

ST-SE570

SERVICE MANUAL

Ver 1.0 2001.04

AEP Model
UK Model



SPECIFICATIONS

FM tuner section

Frequency range 87.5 - 108.0 MHz
(50 kHz step)

Aerial terminals 75 Ω , unbalanced
IEC-male

Intermediate frequency
10.7 MHz

Sensitivity at 26 dB quieting (mono)
10.3 dBf, 0.9 μ V/75 Ω
at 46 dB quieting (stereo)
38.5 dBf, 23 μ V/75 Ω

Usable sensitivity (IHF)
10.3 dBf, 0.9 μ V/75 Ω

S/N at 40 kHz deviation
74 dB (mono), 69 dB
(stereo)

Harmonic distortion 0.09% (mono),
0.18% (stereo)

Frequency response 30 Hz - 15 kHz
(+0.5/-1.0 dB)

Separation 45 dB at 1 kHz

Selectivity at 400 kHz
85 dB
at 300 kHz
70 dB

Output at 40 kHz deviation
600 mV

AM tuner section

Frequency range
MW: 522 - 1,611 kHz
(9 kHz step)
LW: 144 - 288 kHz
(1 kHz step)

Intermediate frequency
450 kHz

Usable Sensitivity (with AM loop aerial)
MW: 200 μ V/m
LW: 700 μ V/m

Signal-to-noise ratio
MW: 54 dB
(50 mV/m, 999 kHz)
LW: 50 dB
(50 mV/m, 216 kHz)

Harmonic distortion 0.3% (50 mV/m,
400 Hz)

Selectivity 50 dB

General

Power requirements 230 V AC, 50/60 Hz

Power consumption 10 W

Dimensions 430 x 83 x 290 mm
(w/h/d)

Weight 2.5 kg

Supplied accessories

Audio cord (1)
AM loop antenna (1)
FM wire antenna (1)
EON connecting cord (1)

Design and specifications are subject to change
without notice.

FM STEREO FM-AM TUNER

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SAFETY-RELATED COMPONENT WARNING!!

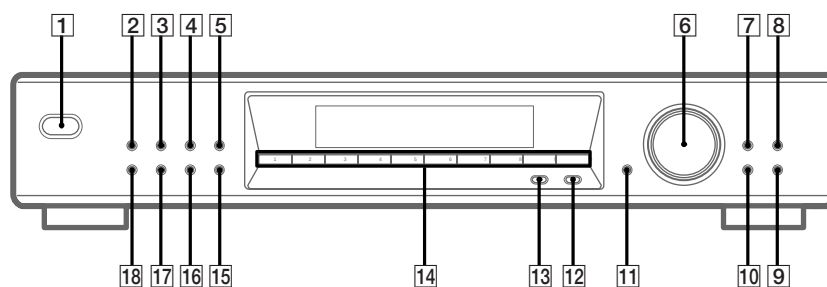
COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

LOCATION OF CONTROLS

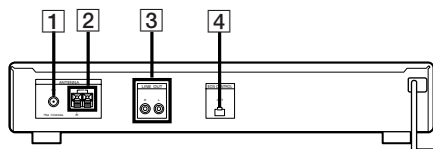
– Front Panel –



AUTO BETICAL SELECT **18** (7, 12)
 BAND **15** (9, 10, 12)
 CHARACTER **7** (11)
 DIRECT **12** (9)
 DISPLAY **5** (10, 11, 13)
 ENTER **11** (9, 11, 12, 14)
 EON NEWS/INFO **3** (13, 14)
 EON TA **2** (13, 14)
 FM MODE **16** (9, 10)

MEMORY **4** (8, 11)
 MENU **10** (9, 11, 14)
 Numeric buttons **14** (7–9)
 POWER **1** (7, 8, 12)
 PTY **17** (14, 15)
 RETURN **9** (9)
 SHIFT **13** (8, 11)
 TUNE MODE **8** (8, 10)
 TUNING/SELECT **6** (7–12, 14)

– Rear Panel –

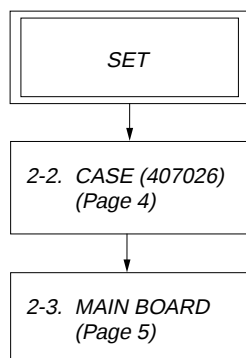


- 1** FM ANTENNA terminal
- 2** AM ANTENNA terminals
- 3** LINE OUT jack
- 4** EON CONTROL OUT terminal

SECTION 2 DISASSEMBLY

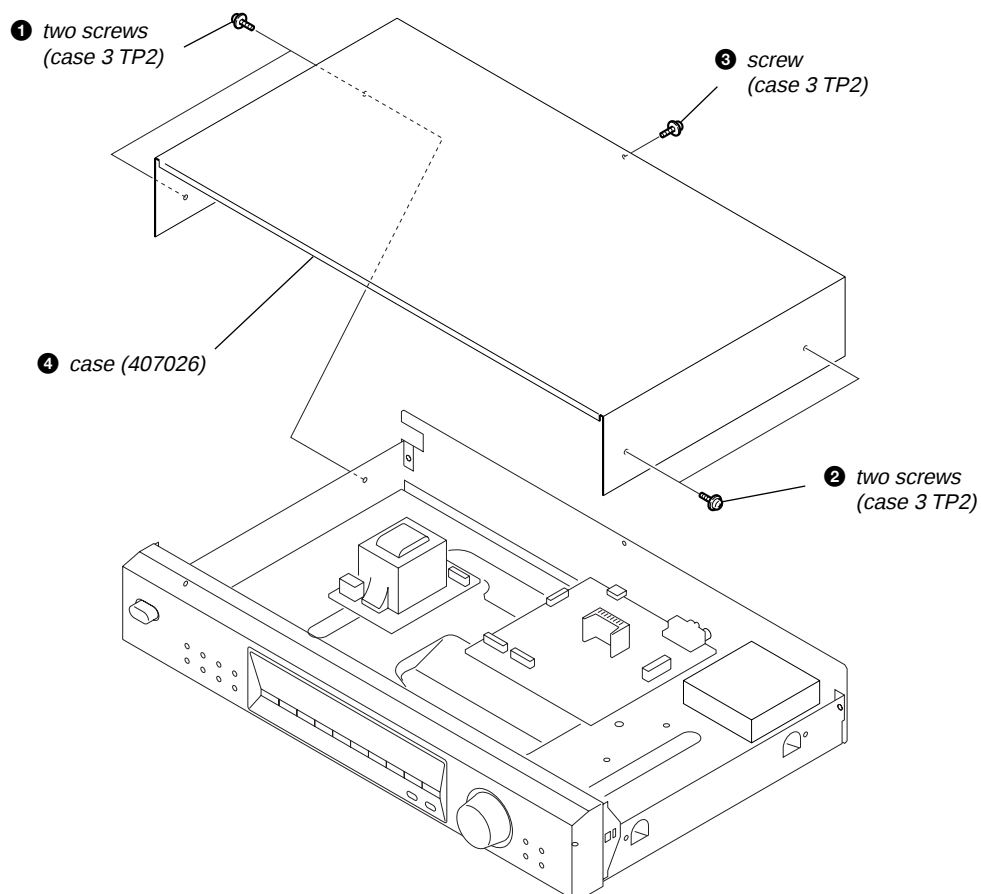
• This set can be disassembled in the order shown below.

2-1. DISASSEMBLY FLOW

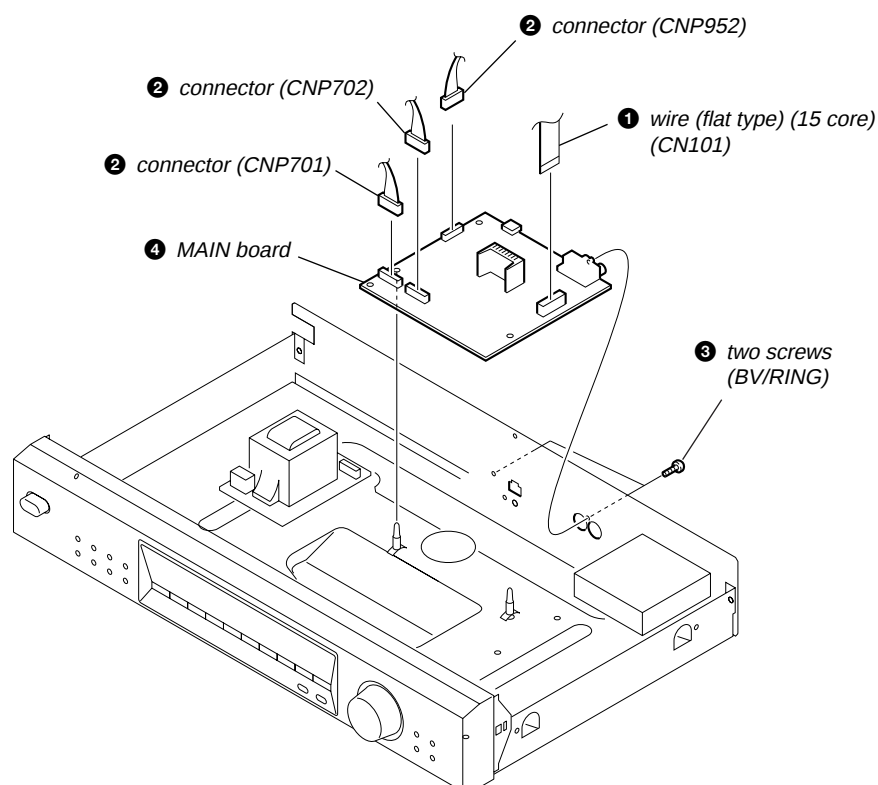


Note: Follow the disassembly procedure in the numerical order given.

2-2. CASE (407026)



2-3. MAIN BOARD



SECTION 3

TEST MODE

1. Circuit Check Mode

Set to the reception frequency that the circuit can STEREO RDS stations. (Set the input level to above 70 dB.)

This enables circuit check to be performed in any of the reception modes-FM, AM (MW, LW). Set to a desired band before setting the test mode.

1. Turn OFF the power.
 2. While pressing **4** and **AUTO-BETICAL SELECT** together, turn ON **POWER**.
- The items in the following table will be checked automatically in order every 2 seconds.

Display	Items	DISPLAY		NG
		FM RDS	AM (MW, LW)	
Tuned	$\overline{AST}$ signal =LOW	OK or NG		IC201 NG, RV201 adjustments
IF Frq	IF COUNT OK	OK or NG	OK or NG	TB101, IC201 NG
Sig Level	SI LEVELh70dB	OK or NG	OK or NG	TB101 NG
Stereo	$\overline{ST}$ signal=LOW	OK or NG		TB101 NG
RDS Signal	RDS DATA OK	OK or NG		IC801 NG

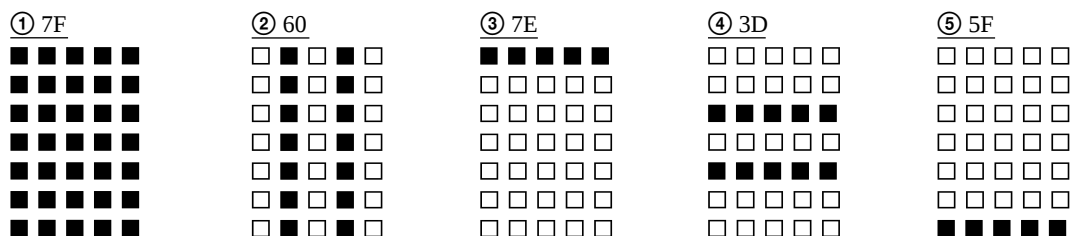
NOTE : The preset data will be erased when this test mode is used. Therefore, take down the data before setting this mode and preset the data again after completing operations in this mode.

2. Display Tube Check and KEY Check mode

1. Turn OFF the power.
2. While pressing **1** and **AUTO-BETICAL SELECT** together, turn ON **POWER**.
3. While continuously pressing **1** and **AUTO-BETICAL SELECT** together, check the following.

Microcomputer version indication (1 sec) → All light up “7F” → Dot area only “60” → Dot area only “7E”
 ↑
 Dot area only “5F” ← Dot area only “3D”

Indication test pattern



The display changes every 1 sec.

4. Release **1** and **AUTO-BETICAL SELECT** . The KEY CHECK mode will be set.
5. All key numbers will be displayed.
Key Number : 25
6. Each time the key is pressed, the key number will be counted down.
Each key will be counted only once, at the first time.
7. When all keys have been pressed, the process will end.

NOTE : As contents of the Factory Preset will be written into memory after completing this check mode, delete contents of memory according to 4. Forced RESET.

3. Entering the Factory Preset (In case perform just to write memory of the Factory Preset.)

1. Turn OFF the power.
2. While pressing **[3]** and **AUTO-BETICAL SELECT** together, turn ON **POWER**.

4. Forced RESET (Used to delete the contents of Factory Preset when it is written into the preset memory.)

Clears all the RAMs and sets the initial state

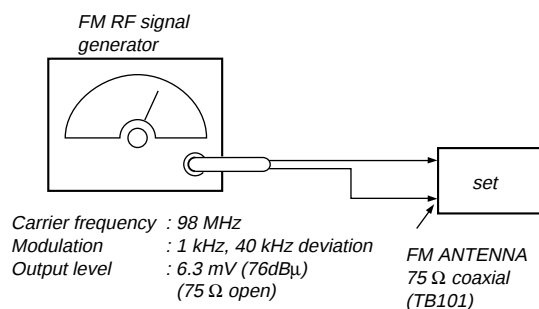
1. Turn OFF the power.
2. While pressing **[5]** and **AUTO-BETICAL SELECT** together, turn ON **POWER**.
3. When “All clear” is indicated on the fluorescent display tube, it means that “Forced Reset” has been completed.

5. Language Change

1. Turn OFF the power.
2. While pressing **[2]**, turn ON **POWER**.

SECTION 4 ELECTRICAL ADJUSTMENTS

FM Signal Level Adjustment

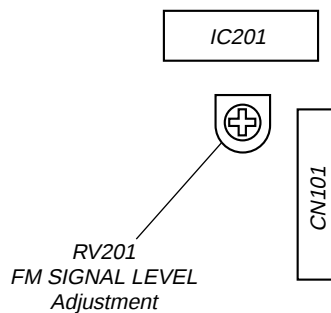


Procedure:

1. Tune the set to 98 MHz.
2. Push the **DISPLAY** button for digital signal meter indication.
3. Adjust RV201 to the place where level and “70dB ↑” indication lights on fluorescent indicator tube.

Adjustment Location:

[MAIN BOARD] — Component Side —

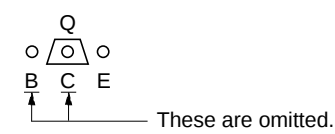


SECTION 5
DIAGRAMS

5-1. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS
(In addition to this, the necessary note is printed in each block)

Note on Printed Wiring Board:

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



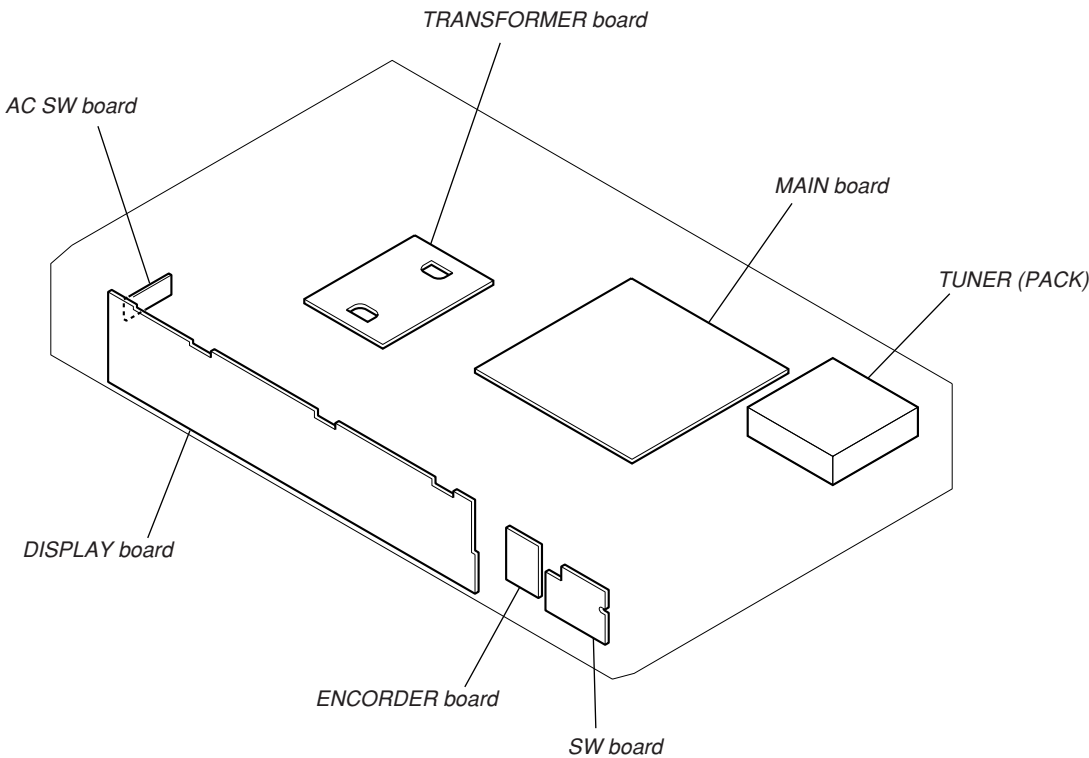
Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF : $\mu\mu\text{F}$ 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.
- Δ : internal component.
- : nonflammable 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.

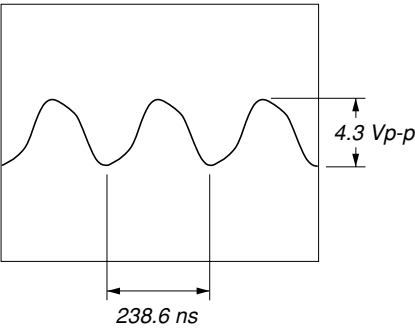
- : B+ Line.
- : B- Line.
- : adjustment for repair.
- Voltagess and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- * : Can not be measured.
- Voltagess are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
- : FM

• Circuit Boards Location



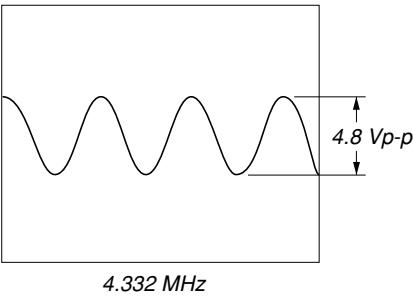
• Waveforms
– DISPLAY Board –

① IC701 ⑪ (X2)

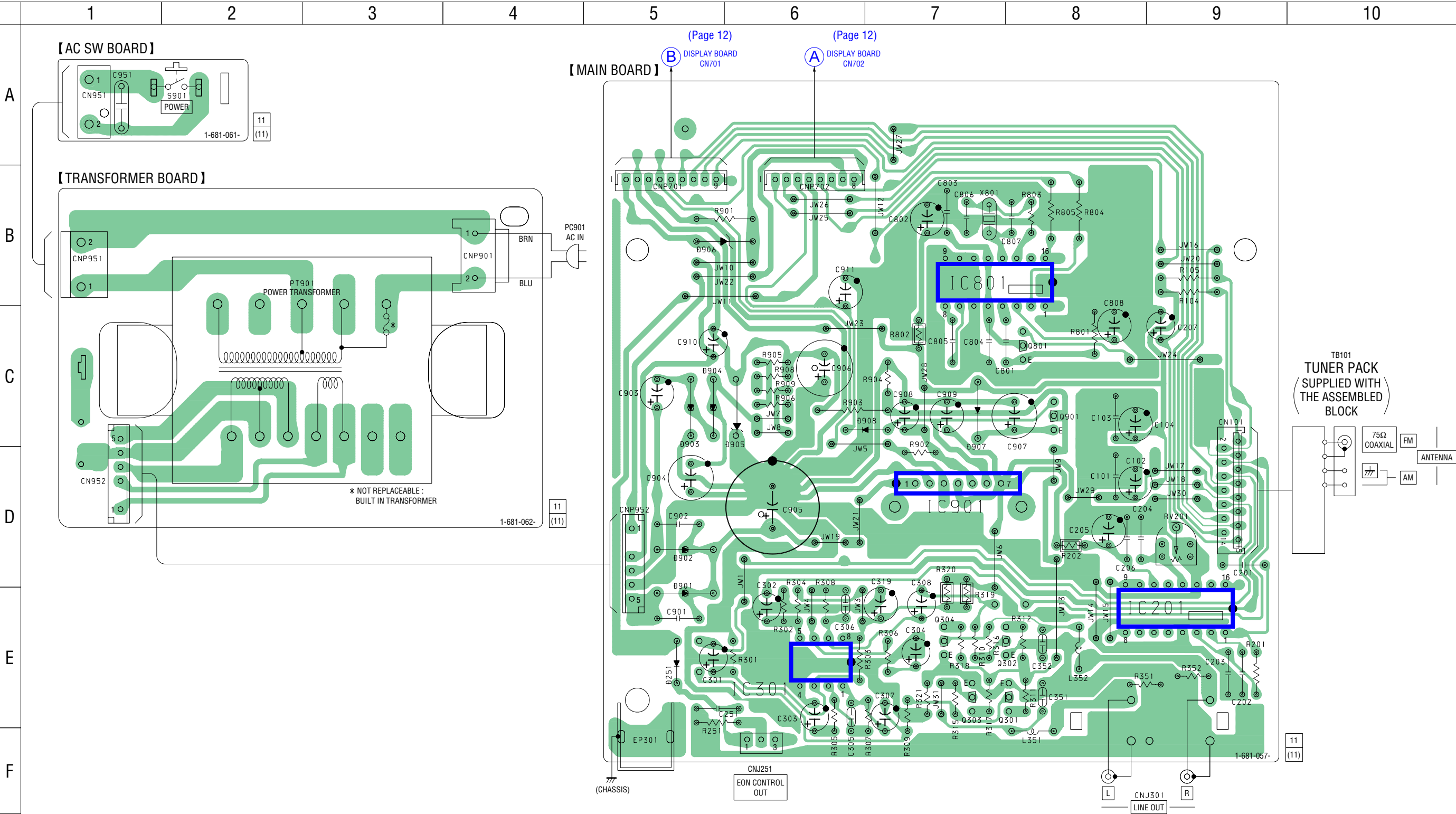


– MAIN Board –

② IC801 ⑭ (OSCO)



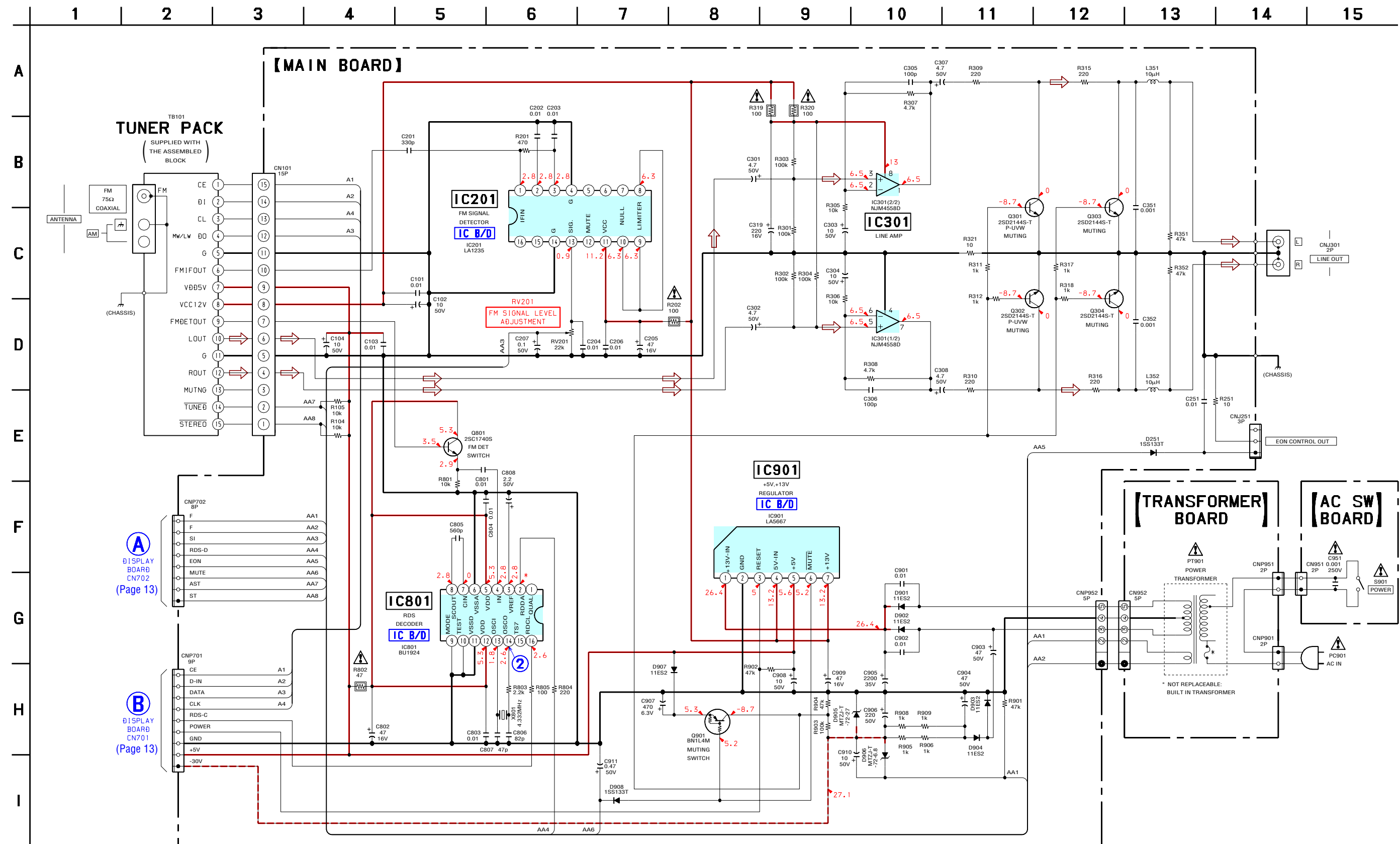
5-2. PRINTED WIRING BOARDS – MAIN Section – • See page 9 for Circuit Boards Location.



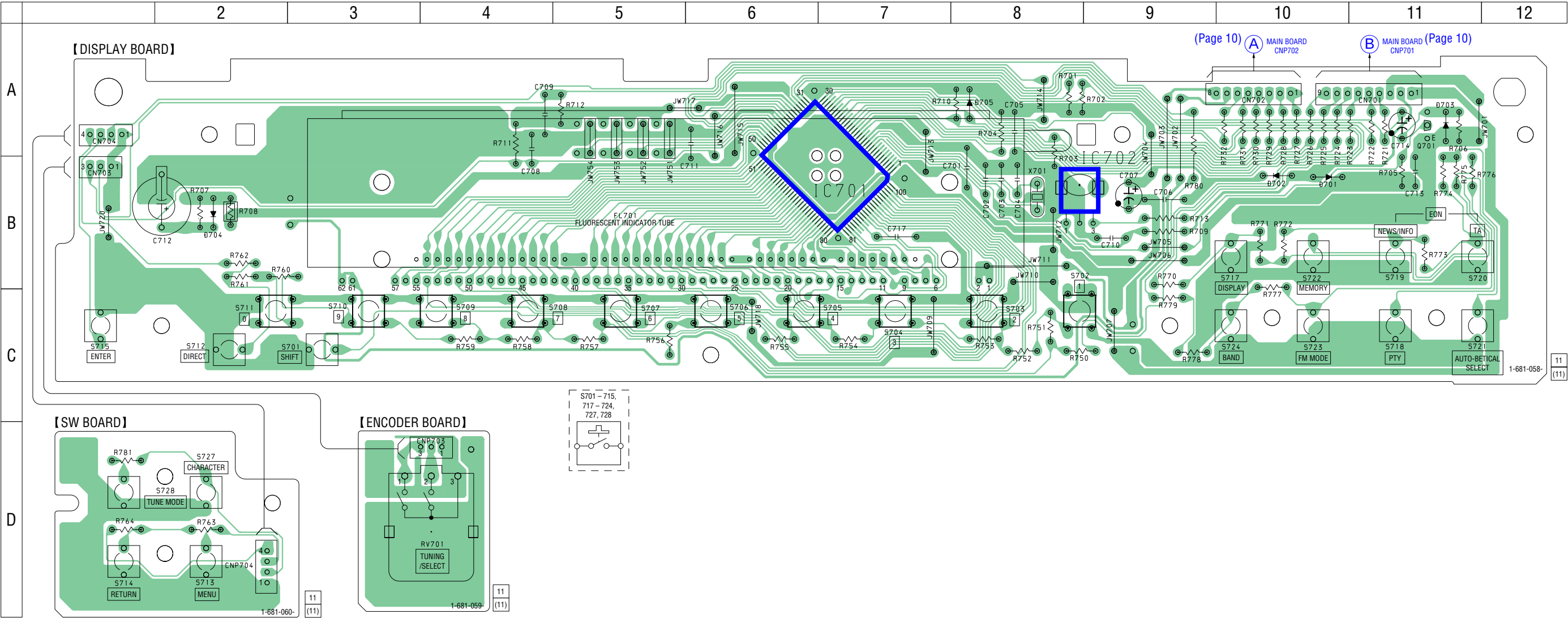
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D251	E-5	IC301	E-6
D901	E-5	IC801	B-7
D902	D-5	IC901	D-7
D903	C-5		
D904	C-5	Q301	E-8
D905	C-6	Q302	E-8
D906	B-5	Q303	E-7
D907	C-7	Q304	E-7
D908	C-7	Q801	C-8
		Q901	C-8
IC201	E-9		

5-3. SCHEMATIC DIAGRAM – MAIN Section – • See page 9 for Waveform. • See page 14 for IC Block Diagram.

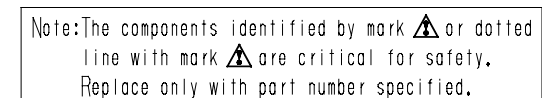


5-4. PRINTED WIRING BOARDS – DISPLAY Section – • See page 9 for Circuit Boards Location.



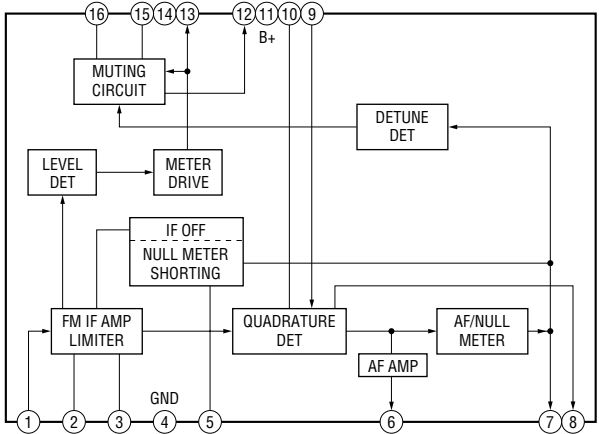
• Semiconductor Location

Ref. No.	Location
D701	B-10
D702	B-10
D703	A-11
D704	B-2
D705	A-8
IC701	B-7
IC702	B-8
Q701	A-11

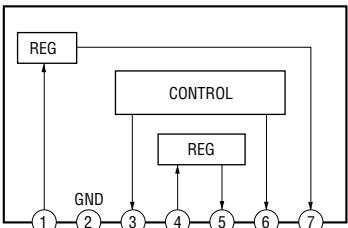


• IC Block Diagrams
– MAIN Board –

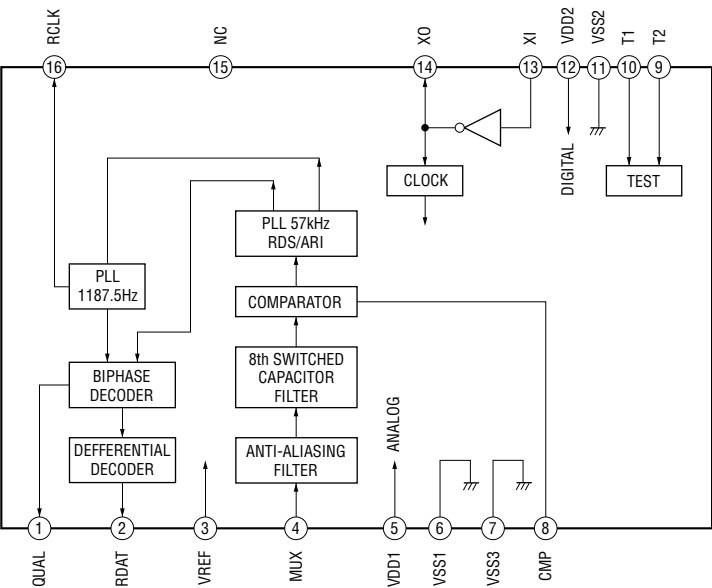
IC201 LA1235



IC901 LA5667



IC801 BU1924



5-6. IC PIN FUNCTION DESCRIPTION

• DISPLAY BOARD IC701 (μPD780205GF-040-3BA)

Pin No.	Pin Name	I/O	Description
1	VDD	—	Power supply terminal (+5V)
2	ANT	—	Not used (open)
3	ANT	—	Not used (open)
4	BAND1	—	Not used (open)
5	BAND2	—	Not used (open)
6	IF-B	—	Not used (open)
7	N.C.	—	Not used (open)
8	MONO	—	Not used (open)
9	TUN	—	Not used (open)
10	RESET	I	System reset signal input terminal “L”: reset
11	X2	O	Main system clock output terminal (4.19MHz)
12	4.19MHz	I	Main system clock input terminal (4.19MHz)
13	GND	—	Ground terminal
14	N.C.	—	Not used (open)
15	LOCK	I	Lock signal input terminal
16	VDD	—	Power supply terminal (+5V)
17	CLK	O	Serial data transfer clock signal output to the PLL IC on tuner pack (TB101) “L”: active
18	DATA	O	Serial data output to the PLL IC on tuner pack (TB101)
19	D-IN	I	Serial data input from the PLL IC on tuner pack (TB101)
20	CE	O	Serial chip enable signal output to the PLL IC on tuner pack (TB101)
21	BLN	—	Not used (open)
22	ST	I	Stereo detection signal input from the tuner pack (TB101)
23	CAL	—	Not used (open)
24	AST	I	Tuned display detection signal input from the tuner pack (TB101) “L”: tuned
25	AVSS	—	Ground terminal
26	MUTE	O	Muting on/off control signal output terminal
27	EON	O	EON output control terminal
28	PGM	—	Not used (open)
29	DATA RDS	I	RDS data input from the RDS decoder (IC801)
30	R2	O	Rotary encoder phase detection
31	KEY2	I	Key input terminal (A/D input)
32	KEY1	I	Key input terminal (A/D input)
33	SI	I	Signal input terminal
34	AVDD	—	Analog power supply terminal (+5V)
35	AVREF	I	Reference voltage (+5V) input terminal
36	RIN	I	Remote control signal input from the remote sensor (IC702)
37	R1	I	Rotary encoder number of rotation detection
38	RDS CLK	I	RDS serial clock signal input from the RDS decoder (IC801)
39	POWER	I	Power supply ON/OFF monitor
40	GND	—	Ground terminal

41, 42	IS5, IS4	I	Setting terminal for the model
43 to 45	IS3, IS2, IS1	I	Setting terminal for the destination
46	VDD	—	Power supply terminal (+5V)
47 to 78	P1 to P32	O	Segment drive signal output to the fluorescent indicator tube (FL701)
79	VLOAD	—	Negative power supply terminal for the fluorescent indicator tube drive (−30V)
80 to 84	P33 to P37	O	Segment drive signal output to the fluorescent indicator tube (FL701)
85	G16	—	Not used (open)
86 to 100	G15 to G1	O	Grid drive signal output to the fluorescent indicator tube (FL701)

SECTION 6

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)

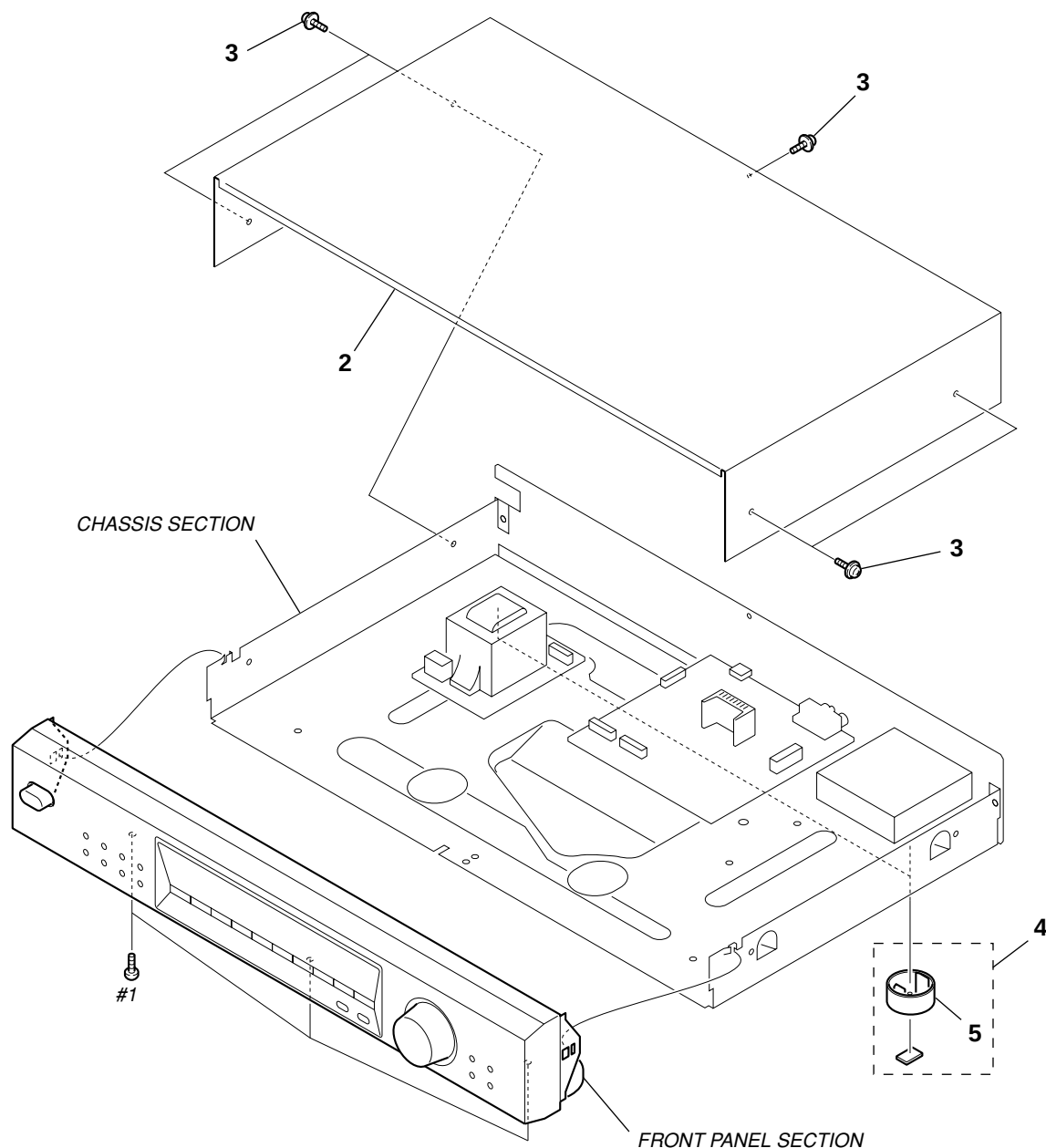
↑
Parts Color

↑
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.
- Accessories and packing materials are given in the last of the electrical parts list.

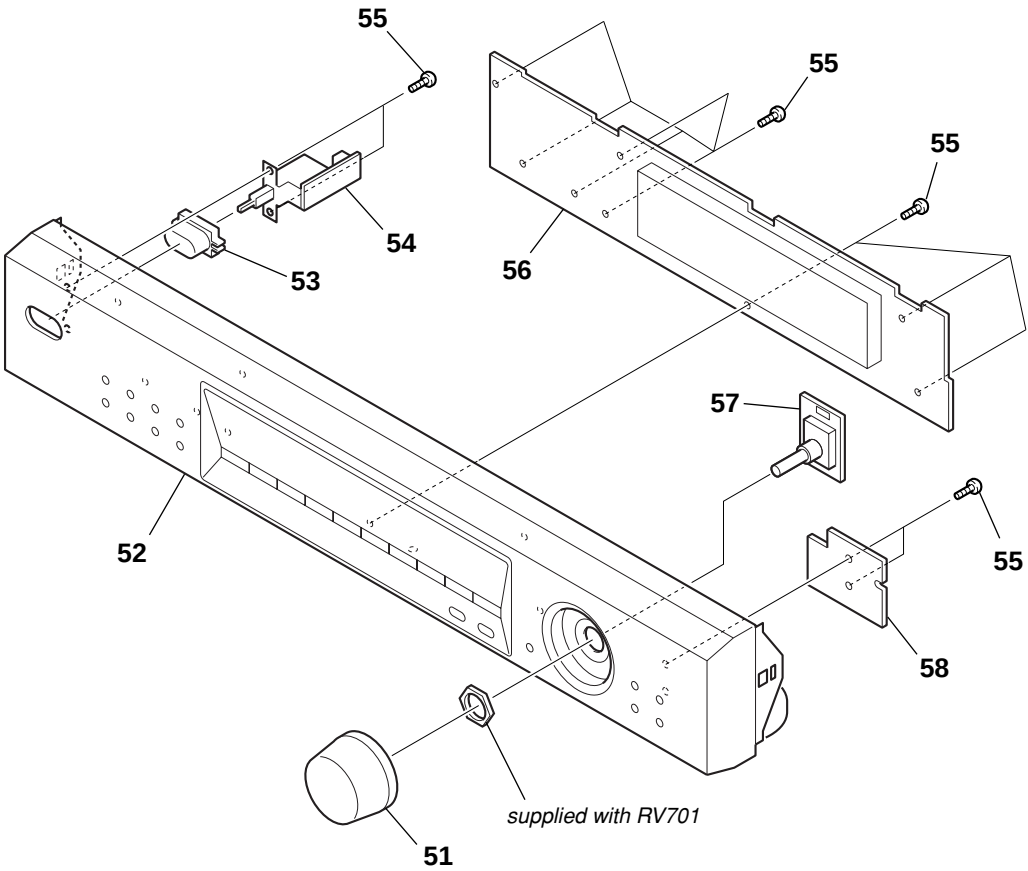
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

6-1. CASE SECTION



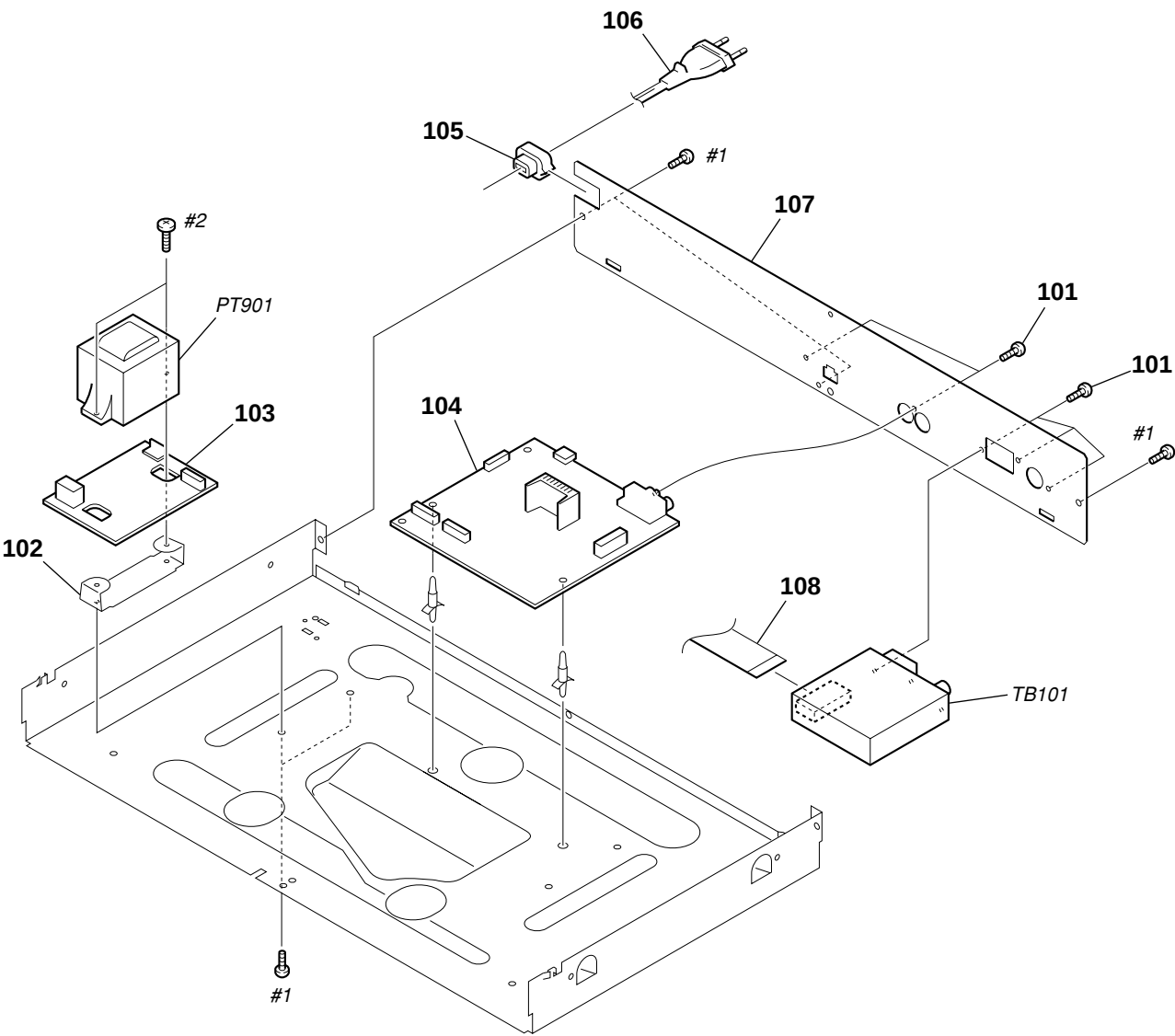
Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
2	4-232-149-11	CASE (407026)		5	4-232-237-01	FOOT (DIA. 30)	
3	4-210-291-01	SCREW (CASE 3 TP2)		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
4	X-4953-448-1	FOOT ASSY					

6-2. FRONT PANEL SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	4-997-882-51	KNOB (T)		55	4-951-620-01	SCREW (2.6X8), +BVTP	
52	X-4953-636-1	PANEL ASSY, FRONT		56	A-4476-422-A	DISPLAY BOARD, COMPLETE	
53	4-231-973-01	BUTTON (POWER)		57	1-681-059-11	ENCORDER BOARD	
54	1-681-061-11	AC SW BOARD		58	1-681-060-11	SW BOARD	

6-3. 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	3-704-515-31	SCREW (BV/RING)		107	4-233-386-51	PANEL, BACK	
102	4-957-880-11	BRACKET, TRANSFORMER		108	1-773-002-11	WIRE (FLAT TYPE) (15 CORE)	
103	1-681-062-11	TRANSFORMER BOARD		$\triangle$ PT901	1-423-525-11	TRANSFORMER, POWER	
104	A-4476-421-A	MAIN BOARD, COMPLETE		TB101	1-693-410-25	TUNER (PACK)	
* 105	3-703-244-00	BUSHING (2104), CORD		#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
$\triangle$ 106	1-575-651-21	CORD, POWER		#2	7-685-872-09	SCREW +BVTT 3X8 (S)	

DISPLAY

ENCODER

MAIN

Ref. No.	Part No.	Description	Remark		
R760	1-249-416-11	CARBON	820	5%	1/4W
R761	1-249-418-11	CARBON	1.2K	5%	1/4W
R762	1-249-421-11	CARBON	2.2K	5%	1/4W
R770	1-247-807-31	CARBON	100	5%	1/4W
R771	1-249-406-11	CARBON	120	5%	1/4W
R772	1-249-406-11	CARBON	120	5%	1/4W
R773	1-249-407-11	CARBON	150	5%	1/4W
R774	1-249-408-11	CARBON	180	5%	1/4W
R775	1-249-409-11	CARBON	220	5%	1/4W
R776	1-249-410-11	CARBON	270	5%	1/4W
R777	1-249-411-11	CARBON	330	5%	1/4W
R778	1-249-413-11	CARBON	470	5%	1/4W
R779	1-249-414-11	CARBON	560	5%	1/4W
R780	1-249-416-11	CARBON	820	5%	1/4W
< SWITCH >					
S701	1-771-349-11	SWITCH, KEYBOARD (SHIFT)			
S702	1-554-303-21	SWITCH, TACTILE (1)			
S703	1-554-303-21	SWITCH, TACTILE (2)			
S704	1-554-303-21	SWITCH, TACTILE (3)			
S705	1-554-303-21	SWITCH, TACTILE (4)			
S706	1-554-303-21	SWITCH, TACTILE (5)			
S707	1-554-303-21	SWITCH, TACTILE (6)			
S708	1-554-303-21	SWITCH, TACTILE (7)			
S709	1-554-303-21	SWITCH, TACTILE (8)			
S710	1-554-303-21	SWITCH, TACTILE (9)			
S711	1-554-303-21	SWITCH, TACTILE (0)			
S712	1-771-349-11	SWITCH, KEYBOARD (DIRECT)			
S715	1-771-349-21	SWITCH, KEYBOARD (ENTER)			
S717	1-771-349-21	SWITCH, KEYBOARD (DISPLAY)			
S718	1-771-349-21	SWITCH, KEYBOARD (PTY)			
S719	1-771-349-21	SWITCH, KEYBOARD (EON NEWS/INFO)			
S720	1-771-349-21	SWITCH, KEYBOARD (EON TA)			
S721	1-771-349-21	SWITCH, KEYBOARD (AUTO-BETICAL SELECT			
S722	1-771-349-21	SWITCH, KEYBOARD (MEMORY)			
S723	1-771-349-21	SWITCH, KEYBOARD (FM MODE)			
S724	1-771-349-21	SWITCH, KEYBOARD (BAND)			
< VIBRATOR >					
X701	1-760-422-11	VIBRATOR, CRYSTAL (4.192MHZ)			

	1-681-059-11	ENCODER BOARD			

< VARIABLE RESISTOR >					
RV701	1-467-703-11	ENCODER, ROTARY (TUNING/SELECT)			

	A-4476-421-A	MAIN BOARD, COMPLETE			

	7-685-647-79	SCREW +BVTP 3X10 TYPE2 IT-3			
< CAPACITOR >					
C101	1-127-876-11	CERAMIC	0.01uF	10%	50V
C102	1-126-964-11	ELECT	10uF	20%	50V
C103	1-127-876-11	CERAMIC	0.01uF	10%	50V

Ref. No.	Part No.	Description	Remark		
C104	1-126-964-11	ELECT	10uF	20%	50V
C201	1-162-288-31	CERAMIC	330PF	10%	50V
C202	1-127-876-11	CERAMIC	0.01uF	10%	50V
C203	1-127-876-11	CERAMIC	0.01uF	10%	50V
C204	1-127-876-11	CERAMIC	0.01uF	10%	50V
C205	1-104-660-91	ELECT	47uF	20%	16V
C206	1-127-876-11	CERAMIC	0.01uF	10%	50V
C207	1-126-956-91	ELECT	0.1uF	20%	50V
C251	1-127-876-11	CERAMIC	0.01uF	10%	50V
C301	1-126-963-11	ELECT	4.7uF	20%	50V
C302	1-126-963-11	ELECT	4.7uF	20%	50V
C303	1-126-964-11	ELECT	10uF	20%	50V
C304	1-126-964-11	ELECT	10uF	20%	50V
C305	1-110-335-11	MYLAR	100PF	5%	50V
C306	1-110-335-11	MYLAR	100PF	5%	50V
C307	1-126-963-11	ELECT	4.7uF	20%	50V
C308	1-126-963-11	ELECT	4.7uF	20%	50V
C319	1-126-934-11	ELECT	220uF	20%	16V
C351	1-130-471-00	MYLAR	0.001uF	5%	50V
C352	1-130-471-00	MYLAR	0.001uF	5%	50V
C801	1-127-876-11	CERAMIC	0.01uF	10%	50V
C802	1-104-660-91	ELECT	47uF	20%	16V
C803	1-127-876-11	CERAMIC	0.01uF	10%	50V
C804	1-127-876-11	CERAMIC	0.01uF	10%	50V
C805	1-162-291-31	CERAMIC	560PF	10%	50V
C806	1-128-808-11	CERAMIC	82PF	5%	50V
C807	1-128-805-11	CERAMIC	47PF	5%	50V
C808	1-126-961-11	ELECT	2.2uF	20%	50V
C901	1-127-876-11	CERAMIC	0.01uF	10%	50V
C902	1-127-876-11	CERAMIC	0.01uF	10%	50V
C903	1-126-967-11	ELECT	47uF	20%	50V
C904	1-126-967-11	ELECT	47uF	20%	50V
C905	1-126-953-11	ELECT	2200uF	20%	35V
C906	1-126-969-11	ELECT	220uF	20%	50V
C907	1-126-935-11	ELECT	470uF	20%	6.3V
C908	1-126-964-11	ELECT	10uF	20%	50V
C909	1-104-660-91	ELECT	47uF	20%	16V
C910	1-126-964-11	ELECT	10uF	20%	50V
C911	1-126-959-11	ELECT	0.47uF	20%	50V
< CONNECTOR >					
CN101	1-784-776-11	CONNECTOR, FFC 15P			
< JACK >					
CNJ251	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL OUT)			
CNJ301	1-778-940-11	JACK 2P (LINE OUT)			
< CONNECTOR >					
* CNP701	1-568-936-11	PIN, CONNECTOR 9P			
* CNP702	1-568-935-11	PIN, CONNECTOR 8P			
CNP952	1-766-267-11	PIN, CONNECTOR (PC BOARD) 5P			
< DIODE >					
D251	8-719-911-19	DIODE	1SS133T-72		
D901	8-719-024-99	DIODE	11ES2-NTA2B		
D902	8-719-024-99	DIODE	11ES2-NTA2B		
D903	8-719-024-99	DIODE	11ES2-NTA2B		

MAIN

SW

TRANSFORMER

Ref. No.	Part No.	Description	Remark
D904	8-719-024-99	DIODE 11ES2-NTA2B	
D905	8-759-983-75	DIODE MTZJ-T-72-27	
D906	8-719-947-27	DIODE MTZJ-T-72-6.8	
D907	8-719-024-99	DIODE 11ES2-NTA2B	
D908	8-719-911-19	DIODE 1SS133T-72	
< IC >			
IC201	8-759-812-35	IC LA1235	
IC301	8-759-634-51	IC NJM4558D	
IC801	8-759-541-48	IC BU1924	
IC901	8-759-820-09	IC LA5667	
< COIL >			
L351	1-410-509-11	INDUCTOR 10uH	
L352	1-410-509-11	INDUCTOR 10uH	
< TRANSISTOR >			
Q301	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW	
Q302	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW	
Q303	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW	
Q304	8-729-922-37	TRANSISTOR 2SD2144S-TP-UVW	
Q801	8-729-119-78	TRANSISTOR 2SC1740S-QRT	
Q901	8-729-900-65	TRANSISTOR BN1L4M-TP	
< RESISTOR >			
R104	1-249-429-11	CARBON 10K 5% 1/4W	
R105	1-249-429-11	CARBON 10K 5% 1/4W	
R201	1-249-413-11	CARBON 470 5% 1/4W	
△ R202	1-249-405-11	CARBON 100 5% 1/4W	F
R251	1-249-393-11	CARBON 10 5% 1/4W	
R301	1-249-441-11	CARBON 100K 5% 1/4W	
R302	1-249-441-11	CARBON 100K 5% 1/4W	
R303	1-249-441-11	CARBON 100K 5% 1/4W	
R304	1-249-441-11	CARBON 100K 5% 1/4W	
R305	1-249-429-11	CARBON 10K 5% 1/4W	
R306	1-249-429-11	CARBON 10K 5% 1/4W	
R307	1-249-425-11	CARBON 4.7K 5% 1/4W	
R308	1-249-425-11	CARBON 4.7K 5% 1/4W	
R309	1-249-409-11	CARBON 220 5% 1/4W	
R310	1-249-409-11	CARBON 220 5% 1/4W	
R311	1-249-417-11	CARBON 1K 5% 1/4W	
R312	1-249-417-11	CARBON 1K 5% 1/4W	
R315	1-249-409-11	CARBON 220 5% 1/4W	
R316	1-249-409-11	CARBON 220 5% 1/4W	
R317	1-249-417-11	CARBON 1K 5% 1/4W	
R318	1-249-417-11	CARBON 1K 5% 1/4W	
△ R319	1-249-405-11	CARBON 100 5% 1/4W	
△ R320	1-249-405-11	CARBON 100 5% 1/4W	
R321	1-249-393-11	CARBON 10 5% 1/4W	
R351	1-249-437-11	CARBON 47K 5% 1/4W	
R352	1-249-437-11	CARBON 47K 5% 1/4W	
R801	1-249-429-11	CARBON 10K 5% 1/4W	
△ R802	1-249-401-11	CARBON 47 5% 1/4W	F
R803	1-249-421-11	CARBON 2.2K 5% 1/4W	
R804	1-249-409-11	CARBON 220 5% 1/4W	
R805	1-247-807-31	CARBON 100 5% 1/4W	
R901	1-249-437-11	CARBON 47K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R902	1-249-437-11	CARBON 47K 5% 1/4W	
R903	1-249-441-11	CARBON 100K 5% 1/4W	
R904	1-249-437-11	CARBON 47K 5% 1/4W	
R905	1-249-417-11	CARBON 1K 5% 1/4W	
R906	1-249-417-11	CARBON 1K 5% 1/4W	
R908	1-249-417-11	CARBON 1K 5% 1/4W	
R909	1-249-417-11	CARBON 1K 5% 1/4W	
< VARIABLE RESISTOR >			
RV201	1-241-765-11	RES, ADJ, CARBON 22K	
< VIBRATOR >			
X801	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	

1-681-060-11	SW BOARD	*****	
< RESISTOR >			
R763	1-249-424-11	CARBON 3.9K 5% 1/4W	
R764	1-249-430-11	CARBON 12K 5% 1/4W	
R781	1-249-418-11	CARBON 1.2K 5% 1/4W	
< SWITCH >			
S713	1-771-349-21	SWITCH, KEYBOARD (MENU)	
S714	1-771-349-21	SWITCH, KEYBOARD (RETURN)	
S727	1-771-349-21	SWITCH, KEYBOARD (CHARACTER)	
S728	1-771-349-21	SWITCH, KEYBOARD (TUNE MODE)	

1-681-062-11	TRANSFORMER BOARD	*****	
< CONNECTOR >			
* CNP901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
CNP951	1-564-321-00	PIN, CONNECTOR 2P	
< TRANSFORMER >			
△ PT901	1-423-521-11	TRANSFORMER, POWER	

MISCELLANEOUS			

△ 106	1-575-651-21	CORD, POWER	
108	1-773-002-11	WIRE (FLAT TYPE) (15 CORE)	
△ PT901	1-423-525-11	TRANSFORMER, POWER	
TB101	1-693-410-25	TUNER (PACK)	

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

<u>Ref. No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
	ACCESSORIES & PACKING MATERIALS		

	1-501-374-11	ANTENNA, LOOP (AM)	
	1-501-659-41	ANTENNA (FM)	
⚠	1-770-019-11	ADAPTOR, CONVERSION PLUG 3P (UK)	
	1-765-383-11	CORD (WITH CONNECTOR)	
		(EON CONNECTING CORD)	
	1-776-263-11	CORD, CONNECTION (AUDIO CORD)	
	4-233-395-11	MANUAL, INSTRUCTION (ENGLISH) (UK)	
	4-233-395-21	MANUAL, INSTRUCTION (FRENCH, GERMAN, SPANISH, DUTCH) (AEP)	
	4-233-395-31	MANUAL, INSTRUCTION (SWEDISH, ITALIAN, POLISH) (AEP)	
	4-233-395-41	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP)	
	4-233-395-51	MANUAL, INSTRUCTION (PORTUGUESE) (AEP)	

MEMO

REVISION HISTORY

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Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

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