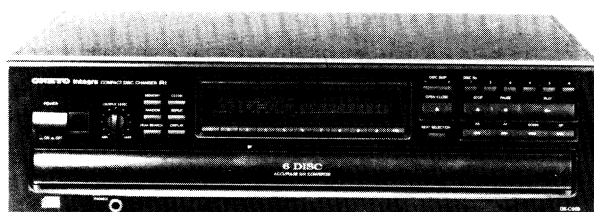


# ONKYO SERVICE MANUAL

## COMPACT DISC PLAYER

**MODEL DX-C909****MODEL DX-C606****Black model**

BHUD, BHUDN	120V AC, 60Hz
BHUP, BHUPF	230V AC, 50Hz
BHUW	120/220V AC, 50/60Hz

**SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY MARK  $\triangle$  ON THE SCHEMATIC DIAGRAM AND IN THE PARTS LIST ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE THESE COMPONENTS WITH ONKYO PARTS WHOSE PARTS NUMBERS APPEAR AS SHOWN IN THIS MANUAL.

MAKE LEAKAGE-CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE ACCEPTABLY INSULATED FROM THE SUPPLY CIRCUIT BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

**SPECIFICATIONS**

Signal readout system:	Optical non-contact
Reading rotation:	About 500~200r.p.m. (constant linear velocity)
Linear velocity:	1.2~1.4m/s
Error correction system:	Cross interleave readsolomon code
Decoded bits:	1 BIT PWM/ACCUPULSE D/A CONVERTER
• Sampling frequency:	352kHz (8 times oversampling)
Number of channels:	2 (Stereo)
Frequency response:	2Hz~20kHz
Total harmonic distortion:	0.0028% (at 1kHz)
Dynamic range:	98dB (at 1kHz)
Signal to noise ratio:	106dB (at 1kHz)
Channel separation:	92dB (at 1kHz)
Wow and Flutter:	Below threshold of measurability
Power consumption:	15 watts
Output level:	2 volts r.m.s.
Dimensions (W×H×D):	455×130×430mm 17-15/16"×5-1/8"×17"
Weight:	9kg, 19.8lbs.

Specifications are subject to change without notice.

**ONKYO**  
**AUDIO COMPONENTS**

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## SERVICE PROCEDURES

### 1. Safety-check out

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

Connect the insulating-resistance tester between the plug of power supply cord and chassis.

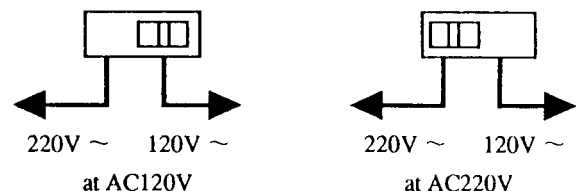
Specifications: More than 10Mohm at 500V.

### 2. Voltage Selector (Back panel)

Worldwide models are equipped with a voltage selector to conform with local power supplies. Be sure to set this switch to match the voltage of the power supply in user's area before turning the power switch on.

Voltage is changed by sliding the groove in the switch with a screw driver to the right or left.

Confirm that the switch has been moved all the way to the right or left before turning the power switch on.



## CAUTION ON REPLACEMENT OF OPTICAL PICKUP

The laser diode in the optical pickup block is so sensitive to static electricity, surge current and etc, that the components are liable to be broken down or its reliability remarkably deteriorated.

During repair, carefully take the following precautions. (The following precautions are included in the service parts.)

### PRECAUTIONS

#### 1. Ground for the work-desk.

Place a conductive sheet such as a sheet of copper (with impedance lower than 10MΩ) on the work-desk and place the set on the conductive sheet so that the chassis.

#### 2. Grounding for the test equipment and tools.

Test equipments and toolings should be grounded in order that their ground level is the same the ground of the power source.

#### 3. Grounding for the human body.

Be sure to put on a wrist-strap for grounding whose other end is grounded.

Be particularly careful when the workers wear synthetic fiber clothes, or air is dry.

#### 4. Select a soldering iron that permits no leakage and have the tip of the iron well-grounded.

#### 5. Do not check the laser diode terminals with the probe of a circuit tester or oscilloscope.

# PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

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

## WARNING!!

WHEN SERVICING, DO NOT APPROACH THE LASER EXIT WITH THE EYE TOO CLOSELY. IN CASE IT IS NECESSARY TO CONFIRM LASER BEAM EMISSION, BE SURE TO OBSERVE FROM A DISTANCE OF MORE THAN 30cm FROM THE SURFACE OF THE OBJECTIVE LENS ON THE OPTICAL PICK-UP BLOCK.

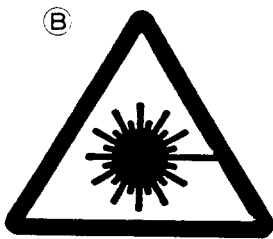
## LASER WARNING LABEL

The label shown below are affixed.

### 1. Warning label

This label is located on the arm of mechanism.

**(A)** **DANGER** —INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK FAILED OR DEFEATED. AVOID DIRECT EXPOSURE TO BEAM  
**CAUTION** —HAZARDOUS LASER AND ELECTROMAGNETIC RADIATION WHEN OPEN AND INTERLOCK DEFEATED  
**ATTENTION** —RAYONNEMENT LASER ET ELECTROMAGNETIQUE DANGEREUX SI OUVERT AVEC L'ECLANCHEMENT DE SECURITE ANNULE.



**(C)**

ADVARSEL: USYNLIG LASERSTRÅLING VED ÅBNING, NÅR SIKKERHEDSÅF-BRYDER ER UDE AF FUNKTION. UNDGÅ UDSÆTTELSE FOR STRÅLING.

**(D)**

VARO!  
 AVATTAESSA JA SUOJALUKITUS OHITETTAESSA OLET ALTTIINA NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.

**(E)**

VARNING  
 OSYNLIG LASERSTRÅLNING NÅR DENNA DEL ÄR ÖPPNAD OCH SPÄRREN ÄR URKOPPLAD. BETRakta EJ STRÅLEN.

- (A)** : Danger label  
**(B)** : Except 120V model  
**(C)** : Except 120V model  
**(D),(E)** : Only 230V model DX-C909 and worldwide model DX-C606

### Laser Diode Properties

- Material: GaAS/GaAlAs
- Wavelength: 780nm
- Emission Duration: continuous
- Laser output: max. 0.5mW\*  
 \*This output is the value measured at a distance about 1.8mm from the objective lens surface on the Optical Pick-up Block.

### 2. Certification label (120V model)

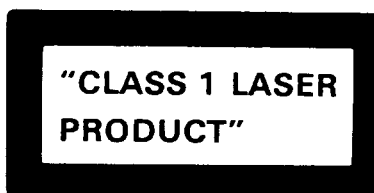
This label is located on the back panel.

PRODUCT IS CERTIFIED BY THE MANUFACTURER TO COMPLY WITH DHHS RULES 21 CFR SUBCHAPTER J APPLICABLE AT THE DATE OF MANUFACTURE



### 3. Class 1 label (Except 120V model)

This label is located on the back panel.



LUOKAN 1 LASERLAITE

KLASS 1 LASER APPARAT

ADVARSEL

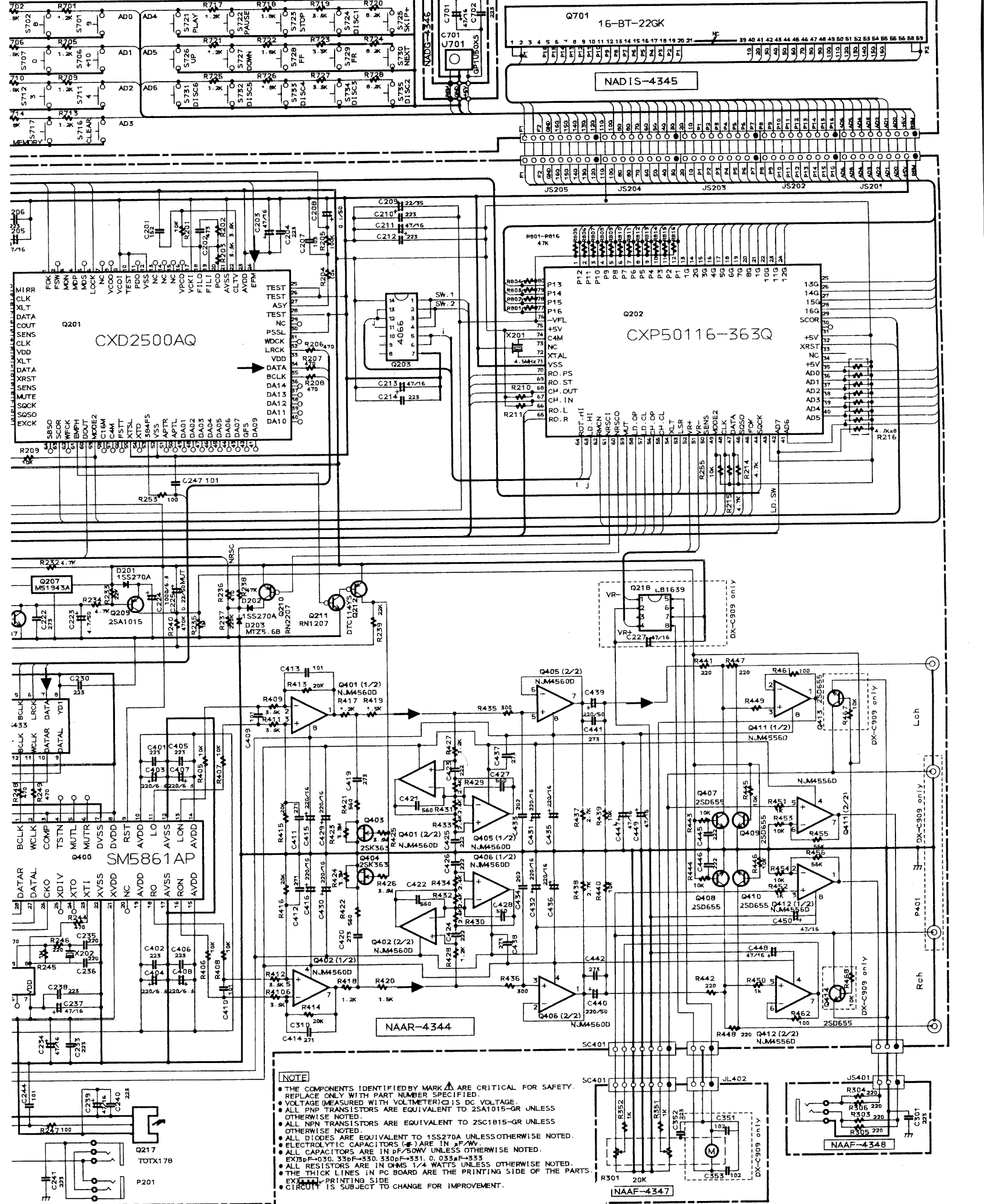
Denna mækning er anbragt på apparatets højre side og indikerer, at apparatet arbejder med laserstråler af klasse 1, hvilket betyder, at der anvendes laserstråler af svageste klasse, og at man ikke på apparatets yderside kan blive udsat for utilsladelig kraftig stråling.

APPARATET BØ/R KUN ÅBNES AF FAGFOLK MED SÉ RLIGT KENDSKAB TIL APPARATER MED LASERSTRÅLER!

Indvendigt i apparatet er anbragt den her gengivne advarselsmærkning, som advarer imod at foretage sådanne indgreb i apparatet, at man kan komme til at udsætte sig for laserstråling.

VAROITUS! LAITTEEN KÄYTTÄMINEN MUULLA KUIN TASSA KAYTTOOHJEESSA MAINTULLA TAVALLA SAATTAA ALTISTAA KÄYTTÄJÄN TURVALLISUUSLUOKAN 1 YLITTAVALLE NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE.

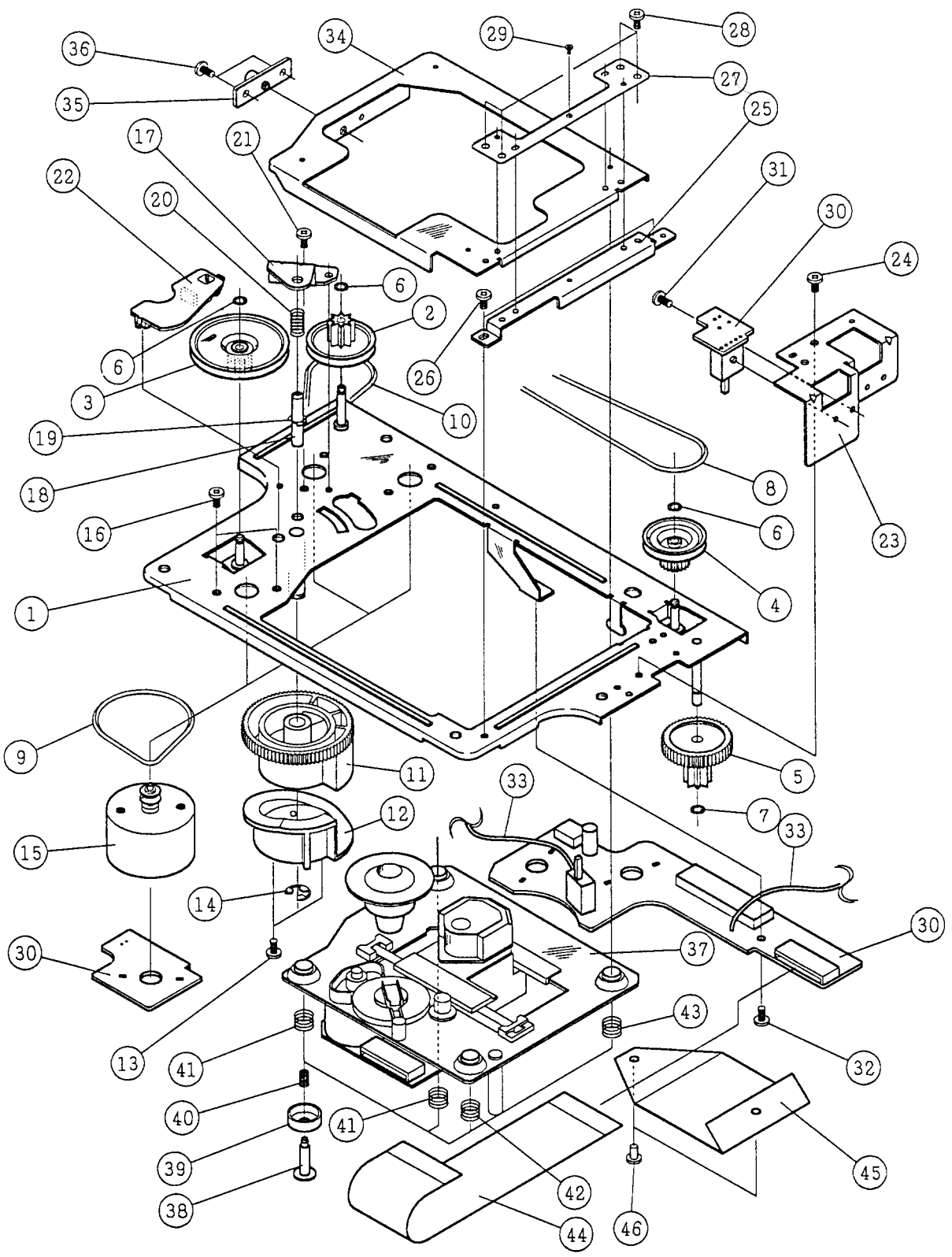




- [NOTE]**
- THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY. REPLACE ONLY WITH PART NUMBER SPECIFIED.
  - VOLTAGE MEASURED WITH VOLTMETER(C) IS DC VOLTAGE.
  - ALL PNP TRANSISTORS ARE EQUIVALENT TO 2SA1015-GR UNLESS OTHERWISE NOTED.
  - ALL NPN TRANSISTORS ARE EQUIVALENT TO 2SC1815-GR UNLESS OTHERWISE NOTED.
  - ALL DIODES ARE EQUIVALENT TO 1SS270A UNLESS OTHERWISE NOTED.
  - ELECTROLYTIC CAPACITORS (E) ARE IN  $\mu$ F/W.
  - ALL CAPACITORS ARE IN pF/50V UNLESS OTHERWISE NOTED.
  - EX: 100P=0.10, 330P=0.33, 0.033A=333
  - ALL RESISTORS ARE IN OHMS 1/4 WATTS UNLESS OTHERWISE NOTED.
  - THE THICK LINES IN PC BOARD ARE THE PRINTING SIDE OF THE PARTS.
  - EXPLANATION: PRINTING SIDE
  - CIRCUIT IS SUBJECT TO CHANGE FOR IMPROVEMENT.

# MECHANISM-EXPLODED VIEW

## CHANGER MECHANISM(CMC-B)



## PARTS LIST

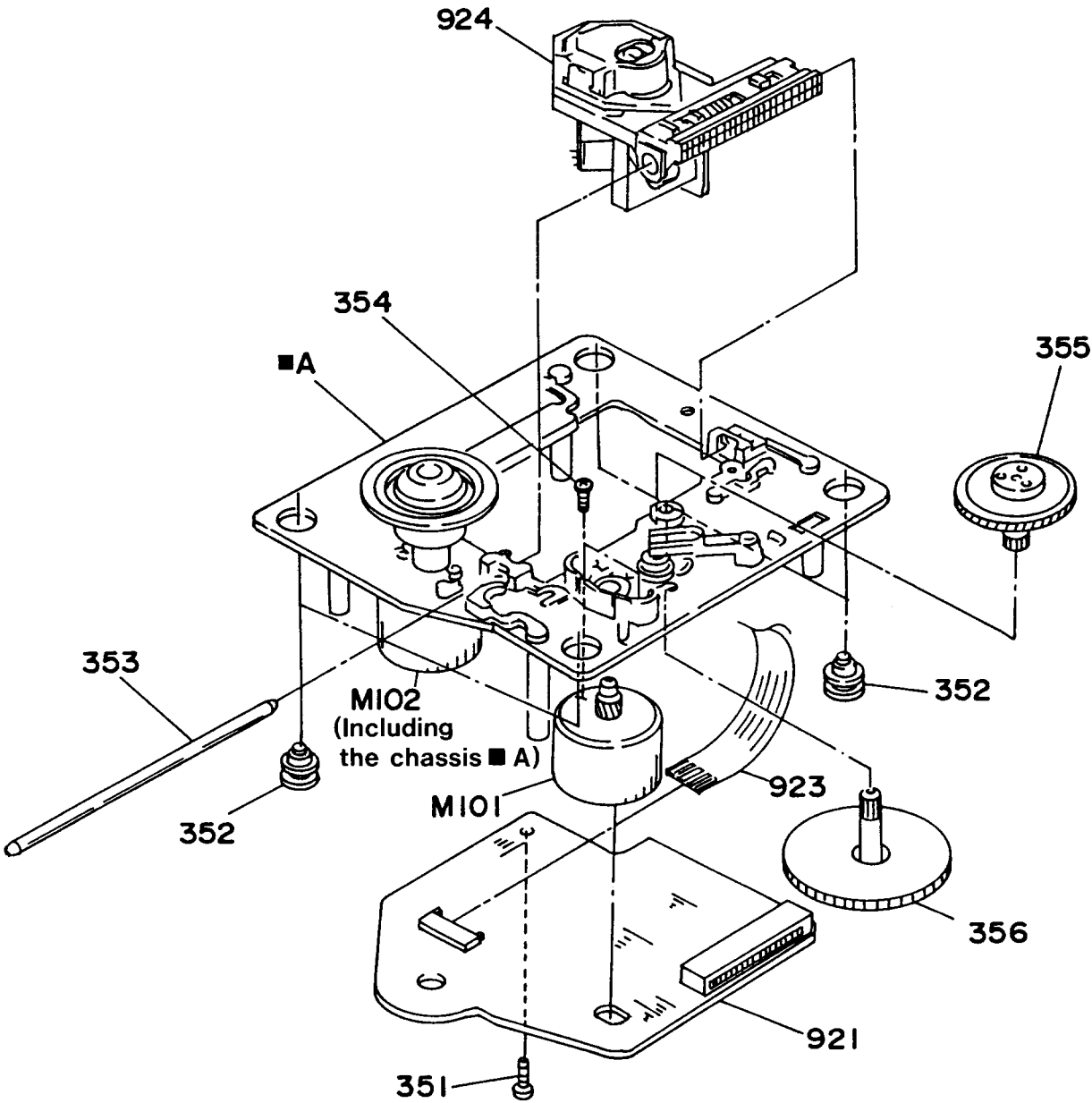
## CMC-B

REF.NO.	PART NO.	DESCRIPTION
1	24802004	Chassis ass'y
2	24810007	Gear A
3	24810008	Gear B
4	24810009	Gear C
5	24810010	Gear D
6	24834003	Washer
7	24840019	E ring
8	24816003	Belt
9	24816004	Belt
10	24816005	Belt
11	24810011	Gear cam A
12	24810012	Gear cam B
13	801502	Self-tapping screw
14	24840020	E ring
15	24804005	Motor ass'y
16	801503	Pan head screw
17	24822006	Plate holder
18	24828004	Shaft
19	24840021	E ring
20	24820004	Spring
21	801504	Pan head screw
22	24814002	Arm switch
23	24822007	Plate switch
24	801505	Screw
25	24822008	Plate B
26	801506	Screw
27	24822009	Plate
28	801507	Screw
29	801508	Screw
30	24840009	Connector pc board ass'y
	25065375	NMS-1219,Switch
CN101	24840022	Connector
CN102	24840012	Connector
CN103	24840011	Connector
31	801506	Screw
32	801509	Screw
33	24840013	Wire
34	24802005	Sub chassis
35	24840014	Lift lever
36	801505	Screw
37	24506980	BU-5BD3,Pickup drive unit
38	801510	Screw
39	24840015	Bush
40	24820005	Spring
41	24820006	Spring
42	24820007	Spring
43	24820008	Spring
44	24840016	Flexible wire
45	24840017	Vinyl sheet
46	24840018	Nylon rivert

## BU-5BD3

REF. NO.	PART NO.	DESCRIPTION
351	838426088	2.6TTB+8B(BC),Self-tapping screw
352	24818001	Insulator A
353	24828001	Sled shaft
354	82142003	2P+3F(BC),Pan head screw
355	24810004	Wheel
356	24810005	Wheel
921	24505321	AR-AS-1,RF/Servo pc board ass'y
923	2043120010	Flexible cable
924	24110011	KSS-240A,Optical pickup
M101	24804002	Sled motor ass'y
M102	24804003	Spindle motor ass'y
S101	25065446	NLF-11022,Leaf switch

# PICK-UP DRIVE UNIT(BU-5BD3)

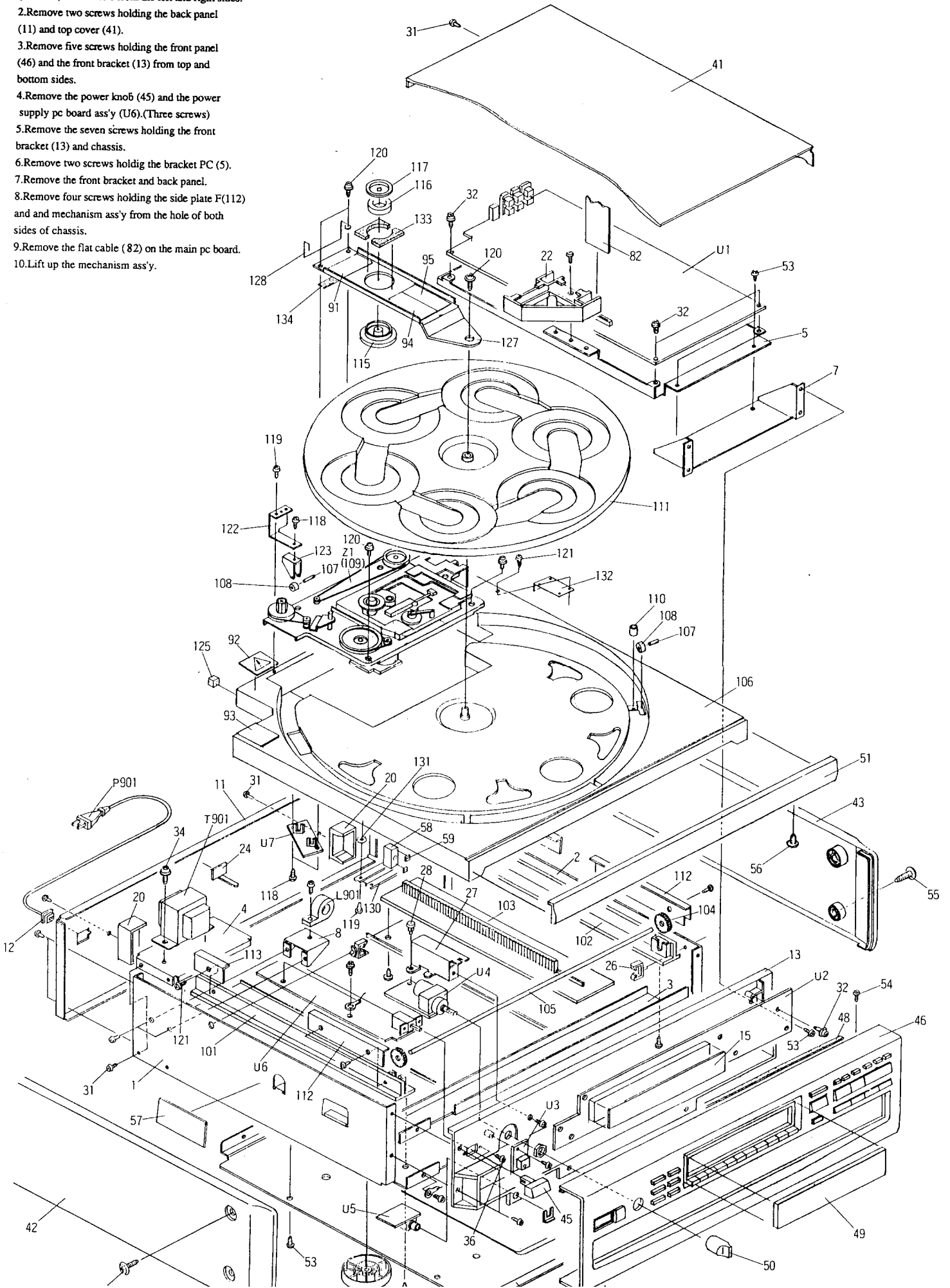




## Mechanism removal

1. Remove eight screws holding the side panels (42 & 43) and chassis from the left and right sides.
2. Remove two screws holding the back panel (11) and top cover (41).
3. Remove five screws holding the front panel (46) and the front bracket (13) from top and bottom sides.
4. Remove the power knob (45) and the power supply pc board ass'y (U6). (Three screws)
5. Remove the seven screws holding the front bracket (13) and chassis.
6. Remove two screws holding the bracket PC (5).
7. Remove the front bracket and back panel.
8. Remove four screws holding the side plate F (112) and mechanism ass'y from the hole of both sides of chassis.
9. Remove the flat cable (82) on the main pc board.
10. Lift up the mechanism ass'y.

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# PARTS LIST

## MODEL DX-C909

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	27130671	Bracket L	57	28175189	Insulator plate <N>	101	27301472A	Guide rail L
2	27130672A	Bracket R	58	24834004	Block	102	27301473	Guide rail R
3	27130675	Bracket F	81	260208	Binder	103	27301476A	Rack
4	27130668	Bracket PT	82	2041294010	NCFC1-294010,Flat cable	104	27301470	Gear
5	27130676	Bracket PC	83	2009990212	NSAS-14P0311,Socket	105	27260309	Shaft,gear
7	27141507	Bracket FR	91	29360807	Label,danger	106	24840003B	Tray
8	27141514	Bracket,core	92	25361218	Label,laser <P/W>	107	27260308	Shaft,roller
10	27170283A	Bottom board	93	25360811A	Label <P>	108	27301465A	Roller
11	27121530A	Back panel <D>	94	25361298A	Label SEM <P>	109	24506981A	CMC-B,Changer mechanism
	27121530-1A	Back panel <P>	95	25361342A	Label SEM/FIN <P>		24506980	BU-5BD3,PU drive unit
	27121530-2A	Back panel <W>	96	29360840	Label,sheet <D>	110	24834001	Tube
12	27300750	△ Bushing, cord	97	29360687	Label,class 1 <P/W>	111	24840004	Carousel
13	27110675B	Front bracket	L901	230910	△ ESD-R-25DB,Core	112	27267767A	Side plate F
14	28140729	Cushion	P901	253168 or 253146	△ AS-UC-6 #18, △ Power supply cord <D>	113	27267768	Side plate R
15	28133278	Back plate		253149	△ AS-CEE 250V 2.5A,Power supply cord <P/W>	114	27267801	Side plate RR
20	27190874	Holder	S902	25065123	△ NSS-1258P,Voltage selector switch <W>	115	27301474	Cap CH
22	27190869	Holder	T901	2300769	△ NPT-1137D,Power transformer <D>	116	28181019A	Magnet CH
24	27190882	K-103G,Holder		2300770	△ NPT-1137P,Power transformer <P>	117	27301475	Yoke CH
25	27300833	WS-2NS,Clamp		2300772	△ NPT-1137DG,Power transformer <W>	118	838430068	3TTB+6B(BC),Self-tapping screw
26	27190541	WS-1NS,Clamp	U1	1H182544-1	NAAR-4344-1,Main circuit pc board ass'y	119	833430080	3TTP+8P(BC),Self-tapping screw
27	27141555	Bracket,volume	U2	1H182545-1	NADIS-4345-1,Display circuit pc board ass'y	120	831430100	3TTW+10P(BC),Self-tapping screw
28	880009	NRP-345,Plastic rivert	U3	1H182546-1	NADG-4346-1,Remote sensor pc board ass'y	121	834430088	3TTS+8B(BC),Self-tapping screw
29	27270180	Spacer	U4	1H182547-1	NAAF-4347-1,Headphone volume pc board ass'y	122	24822002	Bracket A
31	801230	3STS+8BQ(BC),Self-tapping screw	U5	1H182548-1	NAAF-4348-1,Headphone terminal pc board ass'y	123	24822003	Bracket B
32	831130088	3TTW+8B,Self-tapping screw	U6	1H182549-1	NAPS-4349-1,Power supply circuit pc board ass'y	124	28140451	Cushion
33	833430080	3TTP+8P(BC),Self-tapping screw	U7	1H182550-1	NASW-4350-1,Disc sensor pc board ass'y	125	24836006	Cushion, tray
34	830440109	4TTC+10C(BC),Self-tapping screw	Z1		NCD-51S-C,CD mechanism ass'y	126	838426088	2.6TTB+8B(BC),Self-tapping screw
35	834430108	3TTS+10B(BC),Self-tapping screw				127	27301477A	Arm
36	82143006	3P+6FN(BC),Pan head screw				128	24820002	Spring
41	28184500	Top cover				129	24836005	Cushion
42	28185375B	Side panel L				130	24822011	Bracket
43	28185376B	Side panel R				131	24834005	Washer
45	28324531	Knob,power				132	24822010	Bracket BT
46	1H182121	Front panel ass'y				133	24836003	Cushion CH
48	28140837	0.9×250×10,Cushion						
49	28191620	Clear plate						
50	28324492	Knob,level						
51	28400759	Tray panel						
52	27175254	Leg						
53	834430088	3TTS+8B(BC),Self-tapping screw						
54	833430080	3TTP+8P(BC),Self-tapping screw						
55	837440169	4TTP+16C(BC),Self-tapping screw						
56	833440120	4TTP+12P(BC),Self-tapping screw						

NOTE: <D>:120V model only  
<P>:230V model only  
<W>:Worldwide model only  
<N>:U.S.A. model only

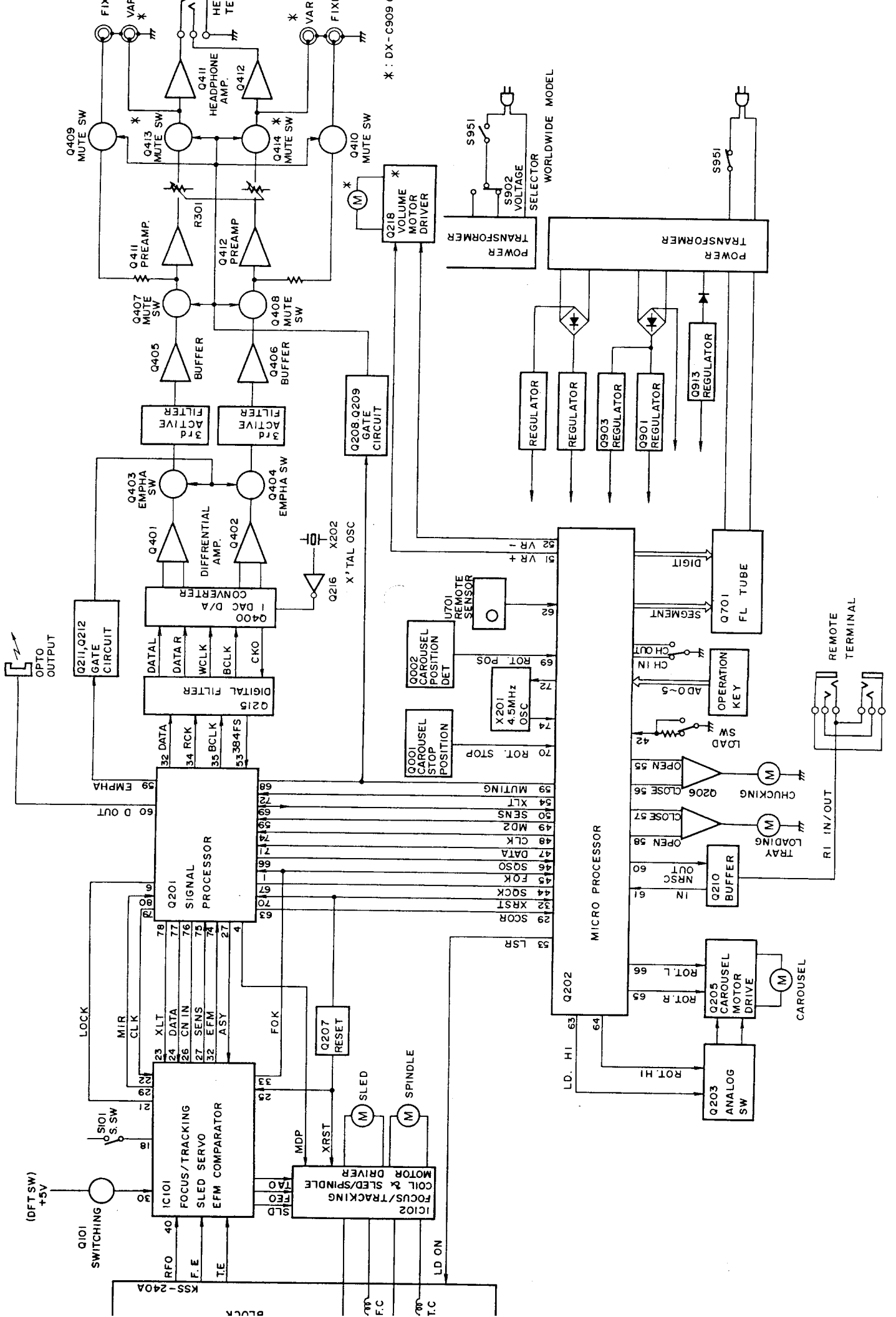
**MODEL DX-C606**

REF.NO.	PART NO.	DESCRIPTION	REF.NO.	PART NO.	DESCRIPTION
1	27130673	Bracket L	57	28175189	Insulator plate <N>
2	27130674A	Bracket R	58	24834004	Block
3	27130675	Bracket F	81	260208	Binder
4	27130668	Bracket PT	82	2041294010	NCFC1-294010,Flat cable
5	27130676	Bracket PC	83	2009990212	NSAS-14P0311,Socket
7	27141507	Bracket FR	91	29360807	Label,danger
8	27141514	Bracket,core	92	25361218	Label,laser <W>
10	27170284A	Bottom board	93	25360811A	Label <W>
11	27121531A	Back panel <D>	94	25361298A	Label SEM <W>
	27121531-1A	Back panel <W>	95	25361342A	Label SEM/FIN <W>
12	27300750	△ Bushing,cord	96	29360840	Label,sheet <D>
13	27110675B	Front bracket	97	29360687	Label,class 1 <W>
14	28140729	Cushion	L901	230910	△ ESD-R-25DB,Core
15	28133278	Back plate	P901	253168 or 253146	△ AS-UC-6 #18, Power supply cord <D>
20	27190874	Holder		253149	△ AS-CEE 250V 2.5A,Power supply cord <W>
22	27190869	Holder	S902	25065123	△ NSS-1258P, Voltage selector switch <W>
24	27190882	K-103G,Holder	T901	2300769-1	△ NPT-1137D,Power transformer <D>
25	27300833	WS-2NS,Clamp		2300772-1	△ NPT-1137DG,Power transformer <W>
26	27190541	WS-1NS,Clamp	U1	1H185544-2	NAAR-4344-2,Main circuit pc board ass'y
27	27141555	Bracket,volume	U2	1H185545-2	NADIS-4345-2,Display circuit pc board ass'y
28	880009	NRP-345,Plastic rivert	U3	1H185546-2	NADG-4346-2,Remote sensor pc board ass'y
29	27270180	Spacer	U4	1H185547-2	NAAF-4347-2,Headphone volume pc board ass'y
31	834430088	3STS+8B(BC),Self-tapping screw	U5	1H185548-2	NAAF-4348-2,Headphone terminal pc board ass'y
32	831130088	3TTW+8B,Self-tapping screw	U6	1H185549-2	NAPS-4349-2,Power supply circuit pc board ass'y
33	833430080	3TTP+8P(BC),Self-tapping screw	U7	1H185550-2	NASW-4350-2,Disc sensor pc board ass'y
34	830440109	4TTC+10C(BC),Self-tapping screw	Z1		NCD-51S-C,CD mechanism ass'y
35	834430108	3TTS+10B(BC),Self-tapping screw			
36	82143006	3P+6FN(BC),Pan head screw			
41	28184500	Top cover			
42	28185375B	Side panel L			
43	28185376B	Side panel R			
45	28324531	Knob,power			
46	1H185121	Front panel ass'y			
48	28140837	0.9×250×10,Cushion			
49	28191620	Clear plate			
50	28324492	Knob,level			
51	28400759	Tray panel			
52	27175254	Leg			
53	834430088	3TTS+8B(BC),Self-tapping screw			
54	833430080	3TTP+8P(BC),Self-tapping screw			
55	837440169	4TTP+16C(BC),Self-tapping screw			
56	833440120	4TTP+12P(BC),Self-tapping screw			

NOTE: <D>:120V model only  
<W>:Worldwide model only  
<N>:U.S.A. model only

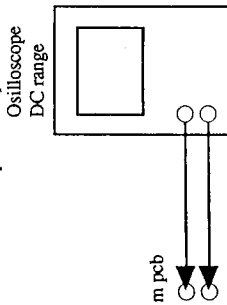
NOTE:  
THE COMPONENTS IDENTIFIED BY MARK △ ARE  
CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK.  
REPLACE ONLY WITH PART NUMBER SPECIFIED.

# LOCK DIAGRAM

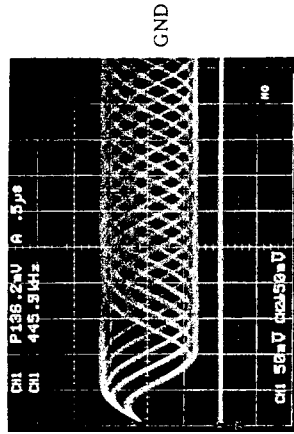


# ADJUSTMENT PROCEDURES

necessary to perform the adjustment of optical pickup.  
Information should be made when replacing the optical pickup.  
Set the oscilloscope to test points RF and VC.



the power switch on.  
the test disc YEDS-18 on the tray and press the play button.  
the waveform on the oscilloscope is optimum eye  
and optimum level as shown photo 1.  
an eye pattern means that shape "◇" can be clearly  
observed at the center of the waveform.



## 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.

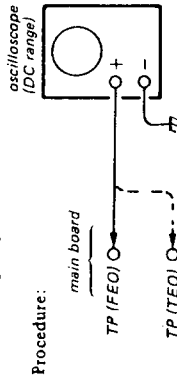
- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, it is more susceptible to mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

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	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	low or high	—
• Sound is interrupted during PLAY. Or time counter display stops progressing.	—	—	low
• More noise during 2-axis device operation.	high	high	high

The following is a simple adjustment method.

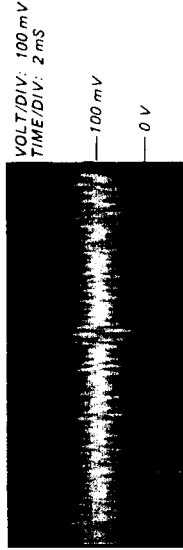
- Simple Adjustment -

**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.

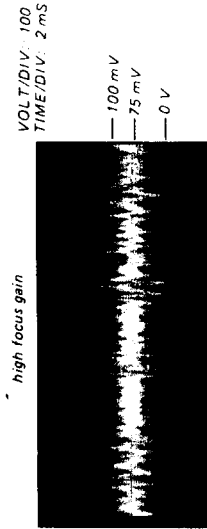


**Procedure:**

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 RE/Servo board TP (FE).
4. Adjust RV102 so that the waveform is as shown in the figure below. (focus gain adjustment)



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



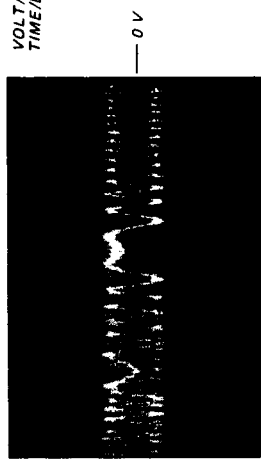
5. Connect oscilloscope to RE/Servo board TP (TE).
6. Adjust RV101 so that the waveform is as shown in the figure below. (tracking gain adjustment)



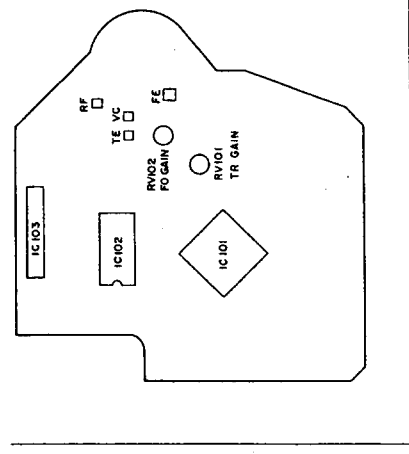
- Incorrect Examples (fundamental wave appears)



low tracking gain



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



## PRINTED CIRCUIT BOARD PARTS LIST

MAIN CIRCUIT PC BOARD(NAAR-4344-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION	MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
							Diodes
					D911	224450512	MTZ5.1B
					D913,D917	223205	1SS270A
					D914,D915	22380046	AM01Z
					D916	224450562	MTZ5.6B
					D918	224450753	MTZ7.5C
					D919,D920	22380046	AM01Z
							Ceramic oscillator
					X201	3010188	CTS4.50MGW040
							X'tal
					X202	3010159	AT-38-169
							Capacitors
					C201	374721524	1500pF ± 5%,50V,Plastic
					C202	374724734	0.047 μ F ± 5%,50V,Plastic
					C203,C205	354744709	47 μ F,16V,Elect.
					C207	374721034	0.01 μ F ± 5%,50V,Plastic
					C208	354781099	0.1 μ F,50V,Elect.
					C209	354762209	22 μ F,35V,Elect.
					C211,C213	354744709	47 μ F,16V,Elect.
					C215,C220	374721044	0.1 μ F ± 5%,50V,Plastic
					C216-C218	354744709	47 μ F,16V,Elect.
					C221	354744709	47 μ F,16V,Elect.
					C222	374722734	0.027 μ F ± 5%,50V,Plastic
					C223	354780479	4.7 μ F,50V,Elect.
					C224	354721029	1000 μ F,6.3V,Elect.
					C225	354782299	0.22 μ F,50V,Elect.
					C227,C228	354744709	47 μ F,16V,Elect.
					C231,C234	354744709	47 μ F,16V,Elect.
					C237,C239	354744709	47 μ F,16V,Elect.
					C242	354744709	47 μ F,16V,Elect.
					C246	354780229	2.2 μ F,50V,Elect.
					C403,C404	354722219	220 μ F,6.3V,Elect.
					C407,C408	354722219	220 μ F,6.3V,Elect.
					C411-C414	373302714	270pF ± 5%,125V,PP
					C415,C416	393142217	220 μ F,16V,Elect.
					C419,C420	374722734	0.027 μ F ± 5%,50V,Plastic
					C423-C426	374722224	2200pF ± 5%,50V,Plastic
					C429-C432	393142217	220 μ F,16V,Elect.
					C433,C434	374722024	2000pF ± 5%,50V,Plastic
					C435,C436	393142217	220 μ F,16V,Elect.
					C439,C440	393182217	220 μ F,50V,Elect.
					C441,C442	374722734	0.027 μ F ± 5%,50V,Plastic
					C445,C446	374722224	2200pF ± 5%,50V,Plastic
					C447-C450	393144707	47 μ F,16V,Elect.
					C903,C904	374722244	0.22 μ F ± 5%,50V,Plastic
					C905,C906	393154727	4700 μ F,25V,Elect.
					C907	354743329	3300 μ F,16V,Elect.
					C908,C932	354742229	2200 μ F,16V,Elect.
					C909	354781019	100 μ F,50V,Elect.
					C910,C926	354762209	22 μ F,35V,Elect.
							ICs
	Q201	22240487	CXD2500AQ				
	Q202	22240568	CXP50116-363Q				
	Q203	222840661TOS	4066B				
	Q205	22240239	TA7291S				
	Q206	22240034	LA6510				
	Q207	22240018	M51943ASL				
	Q215	22240321	YM3433				
	Q216	222755	74HCU04P				
	Q217	24120031	TOTX178				
©	Q218	22240322	LB1639				
	Q400	22240520	SM5861AP				
	Q401,Q402	222579	NJM4560D				
	Q405,Q406	222579	NJM4560D				
	Q411,Q412	222654	NJM4556D				
	Q901	222780055MIT	M5F78M05				
	Q912	222956	NJM2068D-D				
	Q914	222780053	78L05				
			Transistors				
	Q208,Q211	2213570	RN1207				
	Q209	2211454 or 2211455	2SA1015-Y or 2SA1015-GR				
	Q210,Q212	2213590	RN2207				
	Q403,Q404	2212524 or 2212525	2SK363-GR or 2SK363-BL				
	Q407-Q410	2211705 or 2211706	2SD655-E or 2SD655-F				
©	Q413,Q414	2211705 or 2211706	2SD655-E or 2SD655-F				
	Q903	2201074 or 2201073	2SD880-Y or 2SD880-O				
	Q904,Q905	2212304	2SK381-D				
	Q906,Q910	2211255 or 2211254	2SC1815-GR or 2SC1815-Y				
	Q907,Q911	2211454 or 2211455	2SA1015-Y or 2SA1015-GR				
	Q908	2201285 or 2201284	2SD882-Q or 2SD882-R				
	Q909	2201275 or 2201274	2SB772-Q or 2SB772-R				
	Q913	2211504 or 2211503	2SA950-Y or 2SA950-O				
			Diodes				
	D201,D202	223205	1SS270A				
	D203	224450562	MTZ5.6B				
	D901-D904	22380046	AM01Z				
	D905-D908	22380045	RL203				
	D909,D912	223205	1SS270A				
	D910	224453002	MTZ30B				

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
		Capacitors	
	C915,C916	374721024	1000pF±5%,50V,Plastic
	C917	354722219	220 μ F,6.3V,Elect.
	C918,C922	354744709	47 μ F,16V,Elect.
	C919	354741009	10 μ F,16V,Elect.
	C923,C931	354744709	47 μ F,16V,Elect.
	C927	354780229	2.2 μ F,50V,Elect.
	C928	354754719	470 μ F,25V,Elect.
	C929	354721029	1000 μ F,6.3V,Elect.
	C930	374722244	0.22 μ F±5%,50V,Plastic
	C938	354754719	470 μ F,25V,Elect.
		Resistor	
	R216	49163472408	4.7kohm×8,1/10W,Array
		Sockets	
	JS106	25050525	NSCT-3P348
	P101	25050372	NSCT-29P199
		Terminals	
	P102	25045330	NPJ-2PDBL184
☉	P401	25045351	NPJ-4PDWR197
●		25045353	NPJ-2PDBL199
		Plug	
	P402	25055151	NPLG-7P135
		Radiator	
		27160176	RAD56
		Pan head screw	
		82143006	3P+6FN(BC)
		Holder	
		27190751	
		Brackets	
		27141059	Ground
		Cord ass'y	
		2065525200	
DISPLAY CIRCUIT PC BOARD(NADIS-4345-1/2)			
MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
	Q701	212108	16-BT-22GK,FL tube
	S701-S709	25035548	NPS-111-S510,Push switch
	S711-S735	25035548	NPS-111-S510,Push switch
		28141185	Cushion for FL tube

REMOTE SENSOR PC BOARD(NADG-4346-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
	U701	24130003	GP1U50XS,Remote sensor
	C701	353744709	47 μ F,16V,Elect. capacitor

HEADPHONE AMPLIFIER PC BOARD(NAAF-4347-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
☉	R301	5104280	N16RGM20KB30F, Variable resistor
●		5142005A	N16RGM20KB30F, Variable resistor
		2061543101	Cord ass'y
	P402	25055151	NPLG-7P135,Plug

HEADPHONE TERMINAL PC BOARD(NAAF-4348-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
	P301	25045221	HSJ-0540-01-410, Headphone jack
		2063525100	Cord ass'y

POWER SUPPLY CIRCUIT PC BOARD(NAPS-4349-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
▲	C951	3500065A	DE7150FZ103PAC400V/ 125V,Capacitor IS
▲	S951	25035558	NPS-111-L520P, Power switch
		25060092	NTM-1S33,Terminal

DISC SENSOR PC BOARD(NASW-4350-1/2)

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
	Q001,Q002	24190037	GP1S53V,Photo interruptor
	SC001	2002390815	NSAS-8P0309,Socket

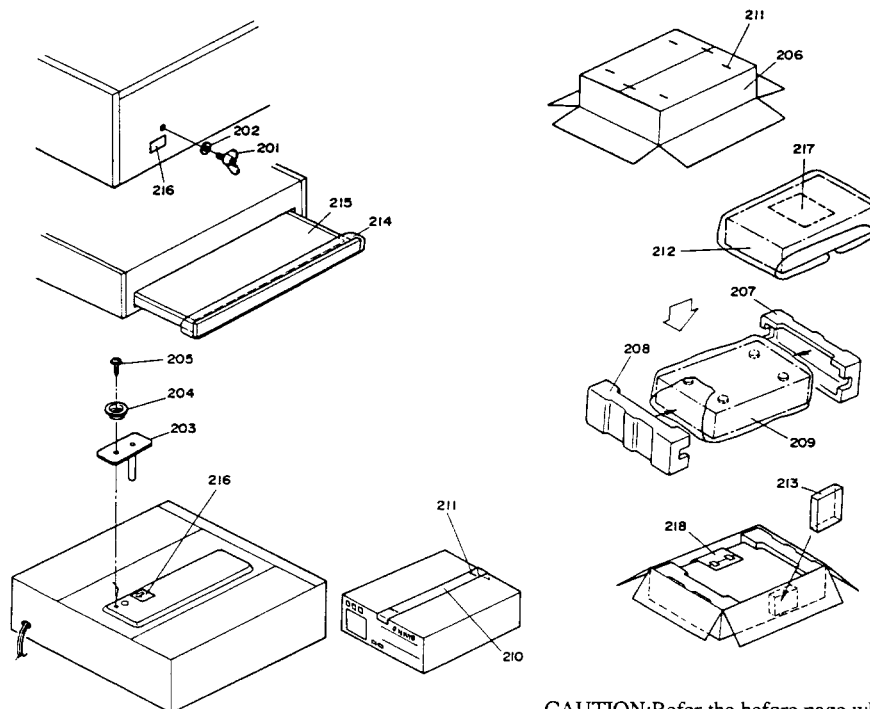
RF/SERVO PC BOARD

MARK	CIRCUIT NO.	PART NO.	DESCRIPTION
	IC101	22240394	CXA1372Q,IC
	IC102	22240551	LA6532M,IC
	Q101	2214290	DTC144EF,Transistor
	CN101	25050669	NSCT-22P473,Connector
	CN102	25050670	NSCT-12P474,Connector
	S101	25065446	NLF-11022,Leaf switch

NOTE ☉ : Model DX-C909 only  
● : Model DX-C606 only

NOTE:  
THE COMPONENTS IDENTIFIED BY MARK ▲ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.

## PACKING VIEW



CAUTION: Refer the before page when lock the transport screw.

## PART LIST

REF.NO.	PART NO.	DESCRIPTION	PART NO.	DESCRIPTION
201	800306	M5×20,Wing screw		Accessory bag ass'y
202	27270357	15×5×0.5,Spacer	2010098A	Connection cord
203	24822012	Bracket,pin	2010200	Connection cord RI
204	27265155A	Ring,cover	24140220A	RC-220C,Remote control unit <DX-C909>
205	834430088	3TTS+8B(BC),Self-tapping screw	24140219A	RC-219C,Remote control unit <DX-C606>
206	29052348	Master carton box <DX-C909>	3010054	UM-3,Battery
	29052347	Master carton box <DX-C606>	29100097	350×250,Polystyrene bag
207	29091548	Pad L	29341700	Instruction manual <D>
208	29091549	Pad R	29341701	Instruction manual <P/W>
209	29100038A	Polystyrene bag	29365019A	Warranty card <N>
210	29110071	Damplon tape	29365024A	Warranty card <F>
211	282301	Sealing hook	29100107	Bag for warranty card <F>
212	29095019-1	0.5×600×800,Protection sheet	29358002J	Service station list <N>
213	29091578	Pad W	25055040	CV-K-2,Conversion plug <W>
214	29095648	2.0×450×60,Protection sheet		
215	29095600	0.5×350×250,Protection sheet		
216	29361434	Label		
217	29361433	Label		

NOTE: <D>:120V model only  
<P>:230V model only  
<W>:Worldwide model only  
<N>:U.S.A. model only  
<F>:French model only

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