

# TOYOTA

## AUDIO COMPONENT SERVICE MANUAL



### CQ-TS7170L

LW/MW/UKW RDS Radio with CD Player

PART No. : 86120-02260

VEHICLE : COROLLA

ID CODE : W58802

DESTINATION : Europe

PRODUCED AFTER : Nov., 2001

### Specification\*

#### General

Power Supply	DC 12V (11V - 16V), Test Voltage 14.4V Negative Ground
Current Consumption	Less than 2.5A (0.5W×4ch)
Power Output	17W×4ch
Speaker Impedance	4Ω

#### LW Radio

Frequency Range	153 - 279kHz
Usable Sensitivity	19dB/μV (S/N 20dB)

#### MW Radio

Frequency Range	522 - 1,611kHz
Usable Sensitivity	17dB/μV (S/N 20dB)

#### FM Stereo Radio

Frequency Range	87.5 - 108.0MHz
Usable Sensitivity	8dB/μV (S/N 30dB)

#### CD Player

Signal to Noise Ratio	More than 70dB (IHF-A)
Channel Separation	65dB (IHF-A)

Dimensions**	178(W)×100(H)×140(D)mm
Weight**	2kg

\* Specifications and the design are subject to possible modification without notice due to improvements.

\*\* Dimensions and Weight shown are approximate.

PUB. No. 80633

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## 1 FEATUERS

- PLL (Phase Locked Loop) synthesized tuning.
- 24-station preset (6-AM, 18-FM).
- RDS (Radio Data System) function.
- Electronic volume control.
- NCD-8 CD player.
- External CD changer control.

## 2 LASER PRODUCTS

**Do not take apart this unit or attempt to make any changes yourself.**

This unit is very intricate that uses a laser pickup to retrieve information from the surface of compact discs. The laser is carefully shielded so that its rays remain inside the cabinet. Therefore, never try to disassemble the player or alter any of its parts since you may be exposed to laser rays and dangerous voltages.

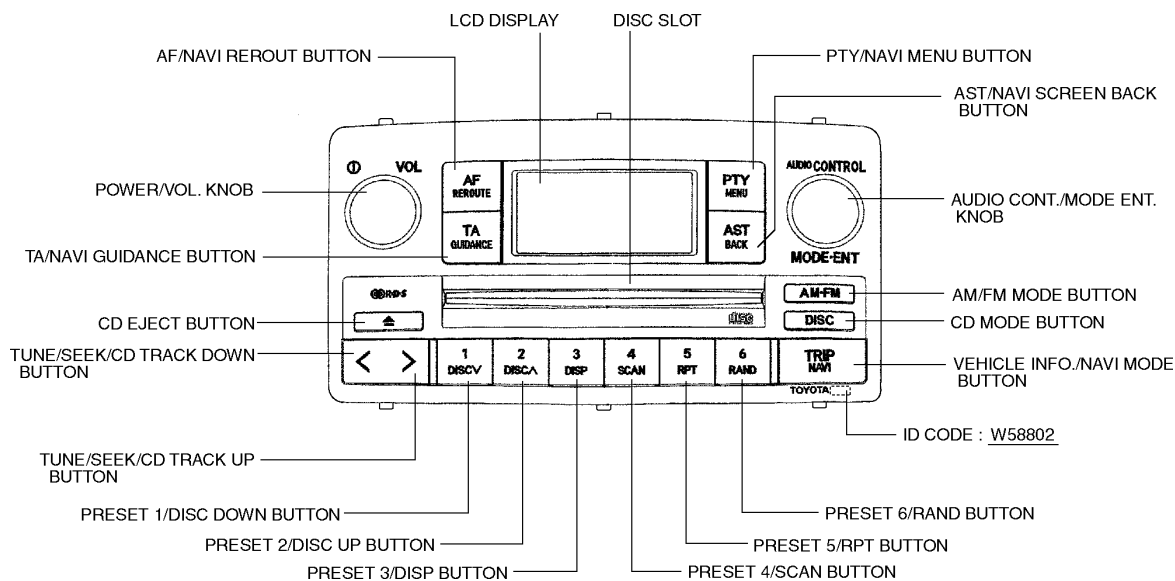
### **Laser products :**

Wave length	780nm
Laser power	No hazardous radiation is emitted with safety protection.

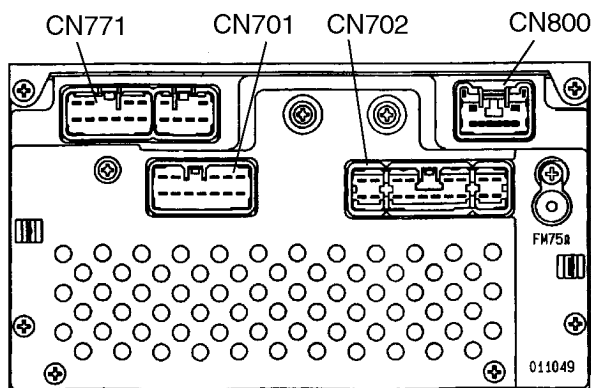
### **Caution**

This product utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

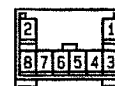
### 3 FRONT VIEW AND FUNCTIONS



### 4 REAR VIEW AND CONNECTORS

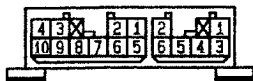


<CN800 8P CONNECTOR>



- |                                   |        |
|-----------------------------------|--------|
| 1. Bus Request Output             | (BRQ)  |
| 2. No Connection                  | (N.C.) |
| 3. Signal Ground                  | (S.G)  |
| 4. HIT64 Communication Signal (-) | (HIT-) |
| 5. HIT64 Communication Signal (+) | (HIT+) |
| 6. No Connection                  | (N.C.) |
| 7. No Connection                  | (N.C.) |
| 8. No Connection                  | (N.C.) |

<CN771 6P/10P CONNECTOR>



[10P CONNECTOR]

- |                             |        |
|-----------------------------|--------|
| 1. Front Speaker, Right (+) | (FR+)  |
| 2. Front Speaker, Left (+)  | (FL+)  |
| 3. Power Supply, ACC        | (ACC)  |
| 4. Power Supply, +B         | (+B)   |
| 5. Front Speaker, Right (-) | (FR-)  |
| 6. Front Speaker, Left (-)  | (FL-)  |
| 7. Ground                   | (GND)  |
| 8. Power Supply, ANT (+)    | (ANT+) |
| 9. Power Supply, AMP (+)    | (AMP+) |
| 10. Power Supply, ILL (+)   | (ILL+) |

[6P CONNECTOR]

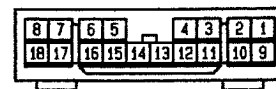
- |                            |        |
|----------------------------|--------|
| 1. Rear Speaker, Right (+) | (RR+)  |
| 2. Rear Speaker, Left (+)  | (RL+)  |
| 3. Rear Speaker, Right (-) | (RR-)  |
| 4. No Connection           | (N.C.) |
| 5. No Connection           | (N.C.) |
| 6. Rear Speaker, Left (-)  | (RL-)  |

<CN701 12P CONNECTOR>



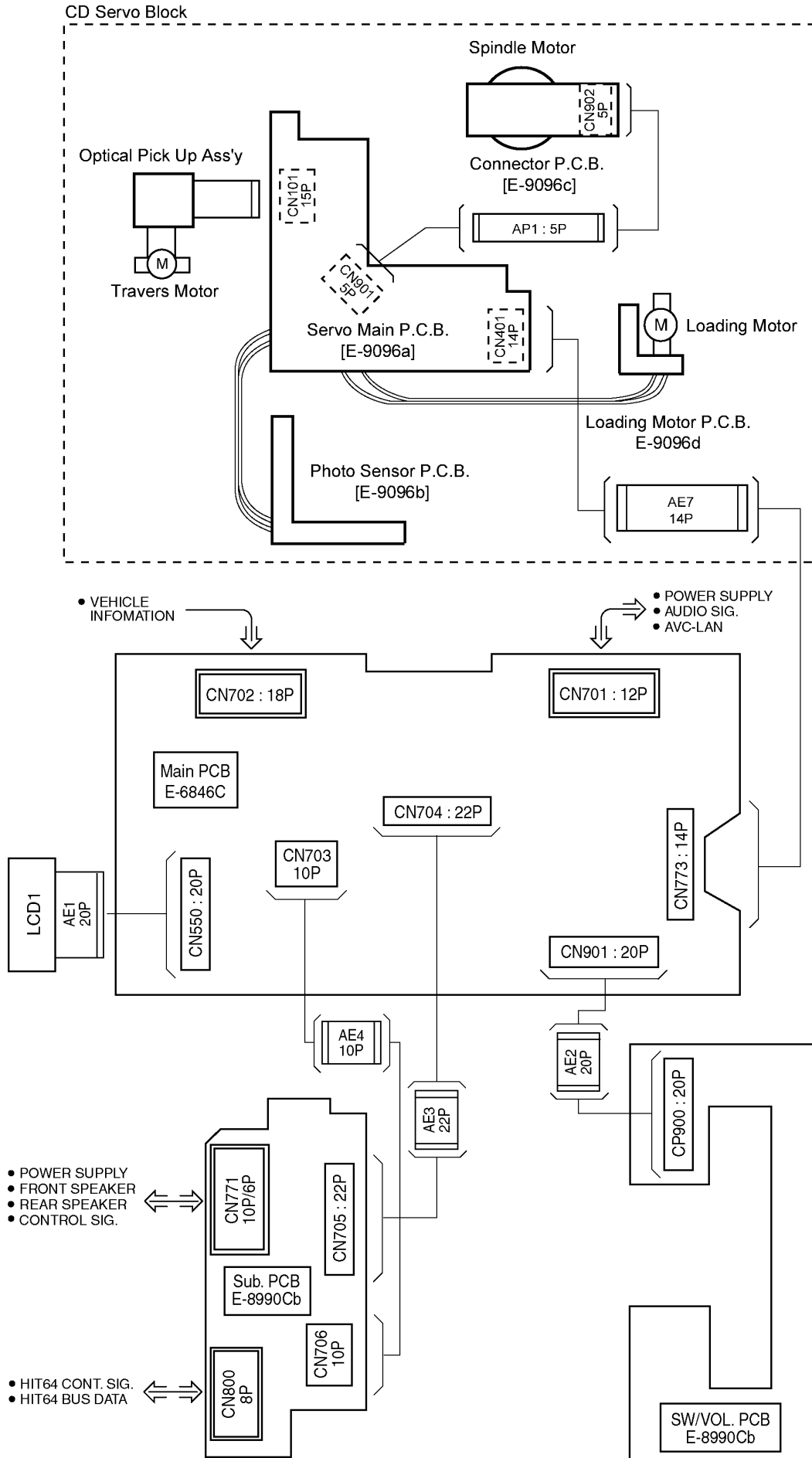
- |                          |        |
|--------------------------|--------|
| 1. Audio Right (+) Input | (R+)   |
| 2. Audio Left (+) Input  | (L+)   |
| 3. Signal Ground         | (S.G)  |
| 4. Mute Control          | (MUTE) |
| 5. Power Supply, +B      | (+B)   |
| 6. Audio Right (-) input | (R-)   |
| 7. Audio Left (-)        | (L-)   |
| 8. Ground                | (GND)  |
| 9. AVC-LAN Data (-)      | (TX-)  |
| 10. AVC-LAN Data (+)     | (TX+)  |
| 11. No Connection        | (N.C.) |
| 12. Power Supply, ACC    | (ACC)  |

<CN702 18P CONNECTOR>



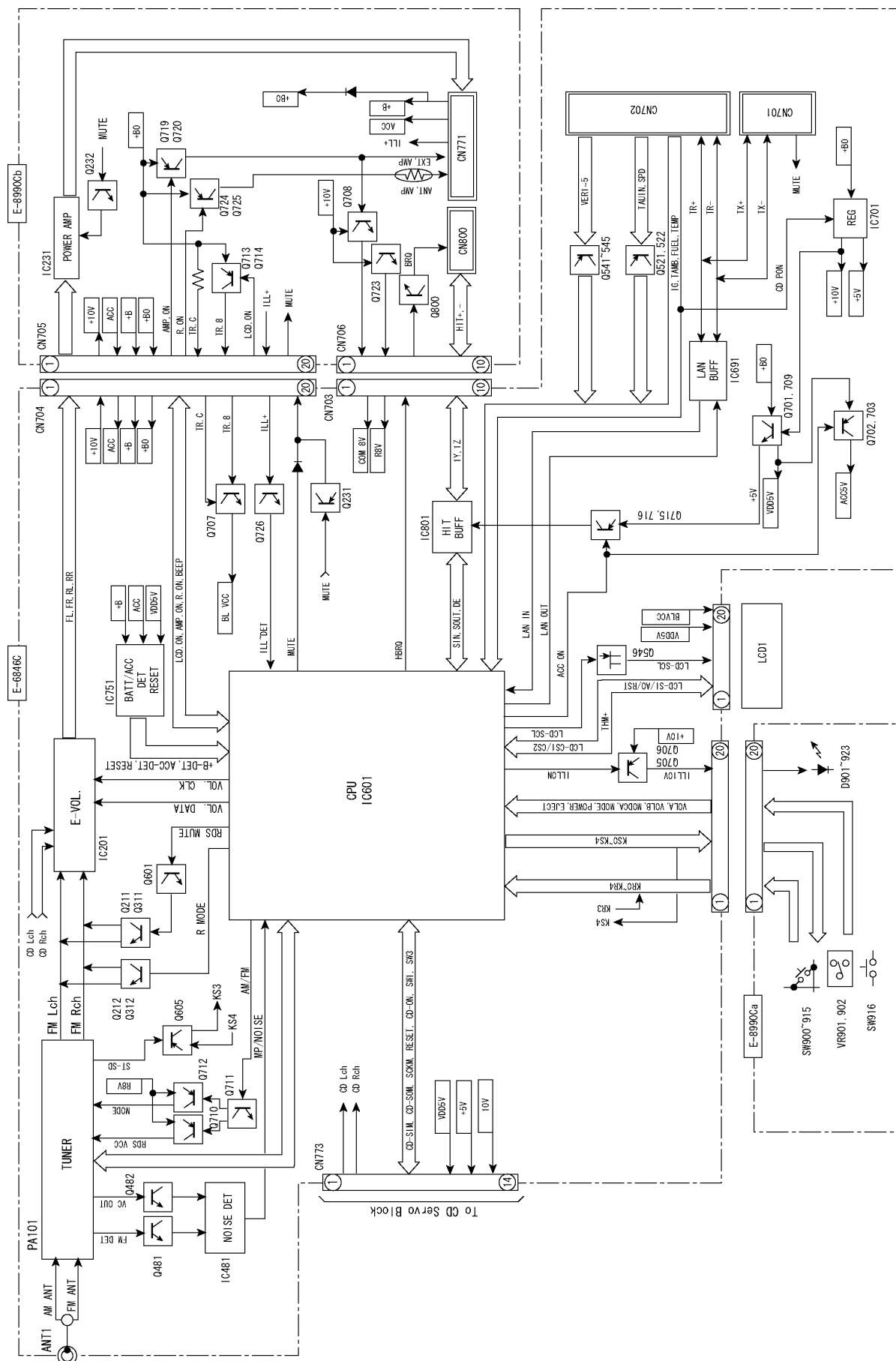
- |                                 |        |
|---------------------------------|--------|
| 1. Engine Type Ver.2 Input      | (VER2) |
| 2. Engine Type Ver.1 Input      | (VER1) |
| 3. AVC-LAN Data (+)             | (TX+)  |
| 4. Ground                       | (GND)  |
| 5. Engine Type Ver.5 Input      | (VER5) |
| 6. No Connection                | (N.C.) |
| 7. Ignition Pulse Input         | (IG)   |
| 8. No Connection                | (N.C.) |
| 9. Engine Type Ver.4 Input      | (VER4) |
| 10. Engine Type Ver.3 Input     | (VER3) |
| 11. AVC-LAN Data (-)            | (TX-)  |
| 12. Outside Temp. (-)           | (TH-)  |
| 13. Outside Temp. (+)           | (TH+)  |
| 14. Injector Voltage Input      | (TAUB) |
| 15. Injector Drive Signal Input | (TAU)  |
| 16. Speed Pulse Input           | (SPD)  |
| 17. No Connection               | (N.C.) |
| 18. No Connection               | (N.C.) |

# 5 WIRING CONNECTION

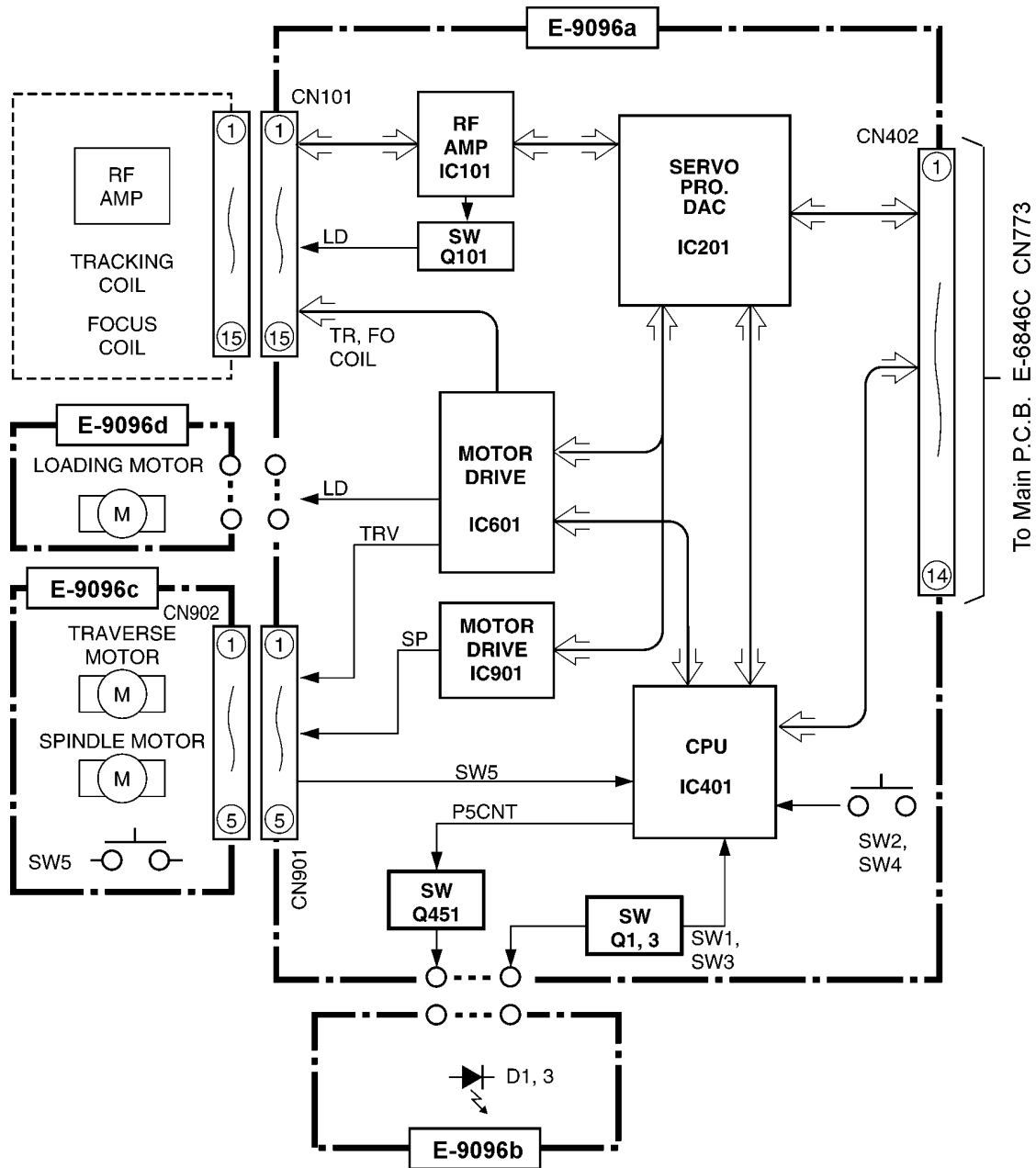


## 6 BLOCK DIAGRAM

### 6.1. Main Block



## 6.2. CD Servo Block



# 7 TERMINALS DESCRIPTION

## 7.1. Main Block

IC601 : C2CBKH000027

Pin No.	Port	Descriptions	I/O	FM (V)	AM (V)	TP (V)
1	BEEP	Beep out	O	0	0	0
2	LCD CS1	LCD driver chip select	O	0	0	0
3	LCD CS2	LCD driver chip select	O	5.3	5.3	5.3
4	LCD RST	LCD driver reset	O	5.3	5.3	5.3
5	LCD A0	LCD command/data	O	0	0.5	0
6	CD CLK	CD data shift clock	O	5.3	5.3	5.3
7	CD SOM	CD data	I	0	0	3.5
8	LCD SCL	LCD data shift clock	O	50.	4.9	5.0
9	CD SIM	CD data	O	0	0	3.6
10	LCD SI	LCD serial data	O	5.3	5.3	5.3
11	RESET	System reset	I	5.3	5.3	5.3
12	XT2	Crystal oscillator	-	1.8	1.8	1.8
13	XT1	Crystal oscillator	-	1.3	1.3	1.3
14	GND	Ground	-	0	0	0
15	X2	Crystal oscillator	-	1.5	1.5	1.5
16	X1	Crystal oscillator	-	1.4	1.4	1.4
17	REG OFF	(Connecting to ground)	-	0	0	0
18	REG CPU	Bypass capacitor terminal	-	3.5	3.5	3.5
19	VDD0	+5V power supply	-	5.1	5.3	5.3
20	KR0	Key matrix data return	I	4.3	1.0	1.0
21	KR2	Key matrix data return	I	0	0	1.0
22	KR4	Key matrix data return	I	4.2	1.0	0
23	KS1	Key matrix strobe	O	0	1.0	1.0
24	KS3	Key matrix strobe	O	0	1.0	1.0
25	VOL A	Rotary encoder signal	I	0	5.2	5.2
26	PWR	Power switch	I	5.1	5.2	5.2
27	VOL B	Rotary encoder signal	I	0	5.2	5.2
28	KS4	Key matrix strobe	O	5.1	1.2	1.2
29	KS2	Key matrix strobe	O	0	1.2	1.2
30	KS0	Key matrix strobe	O	0	1.2	1.2
31	KR3	Key matrix data return	I	0	0	0
32	KR1	Key matrix data return	I	0	0	1.0
33	MODE A	Rotary encoder signal	I	5.2	5.2	5.2
34	MODE B	Rotary encoder signal	I	0	0	0
35	CD PON	CD power on/off	O	5.3	5.3	5.3
36	ILL-DET	Illumi.+ detection	I	0	0	0
37	BL-P	LCD back light on/off	O	5.3	5.3	5.3
38	ILL ON	Illumi. power on/off	O	5.3	5.3	5.3
39	AMP ON	Amp power on/off	O	5.3	5.3	5.3
40	GND	Ground	-	0	0	0
41	VDD	+5V power supply	-	5.3	5.3	5.3
42	R ON	Radio power on/off	O	5.3	5.3	5.3
43	ACC ON	ACC5V power on/off	O	5.3	5.3	5.3
44	MUTE	Mute output	O	0	0	0
45	VOL DATA	Electronic volume data	O	0	0	0
46	VOL CLK	Data shift clock for Electronic volume	O	0	0	0
47	FAN	Not used	-	-	-	-
48	+B-DET	Battery level detection	I	5.3	5.3	5.3
49	SW1	Disc in switch	I	0	0	4.8
50	SW3	Disc out switch	I	0	0	4.9
51	CD RST	CD reset	O	5.3	5.3	5.3
52	CD ON	CD control CPU start	O	0	0	5.3
53	EQ	Not used	-	-	-	-
54	BIT3	Not used	-	-	-	-
55	BIT2	Not used	-	-	-	-
56	BIT1	Not used	-	-	-	-
57	V5	Engine type signal	I	0	0	0
58	V4	Engine type signal	I	0	0	0
59	V3	Engine type signal	I	0	0	0
60	V1	Engine type signal	I	0	0	0
61	V2	Engine type signal	I	0	0	0
62	BRIGHT	Not used	-	-	-	-
63	RDS MUTE	RDS mute	O	5.3	5.3	0
64	HBRQ	HIT64 bus request	O	0	0	0
65	HIT-DE	HIT64 data enable	O	2.0	1.7	1.7

Pin No.	Port	Descriptions	I/O	FM (V)	AM (V)	TP (V)
66	HIT-SIN	HIT64 data	I	0	4.7	4.7
67	HIT-SOUT	HIT64 data	O	5.3	5.3	5.3
68	IF CONT	Not used	-	-	-	-
69	AM/FM	Radio power control	O	5.3	0	5.3
70	RMODE	Radio mute	O	0	5.3	0
71	NC	No connection	-	-	-	-
72	NC	No connection	-	-	-	-
73	VPP	(Connecting to ground)	-	0	0	0
74	IG	Ignition voltage	I	0	0	0
75	FUEL	Not used	-	-	-	-
76	TEMP	Open air temperature	I	0	5.3	5.3
77	TAUB	Injector voltage	I	5.3	0	0
78	NOISE	Noise detection	I	0	0	0.3
79	MP	FM multipass detection	I	0.3	0	0
80	VCONT	Phase diff. level detection	I	0	0	0.3
81	LCDTEMP	LCD temperature	I	2.2	2.1	2.0
82	VDD	+5V power supply	-	5.3	5.3	5.3
83	AVDD	+5V power supply	-	5.3	5.3	5.3
84	GND	Ground	-	0	0	0
85	LAN IN	LAN data	I	0	0	0
86	LAN OUT	LAN data	O	0	0	0
87	GND	Ground	-	0	0	0
88	TAU	Injector drive signal	I	0	0	0
89	SPD	Speed pulse	I	0	0	0
90	PLL-DO	PLL data	O	5.3	5.3	5.3
91	LCD-DET	LCD unit detection	I	5.3	5.3	5.3
92	ACC-DET	ACC level detection	I	5.3	5.3	5.3
93	EJ	CD eject switch	I	5.3	5.3	5.3
94	RDS DATA	RDS data	I	2.5	0	2.5
95	FILT CON	Not used	-	-	-	-
96	NK CON	Not used	-	-	-	-
97	RDS CLK	RDS clock	I	2.6	0	2.6
98	PLL CE	PLL chip enable	O	0	0	0
99	PLL DI	PLL data	I	0	0	0
100	PLL CLK	PLL clock	O	0	0	0

Note 1 : Voltage measurements are with respect to ground, with a voltmeter (internal resistance : 10M ohms).

## 7.2. CD Servo Block

### IC201 : MN662748RPMF

Pin No.	Port	Description	I/O	(V)
1	BCLK	Not used	-	-
2	LRCK	Not used	-	-
3	SRDATA	Not used	-	-
4	DVDD	+5V digital power supply	-	5.0
5	DVSS1	Digital ground	-	0
6	TX	Not used	-	-
7	MCLK	MPU command clock	I	0
8	MDATA	MPU command data	I	0
9	MLD	MPU command load	I	0
10	SENSE	Sense signal	O	0
11	/FLOCK	Focus servo lock	O	0
12	/TLOCK	Tracking servo lock	O	4.9
13	BLKCK	Not used	-	-
14	SQCK	Q code external clock	I	4.9
15	SUBQ	Q code output	O	2.5
16	DMUTE	DSP mute	I	0
17	STAT	DSP Status output	O	3.1
18	/RST	Reset input	I	4.9
19,20		Not used	-	-
21	TRV	Forced traverse output	O	2.5
22	TVD	Traverse drive output	O	2.5
23	PC	Spindle motor control	O	0
24	ECM	Spindle motor drive	O	2.5
25	ECS	Spindle motor drive	O	2.5
26	KICK	Kick pulse output	O	2.5
27	TRD	Tracking motor drive	O	2.5
28	FOD	Focus motor drive	O	2.5
29	VREF	D/A reference voltage	I	2.5
30	FBAL	Focus balance adjust	O	2.5
31	TBAL	Tracking balance adjust	O	2.5
32	FE	Focus error signal	I	2.5
33	TE	Tracking error signal	I	2.5
34	RFENV	RF envelope signal	I	2.5
35	VDET	Vibration detection	I	0
36	OFTR	Off track signal	I	0
37	TRCRS	Track cross signal	I	2.1
38	/RFDET	RF detection signal	I	0
39	BDO	Drop out signal	I	0
40	LDON	Laser on/off control	O	4.5
41	PLL2	Not used	-	-
42	TOFS	TE offset	O	2.5
43	WVEL	Not used	-	-
44	ARE	RF signal	I	1.7
45	IREF	Reference current input	I	1.6
46	DRF	DSL bias	I	0
47	DSL	DSL loop filter	I/O	2.4
48	PLL	PLL loop filter	I/O	1.8
49	VCOF	Not used	-	-
50	AVDD2	+5V analog power supply	-	5.0
51	AFSS2	Analog ground	-	0
52	EFM	Not used	-	-
53	PCK/DSL	DSL bias	I	2.4
54	VCOF2	Tracking offset	O	2.5
55	SUBC	Not used	-	-
56	SBCK	(Connecting to ground)	-	-
57	VSS	Ground	-	0
58	X1	Crystal oscillator	I	1.7
59	X2	Crystal oscillator	O	2.3
60	VDD	+5V power supply	-	5.0
61,62	-	Not used	-	-
63	FCLK	Not used	-	-

64	IPFLAG	Not used	-	-
65	FLAG	Not used	-	-
66-69	-	Not used	-	-
70	IOSEL	(Connecting to ground)	I	0
71	/TEST	(Connecting to ground)	I	0
72	AVDD1	+5V analog power supply	-	4.9
73	OUTL	Audio Lch output	O	4.9
74	AVSS1	Analog ground	-	0
75	OUTR	Audio Rch output	O	4.9
76	RSEL	(Connecting to ground)	-	0
77	CSEL	(Connecting to ground)	-	0
78	PSEL	(Connecting to ground)	-	0
79	MSEL	(Connecting to ground)	-	0
80	SSEL	mode select	I	5.0

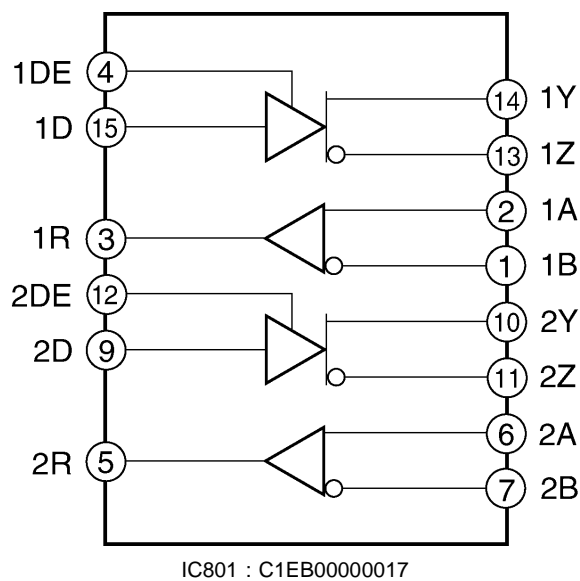
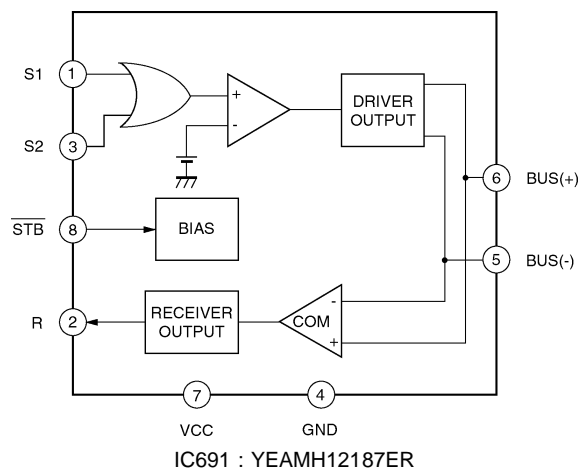
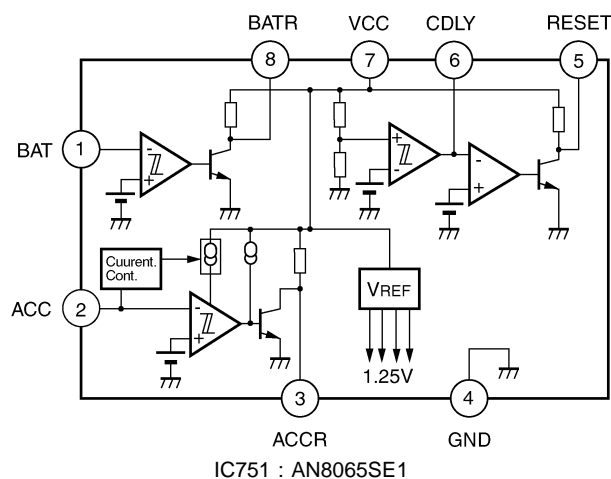
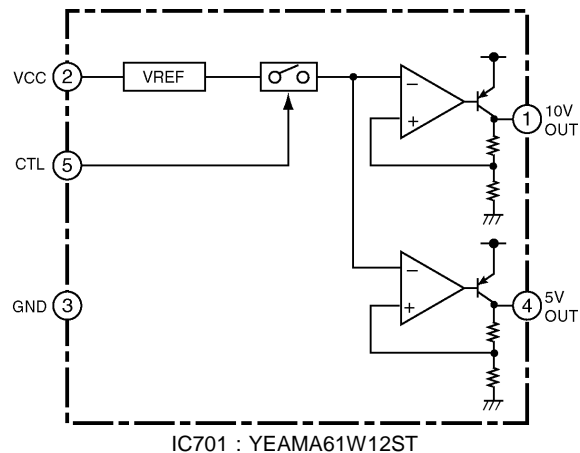
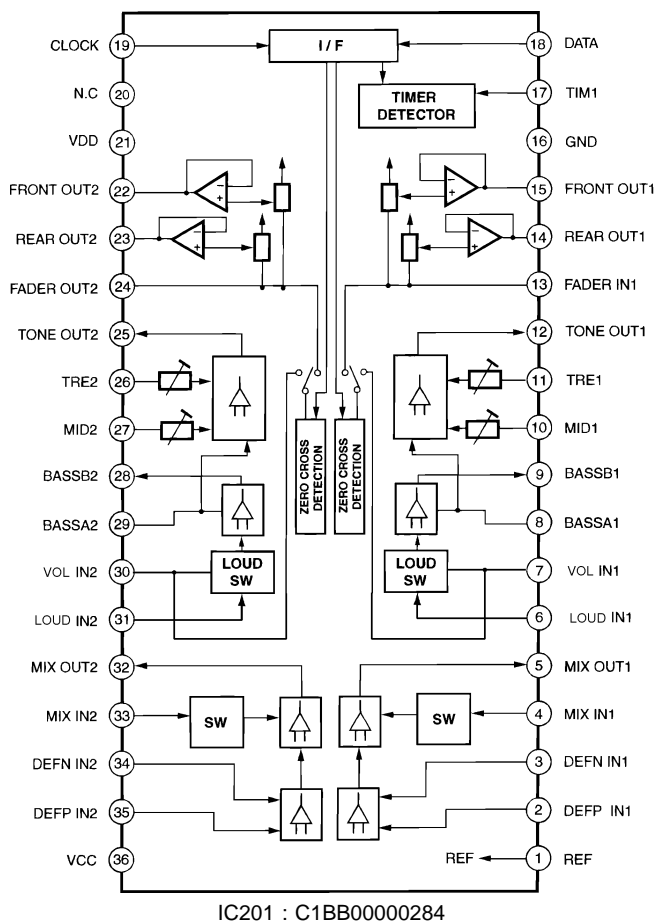
### IC401 : MN101C117AG

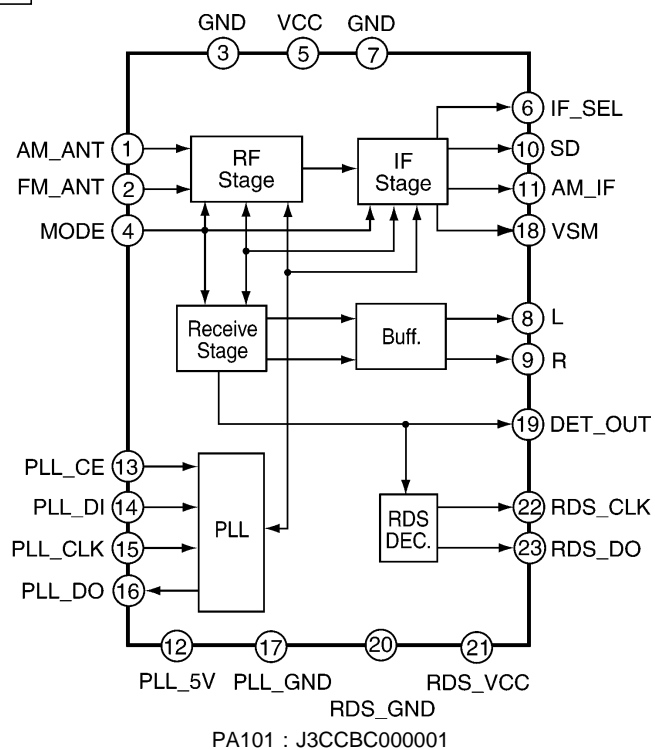
Pin No.	Port	Description	I/O	(V)
1	MASHON	Servo IC OSC control	O	5.0
2	P82	No connection	-	-
3	P81	No connection	-	-
4	P80	(Connection to ground)	-	0
5	Q1	Photo sensor signal (DISC IN)	I	4.5
6	Q3	Photo sensor signal (DISC OUT)	I	4.2
7	Q6	Photo sensor signal (Option)	I	5.0
8	SW4	Clamp SW signal	I	0
9	SW5	Inner SW signal	I	5.0
10	SW2	Feeder arm SW	I	5.0
11	PA6	(Connection to ground)	-	0
12	PA7/IFR	(Connecting to ground)	I	0
13	VDD	+5V power supply	-	5.0
14	OSC2	Crystal oscillator	-	5.0
15	OSC1	Crystal oscillator	-	3.3
16	VSS	Ground	-	0
17	NC	No connection	-	-
18	SOMI	CD control data	O	3.2
19	SIMO	CD control data	I	3.8
20	SCLM	Data shift clock	I	5.0
21	P06	Not used	-	-
22	BD0	Drop out signal	I	0
23	PC1	Loading motor driver control	O	5.0
24	PS2	Focus/Tracking driver control	O	0
25	VDET	Vibration detecting signal	I	0
26	P14	No connection	-	-
27	CDON	CD on signal	I	5.0
28	IRQ1.SENSE	(Connecting to ground)	-	0
29	IRQ2	(Connecting to ground)	-	0
30	LOD	Loading motor control	-	2.6
31	TRV	Traverse motor control	-	2.5
32	/PRST	Servo IC reset	O	5.0
33	STAT	Status signal	I	4.0
34	DMUTE	DSP mute	O	0
35	SUBQ	Sub code Q data	I	2.6
36	SQCK	Sub code Q clock	O	5.0
37	/TLOCK	Tracking servo lock	I	0
38	/FLOCK	Focus servo lock	I	0
39	NRST	reset input	I	5.0
40	MMOD	(Connecting to ground)	-	0
41	SENSE	Sense signal	I	0
42	MLD	Command load	O	5.0
43	MDATA	Command data	O	0.9
44	MCLK	Command clock	O	4.6



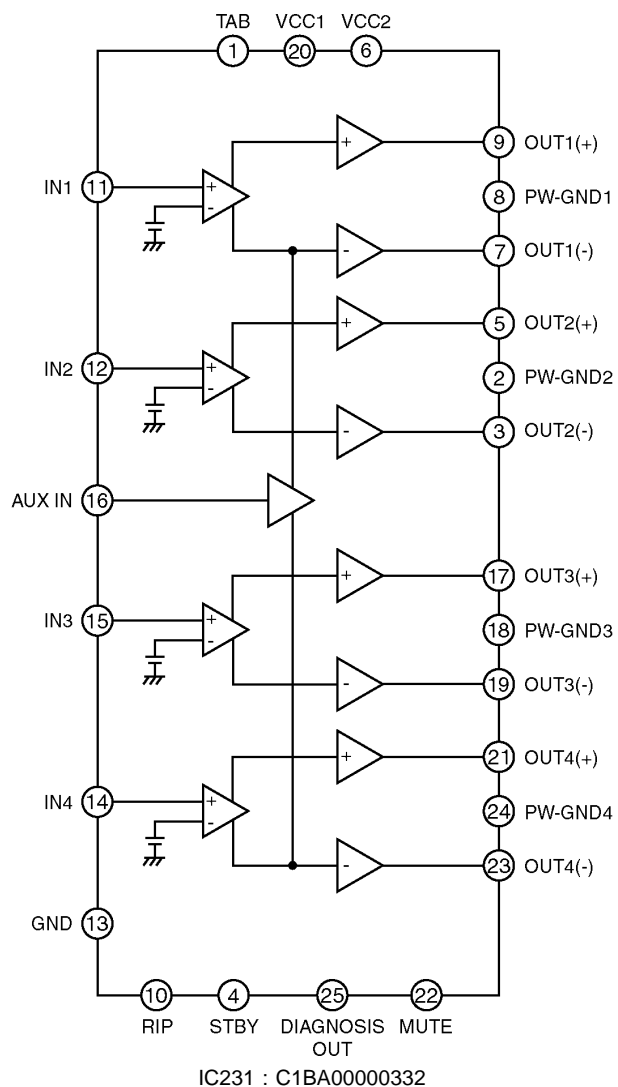
## 8 PACKAGE AND IC BLOCK DIAGRAM

### 8.1. Main Block

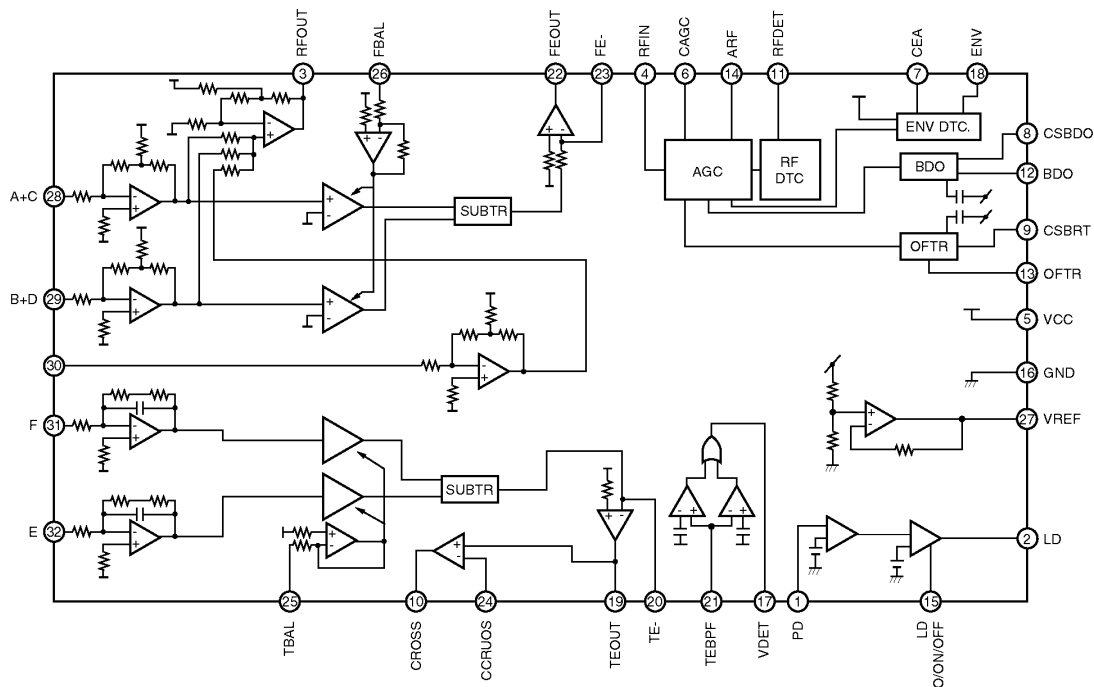




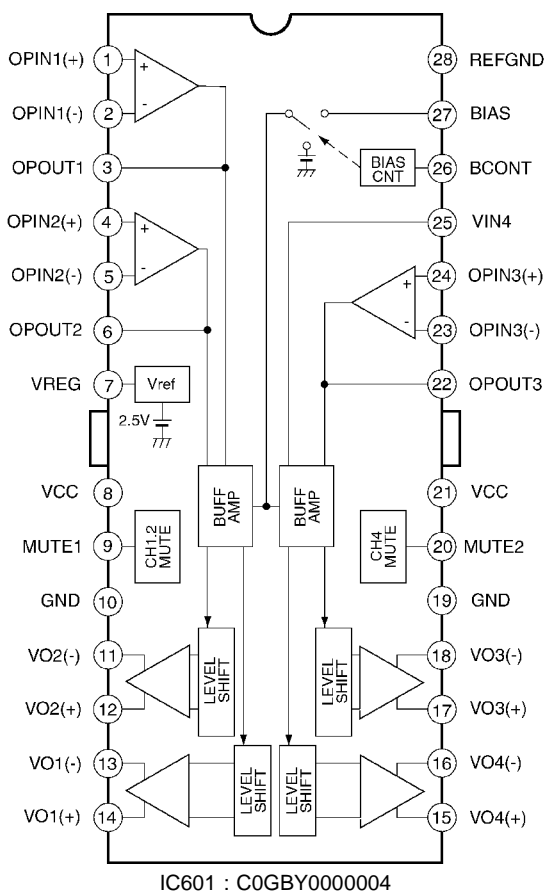
## 8.2. SW/Sub. Block



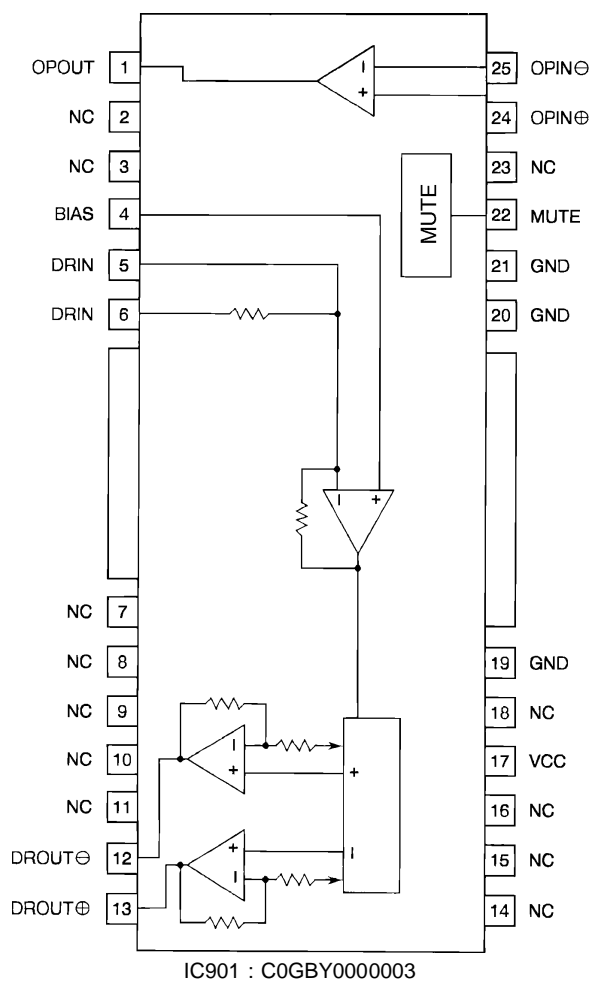
### 8.3. CD Servo Block



IC101 : C1BB0000173



IC601 : C0GBY0000004



IC901 : C0GBY0000003

# 9 REPLACEMENT PARTS LIST

Notes :

1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the remarks column indicates the general location of the parts shown in the exploded drawing, as in a road map.
4. The marking (RTL) indicates that Retention Time is limited for this item. After the discontinuation of assembly in production, the item will continue to be available for a specific period of time. The retention period of availability is dependent on the type of assembly, and in accordance with the laws governing part and product retention. After the end of this period, the assembly will no longer be available.
5. "MCC" marks in remarks column are indicated supply parts of Matsushita Communication Industrial Corp. of America (MCC).

Ref. No.	Part No.	Part Name & Description	Remarks
[E6846C] Main Block			
IC's and TRANSISTORS			
IC201	C1BB00000284	IC	
IC481	C0ABCB000032	IC	
IC601	C2CBKH000027	IC	
IC691	YEAMH12187ER	IC	
IC701	YEAMA61W12ST	IC	
IC751	AN8065SE1	IC	
IC801	C1EB00000017	IC	
PA101	J3CCBC000001	Electronic Tuner	
Q211	B1GBHBEA0004	Transistor	
Q212	B1GDCFN00002	Transistor	
Q213	B1GBCFN00004	Transistor	
Q231	B1GDCFN00002	Transistor	
Q311	B1GBHBEA0004	Transistor	
Q481	B1ABCF000044	Transistor	
Q482	B1ABCF000044	Transistor	
Q521	B1ABCF000042	Transistor	
Q522	B1ABCF000042	Transistor	
Q541	B1GDCFJJ0002	Transistor	
Q542	B1GDCFJJ0002	Transistor	
Q543	B1GDCFJJ0002	Transistor	
Q544	B1GDCFJJ0002	Transistor	
Q545	B1GDCFJJ0002	Transistor	
Q546	YEAN2SK1133T	Transistor	
Q601	B1GDCFN00002	Transistor	
Q605	B1GDCFN00002	Transistor	
Q701	2SD1273	Transistor	
Q702	YEANFP1F3PT1	Transistor	
Q703	YEANCL14YKX	Transistor	
Q705	YEANFP1F3PT1	Transistor	
Q706	YEANCL14YKX	Transistor	
Q707	2SD1273	Transistor	
Q709	B1BBAC000007	Transistor	
Q710	YEANFP1F3PT1	Transistor	
Q711	YEANCL14YKX	Transistor	
Q712	YEANFP1F3PT1	Transistor	
Q715	YEANFP1F3PT1	Transistor	
Q716	YEANCL14YKX	Transistor	
Q726	B1GBCFN00004	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
DIODES			
D101	YEADRD51M1T1	Diode	
D201	YEAD1SS355T1	Diode	
D230	YEAD1SS355T1	Diode	
D231	YEAD1SS355T1	Diode	
D232	YEAD1SS355T1	Diode	
D251	YEADRD39M2T2	Diode	
D301	YEAD1SS355T1	Diode	
D481	MA153TX	Diode	
D482	MA153TX	Diode	
D521	MA153TX	Diode	
D523	YEADDEC10DS1	Diode	
D524	YEADSR1544TL	Diode	
D525	MA153TX	Diode	
D527	MA153TX	Diode	
D541	MA8056LMHTX	Diode	
D542	MA8056LMHTX	Diode	
D543	MA8056LMHTX	Diode	
D544	MA8056LMHTX	Diode	
D545	MA8056LMHTX	Diode	
D546	YEAD1SS355T1	Diode	
D547	YEAD1SS355T1	Diode	
D548	YEAD1SS355T1	Diode	
D549	YEAD1SS355T1	Diode	
D550	YEAD1SS355T1	Diode	
D602	MA152WATX	Diode	
D660	MA152WATX	Diode	
D691	YEADRD56M2T1	Diode	
D692	YEADRD56M2T1	Diode	
D701	YEADSR1544TL	Diode	
D702	YEAD1SS355T1	Diode	
D703	YEADRD56M3T1	Diode	
D710	MA8068MTX	Diode	
CAPACITORS			
C51	YECUS1H102KX	Ceramic, 1000PF 50WV	
C52	F1J1H8R0A007	Ceramic, 8PF 50WV	
C53	YECUS1H101JM	Ceramic, 100PF 50WV	
C54	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C55	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C56	EEUF1C820H	Electrolytic, 82 $\mu$ F 16WV	
C101	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C102	ECA1AM102B	Electrolytic, 1000 $\mu$ F 10WV	
C103	YECUS1E473KX	Ceramic, 0.047 $\mu$ F 25WV	
C104	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C106	YECUS1H823KX	Ceramic, 0.082 $\mu$ F 50WV	
C107	YECUS1H823KX	Ceramic, 0.082 $\mu$ F 50WV	
C108	YECUS1H221JC	Ceramic, 220PF 50WV	
C109	ECEA0JKA331I	Electrolytic, 330 $\mu$ F 6.3WV	
C110	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C112	ECEA1AKA220I	Electrolytic, 22 $\mu$ F 10WV	
C113	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C117	ECEA1HKA010I	Electrolytic, 1 $\mu$ F 50WV	
C121	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C131	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C201	F1H0J1050010	Ceramic, 1 $\mu$ F 6.3WV	
C202	YECUS1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C203	YECUZ1C683KX	Ceramic, 0.068 $\mu$ F 16WV	
C204	YECUZ1C683KX	Ceramic, 0.068 $\mu$ F 16WV	
C205	F1J1C184A006	Ceramic, 0.18 $\mu$ F 16WV	
C206	YECUZ1H561KX	Ceramic, 560PF 50WV	
C207	F1J1C1050013	Ceramic, 1 $\mu$ F 16WV	
C208	YECUS1H473KX	Ceramic, 0.047 $\mu$ F 50WV	
C209	F1H1H101A231	Ceramic, 100PF 50WV	
C210	YECUZ1H221JC	Ceramic, 220PF 50WV	
C211	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C212	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C213	YECUZ1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C217	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C218	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C221	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C222	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C233	YECUZ1H271JC	Ceramic, 270PF 50WV	
C251	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C253	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C254	ECEA1CKA101	Electrolytic, 100μF 16WV	
C255	ECEA0JKA101I	Electrolytic, 100μF 6.3WV	
C256	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C301	F1H0J1050010	Ceramic, 1μF 6.3WV	
C302	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C303	YECUZ1C683KX	Ceramic, 0.068μF 16WV	
C304	YECUZ1C683KX	Ceramic, 0.068μF 16WV	
C305	F1J1C184A006	Ceramic, 0.18μF 16WV	
C306	YECUZ1H561KX	Ceramic, 560PF 50WV	
C307	F1J1C1050013	Ceramic, 1μF 16WV	
C309	F1H1H101A231	Ceramic, 100PF 50WV	
C310	YECUZ1H221JC	Ceramic, 220PF 50WV	
C311	YECUS1A105KX	Ceramic, 1μF 10WV	
C312	YECUS1A105KX	Ceramic, 1μF 10WV	
C317	YECUS1A105KX	Ceramic, 1μF 10WV	
C318	YECUS1A105KX	Ceramic, 1μF 10WV	
C321	YECUS1A105KX	Ceramic, 1μF 10WV	
C322	YECUS1A105KX	Ceramic, 1μF 10WV	
C481	YECUZ1H151JC	Ceramic, 150PF 50WV	
C482	YECUZ1H151JC	Ceramic, 150PF 50WV	
C483	YECUZ1H151JC	Ceramic, 150PF 50WV	
C484	YECUZ1H151JC	Ceramic, 150PF 50WV	
C485	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C486	YECUS1H122KX	Ceramic, 1200PF 50WV	
C487	F1H1H152A201	Ceramic, 1500PF 50WV	
C488	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C489	YECUS1H100CC	Ceramic, 10PF 50WV	
C490	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C491	ECEA1CKA100I	Electrolytic, 10μF 16WV	
C492	ECEA1HKA4R7	Electrolytic, 4.7μF 50WV	
C493	YECUZ1E223KX	Ceramic, 0.022μF 25WV	
C521	YECUV1H221JM	Ceramic, 220PF 50WV	
C522	YECUS1H471JC	Ceramic, 470PF 50WV	
C523	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C525	YECUS1H473KX	Ceramic, 0.047μF 50WV	
C527	YECUS1H102KX	Ceramic, 1000PF 50WV	
C529	YECUV1H221JM	Ceramic, 220PF 50WV	
C530	YECUS1H471JC	Ceramic, 470PF 50WV	
C531	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C535	YECUV2A103KX	Ceramic, 0.01μF 100WV	
C536	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C541	F1K1H104A033	Ceramic, 0.1μF 50WV	
C542	F1K1H104A033	Ceramic, 0.1μF 50WV	
C543	F1K1H104A033	Ceramic, 0.1μF 50WV	
C544	F1K1H104A033	Ceramic, 0.1μF 50WV	
C545	F1K1H104A033	Ceramic, 0.1μF 50WV	
C554	YECUS1H102KX	Ceramic, 1000PF 50WV	
C555	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C561	ECEA1CKA101	Electrolytic, 100μF 16WV	
C566	YECUZ1C104KX	Ceramic, 0.1μF 16WV	
C567	F1H1C473A005	Ceramic, 0.047μF 16WV	
C602	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C604	YECUS1H220JC	Ceramic, 22PF 50WV	
C605	YECUS1H220JC	Ceramic, 22PF 50WV	
C606	YECUS1H180JC	Ceramic, 18PF 50WV	
C607	YECUS1H180JC	Ceramic, 18PF 50WV	
C608	F1H0J1050010	Ceramic, 1μF 6.3WV	
C609	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C610	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C611	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C612	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C613	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C617	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C618	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C619	YECUS1H221JC	Ceramic, 220PF 50WV	
C620	YECUS1H221JC	Ceramic, 220PF 50WV	
C621	YECUS1H221JC	Ceramic, 220PF 50WV	
C622	YECUS1H221JC	Ceramic, 220PF 50WV	
C623	YECUS1H221JC	Ceramic, 220PF 50WV	
C624	YECUS1H102KX	Ceramic, 1000PF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C661	YECUS1H122KX	Ceramic, 1200PF 50WV	
C662	YECUS1H122KX	Ceramic, 1200PF 50WV	
C663	YECUS1H122KX	Ceramic, 1200PF 50WV	
C664	YECUS1H122KX	Ceramic, 1200PF 50WV	
C665	F1J1C1050013	Ceramic, 1μF 16WV	
C666	F1J1C1050013	Ceramic, 1μF 16WV	
C691	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C701	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C702	ECA1CHG102B	Electrolytic, 1000μF 16WV	
C703	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C704	ECA1CHG102B	Electrolytic, 1000μF 16WV	
C705	EEUFCL1A181H	Electrolytic, 180μF 10WV	
C706	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C707	ECEA1AKA101I	Electrolytic, 100μF 10WV	
C708	ECEA0JKA221I	Electrolytic, 220μF 6.3WV	
C709	ECEA1AKA101I	Electrolytic, 100μF 10WV	
C710	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C712	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C713	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C714	YECUZ1H103KX	Ceramic, 0.01μF 50WV	
C752	YECUS1H103KX	Ceramic, 0.01μF 50WV	
C753	YECUS1C104KX	Ceramic, 0.1μF 16WV	
C754	YECUV1H271JM	Ceramic, 270PF 50WV	
C776	YECUS1H221JC	Ceramic, 220PF 50WV	
C777	YECUS1H221JC	Ceramic, 220PF 50WV	
C778	YECUS1H221JC	Ceramic, 220PF 50WV	
C779	YECUS1H221JC	Ceramic, 220PF 50WV	
C780	YECUS1H221JC	Ceramic, 220PF 50WV	
C781	YECUS1H221JC	Ceramic, 220PF 50WV	
C782	YECUV2A103KX	Ceramic, 0.01μF 100WV	
C783	YECUV2A103KX	Ceramic, 0.01μF 100WV	
C784	YECUV2A103KX	Ceramic, 0.01μF 100WV	
C801	YECUS1C104KX	Ceramic, 0.1μF 16WV	
RESISTORS			
L521	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L541	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L542	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L543	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L544	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L545	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L605	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
L612	ERJ3GEY0R00V	Chip, 0Ω 1/16W	
R52	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R102	ERJ6GEYJ473	Chip, 47kΩ 1/10W	
R103	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R104	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R105	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R106	ERJ6GEYJ561	Chip, 560Ω 1/10W	
R107	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R108	ERJ6GEYJ822	Chip, 8.2kΩ 1/10W	
R109	ERJ6GEYJ333	Chip, 33kΩ 1/10W	
R110	ERJ6GEYJ271	Chip, 270Ω 1/10W	
R111	ERJ3GEYJ473V	Chip, 47kΩ 1/16W	
R112	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R113	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R114	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R115	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R116	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R117	ERJ6GEYJ474	Chip, 470kΩ 1/10W	
R118	ERJ6GEYJ222	Chip, 2.2kΩ 1/10W	
R119	ERJ3GEYJ332V	Chip, 3.3kΩ 1/16W	
R121	ERJ3GEYJ392V	Chip, 3.9kΩ 1/16W	
R131	ERJ3GEYJ392V	Chip, 3.9kΩ 1/16W	
R201	ERJ3GEYJ682V	Chip, 6.8kΩ 1/16W	
R202	ERJ3GEYJ512V	Chip, 5.1kΩ 1/16W	
R203	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R204	ERJ3GEYJ332V	Chip, 3.3kΩ 1/16W	
R211	ERJ3GEYJ101V	Chip, 100Ω 1/16W	
R212	ERJ3GEYJ472V	Chip, 4.7kΩ 1/16W	
R213	ERJ3GEY0R00V	Chip, 0Ω 1/16W	
R214	ERJ3GEYJ333V	Chip, 33kΩ 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R215	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R230	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R232	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R233	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R251	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R301	ERJ3GEYJ682V	Chip, 6.8k $\Omega$ 1/16W	
R302	ERJ3GEYJ512V	Chip, 5.1k $\Omega$ 1/16W	
R303	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R304	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R311	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R312	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R313	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R314	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R315	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R480	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R481	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R482	ERJ3GEYJ183V	Chip, 18k $\Omega$ 1/16W	
R483	ERJ3GEYJ393V	Chip, 39k $\Omega$ 1/16W	
R484	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R485	ERJ3GEYJ393V	Chip, 39k $\Omega$ 1/16W	
R486	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R487	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R488	ERJ3GEYJ393V	Chip, 39k $\Omega$ 1/16W	
R489	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R490	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R491	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R492	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R493	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R494	ERJ3GEYJ224V	Chip, 220k $\Omega$ 1/16W	
R495	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R496	ERJ3GEYJ683V	Chip, 68k $\Omega$ 1/16W	
R497	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R498	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R499	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R521	ERA6YED303V	Metal Film, 30k $\Omega$ 1/10W	
R522	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R523	ERA6YED103V	Metal Film, 10k $\Omega$ 1/10W	
R524	ERJ6GEYJ512	Chip, 5.1k $\Omega$ 1/10W	
R525	ERJ6GEYJ432	Chip, 4.3k $\Omega$ 1/10W	
R526	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R527	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R528	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R529	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R530	ERA6YED303V	Metal Film, 30k $\Omega$ 1/10W	
R531	ERA6YED103V	Metal Film, 10k $\Omega$ 1/10W	
R532	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R534	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R535	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R536	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R538	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R539	ERA6YED472V	Metal Film, 4.7k $\Omega$ 1/10W	
R541	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R542	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R543	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R544	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R545	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R555	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R561	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R566	ERJ6GEYJ471	Chip, 470 $\Omega$ 1/10W	
R567	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R568	ERJ3GEYJ274V	Chip, 270k $\Omega$ 1/16W	
R570	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R601	ERJ3GEYJ274V	Chip, 270k $\Omega$ 1/16W	
R604	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R605	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R606	ERJ6GEYJ561	Chip, 560 $\Omega$ 1/10W	
R607	ERJ6GEYJ561	Chip, 560 $\Omega$ 1/10W	
R608	ERJ6GEYJ561	Chip, 560 $\Omega$ 1/10W	
R609	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R610	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R611	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R617	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R620	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	

Ref. No.	Part No.	Part Name & Description	Remarks
R621	ERJ6GEYJ272	Chip, 2.7k $\Omega$ 1/10W	
R624	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R625	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R626	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R627	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R633	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R636	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R637	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R638	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R639	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R640	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R642	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R644	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R646	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R647	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R648	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R649	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R654	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R655	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R656	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R658	ERJ6GEYJ684	Chip, 680k $\Omega$ 1/10W	
R661	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R662	ERJ3GEYJ561V	Chip, 560 $\Omega$ 1/16W	
R663	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R664	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R665	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R666	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R667	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R668	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R669	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R670	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R671	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R672	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R673	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R674	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R691	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R692	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R701	ERDS1FVJ2R2	Carbon, 2.2 $\Omega$ 1/2W	
R702	ERJ6GEYJ183	Chip, 18k $\Omega$ 1/10W	
R703	ERJ6GEYJ182	Chip, 1.8k $\Omega$ 1/10W	
R722	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R751	ERA6YED273V	Metal Film, 27k $\Omega$ 1/10W	
R752	ERA6YKD274V	Metal Film, 270k $\Omega$ 1/10W	
R753	ERA6YED433V	Metal Film, 43k $\Omega$ 1/10W	
R754	ERA6YED472V	Metal Film, 4.7k $\Omega$ 1/10W	
R755	ERJ6GEYJ1R0	Chip, 1.0 $\Omega$ 1/10W	
R778	ERJ8GEYJ394V	Chip, 390k $\Omega$ 1/8W	
R779	ERJ8GEYJ394V	Chip, 390k $\Omega$ 1/8W	
R780	ERJ8GEYJ394V	Chip, 390k $\Omega$ 1/8W	
R781	ERJ8GEYJ394V	Chip, 390k $\Omega$ 1/8W	
R782	ERJ8GEYJ472V	Chip, 4.7k $\Omega$ 1/8W	
R786	ERG1SJ680E	Metal Oxid, 68 $\Omega$ 1W	
R803	ERJ6GEYJ391	Chip, 390 $\Omega$ 1/10W	
R804	ERJ6GEYJ391	Chip, 390 $\Omega$ 1/10W	
R805	ERJ6GEYJ562	Chip, 5.6k $\Omega$ 1/10W	
R806	ERJ6GEYJ562	Chip, 5.6k $\Omega$ 1/10W	
CONNECTORS			
CN550	K1MN20A00048	Connector, 20P	
CN701	YEA012463	Connector, 12P	
CN702	K1FA118B0002	Connector, 18P	
CN703	YEA5280610	Connector, 10P	
CN704	K1MN22A00032	Connector, 22P	
CN773	YEA5280714	Connector, 14P	
CN901	K1MN20A00020	Connector, 20P	
COILS			
L52	G1C330K00021	Coil	
L53	G1C4R7K00009	Coil	
L54	G0A102A00002	Coil	
L55	G0B102K00003	Coil	

Ref. No.	Part No.	Part Name & Description	Remarks
L101	J0JCC0000035	Coil	
L102	YELT03N330JT	Coil	
L103	YELT03N330JT	Coil	
L104	YELTB1LM21B10	Coil	
L105	YELT03N3R3JT	Coil	
L106	YELT03N100KT	Coil	
L551	YELTB1LM32A06	Coil	
L552	YELTB1LM21B10	Coil	
L553	YELTB1LM21B10	Coil	
L566	YELT03N100KT	Coil	
L600	YELTB1LM21A10	Coil	
L601	YELTB1LM21A10	Coil	
L602	YELTB1LM21B10	Coil	
L603	YELTB1LM21B10	Coil	
L604	YELTB1LM21A10	Coil	
L606	YELTB1LM21A10	Coil	
L607	YELTB1LM21A10	Coil	
L608	YELTB1LM21B10	Coil	
L609	YELTB1LM21A10	Coil	
L610	YELTB1LM21B10	Coil	
L611	YELTB1LM21B10	Coil	
CRYSTALS			
XL601	H0A327200019	Crystal	
XL602	H0D123500002	Crystal	
NEON TUBE			
Z51	YEAL02012T	Neon Tube	
FILTER			
LPF51	YEXC07T009	Filter	
NETWORK RESISTORS			
R602	EXBV8V102JV	Network Resistor	
R612	EXBV8V102JV	Network Resistor	
R613	EXBV8V102JV	Network Resistor	
R614	EXBV8V102JV	Network Resistor	
R615	EXBV8V102JV	Network Resistor	
R616	EXBV8V102JV	Network Resistor	
R618	EXBV8V102JV	Network Resistor	
R619	EXBV8V102JV	Network Resistor	
R629	EXBV8V102JV	Network Resistor	
R630	EXBV8V102JV	Network Resistor	
R631	EXBV8V102JV	Network Resistor	
R632	EXBV8V102JV	Network Resistor	
R634	EXBV8V102JV	Network Resistor	
R635	EXBV8V102JV	Network Resistor	
R641	EXBV8V102JV	Network Resistor	
R643	EXBV8V102JV	Network Resistor	
R645	EXBV8V561JV	Network Resistor	
R657	EXBV8V102JV	Network Resistor	
[E8990C] Display/Sub. Block			
IC's and TRANSISTORS			
IC231	C1BA00000332	IC	
Q232	B1GBCFNN0004	Transistor	
Q708	2SD602ARSTW	Transistor	
Q713	B1GDCFGN0001	Transistor	
Q714	B1GBCFNN0004	Transistor	
Q719	YEANB624T2	Transistor	
Q720	YEANCL14YKX	Transistor	
Q721	2SD1328STTX	Transistor	
Q722	2SD1244	Transistor	
Q723	YEAND1862T	Transistor	
Q724	2SB1446TA	Transistor	
Q725	YEANCL14YKX	Transistor	
Q800	B1GBCFNN0004	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
DIODES			
D241	YEADSR1544TL	Diode	
D242	YEADSR1544TL	Diode	
D243	YEADSR1544TL	Diode	
D244	YEADSR1544TL	Diode	
D341	YEADSR1544TL	Diode	
D342	YEADSR1544TL	Diode	
D343	YEADSR1544TL	Diode	
D344	YEADSR1544TL	Diode	
D704	YEADRD56M3T1	Diode	
D707	MA8091LMHTX	Diode	
D708	YEADRB051L40	Diode	
D709	MAZ80910ML	Diode	
D721	YEAD30D2FC6	Diode	
D801	YEADRD13P2T1	Diode	
D802	YEADRD13P2T1	Diode	
D803	B0ACCK000005	Diode	
D901	B3ABB0000140	Diode	
D902	B3ABB0000140	Diode	
D903	B3ABB0000140	Diode	
D904	B3ABB0000140	Diode	
D905	B3ABB0000140	Diode	
D906	B3ABB0000140	Diode	
D907	B3ABB0000140	Diode	
D908	B3ABB0000140	Diode	
D909	B3ABB0000140	Diode	
D910	B3ABB0000140	Diode	
D911	B3ABB0000140	Diode	
D912	B3ABB0000140	Diode	
D913	B3ABB0000140	Diode	
D914	B3ABB0000140	Diode	
D915	B3ABB0000140	Diode	
D916	B3ABB0000140	Diode	
D917	B3ABB0000140	Diode	
D918	B3ABB0000140	Diode	
D919	B3ABB0000140	Diode	
D920	B3ABB0000140	Diode	
D921	B3ABB0000140	Diode	
D922	B3ABB0000140	Diode	
D923	B3ABB0000140	Diode	
D951	MA741TX	Diode	
D952	MA741TX	Diode	
D953	MA741TX	Diode	
D954	MA741TX	Diode	
D955	B0ACCK000005	Diode	
D956	B0ACCK000005	Diode	
D957	B0ACCK000005	Diode	
D958	B0ACCK000005	Diode	
CAPACITORS			
C223	YECUS1H822KX	Ceramic, 8200PF 50WV	
C224	YECUS1H822KX	Ceramic, 8200PF 50WV	
C230	ECEA1HKA4R7	Electrolytic, 4.7µF 50WV	
C232	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C237	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C241	F1K1H104A033	Ceramic, 0.1µF 50WV	
C242	F1K1H104A033	Ceramic, 0.1µF 50WV	
C243	F1K1H104A033	Ceramic, 0.1µF 50WV	
C244	F1K1H104A033	Ceramic, 0.1µF 50WV	
C323	YECUS1H822KX	Ceramic, 8200PF 50WV	
C324	YECUS1H822KX	Ceramic, 8200PF 50WV	
C341	F1K1H104A033	Ceramic, 0.1µF 50WV	
C342	F1K1H104A033	Ceramic, 0.1µF 50WV	
C343	F1K1H104A033	Ceramic, 0.1µF 50WV	
C344	F1K1H104A033	Ceramic, 0.1µF 50WV	
C715	ECEA1HKA4R7	Electrolytic, 4.7µF 50WV	
C716	YECUS1C474KX	Ceramic, 0.47µF 16WV	
C717	YECUS1H103KX	Ceramic, 0.01µF 50WV	
C718	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C719	ECEA1CKA101	Electrolytic, 100µF 16WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C720	ECA1AM221I	Electrolytic, 220µF 10WV	
C721	ECA1CHG102B	Electrolytic, 1000µF 16WV	
C723	YECUV2A103KX	Ceramic, 0.01µF 100WV	
C725	ECA1CHG102B	Electrolytic, 1000µF 16WV	
C772	YECUV2A103KX	Ceramic, 0.01µF 100WV	
C773	YECUV2A103KX	Ceramic, 0.01µF 100WV	
C775	YECUV1C224KX	Ceramic, 0.22µF 16WV	
C802	YECUS1H221JC	Ceramic, 220PF 50WV	
C901	YECUS1H101JM	Ceramic, 100PF 50WV	
C902	YECUS1H101JM	Ceramic, 100PF 50WV	
C903	YECUS1H101JM	Ceramic, 100PF 50WV	
C904	YECUS1H101JM	Ceramic, 100PF 50WV	
C905	YECUS1H221JC	Ceramic, 220PF 50WV	
C906	YECUS1H221JC	Ceramic, 220PF 50WV	
C907	YECUS1H221JC	Ceramic, 220PF 50WV	
C908	YECUS1H221JC	Ceramic, 220PF 50WV	
C909	YECUS1H221JC	Ceramic, 220PF 50WV	
C910	YECUS1H221JC	Ceramic, 220PF 50WV	
C911	YECUS1H221JC	Ceramic, 220PF 50WV	
C912	YECUS1H221JC	Ceramic, 220PF 50WV	
C913	YECUS1H221JC	Ceramic, 220PF 50WV	
C914	YECUS1H221JC	Ceramic, 220PF 50WV	
C915	YECUS1H221JC	Ceramic, 220PF 50WV	
C916	YECUS1H221JC	Ceramic, 220PF 50WV	
RESISTORS			
R223	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R224	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R234	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R240	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R241	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R242	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R243	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R244	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R323	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R324	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R341	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R342	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R343	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R344	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R707	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R708	ERJ6GEYJ1R0	Chip, 1.0Ω 1/10W	
R709	ERG1S151E	Metal Oxid, 150Ω 1W	
R710	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R711	ERJ3GEYJ470V	Chip, 47Ω 1/16W	
R712	ERJ6GEYJ122	Chip, 1.2kΩ 1/10W	
R713	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R714	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R715	ERJ6GEYJ6R8V	Chip, 6.8Ω 1/10W	
R716	ERJ6GEYJ151	Chip, 150Ω 1/10W	
R717	ERJ6GEYJ102	Chip, 1kΩ 1/10W	
R718	ERJ6GEYJ2R2	Chip, 2.2Ω 1/10W	
R719	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R720	ERJ3GEYJ103V	Chip, 10kΩ 1/16W	
R721	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R724	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R725	ERJ6GEYJ122	Chip, 1.2kΩ 1/10W	
R726	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R729	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R730	ERJ6GEYJ472	Chip, 4.7kΩ 1/10W	
R731	ERJ6GEYJ2R2	Chip, 2.2Ω 1/10W	
R772	ERJ8GEYJ102V	Chip, 1kΩ 1/8W	
R774	ERJ6GEYJ103	Chip, 10kΩ 1/10W	
R800	ERJ6GEY0R00V	Chip, 0Ω 1/10W	
R801	ERG1S101E	Metal Oxid, 100Ω 1W	
R802	ERG1S101E	Metal Oxid, 100Ω 1W	
R807	ERJ3GEYJ271V	Chip, 270Ω 1/16W	
R901	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R902	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R903	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R904	ERJ6GEYJ331	Chip, 330Ω 1/10W	
R905	ERJ8GEYJ391V	Chip, 390Ω 1/8W	

Ref. No.	Part No.	Part Name & Description	Remarks
R906	ERJ8GEYJ331V	Chip, 330Ω 1/8W	
R907	ERJ8GEYJ331V	Chip, 330Ω 1/8W	
R908	ERJ8GEYJ391V	Chip, 390Ω 1/8W	
R909	ERJ8GEYJ471V	Chip, 470Ω 1/8W	
R910	ERJ8GEYJ561V	Chip, 560Ω 1/8W	
R911	ERJ8GEYJ471V	Chip, 470Ω 1/8W	
R912	ERJ8GEYJ681V	Chip, 680Ω 1/8W	
R913	ERJ8GEYJ561V	Chip, 560Ω 1/8W	
R923	ERJ8GEYJ471V	Chip, 470Ω 1/8W	
R925	ERJ8GEYJ561V	Chip, 560Ω 1/8W	
CONNECTORS			
CN705	K1MN22A00032	Connector, 22P	
CN706	YEA5280610	Connector, 10P	
CN771	YEA012462	Connector, 6P/10P	
CN800	YEA012345	Connector, 8P	
CP900	K1MN20A00051	Connector, 20P	
SWITCHES			
SW900	EVQ23504M	Switch	
SW901	EVQ23504M	Switch	
SW902	EVQ23504M	Switch	
SW903	EVQ23504M	Switch	
SW904	EVQ23504M	Switch	
SW905	EVQ23504M	Switch	
SW906	EVQ23504M	Switch	
SW907	EVQ23504M	Switch	
SW909	EVQ23504M	Switch	
SW910	EVQ23504M	Switch	
SW911	EVQ23504M	Switch	
SW912	EVQ23504M	Switch	
SW913	EVQ23504M	Switch	
SW914	EVQ23504M	Switch	
SW915	EVQ23504M	Switch	
SW916	EVQ23504M	Switch	
COIL			
L720	G0A151J00004	Coil	
R927	J0JCC0000030	Coil	
R928	J0JCC0000030	Coil	
R929	J0JCC0000030	Coil	
R930	J0JCC0000030	Coil	
VARIABLE RESISTORS			
VR900	K9AA015B0028	Variablr resistor	
VR901	K9AA009B0009	Variablr resistor	
FILTERs			
ZL800	YECCL51R206T	Filter	
ZL801	YECCL51R206T	Filter	
[E9096] CD Servo Block			
IC's and TRANSISTORS			
IC101	C1BB00000173	IC	
IC201	MN662748RPMF	IC	
IC401	MN101C117AG	IC	
IC601	C0GBY0000004	IC	
IC901	C0GBY0000003	IC	
Q1	B3HB00000012	Transistor	
Q3	B3HB00000012	Transistor	
Q6	B3HB00000012	Transistor	
Q101	2SB766ATX	Transistor	
Q451	B1GBCFCJ0005	Transistor	



Ref. No.	Part No.	Part Name & Description	Remarks
<b>DIODES</b>			
D1	YEADAN1102W	Diode	
D3	YEADAN1102W	Diode	
D6	YEADAN1102W	Diode	
D201	YEAD1SS355T1	Diode	
D401	MA152WKT	Diode	
D601	YEAD1SS355T1	Diode	
<b>CAPACITORS</b>			
C101	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C102	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C103	F3H0J1070005	Tantalum, 100 $\mu$ F 6.3WV	
C104	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C105	ECSH0JY475CR	Tantalum, 4.7 $\mu$ F 6.3WV	
C106	F1H1E273A011	Ceramic, 0.027 $\mu$ F 50WV	
C107	F1H1H152A201	Ceramic, 1500PF 50WV	
C108	YECUZ1H472KX	Ceramic, 4700PF 50WV	
C109	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C110	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C111	YECSW1A106MA	Tantalum, 10 $\mu$ F 10WV	
C112	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C113	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C115	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C116	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C117	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C118	F1H1H681A201	Ceramic, 680PF 50WV	
C119	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C120	YECUZ1H561KX	Ceramic, 560PF 50WV	
C121	YECUZ1E123KX	Ceramic, 0.012 $\mu$ F 25WV	
C122	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C133	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C145	YECUZ1A124KX	Ceramic, 0.12 $\mu$ F 10WV	
C199	F3H0J107A001	Tantalum, 100 $\mu$ F 6.3WV	
C201	YECUZ1E123KX	Ceramic, 0.012 $\mu$ F 25WV	
C203	YECUS1C334KX	Ceramic, 0.33 $\mu$ F 16WV	
C204	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C205	YECSW1A106MA	Tantalum, 10 $\mu$ F 10WV	
C206	F1H1A4740004	Ceramic, 0.47 $\mu$ F 10WV	
C208	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C209	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C210	YECSW1A106MA	Tantalum, 10 $\mu$ F 10WV	
C214	YECUS1C334KX	Ceramic, 0.33 $\mu$ F 16WV	
C451	F1H1A4740004	Ceramic, 0.47 $\mu$ F 10WV	
C453	YECUZ1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C601	YECUS1C334KX	Ceramic, 0.33 $\mu$ F 16WV	
C602	ECEV1CA470SP	Electrolytic, 47 $\mu$ F 16WV	
C603	YECUZ1C104KX	Ceramic, 0.1 $\mu$ F 16WV	
C605	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C606	YECUZ1H272KX	Ceramic, 2700PF 50WV	
C901	YECUS1C334KX	Ceramic, 0.33 $\mu$ F 16WV	
C903	YECUZ1C333KX	Ceramic, 0.033 $\mu$ F 16WV	
<b>RESISTORS</b>			
J403	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
J423	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R101	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R102	ERJ14YJ330H	Chip, 33 $\Omega$ 1/4W	
R103	ERJ3GEYJ683V	Chip, 68k $\Omega$ 1/16W	
R104	ERJ3GEYJ683V	Chip, 68k $\Omega$ 1/16W	
R105	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R106	ERJ3GEYJ184V	Chip, 180k $\Omega$ 1/16W	
R107	ERJ3GEYJ184V	Chip, 180k $\Omega$ 1/16W	
R108	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R109	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R110	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R111	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R112	ERJ3GEYJ393V	Chip, 39k $\Omega$ 1/16W	
R113	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R114	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R119	ERJ3GEYJ184V	Chip, 180k $\Omega$ 1/16W	
R120	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	

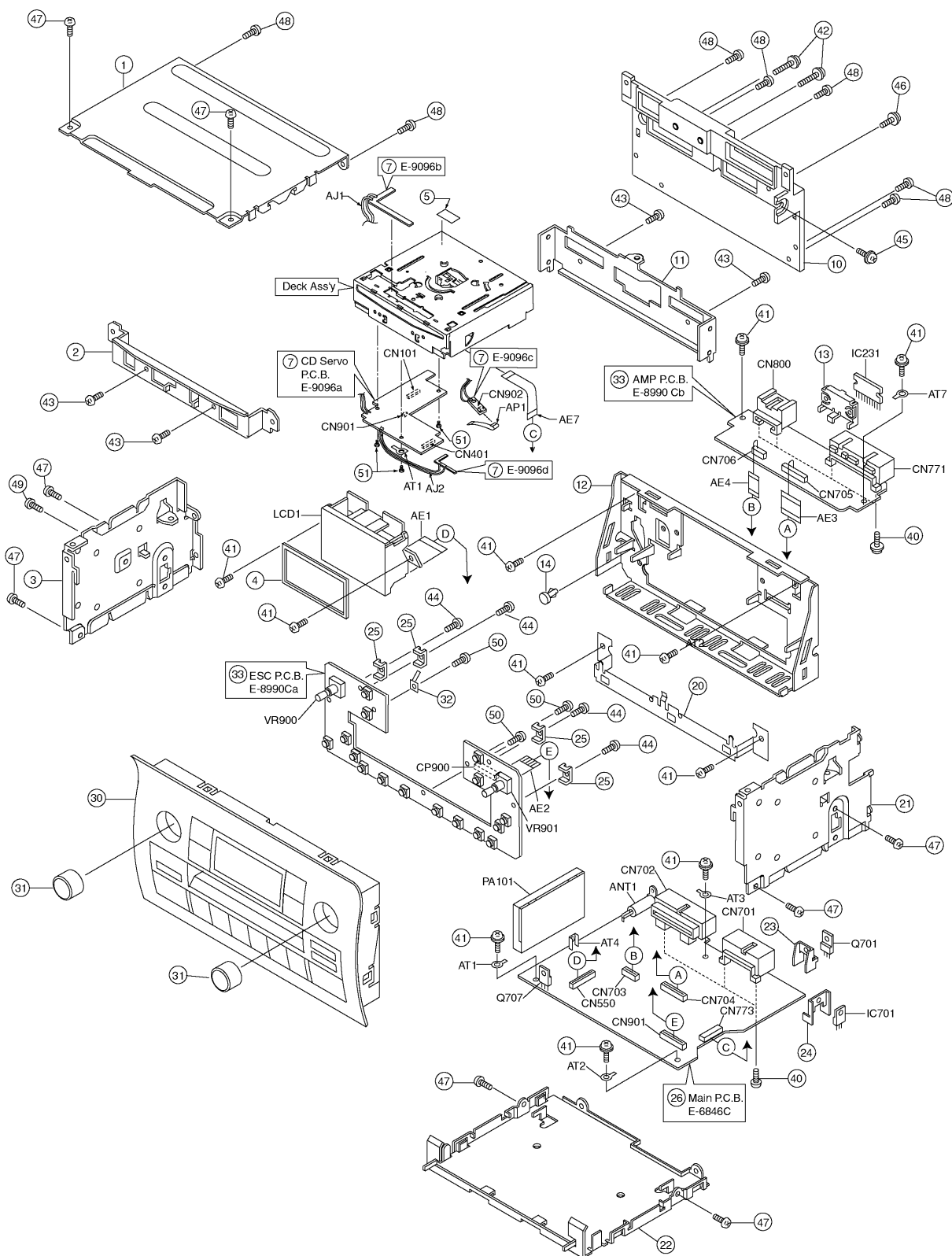
Ref. No.	Part No.	Part Name & Description	Remarks
R147	ERJ3GEYJ153V	Chip, 15k $\Omega$ 1/16W	
R207	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R208	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R209	ERJ3GEYJ391V	Chip, 390 $\Omega$ 1/16W	
R210	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R211	ERJ3GEYJ124V	Chip, 120k $\Omega$ 1/16W	
R213	ERJ3GEYJ470V	Chip, 47 $\Omega$ 1/16W	
R214	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R215	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R401	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R402	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R404	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R411	ERJ3GEYJ334V	Chip, 330k $\Omega$ 1/16W	
R454	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	
R456	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R461	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R463	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R466	ERJ3GEYJ823V	Chip, 82k $\Omega$ 1/16W	
R471	ERJ8GEYJ121V	Chip, 120 $\Omega$ 1/8W	
R473	ERJ8GEYJ121V	Chip, 120 $\Omega$ 1/8W	
R476	ERJ8GEYJ121V	Chip, 120 $\Omega$ 1/8W	
R477	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
R481	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R601	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R602	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R603	ERJ3GEYJ273V	Chip, 27k $\Omega$ 1/16W	
R604	ERJ3GEYJ124V	Chip, 120k $\Omega$ 1/16W	
R605	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R606	ERJ3GEYJ822V	Chip, 8.2k $\Omega$ 1/16W	
R607	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R608	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R609	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R610	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R613	ERJ3GEYJ122V	Chip, 1.2k $\Omega$ 1/16W	
R901	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R902	ERJ3GEYJ333V	Chip, 33k $\Omega$ 1/16W	
R903	ERJ3GEYJ122V	Chip, 1.2k $\Omega$ 1/16W	
<b>CONNECTORS</b>			
CN101	YEAESFW15R2E	Connector, 15P	
CN401	K1MN14B00028	Connector, 14P	
CN901	K1MN05B00010	Connector, 5P	
CN902	K1MN05B00009	Connector, 5P	
<b>SWITCHES</b>			
SW2	ESE22MH32	Switch	
SW4	YEAS09275	Switch	
<b>COILS</b>			
L451	YELTBLM21A10	Coil	
L452	J0JKC0000006	Coil	
<b>CRYSTALS</b>			
XL201	H2D169500005	Crystal	
XL451	YEXLSTCC419T	Crystal	
<b>Mechanical Parts</b>			
<b>MISCELLANEOUS</b>			
AE1	K9ZZ00000866	Connector, 20P	
AE2	K9ZZ00000861	Connector, 20P	
AE3	K9ZZ00000840	Connector, 22P	
AE4	K9ZZ00000837	Connector, 10P	
AE7	K9ZZ00000860	FPC, 14P	
AJ1	YEAJ071287	Cord w/Plug	
AJ2	YEAJ071285	Cord w/Plug	
ANT1	YEAAL0060	Antenna Receplacle	
AP1	YEAP2711	FPC	

Ref. No.	Part No.	Part Name & Description	Remarks
AT1-3	YEAT03435	Terminal (Main PCB)	
AT1	YEATSD00405	Bracket, GND (CD Servo PCB)	
AT4	YEFX0213797	Bracket, GND (Main PCB)	
AT7	YEAT03435	Terminal (Amp. PCB)	
LCD1	L5DZAHE00001	LCD	
1	YEFA031749	Upper Cover	
2	YEFX0215067	Bracket, Deck (F)	
3	YEFA09701A	Side Plate (L)	
4	YEFS011794A	Pad	
5	YEFM031105	Laser Seal	
7	YEP0PT9096Z9	PCB w/Component	RTL
10	YEFF011039A	Heat Sink	
11	YEFX0215068	Bracket, Deck (R)	
12	YEFA07534A	Front Plate	
13	YEFX0215071	Bracket, IC231	
14	YEFJ05030	Color Rivet	
20	YEFX0215821	Bracket	
21	YEFA09700A	Side Plate (R)	
22	YEFA05795	Bottom Cover	
23	YEFX0215072	Bracket, Q701	
24	YEFX0214146	Bracket, IC701	
25	YEFK06940A	Holder, Rubber	
26	YEP0PT6846Z9	PCB w/Component	RTL
30	YEFK026960B	Escucheon Ass'y	
31	YEFK02375	Knob	
32	YEFX0213978	Bracket, GND	
33	YEP0PT8990Z9	PCB w/Component	RTL
40	YEJT01089	Screw, M3x6mm	
41	YEJT03015	Screw, M3x6mm	
42	YEJT03289	Screw, M2.6x16mm	
43	YEJT03263	Screw, M2.8x5	
44	YEJT03279	Screw, M2x10mm	
45	YEJT03013	Screw, M3x12mm	
46	YEJT03290	Screw, M2.6x12mm	
48	XTB3+8FFX	Screw, M3x8mm	
49	XTB26+6FFX	Screw, M2.6x6mm	
47	XTB3+6FFX	Screw, M3x6mm	
50	XTB2+6GFX	Screw, M2x6mm	
51	XYN2+J4FX	Screw, M2x4mm	

# 10 EXPLODED VIEW (Unit)

2

2



1

1

A

B

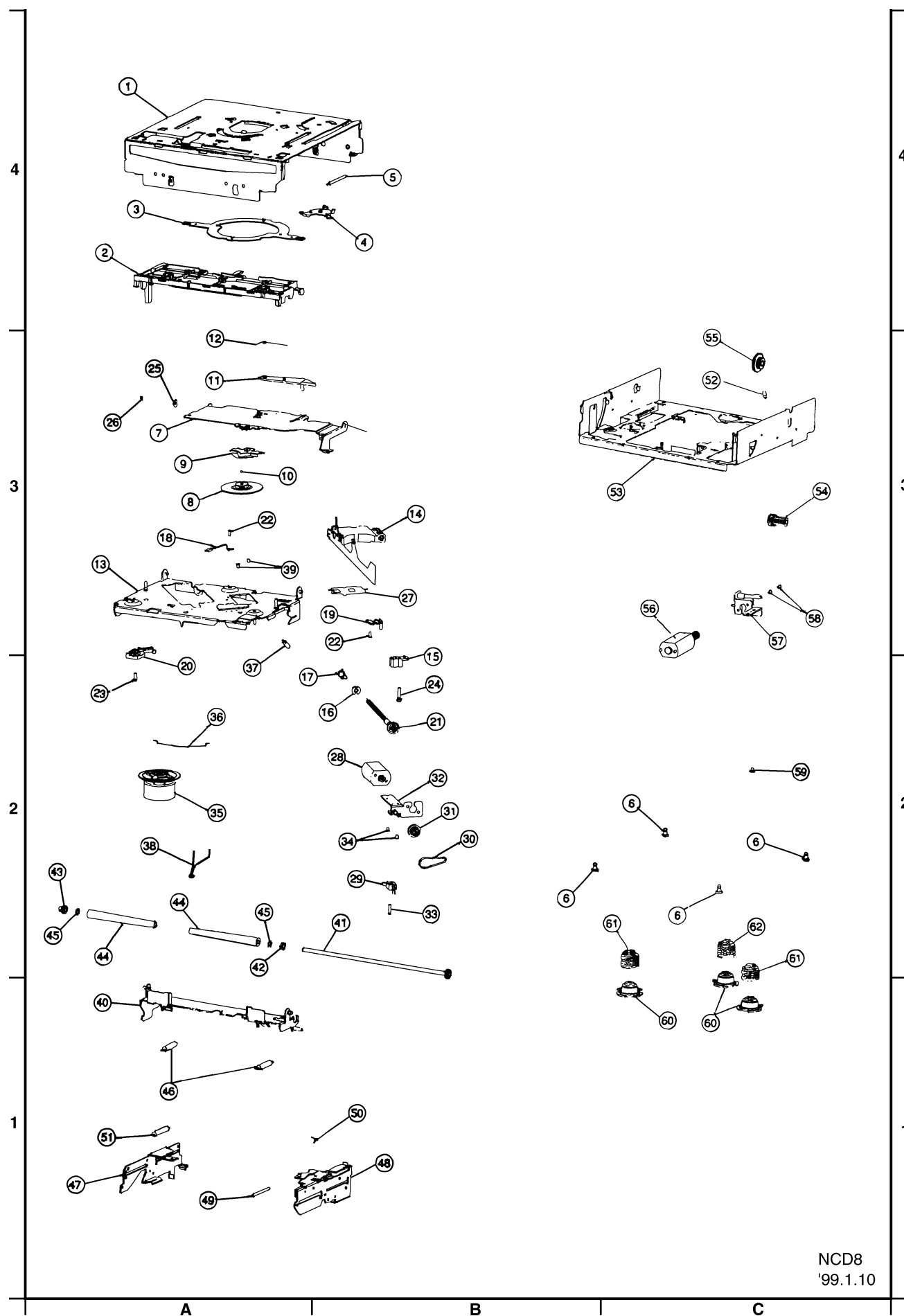
CQ-TS7170L

# 11 CD PLAYER PARTS

## MISCELLANEOUS

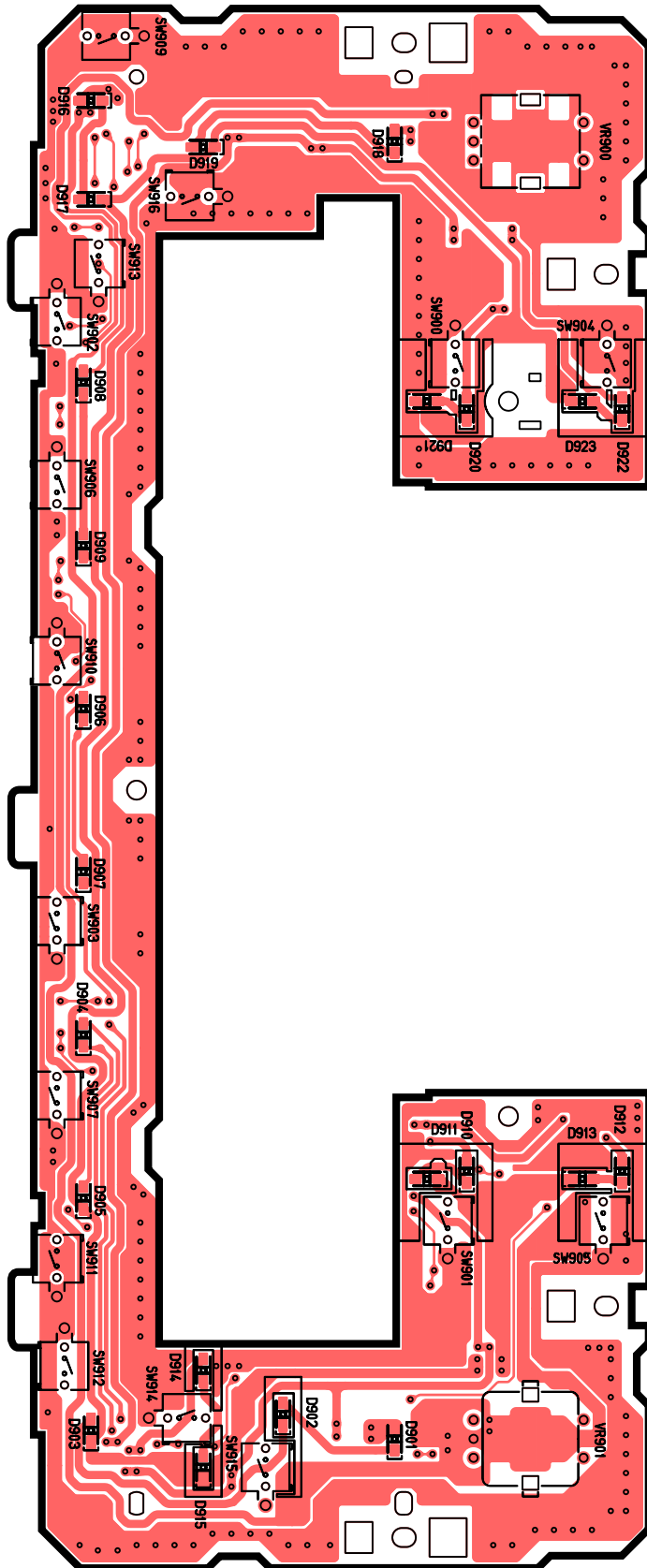
Ref. No.	Part No.	Part Name & Description	Remarks
1	YGFA011781	Upper Chassis	(4-A)
2	YGFX236153	Disk Guide	(4-A)
3	YGFX0462017	Link Lever	(4-A)
4	YGFX0462018	Detection Lever (2)	(4-B)
5	YGFX0052357	Detection Lever (2) Spring	(4-B)
6	YEJT03131	Tapping Screw, 2.6 mm* 5mm	(2-C) (2-B)
7	YGFX249461	Clamp Arm	(3-A)
8	YGFX007640	Clamper	(3-A)
9	YGFX0052363	Clamper Spring Plate	(3-A)
10	YEFX999957	Ball Bearing	(3-A)
11	YGFX0462013	Detection Lever (1)	(3-A)
12	YGFX0052352	Detection Lever (1) Spring	(3-A)
13	YGFA011795	Suspension Chassis Ass'y	(3-A)
14	YEP0FX4378	Optical Pick-up Ass'y	(3-B)
15	YEFW04150	Feed Screw Housing A	(2-B)
16	YEFW04137A	Feed Screw Housing B	(2-B)
17	YGFX0052386	Thrust Adjusting Spring	(2-B)
18	YEFX236144B	Traverse Guide	(3-A)
19	YGFX9992027	Feed Screw Carrier	(3-B)
20	YEFX9991458A	FPC Holder	(2-A)
21	YEJT03211	Traverse Gear Ass'y	(2-B)
22	YEJS02037	Screw, (Pick-up)	(3-A) (3-B)
23	XYN2+C5FX	Screw, (FPC) 2mm * 5mm	(2-A)
24	XYN2+J10FX	Screw, (Housing) 2mm * 10m	(2-B)
25	YEFX0051590	Spring Washer	(3-A)
26	XUC15V	Retaining Ring, 1.5mm	(3-A)
27	YEFX9991806A	Sealed Plate	(3-B)
28	YGP0FX3503	Traverse Motor Ass'y	(2-B)
29	YEAS23151A	Inner Switch	(2-B)
30	YEFRO3080	Rubber Belt	(2-B)
31	YGFX026124A	Idler Pulley	(2-B)
32	YGFX018611	Motor Bracket Ass'y	(2-B)
33	YEJS02018FZ	Screw, (SW)	(2-B)
34	XQN2+A25FX	Screw, 2mm * 25mm	(2-B)
35	YGP0FX3529	Spindle Motor Ass'y	(2-A)
36	YEFX0051991C	Spring (Motor)	(2-A)
37	YGFX0052353	Clamper Spring	(2-A)
38	YGAJ071286	Motor Cable	(2-A)
39	XQN17+A25FX	Screw, 1.7mm * 25mm	(3-A)
40	YGFX0462019	Feeder Arm Ass'y	(1-A)
41	YGP0FX3507	Roller Gear Ass'y	(2-B)
42	YEFW04144	Roller Shaft Collar (1)	(2-A)
43	YEFW04138	Roller Shaft Collar (2)	(2-A)
44	YEFX218282	Rubber Roller	(2-A)
45	YEJW04128	Washer	(2-A)
46	YGFX0052362	Spring (Feeder Arm)	(1-A)
47	YGFX0462015	Suspension Lock Plate (L)	(1-A)
48	YGP0FX3504	Suspension Lock Plate (R) Ass'y	(1-B)
49	YGFX0052355	Spring (Rack Gear)	(1-A)
50	YGFX0052356	Spring (Rack Lock Lever)	(1-B)
51	YGFX0052360	Spring (Suspension Lock Plate L)	(1-A)
52	YGFX0052361	Spring (Lock Plate)	(3-C)
53	YGFA011779	Bottom Chassis Ass'y	(3-C)
54	YGFX003940	Driving Gear (1)	(3-C)
55	YGFX003941	Driving Gear (2)	(3-C)
56	YGP0FX3506	Loding Motor Ass'y	(3-C)
57	YGFX018605	Loding Motor Bracket Ass'y	(3-C)
58	XQN2+A25FX	Screw, (Motor) 2mm * 25mm	(3-C)
59	YEJS06188	Screw	(2-C)
60	YEFS04693	Oil Dumper	(1-C)
61	YGFX0052358	Suspension Spring (A)	(2-C)
62	YGFX0052359	Suspension Spring (B)	(2-C)

## 12 EXPLODED VIEW (CD Deck)

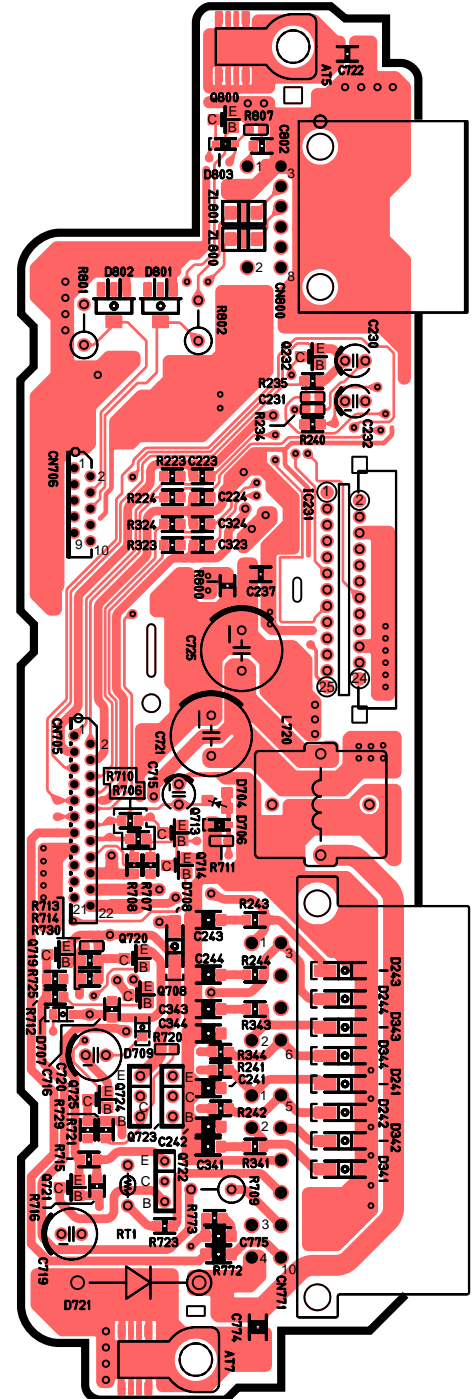


# 13 WIRING DIAGRAM

## 13.1. SW/Sub. Block (Top View)

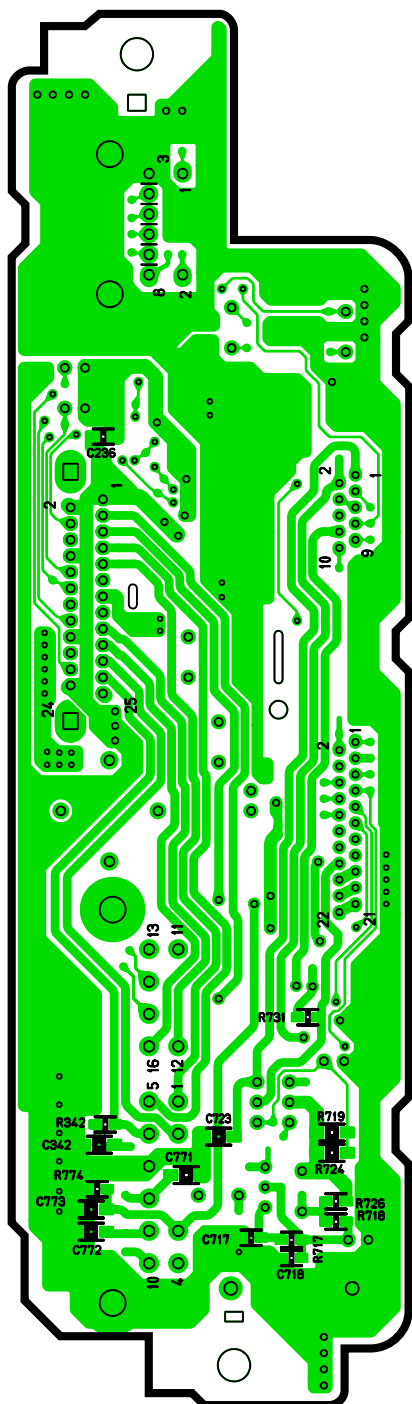


[E-8990Ca][Top View]

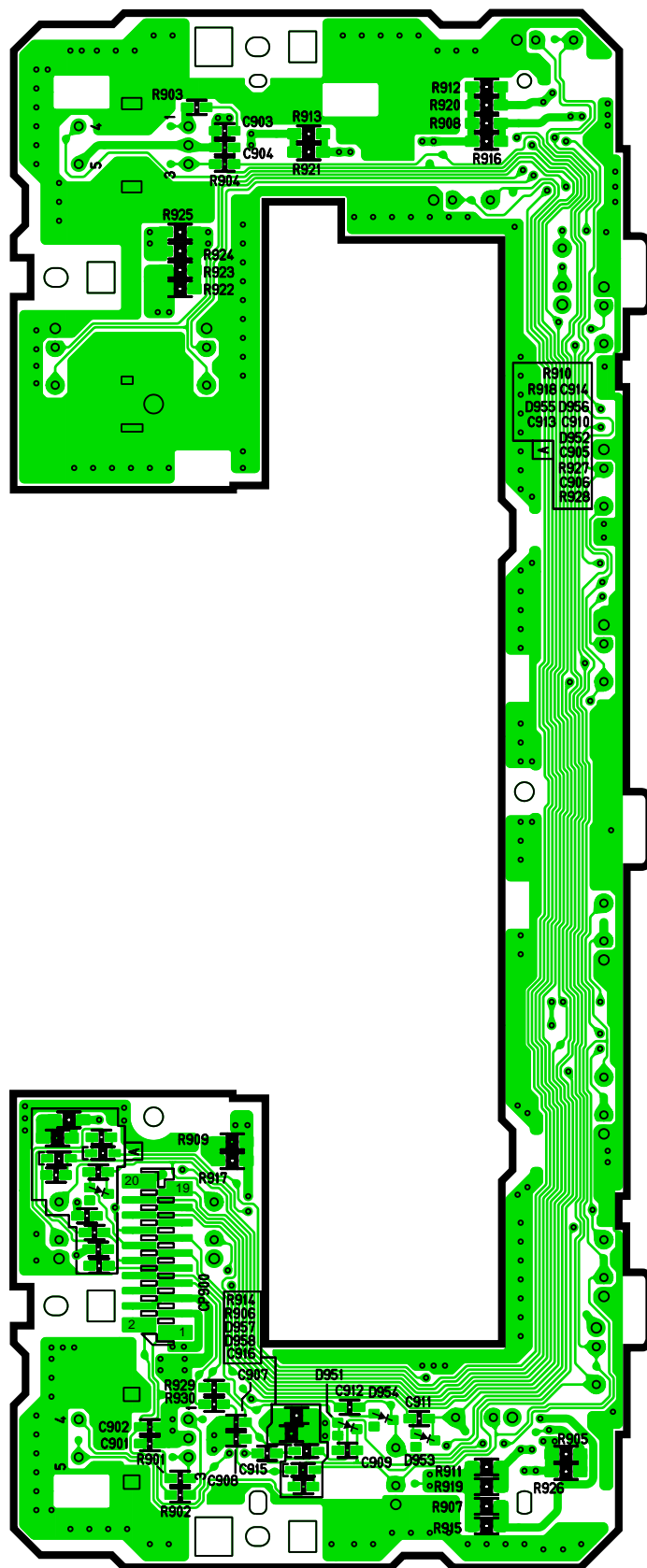


[E-8990Cb][Top View]

## 13.2. SW/Sub. Block (Bottom View)



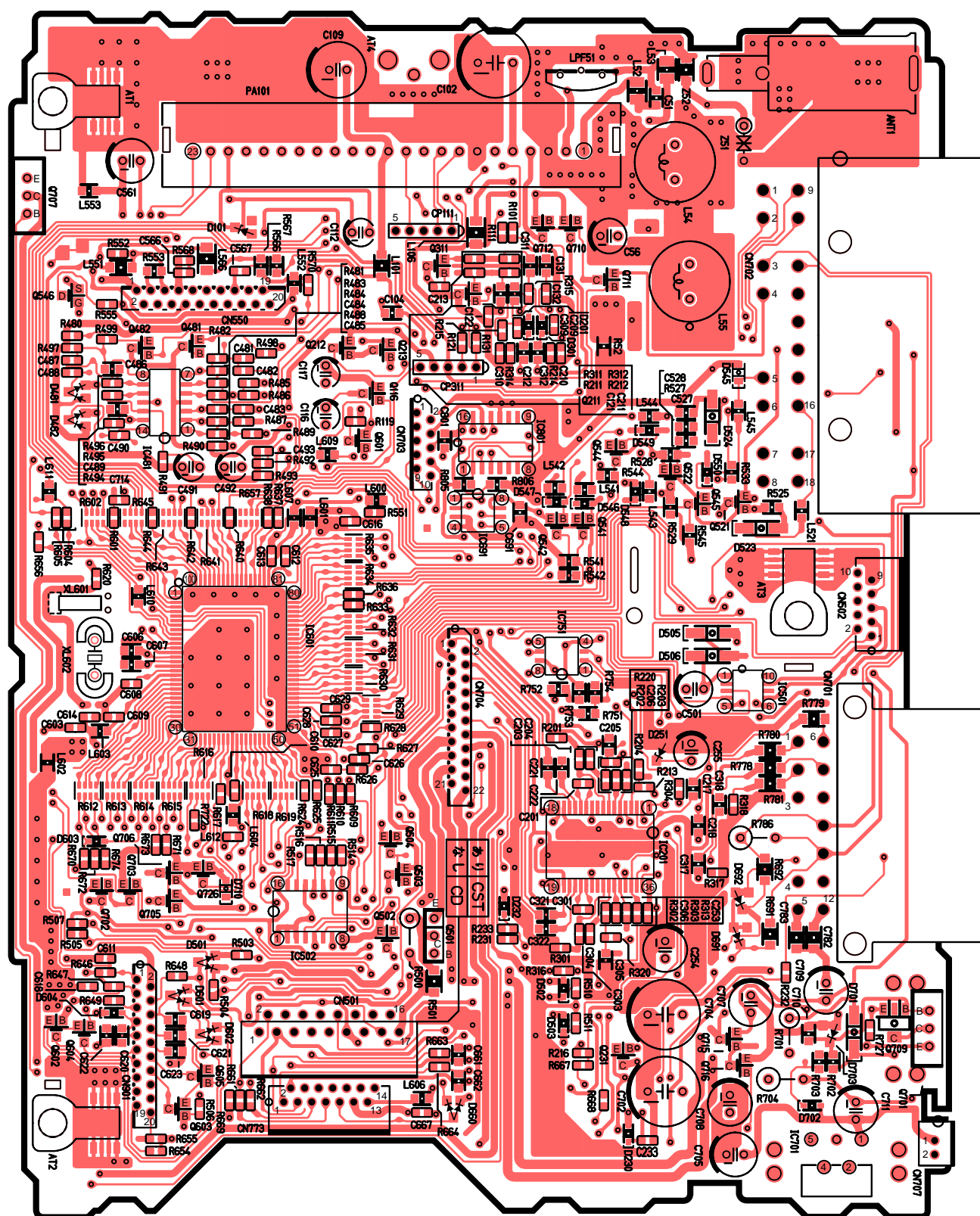
[E-8990Cb][Bottom View]



[E-8990Ca][Bottom View]

ESC,SUB P.C.B

## 13.3. Main Block (Top View)

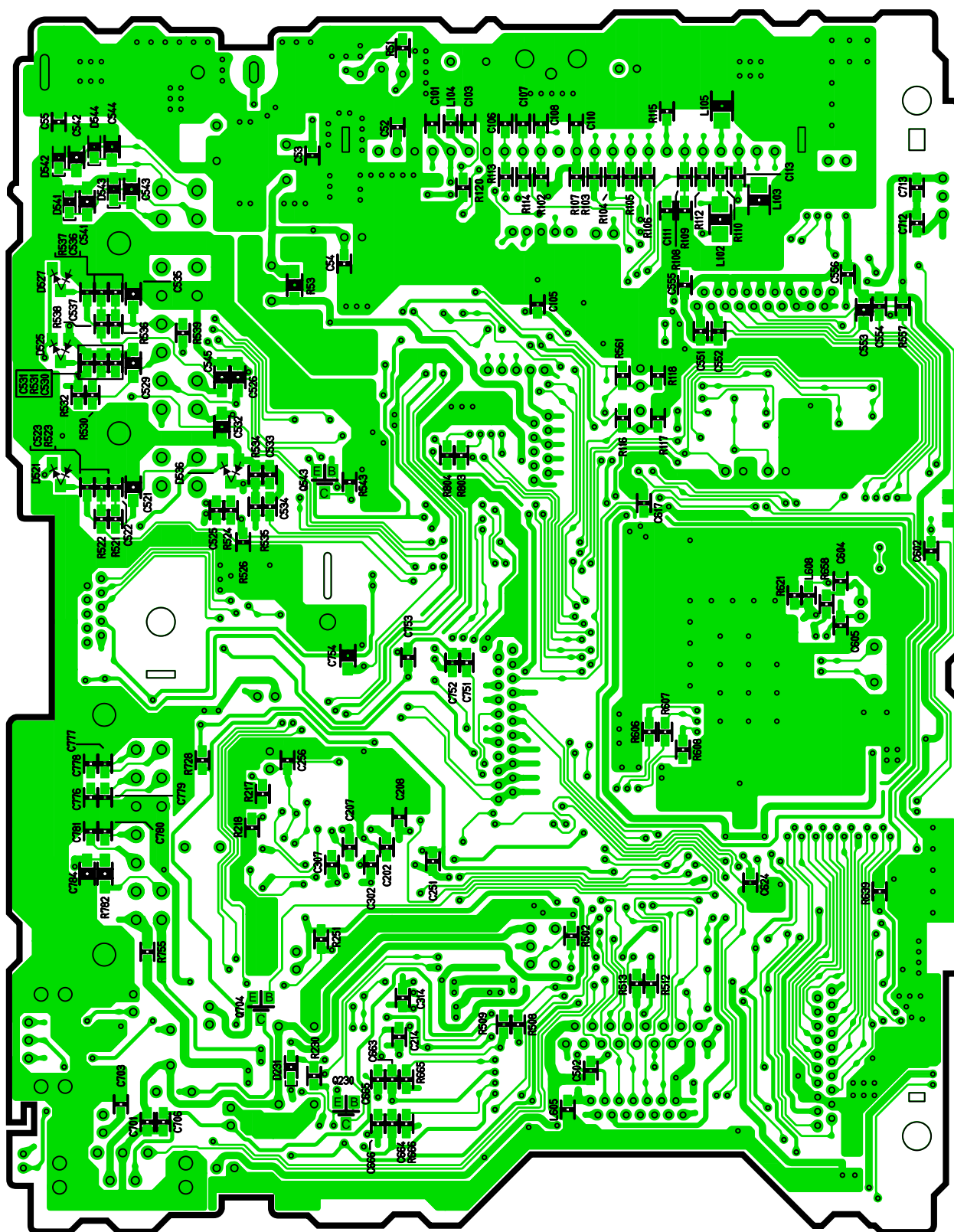


[E-6846C][Top View]

MAIN P.C.B



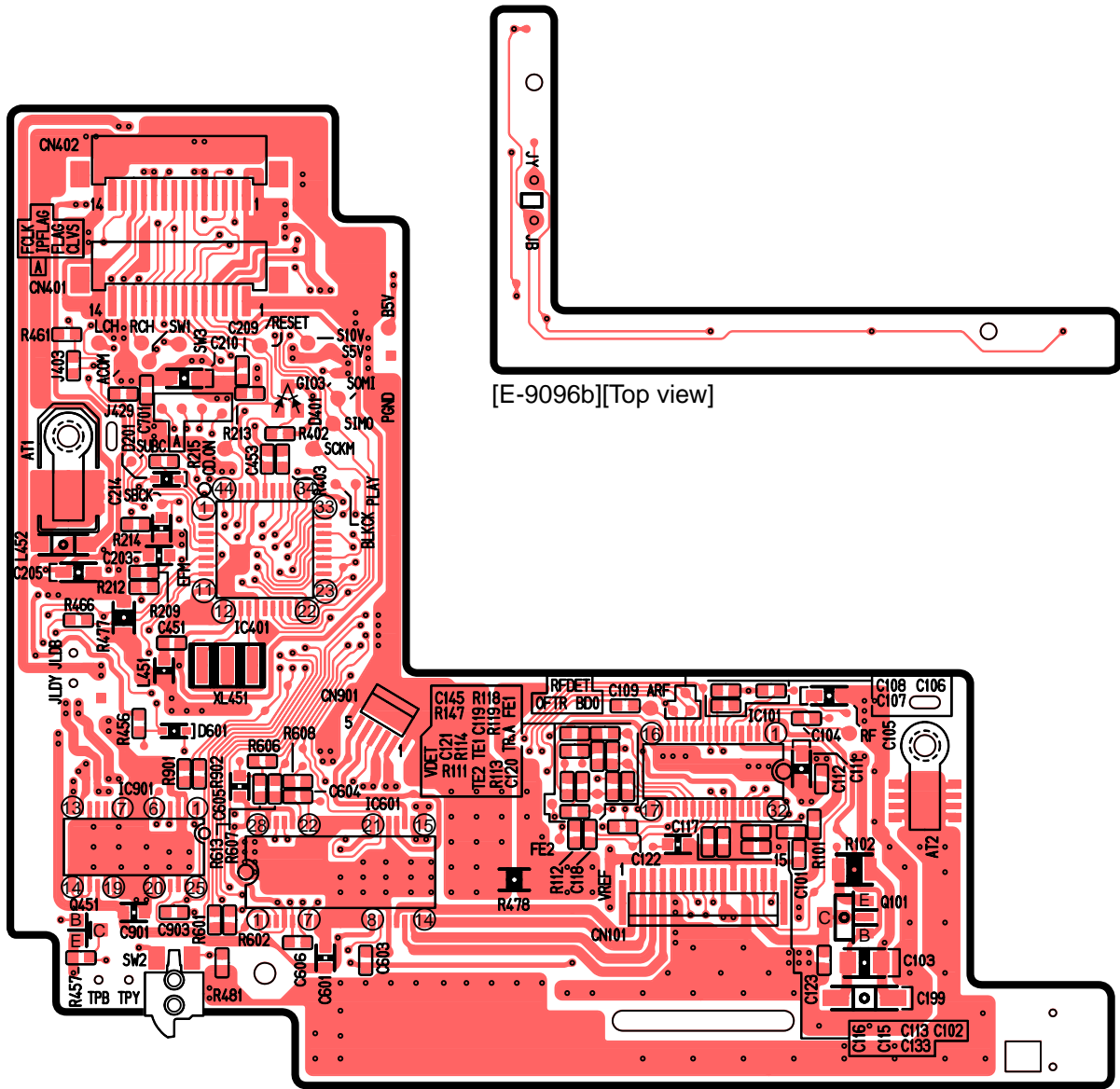
### 13.4. Main Block (Bottom View)



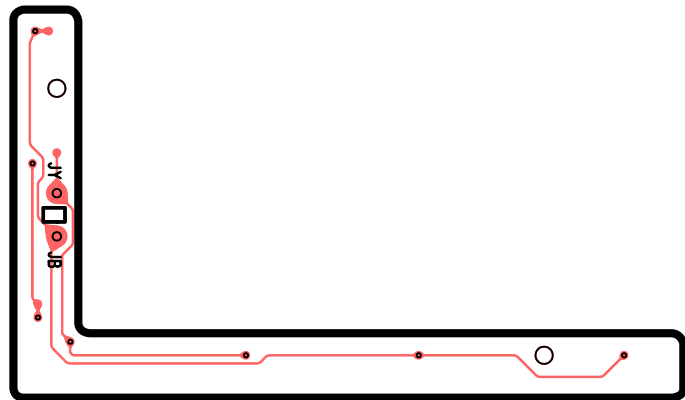
[E-6846C][Bottom View]

MAIN P.C.B

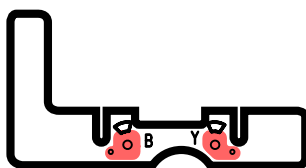
# 13.5. CD Servo Block (Top View)



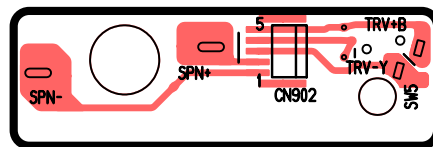
[E-9096a][Top view]



[E-9096b][Top view]

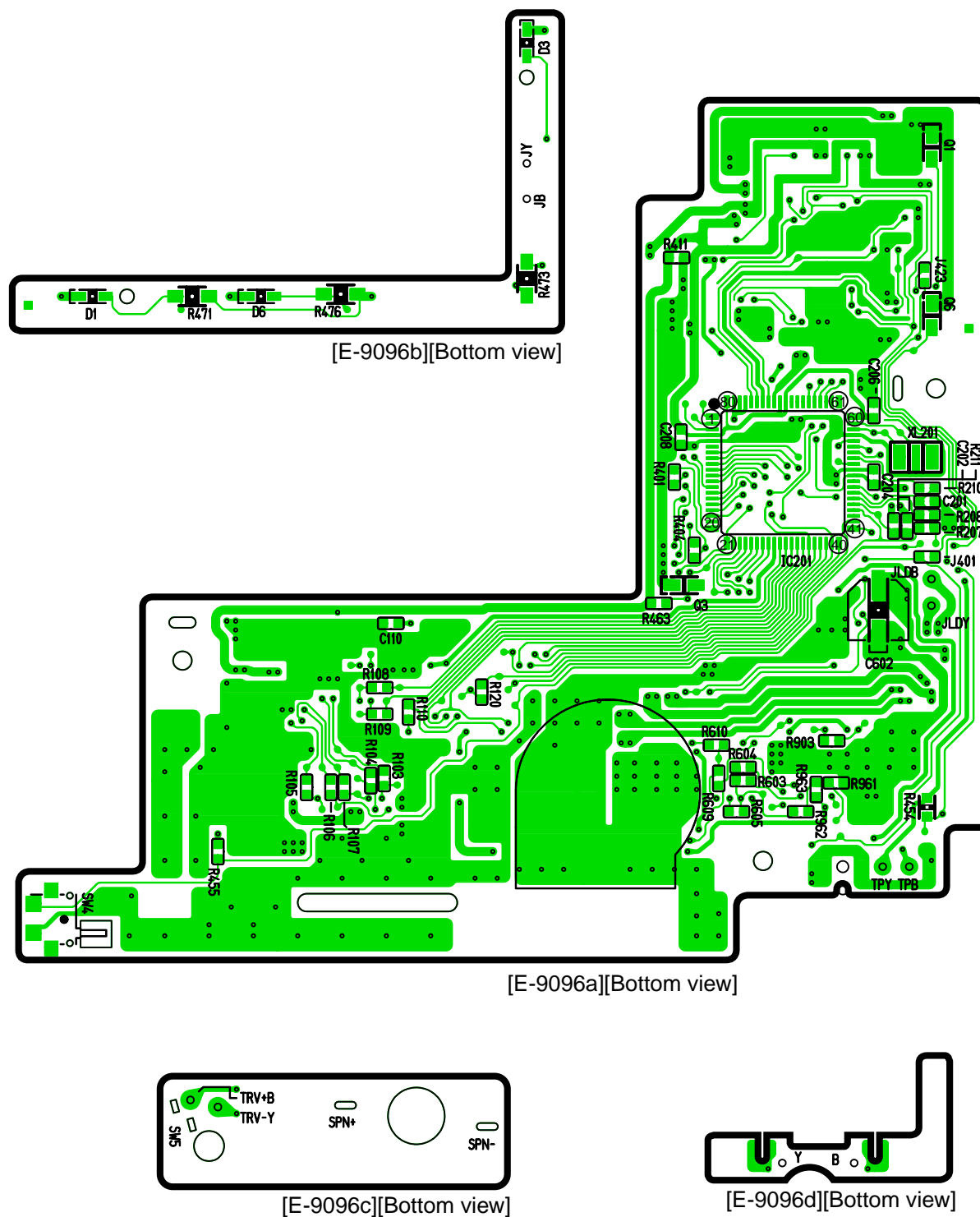


[E-9096d][Top view]



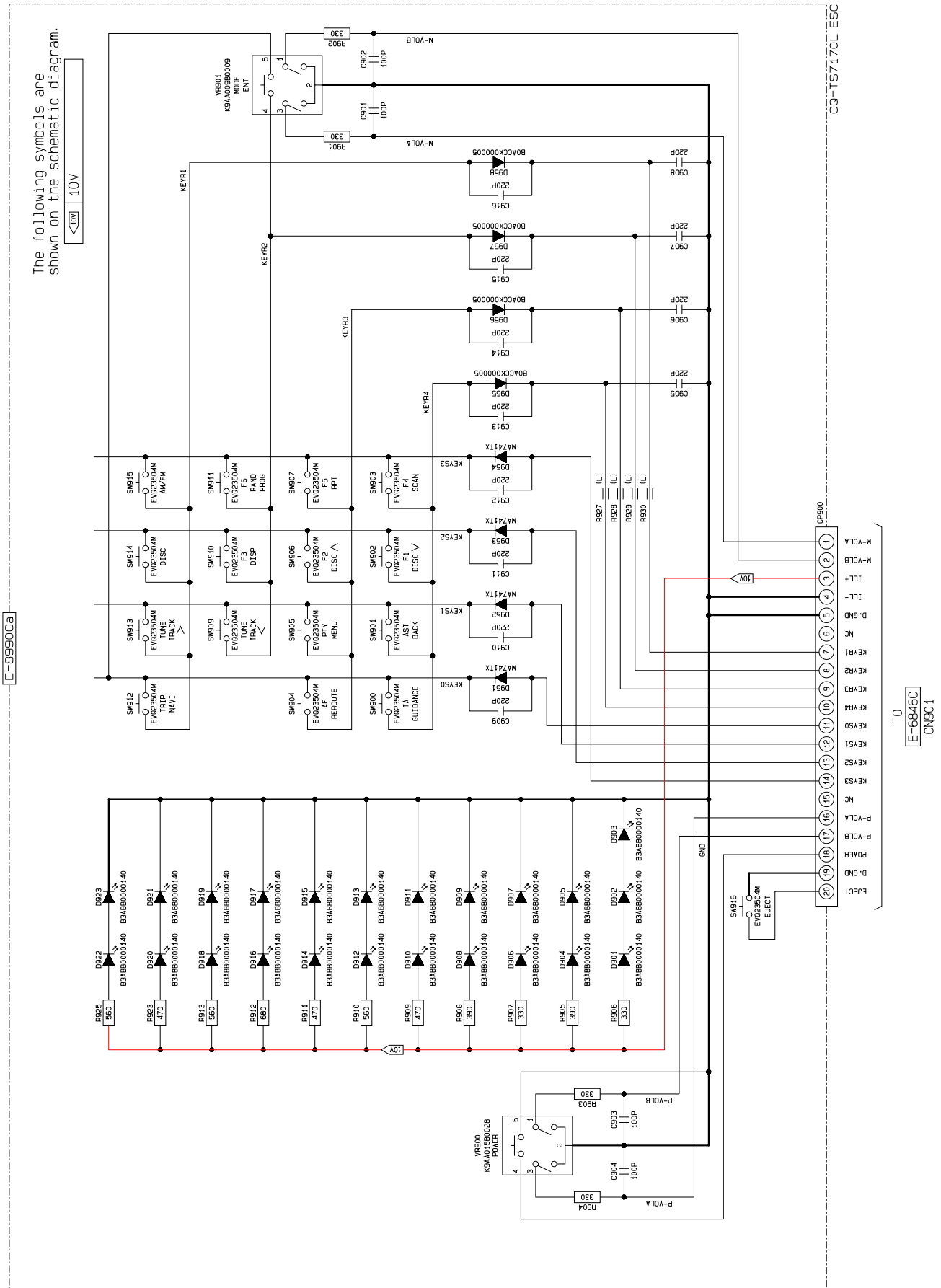
[E-9096c][Top view]

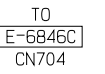
### 13.6. CD Servo Block (Bottom View)



## 14 SCHEMATIC DIAGRAM -1

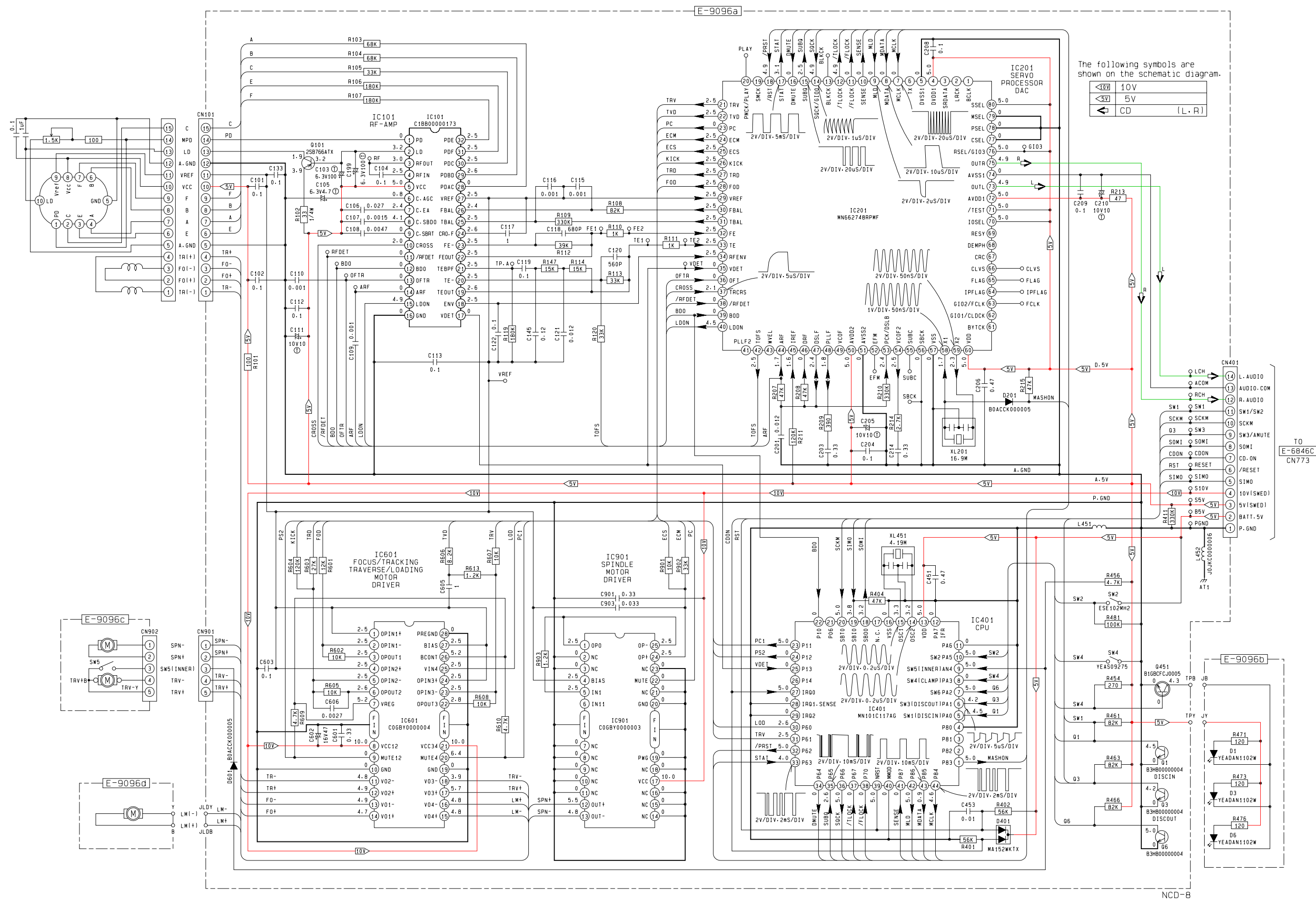
### 14.1. SW/VOL. Block











## PARTS AVAILABILITY

## HOW TO ORDER REPLACEMENT PARTS

Replacement parts can be ordered from either a Parts Depot or directly from Toyota Motor Corporation. When ordering, please refer to the Replacement Parts List in this service manual to insure that you receive the correct part.

Please enter not only part number(s) but also unit number of TOYOTA car radio / car stereo in a REMARKS column of the order sheet.

## DISPONIBILIDAD DE PARTES DE REPUESTO

## METODO DE HACER PEDIDOS DE PARTES DEREPUUESTO

Partes de repuesto pueden pedirse tanto a un Depósito de Partes de Repuesto (Parts Depot) como directamente a la Toyota Motor Corporation. En hacer los pedidos, refiérase a la Lista de Partes de Repuesto que se encuentra en este manual de servicio a fin de asegurarse de su recibo de las partes correctas.

Favor llenar la columna OBSERVACIONES de la hoja de pedido no solamente con el (los) número(s) de part(s) sino también con el número de la unidad de radio/estéreo de carro, TOYOTA.

## DISPONIBILITE DE PIECES

## MOYEN DE COMMANDER DES PIECES DE RECHANGE.

Les pièces de rechange seront commandées au Dépôt de Pièces (Parts Depot) ou directement à Toyota Motor Corporation. Lors d'une commande, veuillez consulter la Liste de pièces de rechange dans ce manuel d'atelier pour être sûr que vous recevez la pièce exacte. Veuillez écrire non seulement le(s) numéro(s) de pièce mais aussi le numéro d'unité de TOYOTA auto-radio/auto-stéréo dans la colonne REMARQUES du bulletin de commande.

<b>TOYOTA PARTS AND ACCESSORIES ORDER</b>																									PAGE NO _____ OF _____																																																																																																					
TO OVERSEAS PARTS DEPARTMENT										TOYOTA MOTOR CORPORATION NAGOYA, JAPAN															DATE		B O ORDER NO																																																																																																			
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**U.S.A.** ————— **PANASONIC PARTS DEPOT** ————

**EASTERN REGIONAL PARTS DEPOT**  
 1225 NORTHBROOK PARKWAY SUITE 2-400  
 SUWANEE, GA 30174  
 PHONE : (404) 388-6800

**WESTERN REGIONAL PARTS DEPOT**  
 20421 84TH AVE. SOUTH  
 KENT, WA 98032  
 PHONE : (206)-395-7343

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**CANADA** ————— **PANASONIC PARTS DEPOT** ————

**TORONTO**  
 PANASONIC CANADA INC.  
 5770 AMBLER DRIVE, MISSISSAUGA, ONTARIO L4W 2T3  
 PHONE : (905)-624-5010

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**EUROPE** ————— **PANASONIC PARTS DEPOT** ————

**HAMBURG**  
 PANASONIC SERVICE DEUTSCHLAND G.M.B.H.  
 2000 HAMBURG 28 AUSSCHLAGER BILLDEICH 32 F.R. GERMANY  
 PHONE : (040)-789511

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**SCANDINAVIA** ————— **PANASONIC PARTS DEPOT** ————

**STOCKHOLM**  
 PANASONIC SERVICE SCANDINAVIAN A.B.  
 INSTRUMENTVAGEN 29-31, BOX 43047,  
 100 72 STOCKHOLM, SWEDEN  
 PHONE : 08-190180

**AUSTRALIA** ————— **PANASONIC PARTS DEPOT** ————

**SYDNEY**  
 PANASONIC AUSTRALIA PTY, LTD  
 1 GARIGAL ROAD, BELROSE, N.S.W. 2085  
 PHONE : (02)-986-7640

**MELBOURNE**  
 PANASONIC AUSTRALIA PTY, LTD  
 1 CARIBBEAN DRIVE, SCORESBY VIC. 3179  
 PHONE : (03)-213-8888

**ADELAIDE**  
 PANASONIC AUSTRALIA PTY, LTD  
 125 PORT ROAD, HINDMARSH S.A. 5007  
 PHONE : (08)-346-3999

**BRISBANE**  
 PANASONIC AUSTRALIA PTY, LTD  
 494 NUDGE ROAD, HENDRA QUEENSLAND. 4012  
 PHONE : (07)-268-6455

**PERTH**  
 PANASONIC AUSTRALIA PTY, LTD  
 37 KEWDAL ROAD, WELSHPOOL, W.A. 6106  
 PHONE : (09)-451-7211

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**OTHER COUNTRIES**  
 Please order from the Overseas Parts Department, Toyota Motor Corporation, using the normal Parts & Accessories Order Form for ordering Automobile parts.

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**OTROS PAISES**  
 Favor hacer pedidos al Departamento Partes al Ultramar (Overseas parts Department), Toyota Motor Corporation utilizando el formulario normal de pedido de partes y accesorios que se usa para pedir las partes de repuestos de automóviles.

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**AUTRES PAYS**  
 Veuillez commandes au département de pièces d'outre-mer (Overseas Parts Department), Toyota Motor Corporation, en vous servant du Bulletin de Commande Pièces & Accessoires pour des commandes de pièces d'automobile.



# TOYOTA MOTOR CORPORATION

OVERSEAS SERVICE DIVISION

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