

CDP-M70

SERVICE MANUAL

*AEP Model
UK Model
E Model*



SPECIFICATIONS

COMPACT DISC PLAYER CDP-M70

System	Compact disc digital audio system
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 (± 0.5 dB)
Signal-to-noise ratio	More than 100 dB
Dynamic range	More than 95 dB
Harmonic distortion	Less than 0.0035% (at 1 kHz)
Wow and flutter	Below measurable limit
Channel separation	More than 96 dB (at 1 kHz)
Outputs	LINE OUT (phono jacks) Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms HEADPHONES (phone jack) Output level 3.6 mW (at 32 ohms) DIGITAL OUT (phono jack) Output level 0.5 Vp-p Load impedance 75 ohms

General

Power requirements

AEP model	220 V AC, 50/60 Hz
UK model	240 V AC, 50/60 Hz
E model	110 - 120, 220 - 240 V AC adjustable, 50/60 Hz

Power consumption

12 W

Dimensions

Approx. 355 $\times$ 85 $\times$ 325 mm (w/h/d)
(14 $\times$ 3 $\frac{3}{8}$ $\times$ 12 $\frac{7}{8}$ inches)

Weight

not including projecting parts and controls
Approx. 4.3 kg (9 lbs 8 oz), net

REMOTE COMMANDER RM-D350A

Remote control system

Infrared control

Power requirements

3 V DC with two R6 (size AA) batteries

Dimensions

67 $\times$ 20 $\times$ 175 (w/h/d)
(2 $\frac{3}{4}$ $\times$ $\frac{33}{32}$ $\times$ 7)

Weight

145 g (5 oz)
including batteries

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®

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FEATURES**Direct music selection**

You can play the desired selection by pressing desired number buttons (1 to 20).

Program play

You can play up to 20 selections in the desired order. Selections can be programmed even after the play begins.

Variety of playing modes

Program, shuffle, and repeat playing modes

Large and easy-to-read music calendar display

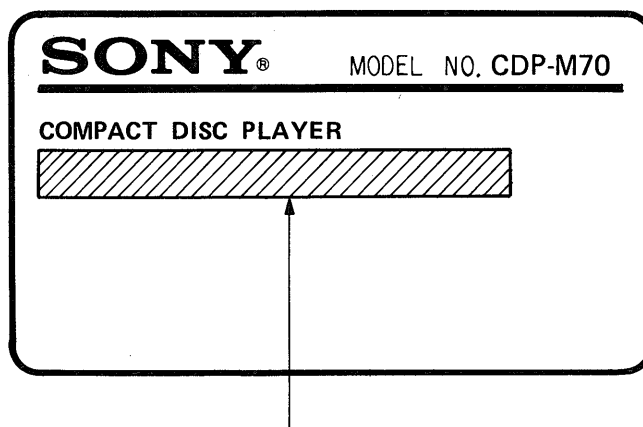
Shows the elapsed playing time, the remaining time of the selection being played, the remaining time of the whole disc, or the following two selection numbers during program play.

Auto play function

Play starts automatically at the desired time when connected to an optional timer.

MODEL IDENTIFICATION

— Specification Labels —



AEP model : AC: 220V ~ 50/60Hz 12W

UK model : AC: 240V ~ 50/60Hz 12W

E model : AC: 110, 120, 220, 240V ~ 50/60Hz 12W

MEMO

Handwriting practice area with horizontal dotted lines.

PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

CAUTION

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

1. Laser Diode Properties

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

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

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

BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

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

Følg iøvrigt instruktionerne i servicemanualen.

ADVARSEL!!

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

1. Laser-diode 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.

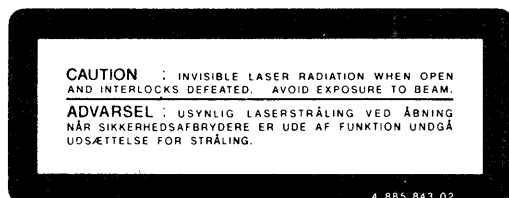
- Klassifikation: Klasse IIIb.

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.

LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

1. Advarsel Mærkning



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

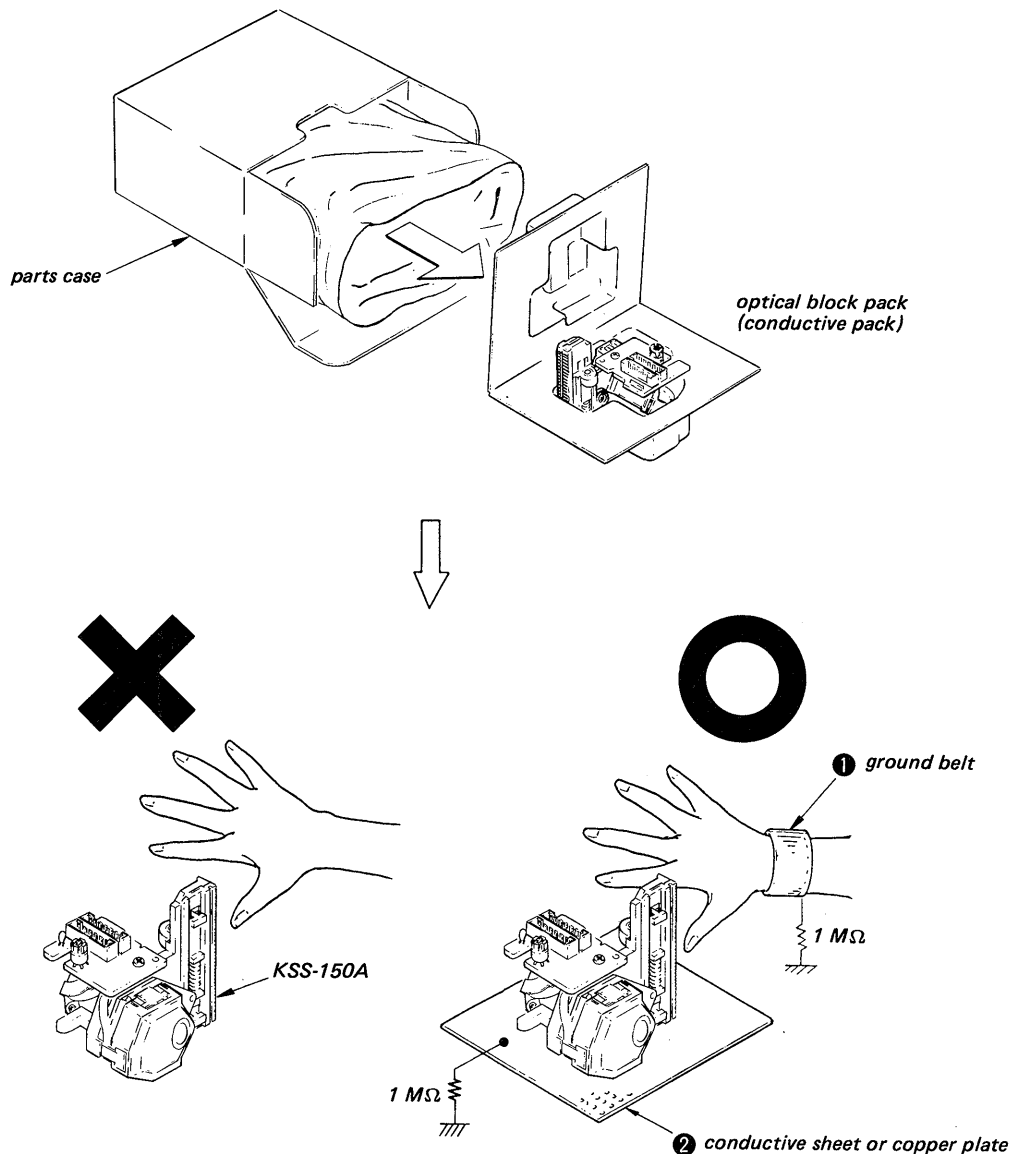
— CAUTION FOR ELECTROSTATIC BREAKDOWN —

NOTES ON HANDLING THE OPTICAL BLOCK (KSS-150A)

The laser diode inside the optical block may be damaged by static electricity in clothes or the human body.

The following procedures are required when unpacking and repairing KSS-150A in order to avoid static electricity damage.

1. Body grounding
Be sure to wear a ground belt (less than $10^8 \Omega$) in order to release the static electricity stored in the body.
2. Workbench grounding
Place a conductive sheet (less than $10^9 \Omega$) or copper plate on the bench where KSS-150A is to be placed to ground it.
3. Static electricity in the clothing will not be released by the ground belt, so be careful not to let KSS-150A touch clothing.



NOTES ON CHECKING LASER DIODE LIGHT EMISSION

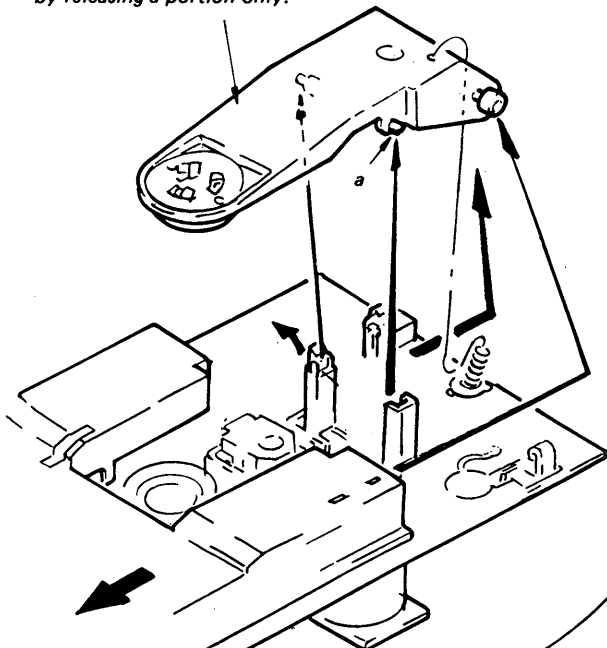
The laser beam on this set is converged by the objective lens in the optical block so that it focuses on the disc reflective surface. Therefore, when checking light emission of the laser diode, be sure to keep the eyes more than 30 cm away from the objective lens.

CHECKING LASER DIODE AND FOCUS SEARCH OPERATION

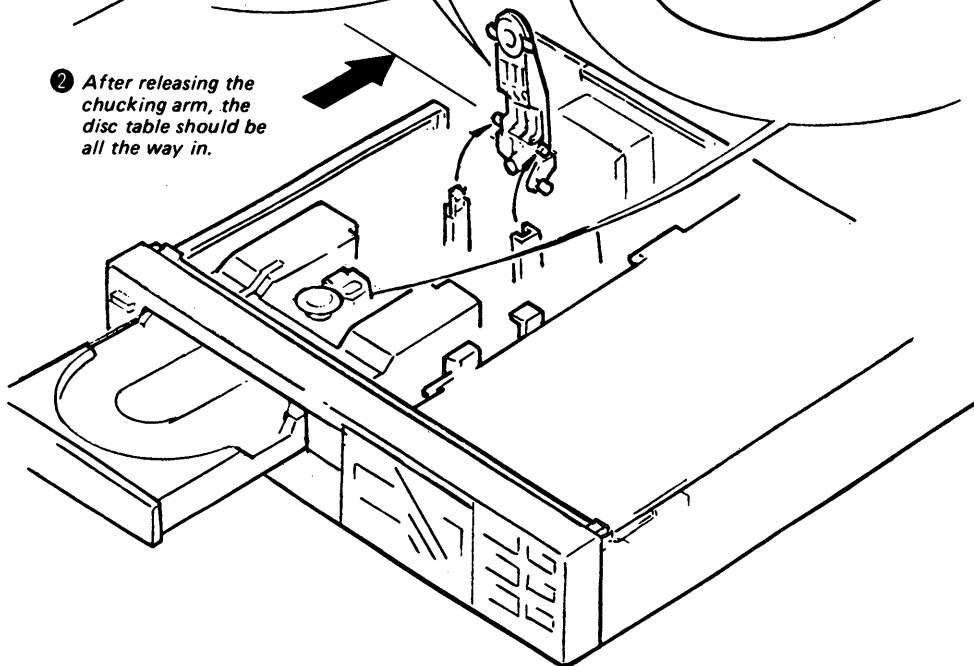
Check if the following operation is performed by looking at the objective lens after releasing the chucking arm and turning the POWER switch on. (Optical block should be at the innermost circumference when checking.)

① Release chucking arm.

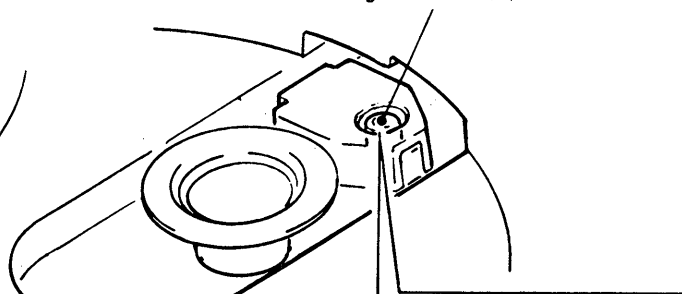
This figure shows the entire chucking arm released, but checking can be done by releasing a portion only.



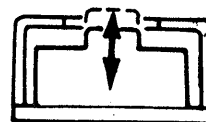
② After releasing the chucking arm, the disc table should be all the way in.



③ When the POWER switch is turned on, diffused laser light can be seen.

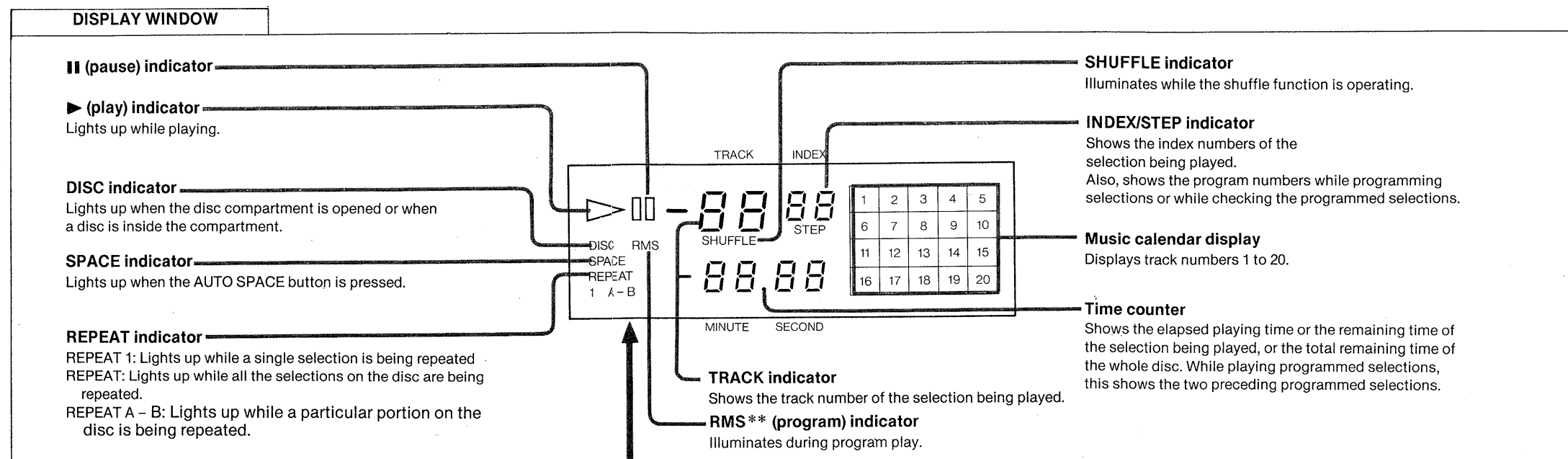


④ Objective lens moves up and down (2 - 3 times)

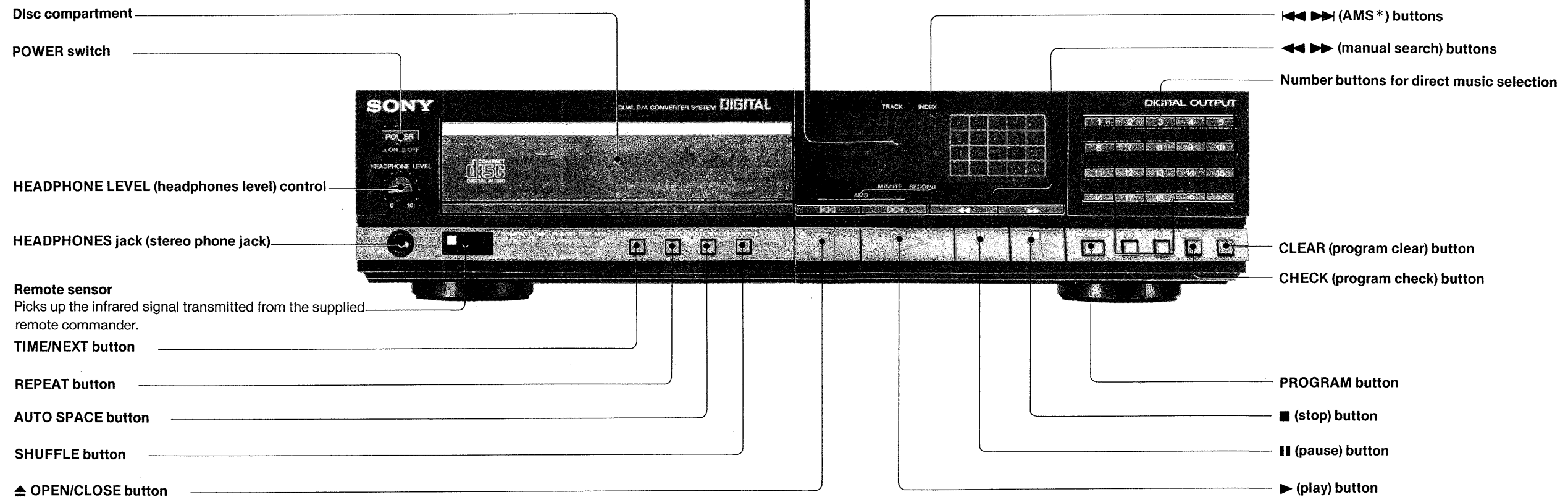


objective lens side view

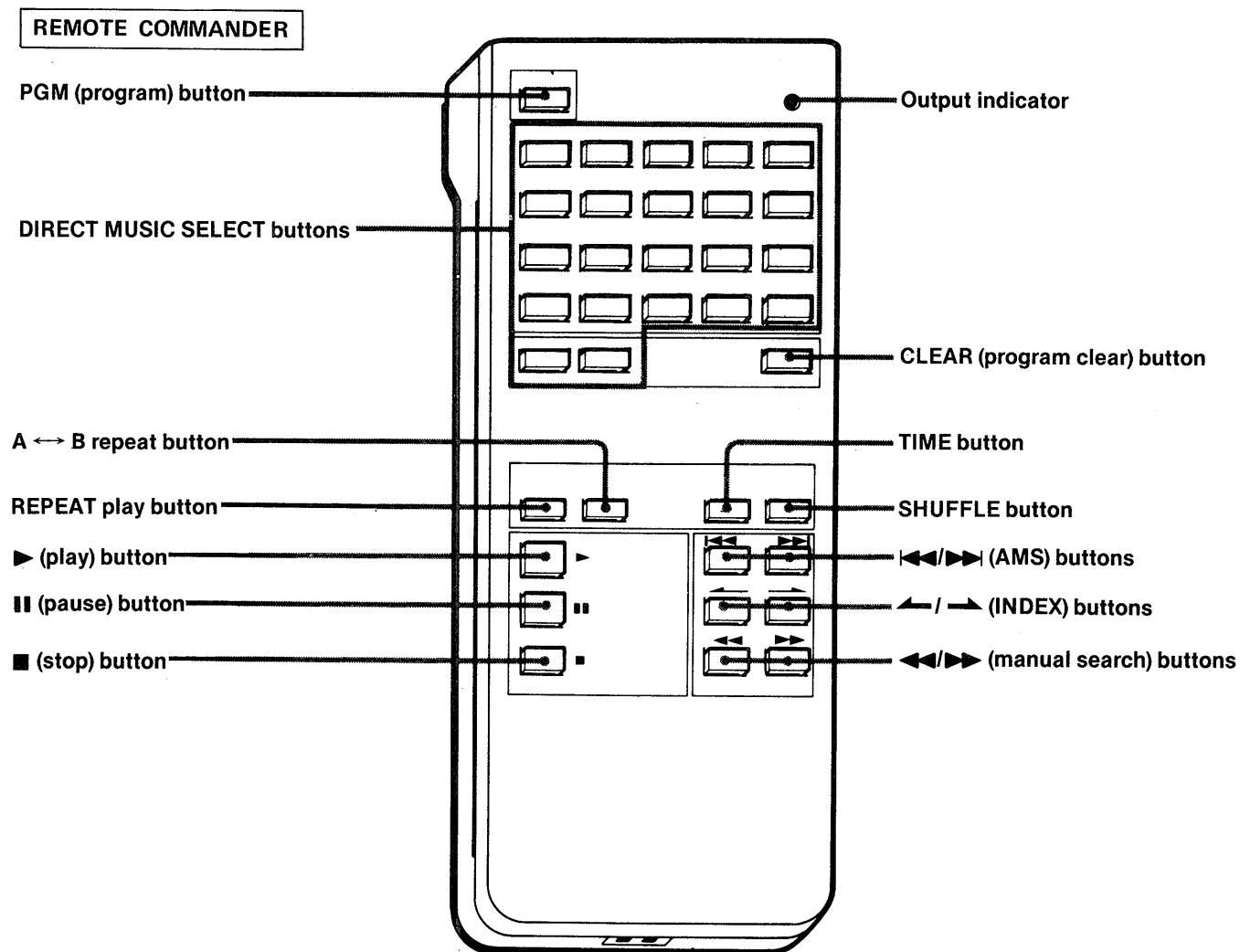
LOCATION AND FUNCTION OF CONTROLS



FRONT PANEL



* AMS is the abbreviation for Automatic Music Sensor.
** RMS is the abbreviation for Random Music Sensor.



SECTION 1 ELECTRICAL ADJUSTMENTS

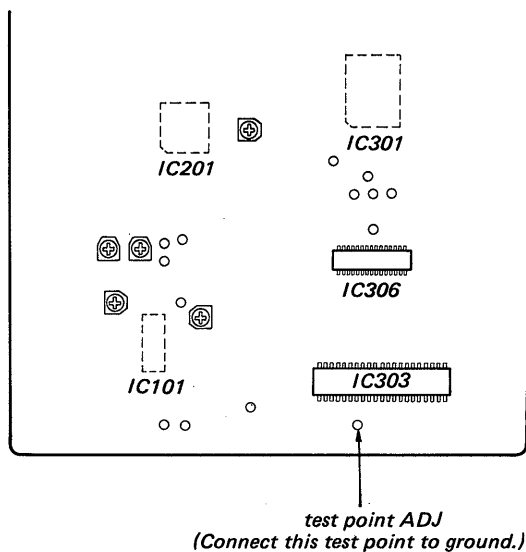
1. Perform adjustments in the order given.
2. Use YEDS-18 disc (3-702-101-01) unless otherwise indicated.
3. Use the oscilloscope with more than 10 M Ω impedance.

Adjustment Mode

1. Connect main board test point ADJ and ground. This is to prevent the disc rotation from stopping even though pits are not read, by making microcomputer IC303 pin (8) low.
2. Turn POWER switch on. (To reset microcomputer.)

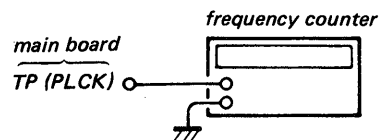
After adjustment, remove the lead wire connecting test point ADJ and ground.

Adjustment Location: main board



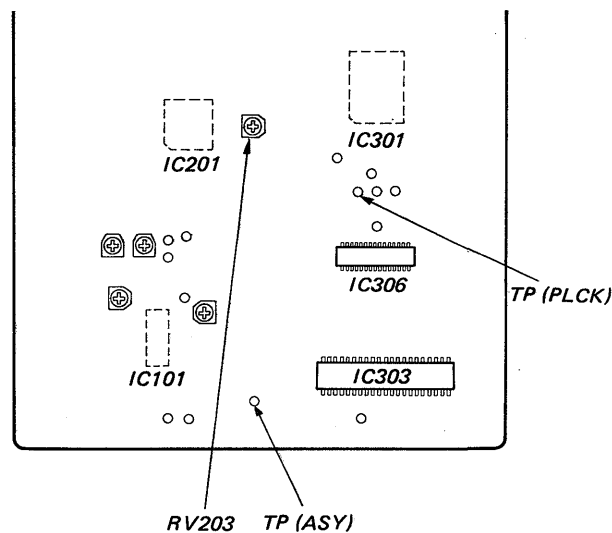
RF PLL Frequency Adjustment

Procedure:



1. Turn POWER switch on.
2. Connect test point TP (ASY) to ground with jumper wire.
3. Connect the frequency counter to test points TP (PLCK).
4. Adjust RV203 so that the reading on frequency counter is 4.3218 MHz $\pm$ 20 kHz.
5. Remove lead wire connecting TP (ASY) and ground.
6. Put disc (YEDS-18) in and press $\triangleright$ button.
7. Confirm that the reading on frequency counter is 4.3218 MHz.

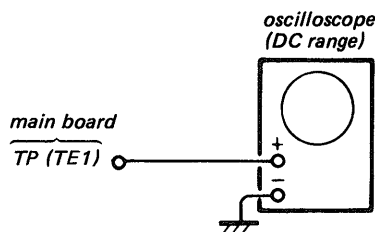
Adjustment Location: main board



E-F Balance Adjustment

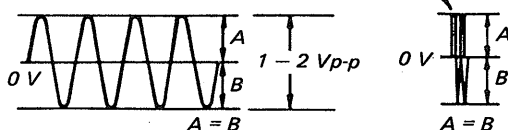
This adjustment should be made when replacing Optical Pick-up Block.

Procedure:

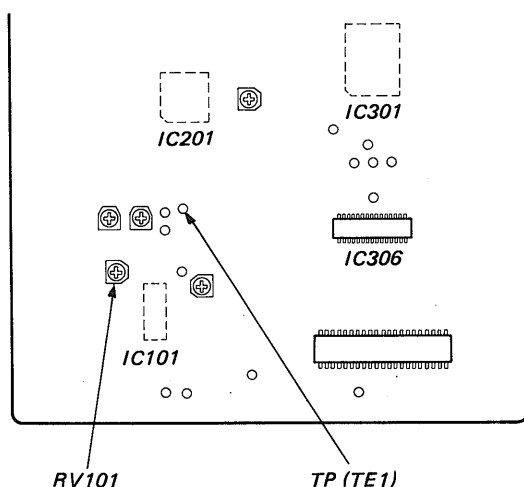


1. Connect oscilloscope to test point TP (TE1) and ground.
2. Put set into adjustment mode. (See page 10.)
3. Turn POWER switch on.
4. Put disc (YEDS-18) in and playback the 6th selection.
5. Adjust RV101 so that the oscilloscope waveform is symmetrical on the top and bottom in relation to 0 V.
6. After adjustment, cancel the adjustment mode. (See page 10.)

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



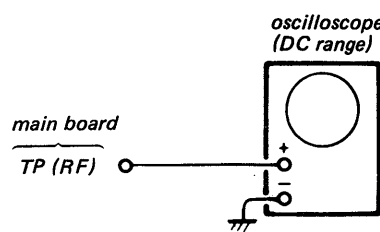
Adjustment Location: main board



Focus Bias Adjustment

This adjustment should be made when replacing Optical Pick-up Block.

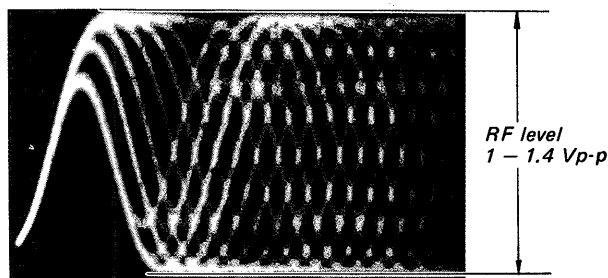
Procedure:



1. Connect oscilloscope to test point TP (RF) and ground.
2. Turn POWER switch on.
3. Put disc (YEDS-18) in and playback the 6th selection.
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.

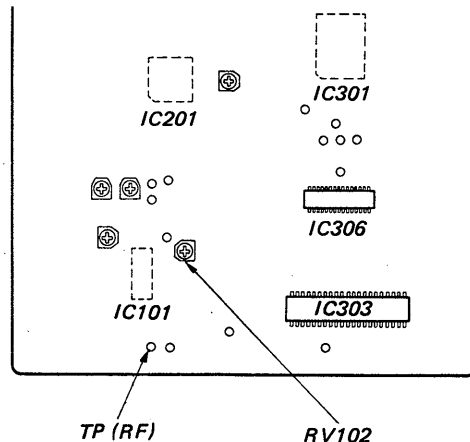
• RF Signal Reference Waveform (eye pattern)

VOLT/DIV: 200 mV
TIME/DIV: 500 nS



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

Adjustment Location: main board



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.

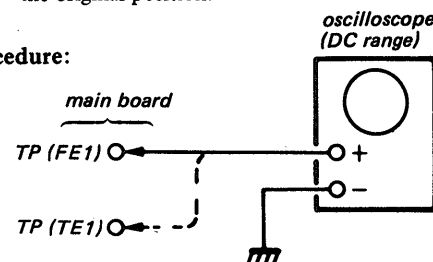
Symptoms	Gain	Focus	Tracking
● The time until music starts becomes longer for STOP → ▷PLAY or automatic selection (◀◀ ▶▶ buttons pressed. (Normally takes about 2 seconds.)		low	low or high
● Music does not start and disc continues to rotate for STOP → ▷PLAY or automatic selection (◀◀ ▶▶ buttons pressed.)		—	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.

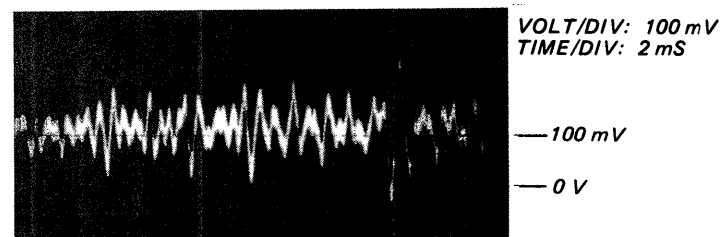
– Simple Adjustment –

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.

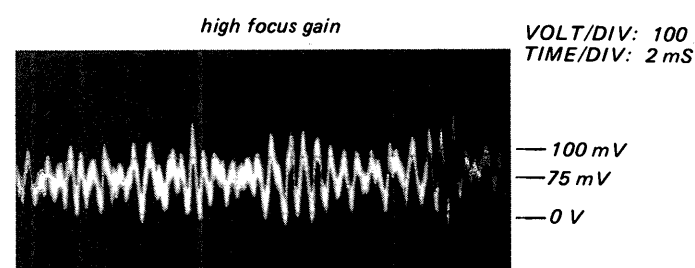
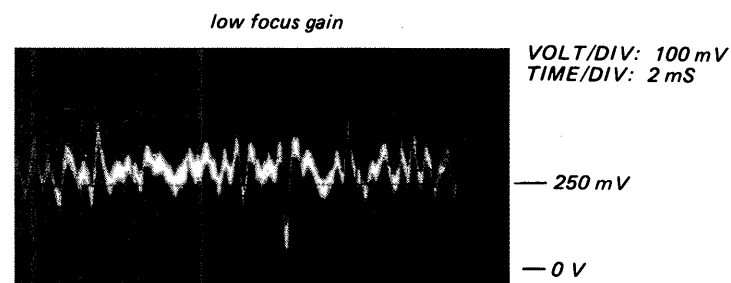
Procedure:



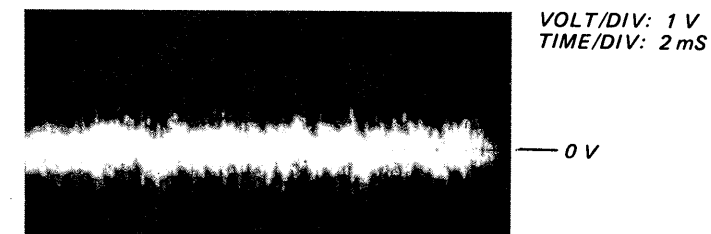
1. Keep the set horizontal.
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)
2. Put into adjustment mode. (See page 10)
3. Insert disc (YEDS-18) playback the 6th selection.
4. Connect oscilloscope to main board TP(FE1).
5. Adjust RV201 so that the waveform is as shown in the figure below. (focus gain adjustment)



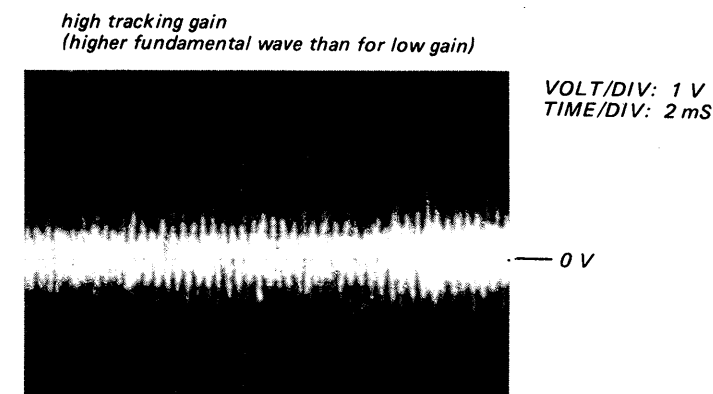
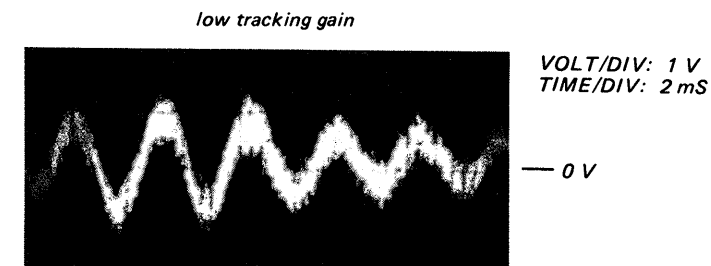
- Inconcurrent Examples (DC level changes more than on adjusted waveform)



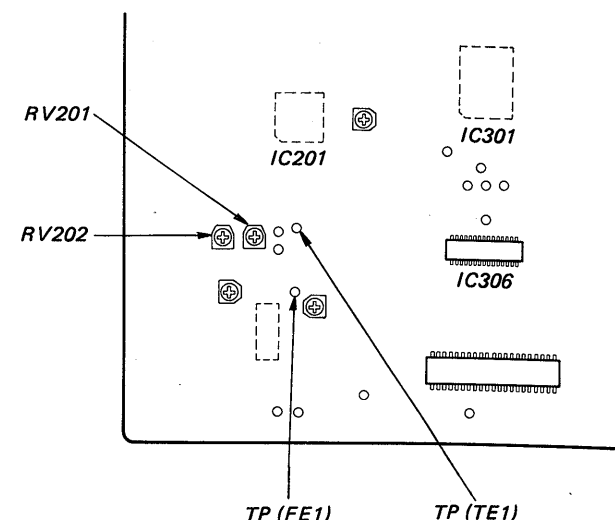
5. Connect oscilloscope to main board TP (TE1).
6. Adjust RV202 so that the waveform is as shown in the figure below. (tracking gain adjustment)



- **Incorrect Examples** (fundamental wave appears)

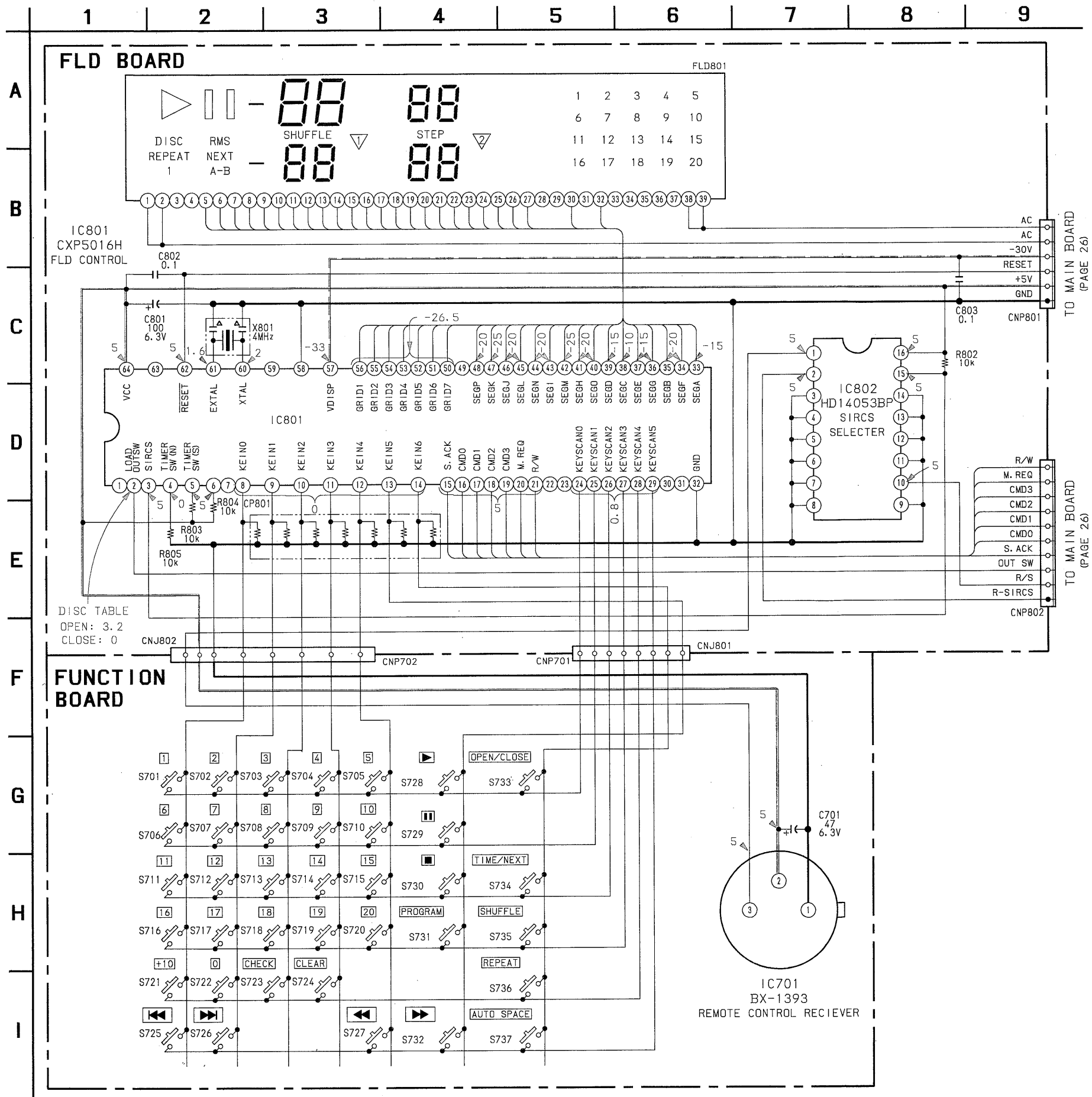


Adjustment Location: main board

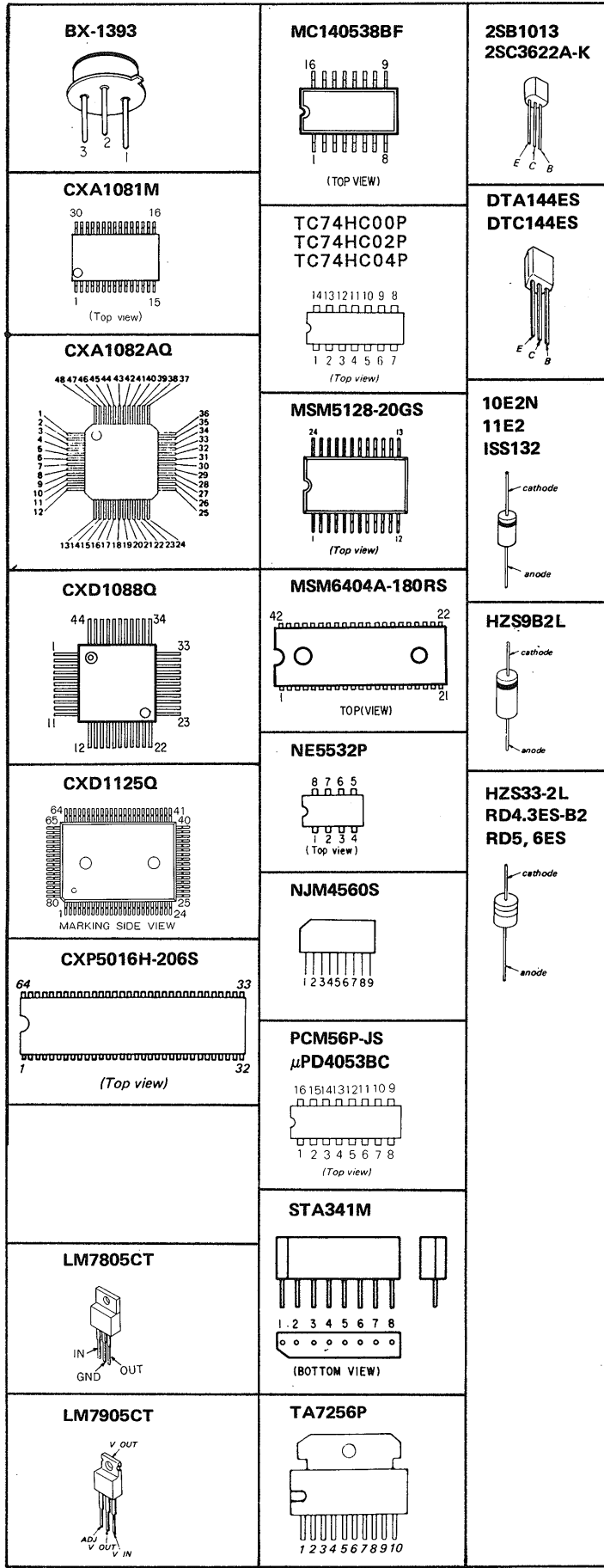


SECTION 2
DIAGRAMS

2-1. DISPLAY SECTION SCHEMATIC DIAGRAM • See page 17 for notes.



2-2. SEMICONDUCTOR LEAD LAYOUTS



Note on schematic Diagram.

Note:

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

Ref. No.	Switch	Position
S1	LIMIT IN	OFF
S2	LOADING IN/OUT	IN
S601	DIGITAL OUT	OFF
S701	DIRECT MUSIC SEARCH 1	OFF
...	...	...
S720	DIRECT MUSIC SEARCH 20	OFF
S721	+10	OFF
S722	0	OFF
S723	CHECK	OFF
S724	CLEAR	OFF
S725	...	...
S726	...	...
S727	...	...
S728	...	...
S729	...	...
S730	...	...
S731	...	...
S732	PROGRAM	OFF
S733	...	...
S734	OPEN/CLOSE	OFF
S735	TIME/NEXT	OFF
S736	SHUFFLE	OFF
S737	REPEAT	OFF
S738	AUTO SPACE	OFF
S951	POWER	OFF
VS901	VOLTAGE SELECTOR	220-240V

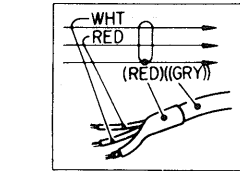
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 k Ω/V).
- no mark: STOP
- () : PLAY
- < > : DIGITAL OUT switch ON.
- Voltage variations may be noted due to normal production tolerances.
- : B + bus
- : B - bus
- : waveform numbers
- : signal path

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

2-3. MOUNTING DIAGRAM

Note:

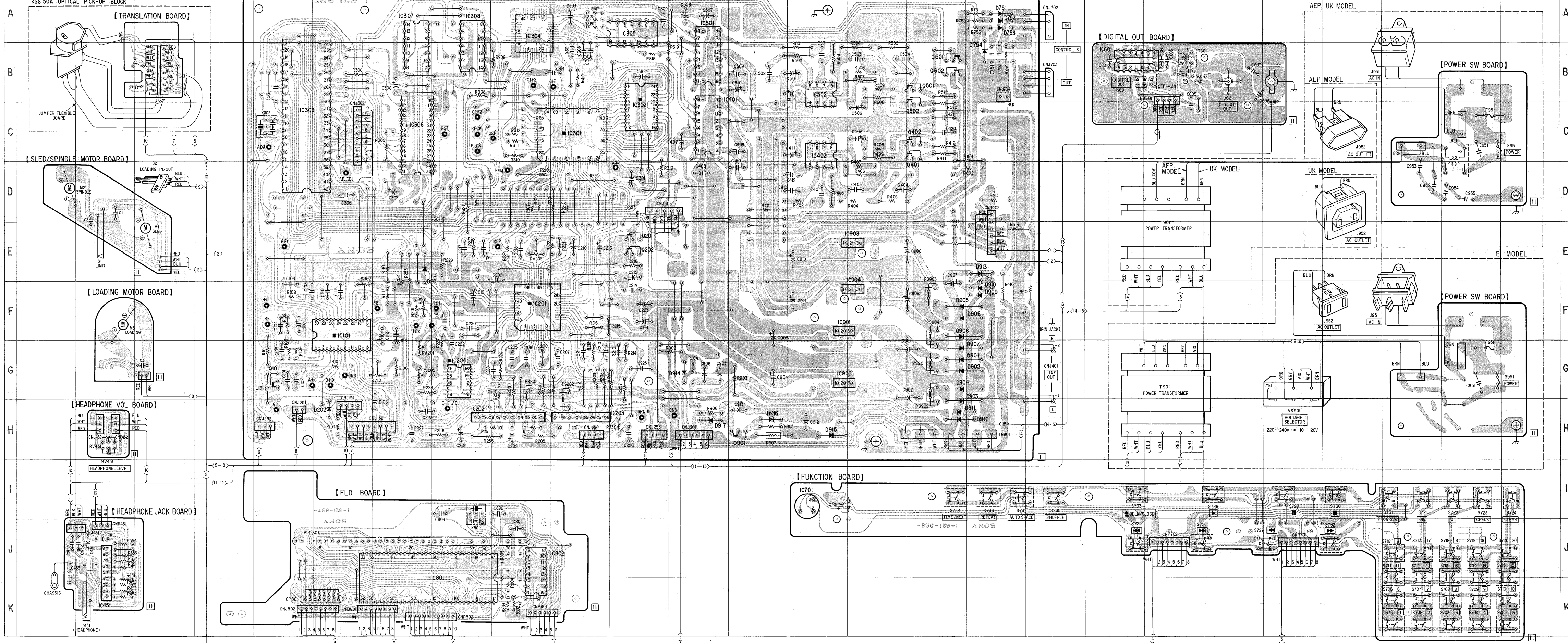
- Color code of sleeving over the end of the jacket.



- : parts extracted from the component side.
- : part mounted on the conductor side.

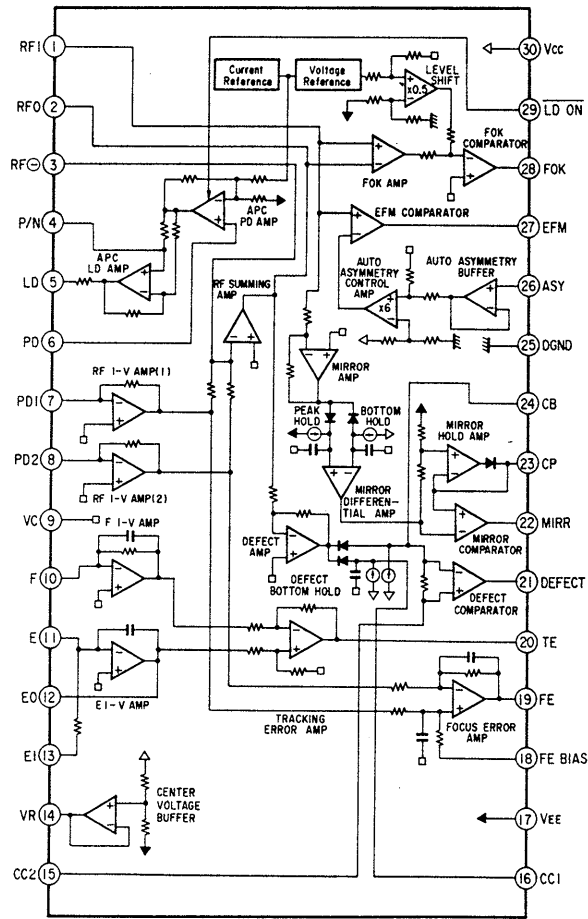
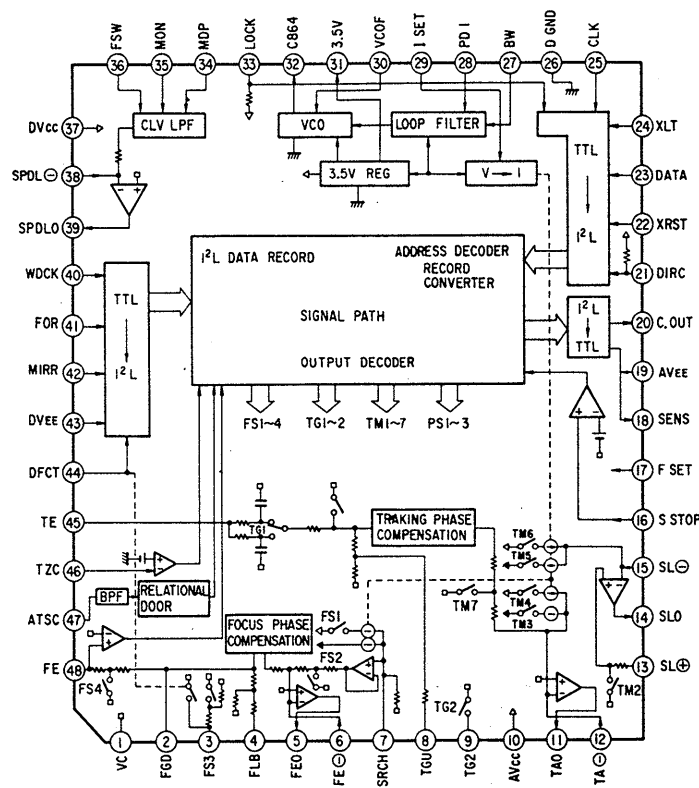
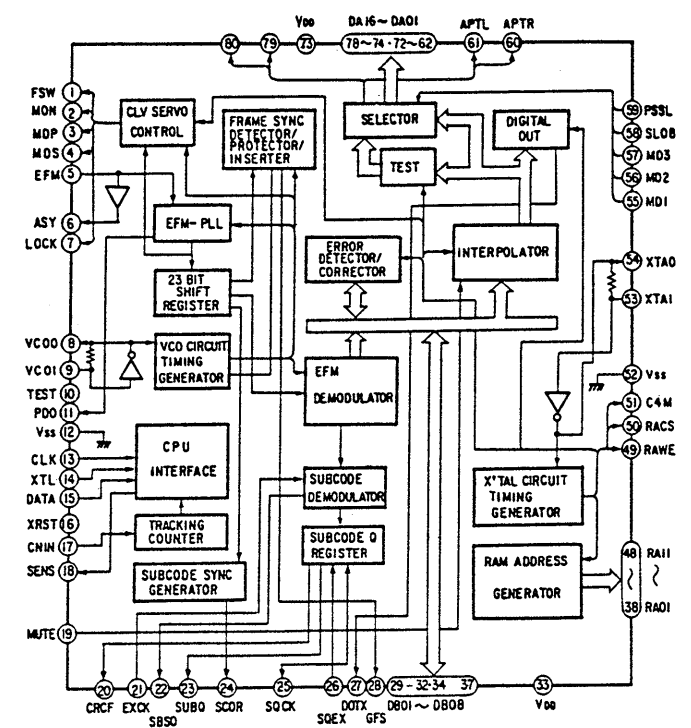
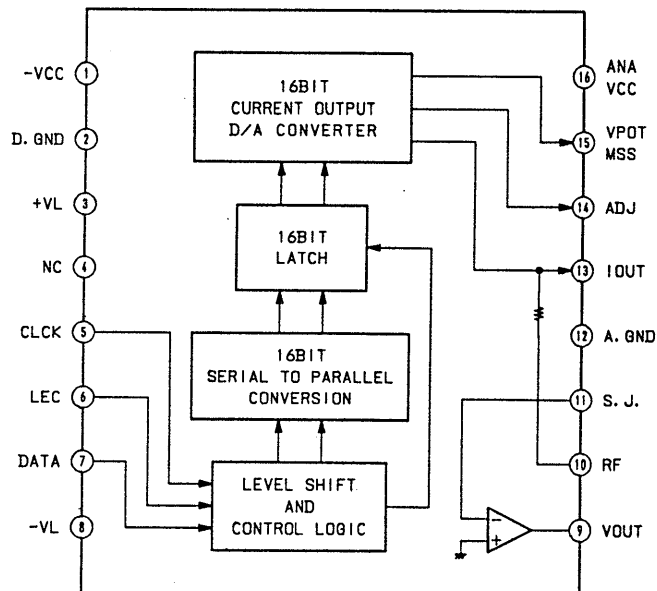
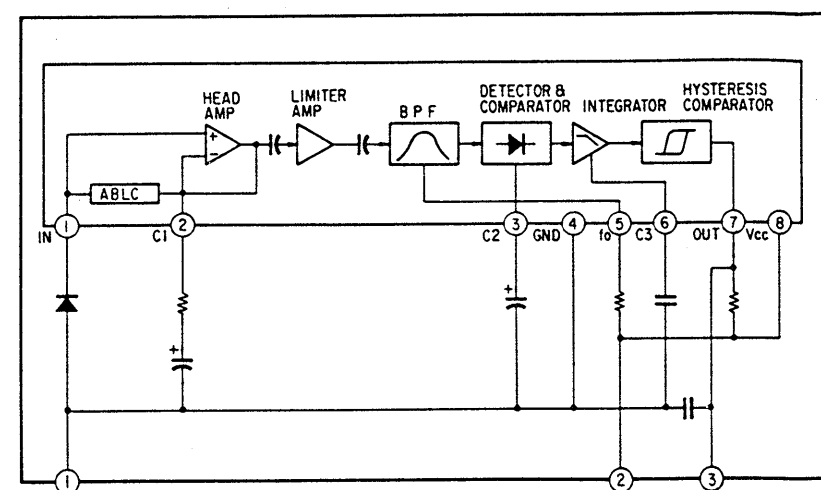
SEMICONDUCTOR LOCATION

Ref. No.	Location	Ref. No.	Location
IC101	F-6	D201	E-7
IC201	F-9	D202	H-6
IC202	H-8	D751	A-17
IC203	H-10	D752	A-17
IC204	G-8	D753	A-17
IC301	C-10	D754	B-17
IC302	C-11	D901	G-16
IC303	C-5	D902	G-16
IC304	A-9	D903	H-16
IC305	A-11	D904	G-16
IC306	C-7	D905	T-16
IC307	A-7	D906	T-16
IC308	A-8	D907	G-16
IC401	C-12	D908	T-16
IC402	C-14	D909	T-17
IC451	J-2	D910	T-17
IC501	A-12	D911	H-16
IC502	B-14	D912	H-16
IC601	B-19	D913	G-16
IC701	I-14	D914	H-12
IC801	J-7	D915	H-14
IC802	J-9	D916	H-13
IC901	F-14	D917	H-12
IC902	G-14		
IC903	T-15		
IC904	T-15		
Q101	G-5		
Q201	E-11		
Q202	E-11		
Q401	C-16		
Q402	C-16		
Q501	B-16		
Q601	B-16		
Q602	B-16		
Q901	H-13		

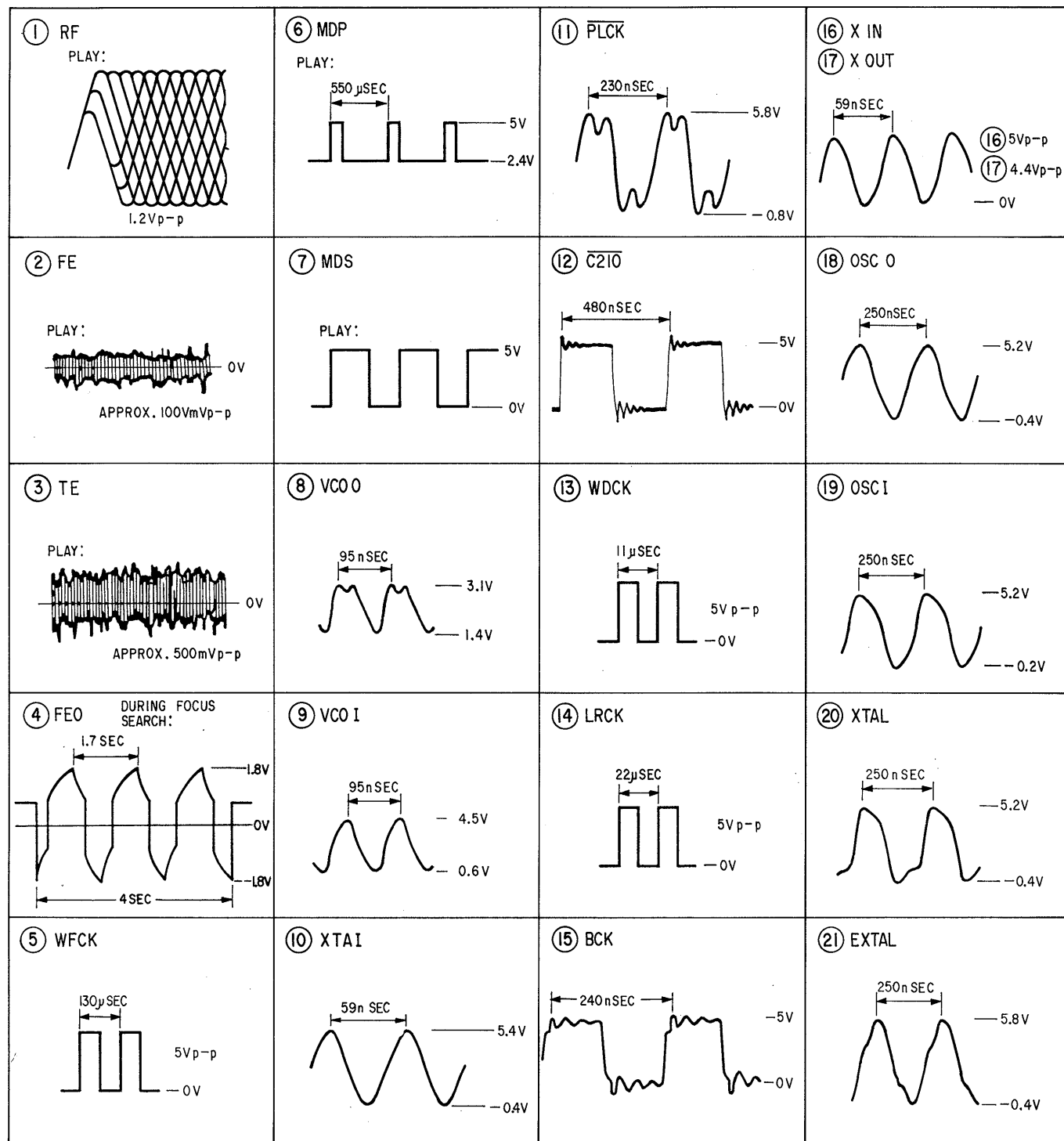




2-5. IC BLOCK DIAGRAMS

IC101
CXA1981MIC201
CXA1082AQIC301
CXD1125QIC401, 501
PCM56PIC701
BX-1393

• WAVEFORMS



SECTION 3

EXPLODED VIEWS AND PARTS LIST

NOTE:

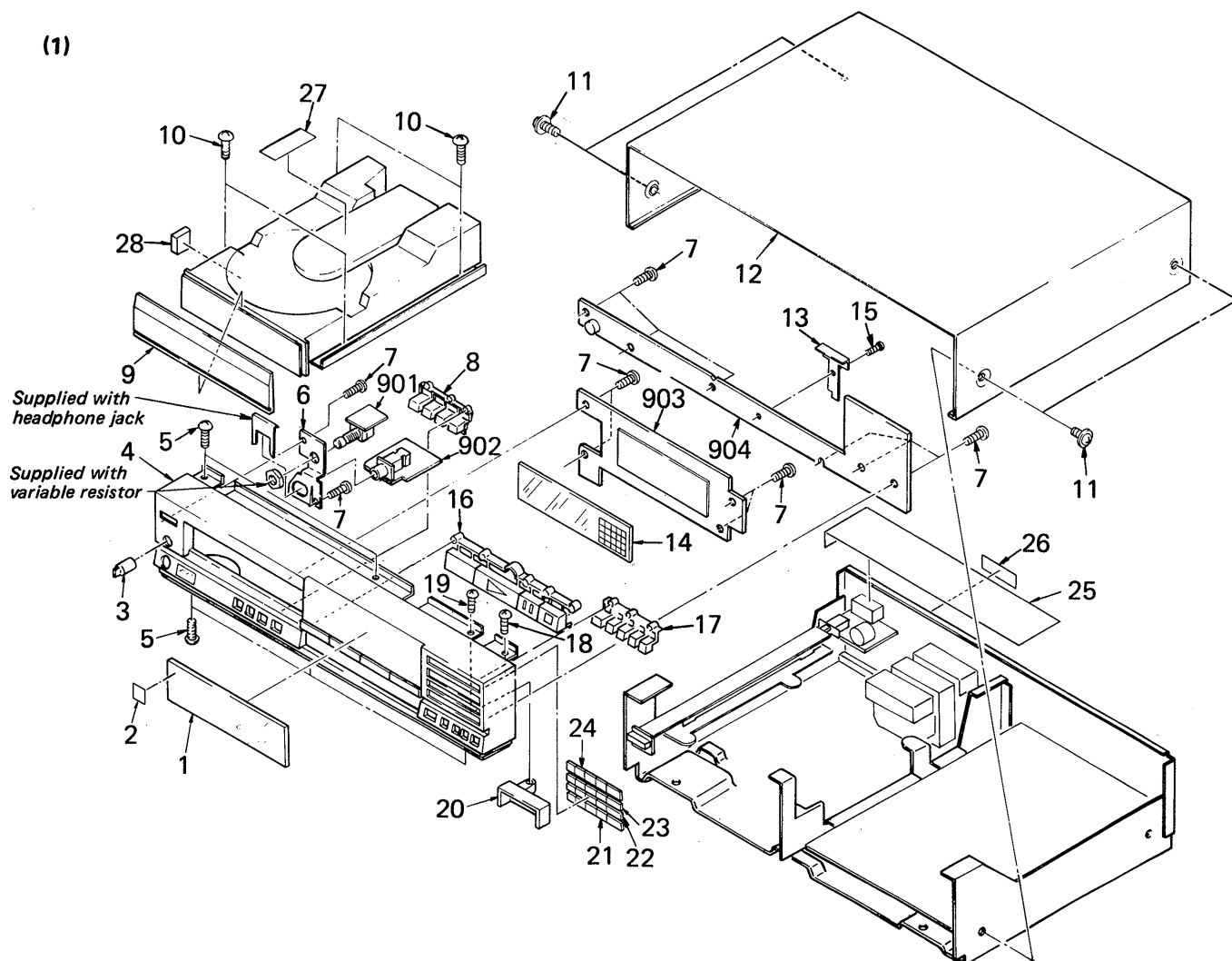
• The mechanical parts with no reference number in the exploded views are not supplied.

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

• The construction parts of an assembled part are indicated with a collation number in the remark column.

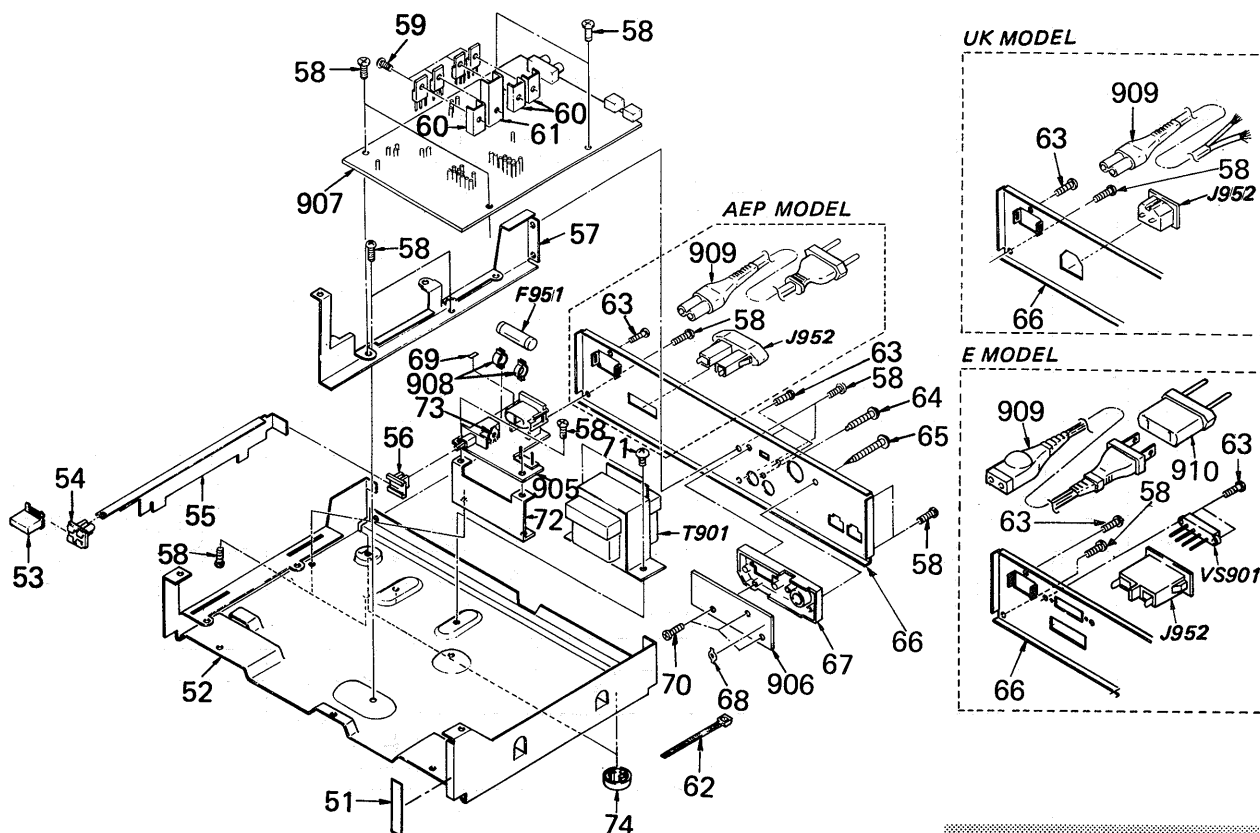
The components identified by shading and mark  are critical for safety. Replace only with part number specified.

(1)



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-918-623-01	WINDOW		17	4-918-628-01	BUTTON BLOCK (A)	
2	3-703-713-41	STICKER, SONY SYMBOL (10)		18	3-703-685-21	SCREW (+BV 3X8)	
3	4-901-708-11	KNOB, VOL		19	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 N-S	
4	X-4917-520-1	FRONT PANEL ASSY		20	*4-918-621-01	RETAINER, PC BOARD	
5	7-685-872-01	SCREW +BVTT 3X8		21	4-918-627-01	KEY BLOCK	
6	*4-918-624-01	BRACKET, VOL		22	4-918-627-11	KEY BLOCK	
7	7-685-134-19	SCREW +BTP 2.6X8 TYPE 2 N-S		23	4-918-627-21	KEY BLOCK	
8	4-918-635-01	BUTTON BLOCK (B)		24	4-918-627-31	KEY BLOCK	
9	4-918-632-01	PANEL, LOADING		25	*4-918-665-01	COVER, POWER	
10	7-685-871-01	SCREW +BVTT 3X6 (S)		26	*4-885-838-00	LABEL, CLASS 1	
11	4-886-871-01	SCREW, M3 CASE		27	4-885-843-02	LABEL, CAUTION, LASER	
12	4-918-639-01	CASE		28	9-911-845-XX	CUSHION	
13	*4-918-662-01	STOPPER		901	*1-621-884-11	PC BOARD, HEADPHONE VOL	
14	*4-918-119-01	FILTER		902	*1-621-885-11	PC BOARD, HEADPHONE JACK	
15	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S		903	*1-621-887-11	PC BOARD, FLD	
16	4-918-630-01	BUTTON BLOCK (C)		904	*1-621-888-11	PC BOARD, FUNCTION	

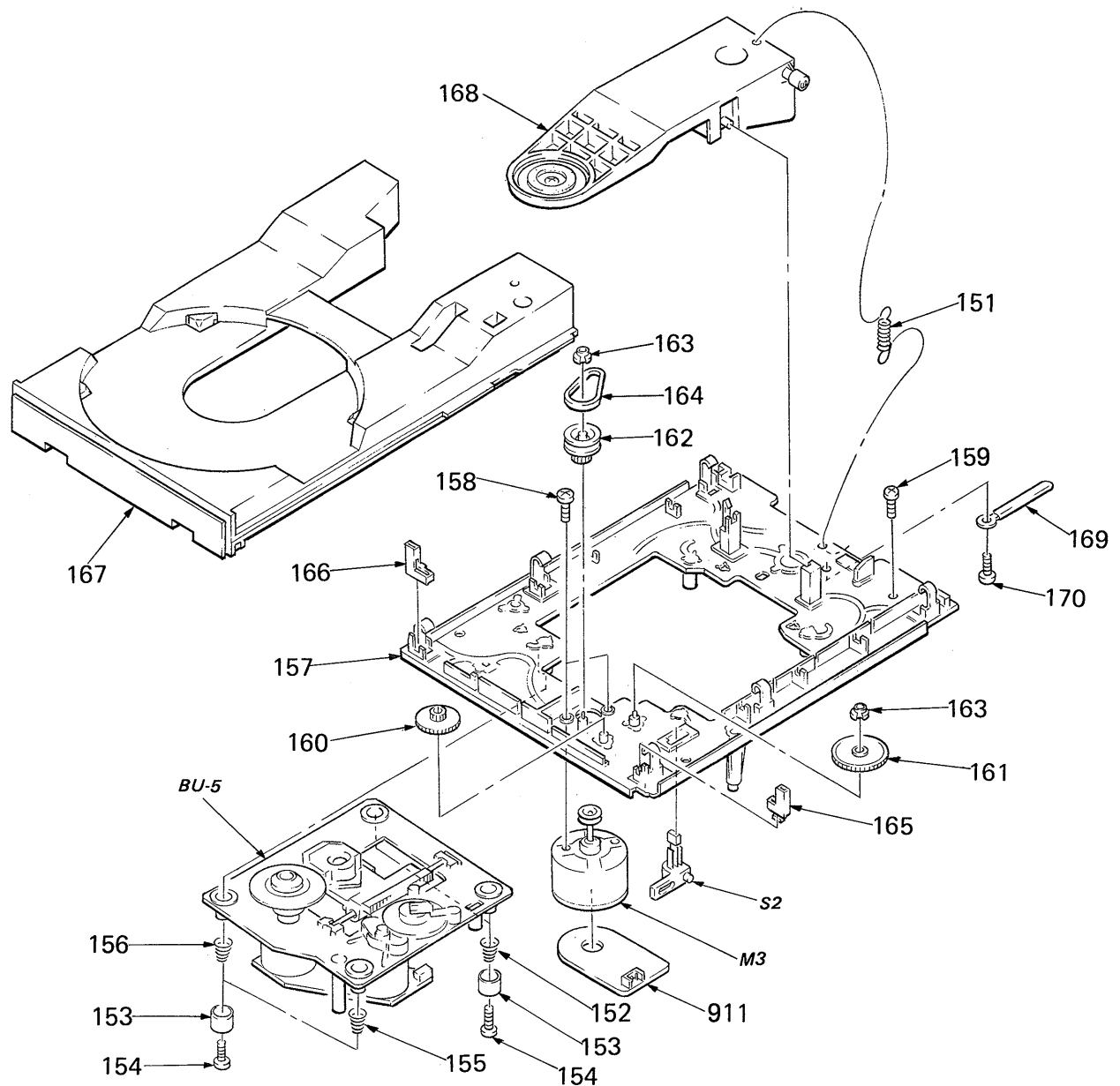
(2)



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

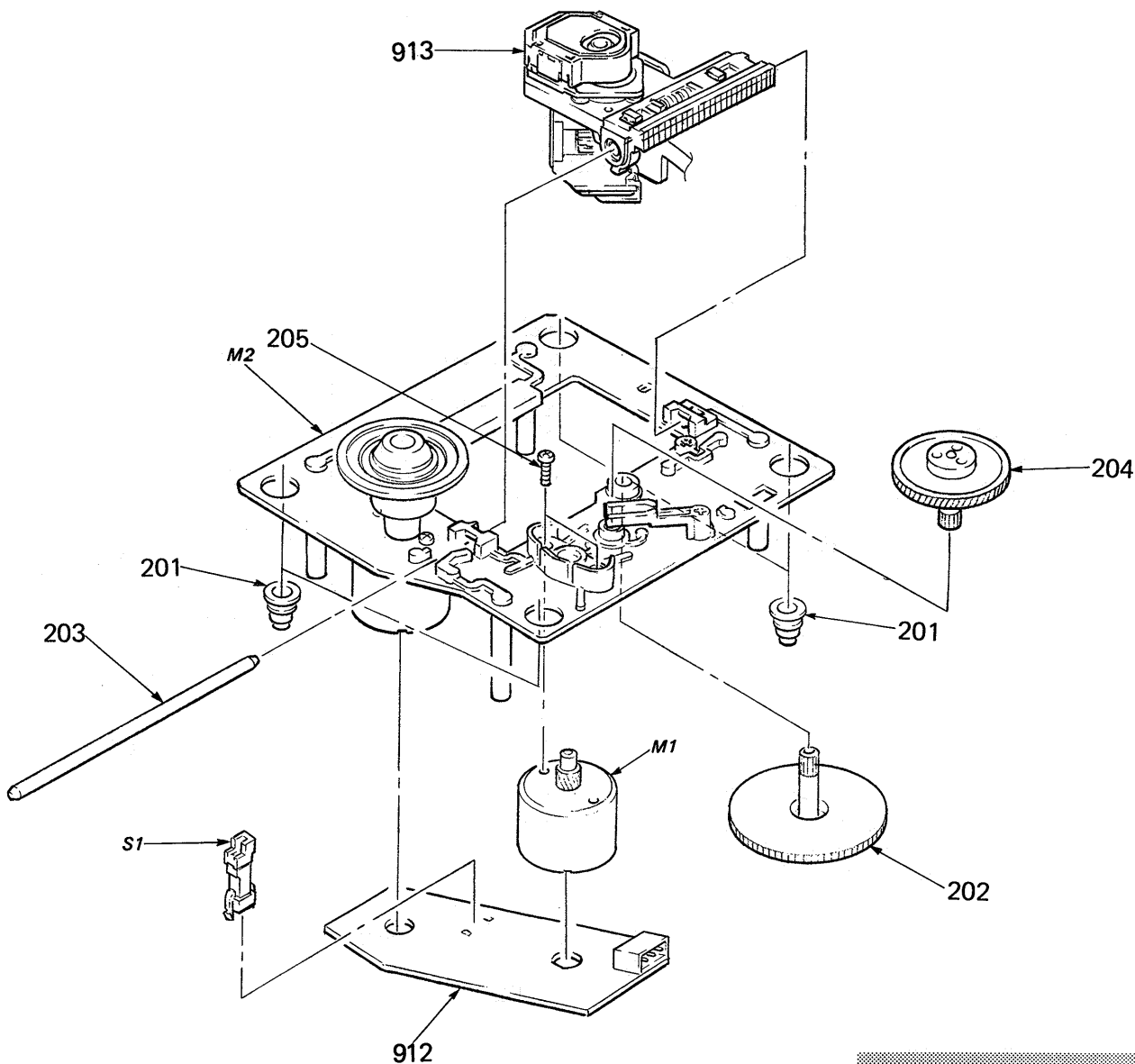
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	*4-918-660-01	INSULATOR		71	7-685-880-01	SCREW +BVTT 4X6 (S)	
52	*A-917-321-01	CHASSIS, MAIN		72	*4-918-626-01	BRACKET, POWER SW	
53	4-907-611-61	KNOB, POWER		73	4-875-455-01	COVER (DIA. 20), CAPACITOR	
54	4-908-569-01	JOINT, SWITCH, POWER		74	X-3701-069-0	FOOT ASSY, M.F	
55	*4-918-631-01	JOINT, POWER SW		905	*1-621-889-11	PC BOARD, POWER SW	
56	4-866-342-00	JOINT (B), KNOB		906	*1-621-886-11	PC BOARD, DIGITAL OUT	
57	*4-917-319-01	CHASSIS, CENTER		907	*A-4651-118-A	MOUNTED PCB, MAIN	
58	7-685-871-01	SCREW +BVTT 3X6 (S)		908	*1-533-183-11	HOLDER, FUSE	
59	2-259-121-00	SCREW, TR		909	Δ 1-558-032-11	(UK)...CORD, POWER	
60	*3-309-144-01	HEAT SINK			Δ 1-558-833-11	(E)...CORD, POWER	
61	*4-886-555-00	HEAT SINK			Δ 1-558-835-11	(AEP)...CORD, POWER	
62	3-701-748-00	(UK)...CLAMP		910	Δ 1-526-565-00	(E)...AC PLUG ADAPTOR	
63	7-685-646-79	SCREW +BVTP 3X8 TYPE 2 N-S		F951	Δ 1-532-286-00	FUSE, TIME LAG (2.5A)	
64	3-703-473-00	SCREW, TERMINAL		J951	Δ 1-526-929-11	(E).....INLET, AC	
65	4-904-486-01	SCREW (F.U), GROUND		J951	Δ 1-526-931-11	(AEP,UK)...INLET, AC	
66	*4-918-637-01	(AEP)...PLATE, JACK		J952	Δ 1-526-751-00	(UK)...OUTLET, AC	
	*4-918-637-11	(UK)...PLATE, JACK		J952	Δ 1-526-774-11	(E)...OUTLET, AC	
	*4-918-637-21	(E)...PLATE, JACK		J952	Δ 1-526-794-11	(AEP)...OUTLET, AC	
67	*4-912-940-01	ESCUTCHEON, D/O		T901	Δ 1-448-795-11	(AEP,UK)...TRANSFORMER, POWER	
68	*4-918-668-01	BRACKET, GROUND		T901	Δ 1-448-796-11	(E).....TRANSFORMER, POWER	
69	3-701-948-18	LABEL, FUSE		VS901	Δ 1-570-046-11	(E).....SWITCH, VOLTAGE CHANGE	
70	7-685-134-19	SCREW +BTP 2.6X8 TYPE 2 N-S					

(3) CDM6A-5



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	4-917-551-01	SPRING (ARM), TENSION		161	4-917-550-01	GEAR (A), LOADING	
152	4-917-507-01	SPRING (H)		162	4-917-546-01	PULLEY (A), LOADING	
153	4-917-508-01	HOLDER, SP		163	4-910-418-01	BUSHING (DIA. 4)	
154	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S		164	4-917-548-01	BELT, DRIVING	
155	4-917-541-01	SPRING (B)		165	*4-918-613-01	CUSHION (RIGHT)	
156	4-918-669-01	SPRING (W)		166	*4-918-612-01	CUSHION (LEFT)	
157	4-917-561-11	CHASSIS (OUTSERT), LOADING		167	A-4665-013-A	TABLE ASSY, DISK	
158	7-621-775-40	SCREW +B 2.6X8		168	A-4681-006-A	ARM ASSY, CHUCKING	
159	7-685-793-04	SCREW +BVTT 2.6X8 (S)		169	3-701-822-00	HOLDER, WIRE	
160	4-910-402-01	GEAR (2), LOADING		170	7-621-259-25	SCREW +BVTT 2.6×4 (S)	
				911	*1-620-098-11	PC BOARD, LOADING MOTOR	
				M3	A-4608-320-A	MOTOR ASSY, L	
				S2	1-570-203-11	SWITCH, LEAF	

(4) BU-5



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

No.	Part No.	Description
201	4-917-562-01	INSULATOR
202	4-917-564-11	GEAR (P)
203	4-917-565-01	SHAFT, SLED
204	4-917-567-01	GEAR (M)
205	7-621-255-15	SCREW +P 2X3

Remarks	No.	Part No.	Description	Remarks
	912	*1-620-097-11	PC BOARD, SL/SP MOTOR	
	913	 X-4917-051-1	DEVICE, OPTICS (KSS-150A)	
	M1	X-4917-504-1	ASSY, MOTOR (SLED)	
	M2	X-4917-505-1	ASSY, MOTOR (SPINDLE)	
	S1	1-570-822-11	SWITCH, LEAF	

SECTION 4

ELECTRICAL PARTS LIST

NOTE:

- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF: μ F, PF: μ F.

RESISTORS

- All resistors are in ohms.
- F : nonflammable

COILS

• MMH : mH, UH : μ H

SEMICONDUCTORS

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

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description
901	*1-621-884-11	PC BOARD, HEADPHONE VOL
902	*1-621-885-11	PC BOARD, HEADPHONE JACK
903	*1-621-887-11	PC BOARD, FLD
904	*1-621-888-11	PC BOARD, FUNCTION
905	*1-621-889-11	PC BOARD, POWER SW
906	*1-621-886-11	PC BOARD, DIGITAL OUT
907	*A-4651-118-A	MOUNTED PCB, MAIN
908	Δ 1-533-183-11	HOLDER, FUSE
909	Δ 1-558-032-11	(UK)....CORD, POWER
	Δ 1-558-833-11	(E)....CORD, POWER
	Δ 1-558-835-11	(AEP)....CORD, POWER
910	Δ 1-526-565-00	(E)....AC PLUG ADAPTOR
911	*1-620-098-11	PC BOARD, LOADING MOTOR
912	*1-620-097-11	PC BOARD, SL/SP MOTOR
913	X-4917-051-1	DEVICE, OPTICS (KSS-150A)
C1	1-106-180-00	FILM 0.0022MF 5% 50V
C2	1-106-180-00	FILM 0.0022MF 5% 50V
C3	1-101-005-00	CERAMIC 0.022MF 50V
C101	1-162-294-31	CERAMIC 0.001MF 10% 50V
C102	1-124-468-11	ELECT 100MF 20% 6.3V
C103	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C104	1-162-198-31	CERAMIC 8.2PF 10% 50V
C105	1-124-468-11	ELECT 100MF 20% 6.3V
C106	1-130-489-00	MYLAR 0.033MF 5% 50V
C107	1-124-468-11	ELECT 100MF 20% 6.3V
C108	1-124-902-00	ELECT 0.47MF 20% 50V
C109	1-130-483-00	MYLAR 0.01MF 5% 50V
C110	1-130-483-00	MYLAR 0.01MF 5% 50V
C111	1-136-159-00	FILM 0.033MF 5% 50V
C112	1-124-468-11	ELECT 100MF 20% 6.3V
C201	1-124-445-00	ELECT 100MF 20% 16V
C202	1-124-445-00	ELECT 100MF 20% 16V
C203	1-124-468-11	ELECT 100MF 20% 6.3V
C204	1-124-468-11	ELECT 100MF 20% 6.3V
C205	1-136-165-00	FILM 0.1MF 5% 50V
C206	1-136-159-00	FILM 0.033MF 5% 50V
C207	1-124-905-11	ELECT 3.3MF 20% 50V
C208	1-136-165-00	FILM 0.1MF 5% 50V
C209	1-124-468-11	ELECT 100MF 20% 6.3V
C210	1-123-875-91	ELECT 10MF 20% 50V
C211	1-136-169-00	FILM 0.22MF 5% 50V
C212	1-124-468-11	ELECT 100MF 20% 6.3V
C213	1-124-791-11	ELECT 1MF 20% 50V
C214	1-161-377-00	CERAMIC 0.0047MF 20% 16V
C215	1-124-927-11	ELECT 4.7MF 20% 50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
C216	1-124-468-11	ELECT 100MF 20% 6.3V
C217	1-136-159-00	FILM 0.033MF 5% 50V
C218	1-162-294-31	CERAMIC 0.001MF 10% 50V
C219	1-124-902-00	ELECT 0.47MF 20% 50V
C220	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C221	1-161-377-00	CERAMIC 0.0047MF 20% 16V
C222	1-136-173-00	FILM 0.47MF 5% 50V
C223	1-136-173-00	FILM 0.47MF 5% 50V
C224	1-161-494-00	CERAMIC 0.022MF 25V
C225	1-161-375-00	CERAMIC 0.0022MF 30% 16V
C226	1-136-165-00	FILM 0.1MF 5% 50V
C227	1-136-165-00	FILM 0.1MF 5% 50V
C228	1-162-282-31	CERAMIC 100PF 10% 50V
C301	1-124-468-11	ELECT 100MF 20% 6.3V
C302	1-124-468-11	ELECT 100MF 20% 6.3V
C303	1-124-468-11	ELECT 100MF 20% 6.3V
C304	1-162-203-31	CERAMIC 15PF 5% 50V
C305	1-162-203-31	CERAMIC 15PF 5% 50V
C306	1-124-468-11	ELECT 100MF 20% 6.3V
C307	1-124-468-11	ELECT 100MF 20% 6.3V
C308	1-124-468-11	ELECT 100MF 20% 6.3V
C309	1-161-063-00	CERAMIC 0.1MF 20% 16V
C310	1-161-379-00	CERAMIC 0.01MF 20% 16V
C311	1-124-468-11	ELECT 100MF 20% 6.3V
C401	1-136-230-00	FILM 0.0022MF 5% 100V
C402	1-130-273-00	FILM 0.001MF 5% 100V
C403	1-136-230-00	FILM 0.0022MF 5% 100V
C404	1-130-340-00	FILM 0.018MF 5% 100V
C406	1-126-049-11	ELECT 22MF 20% 50V
C407	1-124-468-11	ELECT 100MF 20% 6.3V
C408	1-124-468-11	ELECT 100MF 20% 6.3V
C409	1-124-994-11	ELECT 100MF 20% 10V
C410	1-124-994-11	ELECT 100MF 20% 10V
C411	1-124-994-11	ELECT 100MF 20% 10V
C412	1-124-994-11	ELECT 100MF 20% 10V
C420	1-162-291-31	CERAMIC 560PF 10% 50V
C421	1-162-291-31	CERAMIC 560PF 10% 50V
C451	1-123-661-00	ELECT 100MF 20% 6.3V
C452	1-162-290-31	CERAMIC 470PF 10% 50V
C453	1-161-063-00	CERAMIC 0.1MF 20% 16V
C501	1-136-230-00	FILM 0.0022MF 5% 100V
C502	1-130-273-00	FILM 0.001MF 5% 100V
C503	1-136-230-00	FILM 0.0022MF 5% 100V
C504	1-130-340-00	FILM 0.018MF 5% 100V
C506	1-126-049-11	ELECT 22MF 20% 50V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C507	1-124-468-11	ELECT	100MF	20%	6.3V
C508	1-124-468-11	ELECT	100MF	20%	6.3V
C509	1-124-994-11	ELECT	100MF	20%	10V
C510	1-124-994-11	ELECT	100MF	20%	10V
C511	1-124-994-11	ELECT	100MF	20%	10V
C512	1-124-994-11	ELECT	100MF	20%	10V
C551	1-123-661-00	ELECT	100MF	20%	6.3V
C552	1-162-290-31	CERAMIC	470PF	10%	50V
C601	1-161-063-00	CERAMIC	0.1MF	20%	16V
C602	1-161-063-00	CERAMIC	0.1MF	20%	16V
C603	1-161-063-00	CERAMIC	0.1MF	20%	16V
C604	1-161-063-00	CERAMIC	0.1MF	20%	16V
C605	1-161-063-00	CERAMIC	0.1MF	20%	16V
C606	1-161-063-00	CERAMIC	0.1MF	20%	16V
C607	1-161-063-00	CERAMIC	0.1MF	20%	16V
C701	1-124-224-00	ELECT	47MF	20%	6.3V
C751	1-161-379-00	CERAMIC	0.01MF	20%	16V
C752	1-161-379-00	CERAMIC	0.01MF	20%	16V
C801	1-124-468-11	ELECT	100MF	20%	6.3V
C802	1-136-165-00	FILM	0.1MF	5%	50V
C803	1-136-165-00	FILM	0.1MF	5%	50V
C901	1-124-898-11	ELECT	4700MF	20%	16V
C902	1-124-898-11	ELECT	4700MF	20%	16V
C903	1-124-893-11	ELECT	2200MF	20%	10V
C904	1-124-893-11	ELECT	2200MF	20%	10V
C905	1-123-875-91	ELECT	10MF	20%	50V
C906	1-123-875-91	ELECT	10MF	20%	50V
C907	1-124-475-11	ELECT	470MF	20%	16V
C908	1-126-016-11	ELECT	4700MF	20%	16V
C909	1-126-016-11	ELECT	4700MF	20%	16V
C910	1-124-999-11	ELECT	2200MF	20%	10V
C911	1-124-999-11	ELECT	2200MF	20%	10V
C912	1-124-572-11	ELECT	100MF	20%	63V
C913	1-124-121-00	ELECT	100MF	20%	35V
C951	1-161-744-00	CERAMIC	0.01MF		400V
C952	1-161-742-00	(AEP,UK)...CERAMIC	2200PF		400V
C953	1-161-742-00	(AEP,UK)...CERAMIC	2200PF		400V
C954	1-161-742-00	(AEP,UK)...CERAMIC	2200PF		400V
C955	1-161-742-00	(AEP,UK)...CERAMIC	2200PF		400V
CNJ151	1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ152	1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P			
CNJ251	1-564-336-00	PIN, CONNECTOR 2P			
CNJ252	1-564-337-00	PIN, CONNECTOR 3P			
CNJ253	1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ254	1-564-706-41	PIN, CONNECTOR (SMALL TYPE) 4P			
CNJ301	1-564-340-00	PIN, CONNECTOR 6P			
CNJ302	1-564-666-11	PIN, CONNECTOR 10P			
CNJ303	1-564-508-11	PLUG, CONNECTOR 5P			
CNJ401	1-563-560-11	JACK, PIN 2P (LINE OUT)			
CNJ402	1-564-509-11	PLUG, CONNECTOR 6P			
CNJ451	1-564-518-21	PLUG, CONNECTOR 3P			
CNJ452	1-564-506-11	PLUG, CONNECTOR 3P			
CNJ601	1-564-519-11	PLUG, CONNECTOR 4P			
CNJ702	1-564-980-11	PIN, CONNECTOR 4P			
CNJ703	1-564-980-11	PIN, CONNECTOR 4P			
CNJ704	1-564-505-11	PLUG, CONNECTOR 2P			
CNJ801	1-564-501-11	PIN, CONNECTOR 8P			
CNJ802	1-564-501-11	PIN, CONNECTOR 8P			
CP801	1-233-081-11	COMPOSITION CIRCUIT BLOCK			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
D201	8-719-940-76	DIODE 1SS132
D202	8-719-940-76	DIODE 1SS132
D751	8-719-940-76	DIODE 1SS132
D752	8-719-940-76	DIODE 1SS132
D753	8-719-940-76	DIODE 1SS132
D754	8-719-109-87	DIODE RD5.6ES-B
D901	1-8-719-200-77	DIODE 10E2N
D902	1-8-719-200-77	DIODE 10E2N
D903	1-8-719-200-77	DIODE 10E2N
D904	1-8-719-200-77	DIODE 10E2N
D905	1-8-719-200-77	DIODE 10E2N
D906	1-8-719-200-77	DIODE 10E2N
D907	1-8-719-200-77	DIODE 10E2N
D908	1-8-719-200-77	DIODE 10E2N
D909	8-719-940-76	DIODE 1SS132
D910	8-719-940-76	DIODE 1SS132
D911	8-719-940-76	DIODE 1SS132
D912	8-719-940-76	DIODE 1SS132
D913	8-719-111-69	DIODE RD4.3ES-B2
D914	8-719-940-76	DIODE 1SS132
D915	8-719-200-23	DIODE 11E2
D916	8-719-934-26	DIODE HZS33-2L
D917	8-719-933-57	DIODE HZS9B2L
F951	1-532-286-00	FUSE, TIME-LAG (2.5A)
FLD801	1-519-411-11	INDICATOR TUBE, FLUORESCENT
IC101	8-752-030-93	IC CXA1081M
IC201	8-752-030-94	IC CXA1082Q
IC202	8-759-202-01	IC TA7256P
IC203	8-759-303-90	IC STA341M
IC204	8-759-009-07	IC MC14053BF
IC301	8-752-322-04	IC CXD1125Q
IC302	8-759-910-36	IC MSM5128-20GS
IC303	8-759-940-62	IC MSM6404A-180RS
IC304	8-759-939-35	IC CXD1088Q
IC305	8-759-202-11	IC TC74HC00P
IC306	8-759-804-47	IC LC6523H-3270
IC307	8-759-202-12	IC TC74HC02P
IC308	8-759-202-13	IC TC74HC04P
IC401	8-759-937-95	IC PCM56P-S
IC402	8-759-900-72	IC NE5532P
IC451	8-759-700-40	IC NJM4560S
IC501	8-759-937-95	IC PCM56P-S
IC502	8-759-900-72	IC NE5532P
IC601	8-759-202-74	IC TC74HC04P
IC701	8-749-900-36	IC BX-1393
IC801	8-752-802-24	IC CXP5016H-206S
IC802	8-759-140-53	IC UPD4053BC
IC901	8-759-924-12	IC LM7805CT
IC902	8-759-929-64	IC LM7905CT
IC903	8-759-924-12	IC LM7805CT
IC904	8-759-929-64	IC LM7905CT
J451	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)
J601	1-507-567-71	JACK, PIN 1P (DIGITAL OUT)
J951	1-526-929-11	(E).....INLET, AC
J951	1-526-931-11	(AEP,UK)...INLET, AC

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description
J952	△ 1-526-751-00	(UK)...OUTLET, AC
J952	△ 1-526-774-11	(E)...OUTLET, AC
J952	△ 1-526-794-11	(AEP)...OUTLET, AC
L101	1-410-328-11	MICRO INDUCTOR 10UH
L951	△ 1-421-915-11	(AEP,UK)...COIL, LINE FILTER
M1	X-4917-504-1	ASSY, MOTOR (SLED)
M2	X-4917-505-1	ASSY, MOTOR (SPINDLE)
M3	A-4608-320-A	MOTOR, ASSY L
PS201A	△ 1-532-605-00	LINK, IC
PS202A	△ 1-532-605-00	LINK, IC
PS901A	△ 1-532-675-00	LINK, IC
PS902A	△ 1-532-675-00	LINK, IC
PS903A	△ 1-532-675-00	LINK, IC
PS904A	△ 1-532-675-00	LINK, IC
Q101	8-729-801-83	TRANSISTOR 2SB1013
Q201	8-729-900-80	TRANSISTOR DTC114ES
Q202	8-729-900-80	TRANSISTOR DTC114ES
Q401	8-729-245-82	TRANSISTOR 2SC2458Y
Q402	8-729-245-82	TRANSISTOR 2SC2458Y
Q501	8-729-245-82	TRANSISTOR 2SC2458Y
Q502	8-729-245-82	TRANSISTOR 2SC2458Y
Q601	8-729-900-61	TRANSISTOR DTA114ES
Q602	8-729-900-61	TRANSISTOR DTA114ES
Q901	8-729-205-95	TRANSISTOR 2SA1428Y
R101	1-214-092-00	METAL 22 1% 1/4W
R102	1-249-421-11	CARBON 2.2K 5% 1/6W
R103	1-249-428-11	CARBON 8.2K 5% 1/6W
R104	1-215-450-00	CARBON 16K 5% 1/6W
R105	1-249-405-11	CARBON 100 5% 1/6W
R106	1-249-433-11	CARBON 22K 5% 1/6W
R107	1-249-417-11	CARBON 1K 5% 1/6W
R108	1-249-441-11	CARBON 100K 5% 1/6W
R109	1-249-429-11	CARBON 10K 5% 1/6W
R110	1-249-429-11	CARBON 10K 5% 1/6W
R111	1-249-429-11	CARBON 10K 5% 1/6W
R151	1-215-396-00	CARBON 91 5% 1/6W
R201	1-249-425-11	CARBON 4.7K 5% 1/6W
R202	1-249-425-11	CARBON 4.7K 5% 1/6W
R203	1-249-437-11	CARBON 47K 5% 1/6W
R204	1-249-437-11	CARBON 47K 5% 1/6W
R205	1-249-447-11	CARBON 1 5% 1/4W
R206	1-249-385-11	CARBON 2.2 5% 1/4W
R207	1-215-473-00	CARBON 150K 5% 1/6W
R208	1-249-441-11	CARBON 100K 5% 1/6W
R209	1-215-479-00	CARBON 270K 5% 1/6W
R210	1-249-435-11	CARBON 33K 5% 1/6W
R211	1-249-385-11	CARBON 2.2 5% 1/6W
R212	1-249-385-11	CARBON 2.2 5% 1/6W
R213	1-249-438-11	CARBON 56K 5% 1/6W
R214	1-249-424-11	CARBON 3.9K 5% 1/6W
R215	1-249-441-11	CARBON 100K 5% 1/6W
R216	△ 1-215-486-00	CARBON 510K 5% 1/6W
R217	1-249-429-11	CARBON 10K 5% 1/6W
R218	1-249-433-11	CARBON 22K 5% 1/6W
R219	1-215-469-00	METAL 100K 1% 1/6W
R220	1-249-429-11	CARBON 10K 5% 1/6W
R221	1-215-471-00	METAL 120K 1% 1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R222	1-215-434-00	METAL 3.6K 1% 1/6W
R223	1-215-493-00	CARBON 1M 5% 1/6W
R224	1-215-452-00	CARBON 20K 5% 1/6W
R225	1-215-469-00	METAL 100K 1% 1/6W
R226	1-249-441-11	CARBON 100K 5% 1/6W
R227	1-215-485-00	CARBON 470K 5% 1/6W
R228	1-215-485-00	CARBON 470K 5% 1/6W
R229	1-249-429-11	CARBON 10K 5% 1/6W
R230	1-249-393-11	CARBON 10 5% 1/6W
R251	1-215-468-00	CARBON 91K 5% 1/6W
R252	1-249-440-11	CARBON 82K 5% 1/6W
R253	1-249-440-11	CARBON 82K 5% 1/6W
R254	1-215-468-00	CARBON 91K 5% 1/6W
R255	1-249-447-11	CARBON 1 5% 1/4W
R256	1-249-393-11	CARBON 10 5% 1/6W
R257	1-249-405-11	CARBON 100 5% 1/6W
R301	1-249-441-11	CARBON 100K 5% 1/6W
R304	1-249-429-11	CARBON 10K 5% 1/6W
R305	1-249-417-11	CARBON 1K 5% 1/6W
R306	1-249-425-11	CARBON 4.7K 5% 1/6W
R307	1-249-417-11	CARBON 1K 5% 1/6W
R310	1-249-411-11	CARBON 330 5% 1/6W
R311	1-249-411-11	CARBON 330 5% 1/6W
R312	1-249-411-11	CARBON 330 5% 1/6W
R313	1-249-417-11	CARBON 1K 5% 1/6W
R314	1-249-411-11	CARBON 330 5% 1/6W
R315	1-249-411-11	CARBON 330 5% 1/6W
R316	1-249-411-11	CARBON 330 5% 1/6W
R317	1-249-411-11	CARBON 330 5% 1/6W
R318	1-249-411-11	CARBON 330 5% 1/6W
R319	1-249-411-11	CARBON 330 5% 1/6W
R320	1-249-411-11	CARBON 330 5% 1/6W
R321	1-249-411-11	CARBON 330 5% 1/6W
R401	1-247-717-11	CARBON 2.2K 1/4W
R402	1-247-717-11	CARBON 2.2K 1/4W
R403	1-247-716-11	CARBON 1.8K 1/4W
R404	1-247-711-11	CARBON 680 1/4W
R405	1-246-545-00	CARBON 1M 1/4W
R406	1-247-725-11	CARBON 10K 1/4W
R407	1-247-717-11	CARBON 2.2K 1/4W
R408	1-247-712-11	CARBON 820 1/4W
R409	1-249-469-11	CARBON 100K 1/4W
R410	1-247-700-11	CARBON 100 1/4W
R411	1-249-417-11	CARBON 1K 5% 1/6W
R412	1-249-417-11	CARBON 1K 5% 1/6W
R413	1-249-462-11	CARBON 22K 5% 1/4W
R414	1-249-405-11	CARBON 100 5% 1/6W
R415	1-249-405-11	CARBON 100 5% 1/6W
R451	1-249-417-11	CARBON 1K 5% 1/6W
R452	1-249-425-11	CARBON 4.7K 5% 1/6W
R453	1-249-433-11	CARBON 22K 5% 1/6W
R454	1-249-409-11	CARBON 220 5% 1/6W
R501	1-247-717-11	CARBON 2.2K 1/4W
R502	1-247-717-11	CARBON 2.2K 1/4W
R503	1-247-716-11	CARBON 1.8K 1/4W
R504	1-247-711-11	CARBON 680 1/4W
R505	1-246-545-00	CARBON 1M 1/4W

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description
R506	1-249-576-11	CARBON 10K 1/4W
R507	1-247-717-11	CARBON 2.2K 1/4W
R508	1-247-712-11	CARBON 820 1/4W
R509	1-249-469-11	CARBON 100K 1/4W
R510	1-247-700-11	CARBON 100 1/4W
R511	1-249-417-11	CARBON 1K 5% 1/6W
R512	1-249-417-11	CARBON 1K 5% 1/6W
R513	1-249-462-11	CARBON 22K 5% 1/4W
R551	1-249-417-11	CARBON 1K 5% 1/6W
R552	1-249-425-11	CARBON 4.7K 5% 1/6W
R553	1-249-433-11	CARBON 22K 5% 1/6W
R554	1-249-409-11	CARBON 220 5% 1/6W
R601	1-249-441-11	CARBON 100K 5% 1/6W
R602	1-249-441-11	CARBON 100K 5% 1/6W
R603	1-215-394-00	CARBON 75 5% 1/6W
R751	1-249-405-11	CARBON 100 5% 1/6W
R752	1-249-429-11	CARBON 10K 5% 1/6W
R753	1-249-433-11	CARBON 22K 5% 1/6W
R754	1-249-393-11	CARBON 10 5% 1/6W
R802	1-249-429-11	CARBON 10K 5% 1/6W
R803	1-249-429-11	CARBON 10K 5% 1/6W
R804	1-249-429-11	CARBON 10K 5% 1/6W
R805	1-249-429-11	CARBON 10K 5% 1/6W
R901	1-249-417-11	CARBON 1K 5% 1/6W
R902	1-249-441-11	CARBON 100K 5% 1/6W
R903	1-247-696-11	CARBON 47 5% 1/4W
R904	1-249-417-11	CARBON 1K 5% 1/6W
R905	1-249-421-11	CARBON 2.2K 5% 1/6W
R906	1-249-429-11	CARBON 10K 5% 1/6W
R907	1-217-387-00	FUSIBLE 10 5% 1/4W F
R908	1-249-437-11	CARBON 47K 5% 1/6W
R909	1-215-481-00	CARBON 330K 5% 1/6W
RV101	1-230-600-11	RES, ADJ, CARBON 20K
RV102	1-228-993-00	RES, ADJ, CARBON 5K
RV201	1-230-600-11	RES, ADJ, CARBON 20K
RV202	1-230-600-11	RES, ADJ, CARBON 20K
RV203	1-228-990-00	RES, ADJ, METAL GLAZE 1K
RV451	1-237-438-11	RES, VAR, CARBON 20K/20K (HEADPHONES LEVEL)
S1	1-570-822-11	SWITCH, LEAF (LIMIT IN)
S2	1-570-203-11	SWITCH, LEAF (LOADING IN/OUT)
S601	1-554-481-00	SWITCH, SLIDE (DIGITAL OUT)
S701	1-554-303-21	SWITCH, KEY BOARD (1)
S702	1-554-303-21	SWITCH, KEY BOARD (2)
S703	1-554-303-21	SWITCH, KEY BOARD (3)
S704	1-554-303-21	SWITCH, KEY BOARD (4)
S705	1-554-303-21	SWITCH, KEY BOARD (5)
S706	1-554-303-21	SWITCH, KEY BOARD (6)
S707	1-554-303-21	SWITCH, KEY BOARD (7)
S708	1-554-303-21	SWITCH, KEY BOARD (8)
S709	1-554-303-21	SWITCH, KEY BOARD (9)
S710	1-554-303-21	SWITCH, KEY BOARD (10)
S711	1-554-303-21	SWITCH, KEY BOARD (11)
S712	1-554-303-21	SWITCH, KEY BOARD (12)
S713	1-554-303-21	SWITCH, KEY BOARD (13)
S714	1-554-303-21	SWITCH, KEY BOARD (14)
S715	1-554-303-21	SWITCH, KEY BOARD (15)

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S716	1-554-303-21	SWITCH, KEY BOARD (16)
S717	1-554-303-21	SWITCH, KEY BOARD (17)
S718	1-554-303-21	SWITCH, KEY BOARD (18)
S719	1-554-303-21	SWITCH, KEY BOARD (19)
S720	1-554-303-21	SWITCH, KEY BOARD (20)
S721	1-554-303-21	SWITCH, KEY BOARD (+10)
S722	1-554-303-21	SWITCH, KEY BOARD (0)
S723	1-554-303-21	SWITCH, KEY BOARD (CHECK)
S724	1-554-303-21	SWITCH, KEY BOARD (CLEAR)
S725	1-554-303-21	SWITCH, KEY BOARD (◀◀)
S726	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S727	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S728	1-554-303-21	SWITCH, KEY BOARD (▶)
S729	1-554-303-21	SWITCH, KEY BOARD (■)
S730	1-554-303-21	SWITCH, KEY BOARD (■)
S731	1-554-303-21	SWITCH, KEY BOARD (PROGRAM)
S732	1-554-303-21	SWITCH, KEY BOARD (◀◀)
S733	1-554-303-21	SWITCH, KEY BOARD (OPEN/CLOSE)
S734	1-554-303-21	SWITCH, KEY BOARD (TIME/NEXT)
S735	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S736	1-554-303-21	SWITCH, KEY BOARD (REPEAT)
S737	1-554-303-21	SWITCH, KEY BOARD (AUTO SPACE)
S951	1-553-318-00	SWITCH, PUSH (POWER)
T601	1-421-946-11	TRANSFORMER, PULSE
T901	1-448-795-11	(AEP,UK)...TRANSFORMER, POWER
T901	1-448-796-11	(E).....TRANSFORMER, POWER
TB901	*1-535-120-00	TERMINAL
TB951	*1-535-135-00	BASE POST 14MM (10MM PITCH) 2P
TB952	*1-535-139-00	BASE POST 19MM (10MM PITCH) 2P
VS901	1-570-046-11	(E)...SWITCH, VOLTAGE CHANGE (VOLTAGE SELECTOR)
X301	1-567-741-11	VIBRATOR, CRYSTAL, 16.93MHz
X302	1-567-686-11	OSCILLATOR, CERAMIC, 4MHz
X801	1-567-686-11	OSCILLATOR, CERAMIC, 4MHz

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-463-817-11	REMOTE COMMANDER (RM-D350A)
1-558-233-11	CORD (WITH CONNECTOR)(SIRCS) 4P
1-558-787-31	CORD, CONNECTION
3-532-616-00	(F)...BAG, POLYETHYLENE
3-536-080-00	BAG, POLYETHYLENE
3-701-630-00	BAG, POLYETHYLENE
3-765-890-11	MANUAL, INSTRUCTION
3-765-890-41	(AEP)...MANUAL, INSTRUCTION
3-795-629-11	(AEP)...INSTRUCTION
4-918-663-01	CUSHION
4-918-666-01	INDIVIDUAL CARTON
4-917-494-01	LID, BATTERY (FOR REMOTE COMMANDER)

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

SONY SERVICE MANUAL

AEP Model
UK Model
E Model

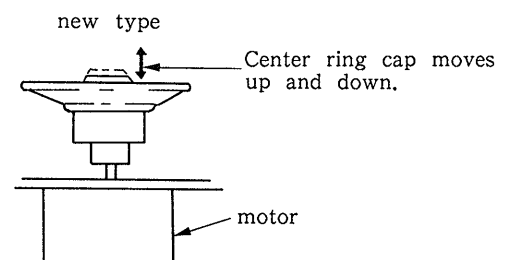
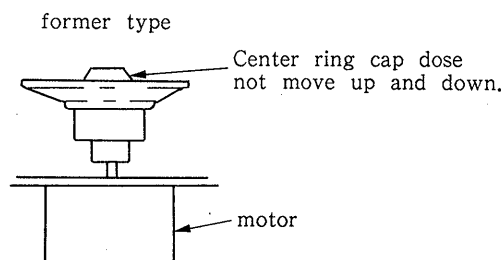
SUPPLEMENT-2

File this supplement with the Service Manual.

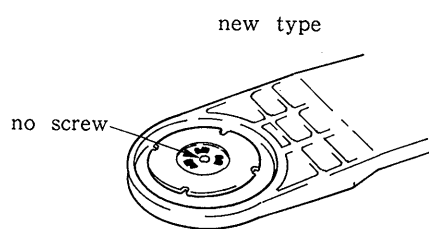
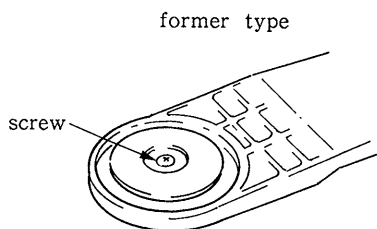
The mechanism section has been changed partly during manufacturing.
There are 2 types of motor assy (spindle) and chucking arm assy.
When replacing these parts, please use new type parts.

1. Discrimination between former and new type.

- motor assy (spindle)



- chucking arm assy



2. Interchangeability between former and new type/ Caution on replacing.

- No interchangeability between former and new type.
- Please replace chucking arm assy together when replacing motor assy (spindle) and please replace motor assy (spindle) together when replace chucking arm assy and also please use new type parts at that time.

3. Fomer and new type parts list. (page 31, 32)

former type			new type		
No.	Part No.	Description	No.	Part No.	Description
168	A-4681-006-A	ARM ASSY, CHUCKING	168	A-4681-011-B	ARM ASSY, CHUCKING
M2	X-4917-505-1	ASSY, MOTOR (SPINDLE)	M2	X-4917-523-1	ASSY, MOTOR (SPINDLE)

