

# TOYOTA

## AUDIO COMPONENT SERVICE MANUAL



### CQ-TS7471A

AM/FM/RDS MPX ELECTRONIC  
TUNING RADIO with CD Player

TOYOTA PART No. 86120-12880

ID CODE : 58816

VEHICLE : COROLLA

DESTINATION : Europe

PRODUCED AFTER : Apr., 2004

### Specifications

#### General

Power Supply	DC 12V Test Voltage 14.4V Negative Ground
Current Consumption	Less than 3.0A (at 0.5W)

#### FM Stereo Radio

Frequency Range	87.50 - 108MHz
Effective Sensitivity	Less than 14dB/μV
Signal to Noise Ratio	More than 46dB

#### LW Radio

Frequency Range	153 - 279Hz
Effective Sensitivity	43dB/μV
Signal to Noise Ratio	More than 42dB

#### MW Radio

Frequency Range	522 - 1611Hz
Effective Sensitivity	34dB/μV
Signal to Noise Ratio	More than 42dB

#### CD Player (YGFD15269)

Signal to Noise Ratio	More than 65dB
Total Harmonic Distortion	Less than 0.3%
Channel Separation	More than 70dB

Dimensions\*\* 178x100x136mm(WxHxD)

Weight\*\* 2000g

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

\*\* Dimensions and Weight shown are approximate.

· Above specifications comply with EIA standards.

PUB. No. 80677

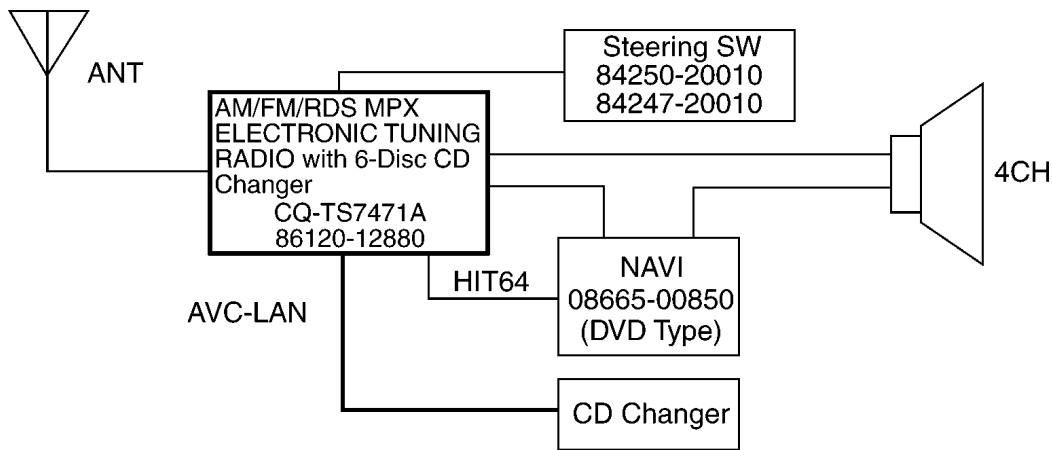
# CONTENTS

	Page		Page
1 FEATUERS .....	2	7 PACKAGE AND IC BLOCK DIAGRAM .....	7
2 SYSTEM BLOCK DIAGRAM .....	2	8 REPLACEMENT PARTS LIST .....	10
3 VIEW AND CONNECTORS .....	3	9 EXPLODED VIEW (Unit) .....	17
4 WIRING CONNECTION .....	4	10 WIRING DIAGRAM .....	18
5 BLOCK DIAGRAM .....	5	11 SCHEMATIC DIAGRAM .....	21
6 TERMINALS DESCRIPTION .....	6	12 MEMO .....	23

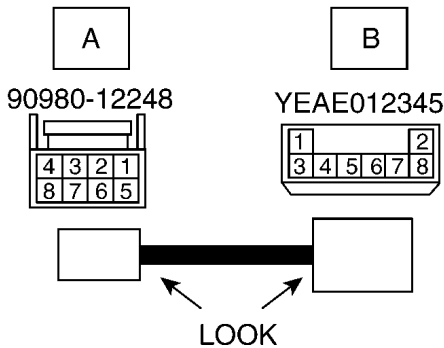
## 1 FEATUERS

- TOYOTA AVC-LAN
- 10-Pro Tuner Pack
- 24-station preset (18-FM, 6-AM)
- RDS (Radio Data System)
- LCD Module
- Escutcheon Color : Black
- The corner of the view is27°
- CD changer control
- Compatible with Audio CD, CD-R and CD-RW

## 2 SYSTEM BLOCK DIAGRAM



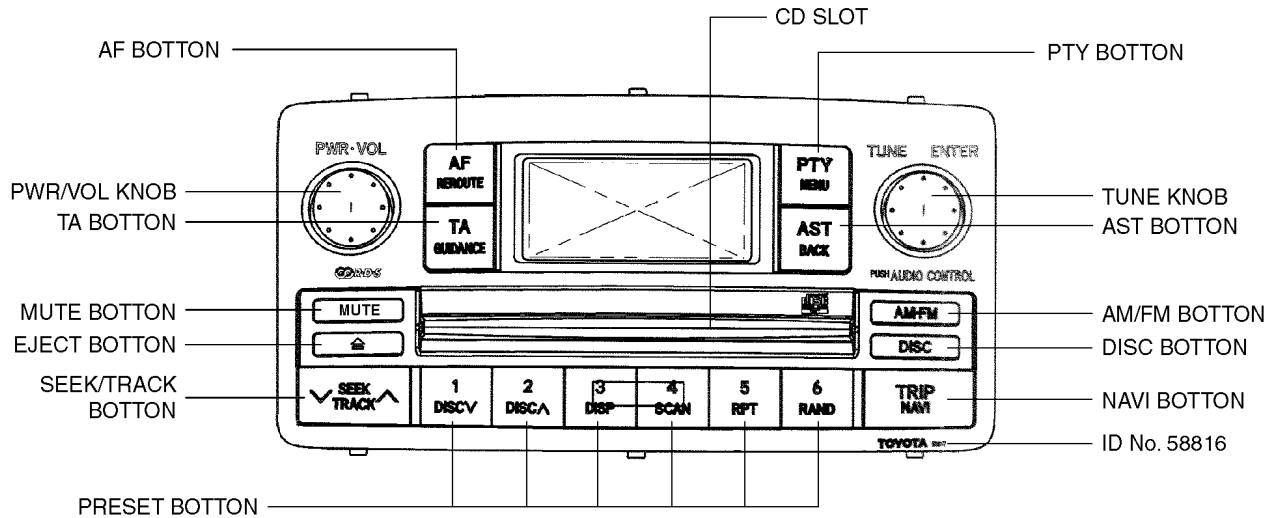
When "NAVI" is connected, the harness of the right drawing is necessary.



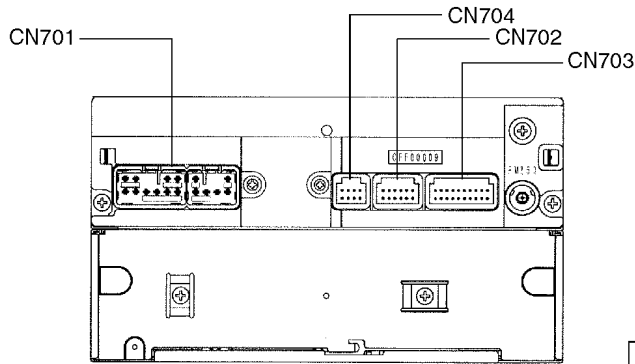
Connected	
A1	B1
A2	-
A3	-
A4	-
A5	B3
A6	B4
A7	B5
A8	-

# 3 VIEW AND CONNECTORS

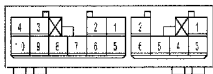
## ■ Front View



## ■ Rear View

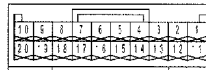


CN701 10P+6P CONNECTOR



- |                                 |         |
|---------------------------------|---------|
| 1. Front Signal Output, Right ⊕ | (FR ⊕)  |
| 2. Front Signal Output, Left ⊕  | (FL ⊕)  |
| 3. Power Supply, ACC            | (ACC)   |
| 4. Power Supply, +B             | (⊕ B)   |
| 5. Front Signal Output, Right ⊖ | (FR ⊖)  |
| 6. Front Signal Output, Left ⊖  | (FL ⊖)  |
| 7. Ground                       | (GND)   |
| 8. N.C                          |         |
| 9. Power Supply, AMP ⊕          | (AMP ⊕) |
| 10. Illumination ⊕              | (ILL ⊕) |
|                                 |         |
| 1. Rear Signal Output, Right ⊕  | (RR ⊕)  |
| 2. Rear Signal Output, Left ⊕   | (RL ⊕)  |
| 3. Rear Signal Output, Right ⊖  | (RR ⊖)  |
| 4. Tel Mute                     | (TLMT)  |
| 5. N.C                          |         |
| 6. Rear Signal Output, Left ⊖   | (RL ⊖)  |

CN703 20P CONNECTOR



- |                                 |         |
|---------------------------------|---------|
| 1. Engine Type Ver.1 Input      | (VER1)  |
| 2. Engine Type Ver.3 Input      | (VER3)  |
| 3. Engine Type Ver.5 Input      | (VER5)  |
| 4. Outside Temperature Signal ⊕ | (TH ⊕)  |
| 5. Outside Temperature Signal ⊖ | (TH ⊖)  |
| 6. SW Ground                    | (SWGND) |
| 7. Steering SW1                 | (SW1)   |
| 8. Steering SW2                 | (SW2)   |
| 9. Bus Communication ⊕          | (TX1 ⊕) |
| 10. Bus Communication ⊖         | (TX1 ⊖) |
| 11. Engine Type Ver.2 Input     | (VER2)  |
| 12. Engine Type Ver.4 Input     | (VER4)  |
| 13. N.C                         |         |
| 14. N.C                         |         |
| 15. Speed Pulse Input           | (SPD)   |
| 16. Ground                      | (GND)   |
| 17. TAUB                        | (TAUB)  |
| 18. Injector Drive Signal Input | (TAU)   |
| 19. Ignition Pulse Input        | (IG)    |
| 20. N.C                         |         |

CN704 8P CONNECTOR



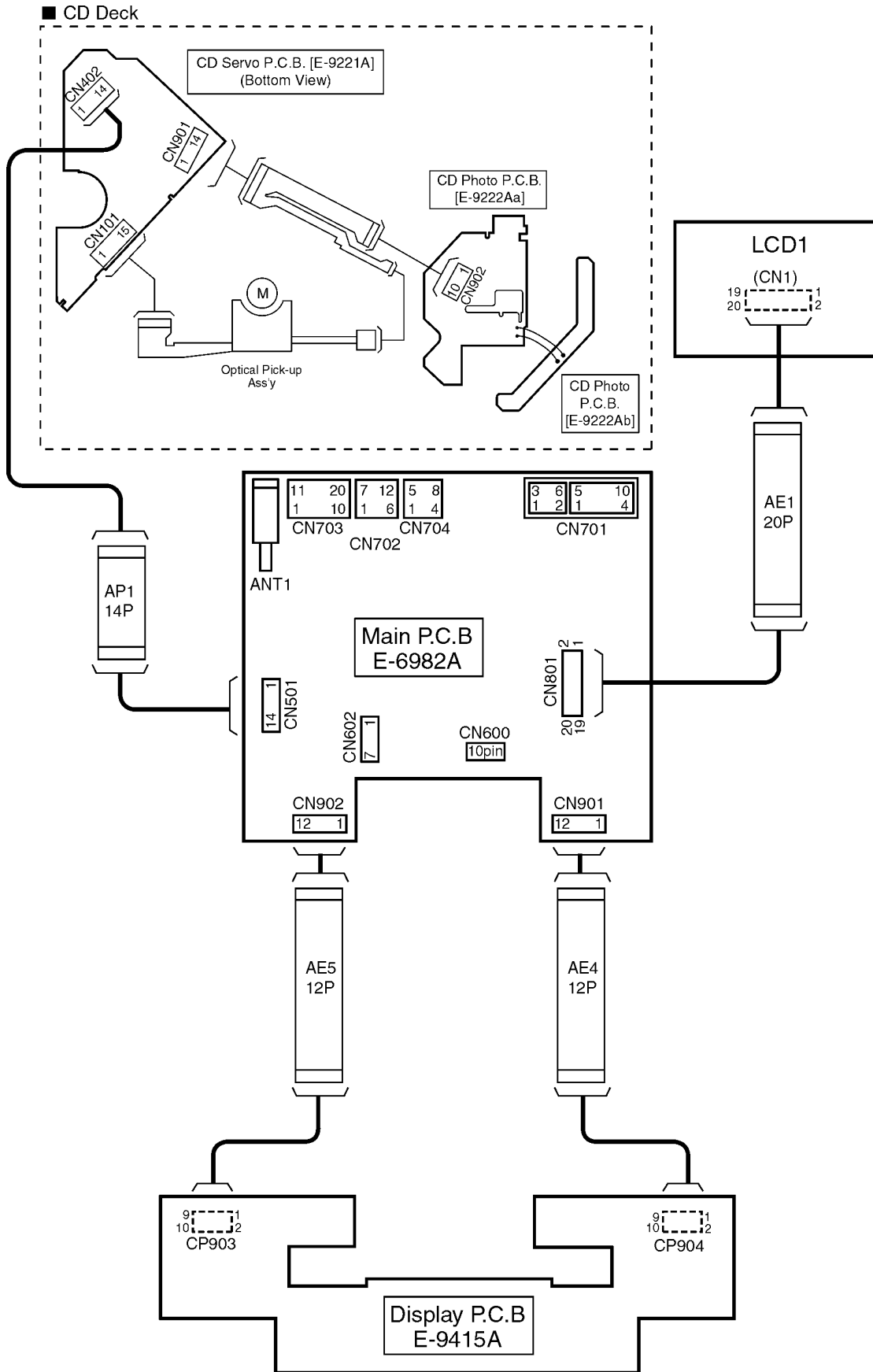
- |                          |         |
|--------------------------|---------|
| 1. BUS Request Output    | (BRQ)   |
| 2. N.C                   |         |
| 3. N.C                   |         |
| 4. N.C                   |         |
| 5. Signal Ground         | (S GND) |
| 6. HIT64 Communication ⊖ | (HIT ⊖) |
| 7. HIT64 Communication ⊕ | (HIT ⊕) |
| 8. N.C                   |         |

CN702 12P CONNECTOR



- |                         |        |
|-------------------------|--------|
| 1. Shild Ground         | (SLD)  |
| 2. Signal Input Right ⊕ | (R ⊕)  |
| 3. Signal Input Right ⊖ | (R ⊖)  |
| 4. Signal Input Left ⊕  | (L ⊕)  |
| 5. Signal Input Left ⊖  | (L ⊖)  |
| 6. Mute Control         | (MUTE) |
| 7. Ground               | (GND)  |
| 8. N.C                  |        |
| 9. Bus Communication ⊕  | (TX ⊕) |
| 10. Bus Communication ⊖ | (TX ⊖) |
| 11. Power Supply, ACC   | (ACC)  |
| 12. Power Supply, +B    | (⊕ B)  |

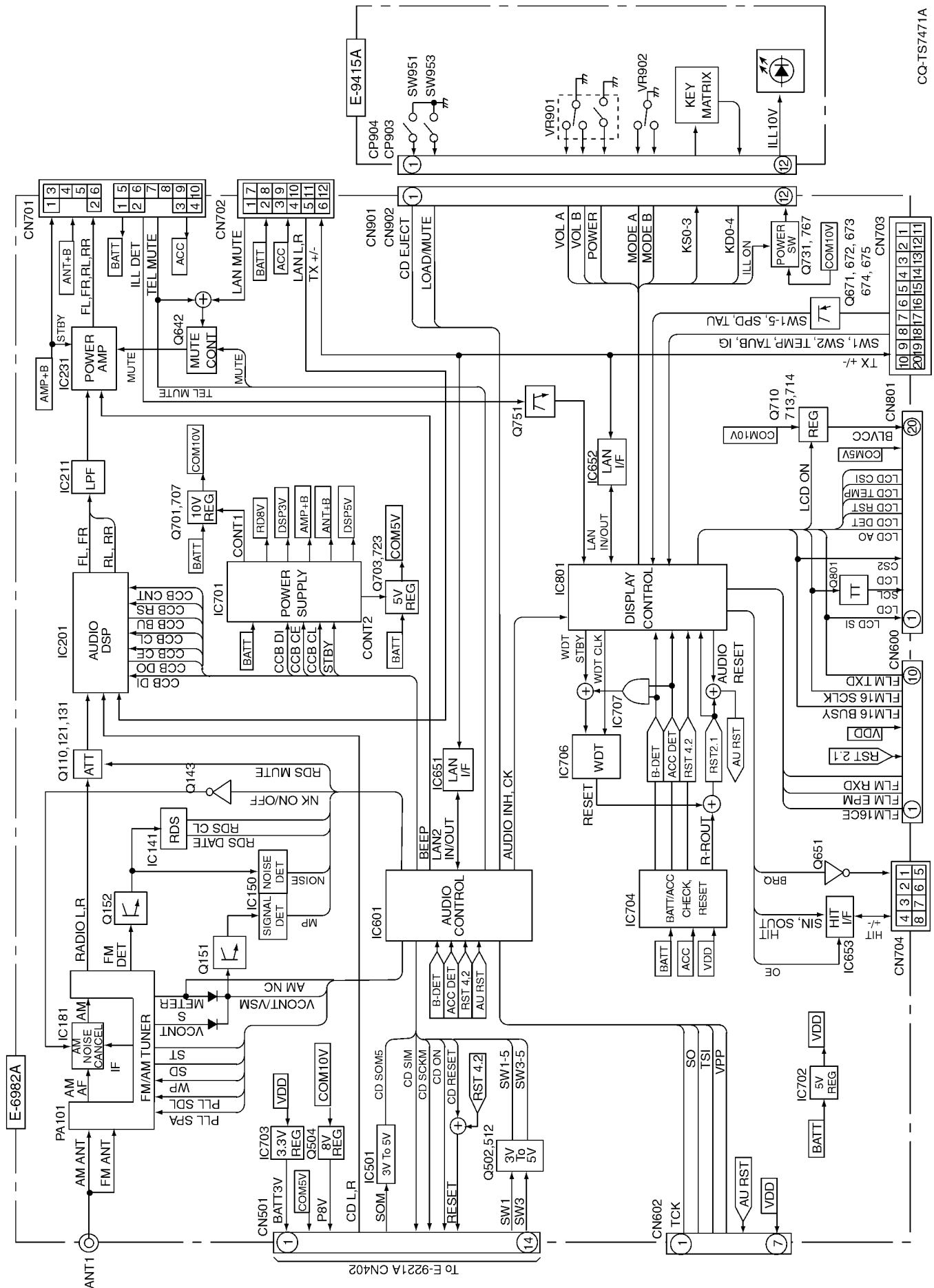
# 4 WIRING CONNECTION



<Note>

- ..... This mark shows a Ref. No. of connector.
- ..... This mark shows a mounting position of connector.

# 5 BLOCK DIAGRAM



To E-9221A CN402

# 6 TERMINALS DESCRIPTION

## 6.1. Main Block

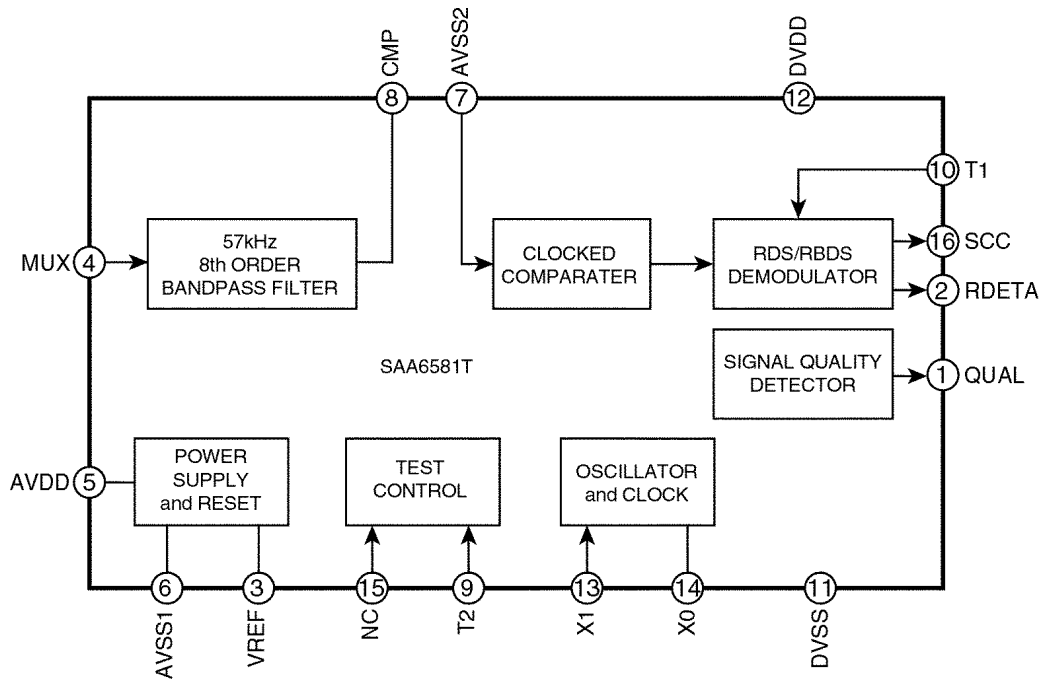
IC601 : C2CBKH000103

Pin No.	Port	Descriptions	I/O	(V)		
				FM	AM	CD
1	BEEP	-	O	0	0	0
2	NC	No connection	-	-	-	-
3	NC	No connection	-	-	-	-
4	SW3-5	CD Mute	I/O	4.8	4.9	0
5	NC	No connection	-	-	-	-
6	CD-ON	CD.C controller enable	O	0	0	4.9
7	CD-RESET	CD.C reset	O	4.9	5.0	5.0
8	CD-SCKM	CD.C shift clock	O	0	0	4.9
9	CD-SOM	CD serial data input	I	4.9	4.9	1.5
10	CD-SIM	CD serial data output	O	4.9	4.9	4.9
11	RESET	Reset	I	4.9	4.9	5.0
12	XT2(NC)	No connection	-	-	-	-
13	XT1	Ground	I	0	0	0
14	GND	Ground	-	0	0	0
15	X2	Crystal oscillator terminal	-	1.8	1.8	1.8
16	X1	Crystal oscillator terminal	I	1.5	1.5	1.5
17	REGOFF	Ground	-	0	0	0
18	REGCPU	Capacitor terminal	-	3.6	3.6	3.6
19	VDD0	+5V power supply	-	4.9	5.0	5.0
20	NC	No connection	-	-	-	-
21	GREEN(NC)	No connection	-	-	-	-
22	RED(NC)	No connection	-	-	-	-
23	Phanton	(Ground Pull-down)	-	0	0	0
24	MODE	Ground	I	4.9	4.9	5.0
25	NC	No connection	-	-	-	-
26	LOAD	Loading Detection	-	4.9	4.9	4.9
27	MODE-A	Mode encoder data	O	4.9	4.9	4.9
28	MODE-B	Mode encoder data	O	4.9	4.9	4.9
29	VOL-A	Volume encoder data	O	4.9	4.9	4.9
30	VOL-B	Volume encoder data	O	4.9	4.9	4.9
31	NC	No connection	-	-	-	-
32	AUDIO-CK	Audio clock	O	1.5	1.5	1.5
33	AUDIO-INH	Audio enable	O	4.9	5.0	4.9
34	LCD-SCK	LCD serial clock	O	0	0	0
35	LCD-DATA	LCD serial data	I	4.8	4.9	4.8
36	LCD-STB	LCD CE data	O	0	0	0
37	LCD-REQ	LCD data	O	0	0	0
38	NC	No connection	-	-	-	-
39	LCD-RESET	LCD Reset	O	0	0	0
40	GND	Ground	-	0	0	0
41	VDD	+5V power supply	-	4.9	5.0	5.0
42	-	-	-	-	-	-
43	STBY	Stand-by	I	4.9	5.0	5.0
44	CCB-DI	CCB Data input	I	4.8	5.0	4.9
45	CCB-DO	CCB Data output	O	0.5	0.5	0.5
46	CCB-CL	CCB serial clock	I	4.8	5.0	4.9
47	CCB-CE	CCB chip enable	I	0	0	0
48	CCB-RS	CCB RS	O	4.9	5.0	5.0
49	CCB-BU	CCB bus	I	0.5	0.5	0.5
50	CCB-CNT	CCB control	I	4.9	0	0
51	NC	No connection	-	-	-	-
52	MP	-	O	4.9	4.9	4.8
53	SD	SD signal	I	4.9	4.9	4.8
54	PLL-SDA	PLL serial data	I/O	4.9	4.9	4.9
55	PLL-SCL	PLL serial clock	O	4.9	5.0	5.0
56	ST	FM stereo detection	I	4.9	4.9	4.8
57	NC	No connection	-	-	-	-
58	NK ON/OFF	AM noise cancellor on/off	-	4.8	0	0
59	NC	No connection	-	-	-	-
60	TEL MUTE	TEL Mute	-	4.9	4.9	4.9
61	MUTE	Mute	-	0	0	0
62	NC	No connection	-	-	-	-
63	NC	No connection	-	-	-	-
64	NC	No connection	-	-	-	-
65	RDS CL	RDS clock	O	2.4	2.4	2.4
66	RDS DATA	RDS data	I	2.7	2.7	2.5

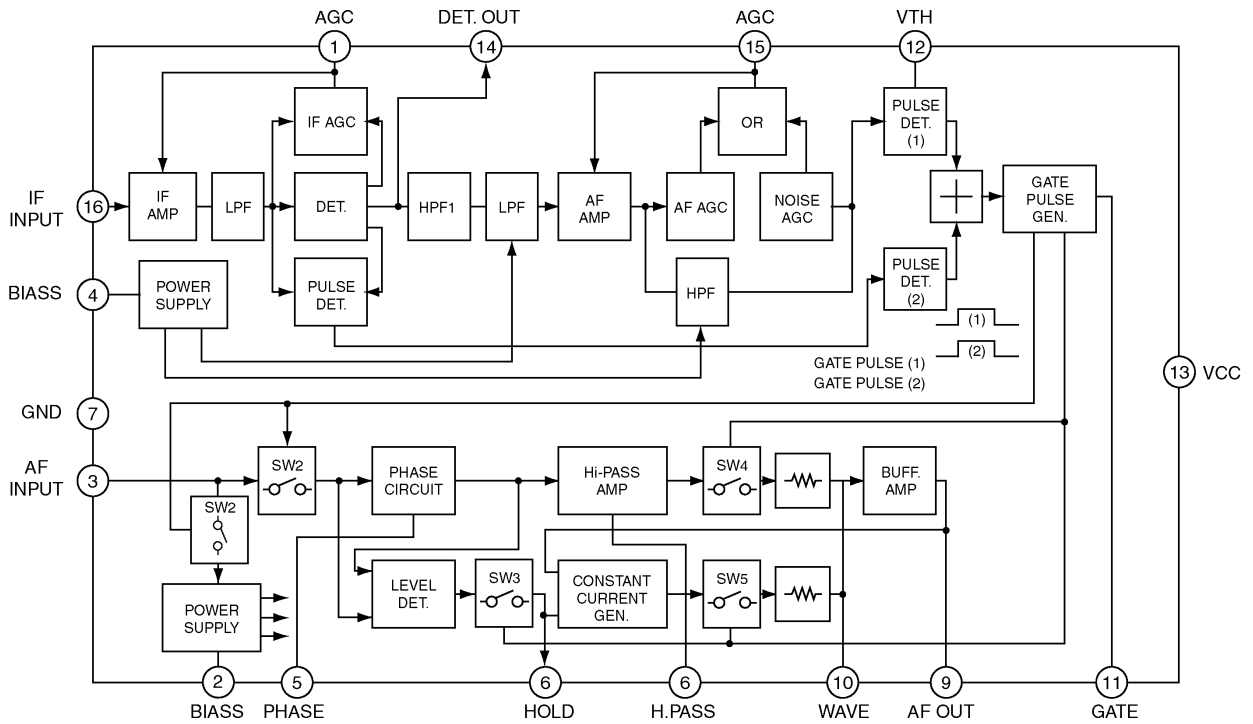
Pin No.	Port	Descriptions	I/O	(V)		
				FM	AM	CD
67	NC	No connection	-	-	-	-
68	RDS MUTE	RDS Mute	O	5.0	5.0	0
69	NC	No connection	-	-	-	-
70	NC	No connection	-	-	-	-
71	NC	No connection	-	-	-	-
72	NC	No connection	-	-	-	-
73	TEST (FLASH VPP)	(Ground pull-down)	-	0	0	0
74	ACC-IN	Temperature sensor	-	0	1.4	0
75	VCONT (VSM)	Field intensity detection	I	0.6	1.1	0.6
76	MP	-	I	0	0	0
77	NOISE	FM noise detection	I	1.4	0	1.4
78	NC	No connection	-	-	-	-
79	NC	No connection	-	-	-	-
80	NC	No connection	-	-	-	-
81	NC	No connection	-	-	-	-
82	VDD	+5V power supply	-	5.0	5.0	5.0
83	AVDD	+5V power supply	-	4.9	4.9	4.9
84	GND (AVSS)	Ground	-	0	0	0
85	LAN IN	LAN data input	I	0	0	0
86	LAN OUT	LAN data output	O	0	0	0
87	GND	Ground	-	0	0	0
88	CD EJ	CD Eject	I	4.9	4.9	4.9
89	NC	(Ground Pull-down)	-	0	0	0
90	PACK (SW)	-	I	4.9	4.9	0
91	+B-DET	Battery detection	I	4.9	4.9	4.9
92	ACC-DET	ACC detection	I	4.9	4.9	4.9
93	RESET 4.2	-	I	4.9	4.9	4.9
94	TSO(SUBC)	CD text serial data input	I	0	0	0
95	SO	Serial data output	O	0	0	0
96	TSI	CD text serial data output	O	0	0	0
97	TCK(SBCK)	CD text serial clock	O	0	0	0
98	TSTB	CD text TSTB No	I	0	0	0
99	NC	No connection	-	-	-	-
100	NC	No connection	-	-	-	-

# 7 PACKAGE AND IC BLOCK DIAGRAM

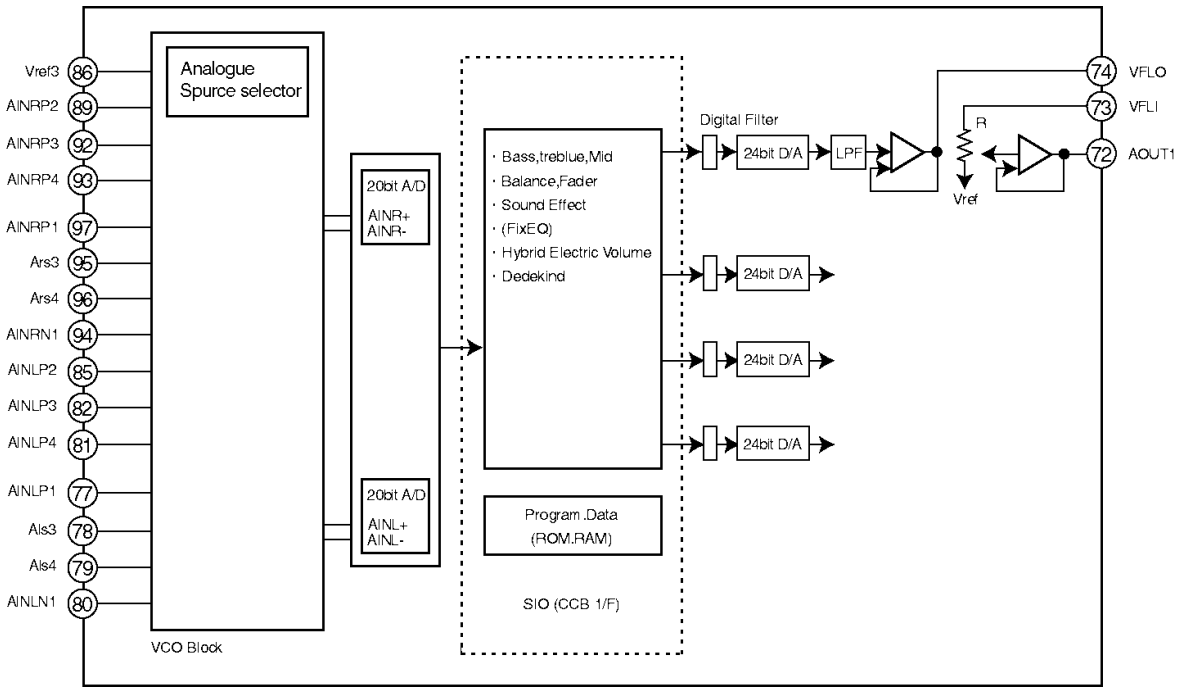
## 7.1. Main Block



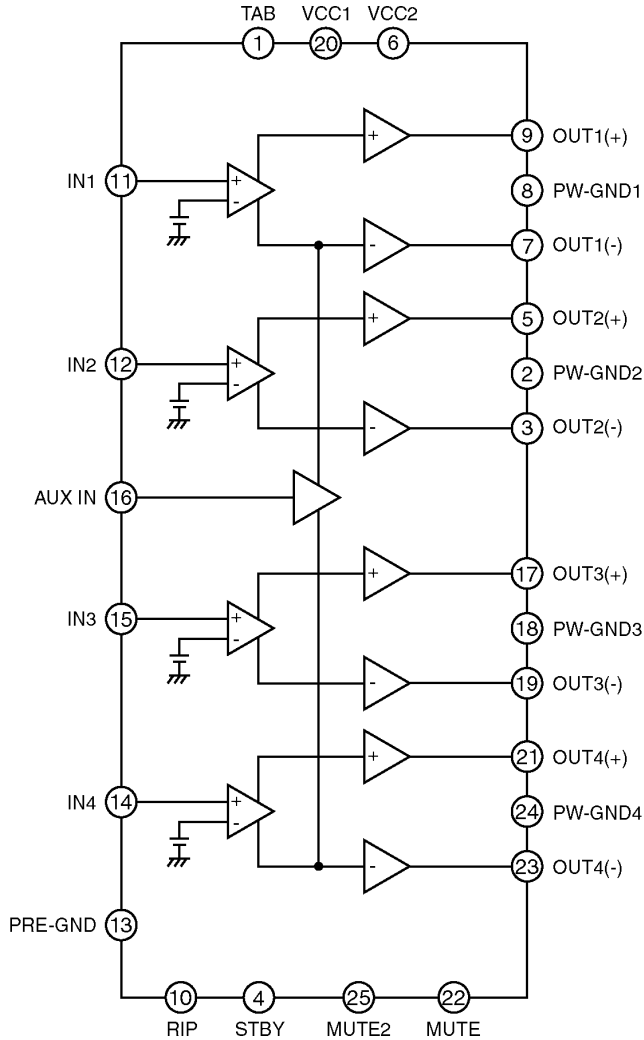
IC141 : C1EB0000061



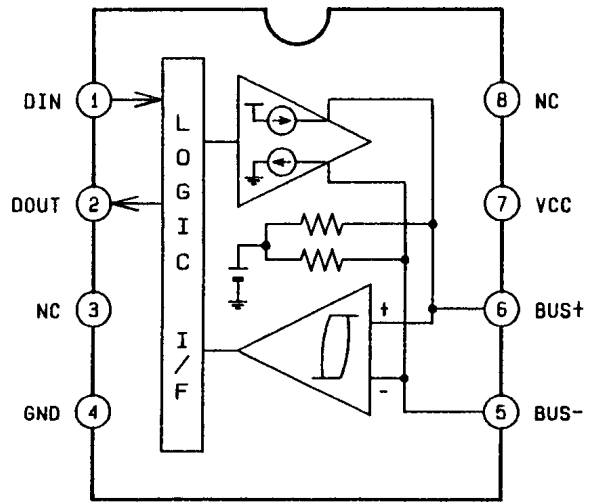
IC181 : YEAMHA12181F



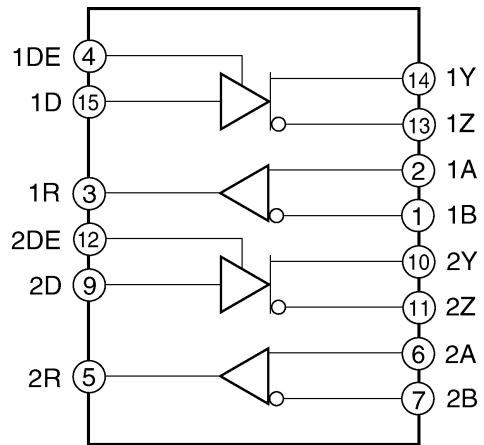
IC201 : C2HBZF000007



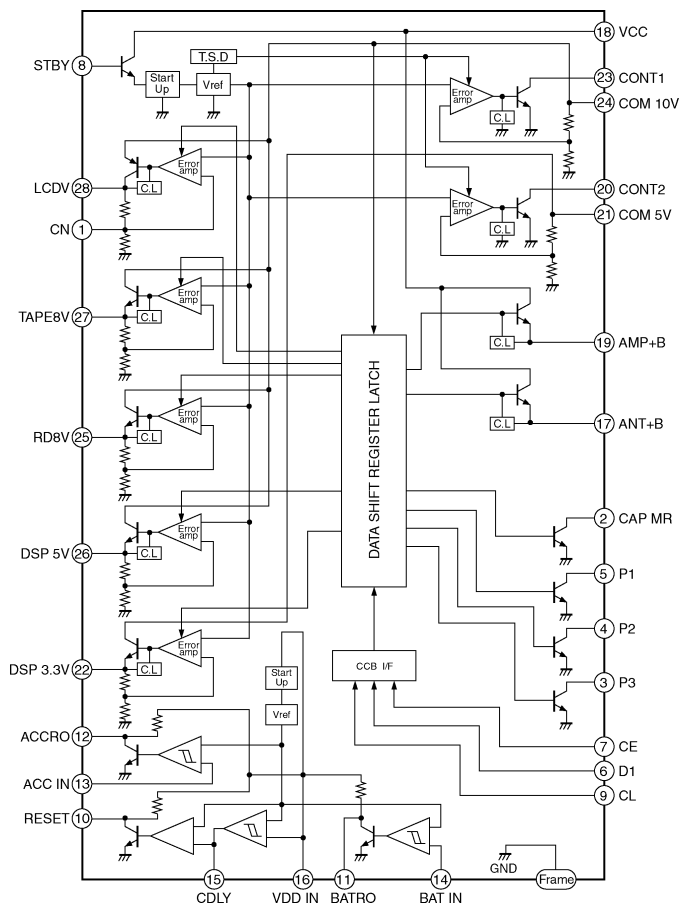
IC231 : C1BA00000345



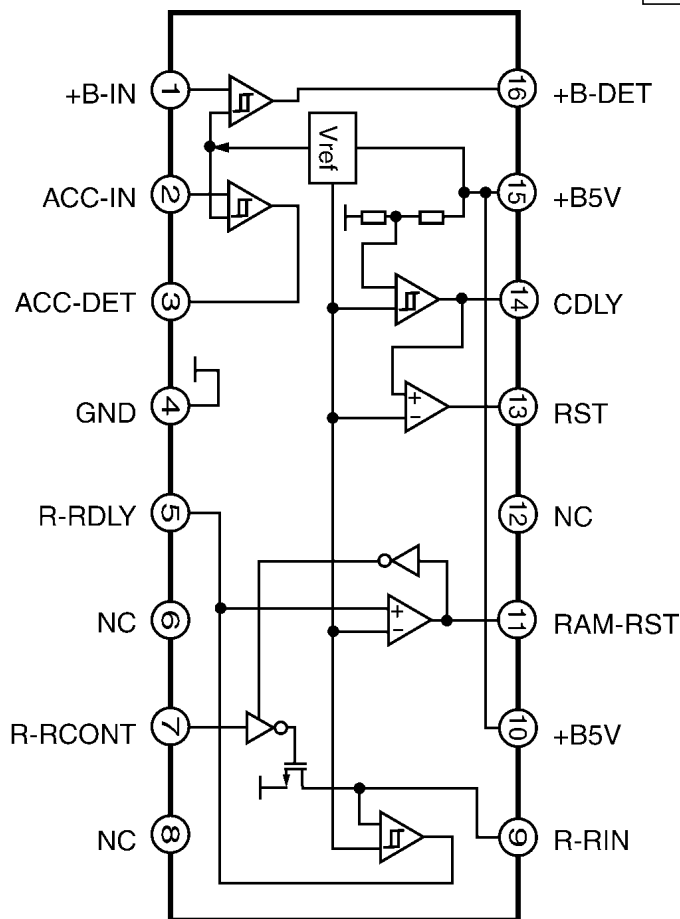
IC651,652 : C1EB00000001



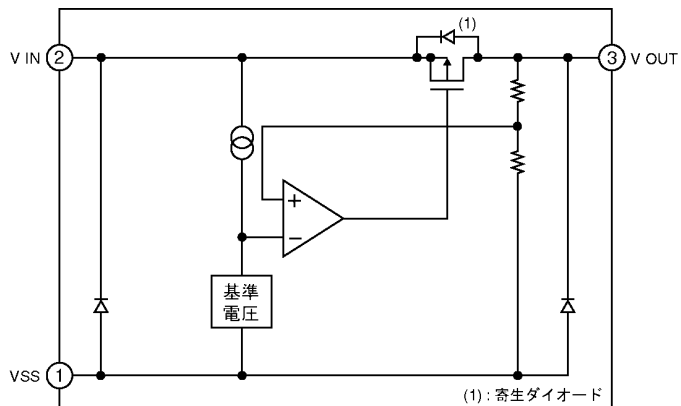
IC653 : C1EB00000017



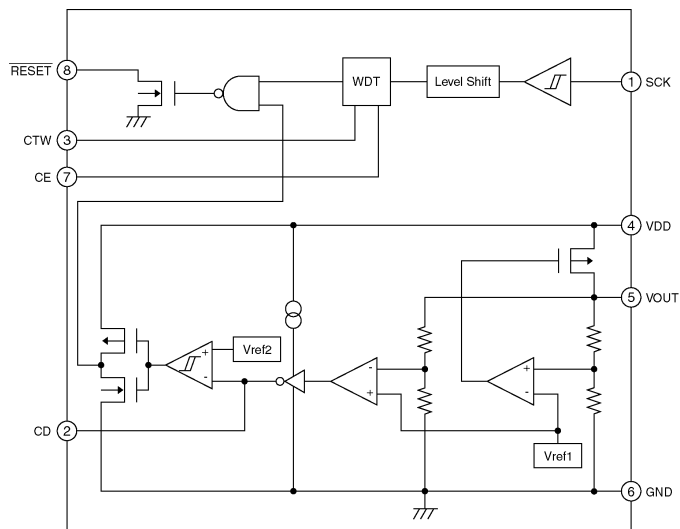
IC701 : C0DBZH00020



IC704 : AN31910A-NF



IC703 : C0CBABC00138



IC706 : C0EBE0000174

# 8 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.

Ref. No.	Part No.	Part Name & Description	Remarks
<b>[E6982A] Main Block</b>			
<b>IC's AND TRANSISTORS</b>			
IC141	C1EB00000061	IC	
IC150	C0ABCB000032	IC	
IC181	YEAMHA12181F	IC	
IC201	C2HBZF000007	IC	
IC211	C0ABCB000038	IC	
IC231	C1BA00000345	IC	
IC501	YEAMT7ST00UL	IC	
IC601	C2CBKH000103	IC	
IC651	C1EB00000001	IC	
IC652	C1EB00000001	IC	
IC653	C1EB00000017	IC	
IC701	C0DBZH000020	IC	
IC702	C1BB00000828	IC	
IC703	C0CBABC00138	IC	
IC704	AN31910A-NF	IC	
IC706	C0EBE0000174	IC	
IC707	C0JBAA000102	IC	
IC801	C2CBJH000062	IC	
PA101	YEP0PTB566B0	Electronic Tuner	
Q110	B1GDCFNN0007	Transistor	
Q121	YEANC323TUTX	Transistor	
Q131	YEANC323TUTX	Transistor	
Q143	B1GBCFGN0001	Transistor	
Q151	B1ABCF000044	Transistor	
Q152	B1ABCF000044	Transistor	
Q502	YEAN2SK3018T	Transistor	
Q504	B1BBCD000001	Transistor	
Q512	YEAN2SK3018T	Transistor	
Q642	B1GKCFNN0006	Transistor	
Q651	B1GBCFNN0004	Transistor	
Q671	B1GDCFJJ0002	Transistor	
Q672	B1GDCFJJ0002	Transistor	
Q673	B1GDCFJJ0002	Transistor	
Q674	B1GDCFJJ0002	Transistor	
Q675	B1GDCFJJ0002	Transistor	
Q681	B1ABCF000042	Transistor	
Q691	B1ABCF000042	Transistor	
Q701	YEAN2SA1757	Transistor	
Q703	YEAN2SA1757	Transistor	
Q707	YEAN2SA1757	Transistor	
Q710	B1BBCD000001	Transistor	
Q713	B1GBCFGN0001	Transistor	
Q714	B1GBCFNN0009	Transistor	
Q723	YEAN2SA1757	Transistor	

Ref. No.	Part No.	Part Name & Description	Remarks
Q731	2SB1073TX	Transistor	
Q751	B1GBCFNN0009	Transistor	
Q767	YEANC114YKX	Transistor	
Q801	YEAN2SK1133T	Transistor	
<b>DIODES</b>			
D16	YEADEC10DS1	Diode	
D101	B0ADDJ000007	Diode	
D110	B0ACCK000005	Diode	
D141	MA153TX	Diode	
D142	MA153TX	Diode	
D501	B0BC8R200012	Diode	
D502	B0ADDJ000006	Diode	
D601	B0ADDJ000006	Diode	
D641	B0ACCK000005	Diode	
D643	B0ACCK000005	Diode	
D644	B0ACCK000005	Diode	
D651	YEARDR18M2T1	Diode	
D652	YEARDR18M2T1	Diode	
D653	YEARDR18M2T1	Diode	
D654	YEARDR18M2T1	Diode	
D655	YEARDR13P2T1	Diode	
D656	YEARDR13P2T1	Diode	
D658	B0ACCK000005	Diode	
D671	MA8056LMHTX	Diode	
D672	MA8056LMHTX	Diode	
D673	MA8056LMHTX	Diode	
D674	MA8056LMHTX	Diode	
D675	MA8056LMHTX	Diode	
D676	B0ACCK000005	Diode	
D677	B0ACCK000005	Diode	
D678	B0ACCK000005	Diode	
D679	B0ACCK000005	Diode	
D680	B0ACCK000005	Diode	
D683	MA153TX	Diode	
D684	MA153TX	Diode	
D685	MA153TX	Diode	
D691	YEADSR1544TL	Diode	
D701	B0BC02700005	Diode	
D703	YEADRB051L40	Diode	
D705	B0BC3R900023	Diode	
D712	B0ADDJ000007	Diode	
D751	B0BC6R800004	Diode	
D760	B0ADDJ000008	Diode	
D761	B0ADDJ000008	Diode	
D762	B0ADDJ000006	Diode	
D800	B0ACCK000005	Diode	
D801	B0ACCK000005	Diode	
D802	B0ACCK000005	Diode	
D803	B0ACCK000005	Diode	
<b>CAPACITORS</b>			
C51	F1J1H102A394	Ceramic, 1000PF 50WV	
C101	YECUS1C154KX	Ceramic, 0.15 $\mu$ F 16WV	
C102	YECUS1H123KX	Ceramic, 0.012 $\mu$ F 50WV	
C103	YECUZ1E223KX	Ceramic, 0.022 $\mu$ F 25WV	
C104	ECEA1AKA101I	Electrolytic, 100 $\mu$ F 10WV	
C107	ECEA1CKA100I	Electrolytic, 10 $\mu$ F 16WV	
C109	F1H1A1050019	Ceramic, 1 $\mu$ F 10WV	
C110	ECEA1HKAR22I	Electrolytic, 0.22 $\mu$ F 50WV	
C111	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 25WV	
C112	YECUS1E223KX	Ceramic, 0.022 $\mu$ F 25WV	
C115	EEUFC1A221B	Electrolytic, 220 $\mu$ F 10WV	
C118	ECEA1HKA010I	Electrolytic, 1 $\mu$ F 50WV	
C119	YECUZ1H103KX	Ceramic, 0.01 $\mu$ F 50WV	
C120	F1J1H471A665	Ceramic, 470PF 50WV	
C121	YECUS1C683KX	Ceramic, 0.068 $\mu$ F 16WV	
C123	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C131	YECUS1C683KX	Ceramic, 0.068 $\mu$ F 16WV	
C133	YECUS1A105KX	Ceramic, 1 $\mu$ F 10WV	
C141	F1J1H331A665	Ceramic, 330PF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C142	ECEA1HKA2R2I	Electrolytic, 2.2µF 50WV	
C143	FLJ1H271A672	Ceramic, 270PF 50WV	
C144	YECUZ1H103KX	Ceramic, 0.01µF 50WV	
C145	FLJ1H561A672	Ceramic, 560PF 50WV	
C146	ECEA0JKA470I	Electrolytic, 47µF 6.3WV	
C147	FLJ1H103A513	Ceramic, 0.01µF 50WV	
C148	YECUS1H470JC	Ceramic, 47PF 50WV	
C149	FLJ1H560A025	Ceramic, 56PF 50WV	
C150	FLJ1H122A675	Ceramic, 1200PF 50WV	
C151	FLJ1H152A675	Ceramic, 1500PF 50WV	
C152	FLJ1H103A513	Ceramic, 0.01µF 50WV	
C153	ECEA1HKA4R7I	Electrolytic, 4.7µF 50WV	
C154	FLJ1H151A672	Ceramic, 150PF 50WV	
C155	YECUZ1H151JC	Ceramic, 150PF 50WV	
C156	FLJ1H151A672	Ceramic, 150PF 50WV	
C157	FLJ1H151A672	Ceramic, 150PF 50WV	
C158	FLJ1H1020024	Ceramic, 1000PF 50WV	
C159	YECUS1H100CC	Ceramic, 10PF 50WV	
C160	FLJ1H1020024	Ceramic, 1000PF 50WV	
C161	YECUS1E223KX	Ceramic, 0.022µF 25WV	
C162	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C178	ECEA1AKA101I	Electrolytic, 100µF 10WV	
C180	YECUZ1H103KX	Ceramic, 0.01µF 50WV	
C181	FLH1E273A011	Ceramic, 0.027µF 25WV	
C182	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C183	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C184	YECUS1C683KX	Ceramic, 0.068µF 16WV	
C186	ECEA1HKA3R3I	Electrolytic, 3.3µF 50WV	
C187	FLH1E153A011	Ceramic, 0.015µF 25WV	
C188	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C189	YECUS1C224KX	Ceramic, 0.22µF 16WV	
C190	FLH1E103A011	Ceramic, 0.01µF 25WV	
C191	FLJ1H562A675	Ceramic, 5600PF 50WV	
C192	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C196	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C201	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C202	FLJ1C1050013	Ceramic, 1µF 16WV	
C203	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C204	FLJ1C1050013	Ceramic, 1µF 16WV	
C205	FLJ1C1050013	Ceramic, 1µF 16WV	
C206	FLH1H152A201	Ceramic, 1500PF 50WV	
C207	ECEA1HNS2R2I	Electrolytic, 2.2µF 50WV	
C208	ECEA1HNS2R2I	Electrolytic, 2.2µF 50WV	
C209	FLH1H180A231	Ceramic, 18PF 50WV	
C210	FLH1H180A231	Ceramic, 18PF 50WV	
C213	FLH1H821A190	Ceramic, 820PF 50WV	
C215	FLH1H821A190	Ceramic, 820PF 50WV	
C219	ECEA1HNSR33I	Electrolytic, 0.33µF 50WV	
C220	ECEA1HNSR33I	Electrolytic, 0.33µF 50WV	
C221	YECUZ1H221JC	Ceramic, 220PF 50WV	
C222	YECUZ1H221JC	Ceramic, 220PF 50WV	
C225	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C226	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C227	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C228	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C229	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C230	FLH1E4730007	Ceramic, 0.047µF 25WV	
C231	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C233	YECUZ1C104KX	Ceramic, 0.1µF 16WV	
C270	EEUFC1A221B	Electrolytic, 220µF 10WV	
C271	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C272	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C273	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C274	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C275	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C276	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C277	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C278	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C279	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C280	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C281	FLH1H100A226	Ceramic, 10PF 50WV	
C282	FLH1H100A226	Ceramic, 10PF 50WV	
C283	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C284	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C285	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C289	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C290	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C291	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C292	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C293	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C294	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C295	ECEA1CKA100I	Electrolytic, 10µF 16WV	
C296	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C297	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C298	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C299	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C301	YECUS1E333KX	Ceramic, 0.033µF 25WV	
C302	FLJ1C1050013	Ceramic, 1µF 16WV	
C304	FLJ1C1050013	Ceramic, 1µF 16WV	
C305	FLJ1C1050013	Ceramic, 1µF 16WV	
C306	FLH1H152A201	Ceramic, 1500PF 50WV	
C307	ECEA1HNS2R2I	Electrolytic, 2.2µF 50WV	
C308	ECEA1HNS2R2I	Electrolytic, 2.2µF 50WV	
C309	FLH1H180A231	Ceramic, 18PF 50WV	
C310	FLH1H180A231	Ceramic, 18PF 50WV	
C313	FLH1H821A190	Ceramic, 820PF 50WV	
C315	FLH1H821A190	Ceramic, 820PF 50WV	
C319	ECEA1HNSR33I	Electrolytic, 0.33µF 50WV	
C320	ECEA1HNSR33I	Electrolytic, 0.33µF 50WV	
C321	YECUZ1H221JC	Ceramic, 220PF 50WV	
C322	YECUZ1H221JC	Ceramic, 220PF 50WV	
C325	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C326	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C327	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C328	FLJ1E2240009	Ceramic, 0.22µF 25WV	
C363	YECUZ1C104KX	Ceramic, 0.1µF 16WV	
C502	YECUZ1H102KX	Ceramic, 1000PF 50WV	
C521	YECUZ1H271JC	Ceramic, 270PF 50WV	
C522	YECUZ1H271JC	Ceramic, 270PF 50WV	
C531	YECUZ1H271JC	Ceramic, 270PF 50WV	
C532	YECUZ1H271JC	Ceramic, 270PF 50WV	
C600	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C602	FLJ1C1050013	Ceramic, 1µF 16WV	
C603	FLH1H180A231	Ceramic, 18PF 50WV	
C604	FLH1H180A231	Ceramic, 18PF 50WV	
C607	FLJ1H103A700	Ceramic, 0.01µF 50WV	
C609	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C611	YECUZ1E104ZF	Ceramic, 0.1µF 25WV	
C612	YECUS1E104ZF	Ceramic, 0.1µF 25WV	
C614	FLJ1H103A700	Ceramic, 0.01µF 50WV	
C615	FLJ1H103A700	Ceramic, 0.01µF 50WV	
C640	ECEA1HKAR47I	Electrolytic, 0.47µF 50WV	
C641	FLJ1H103A513	Ceramic, 0.01µF 50WV	
C644	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C651	FLJ1H103A700	Ceramic, 0.01µF 50WV	
C653	YECUS1H820JM	Ceramic, 82PF 50WV	
C654	YECUS1H820JM	Ceramic, 82PF 50WV	
C655	YECUS1H103ZF	Ceramic, 0.01µF 50WV	
C656	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C657	FLJ1H221A665	Ceramic, 220PF 50WV	
C671	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C672	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C673	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C674	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C675	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C676	YECUV2A102KX	Ceramic, 1000PF 100WV	
C677	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C682	YECUS1E473KX	Ceramic, 0.047µF 25WV	
C684	FLJ1H471A665	Ceramic, 470PF 50WV	
C685	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C686	YECUV1H221JM	Ceramic, 220PF 50WV	
C687	FLJ1H471A665	Ceramic, 470PF 50WV	
C688	YECUS1C104KX	Ceramic, 0.1µF 16WV	
C690	YECUV1H221JM	Ceramic, 220PF 50WV	
C691	YECUV2A102KX	Ceramic, 1000PF 100WV	
C701	ECA1CM222B	Electrolytic, 2200µF 16WV	



Ref. No.	Part No.	Part Name & Description	Remarks
R221	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R222	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R225	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R226	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R227	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R228	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R229	ERJ3GEYJ471V	Chip, 47k $\Omega$ 1/16W	
R230	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R251	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R252	ERJ6GEYJ682	Chip, 6.8k $\Omega$ 1/10W	
R253	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R254	ERJ6GEYJ682	Chip, 6.8k $\Omega$ 1/10W	
R255	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R256	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R271	ERJ6GEYJ221V	Chip, 220 $\Omega$ 1/10W	
R272	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R274	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R276	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R281	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R304	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R305	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R306	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R307	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R309	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R310	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R311	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R312	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R313	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R316	ERJ3GEYJ223V	Chip, 22k $\Omega$ 1/16W	
R317	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R318	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R319	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R320	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R321	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R322	ERJ3GEYJ272V	Chip, 2.7k $\Omega$ 1/16W	
R325	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R326	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R327	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R328	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R351	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R352	ERJ6GEYJ682	Chip, 6.8k $\Omega$ 1/10W	
R353	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R354	ERJ6GEYJ682	Chip, 6.8k $\Omega$ 1/10W	
R355	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R356	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R502	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R504	ERJ3GEYJ474V	Chip, 47k $\Omega$ 1/16W	
R505	ERJ3GEYJ561V	Chip, 56k $\Omega$ 1/16W	
R512	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R514	ERJ3GEYJ474V	Chip, 47k $\Omega$ 1/16W	
R515	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R516	ERJ3GEYJ123V	Chip, 12k $\Omega$ 1/16W	
R521	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R522	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R531	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R532	ERJ3GEYJ222V	Chip, 2.2k $\Omega$ 1/16W	
R600	ERJ3GEYJ472V	Chip, 4.7k $\Omega$ 1/16W	
R602	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R604	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R605	ERJ3GEYJ221V	Chip, 220 $\Omega$ 1/16W	
R607	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R610	ERJ3GEYJ274V	Chip, 270k $\Omega$ 1/16W	
R615	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R618	ERJ3GEYJ332V	Chip, 3.3k $\Omega$ 1/16W	
R619	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R620	ERJ6GEYJ474	Chip, 47k $\Omega$ 1/10W	
R621	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R622	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R623	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R625	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R628	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R630	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	
R631	ERJ3GEYJ102V	Chip, 1k $\Omega$ 1/16W	

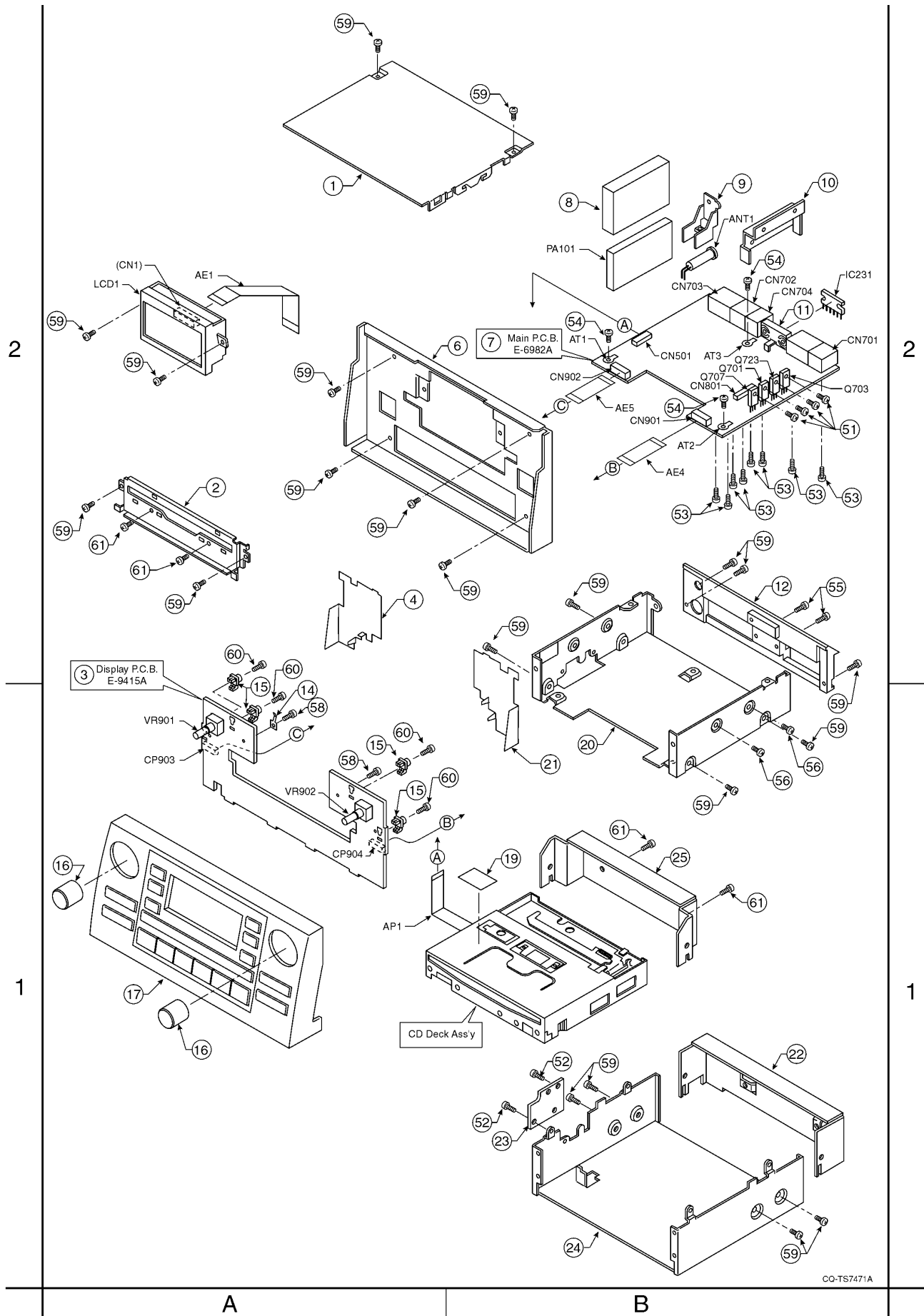
Ref. No.	Part No.	Part Name & Description	Remarks
R633	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R634	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R637	ERJ3GEYJ473V	Chip, 47k $\Omega$ 1/16W	
R638	ERJ3GEYJ101V	Chip, 100 $\Omega$ 1/16W	
R639	ERJ3GEYJ104V	Chip, 100k $\Omega$ 1/16W	
R641	ERJ3GEYJ563V	Chip, 56k $\Omega$ 1/16W	
R643	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R644	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R646	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R648	ERJ6GEYJ472	Chip, 4.7k $\Omega$ 1/10W	
R649	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R650	ERG1SJ680E	Metal Oxid, 68 $\Omega$ 1W	
R651	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R652	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R653	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R654	ERJ8GEYJ101V	Chip, 100 $\Omega$ 1/8W	
R655	ERG1SJ101E	Metal Oxid, 100 $\Omega$ 1W	
R656	ERG1SJ101E	Metal Oxid, 100 $\Omega$ 1W	
R657	ERJ6GEYJ271	Chip, 270 $\Omega$ 1/10W	
R658	ERJ6GEYJ391	Chip, 390 $\Omega$ 1/10W	
R659	ERJ6GEYJ391	Chip, 390 $\Omega$ 1/10W	
R660	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R661	ERJ3GEYJ103V	Chip, 10k $\Omega$ 1/16W	
R662	ERJ3GEYJ562V	Chip, 5.6k $\Omega$ 1/16W	
R663	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R671	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R672	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R673	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R674	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R675	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R676	ERA6YED472V	Metal Film, 4.7k $\Omega$ 1/10W	
R677	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R679	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R680	ERA6YED303V	Metal Film, 30k $\Omega$ 1/10W	
R681	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R682	ERJ6GEYJ432V	Chip, 4.3k $\Omega$ 1/10W	
R683	ERJ6GEYJ512V	Chip, 5.1k $\Omega$ 1/10W	
R685	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R686	ERA6YED303V	Metal Film, 30k $\Omega$ 1/10W	
R687	ERA6YED103V	Metal Film, 10k $\Omega$ 1/10W	
R688	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R691	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R692	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R693	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R696	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R699	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
R702	ERJ6GEYJ1R0V	Chip, 1 $\Omega$ 1/10W	
R703	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R704	ERJ6GEYJ560	Chip, 56 $\Omega$ 1/10W	
R706	ERJ6GEYJ560	Chip, 56 $\Omega$ 1/10W	
R711	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R712	ERJ6RED274V	Metal Film, 270k $\Omega$ 1/10W	
R716	ERJ6GEYJ560	Chip, 56 $\Omega$ 1/10W	
R717	ERJ6GEYJ560	Chip, 56 $\Omega$ 1/10W	
R718	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R720	ERJ3GEYJ471V	Chip, 47k $\Omega$ 1/16W	
R727	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R730	ERJ6GEYJ680	Chip, 68 $\Omega$ 1/10W	
R741	ERJ6GEYJ1R0V	Chip, 1 $\Omega$ 1/10W	
R742	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	
R744	ERJ6GEYJ102	Chip, 1k $\Omega$ 1/10W	
R750	ERJ3GEY0R00V	Chip, 0 $\Omega$ 1/16W	
R751	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R753	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R758	ERJ6GEYJ561	Chip, 560 $\Omega$ 1/10W	
R760	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R761	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R762	ERJ3GEYJ152V	Chip, 1.5k $\Omega$ 1/16W	
R763	ERJ6GEYJ103	Chip, 10k $\Omega$ 1/10W	
R764	ERJ6GEYJ222	Chip, 2.2k $\Omega$ 1/10W	
R765	ERJ6GEYJ473	Chip, 47k $\Omega$ 1/10W	
R766	ERJ6GEYJ222	Chip, 2.2k $\Omega$ 1/10W	
R767	ERJ6GEY0R00V	Chip, 0 $\Omega$ 1/10W	





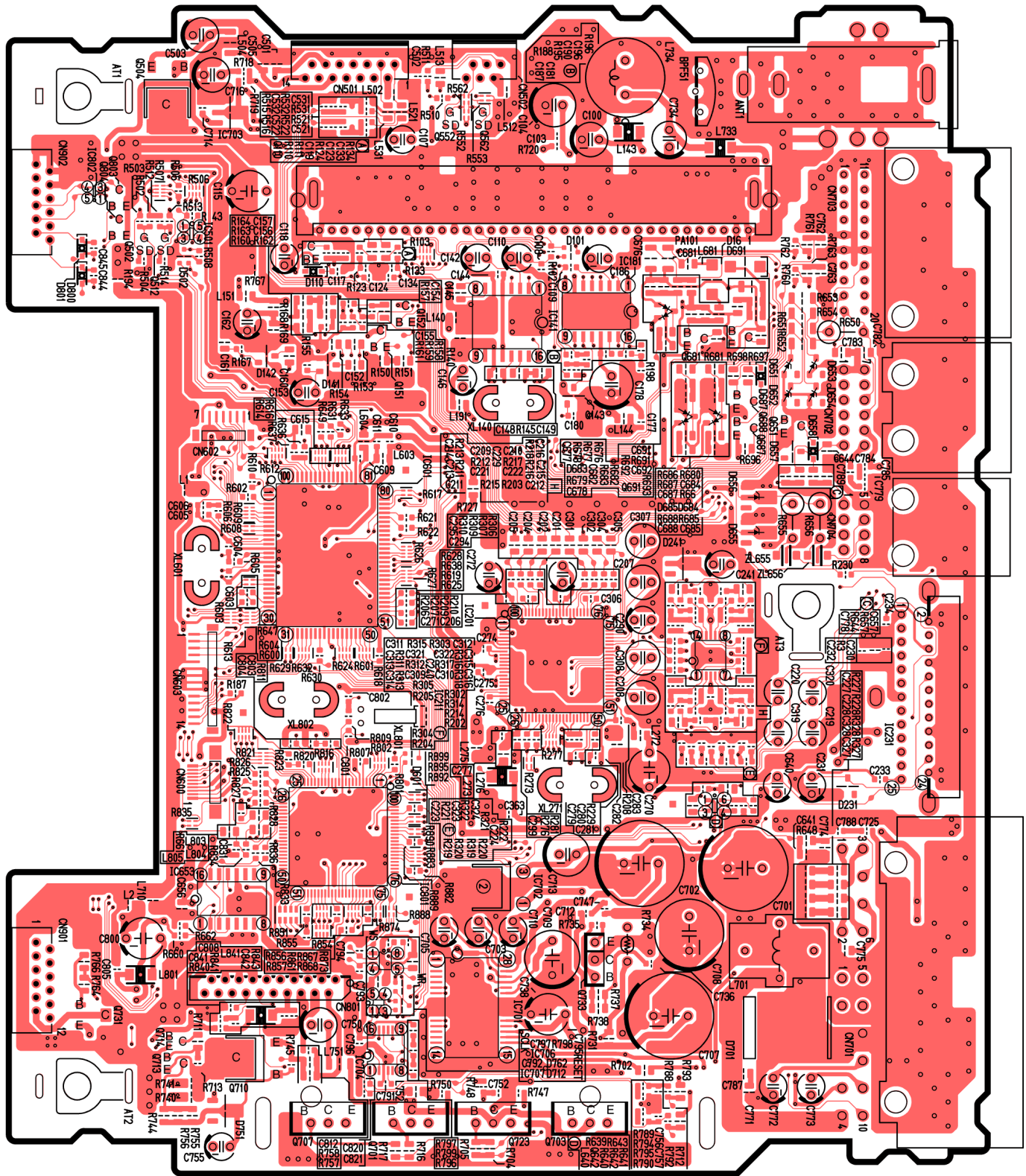
Ref. No.	Part No.	Part Name & Description	Remarks
15	YGFK061119	Holder, Escutcheon	
16	YGFE02495	Knob, Vol, Tuner	
17	YGFC028179	Escutcheon Ass'y	
19	YEFM031105	Laser Seal	
20	YEFA012083A	Chassis, Main Block	
21	YEFV012455	Insulator, Display Block (R)	
22	YEFX0216099	Bracket, Rear	
23	YEFX9993107A	Bracket, Left Side	
24	YEFA012084A	Bottom Cover	
25	YGFX0216261	Bracket, Deck Rear	
51	YEJS05035	Screw	
52	YEJS06303	Screw	
53	YEJT01103	Screw	
54	YEJT03015	Screw	
55	YEJT03289	Tapping Screw	
56	YEJT03312	Screw	
58	XTB2+6GFX	Screw, M2x6	
59	XTB3+6FFX	Screw, M3x6	
60	YEJT03279	Tapping Screw	
61	YEJT03324	Screw	

# 9 EXPLODED VIEW (Unit)



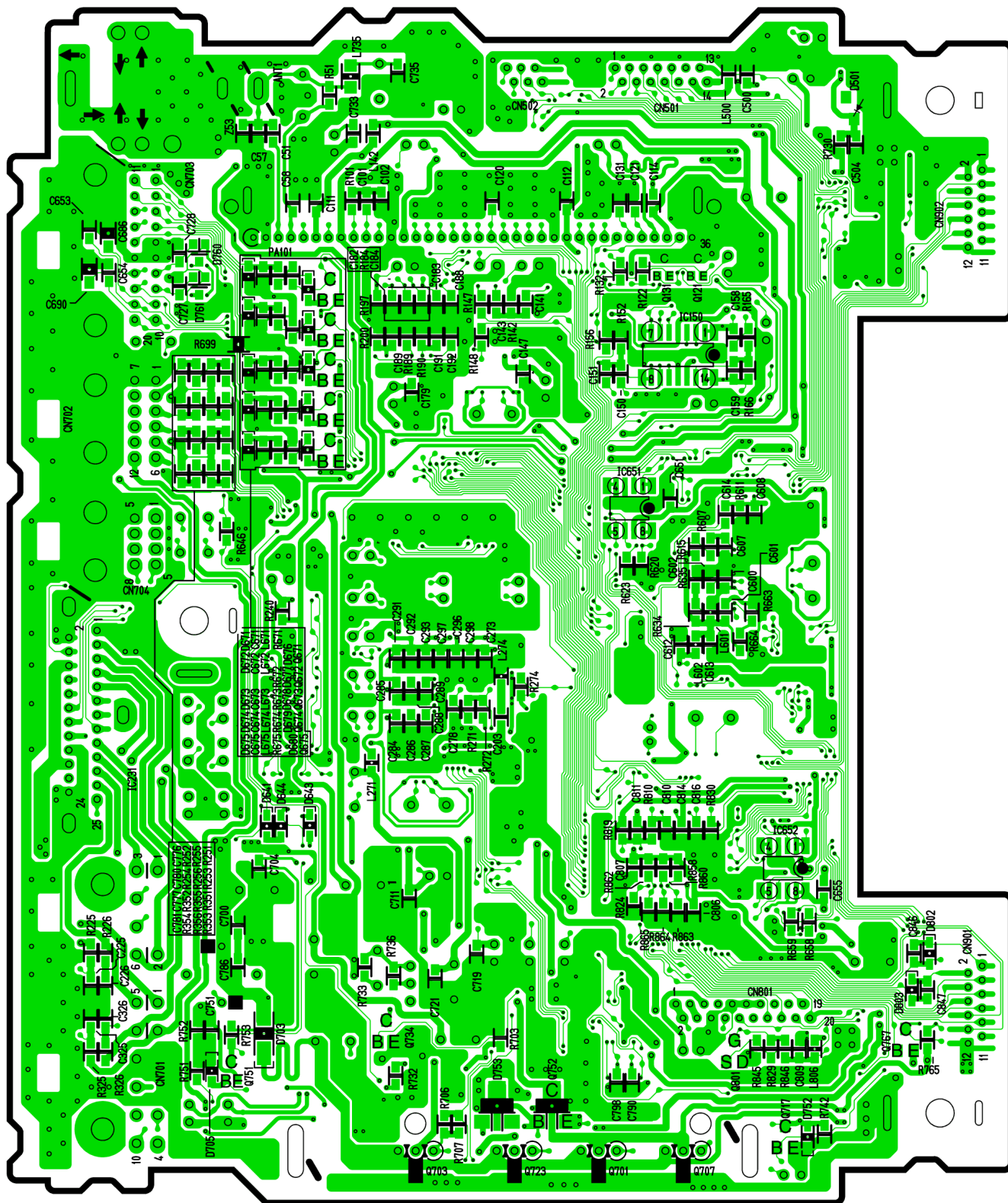
# 10 WIRING DIAGRAM

## 10.1. Main Block (Top View)



[E-6982A][Top View]

# 10.2. Main Block (Bottom View)

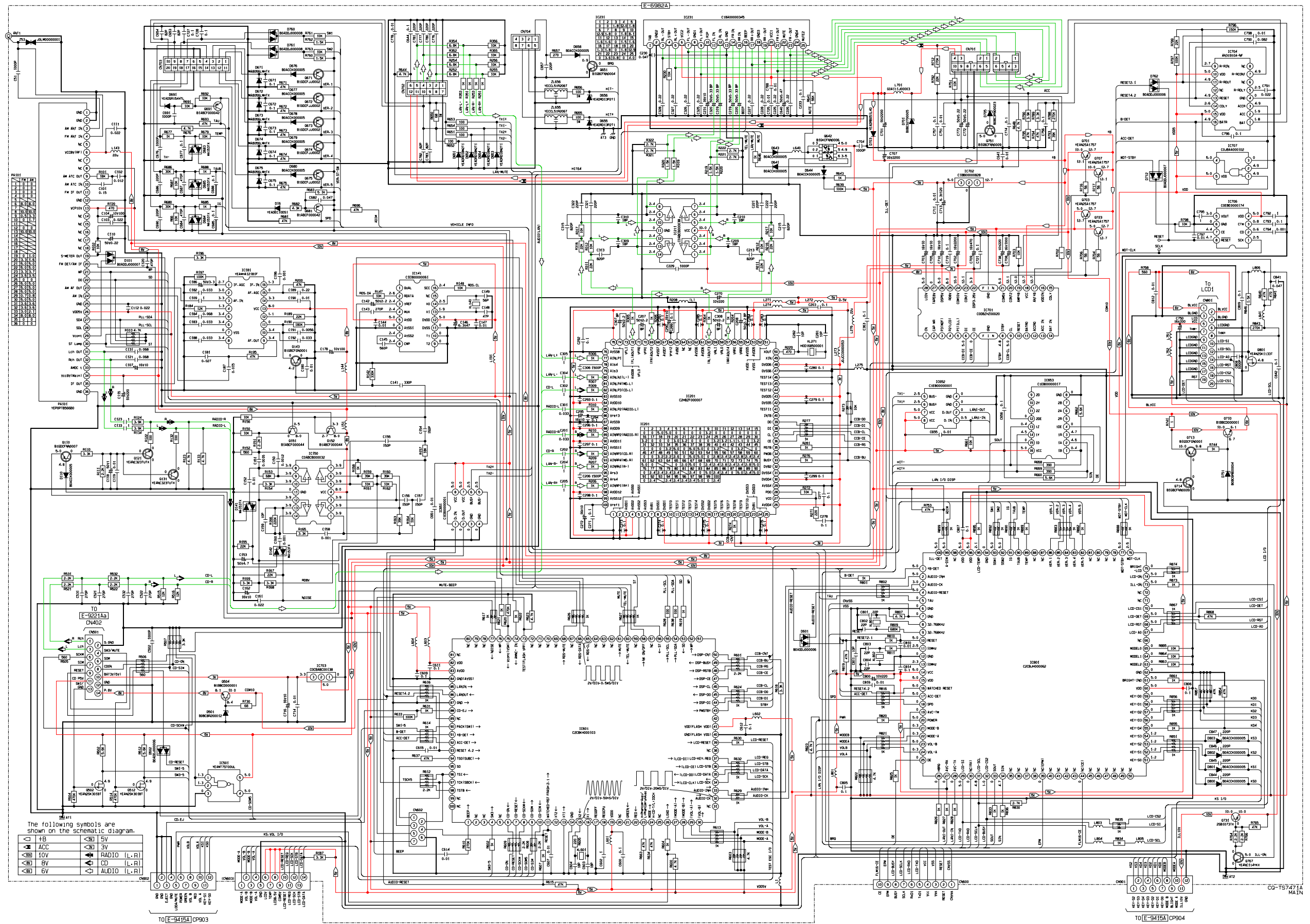


[E-6982A][Bottom View]

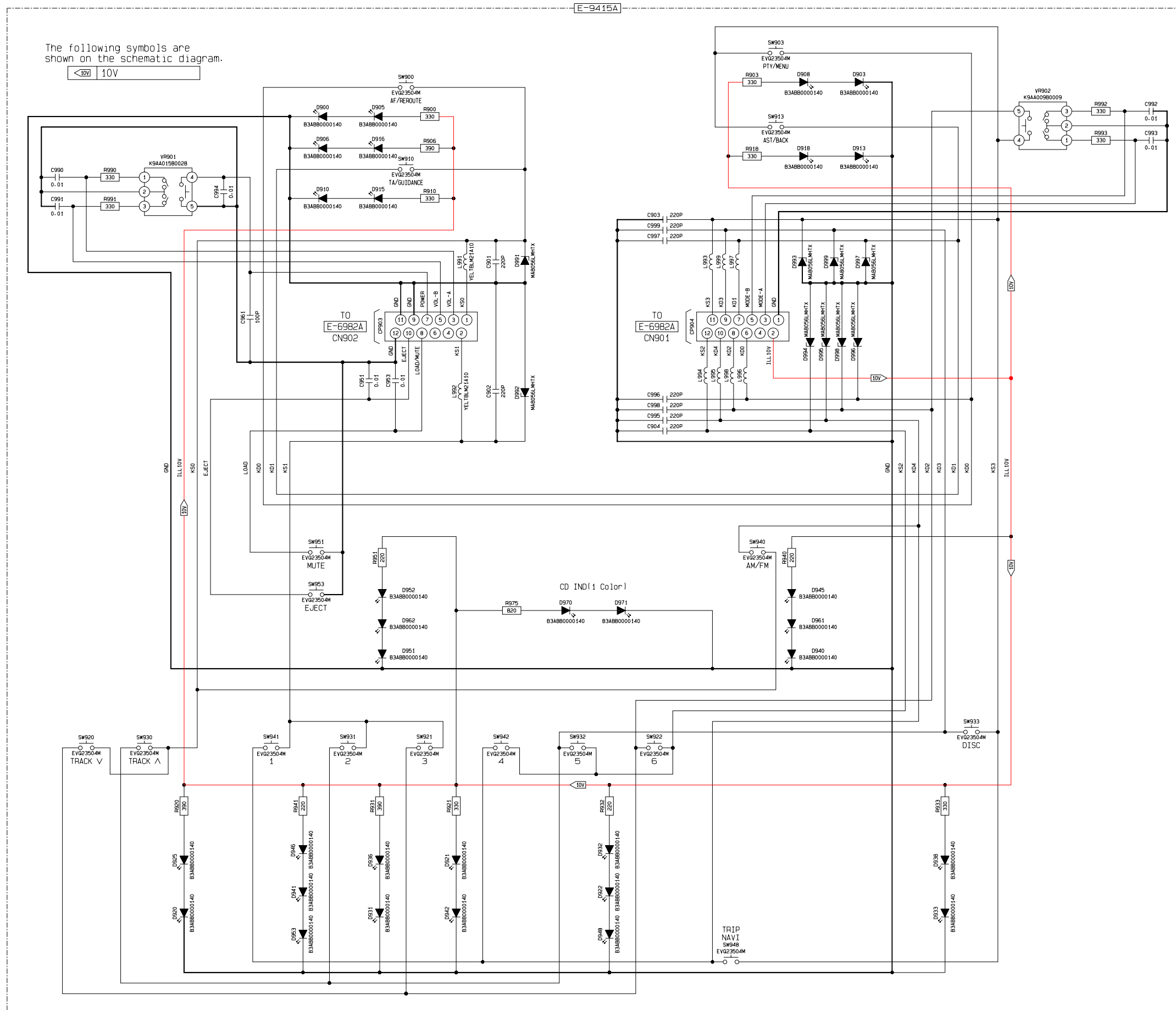


# 11 SCHEMATIC DIAGRAM

## 11.1. Main Block



# 11.2. Display Block



# 12 MEMO



**YGFD15269**

**'05. 5. 12**

# CONTENTS

	Page		Page
1 FEATUERS .....	2	6 IC BLOCK DIAGRAM (CD Deck) .....	4
2 LASER PRODUCTS .....	2	7 REPLACEMENT PARTS LIST .....	6
3 WIRING CONNECTION (CD Deck) .....	2	8 EXPLODED VIEW (CD Deck) .....	8
4 BLOCK DIAGRAM (CD Deck) .....	3	9 WIRING DIAGRAM (CD Deck) .....	9
5 TERMINALS DESCRIPTION (CD Deck) .....	4	10 SCHEMATIC DIAGRAM (CD Deck) .....	11

## 1 FEATUERS

- NCD-9 CD Deck.
- 12cm CD only.
- The specifications are based on the main unit.

## 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.

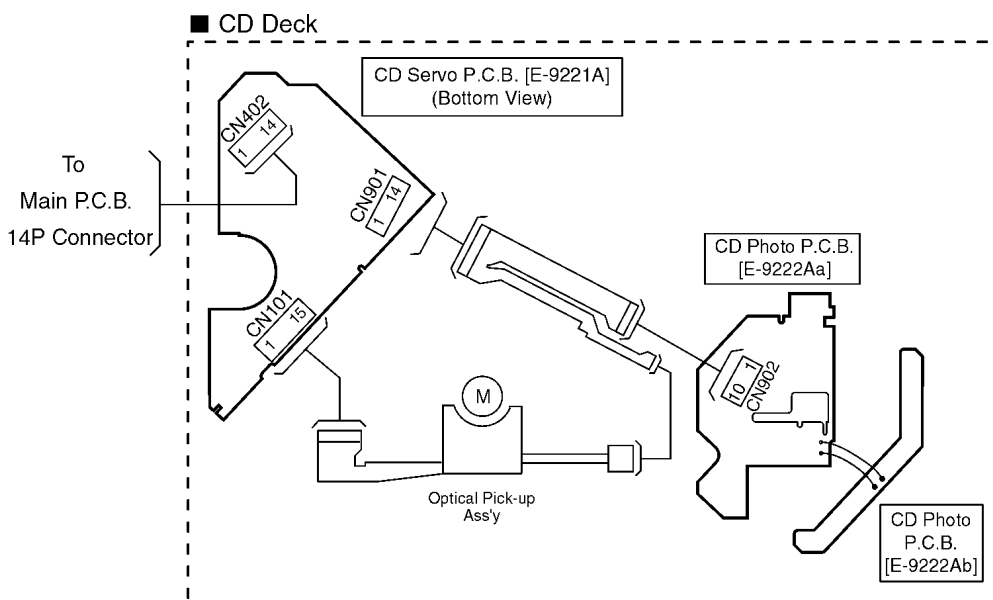
**Laser products :**

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

**Caution**

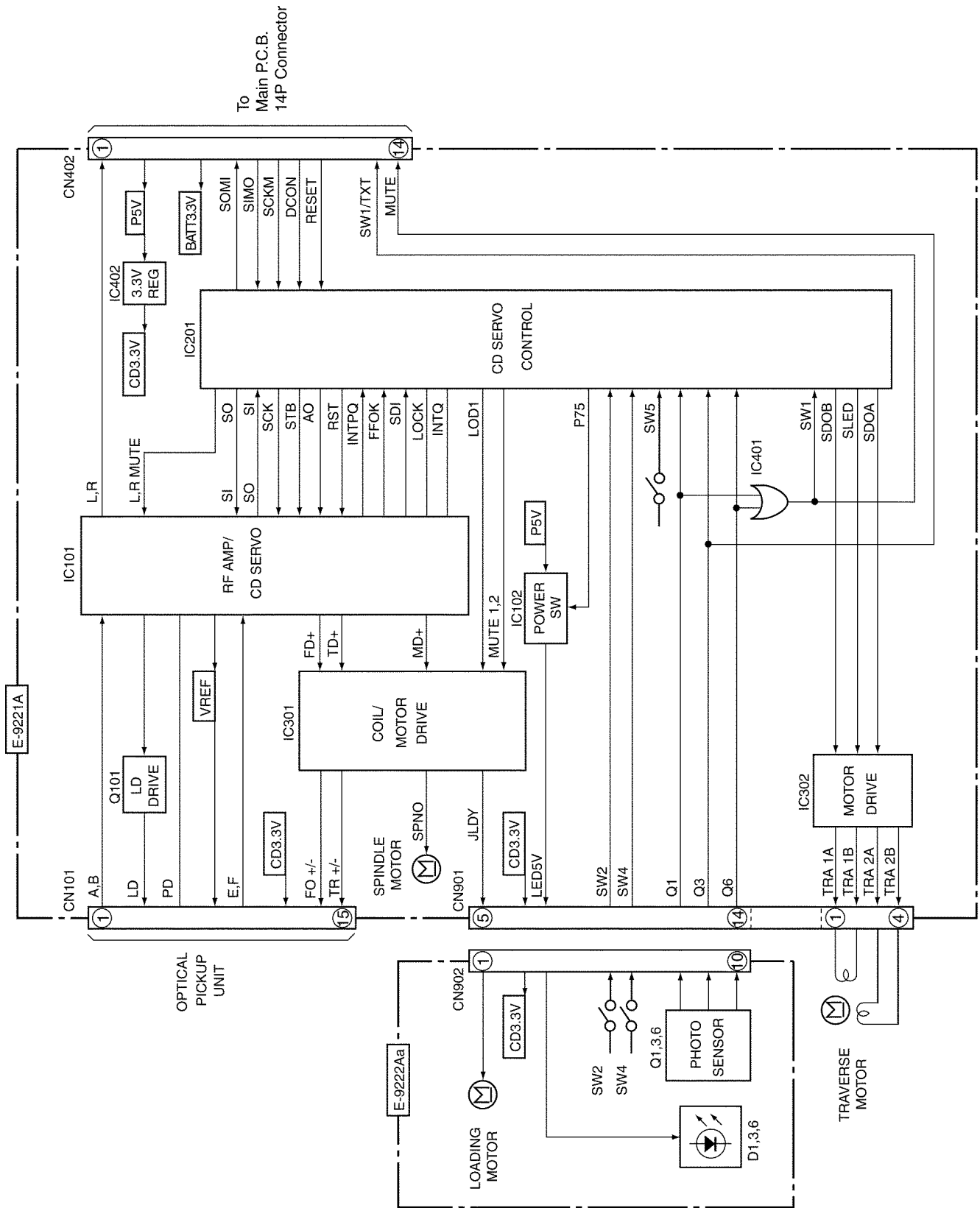
This product utilizes a laser. Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

## 3 WIRING CONNECTION (CD Deck)



# 4 BLOCK DIAGRAM (CD Deck)

YGFD15269

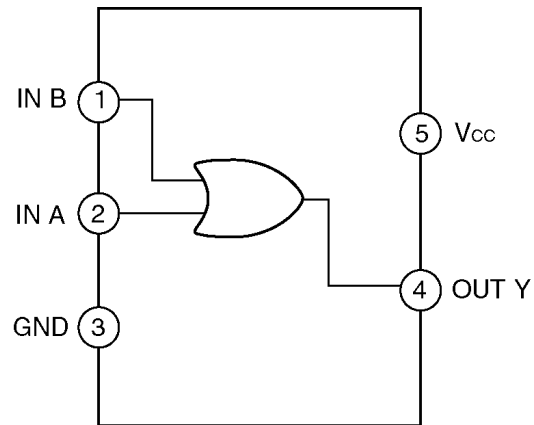


# 5 TERMINALS DESCRIPTION (CD Deck)

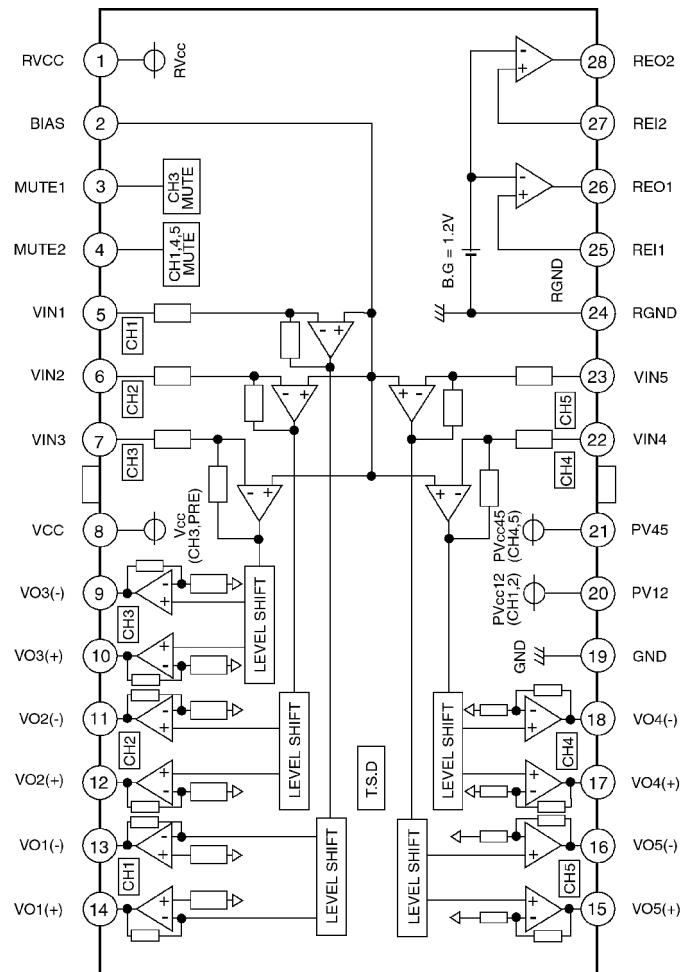
IC201 : C2BBFD000461				
Pin No.	Port	Description	I/O	(V)
1	P50 RFOK	D63712 RFOK Signal	I	3.4
2	P51/RST	D63712 /RST Signal	O	3.4
3	P52 A0	D63712 A0 Signal	O	2.9
4	P53/STB	D63712 /STB Signal	O	3.3
5	P54 XEN	D63712 /XTALEN Signal	O	0
6	P55 8/12cm	0:12cm 1:8cm	I	3.4
7	P56 HOLD	0:Wound vibration(Defect Hold) 1: Normal (No Defect Hold)	I	3.4
8	P57(NC)	-	-	-
9	VSS0	-	-	-
10	VDD0	-	-	-
11	SI31	Pana Bus SI	I	3.4
12	SO31	Pana Bus SO	O	1.8
13	SCK31	Pana Bus SCK	I	3.4
14	SI SI30	D63712 SI	I	0
15	SO SO30	D63712 SO	O	1.8
16	SCK/SCK30	D63712 SCK	O	3.2
17	P23 SW2	SW2	I	3.4
18	P24 SW5	SW5	I	3.4
19	P25 SW4	SW4	I	0
20	VDD1	-	-	-
21	AVSS	-	-	-
22	Q1 ANI3	SW1	I	2.6
23	Q3 ANI12	SW3	I	1.7
24	Q6ANI1	SW6	I	2.1
25	SDI ANI0	Input of thread	I	3.4
26	AVREF	-	-	-
27	AVDD	-	-	-
28	/RESET	-	-	-
29	XT2(NC)	-	-	-
30	XT1	-	-	-
31	IC/VPP	-	-	-
32	X2	-	-	-
33	X1	-	-	-
34	VSS1	-	-	-
35	INTP0	D63712 SUBQ/CD TextInt	I	0
36	INTQ INTP1	-	I	0
37	CDON INTP2	Operation mode (H: Power supply ON)	I	3.1
38	P03 RMUTE	TEST	I	0
39	P70 LMUTE	TEST	I	0
40	P71 IFR	TEST PORT(P TP40)	O	0
41	TO50 SD0A	Stepping motor drive PWM output	O	0
42	TO51 SD0B	Stepping motor drive PWM output	O	0
43	P74 SW1	SW1 level control (at CD TEXT data sent)	I/O	3.4
44	P75	H (lighting): SLEEP/DISC no L (turning off): DISC clamping	I/O	3.4
45	P40	TEST PORT(P TP45)	O	0
46	P41 MASHON	D63712 sending control	O	3.4
47	P42 LOCK	D63712 LOCK signal	I	3.4
48	P43 LOD2(NC)	-	-	-
49	P44 LOD1	Loading motor control terminal 1	O	1.9
50	P45 STB12(SLED)	Driver power supply MUTE (thread output) control	O	0
51	P46 STB6(LOAD)	Driver power supply MUTE (LOAD output) control	O	0
52	P47 STB345	Driver power supply MUTE (FO/TE output) control	O	3.4

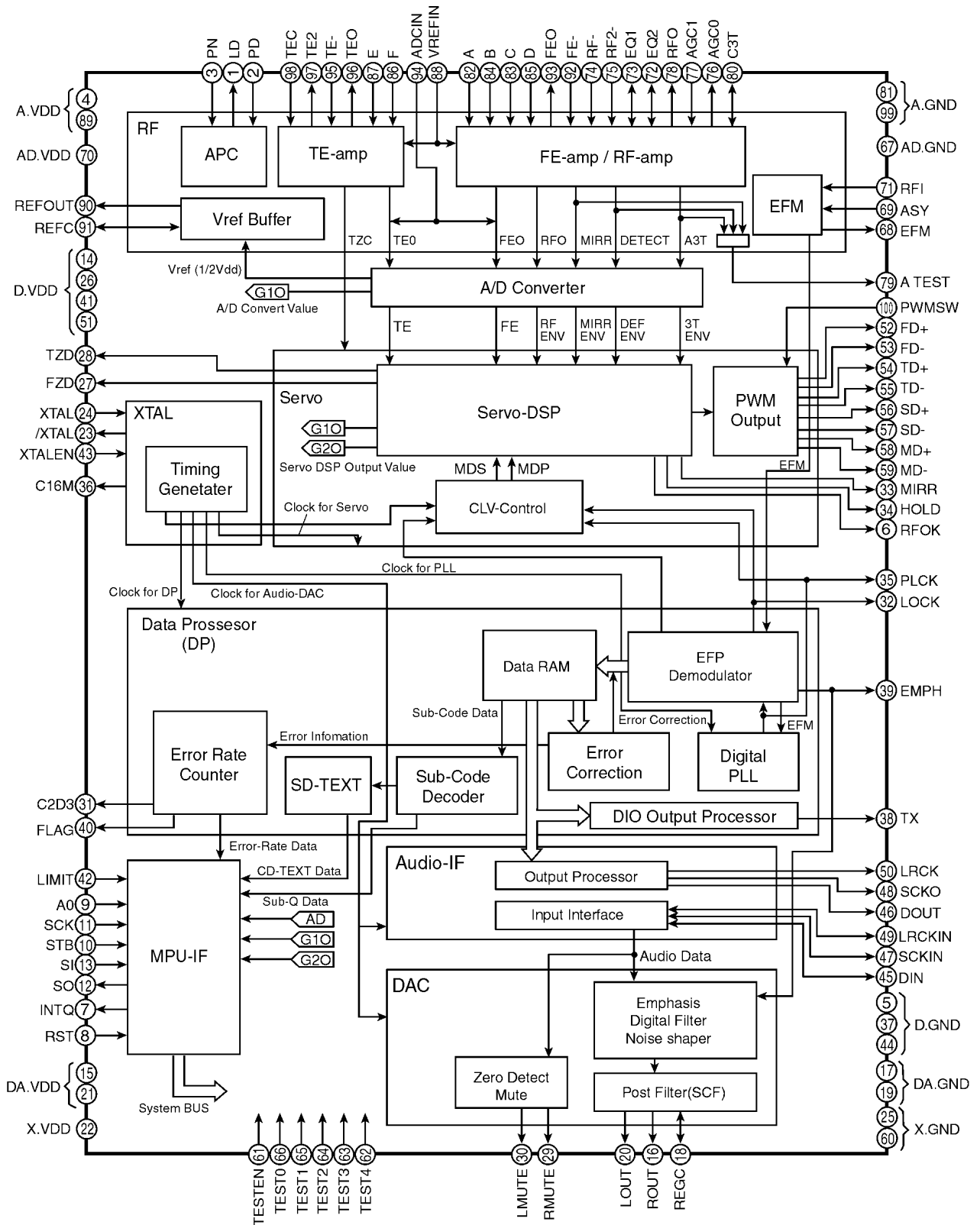
# 6 IC BLOCK DIAGRAM (CD Deck)

IC401 C0JBAE000087



IC301 C0GBY0000012





# 7 REPLACEMENT PARTS LIST

Notes :

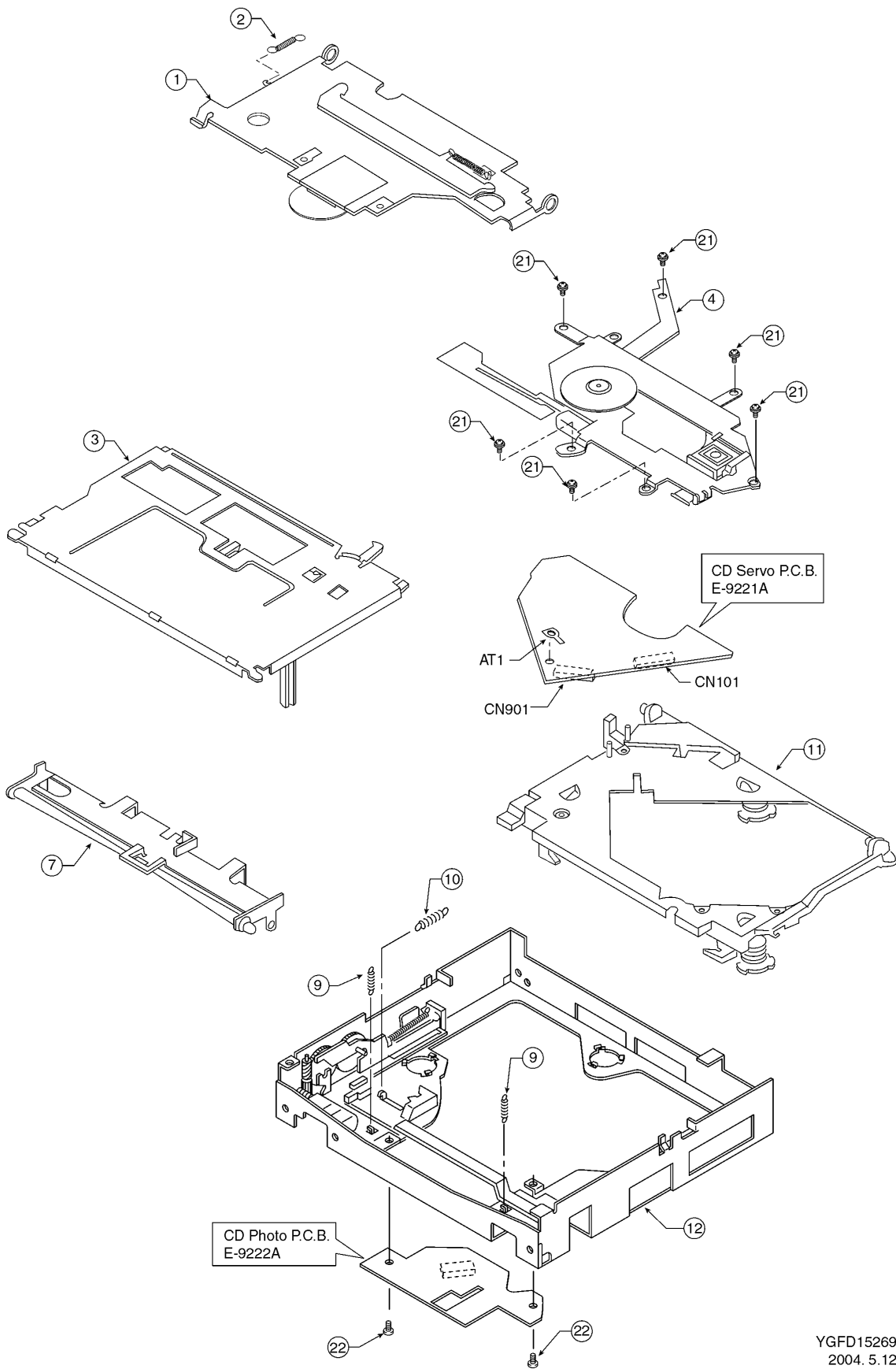
1. Be sure to make your orders of replacement parts according to this list.
2. Important safety notice: Components, identified by  $\Delta$  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.
3. Location keys in the 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.

Ref. No.	Part No.	Part Name & Description	Remarks
[E9221A] CD Servo Block			
IC's and TRANSISTORS			
IC101	C1BB00000806	IC	
IC102	B1GKGBNN0001	IC	
IC201	C2BBFD000461	IC	
IC301	C0GBY0000012	IC	
IC302	YEAMD16808G	IC	
IC401	C0JBAE000087	IC	
IC402	YEAMMC3326D3	IC	
Q101	2SB766ATX	Transistor	
DIODES			
D1	MA152WKTX	Diode	
D123	B0ACCK000005	Diode	
CAPACITORS			
C101	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C102	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C103	F3H0J1070005	Tantalum, 100 $\mu$ F 6.3WV	
C104	F1G1H222A401	Ceramic, 2200PF 50WV	
C105	F1G1H152A401	Ceramic, 1500PF 50WV	
C107	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25 WV	
C111	FLJ0J1060007	Ceramic, 10 $\mu$ F 6.3 WV	
C112	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C114	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C115	FLJ0J1060007	Ceramic, 10 $\mu$ F 6.3 WV	
C116	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C117	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C118	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C120	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C133	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C151	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C167	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C168	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25 WV	
C169	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C173	F1G1H470A058	Ceramic, 47PF 50WV	
C174	F1G1H2R0A101	Ceramic, 2.0PF 50WV	
C176	F1H1H272A021	Ceramic, 2700PF 50WV	
C177	YECUZ1E104ZF	Ceramic, 0.1 $\mu$ F 25WV	
C180	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C190	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C191	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C192	F1G1H330A058	Ceramic, 33PF 50WV	
C195	F1G1H330A058	Ceramic, 33PF 50WV	

Ref. No.	Part No.	Part Name & Description	Remarks
C197	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C198	F1G1H1020006	Ceramic, 1000PF 50WV	
C201	F1H1A4740008	Ceramic, 0.47 $\mu$ F 10WV	
C202	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C218	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25WV	
C310	FLJ0J1060007	Ceramic, 10 $\mu$ F 6.3 WV	
C311	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C312	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C313	FLJ0J1060007	Ceramic, 10 $\mu$ F 6.3 WV	
C320	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25WV	
C321	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25WV	
C322	F1G1E1030003	Ceramic, 0.01 $\mu$ F 25WV	
C323	ECEV1CA470SP	Electrolytic, 47 $\mu$ F 16WV	
C324	F1H1A4740008	Ceramic, 0.47 $\mu$ F 10WV	
C441	F2G0J1010001	Electrolytic, 100 $\mu$ F 6.3WV	
C442	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C443	F1H1A4740008	Ceramic, 0.47 $\mu$ F 10WV	
C444	F1G1A104A001	Ceramic, 0.1 $\mu$ F 10WV	
C446	F2G0J1010001	Electrolytic, 100 $\mu$ F 6.3WV	
C604	F1H1H4710007	Ceramic, 470PF 50WV	
C605	F1H1H4710007	Ceramic, 470PF 50WV	
C606	F1H1H4710007	Ceramic, 470PF 50WV	
C607	F1H1H4710007	Ceramic, 470PF 50WV	
RESISTORS			
R101	D0GBR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
R102	D0GDLR0JA028	Metal Film, 1 $\Omega$ 1/16W	
R114	D0GBR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
R123	D0GA473JA013	Metal Film, 47k $\Omega$ 1/16W	
R141	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R142	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R143	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R144	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R145	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R146	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R152	D0GA682JA013	Metal Film, 6.8k $\Omega$ 1/16W	
R154	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R156	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R158	D0GA122JA013	Metal Film, 1.2k $\Omega$ 1/16W	
R168	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R169	D0GA393JA013	Metal Film, 39k $\Omega$ 1/16W	
R173	D0GA122JA013	Metal Film, 1.2k $\Omega$ 1/16W	
R186	D0GA333JA013	Metal Film, 33k $\Omega$ 1/16W	
R187	D0GA333JA013	Metal Film, 33k $\Omega$ 1/16W	
R199	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R201	D0GBR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
R204	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R205	D0GA473JA013	Metal Film, 47k $\Omega$ 1/16W	
R206	D0GA473JA013	Metal Film, 47k $\Omega$ 1/16W	
R207	D0GA332JA013	Metal Film, 3.3k $\Omega$ 1/16W	
R213	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R218	D0GA563JA013	Metal Film, 56k $\Omega$ 1/16W	
R223	D0GA563JA013	Metal Film, 56k $\Omega$ 1/16W	
R321	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R322	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R354	D0GA103JA013	Metal Film, 10k $\Omega$ 1/16W	
R411	ERJ2GEJ334X	Chip, 330k $\Omega$ 1/16W	
R423	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R431	D0YAR00J0002	Metal Film, 0 $\Omega$ 1/16W	
R433	D0GA273JA013	Metal Film, 27k $\Omega$ 1/16W	
R440	D0GA102JA013	Metal Film, 1k $\Omega$ 1/16W	
R442	D0GA102JA013	Metal Film, 1k $\Omega$ 1/16W	
R604	D0GBR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
R607	D0GBR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
CONNECTORS			
CN101	K1MN15A00035	Connector, 15P	
CN402	K1MN14B00080	Connector, 14P	
CN901	K1MN14B00080	Connector, 14P	

Ref. No.	Part No.	Part Name & Description	Remarks
<b>SWITCHE</b>			
SW5	K0L1BA000022	Switch	
<b>CRYSTALS</b>			
XL101	H2D169500017	Crystal	
XL201	H2D838400004	Crystal	
[E9222A] CD Photo Block			
<b>IC's and TRANSISTORS</b>			
Q1	B3HB00000019	Transistor	
Q3	B3HB00000019	Transistor	
Q6	B3HB00000019	Transistor	
<b>DIODES</b>			
D1	B3EB00000013	Diode	
D3	B3EB00000013	Diode	
D6	B3EB00000013	Diode	
<b>RESISTORS</b>			
J1	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
J2	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
J3	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
J4	ERJ8GEY0R00V	Chip, 0 $\Omega$ 1/8W	
R454	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
R461	ERJ6GEYJ224	Chip, 220k $\Omega$ 1/10W	
R463	ERJ6GEYJ224	Chip, 220k $\Omega$ 1/10W	
R466	ERJ6GEYJ224	Chip, 220k $\Omega$ 1/10W	
R471	ERJ6GEYJ121	Chip, 120 $\Omega$ 1/10W	
R473	ERJ6GEYJ121	Chip, 120 $\Omega$ 1/10W	
R476	ERJ6GEYJ121	Chip, 120 $\Omega$ 1/10W	
R482	D0GDR00Z0001	Metal Film, 0 $\Omega$ 1/16W	
R483	ERJ6GEYJ332	Chip, 3.3k $\Omega$ 1/10W	
<b>CONNECTORS</b>			
CN902	K1MN10B00102	Connector, 10P	
<b>SWITCHEs</b>			
SW2	K0L1BA000022	Switch	
SW4	K0L1BA000023	Switch	
<b>Mechanical Parts</b>			
<b>MISCELLANEOUS</b>			
AT1	YEATSD00405	Terminal	
1	YGP0FX5370	Clamper Arm Unit	
2	YGF0052745	Clamper Arm Spring	
3	YGP0FX4985	Main Chassis (U) Unit	
4	YGP0FX4998	Traverse Unit	
7	YGP0FX5305	Feeder Arm Unit	
9	YGF0052672	Suspension Spring (B)	
10	YGF0052672	Suspension Spring (A)	
11	YGP0FX4993	Suspension Unit	
12	YGP0FX5303	Main Chassis (L) Unit	
21	YGJS02044	Screw	
22	YGJS02043	Screw, M1.4 * 2	

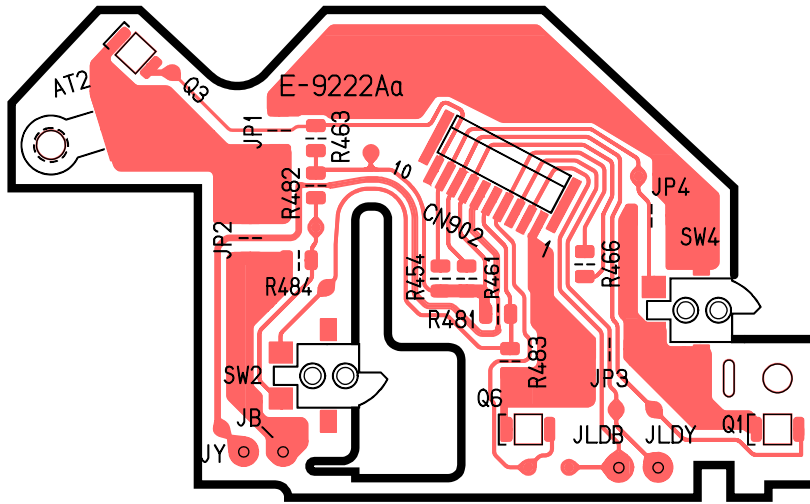
# 8 EXPLODED VIEW (CD Deck)



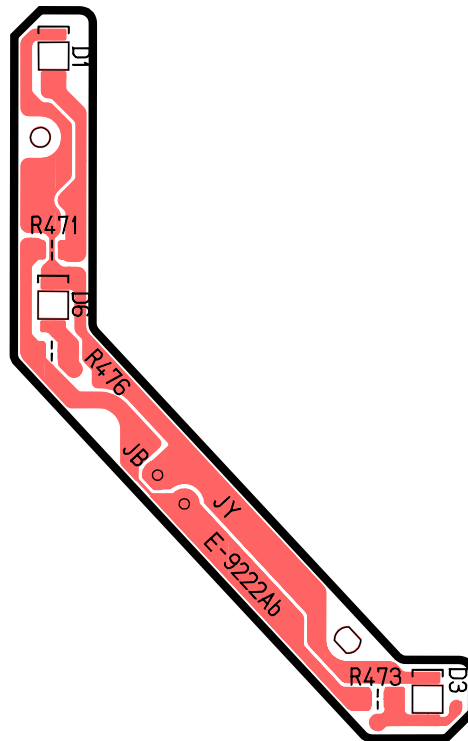
YGFD15269  
2004. 5. 12



## 9.2. CD Photo Block



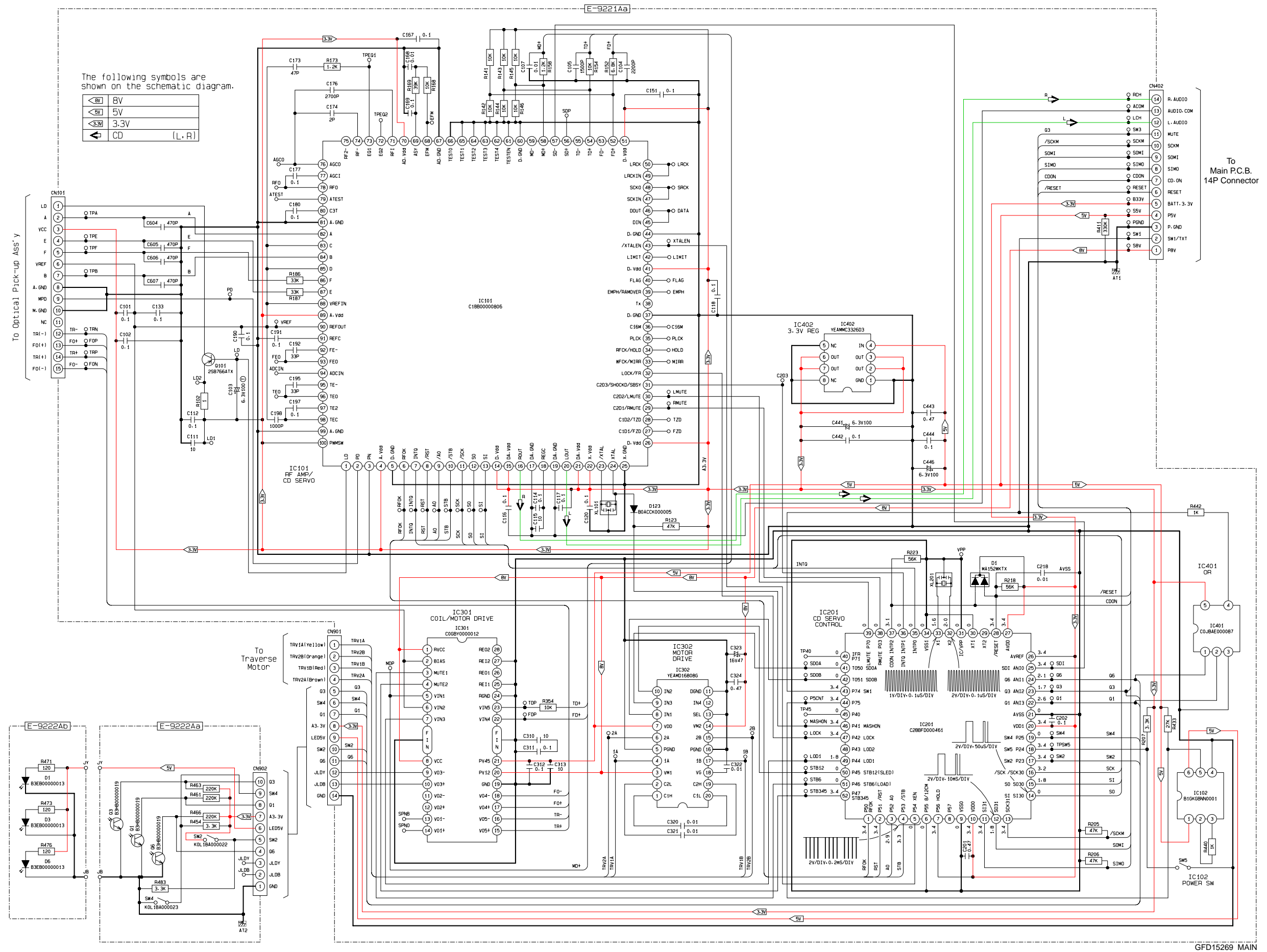
[E-9222Aa][Top View]



[E-9222Ab][Top View]

YGFD15269 CD PHOTO P.C.B.

# 10 SCHEMATIC DIAGRAM (CD Deck)



[www.s-manuals.com](http://www.s-manuals.com)