

CDP-X7ESD

SERVICE MANUAL

*US Model
Canadian Model
AEP Model
UK Model*



Model Name Using Similar Mechanism	CDP-557ESD/707ESD
CD Mechanism Name	CDM4F-10A
Base Unit Name	BU-10A

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 \pm 0.5 dB
Signal to noise ratio	More than 115 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015% (1 kHz)
Channel separation	More than 110 dB (1 kHz)
Wow and flutter	Below measurable limit
Output jacks	

LINE OUT (FIXED)	Output level 2 V (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 120 V, 60 Hz AEP model: AC 220 V, 50/60 Hz UK model: AC 240 V, 50/60 Hz
RAM memory storage	Held for more than a month (after turning the power OFF).
Power consumption	26 watts
Dimensions (w/h/d)	430 x 125 x 375 mm (UK model) (17 x 5 x 14 ⁵ / ₈ inches) 470 x 125 x 375 mm (US, Canadian, AEP model) (18 ⁵ / ₈ x 5 x 14 ⁵ / ₈ inches) (Including projecting parts and controls)
Weight	16 kg (35 lb 5 oz) (UK model) 17 kg (37 lb) (US, Canadian, AEP model)

Remote Commander (RM-D770)

Remote control system	Infrared control
Power requirements	3V DC (with two R6 (size AA) batteries)
Dimensions	67 x 20 x 175 mm (w/h/d) (2 ³ / ₄ x 1 ³ / ₁₆ x 7 inches)
Weight	110 g (4 oz) (including batteries)

Supplied accessories

Remote commander	x 1
Sony SUM-3 (NS) battery	x 2
Screwdriver	x 1



COMPACT DISC PLAYER
SONY®

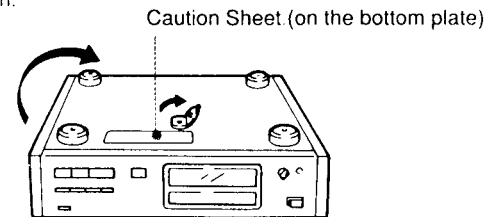
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Before Use (Transportation Screw)

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!

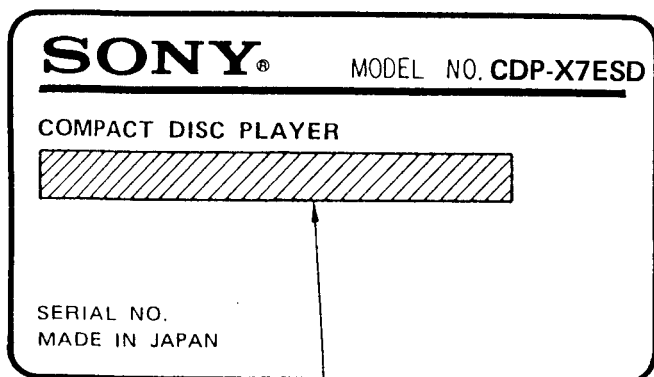
LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1

SERVICING NOTES

MODEL IDENTIFICATION

— Specification Labels —



US, Canadian model: AC: 120 V ~ 60 Hz 26 W

AEP model: AC: 220 V ~ 50/60 Hz 26 W

UK model: AC: 240 V ~ 50/60 Hz 26 W

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)

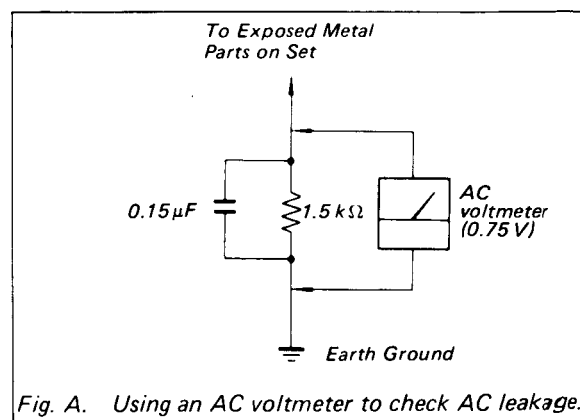


Fig. A. Using an AC voltmeter to check AC leakage.

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 iverigt 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-diooe data

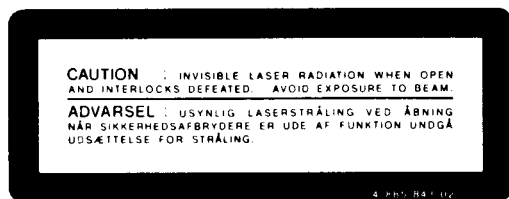
- Materiale: GaAlAs
- Bølgelængde: 780 nm
- Udstråling: Kontinuerlig
- Laseroutput: Max. 0,4 mW*
 - * Målt i 1,6 mm afstand fra overfladen af objektiv-linsen på den optiske pick-up enhed.
- Klassifikation: Klasse IIIb.

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.

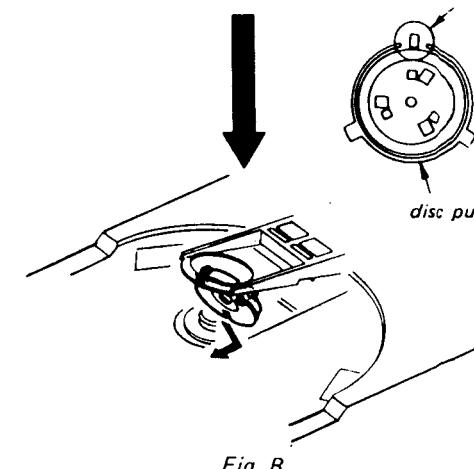
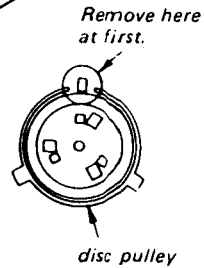
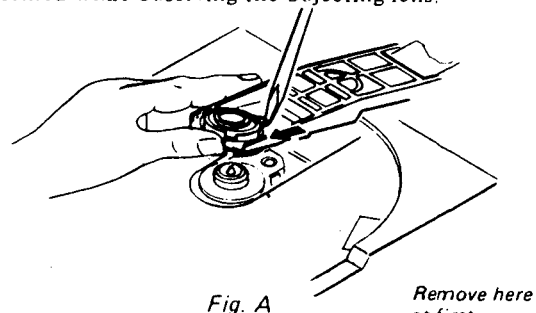
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

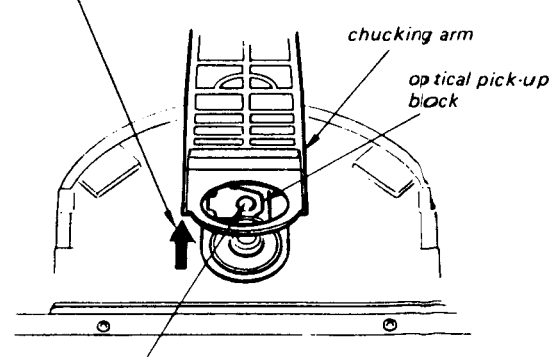
The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 25 cm away from the objective lens.

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.



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

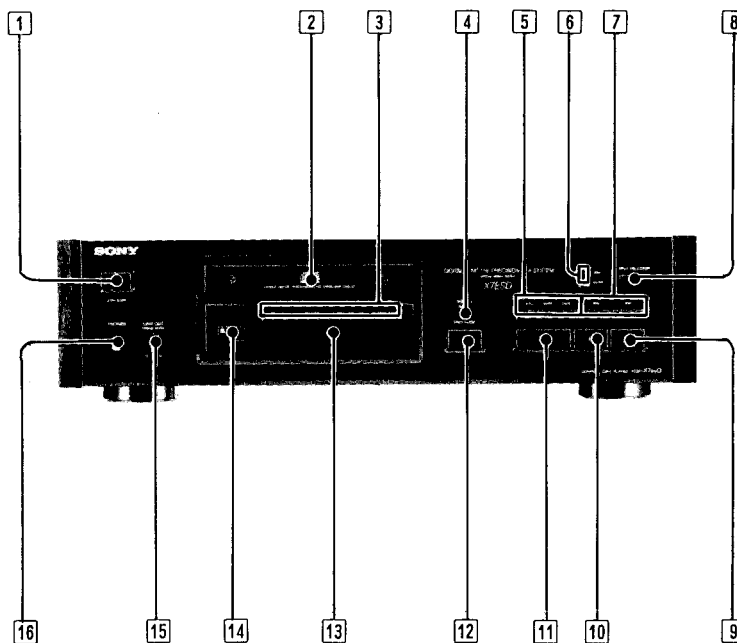


- ① Confirm that laser beam is spread.
- ② Up and down motion of the objective lens. (3 times)

Fig. C

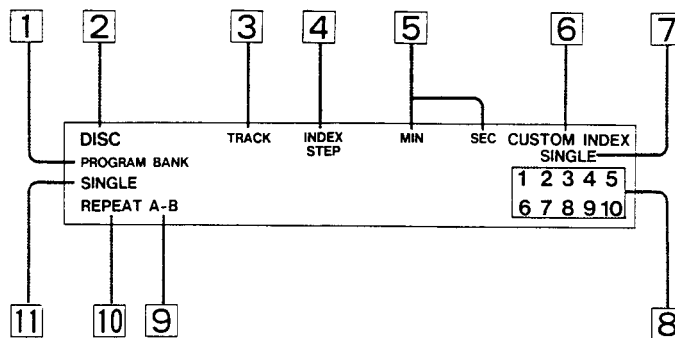
SECTION 2 GENERAL

LOCATION OF CONTROLS

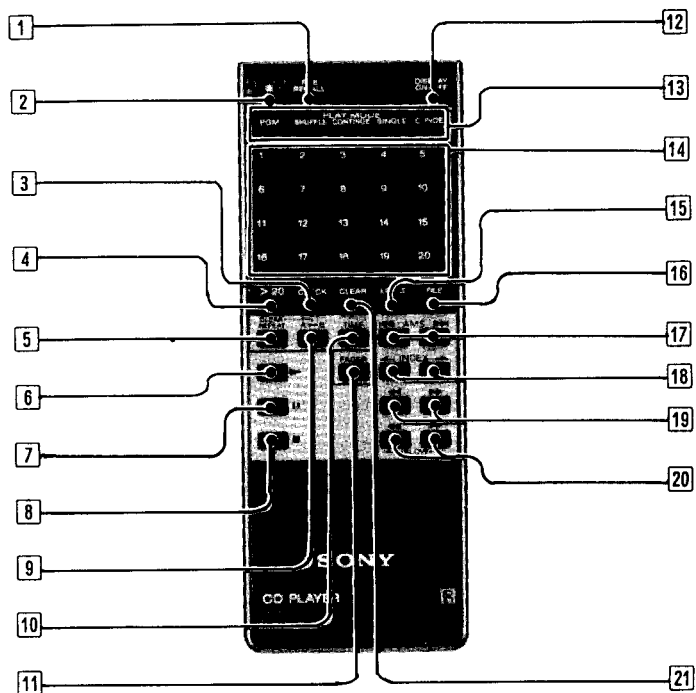


Name of control	Operation
1 POWER switch	Depress to turn on the power.
2 Disc table	Place a disc here.
3 Playing mode indicator lamps	The lamp of the current play mode lights up.
4 DISPLAY ON/OFF button	Press to switch off the display. Press once more to display the indications again.
5 ◀◀ AMS* ▶▶ buttons	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. To restart playing, press this button again.
11 ▶ (play) button	Press to start the play.
12 ▲ OPEN/CLOSE button	Press to open or close the disc table.
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.

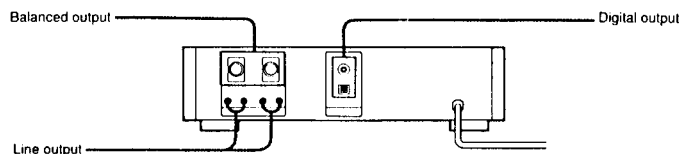
*AMS is an abbreviation of Automatic Music Sensor.



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.



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.
7	⏸ (pause) button	Press to stop the play momentarily. To restart playing, press this button again.
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.

**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: HOT, 3: COLD. (AEP, UK model) (For US, Canadian model; 1: GND, 2: COLD, 3: HOT)

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.

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 10 MΩ impedance.

Adjustment Mode

1. Connect TP (ADJ) and ground on digital board.
(This makes microcomputer IC351 pin 39 low and keeps the RF signal outputting even though pits can not be read.)
2. Turn POWER switch on.
(To reset microcomputer.)
After adjustment, remove the lead wire connected TP (ADJ) and ground.

RF PLL Adjustment

Procedure:

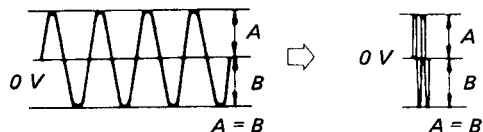
1. Connect test point TP (ASY) and ground on digital board.
2. Connect the frequency counter to TP (PCK) and TP (DG) on digital board.
3. Turn POWER switch ON (stop mode).
4. Adjust RV201 on digital board so that the reading on frequency counter is 4.3218 MHz ± 20 kHz.
5. Remove the lead wire connected in step 1.
6. Put disc (YEDS-18) in and press ▷ PLAY button.
7. Confirm that reading on frequency counter is 4.3218 MHz.

E-F Balance/Focus Bias Adjustment

Procedure:

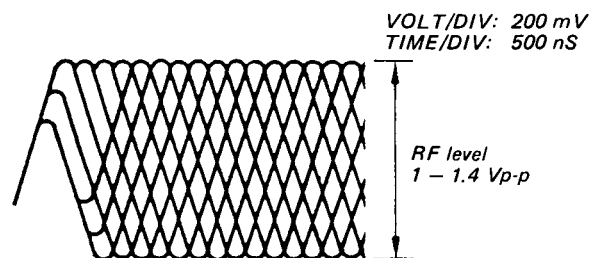
1. Put set into adjustment mode.
2. Connect test point TP (TES) and ground on digital board.
3. Connect oscilloscope to test point TP (TEO) and ground on digital board.
4. Turn POWER switch on (stop mode).
5. Put disc (YEDS-18) in and play back.
6. Adjust RV101 on digital board so that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0 V. (E-F balance adjustment)

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



7. Connect oscilloscope to test point TP (RF) and TP (RFG) on digital board.
8. Remove the lead wire connect in step 2.
(Servo is on and eye pattern can be observed.)
9. Adjust RV104 on digital board for an optimum waveform eye pattern or so that the peak is maximum. Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform. (focus bias adjustment)
10. After adjustment, confirm RF level and cancel adjustment mode.

RF Signal Reference Waveform (eye pattern)



When observing the eye pattern, set the oscilloscope for AC range and raise vertical sensitivity.

REFERENCE

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
<ul style="list-style-type: none"> • The time until music starts becomes longer for STOP → ▷ PLAY or automatic selection (◀◀, ▶▶ buttons pressed.) (Normally takes about 1 seconds.) 	low	low or high
<ul style="list-style-type: none"> • Music does not start and disc continues to rotate for STOP → ▷ PLAY or automatic selection. (◀◀, ▶▶ buttons pressed.) 	-	low
<ul style="list-style-type: none"> • Disc table opens shortly after STOP → ▷ PLAY. 	low or high	-
<ul style="list-style-type: none"> • Sound is interrupted during PLAY. Or time counter display stops progressing. 	-	low
<ul style="list-style-type: none"> • More noise during 2-axis device operation. 	high	high

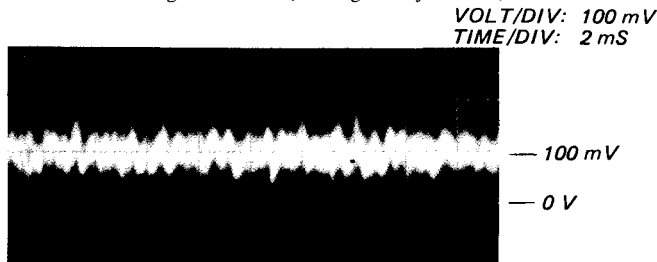
The following is a simple adjustment method.

- Primary Adjustment -

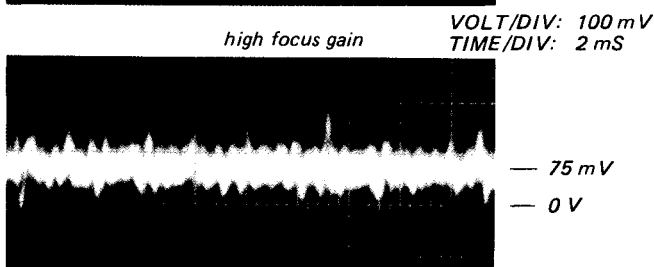
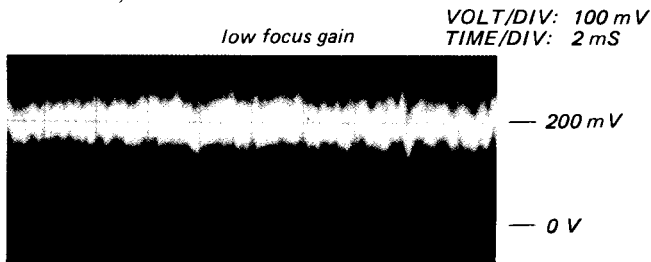
Note: Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the positions after the primary adjustment are only a little different, return the controls to the original position.

Procedure:

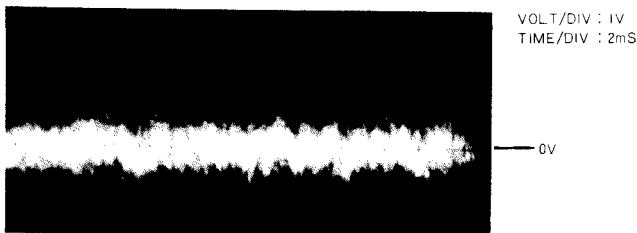
1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Put set into adjustment mode.
3. Insert disc (YEDS-18) and press ▷ PLAY button.
4. Connect oscilloscope to TP (FEO) on digital board.
5. Adjustment RV103 on digital board so that the waveform is as shown in the figure below. (focus gain adjustment)



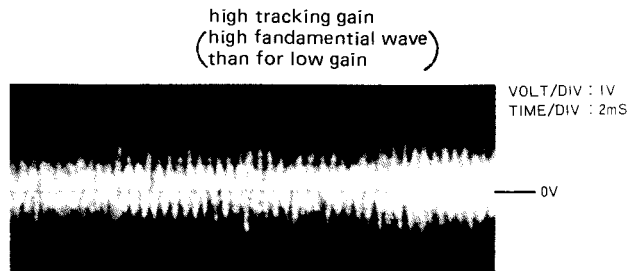
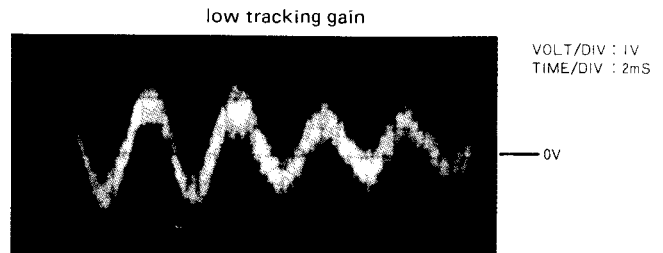
- Incorrect Examples (DC level changes more than on adjusted waveform)



6. Connect oscilloscope to TP (TEO) on digital board.
7. Adjust RV102 on digital board so that the waveform is as shown in the figure below. (tracking gain adjustment)



- Incorrect Examples (fundamental wave appears)



Distortion Adjustment

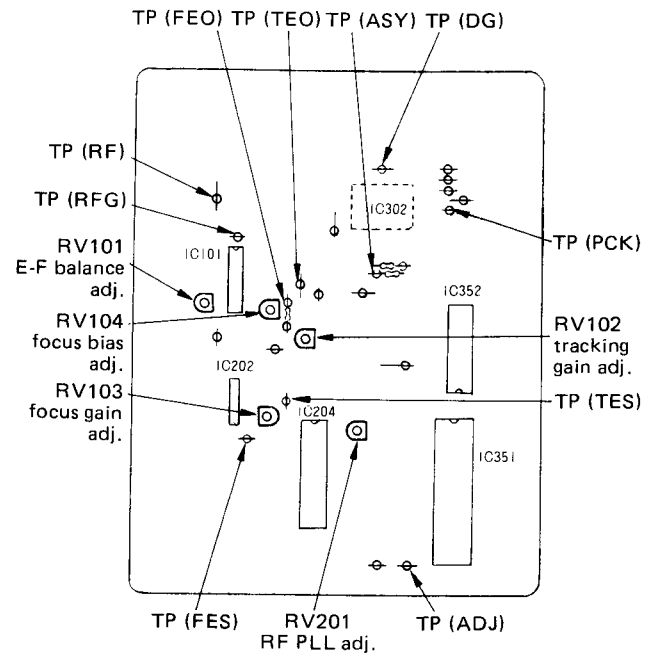
Procedure:

1. Connect the distortion meter to LINE OUT (FIXED) jack.
2. Put disc (YEDS-18) in and play back second selection (1 kHz, 0 dB).
3. Adjust the following adjustable resistors on audio board in order given by arrows so that the distortion becomes minimum.
L-CH: RV604 → RV603 → RV602 → RV601
R-CH: RV704 → RV703 → RV702 → RV701
4. Confirm that the distortion is less than 0.002%.
If that is more than 0.002%, repeat step 3 to obtain less than 0.002% distortion.

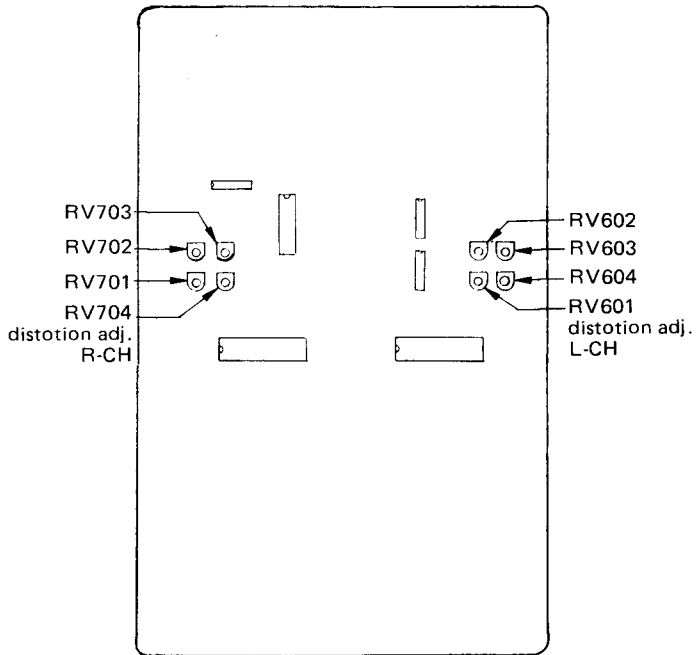
SECTION 4 DIAGRAMS

Adjustment Location

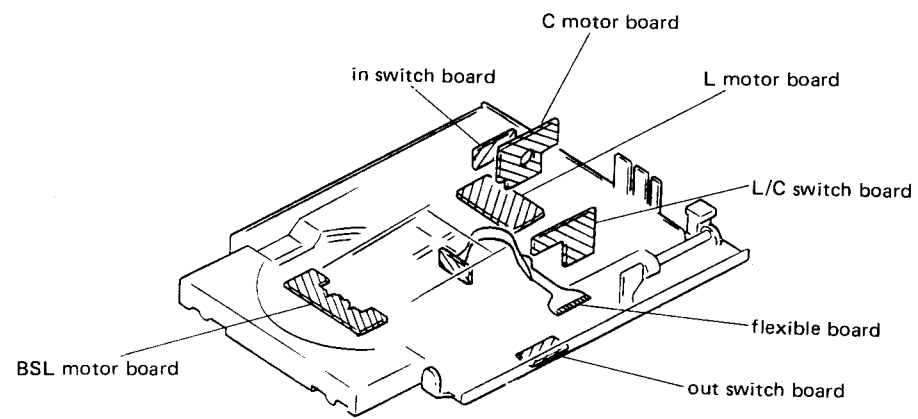
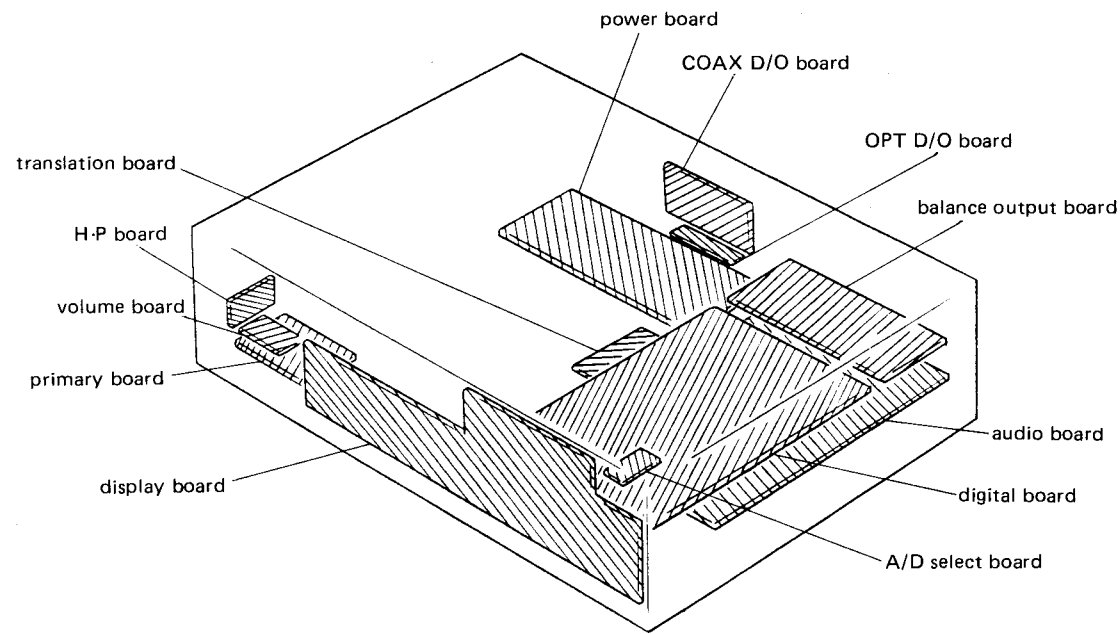
— digital board —



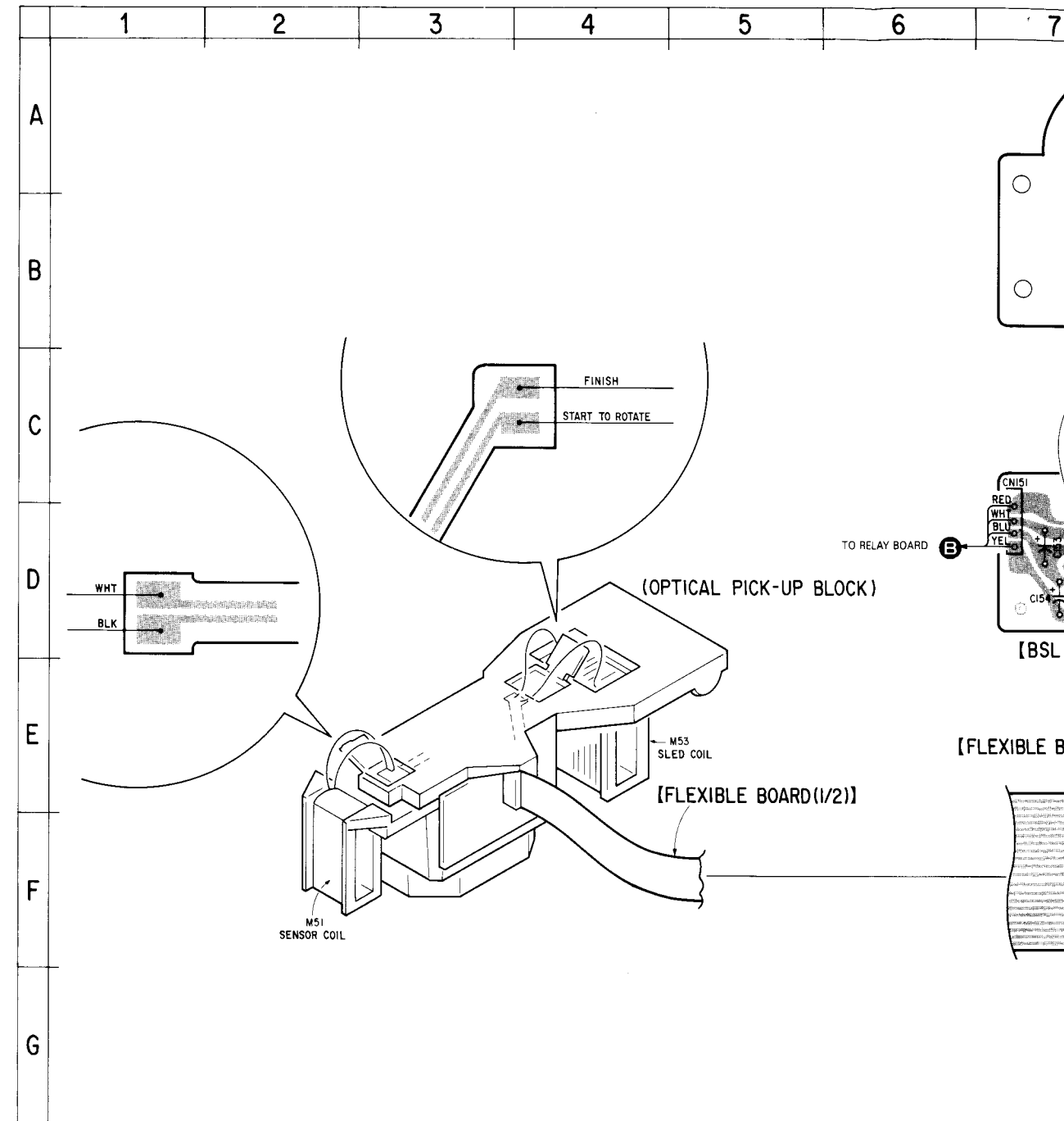
— audio board —



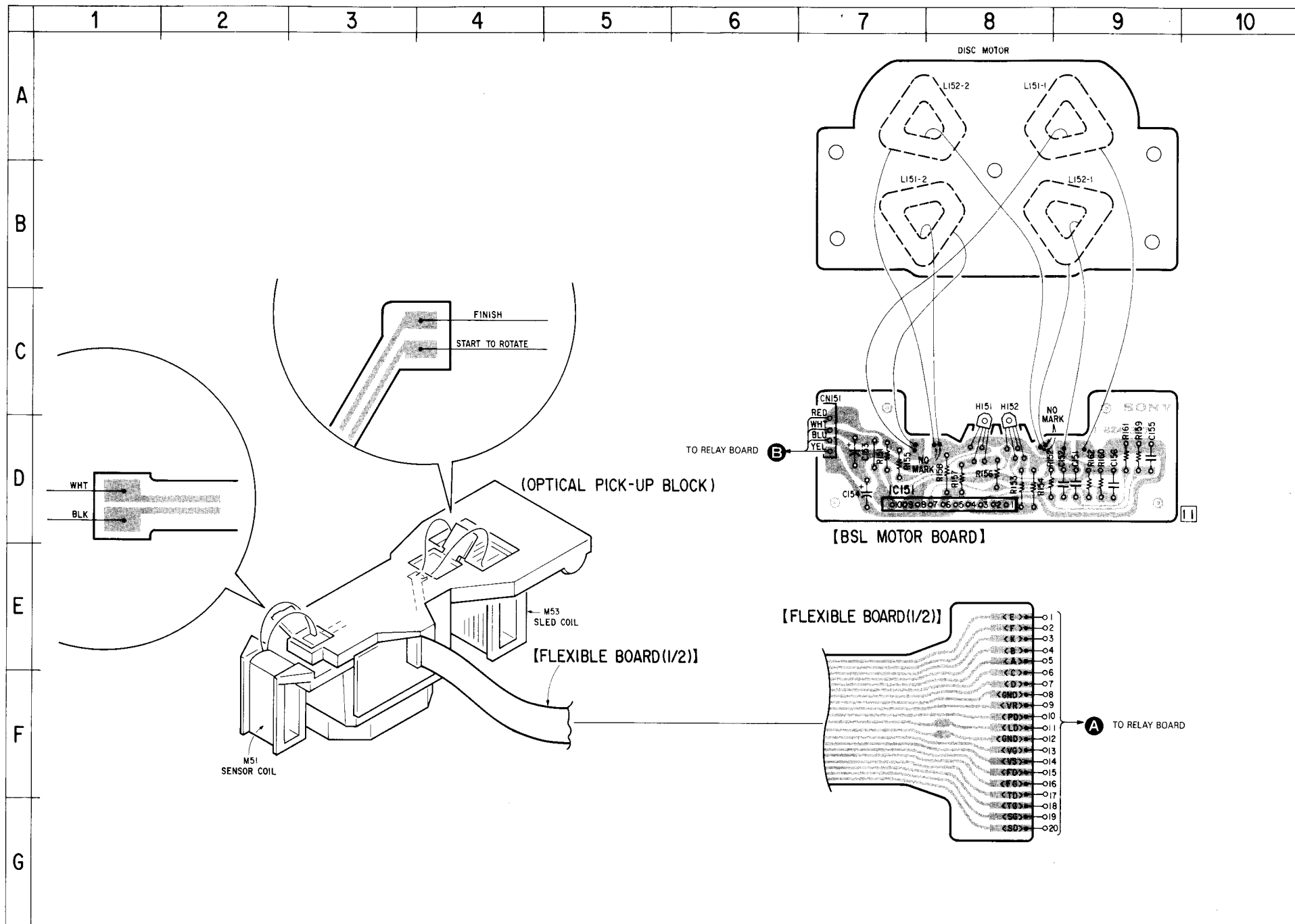
4-1. CIRCUIT BOARDS LOCATION



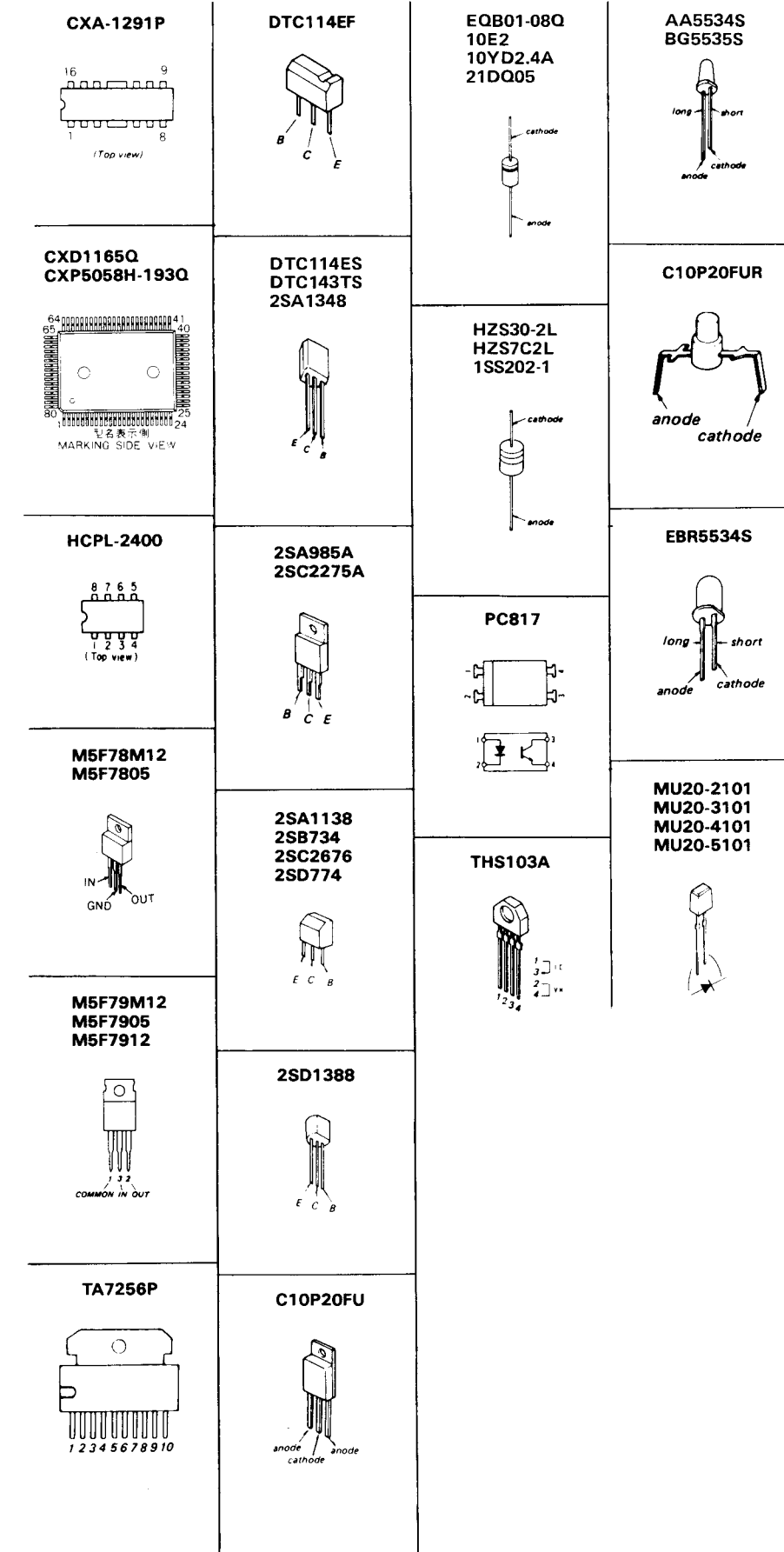
4-2. BU-10A (Base Unit) PRINTED WIRING BOARDS

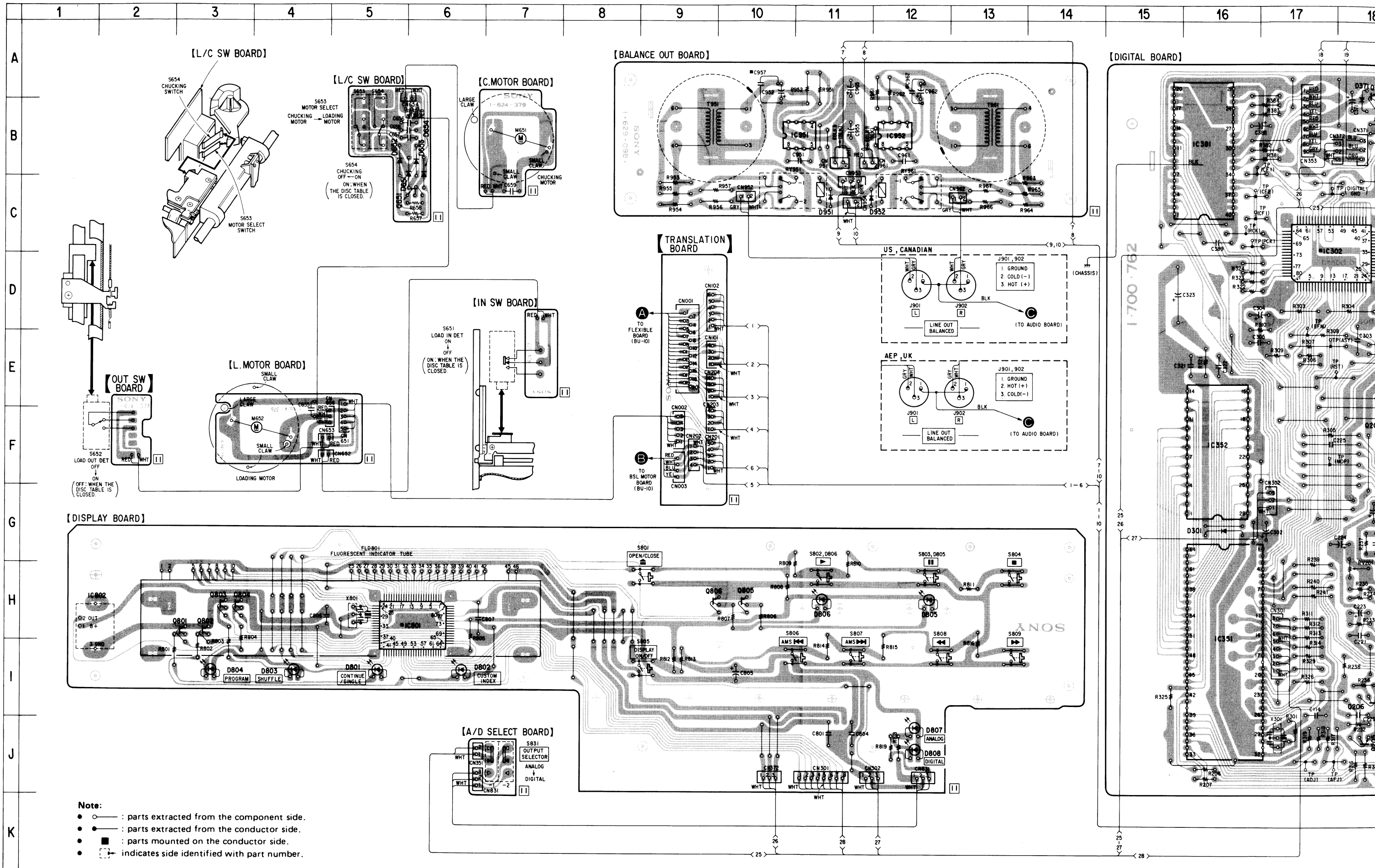


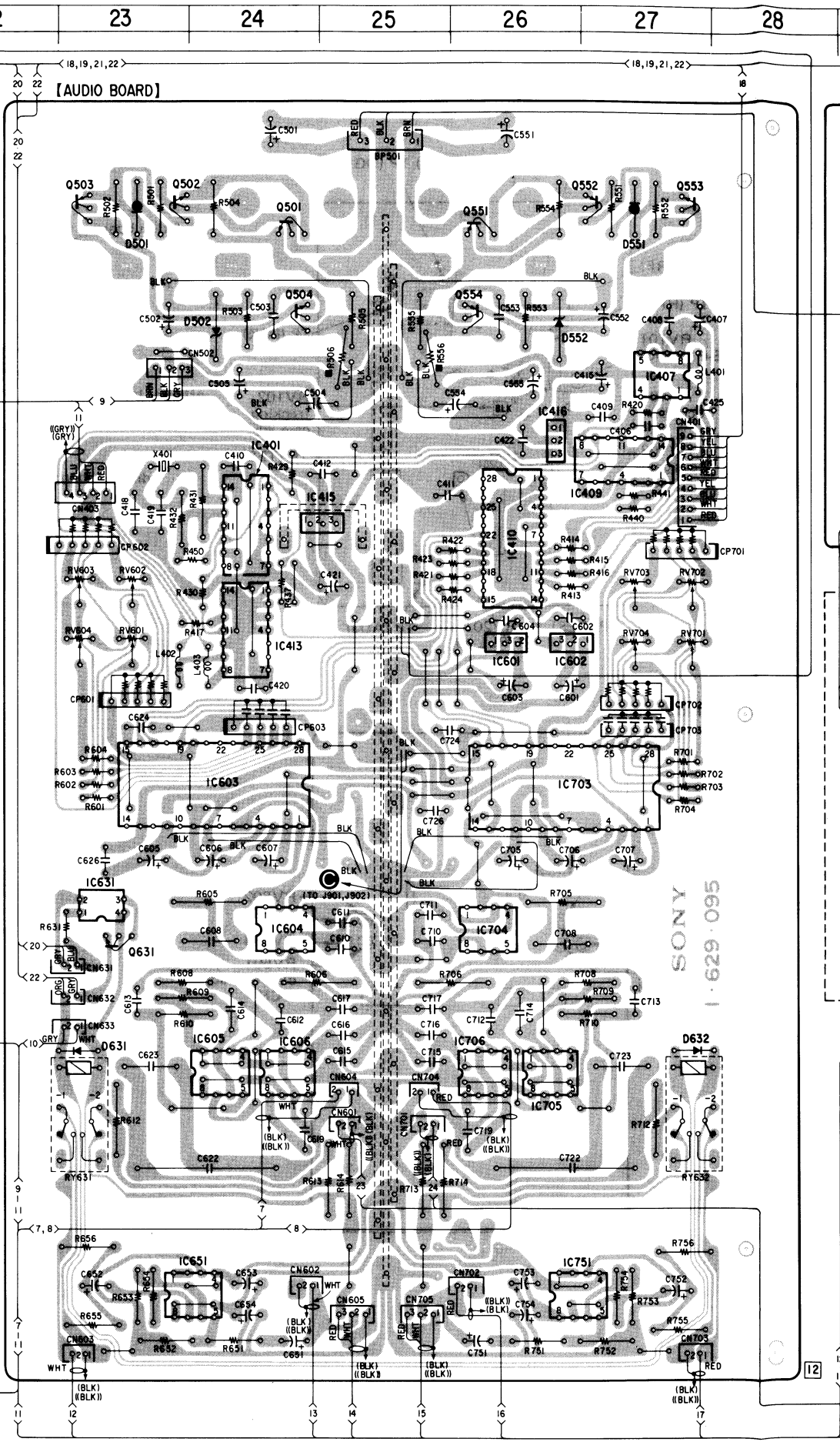
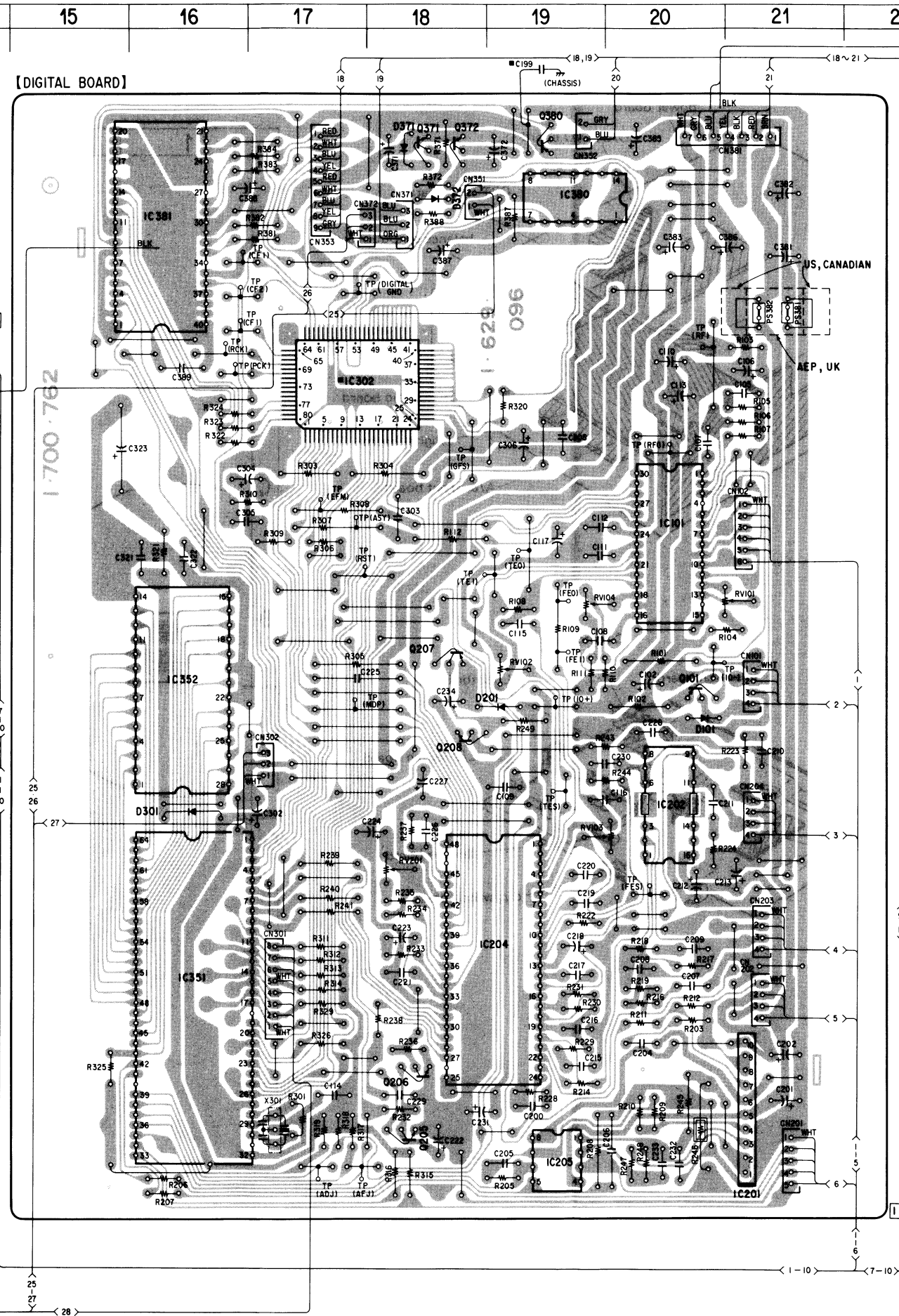
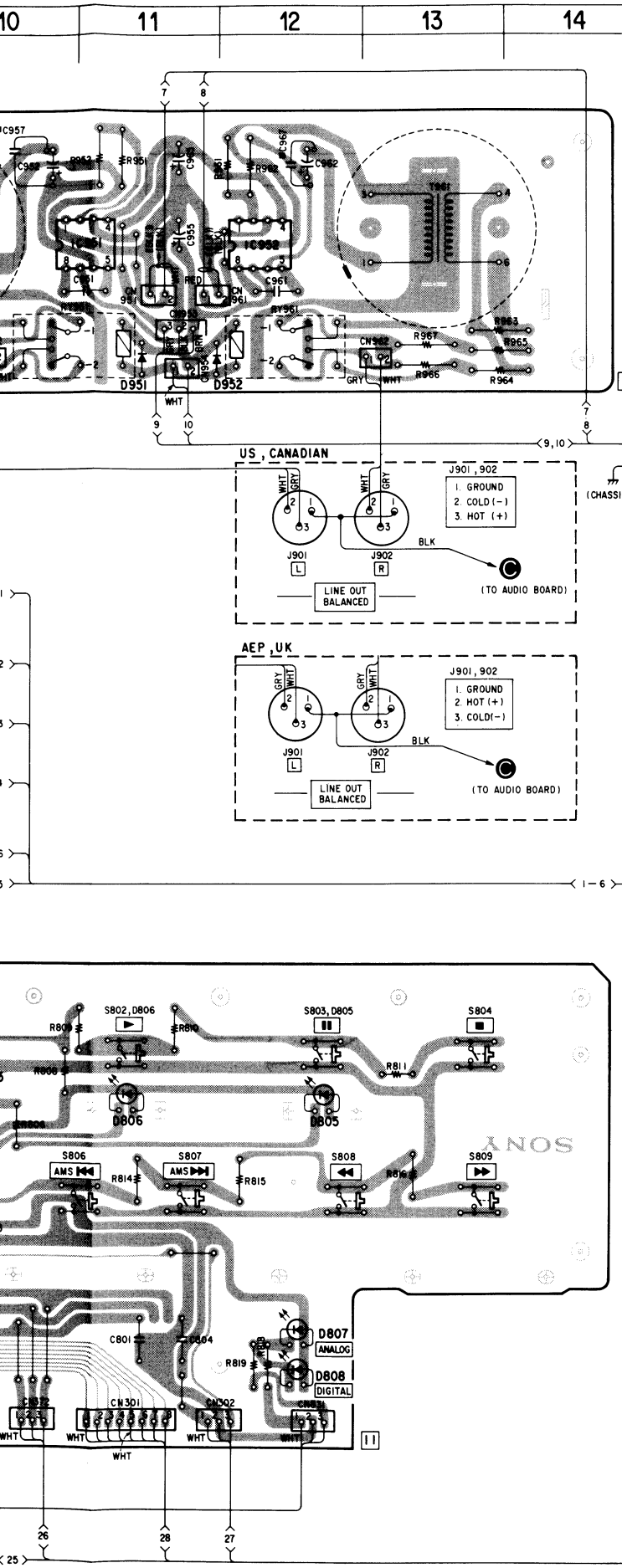
4-2. BU-10A (Base Unit) PRINTED WIRING BOARDS

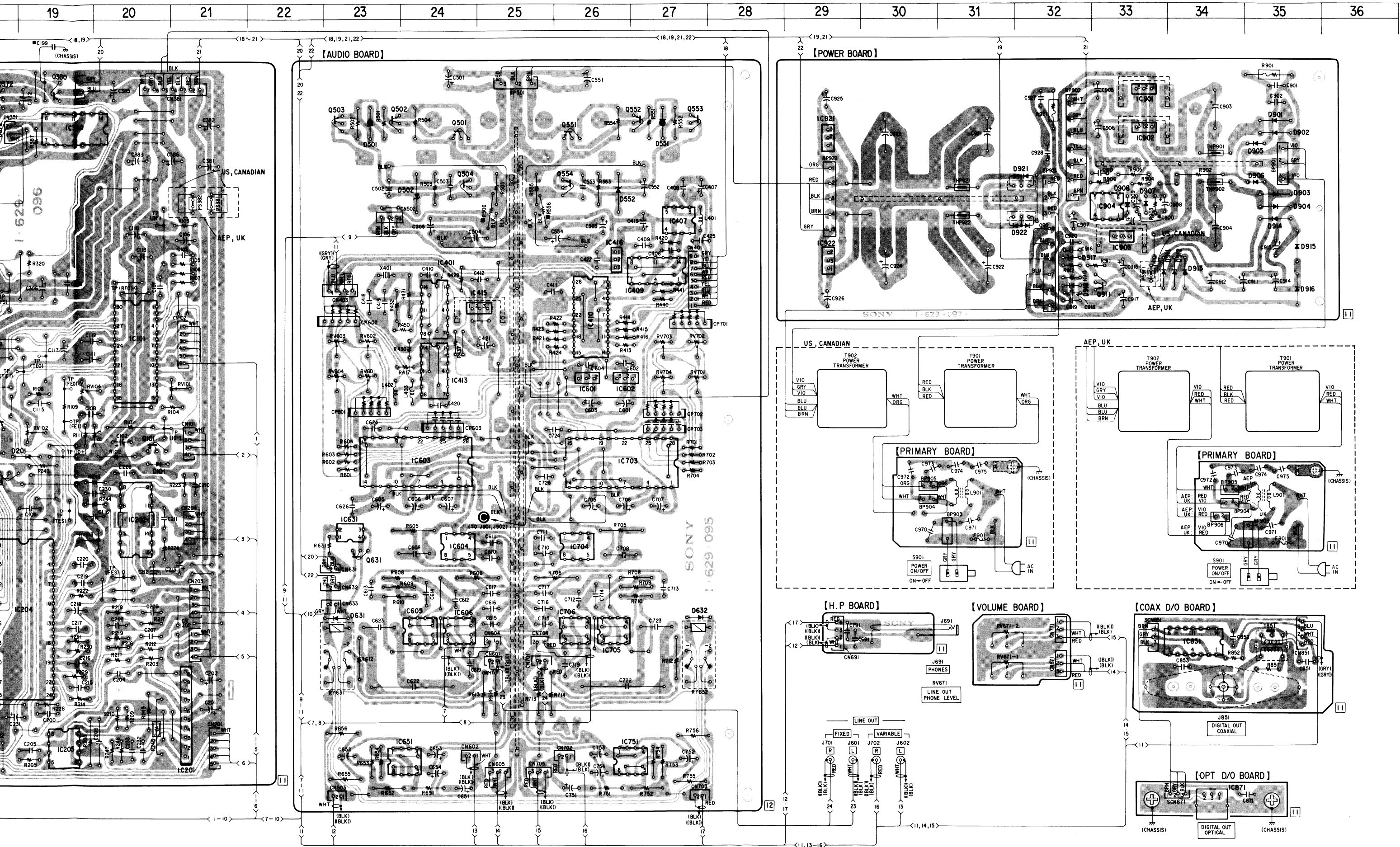


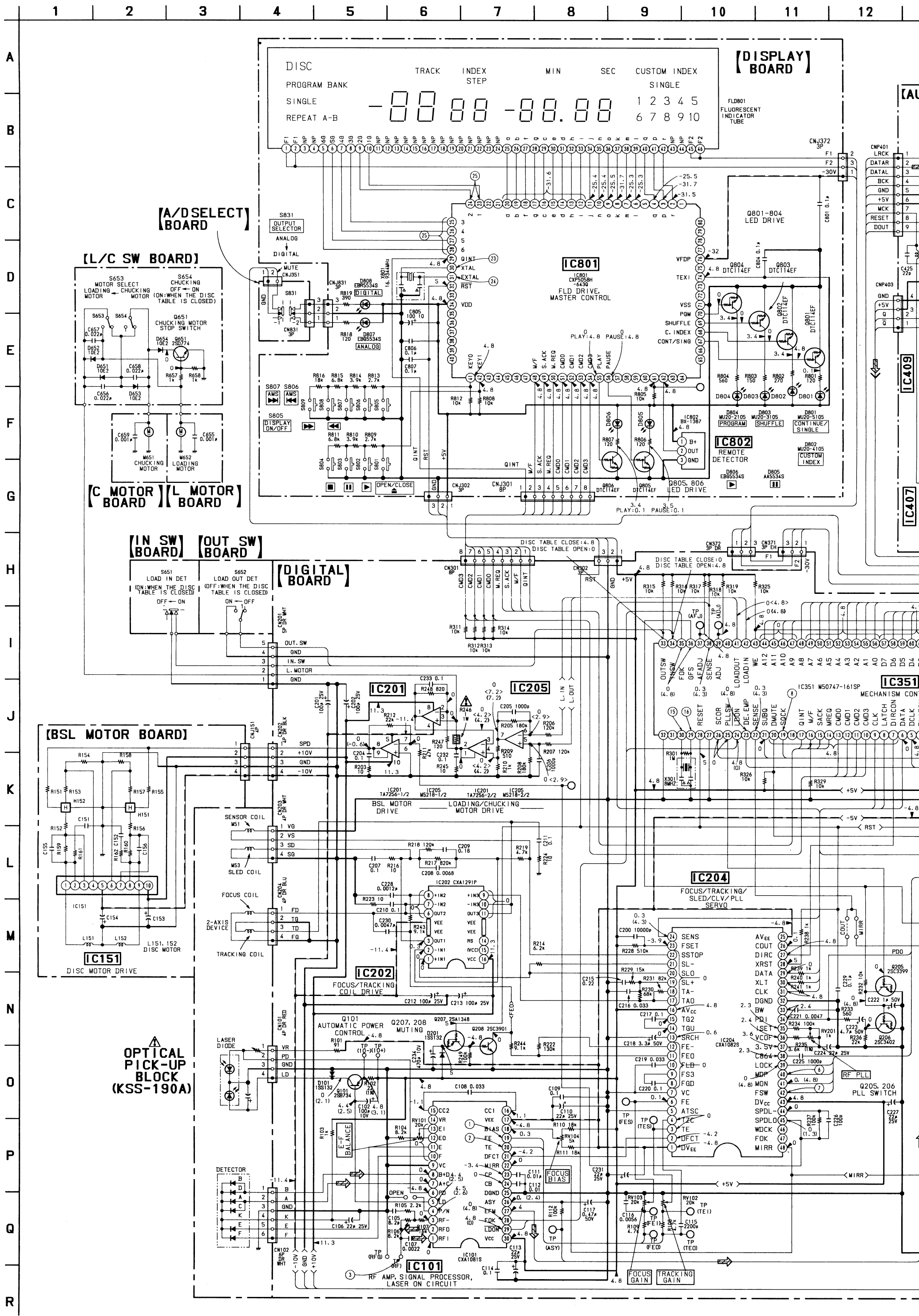
4-3. SEMICONDUCTOR LEAD LAYOUTS

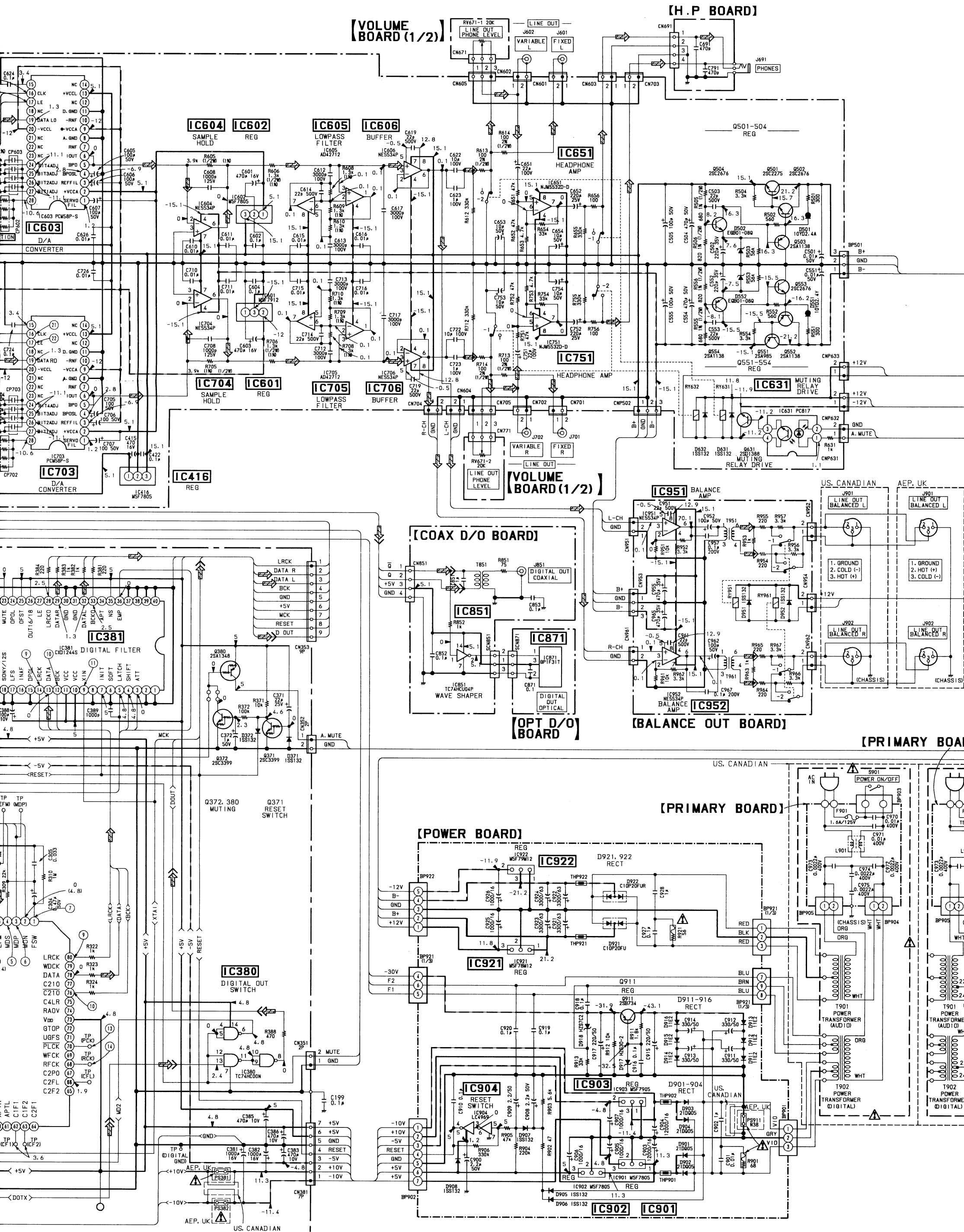


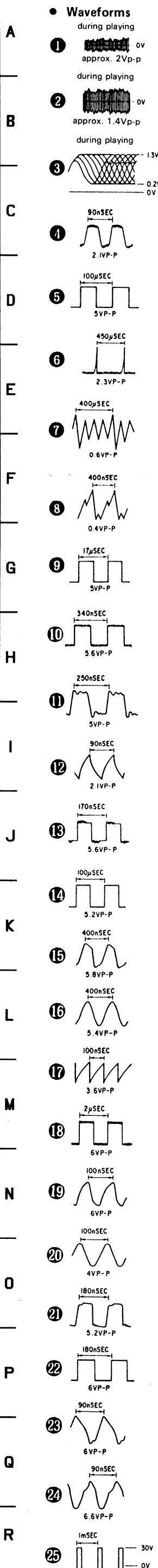
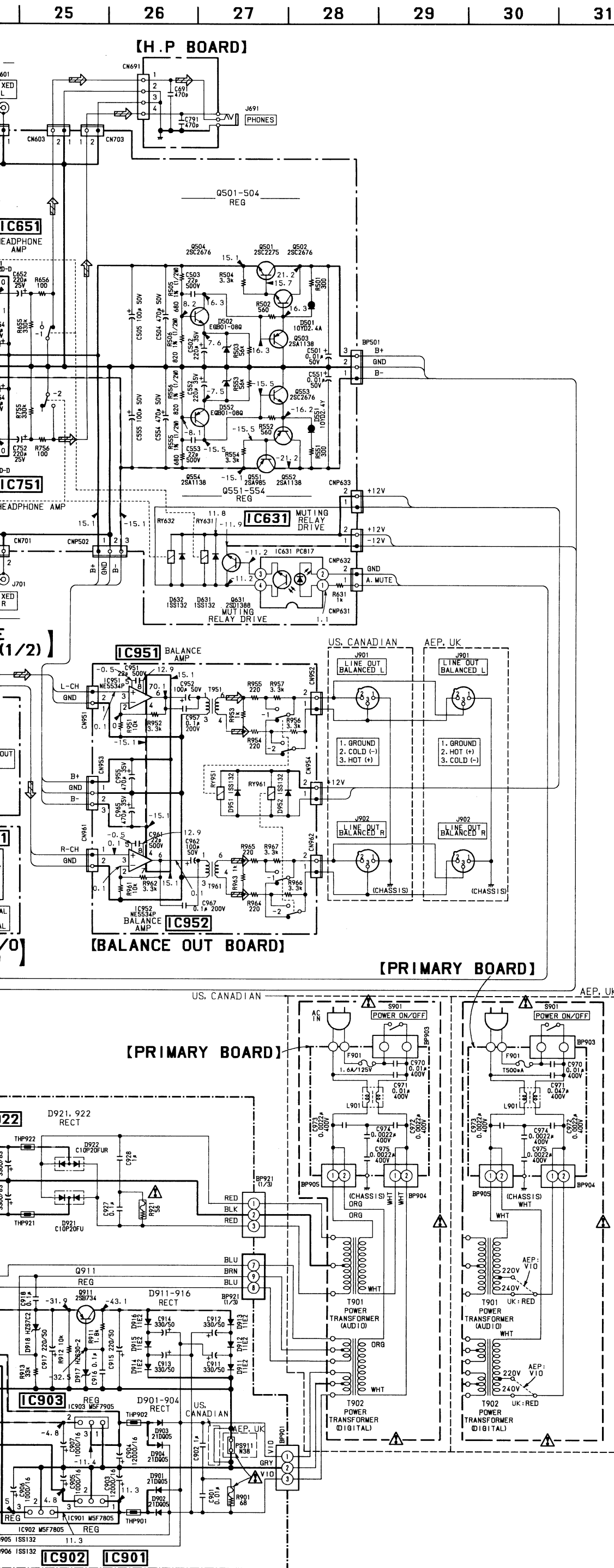












Note on Schematic Diagram:

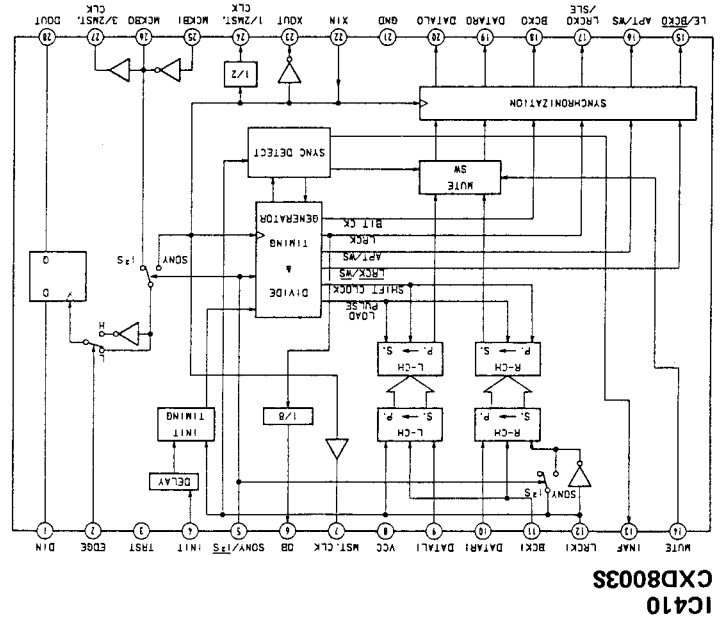
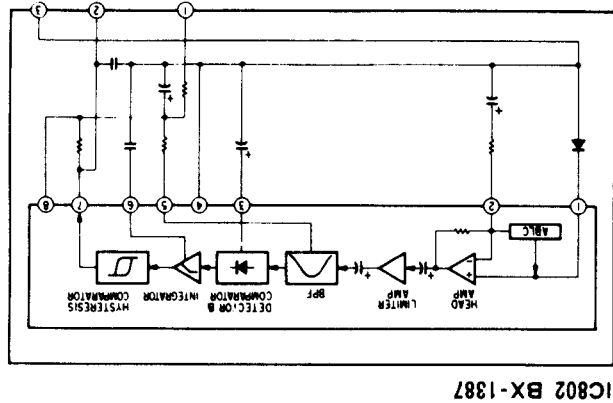
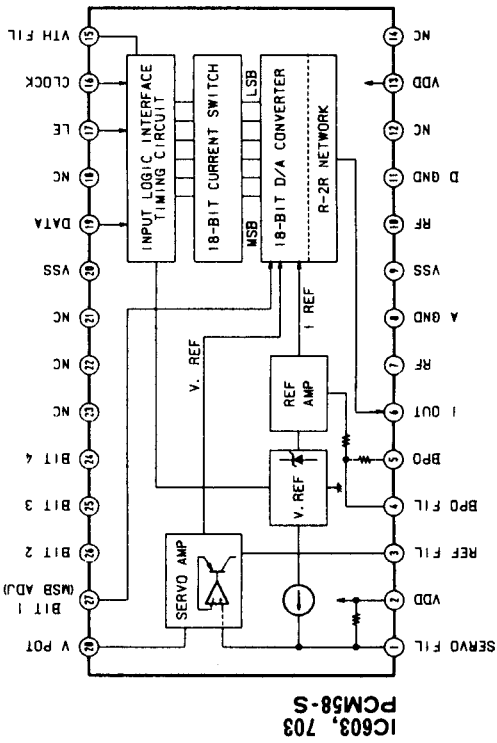
- All capacitors are in μF unless otherwise noted. pF : μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : B+ Line
- : B- Line
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
- no mark: STOP
- (): PLAY
- < >: when LOAD OUT operates
- << >>: when LOAD IN operates
- Voltage are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : CD
- : digital out

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.

• Semiconductor Location on Printed Wiring Boards

Ref. No.	Location	Ref. No.	Location
D101	F-20	IC409	D-27
D201	F-18	IC410	D-26
D301	G-16	IC413	E-24
D371	A-18	IC415	D-24
D372	B-18	IC416	C-26
D501	B-23	IC601	E-26
D502	C-24	IC602	E-26
D551	B-27	IC603	F-24
D552	C-26	IC604	G-24
D631	H-23	IC605	H-24
D632	H-27	IC606	H-24
D651	C-5	IC631	G-23
D652	B-5	IC651	J-23
D653	B-6	IC703	F-26
D654	B-6	IC704	G-26
D801	I-5	IC705	I-26
D802	I-6	IC706	H-26
D803	I-4	IC751	J-26
D804	I-3	IC801	H-6
D805	H-12	IC802	H-1
D806	H-11	IC851	I-34
D807	J-12	IC871	K-34
D808	J-12	IC901	B-33
D901	B-35	IC902	B-33
D902	B-35	IC903	C-33
D903	C-35	IC904	C-33
D904	C-35	IC921	B-29
D905	B-35	IC922	C-29
D906	C-35	IC951	B-10
D907	C-33	IC952	B-12
D908	C-33		
D911	D-34	Q101	F-20
D912	D-34	Q205	J-18
D913	D-34	Q206	I-18
D914	C-35	Q207	F-18
D915	D-35	Q208	G-18
D916	D-35	Q371	A-18
D917	D-32	Q372	A-18
D918	D-32	Q380	A-19
D921	B-32	Q501	B-24
D922	C-32	Q502	B-23
D951	C-11	Q503	B-23
D952	C-11	Q504	C-24
IC101	E-20	Q551	B-26
IC201	J-21	Q552	B-27
IC202	G-20	Q553	B-27
IC204	H-19	Q554	C-26
IC205	J-19	Q631	H-23
IC302	C-17	Q651	C-5
IC351	H-16	Q801	H-3
IC352	F-16	Q802	H-3
IC380	B-19	Q803	H-3
IC381	B-16	Q804	H-3
IC401	D-24	Q805	H-10
IC407	C-27	Q806	H-9
		Q911	D-33



SECTION 5 EXPLODED VIEWS

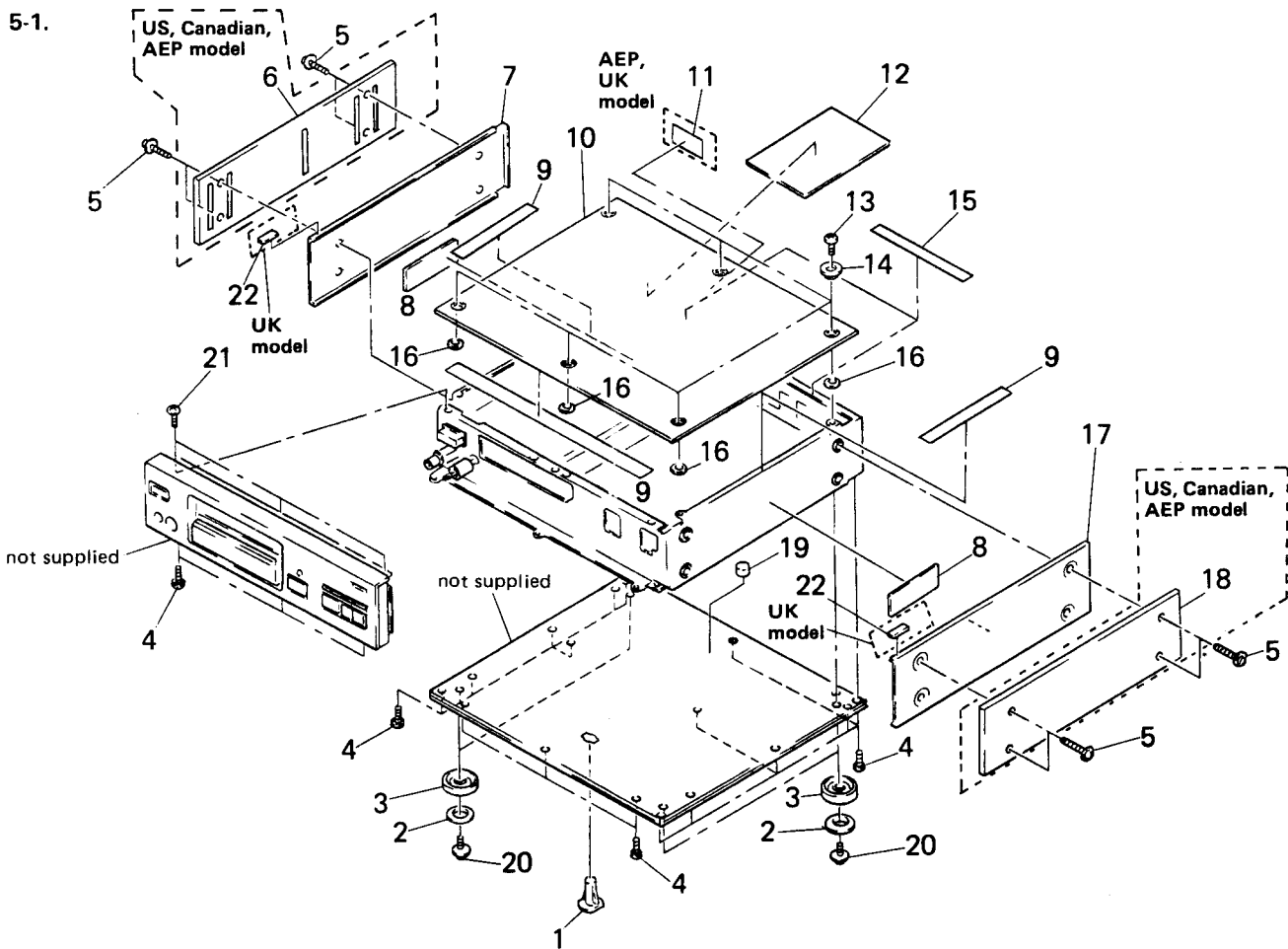
NOTE:

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

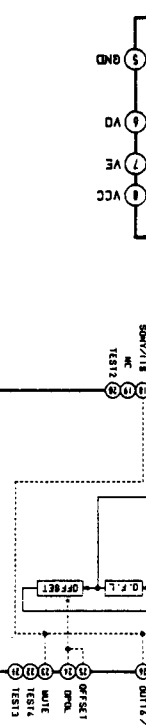
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts
Example:
(RED) ... KNOB, BALANCE (WHITE)
↑ Cabinet's Color ↑ Parts' Color

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

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



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	*4-922-553-01	PLATE, LOCK, TRANSPORT		12	*4-913-188-01	FELT (C), ACOUSTIC ABSORBENT	
2	4-922-543-01	FOOT		13	4-924-242-11	SCREW (M3X6), FLAT HEAD	
3	4-928-028-01	BASE, FOOT		14	4-928-025-01	ESCUTCHEON (TOP PLATE)	
4	3-703-685-21	SCREW (+BV 3X8)		15	3-831-441-11	SPACER	
5	4-847-802-00	(UK)... SCREW		16	*4-923-581-01	SPACER	
	4-885-979-11	(US,Canadian,AEP)...SCREW (4X25)		17	4-928-062-01	PLATE (RIGHT), SIDE	
6	X-4928-010-1	(AEP)...PLATE (L)ASSY, SIDE, ORNAMENTAL		18	X-4928-009-1	(AEP)...PLATE (R)ASSY, SIDE, ORNAMENTAL	
	X-4928-011-1	(US,Canadian) ...PLATE (L)ASSY, SIDE, ORNAMENTAL			X-4928-012-1	(US,Canadian) ...PLATE (R)ASSY, SIDE, ORNAMENTAL	
7	4-928-061-01	PLATE (LEFT), SIDE		19	*4-908-853-01	CUSHION	
8	*4-923-562-01	CUSHION		20	7-682-965-01	SCREW +PSW 4X16	
9	3-831-441-XX	CUSHION, CABINET		21	7-682-548-09	SCREW (3X8)	
10	*4-928-020-01	PLATE, TOP		22	4-858-767-01	(UK)...COVER, LAMP	
11	*4-885-838-01	(AEP,UK)...LABEL, CLASSI					

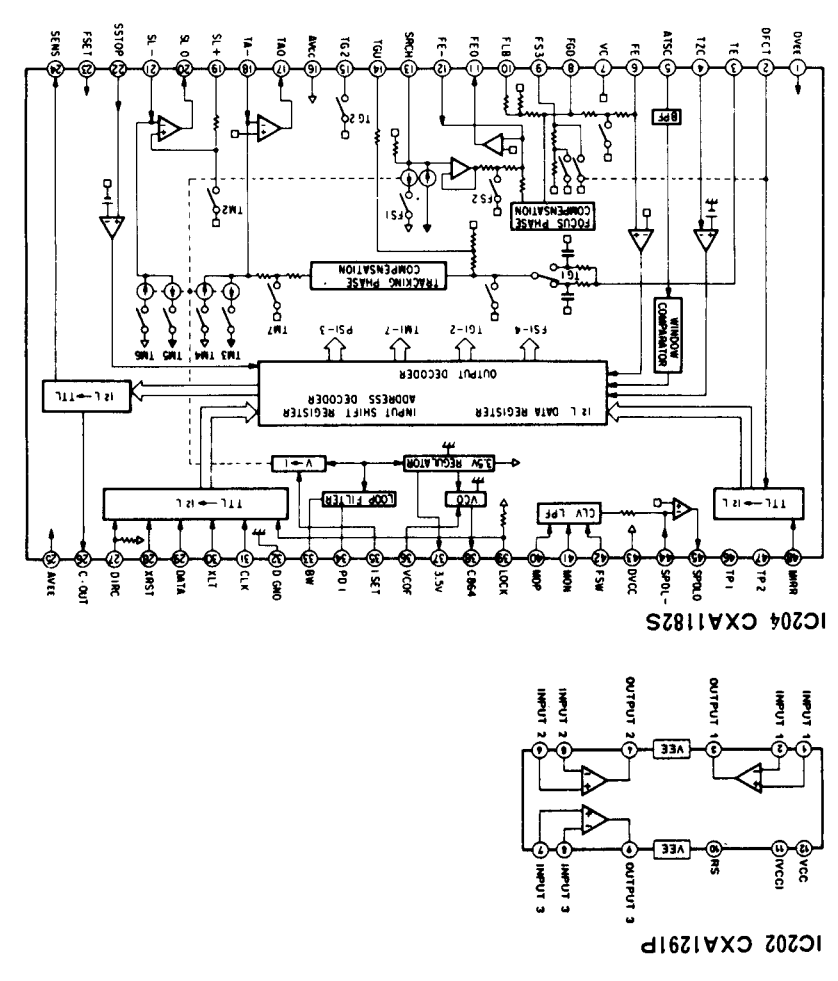
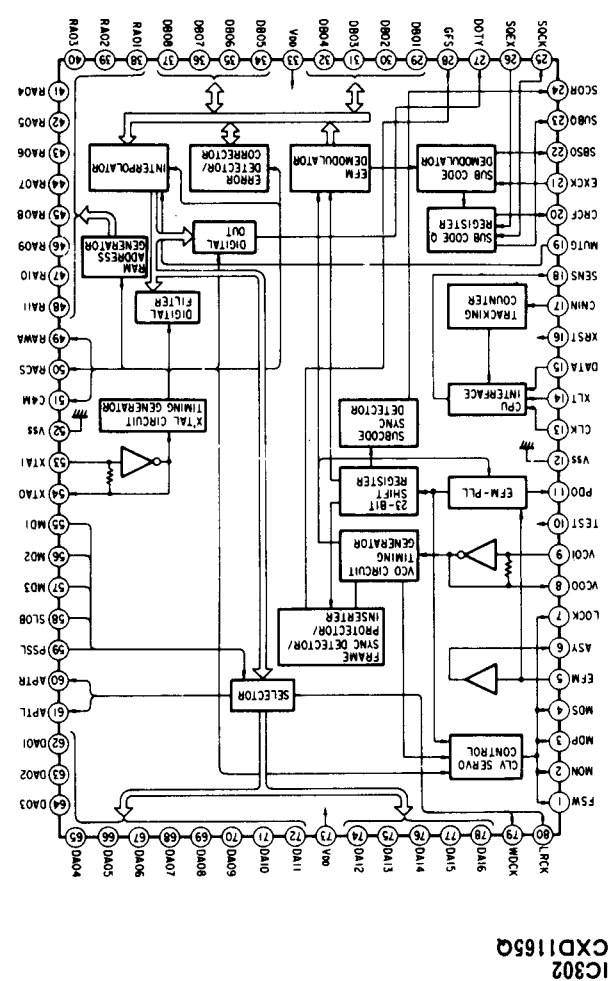
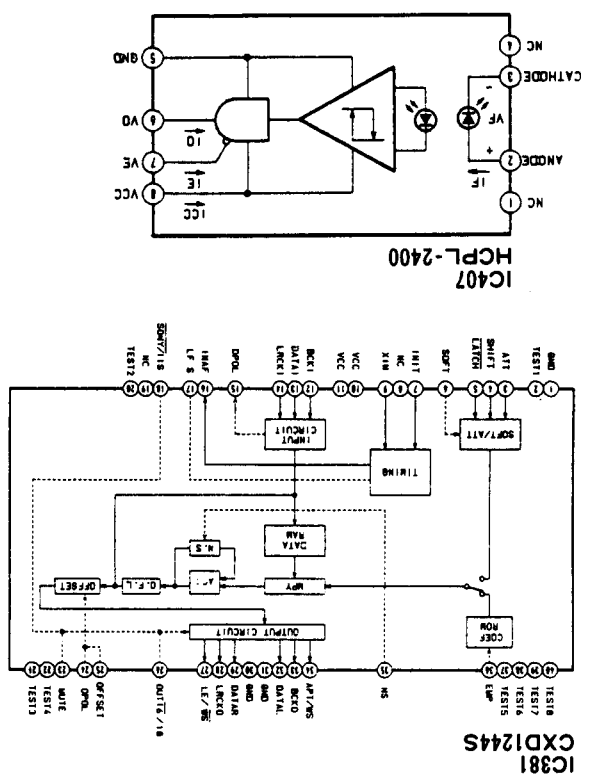


5-2.

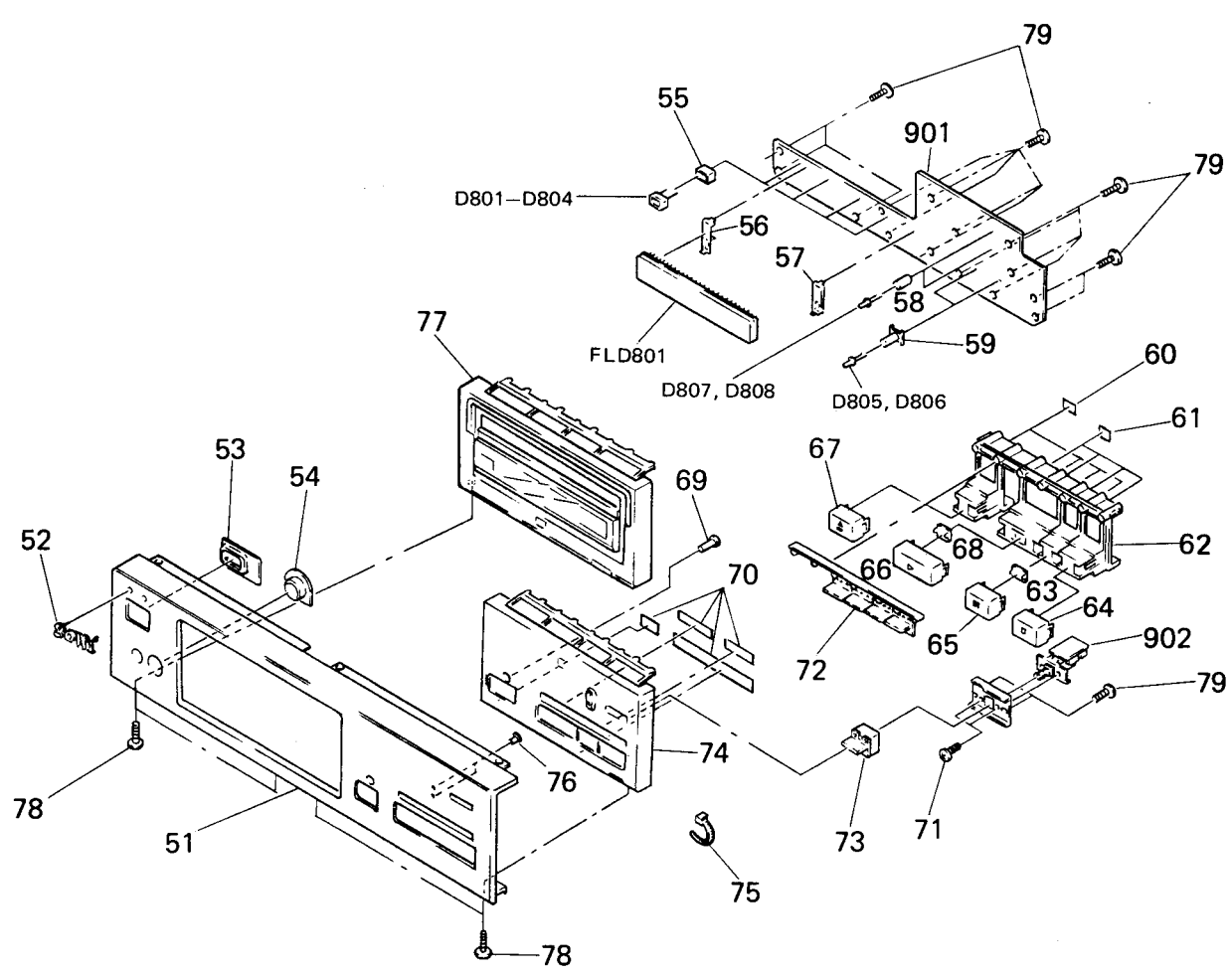


No.	Part No.
51	4-928-034-01 4-928-034-1 4-928-034-2
52	4-908-848-01
53	4-928-038-01
54	4-922-548-01
55	*4-928-074-01
56	*4-928-053-01
57	*4-928-052-01
58	*4-923-532-21
59	*4-913-139-01
60	*4-928-063-01
61	*4-928-063-11
62	4-928-041-01
63	4-922-599-11
64	4-928-044-11
65	4-928-044-01

IC41
CXD1
CXD4



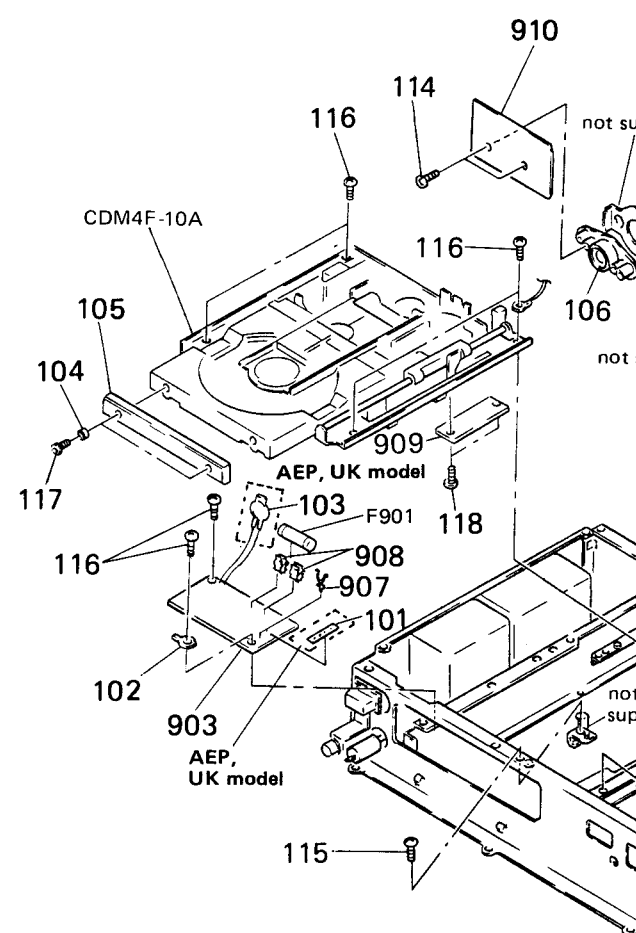
5-2.



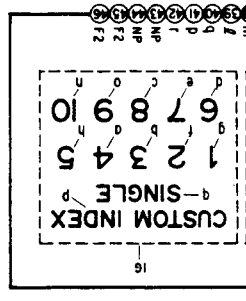
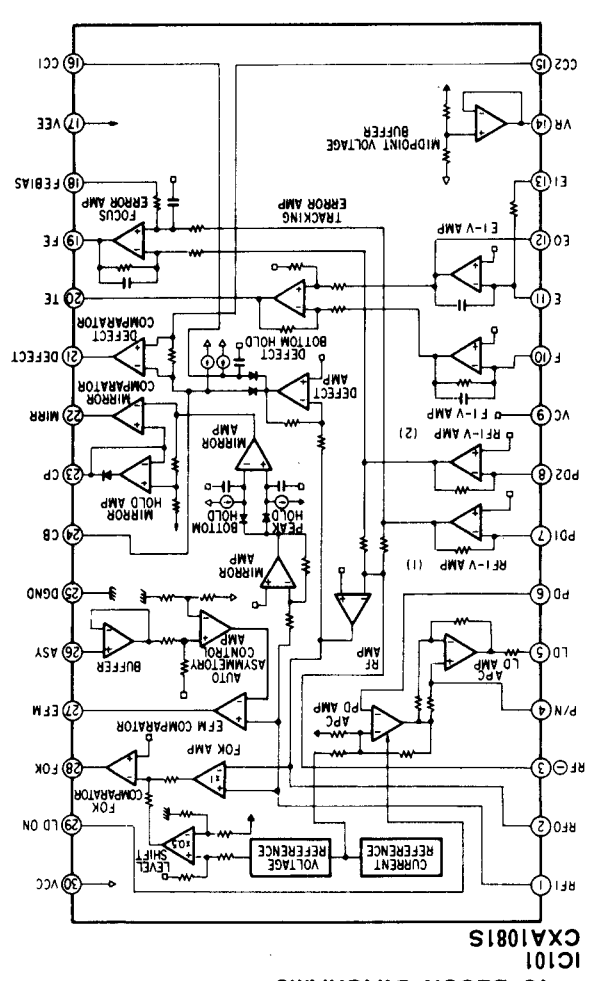
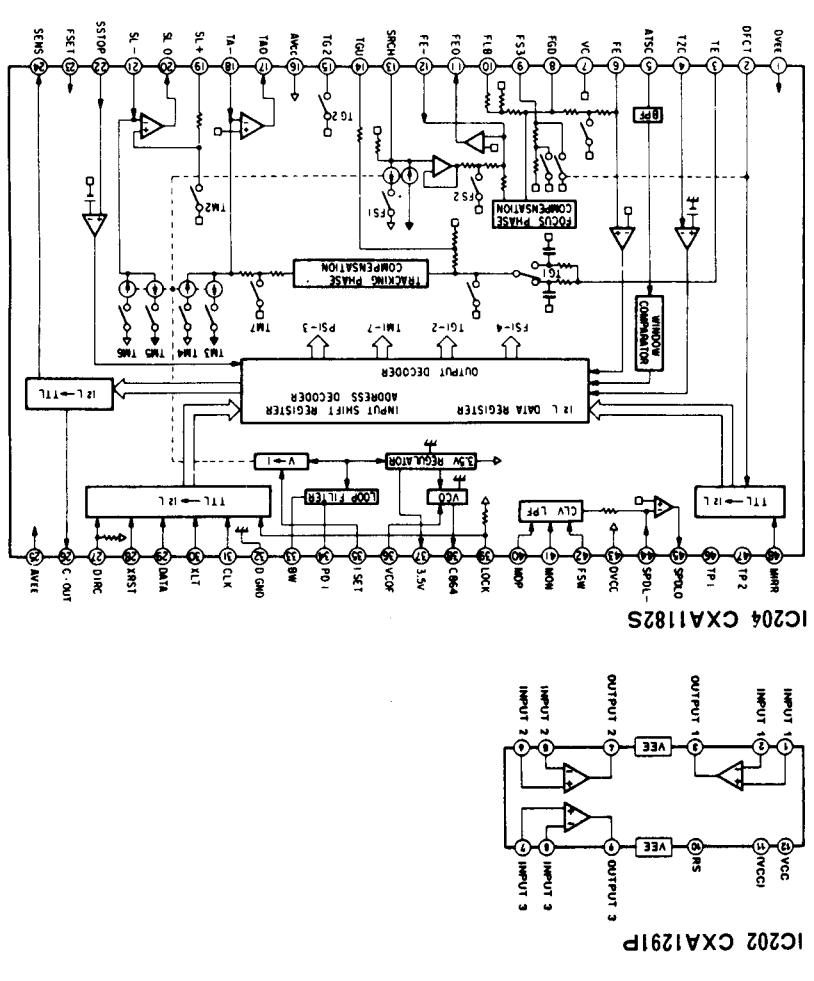
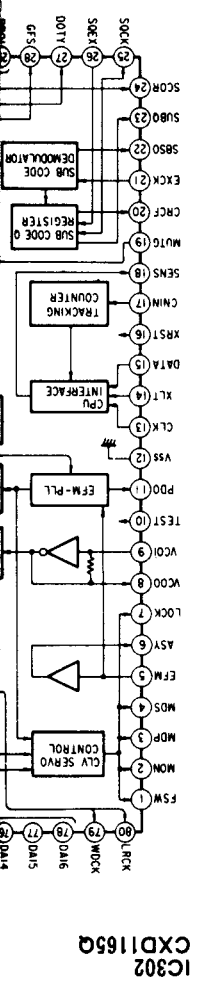
No.	Part No.	Description	Remarks
51	4-928-034-02	(AEP)PANEL, FRONT	
	4-928-034-11	(US,Canadian)...PANEL, FRONT	
	4-928-034-21	(UK)PANEL, FRONT	
52	4-908-848-01	EMBLEM, SONY	
53	4-928-038-01	ESCUTCHEON (POWER)	
54	4-922-548-01	ESCUTCHEON, KNOB	
55	*4-928-074-01	SPACER (LED)	
56	*4-928-053-01	HOLDER (LEFT)	
57	*4-928-052-01	HOLDER (RIGHT)	
58	*4-923-532-21	SPACER, LED	
59	*4-913-139-01	SPACER (A), LED	
60	*4-928-063-01	CUSHION (BUTTON)	
61	*4-928-063-11	CUSHION (BUTTON)	
62	4-928-041-01	BASE (A), KNOB	
63	4-922-599-11	PLATE, INDICATION, PAUSE	
64	4-928-044-11	CAP (M), KNOB (STOP)	
65	4-928-044-01	CAP (M), KNOB (PAUSE)	

No.	Part No.	Description	Remarks
66	4-928-043-01	CAP (L), KNOB (PLAY)	
67	4-928-044-21	CAP (M), KNOB (O/C)	
68	4-922-598-11	PLATE, INDICATION, PLAY	
69	4-928-046-01	BUTTON (DIA. 3.4)	
70	3-831-441-11	CLOTH, UNWEAVED	
71	7-682-548-09	SCREW (3X8)	
72	X-4928-005-1	BASE (B), KNOB	
73	X-4928-006-1	BASE (C), KNOB	
74	*4-928-036-01	BASE (B), PANEL	
75	3-655-653-21	BAND (TAITON), BINDING	
76	4-925-327-01	INDICATOR	
77	X-4928-004-1	(AEP,UK,Canadian)...BASE (A), PANEL	
	X-4928-013-1	(US)...BASE (A), PANEL	
78	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
79	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
901	*1-629-099-11	PC BOARD, DISPLAY	
902	*1-629-100-11	PC BOARD, A/D SELECT	

5-3.

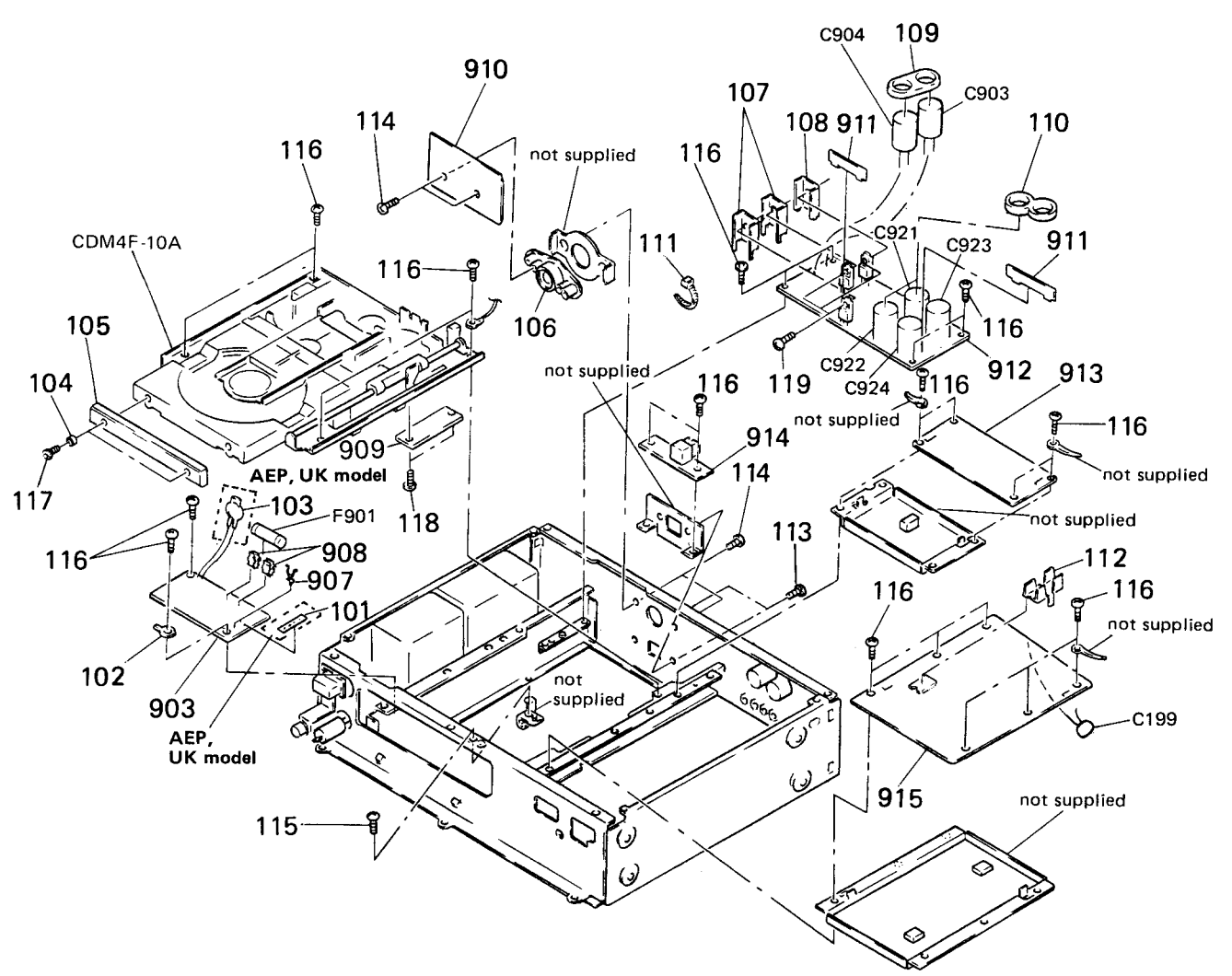
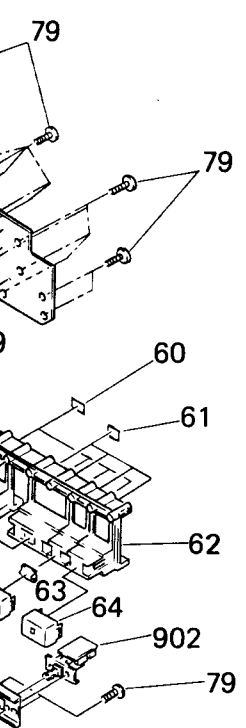


No.	Part No.	Description	Remarks
901	*3-701-948-11	(AEP,UK) ..LABEL (T500mA), FUSE	
902	4-870-539-00	PLATE, GROUND	
903	4-875-455-02	(AEP,UK) ..COVER (DIA.20) CAPACITOR	
904	4-884-635-00	BASE, ORNAMENTAL	
905	4-928-029-01	(Canadian,AEP,UK)...PANEL, LOADING	
	4-928-029-11	(US).....PANEL, LOADING	
906	*4-913-152-01	ESCUTCHEON, D/O	
907	*3-309-144-01	HEAT SINK	
908	*4-886-555-00	HEAT SINK	
909	*4-928-072-01	DAMPER (B)	
910	*4-928-030-01	DAMPER (A)	
911	3-655-653-21	BAND (TAITON), BINDING	
912	*4-922-525-01	HEAT SINK	
913	3-703-685-21	SCREW (+BV 3X8)	
914	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
915	7-682-547-04	SCREW +B 3X6	
916	7-682-548-09	SCREW (3X8)	

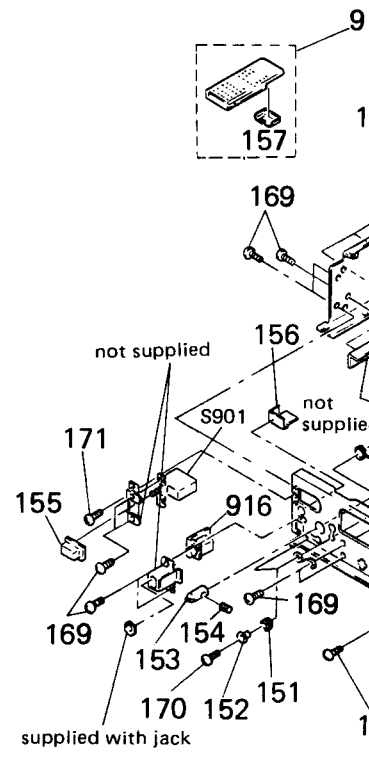


● IC BLOCK DIAGRAMS

5-3.



5-4.



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 ou une ligne pointillée avec une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Remarks

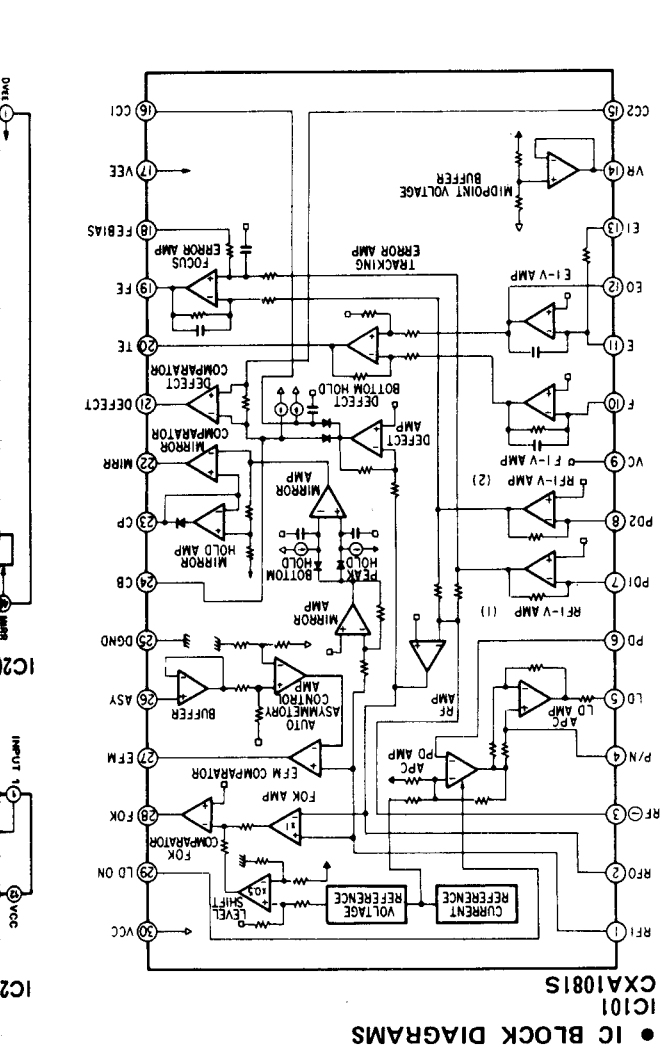
No.	Part No.	Description	Remarks
101	*3-701-948-11	(AEP,UK) ..LABEL (T500mA), FUSE	
102	4-870-539-00	PLATE, GROUND	
103	4-875-455-02	(AEP,UK) ..COVER (DIA.20) CAPACITOR	
104	4-884-635-00	BASE, ORNAMENTAL	
105	4-928-029-01	(Canadian,AEP,UK)...PANEL, LOADING	
	4-928-029-11	(US).....PANEL, LOADING	
106	*4-913-152-01	ESCUTCHEON, D/O	
107	*3-309-144-01	HEAT SINK	
108	*4-886-555-00	HEAT SINK	
109	*4-928-072-01	DAMPER (B)	
110	*4-928-030-01	DAMPER (A)	
111	3-655-653-21	BAND (TAITON), BINDING	
112	*4-922-525-01	HEAT SINK	
113	3-703-685-21	SCREW (+BV 3X8)	
114	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
115	7-682-547-04	SCREW +B 3X6	
116	7-682-548-09	SCREW (3X8)	

No.	Part No.	Description	Remarks
117	7-683-412-05	BOLT, HEXAGON SOCKET 2.6X6	
118	7-621-770-87	SCREW +BVTT 2.6X5 (S)	
119	7-682-147-15	SCREW, TR	
903	*1-629-104-11	PC BOARD, PRIMARY	
907	*1-535-688-11	TERMINAL	
908	1-533-183-11	HOLDER, FUSE	
909	*1-629-103-11	PC BOARD, TRANSLATION	
910	*1-629-106-11	PC BOARD, COAX D/O	
911	1-568-130-11	BAR, BUS 3P	
912	*1-629-097-11	PC BOARD, POWER	
913	*1-629-098-11	PC BOARD, BALANCE OUTPUT	
914	*1-629-105-11	PC BOARD, OPT D/O	
915	*A-4618-224-A	(US,Canadian)...MOUNTED PCB, DIGITAL	
	*A-4646-537-A	(AEP,UK)... ..MOUNTED PCB, DIGITAL	
C199	1-162-179-11	CERAMIC 0.1MF 50V	
F901	Δ 1-532-279-11	(AEP,UK).....FUSE, TIME-LAG (0.5A)	
F901	Δ 1-532-824-11	(US,Canadian)...FUSE, GLASS TUBE (1.6A)	

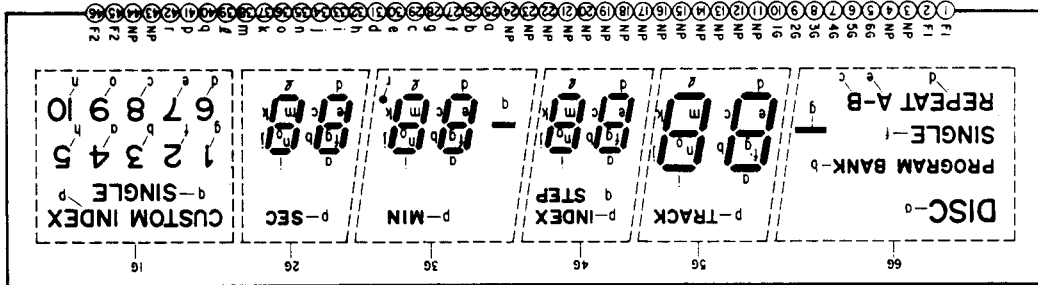
Note:
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

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

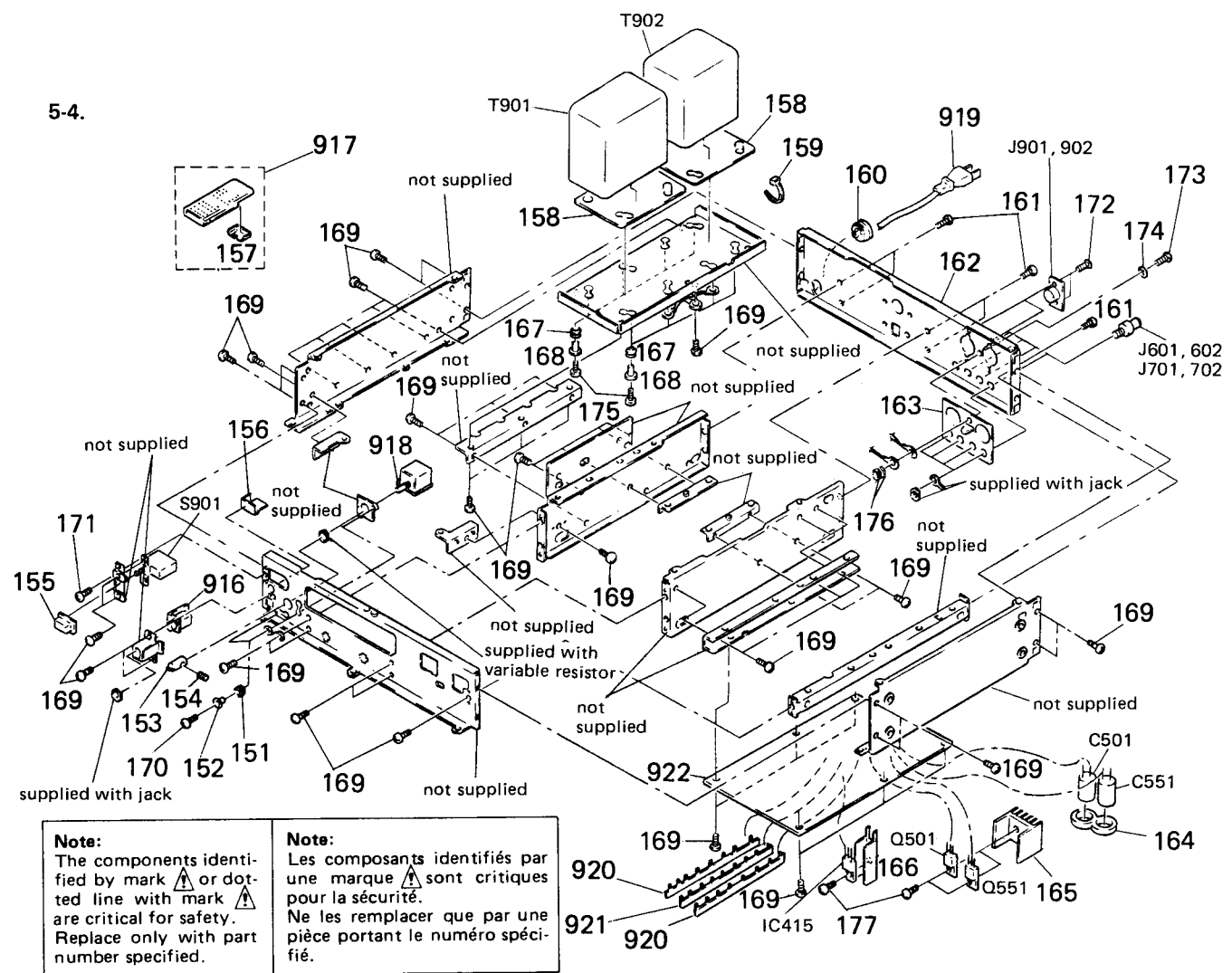
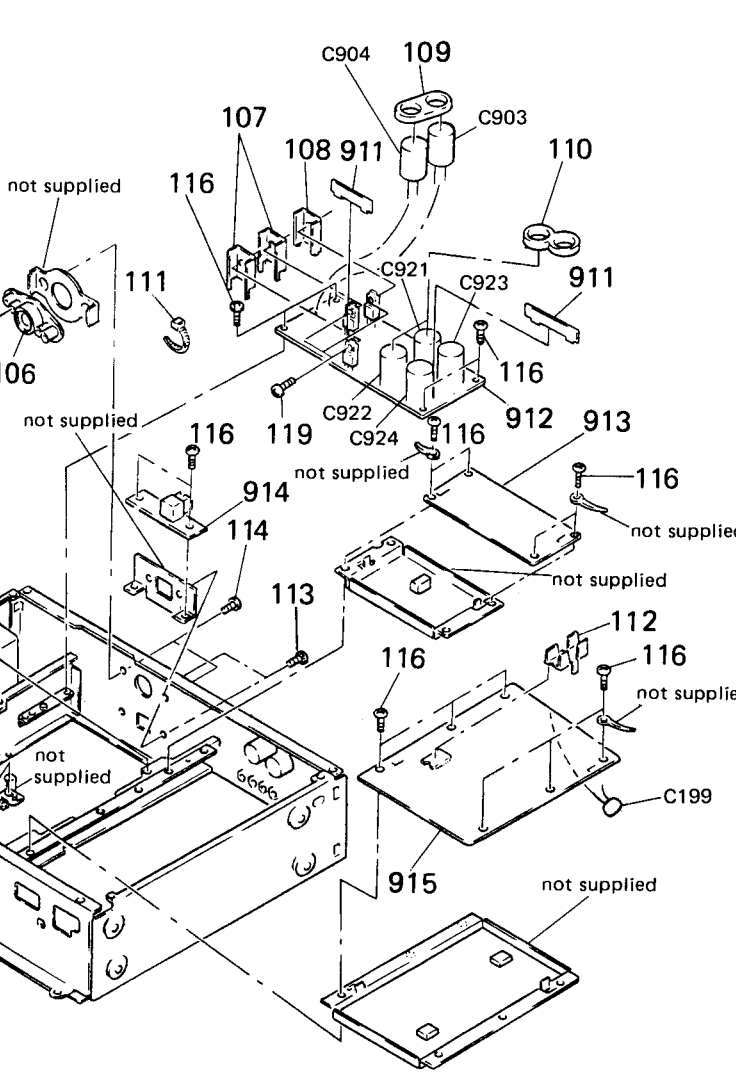
No.	Part No.	Description
151	*4-888-798-11	BUSHING, RUB
152	*4-928-026-01	COLLAR (B)
153	A-4675-314-A	KNOB ASSY, V
154	3-701-505-00	SET SCREW, D
155	4-923-520-01	KNOB, POWER
156	*4-928-080-01	COVER, INSUL
157	4-922-528-01	LID, BATTERY
158	*4-928-064-01	CUSHION (TRA
159	3-655-653-21	BAND (TAITON
160	2-231-019-01	(AEP,UK) ..
	4-916-783-01	(US,Canadian
161	3-703-685-21	SCREW (+BV 3
162	*4-928-050-11	(US).....
	*4-928-050-21	(Canadian)...
	*4-928-050-31	(AEP).....
	*4-928-050-41	(UK).....
163	*4-928-051-01	BRACKET (TER
164	*4-928-073-01	DAMPER (C)
165	*4-363-146-00	HEAT SINK, V
166	*3-309-144-01	HEAT SINK
167	*4-888-798-00	BUSHING, RUB
168	4-928-068-01	COLLAR (C)
169	7-682-548-09	SCREW (3X8)
170	7-682-549-04	SCREW +BVTT
171	7-682-547-04	SCREW +BVTT
172	7-685-246-14	SCREW +RKTP
173	7-685-873-09	SCREW +BVTT
174	7-623-308-07	LW 3, TYPE (



● IC BLOCK DIAGRAMS
CX101
CX10815



● FLD801



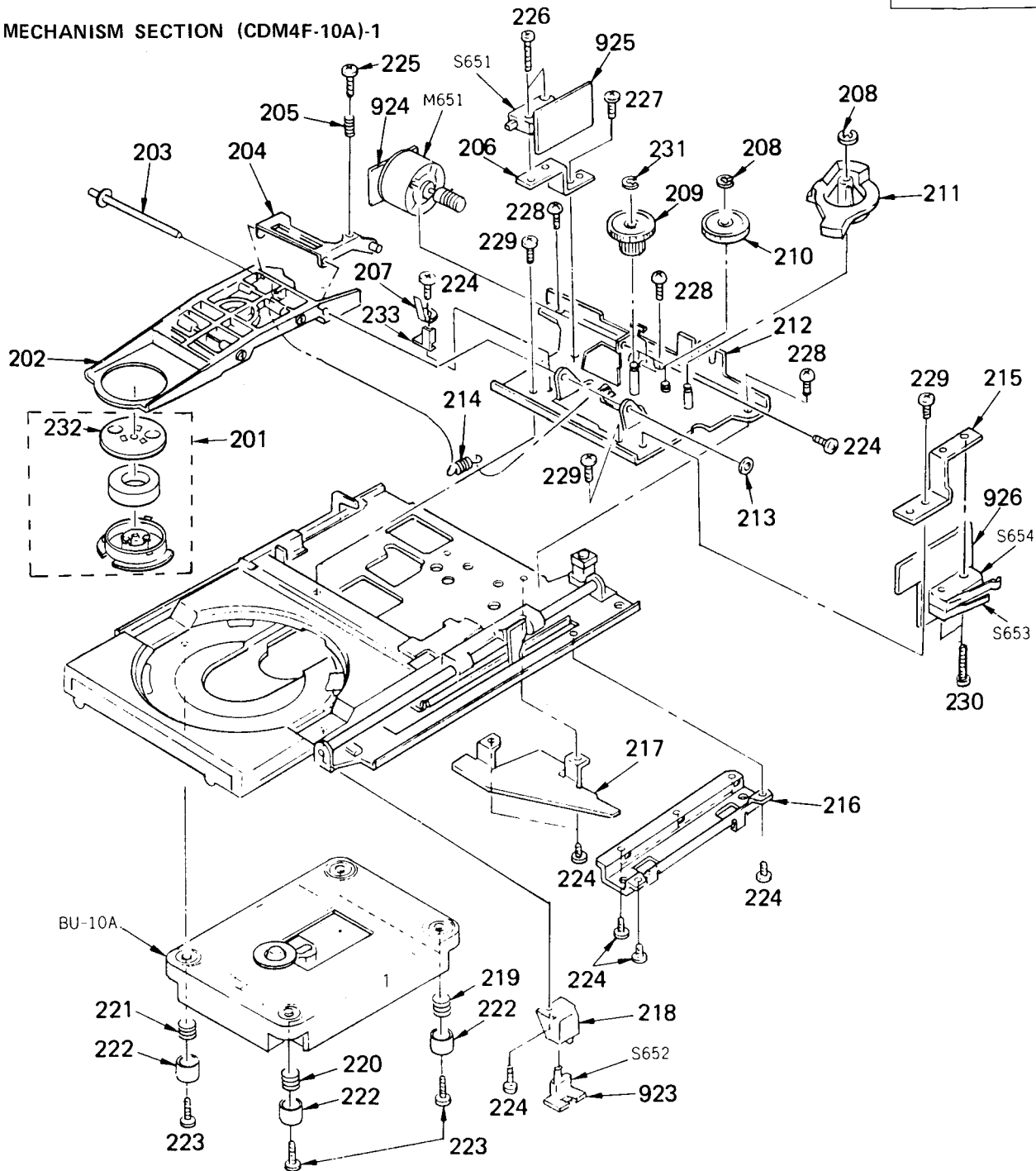
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	*4-888-798-11	BUSHING, RUBBER		175	7-682-562-09	SCREW +B 4X10	
152	*4-928-026-01	COLLAR (B)		176	7-684-023-04	N 3, TYPE 2	
153	A-4675-314-A	KNOB ASSY, VOLUME		177	7-682-147-15	SCREW, TR	
154	3-701-505-00	SET SCREW, DOUBLE POINT 3X3		916	*1-629-101-11	PC BOARD, H.P	
155	4-923-520-01	KNOB, POWER		917	1-465-046-11	REMOTE COMMANDER	
156	*4-928-080-01	COVER, INSULATING		918	*1-629-102-11	PC BOARD, VOLUME	
157	4-922-528-01	LID, BATTERY CASE, COMMANDER		919	▲1-555-795-11	(AEP).....CORD, POWER	
158	*4-928-064-01	CUSHION (TRANSFORMER)			▲1-556-035-11	(UK).....CORD, POWER	
159	3-655-653-21	BAND (TAITON), BINDING			▲1-559-479-11	(US,Canadian)...CORD, POWER	
160	2-231-019-01	(AEP,UK).....CLAMPER, CORD		920	1-568-129-11	BAR, BUS 8P	
	4-916-783-01	(US,Canadian)...BUSHING, CORD		921	1-568-131-11	BAR, BUS 9P	
161	3-703-685-21	SCREW (+BV 3X8)		922	*A-4617-048-A	MOUNTED PCB, AUDIO	
162	*4-928-050-11	(US).....PANEL, BACK		J601	1-507-918-00	JACK, PIN 1P (LINE OUT FIXED L)	
	*4-928-050-21	(Canadian)...PANEL, BACK		J602	1-507-918-00	JACK, PIN 1P (LINE OUT VARIABLE L)	
	*4-928-050-31	(AEP).....PANEL, BACK		J701	1-507-918-00	JACK, PIN 1P (LINE OUT FIXED R)	
	*4-928-050-41	(UK).....PANEL, BACK		J702	1-507-918-00	JACK, PIN 1P (LINE OUT VARIABLE R)	
163	*4-928-051-01	BRACKET (TERMINAL)		J901	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (LINE OUT BALANCED)	
164	*4-928-073-01	DAMPER (C)		J902	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (LINE OUT BALANCED)	
165	*4-363-146-00	HEAT SINK, V.OUT		S901	▲1-554-538-00	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)	
166	*3-309-144-01	HEAT SINK		T901	▲1-449-588-11	(AEP,UK).....TRANSFORMER, POWER	
167	*4-888-798-00	BUSHING, RUBBER		T901	▲1-449-590-11	(US,Canadian)...TRANSFORMER, POWER	
168	4-928-068-01	COLLAR (C)		T902	▲1-449-589-11	(AEP,UK).....TRANSFORMER, POWER	
169	7-682-548-09	SCREW (3X8)		T902	▲1-449-591-11	(US,Canadian) ..TRANSFORMER, POWER	
170	7-682-549-04	SCREW +BVT 3X10 (S)					
171	7-682-547-04	SCREW +BVT 3X6 (S)					
172	7-685-246-14	SCREW +RKT 3X8 TYPE2 SLIT					
173	7-685-873-09	SCREW +BVT 3X10 (S)					
174	7-623-308-07	LW 3, TYPE (A)					

No.	Part No.	Description	Remarks
117	7-683-412-05	BOLT, HEXAGON SOCKET 2.6X6	
118	7-621-770-87	SCREW +BVT 2.6X5 (S)	
119	7-682-147-15	SCREW, TR	
903	*1-629-104-11	PC BOARD, PRIMARY	
907	*1-535-688-11	TERMINAL	
908	1-533-183-11	HOLDER, FUSE	
909	*1-629-098-11	PC BOARD, TRANSLATION	
910	*1-629-106-11	PC BOARD, COAX D/O	
911	1-568-130-11	BAR, BUS 3P	
912	*1-629-097-11	PC BOARD, POWER	
913	*1-629-098-11	PC BOARD, BALANCE OUTPUT	
914	*1-629-105-11	PC BOARD, OPT D/O	
915	*A-4618-224-A	(US,Canadian)...MOUNTED PCB, DIGITAL	
	*A-4646-537-A	(AEP,UK).....MOUNTED PCB, DIGITAL	
C199	1-162-179-11	CERAMIC 0.1MF 50V	
F901	▲1-532-279-11	(AEP,UK).....FUSE, TIME-LAG (0.5A)	
F901	▲1-532-824-11	(US,Canadian)...FUSE, GLASS TUBE (1.6A)	

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

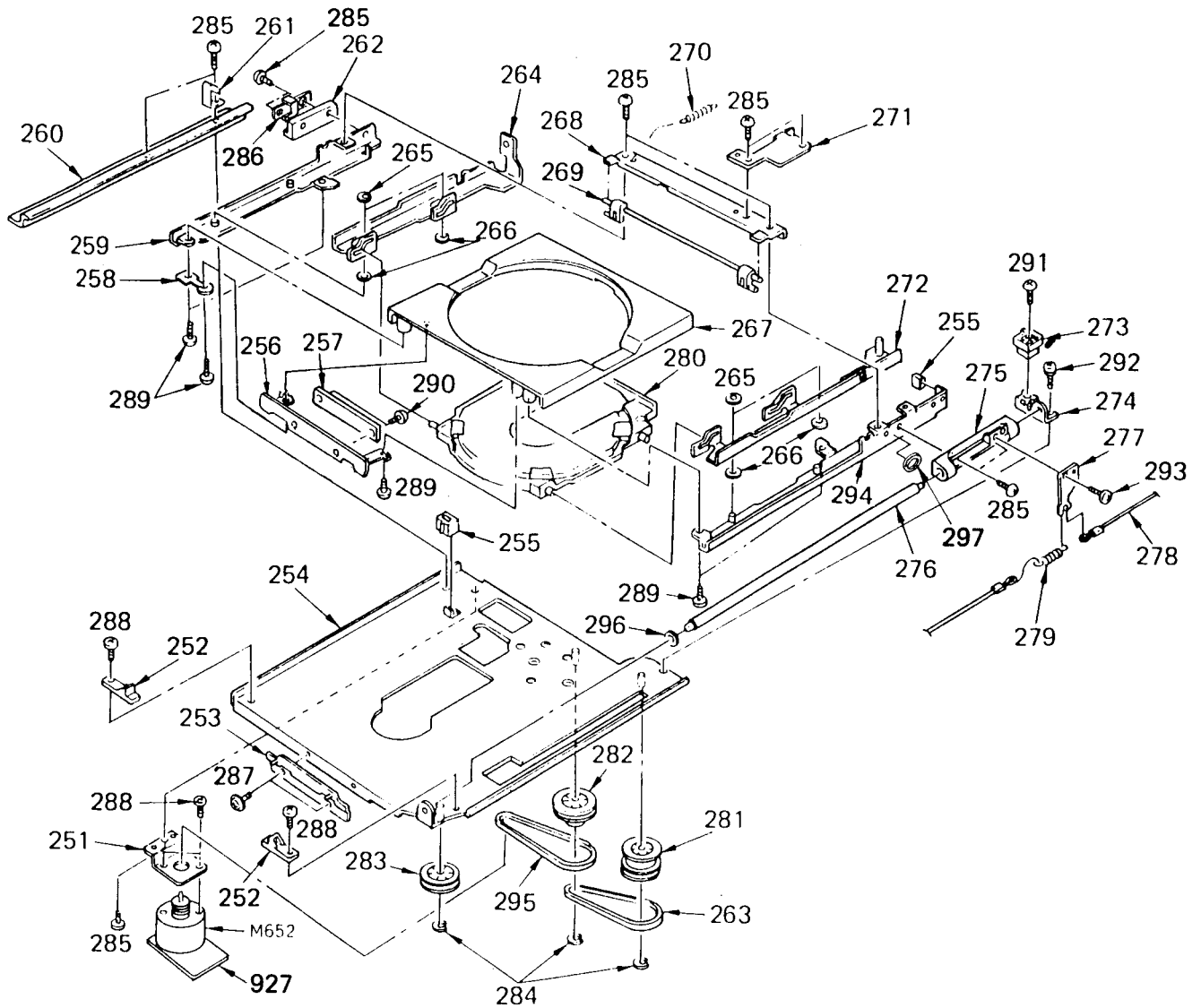
Note:
Les composants identifiés par une marque ▲ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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



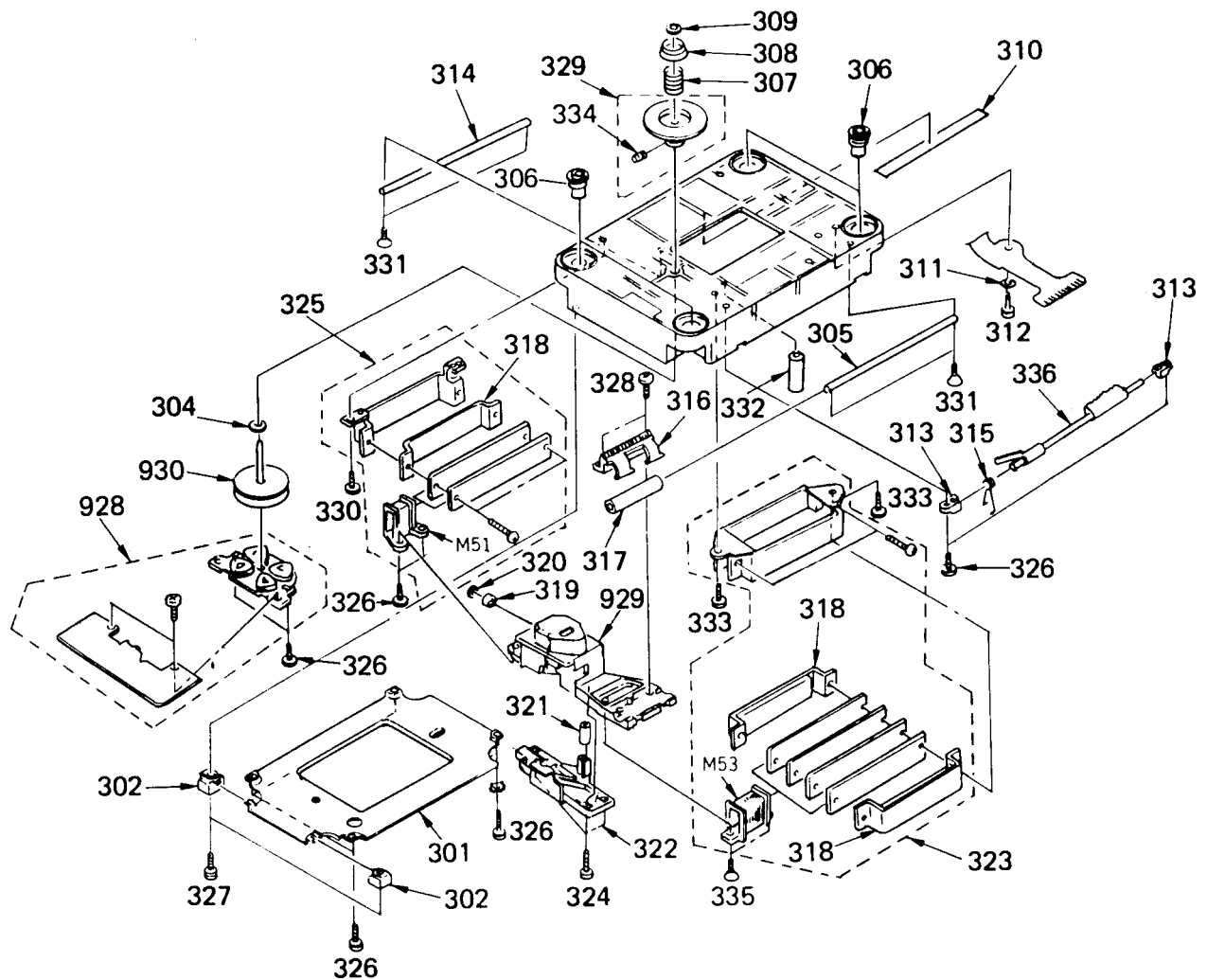
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
201	A-4675-325-A	PULLEY ASSY, PRESS		223	7-686-529-01	SCREW, TOTSU PSW 3X10	
202	*X-4912-509-1	ARM ASSY, C	232	224	7-621-775-00	SCREW +B 2.6X3	
203	4-908-513-01	SHAFT, FULCRUM, C ARM		225	7-621-775-80	SCREW +B 2.6X16	
204	X-4908-513-1	PLATE ASSY, ADJUSTMENT, ARM		226	7-621-773-87	SCREW +BVTT 2.6X10 (S)	
205	4-908-559-01	SPRING, COMPRESSION		227	7-682-646-09	SCREW +PS 3X5	
206	*4-912-543-01	BRACKET (D), SWITCH		228	7-685-870-01	SCREW +BVTT 3X5 (S)	
207	*4-912-569-01	PLATE (B), GROUND		229	7-682-544-09	SCREW +B 3X3	
208	7-624-106-04	STOP RING 3.0, TYPE -E		230	7-621-257-85	SCREW +P 2.3X14	
209	4-912-514-01	GEAR (A)		231	7-624-109-04	STOP RING 5.0, TYPE -E	
210	4-912-525-01	GEAR (B)		232	*4-912-515-01	YOKE	
211	4-912-528-01	GEAR, CAM		233	*4-912-598-01	PLATE (B), GROUND	
212	*X-4912-503-1	CHASSIS ASSY, SUB		923	*1-624-378-11	PC BOARD, OUT SW	
214	4-908-555-01	SPRING, TENSION (C ARM)		924	*1-624-379-11	PC BOARD, C.MOTOR	
215	*4-912-524-01	BRACKET (A), SWITCH		925	*1-624-377-11	PC BOARD, IN SW	
216	*4-912-580-01	COVER, ROPE		926	*1-624-375-11	PC BOARD, L/C SW	
217	*4-908-597-01	COVER, BELT		M651	X-4902-019-1	MOTOR ASSY, CHUCKING	
218	*4-912-588-01	HOLDER (OUT SW)		S651	1-554-205-00	SWITCH, PUSH (LOAD IN DET)	
219	4-912-577-01	SPRING (H), COMPRESSION		S652	1-571-300-11	SWITCH, ROTARY (LOAD OUT DET)	
220	4-912-575-01	SPRING (F), COMPRESSION		S653	1-553-636-00	SWITCH, MICRO (MOTOR SELECT)	
221	4-912-576-01	SPRING (C), COMPRESSION		S654	1-570-447-11	SWITCH, MICRO (CHUCKING)	
222	4-912-578-01	HOLDER, SP					

5-6. MECHANISM SECTION (CDM4F-10A)-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	7-621-759-60	+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		927	*1-624-376-11	PC BOARD, L.MOTOR	
274	*4-912-519-01	RETAINER (RIGHT), SHAFT		M652	X-4912-517-1	MOTOR ASSY, LOADING	
275	4-912-538-01	BEARING (RIGHT), GUIDE					

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



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
301	*4-921-829-01	COVER, MECHANICAL BASE		322	4-921-827-01	COVER, SLIDE BASE	
302	*4-921-823-01	HOLDER		323	A-4608-347-A	MOTOR ASSY	318, M53
303	7-623-421-07	LW 2.6, TYPE B		324	7-621-255-10	SCREW +P 2X3	
304	4-921-853-01	WASHER		325	A-4675-229-A	SENSOR ASSY	M51
305	4-921-821-01	SHAFT (B), SLIDE		326	7-621-773-95	SCREW +P 2.6X6	
306	4-921-816-01	INSULATOR		327	7-621-775-60	SCREW +P 2.6X12	
307	4-908-213-01	SPRING, COMPRESSION		328	7-621-775-10	SCREW +B 2.6X4	
308	4-921-857-01	CAP, CENTERING		329	X-4908-219-1	PULLEY ASSY, DISK	334
309	3-558-708-21	WASHER, STOPPER		330	7-682-545-09	SCREW +B 3X4	
310	9-911-838-XX	CUSHION		331	7-682-248-09	SCREW +K 3X8	
311	7-688-001-01	W 2, SMALL		332	X-4908-221-1	CAM ASSY, LOCK	
312	7-628-253-10	SCREW +PS 2X5		333	7-682-546-09	SCREW +B 3X5	
313	4-908-220-01	HOLDER, ROD		334	7-621-734-09	SET-SCT, HEX. 2.6X3	
314	4-921-822-01	SHAFT (A), SLIDE		335	7-621-559-30	SCREW +K 2.6X5	
315	4-921-817-01	SPRING		336	4-921-825-01	LEVER, LOCK	
316	4-921-826-01	HOLDER, BEARING		928	A-4675-231-A	STATOR ASSY	
317	4-908-221-01	BEARING		929	△ 8-848-083-11	PICKUP, OPTICAL KSS-190A	
318	A-4675-110-A	MAGNET ASSY, LINEAR		930	A-4675-324-A	ROTOR ASSY	
319	4-908-208-01	BEARING (NO-FLANGE), BALL		M51	1-422-198-21	COIL (SENSOR)	
320	7-624-105-04	STOP RING 2.3, TYPE -E		M53	1-422-197-21	COIL (DRIVE)	
321	*4-921-819-01	TUBE, RUBBER					

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.

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: $\mu\mu$ F.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

• MMH: mH, UH: μ H

SEMICONDUCTORS

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

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

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

Ref.No.	Part No.	Description
901	*1-629-099-11	PC BOARD, DISPLAY
902	*1-629-100-11	PC BOARD, A/D SELECT
903	*1-629-104-11	PC BOARD, PRIMARY
907	*1-535-688-11	TERMINAL
908	1-533-183-11	HOLDER, FUSE
909	*1-629-103-11	PC BOARD, TRANSLATION
910	*1-629-106-11	PC BOARD, COAX D/O
911	1-568-130-11	BAR, BUS 3P
912	*1-629-097-11	PC BOARD, POWER
913	*1-629-098-11	PC BOARD, BALANCE OUTPUT
914	*1-629-105-11	PC BOARD, OPT D/O
915	*A-4618-224-A	(US,Canadian)...MOUNTED PCB, DIGITAL
	*A-4646-537-A	(AEP,UK)...MOUNTED PCB, DIGITAL
916	*1-629-101-11	PC BOARD, H.P
917	1-465-046-11	REMOTE COMMANDER
918	*1-629-102-11	PC BOARD, VOLUME
919	Δ 1-555-795-11	(AEP).....CORD, POWER
	Δ 1-556-035-11	(UK).....CORD, POWER
	Δ 1-559-479-11	(US,Canadian)...CORD, POWER
920	1-568-129-11	BAR, BUS 8P
921	1-568-131-11	BAR, BUS 9P
922	*A-4617-048-A	MOUNTED PCB, AUDIO
923	*1-624-378-11	PC BOARD, OUT SW
924	*1-624-379-11	PC BOARD, C.MOTOR
925	*1-624-377-11	PC BOARD, IN SW
926	*1-624-375-11	PC BOARD, L/C SW
927	*1-624-376-11	PC BOARD, L.MOTOR
928	A-4675-231-A	STATOR ASSY
929	Δ 8-848-083-11	PICKUP, OPTICAL KSS-190A
930	A-4675-324-A	ROTOR ASSY
BP501	*1-535-116-00	TERMINAL 3P
BP901	*1-535-116-00	TERMINAL 3P
BP902	*1-535-120-00	TERMINAL 3P
BP903	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P
BP904	*1-535-115-00	TERMINAL 2P
BP905	*1-535-115-00	TERMINAL 2P
BP906	*1-535-115-00	(AEP,UK)...TERMINAL 2P
BP921	*1-535-122-00	TERMINAL 3P
BP922	*1-535-118-00	TERMINAL 3P
C102	1-124-443-00	ELECT 100MF 20% 10V
C105	1-162-198-31	CERAMIC 8.2PF 10% 50V
C106	1-126-233-11	ELECT 22MF 20% 25V
C107	1-106-351-00	MYLAR 0.0022MF 5% 50V
C108	1-136-159-00	FILM 0.033MF 5% 50V
C109	1-164-159-11	CERAMIC 0.1MF 50V

Ref.No.	Part No.	Description
C110	1-126-233-11	ELECT 22MF 20% 25V
C111	1-136-153-00	FILM 0.01MF 5% 50V
C112	1-136-153-00	FILM 0.01MF 5% 50V
C113	1-126-233-11	ELECT 22MF 20% 25V
C114	1-164-159-11	CERAMIC 0.1MF 50V
C115	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C116	1-130-480-00	MYLAR 0.0056MF 5% 50V
C117	1-124-902-00	ELECT 0.47MF 20% 50V
C199	1-162-179-11	CERAMIC 0.1MF 50V
C200	1-161-379-00	CERAMIC 0.01MF 20% 16V
C201	1-124-478-11	ELECT 100MF 20% 25V
C202	1-124-478-11	ELECT 100MF 20% 25V
C204	1-164-159-11	CERAMIC 0.1MF 50V
C205	1-162-294-31	CERAMIC 0.001MF 10% 50V
C206	1-162-294-31	CERAMIC 0.001MF 10% 50V
C207	1-164-159-11	CERAMIC 0.1MF 50V
C208	1-106-363-00	MYLAR 0.0068MF 5% 50V
C209	1-136-168-00	FILM 0.18MF 5% 50V
C210	1-164-159-11	CERAMIC 0.1MF 50V
C211	1-164-159-11	CERAMIC 0.1MF 50V
C212	1-124-478-11	ELECT 100MF 20% 25V
C213	1-124-478-11	ELECT 100MF 20% 25V
C215	1-136-169-00	FILM 0.22MF 5% 50V
C216	1-136-159-00	FILM 0.033MF 5% 50V
C217	1-136-165-00	FILM 0.1MF 5% 50V
C218	1-123-382-00	ELECT 3.3MF 20% 50V
C219	1-136-159-00	FILM 0.033MF 5% 50V
C220	1-136-165-00	FILM 0.1MF 5% 50V
C221	1-106-359-00	MYLAR 0.0047MF 5% 50V
C222	1-124-499-11	ELECT 1MF 20% 50V
C223	1-124-927-11	ELECT 4.7MF 20% 50V
C224	1-126-233-11	ELECT 22MF 20% 25V
C225	1-162-294-31	CERAMIC 0.001MF 10% 50V
C226	1-162-282-31	CERAMIC 100PF 10% 50V
C227	1-126-233-11	ELECT 22MF 20% 25V
C228	1-130-472-00	MYLAR 0.0012MF 5% 50V
C229	1-164-159-11	CERAMIC 0.1MF 50V
C230	1-106-359-00	MYLAR 0.0047MF 5% 50V
C231	1-126-233-11	ELECT 22MF 20% 25V
C232	1-164-159-11	CERAMIC 0.1MF 50V
C233	1-136-165-00	FILM 0.1MF 5% 50V
C234	1-124-472-11	ELECT 47OMF 20% 10V
C302	1-126-233-11	ELECT 22MF 20% 25V
C303	1-161-379-00	CERAMIC 0.01MF 20% 16V
C304	1-124-902-00	ELECT 0.47MF 20% 50V
C305	1-136-159-00	FILM 0.033MF 5% 50V

Ref.No.	Part No.	Description							
C306	1-124-478-11	ELECT	100MF	20%	25V				
C308	1-164-159-11	CERAMIC	0.1MF		50V				
C321	1-164-159-11	CERAMIC	0.1MF		50V				
C322	1-164-159-11	CERAMIC	0.1MF		50V				
C323	1-126-378-51	ELECT	39000MF		5.5V				
C371	1-126-233-11	ELECT	22MF	20%	25V				
C372	1-124-499-11	ELECT	1MF	20%	50V				
C381	1-124-360-00	ELECT	1000MF	20%	16V				
C382	1-124-360-00	ELECT	1000MF	20%	16V				
C383	1-124-472-11	ELECT	470MF	20%	10V				
C385	1-124-472-11	ELECT	470MF	20%	10V				
C386	1-124-472-11	ELECT	470MF	20%	10V				
C387	1-126-233-11	ELECT	22MF	20%	25V				
C388	1-124-443-00	ELECT	100MF	20%	10V				
C389	1-162-294-31	CERAMIC	0.001MF	10%	50V				
C406	1-162-211-31	CERAMIC	33PF	5%	50V				
C407	1-126-101-11	ELECT	100MF	20%	10V				
C408	1-162-179-11	CERAMIC	0.1MF		50V				
C409	1-162-179-11	CERAMIC	0.1MF		50V				
C410	1-162-179-11	CERAMIC	0.1MF		50V				
C411	1-162-179-11	CERAMIC	0.1MF		50V				
C412	1-162-179-11	CERAMIC	0.1MF		50V				
C415	1-126-103-11	ELECT	470MF	20%	16V				
C418	1-107-205-00	MICA	13PF	50%	500V				
C419	1-107-206-00	MICA	15PF	5%	500V				
C420	1-162-179-11	CERAMIC	0.1MF		50V				
C421	1-124-713-11	ELECT	470MF	20%	35V				
C422	1-162-179-11	CERAMIC	0.1MF		50V				
C425	1-162-207-31	CERAMIC	22PF	5%	50V				
C501	1-124-922-11	ELECT	1000MF	20%	50V				
C502	1-124-484-11	ELECT	220MF	20%	35V				
C503	1-107-210-00	MICA	22PF	5%	500V				
C504	1-124-921-11	ELECT	470MF	20%	50V				
C505	1-124-572-11	ELECT	100MF	20%	50V				
C551	1-124-922-11	ELECT	1000MF	20%	50V				
C552	1-124-484-11	ELECT	220MF	20%	35V				
C553	1-107-210-00	MICA	22PF	5%	500V				
C554	1-124-921-11	ELECT	470MF	20%	50V				
C555	1-124-572-11	ELECT	100MF	20%	50V				
C601	1-126-103-11	ELECT	470MF	20%	16V				
C602	1-162-179-11	CERAMIC	0.1MF		50V				
C603	1-126-103-11	ELECT	470MF	20%	16V				
C604	1-162-179-11	CERAMIC	0.1MF		50V				
C605	1-126-052-11	ELECT	100MF	20%	50V				
C606	1-126-052-11	ELECT	100MF	20%	50V				
C607	1-126-052-11	ELECT	100MF	20%	50V				
C608	1-104-240-00	POLYSTYRENE	0.001MF	5%	125V				
C610	1-130-483-00	MYLAR	0.01MF	5%	50V				
C611	1-130-483-00	MYLAR	0.01MF	5%	50V				
C612	1-136-592-11	FILM	0.003MF	2%	100V				
C613	1-136-592-11	FILM	0.003MF	2%	100V				
C614	1-107-210-00	MICA	22PF	5%	500V				
C615	1-130-483-00	MYLAR	0.01MF	5%	50V				
C616	1-130-483-00	MYLAR	0.01MF	5%	50V				
C617	1-136-592-11	FILM	0.003MF	2%	100V				
C619	1-107-210-00	MICA	22PF	5%	500V				
C622	1-136-764-11	FILM	10MF	10%	100V				
C623	1-136-763-11	FILM	1MF	10%	100V				
C624	1-162-179-11	CERAMIC	0.1MF		50V				
C626	1-130-483-00	MYLAR	0.01MF	5%	50V				
C651	1-124-748-11	ELECT	22MF	20%	100V				
C652	1-123-334-00	ELECT	220MF	20%	25V				
C653	1-126-059-11	ELECT	10MF	20%	50V				
C654	1-126-059-11	ELECT	10MF	20%	50V				
C655	1-130-471-00	MYLAR	0.001MF	5%	50V				
C656	1-136-157-00	FILM	0.022MF	5%	50V				
C657	1-136-157-00	FILM	0.022MF	5%	50V				
C658	1-136-157-00	FILM	0.022MF	5%	50V				
C659	1-130-471-00	MYLAR	0.001MF	5%	50V				
C691	1-162-290-31	CERAMIC	470PF	10%	50V				
C705	1-126-052-11	ELECT	100MF	20%	50V				
C706	1-126-052-11	ELECT	100MF	20%	50V				
C707	1-126-052-11	ELECT	100MF	20%	50V				
C708	1-104-240-00	POLYSTYRENE	0.001MF	5%	125V				
C710	1-130-483-00	MYLAR	0.01MF	5%	50V				
C711	1-130-483-00	MYLAR	0.01MF	5%	50V				
C712	1-136-592-11	FILM	0.003MF	2%	100V				
C713	1-136-592-11	FILM	0.003MF	2%	100V				
C714	1-107-210-00	MICA	22PF	5%	500V				
C715	1-130-483-00	MYLAR	0.01MF	5%	50V				
C716	1-130-483-00	MYLAR	0.01MF	5%	50V				
C717	1-136-592-11	FILM	0.003MF	2%	100V				
C719	1-107-210-00	MICA	22PF	5%	500V				
C722	1-136-764-11	FILM	10MF	10%	100V				
C723	1-136-763-11	FILM	1MF	10%	100V				
C724	1-162-179-11	CERAMIC	0.1MF		50V				
C726	1-130-483-00	MYLAR	0.01MF	5%	50V				
C751	1-124-748-11	ELECT	22MF	20%	100V				
C752	1-123-334-00	ELECT	220MF	20%	25V				
C753	1-126-059-11	ELECT	10MF	20%	50V				
C754	1-126-059-11	ELECT	10MF	20%	50V				
C791	1-162-290-31	CERAMIC	470PF	10%	50V				
C801	1-164-159-11	CERAMIC	0.1MF		50V				
C804	1-164-159-11	CERAMIC	0.1MF		50V				
C805	1-124-443-00	ELECT	100MF	20%	10V				
C806	1-164-159-11	CERAMIC	0.1MF		50V				
C807	1-164-159-11	CERAMIC	0.1MF		50V				
C851	1-136-921-11	FILM	1MF	5%	50V				
C852	1-162-179-11	CERAMIC	0.1MF		50V				
C853	1-162-179-11	CERAMIC	0.1MF		50V				
C871	1-162-179-11	CERAMIC	0.1MF		50V				
C900	1-124-925-11	ELECT	2.2MF	20%	50V				
C901	1-136-153-00	FILM	0.01MF	5%	50V				
C902	1-136-177-00	FILM	1MF	5%	50V				
C903	1-126-314-11	ELECT	12000MF	20%	16V				
C904	1-126-314-11	ELECT	12000MF	20%	16V				
C905	1-124-360-00	ELECT	1000MF	20%	16V				
C906	1-124-360-00	ELECT	1000MF	20%	16V				
C907	1-124-360-00	ELECT	1000MF	20%	16V				
C908	1-124-925-11	ELECT	2.2MF	20%	50V				
C909	1-124-925-11	ELECT	2.2MF	20%	50V				
C910	1-162-179-11	CERAMIC	0.1MF		50V				
C911	1-124-912-11	ELECT	330MF	20%	50V				
C912	1-124-912-11	ELECT	330MF	20%	50V				

Ref.No.	Part No.	Description			
C913	1-124-912-11	ELECT	330MF	20%	50V
C914	1-124-912-11	ELECT	330MF	20%	50V
C915	1-124-911-11	ELECT	220MF	20%	50V
C916	1-162-179-11	CERAMIC	0.1MF		50V
C917	1-124-911-11	ELECT	220MF	20%	50V
C918	1-162-179-11	CERAMIC	0.1MF		50V
C919	1-164-159-11	CERAMIC	0.1MF		50V
C920	1-164-159-11	CERAMIC	0.1MF		50V
C921	1-125-551-11	ELECT	3300MF	20%	63V
C922	1-125-551-11	ELECT	3300MF	20%	63V
C923	1-125-551-11	ELECT	3300MF	20%	63V
C924	1-125-551-11	ELECT	3300MF	20%	63V
C925	1-124-360-00	ELECT	1000MF	20%	16V
C926	1-124-360-00	ELECT	1000MF	20%	16V
C927	1-136-165-00	FILM	0.1MF	5%	50V
C928	1-136-177-00	FILM	1MF	5%	50V
C951	1-107-210-00	MICA	22PF	5%	500V
C952	1-124-572-11	ELECT	100MF	20%	50V
C955	1-124-713-11	ELECT	470MF	20%	35V
C957	1-136-576-11	FILM	0.1MF	10%	200V
C961	1-107-210-00	MICA	22PF	5%	500V
C962	1-124-572-11	ELECT	100MF	20%	50V
C965	1-124-713-11	ELECT	470MF	20%	35V
C967	1-136-576-11	FILM	0.1MF	10%	200V
C970	△.1-161-744-00	CERAMIC	0.01MF		400V
C971	△.1-161-744-00	(US,Canadian)			
		...CERAMIC 0.01MF			400V
C971	△.1-162-599-12	(AEP,UK)...CERAMIC 0.0047MF	20%		400V
C972	△.1-161-742-00	CERAMIC	0.0022MF	20%	400V
C973	△.1-161-742-00	CERAMIC	0.0022MF	20%	400V
C974	△.1-161-742-00	CERAMIC	0.0022MF	20%	400V
C975	△.1-161-742-00	CERAMIC	0.0022MF	20%	400V
CN001	*1-562-883-11	SOCKET, CONNECTOR 20P			
CN002	*1-564-339-61	PIN, CONNECTOR 5P			
CN003	*1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P			
CN101	*1-564-338-71	PIN, CONNECTOR 4P			
CN102	*1-564-340-00	PIN, CONNECTOR 6P			
CN201	*1-564-339-00	PIN, CONNECTOR 5P			
CN202	*1-564-338-61	PIN, CONNECTOR 4P			
CN203	*1-564-338-00	PIN, CONNECTOR 4P			
CN204	*1-564-338-81	PIN, CONNECTOR 4P			
CN301	*1-564-342-11	PIN, CONNECTOR 8P			
CN302	*1-564-337-00	PIN, CONNECTOR 3P			
CN351	*1-564-336-00	PIN, CONNECTOR 2P			
CN352	*1-564-505-11	PLUG, CONNECTOR 2P			
CN353	*1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P			
CN371	*1-564-506-11	PLUG, CONNECTOR 3P			
CN372	*1-564-337-61	PIN, CONNECTOR 3P			
CN381	*1-564-510-11	PLUG, CONNECTOR 7P			
CN671	*1-564-518-11	PLUG, CONNECTOR 3P			
CN691	*1-564-519-11	PLUG, CONNECTOR 4P			
CN771	*1-564-518-11	PLUG, CONNECTOR 3P			
CN831	*1-564-337-81	PIN, CONNECTOR 3P			
CN851	*1-564-519-11	PLUG, CONNECTOR 4P			
CN951	*1-564-505-11	PLUG, CONNECTOR 2P			
CN952	*1-564-505-11	PLUG, CONNECTOR 2P			
CN953	*1-564-506-11	PLUG, CONNECTOR 3P			
CN954	*1-564-505-11	PLUG, CONNECTOR 2P			
CN961	*1-564-505-11	PLUG, CONNECTOR 2P			
CN962	*1-564-505-11	PLUG, CONNECTOR 2P			

Ref.No.	Part No.	Description
CNP401	*1-564-711-11	PIN, CONNECTOR (SMALL TYPE) 9P
CNP403	*1-564-507-11	PLUG, CONNECTOR 4P
CNP502	*1-564-506-11	PLUG, CONNECTOR 3P
CNP601	*1-564-505-11	PLUG, CONNECTOR 2P
CNP602	*1-564-505-11	PLUG, CONNECTOR 2P
CNP603	*1-564-505-11	PLUG, CONNECTOR 2P
CNP604	*1-564-505-11	PLUG, CONNECTOR 2P
CNP605	*1-564-506-11	PLUG, CONNECTOR 3P
CNP631	*1-564-505-11	PLUG, CONNECTOR 2P
CNP632	*1-564-505-11	PLUG, CONNECTOR 2P
CNP633	*1-564-505-11	PLUG, CONNECTOR 2P
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
CNP701	*1-564-505-11	PLUG, CONNECTOR 2P
CNP702	*1-564-505-11	PLUG, CONNECTOR 2P
CNP703	*1-564-505-11	PLUG, CONNECTOR 2P
CNP704	*1-564-505-11	PLUG, CONNECTOR 2P
CNP705	*1-564-506-11	PLUG, CONNECTOR 3P
CP601	1-233-172-11	COMPOSITION CIRCUIT BLOCK
CP602	1-233-172-11	COMPOSITION CIRCUIT BLOCK
CP603	1-232-650-11	COMPOSITION CIRCUIT BLOCK
CP701	1-233-172-11	COMPOSITION CIRCUIT BLOCK
CP702	1-233-172-11	COMPOSITION CIRCUIT BLOCK
CP703	1-232-650-11	COMPOSITION CIRCUIT BLOCK
D101	8-719-107-94	DIODE 1SS202-1
D201	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
D501	8-719-224-11	DIODE 10YD2.4A
D502	8-719-902-87	DIODE EQB01-080
D551	8-719-224-11	DIODE 10YD2.4A
D552	8-719-902-87	DIODE EQB01-080
D631	8-719-107-94	DIODE 1SS202-1
D632	8-719-107-94	DIODE 1SS202-1
D651	8-719-200-02	DIODE 10E-2
D652	8-719-200-02	DIODE 10E-2
D653	8-719-200-02	DIODE 10E-2
D654	8-719-200-02	DIODE 10E-2
D801	8-719-974-70	DIODE MU20-5105
D802	8-719-974-69	DIODE MU20-4105
D803	8-719-974-68	DIODE MU20-3105
D804	8-719-974-67	DIODE MU20-2105
D805	8-719-907-75	DIODE AA5534S
D806	8-719-907-81	DIODE BG5534S
D807	8-719-907-81	DIODE BG5534S
D808	8-719-921-01	DIODE EBR5534S
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

Note:
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Note:
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Ref.No.	Part No.	Description
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
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	△.1-532-279-11	(AEP,UK).....FUSE, TIME-LAG (0.5A)
F901	△.1-532-824-11	(US,Canadian)...FUSE, GLASS TUBE(1.6A)
FLD801	1-519-480-11	INDICATOR TUBE, FLUORESCENT
IC101	8-752-034-00	IC CXA1081S
IC201	8-759-202-01	IC TA7256P
IC202	8-759-035-28	IC CXA-1291P
IC204	8-752-032-33	IC CXA1182S
IC205	8-759-601-02	IC M5218P
IC302	8-752-325-59	IC CXD1165Q
IC351	8-759-631-47	IC M50747-161SP
IC352	8-759-820-64	IC LC9600R-183
IC380	8-759-202-11	IC TC74HC00P
IC381	8-752-328-61	IC CXD1244S
IC401	8-759-202-13	IC TC74HCU04P
IC407	8-719-971-39	IC HCPL-2400
IC409	8-759-202-13	IC TC74HCU04P
IC410	8-759-978-53	IC CXD8003S
IC413	8-759-000-99	IC MC74HC74N
IC415	8-759-604-29	IC M5F7805
IC416	8-759-604-29	IC M5F7805
IC601	8-759-604-51	IC M5F7912
IC602	8-759-604-29	IC M5F7805
IC603	8-759-979-00	IC PCM58P-S
IC604	8-759-905-42	IC NE5534P
IC605	8-759-980-72	IC AD42712
IC606	8-759-905-42	IC NE5534P
IC631	8-719-902-56	IC PC817
IC651	8-759-701-21	IC NJM5532D-D
IC703	8-759-979-00	IC PCM58P-S
IC704	8-759-905-42	IC NE5534P
IC705	8-759-980-72	IC AD42712
IC706	8-759-905-42	IC NE5534P
IC751	8-759-701-21	IC NJM5532D-D
IC801	8-752-806-29	IC CXP5058H-193Q
IC802	8-741-138-70	IC BX-1387
IC851	8-759-202-13	IC TC74HCU04P
IC871	8-759-977-71	IC GP1F31T
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

Ref.No.	Part No.	Description
J601	1-507-918-00	JACK, PIN 1P (LINE OUT FIXED L)
J602	1-507-918-00	JACK, PIN 1P (LINE OUT VARIABLE L)
J691	1-507-796-61	JACK (PHONES)
J701	1-507-918-00	JACK, PIN 1P (LINE OUT FIXED R)
J702	1-507-918-00	JACK, PIN 1P (LINE OUT VARIABLE R)
J851	1-507-567-71	JACK, PIN 1P (DIGITAL OUT COAXIAL)
J901	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (LINE OUT BALANCED)
J902	1-564-256-00	CONNECTOR (RECEPTACLE) 3P (LINE OUT BALANCED)
L401	1-410-953-11	INDUCTOR, SMALL TYPE (OUH)
L402	1-410-953-11	INDUCTOR, SMALL TYPE (OUH)
L403	1-410-953-11	INDUCTOR, SMALL TYPE (OUH)
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)...LINK, IC
PS382	△.1-532-675-00	(AEP,UK)...LINK, IC
PS911	△.1-532-675-00	(AEP,UK)...LINK, IC
Q101	8-729-140-97	TRANSISTOR 2SB734-34
Q205	8-729-900-89	TRANSISTOR DTC114ES
Q206	8-729-900-80	TRANSISTOR DTC144ES
Q207	8-729-806-10	TRANSISTOR 2SA1348
Q208	8-729-900-74	TRANSISTOR DTC143TS
Q371	8-729-900-89	TRANSISTOR DTC144ES
Q372	8-729-900-89	TRANSISTOR DTC144ES
Q380	8-729-806-10	TRANSISTOR 2SA1348
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 2SD1388
Q651	8-729-177-42	TRANSISTOR 2SD774-3
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
R101	1-247-806-11	CARBON 91 5% 1/4W
R102	1-214-689-11	METAL 22 1% 1/4W
R103	1-249-417-11	CARBON 1K 5% 1/4W
R104	1-249-428-11	CARBON 8.2K 5% 1/4W
R105	1-249-421-11	CARBON 2.2K 5% 1/4W
R106	1-249-428-11	CARBON 8.2K 5% 1/4W
R107	1-247-860-11	CARBON 16K 5% 1/4W
R108	1-249-425-11	CARBON 4.7K 5% 1/4W
R109	1-249-425-11	CARBON 4.7K 5% 1/4W
R110	1-249-432-11	CARBON 18K 5% 1/4W
R111	1-249-432-11	CARBON 18K 5% 1/4W
R112	1-249-441-11	CARBON 100K 5% 1/4W

Note:

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Note:

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Ref.No.	Part No.	Description			
R203	1-249-393-11	CARBON	10	5%	1/4W
R205	1-247-885-00	CARBON	180K	5%	1/4W
R206	1-247-881-00	CARBON	120K	5%	1/4W
R207	1-247-881-00	CARBON	120K	5%	1/4W
R208	1-247-885-00	CARBON	180K	5%	1/4W
R209	1-249-442-11	CARBON	510	5%	1/4W
R210	1-249-417-11	CARBON	1K	5%	1/4W
R211	1-249-437-11	CARBON	47K	5%	1/4W
R212	1-249-433-11	CARBON	22K	5%	1/4W
R214	1-247-850-11	CARBON	6.2K	5%	1/4W
R216	1-249-393-11	CARBON	10	5%	1/4W
R217	1-247-901-11	CARBON	820K	5%	1/4W
R218	1-247-881-00	CARBON	120K	5%	1/4W
R219	1-249-425-11	CARBON	4.7K	5%	1/4W
R222	1-247-882-11	CARBON	130K	5%	1/4W
R223	1-249-393-11	CARBON	10	5%	1/4W
R224	1-249-393-11	CARBON	10	5%	1/4W
R228	1-247-896-11	CARBON	510K	5%	1/4W
R229	1-249-431-11	CARBON	15K	5%	1/4W
R230	1-249-439-11	CARBON	68K	5%	1/4W
R231	1-249-440-11	CARBON	82K	5%	1/4W
R232	1-249-429-11	CARBON	10K	5%	1/4W
R233	1-249-414-11	CARBON	560	5%	1/4W
R234	1-249-441-11	CARBON	100K	5%	1/4W
R235	1-215-434-00	METAL	3.6K	1%	1/6W
R236	1-249-433-11	CARBON	22K	5%	1/4W
R237	1-249-441-11	CARBON	100K	5%	1/4W
R238	1-249-417-11	CARBON	1K	5%	1/4W
R239	1-249-417-11	CARBON	1K	5%	1/4W
R240	1-249-417-11	CARBON	1K	5%	1/4W
R241	1-249-417-11	CARBON	1K	5%	1/4W
R243	1-247-854-11	CARBON	9.1K	5%	1/4W
R244	1-247-854-11	CARBON	9.1K	5%	1/4W
R245	1-249-393-11	CARBON	10	5%	1/4W
R246	△ 1-217-469-00	FUSIBLE	1	5%	1W
R247	1-249-406-11	CARBON	120	5%	1/4W
R248	1-249-416-11	CARBON	820	5%	1/4W
R249	1-249-441-11	CARBON	100K	5%	1/4W
R301	1-247-903-00	CARBON	1M	5%	1/4W
R303	1-215-469-00	METAL	100K	1%	1/6W
R304	1-215-469-00	METAL	100K	1%	1/6W
R305	1-249-429-11	CARBON	10K	5%	1/4W
R306	1-249-441-11	CARBON	100K	5%	1/4W
R307	1-249-429-11	CARBON	10K	5%	1/4W
R308	1-249-417-11	CARBON	1K	5%	1/4W
R309	1-249-433-11	CARBON	22K	5%	1/4W
R310	1-247-903-00	CARBON	1M	5%	1/4W
R311	1-249-429-11	CARBON	10K	5%	1/4W
R312	1-249-429-11	CARBON	10K	5%	1/4W
R313	1-249-429-11	CARBON	10K	5%	1/4W
R314	1-249-429-11	CARBON	10K	5%	1/4W
R315	1-249-429-11	CARBON	10K	5%	1/4W
R316	1-249-429-11	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	1-249-417-11	CARBON	1K	5%	1/4W

Ref.No.	Part No.	Description			
R321	1-249-405-11	CARBON	100	5%	1/4W
R322	1-249-417-11	CARBON	1K	5%	1/4W
R323	1-249-417-11	CARBON	1K	5%	1/4W
R324	1-249-417-11	CARBON	1K	5%	1/4W
R325	1-249-429-11	CARBON	10K	5%	1/4W
R326	1-249-429-11	CARBON	10K	5%	1/4W
R329	1-249-429-11	CARBON	10K	5%	1/4W
R371	1-249-429-11	CARBON	10K	5%	1/4W
R372	1-249-441-11	CARBON	100K	5%	1/4W
R381	1-249-409-11	CARBON	220	5%	1/4W
R382	1-249-417-11	CARBON	1K	5%	1/4W
R383	1-249-417-11	CARBON	1K	5%	1/4W
R384	1-249-409-11	CARBON	220	5%	1/4W
R387	1-249-429-11	CARBON	10K	5%	1/4W
R388	1-249-413-11	CARBON	470	5%	1/4W
R413	1-249-411-11	CARBON	330	5%	1/4W
R414	1-249-411-11	CARBON	330	5%	1/4W
R415	1-249-411-11	CARBON	330	5%	1/4W
R416	1-249-411-11	CARBON	330	5%	1/4W
R417	1-249-411-11	CARBON	330	5%	1/4W
R420	1-249-417-11	CARBON	1K	5%	1/4W
R421	1-249-413-11	CARBON	470	5%	1/4W
R422	1-249-413-11	CARBON	470	5%	1/4W
R423	1-249-413-11	CARBON	470	5%	1/4W
R424	1-249-405-11	CARBON	100	5%	1/4W
R429	1-249-417-11	CARBON	1K	5%	1/4W
R430	1-249-411-11	CARBON	330	5%	1/4W
R431	1-214-937-00	CARBON	1M	5%	1/2W
R432	1-247-704-11	CARBON	220	5%	1/4W
R437	1-249-411-11	CARBON	330	5%	1/4W
R440	1-249-437-11	CARBON	47K	5%	1/4W
R441	1-249-441-11	CARBON	100K	5%	1/4W
R450	1-249-413-11	CARBON	470	5%	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
R601	1-215-480-00	METAL	300K	1%	1/6W
R602	1-215-481-00	METAL	330K	1%	1/6W
R603	1-215-481-00	METAL	330K	1%	1/6W
R604	1-215-481-00	METAL	330K	1%	1/6W
R605	1-259-569-11	CARBON	3.9K	1%	1/2W
R606	1-259-558-11	CARBON	1.3K	1%	1/2W
R608	1-249-926-11	CARBON	1.3K	1%	1/4W
R609	1-249-926-11	CARBON	1.3K	1%	1/4W
R610	1-249-926-11	CARBON	1.3K	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

Note:

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

Note:

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

Ref.No.	Part No.	Description			
R631	1-249-417-11	CARBON	1K	5%	1/4W
R651	1-249-465-11	CARBON	47K	5%	1/4W
R652	1-249-465-11	CARBON	47K	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
R657	1-249-417-11	CARBON	1K	5%	1/4W
R658	1-249-417-11	CARBON	1K	5%	1/4W
R701	1-215-480-00	METAL	300K	1%	1/6W
R702	1-215-481-00	METAL	330K	1%	1/6W
R703	1-215-481-00	METAL	330K	1%	1/6W
R704	1-215-481-00	METAL	330K	1%	1/6W
R705	1-259-569-11	CARBON	3.9K	1%	1/2W
R706	1-259-558-11	CARBON	1.3K	1%	1/2W
R708	1-249-926-11	CARBON	1.3K	1%	1/4W
R709	1-249-926-11	CARBON	1.3K	1%	1/4W
R710	1-249-926-11	CARBON	1.3K	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
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
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	△.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	△.1-212-875-00	FUSIBLE	56	5%	1/4W F

Ref.No.	Part No.	Description			
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
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
RV101	1-238-398-11	RES, ADJ. METAL GLAZE 20K			
RV102	1-238-398-11	RES, ADJ. METAL GLAZE 20K			
RV103	1-238-398-11	RES, ADJ. METAL GLAZE 20K			
RV104	1-238-396-11	RES, ADJ. METAL GLAZE 5K			
RV201	1-238-394-11	RES, ADJ. METAL GLAZE 1K			
RV601	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV602	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV603	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV604	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV671	1-238-377-11	RES, VAR. CARBON 20K/20K (LINE OUT PHONE LEVEL)			
RV701	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV702	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV703	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
RV704	1-228-997-00	RES, ADJ. METAL GLAZE 100K			
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 (▶)			
S803	1-554-596-21	SWITCH, KEY BOARD ()			
S804	1-554-596-21	SWITCH, KEY BOARD (■)			
S805	1-554-596-21	SWITCH, KEY BOARD (DISPLAY ON/OFF)			
S806	1-554-596-21	SWITCH, KEY BOARD (AMS ◀▶)			
S807	1-554-596-21	SWITCH, KEY BOARD (AMS ◀▶)			
S808	1-554-596-21	SWITCH, KEY BOARD (◀◀)			
S809	1-554-596-21	SWITCH, KEY BOARD (▶▶)			
S831	1-571-744-11	SWITCH, PUSH (1 KEY)(OUTPUT SELECTOR)			
S901	△.1-554-538-00	SWITCH, PUSH (AC POWER)(1 KEY)(POWER)			
T851	1-459-795-11	COIL (WITH CORE)			
T901	△.1-449-588-11	(AEP,UK).....TRANSFORMER, POWER			
T901	△.1-449-590-11	(US,Canadian)...TRANSFORMER, POWER			
T902	△.1-449-589-11	(AEP,UK)TRANSFORMER, POWER			
T902	△.1-449-591-11	(US,Canadian)...TRANSFORMER, POWER			
T951	1-424-189-11	TRANSFORMER, LINE			
T961	1-424-189-11	TRANSFORMER, LINE			

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.

<u>Ref.No.</u>	<u>Part No.</u>	<u>Description</u>
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	1-577-157-11	VIBRATOR, CERAMIC (8MHZ)
X401	1-567-926-11	VIBRATOR, CRYSTAL (4MHZ)
X801	1-577-082-11	VIBRATOR, CERAMIC (16.9344MHZ)

ACCESSORY & PACKING MATERIAL

1-465-046-11	REMOTE COMMANDER (RM-0770)
1-558-271-11	CORD, CONNECTION
3-786-777-11	(Canadian,AEP,UK)...MANUAL, INSTRUCTION
3-786-777-21	(US).....MANUAL, INSTRUCTION
3-786-777-41	(AEP).....MANUAL, INSTRUCTION
*4-912-947-01	KEY, LOCK
4-847-802-00	(US, Canadian, AEP)...SCREW
4-928-079-01	COVER, BATTERY (for REMOTE COMMANDER)
*4-928-005-01	CUSHION
*4-928-082-01	INDIVIDUAL CARTON