1-1. Operating procedure of Aging Mode

1. Set discs in DISC 1 and DISC 2 trays.
 2. Select the function "CD".
 3. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [KARAOKE PON/MPX] simultaneously.
 4. The aging mode is activated, if a roulette mark on the fluorescent indicator tube is blinking.
 5. In the aging mode, the aging is executed in a sequence given in "1-2. Operation during Aging Mode".
The aging continues unless an alarm occurred.
 6. To exit from the aging mode, press [POWER] button to turn the set OFF.
- If a button other than buttons in CD section is pressed during aging, the aging in the CD section is finished.
 - To execute aging to the tape deck section successively, press [] button in the deck A.
"AGING" is displayed on the fluorescent indicator tube. (For the aging in tape deck, see "2. Aging Mode in Tape Deck Section".)

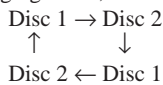
1-2. Operation during aging Mode

In the aging mode, the program is executed in the following sequence.

1. The disc table is ejected.
2. The disc tray turns to select a disc. (For a disc selection sequence, see Section 1-3.)
3. TOC of disc is read.
4. The pick-up accesses to the last track.
5. Disc table is ejected.
6. Steps 2 through 5 are repeated.

1-3. Disc Selection Sequence

- During the aging mode, discs are selected in the following sequence:



2. Aging Mode in Tape Deck Section

2-1. Operating procedure of Aging Mode

1. Load a commercially available 10-minute tape into the decks A and B respectively.
(If a 10-minute tape is not available, another tape may be used but a cycle time will be longer.)
2. Select the function "TAPE".
3. Rewind tapes in advance by pressing [] button respectively on decks A and B.
4. Press three buttons [SPECTRUM ANALYZER], [ENTER/NEXT], and [KARAOKE PON/MPX] simultaneously.
5. Press [] button on deck A. (This button triggers the aging mode.)
6. The aging mode is activated if "AGING A" is displayed on the fluorescent indicator tube.
7. In the aging mode, the aging is executed in a sequence given in "2-2. Operation during Aging Mode".
The aging continues unless an alarm occurred.
8. To exit from the aging mode, press [POWER] button to turn the set OFF.

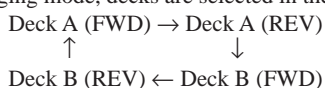
2-2. Operation during Aging Mode

In the aging mode, the program is executed in the following sequence.

1. A tape on FWD side is played for one minute.
2. PAUSE STOP is made.
3. Recording is made for 3 minutes. (For the deck not having the record function, the play is executed. In this case, [] LED does not light up.)
4. FF is executed up to the end of tape.
5. A tape is reversed, and the tape on REV side is played for one minute.
6. PAUSE STOP is made.
7. Recording is made for 3 minutes. (For the deck not having the record function, the play is executed. In this case, [] LED does not light up.)
8. FF is executed up to the end of tape.
9. Steps 1 through 8 are executed for the other deck.
10. Steps 1 through 9 are repeated unless an alarm occurred.

2-3. Deck Selection Sequence

- During the aging mode, decks are selected in the following sequence:



SECTION 5 MECHANICAL ADJUSTMENTS

Precaution

- Clean the following parts with a denatured alcohol-moistened swab:

record/playback heads	pinch rollers
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

Torque Measurement

Torque	Torque meter	Meter reading
FWD	CQ-102C	36 to 61 g • cm (0.5 - 0.84 oz • inch)
FWD back tension	CQ-102C	2 to 6 g • cm (0.02 - 0.08 oz • inch)
REV	CQ-102RC	36 to 61 g • cm (0.5 - 0.84 oz • inch)
REV back tension	CQ-102RC	2 to 6 g • cm (0.02 - 0.08 oz • inch)
FF/REW	CQ-201B	61 to 143 g • cm (0.85 - 1.99 oz • inch)
FWD tension	CQ-403A	100 g or more (3.53 oz or more)
REV tension	CQ-403R	100 g or more (3.53 oz or more)

SECTION 6 ELECTRICAL ADJUSTMENTS

DECK SECTION

0 dB=0.775V

- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- The adjustments should be performed for both L-CH and R-CH.
- Switches and controls should be set as follows unless otherwise specified.

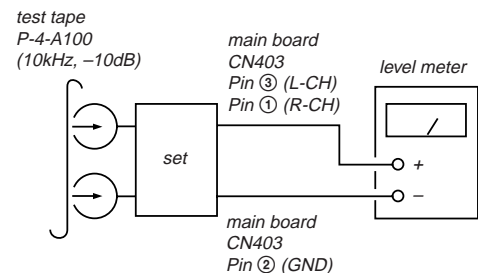
Tape	Signal	Used for
P-4-A100	10 kHz, -10 dB	Azimuth Adjustment
WS-48B	3 kHz, 0 dB	Tape Speed Adjustment
P-4-L300	315 Hz, 0 dB	Level Adjustment

Record/Playback Head Azimuth Adjustment (Deck A, Deck B)

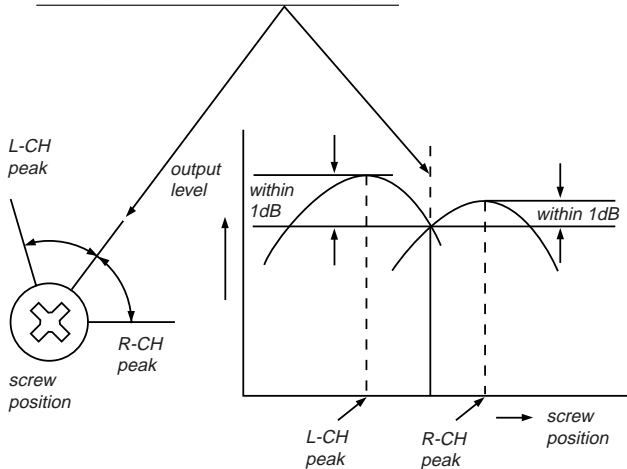
Note: Perform this adjustments for both decks.

Procedure:

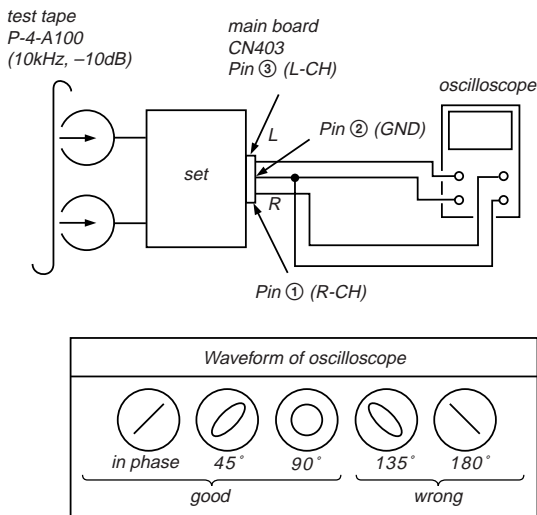
- Mode : Playback



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

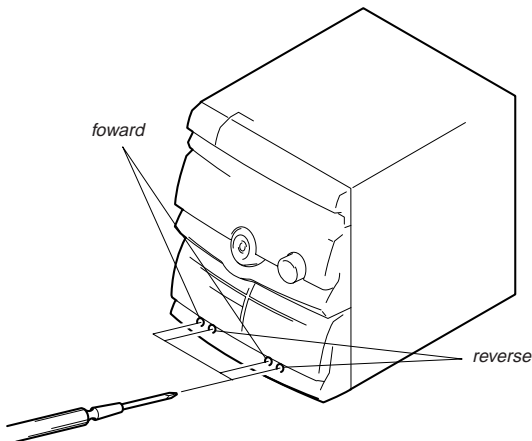


3. Mode: Playback



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

Adjustment Location: Playback Head (Deck A)
Record/Playback/Erase Head (Deck B)



Tape Speed Adjustment (Deck A)

Note: Set the test mode using the following method and begin tape speed adjustment.
In the test mode, the tape will move at double speed while the **HIGH SPEED DUBBING** button is pressed.

Procedure:

With the power turned ON, press the **SPECTRUM ANALYZER** button, **ENTER/NEXT** button, and **EFFECT ON/OFF** button simultaneously.
(The "VOLUME" on the fluorescent display tube will blink while in the test mode.)
To exit the test mode, press the **POWER** button.

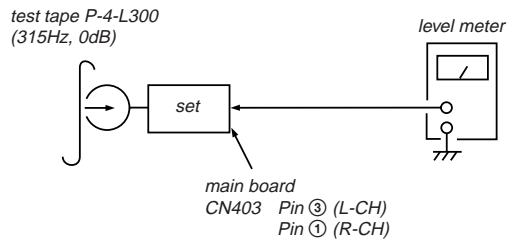
- Load WS-48B into deck A and a recordable tape into deck B.
- Press the **REC** button, and press the **▷** button of deck B to set deck B into the recording state.
- Play deck A.
- While pressing the **HIGH SPEED DUBBING** button, set double speed play.
- Adjust RV652 of the AUDIO board so that the reading of the frequency counter becomes 6000 ± 30 Hz.
- Release the **HIGH SPEED DUBBING** button to set normal speed play.
- Adjust RV651 of the AUDIO board so that the reading of the frequency counter becomes 3000 ± 15 Hz.

Adjustment Location: AUDIO board

Playback Level Adjustment (Deck A, Deck B)

Procedure:

Mode: Playback



Deck A is RV311 (L-CH) and RV411 (R-CH), deck B is RV301 (L-CH) and RV401 (R-CH) so that adjustment within the following adjustment level.

Adjustment level:

CN403 playback level: 301.5 to 338.3 mV (−8.2 to −7.2 dB)
level difference between the channels: within ± 0.5 dB

Adjustment Location: AUDIO board

Record Bias Adjustment (Deck B)

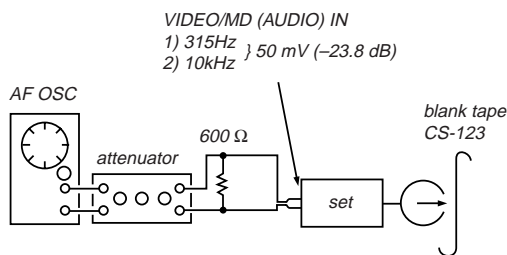
Procedure:

INTRODUCTION

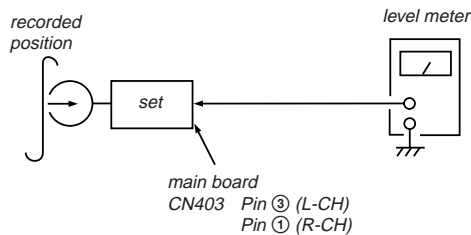
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

1. Press **[FUNCTION]** button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Load a tape into deck B, and press the **[● REC]** button.
3. Mode: Record



4. Mode: Playback



5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
If these levels do not adjustment level, adjust the RV341 (L-CH) and RV441 (R-CH) on the AUDIO board to repeat steps 3 and 4.

Adjustment level: The playback output of 10 kHz level difference against 315 Hz reference should be ± 1.0 dB.

Adjustment Location: AUDIO board

Record Level Adjustment (Deck B)

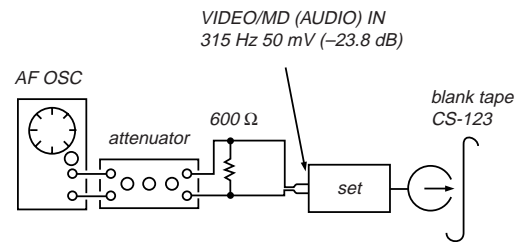
Procedure:

INTRODUCTION

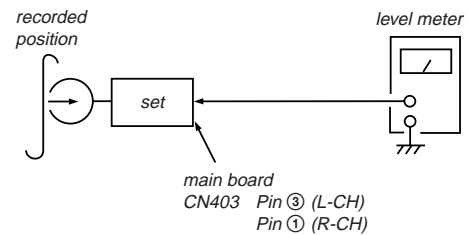
When set to the test mode performed in **Tape Speed Adjustment**, when the tape is rewound after recording, the "REC memory mode" which rewinds only the recorded portion and playback is set.

This "REC memory mode" is convenient for performing this adjustment. During recording, the input signal FUNCTION will automatically switch to VIDEO.

1. Press **[FUNCTION]** button to select VIDEO. (This step is not necessary if the above test mode has already been set.)
2. Load a tape into deck B, and press the **[● REC]** button.
3. Mode: Record



4. Mode: Playback

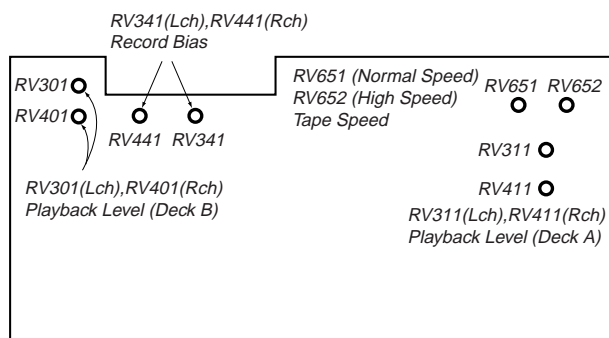


5. Confirm playback the signal recorded in step 2 become adjustment level as follows.
If these levels do not adjustment level, adjust the RV301 (L-CH) and RV351 (R-CH) on the MAIN board to repeat steps 3 and 4.

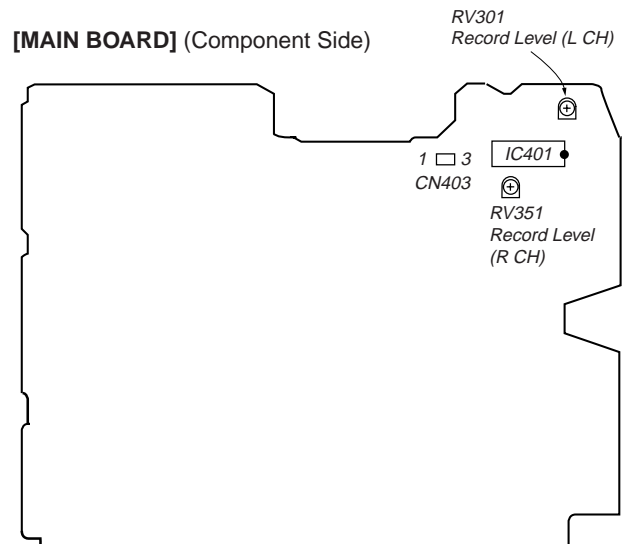
Adjustment level:
CN403 playback level: 47.2 to 53.0 mV (-24.3 to -23.3 dB)

Adjustment Location: MAIN board

Adjustment Location [AUDIO BOARD] (Conductor Side)



[MAIN BOARD] (Component Side)



TUNER SECTION

0dB=1μV

Note 1: As a front-end (FE1) is difficult to repair if faulty, replace it with new one.

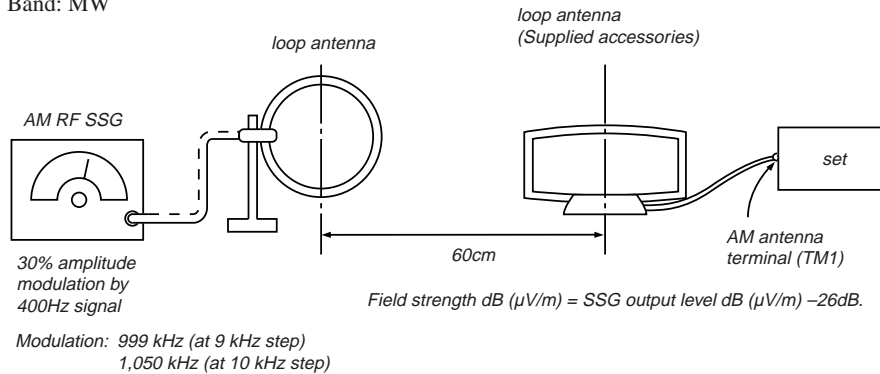
Note 2: No adjustment is needed due to a tuner pack for except AEP, UK, German, East European, CIS models.

AM Tuned Level Adjustment

Note: FM Tuned Level adjustment should be performed after this AM Tuned Level Adjustment.

Setting:

Band: MW



Procedure:

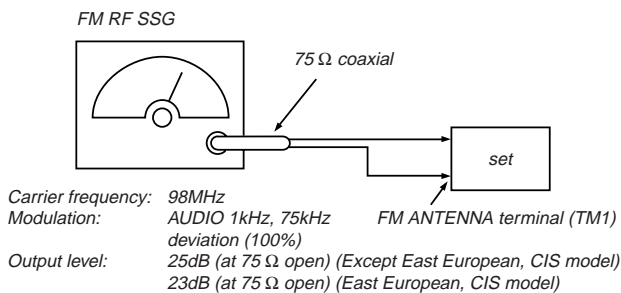
1. Set the output of SSG so that the input level of the set becomes 55 dB or 58 dB. (55 dB: Except East European, CIS model, 58 dB: East European, CIS model)
2. Tune the set to 999 kHz or 1,050 kHz.
3. Adjust RV41 to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: TCB board

FM Tuned Level Adjustment

Note: This adjustment should be performed after the AM Tuned Level Adjustment.

Setting:



Band: FM

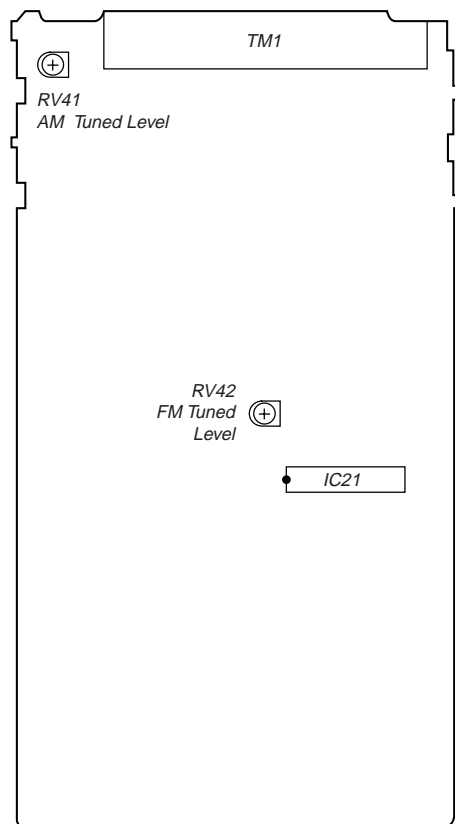
Procedure:

1. Supply a 25 dB or 23 dB 98 MHz signal from the ANTENNA terminal.
2. Tune the set to 98 MHz.
3. Adjust RV42 to the point (moment) when the TUNED indicator will change from going off to going on.

Adjustment Location: TCB board

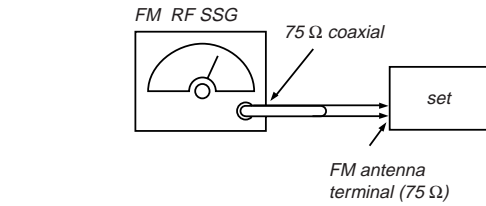
Adjustment Location

[TCB BOARD] (Component Side)



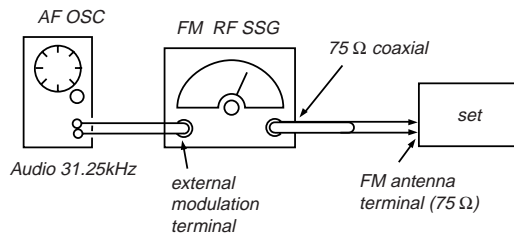
FM Polar Adjustment (East European, CIS model only)

Connection 1 :



Carrier frequency: 69 MHz
Output level: 1 mV (60 dBμ) (at 75 Ω open)
Modulation: AUDIO 1 kHz, 10 kHz deviation

Connection 2 :



Carrier frequency: 69 MHz
Output level: 1 mV (60 dBμ) (at 75 Ω open)
Modulation: AUDIO 31.25 kHz, 10 kHz deviation
(EXTERNAL MODULATION)

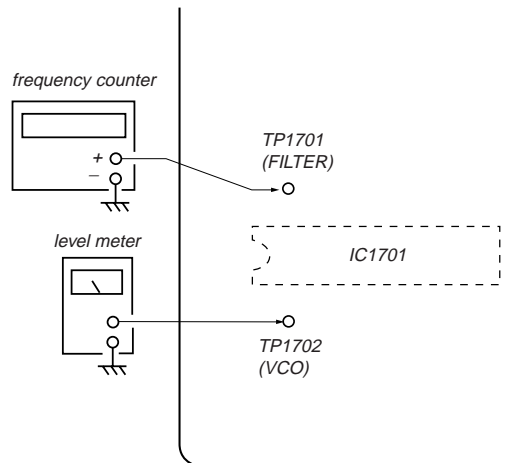
Procedure :

1. Set the modulation of FM RF SSG to AUDIO 1 kHz, 10 kHz deviation according to "Connection 1".
2. Tune the set to 69 MHz.
3. Adjust the RV1702 so that the reading of frequency counter connected to TP1702 (VCO) becomes within $31.25 \text{ kHz} \pm 0.05 \text{ kHz}$. (VCO adjustment)
4. Then record the reading of the level meter connected to TP1701.
5. Set the modulation of FM RF SSG to AUDIO 31.25 kHz, 10 kHz deviation according to "Connection 2".
6. Tune the set to 69 MHz.
7. Set the CT1701 to be mechanical center.
8. Adjust the L1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. Then adjust the CT1701 so that the reading of the level meter connected to TP1701 (FILTER) becomes maximum. (SUB CARRIER PEAK Adjustment)
9. Adjust the RV1701 so that the level at the moment becomes 14 dB higher value than the level recorded in step 4. (SUB CARRIER LEVEL Adjustment)

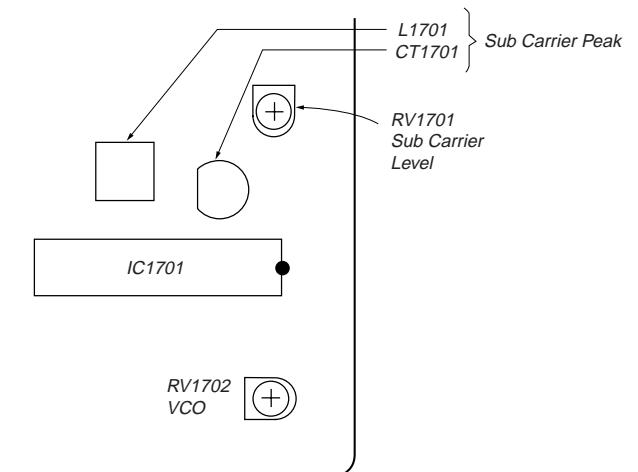
Adjustment Location: TCB board

Adjustment Location

[TCB BOARD] (Conductor Side)



[TCB BOARD] (Component Side)

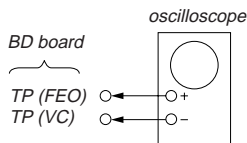


CD SECTION

Note:

1. CD Block is 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 an oscilloscope with more than 10M impedance.
4. Clean the object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

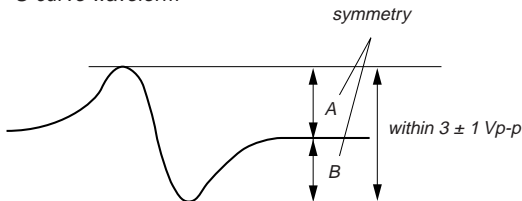
S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO).
2. Connect between test point TP (FOK) and Ground by lead wire.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 ± 1 Vp-p.

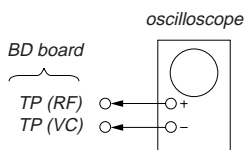
S-curve waveform



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

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

RF Level Check

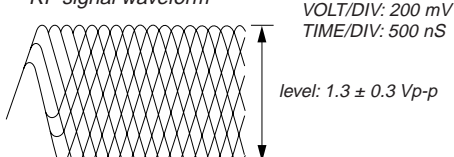


Procedure :

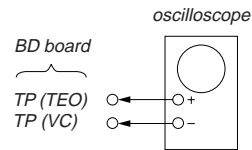
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note: Clear RF signal waveform means that the shape “∞” can be clearly distinguished at the center of the waveform.

RF signal waveform



E-F Balance (1 Track Jump) check

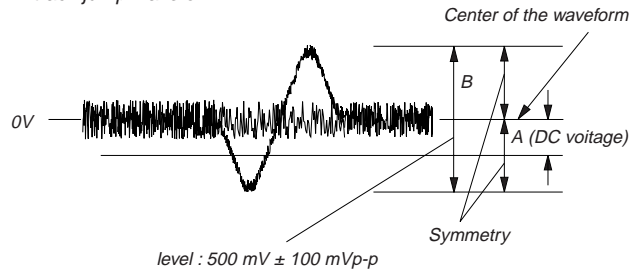


Procedure:

1. Connect oscilloscope to test point TP (TEO) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the “||| (Pause)” button.
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform. Confirm the following:

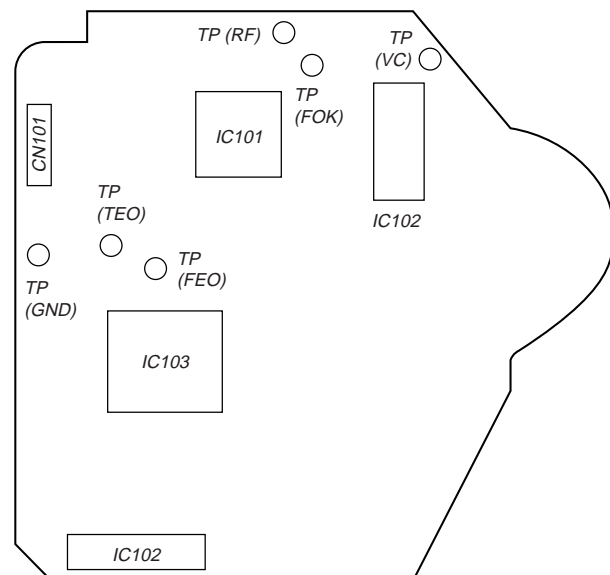
- $\frac{A - B}{2(A + B)} \times 100 = \text{less than } \pm 7 (\%)$
- $A + B = 500 \pm 100 \text{ mVp-p}$

1 track jump waveform



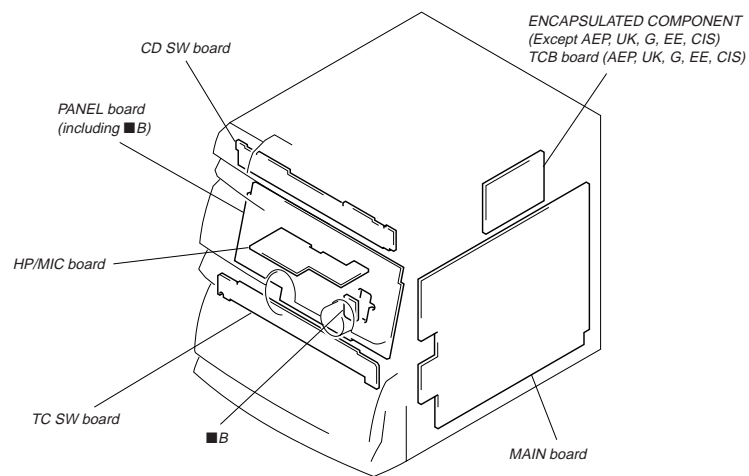
Adjustment Location:

[BD BOARD] (Conductor Side)

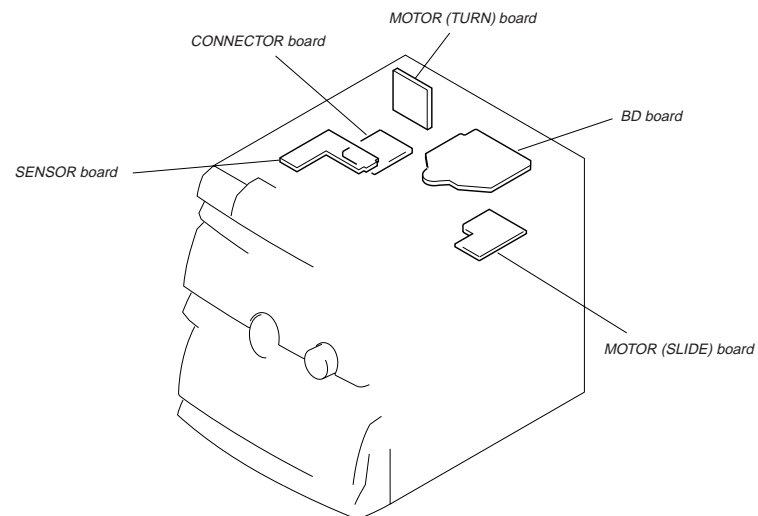


DIAGRAMS

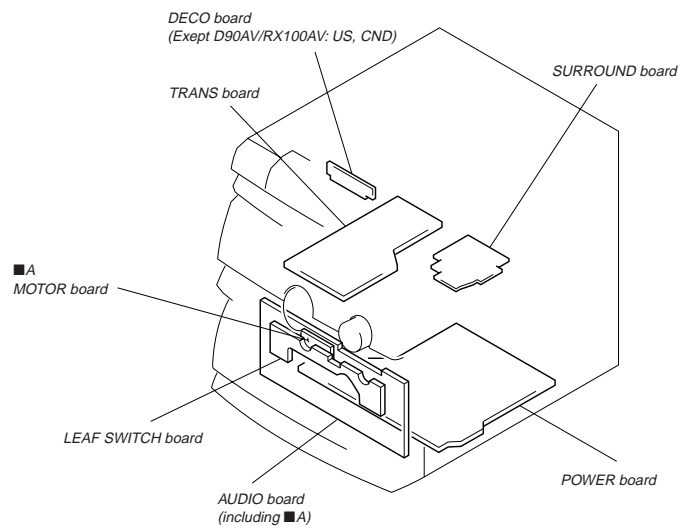
7-1. CIRCUIT BOARDS LOCATION



Note: ■A is including in AUDIO board.
■B is including in PANEL board.

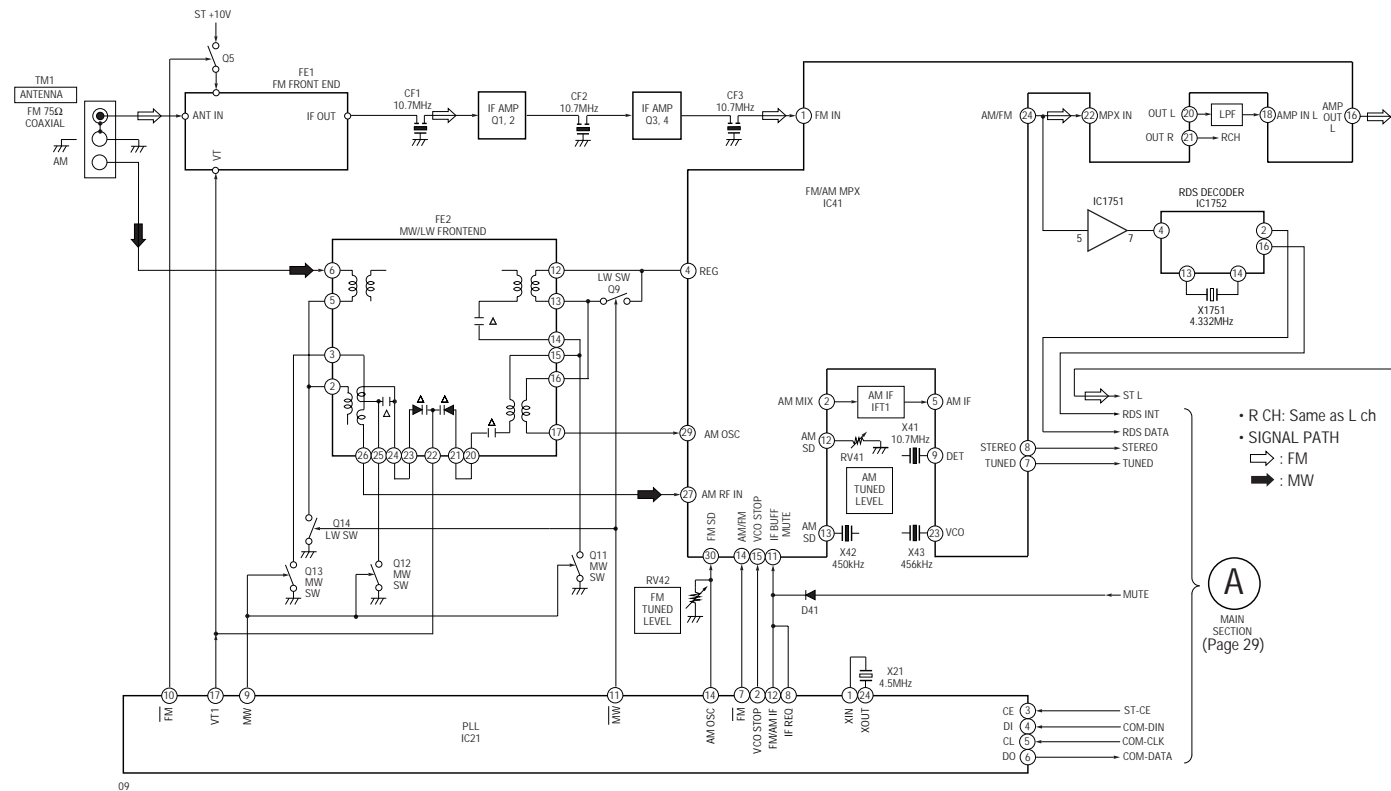


- Abbreviation
CND :Canadian model
G :German model
EE :East European model

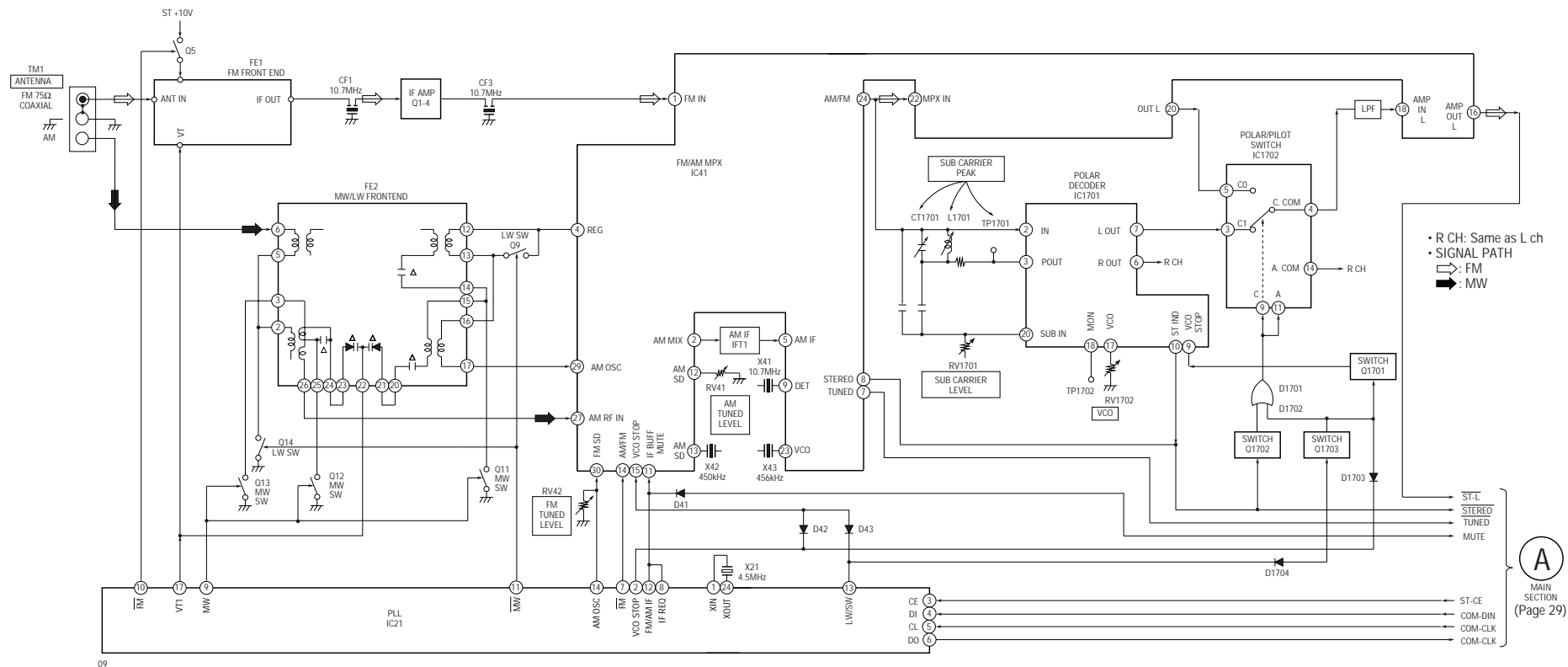


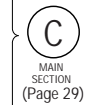
7-2. BLOCK DIAGRAMS

— TUNER SECTION — (AEP, UK, German model)



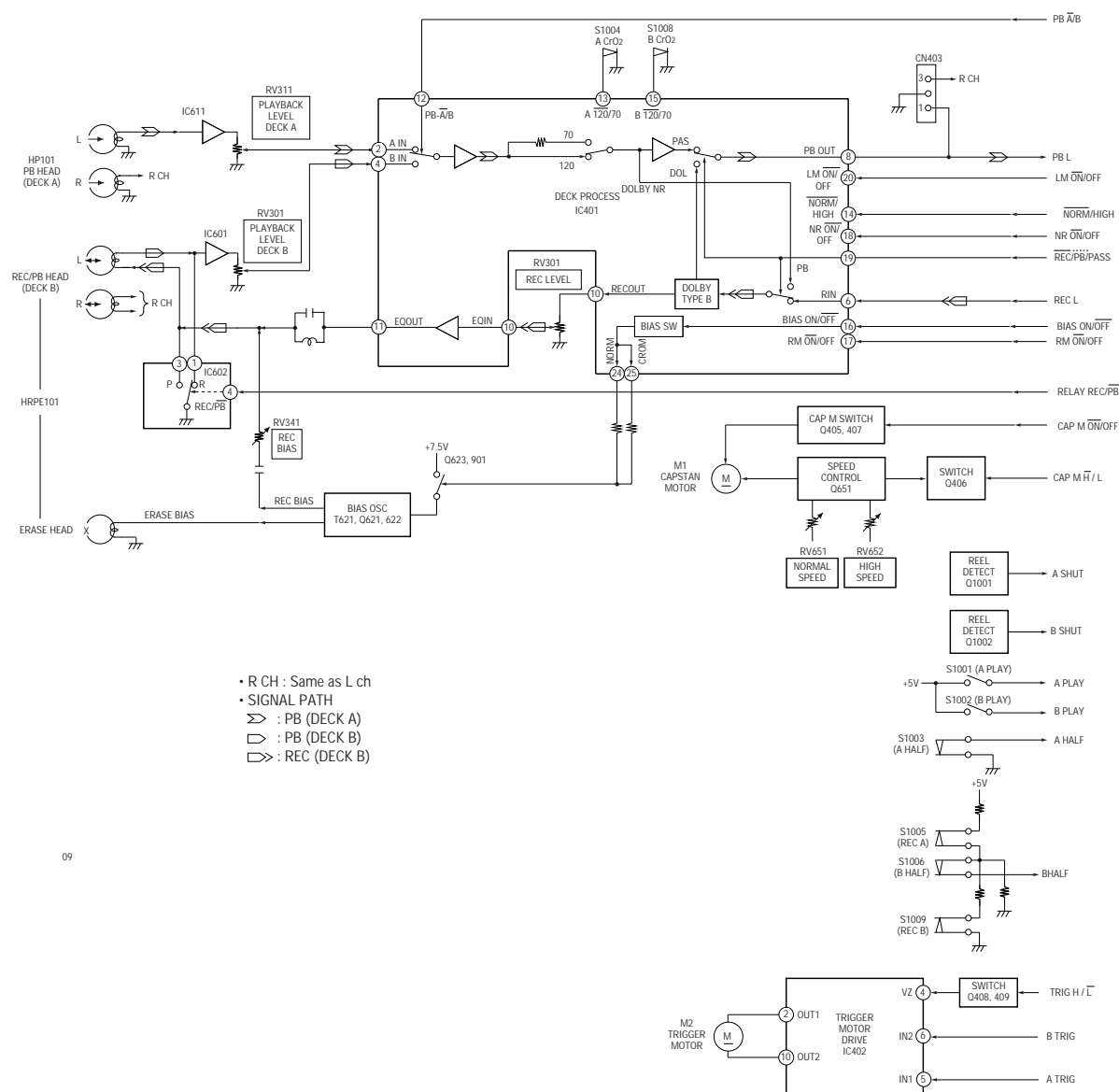
— TUNER SECTION — (East European, CIS model)



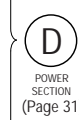


- R CH: Same as L ch
- SIGNAL PATH
 - ➡ : CD
 - ➡➡ : Digital out

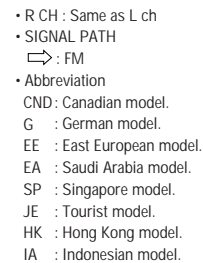
— DECK SECTION —



B
 MAIN
 SECTION
 (Page 29)



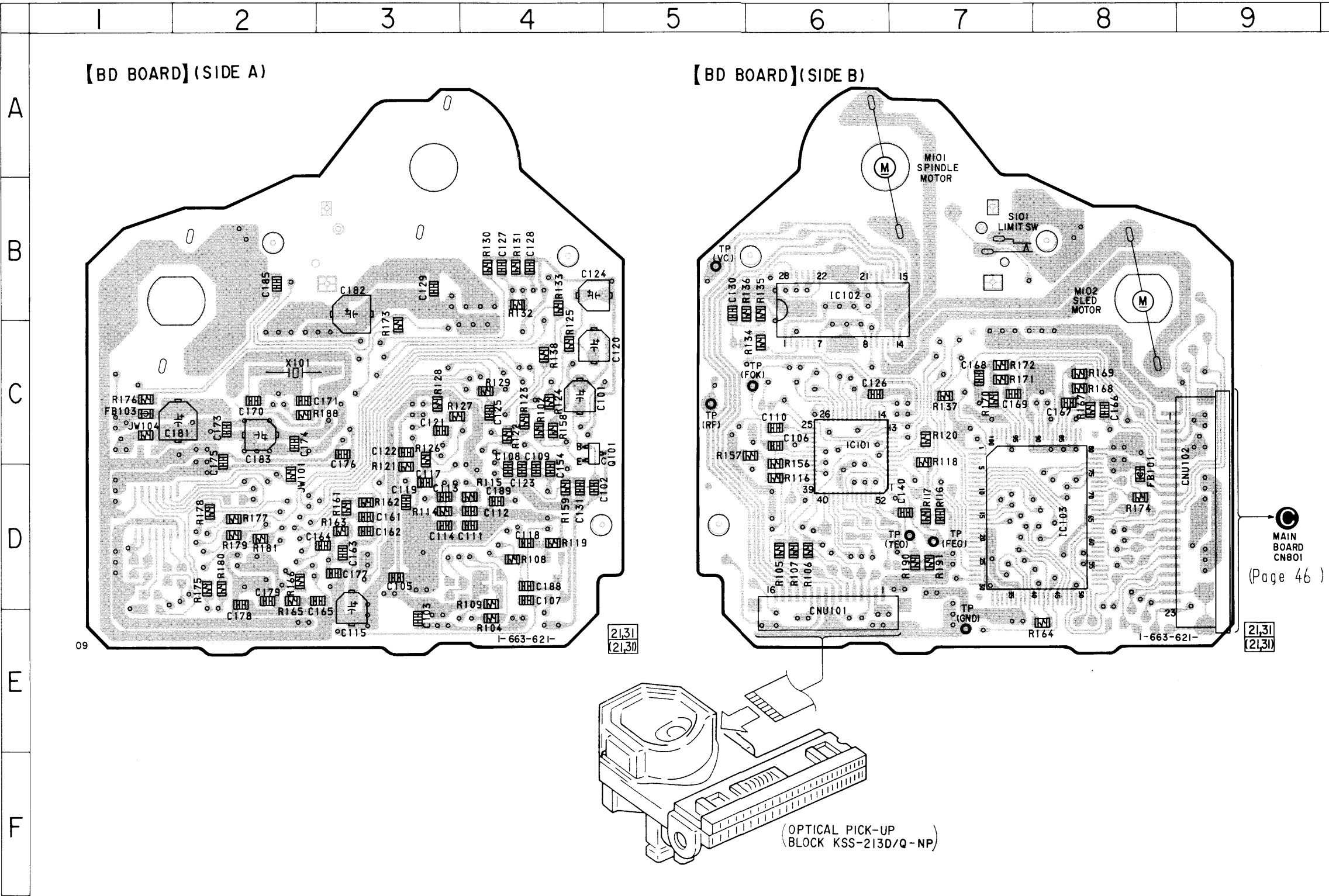
D
MAIN
SECTION
(Page 30)



7-3. PRINTED WIRING BOARD — CD SECTION —
• See page 19 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
IC101	C-6
IC102	B-6
IC103	D-8
Q101	C-5



Note:



- : parts extracted from the component side.
- ○ : Through hole.
- : Pattern from the side which enable seeing.
(The other layer's patterns are not indicated.)


- See page 77 for IC Block Diagrams.
- See page 82 for IC Pin Functions.




- All capacitors are in μF unless otherwise noted, $\text{pF} = \mu\text{F} / 100$
50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.



Note:

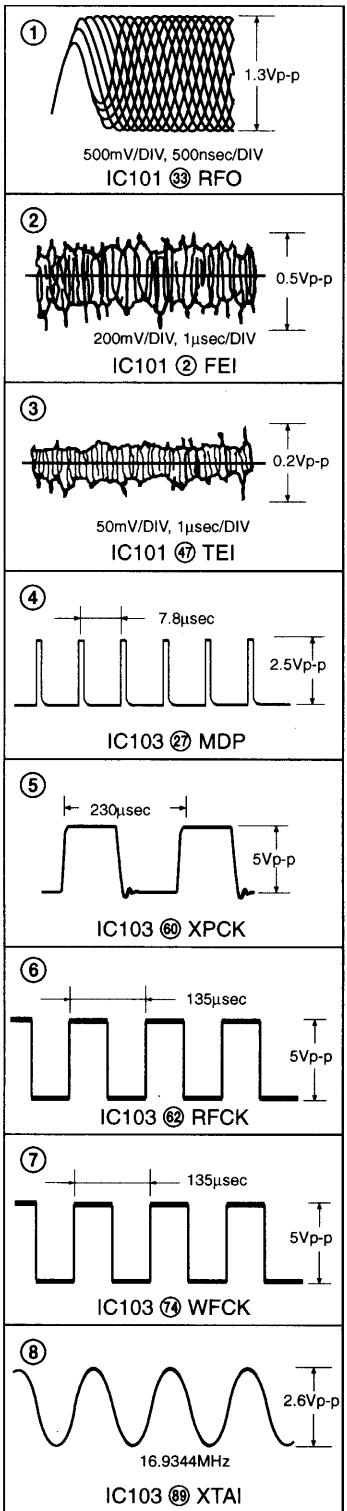
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

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

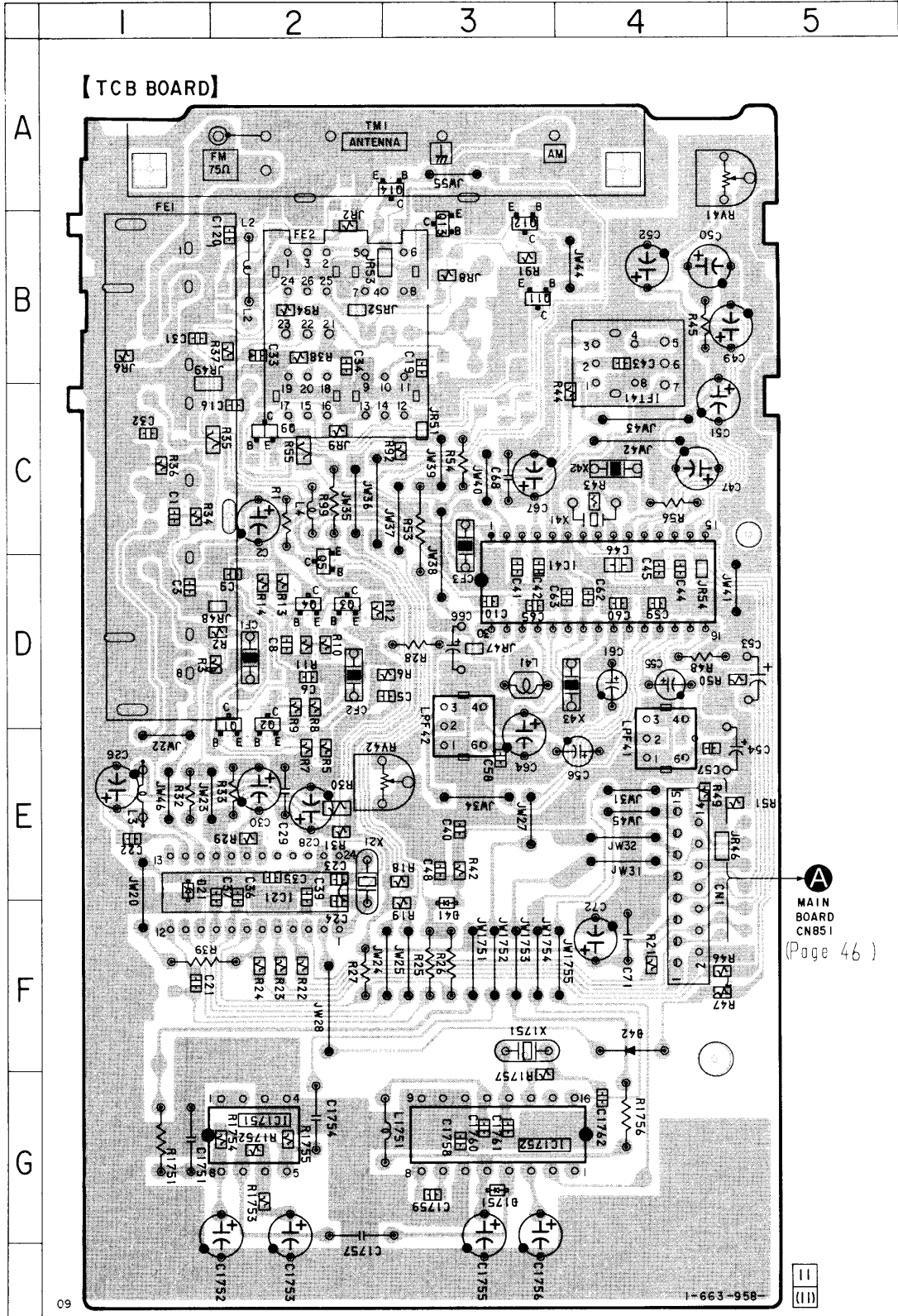
Note:

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

- **B+** :B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- no mark:STOP
- ():PLAY
- * :can not be measured.
- Voltages are taken with a VOM (Input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
-  :CD
-  :digital out



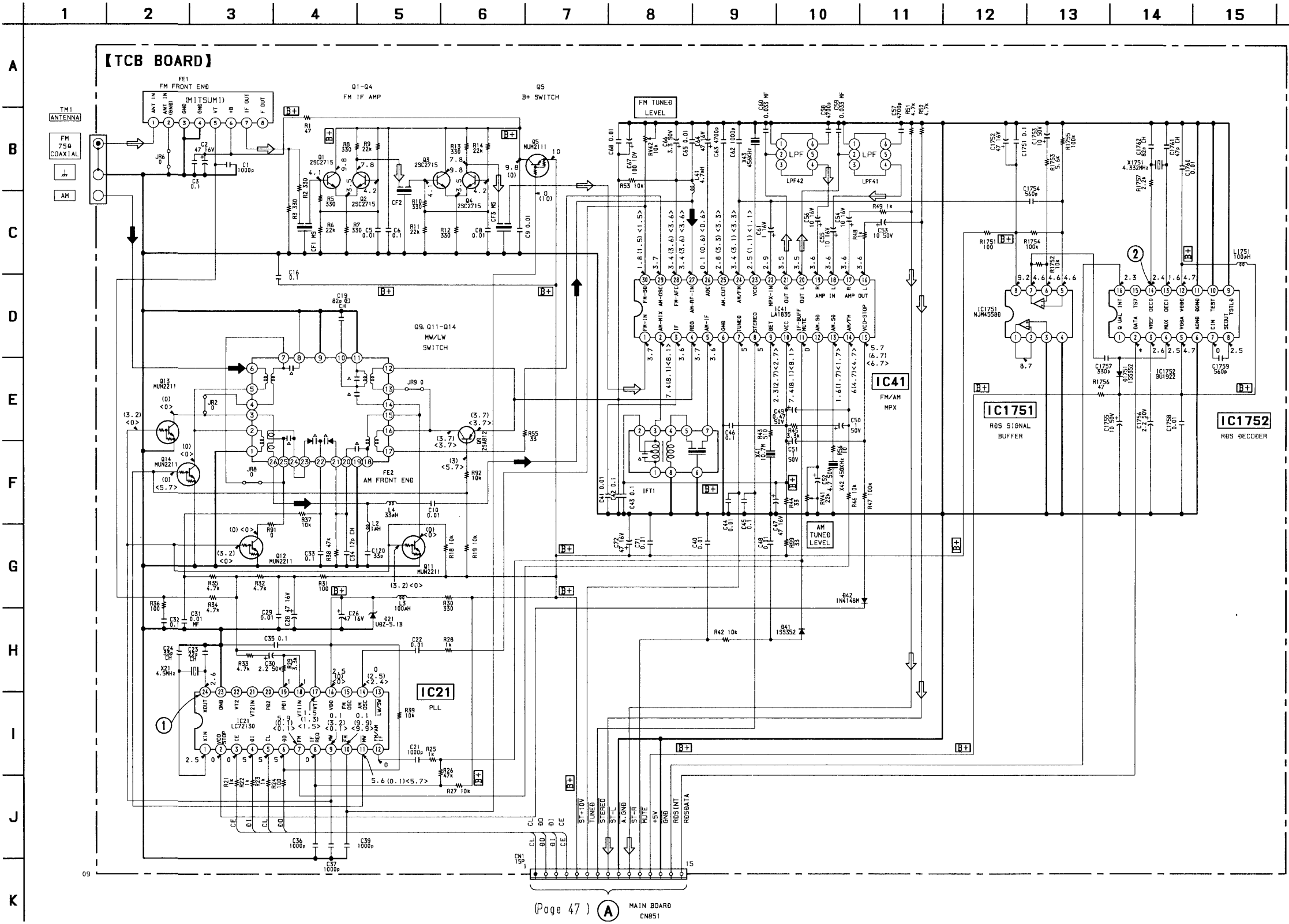
7-5. PRINTED WIRING BOARD — TUNER (AEP, UK, German model) SECTION —
• See page 19 for Circuit Boards Location.



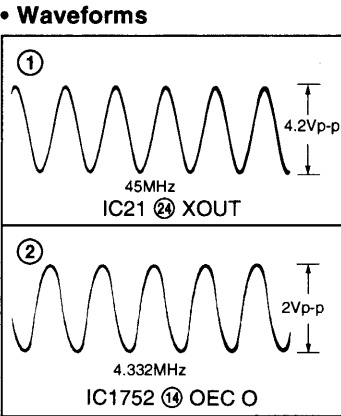
Semiconductor Location	
Ref. No.	Location
D21	E-2
D41	F-3
D42	F-4
D1751	G-3
IC21	F-2
IC41	D-4
IC1751	G-2
IC1752	G-3
Q1	E-2
Q2	E-2
Q3	D-2
Q4	D-2
Q5	D-2
Q9	C-2
Q11	B-3
Q12	B-3
Q13	B-3
Q14	A-3

Note:
• — : parts extracted from the component side.
• : Pattern from the side which enable seeing.

7-6. SCHEMATIC DIAGRAM — TUNER (AEP, UK, German model) SECTION —
• See page 75 for IC Block Diagrams.

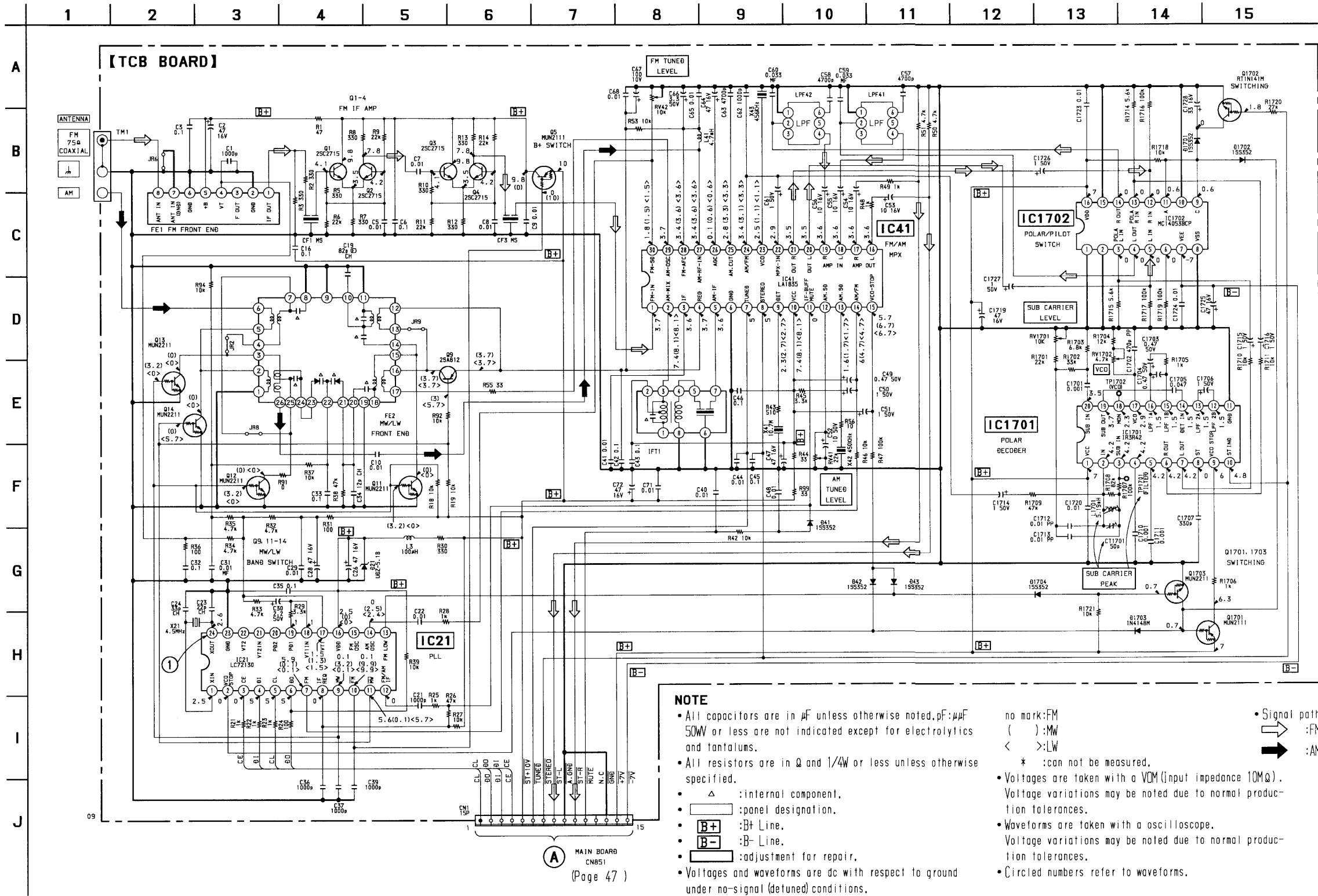


NOTE
• All capacitors are in μF unless otherwise noted, $\text{pF}:\mu\text{F}$
50W or less are not indicated except for electrolytics and tantalums.
• All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
• Δ : internal component.
• : panel designation.
• **B+** : B+ Line.
• : adjustment for repair.
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark:FM
():MW
< :LW
* : can not be measured.
• Voltages are taken with a VOM (input impedance $10\text{M}\Omega$).
Voltage variations may be noted due to normal production tolerances.
• Waveforms are taken with a oscilloscope.
Voltage variations may be noted due to normal production tolerances.
• Circled numbers refer to waveforms.
• Signal path.
→ : FM
→ : AM



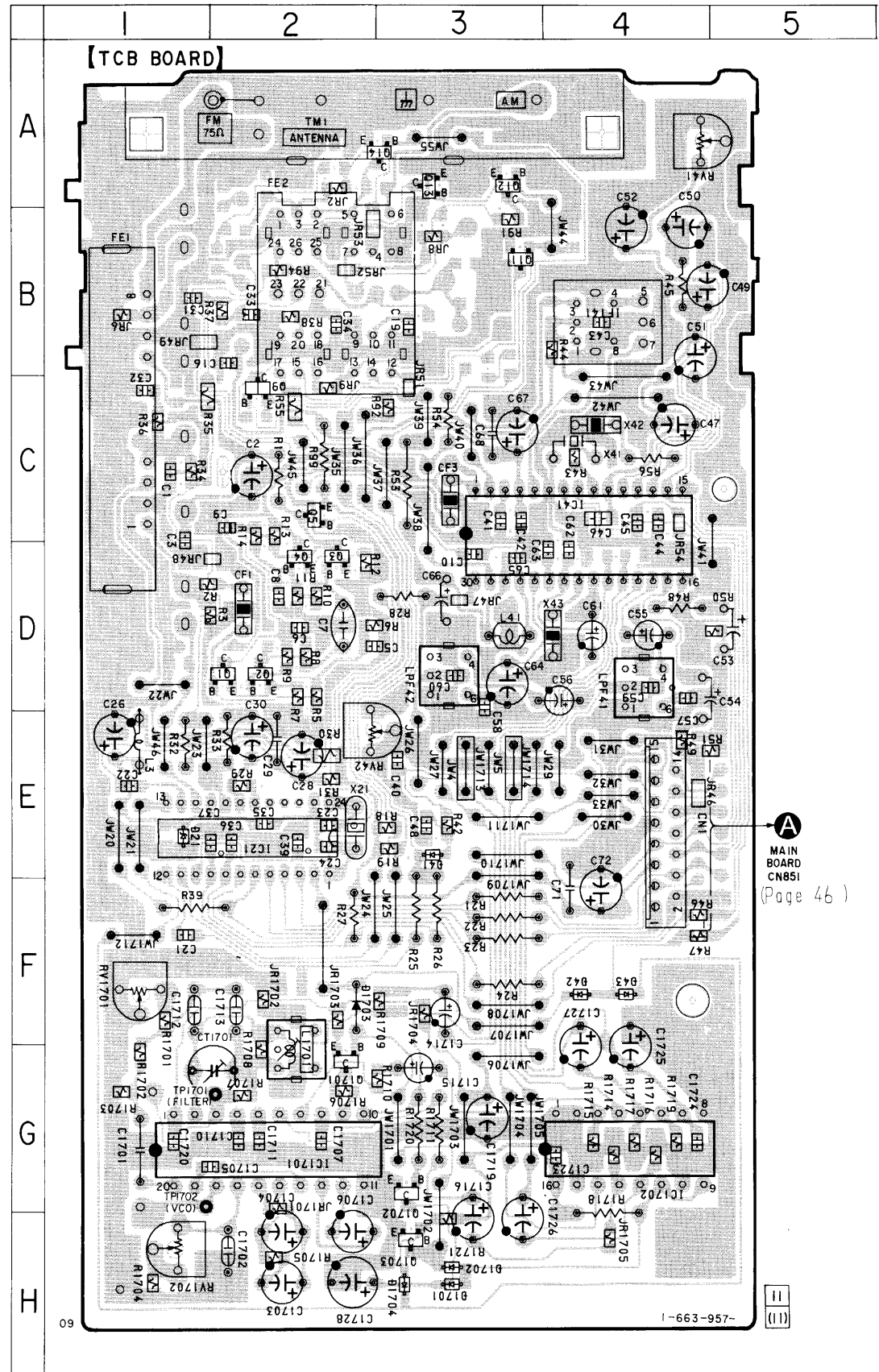
7-7. SCHEMATIC DIAGRAM — TUNER (East European, CIS model) SECTION —

• See page 75 for IC Block Diagrams.



7-8. PRINTED WIRING BOARD — TUNER (East European, CIS model) SECTION —

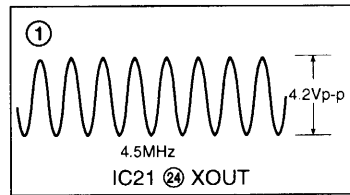
• See page 19 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location
D21	E-1
D41	E-3
D42	F-4
D43	F-4
D1701	H-3
D1702	H-3
D1703	F-2
D1704	H-3
IC21	E-2
IC41	C-2
IC1701	G-4
IC1702	G-4
Q1	D-2
Q2	D-2
Q3	D-2
Q4	D-2
Q5	C-2
Q9	C-2
Q11	B-3
Q12	A-3
Q13	A-3
Q14	A-3
Q1701	G-2
Q1702	H-3
Q1703	H-3

• Waveform



Semiconductor Location

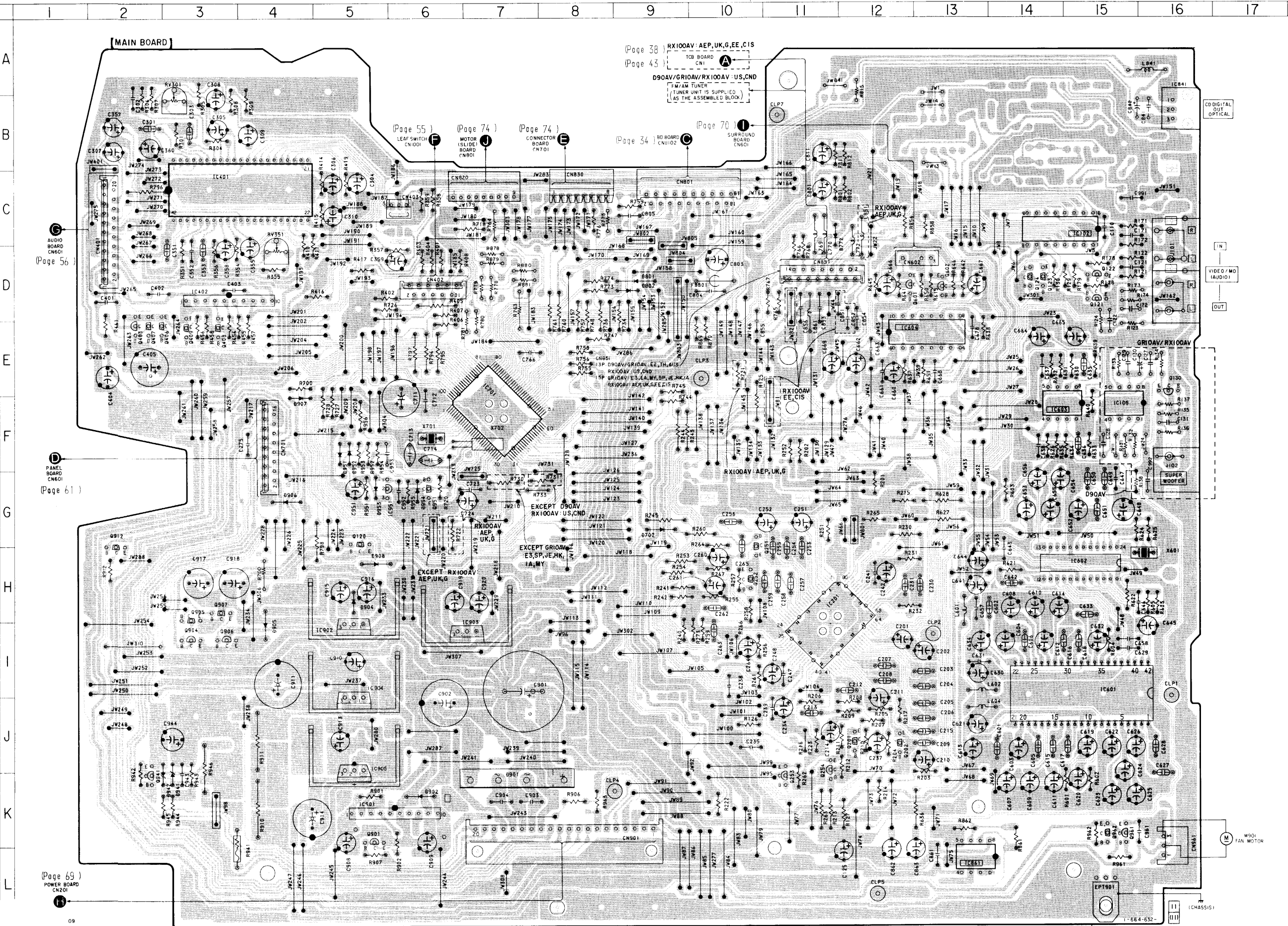
Ref. No.	Location
D702	G-9
D772	C-11
D801	D-9
D802	D-9
D901	K-7
D902	K-6
D904	H-5
D905	I-4
D906	G-4
D907	F-4
D908	H-5
D941	K-3
D942	K-3
D951	F-5
D952	F-5
D953	G-5
D954	G-6
IC101	B-15
IC102	C-15
IC105	F-15
IC201	H-11
IC401	C-2
IC402	D-2
IC601	I-15
IC602	H-15
IC603	F-14
IC604	E-12
IC701	E-7
IC841	A-16
IC861	L-13
IC901	K-5
IC902	I-5
IC903	I-7
IC904	J-5
IC905	J-5
IC951	G-5
Q120	G-5
Q121	D-15
Q122	D-15
Q123	D-14
Q124	D-14
Q130	E-16
Q201	J-12
Q202	J-12
Q251	H-10
Q252	H-10
Q253	K-11
Q254	K-11
Q403	E-2
Q406	E-2
Q407	E-2
Q408	E-3
Q409	E-3
Q601	D-12
Q602	D-13
Q901	K-5
Q904	I-3
Q905	H-3
Q906	I-3
Q907	H-3
Q912	G-2
Q941	K-2
Q951	G-6
Q961	K-15
Q962	K-15

Note:

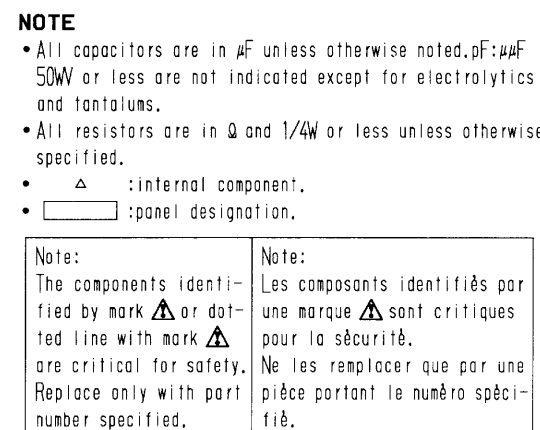
- : parts extracted from the component side.
- : Pattern from the side which enable seeing.
- Abbreviation



CND : Canadian model.
G : German model.
EE : East European model.
AUS : Australian model.
EA : Saudi Arabia model.
SP : Singapore model.
JE : Tourist model.
HK : Hong Kong model.
IA : Indonesia model.
MY : Malaysia model.
TH : Thailand model.
E2 : Without SW tuner E model.
E3 : With SW tuner E model.

7-9. PRINTED WIRING BOARD — MAIN SECTION —
See page 19 for Circuit Boards Location.









- See page 79 for IC Block Diagrams.
- See page 88 for IC Pin Functions.



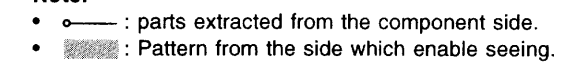
-  :B+ Line.
-  :B- Line.
- Voltages and waveforms are do with respect to ground under no-signal (detuned) conditions.
- no mark:FM
- () : CD PLAY
- # : can not be measured.
- Voltages are taken with a VOM (Input impedance 10M Ω).
- Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.
- Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Abbreviation

CN:	Canadian model.	IA :	Indonesian model.
G :	German model.	MY :	Malaysia model.
EE :	East European model.	TH :	Thailand model.
AUS:	Australian model.	E2 :	Without SW tuner E model.
SA :	Saudi Arabia model.	E3 :	With SW tuner E model.
SP :	Singapore model.	JW :	Jumpier Wire.
HK :	Hong Kong model.	JT :	Tourist model.
- Signal path.

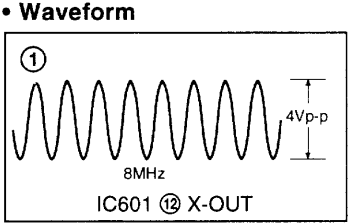
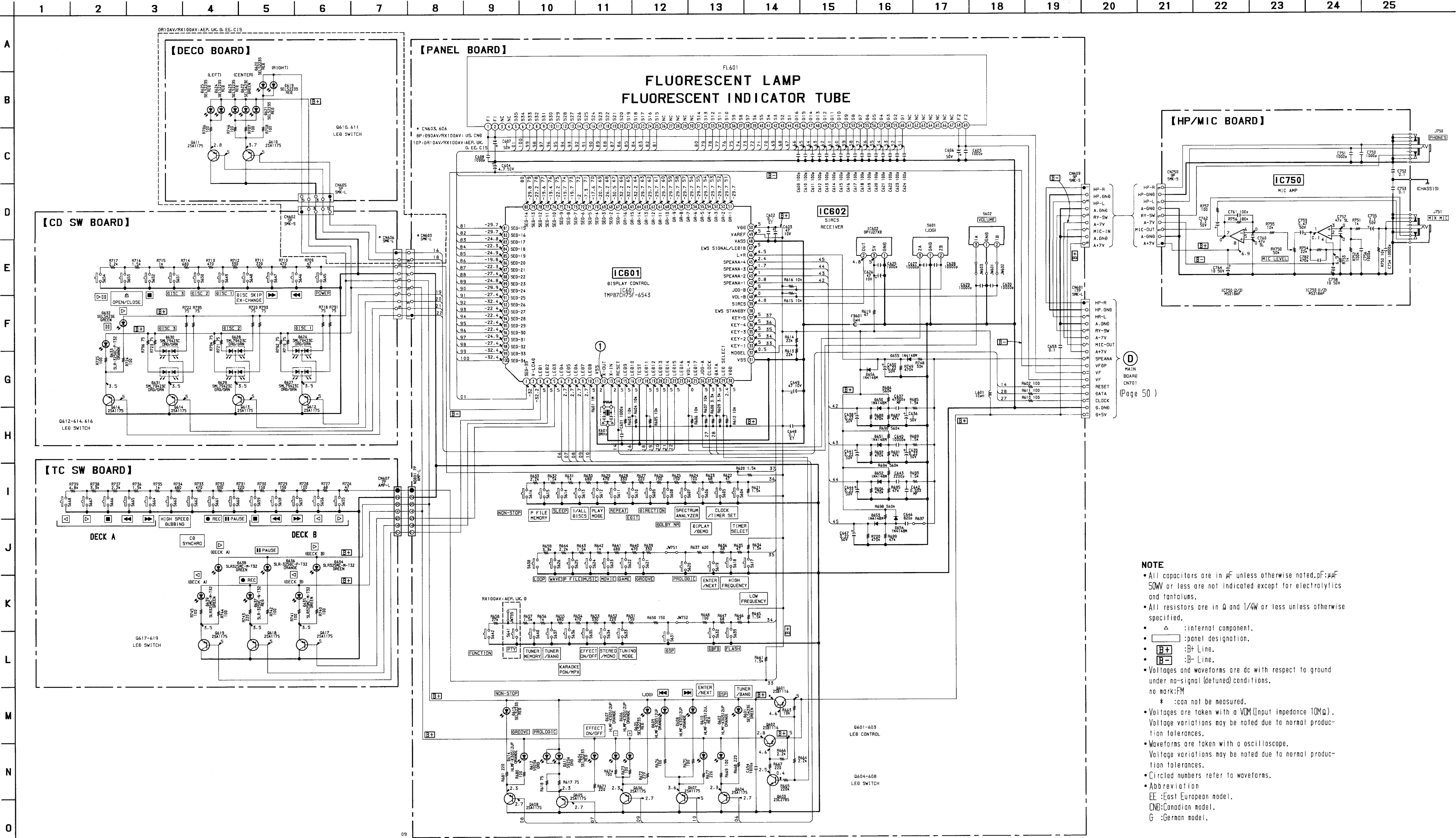
	: FM
	: VIDEO
	: PB (BECK B)
	: SEC (BECK B)
	: CD
	: digital out

- See page 19 for Circuit Boards Location.

Ref. No.	Location
IC601	H-3
IC602	G-4
IC611	H-9
Q621	I-6
Q622	H-6
Q623	H-5
Q651	F-9
Q1001	B-2
Q1002	B-6



7-13. SCHEMATIC DIAGRAM — PANEL SECTION —
• See page 87 for IC Pin Functions.



NOTE

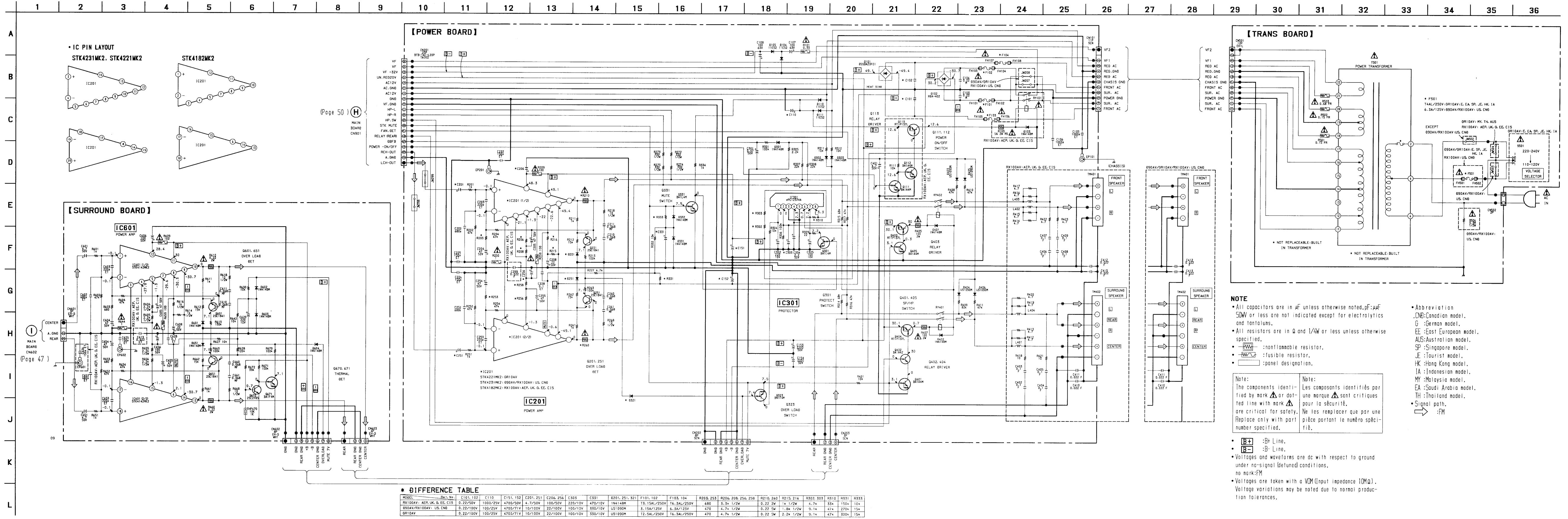
- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F} \times 10^{-6}$.
50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : panel designation.
- B+ : B+ Line.
- B- : B- Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark: FM
- * : can not be measured.
- Voltages are taken with a VOM (input impedance $10\text{M}\Omega$).
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope.
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Abbreviation
EE : East European model.
CND : Canadian model.
G : German model.



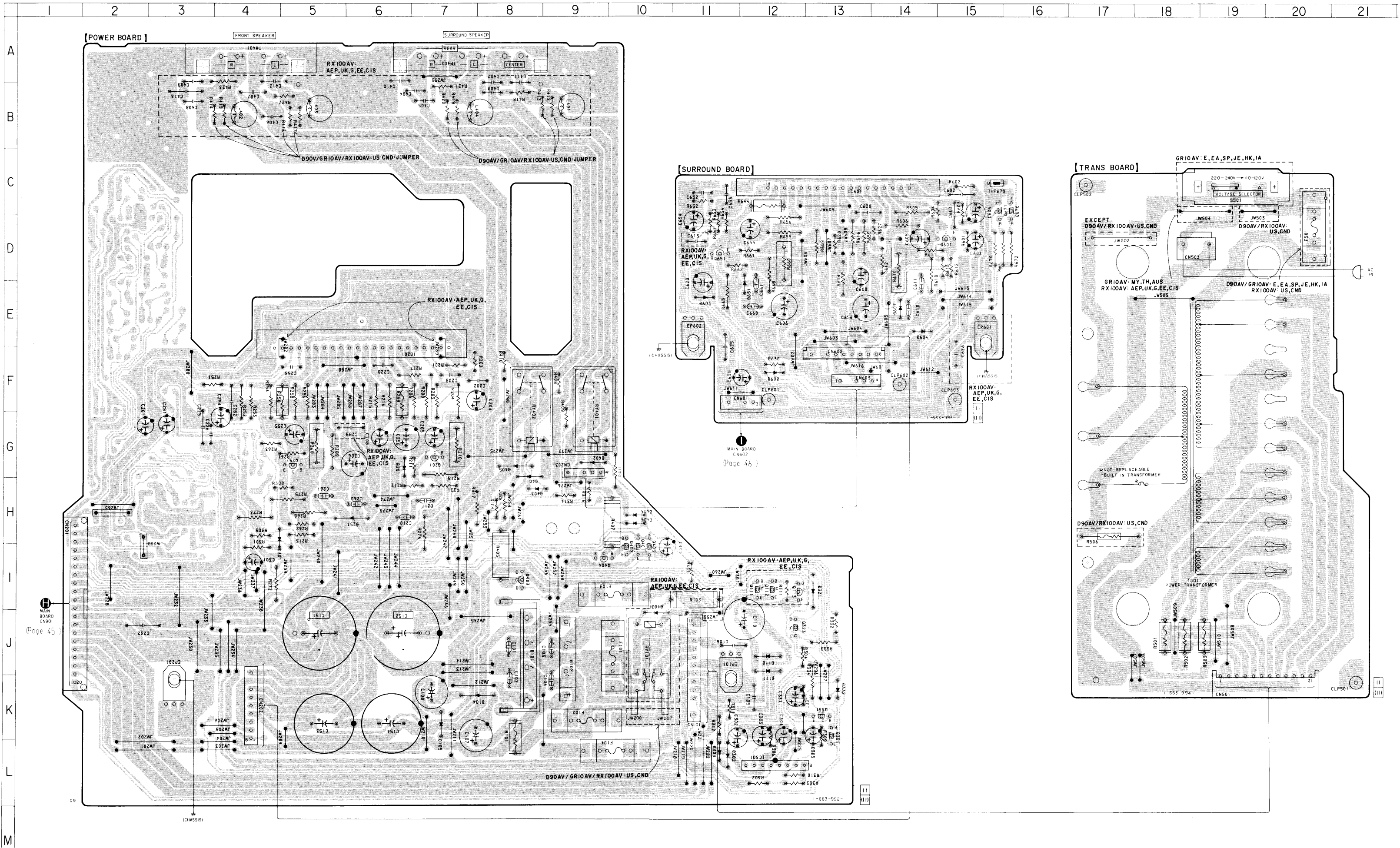
Note:

- : parts extracted from the component side.
- : Pattern from the side which enable seeing.
- Abbreviation
 - CND : Canadian model.
 - G : German model.
 - EE : East European model.

7-15. SCHEMATIC DIAGRAM — POWER SECTION —
• See page 81 for IC Block Diagrams.



7-16. PRINTED WIRING BOARD — POWER SECTION —
• See page 19 for Circuit Boards Location.



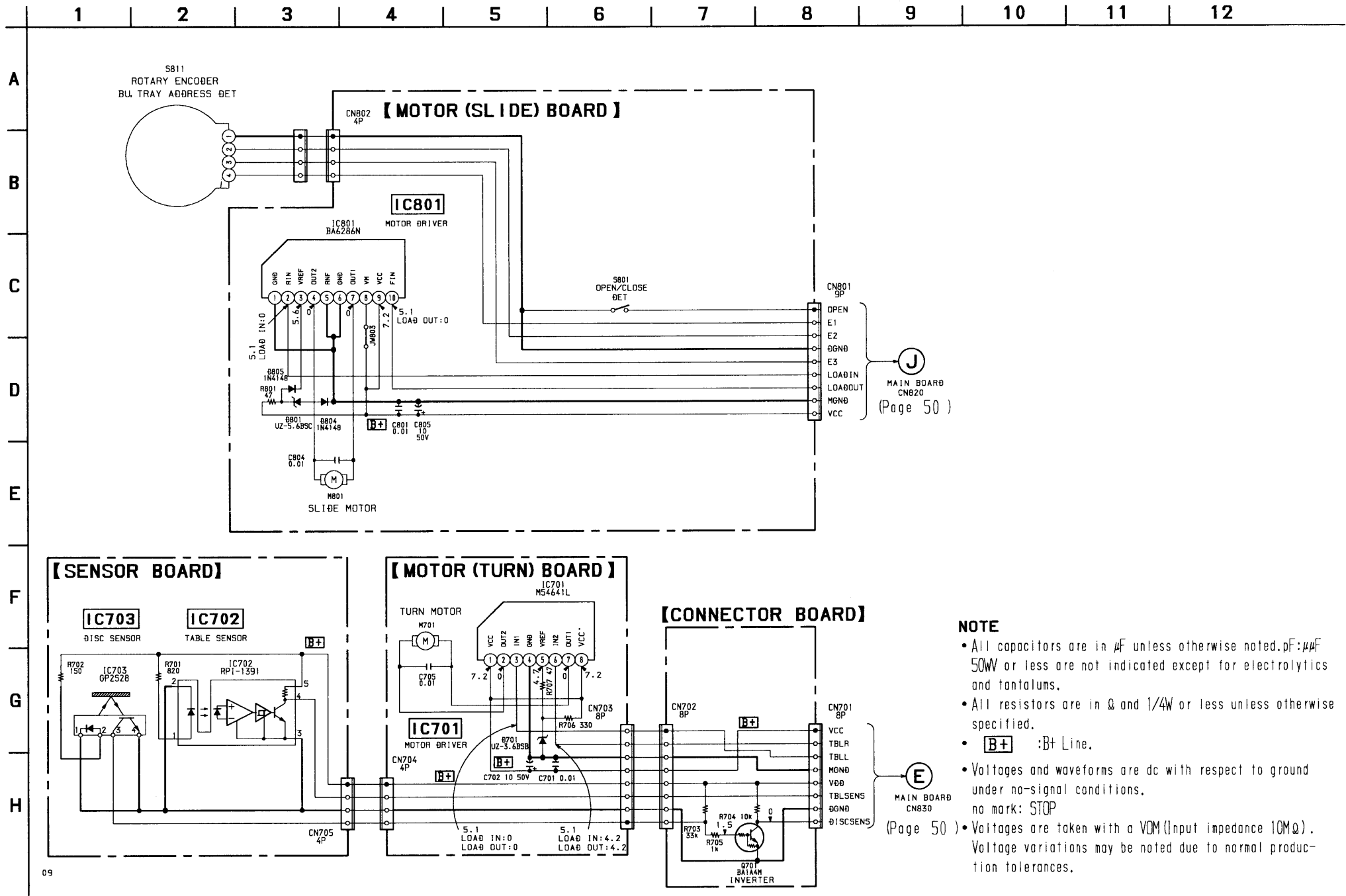
• Semiconductor Location

Ref. No.	Location
D101	J-8
D102	J-9
D103	I-10
D104	K-8
D105	K-7
D110	J-12
D111	J-12
D201	G-6
D251	H-6
D301	I-4
D302	L-11
D303	L-11
D321	I-13
D331	K-13
D332	K-13
D401	H-8
D402	G-9
D403	H-8
D404	H-10
D405	G-8
D406	H-10
D601	E-14
D602	F-12
D603	E-11
D604	E-14
D651	E-12
IC201	F-6
IC301	L-12
IC601	C-13
Q111	I-12
Q112	I-12
Q113	I-12
Q201	G-7
Q251	G-5
Q301	K-13
Q323	J-13
Q331	K-13
Q401	I-10
Q402	I-10
Q403	I-8
Q404	I-9
Q405	I-10
Q601	D-15
Q651	D-11
Q670	C-16
Q671	C-16

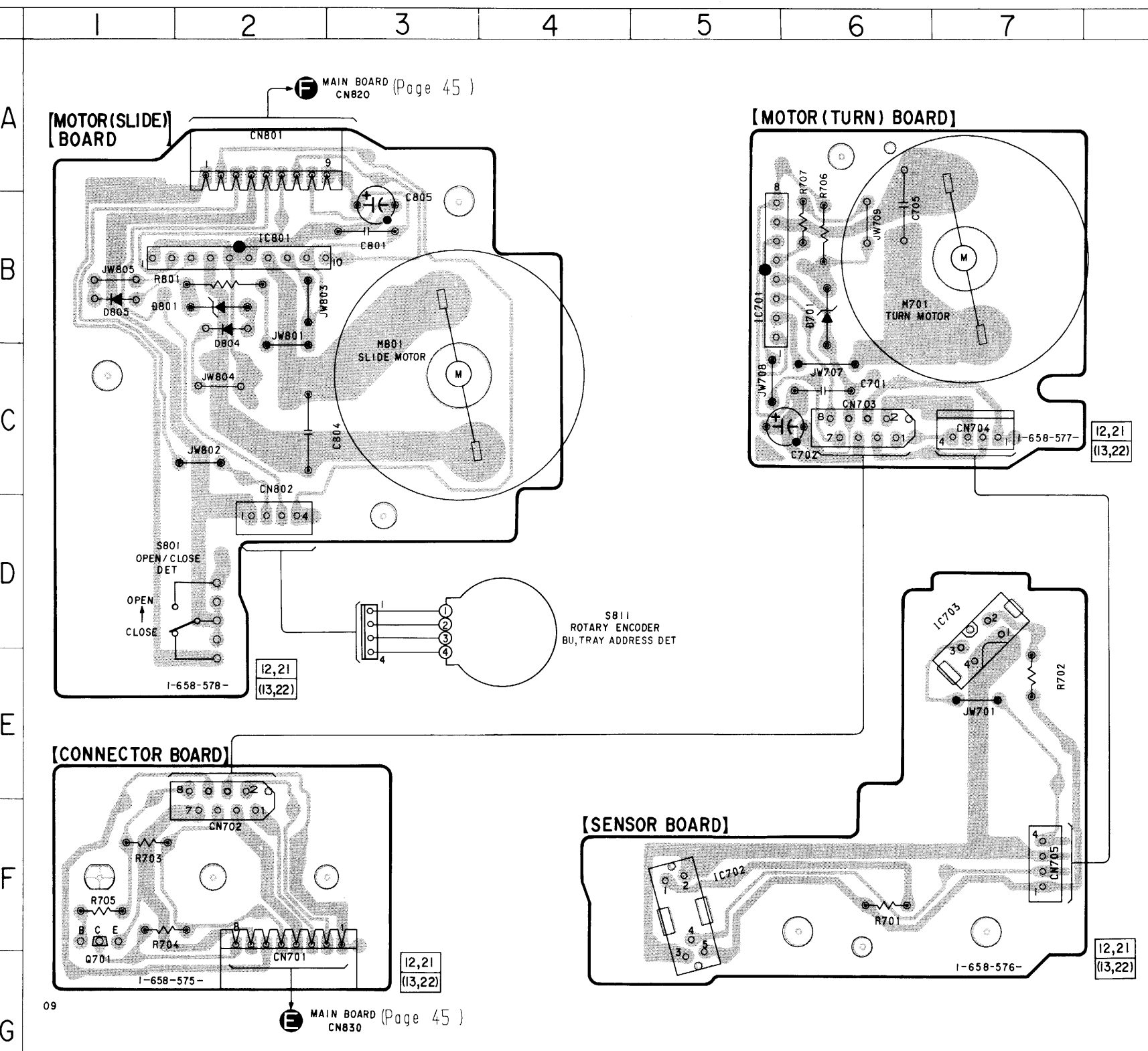
Note:

- : parts extracted from the component side.
- : Pattern from the side which enable seeing.
- Abbreviation
 - CND : Canadian model.
 - G : German model.
 - EE : East European model.
 - AUS : Australian model.
 - EA : Saudi Arabia model.
 - SP : Singapore model.
 - JE : Tourist model.
 - HK : Hong Kong model.
 - IA : Indonesia model.
 - MY : Malaysia model.
 - TH : Thailand model.

7-17. SCHEMATIC DIAGRAM — CD MOTOR SECTION —
• See page 81 for IC Block Diagrams.



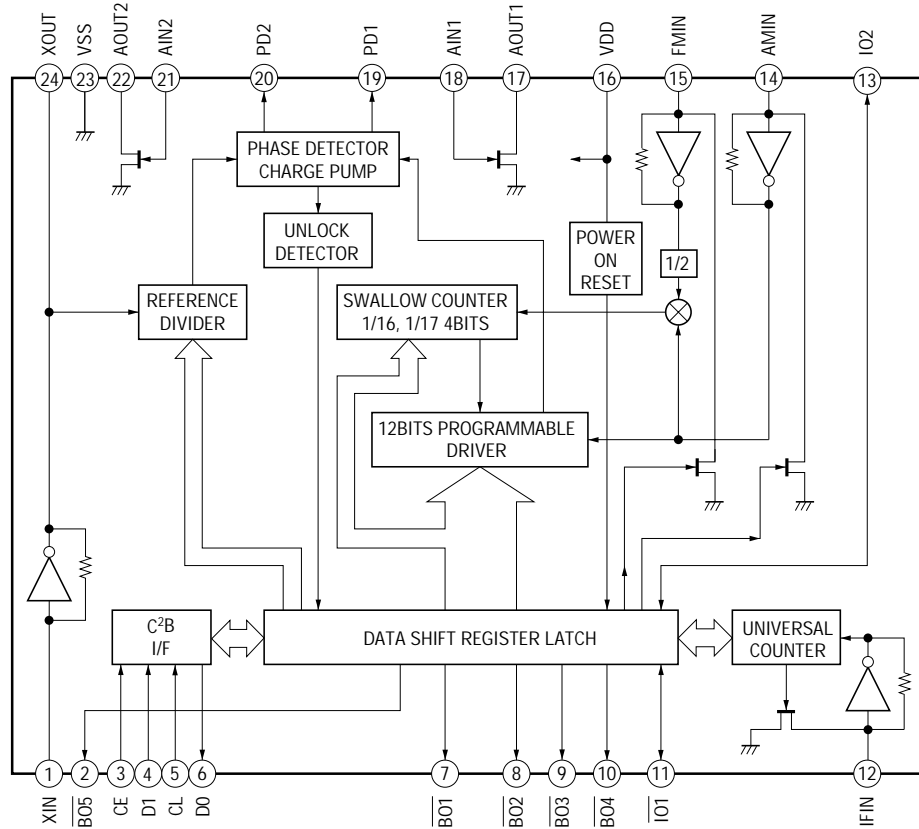
7-18. PRINTED WIRING BOARD — CD MOTOR SECTION —
• See page 19 for Circuit Boards Location.



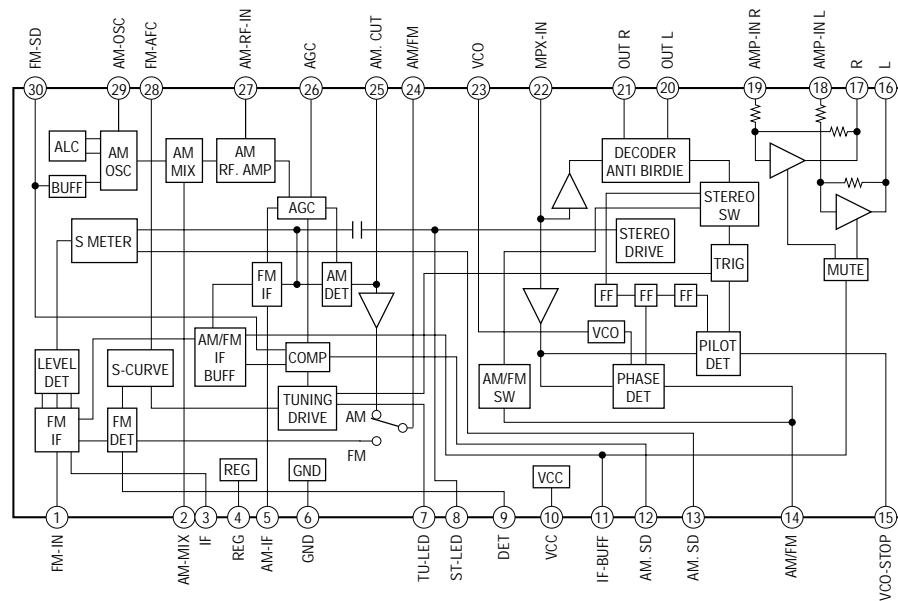
7-19. IC BLOCK DIAGRAMS

• Tuner section

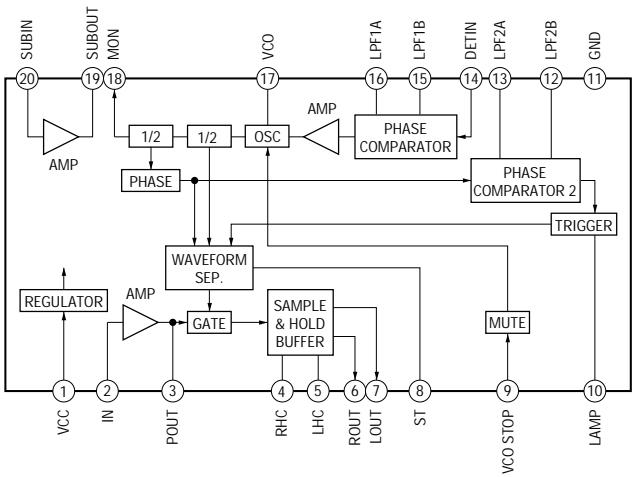
IC21 LC72130



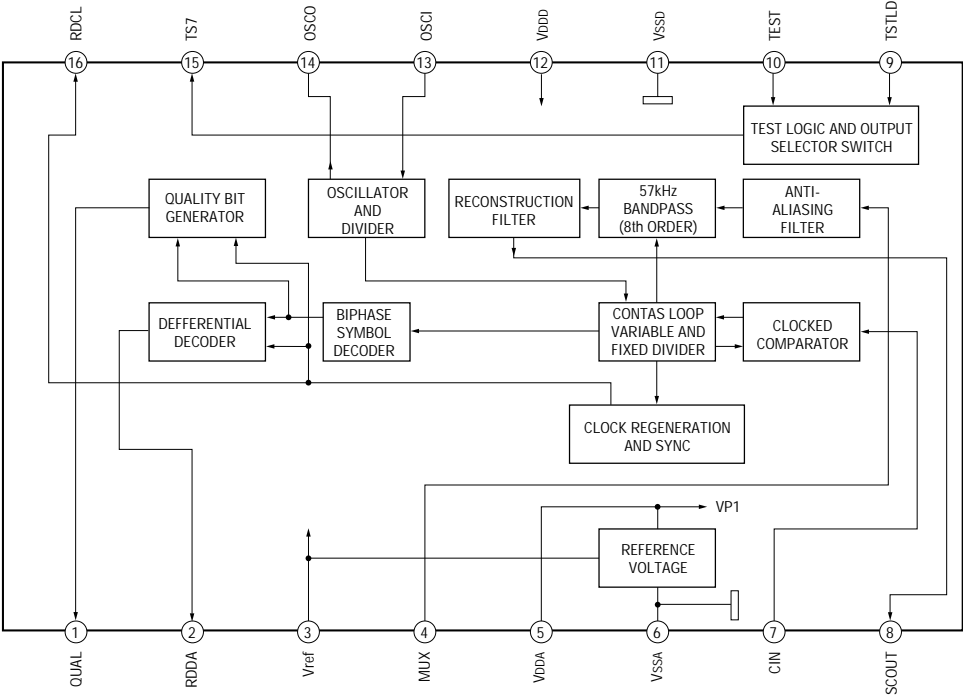
IC41 LA1835



IC1701 IR3R42

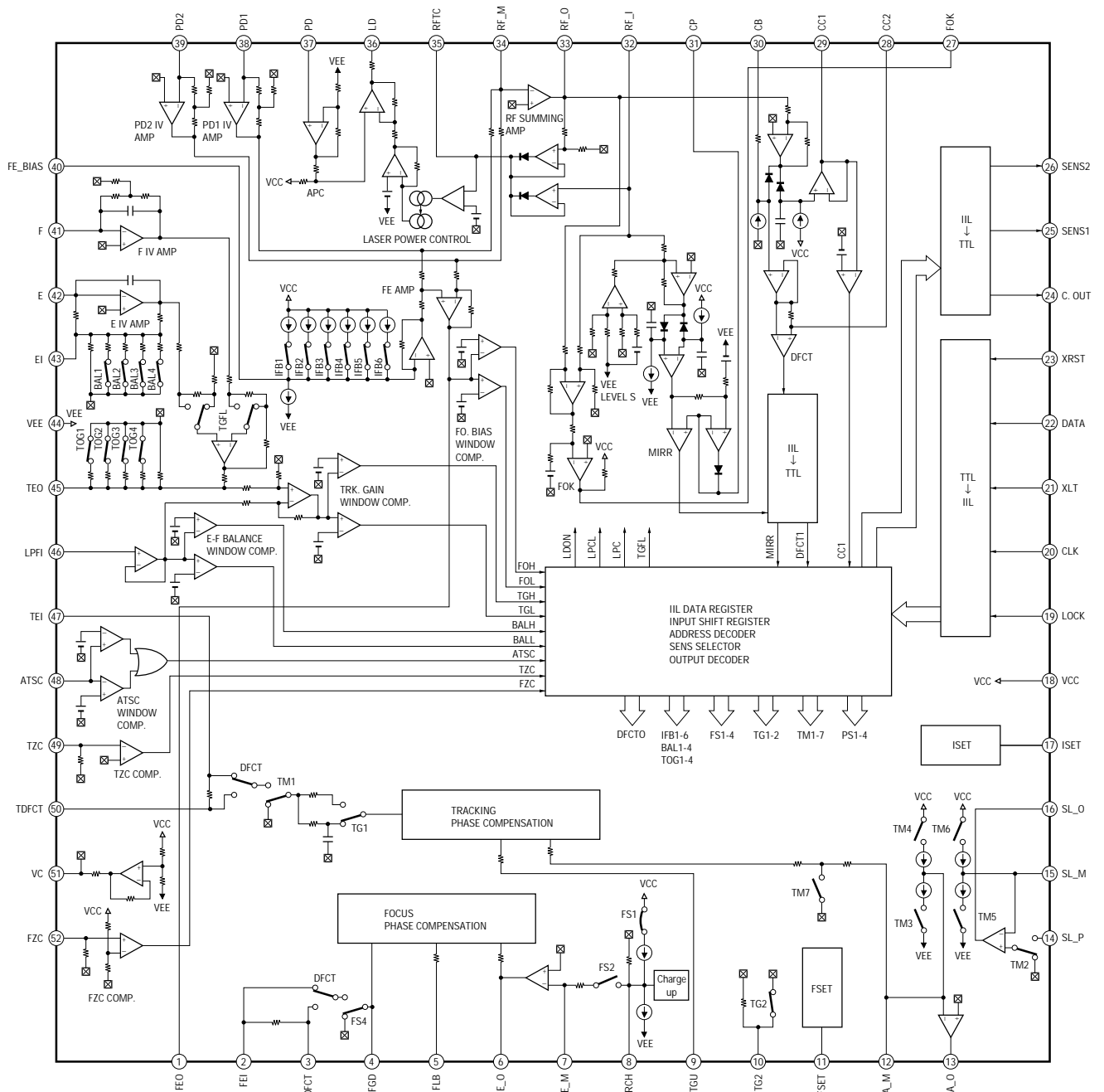


IC1752 BU1922

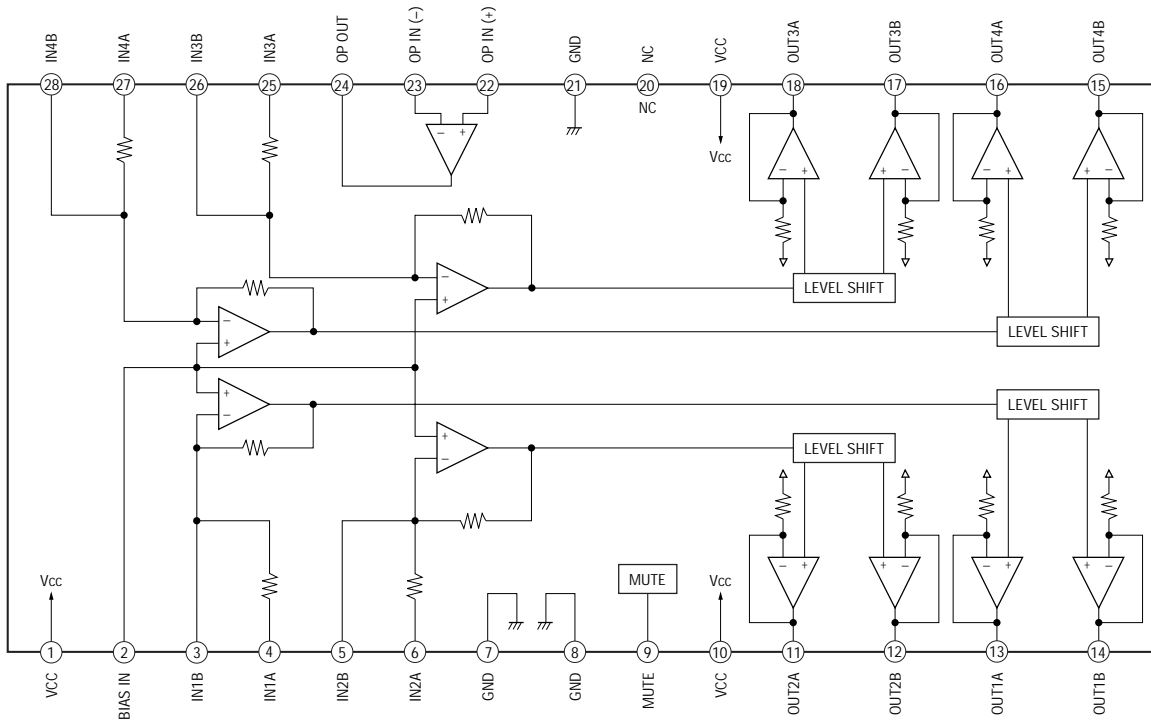


• CD section

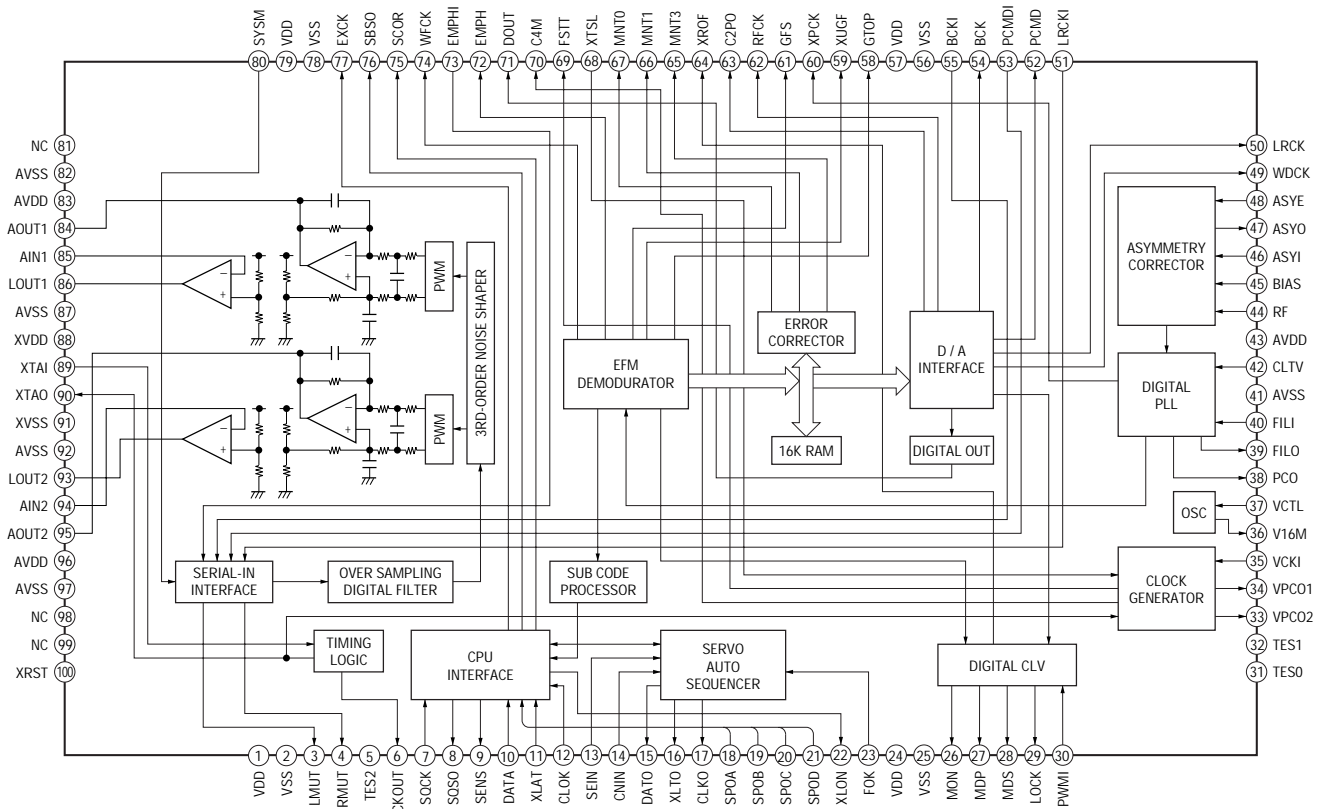
IC101 CXA1992AR



IC102 BA5941FP

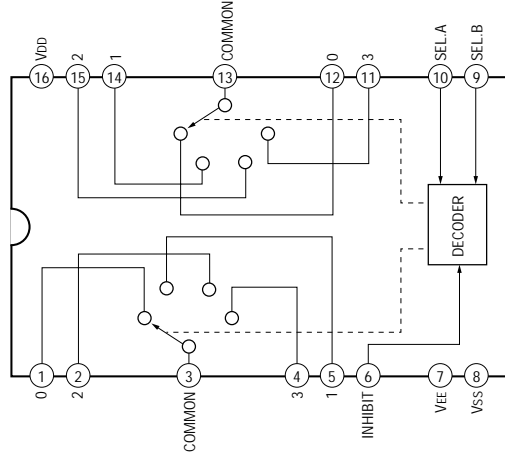


IC103 CXD2519Q

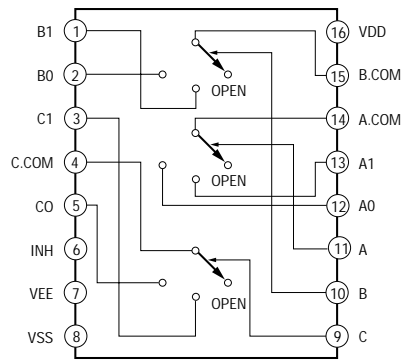


• Main section

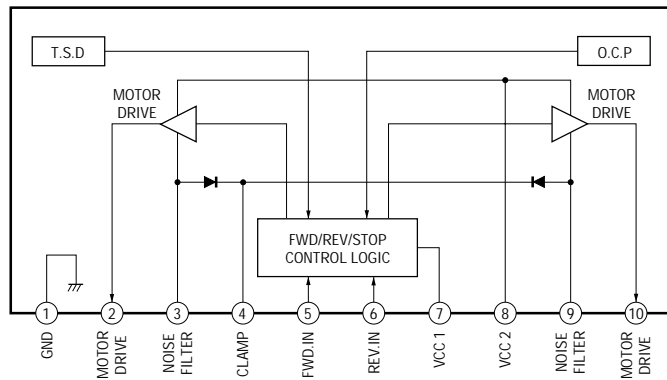
IC102 MC14052BCP



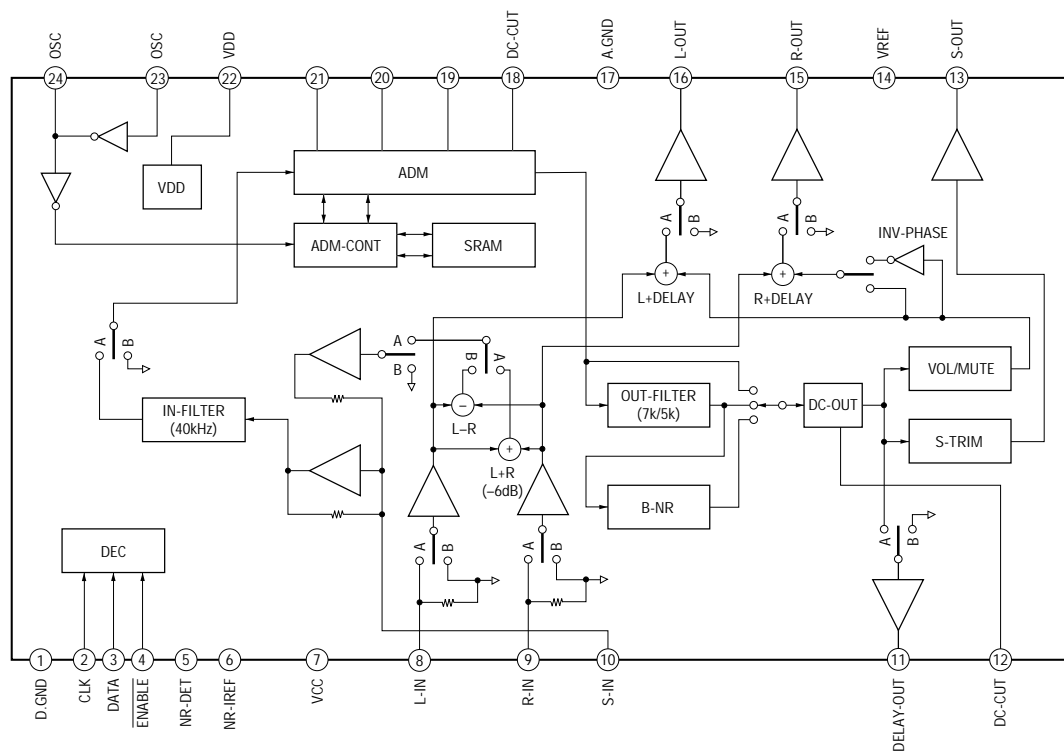
IC103, 1702 MC14053BCP



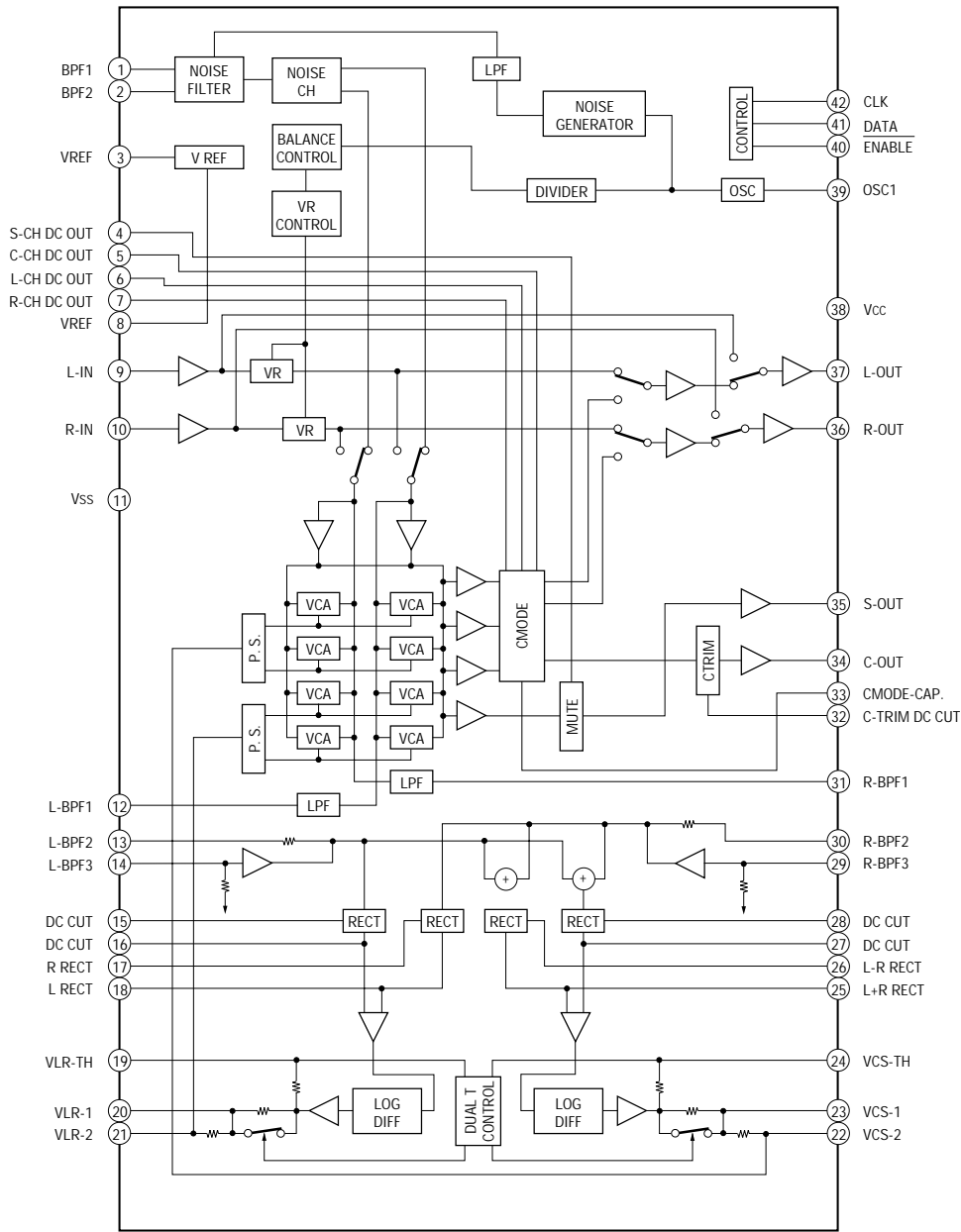
IC402 LB1641



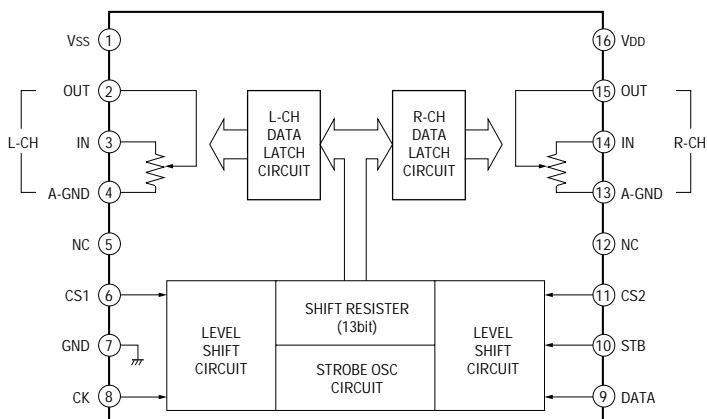
IC602 LV1016



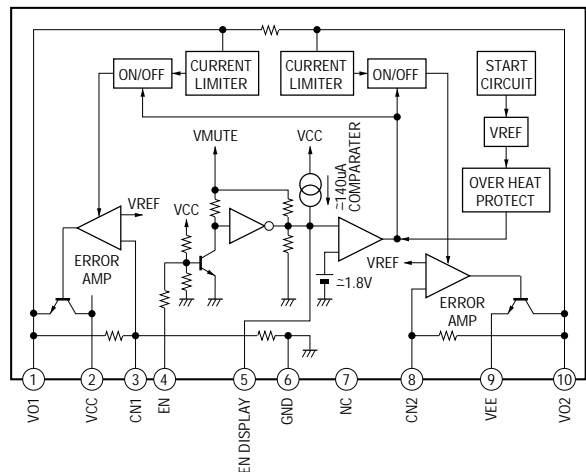
IC601 LA2786



IC604 TC9210P

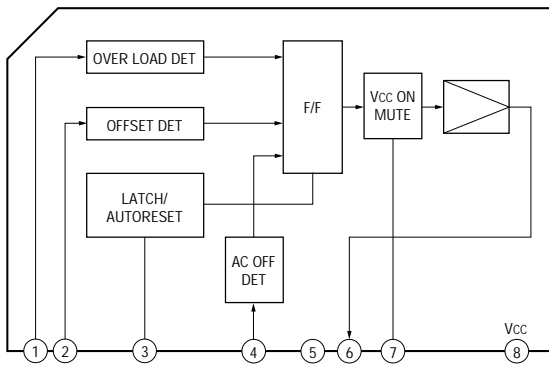


IC901 LA5617



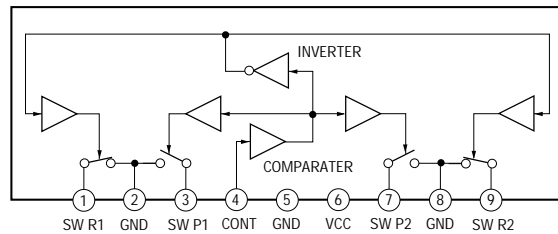
• Power section

IC301 uPC1237HA



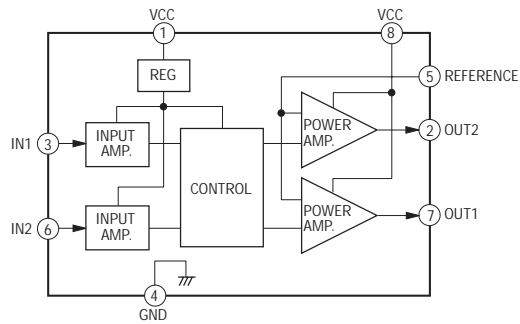
• Deck section

IC602 uPC1330HA

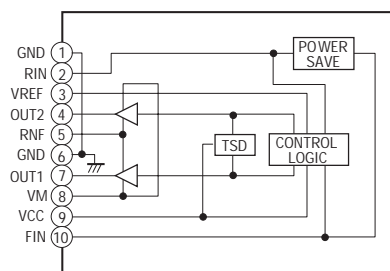


• CD motor section

IC701 M54641L



IC801 BA6286N



7-20. IC PIN FUNCTIONS

• IC101 FOCUS/TRACKING/SLED SERVO RF AMP (CXA1992AR)

Pin No.	Pin Name	I/O	Function
1	FEO	O	Focus error amplifier output Connected internally to the window comparator input for bias adjustment
2	FEI	I	Focus error input
3	FDFCT	I	Capacitor connection pin for defect time constant
4	FGD	I	Ground this pin through a capacitor for cutting the focus servo high-frequency gain
5	FLB	I	External time constant setting pin for boosting the focus servo low-frequency
6	FE O	O	Focus drive output
7	FE M	I	Focus amplifier inverted input
8	SRCH	I	External time constant setting pin for generating focus search waveform
9	TGU	I	External time constant setting pin for switching tracking high-frequency gain
10	TG2	I	External time constant setting pin for switching tracking high-frequency gain
11	FSET	I	Peak frequency setting pin for focus and tracking phase compensation amplifier
12	TA M	I	Tracking amplifier inverted input
13	TA O	O	Tracking drive output
14	SL P	I	Sled amplifier non-inverted input
15	SL M	I	Sled amplifier inverted input
16	SL O	O	Sled drive output
17	ISCT	I	Connect an external capacitance to set the current which determines the Focus search, Track jump, and Sled kick heights
18	Vcc	I	Positive power supply
19	LOCK	I	The sled overrun prevention circuit operates when this pin is Low (No pull-up resistance)
20	CLK	I	Serial data transfer clock input from CPU (No pull-up resistance)
21	XLT	I	Lach input from CPU (No pull-up resistance)
22	DATA	I	Serial data input from CPU (No pull-up resistance)
23	XRST	I	Reset input; resets at Low (No pull-up resistance)
24	C.OUT	O	Track number count signal output
25	SENS1	O	Outputs FZC, DFCT1, TZC, BALH, TGH, FOH, ATSC, and others according to the command from CPU
26	SENS2	O	Outputs DFCT2, MIRR, BALL, TGL, FOL, and others according to the command from CPU
27	FOK	O	Focus OK comparator output
28	CC2	I	Input for the defect bottom hold output with capacitance coupled
29	CC1	O	Defect bottom hold output Connected internally to the interruption comparator input
30	CB	I	Connection pin for defect bottom hold capacitor
31	CP	I	Connection pin for MIRR hold capacitor MIRR comparator non-inverted input
32	RF I	I	Input for the RF summing amplifier output with capacitance coupled
33	RF O	O	RF summing amplifier output Eye-pattern check point

FZC : Focus zero-cross
 DFCT : Defect
 TZC : Tracking zero-cross
 BALH : E-F Balance (High)
 TGH : Tracking Gain (High)
 FOH : Focus Bias (High)

ATSC : Anti Shock
 MIRR : Mirror
 BALL : E-F Balance (Low)
 TGL : Tracking Gain (Low)
 FOL : Focus Bias (Low)

Pin No.	Pin Name	I/O	Function
34	RF M	I	RF summing amplifier inverted input The RF amplifier gain is determined by the resistance connected between this pin and RFO pin
35	RFTC	I	External time constant setting pin during RF level control
36	LD	O	APC amplifier output
37	PD	I	APC amplifier input
38	PD1	I	RF I-V amplifier inverted input Connect these pins to the photo diode A+C and B+D pins
39	PD2	I	
40	FE BIAS	I	Bias adjustment of focus error amplifier Leave this pin open for automatic adjustment
41	F	I	F I-V and E I-V amplifier inverted input Connect these pins to photo diodes F and E
42	E	I	
43	EI	–	I-V amplifier E gain adjustment (When not using automatic balance adjustment)
44	VEE	–	Negative power supply
45	TEO	O	Tracking error amplifier output E-F signal is output
46	LPFI	I	Comparator input for balance adjustment (Input from TEO through LPF)
47	TEI	I	Tracking error input
48	ATSC	I	Window comparator input for ATSC detection
49	TZC	I	Tracking zero-cross comparator input
50	TDFCT	I	Capacitor connection pin for defect time constant
51	VC	O	(VCC + VEE)/2 direct voltage output
52	FZC	I	Focus zero-cross comparator input

APC : Auto Power Control

• IC103 DIGITAL SIGNAL PROCESSOR (CXD2519Q)

Pin No.	Pin Name	I/O	Function
1	VDD	–	+5V power supply
2	VSS	–	Ground
3	LMUT	O	Lch “L” detection flog (Not used)
4	RMUT	O	Rch “L” detection flog (Not used)
5	ACDT	O	Test output (Not used)
6	CKOUT	O	Master clock divider output (Not used)
7	SQCK	I	Clock input for SQSO read out
8	SQSO	O	Serial output for Sub-Q 80bit
9	SENS	O	SENS signal output to CPU
10	DATA	I	Serial data input, supplied from CPU
11	XLAT	I	Latch input, supplied from CPU
12	CLOK	I	Serial data transfer clock input, supplied from CPU
13	SEIN	I	SENS input from IC101
14	CNIN	I	Numbers of track jump counted signal input
15	DATO	O	Serial data output to IC101
16	XLTO	O	Serial data latch output to IC101
17	CLKO	O	Serial data transfer clock output to IC101
18	SPOA	I	Micro computer demodulation interface (Input A)
19	SPOB	I	Micro computer demodulation interface (Input B)
20	SPOC	I	Micro computer demodulation interface (Input C)
21	SPOD	I	Micro computer demodulation interface (Input D)
22	XLON	O	Micro computer demodulation interface (Output)
23	FOK	I	Focus OK input
24	VDD	–	+5V power supply
25	VSS	–	Ground
26	MON	O	Output to control ON/OFF of spindle motor (Not used)
27	MDP	O	Output to control spindle motor servo
28	MDS	O	Output to control spindle motor servo (Not used)
29	LOCK	O	GFS is sampled by 460Hz
30	PWMI	I	Input to control the outside spindle motor
31	TES0	I	Test pin (Connected to ground)
32	TES1	I	Test pin (Connected to ground)
33	VPCO2	O	Charge-pump output (Not used)
34	VPCO1	O	Charge-pump output (Not used)
35	VCKI	I	VCO2 oscillator input (Not used)
36	V16M	O	VCO2 oscillator output (Not used)
37	VCTL	I	VCO2 control voltage input
38	PCO	O	Charge-pump output to master PLL
39	FILO	O	Filter output to master PLL
40	FILI	I	Filter input for master PLL

GFS : Guarded Frame Sync

PLL : Phase Locked Loop

Pin No.	Pin Name	I/O	Function
41	AVSS	–	Analog ground
42	CLTV	I	Control voltage input for VCO
43	AVDD	–	Analog power supply
44	RF	I	EFM signal input
45	BIAS	I	Asymmetry circuit constant current input
46	ASYI	I	Asymmetry compare voltage input
47	ASYO	O	EFM full swing output (“L” =V _{SS} , “H” =V _{DD})
48	ASYE	I	Asymmetry circuit ON/OFF (“L”=OFF, “H”=ON)
49	WDCK	O	D/A interface Word clock f=2fs (Not used)
50	LRCK	O	D/A interface LR clock output f=Fs
51	LRCKI	I	D/A interface LR clock input f=Fs
52	PCMD	O	D/A interface Serial data output
53	PCMDI	I	D/A interface Serial data input
54	BCK	O	D/A interface Bit clock output
55	BCKI	I	D/A interface Bit clock input
56	VSS	–	Ground
57	VDD	–	+5V power supply
58	GTOP	O	Not used
59	XUGF	O	Not used
60	XPLCK	O	EFM decoder PLL clock output
61	GFS	O	“H” Playback EFM sync and interpolation protection timing much
62	RFCK	O	Read frame clock signal output
63	C2PO	O	Not used
64	XRAOF	O	Internal RAM overflow detection signal output (Not used)
65	MNT3	O	Not used
66	MNT1	O	Not used
67	MNT0	O	Not used
68	XTSL	I	Not used
69	FSTT	O	2/3 divider output (Not used)
70	C4M	O	4.2336MHz output(Not used)
71	DOUT	O	Digital audio signal output
72	EMPH	O	Playback disc output in emphasis mode
73	EMPHI	I	“H” =Input when de-emphasis ON
74	WFCK	O	Write frame clock signal output
75	SCOR	O	Sub-code sync output
76	SBSO	O	Sub-P through Sub-W serial output
77	EXCK	I	Clock input for SBSO read-out
78	VSS	–	Ground
79	VDD	–	+5V power supply
80	SYSM	I	System mute input

EFM : Eight to Fourteen Modulation

Pin No.	Pin Name	I/O	Function
81	—	–	Not used
82	AVSS	–	Analog ground
83	AVDD	–	Analog power supply
84	AOUT1	O	Lch analog output
85	AIN1	I	Lch opamp input
86	LOUT1	O	Lch line output
87	AVSS	–	Analog ground
88	XVDD	–	Master clock power supply
89	XTAI	I	X'tal oscillator circuit input
90	XTAO	O	X'tal oscillator circuit output
91	XVSS	–	Master clock ground
92	AVSS	–	Analog ground
93	LOUT2	O	Rch line output
94	AIN2	I	Rch opamp input
95	AOUT2	O	Rch analog output
96	AVDD	–	Analog power supply
97	AVSS	–	Analog ground
98	—	–	Not used
99	—	–	Not used
100	XRST	I	System reset input

• IC601 DISPLAY CONTROL (TMP87CH75F-6543)

Pin No.	Pin Name	I/O	Function
1	SEG35	O	FL segment signal output
2	VLOAD	–	Power supply (–25V) for FL segment signal output
3 to 10	LED1 to LED8	O	LED driver output
11	VSS	–	Ground
12	X-OUT	O	X'tall (8MHz)
13	X-IN	I	
14	RESET	I	Reset signal input from main controller
15	LED9	O	LED driver output (Not used)
16	LED10	O	LED driver output
17	TEST	I	Connected ground
18 to 22	LED11 to LED15	O	LED driver output
23	LED16	O	LED driver output (Not used)
24	VOL-A	I	Rotary encoder (S701) pulse input
25	LED17	O	LED driver output
26	JOG-A	I	Rotary encoder (S711) pulse input
27	CLOCK	I	Serial clock input from main controller
28	DATA	I	Serial data input from main controller
29	LED SELECT	O	LED select signal output
30	VDD	–	Power supply (+5V)
31	VSS	–	Ground
32	MODEL	I	Version select signal input
33 to 37	KEY1 to KEY5	I	Key input
38	EWS STANDBY	I	Not used
39	SIRCS	I	Remote commander signal input
40	VOL-B	I	Rotary encoder (S701) pulse input
41	JOG-B	I	Rotary encoder (S711) pulse input
42	SPEANA-1	I	Spectrum analyzer input
43	SPEANA-2	I	Spectrum analyzer input
44	SPEANA-3	I	Spectrum analyzer input
45	SPEANA-4	I	Spectrum analyzer input
46	L + R	I	Spectrum analyzer (high frequency) input
47	EWS SIGNAL/LED18	O	Not used
48	VASS	–	Ground
49	VAREF	I	Analog reference voltage input
50	VDD	–	Power supply (+5V)
51 to 56	GR1 to GR16	O	FL gride signal output
67 to 100	SEG1 to SEG34	O	FL segment signal output

FL : Fluorescent indicator tube

• IC701 MASTER CONTROL (uPD780018YGF-013-3BA)

Pin No.	Pin Name	I/O	Function
1	TA-MUTE	O	Line mute signal output
2	DBFB-H/L	O	DBFB H/L select signal output
3	427-LT	O	Latch signal output for IC201 (62427)
4	KCON-LT	O	Not used
5	KCON-ON	O	
6	F-RELAY	O	Front speaker relay control output (Not used)
7	R-RELAY	O	Rear speaker relay control output
8	PL-RELAY	O	Not used
9	TEST	I	Connected to ground
10	X2	O	X'tal (5MHz)
11	X1	I	
12	VDD	—	Power supply (+5V)
13	XT2	O	X'tal (32.768 KHz)
14	XT1	I	
15	RESET	I	Reset signal input
16	INT/IN	I	Connected to ground
17	INT/IN/OUT	I	
18	SCOR	O	Subcode data request signal output
19	SOFT-TEST	O	Software test port
20	AC-CUT	I	Back up signal input
21	RDS-INT	I	RDS data interrupt input
22	RDS-DATA	I	RDS data interrupt input
23	VDD	—	Power supply (+5V)
24	AVDD	I	Analog reference voltage input.
25	ADJ	I	CD adjust point port Normal "H"
26	A-SHUT	I	A Deck reel pulse detector
27	B-SHUT	I	B Deck reel pulse detector
28	B-HALF	I	Half detector signal input
29	CLK-CHECK	I	Connected to ground
30	SPEC-IN	I	Version select signal input
31	ADJ 2	I	Connected to ground
32	DEMO-CHANGE	I	DEMO H/L select signal input (Fixed at fixed at "L")
33	AVSS	—	Ground
34	SQ-DATA-IN	I	Subcode Q data clock input
35	—	—	Not used
36	SQ-CLK	I	Sub code Q data clock input
37	SW-ON/OFF	O	Not used
38, 39	FUNC 1, 2	I	Connected to ground
40	VSS	—	Ground
41	VOL-LAT	O	Latch signal to erectrial volume (IC604)
42	PL-LAT	O	Latch signal to pro-logic (IC601, 602)
43	COM-DIN	I	Connected to ground
44	COM-DOUT	O	Common serial data output

Pin No.	Pin Name	I/O	Function
45	COM-CLK	O	Common serial clock output
46	CD-POWER	O	CD power on signal output
47	CD-DATA	O	CD data output
48	CD-CLK	O	CD clock output
49	MSM-CMD	O	Not used
50	MSM-BUSY	I	Connected to ground
51	MSM-LT	O	Not used
52	MSM-NAR	I	
53	MSM-CH	O	
54	INPUT-CHANGE	O	Input sensitivity switching output
55	IIC-DATA	O	Data output for IC601
56	IIC-CLK	O	Clock output for IC601
57	XRST	O	CD reset signal output
58	XLT	O	CD latch signal output
59	FOUCUS-SW	O	Not used
60	TBL-L	O	Table motor control output
61	TBL-R	O	
62	TRAY-LED	O	CD tray LED ON/OFF output (Not used)
63	LOAD-OUT	O	Loading motor control signal output
64	LOAD-IN	O	
65	ST-CLK	O	Tuner clock output
66	ST-DIN	I	Tuner data input
67	ST-DOUT	O	Tuner data output
68	ST-CE	O	Tuner chip enable output
69	TUNED	I	Tuned detection for tuner
70	STEREO	I	Stereo detection for tuner
71	Vss	–	Ground
72	ST-MUTE	O	Tuner mute signal output
73	SENS2	I	BD Condition signal input
74	SENS	I	
75	DISC-SENS	I	Slit sensor of disc table input
76	T-SENS	I	CD table detection signal input
77	UP-SW	I	Up SW (S201) signal input (Not used)
78	ENC 3	I	Disc tray address detect encoder input
79	ENC 2	I	
80	ENC 1	I	
81	OUT-OPEN	O	Loading out detection signal output
82	CAP-M-H/N	O	Capstan motor H/N speed select signal output
83	B-TRG	O	Trigger motor control output
84	A-TRG	O	Trigger motor control output
85	TRG-LOW	O	Trigger motor control output
86	CAP-M-ON/OFF	O	Capstan motor ON/OFF signal output
87	PB-A/B	O	PB Deck A/Deck B select output

Pin No.	Pin Name	I/O	Function
88	EQ-H/N	O	Equalizer H/N select output
89	BIAS	O	Bias ON/OFF signal output
90	REC-MUTE	O	REC mute ON/OFF selection output
91	NR-ON/OFF	O	NR ON/OFF signal output
92	R/P-PASS	O	REC/PB/PASS selection output
93	TC-MUTE	O	TC mute ON/OFF selection output
94	A-PLAY-SW	I	Deck A play detect
95	B-PLAY-SW	I	Deck B play detect
96	TC-RELAY	O	REC/PB head selection output for IC602
97	A-HALF	I	Deck A cassette detect
98	POWER	O	POWER ON/OFF signal output
99	SW-F-CHG	O	Super woofer mode signal output (Not used)
100	STK-MUTE	O	Power amp ON/OFF signal output

SECTION 8 EXPLODED VIEWS

NOTE:

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE)



Cabinets color

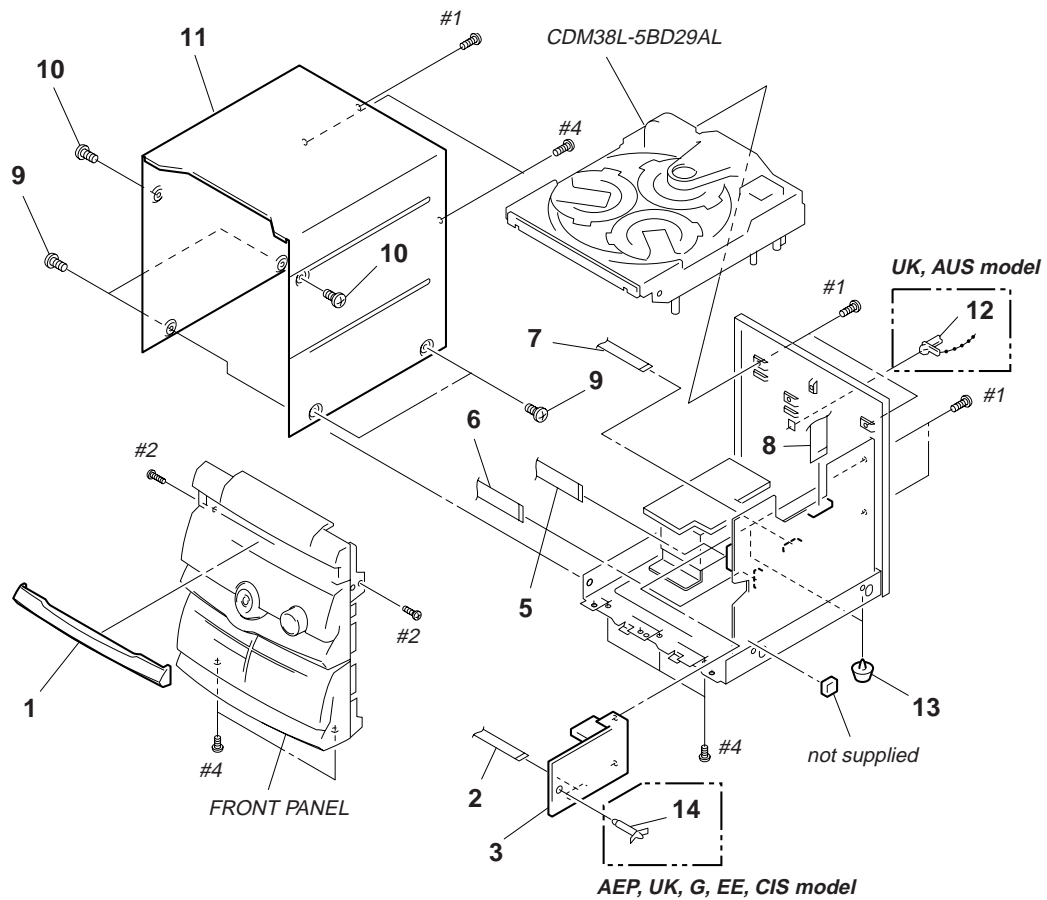
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

- Abbreviation
- CND : Canadian model
- G : German model.
- EE : East European model.
- AUS : Australian model.
- EA : Saudi Arabia model.
- SP : Singapore model.
- JE : Tourist model.
- HK : Hong Kong model.
- IA : Indonesia model.
- MY : Malaysia model.
- TH : Thailand model.
- E2 : Without SW tuner E model.
- E3 : With SW tuner E model.

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

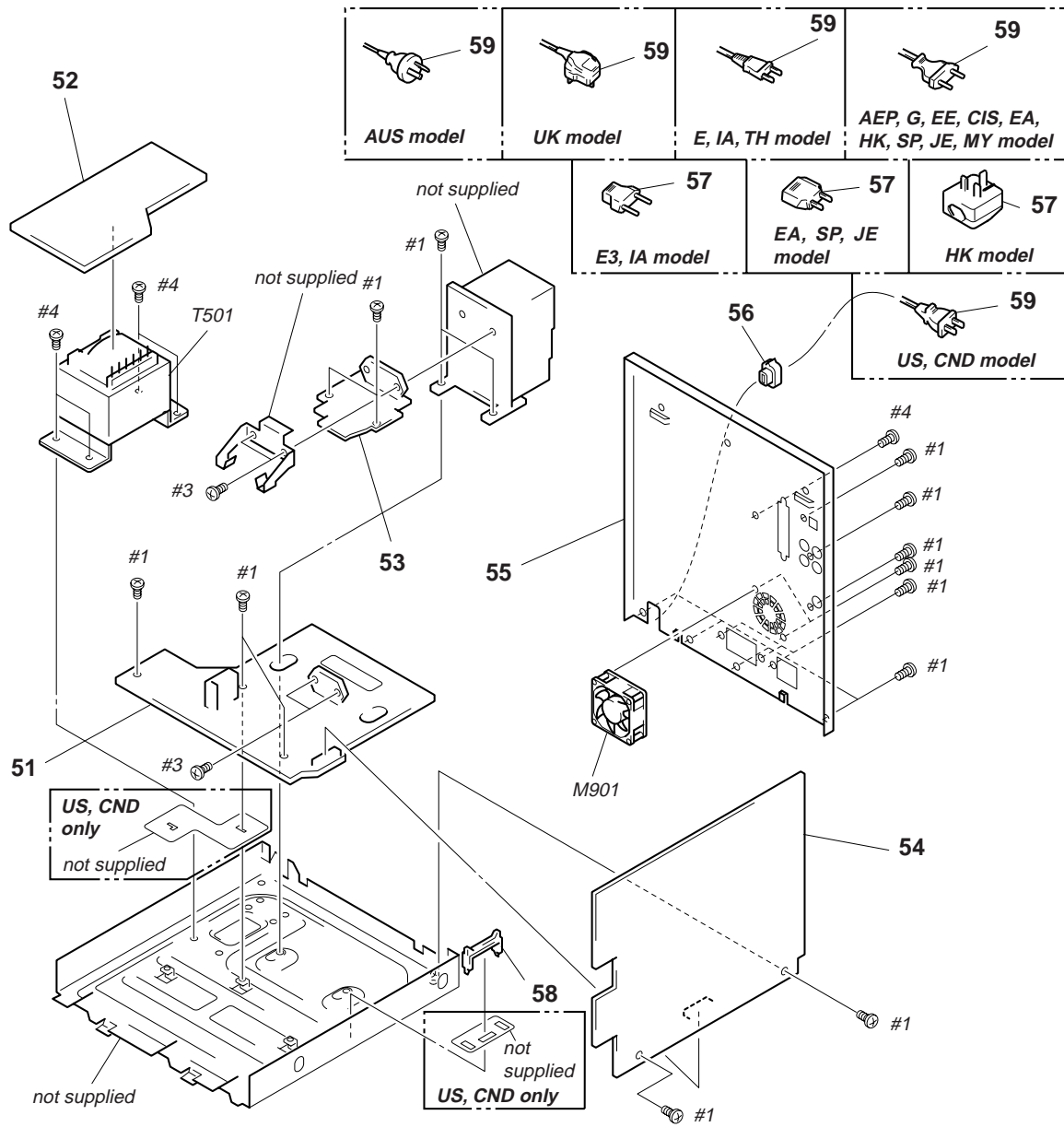
Les composants identifiés par une marque \triangle sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

8-1. CASE SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-988-078-21	PANEL, LOADING (BLACK)(RX100AV)		3	A-4303-570-A	TCB BOARD (EE,CIS)	
1	4-988-078-31	PANEL, LOADING (BLACK)(GR10AV)		3	A-4303-571-A	TCB BOARD (AEP,UK,G)	
1	4-991-701-41	PANEL, LOADING (SILVER)(RX100AV)		5	1-773-158-11	WIRE (FLAT TYPE) (21 CORE)	
1	4-988-078-51	PANEL, LOADING (SILVER)(GR10AV)		6	1-773-051-11	WIRE (FLAT TYPE) (17 CORE)	
1	4-988-078-61	PANEL, LOADING (BLACK)(D90AV)		7	1-769-948-11	WIRE (FLAT TYPE) (11 CORE)	
2	1-751-086-11	WIRE (FLAT CABLE)(13 CORE) (US,CND,E2,TH,AUS)		8	1-777-870-11	WIRE (FLAT TYPE) (19 CORE)	
2	1-773-012-11	WIRE (FLAT CABLE) (15 CORE) (Except US,CND,E2,TH,AUS)		9	3-363-099-01	SCREW (CASE 3 TP2)	
3	1-233-544-11	ENCAPSULATED COMPONENT (US,CND)		10	3-363-099-41	SCREW (CASE 3 TP2)	
3	1-233-545-11	ENCAPSULATED COMPONENT (E2,AUS,TH)		* 11	4-986-851-01	CASE (BLACK)	
3	1-233-546-11	ENCAPSULATED COMPONENT (E3,EA,HK,SP,JE,MY,IA)		* 11	4-988-767-01	CASE (SILVER)	
				12	4-956-370-12	BAND, PLUG FIXED (UK,AUS)	
				13	4-965-822-01	FOOT	
				14	4-924-098-91	HOLDER, PC BOARD (AEP,UK,G,EE,CIS)	

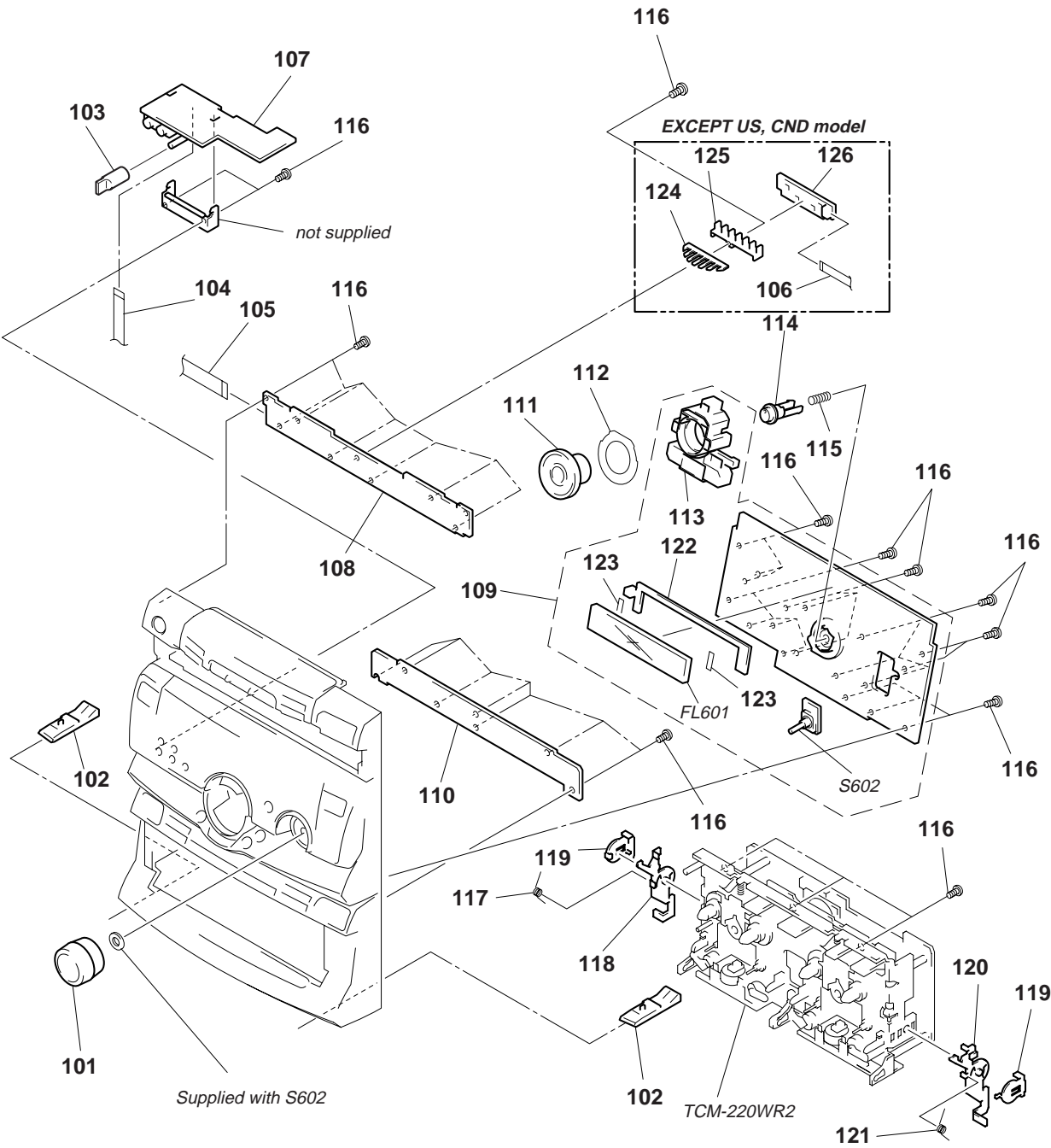
8-2. MAIN BOARD SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 51	A-4392-655-A	POWER BOARD, COMPLETE (GR10AV)		* 55	4-988-023-31	PANEL, BACK (JE)	
* 51	A-4392-656-A	POWER BOARD, COMPLETE (AEP,UK,G,EE,CIS)		* 55	4-988-023-51	PANEL, BACK (AUS)	
* 51	A-4392-657-A	POWER BOARD, COMPLETE (US,CND)		* 55	4-988-023-71	PANEL, BACK (TH)	
* 52	1-663-994-11	TRANS BOARD		* 55	4-988-275-01	PANEL, BACK (Malaysia product)(AEP)	
* 53	A-4392-662-A	SURROUND BOARD, COMPLETE (Except AEP,UK,G,EE,CIS)		* 55	4-988-275-11	PANEL, BACK (EA)	
* 53	A-4392-663-A	SURROUND BOARD, COMPLETE (AEP,UK,G,EE,CIS)		* 55	4-988-275-21	PANEL, BACK (MY)	
* 54	A-4392-628-A	MAIN BOARD, COMPLETE (E2)		56	3-703-244-00	BUSHING (FBS001), CORD (D90AV/GR10AV:EA,HK,SP,JE,MY,AUS/RX100AV)	
* 54	A-4392-629-A	MAIN BOARD, COMPLETE (E3,HK,SP,JE,IA)		56	3-703-571-11	BUSHING (S) (4516), CORD (TH)	
* 54	A-4392-630-A	MAIN BOARD, COMPLETE (AEP,UK,G)		56	4-966-266-01	BUSHING (S) (FSB002), CORD (E,IA)	
* 54	A-4392-631-A	MAIN BOARD, COMPLETE (RX100AV:US,CND)		△ 57	1-569-007-11	ADAPTOR, CONVERSION 2P (E3,IA)	
* 54	A-4398-048-A	MAIN BOARD, COMPLETE (D90AV)		△ 57	1-569-008-11	ADAPTOR, CONVERSION 2P (EA,SP,JE)	
* 54	A-4398-054-A	MAIN BOARD, COMPLETE (EE,CIS)		△ 57	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
* 54	A-4398-057-A	MAIN BOARD, COMPLETE (AUS)		* 58	4-988-533-01	HOLDER, PCB	
* 54	A-4398-310-A	MAIN BOARD, COMPLETE (TH)		△ 59	1-558-943-41	CORD, POWER (E,IA)	
* 54	A-4398-876-A	MAIN BOARD, COMPLETE (EA)		△ 59	1-575-042-21	CORD, POWER (US,CND)	
* 54	A-4398-882-A	MAIN BOARD, COMPLETE (MY)		△ 59	1-575-651-21	CORD, POWER (AEP,G,EE,CIS,EA,HK,SP,JE,MY)	
* 55	4-986-846-01	PANEL, BACK (RX100AV:US)		△ 59	1-696-845-11	CORD, POWER (AUS)	
* 55	4-986-846-11	PANEL, BACK (CND)		△ 59	1-751-326-21	CORD, POWER (TH)	
* 55	4-986-846-21	PANEL, BACK (Indonesia product)(AEP,UK,G)		△ 59	1-751-529-11	CORD, POWER (UK)	
* 55	4-986-846-31	PANEL, BACK (EE,CIS)		M901	1-698-792-11	FAN, DC	
* 55	4-986-846-41	PANEL, BACK (D90AV)		△ T501	1-431-136-11	TRANSFORMER, POWER (AEP,UK,G,EE,CIS)	
* 55	4-988-023-01	PANEL, BACK (E3,IA)		△ T501	1-431-137-11	TRANSFORMER, POWER (US,CND)	
* 55	4-988-023-11	PANEL, BACK (E2)		△ T501	1-431-138-11	TRANSFORMER, POWER (E,SP,JE,EA,HK,MY,AUS,IA)	
* 55	4-988-023-21	PANEL, BACK (SP)		△ T501	1-431-138-21	TRANSFORMER, POWER (TH)	
* 55	4-988-023-41	PANEL, BACK (HK)					

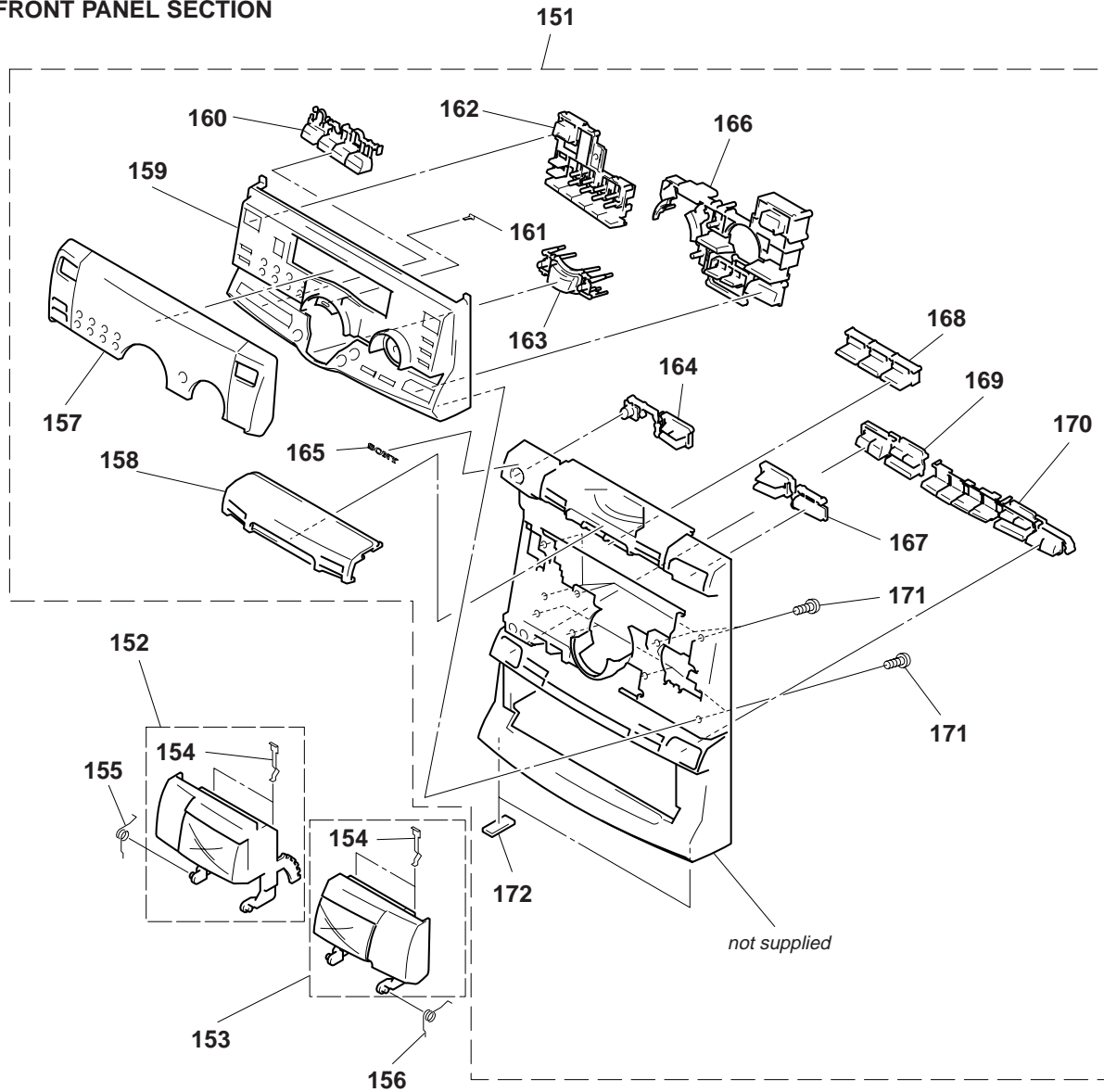
The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
--	--

8-3. PANEL BOARD SECTION



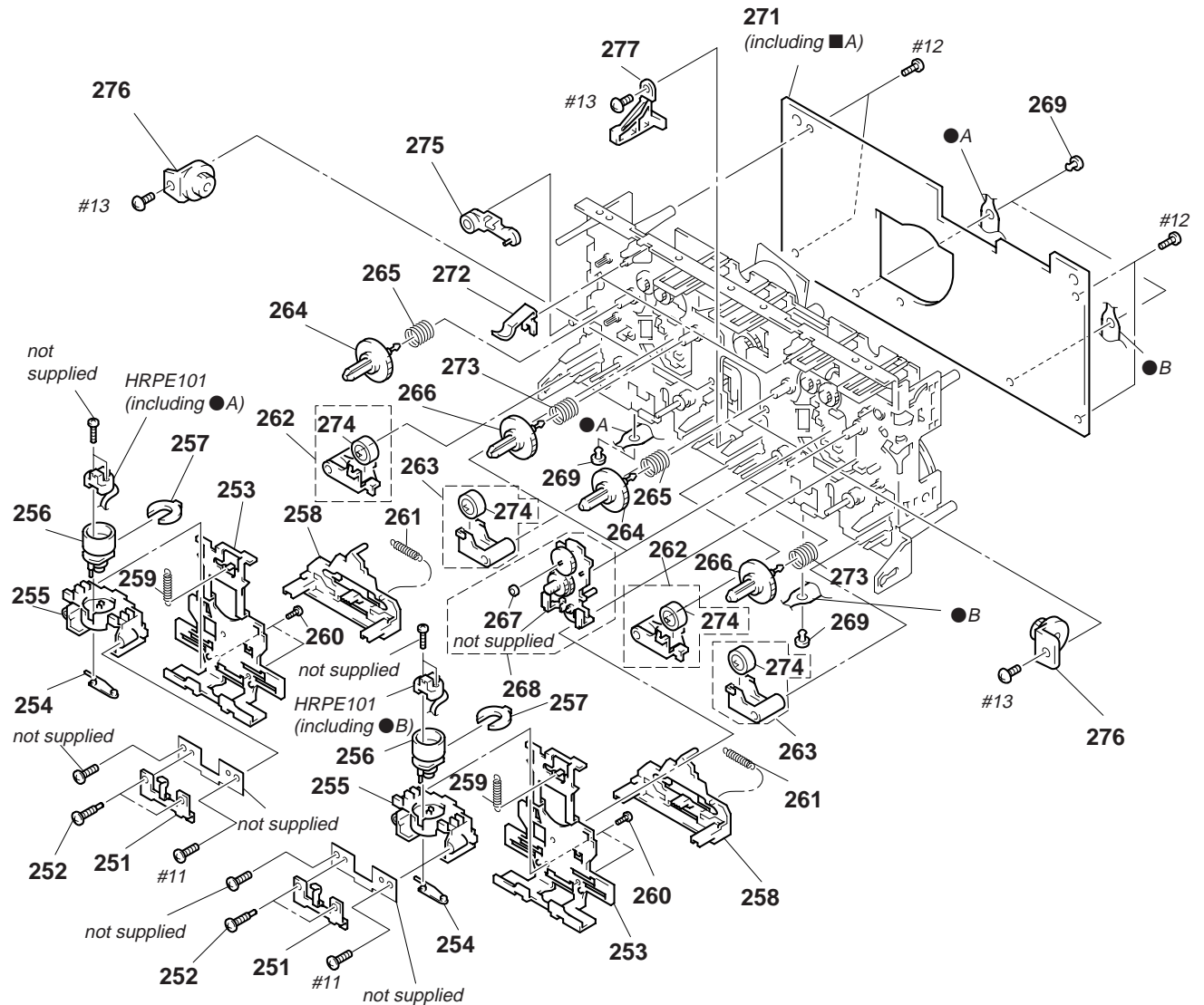
<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
101	4-986-877-11	KNOB (VOL) (BLACK)		111	X-4948-113-1	KNOB (JOG) ASSY (SILVER)	
101	4-986-877-31	KNOB (VOL) (SILVER)		112	4-986-881-11	JOG (PLATE)	
102	4-986-843-11	BUTTON (EJECT) (BLACK)		* 113	4-986-880-11	HOLDER (JOG)	
102	4-986-843-31	BUTTON (EJECT) (SILVER)		114	X-4947-919-1	BUTTON (E/N) ASSY (BLACK)	
103	4-986-893-11	KNOB (MICROPHONE) (BLACK)		114	X-4948-120-1	BUTTON (E/N) ASSY (SILVER)	
103	4-986-893-31	KNOB (MICROPHONE) (SILVER)		115	4-984-085-01	SPRING (ENTER), COMPRESSION	
104	1-769-909-11	WIRE (FLAT TYPE) (9 CORE)		116	4-951-620-01	SCREW (2.6X8), +BVTP	
105	1-777-869-11	WIRE (FLAT TYPE) (10 CORE) (Except US,CND)		117	4-990-130-11	SPRING (OPEN B)	
105	1-777-871-11	WIRE (FLAT TYPE) (8 CORE) (US,CND)		118	3-354-953-01	LEVER (LOCK LEVER L)	
106	1-777-936-11	WIRE (FLAT TYPE) (5 CORE) (Except US,CND)		119	3-354-957-01	JOINT (LOCK LEVER)	
* 107	A-4392-653-A	HP/MIC BOARD, COMPLETE		120	3-354-954-01	LEVER (LOCK LEVER R)	
* 108	A-4392-650-A	CD SW BOARD, COMPLETE (Except US,CND)		121	4-990-129-11	SPRING (OPEN A)	
* 108	A-4392-651-A	CD SW BOARD, COMPLETE (US,CND)		* 122	4-986-870-11	HOLDER, FL TUBE	
* 109	A-4392-643-A	PANEL BOARD, COMPLETE (GR10AV,RX100AV:EE,CIS)		* 123	4-932-810-11	CUSHION (FL)	
* 109	A-4392-644-A	PANEL BOARD, COMPLETE (AEP,UK,G)		124	4-986-863-11	INDICATOR (CD) (Except US,CND)	
* 109	A-4392-645-A	PANEL BOARD, COMPLETE (US,CND)		* 125	4-986-865-11	HOLDER (LED) (Except US,CND)	
* 110	A-4398-652-A	TC SW BOARD, COMPLETE		* 126	1-664-007-11	DECO BOARD (Except US,CND)	
111	X-4947-918-1	KNOB (JOG) ASSY (BLACK)		FL601	1-517-618-11	INDICATOR, TUBE FLUORESCENT	

8-4. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	X-4947-924-1	PANEL ASSY, FRONT (BLACK)(AEP,UK,G)		160	X-4948-112-1	BUTTON (DJ) ASSY (SILVER)	
151	X-4947-939-1	PANEL ASSY, FRONT (BLACK)(US,CND)		161	4-986-883-11	INDICATOR (JOG)	
151	X-4948-106-1	PANEL ASSY, FRONT (SILVER) (E3,EE,CIS,EA,HK,SP,JE,MY,AUS,IA,TH)		162	4-986-872-21	BUTTON (TIMER) (BLACK)	
151	X-4948-122-1	PANEL ASSY, FRONT (BLACK)(E2)		162	4-986-872-51	BUTTON (TIMER) (SILVER)	
151	X-4948-588-1	PANEL ASSY, FRONT (SILVER)(G)		163	4-986-897-11	BUTTON (BPM)	
152	X-4947-922-1	LID (A) ASSY, CASSETTE (BLACK)		164	4-986-860-11	BUTTON (POWER) (BLACK)	
152	X-4948-118-1	LID (A) ASSY, CASSETTE (SILVER)		164	4-986-860-31	BUTTON (POWER) (SILVER)	
153	X-4947-923-1	LID (B) ASSY, CASSETTE (BLACK)		165	4-962-708-21	EMBLEM (4-A), SONY	
153	X-4948-119-1	LID (B) ASSY, CASSETTE (SILVER)		166	X-4947-926-1	BUTTON (T/B) ASSY (BLACK)(AEP,UK,G)	
154	4-959-229-11	DETENT, CASSETTE		166	X-4947-940-1	BUTTON (T/B) ASSY (BLACK)(Except AEP,UK,G)	
155	4-989-903-11	SPRING (A DECK)		166	X-4948-108-1	BUTTON (T/B) ASSY (SILVER) (Except AEP,UK,G)	
156	4-989-904-11	SPRING (B DECK)		166	X-4948-597-1	BUTTON (T/B) ASSY (SILVER)(G)	
157	4-986-869-41	WINDOW (STR) (BLACK)(Except AEP,UK,G)		167	4-986-861-11	BUTTON (PLAY) (BLACK)	
157	4-986-869-51	WINDOW (STR) (BLACK)(AEP,UK,G)		167	4-986-861-31	BUTTON (PLAY) (SILVER)	
157	4-986-869-81	WINDOW (STR) (SILVER)(Except AEP,UK,G)		168	4-986-862-11	BUTTON (CD)	
157	4-991-700-01	WINDOW (STR) (SILVER)(G)		169	4-986-901-11	BUTTON (A DECK) (BLACK)	
158	4-986-859-11	WINDOW (CD) (Except US,CND)		169	4-986-901-31	BUTTON (A DECK) (SILVER)	
158	4-986-859-41	WINDOW (CD) (US,CND)		170	4-986-902-11	BUTTON (B DECK) (BLACK)	
159	4-986-866-11	PANEL, SUB (BLACK)(US,CND)		170	4-986-902-31	BUTTON (B DECK) (SILVER)	
159	4-986-866-31	PANEL, SUB (SILVER)(Except US,CND)		171	4-951-620-01	SCREW (2.6X8), +BVTP	
159	4-986-866-71	PANEL, SUB (BLACK)(Except US,CND)		172	4-930-336-61	FOOT (FELT)	
160	X-4947-925-1	BUTTON (DJ) ASSY (BLACK)					

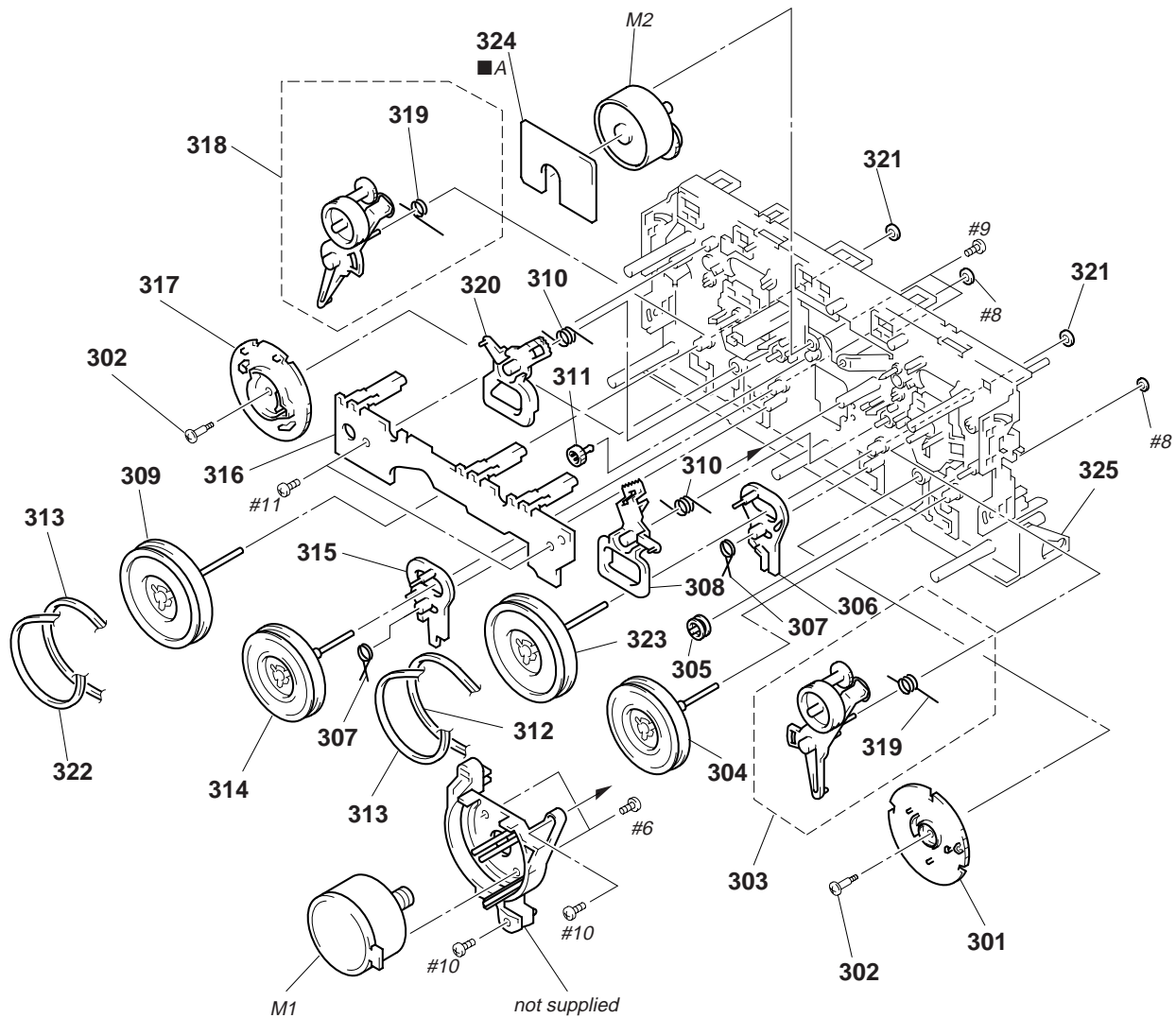
8-5. TC MECHANISM SECTION 1 (TCM-220WR2)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
251	3-908-560-01	SPRING, AZIMUTH ADJUSTMENT		266	X-3371-305-1	REEL (T) ASSY	
252	3-919-684-01	SCREW, AZIMUTH ADJUSTMENT		267	3-669-465-01	WASHER (1.5), STOPPER	
* 253	X-3373-113-1	SLIDER (HEAD) ASSY		268	X-3370-173-1	TU ASSY	
254	3-908-556-01	SPRING, HEAD TOGGLE		269	3-939-862-01	CLIP	
255	3-908-558-02	FITTING BLOCK, HEAD		* 271	A-2007-131-A	AUDIO BOARD, COMPLETE	
256	3-908-557-02	ROTARY BLOCK, HEAD		272	3-930-972-01	DETENT, HALF	
* 257	3-908-559-01	STOPPER, AZIMUTH		273	3-917-142-01	SPRING, COMPRESSION	
258	3-908-555-01	SLIDER (REV SLIDER)		274	3-355-808-02	PINCH ROLLER	
259	3-917-143-11	SPRING, TENSION		275	3-938-863-01	STOPPER	
260	3-388-848-01	SCREW (P2X6)(B TIGHT)		276	3-354-963-01	DAMPER	
261	3-939-371-01	SPRING (1), TENSION		* 277	4-980-439-01	FULCRUM, HOLDER	
262	X-3369-909-1	PINCH LEVER (REV) ASSY		HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
263	X-3369-908-1	PINCH LEVER (FWD) ASSY		HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	
264	3-908-613-01	GEAR (S), REEL					
265	3-917-141-01	SPRING, COMPRESSION					

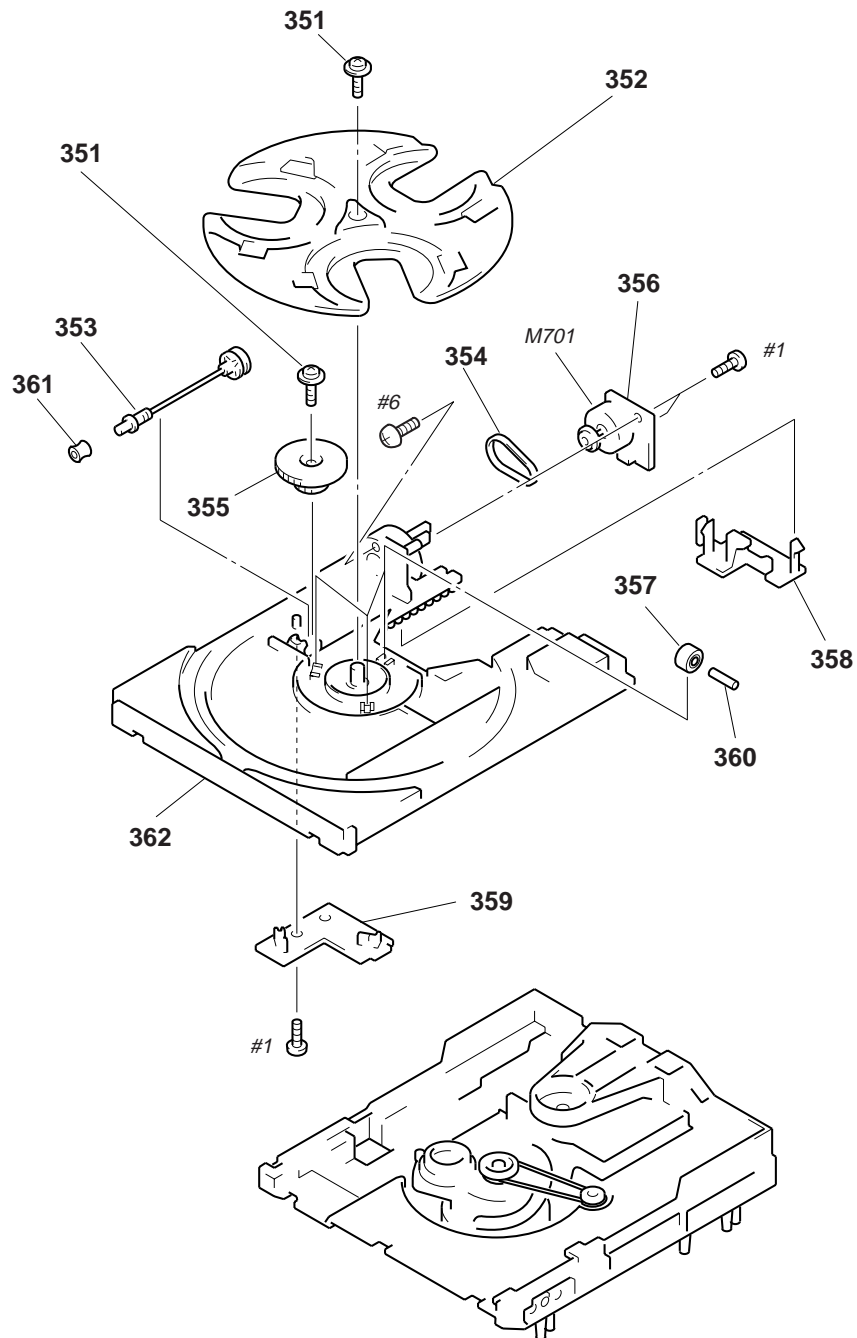
8-6. TC MECHANISM SECTION 2 (TCM-220WR2)

■A: MOTOR board (Supplied with AUDIO board)



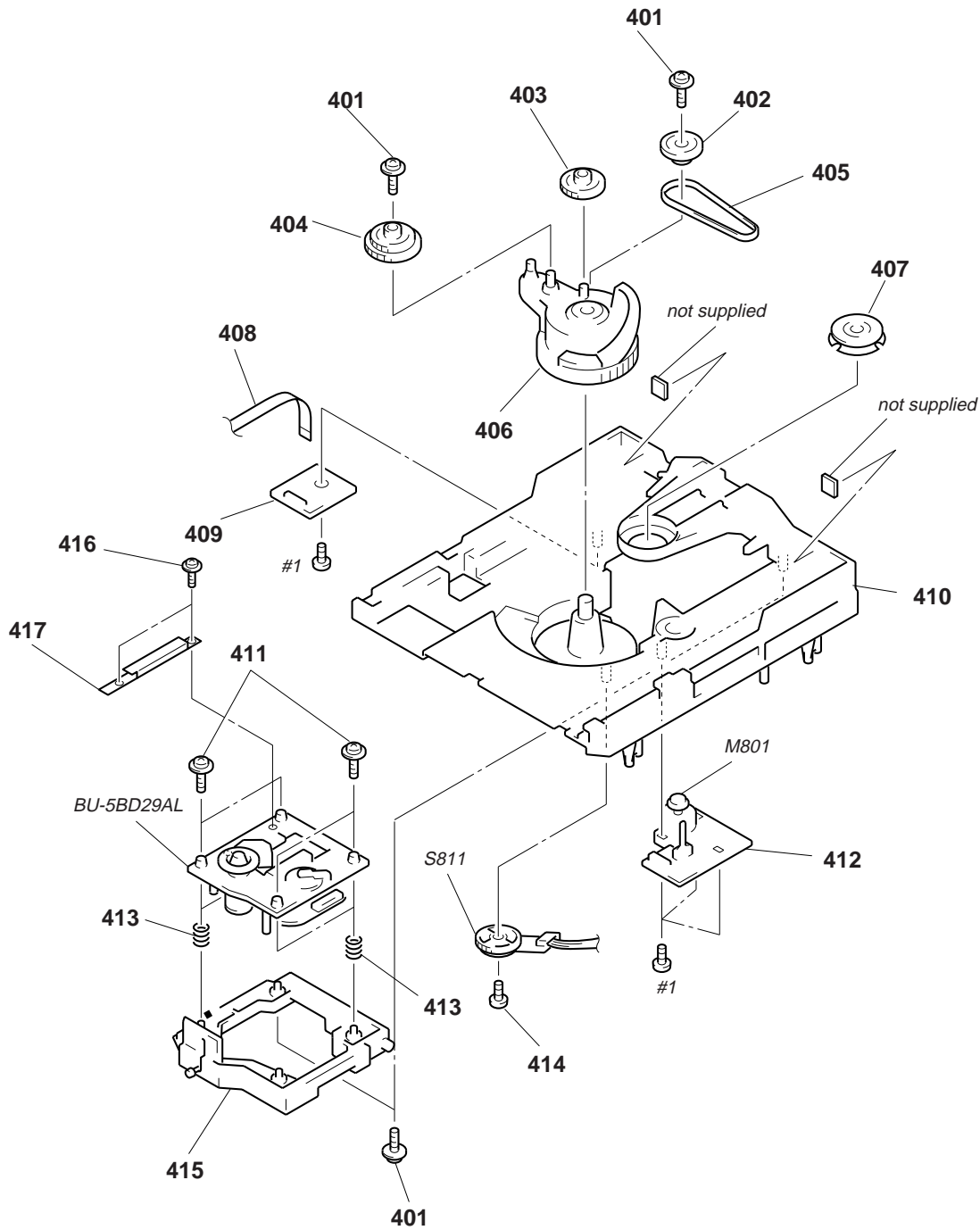
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
301	3-908-597-01	CAM (A)		315	3-908-600-01	LEVER (REV-B)	
302	3-908-608-11	SCREW, STEP		* 316	1-650-669-11	LEAF SWITCH BOARD	
303	X-3372-930-1	ARM (A) ASSY, FR		317	3-908-598-01	CAM (B)	
304	X-3370-169-1	FLYWHEEL (AR) ASSY		318	X-3372-931-1	ARM (B) ASSY, FR	
305	3-928-047-01	PULLEY, TENSION		319	3-911-114-01	SPRING (FR), TORSION	
306	3-908-599-01	LEVER (REV-A)		320	3-908-604-01	LEVER (TRIGGER B)	
307	3-908-601-01	SPRING (REV LEVER), TORSION		321	3-911-115-01	WASHER, STOPPER	
308	3-908-603-01	LEVER (TRIGGER A)		322	3-917-176-11	BELT (B)	
309	X-3370-170-1	FLYWHEEL (BF) ASSY		323	X-3370-172-1	FLYWHEEL (AF) ASSY	
310	3-908-605-01	SPRING (TRIGGER), TORSION		* 324	A-2007-131-A	AUDIO BOARD, COMPLETE	
311	3-908-609-01	GEAR, TRIGGER		325	X-3371-441-1	CHASSIS ASSY, MECHANICAL	
312	3-913-845-11	BELT (A)					
313	3-913-846-11	BELT (FR)		M1	X-3371-223-1	MOTOR ASSY (CAPSTAN)	
314	X-3370-171-1	FLYWHEEL (BR) ASSY		M2	A-2004-410-A	MOTOR ASSY (TRIGGER)	

8-7. CD MECHANISM SECTION 1 (CDM38L-5BD29AL)



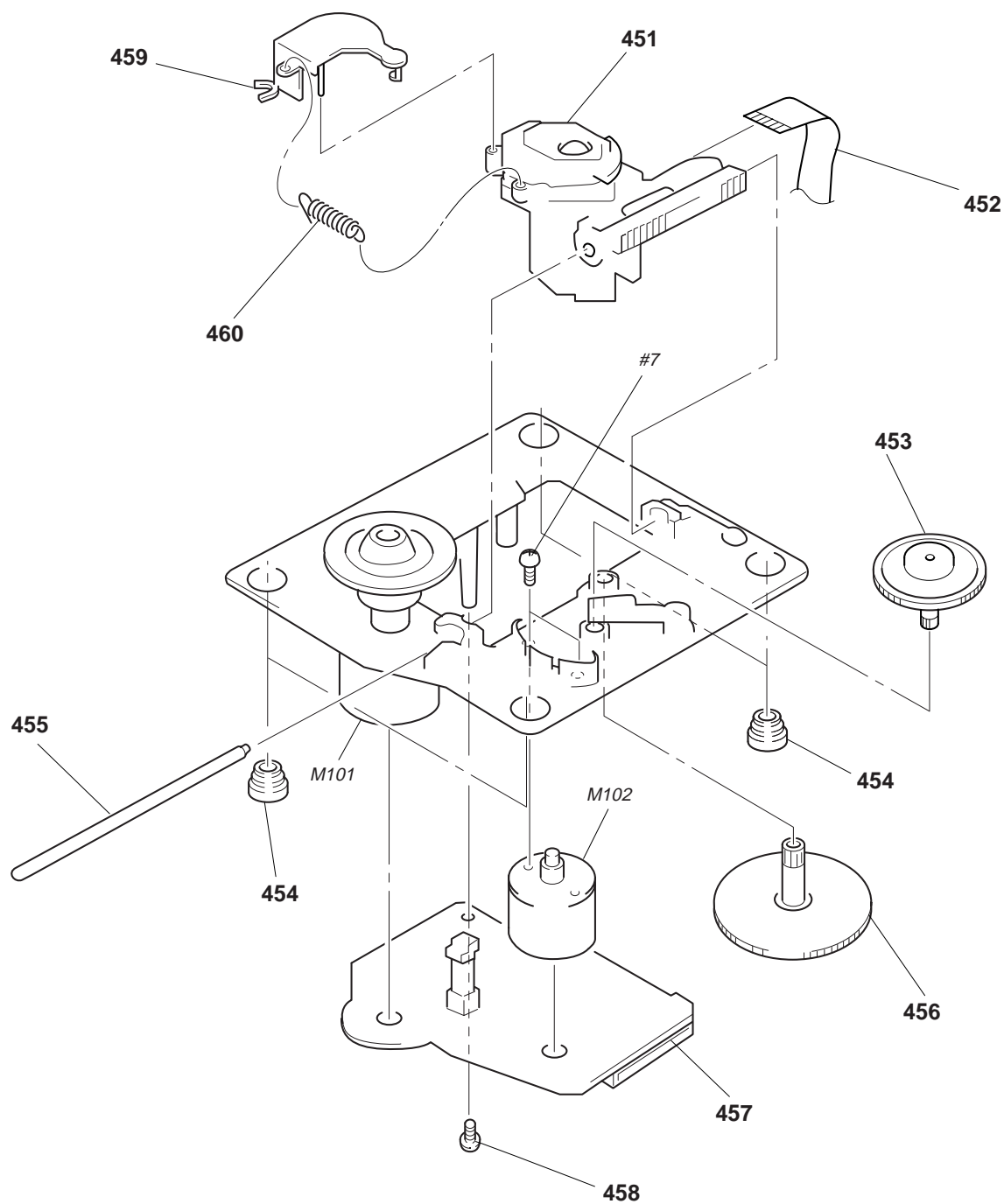
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
351	4-917-583-21	BRACKET, YOKE		358	4-977-941-01	BEARING (WORM)	
352	4-977-945-01	TRAY (TURN)		* 359	1-658-576-11	SENSOR BOARD	
353	X-4946-665-1	SHAFT ASSY, WORM		360	4-934-376-01	SHAFT (ROLLER)	
354	4-977-943-01	BELT (TURN) (1.2)					
355	4-977-956-01	WHEEL, WORM		361	4-981-187-01	COLLAR (WORM)	
* 356	1-658-577-11	MOTOR (TURN) BOARD		362	4-977-944-01	TRAY (SLIDE)	
357	X-4924-457-1	ROLLER ASSY		M701	A-4672-004-A	MOTOR ASSY (TURN)	

8-8. CD MECHANISM SECTION 2 (CDM38L-5BD29AL)



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
401	4-917-583-71	BRACKET, YOKE		411	4-985-672-01	SCREW (+PTPWH M2.6X6), FLOATING	
402	4-977-954-01	PULLEY (SL)		* 412	1-658-578-11	MOTOR (SLIDE) BOARD	
403	4-977-953-01	GEAR (SL-A)		413	4-958-593-01	SPRING (BU), COMPRESSION	
404	4-977-955-01	GEAR (SL-B)		414	4-951-620-41	SCREW (2.6), +BVTP	
405	4-977-942-01	BELT (SL) (1.4)		* 415	X-4946-666-1	HOLDER (BU) ASSY	
406	X-4946-667-1	CAM ASSY, BU		416	4-985-672-01	SCREW (SLIDER), STEP	
407	1-452-538-11	MAGNET		417	4-989-492-01	SLIDER (38)	
408	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)		M801	A-4672-004-A	MOTOR ASSY (SLIDE)	
* 409	1-658-575-11	CONNECTOR BOARD		S811	1-473-335-11	ENCODER, ROTARY (BU, TRAY ADDRESS DET)	
* 410	X-4946-668-1	CHASSIS (CDM) ASSY					

8-9. BASE UNIT SECTION (BU-5BD29AL)



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Δ 451	8-820-020-01	OPTICAL PICK-UP BLOCK KSS-213D/Q-NP		* 457	A-4699-522-A	BD BOARD, COMPLETE	
452	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)		458	4-951-620-01	SCREW (2.6X8), +BVTP	
453	4-912-567-21	GEAR (M)		459	4-989-491-01	COVER, LENS	
454	4-951-940-01	INSULATOR (BU)		460	4-989-819-02	SPRING, TENSION	
455	4-917-565-01	SHAFT, SLED					
				M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
456	4-917-564-01	GEAR (P), FLATNESS		M102	X-4917-504-1	MOTOR ASSY (SLED)	

AUDIO

SECTION 9 ELECTRICAL PARTS LIST

Note:

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

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

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

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked “*” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
All resistors are in ohms
METAL: Metal-film resistor
METAL OXIDE: Metal Oxide-film resistor
F : nonflammable
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A..., uPA...: μ PA..., uPB...: μ PB...,
uPC...: μ PC..., uPD...: μ PD...
- CAPACITORS
uF : μ F
- COILS
uH : μ H
- Abbreviation
CND : Canadian model
G : German model.
EE : East European model.
AUS : Australian model.
EA : Saudi Arabia model.
SP : Singapore model.
JE : Tourist model.
HK : Hong Kong model.
IA : Indonesia model.
MY : Malaysia model.
TH : Thailand model.
E2 : Without SW tuner E model.
E3 : With SW tuner E model.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-2007-131-A	AUDIO BOARD, COMPLETE ***** (including MOTOR board)				< CONNECTOR >	
		< CAPACITOR >		CN601	1-695-382-31	PIN, CONNECTOR (PC BOARD) 21P	
				CN602	1-564-718-11	PIN, CONNECTOR (SMALL TYPE) 2P	
				* CN651	1-564-521-11	PLUG, CONNECTOR 6P	
						< IC >	
C301	1-162-289-31	CERAMIC	390PF 10% 50V	IC601	8-759-111-44	IC uPC4570C-1	
C302	1-126-968-11	ELECT	100uF 20% 6.3V	IC602	8-759-143-54	IC uPC1330HA	
C303	1-162-282-31	CERAMIC	100PF 10% 50V	IC611	8-759-111-44	IC uPC4570C-1	
C304	1-130-483-00	MYLAR	0.01uF 5% 50V			< COIL >	
C305	1-107-715-11	ELECT	22uF 20% 16V				
				L331	1-410-780-11	INDUCTOR 27mH	
C311	1-162-289-31	CERAMIC	390PF 10% 50V	L431	1-410-780-11	INDUCTOR 27mH	
C313	1-162-282-31	CERAMIC	100PF 10% 50V			< MOTOR >	
C314	1-130-487-00	MYLAR	0.022uF 5% 50V	M2	A-2004-410-A	MOTOR ASSY (TRIGGER)	
C315	1-126-233-11	ELECT	22uF 20% 50V			< TRANSISTOR >	
C331	1-137-427-11	FILM	120PF 5% 50V				
				Q621	8-729-142-46	TRANSISTOR 2SC2001-LK	
C332	1-162-288-31	CERAMIC	330PF 10% 50V	Q622	8-729-142-46	TRANSISTOR 2SC2001-LK	
C333	1-162-209-31	CERAMIC	27PF 5% 50V	Q623	8-729-801-93	TRANSISTOR 2SD1387	
C401	1-162-289-31	CERAMIC	390PF 10% 50V	Q651	8-729-900-65	TRANSISTOR DTA144ES	
C402	1-126-968-11	ELECT	100uF 20% 6.3V			< RESISTOR >	
C403	1-162-282-31	CERAMIC	100PF 10% 50V	R301	1-247-881-00	CARBON 120K 5% 1/4W	
				R302	1-249-409-11	CARBON 220 5% 1/4W F	
C404	1-130-483-00	MYLAR	0.01uF 5% 50V	R303	1-249-433-11	CARBON 22K 5% 1/4W	
C405	1-107-715-11	ELECT	22uF 20% 16V	R304	1-247-889-00	CARBON 270K 5% 1/4W	
C411	1-162-289-31	CERAMIC	390PF 10% 50V	R305	1-247-858-11	CARBON 13K 5% 1/4W	
C413	1-162-282-31	CERAMIC	100PF 10% 50V				
C414	1-130-487-00	MYLAR	0.022uF 5% 50V	R311	1-247-881-00	CARBON 120K 5% 1/4W	
				R312	1-247-807-31	CARBON 100 5% 1/4W	
C415	1-126-233-11	ELECT	22uF 20% 50V	R314	1-247-882-11	CARBON 130K 5% 1/4W	
C431	1-137-427-11	FILM	120PF 5% 50V	R315	1-247-850-11	CARBON 6.2K 5% 1/4W	
C432	1-162-288-31	CERAMIC	330PF 10% 50V	R331	1-249-430-11	CARBON 12K 5% 1/4W	
C433	1-162-209-31	CERAMIC	27PF 5% 50V				
C601	1-104-396-11	ELECT	10uF 20% 16V	R401	1-247-881-00	CARBON 120K 5% 1/4W	
				R402	1-249-409-11	CARBON 220 5% 1/4W F	
C602	1-104-396-11	ELECT	10uF 20% 16V	R403	1-249-433-11	CARBON 22K 5% 1/4W	
C611	1-124-907-11	ELECT	10uF 20% 50V	R404	1-247-889-00	CARBON 270K 5% 1/4W	
C612	1-124-907-11	ELECT	10uF 20% 50V	R405	1-247-858-11	CARBON 13K 5% 1/4W	
C621	1-137-150-11	FILM	0.01uF 5% 100V				
C622	1-126-961-11	ELECT	2.2uF 20% 50V	R411	1-247-881-00	CARBON 120K 5% 1/4W	
				R412	1-247-807-31	CARBON 100 5% 1/4W	
C623	1-136-155-00	FILM	0.015uF 5% 50V				
C624	1-130-481-00	MYLAR	0.0068uF 5% 50V				
C625	1-130-481-00	MYLAR	0.0068uF 5% 50V				
C627	1-124-903-11	ELECT	1uF 20% 50V				
C628	1-136-153-00	FILM	0.01uF 5% 50V				
C642	1-104-664-11	ELECT	47uF 20% 16V				
C651	1-161-494-00	CERAMIC	0.022uF 25V				

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
R414	1-247-882-11	CARBON 130K 5%	1/4W	C123	1-163-038-91	CERAMIC CHIP 0.1uF	25V
R415	1-247-850-11	CARBON 6.2K 5%	1/4W	C124	1-126-607-11	ELECT CHIP 47uF	20% 4V
R431	1-249-430-11	CARBON 12K 5%	1/4W	C125	1-164-232-11	CERAMIC CHIP 0.01uF	50V
				C126	1-163-038-91	CERAMIC CHIP 0.1uF	25V
R601	1-249-409-11	CARBON 220 5%	1/4W F	C127	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V
R602	1-249-409-11	CARBON 220 5%	1/4W F	C128	1-163-135-00	CERAMIC CHIP 560PF	5% 50V
R608	1-249-409-11	CARBON 220 5%	1/4W F	C129	1-163-038-91	CERAMIC CHIP 0.1uF	25V
R609	1-249-433-11	CARBON 22K 5%	1/4W	C130	1-164-336-11	CERAMIC CHIP 0.33uF	25V
R611	1-249-409-11	CARBON 220 5%	1/4W F	C131	1-164-346-11	CERAMIC CHIP 1uF	16V
R612	1-249-409-11	CARBON 220 5%	1/4W F	C140	1-110-501-11	CERAMIC CHIP 0.33uF	10% 16V
△ R621	1-212-851-00	FUSIBLE 5.6 5%	1/4W F	C154	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
△ R622	1-212-851-00	FUSIBLE 5.6 5%	1/4W F	C161	1-164-005-11	CERAMIC CHIP 0.47uF	25V
R623	1-249-432-11	CARBON 18K 5%	1/4W	C162	1-164-232-11	CERAMIC CHIP 0.01uF	50V
R624	1-249-432-11	CARBON 18K 5%	1/4W	C163	1-163-117-00	CERAMIC CHIP 100PF	5% 50V
R625	1-249-429-11	CARBON 10K 5%	1/4W	C164	1-163-145-00	CERAMIC CHIP 0.0015uF	5% 50V
R651	1-247-856-00	CARBON 11K 5%	1/4W	C165	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V
R652	1-247-856-00	CARBON 11K 5%	1/4W	C166	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
R653	1-249-441-11	CARBON 100K 5%	1/4W	C167	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
		< VARIABLE RESISTOR >		C168	1-163-137-00	CERAMIC CHIP 680PF	5% 50V
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K		C169	1-163-121-00	CERAMIC CHIP 150PF	5% 50V
RV311	1-238-598-11	RES, ADJ, CARBON 2.2K		C170	1-163-099-00	CERAMIC CHIP 18PF	5% 50V
RV341	1-238-551-11	RES, ADJ, CARBON 220K		C171	1-163-237-11	CERAMIC CHIP 27PF	5% 50V
RV401	1-238-598-11	RES, ADJ, CARBON 2.2K		C173	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV411	1-238-598-11	RES, ADJ, CARBON 2.2K		C174	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV441	1-238-551-11	RES, ADJ, CARBON 220K		C175	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV651	1-238-599-11	RES, ADJ, CARBON 4.7K		C176	1-163-038-91	CERAMIC CHIP 0.1uF	25V
RV652	1-238-599-11	RES, ADJ, CARBON 4.7K		C177	1-163-038-91	CERAMIC CHIP 0.1uF	25V
		< TRANSFORMER >		C178	1-163-038-91	CERAMIC CHIP 0.1uF	25V
T621	1-423-980-11	TRANSFORMER, BIAS OSCILLATION		C179	1-163-038-91	CERAMIC CHIP 0.1uF	25V
*****				C181	1-126-205-11	ELECT CHIP 47uF	20% 6.3V
*****				C182	1-126-393-11	ELECT 33uF	20% 10V
*****				C183	1-124-778-00	ELECT CHIP 22uF	20% 6.3V
*****				C185	1-164-232-11	CERAMIC CHIP 0.01uF	50V
*****				C188	1-163-235-11	CERAMIC CHIP 22PF	5% 50V
*	A-4699-522-A	BD BOARD, COMPLETE		C189	1-163-235-11	CERAMIC CHIP 22PF	5% 50V

		< CAPACITOR >					
C101	1-126-607-11	ELECT CHIP 47uF	20% 4V				
C102	1-163-141-00	CERAMIC CHIP 0.001uF	5% 50V				
C103	1-164-346-11	CERAMIC CHIP 1uF	16V				
C105	1-163-038-91	CERAMIC CHIP 0.1uF	25V				
C106	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V				
C107	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V				
C108	1-164-232-11	CERAMIC CHIP 0.01uF	50V				
C109	1-164-232-11	CERAMIC CHIP 0.01uF	50V				
C110	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V				
C111	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V				
C112	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V				
C113	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V				
C114	1-164-005-11	CERAMIC CHIP 0.47uF	25V				
C115	1-126-607-11	ELECT CHIP 47uF	20% 4V				
C116	1-163-016-00	CERAMIC CHIP 0.0039uF	10% 50V				
C117	1-164-005-11	CERAMIC CHIP 0.47uF	25V				
C118	1-164-004-11	CERAMIC CHIP 0.1uF	10% 25V				
C119	1-163-038-91	CERAMIC CHIP 0.1uF	25V				
C120	1-124-779-00	ELECT CHIP 10uF	20% 16V				
C121	1-163-038-91	CERAMIC CHIP 0.1uF	25V				
C122	1-164-232-11	CERAMIC CHIP 0.01uF	50V				

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	Ref. No.	Part No.	Description				Remark		
< TRANSISTOR >							R178	1-216-025-91	METAL GLAZE	100	5%	1/10W			
Q101	8-729-010-08	TRANSISTOR	MSB710-R				R179	1-216-025-91	METAL GLAZE	100	5%	1/10W			
							< RESISTOR >								
R102	1-216-001-00	METAL CHIP	10	5%	1/10W		R180	1-216-025-91	METAL GLAZE	100	5%	1/10W			
R104	1-216-093-00	METAL CHIP	68K	5%	1/10W		R181	1-216-025-91	METAL GLAZE	100	5%	1/10W			
R105	1-216-088-00	METAL CHIP	43K	5%	1/10W		R188	1-216-037-00	METAL CHIP	330	5%	1/10W			
R106	1-216-088-00	METAL CHIP	43K	5%	1/10W		R190	1-216-097-91	METAL GLAZE	100K	5%	1/10W			
R107	1-216-088-00	METAL CHIP	43K	5%	1/10W		R191	1-216-105-91	METAL GLAZE	220K	5%	1/10W			
							< SWITCH >								
R108	1-216-088-00	METAL CHIP	43K	5%	1/10W		S101	1-572-085-11	SWITCH, LEAF (LIMIT)						
						< VIBRATOR >									
R109	1-216-093-00	METAL CHIP	68K	5%	1/10W		X101	1-767-408-21	VIBRATOR, CRYSTAL (16.9344MHZ)						
R114	1-216-101-00	METAL CHIP	150K	5%	1/10W										
R115	1-216-101-00	METAL CHIP	150K	5%	1/10W										
R116	1-216-061-00	METAL CHIP	3.3K	5%	1/10W		*****								
R117	1-216-069-00	METAL CHIP	6.8K	5%	1/10W		*	A-4392-650-A	CD SW BOARD, COMPLETE (Except US,CND)						
R118	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W				*****						
R119	1-216-085-00	METAL CHIP	33K	5%	1/10W										
R120	1-216-089-91	METAL GLAZE	47K	5%	1/10W		*	A-4392-651-A	CD SW BOARD, COMPLETE (US,CND)						
R121	1-216-114-00	METAL GLAZE	510K	5%	1/10W				*****						
R122	1-216-097-91	METAL GLAZE	100K	5%	1/10W				< CONNECTOR >						
R123	1-216-099-00	METAL CHIP	120K	5%	1/10W		* CN602	1-568-824-11	SOCKET, CONNECTOR 5P						
R124	1-216-091-00	METAL CHIP	56K	5%	1/10W				(GR10AV/RX100AV: AEP,UK,G,EE,CIS)						
R125	1-216-069-00	METAL CHIP	6.8K	5%	1/10W				CN606	1-568-853-11	SOCKET, CONNECTOR 10P				
R126	1-216-063-91	METAL GLAZE	3.9K	5%	1/10W		(GR10AV/RX100AV: AEP,UK,G,EE,CIS)								
R127	1-216-089-91	METAL GLAZE	47K	5%	1/10W		* CN606	1-568-851-11			SOCKET, CONNECTOR 8P				
R128	1-216-098-00	METAL CHIP	110K	5%	1/10W				(D90AV/RX100AV: US,CND)						
R129	1-216-025-91	METAL GLAZE	100	5%	1/10W				< DIODE >						
R130	1-216-079-00	METAL CHIP	18K	5%	1/10W		D626	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)						
R131	1-216-079-00	METAL CHIP	18K	5%	1/10W				D627	8-719-056-13	DIODE SML79423C-TP15 (DISC 1)				
R132	1-216-061-00	METAL CHIP	3.3K	5%	1/10W						D628	8-719-056-13	DIODE SML79423C-TP15 (DISC 2)		
R133	1-216-061-00	METAL CHIP	3.3K	5%	1/10W		D629	8-719-056-13					DIODE SML79423C-TP15 (DISC 2)		
R134	1-216-065-00	METAL CHIP	4.7K	5%	1/10W				D630	8-719-056-13			DIODE SML79423C-TP15 (DISC 3)		
R135	1-216-065-00	METAL CHIP	4.7K	5%	1/10W						D631	8-719-056-13	DIODE SML79423C-TP15 (DISC 3)		
R136	1-216-073-00	METAL CHIP	10K	5%	1/10W		D632	8-719-058-03					DIODE SEL5423E-TP15 (▷)		
R137	1-216-065-00	METAL CHIP	4.7K	5%	1/10W				D633	8-719-063-91			DIODE SLR325DC-P-T32 (Ⅱ)		
R138	1-216-025-91	METAL GLAZE	100	5%	1/10W						< TRANSISTOR >				
R156	1-216-081-00	METAL CHIP	22K	5%	1/10W		Q612	8-729-119-76			TRANSISTOR	2SA1175-HFE			
R157	1-216-069-00	METAL CHIP	6.8K	5%	1/10W		Q613	8-729-119-76	TRANSISTOR	2SA1175-HFE					
R158	1-216-001-00	METAL CHIP	10	5%	1/10W		Q614	8-729-119-76	TRANSISTOR	2SA1175-HFE					
R159	1-216-121-91	METAL GLAZE	1M	5%	1/10W		Q616	8-729-119-76	TRANSISTOR	2SA1175-HFE					
R161	1-216-097-91	METAL GLAZE	100K	5%	1/10W		< RESISTOR >								
R162	1-216-073-00	METAL CHIP	10K	5%	1/10W		R709	1-249-401-11	CARBON	47	5%	1/4W	F		
R163	1-216-121-91	METAL GLAZE	1M	5%	1/10W		R710	1-249-413-11	CARBON	470	5%	1/4W	F		
R164	1-216-061-00	METAL CHIP	3.3K	5%	1/10W		R711	1-247-815-91	CARBON	220	5%	1/4W			
R165	1-216-049-91	METAL GLAZE	1K	5%	1/10W		R712	1-249-411-11	CARBON	330	5%	1/4W			
R166	1-216-073-00	METAL CHIP	10K	5%	1/10W		R713	1-249-413-11	CARBON	470	5%	1/4W	F		
R167	1-216-081-00	METAL CHIP	22K	5%	1/10W		R714	1-249-415-11	CARBON	680	5%	1/4W	F		
R168	1-216-073-00	METAL CHIP	10K	5%	1/10W		R715	1-249-417-11	CARBON	1K	5%	1/4W	F		
R169	1-216-079-00	METAL CHIP	18K	5%	1/10W		R716	1-249-419-11	CARBON	1.5K	5%	1/4W	F		
R170	1-216-081-00	METAL CHIP	22K	5%	1/10W		R717	1-249-421-11	CARBON	2.2K	5%	1/4W	F		
R171	1-216-073-00	METAL CHIP	10K	5%	1/10W		R718	1-247-804-11	CARBON	75	5%	1/4W			
R172	1-216-079-00	METAL CHIP	18K	5%	1/10W		R719	1-247-804-11	CARBON	75	5%	1/4W			
R173	1-216-025-91	METAL GLAZE	100	5%	1/10W		R720	1-247-804-11	CARBON	75	5%	1/4W			
R174	1-216-033-00	METAL CHIP	220	5%	1/10W										
R175	1-216-025-91	METAL GLAZE	100	5%	1/10W										
R176	1-216-025-91	METAL GLAZE	100	5%	1/10W										
R177	1-216-025-91	METAL GLAZE	100	5%	1/10W										

CD SW

CONNECTOR

DECO

HP/MIC

Ref. No.	Part No.	Description			Remark
R721	1-247-804-11	CARBON	75	5%	1/4W
R722	1-247-804-11	CARBON	75	5%	1/4W
R723	1-247-804-11	CARBON	75	5%	1/4W
R724	1-247-807-31	CARBON	100	5%	1/4W
R725	1-247-807-31	CARBON	100	5%	1/4W
R791	1-247-804-11	CARBON	75	5%	1/4W
R792	1-247-804-11	CARBON	75	5%	1/4W
R793	1-247-804-11	CARBON	75	5%	1/4W
R794	1-247-804-11	CARBON	75	5%	1/4W
R795	1-247-804-11	CARBON	75	5%	1/4W
R796	1-247-804-11	CARBON	75	5%	1/4W
< SWITCH >					
S645	1-762-196-21	SWITCH, TACT (POWER)			
S646	1-762-196-21	SWITCH, TACT (◀◀)			
S647	1-762-196-21	SWITCH, TACT (▶▶)			
S648	1-762-196-21	SWITCH, TACT (DISC SKIP EX-CHANGE)			
S649	1-762-196-21	SWITCH, TACT (DISC 1)			
S650	1-762-196-21	SWITCH, TACT (DISC 2)			
S651	1-762-196-21	SWITCH, TACT (DISC 3)			
S652	1-762-196-21	SWITCH, TACT (■)			
S653	1-762-196-21	SWITCH, TACT (≡ OPN/CLOSE)			
S654	1-762-196-21	SWITCH, TACT (▷◁)			

* 1-658-575-11	CONNECTOR BOARD				

< CONNECTOR >					
* CN701	1-568-946-11	PIN, CONNECTOR 8P			
CN702	1-750-413-11	CONNECTOR, FFC/FPC 8P			
< TRANSISTOR >					
Q701	8-729-900-80	TRANSISTOR DTC114ES			
< RESISTOR >					
R703	1-249-435-11	CARBON	33K	5%	1/4W
R704	1-249-429-11	CARBON	10K	5%	1/4W
R705	1-249-417-11	CARBON	1K	5%	1/4W F

* 1-664-007-11	DECO BOARD				

(GR10AV/RX100AV:AEP,UK,G,EE,CIS)					
< CONNECTOR >					
* CN605	1-568-848-11	SOCKET, CONNECTOR 5P			
< DIODE >					
D619	8-719-058-04	DIODE	SEL5223S-TP15 (RIGHT)		
D620	8-719-058-04	DIODE	SEL5223S-TP15 (RIGHT)		
D621	8-719-058-04	DIODE	SEL5223S-TP15 (CENTER)		
D622	8-719-058-03	DIODE	SEL5423E-TP15 (CENTER)		
D623	8-719-058-04	DIODE	SEL5223S-TP15 (CENTER)		
D624	8-719-058-04	DIODE	SEL5223S-TP15 (LEFT)		
D625	8-719-058-04	DIODE	SEL5223S-TP15 (LEFT)		

Ref. No.	Part No.	Description	Remark		
< TRANSISTOR >					
Q610	8-729-119-76	TRANSISTOR	2SA1175-HFE		
Q611	8-729-119-76	TRANSISTOR	2SA1175-HFE		
< RESISTOR >					
R706	1-247-807-31	CARBON	100	5%	1/4W
R707	1-247-807-31	CARBON	100	5%	1/4W
R708	1-247-807-31	CARBON	100	5%	1/4W
R746	1-247-807-31	CARBON	100	5%	1/4W

*	A-4392-653-A	HP/MIC BOARD, COMPLETE	*****		
< CAPACITOR >					
C750	1-162-294-31	CERAMIC	0.001uF	10%	50V
C751	1-162-294-31	CERAMIC	0.001uF	10%	50V
C752	1-164-159-21	CERAMIC	0.1uF		50V
C753	1-164-159-21	CERAMIC	0.1uF		50V
C754	1-162-306-11	CERAMIC	0.01uF	20%	16V
C755	1-124-257-00	ELECT	2.2uF	20%	50V
C756	1-162-294-31	CERAMIC	0.001uF	10%	50V
C757	1-162-215-31	CERAMIC	47PF	5%	50V
C758	1-124-261-00	ELECT	10uF	20%	50V
C759	1-124-465-00	ELECT	0.47uF	20%	50V
C760	1-162-215-31	CERAMIC	47PF	5%	50V
C761	1-162-282-31	CERAMIC	100PF	10%	50V
C762	1-124-257-00	ELECT	2.2uF	20%	50V
C764	1-124-261-00	ELECT	10uF	20%	50V
C782	1-162-290-31	CERAMIC	470PF	10%	50V
< CONNECTOR >					
* CN750	1-568-828-11	SOCKET, CONNECTOR	9P		
< IC >					
IC750	8-759-634-51	IC	M5218AP		
< JACK >					
J750	1-569-112-21	JACK, LARGE TYPE	(PHONES)		
J751	1-569-112-21	JACK, LARGE TYPE	(MIX MIC)		
< RESISTOR >					
R750	1-249-429-11	CARBON	10K	5%	1/4W
R751	1-249-417-11	CARBON	1K	5%	1/4W F
R752	1-249-441-11	CARBON	100K	5%	1/4W
R753	1-249-417-11	CARBON	1K	5%	1/4W F
R754	1-247-863-91	CARBON	22K	5%	1/4W
R755	1-249-429-11	CARBON	10K	5%	1/4W
R756	1-247-885-00	CARBON	180K	5%	1/4W
R757	1-247-807-31	CARBON	100	5%	1/4W
< VARIABLE RESISTOR >					
RV750	1-223-983-11	RES, VAR, CARBON	50K		(MIC LEVEL)

LEAF SWITCH

MAIN

Ref. No.	Part No.	Description	Remark			
*	1-650-669-11	LEAF SWITCH BOARD *****				
		< CONNECTOR >				
* CN1001	1-568-854-11	SOCKET, CONNECTOR 11P				
		< TRANSISTOR >				
Q1001	8-749-010-90	TRANSISTOR PHOTO REFLECTOR	NJL5165KA-H2			
Q1002	8-749-010-90	TRANSISTOR PHOTO REFLECTOR	NJL5165KA-H2			
		< RESISTOR >				
R1001	1-247-818-11	CARBON	300	5%	1/4W	
R1002	1-247-820-11	CARBON	360	5%	1/4W	
R1003	1-249-414-11	CARBON	560	5%	1/4W F	
R1004	1-247-834-11	CARBON	1.3K	5%	1/4W	
R1005	1-247-818-11	CARBON	300	5%	1/4W	
		< SWITCH >				
S1001	1-692-832-11	SWITCH, PUSH (1 KEY)(A PLAY)				
S1002	1-692-832-11	SWITCH, PUSH (1 KEY)(B PLAY)				
S1003	1-572-248-11	SWITCH, LEAF (A HALF)				
S1004	1-571-281-21	SWITCH, LEAF (A CrO2)				
S1005	1-571-281-21	SWITCH, LEAF (REC A)				
S1006	1-572-248-11	SWITCH, LEAF (B HALF)				
S1008	1-571-281-21	SWITCH, LEAF (B CrO2)				
S1009	1-571-281-21	SWITCH, LEAF (REC B)				

*	A-4392-628-A	MAIN BOARD, COMPLETE (GR10AV:E2)				

*	A-4392-629-A	MAIN BOARD, COMPLETE				

		(GR10AV:E3,SP,JE,HK,IA)				
*	A-4392-630-A	MAIN BOARD, COMPLETE (RX100AV:AEP,UK,G)				

*	A-4392-631-A	MAIN BOARD, COMPLETE (RX100AV:US,CND)				

*	A-4398-048-A	MAIN BOARD, COMPLETE (D90AV)				

*	A-4398-054-A	MAIN BOARD, COMPLETE (RX100AV:EE,CIS)				

*	A-4398-057-A	MAIN BOARD, COMPLETE (GR10AV:AUS)				

*	A-4398-310-A	MAIN BOARD, COMPLETE (GR10AV:TH)				

*	A-4398-876-A	MAIN BOARD, COMPLETE (GR10AV:EA)				

*	A-4398-882-A	MAIN BOARD, COMPLETE (GR10AV:MY)				

Ref. No.	Part No.	Description	Remark			
		< CAPACITOR >				
C110	1-162-306-11	CERAMIC 0.01uF 20% 16V				
C121	1-162-286-21	CERAMIC 220PF 10% 50V				
C122	1-162-286-21	CERAMIC 220PF 10% 50V				
C125	1-124-499-11	ELECT 1uF 20% 50V				
C127	1-162-306-11	CERAMIC 0.01uF 20% 16V (GR10AV/RX100AV)				
C128	1-162-306-11	CERAMIC 0.01uF 20% 16V (GR10AV/RX100AV)				
C129	1-162-292-31	CERAMIC 680PF 10% 50V (GR10AV/RX100AV)				
C130	1-126-964-11	ELECT 10uF 20% 50V (GR10AV/RX100AV)				
C131	1-162-286-21	CERAMIC 220PF 10% 50V (GR10AV/RX100AV)				
C171	1-162-286-21	CERAMIC 220PF 10% 50V				
C172	1-162-286-21	CERAMIC 220PF 10% 50V				
C201	1-126-957-11	ELECT 0.22uF 20% 50V				
C202	1-126-957-11	ELECT 0.22uF 20% 50V				
C203	1-136-495-11	FILM 0.068uF 5% 50V				
C204	1-136-495-11	FILM 0.068uF 5% 50V				
C205	1-136-156-00	FILM 0.018uF 5% 50V				
C206	1-136-156-00	FILM 0.018uF 5% 50V				
C207	1-130-480-00	MYLAR 0.0056uF 5% 50V				
C208	1-130-479-00	MYLAR 0.0047uF 5% 50V				
C209	1-130-474-00	MYLAR 0.0018uF 5% 50V				
C210	1-126-964-11	ELECT 10uF 20% 50V				
C211	1-126-964-11	ELECT 10uF 20% 50V				
C212	1-136-165-00	FILM 0.1uF 5% 50V				
C213	1-136-165-00	FILM 0.1uF 5% 50V				
C214	1-126-964-11	ELECT 10uF 20% 50V				
C215	1-136-153-00	FILM 0.01uF 5% 50V				
C230	1-136-167-00	FILM 0.15uF 5% 50V				
C231	1-130-471-00	MYLAR 0.001uF 5% 50V				
C234	1-126-933-11	ELECT 100uF 20% 10V				
C235	1-164-159-21	CERAMIC 0.1uF 50V				
C237	1-126-964-11	ELECT 10uF 20% 50V				
C238	1-162-286-21	CERAMIC 220PF 10% 50V				
C239	1-162-306-11	CERAMIC 0.01uF 20% 16V				
C241	1-162-306-11	CERAMIC 0.01uF 20% 16V				
C242	1-126-933-11	ELECT 100uF 20% 10V				
C247	1-162-306-11	CERAMIC 0.01uF 20% 16V				
C248	1-126-964-11	ELECT 10uF 20% 50V				
C251	1-126-957-11	ELECT 0.22uF 20% 50V				
C252	1-126-957-11	ELECT 0.22uF 20% 50V				
C253	1-136-495-11	FILM 0.068uF 5% 50V				
C254	1-136-495-11	FILM 0.068uF 5% 50V				
C255	1-136-156-00	FILM 0.018uF 5% 50V				
C256	1-136-156-00	FILM 0.018uF 5% 50V				
C257	1-130-480-00	MYLAR 0.0056uF 5% 50V				
C258	1-130-479-00	MYLAR 0.0047uF 5% 50V				
C259	1-130-474-00	MYLAR 0.0018uF 5% 50V				
C260	1-126-964-11	ELECT 10uF 20% 50V				
C261	1-126-964-11	ELECT 10uF 20% 50V				
C262	1-136-165-00	FILM 0.1uF 5% 50V				
C263	1-136-165-00	FILM 0.1uF 5% 50V				
C264	1-126-964-11	ELECT 10uF 20% 50V				
C265	1-136-153-00	FILM 0.01uF 5% 50V				

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C275	1-162-294-31	CERAMIC	0.001uF	10%	50V	C635	1-130-467-00	MYLAR	470PF	5%	50V
C301	1-137-368-11	FILM	0.0047uF	5%	50V	C636	1-130-467-00	MYLAR	470PF	5%	50V
C302	1-162-290-31	CERAMIC	470PF	10%	50V	C637	1-162-306-11	CERAMIC	0.01uF	20%	16V
C303	1-136-165-00	FILM	0.1uF	5%	50V	C638	1-162-306-11	CERAMIC	0.01uF	20%	16V
C304	1-126-964-11	ELECT	10uF	20%	50V	C641	1-124-252-00	ELECT	0.33uF	20%	50V
C305	1-126-960-11	ELECT	1uF	20%	50V	C642	1-136-159-00	FILM	0.033uF	5%	50V
C306	1-126-964-11	ELECT	10uF	20%	50V	C643	1-162-306-11	CERAMIC	0.01uF	20%	16V
C307	1-126-964-11	ELECT	10uF	20%	50V	C644	1-126-933-11	ELECT	100uF	20%	10V
C308	1-126-964-11	ELECT	10uF	20%	50V	C645	1-126-961-11	ELECT	2.2uF	20%	50V
C309	1-126-960-11	ELECT	1uF	20%	50V	C646	1-162-286-21	CERAMIC	220PF	10%	50V
C310	1-126-933-11	ELECT	100uF	20%	10V	C647	1-162-306-11	CERAMIC	0.01uF	20%	16V
C351	1-137-368-11	FILM	0.0047uF	5%	50V	C648	1-126-923-11	ELECT	220uF	20%	10V
C352	1-162-290-31	CERAMIC	470PF	10%	50V	C649	1-136-164-00	FILM	0.082uF	5%	50V
C353	1-136-165-00	FILM	0.1uF	5%	50V	C650	1-130-477-00	MYLAR	0.0033uF	5%	50V
C355	1-126-960-11	ELECT	1uF	20%	50V	C651	1-136-164-00	FILM	0.082uF	5%	50V
C357	1-126-964-11	ELECT	10uF	20%	50V	C652	1-126-959-11	ELECT	0.47uF	20%	50V
C358	1-126-964-11	ELECT	10uF	20%	50V	C653	1-126-923-11	ELECT	220uF	20%	10V
C359	1-126-960-11	ELECT	1uF	20%	50V	C654	1-126-960-11	ELECT	1uF	20%	50V
C360	1-126-933-11	ELECT	100uF	20%	10V	C655	1-126-960-11	ELECT	1uF	20%	50V
C401	1-164-159-21	CERAMIC	0.1uF		50V	C656	1-126-964-11	ELECT	10uF	20%	50V
C402	1-164-159-21	CERAMIC	0.1uF		50V	C657	1-162-306-11	CERAMIC	0.01uF	20%	16V
C403	1-164-159-21	CERAMIC	0.1uF		50V	C658	1-162-286-21	CERAMIC	220PF	10%	50V
C404	1-126-933-11	ELECT	100uF	20%	16V	C660	1-126-933-11	ELECT	100uF	20%	10V
C405	1-126-767-11	ELECT	1000uF	20%	16V	C661	1-162-294-31	CERAMIC	0.001uF	10%	50V
C601	1-136-167-00	FILM	0.15uF	5%	50V	C662	1-126-933-11	ELECT	100uF	20%	10V
C602	1-136-167-00	FILM	0.15uF	5%	50V	C663	1-162-294-31	CERAMIC	0.001uF	10%	50V
C603	1-126-962-11	ELECT	3.3uF	20%	50V	C664	1-126-964-11	ELECT	10uF	20%	50V
C604	1-126-962-11	ELECT	3.3uF	20%	50V	C665	1-126-964-11	ELECT	10uF	20%	50V
C605	1-136-167-00	FILM	0.15uF	5%	50V	C666	1-126-964-11	ELECT	10uF	20%	50V
C606	1-136-167-00	FILM	0.15uF	5%	50V	C667	1-126-964-11	ELECT	10uF	20%	50V
C607	1-126-963-11	ELECT	4.7uF	20%	50V	C668	1-162-286-21	CERAMIC	220PF	10%	50V
C608	1-126-963-11	ELECT	4.7uF	20%	50V	C669	1-124-499-11	ELECT	1uF	20%	50V
C609	1-126-959-11	ELECT	0.47uF	20%	50V	C678	1-162-294-31	CERAMIC	0.001uF	10%	50V
C610	1-126-959-11	ELECT	0.47uF	20%	50V	C711	1-126-916-11	ELECT	1000uF	20%	6.3V
C611	1-126-963-11	ELECT	4.7uF	20%	50V	C712	1-164-159-21	CERAMIC	0.1uF		50V
C612	1-126-963-11	ELECT	4.7uF	20%	50V	C713	1-164-027-11	CERAMIC	22PF	5%	50V
C613	1-126-959-11	ELECT	0.47uF	20%	50V	C714	1-164-027-11	CERAMIC	22PF	5%	50V
C614	1-126-959-11	ELECT	0.47uF	20%	50V	C723	1-164-159-21	CERAMIC	0.1uF		50V
C615	1-136-165-00	FILM	0.1uF	5%	50V	C724	1-126-933-11	ELECT	100uF	20%	10V
C616	1-136-165-00	FILM	0.1uF	5%	50V	C766	1-162-294-31	CERAMIC	0.001uF	10%	50V
C617	1-136-165-00	FILM	0.1uF	5%	50V	C801	1-126-961-11	ELECT	2.2uF	20%	50V
C618	1-136-165-00	FILM	0.1uF	5%	50V	C803	1-126-925-11	ELECT	470uF	20%	10V
C619	1-126-960-11	ELECT	1uF	20%	50V	C804	1-164-159-21	CERAMIC	0.1uF		50V
C620	1-126-960-11	ELECT	1uF	20%	50V	C805	1-162-282-31	CERAMIC	100PF	10%	50V
C621	1-126-923-11	ELECT	220uF	20%	10V	C811	1-126-961-11	ELECT	2.2uF	20%	50V
C622	1-126-964-11	ELECT	10uF	20%	50V	C841	1-164-159-21	CERAMIC	0.1uF		50V
C623	1-126-964-11	ELECT	10uF	20%	50V	C842	1-126-933-11	ELECT	100uF	20%	10V
C624	1-126-964-11	ELECT	10uF	20%	50V	C851	1-164-159-21	CERAMIC	0.1uF		50V
C625	1-126-964-11	ELECT	10uF	20%	50V	C852	1-164-159-21	CERAMIC	0.1uF		(RX100AV:EE,CIS) 50V
C626	1-126-923-11	ELECT	220uF	20%	10V	C853	1-162-294-31	CERAMIC	0.001uF	10%	(RX100AV:EE,CIS) 50V
C627	1-136-161-00	FILM	0.047uF	5%	50V	C854	1-162-294-31	CERAMIC	0.001uF	10%	50V
C628	1-136-157-00	FILM	0.022uF	5%	50V	C855	1-162-294-31	CERAMIC	0.001uF	10%	50V
C629	1-162-292-31	CERAMIC	680PF	10%	50V	C856	1-162-294-31	CERAMIC	0.001uF	10%	50V
C630	1-126-933-11	ELECT	100uF	20%	10V	C861	1-162-306-11	CERAMIC	0.01uF	20%	16V
C631	1-162-306-11	CERAMIC	0.01uF	20%	16V	C862	1-126-964-11	ELECT	10uF	20%	50V
C632	1-126-964-11	ELECT	10uF	20%	50V	C863	1-126-964-11	ELECT	10uF	20%	50V
C633	1-136-173-00	FILM	0.47uF	5%	50V						
C634	1-104-664-11	ELECT	47uF	20%	25V						

MAIN

Ref. No.	Part No.	Description	Remark
C901	1-126-937-11	ELECT 4700uF 20% 16V	
C902	1-126-768-11	ELECT 2200uF 20% 16V	
C903	1-164-159-21	CERAMIC 0.1uF 50V	
C904	1-164-159-21	CERAMIC 0.1uF 50V	
C908	1-126-933-11	ELECT 100uF 20% 10V	
C909	1-126-933-11	ELECT 100uF 20% 10V	
C910	1-126-964-11	ELECT 10uF 20% 50V	
C911	1-126-768-11	ELECT 2200uF 20% 16V	
C913	1-126-964-11	ELECT 10uF 20% 50V	
C914	1-126-767-11	ELECT 1000uF 20% 16V	
C915	1-126-964-11	ELECT 10uF 20% 50V	
C916	1-126-916-11	ELECT 1000uF 20% 6.3V	
C917	1-126-925-11	ELECT 470uF 20% 10V	
C918	1-126-933-11	ELECT 100uF 20% 10V	
C919	1-126-964-11	ELECT 10uF 20% 50V	
C920	1-126-933-11	ELECT 100uF 20% 10V	
C943	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C944	1-126-947-11	ELECT 47uF 20% 35V	
C951	1-126-967-11	ELECT 47uF 20% 10V	
C952	1-136-165-00	FILM 0.1uF 5% 50V	
C953	1-136-165-00	FILM 0.1uF 5% 50V	
C961	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C991	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C992	1-162-306-11	CERAMIC 0.01uF 20% 16V	(GR10AV/RX100AV)
< CONNECTOR >			
CN401	1-568-838-11	SOCKET, CONNECTOR 21P	
* CN402	1-568-830-11	SOCKET, CONNECTOR 11P	
* CN403	1-568-449-11	HOUSING, CONNECTOR (PC BOARD) 3P	
* CN701	1-568-836-11	SOCKET, CONNECTOR 17P	
* CN801	1-568-862-11	SOCKET, CONNECTOR 19P	
* CN820	1-568-947-11	PIN, CONNECTOR 9P	
* CN830	1-568-946-11	PIN, CONNECTOR 8P	
* CN851	1-568-832-11	SOCKET, CONNECTOR 13P	(D90AV/GR10AV:E2,TH,AUS/RX100AV:US,CND)
* CN851	1-568-834-11	SOCKET, CONNECTOR 15P	(GR10AV:E3,EA,MY,SP,JE,HK,IA/RX100AV:AEP,UK,G,EE,CIS)
* CN901	1-770-734-11	CONNECTOR, BOARD TO BOARD 20P	
* CN961	1-564-518-11	PLUG, CONNECTOR 3P	
< DIODE >			
D702	8-719-987-63	DIODE 1N4148M	
D772	8-719-987-63	DIODE 1N4148M	
D801	8-719-987-63	DIODE 1N4148M	
D802	8-719-987-63	DIODE 1N4148M	
D901	8-719-025-03	DIODE RBA-402-SL	
D902	8-719-200-82	DIODE 11ES2	
D904	8-719-987-63	DIODE 1N4148M	
D905	8-719-200-82	DIODE 11ES2	
D906	8-719-200-82	DIODE 11ES2	
D907	8-719-987-63	DIODE 1N4148M	
D908	8-719-200-82	DIODE 11ES2	
D941	8-719-002-60	DIODE UZL-33L	
D942	8-719-010-43	DIODE UZ-5.6BSC	
D951	8-719-987-63	DIODE 1N4148M	
D952	8-719-987-63	DIODE 1N4148M	
D953	8-719-987-63	DIODE 1N4148M	
D954	8-719-987-63	DIODE 1N4148M	

Ref. No.	Part No.	Description	Remark
		< GROUND TERMINAL >	
* EPT901	1-537-738-21	TERMINAL, EARTH	
		< FERRITE BEAD >	
FB801	1-412-473-21	INDUCTOR 0UH	
		< IC >	
IC102	8-759-000-48	IC MC14052BCP	
IC105	8-759-634-51	IC M5218AP (GR10AV/RX100AV)	
IC201	8-759-331-39	IC M62427FP	
IC401	8-759-363-21	IC HA12203NT	
IC402	8-759-822-09	IC LB1641	
IC601	8-759-442-96	IC LA2786	
IC602	8-759-442-97	IC LV1016	
IC603	8-759-634-51	IC M5218AP	
IC604	8-759-281-42	IC TC9210P	
IC701	8-759-468-69	IC uPD780018YGF-017-3BA	
IC841	8-749-923-04	IC TOTX178 (CD DIGITAL OUT OPTICAL)	
IC861	8-759-634-51	IC M5218AP	
IC901	8-759-288-53	IC LA5617	
IC902	8-759-231-53	IC TA7805S	
IC903	8-759-604-86	IC M5F7807L	
IC904	8-759-231-58	IC TA7812S	
IC905	8-759-604-38	IC M5F78M10L	
IC951	8-759-635-63	IC M51943BSL	
		< JACK >	
J101	1-695-188-31	JACK, PIN 4P (VIDEO/MD (AUDIO))	
J102	1-774-785-11	JACK, PIN 1P (SUPER WOOFER)	(GR10AV/RX100AV)
		< COIL >	
L601	1-410-509-11	INDUCTOR 10uH	
L602	1-410-509-11	INDUCTOR 10uH	
L604	1-410-509-11	INDUCTOR 10uH	
L769	1-410-521-11	INDUCTOR 100uH	
L770	1-410-521-11	INDUCTOR 100uH	
L772	1-410-521-11	INDUCTOR 100uH	
L841	1-410-521-11	INDUCTOR 100uH	
L851	1-410-521-11	INDUCTOR 100uH (RX100AV:AEP,UK,G)	
L861	1-410-521-11	INDUCTOR 100uH	
		< TRANSISTOR >	
Q120	8-729-422-57	TRANSISTOR UN4111	
Q121	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q122	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q123	8-729-422-57	TRANSISTOR UN4111	
Q124	8-729-900-36	TRANSISTOR DTC124ES	
Q130	8-729-141-26	TRANSISTOR 2SC3622A-LK	(GR10AV/RX100AV)
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q251	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q252	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q253	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q254	8-729-141-26	TRANSISTOR 2SC3622A-LK	
Q403	8-729-801-93	TRANSISTOR 2SD1387	
Q406	8-729-900-80	TRANSISTOR DTC114ES	

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
Q407	8-729-900-80	TRANSISTOR	DTC114ES				R211	1-249-421-11	CARBON	2.2K	5%	1/4W	F
Q408	8-729-119-76	TRANSISTOR	2SA1175-HFE				R212	1-249-441-11	CARBON	100K	5%	1/4W	
Q409	8-729-900-80	TRANSISTOR	DTC114ES				R213	1-249-429-11	CARBON	10K	5%	1/4W	
Q601	8-729-141-26	TRANSISTOR	2SC3622A-LK				R214	1-249-437-11	CARBON	47K	5%	1/4W	
Q602	8-729-141-26	TRANSISTOR	2SC3622A-LK				R215	1-249-441-11	CARBON	100K	5%	1/4W	
Q901	8-729-119-78	TRANSISTOR	2SC2785-HFE				R217	1-249-431-11	CARBON	15K	5%	1/4W	
Q904	8-729-040-20	TRANSISTOR	RT1P137L-TP				R222	1-247-903-00	CARBON	1M	5%	1/4W	
Q905	8-729-900-36	TRANSISTOR	DTC124ES				R223	1-247-903-00	CARBON	1M	5%	1/4W	
Q906	8-729-040-20	TRANSISTOR	RT1P137L-TP				R230	1-247-863-91	CARBON	22K	5%	1/4W	
Q907	8-729-900-63	TRANSISTOR	DTA124ES				R231	1-247-863-91	CARBON	22K	5%	1/4W	
Q912	8-729-900-36	TRANSISTOR	DTC124ES				R232	1-247-856-00	CARBON	11K	5%	1/4W	
Q941	8-729-118-01	TRANSISTOR	2SB1116				R240	1-249-429-11	CARBON	10K	5%	1/4W	
Q951	8-729-119-78	TRANSISTOR	2SC2785-HFE				R241	1-249-429-11	CARBON	10K	5%	1/4W	
Q961	8-729-111-29	TRANSISTOR	2SD1616A-K				R242	1-249-429-11	CARBON	10K	5%	1/4W	
Q962	8-729-119-76	TRANSISTOR	2SA1175-HFE				R243	1-249-417-11	CARBON	1K	5%	1/4W	F
							R244	1-249-417-11	CARBON	1K	5%	1/4W	F
< RESISTOR >							R245	1-249-417-11	CARBON	1K	5%	1/4W	F
R121	1-249-424-11	CARBON	3.9K	5%	1/4W	F	R251	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R122	1-247-887-00	CARBON	220K	5%	1/4W		R252	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R123	1-249-417-11	CARBON	1K	5%	1/4W	F	R253	1-249-437-11	CARBON	47K	5%	1/4W	
R124	1-249-441-11	CARBON	100K	5%	1/4W		R254	1-249-437-11	CARBON	47K	5%	1/4W	
R125	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R255	1-249-441-11	CARBON	100K	5%	1/4W	
R126	1-249-441-11	CARBON	100K	5%	1/4W		R256	1-247-903-00	CARBON	1M	5%	1/4W	
R127	1-249-421-11	CARBON	2.2K	5%	1/4W	F	R257	1-247-887-00	CARBON	220K	5%	1/4W	
R128	1-249-426-11	CARBON	5.6K	5%	1/4W		R258	1-247-863-91	CARBON	22K	5%	1/4W	
R129	1-249-429-11	CARBON	10K	5%	1/4W		R259	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R130	1-249-441-11	CARBON	100K	5%	1/4W		R260	1-249-429-11	CARBON	10K	5%	1/4W	
R131	1-249-437-11	CARBON	47K	5%	1/4W		R261	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R132	1-247-843-11	CARBON	3.3K	5%	1/4W		R262	1-249-441-11	CARBON	100K	5%	1/4W	
R133	1-249-429-11	CARBON	10K	5%	1/4W		R263	1-249-429-11	CARBON	10K	5%	1/4W	
R134	1-249-417-11	CARBON	1K	5%	1/4W	F	R264	1-249-437-11	CARBON	47K	5%	1/4W	
R135	1-249-441-11	CARBON	100K	5%	1/4W		R265	1-249-441-11	CARBON	100K	5%	1/4W	
R136	1-249-417-11	CARBON	1K	5%	1/4W	F	R267	1-249-431-11	CARBON	15K	5%	1/4W	
R137	1-249-429-11	CARBON	10K	5%	1/4W		R273	1-247-903-00	CARBON	1M	5%	1/4W	
R138	1-249-441-11	CARBON	100K	5%	1/4W		R301	1-249-435-11	CARBON	33K	5%	1/4W	
R171	1-249-424-11	CARBON	3.9K	5%	1/4W	F	R304	1-249-426-11	CARBON	5.6K	5%	1/4W	
R172	1-247-887-00	CARBON	220K	5%	1/4W		R305	1-249-417-11	CARBON	1K	5%	1/4W	F
R173	1-249-417-11	CARBON	1K	5%	1/4W	F	R306	1-247-840-00	CARBON	2.4K	5%	1/4W	
R174	1-249-441-11	CARBON	100K	5%	1/4W		R307	1-247-863-91	CARBON	22K	5%	1/4W	
R178	1-249-426-11	CARBON	5.6K	5%	1/4W		R308	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R179	1-249-429-11	CARBON	10K	5%	1/4W		R309	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R201	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R351	1-247-863-91	CARBON	22K	5%	1/4W	
R202	1-249-425-11	CARBON	4.7K	5%	1/4W	F	R354	1-249-426-11	CARBON	5.6K	5%	1/4W	
R203	1-249-437-11	CARBON	47K	5%	1/4W		R355	1-249-417-11	CARBON	1K	5%	1/4W	F
R204	1-249-437-11	CARBON	47K	5%	1/4W		R356	1-247-840-00	CARBON	2.4K	5%	1/4W	
R205	1-249-441-11	CARBON	100K	5%	1/4W		R357	1-247-863-91	CARBON	22K	5%	1/4W	
R206	1-247-903-00	CARBON	1M	5%	1/4W		R358	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R207	1-247-887-00	CARBON	220K	5%	1/4W		R359	1-249-428-11	CARBON	8.2K	5%	1/4W	F
R208	1-247-863-91	CARBON	22K	5%	1/4W		R401	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R209	1-249-419-11	CARBON	1.5K	5%	1/4W	F	R402	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R210	1-249-429-11	CARBON	10K	5%	1/4W		R403	1-249-425-11	CARBON	4.7K	5%	1/4W	F
							R404	1-249-417-11	CARBON	1K	5%	1/4W	F
							R405	1-249-437-11	CARBON	47K	5%	1/4W	
							R406	1-249-437-11	CARBON	47K	5%	1/4W	
							R407	1-249-437-11	CARBON	47K	5%	1/4W	
							R408	1-249-437-11	CARBON	47K	5%	1/4W	
							R410	1-249-430-11	CARBON	12K	5%	1/4W	
							R411	1-249-426-11	CARBON	5.6K	5%	1/4W	

MAIN

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
R414	1-249-429-11	CARBON	10K	5%	1/4W	R730	1-249-431-11	CARBON	15K	5%	1/4W
R415	1-249-432-11	CARBON	18K	5%	1/4W						(GR10AV:TH)
R416	1-249-429-11	CARBON	10K	5%	1/4W	R730	1-249-425-11	CARBON	4.7K	5%	1/4W F
											(GR10AV:AUS)
R417	1-249-441-11	CARBON	100K	5%	1/4W	R731	1-249-425-11	CARBON	4.7K	5%	1/4W F
R419	1-249-429-11	CARBON	10K	5%	1/4W						(GR10AV:E2)
R454	1-249-425-11	CARBON	4.7K	5%	1/4W F	R731	1-247-843-11	CARBON	3.3K	5%	1/4W
R455	1-249-425-11	CARBON	4.7K	5%	1/4W F						(GR10AV:EA)
R456	1-249-411-11	CARBON	330	5%	1/4W	R731	1-249-435-11	CARBON	33K	5%	1/4W
											(RX100AV:EE,CIS)
R457	1-249-427-11	CARBON	6.8K	5%	1/4W F						
R458	1-249-429-11	CARBON	10K	5%	1/4W	R731	1-249-427-11	CARBON	6.8K	5%	1/4W F
R461	1-247-843-11	CARBON	3.3K	5%	1/4W						(GR10AV:AUS/RX100AV:AEP,UK,G)
R601	1-247-887-00	CARBON	220K	5%	1/4W	R731	1-249-415-11	CARBON	680	5%	1/4W F
R602	1-247-887-00	CARBON	220K	5%	1/4W						(GR10AV:TH)
						R734	1-247-807-31	CARBON	100	5%	1/4W
R603	1-249-417-11	CARBON	1K	5%	1/4W F	R736	1-247-807-31	CARBON	100	5%	1/4W
R604	1-249-432-11	CARBON	18K	5%	1/4W	R744	1-247-807-31	CARBON	100	5%	1/4W
R605	1-249-417-11	CARBON	1K	5%	1/4W F						
R615	1-249-441-11	CARBON	100K	5%	1/4W	R745	1-247-807-31	CARBON	100	5%	1/4W
R621	1-249-436-11	CARBON	39K	5%	1/4W	R747	1-247-807-31	CARBON	100	5%	1/4W
						R748	1-247-807-31	CARBON	100	5%	1/4W
R622	1-249-436-11	CARBON	39K	5%	1/4W	R755	1-247-807-31	CARBON	100	5%	1/4W
R623	1-249-417-11	CARBON	1K	5%	1/4W F	R756	1-247-807-31	CARBON	100	5%	1/4W
R624	1-247-903-00	CARBON	1M	5%	1/4W						
R625	1-249-411-11	CARBON	330	5%	1/4W	R757	1-247-807-31	CARBON	100	5%	1/4W
R626	1-249-417-11	CARBON	1K	5%	1/4W F	R758	1-247-807-31	CARBON	100	5%	1/4W
						R759	1-247-807-31	CARBON	100	5%	1/4W
R627	1-249-417-11	CARBON	1K	5%	1/4W F	R760	1-247-807-31	CARBON	100	5%	1/4W
R628	1-249-417-11	CARBON	1K	5%	1/4W F	R761	1-247-807-31	CARBON	100	5%	1/4W
R630	1-249-425-11	CARBON	4.7K	5%	1/4W F						
R631	1-249-428-11	CARBON	8.2K	5%	1/4W F	R763	1-247-807-31	CARBON	100	5%	1/4W
R632	1-249-441-11	CARBON	100K	5%	1/4W	R764	1-247-807-31	CARBON	100	5%	1/4W
						R765	1-247-807-31	CARBON	100	5%	1/4W
R633	1-249-425-11	CARBON	4.7K	5%	1/4W F	R766	1-247-807-31	CARBON	100	5%	1/4W
R634	1-249-432-11	CARBON	18K	5%	1/4W	R767	1-247-807-31	CARBON	100	5%	1/4W
R635	1-249-441-11	CARBON	100K	5%	1/4W						
R636	1-249-437-11	CARBON	47K	5%	1/4W	R768	1-247-807-31	CARBON	100	5%	1/4W
R637	1-249-441-11	CARBON	100K	5%	1/4W	R773	1-247-807-31	CARBON	100	5%	1/4W
						R774	1-247-807-31	CARBON	100	5%	1/4W
R638	1-249-441-11	CARBON	100K	5%	1/4W	R775	1-247-807-31	CARBON	100	5%	1/4W
R639	1-249-417-11	CARBON	1K	5%	1/4W F	R776	1-247-807-31	CARBON	100	5%	1/4W
R640	1-249-417-11	CARBON	1K	5%	1/4W F						
R641	1-249-417-11	CARBON	1K	5%	1/4W F	R778	1-247-807-31	CARBON	100	5%	1/4W
R642	1-249-417-11	CARBON	1K	5%	1/4W F	R779	1-247-807-31	CARBON	100	5%	1/4W
						R780	1-247-807-31	CARBON	100	5%	1/4W
R645	1-249-429-11	CARBON	10K	5%	1/4W	R781	1-247-807-31	CARBON	100	5%	1/4W
R646	1-249-429-11	CARBON	10K	5%	1/4W	R794	1-247-807-31	CARBON	100	5%	1/4W
R650	1-249-441-11	CARBON	100K	5%	1/4W						
R651	1-249-417-11	CARBON	1K	5%	1/4W F	R795	1-247-807-31	CARBON	100	5%	1/4W
R700	1-249-425-11	CARBON	4.7K	5%	1/4W F	R796	1-247-807-31	CARBON	100	5%	1/4W
						R797	1-247-807-31	CARBON	100	5%	1/4W
R718	1-247-807-31	CARBON	100	5%	1/4W	R798	1-249-425-11	CARBON	4.7K	5%	1/4W F
R720	1-249-425-11	CARBON	4.7K	5%	1/4W F	R801	1-247-807-31	CARBON	100	5%	1/4W
R721	1-247-807-31	CARBON	100	5%	1/4W						
											(RX100AV:AEP,UK,G,EE,CIS)
R722	1-247-807-31	CARBON	100	5%	1/4W	R802	1-249-435-11	CARBON	33K	5%	1/4W
						R811	1-247-807-31	CARBON	100	5%	1/4W
						R812	1-249-435-11	CARBON	33K	5%	1/4W
R726	1-247-807-31	CARBON	100	5%	1/4W	R815	1-247-807-31	CARBON	100	5%	1/4W
						R856	1-249-417-11	CARBON	1K	5%	1/4W F
R727	1-247-807-31	CARBON	100	5%	1/4W						
R728	1-247-807-31	CARBON	100	5%	1/4W	R858	1-249-417-11	CARBON	1K	5%	1/4W F
R730	1-249-427-11	CARBON	6.8K	5%	1/4W F	R861	1-247-891-00	CARBON	330K	5%	1/4W
						R862	1-249-441-11	CARBON	100K	5%	1/4W
						R869	1-249-429-11	CARBON	10K	5%	1/4W
R730	1-249-429-11	CARBON	10K	5%	1/4W	R870	1-247-843-11	CARBON	3.3K	5%	1/4W
											(GR10AV:EA)
R730	1-247-843-11	CARBON	3.3K	5%	1/4W						
											(RX100AV:AEP,UK,G)
						R878	1-249-437-11	CARBON	47K	5%	1/4W
						R879	1-249-437-11	CARBON	47K	5%	1/4W

MAIN

MOTOR (SLIDE)

MOTOR (TURN)

PANEL

Ref. No.	Part No.	Description	Remark			
R880	1-249-437-11	CARBON	47K	5%	1/4W	
R881	1-249-437-11	CARBON	47K	5%	1/4W	
R901	1-247-895-91	CARBON	470K	5%	1/4W	
R902	1-249-417-11	CARBON	1K	5%	1/4W	F
R906	1-249-417-11	CARBON	1K	5%	1/4W	F
R907	1-249-429-11	CARBON	10K	5%	1/4W	
R910	1-216-447-51	CARBON	27	5%	2W	F
R911	1-216-447-51	CARBON	27	5%	2W	F
R912	1-249-417-11	CARBON	1K	5%	1/4W	F
R942	1-247-863-91	CARBON	22K	5%	1/4W	
R943	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R944	1-247-815-91	CARBON	220	5%	1/4W	
R945	1-247-815-91	CARBON	220	5%	1/4W	
R946	1-260-089-11	CARBON	150	5%	1/2W	
R951	1-249-417-11	CARBON	1K	5%	1/4W	F
R952	1-249-425-11	CARBON	4.7K	5%	1/4W	F
R953	1-247-807-31	CARBON	100	5%	1/4W	
R954	1-249-437-11	CARBON	47K	5%	1/4W	
R955	1-249-437-11	CARBON	47K	5%	1/4W	
R956	1-249-429-11	CARBON	10K	5%	1/4W	
R961	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R962	1-249-432-11	CARBON	18K	5%	1/4W	
R963	1-249-425-11	CARBON	4.7K	5%	1/4W	F
< VARIABLE RESISTOR >						
RV301	1-238-598-11	RES, ADJ, CARBON 2.2K				
RV351	1-238-598-11	RES, ADJ, CARBON 2.2K				
< VIBRATOR >						
X601	1-579-125-11	VIBRATOR, CERAMIC (8MHz)				
X701	1-579-233-11	VIBRATOR, CERAMIC (5MHz)				
X702	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)				

*	1-658-578-11	MOTOR (SLIDE) BOARD				

< CAPACITOR >						
C801	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C804	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C805	1-126-964-11	ELECT	10uF	20%	50V	
< CONNECTOR >						
* CN801	1-568-947-11	PIN, CONNECTOR 9P				
< DIODE >						
D801	8-719-010-43	DIODE UZ-5.6BS				
D804	8-719-987-63	DIODE 1N4148M				
D805	8-719-987-63	DIODE 1N4148M				
< IC >						
IC801	8-759-274-09	IC BA6286N				
< MOTOR >						
M801	A-4672-004-A	MOTOR ASSY (SLIDE)				

Ref. No.	Part No.	Description	Remark			
< RESISTOR >						
R801	1-249-401-11	CARBON	47	5%	1/4W	F
< SWITCH >						
S801	1-762-527-11	SWITCH, ROTARY (OPEN/CLOSE)				

*	1-658-577-11	MOTOR (TURN) BOARD				

< CAPACITOR >						
C701	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C702	1-126-964-11	ELECT	10uF	20%	50V	
C705	1-162-306-11	CERAMIC	0.01uF	20%	16V	
< CONNECTOR >						
CN703	1-750-413-11	CONNECTOR, FFC/FPC 8P				
CN704	1-506-469-11	PIN, CONNECTOR 4P				
< DIODE >						
D701	8-719-010-23	DIODE UZ-3.6BSB				
< IC >						
IC701	8-759-633-65	IC M54641L				
< MOTOR >						
M701	A-4672-004-A	MOTOR ASSY (TURN)				
< RESISTOR >						
R706	1-249-411-11	CARBON	330	5%	1/4W	
R707	1-249-401-11	CARBON	47	5%	1/4W	F

*	A-4392-645-A	PANEL BOARD, COMPLETE				

(D90AV/RX100AV:US,CND)						
*	A-4392-643-A	PANEL BOARD, COMPLETE				

(GR10AV/RX100AV:EE,CIS)						
*	A-4392-644-A	PANEL BOARD, COMPLETE (RX100AV:AEP,UK,G)				

	1-690-880-11	LEAD (WITH CONNECTOR)				
*	4-986-870-01	HOLDER, FL TUBE (GR10AV:TH)				
*	4-986-870-11	HOLDER, FL TUBE (EXCEPT GR10AV:TH)				
*	4-986-880-01	HOLDER (JOG) (GR10AV:TH)				
*	4-986-880-11	HOLDER (JOG) (EXCEPT GR10AV:TH)				
< CAPACITOR >						
C601	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C602	1-164-159-21	CERAMIC	0.1uF	20%	16V	
C603	1-124-589-11	ELECT	47uF	20%	16V	
C604	1-126-163-11	ELECT	4.7uF	20%	50V	
C605	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C606	1-126-160-11	ELECT	1uF	20%	50V	

PANEL

Ref. No.	Part No.	Description				Remark
C607	1-126-160-11	ELECT	1uF	20%	50V	
C608	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C609	1-162-282-31	CERAMIC	100PF	10%	50V	
C610	1-162-282-31	CERAMIC	100PF	10%	50V	
C611	1-162-282-31	CERAMIC	100PF	10%	50V	
C612	1-162-282-31	CERAMIC	100PF	10%	50V	
C613	1-162-282-31	CERAMIC	100PF	10%	50V	
C614	1-162-282-31	CERAMIC	100PF	10%	50V	
C615	1-162-282-31	CERAMIC	100PF	10%	50V	
C616	1-162-282-31	CERAMIC	100PF	10%	50V	
C617	1-162-282-31	CERAMIC	100PF	10%	50V	
C618	1-162-282-31	CERAMIC	100PF	10%	50V	
C619	1-162-282-31	CERAMIC	100PF	10%	50V	
C620	1-162-282-31	CERAMIC	100PF	10%	50V	
C621	1-162-282-31	CERAMIC	100PF	10%	50V	
C622	1-162-282-31	CERAMIC	100PF	10%	50V	
C623	1-162-282-31	CERAMIC	100PF	10%	50V	
C624	1-162-282-31	CERAMIC	100PF	10%	50V	
C625	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C626	1-124-589-11	ELECT	47uF	20%	16V	
C627	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C628	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C629	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C630	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C636	1-126-160-11	ELECT	1uF	20%	50V	
C637	1-136-161-00	FILM	0.047uF	5%	50V	
C638	1-124-464-11	ELECT	0.22uF	20%	50V	
C639	1-124-464-11	ELECT	0.22uF	20%	50V	
C640	1-162-306-11	CERAMIC	0.01uF	20%	16V	
C641	1-124-464-11	ELECT	0.22uF	20%	50V	
C642	1-136-159-00	FILM	0.033uF	5%	50V	
C643	1-162-302-11	CERAMIC	0.0022uF	30%	16V	
C644	1-124-464-11	ELECT	0.22uF	20%	50V	
C646	1-130-470-00	MYLAR	820PF	5%	50V	
C647	1-124-464-11	ELECT	0.22uF	20%	50V	
C648	1-164-159-21	CERAMIC	0.1uF	20%	16V	
C649	1-124-589-11	ELECT	47uF	20%	16V	
C650	1-124-464-11	ELECT	0.22uF	20%	50V	
C653	1-164-159-21	CERAMIC	0.1uF		50V	
C654	1-162-294-31	CERAMIC	0.001uF		50V	
< CONNECTOR >						
CN601	1-568-860-11	SOCKET, CONNECTOR 17P				
CN603	1-568-853-11	SOCKET, CONNECTOR 10P				
		(GR10AV/RX100AV:AEP,UK,G,EE,CIS)				
* CN603	1-568-851-11	SOCKET, CONNECTOR 8P				
		(D90AV/RX100AV:US,CND)				
CN609	1-691-645-11	SOCKET, CONNECTOR 9P				
< DIODE >						
D601	8-719-058-03	DIODE SEL5423E-TP15 (TUNER/BAND)				
D602	8-719-057-44	DIODE HLMF-K305-2UP (DSP)				
D604	8-719-058-04	DIODE SEL5223S-TP15 (EFFECT ON/OFF)				
D605	8-719-058-04	DIODE SEL5223S-TP15 (JOG)				
D606	8-719-057-44	DIODE HLMF-K305-2UP (+)				
D607	8-719-057-44	DIODE HLMF-K305-2UP (-)				
D608	8-719-057-44	DIODE HLMF-K305-2UP (▶▶▶)				
D609	8-719-057-44	DIODE HLMF-K305-2UP (◀◀◀)				

Ref. No.	Part No.	Description	Remark			
D610	8-719-057-30	DIODE HLMF-K205-2UL (ENTER/NEXT)				
D611	8-719-057-97	DIODE SEL5923A-TP15 (PROLOGIC)				
D612	8-719-057-97	DIODE SEL5923A-TP15 (PROLOGIC)				
D614	8-719-057-44	DIODE HLMF-K305-2UP (GROOVE)				
D615	8-719-058-04	DIODE SEL5223S-TP15 (NON-STOP)				
D650	8-719-987-63	DIODE 1N4148M				
D651	8-719-987-63	DIODE 1N4148M				
D652	8-719-987-63	DIODE 1N4148M				
D653	8-719-987-63	DIODE 1N4148M				
D654	8-719-987-63	DIODE 1N4148M				
D655	8-719-987-63	DIODE 1N4148M				
D656	8-719-987-63	DIODE 1N4148M				
< FERRITE BEAD >						
FB601	1-412-473-21	INDUCTOR 0UH				
< FLUORESCENT INDICATOR >						
FL601	1-517-618-11	INDICATOR TUBE, FLUORESCENT				
< IC >						
IC601	8-759-446-27	IC TMP87CH75F-6543				
IC602	8-759-332-18	IC GP1U27XB				
< COIL >						
L601	1-410-509-11	INDUCTOR 10uH				
< TRANSISTOR >						
Q601	8-729-118-00	TRANSISTOR 2SB1116-L				
Q602	8-729-118-00	TRANSISTOR 2SB1116-L				
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q604	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q605	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q606	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q607	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q608	8-729-119-76	TRANSISTOR 2SA1175-HFE				
< RESISTOR >						
R601	1-247-903-00	CARBON 1M	5%	1/4W		
R602	1-247-807-31	CARBON 100	5%	1/4W		
R603	1-249-429-11	CARBON 10K	5%	1/4W		
R604	1-249-429-11	CARBON 10K	5%	1/4W		
R605	1-249-429-11	CARBON 10K	5%	1/4W		
R606	1-249-429-11	CARBON 10K	5%	1/4W		
R607	1-249-429-11	CARBON 10K	5%	1/4W		
R608	1-247-843-11	CARBON 3.3K	5%	1/4W		
R609	1-247-843-11	CARBON 3.3K	5%	1/4W		
R610	1-247-807-31	CARBON 100	5%	1/4W		
R611	1-247-807-31	CARBON 100	5%	1/4W		
R612	1-249-429-11	CARBON 10K	5%	1/4W		
R613	1-249-421-11	CARBON 2.2K	5%	1/4W	F	
R614	1-247-863-91	CARBON 22K	5%	1/4W		
R615	1-249-429-11	CARBON 10K	5%	1/4W		
R616	1-249-429-11	CARBON 10K	5%	1/4W		
R617	1-247-804-11	CARBON 75	5%	1/4W		
R618	1-247-804-11	CARBON 75	5%	1/4W		
R619	1-249-401-11	CARBON 47	5%	1/4W	F	
R620	1-249-419-11	CARBON 1.5K	5%	1/4W		

PANEL

Ref. No.	Part No.	Description			Remark	Ref. No.	Part No.	Description			Remark
R621	1-249-419-11	CARBON	1.5K	5%	1/4W F	R689	1-249-419-11	CARBON	1.5K	5%	1/4W F
R622	1-249-401-11	CARBON	47	5%	1/4W F	R690	1-247-897-11	CARBON	560K	5%	1/4W
R623	1-249-403-11	CARBON	68	5%	1/4W F						
R624	1-247-807-31	CARBON	100	5%	1/4W	R691	1-249-437-11	CARBON	47K	5%	1/4W
R625	1-249-407-11	CARBON	150	5%	1/4W F	R692	1-247-895-91	CARBON	470K	5%	1/4W
						R693	1-249-419-11	CARBON	1.5K	5%	1/4W F
R626	1-249-407-11	CARBON	150	5%	1/4W F	R694	1-247-897-11	CARBON	560K	5%	1/4W
R627	1-247-815-91	CARBON	220	5%	1/4W	R695	1-249-437-11	CARBON	47K	5%	1/4W
R628	1-249-411-11	CARBON	330	5%	1/4W						
R629	1-249-413-11	CARBON	470	5%	1/4W F	R696	1-247-895-91	CARBON	470K	5%	1/4W
R630	1-249-415-11	CARBON	680	5%	1/4W F	R698	1-247-897-11	CARBON	560K	5%	1/4W
						R699	1-249-437-11	CARBON	47K	5%	1/4W
R631	1-249-417-11	CARBON	1K	5%	1/4W F	R700	1-247-895-91	CARBON	470K	5%	1/4W
R632	1-249-419-11	CARBON	1.5K	5%	1/4W F	R748	1-249-435-11	CARBON	33K	5%	1/4W
R633	1-249-421-11	CARBON	2.2K	5%	1/4W F						
R634	1-249-419-11	CARBON	1.5K	5%	1/4W F	R749	1-247-895-91	CARBON	470K	5%	1/4W
R635	1-249-401-11	CARBON	47	5%	1/4W F						
								< SWITCH >			
R636	1-249-403-11	CARBON	68	5%	1/4W F	S601	1-762-874-11	SWITCH, JOG			
R637	1-247-826-00	CARBON	620	5%	1/4W	S602	1-467-869-11	ENCODER, ROTARY (VOLUME)			
R639	1-249-411-11	CARBON	330	5%	1/4W	S604	1-762-196-21	SWITCH, TACT (TIMER SELECT)			
R640	1-249-413-11	CARBON	470	5%	1/4W F	S605	1-762-196-21	SWITCH, TACT (CLOCK/TIMER SET)			
R641	1-249-415-11	CARBON	680	5%	1/4W F	S606	1-762-196-21	SWITCH, TACT (DISPLAY/DEMO)			
R642	1-249-417-11	CARBON	1K	5%	1/4W F	S607	1-762-196-21	SWITCH, TACT (SPECTRUM ANALYZER)			
R643	1-249-419-11	CARBON	1.5K	5%	1/4W F	S608	1-762-196-21	SWITCH, TACT (DOLBY NR)			
R644	1-249-421-11	CARBON	2.2K	5%	1/4W F	S609	1-762-196-21	SWITCH, TACT (DIRECTION)			
R645	1-249-419-11	CARBON	1.5K	5%	1/4W F	S610	1-762-196-21	SWITCH, TACT (EDIT)			
R646	1-249-401-11	CARBON	47	5%	1/4W F	S611	1-762-196-21	SWITCH, TACT (REPEAT)			
R647	1-249-403-11	CARBON	68	5%	1/4W F	S612	1-762-196-21	SWITCH, TACT (PLAY MODE)			
R648	1-247-807-31	CARBON	100	5%	1/4W	S613	1-762-196-21	SWITCH, TACT (1/ALL DISCS)			
R650	1-249-407-11	CARBON	150	5%	1/4W F	S614	1-762-196-21	SWITCH, TACT (SLEEP)			
R651	1-249-407-11	CARBON	150	5%	1/4W F	S615	1-762-196-21	SWITCH, TACT (P FILE MEMORY)			
R652	1-247-815-91	CARBON	220	5%	1/4W	S616	1-762-196-21	SWITCH, TACT (NON-STOP)			
R653	1-249-411-11	CARBON	330	5%	1/4W	S617	1-762-196-21	SWITCH, TACT (LOW FREQUENCY)			
R654	1-249-413-11	CARBON	470	5%	1/4W F	S618	1-762-196-21	SWITCH, TACT (HIGH FREQUENCY)			
R655	1-249-415-11	CARBON	680	5%	1/4W F	S619	1-762-196-21	SWITCH, TACT (ENTER/NEXT)			
R656	1-249-417-11	CARBON	1K	5%	1/4W F	S620	1-762-196-21	SWITCH, TACT (PROLOGIC)			
R657	1-249-419-11	CARBON	1.5K	5%	1/4W F	S621	1-762-196-21	SWITCH, TACT (GROOVE)			
R658	1-249-434-11	CARBON	27K	5%	1/4W	S622	1-762-196-21	SWITCH, TACT (GAME)			
R659	1-247-843-11	CARBON	3.3K	5%	1/4W	S623	1-762-196-21	SWITCH, TACT (MOVIE)			
R661	1-249-419-11	CARBON	1.5K	5%	1/4W F	S624	1-762-196-21	SWITCH, TACT (MUSIC)			
R663	1-249-429-11	CARBON	10K	5%	1/4W	S625	1-762-196-21	SWITCH, TACT (P FILE)			
R664	1-249-421-11	CARBON	2.2K	5%	1/4W F	S626	1-762-196-21	SWITCH, TACT (WAVE)			
R665	1-247-887-00	CARBON	220K	5%	1/4W	S631	1-762-196-21	SWITCH, TACT (DSP)			
R666	1-249-421-11	CARBON	2.2K	5%	1/4W F	S632	1-762-196-21	SWITCH, TACT (DBFB)			
R667	1-247-815-91	CARBON	220	5%	1/4W	S633	1-762-196-21	SWITCH, TACT (TUNING MODE)			
R668	1-247-815-91	CARBON	220	5%	1/4W	S634	1-762-196-21	SWITCH, TACT (STEREO/MONO)			
R669	1-247-807-31	CARBON	100	5%	1/4W	S635	1-762-196-21	SWITCH, TACT (EFFECT ON/OFF)			
R671	1-247-815-91	CARBON	220	5%	1/4W	S636	1-762-196-21	SWITCH, TACT (KARAOKE PON/MPX)			
R672	1-247-815-91	CARBON	220	5%	1/4W	S637	1-762-196-21	SWITCH, TACT (TUNER/BAND)			
R673	1-247-807-31	CARBON	100	5%	1/4W	S638	1-762-196-21	SWITCH, TACT (LOOP)			
R674	1-247-807-31	CARBON	100	5%	1/4W	S639	1-762-196-21	SWITCH, TACT (FLASH)			
R675	1-247-807-31	CARBON	100	5%	1/4W	S640	1-762-196-21	SWITCH, TACT (TUNER MEMORY)			
R676	1-247-807-31	CARBON	100	5%	1/4W						
R677	1-247-815-91	CARBON	220	5%	1/4W	S641	1-762-196-21	SWITCH, TACT (PTY)(RX100AV:AEP,UK,G)			
R680	1-247-807-31	CARBON	100	5%	1/4W	S642	1-762-196-21	SWITCH, TACT (FUNCTION)			
R681	1-247-815-91	CARBON	220	5%	1/4W						
R685	1-249-419-11	CARBON	1.5K	5%	1/4W F			< VIBRATOR >			
R686	1-247-897-11	CARBON	560K	5%	1/4W	X601	1-579-125-11	VIBRATOR, CERAMIC (8MHz)			
R687	1-249-437-11	CARBON	47K	5%	1/4W						
R688	1-247-895-91	CARBON	470K	5%	1/4W						

POWER

Ref. No.	Part No.	Description	Remark
*	A-4392-657-A	POWER BOARD, COMPLETE (US,CND) *****	
*	A-4392-656-A	POWER BOARD, COMPLETE (AEP,UK,G,EE,CIS) *****	
*	A-4392-655-A	POWER BOARD, COMPLETE (GR10AV) ***** < CAPACITOR >	
C101	1-130-781-00	FILM 0.22uF 10% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C101	1-136-169-00	FILM 0.22uF 5% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C102	1-130-781-00	FILM 0.22uF 10% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C102	1-136-169-00	FILM 0.22uF 5% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C103	1-136-169-00	FILM 0.22uF 5% 50V	
C104	1-136-169-00	FILM 0.22uF 5% 50V	
C105	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C106	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C107	1-128-576-11	ELECT 100uF 20% 63V	
C108	1-128-576-11	ELECT 100uF 20% 63V	
C110	1-126-942-61	ELECT 1000uF 20% 25V (RX100AV:AEP,UK,G,EE,CIS)	
C110	1-104-665-11	ELECT 100uF 20% 25V (D90AV/GR10AV/RX100AV:US,CND)	
C151	1-128-493-11	ELECT 4700uF 20% 71V (D90AV/GR10AV/RX100AV:US,CND)	
C151	1-126-138-11	ELECT 4700uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C152	1-128-493-11	ELECT 4700uF 20% 71V (D90AV/GR10AV/RX100AV:US,CND)	
C152	1-126-138-11	ELECT 4700uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C153	1-128-550-11	ELECT 2200uF 20% 50V	
C154	1-128-550-11	ELECT 2200uF 20% 50V	
C201	1-128-582-11	ELECT 10uF 20% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C201	1-126-963-11	ELECT 4.7uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C202	1-162-292-31	CERAMIC 680PF 10% 50V	
C203	1-162-286-21	CERAMIC 220PF 10% 50V	
C204	1-126-967-11	ELECT 47uF 20% 50V	
C205	1-126-967-11	ELECT 47uF 20% 50V	
C206	1-128-560-11	ELECT 22uF 20% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C206	1-126-968-11	ELECT 100uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C208	1-126-965-11	ELECT 22uF 20% 50V	
C210	1-130-493-00	MYLAR 0.068uF 5% 50V	
C211	1-130-493-00	MYLAR 0.068uF 5% 50V	
C225	1-162-284-31	CERAMIC 150PF 10% 50V	
C226	1-162-284-31	CERAMIC 150PF 10% 50V	
C228	1-164-159-21	CERAMIC 0.1uF 50V	
C232	1-162-284-31	CERAMIC 150PF 10% 50V	
C251	1-128-582-11	ELECT 10uF 20% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C251	1-126-963-11	ELECT 4.7uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C252	1-162-292-31	CERAMIC 680PF 10% 50V	

Ref. No.	Part No.	Description	Remark
C253	1-162-286-21	CERAMIC 220PF 10% 50V	
C254	1-126-967-11	ELECT 47uF 20% 50V	
C255	1-126-967-11	ELECT 47uF 20% 50V	
C256	1-128-560-11	ELECT 22uF 20% 100V (D90AV/GR10AV/RX100AV:US,CND)	
C256	1-126-968-11	ELECT 100uF 20% 50V (RX100AV:AEP,UK,G,EE,CIS)	
C260	1-130-493-00	MYLAR 0.068uF 5% 50V	
C261	1-130-493-00	MYLAR 0.068uF 5% 50V	
C299	1-161-494-00	CERAMIC 0.022uF 25V (RX100AV:AEP,UK,G,EE,CIS)	
C301	1-126-959-11	ELECT 0.47uF 20% 50V	
C302	1-126-923-11	ELECT 220uF 20% 10V	
C303	1-126-933-11	ELECT 100uF 20% 10V (D90AV/GR10AV/RX100AV:US,CND)	
C303	1-126-923-11	ELECT 220uF 20% 10V (RX100AV:AEP,UK,G,EE,CIS)	
C304	1-126-961-11	ELECT 2.2uF 20% 50V	
C305	1-126-933-11	ELECT 100uF 20% 10V	
C331	1-126-924-11	ELECT 330uF 20% 10V (D90AV/GR10AV/RX100AV:US,CND)	
C331	1-126-925-11	ELECT 470uF 20% 10V (RX100AV:AEP,UK,G,EE,CIS)	
C401	1-126-963-11	ELECT 4.7uF 20% 50V	
C402	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C403	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C404	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C405	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C406	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C407	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C408	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C409	1-164-159-21	CERAMIC 0.1uF 50V (RX100AV:AEP,UK,G,EE,CIS)	
C410	1-161-494-00	CERAMIC 0.022uF 25V	
C411	1-161-494-00	CERAMIC 0.022uF 25V	
C412	1-161-494-00	CERAMIC 0.022uF 25V	
C413	1-161-494-00	CERAMIC 0.022uF 25V	
< CONNECTOR >			
* CN201	1-766-957-11	CONNECTOR, BOARD TO BOARD 20P	
< DIODE >			
D101	8-719-510-68	DIODE D5SBA20F01	
D102	8-719-025-03	DIODE RBA-402-SL	
D103	8-719-987-63	DIODE 1N4148M (RX100AV:AEP,UK,G,EE,CIS)	
D104	8-719-200-82	DIODE 11ES2	
D105	8-719-200-82	DIODE 11ES2	
D110	8-719-200-82	DIODE 11ES2	
D111	8-719-200-82	DIODE 11ES2	
D201	8-719-815-85	DIODE 1S1585 (D90AV/GR10AV/RX100AV:US,CND)	
D201	8-719-987-63	DIODE 1N4148M (RX100AV:AEP,UK,G,EE,CIS)	
D251	8-719-815-85	DIODE 1S1585 (D90AV/GR10AV/RX100AV:US,CND)	
D251	8-719-987-63	DIODE 1N4148M (RX100AV:AEP,UK,G,EE,CIS)	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D301	8-719-987-63	DIODE 1N4148M		L404	1-420-872-00	COIL, AIR-CORE (RX100AV:AEP,UK,G,EE,CIS)	
D302	8-719-987-63	DIODE 1N4148M				< TRANSISTOR >	
D303	8-719-987-63	DIODE 1N4148M		Q111	8-729-900-80	TRANSISTOR DTC114ES	
D321	8-719-815-85	DIODE 1S1585				(RX100AV:AEP,UK,G,EE,CIS)	
		(D90AV/GR10AV/RX100AV:US,CND)		Q112	8-729-900-80	TRANSISTOR DTC114ES	
D321	8-719-987-63	DIODE 1N4148M (RX100AV:AEP,UK,G,EE,CIS)				(RX100AV:AEP,UK,G,EE,CIS)	
D331	8-719-987-63	DIODE 1N4148M		Q113	8-729-040-20	TRANSISTOR RT1P137L-TP	
D332	8-719-987-63	DIODE 1N4148M				(RX100AV:AEP,UK,G,EE,CIS)	
D401	8-719-987-63	DIODE 1N4148M		Q201	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
D402	8-719-987-63	DIODE 1N4148M		Q251	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
D403	8-719-815-85	DIODE 1S1585		Q301	8-729-900-89	TRANSISTOR DTC144ES	
D404	8-719-815-85	DIODE 1S1585		Q323	8-729-900-63	TRANSISTOR DTA124ES	
D405	8-719-815-85	DIODE 1S1585		Q331	8-729-900-89	TRANSISTOR DTC144ES	
D406	8-719-815-85	DIODE 1S1585		Q401	8-729-900-80	TRANSISTOR DTC114ES	
		< EARTH >		Q402	8-729-904-39	TRANSISTOR DTC114TS	
* EP101	1-537-738-21	TERMINAL, EARTH		Q403	8-729-040-20	TRANSISTOR RT1P137L-TP	
* EP201	1-537-738-21	TERMINAL, EARTH		Q404	8-729-040-20	TRANSISTOR RT1P137L-TP	
		< FUSE >		Q405	8-729-900-80	TRANSISTOR DTC114ES	
△ F101	1-532-464-31	FUSE, TIME-LAG (2.5A/250V)(GR10AV)				< RESISTOR >	
△ F101	1-532-465-31	FUSE, TIME-LAG (3.15A/250V)		△ R101	1-219-122-91	FUSIBLE 0.33 5% 1/4W F	
		(RX100AV:AEP,UK,G,EE,CIS)		△ R103	1-216-449-11	METAL OXIDE 56 5% 2W F	
△ F101	1-533-690-11	FUSE, GLASS CYLINDRICAL (DIA.5)				(RX100AV:AEP,UK,G,EE,CIS)	
		(3.15A/125V)(D90AV/RX100AV:US,CND)		R111	1-249-429-11	CARBON 10K 5% 1/4W	
△ F102	1-532-464-31	FUSE, TIME-LAG (2.5A/250V)(GR10AV)				(RX100AV:AEP,UK,G,EE,CIS)	
△ F102	1-532-465-31	FUSE, TIME-LAG (3.15A/250V)		R201	1-249-417-11	CARBON 1K 5% 1/4W F	
		(RX100AV:AEP,UK,G,EE,CIS)		R202	1-249-437-11	CARBON 47K 5% 1/4W	
△ F102	1-533-690-11	FUSE, GLASS CYLINDRICAL (DIA.5)		R203	1-249-413-11	CARBON 470 5% 1/4W F	
		(3.15A/125V)(D90AV/RX100AV:US,CND)				(D90AV/GR10AV/RX100AV:US,CND)	
△ F103	1-532-506-31	FUSE, TIME-LAG (6.3A/250V)		R203	1-249-415-11	CARBON 680 5% 1/4W F	
		(GR10AV/RX100AV:AEP,UK,G,EE,CIS)				(RX100AV:AEP,UK,G,EE,CIS)	
△ F103	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5)		R204	1-249-437-11	CARBON 47K 5% 1/4W	
		(6.3A/125V)(D90AV/RX100AV:US,CND)		R206	1-260-107-11	CARBON 4.7K 5% 1/2W	
△ F104	1-532-506-31	FUSE, TIME-LAG (6.3A/250V)				(D90AV/GR10AV/RX100AV:US,CND)	
		(GR10AV/RX100AV:AEP,UK,G,EE,CIS)		R206	1-260-105-11	CARBON 3.3K 5% 1/2W	
△ F104	1-533-310-11	FUSE, GLASS CYLINDRICAL (DIA.5)				(RX100AV:AEP,UK,G,EE,CIS)	
		(6.3A/125V)(D90AV/RX100AV:US,CND)		R208	1-260-107-11	CARBON 4.7K 5% 1/2W	
		< FUSE HOLDER >				(D90AV/GR10AV/RX100AV:US,CND)	
FH101	1-533-233-21	HOLDER, FUSE		R208	1-260-105-11	CARBON 3.3K 5% 1/2W	
FH102	1-533-233-21	HOLDER, FUSE				(RX100AV:AEP,UK,G,EE,CIS)	
FH103	1-533-233-21	HOLDER, FUSE		△ R209	1-212-881-11	FUSIBLE 100 5% 1/4W F	
FH104	1-533-233-21	HOLDER, FUSE		△ R210	1-217-156-00	WIREWOUND 0.22 10% 5W	
FH105	1-533-233-21	HOLDER, FUSE				(D90AV/GR10AV/RX100AV:US,CND)	
FH106	1-533-233-21	HOLDER, FUSE		△ R210	1-217-151-00	METAL PLATE 0.22 10% 2W	
FH107	1-533-233-21	HOLDER, FUSE				(RX100AV:AEP,UK,G,EE,CIS)	
FH108	1-533-233-21	HOLDER, FUSE		R211	1-249-417-11	CARBON 1K 5% 1/4W F	
		< IC >		R212	1-249-431-11	CARBON 15K 5% 1/4W	
IC201	8-749-921-68	IC STK-4231MK2 (D90AV/RX100AV:US,CND)		R213	1-249-441-11	CARBON 100K 5% 1/4W	
IC201	8-749-922-65	IC STK-4221MK2 (GR10AV)		R215	1-260-102-11	CARBON 1.8K 5% 1/2W	
IC201	8-749-900-34	IC STK-4182MK2 (RX100AV:AEP,UK,G,EE,CIS)				(D90AV/RX100AV:US,CND)	
IC301	8-759-111-68	IC UPC1237HA		R215	1-260-103-11	CARBON 2.2K 5% 1/2W	
		< COIL >				(GR10AV)	
L401	1-420-872-00	COIL, AIR-CORE (RX100AV:AEP,UK,G,EE,CIS)		R215	1-260-099-11	CARBON 1K 5% 1/2W	
L402	1-420-872-00	COIL, AIR-CORE (RX100AV:AEP,UK,G,EE,CIS)				(RX100AV:AEP,UK,G,EE,CIS)	
L403	1-420-872-00	COIL, AIR-CORE (RX100AV:AEP,UK,G,EE,CIS)		R216	1-260-102-11	CARBON 1.8K 5% 1/2W	
						(D90AV/RX100AV:US,CND)	
				R216	1-260-103-11	CARBON 2.2K 5% 1/2W	
						(GR10AV)	

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

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

POWER

SENSOR

Ref. No.	Part No.	Description	Remark
R216	1-260-099-11	CARBON	1K 5% 1/2W (RX100AV:AEP,UK,G,EE,CIS)
R218	1-260-076-11	CARBON	10 5% 1/2W
R227	1-249-425-11	CARBON	4.7K 5% 1/4W F
△ R250	1-217-637-00	FUSIBLE	1 5% 1/4W F
R251	1-249-417-11	CARBON	1K 5% 1/4W F
R252	1-249-437-11	CARBON	47K 5% 1/4W
R253	1-249-413-11	CARBON	470 5% 1/4W F (D90AV/GR10AV/RX100AV:US,CND)
R253	1-249-415-11	CARBON	680 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R254	1-249-437-11	CARBON	47K 5% 1/4W
R256	1-260-107-11	CARBON	4.7K 5% 1/2W (D90AV/GR10AV/RX100AV:US,CND)
R256	1-260-105-11	CARBON	3.3K 5% 1/2W (RX100AV:AEP,UK,G,EE,CIS)
R258	1-260-107-11	CARBON	4.7K 5% 1/2W (D90AV/GR10AV/RX100AV:US,CND)
R258	1-260-105-11	CARBON	3.3K 5% 1/2W (RX100AV:AEP,UK,G,EE,CIS)
△ R259	1-212-881-11	FUSIBLE	100 5% 1/4W F
△ R260	1-217-156-00	WIREWOUND	0.22 10% 5W (D90AV/GR10AV/RX100AV:US,CND)
△ R260	1-217-151-00	METAL PLATE	0.22 10% 2W (RX100AV:AEP,UK,G,EE,CIS)
R261	1-249-417-11	CARBON	1K 5% 1/4W F
R262	1-249-431-11	CARBON	15K 5% 1/4W
R263	1-249-441-11	CARBON	100K 5% 1/4W
R268	1-260-076-11	CARBON	10 5% 1/2W
R272	1-260-093-11	CARBON	330 5% 1/2W
R273	1-260-093-11	CARBON	330 5% 1/2W
R274	1-260-093-11	CARBON	330 5% 1/2W
R275	1-260-093-11	CARBON	330 5% 1/2W
R301	1-249-441-11	CARBON	100K 5% 1/4W
R302	1-247-854-11	CARBON	9.1K 5% 1/4W (D90AV/GR10AV/RX100AV:US,CND)
R302	1-249-425-11	CARBON	4.7K 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R303	1-247-854-11	CARBON	9.1K 5% 1/4W (D90AV/GR10AV/RX100AV:US,CND)
R303	1-249-425-11	CARBON	4.7K 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R304	1-249-429-11	CARBON	10K 5% 1/4W
R305	1-249-421-11	CARBON	2.2K 5% 1/4W F
R306	1-249-441-11	CARBON	100K 5% 1/4W
R307	1-247-863-91	CARBON	22K 5% 1/4W
R308	1-247-863-91	CARBON	22K 5% 1/4W
R309	1-247-791-91	CARBON	22 5% 1/4W
R310	1-249-437-11	CARBON	47K 5% 1/4W (D90AV/GR10AV/RX100AV:US,CND)
R310	1-249-435-11	CARBON	33K 5% 1/4W (RX100AV:AEP,UK,G,EE,CIS)
R311	1-249-429-11	CARBON	10K 5% 1/4W
R312	1-249-429-11	CARBON	10K 5% 1/4W
R314	1-249-439-11	CARBON	68K 5% 1/4W
R315	1-249-439-11	CARBON	68K 5% 1/4W
R316	1-249-437-11	CARBON	47K 5% 1/4W
R317	1-249-437-11	CARBON	47K 5% 1/4W
R331	1-247-889-00	CARBON	270K 5% 1/4W (D90AV/RX100AV:US,CND)

Ref. No.	Part No.	Description	Remark
R331	1-247-890-11	CARBON	300K 5% 1/4W (GR10AV)
R331	1-247-883-00	CARBON	150K 5% 1/4W (RX100AV:AEP,UK,G,EE,CIS)
R332	1-249-429-11	CARBON	10K 5% 1/4W
R333	1-249-431-11	CARBON	15K 5% 1/4W (D90AV/GR10AV/RX100AV:US,CND)
R333	1-249-429-11	CARBON	10K 5% 1/4W (RX100AV:AEP,UK,G,EE,CIS)
R334	1-249-417-11	CARBON	1K 5% 1/4W F
△ R405	1-215-886-11	METAL OXIDE	100 5% 2W F
△ R407	1-215-886-11	METAL OXIDE	100 5% 2W F
R408	1-249-437-11	CARBON	47K 5% 1/4W
R409	1-249-440-11	CARBON	82K 5% 1/4W
R410	1-249-437-11	CARBON	47K 5% 1/4W
R411	1-249-437-11	CARBON	47K 5% 1/4W
R412	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R413	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R414	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R415	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R416	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R417	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R418	1-249-393-11	CARBON	10 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R419	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R420	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R421	1-249-393-11	CARBON	10 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R422	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
R423	1-249-389-11	CARBON	4.7 5% 1/4W F (RX100AV:AEP,UK,G,EE,CIS)
< RELAY >			
△ RY101	1-755-195-11	RELAY (RX100AV:AEP,UK,G,EE,CIS)	
RY401	1-755-142-11	RELAY	
RY402	1-755-141-11	RELAY (D90AV/GR10AV/RX100AV:US,CND)	
RY402	1-755-142-11	RELAY (RX100AV:AEP,UK,G,EE,CIS)	
< TERMINAL >			
TM401	1-537-842-11	TERMINAL BOARD (FRONT SPEAKER)	
TM402	1-537-510-11	TERMINAL BOARD (SPEAKER) (6P) (SURROUND SPEAKER)	

*	1-658-576-11	SENSOR BOARD	*****
< IC >			
IC702	8-749-924-18	PH OTO INTERRUPTER RPI-1391	
IC703	8-749-924-30	PH OTO REFLECTOR GP2S28	

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.
--	--

SENSOR

SURROUND

TCB

Ref. No.	Part No.	Description	Remark			
< RESISTOR >						
R701	1-249-416-11	CARBON	820	5%	1/4W	F
R702	1-249-407-11	CARBON	150	5%	1/4W	F

*	A-4392-662-A	SURROUND BOARD, COMPLETE				

(EXCEPT AEP,UK,G,EE,CIS)						
*	A-4392-663-A	SURROUND BOARD, COMPLETE				

(AEP,UK,G,EE,CIS)						
< CAPACITOR >						
C601	1-126-963-11	ELECT	4.7uF	20%	50V	
C602	1-162-292-31	CERAMIC	680PF	10%	50V	
C603	1-162-286-21	CERAMIC	220PF	10%	50V	
C604	1-126-967-11	ELECT	47uF	20%	50V	
C605	1-126-967-11	ELECT	47uF	20%	50V	
C606	1-126-968-11	ELECT	100uF	20%	50V	
C608	1-126-965-11	ELECT	22uF	20%	50V	
C610	1-130-493-00	MYLAR	0.068uF	5%	50V	
C611	1-130-493-00	MYLAR	0.068uF	5%	50V	
C613	1-161-494-00	CERAMIC	0.022uF		25V	
(AEP,UK,G,EE,CIS)						
C620	1-126-923-11	ELECT	220uF	20%	10V	
C625	1-162-284-31	CERAMIC	150PF	10%	50V	
C626	1-162-284-31	CERAMIC	150PF	10%	50V	
(AEP,UK,G,EE,CIS)						
C628	1-164-159-21	CERAMIC	0.1uF		50V	
C651	1-126-963-11	ELECT	4.7uF	20%	50V	
C652	1-162-292-31	CERAMIC	680PF	10%	50V	
C653	1-162-286-21	CERAMIC	220PF	10%	50V	
C654	1-126-967-11	ELECT	47uF	20%	50V	
C655	1-126-967-11	ELECT	47uF	20%	50V	
C656	1-126-968-11	ELECT	100uF	20%	50V	
C660	1-130-493-00	MYLAR	0.068uF	5%	50V	
C661	1-130-493-00	MYLAR	0.068uF	5%	50V	
< CONNECTOR >						
CN601	1-691-765-11	PLUG (MICRO CONNECTOR) 3P				
CN602	1-691-770-11	PLUG (MICRO CONNECTOR) 8P				
CN603	1-691-766-11	PLUG (MICRO CONNECTOR) 4P				
< DIODE >						
D601	8-719-987-63	DIODE	1N4148M			
D602	8-719-987-63	DIODE	1N4148M			
D603	8-719-987-63	DIODE	1N4148M			
D604	8-719-987-63	DIODE	1N4148M			
D651	8-719-987-63	DIODE	1N4148M			
< EARTH >						
* EP601	1-537-738-21	TERMINAL, EARTH (AEP,UK,G,EE,CIS)				
* EP602	1-537-738-21	TERMINAL, EARTH				
< IC >						
IC601	8-749-900-96	IC STK-4142MK2				

Ref. No.	Part No.	Description	Remark			
< TRANSISTOR >						
Q601	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q651	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA			
Q670	8-729-119-78	TRANSISTOR	2SC2785-HFE			
Q671	8-729-900-36	TRANSISTOR	DTC124ES			
< RESISTOR >						
R601	1-249-417-11	CARBON	1K	5%	1/4W	F
R602	1-249-437-11	CARBON	47K	5%	1/4W	
R603	1-249-415-11	CARBON	680	5%	1/4W	F
R604	1-249-437-11	CARBON	47K	5%	1/4W	
R605	1-260-103-11	CARBON	2.2K	5%	1/2W	
R606	1-260-103-11	CARBON	2.2K	5%	1/2W	
△ R609	1-212-881-11	FUSIBLE	100	5%	1/4W	F
△ R610	1-217-151-00	METAL PLATE	0.22	10%	2W	
R611	1-249-417-11	CARBON	1K	5%	1/4W	F
R612	1-249-431-11	CARBON	15K	5%	1/4W	
R613	1-249-441-11	CARBON	100K	5%	1/4W	
R614	1-260-099-11	CARBON	1K	5%	1/2W	
R616	1-260-099-11	CARBON	1K	5%	1/2W	
R618	1-260-076-11	CARBON	10	5%	1/2W	
R627	1-249-429-11	CARBON	10K	5%	1/4W	
R628	1-247-881-00	CARBON	120K	5%	1/4W	
R630	1-249-429-11	CARBON	10K	5%	1/4W	
R642	1-249-429-11	CARBON	10K	5%	1/4W	
△ R644	1-217-637-00	FUSIBLE	1	5%	1/4W	F
R651	1-249-417-11	CARBON	1K	5%	1/4W	F
R652	1-249-437-11	CARBON	47K	5%	1/4W	
R653	1-249-415-11	CARBON	680	5%	1/4W	F
R654	1-249-437-11	CARBON	47K	5%	1/4W	
R655	1-260-103-11	CARBON	2.2K	5%	1/2W	
R656	1-260-103-11	CARBON	2.2K	5%	1/2W	
△ R659	1-212-881-11	FUSIBLE	100	5%	1/4W	F
△ R660	1-217-151-00	METAL PLATE	0.22	10%	2W	
R661	1-249-417-11	CARBON	1K	5%	1/4W	F
R662	1-249-431-11	CARBON	15K	5%	1/4W	
R663	1-249-441-11	CARBON	100K	5%	1/4W	
R668	1-260-076-11	CARBON	10	5%	1/2W	
R670	1-249-441-11	CARBON	100K	5%	1/4W	
R671	1-249-441-11	CARBON	100K	5%	1/4W	
R672	1-249-436-11	CARBON	39K	5%	1/4W	

< THERMISTOR(POSITIVE) >

THP670 1-807-796-11 THERMISTOR

* A-4303-570-A TCB BOARD, COMPLETE (EE,CIS)

< CAPACITOR >

C1	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C2	1-126-967-11	ELECT	47uF	20%	16V
C3	1-163-038-91	CERAMIC CHIP	0.1uF		25V
C5	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C6	1-163-038-91	CERAMIC CHIP	0.1uF		25V

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

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

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C7	1-101-004-00	CERAMIC	0.01uF		50V	C1705	1-163-035-00	CERAMIC CHIP	0.047uF		50V
C8	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1706	1-126-960-11	ELECT	1.0uF	20%	50V
C9	1-163-031-11	CERAMIC CHIP	0.01uF		50V						
C10	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1707	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C16	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1710	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
						C1711	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V
C19	1-163-249-11	CERAMIC CHIP	82PF	5%	50V	C1712	1-130-736-11	FILM	0.01uF	5%	50V
C21	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C1713	1-130-736-11	FILM	0.01uF	5%	50V
C22	1-163-031-11	CERAMIC CHIP	0.01uF		50V						
C23	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	C1714	1-126-960-11	ELECT	1.0uF	20%	50V
C24	1-163-239-11	CERAMIC CHIP	33PF	5%	50V	C1715	1-126-960-11	ELECT	1.0uF	20%	50V
						C1716	1-126-960-11	ELECT	1.0uF	20%	50V
C26	1-126-967-11	ELECT	47uF	20%	16V	C1719	1-126-967-11	ELECT	47uF	20%	16V
C28	1-126-967-11	ELECT	47uF	20%	16V	C1720	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V						
C30	1-126-961-11	ELECT	2.2uF	20%	50V	C1723	1-163-031-11	CERAMIC CHIP	0.01uF		50V
C31	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1724	1-163-031-11	CERAMIC CHIP	0.01uF		50V
						C1725	1-126-967-11	ELECT	47uF	20%	16V
C32	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1726	1-126-960-11	ELECT	1.0uF	20%	50V
C33	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1727	1-126-960-11	ELECT	1.0uF	20%	50V
C34	1-163-229-11	CERAMIC CHIP	12PF	5%	50V						
C35	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1728	1-126-966-11	ELECT	33uF	20%	16V
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V						
								< FILTER >			
C37	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	CF1	1-567-389-11	FILTER, CERAMIC			
C39	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	CF3	1-567-389-11	FILTER, CERAMIC			
C40	1-163-031-11	CERAMIC CHIP	0.01uF		50V	CF3	1-760-393-11	FILTER, CERAMIC			
C41	1-163-031-11	CERAMIC CHIP	0.01uF		50V						
C42	1-163-038-91	CERAMIC CHIP	0.1uF		25V						
								< CONNECTOR >			
C43	1-163-038-91	CERAMIC CHIP	0.1uF		25V	* CN1	1-568-834-11	SOCKET, CONNECTOR 15P			
C44	1-163-031-11	CERAMIC CHIP	0.01uF		50V						
C45	1-163-038-91	CERAMIC CHIP	0.1uF		25V						
C46	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V						
C47	1-126-967-11	ELECT	47uF	20%	16V						
								< TRIMMER >			
C48	1-163-031-11	CERAMIC CHIP	0.01uF		50V	CT1701	1-141-444-11	CAP, CERAMIC TRIMMER 50PF			
C49	1-126-959-11	ELECT	0.47uF	20%	50V						
C50	1-126-960-11	ELECT	1.0uF	20%	50V						
C51	1-126-960-11	ELECT	1.0uF	20%	50V						
C52	1-126-963-11	ELECT	4.7uF	20%	50V						
								< DIODE >			
C53	1-126-964-11	ELECT	10uF	20%	50V	D21	8-719-976-99	DIODE DTZ5.1B			
C54	1-104-396-11	ELECT	10uF	20%	16V	D41	8-719-016-74	DIODE 1SS352			
C55	1-104-396-11	ELECT	10uF	20%	16V	D42	8-719-016-74	DIODE 1SS352			
C56	1-104-396-11	ELECT	10uF	20%	16V	D43	8-719-016-74	DIODE 1SS352			
C57	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	D1701	8-719-016-74	DIODE 1SS352			
C58	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	D1702	8-719-016-74	DIODE 1SS352			
C59	1-163-989-11	CERAMIC CHIP	33000PF	10%	25V	D1703	8-719-987-63	DIODE 1N4148			
C60	1-163-989-11	CERAMIC CHIP	33000PF	10%	25V	D1704	8-719-016-74	DIODE 1SS352			
C61	1-126-301-11	ELECT	1.0uF	20%	50V						
C62	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V						
								< FRONTEND >			
C63	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	FE1	1-693-335-11	FRONT END (3 GANG)			
C64	1-126-967-11	ELECT	47uF	20%	16V	FE2	1-233-514-11	ENCAPSULATED COMPONENT			
C65	1-163-031-11	CERAMIC CHIP	0.01uF		50V						
C66	1-126-162-11	ELECT	3.3uF	20%	50V						
C67	1-126-933-11	ELECT	100uF	20%	10V						
								< IC >			
C68	1-162-306-11	CERAMIC	0.01uF	30%	16V	IC21	8-759-288-54	IC LC72130			
C71	1-162-306-11	CERAMIC	0.01uF	30%	16V	IC41	8-759-176-03	IC LA1835			
C72	1-126-967-11	ELECT	47uF	20%	16V	IC1701	8-759-063-04	IC IR3R42			
C120	1-163-105-00	CERAMIC CHIP	33PF	5%	50V	IC1702	8-759-140-53	IC uPD4053BC			
C1701	1-162-294-31	CERAMIC CHIP	1000PF	10%	50V						
								< IFT >			
C1702	1-130-014-00	FILM	470PF	5%	50V	IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)			
C1703	1-126-959-11	ELECT	0.47uF	20%	50V						
C1704	1-126-959-11	ELECT	0.47uF	20%	50V						
								< JUMPER RESISTOR >			
						JR2	1-216-295-91	METAL CHIP	0	5%	1/10W

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
JR6	1-216-295-91	METAL CHIP	0	5%	1/10W	R21	1-249-417-11	CARBON	1.0K	5%	1/4W
JR8	1-216-295-91	METAL CHIP	0	5%	1/10W	R22	1-249-417-11	CARBON	1.0K	5%	1/4W
JR9	1-216-295-91	METAL CHIP	0	5%	1/10W	R23	1-249-417-11	CARBON	1.0K	5%	1/4W
JR46	1-216-296-91	METAL CHIP	0	5%	1/8W	R24	1-247-807-31	CARBON	100	5%	1/4W
JR47	1-216-295-91	METAL CHIP	0	5%	1/10W	R25	1-249-417-11	CARBON	1.0K	5%	1/4W F
JR48	1-216-295-91	METAL CHIP	0	5%	1/10W	R26	1-249-437-11	CARBON	47K	5%	1/4W
JR49	1-216-296-91	METAL CHIP	0	5%	1/8W	R27	1-249-429-11	CARBON	10K	5%	1/4W
JR51	1-216-295-91	METAL CHIP	0	5%	1/10W	R28	1-249-417-11	CARBON	1.0K	5%	1/4W F
JR52	1-216-295-91	METAL CHIP	0	5%	1/10W	R29	1-216-061-00	METAL CHIP	3.3K	5%	1/10W
JR53	1-216-296-91	METAL CHIP	0	5%	1/8W	R30	1-216-186-00	METAL CHIP	330	5%	1/8W
JR54	1-216-295-91	METAL CHIP	0	5%	1/10W	R31	1-216-025-91	METAL CHIP	100	5%	1/10W
JR1701	1-216-295-91	METAL CHIP	0	5%	1/10W	R32	1-249-425-11	CARBON	4.7K	5%	1/4W F
JR1702	1-216-295-91	METAL CHIP	0	5%	1/10W	R33	1-249-425-11	CARBON	4.7K	5%	1/4W F
JR1703	1-216-295-91	METAL CHIP	0	5%	1/10W	R34	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
JR1704	1-216-295-91	METAL CHIP	0	5%	1/10W	R35	1-216-214-00	METAL CHIP	4.7K	5%	1/8W
JR1705	1-216-295-91	METAL CHIP	0	5%	1/10W	R36	1-216-025-91	METAL CHIP	100	5%	1/10W
< COIL >						R37	1-216-073-00	METAL CHIP	10K	5%	1/10W
L3	1-410-521-11	MICRO INDUCTOR			100uH	R38	1-216-089-91	METAL CHIP	47K	5%	1/10W
L41	1-407-500-00	MICRO INDUCTOR			4.7mH	R39	1-249-429-11	CARBON	10K	5%	1/4W
L1701	1-409-497-11	COIL (FILTER)				R42	1-216-073-00	METAL CHIP	10K	5%	1/10W
< FILTER >						R43	1-216-042-00	METAL CHIP	510	5%	1/10W
LPF41	1-239-845-11	FILTER, LOW PASS				R44	1-216-013-00	METAL CHIP	33	5%	1/10W
LPF42	1-239-845-11	FILTER, LOW PASS				R45	1-247-843-11	CARBON	3.3K	5%	1/4W F
< TRANSISTOR >						R46	1-216-073-00	METAL CHIP	10K	5%	1/10W
Q1	8-729-201-27	TRANSISTOR	2SC2715Y			R47	1-216-097-91	METAL CHIP	100K	5%	1/10W
Q2	8-729-201-27	TRANSISTOR	2SC2715Y			R48	1-249-417-11	CARBON	1.0K	5%	1/4W F
Q3	8-729-201-27	TRANSISTOR	2SC2715Y			R49	1-216-049-91	METAL CHIP	1.0K	5%	1/10W
Q4	8-729-201-27	TRANSISTOR	2SC2715Y			R50	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
Q5	8-729-424-08	TRANSISTOR	UN2111			R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W
Q9	8-729-216-22	TRANSISTOR	2SA812-M5M6			R53	1-249-429-11	CARBON	10K	5%	1/4W
Q11	8-729-421-22	TRANSISTOR	UN2211			R55	1-216-162-00	METAL CHIP	33	5%	1/8W
Q12	8-729-421-22	TRANSISTOR	UN2211			R56	1-249-393-11	CARBON	10	5%	1/4W F
Q13	8-729-421-22	TRANSISTOR	UN2211			R91	1-216-295-91	METAL CHIP	0	5%	1/10W
Q14	8-729-421-22	TRANSISTOR	UN2211			R92	1-216-073-00	METAL CHIP	10K	5%	1/10W
Q1701	8-729-424-08	TRANSISTOR	UN2111			R94	1-216-073-00	METAL CHIP	10K	5%	1/10W
Q1702	8-729-907-00	TRANSISTOR	DTC114EU			R99	1-249-399-11	CARBON	33	5%	1/4W F
Q1703	8-729-421-22	TRANSISTOR	UN2211			R1701	1-216-081-00	METAL CHIP	22K	5%	1/10W
< RESISTOR >						R1702	1-216-085-00	METAL CHIP	33K	5%	1/10W
R1	1-249-401-11	CARBON	47	5%	1/4W F	R1703	1-216-069-00	METAL CHIP	6.8K	5%	1/10W
R2	1-216-037-00	METAL CHIP	330	5%	1/10W	R1704	1-216-075-00	METAL CHIP	12K	5%	1/10W
R3	1-216-037-00	METAL CHIP	330	5%	1/10W	R1705	1-216-049-91	METAL CHIP	1.0K	5%	1/10W
R5	1-216-037-00	METAL CHIP	330	5%	1/10W	R1706	1-216-049-91	METAL CHIP	1.0K	5%	1/10W
R6	1-216-081-00	METAL CHIP	22K	5%	1/10W	R1707	1-216-097-91	METAL CHIP	100K	5%	1/10W
R7	1-216-037-00	METAL CHIP	330	5%	1/10W	R1708	1-216-095-00	METAL CHIP	82K	5%	1/10W
R8	1-216-037-00	METAL CHIP	330	5%	1/10W	R1709	1-216-089-91	METAL CHIP	47K	5%	1/10W
R9	1-216-081-00	METAL CHIP	22K	5%	1/10W	R1710	1-216-073-00	METAL CHIP	10K	5%	1/10W
R10	1-216-037-00	METAL CHIP	330	5%	1/10W	R1711	1-249-429-11	CARBON	10K	5%	1/4W
R11	1-216-081-00	METAL CHIP	22K	5%	1/10W	R1714	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R12	1-216-037-00	METAL CHIP	330	5%	1/10W	R1715	1-216-067-00	METAL CHIP	5.6K	5%	1/10W
R13	1-216-037-00	METAL CHIP	330	5%	1/10W	R1716	1-216-097-91	METAL CHIP	100K	5%	1/10W
R14	1-216-081-00	METAL CHIP	22K	5%	1/10W	R1717	1-216-097-91	METAL CHIP	100K	5%	1/10W
R18	1-216-073-00	METAL CHIP	10K	5%	1/10W	R1718	1-249-429-11	CARBON	10K	5%	1/4W
R19	1-216-073-00	METAL CHIP	10K	5%	1/10W	R1719	1-216-097-91	METAL CHIP	100K	5%	1/10W
< VARIABLE RESISTOR >						R1720	1-249-434-11	CARBON	27K	5%	1/4W
RV41	1-238-601-11	RES, ADJ, CARBON	22K			R1721	1-216-073-00	METAL CHIP	10K	5%	1/10W

Ref. No.	Part No.	Description	Remark				Ref. No.	Part No.	Description	Remark			
RV42	1-238-600-11	RES, ADJ, CARBON 10K					C54	1-104-396-11	ELECT	10uF	20%	16V	
RV1701	1-238-600-11	RES, ADJ, CARBON 10K					C55	1-104-396-11	ELECT	10uF	20%	16V	
RV1702	1-238-599-11	RES, ADJ, CARBON 4.7K					C56	1-104-396-11	ELECT	10uF	20%	16V	
< TERMINAL >						C57	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V		
						C58	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V		
TM1	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)					C59	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V	
< VIBRATOR >						C60	1-163-989-11	CERAMIC CHIP	0.033uF	10%	25V		
						C61	1-126-301-11	ELECT	1uF	20%	50V		
X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)					C62	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	
X41	1-760-220-11	FILTER, CERAMIC (10.7MHz)					C63	1-163-017-00	CERAMIC CHIP	0.0047uF	5%	50V	
X42	1-527-981-00	FILTER, CERAMIC (450kHz)					C64	1-126-967-11	ELECT	47uF	20%	16V	
X43	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)					C65	1-163-031-11	CERAMIC CHIP	0.01uF		50V	
*****						C66	1-126-162-11	ELECT	3.3uF	20%	50V		
						C67	1-126-933-11	ELECT	100uF	20%	10V		
						C68	1-162-306-11	CERAMIC	0.01uF	30%	16V		
* A-4303-571-A TCB BOARD, COMPLETE (AEP,UK,G)						C71	1-162-306-11	CERAMIC	0.01uF	30%	16V		
*****						C72	1-126-967-11	ELECT	47uF	20%	16V		
< CAPACITOR >						C120	1-163-105-00	CERAMIC CHIP	33PF	5%	50V		
C1	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C1751	1-164-159-11	CERAMIC	0.1uF		50V		
C2	1-126-967-11	ELECT	47uF	20%	16V	C1752	1-126-967-11	ELECT	47uF	20%	16V		
C3	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1753	1-126-964-11	ELECT	10uF	20%	50V		
C5	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1754	1-162-291-31	CERAMIC	560PF	10%	50V		
C6	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1755	1-126-964-11	ELECT	10uF	20%	50V		
						C1756	1-126-961-11	ELECT	2.2uF	20%	50V		
C8	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1757	1-162-288-31	CERAMIC	330PF	10%	50V		
C9	1-163-031-11	CERAMIC CHIP	0.01uF		50V								
C10	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1758	1-163-031-11	CERAMIC CHIP	0.01uF		50V		
C16	1-163-038-91	CERAMIC CHIP	0.1uF		25V	C1759	1-163-135-00	CERAMIC CHIP	560PF	5%	50V		
C19	1-163-249-11	CERAMIC CHIP	82PF	5%	50V	C1760	1-163-031-11	CERAMIC CHIP	0.01uF		50V		
C21	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	C1761	1-163-243-11	CERAMIC CHIP	47PF	5%	50V		
C22	1-163-031-11	CERAMIC CHIP	0.01uF		50V	C1762	1-163-249-11	CERAMIC CHIP	82PF	5%	50V		
C23	1-163-235-11	CERAMIC CHIP	22PF	5%	50V	< FILTER >							
C24	1-163-239-11	CERAMIC CHIP	33PF	5%	50V	CF1	1-579-374-71	FILTER, CERAMIC					
C26	1-126-967-11	ELECT	47uF	20%	16V	CF2	1-760-393-11	FILTER, CERAMIC					
						CF3	1-760-393-11	FILTER, CERAMIC					
C28	1-126-967-11	ELECT	47uF	20%	16V	< CONNECTOR >							
C29	1-162-306-11	CERAMIC	0.01uF	30%	16V	* CN1	1-568-834-11	SOCKET, CONNECTOR 15P					
C30	1-126-961-11	ELECT	2.2uF	20%	100V	< DIODE >							
C31	1-163-031-11	CERAMIC CHIP	0.01uF		50V	D21	8-719-976-99	DIODE UDZ-TE-17-5.1B					
C32	1-163-038-91	CERAMIC CHIP	0.1uF		25V	D41	8-719-016-74	DIODE 1SS352-TPH3					
C33	1-163-038-91	CERAMIC CHIP	0.1uF		25V	D42	8-719-987-63	DIODE 1N4148M					
C34	1-163-229-11	CERAMIC CHIP	12PF	5%	50V	D1751	8-719-016-74	DIODE 1SS352-TPH3					
C35	1-163-038-91	CERAMIC CHIP	0.1uF		25V	< FRONT-END >							
C36	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	FE1	1-693-357-11	FRONT END (4 GANG)					
C37	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	FE2	1-233-514-11	ENCAPSULATED COMPONENT					
C39	1-163-141-00	CERAMIC CHIP	0.001uF	5%	50V	< IC >							
C40	1-163-031-11	CERAMIC CHIP	0.01uF		50V	IC21	8-759-288-54	IC LC72130					
C41	1-163-031-11	CERAMIC CHIP	0.01uF		50V	IC41	8-759-176-03	IC LA1835					
C42	1-163-038-91	CERAMIC CHIP	0.1uF		25V	IC1751	8-759-634-51	IC M5218AP					
C43	1-163-038-91	CERAMIC CHIP	0.1uF		25V	IC1752	8-759-450-86	IC BU1922					
C44	1-163-031-11	CERAMIC CHIP	0.01uF		50V	< IFT >							
C45	1-163-038-91	CERAMIC CHIP	0.1uF		25V	IFT41	1-409-636-11	TRANSFORMER, IF (CERAMIC FILTER)					
C46	1-163-077-00	CERAMIC CHIP	0.1uF	10%	25V								
C47	1-126-967-11	ELECT	47uF	20%	16V								
C48	1-163-031-11	CERAMIC CHIP	0.01uF		50V								
C49	1-126-959-11	ELECT	0.47uF	20%	50V								
C50	1-126-960-11	ELECT	1.0uF	20%	50V								
C51	1-126-960-11	ELECT	1.0uF	20%	50V								
C52	1-126-963-11	ELECT	4.7uF	20%	50V								
C53	1-126-964-11	ELECT	10uF	20%	50V								

Ref. No.	Part No.	Description				Remark	Ref. No.	Part No.	Description				Remark
< JUMPER RESISTOR >							R25	1-249-417-11	CARBON	1K	5%	1/4W F	
JR2	1-216-295-11	METAL CHIP	0	5%	1/10W		R26	1-249-437-11	CARBON	47K	5%	1/4W	
JR6	1-216-295-11	METAL CHIP	0	5%	1/10W		R27	1-249-429-11	CARBON	10K	5%	1/4W	
JR8	1-216-295-11	METAL CHIP	0	5%	1/10W		R28	1-249-417-11	CARBON	1K	5%	1/4W F	
JR9	1-216-295-11	METAL CHIP	0	5%	1/10W		R29	1-216-061-00	METAL CHIP	3.3K	5%	1/10W	
JR46	1-216-296-11	METAL CHIP	0	5%	1/8W		R30	1-216-186-00	METAL CHIP	330	5%	1/8W	
JR47	1-216-295-11	METAL CHIP	0	5%	1/10W		R31	1-216-025-91	METAL CHIP	100	5%	1/10W	
JR48	1-216-295-11	METAL CHIP	0	5%	1/10W		R32	1-249-425-11	CARBON	4.7K	5%	1/4W F	
JR49	1-216-296-11	METAL CHIP	0	5%	1/8W		R33	1-249-425-11	CARBON	4.7K	5%	1/4W F	
JR51	1-216-295-11	METAL CHIP	0	5%	1/10W		R34	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
JR52	1-216-295-11	METAL CHIP	0	5%	1/10W		R35	1-216-214-00	METAL CHIP	4.7K	5%	1/8W	
JR53	1-216-296-11	METAL CHIP	0	5%	1/8W		R36	1-216-025-91	METAL CHIP	100	5%	1/10W	
JR54	1-216-295-11	METAL CHIP	0	5%	1/10W		R37	1-216-073-00	METAL CHIP	10K	5%	1/10W	
< COIL >							R38	1-216-089-91	METAL CHIP	47K	5%	1/10W	
							R39	1-249-429-11	CARBON	10K	5%	1/4W	
							R42	1-216-073-00	METAL CHIP	10K	5%	1/10W	
L2	1-414-142-11	MICRO INDUCTOR			1uH								
L3	1-410-521-11	MICRO INDUCTOR			100uH		R43	1-216-042-00	METAL CHIP	510	5%	1/10W	
L4	1-410-515-11	INDUCTOR			33uH		R44	1-216-013-00	METAL CHIP	33	5%	1/10W	
L41	1-407-500-00	MICRO INDUCTOR			4.7mH		R45	1-247-843-11	CARBON	3.3K	5%	1/4W F	
L1751	1-410-521-11	MICRO INDUCTOR			100uH		R46	1-216-073-00	METAL CHIP	10K	5%	1/10W	
< FILTER >							R47	1-216-097-91	METAL CHIP	100K	5%	1/10W	
LPF41	1-239-845-11	FILTER, LOW PASS					R48	1-249-417-11	CARBON	1K	5%	1/4W F	
LPF42	1-239-845-11	FILTER, LOW PASS					R49	1-216-049-91	METAL CHIP	1.0K	5%	1/10W	
< TRANSISTOR >							R50	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
							R51	1-216-065-00	METAL CHIP	4.7K	5%	1/10W	
							R53	1-249-429-11	CARBON	10K	5%	1/4W	
Q1	8-729-201-27	TRANSISTOR	2SC2715Y-TE85L				R55	1-216-162-00	METAL CHIP	33	5%	1/8W	
Q2	8-729-201-27	TRANSISTOR	2SC2715Y-TE85L				R56	1-249-393-11	CARBON	10	5%	1/4W F	
Q3	8-729-201-27	TRANSISTOR	2SC2715Y-TE85L				R91	1-216-295-11	METAL CHIP	0	5%	1/10W	
Q4	8-729-201-27	TRANSISTOR	2SC2715Y-TE85L				R92	1-216-073-00	METAL CHIP	10K	5%	1/10W	
Q5	8-729-424-08	TRANSISTOR	UN2111				R99	1-249-399-11	CARBON	33	5%	1/4W	
Q9	8-729-216-22	TRANSISTOR	2SA812-M5M6				R1751	1-247-807-31	CARBON	100	5%	1/4W	
Q11	8-729-421-22	TRANSISTOR	UN2211				R1752	1-216-073-00	METAL CHIP	10K	5%	1/10W	
Q12	8-729-421-22	TRANSISTOR	UN2211				R1753	1-216-067-00	METAL CHIP	5.6K	5%	1/10W	
Q13	8-729-421-22	TRANSISTOR	UN2211				R1754	1-216-097-91	METAL CHIP	100K	5%	1/10W	
Q14	8-729-421-22	TRANSISTOR	UN2211				R1755	1-216-097-91	METAL CHIP	100K	5%	1/10W	
< RESISTOR >							R1756	1-249-401-11	CARBON	47	5%	1/4W F	
R1	1-249-401-11	CARBON	47	5%	1/4W F		R1757	1-216-057-00	METAL CHIP	2.2K	5%	1/10W	
R2	1-216-037-00	METAL CHIP	330	5%	1/10W	< VARIABLE RESISTOR >							
R3	1-216-037-00	METAL CHIP	330	5%	1/10W								
R5	1-216-037-00	METAL CHIP	330	5%	1/10W	RV41	1-238-601-11	RES, ADJ, CARBON 22K					
R6	1-216-081-00	METAL CHIP	22K	5%	1/10W	RV42	1-238-600-11	RES, ADJ, CARBON 10K					
R7	1-216-037-00	METAL CHIP	330	5%	1/10W	< TERMINAL >							
R8	1-216-037-00	METAL CHIP	330	5%	1/10W								
R9	1-216-081-00	METAL CHIP	22K	5%	1/10W	TM1	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)					
R10	1-216-037-00	METAL CHIP	330	5%	1/10W								
R11	1-216-081-00	METAL CHIP	22K	5%	1/10W	< VIBRATOR >							
R12	1-216-037-00	METAL CHIP	330	5%	1/10W	X21	1-760-549-11	VIBRATOR, CRYSTAL (4.5MHz)					
R13	1-216-037-00	METAL CHIP	330	5%	1/10W	X41	1-760-220-11	FILTER, CERAMIC (10.7MHz)					
R14	1-216-081-00	METAL CHIP	22K	5%	1/10W	X42	1-527-981-00	FILTER, CERAMIC (450KHz)					
R18	1-216-073-00	METAL CHIP	10K	5%	1/10W	X43	1-577-075-11	OSCILLATOR, CERAMIC (456KHz)					
R19	1-216-073-00	METAL CHIP	10K	5%	1/10W	X1751	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)					
R21	1-216-049-91	METAL CHIP	1.0K	5%	1/10W	*****							
R22	1-216-049-91	METAL CHIP	1.0K	5%	1/10W								
R23	1-216-049-91	METAL CHIP	1.0K	5%	1/10W								
R24	1-216-025-91	METAL CHIP	100	5%	1/10W								

TC SW

TRANS

Ref. No.	Part No.	Description	Remark
*	A-4392-652-A	TC SW BOARD, COMPLETE *****	
		< CONNECTOR >	
CN607	1-506-486-11	PIN, CONNECTOR 7P	
		< DIODE >	
D634	8-719-063-92	DIODE SLR325MC-M-T31-NP (▷)(DECK B)	
D635	8-719-063-92	DIODE SLR325MC-M-T31-NP (◁)(DECK B)	
D636	8-719-063-91	DIODE SLR325DC-P-T32 (■ PAUSE)	
D637	8-719-063-93	DIODE SLR325VC-N-T32 (● REC)	
D638	8-719-063-92	DIODE SLR325MC-M-T31-NP (▷)(DECK A)	
D639	8-719-063-92	DIODE SLR325MC-M-T31-NP (◁)(DECK A)	
		< TRANSISTOR >	
Q617	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q618	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q619	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		< RESISTOR >	
R726	1-249-401-11	CARBON 47 5% 1/4W F	
R727	1-249-403-11	CARBON 68 5% 1/4W F	
R728	1-247-807-31	CARBON 100 5% 1/4W	
R729	1-249-407-11	CARBON 150 5% 1/4W F	
R730	1-249-407-11	CARBON 150 5% 1/4W F	
R731	1-247-815-91	CARBON 220 5% 1/4W	
R732	1-249-411-11	CARBON 330 5% 1/4W	
R733	1-249-413-11	CARBON 470 5% 1/4W F	
R734	1-249-415-11	CARBON 680 5% 1/4W F	
R735	1-249-417-11	CARBON 1K 5% 1/4W F	
R736	1-249-419-11	CARBON 1.5K 5% 1/4W F	
R737	1-249-421-11	CARBON 2.2K 5% 1/4W F	
R738	1-247-843-11	CARBON 3.3K 5% 1/4W	
R739	1-249-427-11	CARBON 6.8K 5% 1/4W F	
R740	1-247-807-31	CARBON 100 5% 1/4W	
R741	1-247-807-31	CARBON 100 5% 1/4W	
R742	1-247-807-31	CARBON 100 5% 1/4W	
R743	1-247-815-91	CARBON 220 5% 1/4W	
R744	1-247-807-31	CARBON 100 5% 1/4W	
R745	1-247-807-31	CARBON 100 5% 1/4W	
		< SWITCH >	
S655	1-762-196-21	SWITCH, TACT (▷)(DECK B)	
S656	1-762-196-21	SWITCH, TACT (◁)(DECK B)	
S657	1-762-196-21	SWITCH, TACT (▶▶)(DECK B)	
S658	1-762-196-21	SWITCH, TACT (◀◀)(DECK B)	
S659	1-762-196-21	SWITCH, TACT (■)(DECK B)	
S660	1-762-196-21	SWITCH, TACT (■ PAUSE)	
S661	1-762-196-21	SWITCH, TACT (● REC)	
S662	1-762-196-21	SWITCH, TACT (CD SYNCHRO)	
S663	1-762-196-21	SWITCH, TACT (HIGH SPEED DUBBING)	
S664	1-762-196-21	SWITCH, TACT (▶▶)(DECK A)	
S665	1-762-196-21	SWITCH, TACT (◀◀)(DECK A)	
S666	1-762-196-21	SWITCH, TACT (■)(DECK A)	
S667	1-762-196-21	SWITCH, TACT (▷)(DECK A)	
S668	1-762-196-21	SWITCH, TACT (◁)(DECK A)	

Ref. No.	Part No.	Description	Remark
*	1-663-994-11	TRANS BOARD *****	
		< CONNECTOR >	
* CN501	1-564-527-11	PLUG, CONNECTOR 12P	
CN502	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
		< FUSE >	
△ F501	1-532-505-31	FUSE, TIME-LAG (4A/250V) (GR10AV:E,EA,SP,JE,HK,IA)	
△ F501	1-533-301-11	FUSE, GLASS CYLINDRICAL (DIA.5) (6.3A/125V)(D90AV/RX100AV: US,CND)	
		< FUSE HOLDER >	
FH501	1-533-233-21	HOLDER, FUSE (D90AV/GR10AV:E,EA,SP,JE,HK,IA/RX100AV: US,CND)	
FH502	1-533-233-21	HOLDER, FUSE (D90AV/GR10AV:E,EA,SP,JE,HK,IA/RX100AV: US,CND)	
		< RESISTOR >	
△ R501	1-219-120-11	FUSIBLE 0.15 5% 1/4W F	
△ R502	1-219-120-11	FUSIBLE 0.15 5% 1/4W F	
△ R503	1-219-124-11	FUSIBLE 0.68 5% 1/4W F	
△ R506	1-202-725-00	SOLID 3.3M 10% 1/2W (D90AV/RX100AV: US,CND)	
		< SWITCH >	
△ S501	1-762-753-11	SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR)(GR10AV: E,EA,SP,JE,HK,IA)	
		< TRANSFORMER >	
△ T501	1-431-136-11	TRANSFORMER, POWER (AEP,UK,G,EE,CIS)	
△ T501	1-431-137-11	TRANSFORMER, POWER (US,CND)	
△ T501	1-431-138-11	TRANSFORMER, POWER (E,EA,SP,JE,HK,MY,AUS,IA)	
△ T501	1-431-138-21	TRANSFORMER, POWER (TH)	

		MISCELLANEOUS *****	
2	1-751-086-11	WIRE (FLAT CABLE)(13 CORE) (US,CND,E2,TH,AUS)	
2	1-773-012-11	WIRE (FLAT CABLE) (15 CORE) (Except US,CND,E2,TH,AUS)	
3	1-233-544-11	ENCAPSULATED COMPONENT (US,CND)	
3	1-233-545-11	ENCAPSULATED COMPONENT (E2,AUS,TH)	
3	1-233-546-11	ENCAPSULATED COMPONENT (E3,EA,HK,SP,JE,MY,IA)	
5	1-773-158-11	WIRE (FLAT TYPE) (21 CORE)	
6	1-773-051-11	WIRE (FLAT TYPE) (17 CORE)	
7	1-769-948-11	WIRE (FLAT TYPE) (11 CORE)	
8	1-777-870-11	WIRE (FLAT TYPE) (19 CORE)	
△ 57	1-569-007-11	ADAPTOR, CONVERSION 2P (E3,IA)	
△ 57	1-569-008-11	ADAPTOR, CONVERSION 2P (EA,SP,JE)	
△ 57	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (HK)	
△ 59	1-558-943-41	CORD, POWER (E,IA)	
△ 59	1-575-042-21	CORD, POWER (US,CND)	
△ 59	1-575-651-21	CORD, POWER (AEP,G,EE,CIS,EA,HK,SP,JE,MY)	

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
△ 59	1-696-845-11	CORD, POWER (AUS)	
△ 59	1-751-326-21	CORD, POWER (TH)	
△ 59	1-751-529-11	CORD, POWER (UK)	
104	1-769-909-11	WIRE (FLAT TYPE) (9 CORE)	
105	1-777-869-11	WIRE (FLAT TYPE) (10 CORE) (Except US,CND)	
105	1-777-871-11	WIRE (FLAT TYPE) (8 CORE) (US,CND)	
106	1-777-936-11	WIRE (FLAT TYPE) (5 CORE) (Except US,CND)	
407	1-452-538-11	MAGNET	
408	1-776-042-11	WIRE (FLAT TYPE) (8 CORE)	
△ 451	8-820-020-01	OPTICAL PICK-UP BLOCK KSS-213D/Q-NP	
452	1-769-069-11	WIRE (FLAT TYPE) (16 CORE)	
FL601	1-517-618-11	INDICATOR, TUBE FLUORESCENT	
HP101	1-500-093-11	HEAD, MAGNETIC (PLAYBACK)	
HRPE101	1-500-094-11	HEAD, MAGNETIC (REC/PB/ERASE)	
M1	X-3371-223-1	MOTOR ASSY (CAPSTAN)	
M2	A-2004-410-A	MOTOR ASSY (TRIGGER)	
M101	X-4917-523-4	MOTOR ASSY (SPINDLE)	
M102	X-4917-504-1	MOTOR ASSY (SLED)	
M701	A-4672-004-A	MOTOR ASSY (TURN)	
M801	A-4672-004-A	MOTOR ASSY (SLIDE)	
M901	1-698-792-11	FAN, DC	
S811	1-473-335-11	ENCODER, ROTARY (BU, TRAY ADDRESS DET)	
△ T501	1-431-136-11	TRANSFORMER, POWER (AEP,UK,G,EE,CIS)	
△ T501	1-431-137-11	TRANSFORMER, POWER (US,CND)	
△ T501	1-431-138-11	TRANSFORMER, POWER (E,EA,SP,JE,HK,MY,AUS,IA)	
△ T501	1-431-138-21	TRANSFORMER, POWER (TH)	

HARDWARE LIST

#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#2	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S
#3	7-685-650-79	SCREW +BVTP 3X16 TYPE2 IT-3
#4	7-685-871-01	SCREW +BVTT 3X6 (S)
#5	7-685-872-09	SCREW +BVTT 3X8 (S)
#6	7-621-775-10	SCREW +B2.6X4
#7	7-621-255-15	SCREW +P2X3
#8	7-623-921-01	RING, RETAINING, CAPSTAN
#9	7-621-775-00	SCREW +B2.6X3
#10	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S
#11	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S
#12	7-685-131-19	SCREW +BTP 2.6X4 TYPE2 N-S
#13	7-685-862-09	SCREW +BVTT 2.6X6 (S)

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.
--	--

SONY®

SERVICE MANUAL

US Model

HCD-D90AV/RX100AV

Canadian Model

AEP Model

UK Model

HCD-RX100AV

E Model

Australian Model

Tourist Model

HCD-GR10AV

CORRECTION-1

Correct your service manual as shown below.

👉 : indicates corrected portion.

Page	INCORRECT	CORRECT
18	<p>E-F Balance (1 Track Jump) Check</p> <ul style="list-style-type: none"> • $\frac{A - B}{2(A + B)} \times 100 = \text{less than } \pm 7 (\%)$ • $A + B = 500 \pm 100 \text{ mVp-p}$ <p>1 track jump waveform</p>	<p>E-F Balance (1 Track Jump) Check</p> <ul style="list-style-type: none"> • $\frac{A}{B} \times 100 = \text{less than } \pm 7 (\%)$ • $B = 500 \pm 100 \text{ mVp-p}$ <p>1 track jump waveform</p>
65	<p>SCHEMATIC DIAGRAM</p> <p>• IC PIN LAYOUT STK4231MK2, STK4221MK2</p>	<p>SCHEMATIC DIAGRAM</p> <p>• IC PIN LAYOUT STK4231MK2, STK4221MK2</p>

(SPM-98002)