CDP-710

SERVICE MANUAL

AEP Model
UK Model

SPECIFICATIONS

COMPACT DISC PLAYER CDP-710

System	Compact disc digital audio system
Laser	Semiconductor laser (λ = 780 nm)
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 102 dB
Dynamic range	More than 95 dB
Harmonic distortion	Less than 0.003% (at 1 kHz)
Channel separation	More than 90 dB
Wow and flutter	Below measurable limit (±0.001% W PEAK)

	Type	Output level	Load impedance
LINE OUT	Phono jack	2 V (50 kilohms)	more than 10 kilohms
HEADPHONES	Stereo jack	28 mW (32 ohms)	—
DIGITAL OUT	Phono jack	0.5 Vp-p (75 ohms)	75 ohms

General

Power requirements	Model for the United Kingdom: 240 V AC Model for the European countries: 220 V AC
Power consumption	15 W
Dimensions	Approx. 430 × 100 × 335 mm (w/h/d) (17 × 4 × 13¼ inches) including projecting parts and controls
Weight	Approx. 4.9 kg (10 lbs 6 oz), net

Remote commander RM-D350A

Remote control system	Infrared control
Power requirements	3 V DC with two batteries size AA (IEC designation R6)
Dimensions	67 × 20 × 175 (w/h/d) (2¾ × 13/16 × 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.

MICROFILM

COMPACT DISC PLAYER
SONY®

AUD

FEATURES

- PROGRAM play for playing up to 20 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. Or for a particular portion of a selection.
- Easy-to-read display window shows the track number being played, elapsed playing time, and the remaining time, and indicates the repeat play, shuffle play, auto space functions.
- Auto space function for creating a blank space of 3 seconds between each selection.
- Timer play for initiating disc play at a desired time (a commercially available timer is required).
- Index search function for quickly locating a desired part* (only with the remote commander).

* Example: a movement in a symphony. Index search can be used only for discs having index numbers. Such discs have (INDEX) mark.

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

To avoid electrical shock, do not open the cabinet. Refer servicing to qualified personnel only.

DANGER

Invisible laser radiation when open and interlock failed or defeated.
Avoid direct exposure to beam.

CAUTION

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

CLASS 1
LASER PRODUCT

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

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

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 30 cm fra den optiske pick-up.

1. Data for Laser Diode
   - Materiale: Ga-As
   - Bølgelængde: 780 nm
   - Udstråling: Kontinuerlig
   - Laser Output: max. 0.4 mW*

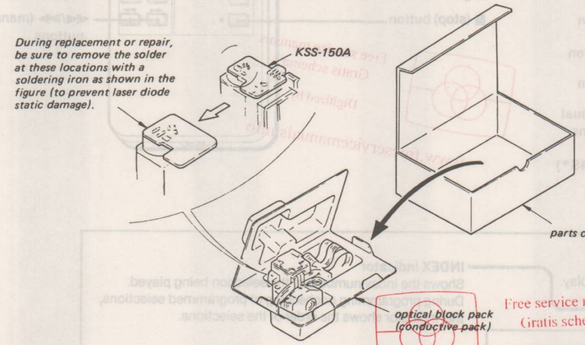
     * målt i 1.6 mm afstand fra overfladen af objektiv-linsen på den optiske pick-up enhsd.
   - Klassifikation: Svarende til klasse IIIb
2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laser-dioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

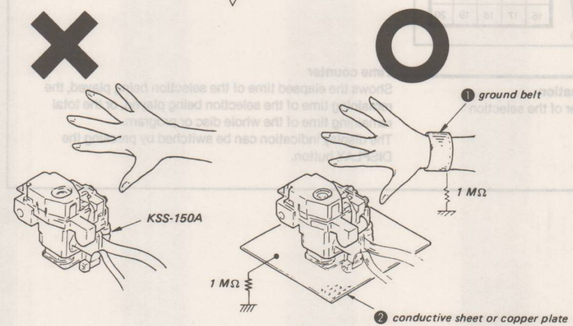
NOTES ON HANDLING THE OPTICAL BLOCK (KSS-150A)

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.



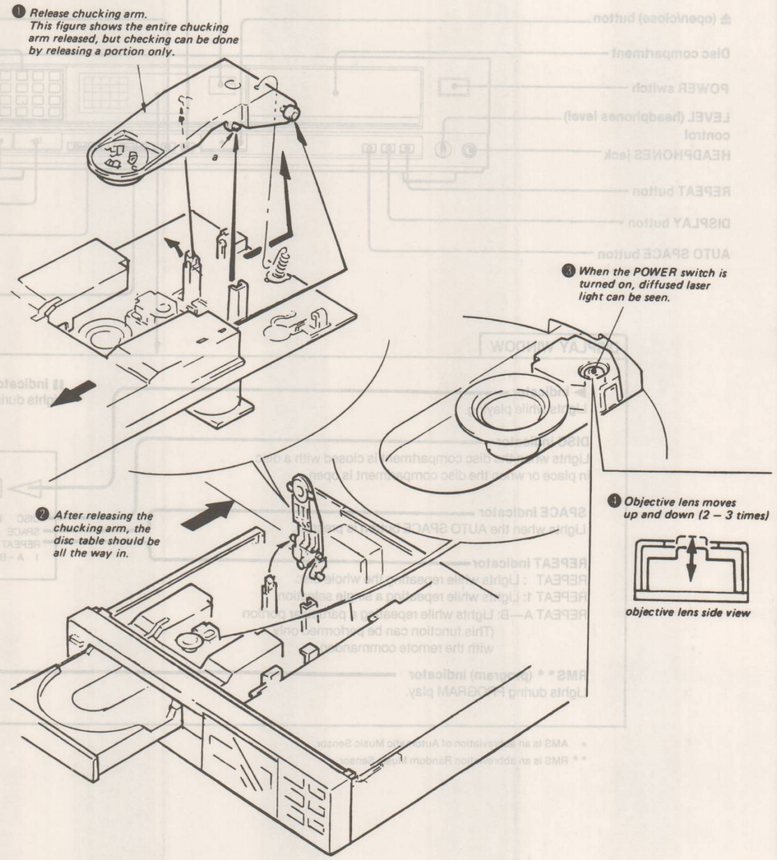


NOTES ON CHECKING LASER DIODE LIGHT EMISSION

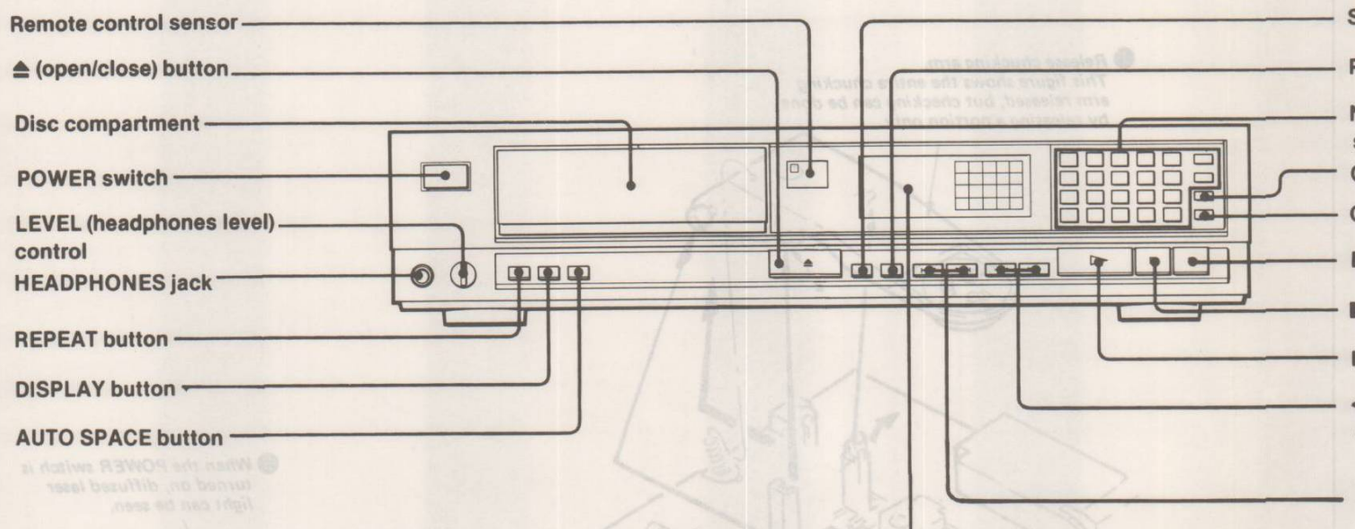
The laser beam on this set is converged by the objective lens in the optical block so that it focuses on the disc reflective surface. Therefore, when checking light emission of the laser diode, be sure to keep the eyes more than 30 cm away from the objective lens.

CHECKING LASER DIODE AND FOCUS SEARCH OPERATION

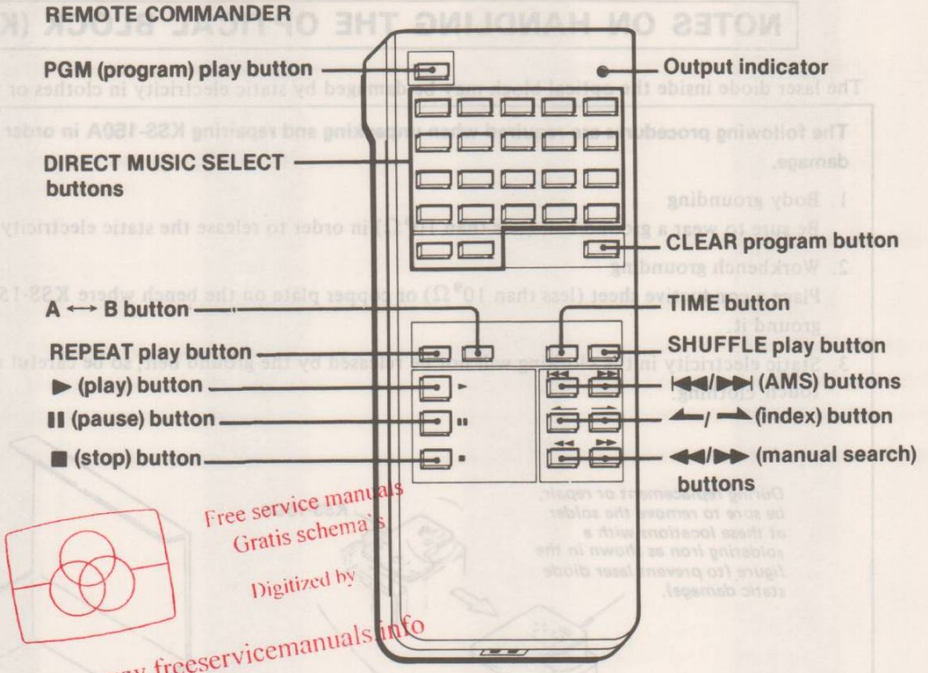
Check if the following operation is performed by looking at the objective lens after releasing the chucking arm and turning the POWER switch on. (Optical block should be at the innermost circumference when checking.)



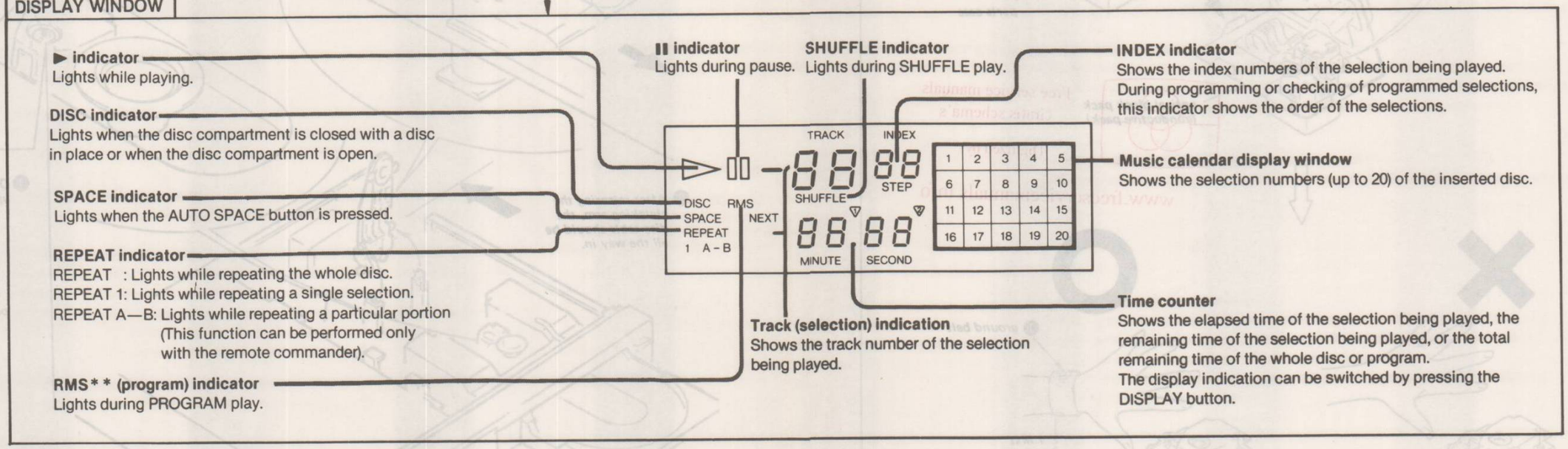
FRONT PANEL



REMOTE COMMANDER



DISPLAY WINDOW



* AMS is an abbreviation of Automatic Music Sensor.

** RMS is an abbreviation Random Music Sensor.

CDP-710 CDP-710

SECTION 1
ADJUSTMENTS

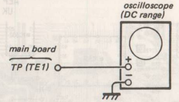
ELECTRICAL ADJUSTMENTS

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

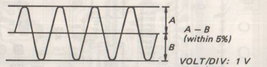
E-F Balance Adjustment

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

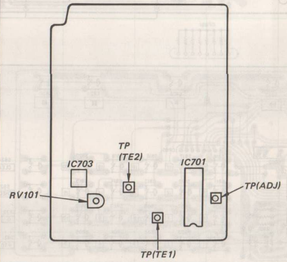
Procedure:



1. Connect test point TP (ADJ) and test point TP (TE2) to ground with lead wire.
2. Connect oscilloscope to test point TP (TE1)
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.



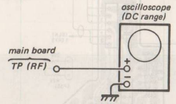
Adjustment Location: main board



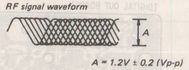
Focus Bias Adjustment

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

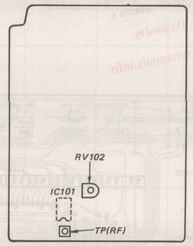
Procedure:



1. Connect oscilloscope to test points TP (RF).
2. Turn POWER switch on.
3. Put disc (YEDS-18) in and press ▷ 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.

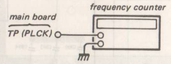


Adjustment Location: main board



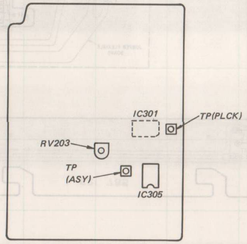
RF PLL Frequency Adjustment/Lock Frequency Check

Procedure:



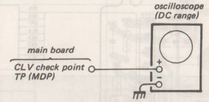
1. Connect test point TP (ASY) to ground with lead wire.
2. Turn POWER switch on.
3. Connect the frequency counter to test points TP (PLCK).
4. Adjust RV203 so that the reading on frequency counter is 4.3218 MHz ± 10 kHz.
   . . . . . (RF PLL frequency adjustment)
5. Remove lead wire connecting TP (ASY) 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

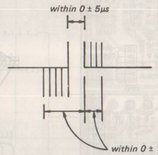


CLV Phase Lock Check

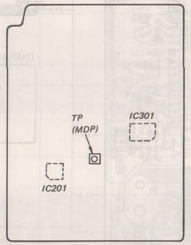
Procedure:



1. Connect oscilloscope to test point TP (MDP).
2. Turn POWER switch on.
3. Put disc (YEDS-18) 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.

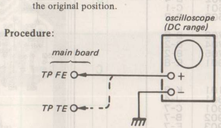
Symptoms \ Gain	Focus	Tracking
• The time until music starts becomes longer for STOP →▷PLAY or automatic selection (⏮, ⏭ buttons pressed. (Normally takes about 2 seconds.)	low	low or high
• Music does not start and disc continues to rotate for STOP →▷PLAY or automatic selection (⏮, ⏭ buttons pressed.)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

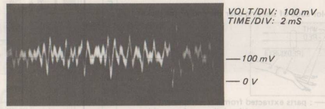
– Simple Adjustment –

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:

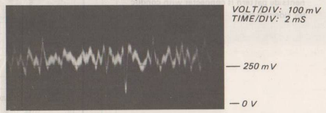


1. Keep the set horizontal.
   (If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2 axis device.)
2. Insert disc (YEDS-18) and press ▷PLAY button.
3. Connect oscilloscope to main amp board TP (FE1).
4. Adjust RV201 so that the waveform is as shown in the figure below. (focus gain adjustment)

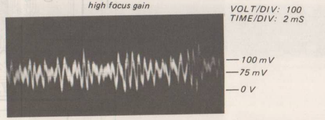


- Incorrent Examples (DC level changes more than on adjusted waveform)

low focus gain



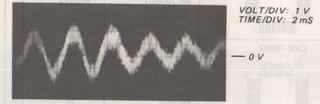
high focus gain



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)

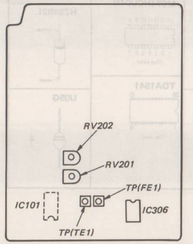
- Incorrect Examples (fundamental wave appears)

low tracking gain



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

Adjustment Location: main board



CDP-710 CDP-710

SECTION 5
DIAGRAMS

Semiconductor Lead Layouts

BX1393

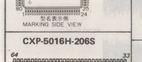
CXA1081M

CXA1082AQ

CXD1088Q

CXD1125Q

CXP-5016H-206S



LA6500-FA

LC3516AML-15

LC6523H-3270

MC14053BF

MSM6404A-180RS

MC7805CT
MC7815CT
MC7905CT
MC7915CT

M5218L
STA341M

NE5532P

NJM4560S

TC74HC02P
MC74HCU04N

TDA1541

DTA114ES
DTA144ES
DTC114ES
DTC144ES

2SA1428Y

2SB734
2SD774

2SC3622A-K

DF02M
RDF02M

HZS3-2L
HZS4.3NB3
ISS202-1

HZS9B2L

U05G

●SEMICONDUCTOR LOCATION

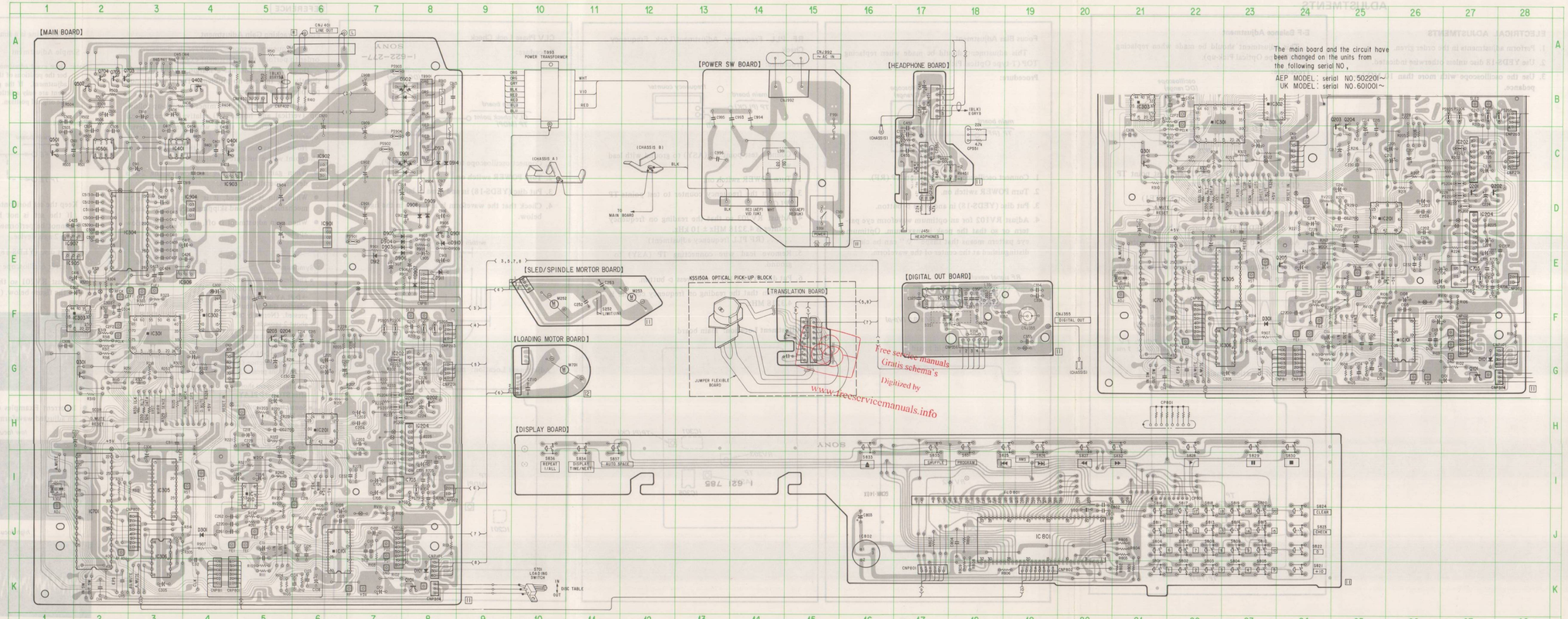
Ref. No.	Location	Ref. No.	Location
IC101	J-6	Q101	K-8
IC201	H-6	Q201	H-8
IC202	G-8	Q202	H-8
IC204	H-8	Q203	F-5
IC210	I-5	Q204	F-5
IC301	F-3	Q301	G-2
IC302	F-4	Q401	C-4
IC303	F-2	Q402	B-4
IC304	D-2	Q501	C-1
IC305	I-3	Q502	B-2
IC306	J-3	Q703	B-2
IC351	F-17	Q704	B-2
IC401	C-3	Q705	B-2
IC451	C-17	Q901	E-8
IC501	C-2		
IC701	J-2	D101	K-8
IC703	I-7	D301	J-4
IC801	J-19	D901	C-7
IC901	D-6	D902	B-7
IC902	C-6	D903	E-7
IC903	D-4	D904	E-7
IC904	D-4	D905	E-7
IC905	E-1	D906	E-7
IC906	E-3	D907	E-8
IC907	E-1	D908	D-8
IC90		D909	D-8
		D910	E-8
		D911	E-8
		D912	E-7
		D913	C-8
		D914	C-8

Note:

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

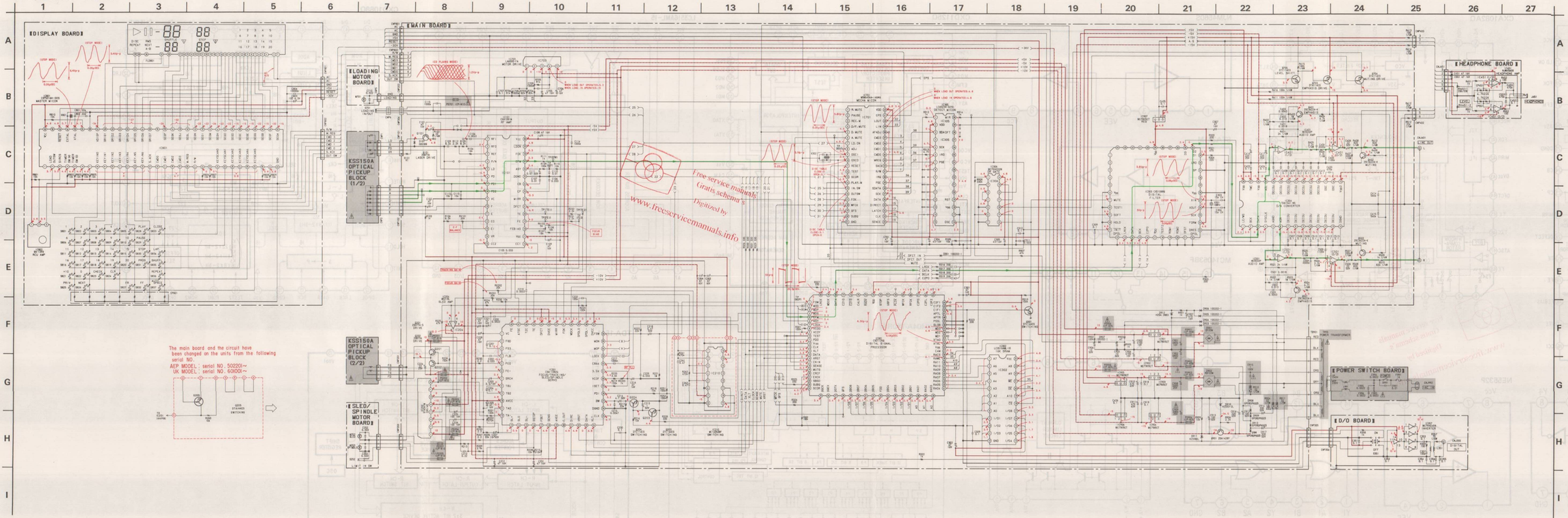
- ○—: parts extracted from the component side.
- ●—: parts extracted from the conductor side.
- ■ : part mounted on the conductor side.
- (← : indicates side identified with part number.
- ⊗ : Through hole
  This mark shows the portion where component side pattern is connecter with conductor side pattern.

5-1. MOUNTING DIAGRAM



CDP-710 CDP-710

5-2. SCHEMATIC DIAGRAM



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

Note:

- All capacitors are in μF unless otherwise noted. pF : μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- Δ : internal component.
- : fusible resistor.
- : signal path.
- % indicates tolerances.

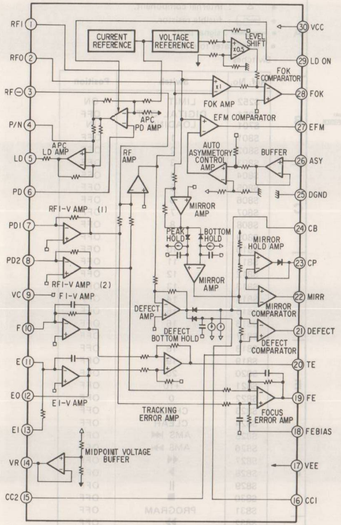
Switches

Ref. No.	Switch	Position
S252	LIMIT	ON
S351	DIGITAL OUT	OFF
S701	LOADING	IN
S801	1	OFF
S802	2	OFF
S803	3	OFF
S804	4	OFF
S805	5	OFF
S806	6	OFF
S807	7	OFF
S808	8	OFF
S809	9	OFF
S810	10	OFF
S811	11	OFF
S812	12	OFF
S813	13	OFF
S814	14	OFF
S815	15	OFF
S816	16	OFF
S817	17	OFF
S818	18	OFF
S819	19	OFF
S820	20	OFF
S821	+10	OFF
S822	0	OFF
S823	CHECK	OFF
S824	CLEAR	OFF
S825	AMS ⏮	OFF
S826	AMS ⏭	OFF
S827	⏪	OFF
S828	▶	OFF
S829	⏸	OFF
S830	■	OFF
S831	PROGRAM	OFF
S832	⏩	OFF
S833	⏏	OFF
S834	DISPLAY TIME/NEXT	OFF
S835	SHUFFLE	OFF
S836	REPEAT 1/ALL	OFF
S837	AUTO SPACE	OFF
S991	POWER	OFF

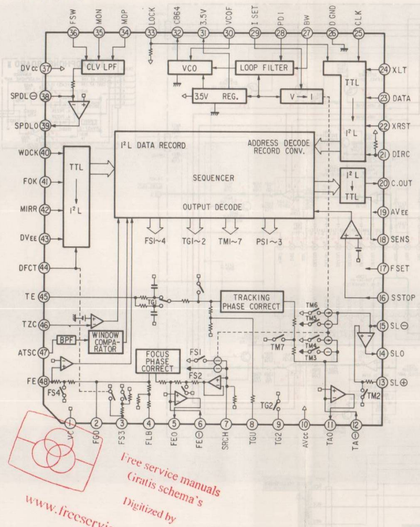
- : B+ bus.
- : B− bus.
- : adjustment for repair.
- Voltages are dc with respect to ground unless otherwise noted.
- Readings are taken under no-signal conditions with a VOM (50 kΩ/V).
  no mark: STOP mode
  ( ) : CD playing mode
- Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken to ground in STOP mode by using oscilloscope.
  Voltage variations may be noted due to normal production tolerances.

CDP-710 CDP-710

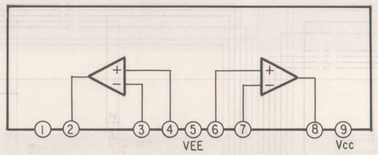
CXA1081M



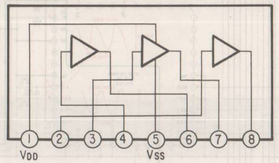
CXA1082AQ



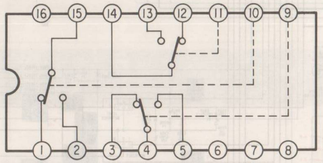
NJM4560S



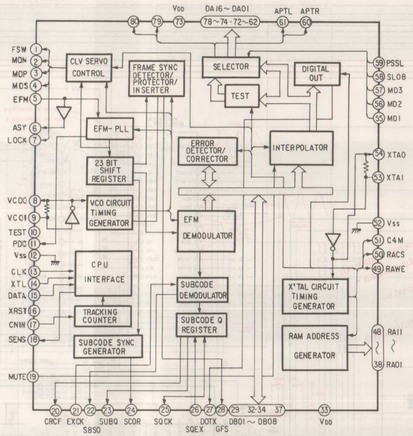
STA341M



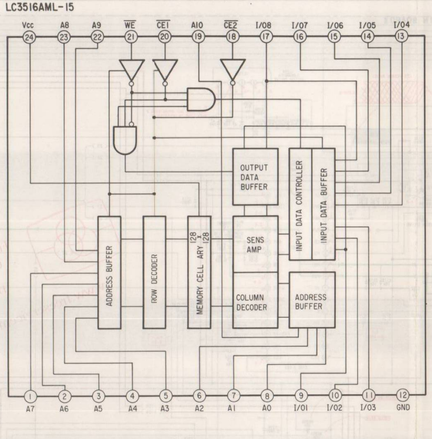
MC14053BF



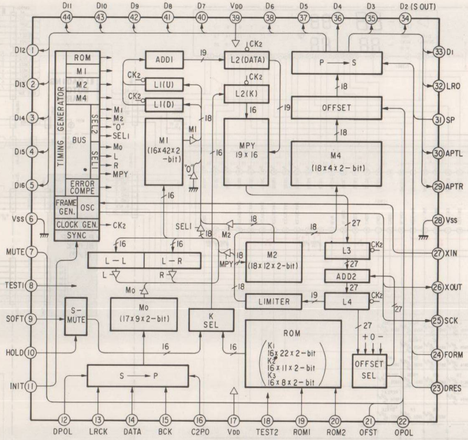
CXD1125Q



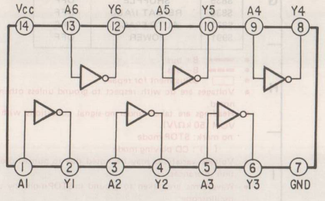
LC3516AML-15



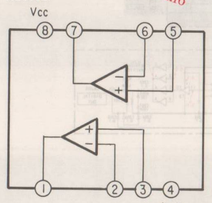
CXD1088Q



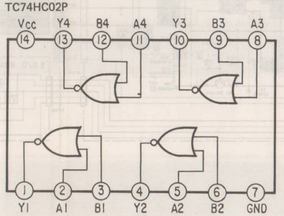
MC74HCU04N



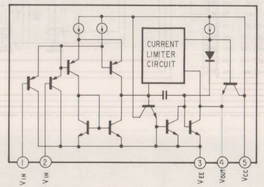
NE5532P



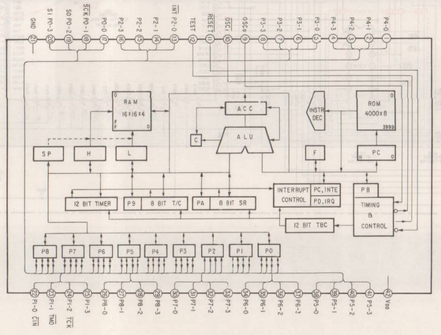
TC74HC02P



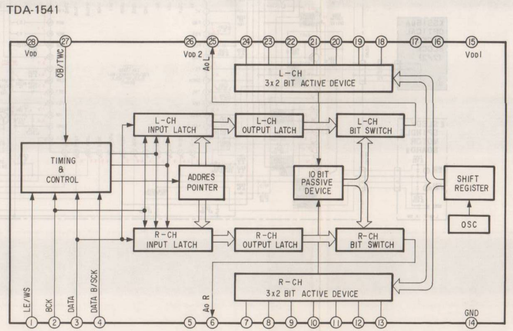
LA6500-FA



MSM6404A-180RS



TDA-1541

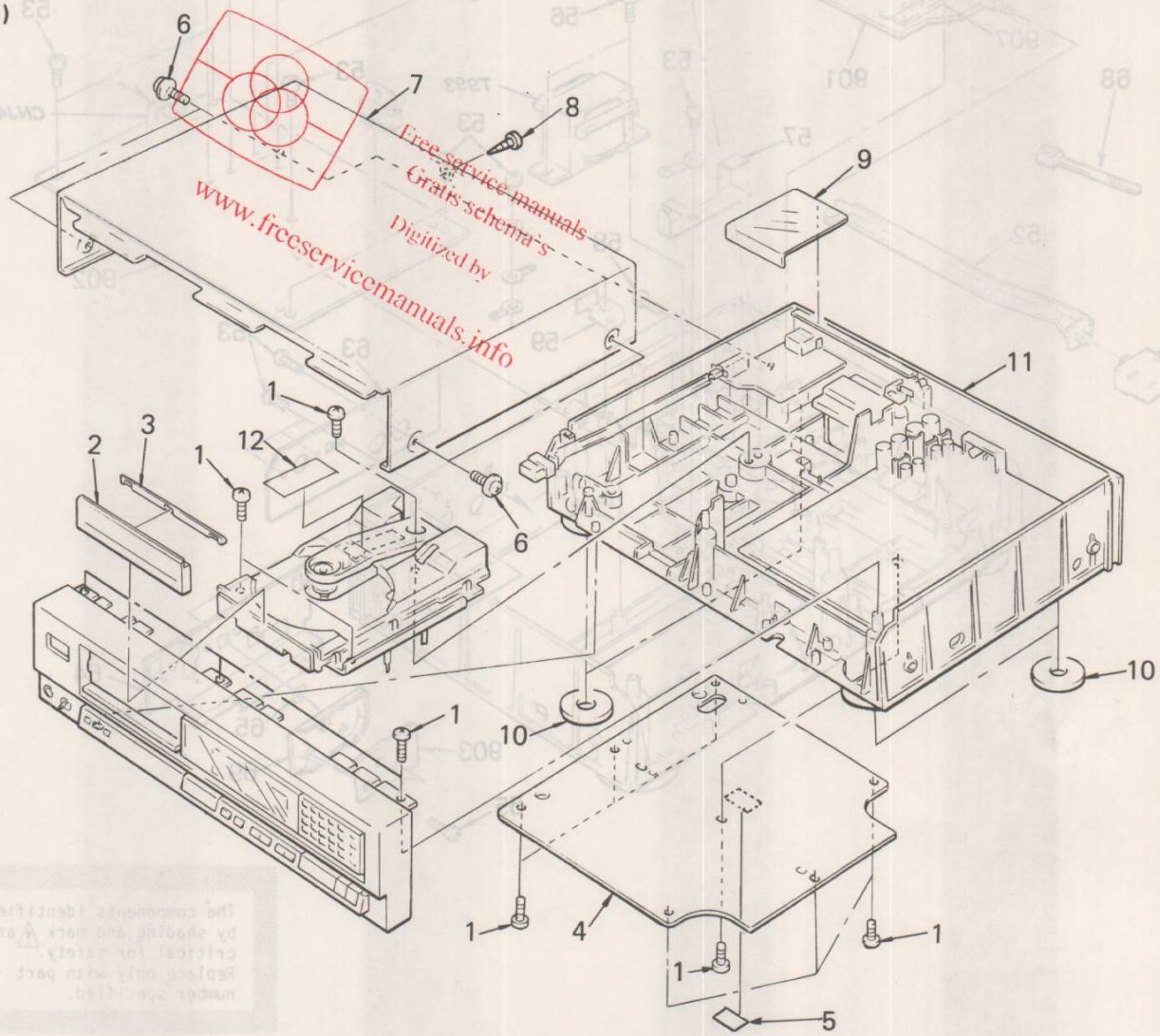


SECTION 3
EXPLODED VIEWS AND PARTS LIST

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.

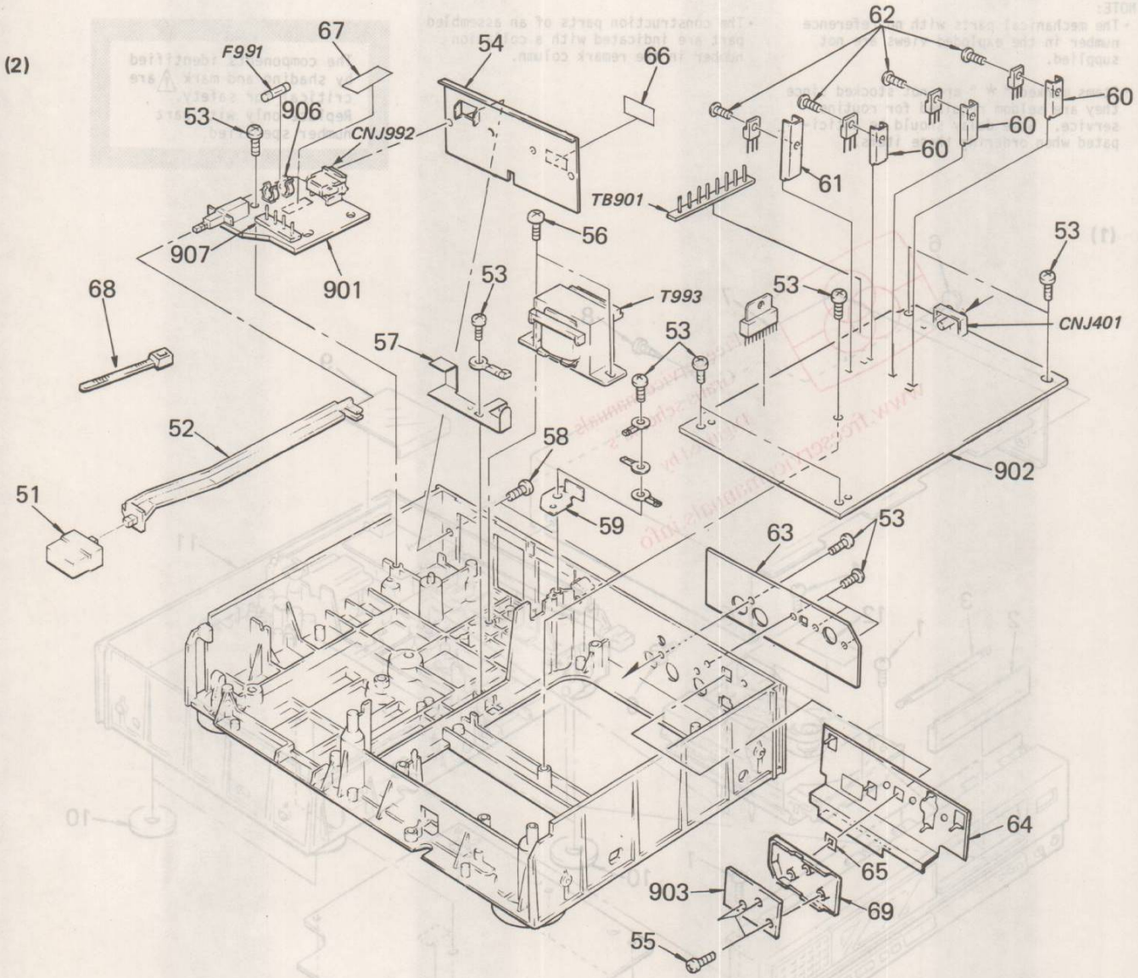
The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

(1)



No.	Part No.	Description	Remarks
1	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
2	4-912-961-11	PANEL, LOADING	
3	4-912-933-01	ESCUTCHEON, LOADING PANEL	
4	*4-912-912-21	PLATE, BOTTOM	
5	3-703-079-21	(UK)....LABEL, CAUTION (BACK)	
6	3-703-135-31	SCREW, TAPPING	
7	4-912-939-01	CASE	
8	3-703-473-11	SCREW, TERMINAL	
9	*4-912-931-01	COVER, POWER	
10	4-912-919-01	FOOT	
11	*4-912-938-11	CHASSIS	
12	4-885-843-02	LABEL, CAUTION, LASER	

(2)

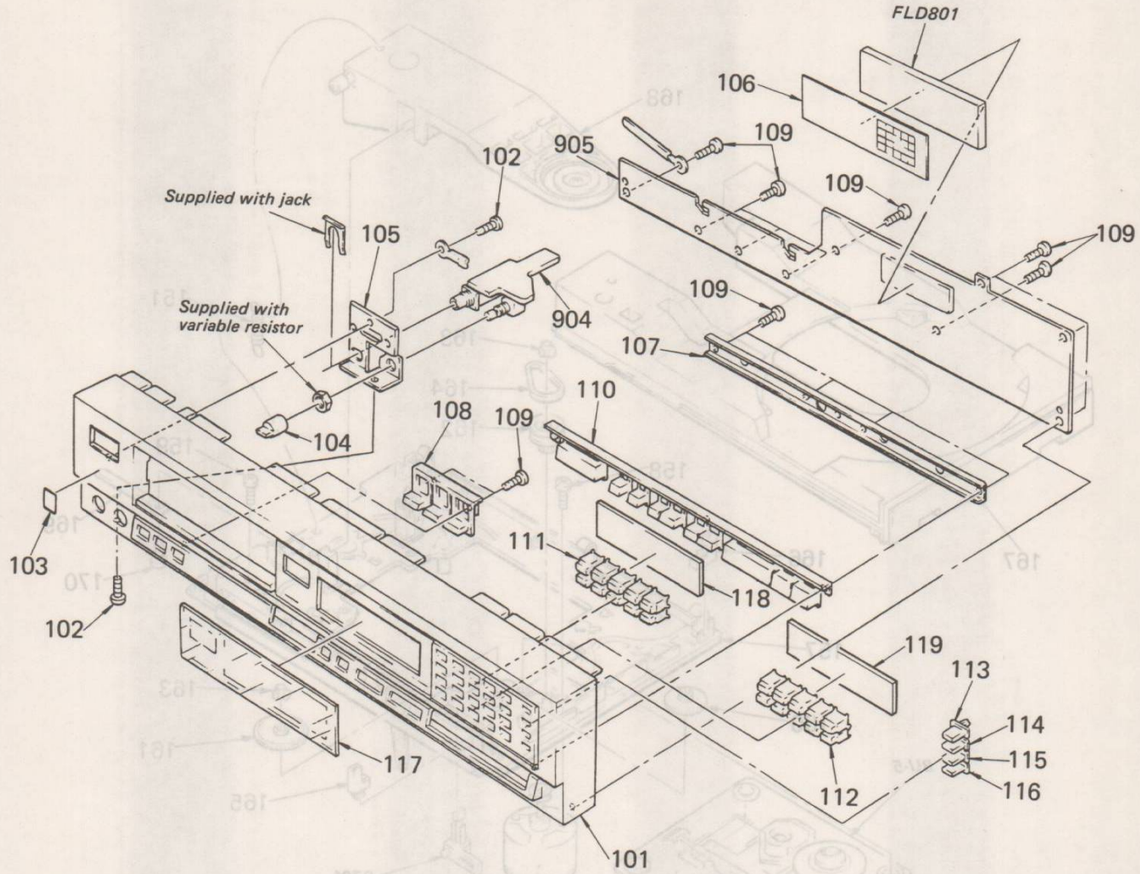


The components identified by shading and mark ⚠ are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remarks
51	4-917-460-01	KNOB, POWER	
52	*4-911-063-01	LEVER, POWER SWITCH	
53	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
54	*4-918-118-21	(AEP)...PLATE, JACK	
	*4-918-118-31	(UK)....PLATE, JACK	
55	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
56	7-685-660-11	SCREW +BVTP 4X10 TYPE2 N-S	
57	*4-912-923-01	PLATE (A), GROUND	
58	7-685-872-09	SCREW +BVTT 3X8 (S)	
59	*4-912-924-01	PLATE (B), GROUND	
60	*4-902-345-01	HEAT SINK	
61	*4-908-502-01	HEAT SINK	
62	7-682-147-15	SCREW, TR	
63	*4-912-930-01	PLATE, ORNAMENTAL, JACK	
64	*4-912-964-01	PLATE, SHIELD	

No.	Part No.	Description	Remarks
65	4-912-946-01	COVER, SWITCH	
66	4-885-838-00	LABEL, CLASS 1	
67	*3-701-948-14	LABEL, FUSE	
68	*3-701-748-00	(UK)....CLAMP	
69	*4-912-940-01	ESCUTCHEON, D/O	
901	*1-622-278-11	PC BOARD, POWER SW	
902	*A-4651-134-A	MOUNTED PCB, MAIN	
903	*1-622-279-11	PC BOARD, DIGITAL OUT	
906	1-533-183-11	HOLDER, FUSE	
907	*1-535-137-00	BASE POST 14MM (10MM PITCH) 4P	
CNJ401	1-562-999-21	JACK, PIN 2P (LINE OUT)	
CNJ992	1-526-931-11	INLET, AC (— AC IN)	
F991	⚠1-532-078-00	FUSE, TIME-LAG (1A)	
T993	⚠1-448-718-11	TRANSFORMER, POWER	
TB901	*1-535-121-00	TERMINAL	

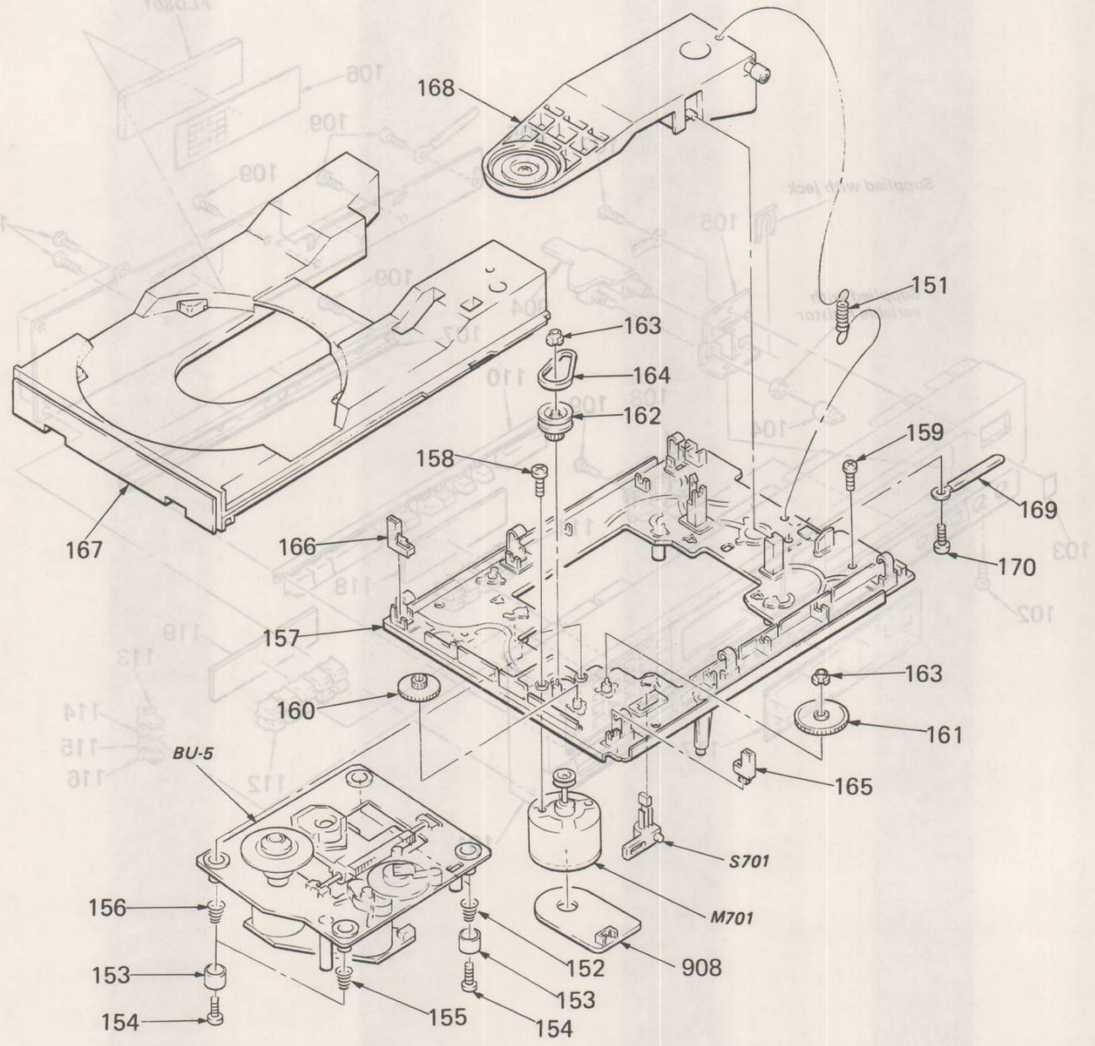
(3)



No.	Part No.	Description	Remarks
101	A-4636-243-C	PANEL (1) ASSY, FRONT	
102	7-682-147-09	SCREW +BVTT 3X6 (S)	
103	3-703-710-41	STICKER, SONY SYMBOL (12)	
104	4-901-708-11	KNOB, LOV	
105	*4-912-922-01	BRACKET, HEADPHONE	
106	*4-918-119-01	FILTER	
107	*4-918-122-01	HOLDER, CONTROL BUTTON	
108	4-918-121-01	BUTTON, 3 GANG	
109	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
110	4-918-125-01	BUTTON, CONTROL	
111	4-918-132-01	BUTTON, 10 GANG (1-10)	

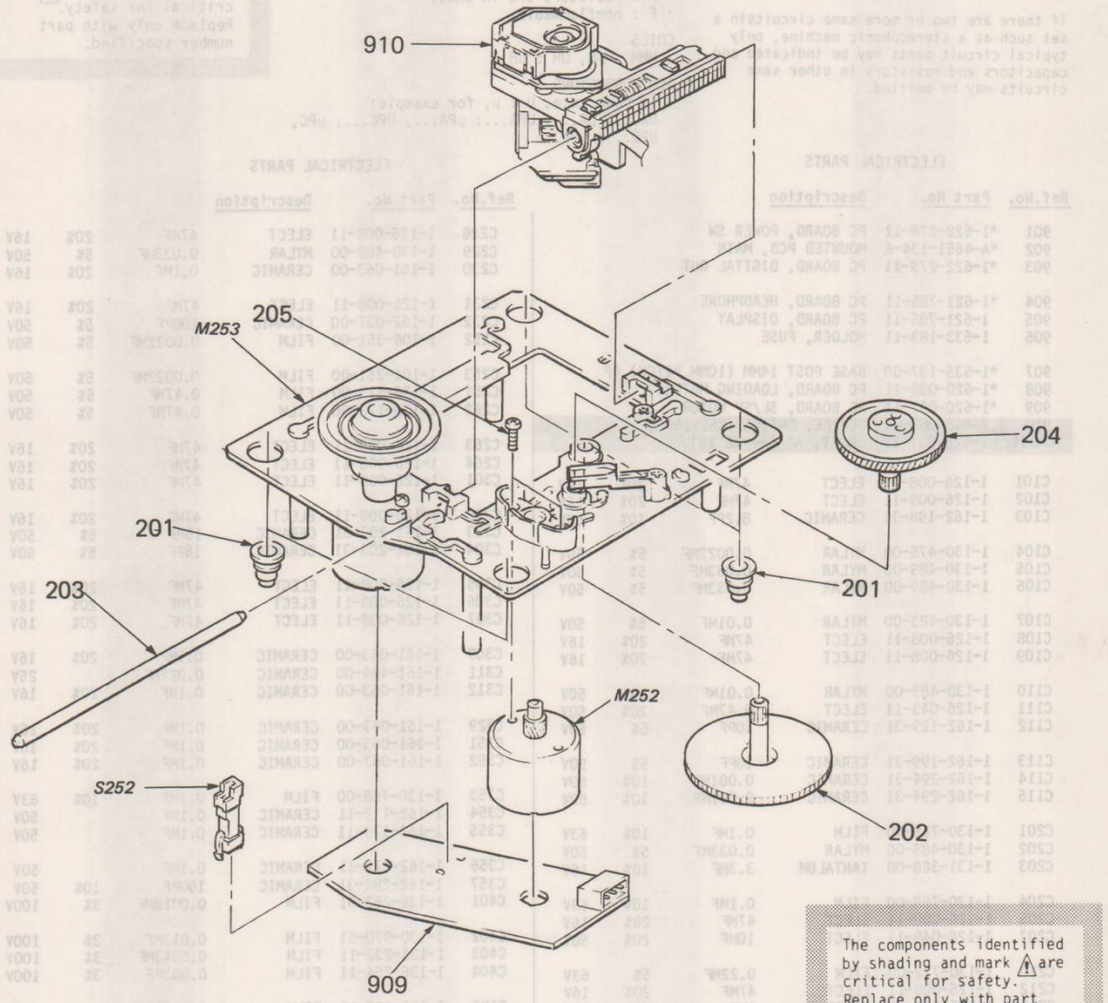
No.	Part No.	Description	Remarks
112	4-918-132-11	BUTTON, 10 GANG (11-20)	
113	4-918-124-11	PUSH BUTTON (+10)	
114	4-918-124-01	PUSH BUTTON (0)	
115	4-918-124-31	PUSH BUTTON (CHECK)	
116	4-918-124-21	PUSH BUTTON (CLEAR)	
117	4-918-120-02	PLATE, INDICATION	
118	*4-912-956-01	GUIDE, 10 KEY	
119	*4-912-956-11	GUIDE, 10 KEY	
904	*1-621-786-11	PC BOARD, HEADPHONE	
905	*1-621-785-11	PC BOARD, DISPLAY	
FLD801	1-519-411-11	INDICATOR TUBE, FLUORESCENT	

(4) CDM6A-5A



No.	Part No.	Description	Remarks
151	4-917-551-01	SPRING (ARM), TENSION	
152	4-917-507-01	SPRING (H)	
153	4-917-508-01	HOLDER, SP	
154	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S	
155	4-917-541-01	SPRING (B)	
156	4-918-669-01	SPRING (W)	
157	4-917-561-11	CHASSIS (OUTSERT), LOADING	
158	7-621-775-40	SCREW +B 2.6X8	
159	7-685-793-04	SCREW +BVTT 2.6X8 (S)	
160	4-910-402-01	GEAR (2), LOADING	
161	4-917-550-01	GEAR (A), LOADING	
162	4-917-546-01	PULLEY (A), LOADING	
163	4-910-418-01	BUSHING (DIA. 4)	
164	4-917-548-01	BELT, DRIVING	
165	*4-918-613-01	CUSHION (RIGHT)	
166	*4-918-612-01	CUSHION (LEFT)	
167	A-4665-013-A	TABLE ASSY, DISK	
168	A-4681-011-A	ARM ASSY, CHUCKING	
169	3-701-822-00	HOLDER, WIRE	
170	7-621-259-25	SCREW +BVTT 2.6×4 (S)	
908	*1-620-098-11	PC BOARD, LOADING MOTOR	
M701	A-4608-320-A	MOTOR ASSY, L	
S701	1-570-203-11	SWITCH, LEAF (LOADING IN/OUT)	

(5) BU-5A



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

No.	Part No.	Description	Remarks
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	
909	*1-620-097-11	PC BOARD, SL/SP MOTOR	
910	⚠ 8-848-062-01	DEVICE, OPTICS (KSS-150A)	
M252	X-4917-504-1	ASSY, MOTOR (SLED)	
M253	X-4917-523-1	ASSY, MOTOR (SPINDLE)	
S252	1-570-822-11	SWITCH, LEAF (LIMIT IN)	

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 circuitsin 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:μF, PF:μμF.

RESISTORS
· All resistors are in ohms.
· F : nonflammable

COILS
· MMH : mH, UH : μH

SEMICONDUCTORS
In each case, U : μ, for example:
UA...: μA..., UPA...: μPA..., UPC...: μPC,
UPD...: μPD...

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
901	*1-622-278-11	PC BOARD, POWER SW			
902	*A-4651-134-A	MOUNTED PCB, MAIN			
903	*1-622-279-11	PC BOARD, DIGITAL OUT			
904	*1-621-786-11	PC BOARD, HEADPHONE			
905	1-621-785-11	PC BOARD, DISPLAY			
906	1-533-183-11	HOLDER, FUSE			
907	*1-535-137-00	BASE POST 14MM (10MM PITCH) 4P			
908	*1-620-098-11	PC BOARD, LOADING MOTOR			
909	*1-620-097-11	PC BOARD, SL/SP MOTOR			
910	⚠8-848-062-01	DEVICE, OPTICS (KSS-150A)			
CNJ992	⚠1-526-931-11	INLET, AC (— AC IN)			
C101	1-126-008-11	ELECT	47MF	20%	16V
C102	1-126-008-11	ELECT	47MF	20%	16V
C103	1-162-198-31	CERAMIC	8.2PF	10%	50V
C104	1-130-475-00	MYLAR	0.0022MF	5%	50V
C105	1-130-489-00	MYLAR	0.033MF	5%	50V
C106	1-130-489-00	MYLAR	0.033MF	5%	50V
C107	1-130-483-00	MYLAR	0.01MF	5%	50V
C108	1-126-008-11	ELECT	47MF	20%	16V
C109	1-126-008-11	ELECT	47MF	20%	16V
C110	1-130-483-00	MYLAR	0.01MF	5%	50V
C111	1-126-043-11	ELECT	0.47MF	20%	50V
C112	1-162-199-31	CERAMIC	10PF	5%	50V
C113	1-162-199-31	CERAMIC	10PF	5%	50V
C114	1-162-294-31	CERAMIC	0.001MF	10%	50V
C115	1-162-294-31	CERAMIC	0.001MF	10%	50V
C201	1-130-768-00	FILM	0.1MF	10%	63V
C202	1-130-489-00	MYLAR	0.033MF	5%	50V
C203	1-131-368-00	TANTALUM	3.3MF	10%	16V
C204	1-130-768-00	FILM	0.1MF	10%	63V
C205	1-126-008-11	ELECT	47MF	20%	16V
C207	1-126-048-11	ELECT	10MF	20%	50V
C210	1-130-772-00	FILM	0.22MF	5%	63V
C212	1-126-008-11	ELECT	47MF	20%	16V
C213	1-126-044-11	ELECT	1MF	20%	50V
C214	1-124-045-00	ELECT	4.7MF	20%	50V
C215	1-130-479-00	MYLAR	0.0047MF	5%	50V
C216	1-126-008-11	ELECT	47MF	20%	16V
C217	1-162-294-31	CERAMIC	0.001MF	10%	50V
C218	1-126-043-11	ELECT	0.47MF	20%	50V
C219	1-130-475-00	MYLAR	0.0022MF	5%	50V
C220	1-130-475-00	MYLAR	0.0022MF	5%	50V
C221	1-126-008-11	ELECT	47MF	20%	16V
C224	1-126-020-71	ELECT	22MF	20%	25V
C225	1-126-009-11	ELECT	100MF	20%	16V
C226	1-126-009-11	ELECT	100MF	20%	16V
C227	1-126-008-11	ELECT	47MF	20%	16V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C228	1-126-008-11	ELECT	47MF	20%	16V
C229	1-130-489-00	MYLAR	0.033MF	5%	50V
C230	1-161-063-00	CERAMIC	0.1MF	20%	16V
C231	1-126-008-11	ELECT	47MF	20%	16V
C232	1-162-037-00	CERAMIC	100PF	5%	50V
C252	1-106-351-00	FILM	0.0022MF	5%	50V
C253	1-106-351-00	FILM	0.0022MF	5%	50V
C261	1-136-173-00	FILM	0.47MF	5%	50V
C262	1-136-173-00	FILM	0.47MF	5%	50V
C263	1-126-008-11	ELECT	47MF	20%	16V
C264	1-126-008-11	ELECT	47MF	20%	16V
C301	1-126-008-11	ELECT	47MF	20%	16V
C302	1-126-008-11	ELECT	47MF	20%	16V
C303	1-162-203-31	CERAMIC	15PF	5%	50V
C304	1-162-203-31	CERAMIC	15PF	5%	50V
C305	1-126-008-11	ELECT	47MF	20%	16V
C306	1-126-008-11	ELECT	47MF	20%	16V
C307	1-126-008-11	ELECT	47MF	20%	16V
C309	1-161-063-00	CERAMIC	0.1MF	20%	16V
C311	1-161-494-00	CERAMIC	0.022MF		25V
C312	1-161-063-00	CERAMIC	0.1MF	20%	16V
C329	1-161-063-00	CERAMIC	0.1MF	20%	16V
C351	1-161-063-00	CERAMIC	0.1MF	20%	16V
C352	1-161-063-00	CERAMIC	0.1MF	20%	16V
C353	1-130-768-00	FILM	0.1MF	10%	63V
C354	1-162-179-11	CERAMIC	0.1MF		50V
C355	1-162-179-11	CERAMIC	0.1MF		50V
C356	1-162-179-11	CERAMIC	0.1MF		50V
C357	1-162-282-31	CERAMIC	100PF	10%	50V
C401	1-136-253-91	FILM	0.0018MF	3%	100V
C402	1-130-970-51	FILM	0.013MF	3%	100V
C403	1-136-232-11	FILM	0.0043MF	3%	100V
C404	1-136-254-11	FILM	0.002MF	3%	100V
C405	1-136-227-11	FILM	0.0011MF	3%	100V
C406	1-126-049-11	ELECT	22MF	20%	50V
C407	1-130-768-00	FILM	0.1MF	10%	63V
C408	1-130-768-00	FILM	0.1MF	10%	63V
C409	1-130-768-00	FILM	0.1MF	10%	63V
C410	1-130-768-00	FILM	0.1MF	10%	63V
C411	1-130-768-00	FILM	0.1MF	10%	63V
C412	1-130-768-00	FILM	0.1MF	10%	63V
C413	1-130-768-00	FILM	0.1MF	10%	63V
C414	1-162-291-31	CERAMIC	560PF	10%	50V
C415	1-162-291-31	CERAMIC	560PF	10%	50V
C416	1-126-024-11	ELECT	220MF	20%	25V
C417	1-126-024-11	ELECT	220MF	20%	25V

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
C420	1-162-290-31	CERAMIC	470PF	10%	50V
C423	1-161-063-00	CERAMIC	0.1MF	20%	16V
C424	1-161-063-00	CERAMIC	0.1MF	20%	16V
C425	1-161-063-00	CERAMIC	0.1MF	20%	16V
C426	1-161-063-00	CERAMIC	0.1MF	20%	16V
C451	1-124-236-00	ELECT	47MF	20%	16V
C452	1-161-063-00	CERAMIC	0.1MF	20%	16V
C453	1-162-290-31	CERAMIC	470PF	10%	50V
C501	1-136-253-11	FILM	0.0018MF	3%	100V
C502	1-130-970-51	FILM	0.013MF	3%	100V
C503	1-136-232-11	FILM	0.0043MF	3%	100V
C504	1-136-254-11	FILM	0.002MF	3%	100V
C505	1-136-227-11	FILM	0.0011MF	3%	100V
C506	1-126-049-11	ELECT	22MF	20%	50V
C507	1-130-768-00	FILM	0.1MF	10%	63V
C508	1-130-768-00	FILM	0.1MF	10%	63V
C509	1-130-768-00	FILM	0.1MF	10%	63V
C510	1-130-768-00	FILM	0.1MF	10%	63V
C511	1-130-768-00	FILM	0.1MF	10%	63V
C512	1-130-768-00	FILM	0.1MF	10%	63V
C513	1-130-768-00	FILM	0.1MF	10%	63V
C551	1-124-236-00	ELECT	47MF	20%	16V
C553	1-162-290-31	CERAMIC	470PF	10%	50V
C701	1-126-008-11	ELECT	47MF	20%	16V
C705	1-126-008-11	ELECT	47MF	20%	16V
C706	1-126-008-11	ELECT	47MF	20%	16V
C707	1-130-768-00	FILM	0.1MF	10%	63V
C708	1-162-294-31	CERAMIC	0.001MF	10%	50V
C709	1-162-294-31	CERAMIC	0.001MF	10%	50V
C710	1-101-005-00	CERAMIC	0.022MF		50V
C801	1-162-207-31	CERAMIC	22PF	5%	50V
C802	1-162-207-31	CERAMIC	22PF	5%	50V
C803	1-123-661-00	ELECT	100MF	20%	6.3V
C804	1-161-379-00	CERAMIC	0.01MF	20%	16V
C901	⚠1-126-017-11	ELECT	6800MF	20%	16V
C902	⚠1-126-017-11	ELECT	6800MF	20%	16V
C903	1-124-762-00	ELECT	4700MF	20%	10V
C904	1-124-762-00	ELECT	4700MF	20%	10V
C905	1-126-048-11	ELECT	10MF	20%	50V
C906	1-126-048-11	ELECT	10MF	20%	50V
C907	1-126-012-11	ELECT	470MF	20%	16V
C908	⚠1-124-636-00	ELECT	3300MF	20%	25V
C909	⚠1-124-636-00	ELECT	3300MF	20%	25V
C910	1-123-377-00	ELECT	470MF	20%	63V
C911	1-123-377-00	ELECT	470MF	20%	63V
C912	1-126-052-11	ELECT	100MF	20%	50V
C913	1-214-725-00	ELECT	100MF	20%	50V
C914	1-124-912-11	ELECT	330MF	20%	50V
C915	⚠1-130-789-00	FILM	1MF	10%	100V
C916	1-126-064-11	ELECT	220MF	20%	63V
C917	1-124-912-11	ELECT	330MF	20%	50V
C918	1-161-063-00	CERAMIC	0.1MF	20%	16V
C919	1-161-063-00	CERAMIC	0.1MF	20%	16V
C920	1-124-557-11	ELECT	1000MF	20%	25V
C991	⚠1-161-744-00	CERAMIC	0.01MF		400V
C993	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V
C994	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V
C995	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V
C996	⚠1-161-742-00	CERAMIC	0.0022MF	20%	400V

ELECTRICAL PARTS

Ref.No.	Part No.	Description
CNJ355	1-507-567-71	JACK, PIN 1P (DIGITAL OUT)
CNJ401	*1-562-999-21	JACK, PIN 2P (LINE OUT)
CNJ451	*1-564-509-11	PLUG, CONNECTOR 6P
CNJ992	⚠1-526-931-11	INLET, AC (— AC IN)
CNP101	*1-564-706-31	PIN, CONNECTOR (SMALL TYPE) 4P
CNP102	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE) 8P
CNP201	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE) 4P
CNP202	*1-564-336-00	PIN, CONNECTOR 2P
CNP203	*1-564-706-41	PIN, CONNECTOR (SMALL TYPE) 4P
CNP304	*1-564-337-00	PIN, CONNECTOR 3P
CNP305	*1-564-508-11	PLUG, CONNECTOR 5P
CNP356	*1-564-520-11	PLUG, CONNECTOR 5P
CNP402	*1-564-506-11	PLUG, CONNECTOR 3P
CNP403	*1-564-506-11	PLUG, CONNECTOR 3P
CNP801	*1-564-340-00	PIN, CONNECTOR 6P
CNP802	*1-564-342-11	PIN, CONNECTOR 8P
CP451	1-233-080-11	COMPOSITION CIRCUIT BLOCK
CP551	1-233-080-11	COMPOSITION CIRCUIT BLOCK
CP801	1-233-081-11	COMPOSITION CIRCUIT BLOCK
D101	8-719-107-94	DIODE 1SS202-1
D301	8-719-107-94	DIODE 1SS202-1
D901	⚠8-719-937-50	DIODE DF02M
D902	⚠8-719-937-49	DIODE RDF02M
D903	8-719-107-94	DIODE 1SS202-1
D904	8-719-107-94	DIODE 1SS202-1
D905	8-719-107-94	DIODE 1SS202-1
D906	8-719-107-94	DIODE 1SS202-1
D907	8-719-107-94	DIODE 1SS202-1
D908	8-719-911-55	DIODE U05G
D909	8-719-911-55	DIODE U05G
D910	8-719-934-26	DIODE HZS33-2L
D911	8-719-933-57	DIODE HZS9B2L
D912	8-719-928-82	DIODE HZS4.3NB3
D913	8-719-911-55	DIODE U05G
D914	8-719-911-55	DIODE U05G
F991	⚠1-532-078-00	FUSE, TIME-LAG (1A)
FLD801	1-519-411-11	INDICATOR TUBE, FLUORESCENT
IC101	8-752-030-93	IC CXA1081M
IC201	8-752-031-61	IC CXA1082AQ
IC202	8-759-303-90	IC STA341M
IC204	8-759-600-02	IC M5218L
IC210	8-759-009-07	IC MC14053BF
IC301	8-752-322-04	IC CXD1125Q
IC302	8-759-802-74	IC LC3516AML-15
IC303	8-759-939-35	IC CXD1088Q
IC304	8-759-933-61	IC TDA1541
IC305	8-759-804-47	IC LC6523H-3270
IC306	8-759-202-12	IC TC74HC02P
IC357	8-759-001-05	IC MC74HCU04N
IC401	8-759-900-72	IC NE5532P
IC451	8-759-700-40	IC NJM4560S
IC501	8-759-900-72	IC NE5532P
IC701	8-759-940-62	IC MSM6404A-180RS
IC703	8-759-803-42	IC LA6500-FA
IC801	8-752-802-24	IC CXP5016H-206S
IC802	8-749-900-36	IC BX-1393
IC901	8-759-013-06	IC MC7805CT
IC902	8-759-012-67	IC MC7905CT

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

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
IC903	8-759-013-10	IC MC7815CT			
IC904	8-759-012-72	IC MC7915CT			
IC905	8-759-013-06	IC MC7805CT			
IC906	8-759-012-67	IC MC7905CT			
IC907	8-759-013-06	IC MC7805CT			
J451	1-563-485-21	JACK, LARGE TYPE (HEADPHONES)			
L351	1-421-946-11	TRANSFORMER, PULSE			
L991 ⚠	1-421-960-11	TRANSFORMER, LINE FILTER			
M252	X-4917-504-1	ASSY, MOTOR (SLED)			
M253	X-4917-523-1	ASSY, MOTOR (SPINDLE)			
M701	A-4608-320-A	MOTOR ASSY, L			
PS201 ⚠	1-532-605-00	LINK, IC			
PS202 ⚠	1-532-605-00	LINK, IC			
PS203 ⚠	1-532-605-00	LINK, IC			
PS204 ⚠	1-532-605-00	LINK, IC			
PS205 ⚠	1-532-605-00	LINK, IC			
PS207 ⚠	1-532-605-00	LINK, IC			
PS701 ⚠	1-532-605-00	LINK, IC			
PS901 ⚠	1-532-675-00	LINK, IC			
PS902 ⚠	1-532-675-00	LINK, IC			
PS903 ⚠	1-532-637-00	LINK, IC			
PS904 ⚠	1-532-637-00	LINK, IC			
PS905 ⚠	1-532-637-00	LINK, IC			
PS906 ⚠	1-532-637-00	LINK, IC			
Q101	8-729-103-43	TRANSISTOR 2SB734			
Q201	8-729-177-43	TRANSISTOR 2SD774			
Q202	8-729-103-43	TRANSISTOR 2SB734			
Q203	8-729-900-89	TRANSISTOR DTC144ES			
Q204	8-729-900-80	TRANSISTOR DTC114ES			
Q205	8-729-900-65	TRANSISTOR DTA144ES			
Q301	8-729-900-89	TRANSISTOR DTC144ES			
Q401	8-729-107-99	TRANSISTOR 2SC3622A-K			
Q402	8-729-107-99	TRANSISTOR 2SC3622A-K			
Q501	8-729-107-99	TRANSISTOR 2SC3622A-K			
Q502	8-729-107-99	TRANSISTOR 2SC3622A-K			
Q703	8-729-900-61	TRANSISTOR DTA114ES			
Q704	8-729-900-61	TRANSISTOR DTA114ES			
Q705	8-729-900-80	TRANSISTOR DTC114ES			
Q901	8-729-205-95	TRANSISTOR 2SA1428Y			
R101	1-215-396-00	CARBON	91	5%	1/6W
R102	1-214-092-00	METAL	22	1%	1/4W
R103	1-249-417-11	CARBON	1K	5%	1/6W
R104	1-215-450-00	CARBON	16K	5%	1/6W
R105	1-249-428-11	CARBON	8.2K	5%	1/6W
R106	1-249-428-11	CARBON	8.2K	5%	1/6W
R107	1-249-432-11	CARBON	18K	5%	1/6W
R108	1-249-432-11	CARBON	18K	5%	1/6W
R109	1-249-441-11	CARBON	100K	5%	1/6W
R110	1-249-429-11	CARBON	10K	5%	1/6W
R111	1-249-417-11	CARBON	1K	5%	1/6W
R112	1-249-421-11	CARBON	2.2K	5%	1/6W
R201	1-249-441-11	CARBON	100K	5%	1/6W
R202	1-215-479-00	CARBON	270K	5%	1/6W
R205	1-249-435-11	CARBON	33K	5%	1/6W
R207	1-249-385-11	CARBON	2.2	5%	1/6W
R209	1-249-424-11	CARBON	3.9K	5%	1/6W
R213	1-249-438-11	CARBON	56K	5%	1/6W
R215	1-215-486-00	CARBON	510K	5%	1/6W

ELECTRICAL PARTS

Ref.No.	Part No.	Description			
R216	1-249-429-11	CARBON	10K	5%	1/6W
R217	1-249-433-11	CARBON	22K	5%	1/6W
R218	1-249-429-11	CARBON	10K	5%	1/6W
R219	1-215-471-00	METAL	120K	1%	1/6W
R220	1-215-434-00	METAL	3.6K	1%	1/6W
R221	1-215-493-00	CARBON	1M	5%	1/6W
R222	1-249-433-11	CARBON	22K	5%	1/6W
R223	1-249-441-11	CARBON	100K	5%	1/6W
R224	1-249-437-11	CARBON	47K	5%	1/6W
R225	1-249-437-11	CARBON	47K	5%	1/6W
R226	1-247-883-00	CARBON	150K	5%	1/6W
R228	1-249-429-11	CARBON	10K	5%	1/6W
R230	1-249-429-11	CARBON	10K	5%	1/6W
R231	1-249-421-11	CARBON	2.2K	5%	1/6W
R232	1-249-421-11	CARBON	2.2K	5%	1/6W
R233	1-249-385-11	CARBON	2.2	5%	1/6W
R235	1-249-385-11	CARBON	2.2	5%	1/6W
R251	1-215-469-00	METAL	100K	1%	1/6W
R252	1-215-469-00	METAL	100K	1%	1/6W
R261	1-247-895-00	CARBON	470K	5%	1/6W
R262	1-247-895-00	CARBON	470K	5%	1/6W
R263	1-249-429-11	CARBON	10K	5%	1/6W
R301	1-249-441-11	CARBON	100K	5%	1/6W
R302	1-249-441-11	CARBON	100K	5%	1/6W
R303	1-249-411-11	CARBON	330	5%	1/6W
R304	1-249-409-11	CARBON	220	5%	1/6W
R305	1-249-429-11	CARBON	10K	5%	1/6W
R310	1-249-441-11	CARBON	100K	5%	1/6W
R312	1-249-417-11	CARBON	1K	5%	1/6W
R313	1-249-425-11	CARBON	4.7K	5%	1/6W
R314	1-249-417-11	CARBON	1K	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	1-249-413-11	CARBON	470	5%	1/6W
R322	1-249-417-11	CARBON	1K	5%	1/6W
R323	1-249-411-11	CARBON	330	5%	1/6W
R324	1-249-411-11	CARBON	330	5%	1/6W
R325	1-249-411-11	CARBON	330	5%	1/6W
R326	1-249-411-11	CARBON	330	5%	1/6W
R327	1-249-411-11	CARBON	330	5%	1/6W
R328	1-249-411-11	CARBON	330	5%	1/6W
R329	1-249-411-11	CARBON	330	5%	1/6W
R330	1-249-411-11	CARBON	330	5%	1/6W
R331	1-249-411-11	CARBON	330	5%	1/6W
R357	1-215-394-00	CARBON	75	5%	1/6W
R358	1-249-417-11	CARBON	1K	5%	1/6W
R359	1-249-405-11	CARBON	100	5%	1/6W
R401	1-249-930-11	CARBON	2K	1%	1/4W
R402	1-214-730-00	METAL	1.1K	1%	1/4W
R403	1-246-545-00	CARBON	1M	1%	1/4W
R404	1-247-721-11	CARBON	4.7K	1%	1/4W
R405	1-247-717-11	CARBON	2.2K	1%	1/4W
R406	1-247-717-11	CARBON	2.2K	1%	1/4W
R407	1-249-983-11	CARBON	330K	1%	1/4W
R408	1-249-921-11	CARBON	820	1%	1/4W
R409	1-247-713-11	CARBON	1K	1%	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			
R410	1-249-921-11	CARBON	820	1%	1/4W
R411	1-249-469-11	CARBON	100K	1%	1/4W
R412	1-247-193-00	CARBON	22K	1%	1/4W
R413	1-247-700-11	CARBON	100	1%	1/4W
R414	1-247-700-11	CARBON	100	1%	1/4W
R415	1-249-469-11	CARBON	100K	1%	1/4W
R416	1-249-469-11	CARBON	100K	1%	1/4W
R451	1-249-417-11	CARBON	1K	5%	1/6W
R452	1-249-405-11	CARBON	100	5%	1/6W
R501	1-249-930-11	CARBON	2K	1%	1/4W
R502	1-249-924-91	CARBON	1.1K	1%	1/4W
R503	1-246-545-00	CARBON	1M	1%	1/4W
R504	1-247-721-11	CARBON	4.7K	1%	1/4W
R505	1-247-717-11	CARBON	2.2K	1%	1/4W
R506	1-247-717-11	CARBON	2.2K	1%	1/4W
R507	1-249-983-11	CARBON	330K	1%	1/4W
R508	1-249-921-11	CARBON	820	1%	1/4W
R509	1-247-713-11	CARBON	1K	1%	1/4W
R510	1-249-921-11	CARBON	820	1%	1/4W
R512	1-247-193-00	CARBON	22K	1%	1/4W
R551	1-249-417-11	CARBON	1K	5%	1/6W
R552	1-249-405-11	CARBON	100	5%	1/6W
R703	1-249-440-11	CARBON	82K	5%	1/6W
R704	1-249-440-11	CARBON	82K	5%	1/6W
R705	1-215-468-00	CARBON	91K	5%	1/6W
R706	1-215-468-00	CARBON	91K	5%	1/6W
R801	1-249-429-11	CARBON	10K	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
R806	1-249-429-11	CARBON	10K	5%	1/6W
R807	1-249-429-11	CARBON	10K	5%	1/6W
R808	1-249-429-11	CARBON	10K	5%	1/6W
R809	1-249-429-11	CARBON	10K	5%	1/6W
R810	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	1-249-401-11	CARBON	47	5%	1/6W
R904 ⚠	1-212-966-00	FUSIBLE	22	5%	1/2W F
R905	1-249-417-11	CARBON	1K	5%	1/6W
R906	1-249-421-11	CARBON	2.2K	5%	1/6W
R907	1-249-437-11	CARBON	47K	5%	1/6W
R908	1-247-891-00	CARBON	330K	5%	1/6W
R909	1-249-429-11	CARBON	10K	5%	1/6W
R910 ⚠	1-212-966-00	FUSIBLE	22	5%	1/2W F
R911 ⚠	1-212-966-00	FUSIBLE	22	5%	1/2W F
RV101	1-237-194-11	RES, ADJ, CARBON 20K (E-F BALANCE)			
RV102	1-237-192-11	RES, ADJ, CARBON 5K (FOCUS BIAS)			
RV201	1-237-194-11	RES, ADJ, CARBON 20K (FOCUS GAIN)			
RV202	1-237-194-11	RES, ADJ, CARBON 20K (TRACKING GAIN)			
RV203	1-228-990-00	RES, ADJ, METAL GLAZE 1K (RF PLL)			
RV451	1-237-438-11	RES, VAR, CARBON 20K/20K (HEADPHONES LEVEL)			
S252	1-570-822-11	SWITCH, LEAF (LIMIT IN)			
S351	1-554-481-00	SWITCH, SLIDE (DIGITAL OUT ON/OFF)			
S701	1-570-203-11	SWITCH, LEAF (LOADING IN/OUT)			
S801	1-554-303-21	SWITCH, KEY BOARD (1)			
S802	1-554-303-21	SWITCH, KEY BOARD (2)			
S803	1-554-303-21	SWITCH, KEY BOARD (3)			

ELECTRICAL PARTS

Ref.No.	Part No.	Description
S804	1-554-303-21	SWITCH, KEY BOARD (4)
S805	1-554-303-21	SWITCH, KEY BOARD (5)
S806	1-554-303-21	SWITCH, KEY BOARD (6)
S807	1-554-303-21	SWITCH, KEY BOARD (7)
S808	1-554-303-21	SWITCH, KEY BOARD (8)
S809	1-554-303-21	SWITCH, KEY BOARD (9)
S810	1-554-303-21	SWITCH, KEY BOARD (10)
S811	1-554-303-21	SWITCH, KEY BOARD (11)
S812	1-554-303-21	SWITCH, KEY BOARD (12)
S813	1-554-303-21	SWITCH, KEY BOARD (13)
S814	1-554-303-21	SWITCH, KEY BOARD (14)
S815	1-554-303-21	SWITCH, KEY BOARD (15)
S816	1-554-303-21	SWITCH, KEY BOARD (16)
S817	1-554-303-21	SWITCH, KEY BOARD (17)
S818	1-554-303-21	SWITCH, KEY BOARD (18)
S819	1-554-303-21	SWITCH, KEY BOARD (19)
S820	1-554-303-21	SWITCH, KEY BOARD (20)
S821	1-554-303-21	SWITCH, KEY BOARD (+10)
S822	1-554-303-21	SWITCH, KEY BOARD (0)
S823	1-554-303-21	SWITCH, KEY BOARD (CHECK)
S824	1-554-303-21	SWITCH, KEY BOARD (CLEAR)
S825	1-554-303-21	SWITCH, KEY BOARD (AMS ⏮)
S826	1-554-303-21	SWITCH, KEY BOARD (AMS ⏭)
S827	1-554-303-21	SWITCH, KEY BOARD (⏪)
S828	1-554-303-21	SWITCH, KEY BOARD (▶)
S829	1-554-303-21	SWITCH, KEY BOARD (⏸)
S830	1-554-303-21	SWITCH, KEY BOARD (■)
S831	1-554-303-21	SWITCH, KEY BOARD (PROGRAM)
S832	1-554-303-21	SWITCH, KEY BOARD (⏩)
S833	1-554-303-21	SWITCH, KEY BOARD (⏏)
S834	1-554-303-21	SWITCH, KEY BOARD (DISPLAY TIME/NEXT)
S835	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S836	1-554-303-21	SWITCH, KEY BOARD (REPEAT 1/ALL)
S837	1-554-303-21	SWITCH, KEY BOARD (AUTO SPACE)
S991 ⚠	1-553-318-00	SWITCH, PUSH (AC POWER)(1 KEY)
T993 ⚠	1-448-718-11	TRANSFORMER, POWER
TB901	*1-535-121-00	TERMINAL
X301	1-567-741-11	VIBRATOR, CRYSTAL
X302	1-567-686-11	OSCILLATOR, CERAMIC
X801	1-567-192-11	OSCILLATOR, CERAMIC

ACCESSORY & PACKING MATERIAL

Part No.	Description
1-463-817-11	REMOTE COMMANDER (RM-D350A)
1-558-787-11	CORD, CONNECTION
⚠ 1-558-032-11	(UK) ...CORD, POWER
⚠ 1-558-835-11	(AEP)...CORD, POWER
3-701-630-00	BAG, POLYETHYLENE
3-765-893-11	MANUAL, INSTRUCTION
3-765-893-41	(AEP)...MANUAL, INSTRUCTION
*3-795-629-11	(AEP)...INSTRUCTION
*4-885-838-00	LABEL, CLASS 1
4-912-944-01	CUSHION
4-913-941-01	HOLDER, COMMANDER
4-917-494-01	LID BATTERY CASE (FOR RM-D350A)
4-918-115-31	INDIVIDUAL CARTON

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

The following checks will assist in the correction of most problems which you may encounter with your unit.
Should any problem persist after you have made these checks, consult your nearest Sony service facility.
Before going through the check list below, first refer back to the connection and operating procedures.

Symptom	Cause	Countermeasures
Play does not begin.	The disc is incorrectly inserted.	Insert the disc correctly.
	The disc is extremely dirty.	Clean the disc.
	The disc is inserted upside down.	Insert the disc with the label surface up.
	The ⏸ button has been pressed.	Press ⏸ again to release pause.
	Moisture condensation.	Leave the player turned on for about an hour.
No audio from one or both channels.	Incorrect connections.	Connect properly.
	The DIGITAL OUT switch is set to ON when using the LINE OUT jacks.	Set the DIGITAL OUT switch to OFF.

Sony Corporation
Audio Group

9-952-587-21

English
87E0257-1
Printed in Japan