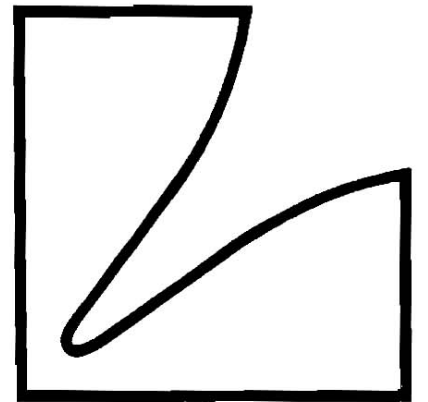


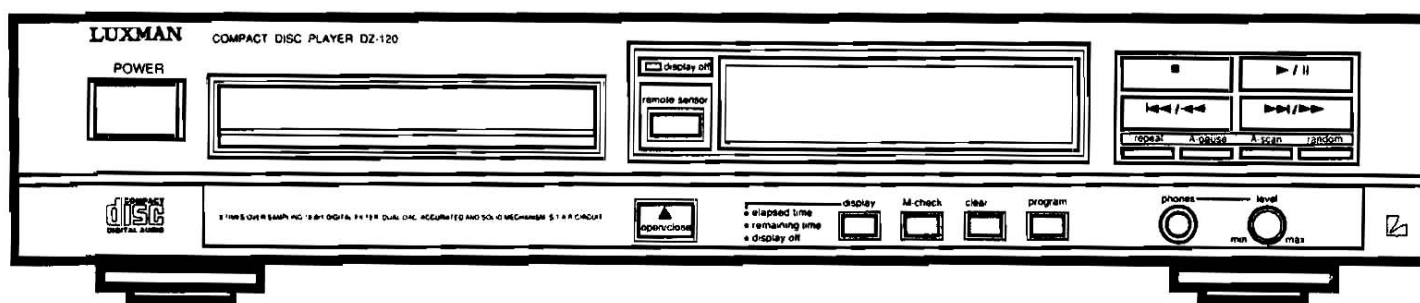
# SERVICE MANUAL



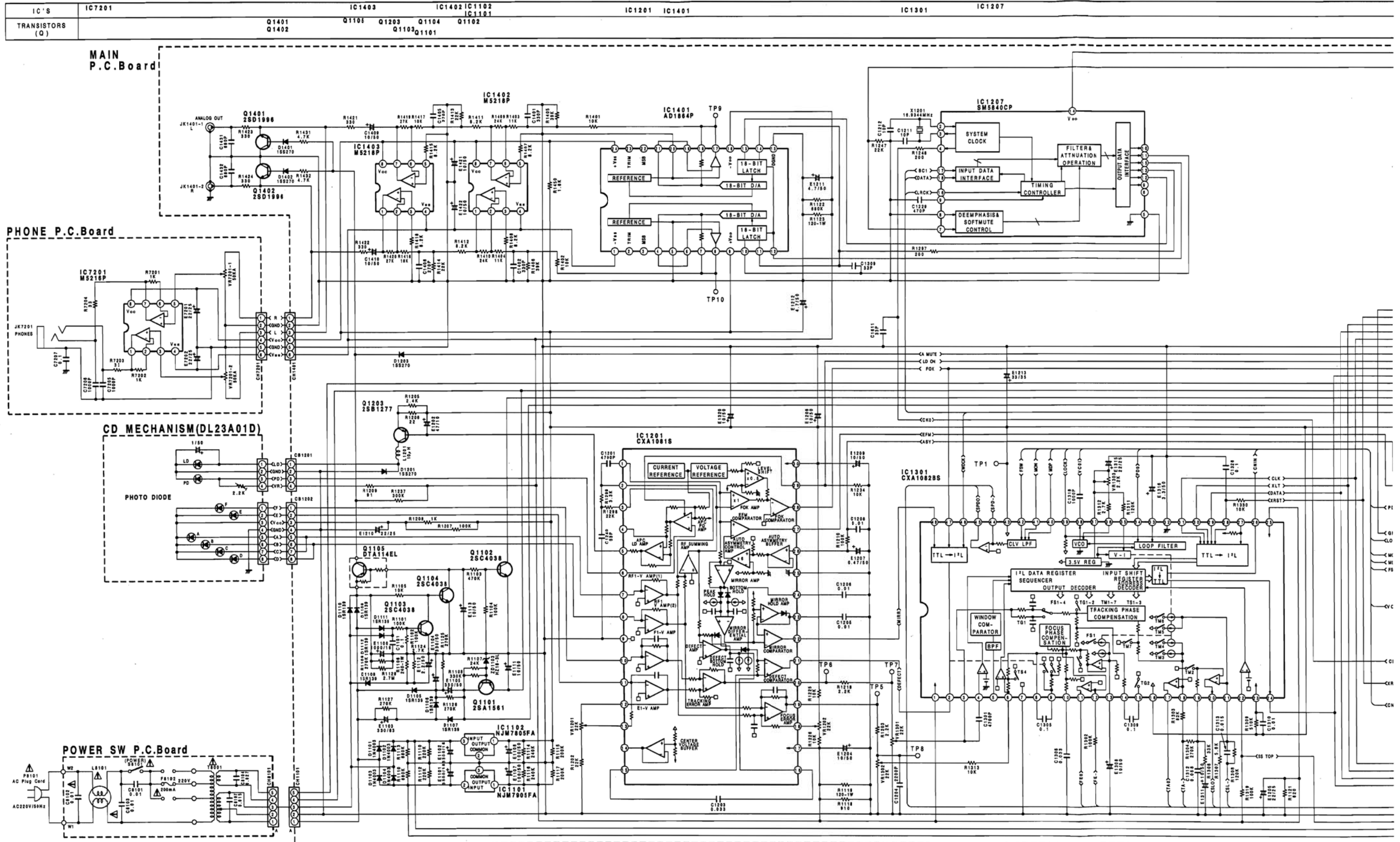
Compact Disc Player

# DZ-120

## Temporary

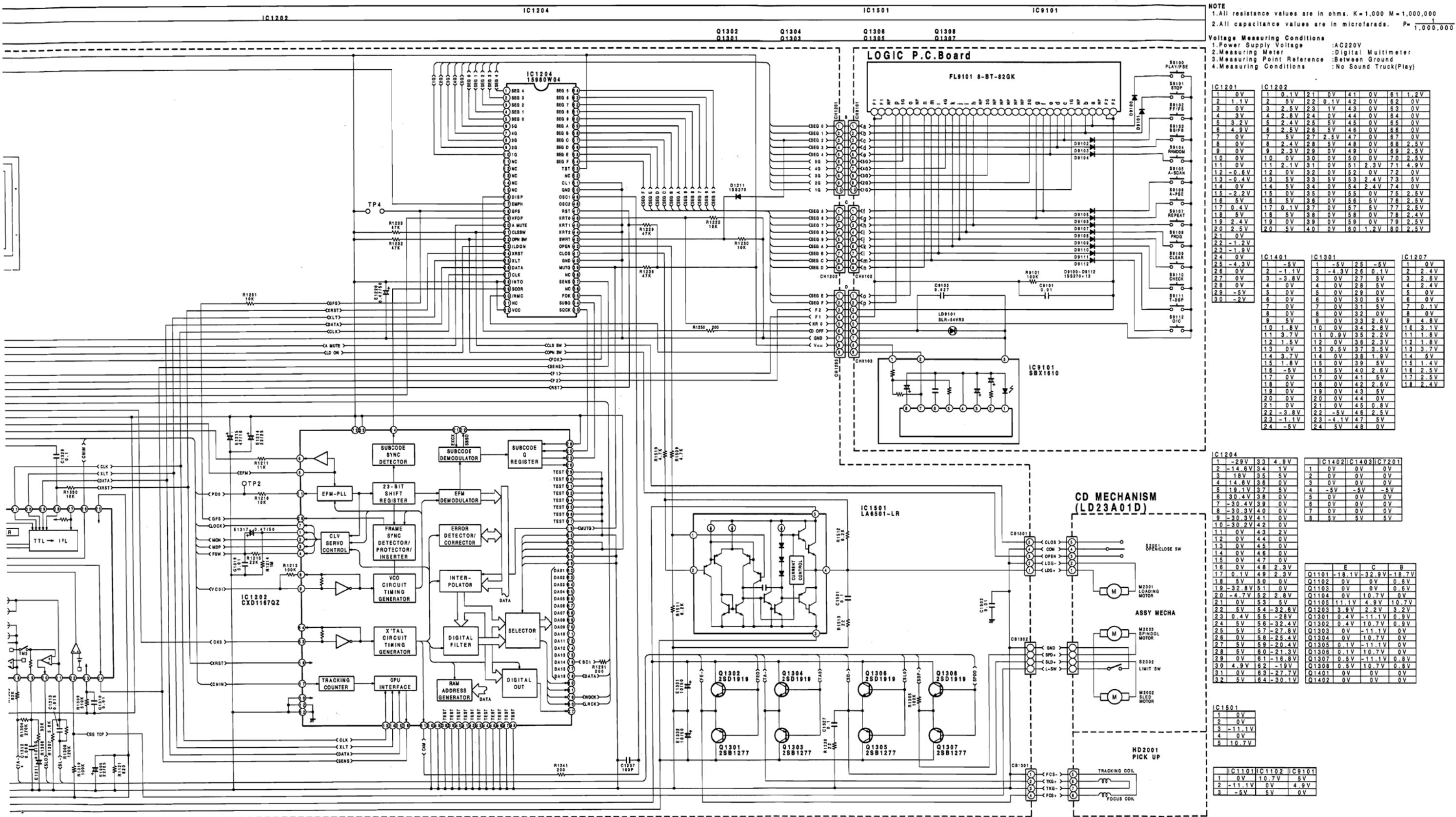


# Schematic Diagram



1  
2  
3  
4  
5

A | B | C | D | E | F | G | H



**NOTE**  
 1. All resistance values are in ohms. K=1,000 M=1,000,000  
 2. All capacitance values are in microfarads. P=1,000,000

**Voltage Measuring Conditions**  
 1. Power Supply Voltage : AC220V  
 2. Measuring Meter : Digital Multimeter  
 3. Measuring Point Reference : Between Ground  
 4. Measuring Conditions : No Sound Track(Play)

IC1201			
1	0V	21	0V
2	1.1V	22	0.1V
3	0V	23	0V
4	2.8V	24	0V
5	3.2V	25	5V
6	4.9V	26	5V
7	0V	27	5V
8	0V	28	5V
9	0V	29	0V
10	0V	30	0V
11	2.1V	31	0V
12	-0.8V	32	0V
13	-0.4V	33	5V
14	0V	34	0V
15	-2.2V	35	0V
16	0V	36	5V
17	0.4V	37	0V
18	5V	38	0V
19	2.4V	39	0V
20	2.5V	40	0V
21	0V	41	0V
22	-1.2V	42	0V
23	-1.9V	43	0V
24	0V	44	0V
25	-4.3V	45	0V
26	0V	46	0V
27	0V	47	0V
28	0V	48	0V
29	-5V	49	0V
30	-2V	50	0V

IC1301			
1	-5V	25	-5V
2	-1.1V	26	0.1V
3	-3.8V	27	5V
4	0V	28	5V
5	0V	29	5V
6	0V	30	5V
7	0V	31	5V
8	0V	32	0V
9	5V	33	2.6V
10	1.8V	34	2.6V
11	3.7V	35	2.2V
12	1.5V	36	2.3V
13	0V	37	3.5V
14	3.7V	38	1.9V
15	1.8V	39	5V
16	-5V	40	2.6V
17	0V	41	5V
18	0V	42	2.6V
19	0V	43	5V
20	0V	44	0V
21	0V	45	0.8V
22	-3.8V	46	2.5V
23	-1.1V	47	5V
24	-5V	48	0V

IC1207			
1	0V	2	2.4V
2	2.4V	3	2.6V
3	2.6V	4	2.4V
4	2.4V	5	0V
5	0V	6	0V
6	0V	7	0.1V
7	0.1V	8	0V
8	0V	9	4.8V
9	4.8V	10	3.1V
10	3.1V	11	1.8V
11	1.8V	12	1.8V
12	1.8V	13	3.7V
13	3.7V	14	5V
14	5V	15	1.4V
15	1.4V	16	2.5V
16	2.5V	17	2.5V
17	2.5V	18	2.4V

IC1204			
1	-29V	33	4.8V
2	-14.6V	34	1V
3	18V	35	5V
4	14.6V	36	0V
5	19.1V	37	5V
6	30.4V	38	0V
7	-30.4V	39	0V
8	-30.3V	40	0V
9	-30.3V	41	0V
10	-30.2V	42	0V
11	0V	43	2V
12	0V	44	0V
13	0V	45	0V
14	0V	46	0V
15	0V	47	0V
16	0V	48	2.3V
17	0.1V	49	2.3V
18	5V	50	0V
19	-32.8V	51	0V
20	-4.7V	52	2.8V
21	0V	53	5V
22	5V	54	-32.6V
23	0.4V	55	-28V
24	5V	56	-2.4V
25	5V	57	-27.8V
26	0V	58	-25.4V
27	5V	59	-20.4V
28	5V	60	-21.3V
29	0V	61	-18.8V
30	4.8V	62	-19V
31	0V	63	-27.7V
32	5V	64	-30.1V

IC1402/IC1403/IC7201			
1	0V	0V	0V
2	0V	0V	0V
3	0V	0V	0V
4	-5V	-5V	-5V
5	0V	0V	0V
6	0V	0V	0V
7	0V	0V	0V
8	5V	5V	5V
9	11.1V	4.9V	10.7V
10	3.9V	2.2V	3.2V
11	0.4V	-11.1V	0.9V
12	0.4V	10.7V	0.9V
13	0V	-1.1V	0V
14	0V	10.7V	0V
15	0.1V	10.7V	0V
16	0.1V	-11.1V	0V
17	0.5V	-11.1V	0.8V
18	0.5V	10.7V	0.8V
19	0V	0V	0V
20	0V	0V	0V

IC1501			
1	0V		
2	0V		
3	-11.1V		
4	0V		
5	10.7V		

IC1101/IC1102/IC9101			
1	0V	10.7V	5V
2	-11.1V	0V	4.9V
3	-5V	5V	0V

# Electrical Parts List

Resistor : Carbon resistors under 1/4 watts are not mentioned in the parts list, please confirm them by schematic diagram.

Capacitor :  $\mu\text{F}$  = microfarads, pF = picofarads

Abbreviations			Symbol No.	Part No.	Description
RES. = Resistor	CAP. = Capacitor				
C.F. = Carbon Film	ELY. = Electrolytic				
M.F. = Metal Film	CER. = Ceramic				
M.O. = Metal Oxide Film	MYL. = Mylar				
M.P. = Metal Plate	TAN. = Tantalum				
TR. = Transistor	POLY. = Polystyrol				
TRANS. = Transformer	PP. = Polypropylene				
CP. = Chip	PLT. = Polyethylene				
	PF. = Polyester Film				
Symbol No.	Part No.	Description			
Main P. C. Board					
IC's					
IC1101	51T80339F01	NJM7905FA			
IC1102	51T80338F01	NJM7805FA			
IC1201	51T84721F01	CXA1081S			
IC1202	51T25718W01	CXD1167QZ			
IC1204	51T15980W04	15980W04			
IC1207	51T35105W01	SM5840CP			
IC1301	51T84722F02	CXA1082BS			
IC1401	51T35103W01	AD1864P			
IC1402	51T90149F01	M5218AP			
IC1403	51T90149F01	M5218AP			
IC1501	51T90889F01	LA6501			
Transistors					
Q1101	48T82757F01	2SA1561			
Q1102	48T82758F01	2SC4038			
Q1103	48T82758F01	2SC4038			
Q1104	48T82758F01	2SC4038			
Q1105	48T82762F02	DTA114EL			
Q1203	48T82759F01	2SB1277			
Q1301	48T82759F01	2SB1277			
Q1302	48T83275F01	2SD1919			
Q1303	48T82759F01	2SB127			
Q1304	48T83275F01	2SD1919			
Q1305	48T82759F01	2SB127			
Q1306	48T83275F01	2SD1919			
Q1307	48T82759F01	2SB127			
Q1308	48T83275F01	2SD1919			
Q1401	48T90183F01	2SD1996			
Q1402	48T90183F01	2SD1996			
Diodes					
D1101	48S40477U01	1N4003			
D1102	48S40477U01	1N4003			
D1103	48S40477U01	1N4003			
D1104	48S40477U01	1N4003			
D1105	48T16313W01	1SR139			
D1106	48T16313W01	1SR139			
D1107	48T16313W01	1SR139			
D1108	48T16313W01	1SR139			
D1109	48T16313W01	1SR139			
D1110	48T16313W01	1SR139			
D1111	48T16313W01	1SR139			
D1112	48T16313W01	1SR139			
D1201	48T84758F01	1SS270			
D1203	48T84758F01	1SS270			
D1211	48T84758F01	1SS270			
D1401	48T84758F01	1SS270			
D1402	48T84758F01	1SS270			
ZD1113	48T52741F54	Zener, HZ18-3L			
Coil / Crystal					
L1201	24T70381F21	Inductor, 10 $\mu\text{H}$			
X1201	91T84727F02	16.9344MHz			
Capacitors					
C1101	08T90316F29	TF,	0.1 $\mu\text{F}$		
E1101	23T00181L23	ELY.,	3300 $\mu\text{F}$ / 16V		
E1102	23T00181L23	ELY.,	3300 $\mu\text{F}$ / 16V		
E1103	23T00181L49	ELY.,	330 $\mu\text{F}$ / 50V		
E1104	23T00181L49	ELY.,	330 $\mu\text{F}$ / 50V		
E1105	23T00181L49	ELY.,	330 $\mu\text{F}$ / 50V		
E1106	23T00181L21	ELY.,	1000 $\mu\text{F}$ / 16V		
E1107	23T00181L48	ELY.,	100 $\mu\text{F}$ / 50V		
E1108	23T00181L48	ELY.,	100 $\mu\text{F}$ / 50V		
E1111	23T00180L25	ELY.,	10 $\mu\text{F}$ / 50V		
E1112	23T00180L23	ELY.,	3.3 $\mu\text{F}$ / 50V		
E1113	23T00180L25	ELY.,	10 $\mu\text{F}$ / 50V		
C1201	08T90316F13	TF,	4700pF		
E1202	23T00180L03	ELY.,	47 $\mu\text{F}$ / 10V		
C1203	08T90316F23	TF,	0.033 $\mu\text{F}$		

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
C1204	08T90316F09	TF, 2200pF	C1502	08T52714F13	CER., 0.01μF
E1204	23T00180L25	ELY., 10μF / 50V	C1611	21S40655F17	CER., 33pF
C1205	08T90316F17	TF, 0.01μF			
E1205	23T00180L25	ELY., 10μF / 50V			
C1206	08T90316F17	TF, 0.01μF			
E1206	23T00180L25	ELY., 10μF / 50V			
C1207	21S40655F23	CER., 100pF			
E1207	23T00180L20	ELY., 0.47μF / 50V			
C1208	08T90316F17	TF., 0.01μF			
C1209	21S40655F17	CER., 33pF			
E1209	23T00181L44	ELY., 10μF / 50V			
E1210	23T00180L12	ELY., 22μF / 25V			
C1211	21S40655F11	CER., 10pF			
E1211	23T00180L24	ELY., 4.7μF / 50V			
C1212	21S40655F11	CER., 10pF			
E1212	23T00180L24	ELY., 4.7μF / 50V			
E1213	23T00180L25	ELY., 10μF / 50V			
E1214	23T00180L12	ELY., 22μF / 25V			
E1215	23T00180L03	ELY., 47μF / 10V			
E1220	23T00180L20	ELY., 0.47μF / 50V			
C1229	08T90316F01	TF, 4700pF			
C1240	08T74293F25	CER., 33pF			
C1301	08T90316F13	TF, 4700pF			
C1305	08T90316F29	TF, 0.1μF			
C1306	08T90316F23	TF, 0.033μF			
E1308	23T00180L24	ELY., 4.7μF / 50V			
C1309	08T90316F29	TF, 0.1μF			
C1310	08T90316F17	TF, 0.01μF			
E1311	23T00180L25	ELY., 10μF / 50V			
C1312	08T90316F27	TF, 0.068μF			
C1313	08T90316F19	TF, 0.015μF			
E1315	23T00180L12	ELY., 22μF / 25V			
E1316	23T00180L23	ELY., 3.3μF / 50V			
E1317	23T00180L20	ELY., 0.47μF / 50V			
C1318	08T90316F05	TF, 1000pF			
C1319	08T90316F17	TF, 0.01μF			
E1320	23T00180L25	ELY., 10μF / 50V			
C1326	08T57298F01	CER., 0.1μF			
C1327	08T57298F01	CER., 0.1μF			
E1331	23T00180L25	ELY., 10μF / 50V			
E1332	23T00180L25	ELY., 10μF / 50V			
C1401	08T93406F13	P.P, 330pF			
C1402	08T93406F13	P.P, 330pF			
C1405	08T93406F11	P.P, 270pF			
C1406	08T93406F11	P.P, 270pF			
E1409	23T00180L25	ELY., 10μF / 50V			
E1410	23T00180L25	ELY., 10μF / 50V			
E1421	23T00180L25	ELY., 10μF / 50V			
E1422	23T00180L25	ELY., 10μF / 50V			
C1431	08T90316F03	TF, 680pF			
C1432	08T90316F03	TF, 680pF			
C1501	08T57298F01	CER., 0.1μF			
<b>Resistors</b>					
VR1201	18T15356W15	Variable, 22K ohm			
VR1202	18T15356W15	Variable, 22K ohm			
VR1301	18T15356W15	Variable, 22K ohm			
VR1302	18T15356W15	Variable, 22K ohm			
VR1303	18T15356W09	Variable, 2.2K ohm			
<b>Phone P. C. Board</b>					
<b>IC / Jack</b>					
IC7201	51T90149F01	M5218AP			
JK7201	09T66672F05	Jack, Phones			
<b>Capacitors</b>					
C7205	08T90316F01	TF, 470pF			
C7206	08T90316F01	TF, 470pF			
C7207	08T52714F13	CER., 0.01μF			
E7201	23T00180L12	ELY., 22μF / 25V			
E7202	23T00180L12	ELY., 22μF / 25V			
<b>Resistors</b>					
VR7201	18T84123F01	Variable, 50K ohm			

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
<b>Power Switch P. C. Board</b>					
<b>Switch</b>					
S8101	40T84122F01	Power SDDLE (POWER)	D9105	48T84758F01	1SS270
			D9106	48T84758F01	1SS270
			D9107	48T84758F01	1SS270
			D9108	48T84758F01	1SS270
			D9109	48T84758F01	1SS270
			D9110	48T84758F01	1SS270
			D9111	48T84758F01	1SS270
			D9112	48T84758F01	1SS270
<b>Capacitors</b>			<b>LED</b>		
C8101	08T00196L01	POLY., 0.01 $\mu$ F	LD9101	48T66616F02	SLR-54VR3 (RED)
C8102	08T00196L01	POLY., 0.01 $\mu$ F			
C8204	08T90316F22	TF, 0.027 $\mu$ F			
C8207	08T90316F19	TF, 0.015 $\mu$ F			
<b>Resistors</b>			<b>Switches</b>		
R1106	06T92263F34	240 ohm 1W	S9100	40T83324F11	Tact, SKHHAP (PLAY / PAUSE)
R1119	06T92263F27	120 ohm 1W	S9101	40T83324F11	Tact, SKHHAP (STOP)
R1123	06T92263F27	120 ohm 1W	S9102	40T83324F11	Tact, SKHHAP (FF / FS)
R1298	06T15279W97	C.F., 22K ohm 2W	S9103	40T83324F11	Tact, SKHHAP (BS / FB)
R1299	06T15279W77	C.F., 3.3K ohm 2W	S9104	40T83324F06	Tact, SKHHAN (RANDOM)
			S9105	40T83324F06	Tact, SKHHAN (A-SCAN)
			S9106	40T83324F06	Tact, SKHHAN (A-PAUSE)
			S9107	40T83324F06	Tact, SKHHAN (REPEAT)
			S9108	40T83324F11	Tact, SKHHAP (PROGRAM)
			S9109	40T83324F11	Tact, SKHHAP (CLEAR)
			S9110	40T83324F11	Tact, SKHHAP (M-CHECK)
			S9111	40T83324F11	Tact, SKHHAP (DISPLAY)
			S9112	40T83324F11	Tact, SKHHAP (OPEN / CLOSE)
<b>Logic P. C. Board</b>			<b>Capacitors</b>		
<b>IC</b>			C9101	08T90316F17	TF, 0.01 $\mu$ F
IC9101	51T26032W01	SBX1610	C9103	08T90316F22	TF, 0.027 $\mu$ F
<b>Diodes</b>					
D9100	48T84758F01	1SS270			
D9101	48T84758F01	1SS270			
D9102	48T84758F01	1SS270			
D9103	48T84758F01	1SS270			
D9104	48T84758F01	1SS270			

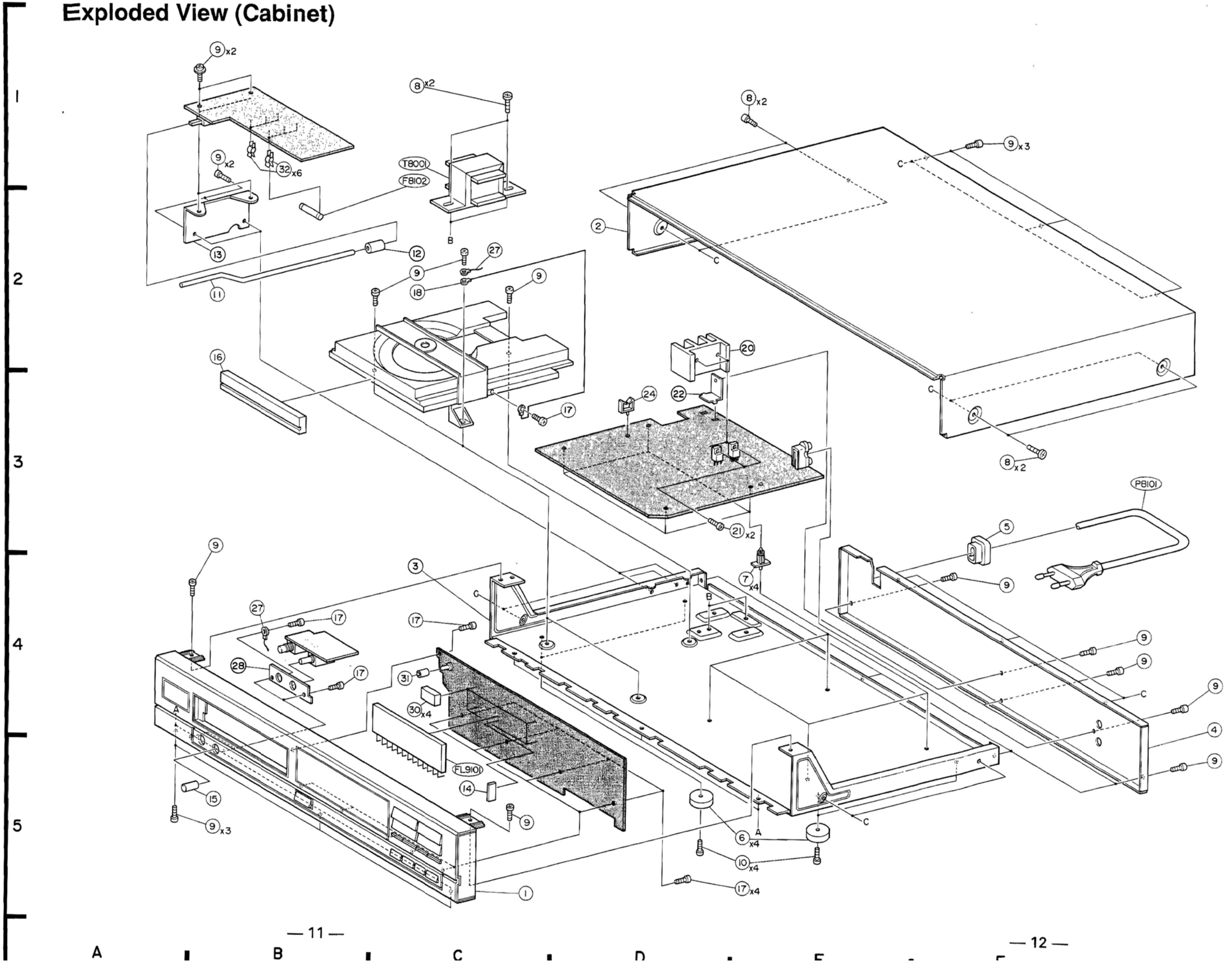
## Cabinet Assembly Parts List

Note : The parts without parts list are not supplied.

Symbol No.	Part No.	Description	Symbol No.	Index	Part No.	Description
<b>Miscellaneous</b>			1		01C31869W01	Assy., Front Panel
			2		15C12903W01	Cover, Top
			4		15C12902W17	Cover, Rear
			5		43T16093W01	Support, Cord
			6		75A96563F03	Pad, Trann-Leg
			7		07A91046F01	Support, P.C.Board
			8		03S71677F14	Screw, Bind (M4×8)
			9		03S71031F04	Screw, Bind (M3×8)
			10		03S71677F25	Screw, Bind (M4×12)
			11		47A12896W02	Shaft, Power
			12		43T25269W01	Pushing, Rubber
			14		75S12196W21	Cushion, Rubber
			15		36A55234F04	Knob, Control
			16		64B31873W01	Panel, Tray
			17		03S71031F02	Screw, Bind (M2.6×8)
			18		01T16425W12	Assy., Lug Wire 1P
			21		03S72235F19	Screw, Bind (M3×6)
			24		42T93247F09	Clamp, Wire
			27		01T15318W02	Assy., Lug Wire 1P
			30		07A83876F01	Support, FL
			31		43A61758F01	Spacer, Lamp
			32		09T51410F01	Holder, Fuse
F8102	65T42077U09	Fuse 200mA				
FL9101	65T15806W01	FL Display				
HD2001	88E08496S01	Head, Optical Pick Up				
M2001	88E08448S01	Assy., Loading Motor				
M2002	01E08458S01	Assy., Sled Motor				
M2003	01E08459S01	Assy., Spindle Motor				
P8101	28T43812P04	Plug, Cord				
or	28T00001K01	Plug, Cord				
S2001	40E08481S01	Switch, Leaf (OPEN / CLOSE)				
S2002	40E08482S01	Switch, Leaf (LIMIT)				
T8101	2516090W01	TRANS., Power				

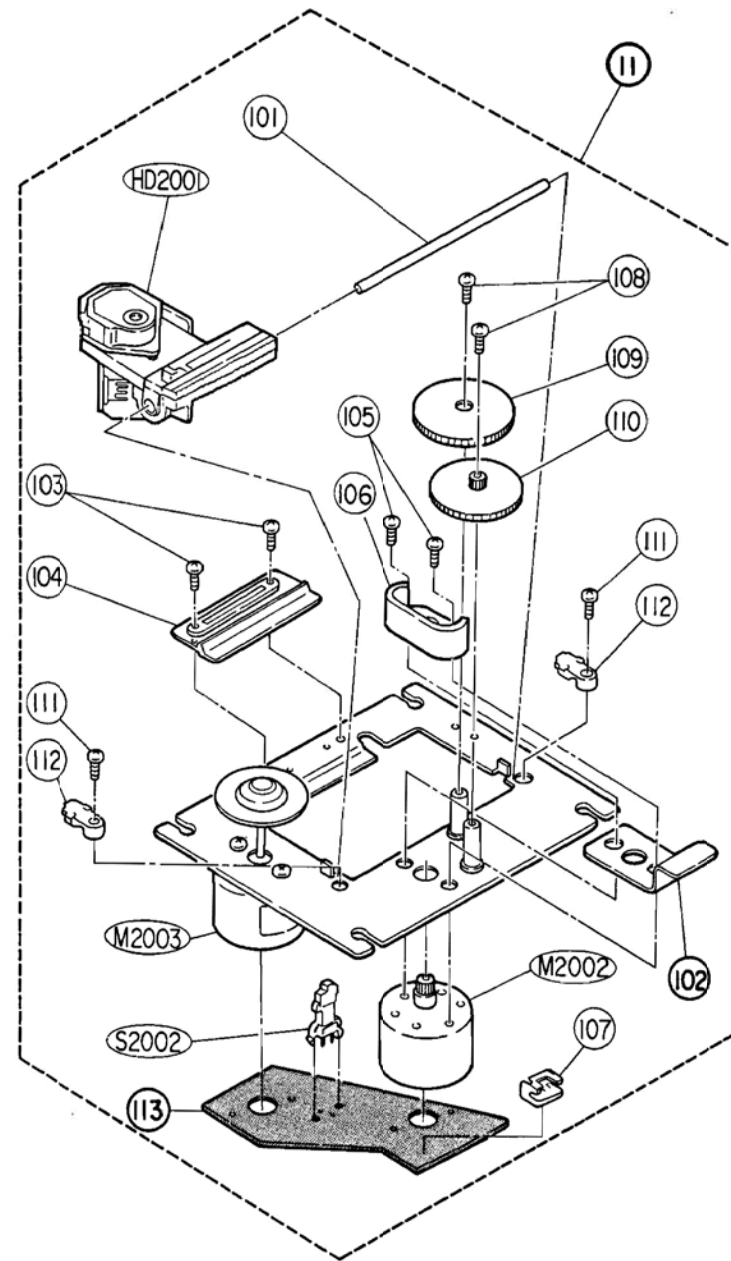
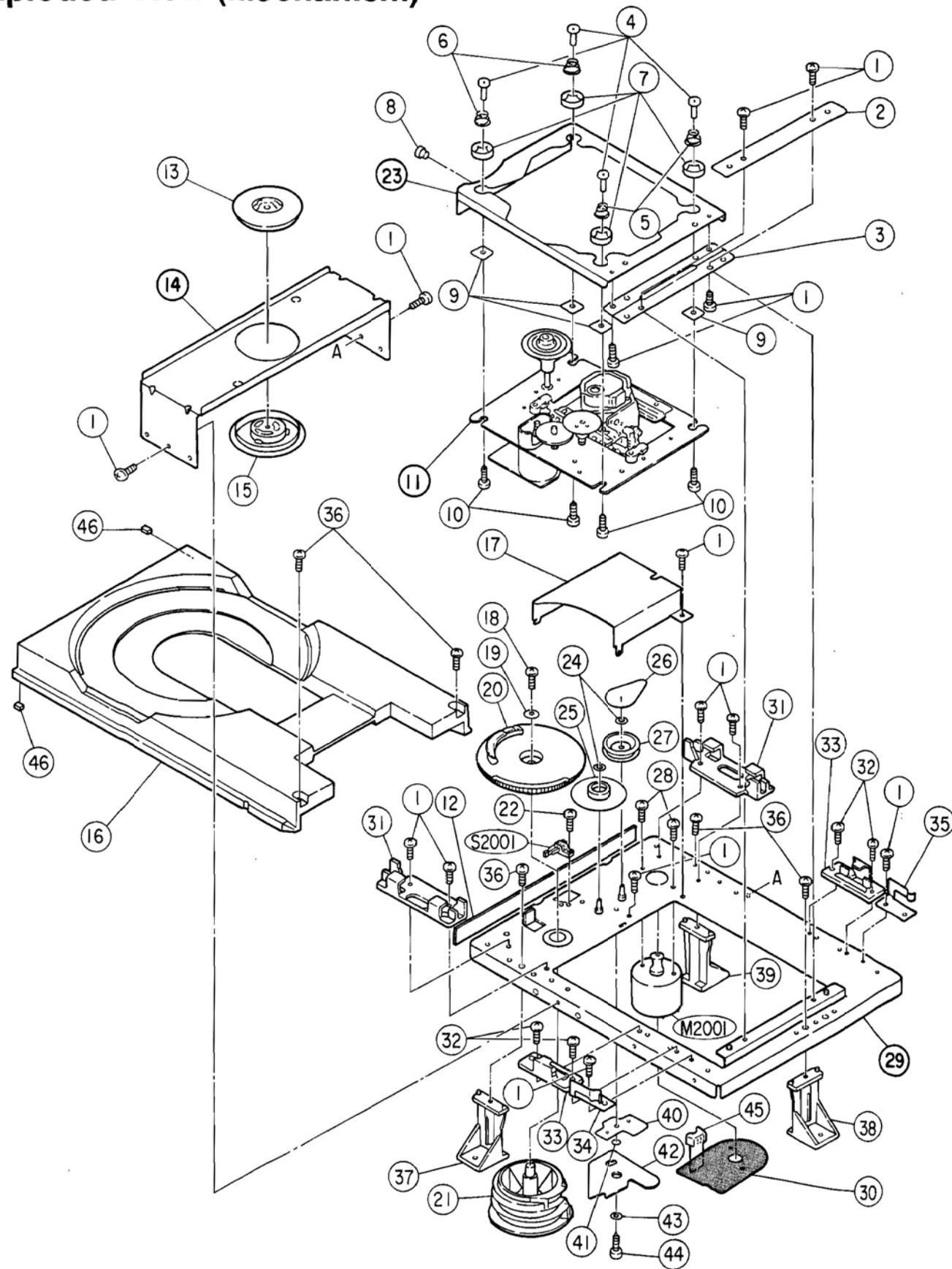
DZ-120      DZ-120

**Exploded View (Cabinet)**





### Exploded View (Mechanism)



## Mechanism Assembly Parts List

NOTE : The parts without parts list are not supplied.

Symbol No.	Index	Part No.	Description	Symbol No.	Index	Part No.	Description
1		03E03010S02	Screw, Round (M2.6×6)	107	4-F	09E08477S01	Connector (4P)
2	1-D	07E08437S01	Plate, Hinge Hold	108	2-G	03E08473S01	Screw, Flat (M1.7×3)
3	2-D	07E08445S01	Hinge	109	2-G	44E08488S01	Gear (A)
4	1-C	49E08460S01	Shaft (T)	110	2-G	44E08489S01	Gear (B)
5	1-C	41E08465S01	Spring, Coil (B)	111		03E08474S01	Screw, Flat (M2.6×8)
6	1-C	41E08466S01	Spring, Coil (A)	112		42E08483S01	Clamp, Shaft
7	1-C	14E08467S01	Insulator (C)				
8	1-B	49E08461S01	Roller				
9		15E08468S01	Plate (T)				
10		03E08471S01	Screw, W/Washer (M1.8×8)				
12	4-C	01E08456S01	Tape, Front				
13	1-B	01E08446S01	Assy., Magnet				
15	2-B	49E08462S01	Pulley, Chacking				
16	4-A	01E08447S01	Tray				
17	3-C	15E08469S01	Cover, Gear				
18	3-C	03E08497S01	Screw, Bind (M2.6×10)				
19	3-C	04E08475S01	Washer, Flat (M2.6)				
20	3-C	44E08490S01	Gear, Drive				
21	5-C	45E08492S01	Cam, Control				
22	4-C	03E03010S03	Screw, Round (M2×4)				
24	3-C	04E02927S01	Washer, Lock (M2)				
25	3-C	44E08491S01	Gear, Middle				
26	3-C	42E08484S01	Belt				
27	3-C	49E08463S01	Pulley, Loading				
28	4-C	03E02990S01	Screw, Bind (M2.6×3)				
30	5-D	84E08495S01	Motor P.C.Board				
31		15E08449S01	Holder, Tray (Front)				
32		03E03008S02	Screw, Pan (M2×4)				
33		15E08450S01	Holder, Tray (Rear)				
34	5-C	45E08493S01	Guide, Tray (R)				
35	4-D	45E08493S02	Guide, Tray (L)				
36		03E08497S02	Screw, Bind (M3×10)				
37	5-B	01E08451S01	Boss, MD Bracket (R)				
38	5-D	01E08452S01	Boss, MD Bracket (Rear)				
39	4-D	01E08453S01	Boss, MD Bracket (L)				
40	5-C	15E08470S01	Plate, Link				
41	5-C	01E08454S01	Boss				
42	5-C	01E08455S01	Assy., Stopper Link				
43	5-C	43E08485S01	Spacer				
44	5-C	03E08498S01	Screw, Frange (M2.6×8)				
45	5-D	09E08476S01	Connector (5P)				
46	3-A	43E08486S01	Damper				
101	1-F	49E08464S01	Shaft, Slide				
103	2-E	03E08472S01	Screw, Flat (M2×5)				
104	3-E	15E08457S01	Holder, Slide				
105	2-F	03E02984S02	Screw, Pan (M2×5)				
106	2-F	15E08478S01	Cover, Gear				

## Packing Assembly Parts List

Symbol No.	Part No.	Description	Symbol No.	Part No.	Description
101	56S30746W02	Carton, Packing			
102	56D13765W01	Tray, Packing (L)			
103	56D13765W02	Tray, Packing (R)			
104	56B40230G23	Sack, Polyethylene			
105-1	68P21552W44	Owner's, Manual			
105-2	28T70621F03	Plug, Output			
105-3	01T90545F01	Unit, Remote Control			
105-4	60T81756F01	Battery, UM-4UC			