

CDP-X707ES

SERVICE MANUAL

<i>US</i>	<i>Model</i>
<i>Canadian</i>	<i>Model</i>
<i>AEP</i>	<i>Model</i>

- This set is almost the same as model CDP-X779ES (US, Canadian, AEP) previously produced.
Therefore, see the service manual for the information which is not contained in this service manual.



COMPACT DISC PLAYER
SONY®

• Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

Page	CDP-X779ES					CDP-X707ES				
	Ref.No	Part.No	Description	Remark		Ref.No	Part.No	Description	Remark	
34	56	4-942-459-01	ESCUTCHEON, KNOB (AEP :BLACK)		56	4-942-459-01	ESCUTCHEON, KNOB (Canadian, AEP, G:BLACK)			
	56	4-942-459-11	ESCUTCHEON, (KNOB) (US, Canadian, AEP:GOLD)		56	4-942-459-11	ESCUTCHEON, KNOB (US, AEP, G:GOLD)			
	57	4-947-968-01	BUTTON (DIA. 3) (US, Canadian, AEP:GOLD)		57	4-947-968-01	BUTTON (DIA. 3) (US, AEP, G:GOLD)			
	57	4-947-986-11	BUTTON (DIA. 3) (AEP :BLACK)		57	4-947-986-11	BUTTON (DIA. 3) (Canadian, AEP, G:BLACK)			
	59	X-4941-984-1	PANEL (BASE) ASSY (US, Canadian, AEP:GOLD)		59	X-4941-984-1	PANEL (BASE) ASSY (US, AEP, G:GOLD)			
	59	X-4942-323-1	PANEL (BASE) ASSY (AEP :BLACK)		59	X-4942-323-1	PANEL (BASE) ASSY (Canadian, AEP, G:BLACK)			
	60	4-908-848-21	EMBLM, SONY (US, Canadian, AEP:GOLD)		60	4-908-848-21	EMBLM, SONY (US, AEP, G:GOLD)			
	60	4-908-848-01	EMBLM, SONY (AEP :BLACK)		60	4-908-848-01	EMBLM, SONY (Canadian, AEP, G:BLACK)			
	61	4-947-760-01	PANEL, FRONT (US, Canadian, AEP:GOLD)		61	4-955-076-11	PANEL, FRONT (AEP, G:BLACK)			
	61	4-947-960-11	PANEL, FRONT (AEP :BLACK)		61	4-955-076-31	PANEL, FRONT (US)			
					61	4-955-076-41	PANEL, FRONT (AEP, G:GOLD)			
	66	A-4604-931-A	KNOB, ASSY (US, Canadian, AEP:GOLD)		61	4-955-076-51	PANEL, FRONT (Canadian)			
	66	A-4660-038-A	KNOB, ASSY (AEP :BLACK)		66	A-4604-931-A	KNOB ASSY (US, AEP, G:GOLD)			
					66	A-4660-038-A	KNOB ASSY (Canadian, AEP, G:BLACK)			
	67	4-947-958-01	CAP (S), KNOB (US, Canadian, AEP:GOLD)		67	4-947-958-01	CAP (S), KNOB (US, AEP, G:GOLD)			
	67	4-947-918-31	CAP (S), KNOB (AEP:BLACK)		67	4-947-918-31	CAP (S), KNOB (Canadian, AEP, G:BLACK)			
	68	4-947-957-01	CAP (L), KNOB (US, Canadian, AEP:GOLD)		68	4-947-957-01	CAP (L), KNOB (US, AEP, G:GOLD)			
	68	4-947-957-11	CAP (L), KNOB (AEP:BLACK)		68	4-947-957-11	CAP (L), KNOB (Canadian, AEP, G:BLACK)			
	69	4-947-958-11	CAP (S), KNOB (US, Canadian, AEP:GOLD)		69	4-947-958-11	CAP (S), KNOB (US, AEP, G:GOLD)			
	69	4-947-958-51	CAP (L), KNOB (AEP:BLACK)		69	4-947-958-51	CAP (S), KNOB (Canadian, AEP, G:BLACK)			
	70	4-947-958-21	CAP (L), KNOB (US, Canadian, AEP:GOLD)		70	4-947-958-21	CAP (S), KNOB (US, AEP, G:GOLD)			
	70	4-947-958-41	CAP (L), KNOB (AEP:BLACK)		70	4-947-958-41	CAP (S), KNOB (Canadian, AEP, G:BLACK)			
35	* 102	A-4649-184-A	D POWER BOAD, COMPLETE		* 102	A-4649-549-A	D POWER BOAD, COMPLETE			
	* 103	A-4649-697-A	AU POWER BOAD, COMPLETE		* 103	A-4649-522-A	AU POWER BOAD, COMPLETE			
	* 115	4-947-973-22	PANEL, BLACK (AEP:BLACK)		* 115	4-955-062-21	PANEL, BLACK (AEP, G:BLACK)			
	* 115	4-947-973-42	PANEL, BLACK (AEP:GOLD)		* 115	4-955-062-41	PANEL, BLACK (AEP, G:GOLD)			
	* 115	4-947-973-52	PANEL, BLACK (Canadian)		* 115	4-955-062-51	PANEL, BLACK (Canadian)			
	* 115	4-947-973-32	PANEL, BLACK (US)		* 115	4-955-062-31	PANEL, BLACK (US)			
	△ 117	1-558-568-21	CORD, POWER (AEP)		△ 117	1-558-568-21	CORD, POWER (AEP, G)			
	* 118	A-4649-018-A	AUDIO BOARD, COMPLETE		* 118	A-4649-523-A	AUDIO BOARD, COMPLETE			
	* 121	1-642-213-11	HP (B) BOARD (US, Canadian, AEP:GOLD)		* 121	1-642-213-11	HP (B) BOARD (US, AEP, G:GOLD)			
	* 121	1-641-759-11	HP BOARD (AEP:BLACK)		* 121	1-641-759-11	HP BOARD (Canadian AEP, G:BLACK)			
	127	4-947-966-01	PANEL, LOADING (US, Canadian, AEP:GOLD)		127	4-955-071-01	PANEL, LOADING (US, AEP, G:GOLD)			
	127	4-947-966-11	PANEL, LOADING (AEP:BLACK)		127	4-955-071-11	PANEL, LOADING (Canadian AEP, G:BLACK)			
	* 133	3-575-524-00	COVER, POWER SWITCH		* 134	4-923-873-01	BRACKET, CORD, STOPPER (Canadian AEP, G:BLACK)			
	* 134	4-923-873-01	BRACKET, CORD, STOPPER (AEP:BLACK)		* 134	4-923-873-11	BRACKET, CORD, STOPPER (US, AEP, G:GOLD)			
	* 134	4-923-873-11	BRACKET, CORD, STOPPER (AEP:GOLD)							
	△ PT901	1-450-775-11	TRANSFORMER, POWER (US, Canadian)		△ PT901	1-450-775-21	TRANSFORMER, POWER (US, Canadian)			
	△ PT902	1-450-776-11	TRANSFORMER, POWER (AEP)		△ PT901	1-450-775-21	TRANSFORMER, POWER (AEP, G)			

G:German model

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

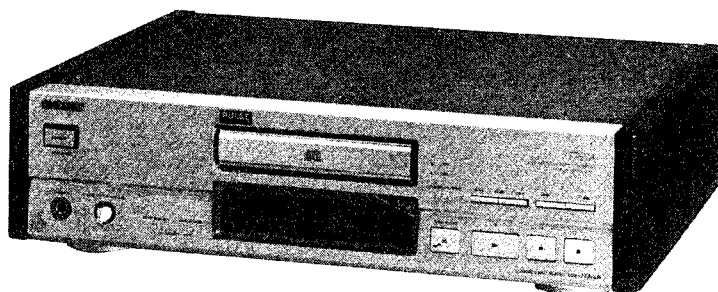
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



CDP-X779ES

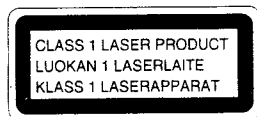
SERVICE MANUAL

US Model
Canadian Model
AEP Model



COMPACT
disc
DIGITAL AUDIO

Laser component in this product is capable of emitting radiation exceeding the limit for Class 1.



This Compact Disc player is classified as a CLASS 1 LASER Product. The CLASS 1 LASER PRODUCT label is located on the rear exterior

Model Name Using Similar Mechanism	CDP-X777ES
CD Mechanism Type	CDM19A-6F70 (Black) CDM19B-6F70 (Gold)
Optical Pick-Up Type	KSS-272A

SPECIFICATIONS

Compact disc player

Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$) Emission duration: continuous Max. $44.6 \mu\text{W}^*$ * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.
Laser output	
Frequency response	2 Hz – 20 kHz $\pm 0.3 \text{ dB}$
Signal to noise ratio	More than 119 dB
Dynamic range	More than 100 dB
Harmonic distortion	Less than 0.0015%
Channel separation	More than 110 dB

Outputs

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
BALANCED OUT (FIXED)	Output level 2 V (at 50 kilohms) Load impedance over 600 ohms
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

PHONES
(Stereo phone jack)

Output level max. 100 mW
Load impedance 32 ohms

General
Power requirements

Model for AEP
220 – 230 V AC 50/60 Hz
Model for US, Canada
120 V AC, 60 Hz

Power consumption

38 W

Dimensions
(approx., including
projections)

470 × 125 × 375 mm (w/h/d)
(18 $\frac{5}{8}$ × 5 × 14 $\frac{7}{8}$ inches)

Weight (approx.)

16.5 kg (36 lbs 7 oz)

— Continued on next page —



COMPACT DISC PLAYER
SONY®

Remote commander (RM-D995)

Remote control system	Infrared control
Power requirements	3 V DC with two batteries size AA (IEC designation R6)
Dimensions	62×18×175 mm (w/h/d) (2½×23/32×7 inches)
Weight	135 g (4.6 oz) Including batteries

Supplied accessories

Connecting cord	1 (2 phono plugs ↔ 2 phono plugs)
Remote commander	1
Sony SUM-3(NS) batteries	2
Screws (for models with sidewood panels only)	8

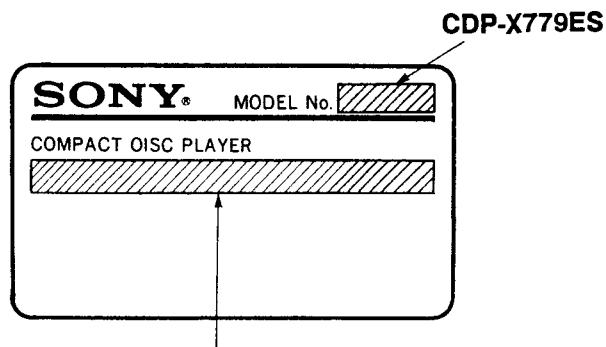
Optional accessory

Audio optical connecting cord POC-15
Digital connecting cord VMC-1ES

Design and specifications are subject to change without notice.

MODEL IDENTIFICATION

—Model Number Label—



US model : AC : 120V 60Hz (Ⓢ mark on rear panel.)

Canadian model : AC : 120V 60Hz

AEP model : AC : 220—230V~50/60Hz

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SAFETY-RELATED COMPONENT WARNING!!

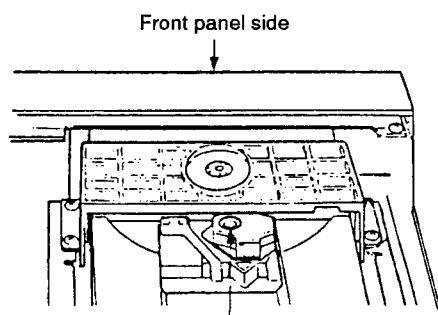
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

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

[CHECKING METHODS OF LASER DIODE AND FOCUS SEARCH OPERATIONS]

- Turn the power switch ON with the condition of the disc table closed without disc. And then watch the objective lens to check whether the operation can be performed or not, as the below figure shows.



- The laser beams diffused can be observed.
- The up and down movements of the objective lens (Twice)

NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts. The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30cm away from the objective lens.

SAFETY CHECK-OUT

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

Check the antenna terminals, metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

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

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

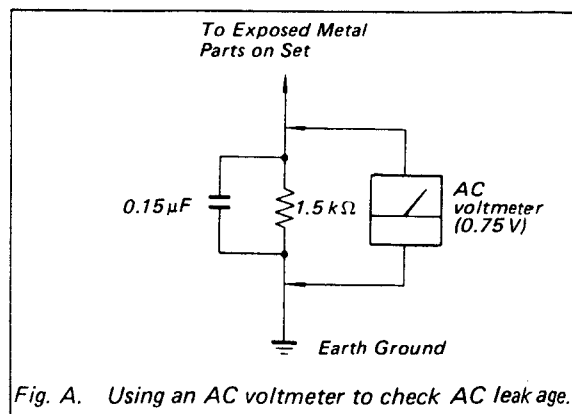
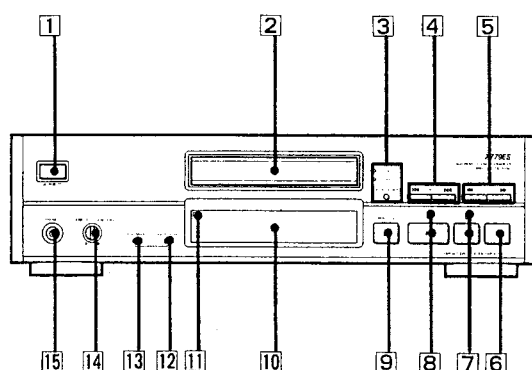


Fig. A. Using an AC voltmeter to check AC leakage.

SECTION 1 GENERAL

Identifying the Parts

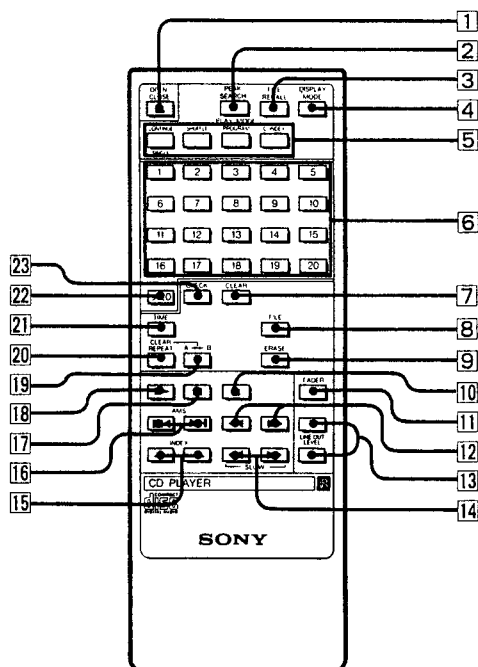
Front Panel



- 1 Power switch
- 2 Disc tray
- 3 DIGITAL OUTPUT button and indicators
- 4 << >> AMS* buttons
- 5 << >> (manual search) buttons
- 6 ■ (stop) button
- 7 ■ (pause) button and indicator
- 8 ► (play) button and indicator
- 9 ▲ OPEN/CLOSE button
- 10 Display window
- 11 Remote sensor
- 12 DISPLAY MODE button
- 13 PLAY MODE buttons
- 14 LINE OUT/PHONE LEVEL control
- 15 PHONES jack

* AMS is the abbreviation of Automatic Music Sensor.

Remote Commander



- 1 ▲ OPEN/CLOSE button
- 2 PEAK SEARCH button
- 3 FILE RECALL button
- 4 DISPLAY MODE button
- 5 PLAY MODE buttons
- 6 Numeric buttons
- 7 CLEAR button
- 8 FILE (custom file) button
- 9 ERASE button
- 10 ■ (stop) button
- 11 FADER (fade in/fade out) button
- 12 << >> (manual search) buttons
- 13 LINE OUT LEVEL (line out/headphones level) buttons
- 14 << >> SLOW (low speed manual search) buttons
- 15 — — INDEX buttons
- 16 << >> AMS* buttons
- 17 ■ (pause) button
- 18 ► (play) button
- 19 A ↔ B repeat button
- 20 REPEAT (repeat/A-B repeat clear) button
- 21 TIME button
- 22 > 20 (over 20) button
- 23 CHECK button

* AMS is the abbreviation of Automatic Music Sensor.

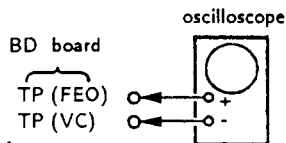
SECTION 2

ELECTRICAL BLOCK CHECKING

Note :

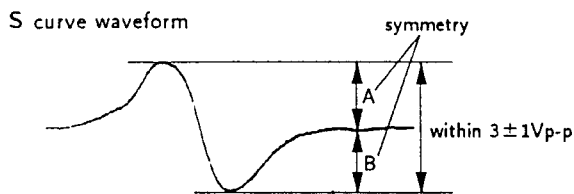
1. CD Block basically constructed to operate without adjustment. Therefore, check each item in order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than $10M\Omega$ impedance.
4. Clean an object lens by an applicator with neutral detergent when the signal level is low than specified value with the following checks.

S Curve Check



Procedure :

1. Connect oscilloscope to test point TP (FEO) on BD board.
2. Connect between test point TP (FES) and TP (VC) by lead wire.
3. Turned Power switch on and actuate the focus serch. (actuate the focus serch when disc table is moving in and out.)
4. Check the oscilloscope waveform (S curve) is symmetrical between A and B. And confirm peak to peak level within $3 \pm 1V_{p-p}$.

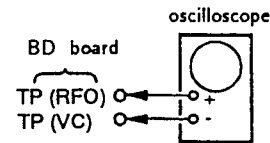


5. After check, remove the lead wire connected in step 2.

Note :

- Try to measure several times to make sure that the ratio of A : B or B : A is more than 10 : 7.
- Take sweep time as long as possible and light up the brightness to obtain best waveform.

RF Level Check

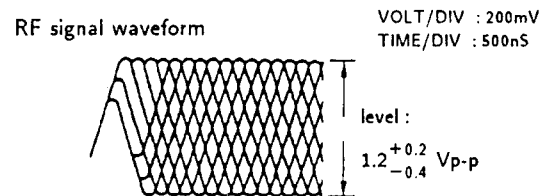


Procedure :

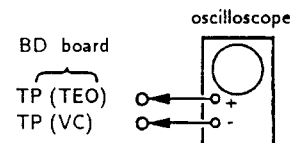
1. Connect oscilloscope to test point TP (RFO) on BD board.
2. Turn Power switch on.
3. Put disc (YEDS-18) in and playback.
4. Confirm that oscilloscope waveform is clear and check RF signal level is correct or not.

Note :

Clear RF signal waveform means that the shape "◇" can be clearly distinguished at the center of the waveform.

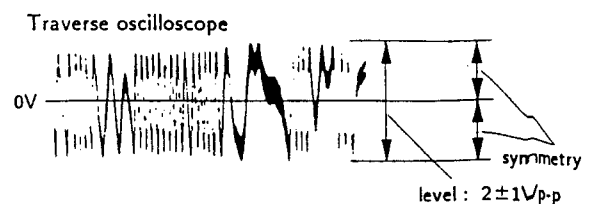


E-F Balance Check



Procedure :

1. Connect test point TP (ADJ) to ground and TP (TES) to TP (VC) with lead wire.
2. Connect oscilloscope to test point TP (TEO) on BD board.
3. Turn Power switch on.
4. Put disc (YEDS-18) in and playback.
5. Confirm that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0V, and check this level.

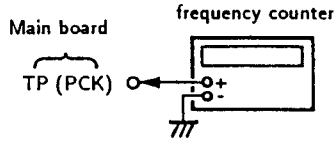


6. Remove the lead wire connected in step 1.

RF PLL Free-run Frequency Check

Procedure :

1. Connect frequency counter to test point (PCK) with lead wire.



2. Turn Power switch on.
3. Confirm that reading on frequency counter is 4. 3218MHz.

Focus/Tracking Gain

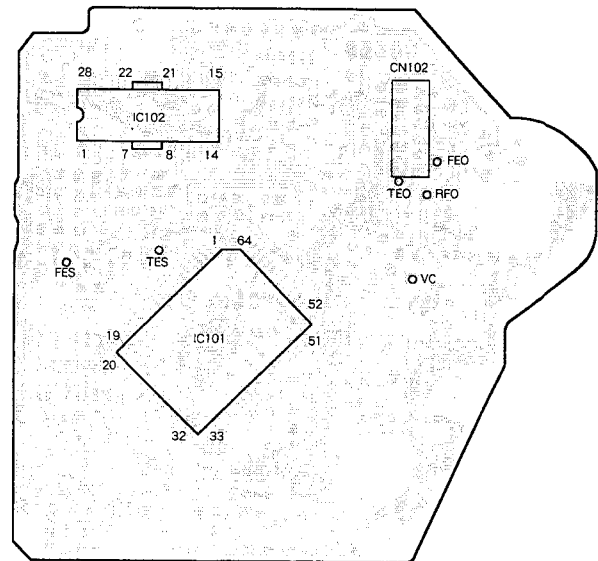
This gain has a margin, so even if it is slightly off. There is no problem.

Therefore, do not perform, this adjustment.

Please note that it should be fixed to mechanical center position when you moved and do not know original position.

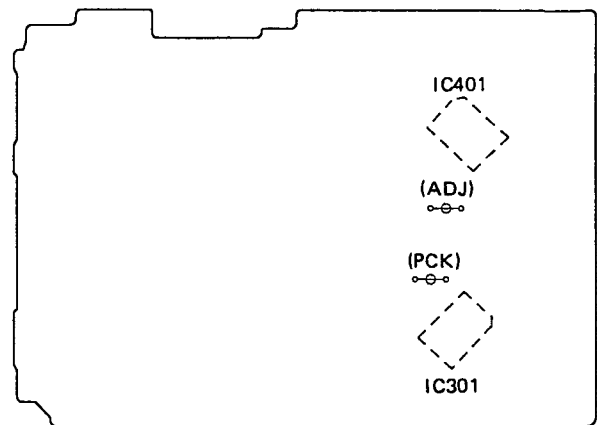
Adjustment Locations : [BD board]

— conductor side —



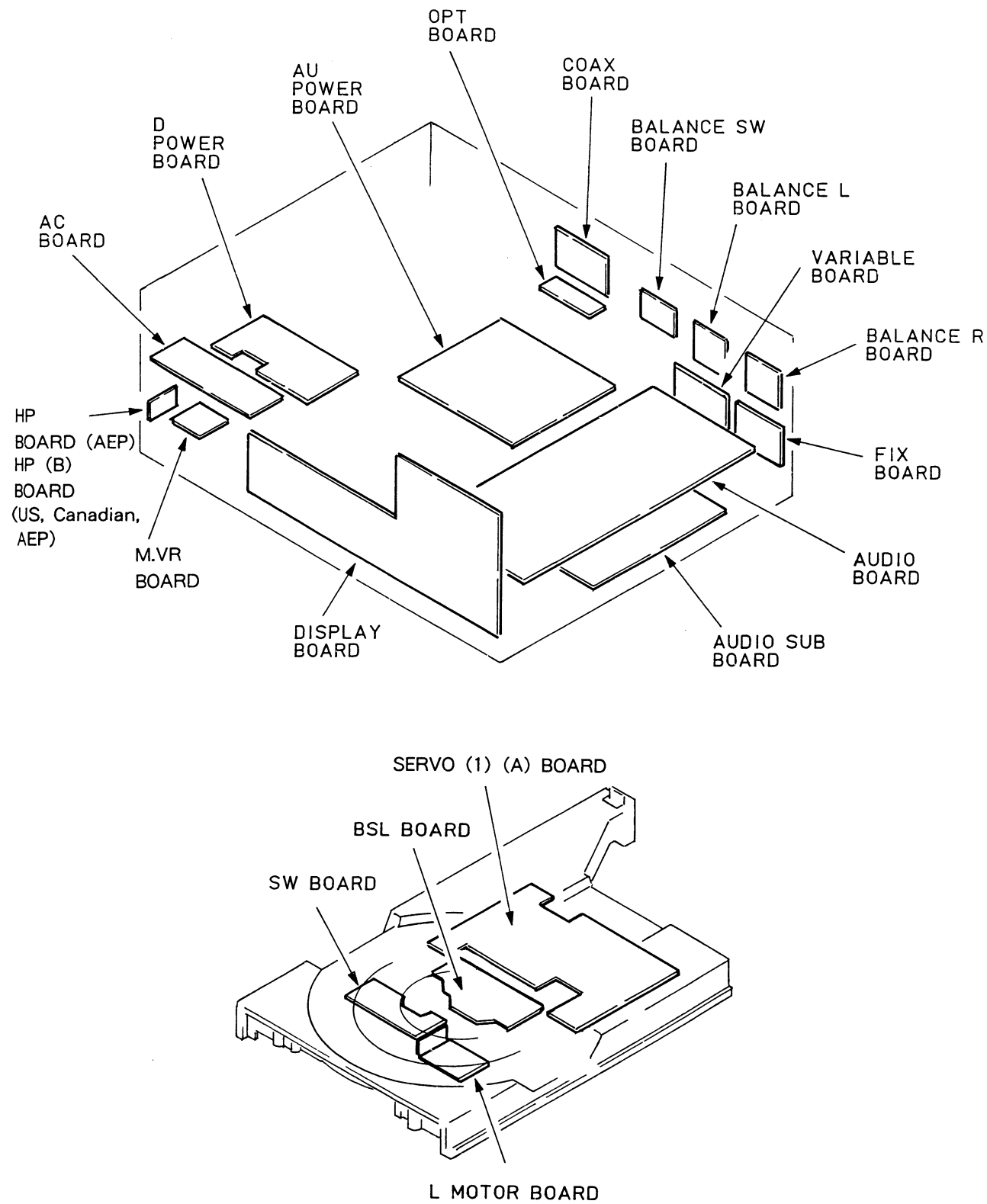
[Main board]

— component side —

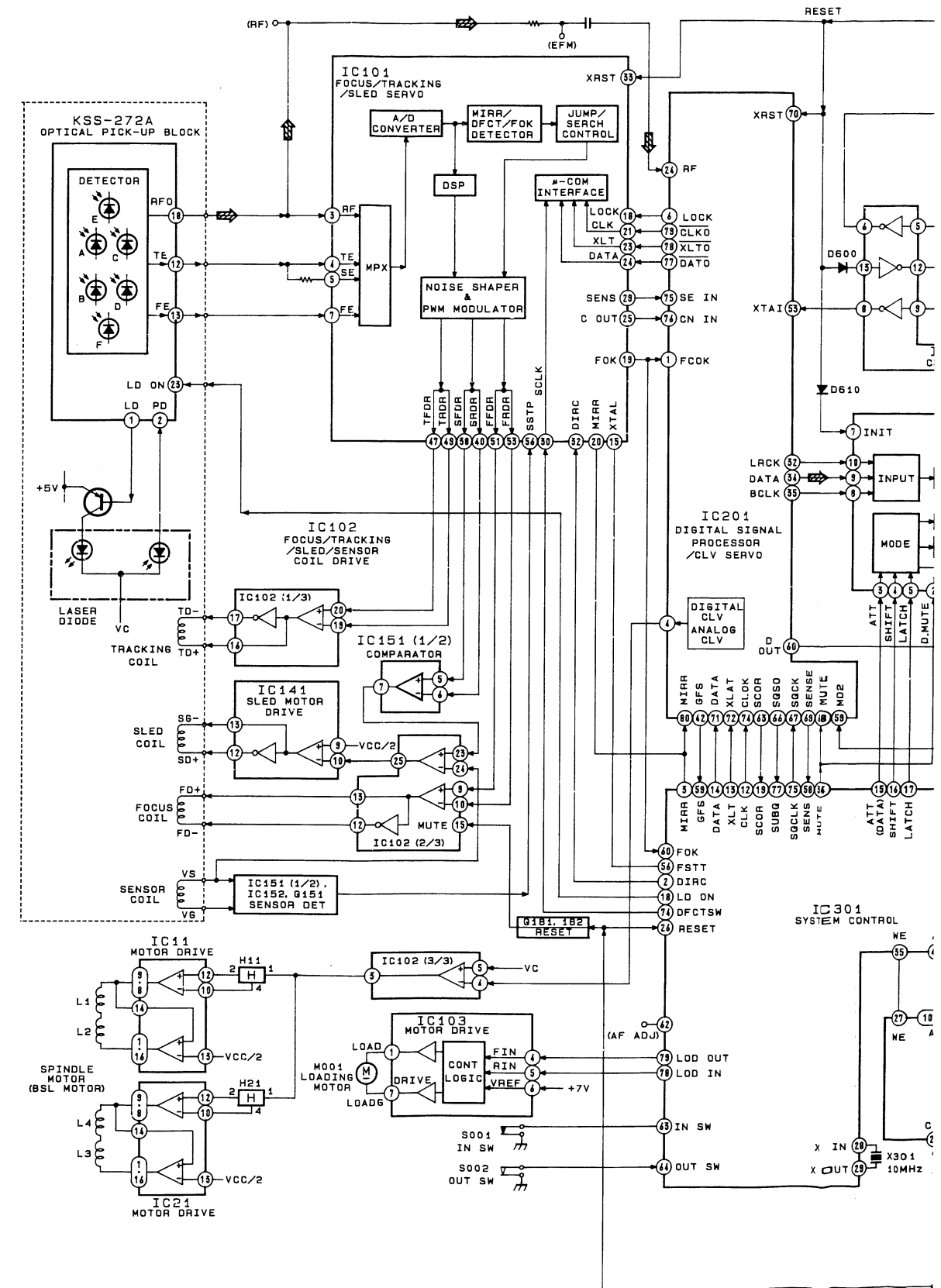


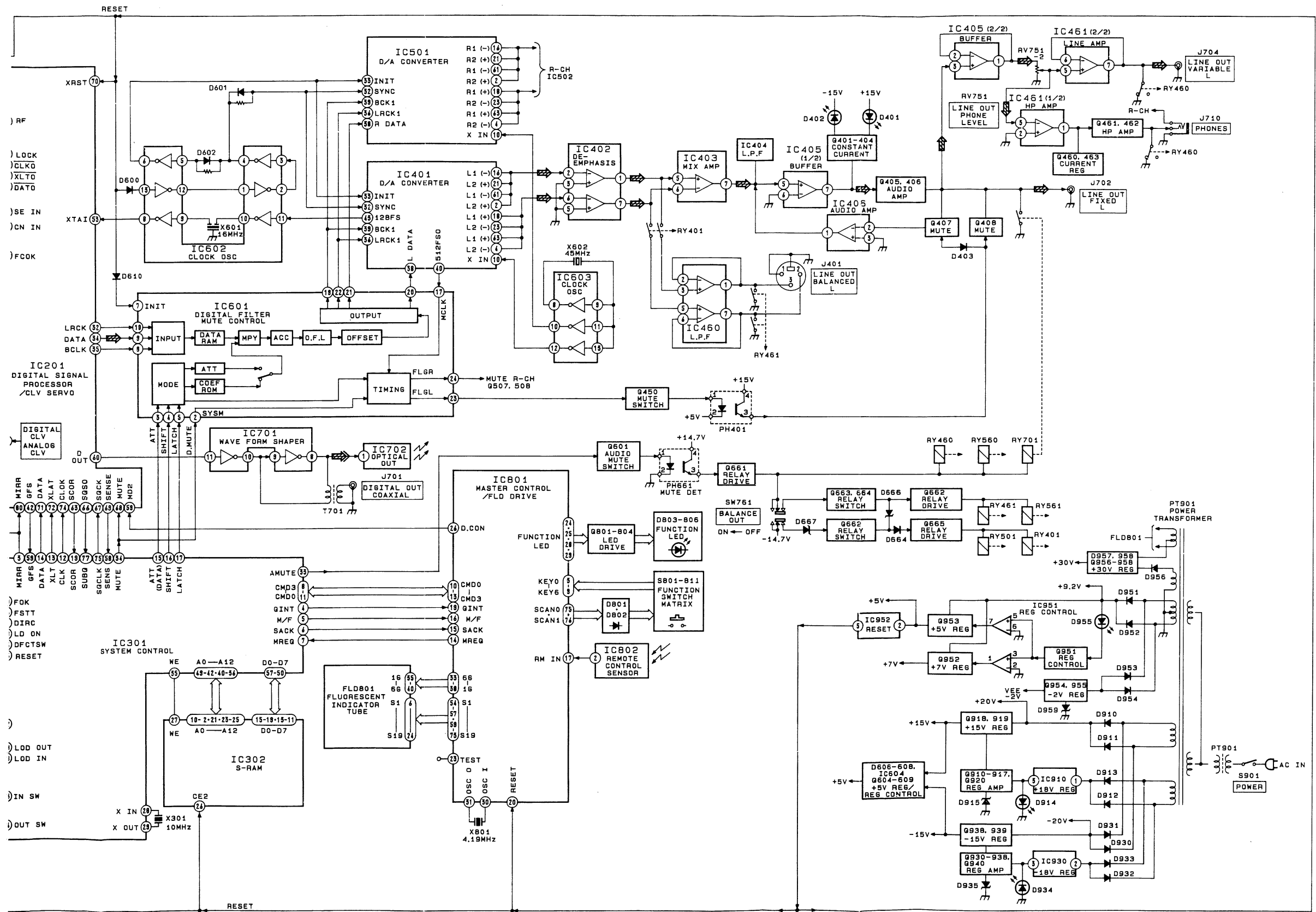
SECTION 3 DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



3-2. BLOCK DIAGRAMS





3-3. PRINTED WIRING BOARD — AUDIO SECTION —

- Refer to page 29 for IC BLOCK DIAGRAM
- Refer to page 32 for Semiconductor Lead Layouts

— AUDIO SECTION —

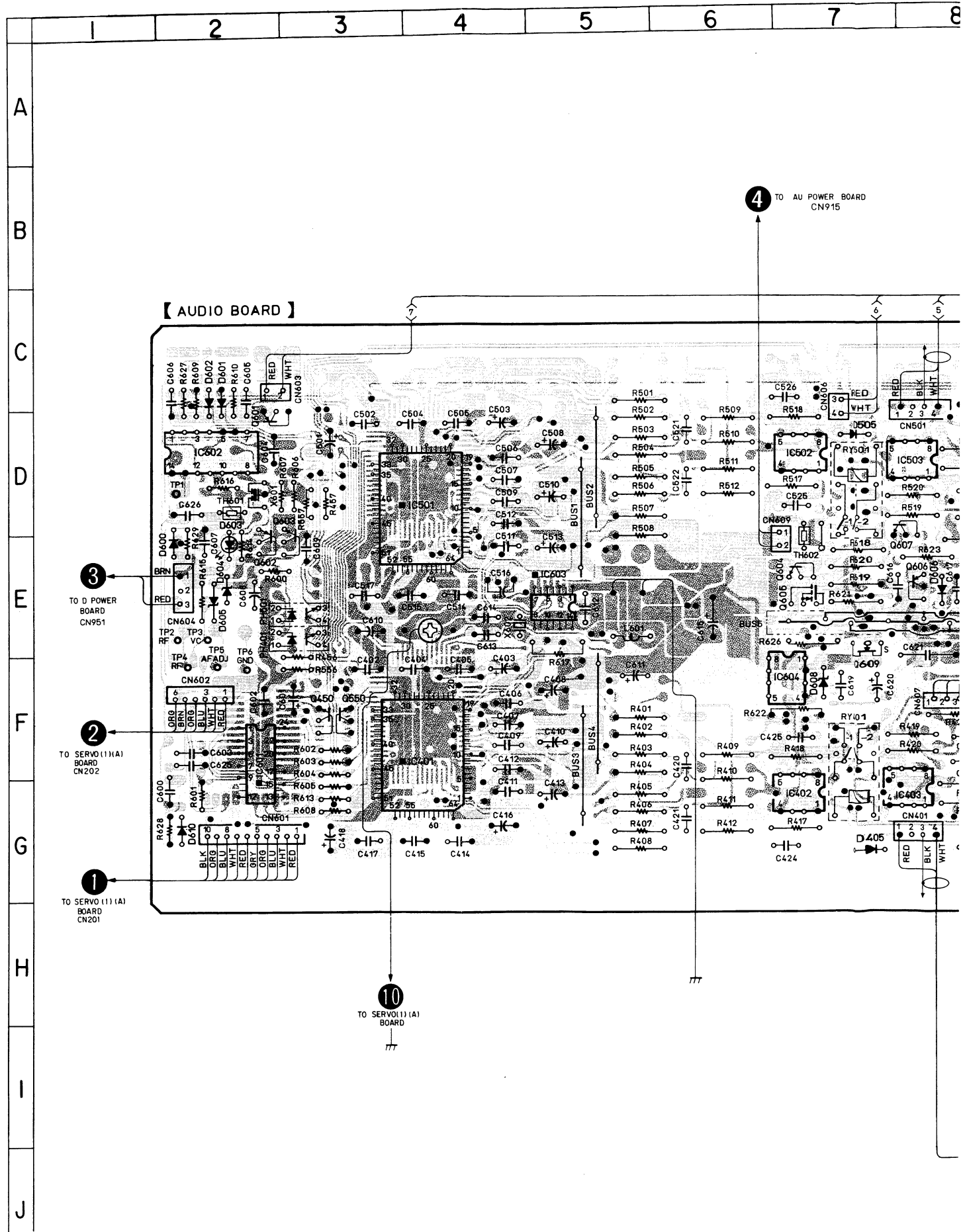
• Semiconductor Location

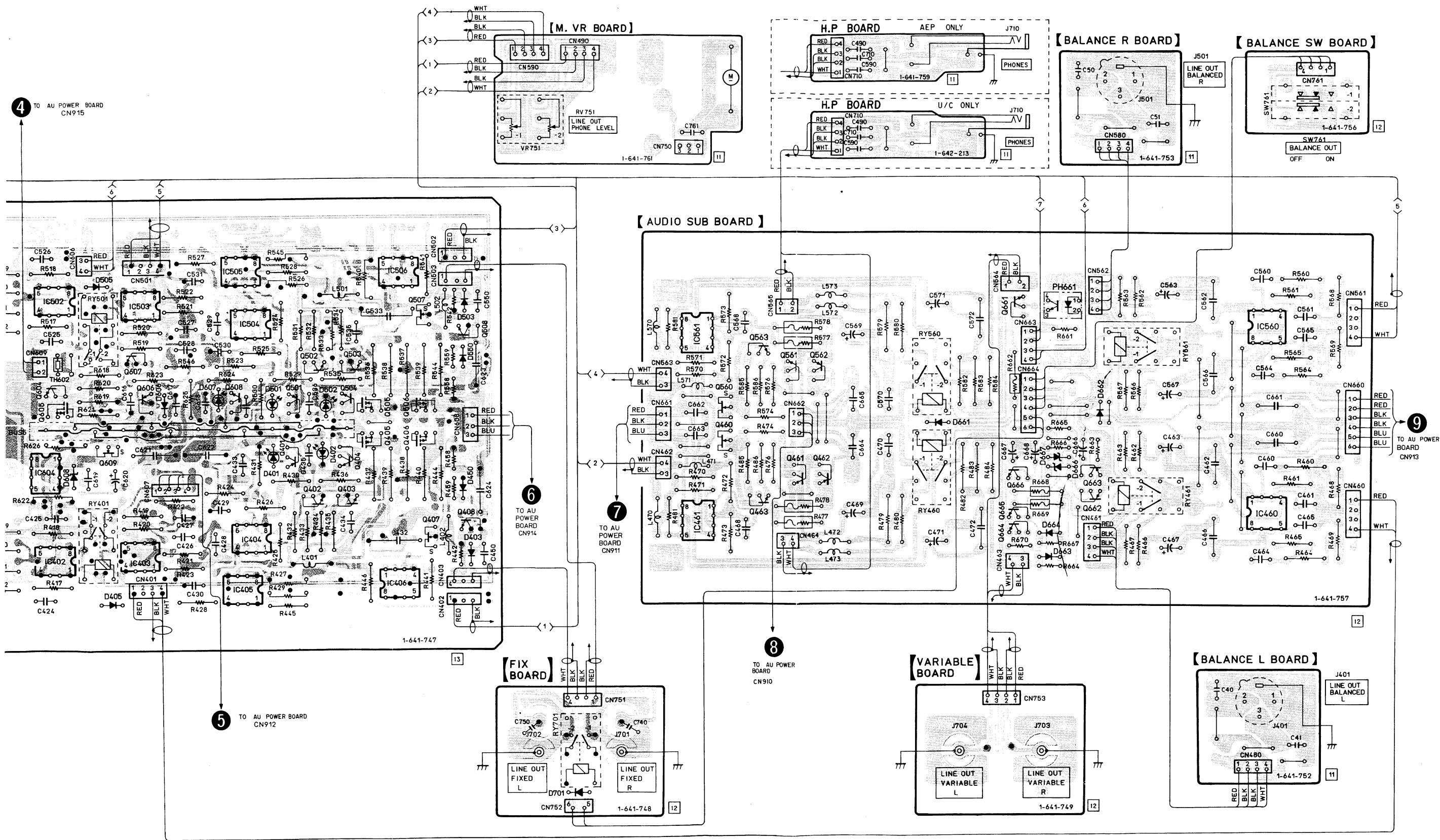
Ref. No.	Location	Ref. No.	Location
D401	F-9	Q401	F-9
D402	F-10	Q402	F-9
D403	G-11	Q403	F-10
D405	G-7	Q404	F-10
D450	F-11	Q405	E-10
D501	E-9	Q406	E-11
D502	E-10	Q407	F-11
D503	D-11	Q408	F-11
D505	D-7	Q450	F-3
D550	D-11	Q460	E-14
D600	E-2	Q461	F-15
D601	C-2	Q462	F-15
D602	C-2	Q463	F-14
D603	E-2	Q501	E-9
D604	E-2	Q502	E-10
D605	E-2	Q503	E-10
D606	E-8	Q504	E-10
D607	E-8	Q505	E-10
D608	F-7	Q506	E-11
D610	G-2	Q507	D-11
D661	E-16	Q508	D-11
D662	E-18	Q550	F-3
D663	G-17	Q560	E-14
D664	F-17	Q561	E-15
D666	F-17	Q562	E-15
D667	F-17	Q563	D-14
D701	I-12	Q601	D-2
		Q602	E-2
IC401	F-4	Q603	E-3
IC402	G-7	Q604	E-7
IC403	G-8	Q605	E-7
IC404	F-9	Q606	E-8
IC405	G-9	Q607	E-8
IC406	G-10	Q608	E-9
IC460	F-20	Q609	E-7
IC461	F-14	Q661	D-17
IC501	D-4	Q662	F-18
IC502	D-7	Q663	F-18
IC503	D-8	Q664	F-17
IC504	D-9	Q665	F-17
IC505	D-9	Q666	F-17
IC506	D-10		
IC560	D-20		
IC561	D-14		
IC601	F-2		
IC602	D-2		
IC603	E-5		
IC604	F-7		
PH401	E-3		
PH501	E-3		
PH661	D-17		

— AUDIO SECTION —

Note:

- ○ : parts extracted from the component side.
- ● : parts extracted from the conductor side.
- ■ : parts mounted on the conductor side.
- ⊗ : Through hole.
- ▨ : Pattern on the side which is seen.
- ▩ : Pattern of the rear side.





3-4. SCHEMATIC DIAGRAM — AUDIO SECTION —

- Refer to page 29 for IC BLOCK DIAGRAM
- Refer to page 32 for Semiconductor Lead Layouts
- Refer to page 31 for Waveform

— AUDIO SECTION —

Note:

- All capacitors are in μF unless otherwise noted. pF: μpF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- $\triangle$: internal component.
- $\text{---}\text{---}$: fusible resistor. All 1/4W.

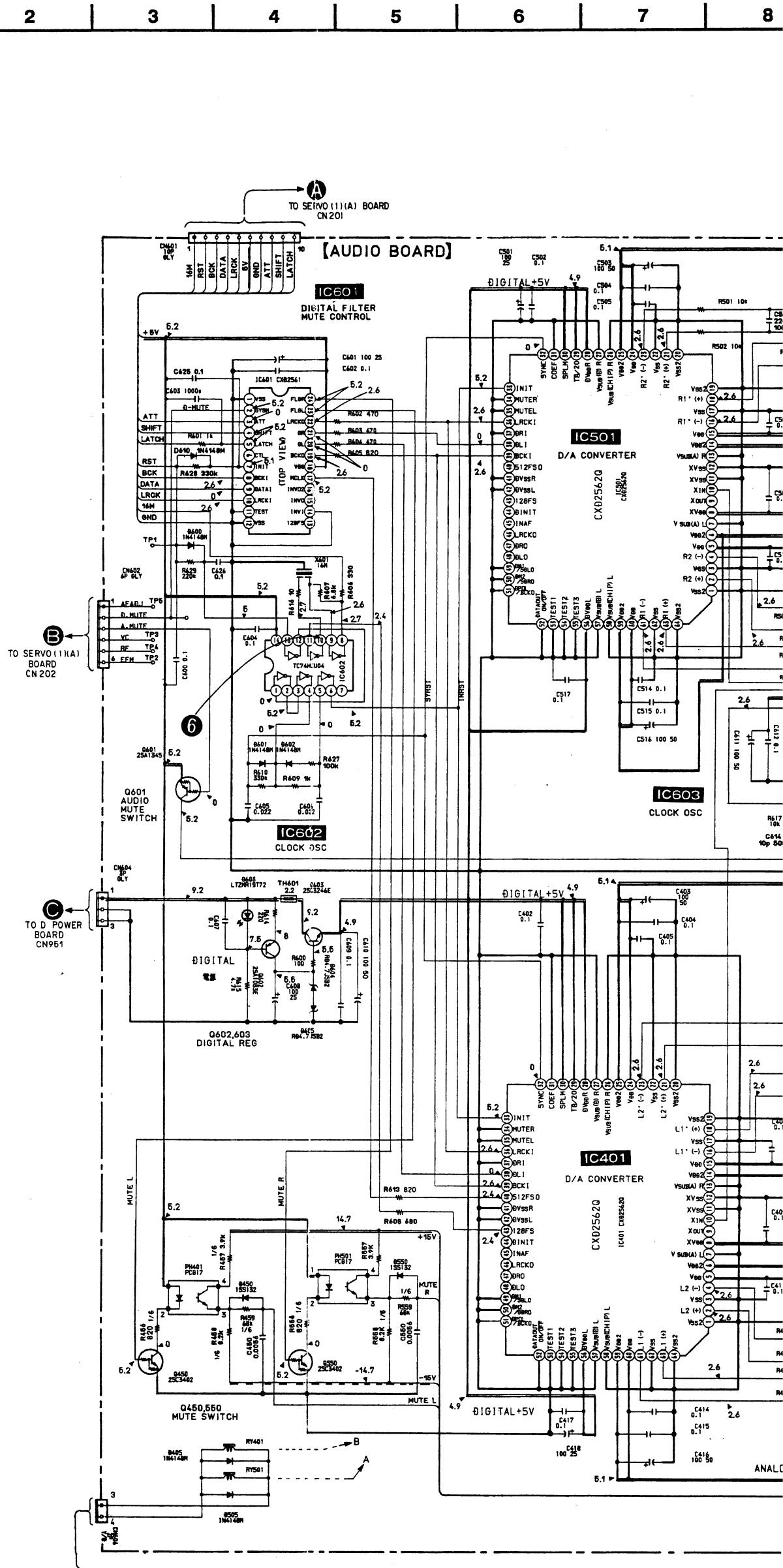
Note:

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

Note:

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

- — : B+ line
- --- : B- line
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : STOP
- < : PLAY
- () : During load-out operation
- (()) : During load-in operation
- Circled numbers refer to waveforms.
- Signal path.
- $\Rightarrow$: CD
- $\Rightarrow\Rightarrow$: digital out
- Resistors which are in the 600s and have no specifications are below 1/4W.
- Those which are not in the above range and have no specifications are 1/4W.



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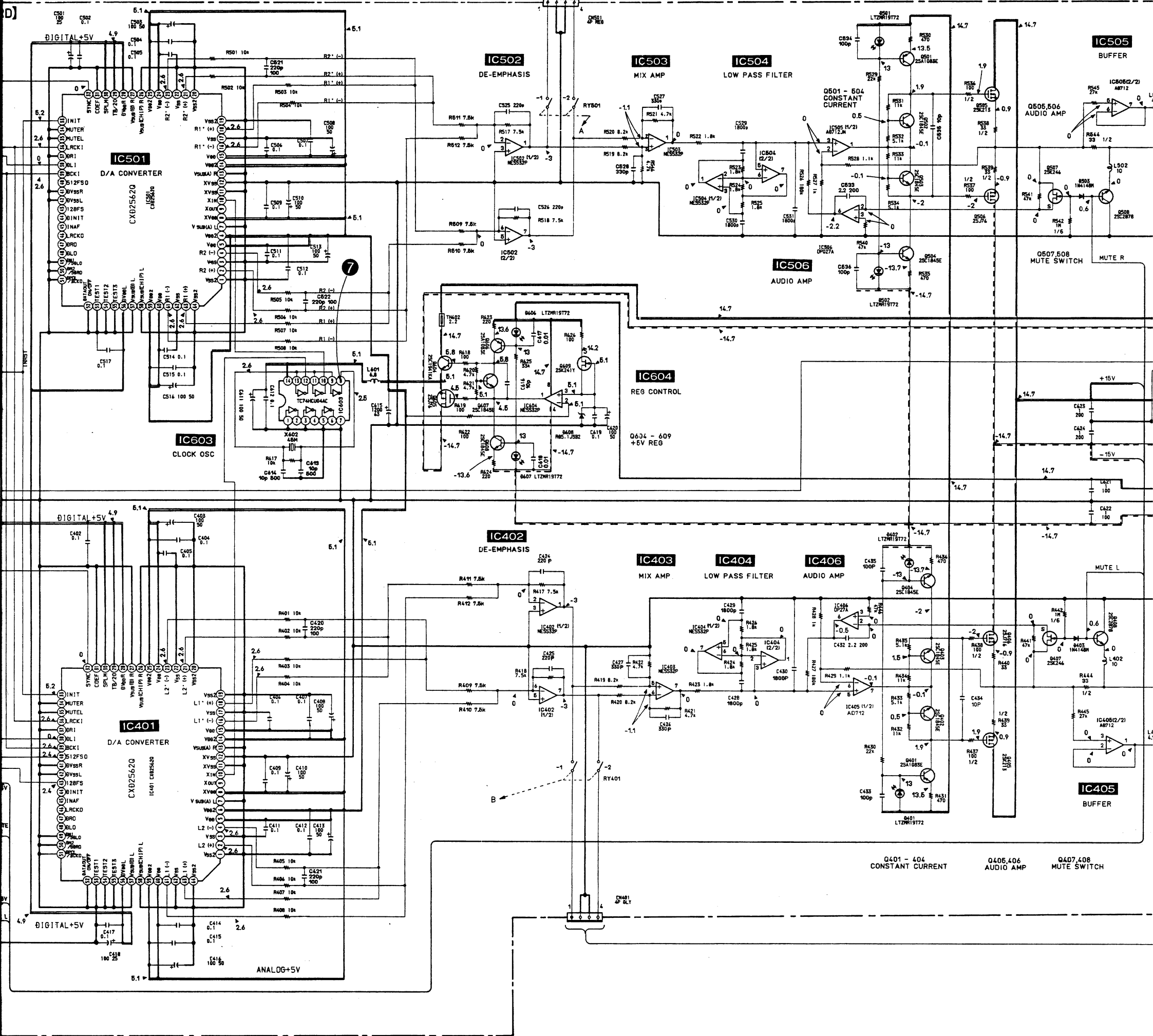
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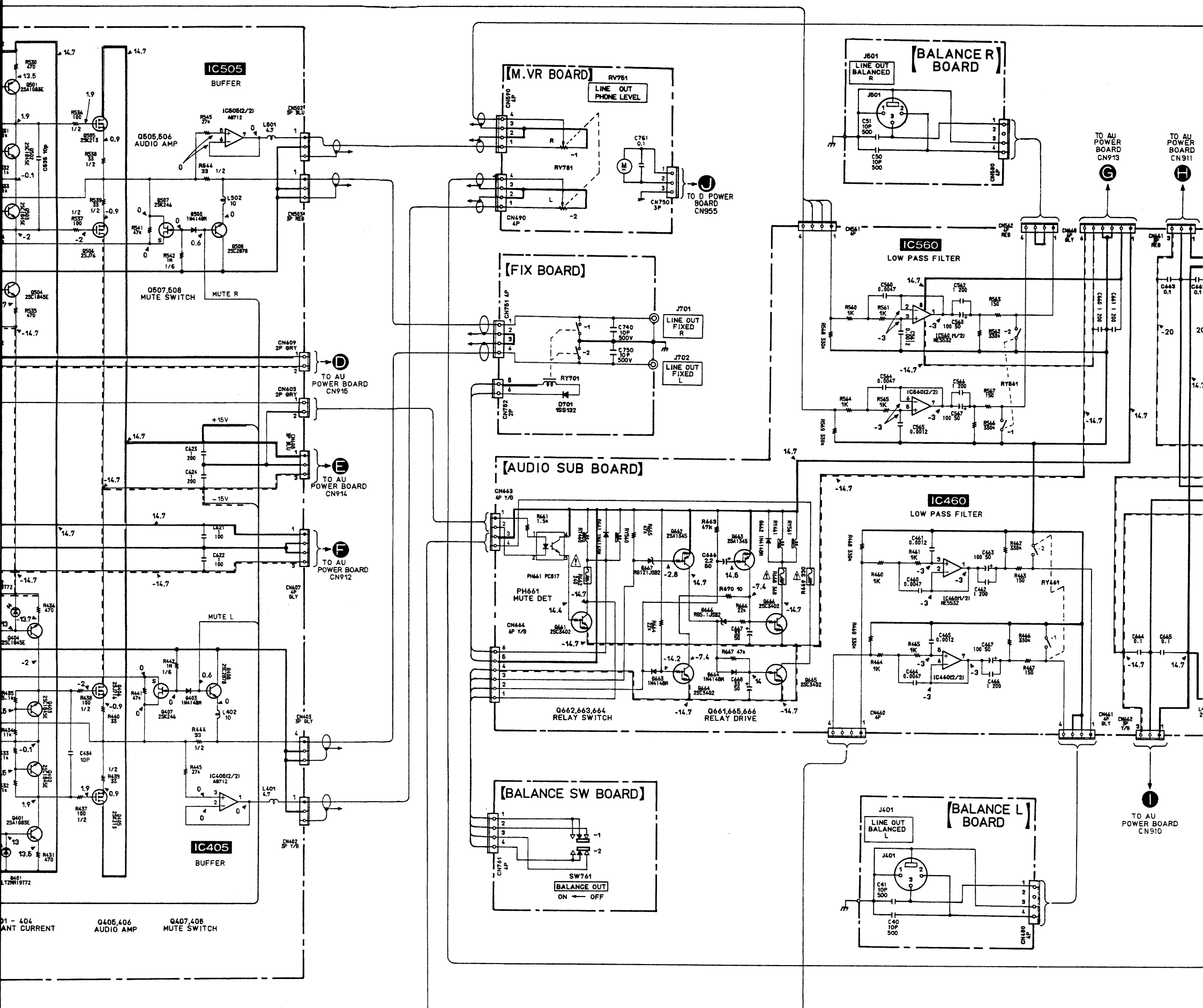
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15

16

17





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22

23

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25

26

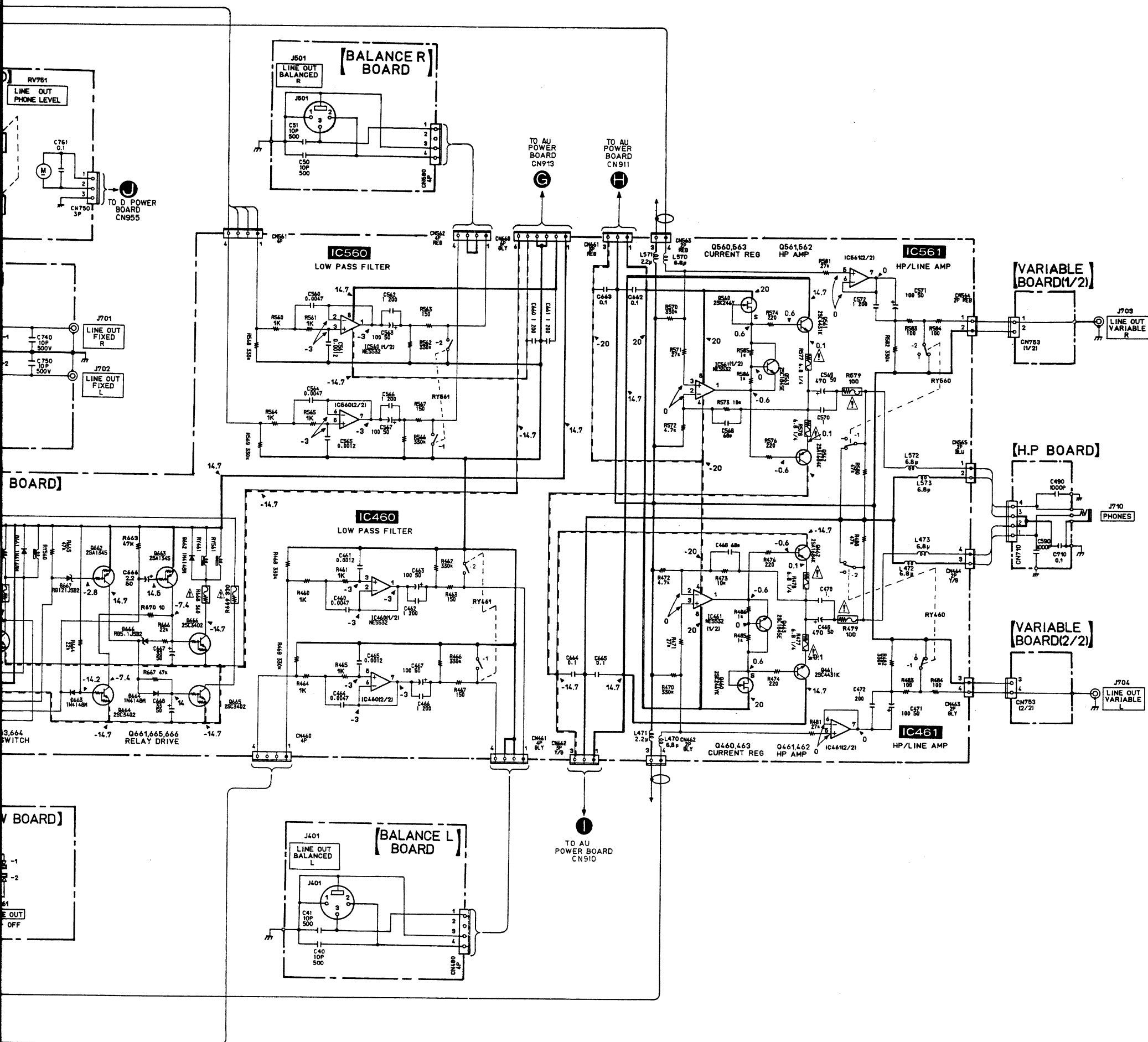
27

28

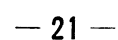
29

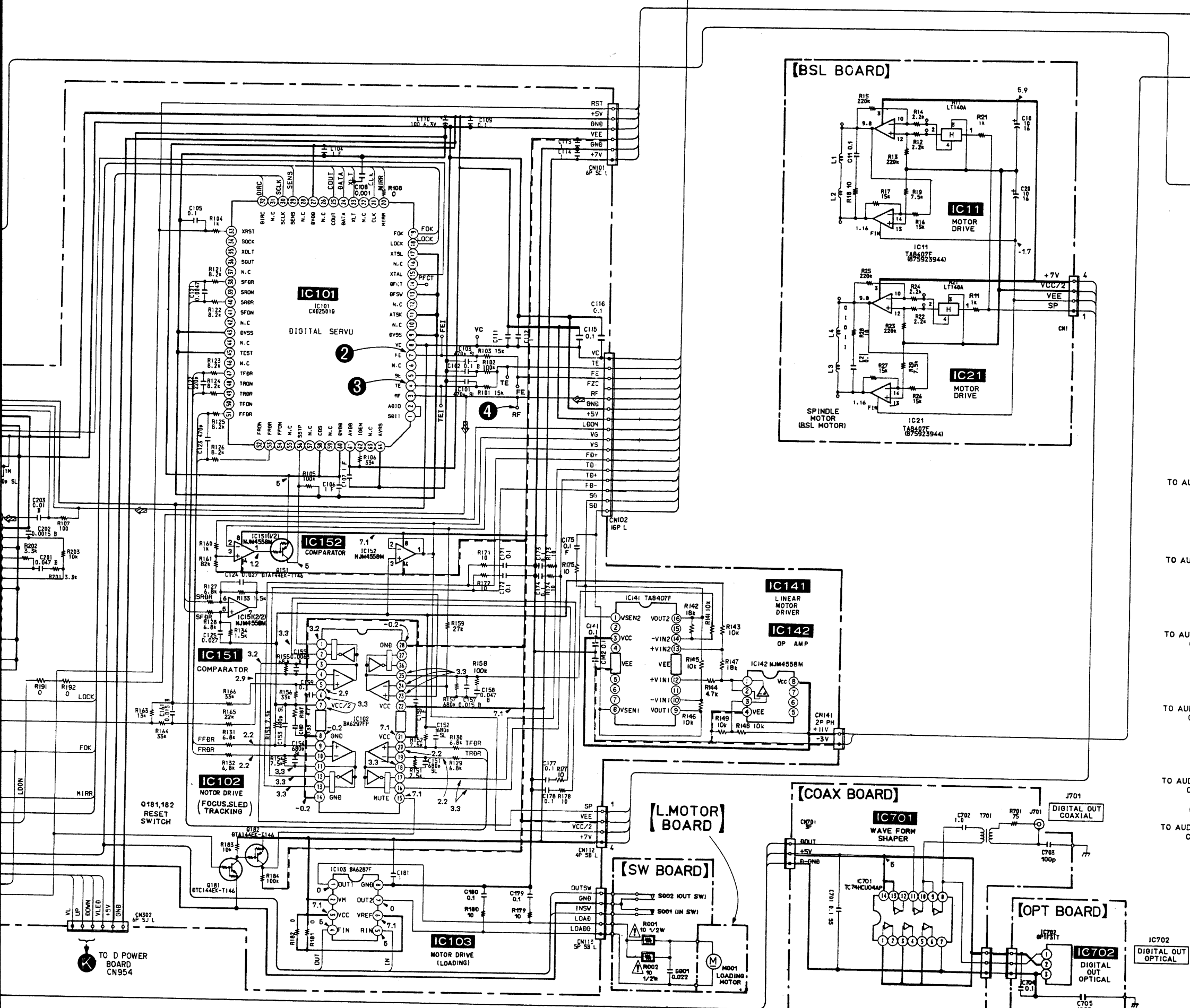
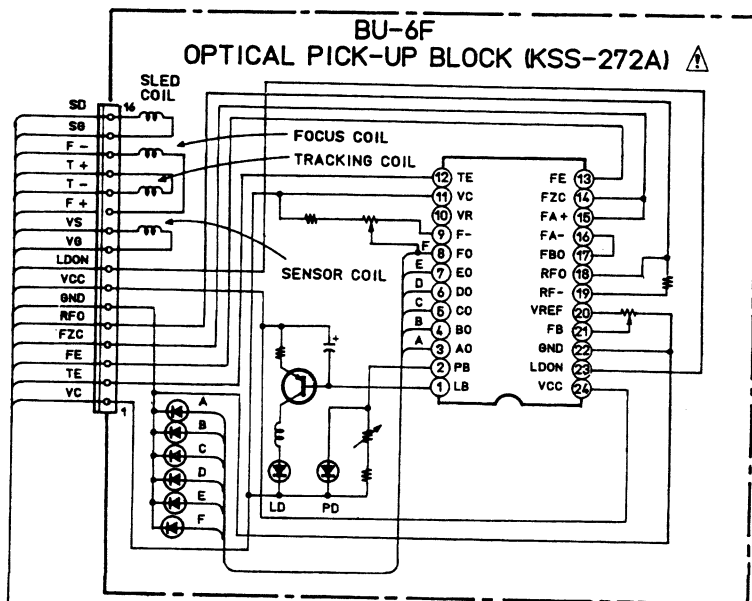
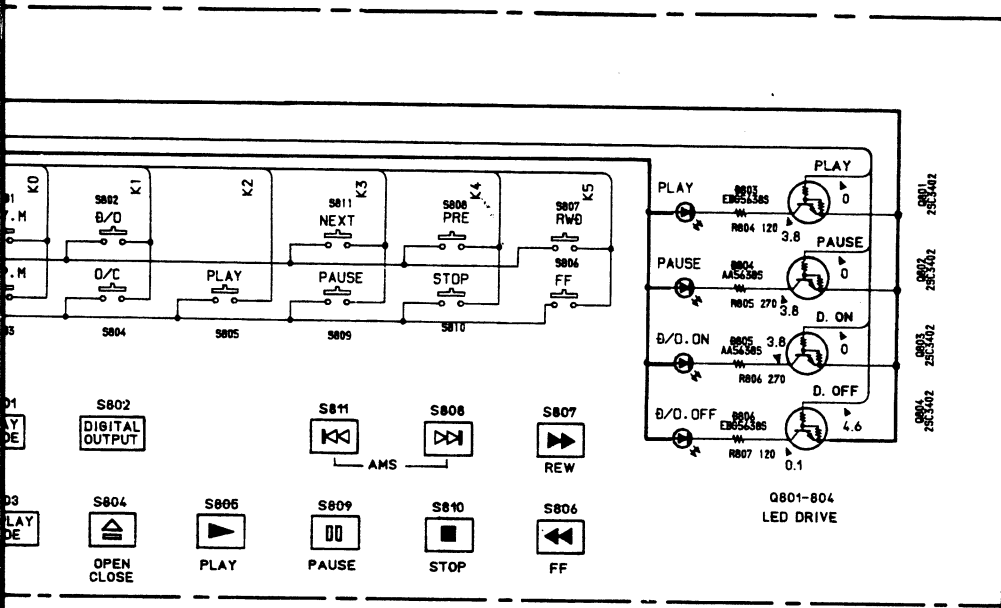
30

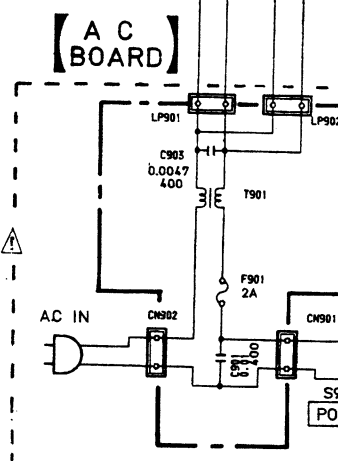
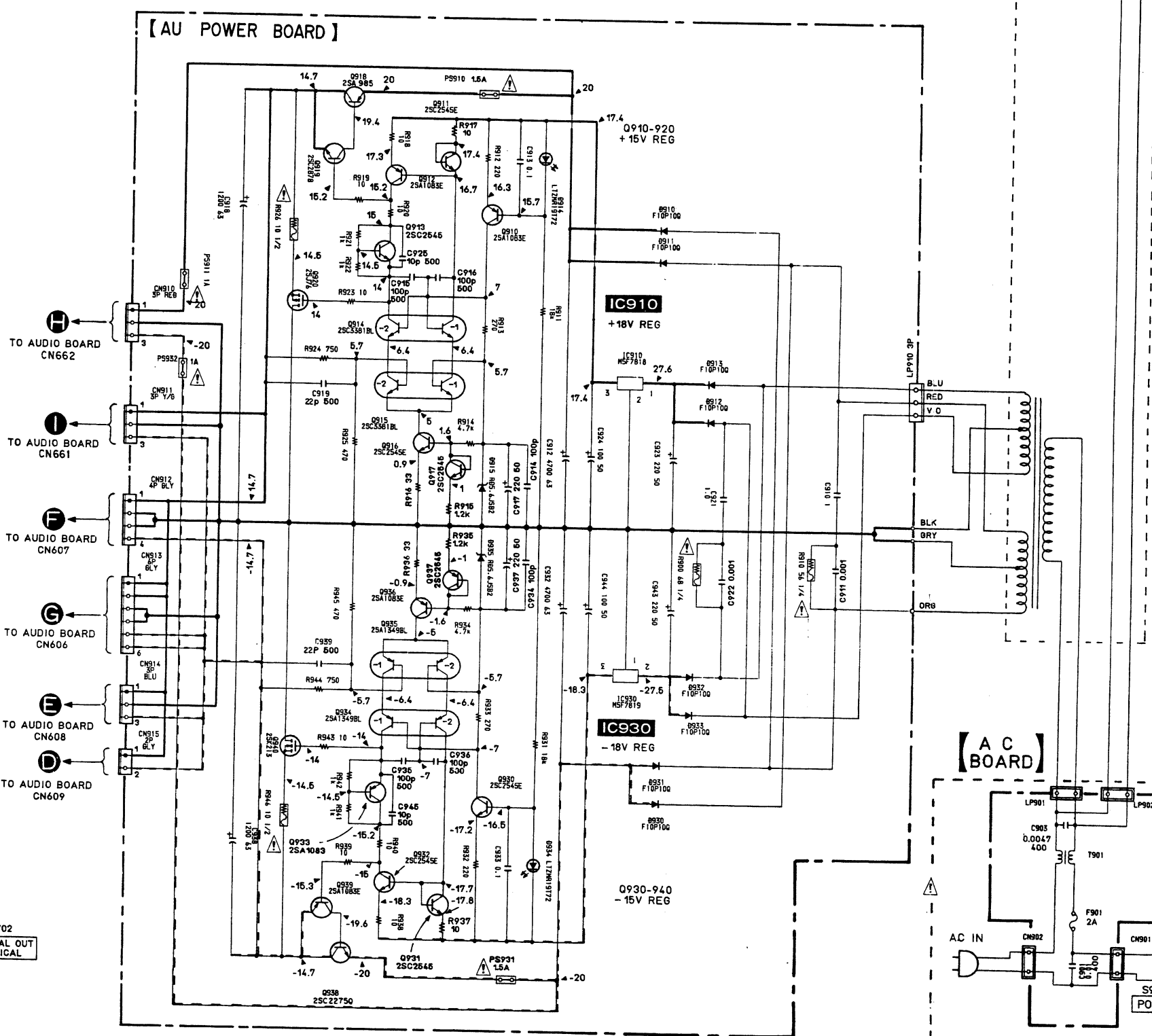
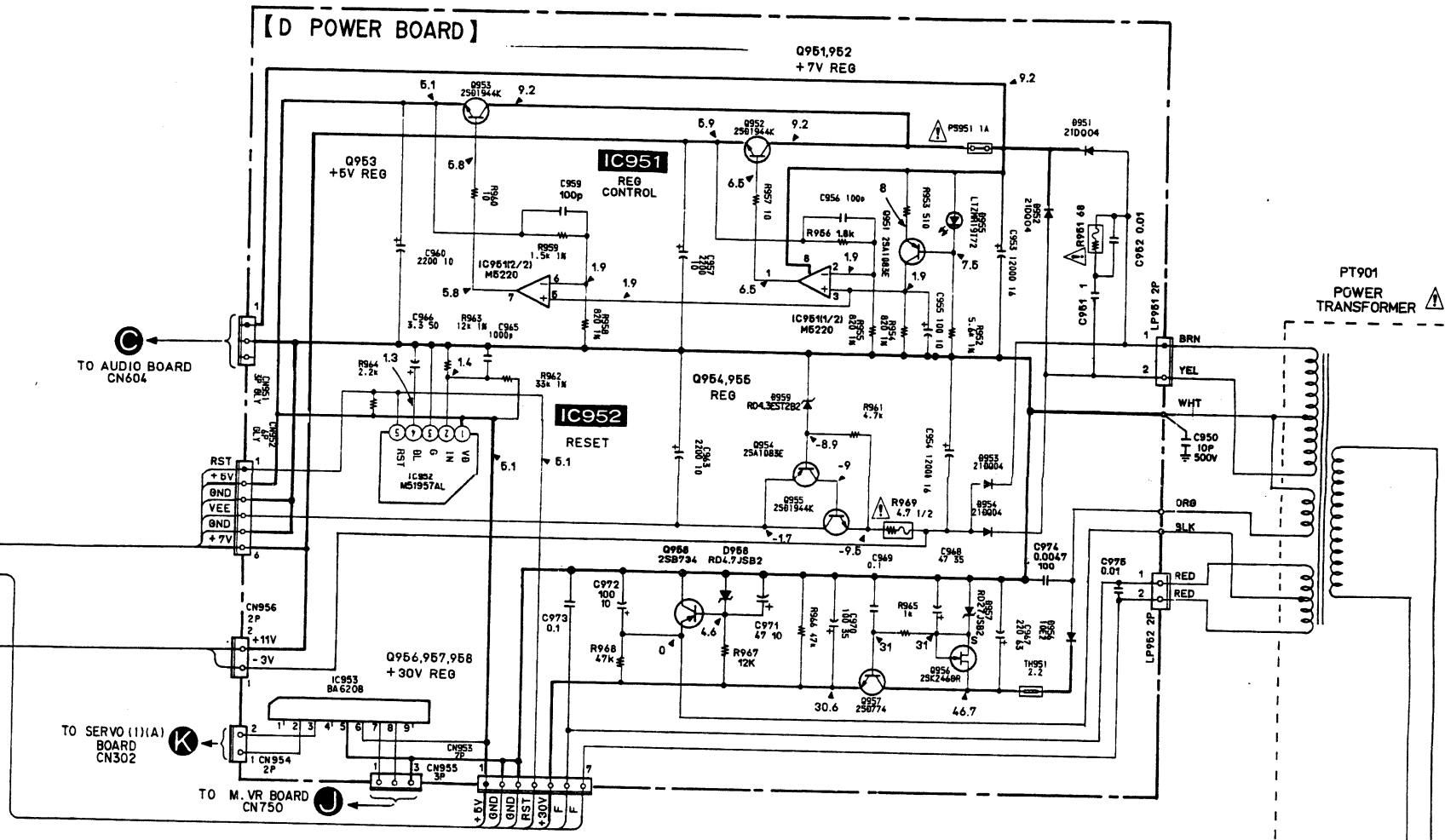
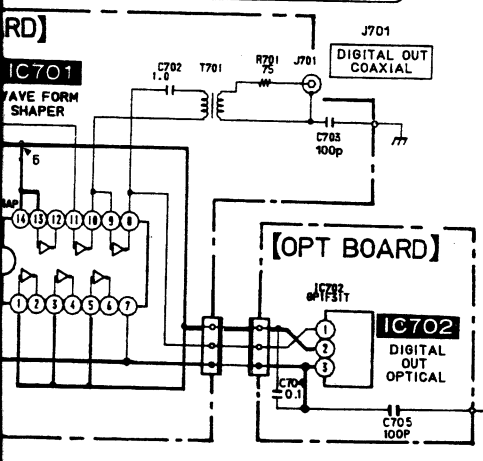
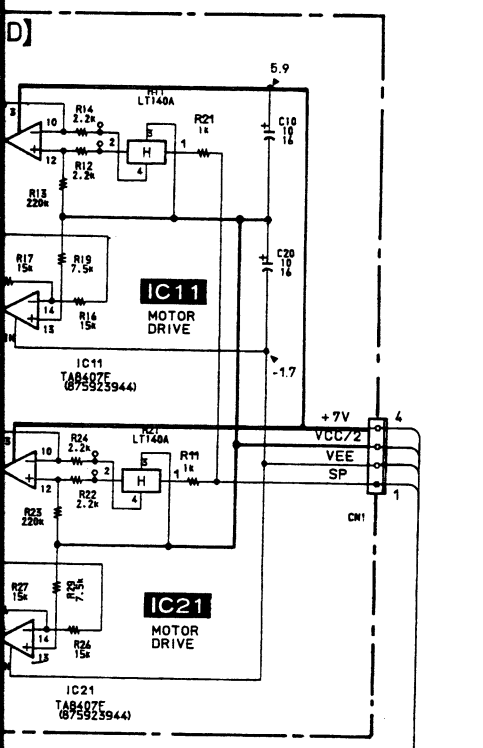
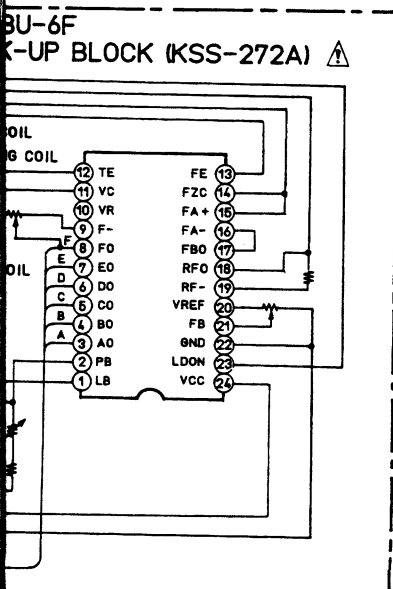
31

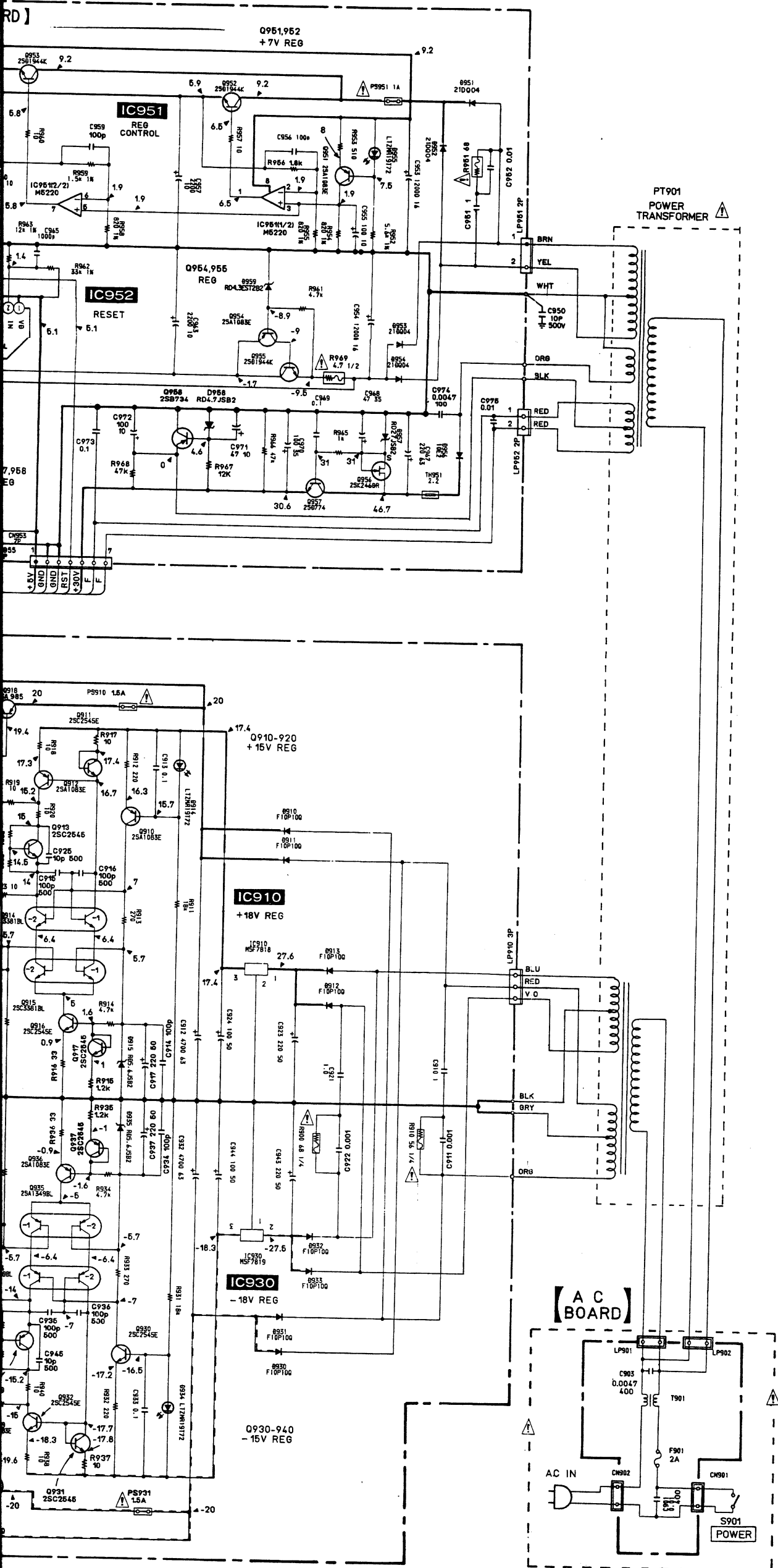


- Refer to page 29 for IC BLOCK DIAGRAM
- Refer to page 32 for Semiconductor Lead Layouts
- Refer to page 31 for Waveform









— DIGITAL SECTION —

Note:

- All capacitors are in μF unless otherwise noted. pF: μpF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- $\triangle$: internal component.
- $\text{---}\text{---}\text{---}$: fusible resistor.

Note:

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

Note:

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

- --- : B+ line
- $\text{---}\text{---}\text{---}$: B- line
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : STOP
- $\langle \rangle$: PLAY
- $(\)$: During load-out operation
- $((\))$: During load-in operation
- Circled numbers refer to waveforms.
- Signal path.
- $\text{---}\text{---}\text{---}$: CD
- $\text{---}\text{---}\text{---}$: digital out
- Those of the audio power board which have no specifications are 1/2W.

3-6. PRINTED WIRING BOARD — DIGITAL SECTION —

- Refer to page 29 for IC BLOCK DIAGRAM
- Refer to page 32 for Semiconductor Lead Layouts

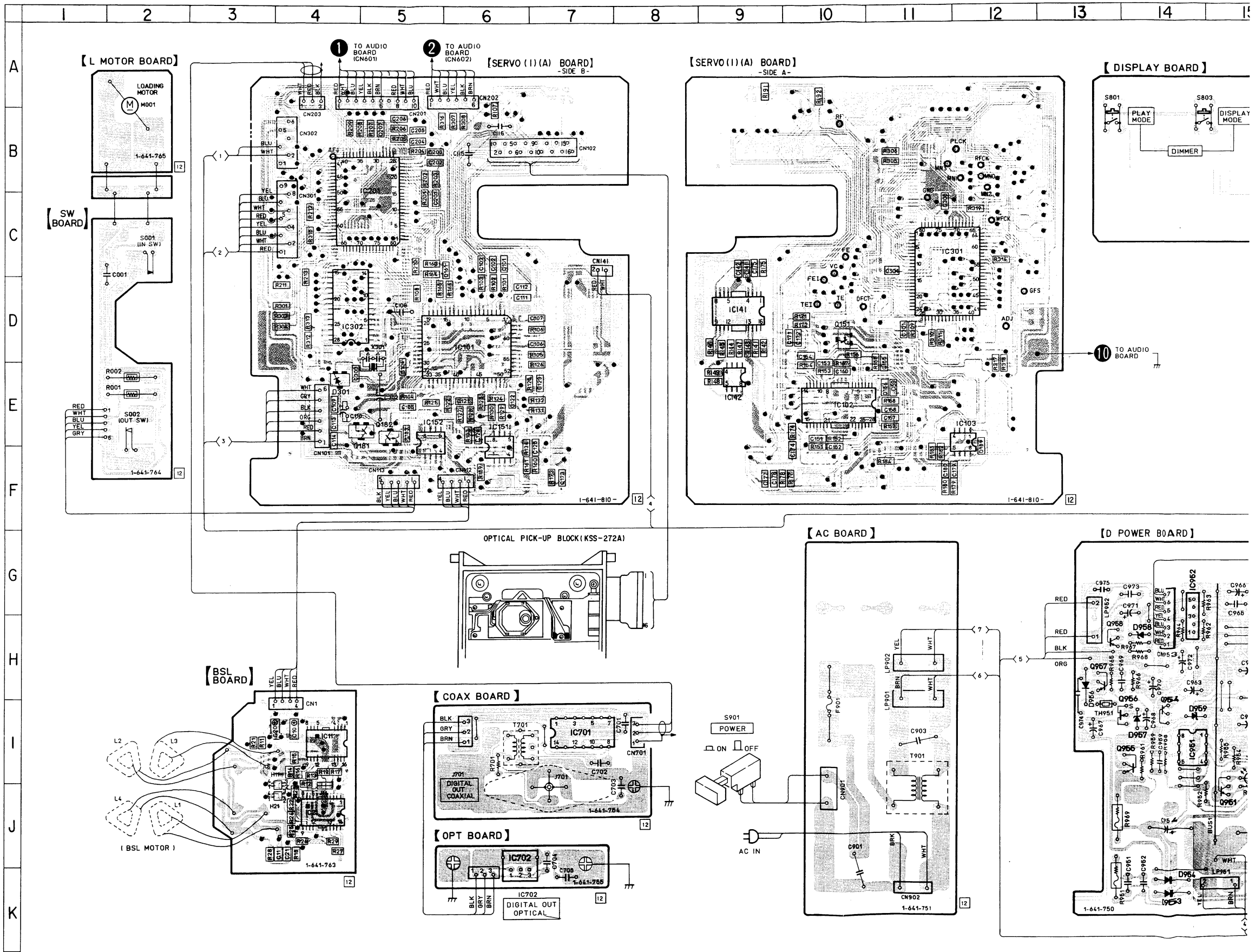
— DIGITAL SECTION —

• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D301	E-4	Q151	D-10
D801	C-16	Q181	E-4
D802	C-17	Q182	E-5
D803	B-24	Q801	B-24
D804	B-25	Q802	B-24
D805	D-22	Q803	D-22
D806	D-22	Q804	D-22
D910	J-20	Q910	J-18
D911	J-20	Q911	J-19
D912	K-20	Q912	I-19
D913	K-20	Q913	J-18
D914	K-18	Q914	I-19
D915	H-18	Q915	I-19
D930	J-21	Q916	H-19
D931	J-21	Q917	H-19
D932	K-21	Q918	F-19
D933	K-21	Q919	G-19
D934	K-23	Q920	G-19
D935	H-23	Q930	J-23
D951	K-15	Q931	J-22
D952	K-15	Q932	I-22
D953	K-14	Q933	J-23
D954	K-14	Q934	I-23
D955	J-15	Q935	I-23
D956	H-13	Q936	H-23
D957	I-14	Q937	H-23
D958	H-14	Q938	F-22
D959	I-14	Q939	G-23
		Q940	G-22
IC11	I-4	Q951	J-15
IC21	J-4	Q952	I-16
IC101	D-8	Q953	H-16
IC102	E-10	Q954	I-14
IC103	F-12	Q955	I-14
IC141	D-9	Q956	I-14
IC142	E-9	Q957	H-13
IC151	F-8	Q958	H-13
IC152	E-5		
IC201	C-5		
IC301	C-11		
IC302	D-4		
IC701	I-7		
IC702	J-6		
IC801	B-17		
IC802	B-15		
IC910	J-19		
IC930	J-22		
IC951	I-14		
IC952	H-14		
IC953	H-15		

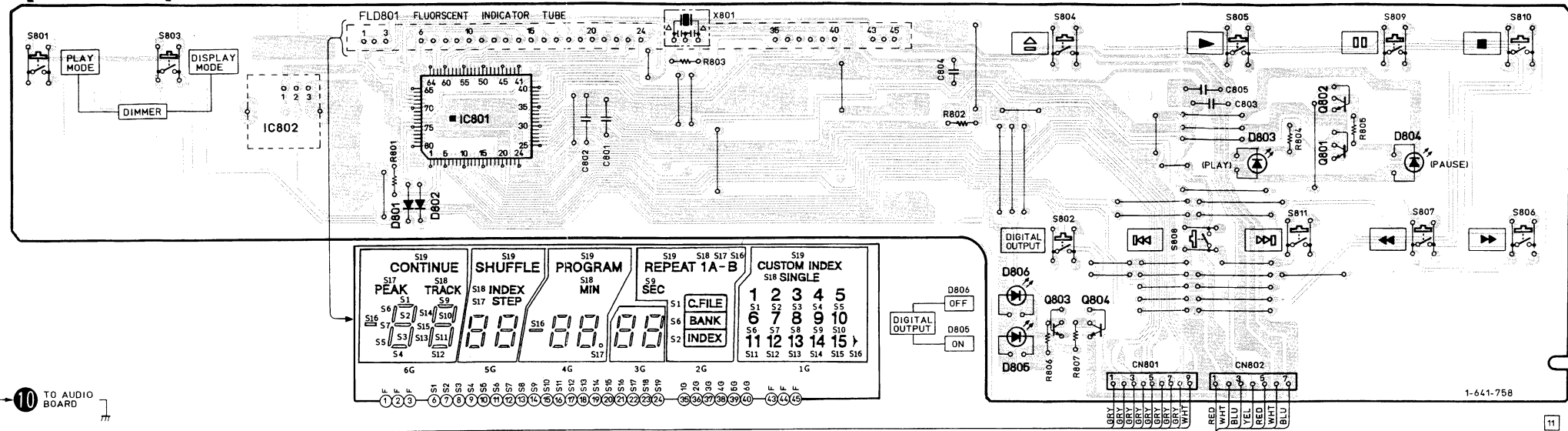
— DIGITAL SECTION —

- Note:
- : parts extracted from the component side.
 - : parts extracted from the conductor side.
 - : parts mounted on the conductor side.
 - ⊗ : Through hole.
 - ▨ : Pattern on the side which is seen.
 - ▩ : Pattern of the rear side.

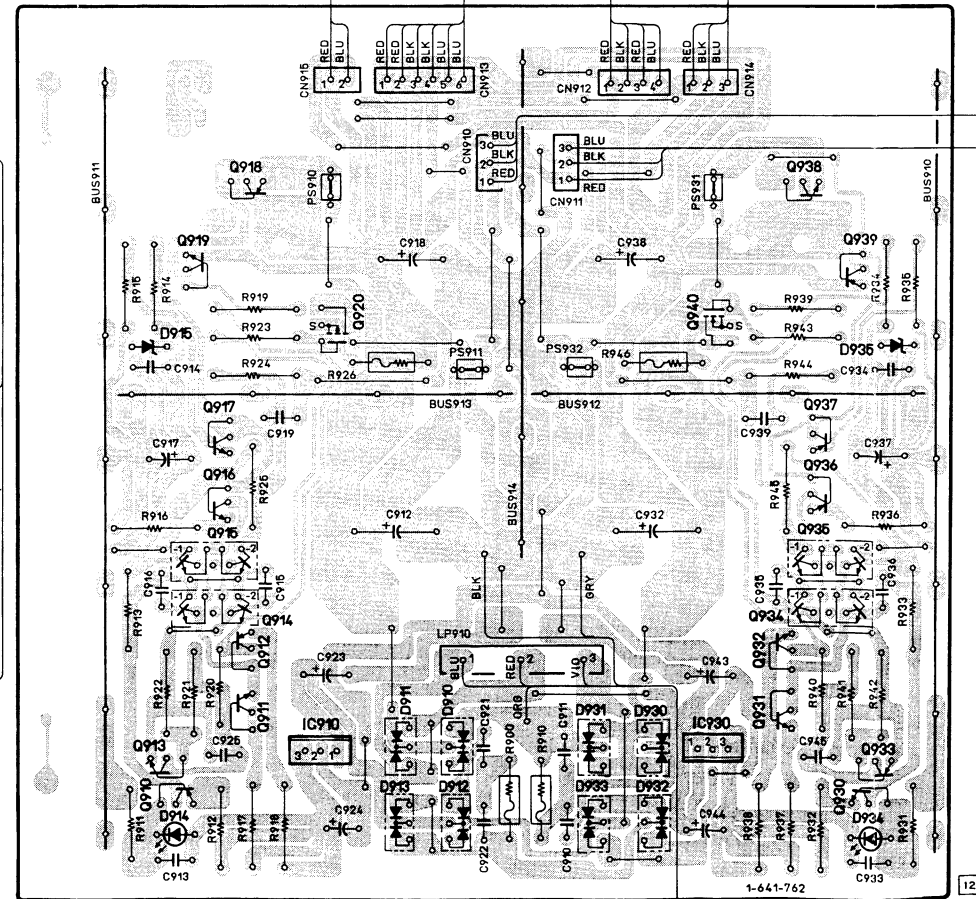


13 14 15 16 17 18 19 20 21 22 23 24 25 26 27

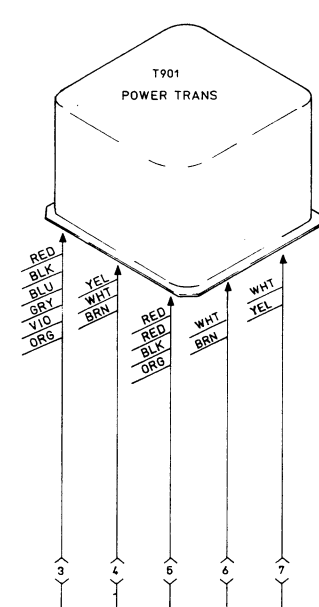
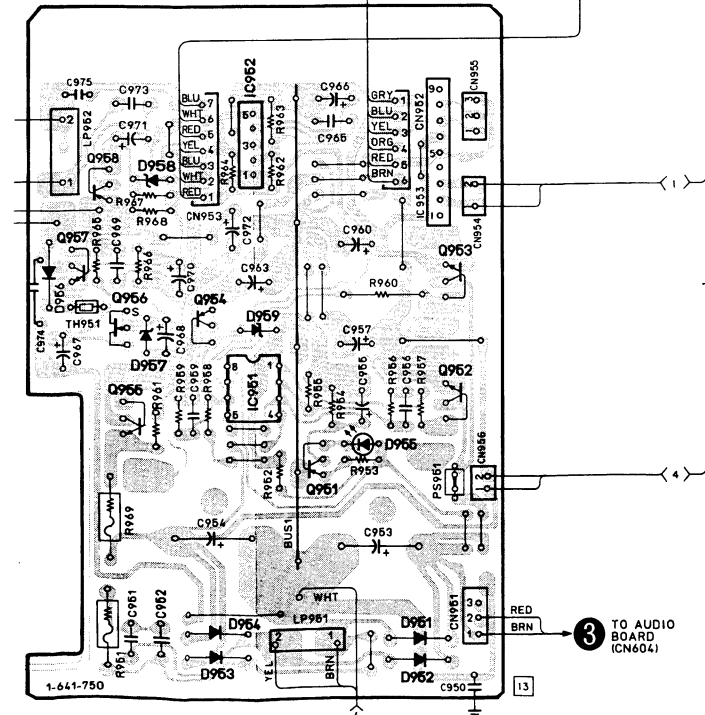
【 DISPLAY BOARD 】



【 AU POWER BOARD 】

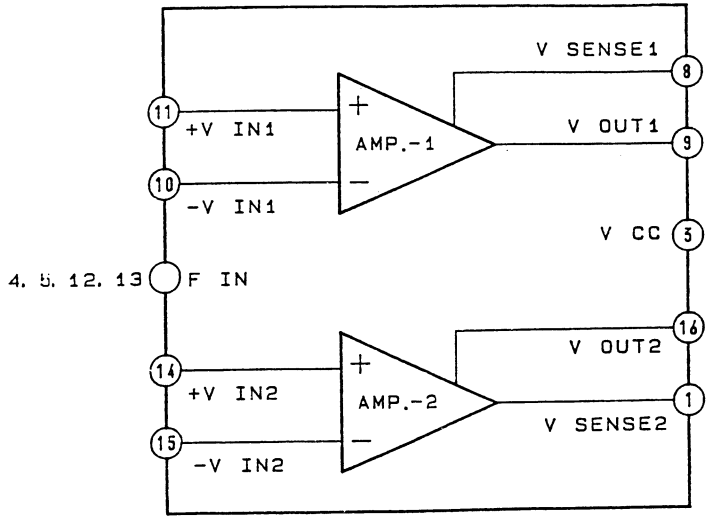


【 D POWER BOARD 】

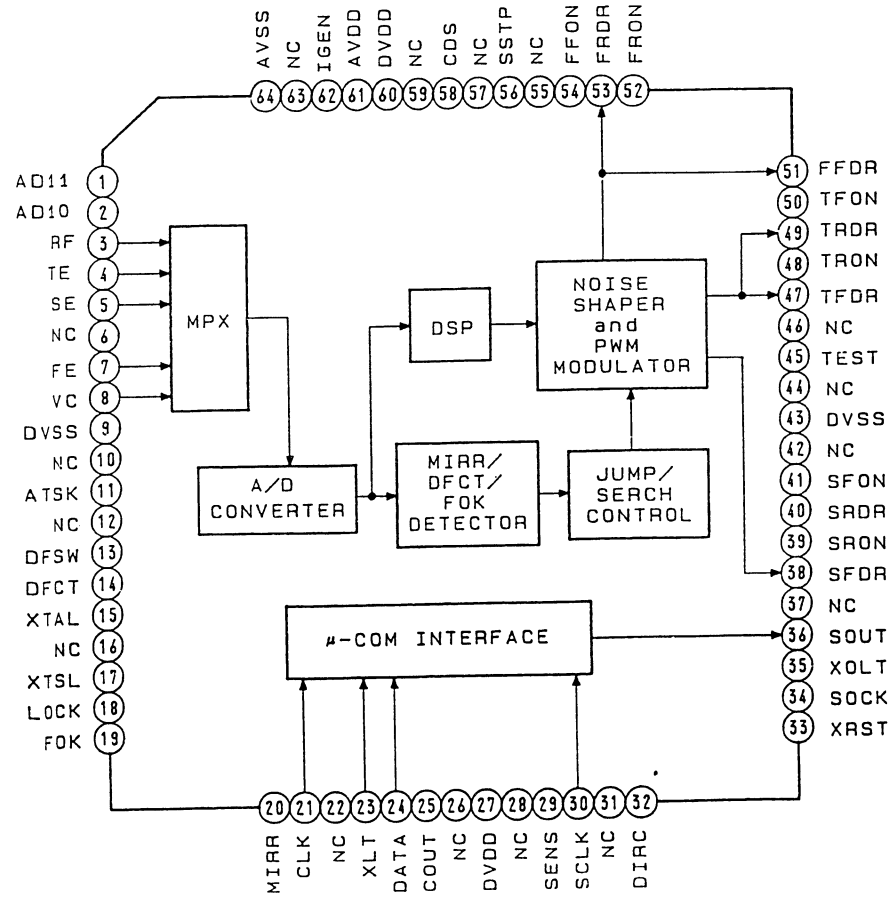


3-7. IC BLOCK DIAGRAMS

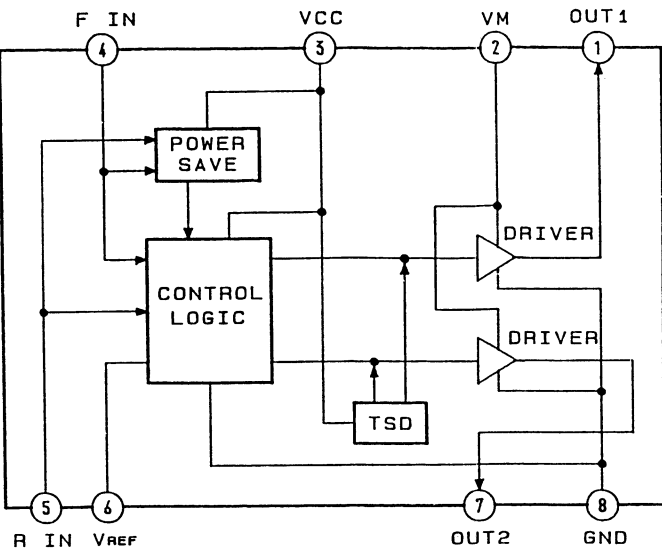
IC11, 21 TA8407F



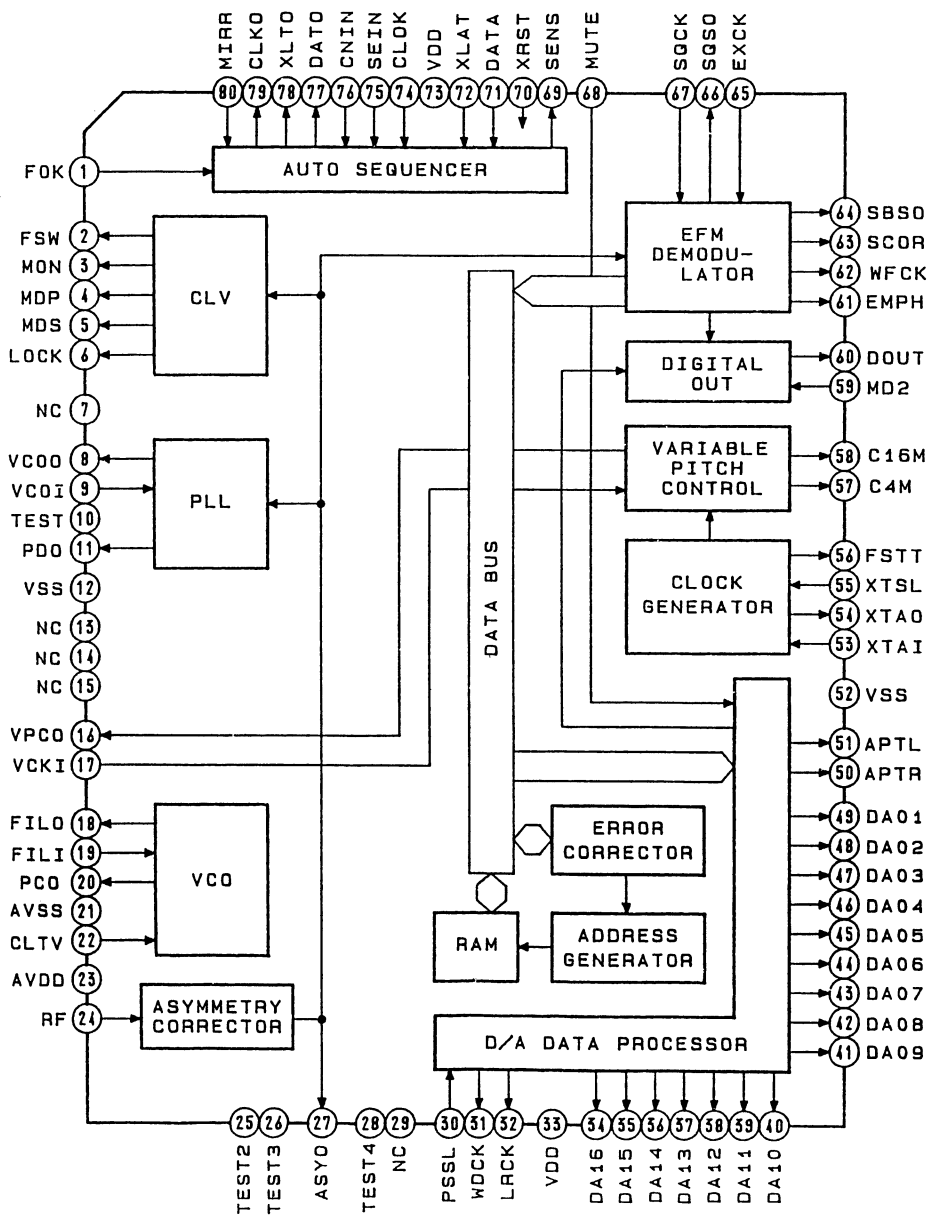
IC101 CXD2501Q



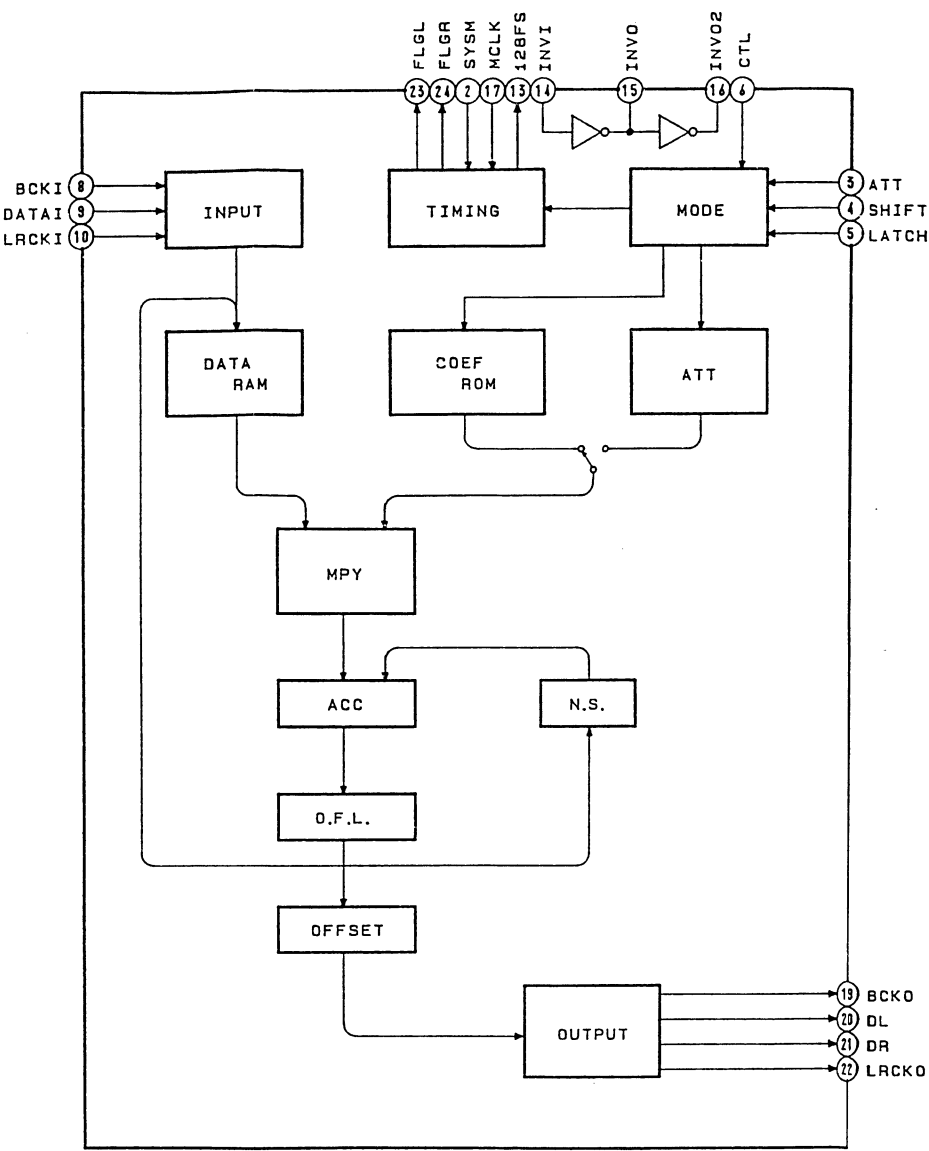
IC103 BA6287F



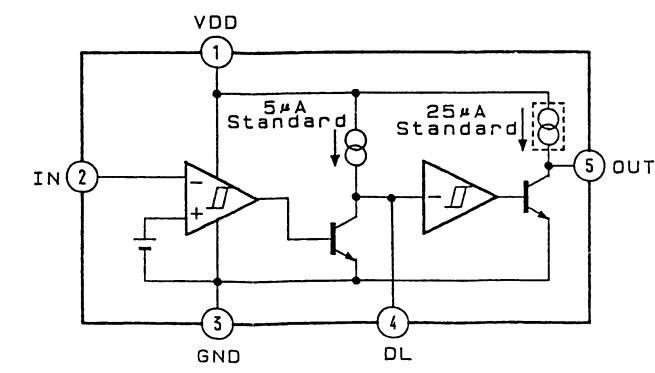
IC201 CXD2500AQ

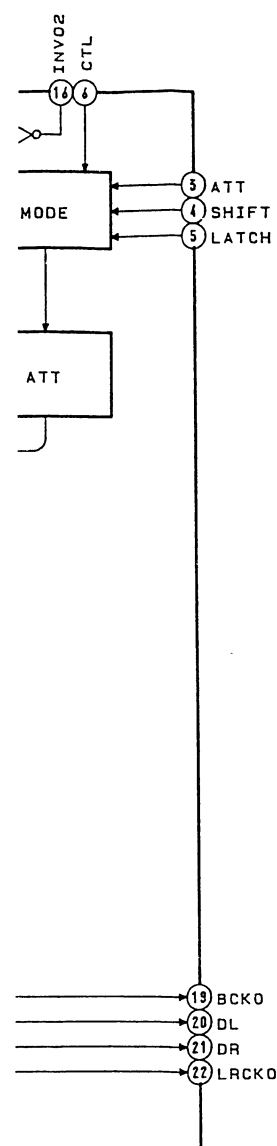


IC601 CXD2560M

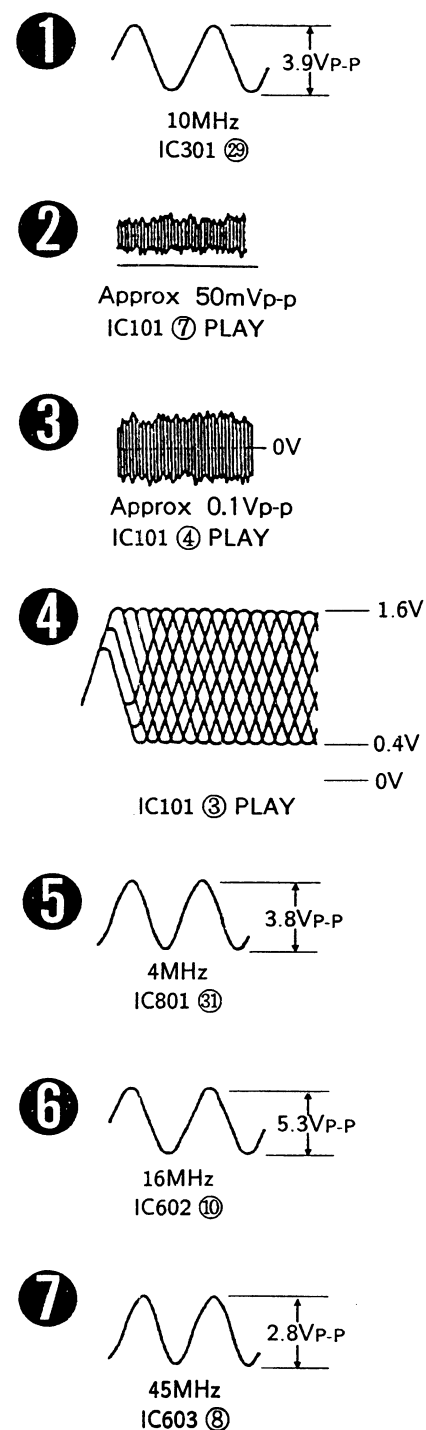


IC952 M51957AL



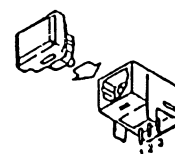


— WAVEFORM —



3-8. SEMICONDUCTOR LEAD LAYOUTS

GP-1F31T



F10P10Q



DTA144ES
DTC114ES



2SB734-34
2SD774-34



2SC1845-EA
2SC2545-E
2SC2878-B



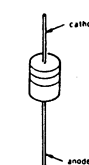
2SC3246-JK



M51957AL



HZS12A2L
LTZ-MR19
RD3.3ES-B2
RD5.6JS-B1
RD4.7JS-B2



DTC114EF



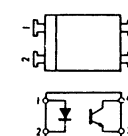
2SA1083E



M5F7818L
M5F7918L



PC817



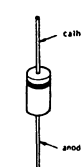
2SA1349-GRBL
2SC3381-BL



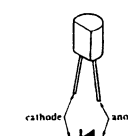
2SJ76
2SK213



ERB83-004
RD5.1JS-B2
10E2
1N4148M



RD27JS-B2



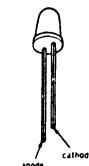
2SA1606-E
2SA985A-QP
2SC3514-Q
2SC2275A-QP
2SC4159-E
2SD1944-K



2SK246-GR
2SK246-Y
2SK30A-0



EAA5638S
EBG5638S



SECTION 4

EXPLODED VIEWS

NOTE:

- -XX, -X mean standardized parts, so they may have some difference from the original one.

- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)

Parts color

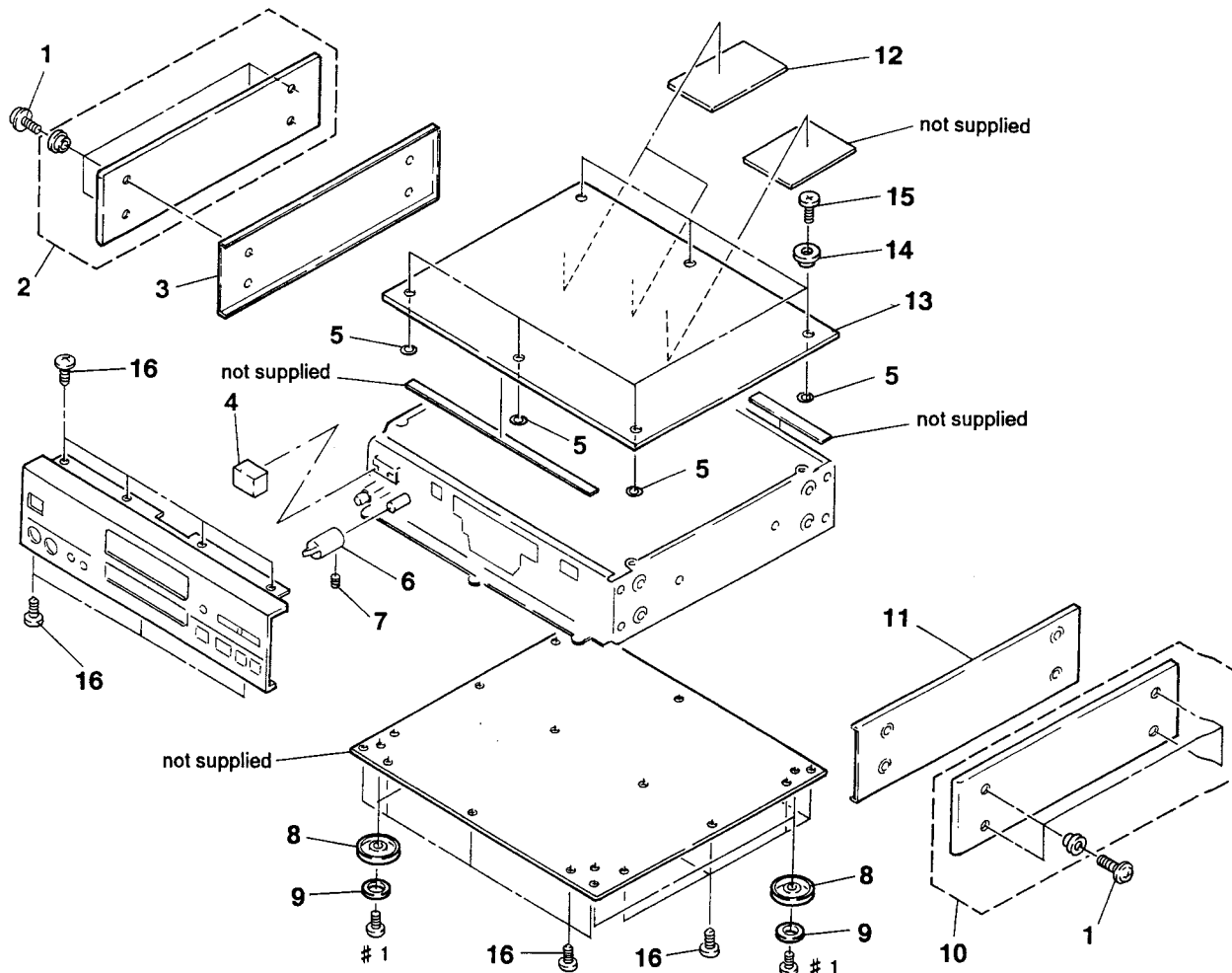
Cabinet's color

- Items marked “ * ” are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

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

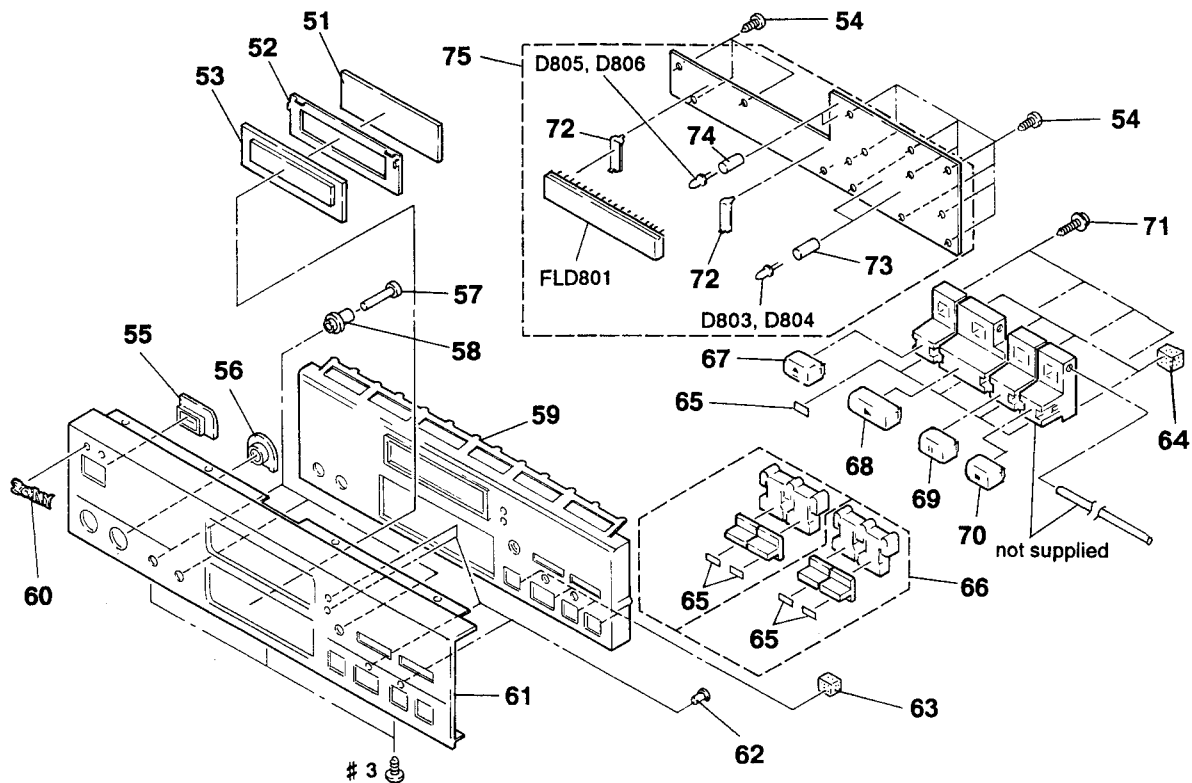
Les composants identifiés par une marque  sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

4-1. CABINET ASSEMBLY



<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
1	4-885-979-11	SCREW (4X25)		10	X-4941-169-2	PLATE(R) ASSY, SIDE, ORNAMENTAL (US, Canadian, AEP: GOLD)	
2	X-4941-168-2	PLATE(L) ASSY, SIDE, ORNAMENTAL (US, Canadian, AEP: GOLD)					
2	X-4941-204-1	PRATE (L) ASSY, SIDE, ORNAMENTAL (AEP: BLACK)		10	X-4941-205-1	PRATE (R) ASSY, SIDE, ORNAMENTAL (AEP: BLACK)	
* 3	4-928-061-31	PLATE (LEFT), SIDE (US, Canadian, AEP: GOLD)		* 11	4-928-062-31	PLATE (RIGHT), SIDE (US, Canadian, AEP: GOLD)	
* 3	4-928-061-21	PLATE (LEFT), SIDE (AEP: BLACK)		* 11	4-928-062-21	PLATE (RIGHT), SIDE (AEP: BLACK)	
4	X-4934-014-1	KNOB (POWER) ASSY (AEP: BLACK)		12	3-831-441-11	FELT (C), ACOUSTIC ABSORBENT	
4	X-4941-629-1	KNOB (POWER) ASSY (US, Canadian, AEP: GOLD)		* 13	4-928-020-01	PLATE, TOP (AEP: BLACK)	
* 5	4-923-581-01	SPACER		13	4-928-020-11	PLATE, TOP (US, Canadian, AEP: GOLD)	
6	4-950-058-01	KNOB, VOLUME (AEP: BLACK)		14	4-924-237-01	ESCUTCHEON (A) (US, Canadian, AEP: GOLD)	
6	4-950-058-11	KNOB, VOLUME (US, Canadian, AEP: GOLD)		14	4-924-237-11	ESCUTCHEON (A) (AEP: BLACK)	
7	3-701-505-00	SET SCREW, DOUBLE POINT 3X3		15	4-924-242-01	SCREW (M3X6), FLAT HEAD (US, Canadian, AEP: GOLD)	
8	4-928-028-01	BASE, FOOT (AEP: BLACK)		15	4-924-242-11	SCREW (M3X6), FLAT HEAD (AEP: BLACK)	
8	4-928-028-11	BASE, FOOT (US, Canadian, AEP: GOLD)		16	4-929-074-01	SCREW (3X8)	
9	4-935-912-01	FOOT (CUSHION)					

4-2. FRONT PANEL ASSEMBLY

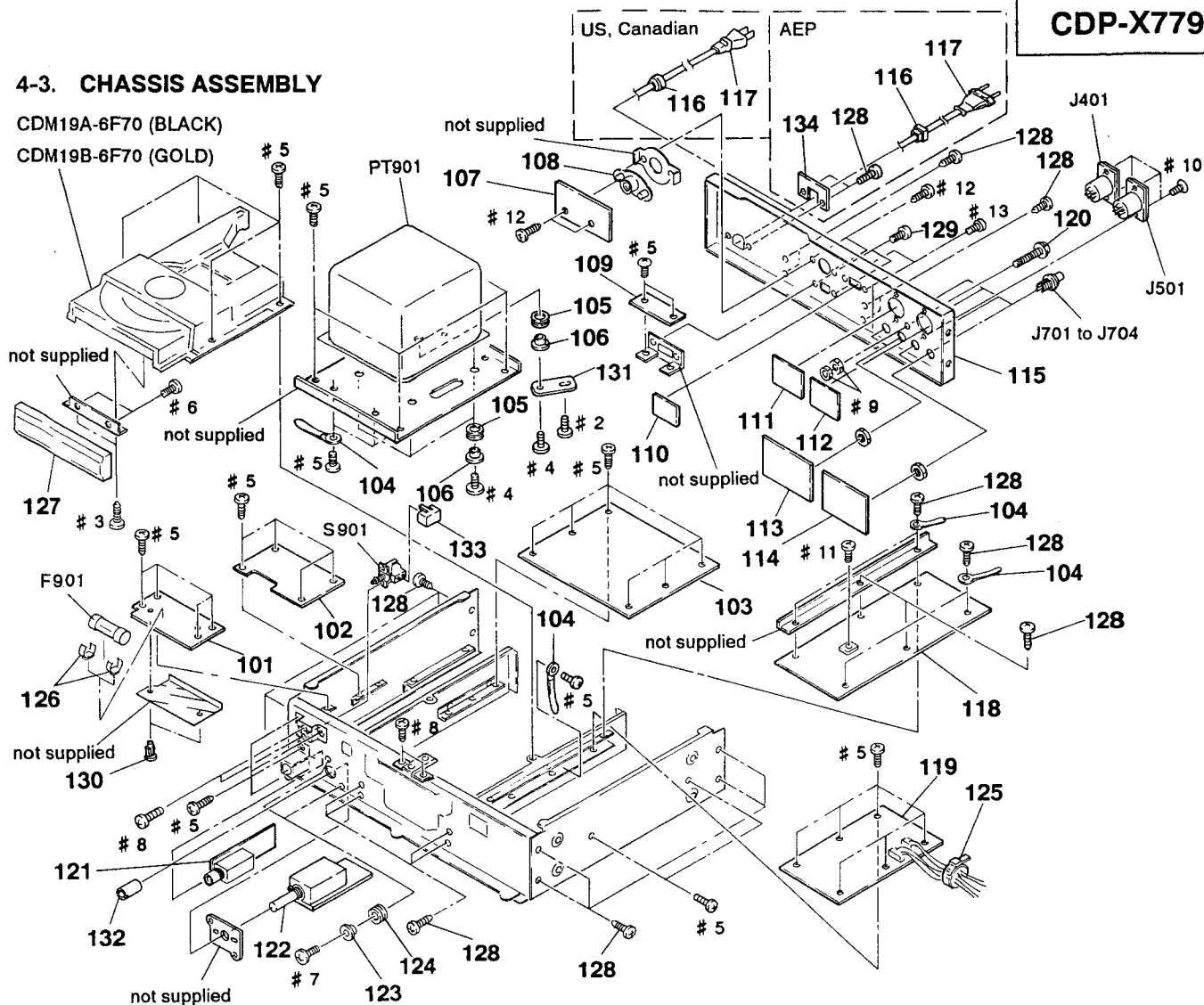


Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-947-968-01	FILTER		64	9-911-845-XX	CUSHION	
52	4-947-969-01	PLATE, ORNAMENTAL (US, Canadian, AEP: GOLD)		65	3-831-441-11	SPACER	
52	4-947-969-11	PLATE, ORNAMENTAL (AEP: BLACK)		66	A-4604-931-A	KNOB ASSY (US, Canadian, AEP: GOLD)	
53	4-947-967-01	WINDOW		66	A-4660-038-A	KNOB ASSY (AEP: BLACK)	
54	4-951-620-01	SCREW (2. 6X8), +BVTP		67	4-947-958-01	CAP (S), KNOB (US, Canadian, AEP: GOLD)	
55	4-928-038-01	ESCUTCHEON (POWER) (AEP: BLACK)		67	4-947-958-31	CAP (S), KNOB (AEP: BLACK)	
55	4-928-038-11	ESCUTCHEON (POWER) (US, Canadian, AEP: GOLD)		68	4-947-957-01	CAP (L), KNOB (US, Canadian, AEP: GOLD)	
56	4-942-459-01	ESCUTCHEON, KNOB (AEP: BLACK)		68	4-947-957-11	CAP (L), KNOB (AEP: BLACK)	
56	4-942-459-11	ESCUTCHEON, KNOB (US, Canadian, AEP: GOLD)		69	4-947-958-11	CAP (S), KNOB (US, Canadian, AEP: GOLD)	
57	4-947-986-01	BUTTON (DIA. 3) (US, Canadian, AEP: GOLD)		69	4-947-958-51	CAP (S), KNOB (AEP: BLACK)	
57	4-947-986-11	BUTTON (DIA. 3) (AEP: BLACK)		70	4-947-958-21	CAP (S), KNOB (US, Canadian, AEP: GOLD)	
* 58	4-947-987-01	GUIDE (BUTTON DIA. 3)		70	4-947-958-41	CAP (S), KNOB (AEP: BLACK)	
59	X-4941-984-1	PANEL (BASE) ASSY (US, Canadian, AEP: GOLD)		* 71	4-933-134-11	SCREW (+PTPH M2. 6X8)	
59	X-4942-323-1	PANEL (BASE) ASSY (AEP: BLACK)		* 72	4-947-984-01	HOLDER (FL)	
60	4-908-848-21	EMBLEM, SONY (US, Canadian, AEP: GOLD)		* 73	4-923-532-21	SPACER, LED	
60	4-908-848-01	EMBLEM, SONY (AEP: BLACK)		* 74	4-923-532-31	SPACER, LED	
61	4-947-960-01	PANEL, FRONT (US, Canadian, AEP: GOLD)		* 75	A-4649-013-A	DISPLAY BOARD, COMPLETE	
61	4-947-960-11	PANEL, FRONT (AEP: BLACK)		D803	8-719-913-49	DIODE EBG5638S (PLAY)	
62	4-941-214-01	INDICATOR		D804	8-719-913-47	DIODE EBG5638S (PAUSE)	
63	9-911-846-XX	CUSHION		D805	8-719-913-47	DIODE EBG5638S (D/O ON)	
				D806	8-719-913-49	DIODE EBG5638S (D/O OFF)	
				FLD801	1-519-688-11	INDICATOR TUBE, FLUORESCENT	

4-3. CHASSIS ASSEMBLY

CDM19A-6F70 (BLACK)

CDM19B-6F70 (GOLD)



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

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

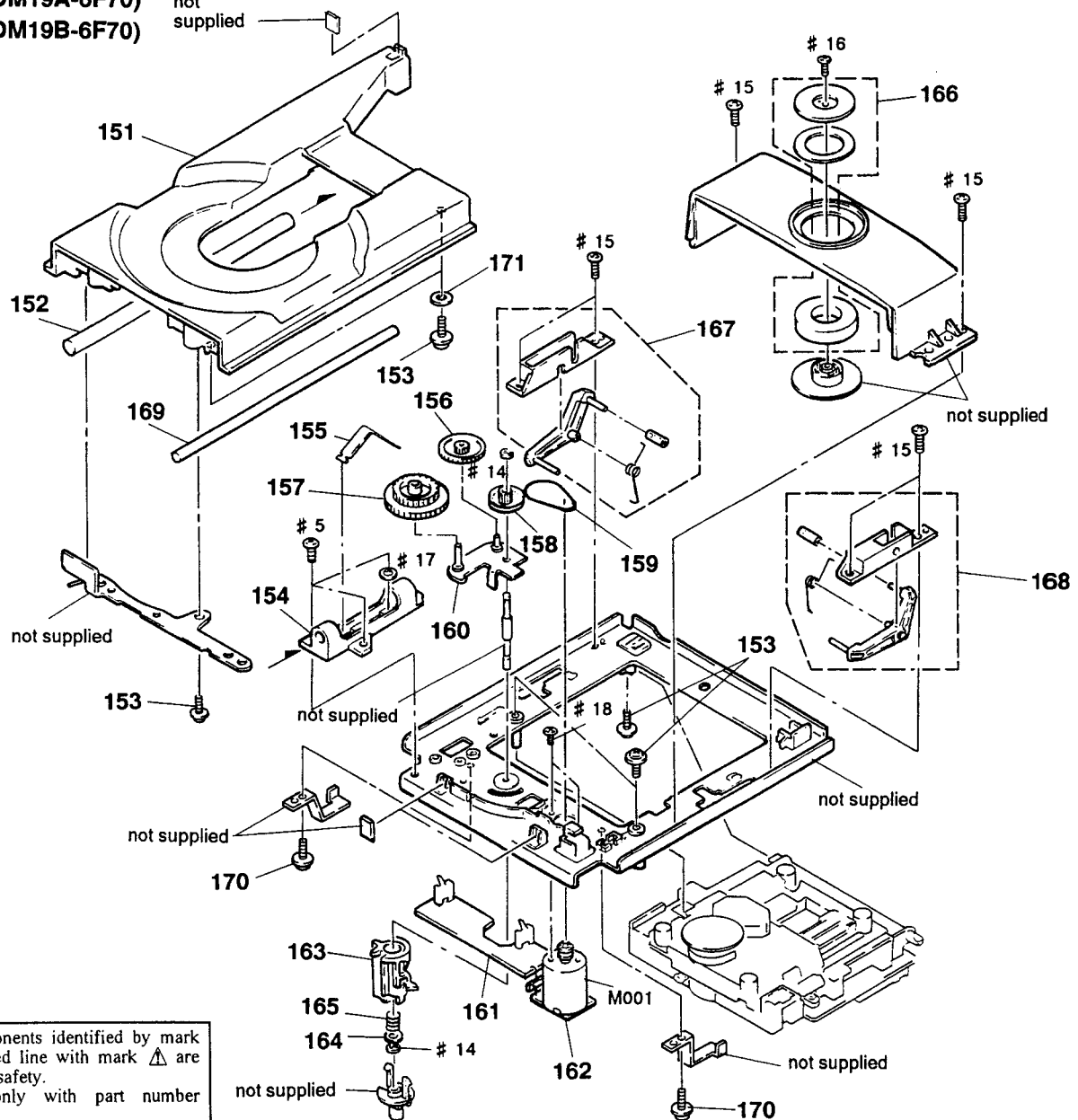
Ref. No.	Part No.	Description	Remark
* 101	1-641-751-11	AC BOARD	
* 102	A-4649-184-A	D POWER BOARD, COMPLETE	
* 103	A-4649-017-A	AU POWER BOARD, COMPLETE	
* 104	3-701-822-00	HOLDER, WIRE	
* 105	4-888-798-00	BUSHING, RUBBER	
106	4-928-068-01	COLLAR (C)	
* 107	1-641-754-11	COAX BOARD	
* 108	4-913-152-01	ESCUTCHEON, D/O	
* 109	1-641-755-11	OPT BOARD	
* 110	1-641-756-11	BALANCE SW BOARD	
* 111	1-641-752-11	BALANCE (L) BOARD	
* 112	1-641-753-11	BALANCE (R) BOARD	
* 113	1-641-749-11	VARIABLE BOARD	
* 114	1-641-748-11	FIX BOARD	
* 115	4-947-973-22	PANEL, BACK (AEP: BLACK)	
* 115	4-947-973-32	PANEL, BACK (US)	
* 115	4-947-973-42	PANEL, BACK (AEP: GOLD)	
* 115	4-947-973-52	PANEL, BACK (Canadian)	
* 116	3-703-685-00	BUSHING (2104), CORD (AEP)	
116	4-916-783-01	BUSHING, CORD (US, Canadian)	
$\triangle$ 117	1-558-568-21	CORD, POWER (AEP)	
$\triangle$ 117	1-690-958-11	CORD, POWER (US, Canadian)	
* 118	A-4649-018-A	AUDIO BOARD, COMPLETE	
* 119	A-4649-021-A	AUDIO SUB BOARD, COMPLETE	
120	4-886-821-51	SCREW, CASE, (M3X14)	
* 121	1-642-213-11	HP(B) BOARD (US, Canadian, AEP: GOLD)	
* 121	1-641-759-11	HP BOARD (AEP: BLACK)	
* 122	1-641-761-11	M. VR BOARD	

Ref. No.	Part No.	Description	Remark
* 123	4-928-026-01	COLLAR (B)	
* 124	4-888-798-11	BUSHING, RUBBER	
125	3-655-653-21	BAND (TAITON), BINDING	
126	1-533-183-11	HOLDER, FUSE	
127	4-947-966-01	PANEL, LOADING (US, Canadian, AEP: GOLD)	
127	4-947-966-11	PANEL, LOADING (AEP: BLACK)	
128	4-929-074-01	SCREW (3X8)	
129	3-703-685-21	SCREW (+BV 3X8)	
130	3-531-576-11	RIVET	
* 131	4-952-424-01	PLATE (TRANSFORMER), GROUND	
* 132	4-942-456-01	BRACKET (VOL)	
133	3-575-524-00	COVER, POWER SWITCH	
* 134	4-923-873-01	BRACKET, CORD STOPPER (AEP: BLACK)	
* 134	4-923-873-11	BRACKET, CORD STOPPER (AEP: GOLD)	
$\triangle$ F901	1-532-215-00	FUSE, TIME-LAG (AEP)	
$\triangle$ F901	1-532-825-11	FUSE, GLASS TUBE (US, Canadian)	
J401	1-563-030-11	CONNECTOR (RECEPTACLE) 3P (BALANCE OUT L)	
J501	1-563-030-11	CONNECTOR (RECEPTACLE) 3P (BALANCE OUT R)	
J701	1-568-918-11	JACK, PIN 1P (FIXED R)	
J702	1-568-918-11	JACK, PIN 1P (FIXED L)	
J703	1-568-918-11	JACK, PIN 1P (VARIABLE R)	
J704	1-568-918-11	JACK, PIN 1P (VARIABLE L)	
$\triangle$ PT901	1-450-775-11	TRANSFORMER, POWER (US, Canadian)	
$\triangle$ PT901	1-450-776-11	TRANSFORMER, POWER (AEP)	
$\triangle$ S901	1-554-538-00	SWITCH, PUSH (AC POWER) (1 KEY)	

4-4. MECHANISM BLOCK ASSEMBLY (1)

(CDM19A-6F70)

(CDM19B-6F70)



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

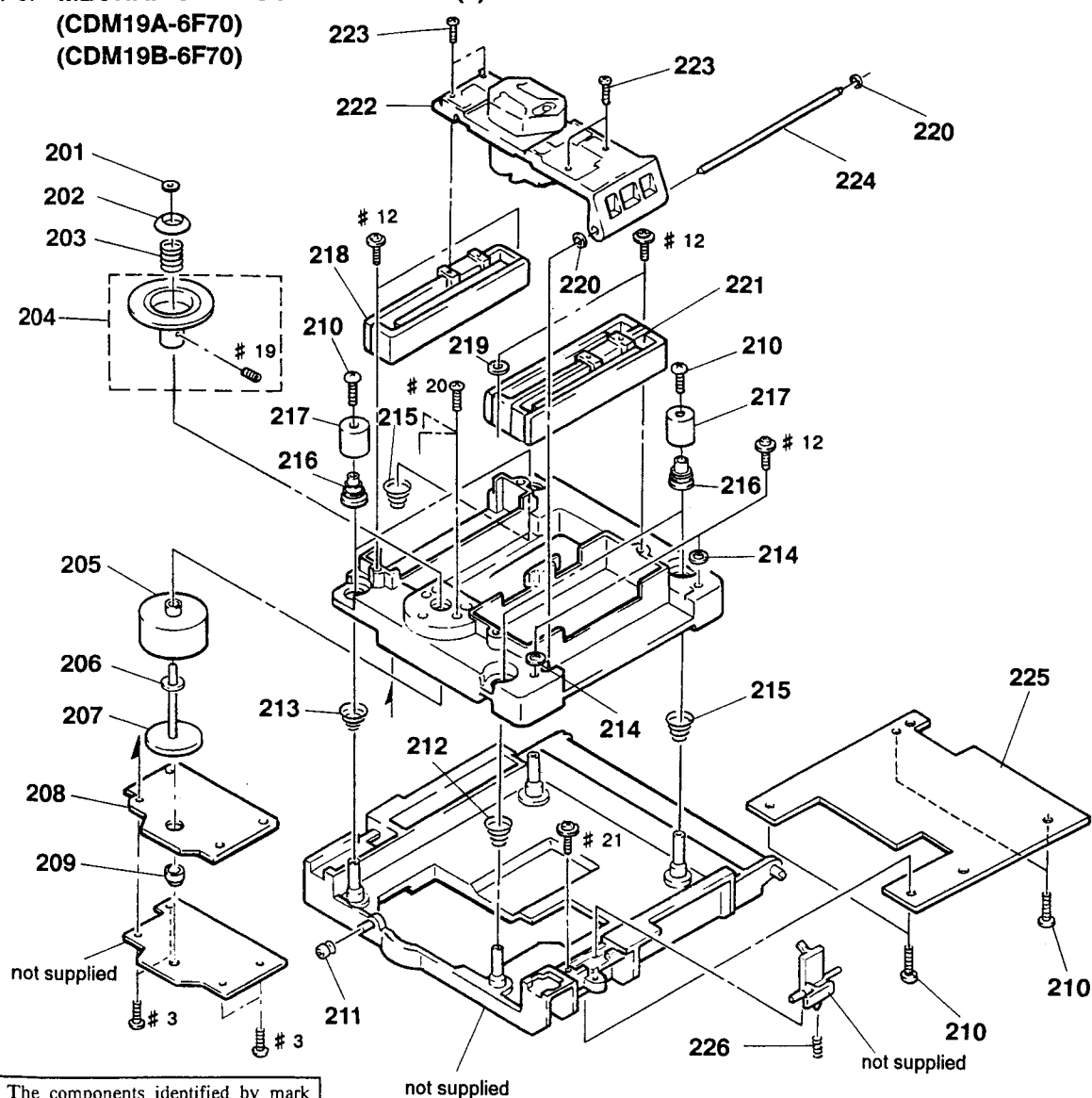
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-948-353-01	TABLE, DISK (AEP: BLACK)		* 162	1-641-765-11	L. MOTOR BOARD	
151	4-948-353-11	TABLE, DISK (US, Canadian, AEP: GOLD)		* 163	4-948-371-01	CAM (BU)	
* 152	4-948-368-01	BAR (MAIN), GUIDE		164	4-927-654-01	WASHER (LIMITER)	
* 153	4-917-583-21	BRACKET, YOKE		165	3-659-338-00	SPRING, COMPRESSION	
* 154	4-948-360-01	BEARING, LOADING		166	A-4604-912-A	MAGNET ASSY	
* 155	4-927-648-01	SLIDER (GROUND)		167	A-4604-913-A	LOCK (L) ASSY, STABLE	
156	4-927-628-01	GEAR (C)		168	A-4604-914-A	LOCK (R) ASSY, STABLE	
157	4-927-620-01	GEAR (P)		* 169	4-948-369-01	BAR (SUB), GUIDE	
158	4-929-724-01	PULLEY (B)		170	3-703-685-21	SCREW (+BV 3X8)	
159	4-927-649-01	BELT		171	4-927-318-01	WASHER	
160	X-4927-608-1	ARM ASSY, SWING		M001	A-4604-347-A	MOTOR (L) ASSY (LOADING)	
* 161	1-641-764-11	SW BOARD					

4-5. MECHANISM BLOCK ASSEMBLY (2)

(CDM19A-6F70)

(CDM19B-6F70)



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

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

Ref. No.	Part No.	Description
201	4-947-420-01	RING (DIA. 2.53), RETAINING
202	4-948-381-01	CAP, CENTERING
203	4-908-213-01	SPRING, COMPRESSION
204	X-4942-048-1	PULLEY ASSY, DISK
205	4-948-382-02	BEARING (SPINDLE)
206	3-701-439-11	WASHER
* 207	A-4660-055-B	PULLEY ASSY, MOTOR
* 208	A-4617-993-A	BSL BOARD, COMPLETE
209	4-943-342-01	BEARING
210	4-951-620-01	SCREW (2.6X8), +BVTP
211	4-927-631-01	ROLLER (L)
212	4-917-573-01	SPRING (E)
213	4-948-375-01	SPRING (F), COIL
214	4-927-318-01	WASHER

Remark	Ref. No.	Part No.	Description	Remark
	215	4-917-571-01	SPRING (A)	
	* 216	4-917-584-11	INSULATOR	
	217	4-927-634-01	HOLDER (SP)	
	218	A-4638-084-A	SENSOR ASSY, SPEED	
	219	4-927-669-01	WASHER (BU)	
	* 220	4-917-582-01	CUSHION, SLIDE	
	221	A-4608-335-A	MOTOR ASSY, LINEAR	
	▲ 222	8-848-244-11	DEVICE, OPTICAL KSS-272A	
	223	3-318-203-61	SCREW (B1.7X4), TAPPING	
	* 224	4-910-431-01	SHAFT, SLIDE	
	* 225	A-4649-006-A	SERVO (1) (A) BOARD, COMPLETE	
	226	3-305-423-00	SPRING, COMPRESSION	

AC AU POWER**SECTION 5
ELECTRICAL PARTS LIST**

NOTE:

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.

When indicating parts by reference number, please include the board name.

• 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.

• -XX, -X mean standardized parts, so they may have some difference from the original one.

RESISTORS

All resistors are in ohms

METAL: Metal-film resistor

METAL OXIDE: Metal Oxide-film resistor

F: nonflammable

• Color Indication of Appearance Parts Example:

KNOB, BALANCE (WHITE) ... (RED)

↑
Parts color

↑
Cabinet's color

• Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

SEMICONDUCTORS

In each case, u: μ , for example:

uA...: μ A..., uPA...: μ PA...,

uPB...: μ PB..., uPC...: μ PC...,

uPD...: μ PD...

CAPACITORS

uF: μ F

COILS

uH: μ H

• Hardware (# mark) list is given in the last of this parts list.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-641-751-11	AC BOARD *****		C918	1-125-663-11	ELECT 1200uF 20% 63V	
		< CAPACITOR >		C919	1-107-210-00	MICA 22PF 5% 500V	
Δ C901	1-161-744-00	CERAMIC 0.01uF 400V		C921	1-136-177-00	FILM 1uF 5% 50V	
Δ C903	1-162-599-12	CERAMIC 0.0047uF 20% 400V		C922	1-106-343-00	MYLAR 1000PF 5% 200V	
		< CONNECTOR >		C923	1-124-911-11	ELECT 220uF 20% 50V	
CN901	1-564-321-00	PIN, CONNECTOR 2P		C924	1-124-572-11	ELECT 100uF 20% 63V	
* CN902	1-580-230-11	PIN, CONNECTOR (PC BOARD) 3P		C925	1-107-202-00	MICA 10PF 5% 500V	
		< BASE POST >		C932	1-125-709-11	ELECT 4700uF 20% 63V	
LP901	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P		C933	1-130-495-00	MYLAR 0.1uF 5% 50V	
LP902	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P		C934	1-107-169-00	MICA 100PF 5% 500V	
		< COIL >		C935	1-107-169-00	MICA 100PF 5% 500V	
T901	1-421-915-11	COIL, LINE FILTER		C936	1-107-169-00	MICA 100PF 5% 500V	
		< FUSE >		C937	1-124-911-11	ELECT 220uF 20% 50V	
Δ F901	1-532-215-00	FUSE, TIME-LAG (AEP)		C938	1-125-663-11	ELECT 1200uF 20% 63V	
Δ F902	1-532-825-11	FUSE, GLASS TUBE (US, Canadian)		C939	1-107-210-00	MICA 22PF 5% 500V	
*****				C943	1-124-911-11	ELECT 220uF 20% 50V	
*	A-4649-017-A	AU POWER BOARD, COMPLETE *****		C944	1-124-572-11	ELECT 100uF 20% 63V	
		< BUS BAR >		C945	1-107-202-00	MICA 10PF 5% 500V	
* BUS910	1-566-959-11	BAR, BUS		< CONNECTOR >			
* BUS911	1-566-959-11	BAR, BUS		* CN910	1-573-262-41	PIN, CONNECTOR 3P	
* BUS912	1-580-302-11	BAR, BUS 4P		* CN911	1-573-262-21	PIN, CONNECTOR 3P	
* BUS913	1-580-302-11	BAR, BUS 4P		* CN912	1-573-263-11	PIN, CONNECTOR 4P	
* BUS914	1-691-279-11	BUS BAR 5P		* CN913	1-573-265-11	PIN, CONNECTOR 6P	
		< CAPACITOR >		* CN914	1-573-262-31	PIN, CONNECTOR 3P	
C910	1-136-177-00	FILM 1uF 5% 50V		* CN915	1-573-261-11	PIN, CONNECTOR 2P	
C911	1-106-343-00	MYLAR 1000PF 5% 200V		< DIODE >			
C912	1-125-709-11	ELECT 4700uF 20% 63V		D910	8-719-210-29	DIODE F10P10Q	
C913	1-130-495-00	MYLAR 0.1uF 5% 50V		D911	8-719-210-29	DIODE F10P10Q	
C914	1-107-169-00	MICA 100PF 5% 500V		D912	8-719-210-29	DIODE F10P10Q	
C915	1-107-169-00	MICA 100PF 5% 500V		D913	8-719-210-29	DIODE F10P10Q	
C916	1-107-169-00	MICA 100PF 5% 500V		D914	8-719-988-53	DIODE LTZ-MR19	
C917	1-124-911-11	ELECT 220uF 20% 50V		D915	8-719-114-36	DIODE RD5.6JS-B1	
				D930	8-719-210-29	DIODE F10P10Q	
				D931	8-719-210-29	DIODE F10P10Q	
				D932	8-719-210-29	DIODE F10P10Q	
				D933	8-719-210-29	DIODE F10P10Q	
				D934	8-719-988-53	DIODE LTZ-MR19	
				D935	8-719-114-36	DIODE RD5.6JS-B1	

AU POWER

AUDIO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< IC >				R924	1-249-799-11	CARBON 750 1% 1/2W	
IC910	8-759-604-87	IC M5F7818L		R925	1-259-547-11	CARBON 470 1% 1/2W	
IC930	8-759-604-91	IC M5F7918L		△R926	1-217-997-11	FUSIBLE 10 5% 1/2W	
< BASE POST >				R931	1-259-585-11	CARBON 18K 1% 1/2W	
* LP910	1-535-140-00	BASE POST 22MM (10MM PITCH) 3P		R932	1-259-539-11	CARBON 220 1% 1/2W	
< IC LINK >				R933	1-259-541-11	CARBON 270 1% 1/2W	
△PS910	1-532-675-00	LINK, IC 1.5A		R934	1-259-571-11	CARBON 4.7K 1% 1/2W	
△PS911	1-532-637-00	LINK, IC 1.0A		R935	1-259-557-11	CARBON 1.2K 1% 1/2W	
△PS931	1-532-675-00	LINK, IC 1.5A		R936	1-259-519-11	CARBON 33 1% 1/2W	
△PS932	1-532-637-00	LINK, IC 1.0A		R937	1-259-507-11	CARBON 10 1% 1/2W	
< TRANSISTOR >				R938	1-259-507-11	CARBON 10 1% 1/2W	
Q910	8-729-322-40	TRANSISTOR 2SA1083E		R939	1-259-507-11	CARBON 10 1% 1/2W	
Q911	8-729-354-52	TRANSISTOR 2SC2545-E		R940	1-259-507-11	CARBON 10 1% 1/2W	
Q912	8-729-322-40	TRANSISTOR 2SA1083E		R941	1-259-555-11	CARBON 1K 1% 1/2W	
Q913	8-729-354-52	TRANSISTOR 2SC2545-E		R942	1-259-555-11	CARBON 1K 1% 1/2W	
Q914	8-729-202-72	TRANSISTOR 2SC3381-BL		R943	1-259-507-11	CARBON 10 1% 1/2W	
Q915	8-729-202-72	TRANSISTOR 2SC3381-BL		R944	1-249-799-11	CARBON 750 1% 1/2W	
Q916	8-729-354-52	TRANSISTOR 2SC2545-E		R945	1-259-547-11	CARBON 470 1% 1/2W	
Q917	8-729-354-52	TRANSISTOR 2SC2545-E		△R946	1-217-997-11	FUSIBLE 10 5% 1/2W	
Q918	8-729-141-10	TRANSISTOR 2SA985A-QP		*****			
Q919	8-729-201-05	TRANSISTOR 2SC2878-B		* A-4649-018-A	AUDIO BOARD, COMPLETE		
Q920	8-729-307-65	TRANSISTOR 2SJ76		*****			
Q930	8-729-354-52	TRANSISTOR 2SC2545-E		< BUS BAR >			
Q931	8-729-354-52	TRANSISTOR 2SC2545-E		* BUS1	1-569-137-11	BUS BAR 2P	
Q932	8-729-354-52	TRANSISTOR 2SC2545-E		* BUS2	1-569-137-11	BUS BAR 2P	
Q933	8-729-322-40	TRANSISTOR 2SA1083E		* BUS3	1-569-137-11	BUS BAR 2P	
Q934	8-729-232-00	TRANSISTOR 2SA1349-GRBL		* BUS3	1-691-275-11	BUS BAR	
Q935	8-729-232-00	TRANSISTOR 2SA1349-GRBL		* BUS4	1-569-137-11	BUS BAR 2P	
Q936	8-729-322-40	TRANSISTOR 2SA1083E		< CAPACITOR >			
Q937	8-729-322-40	TRANSISTOR 2SA1083E		C402	1-136-165-00	FILM 0.1uF 5% 50V	
Q938	8-729-141-58	TRANSISTOR 2SC2275A-QP		C403	1-126-052-11	ELECT 100uF 20% 50V	
Q939	8-729-322-40	TRANSISTOR 2SA1083E		C404	1-162-806-11	CERAMIC 0.1uF 10% 50V	
Q940	8-729-321-35	TRANSISTOR 2SK213		C405	1-162-806-11	CERAMIC 0.1uF 10% 50V	
< RESISTOR >				C406	1-162-806-11	CERAMIC 0.1uF 10% 50V	
△R900	1-212-877-11	FUSIBLE 68 5% 1/4W F		C407	1-162-806-11	CERAMIC 0.1uF 10% 50V	
△R910	1-212-875-00	FUSIBLE 56 5% 1/4W F		C408	1-126-052-11	ELECT 100uF 20% 50V	
R911	1-259-585-11	CARBON 18K 1% 1/2W		C409	1-162-806-11	CERAMIC 0.1uF 10% 50V	
R912	1-259-539-11	CARBON 220 1% 1/2W		C410	1-126-052-11	ELECT 100uF 20% 50V	
R913	1-259-541-11	CARBON 270 1% 1/2W		C411	1-162-806-11	CERAMIC 0.1uF 10% 50V	
R914	1-259-571-11	CARBON 4.7K 1% 1/2W		C412	1-162-806-11	CERAMIC 0.1uF 10% 50V	
R915	1-259-557-11	CARBON 1.2K 1% 1/2W		C413	1-126-052-11	ELECT 100uF 20% 50V	
R916	1-259-519-11	CARBON 33 1% 1/2W		C414	1-162-806-11	CERAMIC 0.1uF 10% 50V	
R917	1-259-507-11	CARBON 10 1% 1/2W		C415	1-162-806-11	CERAMIC 0.1uF 10% 50V	
R918	1-259-507-11	CARBON 10 1% 1/2W		C416	1-126-052-11	ELECT 100uF 20% 50V	
R919	1-259-507-11	CARBON 10 1% 1/2W		C417	1-136-165-00	FILM 0.1uF 5% 50V	
R920	1-259-507-11	CARBON 10 1% 1/2W		C418	1-124-122-11	ELECT 100uF 20% 50V	
R921	1-259-555-11	CARBON 1K 1% 1/2W		C420	1-136-810-11	FILM 220PF 5% 100V	
R922	1-259-555-11	CARBON 1K 1% 1/2W		C421	1-136-810-11	FILM 220PF 5% 100V	
R923	1-259-507-11	CARBON 10 1% 1/2W					
				The components identified by mark Les composants identifiés par une			

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.

AUDIO

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
C424	1-136-810-11	FILM	220PF	5%	100V	C607	1-136-165-00	FILM	0.1uF	5%	50V
C425	1-136-810-11	FILM	220PF	5%	100V	C608	1-124-122-11	ELECT	100uF	20%	50V
C426	1-136-811-11	FILM	330PF	5%	100V	C609	1-136-165-00	FILM	0.1uF	5%	50V
C427	1-136-811-11	FILM	330PF	5%	100V	C610	1-126-052-11	ELECT	100uF	20%	50V
C428	1-136-192-11	FILM	0.0018uF	2%	100V	C611	1-124-572-11	ELECT	100uF	20%	63V
C429	1-136-192-11	FILM	0.0018uF	2%	100V	C612	1-162-806-11	CERAMIC	0.1uF	10%	50V
C430	1-136-192-11	FILM	0.0018uF	2%	100V	C613	1-107-202-00	MICA	10PF	5%	500V
C432	1-137-508-11	FILM	2.2uF	10%	63V	C614	1-107-202-00	MICA	10PF	5%	500V
C433	1-107-169-00	MICA	100PF	5%	500V	C615	1-125-663-11	ELECT	1200uF	20%	63V
C434	1-107-202-00	MICA	10PF	5%	500V	C616	1-107-202-00	MICA	10PF	5%	500V
C435	1-107-169-00	MICA	100PF	5%	500V	C617	1-130-483-00	MYLAR	0.01uF	5%	50V
C450	1-130-480-00	MYLAR	0.0056uF	5%	50V	C618	1-130-483-00	MYLAR	0.01uF	5%	50V
C501	1-124-122-11	ELECT	100uF	20%	50V	C619	1-162-806-11	CERAMIC	0.1uF	10%	50V
C502	1-136-165-00	FILM	0.1uF	5%	50V	C620	1-124-572-11	ELECT	100uF	20%	63V
C503	1-126-052-11	ELECT	100uF	20%	50V	C621	1-137-507-11	FILM	1uF	10%	63V
C504	1-162-806-11	CERAMIC	0.1uF	10%	50V	C622	1-137-507-11	FILM	1uF	10%	63V
C505	1-162-806-11	CERAMIC	0.1uF	10%	50V	C623	1-137-507-11	FILM	1uF	10%	63V
C506	1-162-806-11	CERAMIC	0.1uF	10%	50V	C624	1-137-507-11	FILM	1uF	10%	63V
C507	1-162-806-11	CERAMIC	0.1uF	10%	50V	C625	1-164-159-11	CERAMIC	0.1uF		50V
C508	1-126-052-11	ELECT	100uF	20%	50V	C626	1-164-159-11	CERAMIC	0.1uF		50V
C509	1-162-806-11	CERAMIC	0.1uF	10%	50V	< CONNECTOR >					
C510	1-126-052-11	ELECT	100uF	20%	50V	* CN401	1-573-263-11	PIN, CONNECTOR	4P		
C511	1-162-806-11	CERAMIC	0.1uF	10%	50V	* CN402	1-573-262-41	PIN, CONNECTOR	3P		
C512	1-162-806-11	CERAMIC	0.1uF	10%	50V	* CN403	1-573-262-11	PIN, CONNECTOR	3P		
C513	1-126-052-11	ELECT	100uF	20%	50V	* CN501	1-573-263-21	PIN, CONNECTOR	4P		
C514	1-162-806-11	CERAMIC	0.1uF	10%	50V	* CN502	1-573-262-31	PIN, CONNECTOR	3P		
C515	1-162-806-11	CERAMIC	0.1uF	10%	50V	* CN503	1-573-262-21	PIN, CONNECTOR	3P		
C516	1-126-052-11	ELECT	100uF	20%	50V	* CN601	1-569-997-11	PIN, CONNECTOR (PC BOARD)	10P		
C517	1-136-165-00	FILM	0.1uF	5%	50V	* CN602	1-569-993-11	PIN, CONNECTOR (PC BOARD)	6P		
C521	1-136-810-11	FILM	220PF	5%	100V	* CN603	1-573-261-11	PIN, CONNECTOR	2P		
C522	1-136-810-11	FILM	220PF	5%	100V	* CN604	1-573-262-11	PIN, CONNECTOR	3P		
C525	1-136-810-11	FILM	220PF	5%	100V	* CN606	1-573-261-41	PIN, CONNECTOR	2P		
C526	1-136-810-11	FILM	220PF	5%	100V	* CN607	1-573-263-11	PIN, CONNECTOR	4P		
C527	1-136-811-11	FILM	330PF	5%	100V	* CN608	1-573-262-31	PIN, CONNECTOR	3P		
C528	1-136-811-11	FILM	330PF	5%	100V	* CN609	1-573-261-11	PIN, CONNECTOR	2P		
C529	1-136-192-11	FILM	0.0018uF	2%	100V	< DIODE >					
C530	1-136-192-11	FILM	0.0018uF	2%	100V	D401	8-719-988-53	DIODE	LTZ-MR19		
C531	1-136-192-11	FILM	0.0018uF	2%	100V	D402	8-719-988-53	DIODE	LTZ-MR19		
C533	1-137-508-11	FILM	2.2uF	10%	63V	D403	8-719-987-63	DIODE	1N4148M		
C534	1-107-169-00	MICA	100PF	5%	500V	D405	8-719-987-63	DIODE	1N4148M		
C535	1-107-202-00	MICA	10PF	5%	500V	D450	8-719-987-63	DIODE	1N4148M		
C536	1-107-169-00	MICA	100PF	5%	500V	D501	8-719-988-53	DIODE	LTZ-MR19		
C550	1-130-480-00	MYLAR	0.0056uF	5%	50V	D502	8-719-988-53	DIODE	LTZ-MR19		
C600	1-164-159-11	CERAMIC	0.1uF		50V	D503	8-719-987-63	DIODE	1N4148M		
C601	1-124-122-11	ELECT	100uF	20%	50V	D505	8-719-987-63	DIODE	1N4148M		
C602	1-136-165-00	FILM	0.1uF	5%	50V	D550	8-719-987-63	DIODE	1N4148M		
C603	1-162-294-31	CERAMIC	0.001uF	10%	50V	D600	8-719-987-63	DIODE	1N4148M		
C604	1-136-165-00	FILM	0.1uF	5%	50V	D601	8-719-987-63	DIODE	1N4148M		
C605	1-161-494-00	CERAMIC	0.022uF		25V						
C606	1-161-494-00	CERAMIC	0.022uF		25V						

AUDIO

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
D602	8-719-987-63	DIODE 1N4148M		Q503	8-729-184-53	TRANSISTOR 2SC1845-EA	
D603	8-719-988-53	DIODE LTZ-MR19		Q504	8-729-184-53	TRANSISTOR 2SC1845-EA	
D604	8-719-114-26	DIODE RD4. 7JS-B2		Q505	8-729-321-35	TRANSISTOR 2SK213	
				Q506	8-729-307-65	TRANSISTOR 2SJ76	
D605	8-719-114-26	DIODE RD4. 7JS-B2		Q507	8-729-224-62	TRANSISTOR 2SK246-GR	
D606	8-719-988-53	DIODE LTZ-MR19		Q508	8-729-201-05	TRANSISTOR 2SC2878-B	
D607	8-719-988-53	DIODE LTZ-MR19		Q550	8-729-900-80	TRANSISTOR DTC114ES	
D608	8-719-114-30	DIODE RD5. 1JS-B2		Q601	8-729-900-65	TRANSISTOR DTA144ES	
D610	8-719-987-63	DIODE 1N4148M		Q602	8-729-322-40	TRANSISTOR 2SA1083E	
(IC)				Q603	8-729-620-23	TRANSISTOR 2SC3246-JK	
IC401	8-759-044-10	IC CXD2562Q		Q604	8-729-104-18	TRANSISTOR 2SC3514	
IC402	8-759-900-72	IC NE5532P		Q605	8-729-307-65	TRANSISTOR 2SJ76	
IC403	8-759-900-72	IC NE5532P		Q606	8-729-322-40	TRANSISTOR 2SA1083E	
IC404	8-759-900-72	IC NE5532P		Q607	8-729-184-53	TRANSISTOR 2SC1845-EA	
IC405	8-759-971-80	IC AD712JN		Q608	8-729-184-53	TRANSISTOR 2SC1845-EA	
IC406	8-759-998-79	IC OPA27GP		Q609	8-729-203-02	TRANSISTOR 2SK30A-0	
IC501	8-759-044-10	IC CXD2562Q		(RESISTOR)			
IC502	8-759-900-72	IC NE5532P		R401	1-249-947-11	CARBON 10K 1% 1/4W	
IC503	8-759-900-72	IC NE5532P		R402	1-249-947-11	CARBON 10K 1% 1/4W	
IC504	8-759-900-72	IC NE5532P		R403	1-249-947-11	CARBON 10K 1% 1/4W	
IC505	8-759-971-80	IC AD712JN		R404	1-249-947-11	CARBON 10K 1% 1/4W	
IC506	8-759-998-79	IC OPA27GP		R405	1-249-947-11	CARBON 10K 1% 1/4W	
IC601	8-752-342-65	IC CXD2560M		R406	1-249-947-11	CARBON 10K 1% 1/4W	
IC602	8-759-917-18	IC SN74HCU04N		R407	1-249-947-11	CARBON 10K 1% 1/4W	
IC603	8-759-233-64	IC TC74HCU04AF		R408	1-249-947-11	CARBON 10K 1% 1/4W	
IC604	8-759-900-72	IC NE5532P		R409	1-249-944-11	CARBON 7.5K 1% 1/4W	
(COIL)				R410	1-249-944-11	CARBON 7.5K 1% 1/4W	
L401	1-410-969-11	INDUCTOR 4.7uH		R411	1-249-944-11	CARBON 7.5K 1% 1/4W	
L402	1-410-971-11	INDUCTOR 10uH		R412	1-249-944-11	CARBON 7.5K 1% 1/4W	
L501	1-410-969-11	INDUCTOR 4.7uH		R417	1-249-944-11	CARBON 7.5K 1% 1/4W	
L502	1-410-971-11	INDUCTOR 10uH		R418	1-249-944-11	CARBON 7.5K 1% 1/4W	
L601	1-410-970-11	INDUCTOR 6.8uH		R419	1-249-945-11	CARBON 8.2K 1% 1/4W	
(PHOTO INTERRUPTER)				R420	1-249-945-11	CARBON 8.2K 1% 1/4W	
PH401	8-719-902-56	DIODE PC817		R421	1-247-721-11	CARBON 4.7K 5% 1/4W	
PH501	8-719-902-56	DIODE PC817		R422	1-247-721-11	CARBON 4.7K 5% 1/4W	
(TRANSISTOR)				R423	1-249-929-11	CARBON 1.8K 1% 1/4W	
Q401	8-729-322-40	TRANSISTOR 2SA1083E		R424	1-249-929-11	CARBON 1.8K 1% 1/4W	
Q402	8-729-184-53	TRANSISTOR 2SC1845-EA		R425	1-249-929-11	CARBON 1.8K 1% 1/4W	
Q403	8-729-184-53	TRANSISTOR 2SC1845-EA		R426	1-249-929-11	CARBON 1.8K 1% 1/4W	
Q404	8-729-184-53	TRANSISTOR 2SC1845-EA		R427	1-249-977-11	CARBON 180K 1% 1/4W	
Q405	8-729-321-35	TRANSISTOR 2SK213		R428	1-247-713-11	CARBON 1K 5% 1/4W	
Q406	8-729-307-65	TRANSISTOR 2SJ76		R429	1-214-730-00	METAL 1.1K 1% 1/4W	
Q407	8-729-224-62	TRANSISTOR 2SK246-GR		R430	1-249-462-11	CARBON 22K 5% 1/4W	
Q408	8-729-201-05	TRANSISTOR 2SC2878-B		R431	1-249-915-11	CARBON 470 1% 1/4W	
Q450	8-729-900-80	TRANSISTOR DTC114ES		R432	1-249-948-11	CARBON 11K 1% 1/4W	
Q501	8-729-322-40	TRANSISTOR 2SA1083E		R433	1-249-940-11	CARBON 5.1K 1% 1/4W	
Q502	8-729-184-53	TRANSISTOR 2SC1845-EA		R434	1-249-948-11	CARBON 11K 1% 1/4W	
				R435	1-249-940-11	CARBON 5.1K 1% 1/4W	
				R436	1-249-915-11	CARBON 470 1% 1/4W	

AUDIO

AUDIO SUB

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
< VIBRATOR >							
X602	1-577-686-11	VIBRATOR, CRYSTAL (45 MHz)		* CN563	1-573-261-21	PIN, CONNECTOR 2P	
*****				* CN564	1-573-261-21	PIN, CONNECTOR 2P	
*	A-4649-021-A	AUDIO SUB BOARD, COMPLETE		* CN565	1-573-261-31	PIN, CONNECTOR 2P	
*****				* CN660	1-573-265-11	PIN, CONNECTOR 6P	
< CAPACITOR >				* CN661	1-573-262-21	PIN, CONNECTOR 3P	
C460	1-136-233-11	FILM	0.0047uF 2% 100V	* CN662	1-573-262-41	PIN, CONNECTOR 3P	
C461	1-136-228-11	FILM	0.0012uF 2% 100V	* CN663	1-573-263-41	PIN, CONNECTOR 4P	
C462	1-137-507-11	FILM	1uF 10% 63V	* CN664	1-573-265-41	PIN, CONNECTOR 6P	
C463	1-124-572-11	ELECT	100uF 20% 63V	< DIODE >			
C464	1-136-233-11	FILM	0.0047uF 2% 100V	D661	8-719-987-63	DIODE 1N4148M	
C465	1-136-228-11	FILM	0.0012uF 2% 100V	D662	8-719-987-63	DIODE 1N4148M	
C466	1-137-507-11	FILM	1uF 10% 63V	D663	8-719-987-63	DIODE 1N4148M	
C467	1-124-572-11	ELECT	100uF 20% 63V	D664	8-719-987-63	DIODE 1N4148M	
C468	1-136-272-00	FILM	68PF 5% 630V	D666	8-719-114-30	DIODE RD5.1JS-B2	
C469	1-124-913-11	ELECT	470uF 20% 50V	D667	8-719-933-74	DIODE HZS12A2L	
C470	1-136-177-00	FILM	1uF 5% 50V	< IC >			
C471	1-124-572-11	ELECT	100uF 20% 63V	IC460	8-759-900-72	IC NE5532P	
C472	1-137-507-11	FILM	1uF 10% 63V	IC461	8-759-900-72	IC NE5532P	
C560	1-136-233-11	FILM	0.0047uF 2% 100V	IC560	8-759-900-72	IC NE5532P	
C561	1-136-228-11	FILM	0.0012uF 2% 100V	IC561	8-759-900-72	IC NE5532P	
C562	1-137-507-11	FILM	1uF 10% 63V	< COIL >			
C563	1-124-572-11	ELECT	100uF 20% 63V	L470	1-410-970-11	INDUCTOR 6.8uH	
C564	1-136-233-11	FILM	0.0047uF 2% 100V	L471	1-410-967-11	INDUCTOR 2.2uH	
C565	1-136-228-11	FILM	0.0012uF 2% 100V	L472	1-410-970-11	INDUCTOR 6.8uH	
C566	1-137-507-11	FILM	1uF 10% 63V	L473	1-410-970-11	INDUCTOR 6.8uH	
C567	1-124-572-11	ELECT	100uF 20% 63V	L570	1-410-970-11	INDUCTOR 6.8uH	
C568	1-136-272-00	FILM	68PF 5% 630V	L571	1-410-967-11	INDUCTOR 2.2uH	
C569	1-124-913-11	ELECT	470uF 20% 50V	L572	1-410-970-11	INDUCTOR 6.8uH	
C570	1-136-177-00	FILM	1uF 5% 50V	L573	1-410-970-11	INDUCTOR 6.8uH	
C571	1-124-572-11	ELECT	100uF 20% 63V	< PHOTO INTERRUPTER >			
C572	1-137-507-11	FILM	1uF 10% 63V	PH661	8-719-902-56	DIODE PC817	
C660	1-137-507-11	FILM	1uF 10% 63V	< TRANSISTOR >			
C661	1-137-507-11	FILM	1uF 10% 63V	Q460	8-729-224-61	TRANSISTOR 2SK246-Y	
C662	1-162-806-11	CERAMIC	0.1uF 10% 50V	Q461	8-729-809-29	TRANSISTOR 2SC4159-E	
C663	1-162-806-11	CERAMIC	0.1uF 10% 50V	Q462	8-729-809-26	TRANSISTOR 2SA1606-E	
C664	1-162-806-11	CERAMIC	0.1uF 10% 50V	Q463	8-729-184-53	TRANSISTOR 2SC1845-EA	
C665	1-162-806-11	CERAMIC	0.1uF 10% 50V	Q560	8-729-224-61	TRANSISTOR 2SK246-Y	
C666	1-126-045-11	ELECT	2.2uF 20% 50V	Q561	8-729-809-29	TRANSISTOR 2SC4159-E	
C667	1-126-696-11	ELECT	33uF 20% 35V	Q562	8-729-809-26	TRANSISTOR 2SA1606-E	
C668	1-126-696-11	ELECT	33uF 20% 35V	Q563	8-729-184-53	TRANSISTOR 2SC1845-EA	
< CONNECTOR >				Q661	8-729-900-80	TRANSISTOR DTC114ES	
* CN461	1-573-263-11	PIN, CONNECTOR 4P		Q662	8-729-900-65	TRANSISTOR DTA144ES	
* CN462	1-573-261-11	PIN, CONNECTOR 2P		Q663	8-729-900-65	TRANSISTOR DTA144ES	
* CN463	1-573-261-11	PIN, CONNECTOR 2P		Q664	8-729-900-80	TRANSISTOR DTC114ES	
* CN464	1-573-261-41	PIN, CONNECTOR 2P		Q665	8-729-900-80	TRANSISTOR DTC114ES	
* CN562	1-573-263-21	PIN, CONNECTOR 4P					

AUDIO SUB

BALANCE (L)

BALANCE (R)

Ref. No.	Part No.	Description	Remark			Ref. No.	Part No.	Description	Remark		
Q666	8-729-900-80	TRANSISTOR DTC114ES				R582	1-247-891-00	CARBON	330K	5%	1/4W
		(RESISTOR)				R583	1-247-700-11	CARBON	100	5%	1/4W
R460	1-247-713-11	CARBON	1K	5%	1/4W	R584	1-247-700-11	CARBON	100	5%	1/4W
R461	1-247-713-11	CARBON	1K	5%	1/4W	R585	1-247-713-11	CARBON	1K	5%	1/4W
R462	1-247-891-00	CARBON	330K	5%	1/4W	R586	1-247-713-11	CARBON	1K	5%	1/4W
R463	1-247-702-11	CARBON	150	5%	1/4W	R661	1-259-432-11	CARBON	1.5K	5%	1/6W
R464	1-247-713-11	CARBON	1K	5%	1/4W	△R662	1-212-889-00	FUSIBLE	220	5%	1/4W F
						R663	1-259-468-11	CARBON	47K	5%	1/6W
R465	1-247-713-11	CARBON	1K	5%	1/4W	R664	1-259-460-11	CARBON	22K	5%	1/6W
R466	1-247-891-00	CARBON	330K	5%	1/4W	R665	1-259-468-11	CARBON	47K	5%	1/6W
R467	1-247-702-11	CARBON	150	5%	1/4W	R666	1-259-460-11	CARBON	22K	5%	1/6W
R468	1-247-891-00	CARBON	330K	5%	1/4W	R667	1-259-468-11	CARBON	47K	5%	1/6W
R469	1-247-891-00	CARBON	330K	5%	1/4W	△R668	1-212-893-00	FUSIBLE	330	5%	1/4W F
						△R669	1-212-893-00	FUSIBLE	330	5%	1/4W F
R470	1-247-891-00	CARBON	330K	5%	1/4W	R670	1-259-380-11	CARBON	10	5%	1/6W
R471	1-249-586-11	CARBON	27K	5%	1/4W			(RELAY)			
R472	1-247-721-11	CARBON	4.7K	5%	1/4W	RY460	1-515-727-11	RELAY			
R473	1-247-725-11	CARBON	10K	5%	1/4W	RY461	1-515-727-11	RELAY			
R474	1-247-704-11	CARBON	220	5%	1/4W	RY560	1-515-727-11	RELAY			
						RY561	1-515-727-11	RELAY			
R476	1-247-704-11	CARBON	220	5%	1/4W						
△R477	1-212-853-00	FUSIBLE	6.8	5%	1/4W F						
△R478	1-212-853-00	FUSIBLE	6.8	5%	1/4W F						
△R479	1-212-881-11	FUSIBLE	100	5%	1/4W F						
R480	1-249-465-11	CARBON	47K	5%	1/4W						
R481	1-249-586-11	CARBON	27K	5%	1/4W						
R482	1-247-891-00	CARBON	330K	5%	1/4W						
R483	1-247-700-11	CARBON	100	5%	1/4W						
R484	1-247-700-11	CARBON	100	5%	1/4W						
R485	1-247-713-11	CARBON	1K	5%	1/4W						
R486	1-247-713-11	CARBON	1K	5%	1/4W						
R560	1-247-713-11	CARBON	1K	5%	1/4W						
R561	1-247-713-11	CARBON	1K	5%	1/4W						
R562	1-247-891-00	CARBON	330K	5%	1/4W						
R563	1-247-702-11	CARBON	150	5%	1/4W						
R564	1-247-713-11	CARBON	1K	5%	1/4W						
R565	1-247-713-11	CARBON	1K	5%	1/4W						
R566	1-247-891-00	CARBON	330K	5%	1/4W						
R567	1-247-702-11	CARBON	150	5%	1/4W						
R568	1-247-891-00	CARBON	330K	5%	1/4W						
R569	1-247-891-00	CARBON	330K	5%	1/4W						
R570	1-247-891-00	CARBON	330K	5%	1/4W						
R571	1-249-586-11	CARBON	27K	5%	1/4W						
R572	1-247-721-11	CARBON	4.7K	5%	1/4W						
R573	1-247-725-11	CARBON	10K	5%	1/4W						
R574	1-247-704-11	CARBON	220	5%	1/4W						
R576	1-247-704-11	CARBON	220	5%	1/4W						
△R577	1-212-853-00	FUSIBLE	6.8	5%	1/4W F						
△R578	1-212-853-00	FUSIBLE	6.8	5%	1/4W F						
△R579	1-212-881-11	FUSIBLE	100	5%	1/4W F						
R580	1-249-465-11	CARBON	47K	5%	1/4W						
R581	1-249-586-11	CARBON	27K	5%	1/4W						

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.

BALANCE SW

BSL

COAX

D POWER

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-641-756-11	BALANCE SW BOARD *****		R27	1-216-077-00	METAL CHIP 15K 5% 1/10W	
		< CONNECTOR >		R28	1-216-150-00	METAL GLAZE 10 5% 1/8W	
* CN761	1-573-263-41	PIN, CONNECTOR 4P < SWITCH >		R29	1-216-070-00	METAL CHIP 7.5K 5% 1/10W	
SW761	1-571-083-11	SWITCH, SLIDE (BALANCE OUT)		*****			
*****				*	1-641-754-11	COAX BOARD *****	
		< CAPACITOR >					
				C701	1-136-165-00	FILM 0.1uF 5% 50V	
				C702	1-136-177-00	FILM 1uF 5% 50V	
				C703	1-107-169-00	MICA 100PF 5% 500V	
						< CONNECTOR >	
*	A-4617-993-A	BSL BOARD, COMPLETE *****		* CN701	1-573-273-11	PIN, CONNECTOR 3P	
		< CAPACITOR >				< IC >	
C10	1-124-779-00	ELECT CHIP 10uF 20% 16V		IC701	8-759-917-18	IC SN74HCU04N	
C11	1-163-077-00	CERAMIC CHIP 0.1uF 10% 25V				< JACK >	
C20	1-124-779-00	ELECT CHIP 10uF 20% 16V		J701	1-507-567-71	JACK, PIN 1P (DIGITAL OUT COAXIAL)	
C21	1-163-077-00	CERAMIC CHIP 0.1uF 10% 25V				< RESISTOR >	
		< CONNECTOR >		R701	1-259-401-11	CARBON 75 5% 1/6W	
* CN1	1-564-519-11	PLUG, CONNECTOR 4P < DIODE >				< COIL >	
H11	8-719-987-62	DIODE LT140SC-TE84L		T701	1-459-795-11	COIL (WITH CORE)	
H21	8-719-987-62	DIODE LT140SC-TE84L		*****			
		< IC >		*	A-4649-184-A	D POWER BOARD, COMPLETE *****	
IC11	8-759-055-78	IC TA8407F(EL)				< BUS BAR >	
IC21	8-759-055-78	IC TA8407F(EL)					
		< JACK >		* BUS1	1-691-279-11	BUS BAR 5P	
J11	1-216-296-00	METAL CHIP 0 5% 1/8W < RESISTOR >				< CAPACITOR >	
R11	1-216-049-00	METAL CHIP 1K 5% 1/10W		C950	1-107-202-00	MICA 10PF 5% 500V	
R12	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		C951	1-136-177-00	FILM 1uF 5% 50V	
R13	1-216-105-00	METAL CHIP 220K 5% 1/10W		C952	1-130-483-00	MYLAR 0.01uF 5% 50V	
R14	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		C953	1-128-217-11	ELECT 12000uF 20% 16V	
R15	1-216-105-00	METAL CHIP 220K 5% 1/10W		C954	1-128-217-11	ELECT 12000uF 20% 16V	
R16	1-216-077-00	METAL CHIP 15K 5% 1/10W		C955	1-124-994-11	ELECT 100uF 20% 10V	
R17	1-216-077-00	METAL CHIP 15K 5% 1/10W		C956	1-162-282-31	CERAMIC 100PF 10% 50V	
R18	1-216-150-00	METAL GLAZE 10 5% 1/8W		C957	1-124-999-11	ELECT 2200uF 20% 10V	
R19	1-216-070-00	METAL CHIP 7.5K 5% 1/10W		C959	1-162-282-31	CERAMIC 100PF 10% 50V	
R21	1-216-049-00	METAL CHIP 1K 5% 1/10W		C960	1-124-999-11	ELECT 2200uF 20% 10V	
R22	1-216-057-00	METAL CHIP 2.2K 5% 1/10W		C963	1-124-999-11	ELECT 2200uF 20% 10V	
R23	1-216-105-00	METAL CHIP 220K 5% 1/10W		C965	1-162-294-31	CERAMIC 0.001uF 10% 50V	
R24	1-216-057-00	METAL CHIP 2.2K 5% 1/10W					
R25	1-216-105-00	METAL CHIP 220K 5% 1/10W					
R26	1-216-077-00	METAL CHIP 15K 5% 1/10W					

D POWER **DISPLAY**

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
C966	1-126-303-11	ELECT	3.3uF 20% 50V	Q957	8-729-140-96	TRANSISTOR	2SD774-34
C967	1-126-064-11	ELECT	220uF 20% 63V	Q958	8-729-140-97	TRANSISTOR	2SB734-34
C968	1-126-051-11	ELECT	47uF 20% 35V			(RESISTOR)	
C969	1-136-165-00	FILM	0.1uF 5% 50V	△R951	1-212-877-11	FUSIBLE	68 5% 1/4W F
C970	1-126-052-11	ELECT	100uF 20% 35V	R952	1-259-446-11	CARBON	5.6K 5% 1/6W
C971	1-126-022-11	ELECT	47uF 20% 10V	R953	1-215-414-00	METAL	510 1% 1/6W
C972	1-124-994-11	ELECT	100uF 20% 10V	R954	1-215-419-00	METAL	820 1% 1/6W
C973	1-136-165-00	FILM	0.1uF 5% 50V	R955	1-215-419-00	METAL	820 1% 1/6W
C974	1-136-233-11	FILM	0.0047uF 2% 100V	R956	1-215-427-00	METAL	1.8K 1% 1/6W
C975	1-130-483-00	MYLAR	0.01uF 5% 50V	R957	1-259-380-11	CARBON	10 5% 1/6W
		(CONNECTOR)		R958	1-215-419-00	METAL	820 1% 1/6W
* CN951	1-573-262-11	PIN, CONNECTOR 3P		R959	1-215-425-00	METAL	1.5K 1% 1/6W
* CN952	1-573-265-11	PIN, CONNECTOR 6P		R960	1-259-380-11	CARBON	10 5% 1/6W
* CN953	1-573-266-11	PIN, CONNECTOR 7P		R961	1-259-444-11	CARBON	4.7K 5% 1/6W
* CN954	1-573-261-31	PIN, CONNECTOR 2P		R962	1-215-457-00	METAL	33K 1% 1/6W
* CN955	1-573-262-31	PIN, CONNECTOR 3P		R963	1-215-447-00	METAL	12K 1% 1/6W
* CN956	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P		R964	1-259-436-11	CARBON	2.2K 5% 1/6W
		(DIODE)		R965	1-259-428-11	CARBON	1K 5% 1/6W
D951	8-719-975-85	DIODE	ERB83-004	R966	1-259-468-11	CARBON	47K 5% 1/6W
D952	8-719-975-85	DIODE	ERB83-004	R967	1-215-447-00	METAL	12K 1% 1/6W
D953	8-719-975-85	DIODE	ERB83-004	R968	1-259-468-11	CARBON	47K 5% 1/6W
D954	8-719-975-85	DIODE	ERB83-004	△R969	1-212-950-00	FUSIBLE	4.7 5% 1/2W F
D955	8-719-988-53	DIODE	LTZ-MR19			(THERMISTOR)	
D956	8-719-200-02	DIODE	10E2	TH951	1-806-882-11	THERMISTOR, POSITIVE	
D957	8-719-115-04	DIODE	RD27JS-B2	*****			
D958	8-719-114-26	DIODE	RD4.7JS-B2	*	A-4649-013-A	DISPLAY BOARD, COMPLETE	
D959	8-719-109-66	DIODE	RD3.3ES-B2			*****	
		(IC)				(CAPACITOR)	
IC951	8-759-602-01	IC	M5220P	C801	1-164-159-11	CERAMIC	0.1uF 50V
IC952	8-759-636-16	IC	M51957AL	C802	1-164-159-11	CERAMIC	0.1uF 50V
IC953	8-759-982-03	IC	RC5532DD	C803	1-164-159-11	CERAMIC	0.1uF 50V
		(BASE POST)		C804	1-162-806-11	CERAMIC	0.1uF 10% 50V
LP951	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P		C805	1-164-159-11	CERAMIC	0.1uF 50V
LP952	1-535-139-00	BASE POST 22MM (10MM PITCH) 2P				(CONNECTOR)	
		(IC LINK)		* CN802	1-573-266-11	PIN, CONNECTOR 7P	
△PS951	1-532-675-00	LINK, IC 1.5A				(DIODE)	
		(TRANSISTOR)		D801	8-719-987-63	DIODE	1N4148M
Q951	8-729-322-40	TRANSISTOR	2SA1083E	D802	8-719-987-63	DIODE	1N4148M
Q952	8-729-905-67	TRANSISTOR	2SD1944-K	D803	8-719-913-49	LED	EBG5638S
Q953	8-729-905-67	TRANSISTOR	2SD1944-K	D804	8-719-913-47	LED	EAA5638S
Q954	8-729-322-40	TRANSISTOR	2SA1083E	D805	8-719-913-47	LED	EAA5638S
Q955	8-729-905-67	TRANSISTOR	2SD1944-K	D806	8-719-913-49	LED	EBG5638S
Q956	8-729-224-62	TRANSISTOR	2SK246-GR				

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

DISPLAY

FIX

HP (B)

HP

L. MOTOR

M. VR

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
		(FLUORESCENT INDICATOR)					
FLD801	1-519-688-11	INDICATOR TUBE, FLUORESCENT		* CN752	1-573-261-41	PIN, CONNECTOR 2P	
		(IC)				(DIODE)	
IC801	8-759-070-02	IC MSC62408-039GS-V1K		D701	8-719-987-63	DIODE 1N4148M	
IC802	8-741-100-48	IC SBX1610-59				*****	
		(TRANSISTOR)		*	1-642-213-11	HP(B) BOARD (US, Canadian, AEP: GOLD)	
Q801	8-729-900-45	TRANSISTOR DTC114EF				*****	
Q802	8-729-900-45	TRANSISTOR DTC114EF		*	1-641-759-11	HP BOARD (AEP)	
Q803	8-729-900-45	TRANSISTOR DTC114EF				*****	
Q804	8-729-900-45	TRANSISTOR DTC114EF				(CAPACITOR)	
		(RESISTOR)		C490	1-162-294-31	CERAMIC 0.001uF 10% 50V	
R801	1-259-452-11	CARBON 10K 5% 1/6W		C590	1-162-294-31	CERAMIC 0.001uF 10% 50V	
R802	1-259-452-11	CARBON 10K 5% 1/6W		C710	1-164-159-11	CERAMIC 0.1uF 50V	
R803	1-259-500-11	CARBON 1M 5% 1/6W				(CONNECTOR)	
R804	1-259-406-11	CARBON 120 5% 1/6W		* CN710	1-573-274-11	PIN, CONNECTOR 4P	
R805	1-259-414-11	CARBON 270 5% 1/6W				(JACK)	
R806	1-259-414-11	CARBON 270 5% 1/6W		J710	1-568-519-61	JACK, LARGE TYPE	
R807	1-259-406-11	CARBON 120 5% 1/6W				(US, Canadian, AEP: GOLD)	
		(SWITCH)			1-568-519-31	JACK, LARGE TYPE (AEP) (PHONES)	
S801	1-572-198-11	SWITCH, KEY BOARD (PLAY MODE)				*****	
S802	1-572-198-11	SWITCH, KEY BOARD (DIGITAL OUTPUT)		*	1-641-765-11	L. MOTOR BOARD	
S803	1-572-198-11	SWITCH, KEY BOARD (DISPLAY MODE)				*****	
S804	1-572-198-11	SWITCH, KEY BOARD (OPEN/CLOSE)				*****	
S805	1-572-198-11	SWITCH, KEY BOARD (PLAY)				*****	
S806	1-572-198-11	SWITCH, KEY BOARD (FF)				*****	
S807	1-572-198-11	SWITCH, KEY BOARD (REW)			1-641-761-11	M. VR BOARD	
S808	1-572-198-11	SWITCH, KEY BOARD (AMS >>>)				*****	
S809	1-572-198-11	SWITCH, KEY BOARD (PAUSE)				(CAPACITOR)	
S810	1-572-198-11	SWITCH, KEY BOARD (STOP)		C761	1-164-159-11	CERAMIC 0.1uF 50V	
S811	1-572-198-11	SWITCH, KEY BOARD (AMS <<<)				(CONNECTOR)	
		(VIBRATOR)		* CN490	1-573-274-11	PIN, CONNECTOR 4P	
X801	1-577-359-21	VIBRATOR, CERAMIC (4.19 MHz)		* CN590	1-573-274-21	PIN, CONNECTOR 4P	
		*****		* CN750	1-573-273-11	PIN, CONNECTOR 3P	
*	1-641-748-11	FIX BOARD				(VARIABLE RESISTOR)	
		*****		RV751	1-241-792-11	RES, VAR, CARBBON 20K/20K	
		(CAPACITOR)				*****	
C740	1-107-202-00	MICA 10PF 5% 500V				*****	
C750	1-107-202-00	MICA 10PF 5% 500V				*****	
		(CONNECTOR)				*****	
* CN751	1-573-263-11	PIN, CONNECTOR 4P				*****	

OPT

SERVO (1) (A)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-641-755-11	OPT BOARD *****		C172	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< CAPACITOR >		C173	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C704	1-136-165-00	FILM 0.1uF 5%	50V	C174	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C705	1-107-169-00	MICA 100PF 5%	500V	C175	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< IC >		C177	1-163-038-00	CERAMIC CHIP 0.1uF	25V
IC702	8-759-977-71	IC GP-1F31T		C178	1-163-038-00	CERAMIC CHIP 0.1uF	25V
*****				C179	1-163-038-00	CERAMIC CHIP 0.1uF	25V
*	A-4649-006-A	SERVO (1) (A) BOARD, COMPLETE *****		C180	1-163-038-00	CERAMIC CHIP 0.1uF	25V
		< CAPACITOR >		C181	1-164-346-11	CERAMIC CHIP 1uF	16V
C101	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	C201	1-163-809-11	CERAMIC CHIP 0.047uF 10%	25V
C102	1-164-004-11	CERAMIC CHIP 0.1uF 10%	25V	C202	1-163-011-11	CERAMIC CHIP 0.0015uF 10%	50V
C103	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	C203	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C104	1-164-346-11	CERAMIC CHIP 1uF	16V	C204	1-163-117-00	CERAMIC CHIP 100PF 5%	50V
C105	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C205	1-164-489-11	CERAMIC CHIP 0.22uF 10%	16V
C106	1-164-346-11	CERAMIC CHIP 1uF	16V	C206	1-164-232-11	CERAMIC CHIP 0.01uF	50V
C107	1-164-346-11	CERAMIC CHIP 1uF	16V	C207	1-164-346-11	CERAMIC CHIP 1uF	16V
C108	1-162-294-31	CERAMIC 0.001uF 10%	50V	C301	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C109	1-163-038-00	CERAMIC CHIP 0.1uF	25V	C302	1-125-622-11	CAP, DOUBLE LAYERS	0.10F
C110	1-124-584-00	ELECT 100uF 20%	10V	C303	1-163-038-00	CERAMIC CHIP 0.1uF	25V
C111	1-164-346-11	CERAMIC CHIP 1uF	16V	C304	1-163-009-11	CERAMIC CHIP 0.001uF 10%	50V
C112	1-164-346-11	CERAMIC CHIP 1uF	16V	C305	1-164-346-11	CERAMIC CHIP 1uF	16V
C113	1-164-346-11	CERAMIC CHIP 1uF	16V			< CONNECTOR >	
C114	1-164-346-11	CERAMIC CHIP 1uF	16V	* CN101	1-573-276-11	PIN, CONNECTOR 6P	
C115	1-162-806-11	CERAMIC 0.1uF 10%	50V	CN102	1-568-799-11	SOCKET, CONNECTOR 16P	
C116	1-162-806-11	CERAMIC 0.1uF 10%	50V	* CN112	1-580-001-11	PIN, CONNECTOR (PC BOARD) 4P	
C121	1-163-017-00	CERAMIC CHIP 0.0047uF 5%	50V	* CN113	1-580-002-11	PIN, CONNECTOR (PC BOARD) 5P	
C122	1-163-001-11	CERAMIC CHIP 220PF 10%	50V	* CN141	1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P	
C123	1-163-133-00	CERAMIC CHIP 470PF 5%	50V	* CN201	1-580-007-11	PIN, CONNECTOR (PC BOARD) 10P	
C124	1-163-986-00	CERAMIC CHIP 0.027uF 10%	25V	* CN202	1-580-003-11	PIN, CONNECTOR (PC BOARD) 6P	
C125	1-163-986-00	CERAMIC CHIP 0.027uF 10%	25V	* CN203	1-564-719-11	PIN, CONNECTOR (SMALL TYPE) 3P	
C141	1-163-038-00	CERAMIC CHIP 0.1uF	25V	* CN301	1-691-465-11	PIN, CONNECTOR 9P	
C142	1-163-038-00	CERAMIC CHIP 0.1uF	25V	* CN302	1-691-462-11	PIN, CONNECTOR 6P	
C151	1-163-137-00	CERAMIC CHIP 680PF 5%	50V			< DIODE >	
C152	1-163-137-00	CERAMIC CHIP 680PF 5%	50V	D301	8-719-104-34	DIODE 1S2836	
C153	1-163-137-00	CERAMIC CHIP 680PF 5%	50V			< IC >	
C154	1-163-137-00	CERAMIC CHIP 680PF 5%	50V	IC101	8-752-344-48	IC CXD2501Q	
C155	1-163-019-00	CERAMIC CHIP 0.0068uF 10%	50V	IC102	8-759-071-79	IC BA6297FP-T1	
C156	1-164-346-11	CERAMIC CHIP 1uF	16V	IC103	8-759-040-83	IC BA6287F-T1	
C157	1-163-023-00	CERAMIC CHIP 0.015uF 5%	50V	IC141	8-759-055-78	IC TA8407F(EL)	
C158	1-163-809-11	CERAMIC CHIP 0.047uF 10%	25V	IC142	8-759-981-92	IC RC4558M	
C159	1-163-038-00	CERAMIC CHIP 0.1uF	25V	IC151	8-759-981-92	IC RC4558M	
C160	1-164-336-11	CERAMIC CHIP 0.33uF	25V	IC152	8-759-981-92	IC RC4558M	
C161	1-163-023-00	CERAMIC CHIP 0.015uF 5%	50V	IC201	8-752-337-26	IC CXD2500AQ	
C171	1-163-038-00	CERAMIC CHIP 0.1uF	25V	IC301	8-759-069-47	IC M37451M8-174FP	
				IC302	8-759-512-81	IC LH5160N-10L	

SERVO (1) (A)

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
< TRANSISTOR >							
Q151	8-729-901-06	TRANSISTOR DTA144EK		R165	1-216-081-00	METAL CHIP 22K 5% 1/10W	
Q181	8-729-901-01	TRANSISTOR DTC144EK		R166	1-216-085-00	METAL CHIP 33K 5% 1/10W	
Q182	8-729-901-06	TRANSISTOR DTA144EK		R167	1-216-308-00	METAL CHIP 4.7 5% 1/10W	
< RESISTOR >				R171	1-216-001-00	METAL CHIP 10 5% 1/10W	
R101	1-216-077-00	METAL CHIP 15K 5% 1/10W		R172	1-216-001-00	METAL CHIP 10 5% 1/10W	
R102	1-216-097-00	METAL CHIP 100K 5% 1/10W		R173	1-216-001-00	METAL CHIP 10 5% 1/10W	
R103	1-216-077-00	METAL CHIP 15K 5% 1/10W		R174	1-216-001-00	METAL CHIP 10 5% 1/10W	
R104	1-216-049-00	METAL CHIP 1K 5% 1/10W		R175	1-216-001-00	METAL CHIP 10 5% 1/10W	
R105	1-216-097-00	METAL CHIP 100K 5% 1/10W		R177	1-216-001-00	METAL CHIP 10 5% 1/10W	
R106	1-216-085-00	METAL CHIP 33K 5% 1/10W		R178	1-216-001-00	METAL CHIP 10 5% 1/10W	
R107	1-216-025-00	METAL CHIP 100 5% 1/10W		R179	1-216-001-00	METAL CHIP 10 5% 1/10W	
R108	1-216-049-00	METAL CHIP 1K 5% 1/10W		R180	1-216-001-00	METAL CHIP 10 5% 1/10W	
R121	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R181	1-216-295-00	METAL CHIP 0 5% 1/10W	
R122	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R182	1-216-295-00	METAL CHIP 0 5% 1/10W	
R123	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R183	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R124	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R184	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R125	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R191	1-216-295-00	METAL CHIP 0 5% 1/10W	
R126	1-216-071-00	METAL CHIP 8.2K 5% 1/10W		R192	1-216-295-00	METAL CHIP 0 5% 1/10W	
R127	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R201	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R128	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R202	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R129	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R203	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R130	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R204	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R131	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R205	1-216-105-00	METAL CHIP 220K 5% 1/10W	
R132	1-216-069-00	METAL CHIP 6.8K 5% 1/10W		R206	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R133	1-216-053-00	METAL CHIP 1.5K 5% 1/10W		R207	1-216-041-00	METAL CHIP 470 5% 1/10W	
R134	1-216-053-00	METAL CHIP 1.5K 5% 1/10W		R208	1-216-041-00	METAL CHIP 470 5% 1/10W	
R141	1-216-073-00	METAL CHIP 10K 5% 1/10W		R209	1-216-041-00	METAL CHIP 470 5% 1/10W	
R142	1-216-079-00	METAL CHIP 18K 5% 1/10W		R210	1-216-033-00	METAL CHIP 220 5% 1/10W	
R143	1-216-073-00	METAL CHIP 10K 5% 1/10W		R211	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R144	1-216-065-00	METAL CHIP 4.7K 5% 1/10W		R212	1-216-037-00	METAL CHIP 330 5% 1/10W	
R145	1-216-073-00	METAL CHIP 10K 5% 1/10W		R213	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R146	1-216-073-00	METAL CHIP 10K 5% 1/10W		R301	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R147	1-216-079-00	METAL CHIP 18K 5% 1/10W		R303	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R148	1-216-073-00	METAL CHIP 10K 5% 1/10W		R304	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R149	1-216-073-00	METAL CHIP 10K 5% 1/10W		R305	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R151	1-216-070-00	METAL CHIP 7.5K 5% 1/10W		R306	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R152	1-216-070-00	METAL CHIP 7.5K 5% 1/10W		R307	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R153	1-216-070-00	METAL CHIP 7.5K 5% 1/10W		R308	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R154	1-216-070-00	METAL CHIP 7.5K 5% 1/10W		R309	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R155	1-216-093-00	METAL CHIP 68K 5% 1/10W		R310	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R156	1-216-085-00	METAL CHIP 33K 5% 1/10W		R311	1-216-037-00	METAL CHIP 330 5% 1/10W	
R157	1-216-117-00	METAL CHIP 680K 5% 1/10W		R312	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R158	1-216-097-00	METAL CHIP 100K 5% 1/10W		R313	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R159	1-216-083-00	METAL CHIP 27K 5% 1/10W		R314	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R160	1-216-049-00	METAL CHIP 1K 5% 1/10W		R315	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R161	1-216-095-00	METAL CHIP 82K 5% 1/10W		R316	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R163	1-216-076-00	METAL CHIP 13K 5% 1/10W		R317	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R164	1-216-085-00	METAL CHIP 33K 5% 1/10W		R318	1-216-073-00	METAL CHIP 10K 5% 1/10W	
				R319	1-216-073-00	METAL CHIP 10K 5% 1/10W	

SERVO (1) (A)

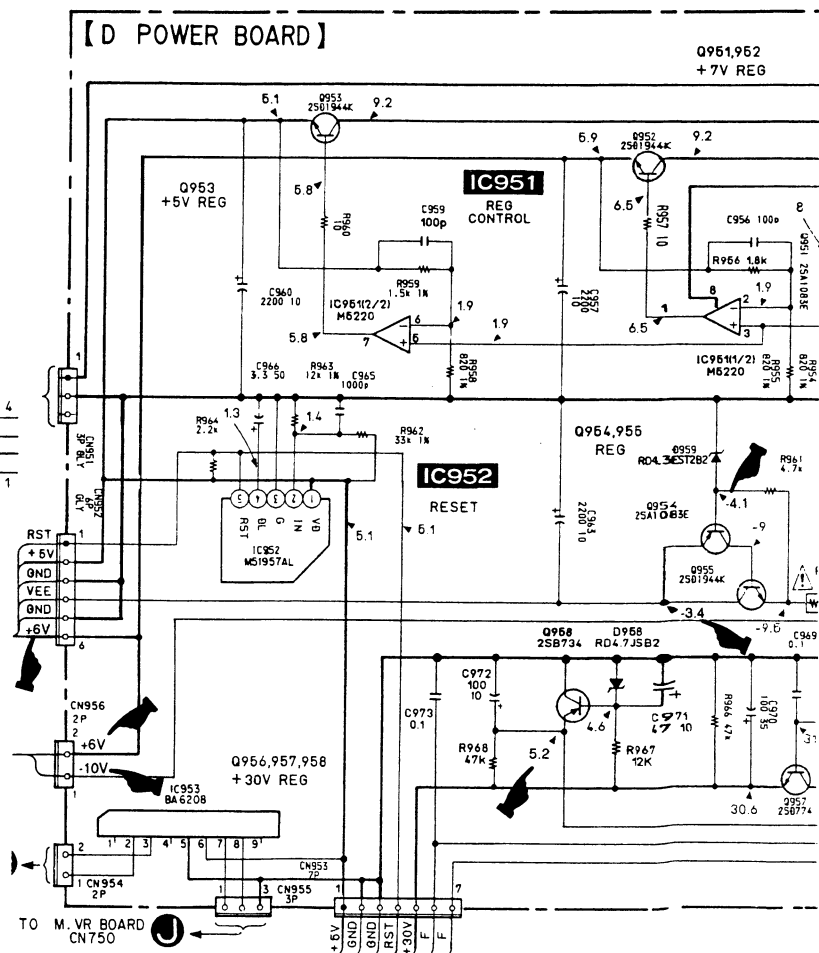
SW

VARIABLE

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< VIBRATOR >		*****			
X301	1-577-377-11	VIBRATOR, CERAMIC				ACCESSORIES & PACKING MATERIALS	
		*****				*****	
*	1-641-764-11	SW BOARD				1-465-871-11 REMOTE COMMANDER (RM-D995)	
		*****				(US, Canadian, AEP: GOLD)	
		< CAPACITOR >				1-465-872-11 REMOTE COMMANDER (RM-D996) (AEP: BLACK)	
C001	1-161-494-00	CERAMIC 0.022uF 25V				1-558-271-11 CORD, CONNECTION	
		< RESISTOR >				3-707-584-01 COVER, BATTERY (AEP: BLACK)	
△R001	1-247-727-11	CARBON 10 5% 1/2W F				3-707-584-11 COVER, BATTERY (US, Canadian, AEP: GOLD)	
△R002	1-247-727-11	CARBON 10 5% 1/2W F				3-750-090-01 INSTRUCTION (Canadian)	
		< SWITCH >				3-750-411-11 MANUAL, INSTRUCTION	
S001	1-571-300-21	SWITCH, ROTARY (IN SW)				3-754-116-11 MANUAL, INSTRUCTION	
S002	1-571-300-21	SWITCH, ROTARY (OUT SW)				(ENGLISH, SPANISH, FRENCH, PORTUGUESE)	
		*****				(Canadian, AEP)	
*	1-641-749-11	VARIABLE BOARD				3-754-116-21 MANUAL, INSTRUCTION (ENGLISH) (US)	
		*****				3-754-116-41 MANUAL, INSTRUCTION	
		< CONNECTOR >				(GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP)	
* CN753	1-573-263-31	PIN, CONNECTOR 4P				3-795-629-11 INSTRUCTION (AEP)	
		*****				4-847-802-00 SCREW	
		MISCELLANEOUS				4-928-005-01 CUSHION	
		*****				* 4-941-548-01 LABEL, CLASS 1 (AEP)	
△117	1-558-568-21	CORD, POWER (AEP)				* 4-951-272-01 INDIVIDUAL CARTON	
△117	1-690-958-11	CORD, POWER (US, Canadian)				9-910-999-33 INSTRUCTION (US)	
126	1-533-183-11	HOLDER, FUSE				*****	
△222	8-848-244-11	DEVICE, OPTICAL KSS-272A				HARDWARE LIST	
D803	8-719-913-49	DIODE EBG5638S (PLAY)				*****	
D804	8-719-913-47	DIODE EBG5638S (PAUSE)				#1 7-682-664-09 SCREW +PSW 4X14	
D805	8-719-913-47	DIODE EBG5638S (D/O ON)				#2 7-682-548-04 SCREW +BVTT 3X8 (S)	
D806	8-719-913-49	DIODE EBG5638S (D/O OFF)				#3 7-685-647-79 SCREW +BVTP 3X10 TYPE2 SLIT	
J401	1-563-030-11	CONNECTOR (RECEPTACLE) 3P				#4 7-682-562-09 SCREW +B 4X10	
J501	1-563-030-11	CONNECTOR (RECEPTACLE) 3P				#5 7-682-548-09 SCREW +BVTT 3X8 (S)	
J701	1-568-918-11	JACK, PIN 1P (FIXED R)				#6 7-682-546-09 SCREW +B 3X5	
J702	1-568-918-11	JACK, PIN 1P (FIXED L)				#7 7-682-549-04 SCREW +BVTT 3X10 (S)	
J703	1-568-918-11	JACK, PIN 1P (VARIABLE R)				#8 7-682-547-04 SCREW +B 3X6	
J704	1-568-918-11	JACK, PIN 1P (VARIABLE L)				#9 7-684-023-04 N 3, TYPE 2	
△PT901	1-450-775-11	TRANSFORMER, POWER (US, Canadian)				#10 7-685-246-14 SCREW +RKTP 3X8 TYPE2 SLIT	
△PT901	1-450-776-11	TRANSFORMER, POWER (AEP)				#11 7-682-147-15 SCREW, TR	
△PT901	1-532-215-00	FUSE, TIME-LAG (AEP)				#12 7-685-646-79 SCREW, TAPPING	
△PT901	1-532-825-11	FUSE, GLASS TUBE (US, Canadian)				#13 7-621-775-10 SCREW +B 2.6X4	
△S901	1-554-538-00	SWITCH, PUSH (AC POWER) (1 KEY)				#14 7-624-105-04 STOP RING 2.3, TYPE -E	
						#15 7-682-547-09 SCREW +BVTT 3X6 (S)	
						#16 7-685-131-19 SCREW +BTP 2.6X4 TYPE2 N-S	
						#17 7-688-003-12 W 3, MIDDLE	
						#18 7-682-544-04 SCREW +P 3X3	
						#19 7-621-734-09 SET-SCT, HEX. 2.6X3	
						#20 7-621-770-XX SCREW +P 2.6X8	
						#21 7-685-132-19 + PTPWH (2.6X5)	
						#22 7-621-770-67 SCREW +BVTT 2.6X6 (S)	

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.



The schematic diagram illustrates a digital servo motor driver circuit. Key components and sections include:

- IC101: Digital Servo** - The central control unit, receiving signals like DIRC, SCLK, SENS, and outputting control signals to the motor drive section.
- IC152: Comparator** - Used for signal processing and feedback.
- IC151: Comparator** - Another comparator stage for signal processing.
- IC102: Motor Drive (FOCUS/LED TRACKING)** - A motor drive IC that interfaces with the digital servo.
- IC103: Motor Drive (LOADING)** - A motor drive IC for loading the motor.
- IC141: Linear Motor Driver** - A linear motor driver IC that provides power to the motor.
- IC142: Op Amp** - An operational amplifier used for signal processing and feedback.
- Power Supply** - The circuit is powered by a +5V and +6V supply, with various decoupling capacitors (C101-C199) and resistors (R101-R199) for stability.
- Motor Control** - The motor (M001) is controlled by the motor drive section, which includes a switch (SW BOARD) and a motor loading section.

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SONY® SERVICE MANUAL

*US Model
Canadian Model
AEP Model*

CORRECTION-2

File this Correction with Service Manual.

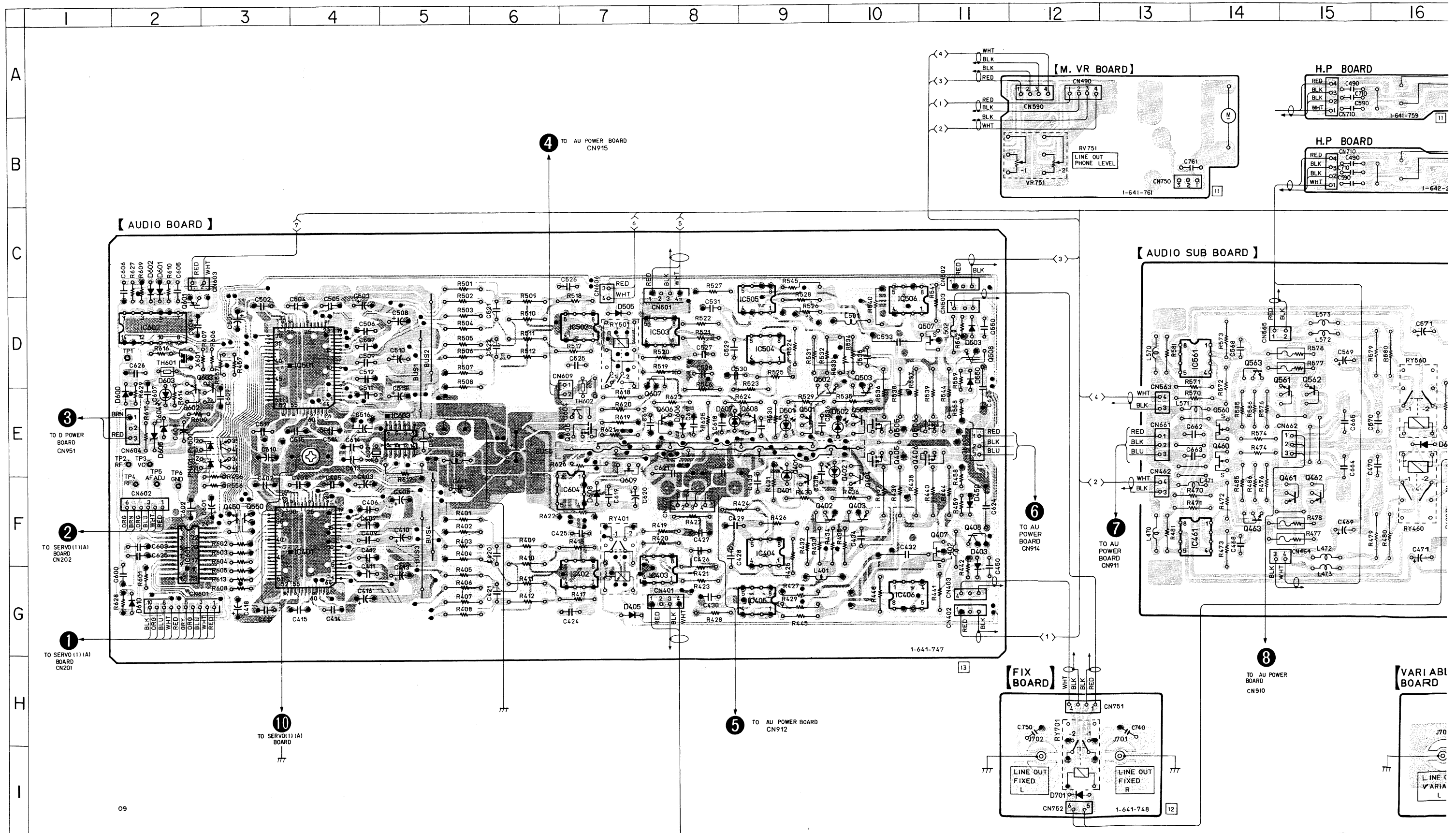
Refer this correction manual for printed wiring board-Audio section
due to error of printing on page 12, 13 & 14 which is previous issued.

3-3. PRINTED WIRING BOARD —Audio Section—

— AUDIO SECTION —

Note:

- ○ — : parts extracted from the component side.
- ● — : parts extracted from the conductor side.
- ■ : parts mounted on the component side.
- ● : Through hole components.



Correction-2

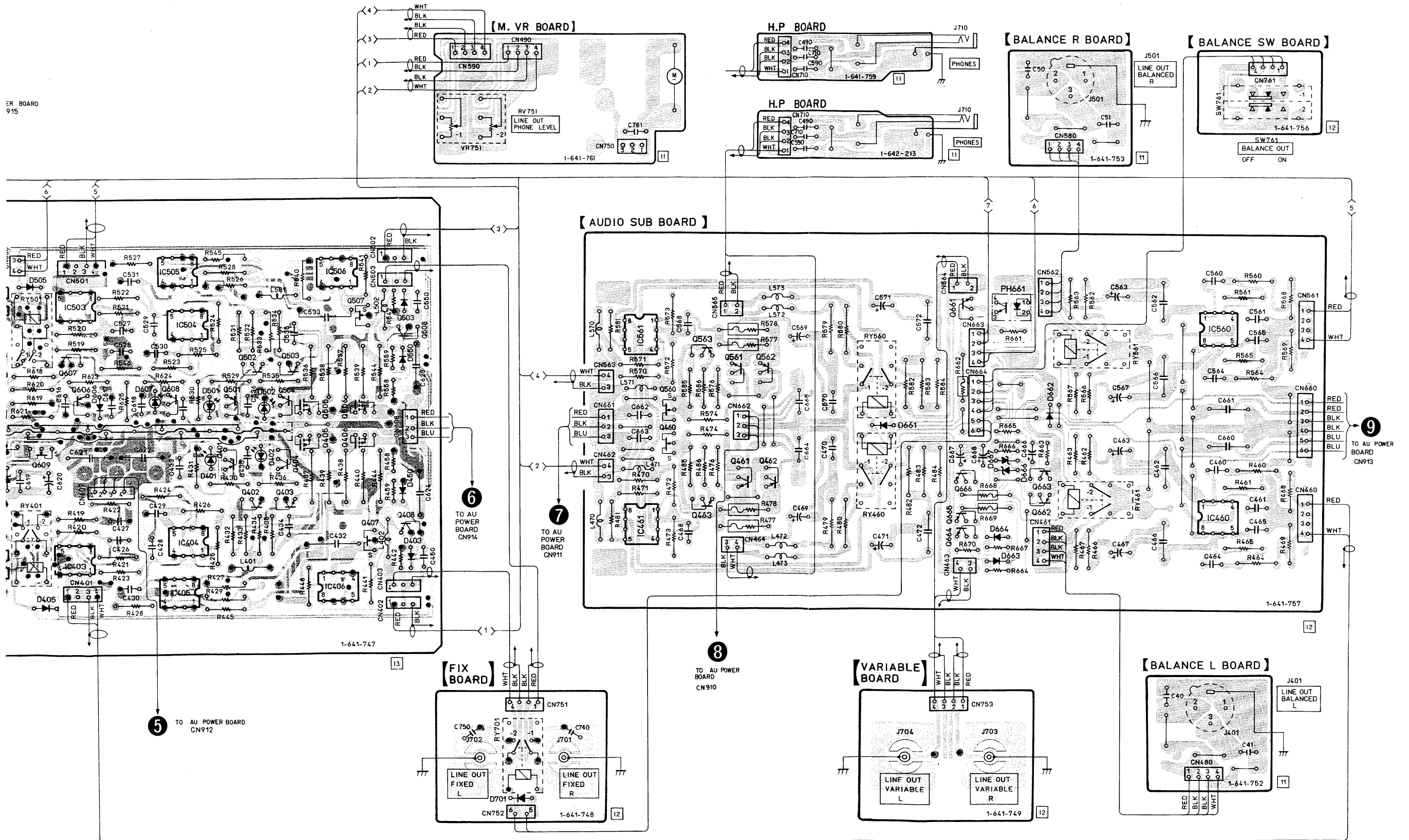
— AUDIO SECTION —

Note:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- ▨ : Pattern from the side which enable seeing.
- : parts extracted from the conductor side.
- : Through hole.
- ▨ : Pattern of the rear side.

7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

ER BOARD
915



CDP-X779ES

SONY SERVICE MANUAL

US Model
Canadian Model
AEP Model

CORRECTION-3

Correct your service manual as shown below.

____ (Under line) : indicates corrected portion.

Page	INCORRECT			CORRECT	
	<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
34	69	4-947-958-51	CAP (S), KNOB (AEP:BLACK)	4-947-958- <u>41</u>	CAP (S), KNOB (AEP:BLACK)
	70	4-947-958-41	CAP (S), KNOB (AEP:BLACK)	4-947-958- <u>51</u>	CAP (S), KNOB (AEP:BLACK)

(SPM-95028)