

CDP-350/550

SERVICE MANUAL

*AEP Model
UK Model*



PHOTO: CDP-550

SPECIFICATIONS

Compact disc player

System	Compact disc digital audio system
Laser	Semiconductor laser ($\lambda = 780 \text{ nm}$)
Emission duration	Continuous
Laser output	Max. 0.4 mW This output is the value measured at a distance of about 1.6 mm from the objective lens surface on the Optical Pick-up Block.
Frequency response	2 Hz - 20 kHz ($\pm 0.5 \text{ dB}$)
Signal to noise ratio	More than 100 dB
Dynamic range	More than 88 dB
Harmonic distortion	Less than 0.05% (1 kHz)
Wow and flutter	Below measurable limit
Outputs	LINE OUT (phono jacks) Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms
Channel separation	More than 95 dB (1 kHz)

General

Power requirements	UK model : 240 V AC, 50 Hz AEP model : 220 V AC, 50 Hz
Power consumption	10 W
Dimensions (approx.) (w/h/d)	430x100x340 mm (17x4x13½ inches) including projecting parts and controls
Weight (approx., net)	4.5 kg (9 lbs 15 oz)

Supplied accessories

Audio signal connecting cord	1 (2 phono plugs - 2 phono plugs)
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Remote commander (supplied only for the CDP-550)

Remote control system

Infrared control

Power requirements

3 V DC with two R6 (size AA) batteries

Dimensions

61x20x150 mm (w/h/d)
(2½ x 1³/₁₆ x 6 inches)

Weight


110 g (4 oz)

Including batteries

Supplied accessory

Sony SUM-3 (NS) batteries (2)
Remote commander (RM-D250)
(Supplied only for the CDP-550)

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND 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.

COMPACT DISC PLAYER SONY®



FEATURES

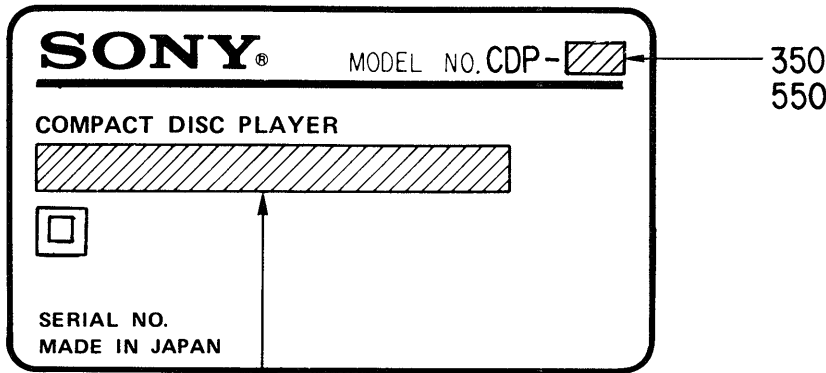
- Digital filter for high performance and high fidelity.
- PROGRAM play for playing the selections in a desired order.
- SHUFFLE play for playing the selections in a random order.
- REPEAT function for a single selection, the whole disc, PROGRAM play, or SHUFFLE play.
- AUTO SPACE function for inserting a blank space of 3 seconds between each selection.
- Easy-to-read display window shows the selection number being played, all the numbers of the selections on the disc the elapsed playing time, and the remaining time.

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MODEL IDENTIFICATION

— Specifications Labels —



AEP model : AC: 220V ~ 50/60Hz 10W
 UK model : AC: 240V ~ 50/60Hz 10W

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

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

1. Laser Diode Properties

- Material: GaAlAs
- Wavelength: 780 nm
- Emission Duration: continuous
- Laser Output: max. 44.6 μ W*

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

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

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

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

Følg iøvrigt instruktionerne i servicemanualen.

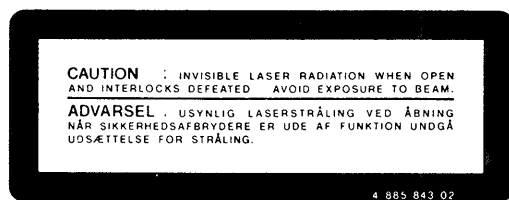
ADVARSEL!!

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

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning



1. Laser-didoe 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.

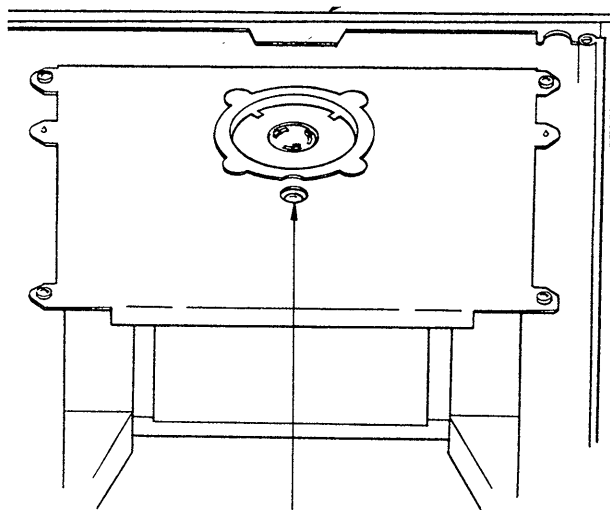
2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laserdioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

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

— SERVICING NOTE —

LASER DIODE AND FOCUS SERCH OPERATION CHECK

1. Make POWER switch on with no disc inserted and disc table closed.
2. Confirm that the operation indicated in Fig. C is performed while observing the objecting lens.



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

Fig. C

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.

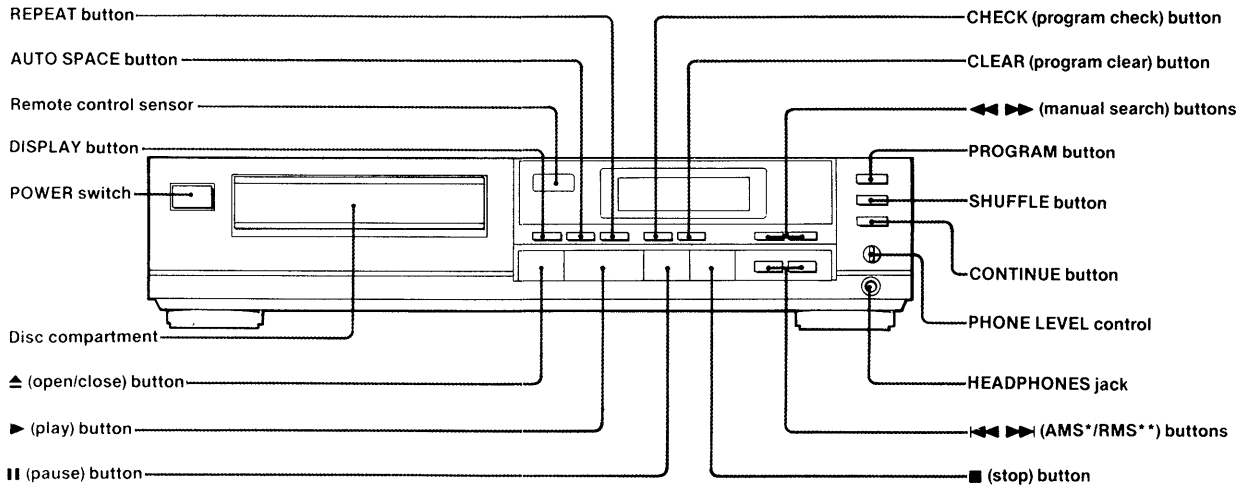
NOTES ON LASER DIODE EMISSION CHECK

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.

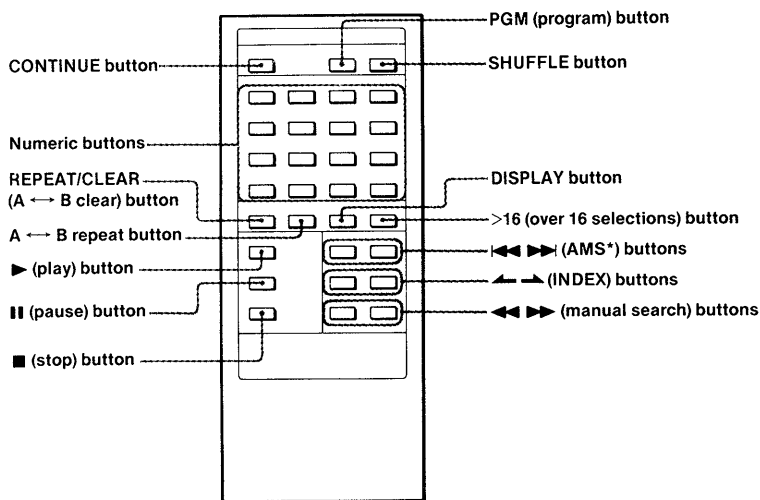
SECTION 1 OUTLINE

1-1 LOCATION AND FUNCTION OF CONTROLS

Front panel



REMOTE COMMANDER (Supplied only for the CDP-550)



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

1-2. CIRCUIT DESCRIPTION

IC101 (MSC6458-20SS) SYSTEM CONTROL MICROCOMPUTER

Table 1 Pin Functions IC101
Description of IC101 (MSC6458)

IC101 has the following functions:

- . Digital signal output to operation key
- . Sub Q signal loading and processing
- . Fluorescent display (FLD) control
- . Servo circuit control

Pin Function

Pin No.	Pin name	I/O	Description
1	DIRC	O	Jump pulse inversion instruction during 1 track jump.
2	CLK	O	Command transfer of clock to SSP (IC2) and DSP (IC3).
3	DATA	O	Command transfer of data to SSP (IC2) and DSP (IC3).
4	XLT	O	Command transfer of latch to SSP (IC2) and DSP (IC3).
5	M-SYNC	O	Sync REC ("H" for 300msec during muting).
6	P-SYNC	O	Sync REC ("H" for 300msec when muting is off).
7	SENSE	I	SSP (IC2) and DSP (IC3) sense information.
8	SYNC ON	I	Sync REC ("L" in REC mode).
9	SIRCS	I	Remote control signal input.
10	SCOR	I	Q code read timing.
11	VL UP	O	Remote controller. "L" when volume is being increased.
12	ADJ	I	"L" in PLAY mode.
13	AMUTE	O	All muting. Output to DSP (IC3) MUTG.
14	DMUTE	O	Software muting. Output to digital filter (IC4) software.
15	SUBQ	I	Subcode data.
16	SQCLK	O	Subcode data read clock.
17	GFS	I	"H" when CLV is locked.
18	FOK	I	"H" when focus is on.
19	KEY0	I	Key matrix input, "H" active.
20	KEY1	I	Key matrix input, "H" active.
21	KEY2	I	Key matrix input, "H" active.
22	KEY3	I	Key matrix input, "H" active.
23	KEY4	I	Key matrix input, "H" active.
24	KEY5	I	Key matrix input, "H" active.
25	INSW	I	Loading IN SW.
26	LDON	O	Laser on/off.
27	EPS/OUTSW	I/O	Emphasis on/off (during loading). Loading OUT SW.
28	LODOUT	O	Loading motor control.

Pin No.	Pin name	I/O	Description
29	LODIN	O	Loading motor control.
30	OSCI	I	Oscillator input terminal (4 MHz).
31	OSCO	I	Oscillator input terminal (4 MHz).
32	GND	-	GND terminal.
33	RESET	I	Reset input terminal. Input when power is turned on.
34	TEST	-	No connection (NC).
35	VL DOWN	-	No connection (NC).
36	TIMER	-	No connection (NC).
37	AFADJ	I	"L" in PLAY mode. CLV-S is fixed. "L" in test mode before power is turned on.
38	PLLSW	O	"L" in PLAY mode and "H" in search mode.
39	8G	O	FLD timing output.
40	7G	O	FLD timing output.
41	6G	O	FLD timing output.
42	5G	O	FLD timing output.
43	4G	O	FLD timing output.
44	3G	O	FLD timing input.
45	2G	O	FLD timing input.
46	1G	O	FLD timing input.
47	NC	-	No connection (NC).
48	o	O	FLD segment output.
49	n	O	FLD segment output.
50	m	O	FLD segment output.
51	+30V	-	+30V
52	l	O	FLD segment output.
53	k	O	FLD segment output.
54	j	O	FLD segment output.
55	i	O	FLD segment output.
56	h	O	FLD segment output.
57	g	O	FLD segment output.
58	f	O	FLD segment output.
59	e	O	FLD segment output.
60	d	O	FLD segment output.
61	c	O	FLD segment output.
62	b	O	FLD segment output.
63	a	O	FLD segment output.
64	VDD	-	Positive (+) power supply (5V)

SECTION 2 ADJUSTMENTS

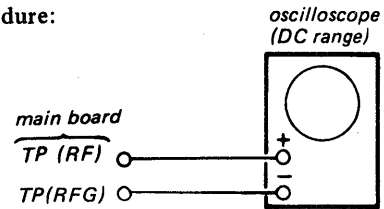
ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-18 (Part No. 3-702-101-01) disc unless otherwise indicated.
3. Use the oscilloscope with more than 10 M Ω impedance.

Focus Bias Adjustment

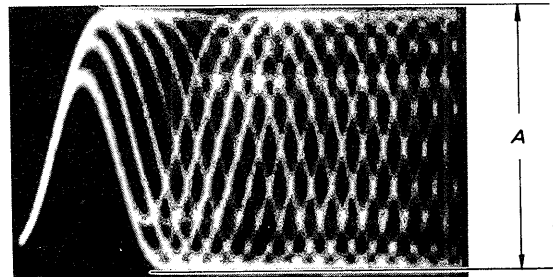
This adjustment should be made when replacing TOP (T-type Optical Pick-up).

Procedure:



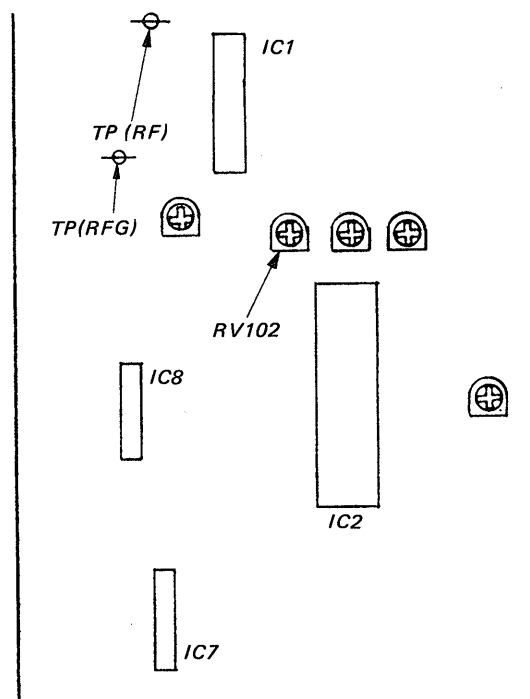
1. Connect oscilloscope to test points TP (RF).
2. Turn POWER switch on.
3. Put disc (YEDS-18) in and press \triangleright button.
4. Adjust RV102 for an optimum waveform eye pattern or so that the peak is maximum. Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform.

RF signal waveform



$$A = 1.2V \pm 0.2 (V_{p-p})$$

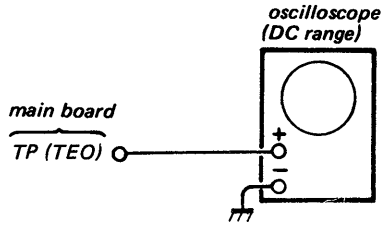
Adjustment Location: main board



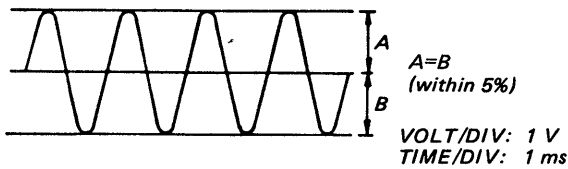
E-F Balance Adjustment

This adjustment should be made when replacing TOP (T-type Optical Pick-up).

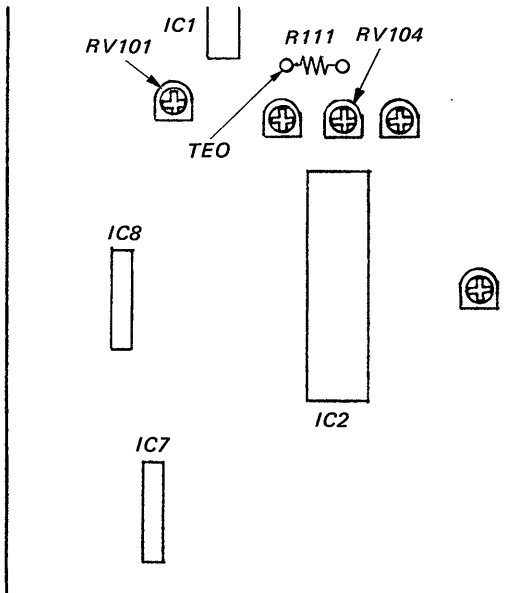
Procedure:



1. Turn RV104 fully counterclockwise (minimum).
2. Connect oscilloscope to test point TP (TEO).
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and press ▷ button.
5. Adjust RV101 so that the traverse waveform is symmetrical above and below.
6. After adjustment, remove the lead wire connected in step 5.

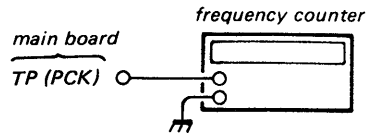


Adjustment Location: main board



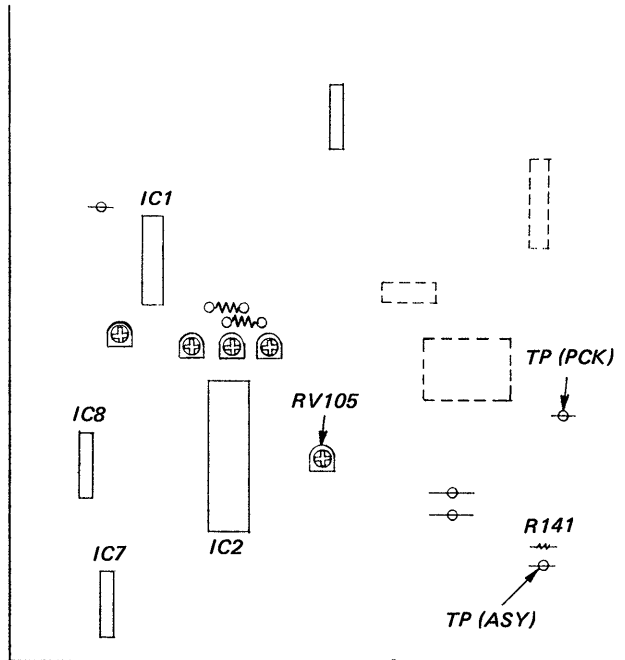
RF PLL Frequency Adjustment/Lock Frequency Check

Procedure:



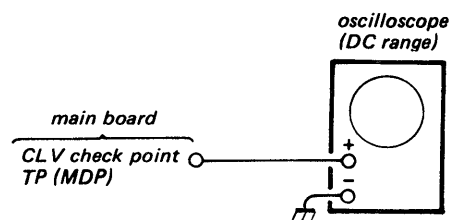
1. Connect test point TP (ASY) to ground with lead wire.
2. Turn POWER switch on.
3. Connect the frequency counter to test points TP (PCK).
4. Adjust RV105 so that the reading on frequency counter is 4.3218 MHz \pm 30 kHz.
..... (RF PLL frequency adjustment)
5. Remove lead wire connecting TP (ASY) to ground.
6. Put disc (YEDS-18) in and press ▷ button.
7. Confirm that the reading on frequency counter is 4.3218 MHz.

Adjustment Location: main board

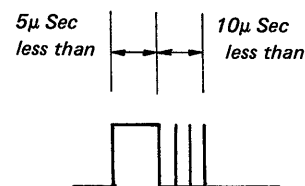


CLV Phase Lock Check

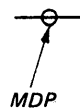
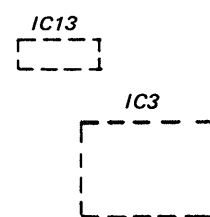
Procedure:



1. Connect oscilloscope to test point TP (MDP).
2. Turn POWER switch on.
3. Put disc (YEDS-18; TRACK No. 5) in and press ▷ button.
4. Check that the waveform is as shown in the figure below.



Adjustment Location: main board



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, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

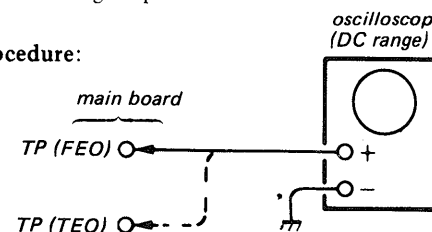
Symptoms	Gain	Focus	Tracking
• The time until music starts becomes longer for STOP →▷PLAY or automatic selection (◀▶ buttons pressed. (Normally takes about 2 seconds.)		low	low or high
• Music does not start and disc continues to rotate for STOP →▷PLAY or automatic selection (◀▶ buttons pressed.)		—	low
• Disc table opens shortly after STOP →▷PLAY.		low or high	—
• Sound is interrupted during PLAY. Or time counter display stops progressing.		—	low
• More poise during 2-axis device operation.		high	high

The following is a simple adjustment method.

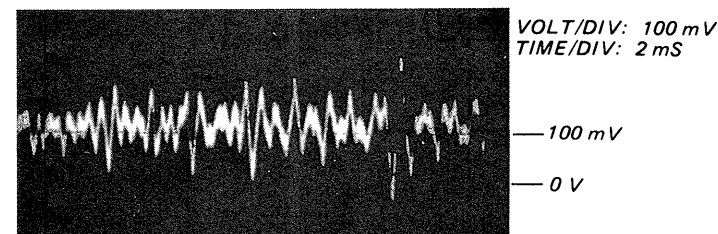
— Simple Adjustment —

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

Procedure:

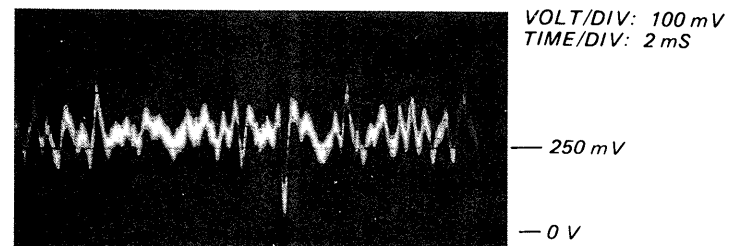


1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)
2. Insert disc (YEDS-18) and press ▷PLAY button.
3. Connect oscilloscope to main amp board TP (FEO).
4. Adjust RV103 so that the waveform is as shown in the figure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

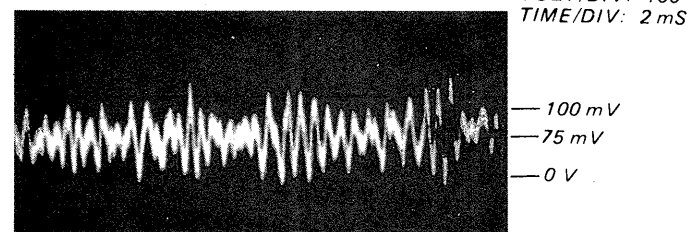


- Incorrect Examples (DC level changes more than on adjusted waveform)

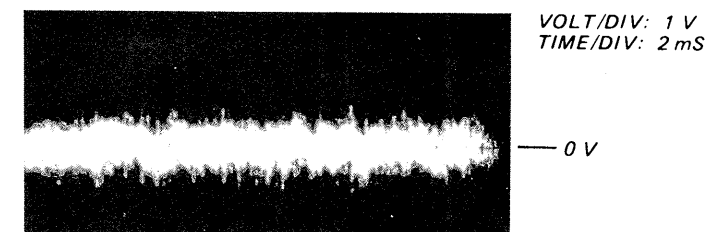
low focus gain



high focus gain

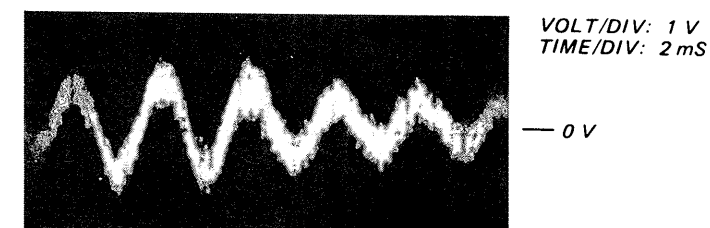


5. Connect oscilloscope to main board TP (TEO).
6. Adjust RV104 so that the waveform is as shown in the figure below. (tracking gain adjustment)

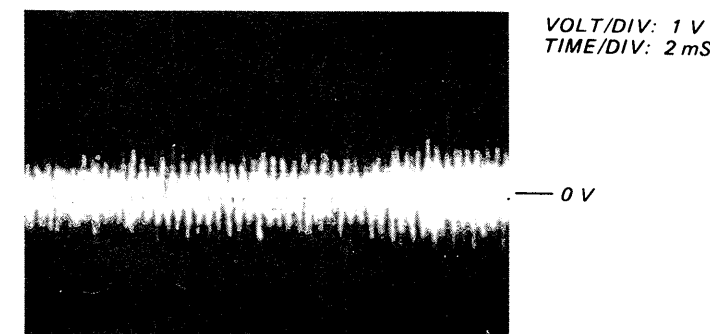


- Incorrect Examples (fundamental wave appears)

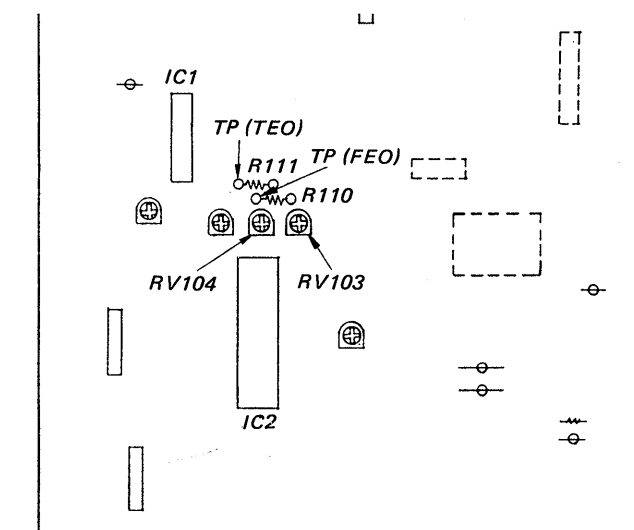
low tracking gain



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

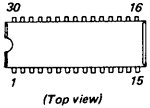
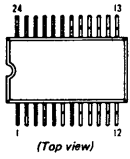
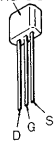
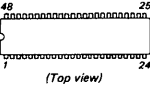
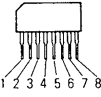
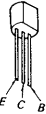
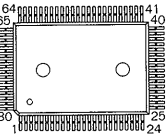

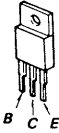
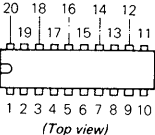
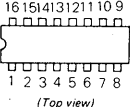

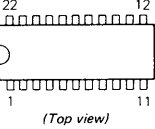
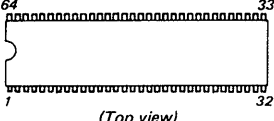
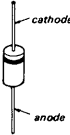
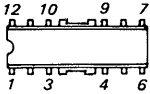

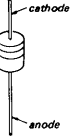


Adjustment Location: main board



SECTION 3 DIAGRAMS

3-1. SEMICONDUCTOR LEAD LAYOUT

<p>CXA1081S</p>  <p>(Top view)</p>	<p>LC9600P-144</p>  <p>(Top view)</p>	<p>2SA1345</p> <p>MARKING SIDE VIEW</p> 
<p>CXA1182S</p>  <p>(Top view)</p>	<p>M5218L</p> 	<p>2SB1013 2SC3622A-K</p> 
<p>CXD1125Q</p>  <p>MARKING SIDE VIEW</p>	<p>M5231TL</p> 	<p>2SB1133SA 2SD1666SA</p> 
<p>CXD1161P-2</p>  <p>(Top view)</p>	<p>M5290P-16 TA8406P</p>  <p>(Top view)</p>	<p>2SC3399 2SC3402</p> 
<p>CXD1162P</p>  <p>(Top view)</p>	<p>MSC6458-20SS</p>  <p>(Top view)</p>	<p>ISS132 10E2</p> 
<p>LA6520</p> 	<p>μPC4570HA</p> 	<p>RD5.1ES-B RD6.8ES-B HZS6C3L</p> 

3-2. MOUNTING DIAGRAM

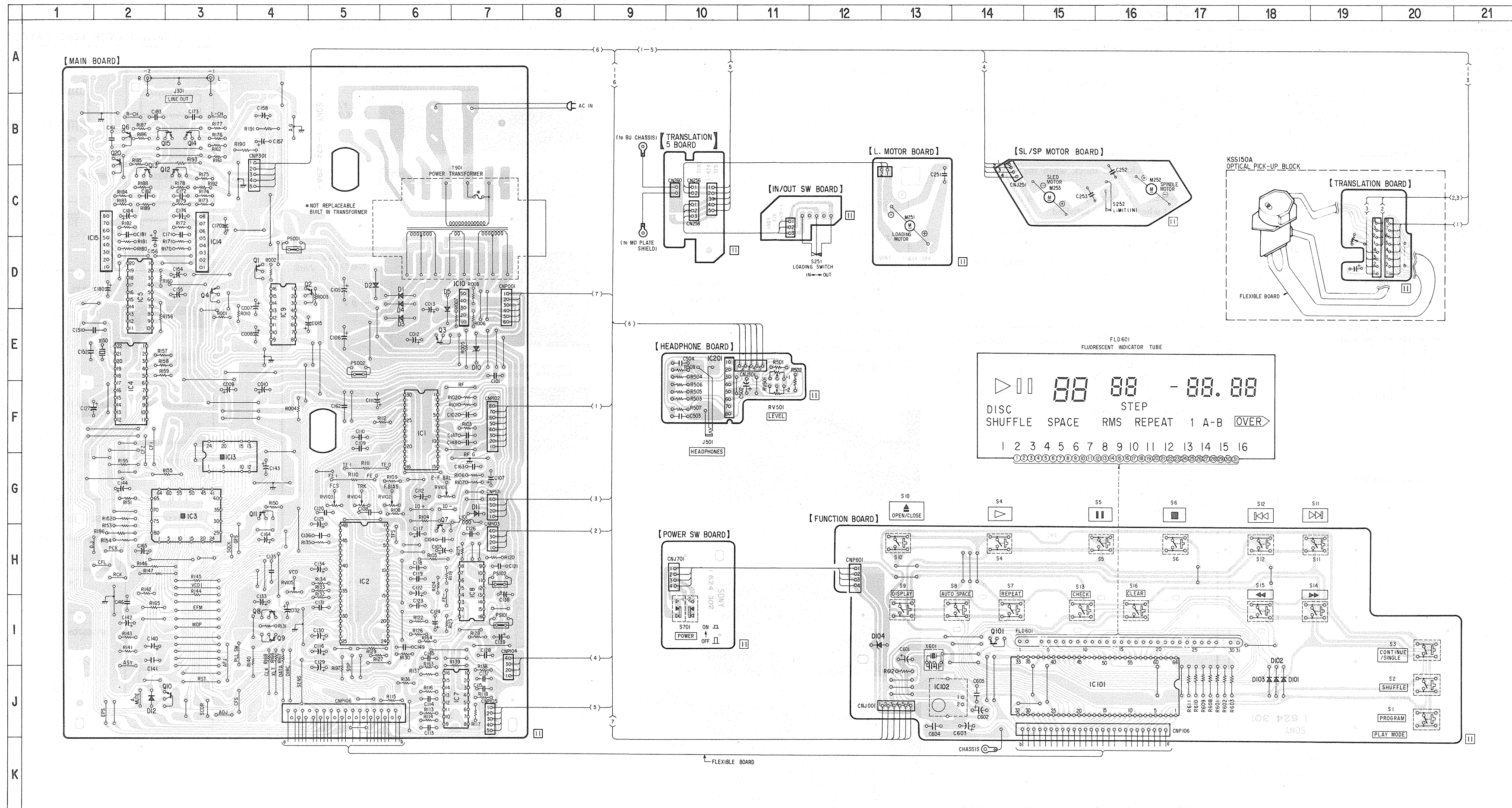
See page 11 for semiconductor lead layouts.

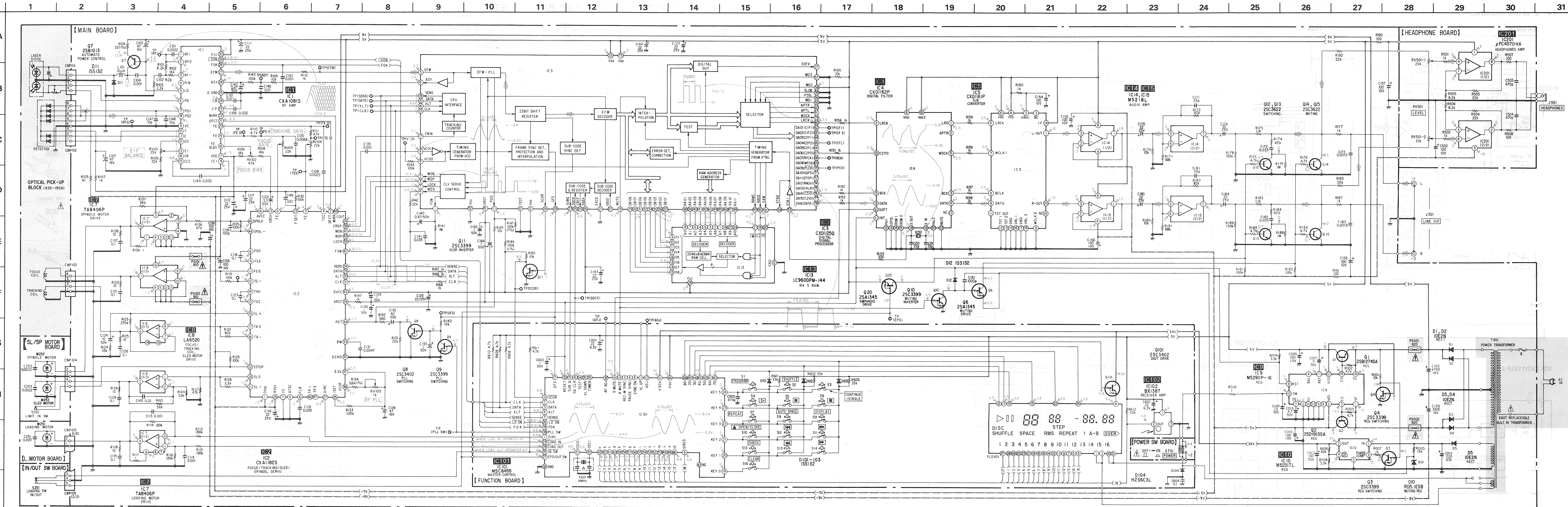
SEMICONDUCTOR LOCATION

Ref.No.	Location	Ref.No.	Location
IC1	F-6	Q10	J-3
IC2	H-5	Q11	G-4
IC3	G-5	Q12	C-3
IC4	F-2	Q13	C-2
IC5	D-2	Q14	B-3
IC7	J-7		
IC8	I-7	Q15	B-3
IC9	E-4	Q20	B-3
IC10	D-7	Q101	I-14
IC13	G-3		
IC14	D-3	D1	D-6
		D2	D-5
IC15	D-2	D3	E-6
IC101	J-15	D4	D-6
IC102	J-13	D5	E-6
IC201	F-10		
		D10	E-7
Q1	D-4	D11	G-7
Q2	D-5	D12	J-2
Q3	E-6	D101	J-18
Q4	D-3	D102	J-18
Q6	B-2		
		D103	J-18
Q7	H-6	D104	I-12
Q8	I-4		
Q9	I-4		

Note on Mounting Diagram:

- : parts extracted from the component side.
- : parts mounted on the conductor side.
- : indicates side identified with part number.
- : Jumper wire connected to the ground pattern on the component side.





Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. $\text{pF} = \mu\text{F}$ 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- % : indicates tolerance.
- Δ : internal component.

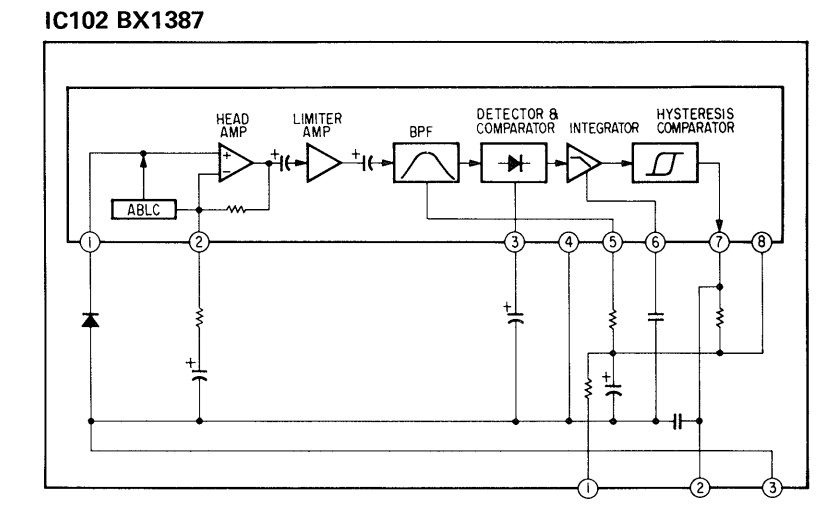
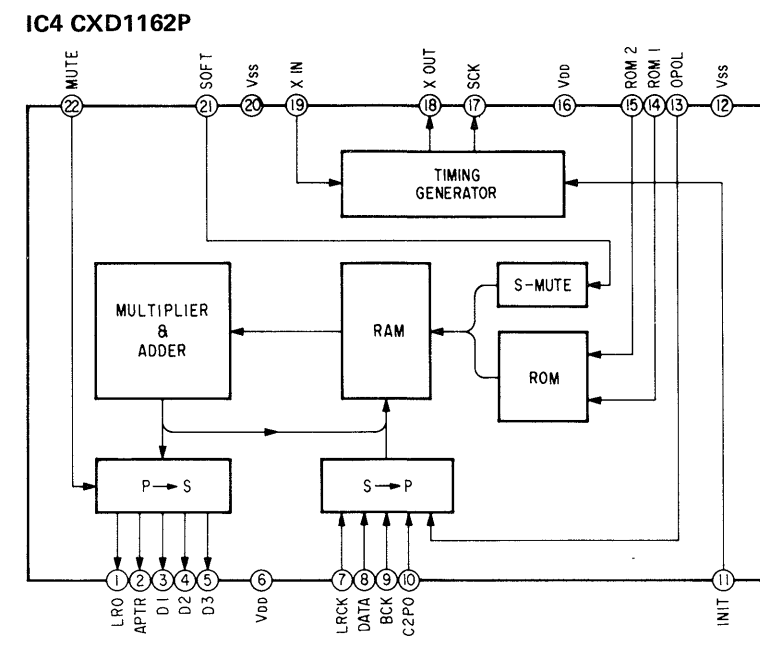
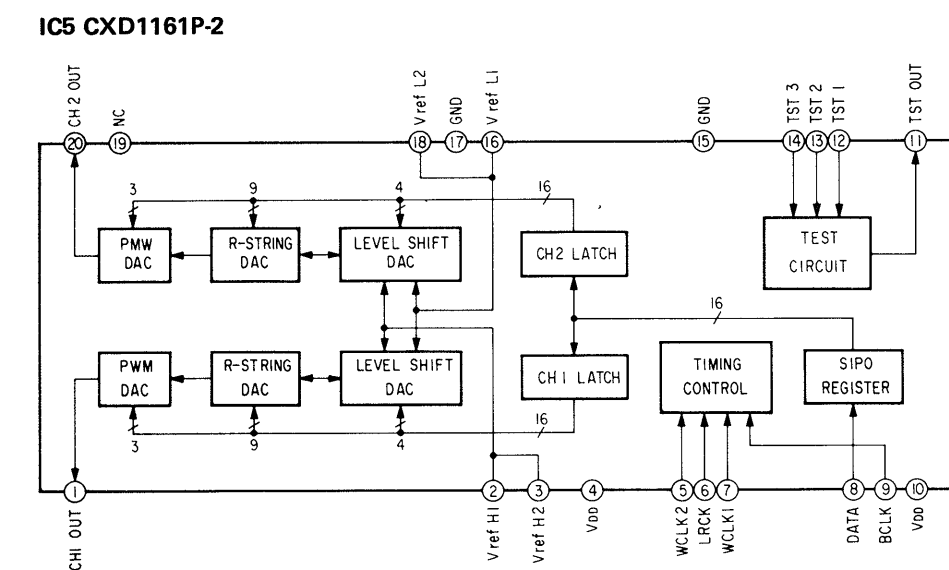
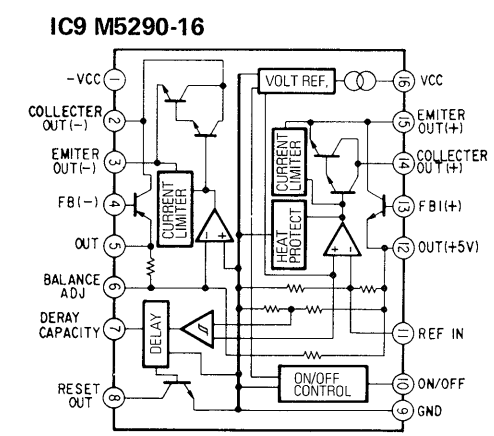
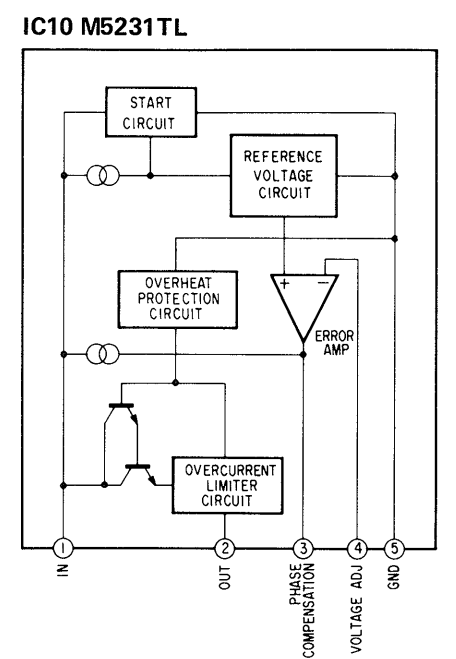
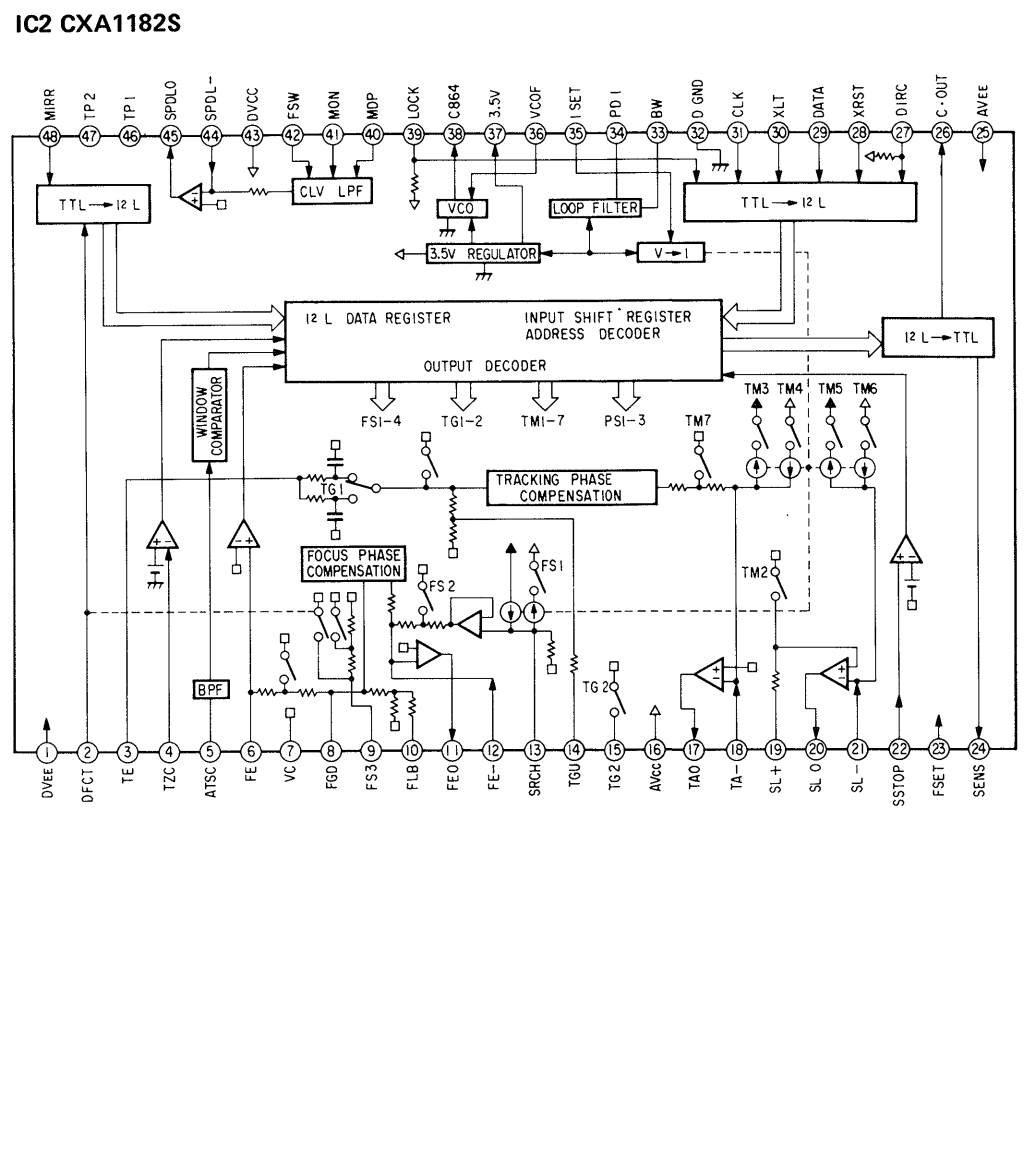
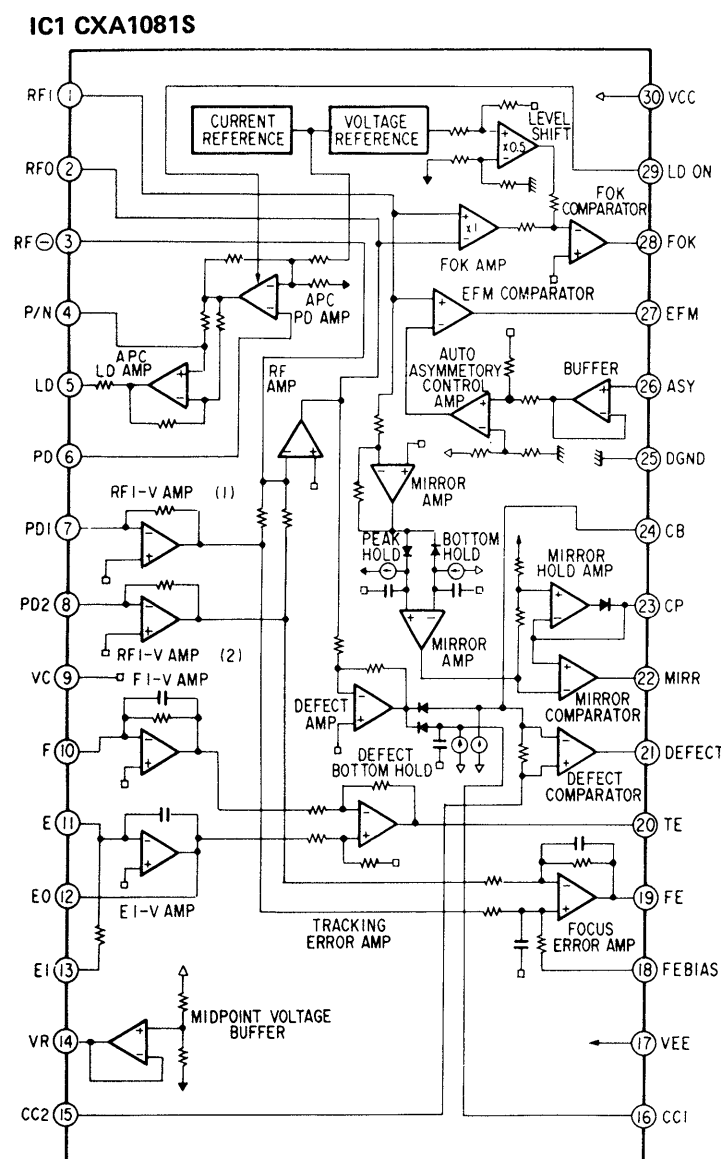
Note: The components identified by shading and mark Δ are critical for safety. Replace only with part number specified.

Switch

Ref. No.	Switch	Position
S1	PROGRAM	OFF
S2	SHUFFLE	OFF
S3	CONTINUE/SINGLE	OFF
S4	▶	OFF
S5	◀	OFF
S6	■	OFF
S7	REPEAT	OFF
S8	AUTO SPACE	OFF
S9	DISPLAY	OFF
S10	OPEN/CLOSE	OFF
S11	⏮	OFF
S12	⏭	OFF
S13	CHECK	OFF
S14	▶▶	OFF
S15	◀◀	OFF
S16	CLEAR	OFF
S251	LOADING	IN
S252	LIMIT (IN)	OFF
S701	POWER	OFF

- \ominus : B+ bus.
- \ominus : B- bus.
- \square : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- () : Stop mode
- () : Playing mode
- Voltagers are taken with a VOM (50 k Ω /V). 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.
- Signal path.
- \Rightarrow : CD

3-4. IC BLOCK DIAGRAM



SECTION 4 EXPLODED VIEWS AND PARTS LIST

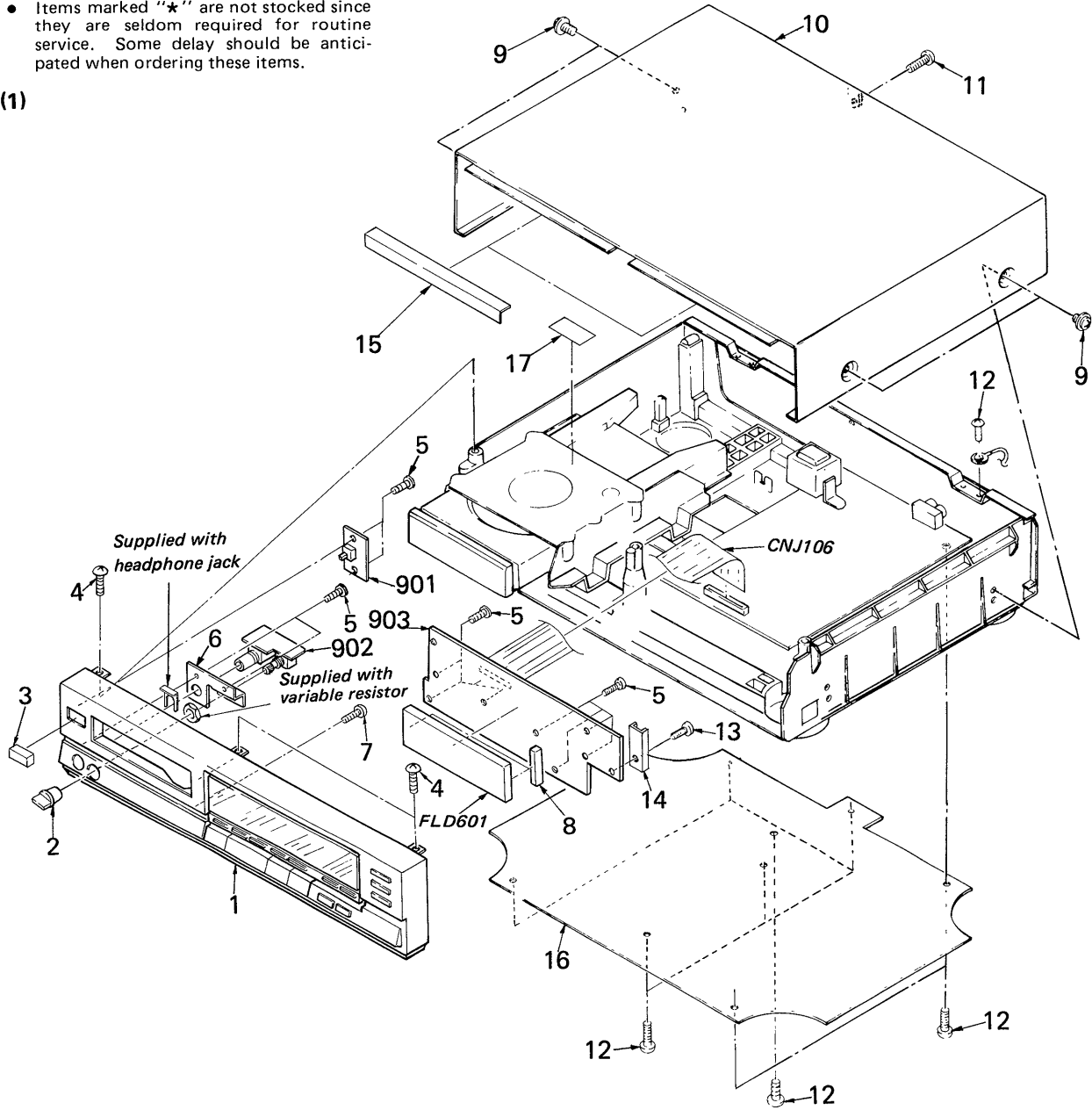
NOTE:

- 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.

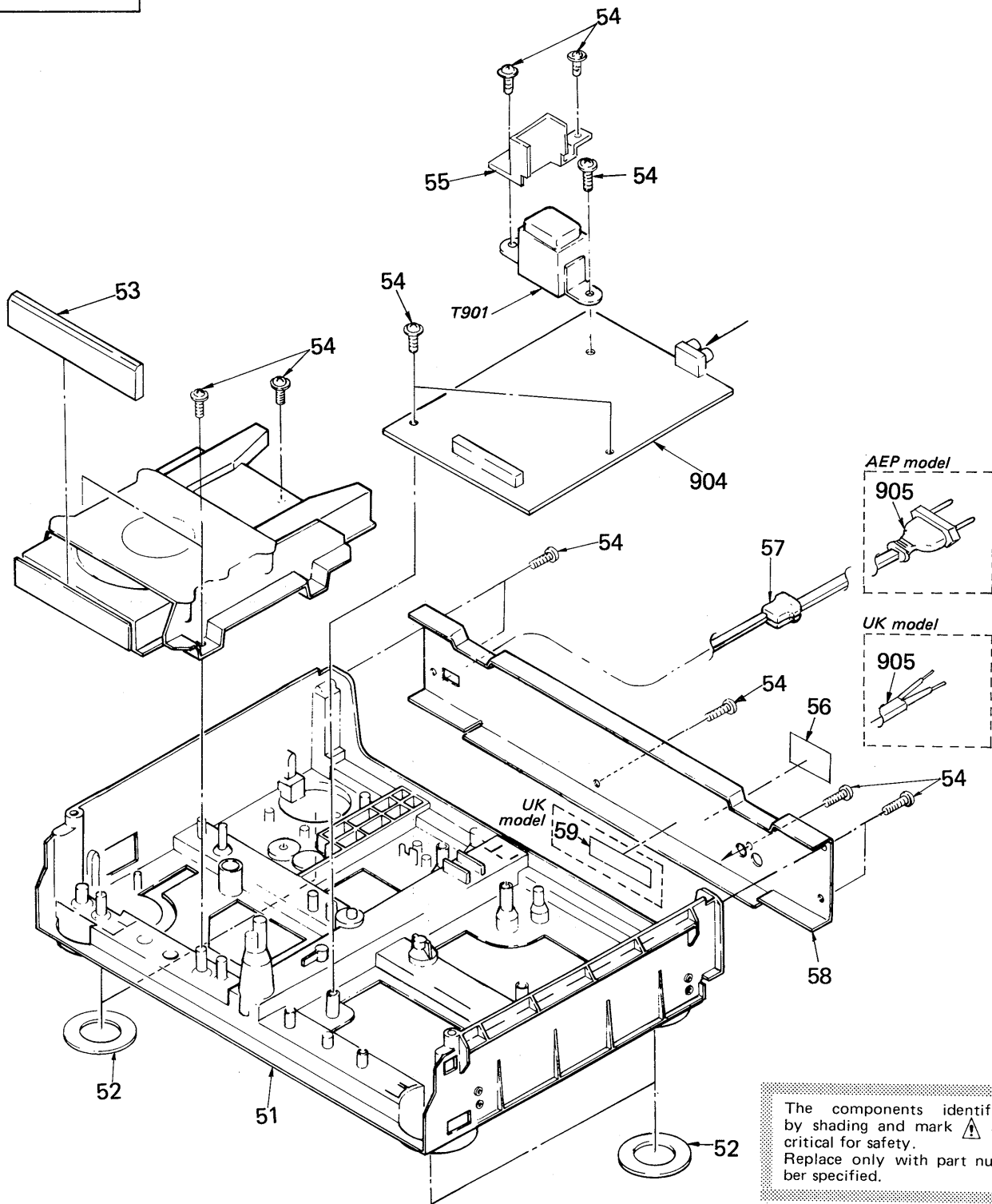
The components identified by shading and mark are critical for safety. Replace only with part number specified.

(1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	X-4922-405-1 X-4922-406-2 X-4922-407-1	(CDP-350).....PANEL ASSY, FRONT (CDP-550:BLACK ,CDP-550:UK) ...PANEL ASSY, FRONT (CDP-550:SILVER)....PANEL ASSY, FRONT		10	4-912-939-01 4-912-939-21	(EXCEPT CDP-550:SILVER)...CASE (CDP-550:SILVER).....CASE	
2	4-901-708-11 4-901-708-21	(EXCEPT CDP-550:SILVER)...KNOB, LEVEL (CDP-550:SILVER).....KNOB, LEVEL		11	7-682-547-09	SCREW +BV 3X6, S TIGHT	
3	4-922-921-01 4-922-921-11	(EXCEPT CDP-550:SILVER)...BUTTON (POWER) (CDP-550:SILVER).....BUTTON (POWER)		12	7-682-147-01	SCREW +BVTT 3X6 (S)	
4	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S		13	7-685-135-19	SCREW (+ PTPWH) (2.6X10)	
5	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S		14	*4-922-426-01	REINFORCEMENT (PC BOARD)	
6	*4-922-408-01	BRACKET (HP)		15	*4-922-422-01	CUSHION (C)	
7	3-683-421-01	SCREW (+ PTPWH)(2.6X8)		16	*4-922-927-31	PLATE, BOTTOM	
8	9-911-842-XX	CUSHION (S)		17	4-885-843-02	LABEL, CAUTION, LASER	
9	7-685-646-79	SCREW, TAPPING		901	*1-624-302-11	PC BOARD, POWER SW	
				902	*1-624-303-11	PC BOARD, HEADPHONE	
				903	*1-624-301-11	PC BOARD, FUNCTION	
				CNJ106	1-535-684-11	JUMPER, FILM (WITH TERMINAL)	
				FLD601	1-519-433-11	INDICATOR TUBE, FLUORESCENT	

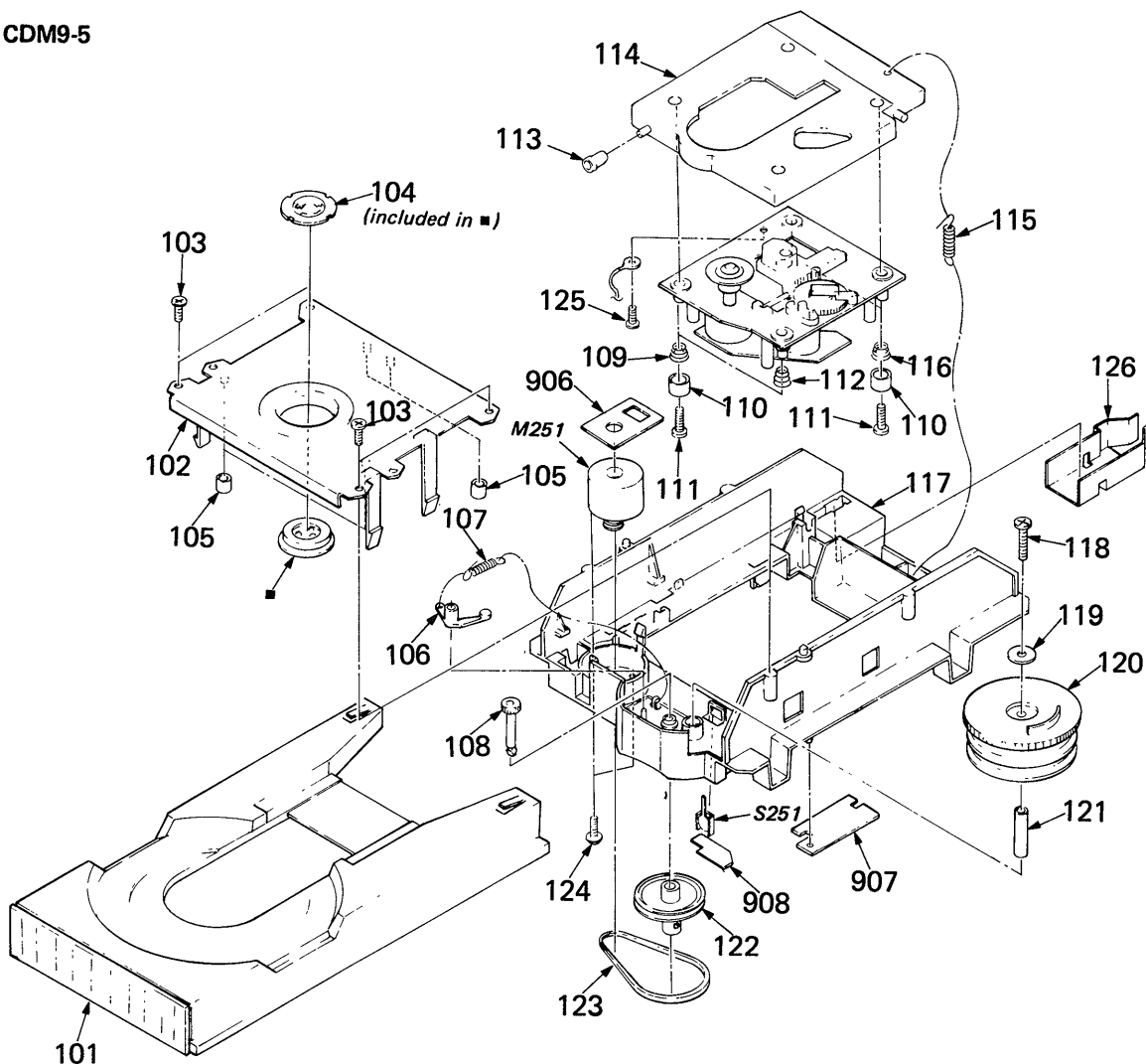
(2)



No.	Part No.	Description	Remarks
51	*4-922-928-01	CHASSIS	
52	4-922-915-01	FOOT (FELT)	
53	4-922-410-01	(CDP-550:BLACK,CDP-550:UK) ...PANEL, LOADING	
	4-922-410-31	(CDP-350)...PANEL, LOADING	
	4-922-410-51	(CDP-550:SILVER)...PANEL, LOADING	
54	7-685-647-79	SCREW, TAPPING	
55	*4-922-423-01	REINFORCEMENT (TRANSFORMER)	
56	*4-885-838-00	LABEL, CLASS 1	
57	*3-703-244-00	BUSHING (2104), CORD	

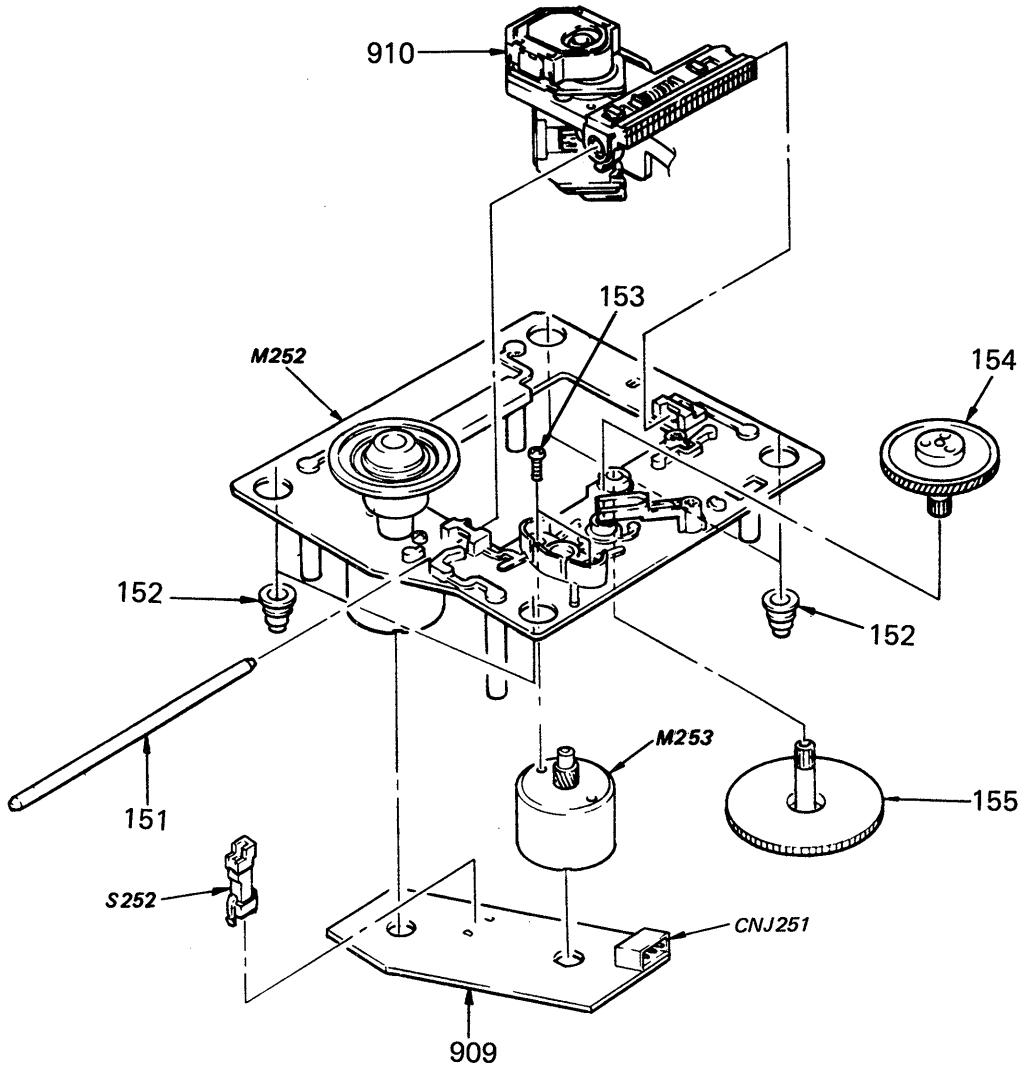
No.	Part No.	Description	Remarks
58	*4-922-401-41	(CDP-550:UK).....PANEL, BACK	
	*4-922-401-31	(CDP-550:BLACK,CDP-550:SILVER) ...PANEL, BACK	
	*4-922-403-21	(CDP-350:AEP).....PANEL, BACK	
	*4-922-403-31	(CDP-350:UK).....PANEL, BACK	
59	*4-922-939-01	(UK)...CUSHION	
904	*A-4651-173-A	MOUNTED PCB, MAIN	
905	⚠1-555-795-00	(AEP)...CORD, POWER, EULO PLUG	
	⚠1-558-204-11	(UK)...CORD, POWER	
T901	⚠1-449-025-11	TRANSFORMER, POWER	

(3) CDM9-5



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	*4-922-515-01	TABLE, DISK		116	4-917-507-01	SPRING (H)	
102	*4-922-510-01	REINFORCEMENT		117	*4-922-516-01	CHASSIS (MD)	
103	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S		118	7-685-552-19	SCREW +BTP 3X25 TYPE2 N-S	
104	A-4665-012-C	MAGNET ASSY		119	0-056-028-00	WASHER, PLAIN, 14 DIA.	
105	*3-576-990-01	CUSHION		120	4-922-511-01	GEAR (LOADING)	
106	4-917-519-01	LEVER, SET		121	*4-917-523-01	COLLAR, CAM	
107	4-917-514-01	SPRING, TENSION		122	4-922-512-01	PULLEY	
108	4-922-508-01	GEAR (DRIVING)		123	4-917-522-01	BELT	
109	4-917-541-01	SPRING (B)		124	7-621-759-40	+PSW, 2.6X6	
110	4-917-508-01	HOLDER, SP		125	7-621-770-67	SCREW +BVTT 2.6X6 (S)	
111	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S		126	4-923-541-11	SPRING	
112	4-918-669-01	SPRING (W)		906	*1-624-324-11	PC BOARD, L.MOTOR	
113	4-917-515-01	ROLLER		907	*1-624-325-11	PC BOARD, TRANSLATION 5	
114	*4-922-514-01	BRACKET (BU-5)		908	*1-624-323-11	PC BOARD, IN/OUT SW	
115	4-917-526-01	SPRING, TENSION		M251	A-4608-346-A	MOTOR ASSY, L	
				S251	1-571-300-11	SWITCH, ROTARY (IN/OUT)	

(4) BU-5C



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	4-917-565-01	SHAFT, SLED		909	*1-624-322-11	PC BOARD, SL/SP MOTOR	
152	4-917-562-01	INSULATOR		910	▲8-848-062-01	DEVICE, OPTICS (KSS-150A)	
153	7-621-255-15	SCREW +P 2X3		CNJ251	*1-564-720-21	PIN, CONNECTOR (SMALL TYPE) 4P	
154	4-917-567-01	GEAR (M)		M252	X-4917-523-1	ASSY, MOTOR (SPINDLE)	
155	4-917-564-01	GEAR (P)		M253	X-4917-504-1	ASSY, MOTOR (SLED)	
				S252	1-571-274-11	SWITCH, LEAF (LIMIT IN)	

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				Ref.No.	Part No.	Description			
C251	1-136-157-00	FILM	0.022MF	5%	50V	IC8	8-759-805-18	IC LA6520			
C252	1-106-351-00	MYLAR	0.0022MF	5%	50V	IC9	8-759-630-21	IC M5290P-16			
C253	1-106-351-00	MYLAR	0.0022MF	5%	50V	IC10	8-759-605-43	IC M5231TL			
C502	1-124-443-00	ELECT	100MF	20%	10V	IC13	8-752-320-44	IC LC9600P-144			
C503	1-162-290-31	CERAMIC	470PF	10%	50V	IC14	8-759-600-02	IC M5218L			
C504	1-162-290-31	CERAMIC	470PF	10%	50V	IC15	8-759-600-02	IC M5218L			
C601	1-124-638-11	ELECT	22MF	20%	6.3V	IC101	8-759-971-52	IC MSC6458-20SS			
C602	1-124-638-11	ELECT	22MF	20%	6.3V	IC102	8-741-138-70	IC BX-1387			
C603	1-123-611-00	ELECT	1MF	20%	50V	IC201	8-759-106-61	IC UPC4570HA			
C604	1-162-851-11	CERAMIC	0.1MF	20%	16V	J301	1-566-921-11	JACK, PIN 2P (LINE OUT)			
C605	1-162-290-31	CERAMIC	470PF	10%	50V	J501	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)			
CN256	*1-564-336-51	PIN, CONNECTOR 2P				L101	1-408-563-00	INDUCTOR 10UH			
CN258	*1-564-337-51	PIN, CONNECTOR 3P				M251	A-4608-346-A	MOTOR ASSY, L			
CN260	*1-564-704-11	PIN, CONNECTOR (SMALL TYPE) 2P				M252	X-4917-523-1	ASSY, MOTOR (SPINDLE)			
CNJ106	1-535-684-11	JUMPER, FILM (WITH TERMINAL)				M253	X-4917-504-1	ASSY, MOTOR (SLED)			
CNJ251	*1-564-720-21	PIN, CONNECTOR (SMALL TYPE) 4P				PS001	△1-532-685-00	LINK, IC (N 20)			
CNP001	*1-564-340-00	PIN, CONNECTOR 6P				PS002	△1-532-685-00	LINK, IC (N 20)			
CNP101	*1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P				PS101	△1-532-605-00	LINK, IC (N 10)			
CNP102	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P				PS102	△1-532-605-00	LINK, IC (N 10)			
CNP103	*1-564-706-41	PIN, CONNECTOR (SMALL TYPE) 4P				Q1	8-729-804-68	TRANSISTOR 2SB1133-S			
CNP104	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P				Q2	8-729-804-17	TRANSISTOR 2SD1686-R			
CNP105	*1-564-339-61	PIN, CONNECTOR 5P				Q3	8-729-806-38	TRANSISTOR 2SC3399			
CNP106	1-566-908-11	SOCKET, CONNECTOR 32P				Q4	8-729-806-38	TRANSISTOR 2SC3399			
CNP301	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P				Q6	8-729-806-20	TRANSISTOR 2SA1345			
CNP501	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE) 5P				Q7	8-729-801-83	TRANSISTOR 2SB1013			
CNP601	*1-564-497-11	PIN, CONNECTOR 4P				Q8	8-729-806-28	TRANSISTOR 2SC3402			
D1	8-719-200-02	DIODE 10E2				Q9	8-729-806-38	TRANSISTOR 2SC3399			
D2	8-719-200-02	DIODE 10E2				Q10	8-729-806-38	TRANSISTOR 2SC3399			
D3	8-719-200-02	DIODE 10E2				Q11	8-729-806-38	TRANSISTOR 2SC3399			
D4	8-719-200-02	DIODE 10E2				Q12	8-729-107-99	TRANSISTOR 2SC3622A-K			
D5	8-719-200-02	DIODE 10E2				Q13	8-729-107-99	TRANSISTOR 2SC3622A-K			
D10	8-719-109-83	DIODE RD5.1ES-B				Q14	8-729-107-99	TRANSISTOR 2SC3622A-K			
D11	8-719-940-76	DIODE 1SS132				Q15	8-729-107-99	TRANSISTOR 2SC3622A-K			
D12	8-719-940-76	DIODE 1SS132				Q20	8-729-806-20	TRANSISTOR 2SA1345			
D101	8-719-940-76	DIODE 1SS132				Q101	8-729-806-28	TRANSISTOR 2SC3402			
D102	8-719-940-76	DIODE 1SS132				R001	1-249-429-11	CARBON 10K 5% 1/4W			
D103	8-719-940-76	DIODE 1SS132				R002	1-249-425-11	CARBON 4.7K 5% 1/4W			
D104	8-719-109-95	DIODE RD6.8ESB				R003	1-249-425-11	CARBON 4.7K 5% 1/4W			
FLD601	1-519-433-11	INDICATOR TUBE, FLUORESCENT				R004	1-249-423-11	CARBON 3.3K 5% 1/4W			
IC1	8-752-031-80	IC CXA1081S				R005	1-249-431-11	CARBON 15K 5% 1/4W			
IC2	8-752-032-33	IC CXA1182S				R006	1-215-464-00	CARBON 62K 5% 1/4W			
IC3	8-752-322-04	IC CXD1125Q				R007	1-249-417-11	CARBON 1K 5% 1/4W			
IC4	8-759-946-62	IC CXD1162P				R008	1-249-423-11	CARBON 3.3K 5% 1/4W			
IC5	8-759-805-35	IC CXD1161P-2				R010	1-249-381-11	CARBON 1 5% 1/4W			
IC7	8-759-208-96	IC TA8406P									

The components identified by shading and mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description					Ref.No.	Part No.	Description				
R101	1-249-428-11	CARBON	8.2K	5%	1/4W		R147	1-215-469-00	METAL	100K	1%	1/6W	
R102	1-215-450-00	CARBON	16K	5%	1/4W		R150	1-249-429-11	CARBON	10K	5%	1/4W	
R103	1-249-421-11	CARBON	2.2K	5%	1/4W		R151	1-249-417-11	CARBON	1K	5%	1/4W	
R104	1-214-092-00	METAL	22	1%	1/4W		R152	1-249-417-11	CARBON	1K	5%	1/4W	
R105	1-215-396-00	CARBON	91	5%	1/4W		R153	1-249-417-11	CARBON	1K	5%	1/4W	
R106	1-249-433-11	CARBON	22K	5%	1/4W		R154	1-249-417-11	CARBON	1K	5%	1/4W	
R107	1-249-417-11	CARBON	1K	5%	1/4W		R155	1-249-411-11	CARBON	330	5%	1/4W	
R108	1-249-432-11	CARBON	18K	5%	1/4W		R156	1-249-417-11	CARBON	1K	5%	1/4W	
R109	1-249-432-11	CARBON	18K	5%	1/4W		R157	1-249-417-11	CARBON	1K	5%	1/4W	
R110	1-249-425-11	CARBON	4.7K	5%	1/4W		R158	1-249-417-11	CARBON	1K	5%	1/4W	
R111	1-249-425-11	CARBON	4.7K	5%	1/4W		R159	1-249-417-11	CARBON	1K	5%	1/4W	
R112	1-249-417-11	CARBON	1K	5%	1/4W		R160	1-259-428-11	CARBON	1K	5%	1/6W	
R113	1-215-472-00	CARBON	130K	5%	1/4W		R161	1-249-441-11	CARBON	100K	5%	1/4W	
R114	1-247-881-00	CARBON	120K	5%	1/4W		R162	1-249-441-11	CARBON	100K	5%	1/4W	
R115	1-215-472-00	CARBON	130K	5%	1/4W		R163	1-249-438-11	CARBON	56K	5%	1/4W	
R116	1-247-881-00	CARBON	120K	5%	1/4W		R164	1-249-424-11	CARBON	3.9K	5%	1/4W	
R117	1-249-381-11	CARBON	1	5%	1/4W		R165	1-249-429-11	CARBON	10K	5%	1/4W	
R118	1-249-393-11	CARBON	10	5%	1/4W		R166	1-249-417-11	CARBON	1K	5%	1/4W	
R119	1-215-472-00	CARBON	130K	5%	1/4W		R167	1-249-417-11	CARBON	1K	5%	1/4W	
R120	1-249-393-11	CARBON	10	5%	1/4W		R168	1-249-417-11	CARBON	1K	5%	1/4W	
R122	1-249-440-11	CARBON	82K	5%	1/4W		R170	1-259-452-11	CARBON	10K	5%	1/6W	
R123	1-215-479-00	CARBON	270K	5%	1/4W		R171	1-259-472-11	CARBON	68K	5%	1/6W	
R124	1-249-435-11	CARBON	33K	5%	1/4W		R172	1-259-474-11	CARBON	82K	5%	1/6W	
R125	1-249-393-11	CARBON	10	5%	1/4W		R173	1-259-429-11	CARBON	1.1K	5%	1/6W	
R126	1-249-423-11	CARBON	3.3K	5%	1/4W		R174	1-259-420-11	CARBON	470	5%	1/6W	
R127	1-249-425-11	CARBON	4.7K	5%	1/4W		R175	1-249-425-11	CARBON	4.7K	5%	1/4W	
R128	1-249-393-11	CARBON	10	5%	1/4W		R176	1-249-425-11	CARBON	4.7K	5%	1/4W	
R129	1-249-429-11	CARBON	10K	5%	1/4W		R177	1-259-428-11	CARBON	1K	5%	1/6W	
R130	1-215-486-00	CARBON	510K	5%	1/4W		R178	1-259-500-11	CARBON	1M	5%	1/6W	
R131	1-249-433-11	CARBON	22K	5%	1/4W		R179	1-259-480-11	CARBON	150K	5%	1/6W	
R132	1-249-414-11	CARBON	560	5%	1/4W		R180	1-259-452-11	CARBON	10K	5%	1/6W	
R133	1-249-441-11	CARBON	100K	5%	1/4W		R181	1-259-472-11	CARBON	68K	5%	1/6W	
R134	1-215-434-00	METAL	3.6K	1%	1/6W		R182	1-259-474-11	CARBON	82K	5%	1/6W	
R135	1-249-441-11	CARBON	100K	5%	1/4W		R183	1-259-429-11	CARBON	1.1K	5%	1/6W	
R136	1-249-437-11	CARBON	47K	5%	1/4W		R184	1-259-420-11	CARBON	470	5%	1/6W	
R137	1-249-436-11	CARBON	39K	5%	1/4W		R185	1-249-425-11	CARBON	4.7K	5%	1/4W	
R138	1-249-393-11	CARBON	10	5%	1/4W		R186	1-249-425-11	CARBON	4.7K	5%	1/4W	
R139	1-249-381-11	CARBON	1	5%	1/4W		R187	1-259-428-11	CARBON	1K	5%	1/6W	
R140	1-249-429-11	CARBON	10K	5%	1/4W		R188	1-259-500-11	CARBON	1M	5%	1/6W	
R141	1-215-493-00	CARBON	1M	5%	1/4W		R189	1-259-480-11	CARBON	150K	5%	1/6W	
R142	1-249-433-11	CARBON	22K	5%	1/4W		R190	1-259-404-11	CARBON	100	5%	1/6W	
R143	1-249-441-11	CARBON	100K	5%	1/4W		R191	1-259-404-11	CARBON	100	5%	1/6W	
R144	1-249-441-11	CARBON	100K	5%	1/4W		R192	1-259-460-11	CARBON	22K	5%	1/6W	
R145	1-249-429-11	CARBON	10K	5%	1/4W		R193	1-259-460-11	CARBON	22K	5%	1/6W	
R146	1-215-469-00	METAL	100K	1%	1/6W		R195	1-249-429-11	CARBON	10K	5%	1/4W	

Ref.No.	Part No.	Description
R197	1-249-417-11	CARBON 1K 5% 1/4W
R501	1-259-428-11	CARBON 1K 5% 1/6W
R502	1-259-428-11	CARBON 1K 5% 1/6W
R503	1-259-460-11	CARBON 22K 5% 1/6W
R504	1-259-460-11	CARBON 22K 5% 1/6W
R505	1-259-450-11	CARBON 8.2K 5% 1/6W
R506	1-259-450-11	CARBON 8.2K 5% 1/6W
R507	1-259-404-11	CARBON 100 5% 1/6W
R508	1-259-404-11	CARBON 100 5% 1/6W
R601	1-249-435-11	CARBON 33K 5% 1/4W
R602	1-249-435-11	CARBON 33K 5% 1/4W
R603	1-249-435-11	CARBON 33K 5% 1/4W
R608	1-249-425-11	CARBON 4.7K 5% 1/4W
R609	1-249-425-11	CARBON 4.7K 5% 1/4W
R610	1-249-425-11	CARBON 4.7K 5% 1/4W
R611	1-249-425-11	CARBON 4.7K 5% 1/4W
R612	1-249-421-11	CARBON 2.2K 5% 1/4W
RV101	1-228-995-00	RES, ADJ, CARBON 22K (E-F BAL)
RV102	1-228-993-00	RES, ADJ, CARBON 4.7K (F.BIAS)
RV103	1-228-995-00	RES, ADJ, CARBON 22K (FCS)
RV104	1-228-995-00	RES, ADJ, CARBON 22K (TRK)
RV105	1-228-990-00	RES, ADJ, METAL GLAZE 1K (VCO)
RV501	1-237-789-11	RES, VAR, CARBON 20K/20K (LEVEL)
S1	1-554-303-21	SWITCH, KEY BOARD (PROGRAM)
S2	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S3	1-554-303-21	SWITCH, KEY BOARD (CONTINUE/SINGLE)
S4	1-554-303-21	SWITCH, KEY BOARD (▶)
S5	1-554-303-21	SWITCH, KEY BOARD ()
S6	1-554-303-21	SWITCH, KEY BOARD (■)
S7	1-554-303-21	SWITCH, KEY BOARD (REPEAT)
S8	1-554-303-21	SWITCH, KEY BOARD (AUTO SPACE)
S9	1-554-303-21	SWITCH, KEY BOARD (DISPLAY)
S10	1-554-303-21	SWITCH, KEY BOARD (OPEN/CLOSE)
S11	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S12	1-554-303-21	SWITCH, KEY BOARD (◀◀)
S13	1-554-303-21	SWITCH, KEY BOARD (CHECK)
S14	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S15	1-554-303-21	SWITCH, KEY BOARD (◀◀)
S16	1-554-303-21	SWITCH, KEY BOARD (CLEAR)
S251	1-571-300-11	SWITCH, ROTARY (LOADING IN/OUT)
S252	1-571-274-11	SWITCH, LEAF (LIMIT IN)
S701	▲ 1-571-305-11	SWITCH, PUSH (1 KEY)(POWER)
T901	▲ 1-449-025-11	TRANSFORMER, POWER
X150	1-567-908-11	VIBRATOR, CRYSTAL
X601	1-567-686-11	OSCILLATOR, CERAMIC

ACCESSORY & PACKING MATERIAL

1-463-924-11	(CDP-550)...REMOTO COMMANDER (RM-D250)
1-558-543-11	CORD, CONNECTION
3-704-346-01	SHEET (STANDARD), PROTECTION
3-769-600-11	MANUAL, INSTRUCTION
3-769-600-41	MANUAL, INSTRUCTION
*3-795-629-11	(AEP)...INSTRUCTION
4-922-416-01	INDIVIDUAL CARTON
4-922-417-01	(CDP-550)...LID, BATTERY CASE
4-922-418-01	CUSHION

The components identified by shading and mark ▲ are critical for safety. Replace only with part number specified.

Sony Corporation
Audio Group

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