

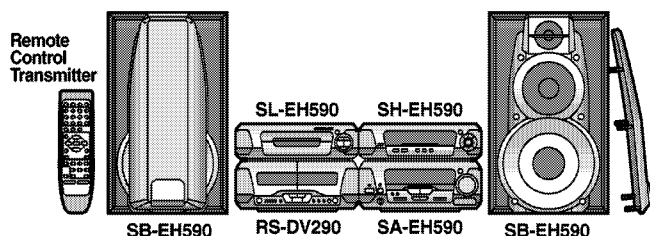
Service Manual

Sound Processor

SH-EH590EG

Colour

(S)..... Silver Type



Because of unique interconnecting cables, when a component requires service, send or bring in the entire system.

System	SC-EH590
Sound Processor	SH-EH590
Tuner/Amplifier	SA-EH590
CD Player	SL-EH590
Cassette Deck	RS-DV290
Front Speakers*	SB-EH590

* : Made in Singapore.

Specifications

EQ/SFP section

MANUAL GEQ:

5-Band EQ

Center frequency;

70 /300/1 k/3.15 k/10 k Hz

Level control;

± 2.0, 4.0, 6.0 dB

EQ mode:

3 modes;

HEAVY, CLEAR, SOFT

Pre-amplifier section

Input sensitivity/impedance:

AUX;

250 mV/15 kΩ

DSP control section

DSP control mode:

SUPER SOUND EQ

Spectrum analyzer section

Display mode:

NORMAL, PEAKHOLD, AURORA

General

Dimensions (W×H×D):

293×89×269 mm

Mass:

1.4 kg

Notes: Specifications are subject to change without notice.

Mass and dimensions are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

Technics

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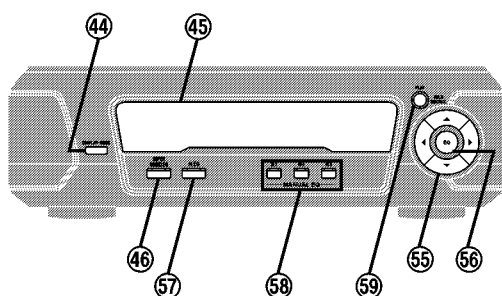
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1 Note

Refer to the service manual for Model No. SA-EH590EG, SA-EH590EP (Order No. AD0302008C8) for information on Accessories and Packaging.

2 Location of Controls

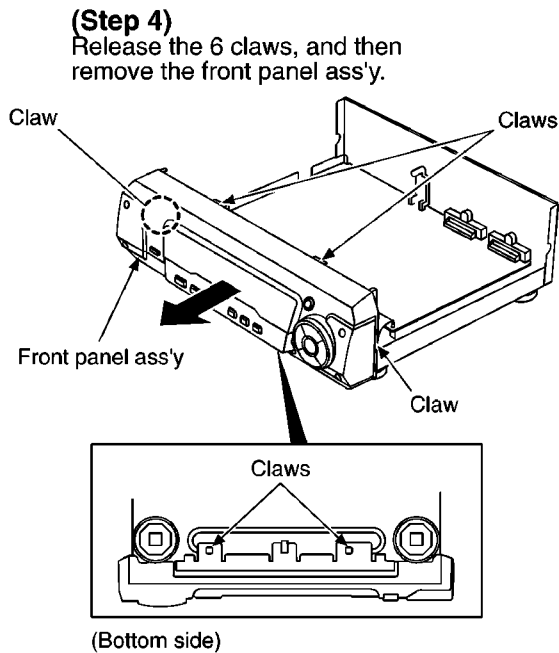
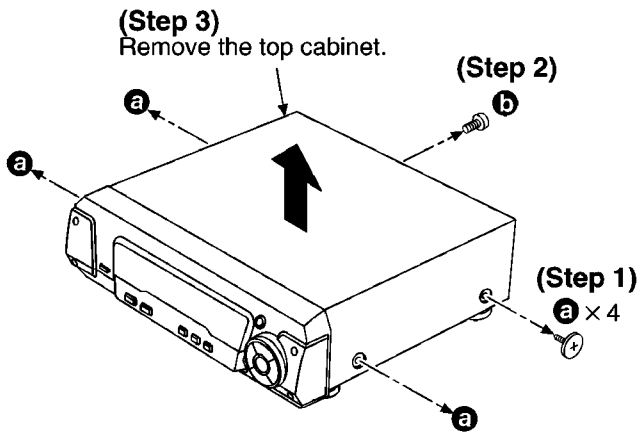


- ④④ Display mode button (DISPLAY MODE)
- ④⑤ Display
- ④⑥ Super sound EQ button (SUPER SOUND EQ)
- ④⑦ Multi control buttons
(◀, ▶, ▲, ▼, MULTI CONTROL)
- ④⑧ EQ button (EQ)
- ④⑨ AI EQ button (AI EQ)
- ④⑩ Manual EQ buttons (M1, M2, M3)
- ④⑪ Flat button (FLAT)

3 Operation Checks and Component Replacement Procedures

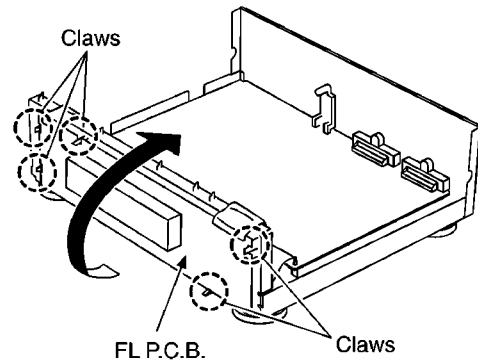
- This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.
- For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.

3.1. Checking for the FL P.C.B.

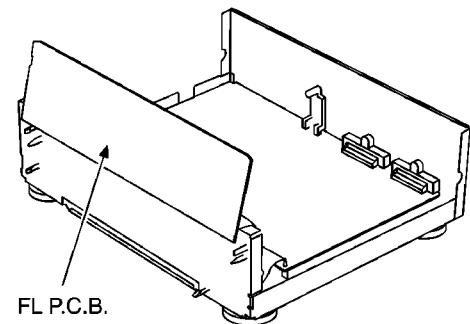


(Step 5)

Release the 5 claws, and then remove the FL P.C.B..

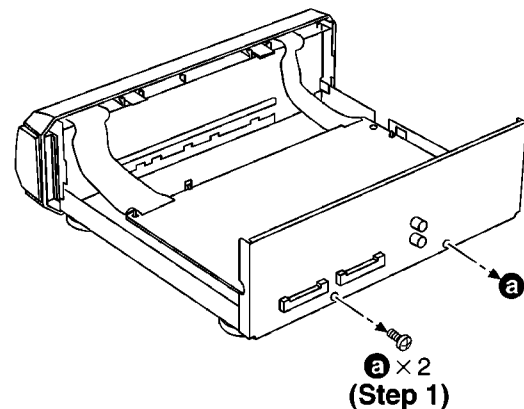


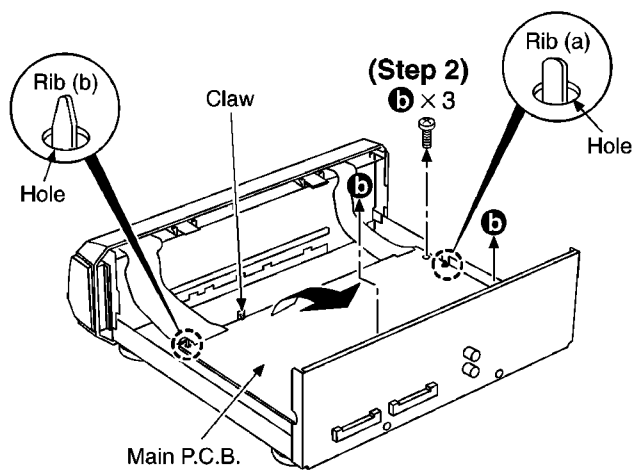
- Check the FL P.C.B. as shown below.



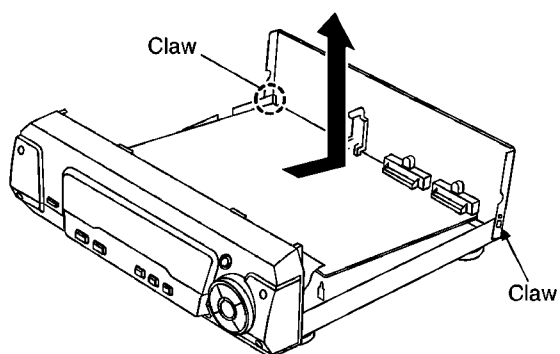
3.2. Checking for the main P.C.B.

- Follow the (Step 1) - (Step 3) of item 3.1.



**(Step 3)**

Release the claw, and then lift up the main P.C.B..
 (Lift up the main P.C.B. until the rib (a) and rib (b) are released from the hole of main P.C.B..)

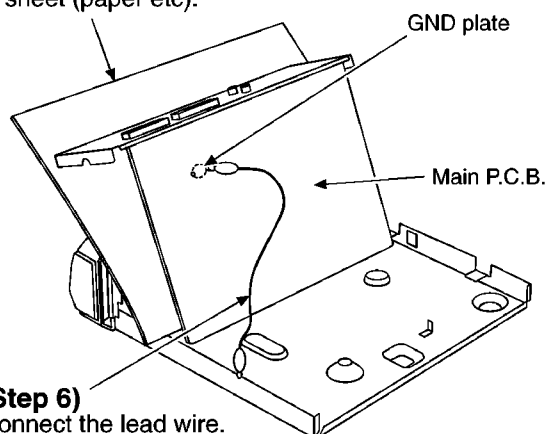
**(Step 4)**

Release the 2 claws, and then remove the main P.C.B. in the direction of arrow.

• Check the main P.C.B. as shown below.

(Step 5)

Insert the insulator sheet (paper etc).

**(Step 6)**

Connect the lead wire.

4 To Supply Power Source

This unit is designed to operate on power supplied from system connected.

When a component requires service, use the system connections to supply power source.

For system connections, refer to Fig. 4-1.

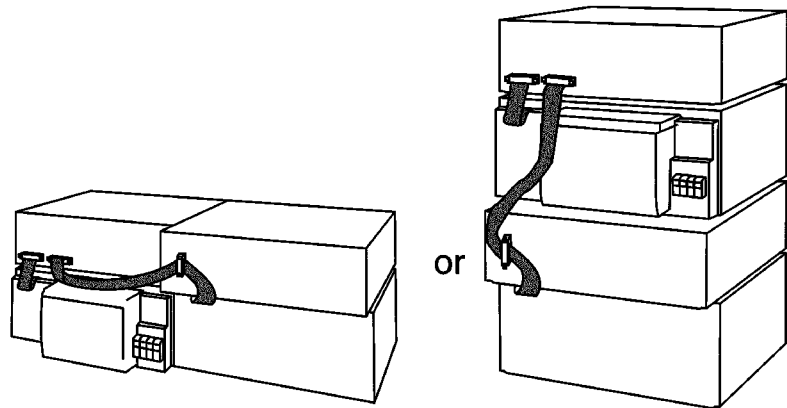


Fig. 4-1.

5 Schematic Diagram Notes

- This schematic diagram may be modified at any time with the development of new technology.

Notes:

S601:	Display mode switch (DISPLAY MODE)
S602:	Super sound EQ switch (SUPER SOUND EQ)
S603:	AI EQ switch (AI EQ)
S605:	Manual EQ switch (M1)
S606:	Manual EQ switch (M2)
S607:	Manual EQ switch (M3)
S608:	Multi control switch (►)
S609:	Multi control switch (▲)
S610:	Multi control switch (◀)
S611:	Multi control switch (▼)
S612:	Flat switch (FLAT)
S615:	EQ switch (EQ)

- Indicated voltage values are the standard values for the unit measured by the DC electronic circuit tester (high-impedance) with the chassis taken as standard. Therefore, there may exist some errors in the voltage values, depending on the internal impedance of the DC circuit tester.

No mark : Power on

- Important safety notice:

Components identified by \triangle mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufacturer's specified parts shown in the parts list.

- The supply part number is described alone in the replacement parts list.

- Voltage and signal line

	: Positive voltage line
	: Negative voltage line
	: CD playback signal line

Caution!

IC and LSI are sensitive to static electricity.

Secondary trouble can be prevented by taking care during repair.

Cover the parts boxes made of plastics with aluminum foil.

Ground the soldering iron.

Put a conductive mat on the work table.

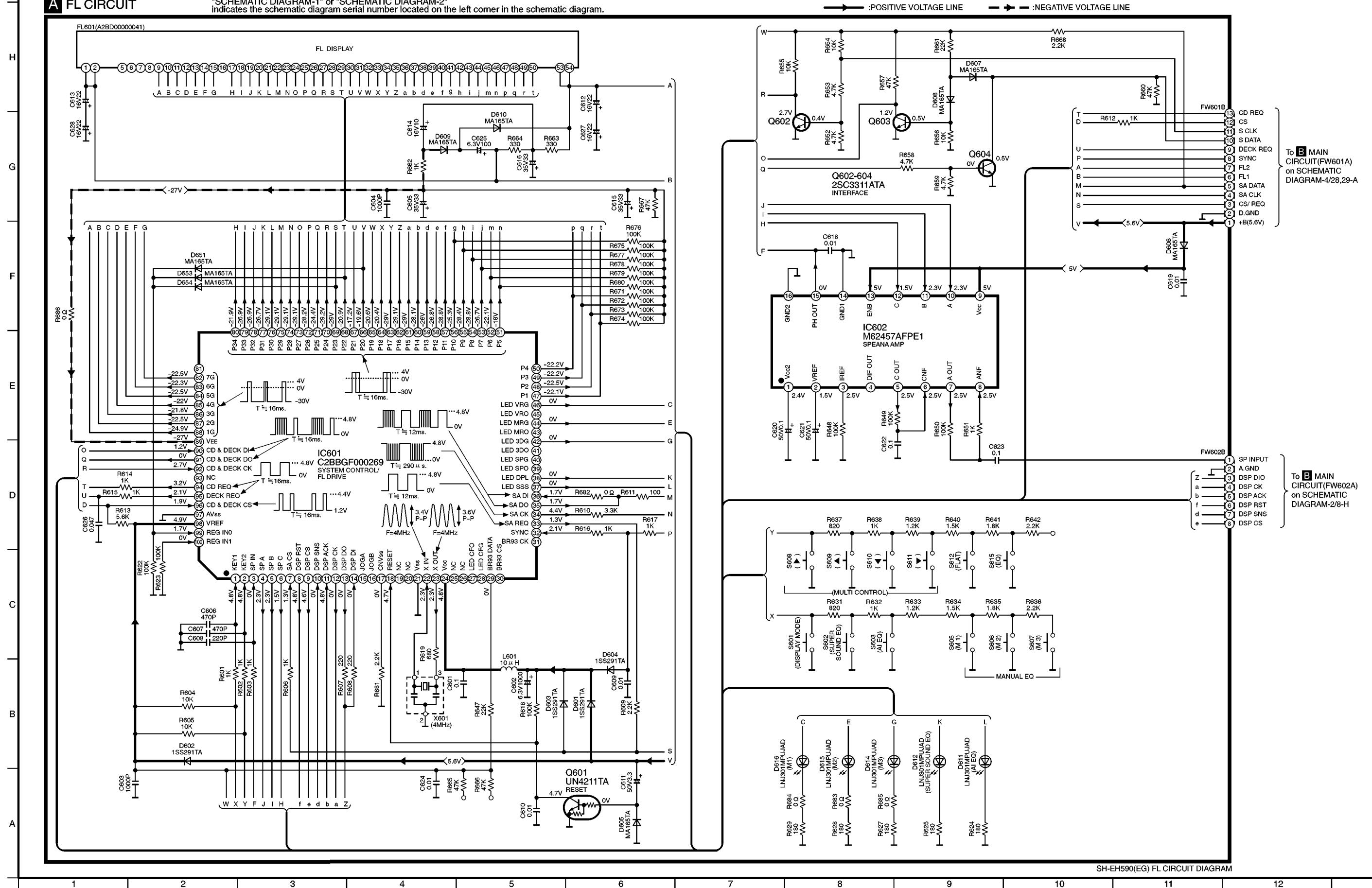
Do not touch the legs of IC or LSI with the fingers directly.

6 Schematic Diagram

SCHEMATIC DIAGRAM-1

A FL CIRCUIT

NOTE:
The number which noted at the connectors on the schematic diagram as "SCHEMATIC DIAGRAM-1" or "SCHEMATIC DIAGRAM-2" indicates the schematic diagram serial number located on the left corner in the schematic diagram.



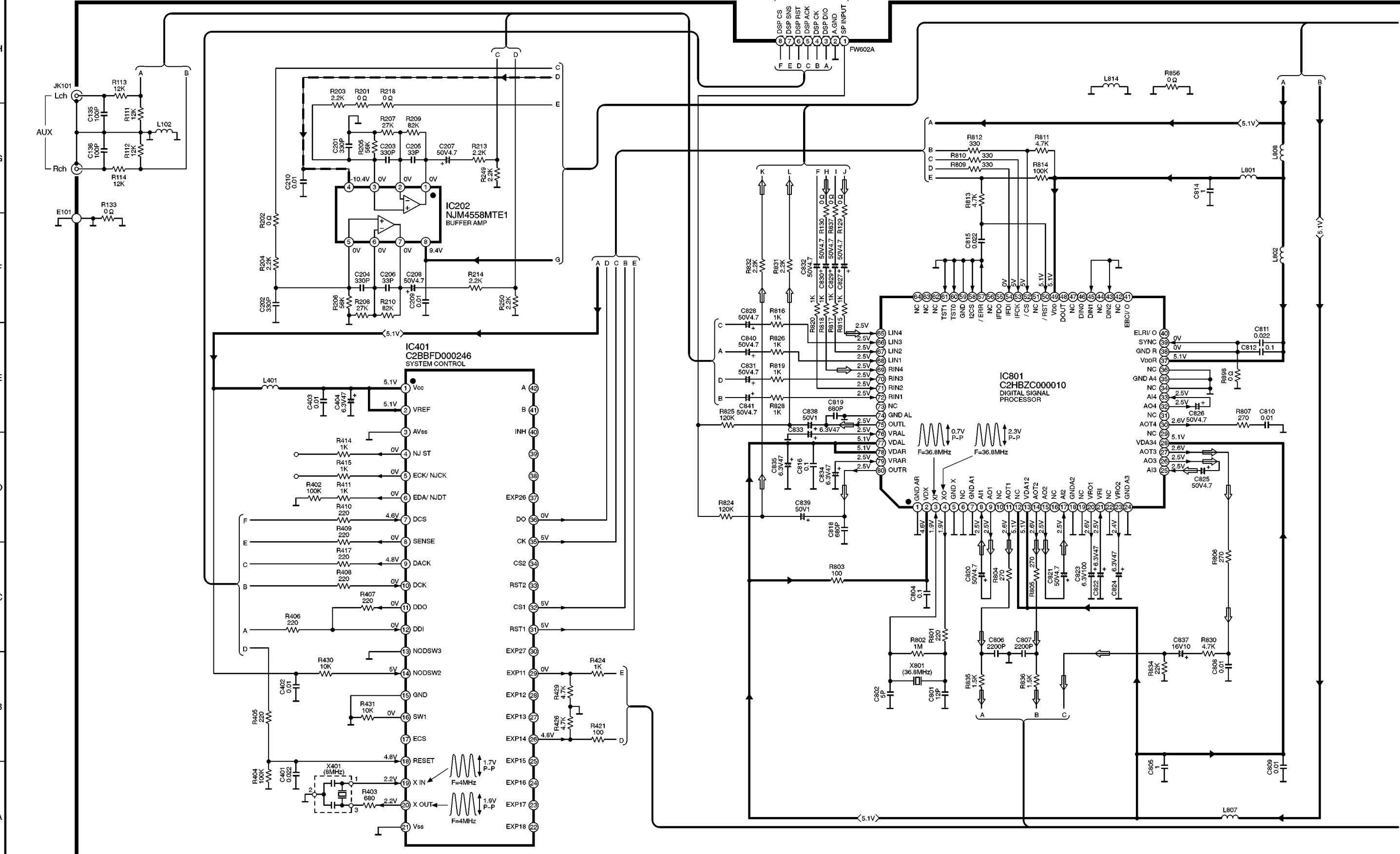
SH-EH590(EG) FL CIRCUIT DIAGRAM

SCHEMATIC DIAGRAM-2

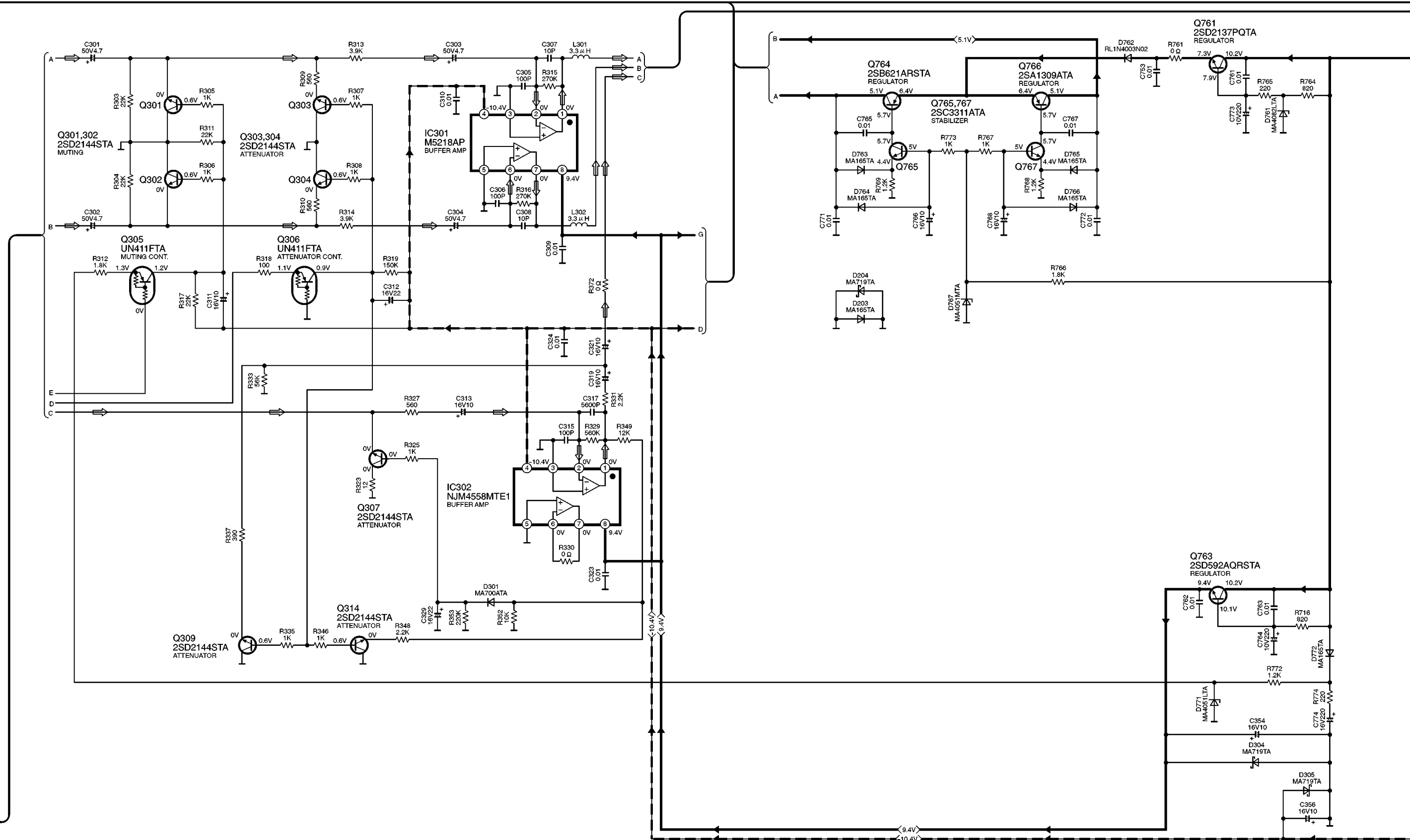
B MAIN CIRCUIT

→: POSITIVE VOLTAGE LINE →: NEGATIVE VOLTAGE LINE ⇨: CD PLAYBACK SIGNAL LINE

To A FL CIRCUIT(FW602B)
on SCHEMATIC DIAGRAM-1/11,12-D



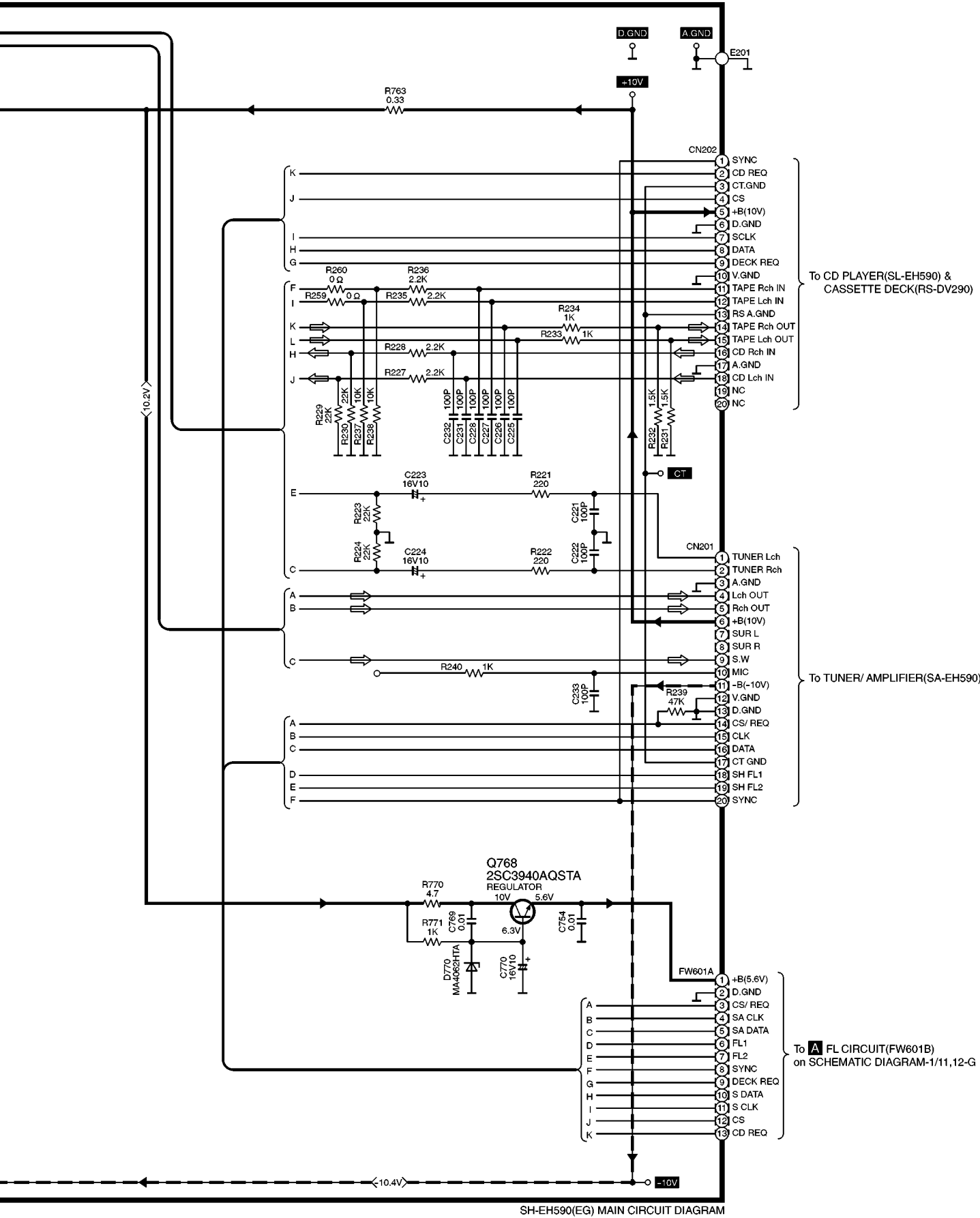
SCHEMATIC DIAGRAM-3

B MAIN CIRCUIT → : POSITIVE VOLTAGE LINE → : NEGATIVE VOLTAGE LINE ⇨ : CD PLAYBACK SIGNAL LINE


SH-EH590(EG) MAIN CIRCUIT DIAGRAM

SCHEMATIC DIAGRAM-4
B MAIN CIRCUIT

➡: POSITIVE VOLTAGE LINE ➡: CD PLAYBACK SIGNAL LINE
➡: NEGATIVE VOLTAGE LINE

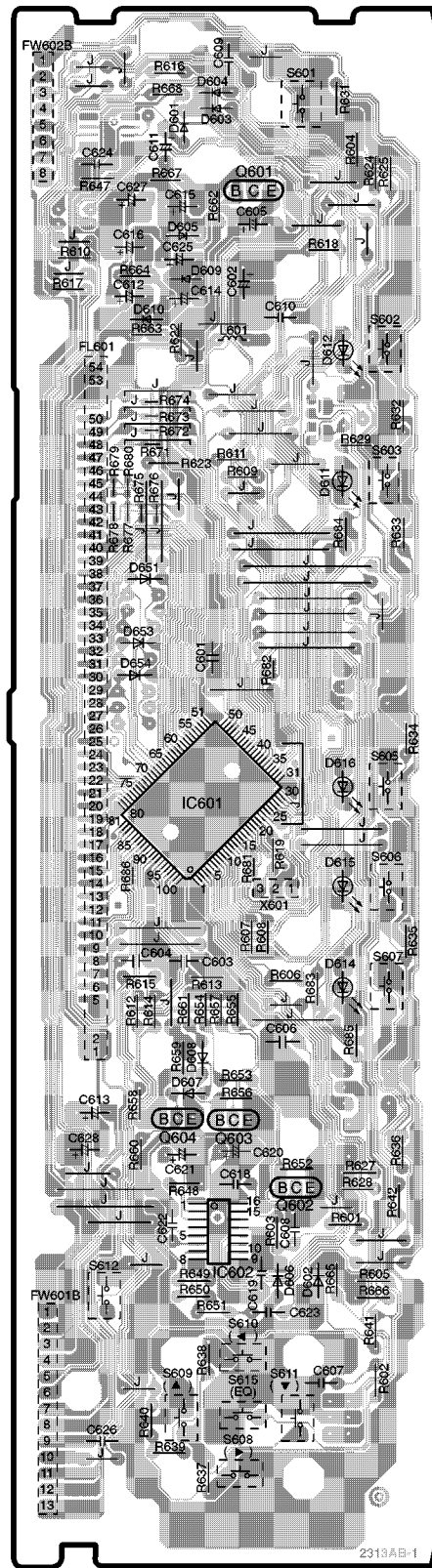


SH-EH590(EG) MAIN CIRCUIT DIAGRAM

7 Printed Circuit Board Diagram

Note: This printed circuit board diagram may be modified at any time with the development of new technology.

A FL P.C.B.

DISPLAY
MODESUPER
SOUND EQ

AI EQ

M1

M2

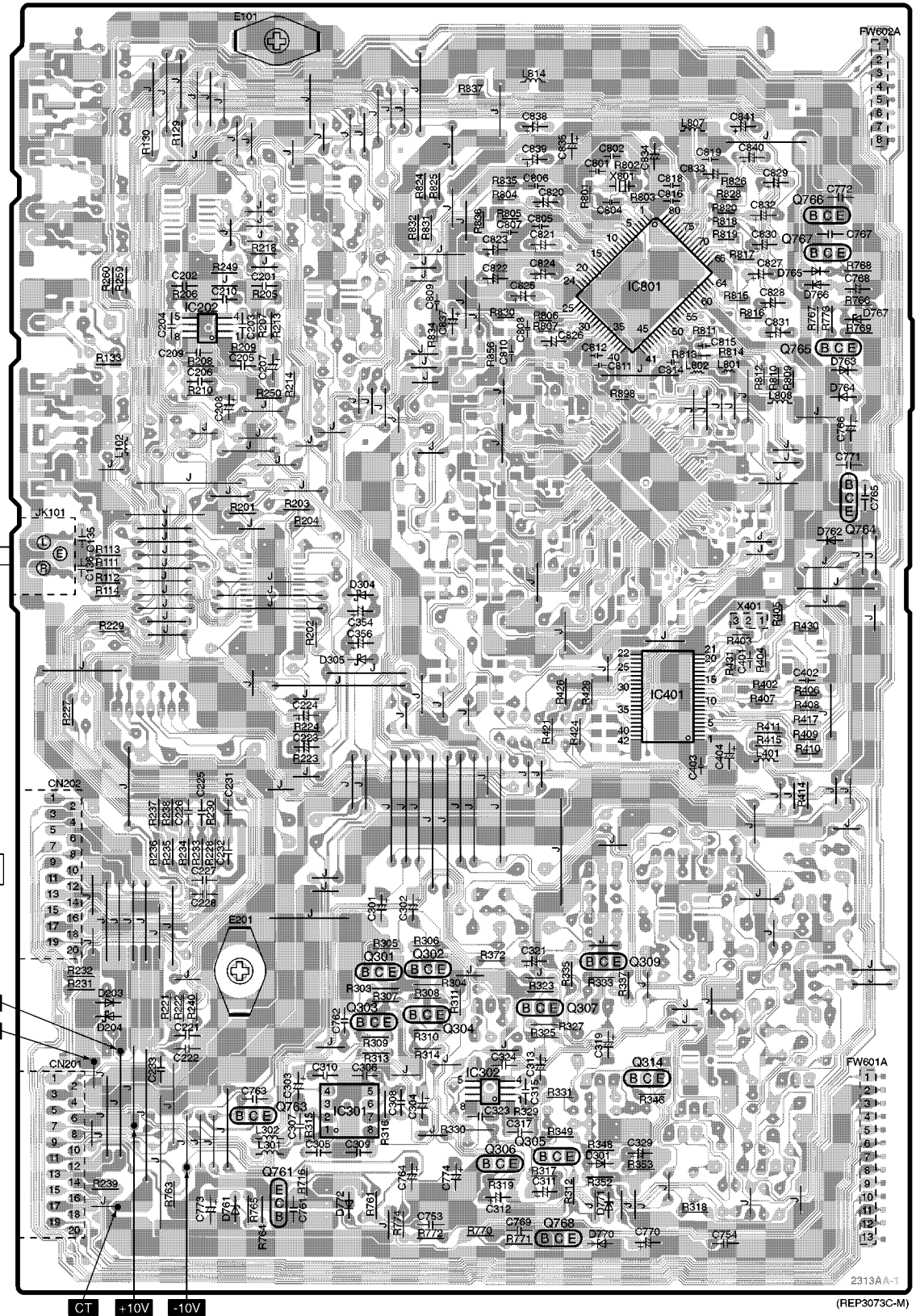
MANUAL EQ

M3

FLAT

2313AB-1
(REP3073C-M)

B MAIN P.C.B.



AUX

To CD PLAYER &
CASSETTE DECK

D.GND

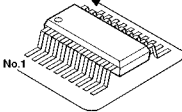
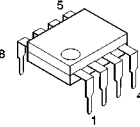
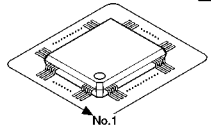
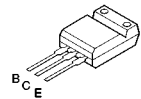
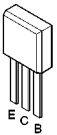
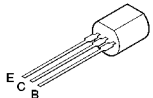
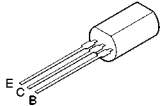
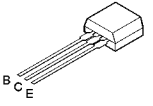
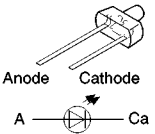
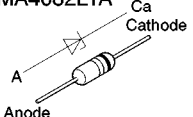
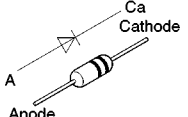
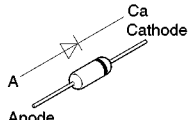
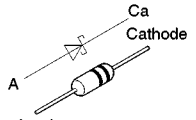
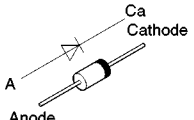
A.GND

To TUNER/
AMPLIFIER

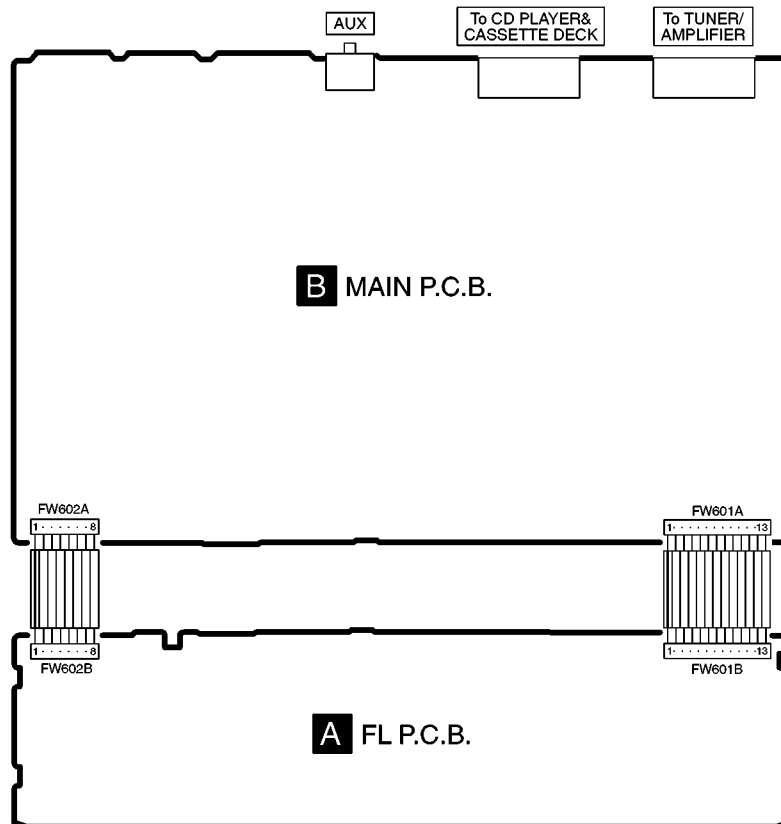
CT +10V -10V

2313A A-1
(REP3073C-M)

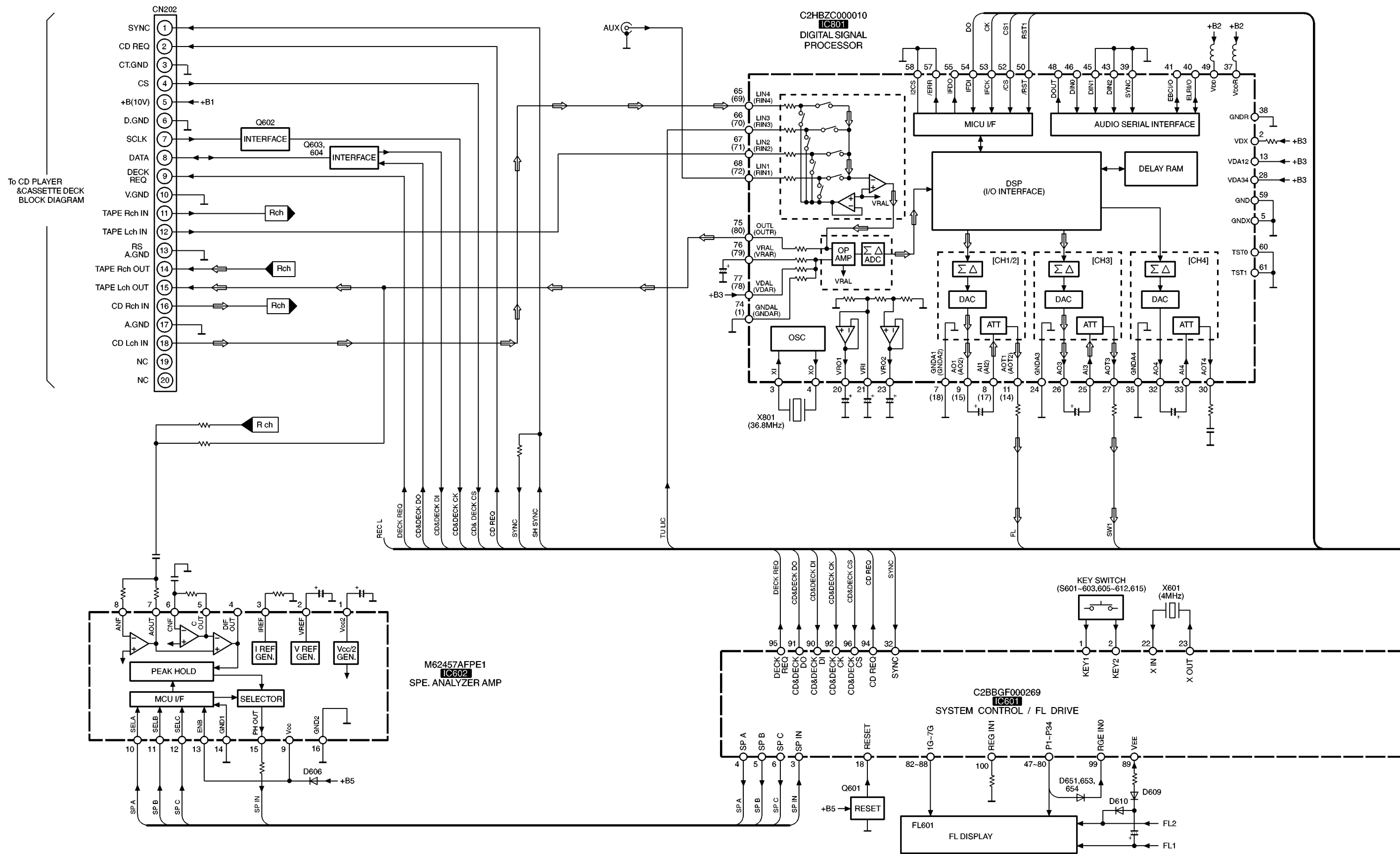
8 Type Illustration of ICs, Transistors and Diodes

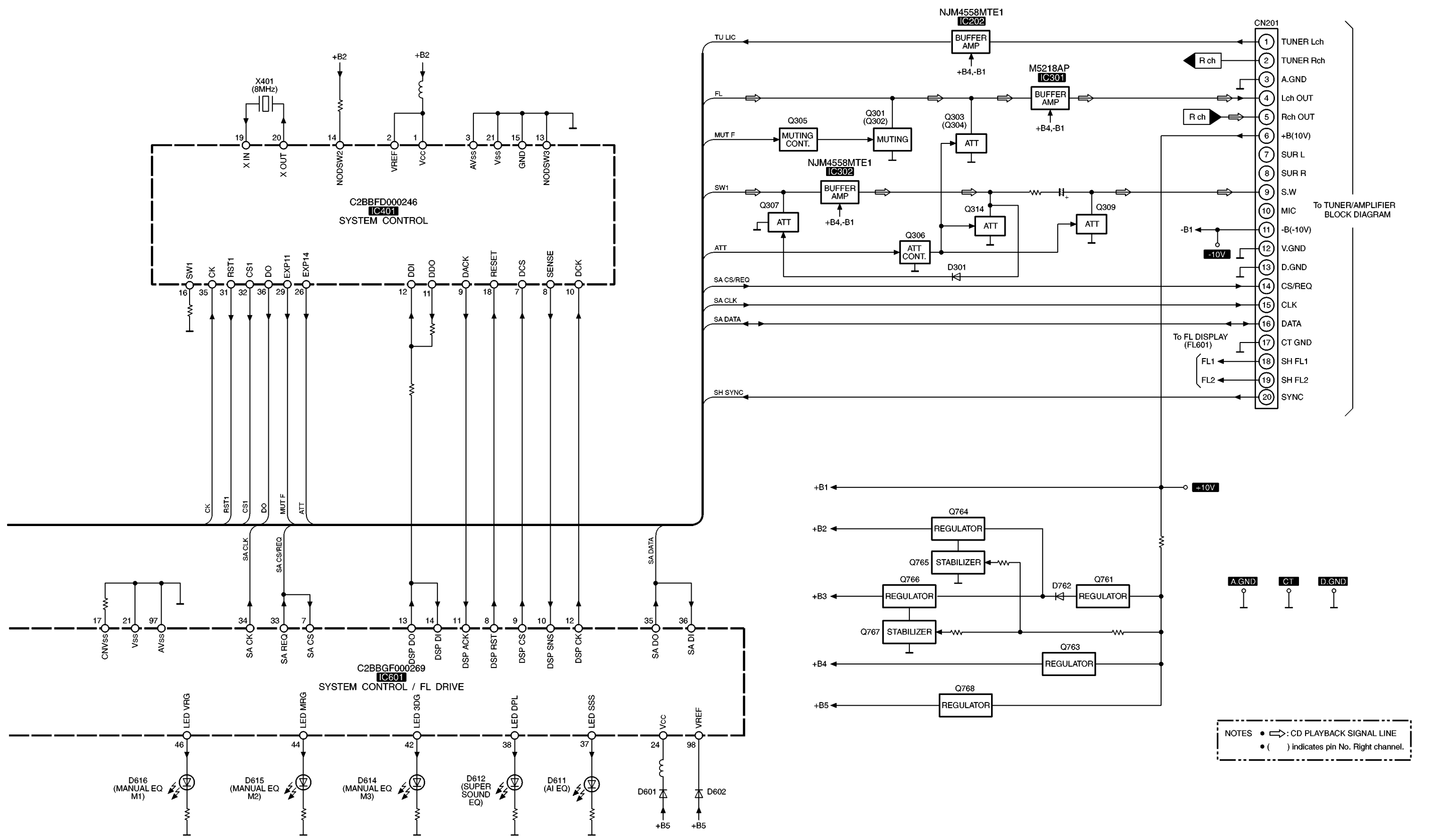
<div></div> <div><table><tr><td>M62457AFPE1</td><td>16PIN</td></tr><tr><td>C2BBFD000246</td><td>42PIN</td></tr><tr><td>NJM4558MTE1</td><td>8PIN</td></tr></table></div>		M62457AFPE1	16PIN	C2BBFD000246	42PIN	NJM4558MTE1	8PIN	<div></div> <div>M5218AP</div>	<div></div> <div><table><tr><td>C2BBGF000269</td><td>100PIN</td></tr><tr><td>C2HBZC000010</td><td>80PIN</td></tr></table></div>		C2BBGF000269	100PIN	C2HBZC000010	80PIN	<div></div> <div>2SD2137PQTA</div>
M62457AFPE1	16PIN														
C2BBFD000246	42PIN														
NJM4558MTE1	8PIN														
C2BBGF000269	100PIN														
C2HBZC000010	80PIN														
<div></div> <div>2SC3311ATA UN4211TA UN411FTA</div>	<div></div> <div>2SB621ARSTA 2SD592AQRSTA 2SA1309ATA</div>	<div></div> <div>2SC3940AQSTA</div>	<div></div> <div>2SD2144STA</div>	<div></div> <div>LNJ301MPUJAD</div>											
<div><p>MA4051LTA MA4051MTA MA4062HTA MA4082LTA</p></div>	<div><p>1SS291TA MA700ATA</p></div>	<div><p>MA165TA</p></div>	<div><p>MA719TA</p></div>	<div><p>RL1N4003N02</p></div>											

9 Wiring Connection Diagram



10 Block Diagram





SH-EH590(EG) BLOCK DIAGRAM

11 Terminal Function of ICs

11.1. IC601 (C2BBGF000269): System Control/FL Drive

Pin No.	Terminal Name	I/O	Function
1	KEY1	I	Operation key signal input
2	KEY2	I	Operation key signal input
3	SP IN	I	A/D signal input from IC602
4	SP A	O	Band select signal output for IC602
5	SP B	O	Band select signal output for IC602
6	SP C	O	Band select signal output for IC602
7	SA CS	I	Chip select signal input
8	DSP RST	O	Reset signal output for IC401
9	DSP CS	O	Chip select signal output for IC401
10	DSP SNS	I	Sense signal input from IC401
11	DSP ACK	I	Acknowledge signal input from IC401
12	DSP CK	O	Clock signal output for IC401
13	DSP DO	O	Data signal output for IC401
14	DSP DI	I	Data signal input from IC401
15	JOG A	-	Not used, open
16	JOG B	-	Not used, open
17	CNV _{SS}	-	GND terminal
18	RESET	I	System reset signal input
19	NC	-	Not used, open
20	NC	-	Not used, open
21	V _{SS}	-	GND terminal
22	X IN	I	Oscillator connected terminal (F=4 MHz)
23	X OUT	O	
24	V _{CC}	I	Power supply terminal
25	NC	-	Not used, open
26	NC	-	Not used, open
27	LED CFO	-	Not used, open
28	LED CFG	-	Not used, open
29	BR93 DATA	-	Not used, connected to GND
30	BR93 CS	-	Not used, open
31	BR93 CK	-	Not used, open
32	SYNC	I	Power failure detect signal input
33	SA REQ	O	Request signal output for Tuner/Amplifier
34	SA CK	O	Serial communication signal to Tuner/Amplifier (Clock signal output)
35	SA DO	O	Serial communication signal to Tuner/Amplifier (Data signal output)
36	SA DI	I	Serial communication signal to Tuner/Amplifier (Data signal input)
37	LED SSS	O	LED (AI EQ) signal output
38	LED DPL	O	LED (SUPER SOUND EQ) signal output
39	LED SPO	-	Not used, open
40	LED SPG	-	Not used, open
41	LED 3DO	-	Not used, open
42	LED 3DG	O	LED (M3) signal output
43	LED MRO	-	Not used, open
44	LED MRG	O	LED (M2) signal output
45	LED VRO	-	Not used, open
46	LED VRG	O	LED (M1) signal output
47 80	P1 P34	O	FL segment signal output
81	NC	-	Not used, open
82 88	7G 1G	O	FL grid signal output
89	V _{EE}	I	Power supply terminal (Negative)
90	CD&DECK DI	I	Data signal input (CD and Deck mechanism)
91	CD&DECK DO	O	Data signal output (CD and Deck mechanism)

Pin No.	Terminal Name	I/O	Function
92	CD&DECK CK	I	Clock signal input (CD and Deck mechanism)
93	NC	-	Not used, open
94	CD REQ	O	Serial data request signal output for CD
95	DECK REQ	O	Serial data request signal output for Deck mechanism
96	CD&DECK CS	I	Chip select signal input (CD and Deck mechanism)
97	AV _{SS}	-	GND terminal
98	VREF	I	Reference voltage input
99	REGIN0	I	Destination select signal input
100	REGIN1	I	Destination select signal input

12 Replacement Parts List

Notes:

- Important safety notice:

Components identified by Δ mark have special characteristics important for safety.

Furthermore, special parts which have purposes of fire-retardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.

When replacing any of components, be sure to use only manufactures specified parts shown in the parts list.

- The marking [RTL] indicates that retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.
- All parts are supplied by SPC.

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	RKM0400-S1	CABINET	1	
2	RHD30007-1S	SCREW	4	
3	XTB3+8JFZ	SCREW	9	
4	RKA0105-K	RUBBER	4	
5	RKA0106-N	FOOT RING	4	
6	RYP1164-S	FRONT PANEL UNIT	1	
6-1	RGB0025-A	TECHNICS BADGE	1	
6-2	RKW0576A-1V	FL WINDOW	1	
7	RGR0285K-E	REAR PANEL	1	
8	REZ1299	WIRE ASS'Y	1	
9	RMN0526	FL HOLDER	1	
C135,36	ECUV1H101KCV	50V 100P	2	ECJ1VC1H101K
C201-04	ECBT1H331KB3	50V 330P	4	
C205,06	ECBT1H330J5	50V 33P	2	F1D1H330A006
C207,08	ECEA1HKA4R7	50V 4.7U	2	
C209,10	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C221,22	ECBA1H101KB5	50V 100P	2	
C223,24	ECA1CAK100XB	16V 10U	2	
C225-28	ECBA1H101KB5	50V 100P	4	
C231-33	ECBA1H101KB5	50V 100P	3	
C301-04	ECEA1HKA4R7	50V 4.7U	4	
C305,06	ECBA1H101KB5	50V 100P	2	
C307,08	ECBT1H100JC5	50V 10P	2	F1D1H100A015
C309,10	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C311	ECA1CAK100XB	16V 10U	1	
C312	ECA1CAK220XB	16V 22U	1	
C313	ECA1CAK100XB	16V 10U	1	
C315	ECBA1H101KB5	50V 100P	1	
C317	ECBT1C562KR5	16V 5600P	1	F1D1C562A010
C319	ECA1CAK100XB	16V 10U	1	
C321	ECA1CAK100XB	16V 10U	1	
C323,24	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C329	ECA1CAK220XB	16V 22U	1	
C354	ECA1CAK100XB	16V 10U	1	
C356	ECA1CAK100XB	16V 10U	1	
C401	ECJ1VB1E223K	25V 0.022U	1	
C402,03	ECUVNH103KBV	50V 0.01U	2	F1H1H103A748
C404	ECA0JAK470XH	6.3V 47U	1	
C601	ECBT1H104KB5	50V 0.1U	1	F1D1H1040002
C602	ECA0JM102	6.3V 1000U	1	
C603,04	ECBT1H102KB3	50V 1000P	2	
C605	ECA1VAK330XB	35V 33U	1	
C606,07	ECBT1H471KB3	50V 470P	2	
C608	ECBT1H221KB3	50V 220P	1	
C609,10	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C611	ECA1HAK3R3XB	50V 3.3U	1	
C612,13	F2A1C220A034	16V 22U	2	
C614	ECA1CAK100XB	16V 10U	1	
C615	ECA1VAK330XB	35V 33U	1	
C616	ECEA1VKS330Q	35V 33U	1	
C618,19	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C620,21	ECA1HAK0R1XB	50V 0.1U	2	
C622,23	ECBT1H104KB5	50V 0.1U	2	F1D1H1040002
C624	ECBT1C103MS5	16V 0.01U	1	F1D1C103A004
C625	ECA0JAK101XB	6.3V 100U	1	
C626	ECBT1H473KB5	50V 0.047U	1	F1D1H473A012
C627,28	F2A1C220A034	16V 22U	2	
C753,54	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C761-63	ECBT1C103MS5	16V 0.01U	3	F1D1C103A004
C764	ECA1AAK221XH	10V 220U	1	
C765	ECBT1C103MS5	16V 0.01U	1	F1D1C103A004
C766	ECA1CAK100XB	16V 10U	1	
C767	ECBT1C103MS5	16V 0.01U	1	F1D1C103A004
C768	ECA1CAK100XB	16V 10U	1	
C769	ECBT1C103MS5	16V 0.01U	1	F1D1C103A004
C770	ECA1CAK100XB	16V 10U	1	
C771,72	ECBT1C103MS5	16V 0.01U	2	F1D1C103A004
C773	ECA1AAK221XH	10V 220U	1	
C774	ECA1CAM221XB	16V 220U	1	
C801	ECJ1VC1H120J	50V 12P	1	
C802	ECJ1VC1H050C	50V 5P	1	
C804	ECJ1VB1C104K	16V 0.1U	1	
C805	ECJ1VB0J105K	6.3V 1U	1	
C806,07	ECJ1VB1H222K	50V 2200P	2	
C808-10	ECUVNH103KBV	50V 0.01U	3	F1H1H103A748
C811	ECJ1VB1E223K	25V 0.022U	1	
C812	ECJ1VB1C104K	16V 0.1U	1	
C814	ECJ1VB0J105K	6.3V 1U	1	
C815	ECJ1VB1E223K	25V 0.022U	1	
C816	ECJ1VB1C104K	16V 0.1U	1	
C818,19	ECJ1VB1H681K	50V 680P	2	
C820,21	ECEA1HKA4R7	50V 4.7U	2	
C822	ECA0JAK470XH	6.3V 47U	1	
C823	EEAFC0J101B	6.3V 100U	1	
C824	ECA0JAK470XH	6.3V 47U	1	
C825-32	ECEA1HKA4R7	50V 4.7U	8	
C833-35	ECA0JAK470XH	6.3V 47U	3	
C837	ECA1CAK100XB	16V 10U	1	
C838,39	ECA1HAK010XI	50V 1U	2	
C840,41	ECEA1HKA4R7	50V 4.7U	2	
CN201	RJT065A20	CONNECTOR (20P)	1	K1FA220B0007
CN202	RJT065K20	CONNECTOR (20P)	1	K1FA220B0006
D203	MA165TA5	DIODE	1	MA2C16500E
D204	MA719	DIODE	1	MA2C719
D301	MA700	DIODE	1	MA2C700
D304,05	MA719	DIODE	2	MA2C719
D601-04	1SS291TA	DIODE	4	
D605-10	MA165TA5	DIODE	6	MA2C16500E
D611,12	LNJ301MPUJAD	LED	2	
D614-16	LNJ301MPUJAD	LED	3	
D651	MA165TA5	DIODE	1	MA2C16500E
D653,54	MA165TA5	DIODE	2	MA2C16500E
D761	MA4082LTA	DIODE	1	MAZ40820LF
D762	B0AAMM000009	DIODE	1	
D763-66	MA165TA5	DIODE	4	MA2C16500E
D767	MA4051M	DIODE	1	MAZ40510M
D770	MA4062H	DIODE	1	MAZ40620H
D771	MA4051-L	DIODE	1	MAZ40510L
D772	MA165TA5	DIODE	1	MA2C16500E
FL601	A2BD00000041	FL DISPLAY	1	
IC202	NJM4558MTE1	IC	1	C0ABBB000109
IC301	M5218AP	IC	1	C0AABB000055
IC302	NJM4558MTE1	IC	1	C0ABBB000109
IC401	C2BBFD000246	IC	1	
IC601	C2BBGF000269	IC	1	
IC602	M62457AFPE1	IC	1	C1BB00000486
IC801	C2HBZC000010	IC	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
JK101	SJF3068-7N	JACK,AUX (DVD)	1	K2HA102B0046
L102	RLBV102V-Y	COIL	1	J0JBC0000014
L301,02	RLQA3R3JT1-Y	COIL	2	G0C3R3JA0019
L401	RLQB100JTD-D	COIL	1	G0C100JA0030
L601	G0C100JA0019	COIL	1	
L801	J0JCC0000077	COIL	1	
L802	RLBV102V-Y	COIL	1	J0JBC0000014
L807	G0A200D00002	COIL	1	
L808	RLQB100JTD-D	COIL	1	G0C100JA0030
L814	G0A200D00002	COIL	1	
PCB1	REP3073C-M	PCB ASS'Y	1	[RTL]
Q301-04	2SD2144S	TRANSISTOR	4	B1AAGC000006
Q305,06	UN411FTA	TRANSISTOR	2	UNR411F00A
Q307	2SD2144S	TRANSISTOR	1	B1AAGC000006
Q309	2SD2144S	TRANSISTOR	1	B1AAGC000006
Q314	2SD2144S	TRANSISTOR	1	B1AAGC000006
Q601	UN4211	TRANSISTOR	1	UNR4211
Q602-04	2SC3311ATA	TRANSISTOR	3	2SC3311A0A
Q761	2SD2137PQTA	TRANSISTOR	1	2SD21370PA
Q763	2SD592A	TRANSISTOR	1	2SD0592AW
Q764	2SB0621AHA	TRANSISTOR	1	
Q765	2SC3311ATA	TRANSISTOR	1	2SC3311A0A
Q766	2SA1309ATA	TRANSISTOR	1	2SA1309AWA
Q767	2SC3311ATA	TRANSISTOR	1	2SC3311A0A
Q768	2SC3940AQSTA	TRANSISTOR	1	2SC3940ARA
R111-14	ERDS2FJ123	1/4W 12K	4	
R129,30	ERDS2T0	1/4W 0	2	
R133	ERJ3GEY0R00V	1/16W 0	1	
R201,02	ERDS2T0	1/4W 0	2	
R203,04	ERDS2FJ222	1/4W 2.2K	2	
R205,06	ERDS2FJ563	1/4W 56K	2	
R207,08	ERDS2FJ273	1/4W 27K	2	
R209,10	ERDS2TJ823T	1/4W 82K	2	
R213,14	ERDS2FJ222	1/4W 2.2K	2	
R218	ERDS2T0	1/4W 0	1	
R221,22	ERDS2FJ221	1/4W 220	2	
R223,24	ERDS2FJ223	1/4W 22K	2	
R227,28	ERDS2FJ222	1/4W 2.2K	2	
R229,30	ERDS2FJ223	1/4W 22K	2	
R231,32	ERDS2FJ152	1/4W 1.5K	2	
R233,34	ERDS2FJ102	1/4W 1K	2	
R235,36	ERDS2FJ222	1/4W 2.2K	2	
R237,38	ERDS2FJ103	1/4W 10K	2	
R239	ERDS2FJ473	1/4W 47K	1	
R240	ERDS2FJ102	1/4W 1K	1	
R249,50	ERDS2FJ222	1/4W 2.2K	2	
R259,60	ERDS2T0	1/4W 0	2	
R303,04	ERDS2FJ223	1/4W 22K	2	
R305-08	ERDS2FJ102	1/4W 1K	4	
R309,10	ERDS2FJ561	1/4W 560	2	
R311	ERDS2FJ223	1/4W 22K	1	
R312	ERDS2FJ182	1/4W 1.8K	1	
R313,14	ERDS2TJ392T	1/4W 3.9K	2	
R315,16	ERDS2FJ274	1/4W 270K	2	
R317	ERDS2FJ223	1/4W 22K	1	
R318	ERDS2FJ101	1/4W 100	1	
R319	ERDS2FJ154	1/4W 150K	1	
R323	ERDS2FJ120	1/4W 12	1	
R325	ERDS2FJ102	1/4W 1K	1	
R327	ERDS2FJ561	1/4W 560	1	
R329	ERDS2FJ564	1/4W 560K	1	
R330	ERDS2T0	1/4W 0	1	
R331	ERDS2FJ222	1/4W 2.2K	1	
R333	ERDS2FJ563	1/4W 56K	1	
R335	ERDS2FJ102	1/4W 1K	1	
R337	ERDS2FJ391	1/4W 390	1	
R346	ERDS2FJ102	1/4W 1K	1	
R348	ERDS2FJ222	1/4W 2.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R349	ERDS2FJ123	1/4W 12K	1	
R352	ERDS2FJ103	1/4W 10K	1	
R353	ERDS2FJ224	1/4W 220K	1	
R372	ERDS2T0	1/4W 0	1	
R402	ERJ3GEYJ104	1/16W 100K	1	
R403	ERJ3GEYJ681V	1/16W 680	1	D0GB681JA002
R404	ERJ3GEYJ104	1/16W 100K	1	
R405-10	ERJ3GEYJ221V	1/16W 220	6	
R411	ERDS2FJ102	1/4W 1K	1	
R414,15	ERDS2FJ102	1/4W 1K	2	
R417	ERJ3GEYJ221V	1/16W 220	1	
R421	ERDS2FJ101	1/4W 100	1	
R424	ERDS2FJ102	1/4W 1K	1	
R426	ERDS2FJ472	1/4W 4.7K	1	
R429	ERDS2FJ472	1/4W 4.7K	1	
R430,31	ERJ3GEYJ103V	1/16W 10K	2	D0GB103JA002
R601-03	ERDS2FJ102	1/4W 1K	3	
R604,05	ERDS2FJ103	1/4W 10K	2	
R606	ERDS2FJ102	1/4W 1K	1	
R607,08	ERDS2FJ221	1/4W 220	2	
R609	ERDS2FJ222	1/4W 2.2K	1	
R610	ERDS2FJ332	1/4W 3.3K	1	
R611	ERDS2FJ101	1/4W 100	1	
R612	ERDS2FJ102	1/4W 1K	1	
R613	ERDS2FJ562	1/4W 5.6K	1	
R614-17	ERDS2FJ102	1/4W 1K	4	
R618	ERDS2FJ104	1/4W 100K	1	
R619	ERDS2FJ681	1/4W 680	1	
R622,23	ERDS2FJ104	1/4W 100K	2	
R624,25	ERDS2TJ181	1/4W 180	2	
R627-29	ERDS2TJ181	1/4W 180	3	
R631	ERDS2FJ821	1/4W 820	1	
R632	ERDS2FJ102	1/4W 1K	1	
R633	ERDS2FJ122	1/4W 1.2K	1	
R634	ERDS2FJ152	1/4W 1.5K	1	
R635	ERDS2FJ182	1/4W 1.8K	1	
R636	ERDS2FJ222	1/4W 2.2K	1	
R637	ERDS2FJ821	1/4W 820	1	
R638	ERDS2FJ102	1/4W 1K	1	
R639	ERDS2FJ122	1/4W 1.2K	1	
R640	ERDS2FJ152	1/4W 1.5K	1	
R641	ERDS2FJ182	1/4W 1.8K	1	
R642	ERDS2FJ222	1/4W 2.2K	1	
R647	ERDS2FJ223	1/4W 22K	1	
R648-50	ERDS2FJ104	1/4W 100K	3	
R651	ERDS2FJ102	1/4W 1K	1	
R652,53	ERDS2FJ472	1/4W 4.7K	2	
R654-56	ERDS2FJ103	1/4W 10K	3	
R657	ERDS2FJ473	1/4W 47K	1	
R658,59	ERDS2FJ472	1/4W 4.7K	2	
R660	ERDS2FJ473	1/4W 47K	1	
R661	ERDS2FJ223	1/4W 22K	1	
R662	ERDS2FJ102	1/4W 1K	1	
R663,64	ERDS2FJ331	1/4W 330	2	
R665-67	ERDS2FJ473	1/4W 47K	3	
R668	ERDS2FJ222	1/4W 2.2K	1	
R671-80	ERJ6GEYJ104V	1/10W 100K	10	
R681	ERJ3GEYJ222V	1/16W 2.2K	1	
R682	ERJ3GEY0R00V	1/16W 0	1	
R683-85	ERDS2T0	1/4W 0	3	
R686	ERJ3GEY0R00V	1/16W 0	1	
R716	ERDS2FJ821	1/4W 820	1	
R761	ERDS2T0	1/4W 0	1	
R763	ERQ16NKKWR33E	1/6W 0.33	1	
R764	ERDS2FJ821	1/4W 820	1	
R765	ERDS2FJ221	1/4W 220	1	
R766	ERDS2FJ182	1/4W 1.8K	1	
R767	ERDS2FJ102	1/4W 1K	1	
R768,69	ERDS2FJ122	1/4W 1.2K	2	
R770	ERD2FCJ4R7	1/4W 4.7	1	
R771	ERDS2FJ102	1/4W 1K	1	
R772	ERDS2FJ122	1/4W 1.2K	1	
R773	ERDS2FJ102	1/4W 1K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R774	ERDS2FJ221	1/4W 220	1	
R801	ERJ3GEYJ221V	1/16W 220	1	
R802	ERJ3GEYJ105V	1/16W 1M	1	
R803	ERJ3GEYJ101	1/16W 100	1	D0GB101JA002
R804-07	ERJ3GEYJ271V	1/16W 270	4	
R809,10	ERJ3GEYJ331V	1/16W 330	2	
R811	ERJ3GEYJ472V	1/16W 4.7K	1	
R812	ERJ3GEYJ331V	1/16W 330	1	
R813	ERJ3GEYJ472V	1/16W 4.7K	1	
R814	ERJ3GEYJ104	1/16W 100K	1	
R815-20	ERJ3GEYJ102V	1/16W 1K	6	
R824,25	ERDS2TJ124	1/4W 120K	2	
R826	ERJ3GEYJ102V	1/16W 1K	1	
R828	ERJ3GEYJ102V	1/16W 1K	1	
R830	ERJ3GEYJ472V	1/16W 4.7K	1	
R831,32	ERDS2FJ222	1/4W 2.2K	2	
R834	ERJ3GEYJ223V	1/16W 22K	1	D0GB223JA002
R835,36	ERJ3GEYJ152V	1/16W 1.5K	2	
R837	ERJ3GEY0R00V	1/16W 0	1	
R856	ERJ3GEY0R00V	1/16W 0	1	
R898	ERJ3GEY0R00V	1/16W 0	1	
S601-03	EVQ11G05R	SW, OPERATION	3	
S605-12	EVQ11G05R	SW, OPERATION	8	
S615	EVQ11G05R	SW, EQ	1	
X401	RSXY8M00D01T	OSCILLATOR	1	H2B800400005
X601	H2B400400013	OSCILLATOR	1	
X801	RSXZ36M8M01T	OSCILLATOR	1	

13 Cabinet Parts Location

