

CDP-X77ES

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model*



Model Name Using Similar Mechanism	CDP-X7ESD
CD Mechanism Name	CDM4F-10B
Base Unit Name	BU-10B

SPECIFICATIONS

Compact Disc Player Unit

System	Compact disc digital audio system
Disc	Compact Disc
Data read system	Non-Contact optical reading (using a semiconductor laser)
Laser	GaAlAs dual hetero-diode (λ (wavelength) = 780 nm)
Spindle speed	Approx. 200 rpm – 500 rpm (CLV)
Error correction	Sony Super Strategy, Cross Interleave Reed Solomon code
Frequency response	2 – 20,000 Hz ± 0.3 dB
Signal to noise ratio	More than 117 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015% (1 kHz)
Channel separation	More than 110 dB (1kHz)
Wow and flutter	Below measurable limit
Output jacks	

LINE OUT (FIXED)	Output level 2V (at 50 kilohms) Load impedance over 10 kilohms
LINE OUT (VARIABLE)	Output level max. 2 V (at 50 kilohms) Load impedance over 50 kilohms
DIGITAL OUT (COAXIAL)	Output level 0.5 Vp-p (at 75 ohms) Load impedance 75 ohms
DIGITAL OUT (OPTICAL)	Wave length 660 nm Output level –18 dBm

General

Power requirements	US, Canadian model : AC 120V, 60Hz AEP, E model : AC 220V, 50/60Hz UK, Australian model : AC 240V, 50/60Hz
RAM memory storage	Held for more than a month (after turning the power OFF).
Power consumption	26 watts
Dimensions (w/h/d)	470 × 125 × 375 mm (18 ⁵ / ₈ × 5 × 14 ⁷ / ₈ inches) (Including projecting parts and controls)
Weight	17 kg (37 lb 8 oz)

Remote Commander (supplied) (BLACK : RM-D770)
(GOLD : RM-D771)

Remote control system

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

Supplied accessories

Remote commander	× 1
Size AA (R6) battery	× 2
Screwdriver	× 1
Screw (M4)	× 8

Design and specifications subject to change without notice.



COMPACT DISC PLAYER
SONY®

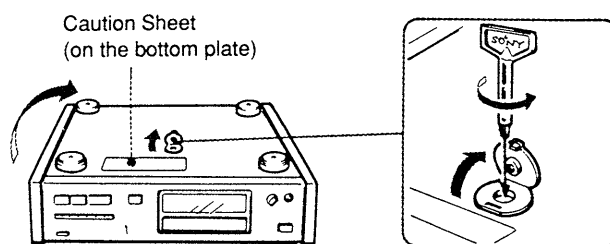
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Before Use (Transportation Screw)

Before starting any operation, be sure to release the transportation screw (for protection of the laser pickup and internal mechanism) located on the bottom of the unit. Turn this screw in the direction of the arrow, following the Caution Sheet attached to the bottom plate. To release the transportation screw, open the cap and turn the screw counterclockwise 180 degrees **using the provided screwdriver**. Be careful not to turn the screw too far, as it could damage the internal mechanism or cause a malfunction. Before transporting this unit, tighten the screw firmly.

When rotating the screw, be sure to place the unit upside down.



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!

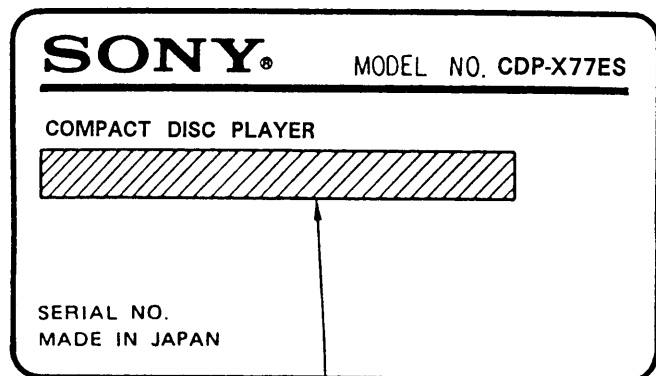
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1

SERVICING NOTES

MODEL IDENTIFICATION

—Specification Labels—



US, Canadian model : AC : 120V~60Hz 26W
 AEP, E model : AC : 220V~50/60Hz 26W
 UK, Australian model : AC : 240V~50/60Hz 26W

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

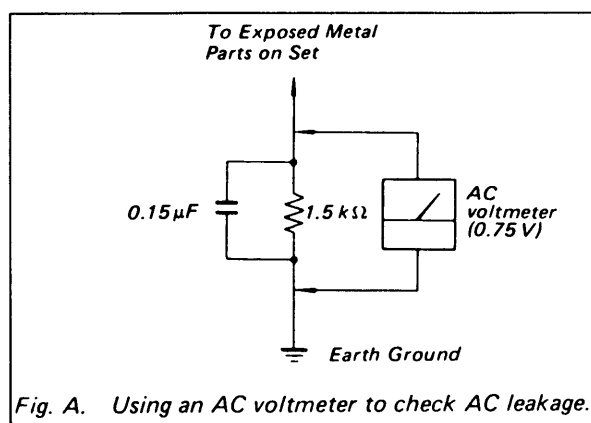


Fig. A. Using an AC voltmeter to check AC leakage.

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 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.

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.

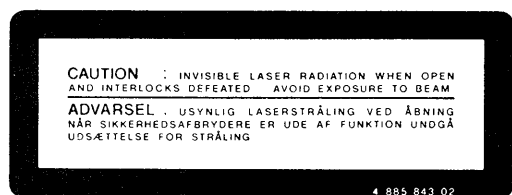
- Klassifikation: Klasse IIIb.

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.

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.

LASER DIODE AND FOCUS SEARCH OPERATION CHECK

1. Remove disc pulley by lifting up chucking arm by hand. (Fig. A, B)
2. Make POWER switch on with no disc inserted and disc table closed.
3. Confirm that the operation indicated in Fig. C is performed while observing the objecting lens.

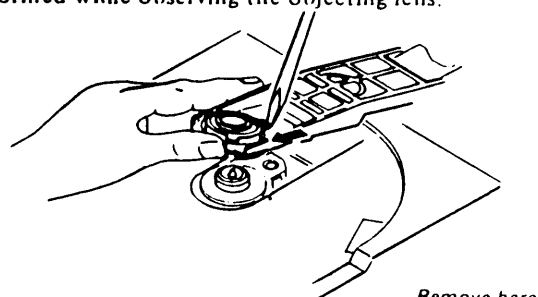


Fig. A

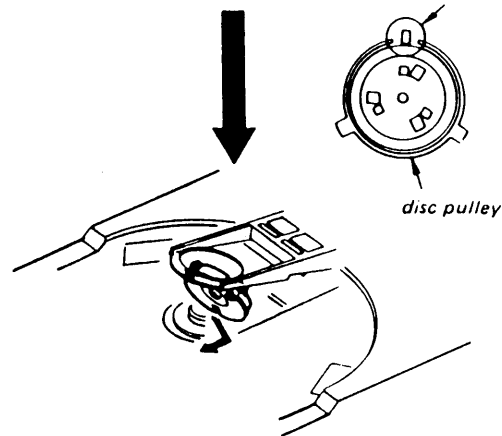
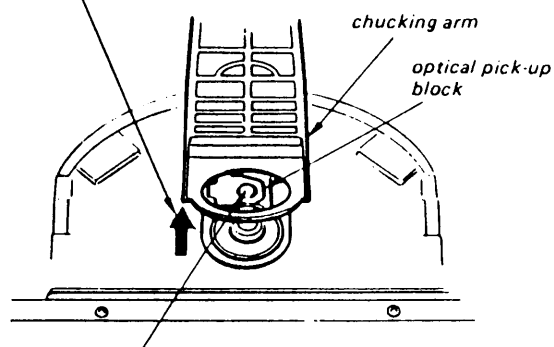


Fig. B

Lift up chucking arm by hand in the direction of arrow.



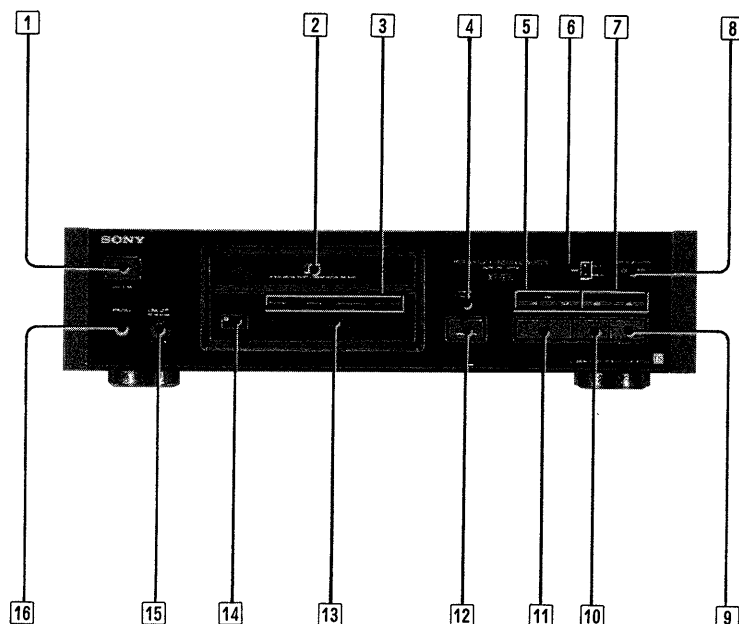
- ① Confirm that laser beam is spread.
- ② Up and down motion of the objective lens. (3 times)

Fig. C

SECTION 2

GENERAL

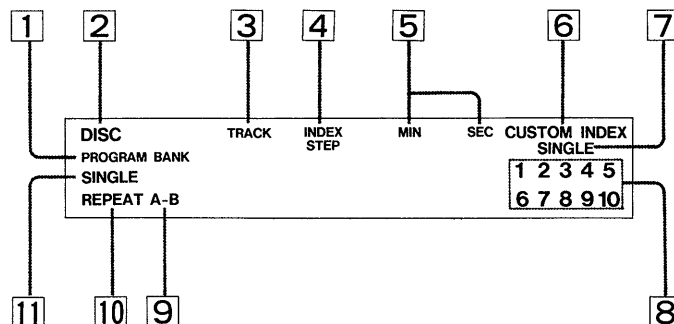
LOCATION OF CONTROLS



Name of control	Operation
1 POWER switch	Depress to turn on the power
2 Disc table	Place a disc here.
3 Playing mode indicator lamps	The lamp of the current play mode lights up.
4 DISPLAY ON/OFF button	Press to switch off the display. Press once more to display the indications again.
5 <<AMS>> buttons	Use these buttons to designate the selection number to be played. During play, each time the << button is pressed, the beginning of the current selection, then the beginning of the previous selection is located in sequence. (Each time the >> button is pressed, the beginning of the next selection is located in the same way.) When the << or >> button is kept pressed, the selections are skipped continuously.
6 Output indicator lamp	The lamp of the output you chose with the OUTPUT SELECTOR lights up.
7 <<>> (manual search) buttons	Use these buttons to play from the desired point of a selection. To go back, keep << pressed, and to go ahead, keep >> pressed. When the << or >> button is pressed in the pause mode, a quick search operation can be activated.
8 OUTPUT SELECTOR button	Select analog output or digital output with this selector.
9 ■ (stop) button	Press to stop the play.
10 (pause) button	Press to stop the play momentarily. Press the ► button or this button to release pause.
11 ► (play) button	Press to start the play or to release pause.
12 ▲ OPEN/CLOSE button	Press to start the play or to release pause.
13 Display window	The current play mode, the track number of the selection, and the elapsed playing time of the selection, etc., are displayed here.
14 Remote sensor	The signals from the remote commander are received here.
15 LINE OUT/PHONE LEVEL (volume) control	Use this control to adjust the level of headphones and the output level of the line out (VARIABLE).
16 PHONES jack	Connect headphones here.

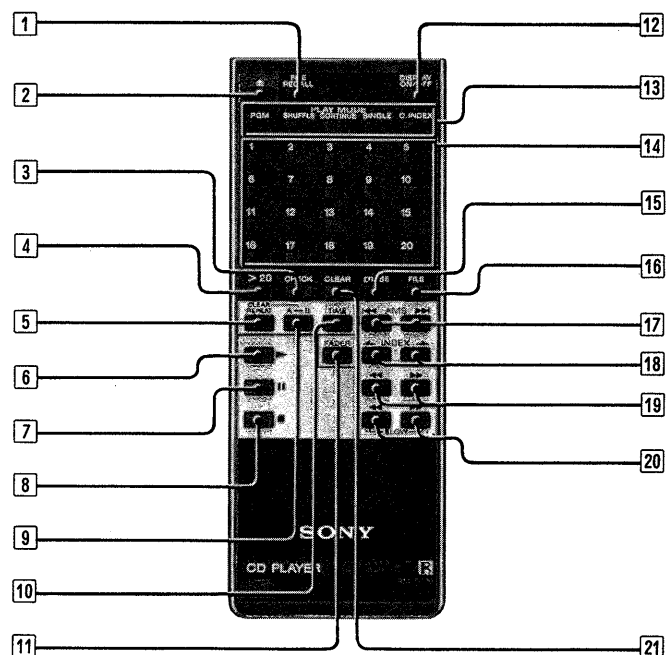
* AMS is an abbreviation of Automatic Music Sensor.

Information Display



Indication	Meaning
1 PROGRAM BANK	The program bank is stored.
2 DISC	A disc is inserted.
3 TRACK	The track number of the selection is displayed.
4 INDEX	While "INDEX" is lit, the index number of the section being played is displayed. When the Custom Index is stored, the custom index number is displayed while the Custom Index is played.
STEP	During program play, "STEP" is lit and the program number of the selection is displayed.
5 MIN/SEC	The elapsed playing time of the selection, the remaining time of the currently playing selection, and the total remaining time until the end of the disc are displayed with each press of the TIME button.
6 CUSTOM INDEX	The custom index is stored, and the playing mode is the custom index mode.
7 CUSTOM INDEX SINGLE	The playing mode is the custom index single mode.
8 1 ~ 10	The custom index number is displayed while custom index is played.
9 REPEAT A-B	A ↔ B repeat is being played.
10 REPEAT	The unit is in the repeat play mode.
11 SINGLE	The unit is in the single play mode.

Remote Commander

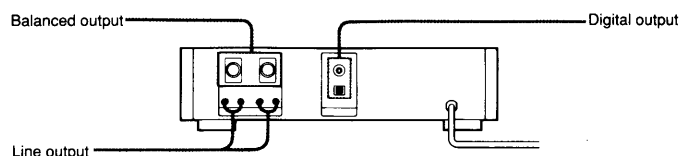


1 FILE RECALL button	Press to recall the program bank.
2 ▲ (open/close) button	Press to open or close the disc table.
3 CHECK (program check) button	Press to check the programmed contents. Use this button to cancel a custom index memory.
4 > 20 (over 20 button)	Press to select a selection having a track number over 20. Then press one of the 1 to 10 buttons. In this case, the 10 button corresponds to "0". <Example> To select the 22nd selection: Press >20, then 2 and 2. To select the 30th selection: Press >20, then 3 and 10.
5 REPEAT CLEAR (repeat/repeat clear) button	Press to play the disc repeatedly. Press again to release repeat play.
6 ► (play) button	Press to start the play or to release pause.
7 (pause) button	Press to stop the play momentarily. Press the ► button or this button to release pause.
8 ■ (stop) button	Press to stop the play.
9 A ↔ B repeat button	Press when the required start point and stop point for repeat play are reached.
10 TIME button	Press to change the display.
11 FADER (fade in/fade out) button	Press to have the play fade in or fade out.
12 DISPLAY ON/OFF button	Press to turn off all the indications. Press to display the indications again.
13 PLAY MODE buttons	Press to select the desired play mode. PGM (program play) button SHUFFLE (shuffle play) button CONTINUE (continuous play) button SINGLE (single play) button C. INDEX (custom index mode) button
14 Numeric buttons	Press to designate the desired selection.
15 ERASE (memory erase) button	Press to cancel a program bank or a custom index memory.
16 FILE (custom file) button	Press to store a program or a custom index.
17 ◀◀ AMS ▶▶ buttons	Use these buttons to designate the selection number to be played.
18 ◀◀ INDEX ▶▶ buttons	Press to select the desired index number or a custom index.
19 ◀◀ ▶▶ (manual search) buttons	Use these buttons to play from the desired point of a selection.
20 ◀◀ ▶▶ SLOW (low speed manual search) buttons	Press to search at a lower speed.
21 CLEAR (program clear) button	Press to cancel a programmed selection.

The following operations can not be conducted with the remote commander.

- Power ON/OFF
- Volume control
- Analog/Digital OUTPUT SELECTOR

Rear Panel

**Balanced output**

As it is hardly affected by external noise, the balanced output connector is utilised by professionals in studios and the broadcasting stations. Connect the unit to an amplifier having a balanced input jack. For the connection, use cannon connectors XLR-3-32 or equivalent.

Pin assignment of the connectors are as follows:

1 : GND, 2 : COLD, 3 : HOT (US, Canadian Model)

1 : GND, 2 : HOT, 3 : COLD (AEP, UK, E, Australian Model)

Digital output

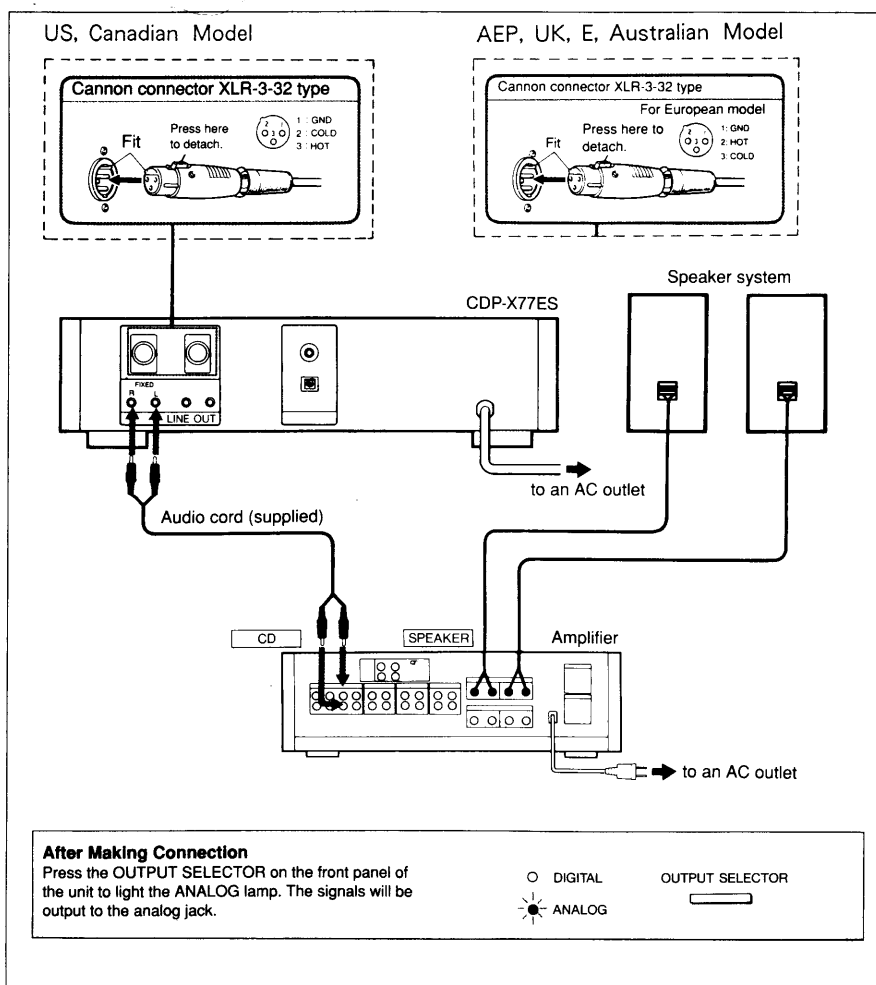
The music signal remains digital when transported, thus the information does not deteriorate. Use the digital output connection when you connect the unit to an amplifier with a digital input or D/A converter.

When you connect a unit using a coaxial digital connecting cord, use the digital connecting cord VMC-1ES (optional). When you connect using optical digital connecting cord, use the audio optical cable POC-15 (optional).

Line output

Use the line output jacks when connecting this unit for analog use.

Normally make the connection to the FIXED jack. If you use the VARIABLE jack to connect a power amplifier, you can adjust the volume with the LINE OUT/PHONE LEVEL control on the front panel. The LINE OUT/PHONE LEVEL control not only adjusts the headphones output but also the output level of the variable LINE OUT jack. Accordingly, you can make the level of this unit correspond to that of other music sources. Be careful when recording as the recording level will change when you use the LINE OUT/PHONE LEVEL control.

Connecting the Unit with Analog Equipment

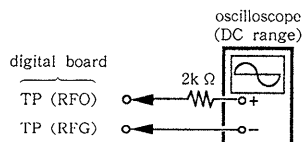
SECTION 3

ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10MΩ impedance.

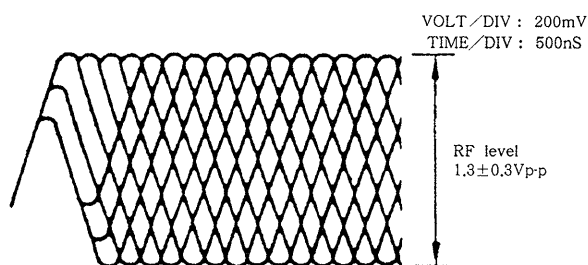
RF Level Check

Procedure :



1. Connect oscilloscope to test point TP (RFO) and TP (RFG) on digital board.
2. Turn POWER switch on.
3. Put disc (YEDS-18) in and play back.
4. 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.

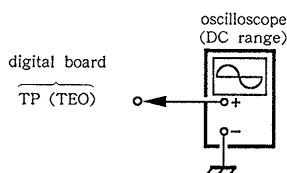
RF Signal Reference Waveform (eye pattern)



REFERENCE

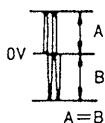
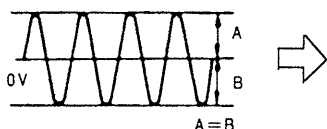
E-F Balance Check

Procedure :



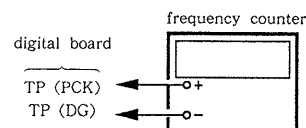
1. Connect test point TP (ADJ) and TP (TEI) to ground with lead wire.
2. Connect oscilloscope to test point TP (TEO) on digital board.
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and play back.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V.
6. 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. Connect frequency counter to test point TP (PCK) and TP (DG) on digital board.
2. Turn POWER switch on.
3. Put disc (YEDS-18) in and play back.
4. 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 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.

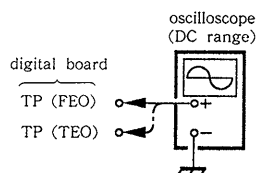
Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for STOP→▷PLAY or automatic selection, (⏮⏭ buttons pressed.) (Normally takes about 1 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP→▷PLAY or automatic selection, (⏮⏭ buttons pressed.)	—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

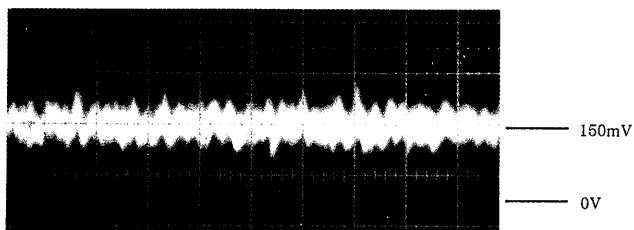
If the positions after the primary adjustment are only a little different, return the controls to the original position.



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) on digital board.
4. Adjust RV201 on digital board so that the waveform is as shown in the figure below. (focus gain adjustment)

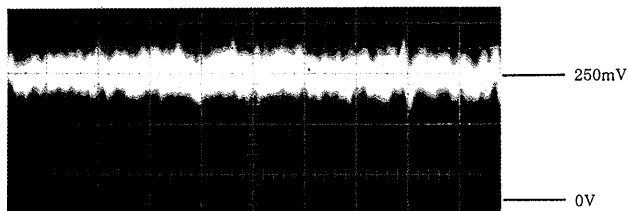
VOLT/DIV : 100mV
TIME/DIV : 2mS



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

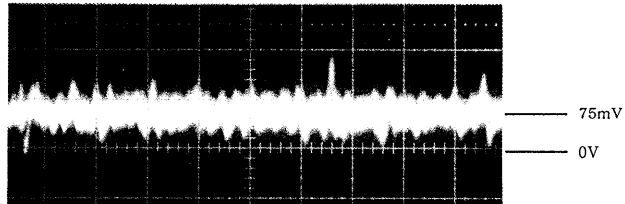
low focus gain

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



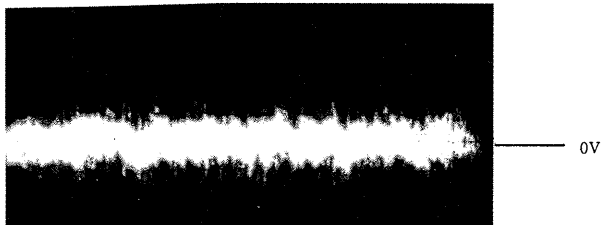
high focus gain

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



5. Connect oscilloscope to TP (TEO) on digital board.
6. Adjust RV202 on digital board so that the waveform is as shown the figure below. (tracking gain adjustment)

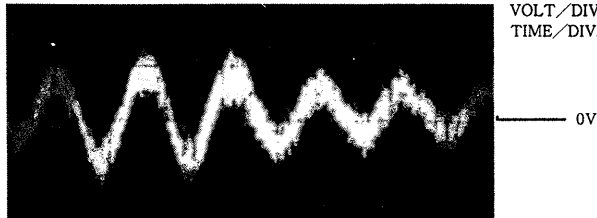
VOLT/DIV : 200mV
TIME/DIV : 2mS



- Incorrect Examples (fundamental wave appears)

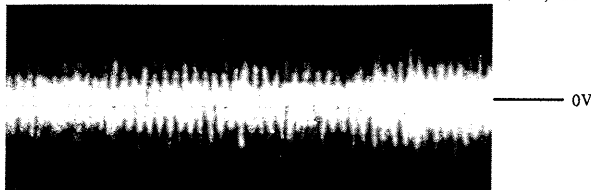
low tracking gain

VOLT/DIV : 200mV
TIME/DIV : 2mS

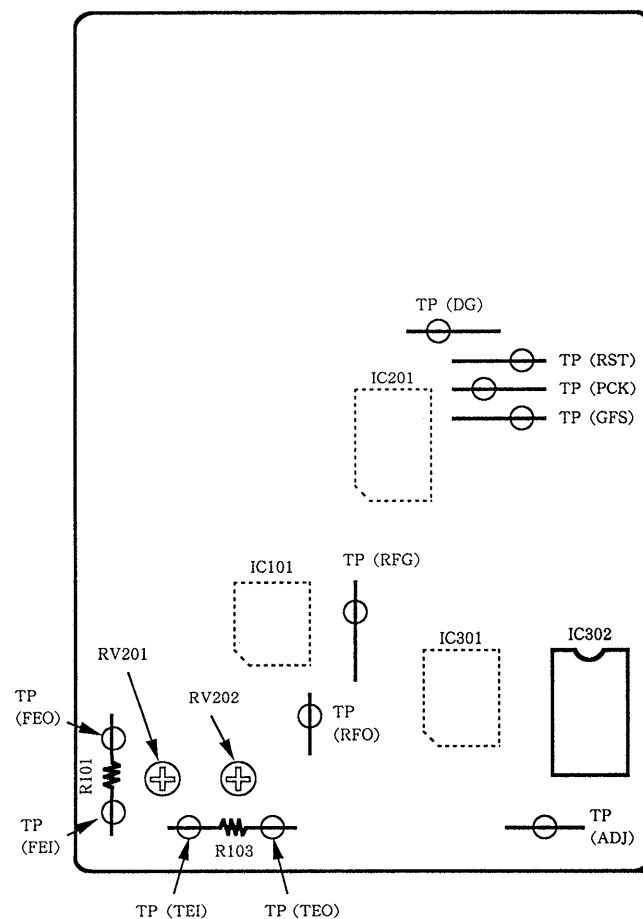


high tracking gain
(high fundamental wave)
than for low gain

VOLT/DIV : 200mV
TIME/DIV : 2mS

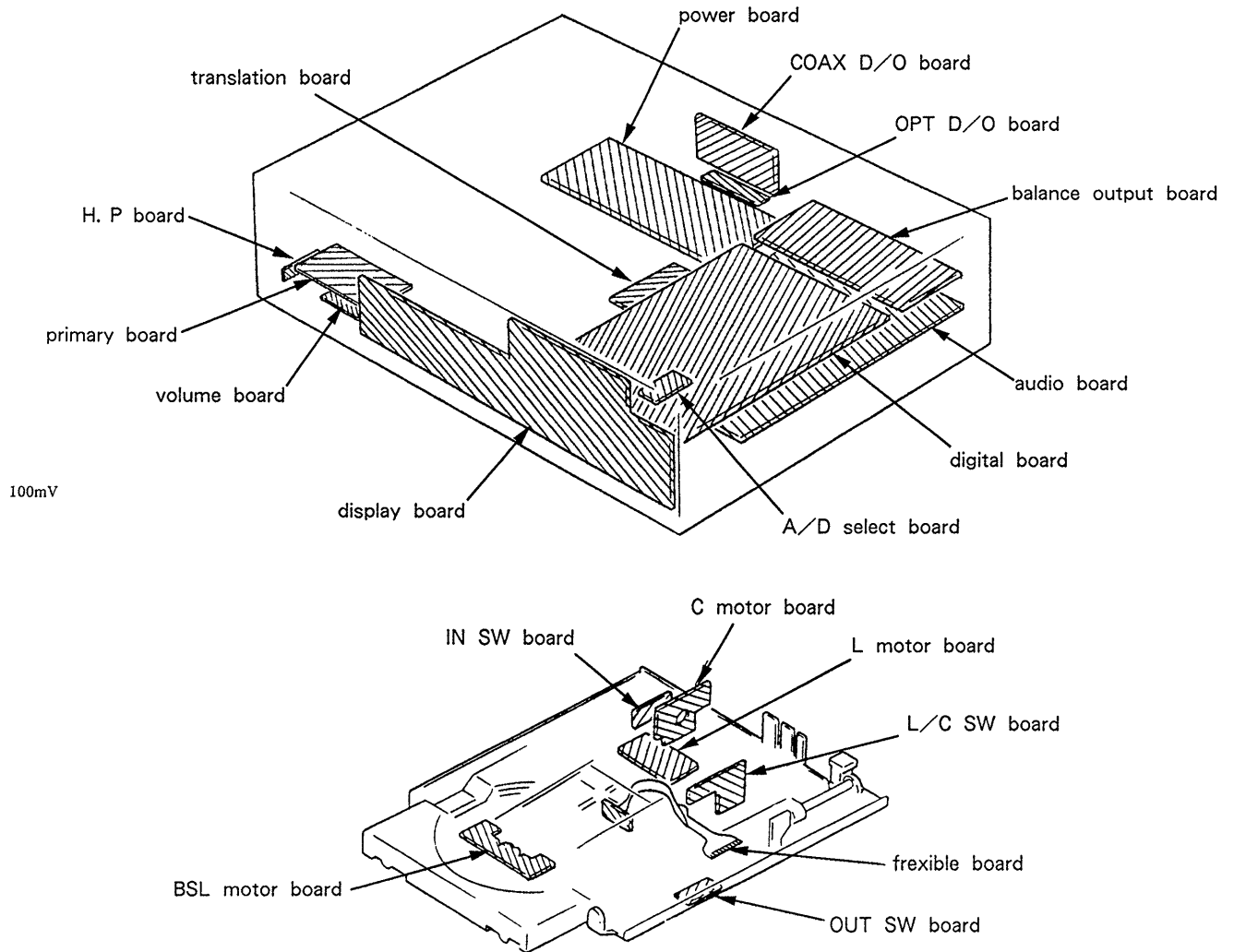


Adjustment Location : [digital board]



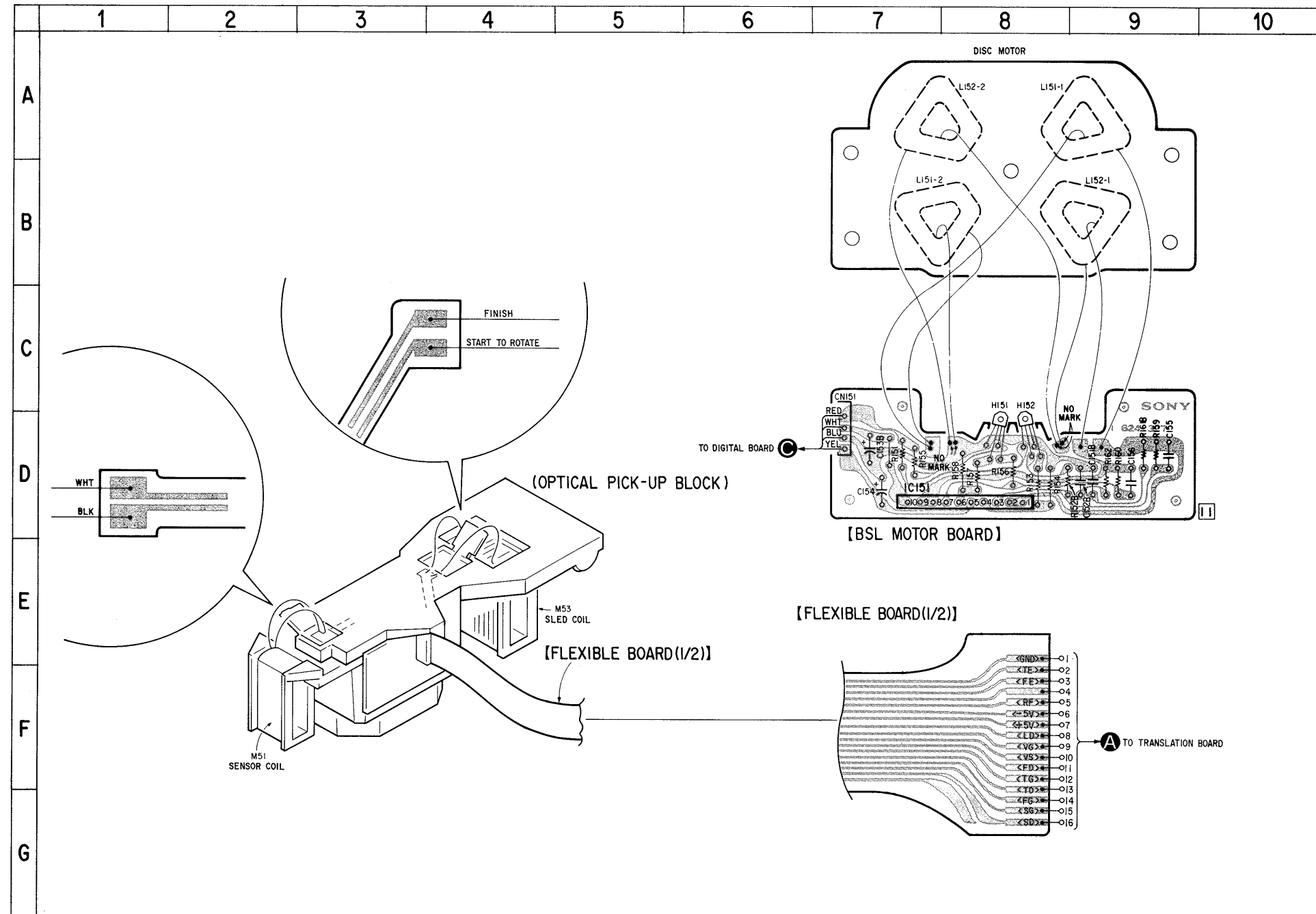
SECTION 4 DIAGRAMS

4-1. CIRCUIT BOARDS LOCATION



4-2. BU-10A (BASE UNIT) SECTION PRINTED WIRING BOARDS

• Refer to page 26 for Semiconductor Lead Layouts.



Note :

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : parts mounted on the conductor side.
- indicates side identified with part number.

• MAIN SECTION
SEMICONDUCTOR LOCATION

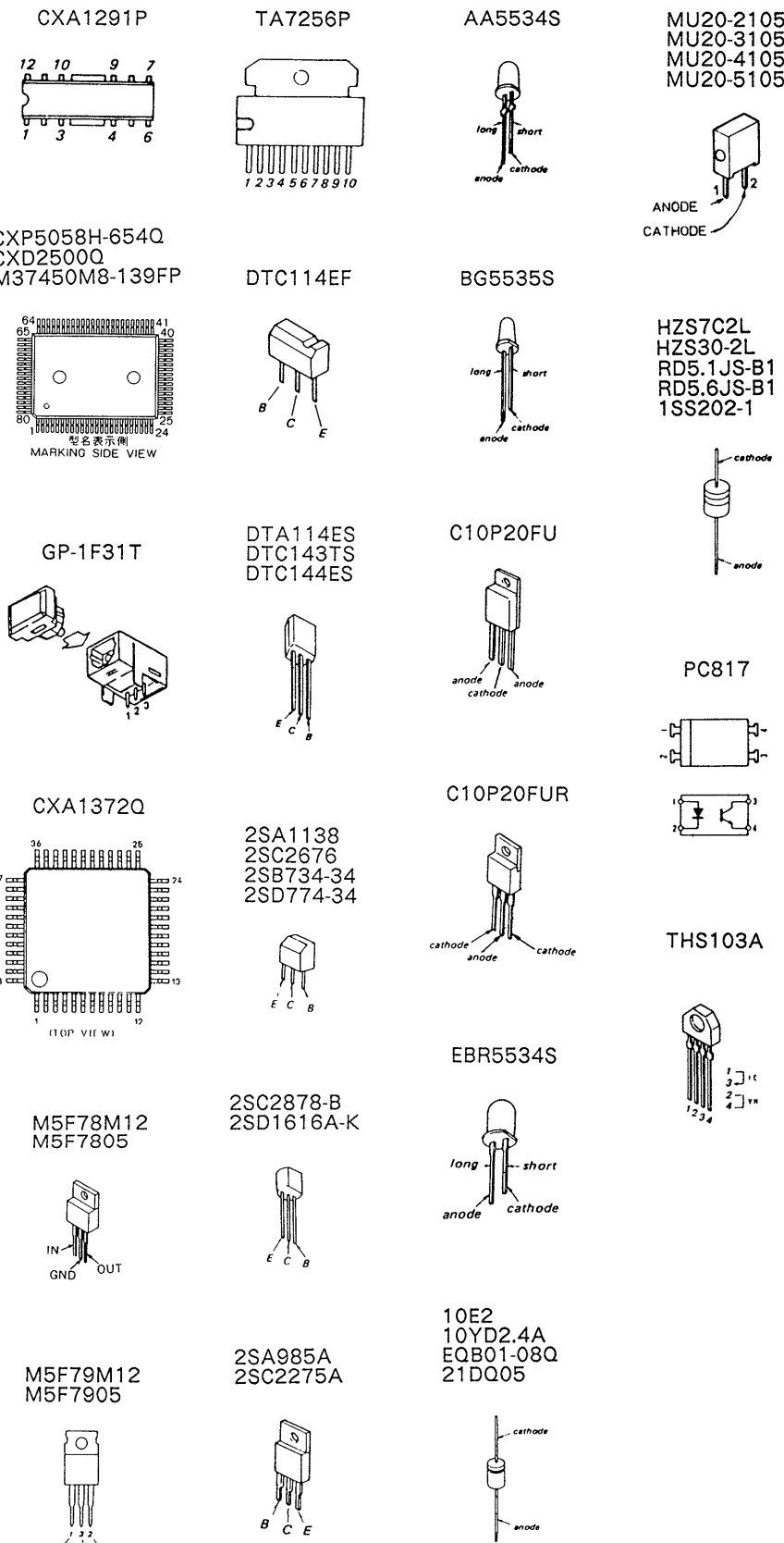
Ref. No.	Location	Ref. No.	Location
IC051	J-19	Q801	H-3
IC101	H-20	Q802	H-3
IC102	D-20	Q803	H-3
IC103	G-19	Q804	H-3
IC104	F-21	Q805	H-10
IC201	F-17	Q806	H-9
IC202	B-16	Q911	D-33
IC301	I-17		
IC302	I-16	D161	E-19
IC380	D-16	D301	H-16
IC381	D-17	D371	B-20
IC382	D-18	D372	B-20
IC383	B-18	D421	D-24
IC401	E-24		
IC421	D-23	D424	E-23
		D425	E-23
IC431	G-24	D431	G-24
IC451	E-26	D474	H-27
IC481	G-26	D475	F-27
IC491	E-27		
IC601	H-23	D491	E-23
		D496	D-25
IC604	H-24	D497	E-25
IC605	I-24	D501	B-23
IC606	I-24	D502	C-23
IC651	J-24		
IC701	G-27	D551	B-27
		D552	C-27
IC704	H-26	D630	G-23
IC705	I-26	D631	I-23
IC706	I-26	D632	I-27
IC751	J-26		
IC801	H-6	D651	C-5
		D652	B-5
IC802	H-1	D653	B-6
IC851	I-34	D654	B-6
IC871	K-34	D801	I-5
IC901	B-33		
IC902	B-33	D802	I-6
		D803	I-4
IC903	C-33	D804	I-3
IC904	C-33	D805	H-12
IC921	B-29	D806	H-11
IC922	D-29		
IC951	B-10	D807	J-12
IC952	B-12	D808	J-12
		D901	B-35
		D902	B-35
		D903	C-35
Q101	J-17		
Q161	E-19		
Q162	E-19	D904	C-35
Q371	B-20	D905	B-35
Q372	B-19	D906	C-35
		D907	C-33
Q380	B-19	D908	C-33
Q421	H-23		
Q431	G-24	D911	D-33
Q471	H-27	D912	D-34
Q496	E-26	D913	D-34
		D914	C-35
		D915	D-35
Q501	B-24		
Q502	B-23		
Q503	B-23	D916	D-35
Q504	C-23	D917	D-32
Q551	B-26	D918	D-32
		D921	C-32
Q552	B-26	D922	C-32
Q553	B-27		
Q554	C-27	D951	C-11
Q631	H-23	D952	C-11
Q651	C-26		



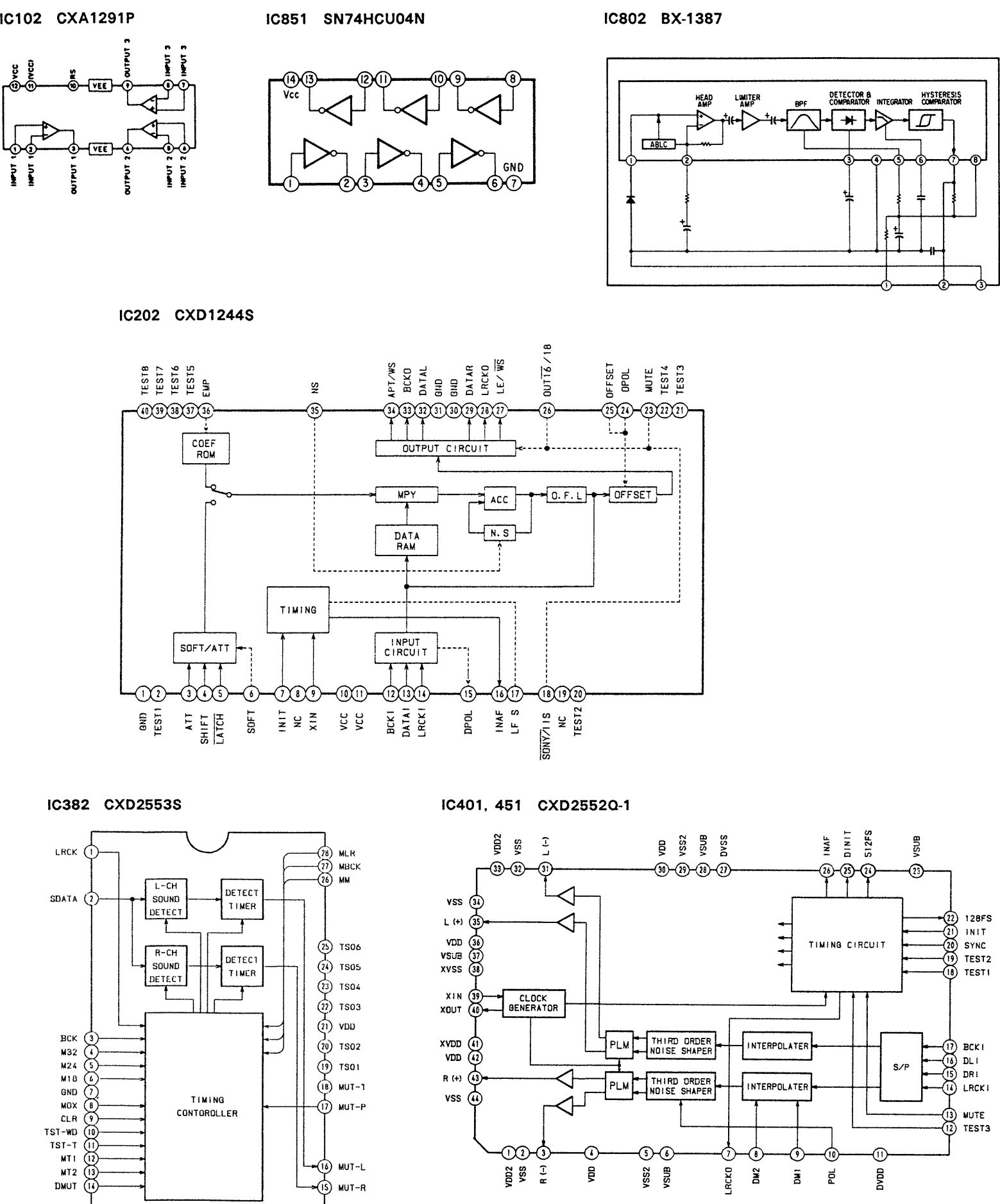
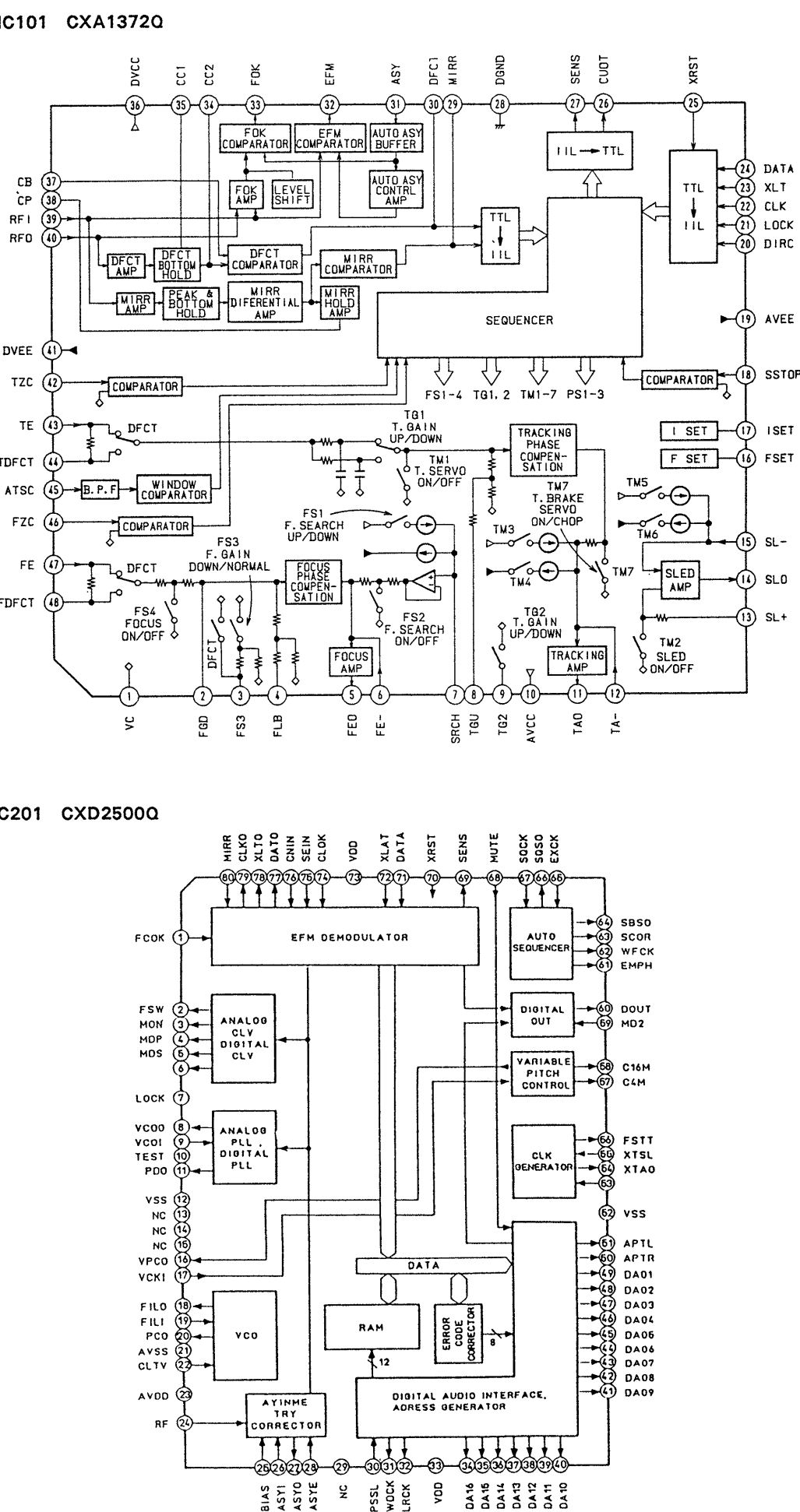
1 during playing 1.3Vp-p	15 0.1 μsec 4.8Vp-p
2 during playing approx. 0.14Vp-p	16 0.1 μsec 4.2Vp-p
3 during playing approx. 50mVp-p	17 0.25 μsec 6Vp-p
4 22 μsec 4.8Vp-p	18 0.25 μsec 4.5Vp-p
5 0.48 μsec 4.8Vp-p	19 0.12 μsec 3Vp-p
6 0.23 μsec 4.8Vp-p	20 2.8 μsec 5.5Vp-p
7 175nsec 4.2Vp-p	21 24nsec 6Vp-p
12 22 μsec 5Vp-p	23 24nsec 2.2Vp-p
13 0.48 μsec 5Vp-p	24 1.5msec 45Vp-p
14 60nsec 3.4Vp-p	

-  B+ Line
-  B- Line
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- no mark: STOP
- () : PLAY
- < > : when LOAD OUT operates
- << >> : when LOARD IN operates
- 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

4-5. SEMICONDUCTOR LEAD LAYOUTS



4-6. IC BLOCK DIAGRAMS



EXPLODED VIEWS

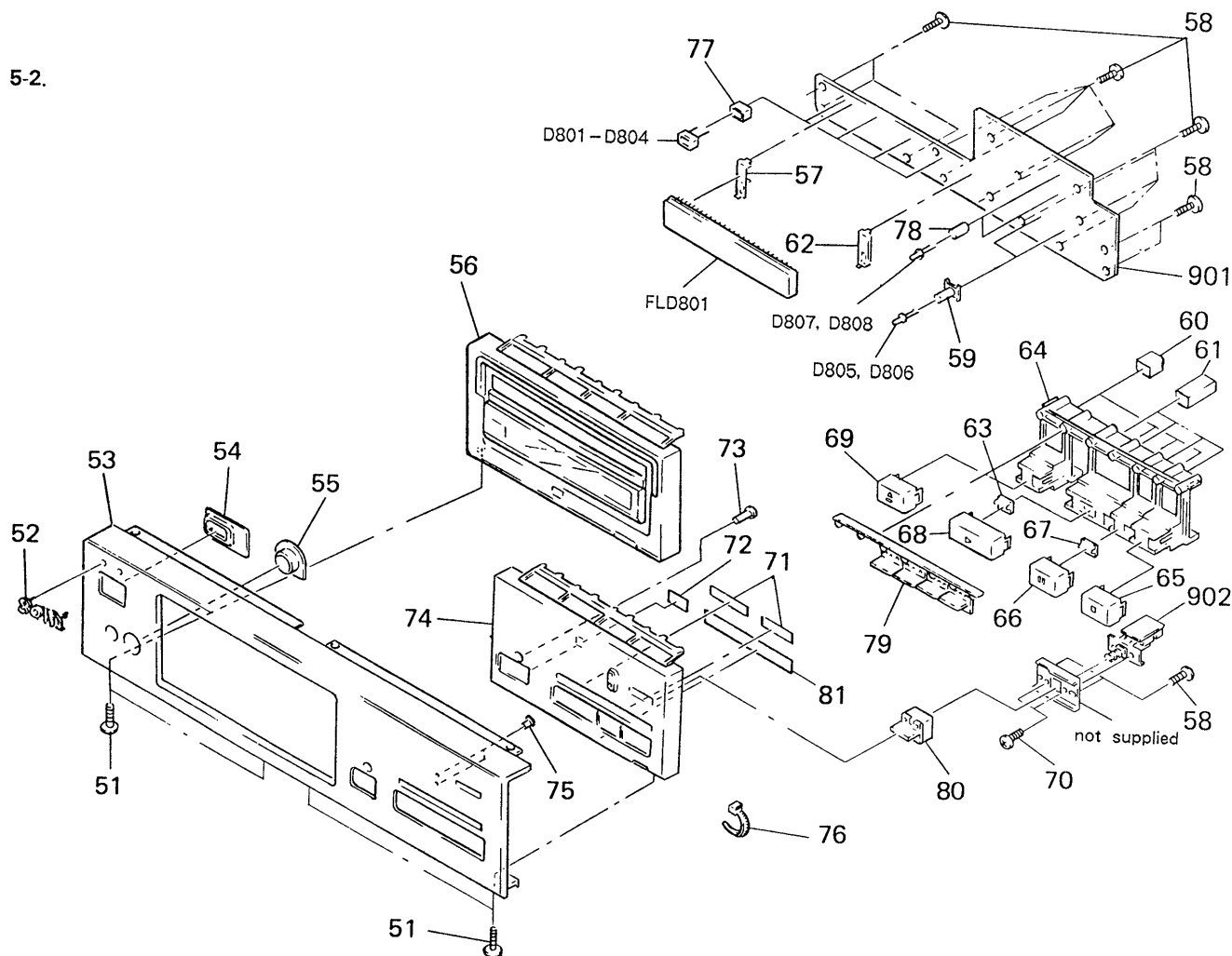
- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- CND : Canadian
- AUS : Australian

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

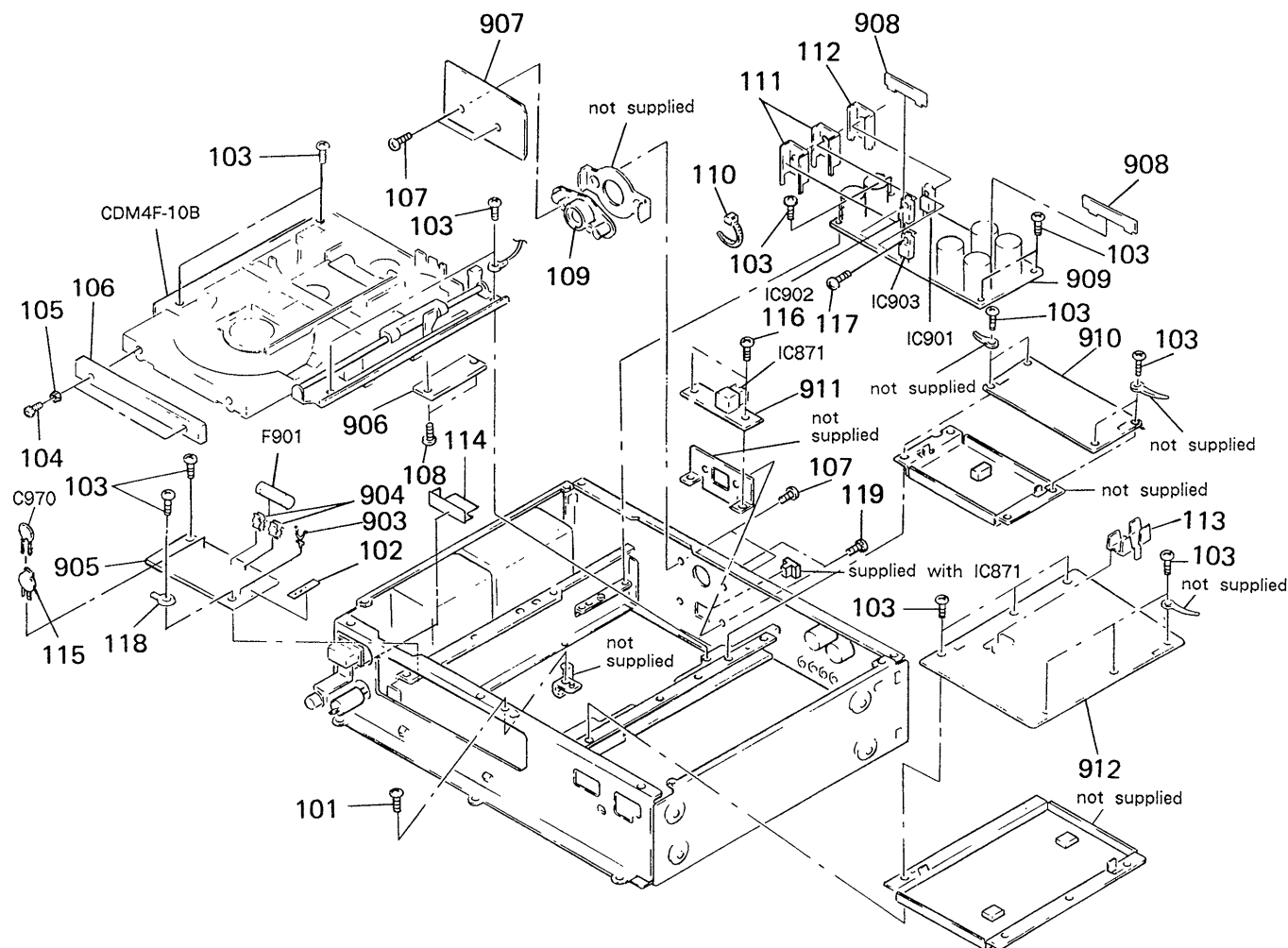
No.	Part No.	Description	Remarks
13	4-928-025-01	(BLACK)...ESCUTCHEON (TOP PLATE)	
	4-928-025-21	(GOLD)...ESCUTCHEON (TOP PLATE)	
14	4-924-242-01	(GOLD)...SCREW (M3X6), FLAT HEAD	
	4-924-242-11	(BLACK)...SCREW (M3X6), FLAT HEAD	
15	3-831-441-11	SPACER	
16	*4-928-020-01	(BLACK)...PLATE, TOP	
	*4-928-020-11	(GOLD)...PLATE, TOP	
17	4-928-062-01	(BLACK)...PLATE (RIGHT), SIDE	
	4-928-062-11	(GOLD)...PLATE (RIGHT), SIDE	
18	X-4928-009-1	(AEP,E:BLACK,AUS)...PLATE (R) ASSY, SIDE, ORNAMENTAL	
	X-4928-012-1	(US,CND)...PLATE (R) ASSY, SIDE, ORNAMENTAL	
	X-4928-015-1	(AEP,E:GOLD)...PLATE (R) ASSY, SIDE, ORNAMENTAL	
19	*4-908-853-01	CUSHION	
20	7-682-964-09	SCREW +PSW 4X14	

5-2.



No.	Part No.	Description	Remarks
51	7-685-646-79	SCREW +BVP 3X8 TYPE2 N-S	
52	4-908-848-01 4-908-848-21	(BLACK)...EMBLEM, SONY (GOLD)...EMBLEM, SONY	
53	4-928-034-31 4-928-034-41 4-928-034-51 4-928-091-01	(AEP,E:BLACK,AUS)...PANEL, FRONT (US,CND).....PANEL, FRONT (UK).....PANEL, FRONT (AEP,E:GOLD).....PANEL, FRONT	
54	4-928-038-01 4-928-038-11	(BLACK)...ESCUTCHEON (POWER) (GOLD)...ESCUTCHEON (POWER)	
55	4-922-548-01 4-922-548-11	(BLACK)...ESCUTCHEON, KNOB (GOLD)...ESCUTCHEON, KNOB	
56	X-4928-004-1 X-4928-013-1 X-4934-022-1	(AEP,E:BLACK,CND,AUS) ...BASE (A) ASSY, PANEL (US).....BASE (A) ASSY, PANEL (AEP,E:GOLD)....BASE (A) ASSY, PANEL	
57	*4-928-053-01	HOLDER (LEFT)	
58	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
59	*4-913-139-01	SPACER (A), LED	
60	*4-928-063-11	CUSHION (BUTTON)	
61	*4-928-063-01	CUSHION (BUTTON)	
62	*4-928-052-01	HOLDER (RIGHT)	
63	4-922-598-11	PLATE, INDICATION, PLAY	
64	4-928-041-01	BASE (A), KNOB	
65	4-928-088-11 4-928-088-41	(BLACK)...CAP (M), KNOB (STOP) (GOLD)...CAP (M), KNOB (STOP)	
66	4-928-088-01 4-928-088-31	(BLACK)...CAP (M), KNOB (PAUSE) (GOLD)...CAP (M), KNOB (PAUSE)	
67	4-922-599-11	PLATE, INDICATION, PAUSE	
68	4-928-043-01 4-928-043-11	(BLACK)...CAP (L), KNOB (PLAY) (GOLD)...CAP (L), KNOB (PLAY)	

No.	Part No.	Description	Remarks
69	4-928-088-21 4-928-088-51	(BLACK)...CAP (M), KNOB (OPNE/CLOSE) (GOLD)...CAP (M), KNOB (OPNE/CLOSE)	
70	7-682-548-09	SCREW (3X8)	
71	*4-935-920-01	SPACER (AMS)	
72	*4-935-919-01	SPACER (O/C)	
73	4-928-046-01 4-928-046-11	(BLACK)...BUTTON (DIA. 3.4) (GOLD)...BUTTON (DIA. 3.4)	
74	*4-928-036-01 *4-928-036-11	(BLACK)...BASE (B), PANEL (GOLD)...BASE (B), PANEL	
75	4-925-327-01	INDICATOR	
76	3-655-653-21	BAND (TAITON), BINDING	
77	*4-928-074-01	SPACER (LED)	
78	*4-923-532-21	SPACER, LED	
79	X-4934-020-1 X-4934-023-1	(BLACK)...BASE (B) ASSY, KNOB (GOLD)...BASE (B) ASSY, KNOB	
80	X-4934-021-1 X-4934-024-1	(BLACK)...BASE (C) ASSY, KNOB (GOLD)...BASE (C) ASSY, KNOB	
81	*4-935-921-01	SPACER (PLAY)	
901	*A-4617-234-A	MOUNTED PCB, DISPLAY	
902	*1-629-100-21	PC BOARD, A/D SELECT	
D801	8-719-974-70	DIODE MU20-5105 (CUSTOM INDEX)	
D802	8-719-974-69	DIODE MU20-4105 (CONTINUE/SINGLE)	
D803	8-719-974-68	DIODE MU20-3105 (SHUFFLE)	
D804	8-719-974-67	DIODE MU20-2105 (PROGRAM)	
D805	8-719-907-75	DIODE AA5534S (PAUSE)	
D806	8-719-907-81	DIODE BG5535S (STOP)	
D807	8-719-907-81	DIODE BG5535S (ANALOG)	
D808	8-719-921-01	DIODE EBR5534S (DIGITAL)	
FLD801	1-519-480-11	INDICATOR TUBE, FLUORESCENT	

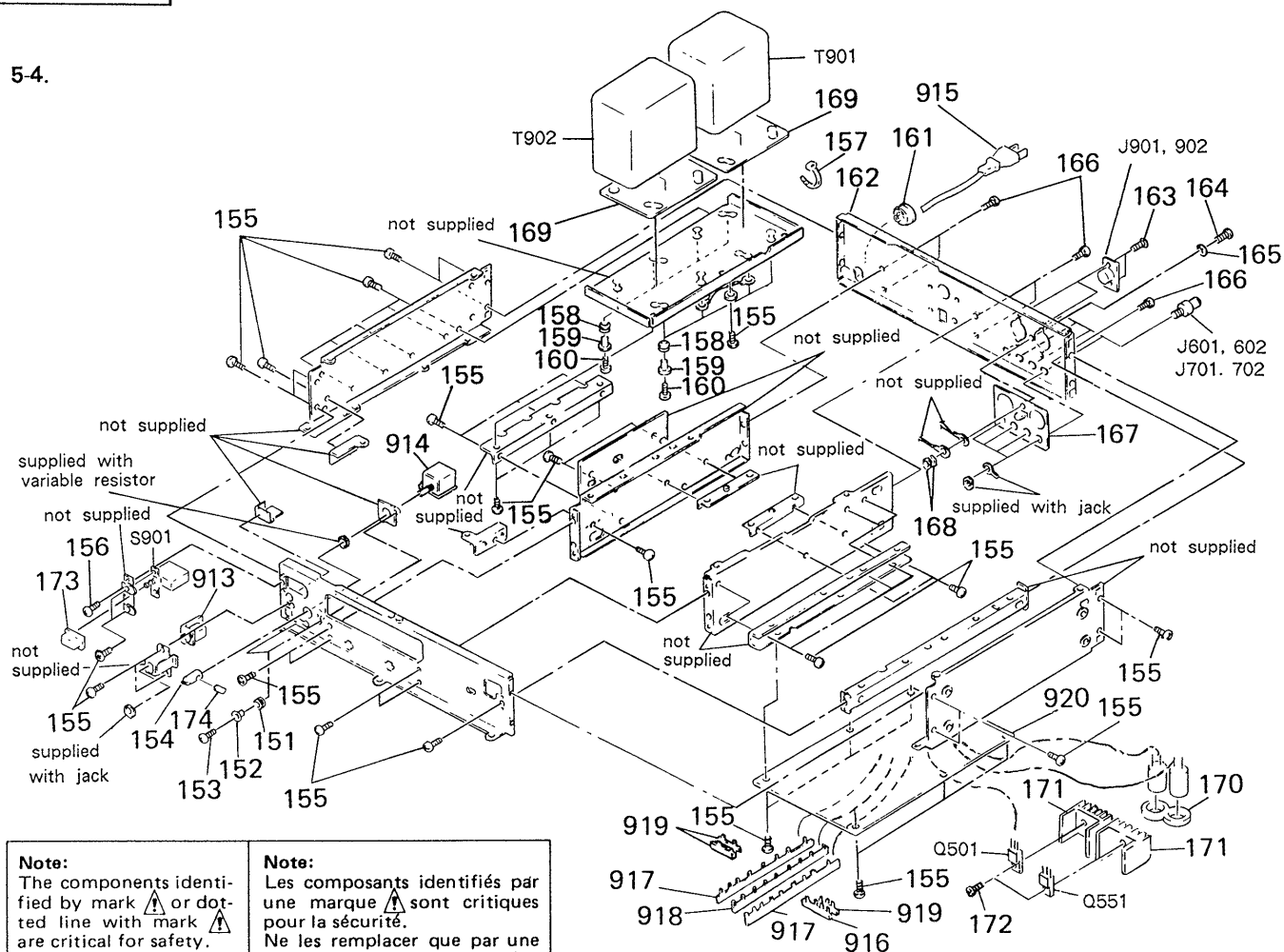


Note:
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

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

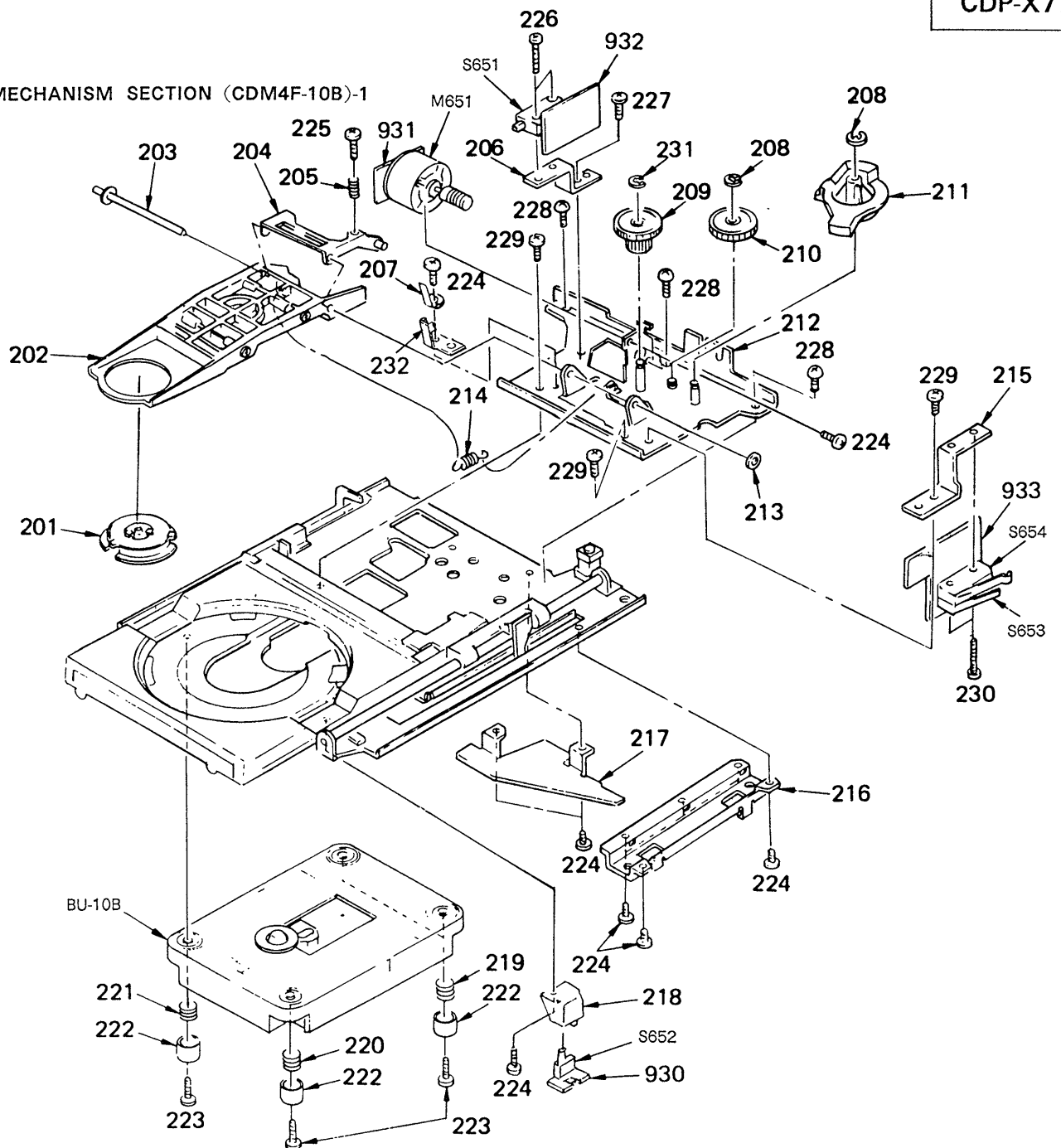
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	7-682-547-04	SCREW +B 3X6		118	4-870-539-00	PLATE, GROUND	
102	*3-701-946-22	(US,CND)...LABEL (1.6A 125V), FUSE		119	3-703-685-21	SCREW (+BV 3X8)	
103	7-682-548-09	SCREW (3X8)		903	*1-535-688-11	TERMINAL	
				904	1-533-183-11	HOLDER, FUSE	
104	4-901-727-21	(GOLD)...BOLT (2.6X8), HOLE, HEXAGON					
	7-683-412-05	(BLACK)...BOLT, HEXAGON SOCKET 2.6X6		905	*1-629-104-11	PC BOARD, PRIMARY	
105	4-884-635-00	(BLACK)...BASE, ORNAMENTAL		906	*1-629-103-21	PC BOARD, TRANSLATION	
	4-884-635-21	(GOLD)...BASE, ORNAMENTAL		907	*1-629-106-11	PC BOARD, COAX D/O	
				908	1-568-130-11	BAR, BUS 3P	
106	4-928-084-01	(AEP,E:GOLD).....PANEL, LOADING		909	*A-4618-219-A	(AEP,UK,E,AUS)...MOUNTED PCB, POWER	
	4-928-084-11	(AEP,E:BLACK,CND,UK,AUS)..PANEL, LOADING			*A-4618-223-A	(US,CND).....MOUNTED PCB, POWER	
	4-928-084-21	(US).....PANEL, LOADING					
107	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		910	*1-633-092-11	PC BOARD, BALANCE OUTPUT	
108	7-621-770-87	SCREW +BVTT 2.6X5 (S)		911	*1-629-105-11	PC BOARD, OPT D/O	
109	*4-913-152-01	ESCUTCHEON, D/O					
110	3-655-653-21	BAND (TAITON), BINDING		912	*A-4617-235-A	(AEP,UK,E,AUS)...MOUNTED PCB, DIGITAL	
111	4-902-345-01	HEAT SINK			*A-4617-395-A	(US,CND).....MOUNTED PCB, DIGITAL	
112	*4-886-555-00	HEAT SINK		C970	A 1-161-744-00	CERAMIC 0.01MF 400V	
113	*4-922-525-01	HEAT SINK		F901	A 1-532-215-00	(AEP,UK,E,AUS)...FUSE, TIME-LAG (0.8A)	
114	*4-928-080-01	COVER, INSULATING		F901	A 1-532-742-11	(US,CND).....FUSE, GLASS TUBE (1.6A)	
115	4-875-455-01	(AEP,UK,E,AUS)..COVER(DIA. 20), CAPACITOR					
116	7-682-548-09	SCREW (3X8)		IC871	8-759-977-71	IC GP1F31T (DIGITAL OUT OPTICAL)	
117	7-682-147-15	SCREW, TR		IC901	8-759-604-29	IC M5F7805	
				IC902	8-759-604-29	IC M5F7805	
				IC903	8-759-604-47	IC M5F7905	

5-4.



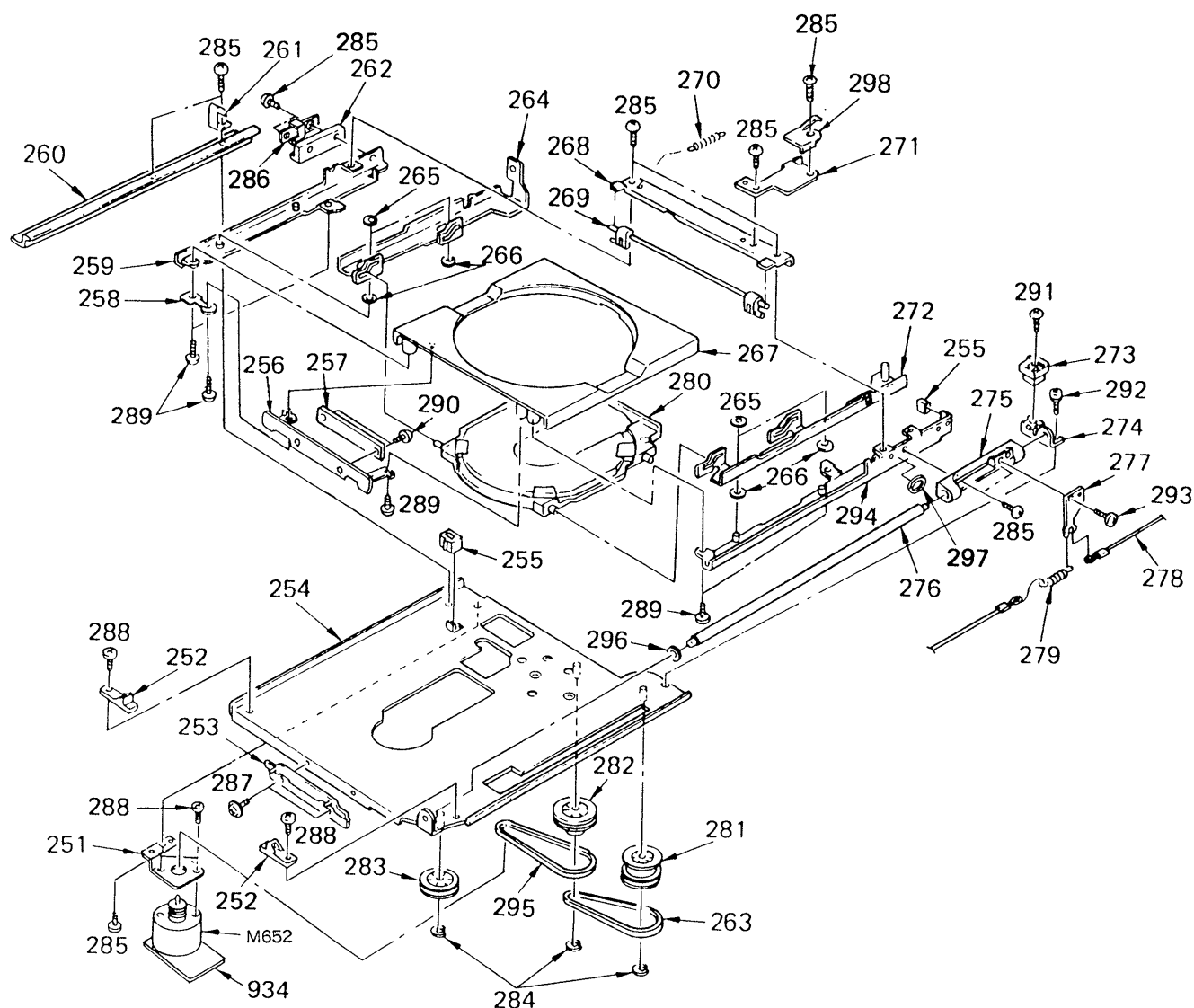
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	*4-888-798-11	BUSHING, RUBBER		174	3-701-505-00	SET SCREW, DOUBLE POINT 3X3	
152	*4-928-026-01	COLLAR (B)		913	*1-629-101-21	PC BOARD, H.P	
153	7-682-549-04	SCREW +BVT 3X10 (S)		914	*1-629-102-21	PC BOARD, VOLUME	
154	A-4675-314-A 4-928-024-11	(BLACK)...KNOB ASSY, VOLUME (GOLD)...KNOB, VOLUME	174	915	1-555-795-00 1-559-272-11 1-559-479-11 1-575-379-11	(AEP,E)...CORD, POWER (UK).....CORD, POWER (US,CND)...CORD, POWER (AUS).....CORD, POWER	
155	7-682-548-09	SCREW (3X8)		916	1-566-940-21	BUS BAR 3P	
156	7-682-547-04	SCREW +B 3X6		917	1-568-129-11	BAR, BUS 8P	
157	3-655-653-21	BAND (TAITON), BINDING		918	1-568-131-11	BAR, BUS 9P	
158	*4-888-798-00	BUSHING, RUBBER		919	*1-569-137-11	BUS BAR 2P	
159	4-928-068-01	COLLAR (C)		920	*A-4617-238-A	MOUNTED PCB, AUDIO	
160	7-682-562-09	SCREW +B 4X10		J601	1-507-918-00	JACK, PIN 1P (FIXED L)	
161	2-231-019-00 4-916-783-01	(AEP,E,AUS)...CLAMPER, CORD (US,CND,UK)...BUSHING, CORD		J602	1-507-918-00	JACK, PIN 1P (VARIABLE L)	
162	*4-928-050-61 *4-928-050-71 *4-928-050-81 *4-928-050-91 *4-928-083-31 *4-935-934-01	(US).....PANEL, BACK (CND).....PANEL, BACK (AEP,E:BLACK)...PANEL, BACK (UK).....PANEL, BACK (AEP,E:GOLD)...PANEL, BACK (AUS).....PANEL, BACK		J701	1-507-918-00	JACK, PIN 1P (FIXED R)	
163	7-685-246-14	SCREW +RKTP 3X8 TYPE2 SLIT		J702	1-507-918-00	JACK, PIN 1P (VARIABLE R)	
164	7-685-873-09	SCREW +BVT 3X10 (S)		J901	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (BALANCE L)	
165	7-623-308-07	LW 3, TYPE (A)		J902	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (BALANCE R)	
166	4-929-074-01	SCREW (3X8)		Q501	8-729-107-53	TRANSISTOR 2SC2275A	
167	*4-928-051-01	BRACKET (TERMINAL)		Q551	8-729-190-53	TRANSISTOR 2SA985A	
168	7-684-023-04	N 3, TYPE 2		S901	1-554-538-00	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)	
169	*4-928-064-01	CUSHION (TRANSFORMER)		T901	1-449-588-11	(AEP,UK,E,AUS) ...TRANSFORMER, POWER (AUDIO)	
170	*4-928-073-01	DAMPER (C)		T901	1-449-590-11	(US,CND)...TRANSFORMER, POWER (AUDIO)	
171	*4-363-146-00	HEAT SINK, V.OUT		T902	1-449-589-11	(AEP,UK,E,AUS) ...TRANSFORMER, POWER (DIGITAL)	
172	7-682-147-15	SCREW, TR		T902	1-449-591-11	(US,CND)...TRANSFORMER, POWER (DIGITAL)	
173	X-4934-014-1 X-4934-015-1	(BLACK)...KNOB (POWER) ASSY (GOLD)...KNOB (POWER) ASSY					

5-5. MECHANISM SECTION (CDM4F-10B)-1



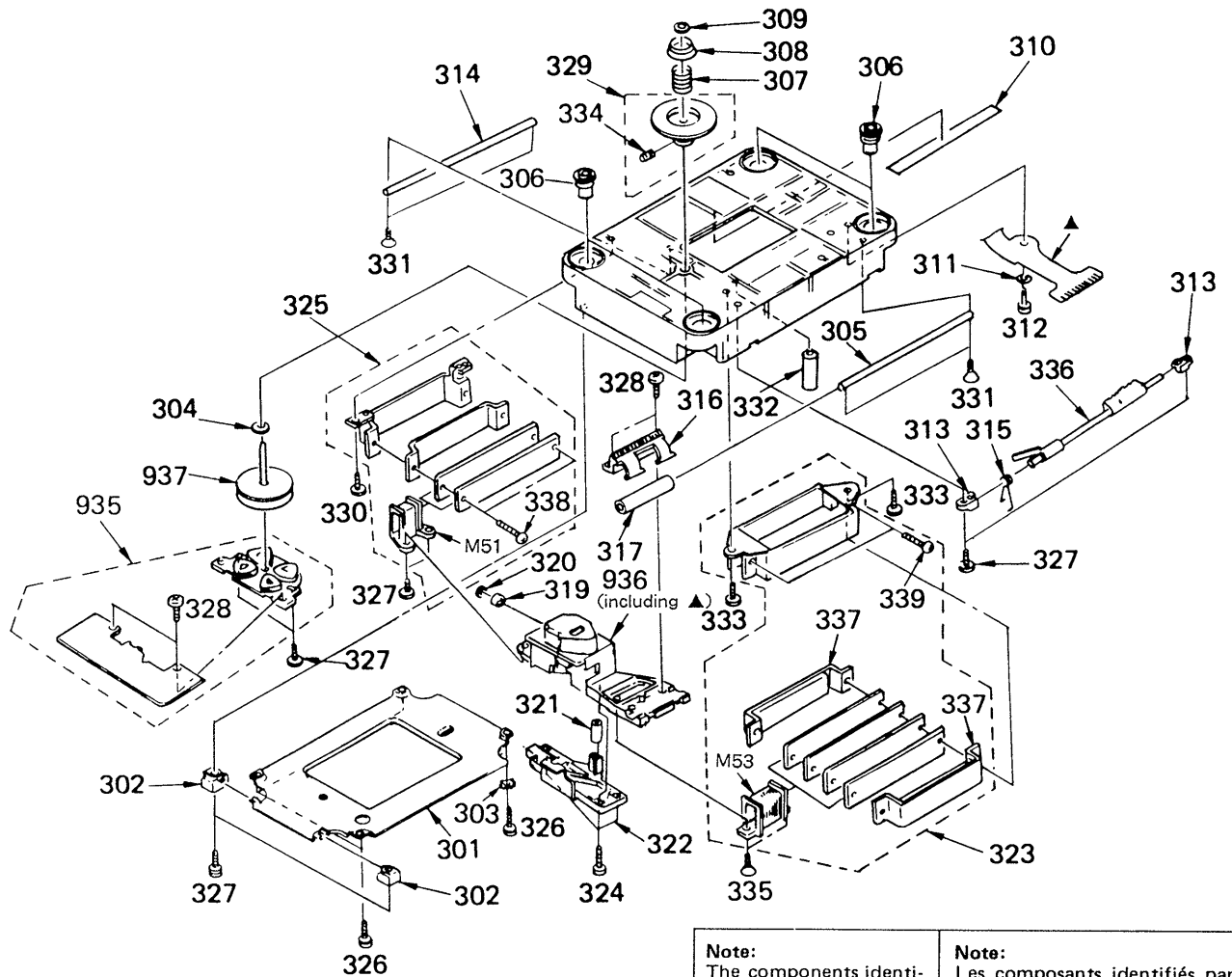
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	A-4675-325-A	PULLEY ASSY, PRESS		222	4-912-578-01	HOLDER, SP	
202	*X-4912-509-1	ARM ASSY, C		223	7-686-529-01	SCREW, TOTSU PSW 3X10	
203	4-908-513-01	SHAFT, FULCRUM, C ARM		224	7-621-775-00	SCREW +B 2.6X3	
204	X-4908-513-1	PLATE ASSY, ADJUSTMENT, ARM		225	7-621-775-80	SCREW +B 2.6X16	
205	4-908-559-01	SPRING, COMPRESSION		226	7-621-773-87	SCREW +BVTT 2.6X10 (S)	
206	*4-912-543-01	BRACKET (D), SWITCH		227	7-682-646-09	SCREW +PS 3X5	
207	*4-912-569-01	PLATE (B), GROUND		228	7-685-870-01	SCREW +BVTT 3X5 (S)	
208	7-624-106-04	STOP RING 3.0, TYPE -E		229	7-682-544-09	SCREW +B 3X3	
209	4-912-514-01	GEAR (A)		230	7-621-257-85	SCREW +P 2.3X14	
210	4-912-525-01	GEAR (B)		231	7-624-109-04	STOP RING 5.0, TYPE -E	
211	4-912-528-01	GEAR, CAM		232	*4-912-598-01	PLATE (B), GROUND	
212	*X-4912-503-1	CHASSIS ASSY, SUB		930	*1-624-378-11	PC BOARD, OUT SW	
213	3-558-708-21	WASHER, STOPPER		931	*1-624-379-11	PC BOARD, C.MOTOR	
214	4-908-555-01	SPRING, TENSION (C ARM)		932	*1-624-377-11	PC BOARD, IN SW	
215	*4-912-524-01	BRACKET (A), SWITCH		933	*1-624-375-11	PC BOARD, L/C SW	
216	*4-912-580-01	COVER, ROPE		M651	X-4902-019-1	MOTOR ASSY, CHUCKING	
217	*4-908-597-01	COVER, BELT		S651	1-554-205-00	SWITCH,PUSH(LOAD IN DET)	
218	*4-912-588-01	HOLDER (OUT SW)		S652	1-571-300-11	SWITCH, ROTARY (LOAD OUT DET)	
219	4-912-577-01	SPRING (H), COMPRESSION		S653	1-553-636-00	SWITCH,MICRO(MOTOR SELECT)	
220	4-912-575-01	SPRING (F), COMPRESSION		S654	1-570-447-11	SWITCH,MICRO(CHUCKING)	
221	4-912-576-01	SPRING (C), COMPRESSION					

5-6. MECHANISM SECTION (CDM4F-10B)-2



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
251	*4-908-523-01	BRACKET, MOTOR		276	4-912-521-11	SHAFT (RIGHT), GUIDE	
252	4-908-540-01	GUIDE, ASSIST		277	*4-912-520-01	BRACKET, ROPE	
253	*X-4912-508-1	BRACKET ASSY, TABLE		278	4-912-517-01	ROPE	
254	*X-4912-516-1	CHASSIS ASSY, MECHANICAL		279	4-908-553-01	SPRING, COMPRESSION (ROPE)	
255	4-887-175-00	RUBBER, STOPPER		280	*X-4912-515-1	PLATE ASSY, DISK	
256	*4-912-579-01	BRACKET (LP)		281	4-908-525-01	PULLEY (C)	
257	*4-912-544-01	PLATE, FIXED		282	4-908-519-01	PULLEY (A)	
258	*4-912-568-01	PLATE (A), GROUND		283	4-908-524-01	PULLEY (B)	
259	*X-4912-504-1	BRACKET (LEFT) ASSY, TABLE		284	7-624-106-04	STOP RING 3.0, TYPE -E	
260	*4-912-529-01	GUIDE, LOADING		285	7-685-870-01	SCREW +BVTT 3X5 (S)	
261	*4-912-527-01	RETAINER, TABLE		286	4-912-594-01	SPRING	
262	*4-912-534-01	GUIDE, SUB		287	7-628-254-20	+PSW, 2.6X8	
263	4-912-599-01	BELT (FF)		288	7-621-775-00	SCREW +B 2.6X3	
264	*4-912-583-01	SLIDER (CAM LEFT)		289	7-685-646-79	SCREW +BVTP 3X8 TYPE2 SLIT	
265	3-558-708-21	WASHER, STOPPER		290	7-621-770-87	SCREW +BVTT 2.6X5 (S)	
266	3-701-439-11	WASHER		291	7-682-552-04	SCREW +BVTT 3X16 (S)	
267	*4-912-585-01	TABLE, DISK		292	7-682-646-09	SCREW +PS 3X5	
268	*4-912-532-01	REINFORCEMENT, TABLE		293	7-685-132-19	SCREW +BTP 2.6X5 TYPE2 N-S	
269	4-908-534-01	LEVER, FUNCTION		294	*X-4912-505-1	BRACKET (RIGHT) ASSY, TABLE	
270	4-912-516-01	SPRING (DISK CAM), TENSION		295	4-908-591-01	BELT, DRIVING	
271	*4-912-522-01	PLATE, SW		296	*4-912-587-01	CUSHION	
272	*X-4912-514-1	SLIDER (CAM RIGHT) ASSY		297	4-912-593-01	WASHER	
273	*4-912-513-01	STOPPER, TABLE		298	*4-936-101-01	PLATE (MD), GROUND	
274	*4-912-519-01	RETAINER (RIGHT), SHAFT		934	*1-624-376-11	PC BOARD, L.MOTOR	
275	4-912-538-01	BEARING (RIGHT), GUIDE		M652	X-4912-517-1	MOTOR ASSY, LOADING	

5-7. BASE UNIT (BU-10B)



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	No.	Part No.	Description	Remarks
301	*4-921-859-01	COVER (A), MECHANICAL BASE		324	7-621-255-10	SCREW +P 2X3	
302	*4-921-823-01	HOLDER		325	A-4675-229-A	SENSOR ASSY	338,M51
303	7-623-421-07	LW 2.6, TYPE B		326	7-621-773-95	SCREW +B 2.6X6	
304	4-921-853-01	WASHER		327	7-621-775-60	SCREW +P 2.6X12	
305	4-921-821-01	SHAFT (B), SLIDE		328	7-621-775-10	SCREW +B 2.6X4	
306	4-921-816-01	INSULATOR		329	X-4908-219-1	PULLEY ASSY, DISK	334
307	4-908-213-01	SPRING, COMPRESSION		330	7-682-545-04	SCREW +B 3X4	
308	4-921-857-01	CAP, CENTERING		331	7-682-248-09	SCREW +K 3X8	
309	3-558-708-21	WASHER, STOPPER		332	X-4908-221-1	CAM ASSY, LOCK	
310	9-911-838-XX	CUSHION		333	7-682-546-09	SCREW +B 3X5	
311	7-688-001-01	W 2, SMALL		334	7-621-734-09	SET-SCT, HEX. 2.6X3	
312	7-628-253-10	SCREW +PS 2X5		335	7-621-559-30	SCREW +K 2.6X5	
313	4-908-220-01	HOLDER, ROD		336	4-921-825-01	LEVER, LOCK	
314	4-921-822-01	SHAFT (A), SLIDE		337	A-4675-110-A	MAGNET ASSY, LINEAR	
315	4-921-817-01	SPRING		338	7-621-770-XX	SCREW +BVTT 2.6X8 (S)	
316	4-921-826-01	HOLDER, BEARING		339	7-621-775-88	SCREW +BVTT 2.6X16 (S)	
317	4-908-221-01	BEARING		935	A-4675-231-A	STATOR ASSY	
319	4-908-208-01	BEARING (NO-FLANGE), BALL		936	8-848-160-11	DEVICE, OPTICAL KSS-280A	
320	7-624-105-04	STOP RING 2.3, TYPE -E		937	A-4675-324-A	ROTOR ASSY	
321	*4-921-819-01	TUBE, RUBBER		M51	1-422-198-21	COIL (SENSOR)	
322	4-921-860-01	COVER (B), SLIDE BASE		M53	1-422-197-21	COIL (DRIVE)	
323	A-4608-347-C	MOTOR ASSY	337,339,M53				

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 F.**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

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

- CND : Canadian
- AUS : Australian

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.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*A-4617-234-A	MOUNTED PCB, DISPLAY	C104	1-136-165-00	FILM 0.1MF 5% 50V
902	*1-629-100-21	PC BOARD, A/D SELECT	C105	1-161-375-00	CERAMIC 0.0022MF 30% 16V
903	*1-535-688-11	TERMINAL	C106	1-106-351-00	MYLAR 0.0022MF 5% 50V
904	1-533-183-11	HOLDER, FUSE			
905	*1-629-104-11	PC BOARD, PRIMARY	C107	1-136-153-00	FILM 0.01MF 5% 50V
906	*1-629-103-21	PC BOARD, TRANSLATION	C108	1-136-153-00	FILM 0.01MF 5% 50V
907	*1-629-106-11	PC BOARD, COAX D/O	C109	1-136-165-00	FILM 0.1MF 5% 50V
908	1-568-130-11	BAR, BUS 3P			
909	*A-4618-219-A	(AEP,UK,E,AUS)...MOUNTED PCB, POWER	C110	1-136-159-00	FILM 0.033MF 5% 50V
	*A-4618-223-A	(US,CND).....MOUNTED PCB, POWER	C111	1-126-059-11	ELECT 10MF 20% 50V
910	*1-633-092-11	PC BOARD, BALANCE OUTPUT	C112	1-136-165-00	FILM 0.1MF 5% 50V
911	*1-629-105-11	PC BOARD, OPT D/O			
912	*A-4617-235-A	(AEP,UK,E,AUS)...MOUNTED PCB, DIGITAL	C113	1-136-169-00	FILM 0.22MF 5% 50V
	*A-4617-395-A	(US,CND).....MOUNTED PCB, DIGITAL	C114	1-126-045-11	ELECT 2.2MF 20% 50V
913	*1-629-101-21	PC BOARD, H.P	C115	1-162-306-11	CERAMIC 0.01MF 20% 16V
914	*1-629-102-21	PC BOARD, VOLUME			
915	Δ 1-555-795-00	(AEP,E)...CORD, POWER	C116	1-136-159-00	FILM 0.033MF 5% 50V
	Δ 1-559-272-11	(UK).....CORD, POWER	C118	1-126-049-11	ELECT 22MF 20% 25V
	Δ 1-559-479-11	(US,CND)...CORD, POWER	C119	1-126-049-11	ELECT 22MF 20% 25V
	Δ 1-575-379-11	(AUS).....CORD, POWER			
916	1-566-940-21	BUS BAR 3P	C121	1-136-153-00	FILM 0.01MF 5% 50V
917	1-568-129-11	BAR, BUS 8P	C122	1-126-043-11	ELECT 0.47MF 20% 50V
918	1-568-131-11	BAR, BUS 9P	C123	1-130-472-00	MYLAR 0.0012MF 5% 50V
919	*1-569-137-11	BUS BAR 2P			
920	*A-4617-238-A	MOUNTED PCB, AUDIO	C124	1-106-359-00	MYLAR 0.0047MF 5% 50V
930	*1-624-378-11	PC BOARD, OUT SW	C125	1-164-159-11	CERAMIC 0.1MF 50V
931	*1-624-379-11	PC BOARD, C.MOTOR	C127	1-164-159-11	CERAMIC 0.1MF 50V
932	*1-624-377-11	PC BOARD, IN SW			
933	*1-624-375-11	PC BOARD, L/C SW	C129	1-136-168-00	FILM 0.18MF 5% 50V
934	*1-624-376-11	PC BOARD, L.MOTOR	C130	1-106-363-00	MYLAR 0.0068MF 5% 50V
935	A-4675-231-A	STATOR ASSY	C132	1-106-363-00	MYLAR 0.0068MF 5% 50V
936	Δ 8-848-160-11	DEVICE, OPTICAL KSS-280A			
937	A-4675-324-A	ROTOR ASSY	C133	1-164-159-11	CERAMIC 0.1MF 50V
BP501	*1-535-116-00	TERMINAL	C134	1-162-294-31	CERAMIC 0.001MF 10% 50V
BP901	*1-535-116-00	TERMINAL	C135	1-162-294-31	CERAMIC 0.001MF 10% 50V
BP902	*1-535-120-00	TERMINAL			
BP903	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P	C136	1-164-159-11	CERAMIC 0.1MF 50V
BP904	*1-535-115-00	TERMINAL	C137	1-126-023-11	ELECT 100MF 20% 25V
BP905	*1-535-115-00	TERMINAL	C138	1-126-023-11	ELECT 100MF 20% 25V
BP906	*1-535-115-00	(AEP,UK,E,AUS)...TERMINAL			
BP921	*1-535-122-00	TERMINAL	C139	1-126-023-11	ELECT 100MF 20% 25V
BP922	*1-535-118-00	TERMINAL	C140	1-126-023-11	ELECT 100MF 20% 25V
C054	1-164-159-11	CERAMIC 0.1MF 50V	C141	1-124-994-11	ELECT 100MF 20% 10V
C056	1-162-280-31	CERAMIC 82PF 10% 50V			
C057	1-162-195-31	CERAMIC 4.7PF 10% 50V	C143	1-164-159-11	CERAMIC 0.1MF 50V
C101	1-130-480-00	MYLAR 0.0056MF 5% 50V	C144	1-164-159-11	CERAMIC 0.1MF 50V
C102	1-136-159-00	FILM 0.033MF 5% 50V	C145	1-124-994-11	ELECT 100MF 20% 10V
C103	1-136-165-00	FILM 0.1MF 5% 50V			
			C151	1-164-159-11	CERAMIC 0.1MF 50V
			C151B	1-161-494-11	CERAMIC 0.022MF 25V
			C152	1-164-159-11	CERAMIC 0.1MF 50V
			C152B	1-161-494-11	CERAMIC 0.022MF 25V
			C153	1-126-049-11	ELECT 22MF 20% 25V
			C153B	1-124-477-11	ELECT 47MF 20% 16V
			C154	1-124-477-11	ELECT 47MF 20% 16V
			C155	1-161-375-00	CERAMIC 0.0022 MF 30% 16V
			C156	1-161-375-00	CERAMIC 0.0022 MF 30% 16V

Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
C161	1-124-997-11	ELECT	470MF	20%	10V	C458	1-126-101-11	ELECT	100MF	20%	10V
C201	1-106-347-00	MYLAR	0.0015MF	5%	50V	C459	1-136-165-00	FILM	0.1MF	5%	50V
C202	1-136-161-00	FILM	0.047MF	5%	50V	C460	1-126-101-11	ELECT	100MF	20%	10V
C203	1-136-155-00	FILM	0.015MF	5%	50V	C461	1-136-165-00	FILM	0.1MF	5%	50V
C204	1-164-159-11	CERAMIC	0.1MF		50V	C462	1-126-101-11	ELECT	100MF	20%	10V
C206	1-126-049-11	ELECT	22MF	20%	25V	C463	1-136-165-00	FILM	0.1MF	5%	50V
C209	1-124-997-11	ELECT	470MF	20%	10V	C464	1-126-101-11	ELECT	100MF	20%	10V
C233	1-136-165-00	FILM	0.1MF	5%	50V	C465	1-136-808-11	FILM	100PF	5%	100V
C251	1-126-049-11	ELECT	22MF	20%	25V	C466	1-136-808-11	FILM	100PF	5%	100V
C252	1-162-294-31	CERAMIC	0.001MF	10%	50V	C475	1-136-174-00	FILM	0.56MF	5%	50V
C253	1-164-159-11	CERAMIC	0.1MF		50V	C481	1-107-202-00	MICA	10PF	0.5PF	500V
C302	1-164-159-11	CERAMIC	0.1MF		50V	C482	1-107-202-00	MICA	10PF	0.5PF	500V
C303	1-164-159-11	CERAMIC	0.1MF		50V	C483	1-130-495-00	MYLAR	0.1MF	5%	50V
C304	1-126-378-51	ELECT	39000MF		5.5V	C485	1-162-179-11	CERAMIC	0.1MF		50V
C305	1-164-159-11	CERAMIC	0.1MF		50V	C491	1-126-103-11	ELECT	470MF	20%	16V
C351	1-126-049-11	ELECT	22MF	20%	25V	C492	1-130-495-00	MYLAR	0.1MF	5%	50V
C371	1-126-049-11	ELECT	22MF	20%	25V	C496	1-123-330-00	ELECT	22MF	20%	16V
C372	1-126-044-11	ELECT	1MF	20%	50V	C501	1-124-921-11	ELECT	470MF	20%	50V
C381	1-126-013-11	ELECT	1000MF	20%	16V	C502	1-124-484-11	ELECT	220MF	20%	35V
C382	1-126-013-11	ELECT	1000MF	20%	16V	C503	1-107-210-00	MICA	22PF	5%	500V
C383	1-124-997-11	ELECT	470MF	20%	10V	C504	1-124-921-11	ELECT	470MF	20%	50V
C385	1-124-997-11	ELECT	470MF	20%	10V	C505	1-124-921-11	ELECT	470MF	20%	50V
C386	1-124-997-11	ELECT	470MF	20%	10V	C551	1-124-921-11	ELECT	470MF	20%	50V
C387	1-126-049-11	ELECT	22MF	20%	25V	C552	1-124-484-11	ELECT	220MF	20%	35V
C391	1-124-997-11	ELECT	470MF	20%	10V	C553	1-107-210-00	MICA	22PF	5%	500V
C392	1-124-994-11	ELECT	100MF	20%	10V	C554	1-124-921-11	ELECT	470MF	20%	50V
C393	1-124-997-11	ELECT	470MF	20%	10V	C555	1-124-921-11	ELECT	470MF	20%	50V
C394	1-124-994-11	ELECT	100MF	20%	10V	C601	1-136-808-11	FILM	100PF	5%	100V
C398	1-162-179-11	CERAMIC	0.1MF		50V	C602	1-136-808-11	FILM	100PF	5%	100V
C399	1-162-179-11	CERAMIC	0.1MF		50V	C603	1-136-811-11	FILM	330PF	5%	100V
C401	1-136-165-00	FILM	0.1MF	5%	50V	C604	1-136-811-11	FILM	330PF	5%	100V
C402	1-136-165-00	FILM	0.1MF	5%	50V	C610	1-130-483-00	MYLAR	0.01MF	5%	50V
C403	1-126-101-11	ELECT	100MF	20%	10V	C611	1-130-483-00	MYLAR	0.01MF	5%	50V
C404	1-136-174-00	FILM	0.56MF	5%	50V	C612	1-136-192-11	FILM	0.0018MF	2%	100V
C406	1-136-165-00	FILM	0.1MF	5%	50V	C613	1-136-192-11	FILM	0.0018MF	2%	100V
C407	1-136-165-00	FILM	0.1MF	5%	50V	C614	1-107-210-00	MICA	22PF	5%	500V
C408	1-126-101-11	ELECT	100MF	20%	10V	C615	1-130-483-00	MYLAR	0.01MF	5%	50V
C409	1-136-165-00	FILM	0.1MF	5%	50V	C616	1-130-483-00	MYLAR	0.01MF	5%	50V
C410	1-126-101-11	ELECT	100MF	20%	10V	C617	1-136-192-11	FILM	0.0018MF	2%	100V
C411	1-136-165-00	FILM	0.1MF	5%	50V	C619	1-107-210-00	MICA	22PF	5%	500V
C412	1-126-101-11	ELECT	100MF	20%	10V	C622	1-136-764-11	FILM	10MF	10%	100V
C413	1-136-165-00	FILM	0.1MF	5%	50V	C623	1-136-763-11	FILM	1MF	10%	100V
C414	1-126-101-11	ELECT	100MF	20%	10V	C651A	1-123-382-00	ELECT	3.3MF	20%	50V
C415	1-136-808-11	FILM	100PF	5%	100V	C651B	1-136-157-00	FILM	0.022MF	5%	50V
C416	1-136-808-11	FILM	100PF	5%	100V	C652A	1-123-334-00	ELECT	220MF	20%	25V
C421	1-126-059-11	ELECT	10MF	20%	50V	C652B	1-136-157-00	FILM	0.022MF	5%	50V
C422	1-162-179-11	CERAMIC	0.1MF		50V	C653A	1-126-059-11	ELECT	10MF	20%	50V
C424	1-126-101-11	ELECT	100MF	20%	10V	C653B	1-136-157-00	FILM	0.022MF	5%	50V
C425	1-136-174-00	FILM	0.56MF	5%	50V	C654A	1-126-059-11	ELECT	10MF	20%	50V
C431	1-126-059-11	ELECT	10MF	20%	50V	C654B	1-130-471-00	MYLAR	0.001MF	5%	50V
C432	1-126-103-11	ELECT	470MF	20%	16V	C655	1-130-471-00	MYLAR	0.001MF	5%	50V
C451	1-136-165-00	FILM	0.1MF	5%	50V	C691	1-162-290-31	CERAMIC	470PF	10%	50V
C452	1-136-165-00	FILM	0.1MF	5%	50V	C701	1-136-808-11	FILM	100PF	5%	100V
C453	1-126-101-11	ELECT	100MF	20%	10V	C702	1-136-808-11	FILM	100PF	5%	100V
C454	1-136-174-00	FILM	0.56MF	5%	50V	C703	1-136-811-11	FILM	330PF	5%	100V
C456	1-136-165-00	FILM	0.1MF	5%	50V	C704	1-136-811-11	FILM	330PF	5%	100V
C457	1-136-165-00	FILM	0.1MF	5%	50V						

Ref.No.	Part No.	Description					Ref.No.	Part No.	Description				
C710	1-130-483-00	MYLAR	0.01MF	5%	50V		C955	1-124-713-11	ELECT	470MF	20%	35V	
C711	1-130-483-00	MYLAR	0.01MF	5%	50V		C957	1-136-576-11	FILM	0.1MF	10%	200V	
C712	1-136-192-11	FILM	0.0018MF	2%	100V		C961	1-107-210-00	MICA	22PF	5%	500V	
C713	1-136-192-11	FILM	0.0018MF	2%	100V		C962	1-124-572-11	ELECT	100MF	20%	50V	
C714	1-107-210-00	MICA	22PF	5%	500V		C963	1-123-382-00	ELECT	3.3MF	20%	50V	
C715	1-130-483-00	MYLAR	0.01MF	5%	50V		C965	1-124-713-11	ELECT	470MF	20%	35V	
C716	1-130-483-00	MYLAR	0.01MF	5%	50V		C967	1-136-576-11	FILM	0.1MF	10%	200V	
C717	1-136-192-11	FILM	0.0018MF	2%	100V		C970	△ 1-161-744-00	CERAMIC	0.01MF		400V	
C719	1-107-210-00	MICA	22PF	5%	500V		C971	△ 1-161-744-00	(US,CND)...CERAMIC	0.01MF		400V	
C722	1-136-764-11	FILM	10MF	10%	100V		C971	△ 1-162-599-12	(AEP,UK,E,AUS) ...CERAMIC	0.0047MF	20%	400V	
C723	1-136-763-11	FILM	1MF	10%	100V								
C751	1-123-382-00	ELECT	3.3MF	20%	50V		C972	△ 1-161-742-00	CERAMIC	0.0022MF	20%	400V	
C752	1-123-334-00	ELECT	220MF	20%	25V		C973	△ 1-161-742-00	CERAMIC	0.0022MF	20%	400V	
C753	1-126-059-11	ELECT	10MF	20%	50V		C974	△ 1-161-742-00	CERAMIC	0.0022MF	20%	400V	
C754	1-126-059-11	ELECT	10MF	20%	50V		C975	△ 1-161-742-00	CERAMIC	0.0022MF	20%	400V	
C791	1-162-290-31	CERAMIC	470PF	10%	50V		CN001	*1-568-835-11	SOCKET, CONNECTOR 16P				
C801	1-164-159-11	CERAMIC	0.1MF		50V		CN002	*1-564-339-61	PIN, CONNECTOR 5P				
C804	1-164-159-11	CERAMIC	0.1MF		50V		CN003	*1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P				
C805	1-124-443-00	ELECT	100MF	20%	10V		CN101	*1-564-341-11	PIN, CONNECTOR 7P				
C806	1-164-159-11	CERAMIC	0.1MF		50V		CN102	*1-564-338-81	PIN, CONNECTOR 4P				
C807	1-164-159-11	CERAMIC	0.1MF		50V		CN103	*1-564-338-00	PIN, CONNECTOR 4P				
C808	1-162-179-11	CERAMIC	0.1MF		50V		CN104	*1-564-339-00	PIN, CONNECTOR 5P				
C851	1-136-921-11	FILM	1MF	5%	50V		CN105	*1-564-338-61	PIN, CONNECTOR 4P				
C852	1-162-179-11	CERAMIC	0.1MF		50V		CN301	*1-564-342-11	PIN, CONNECTOR 8P				
C853	1-162-179-11	CERAMIC	0.1MF		50V		CN302	*1-564-337-00	PIN, CONNECTOR 3P				
C900	1-124-925-11	ELECT	2.2MF	20%	50V		CN303	*1-564-505-11	PLUG, CONNECTOR 2P				
C901	1-136-153-00	FILM	0.01MF	5%	50V		CN351	*1-564-336-00	PIN, CONNECTOR 2P				
C902	1-136-177-00	FILM	1MF	5%	50V		CN352	*1-564-505-11	PLUG, CONNECTOR 2P				
C903	1-126-314-11	ELECT	12000MF	20%	16V		CN353	*1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P				
C904	1-126-314-11	ELECT	12000MF	20%	16V		CN371	*1-564-506-11	PLUG, CONNECTOR 3P				
C905	1-124-360-00	ELECT	1000MF	20%	16V		CN372	*1-564-337-61	PIN, CONNECTOR 3P				
C906	1-124-360-00	ELECT	1000MF	20%	16V		CN381	*1-564-510-11	PLUG, CONNECTOR 7P				
C907	1-124-360-00	ELECT	1000MF	20%	16V		CN391	*1-564-507-11	PLUG, CONNECTOR 4P				
C908	1-124-925-11	ELECT	2.2MF	20%	50V		CN401	*1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P				
C909	1-124-925-11	ELECT	2.2MF	20%	50V		CN502	*1-564-506-11	PLUG, CONNECTOR 3P				
C910	1-162-179-11	CERAMIC	0.1MF		50V		CN601	*1-564-505-11	PLUG, CONNECTOR 2P				
C911	1-124-912-11	ELECT	330MF	20%	50V		CN602	*1-564-505-11	PLUG, CONNECTOR 2P				
C912	1-124-912-11	ELECT	330MF	20%	50V		CN603	*1-564-505-11	PLUG, CONNECTOR 2P				
C913	1-124-912-11	ELECT	330MF	20%	50V		CN604	*1-564-505-11	PLUG, CONNECTOR 2P				
C914	1-124-912-11	ELECT	330MF	20%	50V		CN605	*1-564-506-11	PLUG, CONNECTOR 3P				
C915	1-124-911-11	ELECT	220MF	20%	50V		CN631	*1-564-505-11	PLUG, CONNECTOR 2P				
C916	1-124-122-11	ELECT	100MF	20%	50V		CN632	*1-564-505-11	PLUG, CONNECTOR 2P				
C917	1-124-911-11	ELECT	220MF	20%	50V		CN633	*1-564-505-11	PLUG, CONNECTOR 2P				
C918	1-124-443-00	ELECT	100MF	20%	10V		CN671	*1-564-518-11	PLUG, CONNECTOR 3P				
C919	1-164-159-11	CERAMIC	0.1MF		50V		CN691	*1-564-519-11	PLUG, CONNECTOR 4P				
C920	1-164-159-11	CERAMIC	0.1MF		50V		CN701	*1-564-505-11	PLUG, CONNECTOR 2P				
C921	1-125-551-11	ELECT	3300MF	20%	63V		CN702	*1-564-505-11	PLUG, CONNECTOR 2P				
C922	1-125-551-11	ELECT	3300MF	20%	63V		CN703	*1-564-505-11	PLUG, CONNECTOR 2P				
C923	1-125-551-11	ELECT	3300MF	20%	63V		CN704	*1-564-505-11	PLUG, CONNECTOR 2P				
C924	1-125-551-11	ELECT	3300MF	20%	63V		CN705	*1-564-506-11	PLUG, CONNECTOR 3P				
C925	1-124-360-00	ELECT	1000MF	20%	16V		CN771	*1-564-518-11	PLUG, CONNECTOR 3P				
C926	1-124-360-00	ELECT	1000MF	20%	16V		CN831	*1-564-337-81	PIN, CONNECTOR 3P				
C927	1-136-165-00	FILM	0.1MF	5%	50V		CN851	*1-564-519-11	PLUG, CONNECTOR 4P				
C928	1-136-177-00	FILM	1MF	5%	50V		CN925	*1-564-505-11	PLUG, CONNECTOR 2P				
C951	1-107-210-00	MICA	22PF	5%	500V		CN951	*1-564-505-11	PLUG, CONNECTOR 2P				
C952	1-124-572-11	ELECT	100MF	20%	50V		CN953	*1-564-506-11	PLUG, CONNECTOR 3P				
C953	1-123-382-00	ELECT	3.3MF	20%	50V								

Note:
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Ref.No.	Part No.	Description
CN954	*1-564-505-11	PLUG, CONNECTOR 2P
CN961	*1-564-505-11	PLUG, CONNECTOR 2P
CN962	*1-564-505-11	PLUG, CONNECTOR 2P
CNJ151	*1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P
CNP652	*1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P
CNP653	*1-564-336-61	PIN, CONNECTOR 2P
CNP654	*1-564-336-71	PIN, CONNECTOR 2P
CNP656	*1-564-337-00	PIN, CONNECTOR 3P
D161	8-719-107-94	DIODE 1SS202-1
D301	8-719-107-94	DIODE 1SS202-1
D371	8-719-107-94	DIODE 1SS202-1
D372	8-719-107-94	DIODE 1SS202-1
D421	8-719-107-94	DIODE 1SS202-1
D424	8-719-107-94	DIODE 1SS202-1
D425	8-719-902-56	DIODE PC817
D431	8-719-114-36	DIODE RD5.6JS-B1
D474	8-719-107-94	DIODE 1SS202-1
D475	8-719-902-56	DIODE PC817
D491	8-719-200-31	DIODE 21DQ05
D496	8-719-114-29	DIODE RD5.1JS-B1
D497	8-719-107-94	DIODE 1SS202-1
D501	8-719-224-11	DIODE 10YD2.4A
D502	8-719-902-87	DIODE EQB01-08Q
D551	8-719-224-11	DIODE 10YD2.4A
D552	8-719-902-87	DIODE EQB01-08Q
D630	8-719-902-56	DIODE PC817
D631	8-719-107-94	DIODE 1SS202-1
D632	8-719-107-94	DIODE 1SS202-1
D651	8-719-200-02	DIODE 10E2
D652	8-719-200-02	DIODE 10E2
D653	8-719-200-02	DIODE 10E2
D654	8-719-200-02	DIODE 10E2
D801	8-719-974-70	DIODE MU20-5105 (CUSTOM INDEX)
D802	8-719-974-69	DIODE MU20-4105 (CONTINUE/SINGLE)
D803	8-719-974-68	DIODE MU20-3105 (SHUFFLE)
D804	8-719-974-67	DIODE MU20-2105 (PROGRAM)
D805	8-719-907-75	DIODE AA5534S (PAUSE)
D806	8-719-907-81	DIODE BG5535S (STOP)
D807	8-719-907-81	DIODE BG5535S (ANALOG)
D808	8-719-921-01	DIODE EBR5534S (DIGITAL)
D901	8-719-200-31	DIODE 21DQ05
D902	8-719-200-31	DIODE 21DQ05
D903	8-719-200-31	DIODE 21DQ05
D904	8-719-200-31	DIODE 21DQ05
D905	8-719-107-94	DIODE 1SS202-1
D906	8-719-107-94	DIODE 1SS202-1
D907	8-719-107-94	DIODE 1SS202-1
D908	8-719-107-94	DIODE 1SS202-1
D911	8-719-200-02	DIODE 10E2
D912	8-719-200-02	DIODE 10E2
D913	8-719-200-02	DIODE 10E2
D914	8-719-200-02	DIODE 10E2
D915	8-719-200-02	DIODE 10E2
D916	8-719-200-02	DIODE 10E2
D917	8-719-934-22	DIODE HZS30-2L
D918	8-719-933-50	DIODE HZS7C2L

Ref.No.	Part No.	Description
D921	8-719-200-68	DIODE C10P20FU
D922	8-719-200-69	DIODE C10P20FUR
D951	8-719-107-94	DIODE 1SS202-1
D952	8-719-107-94	DIODE 1SS202-1
F901	△1-532-215-00	(AEP,UK,E,AUS)...FUSE, TIME-LAG (0.8A)
F901	△1-532-742-11	(US,CND).....FUSE, GLASS TUBE (1.6A)
FLD801	1-519-480-11	INDICATOR TUBE, FLUORESCENT
H151	8-719-800-18	DIODE THS103A
H152	8-719-800-18	DIODE THS103A
IC051	8-759-101-37	IC UPC357C
IC101	8-752-037-33	IC CXA1372Q
IC102	8-752-035-28	IC CXA-1291P
IC103	8-759-601-02	IC M5218P
IC104	8-759-202-01	IC TA7256P
IC151	8-759-202-01	IC TA7256P
IC201	8-752-333-31	IC CXD2500Q
IC202	8-752-328-61	IC CXD1244S
IC301	8-759-634-57	IC M37450M8-139FP
IC302	8-759-822-50	IC LC3564PL-15
IC380	8-759-202-11	IC TC74HC00P
IC381	8-759-000-99	IC MC74HC74N
IC382	8-752-334-77	IC CXD2553S
IC383	8-759-233-63	IC TC74HCU04P
IC401	8-752-335-51	IC CXD2552Q-1
IC421	8-759-232-01	IC TC74HC00AP
IC431	8-759-980-72	IC AD42712
IC451	8-752-335-51	IC CXD2552Q-1
IC481	8-759-233-63	IC TC74HCU04AP
IC491	8-759-605-44	IC M74HC6004P
IC601	8-759-982-03	IC RC5532DD
IC604	8-759-905-42	IC NE5534P
IC605	8-759-980-72	IC AD42712
IC606	8-759-905-42	IC NE5534P
IC651	8-759-982-03	IC RC5532DD
IC701	8-759-982-03	IC RC5532DD
IC704	8-759-905-42	IC NE5534P
IC705	8-759-980-72	IC AD42712
IC706	8-759-905-42	IC NE5534P
IC751	8-759-982-03	IC RC5532DD
IC801	8-752-814-75	IC CXP5058H-654Q
IC802	8-741-138-70	IC BX-1387
IC851	8-759-917-18	IC SN74HCU04N
IC871	8-759-977-71	IC GP1F31T (DIGITAL OUT OPTICAL)
IC901	8-759-604-29	IC M5F7805
IC902	8-759-604-29	IC M5F7805
IC903	8-759-604-47	IC M5F7905
IC904	8-759-803-41	IC LC4969
IC921	8-759-604-39	IC M5F78M12
IC922	8-759-604-45	IC M5F79M12
IC951	8-759-905-42	IC NE5534P
IC952	8-759-905-42	IC NE5534P
J601	1-507-918-00	JACK, PIN 1P (FIXED L)
J602	1-507-918-00	JACK, PIN 1P (VAROABLE L)
J691	1-507-796-61	JACK (PHONES)
J701	1-507-918-00	JACK, PIN 1P (FIXED R)
J702	1-507-918-00	JACK, PIN 1P (VAROABLE R)
J851	1-507-567-71	JACK, PIN 1P (DIGITAL OUT COAXIAL)

Note:

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Ref.No.	Part No.	Description
J901	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (BALANCE L)
J902	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (BALANCE R)
L481	1-410-547-11	INDUCTOR 3.9UH
L901	△1-421-915-11	COIL, LINE FILTER
M51	1-422-198-21	COIL (SENSOR)
M53	1-422-197-21	COIL (DRIVE)
M651	X-4902-019-1	MOTOR ASSY, CHUCKING
M652	X-4912-517-1	MOTOR ASSY, LOADING
PS381	△1-532-675-00	(AEP,UK,E,AUS)...LINK, IC
PS382	△1-532-675-00	(AEP,UK,E,AUS)...LINK, IC
PS911	△1-532-675-00	(AEP,UK,E,AUS)...LINK, IC
Q101	8-729-900-89	TRANSISTOR DTC144ES
Q161	8-729-900-61	TRANSISTOR DTA114ES
Q162	8-729-900-74	TRANSISTOR DTC143TS
Q371	8-729-900-89	TRANSISTOR DTC144ES
Q372	8-729-900-89	TRANSISTOR DTC144ES
Q380	8-729-900-61	TRANSISTOR DTA114ES
Q421	8-729-201-05	TRANSISTOR 2SC2878-B
Q431	8-729-107-53	TRANSISTOR 2SC2275A
Q471	8-729-201-05	TRANSISTOR 2SC2878-B
Q496	8-729-140-96	TRANSISTOR 2SD774-34
Q501	8-729-107-53	TRANSISTOR 2SC2275A
Q502	8-729-167-62	TRANSISTOR 2SC2676
Q503	8-729-113-82	TRANSISTOR 2SA1138
Q504	8-729-167-62	TRANSISTOR 2SC2676
Q551	8-729-190-53	TRANSISTOR 2SA985A
Q552	8-729-113-82	TRANSISTOR 2SA1138
Q553	8-729-167-62	TRANSISTOR 2SC2676
Q554	8-729-113-82	TRANSISTOR 2SA1138
Q631	8-729-111-29	TRANSISTOR 2SD1616A-K
Q651	8-729-140-96	TRANSISTOR 2SD774-34
Q801	8-729-900-45	TRANSISTOR DTC114EF
Q802	8-729-900-45	TRANSISTOR DTC114EF
Q803	8-729-900-45	TRANSISTOR DTC114EF
Q804	8-729-900-45	TRANSISTOR DTC114EF
Q805	8-729-900-45	TRANSISTOR DTC114EF
Q806	8-729-900-45	TRANSISTOR DTC114EF
Q911	8-729-140-97	TRANSISTOR 2SB734-34
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
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	1-249-439-11	CARBON 68K 5% 1/4W
R107	1-249-431-11	CARBON 15K 5% 1/4W
R108	1-249-426-11	CARBON 5.6K 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

Ref.No.	Part No.	Description			
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	1-247-901-11	CARBON	820K	5%	1/4W
R121	1-247-881-00	CARBON	120K	5%	1/4W
R122	1-249-425-11	CARBON	4.7K	5%	1/4W
R123	1-247-883-00	CARBON	150K	5%	1/4W
R124	1-249-438-11	CARBON	56K	5%	1/4W
R125	1-249-440-11	CARBON	82K	5%	1/4W
R126	1-249-433-11	CARBON	22K	5%	1/4W
R127	1-249-393-11	CARBON	10	5%	1/4W
R128	1-247-881-00	CARBON	120K	5%	1/4W
R129	1-247-881-00	CARBON	120K	5%	1/4W
R130	1-247-885-00	CARBON	180K	5%	1/4W
R131	1-247-885-00	CARBON	180K	5%	1/4W
R132	1-249-393-11	CARBON	10	5%	1/4W
R151	1-249-393-11	CARBON	10	5%	1/4W
R151B	1-249-417-11	CARBON	1K	5%	1/4W
R152	1-249-417-11	CARBON	1K	5%	1/4W
R152B	1-249-417-11	CARBON	1K	5%	1/4W
R153	1-249-417-11	CARBON	1K	5%	1/4W
R153B	1-249-417-11	CARBON	1K	5%	1/4W
R154	1-247-887-00	CARBON	220K	5%	1/4W
R155	1-249-417-11	CARBON	1K	5%	1/4W
R156	1-249-417-11	CARBON	1K	5%	1/4W
R157	1-249-417-11	CARBON	1K	5%	1/4W
R158	1-247-887-00	CARBON	220K	5%	1/4W
R159	1-247-887-00	CARBON	220K	5%	1/4W
R160	1-247-887-00	CARBON	220K	5%	1/4W
R161	1-249-441-11	CARBON	100K	5%	1/4W
R161B	1-249-405-11	CARBON	100	5%	1/4W
R162	1-249-405-11	CARBON	100	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
R205	1-249-429-11	CARBON	10K	5%	1/4W
R206	1-249-429-11	CARBON	10K	5%	1/4W
R207	1-249-435-11	CARBON	33K	5%	1/4W
R209	1-249-417-11	CARBON	1K	5%	1/4W
R210	1-249-417-11	CARBON	1K	5%	1/4W
R211	1-249-417-11	CARBON	1K	5%	1/4W
R213	1-249-415-11	CARBON	680	5%	1/4W
R214	1-249-415-11	CARBON	680	5%	1/4W
R215	1-249-415-11	CARBON	680	5%	1/4W
R216	1-249-415-11	CARBON	680	5%	1/4W
R244	1-249-442-11	CARBON	510	5%	1/4W
R245	1-249-417-11	CARBON	1K	5%	1/4W
R246	△1-217-469-00	FUSIBLE	1	5%	1W F
R247	1-249-406-11	CARBON	120	5%	1/4W
R248	1-249-416-11	CARBON	820	5%	1/4W
R251	1-249-417-11	CARBON	1K	5%	1/4W
R252	1-249-429-11	CARBON	10K	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

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Ref.No.	Part No.	Description			
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
R315	1-249-429-11	CARBON	10K	5%	1/4W
R317	1-249-429-11	CARBON	10K	5%	1/4W
R318	1-249-429-11	CARBON	10K	5%	1/4W
R319	1-249-429-11	CARBON	10K	5%	1/4W
R320	1-249-429-11	CARBON	10K	5%	1/4W
R321	1-249-405-11	CARBON	100	5%	1/4W
R361	1-249-415-11	CARBON	680	5%	1/4W
R371	1-249-429-11	CARBON	10K	5%	1/4W
R372	1-249-441-11	CARBON	100K	5%	1/4W
R388	1-249-413-11	CARBON	470	5%	1/4W
R391	1-247-903-00	CARBON	1M	5%	1/4W
R393	1-249-417-11	CARBON	1K	5%	1/4W
R401	1-259-580-11	CARBON	11K	1%	1/2W
R402	1-259-580-11	CARBON	11K	1%	1/2W
R403	1-259-580-11	CARBON	11K	1%	1/2W
R404	1-259-580-11	CARBON	11K	1%	1/2W
R420	1-249-417-11	CARBON	1K	5%	1/4W
R421	1-249-429-11	CARBON	10K	5%	1/4W
R422	1-249-405-11	CARBON	100	5%	1/4W
R424	1-249-423-11	CARBON	3.3K	5%	1/4W
R425	1-249-427-11	CARBON	6.8K	5%	1/4W
R426	1-249-439-11	CARBON	68K	5%	1/4W
R427	1-249-504-11	CARBON	10	5%	1/4W
R431	1-249-929-11	CARBON	1.8K	1%	1/4W
R451	1-259-580-11	CARBON	11K	1%	1/2W
R452	1-259-580-11	CARBON	11K	1%	1/2W
R453	1-259-580-11	CARBON	11K	1%	1/2W
R454	1-259-580-11	CARBON	11K	1%	1/2W
R456	1-249-415-11	CARBON	680	5%	1/4W
R470	1-249-417-11	CARBON	1K	5%	1/4W
R474	1-249-423-11	CARBON	3.3K	5%	1/4W
R475	1-249-427-11	CARBON	6.8K	5%	1/4W
R476	1-249-439-11	CARBON	68K	5%	1/4W
R477	1-249-504-11	CARBON	10	5%	1/4W
R481	1-247-725-11	CARBON	10K	5%	1/4W
R482	1-249-413-11	CARBON	470	5%	1/4W
R491	1-249-415-11	CARBON	680	5%	1/4W
R496	1-249-929-11	CARBON	1.8K	1%	1/4W
R501	1-249-539-11	CARBON	300	5%	1/4W
R502	1-247-710-11	CARBON	560	5%	1/4W
R503	1-249-466-11	CARBON	56K	5%	1/4W
R504	1-247-719-11	CARBON	3.3K	5%	1/4W
R505	1-259-551-11	CARBON	680	1%	1/2W
R506	1-259-553-11	CARBON	820	1%	1/2W
R551	1-249-539-11	CARBON	300	5%	1/4W
R552	1-247-710-11	CARBON	560	5%	1/4W
R553	1-249-466-11	CARBON	56K	5%	1/4W
R554	1-247-719-11	CARBON	3.3K	5%	1/4W
R555	1-259-551-11	CARBON	680	1%	1/2W
R556	1-259-553-11	CARBON	820	1%	1/2W
R598	1-259-583-11	CARBON	15K	1%	1/2W

Ref.No.	Part No.	Description			
R599	1-259-583-11	CARBON	15K	1%	1/2W
R600	1-259-583-11	CARBON	15K	1%	1/2W
R601	1-259-583-11	CARBON	15K	1%	1/2W
R602	1-259-587-11	CARBON	22K	1%	1/2W
R603	1-259-587-11	CARBON	22K	1%	1/2W
R604	1-259-571-11	CARBON	4.7K	1%	1/2W
R605	1-259-571-11	CARBON	4.7K	1%	1/2W
R606	1-259-571-11	CARBON	4.7K	1%	1/2W
R607	1-259-571-11	CARBON	4.7K	1%	1/2W
R608	1-259-561-11	CARBON	1.8K	1%	1/2W
R609	1-249-929-11	CARBON	1.8K	1%	1/4W
R610	1-249-929-11	CARBON	1.8K	1%	1/4W
R611	1-249-929-11	CARBON	1.8K	1%	1/4W
R612	1-247-891-00	CARBON	330K	5%	1/4W
R613	1-247-739-11	CARBON	100	2%	1/2W
R614	1-247-739-11	CARBON	100	2%	1/2W
R615	1-247-739-11	CARBON	100	2%	1/2W
R631	1-249-417-11	CARBON	1K	5%	1/4W
R651A	1-249-465-11	CARBON	47K	5%	1/4W
R651B	1-249-417-11	CARBON	1K	5%	1/4W
R652A	1-249-465-11	CARBON	47K	5%	1/4W
R652B	1-249-417-11	CARBON	1K	5%	1/4W
R653	1-247-721-11	CARBON	4.7K	5%	1/4W
R654	1-249-497-11	CARBON	33K	5%	1/4W
R655	1-247-891-00	CARBON	330K	5%	1/4W
R656	1-247-700-11	CARBON	100	5%	1/4W
R698	1-259-583-11	CARBON	15K	1%	1/2W
R699	1-259-583-11	CARBON	15K	1%	1/2W
R700	1-259-583-11	CARBON	15K	1%	1/2W
R701	1-259-583-11	CARBON	15K	1%	1/2W
R702	1-259-587-11	CARBON	22K	1%	1/2W
R703	1-259-587-11	CARBON	22K	1%	1/2W
R704	1-259-571-11	CARBON	4.7K	1%	1/2W
R705	1-259-571-11	CARBON	4.7K	1%	1/2W
R706	1-259-571-11	CARBON	4.7K	1%	1/2W
R707	1-259-571-11	CARBON	4.7K	1%	1/2W
R708	1-259-561-11	CARBON	1.8K	1%	1/2W
R709	1-249-929-11	CARBON	1.8K	1%	1/4W
R710	1-249-929-11	CARBON	1.8K	1%	1/4W
R711	1-249-929-11	CARBON	1.8K	1%	1/4W
R712	1-247-891-00	CARBON	330K	5%	1/4W
R713	1-247-739-11	CARBON	100	2%	1/2W
R714	1-247-739-11	CARBON	100	2%	1/2W
R715	1-247-739-11	CARBON	100	2%	1/2W
R751	1-249-465-11	CARBON	47K	5%	1/4W
R752	1-249-465-11	CARBON	47K	5%	1/4W
R753	1-247-721-11	CARBON	4.7K	5%	1/4W
R754	1-249-497-11	CARBON	33K	5%	1/4W
R755	1-247-891-00	CARBON	330K	5%	1/4W
R756	1-247-700-11	CARBON	100	5%	1/4W
R801	1-249-406-11	CARBON	120	5%	1/4W
R802	1-249-410-11	CARBON	270	5%	1/4W
R803	1-249-407-11	CARBON	150	5%	1/4W
R804	1-249-414-11	CARBON	560	5%	1/4W
R805	1-249-429-11	CARBON	10K	5%	1/4W

Ref.No.	Part No.	Description			
R806	1-249-406-11	CARBON	120	5%	1/4W
R807	1-249-406-11	CARBON	120	5%	1/4W
R808	1-249-429-11	CARBON	10K	5%	1/4W
R809	1-249-422-11	CARBON	2.7K	5%	1/4W
R810	1-249-424-11	CARBON	3.9K	5%	1/4W
R811	1-249-427-11	CARBON	6.8K	5%	1/4W
R812	1-249-429-11	CARBON	10K	5%	1/4W
R813	1-249-422-11	CARBON	2.7K	5%	1/4W
R814	1-249-424-11	CARBON	3.9K	5%	1/4W
R815	1-249-427-11	CARBON	6.8K	5%	1/4W
R816	1-249-432-11	CARBON	18K	5%	1/4W
R818	1-249-406-11	CARBON	120	5%	1/4W
R819	1-249-412-11	CARBON	390	5%	1/4W
R851	1-247-804-11	CARBON	75	5%	1/4W
R852	1-249-417-11	CARBON	1K	5%	1/4W
R901	Δ 1-212-877-11	FUSIBLE	68	5%	1/4W F
R902	1-249-520-11	CARBON	47	5%	1/4W
R903	1-249-426-11	CARBON	5.6K	5%	1/4W
R904	1-247-887-00	CARBON	220K	5%	1/4W
R905	1-249-437-11	CARBON	47K	5%	1/4W
R906	1-247-891-00	CARBON	330K	5%	1/4W
R911	1-249-420-11	CARBON	1.8K	5%	1/4W
R912	1-249-429-11	CARBON	10K	5%	1/4W
R913	1-249-435-11	CARBON	33K	5%	1/4W
R921	Δ 1-212-875-00	FUSIBLE	56	5%	1/4W F
R951	1-247-725-11	CARBON	10K	5%	1/4W
R952	1-247-719-11	CARBON	3.3K	5%	1/4W
R953	1-247-713-11	CARBON	1K	5%	1/4W
R954	1-247-704-11	CARBON	220	5%	1/4W
R955	1-247-704-11	CARBON	220	5%	1/4W
R956	1-247-719-11	CARBON	3.3K	5%	1/4W
R957	1-247-719-11	CARBON	3.3K	5%	1/4W
R958	1-249-469-11	CARBON	100K	5%	1/4W
R961	1-247-725-11	CARBON	10K	5%	1/4W
R962	1-247-719-11	CARBON	3.3K	5%	1/4W
R963	1-247-713-11	CARBON	1K	5%	1/4W
R964	1-247-704-11	CARBON	220	5%	1/4W
R965	1-247-704-11	CARBON	220	5%	1/4W
R966	1-247-719-11	CARBON	3.3K	5%	1/4W
R967	1-247-719-11	CARBON	3.3K	5%	1/4W
R968	1-249-469-11	CARBON	100K	5%	1/4W
RV201	1-228-995-00	RES, ADJ, METAL GLAZE 20K			
RV202	1-228-995-00	RES, ADJ, METAL GLAZE 20K			
RV671	1-238-377-11	RES, VAR, CARBON 20K/20K (LINE OUT PHONE LEVEL)			
RY631	1-515-710-11	RELAY			
RY632	1-515-710-11	RELAY			
RY951	1-515-710-11	RELAY			
RY961	1-515-710-11	RELAY			
S651	1-554-205-00	SWITCH, PUSH (LOAD IN DET)			
S652	1-571-300-11	SWITCH, ROTARY (LOAD OUT DET)			
S653	1-553-636-00	SWITCH, MICRO (MOTOR SELECT)			
S654	1-570-447-11	SWITCH, MICRO (CHUCKING)			
S801	1-554-596-21	SWITCH, KEY BOARD (OPEN/CLOSE)			
S802	1-554-596-21	SWITCH, KEY BOARD (PLAY)			

Ref.No.	Part No.	Description
S803	1-554-596-21	SWITCH, KEY BOARD (PAUSE)
S804	1-554-596-21	SWITCH, KEY BOARD (STOP)
S805	1-554-596-21	SWITCH, KEY BOARD (DISPLAY ON/OFF)
S806	1-554-596-21	SWITCH, KEY BOARD (AMS $\ll$)
S807	1-554-596-21	SWITCH, KEY BOARD (AMS $\gg$)
S808	1-554-596-21	SWITCH, KEY BOARD ($\ll$)
S809	1-554-596-21	SWITCH, KEY BOARD ($\gg$)
S831	1-571-744-11	SWITCH, PUSH (1 KEY)(OUTPUT SELECTOR)
S901	Δ 1-554-538-00	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)
T851	1-459-795-11	COIL (WITH CORE)
T901	Δ 1-449-588-11	(AEP,UK,E,AUS) ...TRANSFORMER, POWER (AUDIO)
T901	Δ 1-449-590-11	(US,CND)...TRANSFORMER, POWER (AUDIO)
T902	Δ 1-449-589-11	(AEP,UK,E,AUS) ...TRANSFORMER, POWER (DIGITAL)
T902	Δ 1-449-591-11	(US,CND)...TRANSFORMER, POWER (DIGITAL)
T951	1-424-189-11	TRANSFORMER, LINE
T961	1-424-189-11	TRANSFORMER, LINE
THP901	1-808-065-11	THERMISTOR, POSITIVE
THP902	1-808-065-11	THERMISTOR, POSITIVE
THP921	1-808-065-11	THERMISTOR, POSITIVE
THP922	1-808-065-11	THERMISTOR, POSITIVE
X301	1-577-377-11	VIBRATOR, CERAMIC (10MHz)
X391	1-577-685-11	FILTER, CRYSTAL (16.9344MHz)
X481	1-577-686-11	VIBRATOR, CRYSTAL (45.1584MHz)
X801	1-577-082-11	VIBRATOR, CERAMIC (4MHz)

ACCESSORY & PACKING MATERIAL

1-465-046-11	(BLACK)...REMOTE COMMANDER (RM-D770)
1-465-370-11	(GOLD)...REMOTE COMMANDER (RM-D771)
1-558-271-11	CORD, CONNECTION
3-701-630-00	BAG, POLYETHYLENE
3-750-933-11	(EXCEPT UK)...MANUAL, INSTRUCTION
3-750-933-21	(US).....MANUAL, INSTRUCTION
3-750-933-41	(AEP,E).....MANUAL, INSTRUCTION
*3-795-629-11	(AEP,E)...INSTRUCTION
4-847-802-00	(EXCEPT UK)...SCREW
*4-912-947-01	KEY, LOCK
4-922-528-01	(BLACK)...LID, BATTERY CASE, COMMANDER
*4-928-005-01	CUSHION
*4-935-903-21	INDIVIDUAL CARTON

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.

CDP-X77ES

SONY SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model*

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT			CORRECT	
	<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
42		4-922-528-01	(BLACK)···LID, BATTERY CASE, COMMANDER	 <u>4-928-079-01</u>	(BLACK)···LID, BATTERY CASE, COMMANDER
				 <u>3-707-584-01</u>	 <u>(GOLD)</u> ···LID, BATTERY CASE, COMMANDER

(RPC-95016)