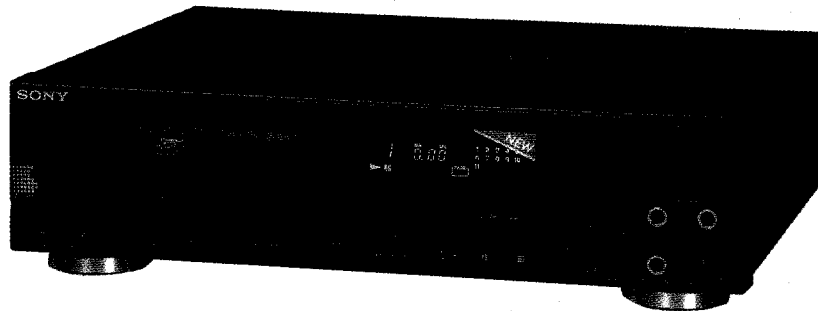


CDP-K1A

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model
E Model



Model Name Using Similar Mechanism	CDP-391
CD Mechanism Type	CDM14-5BD1
Optical Pick-Up Block Type	BU-5BD1

SPECIFICATIONS

Compact disc player

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous
Laser output	Max. $44.6 \mu\text{W}^*$ * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	2 Hz – 20 kHz $\pm 0.5 \text{ dB}$
Signal to noise ratio	More than 98 dB
Dynamic range	More than 92 dB
Harmonic distortion	Less than 0.008%
Channel separation	More than 95 dB

Output

LINE OUT (phono jacks)	Output level 1.5 V (at 50 kilohms) Load impedance over 10 kilohms
HEADPHONES (stereo phone jacks)	Output level max. 10 mW Load impedance 32 ohms

Input

MIC1/MIC2 jack	Phone jack 1 mV (Impedance below 1 kilohm)
----------------	---

General

Power requirements	UK model: 240V AC, 50/60Hz AEP model: 220–230V AC, 50/60Hz US model: 120V AC, 60Hz Canadian model: 120V AC, 60Hz E model: 110–120, 220–240 V AC adjustable, 50/60Hz
Power consumption	16W
Dimensions (approx., including projections)	355 x 95 x 310 mm (w/h/d) (14 x 3 ³ / ₄ x 12 ¹ / ₄ inches)
Weight (approx.)	3.2 kg (7 lb 1 oz)

Supplied accessories

Audio cord (1) (2 phono plugs – 2 phono plugs)
Remote commander
RM-DK113 (US, Canadian, AEP, UK model)
RM-DK112 (E model)
Sony SUM-3(NS) batteries (2)

Design and specifications are subject to change without notice.

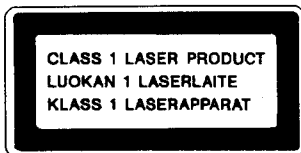


COMPACT DISC PLAYER
SONY®

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For the United Kingdom and European countries.



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

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.

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

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

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

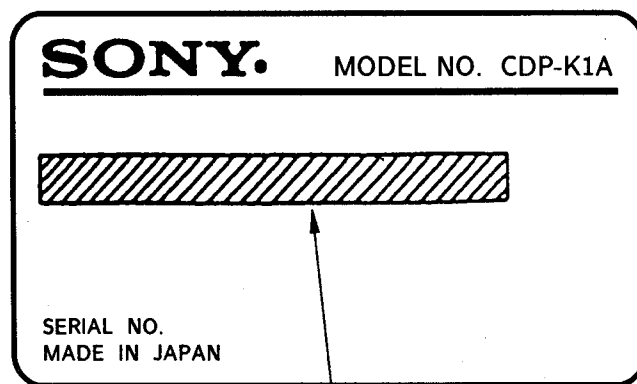
The flexible board is easily damaged and should be handled with care.

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 more than 30cm away from the objective lens.

MODEL IDENTIFICATION

- Specification Label -



US, Canadian Model : AC : 120V 60Hz 16W

AEP Model : AC : 220 - 230V ~ 50/60Hz

UK Model : AC : 240V ~ 50/60Hz

E Model : AC : 120/220/240V ~ 50/60Hz

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.

SAFETY CHECK-OUT

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

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

LEAKAGE TEST

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

Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 0.75V, 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)

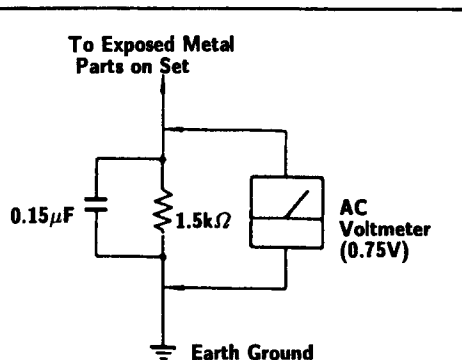


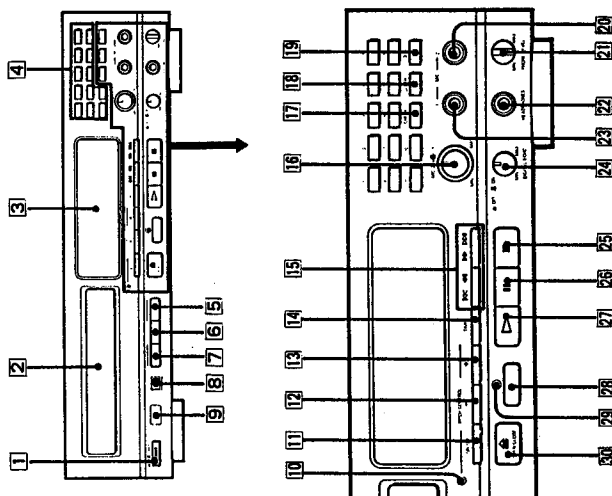
Fig. A. Using an AC voltmeter to check AC leakage.

Identifying the Parts

A

Front Panel **A**

Refer to the pages indicated in () for details.

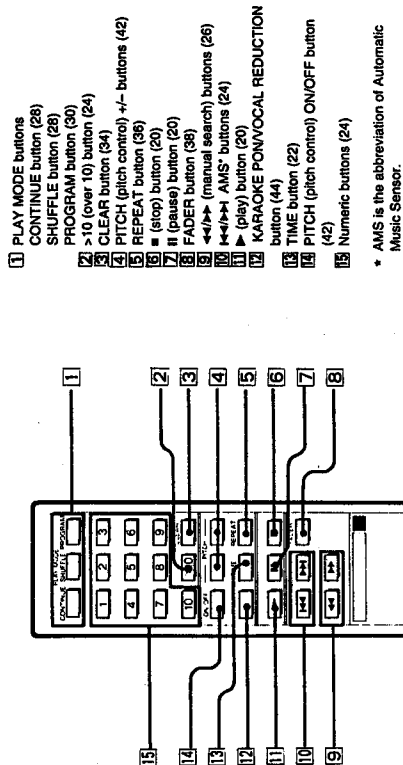


16

Identifying the Parts

Remote Commander **B**

Refer to the pages indicated in () for details.



18

SECTION 1 GENERAL

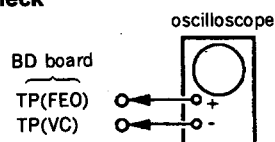
This section is extracted from instruction manual.

SECTION 2 ELECTRICAL BLOCK CHECKING

Note :

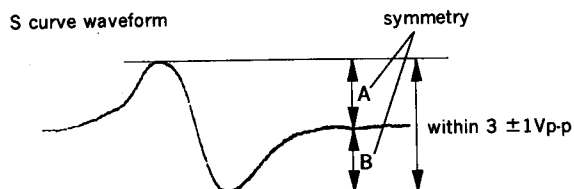
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal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

S Curve Check



Procedure :

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

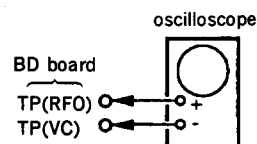


5. After check, remove the lead wire connected in step 2.

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

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

RF Level Check

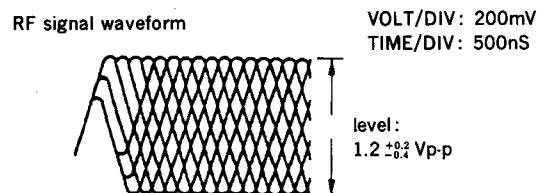


Procedure :

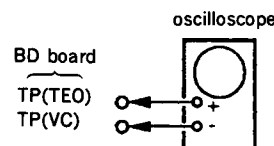
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

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

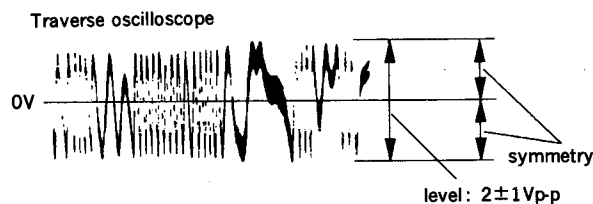


E-F Balance Check



Procedure :

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

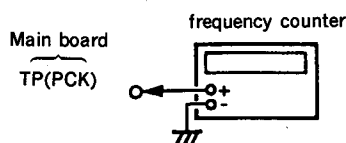


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

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



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

Focus/Tracking Gain

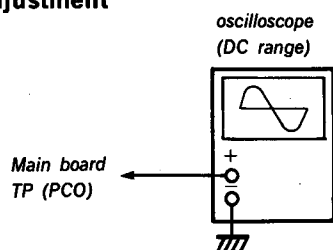
This gain has a margin, so even if it is slightly off.

There is no problem.

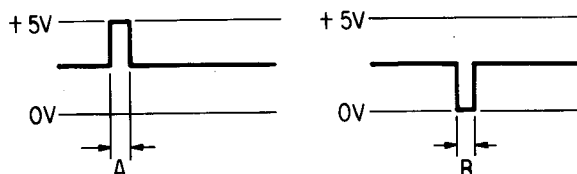
Therefore, do not perform, this adjustment.

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

VCO Adjustment

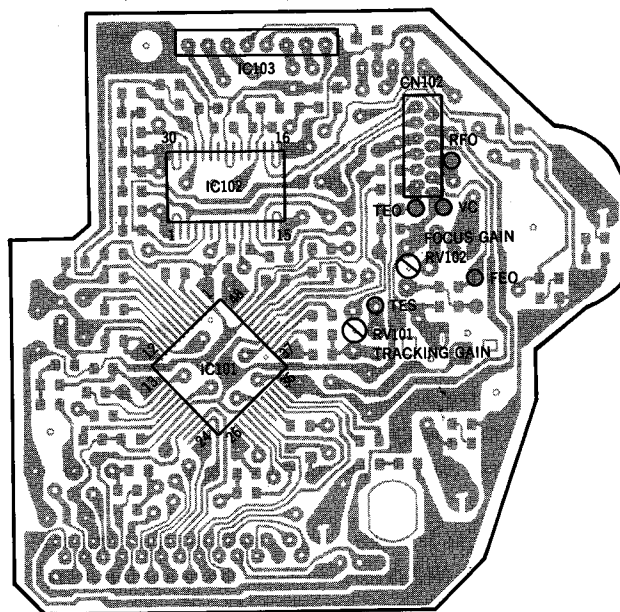


1. Connect oscilloscope to test point TP (RFO) on Main board.
2. Turn POWER switch on.
3. Adjust CT301 so that pulse width A or B are 0.5msec.

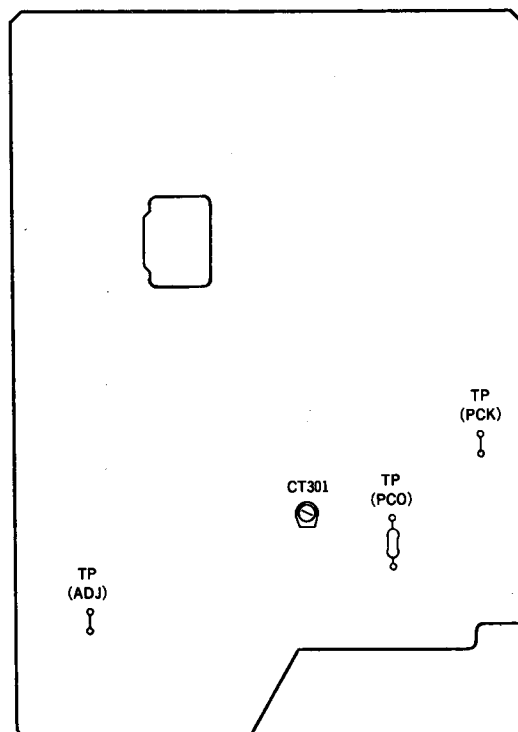


Adjustment Location :

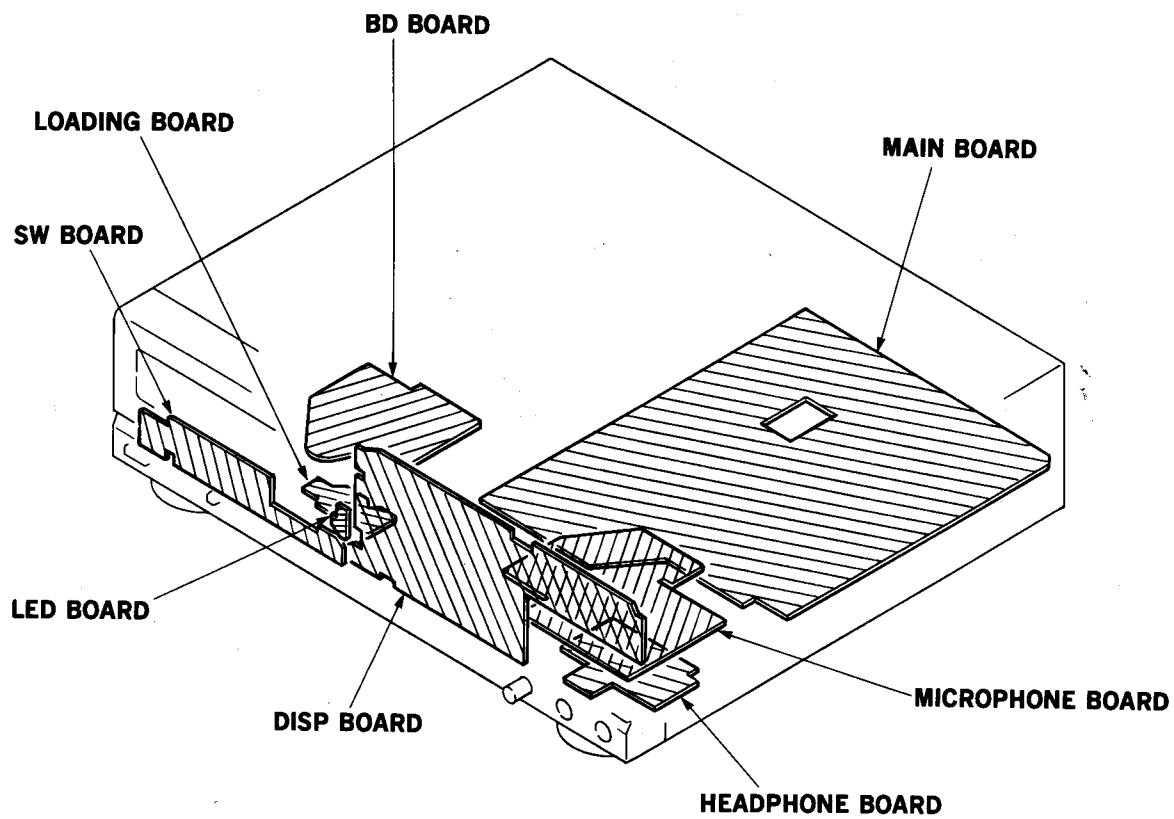
BD board (Conductor Side)



MAIN board (component side)



3-2 CIRCUIT BOARDS LOCATION



3-7. PIN DESCRIPTION

● IC401 CXP50112-256Q

Pin No.	Pin Name	I/O	Description	Pin No.	Pin Name	I/O	Description
1	—	O	—	41	KEY6	I	Key scan 6
2	—	O	—	42	KEY7	I	Key scan 7
3	—	O	—	43	—	I	0V
4	—	O	—	44	CLK	O	SSP, DSP, D/F data clock
5	S1	O	Display segment S1	45	DATA	O	SSP, DSP, D/F data
6	S2	O	Display segment S2	46	—	I	0V
7	S3	O	Display segment S3	47	GFS	I	GFS input
8	S4	O	Display segment S4	48	FOK	I	FOK input
9	S5	O	Display segment S5	49	SQCLK	O	SUB-Q read clock
10	S6	O	Display segment S6	50	SUBQ	I	SUB-Q serial data
11	S7	O	Display segment S7	51	AMUT	O	Audio mute out (mute on "H")
12	S8	O	Display segment S8	52	LDON	O	Laser on/off (Laser on "H")
13	S9	O	Display segment S9	53	PRGL	O	D/F data latch pulse
14	S10	O	Display segment S10	54	XLT	O	SSP, DSP, data latch pulse
15	S11	O	Display segment S11	55	AUTO-P	I	AUTO PAUSE (on "L")
16	S12	O	Display segment S12	56	—	I	—
17	S13	O	Display segment S13	57	—	I	—
18	S14	O	Display segment S14	58	—	I	—
19	S15	O	Display segment S15	59	DFCTSW	O	DEFECT circuit control terminal
20	S16	O	Display segment S16	60	—	—	—
21	1G	O	Display grid 1	61	SENS	I	SSP, DSP, sense terminal
22	2G	O	Display grid 2	62	RMC	I	Remote commander input
23	3G	O	Display grid 3	63	OUTSW	I	Loading out switch
24	4G	O	Display grid 4	64	INSW	I	Loading in switch
25	5G	O	Display grid 5	65	ADJ	I	ADJ mode terminal
26	6G	O	Display grid 6	66	AFADJ	I	AFADJ mode terminal
27	7G	O	Display grid 7	67	LODOUT	O	Loading out output
28	8G	O	Display grid 8	68	LODIN	O	Loading in output
29	SCOR	I	SUB-Q sync input	69	KOP	O	KARAOKE PON LED
30	—	—	—	70	V-PITCH	O	VARIABLE PITCH control LED
31	+5V	I	+5V	71	VSS	I	0V
32	RST	I	RESET input	72	XTAL	—	Main system clock connection
33	NC	I	+5V	73	+5v	I	+5V
34	Vdd	I	+5V	74	EXTAL	I	Main system clock connection
35	KEY0	I	Key scan 0	75	+5V	I	+5V
36	KEY1	I	Key scan 1	76	-32V	I	Display glid, segment low voltage input
37	KEY2	I	Key scan 2	77	KS0	O	Key source output 0
38	KEY3	I	Key scan 3	78	KS1	O	Key source output 1
39	KEY4	I	Key scan 4	79	KS2	O	Key source output 2
40	KEY5	I	Key scan 5	80	KS3	O	Key source output 3

SECTION 4 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

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

- Color Indication of Appearance Parts

Example:

KNOB, BALANCE (WHITE) . . (RED)

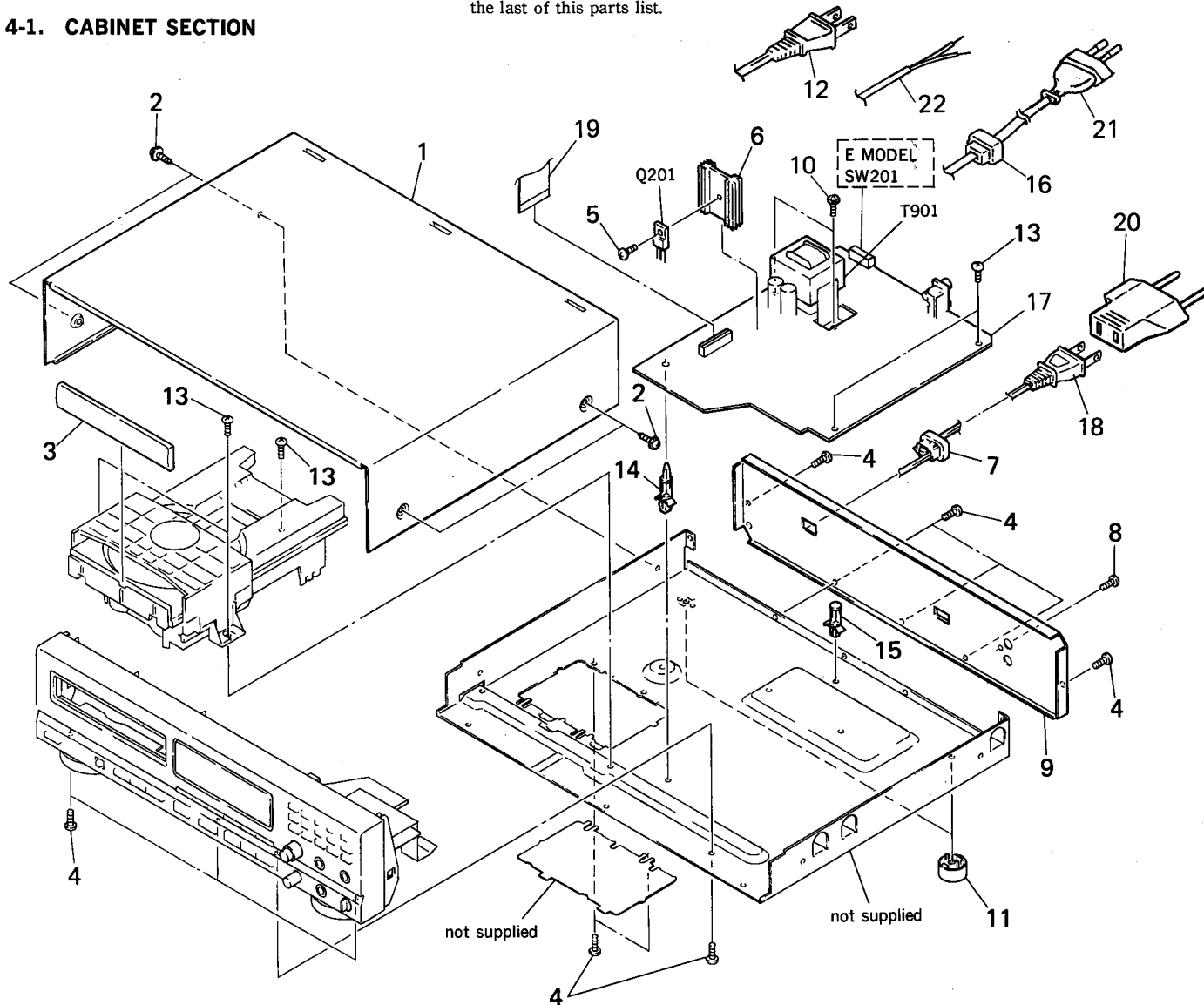
Parts Color Cabinet's Color

- Hardware (# mark) list is given in the last of this parts list.

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.

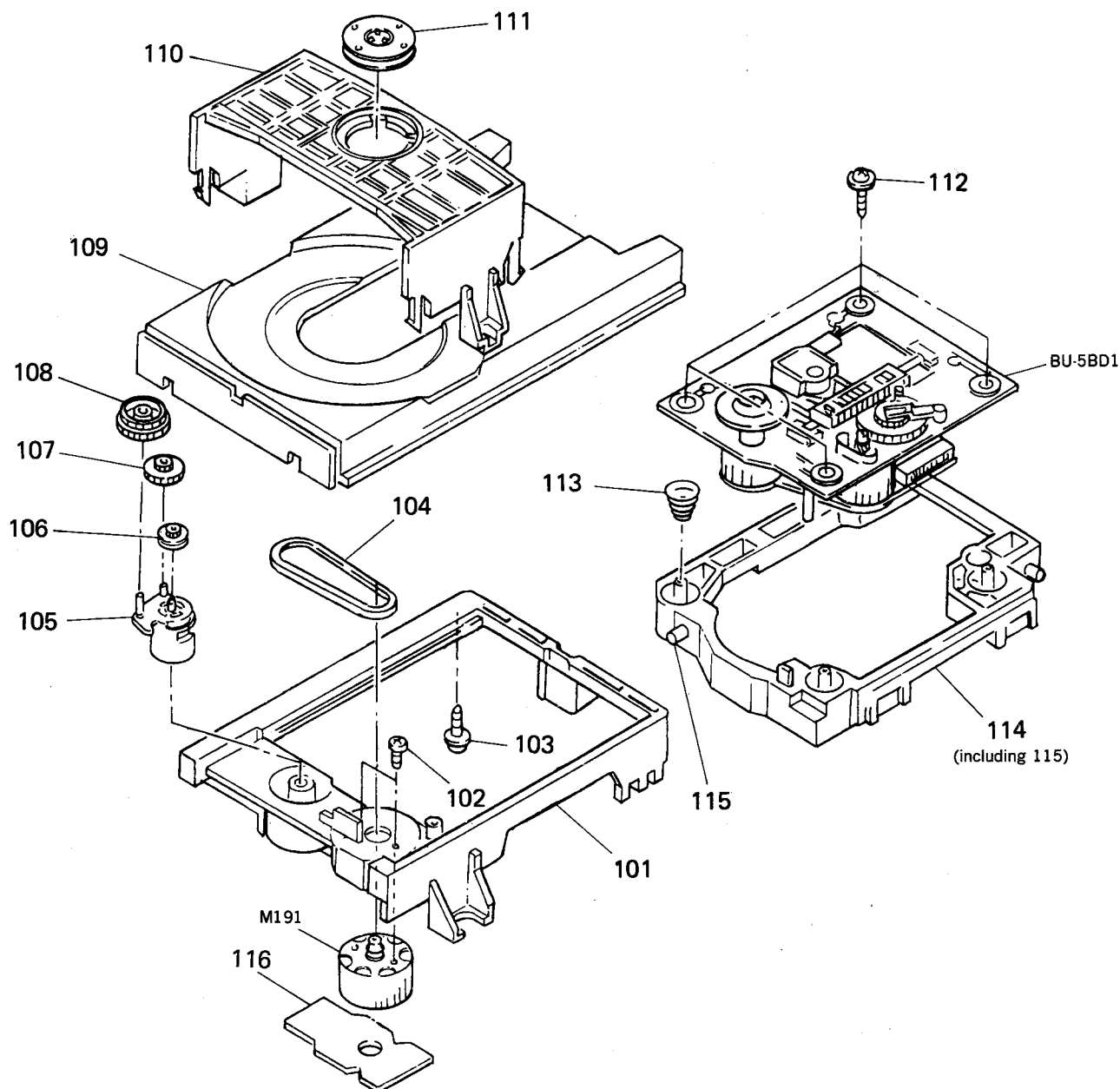
4-1. CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	4-919-376-31	CASE	
2	3-704-366-31	SCREW (CASE) (M3X6)	
3	4-947-549-01	PANEL, LOADING	
4	7-682-547-09	SCREW +BVTT 3X6 (S)	
5	7-682-147-15	SCREW, TR	
* 6	4-908-502-01	HEAT SINK	
* 7	3-703-571-11	BUSHING (S) (4516), CORD (E)	
8	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
* 9	4-948-347-11	PANEL, BACK (E)	
* 9	4-948-347-22	PANEL, BACK (US)	
* 9	4-948-347-31	PANEL, BACK (Canadian)	
* 9	4-948-347-41	PANEL, BACK (AEP)	
* 9	4-948-347-51	PANEL, BACK (UK)	
10	4-886-821-11	SCREW, S TIGHT, +PTTW 3X6	
11	4-933-601-01	FOOT	
△12	1-590-836-11	CORD, POWER (US, Canadian)	

Ref. No.	Part No.	Description	Remark
13	7-682-547-04	SCREW +BVTT 3X6 (S)	
* 14	4-924-098-31	HOLDER, PC BOARD	
* 15	3-349-025-31	HOLDER, PC BOARD	
* 16	3-703-244-00	BUSHING (2104), CORD (US, Canadian, AEP, UK)	
* 17	A-4617-647-A	MAIN BOARD, COMPLETE (AEP, UK)	
* 17	A-4617-651-A	MAIN BOARD, COMPLETE (E)	
* 17	A-4617-910-A	MAIN BOARD, COMPLETE (US, Canadian)	
△18	1-558-943-41	CORD, POWER (E)	
19	1-575-160-11	WIRE, FLAT TYPE (22 CORE)	
△20	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
△21	1-575-651-21	CORD, POWER (AEP)	
△22	1-558-946-21	CORD, POWER (UK)	
△T901	1-449-921-11	TRANSFORMER, POWER (US, Canadian)	
△T901	1-449-922-11	TRANSFORMER, POWER (AEP, UK)	
△T901	1-449-923-11	TRANSFORMER, POWER (E)	

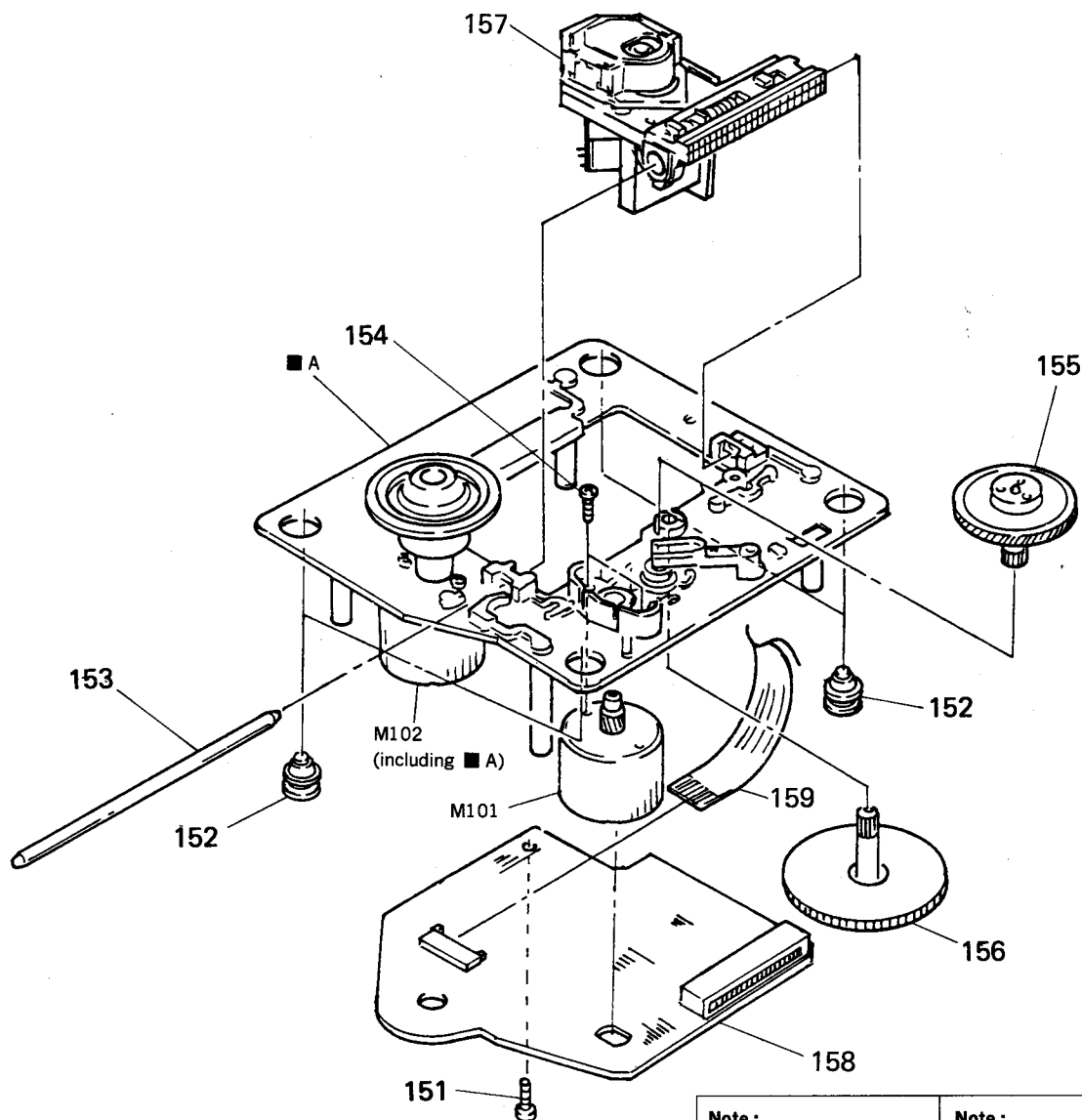
4-3. MD BLOCK (CDM14-5BD1) SECTION



Ref. No.	Part No.	Description	Remark
101	4-933-111-01	CHASSIS (MD)	
102	7-621-775-10	SCREW +B 2. 6X4	
* 103	4-917-583-21	BRACKET, YOKE	
104	4-927-649-01	BELT	
105	4-933-109-01	CAM	
106	4-927-651-01	PULLEY (S)	
107	4-927-628-01	GEAR (C)	
108	4-933-107-01	GEAR (PL)	
109	4-933-112-01	TABLE, DISK	
110	4-933-110-01	HOLDER (MG)	

Ref. No.	Part No.	Description	Remark
* 111	1-452-538-11	MAGNET	
112	4-933-134-01	SCREW (+PTPH M2. 6X6)	
113	4-948-503-01	SPRING (BU), COMPRESSION	
114	4-933-129-01	HOLDER (BU)	
115	4-933-108-01	SHAFT (CAM)	
* 116	1-632-202-11	LOADING BOARD	
M191	A-4604-363-A	MOTOR (L) ASSY (LOADING)	

4-4. OPTICAL PICK-UP BLOCK (BU-5BD1) ASSEMBLY



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

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

Ref. No.	Part No.	Description	Remark
151	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
152	4-933-126-01	INSULATOR (A)	
153	4-917-565-01	SHAFT, SLED	
154	7-621-255-15	SCREW +P 2X3	
155	4-917-567-01	GEAR (M)	
156	4-917-564-01	GEAR (P), FLATNESS	

Ref. No.	Part No.	Description	Remark
$\triangle$ 157	8-848-144-11	DEVICE, OPTICAL KSS-240A	
* 158	A-4617-161-A	BD BOARD, COMPLETE	
159	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-523-3	MOTOR ASSY (SLED)	
M102	X-4917-504-1	MOTOR ASSY (SPINDLE)	

BD

SECTION 5 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA...: μ A.. uPA...: μ PA..
uPB...: μ PB.. uPC...: μ PC.. uPD...: μ PD..
- CAPACITORS
uF: μ F
- COILS
uH: μ H

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.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	A-4617-161-A	BD BOARD, COMPLETE *****				< DIODE >	
		< CAPACITOR >		D101	8-719-021-25	DIODE UZM4.7X-T1	
C101	1-163-038-00	CERAMIC CHIP 0.1uF	25V			< IC >	
C102	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V	IC101	8-752-055-73	IC CXA1372AQ	
C103	1-126-163-11	ELECT 4.7uF	20% 50V	IC102	8-759-822-36	IC LA6532M	
C104	1-163-038-00	CERAMIC CHIP 0.1uF	25V	IC103	8-759-633-65	IC M54641L	
C105	1-126-154-11	ELECT 47uF	20% 6.3V			< JACK >	
C106	1-126-154-11	ELECT 47uF	20% 6.3V	J101	1-216-295-00	METAL CHIP 0 5% 1/10W	
C107	1-126-154-11	ELECT 47uF	20% 6.3V	J102	1-216-295-00	METAL CHIP 0 5% 1/10W	
C108	1-163-038-00	CERAMIC CHIP 0.1uF	25V			< TRANSISTOR >	
C109	1-163-038-00	CERAMIC CHIP 0.1uF	25V	Q101	8-729-901-01	TRANSISTOR DTC144EK	
C110	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V			< RESISTOR >	
C111	1-131-367-00	TANTALUM 22uF	10% 20V	R101	1-216-097-00	METAL CHIP 100K 5% 1/10W	
C112	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R102	1-216-095-00	METAL CHIP 82K 5% 1/10W	
C113	1-164-232-11	CERAMIC CHIP 0.01uF	50V	R103	1-216-091-00	METAL CHIP 56K 5% 1/10W	
C114	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V	R104	1-216-099-00	METAL CHIP 120K 5% 1/10W	
C115	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V	R105	1-216-069-00	METAL CHIP 6.8K 5% 1/10W	
C117	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R106	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
C118	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R107	1-216-114-00	METAL GLAZE 510K 5% 1/10W	
C119	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V	R108	1-216-105-00	METAL CHIP 220K 5% 1/10W	
C120	1-163-989-11	CERAMIC CHIP 0.033uF	10% 25V	R109	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
C151	1-163-019-00	CERAMIC CHIP 0.0068uF	10% 50V	R110	1-216-049-00	METAL CHIP 1K 5% 1/10W	
C152	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R111	1-216-049-00	METAL CHIP 1K 5% 1/10W	
C153	1-163-006-11	CERAMIC CHIP 560PF	10% 50V	R112	1-216-083-00	METAL CHIP 27K 5% 1/10W	
C154	1-164-161-11	CERAMIC CHIP 0.0022uF	10% 100V	R113	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
C155	1-163-023-00	CERAMIC CHIP 0.015uF	5% 50V	R114	1-216-105-00	METAL CHIP 220K 5% 1/10W	
C171	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R152	1-216-073-00	METAL CHIP 10K 5% 1/10W	
C172	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R153	1-216-085-00	METAL CHIP 33K 5% 1/10W	
C173	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R154	1-216-085-00	METAL CHIP 33K 5% 1/10W	
C174	1-163-038-00	CERAMIC CHIP 0.1uF	25V	R155	1-216-093-00	METAL CHIP 68K 5% 1/10W	
		< CONNECTOR >		R156	1-216-081-00	METAL CHIP 22K 5% 1/10W	
CN101	1-568-796-11	SOCKET, CONNECTOR 22P		R157	1-216-079-00	METAL CHIP 18K 5% 1/10W	
CN102	1-568-795-11	SOCKET, CONNECTOR 12P					
CN103	1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P					

BD

DISP

Ref. No.	Part No.	Description	Remark		
R158	1-216-079-00	METAL CHIP	18K	5%	1/10W
R159	1-216-079-00	METAL CHIP	18K	5%	1/10W
R160	1-216-049-00	METAL CHIP	1K	5%	1/10W
R171	1-216-001-00	METAL CHIP	10	5%	1/10W
R172	1-216-001-00	METAL CHIP	10	5%	1/10W

R173	1-216-001-00	METAL CHIP	10	5%	1/10W
R174	1-216-001-00	METAL CHIP	10	5%	1/10W

< VARIABLE RESISTOR >

RV101	1-241-630-11	RES, ADJ, CARBON 10K
RV102	1-241-630-11	RES, ADJ, CARBON 10K

< SWITCH >

S101	1-572-085-11	SWITCH, LEAF (LIMIT)
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*	1-637-176-11	DISP BOARD

*	4-923-532-31	SPACER, LED
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< CAPACITOR >

C401	1-164-159-11	CERAMIC	0.1uF	50V
C402	1-164-159-11	CERAMIC	0.1uF	50V
C403	1-164-159-11	CERAMIC	0.1uF	50V
C404	1-164-159-11	CERAMIC	0.1uF	50V
C405	1-126-154-11	ELECT	47uF	20% 6.3V

< CONNECTOR >

CN401	1-535-878-11	JUMPER, FILM (WITH TERMINAL)
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< DIODE >

D401	8-719-987-97	DIODE BR3371X
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< FLUORECENT INDICATOR >

FLD401	1-519-611-11	INDICATOR TUBE, FLUORESCENT
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< IC >

IC401	8-752-832-05	IC CXP50112-256Q
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< RESISTOR >

R401	1-249-425-11	CARBON	4.7K	5%	1/4W
R402	1-249-425-11	CARBON	4.7K	5%	1/4W
R403	1-249-433-11	CARBON	22K	5%	1/4W
R404	1-249-433-11	CARBON	22K	5%	1/4W
R405	1-249-411-11	CARBON	330	5%	1/4W

Ref. No.	Part No.	Description	Remark		
R406	1-249-411-11	CARBON	330	5%	1/4W
R407	1-249-433-11	CARBON	22K	5%	1/4W
R408	1-249-433-11	CARBON	22K	5%	1/4W
R409	1-249-433-11	CARBON	22K	5%	1/4W
R411	1-249-433-11	CARBON	22K	5%	1/4W

R412	1-249-433-11	CARBON	22K	5%	1/4W
R413	1-249-433-11	CARBON	22K	5%	1/4W
R414	1-249-433-11	CARBON	22K	5%	1/4W
R415	1-249-433-11	CARBON	22K	5%	1/4W
R416	1-249-433-11	CARBON	22K	5%	1/4W

R417	1-249-433-11	CARBON	22K	5%	1/4W
R418	1-249-433-11	CARBON	22K	5%	1/4W
R419	1-249-433-11	CARBON	22K	5%	1/4W
R420	1-249-433-11	CARBON	22K	5%	1/4W

< SWITCH >

S406	1-554-303-21	SWITCH, TACTILE (1)
S407	1-554-303-21	SWITCH, TACTILE (2)
S408	1-554-303-21	SWITCH, TACTILE (3)
S409	1-554-303-21	SWITCH, TACTILE (4)
S410	1-554-303-21	SWITCH, TACTILE (5)

S411	1-554-303-21	SWITCH, TACTILE (6)
S412	1-554-303-21	SWITCH, TACTILE (7)
S413	1-554-303-21	SWITCH, TACTILE (8)
S414	1-554-303-21	SWITCH, TACTILE (9)
S415	1-554-303-21	SWITCH, TACTILE (10)

S416	1-554-303-21	SWITCH, TACTILE (11)
S417	1-554-303-21	SWITCH, TACTILE (12)
S418	1-554-303-21	SWITCH, TACTILE (CHECK)
S419	1-554-303-21	SWITCH, TACTILE (CLEAR)
S420	1-554-303-21	SWITCH, TACTILE (>12)

S421	1-554-303-21	SWITCH, TACTILE (ON/OFF (PITCH CONTROL))
S422	1-554-303-21	SWITCH, TACTILE (- (PITCH CONTROL))
S423	1-554-303-21	SWITCH, TACTILE (+ (PITCH CONTROL))
S424	1-554-303-21	SWITCH, TACTILE (TIME)
S425	1-554-303-21	SWITCH, TACTILE (X1/X4)

S426	1-554-303-21	SWITCH, TACTILE (▶▶/▶▶)
S427	1-554-303-21	SWITCH, TACTILE (≡OPEN/CLOSE)
S428	1-554-303-21	SWITCH, TACTILE (VOCAL REDUCTION)
S429	1-554-303-21	SWITCH, TACTILE (>)
S430	1-554-303-21	SWITCH, TACTILE (II)

S431	1-554-303-21	SWITCH, TACTILE (■)
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< VIBRATOR >

X401	1-577-082-11	VIBRATOR, CERAMIC
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HEADPHONE

LED

LOADING

MAIN

Ref. No.	Part No.	Description	Remark
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*	1-637-175-11	HEADPHONE BOARD *****	
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< CAPACITOR >

C501	1-162-294-31	CERAMIC	0.001uF	10%	50V
C502	1-162-294-31	CERAMIC	0.001uF	10%	50V
C503	1-164-159-11	CERAMIC	0.1uF		50V
C504	1-124-465-00	ELECT	0.47uF	20%	50V
C535	1-124-589-11	ELECT	47uF	20%	16V
C536	1-124-589-11	ELECT	47uF	20%	16V

< CONNECTOR >

* CNP501	1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P	
* CNP502	1-564-337-00	PIN, CONNECTOR 3P	

< IC >

IC501	8-759-700-74	IC	RC4556S
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< JACK >

J501	1-507-796-71	JACK (HEADPHONES)	
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< RESISTOR >

R501	1-249-417-11	CARBON	1K	5%	1/4W
R502	1-249-423-11	CARBON	3.3K	5%	1/4W
R503	1-249-431-11	CARBON	15K	5%	1/4W
R504	1-249-402-11	CARBON	56	5%	1/4W
R505	1-249-417-11	CARBON	1K	5%	1/4W
R506	1-249-423-11	CARBON	3.3K	5%	1/4W
R507	1-249-431-11	CARBON	15K	5%	1/4W
R508	1-249-402-11	CARBON	56	5%	1/4W
R509	1-249-417-11	CARBON	1K	5%	1/4W
R546	1-249-429-11	CARBON	10K	5%	1/4W

< VARIABLE RESISTOR >

RV501	1-238-487-11	RES, VAR, CARBON 20K/20K	
RV501	1-238-487-11	(HEADPHONES LEVEL)	
RV502	1-241-311-11	RES, VAR, CARBON 50K (WITH SW)	
RV502	1-241-311-11	(DIGITAL ECHO)	

*	1-637-178-11	LED BOARD *****	
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< DIODE >

D402	8-719-987-97	DIODE	BR3371X
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Ref. No.	Part No.	Description	Remark
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*	1-632-202-11	LOADING BOARD *****	
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< CONNECTOR >

* CN301	1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P	
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< SWITCH >

S271	1-572-086-11	SWITCH, LEAF (LOAD OUT)	
S272	1-572-086-11	SWITCH, LEAF (LOAD IN)	

*	A-4617-910-A	MAIN BOARD, COMPLETE (US, Canadian) *****	
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*	A-4617-647-A	MAIN BOARD, COMPLETE (AEP, UK) *****	
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*	A-4617-651-A	MAIN BOARD, COMPLETE (E) *****	
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	7-682-147-15	SCREW, TR	
*	4-908-502-01	HEAT SINK	

< CAPACITOR >

C201	1-126-937-11	ELECT	4700uF	20%	16V
C202	1-126-937-11	ELECT	4700uF	20%	16V
C203	1-124-572-11	ELECT	100uF	20%	63V
C204	1-126-059-11	ELECT	10uF	20%	50V
C205	1-126-024-11	ELECT	220uF	20%	16V
C206	1-126-024-11	ELECT	220uF	20%	16V
C207	1-126-301-11	ELECT	1uF	20%	50V
C208	1-126-059-11	ELECT	10uF	20%	50V
C209	1-126-059-11	ELECT	10uF	20%	50V
C210	1-126-012-11	ELECT	470uF	20%	16V

C211	1-126-012-11	ELECT	470uF	20%	16V
C212	1-164-159-11	CERAMIC	0.1uF		50V
C301	1-162-208-31	CERAMIC	24PF	5%	50V
C302	1-162-206-31	CERAMIC	20PF	5%	50V
C303	1-164-159-11	CERAMIC	0.1uF		50V

C304	1-124-994-11	ELECT	100uF	20%	10V
C305	1-126-301-11	ELECT	1uF	20%	50V
C306	1-164-159-11	CERAMIC	0.1uF		50V
C307	1-161-374-11	CERAMIC	0.0015uF	20%	50V
C308	1-164-159-11	CERAMIC	0.1uF		50V

C309	1-162-306-11	CERAMIC	0.01uF	20%	16V
C310	1-126-300-11	ELECT	0.47uF	20%	50V
C311	1-136-161-00	FILM	0.047uF	5%	50V
C313	1-164-159-11	CERAMIC	0.1uF		50V
C314	1-126-162-11	ELECT	3.3uF	20%	50V

Ref. No.	Part No.	Description	Remark
C316	1-162-294-31	CERAMIC	0.001uF 10% 50V
C318	1-164-159-11	CERAMIC	0.1uF 50V
C319	1-164-159-11	CERAMIC	0.1uF 50V
C320	1-164-159-11	CERAMIC	0.1uF 50V
C321	1-126-012-11	ELECT	470uF 20% 16V
C322	1-126-012-11	ELECT	470uF 20% 16V
C323	1-130-481-00	MYLAR	0.0068uF 5% 50V
C324	1-130-475-00	MYLAR	0.0022uF 5% 50V
C325	1-130-481-00	MYLAR	0.0068uF 5% 50V
C326	1-130-475-00	MYLAR	0.0022uF 5% 50V
C327	1-130-485-00	MYLAR	0.015uF 5% 50V
C328	1-130-482-00	MYLAR	0.0082uF 5% 50V
C329	1-130-485-00	MYLAR	0.015uF 5% 50V
C330	1-130-482-00	MYLAR	0.0082uF 5% 50V
C331	1-124-910-11	ELECT	47uF 20% 50V
C332	1-124-910-11	ELECT	47uF 20% 50V
C333	1-126-059-11	ELECT	10uF 20% 50V
C334	1-126-059-11	ELECT	10uF 20% 50V
C335	1-164-159-11	CERAMIC	0.1uF 50V
C336	1-164-159-11	CERAMIC	0.1uF 50V
C337	1-164-159-11	CERAMIC	0.1uF 50V
C338	1-164-159-11	CERAMIC	0.1uF 50V
C339	1-164-159-11	CERAMIC	0.1uF 50V
C340	1-126-049-11	ELECT	22uF 20% 25V
C341	1-126-049-11	ELECT	22uF 20% 25V
C342	1-130-471-00	MYLAR	0.001uF 5% 50V
C343	1-130-471-00	MYLAR	0.001uF 5% 50V
C344	1-124-994-11	ELECT	100uF 20% 10V
C345	1-124-994-11	ELECT	100uF 20% 10V
C346	1-124-994-11	ELECT	100uF 20% 10V
C347	1-164-159-11	CERAMIC	0.1uF 50V
C348	1-126-157-11	ELECT	10uF 20% 16V
C391	1-124-910-11	ELECT	47uF 20% 50V
C392	1-162-199-31	CERAMIC	10PF 5% 50V
C395	1-162-207-31	CERAMIC	22PF 5% 50V

(Canadian, AEP, UK, E)

< CONNECTOR >

- * CNP201 1-580-230-11 PIN, CONNECTOR (PC BOARD) 3P
- * CNP301 1-568-844-11 SOCKET, CONNECTOR 29P
- * CNP302 1-568-822-11 SOCKET, CONNECTOR 22P
- * CNP303 1-564-708-11 PIN, CONNECTOR (SMALL TYPE) 6P
- * CNP304 1-564-709-11 PIN, CONNECTOR (SMALL TYPE) 7P

< TRIMMER >

CT301 1-141-227-00 CAP, TRIMMER 20PF

Ref. No.	Part No.	Description	Remark
< DIODE >			
D201	8-719-200-82	DIODE	11ES2
D202	8-719-200-82	DIODE	11ES2
D203	8-719-200-82	DIODE	11ES2
D204	8-719-200-82	DIODE	11ES2
D205	8-719-200-82	DIODE	11ES2
D206	8-719-200-82	DIODE	11ES2
D207	8-719-109-85	DIODE	RD5. 1ES-B2
D208	8-719-933-51	DIODE	HZS7C3L
D209	8-719-109-97	DIODE	RD6. 8ES-B2
D301	8-719-107-94	DIODE	1SS202-1

< IC >

IC201	8-759-630-21	IC	M5290P-16
IC202	8-759-633-42	IC	M5293L
IC301	8-752-337-26	IC	CXD2500AQ
IC302	8-752-337-09	IC	CXD2554P
IC303	8-759-917-18	IC	SN74HCU04AN
IC304	8-759-998-22	IC	PCM56P
IC305	8-759-998-22	IC	PCM56P
IC306	8-759-501-96	IC	BA7042
IC307	8-759-605-44	IC	M74HC6004P
IC308	8-759-945-58	IC	RC4558P
IC309	8-759-945-58	IC	RC4558P
IC310	8-759-945-58	IC	RC4558P
IC311	8-759-945-58	IC	RC4558P
IC312	8-759-945-58	IC	RC4558P
IC313	8-759-000-49	IC	MC14066BCP
IC314	8-759-945-58	IC	RC4558P

< JACK >

J301 1-569-442-11 JACK, PIN 2P (LINE OUT)

< IC LINK >

PS201	1-532-637-00	LINK, IC	1.0A (AEP, UK, E)
PS202	1-532-637-00	LINK, IC	1.0A (AEP, UK, E)

< TRANSISTOR >

Q201	8-729-141-83	TRANSISTOR	2SB1094-LK
Q202	8-729-808-77	TRANSISTOR	2SD1913SA-R
Q203	8-729-141-83	TRANSISTOR	2SB1094-LK
Q204	8-729-230-45	TRANSISTOR	2SC2458-YGR
Q205	8-729-900-89	TRANSISTOR	DTC144ES
Q206	8-729-119-76	TRANSISTOR	2SA1175-HFE
Q207	8-729-900-89	TRANSISTOR	DTC144ES
Q301	8-729-900-89	TRANSISTOR	DTC144ES
Q302	8-729-900-65	TRANSISTOR	DTA144ES
Q303	8-729-900-65	TRANSISTOR	DTA144ES

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q305	8-729-141-30	TRANSISTOR	2SC3623A-LK	R326	1-249-413-11	CARBON	470 5% 1/4W
Q306	8-729-141-30	TRANSISTOR	2SC3623A-LK	R327	1-249-413-11	CARBON	470 5% 1/4W
Q307	8-729-141-30	TRANSISTOR	2SC3623A-LK	R328	1-249-417-11	CARBON	1K 5% 1/4W
Q308	8-729-141-30	TRANSISTOR	2SC3623A-LK	R329	1-249-417-11	CARBON	1K 5% 1/4W
Q309	8-729-141-30	TRANSISTOR	2SC3623A-LK	R330	1-249-441-11	CARBON	100K 5% 1/4W
Q310	8-729-141-30	TRANSISTOR	2SC3623A-LK	R331	1-249-441-11	CARBON	100K 5% 1/4W
Q311	8-729-141-30	TRANSISTOR	2SC3623A-LK	R332	1-249-435-11	CARBON	33K 5% 1/4W
Q312	8-729-141-30	TRANSISTOR	2SC3623A-LK	R333	1-249-429-11	CARBON	10K 5% 1/4W
Q314	8-729-900-65	TRANSISTOR	DTA144ES	R334	1-249-435-11	CARBON	33K 5% 1/4W
Q315	8-729-900-65	TRANSISTOR	DTA144ES	R335	1-249-429-11	CARBON	10K 5% 1/4W
Q316	8-729-141-30	TRANSISTOR	2SC3623A-LK	R336	1-249-441-11	CARBON	100K 5% 1/4W
Q317	8-729-141-30	TRANSISTOR	2SC3623A-LK	R337	1-249-425-11	CARBON	4.7K 5% 1/4W
< RESISTOR >				R338	1-249-429-11	CARBON	10K 5% 1/4W
R201	1-249-425-11	CARBON	4.7K 5% 1/4W	R339	1-249-425-11	CARBON	4.7K 5% 1/4W
R202	1-249-425-11	CARBON	4.7K 5% 1/4W	R340	1-249-429-11	CARBON	10K 5% 1/4W
R203	1-249-438-11	CARBON	56K 5% 1/4W	R341	1-249-425-11	CARBON	4.7K 5% 1/4W
R204	1-249-429-11	CARBON	10K 5% 1/4W	R342	1-249-417-11	CARBON	1K 5% 1/4W
R205	1-249-425-11	CARBON	4.7K 5% 1/4W	R343	1-249-417-11	CARBON	1K 5% 1/4W
R206	1-249-417-11	CARBON	1K 5% 1/4W	R344	1-249-425-11	CARBON	4.7K 5% 1/4W
R207	1-249-429-11	CARBON	10K 5% 1/4W	R345	1-249-425-11	CARBON	4.7K 5% 1/4W
R208	1-249-411-11	CARBON	330 5% 1/4W	R346	1-249-429-11	CARBON	10K 5% 1/4W
R209	1-249-410-11	CARBON	270 5% 1/4W	R347	1-249-425-11	CARBON	4.7K 5% 1/4W
R210	1-249-423-11	CARBON	3.3K 5% 1/4W	R348	1-249-425-11	CARBON	4.7K 5% 1/4W
R211	1-249-435-11	CARBON	33K 5% 1/4W	R349	1-249-429-11	CARBON	10K 5% 1/4W
R301	1-249-417-11	CARBON	1K 5% 1/4W	R350	1-249-425-11	CARBON	4.7K 5% 1/4W
R302	1-249-417-11	CARBON	1K 5% 1/4W	R351	1-249-441-11	CARBON	100K 5% 1/4W
R303	1-249-417-11	CARBON	1K 5% 1/4W	R352	1-249-441-11	CARBON	100K 5% 1/4W
R304	1-249-417-11	CARBON	1K 5% 1/4W	R353	1-249-429-11	CARBON	10K 5% 1/4W
R305	1-249-413-11	CARBON	470 5% 1/4W (US)	R354	1-249-429-11	CARBON	10K 5% 1/4W
R305	1-249-411-11	CARBON	330 5% 1/4W (Canadian, AEP, UK, E)	R355	1-249-435-11	CARBON	33K 5% 1/4W
R306	1-249-417-11	CARBON	1K 5% 1/4W	R356	1-249-435-11	CARBON	33K 5% 1/4W
R307	1-249-417-11	CARBON	1K 5% 1/4W	R357	1-249-441-11	CARBON	100K 5% 1/4W
R308	1-249-417-11	CARBON	1K 5% 1/4W	R358	1-249-441-11	CARBON	100K 5% 1/4W
R309	1-249-429-11	CARBON	10K 5% 1/4W	R359	1-249-441-11	CARBON	100K 5% 1/4W
R310	1-249-441-11	CARBON	100K 5% 1/4W	R360	1-249-417-11	CARBON	1K 5% 1/4W
R311	1-249-423-11	CARBON	3.3K 5% 1/4W	R361	1-249-423-11	CARBON	3.3K 5% 1/4W
R312	1-249-423-11	CARBON	3.3K 5% 1/4W	R362	1-249-411-11	CARBON	330 5% 1/4W
R313	1-249-429-11	CARBON	10K 5% 1/4W	R363	1-249-411-11	CARBON	330 5% 1/4W
R319	1-249-425-11	CARBON	4.7K 5% 1/4W	R364	1-249-436-11	CARBON	39K 5% 1/4W
R320	1-249-411-11	CARBON	330 5% 1/4W	R365	1-249-429-11	CARBON	10K 5% 1/4W
R321	1-249-441-11	CARBON	100K 5% 1/4W	R366	1-249-441-11	CARBON	100K 5% 1/4W
R322	1-249-433-11	CARBON	22K 5% 1/4W	R367	1-249-411-11	CARBON	330 5% 1/4W
R323	1-249-411-11	CARBON	330 5% 1/4W	R368	1-249-414-11	CARBON	560 5% 1/4W
R324	1-249-411-11	CARBON	330 5% 1/4W	R369	1-249-433-11	CARBON	22K 5% 1/4W
R325	1-249-411-11	CARBON	330 5% 1/4W	R370	1-249-423-11	CARBON	3.3K 5% 1/4W
				R371	1-249-429-11	CARBON	10K 5% 1/4W
				R372	1-249-429-11	CARBON	10K 5% 1/4W
				R373	1-249-436-11	CARBON	39K 5% 1/4W
				R374	1-249-441-11	CARBON	100K 5% 1/4W

MAIN

MICROPHONE

Ref. No.	Part No.	Description	Remark		
R375	1-249-411-11	CARBON	330	5%	1/4W
R376	1-249-414-11	CARBON	560	5%	1/4W
R377	1-249-423-11	CARBON	3.3K	5%	1/4W
R378	1-249-433-11	CARBON	22K	5%	1/4W
R379	1-249-441-11	CARBON	100K	5%	1/4W
R380	1-249-417-11	CARBON	1K	5%	1/4W
R382	1-249-441-11	CARBON	100K	5%	1/4W
R383	1-249-405-11	CARBON	100	5%	1/4W
R384	1-249-405-11	CARBON	100	5%	1/4W
R385	1-249-415-11	CARBON	680	5%	1/4W
R386	1-249-425-11	CARBON	4.7K	5%	1/4W
R387	1-249-441-11	CARBON	100K	5%	1/4W
R388	1-249-429-11	CARBON	10K	5%	1/4W
R389	1-249-423-11	CARBON	3.3K	5%	1/4W
R390	1-249-429-11	CARBON	10K	5%	1/4W
R392	1-249-425-11	CARBON	4.7K	5%	1/4W
R393	1-249-425-11	CARBON	4.7K	5%	1/4W
R394	1-249-429-11	CARBON	10K	5%	1/4W
R395	1-249-429-11	CARBON	10K	5%	1/4W
R396	1-249-425-11	CARBON	4.7K	5%	1/4W
R397	1-249-425-11	CARBON	4.7K	5%	1/4W
R398	1-249-417-11	CARBON	1K	5%	1/4W
R399	1-249-433-11	CARBON	22K	5%	1/4W

< SWITCH >

SW201 1-571-722-11 SWITCH, VOLTAGE SELECTION (E)

< VIBRATOR >

X301 1-567-908-11 VIBRATOR, CRYSTAL

* A-4617-650-A MICROPHONE BOARD, COMPLETE

< CAPACITOR >

C505	1-126-301-11	ELECT	1uF	20%	50V
C506	1-162-294-31	CERAMIC	0.001uF	10%	50V
C507	1-162-290-31	CERAMIC	470PF	10%	50V
C508	1-126-300-11	ELECT	0.47uF	20%	50V
C509	1-126-301-11	ELECT	1uF	20%	50V
C510	1-162-294-31	CERAMIC	0.001uF	10%	50V
C511	1-162-290-31	CERAMIC	470PF	10%	50V
C512	1-126-300-11	ELECT	0.47uF	20%	50V
C513	1-124-994-11	ELECT	100uF	20%	10V
C514	1-124-994-11	ELECT	100uF	20%	10V

Ref. No.	Part No.	Description	Remark		
C515	1-126-301-11	ELECT	1uF	20%	50V
C516	1-126-301-11	ELECT	1uF	20%	50V
C517	1-130-474-00	MYLAR	0.0018uF	5%	50V
C518	1-162-306-11	CERAMIC	0.01uF	20%	16V
C519	1-164-159-11	CERAMIC	0.1uF		50V
C520	1-136-165-00	FILM	0.1uF	5%	50V
C521	1-136-165-00	FILM	0.1uF	5%	50V
C522	1-164-159-11	CERAMIC	0.1uF		50V
C524	1-126-301-11	ELECT	1uF	20%	50V
C525	1-126-177-11	ELECT	100uF	20%	10V
C526	1-124-910-11	ELECT	47uF	20%	50V
C527	1-126-163-11	ELECT	4.7uF	20%	50V
C528	1-136-165-00	FILM	0.1uF	5%	50V
C529	1-162-282-31	CERAMIC	100PF	10%	50V
C530	1-124-465-00	ELECT	0.47uF	20%	50V
C531	1-136-165-00	FILM	0.1uF	5%	50V
C532	1-161-329-00	CERAMIC	0.0068uF	30%	16V
C533	1-162-215-31	CERAMIC	47PF	5%	50V
C534	1-164-159-11	CERAMIC	0.1uF		50V

< CONNECTOR >

* CNP503 1-564-709-11 PIN, CONNECTOR (SMALL TYPE) 7P

< DIODE >

D501	8-719-107-94	DIODE	1SS202-1
D502	8-719-107-94	DIODE	1SS202-1
D503	8-719-107-94	DIODE	1SS202-1

< IC >

IC502	8-759-634-50	IC	M5218AL
IC503	8-759-634-50	IC	M5218AL
IC504	8-759-604-81	IC	M50195P
IC505	8-759-821-13	IC	LM3364K-15
IC506	8-759-700-48	IC	LM2903S

< JACK >

J502	1-507-854-00	JACK, PHONE (MIC 1)
J503	1-507-854-00	JACK, PHONE (MIC 2)

< TRANSISTOR >

Q501	8-729-900-65	TRANSISTOR	DTA144ES
Q502	8-729-900-65	TRANSISTOR	DTA144ES
Q503	8-729-141-30	TRANSISTOR	2SC3623A-LK
Q504	8-729-141-30	TRANSISTOR	2SC3623A-LK

< RESISTOR >

R510	1-249-429-11	CARBON	10K	5%	1/4W
R511	1-249-411-11	CARBON	330	5%	1/4W
R512	1-249-429-11	CARBON	10K	5%	1/4W

MICROPHONE

SW

Ref. No.	Part No.	Description	Remark		
R513	1-249-413-11	CARBON	470	5%	1/4W
R514	1-249-431-11	CARBON	15K	5%	1/4W
R515	1-249-429-11	CARBON	10K	5%	1/4W
R516	1-249-411-11	CARBON	330	5%	1/4W
R517	1-249-429-11	CARBON	10K	5%	1/4W
R518	1-249-413-11	CARBON	470	5%	1/4W
R519	1-249-431-11	CARBON	15K	5%	1/4W
R520	1-249-429-11	CARBON	10K	5%	1/4W
R521	1-249-425-11	CARBON	4.7K	5%	1/4W
R522	1-249-429-11	CARBON	10K	5%	1/4W
R523	1-249-437-11	CARBON	47K	5%	1/4W
R524	1-249-437-11	CARBON	47K	5%	1/4W
R525	1-249-429-11	CARBON	10K	5%	1/4W
R526	1-249-433-11	CARBON	22K	5%	1/4W
R527	1-249-433-11	CARBON	22K	5%	1/4W
R528	1-249-429-11	CARBON	10K	5%	1/4W
R529	1-249-423-11	CARBON	3.3K	5%	1/4W
R530	1-249-433-11	CARBON	22K	5%	1/4W
R531	1-249-421-11	CARBON	2.2K	5%	1/4W
R532	1-249-441-11	CARBON	100K	5%	1/4W
R533	1-249-435-11	CARBON	33K	5%	1/4W
R534	1-249-425-11	CARBON	4.7K	5%	1/4W
R535	1-249-423-11	CARBON	3.3K	5%	1/4W
R536	1-249-437-11	CARBON	47K	5%	1/4W
R537	1-249-433-11	CARBON	22K	5%	1/4W
R538	1-249-440-11	CARBON	82K	5%	1/4W
R539	1-249-429-11	CARBON	10K	5%	1/4W
R540	1-249-421-11	CARBON	2.2K	5%	1/4W
R541	1-249-433-11	CARBON	22K	5%	1/4W
R542	1-247-903-00	CARBON	1M	5%	1/4W
R545	1-249-441-11	CARBON	100K	5%	1/4W
< VARIABLE RESISTOR >					
RV503	1-241-310-11	RES, VAR, CARBON 50K/50K			
< VIBRATOR >					
X501	1-577-082-11	VIBRATOR, CERAMIC			

*	1-637-177-11	SW BOARD			

< CAPACITOR >					
C406	1-164-159-11	CERAMIC	0.1uF		50V

Ref. No.	Part No.	Description	Remark
< CONNECTOR >			
*	CNP402	1-564-339-00 PIN, CONNECTOR 5P	
*	CNP403	1-564-338-00 PIN, CONNECTOR 4P	
*	CNP404	1-564-339-61 PIN, CONNECTOR 5P	
*	CNP405	1-564-336-00 PIN, CONNECTOR 2P	
< IC >			
IC402	8-749-920-83	IC GPIU52XB	
< SWITCH >			
S401	1-570-157-51	SWITCH, SLIDE (AUTO PAUSE)	
S402	1-554-118-00	SWITCH, PUSH (1 KEY) (POWER)	
S403	1-554-303-21	SWITCH, TACTILE (REPEAT (PLAY MODE))	
S404	1-554-303-21	SWITCH, TACTILE (SHUFFLE (PLAY MODE))	
S405	1-554-303-21	SWITCH, TACTILE (PROGRAM (PLAY MODE))	

MISCELLANEOUS			

△12	1-590-836-11	CORD, POWER (US, Canadian)	
△18	1-558-943-41	CORD, POWER (E)	
19	1-575-160-11	WIRE, FLAT TYPE (22 CORE)	
△20	1-569-007-11	ADAPTER, CONVERSION 2P (E)	
△21	1-575-651-21	CORD, POWER (AEP)	
△22	1-558-946-21	CORD, POWER (UK)	
* 111	1-452-538-11	MAGNET	
△157	8-848-144-11	DEVICE, OPTICAL KSS-240A	
159	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
M101	X-4917-523-3	MOTOR ASSY (SLED)	
M102	X-4917-504-1	MOTOR ASSY (SPINDLE)	
M191	A-4604-363-A	MOTOR (L) ASSY (LOADING)	
△T901	1-449-921-11	TRANSFORMER, POWER (US, Canadian)	
△T901	1-449-922-11	TRANSFORMER, POWER (AEP, UK)	
△T901	1-449-923-11	TRANSFORMER, POWER (E)	

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
		ACCESSORIES & PACKING MATERIALS	

	1-465-870-11	REMOTE COMMANDER (RM-DK112) (E)	
	1-465-947-11	REMOTE COMMANDER (RM-DK113)	
		(US, Canadian, AEP, UK)	
	1-558-271-11	CORD, CONNECTION	
	2-181-754-01	COVER, BATTERY	
	3-754-019-11	MANUAL, INSTRUCTION	
		(ENGLISH/FRENCH/SPANISH/PORTUGUESE)	
	3-754-019-41	MANUAL, INSTRUCTION	
		(GERMAN/DUTCH/SWEDISH/ITALIAN) (AEP)	
*	4-922-998-01	CUSHION	
*	4-941-548-01	LABEL, CLASS 1 (AEP, UK, E)	
*	4-942-163-21	INDIVIDUAL CARTON (E)	
*	4-948-450-31	INDIVIDUAL CARTON (US, Canadian, AEP, UK)	
	8-812-030-90	MICROPHONE, DYNAMIC F-VJ10A (E)	

