

# **ONKYO® SERVICE MANUAL**

## **COMPACT DISC PLAYER MODELS DX-7211/7111**



**Black and Silver models**

BUP, SUP, BUPT	230V AC, 50Hz
BUWT	220-230V /120V AC, 50/60Hz
BUGK	220V AC, 60Hz
BUDN	120V AC, 60Hz

### **SAFETY-RELATED COMPONENT WARNING!!**

COMPONENTS IDENTIFIED BY MARK  $\Delta$  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 PART 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 - 200 r.p.m. (constant linear velocity)
- Linear velocity: 1.2 - 1.4 m/s
- Error correction system: Cross Interleave Reed-Solomon code
- D/A converter: 1 bit PWM / ACCUPULSE D/A CONVERTER
- Sampling frequency: 352.8 kHz (Eight- times oversampling)
- Number of channels: 2 (stereo)
- Frequency response: 5 Hz - 20 kHz
- Total harmonic distortion: 0.004 % (at 1 kHz)
- Dynamic range: 96 dB
- Signal to noise ratio: 100 dB
- Channel separation: 90 dB (at 1 kHz)
- Wow and Flutter: Below threshold of measurability
- Output level: 2 volts r.m.s.
- Headphone jack: 1
- (DX-7211 only) Optimum load impedance 8 to 200 ohms
- Power consumption: 12 watts
- Power supply rating: DX-7211: AC 120 V, 60 Hz  
AC 230 V, 50 Hz  
AC 220 -230 V/120 V, Switchable 50/60 Hz  
AC 220 V, 60 Hz  
AC 240 V, 50 Hz
- DX-7111: AC 230 V, 50 Hz
- Dimensions (W × H × D): DX-7211: 435 × 91 × 308 mm (17-1/8" × 3-9/16" × 12-1/8")  
DX-7111: 435 × 91 × 302 mm
- Weight: DX-7211: 4.1 kg, (9.0 lbs. )  
DX-7111: 4.0 kg, (8.8 lbs.)

Specifications and external appearance are subject to change without notice because of product improvements .



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## SERVICE PROCEDURES

### 1. Safety-check out

(Only U.S.A. model)

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 the screw on the back panel.

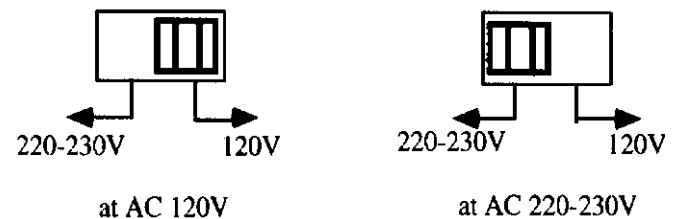
Specifications : 3.3Mohm $\pm$ 10% at 500V.

### 2. Voltage Selector (Rear Panel)

Worldwide models are equipped with a voltage selector to conform to local power supplied.

Be sure to set this switch to match the voltage of the power supply in your area before plugging in the unit. Models without a voltage selector can only be used in area where the power supply is the same as that of the unit.

#### VOLTAGE SELECTOR



#### Setting the voltage selector

1. Determine the proper for voltage for your area : 220V-230V or 120V.
2. If the preset voltage is not proper for your area, insert a screwdriver into the groove in the switch. Slide the switch all the way to the right (120V) or to the left (220-230V), which-ever is proper.

## CAUTION ON REPLACEMENT OF OPTICAL PICK UP

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 10M $\Omega$ ) 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 EYES 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.

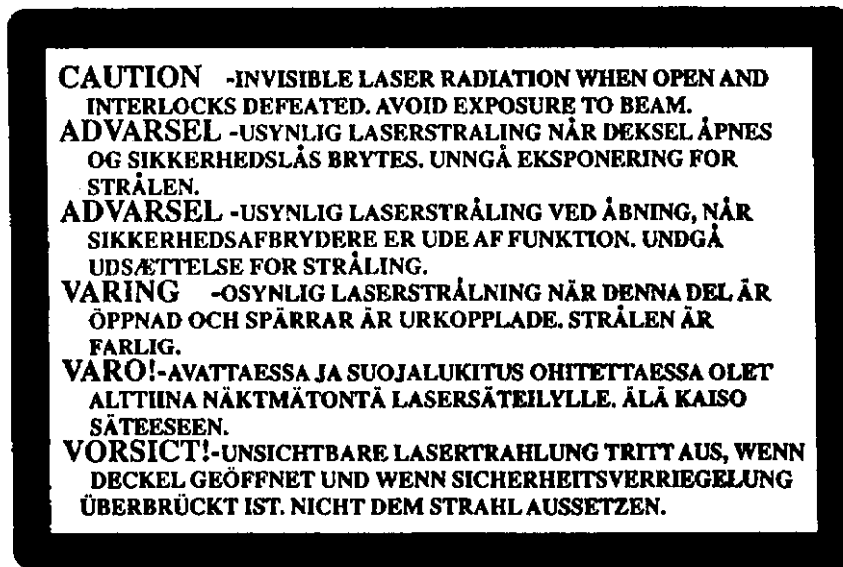
### Laser Diode Properties

- Material: GaAlAs
- Wavelength: 760-800nm
- Emission Duration: continuous
- Laser output: max. 0.5mW\*

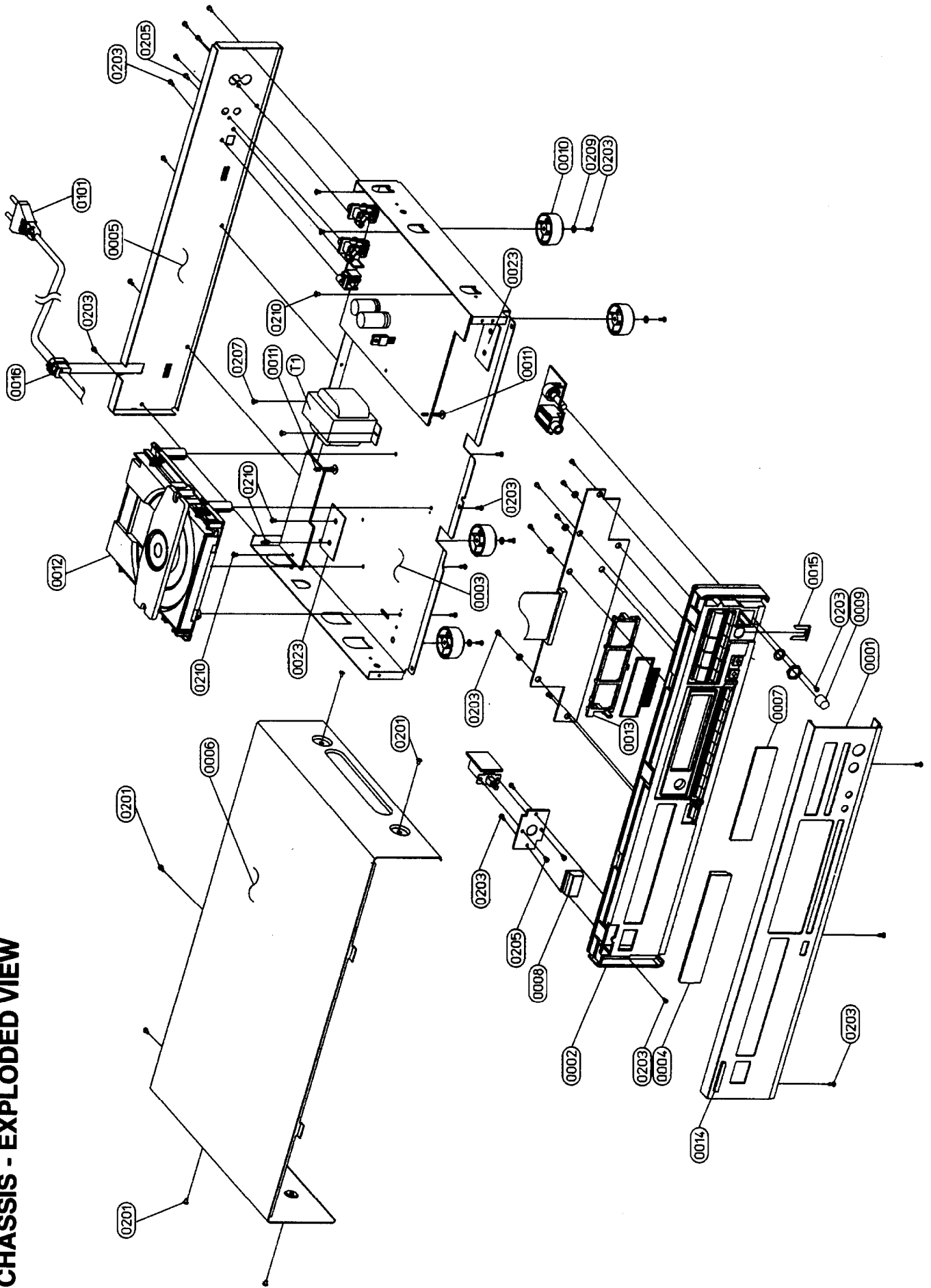
\* This output is the value measure at a distance about 1.8mm from the objective lens surface on the Optical pick-up Block.

## LASER WARNING LABELS

There labels are located on the mechanism.



**CHASSIS - EXPLODED VIEW**



## CHASSIS - EXPLODED VIEW PARTS LIST

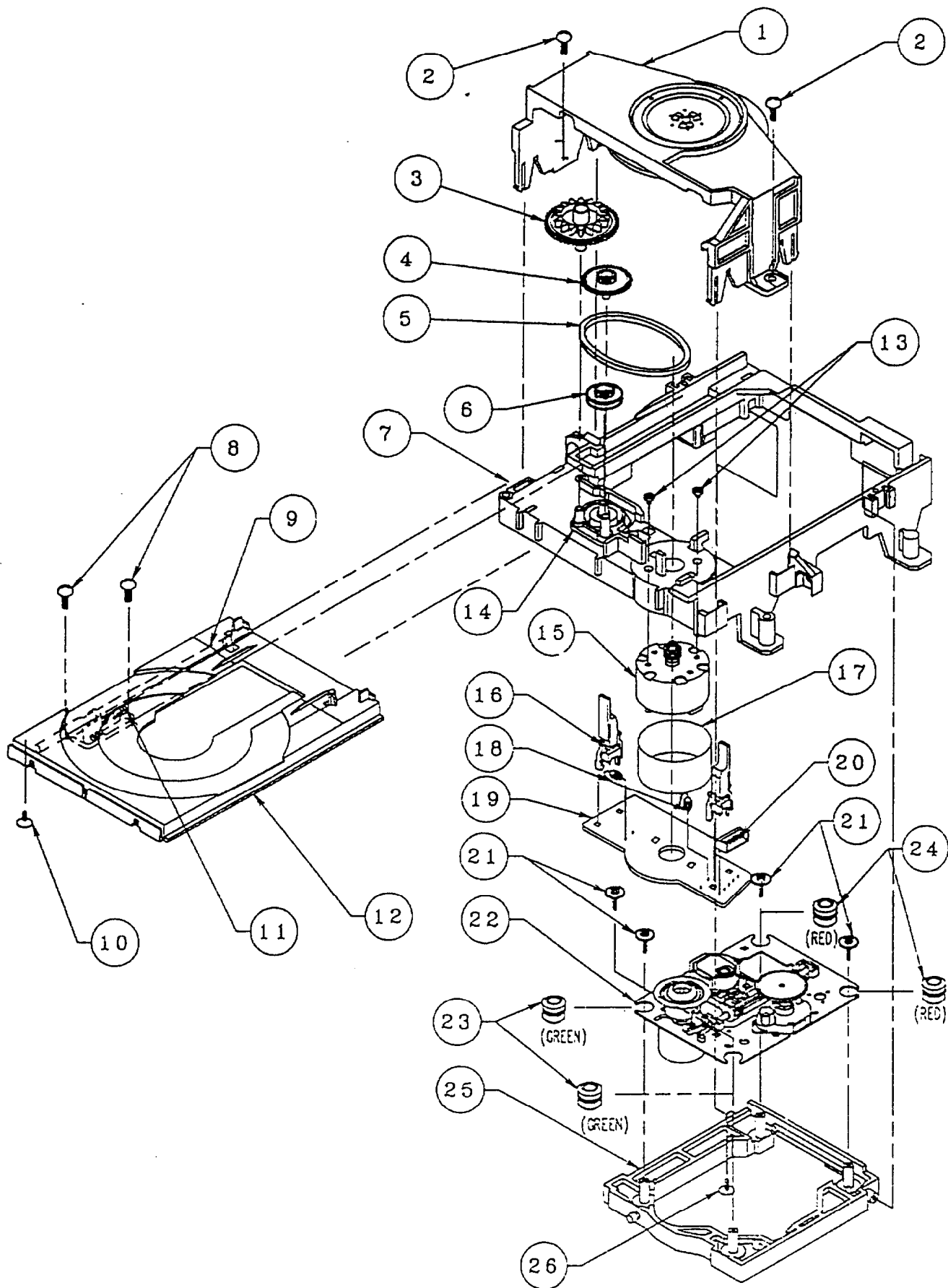
REF. NO.	PARTS NO.	DESCRIPTION	REF. NO.	PARTS NO.	DESCRIPTION
0001	1402-6552-0	FRONT PANEL (DX-7211) <B><P,D>	0023	4152-4011-0	COVER, CONNECTION PCB
	1402-6553-0	FRONT PANEL (DX-7211) <S><P>	0101	△ 7009-3100-1	AC CORD, 18AWGX2 SPT-2 UL/CSA <P,D>
	1402-6593-0	FRONT PANEL (DX 7111) <S>		△ 7009-3110-0	AC CORD (SEMCO) (DX-7111/DX-7211) <P>
0002	1402-6592-0	FRONT PANEL (DX-7111) <B>	0201	2954-3010-4000	ST SCREW 3X10MM (DX-7111)
	4152-3751-0	FRONT BRACKET <B>	0203	2954-3008-0000	TAPPING 3X8MM B-TITE (YEL.ZN)
	4152-3752-0	FRONT BRACKET <S>	0205	2904-3006-0000	SCREW M3X6
0003	1402-6570-0	CHASSIS	0207	2900-4006-3010	M4X0.5PX6MM W/FLAT WASHR
0004	1464-3302-0	CD DOOR <B>	0209	2842-3367-0	METAL WASHER (ID=3.3 OD=6.7)
	1464-3303-0	CD DOOR <S>	0210	2954-3006-0000	3X6MM B-TITE (YEL. ZN)
0005	1402-6581-0	REAR PANEL (DX 7211) <P>	T1	△ 1806-2162-0	POWER, 120/230V <P,D>
	1402-6583-0	REAR PANEL (DX-7211) <WT>		△ 1806-2166-0	POWER, 220V <PT>
	1402-6585-0	REAR PANEL (DX-7211) <D,P>	P5	7705-01502003	CONN WIRE ASSY
	1402-6588-0	REAR PANEL (DX-7111) <P>	P6	7506 12201004	6P CONN WIRE
0006	1402-6562-0	TOP COVER <B>	P9	7009-8640-0	CONN WIRE ASSY
	1402-6563-0	TOP COVER <S>	P10	7009-8630-0	CONN WIRE ASSY
0007	3715-3106-0	LENS (DX-7211) <B>	PCB-1	PCB-Q0011C-MAIN	MAIN PCB ASSY (DX-7211)
	3715 3107 0	LENS (DX 7211) <S>		PCB-Q0010C-MAIN	MAIN PCB ASSY (DX7111)
	3715-3111-0	LENS (DX-7111) <S>	PCB-2	PCB-Q0011C-DISP	DISPLAY PCB ASSY (DX-7211)
	3715-3112-0	LENS (DX-7111) <B>		PCB-Q0010C-DISP	DISPLAY PCB ASSY (DX-7111)
0008	2441-4522-0	KNOB, POWER <B>	PCB-3	PCB Q0011C LIVE	LIVE PCB ASSY (DX-7211)
	2441-4523-0	KNOB, POWER <S>		PCB-Q0010C-LIVE	LIVE PCB ASSY (DX-7111)
0009	2441-4602-0	KNOB, LEVEL <B>	PCB 4	PCB-Q0011C-JACK	HEAD PHONE JACK PCB ASSY (DX7211)
	2441-4603-0	KNOB, LEVEL <S>	PCB-5	PCB-Q0011C-PWR	POWER PCB ASSY (DX-7211)
0010	4152 3761 0	FOOT		PCB-Q0010C-PWR	POWER PCB ASSY (DX-7111)
0011	4152-0791-0	PCB SUPPORT	PCB-6	PCB-Q0011C-CONN	CONNECTOR PCB ASSY (DX-7211)
0012	4111-0701-0	KSL-213CGNA, CD DECK		PCB-Q0010C-CONN	CONNECTOR PCB ASSY (DX-7111)
0013	1464-3401-0	DISPLAY BRACKET	PCB-7	PCB Q0011C MOTO	SERVO MOTOR BOARD ASSY (DX7211)
	4152-3801-0	PLATE <B>		PCB-Q0010C-MOTO	SERVO MOTOR BOARD ASSY (DX-7111)
	4152-3802-0	PLATE <S>			
0015	4132-4121-0	PHONE JACK 6.4MM (DX-7211)			
0016	4152 3851-0	STRAIN RELIEF			

NOTE:

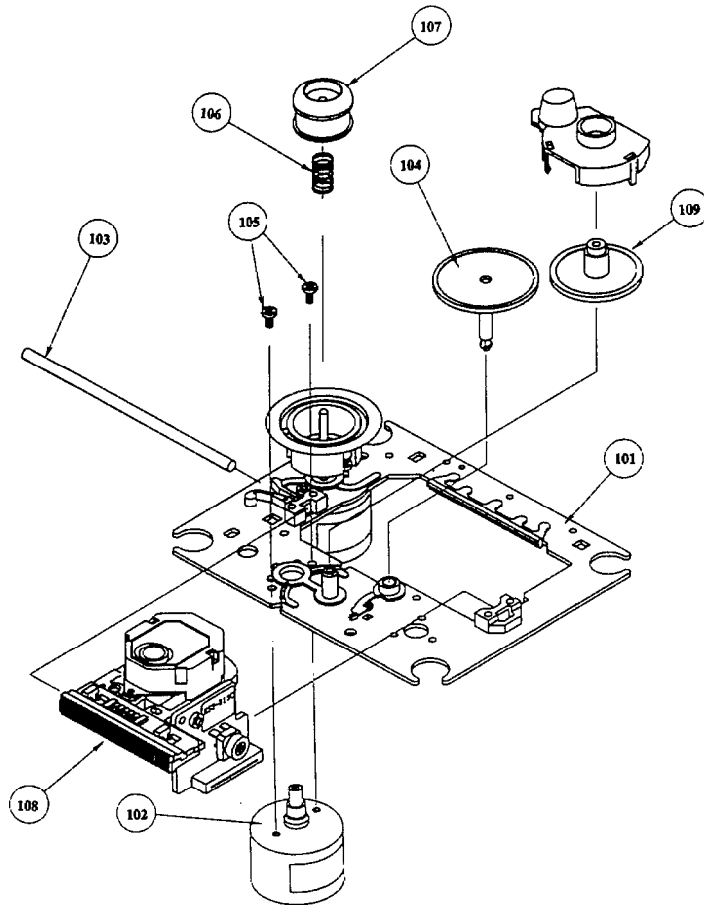
<B> Black model  
 <S> Silver model  
 <P> 230V model only  
 <D> 120V model only  
 <PT> Asian model only  
 <WT> Taiwanese model only

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

# CD MECHANISM EXPLODED VIEW



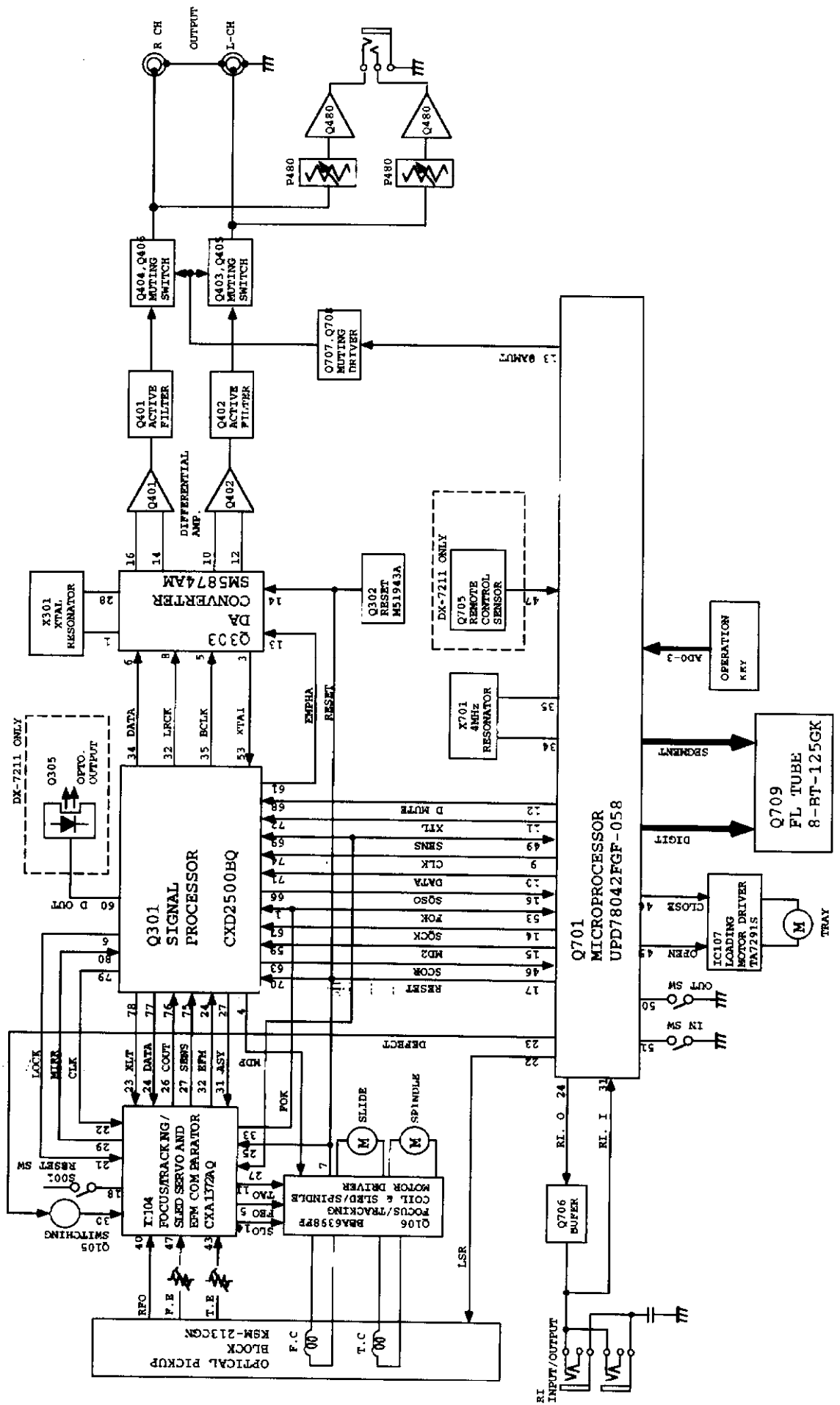
## DRIVE UNIT EXPLODED VIEW



## PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	REF. NO.	PART NO.	DESCRIPTION
1	X2626-229-1	Holder ass'y	101	X2625-984-1	Chassis ass'y
2	7685-646-79	BV3×8,Screw	102	X2625-769-1	Motor gear ass'y
3	2627-163-01	Gear (P)	103	2626-908-01	Sled shaft
4	2627-162-01	Gear (C)	104	2625-188-02	Gear (A)
5	4927-649-01	Belt	105	7621-255-15	P2×3, Screw
6	2627-172-01	Pulley (S)	106	2625-191-01	Spring (S)
7	2627-169-01	Chassis	107	2625-477-01	Ring (LO)
8	7685-647-79	B3C10,Screw	108	<del>8848-483-05</del>	KSS213C, Optical pickup
9	2627-171-01	Shaft	109	2627-003-01	Gear (B)
10	7685-233-19	K2.6×6,Screw		24800017Y	
11	2627-164-01	Bearing			
12	2627-170-01	Table disk			
13	7621-775-10	B2.6×4,Screw			
14	2627-166-01	Cam			
15	X2625-878-1	Loading motor ass'y			
16	1572-086-11	Leaf switch			
17		Shield			
18	1412-852-11	47 μ H, Inductor			
19	1656-254-11	Loading PCB			
20	1695-107-11	5P connector			
21	3916-006-01	2.6×16, Special Screw			
22		KSM-213CGN			
23	3910-095-11	Rubber vibration			
24	3931-379-01	Rubber vibration			
25	X2625-879-1	Holder (BU) ass'y			
26	7685-903-21	Bracket yoke			

BLOCK DIAGRAM





# MICROPROCESSOR TERMINAL DESCRIPTION

## μPD78042FGF-047

PIN NO.	SYMBOL	I/O	DESCRIPTION	PIN NO.	SYMBOL	I/O	DESCRIPTION
1	2G	0	FL tube grid signal	41	D2		Not used
2	3G			42	D1		
3	4G			43	D0		
4	5G			44	CLOSE	0	Tray open control signal
5	6G			45	OPEN	0	Tray close control signal
6	7G			46	SCOR	1	Sub code block detection signal from signal process IC
7	8G			47	RMCON	1	Remote control signal
8	Vdd	1	Power supply pin (+5V)	48	Vss2	1	Power supply grand pin
9	CLK	0	Command forward clock for signal process IC	49	SENS	1	Sense input pin from signal processor
10	DATA	0	Command data for signal process IC	50	OUTSW	1	Tray open operation completion signal
11	XLT	0	Command latch for signal process IC	51	INSW	1	Tray close operation completion signal
12	DMUTE	0	Digital mute signal for audio output	52	Vdd2	1	Power supply pin (+5v)
13	AMUTE	0	Analog mute signal for audio output	53	FOK	1	Focus OK signal
14	SQCK	0	Sub code forward clock for signal process IC	54	VR -		Not used
15	MD2	0	Inhibiting signal of digital output of signal processor	55	VR +		
16	SQSO	1	Sub code input pin from signal process IC	56	A12		
17	RESET	1	Reset signal input pin	57	A11		
18	-		Not used	58	A10		
19	-		Not used	59	A9		
20	AVss	1	A/D converter grand pin	60	A8		
21	NP		Not used	61	P1	0	FL tube Segment signal
22	LSR	0	Laser control signal	62	P2		
23	DEFECT	0	Defect control signal	63	P6		
24	RI. OUT	0	System signal output pin	64	P7		
25	AD3	1	Key input pin	65	P3		
26	AD2			66	P5		
27	AD1			67	P4		
28	AD0			68	P15		
29	AVDD1	1	A/D converter power supply pin (+5v)	69	P11		
30	AVREF	1	A/D converter reference voltage input pin (+5V)	70	P12		
31	RI-1	1	System signal input pin	71	-VDISP	1	Negative power supply pin for FL tube
32	XT2		Not used	72	P10	0	FL tube Segment signal
33	Vss	1	Power supply grand pin	73	P14		
34	X1	1	Clock circuit input pin	74	P13		
35	X2	0	Clock circuit output pin	75	P16		
36	D7		Not used	76	P8		
37	D6			77	P9		
38	D5			78	NC		Not used
39	D4			79	NC		Not used
40	D3			80	1G	0	FL tube grid signal

# ADJUSTMENT PROCEDURES

## Instruments required

Dual trace oscilloscope, Frequency counter, AF oscillator, Test disc (SONY YEDS-18) and AC voltmeter.

### 1. Focus offset adjustment

Turn R120 and R121 to the mechanical center.

Load the test disc YEDS-18 on the tray and play the track 2.

Connect the oscilloscope to terminal P3.

Adjust R119 until the waveform on the oscilloscope becomes maximum.

After adjustment, disconnect the oscilloscope.

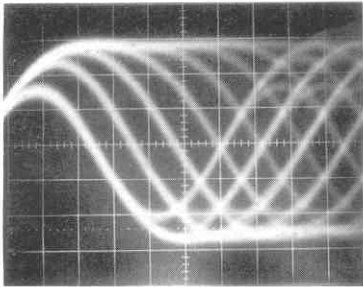
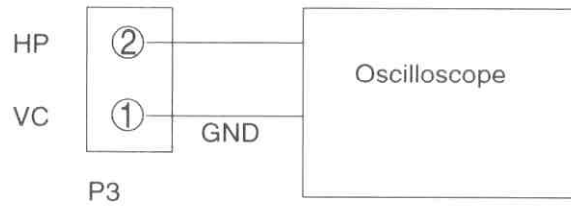


Photo 1

0.2V/div  
0.2μs/div



### 2. Tracking offset adjustment

Load the test disc YEDS-18 on the tray and play the track 2.

Turn R121 to minimum position. (Counter clockwise)

Connect the oscilloscope across pin 2 (TE) of P4 and pin 1 (VC) of P3.

Adjust R116 until the center of tracking error signal on the oscilloscope becomes GND level.

Turn R121 to the mechanical center.

After adjustment, disconnect the oscilloscope.

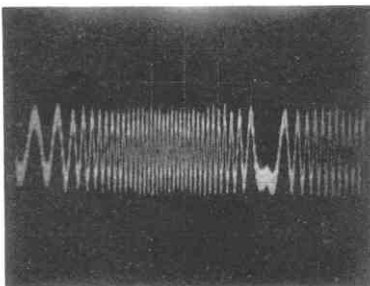
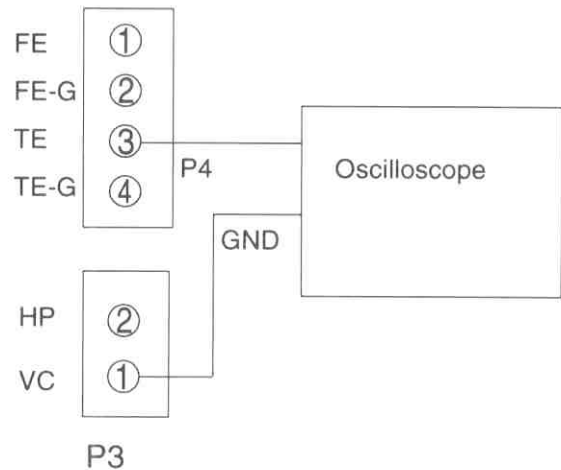


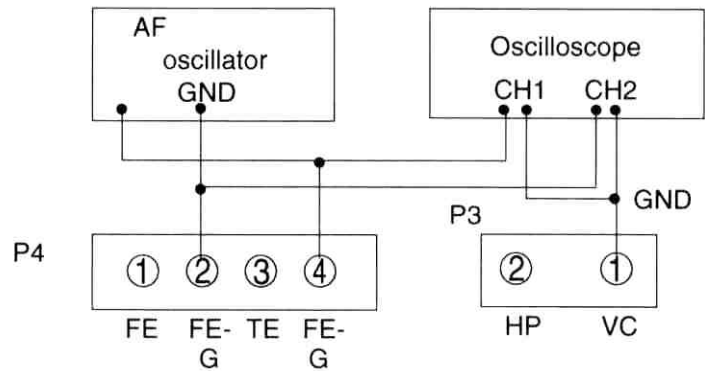
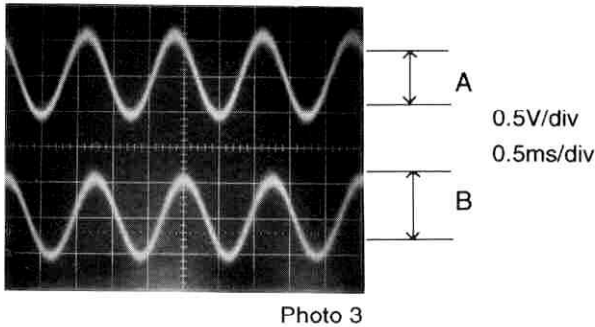
Photo 2

0.5V/div  
5ms/div



**3. Focus gain adjustment**

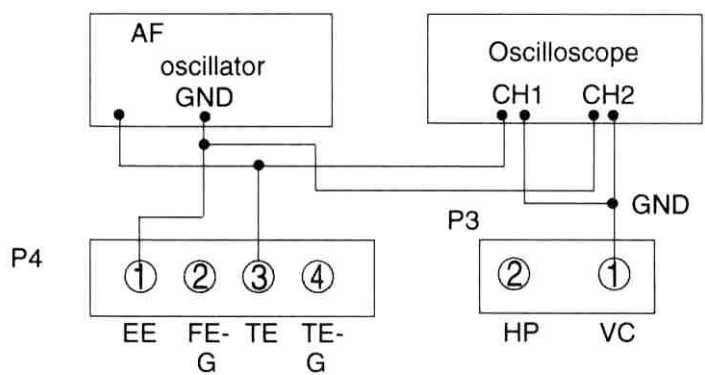
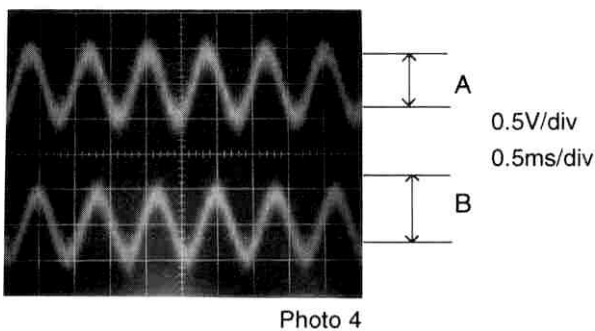
Set the output of AF oscillator to 1kHz, 1~1.5 Vp-p.  
 Play the track 2 of test disc.  
 Connect the oscilloscope and the AF oscillator as shown below.



Adjust R120 until 1kHz components of channels 1 and 2 on the oscilloscope become same level.  
 After adjustment, disconnect the AF oscillator and the oscilloscope.

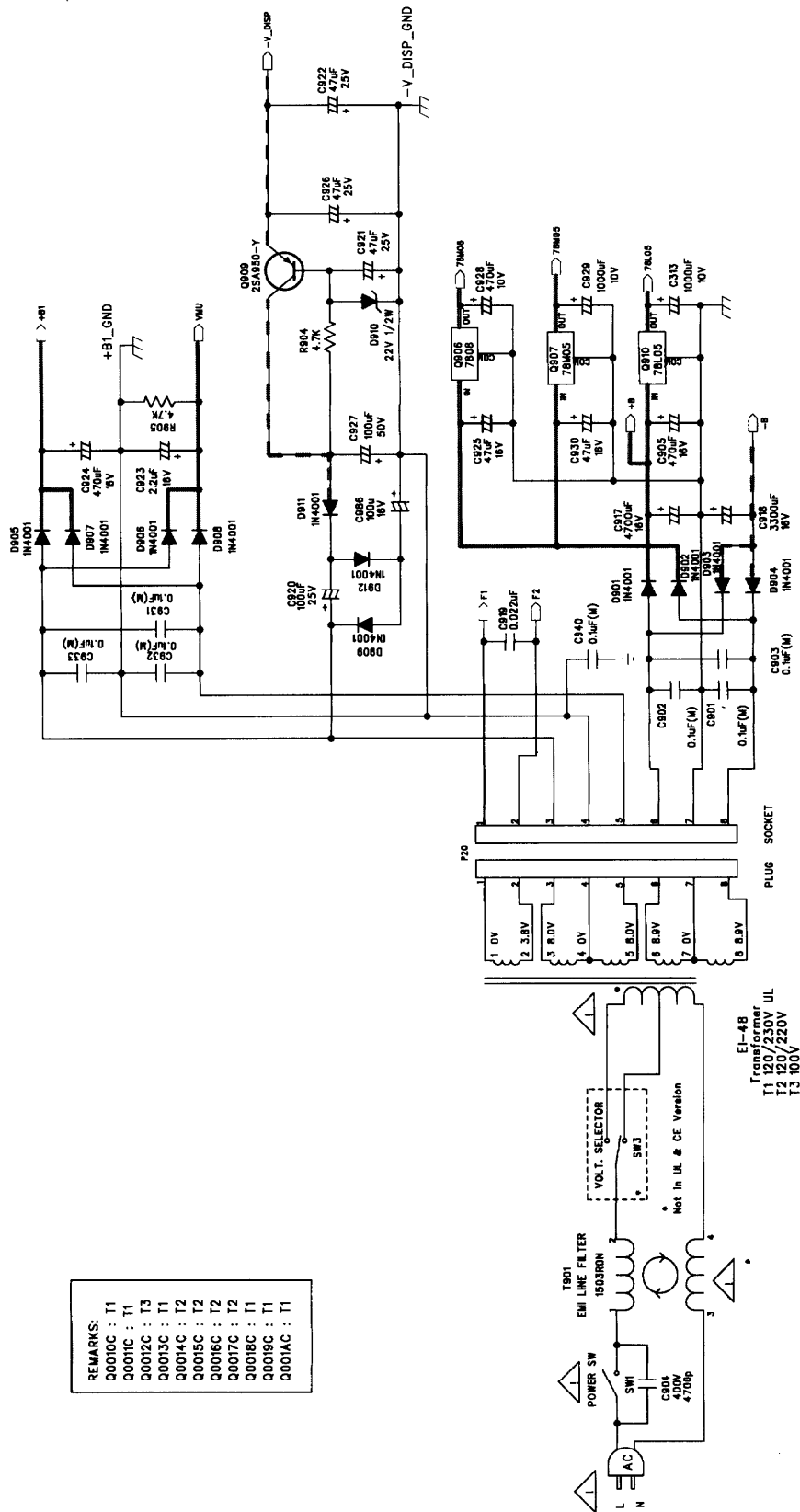
**4. Tracking gain adjustment**

Set the output of AF oscillator to 1.2kHz, 1~1.5 Vp-p.  
 Play the track 2 of test disc.  
 Connect the oscilloscope and the AF oscillator as shown below.



Adjust R121 until 1.2kHz components of channels 1 and 2 on the the oscilloscope become same level.  
 After adjustment, disconnect the AF oscillator and the oscilloscope.  
 After adjustment, confirm that the center of tracking error signal becomes GND level.


# SCHEMATIC DIAGRAM (1)



REMARKS:  
 00010C : T1  
 00011C : T1  
 00012C : T3  
 00013C : T1  
 00014C : T2  
 00015C : T2  
 00016C : T2  
 00017C : T2  
 00018C : T1  
 00019C : T1  
 0001AC : T1

EI-48  
 Transformer  
 T1 120/230V UL  
 T2 120/220V  
 T3 100V

--- :+B  
 - - - :-B

NOTE: COMPONENTS MARKED WITH  ARE SAFETY CRITICAL PARTS.

A

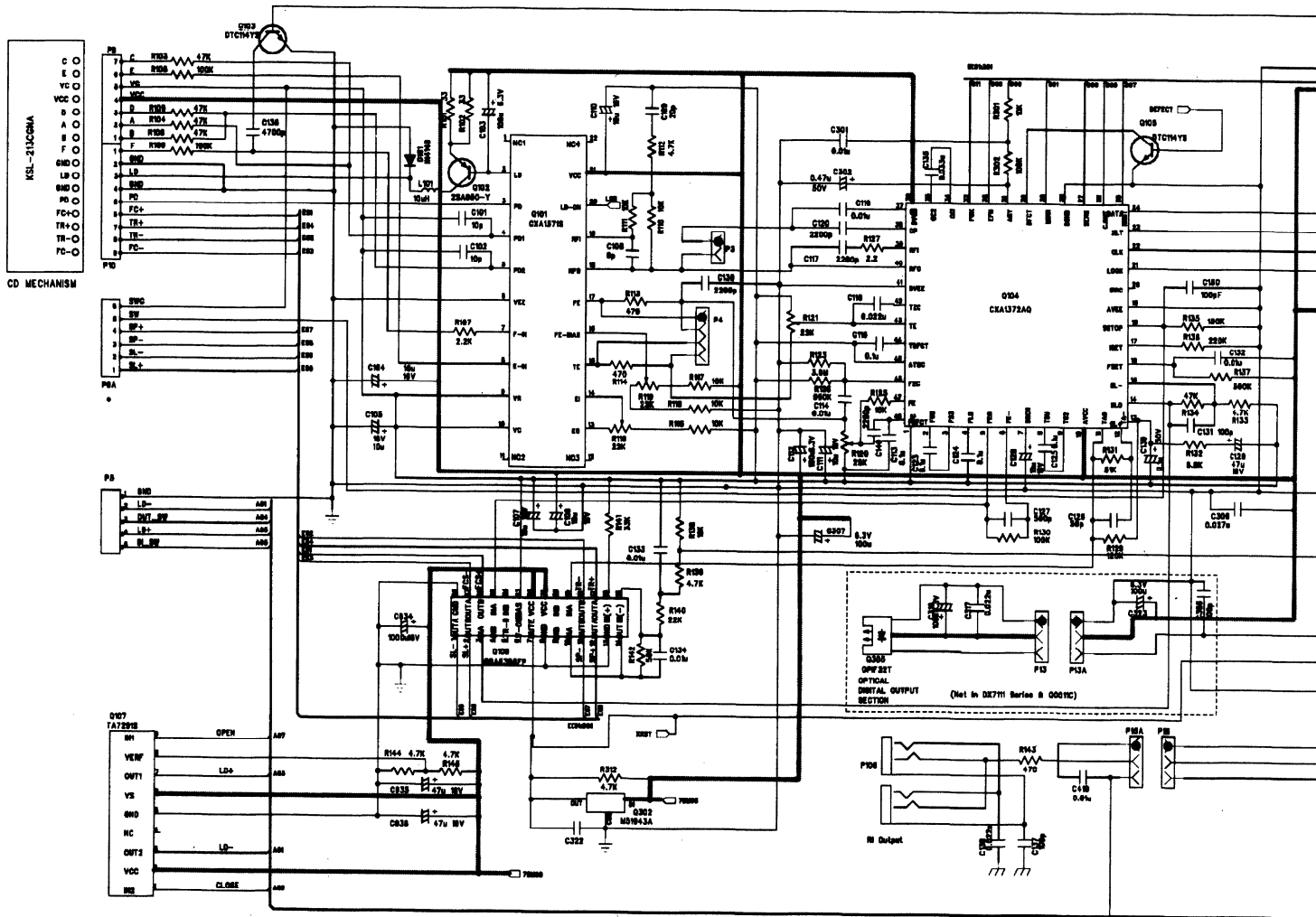
B

C

D

# SCHEMATIC DIAGRAM (2)

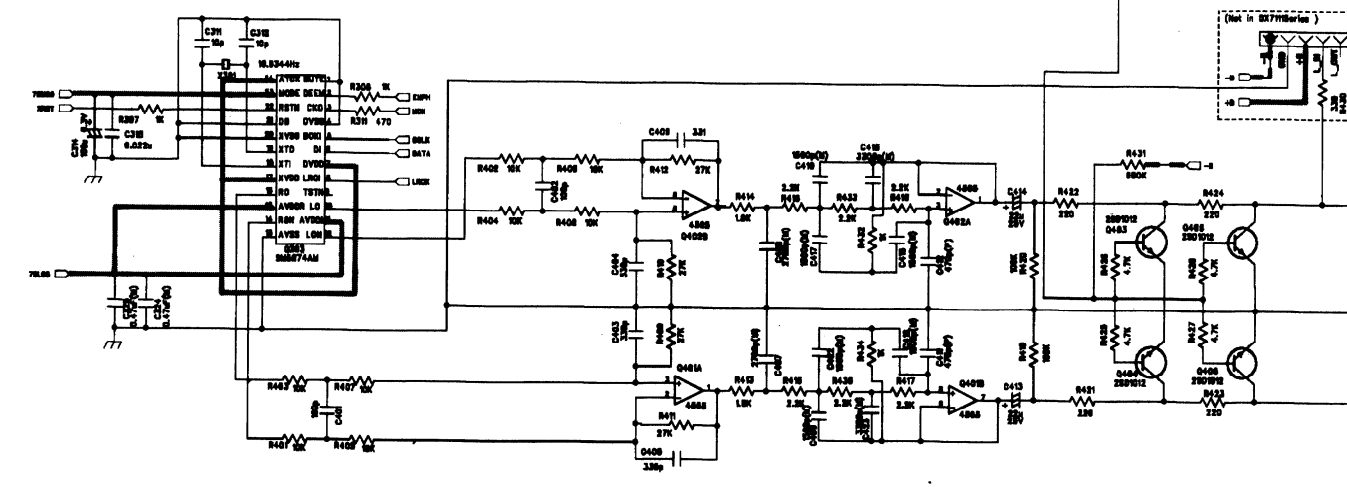
1



3

4

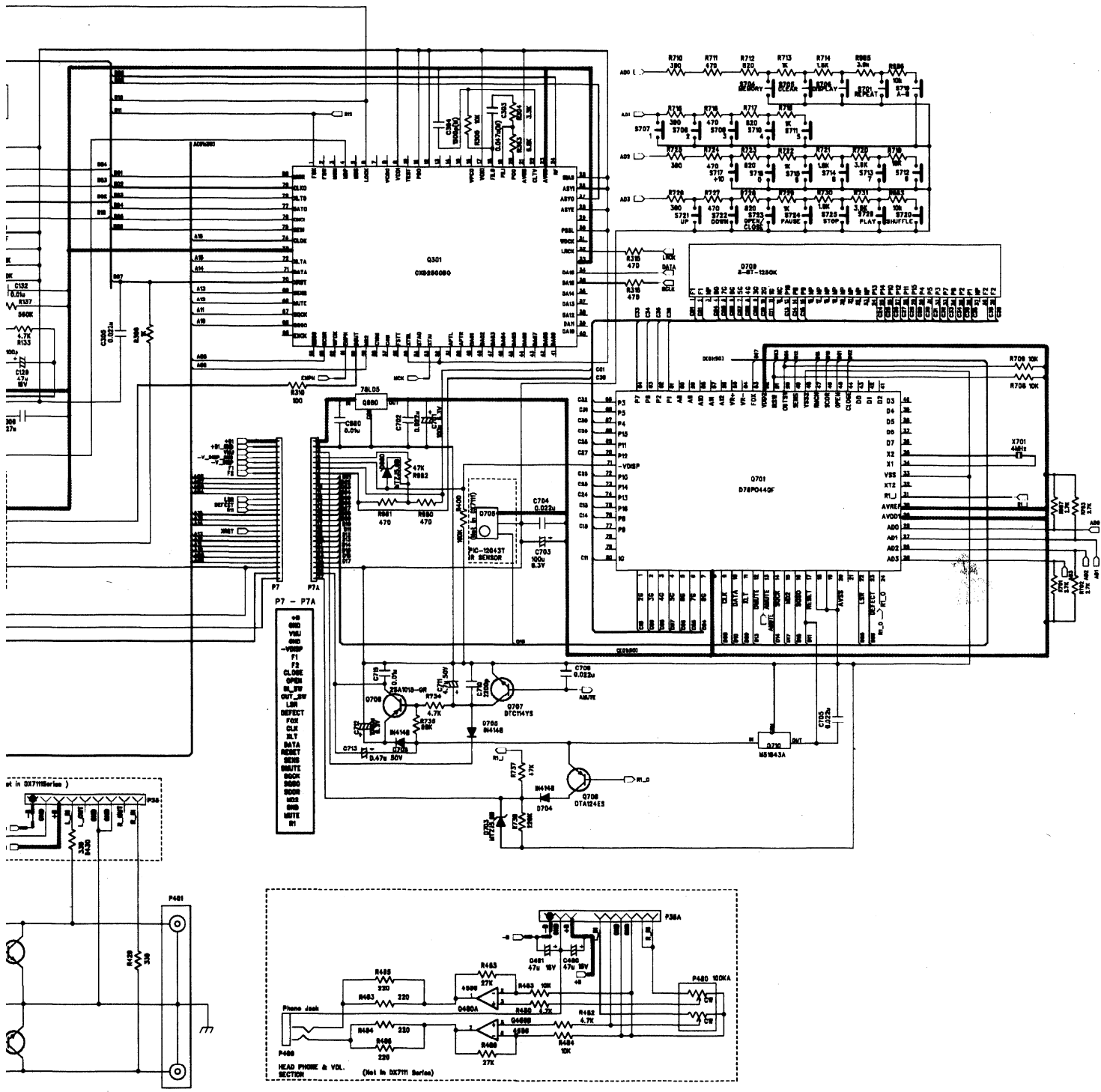
5



E

F

G



NOTE  
 THE COMPONENTS IDENTIFIED BY MARK  $\Delta$  ARE CRITICAL FOR SAFETY.  
 REPLACE ONLY WITH PART NUMBER SPECIFIED.  
 VOLTAGE MEASURED WITH VOL METER ON  $\pm 25$  DC VOLTAGE AND INPUT SIGNAL  
 RESISTOR TYPICAL CAPACITORS  $\pm 20\%$  1 ARE IN  $\mu$ F UNLESS OTHERWISE NOTED.  
 ALL CAPACITORS ARE IN PFD/200V UNLESS OTHERWISE NOTED.  
 EX) 820 - 30F 330 - 330F 331 - 330F 333 - 0.033uF  
 ALL RESISTORS ARE IN OHMS UNLESS OTHERWISE NOTED.  
 THE TRAIL LINES ON PCB BOARD ARE THE FRONT SIDE OF THE PARTS  
 EX) 800 - PRINTING SIDE  
 SCHEMATIC IS SUBJECT TO CHANGE FOR IMPROVEMENT.

— — — — — +B  
 - - - - - -B

## PRINTED CIRCUIT BOARD - PARTS LIST

## PCB-1 MAIN PC BOARD

REF. NO.	PART NO.	DESCRIPTION
	<b>ICs</b>	
Q101	22240404	CXA1571S, RF AMP
Q104	22241067	CXA1372AQ, SERVO AMP.
Q106	22241066	BA6398FP, BTL DRVIER ROHM
Q107	22240239	TA7291S, BRIDGE DRIVER
Q301	22240487A	CXD2500BQ, CD DSP
Q302	22240018	M51943ASL, SYSTEM RESET
Q303	3130-4390-0	SM5874AM-ET, D/A CONVERTER
Q491, Q402	22240201	NJM4565DB, OP-AMP
Q907	222780050	7805H, 5V REG
Q908	222780082	$\mu$ PC78M08, +8V REG
Q910, Q980	222780053	NJM78L05A, REG.
	<b>Transistors</b>	
Q102, Q909	2211504	2SA950-Y
Q103, Q105	221281	DTC114YSA
Q403-Q406	4851-012F-5	2SD1012F
	<b>Photo coupler</b>	
Q305	4811-F32T-3	GP1F32T (DX-7211)
	<b>Diodes</b>	
D101	223171	1SS270A
D901-D909, D911, D912	223865	IN4001
D91C	224472204	MTZJ22C
	<b>Capacitors</b>	
C103, C112, C307, C314	354721019	100 $\mu$ F $\pm$ 20% 6.3V Elect.
C104-C106, C109- C111, C128	354741009	10 $\mu$ F $\pm$ 20% 16V Elect.
C129, C925, C930, C935, C936	354744709	47 $\mu$ F $\pm$ 20% 16V Elect.
C130	354781099	0.1 $\mu$ F $\pm$ 20% 50V Elect.
C135	363523335	0.033 $\mu$ F $\pm$ 10% 50V Plastic
C301	363521035	0.01 $\mu$ F $\pm$ 10% 50V Plastic
C302	354784799	0.47 $\mu$ F $\pm$ 20% 50V Elect.
C303	363524735	0.047 $\mu$ F 50V Metalzd Plastic
C304	363521525	1500pF $\pm$ 10% 50V Plastic
C308	363522734	0.027 $\mu$ F $\pm$ 5% 50V Plastic
C313, C929	354731029	1000 $\mu$ F $\pm$ 20% 10V Elect.
C315	363522234	0.022 $\mu$ F $\pm$ 5% 50V Plastic
C324, C325	363524745	0.47 $\mu$ F $\pm$ 10% 63V Plastic
C407	363522724	2700pF $\pm$ 5% 50V Plastic
C409, C410, C416, C417, C418, C422	363521524	1500pF $\pm$ 5% 50V Plastic
C411, C412	374724714	470pF $\pm$ 5% 25V Plastic
C414, C413	354752209	22 $\mu$ F $\pm$ 10% 25V Elect.
C415, C423	363523324	3300pF $\pm$ 5% 50V Plastic
C901, C903, C931-C933, C940	363521045	0.1 $\mu$ F $\pm$ 10% 50V Plastic
C905, C906, C924	354744719	470 $\mu$ F $\pm$ 20% 16V Elect.
C917	354744729	4700 $\mu$ F $\pm$ 20% 16V Elect.
C918	354743329	3300 $\mu$ F $\pm$ 20% 16V Elect.
C920	354751019	100 $\mu$ F $\pm$ 20% 25V Elect.
C921, C922, C926	354754709	47 $\mu$ F $\pm$ 20% 25V Elect.
C923	354750229	2.2 $\mu$ F $\pm$ 20% 25V Elect.
C927	354781019	100 $\mu$ F $\pm$ 20% 50V Elect.
C928	354734719	470 $\mu$ F $\pm$ 20% 10V Elect.
C934	354741029	1000 $\mu$ F $\pm$ 20% 16V Elect.
C982	354780479	4.7 $\mu$ F $\pm$ 20% 50V Elect.
C986	354741019	100 $\mu$ F $\pm$ 20% 16V Elect.
	<b>Resistors</b>	
R116, R119-R121	5210066	SVR 22K, VARIABLE RESISTOR
	<b>Coil</b>	
L101	1801-100K-M	10uH, CHOKE
	<b>Terminals</b>	
P1-P5	4132-1071-0	TERMINAL PIN
P3	2113-1160-0	2P WAFER
P4	2113-1161-0	4P WAFER

REF. NO.	PART NO.	DESCRIPTION
P6A	2102-061S-004	3P ST. WAFER
P7	2101-0751-0	WAFER IDC CABLE 34P
P9A	2102-071S-004	7P WAFER
P10A	2102-091S-004	9P WAFER
P35	2102-091S-004	9P WAFER (DX-7211)
	<b>Connectors</b>	
P17	7403-1220-23	FLAT WIRE 3-PIN
P20	2102-081S-004	8P WAFER
	<b>Jacks</b>	
P106	2113-1159-0	2P PHONE JACK (DX-7211)
P401	2113-1158-0	2P RCA JACK
	<b>Resonator</b>	
X301	2300-1490-0	X'TAL 16.9344MHZ HIC49U

## PCB-2 DISPLAY PC BOARD

REF. NO.	PART NO.	DESCRIPTION
	<b>ICs</b>	
Q701	22241197	UPD78042FGF-058, CPU
Q710	22240018	M51943A, SYSTEM RESET
	<b>Transistors</b>	
Q706	2213300	DTA124ES
Q707	221281	DTC114YSA
Q708	2211455	2SA1015 (G.R.)
	<b>Diodes</b>	
D703, D980	4837-5V61-2	MTZJ5.6B
D704-D706	223171	1SS270A
	<b>Capacitors</b>	
C701, C703	354721019	100 $\mu$ F $\pm$ 20% 6.3V Elect.
C713	354784799	0.47 $\mu$ F $\pm$ 20% 50V Elect.
C712	354731029	1000 $\mu$ F $\pm$ 20% 10V Elect.
	<b>Display</b>	
Q709	2460-1250-0	
	<b>Remoto sensor</b>	
Q705	4812-043T-3	IR SENSOR MODULE (DX-7211)
	<b>Connector</b>	
P7A	2101-0751-0	WAFER IDC CABLE 34P
	<b>Switches</b>	
S701, S704-S706, S719, S726 S707-S717	5200-3529-0	TACT SWITCH
	<b>Resonator</b>	
X701	2703-0150-0	CR4.00MHZ, OSCILLA

## PCB-3 LIVE PC BOARD

REF. NO.	PART NO.	DESCRIPTION
	<b>Capacitor</b>	
C904	8910-0049-0	400V 4700P DE7150F472MVA1KC
	<b>Switch</b>	
SW3		SWITCH, VOLTAGE SELECTOR
	<b>Filter</b>	
T901	1806-2170-0	EMI LINE FILTER
	<b>Other</b>	
C904	1660-0700-0	INSULATING BOOT (ID=14)

## PCB-4 HEADPHONES JACK PC BOARD

REF. NO.	PART NO.	DESCRIPTION
	<b>IC</b>	
Q480	222654	NJM4556D, OP-AMP (DX-7211)
	<b>Resistor</b>	
P480	4750-4460-0	VR-VL 100KA, PHONES LEVEL (DX-7211)
	<b>Terminal</b>	
P35A	2102-091S-004	9P WAFER (DX-7211)

REF. NO.	PART NO.	DESCRIPTION
P490	<b>Jack</b> 2113-1081-2	HTJ-064. HEADPHONES (DX-7211)

**PCB-5 POWER PC BOARD**

REF. NO.	PART NO.	DESCRIPTION
SW1	<b>Switch</b> △ 5200-3431-0	POWER SWITCH

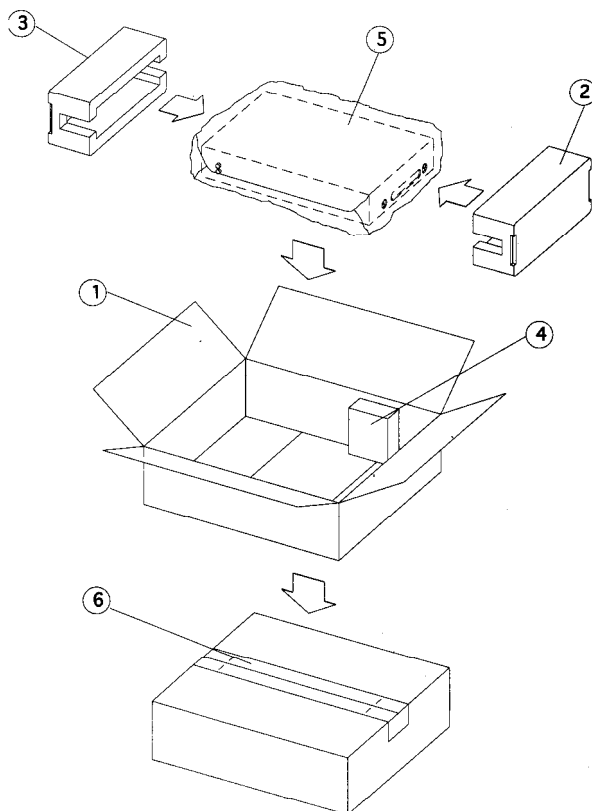
**PCB7 SERVO MOTOR PC BOARD**

REF. NO.	PART NO.	DESCRIPTION
SW2	<b>Switch</b> 5200-3527-0	LEAF SWITCH, MSW-1731CVCA
P8B	<b>Connectors</b> 2101-0691-0	WAFER16PIN
P8B	7009-7910-1	FLEXIBLE CABLE 16P

<p>NOTE: THE COMPONENTS IDENTIFIED BY MARK △ ARE CRITICAL FOR RISK OF FIRE AND ELECTRIC SHOCK. REPLACE ONLY WITH PART NUMBER SPECIFIED.</p>
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**PACKING VIEW**



**PACKING VIEW PARTS LIST**

REF. NO.	PART NO.	DESCRIPTION
1	1477-1601-0	CARTON (DX-7211) <B> <P,D>
	1477-1602-0	CARTON (DX-7211) <S>
	1477-1604-0	CARTON (DX-7111) <B>
	1477-1605-0	CARTON (DX-7111) <S><P>
2	1490-2833-0	PAD, LEFT
3	1490-2843-0	PAD, RIGHT
4	1490-2923-0	POLYFOAM BLOCK 120LX100WX50T
5	2910003R-1AY	POLYBAG (600X550X0.05) RECYCLE
6	29110071	PP TAPE
	29100097-1AY	POLYBAG MANUAL (240X360X0.05)
	1497-1832-0	EPE SHEET 170X60X0.5T
	4301-3822-0	INSTRUCTION MANUAL (ENG)
	4301-3823-0	INSTRUCTION MANUAL (GDSW)
	4301-3825-0	INSTRUCTION MANUAL (FSI)
	4301-3828-0	INSTRUCTION MANUAL (END/CHINA)
	2010098A	PIN CORD, AS
	2010200	CORD AS, RI
	8900-1510-0	REMOTE CONTROL (DX-7211)
	3030-1125-0	WARRANTY CARD (ORANGE) <D>
	3050-1001-0	SS LIST (ORANGE) <D>
	3010054	BATTERY,UM-3 (DX-7211)
	3000-4225-0	LABEL, EAN (DX-7111)

NOTE: <B> Black model  
 <S> Silver model  
 <P> 230V model only  
 <D> 120V model only  
 <PT> Asian model only  
 <WT> Taiwanese model only

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