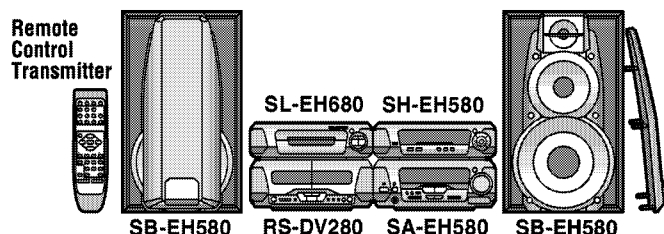


# Service Manual

## Tuner/Amplifier



**SA-EH580EE**  
**SA-EH580EG**  
**SA-EH580EP**

Colour

(N).....Gold Type

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

| System          | SC-EH580        |
|-----------------|-----------------|
| Sound Processor | SH-EH580        |
| Tuner/Amplifier | <b>SA-EH580</b> |
| CD Player       | SL-EH680        |
| Cassette Deck   | RS-DV280        |
| Front Speakers* | SB-EH580        |

\* : Made in Spain.

## Specifications

### Amplifier section

Power output (L/R both channel driven):

|                             |                |
|-----------------------------|----------------|
| DIN 1 kHz, THD 1 % (High);  | 2 × 25 W (6 Ω) |
| 100 Hz, THD 1 % (Low);      | 2 × 65 W (8 Ω) |
| RMS 1 kHz, THD 10 % (High); | 2 × 35 W (6 Ω) |
| 100 Hz, THD 10 % (Low);     | 2 × 85 W (8 Ω) |

Total harmonic distortion:

|                       |             |
|-----------------------|-------------|
| Rated power at 1 kHz; | 1 % (6 Ω)   |
| Half power at 1 kHz;  | 0.1 % (6 Ω) |

Load impedance:

|              |     |
|--------------|-----|
| Main (High); | 6 Ω |
| Main (Low);  | 8 Ω |

DIGITAL S.WOOFER:

|                    |           |
|--------------------|-----------|
| Center frequency;  | 60 Hz     |
| LEVEL (VOL-20 dB): | MID +3 dB |
|                    | MAX +6 dB |

### FM tuner section

Frequency range: 87.50 – 108.00 MHz  
(0.05 MHz steps)

Sensitivity: 1.8 μV (IHF usable)

S/N 26 dB: 1.5 μV

S/N (MONO): 70 dB (75 dB, IHF)

Antenna terminal(s): 75 Ω (unbalanced)

### AM tuner section

Frequency range: 522 – 1629 kHz (9 kHz steps)  
520 – 1630 kHz (10 kHz steps)  
500 μV/m

Sensitivity (S/N 20 dB):

### Timer section

Clock:

Quartz - lock type

Function: Play timer (1 time, daily), Rec timer (1 time, daily),  
Sleep (120 min, 30 min intervals)

Setting Intervals (Play/Rec): 1 minute – 23 hours 59 minutes  
(1 min intervals)

### General

Power supply: AC 230 V, 50 Hz

Power consumption: 160 W

Standby: 0.5 W

Dimensions (W×H×D): 293×118.5×345 mm

Mass: 5.0 kg

Notes: Specifications are subject to change without notice.

Mass and dimensions are approximate.

Total harmonic distortion is measured by the digital spectrum analyzer.

## ⚠ 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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## 1 Before Repairs

1. Turn off the power supply. Using a 10  $\Omega$ , 10 W resistor, connect both ends of power supply capacitors (C701, C703 and C702, C704) in order to discharge the voltage.
2. Before turning the power supply on, after completion of repair, slowly apply the primary voltage by using a power supply voltage controller to make sure that the consumed current at 50 Hz in NO SIGNAL mode should be shown below with respect to supply voltage 230 V.

|                        |             |
|------------------------|-------------|
| Power supply voltage   | AC 230 V    |
| Consumed current 50 Hz | 70 - 300 mA |

## 2 Protection Circuitry

The protection circuitry may have operated if either of the following conditions is noticed:

- No sound is heard when the power is switched ON.
- Sound stops during a performance.

The functions of this circuitry is to prevent circuitry damage if, for example, the positive and negative speaker connection wires are shorted, or if speaker systems with an impedance less than the indicated rated impedance of this unit are used.

If this occurs, follow the procedures outlined below.

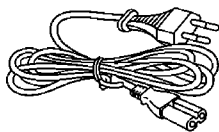
1. Switch OFF the power.
2. Determine the cause of the problem and correct it.
3. Switch ON the power once again.

### Note:

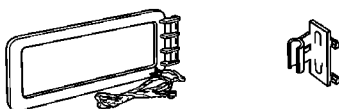
When the protection circuitry functions, the unit will not operate unless the power is first switched OFF and then ON again.

### 3 Accessories

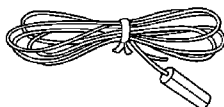
- AC power supply cord  
(RJA0019-2X).....1 pc.



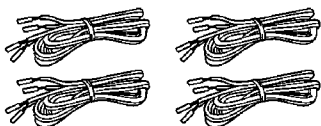
- AM loop antenna set  
(RSA0022-L).....1 pc.



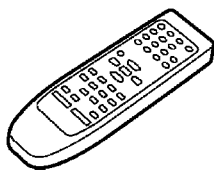
- FM indoor antenna  
(RSA0007).....1 pc.



- Speaker cords  
(REE0853).....2 pcs.  
(REE1057).....2 pcs.

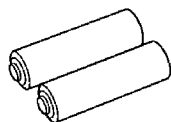


- Remote control transmitter  
(EUR7702070).....1 pc.

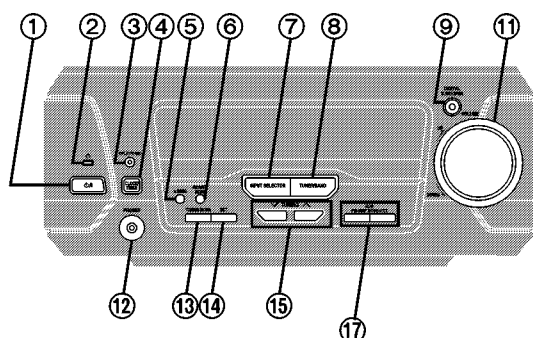


- Remote control batteries  
(R6/LR6, "AA", UM-3).....2 pcs.

**Note:** These are available on sales route.

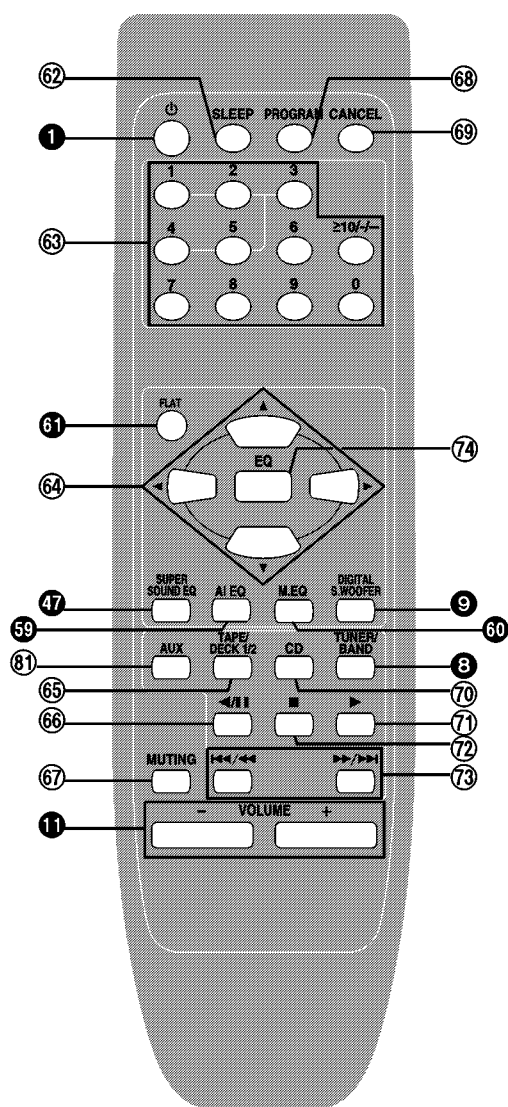


## 4 Location of Controls

**A**


### A Tuner/amplifier

- ① **Standby/on switch (⏻/I)**  
Press to switch the unit from on to standby mode or vice versa. In standby mode, the unit is still consuming a small amount of power.
- ② **Standby indicator (⏻)**  
When the unit is connected to the AC mains supply, this indicator lights up in standby mode and goes out when the unit is turned on.
- ③ **Play timer/record timer button and indicator (⏻PLAY/⏻REC)**
- ④ **Clock/timer button (CLOCK/TIMER)**
- ⑤ **Demo button (DEMO)**
- ⑥ **FM mode button (FM AUTO/MONO)**
- ⑦ **Source input button (INPUT SELECTOR)**
- ⑧ **Tuner/band button (TUNER/BAND)**
- ⑨ **Digital super woofer button and indicator (DIGITAL S.WOOFER)**
- ⑪ **Volume control (VOLUME)**
- ⑫ **Headphone jack (PHONES)**
- ⑬ **Tuning mode button (TUNING MODE)**
- ⑭ **Set button (SET)**
- ⑮ **Tuning buttons (V, ^ TUNING)**
- ⑰ **RDS display mode button (RDS, PS-DISP MODE-PTY)**

**B**


### B Remote control

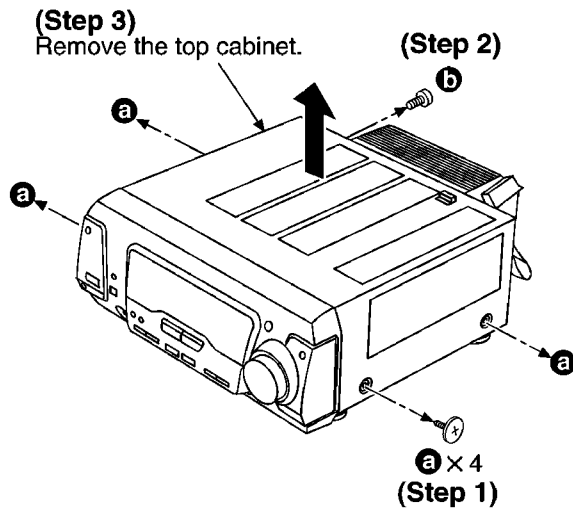
Buttons such as ❶ function in the same way as the controls on the main unit.

- ❷ **Sleep timer button (SLEEP)**
- ❸ **Numbered buttons (1-9, 0, ≥10/--)**
- ❹ **Cursor buttons (←, →, ▲, ▼)**
- ❺ **Tape select, deck 1/deck 2 select button (TAPE/DECK 1/2)**
- ❻ **CD pause/tape reverse playback button (⏮/⏮)**
- ❼ **Muting button (MUTING)**
- ❽ **Program button (PROGRAM)**
- ❾ **Cancel button (CANCEL)**
- ❿ **CD button (CD)**
- ⓫ **CD play/tape forward playback button (⏭)**
- ⓬ **CD/tape stop button (■)**
- ⓭ **CD skip/search, tape fast forward/rewind buttons (⏮/⏮, ⏭/⏭)**
- ⓮ **EQ button (EQ)**
- ⓯ **AUX button (AUX)**

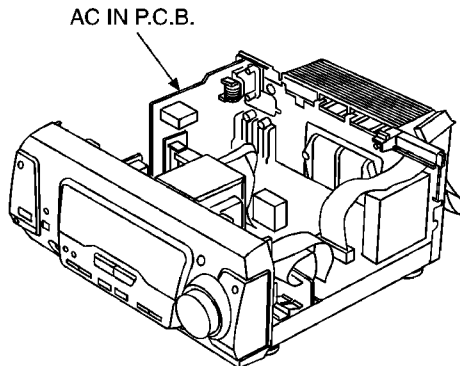
## 5 Operation Checks and Component Replacement Procedures

- 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.

### 5.1. Checking for the AC IN P.C.B.

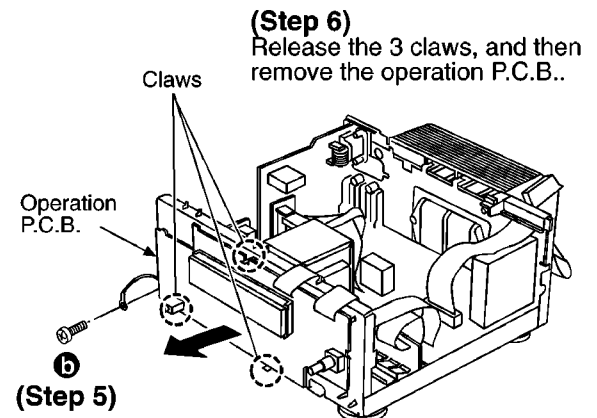
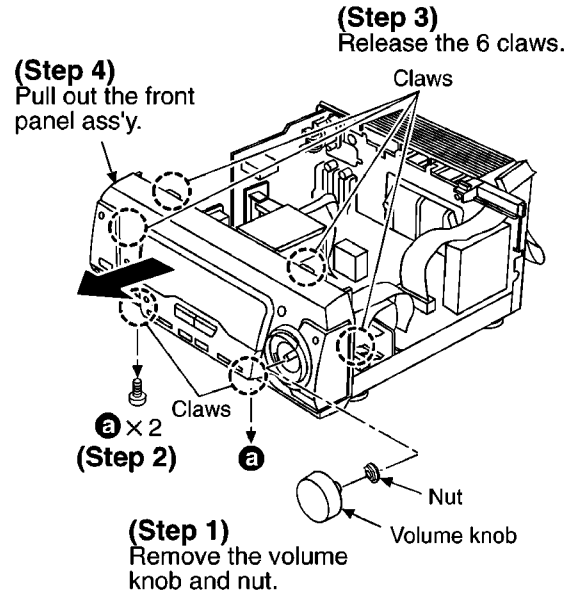


- Check the AC IN P.C.B. as shown below.

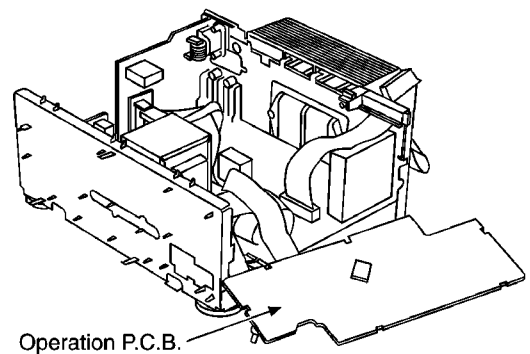


### 5.2. Checking for the operation P.C.B.

- Follow the (Step 1) - (Step 3) of item 5.1.

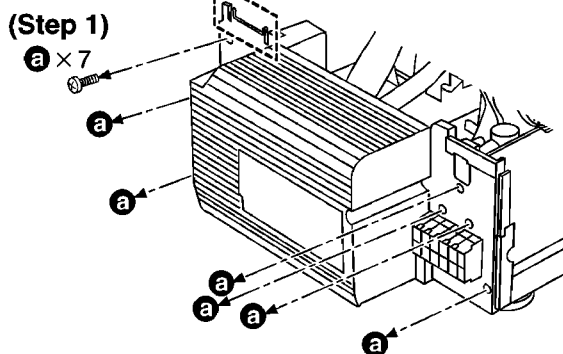
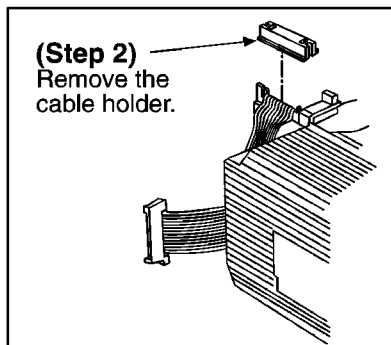


- Check the operation P.C.B. as shown below.

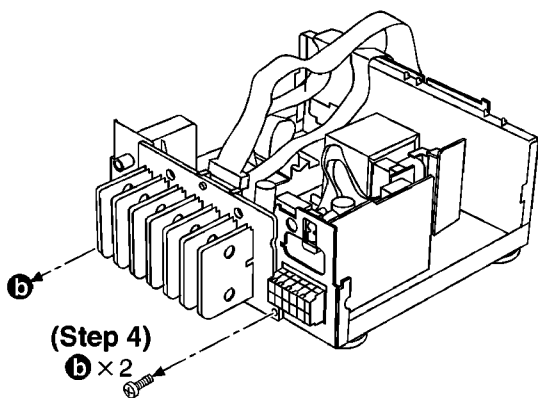
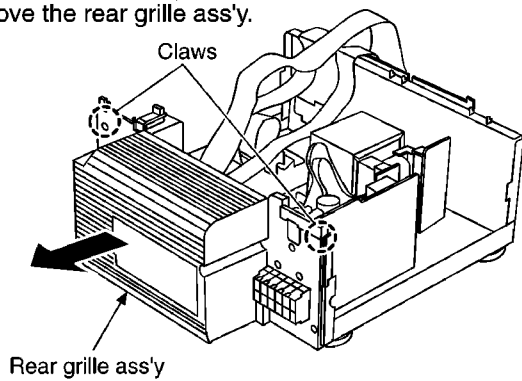


### 5.3. Checking for the main P.C.B.

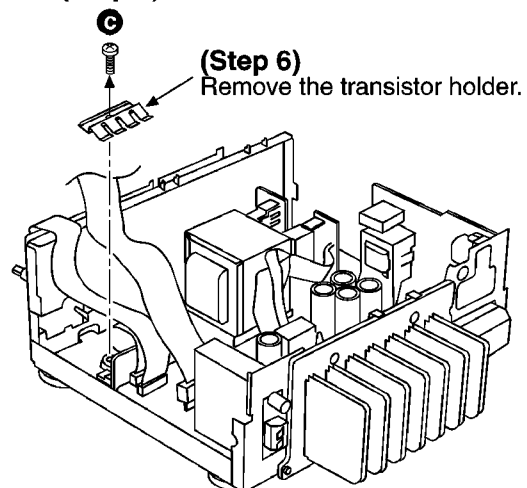
- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 6) of item 5.2.



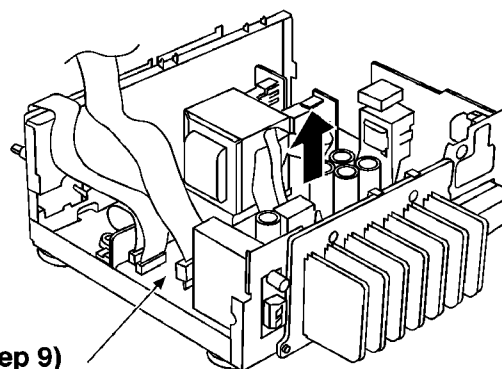
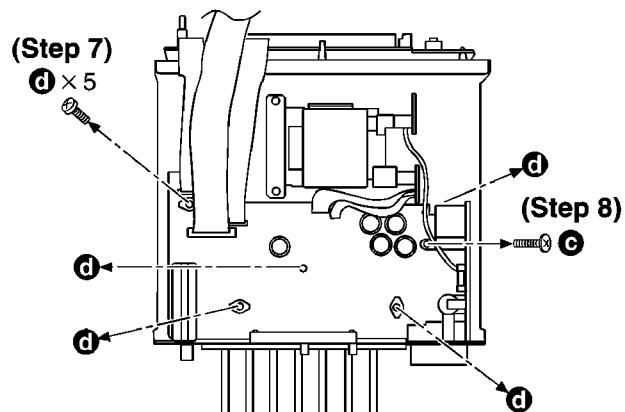
**(Step 3)**  
Release the 2 claws, and then remove the rear grille ass'y.



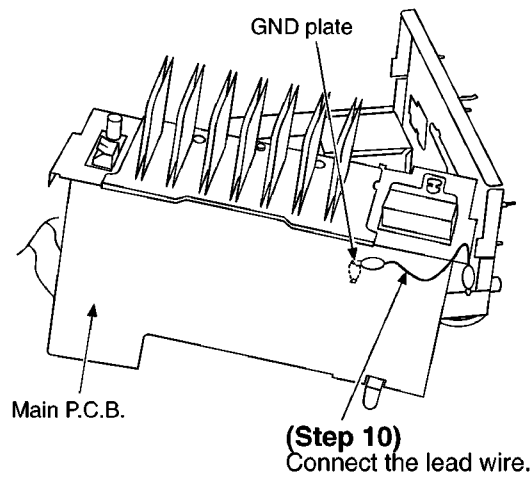
**(Step 5)**



**(Step 7)**

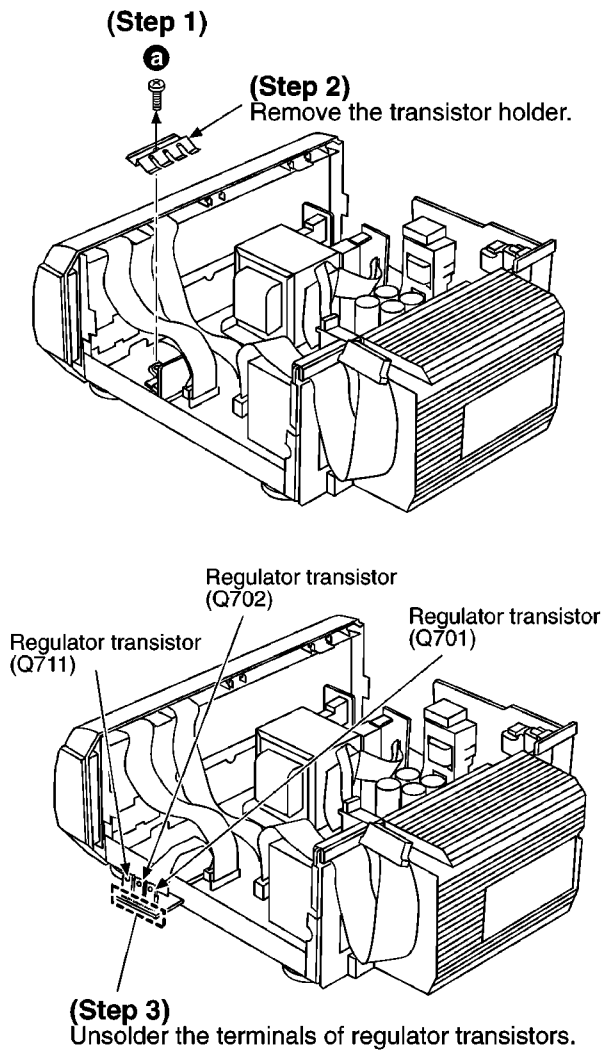


- Check the main P.C.B. as shown below.



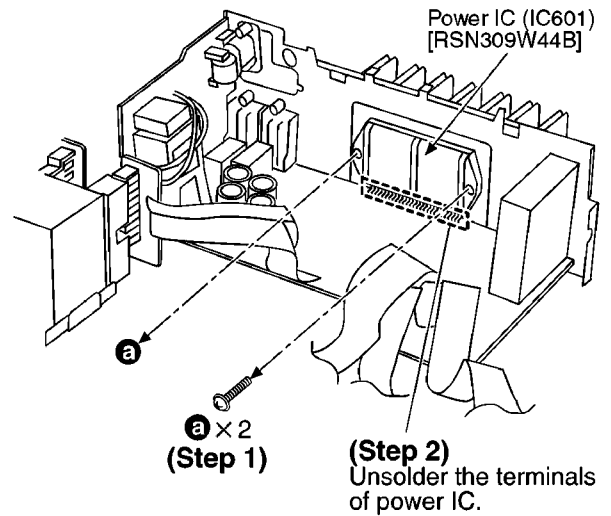
## 5.4. Replacement for the regulator transistor

- Follow the (Step 1) - (Step 3) of item 5.1.



## 5.5. Replacement for the power IC

- Follow the (Step 1) - (Step 3) of item 5.1.
- Follow the (Step 1) - (Step 6) of item 5.2.
- Follow the (Step 1) - (Step 10) of item 5.3.



### NOTE:

When mounting the power IC apply silicone compound (RFKX0002) to the rear side of power IC.

## 6 To Supply Power Source

This unit is designed to operate on power supplied from system connected.  
For system connection, refer to Fig. 6-1.

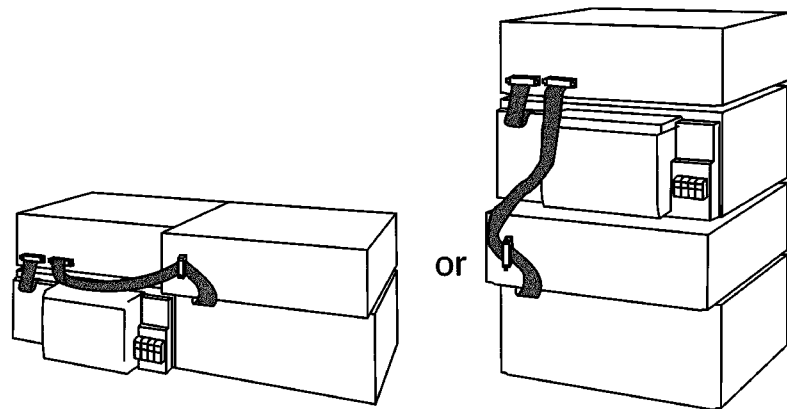


Fig. 6-1.

**When the unit has to test and service alone, use the following method to supply power source.**

1. Short the section between **W902A Pin 3** and **C740 (-) (GND)**. (Refer to Fig. 6-2. )
2. Connect this unit to an AC power supply cord.  
(This unit come to stand-by mode.)
3. Turn the unit ON.

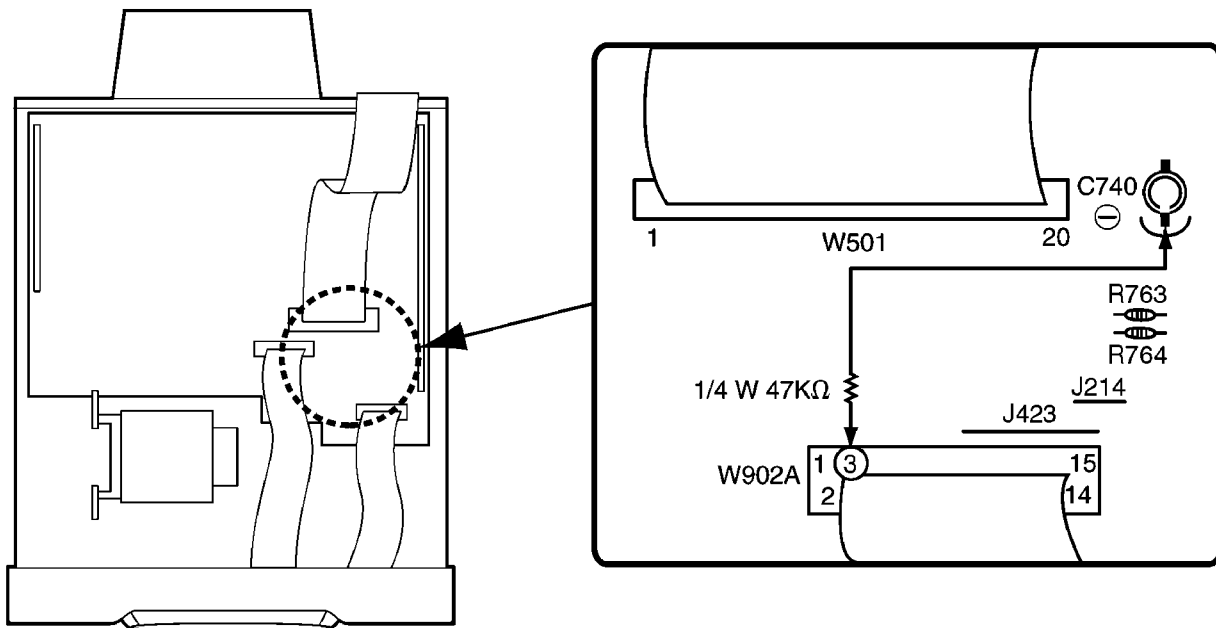


Fig. 6-2.

### Notes:

**Use only this method when checking the voltage etc..**

**In case of checking the operations, use the system connections to supply power source.**

## 7 Self-Diagnostic Function

This unit is equipped with a self-diagnostic function which, in the event of a malfunction, automatically displays a code indicating the nature of the malfunction.

Use this self-diagnostic function when servicing the unit.

### 7.1. To display the malfunction code

- U70 CD:** Automatically displays on the tuner/amplifier when a malfunction occurs. Refer to Fig. 7-1.
- U70 DECK:** Automatically displays on the tuner/amplifier when a malfunction occurs. Refer to Fig. 7-1.
- F61:** Automatically displays on the tuner/amplifier when a malfunction occurs. Refer to Fig. 7-1.

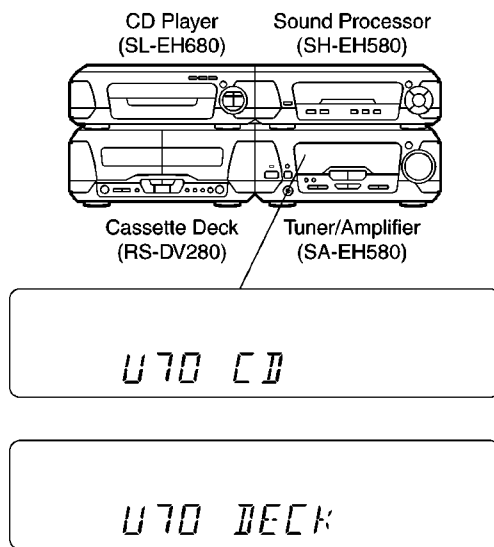


Fig. 7-1.

### 7.2. To return to the normal display

#### 1. For U70 CD/U70 DECK

- Press any operation button on the tuner/amplifier.
- To re-display the code, switch the power off (POWER STANDBY button), and then switch power back on again.

#### 2. For F61

- If F61 is displayed, the power will automatically be switched off and the standby indicator will light up.
- F61 will be displayed for 3 seconds, and then the clock will be displayed.
- To re-display the code, switch the power on. F61 will be re-displayed, and then after 3 seconds the clock will be displayed and the power will automatically switch off.

### 7.3. Display contents

#### 7.3.1. U70 CD/U70 DECK (displayed automatically)

##### • Problem or condition

A bus-line communications error has occurred as a result of the flat cables being inserted incorrectly, thus preventing the system from operating.

- If U70 is displayed on the tuner/amplifier, the tape deck or CD Player cannot be operated by remote control.

##### • Correction Procedure

1. To check for correct insertion of flat cables.
  - Insert each connector until you hear a click.
  - Insert the flat cables at the back of the unit in the order indicated. Refer to Fig. 7-2.

Make sure the white side of the cables is on your right side. Refer to Fig. 7-3.

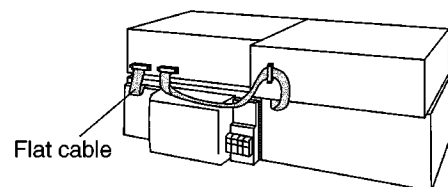


Fig. 7-2.

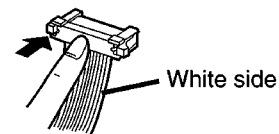


Fig. 7-3.

2. Breakage of flat cables. (Check and replace.)
3. If the problem is not corrected by items 1 and 2 above, this indicates a faulty IC.

##### SA-EH580:

IC901 (C2BBFD000317)

##### SL-EH680:

IC451 (C2BBFD000256)

##### RS-DV280:

IC701 (M38503M2406F)

Check these ICs and replace.

#### 7.3.2. F61

##### • Problem or condition

When the power switch is switched on, it automatically switches back off, making it impossible to switch power on.

##### • Correction procedure

Faulty Tuner/Amplifier (SA-EH580) output IC (IC601). (When a DC voltage is applied to speaker terminals.)

## 8 Schematic Diagram Notes

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

### Notes:

|               |                                                                                                                                                                                                                    |
|---------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>S901:</b>  | Power standby/on switch (  )                                                                                                      |
| <b>S902:</b>  | Clock/timer switch (CLOCK/TIMER)                                                                                                                                                                                   |
| <b>S903:</b>  | Demo switch (  DEMO)                                                                                                              |
| <b>S904:</b>  | Play timer/record timer switch<br>(  PLAY/  REC) |
| <b>S905:</b>  | FM mode switch<br>(FM AUTO/MONO)                                                                                                                                                                                   |
| <b>S906:</b>  | Tuning mode switch<br>(TUNING MODE)                                                                                                                                                                                |
| <b>S907:</b>  | Set switch (SET)                                                                                                                                                                                                   |
| <b>S908:</b>  | Source input switch<br>(INPUT SELECTOR)                                                                                                                                                                            |
| <b>S910:</b>  | Tuning down switch (TUNING,  )                                                                                                    |
| <b>S911:</b>  | Tuning up switch (TUNING,  )                                                                                                      |
| <b>S912:</b>  | Tuner/band switch (TUNER/BAND)                                                                                                                                                                                     |
| <b>S913:</b>  | Digital super woofer switch<br>(DIGITAL S.WOOFER)                                                                                                                                                                  |
| <b>S914:</b>  | RDS display mode PS switch<br>(RDS DISP MODE-PS)                                                                                                                                                                   |
| <b>S915:</b>  | RDS display mode PTY switch<br>(RDS DISP MODE-PTY)                                                                                                                                                                 |
| <b>VR901:</b> | Volume control VR (VOLUME)                                                                                                                                                                                         |

- 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 (FM or AM)

- Important safety notice:

Components identified by  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 |
|  | : AM signal line        |
|  | : AM OSC signal line    |
|  | : FM signal line        |
|  | : FM OSC signal line    |
|  | : Audio 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.

# 9 Schematic Diagram

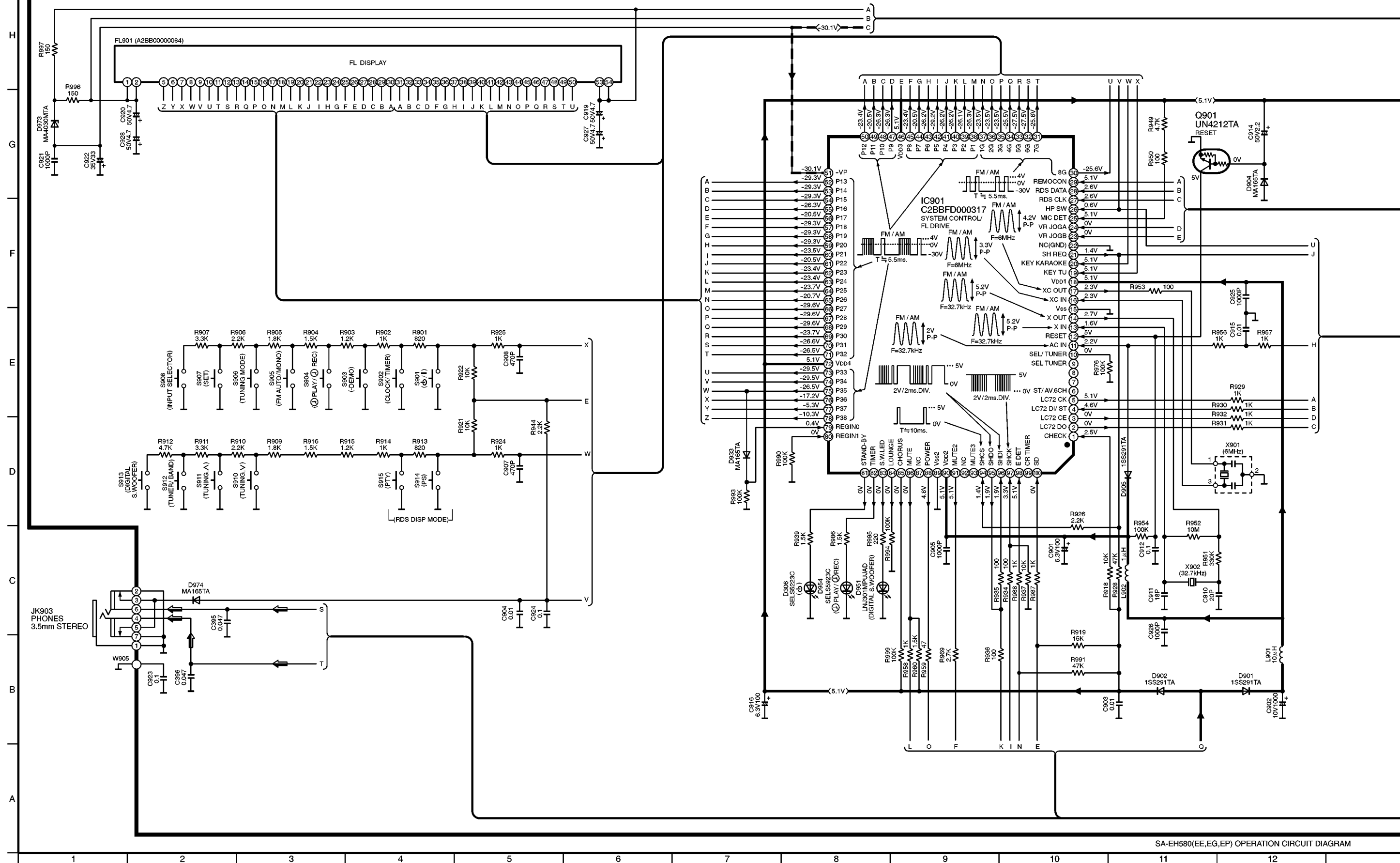
## SCHEMATIC DIAGRAM-1

### A OPERATION 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.

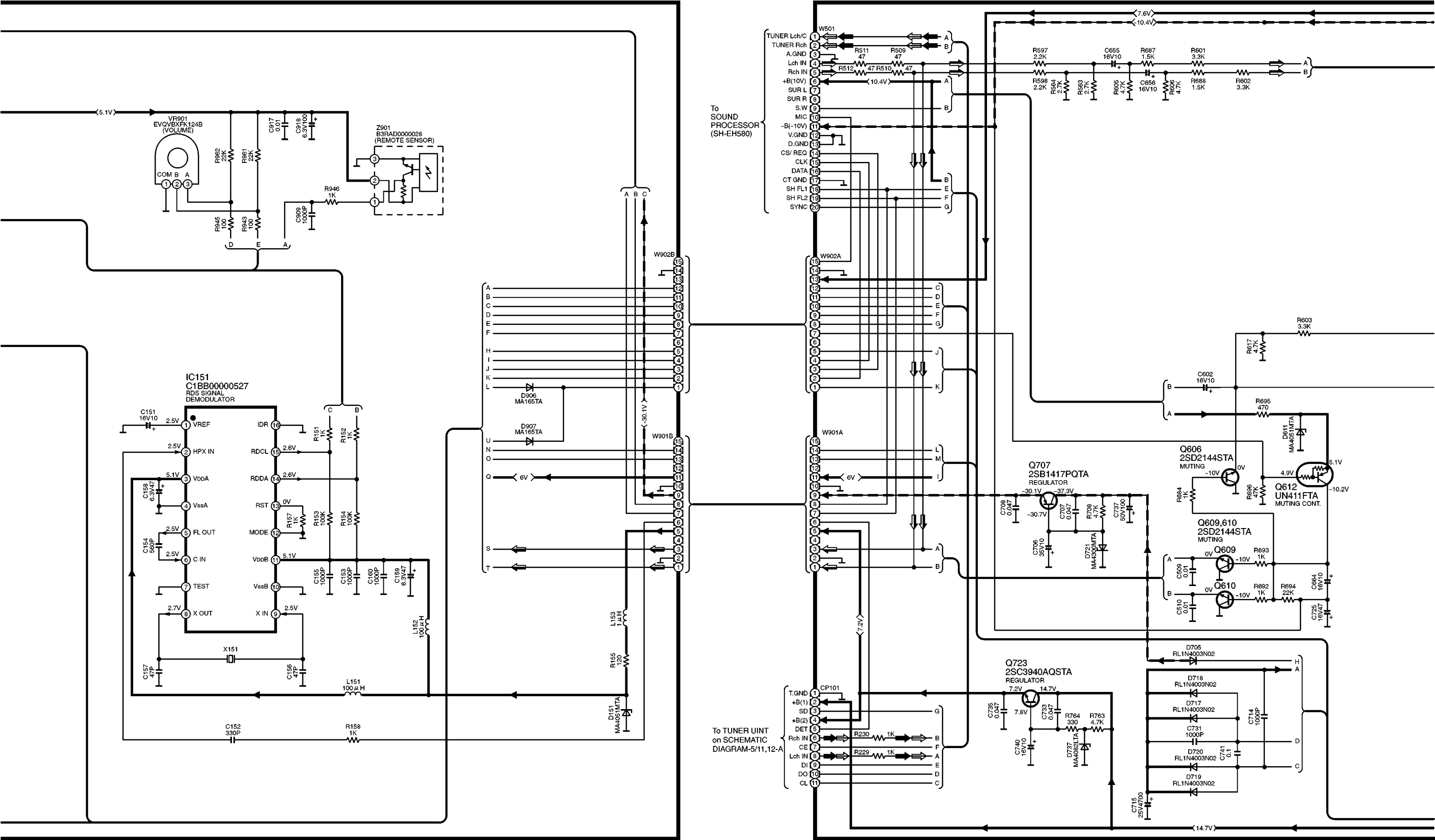
→ : POSITIVE VOLTAGE LINE    → : NEGATIVE VOLTAGE LINE    → : AUDIO SIGNAL LINE



SCHEMATIC DIAGRAM-2  
A OPERATION CIRCUIT

→ : POSITIVE VOLTAGE LINE    ⇨ : FM SIGNAL LINE  
- - - : NEGATIVE VOLTAGE LINE    ⇨ : AM SIGNAL LINE    ⇨ : AUDIO SIGNAL LINE

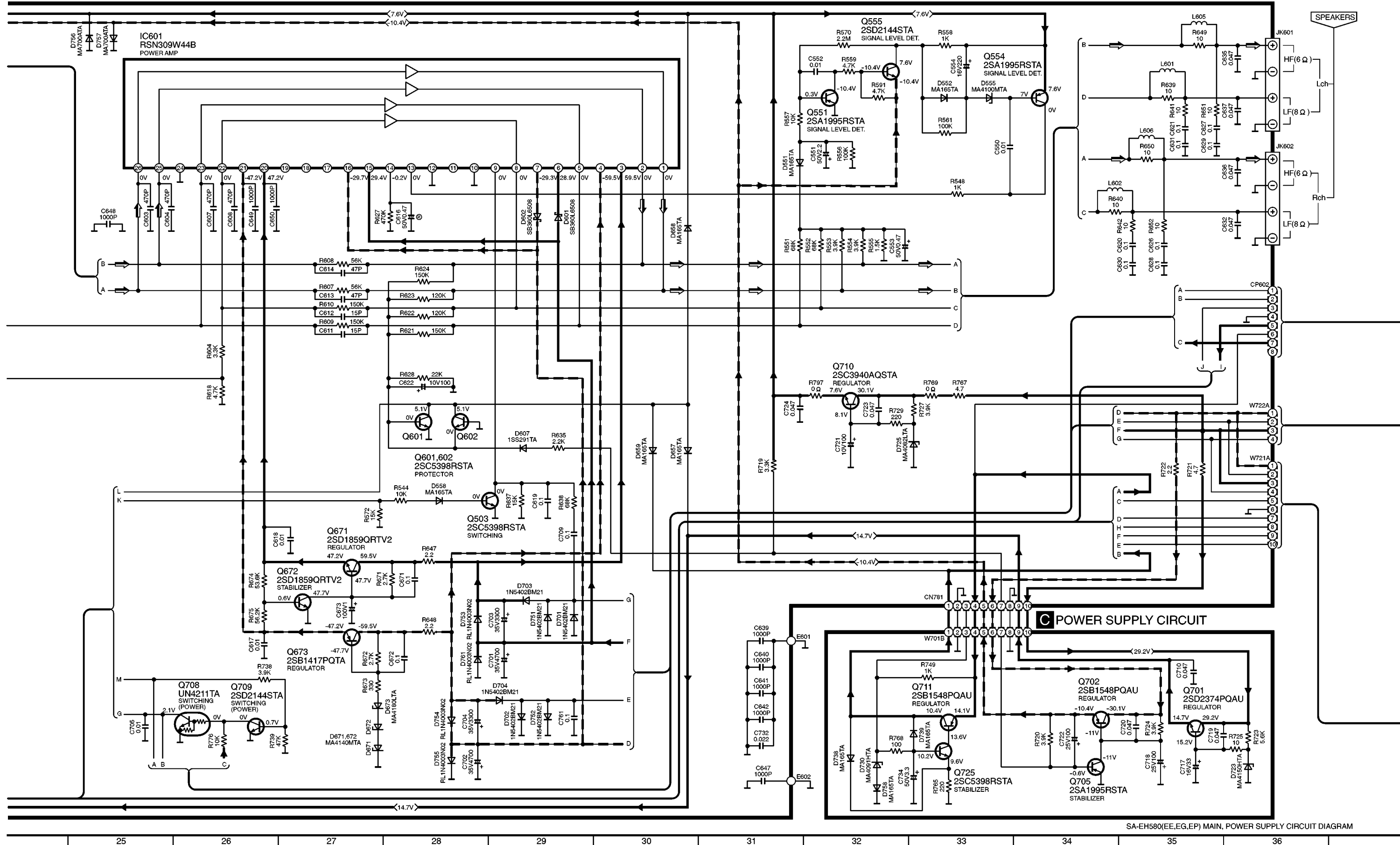
B MAIN CIRCUIT



SCHEMATIC DIAGRAM-3

**B MAIN CIRCUIT**

→ : POSITIVE VOLTAGE LINE    → - - : NEGATIVE VOLTAGE LINE    → : AUDIO SIGNAL LINE

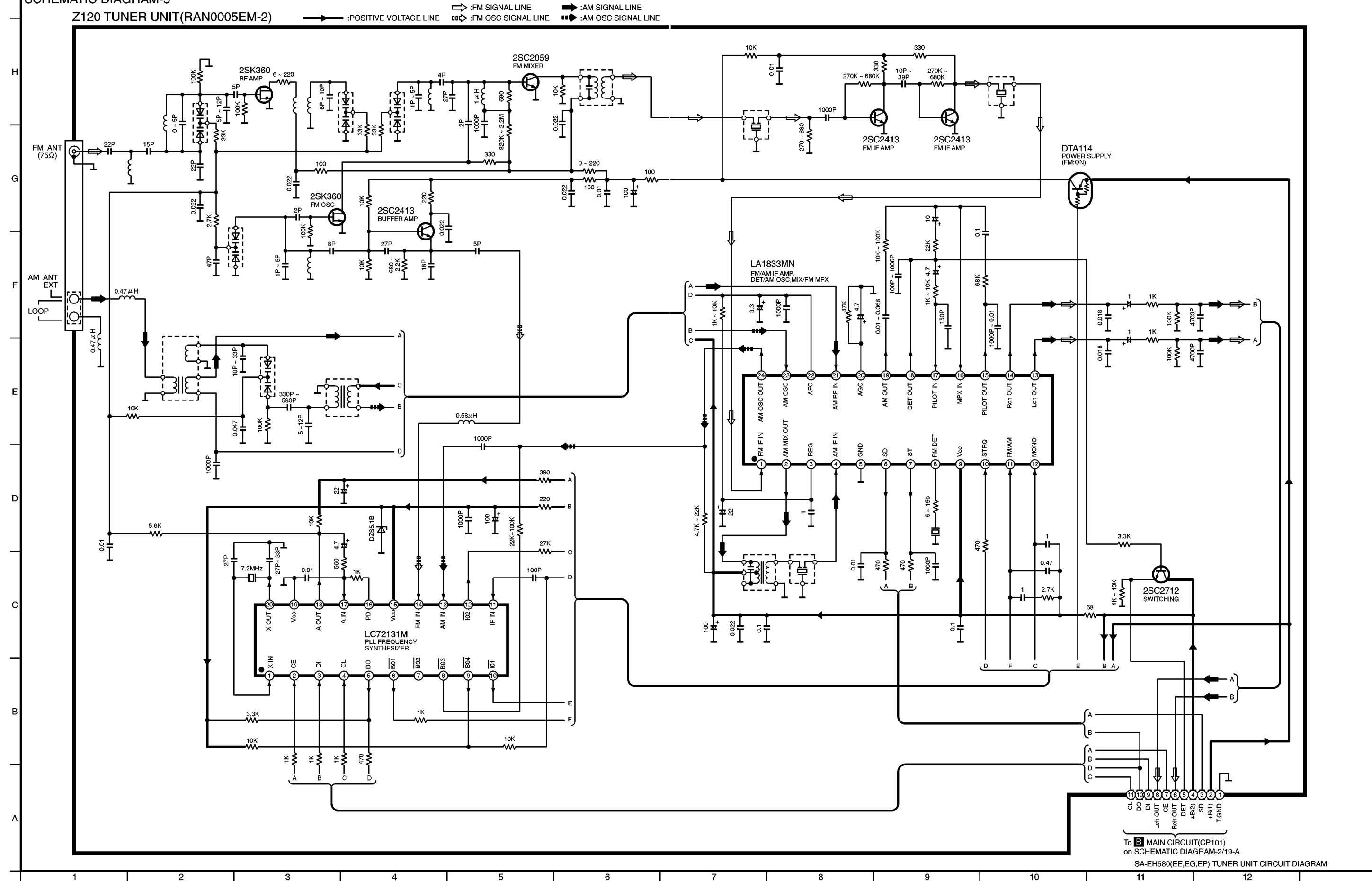


SA-EH580(E,E,G,EP) MAIN, POWER SUPPLY CIRCUIT DIAGRAM



## SCHEMATIC DIAGRAM-5

## Z120 TUNER UNIT(RAN0005EM-2)

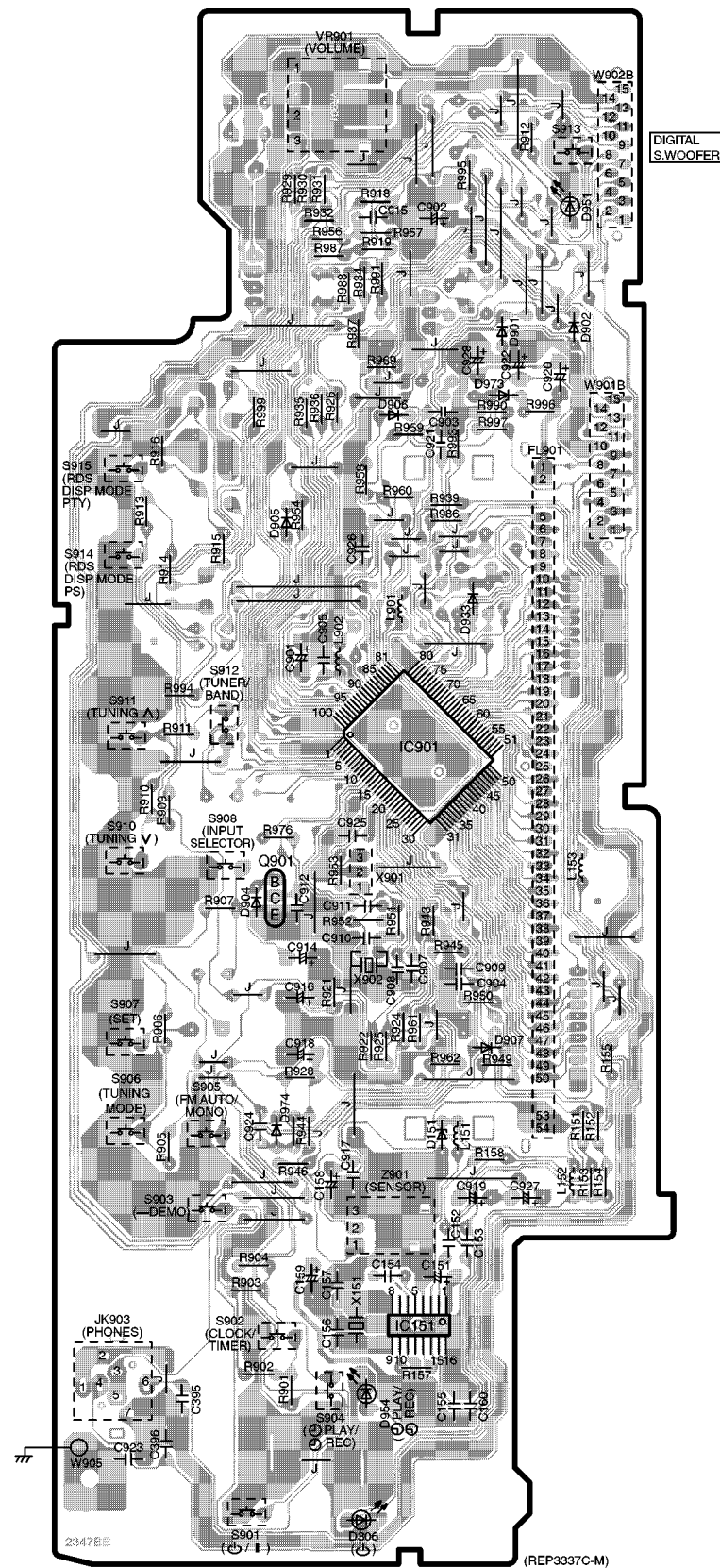




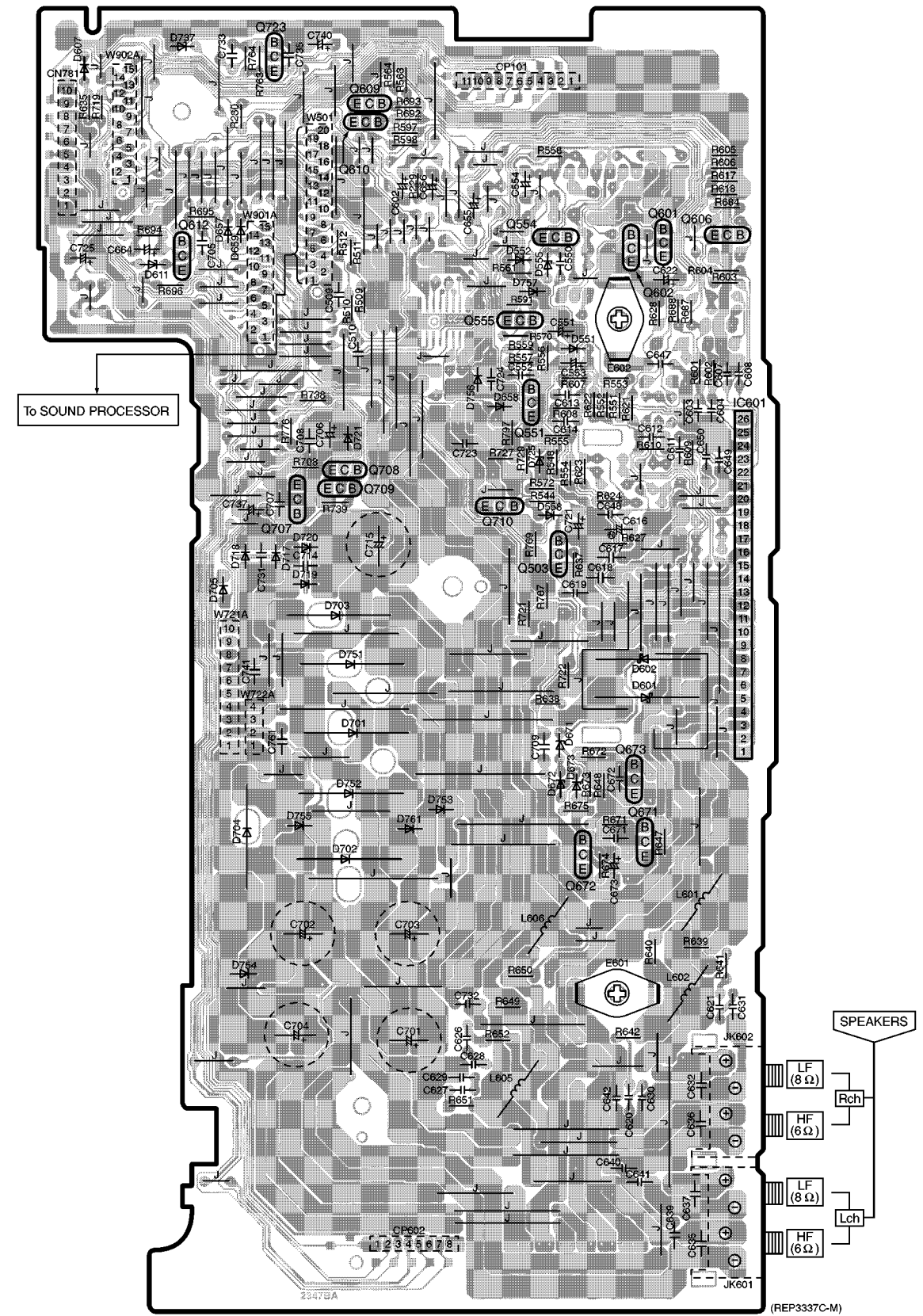
## 10 Printed Circuit Board Diagram

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

## A OPERATION P.C.B.

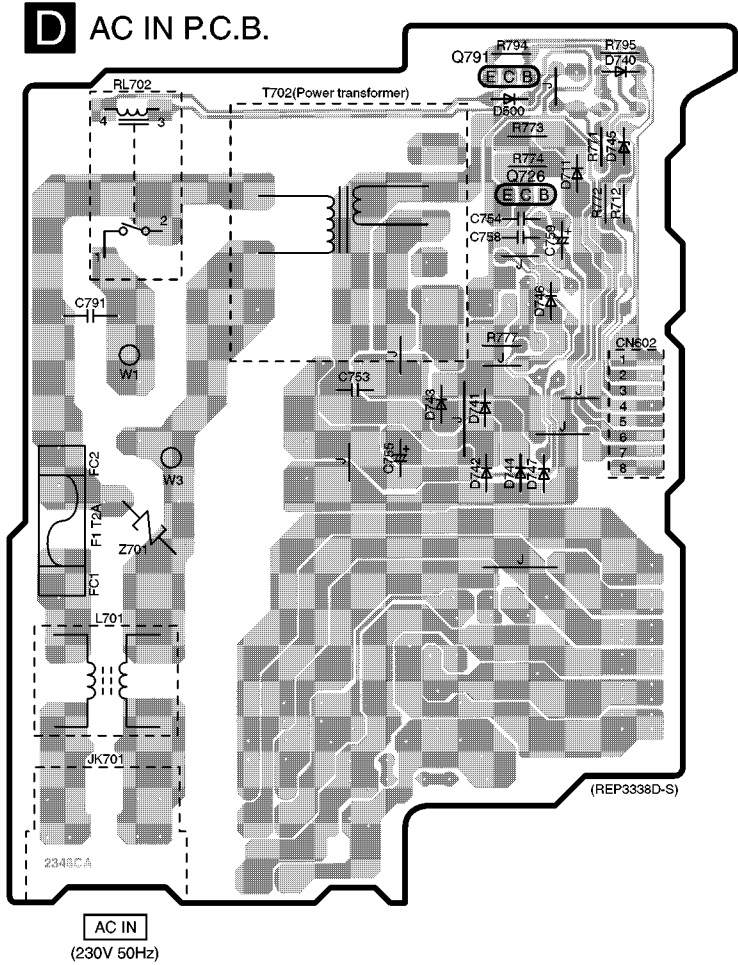


**B** MAIN P.C.B.

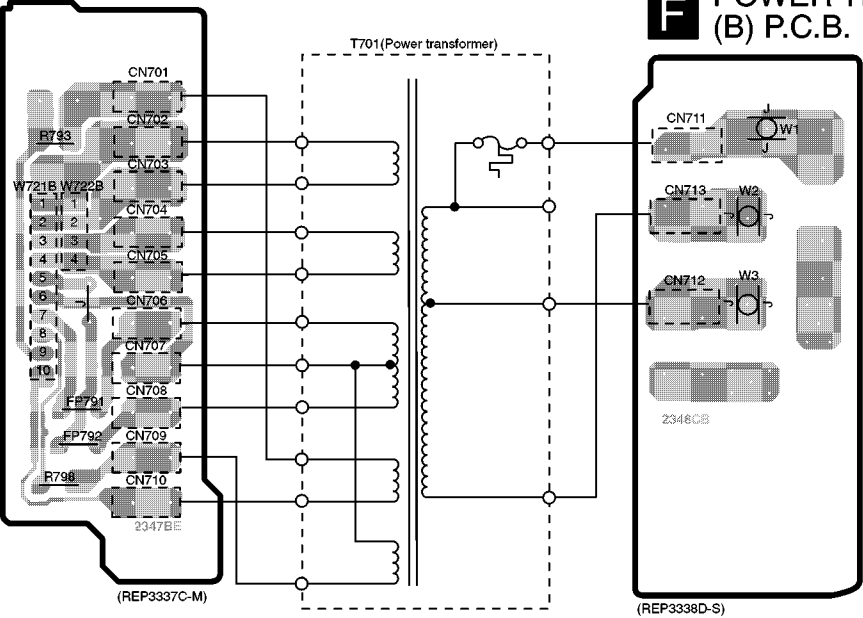


Note: This printed circuit board diagram may be modified at any time with the development of new technology.

H  
G  
F  
E  
D  
C  
B  
A

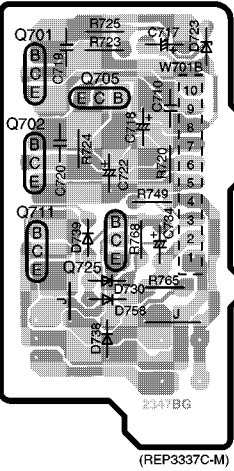


**E** POWER TRANSFORMER  
(A) P.C.B.

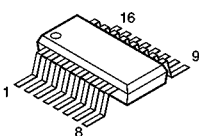
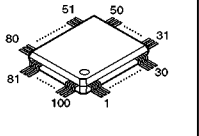
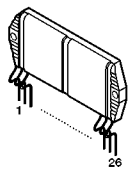
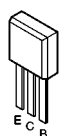
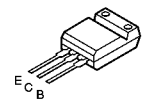
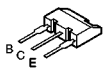
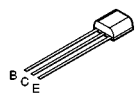
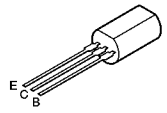
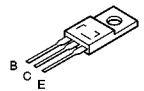
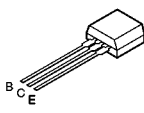
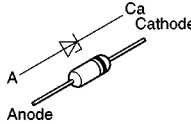
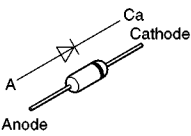
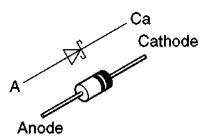
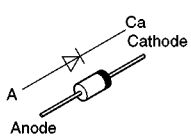
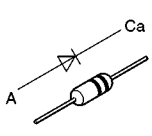
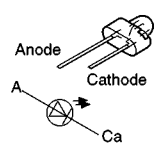
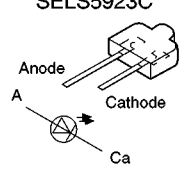
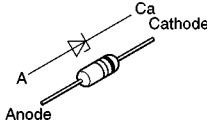


**F** POWER TRANSFORMER  
(B) P.C.B.

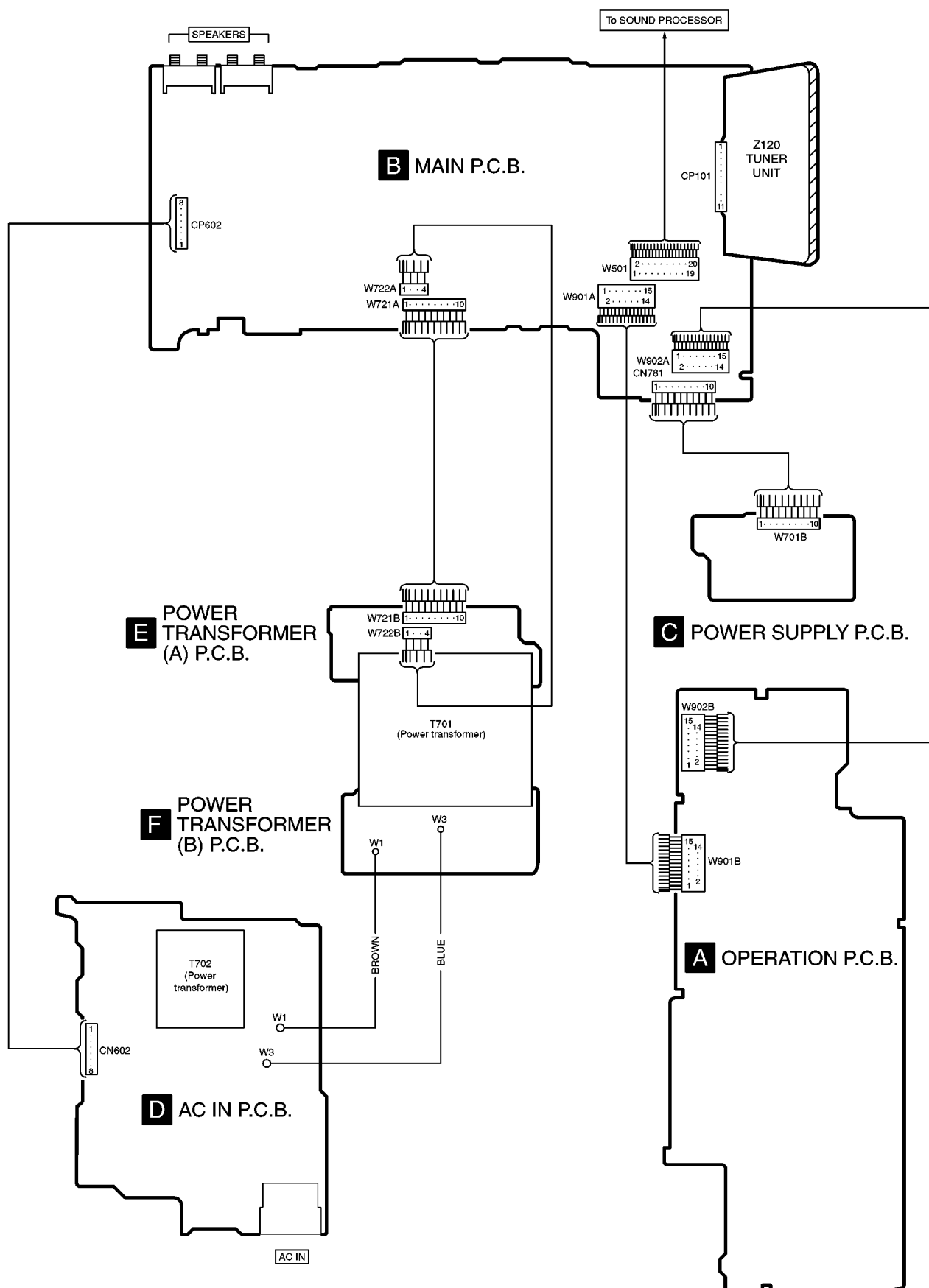
**C** POWER SUPPLY P.C.B.



# 11 Type Illustration of ICs, Transistors and Diodes

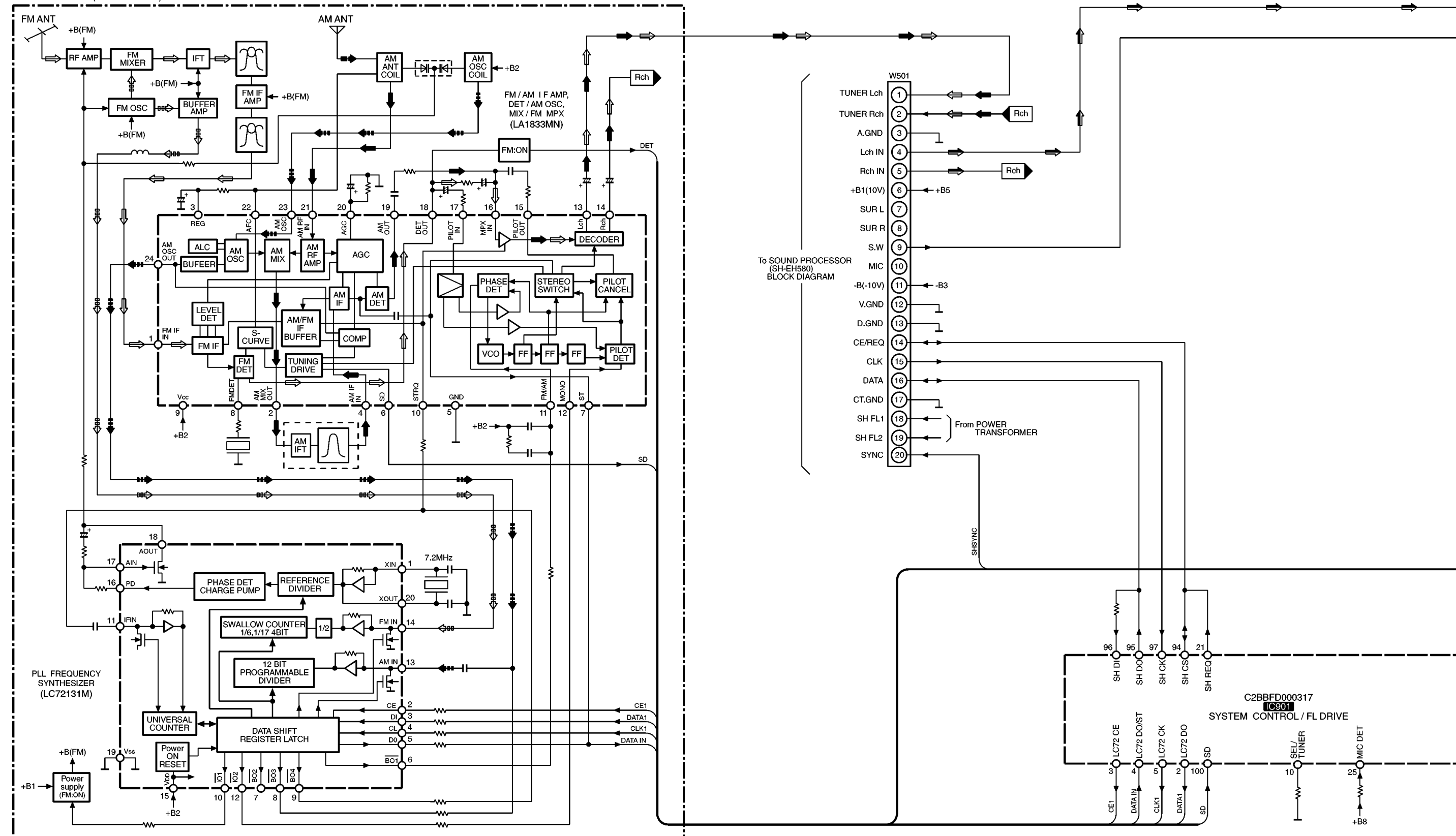
|                                                                                                                                                                                        |                                                                                                          |                                                                                                                               |                                                                                                                                             |                                                                                                                                                                                         |                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>C1BB00000527</b><br>                                                                               | <b>C2BBFD000317</b><br> | <b>RSN309W44B</b><br>                        | <b>UN411FTA</b><br><b>UN4211TA</b><br><b>UN4212TA</b><br> | <b>2SB1417PQTA</b><br>                                                                               | <b>2SD1859QRTV2</b><br>                  |
| <b>2SA1995RSTA</b><br><b>2SC5398RSTA</b><br>                                                          | <b>2SC3940AQSTA</b><br> | <b>2SB1548PQAU</b><br><b>2SD2374PQAU</b><br> | <b>2SD2144STA</b><br>                                     | <br><b>MA4100MTA</b><br><b>MA4140MTA</b><br><b>MA4150HTA</b><br><b>MA4180LTA</b><br><b>MA4300MTA</b> |                                                                                                                             |
| <b>MA165TA</b><br>                                                                                    | <b>SB360L6508</b><br>   | <b>RL1N4003N02</b><br><b>1N5402BM21</b><br>  | <b>1SS291TA</b><br><b>MA700ATA</b><br>                    | <b>LNJ301MPUJAD</b><br>                                                                              | <b>SELS5223C</b><br><b>SELS5923C</b><br> |
| <br><b>MA4030MTA</b><br><b>MA4051MTA</b><br><b>MA4068LTA</b><br><b>MA4082LTA</b><br><b>MA4091HTA</b> |                                                                                                          |                                                                                                                               |                                                                                                                                             |                                                                                                                                                                                         |                                                                                                                             |

# 12 Wiring Connection Diagram

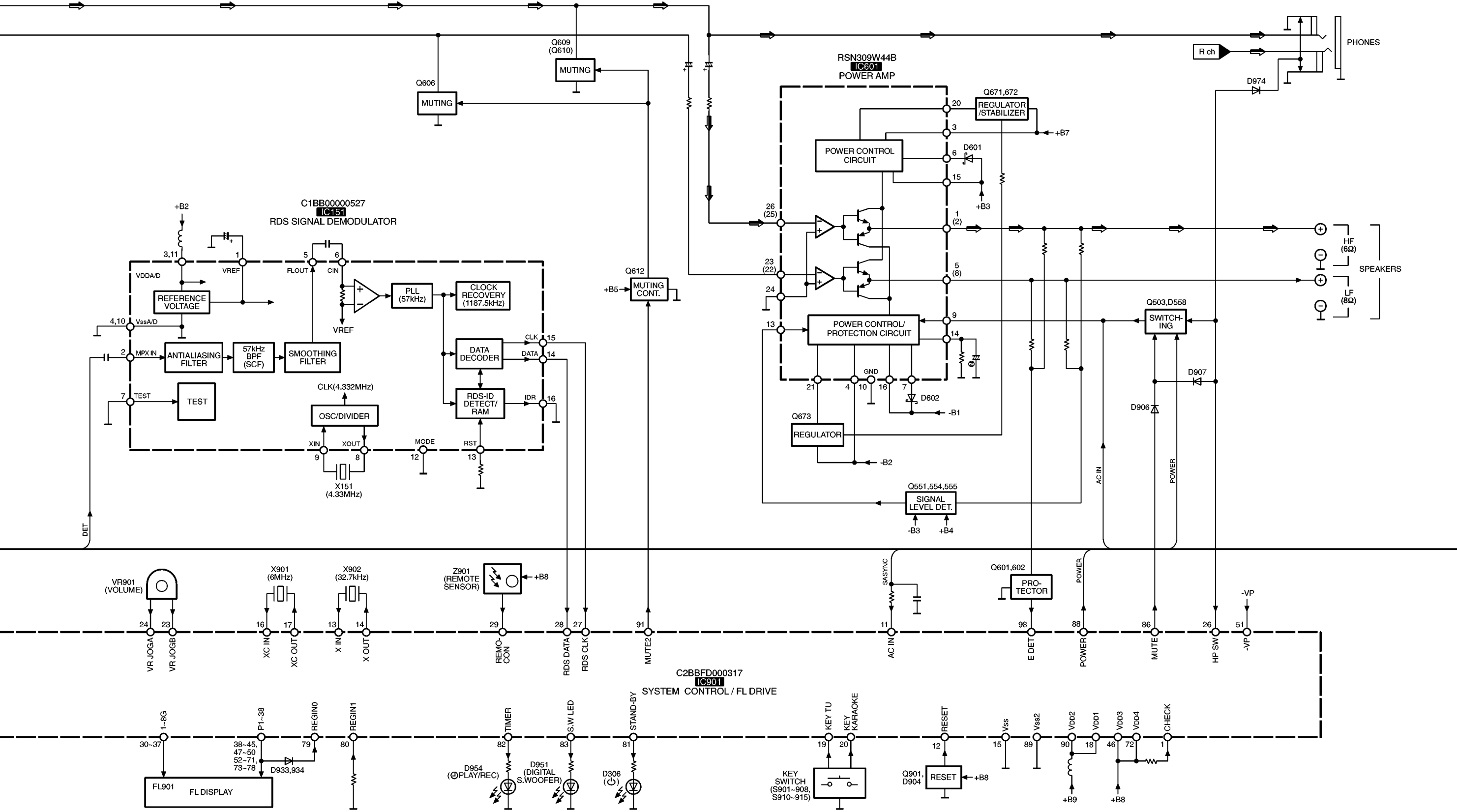


# 13 Block Diagram

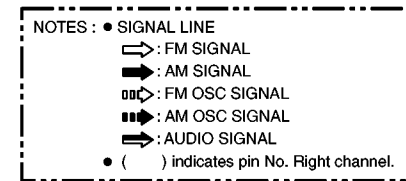
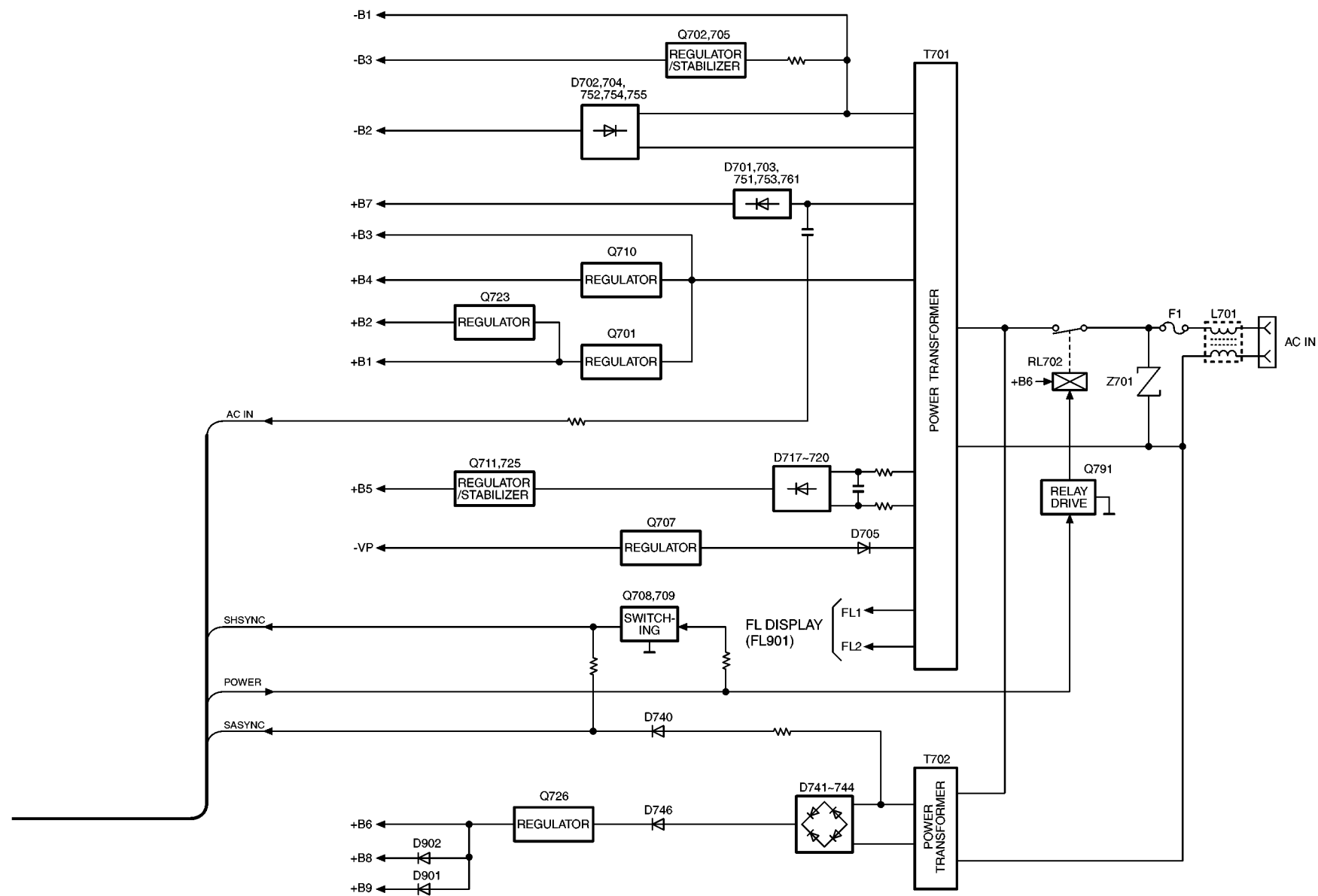
Z120 TUNER UNIT (RAN0005EM-2)



SA-EH580(E,E,G,EP) BLOCK DIAGRAM



SA-EH580(EE,EG,EP) BLOCK DIAGRAM





## 14 Terminal Function of ICs

### 14.1. IC901 (C2BBFD000317): System Control/FL Drive

| Pin No.       | Terminal Name     | I/O | Function                                                                            |
|---------------|-------------------|-----|-------------------------------------------------------------------------------------|
| 1             | CHECK             | I   | Clock check signal input                                                            |
| 2             | LC72 DI           | O   | PLL data signal output for tuner unit (Z120)                                        |
| 3             | LC72 CE           | O   | Chip enable signal output for tuner unit (Z120)                                     |
| 4             | LC72 DI/ST        | I   | IF count data/stereo detect signal input from tuner unit (Z120)                     |
| 5             | LC72 CK           | O   | Clock signal output for tuner unit (Z120)                                           |
| 6             | ST/AV. 6CH        | -   | Not used, open                                                                      |
| 7             | NC                | -   | Not used, open                                                                      |
| 8             |                   |     |                                                                                     |
| 9             | SEL TUNER         | -   | Not used, open                                                                      |
| 10            | SEL/ TUNER        | -   | Not used, connected to GND                                                          |
| 11            | AC IN             | I   | Power failure detect signal input                                                   |
| 12            | RESET             | I   | Reset signal input                                                                  |
| 13            | X IN              | I   | Oscillator connected terminal (32.7 kHz)                                            |
| 14            | X OUT             | O   |                                                                                     |
| 15            | V <sub>SS</sub>   | -   | GND terminal                                                                        |
| 16            | XC IN             | I   | Oscillator connected terminal (6 MHz)                                               |
| 17            | XC OUT            | O   |                                                                                     |
| 18            | V <sub>DD</sub> 1 | I   | Power supply terminal                                                               |
| 19            | KEY TU            | I   | Operation key signal input                                                          |
| 20            | KEY KARAOKE       | I   | Operation key signal input                                                          |
| 21            | SH REQ            | O   | Request signal output for Sound Processor                                           |
| 22            | NC(GND)           | -   | Not used, connected to GND                                                          |
| 23            | VR JOGB           | I   | Volume control signal input                                                         |
| 24            | VR JOGA           | I   |                                                                                     |
| 25            | MIC DET           | I   | Microphone connecting detect signal input (Not used, connected to V <sub>DD</sub> ) |
| 26            | HP SW             | I   | Headphone connecting detect signal input                                            |
| 27            | RDS CLK           | I   | RDS clock signal input                                                              |
| 28            | RDS DATA          | I   | RDS data signal input                                                               |
| 29            | REMO CON          | I   | Remote control signal input                                                         |
| 30<br> <br>37 | 8G<br> <br>1G     | O   | Grid signal output                                                                  |
| 38<br> <br>45 | P1<br> <br>P8     | O   | Segment signal output                                                               |
| 46            | V <sub>DD</sub> 3 | I   | Power supply terminal                                                               |
| 47<br> <br>50 | P9<br> <br>P12    | O   | Segment signal output                                                               |
| 51            | -VP               | I   | Power supply terminal (Negative)                                                    |
| 52<br> <br>71 | P13<br> <br>P32   | O   | Segment signal output                                                               |
| 72            | V <sub>DD</sub> 4 | I   | Power supply terminal                                                               |
| 73<br> <br>78 | P33<br> <br>P38   | O   | Segment signal output                                                               |
| 79            | REGIN0            | -   | Not used, connected to GND                                                          |
| 80            | REGIN1            | -   |                                                                                     |
| 81            | STANDBY           | O   | LED (STANDBY) drive signal output                                                   |
| 82            | TIMER             | O   | LED (TIMER) drive signal output                                                     |
| 83            | S.W.LED           | O   | LED (DIGITAL S.WOOFER) drive signal output                                          |
| 84            | LOUNGE            | -   | LED (LOUNGE) drive signal output (Not used, connected to GND)                       |

| Pin No. | Terminal Name     | I/O | Function                                                                   |
|---------|-------------------|-----|----------------------------------------------------------------------------|
| 85      | CHORUS            | -   | LED (CHORUS) drive signal output (Not used, connected to V <sub>DD</sub> ) |
| 86      | MUTE              | O   | Muting signal output                                                       |
| 87      | NC                | -   | Not used, open                                                             |
| 88      | POWER             | O   | Power control signal output                                                |
| 89      | V <sub>SS</sub> 2 | -   | GND terminal                                                               |
| 90      | V <sub>DD</sub> 2 | I   | Power supply terminal                                                      |
| 91      | MUTE2             | O   | Muting signal output                                                       |
| 92      | NC                | -   | Not used, open                                                             |
| 93      | MUTE3             | O   | Muting signal output                                                       |
| 94      | SH CS             | I/O | Chip select signal input/output for Sound Processor                        |
| 95      | SH DO             | O   | Serial communication signal to Sound Processor (Data signal output)        |
| 96      | SH DI             | I   | Serial communication signal to Sound Processor (Data signal input)         |
| 97      | SH CK             | I   | Serial communication signal to Sound Processor (Clock signal input)        |
| 98      | E DET             | I   | Unusual condition detect signal input                                      |
| 99      | CR TIMER          | -   | Not used, open                                                             |
| 100     | SD                | I   | Station detector signal input from tuner unit (Z120)                       |

# 15 Replacement Parts List

## Notes:

- Important safety notice:

Components identified by  $\Delta$  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 manufacture's specified parts shown in the parts list.

- The <IA> <IB> <IC> marks in Remarks indicate language of instruction manual.

<IA>: German, Italian, French, Netherlands, Danish, Swedish

<IB>: English

<IC>: Russian, Polish, Czech

- The parenthesized indications in the Remarks columns specify the areas.

(EE): SA-EH580EE

(EG): SA-EH580EG

(EP): SA-EH580EP

- The marking [RTL] indicates the 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 MESA.

| Ref. No. | Part No.     | Part Name & Description     | Pcs | Remarks      |
|----------|--------------|-----------------------------|-----|--------------|
| 1        | RKM0395F-1S  | CABINET                     | 1   |              |
| 2        | RHD30007-1S  | SCREW                       | 4   |              |
| 3        | XTBS3+10JFZ1 | SCREW                       | 1   |              |
| 4        | REX0967      | SYSTEM CONNECT. ASS`Y (20P) | 1   |              |
| 5        | RMQ1018      | GASKET                      | 1   |              |
| 6        | RGW0386-S    | KNOB, VOLUME                | 1   |              |
| 7        | RHN90001     | NUT                         | 1   |              |
| 8        | RKA0106-N    | FOOT RING                   | 4   |              |
| 9        | RKF0606V-K   | BACK COVER                  | 1   |              |
| 10       | RKW0581-1V   | FL WINDOW                   | 1   |              |
| 11       | RMN0427A     | CABLE HOLDER                | 1   |              |
| 12       | RYP1089-N    | FRONT PANEL UNIT            | 1   |              |
| 12-1     | RGB0025-A    | TECHNICS BADGE              | 1   |              |
| 13       | SHG1654      | RUBBER                      | 4   |              |
| 14       | XTB3+10JFZ   | SCREW                       | 9   |              |
| 15       | XTB3+8JFZ    | SCREW                       | 11  |              |
| 16       | XTW3+15T     | SCREW                       | 2   |              |
| 17       | XTBS3+8JFZ1  | SCREW                       | 2   |              |
| 18       | RLBT4001-N   | FERRITE CORE                | 1   | J0KD00000028 |
| 19       | RMN0582      | HOLDER                      | 1   |              |
| 20       | XTB3+12FFZ   | SCREW                       | 1   |              |
| 21       | XTB3+20JFZ   | SCREW                       | 1   |              |
| 22       | RGN2215-K    | NAME PLATE                  | 1   | (EG)         |
| 22       | RGN2326-K    | NAME PLATE                  | 1   | (EE)         |
| A1       | EUR7702070   | REMOTE CONTROL UNIT         | 1   |              |
| A1-1     | UR64EC2337E  | BATT. COVER                 | 1   |              |
| A2       | REE0853      | SP CORD (GLAY/BLUE)         | 2   |              |
| A3       | REE1057      | SP CORD (RED/BLUCK)         | 2   |              |
| A4       | RSA0022-L    | AM LOOP ANTENNA             | 1   | N1DAEYA00008 |
| A5       | RJA0019-2X   | AC POWER SUPPLY CORD        | 1   | $\Delta$     |
| A6       | RQCA0801     | DEMO GUIDE                  | 1   |              |
| A7       | RQCB0169     | SERVICE CENTER LIST         | 1   |              |
| A8       | RQT6299-D    | OPERATING INSTRUCTIONS      | 1   | <IA> (EG)    |

| Ref. No. | Part No.     | Part Name & Description | Pcs | Remarks        |
|----------|--------------|-------------------------|-----|----------------|
| A8       | RQT6301-B    | OPERATING INSTRUCTIONS  | 1   | <IB> (EE) (EP) |
| A8       | RQT6302-R    | OPERATING INSTRUCTIONS  | 1   | <IC> (EP)      |
| A9       | RSA0007      | FM INDOOR ANTENNA       | 1   | N1EAYY000002   |
| C151     | ECA1CAK100XB | 16V 10U                 | 1   |                |
| C152     | ECBT1H331KB5 | 50V 330P                | 1   | F1D1H331A012   |
| C153     | ECBA1H102KB5 | 50V 1000P               | 1   |                |
| C154     | ECBT1H561KB5 | 50V 560P                | 1   | F1D1H561A012   |
| C155     | ECBA1H102KB5 | 50V 1000P               | 1   |                |
| C156, 57 | ECBT1H470J5  | 50V 47P                 | 2   | ECBT1H470J3    |
| C158, 59 | RCE0JKA470BG | 6.3V 47U                | 2   | F2A0J470A014   |
| C160     | ECBA1H102KB5 | 50V 1000P               | 1   |                |
| C395, 96 | ECBT1H473KB5 | 50V 0.047U              | 2   | F1D1H473A012   |
| C509, 10 | ECBT1H103KB5 | 50V 0.01U               | 2   |                |
| C550     | ECBT1H103KB5 | 50V 0.01U               | 1   |                |
| C551     | ECA1HAK2R2XB | 50V 2.2U                | 1   |                |
| C552     | ECBT1H103KB5 | 50V 0.01U               | 1   |                |
| C553     | RCE1HKA47BG  | 50V 0.47U               | 1   | F2A1HR47A015   |
| C554     | ECA1CAM221XB | 16V 220U                | 1   |                |
| C602     | ECA1CAK100XB | 16V 10U                 | 1   |                |
| C603, 04 | ECBT1H471KB5 | 50V 470P                | 2   | F1D1H471A012   |
| C607, 08 | ECBT1H471KB5 | 50V 470P                | 2   | F1D1H471A012   |
| C611, 12 | ECBT1H150JC5 | 50V 15P                 | 2   | ECBT1H150JC3   |
| C613, 14 | ECBT1H470J5  | 50V 47P                 | 2   | ECBT1H470J3    |
| C616     | ECEA1HKNR47B | 50V 0.47U               | 1   |                |
| C617, 18 | ECR2H103ZU   | 100V 0.01U              | 2   |                |
| C619-21  | ECBT1H104KB5 | 50V 0.1U                | 3   | F1D1H1040002   |
| C622     | RCE1AKA101BG | 10V 100U                | 1   | F2A1A1010020   |
| C626-31  | ECBT1H104KB5 | 50V 0.1U                | 6   | F1D1H1040002   |
| C632     | ECBT1H473KB5 | 50V 0.047U              | 1   | F1D1H473A012   |
| C635-37  | ECBT1H473KB5 | 50V 0.047U              | 3   | F1D1H473A012   |
| C639-42  | ECBA1H102KB5 | 50V 1000P               | 4   |                |
| C647-50  | ECBA1H102KB5 | 50V 1000P               | 4   |                |
| C655, 56 | ECA1CAK100XB | 16V 10U                 | 2   |                |
| C664     | ECA1CAK100XB | 16V 10U                 | 1   |                |
| C671, 72 | ECBT1H104KB5 | 50V 0.1U                | 2   | F1D1H1040002   |
| C673     | ECA2AM010    | 100V 1U                 | 1   |                |
| C701, 02 | F2B1V4720004 | 35V 4700U               | 2   |                |
| C703, 04 | ECA1VM332    | 35V 3300U               | 2   |                |
| C705     | ECBT1H103KB5 | 50V 0.01U               | 1   |                |
| C706     | RCE1VKA100BG | 35V 10U                 | 1   | F2A1V1000011   |
| C707, 08 | ECBT1H473KB5 | 50V 0.047U              | 2   | F1D1H473A012   |
| C709     | ECQV1H104JM3 | 50V 0.1U                | 1   |                |
| C710     | ECBT1H473KB5 | 50V 0.047U              | 1   | F1D1H473A012   |
| C714     | ECBA1H102KB5 | 50V 1000P               | 1   |                |
| C715     | ECA1EAM472XE | 25V 4700U               | 1   |                |
| C717     | ECA1CAK330XB | 16V 33U                 | 1   |                |
| C718     | ECA1EAM101XB | 25V 100U                | 1   |                |
| C719, 20 | ECBT1H473KB5 | 50V 0.047U              | 2   | F1D1H473A012   |
| C721     | RCE1AKA101BG | 10V 100U                | 1   | F2A1A1010020   |
| C722     | ECA1EAM101XB | 25V 100U                | 1   |                |
| C723, 24 | ECBT1H473KB5 | 50V 0.047U              | 2   | F1D1H473A012   |
| C725     | ECA1CAK470XB | 16V 47U                 | 1   |                |
| C731     | ECBA1H102KB5 | 50V 1000P               | 1   |                |
| C732     | ECBT1H223KB5 | 50V 0.022U              | 1   | F1D1H223A012   |
| C733     | ECBT1H473KB5 | 50V 0.047U              | 1   | F1D1H473A012   |
| C734     | RCE1HKA3R3BG | 50V 3.3U                | 1   | F2A1H3R3A015   |
| C735     | ECBT1H473KB5 | 50V 0.047U              | 1   | F1D1H473A012   |
| C737     | ECA1HAM101XB | 50V 100U                | 1   |                |
| C740     | ECA1CAK100XB | 16V 10U                 | 1   |                |
| C741     | ECQE1104KF3  | 100V 0.1U               | 1   |                |
| C753     | ECKR1H103ZF5 | 50V 0.01U               | 1   | F1B1H1030001   |
| C754     | ECBT1H103KB5 | 50V 0.01U               | 1   |                |
| C755     | ECA1CAM102X  | 16V 1000U               | 1   | ECA1CAM102XB   |
| C758     | ECBT1H103KB5 | 50V 0.01U               | 1   |                |
| C759     | RCE1AKA470BG | 10V 47U                 | 1   | F2A1A470A011   |
| C761     | ECQE1104KF3  | 100V 0.1U               | 1   |                |
| C791     | ECKWRS102MBC | 1000P                   | 1   | $\Delta$       |
| C901     | EEAF0C0J101B | 6.3V 100U               | 1   |                |

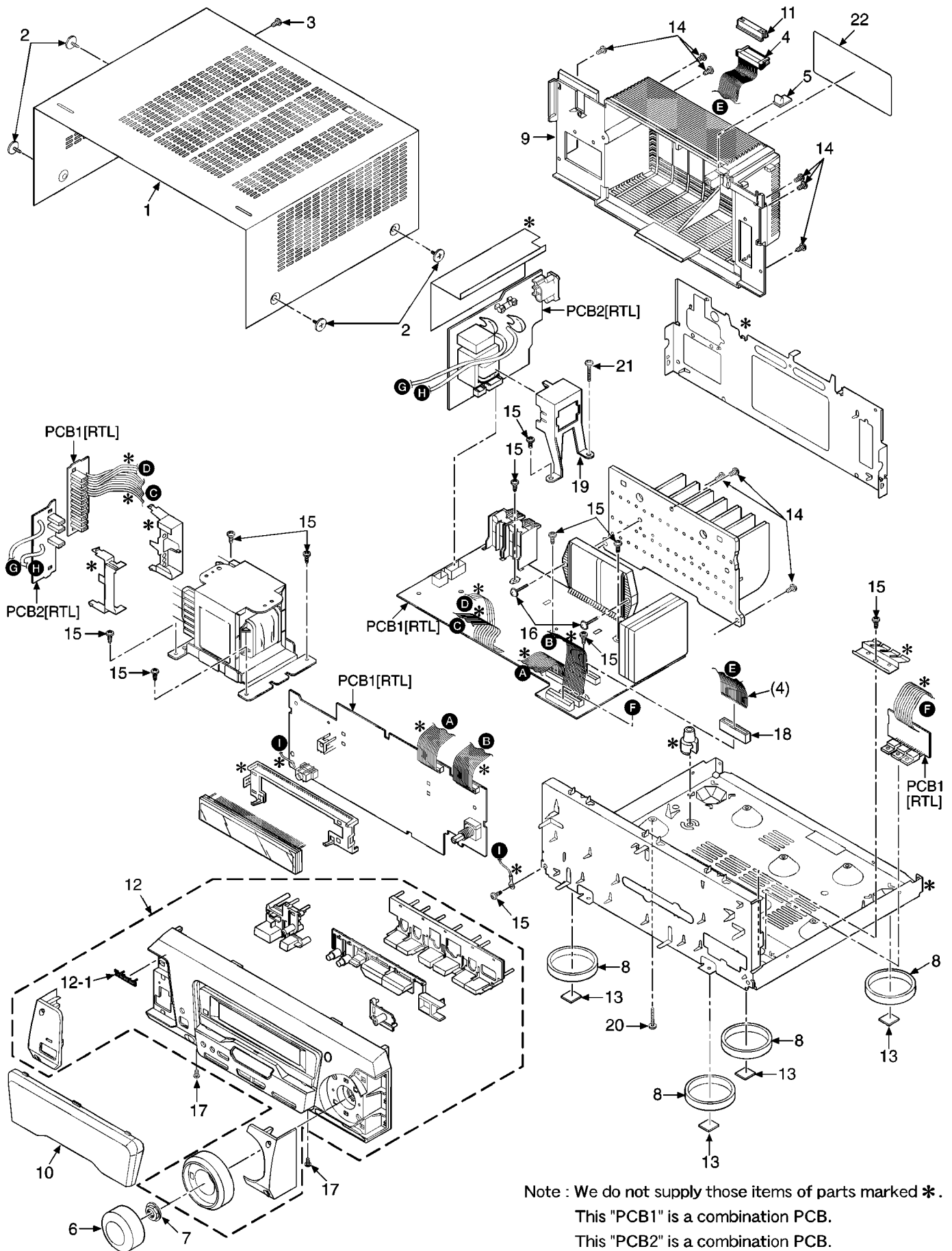
| Ref. No. | Part No.     | Part Name & Description | Pcs | Remarks           |
|----------|--------------|-------------------------|-----|-------------------|
| C902     | F2A1A102A018 | 10V 1000U               | 1   |                   |
| C903,04  | ECBT1H103KB5 | 50V 0.01U               | 2   |                   |
| C905     | ECBA1H102KB5 | 50V 1000P               | 1   |                   |
| C907,08  | ECBT1H471KB5 | 50V 470P                | 2   | F1D1H471A012      |
| C909     | ECBA1H102KB5 | 50V 1000P               | 1   |                   |
| C910     | ECBT1H200JC5 | 50V 20P                 | 1   | F1D1H200A015      |
| C911     | ECBA1H180J5  | 50V 18P                 | 1   | F1D1H180A006      |
| C912     | ECBT1H104KB5 | 50V 0.1U                | 1   | F1D1H1040002      |
| C914     | ECA1HAK2R2XB | 50V 2.2U                | 1   |                   |
| C915     | ECBT1H103KB5 | 50V 0.01U               | 1   |                   |
| C916     | EEAFC0J101B  | 6.3V 100U               | 1   |                   |
| C917     | ECBT1H103KB5 | 50V 0.01U               | 1   |                   |
| C918     | ECA0JAK101XB | 6.3V 100U               | 1   |                   |
| C919,20  | RCE1HKA4R7BG | 50V 4.7U                | 2   | F2A1H4R70009      |
| C921     | ECBA1H102KB5 | 50V 1000P               | 1   |                   |
| C922     | ECA1VAK330XB | 35V 33U                 | 1   |                   |
| C923,24  | ECBT1H104KB5 | 50V 0.1U                | 2   | F1D1H1040002      |
| C925,26  | ECBA1H102KB5 | 50V 1000P               | 2   |                   |
| C927,28  | RCE1HKA4R7BG | 50V 4.7U                | 2   | F2A1H4R70009      |
| CN602    | RJU057W008   | CONNECTOR (8P)          | 1   | K1KB08B00034      |
| CN701-13 | RJS1A1101T1  | CONNECTOR (1P)          | 13  |                   |
| CN781    | RJS10T5ZA    | CONNECTOR (10P)         | 1   | K1MP10A00007      |
| CP101    | RJT100W11    | CONNECTOR (11P)         | 1   | K1KA11A00093      |
| CP602    | RJT057W008-1 | CONNECTOR (8P)          | 1   | K1KA08A00187      |
| D151     | MA4051M      | DIODE                   | 1   | MAZ40510M         |
| D306     | SELS5223C    | LED                     | 1   | B3AAA0000486      |
| D500     | MA165        | DIODE                   | 1   | MA2C165           |
| D551,52  | MA165        | DIODE                   | 2   | MA2C165           |
| D555     | MA4100M      | DIODE                   | 1   | MAZ41000MF        |
| D558     | MA165        | DIODE                   | 1   | MA2C165           |
| D601,02  | SB360L6508   | DIODE                   | 2   | B0JAPG000014      |
| D607     | 1SS291TA     | DIODE                   | 1   |                   |
| D611     | MA4051M      | DIODE                   | 1   | MAZ40510M         |
| D657-59  | MA165        | DIODE                   | 3   | MA2C165           |
| D671,72  | MA4140M      | DIODE                   | 2   | MAZ41400M         |
| D673     | MA4180L      | DIODE                   | 1   | MAZ41800L         |
| D701-04  | 1N5402BF     | DIODE                   | 4   |                   |
| D705     | RL1N4003N02  | DIODE                   | 1   | B0AAMM000009      |
| D711     | RL1N4003N02  | DIODE                   | 1   | B0AAMM000009      |
| D717-20  | RL1N4003N02  | DIODE                   | 4   | B0AAMM000009      |
| D721     | MA4300M      | DIODE                   | 1   | MAZ43000M         |
| D723     | MA4150-M     | DIODE                   | 1   | MAZ41500M         |
| D725     | MA4082LTA    | DIODE                   | 1   | MAZ40820LF        |
| D730     | MA4091H      | DIODE                   | 1   | MAZ40910H         |
| D737     | MA4082LTA    | DIODE                   | 1   | MAZ40820LF        |
| D738-40  | MA165        | DIODE                   | 3   | MA2C165           |
| D741-44  | RL1N4003N02  | DIODE                   | 4   | B0AAMM000009      |
| D745     | MA4051M      | DIODE                   | 1   | MAZ40510M         |
| D746     | RL1N4003N02  | DIODE                   | 1   | B0AAMM000009      |
| D747     | MA4068L      | DIODE                   | 1   | MAZ40680L         |
| D751,52  | 1N5402BF     | DIODE                   | 2   |                   |
| D753-55  | RL1N4003N02  | DIODE                   | 3   | B0AAMM000009      |
| D756,57  | MA700        | DIODE                   | 2   | MA2C700           |
| D758     | MA165        | DIODE                   | 1   | MA2C165           |
| D761     | RL1N4003N02  | DIODE                   | 1   | B0AAMM000009      |
| D901,02  | 1SS291TA     | DIODE                   | 2   |                   |
| D904     | MA165        | DIODE                   | 1   | MA2C165           |
| D905     | 1SS291TA     | DIODE                   | 1   |                   |
| D906,07  | MA165        | DIODE                   | 2   | MA2C165           |
| D933     | MA165        | DIODE                   | 1   | MA2C165           |
| D951     | LNJ301MPUJAD | LED                     | 1   |                   |
| D954     | SELS5923C    | LED                     | 1   | B3ADA0000083      |
| D973     | MA4030M      | DIODE                   | 1   | MAZ40300M         |
| D974     | MA165        | DIODE                   | 1   | MA2C165           |
| F1       | XBA2C20TB0   | FUSE, T2A               | 1   | △<br>K5D202BL0004 |
| FL901    | A2BB00000084 | FL DISPLAY              | 1   |                   |

| Ref. No. | Part No.     | Part Name & Description | Pcs | Remarks           |
|----------|--------------|-------------------------|-----|-------------------|
| FP791,92 | K5G402AA0002 | FUSE PROTECTOR          | 2   |                   |
| IC151    | C1BB00000527 | IC                      | 1   |                   |
| IC601    | RSN309W44B   | IC                      | 1   |                   |
| IC901    | C2BBFD000317 | IC                      | 1   |                   |
| JK601,02 | K4BC04B00028 | JACK, SP                | 2   |                   |
| JK701    | SJS9236-1    | JACK, AC INLET          | 1   | △<br>K2AA2B000002 |
| JK903    | RJJ37TN02-C  | JACK, HEADPHONES        | 1   | K2HC103A0009      |
| L151,52  | ELEXT101KA9  | COIL                    | 2   |                   |
| L153     | RLQA1R0JT1-Y | COIL                    | 1   | G0C1R0JA0019      |
| L601,02  | RLQYR73MW1-0 | COIL                    | 2   | G0ZZ00001606      |
| L605,06  | RLQYR73MW1-0 | COIL                    | 2   | G0ZZ00001606      |
| L701     | RLQZ371      | COIL                    | 1   | △<br>ELF15N035AN  |
| L901     | RLQA100JT1-Y | COIL                    | 1   | G0C100JA0019      |
| L902     | RLQA1R0JT1-Y | COIL                    | 1   | G0C1R0JA0019      |
| P1       | RPG5866      | PACKING CASE (SYSTEM)   | 1   | (EG)              |
| P1       | RPG6080      | PACKING CASE (SYSTEM)   | 1   | (EE)              |
| P1       | RPG5868      | PACKING CASE (SYSTEM)   | 1   | (EP)              |
| P2       | RPQ0951      | PAD (SYSTEM)            | 1   |                   |
| P3       | RPG4397      | PACKING CASE (RS)       | 1   |                   |
| P3       | RPG4396      | PACKING CASE (SA)       | 1   |                   |
| P3       | RPG4398      | PACKING CASE (SH)       | 1   |                   |
| P3       | RPG4399      | PACKING CASE (SL)       | 1   |                   |
| P4       | RPN1195-2    | PAD (RS)                | 1   |                   |
| P4       | RPN1194      | PAD (SA)                | 1   |                   |
| P4       | RPN1196      | PAD (SH)                | 1   |                   |
| P4       | RPN1203      | PAD (SL)                | 1   |                   |
| P5       | RPF0139-1    | PROTECTION BAG          | 1   |                   |
| P6       | SPP740-1     | SHEET                   | 4   |                   |
| PCB1     | REP3337C-M   | PCB ASS'Y               | 1   | [RTL]             |
| PCB2     | REP3338D-S   | PCB ASS'Y               | 1   | [RTL]             |
| Q503     | 2SC5398RSTA  | TRANSISTOR              | 1   | B1AACF000059      |
| Q551     | 2SA1995RSTA  | TRANSISTOR              | 1   | B1ACDF000006      |
| Q554     | 2SA1995RSTA  | TRANSISTOR              | 1   | B1ACDF000006      |
| Q555     | 2SD2144S     | TRANSISTOR              | 1   | B1AAGC000006      |
| Q601,02  | 2SC5398RSTA  | TRANSISTOR              | 2   | B1AACF000059      |
| Q606     | 2SD2144S     | TRANSISTOR              | 1   | B1AAGC000006      |
| Q609,10  | 2SD2144S     | TRANSISTOR              | 2   | B1AAGC000006      |
| Q612     | UN411FTA     | TRANSISTOR              | 1   | UNR411F00A        |
| Q671,72  | 2SD1859QRTV2 | TRANSISTOR              | 2   | B1BAAJ000003      |
| Q673     | 2SB1417PQTA  | TRANSISTOR              | 1   | 2SB14170JA        |
| Q701     | 2SD2374PQAU  | TRANSISTOR              | 1   | 2SD23740J1AU      |
| Q702     | 2SB1548PQAU  | TRANSISTOR              | 1   | 2SB15480J1AU      |
| Q705     | 2SA1995RSTA  | TRANSISTOR              | 1   | B1ACDF000006      |
| Q707     | 2SB1417PQTA  | TRANSISTOR              | 1   | 2SB14170JA        |
| Q708     | UN4211       | TRANSISTOR              | 1   | UNR4211           |
| Q709     | 2SD2144S     | TRANSISTOR              | 1   | B1AAGC000006      |
| Q710     | 2SC3940AQSTA | TRANSISTOR              | 1   | 2SC3940ARA        |
| Q711     | 2SB1548PQAU  | TRANSISTOR              | 1   | 2SB15480J1AU      |
| Q723     | 2SC3940AQSTA | TRANSISTOR              | 1   | 2SC3940ARA        |
| Q725     | 2SC5398RSTA  | TRANSISTOR              | 1   | B1AACF000059      |
| Q726     | 2SC3940AQSTA | TRANSISTOR              | 1   | 2SC3940ARA        |
| Q791     | 2SD2144S     | TRANSISTOR              | 1   | B1AAGC000006      |
| Q901     | UN4212TA     | TRANSISTOR              | 1   | UNR421200A        |
| R151,52  | ERDS2FJ102   | 1/4W 1K                 | 2   |                   |
| R153,54  | ERDS2FJ104   | 1/4W 100K               | 2   | ERDS2TJ104T       |
| R155     | ERDS2FJ121   | 1/4W 120                | 1   | ERDS2TJ121T       |
| R157,58  | ERDS2FJ102   | 1/4W 1K                 | 2   |                   |
| R229,30  | ERDS2FJ102   | 1/4W 1K                 | 2   |                   |
| R509-12  | ERDS2FJ470   | 1/4W 47                 | 4   |                   |
| R544     | ERDS2FJ103   | 1/4W 10K                | 1   |                   |
| R548     | ERDS2FJ102   | 1/4W 1K                 | 1   |                   |
| R551,52  | ERDS2FJ683   | 1/4W 68K                | 2   | ERDS2TJ683T       |

| Ref. No. | Part No.     | Part Name & Description | Pcs | Remarks      |
|----------|--------------|-------------------------|-----|--------------|
| R553,54  | ERDS2TJ392   | 1/4W 3.9K               | 2   |              |
| R555     | ERDS2FJ152   | 1/4W 1.5K               | 1   |              |
| R556     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T  |
| R557     | ERDS2FJ103   | 1/4W 10K                | 1   |              |
| R558     | ERDS2FJ102   | 1/4W 1K                 | 1   |              |
| R559     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T  |
| R561     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T  |
| R563,64  | ERDS2TJ272   | 1/4W 2.7K               | 2   |              |
| R570     | ERDS2TJ225   | 1/4W 2.2M               | 1   |              |
| R572     | ERDS2FJ153   | 1/4W 15K                | 1   | ERDS2TJ153T  |
| R591     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T  |
| R597,98  | ERDS2FJ222   | 1/4W 2.2K               | 2   | ERDS2TJ222T  |
| R601-04  | ERDS2FJ332   | 1/4W 3.3K               | 4   |              |
| R605,06  | ERDS2FJ472   | 1/4W 4.7K               | 2   | ERDS2TJ472T  |
| R607,08  | ERDS2FJ563   | 1/4W 56K                | 2   | ERDS2TJ563T  |
| R609,10  | ERDS2FJ154   | 1/4W 150K               | 2   |              |
| R617,18  | ERDS2FJ472   | 1/4W 4.7K               | 2   | ERDS2TJ472T  |
| R621     | ERDS2FJ154   | 1/4W 150K               | 1   |              |
| R622,23  | ERDS2TJ124   | 1/4W 120K               | 2   |              |
| R624     | ERDS2FJ154   | 1/4W 150K               | 1   |              |
| R627     | ERDS2FJ474   | 1/4W 470K               | 1   |              |
| R628     | ERDS2FJ223   | 1/4W 22K                | 1   |              |
| R635     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T  |
| R637     | ERDS2FJ153   | 1/4W 15K                | 1   | ERDS2TJ153T  |
| R638     | ERDS2FJ683   | 1/4W 68K                | 1   | ERDS2TJ683T  |
| R639,40  | ERDS1FJ100   | 1/2W 10                 | 2   | ERDS1FVJ100T |
| R641,42  | ERDS2FJ100   | 1/4W 10                 | 2   |              |
| R647,48  | ERDS2FJ2R2   | 1/4W 2.2                | 2   | ERD25FVJ2R2T |
| R649-52  | ERDS1FJ100   | 1/2W 10                 | 4   | ERDS1FVJ100T |
| R671,72  | ERDS2TJ272   | 1/4W 2.7K               | 2   |              |
| R673     | ERDS2FJ331   | 1/4W 330                | 1   |              |
| R674     | EROS2TKF5362 | 1/2W 53.6K              | 1   | EROS2TKF5362 |
| R675     | EROS2TKG5622 | 1/2W 56.2K              | 1   | EROS2TKG5622 |
| R684     | ERDS2FJ102   | 1/4W 1K                 | 1   |              |
| R687,88  | ERDS2FJ152   | 1/4W 1.5K               | 2   |              |
| R692,93  | ERDS2FJ102   | 1/4W 1K                 | 2   |              |
| R694     | ERDS2FJ223   | 1/4W 22K                | 1   |              |
| R695     | ERDS2FJ471   | 1/4W 470                | 1   |              |
| R696     | ERDS2FJ473   | 1/4W 47K                | 1   | ERDS2TJ473T  |
| R708     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T  |
| R712     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T  |
| R719     | ERDS2FJ332   | 1/4W 3.3K               | 1   |              |
| R720     | ERDS2TJ392   | 1/4W 3.9K               | 1   |              |
| R721     | ERD2FCJ4R7   | 1/4W 4.7                | 1   | ERD2FCVJ4R7T |
| R722     | ERQ16NKM2R2E | 1/6W 2.2                | 1   |              |
| R723     | ERDS2FJ562   | 1/4W 5.6K               | 1   |              |
| R724     | ERDS2TJ392   | 1/4W 3.9K               | 1   |              |
| R725     | ERDS2FJ100   | 1/4W 10                 | 1   |              |
| R727     | ERDS2TJ392   | 1/4W 3.9K               | 1   |              |
| R729     | ERDS2FJ221   | 1/4W 220                | 1   |              |
| R738     | ERDS2TJ392   | 1/4W 3.9K               | 1   |              |
| R739     | ERDS2FJ473   | 1/4W 47K                | 1   | ERDS2TJ473T  |
| R749     | ERDS2FJ102   | 1/4W 1K                 | 1   |              |
| R763     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T  |
| R764     | ERDS2FJ331   | 1/4W 330                | 1   |              |
| R765     | ERDS1FJ221   | 1/2W 220                | 1   | ERDS1FVJ221T |
| R767     | ERD2FCJ4R7   | 1/4W 4.7                | 1   | ERD2FCVJ4R7T |
| R768     | ERDS2FJ101   | 1/4W 100                | 1   |              |
| R769     | ERD25V0R00T  | 1/4W 0                  | 1   |              |
| R771     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T  |
| R772     | ERDS2FJ223   | 1/4W 22K                | 1   |              |
| R773,74  | ERDS1FJ180   | 1/2W 18                 | 2   |              |
| R776     | ERDS2FJ103   | 1/4W 10K                | 1   |              |
| R777     | ERDS2FJ102   | 1/4W 1K                 | 1   |              |
| R793     | ERDS2TJ1R0   | 1/4W 1.0                | 1   |              |
| R794     | ERDS2FJ473   | 1/4W 47K                | 1   | ERDS2TJ473T  |
| R795     | ERDS2TJ392   | 1/4W 3.9K               | 1   |              |
| R797     | ERDS2T0T     | 1/4W 18K                | 1   |              |
| R798     | ERQ16NKM2R2E | 1/6W 2.2                | 1   |              |
| R901     | ERDS2FJ821   | 1/4W 820                | 1   | ERDS2TJ821T  |
| R902     | ERDS2FJ102   | 1/4W 1K                 | 1   |              |
| R903     | ERDS2FJ122   | 1/4W 1.2K               | 1   | ERDS2TJ122T  |
| R904     | ERDS2FJ152   | 1/4W 1.5K               | 1   |              |

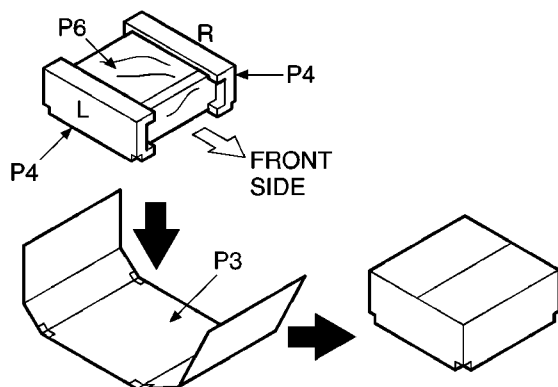
| Ref. No. | Part No.     | Part Name & Description | Pcs | Remarks           |
|----------|--------------|-------------------------|-----|-------------------|
| R905     | ERDS2FJ182   | 1/4W 1.8K               | 1   |                   |
| R906     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T       |
| R907     | ERDS2FJ332   | 1/4W 3.3K               | 1   |                   |
| R909     | ERDS2FJ182   | 1/4W 1.8K               | 1   |                   |
| R910     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T       |
| R911     | ERDS2FJ332   | 1/4W 3.3K               | 1   |                   |
| R912     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T       |
| R913     | ERDS2FJ821   | 1/4W 820                | 1   | ERDS2TJ821T       |
| R914     | ERDS2FJ102   | 1/4W 1K                 | 1   |                   |
| R915     | ERDS2FJ122   | 1/4W 1.2K               | 1   | ERDS2TJ122T       |
| R916     | ERDS2FJ152   | 1/4W 1.5K               | 1   |                   |
| R918     | ERDS2FJ103   | 1/4W 10K                | 1   |                   |
| R919     | ERDS2FJ153   | 1/4W 15K                | 1   | ERDS2TJ153T       |
| R921,22  | ERDS2FJ103   | 1/4W 10K                | 2   |                   |
| R924,25  | ERDS2FJ102   | 1/4W 1K                 | 2   |                   |
| R926     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T       |
| R928     | ERDS2FJ473   | 1/4W 47K                | 1   | ERDS2TJ473T       |
| R929-32  | ERDS2FJ102   | 1/4W 1K                 | 4   |                   |
| R934-36  | ERDS2FJ101   | 1/4W 100                | 3   |                   |
| R937     | ERDS2FJ103   | 1/4W 10K                | 1   |                   |
| R939     | ERDS2FJ152   | 1/4W 1.5K               | 1   |                   |
| R943     | ERDS2FJ101   | 1/4W 100                | 1   |                   |
| R944     | ERDS2FJ222   | 1/4W 2.2K               | 1   | ERDS2TJ222T       |
| R945     | ERDS2FJ101   | 1/4W 100                | 1   |                   |
| R946     | ERDS2FJ102   | 1/4W 1K                 | 1   |                   |
| R949     | ERDS2FJ472   | 1/4W 4.7K               | 1   | ERDS2TJ472T       |
| R950     | ERDS2FJ101   | 1/4W 100                | 1   |                   |
| R951     | ERDS2FJ334   | 1/4W 330K               | 1   | ERDS2TJ334T       |
| R952     | ERDS2TJ106T  | 1/4W 10M                | 1   |                   |
| R953     | ERDS2FJ101   | 1/4W 100                | 1   |                   |
| R954     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T       |
| R956-58  | ERDS2FJ102   | 1/4W 1K                 | 3   |                   |
| R959     | ERDS2FJ470   | 1/4W 47                 | 1   |                   |
| R960     | ERDS2FJ152   | 1/4W 1.5K               | 1   |                   |
| R961,62  | ERDS2FJ223   | 1/4W 22K                | 2   |                   |
| R969     | ERDS2TJ272   | 1/4W 2.7K               | 1   |                   |
| R976     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T       |
| R986     | ERDS2FJ152   | 1/4W 1.5K               | 1   |                   |
| R987,88  | ERDS2FJ102   | 1/4W 1K                 | 2   |                   |
| R990     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T       |
| R991     | ERDS2FJ473   | 1/4W 47K                | 1   | ERDS2TJ473T       |
| R993,94  | ERDS2FJ104   | 1/4W 100K               | 2   | ERDS2TJ104T       |
| R995     | ERDS2FJ221   | 1/4W 220                | 1   |                   |
| R996,97  | ERDS2FJ151   | 1/4W 150                | 2   | ERDS2TJ151T       |
| R999     | ERDS2FJ104   | 1/4W 100K               | 1   | ERDS2TJ104T       |
| RL702    | RSY0040M-0   | RELAY                   | 1   | △                 |
| S901-08  | EVQ11G05R    | SW, OPERATION           | 8   |                   |
| S910-15  | EVQ11G05R    | SW, OPERATION           | 6   |                   |
| T701     | RTP2N5B012   | POWER TRANSFORMER       | 1   | △<br>ETP76VST71SA |
| T702     | RTP1H3E001   | POWER TRANSFORMER       | 1   | △<br>ETP28KBZ21BG |
| VR901    | EVQVBXFK124B | V.R., VOLUME            | 1   |                   |
| X151     | RSXC4M33S02T | OSCILLATOR              | 1   | H0H433400001      |
| X901     | EF0EC6004T4  | OSCILLATOR              | 1   | EF0EC6004T4       |
| X902     | RSXD32K7S02  | OSCILLATOR              | 1   | H0A327200027      |
| Z120     | RAN0005EM-2  | TUNER PACK              | 1   |                   |
| Z701     | ENC471D5A    | ZNR                     | 1   | △<br>J0LG00000008 |
| Z901     | B3RAD0000028 | REMOTE SENSOR           | 1   |                   |

# 16 Cabinet Parts Location

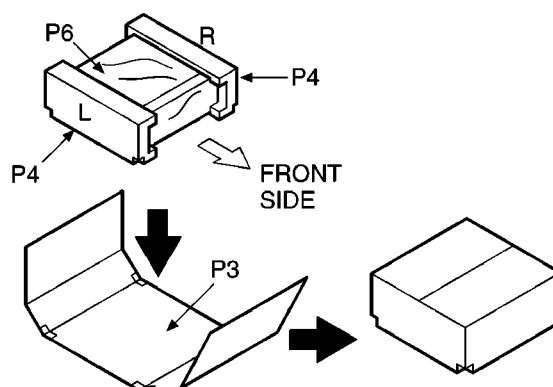


# 17 Packaging

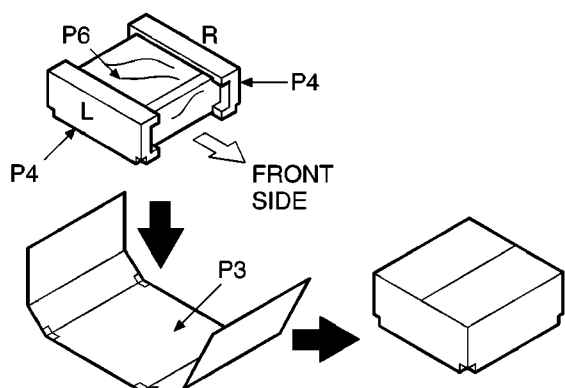
Sound Processor: SH-EH580



CD Player : SL-EH680



Cassette deck : RS-DV280



Tuner/Amplifier : SA-EH580

