

TA-FA30ES

SERVICE MANUAL

AEP Model
UK Model
E Model
Australian Model
Chinese Model



Photo: GOLD model

SPECIFICATIONS

System

Power Amplifier: Pure-complementary SEPP MOS FET power amplifier with all stages directly coupled
Preamplifier: Low-noise, high-gain equalizer amplifier
Power section: Large-capacity power supply advanced STD

Rated output

4 ohms, 120 W + 120 W (DIN 0.7%, 1 kHz)
8 ohms, 80 W + 80 W (DIN 0.7%, 1 kHz)

Speaker Impedance

4 to 16 ohms

Output bandwidth (8 ohms)

10 Hz to 100 kHz (at 40 W output, and high-frequency distortion rate of 0.08%)

Total harmonic distortion

0.008% (at 8 ohms, 10 W output)

Damping factor

100 (8 ohms, 1 kHz)

Intermodulation (1M) distortion (60 Hz : 7 kHz = 4 : 1)

0.008% (8 ohms)

Throughrate

125 V/ μ sec, 250 V/ μ sec (Inside)

Residual noise

Less than 100 μ V (network A)

Equalizer deviation

PHONO MM: 20 Hz to 20 kHz, ± 5 dB

Frequency response

TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD: 7 Hz to 100 kHz ± 3 dB

S/N

PHONO MC: 78 dB (network A, 0.5 mV)
MM: 95 dB (network A, 5 mV)
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD: 105 dB

Inputs

Input sensitivity and impedance

PHONO MC: 0.17 mV, 100 ohms
MM: 2.5 mV, 50 kilohms
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD: 150 mV, 20 kilohms

Maximum input capability (1 kHz)

PHONO MC: 9 mV
MM: 150 mV

Outputs

Output level/impedance

REC OUT 1, 2: 150 mV, 1 kilohm
PHONES: 10 mW (at 8 ohms)

Tone controls

BASS (100 Hz): ± 7 dB
TREBLE (10 kHz): ± 7 dB

General

Power requirements

230 V AC, 50/60 Hz

Power consumption

220 W

Dimensions (approx) (w/h/d)

430 \times 150 \times 415 mm incl. projecting parts and controls

Mass (approx)

11.0 kg

Supplied accessories

Remote commander (remote) RM-S326 (1)
Sony batteries R6 (size-AA) (2)

Design and specifications are subject to change without notice.



INTEGRATED STEREO AMPLIFIER

SONY®

TABLE OF CONTENTS

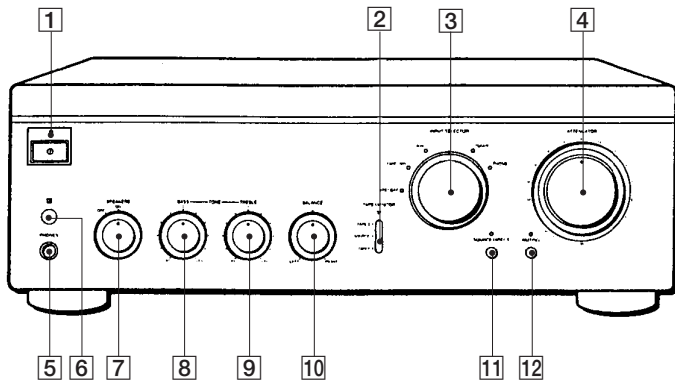
1. GENERAL	
Location of Controls	3
2. DISASSEMBLY	4
3. ELECTRICAL ADJUSTMENTS	6
4. DIAGRAMS	
4-1. Notes for Printed Wiring Boards and Schematic Diagrams	8
4-2. Printed Wiring Boards – INPUT Section –	9
4-3. Schematic Diagram – INPUT Section –	11
4-4. Printed Wiring Boards – MAIN Section –	13
4-5. Schematic Diagram – MAIN Section –	15
4-6. Printed Wiring Boards – PANEL Section –	17
4-7. Schematic Diagram – PANEL Section –	19
4-8. Printed Wiring Boards – POWER Section –	21
4-9. Schematic Diagram – POWER Section –	23
4-10. IC Pin Function Description	26
5. EXPLODED VIEWS	27
6. ELECTRICAL PARTS LIST	31

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.

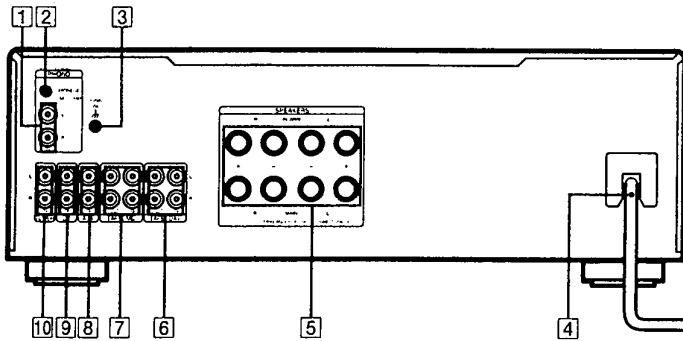
SECTION 1 GENERAL

LOCATION OF CONTROLS Front Panel



- 1 ① (Power) switch and indicator
- 2 TAPE MONITOR switch and indicator
- 3 INPUT SELECTOR switch and indicator
- 4 ATTENUATOR control
- 5 PHONES jack
- 6 Remote control sensor
- 7 SPEAKERS switch
- 8 BASS control
- 9 TREBLE control
- 10 BALANCE control
- 11 SOURCE DIRECT switch and indicator
- 12 MUTING switch and indicator

Rear Panel

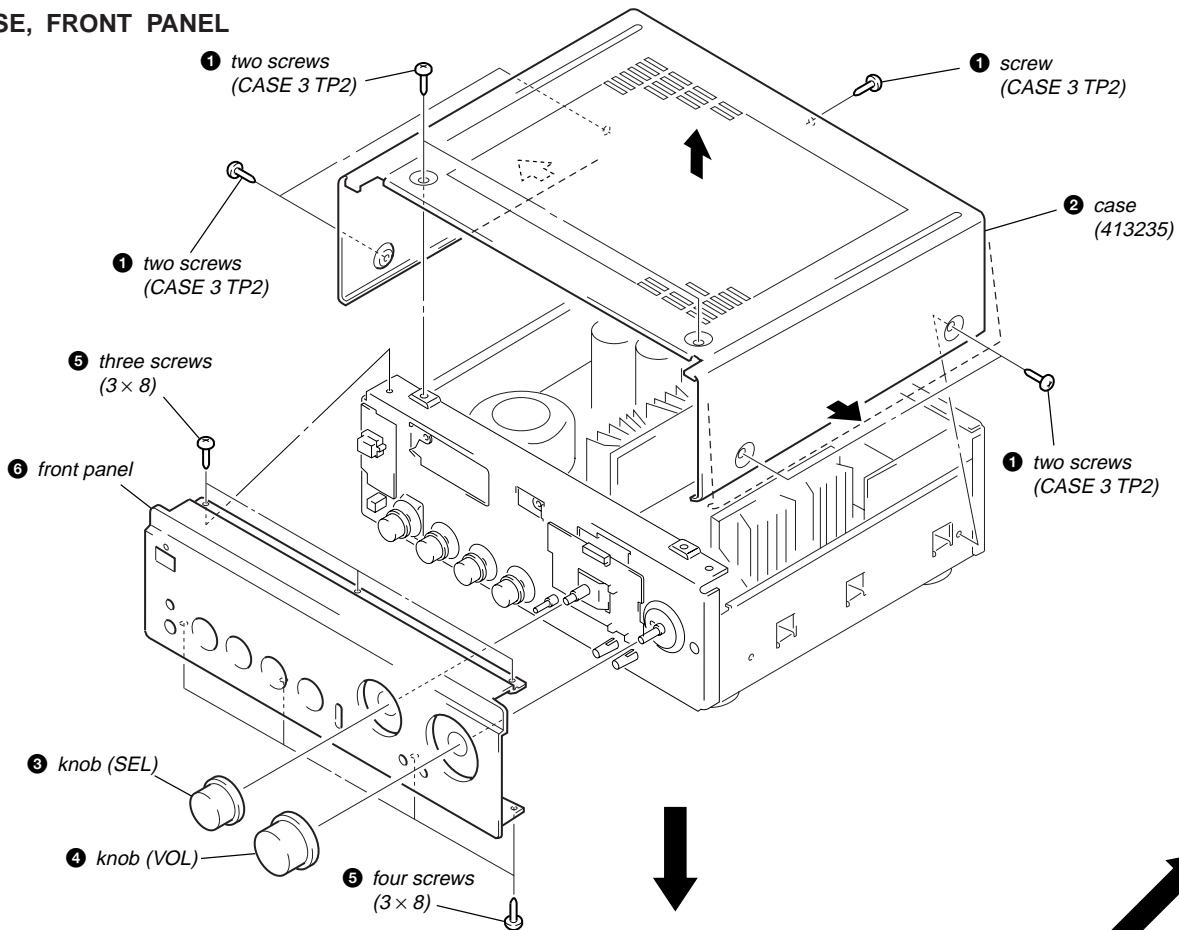


- 1 PHONO
- 2 CARTRIDGE MM/MC
- 3 SIGNAL GND $\overline{\text{h}}$
- 4 Mains lead
- 5 SPEAKERS MAIN/BI-WIRE
- 6 TAPE 1/DAT
- 7 TAPE 2/MD
- 8 AUX
- 9 CD
- 10 TUNER

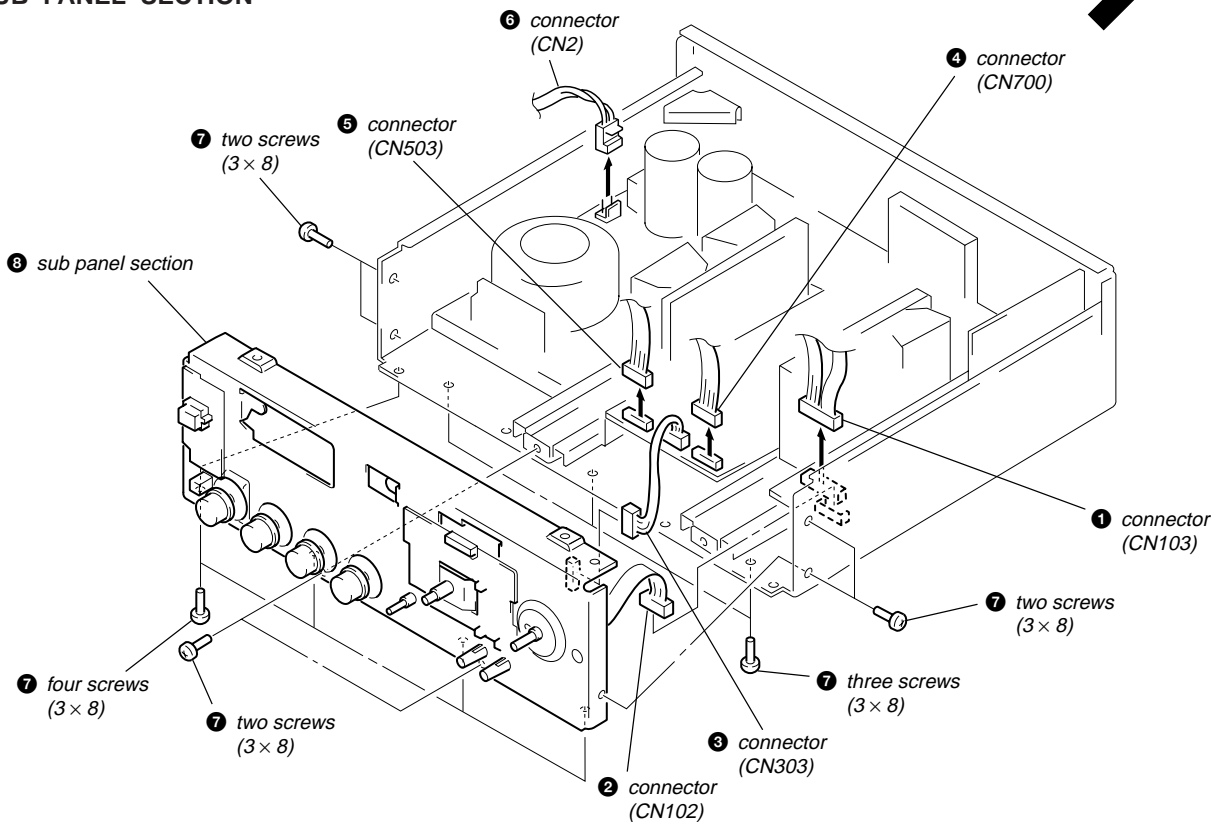
SECTION 2 DISASSEMBLY

Note: Follow the disassembly procedure in the numerical order given.

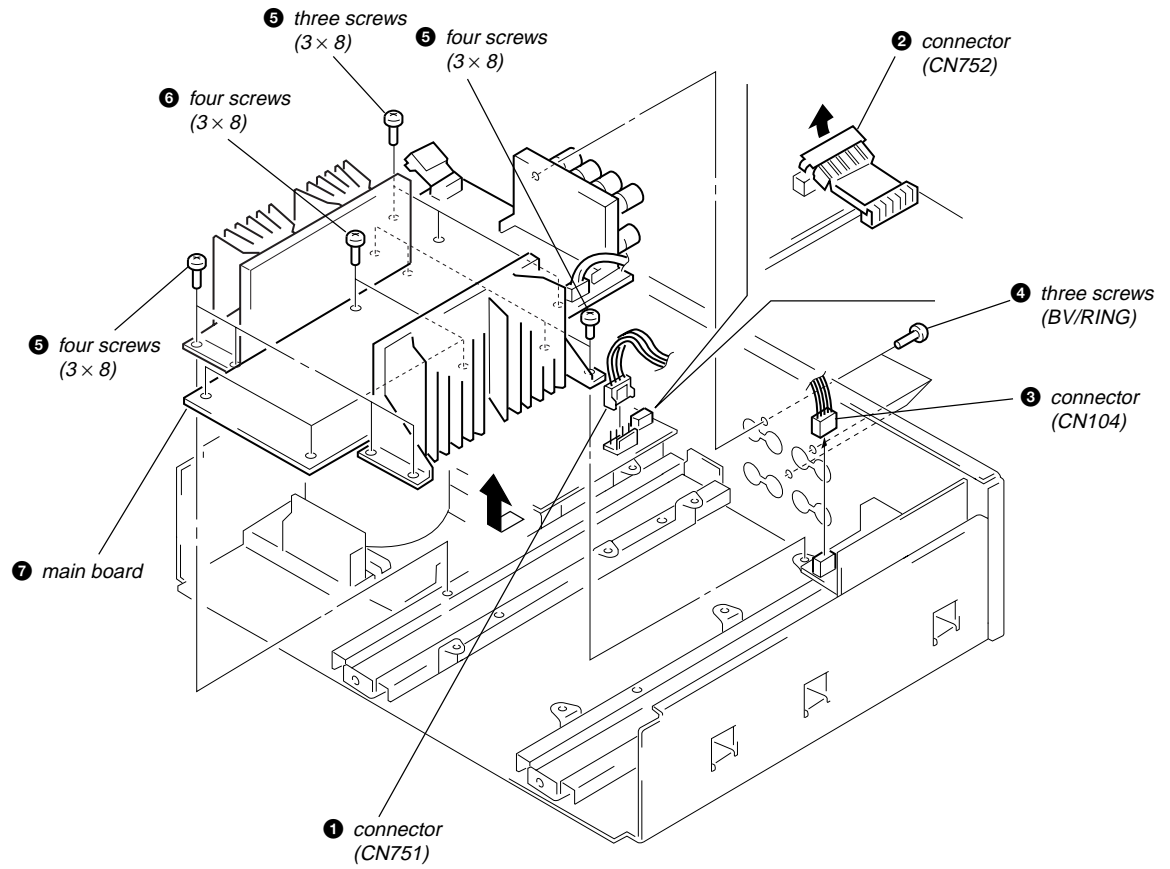
CASE, FRONT PANEL



SUB PANEL SECTION



MAIN BOARD






SECTION 3 ELECTRICAL ADJUSTMENTS

Bias Adjustment

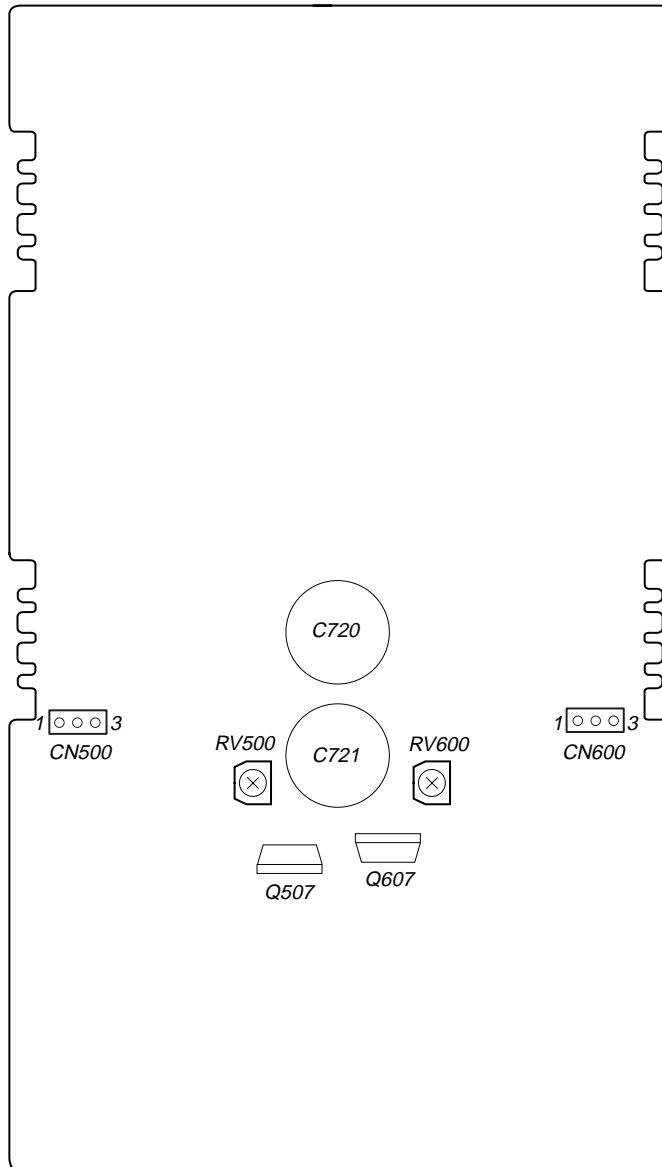
1. Rotate fully the bias adjusting semi-fixed resistors (RV500, RV600) to the MIN position (counterclockwise).
2. Connect a digital voltmeter to the CN500 and CN600.

	1 pin	3 pin
CN500	+	-
CN600	-	+

3. Set the slidack to 0 V, and press the  button (ON) on the set.
4. Raise gradually the slidack voltage up to the rated voltage (230 V).
5. At this time, confirm that the SP relay is turned on (it will click), and at the same time, the LED on the  button changes from red to green.
6. Adjust the RV500 and RV600 so that a reading of digital voltmeter is $10 \text{ mV} \pm 2 \text{ mV}$.
7. Return the slidack to 0 V, and press the  button (OFF) on the set.

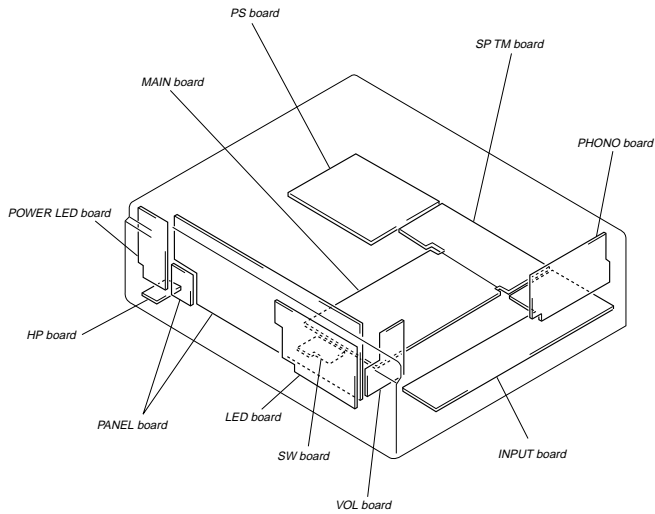
Adjustment Location:

MAIN Board (Component Side)



SECTION 4 DIAGRAMS

• Circuit Boards Location



4-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS (In addition to this, the necessary note is printed in each block.)

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF; μF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

NOTE: The components identified by mark Δ , or dotted line with mark Δ , 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 conditions.

no mark: POWER ON

- Voltages are taken with a VOM (Input impedance 10 M Ω).

Voltage variations may be noted due to normal production tolerances.

- Waveforms are taken with an oscilloscope.

Voltage variations may be noted due to normal production tolerances.

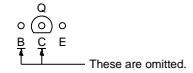
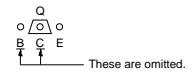
- Circled numbers refer to waveforms.

- Signal path.

- : TUNER

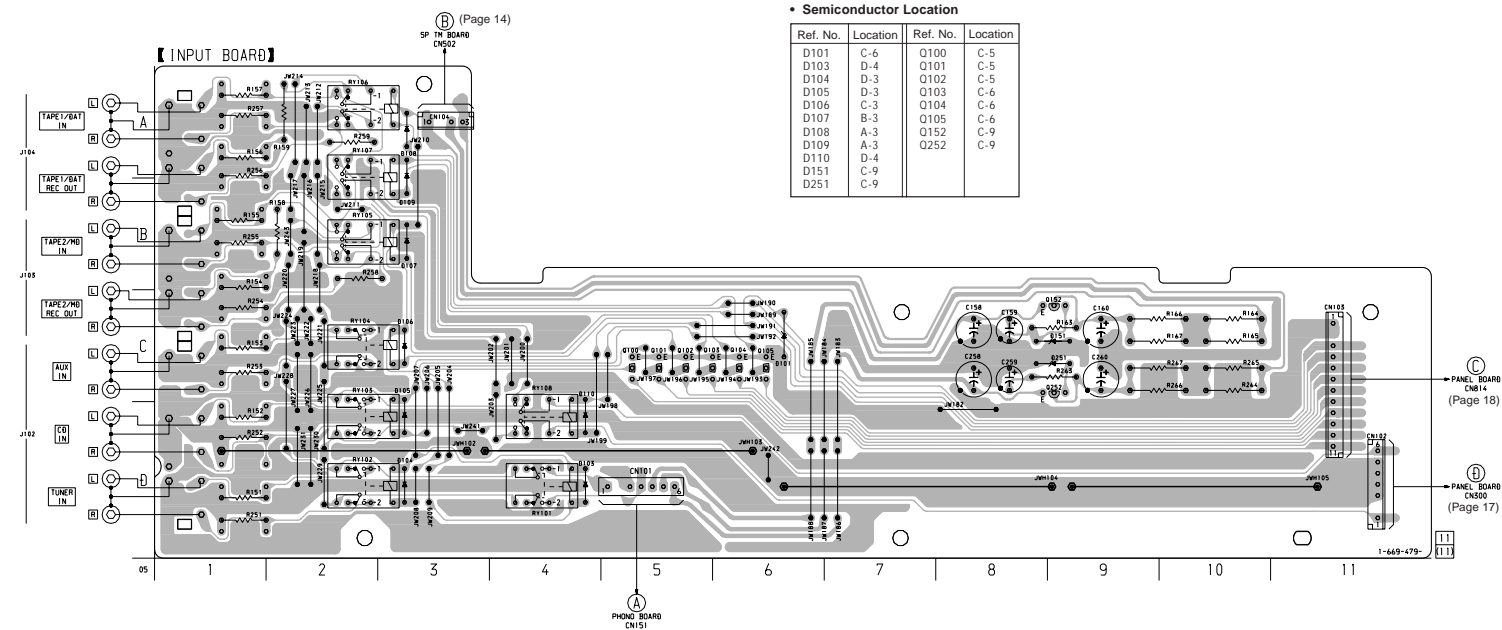
Note on Printed Wiring Boards:

- : parts extracted from the component side.
- : Pattern from the side which enables seeing.
- Indication of transistor.



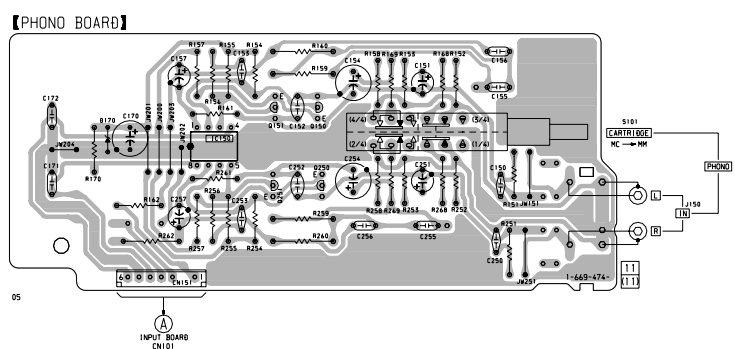
TA-FA30ES

4-2. PRINTED WIRING BOARDS – INPUT Section – • See page 7 for circuit Boards Location.

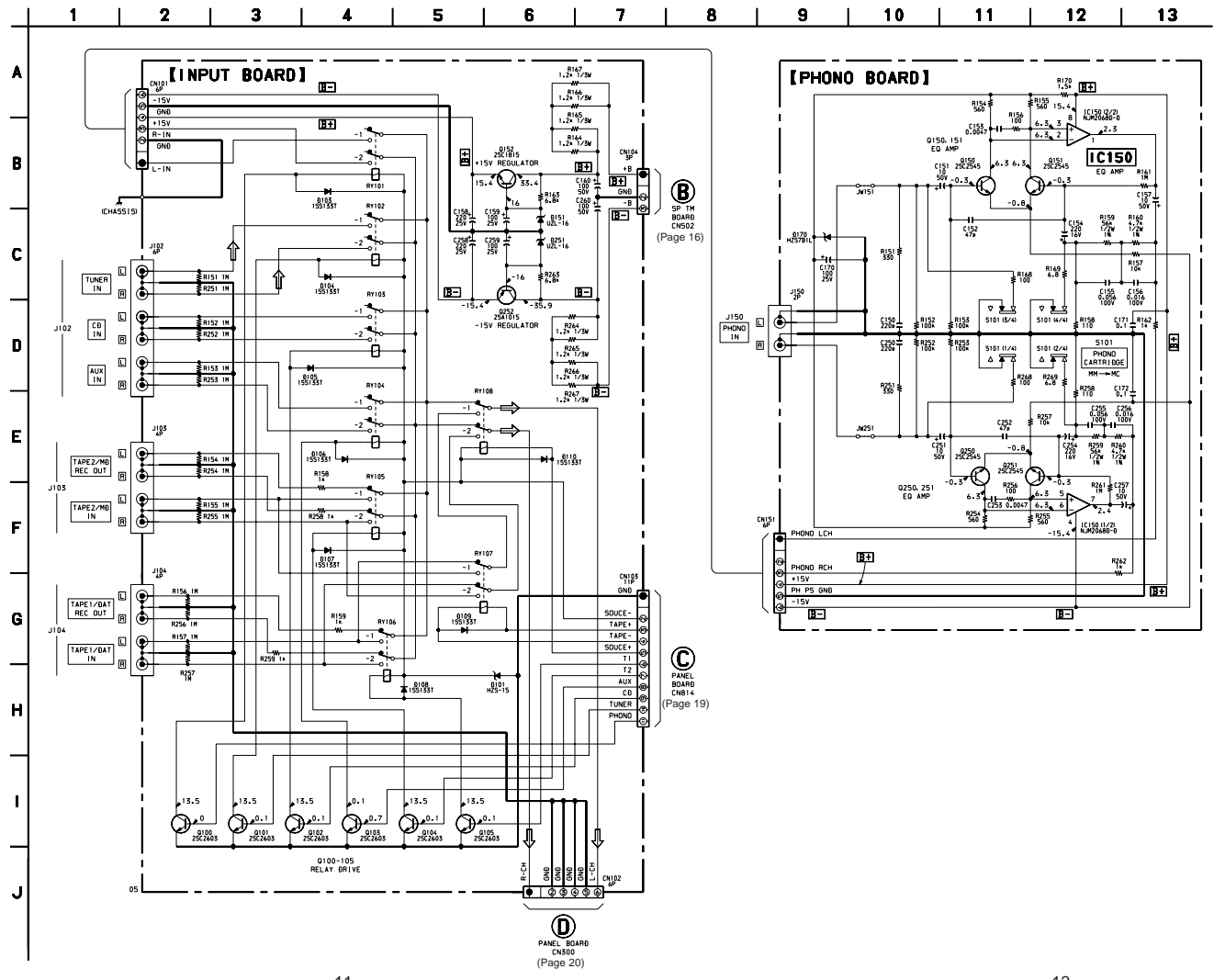


• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D101	C-6	Q100	C-5
D103	D-4	Q101	C-5
D104	D-3	Q102	C-5
D105	D-3	Q103	C-6
D106	C-3	Q104	C-6
D107	B-3	Q105	C-6
D108	A-3	Q152	C-9
D109	A-3	Q252	C-9
D110	D-4		
D151	C-9		
D251	C-9		

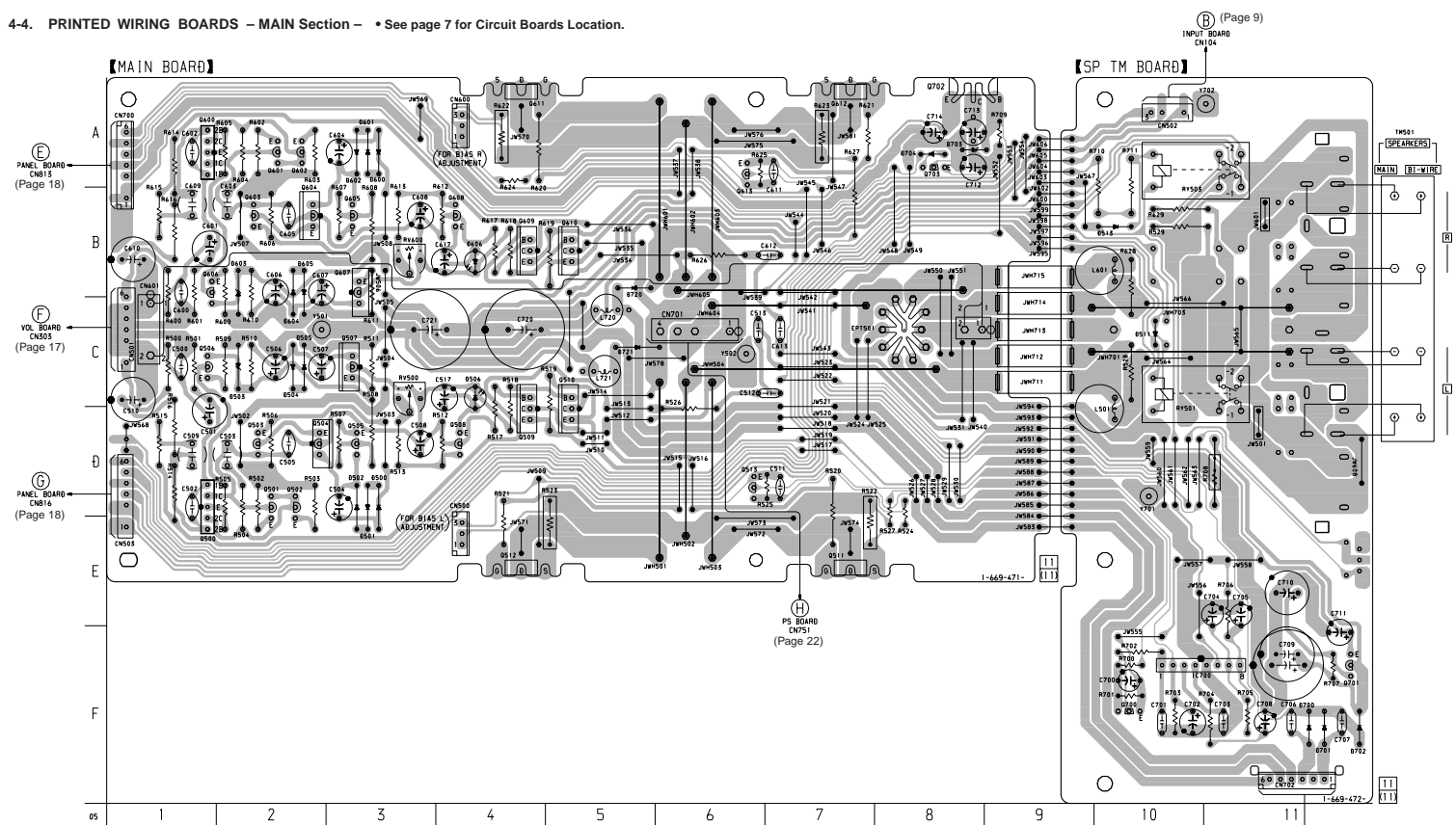


4-3. SCHEMATIC DIAGRAM - INPUT Section -



TA-FA30ES

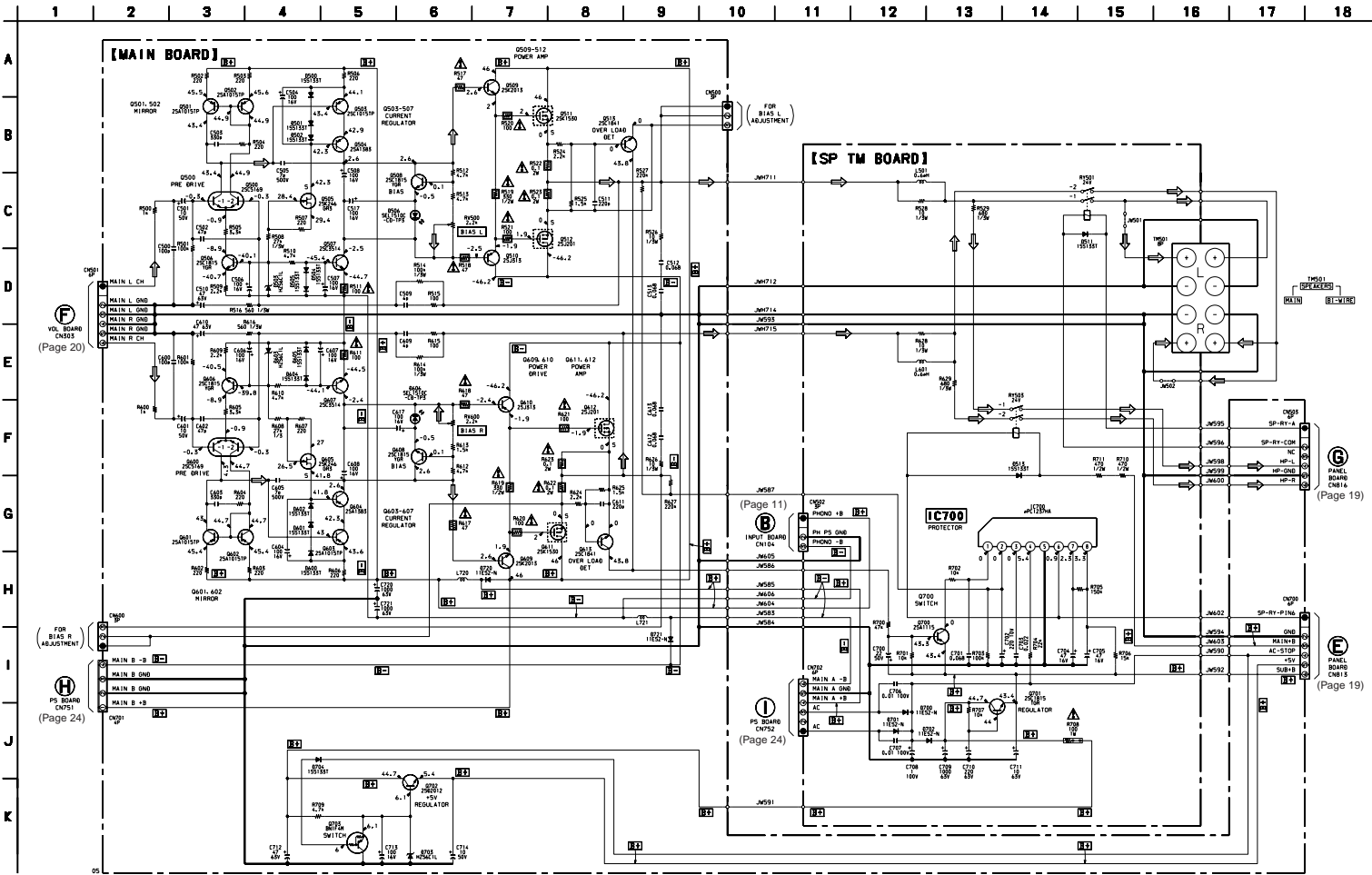
4-4. PRINTED WIRING BOARDS – MAIN Section – • See page 7 for Circuit Boards Location.



• Semiconductor Location

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D500	D-3	D606	B-4	0504	D-2	0605	B-3
D501	D-3	D700	F-11	0505	D-3	0606	B-1
D502	D-3	D701	F-11	0506	C-1	0607	B-3
D503	C-2	D702	F-11	0507	C-3	0608	B-4
D504	C-2	D703	A-8	0508	D-4	0609	B-4
D505	C-2	D704	A-8	0509	D-4	0610	B-5
D506	C-4	D720	B-5	0510	C-5	0611	A-4
D511	C-10	D721	C-5	0511	E-7	0612	A-7
D513	B-10			0512	E-4	0613	A-6
D600	A-3	IC700	F-10	0513	D-6	0700	F-10
D601	A-3			0600	A-1	0701	F-11
D602	A-3	0500	D-1	0601	A-2	0702	A-8
D603	B-2	0501	D-2	0602	A-2	0703	A-8
D604	B-2	0502	D-2	0603	B-2		
D605	B-2	0503	D-2	0604	B-2		

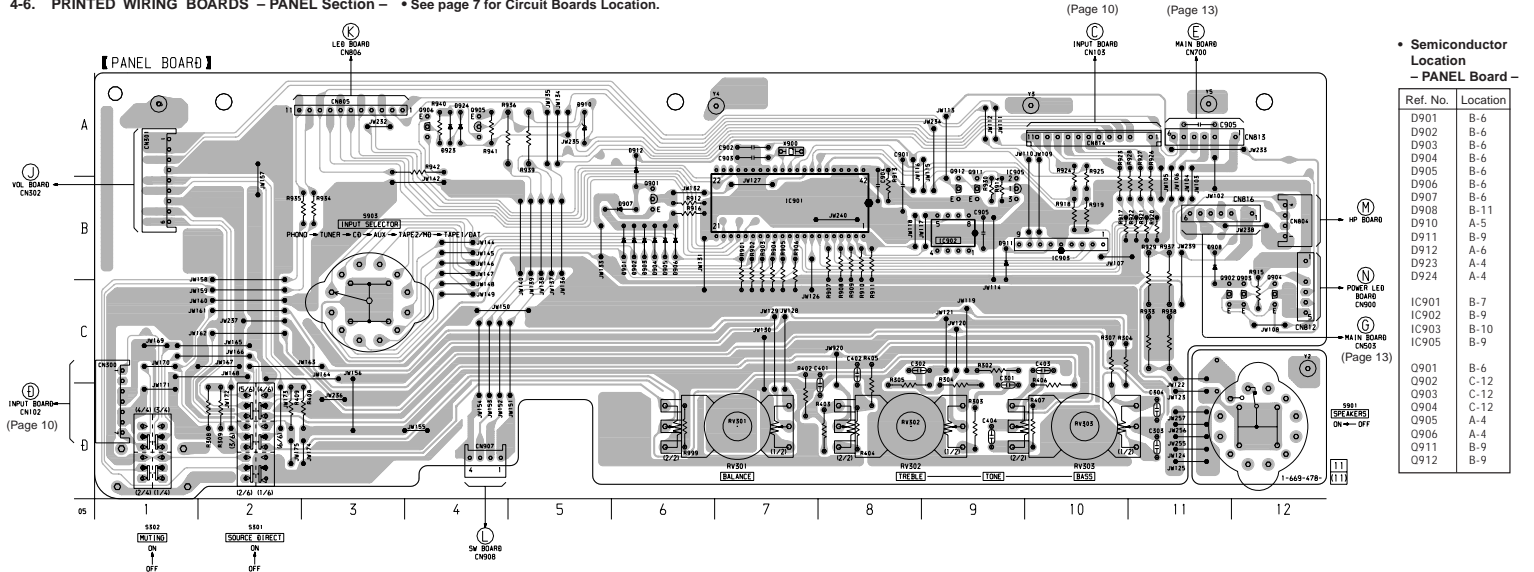
4-5. SCHEMATIC DIAGRAM – MAIN Section – • See page 25 for IC Block Diagram.



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

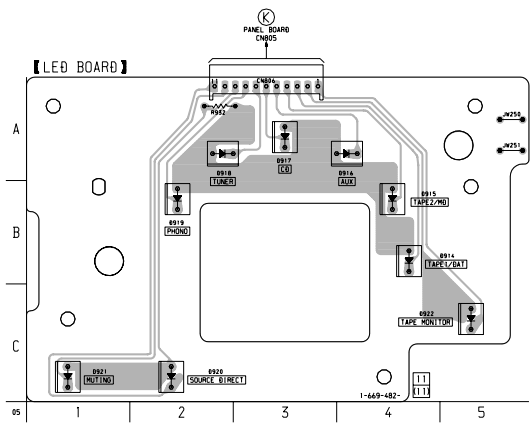
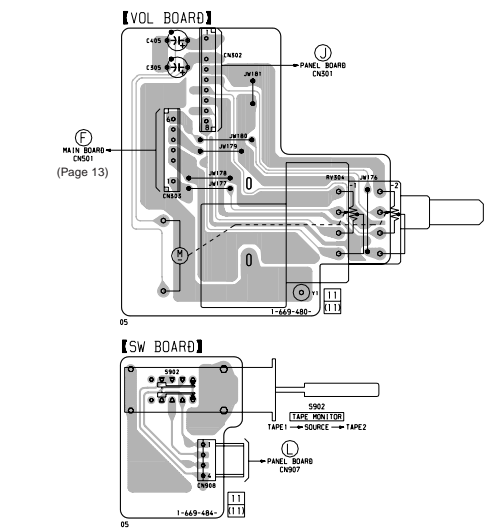
TA-FA30ES

4-6. PRINTED WIRING BOARDS - PANEL Section - • See page 7 for Circuit Boards Location.



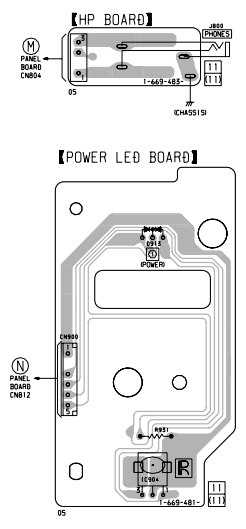
• Semiconductor Location - PANEL Board -

Ref. No.	Location
D901	B-6
D902	B-6
D903	B-6
D904	B-6
D905	B-6
D906	B-6
D907	B-6
D908	B-11
D910	A-5
D911	B-9
D912	A-6
D923	A-4
D924	A-4
IC901	B-7
IC902	B-9
IC903	B-10
IC905	B-9
(Page 13)	
O901	B-6
O902	C-12
O903	C-12
O904	C-12
O905	A-4
O906	A-4
O911	B-9
O912	B-9

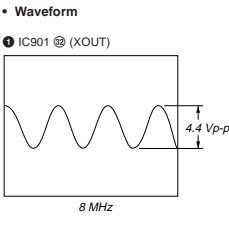
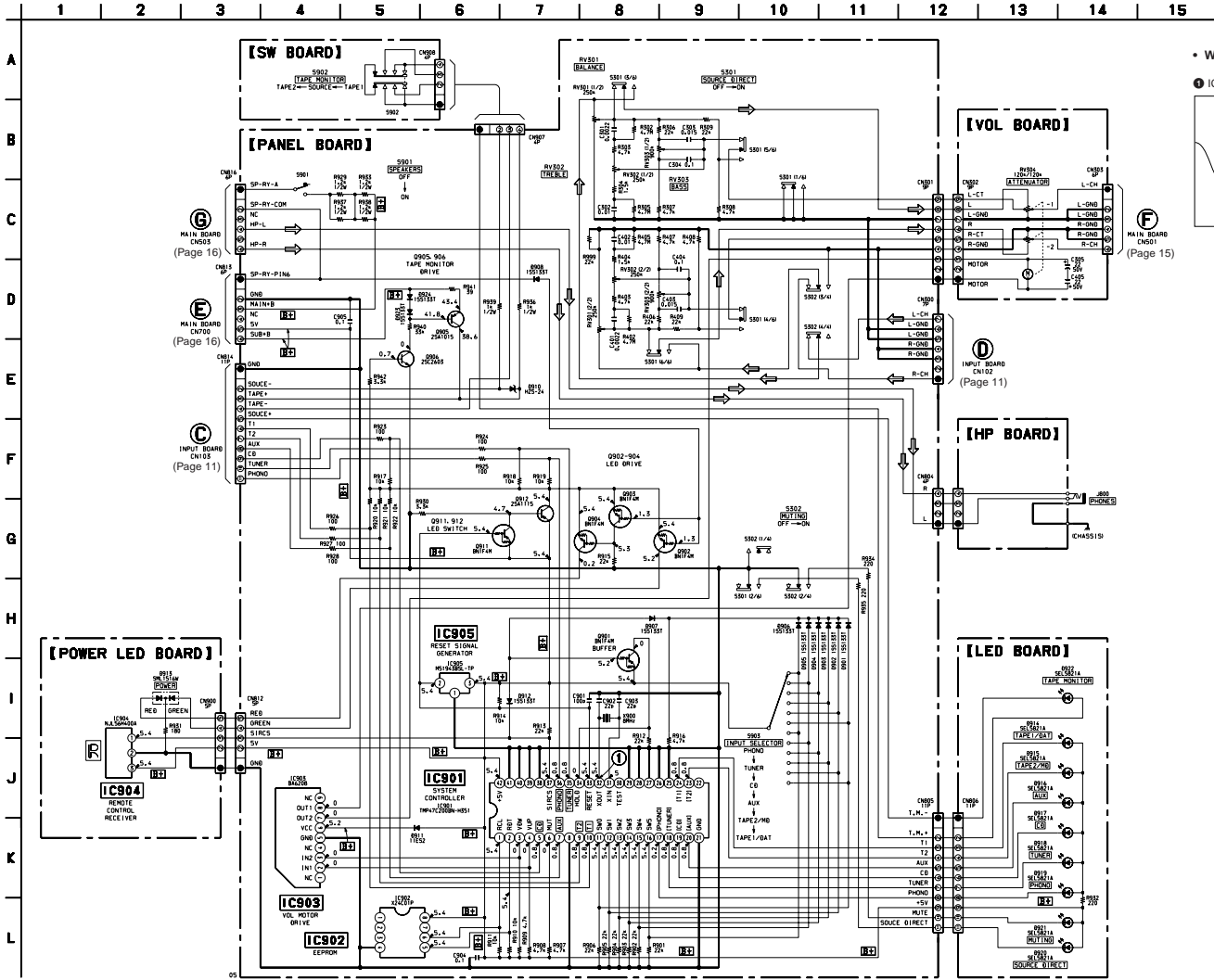


• Semiconductor Location - LED Board -

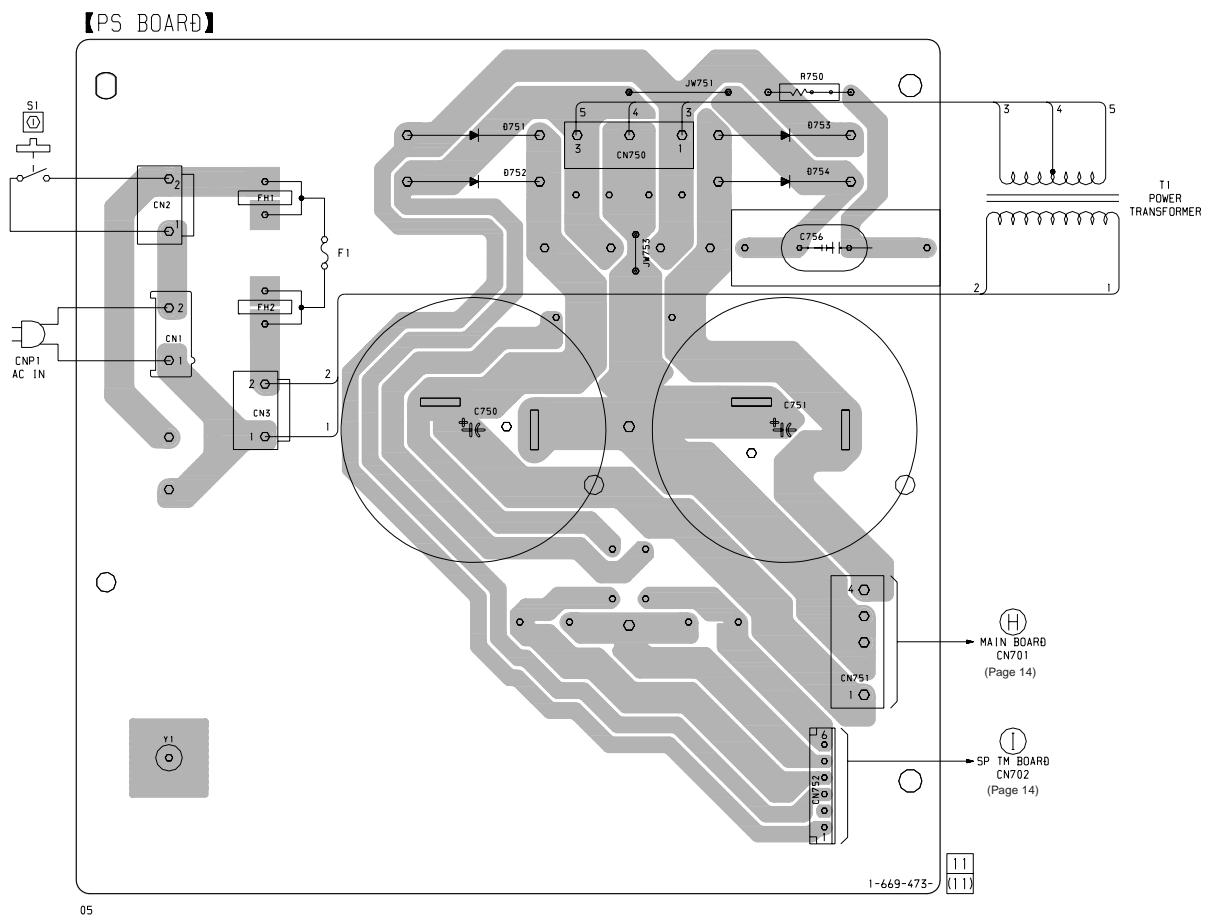
Ref. No.	Location
D914	B-4
D915	B-4
D916	A-4
D917	A-3
D918	A-2
D919	B-2
D920	C-2
D921	C-1
D922	C-5



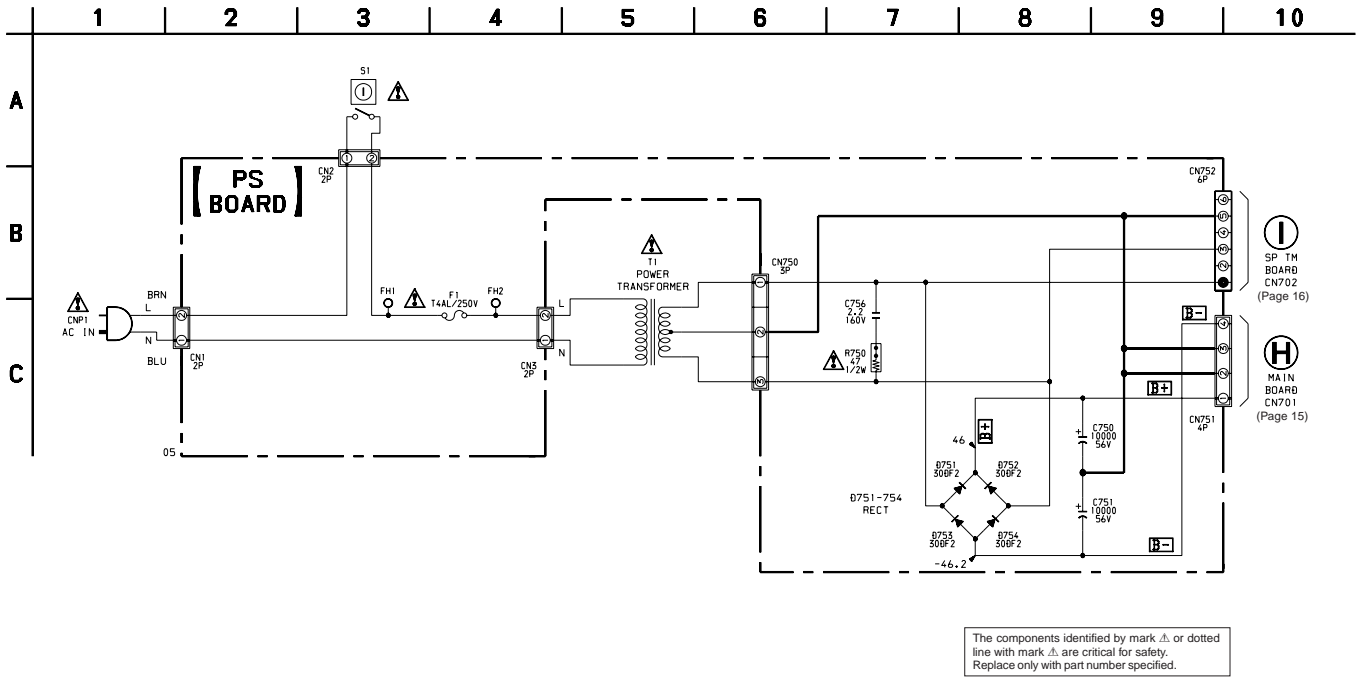
4-7. SCHEMATIC DIAGRAM - PANEL Section - • See page 25 for IC Block Diagram.



4-8. PRINTED WIRING BOARDS – POWER Section – • See page 7 for Circuit Boards Location.

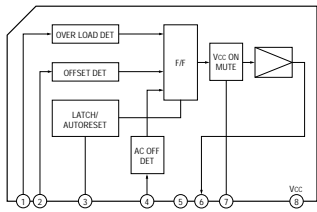


4-9. SCHEMATIC DIAGRAM – POWER Section –

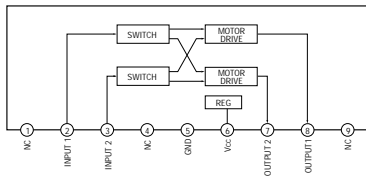


• IC Block Diagrams

IC700 μ PC1237HA (SPTM BOARD)



IC903 BA6208 (PANEL BOARD)



4-10. IC PIN FUNCTION DESCRIPTION

• PANEL BOARD IC901 TMP47C200BN-H351 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Function
1	RCL	O	Serial clock signal output to the EEPROM (IC902)
2	RDT	I/O	Two-way data bus with the EEPROM (IC902)
3	VDW	O	Volume motor drive signal output to the BA6208 (IC903) (for volume down direction) "H" active
4	VUP	O	Volume motor drive signal output to the BA6208 (IC903) (for volume up direction) "H" active
5	CD	O	Function relay (for CD) drive signal output terminal "H": relay on (CD on)
6	MUT	O	Muting control signal output terminal "H": muting on Not used (pull up)
7	AUX	O	Function relay (for AUX) drive signal output terminal "H": relay on (AUX on)
8	—	—	Not used (fixed at "L")
9	T2	O	Function relay (for TAPE2/MD) drive signal output terminal "H": relay on (TAPE2/MD on)
10	T1	O	Function relay (for TAPE1/DAT) drive signal output terminal "H": relay on (TAPE1/DAT on)
11	SW0	I	Input selector switch (S903) input terminal "H": TAPE1/DAT, "L": other function
12	SW1	I	Input selector switch (S903) input terminal "H": TAPE2/MD, "L": other function
13	SW2	I	Input selector switch (S903) input terminal "H": AUX, "L": other function
14	SW3	I	Input selector switch (S903) input terminal "H": CD, "L": other function
15	SW4	I	Input selector switch (S903) input terminal "H": TUNER, "L": other function
16	SW5	I	Input selector switch (S903) input terminal "H": PHONO, "L": other function
17	PHONO	O	Function LED (PHONO) drive signal output terminal "L": LED on
18	TUNER	O	Function LED (TUNER) drive signal output terminal "L": LED on
19	CD	O	Function LED (CD) drive signal output terminal "L": LED on
20	AUX	O	Function LED (AUX) drive signal output terminal "L": LED on
21	GND	—	Ground terminal
22	—	—	Not used (open)
23	T2	O	Function LED (TAPE2/MD) drive signal output terminal "L": LED on
24	T1	O	Function LED (TAPE1/DAT) drive signal output terminal "L": LED on
25 to 29	—	—	Not used (fixed at "L")
30	TEST	—	Not used (open)
31	XIN	I	System clock input terminal (8 MHz)
32	XOUT	O	System clock output terminal (8 MHz)
33	RESET	I	System reset signal input from the reset signal generator (IC905) "L": reset For several hundreds msec. after the power supply rises, "L" is input, then it changes to "H"
34	HOLD	I	Cancellation of hold mode signal "H": start
35	TUNER	O	Function relay (for TUNER) drive signal output terminal "H": relay on (TUNER on)
36	PHONO	O	Function relay (for PHONO) drive signal output terminal "H": relay on (PHONO on)
37	SIRCS	I	Remote control signal input from the remote control receiver (IC904)
38 to 41	—	—	Not used (fixed at "L")
42	+5V	—	Power supply terminal (+5V)

SECTION 5 EXPLODED VIEWS

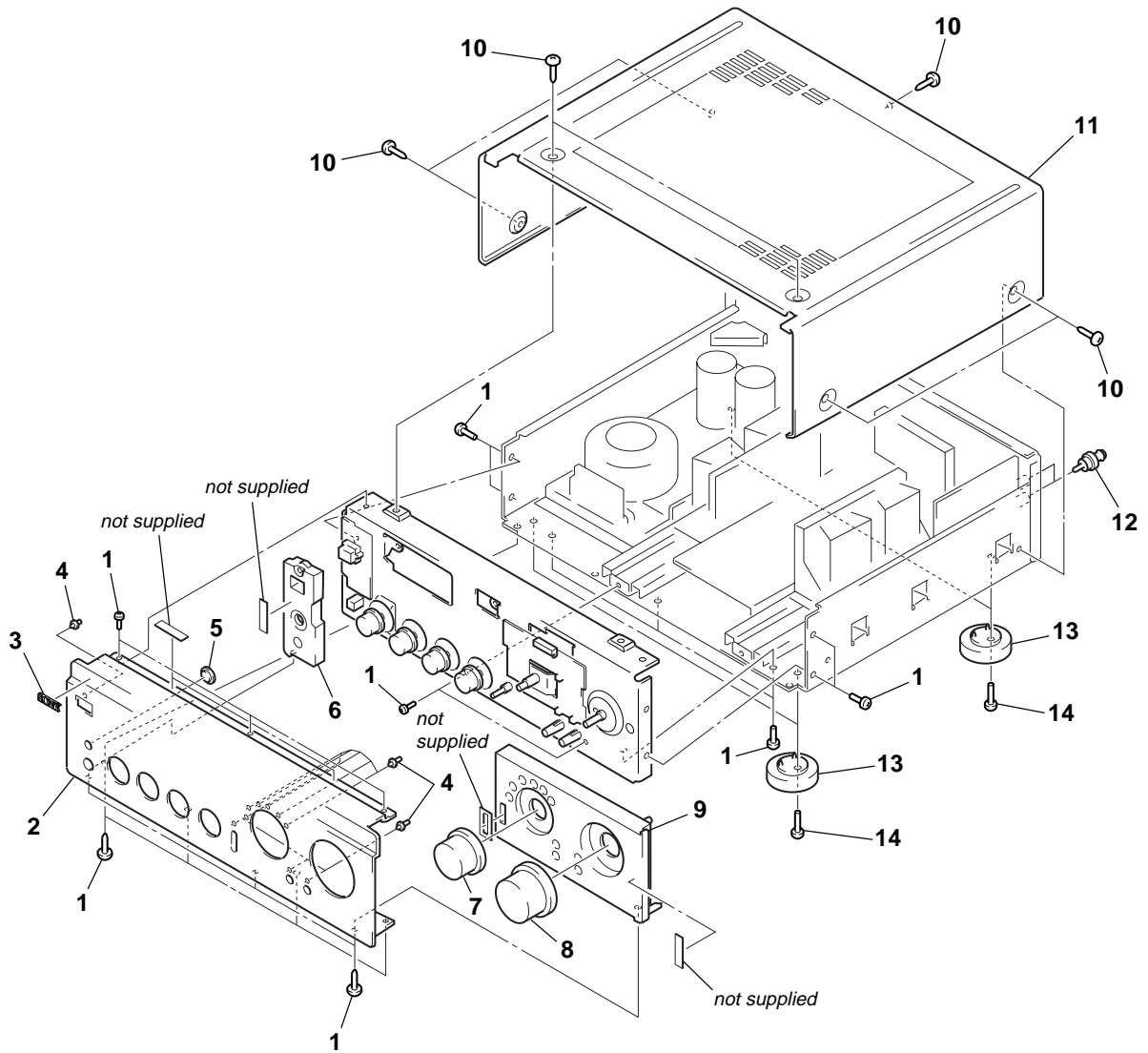
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
Example:
KNOB, BALANCE (WHITE) . . . (RED)
 ↑ ↑
 Parts Color Cabinet's Color

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.

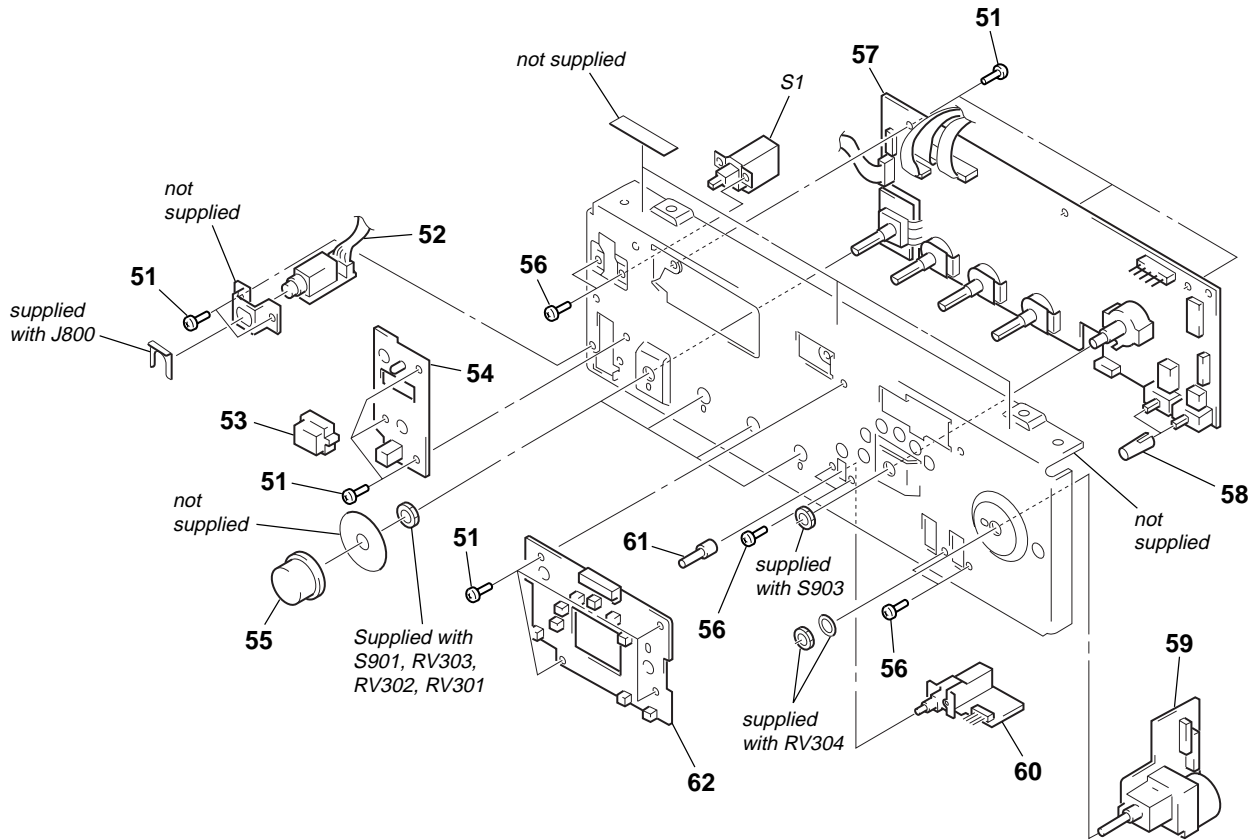
The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

(1) CASE, FRONT PANEL SECTION-1



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	4-967-961-01	SCREW (3X8)		8	4-999-432-01	KNOB (VOL) (BLACK)	
2	4-999-428-01	PANEL, FRONT (BLACK)		8	4-999-432-11	KNOB (VOL) (GOLD)	
2	4-999-428-11	PANEL, FRONT (GOLD)		9	4-999-430-01	BASE (R), PANEL (BLACK)	
3	4-942-568-41	EMBLEM (NO.5), SONY (BLACK)		9	4-999-430-11	BASE (R), PANEL (GOLD)	
3	4-942-568-51	EMBLEM (NO.5), SONY (GOLD)		10	4-210-291-01	SCREW (CASE 3 TP2) (BLACK)	
*	X-4950-462-1	LENS ASSY, LED		10	4-210-291-11	SCREW (CASE 3 TP2) (GOLD)	
5	4-975-105-01	WINDOW, RAY CATCHER (BLACK)		* 11	4-999-439-01	CASE (413235) (BLACK)	
5	4-975-105-31	WINDOW, RAY CATCHER (GOLD)		* 11	4-999-439-21	CASE (413235) (GOLD)	
6	4-999-429-01	BASE (L), PANEL (BLACK)		12	1-506-113-00	SHORT PLUG	
6	4-999-429-11	BASE (L), PANEL (GOLD)		13	X-4949-759-1	FOOT ASSY	
7	4-999-433-01	KNOB (SEL) (BLACK)		14	7-685-885-09	SCREW +BVTT 4X16 (S)	
7	4-999-433-11	KNOB (SEL) (GOLD)					

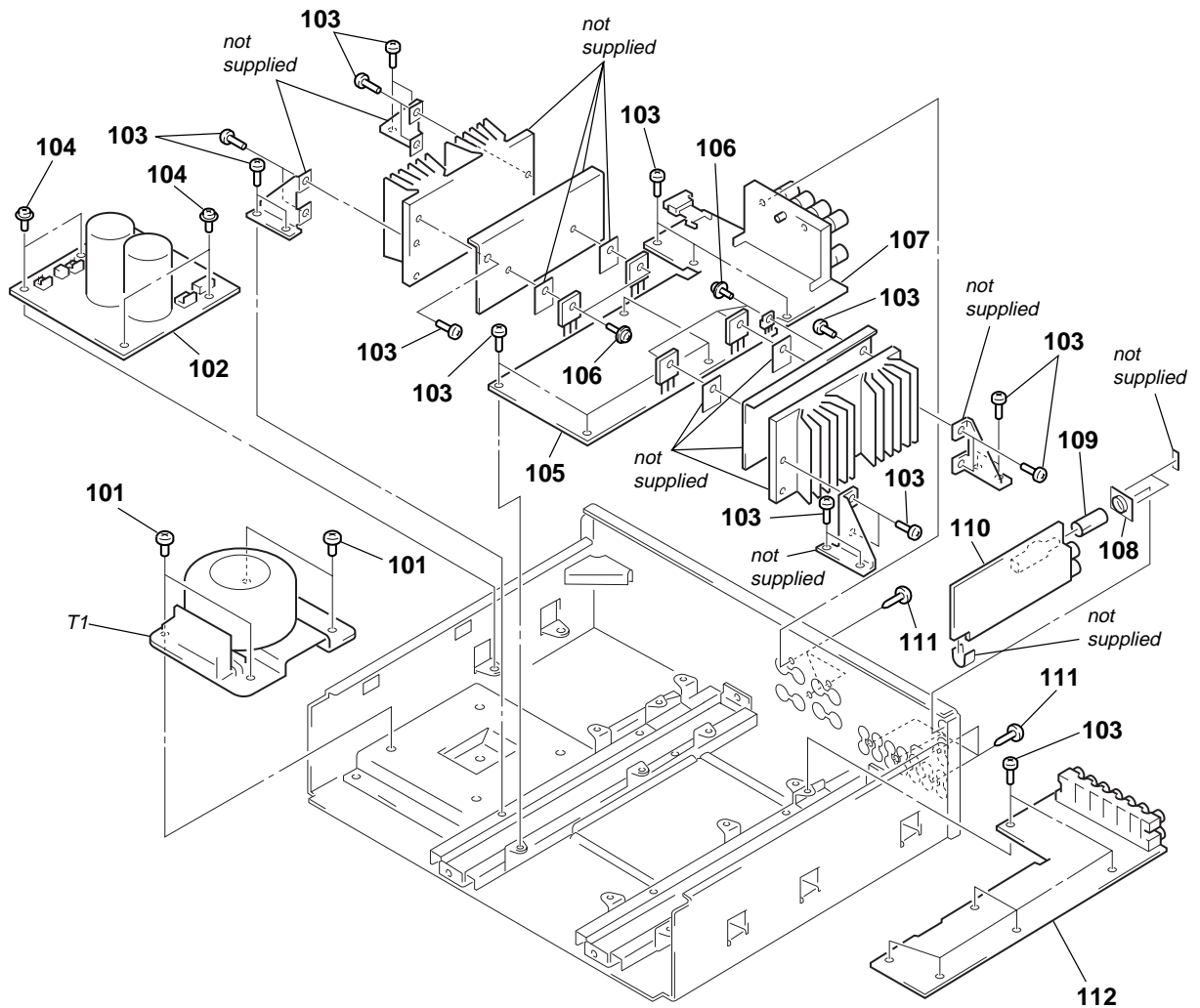
(2) FRONT PANEL SECTION-2



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	4-967-961-01	SCREW (3X8)		* 57	A-4407-634-A	PANEL BOARD, COMPLETE	
* 52	1-669-483-11	HP BOARD		58	4-970-146-01	BUTTON (BLCAK)	
53	3-024-055-01	BUTTON (POWER) (Ⓞ) (BLACK)		58	4-970-146-21	BUTTON (GOLD)	
53	3-024-055-11	BUTTON (POWER) (Ⓞ) (GOLD)		* 59	1-669-480-11	VOL BOARD	
* 54	1-669-481-11	POWER LED BOARD		* 60	1-669-484-11	SW BOARD	
55	X-4949-758-1	KNOB (BAL) ASSY (BLACK)		61	4-976-796-01	KNOB (A), LEVER	
55	X-4949-761-1	KNOB (BAL) ASSY (GOLD)		* 62	1-669-482-11	LED BOARD	
56	7-685-751-09	SCREW +PTT 3X6 (S)		\triangle S1	1-554-920-11	SWITCH, PUSH (AC POWER) (1KEY)	

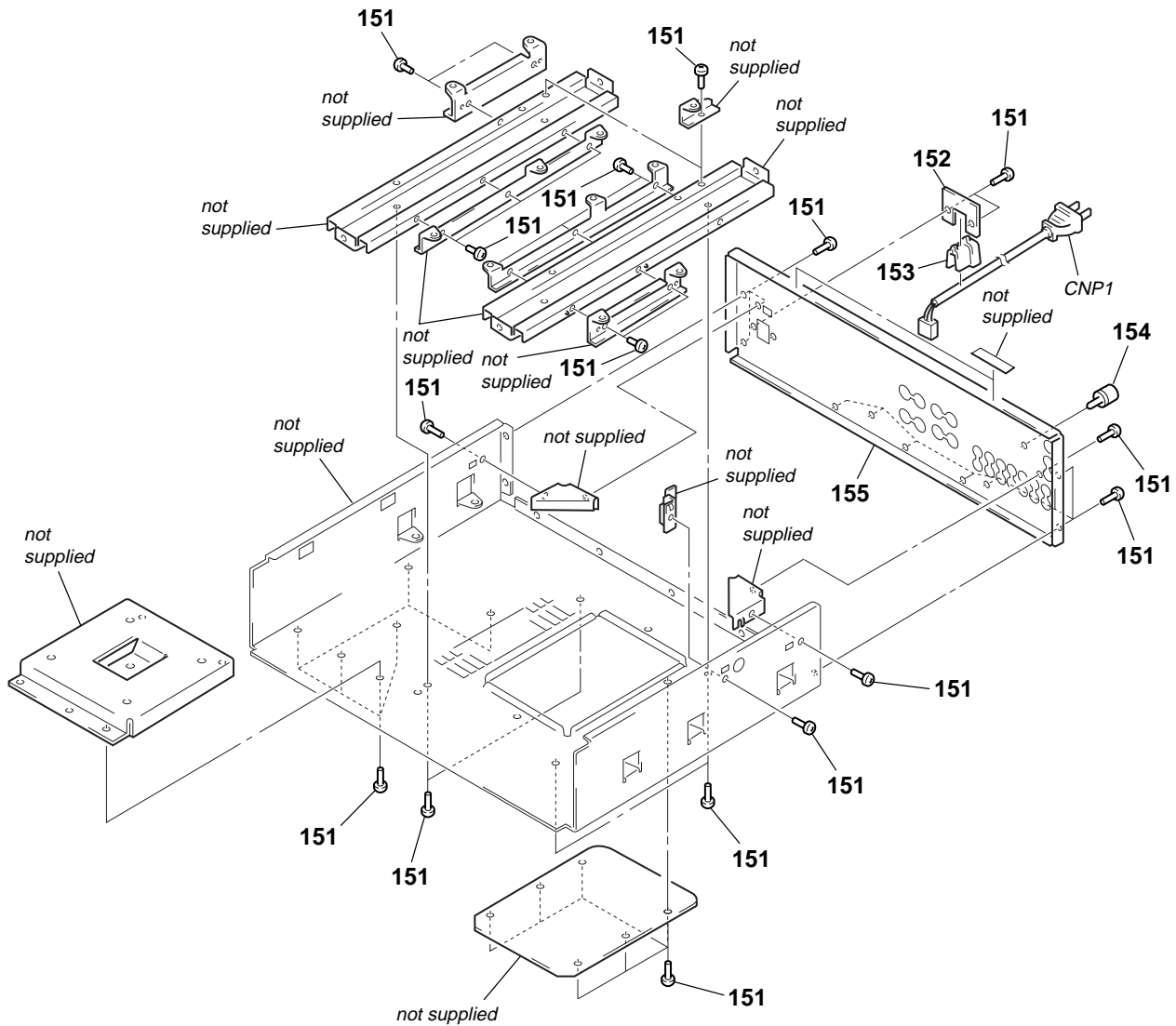
(3) CHASSIS SECTION-1



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	4-967-960-01	SCREW (4X8)		108	4-970-145-01	ESCUTCHEON (P)	
* 102	1-669-473-11	PS BOARD		109	4-970-146-01	BUTTON (BLCAK)	
103	4-967-961-01	SCREW (3X8)		* 110	A-4407-672-A	PHONO BOARD, COMPLETE	
104	4-211-985-01	SCREW (3X8), PC BOARD FITTING		111	3-704-515-41	SCREW (BV/RING)	
* 105	A-4407-669-A	MAIN BOARD, COMPLETE		* 112	A-4407-635-A	INPUT BOARD, COMPLETE	
106	3-905-609-21	SCREW (TRANSISTOR)		Δ T1	1-431-827-11	TRANSFORMER, POWER	
* 107	A-4407-670-A	SP TM BOARD, COMPLETE					

(4) CHASSIS SECTION-2



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
151	4-967-961-01	SCREW (3X8)		154	4-947-010-01	SCREW, FEEDER FIXED	
* 152	4-923-873-01	BRACKET, CORD STOPPER		* 155	4-999-426-01	PANEL, BACK	
* 153	3-703-244-00	BUSHING (2104), CORD		Δ CNP1	1-777-185-11	CORD, POWER	

SECTION 6 ELECTRICAL PARTS LIST

HP	INPUT
-----------	--------------

NOTE:

- 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 and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
In each case, u: μ , for example:
uA. . . : μ A. . . uPA. . . : μ PA. . .
uPB. . . : μ PB. . . uPC. . . : μ PC. . .
uPD. . . : μ PD. . .
- CAPACITORS
uF: μ F
- COILS
uH: μ H

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
*	1-669-483-11	HP BOARD ***** < JACK >		Q101	8-729-620-05	TRANSISTOR 2SC2603-EF	
J800	1-770-307-11	JACK (LARGE TYPE) (PHONES) *****		Q102	8-729-620-05	TRANSISTOR 2SC2603-EF	
*	A-4407-635-A	INPUT BOARD, COMPLETE ***** < CAPACITOR >		Q103	8-729-620-05	TRANSISTOR 2SC2603-EF	
C158	1-126-024-11	ELECT 220uF 20% 25V		Q104	8-729-620-05	TRANSISTOR 2SC2603-EF	
C159	1-126-023-11	ELECT 100uF 20% 25V		Q105	8-729-620-05	TRANSISTOR 2SC2603-EF	
C160	1-126-052-11	ELECT 100uF 20% 50V		Q152	8-729-119-78	TRANSISTOR 2SC403SP-51	
C258	1-126-024-11	ELECT 220uF 20% 25V		Q252	8-729-201-53	TRANSISTOR 2SA1015-GR	
C259	1-126-023-11	ELECT 100uF 20% 25V				< RESISTOR >	
C260	1-126-052-11	ELECT 100uF 20% 50V		R151	1-259-239-11	CARBON 1M 5% 1/4W	
		< CONNECTOR >		R152	1-259-239-11	CARBON 1M 5% 1/4W	
CN102	1-691-768-11	PLUG (MICRO CONNECTOR) 6P		R153	1-259-239-11	CARBON 1M 5% 1/4W	
CN103	1-691-773-11	PLUG (MICRO CONNECTOR) 11P		R154	1-259-239-11	CARBON 1M 5% 1/4W	
CN104	1-691-765-11	PLUG (MICRO CONNECTOR) 3P		R155	1-259-239-11	CARBON 1M 5% 1/4W	
		< DIODE >		R156	1-259-239-11	CARBON 1M 5% 1/4W	
D101	8-719-986-34	DIODE HZS15-1LTA		R157	1-259-239-11	CARBON 1M 5% 1/4W	
D103	8-719-911-19	DIODE 1SS119		R158	1-259-167-21	CARBON 1K 5% 1/4W	
D104	8-719-911-19	DIODE 1SS119		R159	1-259-167-21	CARBON 1K 5% 1/4W	
D105	8-719-911-19	DIODE 1SS119		R163	1-259-187-11	CARBON 6.8K 5% 1/4W	
D106	8-719-911-19	DIODE 1SS119		R164	1-249-212-11	CARBON 1.2K 5% 1/3W	
D107	8-719-911-19	DIODE 1SS119		R165	1-249-212-11	CARBON 1.2K 5% 1/3W	
D108	8-719-911-19	DIODE 1SS119		R166	1-249-212-11	CARBON 1.2K 5% 1/3W	
D109	8-719-911-19	DIODE 1SS119		R167	1-249-212-11	CARBON 1.2K 5% 1/3W	
D110	8-719-911-19	DIODE 1SS119		R251	1-259-239-11	CARBON 1M 5% 1/4W	
D151	8-719-986-38	DIODE HZS16-1LTA		R252	1-259-239-11	CARBON 1M 5% 1/4W	
D251	8-719-986-38	DIODE HZS16-1LTA		R253	1-259-239-11	CARBON 1M 5% 1/4W	
		< JACK >		R254	1-259-239-11	CARBON 1M 5% 1/4W	
J102	1-778-517-11	JACK, PIN 6P (TUNER IN, CD IN, AUX IN)		R255	1-259-239-11	CARBON 1M 5% 1/4W	
J103	1-784-934-21	JACK, PIN 4P (TAPE2/MD REC OUT, IN)		R256	1-259-239-11	CARBON 1M 5% 1/4W	
J104	1-784-934-21	JACK, PIN 4P (TAPE1/DAT REC OUT, IN)		R257	1-259-239-11	CARBON 1M 5% 1/4W	
		< TRANSISTOR >		R258	1-259-167-21	CARBON 1K 5% 1/4W	
Q100	8-729-620-05	TRANSISTOR 2SC2603-EF		R259	1-259-167-21	CARBON 1K 5% 1/4W	
				R263	1-259-187-11	CARBON 6.8K 5% 1/4W	
				R264	1-249-212-11	CARBON 1.2K 5% 1/3W	
				R265	1-249-212-11	CARBON 1.2K 5% 1/3W	
				R266	1-249-212-11	CARBON 1.2K 5% 1/3W	
				R267	1-249-212-11	CARBON 1.2K 5% 1/3W	
						< 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	

INPUT	LED	MAIN
-------	-----	------

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
RY106	1-515-614-11	RELAY		C613	1-136-163-00	FILM	0.068uF 5% 50V
RY107	1-515-614-11	RELAY		C617	1-126-023-11	ELECT	100uF 20% 16V
RY108	1-515-614-11	RELAY		C712	1-128-552-51	ELECT	47uF 20% 63V
*****				C713	1-126-933-11	ELECT	100uF 20% 16V
*	1-669-482-11	LED BOARD		C714	1-126-964-11	ELECT	10uF 20% 50V
		*****		C720	1-110-397-11	ELECT	1000uF 20% 63V
		< CONNECTOR >		C721	1-110-397-11	ELECT	1000uF 20% 63V
* CN806	1-563-381-11	SOCKET, CONNECTOR 11P				< CONNECTOR >	
		< DIODE >		CN500	1-564-506-11	PLUG, CONNECTOR 3P	
D914	8-719-046-38	LED SEL5821A-TH8F (TAPE1/DAT)		CN503	1-564-510-11	PLUG (MICRO CONNECTOR) 6P	
D915	8-719-046-38	LED SEL5821A-TH8F (TAPE2/MD)		CN600	1-564-506-11	PLUG, CONNECTOR 3P	
D916	8-719-046-38	LED SEL5821A-TH8F (AUX)		CN700	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
D917	8-719-046-38	LED SEL5821A-TH8F (CD)				< DIODE >	
D918	8-719-046-38	LED SEL5821A-TH8F (TUNER)		D500	8-719-911-19	DIODE 1SS119	
D919	8-719-046-38	LED SEL5821A-TH8F (PHONO)		D501	8-719-911-19	DIODE 1SS119	
D920	8-719-046-38	LED SEL5821A-TH8F (SOURCE DIRECT)		D502	8-719-911-19	DIODE 1SS119	
D921	8-719-046-38	LED SEL5821A-TH8F (MUTING)		D503	8-719-933-39	DIODE HZS6C1L	
D922	8-719-046-38	LED SEL5821A-TH8F (TAPE MONITOR)		D504	8-719-911-19	DIODE 1SS119	
		< RESISTOR >		D505	8-719-911-19	DIODE 1SS119	
R932	1-249-409-11	CARBON 220 5% 1/4W		D506	8-719-310-61	LED SEL1510C-D	
*****				D600	8-719-911-19	DIODE 1SS119	
*	A-4407-669-A	MAIN BOARD, COMPLETE		D601	8-719-911-19	DIODE 1SS119	
		*****		D602	8-719-911-19	DIODE 1SS119	
		< CAPACITOR >		D603	8-719-933-39	DIODE HZS6C1L	
C500	1-102-973-00	CERAMIC 100PF 5% 50V		D604	8-719-911-19	DIODE 1SS119	
C501	1-128-197-11	ELECT 10uF 20% 50V		D605	8-719-911-19	DIODE 1SS119	
C502	1-101-880-00	CERAMIC 47PF 5% 50V		D606	8-719-310-61	LED SEL1510C-D	
C503	1-125-852-11	FILM 330PF 5% 50V		D703	8-719-933-39	DIODE HZS6C1L	
C504	1-126-023-11	ELECT 100uF 20% 16V		D704	8-719-911-19	DIODE 1SS119	
C505	1-107-587-11	CERAMIC 7PF 0.5PF 500V		D720	8-719-024-99	DIODE 11ES2-NTA2B	
C506	1-126-023-11	ELECT 100uF 20% 16V		D721	8-719-024-99	DIODE 11ES2-NTA2B	
C507	1-126-023-11	ELECT 100uF 20% 16V				< BRIDGE >	
C508	1-126-023-11	ELECT 100uF 20% 16V		JWH711	4-999-918-01	BRIDGE (PC-BOARD)	
C509	1-125-842-11	FILM 4PF 10% 50V		JWH712	4-999-918-01	BRIDGE (PC-BOARD)	
C510	1-128-200-11	ELECT 47uF 20% 63V		JWH713	4-999-918-01	BRIDGE (PC-BOARD)	
C511	1-102-978-00	CERAMIC 220PF 5% 50V		JWH714	4-999-918-01	BRIDGE (PC-BOARD)	
C512	1-136-163-00	FILM 0.068uF 5% 50V		JWH715	4-999-918-01	BRIDGE (PC-BOARD)	
C513	1-136-163-00	FILM 0.068uF 5% 50V				< COIL >	
C517	1-126-023-11	ELECT 100uF 20% 16V		L720	1-428-203-11	COIL, AIR-CORE	
C600	1-102-973-00	CERAMIC 100PF 5% 50V		L721	1-428-203-11	COIL, AIR-CORE	
C601	1-128-197-11	ELECT 10uF 20% 50V				< TRANSISTOR >	
C602	1-101-880-00	CERAMIC 47PF 5% 50V		Q500	8-729-045-15	TRANSISTOR 2SC5169-FG	
C603	1-125-852-11	FILM 330PF 5% 50V		Q501	8-729-201-53	TRANSISTOR 2SA1015-GR	
C604	1-126-023-11	ELECT 100uF 20% 16V		Q502	8-729-201-53	TRANSISTOR 2SA1015-GR	
C605	1-107-587-11	CERAMIC 7PF 0.5PF 500V		Q503	8-729-201-53	TRANSISTOR 2SA1015-GR	
C606	1-126-023-11	ELECT 100uF 20% 16V		Q504	8-729-104-91	TRANSISTOR 2SA1383	
C607	1-126-023-11	ELECT 100uF 20% 16V		Q505	8-729-202-67	FET 2SK246-GR3	
C608	1-126-023-11	ELECT 100uF 20% 16V		Q506	8-729-119-78	TRANSISTOR 2SC403SP-51	
C609	1-125-842-11	FILM 4PF 10% 50V		Q507	8-729-104-18	TRANSISTOR 2SC3514-Q	
C610	1-128-200-11	ELECT 47uF 20% 63V		Q508	8-729-119-78	TRANSISTOR 2SC403SP-51	
C611	1-102-978-00	CERAMIC 220PF 5% 50V		Q509	8-729-018-19	TRANSISTOR 2SK2013-Y	
C612	1-136-163-00	FILM 0.068uF 5% 50V		Q510	8-729-018-21	TRANSISTOR 2SJ313-Y	
				Q511	8-729-015-30	FET 2SK1530-Y	

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
Q512	8-729-015-31	FET 2SJ201-Y		R610	1-259-183-11	CARBON	4.7K 5% 1/4W
Q513	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		△ R611	1-249-405-11	CARBON	100 5% 1/4W F
Q600	8-729-045-15	TRANSISTOR 2SC5169-FG		R612	1-259-183-11	CARBON	4.7K 5% 1/4W
Q601	8-729-201-53	TRANSISTOR 2SA1015-GR		R613	1-259-171-21	CARBON	1.5K 5% 1/4W
Q602	8-729-201-53	TRANSISTOR 2SA1015-GR		R614	1-249-496-11	CARBON	100K 5% 1/3W
Q603	8-729-201-53	TRANSISTOR 2SA1015-GR		R615	1-259-143-21	CARBON	100 5% 1/4W
Q604	8-729-104-91	TRANSISTOR 2SA1383		R616	1-247-749-11	CARBON	560 5% 1/2W
Q605	8-729-202-67	FET 2SK246-GR3		△ R617	1-247-696-11	CARBON	47 5% 1/4W F
Q606	8-729-119-78	TRANSISTOR 2SC403SP-51		△ R618	1-247-696-11	CARBON	47 5% 1/4W F
Q607	8-729-104-18	TRANSISTOR 2SC3514-Q		△ R619	1-247-745-11	CARBON	330 5% 1/2W F
Q608	8-729-119-78	TRANSISTOR 2SC403SP-51		△ R620	1-249-405-11	CARBON	100 5% 1/4W F
Q609	8-729-018-19	TRANSISTOR 2SK2013-Y		△ R621	1-249-405-11	CARBON	100 5% 1/4W F
Q610	8-729-018-21	TRANSISTOR 2SJ313-Y		△ R622	1-208-601-11	REGISTER	0.1 10% 2W F
Q611	8-729-015-30	FET 2SK1530-Y		△ R623	1-208-601-11	REGISTER	0.1 10% 2W F
Q612	8-729-015-31	FET 2SJ201-Y		R624	1-259-436-11	CARBON	2.2K 5% 1/6W
Q613	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA		R625	1-259-432-11	CARBON	1.5K 5% 1/6W
Q702	8-729-209-15	TRANSISTOR 2SD2012		R626	1-249-162-11	CARBON	10 5% 1/3W
Q703	8-729-900-63	TRANSISTOR DTA124ES		R627	1-259-484-11	CARBON	220K 5% 1/6W
		< RESISTOR >		R709	1-249-425-11	CARBON	4.7K 5% 1/4W
R500	1-259-167-21	CARBON	1K 5% 1/4W			< VARIABLE RESISTOR >	
R501	1-259-215-21	CARBON	100K 5% 1/4W	RV500	1-241-762-11	RES, ADJ, CARBON 2.2K	
R502	1-259-151-21	CARBON	220 5% 1/4W	RV600	1-241-762-11	RES, ADJ, CARBON 2.2K	
R503	1-259-151-21	CARBON	220 5% 1/4W	*****			
R504	1-259-151-21	CARBON	220 5% 1/4W	*	A-4407-634-A	PANEL BOARD, COMPLETE	
R505	1-259-179-21	CARBON	3.3K 5% 1/4W			*****	
R506	1-259-151-21	CARBON	220 5% 1/4W			< CAPACITOR >	
R507	1-259-151-21	CARBON	220 5% 1/4W	C301	1-130-475-00	MYLAR	0.0022uF 5% 50V
R508	1-249-490-11	CARBON	27K 5% 1/3W	C302	1-136-153-00	FILM	0.01uF 5% 50V
R509	1-259-175-11	CARBON	2.2K 5% 1/4W	C303	1-136-155-00	FILM	0.015uF 5% 50V
R510	1-259-183-11	CARBON	4.7K 5% 1/4W	C304	1-136-165-00	FILM	0.1uF 5% 50V
△ R511	1-249-405-11	CARBON	100 5% 1/4W F	C401	1-130-475-00	MYLAR	0.0022uF 5% 50V
R512	1-259-183-11	CARBON	4.7K 5% 1/4W	C402	1-136-153-00	FILM	0.01uF 5% 50V
R513	1-259-171-21	CARBON	1.5K 5% 1/4W	C403	1-136-155-00	FILM	0.015uF 5% 50V
R514	1-249-496-11	CARBON	100K 5% 1/3W	C404	1-136-165-00	FILM	0.1uF 5% 50V
R515	1-259-143-21	CARBON	100 5% 1/4W	C901	1-162-282-31	CERAMIC	100PF 10% 50V
R516	1-247-749-11	CARBON	560 5% 1/2W	C902	1-162-207-31	CERAMIC	22PF 5% 50V
△ R517	1-247-696-11	CARBON	47 5% 1/4W F	C903	1-162-207-31	CERAMIC	22PF 5% 50V
△ R518	1-247-696-11	CARBON	47 5% 1/4W F	C904	1-164-159-11	CERAMIC	0.1uF 50V
△ R519	1-247-745-11	CARBON	330 5% 1/2W F	C905	1-164-159-11	CERAMIC	0.1uF 50V
△ R520	1-249-405-11	CARBON	100 5% 1/4W F			< CONNECTOR >	
△ R521	1-249-405-11	CARBON	100 5% 1/4W F	* CN300	1-564-522-11	PLUG, CONNECTOR 7P	
△ R522	1-208-601-11	REGISTER	0.1 10% 2W F	CN301	1-564-524-11	PLUG, CONNECTOR 9P	
△ R523	1-208-601-11	REGISTER	0.1 10% 2W F	* CN804	1-564-519-11	PLUG, CONNECTOR 4P	
R524	1-259-436-11	CARBON	2.2K 5% 1/6W	* CN805	1-569-648-11	PIN, CONNECTOR (PC BOARD) 11P	
R525	1-259-432-11	CARBON	1.5K 5% 1/6W	CN814	1-691-773-11	PLUG (MICRO CONNECTOR) 11P	
R526	1-249-162-11	CARBON	10 5% 1/3W	CN907	1-562-087-00	SOCKET, CONNECTOR 4P	
R527	1-259-484-11	CARBON	220K 5% 1/6W			< DIODE >	
R600	1-259-167-21	CARBON	1K 5% 1/4W	D901	8-719-911-19	DIODE 1SS119	
R601	1-259-215-21	CARBON	100K 5% 1/4W	D902	8-719-911-19	DIODE 1SS119	
R602	1-259-151-21	CARBON	220 5% 1/4W	D903	8-719-911-19	DIODE 1SS119	
R603	1-259-151-21	CARBON	220 5% 1/4W	D904	8-719-911-19	DIODE 1SS119	
R604	1-259-151-21	CARBON	220 5% 1/4W	D905	8-719-911-19	DIODE 1SS119	
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				

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

PANEL

PHONO

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
D906	8-719-911-19	DIODE 1SS119		R917	1-249-429-11	CARBON 10K 5%	1/4W
D907	8-719-911-19	DIODE 1SS119		R918	1-249-429-11	CARBON 10K 5%	1/4W
D908	8-719-911-19	DIODE 1SS119		R919	1-249-429-11	CARBON 10K 5%	1/4W
D910	8-719-986-56	DIODE HZS24-3LTA		R920	1-249-429-11	CARBON 10K 5%	1/4W
D911	8-719-200-82	DIODE 11ES2		R921	1-249-429-11	CARBON 10K 5%	1/4W
D912	8-719-911-19	DIODE 1SS119		R922	1-249-429-11	CARBON 10K 5%	1/4W
D923	8-719-911-19	DIODE 1SS119		R923	1-247-807-31	CARBON 100 5%	1/4W
D924	8-719-911-19	DIODE 1SS119		R924	1-247-807-31	CARBON 100 5%	1/4W
< IC >				R925	1-247-807-31	CARBON 100 5%	1/4W
IC901	8-759-352-00	IC TMP47C200BN-H351		R926	1-247-807-31	CARBON 100 5%	1/4W
IC902	8-759-188-67	IC X24C01P-S		R927	1-247-807-31	CARBON 100 5%	1/4W
IC903	8-759-962-08	IC BA6208		R928	1-247-807-31	CARBON 100 5%	1/4W
IC905	8-759-635-63	IC M51943BSL		R929	1-247-753-11	CARBON 1.2K 5%	1/2W
< TRANSISTOR >				R930	1-247-843-11	CARBON 3.3K 5%	1/4W
Q901	8-729-900-63	TRANSISTOR DTA124ES		R933	1-247-753-11	CARBON 1.2K 5%	1/2W
Q902	8-729-900-63	TRANSISTOR DTA124ES		R934	1-249-409-11	CARBON 220 5%	1/4W
Q903	8-729-900-63	TRANSISTOR DTA124ES		R935	1-249-409-11	CARBON 220 5%	1/4W
Q904	8-729-900-63	TRANSISTOR DTA124ES		R936	1-247-752-11	CARBON 1K 5%	1/2W
Q905	8-729-201-53	TRANSISTOR 2SA1015-GR		R937	1-247-753-11	CARBON 1.2K 5%	1/2W
Q906	8-729-620-05	TRANSISTOR 2SC2603-EF		R938	1-247-753-11	CARBON 1.2K 5%	1/2W
Q911	8-729-900-63	TRANSISTOR DTA124ES		R939	1-247-752-11	CARBON 1K 5%	1/2W
Q912	8-729-119-76	TRANSISTOR 2SA1175-HFE		R940	1-249-435-11	CARBON 33K 5%	1/4W
< RESISTOR >				R941	1-249-400-11	CARBON 39 5%	1/4W
R302	1-259-502-11	CARBON 4.7M 5%	1/4W	R942	1-247-843-11	CARBON 3.3K 5%	1/4W
R303	1-259-183-11	CARBON 4.7K 5%	1/4W	R999	1-249-433-11	CARBON 22K 5%	1/4W
R304	1-259-171-21	CARBON 1.5K 5%	1/4W	< VARIABLE RESISTOR >			
R305	1-259-502-11	CARBON 4.7M 5%	1/4W	RV301	1-225-615-11	RES, VAR, CARBON 250K/250K (BALANCE)	
R306	1-259-199-11	CARBON 22K 5%	1/4W	RV302	1-225-614-11	RES, VAR, CARBON 250K/250K (TREBLE)	
R307	1-259-183-11	CARBON 4.7K 5%	1/4W	RV303	1-225-613-11	RES, VAR, CARBON 900K/900K (BASS)	
R308	1-259-183-11	CARBON 4.7K 5%	1/4W	< SWITCH >			
R309	1-259-199-11	CARBON 22K 5%	1/4W	S301	1-571-828-11	SWITCH, PUSH (1 KEY) (SOURCE DIRECT)	
R402	1-259-502-11	CARBON 4.7M 5%	1/4W	S302	1-762-394-11	SWITCH, PUSH (1 KEY) (MUTING)	
R403	1-259-183-11	CARBON 4.7K 5%	1/4W	S901	1-771-506-11	SWITCH, ROTARY (SPEAKERS)	
R404	1-259-171-21	CARBON 1.5K 5%	1/4W	S903	1-762-183-11	SWITCH, ROTARY (INPUT SELECTOR)	
R405	1-259-502-11	CARBON 4.7M 5%	1/4W	< VIBRATOR >			
R406	1-259-199-11	CARBON 22K 5%	1/4W	X900	1-579-223-11	OSCILLATOR, CERAMIC (8MHz)	
R407	1-259-183-11	CARBON 4.7K 5%	1/4W	*****			
R408	1-259-183-11	CARBON 4.7K 5%	1/4W	* A-4407-672-A PHONO BOARD, COMPLETE			
R409	1-259-199-11	CARBON 22K 5%	1/4W	*****			
R901	1-249-433-11	CARBON 22K 5%	1/4W	< CAPACITOR >			
R902	1-249-433-11	CARBON 22K 5%	1/4W	C150	1-102-978-00	CERAMIC 220PF 5%	50V
R903	1-249-433-11	CARBON 22K 5%	1/4W	C151	1-126-059-11	ELECT 10uF 20%	50V
R904	1-249-433-11	CARBON 22K 5%	1/4W	C152	1-101-880-00	CERAMIC 47PF 5%	50V
R905	1-249-433-11	CARBON 22K 5%	1/4W	C153	1-106-359-00	MYLAR 4700PF 5%	200V
R906	1-249-433-11	CARBON 22K 5%	1/4W	C154	1-126-024-11	ELECT 220uF 20%	16V
R907	1-249-425-11	CARBON 4.7K 5%	1/4W	C155	1-130-341-00	FILM 0.056uF 3%	100V
R908	1-249-425-11	CARBON 4.7K 5%	1/4W	C156	1-130-971-00	FILM 0.016uF 3%	100V
R909	1-249-425-11	CARBON 4.7K 5%	1/4W	C157	1-126-059-11	ELECT 10uF 20%	50V
R910	1-249-429-11	CARBON 10K 5%	1/4W	C170	1-126-023-11	ELECT 100uF 20%	25V
R911	1-249-429-11	CARBON 10K 5%	1/4W	C171	1-136-165-00	FILM 0.1uF 5%	50V
R912	1-249-433-11	CARBON 22K 5%	1/4W	C172	1-136-165-00	FILM 0.1uF 5%	50V
R913	1-249-433-11	CARBON 22K 5%	1/4W	C250	1-102-978-00	CERAMIC 220PF 5%	50V
R914	1-249-429-11	CARBON 10K 5%	1/4W	C251	1-126-059-11	ELECT 10uF 20%	50V
R915	1-249-433-11	CARBON 22K 5%	1/4W				
R916	1-249-425-11	CARBON 4.7K 5%	1/4W				

Ref. No.	Part No.	Description	Remark
C252	1-101-880-00	CERAMIC	47PF 5% 50V
C253	1-106-359-00	MYLAR	4700PF 5% 200V
C254	1-126-024-11	ELECT	220uF 20% 16V
C255	1-130-341-00	FILM	0.056uF 3% 100V
C256	1-130-971-00	FILM	0.016uF 3% 100V
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)	
< 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 >			
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
R168	1-259-143-21	CARBON	100 5% 1/4W
R169	1-259-115-11	CARBON	6.8 5% 1/4W
R170	1-259-171-21	CARBON	1.5K 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
R268	1-259-143-21	CARBON	100 5% 1/4W
R269	1-259-115-11	CARBON	6.8 5% 1/4W

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S101	1-762-395-11	SWITCH, PUSH (1 KEY) (PHONO CARTRIDGE)	

*	1-669-481-11	POWER LED BOARD	

< CONNECTOR >			
CN900	1-691-767-11	PLUG (MICRO CONNECTOR) 5P	
< DIODE >			
D913	8-719-313-40	LED SEL1516W (POWER)	
< IC >			
IC904	8-749-014-66	IC NJL56H400A	
< RESISTOR >			
R931	1-249-408-11	CARBON	180 5% 1/4W

*	1-669-473-11	PS BOARD	

< CAPACITOR >			
C750	1-125-939-11	ELECT	10000uF 20% 56V
C751	1-125-939-11	ELECT	10000uF 20% 56V
C756	1-136-880-11	FILM	2.2uF 10% 160V
< 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	
* CN750	1-564-687-11	PIN, CONNECTOR 3P	
* 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	
D752	8-719-230-02	DIODE 30DF2	
D753	8-719-230-02	DIODE 30DF2	
D754	8-719-230-02	DIODE 30DF2	
< FUSE >			
△ F1	1-532-504-51	FUSE T4AL/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

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

TA-FA30ES

SP TM SW VOL

Ref. No.	Part No.	Description	Remark
*	A-4407-670-A	SP TM BOARD, COMPLETE *****	
		< CAPACITOR >	
C700	1-126-965-11	ELECT 22uF 20%	50V
C701	1-136-163-00	FILM 0.068uF 5%	50V
C702	1-124-995-11	ELECT 220uF 20%	10V
C703	1-136-157-00	FILM 0.022uF 5%	50V
C704	1-104-664-11	ELECT 47uF 20%	16V
C705	1-104-664-11	ELECT 47uF 20%	16V
C706	1-137-150-11	MYLAR 0.01uF 10%	100V
C707	1-137-150-11	MYLAR 0.01uF 10%	100V
C708	1-128-578-11	ELECT 1uF 20%	100V
C709	1-128-556-11	ELECT 1000uF 20%	63V
C710	1-128-553-11	ELECT 220uF 20%	63V
C711	1-128-582-11	ELECT 10uF 20%	63V
		< CONNECTOR >	
CN702	1-770-831-11	CONNECTOR, BOARD TO BOARD 6P	
		< DIODE >	
D511	8-719-911-19	DIODE 1SS119	
D513	8-719-911-19	DIODE 1SS119	
D700	8-719-024-99	DIODE 11ES2-NTA2B	
D701	8-719-024-99	DIODE 11ES2-NTA2B	
D702	8-719-024-99	DIODE 11ES2-NTA2B	
		< IC >	
IC700	8-759-111-68	IC uPC1237HA	
		< COIL >	
L501	1-411-906-11	COIL, AIR-CORE 0.6uH	
L601	1-411-906-11	COIL, AIR-CORE 0.6uH	
		< TRANSISTOR >	
Q700	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q701	8-729-119-78	TRANSISTOR 2SC403SP-51	
		< RESISTOR >	
R528	1-249-162-11	CARBON 10 5%	1/3W
R529	1-247-750-11	CARBON 680 5%	1/2W
R628	1-249-162-11	CARBON 10 5%	1/3W
R629	1-247-750-11	CARBON 680 5%	1/2W
R700	1-249-437-11	CARBON 47K 5%	1/4W
R701	1-249-429-11	CARBON 10K 5%	1/4W
R702	1-249-429-11	CARBON 10K 5%	1/4W
R703	1-259-476-11	CARBON 100K 5%	1/6W
R704	1-249-433-11	CARBON 22K 5%	1/4W
R705	1-247-883-00	CARBON 150K 5%	1/4W
R706	1-249-431-11	CARBON 15K 5%	1/4W
R707	1-249-429-11	CARBON 10K 5%	1/4W
△R708	1-217-493-00	FUSIBLE 100 5%	1W F
R710	1-247-747-11	CARBON 470 5%	1/2W
R711	1-247-747-11	CARBON 470 5%	1/2W
		< RELAY >	
RY501	1-515-920-11	RELAY (24V)	

Ref. No.	Part No.	Description	Remark
RY503	1-515-920-11	RELAY (24V)	
		< TERMINAL >	
TM501	1-537-235-11	TERMINAL BOARD (SP) (SPEAKERS MAIN, BI-WIRE)	

*	1-669-484-11	SW BOARD *****	
		< CONNECTOR >	
CN908	1-560-941-11	PIN, CONNECTOR 4P	
		< SWITCH >	
S902	1-762-165-11	SWITCH, LEVER SLIDE (TAPE MONITOR)	

*	1-669-480-11	VOL BOARD *****	
		< CAPACITOR >	
C305	1-126-965-11	ELECT 22uF 20%	50V
C405	1-126-965-11	ELECT 22uF 20%	50V
		< CONNECTOR >	
CN302	1-691-770-11	PLUG (MICRO CONNECTOR) 8P	
CN303	1-691-768-11	PLUG (MICRO CONNECTOR) 6P	
		< VARIABLE RESISTOR >	
RV304	1-223-936-11	RES, VAR, CARBON 120K/120K (ATTENUATOR)	

		MISCELLANEOUS *****	
4	1-506-113-00	SHORT PLUG	
△CNP1	1-777-185-11	CORD, POWER	
△T1	1-431-827-11	TRANSFORMER, POWER	

		ACCESSORIES & PACKING MATERIALS *****	
	1-475-739-11	REMOTE COMMANDER (RM-S326)	
	3-864-461-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE)	
	3-864-461-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, TURKISH, ITALIAN)	
	4-981-643-01	COVER, BATTERY (for RM-S326)	

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