

CDP-C35/C201/C205/C305

SERVICE MANUAL

US Model
CDP-C35/C201/C205/C305

Canadian Model

AEP Model

E Model

Australian Model
CDP-C305



Model Name Using Similar Mechanism	CDP-190/390
Optical Pick-up Block Type	BU-5BD3

SPECIFICATIONS

System	Compact disc digital audio system
Laser	Semiconductor laser ($\lambda=780$ nm) Emission duration: continuous
Laser output	Max. 44.6 μ 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 (+1.0 dB, -1.2 dB)
Signal to noise ratio	More than 93 dB
Dynamic range	More than 90 dB
Harmonic distortion	Less than 0.05% (1 kHz)
Channel separation	More than 90 dB (1 kHz)
Wow and flutter	Below measurable limit
Outputs	LINE OUT (phono jacks) Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms PHONES (stereo phone jack) (CDP-C305/C205 only) Output level 0 - 10 mW (variable) (at 32 ohms)

General	
Power requirements	US, Canadian model 120 V AC, 60 Hz AEP model 200V AC, 50/60Hz E model 110-120, 220-240V AC adjustable, 50/60Hz Australian model 240 V AC, 50/60 Hz
Power consumption	11 W
Dimensions	Approx. 430×110×385 mm (w/h/d) (17×4 ³ / ₈ ×15 ¹ / ₄ inches)
Weight	Approx. 4.9 kg (10 lbs 13 oz), net

Supplied accessories

Audio signal connecting cord
(phono plug × 2 ↔ phono plug × 2) (1)
Remote commander (1) (CDP-C305 only)
R6 (size AA) batteries (2) (CDP-C305 only)
Operating Manual (1)

Design and specifications subject to change without notice.



COMPACT DISC PLAYER
SONY®

Note on the Transit Key

The white transit key on the bottom exterior of the unit protects the optical system against shock during transportation. Before operating the CD player, be sure to remove the key by following the instructions on the label, and store it in a safe place.

When transporting the unit, replace the key in its original hole and lock it in place.

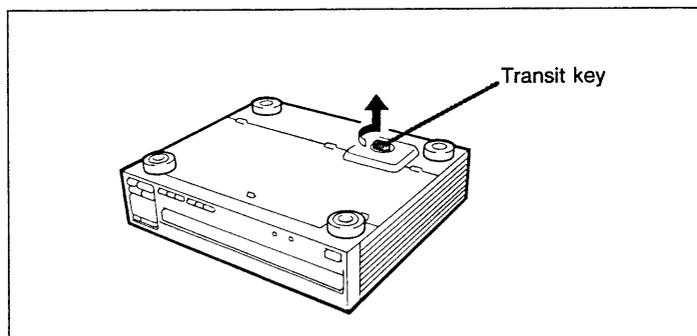


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SAFETY-RELATED COMPONENT WARNING!!

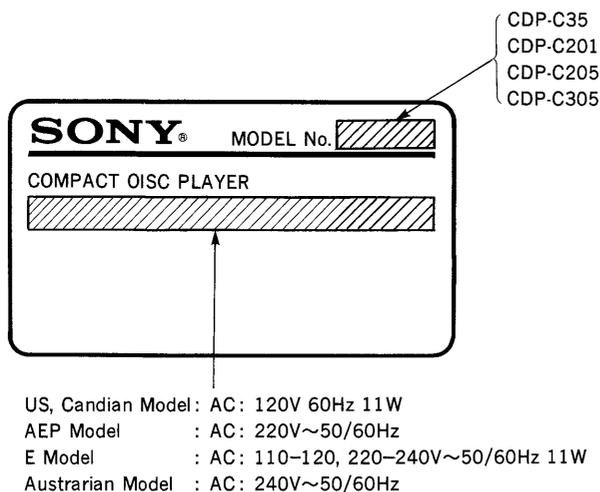
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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.

MODEL IDENTIFICATION

—Model Number Label—

**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 from more than 30cm away from the objective lens.

SAFETY CHECK-OUT

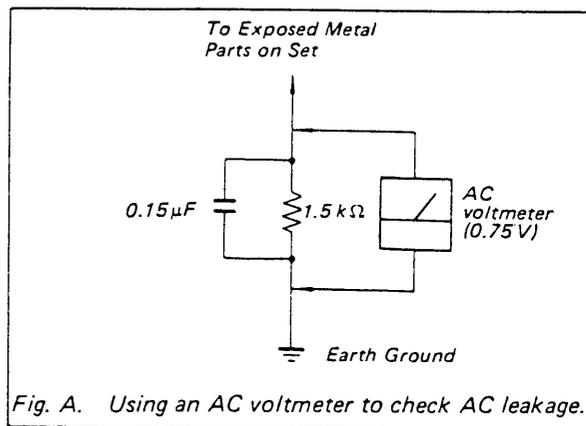
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

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

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



PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

CAUTION

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

1. Laser Diode Properties

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

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

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

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

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

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

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

1. Laser-dioe data

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

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

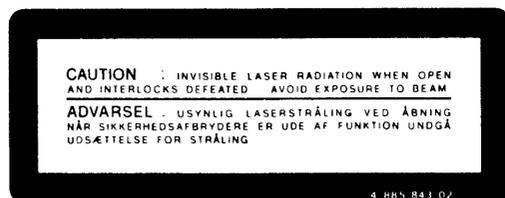
- Klassifikation: Klasse IIIb.

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

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

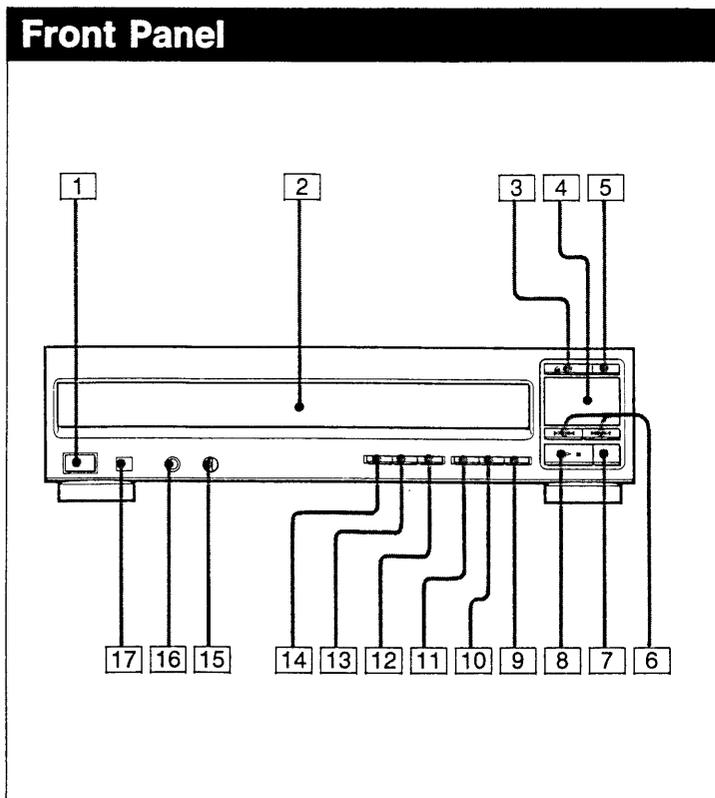
1. Advarsel Mærkning



VAROITUS: Laite sisältää, laserdiodin, joka lähettää (näkyvätöntä) silmille vaarallista lasersäteilyä.

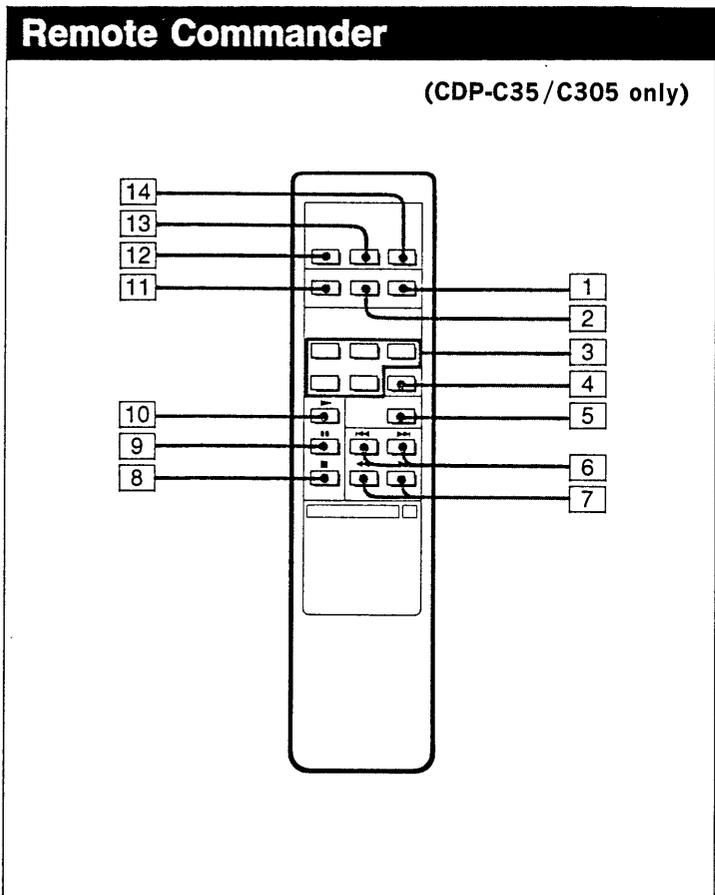
SECTION 1 GENERAL

1-1. LOCATION OF CONTROLS



- 1 POWER switch
 - 2 Disc tray
 - 3 ▲ OPEN/CLOSE button
 - 4 Display window
 - 5 DISC SKIP button
 - 6 ◀◀◀/▶▶▶ (AMS*/RMS**: manual search) buttons
 - 7 ■ (stop) button
 - 8 ▶|| (play/pause) button
 - 9 PROGRAM button
 - 10 SHUFFLE button
 - 11 CONTINUE button
 - 12 TIME FADE button
 - 13 REPEAT button
 - 14 TIME button
 - 15 (Headphones) LEVEL control
 - 16 HEADPHONES jack
 - 17 Remote sensor
- } EXCEPT FOR CDP-C201

* AMS is the abbreviation of Automatic Music Sensor.
 ** RMS is the abbreviation of Random Music Sensor.

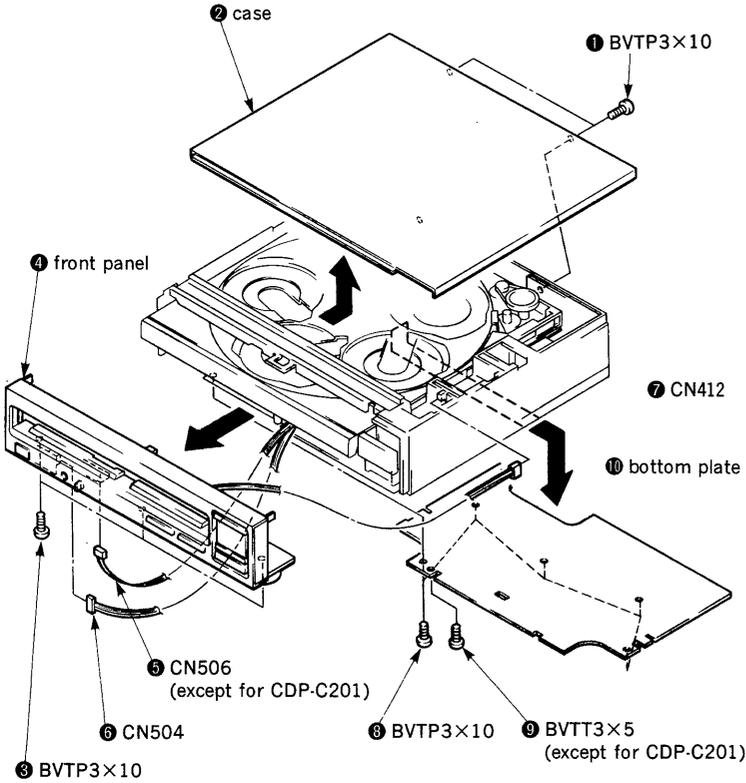


- 1 MUSIC SCAN button
- 2 REPEAT button
- 3 DISC 1 - 5 buttons
- 4 DISC SKIP button
- 5 FADER button
- 6 ◀◀▶▶ (AMS*) buttons
- 7 ◀▶▶▶ (manual search) buttons
- 8 ■ (stop) button
- 9 || (pause) button
- 10 ▶ (play) button
- 11 TIME button
- 12 CONTINUE button
- 13 SHUFFLE button
- 14 PGM (program) button

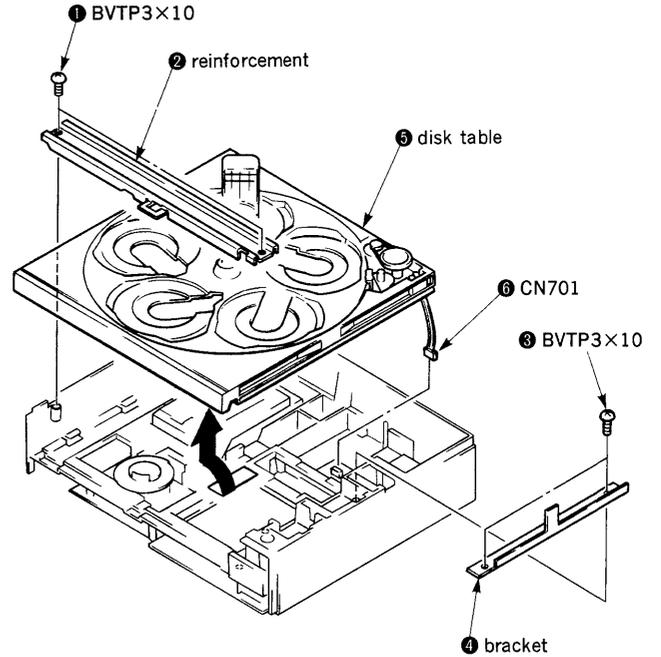
SECTION 2 DIASSEMBLY

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

2-1. FRONT PANEL, CASE AND BOTTOM PLATE

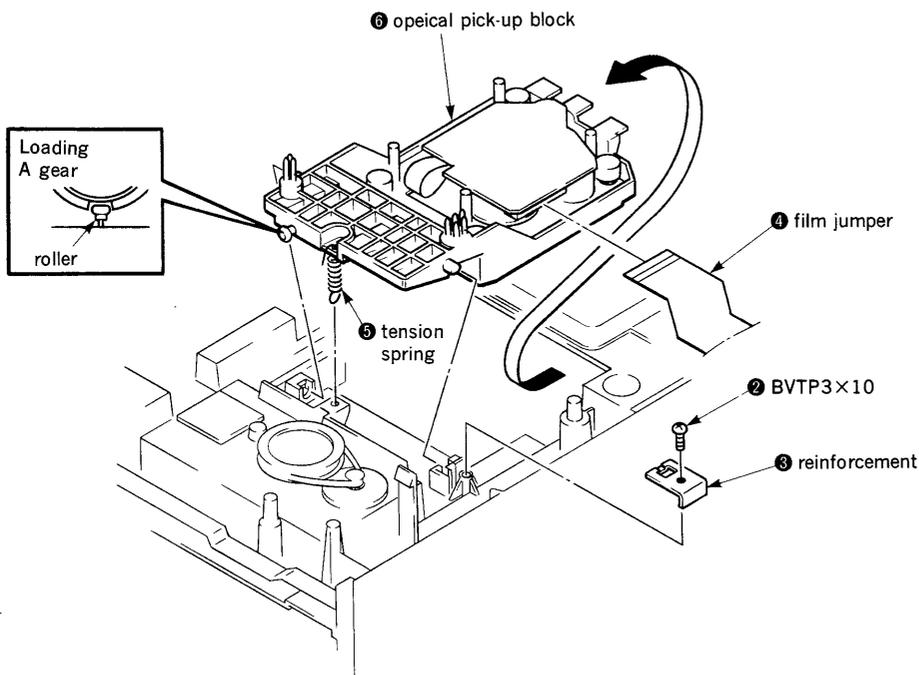


2-2. DISK TABLE



2-3. OPTICAL PICK-UP BLOCK

① Replace the set up side down.

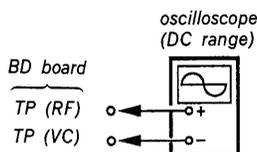


SECTION 3 ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-18 disc (3-702-101-1) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.

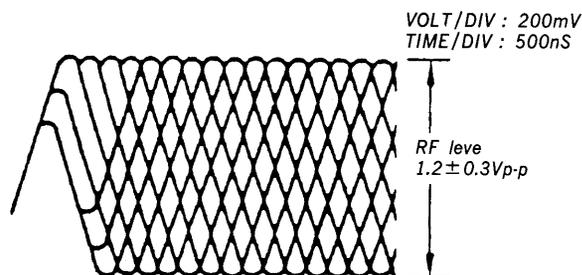
RF Level Check

Procedure :



1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Confirm that RF level and eye pattern is optimum. Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the wave form.

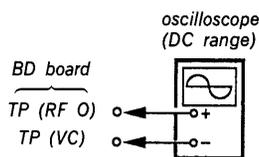
RF signal Reference Waveform (eye pattern)



REFERENCE

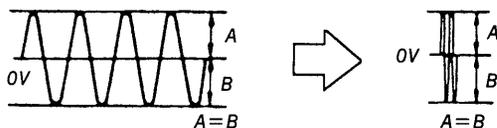
E-F Balance Check

Procedure :



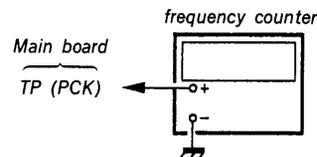
1. Connect test point TP (AF ADJ) and TP (TES) to ground with lead wire.
2. Connect oscilloscope to test point TP (TE O) and TP (VC) on BD board.
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and play back.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V.
6. After check, remove the lead wire connected in step 1.

Note : Take sweep time as long as possible to obtain best waveform.



RF PLL Free-run Frequency Check

Procedure :



1. Turn POWER switch on.
2. Put disc (YEDS-18) in and play back.
3. Confirm that reading on frequency counter is 4.3218MHz.

Focus/Tracking Gain Adjustment

A frequency response 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 mechanical shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is 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.

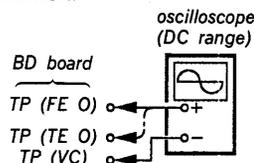
Gain	Focus	Tracking
Symptoms		
• The time until music starts becomes longer for STOP →▷ PLAY or automatic selection. (◀◀, ▶▶ buttons pressed.) (Normally takes about 1 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP →▷ PLAY or automatic selection. (◀◀, ▶▶ buttons 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.

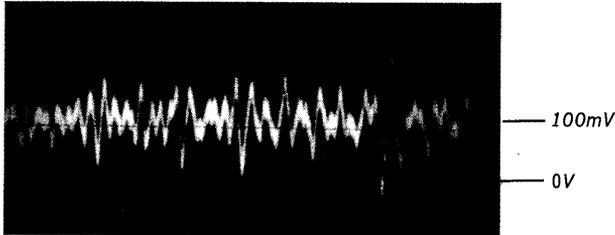
If the positions after the primary adjustment are only a little different, return the controls to the original position.



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. Insert disc (YEDS-18) and press ▷ PLAY button.
3. Connect oscilloscope to TP (FEO) and TP (VC) on BD board.
4. Adjustment RV102 on BD board so that the waveform is as shown in the figure below. (focus gain adjustment)

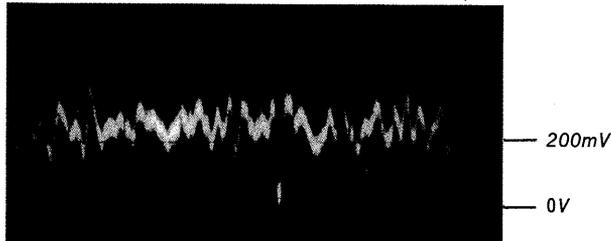
VOLT/DIV : 100mV
TIME/DIV : 2mS



• Incorrect Examples (DC level changes more than on adjusted waveform)

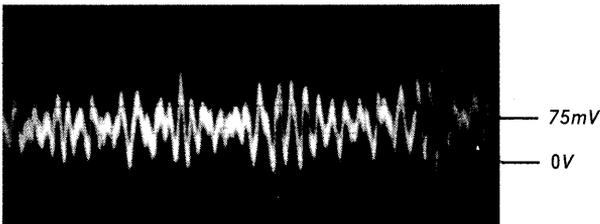
low focus gain

VOLT/DIV : 100mV
TIME/DIV : 2mS



high focus gain

VOLT/DIV : 100mV
TIME/DIV : 2mS



5. Connect oscilloscope to TP (TEO) and TP (VC) on BD board.
6. Adjust RV101 on BD board so that the waveform is as shown the figure below. (tracking gain adjustment)

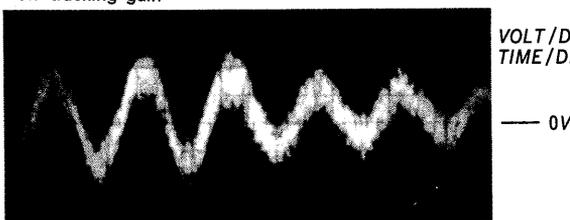
VOLT/DIV : 1V
TIME/DIV : 2mS



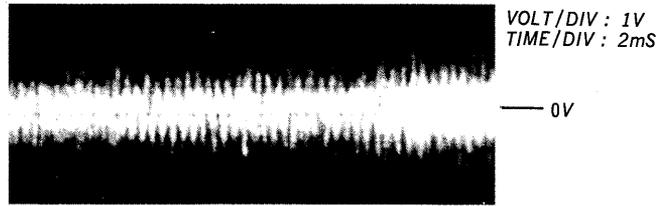
• Incorrect Examples (fundamentia wave appears)

low tracking gain

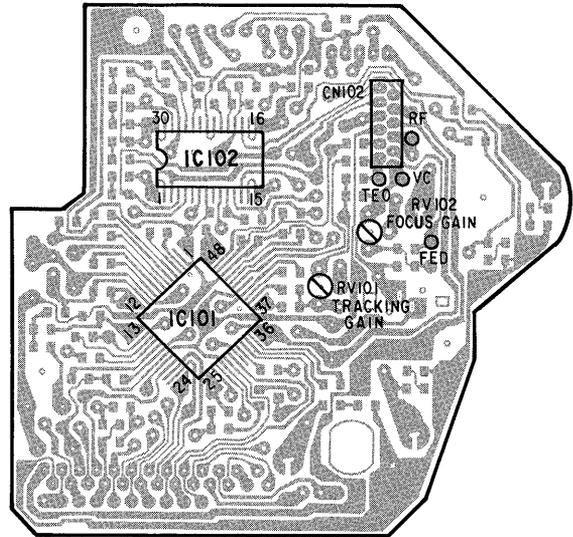
VOLT/DIV : 1V
TIME/DIV : 2mS



high tracking gain
(high fundamental wave)
than for low gain

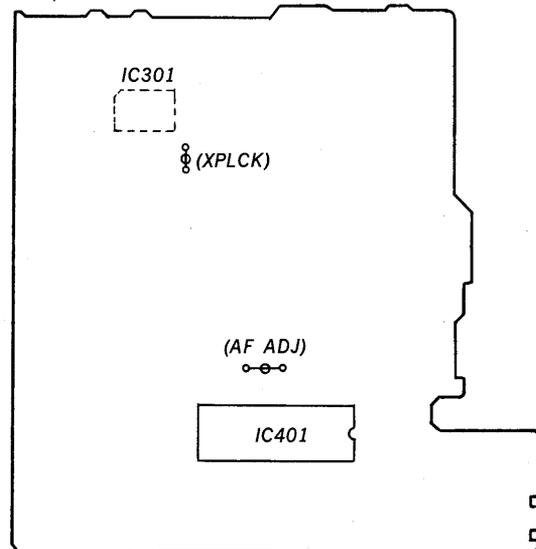


**Adjustment Location :
[BD board]**



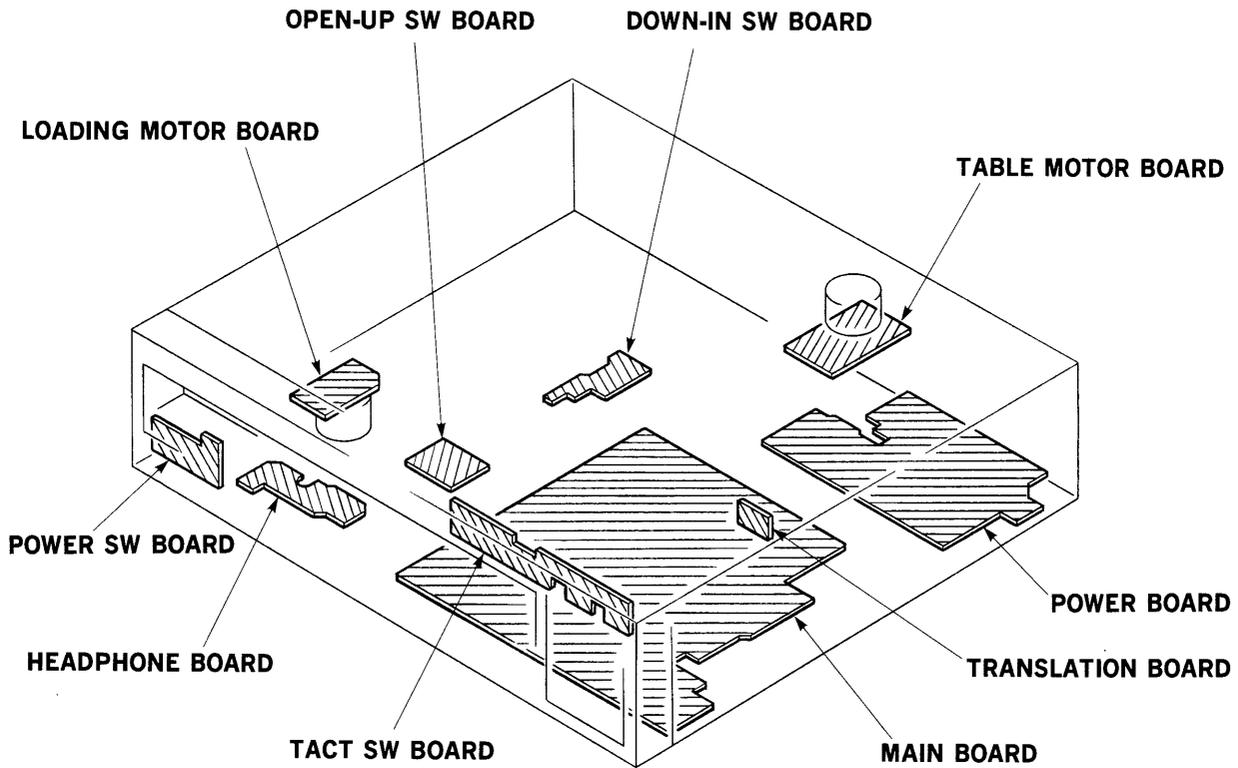
[Main board]

Component side



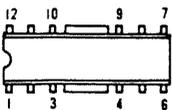
SECTION 4 DIAGRAMS

4-1. CIRCUIT BOARDS LOCATION

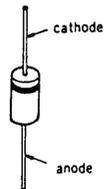


4-2. SEMICONDUCTOR LEAD LAYOUTS

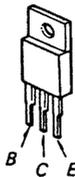
CXA1291P



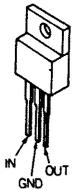
10E2N



2SB1094-L



MC7808CT



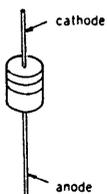
DTA144ES
DTC143TS
DTC144ES



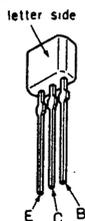
2SD774-34



RD3.9ES-B2
RD4.7ES-B2
1SS202-1



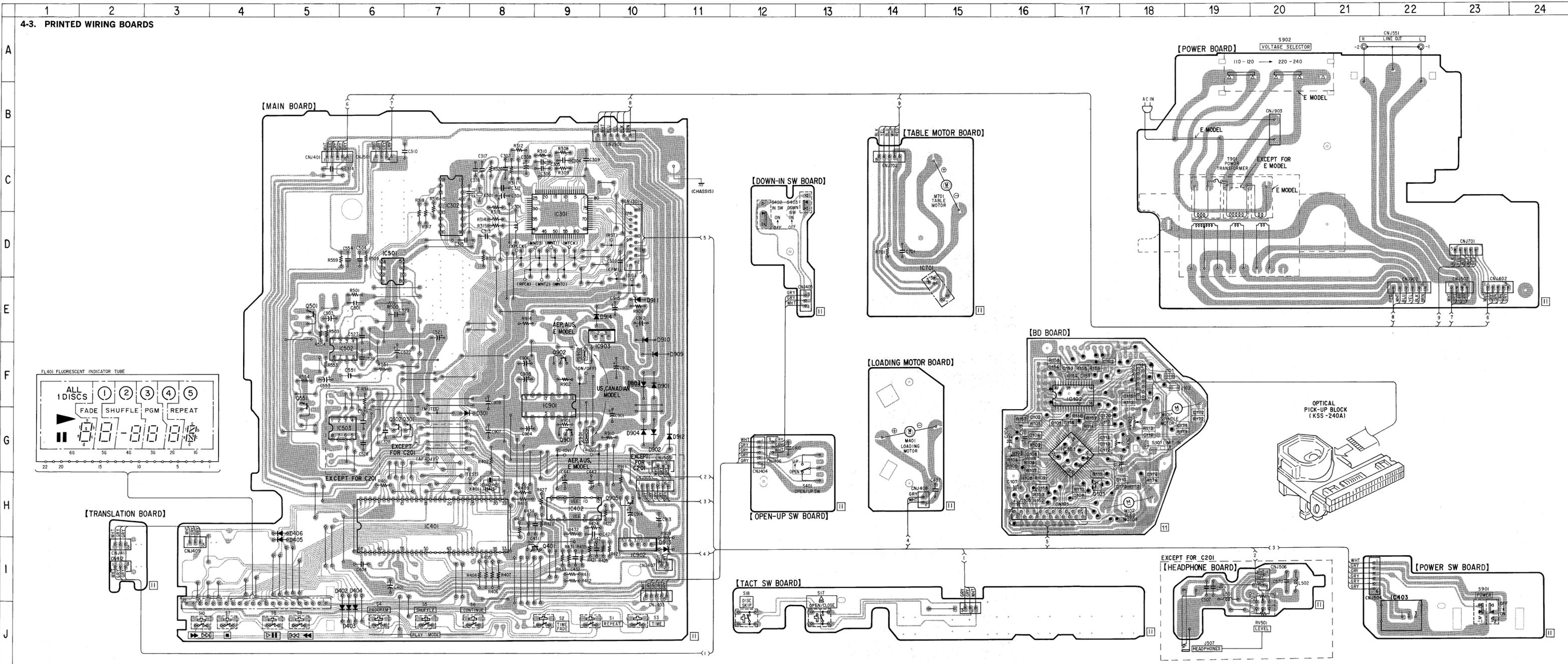
2SA1175-HFE



• Semiconductor Location

Ref. No.	Location
D301	G-7
D402	J-6
D403	J-6
D404	J-6
D405	I-5
D406	H-5
D901	F-10
D902	G-10
D903	F-10
D904	G-10
D909	F-10
D910	F-10
D911	E-10
D912	G-11
D913	I-11
D914	E-9
IC101	G-17
IC102	F-17
IC301	C-9
IC302	C-7
IC401	H-7
IC402	H-9
IC403	I-22
IC501	E-6
IC502	F-6
IC503	G-6
IC701	E-15
IC901	F-9
IC902	I-10
IC903	E-10
Q101	H-17
Q301	G-7
Q302	G-6
Q401	I-9
Q501	E-5
Q551	F-5
Q901	G-9
Q902	F-9
Q905	H-10

Note:
 ● : parts extracted from the component side.
 ● : Through hole.
 ● : Pattern on the side which is seen.
 ○ : Pattern of the rear side.
 ● AUS: Austrarian Model



4-4. SCHEMATIC DIAGRAM
 Refer to page 19 for IC Block Diagrams.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

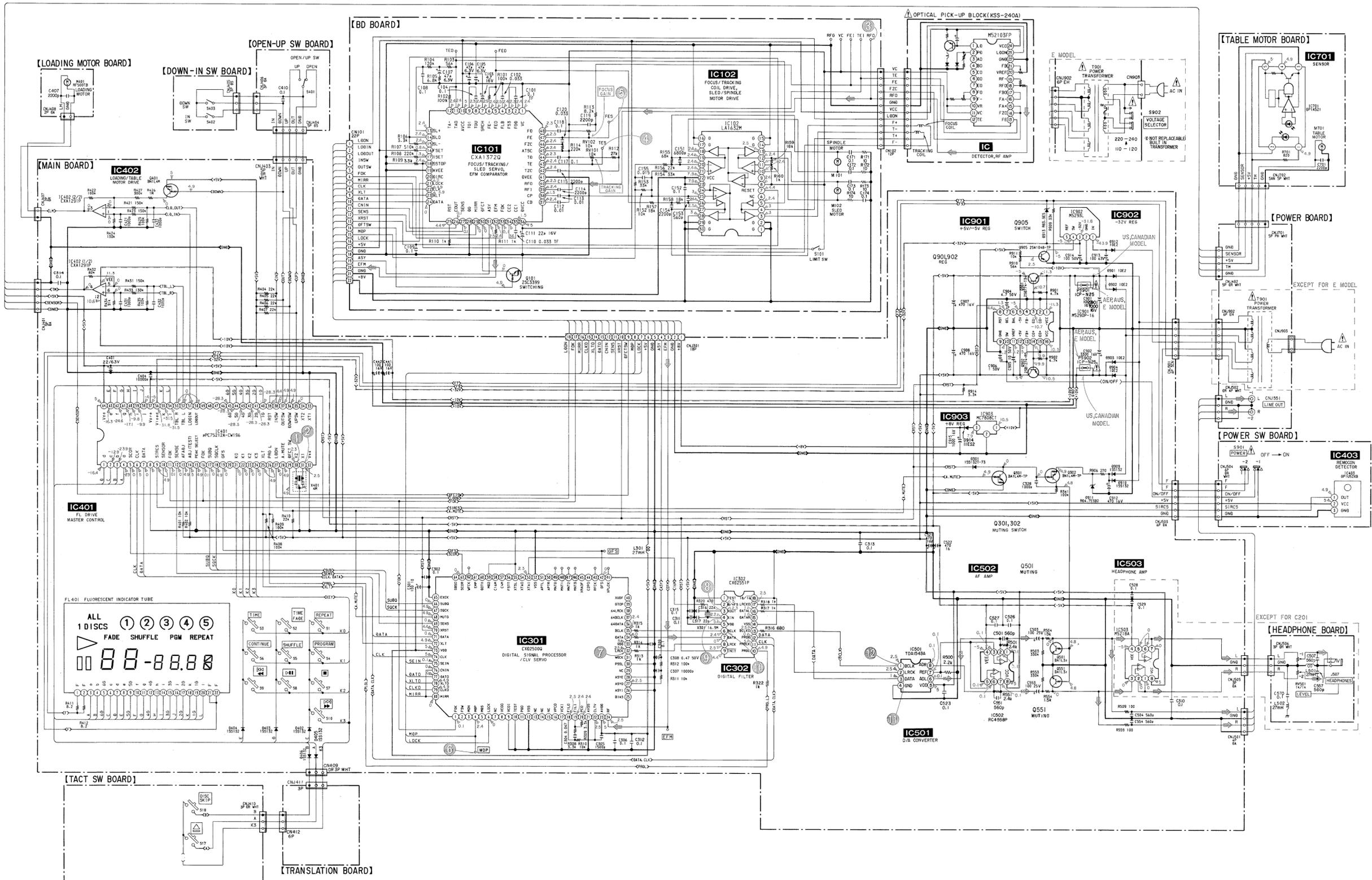
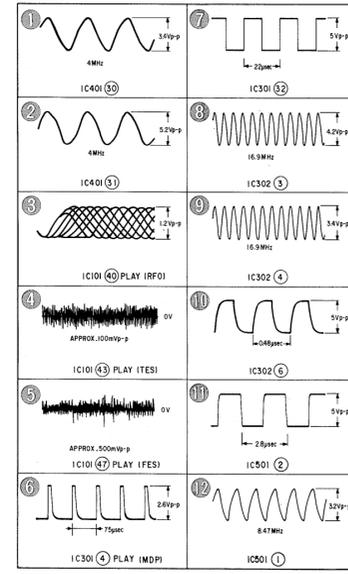
Note:

- All capacitors are in μF unless otherwise noted. pF : μF F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- : B+ Line
- : B- Line
- : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions. no mark: STOP
- Voltagess are taken with a VOM (Input Impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : CD

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

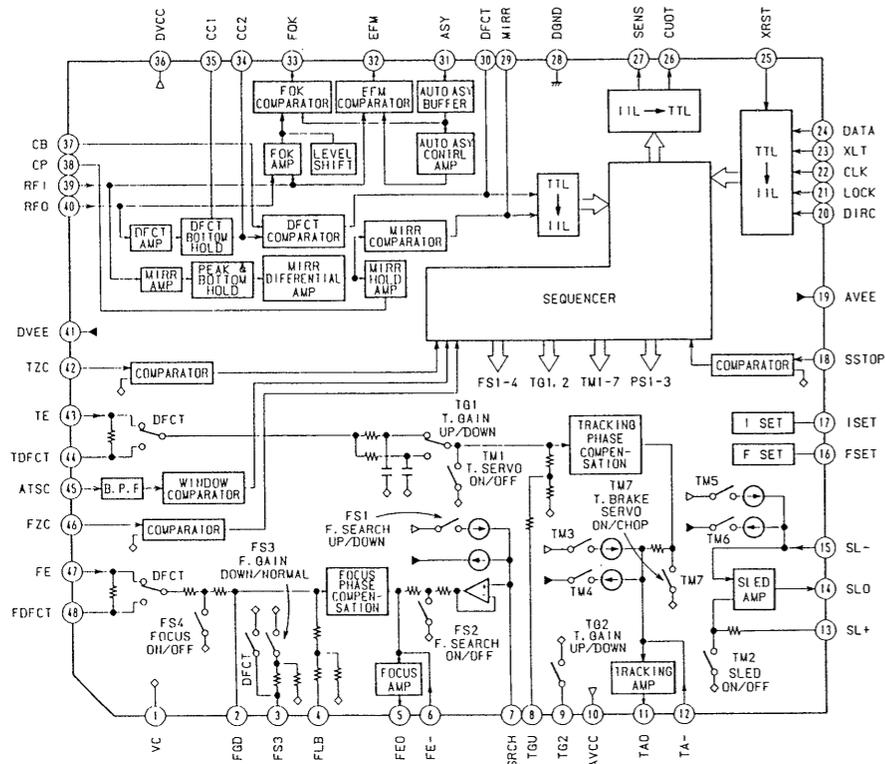
Note: Les composants identifiés par une marque **A** sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

• AUS: Austrian Model

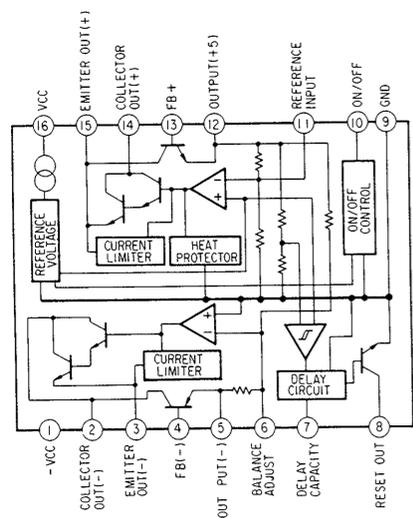


● IC Block Diagrams

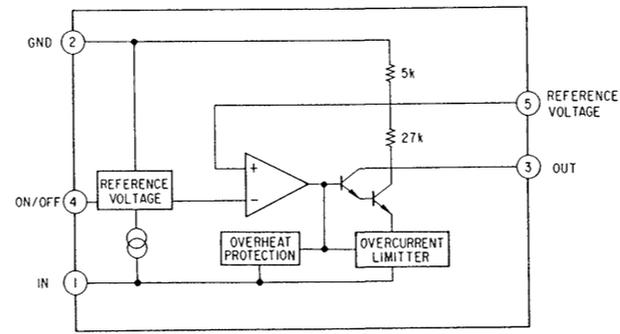
IC101 CXA1372Q



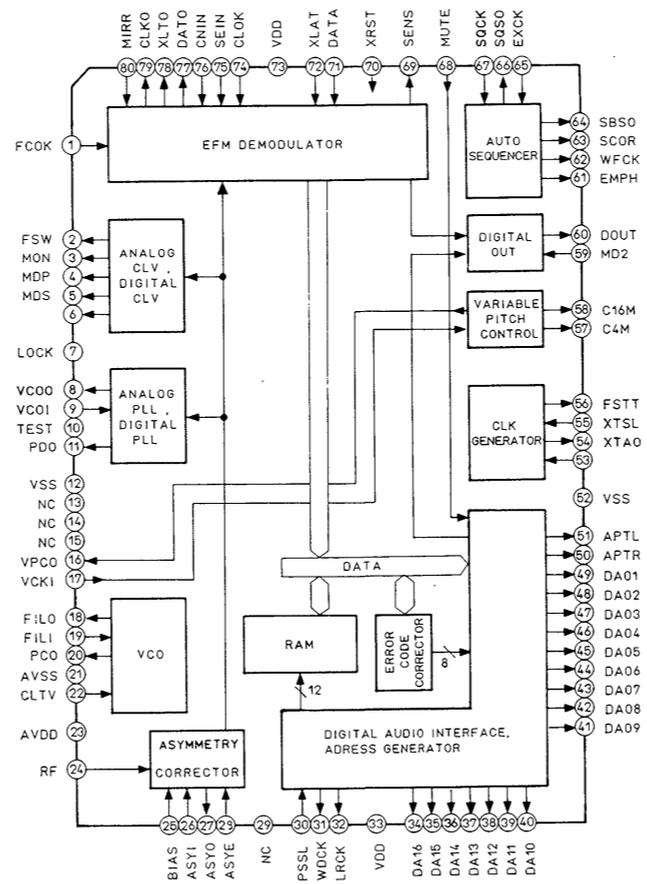
IC901 M5290P-16



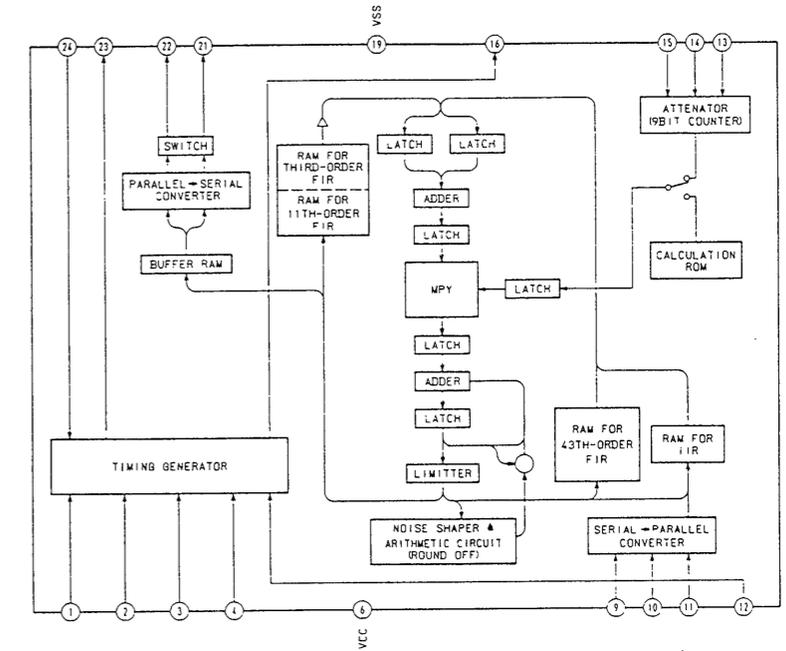
IC902 M5293L



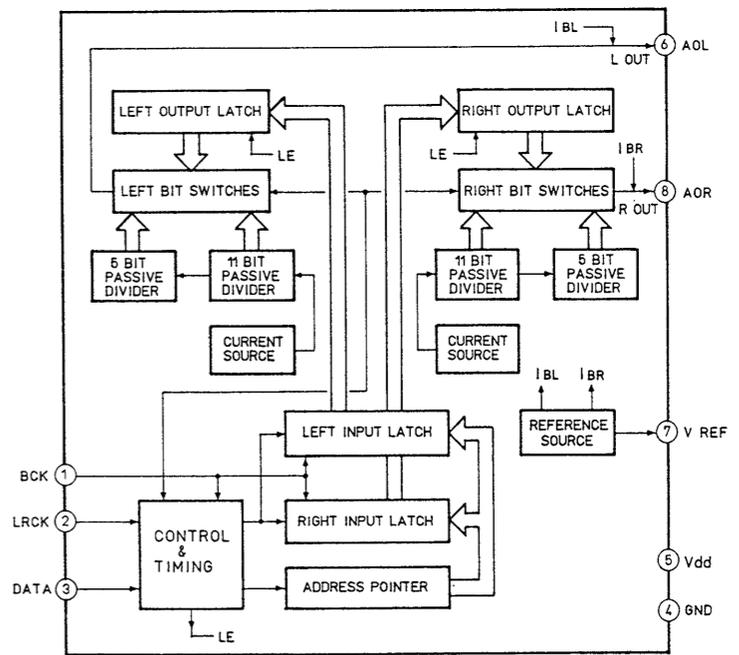
IC301 CXD2500Q



IC302 CXD2551P



IC501 TDA1543A



SECTION 5 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.

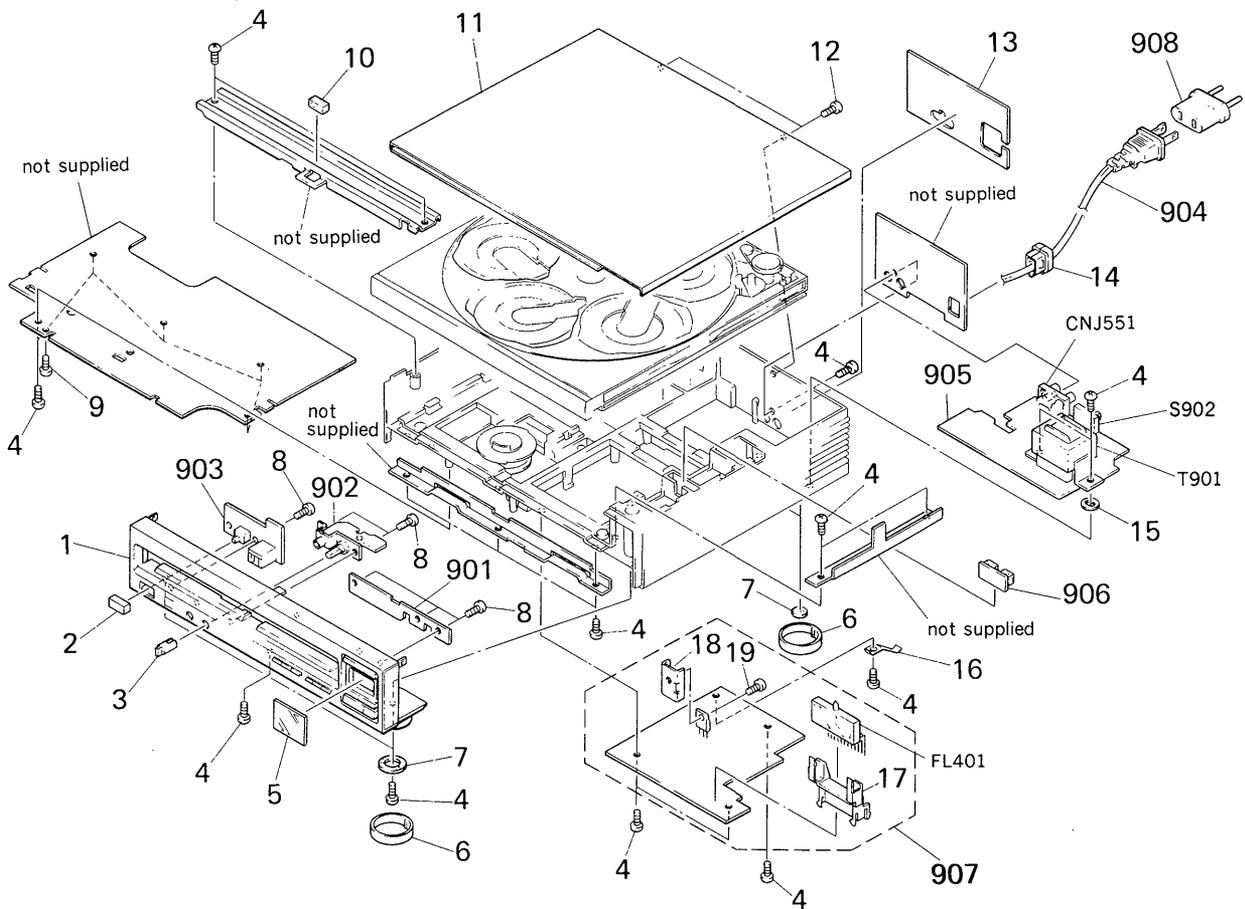
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)
↑ Cabinet's Color ↑ Parts' Color

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.

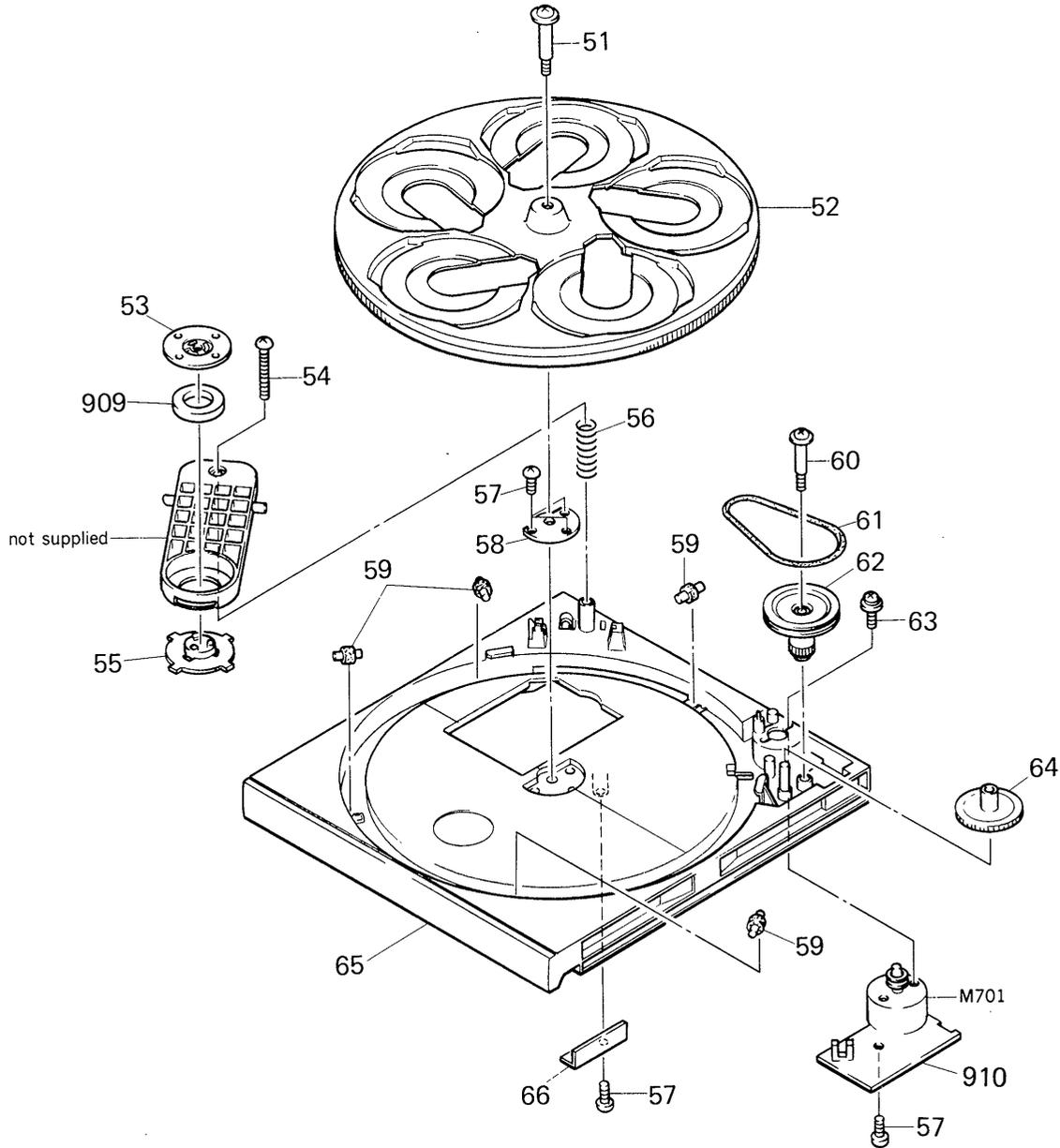
- AUS: Australian Model

5-1. CABINET SECTION



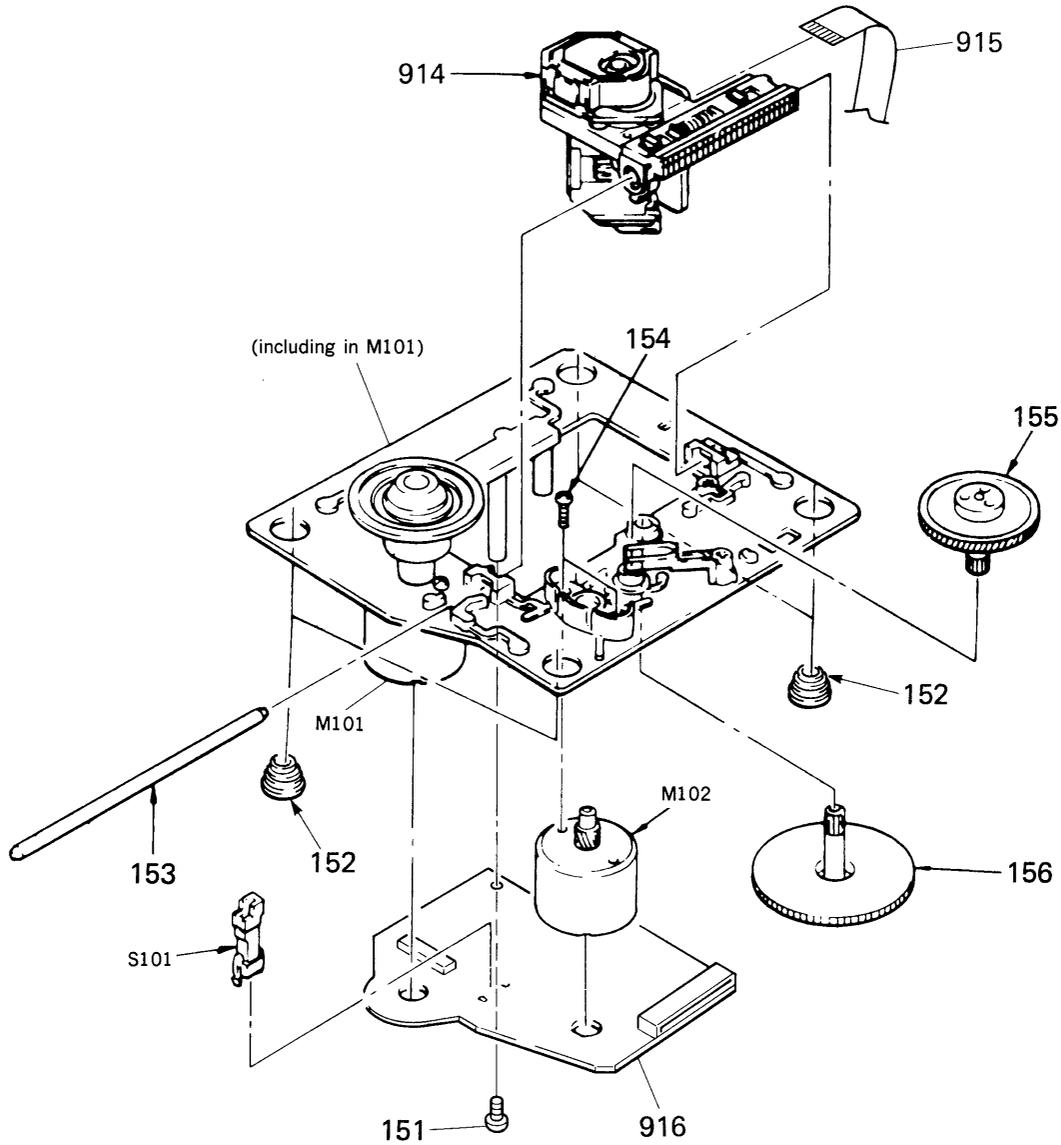
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	X-4924-452-1	(C305:US,Canadian)...PANEL ASSY, FRONT		15	4-870-539-00	PLATE, GROUND	
	X-4924-453-1	(AEP/E/AUS).....PANEL ASSY, FRONT		16	*4-930-512-01	PLATE, GROUND	
	X-4924-454-1	(C205).....PANEL ASSY, FRONT		17	*4-926-396-01	HOLDER (FL)	
	X-4924-455-1	(C201).....PANEL ASSY, FRONT		18	*3-309-144-21	HEAT SINK	
	X-4924-456-1	(C35).....PANEL ASSY, FRONT		19	7-682-547-04	SCREW +BVTT 3X6 (S)	
2	4-922-921-01	BUTTON (POWER)		901	*1-634-804-11	PC BOARD, TACT SW	
3	4-922-531-11	(EXCEPT C201)...KNOB (A TYPE), LOV		902	*1-634-802-11	(EXCEPT C201)...PC BOARD, HEADPHONE	
4	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S		903	*1-634-803-11	PC BOARD, POWER SW	
5	4-934-367-01	(EXCEPT C35)...WINDOW (FL)		904	▲.1-575-104-11	(E).....CORD, POWER	
	4-934-368-01	(C35).....WINDOW (FL)			▲.1-575-105-11	(US,Canadian)...CORD, POWER	
6	4-926-398-01	(AEP/E/AUS)...PLATE, ORNAMENTAL			▲.1-575-453-11	(AEP).....CORD, POWER	
7	4-926-391-01	FOOT (FELT)			▲.1-575-677-11	(AUS).....CORD, POWER	
8	4-928-635-01	SCREW, +BV (2.6X8) TAPPING		905	*1-634-806-11	PC BOARD, POWER	
9	7-685-870-01	SCREW +BVTT 3X5 (S)		906	*1-634-805-11	PC BOARD, TRANSLATION	
10	9-911-842-XX	CUSHION (S)		907	*A-4617-409-A	(C201).....MOUNTED PCB, MAIN	
11	4-930-503-21	CASE			*A-4617-411-A	(C35,C205,C305:US/Canadian)	
12	4-909-982-31	SCREW, TAPPING				...MOUNTED PCB, MAIN	
13	*4-934-346-01	(C305:US)			*A-4617-415-A	(AEP,E,AUS).....MOUNTED PCB, MAIN	
	*4-934-347-01	...PLATE (BACK PANEL), INDICATION (Canadian)		908	▲.1-569-007-11	(E3)...ADAPTOR, CONVERSION 2P	
	*4-934-348-01	...PLATE (BACK PANEL), INDICATION (AEP).....PLATE (BACK PANEL), INDICATION			CNJ551	1-566-921-11	JACK, PIN 2P (LINE OUT)
	*4-934-349-01	(AUS).....PLATE (BACK PANEL), INDICATION			FL401	1-519-582-11	INDICATOR TUBE, FLUORESCENT
	*4-934-350-01	(E).....PLATE (BACK PANEL), INDICATION			S902	▲.1-571-722-11	(E)...SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR)
	*4-934-351-01	(C205).....PLATE (BACK PANEL), INDICATION		T901	▲.1-449-954-11	(US,Canadian)...TRANSFORMER, POWER	
	*4-934-352-01	(C201).....PLATE (BACK PANEL), INDICATION			T901	▲.1-449-955-11	(AEP/AUS).....TRANSFORMER, POWER
	*4-934-353-01	(C35).....PLATE (BACK PANEL), INDICATION			T901	▲.1-449-956-11	(E).....TRANSFORMER, POWER
14	*3-703-244-00	(EXCEPT E)...BUSHING (2104), CORD					
	*3-703-571-11	(E).....BUSHING (S)(4516), CORD					

5-2. DISK TABLE SECTION



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	4-923-597-01	SCREW, STEP		62	4-926-385-01	GEAR (C)	
52	*4-926-383-01	TABLE (B), DISK		63	7-621-759-35	+PSW, 2.6X5	
53	4-921-029-01	YOKE, CHUCKING		64	4-926-386-01	GEAR (B)	
54	7-682-554-04	SCREW +B 3X25		65	4-934-369-01	(EXCEPT C35,C205)...TABLE (A), DISK	
55	4-921-022-01	PULLEY, CHUCKING			4-934-369-11TABLE (A), DISK	
56	4-926-395-01	SPRING, COMPRESSION			4-934-369-21	(C35).....TABLE (A), DISK	
57	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S		66	*4-926-388-01	BRACKET (ADJUSTMENT)	
58	*4-926-387-01	BRACKET (CENTER SHAFT)		909	1-452-340-21	MAGNET	
59	*X-4924-409-1	SHAFT (ROLLER B) ASSY		910	*1-634-807-11	PC BOARD, TABLE MOTOR	
60	4-926-384-01	SCREW, STEP		M701	A-4604-232-A	MOTOR ASSY, ROTARY	
61	4-926-399-01	BELT					

5-4. OPTICAL PICK-UP BLOCK
(BU-5BD3)



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.

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S		914	\triangle .8-848-144-11	DEVICE, OPTICAL KSS-240A	
152	4-933-126-01	INSULATOR (A)		915	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
153	4-917-565-01	SHAFT, SLED		916	*A-4617-371-A	MOUNTED PCB, BD	
154	7-621-255-15	SCREW +P 2X3		M101	1-4917-523-3	MOTOR ASSY (SPINDLE)	
155	4-917-567-01	GEAR (M)		M102	X-4917-504-1	MOTOR ASSY (SLED)	
156	4-917-564-01	GEAR (P), FLATNESS		S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)	

SECTION 6 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: μ F, PF: μ μ F.

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

COILS
• MMH: mH, UH: μ H

SEMICONDUCTORS
In each case, U: μ , for example:
UA...: μ A..., UPA...: μ PA...,
UPC...: μ PC, UPD...: μ PD...

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.

- AUS: Austrarian Model

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*1-634-804-11	PC BOARD, TACT SW	C171	1-163-038-00	CERAMIC CHIP 0.1MF 25V
902	*1-634-802-11	(EXCEPT C201)...PC BOARD, HEADPHONE	C172	1-163-038-00	CERAMIC CHIP 0.1MF 25V
903	*1-634-803-11	PC BOARD, POWER SW	C173	1-163-038-00	CERAMIC CHIP 0.1MF 25V
904	Δ .1-575-104-11	(E).....CORD, POWER	C174	1-163-038-00	CERAMIC CHIP 0.1MF 25V
	Δ .1-575-105-11	(US,Canadian)...CORD, POWER	C301	1-124-443-00	ELECT 100MF 20% 10V
	Δ .1-575-453-11	(AEP).....CORD, POWER	C302	1-164-159-11	CERAMIC 0.1MF 50V
	Δ .1-575-677-11	(AUS).....CORD, POWER	C304	1-136-161-00	FILM 0.047MF 5% 50V
905	*1-634-806-11	PC BOARD, POWER	C305	1-161-374-11	CERAMIC 0.0015MF 30% 16V
906	*1-634-805-11	PC BOARD, TRANSLATION	C306	1-164-159-11	CERAMIC 0.1MF 50V
907	*A-4617-409-A	(C201).....MOUNTED PCB, MAIN	C307	1-161-379-00	CERAMIC 0.01MF 30% 16V
	*A-4617-411-A	(C35,C205,C305:US/Canadian)	C308	1-124-902-00	ELECT 0.47MF 20% 50V
	*A-4617-415-A	(AEP,E,AUS).....MOUNTED PCB, MAIN	C309	1-164-159-11	CERAMIC 0.1MF 50V
908	Δ .1-569-007-11	(E3)...ADAPTOR, CONVERSTION 2P	C310	1-164-159-11	CERAMIC 0.1MF 50V
909	1-452-340-21	MAGNET	C311	1-164-159-11	CERAMIC 0.1MF 50V
910	*1-634-807-11	PC BOARD, TABLE MOTOR	C312	1-164-159-11	CERAMIC 0.1MF 50V
911	*1-634-808-11	PC BOARD, LOADING MOTOR	C313	1-164-159-11	CERAMIC 0.1MF 50V
912	*1-634-810-11	PC BOARD, OPEN-UP SW	C314	1-164-159-11	CERAMIC 0.1MF 50V
913	*1-634-809-11	PC BOARD, DOWN-IN SW	C315	1-164-159-11	CERAMIC 0.1MF 50V
914	Δ .8-848-144-11	DEVICE, OPTICAL KSS-240A	C316	1-162-207-31	CERAMIC 22PF 5% 50V
915	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	C317	1-162-207-31	CERAMIC 22PF 5% 50V
916	*A-4617-371-A	MOUNTED PCB, BD	C328	1-162-294-31	CERAMIC 0.001MF 10% 50V
C101	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C401	1-124-638-11	ELECT 22MF 20% 6.3V
C102	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	C404	1-161-379-00	CERAMIC 0.01MF 30% 16V
C103	1-126-094-11	ELECT 4.7MF 20% 16V	C407	1-161-494-00	CERAMIC 0.022MF 25V
C104	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C410	1-164-159-11	CERAMIC 0.1MF 50V
C105	1-126-154-11	ELECT 47MF 20% 6.3V	C421	1-162-294-31	CERAMIC 0.001MF 10% 50V
C106	1-126-154-11	ELECT 47MF 20% 6.3V	C422	1-162-294-31	CERAMIC 0.001MF 10% 50V
C107	1-126-154-11	ELECT 47MF 20% 6.3V	C431	1-162-294-31	CERAMIC 0.001MF 10% 50V
C108	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C432	1-162-294-31	CERAMIC 0.001MF 10% 50V
C109	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C441	1-126-101-11	ELECT 100MF 20% 16V
C110	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	C442	1-126-101-11	ELECT 100MF 20% 16V
C111	1-131-367-00	TANTALUM 22MF 20% 16V	C501	1-162-291-31	CERAMIC 560PF 10% 50V
C112	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	C503	1-124-478-11	ELECT 100MF 20% 25V
C113	1-164-232-11	CERAMIC CHIP 0.01MF 10% 50V	C504	1-162-291-31	CERAMIC 560PF 10% 50V
C114	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	C507	1-162-291-31	(EXCEPT C201)...CERAMIC 560PF 10% 50V
C115	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	C521	1-126-103-11	ELECT 470MF 20% 16V
C117	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C522	1-126-103-11	ELECT 470MF 20% 16V
C118	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C523	1-164-159-11	CERAMIC 0.1MF 50V
C119	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	C526	1-164-159-11	CERAMIC 0.1MF 50V
C120	1-163-989-11	CERAMIC CHIP 0.033MF 10% 25V	C527	1-164-159-11	CERAMIC 0.1MF 50V
C151	1-163-019-00	CERAMIC CHIP 0.0068MF 10% 50V	C528	1-164-159-11	(EXCEPT C201)...CERAMIC 0.1MF 50V
C152	1-163-038-00	CERAMIC CHIP 0.1MF 25V	C529	1-164-159-11	(EXCEPT C201)...CERAMIC 0.1MF 50V
C153	1-163-006-11	CERAMIC CHIP 560PF 10% 50V	C551	1-162-291-31	CERAMIC 560PF 10% 50V
C154	1-164-161-11	CERAMIC CHIP 0.0022MF 10% 50V	C553	1-124-478-11	ELECT 100MF 20% 25V
C155	1-163-023-00	CERAMIC CHIP 0.015MF 10% 50V	C554	1-162-291-31	CERAMIC 560PF 10% 50V

Ref.No.	Part No.	Description			
C557	1-162-291-31	(EXCEPT C201)...CERAMIC	560PF	10%	50V
C570	1-164-159-11	(EXCEPT C201)...CERAMIC	0.1MF		50V
C701	1-161-375-00	CERAMIC	0.0022MF	30%	16V
C901	1-124-360-00	ELECT	1000MF	20%	16V
C902	1-124-887-00	ELECT	3300MF	20%	16V
C904	1-124-927-11	ELECT	4.7MF	20%	50V
C905	1-123-875-11	ELECT	10MF	20%	50V
C906	1-124-791-11	ELECT	1MF	20%	50V
C907	1-126-103-11	ELECT	470MF	20%	16V
C908	1-126-103-11	ELECT	470MF	20%	16V
C912	1-126-103-11	ELECT	470MF	20%	16V
C913	1-124-572-11	ELECT	100MF	20%	63V
C914	1-124-122-11	ELECT	100MF	20%	50V
C915	1-124-360-00	ELECT	1000MF	20%	16V
CN101	1-568-796-11	SOCKET, CONNECTOR	22P		
CN102	1-568-795-11	SOCKET, CONNECTOR	12P		
CNJ301	1-568-468-11	SOCKET, CONNECTOR	18P		
CNJ402*1	1-564-339-61	PIN, CONNECTOR	5P		
CNJ403*1	1-564-339-00	PIN, CONNECTOR	5P		
CNJ407*1	1-564-336-00	PIN, CONNECTOR	2P		
CNJ411*1	1-564-337-00	PIN, CONNECTOR	3P		
CNJ502*1	1-564-338-00	PIN, CONNECTOR	4P		
CNJ504*1	1-564-499-11	PIN, CONNECTOR	6P		
CNJ506*1	1-564-337-00	(EXCEPT C201)...PIN, CONNECTOR	3P		
CNJ551	1-566-921-11	JACK, PIN 2P (LINE OUT)			
CNJ701*1	1-564-707-11	PIN, CONNECTOR (SMALL TYPE)	5P		
CNJ902*1	1-564-509-11	PLUG, CONNECTOR	6P		
CNJ903*1	1-564-321-00	PIN, CONNECTOR	2P		
D301	8-719-107-94	DIODE 1SS202-1			
D402	8-719-107-94	DIODE 1SS202-1			
D403	8-719-107-94	DIODE 1SS202-1			
D404	8-719-107-94	DIODE 1SS202-1			
D405	8-719-107-94	DIODE 1SS202-1			
D406	8-719-107-94	DIODE 1SS202-1			
D901	8-719-200-77	DIODE 10E2N			
D902	8-719-200-77	DIODE 10E2N			
D903	8-719-200-77	DIODE 10E2N			
D904	8-719-200-77	DIODE 10E2N			
D909	8-719-107-94	DIODE 1SS202-1			
D910	8-719-107-94	DIODE 1SS202-1			
D911	8-719-109-81	DIODE RD4.7ES-B2			
D912	8-719-200-77	DIODE 10E2N			
D913	8-719-109-72	DIODE RD3.9ES-B2			
D914	8-719-200-82	DIODE 11ES2			
FL401	1-519-582-11	INDICATOR TUBE, FLUORESCENT			
IC101	8-752-037-33	IC CXA1372Q			
IC102	8-759-821-94	IC LA6532M			
IC301	8-752-333-31	IC CXD2500Q			
IC302	8-752-334-06	IC CXD2551P			
IC401	8-759-149-33	IC UPD75212ACW-196			
IC402	8-752-035-28	IC CXA1291P			
IC403	8-749-920-83	IC GPIU52XB			
IC501	8-759-990-13	IC TDA1543A-S1			
IC502	8-759-945-58	IC RC4558P			
IC503	8-759-634-51	(EXCEPT C201)...IC M5218AP			
IC701	8-719-970-19	IC GP-1A521			

Ref.No.	Part No.	Description			
IC901	8-759-630-21	IC M5290P-16			
IC902	8-759-633-42	IC M5293L			
IC903	8-759-013-08	IC MC7808CT			
J101	1-216-295-00	METAL GLAZE	0	5%	1/10W
J102	1-216-295-00	METAL GLAZE	0	5%	1/10W
J507	1-568-519-21	(EXCEPT C201)...JACK, LARGE TYPE (HEADPHONES)			
L301	*1-410-858-11	INDUCTOR	27MMH		
L501	*1-410-858-11	(EXCEPT C201)...INDUCTOR	27MMH		
L502	*1-410-858-11	(EXCEPT C201)...INDUCTOR	27MMH		
M101	1-4917-523-3	MOTOR ASSY (SPINDLE)			
M102	X-4917-504-1	MOTOR ASSY (SLED)			
M401	A-4604-228-A	MOTOR ASSY, LOADING			
M701	A-4604-232-A	MOTOR ASSY, ROTARY			
PS901A	1-532-637-00	(AEP/E/AUS)...LINK, IC ICP-N25 (1A)			
PS902A	1-532-637-00	(AEP/E/AUS)...LINK, IC ICP-N25 (1A)			
Q101	8-729-901-01	TRANSISTOR DTC144EK			
Q301	8-729-900-89	TRANSISTOR DTC144ES			
Q302	8-729-900-65	TRANSISTOR DTA144ES			
Q401	8-729-900-65	TRANSISTOR DTA144ES			
Q501	8-729-900-74	TRANSISTOR DTC143TS			
Q551	8-729-900-74	TRANSISTOR DTC143TS			
Q901	8-729-140-96	TRANSISTOR 2SD774-34			
Q902	8-729-111-67	TRANSISTOR 2SB1094-L			
Q905	8-729-119-76	TRANSISTOR 2SA1175-HFE			
R101	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R102	1-216-097-00	METAL GLAZE	100K	5%	1/10W
R103	1-216-091-00	METAL GLAZE	56K	5%	1/10W
R104	1-216-099-00	METAL GLAZE	120K	5%	1/10W
R105	1-216-069-00	METAL GLAZE	6.8K	5%	1/10W
R106	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R107	1-216-114-00	METAL GLAZE	510K	5%	1/10W
R108	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R109	1-216-061-00	METAL GLAZE	3.3K	5%	1/10W
R110	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R111	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R112	1-216-083-00	METAL GLAZE	27K	5%	1/10W
R113	1-216-071-00	METAL GLAZE	8.2K	5%	1/10W
R114	1-216-105-00	METAL GLAZE	220K	5%	1/10W
R152	1-216-073-00	METAL GLAZE	10K	5%	1/10W
R153	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R154	1-216-085-00	METAL GLAZE	33K	5%	1/10W
R155	1-216-093-00	METAL GLAZE	68K	5%	1/10W
R156	1-216-081-00	METAL GLAZE	22K	5%	1/10W
R157	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R158	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R159	1-216-079-00	METAL GLAZE	18K	5%	1/10W
R160	1-216-049-00	METAL GLAZE	1K	5%	1/10W
R171	1-216-001-00	METAL GLAZE	10	5%	1/10W
R172	1-216-001-00	METAL GLAZE	10	5%	1/10W
R173	1-216-001-00	METAL GLAZE	10	5%	1/10W
R174	1-216-001-00	METAL GLAZE	10	5%	1/10W
R308	1-249-423-11	CARBON	3.3K	5%	1/4W
R309	1-249-423-11	CARBON	3.3K	5%	1/4W
R310	1-249-429-11	CARBON	10K	5%	1/4W
R311	1-249-429-11	CARBON	10K	5%	1/4W
R312	1-249-441-11	CARBON	100K	5%	1/4W
R313	1-249-417-11	CARBON	1K	5%	1/4W

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

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

Ref.No.	Part No.	Description			
R314	1-249-417-11	CARBON	1K	5%	1/4W
R315	1-249-417-11	CARBON	1K	5%	1/4W
R316	1-249-415-11	CARBON	680	5%	1/4W
R317	1-249-417-11	CARBON	1K	5%	1/4W
R318	1-249-417-11	CARBON	1K	5%	1/4W
R320	1-249-413-11	CARBON	470	5%	1/4W
R322	1-249-417-11	CARBON	1K	5%	1/4W
R341	1-249-441-11	CARBON	100K	5%	1/4W
R401	1-249-429-11	CARBON	10K	5%	1/4W
R402	1-249-429-11	CARBON	10K	5%	1/4W
R404	1-249-433-11	CARBON	22K	5%	1/4W
R405	1-249-433-11	CARBON	22K	5%	1/4W
R406	1-249-433-11	CARBON	22K	5%	1/4W
R407	1-249-433-11	CARBON	22K	5%	1/4W
R408	1-249-441-11	CARBON	100K	5%	1/4W
R409	1-249-441-11	CARBON	100K	5%	1/4W
R410	1-249-433-11	CARBON	22K	5%	1/4W
R411	1-249-392-11	CARBON	8.2	5%	1/4W
R412	1-249-392-11	CARBON	8.2	5%	1/4W
R421	1-247-883-00	CARBON	150K	5%	1/4W
R422	1-249-441-11	CARBON	100K	5%	1/4W
R423	1-247-883-00	CARBON	150K	5%	1/4W
R424	1-247-882-11	CARBON	130K	5%	1/4W
R425	1-249-441-11	CARBON	100K	5%	1/4W
R426	1-247-903-00	CARBON	1M	5%	1/4W
R427	1-247-890-11	CARBON	300K	5%	1/4W
R431	1-247-883-00	CARBON	150K	5%	1/4W
R432	1-249-440-11	CARBON	82K	5%	1/4W
R433	1-247-882-11	CARBON	130K	5%	1/4W
R434	1-247-878-00	CARBON	91K	5%	1/4W
R435	1-249-441-11	CARBON	100K	5%	1/4W
R500	1-249-421-11	CARBON	2.2K	5%	1/4W
R501	1-247-840-00	CARBON	2.4K	5%	1/4W
R503	1-247-891-00	CARBON	330K	5%	1/4W
R504	1-249-419-11	CARBON	1.5K	5%	1/4W
R509	1-249-405-11	CARBON	100	5%	1/4W
R551	1-247-840-00	CARBON	2.4K	5%	1/4W
R553	1-247-891-00	CARBON	330K	5%	1/4W
R554	1-249-419-11	CARBON	1.5K	5%	1/4W
R559	1-249-405-11	CARBON	100	5%	1/4W
R701	1-249-416-11	CARBON	820	5%	1/4W
R901	1-249-425-11	CARBON	4.7K	5%	1/4W
R902	1-249-425-11	CARBON	4.7K	5%	1/4W
R906	1-249-410-11	CARBON	270	5%	1/4W
R909	1-249-435-11	CARBON	33K	5%	1/4W
R910	1-249-438-11	CARBON	56K	5%	1/4W
R911	1-249-429-11	CARBON	10K	5%	1/4W
R914	1-249-423-11	CARBON	3.3K	5%	1/4W
RV101	1-238-016-11	RES, ADJ, CARBON 10K			
RV102	1-238-016-11	RES, ADJ, CARBON 10K			
RV501	1-241-031-11	(EXCEPT C201)...RES, VAR, CARBON 1K/1K (HEADPHONES LEVEL)			

Ref.No.	Part No.	Description
S1	1-554-088-00	SWITCH, KEY BOARD (REPEAT)
S2	1-554-088-00	SWITCH, KEY BOARD (TIME FADE)
S3	1-554-088-00	SWITCH, KEY BOARD (TIME)
S4	1-554-088-00	SWITCH, KEY BOARD (PROGRAM)
S5	1-554-088-00	SWITCH, KEY BOARD (SHUFFLE)
S6	1-554-088-00	SWITCH, KEY BOARD (CONTINUE)
S7	1-554-088-00	SWITCH, KEY BOARD (■)
S8	1-554-088-00	SWITCH, KEY BOARD (▷◁)
S9	1-554-088-00	SWITCH, KEY BOARD (◀◀▶▶)
S10	1-554-088-00	SWITCH, KEY BOARD (▶▶▷▷◁◁)
S17	1-554-596-21	SWITCH, KEY BOARD (⊆ OPEN/CLOSE)
S18	1-554-596-21	SWITCH, KEY BOARD (DISC SKIP)
S101	1-572-085-11	SWITCH, LEAF (LIMIT IN)
S401	1-571-300-11	SWITCH, ROTARY (OPEN/UP)
S402	1-554-205-00	SWITCH, PUSH (IN)
S403	1-570-973-11	SWITCH (DOWN)
S901	△.1-571-305-11	SWITCH, PUSH (1 KEY)(POWER)
S902	△.1-571-722-11	(E)...SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR)
T901	△.1-449-954-11	(US,Canadian)...TRANSFORMER, POWER
T901	△.1-449-955-11	(AEP/AUS).....TRANSFORMER, POWER
T901	△.1-449-956-11	(E).....TRANSFORMER, POWER
X301	1-567-908-21	VIBRATOR, CRYSTAL (16MHz)
X401	1-577-358-21	VIBRATOR, CERAMIC (4MHz)

ACCESSORY & PACKING MATERIAL

1-465-398-11	(EXCEPT C201,C205)...COMMANDER, REMOTE (RM-D306)
2-181-754-01	(EXCEPT C201,C205)...COVER, BATTERY
1-559-533-11	CORD, CONNECTION
*3-701-630-00	BAG, POLYETHYLENE
*3-704-217-01	(EXCEPT AEP/E/AUS)...LABEL(CERTIFICATION)
3-751-430-11	(Canadian/AEP/E)...MANUAL, INSTRUCTION (ENGLISH,FRENCH,SPANISH,PORTUGUESE)
3-751-430-21	(C201,C205,C305:US/AUS) ...MANUAL, INSTRUCTION (ENGLISH)
3-751-430-41	(AEP)...MANUAL, INSTRUCTION (GERMAN,DUTCH,SWEDISH,ITALIAN)
3-751-431-21	(C35)...MANUAL, INSTRUCTION (ENGLISH)
4-930-510-01	PLATE, LOCK
*4-937-901-01	CUSHION (FRONT)
*4-937-902-01	CUSHION (REAR)
*4-937-903-11	(C305)....INDIVIDUAL CARTON
*4-937-903-21	(C35)....INDIVIDUAL CARTON
*4-937-903-31	(C205)....INDIVIDUAL CARTON
*4-937-903-41	(C201)....INDIVIDUAL CARTON

Note:

The components identified by mark △ or dot-ted 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.

CDP-C35/C201/C205/C305

SONY SERVICE MANUAL

US Model
CDP-C35/C201/C205/C305

Canadian Model

AEP Model

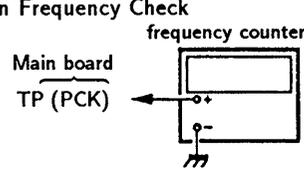
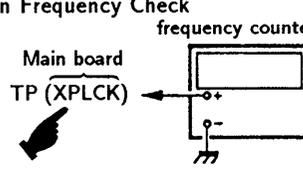
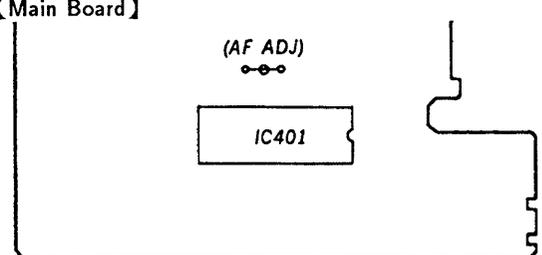
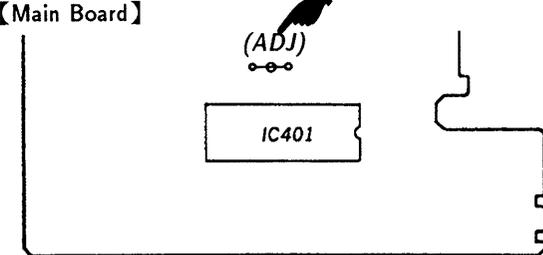
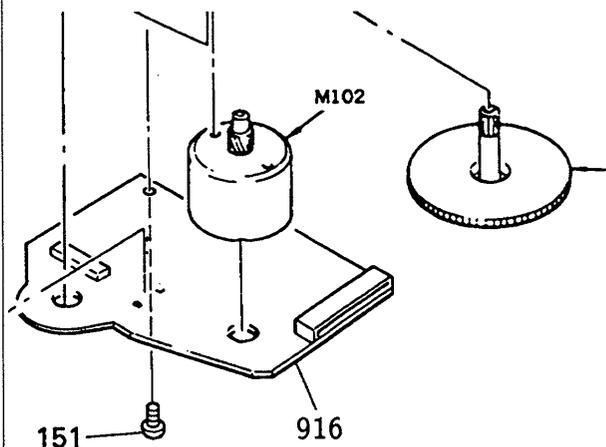
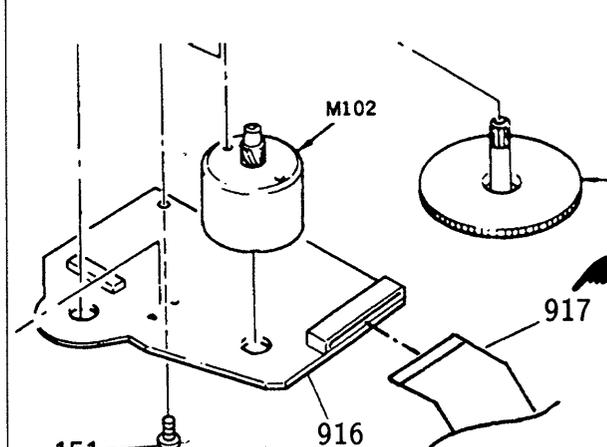
E Model

Australian Model
CDP-C305

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT	CORRECT
7	<p>E-F Blance Check Procedure :</p> <p>1. Connect test point TP (AFADJ) and TP (TES) to ground with lead wire.</p>	<p>E-F Blance Check Procedure :</p> <p>1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.</p>
	<p>RF PLL Free-run Frequency Check Procedure :</p> 	<p>RF PLL Free-run Frequency Check Procedure :</p> 
8	<p>Adjustment Location 【Main Board】</p> 	<p>Adjustment Location 【Main Board】</p> 
2 4	 <p>No. Part No. Description</p> <p>M101 1-4917-523-3 MOTOR ASSY (SPINDLE)</p>	 <p>No. Part No. Description</p> <p>M101 X-4917-523-3 MOTOR ASSY (SPINDLE)</p> <p>917 1-535-847-11 JUMPER, FILM (WITH TERMINAL)</p>

CDP-C35/C201/C205/C305

SONY SERVICE MANUAL

US Model
CDP-C35/C201/C205/C305

Canadian Model

AEP Model

E Model

Australian Model
CDP-C305

CORRECTION-2

Correct your service manual as shown below.

 : indicates corrected portion.

