

CDP-C545/C745

SERVICE MANUAL



Photo : CDP-C745

US Model
Canadian Model
AEP Model
CDP-C545/C745
E Model
Australian Model
CDP-C545

SPECIFICATIONS

Compact Disc Player

System	Compact disc digital audio system
Laser	Semiconductor laser
Wavelength	780 – 790 nm
Frequency response	CDP-C745 2 Hz – 20 kHz (± 0.3 dB) CDP-C545 2 Hz – 20 kHz (± 0.5 dB)

Signal to noise ratio	More than 107 dB
Dynamic range	More than 98 dB
Harmonic distortion	CDP-C745 Less than 0.0027% CDP-C545 Less than 0.0030%

Channel separation	More than 100 dB
--------------------	------------------

Outputs

LINE OUT (FIXED) (phono jacks)	Output level 2 V (at 50 kilohms, non DSP mode.) Load impedance over 10 kilohms
-----------------------------------	--

LINE OUT (VARIABLE) (phono jacks)	Output level max. 2 V (at 50 kilohms, non DSP mode.)
CDP-C545 for Continental Europe and CDP-C745)	Load impedance over 50 kilohms

DIGITAL OUT (OPTICAL) (optical output connector)	Wave length 660 nm Output level –18 dBm
---	--

PHONES (stereo phone jack)	Output level max. CDP-C745 15mW CDP-C545 10mW Load impedance 32 ohms
-------------------------------	---

Model Name Using Similer Mechanism	CDP-C435/C535	
Base Unit Type	C545	BU-5BD10B (for KSS-240A) BU-5BD10C (for KSS-390A)
	C745	BU-5BD10B (for KSS-240A) BU-5BD11C (for KSS-390A)
Optical Pick-up Type	KSS-240A or KSS-390A	

General

Power requirements	Model for the USA, Canada 120V AC, 60Hz Model for Continental Europe 220-230V AC, 50/60Hz Model for Australia 240V AC, 50/60Hz Model for other countries 110-120 or 220-240V AC, adjustable, 50/60Hz
--------------------	---

Power consumption	15 W
Dimensions (approx.)	430 × 125 × 385 mm (w/h/d) (17 × 5 × 15 1/4 inches) Including projecting parts and controls
Mass (approx.)	5.7 kg (12 lbs 10 oz), net

Remote Commander	RM-D745(CDP-C745) RM-D645(CDP-C545:AEP) RM-D545(CDP-C545:US,CND,E,AUS)
------------------	--

Remote control system	Infrared control
Power requirements	3 V DC with two size AA batteries (IEC designation R6)
Dimensions (approx.)	62 × 20 × 175 mm (w/h/d) (2 1/2 × 1 1/16 × 7 inches)
Mass (approx.)	131 g (4.7 oz) including batteries

Design and specifications are subject to change without notice.

COMPACT DISC PLAYER
SONY®



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 SIKKERHEDSAFBRYDERE ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VARO! : AVATTAESSA JA SUOJALUKITUS OHITETTAESSA DLET ALTIINA LASERSATEILYLLE.
WARNING : LASERSTRÅLING NÅR DENNA DEL ÅR OPPNÅD OCH SPÄRREN ÅR URÖPPPLAD.
ADVARSEL : USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN

This caution label is located inside the unit.

For the Customers in Canada

CAUTION
TO PREVENT ELECTRIC SHOCK, DO NOT USE THIS POLARIZED AC PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

This apparatus complies with the Class B limits for radio noise emissions set out in Radio Interference Regulations.

For Customers in Australia

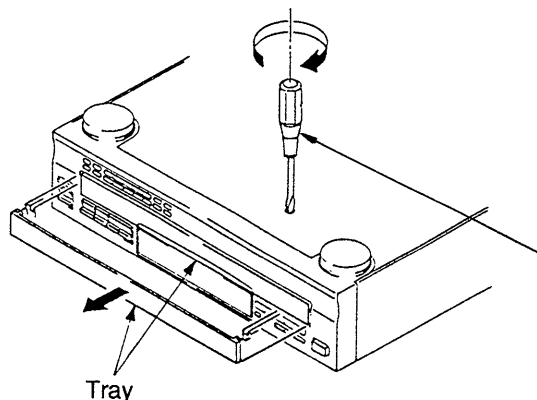
The following caution label is located inside the unit.

DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.
DANGER
RADIATION DE LASER INVISIBLE LORS D'OUVERTURE AVEC L'ENCLenchement DE SECURITE ANNULE. EVITER L'EXPOSITION DIRECTE AU RAYON.
4-906-403-01

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.

HOW TO OPEN THE DISC TRAY WHEN POWER SWITCH TURNS OFF



Insert a tapering driver into the aperture of the unit bottom, and turn in the direction of arrow (to OUT direction).

* To close the disc tray, turn the driver in the reverse direction (to IN direction).

TABLE OF CONTENTS

Section	Title	Page
1.	GENERAL	4
2.	DISASSEMBLY	
2-1.	Case, Bottom Plate and Front Panel	5
2-2.	Back Panel and Disc Table	5
2-3.	Optical Pick-up Block	6
2-4.	Bracket (Gear)	6
2-5.	Positioning the Encoder When Attaching the Gear (Main)	7
3.	ELECTRICAL BLOCK CHECKING	8
4.	DIAGRAMS	
4-1.	Circuit Boards Location	9
4-2.	Block Diagram	10
4-3.	Semiconductor Lead Layouts	14
4-4.	Printed Wiring Board — BD Section —	15
4-5.	Schematic Diagram — BD Section —	17
4-6.	Printed Wiring Boards — Main Section —	21
4-7.	Schematic Diagram — Main Section —	25
4-8.	Schematic Diagram — Panel Section —	29
4-9.	Printed Wiring Boards — Panel Section —	33
4-10.	IC Pin Functions	
	• IC101 Digital Signal Processor (CXD2515Q)	36
	• IC501 System Control (CXP84124-014Q (C545)) (CXP84332-004Q (C745))	39
5.	EXPLODED VIEWS	
5-1.	Front Panel and Case Section	41
5-2.	Back Panel and Disc Table Section	42
5-3.	Chassis Section	43
5-4.	Base Unit Section	
	(BU-5BD10B : C545 (for KSS-240A))	
	(BU-5BD10C : C545 (for KSS-390A))	
	(BU-5BD11B : C745 (for KSS-240A))	
	(BU-5BD11C : C745 (for KSS-390A))	44
6.	ELECTRICAL PARTS LIST	45

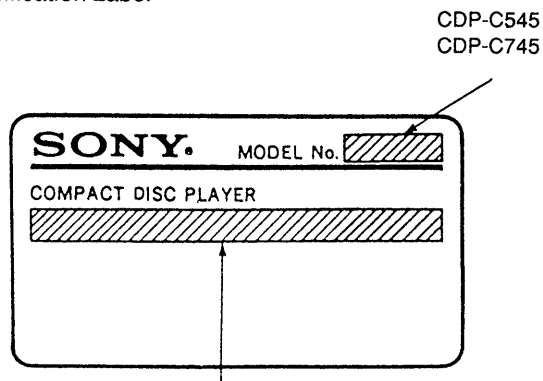
When moving the player

Before moving the player, follow the procedure below to return the internal mechanisms back to their original position.

- 1 Remove all of the discs from the disc tray.
- 2 Press the OPEN/CLOSE button to close the disc tray. Make sure that the "— NO DISC —" indication lights up in the front panel display.
- 3 Wait for 10 seconds, then press the POWER button to turn the player off.

MODEL IDENTIFICATION

— Specification Label —



US, Canadian model : AC: 120V 60Hz 15W
AEP model : AC: 220-230V ~50/60Hz 15W
E model : AC: 110-120V, 220-240V ~50/60Hz 15W
Australian model : AC: 240V ~50/60Hz

CAUTION

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

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.

SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK Δ OR DOTTED LINE WITH MARK Δ 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.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE

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

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

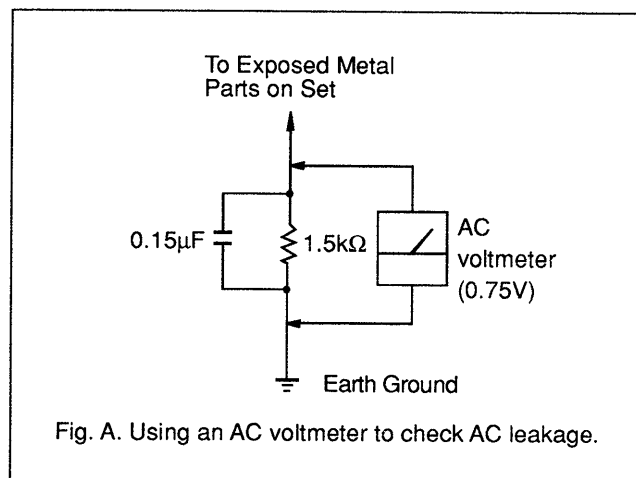


Fig. A. Using an AC voltmeter to check AC leakage.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!!

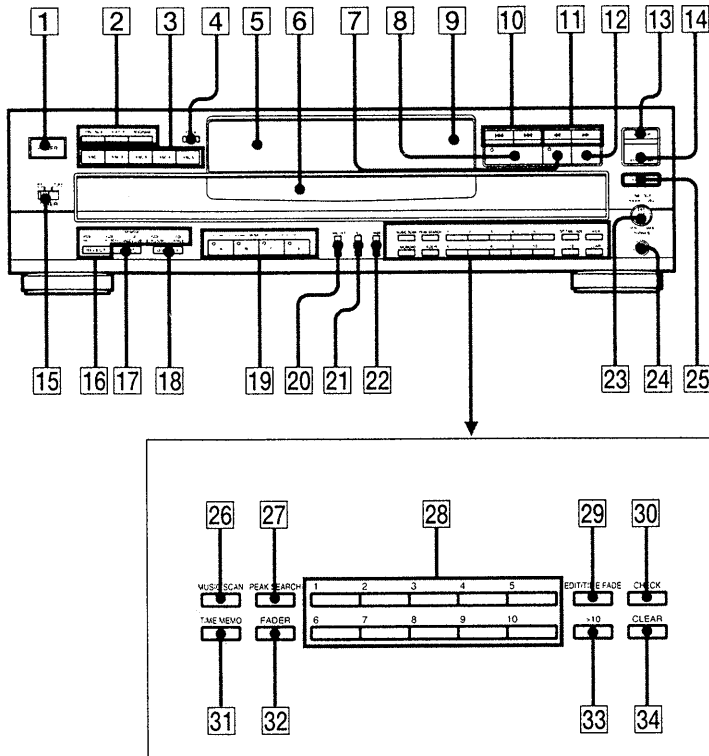
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE Δ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

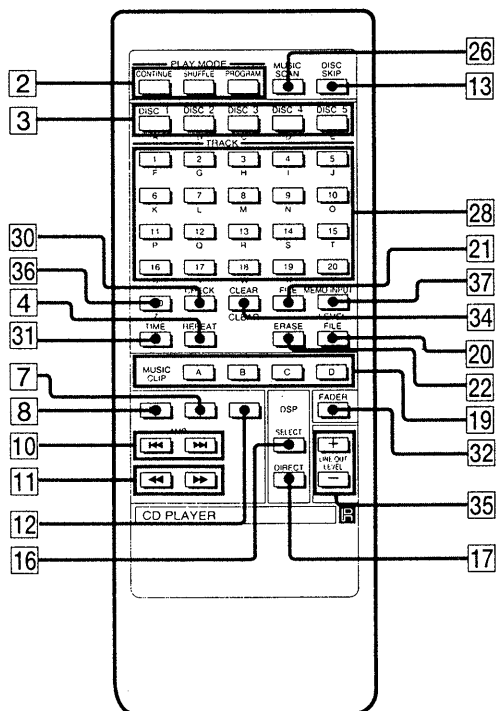
See the pages indicated in () for details.

A



- 1 POWER switch (8)
- 2 PLAY MODE buttons
CONTINUE button (8)
SHUFFLE button (16)
PROGRAM button (17)
- 3 DISC 1-5 buttons (8)
- 4 REPEAT button (22)
- 5 Display window (8)
- 6 Disc tray (8)
- 7 (pause) button (and indicator) (9)
- 8 (play) button (and indicator) (8)
- 9 Remote sensor
- 10 (AMS*) buttons (11)
- 11 (manual search) buttons (11)
- 12 (stop) button (9)
- 13 DISC SKIP button (8)
- 14 OPEN/CLOSE button (8)
- 15 TIMER switch (38)
- 16 DSP SELECT button (and indicators)
(CDP-C745 only)(15)
- 17 DIRECT button
(CDP-C745 only)(15)
- 18 DSP FILE button
(CDP-C745 only)(37)
- 19 MUSIC CLIP buttons (and indicators)
(30)
- 20 LEVEL FILE button (CDP-C745 only)
(36)
- 21 FILE button (33)
- 22 ERASE button (33)
- 23 LINE OUT/PHONE LEVEL control
(CDP-C745)
PHONE LEVEL control (CDP-C545) (5)
- 24 PHONES jack (9)
- 25 EX-CHANGE button (12)
- 26 MUSIC SCAN button (21)
- 27 PEAK SEARCH button (27)
- 28 Numeric (Numeric/letter**) buttons
(11)
- 29 EDIT/TIME FADE button (23)
- 30 CHECK button (20)
- 31 TIME/MEMO (TIME) button (10)
- 32 FADER button (13)
- 33 >10 (over 10) button (11)
- 34 CLEAR button (17)
- 35 LINE OUT LEVEL +/- buttons
(RM-D745 only) (5)
- 36 >20 (over 20) button (11)
- 37 MEMO INPUT button (32)

B

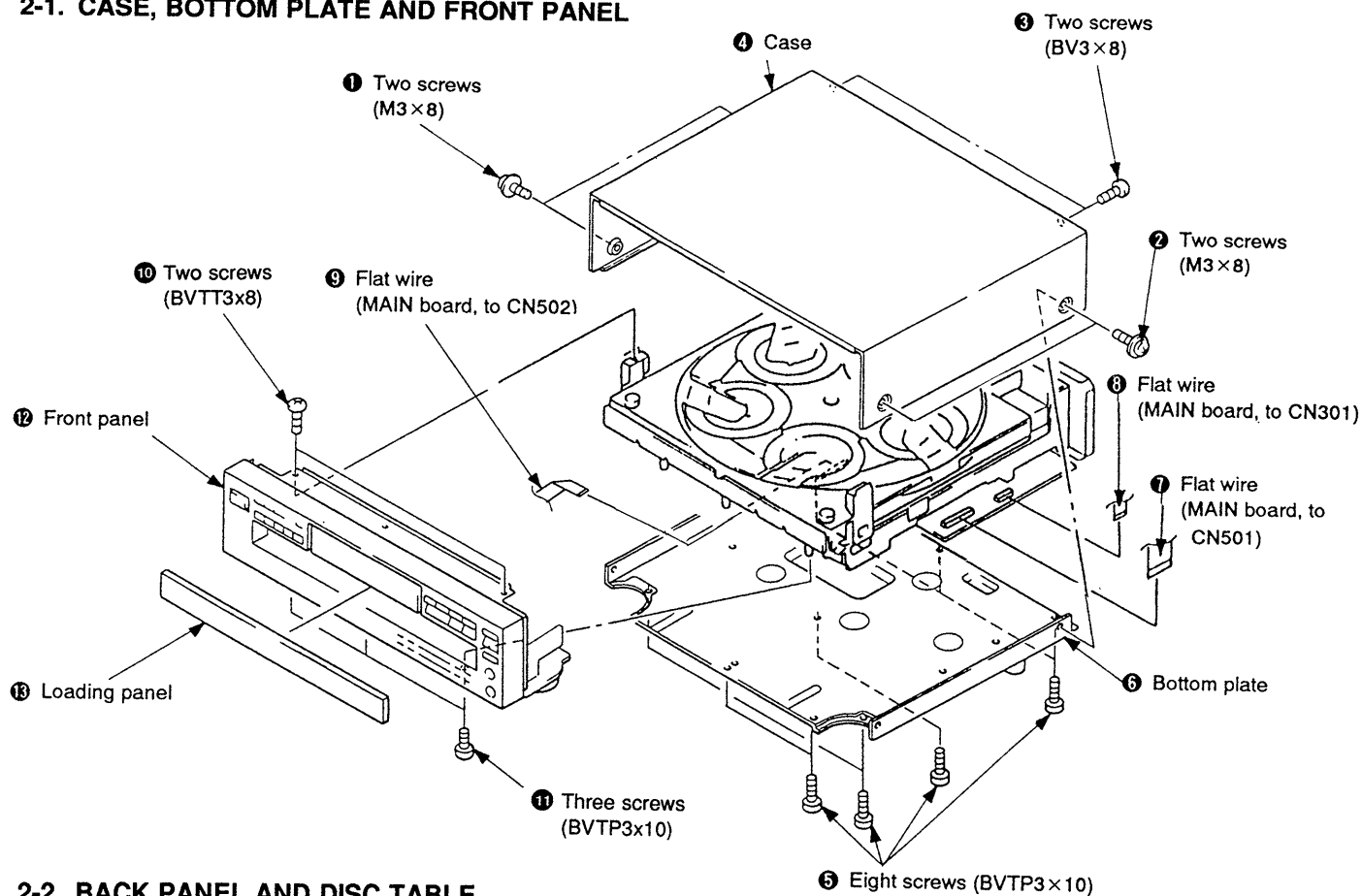


* AMS is the abbreviation for Automatic Music Sensor.

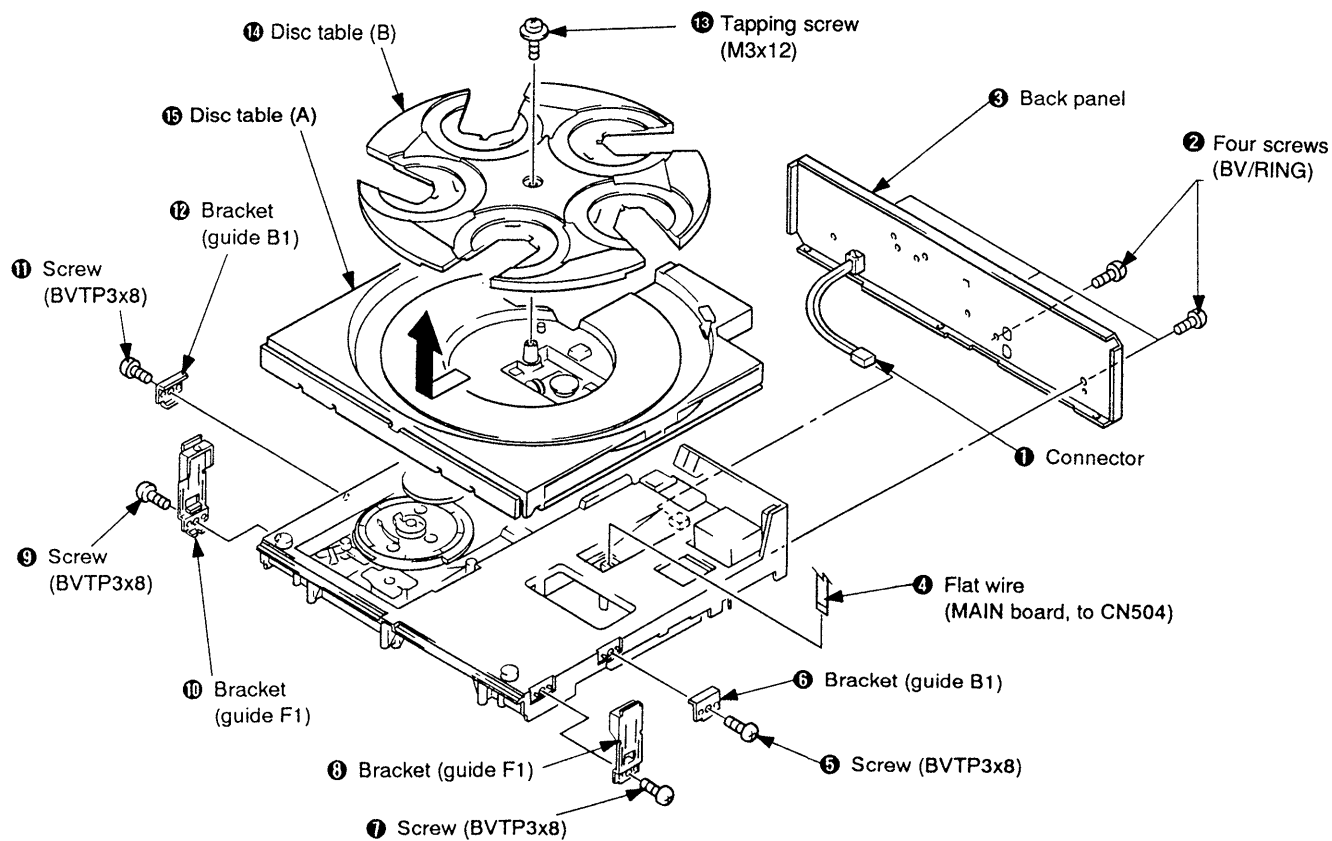
** Buttons with orange letters (A, B, ...) on the remote commander are for writing a disc memo (page 32).

SECTION 2 DISASSEMBLY

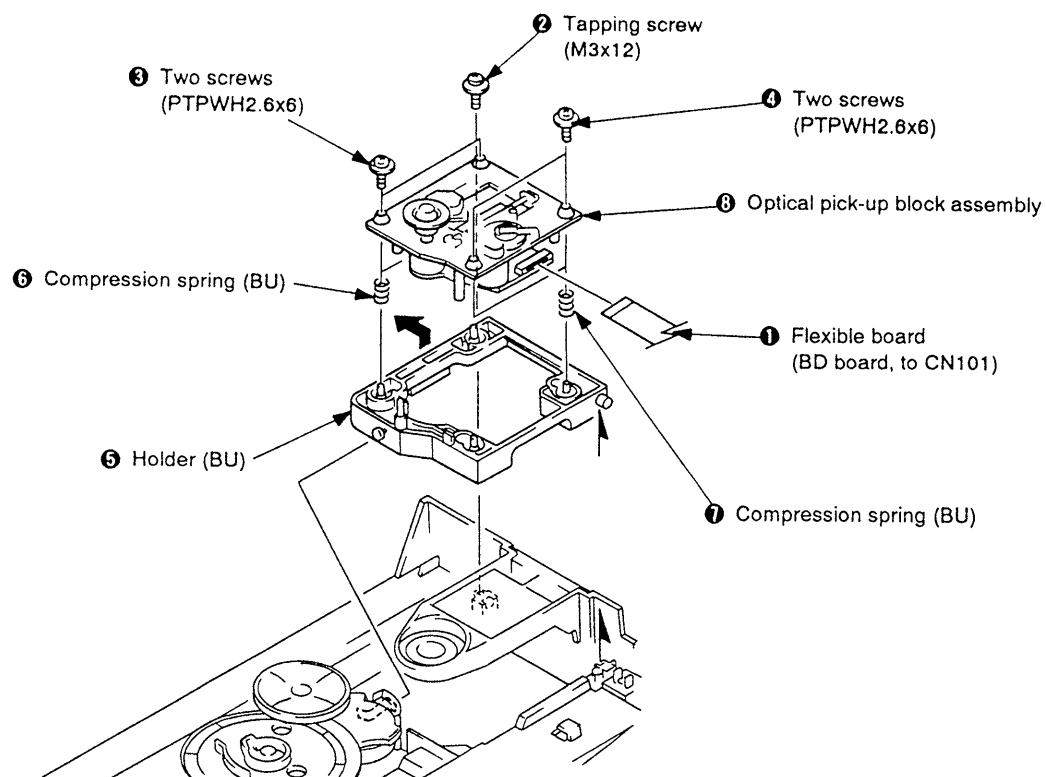
2-1. CASE, BOTTOM PLATE AND FRONT PANEL



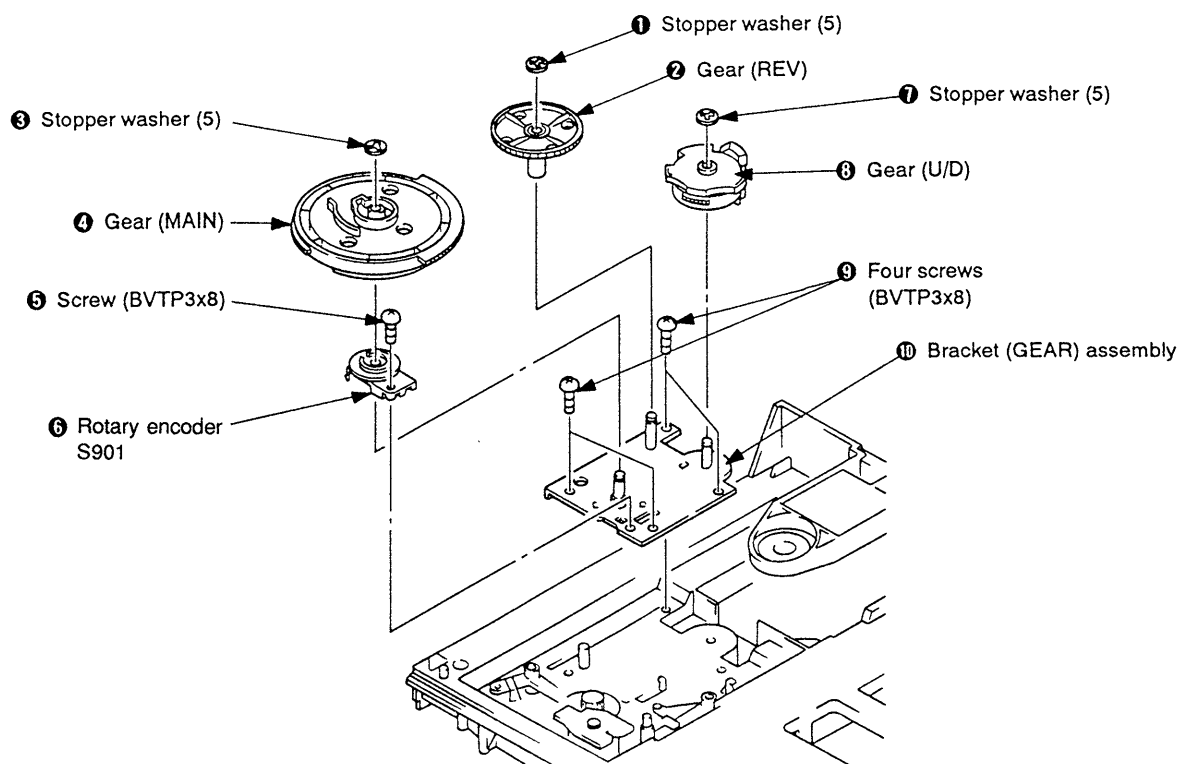
2-2. BACK PANEL AND DISC TABLE



2-3. OPTICAL PICK-UP BLOCK

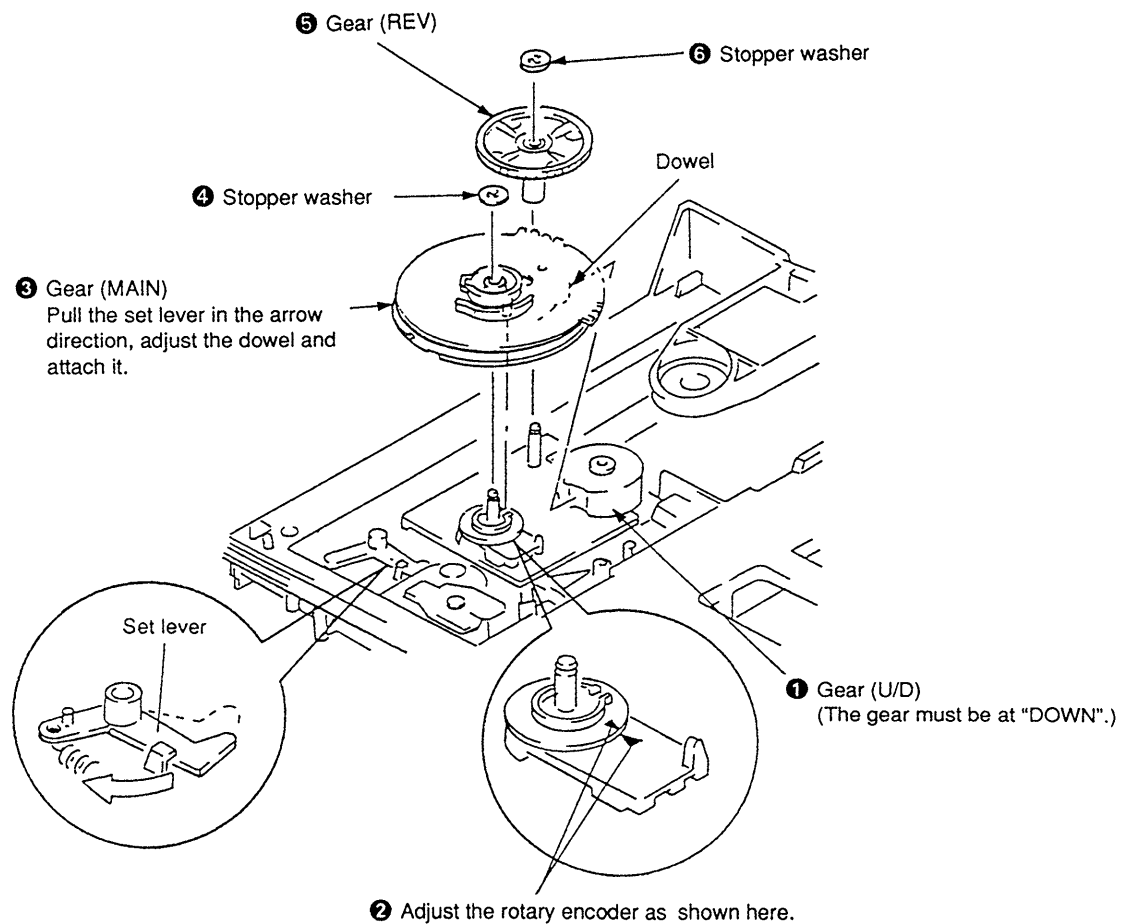


2-4. BRACKET (GEAR)



2-5. POSITIONING THE ENCODER WHEN ATTACHING THE GEAR (MAIN)

The position of the rotary encoder must be adjusted when attaching the gear (MAIN). If its position is not adjusted properly, problem may occur afterwards during operation.



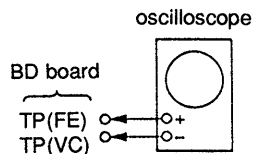
SECTION 3

ELECTRICAL BLOCK CHECING

Note :

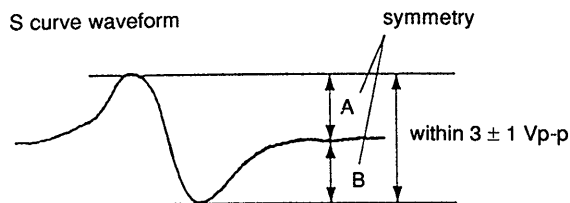
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal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

S Curve Check



Procedure :

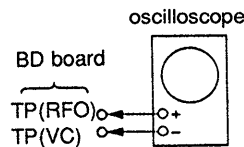
1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)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



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



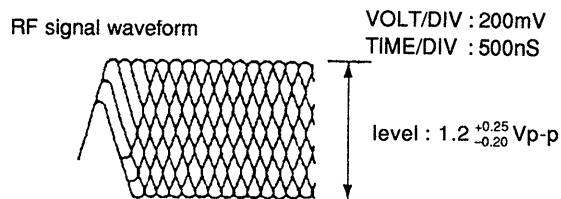
Procedure :

1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turned Power switch on.

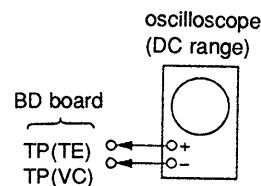
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

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

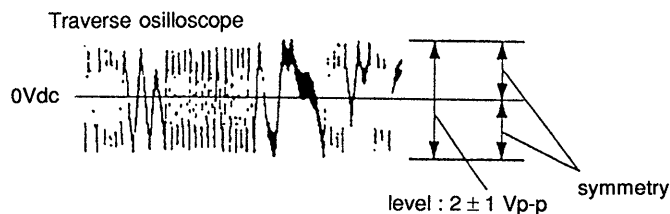


E-F Balance Check



Procedure :

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

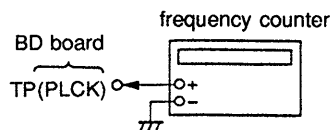


6. Remove the lead wire connected in step 1.

RF Free-run Frequency Check

Procedure :

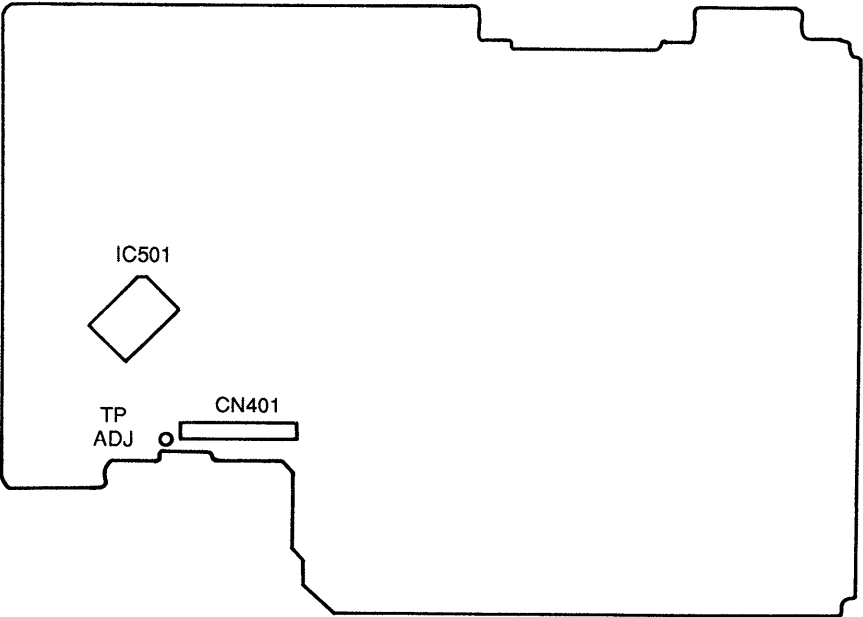
1. Connect frequency counter to test point (PLCK) with lead wire.



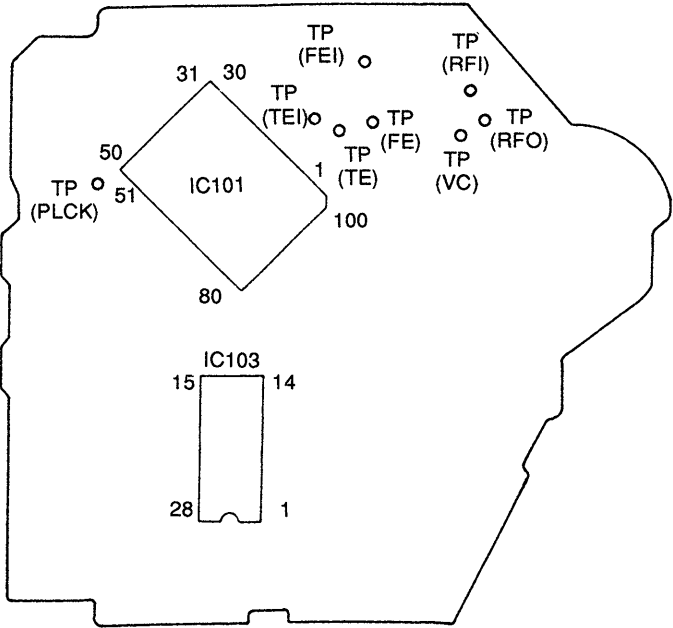
2. Turned Power switch on.
3. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

[MAIN BOARD] (Component Side)



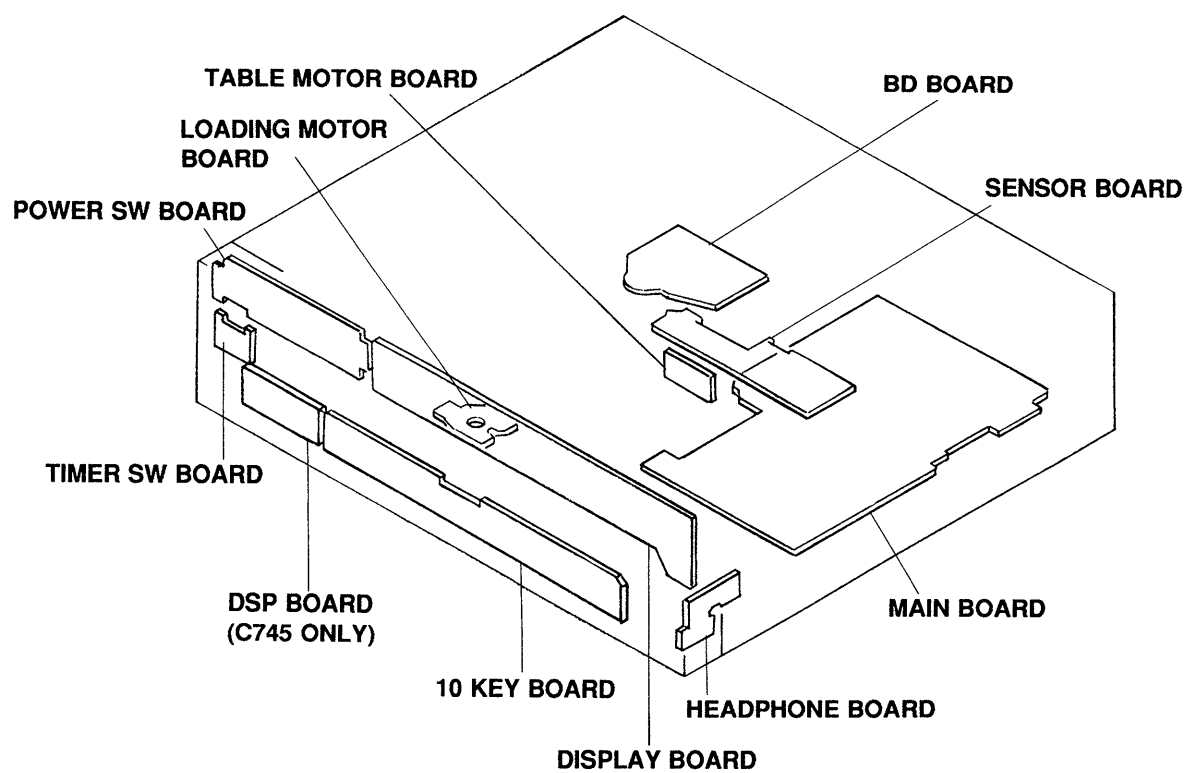
[BD BOARD] — Side A —



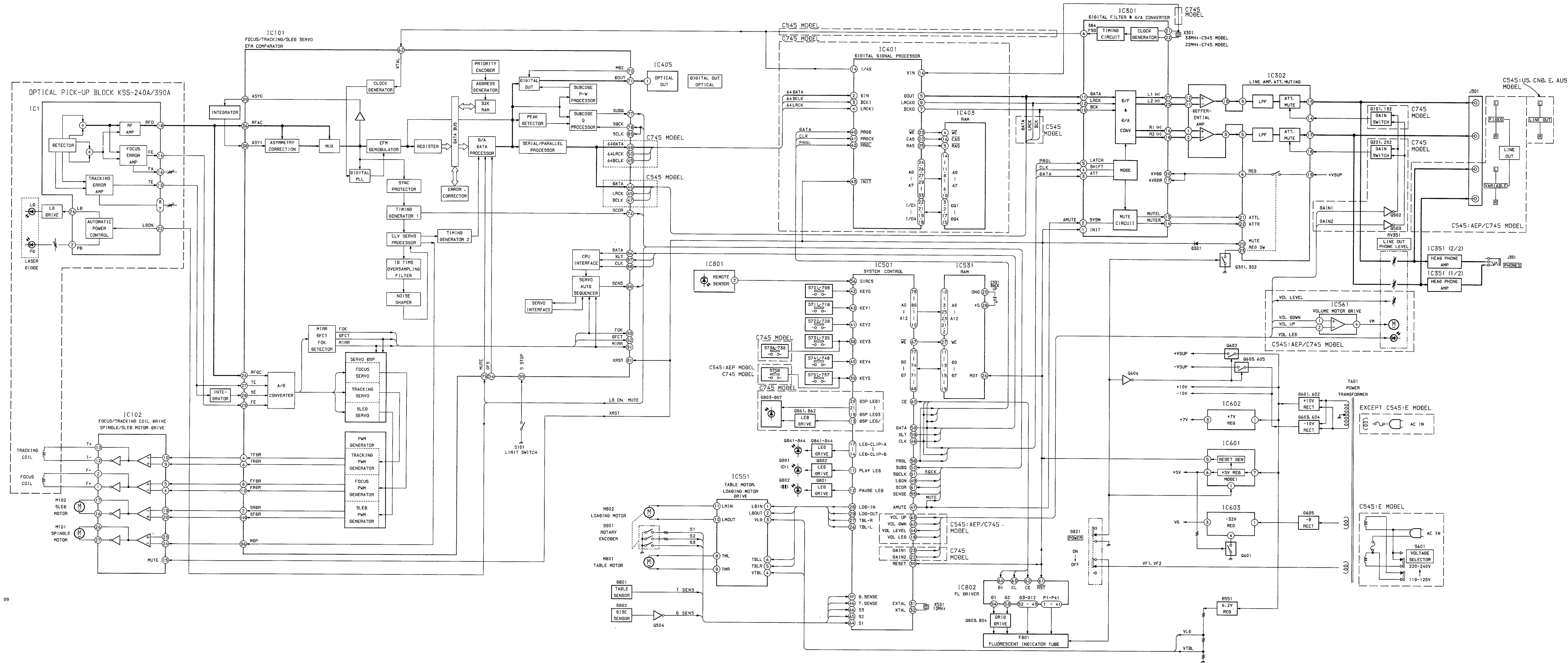
SECTION 4

DIAGRAMS

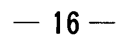
4-1. CIRCUIT BOARDS LOCATION



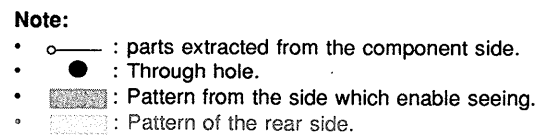
4-2. BLOCK DIAGRAM

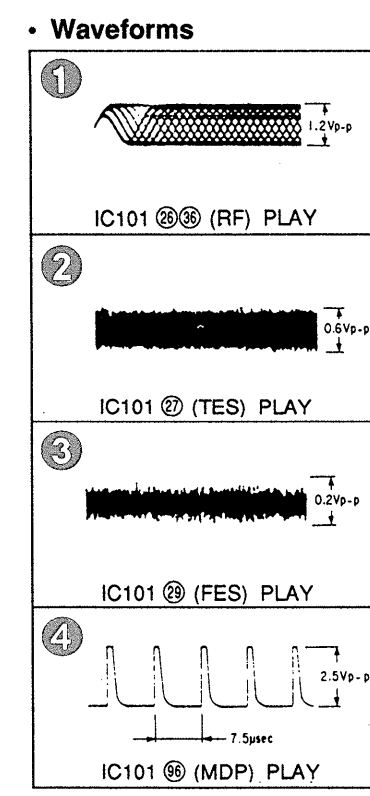
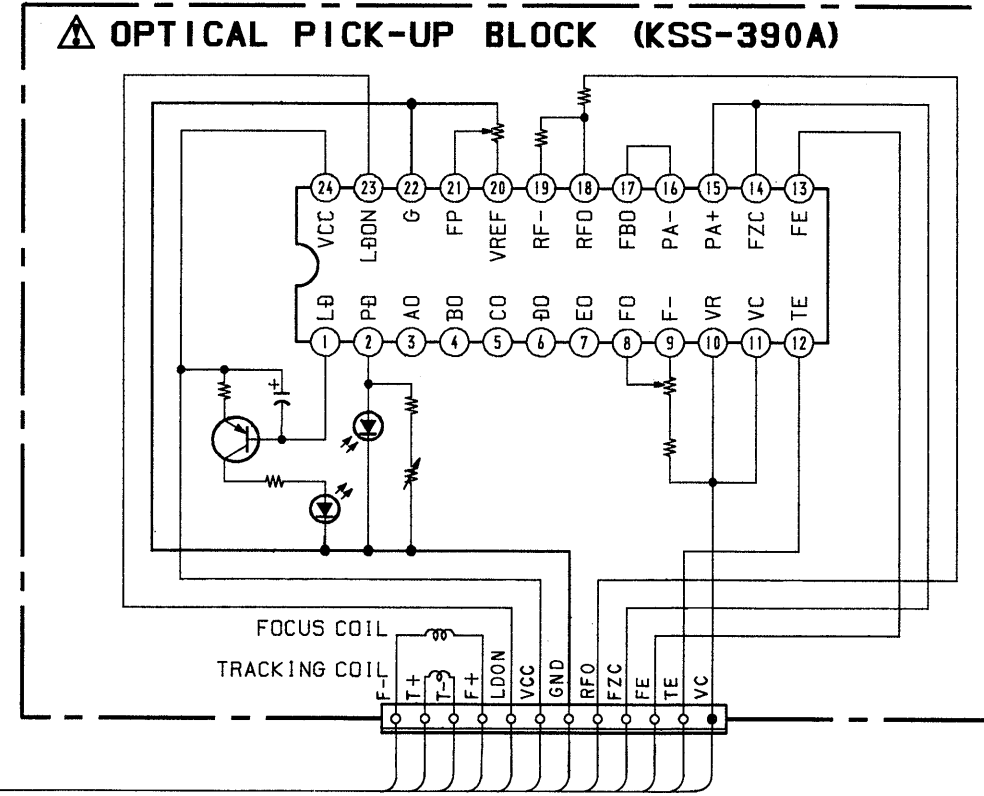


— 15 —



Ref. No.	Location
IC101	D-2
IC102	B-3





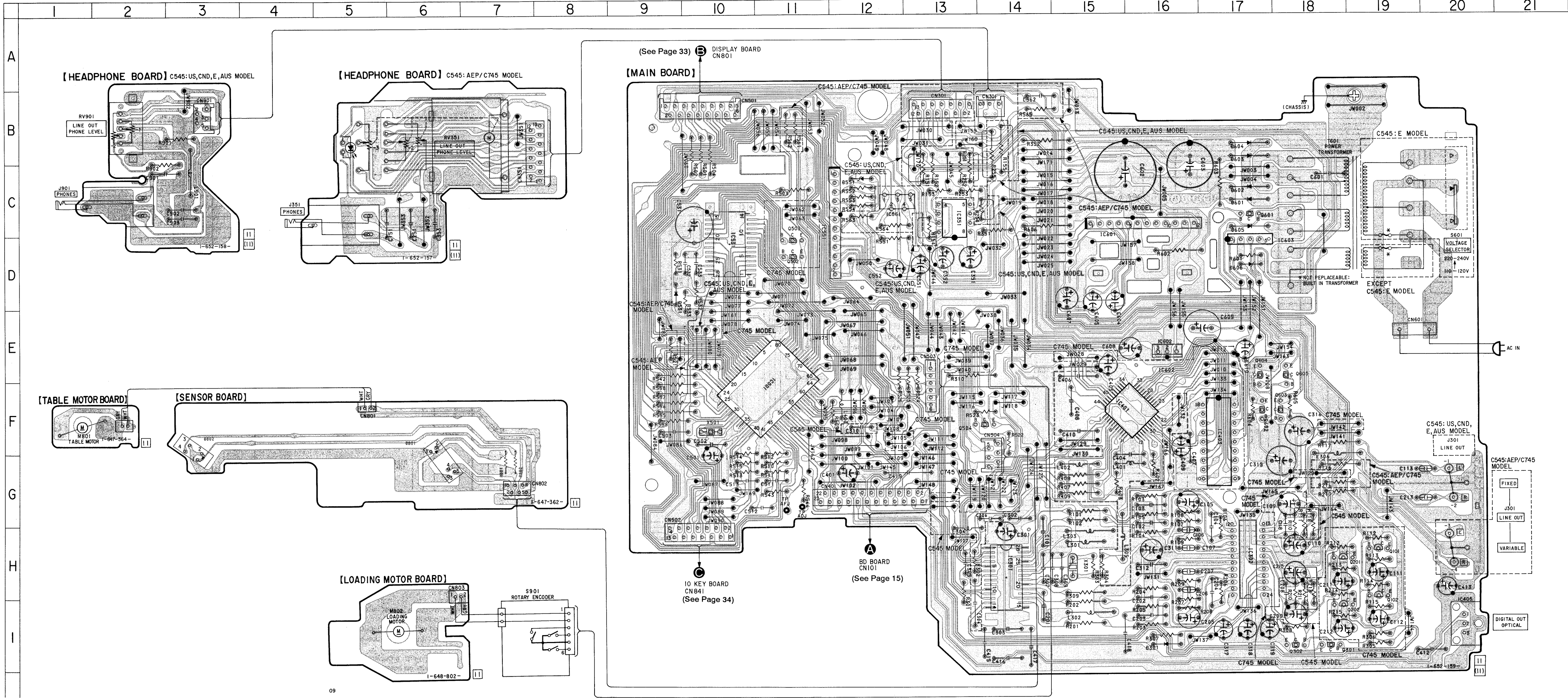
4-6. PRINTED WIRING BOARDS — MAIN SECTION —
• See page 10 for Circuit Boards Location.
• See page 14 for Semiconductor Lead Layouts.

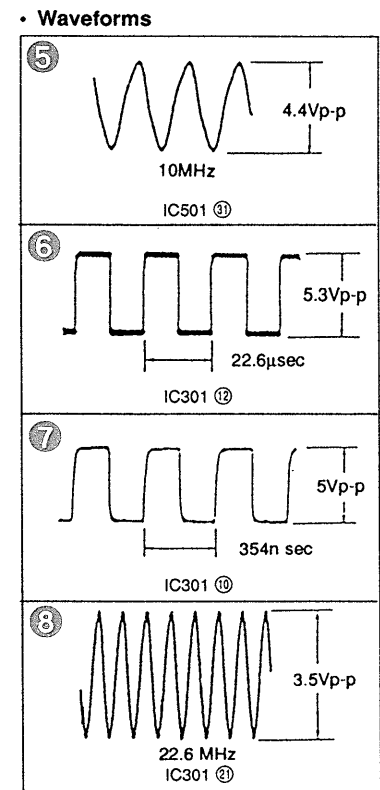
• Semiconductor Location

Ref. No.	Location
D301	I-16
D531	D-9
D551	C-12
D601	C-17
D602	C-17
D603	B-17
D604	B-17
D605	C-17
D606	D-17
D801	F-6
D802	F-3
IC301	H-14
IC302	H-17
IC351	C-13
IC401	F-15
IC403	F-17
IC405	I-20
IC501	F-11
IC531	D-10
IC551	C-11
IC561	C-12
IC601	D-15
IC602	E-16
IC603	D-18
Q101	H-19
Q102	I-19
Q201	H-19
Q202	I-19
Q301	I-19
Q302	I-18
Q502	D-11
Q503	C-11
Q504	F-13
Q601	C-17
Q602	F-17
Q603	F-18
Q604	E-17
Q605	E-18

Note:

- : parts extracted from the component side.
- : Pattern from the side which enable seeing.
- CND : Canadian model.
- AUS : Australian model.

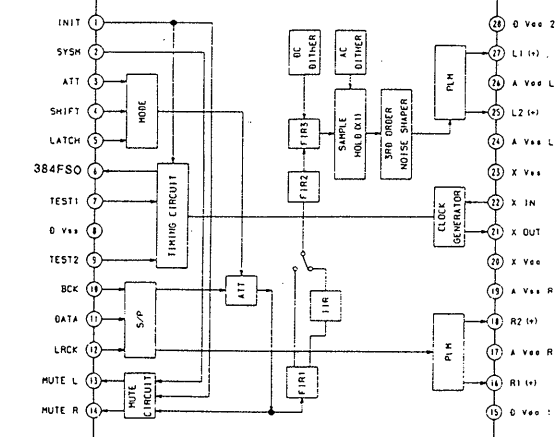


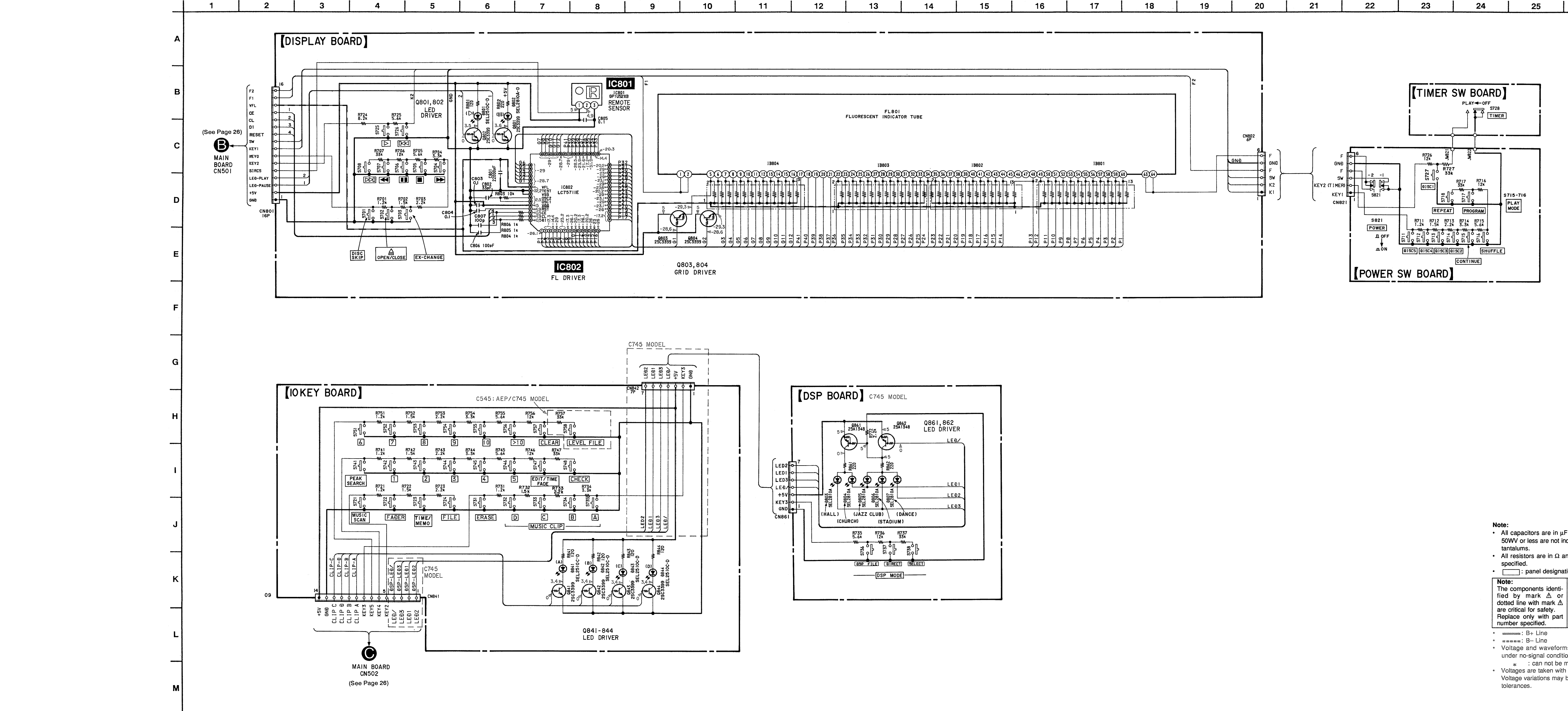


- **Note:**
 - All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and 1/4W or less unless otherwise specified.
 - $\triangle$: internal component.
 -  : panel designation.

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

-  : B: Line
-  : B: Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- 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
- CND : Canadian model.
AUS : Australian model.

[illegible][illegible][illegible]



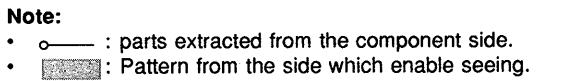
Note:

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

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

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

- ———: B+ Line
- =====: B- Line
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- * : can not be measured.
- Voltages are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.



Semiconductor Location	
Ref. No.	Location
D801	B-6
D802	B-5
D803	G-2
D804	G-3
D805	G-4
D806	G-4
D807	G-5
D841	J-2
D842	J-3
D843	J-3
D844	J-4
IC801	B-8
IC802	B-11
Q801	B-5
Q802	A-5
Q803	B-9
Q804	A-9
Q841	J-2
Q842	J-3
Q843	J-5
Q844	I-5
Q861	F-4
Q862	F-4

4-10. IC PIN FUNCTIONS

• IC101 (CXD2515Q)

Pin No.	Pin Name	I/O	Function
1	SRON	O	Sled drive output
2	SRDR	O	Sled drive output
3	SFON	O	Sled drive output
4	TFDR	O	Tracking drive output
5	TRON	O	Tracking drive output
6	TRDR	O	Tracking drive output
7	TFON	O	Tracking drive output
8	FFDR	O	Focus drive output
9	FRON	O	Focus drive output
10	FRDR	O	Focus drive output
11	FFON	O	Focus drive output
12	VCOO	O	VCO output for analog EFM PLL
13	VCOI	I	VCO output for analog EFM PLL
14	TEST	I	TEST pin connected normally to GND
15	DVss	—	Digital GND
16	TES2	I	TEST pin connected normally to GND
17	TES3	I	TEST pin connected normally to GND
18	PDO	O	Charge-pump output for analog EFM PLL
19	VPCO	O	Charge-pump output for variable pitch PLL
20	VCKI	I	Clock input from variable pitch external VCO
21	AVD2	—	Analog power supply
22	IGEN	I	Power supply pin for operational amplifiers
23	AVS2	—	Analog GND
24	ADII	I	Input pin for A/D converter
25	ADIO	O	Operational amplifier output pin
26	RFDC	I	RF signal input
27	TE	I	Tracking error signal input
28	SE	I	Sled error signal input
29	FE	I	Focus error signal input
30	VC	I	Center voltage input pin
31	FILO	O	Filter output for master PLL
32	FILI	I	Filter input for master PLL
33	PCO	O	Charge-pump output for master PLL
34	CLTV	I	Control voltage input for master VCO
35	AVS1	—	Analog GND
36	RFAC	I	EFM signal input
37	BIAS	I	Asymmetry circuit constant current input
38	ASYI	I	Asymmetry compare voltage input
39	ASYO	O	EFM full swing output
40	AVD1	—	Analog power supply

Pin No.	Pin Name	I/O	Function
41	DVDD	—	Digital power supply
42	ASYE	I	Asymmetry circuit ON/OFF
43	PSSL	I	Audio data output mode selection input
44	WDCK	O	48-bit slot D/A interface. Word clock
45	LRCK	O	48-bit slot D/A interface. LR clock
46	DATA	O	DA 16 output when PSSL=1. 48-bit slot serial data when PSSL=0
47	BCLK	O	DA 15 output when PSSL=1. 48-bit slot data when PSSL=0
48	64DATA	O	DA 14 output when PSSL=1. 64-bit slot data when PSSL=0
49	64BCLK	O	DA 13 output when PSSL=1. 64-bit slot data when PSSL=0
50	64LRCK	O	DA 12 output when PSSL=1. 64-bit slot data when PSSL=0
51	GTOP	O	DA 11 output when PSSL=1. GTOP output when PSSL=0
52	XUGF	O	DA 10 output when PSSL=1. XUGF output when PSSL=0
53	XPLCK	O	DA 09 output when PSSL=1. XPLCK output when PSSL=0
54	GFS	O	DA 08 output when PSSL=1. GFS output when PSSL=0
55	PFCK	O	DA 07 output when PSSL=1. RFCK output when PSSL=0
56	C2PO	O	DA 06 output when PSSL=1. C2PO output when PSSL=0
57	XRAOF	O	DA 05 output when PSSL=1. XRA0F output when PSSL=0
58	MNT3	O	DA 04 output when PSSL=1. MNT3 output when PSSL=0
59	MNT2	O	DA 03 output when PSSL=1. MNT2 output when PSSL=0
60	MNT1	O	DA 02 output when PSSL=1. MNT1 output when PSSL=0
61	MNT0	O	DA 01 output when PSSL=1. MNT0 output when PSSL=0
62	XTAI	I	X'tal oscillator circuit input
63	XTAO	O	X'tal oscillator circuit output
64	XTSL	I	X'tal selection input pin
65	DVss	—	Digital GND
66	FSTI	I	2/3 divider output of pins 62, 63
67	FSTO	O	2/3 divider output of pins 62, 63
68	C4M	O	4.2336 MHz output
69	C16M	O	16.9344 MHz output
70	MD2	I	Digital-out ON/OFF control pin
71	DOUT	O	Digital-out output pin
72	EMPH	O	Playback disc output in emphasis mode
73	WFCK	O	WFCK output
74	SCOR	O	Sub-code sync output
75	SBSO	O	Sub-P through Sub-W serial output
76	EXCK	I	Clock input for SBS0 read-out
77	SUBQ	O	Sub-Q 80-bit output
78	SQCK	I	Clock input for SQS0 read-out
79	MUTE	I	Muting selection pin
80	SENS	O	SENS output
81	XRST	I	System reset
82	DIRC	I	Used in 1-track jump mode
83	SCLK	I	SENS serial data read-out clock
84	DFSW	I	DFCT selection pin
85	ATSK	I	Input pin for anti-shock

Pin No.	Pin Name	I/O	Function
86	DATA	I	Serial data input, supplied from CPU
87	XLAT	I	Latch input, supplied from CPU
88	CLOCK	I	Serial data transfer clock input, supplied from CPU
89	COUT	O	Numbers of track counted signal output
90	DVDD	—	Digital power supply
91	MIRR	O	Mirror signal output
92	DFCT	O	Defect signal output
93	FOK	O	Focus OK output
94	FSW	O	Output to select spindle motor output filter
95	MON	O	Output to control ON/OFF of spindle motor
96	MDP	O	Output to control spindle motor servo
97	MDS	O	Output to control spindle motor servo
98	LOCK	O	GFS is sampled by 460 Hz. H when GFS is H
99	SSTP	I	Input signal to detect disc inner most track
100	SFDR	O	Sled drive output

• **IC501 SYSTEM CONTROL (CXP84124-014Q (C545))**
(CXP84332-004Q (C745))

PIN No.	PIN NAME	I/O	FUNCTION
1 to 10	A3 to A12	O	S-RAM address control output pin.
11	PLAY LED	O	▷ LED ON/OFF pin.
12	PAUSE LED	O	▮ LED ON/OFF pin.
13	DSP LED/	O	} LED ON/OFF pin.
14	LED-CLIP-C	O	
15	LED-CLIP-D	O	
16	LED-CLIP-B	O	
17	LED-CLIP-A	O	
18	VOL LED	O	Volume LED control pin.
19	$\overline{\text{DSP}}$ LED3	O	} LED ON/OFF pin.
20	$\overline{\text{DSP}}$ LED2	O	
21	$\overline{\text{DSP}}$ LED1	O	
22	GAIN 2	O	} Gain switch control pin.
23	GAIN 1	O	
24	LEVEL SW	—	C545: US, CND, E, AUS are GND, C545: AEP is +5V, C745 is (OPEN) NC.
25	DSPLT	O	Serial data latch signal output pin to Digital Signal processor.
26	TBL-L	O	} Table motor control pin.
27	TBL-R	O	
28	LOD-IN	O	} Loading motor control pin.
29	LOD-OUT	O	
30	RESET	I	Reset signal input pin.
31	EXTAL	I	8 MHz clock input pin.
32	XTAL	O	8 MHz clock output pin.
33	V _{ss}	—	GND
34	TX	—	} Not used.
35	TEX	—	
36	AV _{ss}	—	GND
37	AV _{REF}	I	Reference voltage input pin of A/D conversion. (Connected GND)
38 to 43	KEY0 to KEY5	I	Key input pin. (A/D)
44	VOL LEVEL	I	Volume level input pin.
45	ADJ/AFJ	I	Test mode pin. Normally: "H"
46	T.SENSE	I	Slit sensor of disc table input pin.
47	AMUTE	O	Analog muting control signal output pin.
48	CLK	O	Serial clock output pin to BD.
49	LDON	O	Optical pick-up laser diode control pin. ON: "H"
50	DATA	O	Serial data output pin.
51	SQCLK	O	Subcode Q data readout clock output pin.
52	SUBQ	I	Subcode Q data input pin.
53, 54	—	—	Not used.
55	SENSE	I	SENSE signal input pin.

PIN No.	PIN NAME	I/O	FUNCTION
56	SIRCS	I	Remote control signal input pin.
57	D. SENS	I	Disc sensor input pin.
58	PRGL	O	Latch signal output pin to digital filter IC.
59	XLT	O	Serial data latch signal output pin.
60	CE	O	Chip enable output.
61	SCOR	I	Subcode Q data readout timing signal input pin.
62	VOL DWN	O	} Volume motor drive pin.
63	VOL UP	O	
64 to 66	S1 to S3	I	Rotary encoder input (S901).
67	$\overline{\text{WE}}$	O	Write enable output pin.
68 to 71	D4 to D7	O	FL segment output pin.
72	—	—	Connected to +5V.
73	VDD	—	Power supply pin. (+5V)
74 to 77	D0 to D3	O	FL timing output pin.
78 to 80	A0 to A2	O	S-RAM address control output pin.

SECTION 5

EXPLODED VIEWS

NOTE:

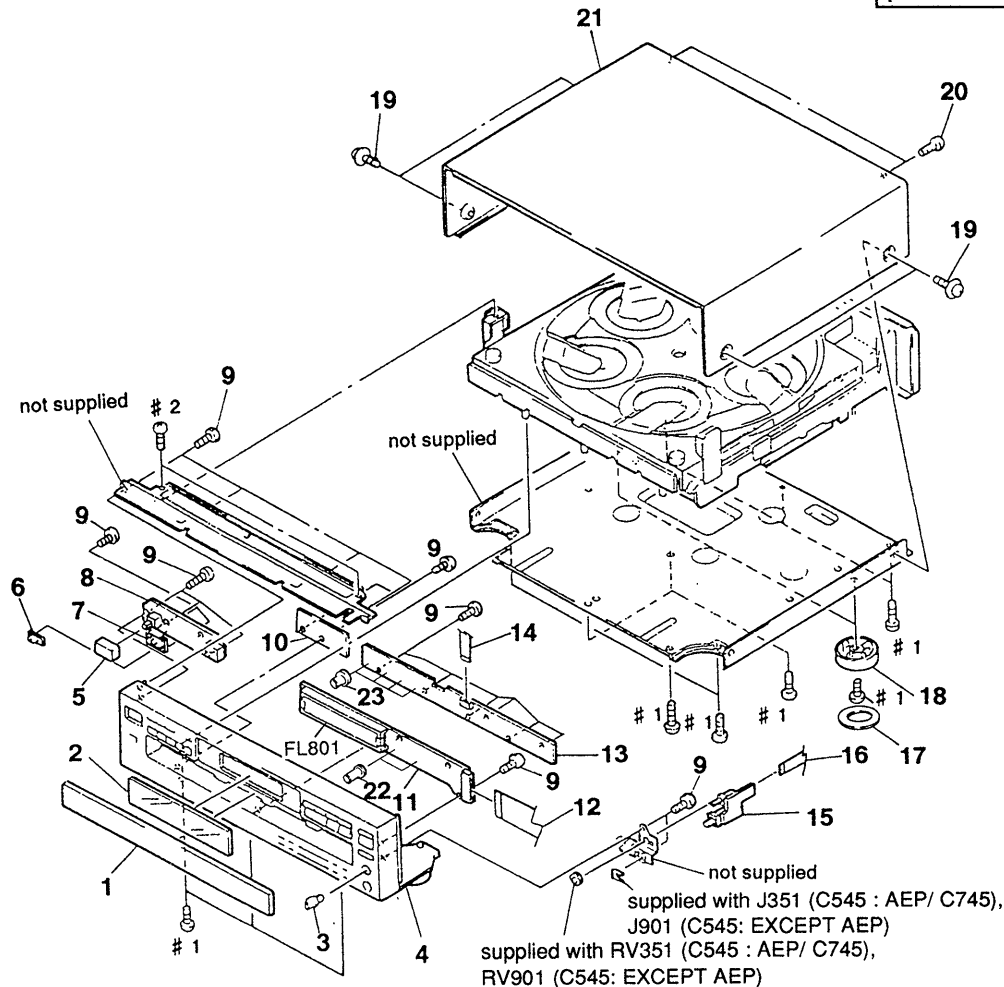
- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.

- 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.
- CND : Canadian model
AUS : Australian model

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

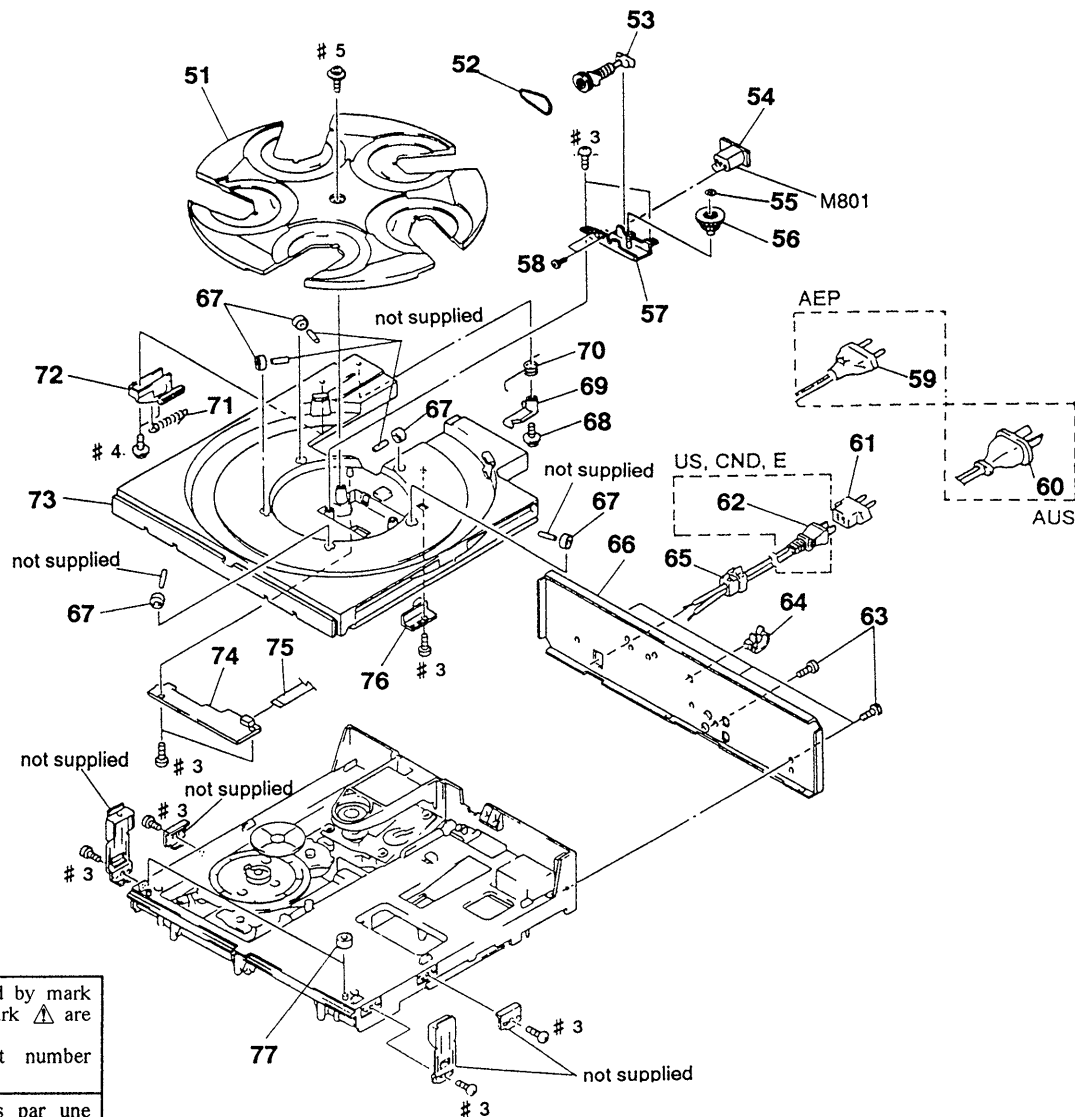
Les composants identifiés par une marque  sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

5-1. FRONT PANEL AND CASE SECTION



Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
1	4-964-694-01	PANEL, LOADING		* 13	A-4673-097-A	10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)	
2	4-965-461-01	PLATE, INDICATION (C745)		* 13	A-4673-100-A	10 KEY BOARD, COMPLETE (C545:AEP)	
2	4-965-461-11	PLATE, INDICATION (C545)		14	1-765-250-11	WIRE (FLAT TYPE) (14 CORE) (C745)	
3	4-950-189-01	KNOB (A) (VOL) (C545:EXCEPT AEP)		14	1-765-266-11	WIRE (FLAT TYPE) (10 CORE) (C545)	
3	A-4660-389-A	KNOB (HP) ASSY (C545:AEP/C745)		* 15	1-652-157-11	HEADPHONE BOARD (C545:AEP/C745)	
4	X-4944-756-1	PANEL ASSY, FRONT (C745:US, CND)		* 15	1-652-158-11	HEADPHONE BOARD (C545:US, CND, E, AUS)	
4	X-4944-757-1	PANEL ASSY, FRONT (C745:AEP)		16	1-765-249-11	WIRE (FLAT TYPE) (13 CORE) (C545:AEP/C745)	
4	X-4944-758-1	PANEL ASSY, FRONT (C545:AEP)		16	1-765-251-11	WIRE (FLAT TYPE) (5 CORE) (C545:EXCEPT AEP)	
4	X-4944-759-1	PANEL ASSY, FRONT (C545:US, CND)		17	4-923-836-11	CUSHION	
4	X-4944-760-1	PANEL ASSY, FRONT (C545:E, AUS)		18	X-4942-197-1	FOOT ASSY (C545:US, CND/C745:US, CND)	
5	4-922-921-01	BUTTON (POWER)		18	X-4942-198-1	FOOT ASSY (C545:AEP, E, AUS/C745:AEP)	
6	4-922-518-01	KNOB (TIMER)		19	3-704-366-01	SCREW (CASE) (M3X8)	
* 7	1-652-154-11	TIMER SW BOARD		20	3-703-685-21	SCREW (+BV 3X8)	
* 8	1-652-155-11	POWER SW BOARD		21	4-944-153-51	CASE	
9	4-951-620-01	SCREW (2. 6X8), +BVTP		* 22	3-362-478-11	LED HOLDER (T)	
* 10	1-652-156-11	DSP BOARD (C745)		* 23	3-362-478-21	LED HOLDER (T)	
* 11	A-4673-092-A	DISPLAY BOARD, COMPLETE		FL801	1-517-278-11	INDICATOR TUBE, FLUORESCENT	
12	1-765-264-11	WIRE (FLAT TYPE) (16 CORE)					
* 13	A-4673-093-A	10 KEY BOARD, COMPLETE (C745)					

5-2. BACK PANEL AND DISC TABLE SECTION

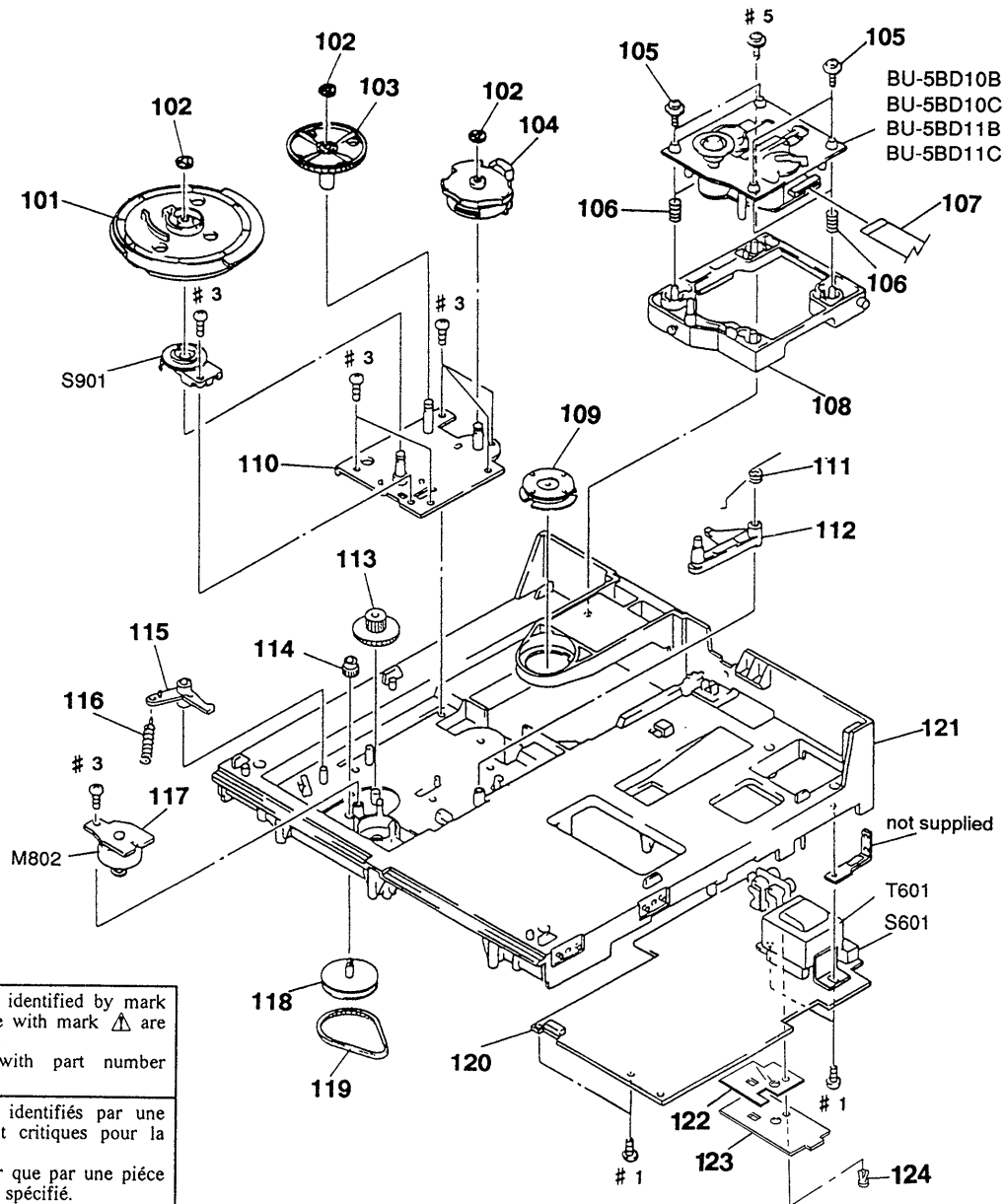


The components identified by mark  or dotted line with mark  are critical for safety.
Replace only with part number specified.

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
51	4-957-299-01	TABLE (B), DISC		* 66	4-965-464-11	PANEL, BACK (C745:AEP)	
52	4-957-304-01	BELT (RM)		* 66	4-965-464-21	PANEL, BACK (C545:AEP)	
53	X-4943-479-1	GEAR (ROTARY A) ASSY		* 66	4-965-464-31	PANEL, BACK (C545:US, CND)	
* 54	1-647-364-11	TABLE MOTOR BOARD		* 66	4-965-464-41	PANEL, BACK (C545:E)	
55	3-325-697-01	WASHER		* 66	4-965-464-51	PANEL, BACK (C545:AUS)	
56	4-957-284-01	GEAR (LOTARY B)		67	X-4924-457-1	ROLLER ASSY	
57	X-4943-477-1	BRACKET (RM) ASSY		68	4-957-868-01	SCREW (+PTPWH 2.6X20)	
58	4-965-659-01	SCREW (+B 2X2.2)		69	4-957-291-01	LEVER (RACK RELEASE)	
 59	1-575-651-21	CORD, POWER (C545:AEP/C745:AEP)		70	4-957-293-01	SPRING (RACK RELEASE)	
 60	1-696-845-11	CORD, POWER (C545:AUS)		71	4-957-294-01	SPRING (D.T), TENSION	
 61	1-569-007-11	ADAPTER, CONVERSION 2P (C545:E)		72	4-957-292-01	SLIDER (RACK)	
 62	1-590-836-11	CORD, POWER (C545:US, CND/C745:US, CND)		* 73	4-957-298-01	TABLE (A), DISC	
 62	1-696-027-11	CORD, POWER (C545:E)		* 74	1-647-362-11	SENSOR BOARD	
63	3-704-515-21	SCREW (BV/RING)		75	1-751-052-11	WIRE (FLAT TYPE) (6 CORE)	
* 64	4-949-235-01	HOOK		76	X-4943-480-1	BRACKET (ROLLER D) ASSY	
* 65	3-703-244-00	BUSHING (2104), CORD(C545:EXCEPT E/C745)		* 77	4-951-619-01	CUSHION (A)	
* 65	3-703-571-11	BUSHING (S) (4516), CORD (C545:E)		M801	A-4660-322-A	MOTOR ASSY, ROTARY (TABLE)	
* 66	4-965-464-01	PANEL, BACK (C745:US, CND)					

5-3. CHASSIS SECTION



Ref. No. Part No. Description

101	4-957-288-01	GEAR (MAIN)
102	4-957-283-01	WASHER (5), STOPPER
103	4-957-287-01	GEAR (REV)
104	4-957-286-01	GEAR (U/D)
105	4-933-134-01	SCREW (+PTPWH M2. 6X6)
106	4-948-503-01	SPRING (BU), COMPRESSION
107	1-765-265-11	WIRE (FLAT TYPE) (23 CORE)
* 108	4-957-289-01	HOLDER (BU)
* 109	1-452-538-11	MAGNET
110	X-4943-478-1	BRACKET (GEAR) ASSY
111	4-957-281-01	SPRING (LOCK LEVER)
112	4-957-279-01	LEVER, LOCK
113	4-957-303-01	GEAR (LOADING C)
114	4-934-375-01	GEAR (LOADING B)
115	4-957-285-01	LEVER, SET
116	4-962-087-01	SPRING (S), TENSION
* 117	1-649-802-11	LOADING MOTOR BOARD
118	X-4941-529-1	PULLEY ASSY
119	4-944-490-01	BELT (TIMING)

Remark

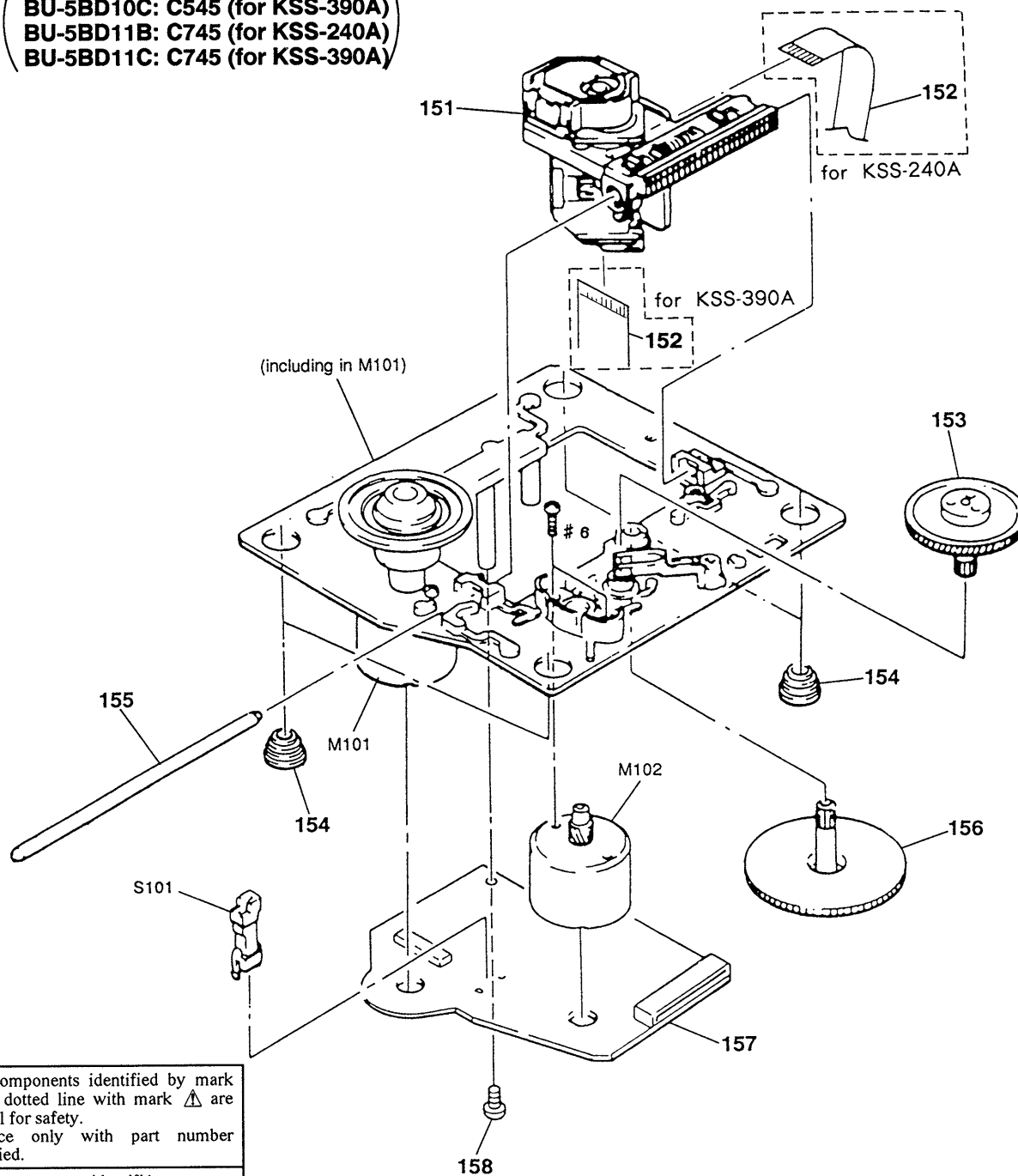
Ref. No. Part No. Description

* 120	A-4673-095-A	MAIN BOARD, COMPLETE (C745:US, CND)
* 120	A-4673-096-A	MAIN BOARD, COMPLETE (C745:AEP)
* 120	A-4673-099-A	MAIN BOARD, COMPLETE (C545:US, CND, AUS)
* 120	A-4673-101-A	MAIN BOARD, COMPLETE (C545:AEP)
* 120	A-4673-102-A	MAIN BOARD, COMPLETE (C545:E)
* 121	4-957-300-03	CHASSIS
* 122	4-957-556-01	SHEET, INSULATING (C545:AEP, E, AUS/C745:AEP)
* 123	4-957-555-01	SHEET, INSULATING (C545:AEP, E, AUS/C745:AEP)
124	3-531-576-11	RIVET (C545:AEP, E, AUS/C745:AEP)
M802	A-4604-834-A	MOTOR ASSY, LOADING
$\triangle$ S601	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (C545:E)
S901	1-466-996-11	ENCODER, ROTARY
$\triangle$ T601	1-423-553-11	TRANSFORMER, POWER (C545:US, CND/C745:US, CND)
$\triangle$ T601	1-423-554-11	TRANSFORMER, POWER (C545:AEP, AUS/C745:AEP)
$\triangle$ T601	1-423-555-11	TRANSFORMER, POWER (C545:E)

Remark

5-4. BASE UNIT SECTION

- (BU-5BD10B: C545 (for KSS-240A)
 BU-5BD10C: C545 (for KSS-390A)
 BU-5BD11B: C745 (for KSS-240A)
 BU-5BD11C: C745 (for KSS-390A))



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.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
$\triangle$ 151	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)		* 157	A-4649-433-A	BD BOARD, COMPLETE (C745) (for KSS-240A)	
$\triangle$ 151	8-848-281-11	OPTICAL PICK-UP BLOCK (KSS-390A)		* 157	A-4649-994-A	BD BOARD, COMPLETE (C545) (for KSS-390A)	
152	1-575-001-11	WIRE, FLAT TYPE (12 CORE) (for KSS-240A)		* 157	A-4649-995-A	BD BOARD, COMPLETE (C745) (for KSS-390A)	
152	1-647-341-11	FLEXIBLE BOARD (for KSS-390A)		158	4-951-620-01	SCREW (2.6X8), +BVT	
153	4-917-567-01	GEAR (M)		M101	X-4917-523-3	BASE (OUT SERT) ASSY (SPINDLE)	
154	4-951-940-01	INSULATOR (BU)		M102	X-4917-504-1	MOTOR ASSY (SLED)	
155	4-917-565-01	SHAFT, SLED		S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
156	4-917-564-01	GEAR (P), FLATNESS					
* 157	A-4649-432-A	BD BOARD, COMPLETE (C545) (for KSS-240A)					

SECTION 6 ELECTRICAL PARTS LIST

10 KEY

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.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example:
KNOB, BALANCE (WHITE) ... (RED)

↑ ↑
Parts color Cabinet's color

- CND : Canadian model
- AUS : Australian model

- 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

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-4673-093-A	10 KEY BOARD, COMPLETE (C745) *****		R752	1-249-419-11	CARBON 1.5K 5% 1/4W F	
*	A-4673-097-A	10 KEY BOARD, COMPLETE ***** (C545:US, CND, E, AUS)		R753	1-249-421-11	CARBON 2.2K 5% 1/4W F	
*	A-4673-100-A	10 KEY BOARD, COMPLETE (C545:AEP) ***** < CONNECTOR >		R754	1-249-423-11	CARBON 3.3K 5% 1/4W F	
	CN841	1-750-228-11 CONNECTOR, FFC/FPC 10P (C545)		R755	1-249-426-11	CARBON 5.6K 5% 1/4W	
	CN841	1-750-231-11 CONNECTOR, FFC/FPC 14P (C745)		R756	1-249-430-11	CARBON 12K 5% 1/4W	
*	CN842	1-695-823-11 CONNECTOR, BOARD TO BOARD 8P (C745) < DIODE >		R757	1-249-435-11	CARBON 33K 5% 1/4W (C545:AEP/C745)	
	D841	8-719-310-71 DIODE SEL2510C-D (A)		R841	1-249-406-11	CARBON 120 5% 1/4W F	
	D842	8-719-310-71 DIODE SEL2510C-D (B)		R842	1-249-406-11	CARBON 120 5% 1/4W F	
	D843	8-719-310-71 DIODE SEL2510C-D (C)		R843	1-249-406-11	CARBON 120 5% 1/4W F	
	D844	8-719-310-71 DIODE SEL2510C-D (D)		R844	1-249-406-11	CARBON 120 5% 1/4W F	
		< TRANSISTOR >				< SWITCH >	
	Q841	8-729-900-89 TRANSISTOR DTC144ES		S721	1-554-303-21	SWITCH, TACTILE (MUSIC SCAN)	
	Q842	8-729-900-89 TRANSISTOR DTC144ES		S722	1-554-303-21	SWITCH, TACTILE (FADER)	
	Q843	8-729-900-89 TRANSISTOR DTC144ES		S723	1-554-303-21	SWITCH, TACTILE (TIME/MEMO)	
	Q844	8-729-900-89 TRANSISTOR DTC144ES		S724	1-554-303-21	SWITCH, TACTILE (FILE)	
		< RESISTOR >		S731	1-554-303-21	SWITCH, TACTILE (ERASE)	
	R721	1-249-418-11 CARBON 1.2K 5% 1/4W F		S732	1-554-303-21	SWITCH, TACTILE (D)	
	R722	1-249-419-11 CARBON 1.5K 5% 1/4W F		S733	1-554-303-21	SWITCH, TACTILE (C)	
	R723	1-249-421-11 CARBON 2.2K 5% 1/4W F		S734	1-554-303-21	SWITCH, TACTILE (B)	
	R731	1-249-418-11 CARBON 1.2K 5% 1/4W F		S735	1-554-303-21	SWITCH, TACTILE (A)	
	R732	1-249-419-11 CARBON 1.5K 5% 1/4W F		S741	1-554-303-21	SWITCH, TACTILE (PEAK SEARCH)	
	R733	1-249-421-11 CARBON 2.2K 5% 1/4W F		S742	1-554-303-21	SWITCH, TACTILE (1)	
	R734	1-249-423-11 CARBON 3.3K 5% 1/4W F		S743	1-554-303-21	SWITCH, TACTILE (2)	
	R741	1-249-418-11 CARBON 1.2K 5% 1/4W F		S744	1-554-303-21	SWITCH, TACTILE (3)	
	R742	1-249-419-11 CARBON 1.5K 5% 1/4W F		S745	1-554-303-21	SWITCH, TACTILE (4)	
	R743	1-249-421-11 CARBON 2.2K 5% 1/4W F		S746	1-554-303-21	SWITCH, TACTILE (5)	
	R744	1-249-423-11 CARBON 3.3K 5% 1/4W F		S747	1-554-303-21	SWITCH, TACTILE (EDIT/TIME FADE)	
	R745	1-249-426-11 CARBON 5.6K 5% 1/4W		S748	1-554-303-21	SWITCH, TACTILE (CHECK)	
	R746	1-249-430-11 CARBON 12K 5% 1/4W		S751	1-554-303-21	SWITCH, TACTILE (6)	
	R747	1-249-435-11 CARBON 33K 5% 1/4W		S752	1-554-303-21	SWITCH, TACTILE (7)	
	R751	1-249-418-11 CARBON 1.2K 5% 1/4W F		S753	1-554-303-21	SWITCH, TACTILE (8)	
				S754	1-554-303-21	SWITCH, TACTILE (9)	
				S755	1-554-303-21	SWITCH, TACTILE (10)	
				S756	1-554-303-21	SWITCH, TACTILE (>10)	
				S757	1-554-303-21	SWITCH, TACTILE (CLEAR)	
				S758	1-554-303-21	SWITCH, TACTILE (LEVEL FILE) (C545:AEP/C745)	

BD DISPLAY

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-4649-432-A	BD BOARD, COMPLETE (C545) (for KSS-240A) *****		R104	1-216-085-00	METAL CHIP 33K 5%	1/10W
				R105	1-216-097-00	METAL CHIP 100K 5%	1/10W
*	A-4649-994-A	BD BOARD, COMPLETE (C545) (for KSS-390A) *****		R106	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
				R107	1-216-061-00	METAL CHIP 3.3K 5%	1/10W
*	A-4649-433-A	BD BOARD, COMPLETE (C745) (for KSS-240A) *****		R108	1-216-073-00	METAL CHIP 10K 5%	1/10W
				R109	1-216-121-00	METAL CHIP 1M 5%	1/10W
				R110	1-216-025-00	METAL CHIP 100 5%	1/10W
*	A-4649-995-A	BD BOARD, COMPLETE (C745) (for KSS-390A) *****		R112	1-216-049-00	METAL CHIP 1K 5%	1/10W
				R113	1-216-077-00	METAL CHIP 15K 5%	1/10W
				R114	1-216-077-00	METAL CHIP 15K 5%	1/10W
				R117	1-216-077-00	METAL CHIP 15K 5%	1/10W
				R118	1-216-077-00	METAL CHIP 15K 5%	1/10W
		< CAPACITOR >					
C101	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	R121	1-216-077-00	METAL CHIP 15K 5%	1/10W
C102	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R122	1-216-077-00	METAL CHIP 15K 5%	1/10W
C103	1-163-005-11	CERAMIC CHIP 470PF	10% 50V	R123	1-216-073-00	METAL CHIP 10K 5%	1/10W
C105	1-135-155-21	TANTALUM CHIP 4.7uF	10% 16V	R124	1-216-097-00	METAL CHIP 100K 5%	1/10W
C106	1-164-346-11	CERAMIC CHIP 1uF	16V	R125	1-216-049-00	METAL CHIP 1K 5%	1/10W (C545)
C107	1-164-505-11	CERAMIC CHIP 2.2uF	16V	R126	1-216-049-00	METAL CHIP 1K 5%	1/10W (C545)
C108	1-163-035-00	CERAMIC CHIP 0.047uF	50V	R127	1-216-049-00	METAL CHIP 1K 5%	1/10W (C545)
C109	1-163-011-11	CERAMIC CHIP 0.0015uF	10% 50V	R128	1-216-049-00	METAL CHIP 1K 5%	1/10W (C745)
C110	1-163-017-00	CERAMIC CHIP 0.0047uF	5% 50V	R129	1-216-049-00	METAL CHIP 1K 5%	1/10W (C745)
C111	1-163-251-11	CERAMIC CHIP 100PF	5% 50V	R130	1-216-049-00	METAL CHIP 1K 5%	1/10W (C745)
C112	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R131	1-216-037-00	METAL CHIP 330 5%	1/10W
C113	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R151	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C123	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R152	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C124	1-164-005-11	CERAMIC CHIP 0.47uF	25V	R153	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C151	1-163-007-11	CERAMIC CHIP 680PF	10% 50V	R154	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C152	1-163-007-11	CERAMIC CHIP 680PF	10% 50V	R155	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C153	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R156	1-216-070-00	METAL CHIP 7.5K 5%	1/10W
C154	1-164-336-11	CERAMIC CHIP 0.33uF	25V	R157	1-216-093-00	METAL CHIP 68K 5%	1/10W
C155	1-163-007-11	CERAMIC CHIP 680PF	10% 50V	R158	1-216-076-00	METAL CHIP 13K 5%	1/10W
C156	1-163-007-11	CERAMIC CHIP 680PF	10% 50V	R159	1-216-085-00	METAL CHIP 33K 5%	1/10W
C157	1-163-033-00	CERAMIC CHIP 0.022uF	50V	R160	1-216-081-00	METAL CHIP 22K 5%	1/10W
C158	1-163-033-00	CERAMIC CHIP 0.022uF	50V	R161	1-216-308-00	METAL CHIP 4.7 5%	1/10W
C159	1-163-023-00	CERAMIC CHIP 0.015uF	5% 50V	R162	1-216-093-00	METAL CHIP 68K 5%	1/10W
C160	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V	R163	1-216-093-00	METAL CHIP 68K 5%	1/10W
C161	1-163-038-00	CERAMIC CHIP 0.1uF	25V				
		< CONNECTOR >					
* CN101	1-568-865-11	SOCKET, CONNECTOR 23P		S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
CN102	1-568-795-11	SOCKET, CONNECTOR 12P					
		< IC >					
IC101	8-752-360-75	IC CXD2599Q (for KSS-390A)					
IC101	8-752-361-90	IC CXD2515Q (for KSS-240A)					
IC102	8-759-071-79	IC BA6297AFP					
		< RESISTOR >					
R101	1-216-077-00	METAL CHIP 15K 5%	1/10W	C801	1-161-494-00	CERAMIC 0.022uF	25V
R102	1-216-097-00	METAL CHIP 100K 5%	1/10W	C802	1-162-211-31	CERAMIC 33PF	5% 50V
R103	1-216-077-00	METAL CHIP 15K 5%	1/10W	C803	1-164-159-11	CERAMIC 0.1uF	50V

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C804	1-164-159-11	CERAMIC	0.1uF		50V			< SWITCH >			
C805	1-164-159-11	CERAMIC	0.1uF		50V						
C806	1-162-282-31	CERAMIC	100PF	10%	50V	S701	1-554-303-21	SWITCH, TACTILE (DISC SKIP)			
C807	1-162-282-31	CERAMIC	100PF	10%	50V	S702	1-554-303-21	SWITCH, TACTILE (△ OPEN/CLOSE)			
						S703	1-554-303-21	SWITCH, TACTILE (EX-CHANGE)			
						S704	1-554-303-21	SWITCH, TACTILE (▶▶▶)			
		< CONNECTOR >				S705	1-554-303-21	SWITCH, TACTILE (■)			
CN801	1-750-233-11	CONNECTOR, FFC/FPC 16P				S706	1-554-303-21	SWITCH, TACTILE (■)			
CN802	1-750-195-11	CONNECTOR, BOARD TO BOARD 6P				S707	1-554-303-21	SWITCH, TACTILE (◀◀◀)			
		< DIODE >				S708	1-554-303-21	SWITCH, TACTILE (▷▷▷)			
D801	8-719-303-02	DIODE SEL2510C-D (▷)				S725	1-554-303-21	SWITCH, TACTILE (▷)			
D802	8-719-303-17	DIODE SEL2810A-D (■)				S726	1-554-303-21	SWITCH, TACTILE (◀◀◀)			
		< FLUORESCENT INDICATOR >									
FL801	1-517-278-11	INDICATOR TUBE, FLUORESCENT									
		< COMPOSITION CIRCUIT BLOCK >									
IB801	1-232-817-11	COMPOSITION CIRCUIT BLOCK									
IB802	1-232-817-11	COMPOSITION CIRCUIT BLOCK									
IB803	1-232-817-11	COMPOSITION CIRCUIT BLOCK									
IB804	1-232-817-11	COMPOSITION CIRCUIT BLOCK									
		< IC >									
IC801	8-749-920-83	IC GP1U52XB									
IC802	8-759-823-57	IC LC75711E									
		< TRANSISTOR >									
Q801	8-729-900-89	TRANSISTOR DTC144ES									
Q802	8-729-900-89	TRANSISTOR DTC144ES									
Q803	8-729-900-89	TRANSISTOR DTC144ES									
Q804	8-729-900-89	TRANSISTOR DTC144ES									
		< RESISTOR >									
R701	1-249-418-11	CARBON	1.2K	5%	1/4W F						
R702	1-249-419-11	CARBON	1.5K	5%	1/4W F						
R703	1-249-421-11	CARBON	2.2K	5%	1/4W F						
R704	1-249-423-11	CARBON	3.3K	5%	1/4W F						
R705	1-249-426-11	CARBON	5.6K	5%	1/4W						
R706	1-249-430-11	CARBON	12K	5%	1/4W						
R707	1-249-435-11	CARBON	33K	5%	1/4W						
R724	1-249-428-11	CARBON	8.2K	5%	1/4W F						
R725	1-249-426-11	CARBON	5.6K	5%	1/4W						
R801	1-249-406-11	CARBON	120	5%	1/4W F						
R802	1-249-409-11	CARBON	220	5%	1/4W F						
R803	1-249-429-11	CARBON	10K	5%	1/4W						
R804	1-249-417-11	CARBON	1K	5%	1/4W F						
R805	1-249-417-11	CARBON	1K	5%	1/4W F						
R806	1-249-417-11	CARBON	1K	5%	1/4W F						

*	1-652-156-11	DSP BOARD (C745)	*****							
		< CONNECTOR >								
*	CN861	1-695-822-11	CONNECTOR, BOARD TO BOARD 8P (C745)							
		< DIODE >								
D803	8-719-301-52	SEL2810A-C (HALL)								
D804	8-719-301-52	SEL2810A-C (CHURCH)								
D805	8-719-301-52	SEL2810A-C (JAZZ CLUB)								
D806	8-719-301-52	SEL2810A-C (STADIUM)								
D807	8-719-301-52	SEL2810A-C (DANCE)								
		< TRANSISTOR >								
Q861	8-729-900-61	TRANSISTOR DTA114ES								
Q862	8-729-900-61	TRANSISTOR DTA114ES								
		< RESISTOR >								
R735	1-249-426-11	CARBON	5.6K	5%	1/4W					
R736	1-249-430-11	CARBON	12K	5%	1/4W					
R737	1-249-435-11	CARBON	33K	5%	1/4W					
R772	1-249-421-11	CARBON	2.2K	5%	1/4W F					
R861	1-249-409-11	CARBON	220	5%	1/4W F					
R862	1-249-409-11	CARBON	220	5%	1/4W F					
		< SWITCH >								
S736	1-554-303-21	SWITCH, TACTILE (DSP FILE)								
S737	1-554-303-21	SWITCH, TACTILE (DIRECT)								
S738	1-554-303-21	SWITCH, TACTILE (SELECT)								

HEADPHONE

LOADING MOTOR

MAIN

Ref.No.	Part No.	Description	Remark
*	1-652-157-11	HEADPHONE BOARD (C545:AEP/C745)	

		< CAPACITOR >	
C151	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C251	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C353	1-164-159-11	CERAMIC 0.1uF 50V	
		< CONNECTOR >	
CN351	1-750-230-11	CONNECTOR, FFC/FPC 13P	
		< JACK >	
J351	1-750-162-41	JACK (LARGE TYPE) (PHONES)	
		< VARIABLE RESISTOR >	
RV351	1-241-917-11	RES, VAR, CARBON 10K/10K/10K (LINE OUT PHONE LEVEL)	

*	1-652-158-11	HEADPHONE BOARD (C545:US, CND, E, AUS)	

		< CAPACITOR >	
C901	1-164-159-11	CERAMIC 0.1uF 50V	
C902	1-162-290-31	CERAMIC 470PF 10% 50V	
C903	1-162-290-31	CERAMIC 470PF 10% 50V	
		< CONNECTOR >	
CN901	1-750-737-11	CONNECTOR, FFC/FPC 5P	
		< JACK >	
J901	1-750-162-41	JACK (LARGE TYPE) (PHONES)	
		< COIL >	
L901	1-412-473-21	INDUCTOR 0uH	
		< RESISTOR >	
R901	1-249-402-11	CARBON 56 5% 1/4W F	
R902	1-249-402-11	CARBON 56 5% 1/4W F	
		< VARIABLE RESISTOR >	
RV901	1-223-359-11	RES, VAR, CARBON 1K/1K (PHONE LEVEL)	

Ref.No.	Part No.	Description	Remark
*	1-648-802-11	LOADING MOTOR BOARD	

		< MOTOR >	
M802	A-4604-834-A	MOTOR ASSY, LOADING	

*	A-4673-095-A	MAIN BOARD, COMPLETE (C745:US, CND)	

*	A-4673-096-A	MAIN BOARD, COMPLETE (C745:AEP)	

*	A-4673-099-A	MAIN BOARD, COMPLETE (C545:US, CND, AUS)	

*	A-4673-101-A	MAIN BOARD, COMPLETE (C545:AEP)	

*	A-4673-102-A	MAIN BOARD, COMPLETE (C545:E)	

	7-685-647-79	SCREW +P 3X10 TYPE2 NON-SLIT	
		< CAPACITOR >	
C101	1-164-159-11	CERAMIC 0.1uF 50V	
C102	1-162-282-31	CERAMIC 100PF 10% 50V	
C103	1-162-213-31	CERAMIC 39PF 5% 50V (C745)	
C103	1-162-215-31	CERAMIC 47PF 5% 50V (C545)	
C104	1-162-213-31	CERAMIC 39PF 5% 50V (C745)	
C104	1-162-215-31	CERAMIC 47PF 5% 50V (C545)	
C105	1-124-994-11	ELECT 100uF 20% 10V	
C106	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C107	1-106-359-00	MYLAR 4700PF 5% 200V	
C108	1-162-211-31	CERAMIC 33PF 5% 50V (C745)	
C109	1-126-101-11	ELECT 100uF 20% 16V (C745)	
C110	1-124-994-11	ELECT 100uF 20% 10V	
C111	1-124-463-00	ELECT 0.1uF 20% 50V (C745)	
C112	1-124-463-00	ELECT 0.1uF 20% 50V (C745)	
C113	1-130-467-00	MYLAR 470PF 5% 50V	
C201	1-164-159-11	CERAMIC 0.1uF 50V	
C202	1-162-282-31	CERAMIC 100PF 10% 50V	
C203	1-162-213-31	CERAMIC 39PF 5% 50V (C745)	
C203	1-162-215-31	CERAMIC 47PF 5% 50V (C545)	
C204	1-162-213-31	CERAMIC 39PF 5% 50V (C745)	
C204	1-162-215-31	CERAMIC 47PF 5% 50V (C545)	
C205	1-124-994-11	ELECT 100uF 20% 10V	
C206	1-130-472-00	MYLAR 0.0012uF 5% 50V	
C207	1-106-359-00	MYLAR 4700PF 5% 200V	
C208	1-162-211-31	CERAMIC 33PF 5% 50V (C745)	
C209	1-126-101-11	ELECT 100uF 20% 16V (C745)	
C210	1-124-994-11	ELECT 100uF 20% 10V	

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C211	1-124-463-00	ELECT	0.1uF	20%	50V (C745)	C533	1-161-494-00	CERAMIC	0.022uF	25V	
C212	1-124-463-00	ELECT	0.1uF	20%	50V (C745)	C551	1-126-022-11	ELECT	47uF	20%	16V
C213	1-130-467-00	MYLAR	470PF	5%	50V	C552	1-126-022-11	ELECT	47uF	20%	16V
						C562	1-164-159-11	CERAMIC	0.1uF	50V	
C301	1-126-786-11	ELECT	47uF	20%	16V					(C545:AEP/C745)	
C302	1-164-159-11	CERAMIC	0.1uF		50V	C601	1-161-494-00	CERAMIC	0.022uF	25V	
C303	1-164-159-11	CERAMIC	0.1uF		50V						
C305	1-161-494-00	CERAMIC	0.022uF		25V	C602	1-126-937-11	ELECT	4700uF	20%	16V
C306	1-162-199-31	CERAMIC	10PF	5%	50V (C545)	C603	1-124-556-11	ELECT	2200uF	20%	16V
						C604	1-126-301-11	ELECT	1uF	20%	50V
C307	1-164-159-11	CERAMIC	0.1uF		50V	C605	1-126-163-11	ELECT	4.7uF	20%	50V
C308	1-162-196-31	CERAMIC	5.6PF	10%	50V (C545)	C607	1-126-101-11	ELECT	100uF	20%	16V
C308	1-162-199-31	CERAMIC	10PF	5%	50V (C745)						
C309	1-162-196-31	CERAMIC	5.6PF	10%	50V (C545)	C608	1-126-101-11	ELECT	100uF	20%	16V
C309	1-162-199-31	CERAMIC	10PF	5%	50V (C745)	C609	1-124-572-11	ELECT	100uF	20%	63V
						C610	1-124-261-00	ELECT	10uF	20%	50V
C310	1-162-215-31	CERAMIC	47PF	5%	50V (C545)						
C311	1-126-022-11	ELECT	47uF	20%	16V						
C312	1-161-494-00	CERAMIC	0.022uF		25V						
C315	1-126-025-11	ELECT	330uF	20%	16V						
C316	1-126-025-11	ELECT	330uF	20%	16V						
C317	1-126-301-11	ELECT	1uF	20%	50V						
C318	1-126-022-11	ELECT	47uF	20%	16V						
C319	1-126-049-11	ELECT	22uF	20%	25V						
C351	1-126-023-11	ELECT	100uF	20%	16V						
C352	1-126-023-11	ELECT	100uF	20%	16V						
C401	1-126-022-11	ELECT	47uF	20%	16V						
					(C545:US, CND, E, AUS)						
C401	1-126-786-11	ELECT	47uF	20%	16V						
					(C545:E/C745)						
C404	1-162-208-31	CERAMIC	24PF	5%	50V (C745)						
C405	1-126-022-11	ELECT	47uF	20%	16V (C745)						
C406	1-164-159-11	CERAMIC	0.1uF		50V (C745)						
C407	1-164-159-11	CERAMIC	0.1uF		50V (C745)						
C408	1-161-494-00	CERAMIC	0.022uF		25V (C745)						
C409	1-126-022-11	ELECT	47uF	20%	16V (C745)						
C410	1-162-208-31	CERAMIC	24PF	5%	50V (C745)						
C412	1-164-159-11	CERAMIC	0.1uF		50V						
C413	1-126-022-11	ELECT	47uF	20%	16V						
C415	1-164-159-11	CERAMIC	0.1uF		50V						
C416	1-164-159-11	CERAMIC	0.1uF		50V						
C417	1-164-159-11	CERAMIC	0.1uF		50V						
C418	1-164-159-11	CERAMIC	0.1uF		50V						
C419	1-164-159-11	CERAMIC	0.1uF		50V						
C501	1-126-022-11	ELECT	47uF	20%	16V						
C502	1-164-159-11	CERAMIC	0.1uF		50V						
C503	1-164-159-11	CERAMIC	0.1uF		50V						
C511	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C512	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C513	1-162-294-31	CERAMIC	0.001uF	10%	50V						
C531	1-104-905-11	CAP, DOUBLE LAYERS	0.22F	(C545:AEP, E)							
C531	1-125-705-11	CAP, DOUBLE LAYERS	0.22F	(C545:US, CND, AUS/C745)							
C532	1-164-159-11	CERAMIC	0.1uF		50V						

< CONNECTOR >

CN301	1-750-230-11	CONNECTOR, FFC/FPC	13P (C545:AEP/C745)
CN301	1-750-737-11	CONNECTOR, FFC/FPC	5P (C545:US, CND, E, AUS)
CN401	1-764-004-11	CONNECTOR, FFC/FPC	23P
CN501	1-750-233-11	CONNECTOR, FFC/FPC	16P
CN502	1-750-228-11	CONNECTOR, FFC/FPC	10P (C545)
CN502	1-750-231-11	CONNECTOR, FFC/FPC	14P (C745)
CN504	1-750-223-11	CONNECTOR, FFC/FPC	6P
* CN601	1-573-047-11	PIN, CONNECTOR (PC BOARD)	2P

< DIODE >

D301	8-719-987-63	DIODE	1N4148M
D531	8-719-987-63	DIODE	1N4148M
D551	8-719-109-92	DIODE	RD6.2ES-B1
D601	8-719-200-82	DIODE	11ES2
D602	8-719-200-82	DIODE	11ES2
D603	8-719-200-82	DIODE	11ES2
D604	8-719-200-82	DIODE	11ES2
D605	8-719-200-82	DIODE	11ES2
D606	8-719-121-24	DIODE	RD9.1ES-L

< IC >

IC301	8-752-359-50	IC	CXD2564AM (C745)
IC301	8-752-360-60	IC	CXD2565M-1 (C545)
IC302	8-759-160-55	IC	LA9216
IC351	8-759-167-88	IC	NJM4565D
IC401	8-759-265-47	IC	CXD8458Q (C745)
IC403	8-759-247-12	IC	MSM51C464A-70RS (C745)
IC405	8-749-921-12	IC	GPIF32T (DIGITAL OUT OPTICAL)
IC501	8-752-856-06	IC	CXP84124-014Q (C545)
IC501	8-752-856-07	IC	CXP84332-004Q (C745)
IC531	8-759-512-81	IC	LH5160N-10L
IC551	8-759-172-31	IC	BA6191
IC561	8-759-803-42	IC	LA6500-FA (C545:AEP/C745)
IC601	8-759-274-37	IC	BA3963
IC602	8-759-605-00	IC	M5F78M07L

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
IC603	8-759-633-42	IC M5293L		R114	1-249-419-11	CARBON 1.5K 5%	1/4W F (C745)
	< JACK >			R115	1-249-425-11	CARBON 4.7K 5%	1/4W F (C745)
J301	1-569-443-31	JACK, PIN 4P (LINE OUT) (C545:AEP/C745)		R116	1-249-417-11	CARBON 1K 5%	1/4W F (C545:AEP/C745)
J301	1-750-679-11	JACK, PIN 2P (LINE OUT) (C545:US, CND, E, AUS)		R117	1-249-417-11	CARBON 1K 5%	1/4W F
	< COIL >			R118	1-249-429-11	CARBON 10K 5%	1/4W (C545)
L301	1-412-297-11	INDUCTOR 3.3uH		R151	1-249-435-11	CARBON 33K 5%	1/4W (C545:AEP/C745)
L302	1-412-473-21	INDUCTOR 0uH		R152	1-249-432-11	CARBON 18K 5%	1/4W (C545:AEP/C745)
L303	1-412-473-21	INDUCTOR 0uH		R153	1-249-422-11	CARBON 2.7K 5%	1/4W F (C545:AEP/C745)
L304	1-412-297-11	INDUCTOR 3.3uH (C545)		R154	1-249-429-11	CARBON 10K 5%	1/4W (C545:AEP/C745)
L305	1-412-297-11	INDUCTOR 3.3uH (C745)		R155	1-249-402-11	CARBON 56 5%	1/4W F (C545:AEP/C745)
L306	1-412-473-21	INDUCTOR 0uH		R201	1-249-436-11	CARBON 39K 5%	1/4W
L401	1-412-297-11	INDUCTOR 3.3uH (C745)		R202	1-249-436-11	CARBON 39K 5%	1/4W
L402	1-412-297-11	INDUCTOR 3.3uH (C745)		R203	1-249-431-11	CARBON 15K 5%	1/4W
L403	1-412-297-11	INDUCTOR 3.3uH		R204	1-249-431-11	CARBON 15K 5%	1/4W
	< TRANSISTOR >			R205	1-249-437-11	CARBON 47K 5%	1/4W (C545)
Q101	8-729-231-55	TRANSISTOR 2SC2878-AB (C745)		R206	1-249-437-11	CARBON 47K 5%	1/4W (C545)
Q102	8-729-231-55	TRANSISTOR 2SC2878-AB (C745)		R207	1-249-429-11	CARBON 10K 5%	1/4W
Q201	8-729-231-55	TRANSISTOR 2SC2878-AB (C745)		R208	1-249-419-11	CARBON 1.5K 5%	1/4W F
Q202	8-729-231-55	TRANSISTOR 2SC2878-AB (C745)		R209	1-249-419-11	CARBON 1.5K 5%	1/4W F
Q301	8-729-900-89	TRANSISTOR DTC144ES		R205	1-249-438-11	CARBON 56K 5%	1/4W (C745)
Q302	8-729-620-05	TRANSISTOR 2SC2603-EF		R206	1-249-438-11	CARBON 56K 5%	1/4W (C745)
Q502	8-729-900-65	TRANSISTOR DTA144ES (C745)		R210	1-249-421-11	CARBON 2.2K 5%	1/4W F (C745)
Q503	8-729-900-65	TRANSISTOR DTA144ES (C745)		R211	1-249-437-11	CARBON 47K 5%	1/4W (C745)
Q504	8-729-620-05	TRANSISTOR 2SC2603-EF		R212	1-249-424-11	CARBON 3.9K 5%	1/4W F (C745)
Q601	8-729-119-76	TRANSISTOR 2SA1175-HFE		R213	1-249-425-11	CARBON 4.7K 5%	1/4W F (C745)
Q602	8-729-900-61	TRANSISTOR DTA114ES		R214	1-249-419-11	CARBON 1.5K 5%	1/4W F (C745)
Q603	8-729-900-80	TRANSISTOR DTC114ES		R215	1-249-425-11	CARBON 4.7K 5%	1/4W F (C745)
Q604	8-729-900-89	TRANSISTOR DTC144ES		R216	1-249-417-11	CARBON 1K 5%	1/4W F (C545:AEP/C745)
Q605	8-729-900-61	TRANSISTOR DTA114ES		R217	1-249-417-11	CARBON 1K 5%	1/4W F
	< RESISTOR >			R218	1-249-429-11	CARBON 10K 5%	1/4W (C545)
R101	1-249-436-11	CARBON 39K 5%	1/4W	R251	1-249-435-11	CARBON 33K 5%	1/4W (C545:AEP/C745)
R102	1-249-436-11	CARBON 39K 5%	1/4W	R252	1-249-432-11	CARBON 18K 5%	1/4W (C545:AEP/C745)
R103	1-249-431-11	CARBON 15K 5%	1/4W	R253	1-249-422-11	CARBON 2.7K 5%	1/4W F (C545:AEP/C745)
R104	1-249-431-11	CARBON 15K 5%	1/4W				
R105	1-249-437-11	CARBON 47K 5%	1/4W (C545)	R254	1-249-429-11	CARBON 10K 5%	1/4W (C545:AEP/C745)
R105	1-249-438-11	CARBON 56K 5%	1/4W (C745)	R255	1-249-402-11	CARBON 56 5%	1/4W F (C545:AEP/C745)
R106	1-249-437-11	CARBON 47K 5%	1/4W (C545)				
R106	1-249-438-11	CARBON 56K 5%	1/4W (C745)	R301	1-249-417-11	CARBON 1K 5%	1/4W F
R107	1-249-429-11	CARBON 10K 5%	1/4W	R302	1-247-807-31	CARBON 100 5%	1/4W F
R108	1-249-419-11	CARBON 1.5K 5%	1/4W F	R303	1-247-903-00	CARBON 1M 5%	1/4W (C745)
R109	1-249-419-11	CARBON 1.5K 5%	1/4W F	R303	1-249-425-11	CARBON 4.7K 5%	1/4W F (C545)
R110	1-249-421-11	CARBON 2.2K 5%	1/4W F (C745)	R304	1-249-413-11	CARBON 470 5%	1/4W F (C745)
R111	1-249-437-11	CARBON 47K 5%	1/4W (C745)				
R112	1-249-424-11	CARBON 3.9K 5%	1/4W F (C745)				
R113	1-249-425-11	CARBON 4.7K 5%	1/4W F (C745)				

MAIN

POWER SW

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R305	1-249-441-11	CARBON	100K 5% 1/4W (C745)	R563	1-249-441-11	CARBON	100K 5% 1/4W (C545:AEP/C745)
R306	1-249-441-11	CARBON	100K 5% 1/4W (C745)	R564	1-249-441-11	CARBON	100K 5% 1/4W (C545:AEP/C745)
R307	1-249-429-11	CARBON	10K 5% 1/4W				
R308	1-249-433-11	CARBON	22K 5% 1/4W				
R309	1-247-807-31	CARBON	100 5% 1/4W (C745)				
				R565	1-249-393-11	CARBON	10 5% 1/4W F (C545:AEP/C745)
R309	1-249-409-11	CARBON	220 5% 1/4W F (C545)	R601	1-249-435-11	CARBON	33K 5% 1/4W
R310	1-249-429-11	CARBON	10K 5% 1/4W	R602	1-249-429-11	CARBON	10K 5% 1/4W
R351	1-247-807-31	CARBON	100 5% 1/4W	R603	1-249-438-11	CARBON	56K 5% 1/4W
R352	1-247-807-31	CARBON	100 5% 1/4W	R604	1-247-807-31	CARBON	100 5% 1/4W
R402	1-249-417-11	CARBON	1K 5% 1/4W F (C745)				
				R605	1-247-807-31	CARBON	100 5% 1/4W
R403	1-247-807-31	CARBON	100 5% 1/4W (C745)	R606	1-249-429-11	CARBON	10K 5% 1/4W
R407	1-249-417-11	CARBON	1K 5% 1/4W F (C745)				
R408	1-249-417-11	CARBON	1K 5% 1/4W F (C745)				
R409	1-249-417-11	CARBON	1K 5% 1/4W F (C745)				
R501	1-247-807-31	CARBON	100 5% 1/4W				
R502	1-247-807-31	CARBON	100 5% 1/4W				
R503	1-247-807-31	CARBON	100 5% 1/4W				
R504	1-249-417-11	CARBON	1K 5% 1/4W F				
R509	1-249-417-11	CARBON	1K 5% 1/4W F				
R510	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R511	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R512	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R513	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R514	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R515	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R521	1-249-413-11	CARBON	470 5% 1/4W F (C545:AEP/C745)				
R522	1-249-430-11	CARBON	12K 5% 1/4W				
R523	1-249-429-11	CARBON	10K 5% 1/4W				
R524	1-249-425-11	CARBON	4.7K 5% 1/4W F				
R525	1-249-425-11	CARBON	4.7K 5% 1/4W F				
R526	1-249-425-11	CARBON	4.7K 5% 1/4W F				
R531	1-249-399-11	CARBON	33 5% 1/4W F				
R532	1-249-417-11	CARBON	1K 5% 1/4W F				
R533	1-249-429-11	CARBON	10K 5% 1/4W				
R542	1-249-429-11	CARBON	10K 5% 1/4W				
R543	1-249-428-11	CARBON	8.2K 5% 1/4W F				
R544	1-249-418-11	CARBON	1.2K 5% 1/4W F				
R551	1-249-425-11	CARBON	4.7K 5% 1/4W F				
R552	1-247-840-00	CARBON	2.4K 5% 1/4W				
R553	1-247-828-11	CARBON	750 5% 1/4W				
R554	1-249-418-11	CARBON	1.2K 5% 1/4W F				
R555	1-249-439-11	CARBON	68K 5% 1/4W				
R556	1-249-439-11	CARBON	68K 5% 1/4W				
R557	1-249-439-11	CARBON	68K 5% 1/4W				
R558	1-249-439-11	CARBON	68K 5% 1/4W				
R559	1-249-417-11	CARBON	1K 5% 1/4W F				
R561	1-249-441-11	CARBON	100K 5% 1/4W (C545:AEP/C745)				
R562	1-249-441-11	CARBON	100K 5% 1/4W (C545:AEP/C745)				

< SWITCH >

△S601 1-572-675-11 SWITCH, POWER VOLTAGE CHANGE (C545:E)

< VIBRATOR >

X301 1-579-314-11 VIBRATOR, CRYSTAL (22MHz) (C745)
X301 1-579-834-11 VIBRATOR, CRYSTAL (33.8MHz) (C545)
X501 1-579-175-11 VIBRATOR, CERAMIC (10MHz)

* 1-652-155-11 POWER SW BOARD

< CONNECTOR >

CN821 1-750-186-11 CONNECTOR, BOARD TO BOARD 6P

< RESISTOR >

R711 1-249-418-11 CARBON 1.2K 5% 1/4W F
R712 1-249-419-11 CARBON 1.5K 5% 1/4W F
R713 1-249-421-11 CARBON 2.2K 5% 1/4W F
R714 1-249-423-11 CARBON 3.3K 5% 1/4W F
R715 1-249-426-11 CARBON 5.6K 5% 1/4W

R716 1-249-430-11 CARBON 12K 5% 1/4W
R717 1-249-435-11 CARBON 33K 5% 1/4W
R726 1-249-430-11 CARBON 12K 5% 1/4W
R727 1-249-435-11 CARBON 33K 5% 1/4W

< SWITCH >

S711 1-554-303-21 SWITCH, TACTILE (DISC 5)
S712 1-554-303-21 SWITCH, TACTILE (DISC 4)
S713 1-554-303-21 SWITCH, TACTILE (DISC 3)
S714 1-554-303-21 SWITCH, TACTILE (DISC 2)
S715 1-554-303-21 SWITCH, TACTILE (CONTINUE)

S716 1-554-303-21 SWITCH, TACTILE (SHUFFLE)
S717 1-554-303-21 SWITCH, TACTILE (PROGRAM)
S718 1-554-303-21 SWITCH, TACTILE (REPEAT)
S727 1-554-303-21 SWITCH, TACTILE (DISC 1)
S821 1-572-714-11 SWITCH, PUSH (POWER)

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

SENSOR**TABLE MOTOR****TIMER SW**

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-647-362-11	SENSOR BOARD *****		152	1-647-341-11	FLEXIBLE BOARD (for KSS-390A)	
		< CONNECTOR >		FL801	1-517-278-11	INDICATOR TUBE, FLUORESCENT	
CN801	1-573-383-11	PIN, CONNECTOR (PC BOARD) 2P		M101	X-4917-523-3	BASE (OUT SERT) ASSY (SPINDLE)	
CN802	1-750-243-11	SOCKET, CONNECTOR 6P		M102	X-4917-504-1	MOTOR ASSY (SLED)	
		< DIODE >		M801	A-4660-322-A	MOTOR ASSY, ROTARY (TABLE)	
D801	8-749-924-18	DIODE RPI-1391		M802	A-4604-834-A	MOTOR ASSY, LOADING	
D802	8-749-924-30	DIODE GP2S28					
		< RESISTOR >		S101	1-572-085-11	SWITCH, LEAF (LIMIT)	
R801	1-249-416-11	CARBON 820 5% 1/4W F		△S601	1-572-675-11	SWITCH, POWER VOLTAGE CHANGE (C545:E)	
R802	1-249-406-11	CARBON 120 5% 1/4W F		S901	1-466-996-11	ENCODER, ROTARY	
*****				△T601	1-423-553-11	TRANSFORMER, POWER (C545:US, CND/C745:US, CND)	
*	1-647-364-11	TABLE MOTOR BOARD *****		△T601	1-423-554-11	TRANSFORMER, POWER (C545:AEP, AUS/C745:AEP)	
		< MOTOR >		△T601	1-423-555-11	TRANSFORMER, POWER (C545:E)	
M801	A-4660-322-A	MOTOR ASSY, ROTARY (TABLE)		*****			
*****						ACCESSORIES & PACKING MATERIALS *****	
*	1-652-154-11	TIMER SW BOARD *****				1-467-669-11	REMOTE COMMANDER (RM-D745) (C745)
		< SWITCH >				1-467-670-11	REMOTE COMMANDER (RM-D645) (C545:AEP)
S728	1-570-157-51	SWITCH, SLIDE (TIMER)				1-467-671-11	REMOTE COMMANDER (RM-D545) (C545:EXCEPT AEP)
*****						1-558-271-11	CORD, CONNECTION (AUDIO) (108cm)
		MISCELLANEOUS *****				3-707-584-21	COVER, BATTERY (for REMOTE COMMANDER)
12	1-765-264-11	WIRE (FLAT TYPE) (16 CORE)				3-758-411-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, SWEDISH) (C545:CND, AEP, E/C745:CND, AEP)
14	1-765-250-11	WIRE (FLAT TYPE) (14 CORE) (C745)				3-758-411-21	MANUAL, INSTRUCTION (ENGLISH) (C545:US, AUS/C745:US)
16	1-765-249-11	WIRE (FLAT TYPE) (13 CORE) (C545:AEP/C745)				3-758-411-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN, PORTUGUESE) (C545:AEP/C745:AEP)
△59	1-575-651-21	CORD, POWER (C545:AEP/C745:AEP)		*	4-965-971-01	CUSHION (FRONT)	
△60	1-696-845-11	CORD, POWER (C545:AUS)		*	4-965-972-01	CUSHION (REAR)	
△61	1-569-007-11	ADAPTER, CONVERSION 2P (C545:E)		*	4-966-433-01	INDIVIDUAL CARTON (C545)	
△62	1-590-836-11	CORD, POWER (C545:US, CND/C745:US, CND)		*	4-966-434-01	INDIVIDUAL CARTON (C745)	
△62	1-696-027-11	CORD, POWER (C545:E)		*****			
75	1-751-052-11	WIRE (FLAT TYPE) (6 CORE)				HARDWARE LIST *****	
107	1-765-265-11	WIRE (FLAT TYPE) (23 CORE)		#1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
* 109	1-452-538-11	MAGNET		#2	7-682-548-04	SCREW +BVTT 3X8 (S)	
△151	8-848-144-11	OPTICAL PICK-UP BLOCK (KSS-240A)		#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
△151	8-848-281-11	OPTICAL PICK-UP BLOCK (KSS-390A)		#4	7-685-134-19	SCREW +PTPHW 2.6X8 (TYPE2)	
152	1-575-001-11	WIRE, FLAT TYPE (12 CORE)		#5	7-685-648-79	SCREW (M3X12), TAPPING	
				#6	7-621-255-15	SCREW +P 2X3	

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.

CDP-C545/C745

SONY[®] SERVICE MANUAL

US Model
Canadian Model
AEP Model
CDP-545/C745
E Model
Australian Model
CDP-C545

SUPPLEMENT-1

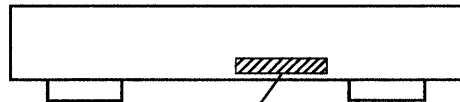
File this supplement with the service manual.

Subject : 1. Service parts changed (For Japan production)
2. Circuit changed (For Japan production)
3. Malaysia production model
4. Addition of the BU-5BD20 (Malaysia production of CDP-C545 only)

(ENG-95016)

How to identify production which made in Malaysia.

— BACK PANEL —



	Made in Japan	Made in Malaysia
CDP-C545 (US model)	4-965-464-3□	4-975-544-1□
CDP-C545 (Canadian model)	4-965-464-3□	4-975-544-2□
CDP-C545 (AEP model)	4-965-464-2□	4-975-544-3□
CDP-C545 (E model)	4-965-464-4□	4-975-544-4□
CDP-C545 (Australian model)	4-965-464-5□	4-975-544-5□
CDP-C745 (US model)	4-965-464-0□	4-975-544-6□
CDP-C745 (Canadian model)	4-965-464-0□	_____
CDP-C745 (AEP model)	4-965-464-1□	_____

- AEP and Canadian model of CDP-C745 are produced at Japan only.
Therefore, these informations are not related for AEP and Canadian mode of CDP-C745.

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.
- 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
F : nonflammable
- For detailed Singapore and Malaysia model, refer to AEP model.

- 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
- Abbreviations
CND : Canadian model
AUS : Australian model

1. SERVICE PARTS CHANGED (For Japan production)

Change of parts for Japan production. (Exploded views)

Page	FORMER			NEW		
	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
42	63	3-704-515-21	SCREW (BV/RING)			
	* 64	4-949-235-01	HOOK			
52		1-467-669-11	REMOTE COMMANDER (RM-D745) (C745)		1-467-669-21	REMOTE COMMANDER (RM-D745) (C745)
		1-467-670-11	REMOTE COMMANDER (RM-D645) (C545:AEP)		1-467-670-21	REMOTE COMMANDER (RM-D645) (C545:AEP)
		1-467-671-11	REMOTE COMMANDER (RM-D545) (C545:EXCEPT AEP)		1-467-671-21	REMOTE COMMANDER (RM-D545) (C545:EXCEPT AEP)

2. Circuit changed (For Japan production)

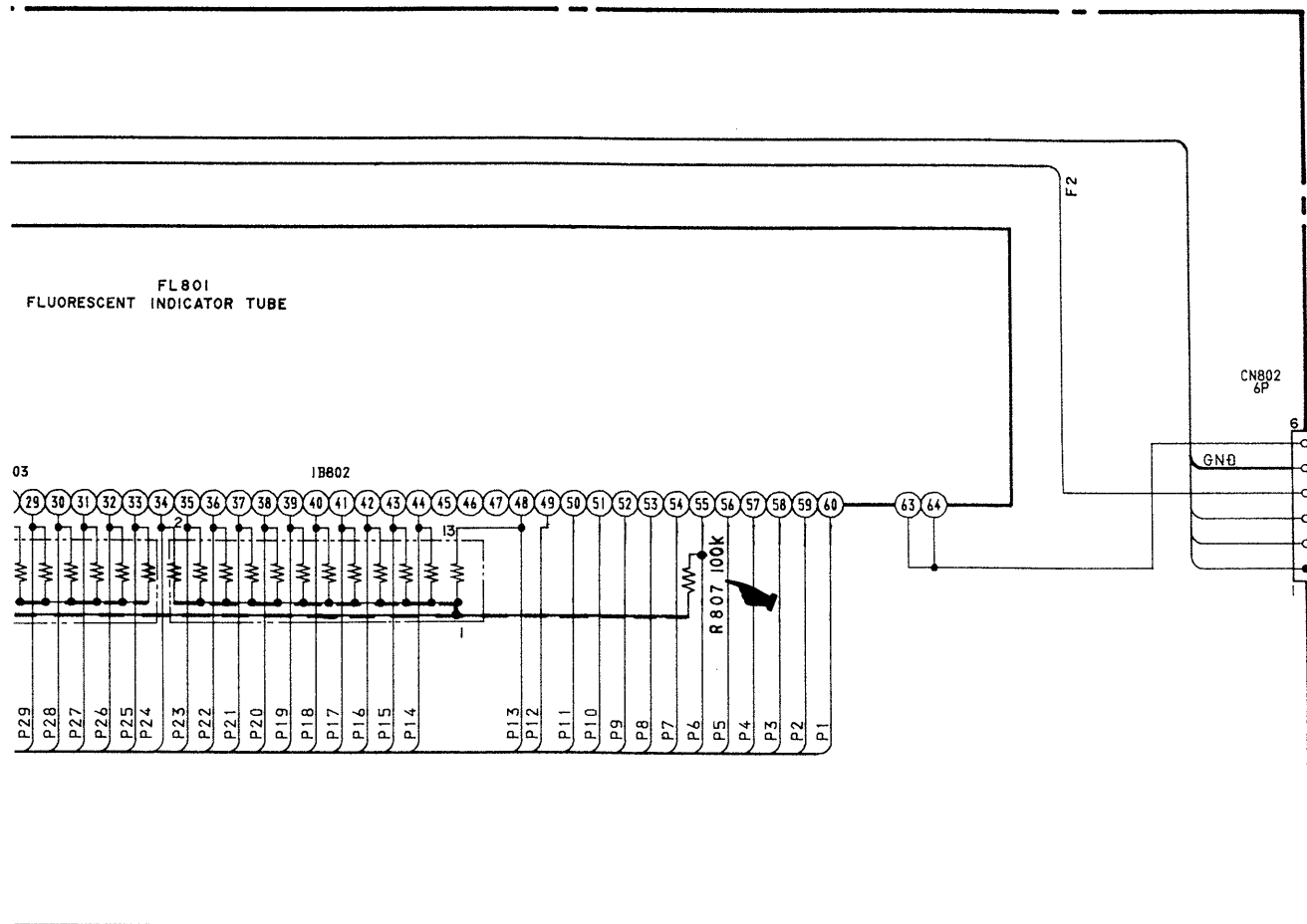
Change of parts for Japan production. (Complete board)

Page	FORMER							NEW								
	Ref.No.	Part No.	Description					Ref.No.	Part No.	Description						
45	** 10 KEY BOARD **								** 10 KEY BOARD **							
	D841	8-719-310-71	DIODE	SEL2510C-D (A)				*	3-362-478-21	HOLDER (T), LED						
	D842	8-719-310-71	DIODE	SEL2510C-D (A)				D841	8-719-303-02	DIODE	SEL2510C-D					
	D843	8-719-310-71	DIODE	SEL2510C-D (A)				D842	8-719-303-02	DIODE	SEL2510C-D					
	D844	8-719-310-71	DIODE	SEL2510C-D (A)				D843	8-719-303-02	DIODE	SEL2510C-D					
								D844	8-719-303-02	DIODE	SEL2510C-D					
47	** DISPLAY BOARD **								** DISPLAY BOARD **							
	D802	8-719-303-17	DIODE	SEL2810A-D (III)				D802	8-719-301-52	LED	SEL2810A-C (III)					
	IB801	1-232-817-11	COMPOSITION CIRCUIT BLOCK													
	IB804	1-232-817-11	COMPOSITION CIRCUIT BLOCK													
	IC802	8-759-823-57	IC	LC75711E				IC802	8-759-337-52	IC	LC75721E					
	R802	1-249-409-11	CARBON	220	5%	1/4W	F	R802	1-247-815-91	CARBON	220	5%	1/4W	F		
								R807	1-249-441-11	CARBON	100K	5%	1/4W	F		
48	** HEADPHONE BOARD ** (C545:AEP/C745)								** HEADPHONE BOARD ** (C545:AEP/C745)							
	C353	1-164-159-21	CERAMIC	0.1uF				50V	C353	1-164-159-21	CERAMIC	0.1uF				50V
	** HEADPHONE BOARD ** (C545:US, CND, E, AUS)								** HEADPHONE BOARD ** (C545:US, CND, E, AUS)							
	C901	1-164-159-11	CERAMIC	0.1uF				50V	C901	1-162-290-31	CERAMIC	470PF	10%			50V
	C902	1-162-290-31	CERAMIC	470PF	10%			50V	C902	1-162-290-31	CERAMIC	470PF	10%			50V
	C903	1-162-290-31	CERAMIC	470PF	10%			50V	C903	1-164-159-11	CERAMIC	0.1uF				50V
49	** MAIN BOARD **								** MAIN BOARD **							
	C401	1-126-022-11	ELECT	47uF	20%	16V		C401	1-126-786-11	ELECT	47uF	20%	16V			
						(C545:US, CND, AUS)										
	C401	1-126-786-11	ELECT	47uF	20%	16V										
						(C545:E/C745)										
	C531	1-104-905-11	CAP, DOUBLE LAYERS 0.22F					C531	1-104-905-11	CAP, DOUBLE LAYERS 0.22F						
						(C545:AEP, E)										
	C531	1-125-705-11	CAP, DOUBLE LAYERS 0.22F													
						(C545:US, CND, AUS/C745)										
	IC531	8-759-512-81	IC	LH5160-10L				IC531	8-759-336-84	IC	LC3564SM-10					
50	J301	1-750-679-11	JACK, PIN 2P (LINE OUT)					J301	1-750-679-11	JACK, PIN 2P (LINE OUT) (C545:E)						
						(C545:US, CND, E, AUS)		J301	1-750-679-21	JACK, PIN 2P (LINE OUT)						
													(C545:US, CND, AUS)			
	L301	1-412-297-11	INDUCTOR	3.3uH				L301	1-410-503-11	INDUCTOR	3.3uH					
	L304	1-412-297-11	INDUCTOR	3.3uH	(C545)			L304	1-410-503-11	INDUCTOR	3.3uH	(C545)				
	L403	1-412-297-11	INDUCTOR	3.3uH				L403	1-410-503-11	INDUCTOR	3.3uH					
51	R308	1-249-433-11	CARBON	22K	5%	1/4W		R308	1-247-863-91	CARBON	22K	5%	1/4W			
	R309	1-249-409-11	CARBON	220	5%	1/4W	(C545)	R309	1-247-815-91	CARBON	220	5%	1/4W	(C545)		
52	** SENSOR BOARD **								** SENSOR BOARD **							
	R802	1-249-406-11	CARBON	120	5%	1/4W	F	R802	1-247-815-91	CARBON	220	5%	1/4W			

SCHEMATIC DIAGRAM (See page 31)

 : Added portion
 Location : C-13 to C-20

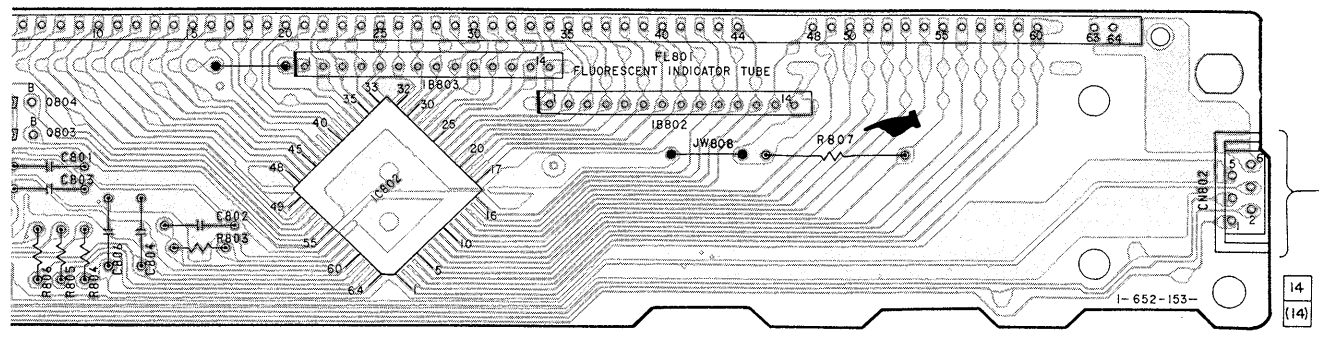
[DISPLAY BOARD]



PRINTED WIRING BOARD (See page 34, 35)

Location : B-8 to B-16

[DISPLAY BOARD]



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.

3. Malaysia production model

- There is no changeability between the following boards which made in Japan and Malaysia.
Referring to "How to identify production ..." (page 1), use the appropriate boards.
Therefore, see the service manual for the information which is not contained in this service manual.

Difference between productions made in Japan and Malaysia

BOARD	Made in Japan	Made in Malaysia
10 KEY	* A-4673-093-A (C745:US) * A-4673-097-A (C545:US, CND, E, AUS) * A-4673-100-A (C545:AEP)	* A-4673-601-A (C745:US) * A-4673-614-A (C545:US, CND, E, AUS) * A-4673-612-A (C545:AEP)
BD	* A-4649-432-A (C545) (for KSS-240A)	* A-4673-510-A (C545) (for KSS-213B/S-N)
DISPLAY	* A-4673-092-A (C545:US, CND, AEP, E, AUS/C745:US)	* A-4673-600-A (C545:US, CND, AEP, E, AUS/C745:US)
MAIN	* A-4673-095-A (C745:US) * A-4673-099-A (C545:US, CND, E, AUS) * A-4673-101-A (C545:AEP) * A-4673-102-A (C545:E)	* A-4673-604-A (C745:US) * A-4673-616-A (C545:US, CND, E, AUS) * A-4673-613-A (C545:AEP) * A-4673-617-A (C545:E)

EXPLODED VIEWS

- There followings shows differences between productions made in Japan and malaysia.
Referring to "How to identify production ..." (page 1), use the appropriate parts.

Page	Made in Japan	Made in Malaysia																																																																																																															
41	<table> <tr> <th>Ref. No.</th><th>Part No.</th><th>Description</th></tr> <tr> <td>1</td><td>4-964-694-01</td><td>PANEL, LOADING</td></tr> <tr> <td>4</td><td>X-4944-756-1</td><td>PANEL ASSY, FRONT (C745:US)</td></tr> <tr> <td>4</td><td>X-4944-758-1</td><td>PANEL ASSY, FRONT (C545:AEP)</td></tr> <tr> <td>4</td><td>X-4944-759-1</td><td>PANEL ASSY, FRONT (C545:US, CND)</td></tr> <tr> <td>4</td><td>X-4944-760-1</td><td>PANEL ASSY, FRONT (C545:E, AUS)</td></tr> <tr> <td>5</td><td>4-922-921-01</td><td>BUTTON (POWER)</td></tr> <tr> <td>6</td><td>4-922-518-01</td><td>KNOB (TIMER)</td></tr> <tr> <td>* 11</td><td>A-4673-092-A</td><td>DISPLAY BOARD, COMPLETE</td></tr> <tr> <td>* 13</td><td>A-4673-093-A</td><td>10 KEY BOARD, COMPLETE (C745:US)</td></tr> <tr> <td>* 13</td><td>A-4673-097-A</td><td>10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)</td></tr> <tr> <td>* 13</td><td>A-4673-100-A</td><td>10 KEY BOARD, COMPLETE(C545:AEP)</td></tr> <tr> <td>17</td><td>4-923-836-11</td><td>CUSHION</td></tr> <tr> <td>18</td><td>X-4942-198-1</td><td>FOOT ASSY (US, CND)</td></tr> <tr> <td>18</td><td>X-4942-197-1</td><td>FOOT ASSY (AEP, E, AUS)</td></tr> </table>	Ref. No.	Part No.	Description	1	4-964-694-01	PANEL, LOADING	4	X-4944-756-1	PANEL ASSY, FRONT (C745:US)	4	X-4944-758-1	PANEL ASSY, FRONT (C545:AEP)	4	X-4944-759-1	PANEL ASSY, FRONT (C545:US, CND)	4	X-4944-760-1	PANEL ASSY, FRONT (C545:E, AUS)	5	4-922-921-01	BUTTON (POWER)	6	4-922-518-01	KNOB (TIMER)	* 11	A-4673-092-A	DISPLAY BOARD, COMPLETE	* 13	A-4673-093-A	10 KEY BOARD, COMPLETE (C745:US)	* 13	A-4673-097-A	10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)	* 13	A-4673-100-A	10 KEY BOARD, COMPLETE(C545:AEP)	17	4-923-836-11	CUSHION	18	X-4942-198-1	FOOT ASSY (US, CND)	18	X-4942-197-1	FOOT ASSY (AEP, E, AUS)	<table> <tr> <th>Ref. No.</th><th>Part No.</th><th>Description</th></tr> <tr> <td>1</td><td>4-964-694-11</td><td>PANEL, LOADING</td></tr> <tr> <td>4</td><td>X-4946-257-1</td><td>PANEL ASSY, FRONT (C745:US)</td></tr> <tr> <td>4</td><td>X-4946-256-1</td><td>PANEL ASSY, FRONT (C545:AEP)</td></tr> <tr> <td>4</td><td>X-4946-255-1</td><td>PANEL ASSY, FRONT (C545:US, CND)</td></tr> <tr> <td>4</td><td>X-4946-259-1</td><td>PANEL ASSY, FRONT (C545:E, AUS)</td></tr> <tr> <td>5</td><td>4-922-921-31</td><td>BUTTON (POWER)</td></tr> <tr> <td>6</td><td>4-922-518-71</td><td>KNOB (TIMER)</td></tr> <tr> <td>* 11</td><td>A-4673-600-A</td><td>DISPLAY BOARD, COMPLETE</td></tr> <tr> <td>* 13</td><td>A-4673-601-A</td><td>10 KEY BOARD, COMPLETE (C745:US)</td></tr> <tr> <td>* 13</td><td>A-4673-614-A</td><td>10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)</td></tr> <tr> <td>* 13</td><td>A-4673-612-A</td><td>10 KEY BOARD, COMPLETE(C545:AEP)</td></tr> <tr> <td>17</td><td>4-923-836-21</td><td>CUSHION</td></tr> <tr> <td>18</td><td>4-937-929-31</td><td>FOOT (DIA. 58) (US, CND)</td></tr> <tr> <td>18</td><td>X-4942-199-1</td><td>FOOT ASSY (AEP, E, AUS)</td></tr> </table>	Ref. No.	Part No.	Description	1	4-964-694-11	PANEL, LOADING	4	X-4946-257-1	PANEL ASSY, FRONT (C745:US)	4	X-4946-256-1	PANEL ASSY, FRONT (C545:AEP)	4	X-4946-255-1	PANEL ASSY, FRONT (C545:US, CND)	4	X-4946-259-1	PANEL ASSY, FRONT (C545:E, AUS)	5	4-922-921-31	BUTTON (POWER)	6	4-922-518-71	KNOB (TIMER)	* 11	A-4673-600-A	DISPLAY BOARD, COMPLETE	* 13	A-4673-601-A	10 KEY BOARD, COMPLETE (C745:US)	* 13	A-4673-614-A	10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)	* 13	A-4673-612-A	10 KEY BOARD, COMPLETE(C545:AEP)	17	4-923-836-21	CUSHION	18	4-937-929-31	FOOT (DIA. 58) (US, CND)	18	X-4942-199-1	FOOT ASSY (AEP, E, AUS)																					
Ref. No.	Part No.	Description																																																																																																															
1	4-964-694-01	PANEL, LOADING																																																																																																															
4	X-4944-756-1	PANEL ASSY, FRONT (C745:US)																																																																																																															
4	X-4944-758-1	PANEL ASSY, FRONT (C545:AEP)																																																																																																															
4	X-4944-759-1	PANEL ASSY, FRONT (C545:US, CND)																																																																																																															
4	X-4944-760-1	PANEL ASSY, FRONT (C545:E, AUS)																																																																																																															
5	4-922-921-01	BUTTON (POWER)																																																																																																															
6	4-922-518-01	KNOB (TIMER)																																																																																																															
* 11	A-4673-092-A	DISPLAY BOARD, COMPLETE																																																																																																															
* 13	A-4673-093-A	10 KEY BOARD, COMPLETE (C745:US)																																																																																																															
* 13	A-4673-097-A	10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)																																																																																																															
* 13	A-4673-100-A	10 KEY BOARD, COMPLETE(C545:AEP)																																																																																																															
17	4-923-836-11	CUSHION																																																																																																															
18	X-4942-198-1	FOOT ASSY (US, CND)																																																																																																															
18	X-4942-197-1	FOOT ASSY (AEP, E, AUS)																																																																																																															
Ref. No.	Part No.	Description																																																																																																															
1	4-964-694-11	PANEL, LOADING																																																																																																															
4	X-4946-257-1	PANEL ASSY, FRONT (C745:US)																																																																																																															
4	X-4946-256-1	PANEL ASSY, FRONT (C545:AEP)																																																																																																															
4	X-4946-255-1	PANEL ASSY, FRONT (C545:US, CND)																																																																																																															
4	X-4946-259-1	PANEL ASSY, FRONT (C545:E, AUS)																																																																																																															
5	4-922-921-31	BUTTON (POWER)																																																																																																															
6	4-922-518-71	KNOB (TIMER)																																																																																																															
* 11	A-4673-600-A	DISPLAY BOARD, COMPLETE																																																																																																															
* 13	A-4673-601-A	10 KEY BOARD, COMPLETE (C745:US)																																																																																																															
* 13	A-4673-614-A	10 KEY BOARD, COMPLETE (C545:EXCEPT AEP)																																																																																																															
* 13	A-4673-612-A	10 KEY BOARD, COMPLETE(C545:AEP)																																																																																																															
17	4-923-836-21	CUSHION																																																																																																															
18	4-937-929-31	FOOT (DIA. 58) (US, CND)																																																																																																															
18	X-4942-199-1	FOOT ASSY (AEP, E, AUS)																																																																																																															
42	<table> <tr> <td>51</td><td>4-957-299-01</td><td>TABLE (B), DISK</td></tr> <tr> <td>55</td><td>3-325-697-01</td><td>WASHER</td></tr> <tr> <td>57</td><td>X-4943-477-1</td><td>BRACKET (RM) ASSY</td></tr> <tr> <td>58</td><td>4-965-659-01</td><td>SCREW (+B 2X2.2)</td></tr> <tr> <td>62</td><td>1-590-836-11</td><td>CORD, POWER (US, CND)</td></tr> <tr> <td>* 66</td><td>4-965-464-01</td><td>PANEL, BACK (C745:US)</td></tr> <tr> <td>* 66</td><td>4-965-464-21</td><td>PANEL, BACK (C545:AEP)</td></tr> <tr> <td>* 66</td><td>4-965-464-31</td><td>PANEL, BACK (C545:US)</td></tr> <tr> <td>* 66</td><td>4-965-464-31</td><td>PANEL, BACK (C545:CND)</td></tr> <tr> <td>* 66</td><td>4-965-464-41</td><td>PANEL, BACK (C545:E)</td></tr> <tr> <td>* 66</td><td>4-965-464-51</td><td>PANEL, BACK (C545:AUS)</td></tr> <tr> <td>68</td><td>4-957-868-01</td><td>SCREW (+PTPWH 2.6X20)</td></tr> <tr> <td>69</td><td>4-957-291-01</td><td>LEVER (RACK RELEASE)</td></tr> <tr> <td>70</td><td>4-957-293-01</td><td>SPRING (RACK RELEASE)</td></tr> <tr> <td>71</td><td>4-957-294-01</td><td>SPRING (D.T), TENSION</td></tr> <tr> <td>72</td><td>4-957-292-01</td><td>SLIDER (RACK)</td></tr> <tr> <td>76</td><td>X-4943-480-1</td><td>BRACKET (ROLLER D) ASSY</td></tr> <tr> <td>M801</td><td>A-4660-322-A</td><td>MOTOR ASSY, ROTARY</td></tr> </table>	51	4-957-299-01	TABLE (B), DISK	55	3-325-697-01	WASHER	57	X-4943-477-1	BRACKET (RM) ASSY	58	4-965-659-01	SCREW (+B 2X2.2)	 62	1-590-836-11	CORD, POWER (US, CND)	* 66	4-965-464-01	PANEL, BACK (C745:US)	* 66	4-965-464-21	PANEL, BACK (C545:AEP)	* 66	4-965-464-31	PANEL, BACK (C545:US)	* 66	4-965-464-31	PANEL, BACK (C545:CND)	* 66	4-965-464-41	PANEL, BACK (C545:E)	* 66	4-965-464-51	PANEL, BACK (C545:AUS)	68	4-957-868-01	SCREW (+PTPWH 2.6X20)	69	4-957-291-01	LEVER (RACK RELEASE)	70	4-957-293-01	SPRING (RACK RELEASE)	71	4-957-294-01	SPRING (D.T), TENSION	72	4-957-292-01	SLIDER (RACK)	76	X-4943-480-1	BRACKET (ROLLER D) ASSY	M801	A-4660-322-A	MOTOR ASSY, ROTARY	<table> <tr> <td>* 51</td><td>4-957-299-11</td><td>TABLE (B), DISK</td></tr> <tr> <td>55</td><td>3-325-697-21</td><td>WASHER</td></tr> <tr> <td>57</td><td>X-4944-128-1</td><td>BRACKET (RM) ASSY</td></tr> <tr> <td>58</td><td>7-621-772-00</td><td>SCREW +B 2X3</td></tr> <tr> <td>62</td><td>1-575-042-21</td><td>CORD, POWER (US, CND)</td></tr> <tr> <td>* 64</td><td>4-949-235-01</td><td>HOOK</td></tr> <tr> <td>* 66</td><td>4-975-544-61</td><td>PANEL, BACK (C745:US)</td></tr> <tr> <td>* 66</td><td>4-975-544-31</td><td>PANEL, BACK (C545:AEP)</td></tr> <tr> <td>* 66</td><td>4-975-544-11</td><td>PANEL, BACK (C545:US)</td></tr> <tr> <td>* 66</td><td>4-975-544-21</td><td>PANEL, BACK (C545:CND)</td></tr> <tr> <td>* 66</td><td>4-975-544-41</td><td>PANEL, BACK (C545:E)</td></tr> <tr> <td>* 66</td><td>4-975-544-51</td><td>PANEL, BACK (C545:AUS)</td></tr> <tr> <td>68</td><td>4-957-868-11</td><td>SCREW (+PTPWH 2.6X20)</td></tr> <tr> <td>69</td><td>4-957-291-11</td><td>LEVER (RACK RELEASE)</td></tr> <tr> <td>70</td><td>4-957-293-11</td><td>SPRING (RACK RELEASE)</td></tr> <tr> <td>71</td><td>4-957-294-11</td><td>SPRING (D.T), TENSION</td></tr> <tr> <td>72</td><td>4-957-292-11</td><td>SLIDER (RACK)</td></tr> <tr> <td>76</td><td>X-4944-129-1</td><td>BRACKET (ROLLER D) ASSY</td></tr> <tr> <td>M801</td><td>A-4660-525-A</td><td>MOTOR ASSY, ROTARY</td></tr> </table>	* 51	4-957-299-11	TABLE (B), DISK	55	3-325-697-21	WASHER	57	X-4944-128-1	BRACKET (RM) ASSY	58	7-621-772-00	SCREW +B 2X3	 62	1-575-042-21	CORD, POWER (US, CND)	* 64	4-949-235-01	HOOK	* 66	4-975-544-61	PANEL, BACK (C745:US)	* 66	4-975-544-31	PANEL, BACK (C545:AEP)	* 66	4-975-544-11	PANEL, BACK (C545:US)	* 66	4-975-544-21	PANEL, BACK (C545:CND)	* 66	4-975-544-41	PANEL, BACK (C545:E)	* 66	4-975-544-51	PANEL, BACK (C545:AUS)	68	4-957-868-11	SCREW (+PTPWH 2.6X20)	69	4-957-291-11	LEVER (RACK RELEASE)	70	4-957-293-11	SPRING (RACK RELEASE)	71	4-957-294-11	SPRING (D.T), TENSION	72	4-957-292-11	SLIDER (RACK)	76	X-4944-129-1	BRACKET (ROLLER D) ASSY	M801	A-4660-525-A	MOTOR ASSY, ROTARY
51	4-957-299-01	TABLE (B), DISK																																																																																																															
55	3-325-697-01	WASHER																																																																																																															
57	X-4943-477-1	BRACKET (RM) ASSY																																																																																																															
58	4-965-659-01	SCREW (+B 2X2.2)																																																																																																															
 62	1-590-836-11	CORD, POWER (US, CND)																																																																																																															
* 66	4-965-464-01	PANEL, BACK (C745:US)																																																																																																															
* 66	4-965-464-21	PANEL, BACK (C545:AEP)																																																																																																															
* 66	4-965-464-31	PANEL, BACK (C545:US)																																																																																																															
* 66	4-965-464-31	PANEL, BACK (C545:CND)																																																																																																															
* 66	4-965-464-41	PANEL, BACK (C545:E)																																																																																																															
* 66	4-965-464-51	PANEL, BACK (C545:AUS)																																																																																																															
68	4-957-868-01	SCREW (+PTPWH 2.6X20)																																																																																																															
69	4-957-291-01	LEVER (RACK RELEASE)																																																																																																															
70	4-957-293-01	SPRING (RACK RELEASE)																																																																																																															
71	4-957-294-01	SPRING (D.T), TENSION																																																																																																															
72	4-957-292-01	SLIDER (RACK)																																																																																																															
76	X-4943-480-1	BRACKET (ROLLER D) ASSY																																																																																																															
M801	A-4660-322-A	MOTOR ASSY, ROTARY																																																																																																															
* 51	4-957-299-11	TABLE (B), DISK																																																																																																															
55	3-325-697-21	WASHER																																																																																																															
57	X-4944-128-1	BRACKET (RM) ASSY																																																																																																															
58	7-621-772-00	SCREW +B 2X3																																																																																																															
 62	1-575-042-21	CORD, POWER (US, CND)																																																																																																															
* 64	4-949-235-01	HOOK																																																																																																															
* 66	4-975-544-61	PANEL, BACK (C745:US)																																																																																																															
* 66	4-975-544-31	PANEL, BACK (C545:AEP)																																																																																																															
* 66	4-975-544-11	PANEL, BACK (C545:US)																																																																																																															
* 66	4-975-544-21	PANEL, BACK (C545:CND)																																																																																																															
* 66	4-975-544-41	PANEL, BACK (C545:E)																																																																																																															
* 66	4-975-544-51	PANEL, BACK (C545:AUS)																																																																																																															
68	4-957-868-11	SCREW (+PTPWH 2.6X20)																																																																																																															
69	4-957-291-11	LEVER (RACK RELEASE)																																																																																																															
70	4-957-293-11	SPRING (RACK RELEASE)																																																																																																															
71	4-957-294-11	SPRING (D.T), TENSION																																																																																																															
72	4-957-292-11	SLIDER (RACK)																																																																																																															
76	X-4944-129-1	BRACKET (ROLLER D) ASSY																																																																																																															
M801	A-4660-525-A	MOTOR ASSY, ROTARY																																																																																																															

Page	Made in Japan			Made in Malaysia		
	Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
43	102	4-957-283-01	WASHER (5), STOPPER	102	4-957-283-11	WASHER (5), STOPPER
	* 108	4-957-289-01	HOLDER (BU)	* 108	4-957-289-12	HOLDER (BU)
	110	X-4943-478-1	BRACKET (GEAR) ASSY	110	X-4944-127-1	BRACKET (GEAR) ASSY
	111	4-957-281-01	SPRING (LOCK LEVER)	111	4-957-281-11	SPRING (LOCK LEVER)
	112	4-957-279-01	LEVER, LOCK	112	4-957-279-11	LEVER, LOCK
	115	4-957-285-01	LEVER, SET	115	4-957-285-11	LEVER, SET
	* 120	A-4673-095-A	MAIN BOARD, COMPLETE (C745:US)	* 120	A-4673-604-A	MAIN BOARD, COMPLETE (C745:US)
	* 120	A-4673-099-A	MAIN BOARD, COMPLETE (C545:US, CND, AUS)	* 120	A-4673-616-A	MAIN BOARD, COMPLETE (C545:US, CND, AUS)
	* 120	A-4673-101-A	MAIN BOARD, COMPLETE (C545AEP)	* 120	A-4673-613-A	MAIN BOARD, COMPLETE (C545:AEP)
	* 120	A-4673-102-A	MAIN BOARD, COMPLETE (C545:E)	* 120	A-4673-617-A	MAIN BOARD, COMPLETE (C545:E)
	* 122	4-957-556-01	SHEET, INSULATING	* 122	4-957-556-11	SHEET, INSULATING
	* 123	4-957-555-01	SHEET, INSULATING	* 123	4-957-555-11	SHEET, INSULATING
	M802	A-4604-834-A	MOTOR ASSY, LOADING	M802	A-4604-847-A	MOTOR ASSY, LOADING
	△T601	1-423-553-11	TRANSFORMER, POWER	△T601	1-423-872-11	TRANSFORMER, POWER
	△T601	1-423-554-11	TRANSFORMER, POWER	△T601	1-423-992-11	TRANSFORMER, POWER
	△T601	1-423-555-11	TRANSFORMER, POWER	△T601	1-423-993-11	TRANSFORMER, POWER

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

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

ELECTRICAL PARTS LIST

Page	Made in Japan						Made in Malaysia					
	Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
45	*	A-4673-093-A	10 KEY BOARD, COMPLETE (C745:US)				*	A-4673-601-A	10 KEY BOARD, COMPLETE (C745:US)			
			*****						*****			
	*	A-4673-097-A	10 KEY BOARD, COMPLETE				*	A-4673-614-A	10 KEY BOARD, COMPLETE			
			*****						*****			
			(C545:US, CND, E, AUS)						(C545:US, CND, E, AUS)			
	*	A-4673-100-A	10 KEY BOARD, COMPLETE				*	A-4673-612-A	10 KEY BOARD, COMPLETE			
			*****						*****			
			(C545:AEP)						(C545:AEP)			
	CN841	1-750-228-11	CONNECTOR, FFC/FPC 10P				CN841	1-750-451-11	CONNECTOR, FFC/FPC 10P			
	CN841	1-750-231-11	CONNECTOR, FFC/FPC 14P				* CN841	1-750-455-11	CONNECTOR, FFC/FPC 14P			
46	*	A-4673-092-A	DISPLAY BOARD, COMPLETE				*	A-4673-600-A	DISPLAY BOARD, COMPLETE			
			*****						*****			
			(C545:US, CND, AEP, E, AUS/C745:US)						(C545:US, CND, AEP, E, AUS/C745:US)			
47		** DSP BOARD **						** DSP BOARD **				
	R861	1-247-815-91	CARBON	220	5%	1/4W	R861	1-249-409-11	CARBON	220	5%	1/4W F
	R862	1-247-815-91	CARBON	220	5%	1/4W	R862	1-249-409-11	CARBON	220	5%	1/4W F
48		** HEADPHONE BOARD **						** HEADPHONE BOARD **				
	CN351	1-750-230-11	CONNECTOR, FFC/FPC 13P				* CN351	1-568-856-11	SOCKET, CONNECTOR 13P			
	CN901	1-750-737-11	CONNECTOR, FFC/FPC 5P				CN901	1-750-446-11	CONNECTOR, FFC/FPC 5P			
	*	A-4673-095-A	MAIN BOARD, COMPLETE (C745:US)				*	A-4673-604-A	MAIN BOARD, COMPLETE (C745:US)			
			*****						*****			
	*	A-4673-099-A	MAIN BOARD, COMPLETE				*	A-4673-616-A	MAIN BOARD, COMPLETE			
			*****						*****			
			(C545:US, CND, E, AUS)						(C545:US, CND, E, AUS)			
	*	A-4673-101-A	MAIN BOARD, COMPLETE (C545:AEP)				*	A-4673-613-A	MAIN BOARD, COMPLETE (C545:AEP)			
			*****						*****			
	*	A-4673-102-A	MAIN BOARD, COMPLETE (C545:E)				*	A-4673-617-A	MAIN BOARD, COMPLETE (C545:E)			
			*****						*****			
49	C413	1-126-022-11	ELECT	47uF	20%	16V						
	C415	1-164-159-21	CERAMIC	0.1uF		50V						
	C418	1-164-159-21	CERAMIC	0.1uF		50V						
	CN301	1-750-230-11	CONNECTOR, FFC/FPC 13P				CN301	1-750-745-11	CONNECTOR, FFC/FPC 13P			
			(C545:AEP/C745:US)						(C545:AEP/C745:US)			
	CN401	1-764-004-11	CONNECTOR, FFC/FPC 23P				* CN401	1-568-865-11	SOCKET, CONNECTOR 23P			
	CN501	1-750-233-11	CONNECTOR, FFC/FPC 16P									
	CN504	1-750-223-11	CONNECTOR, FFC/FPC 6P				* CN504	1-568-825-11	SOCKET, CONNECTOR 6P			
	D601	8-719-200-82	DIODE	11ES2			D601	8-719-024-99	DIODE	11ES2-NTA2B		
	D602	8-719-200-82	DIODE	11ES2			D602	8-719-024-99	DIODE	11ES2-NTA2B		
	D603	8-719-200-82	DIODE	11ES2			D603	8-719-024-99	DIODE	11ES2-NTA2B		
	D604	8-719-200-82	DIODE	11ES2			D604	8-719-024-99	DIODE	11ES2-NTA2B		
	D605	8-719-200-82	DIODE	11ES2			D605	8-719-024-99	DIODE	11ES2-NTA2B		
	D606	8-719-121-24	DIODE	RD9.1ES-L			D606	8-719-110-13	DIODE	RD9.1ESB2		
	IC501	8-752-856-06	IC	EXP84124-014Q			IC501	8-752-846-82	IC	EXP84124-032Q		

Page	Made in Japan			Made in Malaysia		
	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
52	*	1-647-364-11	TABLE MOTOR BOARD	*	1-650-082-11	TABLE MOTOR BOARD
		ACCESSORIES & PACKING MATERIALS			ACCESSORIES & PACKING MATERIALS	
		*****			*****	
		1-558-271-11	CORD, CONNECTION (AUDIO) (108cm)		1-551-734-11	CORD, CONNECTION (AUDIO 158cm)
		3-758-411-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, SWEDISH) (C545:CND, AEP, E/C745:CND, AEP)		3-758-411-61	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, SWEDISH) (C545:CND, AEP, E/C745:AEP)
		3-758-411-21	MANUAL, INSTRUCTION (ENGLISH) (C545:US, AUS/C745:US)		3-758-411-71	MANUAL, INSTRUCTION (ENGLISH) (C545:US, AUS/C745:US)
		3-758-411-41	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN, PORTUGUESE) (C545:AEP/C745:AEP)		3-758-411-81	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN, PORTUGUESE) (C545:AEP)
	*	4-965-971-01	CUSHION (FRONT)	*	4-965-249-01	CUSHION (FRONT)
	*	4-965-972-01	CUSHION (REAR)	*	4-965-250-01	CUSHION (REAR)
	*	4-966-433-01	INDIVIDUAL CARTON (C545)	*	4-975-946-01	INDIVIDUAL CARTON (C545:EXCEPT AEP)
	*	4-966-433-01	INDIVIDUAL CARTON (C545)	*	4-975-947-01	INDIVIDUAL CARTON (C545:AEP)
	*	4-966-434-01	INDIVIDUAL CARTON (C745)	*	4-975-949-01	INDIVIDUAL CARTON (C745)

4. Addition of the BU-5BD20 (Malaysia production of CDP-C545 only)

- **Difference of the CD Base unit**

As for productions which made in Malaysia, BU-5BD20 is used for CD base unit.

The boards, circuits and checking are different from BU-5BD10B which made in Japan.

Therefore, the productions which made in Malaysia are mentioned in this Service Manual Supplement-1.

Refer to the circuit, boardts, adjustments and parts list.

BU-5BD20 DIFFERENCE TABLE

Page	BU-5BD10B			BU-5BD20		
	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>
43	107	1-765-265-11	WIRE (FLAT TYPE) (23 CORE)	107	1-776-172-11	WIRE (FLAT TYPE) (23 CORE)
44	△151	8-841-144-11	OPTICAL PICK-UP BLOCK KSS-240A	△151	8-848-376-01	OPTICAL PICK-UP BLOCK KSS-213B/S-N
	152	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	152	1-769-069-11	WIRE (FLAT TIPE) (16 CORE)
	* 157	A-4649-432-A	BD BOARD, COMPLETE	* 157	A-4673-510-A	BD BOARD, COMPLETE

- **Base Unit Change**

As the base unit BU-5BD10B has changed to BU-5BD20, IC501 of the MAIN BOARD has changed.

The interchangeability between IC501 and BD BOARD is as below:

		MAIN BOARD IC501	
		FORMER	NEW
		8-752-856-06 CXP84124-014Q	8-752-846-82 CXP82220-032Q
Base	BU-5BD10B	○	○
Unit Type	BU-5BD20	×	○

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

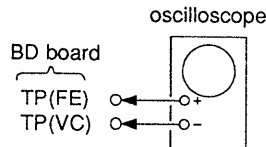
Les composants identifiés par une marque △ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

ELECTRICAL BLOCK CHECKING (for BU-5BD20)

Note :

1. CD Block is basically designed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use an oscilloscope with more than 10M Ω 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.

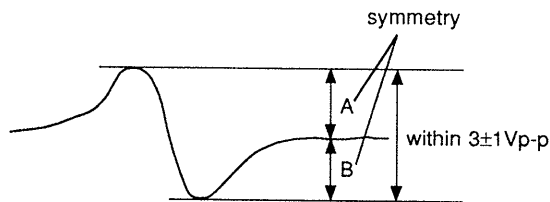
S Curve Check



Procedure :

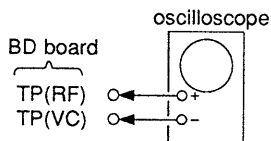
1. Connect oscilloscope to test point TP (FE) on BD board.
2. Connect between test point TP (FEI) and TP (VC) by lead wire.
3. Turned Power switch on.
4. Put disc (YEDS-18) in and turned Power switch on again and actuate the focus search. (actuate the focus search when disc table is moving in and out.)
5. Check the oscilloscope waveform (S-curve) is symmetrical between A and B. And confirm peak to peak level within 3 $\pm$ 1Vp-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 :

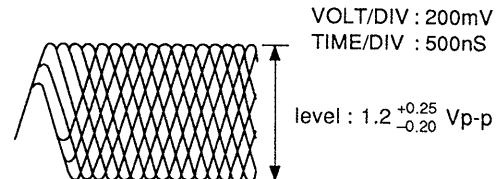
1. Connect oscilloscope to test point TP (RF) on BD board.
2. Turned Power switch on.

3. Put disc (YEDS-18) in to play the number five track.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

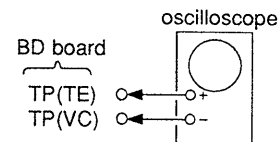
Note :

A clear RF signal waveform means that the shape “ $\diamond$ ” can be clearly distinguished at the center of the waveform.

RF signal waveform



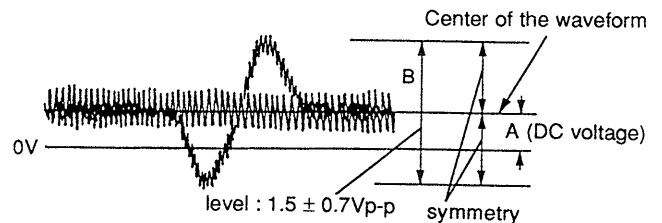
E-F Balance (1 Track Jump) Check



Procedure :

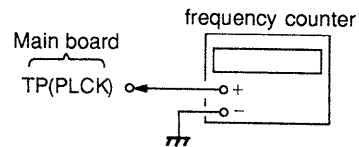
1. Connect oscilloscope to test point TP (TE) on BD board.
2. Turned Power switch on.
3. Put disc (YEDS-18) in to play the number five track.
4. Press the “II (pause)” button. (Becomes the 1 track jump mode)
5. Check the level B of the oscilloscope's waveform and the A (DC voltage) of the center of the Traverse waveform. Confirm the following :
 $A/B \times 100 = \text{less than } \pm 20\%$.

1 track jump waveform



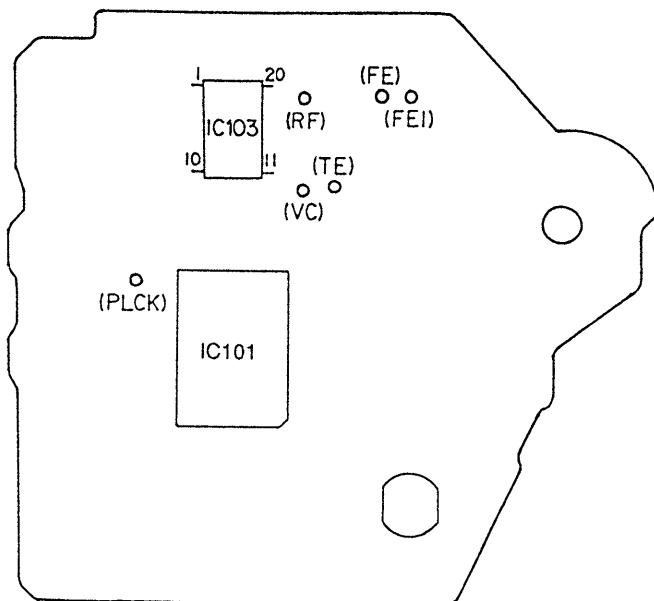
RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PLCK) with lead wire.
- 
2. Turned Power switch on.
 3. Put the disc (YEDS-18) in to play the number five track. Confirm that reading on frequency counter is 4.3218MHz.

Adjustment Location :

[BD BOARD] — SIDE A —



PRINTED WIRING BOARD — BD SECTION —

	1	2	3	4	5	6	7	8	9
--	---	---	---	---	---	---	---	---	---

A

B

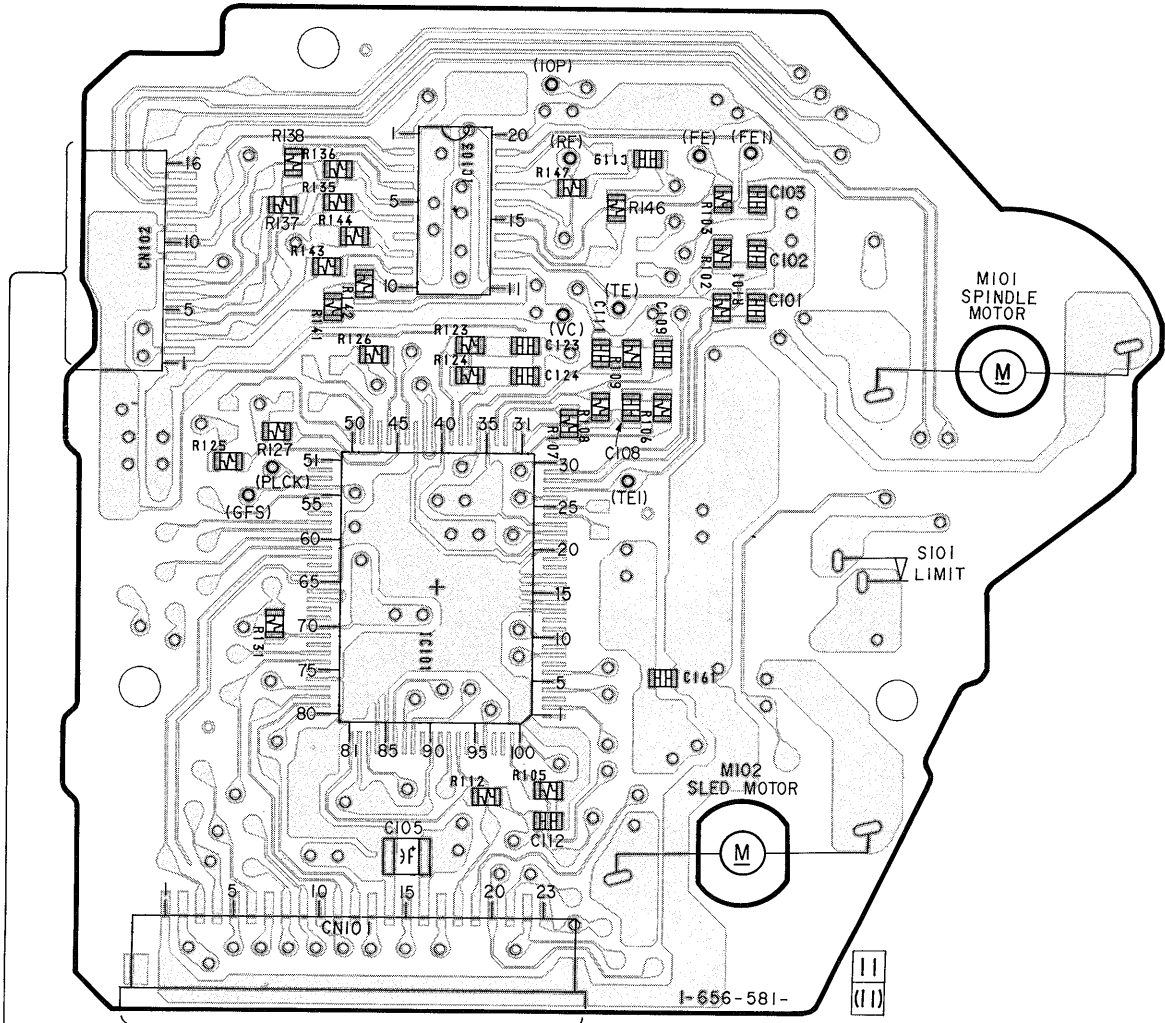
C

D

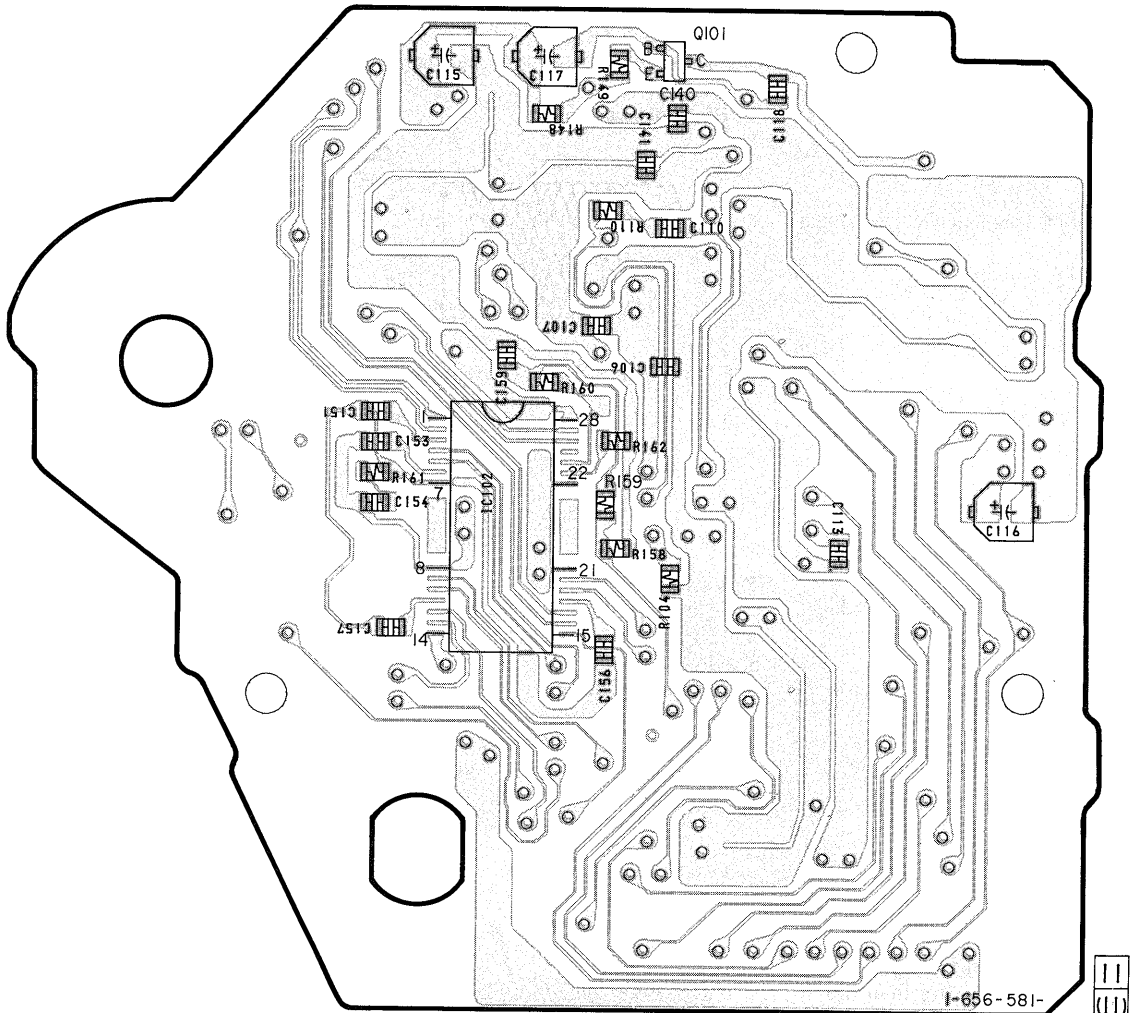
E

F

【BD BOARD】(SIDE A)

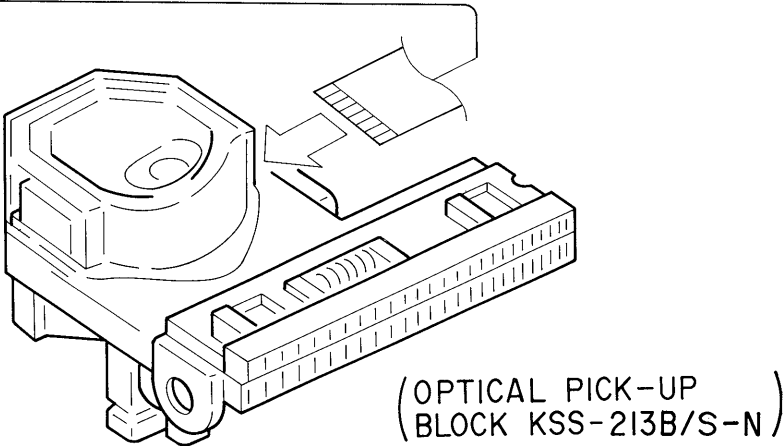


【BD BOARD】(SIDE B)



• Semiconductor Location

Ref. No.	Location
IC101	C-2
IC102	C-7
IC103	B-2
Q101	A-8

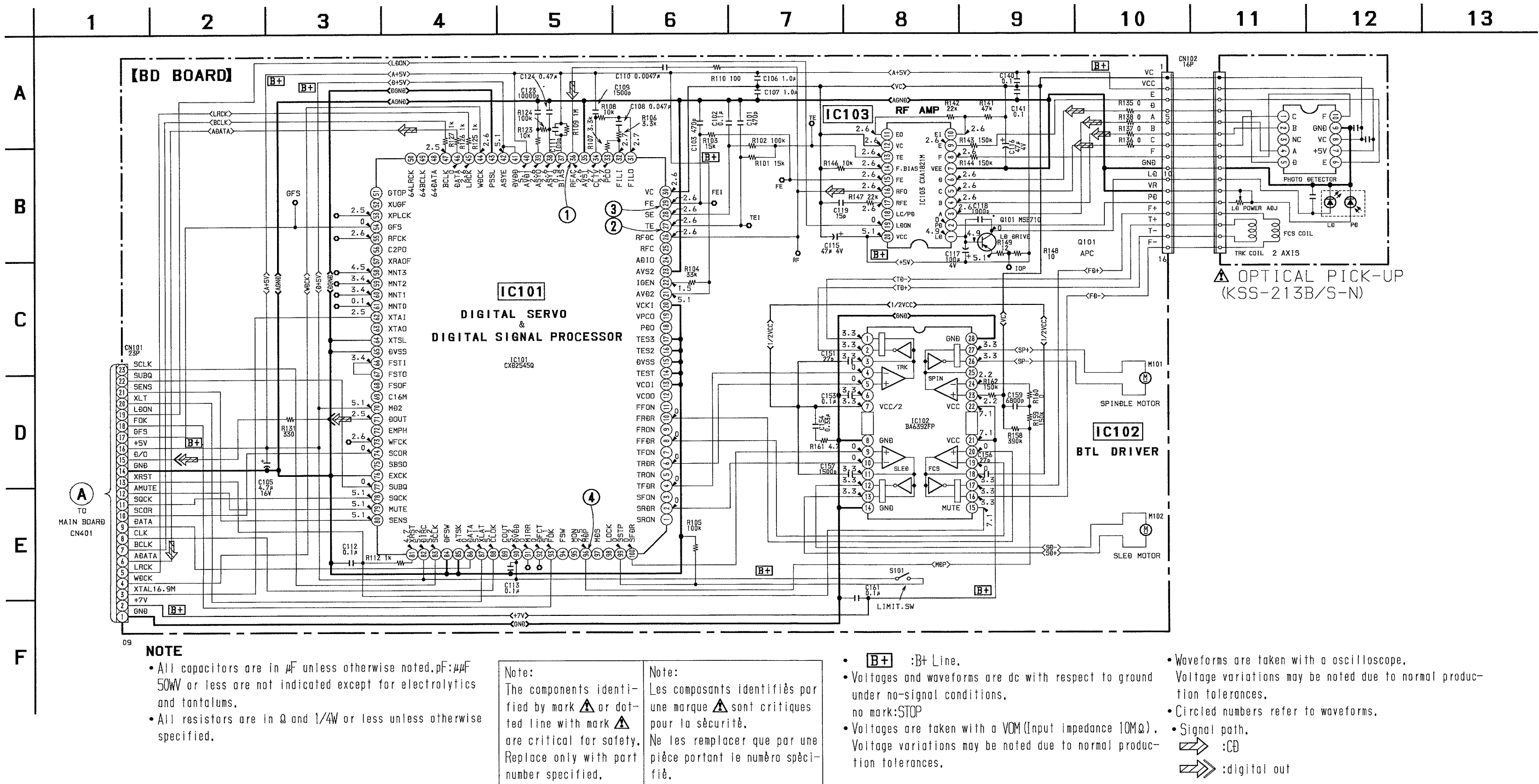


(OPTICAL PICK-UP
BLOCK KSS-213B/S-N)

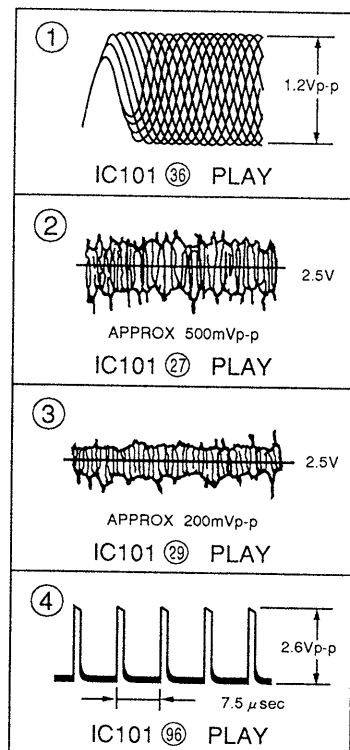
Note:

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

SCHEMATIC DIAGRAM — BD SECTION —

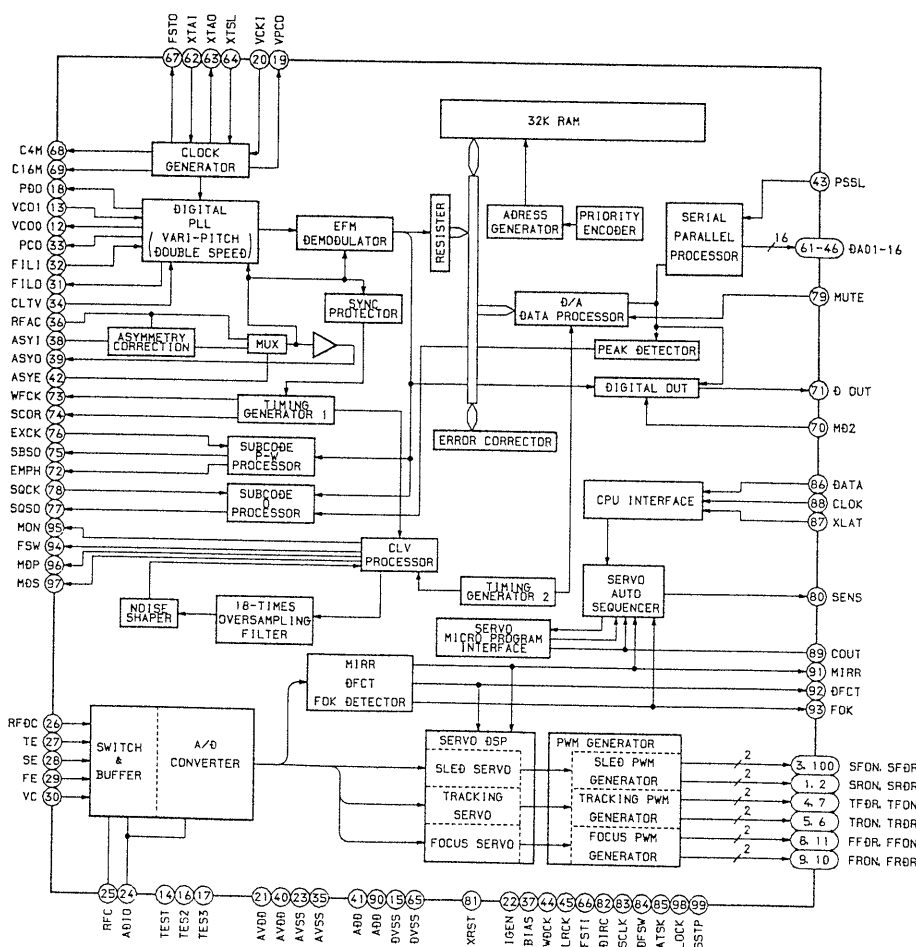


Waveformes

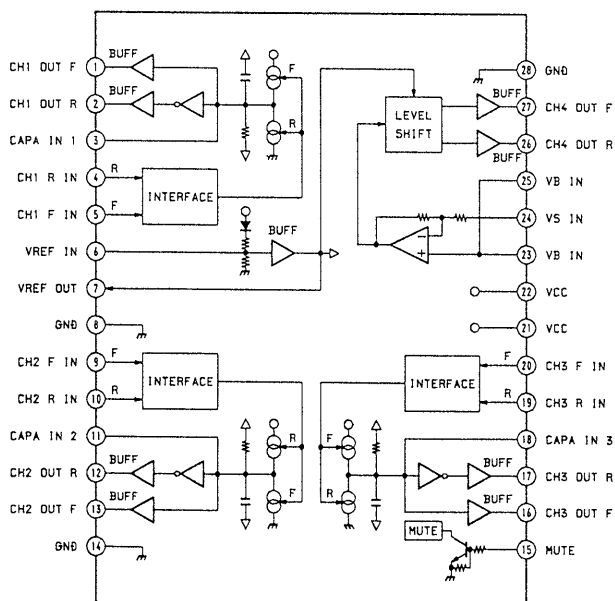


IC Block Diagrams

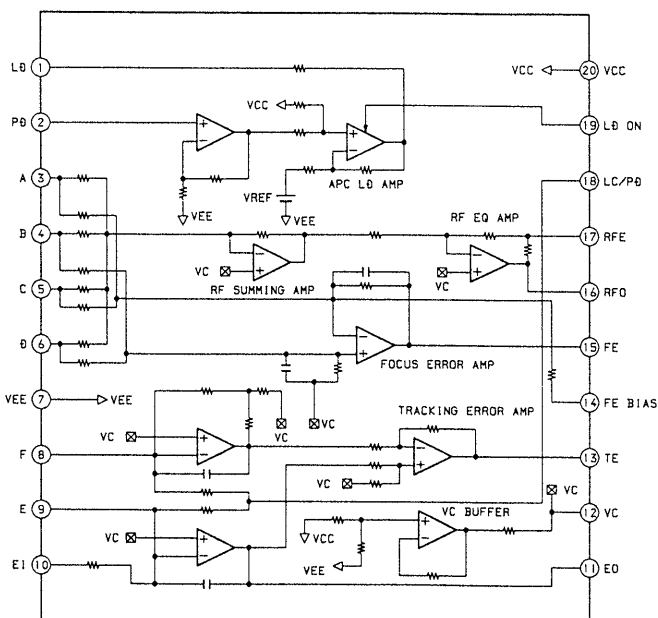
IC101 CXD2545Q



IC102 BA6392FP



IC103 CXA1821M



IC PIN FUNCTION

• IC101 (CXD2545Q)

Pin No.	Pin Name	I/O	Function
1	SRON	O	Sled drive output (Not used)
2	SRDR	O	Sled drive output
3	SFON	O	Sled drive output (Not used)
4	TFDR	O	Tracking drive output
5	TRON	O	Tracking drive output (Not used)
6	TRDR	O	Tracking drive output
7	TFON	O	Tracking drive output (Not used)
8	FFDR	O	Focus drive output
9	FRON	O	Focus drive output (Not used)
10	FRDR	O	Focus drive output
11	FFON	O	Focus drive output (Not used)
12	VCOO	O	VCO output for analog EFM PLL (Not used)
13	VCOI	I	VCO output for analog EFM PLL (GND)
14	TEST	I	TEST pin connected normally to GND
15	DVss	—	Digital GND
16	TES2	I	TEST pin connected normally to GND
17	TES3	I	TEST pin connected normally to GND
18	PDO	O	Charge-pump output for analog EFM PLL (Not used)
19	VPCO	O	Charge-pump output for variable pitch PLL (Not used)
20	VCKI	I	Clock input from variable pitch external VCO (GND)
21	AVD2	—	Analog power supply
22	IGEN	I	Power supply pin for operational amplifiers
23	AVS2	—	Analog GND
24	ADIO	I	(Not used)
25	RFC	O	(Not used)
26	RFDC	I	RF signal input
27	TE	I	Tracking error signal input
28	SE	I	Sled error signal input
29	FE	I	Focus error signal input
30	VC	I	Center voltage input pin
31	FILO	O	Filter output for master PLL
32	FILI	I	Filter input for master PLL
33	PCO	O	Charge-pump output for master PLL
34	CLTV	I	Control voltage input for master VCO
35	AVS1	—	Analog GND
36	RFAC	I	EFM signal input
37	BIAS	I	Asymmetry circuit constant current input
38	ASYI	I	Asymmetry compare voltage input
39	ASYO	O	EFM full swing output
40	AVD1	—	Analog power supply

Pin No.	Pin Name	I/O	Function
41	DVDD	—	Digital power supply
42	ASYE	I	Asymmetry circuit ON/OFF
43	PSSL	I	Audio data output mode selection input (GND)
44	WDCK	O	48-bit slot D/A interface. Word clock (Not used)
45	LRCK	O	48-bit slot D/A interface. LR clock
46	DATA	O	DA 16 output when PSSL=1. 48-bit slot serial data when PSSL=0
47	BCLK	O	DA 15 output when PSSL=1. 48-bit slot data when PSSL=0
48	64DATA	O	DA 14 output when PSSL=1. 64-bit slot data when PSSL=0 (Not used)
49	64BCLK	O	DA 13 output when PSSL=1. 64-bit slot data when PSSL=0 (Not used)
50	64LRCK	O	DA 12 output when PSSL=1. 64-bit slot data when PSSL=0 (Not used)
51	GTOP	O	DA 11 output when PSSL=1. GTOP output when PSSL=0 (Not used)
52	XUGF	O	DA 10 output when PSSL=1. XUGF output when PSSL=0 (Not used)
53	XPLCK	O	DA 09 output when PSSL=1. XPLCK output when PSSL=0
54	GFS	O	DA 08 output when PSSL=1. GFS output when PSSL=0
55	RFCK	O	DA 07 output when PSSL=1. RFCK output when PSSL=0
56	C2PO	O	DA 06 output when PSSL=1. C2PO output when PSSL=0 (Not used)
57	XRA0F	O	DA 05 output when PSSL=1. XRA0F output when PSSL=0 (Not used)
58	MNT3	O	DA 04 output when PSSL=1. MNT3 output when PSSL=0
59	MNT2	O	DA 03 output when PSSL=1. MNT2 output when PSSL=0
60	MNT1	O	DA 02 output when PSSL=1. MNT1 output when PSSL=0
61	MNT0	O	DA 01 output when PSSL=1. MNT0 output when PSSL=0
62	XTAI	I	X'tal oscillator circuit input
63	XTAO	O	X'tal oscillator circuit output (Not used)
64	XTSL	I	X'tal selection input pin (GND)
65	DVss	—	Digital GND
66	FSTI	I	2/3 divider output of pins 62, 63
67	FSTO	O	2/3 divider output of pins 62, 63
68	FSOF	O	(Not used)
69	C16M	O	16.9344 MHz output (Not used)
70	MD2	I	Digital-out ON/OFF control pin (+5V)
71	DOUT	O	Digital-out output pin
72	EMPH	O	Playback disc output in emphasis mode (Not used)
73	WFCK	O	WFCK output
74	SCOR	O	Sub-code sync output
75	SBSO	O	Sub-P through Sub-W serial output (Not used)
76	EXCK	I	Clock input for SBS0 read-out (+5V)
77	SUBQ	O	Sub-Q 80-bit output
78	SQCK	I	Clock input for SQS0 read-out
79	MUTE	I	Muting selection pin
80	SENS	O	SENS output
81	XRST	I	System reset
82	DIRC	I	Used in 1-track jump mode (+5V)
83	SCLK	I	SENS serial data read-out clock
84	DFSW	I	DFCT selection pin (GND)
85	ATSK	I	Input pin for anti-shock (GND)

Pin No.	Pin Name	I/O	Function
86	DATA	I	Serial data input, supplied from CPU
87	XLAT	I	Latch input, supplied from CPU
88	CLOCK	I	Serial data transfer clock input, supplied from CPU
89	COUT	O	Numbers of track counted signal output (Not used)
90	DVDD	—	Digital power supply
91	MIRR	O	Mirror signal output
92	DFCT	O	Defect signal output
93	FOK	O	Focus OK output
94	FSW	O	Output to select spindle motor output filter (Not used)
95	MON	O	Output to control ON/OFF of spindle motor (Not used)
96	MDP	O	Output to control spindle motor servo
97	MDS	O	Output to control spindle motor servo (Not used)
98	LOCK	O	GFS is sampled by 460 Hz. H when GFS is H (Not used)
99	SSTP	I	Input signal to detect disc inner most track
100	SFDR	O	Sled drive output

ELECTRICAL PARTS LIST

NOTE:

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

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	A-4673-510-A	BD BOARD, COMPLETE (C545)				< MOTOR >	
		*****		M101	X-4917-504-1	MOTOR ASSY (SLED)	
		< CAPACITOR >		M102	X-4917-523-4	BASE (OUTSERT) ASSY (SPINDLE MOTOR)	
						< TRANSISTOR >	
C101	1-163-005-11	CERAMIC CHIP	470PF 10%	50V			
C102	1-163-038-91	CERAMIC CHIP	0.1uF	25V			
C103	1-163-005-11	CERAMIC CHIP	470PF 10%	50V			
C105	1-135-155-21	TANTALUM CHIP	4.7uF 10%	16V			
C106	1-164-346-11	CERAMIC CHIP	1uF	16V			
						< RESISTOR >	
C107	1-164-346-11	CERAMIC CHIP	1uF	16V	R101	1-216-077-00	METAL CHIP 15K 5% 1/10W
C108	1-163-035-00	CERAMIC CHIP	0.047uF	50V	R102	1-216-097-91	METAL GLAZE 100K 5% 1/10W
C109	1-163-145-00	CERAMIC CHIP	0.0015uF 5%	50V	R103	1-216-077-00	METAL CHIP 15K 5% 1/10W
C110	1-163-017-00	CERAMIC CHIP	0.0047uF 5%	50V	R104	1-216-085-00	METAL CHIP 33K 5% 1/10W
C111	1-163-251-11	CERAMIC CHIP	100PF 5%	50V	R105	1-216-097-91	METAL GLAZE 100K 5% 1/10W
C112	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R106	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
C113	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R107	1-216-061-00	METAL CHIP 3.3K 5% 1/10W
C115	1-126-607-11	ELECT CHIP	47uF 20%	4V	R108	1-216-073-00	METAL CHIP 10K 5% 1/10W
C116	1-126-607-11	ELECT CHIP	47uF 20%	4V	R109	1-216-121-91	METAL GLAZE 1M 5% 1/10W
C117	1-126-209-11	ELECT	100uF 20%	4V	R110	1-216-025-91	METAL GLAZE 100 5% 1/10W
C118	1-163-275-11	CERAMIC CHIP	0.001uF 5%	50V	R112	1-216-049-91	METAL GLAZE 1K 5% 1/10W
C119	1-163-097-00	CERAMIC CHIP	15PF 5%	50V	R123	1-216-073-00	METAL CHIP 10K 5% 1/10W
C123	1-164-232-11	CERAMIC CHIP	0.01uF	50V	R124	1-216-097-91	METAL GLAZE 100K 5% 1/10W
C124	1-164-005-11	CERAMIC CHIP	0.47uF	25V	R125	1-216-049-91	METAL GLAZE 1K 5% 1/10W
C140	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R126	1-216-049-91	METAL GLAZE 1K 5% 1/10W
C141	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R127	1-216-049-91	METAL GLAZE 1K 5% 1/10W
C151	1-163-237-11	CERAMIC CHIP	27PF 5%	50V	R131	1-216-037-00	METAL CHIP 330 5% 1/10W
C153	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R135	1-216-295-91	CONDUCTOR, CHIP (2012)
C154	1-164-336-11	CERAMIC CHIP	0.33uF	25V	R136	1-216-295-91	CONDUCTOR, CHIP (2012)
C156	1-163-237-11	CERAMIC CHIP	27PF 5%	50V	R137	1-216-295-91	CONDUCTOR, CHIP (2012)
C157	1-163-145-00	CERAMIC CHIP	0.0015uF 5%	50V	R138	1-216-295-91	CONDUCTOR, CHIP (2012)
C159	1-163-019-00	CERAMIC CHIP	0.0068uF 10%	50V	R141	1-216-089-91	METAL GLAZE 47K 5% 1/10W
C161	1-163-038-91	CERAMIC CHIP	0.1uF	25V	R142	1-216-081-00	METAL CHIP 22K 5% 1/10W
					R143	1-216-101-00	METAL CHIP 150K 5% 1/10W
					R144	1-216-101-00	METAL CHIP 150K 5% 1/10W
		< CONNECTOR >					
CN101	1-770-072-11	CONNECTOR (FFC) 23P			R146	1-216-073-00	METAL CHIP 10K 5% 1/10W
CN102	1-770-014-11	CONNECTOR, FFC/FPC 16P			R147	1-216-081-00	METAL CHIP 22K 5% 1/10W
					R148	1-216-001-00	METAL CHIP 10 5% 1/10W
		< IC >			R149	1-216-003-11	METAL GLAZE 12 5% 1/10W
IC101	8-752-369-78	IC CXD2545Q			R158	1-216-111-91	METAL GLAZE 390K 5% 1/10W
IC102	8-759-176-09	IC BA6392FP					
IC103	8-752-072-45	IC CXA1821M-T6			R159	1-216-101-00	METAL CHIP 150K 5% 1/10W
					R160	1-216-295-91	CONDUCTOR, CHIP (2012)
					R161	1-216-308-00	METAL CHIP 4.7 5% 1/10W

BD

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
R162	1-216-101-00	METAL CHIP	150K 5% 1/10W
		< SWITCH >	
S101	1-572-085-11	SWITCH, LEAF (LIMIT)	