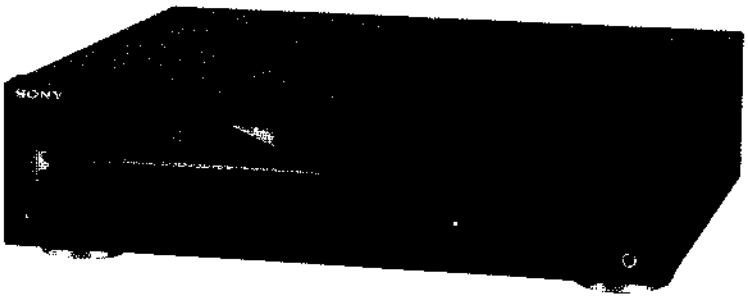
CDP-X33ES

SERVICE MANUAL

US Model
Canadian Model
AEP Model
UK Model



Model Name Using Similar Mechanism	CDP-338ESD/608ESD
CD Mechanism Name	CDM11E-6C
Base Unit Name	BU-6C

SPECIFICATIONS

Compact disc player

Frequency response	2 Hz – 20 kHz ±0,5 dB
Signal to noise ratio	More than 113 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0020%
Channel separation	More than 110 dB

Outputs

LINE OUT (FIXED) (phono jacks)	Output level 2 V (at 50 kiloohms) Load impedance over 10 kiloohms
LINE OUT (VARIABLE) (phono jacks)	Output level max. 2 V (at 50 kiloohms) Load impedance over 50 kiloohms
DIGITAL OUT (OPTICAL) (optical output connector)	Wave length 660 nm Output level – 18 dBm
HEADPHONES (Stereo phone jack)	Output level max. 28 mW Load impedance 32 ohms

General

Power requirements	**AEP Model** 220 V AC (or 240 V AC adjustable by Sony personnel), 50/60 Hz **UK Model** 240 V AC (or 220 V AC adjustable by Sony personnel), 50/60 Hz **US, Canadian Models** 120 V 60 Hz
Power consumption	20 W
Dimensions (approx., including projections)	430×125×375 mm (w/h/d) (17×5×14 7/8 inches)
Weight (approx).	10 kg (22 lbs 1 oz)

Remote commander (RM-D590)

Remote control system	Infrared control
Power requirements	3 V DC with two batteries size AA (IEC designation R6)
Dimensions	67×18×175 mm (w/h/d) (2 3/4×23/32×7 inches)
Weight	150 g (5.3 oz) Including batteries

Supplied accessories

Connecting cord	1 (2 phono plugs ↔ 2 phono plugs)
Remote commander	1
Size AA batteries	2

Optional accessory

Audio optical connecting cord POC-15

Design and specifications subject to change without notice

MICROFILM

COMPACT DISC PLAYER

SONY

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SAFETY-RELATED COMPONENT WARNING!!

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

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

SAFETY CHECK-OUT

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

LEAKAGE TEST

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

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

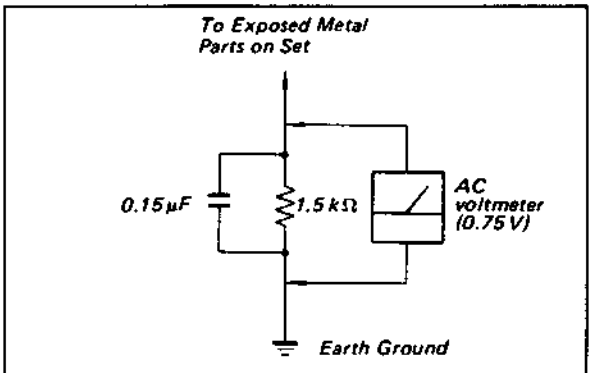
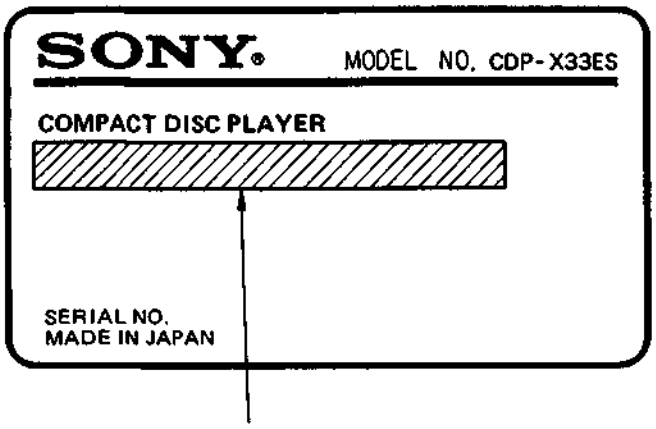


Fig. A. Using an AC voltmeter to check AC leakage.

MODEL IDENTIFICATION
– Specification Labels –

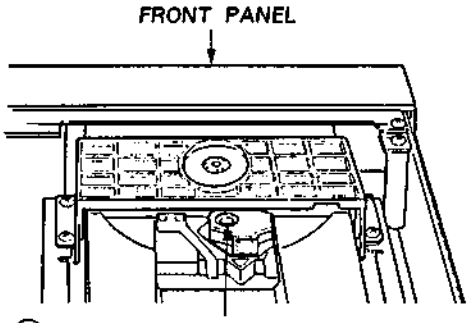


US, Canadian models : AC : 120V 60Hz 22W
AEP model : AC : 220V ∿50/60Hz
UK model : AC : 240V ∿50/60Hz

– SERVICING NOTE –

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Turn POWER switch on with no disc inserted and disc table closed.
2. Confirm that the operation indicated in Fig. A is performed while observing the objective lens.



① *Confirm that laser beam is spread.*
② *Up and down motion of the objective lens. (3 times)*

Fig. A

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 25 cm away from the objective lens.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

CAUTION

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

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

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

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

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

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

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

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

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

     * Målt i 1,6 mm afstand fra overfladen af objektivlinsen på den optiske pick-up enhed.

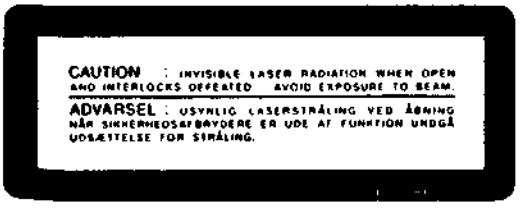
   - Klassifikation: Klasse IIIb.

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

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning

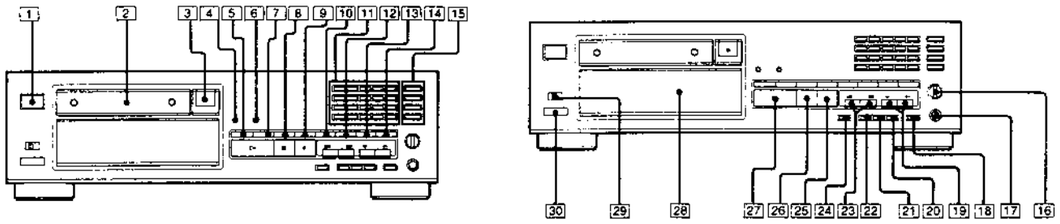


VAROITUS: Laite sisältää, laserdiodin, joka lähettää (näkymätöntä) silmille vaarallista lasersateilyä.

SECTION 1
GENERAL

Location of Controls

Front Panel

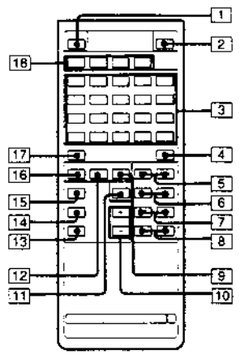


1 POWER switch
2 Disc tray
3 ⏏ (open/close) button
4 DISPLAY MODE button
5 REPEAT button
6 TIME/MEMO button
7 FADER (fade in/fade out) button
8 CHECK (program check) button
9 CLEAR (program clear) button
10 FILE (custom file) button
11 Numeric buttons
12 ERASE (memory erase) button
13 >20 (over 20) button
14 MULTI PGM button
15 PLAY MODE buttons
CONTINUE button
SHUFFLE button,
PROGRAM button
C. (custom) INDEX button

16 LINE OUT/PHONE LEVEL control
17 HEADPHONES jack
18 LEVEL FILE button
19 ◀◀ ▶▶ (manual search) buttons
20 TIME SET button
21 EDIT/TIME FADE button
22 PEAK SEARCH button
23 ⏮ ⏭ (AMS*) buttons
24 FILE RECALL button
25 ■ (stop) button
26 ❚❚ (pause) button
27 ▶ (play) button
28 Display window
29 TIMER switch
30 Remote sensor

* AMS is the abbreviation of Automatic Music Sensor.

Remote Commander (RM-D590)



1 ⏏ (open/close) button
2 DISPLAY MODE button
3 Numeric buttons
4 FILE (custom file) button
5 ⏮ ⏭ AMS buttons
6 ← →INDEX buttons
7 ◀◀ ▶▶ (manual search) buttons
8 ◀◀ ▶▶ SLOW (low speed manual search) buttons
9 AUTO SPACE button
10 LINEOUT VOLUME (line out/headphone volume) buttons
11 FADER (fade in/fade out) button
12 A ↔ B repeat button
13 ■ (stop) button
14 ❚❚ (pause) button
15 ▶ (play) button
16 CLEAR/REPEAT button
(A ↔ B repeat clear/repeat) button
17 >20 (over 20) button
18 PLAY MODE buttons
CONTINUE button
SHUFFLE button,
PGM (program) button.
C.INDEX button

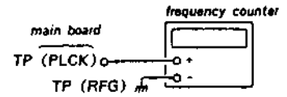
SECTION 2
ELECTRICAL ADJUSTMENTS

ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-18 (Part No: 3-702-101-01) disc unless otherwise indicated.
3. Use the oscilloscope with more than 10 MΩ impedance.

RF PLL Lock Frequency Check

Procedure:

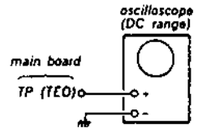


1. Ground TP (ADJ) for adjustment mode.
2. Ground TP (ASY).
3. Connect the frequency counter to TP (PLCK).
4. Turn the power on.
5. Set disc (YESD-18) and play 5th program.
6. Confirm that the reading on frequency counter is 4.3218MHz ± 30kHz.

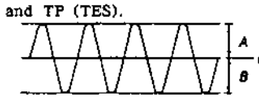
E-F Balance Check

This check should be made after replacing the optical pick-up block.

Procedure:



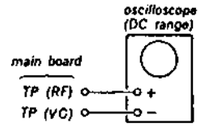
1. Ground TP (ADJ) for adjustment mode.
2. Ground TP (TES) with lead wire.
3. Connect oscilloscope to TP (TEO).
4. Set disc (YEDS-18) and press ▷PLAY button.
5. Confirm that the traverse waveform is symmetrical about 0V-axis.
6. Turn the power off and remove the lead wire connected to TP (ADJ) and TP (TES).



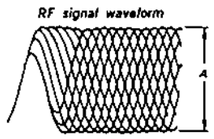
RF Level Check

This check should be made after replacing the optical pick-up block.

Procedure:



1. Ground TP (ADJ) for adjustment mode.
2. Connect the oscilloscope to TP (RF) and TP (GND).
3. Set disc (YEDS-18) and press PLAY button.
4. Confirm that waveform eye pattern is clear and RF level is optimum. The optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform.
5. Turn the power off.



A = 1.3 ± 0.3 (Vp-p)

REFERENCE

Focus/Tracking Gain Adjustments

A frequency responce analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow up (vertical and horizontal) relative to mechanical noise and shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

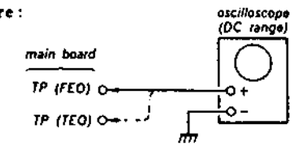
Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for ■ STOP → ▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.) (Normally takes about 1 seconds.)	low	low or high
• Music does not start and disc continues to rotate for ■ STOP → ▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.)	–	low
• Sound is interrupted during PLAY or time counter display stops progressing.	–	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

– Primary Adjustment –

Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the position after the primary adjustment are only a little different, return the controls to the original position.

Procedure:



SECTION 2
TRICAL ADJUSTMENTS

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REFERENCE

Focus/Tracking Gain Adjustments

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Focus/tracking gain determines the pick-up follow up (vertical and horizontal) relative to mechanical noise and shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

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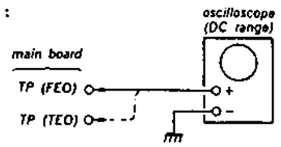
• Music does not start and disc continues to rotate for ■ STOP → ▷ PLAY or automatic selection. (⏮, ⏭ buttons pressed.)	–	low
• Sound is interrupted during PLAY or time counter display stops progressing.	–	low
• More noise during 2-axis device operation.	high	high

The following is a simple adjustment method.

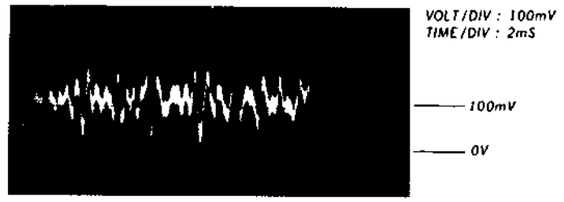
– Primary Adjustment –

Note : Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the position after the primary adjustment are only a little different, return the controls to the original position.

Procedure :

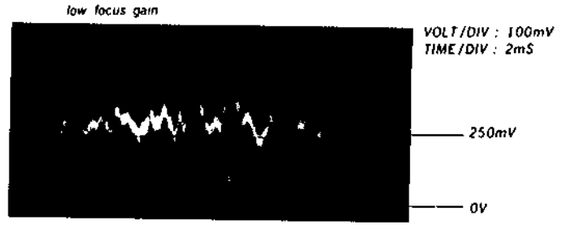


1. Keep the set horizontal.
   (If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Put the set into test mode.
3. Set disc (YEDS-18) and turn POWER switch on.
4. Connect oscilloscope to main amp board TP (FEO).
5. Adjust RV201 so that the waveform is as shwon in the figure below. (focus gain adjustment)



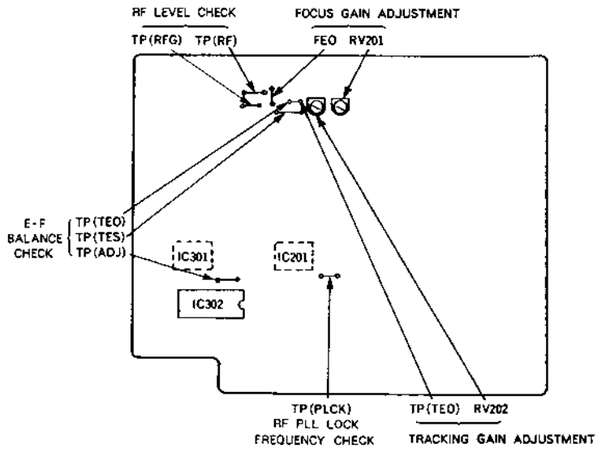
- Incorrent Examples (DC level changes more than on adjusted waveform)

low focus gain



high focus gain

Adjustment Location : MAIN BOARD – Component side –



6. Connect oscilloscope to main board TP (TEO).
7. Adjust RV202 so that the waveform is as shown in the figure below. (tracking gain adjustment)
8. Turn POWER switch off.

- Incorrect Examples (fundamental wave appears)

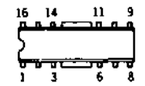
low tracking gain

high tracking gain
higher fundamental wave than for low gain)

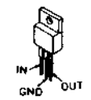
SECTION 3
DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUTS

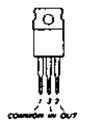
CXA1291P



M5F78M12
M5F7805



M5F7905
M5F7912

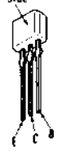


DTA114ES
DTA124ES
DTC114ES
DTC144ES

DTC114EF
2SD1293M

2SA1175-HFE
2SC2785-HFE

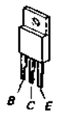
letter side



2SC1845-EA
2SC2878-B

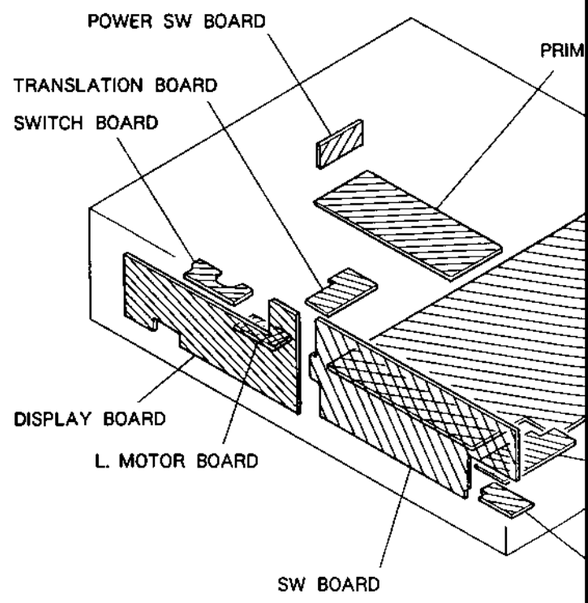
2SD774-34

2SD1944-K



2SK161-GR

3-2. CIRCUIT BOARDS LOCATION



6. Connect oscilloscope to main board TP (TEO).
7. Adjust RV202 so that the waveform is as shown in the figure below. (tracking gain adjustment)
8. Turn POWER switch off.

• Incorrect Examples (fundamental wave appears)

low tracking gain

high tracking gain
higher fundamental wave than for low gain)

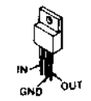
JUSTMENT

SECTION 3
DIAGRAMS

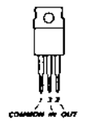
3-1. SEMICONDUCTOR LEAD LAYOUTS

CXA1291P

M5F78M12
M5F7805

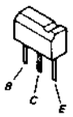


M5F7905
M5F7912

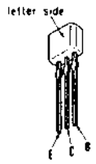


DTA114ES
DTA124ES
DTC114ES
DTC144ES

DTC114EF
2SD1293M



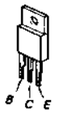
2SA1175-HFE
2SC2785-HFE



2SC1845-EA
2SC2878-B

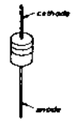
2SD774-34

2SD1944-K

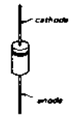


2SK161-GR

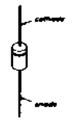
HZS36-2L
HZS7B3L
RD5.1JS-B1
1SS202-1



1S1585
10E2

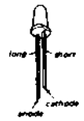


30DF2-FA

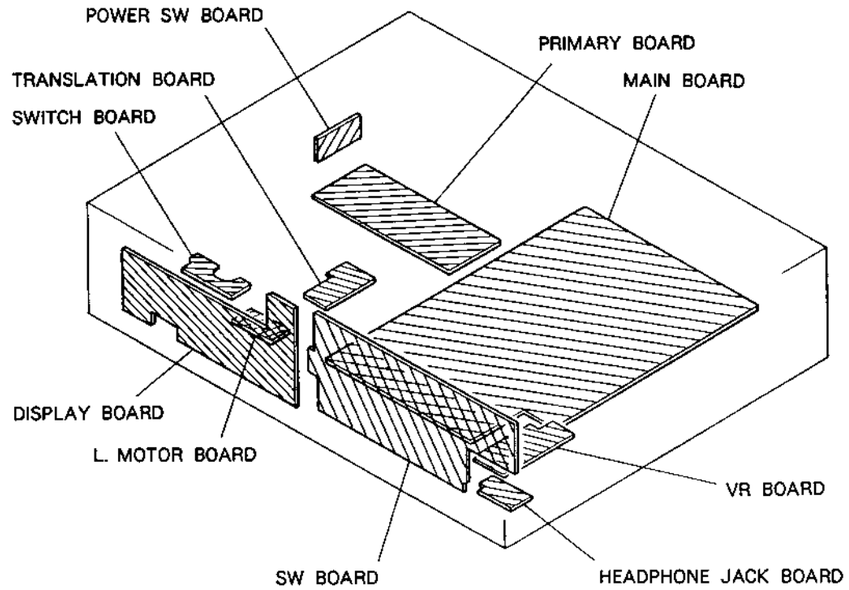


AA5534S

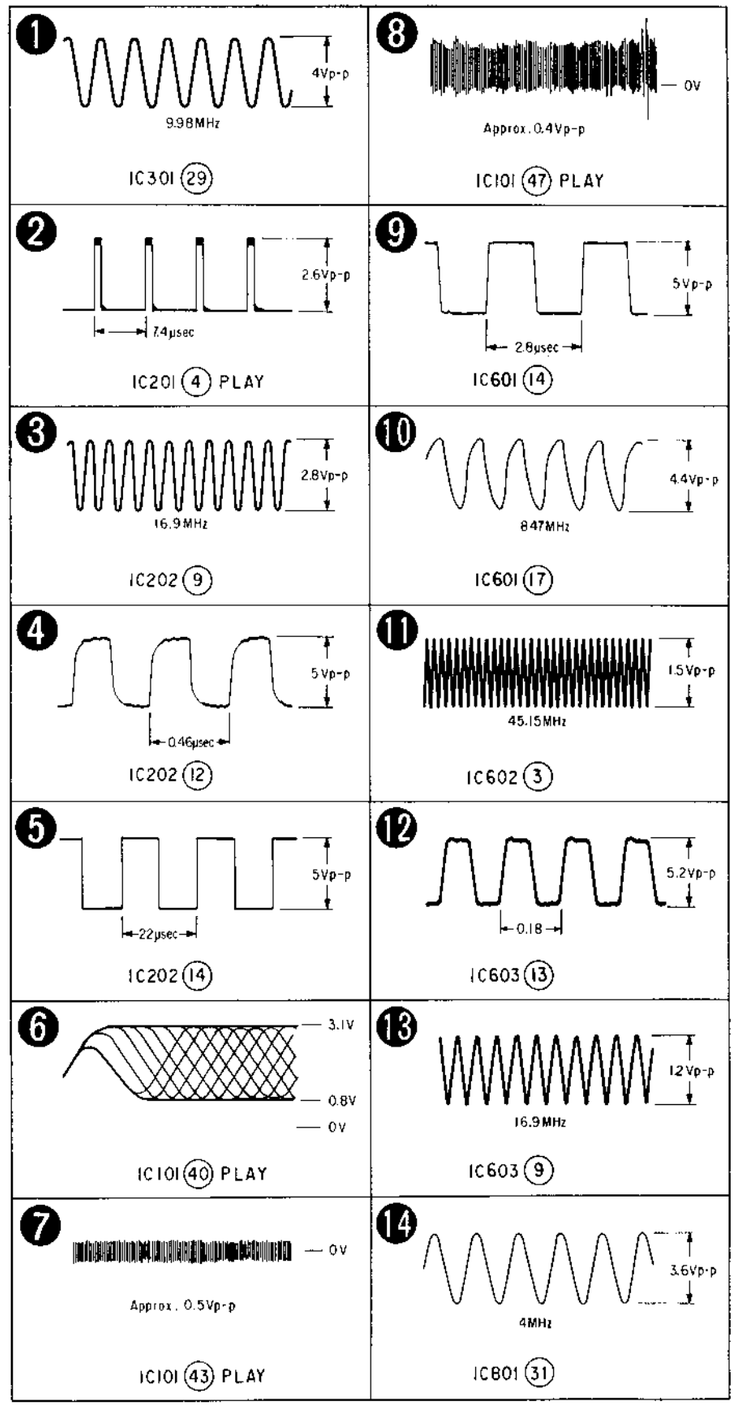
BG5535S



3-2. CIRCUIT BOARDS LOCATION



· WAVEFORMS



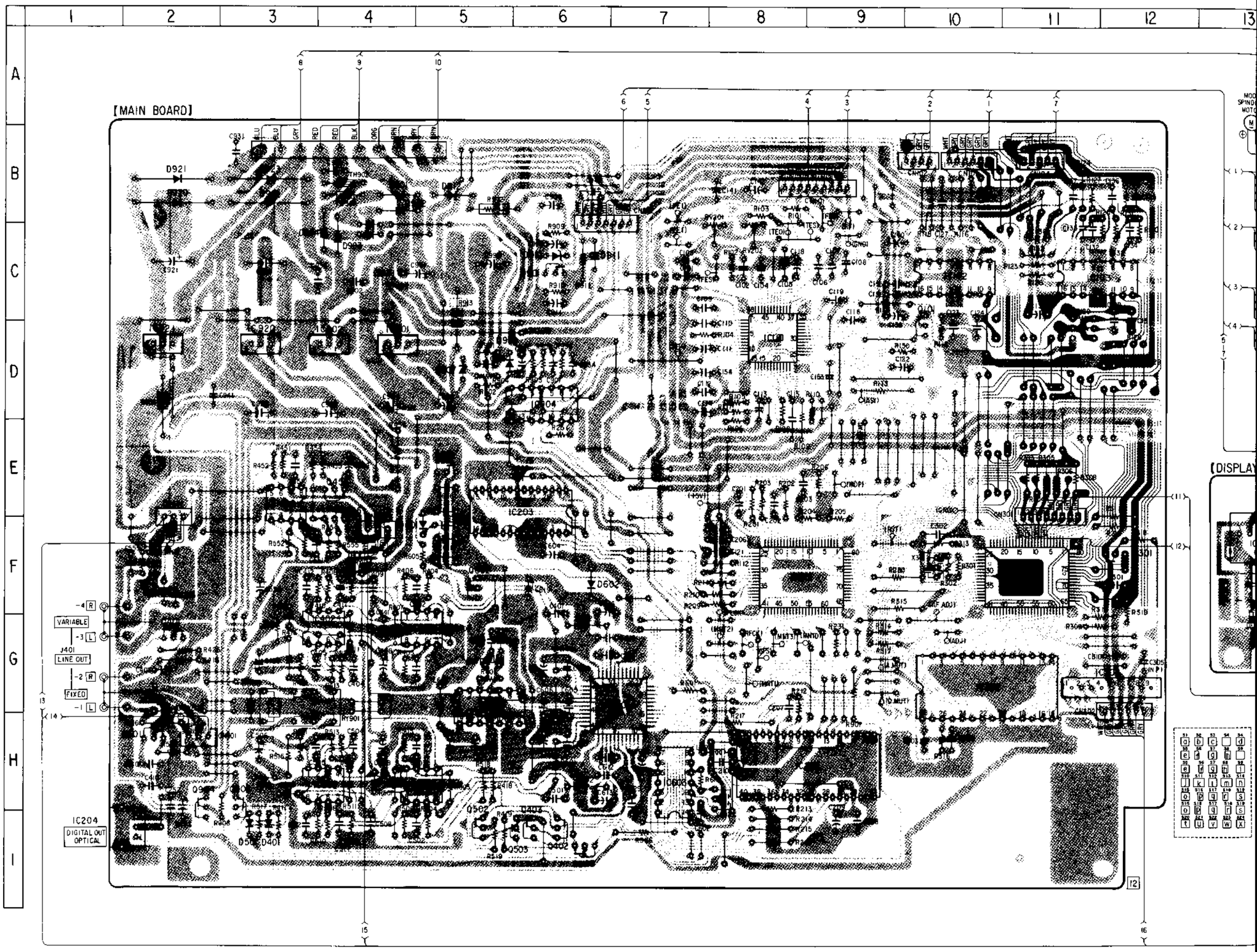
3-3. PRINTED WIRING BOARDS

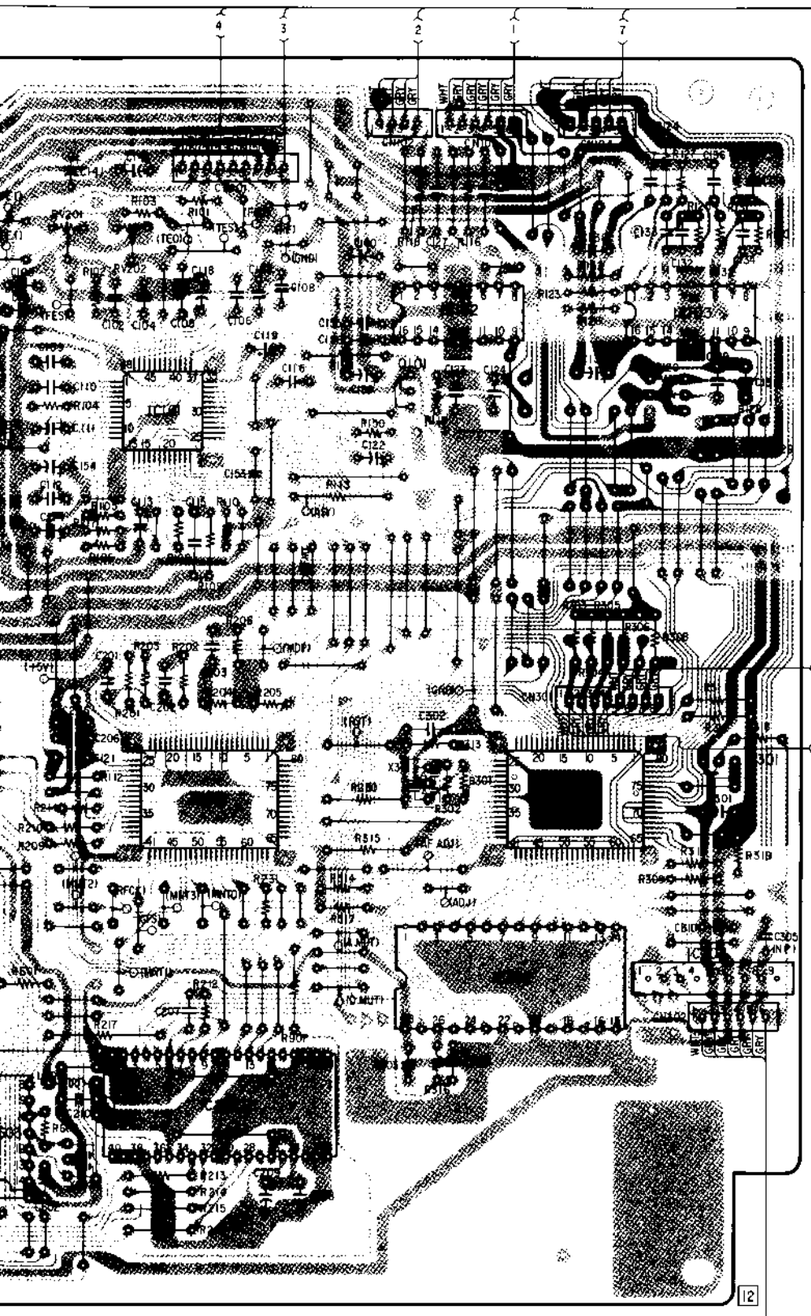
• Semiconductor Location

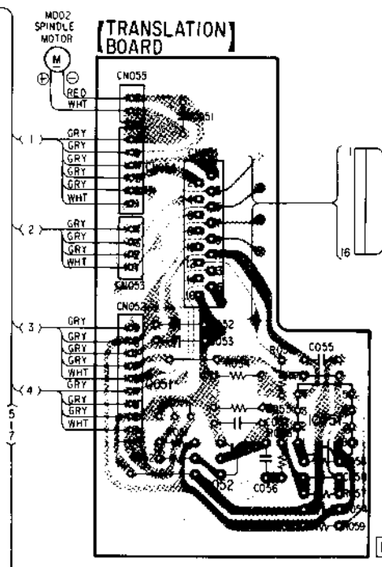
Ref. No.	Location	Ref. No.	Location
D401	I-3	IC901	D-4
D501	I-3	IC902	D-4
D601	F-5	IC904	D-6
D602	F-7	IC920	D-3
D603	F-5	IC921	D-2
D701	H-24		
D702	H-24	Q051	D-14
D703	H-25	Q052	D-14
D704	H-25	Q101	C-10
D705	H-25	Q301	F-12
D706	H-24	Q401	G-2
D707	H-23	Q402	I-6
D708	G-22	Q403	I-6
D709	G-24	Q451	E-4
D801	H-20	Q501	H-2
D901	B-5	Q502	I-5
D902	B-5	Q503	I-6
D903	B-4	Q551	E-4
D904	B-4	Q601	E-5
D905	C-4	Q602	F-5
D906	C-4	Q801	F-17
D907	D-5	Q802	F-17
D908	D-6	Q803	F-20
D909	G-3	Q804	F-20
D910	C-6	Q901	C-6
D911	C-7	Q902	H-3
D912	B-5	Q903	I-6
D920	B-2	Q904	H-3
D921	B-2		
D922	B-3		
D923	B-3		
IC051	D-15		
IC101	D-8		
IC102	C-10		
IC103	C-12		
IC201	F-9		
IC202	H-9		
IC203	E-6		
IC204	I-1		
IC301	F-11		
IC302	G-11		
IC303	G-12		
IC401	G-5		
IC402	G-4		
IC450	E-3		
IC501	H-5		
IC502	H-4		
IC601	G-7		
IC602	G-5		
IC603	H-7		
IC801	F-19		
IC802	F-13		

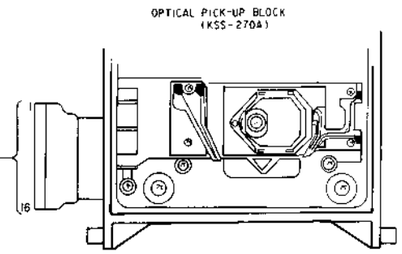
Note on Mounting Diagram:

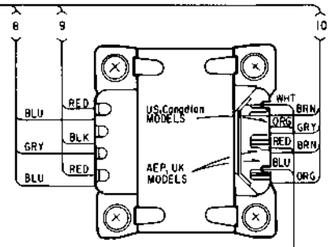
- o—— : parts extracted from the component side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.

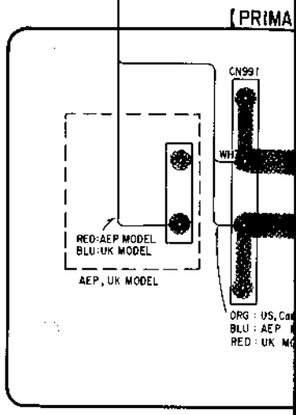


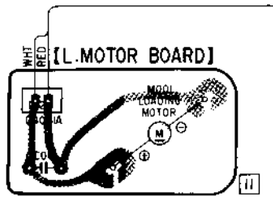


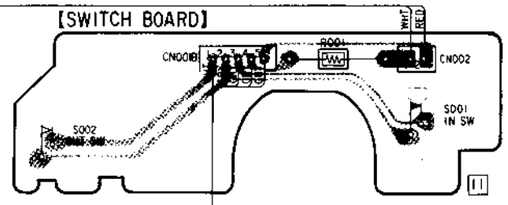

MD02
SPINDLE
MOTOR
[TRANSLATION]
BOARD
CN055

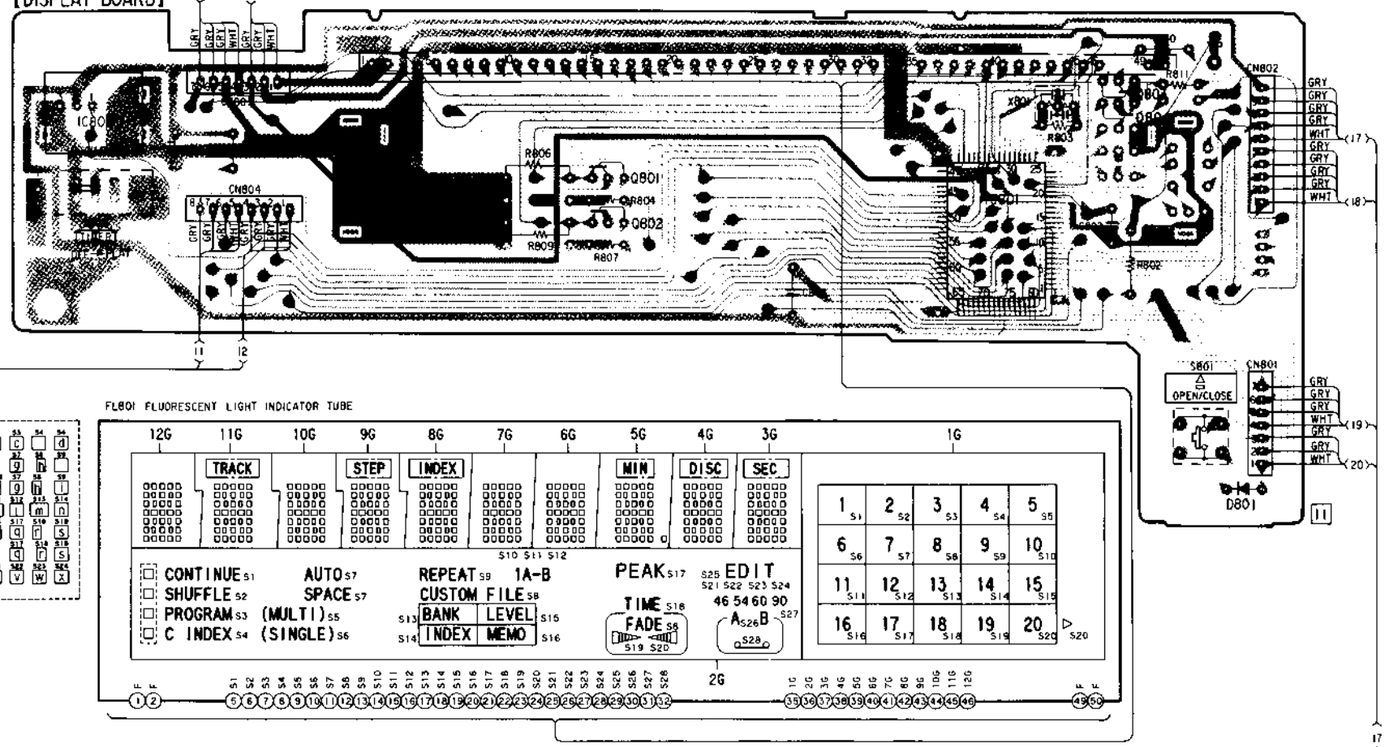

OPTICAL PICK-UP BLOCK
(KSS-270A)

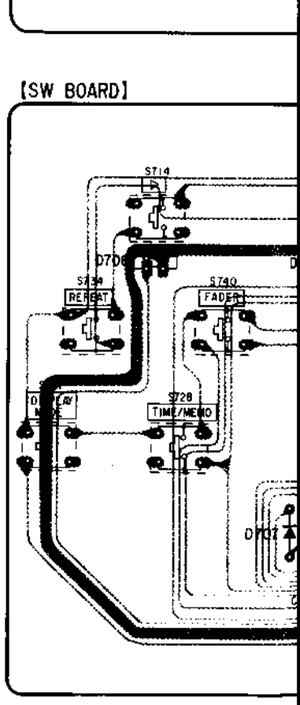

US,Canadian
MODELS
AEP, UK
MODELS
T991
POWER TRANSFORMER

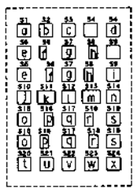

[PRIMA
CN991
RED:AEP MODEL
BLU:UK MODEL
AEP, UK MODEL


[L.MOTOR BOARD]
MD01
LOADING
MOTOR


[SWITCH BOARD]
CN002
SD01
IN SW


[DISPLAY BOARD]
CN804
CN802
Q801
Q802
R809
R807
R806


[SW BOARD]
S714
S739
REPEAT
S740
FADER
S728
TIME/MEMO



FL801 FLUORESCENT LIGHT INDICATOR TUBE
TRACK
STEP
INDEX
MIN
DISC
SEC
CONTINUE S1
SHUFFLE S2
PROGRAM S3
C INDEX S4
AUTO S7
SPACE S7
(MULTI) S5
(SINGLE) S6
REPEAT S9
1A-B
CUSTOM FILE S8
BANK
INDEX
LEVEL
MEMO
PEAK S17
TIME S18
FADE S6
EDIT
S801
OPEN/CLOSE
CN801
D801

TICAL PICK-UP BLOCK
(KSS-270A)

T991
POWER TRANSFORMER

【PRIMARY BOARD】

AC IN

【L.MOTOR BOARD】

【SWITCH BOARD】

【POWER SW BOARD】

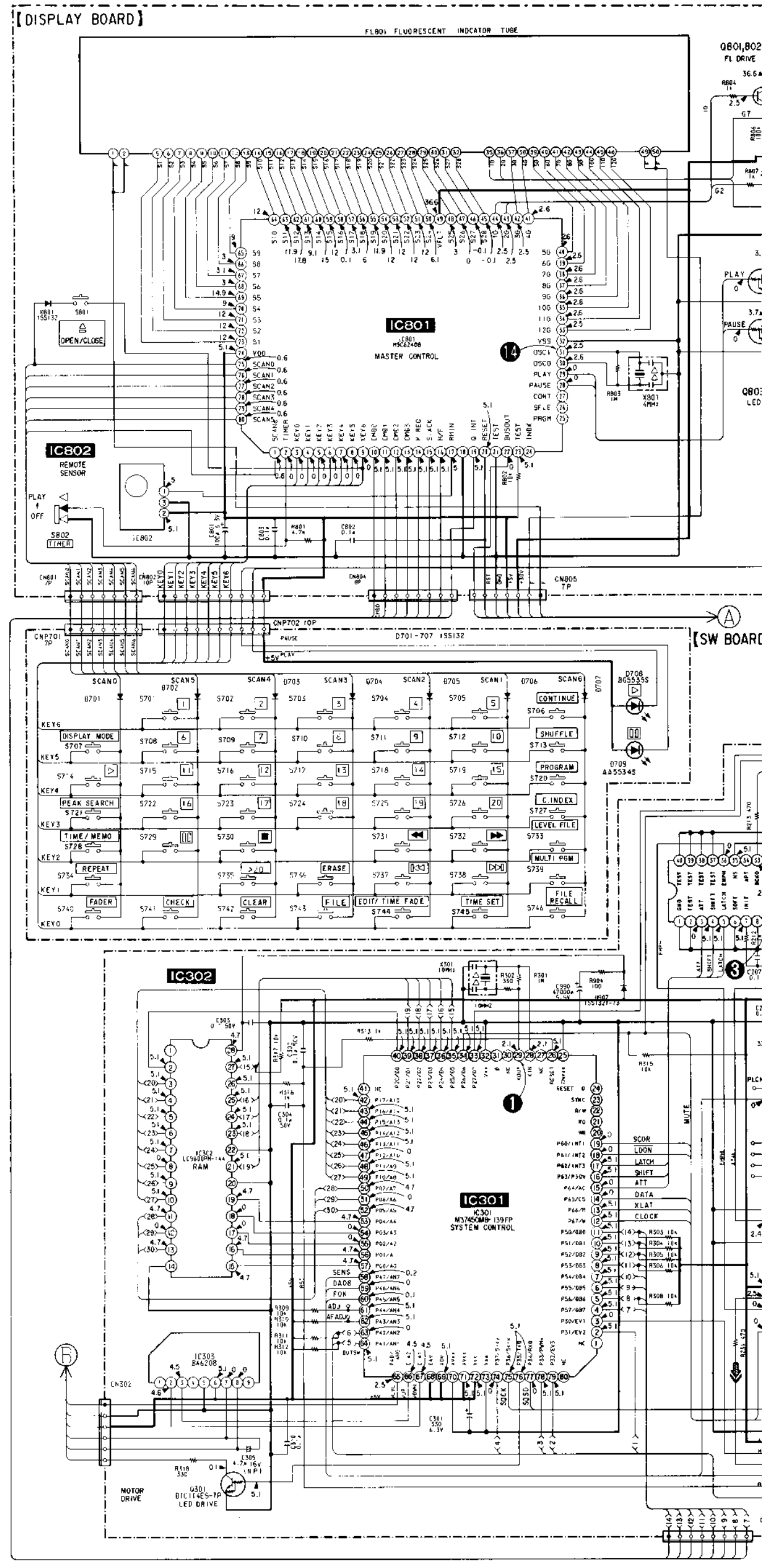
【SW BOARD】

【HEADPHONE JACK BOARD】

【VR BOARD】

3-4. SCHEMATIC DIAGRAM

· See page 9 for waveforms.



Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- % : indicates tolerance.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.

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

- : B+ Line
- : B− Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
  no mark : PLAY
- Voltages are taken with a VOM (Input impedance 10M Ω)
  Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  : CD
  : digital out

【MAIN BOARD】

IC601 CX025370 D/A CONVERTER

IC602 TC74HCU04AP OSC

IC603 TC74HCU04AP BUFFER/FILTER X602 16.9344MHz

IC501 IC502 AUDIO AMP

IC401 IC402 — AUDIO AMP —

IC904 IC204 WAVE FORM SHAPER, RESET / OPTICAL OUTPUT

IC901 IC902 — REG —

IC203 CXD2553S CONTROL

Q402,403,502,503 — SWITCHING

IC202 CXD1244S DIGITAL FILTER

IC101 CXA1372 EFM COMPARATOR FOCUS/TRACKING SERVO

IC201 CXD2500Q DIGITAL SIGNAL PROCESSOR

IC102 CXA1291P FOCUS/TRACKING COIL DRIVE

IC103 CXA1291A LOADING/SPINDLE MOTOR DRIVE

Q902,903 MUTE SW

Q401,501 SWITCHING

Q601,602 — REG —

Q801,802 FL DRIVE

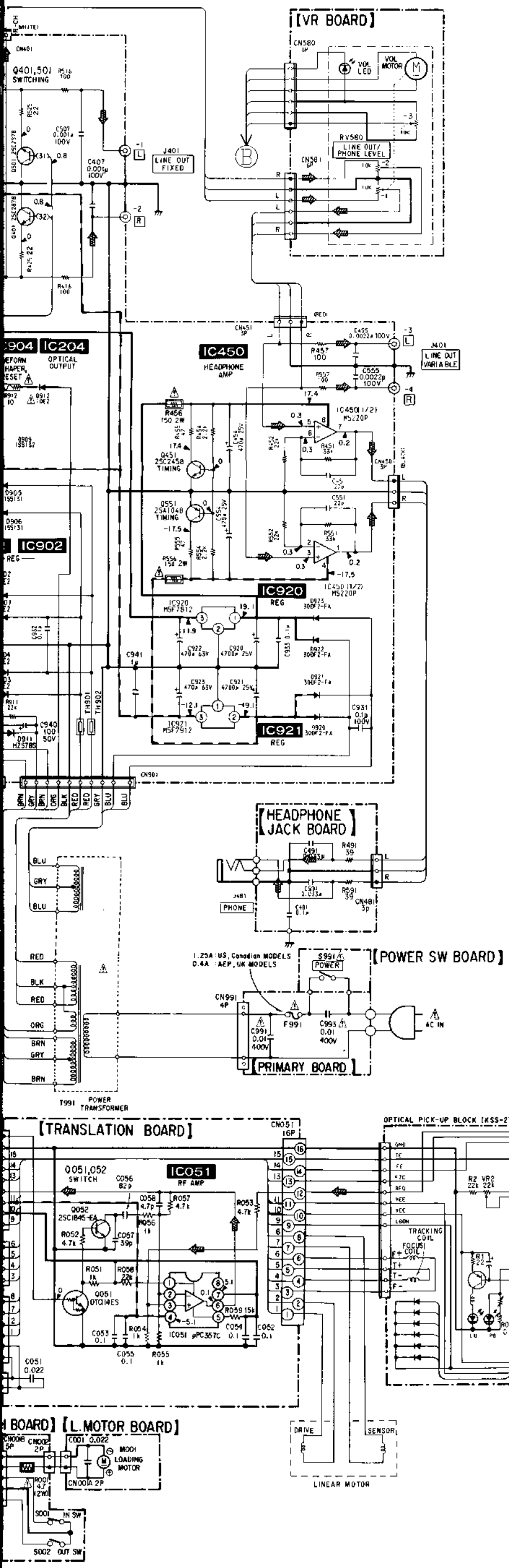
Q803,804 LED DRIVE

【TRANSLATION BOARD】

IC051 RF AMP

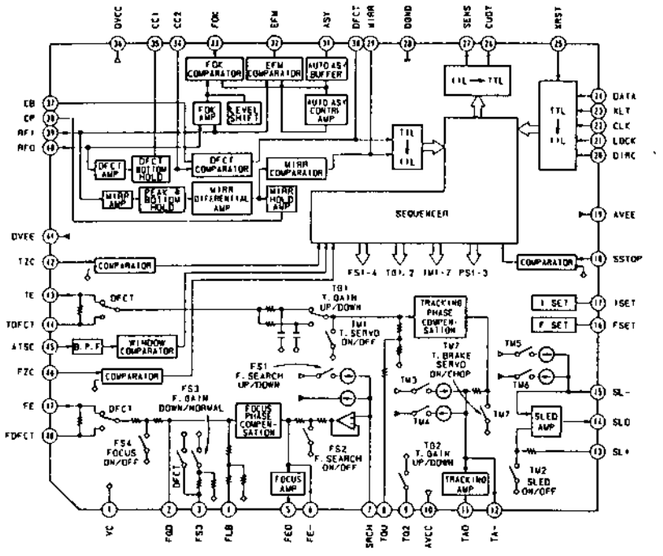
Q051,052 SWITCH

【SWITCH BOARD】【L.MOTOR BOARD】

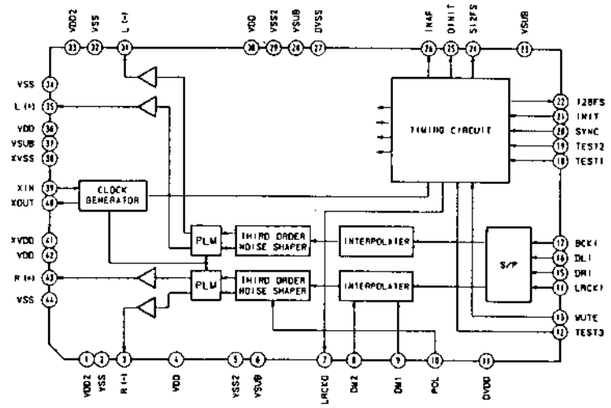

[VR BOARD]
CN580
VOL LED
VOL MOTOR
RV580
LINE OUT/ PHONE LEVEL
CN581
Q401,501 SWITCHING
J401 LINE OUT FIXED
IC450 HEADPHONE AMP
J401 LINE OUT VARIABLE
Q451 2SC2458 TIMING
Q551 2SA1048 TIMING
IC450(1/2) NJ220P
IC920 REG
IC921 REG
IC902
IC204 OPTICAL OUTPUT
CN901
[HEADPHONE JACK BOARD]
PHONE
[POWER SW BOARD]
POWER
CN991
F991
AC IN
[PRIMARY BOARD]
T991 POWER TRANSFORMER
[TRANSLATION BOARD]
IC051 RF AMP
Q051,052 SWITCH
IC051 μPC357C
OPTICAL PICK-UP BLOCK (KSS-270A)
TRACKING COIL
FOCUS COIL
LINEAR MOTOR
[L.MOTOR BOARD]
M001 LOADING MOTOR
S001 IN SW
S002 OUT SW

· IC BLOCK DIAGRAMS

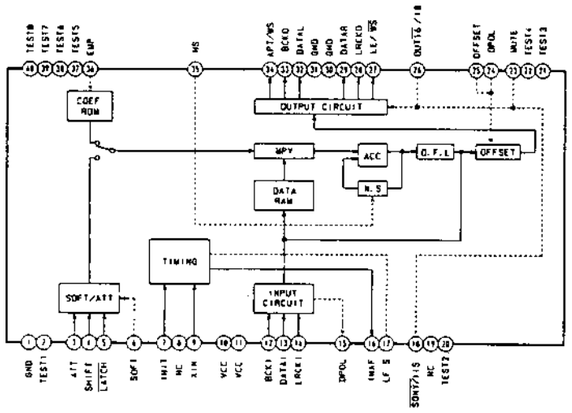
IC101 CXA1372Q



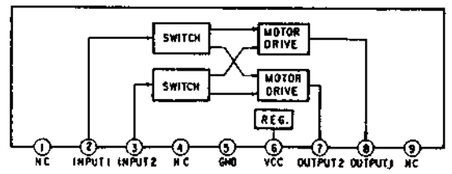
IC601 CXD2552Q-2



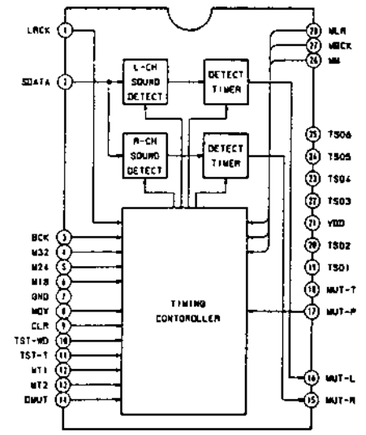
IC202 CXD1244S



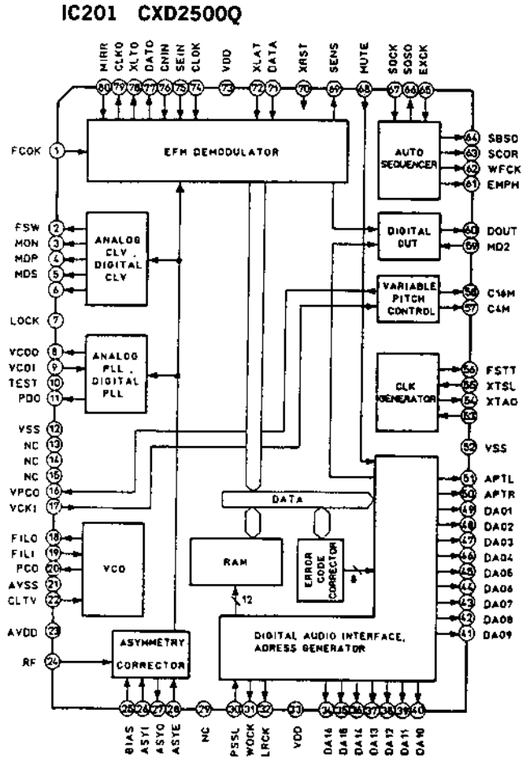
IC303 BA6208



IC203 CXD2553S



IC201 CXD2500Q



SECTION 4
EXPLODED VIEWS

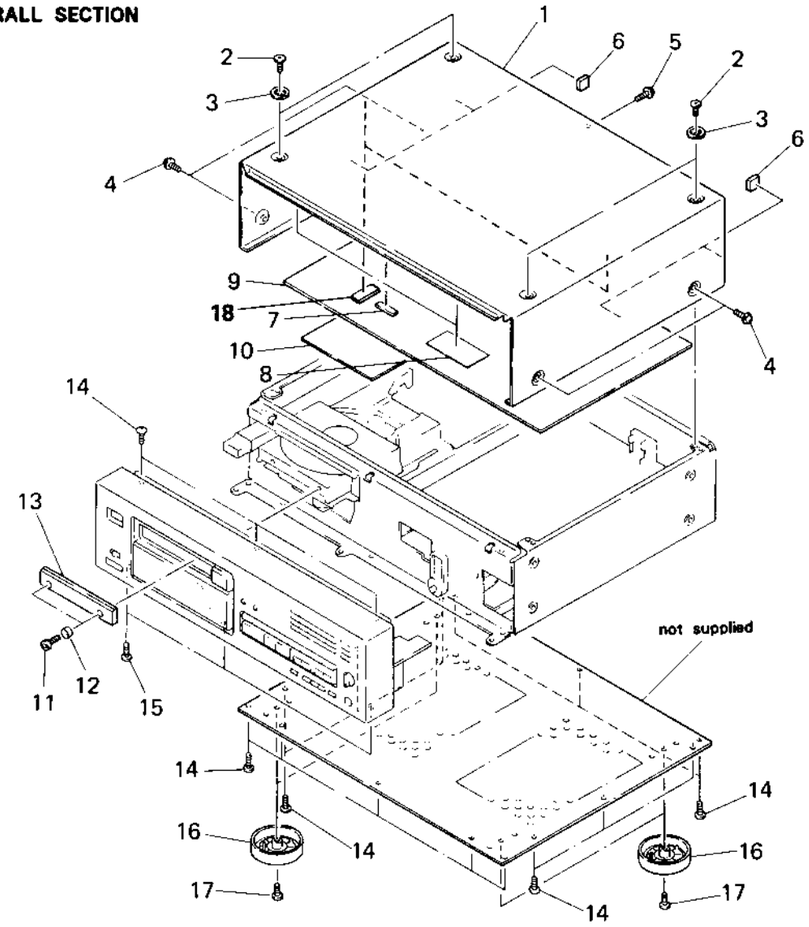
NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
  Example:
  (RED) . . . KNOB, BALANCE (WHITE)
  ↑ ↑
  Cabinet's Color Parts' Color

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

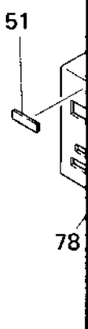
Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

4-1. OVERALL SECTION



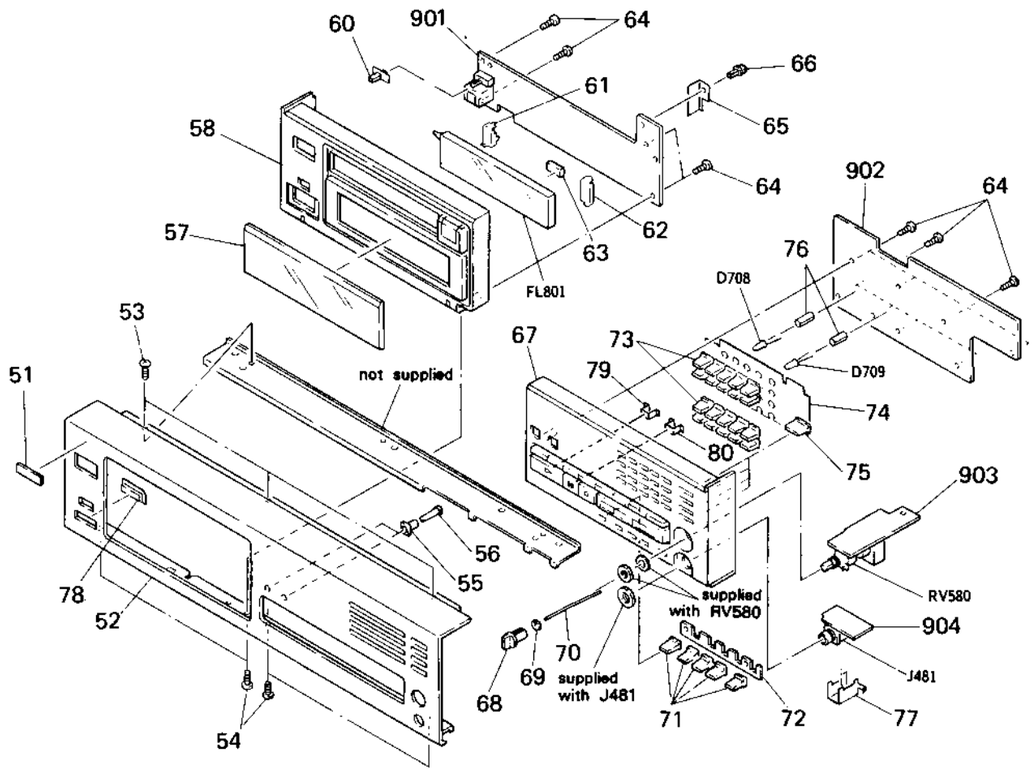
No.	Part No.	Description	Remarks
1	4-934-043-01	CASE	
2	4-924-242-11	SCREW (M3X6), FLAT HEAD	
3	4-928-025-11	ESCUTCHEON (TOP PLATE)	
4	4-847-802-00	SCREW	
5	4-886-821-21	SCREW, M3 CASE STOPPER	
6	*4-929-007-01	CUSHION (CASE)	
7	3-485-330-11	FELT	
8	*4-923-563-11	CUSHION	
9	A-4675-309-A	REINFORCEMENT (TOP PLATE) ASSY	
10	4-913-188-11	FELT (C), ACOUSTIC ABSORBENT	
11	7-621-996-05	BOLT, HEXAGON SOCKET 2.6X5	
12	4-884-635-00	BASE, ORNAMENTAL	
13	X-4934-006-1	(Canadian,AEP,UK)...PANEL ASSY, LOADING	
	X-4934-025-1	(US).....PANEL ASSY, LOADING	
14	7-682-548-09	SCREW (3X8)	
15	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
16	X-4934-010-1	(Canadian,AEP,UK)...FOOT ASSY	
	X-4934-027-1	(US).....FOOT ASSY	
17	7-682-561-09	SCREW +8 4X8	
18	3-831-441-11	SPACER	

4-2. FRONT



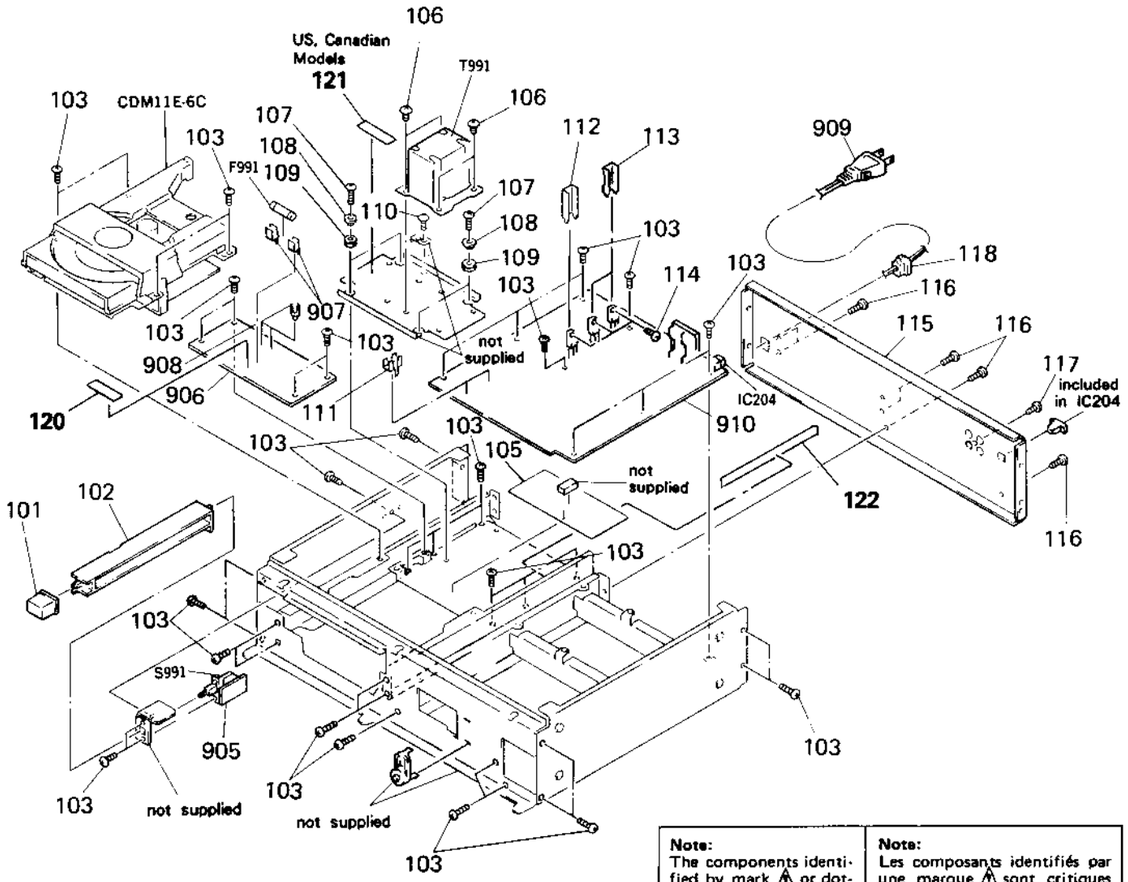
No.	Part No.
51	4-908-8
52	4-934-0
	4-934-0
53	7-685-8
54	7-685-6
55	4-934-0
56	4-934-0
57	4-934-0
58	X-4934-
60	4-922-5
61	*4-928-0
62	*4-928-0
63	9-911-8
64	7-685-1
65	*4-934-0
66	3-531-5
67	X-4934-
68	4-922-9
69	4-922-9

4-2. FRONT PANEL SECTION



No.	Part No.	Description	Remarks
51	4-908-848-01	EMBLEM, SONY	
52	4-934-038-01	(AEP).....PANEL, FRONT	
	4-934-038-11	(US,Canadian,UK)...PANEL, FRONT	
53	7-685-870-01	SCREW +BVTT 3X5 (S)	
54	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
55	4-934-033-01	ESCUTCHEON (DISPLAY)	
56	4-934-031-01	BUTTON (DISPLAY)	
57	4-934-036-01	PLATE, INDICATION	
58	X-4934-026-1	BASE (L) ASSY	
60	4-922-518-11	KNOB (TIMER)	
61	*4-928-053-01	HOLDER (LEFT)	
62	*4-928-052-01	HOLDER (RIGHT)	
63	9-911-841-XX	SPACER	
64	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
65	*4-934-051-01	COVER	
66	3-531-576-01	RIVET	
67	X-4934-005-1	BASE (RIGHT) ASSY	
68	4-922-977-01	KNOB (HP)	
69	4-922-978-01	HOLDER (FIBER)	
70	4-922-979-11	INDICATOR	
71	4-934-053-01	BUTTON (A)	
72	*4-934-097-01	CUSHION (BUTTON A)	
73	4-934-026-01	BUTTON (M/C)	
74	*4-934-096-01	CUSHION (MC)	
75	4-934-027-01	BUTTON (MODE)	
76	*4-923-532-21	SPACER, LED	
77	*4-934-048-01	PLATE, GROUND	
78	4-934-037-01	WINDOW (LAY CATCHER)	
79	4-934-049-01	INDICATOR (PLAY)	
80	4-934-050-01	INDICATOR (PAUSE)	
901	*A-4617-219-A	MOUNTED PCB, DISPLAY	
902	*1-633-018-11	PC BOARD, SW	
903	*1-633-019-11	PC BOARD, VR	
904	*1-633-020-11	PC BOARD, HEADPHONE JACK	
D708	8-719-907-81	DIODE BG5535S	
D709	8-719-907-75	DIODE AA5534S	
FL801	1-519-554-11	INDICATOR TUBE, FLUORESCENT	
J481	1-568-519-31	JACK, LARGE TYPE (PHONE)	
RV580	1-238-776-11	RES, VAR, CARBON 10KX3 (LINE OUT/PHONE LEVEL)(including VOL MOTOR,LED)	

4-3. CHASSIS SECTION

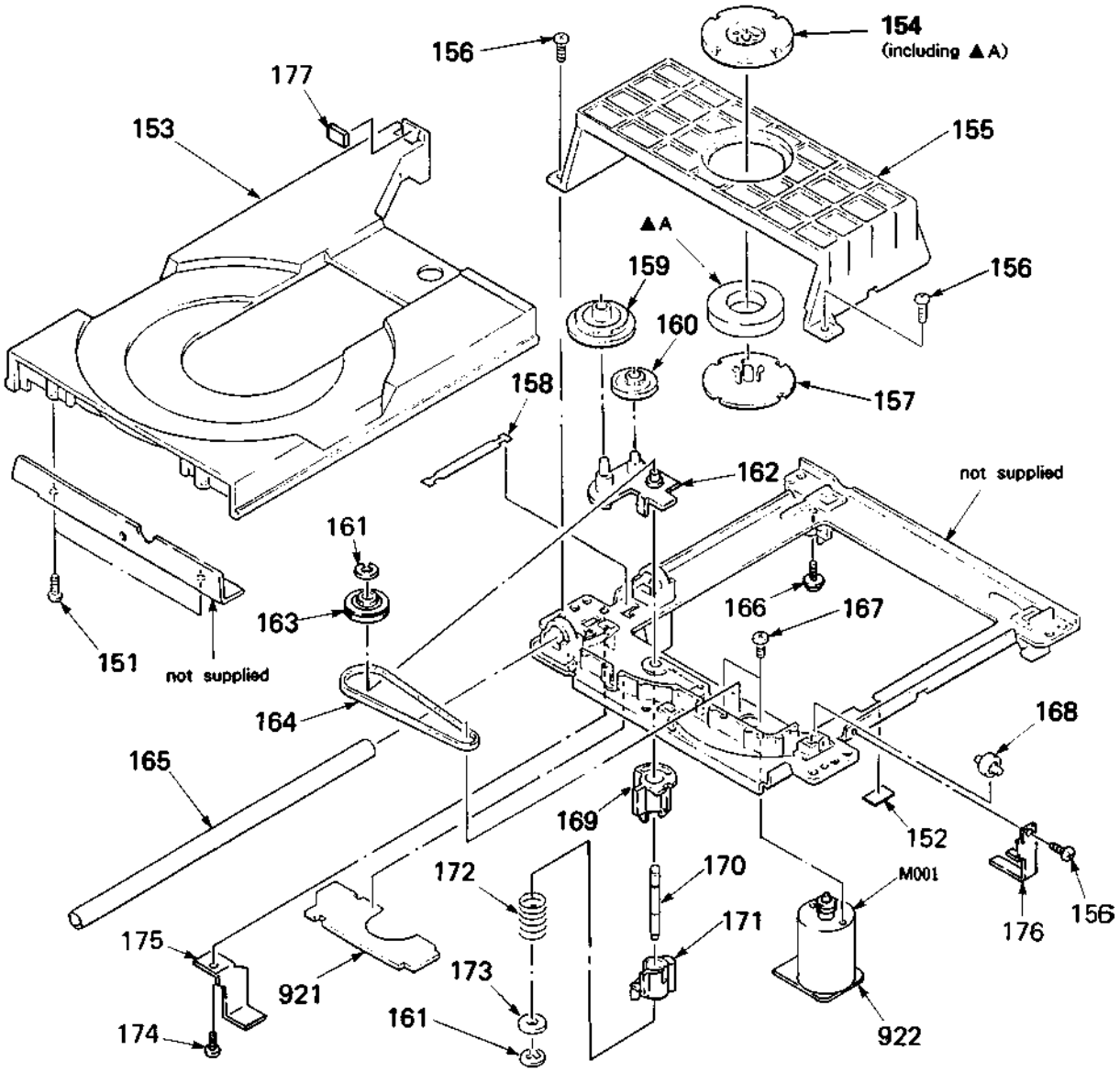


Note:
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

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

No.	Part No.	Description	Remarks
101	4-923-520-01	KNOB, POWER	
102	*4-934-044-01	LEVER (POWER)	
103	7-682-548-09	SCREW (3X8)	
105	*4-935-908-01	SHEET	
106	7-682-560-04	SCREW +BVTT 4X6 (S)	
107	7-685-873-09	SCREW +BVTT 3X10 (S)	
108	4-928-032-01	COLLAR (A)	
109	*4-888-798-00	BUSHING, RUBBER	
110	7-682-547-04	SCREW +BVTT 3X6 (S)	
111	*4-922-525-01	HEAT SINK	
112	*4-886-555-00	HEAT SINK	
113	4-902-345-01	HEAT SINK	
114	7-682-147-15	SCREW, TR	
115	*4-934-003-12	(AEP).....PANEL, BACK	
	*4-934-003-22	(UK).....PANEL, BACK	
	*4-934-003-31	(US).....PANEL, BACK	
	*4-934-003-42	(Canadian)...PANEL, BACK	
116	4-929-074-01	SCREW (3X8)	
117	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S	
118	2-231-019-00	CLAMPER, CORD	
120	*3-701-946-21	(US,Canadian)...LABEL (1.25A125V), FUSE	
	*3-701-948-10	(AEP,UK).....LABEL (T400MA), FUSE	
121	*3-703-044-26	(US,Canadian)...LABEL, CAUTION	
122	3-831-441-11	SPACER	
905	*1-633-017-11	PC BOARD, POWER SW	
906	*1-633-321-11	PC BOARD, PRIMARY	
907	1-533-183-11	HOLDER, FUSE	
908	*1-535-771-11	TERMINAL	
909	⚠1-555-795-00	(AEP).....CORD, POWER	
	⚠1-556-035-11	(UK).....CORD, POWER	
	⚠1-557-577-11	(US,Canadian)...CORD, POWER	
910	*A-4617-220-A	MOUNTED PCB, MAIN	
F991	⚠1-532-066-11	(AEP,UK).....FUSE, TIME LAG (0.4A)	
F991	⚠1-532-741-11	(US,Canadian)...FUSE, GLASS TUBE (1.25A)	
IC204	8-759-977-71	IC GP-1F31T	
S991	⚠1-570-156-11	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)	
T991	⚠1-450-039-11	(US,Canadian)...TRANSFORMER, POWER	
T991	⚠1-450-040-11	(AEP,UK).....TRANSFORMER, POWER	

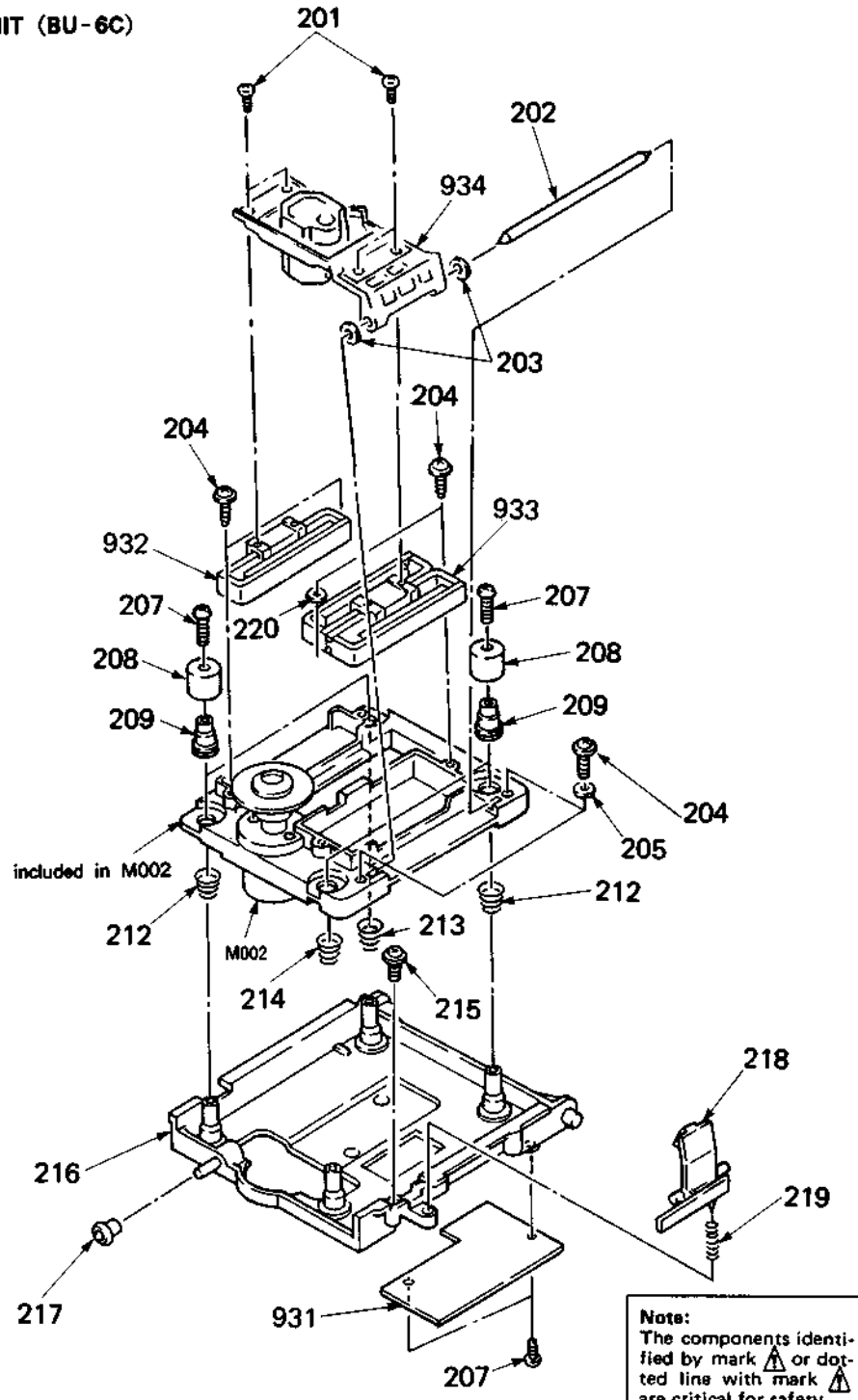
4-4. MECHANISM SECTION (CDM11E-6C)



No.	Part No.	Description	Remarks
151	7-685-647-79	SCREW +P 3X10 TYPE2 SLIT	
152	3-831-441-11	CUSHION (A)	
153	*4-927-642-01	TABLE (EXL), DISC	
154	A-4665-024-A	MAGNET ASSY	
155	*4-927-638-03	HOLDER (A,P)	
156	7-621-770-67	SCREW +BVTT 2.6X6 (S)	
157	*4-918-679-04	PULLEY, PRESS	
158	*4-927-648-01	SLIDER (GROUND)	
159	4-927-620-01	GEAR (P)	
160	4-927-628-01	GEAR (C)	
161	7-624-105-04	STOP RING 2.3, TYPE -E	
162	X-4927-608-1	ARM ASSY, SWING	
163	4-929-724-01	PULLEY (B)	
164	4-927-649-01	BELT	
165	4-927-617-01	BAR, GUIDE	

No.	Part No.	Description	Remarks
166	*4-917-583-21	BRACKET, YOKE	
167	7-682-544-04	SCREW +P 3X3	
168	4-927-627-01	ROLLER (S,G)	
169	4-927-624-01	CAM (L,A)	
170	4-927-665-01	SHAFT (S)	
171	4-927-635-01	CAM (L,B)	
172	3-659-338-00	SPRING, COMPRESSION	
173	4-927-654-01	WASHER (LIMITER)	
174	7-621-773-86	SCREW +BVTT 2.6X4 (S)	
175	*4-927-659-01	LIMITER (BU-6)	
176	*4-927-655-01	LIMITER	
177	*4-927-670-01	CUSHION (MD)	
921	*1-632-974-11	PC BOARD, SWITCH	
922	*1-632-975-11	PC BOARD, L.MOTOR	
M001	A-4604-347-A	MOTOR (L) ASSY (LOADING)	

4-5. BASE UNIT (BU-6C)



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

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

No.	Part No.	Description	Remarks
201	3-318-203-61	SCREW (B1.7X4), TAPPING	
202	*4-910-431-01	SHAFT, SLIDE	
203	*4-917-582-01	CUSHION, SLIDE	
204	7-685-646-79	SCREW, TAPPING +PTTWH M3X8	
205	4-927-318-01	WASHER	
207	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
208	4-927-634-01	HOLDER (SP)	
209	*4-917-584-11	INSULATOR	
212	4-917-572-01	SPRING (B)	
213	4-917-571-01	SPRING (A)	
214	4-917-573-01	SPRING (E)	
215	7-685-132-19	+ PTPWH (2.6X5)	
216	*4-927-637-01	HOLDER (BU-6)	
217	4-927-631-01	ROLLER (L)	
218	4-927-626-01	LEVER (L)	
219	3-305-423-00	SPRING, COMPRESSION	
220	4-927-669-01	WASHER (BU)	
931	*1-632-973-11	PC BOARD, TRANSLATION	
932	A-4638-084-A	SENSOR ASSY, SPEED	
933	A-4608-335-A	MOTOR ASSY, LINEAR	
934	⚠8-848-159-11	DEVICE, OPTICAL KSS-270A	
M002	X-4927-605-3	BASE ASSY, MECHANISM (SPINDLE MOTOR)	

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.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:
MF: μF, PF: μμF.

RESISTORS
- All resistors are in ohms.
- F: nonflammable

COILS
- MMH: mH, UH: μH

SEMICONDUCTORS
In each case, U: μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC, UPD...: μPD...

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
901	*A-4617-219-A	MOUNTED PCB, DISPLAY
902	*1-633-018-11	PC BOARD, SW
903	*1-633-019-11	PC BOARD, VR
904	*1-633-020-11	PC BOARD, HEADPHONE JACK
905	*1-633-017-11	PC BOARD, POWER SW
906	*1-633-321-11	PC BOARD, PRIMARY
907	1-533-183-11	HOLDER, FUSE
908	*1-535-771-11	TERMINAL
909	⚠1-555-795-00	(AEP).....CORD, POWER
	⚠1-556-035-11	(UK).....CORD, POWER
	⚠1-557-577-11	(US,Canadian)...CORD, POWER
910	*A-4617-220-A	MOUNTED PCB, MAIN
921	*1-632-974-11	PC BOARD, SWITCH
922	*1-632-975-11	PC BOARD, L.MOTOR
931	*1-632-973-11	PC BOARD, TRANSLATION
932	A-4638-084-A	SENSOR ASSY, SPEED
933	A-4608-335-A	MOTOR ASSY, LINEAR
934	⚠8-848-159-11	DEVICE, OPTICAL KSS-270A

Ref.No.	Part No.	Description		
C001	1-136-157-00	FILM 0.022MF	5%	50V
C051	1-136-157-00	FILM 0.022MF	5%	50V
C052	1-164-159-11	CERAMIC 0.1MF		50V
C053	1-164-159-11	CERAMIC 0.1MF		50V
C054	1-164-159-11	CERAMIC 0.1MF		50V
C055	1-164-159-11	CERAMIC 0.1MF		50V
C056	1-162-280-31	CERAMIC 82PF	10%	50V
C057	1-162-213-31	CERAMIC 39PF	5%	50V
C058	1-162-195-31	CERAMIC 4.7PF	10%	50V
C101	1-130-480-00	MYLAR 0.0056MF	5%	50V
C102	1-136-159-00	FILM 0.033MF	5%	50V
C103	1-136-165-00	FILM 0.1MF	5%	50V
C104	1-136-165-00	FILM 0.1MF	5%	50V
C105	1-161-375-00	CERAMIC 0.0022MF	30%	16V
C106	1-106-351-00	MYLAR 0.0022MF	5%	50V
C107	1-136-153-00	FILM 0.01MF	5%	50V
C108	1-136-153-00	FILM 0.01MF	5%	50V
C109	1-136-165-00	FILM 0.1MF	5%	50V
C110	1-136-159-00	FILM 0.033MF	5%	50V
C111	1-123-875-11	ELECT 10MF	20%	50V
C112	1-136-165-00	FILM 0.1MF	5%	50V
C113	1-123-382-00	ELECT 3.3MF	20%	50V
C114	1-126-233-11	ELECT 22MF	20%	25V
C115	1-162-306-11	CERAMIC 0.01MF	20%	16V
C116	1-136-159-00	FILM 0.033MF	5%	50V
C118	1-124-983-11	ELECT 330MF	20%	6.3V
C119	1-124-983-11	ELECT 330MF	20%	6.3V
C121	1-136-153-00	FILM 0.01MF	5%	50V
C122	1-124-902-00	ELECT 0.47MF	20%	50V
C123	1-130-472-00	MYLAR 0.0012MF	5%	50V
C124	1-106-359-00	MYLAR 0.0047MF	5%	50V
C125	1-164-159-11	CERAMIC 0.1MF		50V
C127	1-164-159-11	CERAMIC 0.1MF		50V
C129	1-136-161-00	FILM 0.047MF	5%	50V
C130	1-136-155-00	FILM 0.015MF	5%	50V
C132	1-162-294-31	CERAMIC 0.001MF	10%	50V
C133	1-164-159-11	CERAMIC 0.1MF		50V
C134	1-162-294-31	CERAMIC 0.001MF	10%	50V
C135	1-162-294-31	CERAMIC 0.001MF	10%	50V
C136	1-164-159-11	CERAMIC 0.1MF		50V
C137	1-126-023-11	ELECT 100MF	20%	25V
C138	1-126-023-11	ELECT 100MF	20%	25V
C139	1-126-023-11	ELECT 100MF	20%	25V
C140	1-126-023-11	ELECT 100MF	20%	25V
C141	1-124-983-11	ELECT 330MF	20%	6.3V
C142	1-124-983-11	ELECT 330MF	20%	6.3V
C153	1-164-159-11	CERAMIC 0.1MF		50V
C154	1-124-983-11	ELECT 330MF	20%	6.3V
C155	1-164-159-11	CERAMIC 0.1MF		50V
C156	1-164-159-11	CERAMIC 0.1MF		50V
C157	1-164-159-11	CERAMIC 0.1MF		50V
C201	1-106-347-00	MYLAR 0.0015MF	5%	50V
C202	1-136-161-00	FILM 0.047MF	5%	50V
C203	1-136-153-00	FILM 0.01MF	5%	50V
C205	1-124-983-11	ELECT 330MF	20%	6.3V
C206	1-164-159-11	CERAMIC 0.1MF		50V
C207	1-164-159-11	CERAMIC 0.1MF		50V
C208	1-136-165-00	FILM 0.1MF	5%	50V
C209	1-124-983-11	ELECT 330MF	20%	6.3V
C210	1-164-159-11	CERAMIC 0.1MF		50V
C251	1-124-983-11	ELECT 330MF	20%	6.3V
C252	1-164-159-11	CERAMIC 0.1MF		50V
C301	1-124-983-11	ELECT 330MF	20%	6.3V
C302	1-164-159-11	CERAMIC 0.1MF		50V
C303	1-136-165-00	FILM 0.1MF	5%	50V
C304	1-164-159-11	CERAMIC(NONPOLAR)0.1MF		50V
C305	1-126-151-11	ELECT 4.7MF	20%	16V
C310	1-136-165-00	FILM 0.1MF	5%	50V
C401	1-136-437-11	FILM 220PF	5%	630V
C402	1-136-433-11	FILM 100PF	5%	630V
C403	1-136-433-11	FILM 100PF	5%	630V
C404	1-136-954-11	FILM 6200PF	5%	630V

Ref.No.	Part No.	Description			
C405	1-129-702-00	FILM	0.001MF	5%	630V
C406	1-124-130-00	ELECT	100MF	20%	63V
C407	1-136-250-11	FILM	0.001MF	3%	100V
C408	1-123-333-00	ELECT	100MF	20%	25V
C409	1-123-333-00	ELECT	100MF	20%	25V
C410	1-124-499-11	ELECT	1MF	20%	50V
C411	1-136-437-11	FILM	220PF	5%	630V
C412	1-136-437-11	FILM	220PF	5%	630V
C440	1-136-746-11	FILM	1MF	5%	50V
C441	1-136-746-11	FILM	1MF	5%	50V
C451	1-162-207-31	CERAMIC	22PF	5%	50V
C454	1-126-026-11	ELECT	470MF	20%	25V
C455	1-136-230-00	FILM	0.0022MF	3%	100V
C481	1-164-159-11	CERAMIC	0.1MF		50V
C491	1-136-159-00	FILM	0.033MF	5%	50V
C501	1-136-437-11	FILM	220PF	5%	630V
C502	1-136-433-11	FILM	100PF	5%	630V
C503	1-136-433-11	FILM	100PF	5%	630V
C504	1-136-954-11	FILM	6200PF	5%	630V
C505	1-129-702-00	FILM	0.001MF	5%	630V
C506	1-124-130-00	ELECT	100MF	20%	63V
C507	1-136-250-11	FILM	0.001MF	3%	100V
C508	1-123-333-00	ELECT	100MF	20%	25V
C509	1-123-333-00	ELECT	100MF	20%	25V
C510	1-124-499-11	ELECT	1MF	20%	50V
C511	1-136-437-11	FILM	220PF	5%	630V
C512	1-136-437-11	FILM	220PF	5%	630V
C540	1-136-746-11	FILM	1MF	5%	50V
C541	1-136-746-11	FILM	1MF	5%	50V
C551	1-162-207-31	CERAMIC	22PF	5%	50V
C554	1-126-026-11	ELECT	470MF	20%	25V
C555	1-136-230-00	FILM	0.0022MF	3%	100V
C591	1-136-159-00	FILM	0.033MF	5%	50V
C601	1-131-367-00	TANTALUM	22MF	20%	16V
C602	1-136-165-00	FILM	0.1MF	5%	50V
C604	1-123-333-00	ELECT	100MF	20%	25V
C605	1-131-367-00	TANTALUM	22MF	20%	16V
C606	1-123-333-00	ELECT	100MF	20%	25V
C607	1-136-165-00	FILM	0.1MF	5%	50V
C608	1-123-333-00	ELECT	100MF	20%	25V
C609	1-136-165-00	FILM	0.1MF	5%	50V
C610	1-123-333-00	ELECT	100MF	20%	25V
C611	1-136-165-00	FILM	0.1MF	5%	50V
C612	1-136-165-00	FILM	0.1MF	5%	50V
C613	1-123-333-00	ELECT	100MF	20%	25V
C614	1-136-165-00	FILM	0.1MF	5%	50V
C615	1-136-165-00	FILM	0.1MF	5%	50V
C616	1-123-333-00	ELECT	100MF	20%	25V
C617	1-123-332-00	ELECT	47MF	20%	25V
C618	1-123-332-00	ELECT	47MF	20%	25V
C619	1-126-103-11	ELECT	470MF	20%	10V
C620	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C621	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C624	1-130-495-00	MYLAR	0.1MF	5%	50V
C625	1-126-335-11	ELECT	220MF	20%	10V
C626	1-136-165-00	FILM	0.1MF	5%	50V
C627	1-136-165-00	FILM	0.1MF	5%	50V

Ref.No.	Part No.	Description			
C628	1-164-159-11	CERAMIC	0.1MF		50V
C629	1-136-165-00	FILM	0.1MF	5%	50V
C801	1-126-177-11	ELECT	100MF	20%	6.3V
C802	1-164-159-11	CERAMIC	0.1MF		50V
C803	1-164-159-11	CERAMIC	0.1MF		50V
C901	1-126-016-11	ELECT	4700MF	20%	16V
C902	1-124-556-11	ELECT	2200MF	20%	16V
C903	1-124-986-11	ELECT	2200MF	20%	6.3V
C904	1-124-997-11	ELECT	470MF	20%	6.3V
C905	1-126-045-11	ELECT	2.2MF	20%	50V
C906	1-126-045-11	ELECT	2.2MF	20%	50V
C907	1-164-159-11	CERAMIC	0.1MF		50V
C909	1-126-063-11	ELECT	100MF	20%	63V
C910	1-126-051-11	ELECT	47MF	20%	50V
C911	1-126-052-11	ELECT	100MF	20%	50V
C920	1-126-549-11	ELECT	4700MF	20%	25V
C921	1-126-549-11	ELECT	4700MF	20%	25V
C922	1-123-377-00	ELECT	470MF	20%	63V
C923	1-123-377-00	ELECT	470MF	20%	63V
C931	1-136-203-11	FILM	0.1MF	10%	100V
C932	1-164-159-11	CERAMIC	0.1MF		50V
C933	1-136-165-00	FILM	0.1MF	5%	50V
C934	1-136-165-00	FILM	0.1MF	5%	50V
C940	1-124-122-11	ELECT	100MF	20%	50V
C941	1-136-746-11	FILM	1MF	5%	50V
C990	1-126-534-11	ELECT	47000MF		5.5V
C991 ⚠	1-161-744-00	CERAMIC	0.01MF		400V
C993 ⚠	1-161-744-00	CERAMIC	0.01MF		400V

CN051	1-569-429-11	SOCKET, CONNECTOR 16P
CN101	*1-506-503-11	PIN, CONNECTOR 9P
CN102	*1-564-338-00	PIN, CONNECTOR 4P
CN103	*1-564-340-00	PIN, CONNECTOR 6P
CN104	*1-564-339-00	PIN, CONNECTOR 5P
CN301	*1-564-342-11	PIN, CONNECTOR 8P
CN302	*1-564-340-00	PIN, CONNECTOR 6P
CN401	*1-564-506-11	PLUG, CONNECTOR 3P
CN450	*1-564-506-11	PLUG, CONNECTOR 3P
CN451	*1-564-506-11	PLUG, CONNECTOR 3P
CN581	*1-564-708-11	PIN, CONNECTOR (SMALL TYPE) 6P
CN801	*1-564-500-11	PIN, CONNECTOR 7P
CN802	*1-564-502-11	PIN, CONNECTOR 10P
CN901	*1-535-123-00	TERMINAL 10P
CN902	*1-564-341-11	PIN, CONNECTOR 7P
CN991	*1-535-141-00	BASE POST 22MM (10MM PITCH) 4P

D401	8-719-107-94	DIODE 1SS202-1
D501	8-719-107-94	DIODE 1SS202-1
D601	8-719-107-94	DIODE 1SS202-1
D602	8-719-107-94	DIODE 1SS202-1
D603	8-719-114-29	DIODE RD5.1JS-B1
D701	8-719-107-94	DIODE 1SS202-1
D702	8-719-107-94	DIODE 1SS202-1
D703	8-719-107-94	DIODE 1SS202-1
D704	8-719-107-94	DIODE 1SS202-1
D705	8-719-107-94	DIODE 1SS202-1
D706	8-719-107-94	DIODE 1SS202-1
D707	8-719-107-94	DIODE 1SS202-1
D708	8-719-907-81	DIODE BG5535S

Note:
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Replace only with part number specified.

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

Ref.No.	Part No.	Description
D709	8-719-907-75	DIODE AA5534S
D801	8-719-107-94	DIODE 1SS202-1
D901	8-719-200-02	DIODE 10E2
D902	8-719-200-02	DIODE 10E2
D903	8-719-200-02	DIODE 10E2
D904	8-719-200-02	DIODE 10E2
D905	8-719-815-85	DIODE 1S1585
D906	8-719-815-85	DIODE 1S1585
D907	8-719-107-94	DIODE 1SS202-1
D908	8-719-107-94	DIODE 1SS202-1
D909	8-719-107-94	DIODE 1SS202-1
D910	8-719-913-62	DIODE HZS36-2L
D911	8-719-933-48	DIODE HZS783L
D912	8-719-200-02	DIODE 10E2
D920	8-719-200-97	DIODE 30DF2-FA
D921	8-719-200-97	DIODE 30DF2-FA
D922	8-719-200-97	DIODE 30DF2-FA
D923	8-719-200-97	DIODE 30DF2-FA
F991 ⚠	1-532-066-11	(AEP,UK).....FUSE, TIME LAG (0.4A)
F991 ⚠	1-532-741-11	(US,Canadian)...FUSE, GLASS TUBE (1.25A)
FL801	1-519-554-11	INDICATOR TUBE, FLUORESCENT
IC051	8-759-903-55	IC LF357N
IC101	8-752-037-33	IC CXA1372Q
IC102	8-752-035-28	IC CXA1291P
IC103	8-752-035-28	IC CXA1291P
IC201	8-752-333-31	IC CXD2500Q
IC202	8-752-328-61	IC CXD1244S
IC203	8-752-334-77	IC CXD2553S
IC204	8-759-977-71	IC GP-1F31T
IC301	8-759-634-57	IC M37450M8-139FP
IC302	8-759-820-65	IC LC9600RM-183
IC303	8-759-962-08	IC BA6208
IC401	8-759-982-03	IC RD5532D
IC402	8-759-982-03	IC RD5532D
IC450	8-759-602-01	IC M5220P
IC501	8-759-982-03	IC RD5532D
IC502	8-759-982-03	IC RD5532D
IC601	8-752-335-52	IC CXD2552Q-2
IC602	8-759-233-63	IC TC74HCU04AP
IC603	8-759-233-63	IC TC74HCU04AP
IC801	8-759-998-54	IC MSC62408-005GS-K
IC802	8-749-920-03	IC GP1U52
IC901	8-759-634-55	IC M5F7805L-720
IC902	8-759-604-47	IC M5F7905
IC904	8-759-803-70	IC LC74HC08
IC920	8-759-604-33	IC M5F7812
IC921	8-759-604-51	IC M5F7912
J401	1-568-760-11	JACK, PIN 4P (LINE OUT)
J481	1-568-519-31	JACK, LARGE TYPE (PHONE)
L601	1-410-548-21	INDUCTOR 4.7UH
L603	1-410-548-21	INDUCTOR 4.7UH
M001	A-4604-347-A	MOTOR (L) ASSY (LOADING)
M002	X-4927-605-3	BASE ASSY, MECHANISM (SPINDLE MOTOR)
Q051	8-729-900-80	TRANSISTOR DTC114ES
Q052	8-729-184-53	TRANSISTOR 2SC1845-EA
Q101	8-729-900-89	TRANSISTOR DTC144ES
Q301	8-729-900-80	TRANSISTOR DTC114ES
Q401	8-729-201-05	TRANSISTOR 2SC2878B
Q402	8-729-900-63	TRANSISTOR DTA124ES
Q403	8-729-900-80	TRANSISTOR DTC114ES
Q451	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q501	8-729-201-05	TRANSISTOR 2SC2878B
Q502	8-729-900-63	TRANSISTOR DTA124ES
Q503	8-729-900-80	TRANSISTOR DTC114ES
Q551	8-729-119-76	TRANSISTOR 2SA1175-HFE
Q601	8-729-216-13	TRANSISTOR 2SK161-GR
Q602	8-729-905-67	TRANSISTOR 2SD1944-K
Q801	8-729-905-05	TRANSISTOR 2SD1293M
Q802	8-729-905-05	TRANSISTOR 2SD1293M
Q803	8-729-900-45	TRANSISTOR DTC114EF
Q804	8-729-900-45	TRANSISTOR DTC114EF
Q901	8-729-140-96	TRANSISTOR 2SD774-34
Q902	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q903	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q904	8-729-900-61	TRANSISTOR DTA114ES

Ref.No.	Part No.	Description				
R001 ⚠	1-216-377-11	METAL OXIDE	4.7	5%	2W	F
R051	1-249-417-11	CARBON	1K	5%	1/4W	
R052	1-249-425-11	CARBON	4.7K	5%	1/4W	
R053	1-249-425-11	CARBON	4.7K	5%	1/4W	
R054	1-249-417-11	CARBON	1K	5%	1/4W	
R055	1-249-417-11	CARBON	1K	5%	1/4W	
R056	1-249-417-11	CARBON	1K	5%	1/4W	
R057	1-249-425-11	CARBON	4.7K	5%	1/4W	
R058	1-249-433-11	CARBON	22K	5%	1/4W	
R059	1-249-431-11	CARBON	15K	5%	1/4W	
R101	1-249-425-11	CARBON	4.7K	5%	1/4W	
R102	1-247-887-00	CARBON	220K	5%	1/4W	
R103	1-249-425-11	CARBON	4.7K	5%	1/4W	
R104	1-247-882-11	CARBON	130K	5%	1/4W	
R105	1-249-440-11	CARBON	82K	5%	1/4W	
R106	1-249-440-11	CARBON	82K	5%	1/4W	
R107	1-249-431-11	CARBON	15K	5%	1/4W	
R108	1-247-846-11	CARBON	4.3K	5%	1/4W	
R109	1-247-896-11	CARBON	510K	5%	1/4W	
R110	1-249-441-11	CARBON	100K	5%	1/4W	
R112	1-249-429-11	CARBON	10K	5%	1/4W	
R113	1-249-441-11	CARBON	100K	5%	1/4W	
R114	1-247-854-11	CARBON	9.1K	5%	1/4W	
R115	1-247-854-11	CARBON	9.1K	5%	1/4W	
R116	1-249-393-11	CARBON	10	5%	1/4W	
R118	1-249-393-11	CARBON	10	5%	1/4W	
R120	1-247-899-11	CARBON	680K	5%	1/4W	
R121	1-249-441-11	CARBON	100K	5%	1/4W	
R123	1-247-883-00	CARBON	150K	5%	1/4W	
R124	1-247-878-00	CARBON	91K	5%	1/4W	
R125	1-247-883-00	CARBON	150K	5%	1/4W	
R126	1-249-433-11	CARBON	22K	5%	1/4W	
R127	1-249-393-11	CARBON	10	5%	1/4W	
R128	1-249-441-11	CARBON	100K	5%	1/4W	
R129	1-249-441-11	CARBON	100K	5%	1/4W	
R130	1-249-441-11	CARBON	100K	5%	1/4W	
R131	1-249-441-11	CARBON	100K	5%	1/4W	
R132	1-249-393-11	CARBON	10	5%	1/4W	
R150	1-249-417-11	CARBON	1K	5%	1/4W	

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

Ref.No.	Part No.	Description				
R152	1-249-393-11	CARBON	10	5%	1/4W	
R153	1-249-424-11	CARBON	3.9K	5%	1/4W	
R201	1-249-423-11	CARBON	3.3K	5%	1/4W	
R202	1-249-423-11	CARBON	3.3K	5%	1/4W	
R203	1-249-429-11	CARBON	10K	5%	1/4W	
R204	1-249-429-11	CARBON	10K	5%	1/4W	
R205	1-249-429-11	CARBON	10K	5%	1/4W	
R206	1-249-435-11	CARBON	33K	5%	1/4W	
R209	1-249-413-11	CARBON	470	5%	1/4W	
R210	1-249-413-11	CARBON	470	5%	1/4W	
R211	1-249-413-11	CARBON	470	5%	1/4W	
R212	1-249-417-11	CARBON	1K	5%	1/4W	
R213	1-259-420-11	CARBON	470	5%	1/6W	
R214	1-259-420-11	CARBON	470	5%	1/6W	
R215	1-259-420-11	CARBON	470	5%	1/6W	
R216	1-259-420-11	CARBON	470	5%	1/6W	
R217	1-249-411-11	CARBON	330	5%	1/4W	
R230	1-249-417-11	CARBON	1K	5%	1/4W	
R231	1-249-413-11	CARBON	470	5%	1/4W	
R251	1-249-413-11	CARBON	470	5%	1/4W	
R301	1-247-903-00	CARBON	1M	5%	1/4W	
R302	1-249-411-11	CARBON	330	5%	1/4W	
R303	1-249-429-11	CARBON	10K	5%	1/4W	
R304	1-249-429-11	CARBON	10K	5%	1/4W	
R305	1-249-429-11	CARBON	10K	5%	1/4W	
R306	1-249-429-11	CARBON	10K	5%	1/4W	
R308	1-249-429-11	CARBON	10K	5%	1/4W	
R309	1-249-429-11	CARBON	10K	5%	1/4W	
R310	1-249-429-11	CARBON	10K	5%	1/4W	
R311	1-249-429-11	CARBON	10K	5%	1/4W	
R312	1-249-429-11	CARBON	10K	5%	1/4W	
R313	1-249-417-11	CARBON	1K	5%	1/4W	
R314	1-249-429-11	CARBON	10K	5%	1/4W	
R315	1-249-429-11	CARBON	10K	5%	1/4W	
R316	1-249-417-11	CARBON	1K	5%	1/4W	
R317	1-249-429-11	CARBON	10K	5%	1/4W	
R318	1-249-411-11	CARBON	330	5%	1/4W	
R319	1-249-429-11	CARBON	10K	5%	1/4W	
R401	1-215-444-00	METAL	9.1K	1%	1/6W	
R402	1-215-444-00	METAL	9.1K	1%	1/6W	
R403	1-215-437-00	METAL	4.7K	1%	1/6W	
R404	1-215-437-00	METAL	4.7K	1%	1/6W	
R405	1-215-454-00	METAL	24K	1%	1/6W	
R406	1-215-454-00	METAL	24K	1%	1/6W	
R407	1-215-439-00	METAL	5.6K	1%	1/6W	
R408	1-215-439-00	METAL	5.6K	1%	1/6W	
R409	1-215-439-00	METAL	5.6K	1%	1/6W	
R410	1-215-439-00	METAL	5.6K	1%	1/6W	
R411	1-215-430-00	METAL	2.4K	1%	1/6W	
R412	1-215-423-00	METAL	1.2K	1%	1/6W	
R413	1-215-430-00	METAL	2.4K	1%	1/6W	
R414	1-259-488-11	CARBON	330K	5%	1/6W	
R415	1-247-700-11	CARBON	100	5%	1/4W	
R416	1-247-700-11	CARBON	100	5%	1/4W	
R417	1-259-466-11	CARBON	39K	5%	1/6W	
R418	1-259-440-11	CARBON	3.3K	5%	1/6W	
R419	1-259-432-11	CARBON	1.5K	5%	1/6W	

Ref.No.	Part No.	Description				
R421	1-259-428-11	CARBON	1K	5%	1/6W	
R425	1-259-388-11	CARBON	22	5%	1/6W	
R451	1-259-464-11	CARBON	33K	5%	1/6W	
R452	1-259-460-11	CARBON	22K	5%	1/6W	
R454	1-249-421-11	CARBON	2.2K	5%	1/4W	
R455	1-249-401-11	CARBON	47	5%	1/4W	
R456 ⚠	1-215-887-00	METAL OXIDE	150	5%	2W	F
R457	1-259-404-11	CARBON	100	5%	1/6W	
R491	1-249-400-11	CARBON	39	5%	1/4W	
R501	1-215-444-00	METAL	9.1K	1%	1/6W	
R502	1-215-444-00	METAL	9.1K	1%	1/6W	
R503	1-215-437-00	METAL	4.7K	1%	1/6W	
R504	1-215-437-00	METAL	4.7K	1%	1/6W	
R505	1-215-454-00	METAL	24K	1%	1/6W	
R506	1-215-454-00	METAL	24K	1%	1/6W	
R507	1-215-439-00	METAL	5.6K	1%	1/6W	
R508	1-215-439-00	METAL	5.6K	1%	1/6W	
R509	1-215-439-00	METAL	5.6K	1%	1/6W	
R510	1-215-439-00	METAL	5.6K	1%	1/6W	
R511	1-215-430-00	METAL	2.4K	1%	1/6W	
R512	1-215-423-00	METAL	1.2K	1%	1/6W	
R513	1-215-430-00	METAL	2.4K	1%	1/6W	
R514	1-259-488-11	CARBON	330K	5%	1/6W	
R515	1-247-700-11	CARBON	100	5%	1/4W	
R516	1-247-700-11	CARBON	100	5%	1/4W	
R517	1-259-466-11	CARBON	39K	5%	1/6W	
R518	1-259-440-11	CARBON	3.3K	5%	1/6W	
R519	1-259-432-11	CARBON	1.5K	5%	1/6W	
R521	1-259-428-11	CARBON	1K	5%	1/6W	
R525	1-259-388-11	CARBON	22	5%	1/6W	
R551	1-259-464-11	CARBON	33K	5%	1/6W	
R552	1-259-460-11	CARBON	22K	5%	1/6W	
R554	1-249-421-11	CARBON	2.2K	5%	1/4W	
R555	1-249-401-11	CARBON	47	5%	1/4W	
R556 ⚠	1-215-887-00	METAL OXIDE	150	5%	2W	F
R557	1-259-404-11	CARBON	100	5%	1/6W	
R591	1-249-400-11	CARBON	39	5%	1/4W	
R601	1-259-422-11	CARBON	560	5%	1/6W	
R602	1-259-500-11	CARBON	1M	5%	1/6W	
R603	1-259-452-11	CARBON	10K	5%	1/6W	
R605	1-259-428-11	CARBON	1K	5%	1/6W	
R801	1-249-425-11	CARBON	4.7K	5%	1/4W	
R802	1-249-429-11	CARBON	10K	5%	1/4W	
R803	1-247-903-00	CARBON	1M	5%	1/4W	
R804	1-249-417-11	CARBON	1K	5%	1/4W	
R806	1-249-441-11	CARBON	100K	5%	1/4W	
R807	1-249-417-11	CARBON	1K	5%	1/4W	
R809	1-249-441-11	CARBON	100K	5%	1/4W	
R810	1-249-406-11	CARBON	120	5%	1/4W	
R811	1-249-409-11	CARBON	220	5%	1/4W	
R901	1-249-426-11	CARBON	5.6K	5%	1/4W	
R902	1-247-887-00	CARBON	220K	5%	1/4W	
R903	1-249-437-11	CARBON	47K	5%	1/4W	
R904	1-249-405-11	CARBON	100	5%	1/4W	
R905	1-247-891-00	CARBON	330K	5%	1/4W	
R906	1-249-441-11	CARBON	100K	5%	1/4W	
R907	1-249-433-11	CARBON	22K	5%	1/4W	

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Ref.No.	Part No.	Description				
R908	1-249-405-11	CARBON	100	5%	1/4W	
R909	1-249-425-11	CARBON	4.7K	5%	1/4W	
R910	1-249-429-11	CARBON	10K	5%	1/4W	
R911	1-249-433-11	CARBON	22K	5%	1/4W	
R912 ⚠	1-212-857-00	FUSIBLE	10	5%	1/4W	F
R913 ⚠	1-215-886-11	METAL OXIDE	100	5%	2W	F
R934	1-247-887-00	CARBON	220K	5%	1/4W	
RV201	1-228-995-00	RES, ADJ, CARBON 20K				
RV202	1-228-995-00	RES, ADJ, CARBON 20K				
RV580	1-238-776-11	RES, VAR, CARBON 10KX3 (LINE OUT/PHONE LEVEL)(including VOL MOTOR,LED)				
RY901	1-515-710-11	RELAY				
S001	1-571-736-11	SWITCH, LEAF (IN)				
S002	1-571-736-11	SWITCH, LEAF (OUT)				
S701	1-554-596-21	SWITCH, KEY BOARD (1)				
S702	1-554-596-21	SWITCH, KEY BOARD (2)				
S703	1-554-596-21	SWITCH, KEY BOARD (3)				
S704	1-554-596-21	SWITCH, KEY BOARD (4)				
S705	1-554-596-21	SWITCH, KEY BOARD (5)				
S706	1-554-596-21	SWITCH, KEY BOARD (CONTINUE)				
S707	1-554-596-21	SWITCH, KEY BOARD (DISPLAY MODE)				
S708	1-554-596-21	SWITCH, KEY BOARD (6)				
S709	1-554-596-21	SWITCH, KEY BOARD (7)				
S710	1-554-596-21	SWITCH, KEY BOARD (8)				
S711	1-554-596-21	SWITCH, KEY BOARD (9)				
S712	1-554-596-21	SWITCH, KEY BOARD (0)				
S713	1-554-596-21	SWITCH, KEY BOARD (SHUFFLE)				
S714	1-554-596-21	SWITCH, KEY BOARD (▷)				
S715	1-554-596-21	SWITCH, KEY BOARD (11)				
S716	1-554-596-21	SWITCH, KEY BOARD (12)				
S717	1-554-596-21	SWITCH, KEY BOARD (13)				
S718	1-554-596-21	SWITCH, KEY BOARD (14)				
S719	1-554-596-21	SWITCH, KEY BOARD (15)				
S720	1-554-596-21	SWITCH, KEY BOARD (PROGRAM)				
S721	1-554-596-21	SWITCH, KEY BOARD (PEAK SEARCH)				
S722	1-554-596-21	SWITCH, KEY BOARD (16)				
S723	1-554-596-21	SWITCH, KEY BOARD (17)				
S724	1-554-596-21	SWITCH, KEY BOARD (18)				
S725	1-554-596-21	SWITCH, KEY BOARD (19)				
S726	1-554-596-21	SWITCH, KEY BOARD (20)				
S727	1-554-596-21	SWITCH, KEY BOARD (C.INDEX)				
S728	1-554-596-21	SWITCH, KEY BOARD (TIME/MEMO)				
S729	1-554-596-21	SWITCH, KEY BOARD (▮▮)				
S730	1-554-596-21	SWITCH, KEY BOARD (■)				
S731	1-554-596-21	SWITCH, KEY BOARD (◀◀)				

Ref.No.	Part No.	Description
S732	1-554-596-21	SWITCH, KEY BOARD (▶▶)
S733	1-554-596-21	SWITCH, KEY BOARD (LEVEL FILE)
S734	1-554-596-21	SWITCH, KEY BOARD (REPEAT)
S735	1-554-596-21	SWITCH, KEY BOARD (>20)
S736	1-554-596-21	SWITCH, KEY BOARD (ERASE)
S737	1-554-596-21	SWITCH, KEY BOARD (⏮)
S738	1-554-596-21	SWITCH, KEY BOARD (⏭)
S739	1-554-596-21	SWITCH, KEY BOARD (MULTI PGM)
S740	1-554-596-21	SWITCH, KEY BOARD (FADER)
S741	1-554-596-21	SWITCH, KEY BOARD (CHECK)
S742	1-554-596-21	SWITCH, KEY BOARD (CLEAR)
S743	1-554-596-21	SWITCH, KEY BOARD (FILE)
S744	1-554-596-21	SWITCH, KEY BOARD (EDIT/TIME FADE)
S745	1-554-596-21	SWITCH, KEY BOARD (TIME SET)
S746	1-554-596-21	SWITCH, KEY BOARD (FILE RECALL)
S801	1-554-596-21	SWITCH, KEY BOARD (OPEN/CLOSE)
S802	1-570-157-51	SWITCH, SLIDE (TIMER)
S991 ⚠	1-570-156-11	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)
T991 ⚠	1-450-039-11	(US,Canadian)...TRANSFORMER, POWER
T991 ⚠	1-450-040-11	(AEP,UK).....TRANSFORMER, POWER
TH901	1-808-065-11	THERMISTOR, POSITIVE
TH902	1-808-065-11	THERMISTOR, POSITIVE
X301	1-577-377-11	VIBRATOR, CERAMIC (10MHz)
X601	1-577-686-11	VIBRATOR, CRYSTAL (45.158MHz)
X602	1-577-685-11	FILTER, CRYSTAL (16.9344MHz)
X801	1-577-082-11	VIBRATOR, CERAMIC (4MHz)

ACCESSORY & PACKING MATERIAL

	1-465-277-11	REMOTE COMMANDER (RM-D590)
	1-558-271-11	CORD, CONNECTION
	3-750-932-11	(Canadian,AEP,UK)...MANUAL, INSTRUCTION
	3-750-932-21	(US).....MANUAL, INSTRUCTION
	3-750-932-41	(AEP).....MANUAL, INSTRUCTION
*	3-759-629-11	(AEP)...INSTRUCTION
	4-925-788-01	COVER, BATTERY (FOR REMOTE COMMANDER)
*	4-934-098-01	STOPPER, DISC TABLE
*	4-935-901-11	INDIVIDUAL CARTON
*	4-923-548-01	CUSHION (UPPER)
*	4-923-549-01	CUSHION (LOWER)

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