

# TA-FB930R

## SERVICE MANUAL

AEP Model



Photo: BLACK model

### SPECIFICATIONS

#### Amplifier section

**DIN power output**  
120 W + 120 W (4 ohms at 1 kHz)  
80 W + 80 W (8 ohms at 1 kHz)

**Total harmonic distortion**  
Less than 0.008% (at 10 W output)

**Frequency response**  
PHONO (20 Hz - 20 kHz): RIAA equalization curve  
 $\pm 0.5$  dB  
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD:  
7 Hz - 100 kHz  $\pm 3$  dB

**S/N (network A)**  
PHONO  
94 dB  
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD:  
105 dB

**Output voltage/impedance**  
REC OUT 1, 2: 150 mV, 1 kilohm  
PHONES: 10 mW (at 8 ohms)

**Speakers impedance**  
4 - 16 ohms, 8 - 16 ohms (SPEAKERS A+B)

**Damping factor**  
100 (8 ohms, 1 kHz)

#### General

##### System

Power amplifier: Pure-complementary SEPP OCL  
power amplifier with all stages directly coupled  
Preamplifier: Low-noise, equalizer amplifier

**Power requirements**  
230 V AC, 50/60 Hz

**Power consumption**  
210 W

**Dimensions (approx.) (w/h/d)**  
430 x 150 x 410 mm  
incl. projecting parts and controls

**Mass (approx.)**  
10.3 kg

##### Supplied accessories

- Remote commander (remote) (1) RM-S316
- Sony batteries R6 (size-AA) (2)

Design and specifications are subject to change without notice.

## INTEGRATED STEREO AMPLIFIER



# SONY®

## TABLE OF CONTENTS

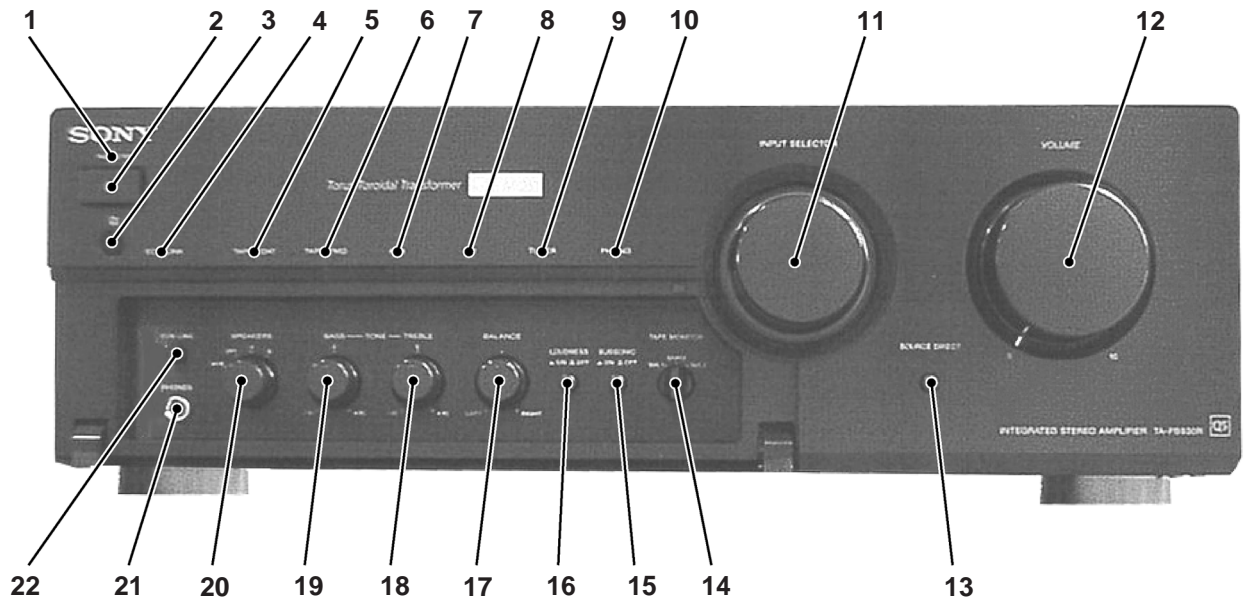
<b>1. GENERAL</b> .....	3
<b>2. ELECTRICAL ADJUSTMENT</b> .....	4
<b>3. DIAGRAMS</b>	
3-1. Circuit Boards Location .....	5
3-2. Schematic Diagram – Input Section – .....	6
3-3. Printed Wiring Board – Input Section – .....	7
3-4. Schematic Diagram – Main Section – .....	8
3-5. Printed Wiring Board – Main Section – .....	9
3-6. Schematic Diagram – Panel Section – .....	10
3-7. Printed Wiring Board – Panel Section – .....	11
3-8. Schematic Diagram – Power Section – .....	12
3-9. Printed Wiring Board – Power Section – .....	13
3-10. IC Block Diagrams .....	14
3-11. IC Pin Function .....	14
<b>4. EXPLODED VIEW</b>	
4-1. Case Section .....	15
4-2. Front Panel Section .....	16
4-3. Chassis Section .....	17
<b>5. ELECTRICAL PARTS LIST</b> .....	18

### SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK  $\triangle$  OR DOTTED LINE WITH MARK  $\triangle$  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

# SECTION 1 GENERAL

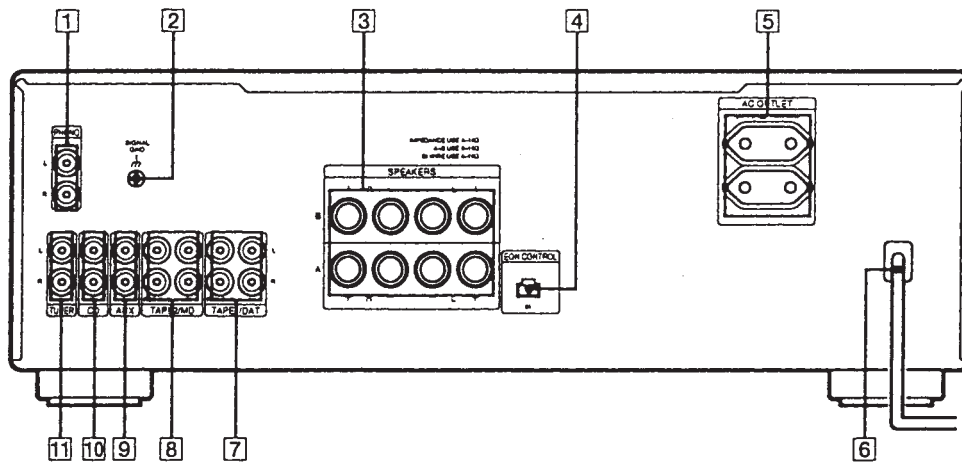
## Front Panel Descriptions



- |                        |                                       |
|------------------------|---------------------------------------|
| 1 PROTECTION indicator | 12 VOLUME knob                        |
| 2 Ⓞ (Power) button     | 13 SOURCE DIRECT button and indicator |
| 3 Remote sensor        | 14 TAPE MONITOR knob                  |
| 4 EON LINK indicator   | 15 SUBSONIC button                    |
| 5 TAPE 1/DAT indicator | 16 LOUDNESS button                    |
| 6 TAPE 2/MD indicator  | 17 BALANCE knob                       |
| 7 AUX indicator        | 18 TREBLE knob                        |
| 8 CD indicator         | 19 BASS knob                          |
| 9 TUNER indicator      | 20 SPEAKERS knob                      |
| 10 PHONO indicator     | 21 PHONE jack                         |
| 11 INPUT SELECTOR knob | 22 EON LINK button                    |

This section is extracted from instruction manual.

## Rear Panel Descriptions



- |   |              |
|---|--------------|
| 1 PHONO   | 6 Mains lead |
| 2 h (SIGNAL GND)  | 7 TAPE1/DAT  |
| 3 SPEAKERS A/B  | 8 TAPE2/MD   |
| 4 EON CONTROL IN  | 9 AUX        |
| 5 AC OUTLET (unavailable on the TA-FB920R (U.K. model)) | 10 CD        |
|   | 11 TUNER     |

## SECTION 2 ELECTRICAL ADJUSTMENT

### Bias Adjustment



#### NOTE:

1. Perform the adjustment after the unit has warmed up sufficiently.
2. Perform the bias adjustment if the power transistor has been replaced.

#### Procedure:

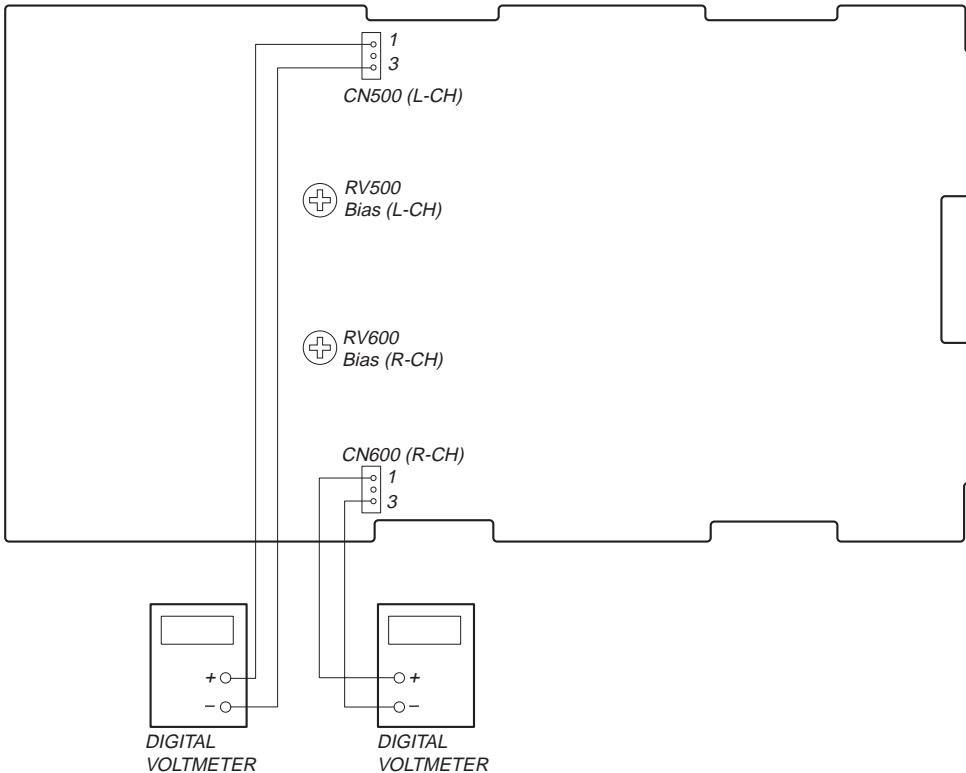
1. Rotate fully the bias adjusting semi-fixed resistors (RV500, RV600) to the MIN position (counterclockwise).
2. Connect a digital voltmeter to the CN500 and CN600.

	1 pin	3 pin
CN500 (L-CH)	+	-
CN600(R-CH)	+	-

3. Set the slide regulator to 0V, and press the  button (ON) on the set.
4. Raise gradually the slide regulator voltage up to the rated voltage.
5. At this time, confirm that the SP relay is turned on (it will click).
6. Adjust the RV500 and RV600 so that a reading of digital voltmeter is  $10 \pm 1$  mV.
7. Return the slidack to 0 V, and press the  button (OFF) on the set.

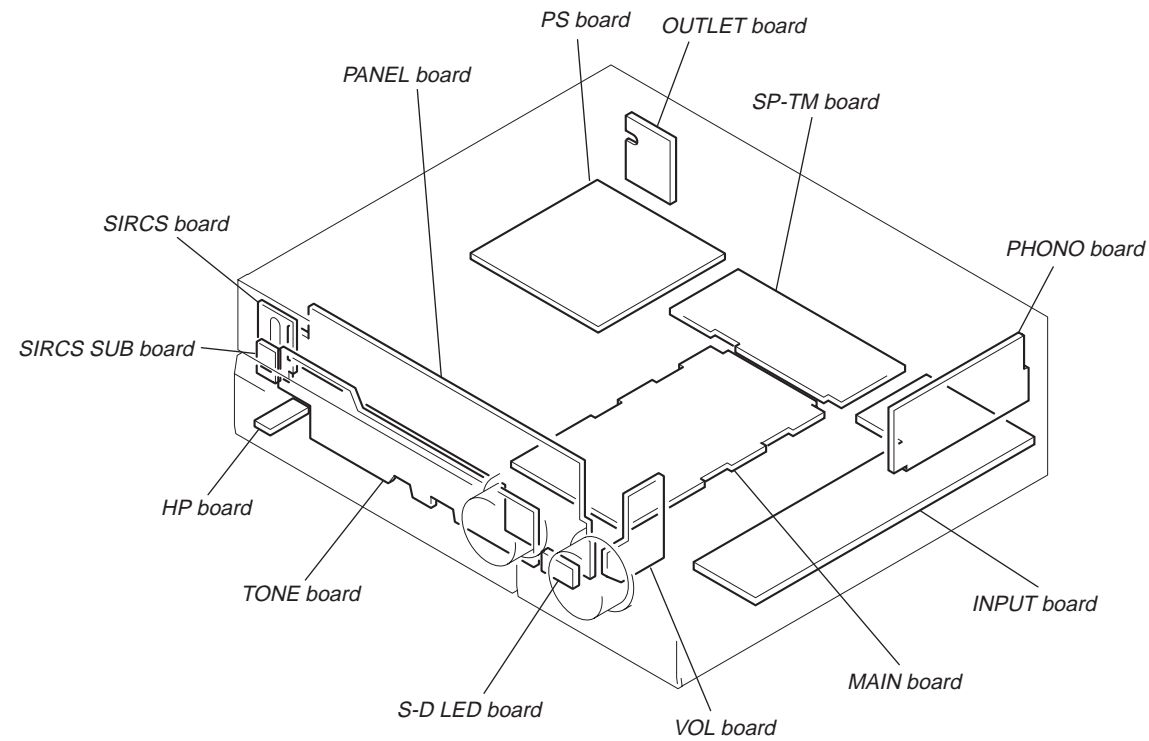
#### Adjustment Location :

[MAIN BOARD] – COMPONENT SIDE –



## SECTION 3 DIAGRAMS




### 3-1. CIRCUIT BOARDS LOCATION







**THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.**  
(In addition to this, the necessary note is printed in each block.)

#### For schematic diagrams.

##### Note:




- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{pF}$  50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{ W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
-  : nonflammable resistor.
-  : fusible resistor.
-  : panel designation.

**Note:** The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety.  
Replace only with part number specified.

-  : B+ Line.
-  : B- Line.
-  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark : POWER ON
- Voltages are taken with a VOM (Input impedance 10 M $\Omega$ ).  
Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.  
Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
-  : TUNER
- Abbreviation  
G : German model.  
EE : East European model.  
AUS : Australian model.  
SP : Singapore model.  
MY : Malaysia model.

#### For printed wiring boards.

##### Note:

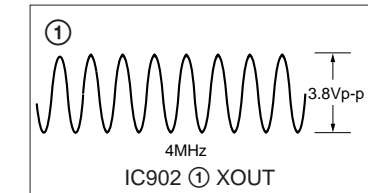
-  : parts extracted from the component side.
-  : parts extracted from the conductor side.
-  : Pattern from the side which enables seeing.

#### • Indication of transistor



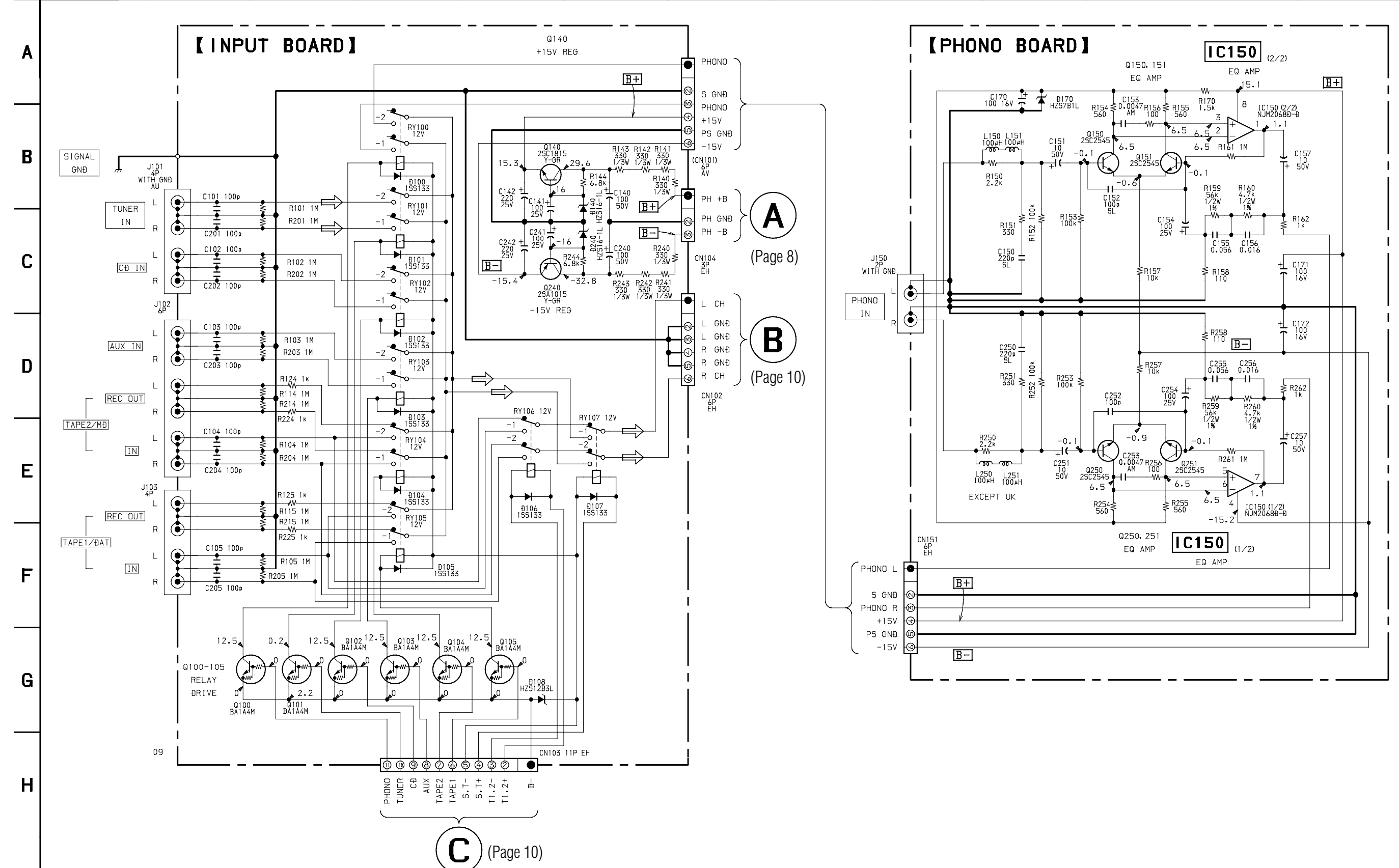
These are omitted

### WAVEFORM



3-2. SCHEMATIC DIAGRAM – INPUT SECTION –

1 2 3 4 5 6 7 8 9 10 11 12 13



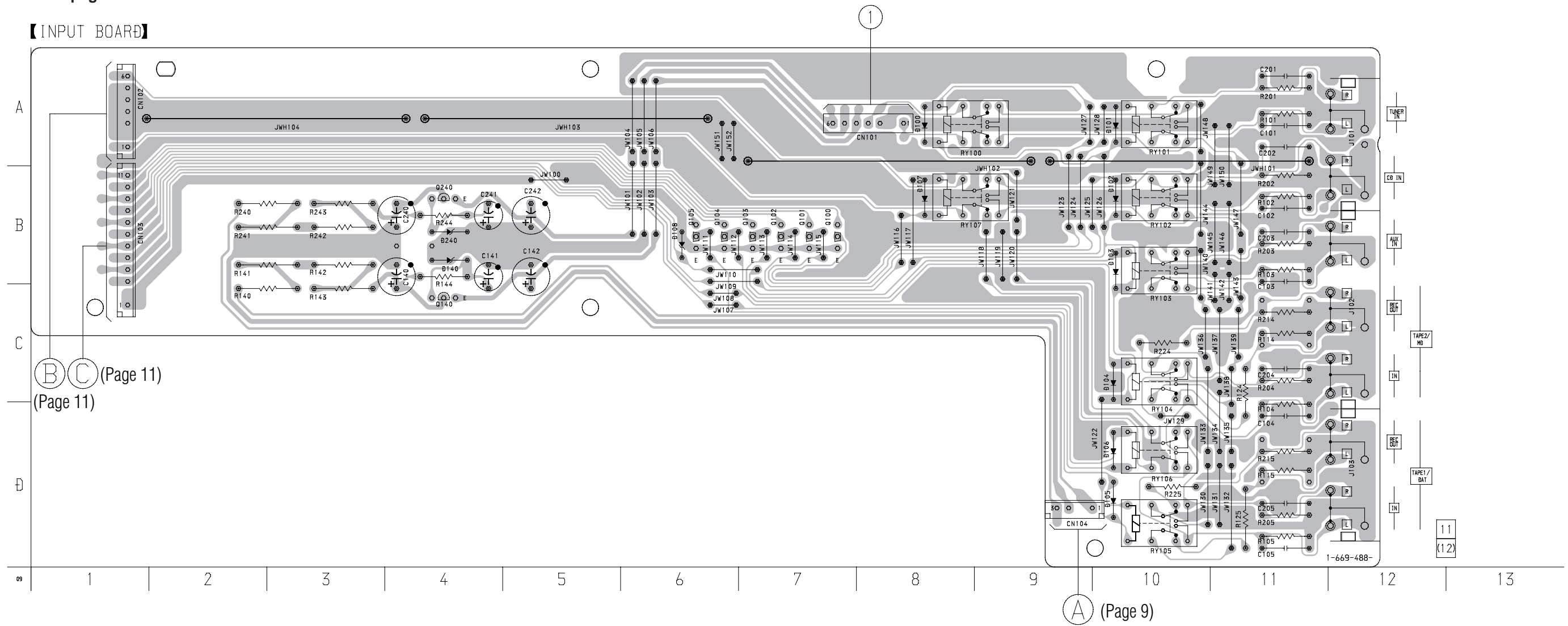
**A**  
(Page 8)

**B**  
(Page 10)

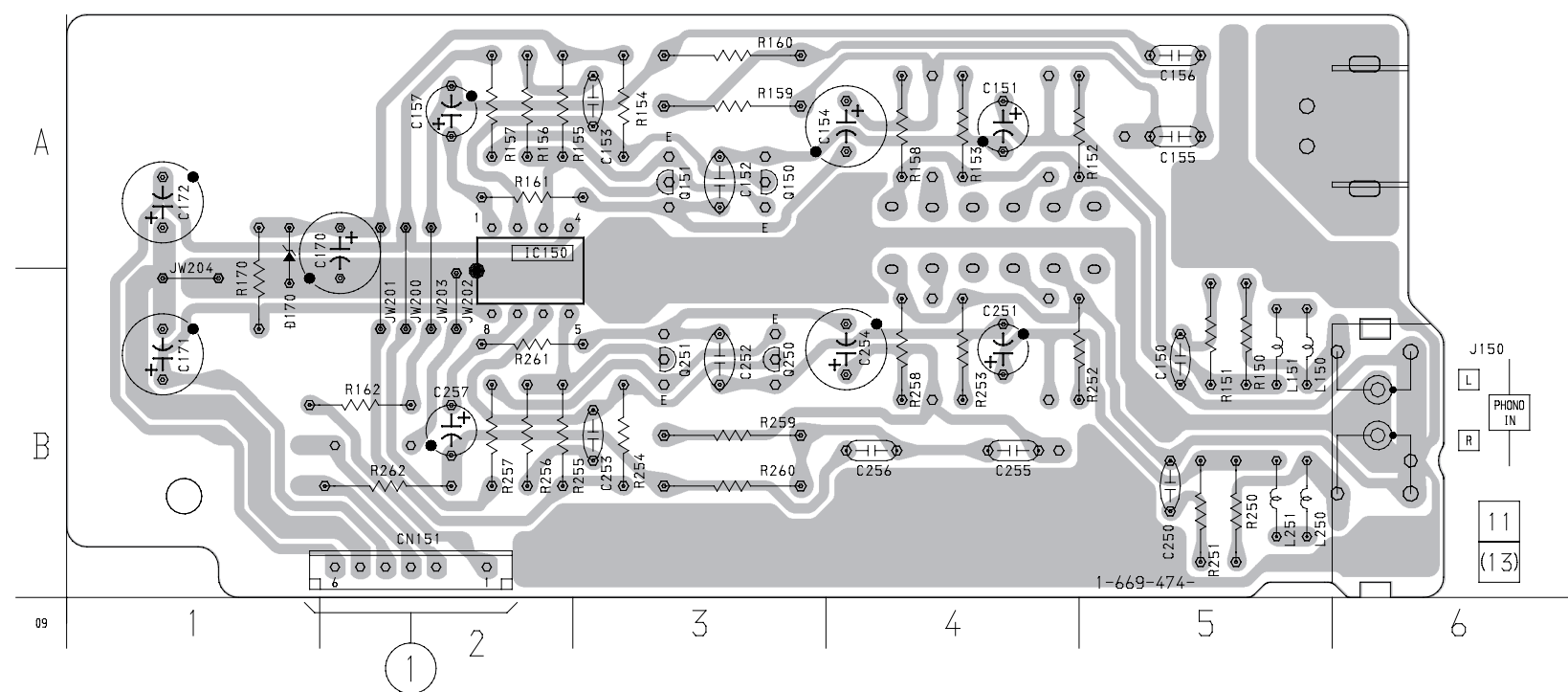
**C**  
(Page 10)

**3-3. PRINTED WIRING BOARD – INPUT SECTION –**  
 • See page 5 for Circuit Boards Location.

【INPUT BOARD】



【PHONO BOARD】

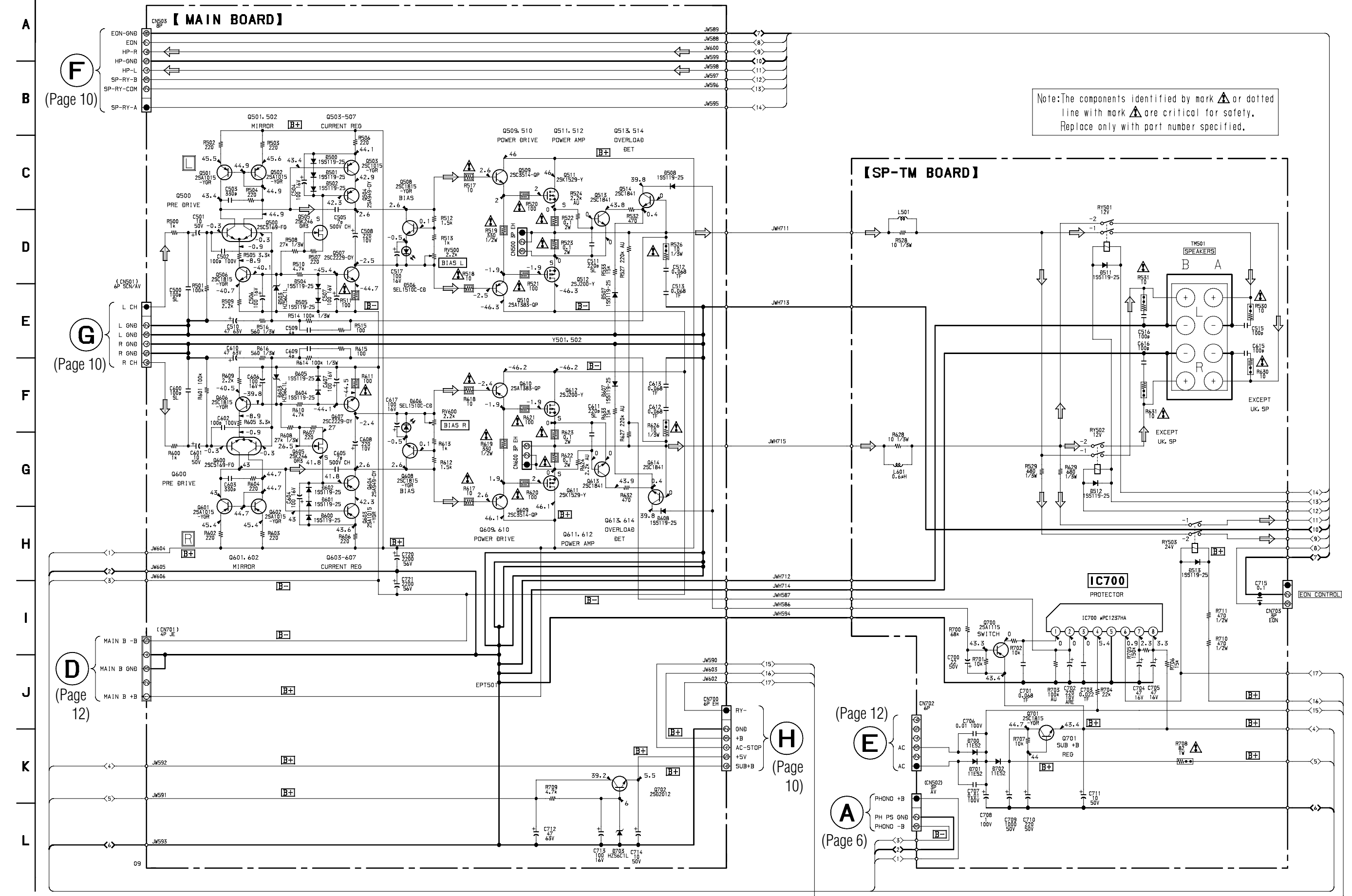


• Semiconductor Location

Ref. No.	Location
D100	A-8
D101	A-10
D102	B-10
D103	B-10
D104	C-10
D105	D-10
D106	D-10
D107	B-8
D108	B-6
D140	B-4
D240	B-4
Q100	B-7
Q101	B-7
Q102	B-7
Q103	B-7
Q104	B-6
Q105	B-6
Q140	C-4
Q240	B-4

3-4. SCHEMATIC DIAGRAM - MAIN SECTION -  
• See page 14 for IC Block Diagrams.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18



Note: The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

F (Page 10)

G (Page 10)

D (Page 12)

H (Page 10)

E (Page 12)

A (Page 6)



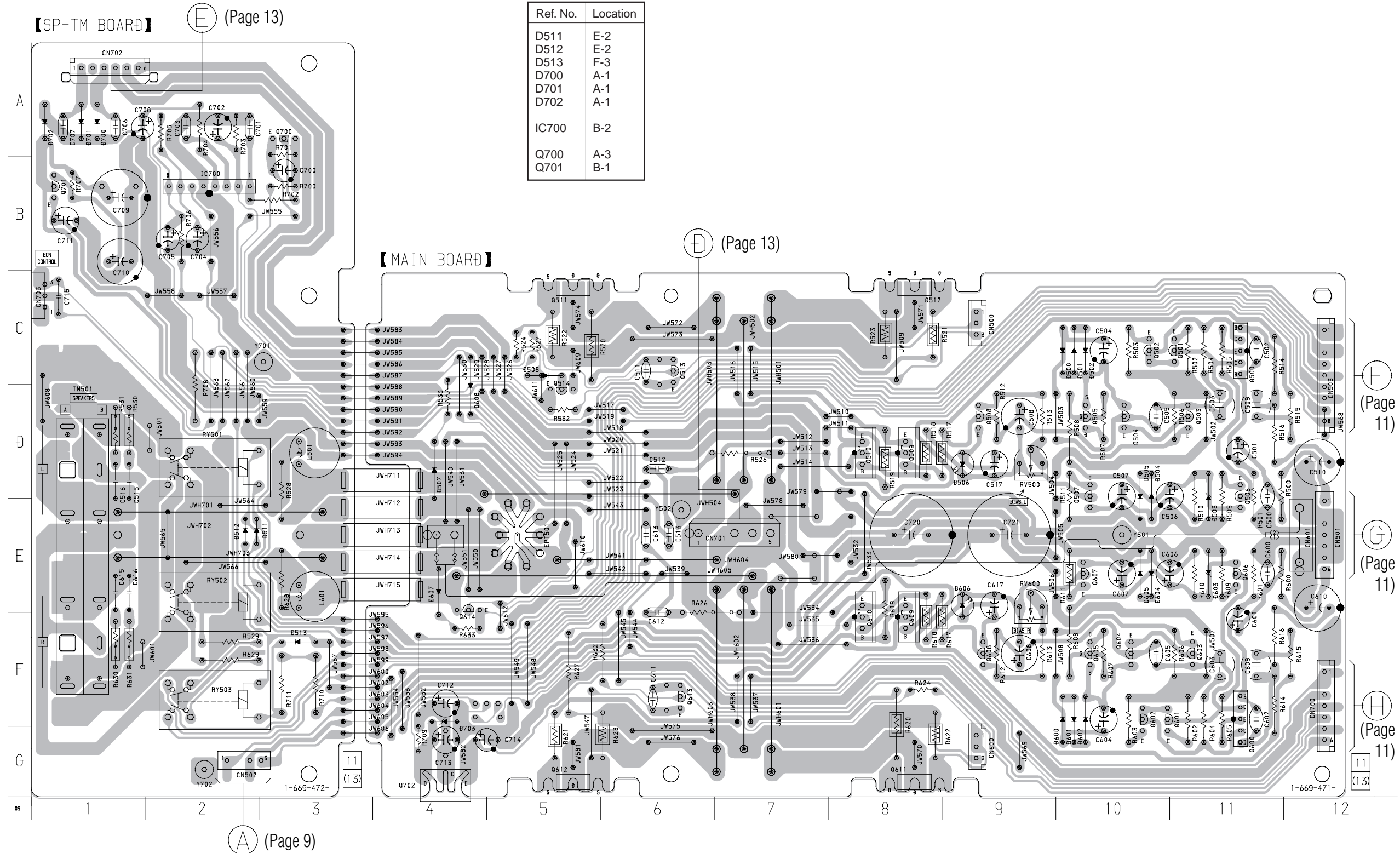
3-5. PRINTED WIRING BOARD – MAIN SECTION –  
 • See page 5 for Circuit Boards Location.

• Semiconductor Location

Ref. No.	Location
D511	E-2
D512	E-2
D513	F-3
D700	A-1
D701	A-1
D702	A-1
IC700	B-2
Q700	A-3
Q701	B-1

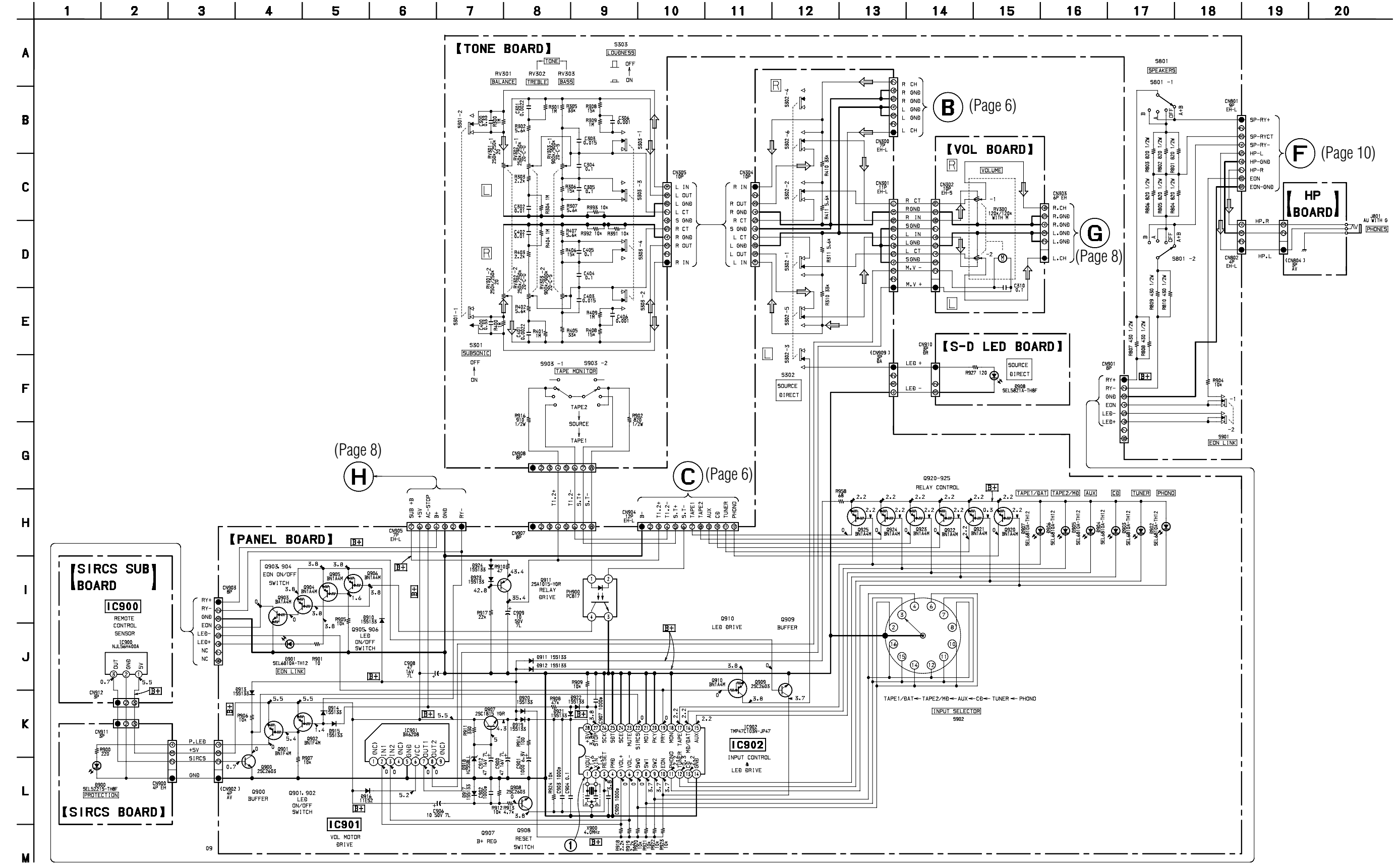
• Semiconductor Location

Ref. No.	Location
D500	C-10
D501	C-10
D502	C-10
D503	D-11
D504	E-10
D505	E-10
D506	D-9
D507	D-4
D508	C-5
D600	F-10
D601	F-10
D602	F-10
D603	E-11
D604	E-10
D605	E-10
D606	F-9
D607	E-4
D608	C-4
D703	F-4
Q500	C-11
Q501	C-10
Q502	C-10
Q503	D-11
Q504	D-10
Q505	D-10
Q506	D-11
Q507	E-10
Q508	D-9
Q509	D-8
Q510	D-8
Q511	C-5
Q512	C-8
Q513	C-6
Q514	D-5
Q600	F-11
Q601	F-10
Q602	F-10
Q603	F-11
Q604	F-10
Q605	F-10
Q606	E-11
Q607	E-10
Q608	F-9
Q609	F-8
Q610	F-8
Q611	G-8
Q612	G-5
Q613	F-6
Q614	E-4
Q702	G-4



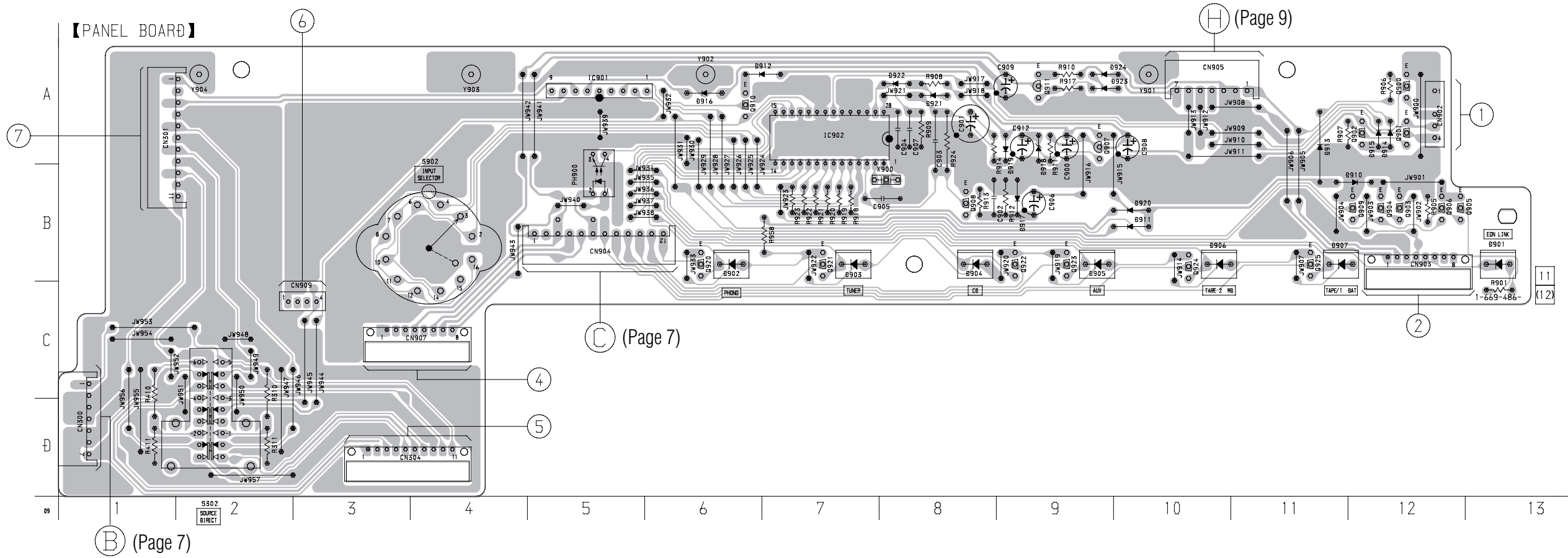
3-6. SCHEMATIC DIAGRAM – PANEL SECTION –

- See page 5 for Waveform.
- See page 14 for IC Block Diagrams.
- See page 14 for IC Pin Function.



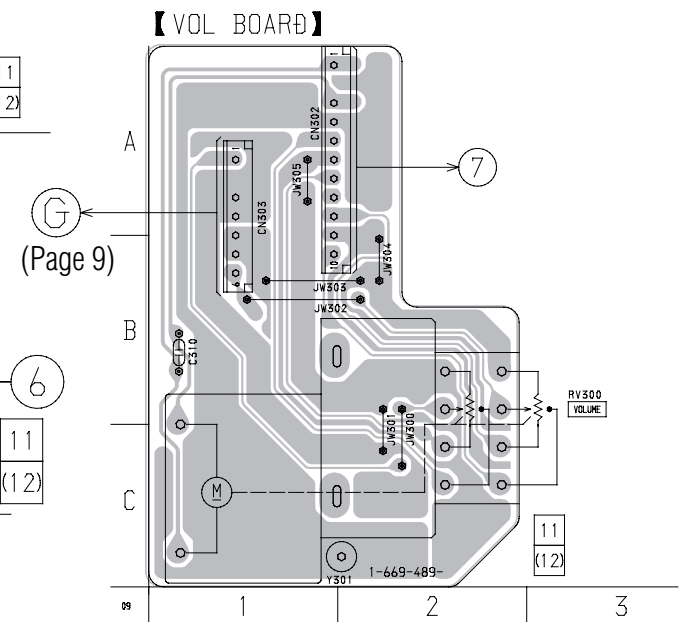
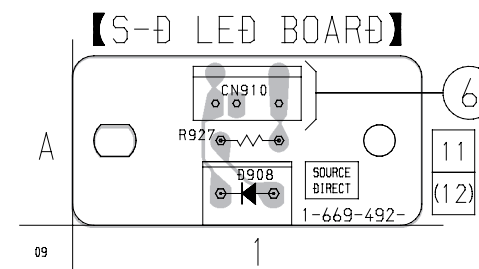
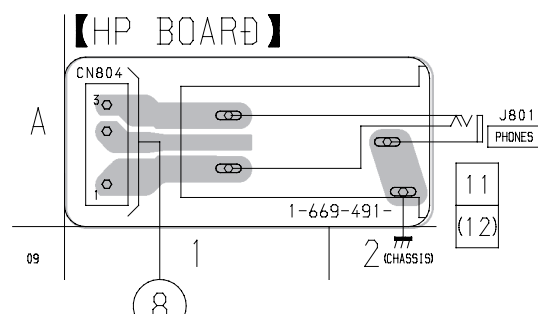
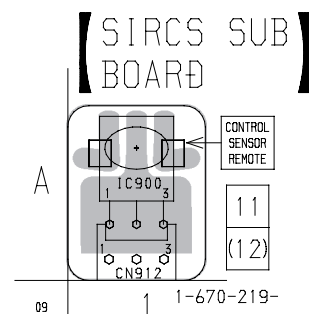
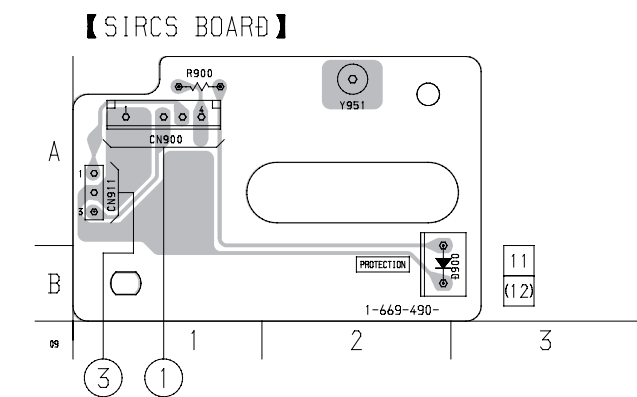
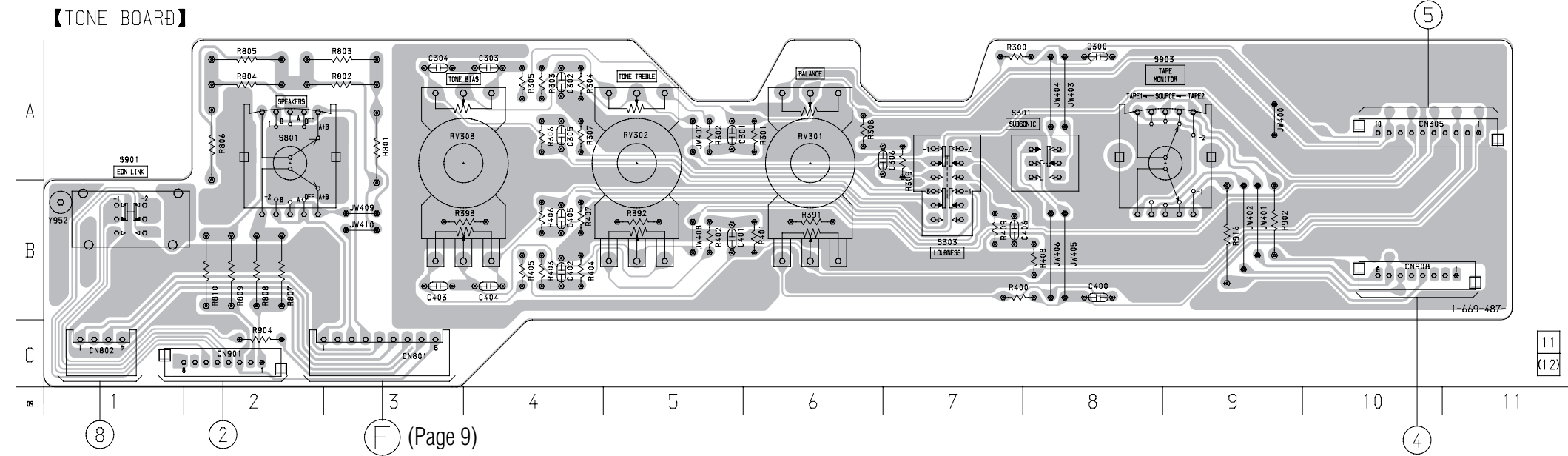
3-7. PRINTED WIRING BOARD – PANEL SECTION –

• See page 5 for Circuit Boards Location.

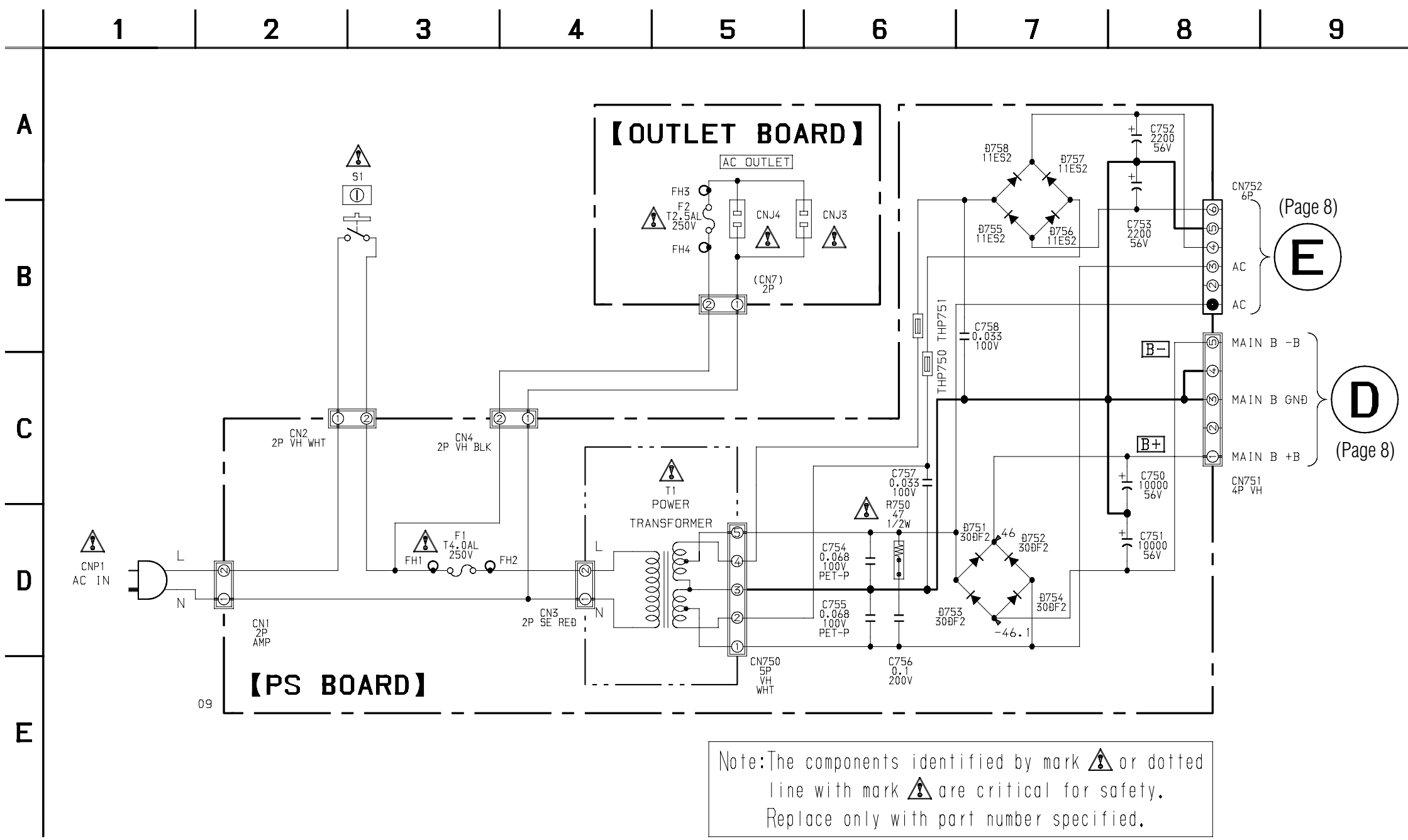


• Semiconductor Location

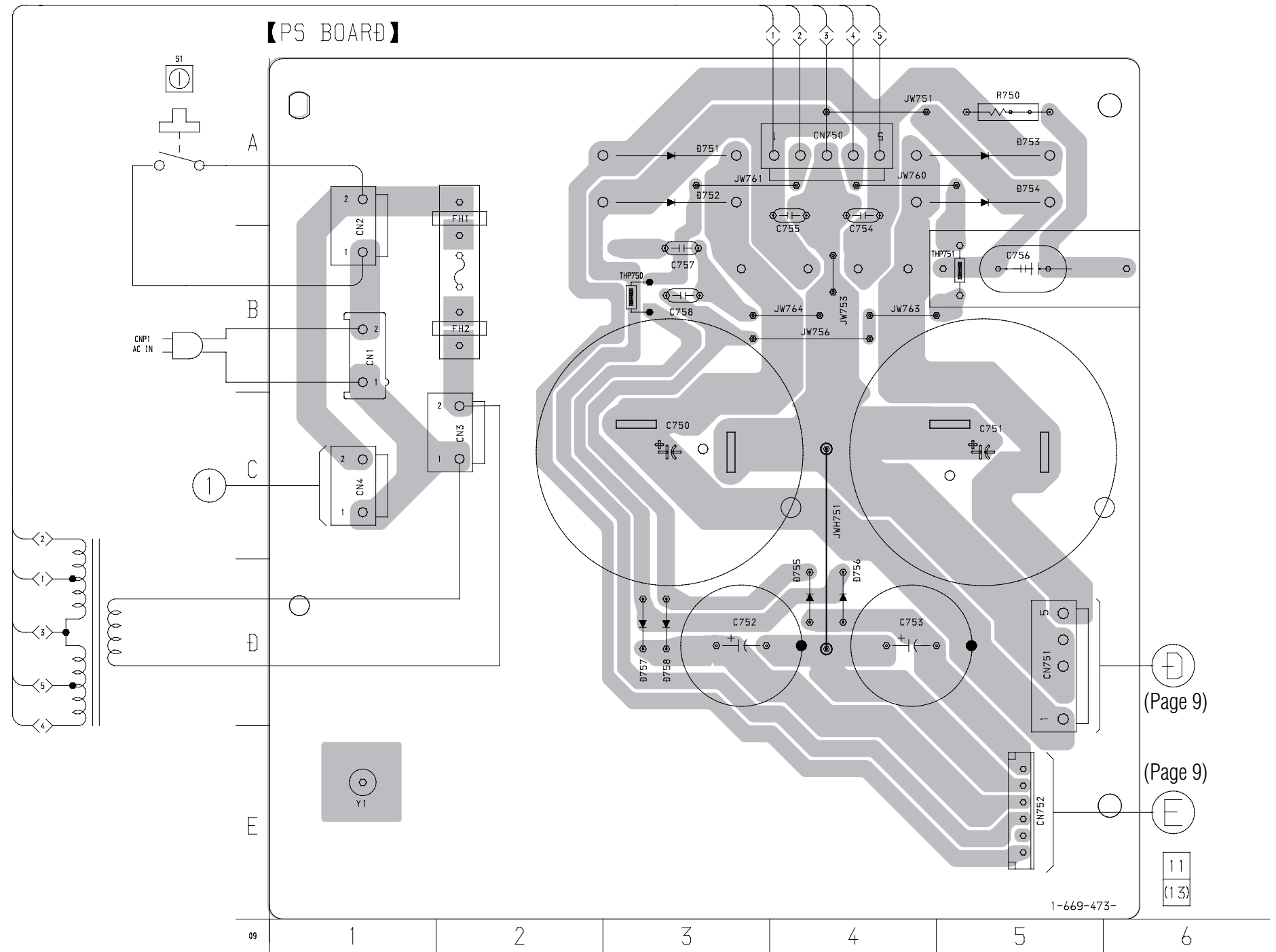
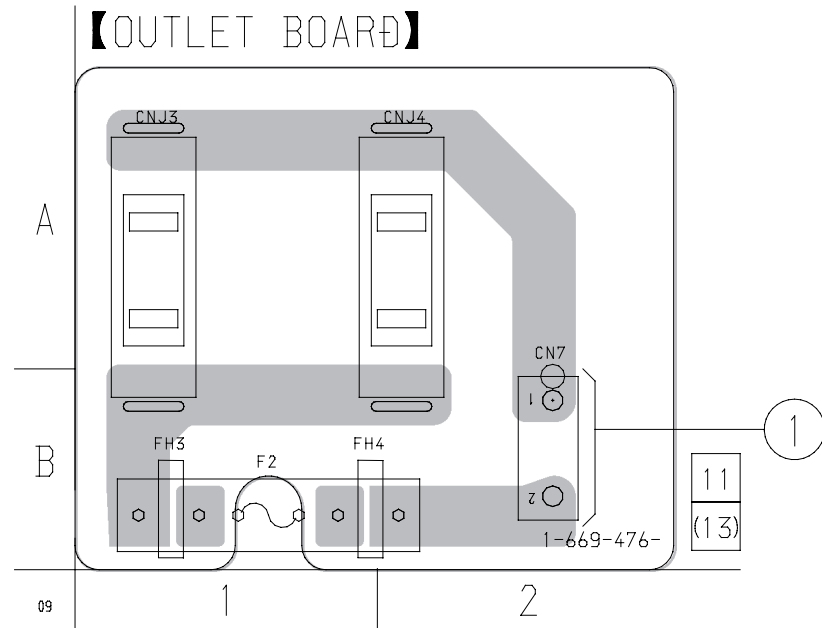
Ref. No.	Location
D901	B-13
D902	B-6
D903	B-7
D904	B-8
D905	B-9
D906	B-10
D907	B-11
D910	B-11
D911	B-11
D912	A-6
D913	A-11
D914	A-12
D915	A-12
D916	A-6
D917	B-9
D918	A-9
D919	A-8
D920	B-11
D921	A-8
D922	A-8
D923	A-10
D924	A-10
IC901	A-5
IC902	A-7
Q900	A-12
Q901	A-12
Q902	A-12
Q903	B-12
Q904	B-12
Q905	B-12
Q906	B-12
Q907	A-9
Q908	B-8
Q909	B-11
Q910	A-6
Q911	A-9
Q920	B-6
Q921	B-7
Q922	B-9
Q923	B-9
Q924	B-10
Q925	B-11



3-8. SCHEMATIC DIAGRAM – POWER SECTION –



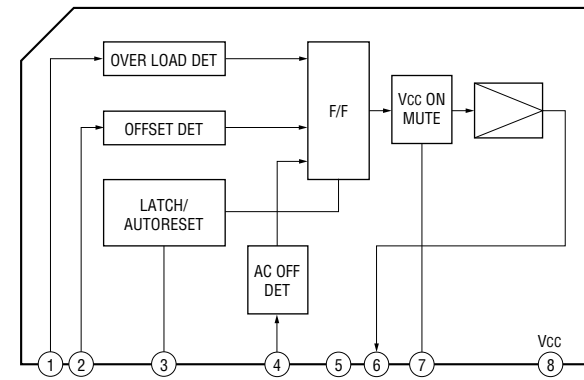
3-9. PRINTED WIRING BOARD – POWER SECTION –  
 • See page 5 for Circuit Boards Location.



### 3-10. IC BLOCK DIAGRAMS

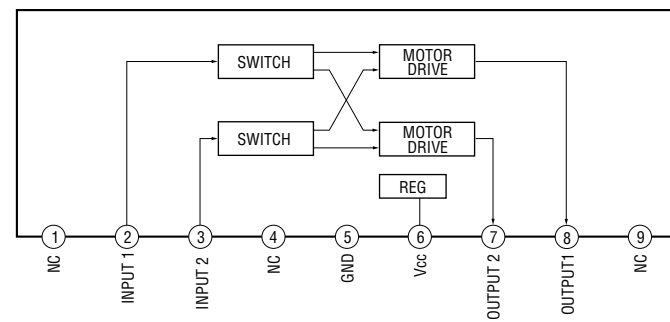
#### • Main Board

##### IC700 uPC1237HA



#### • Panel Board

##### IC901 BA6208



### 3-11. IC PIN FUNCTION

#### • IC902 Input Control & LED Drive (TMP47C103N-JP47) (Panel Board)

Pin No.	Pin Name	I/O	Function
1	X OUT	O	System clock (4MHz)
2	X IN	I	
3	RESET	I	Reset input
4	PMD	I	Mode select input (Connected to ground)
5	VOL +	O	Motor drive output (+)
6	VOL -	O	Motor drive output (-)
7	SW 0	I	Rotary switch input (CD)
8	SW 1	I	Rotary switch input (TUNER)
9	SW 2	I	Rotary switch input (PHONO)
10	EON	I	EON signal input
11	PHONO	O	PHONO LED drive output
12	TUNER	O	TUNER LED drive output
13	CD	O	CD LED drive output
14	GND	—	Ground
15	AUX	O	AUX LED drive output
16	MD/DAT	O	TAPE "2" LED drive output
17	TAPE	O	TAPE "1" LED drive output
18	MON	O	MONITOR output (Connected to ground)
19	PRY	O	Power relay output
20	PKY	I	Power key input (Connected to ground)
21	MOI	I	MONITOR input (Connected to ground)
22	SIRCS	I	SIRCS input
23	MUTE	O	Muting output (Connected to ground)
24	SCE	O	Chip enable output (Connected to ground)
25	SDT	O	Serial data output (Connected to ground)
26	SCK	O	Serial clock output (Connected to ground)
27	STOP	I	STOP input
28	+3V	—	+3V Power supply

## SECTION 4 EXPLODED VIEWS

**NOTE:**

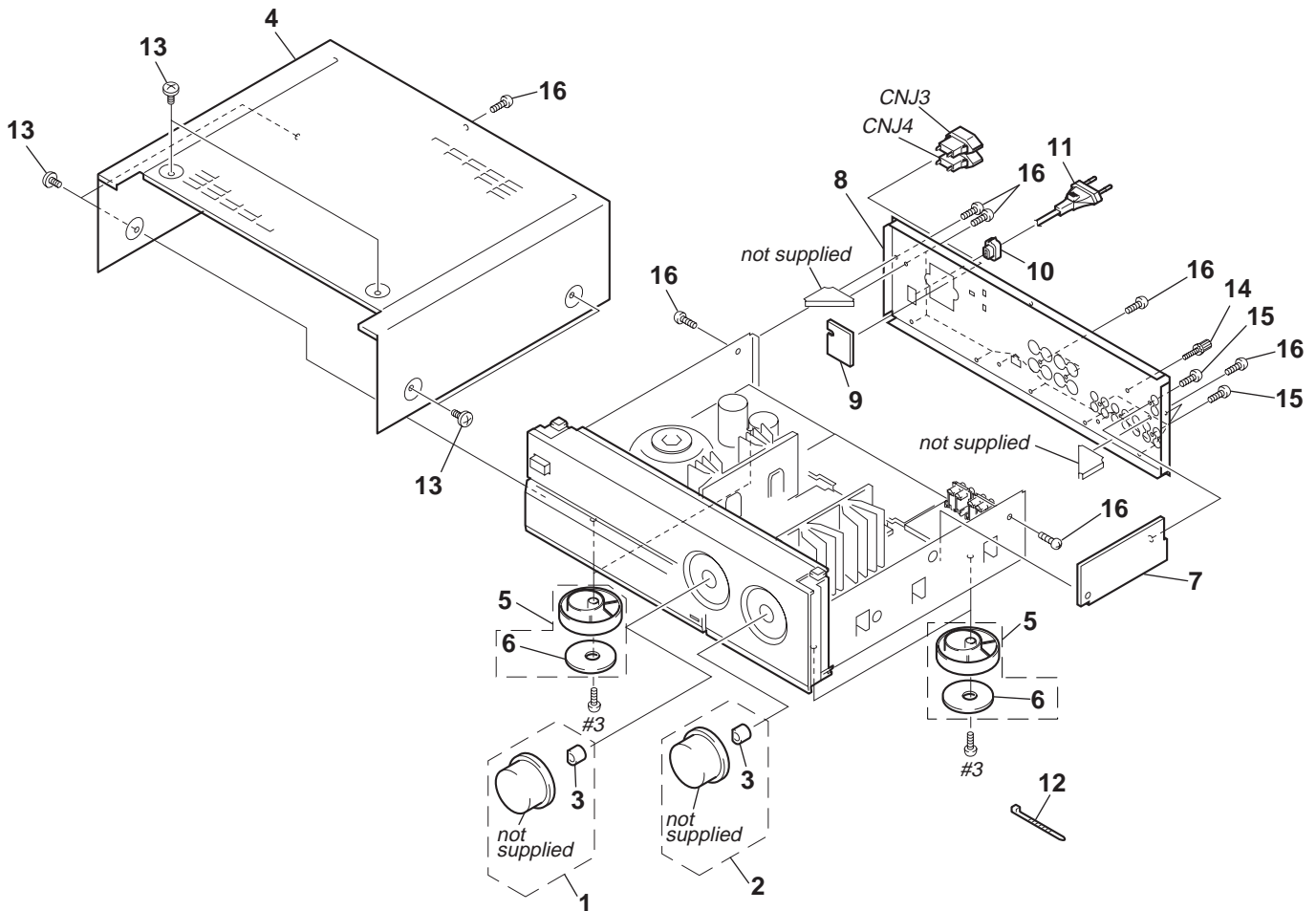
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Color Indication of Appearance Parts Example:  
KNOB, BALANCE (WHITE)

↑  
Parts color

- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

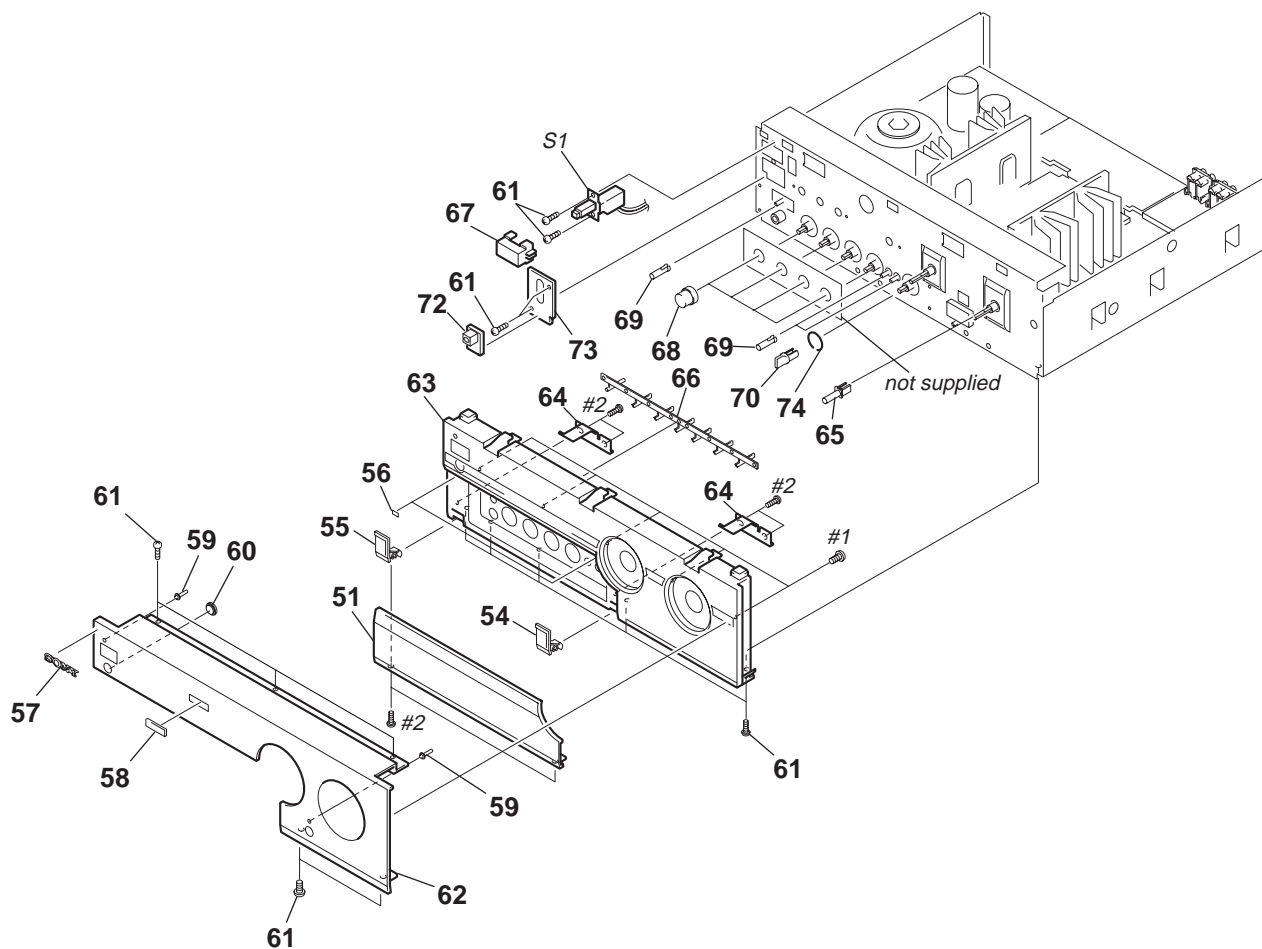
The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

### 4-1. CASE SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	X-4949-780-1	KNOB(SELECTOR) ASSY (BLACK)		* 9	1-669-476-11	OUTLET BOARD	
1	X-4950-264-1	KNOB(SELECTOR) ASSY (SILVER)		* 10	3-703-244-00	BUSHING (2104), CORD	
2	X-4949-781-1	KNOB(VOLUME) ASSY (BLACK)		$\triangle$ 11	1-777-185-11	CORD, POWER	
2	X-4950-265-1	KNOB(VOLUME) ASSY (SILVER)		12	3-655-653-21	BAND (TAITON), BINDING	
3	3-703-466-00	SPRING (6600)		13	4-210-291-01	SCREW (CASE 3 TP2)(BLACK)	
* 4	4-999-439-03	CASE(413235)(BLACK)		13	4-210-291-11	SCREW (CASE 3 TP2)(SILVER)	
* 4	4-999-439-43	CASE(413235)(SILVER)		14	4-947-010-01	SCREW, FEEDER FIXED	
5	X-4949-760-1	FOOT ASSY		15	3-704-515-51	SCREW (BV/RING)	
6	4-970-124-01	CUSHION (F50180S)		16	4-974-510-01	SCREW (+BV 3X8 CU)	
7	A-4419-860-A	PHONO BOARD, COMPLETE		$\triangle$ CNJ3	1-526-794-11	OUTLET, AC	
8	4-218-231-21	PANEL, BACK		$\triangle$ CNJ4	1-526-794-11	OUTLET, AC	

## 4-2. FRONT PANEL SECTION

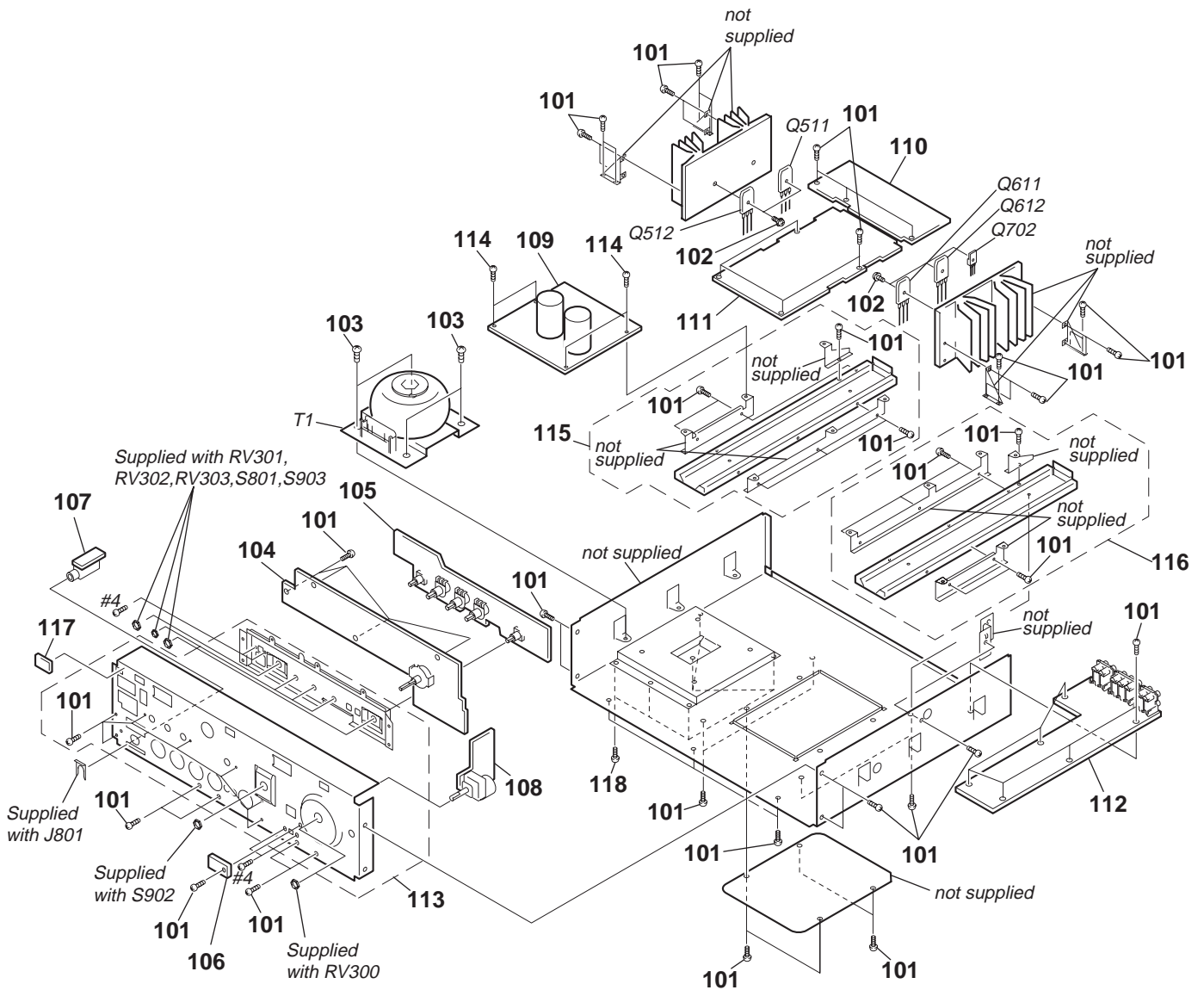


The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety.  
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-999-407-21	DOOR(BLACK)		63	X-4950-263-1	BASE ASSY, PANEL (SILVER)	
51	4-999-407-31	DOOR(SILVER)		64	4-221-595-01	SPRING (DOOR), LEAF	
52	4-900-031-02	KNOB(DOOR)		65	4-999-436-01	BUTTON (DIA. 6X28.8)(BLACK)	
54	4-221-598-01	ARM(DOOR/R)(BLACK)		65	4-999-436-12	BUTTON (DIA. 6X28.8)(SILVER)	
54	4-221-598-11	ARM(DOOR/R)(SILVER)		* 66	4-999-404-02	PLATE (DOOR), INDICATION (BLACK)	
55	4-221-460-01	ARM(DOOR/L)(BLACK)		* 66	4-999-404-13	PLATE (DOOR), INDICATION (SILVER)	
55	4-221-460-11	ARM(DOOR/L)(SILVER)		67	3-024-055-01	BUTTON (POWER)(BLACK)	
* 56	4-999-492-01	CUSHION (DOOR)(BLACK)		67	3-024-055-22	BUTTON (POWER)(SILVER)	
* 56	4-999-492-11	CUSHION (DOOR)(SILVER)		68	4-999-406-01	KNOB(D18)(BLACK)	
57	4-942-568-41	EMBLEM (NO.5), SONY (BLACK)		68	4-999-406-11	KNOB(D18)(SILVER)	
57	4-942-568-61	EMBLEM (NO.5), SONY (SILVER)		69	4-980-773-01	BUTTON (DIA. 6)(BLACK)	
58	4-218-232-02	EMBLEM (MOS)		69	4-980-773-12	BUTTON (DIA. 6)(SILVER)	
59	4-999-413-01	INDICATOR (PROTECTION)		70	4-950-189-01	KNOB(A)(VOL)(BLACK)	
60	4-980-776-01	WINDOW, REMOTE CONTROL		70	4-950-189-61	KNOB(A)(VOL)(SILVER)	
61	4-974-510-01	SCREW (+BV 3X8 CU)		* 72	1-670-219-11	SIRCS SUB BOARD	
62	4-999-402-21	PANEL, FRONT (BLACK)		* 73	1-669-490-11	SIRCS BOARD	
62	4-999-402-31	PANEL, FRONT (SILVER)		74	4-948-469-01	SPRING, RING	
63	X-4949-779-1	BASE ASSY, PANEL (BLACK)		$\triangle$ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	



### 4-3. CHASSIS SECTION



The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-974-510-01	SCREW (+BV 3X8 CU)		113	X-4950-316-6	PANEL ASSY, SUB	
102	3-905-609-21	SCREW (TRANSISTOR)		114	4-211-985-01	SCREW (3X8), PC BOARD FITTING	
103	4-967-960-01	SCREW (4X8)		115	X-4950-314-2	BRACKET (RAIL)(L) ASSY	
104	A-4419-849-A	PANEL BOARD, COMPLETE		116	X-4950-315-2	BRACKET (RAIL)(R) ASSY	
105	A-4419-850-A	TONE BOARD, COMPLETE		117	4-985-642-01	CUSHION	
* 106	1-669-492-11	S-D LED BOARD		118	4-967-961-01	SCREW (3X8)	
* 107	1-669-491-11	HP BOARD		Q511	8-729-232-45	TRANSISTOR 2SK1529-Y	
* 108	1-669-489-11	VOL BOARD		Q512	8-729-232-46	TRANSISTOR 2SJ200-Y	
109	A-4419-859-A	PS BOARD, COMPLETE		Q611	8-729-232-45	TRANSISTOR 2SK1529-Y	
110	A-4419-858-A	SP-TM BOARD, COMPLETE		Q612	8-729-232-46	TRANSISTOR 2SJ200-Y	
111	A-4419-857-A	MAIN BOARD, COMPLETE		Q702	8-729-209-15	TRANSISTOR 2SD2012	
112	A-4419-851-A	INPUT BOARD, COMPLETE		$\triangle$ T1	1-433-952-11	TRANSFORMER, POWER	

## SECTION 5

# ELECTRICAL PARTS LIST

**HP**

**INPUT**

**Note:**

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS  
All resistors are in ohms  
METAL: Metal-film resistor  
METAL OXIDE: Metal Oxide-film resistor  
F : nonflammable
- SEMICONDUCTORS  
In each case, u:  $\mu$  , for example:  
uA...:  $\mu$  A..., uPA...:  $\mu$  PA..., uPB...:  $\mu$  PB...,  
uPC...:  $\mu$  PC..., uPD...:  $\mu$  PD...
- CAPACITORS  
uF :  $\mu$  F
- COILS  
uH :  $\mu$  H
- Abbreviation

Ref. No.	Part No.	Description	Remark
*	1-669-491-11	HP BOARD *****	
		< JACK >	
J801	1-770-307-11	JACK (LARGE TYPE)(PHONES)	
*****			
	A-4419-851-A	INPUT BOARD, COMPLETE *****	
		< CAPACITOR >	
C101	1-162-282-31	CERAMIC 100PF 10% 50V	
C102	1-162-282-31	CERAMIC 100PF 10% 50V	
C103	1-162-282-31	CERAMIC 100PF 10% 50V	
C104	1-162-282-31	CERAMIC 100PF 10% 50V	
C105	1-162-282-31	CERAMIC 100PF 10% 50V	
C140	1-126-052-11	ELECT 100uF 20% 50V	
C141	1-126-023-11	ELECT 100uF 20% 25V	
C142	1-126-024-11	ELECT 220uF 20% 25V	
C201	1-162-282-31	CERAMIC 100PF 10% 50V	
C202	1-162-282-31	CERAMIC 100PF 10% 50V	
C203	1-162-282-31	CERAMIC 100PF 10% 50V	
C204	1-162-282-31	CERAMIC 100PF 10% 50V	
C205	1-162-282-31	CERAMIC 100PF 10% 50V	
C240	1-126-052-11	ELECT 100uF 20% 50V	
C241	1-126-023-11	ELECT 100uF 20% 25V	
C242	1-126-024-11	ELECT 220uF 20% 25V	
		< CONNECTOR >	
CN102	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
CN103	1-691-773-11	PLUG (MICRO CONNECTOR) 11P	
CN104	1-691-765-11	PLUG (MICRO CONNECTOR) 3P	
		< DIODE >	
D100	8-719-911-19	DIODE 1SS119-25	
D101	8-719-911-19	DIODE 1SS119-25	
D102	8-719-911-19	DIODE 1SS119-25	
D103	8-719-911-19	DIODE 1SS119-25	
D104	8-719-911-19	DIODE 1SS119-25	
D105	8-719-911-19	DIODE 1SS119-25	
D106	8-719-911-19	DIODE 1SS119-25	
D107	8-719-911-19	DIODE 1SS119-25	
D108	8-719-986-29	DIODE HZS12B3LTA	
D140	8-719-986-38	DIODE HZS16-1LTA	
D240	8-719-986-38	DIODE HZS16-1LTA	

Ref. No.	Part No.	Description	Remark
		< JACK >	
J101	1-784-934-11	JACK, PIN 4P (TUNER/CD IN)	
J102	1-770-015-11	JACK, PIN 6P (AUX IN, TAPE2/MD, REC OUT/IN)	
J103	1-573-028-31	JACK, PIN 4P (TAPE1/DAT, REC OUT/IN)	
		< TRANSISTOR >	
Q100	8-729-900-80	TRANSISTOR DTC114ES	
Q101	8-729-900-80	TRANSISTOR DTC114ES	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
Q103	8-729-900-80	TRANSISTOR DTC114ES	
Q104	8-729-900-80	TRANSISTOR DTC114ES	
Q105	8-729-900-80	TRANSISTOR DTC114ES	
Q140	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q240	8-729-201-53	TRANSISTOR 2SA1015-GR	
		< RESISTOR >	
R101	1-259-239-11	CARBON 1M 5% 1/4W	
R102	1-259-239-11	CARBON 1M 5% 1/4W	
R103	1-259-239-11	CARBON 1M 5% 1/4W	
R104	1-259-239-11	CARBON 1M 5% 1/4W	
R105	1-259-239-11	CARBON 1M 5% 1/4W	
R114	1-259-239-11	CARBON 1M 5% 1/4W	
R115	1-259-239-11	CARBON 1M 5% 1/4W	
R124	1-259-167-21	CARBON 1K 5% 1/4W	
R125	1-259-167-21	CARBON 1K 5% 1/4W	
R140	1-249-198-11	CARBON 330 5% 1/3W	
R141	1-249-198-11	CARBON 330 5% 1/3W	
R142	1-249-198-11	CARBON 330 5% 1/3W	
R143	1-249-198-11	CARBON 330 5% 1/3W	
R144	1-259-187-11	CARBON 6.8K 5% 1/4W	
R201	1-259-239-11	CARBON 1M 5% 1/4W	
R202	1-259-239-11	CARBON 1M 5% 1/4W	
R203	1-259-239-11	CARBON 1M 5% 1/4W	
R204	1-259-239-11	CARBON 1M 5% 1/4W	
R205	1-259-239-11	CARBON 1M 5% 1/4W	
R214	1-259-239-11	CARBON 1M 5% 1/4W	
R215	1-259-239-11	CARBON 1M 5% 1/4W	
R224	1-259-167-21	CARBON 1K 5% 1/4W	
R225	1-259-167-21	CARBON 1K 5% 1/4W	
R240	1-249-198-11	CARBON 330 5% 1/3W	
R241	1-249-198-11	CARBON 330 5% 1/3W	
R242	1-249-198-11	CARBON 330 5% 1/3W	
R243	1-249-198-11	CARBON 330 5% 1/3W	
R244	1-259-187-11	CARBON 6.8K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
		< RELAY >	
RY100	1-515-614-11	RELAY	
RY101	1-515-614-11	RELAY	
RY102	1-515-614-11	RELAY	
RY103	1-515-614-11	RELAY	
RY104	1-515-614-11	RELAY	
RY105	1-515-614-11	RELAY	
RY106	1-515-614-11	RELAY	
RY107	1-515-614-11	RELAY	

\*\*\*\*\*

A-4419-857-A MAIN BOARD, COMPLETE  
\*\*\*\*\*

Ref. No.	Part No.	Description	Value	Tolerance	Voltage	Remark
		< CAPACITOR >				
C500	1-102-973-00	CERAMIC	100PF	5%	50V	
C501	1-119-824-31	ELECT	10uF	20%	50V	
C502	1-136-808-11	FILM	100PF	5%	100V	
C503	1-125-852-11	FILM	330PF	5%	50V	
C504	1-126-023-11	ELECT	100uF	20%	16V	
C505	1-107-587-11	CERAMIC	7PF	0.5PF	500V	
C506	1-126-023-11	ELECT	100uF	20%	16V	
C507	1-126-023-11	ELECT	100uF	20%	16V	
C508	1-119-779-11	ELECT	220uF	20%	10V	
C509	1-125-842-11	FILM	4PF	10%	50V	
C510	1-119-836-21	ELECT	47uF	20%	63V	
C511	1-102-978-00	CERAMIC	220PF	5%	50V	
C512	1-136-163-00	FILM	0.068uF	5%	50V	
C513	1-136-163-00	FILM	0.068uF	5%	50V	
C517	1-126-023-11	ELECT	100uF	20%	16V	
C600	1-102-973-00	CERAMIC	100PF	5%	50V	
C601	1-119-824-31	ELECT	10uF	20%	50V	
C602	1-136-808-11	FILM	100PF	5%	100V	
C603	1-125-852-11	FILM	330PF	5%	50V	
C604	1-126-023-11	ELECT	100uF	20%	16V	
C605	1-107-587-11	CERAMIC	7PF	0.5PF	500V	
C606	1-126-023-11	ELECT	100uF	20%	16V	
C607	1-126-023-11	ELECT	100uF	20%	16V	
C608	1-119-779-11	ELECT	220uF	20%	10V	
C609	1-125-842-11	FILM	4PF	10%	50V	
C610	1-119-836-21	ELECT	47uF	20%	63V	
C611	1-102-978-00	CERAMIC	220PF	5%	50V	
C612	1-136-163-00	FILM	0.068uF	5%	50V	
C613	1-136-163-00	FILM	0.068uF	5%	50V	
C617	1-126-023-11	ELECT	100uF	20%	16V	
C712	1-128-552-51	ELECT	47uF	20%	63V	
C713	1-126-933-11	ELECT	100uF	20%	16V	
C714	1-126-964-11	ELECT	10uF	20%	50V	
C720	1-113-618-11	ELECT	2200uF	20%	56V	
C721	1-113-618-11	ELECT	2200uF	20%	56V	

< CONNECTOR >

* CN500	1-564-506-11	PLUG, CONNECTOR 3P	
CN503	1-691-770-11	PLUG (MICRO CONNECTOR) 8P	
* CN600	1-564-506-11	PLUG, CONNECTOR 3P	
CN700	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	

Ref. No.	Part No.	Description	Remark
		< DIODE >	
D500	8-719-911-19	DIODE 1SS119-25	
D501	8-719-911-19	DIODE 1SS119-25	
D502	8-719-911-19	DIODE 1SS119-25	
D503	8-719-933-39	DIODE HZS6C1LTA	
D504	8-719-911-19	DIODE 1SS119-25	
D505	8-719-911-19	DIODE 1SS119-25	
D506	8-719-310-61	DIODE SEL1510C-CD-TP3	
D507	8-719-911-19	DIODE 1SS119-25	
D508	8-719-911-19	DIODE 1SS119-25	
D600	8-719-911-19	DIODE 1SS119-25	

D601	8-719-911-19	DIODE 1SS119-25
D602	8-719-911-19	DIODE 1SS119-25
D603	8-719-933-39	DIODE HZS6C1LTA
D604	8-719-911-19	DIODE 1SS119-25
D605	8-719-911-19	DIODE 1SS119-25

D606	8-719-310-61	DIODE SEL1510C-CD-TP3
D607	8-719-911-19	DIODE 1SS119-25
D608	8-719-911-19	DIODE 1SS119-25
D703	8-719-933-39	DIODE HZS6C1LTA

< BRIDGE >

JWH711	4-999-918-01	BRIDGE (PC-BOARD)
JWH712	4-999-918-01	BRIDGE (PC-BOARD)
JWH713	4-999-918-01	BRIDGE (PC-BOARD)
JWH714	4-999-918-01	BRIDGE (PC-BOARD)
JWH715	4-999-918-01	BRIDGE (PC-BOARD)

< TRANSISTOR >

Q500	8-729-045-15	TRANSISTOR 2SC5169-FG
Q501	8-729-201-53	TRANSISTOR 2SA1015-GR
Q502	8-729-201-53	TRANSISTOR 2SA1015-GR
Q503	8-729-201-53	TRANSISTOR 2SA1015-GR
Q504	8-729-021-74	TRANSISTOR 2SA949-OY
Q505	8-729-202-67	TRANSISTOR 2SK246GR-3
Q506	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q507	8-729-021-73	TRANSISTOR 2SC2229-OY
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q509	8-729-104-18	TRANSISTOR 2SC3514
Q510	8-729-104-91	TRANSISTOR 2SA1383
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y
Q513	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA
Q514	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA

Q600	8-729-045-15	TRANSISTOR 2SC5169-FG
Q601	8-729-201-53	TRANSISTOR 2SA1015-GR
Q602	8-729-201-53	TRANSISTOR 2SA1015-GR
Q603	8-729-201-53	TRANSISTOR 2SA1015-GR
Q604	8-729-021-74	TRANSISTOR 2SA949-OY

Q605	8-729-202-67	TRANSISTOR 2SK246GR-3
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q607	8-729-021-73	TRANSISTOR 2SC2229-OY
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q609	8-729-104-18	TRANSISTOR 2SC3514

Q610	8-729-104-91	TRANSISTOR 2SA1383
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y

<b>MAIN</b>	<b>OUTLET</b>	<b>PANEL</b>
-------------	---------------	--------------

Ref. No.	Part No.	Description	Remark
Q613	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q614	8-729-140-84	TRANSISTOR	2SC1841-PAFAEA
Q702	8-729-209-15	TRANSISTOR	2SD2012
		< RESISTOR >	
R500	1-259-167-21	CARBON	1K 5% 1/4W
R501	1-259-215-21	CARBON	100K 5% 1/4W
R502	1-259-151-21	CARBON	220 5% 1/4W
R503	1-259-151-21	CARBON	220 5% 1/4W
R504	1-259-151-21	CARBON	220 5% 1/4W
R505	1-259-179-21	CARBON	3.3K 5% 1/4W
R506	1-259-151-21	CARBON	220 5% 1/4W
R507	1-259-151-21	CARBON	220 5% 1/4W
R508	1-249-490-11	CARBON	27K 5% 1/3W
R509	1-259-175-11	CARBON	2.2K 5% 1/4W
R510	1-259-183-11	CARBON	4.7K 5% 1/4W
△ R511	1-249-405-11	CARBON	100 5% 1/4W F
R512	1-259-171-21	CARBON	1.5K 5% 1/4W
R513	1-259-167-21	CARBON	1K 5% 1/4W
R514	1-249-721-11	CARBON	100K 5% 1/2W
R515	1-259-143-21	CARBON	100 5% 1/4W
R516	1-247-749-11	CARBON	560 5% 1/2W F
△ R517	1-247-688-11	CARBON	10 5% 1/4W F
△ R518	1-247-688-11	CARBON	10 5% 1/4W F
△ R519	1-247-745-11	CARBON	330 5% 1/2W F
△ R520	1-249-405-11	CARBON	100 5% 1/4W F
△ R521	1-249-405-11	CARBON	100 5% 1/4W F
△ R522	1-208-603-11	REGISTER	0.1 10% 5W F
△ R523	1-208-603-11	REGISTER	0.1 10% 5W F
R524	1-259-424-11	CARBON	680 5% 1/6W
△ R526	1-217-997-11	FUSIBLE	10 5% 1/2W F
R527	1-259-484-11	CARBON	220K 5% 1/6W
R532	1-259-420-11	CARBON	470 5% 1/6W
R533	1-249-431-11	CARBON	15K 5% 1/4W
R600	1-259-167-21	CARBON	1K 5% 1/4W
R601	1-259-215-21	CARBON	100K 5% 1/4W
R602	1-259-151-21	CARBON	220 5% 1/4W
R603	1-259-151-21	CARBON	220 5% 1/4W
R604	1-259-151-21	CARBON	220 5% 1/4W
R605	1-259-179-21	CARBON	3.3K 5% 1/4W
R606	1-259-151-21	CARBON	220 5% 1/4W
R607	1-259-151-21	CARBON	220 5% 1/4W
R608	1-249-490-11	CARBON	27K 5% 1/3W
R609	1-259-175-11	CARBON	2.2K 5% 1/4W
R610	1-259-183-11	CARBON	4.7K 5% 1/4W
△ R611	1-249-405-11	CARBON	100 5% 1/4W F
R612	1-259-171-21	CARBON	1.5K 5% 1/4W
R613	1-259-167-21	CARBON	1K 5% 1/4W
R614	1-249-721-11	CARBON	100K 5% 1/2W
R615	1-259-143-21	CARBON	100 5% 1/4W
R616	1-247-749-11	CARBON	560 5% 1/2W F
△ R617	1-247-688-11	CARBON	10 5% 1/4W F
△ R618	1-247-688-11	CARBON	10 5% 1/4W F
△ R619	1-247-745-11	CARBON	330 5% 1/2W F
△ R620	1-249-405-11	CARBON	100 5% 1/4W F
△ R621	1-249-405-11	CARBON	100 5% 1/4W F

Ref. No.	Part No.	Description	Remark
△ R622	1-208-603-11	REGISTER	0.1 10% 5W F
△ R623	1-208-603-11	REGISTER	0.1 10% 5W F
R624	1-259-424-11	CARBON	680 5% 1/6W
△ R626	1-217-997-11	FUSIBLE	10 5% 1/2W F
R627	1-259-484-11	CARBON	220K 5% 1/6W
R632	1-259-420-11	CARBON	470 5% 1/6W
R633	1-249-431-11	CARBON	15K 5% 1/4W
R709	1-249-425-11	CARBON	4.7K 5% 1/4W F
		< VARIABLE RESISTOR >	
RV500	1-241-762-11	RES, ADJ, CARBON 2.2K (BIAS L)	
RV600	1-241-762-11	RES, ADJ, CARBON 2.2K (BIAS R)	
*****			
*	1-669-476-11	OUTLET BOARD	*****
		< JACK >	
△ CNJ3	1-526-794-11	OUTLET AC (AC OUTLET)	
△ CNJ4	1-526-794-11	OUTLET AC (AC OUTLET)	
		< FUSE >	
△ F2	1-532-464-51	FUSE (T2.5AL/250V)	
		< FUSE HOLDER >	
FH3	1-533-233-11	HOLDER, FUSE	
FH4	1-533-233-11	HOLDER, FUSE	
*****			
	A-4419-849-A	PANEL BOARD, COMPLETE	*****
		< CAPACITOR >	
C900	1-126-786-11	ELECT	47uF 20% 16V
C901	1-126-916-11	ELECT	1000uF 20% 6.3V
C902	1-162-294-31	CERAMIC	0.001uF 10% 50V
C903	1-162-294-31	CERAMIC	0.001uF 10% 50V
C904	1-164-159-11	CERAMIC	0.1uF 50V
C905	1-162-294-31	CERAMIC	0.001uF 10% 50V
C906	1-126-795-11	ELECT	10uF 20% 50V
C907	1-162-294-31	CERAMIC	0.001uF 10% 50V
C908	1-126-786-11	ELECT	47uF 20% 16V
C909	1-126-795-11	ELECT	10uF 20% 50V
C912	1-126-786-11	ELECT	47uF 20% 16V
		< CONNECTOR >	
* CN300	1-564-522-11	PLUG, CONNECTOR 7P	
* CN301	1-564-526-11	PLUG, CONNECTOR 11P	
CN304	1-785-438-11	CONNECTOR, BOARD TO BOARD 10P	
CN903	1-766-928-11	CONNECTOR, BOARD TO BOARD 8P	
* CN904	1-564-527-11	PLUG, CONNECTOR 12P	
* CN905	1-564-522-11	PLUG, CONNECTOR 7P	
* CN907	1-774-252-11	CONNECTOR, BOARD TO BOARD 8P	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< DIODE >		R901	1-249-393-11	CARBON 10 5%	1/4W F
D901	8-719-313-50	DIODE SEL6810A-TH12 (EON LINK)		R905	1-249-429-11	CARBON 10K 5%	1/4W
D902	8-719-313-50	DIODE SEL6810A-TH12 (PHONO)		R906	1-249-429-11	CARBON 10K 5%	1/4W
D903	8-719-313-50	DIODE SEL6810A-TH12 (TUNER)		R907	1-249-429-11	CARBON 10K 5%	1/4W
D904	8-719-313-50	DIODE SEL6810A-TH12 (CD)		R908	1-249-437-11	CARBON 47K 5%	1/4W
D905	8-719-313-50	DIODE SEL6810A-TH12 (AUX)		R909	1-249-429-11	CARBON 10K 5%	1/4W
D906	8-719-313-50	DIODE SEL6810A-TH12 (TAPE2/MD)		R910	1-249-401-11	CARBON 47 5%	1/4W F
D907	8-719-313-50	DIODE SEL6810A-TH12 (TAPE1/DAT)		R911	1-249-411-11	CARBON 330 5%	1/4W
D910	8-719-911-19	DIODE 1SS119-25		R912	1-249-429-11	CARBON 10K 5%	1/4W
D911	8-719-911-19	DIODE 1SS119-25		R913	1-249-425-11	CARBON 4.7K 5%	1/4W F
D912	8-719-911-19	DIODE 1SS119-25		R914	1-247-807-31	CARBON 100 5%	1/4W
D913	8-719-911-19	DIODE 1SS119-25		R917	1-249-433-11	CARBON 22K 5%	1/4W
D914	8-719-911-19	DIODE 1SS119-25		R918	1-249-421-11	CARBON 2.2K 5%	1/4W F
D915	8-719-911-19	DIODE 1SS119-25		R919	1-249-421-11	CARBON 2.2K 5%	1/4W F
D916	8-719-024-99	DIODE 11ES2-NTA2B		R920	1-249-429-11	CARBON 10K 5%	1/4W
D917	8-719-911-19	DIODE 1SS119-25		R921	1-249-429-11	CARBON 10K 5%	1/4W
D918	8-719-985-66	DIODE HZS5BLL-TA		R922	1-249-429-11	CARBON 10K 5%	1/4W
D919	8-719-911-19	DIODE 1SS119-25		R923	1-249-429-11	CARBON 10K 5%	1/4W
D920	8-719-911-19	DIODE 1SS119-25		R924	1-249-429-11	CARBON 10K 5%	1/4W
D921	8-719-911-19	DIODE 1SS119-25		R958	1-249-403-11	CARBON 68 5%	1/4W F
D922	8-719-911-19	DIODE 1SS119-25				< SWITCH >	
D923	8-719-911-19	DIODE 1SS119-25		S301	1-571-112-21	SWITCH, PUSH (1 KEY)(SUBSONIC OFF<-ON)	
D924	8-719-911-19	DIODE 1SS119-25		S302	1-762-393-11	SWITCH, PUSH (SOURCE DIRECT)	
		< IC >		S303	1-762-387-11	SWITCH, PUSH (LOUDNESS OFF<-ON)	
IC901	8-759-962-08	IC BA6208		S801	1-771-384-11	SWITCH, ROTARY (SPEAKERS)	
IC902	8-759-392-41	IC TMP47C103N-JP47		S901	1-762-203-11	SWITCH, PUSH (1 KEY)(EON LINK)	
		< PHOTO INTERRUPTER >		S902	1-771-383-12	SWITCH, ROTARY (INPUT SELECTOR)	
PH900	8-719-902-56	PHOTO COUPLER PC817		S903	1-762-656-11	SWITCH, ROTARY (TAPE MONITOR)	
		< TRANSISTOR >				< VIBRATOR >	
Q900	8-729-620-05	TRANSISTOR 2SC2603TP-EF		X900	1-577-358-21	VIBRATOR, CERAMIC (4MHZ)	
Q901	8-729-900-63	TRANSISTOR DTA124ES				*****	
Q902	8-729-900-63	TRANSISTOR DTA124ES				A-4419-860-A PHONO BOARD, COMPLETE	
Q903	8-729-900-80	TRANSISTOR DTC114ES				*****	
Q904	8-729-422-57	TRANSISTOR UN4111				< CAPACITOR >	
Q905	8-729-422-57	TRANSISTOR UN4111		C150	1-102-978-00	CERAMIC 220PF 5% 50V	
Q906	8-729-422-57	TRANSISTOR UN4111		C151	1-126-059-11	ELECT 10uF 20% 50V	
Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE		C152	1-136-808-11	FILM 100PF 5% 100V	
Q908	8-729-620-05	TRANSISTOR 2SC2603TP-EF		C153	1-106-359-00	MYLAR 4700PF 5% 200V	
Q909	8-729-620-05	TRANSISTOR 2SC2603TP-EF		C154	1-126-023-11	ELECT 100uF 20% 16V	
Q910	8-729-422-57	TRANSISTOR UN4111		C155	1-130-341-00	FILM 0.056uF 3% 100V	
Q911	8-729-201-53	TRANSISTOR 2SA1015TP-YGR		C156	1-130-971-00	FILM 0.016uF 3% 100V	
Q920	8-729-422-57	TRANSISTOR UN4111		C157	1-126-059-11	ELECT 10uF 20% 50V	
Q921	8-729-422-57	TRANSISTOR UN4111		C170	1-126-023-11	ELECT 100uF 20% 16V	
Q922	8-729-422-57	TRANSISTOR UN4111		C171	1-126-023-11	ELECT 100uF 20% 16V	
Q923	8-729-422-57	TRANSISTOR UN4111		C172	1-126-023-11	ELECT 100uF 20% 16V	
Q924	8-729-422-57	TRANSISTOR UN4111		C250	1-102-978-00	CERAMIC 220PF 5% 50V	
Q925	8-729-422-57	TRANSISTOR UN4111		C251	1-126-059-11	ELECT 10uF 20% 50V	
		< RESISTOR >		C252	1-136-808-11	FILM 100PF 5% 100V	
R310	1-259-464-11	CARBON 33K 5%	1/6W	C253	1-106-359-00	MYLAR 4700PF 5% 200V	
R311	1-259-446-11	CARBON 5.6K 5%	1/6W	C254	1-126-023-11	ELECT 100uF 20% 16V	
R410	1-259-464-11	CARBON 33K 5%	1/6W	C255	1-130-341-00	FILM 0.056uF 3% 100V	
R411	1-259-446-11	CARBON 5.6K 5%	1/6W	C256	1-130-971-00	FILM 0.016uF 3% 100V	

PHONO	PS	S-D LED
-------	----	---------

Ref. No.	Part No.	Description	Remark
C257	1-126-059-11	ELECT 10uF 20%	50V
< CONNECTOR >			
CN151	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
< DIODE >			
D170	8-719-985-97	DIODE HZS7B1LTA	
< IC >			
IC150	8-759-701-25	IC NJM2068D-D	
< JACK >			
J150	1-784-933-11	JACK 2P (PHONO IN)	
< COIL >			
L150	1-410-977-11	INDUCTOR 100uH	
L151	1-410-977-11	INDUCTOR 100uH	
L250	1-410-977-11	INDUCTOR 100uH	
L251	1-410-977-11	INDUCTOR 100uH	
< TRANSISTOR >			
Q150	8-729-354-52	TRANSISTOR 2SC2545	
Q151	8-729-354-52	TRANSISTOR 2SC2545	
Q250	8-729-354-52	TRANSISTOR 2SC2545	
Q251	8-729-354-52	TRANSISTOR 2SC2545	
< RESISTOR >			
R150	1-259-175-11	CARBON 2.2K 5%	1/4W
R151	1-249-911-11	CARBON 330 5%	1/4W
R152	1-259-215-21	CARBON 100K 5%	1/4W
R153	1-259-215-21	CARBON 100K 5%	1/4W
R154	1-259-161-21	CARBON 560 5%	1/4W
R155	1-259-161-21	CARBON 560 5%	1/4W
R156	1-259-143-21	CARBON 100 5%	1/4W
R157	1-259-191-21	CARBON 10K 5%	1/4W
R158	1-249-900-11	CARBON 110 5%	1/4W
R159	1-249-844-11	CARBON 56K 1%	1/2W
R160	1-259-320-11	CARBON 4.7K 1%	1/2W
R161	1-259-239-11	CARBON 1M 5%	1/4W
R162	1-259-167-21	CARBON 1K 5%	1/4W
R170	1-259-171-21	CARBON 1.5K 5%	1/4W
R250	1-259-175-11	CARBON 2.2K 5%	1/4W
R251	1-249-911-11	CARBON 330 5%	1/4W
R252	1-259-215-21	CARBON 100K 5%	1/4W
R253	1-259-215-21	CARBON 100K 5%	1/4W
R254	1-259-161-21	CARBON 560 5%	1/4W
R255	1-259-161-21	CARBON 560 5%	1/4W
R256	1-259-143-21	CARBON 100 5%	1/4W
R257	1-259-191-21	CARBON 10K 5%	1/4W
R258	1-249-900-11	CARBON 110 5%	1/4W
R259	1-249-844-11	CARBON 56K 1%	1/2W
R260	1-259-320-11	CARBON 4.7K 1%	1/2W
R261	1-259-239-11	CARBON 1M 5%	1/4W
R262	1-259-167-21	CARBON 1K 5%	1/4W

\*\*\*\*\*

Ref. No.	Part No.	Description	Remark
	A-4419-859-A	PS BOARD, COMPLETE	
*****			
< CAPACITOR >			
C750	1-128-974-11	ELECT 10000uF 20%	56V
C751	1-128-974-11	ELECT 10000uF 20%	56V
C752	1-113-618-11	ELECT 2200uF 20%	56V
C753	1-113-618-11	ELECT 2200uF 20%	56V
C754	1-137-398-11	FILM 0.068uF 5%	100V
C755	1-137-398-11	FILM 0.068uF 5%	100V
C756	1-104-999-11	MYLAR 0.1uF 10%	200V
C757	1-137-352-11	FILM 0.033uF 5%	100V
C758	1-137-352-11	FILM 0.033uF 5%	100V
< CONNECTOR >			
CN1	1-774-108-11	PIN, CONNECTOR (PC BOARD)	
CN2	1-564-321-00	PIN, CONNECTOR 2P	
CN3	1-564-321-00	PIN, CONNECTOR 2P	
* CN4	1-564-321-21	PIN, CONNECTOR 2P	
* CN750	1-564-242-00	PIN, CONNECTOR 5P	
* CN751	1-766-920-11	PIN, CONNECTOR 4P	
CN752	1-770-832-11	CONNECTOR, BOARD TO BOARD 6P	
< DIODE >			
D751	8-719-230-02	DIODE 30DF2-FC	
D752	8-719-230-02	DIODE 30DF2-FC	
D753	8-719-230-02	DIODE 30DF2-FC	
D754	8-719-230-02	DIODE 30DF2-FC	
D755	8-719-024-99	DIODE 11ES2-NTA2B	
D756	8-719-024-99	DIODE 11ES2-NTA2B	
D757	8-719-024-99	DIODE 11ES2-NTA2B	
D758	8-719-024-99	DIODE 11ES2-NTA2B	
< FUSE >			
△ F1	1-532-504-51	FUSE (T4.0AL/250V)	
< FUSE HOLDER >			
FH1	1-533-233-11	HOLDER, FUSE	
FH2	1-533-233-11	HOLDER, FUSE	
< RESISTOR >			
△ R750	1-212-974-00	FUSIBLE 47 5%	1/2W F
*****			
* 1-669-492-11	S-D LED BOARD	*****	
< CONNECTOR >			
CN910	1-691-758-51	PIN, CONNECTOR 3P	
< DIODE >			
D908	8-719-046-38	DIODE SEL5821A-TH8F (SOURCE DIRECT)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

<b>S-D LED</b>	<b>SIRCS</b>	<b>SIRCS SUB</b>	<b>SP-TM</b>	<b>STONE</b>
----------------	--------------	------------------	--------------	--------------

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< RESISTOR >				< DIODE >	
R927	1-249-406-11	CARBON 120 5%	1/4W F	D511	8-719-911-19	DIODE 1SS119-25	
*****				D512	8-719-911-19	DIODE 1SS119-25	
*	1-669-490-11	SIRCS BOARD		D513	8-719-911-19	DIODE 1SS119-25	
		*****		D700	8-719-024-99	DIODE 11ES2-NTA2B	
		< CONNECTOR >		D701	8-719-024-99	DIODE 11ES2-NTA2B	
CN900	1-691-766-11	PLUG (MICRO CONNECTOR) 4P		D702	8-719-024-99	DIODE 11ES2-NTA2B	
* CN911	1-560-666-00	PIN, CONNECTOR 3P				< IC >	
		< DIODE >		IC700	8-759-111-68	IC uPC1237HA	
D900	8-719-046-46	DIODE SEL5221S-TH8F (PROTECTION)				< COIL >	
		< RESISTOR >		L501	1-411-906-11	COIL, AIR-CORE	
R900	1-249-409-11	CARBON 220 5%	1/4W F	L601	1-411-906-11	COIL, AIR-CORE	
*****						< TRANSISTOR >	
*	1-670-219-11	SIRCS SUB BOARD		Q700	8-729-119-76	TRANSISTOR 2SA1115-EF	
		*****		Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE	
		< CONNECTOR >				< RESISTOR >	
* CN912	1-565-835-11	SOCKET, CONNECTOR 3P		R528	1-249-162-11	CARBON 10 5%	1/3W
		< IC >		R529	1-247-750-11	CARBON 680 5%	1/2W F
IC900	8-759-459-86	IC NJL64H400A (REMOTE CONTROL SENSOR)		△ R530	1-212-857-00	FUSIBLE 10 5%	1/4W F
*****				△ R531	1-212-857-00	FUSIBLE 10 5%	1/4W F
A-4419-858-A		SP-TM BOARD, COMPLETE		R628	1-249-162-11	CARBON 10 5%	1/3W
		*****		R629	1-247-750-11	CARBON 680 5%	1/2W F
		< CAPACITOR >		△ R630	1-212-857-00	FUSIBLE 10 5%	1/4W F
C515	1-162-282-31	CERAMIC 100PF 10%	50V	△ R631	1-212-857-00	FUSIBLE 10 5%	1/4W F
C516	1-162-282-31	CERAMIC 100PF 10%	50V	R700	1-249-439-11	CARBON 68K 5%	1/4W
C615	1-162-282-31	CERAMIC 100PF 10%	50V	R701	1-249-429-11	CARBON 10K 5%	1/4W
C616	1-162-282-31	CERAMIC 100PF 10%	50V	R702	1-249-429-11	CARBON 10K 5%	1/4W
C700	1-126-965-11	ELECT 22uF 20%	50V	R703	1-259-476-11	CARBON 100K 5%	1/6W
C701	1-136-163-00	FILM 0.068uF 5%	50V	R704	1-249-433-11	CARBON 22K 5%	1/4W
C702	1-124-995-11	ELECT 220uF 20%	10V	R705	1-247-883-00	CARBON 150K 5%	1/4W
C703	1-136-157-00	FILM 0.022uF 5%	50V	R706	1-249-431-11	CARBON 15K 5%	1/4W
C704	1-104-664-11	ELECT 47uF 20%	16V	R707	1-249-429-11	CARBON 10K 5%	1/4W
C705	1-104-664-11	ELECT 47uF 20%	16V	△ R708	1-213-082-61	FUSIBLE 82 5%	1W
C706	1-137-150-11	MYLAR 0.01uF 10%	100V	R710	1-247-747-11	CARBON 470 5%	1/2W
C707	1-137-150-11	MYLAR 0.01uF 10%	100V	R711	1-247-747-11	CARBON 470 5%	1/2W
C708	1-128-578-11	ELECT 1uF 20%	100V			< RELAY >	
C709	1-128-556-11	ELECT 1000uF 20%	63V	RY501	1-515-921-11	RELAY (12V)	
C710	1-128-553-11	ELECT 220uF 20%	63V	RY502	1-515-921-11	RELAY (12V)	
C711	1-128-582-11	ELECT 10uF 20%	63V	RY503	1-515-920-11	RELAY (24V)	
C715	1-164-159-11	CERAMIC 0.1uF	50V			< TERMINAL >	
		< CONNECTOR >		TM501	1-537-740-11	TERMINAL BOARD (SPEAKERS)	
CN702	1-770-831-11	CONNECTOR, BOARD TO BOARD 6P		*****			
CN703	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL)		A-4419-850-A		STONE BOARD, COMPLETE	
						*****	
						< CAPACITOR >	
C300	1-136-171-00	FILM 0.33uF 5%	50V	C300	1-136-171-00	FILM 0.33uF 5%	50V
C301	1-130-475-00	MYLAR 0.0022uF 5%	50V	C301	1-130-475-00	MYLAR 0.0022uF 5%	50V

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

**TONE**      **VOL**

Ref. No.	Part No.	Description	Remark
C302	1-136-153-00	FILM	0.01uF 5% 50V
C303	1-136-155-00	FILM	0.015uF 5% 50V
C304	1-136-165-00	FILM	0.1uF 5% 50V
C305	1-136-165-00	FILM	0.1uF 5% 50V
C306	1-130-471-00	MYLAR	0.001uF 5% 50V
C400	1-136-171-00	FILM	0.33uF 5% 50V
C401	1-130-475-00	MYLAR	0.0022uF 5% 50V
C402	1-136-153-00	FILM	0.01uF 5% 50V
C403	1-136-155-00	FILM	0.015uF 5% 50V
C404	1-136-165-00	FILM	0.1uF 5% 50V
C405	1-136-165-00	FILM	0.1uF 5% 50V
C406	1-130-471-00	MYLAR	0.001uF 5% 50V
< CONNECTOR >			
CN305	1-785-440-11	CONNECTOR, BOARD TO BOARD 10P	
* CN801	1-564-524-11	PLUG, CONNECTOR 9P	
* CN802	1-564-519-11	PLUG, CONNECTOR 4P	
CN901	1-785-420-11	CONNECTOR, BOARD TO BOARD 8P	
CN908	1-785-439-11	CONNECTOR, BOARD TO BOARD 8P	
< RESISTOR >			
R300	1-259-500-11	CARBON	1M 5% 1/6W
R301	1-259-500-11	CARBON	1M 5% 1/6W
R302	1-259-446-11	CARBON	5.6K 5% 1/6W
R303	1-259-436-11	CARBON	2.2K 5% 1/6W
R304	1-259-500-11	CARBON	1M 5% 1/6W
R305	1-259-464-11	CARBON	33K 5% 1/6W
R306	1-259-456-11	CARBON	15K 5% 1/6W
R307	1-259-446-11	CARBON	5.6K 5% 1/6W
R308	1-259-456-11	CARBON	15K 5% 1/6W
R309	1-259-500-11	CARBON	1M 5% 1/6W
R391	1-249-429-11	CARBON	10K 5% 1/4W
R392	1-249-429-11	CARBON	10K 5% 1/4W
R393	1-249-429-11	CARBON	10K 5% 1/4W
R400	1-259-500-11	CARBON	1M 5% 1/6W
R401	1-259-500-11	CARBON	1M 5% 1/6W
R402	1-259-446-11	CARBON	5.6K 5% 1/6W
R403	1-259-436-11	CARBON	2.2K 5% 1/6W
R404	1-259-500-11	CARBON	1M 5% 1/6W
R405	1-259-464-11	CARBON	33K 5% 1/6W
R406	1-259-456-11	CARBON	15K 5% 1/6W
R407	1-259-446-11	CARBON	5.6K 5% 1/6W
R408	1-259-456-11	CARBON	15K 5% 1/6W
R409	1-259-500-11	CARBON	1M 5% 1/6W
R801	1-247-751-11	CARBON	820 5% 1/2W
R802	1-247-751-11	CARBON	820 5% 1/2W
R803	1-247-751-11	CARBON	820 5% 1/2W
R804	1-247-751-11	CARBON	820 5% 1/2W
R805	1-247-751-11	CARBON	820 5% 1/2W
R806	1-247-751-11	CARBON	820 5% 1/2W
R807	1-247-747-11	CARBON	470 5% 1/2W
R808	1-247-747-11	CARBON	470 5% 1/2W
R809	1-247-747-11	CARBON	470 5% 1/2W
R810	1-247-747-11	CARBON	470 5% 1/2W
R902	1-247-751-11	CARBON	820 5% 1/2W
R904	1-249-429-11	CARBON	10K 5% 1/4W
R916	1-247-239-00	CARBON	910 5% 1/2W

Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >			
RV301	1-225-642-11	RES, VAR, CARBON 250K/250K (BALANCE)	
RV302	1-225-643-11	RES, VAR, CARBON 250K/250K (TREBLE TONE)	
RV303	1-225-644-11	RES, VAR, CARBON 900K/900K (BASS TONE)	
*****			
*	1-669-489-11	VOL BOARD	*****
< CAPACITOR >			
C310	1-136-165-00	FILM	0.1uF 5% 50V
< CONNECTOR >			
CN302	1-691-772-11	PLUG (MICRO CONNECTOR) 10P	
CN303	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
< VARIABLE RESISTOR >			
RV300	1-225-675-11	RES, VAR, CARBON 120K/120K (VOLUME)	
*****			
MISCELLANEOUS			
*****			
△ 11	1-777-185-11	CORD, POWER	
△ CNJ3	1-526-794-11	OUTLET, AC	
△ CNJ4	1-526-794-11	OUTLET, AC	
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q702	8-729-209-15	TRANSISTOR 2SD2012	
△ S1	1-554-920-11	SWITCH, PUSH (AC POWER)(1 KEY)	
△ T1	1-433-952-11	TRANSFORMER, POWER	
*****			
ACCESSORIES & PACKING MATERIALS			
*****			
1-473-656-11	REMOTE COMMANDER (RM-S316)		
3-866-636-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)		
3-866-636-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN)		
4-981-643-01	COVER, BATTERY (FOR RM-S316)		
*****			
*****			
*****			
*****			
*****			
#1	7-682-548-09	SCREW +B 3X8	
#2	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S (SILVER)	
#2	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S (BLACK)	
#3	7-685-885-09	SCREW +BVTT 4X16 (S)	
#4	7-685-872-09	SCREW +BVTT 3X8 (S)	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.