CDP-M18/M19

SERVICE MANUAL

Canadian Model
CDP-M18

US Model
Canadian Model
E Model
CDP-M19

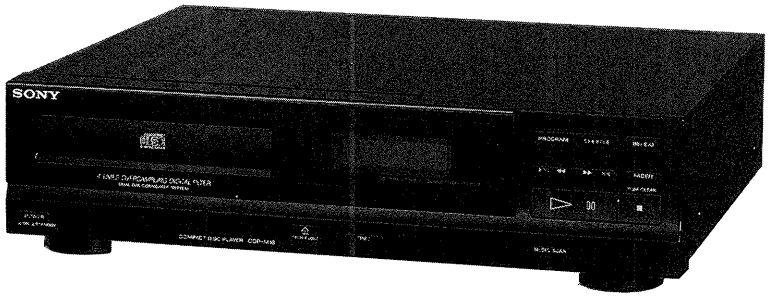


Photo : CDP-M18

Model Name Using Similar Mechanism	CDP-190/390
CD Mechanism Name	CDM14-5BD1
Base Unit Name	BU-5BD1

SPECIFICATIONS

Compact disc player

Frequency response	2Hz–20kHz ±$^{1.0}_{1.2}$ dB
Signal to noise ratio	More than 93dB
Dynamic range	More than 90dB
Harmonic distortion	Less than 0.05%
Channel separation	More than 90dB

Outputs

LINE OUT (phono jacks)	Output level 2V (at 50 kilohms) Load impedance over 10 kilohms
PHONES (CDP-M19) (stereo phone jack)	Output level max. 14mW Load impedance 32 ohms

General

Power requirements	US, Canadian model : 120V AC, 60Hz E, Saudi Arabia, Australian model : 110, 120, 220 or 240VAC adjustable, 50/60Hz
Power consumption	10W
Dimensions (approx, including projections)	355×95×300mm (w/h/d) (14×3 3/4×11 7/8 inches)
Weight (approx)	2.8kg (6 lbs 3 oz)

Design and specifications subject to change without notice.

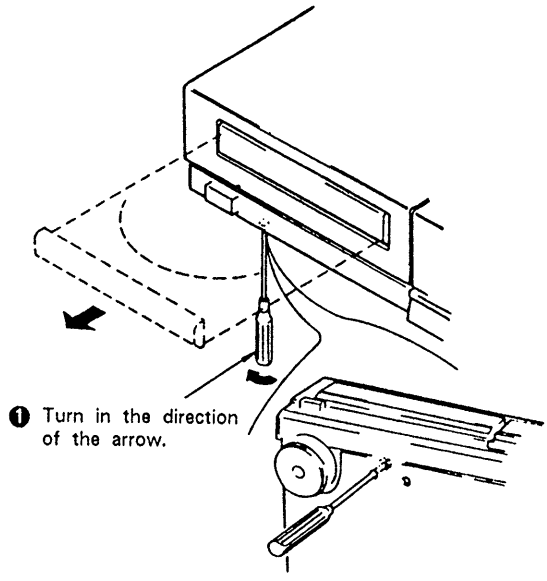
使用時は添付資料も参照のこと
Refer to the additional documents.

COMPACT DISC PLAYER

SONY

TABLE OF CONTENTS

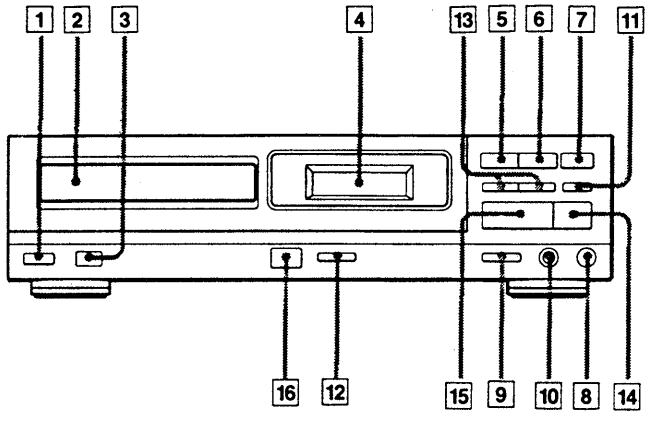
HOW TO OPEN THE DISC TRAY WHEN POWER SWTCH TURNS OFF



Caution : When you work, keep the set horizontal.

SECTION 1
GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS



1 POWER switch
2 Disc tray
3 Remote sensor
4 Display window
5 PROGRAM button
6 SHUFFLE button
7 REPEAT button
8 (headphone) LEVEL control (CDP-M19)
9 MUSIC SCAN button
10 PHONES jack (CDP-M19)
11 FADER button
12 TIME button
13 ⏮ ⏭ (AMS*/RMS**)/◀◀ ▶▶ (manual search) buttons
14 ■ (stop)/PGM (program) CLEAR button
15 ⏯ (play/pause) button
16 ⏏ (open/close) button

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.

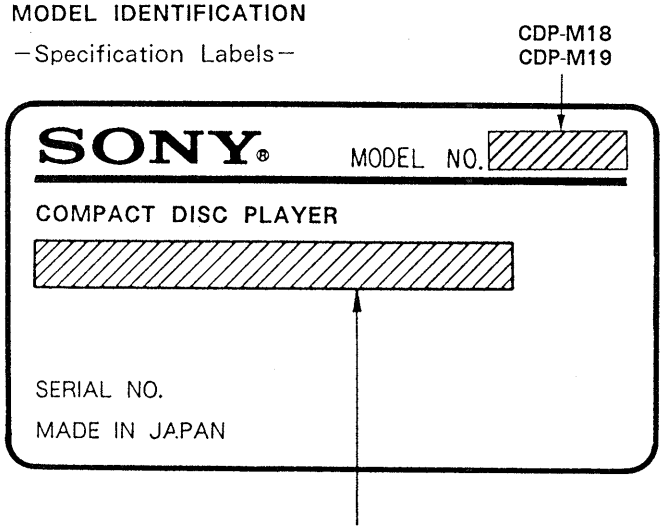
ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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.

SECTION 2
SERVICING NOTES

MODEL IDENTIFICATION

—Specification Labels—



US, Canadian model : AC : 120V 60Hz 10W
E, Saudi Arabia,
Australian model : AC : 110—120V, 220—240V
~50/60Hz 10W

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.

NOTE ON DISASSEMBLY OF BASE UNIT

Disassembly of BASE UNIT (BU-5BD1) is the same as that of CDP-190/390. Please refer to the CDP-190/390 service manual.

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 2 V AC range are suitable. (See Fig. A)

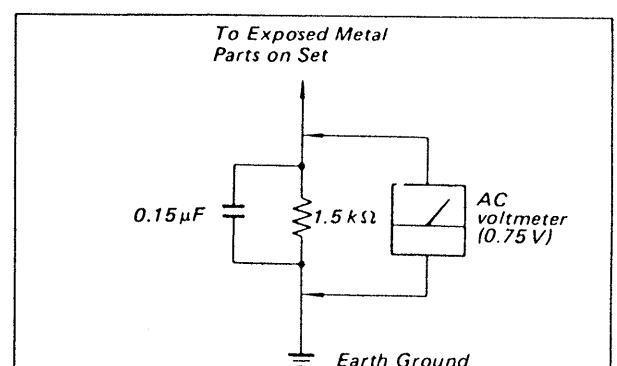
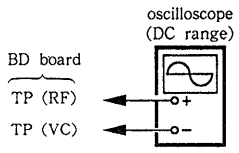


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 3
ELECTRICAL ADJUSTMENTS

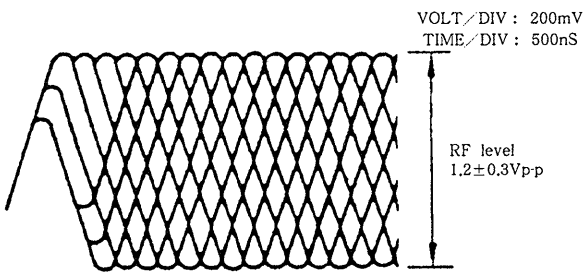
1. Perform adjustments in the order given.
2. Use YEDS-18 disc (3-702-101-1) unless otherwise indicated.
3. Use the oscilloscope with more than 10 MΩ impedance.

RF Level Check
Procedure ;



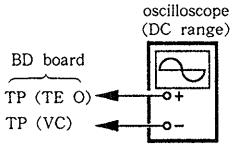
1. Connect oscilloscope to test point TP (RF) and TP (VC) on BD board.
2. Confirm that RF level and eye pattern is optimum.
   Oputimum eye pattern means that shape "◇" can be clearly distinguished at the center of the wave form.

RF Signal Reference Waveform (eye pattern)



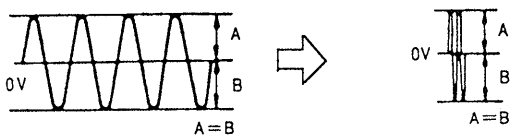
REFERENCE

E-F Balance Check
Procedure :

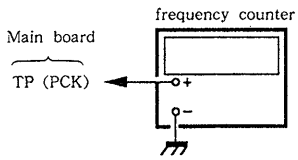


1. Connect test point TP (ADJ) and TP (TES) to ground with lead wire.
2. Connect oscilloscope to test point TP (TE O) and TP (VC) on BD board.
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 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 playback.
3. Confirm that reading on frequency counter is 4.3218MHz.

Focus/Tracking Gain Adjustment

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 mechanical shock when the 2-axis device operate.

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

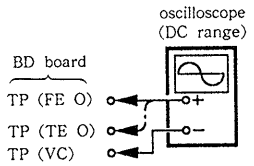
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

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.

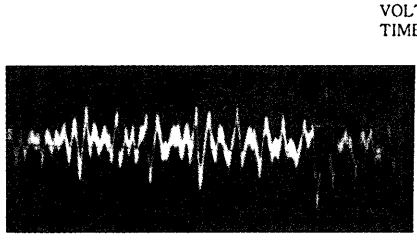
–Primary Adjustment–

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



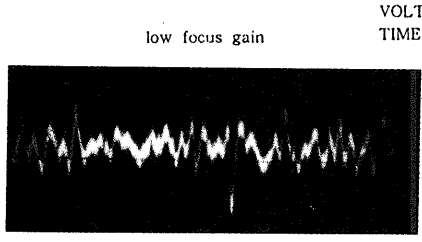
Procedure :

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 digital board so that the waveform is as shown in the figure below. (focus gain adjustment)

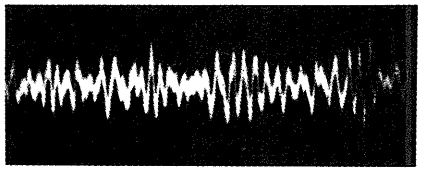


• Incorrent Examples (DC level changes more than on adjusted waveform)

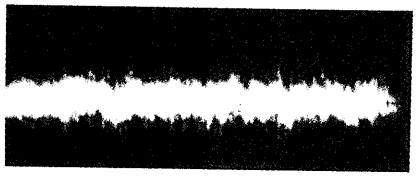
low focus gain



high focus gain

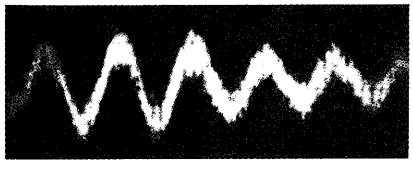


5. Connect oscilloscope to TP (TEO) and TP (VC) on BD board.
6. Adjust RV101 on digital board so that the waveform is as shown the figure below. (tracking gain adjustment)

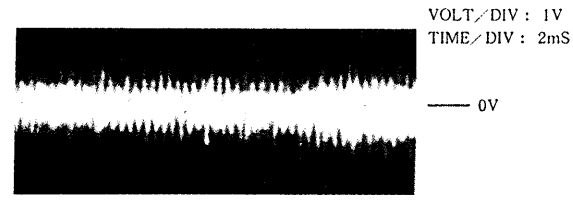


• Incorrect Examples (fundamential wave appears)

low tracking gain

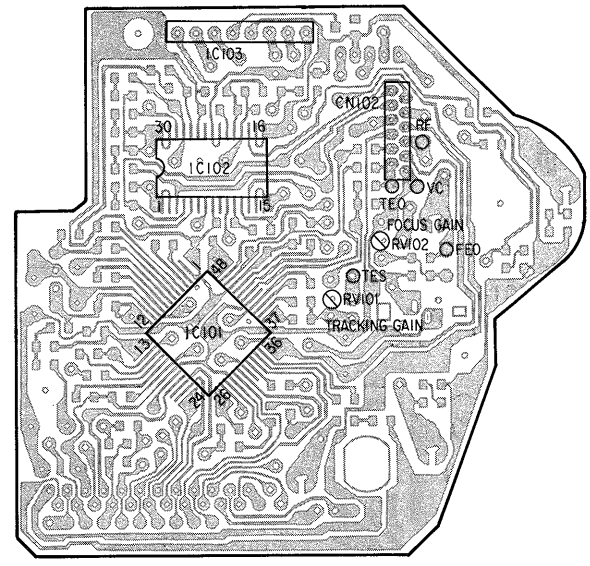


high tracking gain
(high fandamential wave than for low gain)

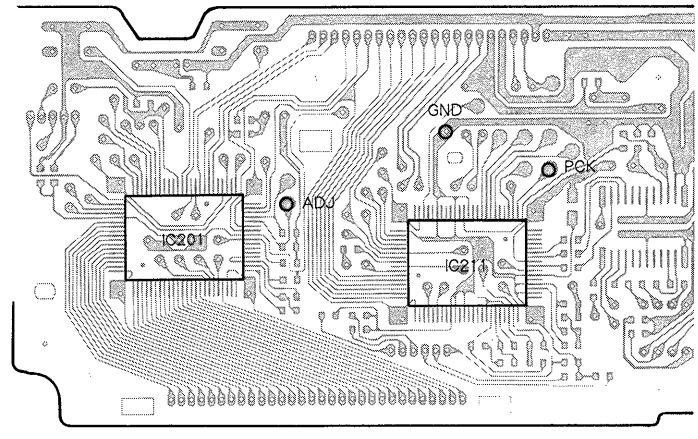


Adjustment Location :

[BD board]



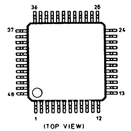
[Main board]



SECTION 4
DIAGRAMS

● SEMICONDUCTOR LEAD LAYOUTS

CXA1372Q

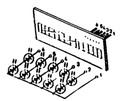


CXD2500Q
μPD75308GF-545-3B9

DTC144EK
FN1L4M-M31
2SD596DV345

RD4.7M-B1

SEL8864



1SS226

11ES2

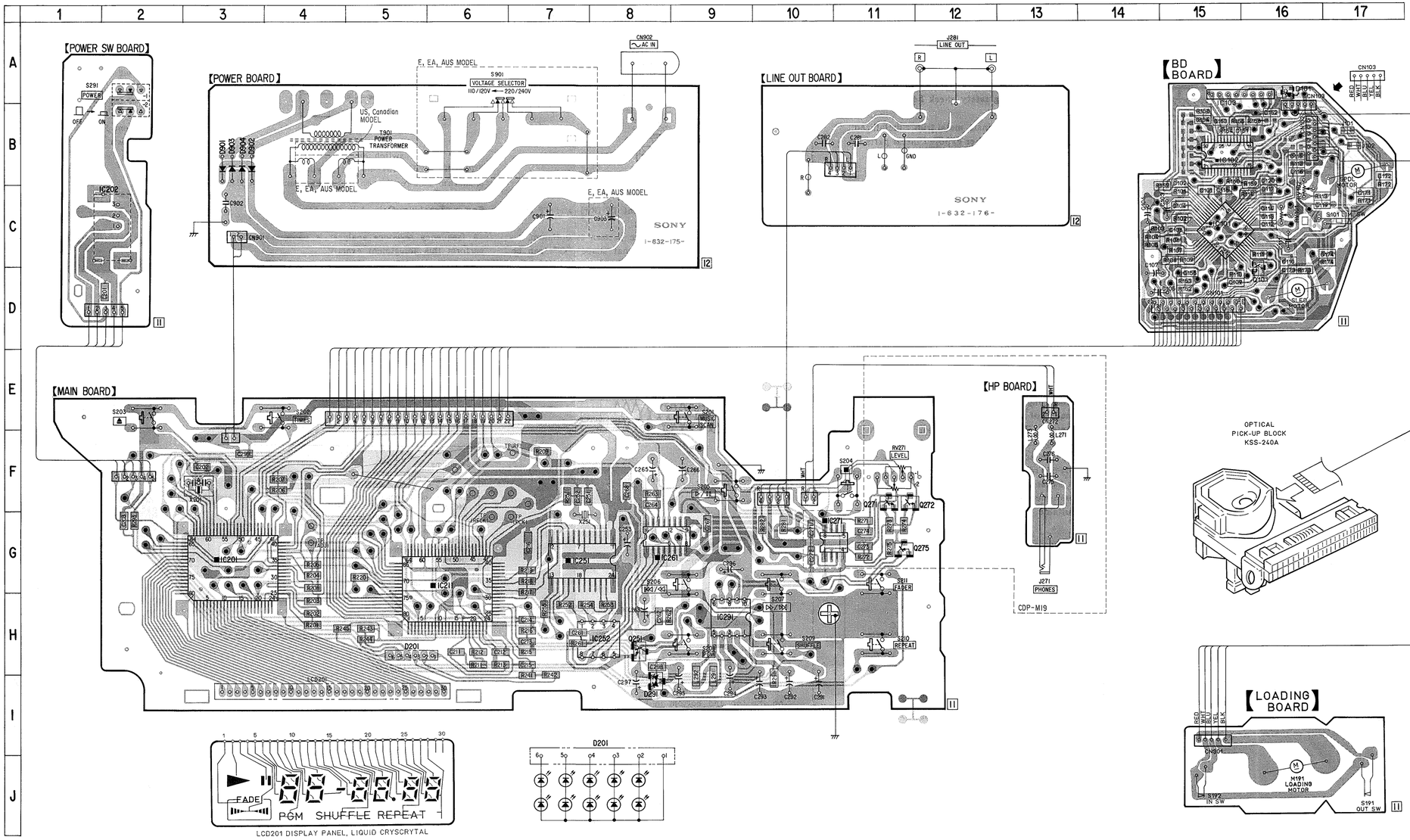
● SEMICONDUCTOR LOCATION

Ref. No.	Location
IC101	C-15
IC102	B-15
IC103	A-15
IC201	G-3
IC202	C-2
IC211	G-6
IC251	C-7
IC252	H-8
IC261	G-8
IC271	G-10
IC291	H-9
Q101	D-16
Q251	H-8
Q271	F-11
Q272	F-11
Q275	G-11
D101	A-16
D201	H-5
D291	H-9
D901	B-3
D902	B-3
D903	B-3
D904	B-3

Note :

- ■ : parts mounted on the conductor side.
- ● : Through hole.
- ▨ : Pattern on the side which is seen.
- ▨ : Pattern of the rear side.
- EA : Saudi Arabia
- AUS : Australian

4-1. PRINTED WIRING BOARDS



Note :

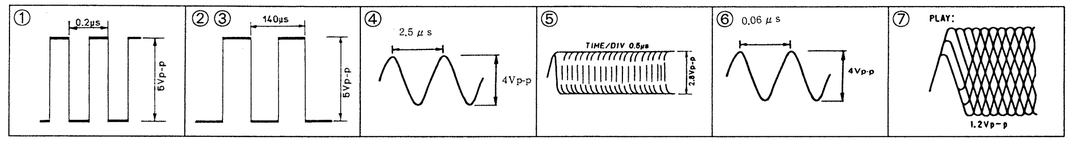
- All capacitors are in μ F unless otherwise noted. pF : μ μ F 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼W or less unless otherwise specified.
- △ : internal component.

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.

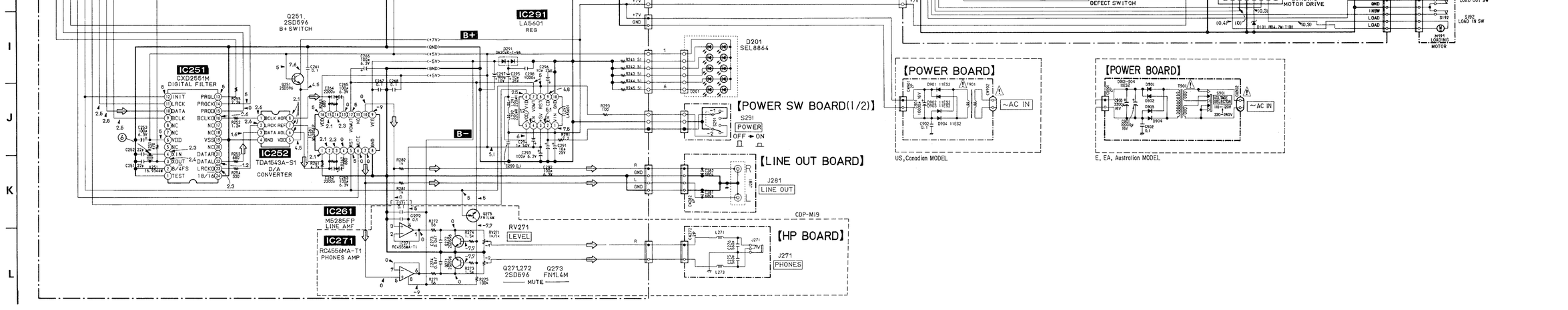
- B+ : B+ Line
- B− : B− Line
- ▭ : adjustment for repair.

- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark : PLAY
  ( ) : STOP
- 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
- EA : Saudi Arabia
- AUS : Australian

● **WAVEFORM**

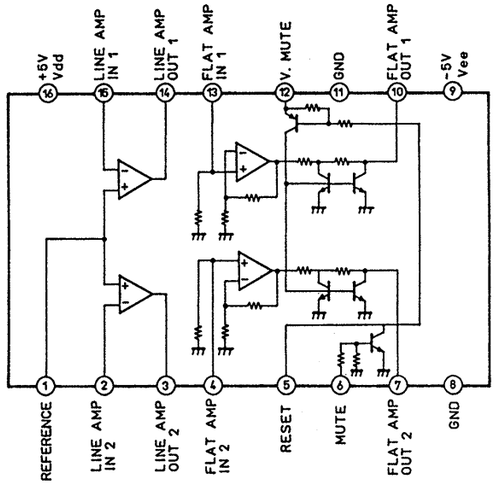


4-2. SCHEMATIC DIAGRAM

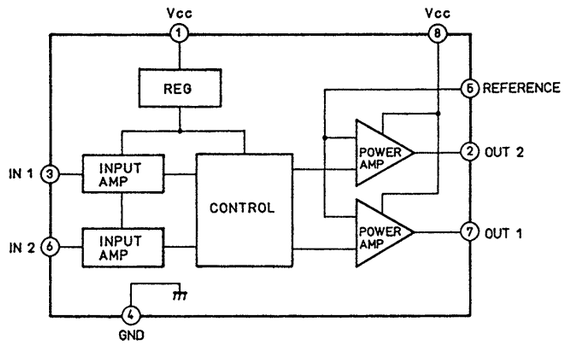


4-3. IC BLOCK DIAGRAM

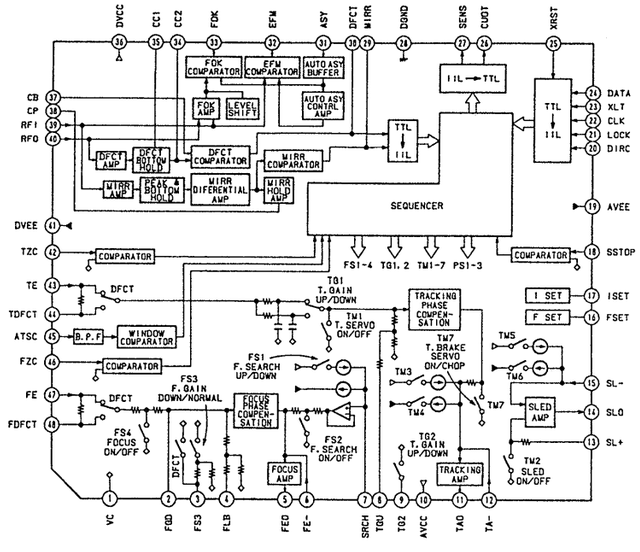
M5285FP



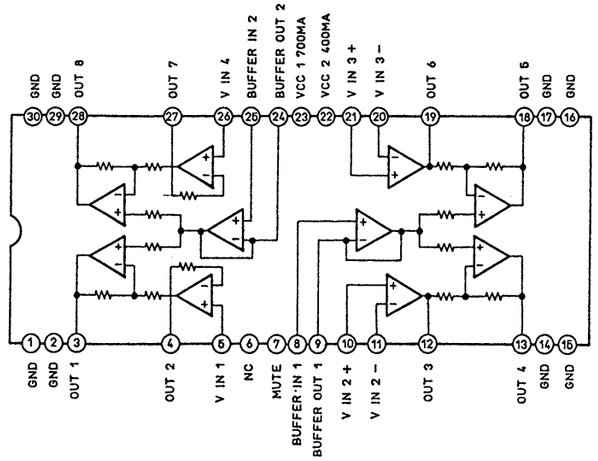
M54641L



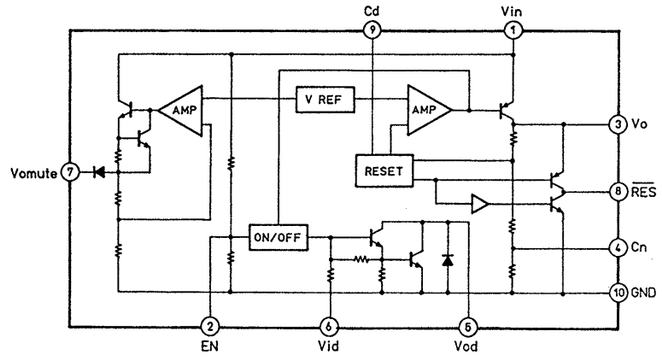
CXA1372Q



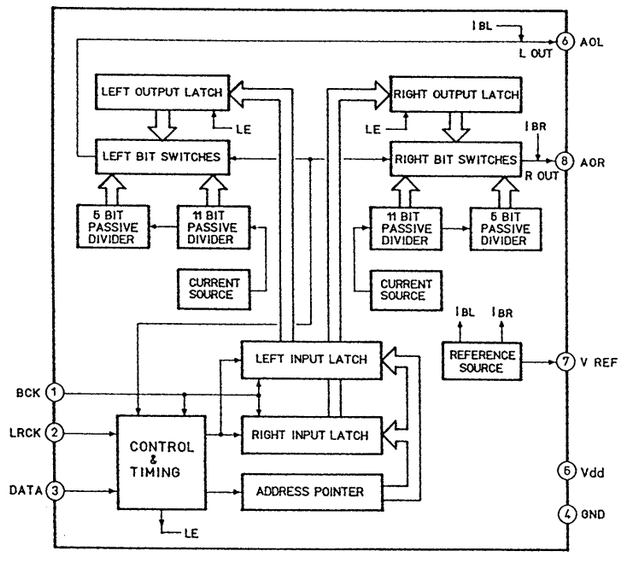
LA6532



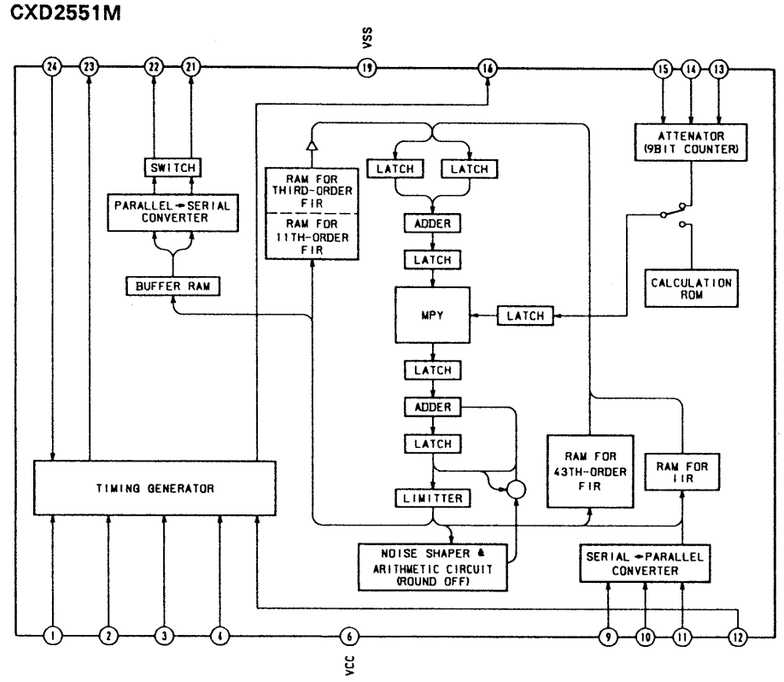
LA5601



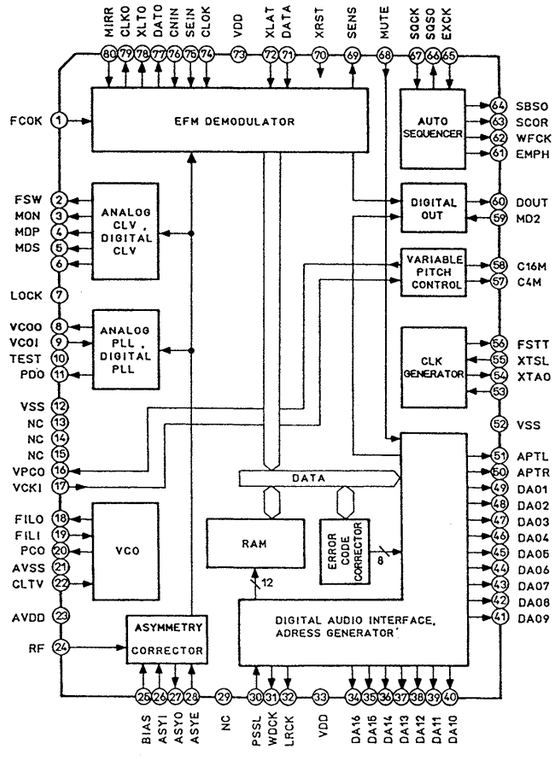
TDA1543



CXD2551M



CXD2500



SECTION 5
EXPLODED VIEWS

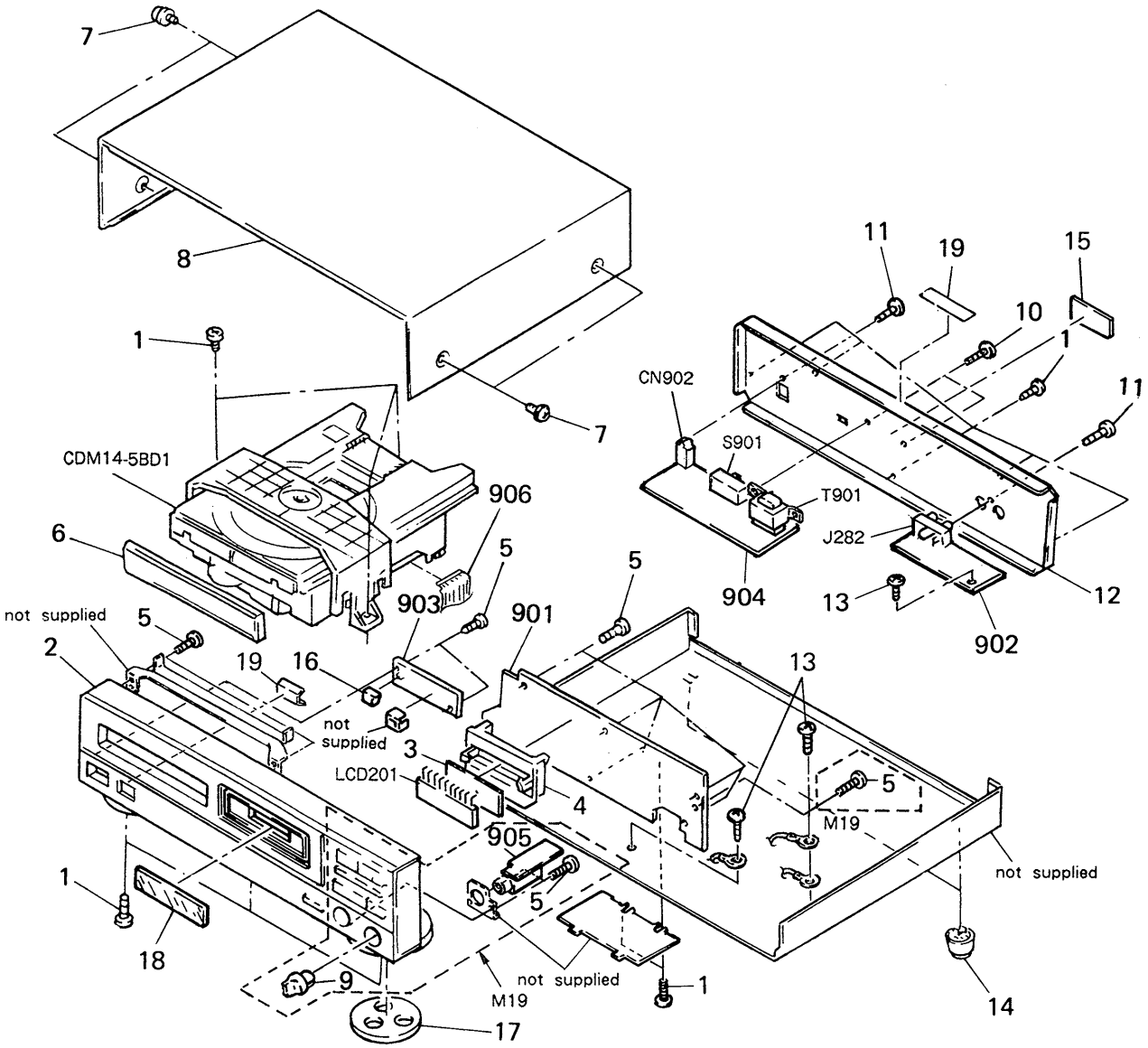
NOTE:

- 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
- AUS : Australian
  EA : Saudi Arabia

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 spécifé.

(1) CHASSIS SECTION

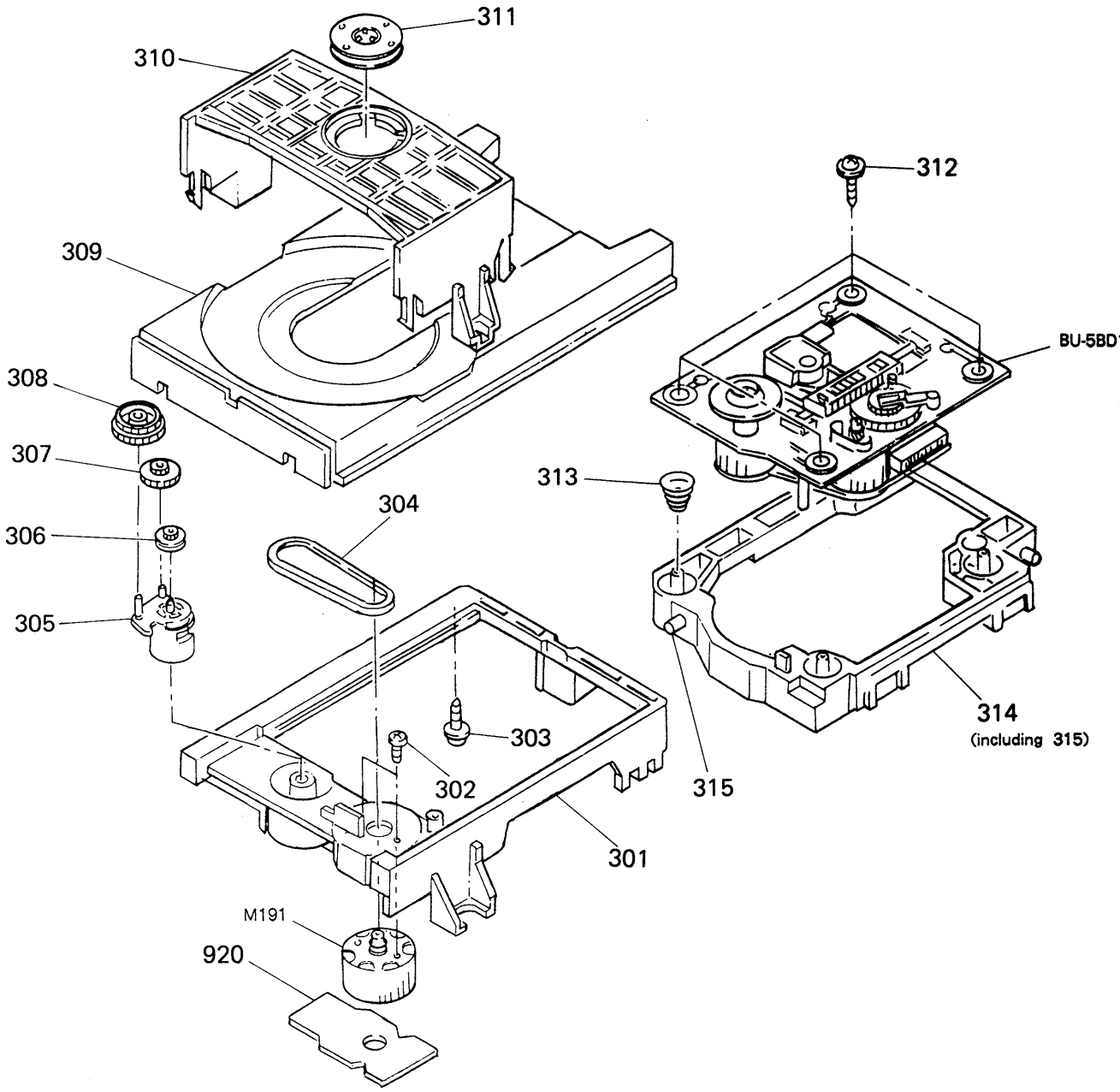


No.	Part No.	Description	Remaeks
1	7-682-548-09	SCREW +BVTT 3X8 (S)	
2	X-4917-588-3	(M19:US).....PANEL ASSY, FRONT	
	X-4917-589-3	(M19:Canadian)...PANEL ASSY, FRONT	
	X-4917-590-3	(M19:E,EA,AUS) ....PANEL ASSY, FRONT (BLACK)	
	X-4917-591-3	(M19:E,EA,AUS) ....PANEL ASSY, FRONT (GRAY)	
	X-4917-594-3	(M18).....PANEL ASSY, FRONT	
3	*4-933-114-01	ILLUMINATOR	
4	*4-933-121-01	HOLDER (LCD)	
5	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
6	4-927-339-01	(E,EA,AUS).....PANEL, LOADING (BLACK)	
	4-927-339-12	(M19:Canadian)...PANEL, LOADING	
	4-927-339-21	(E,EA,AUS).....PANEL, LOADING (GRAY)	
	4-927-339-31	(US).....PANEL, LOADING	
7	3-704-366-01	SCREW (CASE)(M3X8)	
8	4-919-376-31	(BLACK)...CASE	
	4-919-376-81	(GRAY)....CASE	
9	4-933-116-11	(M19)...KNOB (C, TYPE), LOV	
10	4-820-330-31	SCREW	
11	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
12	*4-927-327-11	(E,EA).....PANEL, BACK	
	*4-927-327-22	(US).....PANEL, BACK	
	*4-927-327-31	(M19:Canadian)...PANEL, BACK	
	*4-927-327-51	(M18).....PANEL, BACK	
	*4-927-327-61	(AUS).....PANEL, BACK	

No.	Part No.	Description	Remaeks
13	7-682-547-04	SCREW +BVTT 3X6 (S)	
14	4-933-601-01	FOOT	
15	*4-885-838-01	(E,EA,AUS)...LABEL, CLASS 1	
16	4-927-341-01	BUTTON (POWER)	
17	*4-921-906-01	FELT	
18	4-927-351-03	PLATE, INDICATION	
19	*4-937-504-01	(EXCEPT US)...SHEET (REMOTE CONTROL)	
	*4-937-504-12	(US).....SHEET (REMOTE CONTROL)	
901	*A-4617-196-A	(M19)...MOUNTED PCB, MAIN	
	*A-4617-394-A	(M18)...MOUNTED PCB, MAIN	
902	*1-632-176-11	PC BOARD, LINE OUT	
903	*1-634-305-11	PC BOARD, POWER SW	
904	*1-632-175-11	PC BOARD, POWER	
905	*1-634-306-11	(M19)...PC BOARD, HP	
906	1-535-798-11	JUMPER, FILM (WITH TERMINAL)	
CN902⚠	1-526-929-11	(E).....INLET, AC	
CN902⚠	1-526-930-11	(US,Canadian)...INLET, AC	
CN902⚠	1-526-931-11	(EA,AUS).....INLET, AC	
J281	1-566-921-11	JACK, PIN 2P (LINE OUT)	
LCD201	1-808-794-31	DISPLAY PANEL, LIQUID CRYSTAL	
S901 ⚠	1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (120/220V)	

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.

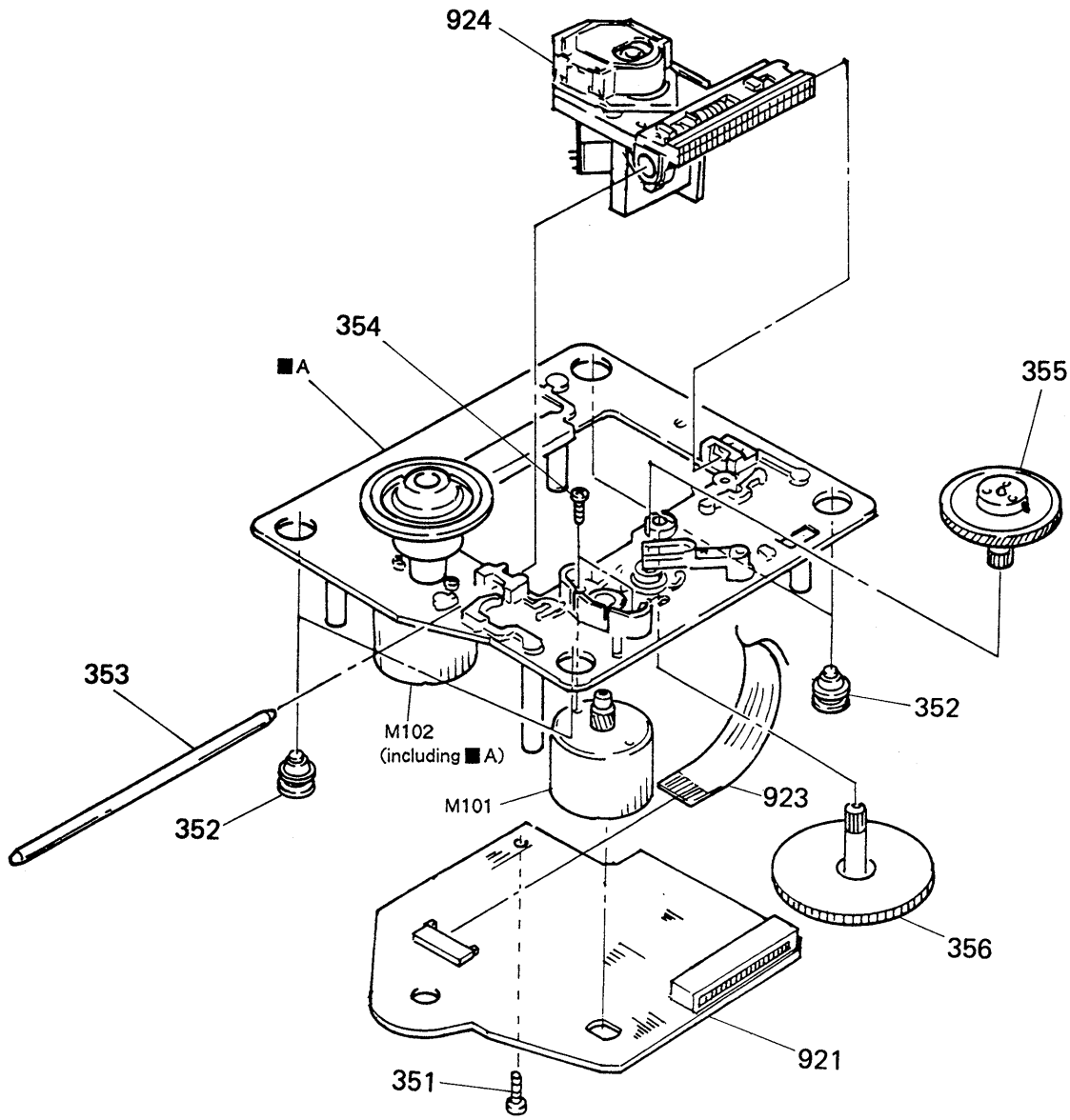
(2) CD MECHANISM SECTION (CDM14-5BD1)



No.	Part No.	Description	Remarks
301	4-933-111-01	CHASSIS (MD)	
302	7-621-775-10	SCREW +B 2.6X4	
303	*4-917-583-21	BRACKET, YOKE	
304	4-927-649-01	BELT	
305	4-933-109-01	CAM	
306	4-927-651-01	PULLEY (S)	
307	4-927-628-01	GEAR (C)	
308	4-933-107-01	GEAR (PL)	
309	4-933-112-01	TABLE, DISK	

No.	Part No.	Description	Remarks
310	4-933-110-01	HOLDER (MG)	
311	A-4675-347-A	MG ASSY	
312	4-933-134-01	SCREW (+PTPWH M2.6X6)	
313	4-917-541-01	SPRING (B)	
314	4-933-129-01	HOLDER (BU)	
315	4-933-108-01	SHAFT (CAM)	
920	*1-632-202-11	PC BOARD, LOADING	
M191	A-4604-363-A	MOTOR (L) ASSY	

(3) OPTICAL PICK-UP BLOCK (BU-5BD1)



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.

No.	Part No.	Description	Remarks
351	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
352	4-933-126-01	INSULATOR (A)	
353	4-917-565-01	SHAFT, SLED	
354	7-621-255-15	SCREW +P 2X3	
355	4-917-567-01	GEAR (M)	
356	4-917-564-01	GEAR (P), FLATNESS	

No.	Part No.	Description	Remarks
921	*A-4617-161-A	MOUNTED PCB, BD	
923	1-575-001-11	WIRE, FLAT TYPE (12 CORE)	
924	⚠8-848-144-11	DEVICE, OPTICAL KSS-240A	
M101	X-4917-504-1	ASSY, MOTOR (SLED)	
M102	X-4917-523-1	ASSY, MOTOR (SPINDLE)	

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: 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...

- AUS : Australian
  EA : Saudi Arabia

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-4617-196-A	(M19)...MOUNTED PCB, MAIN		
	*A-4617-394-A	(M18)...MOUNTED PCB, MAIN		
902	*1-632-176-11	PC BOARD, LINE OUT		
903	*1-634-305-11	PC BOARD, POWER SW		
904	*1-632-175-11	PC BOARD, POWER		
905	*1-634-306-11	(M19)...PC BOARD, HP		
906	1-535-798-11	JUMPER, FILM (WITH TERMINAL)		
920	*1-632-202-11	PC BOARD, LOADING		
921	*A-4617-161-A	MOUNTED PCB, BD		
923	1-575-001-11	WIRE, FLAT TYPE (12 CORE)		
924	⚠8-848-144-11	DEVICE, OPTICAL KSS-240A		
C101	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C102	1-163-989-11	CERAMIC CHIP 0.033MF	10%	25V
C103	1-126-094-11	ELECT 4.7MF	20%	16V
C104	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C105	1-126-154-11	ELECT 47MF	20%	6.3V
C106	1-126-154-11	ELECT 47MF	20%	6.3V
C107	1-126-154-11	ELECT 47MF	20%	6.3V
C108	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C109	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C110	1-163-989-11	CERAMIC CHIP 0.033MF	10%	25V
C111	1-131-367-00	TANTALUM 22MF	20%	16V
C112	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C113	1-164-232-11	CERAMIC CHIP 0.01MF	10%	50V
C114	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C115	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C117	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C118	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C119	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C120	1-163-989-11	CERAMIC CHIP 0.033MF	10%	25V
C151	1-163-019-00	CERAMIC CHIP 0.0068MF	10%	50V
C152	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C153	1-163-006-11	CERAMIC CHIP 560PF	10%	50V
C154	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C155	1-163-023-00	CERAMIC CHIP 0.015MF	10%	50V
C171	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C172	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C173	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C174	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C201	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C202	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C203	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C211	1-163-809-11	CERAMIC CHIP 0.047MF	10%	25V
C212	1-163-011-11	CERAMIC CHIP 0.0015MF	10%	50V
C213	1-164-232-11	CERAMIC CHIP 0.01MF		50V

Ref.No.	Part No.	Description		
C214	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C215	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C216	1-135-091-00	TANTAL. CHIP 1MF	20%	16V
C251	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
C252	1-163-101-00	CERAMIC CHIP 22PF	5%	50V
C253	1-124-225-00	ELECT 100MF	20%	6.3V
C261	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C262	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C263	1-124-225-00	ELECT 100MF	20%	6.3V
C264	1-164-161-11	CERAMIC CHIP 0.0022MF	10%	50V
C265	1-124-225-00	ELECT 100MF	20%	6.3V
C266	1-124-225-00	ELECT 100MF	20%	6.3V
C267	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C268	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C271	1-163-038-00	(M19)...CERAMIC CHIP 0.1MF		25V
C272	1-163-038-00	(M19)...CERAMIC CHIP 0.1MF		25V
C273	1-163-035-00	(M19)...CERAMIC CHIP 0.047MF		50V
C274	1-163-035-00	(M19)...CERAMIC CHIP 0.047MF		50V
C275	1-130-468-00	(M19)...MYLAR 560PF	5%	50V
C276	1-130-468-00	(M19)...MYLAR 560PF	5%	50V
C281	1-130-469-00	MYLAR 680PF	5%	50V
C282	1-130-469-00	MYLAR 680PF	5%	50V
C291	1-126-096-11	ELECT 10MF	20%	25V
C292	1-124-225-00	ELECT 100MF	20%	6.3V
C293	1-124-225-00	ELECT 100MF	20%	6.3V
C294	1-126-160-11	ELECT 1MF	20%	50V
C295	1-126-096-11	ELECT 10MF	20%	25V
C296	1-126-096-11	ELECT 10MF	20%	25V
C297	1-124-584-00	ELECT 100MF	20%	10V
C298	1-163-009-11	CERAMIC CHIP 0.001MF	10%	50V
C299	1-163-038-00	CERAMIC CHIP 0.1MF		25V
C901	1-126-939-11	ELECT 10000MF	20%	16V
C902	1-162-851-11	CERAMIC 0.1MF	20%	16V
C903	1-124-887-00	(E,EA,AUS)...ELECT 3300MF	20%	16V
CN101	1-568-796-11	SOCKET, CONNECTOR 22P		
CN102	1-568-795-11	SOCKET, CONNECTOR 12P		
CN103	*1-564-721-11	PIN, CONNECTOR (SMALL TYPE) 5P		
CN272	*1-564-495-11	(M19)...PIN, CONNECTOR 2P		
CN282	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P		
CN301	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P		
CN901	*1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P		
CN902⚠	1-526-929-11	(E).....INLET, AC		
CN902⚠	1-526-930-11	(US,Canadian)...INLET, AC		
CN902⚠	1-526-931-11	(EA,AUS).....INLET, AC		
D101	8-719-105-72	DIODE RD4.7M-B1		
D201	1-808-805-11	DIODE SEL8864		
D291	8-719-800-76	DIODE 1SS226		

Ref.No.	Part No.	Description
D901	8-719-200-82	DIODE 11ES2
D902	8-719-200-82	DIODE 11ES2
D903	8-719-200-82	DIODE 11ES2
D904	8-719-200-82	DIODE 11ES2
IC101	8-752-037-33	IC CXA1372Q
IC102	8-759-821-94	IC LA6532M
IC103	8-759-633-65	IC M54641L
IC201	8-759-149-91	IC UPD75308GF-545-3B9
IC202	8-749-920-83	IC GP1U52XB
IC211	8-752-333-31	IC CXD2500Q
IC251	8-752-334-07	IC CXD2551M
IC252	8-759-990-13	IC TDA1543A-S1
IC261	8-759-633-66	IC M5285FP
IC271	8-759-981-86	(M19)...IC RC4556MA
IC291	8-759-821-93	IC LA5601
J271	1-568-519-21	(M19)...JACK, LARGE TYPE (PHONES)
J281	1-566-921-11	JACK, PIN 2P (LINE OUT)
L271	1-424-090-11	(M19)...COIL, LINE FILTER
L273	1-424-090-11	(M19)...COIL, LINE FILTER
L291	1-410-658-31	INDUCTOR CHIP 220UH
L292	1-410-658-31	INDUCTOR CHIP 220UH
LCD201	1-808-794-31	DISPLAY PANEL, LIQUID CRYSTAL
M101	X-4917-504-1	ASSY, MOTOR (SLED)
M102	X-4917-523-3	ASSY, BASE (SPINDLE)
M191	A-4604-363-A	MOTOR (L) ASSY
Q101	8-729-901-01	TRANSISTOR DTC144EK
Q251	8-729-141-75	TRANSISTOR 2SD596-DV345
Q271	8-729-141-75	(M19)...TRANSISTOR 2SD596-DV345
Q272	8-729-141-75	(M19)...TRANSISTOR 2SD596-DV345
Q273	8-729-113-66	(M19)...TRANSISTOR FN1L4M-M31
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
R201	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R202	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R203	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R204	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R205	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R206	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R207	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R208	1-216-081-00	METAL GLAZE 22K 5% 1/10W
R209	1-216-097-00	METAL GLAZE 100K 5% 1/10W
R211	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R212	1-216-061-00	METAL GLAZE 3.3K 5% 1/10W
R213	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R215	1-216-073-00	METAL GLAZE 10K 5% 1/10W
R216	1-216-113-00	METAL GLAZE 470K 5% 1/10W
R217	1-216-037-00	METAL GLAZE 330 5% 1/10W
R218	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R219	1-216-055-00	METAL GLAZE 1.8K 5% 1/10W
R220	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R241	1-216-018-00	METAL GLAZE 51 5% 1/10W
R242	1-216-018-00	METAL GLAZE 51 5% 1/10W
R243	1-216-018-00	METAL GLAZE 51 5% 1/10W
R244	1-216-018-00	METAL GLAZE 51 5% 1/10W
R245	1-216-018-00	METAL GLAZE 51 5% 1/10W
R251	1-216-041-00	METAL GLAZE 470 5% 1/10W
R252	1-216-051-00	METAL GLAZE 1.2K 5% 1/10W
R253	1-216-045-00	METAL GLAZE 680 5% 1/10W
R254	1-216-037-00	METAL GLAZE 330 5% 1/10W
R255	1-216-057-00	METAL GLAZE 2.2K 5% 1/10W
R261	1-216-065-00	METAL GLAZE 4.7K 5% 1/10W
R262	1-216-045-00	METAL GLAZE 680 5% 1/10W
R263	1-216-045-00	METAL GLAZE 680 5% 1/10W
R271	1-216-019-00	(M19)...METAL GLAZE 56 5% 1/10W
R272	1-216-019-00	(M19)...METAL GLAZE 56 5% 1/10W

Ref.No.	Part No.	Description
R273	1-216-053-00	(M19)...METAL GLAZE 1.5K 5% 1/10W
R274	1-216-053-00	(M19)...METAL GLAZE 1.5K 5% 1/10W
R275	1-216-097-00	(M19)...METAL GLAZE 100K 5% 1/10W
R281	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R282	1-216-049-00	METAL GLAZE 1K 5% 1/10W
R291	1-216-298-00	METAL GLAZE 2.2 5% 1/10W
R293	1-216-025-00	METAL GLAZE 100 5% 1/10W
RV101	1-238-016-11	RES, ADJ, CARBON 10K (TRACKING GAIN)
RV102	1-238-016-11	RES, ADJ, CARBON 10K (FOCUS GAIN)
RV271	1-238-748-11	(M19)...RES, VAR, CARBON 1K/1K(LEVEL)
S101	1-572-085-11	SWITCH, LEAF (LIMIT SW)
S191	1-572-086-11	SWITCH, LEAF (OUT SW)
S192	1-572-086-11	SWITCH, LEAF (IN SW)
S201	1-554-303-21	SWITCH, KEY BOARD (MUSIC SCAN)
S202	1-554-303-21	SWITCH, KEY BOARD (TIMES)
S203	1-554-303-21	SWITCH, KEY BOARD (OPEN/CLOSE)
S204	1-554-303-21	SWITCH, KEY BOARD (■)
S205	1-554-303-21	SWITCH, KEY BOARD (▷/II)
S206	1-554-303-21	SWITCH, KEY BOARD (⏮/◁◁)
S207	1-554-303-21	SWITCH, KEY BOARD (▷▷/▷▷⏭)
S208	1-554-303-21	SWITCH, KEY BOARD (PGM)
S209	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S210	1-554-303-21	SWITCH, KEY BOARD (REPEAT)
S211	1-554-303-21	SWITCH, KEY BOARD (FADER)
S291	1-571-305-11	SWITCH, PUSH (1 KEY)(POWER)
S901	⚠1-571-722-11	(E,EA,AUS)...SWITCH, VOLTAGE SELECTION (120/220V)
T901	⚠1-449-824-11	(US,Canadian)...TRANSFORMER, POWER
T901	⚠1-450-011-11	(E,EA,AUS).....TRANSFORMER, POWER
X201	1-567-775-11	VIBRATOR, CERAMIC
X251	1-567-908-11	VIBRATOR, CRYSTAL

ACCESSORY & PACKING MATERIAL

	⚠1-555-074-11	(AUS).....CORD, POWER
	⚠1-556-280-00	(E).....CORD, POWER
	⚠1-558-834-11	(US,Canadian)...CORD, POWER
	⚠1-558-835-11	(EA).....CORD, POWER
	1-559-533-11	CORD, CONNECTION
	⚠1-569-007-11	(E)....ADAPTOR, CONVERSION 2P
	⚠1-569-008-11	(EA)...ADAPTOR, CONVERSION 2P
	3-750-716-11	(M19:EXCEPT US)...MANUAL, INSTRUCTION
	3-750-716-21	(US).....MANUAL, INSTRUCTION
	*3-795-629-11	INSTRUCTION
	*4-922-998-01	CUSHION
	*4-927-393-11	(M19)...INDIVIDUAL CARTON
	*4-927-393-21	(M18)...INDIVIDUAL CARTON

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.

9-955-635-11

Sony Corporation
Audio Group

English
90D0240-1
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Published by Customer Relations and Service Group

CDP-M18/M19

SONY
SERVICE MANUAL

Canadian Model
CDP-M18

US Model
Canadian Model
E Model
CDP-M19

CORRECTION-1

Correct your service manual as shown below.

☛ : indicates corrected portion.

Page	INCORRECT	CORRECT
4	**E-F Balance Check** **Procedure :** 1. Connect test point TP (ADJ) to ground with lead wire.	**E-F Balance Check** **Procedure :** 1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire. ☛

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