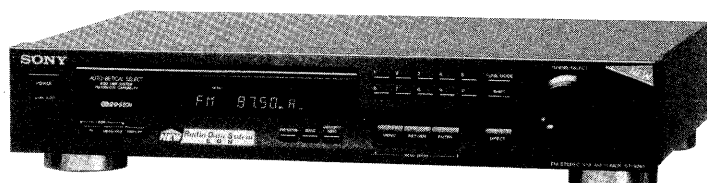


ST-S261

SERVICE MANUAL

AEP Model
UK Model



SPECIFICATIONS

FM tuner

Frequency range	87.5 - 108 MHz (50 kHz step)
Antenna terminals	75 Ω unbalanced
Intermediate frequency	10.7 MHz
Sensitivity	(mono S/N 26 dB) 10.3 dBf, 0.9 μ V/75 Ω (stereo S/N 46 dB) 38.5 dBf, 23 μ V/75 Ω
Usable sensitivity	10.3 dBf, 0.9 μ V/75 Ω (IHF)
Signal-to-noise ratio	(at 40 kHz deviation) 74 dB (mono) 69 dB (stereo)
Harmonic distortion	0.1% (mono); 0.2% (stereo) (at 1 kHz)
Frequency response	30 Hz - 15 kHz, (+0.5 dB, -2.0 dB)
Separation	45 dB (at 1 kHz)
Selectivity	60 dB (at 300 kHz) 80 dB (at 400 kHz)
Output/impedance	600 mV/470 Ω (at 40 kHz deviation)

AM tuner

Frequency range	MW: 531 - 1,602 kHz (9 kHz step) LW: 153 - 279 kHz (1 kHz step)
Intermediate frequency	450 kHz
Usable sensitivity	(with AM loop antenna) MW: 300 μ V/m (999 kHz) LW: 1 mV/m (216 kHz)
Signal-to-noise ratio	54 dB
Harmonic distortion	0.5%
Selectivity	32 dB

General

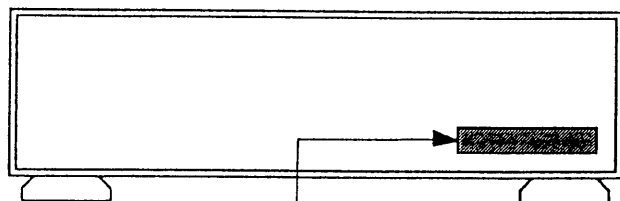
Power requirements	230 V AC, 50/60 Hz (U.K. model) 220 - 230 V AC, 50/60 Hz (European model)
Power consumption	10 W
Dimensions	Approx. 430 mm (W) x 85 mm (H) x 295 mm (D) (17 x 3 ¹ / ₄ x 11 ¹ / ₂ inches)
Mass	Approx. 2.9 kg (6 lb. 3 oz.)
Accessories supplied	Connecting cord (1) AM loop antenna (1) FM wire antenna (1) EON connecting cord (1)

Design and specifications are subject to change without notice.

FM STEREO FM-AM TUNER
SONY[®]

MODEL IDENTIFICATION

— BACK PANEL —



4-973-843-1□ (AEP model)
4-973-843-3□ (UK model)

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	• IC701 System Control IC (μPD78044AGF-094-3B9) ..	20
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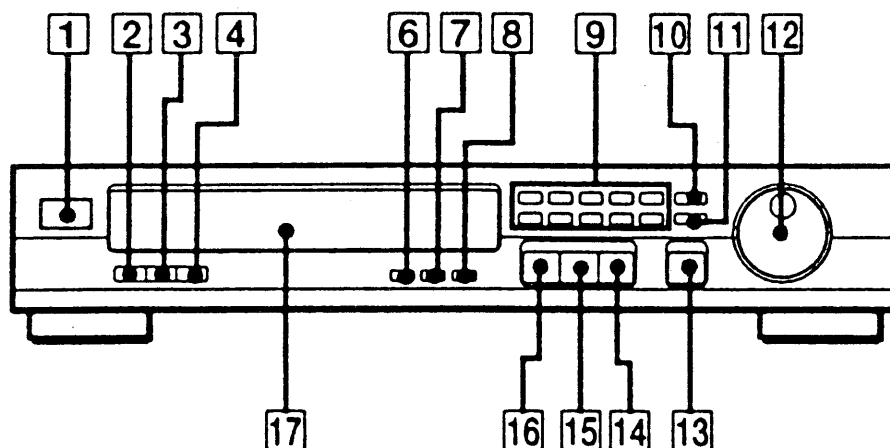
SAFETY-RELATED COMPONENT WARNING !!

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

This section is extracted
from instruction manual.

Front Panel



- | | |
|----------------------------------|--|
| 1 Power switch (10) | 11 SHIFT button (36, 40) |
| 2 EON TA button (58) | 12 TUNING/SELECT knob (12, 16, 18, 20, 22, 28, 30, 32, 40, 42, 46, 62, 64) |
| 3 EON NEWS/INFO button (58) | 13 DIRECT button (24) |
| 4 DISPLAY button (44, 56) | 14 ENTER button (12, 16, 18, 28, 30, 32, 34, 42, 46, 62, 64) |
| 6 FM MODE button (26) | 15 RETURN button (12, 30, 34) |
| 7 BAND button (20, 22, 24) | 16 MENU button (12, 16, 18, 28, 32, 34, 42, 46, 62, 64) |
| 8 MEMORY/NEXT button (36, 42) | 17 Display window |
| 9 Preset buttons (24, 36, 40) | |
| 10 TUNE MODE button (20, 22, 42) | |

(The numbers in parentheses indicate the page(s) where the control is described.)

Preset Tuning

This section shows you how to store and automatically tune in your favorite stations. Each station stored for preset tuning is first assigned a two-character code, consisting of a letter (A-C) followed by a one-digit number (0-9). To tune in a stored station, you simply enter the appropriate two-character code. You can store up to 30 stations.

Storing Stations Using "Auto-betel select"

"Auto-betel select" is the easiest way to automatically store all FM RDS and FM stations in your broadcast area. The tuner first selects FM RDS stations with the clearest RDS signal from among the same RDS stations broadcasting the same program and stores them in alphabetical order without redundancy up to 30 stations. Then the tuner stores FM stations other than the FM RDS stations from low to high frequencies. If you want to store FM and AM (MW/LW) stations one by one, do the procedure on page 36.

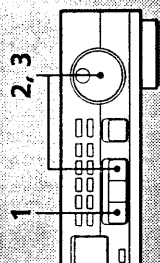
1 Press MENU.

2 Rotate the TUNING/SELECT knob until "AUTO-BET" appears and then press ENTER.

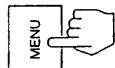
3 Rotate the TUNING/SELECT knob until "Y/N YES" appears and then press ENTER.
The tuner scans and stores all FM RDS and FM stations in the broadcast area. For RDS stations, the tuner first checks for stations broadcasting the same program, then stores only the one with the clearest signal. The selected RDS stations are sorted alphabetically by their Program Service name, then assigned two-character codes. For more details on RDS, see page 50.

After scanning, the display shows the total number of the stored FM RDS stations and then the station stored in A1 is received.

(to be continued)



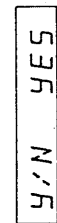
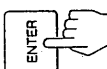
1



2



3



Preset Tuning

(continued)

The following settings will be stored along with the station
FM MODE

If you perform the scanning again

Some of the preset stations may be replaced with new ones depending on the reception quality.

To cancel the scanning

Perform one of the following procedures.
• Press RETURN. The scanning stops and the display returns to the "AUTO-BET" menu.

If you press RETURN again, the display shows the currently received frequency.
• Press ENTER. The scanning stops and the display shows the currently received frequency.

To tune in stored stations

See page 40.

To erase stored stations one by one

- 1 Press MENU.
- 2 Rotate the TUNING/SELECT knob until "Clear" appears and then press ENTER.
- 3 Rotate the TUNING/SELECT knob until the preset station to be erased appears and then press ENTER.
The frequency stored in the specified code is erased and the digit of the preset code disappears.
- 4 Repeat steps 1 through 3 for other stored stations to be erased.

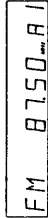
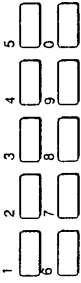
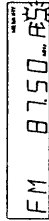
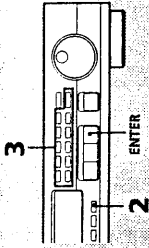
To erase all stored stations at a time

- 1 Turn off the power.
- 2 Hold down 5 and MENU, and press POWER to turn on the power again.

Notes

- If you move to another area, do this procedure again to store the stations for the new broadcast area.

Preset Tuning



Storing Stations Manually

This procedure shows you how to select and store FM and AM (MW/LW) stations one by one. This procedure is useful if you want to select just which stations to store, and for storing FM stations or FM RDS stations with a very weak signal that may not be stored using "Auto-beat select". If you want to automatically store FM and/or FM RDS station in your broadcast area, do one of the procedures described on page 32, depending on which tuner you have.

- 1 Tune in the desired station.**
For details on tuning in stations, see pages 20-24 and 40.
- 2 Press MEMORY/NEXT.**
"MEMORY" appears to show that the tuner is ready to store a station. If the stations is tuned in with the automatic tuning, manual tuning or direct tuning: The lowest vacant code appears. If you want to store the station in that preset code, press ENTER. If you want to specify the other preset code, go to step 3.
- 3 Enter the two-character code under which you want the station stored.**
Press SHIFT to select A, B, or C. The letter you choose appears on the display. Each time you press SHIFT, the letter changes. Then, press a preset button 0-9. The tuner stores the station under the two-character code.
- 4 Perform steps 1 through 3 for other stations.**

(to be continued)

Preset Tuning

(continued)

If you make a mistake during entry
Perform steps 2 and 3 again.

To cancel the storing while the MEMORY indicator is lit

- Press RETURN or
- Press MEMORY/NEXT.

The following settings will be stored along with the station

FM MODE

If you store a new station in the same code

The previously stored station is erased. Each code can hold only one station.

To tune in stored stations

See page 40.

To erase stored stations one by one

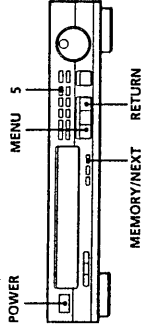
- 1 Press MENU.
 - 2 Rotate the TUNING/SELECT knob until "Clear" appears and then press ENTER.
 - 3 Rotate the TUNING/SELECT knob until the preset station to be erased appears and then press ENTER.
- The frequency stored in the specified code is erased and the digit of the preset code disappears.
- 4 Repeat steps 1 through 3 for other stored stations to be erased.

To erase all stored stations at a time

- 1 Turn off the power.
- 2 Hold down 5 and MENU, and press POWER to turn on the power again.

Notes

- If you move to another area, do this procedure again to store the stations for the new broadcast area.
- The stations remain stored in memory for up to one month after turning the power off.

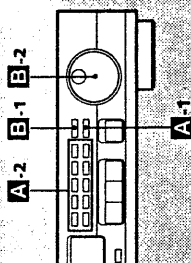


Preset Tuning

Tuning in Stored Stations **A**

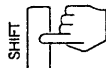
Enter the two-character code of the station you want to listen to.

- 1 First, press **SHIFT** to select **A**, **B**, or **C**.
- 2 Press a preset button 0-9.
The tuner automatically tunes in the station stored under that two-character code.

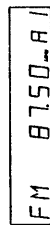
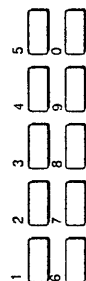


A

1

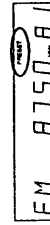


2



B

1



2

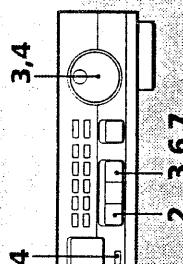


Preset Tuning

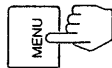
Assigning Names to Stored Stations

This procedure shows you how to assign a name of up to 5 characters for each stored station except the FM RDS stations. When you tune in a stored station by using the procedure on page 40, the name appears on the display instead of the frequency.

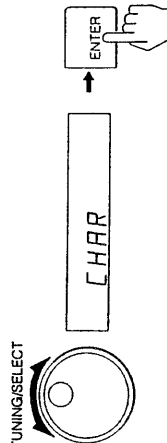
- 1 Tune in a preset station except the FM RDS stations.
See page 40.
- 2 Press **MENU**.
- 3 Rotate the **TUNING/SELECT** knob until "CHAR" appears and then press **ENTER**.
- 4 Rotate the **TUNING/SELECT** knob until the desired character appears and then press **MEMORY/TEXT**.
The first character stops blinking and the cursor of the second position blinks. The list of characters you can choose from is shown on the next page. To search forward through the list, turn the knob clockwise. To search backward through the list, turn the knob counterclockwise.
- 5 Repeat step 4 until you obtain the desired name.
- 6 Press **ENTER**.
The name you created is set and the preset code in which the name will be stored blinks.
- 7 Press **ENTER** again.



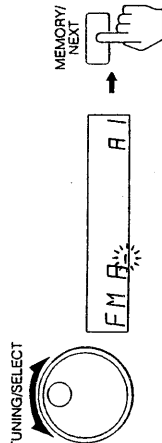
2



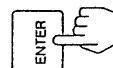
3



4



6, 7



(to be continued)

Preset Tuning

(continued)

To modify a name

Even after pressing the ENTER button, you can change the character. In step 4 or 5, press the MEMORY/NEXT button so that the character to be changed blinks and then perform steps 4 through 7.

To store the station after assigning the name

In step 1 above, even if you tune in a station other than a preset station, you can store it with the assigned name. After pressing ENTER in step 6, press the two-character code within 8 seconds and then press ENTER.

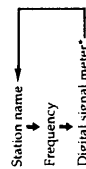
b) Character List

(space) A, B, C, D, E, F, G, H, I, J, K,
L, M, N, O, P, Q, R, S, T, U, V, W, X, Y,
Z, [, \,], ^, _ , ` , ~ , ! , " , # , \$, % , & , ' ,
* , + , , - , . , / , 0 , 1 , 2 , 3 , 4 , 5 , 6 , 7 , 8 , 9 , < , = ,
(space) >
(space)

b)

Displaying the Name A

You can assign names to stored stations by doing the procedure on page 42. To display the name of a stored station, press the DISPLAY button. Each time you press DISPLAY, the display alternates between the station frequency, name, and digital signal meter.

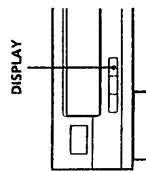


- For FM, the digital signal meter displays the strength of the received signal. For best reception, adjust the direction of the antenna until the digital signal meter indicates the signal at its peak strength. When you tune in an AM (MW/LW) station, the digital signal meter shows "– dB" and it does not function.

Notes on the DISPLAY button

When receiving an RDS station, see page 56 for use of the DISPLAY button.

A



Preset Tuning

Sorting the Preset Stations

To easily search for a desired preset station, this unit has a preset station sorting function. You can sort the preset stations in alphabetical order ("Alphabet"), in order of signal strength ("Strength"), or according to the reception band ("Band"). In addition, you can sort the preset RDS stations in order of country code ("Country").

1 Press MENU.

2 Rotate the TUNING/SELECT knob until "Sort" appears and then press ENTER. "Select" appears.

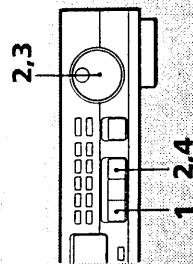
3 Rotate the TUNING/SELECT knob until the desired way of sorting appears.

By rotating the knob, the display changes in the following order:

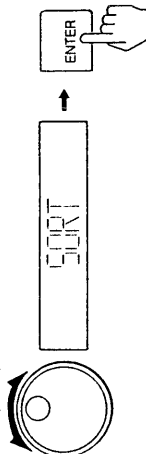


4 Press ENTER.

The unit sorts the preset stations in the order you selected and then receives the preset station stored in A1.

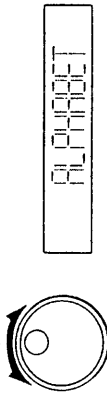


2 TUNING/SELECT

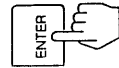


3

TUNING/SELECT



4





(continued)

How the unit arranges the preset stations

"Alphabet":

The unit arranges the preset stations that have station names in alphabetical order. Station names that have a space as the first character are selected first, followed by names starting with an alphabetic character, symbol or numerical digit, in that order. Preset stations that have no station names are arranged by frequency, from low to high.

"Strength":

The unit sorts FM preset stations in order of signal strength, starting with stations that have names, followed by stations that have no names. The rest of the stations are arranged by frequency, from low to high.

"Country":

The unit arranges FM RDS stations that have a PI code (see page 54) in order of country code (1 - 9 and A - F). Stations that have the same country code are arranged in alphabetical order. The rest of the stations are arranged by frequency, from low to high.

Note

Since some countries have the same country code (or a certain country has two country codes), stations in different countries may be arranged together.

"Band":

The unit sorts FM RDS stations that have names in alphabetical order, followed by FM RDS stations that have no names. After that, the unit arranges regular FM stations from low to high frequencies, and then arranges the remaining stations in the same manner.

SECTION 2

TEST MODE

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.

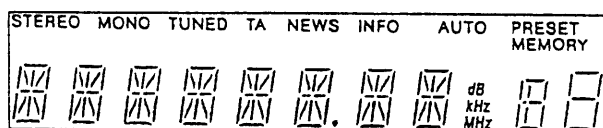
1. Display Tube and Key Check Mode

1-1. Display Tube Check

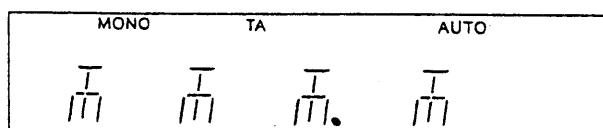
- 1-1-1. Turn OFF the power.
- 1-1-2. While pressing **[1]** and **[MENU]** together, turn ON **[POWER]**.
- 1-1-3. While continuously pressing **[1]** and **[MENU]** together, check the following.

Microcomputer version indication (1 sec) → All light up(1) → 8-digit test pattern(2) → 2-digit test pattern (3) →

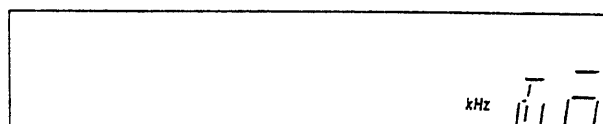
- (1) All light up



- (2) 8-digit test pattern



- (3) 2-digit test pattern



The display changes every 500 msec.

1-2. Key Check

- 1-2-1. Release **[1]** and **[MENU]**. The KEY CHECK mode will be set.
- 1-2-2. All key numbers will be displayed.
Key Number : 22
- 1-2-3. Each time the key is pressed, the key number will be counted down.
Each key will be counted only once, at the first time.
- 1-2-4. When all keys have been pressed, the process will end and the factory preset will be entered.

2. Entering the Factory Preset

To skip “1. Display Tube Key Check Mode”, and factory preset:

- (1) Turn OFF the power.
- (2) While pressing [3] and [MENU] together, turn ON [POWER].

3. Circuit Check Mode

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

- (1) Turn OFF the power.
- (2) While pressing [4] and [MENU] 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	
TUNED	AST signal =LOW	OK or NG	OK or NG	TB 101 NG
IF	IF COUNT OK	OK or NG	OK or NG	TB 101 NG
SIG L	SI LEVEL ≥ 70 dB	OK or NG	OK or NG	IC 201 NG RV201 adjustments
ST	ST signal=LOW	OK or NG		TB101 NG
RDS	RDS DATA OK	OK or NG		IC802 NG

4. Forced RESET

Clears all the RAMs and sets the initial state

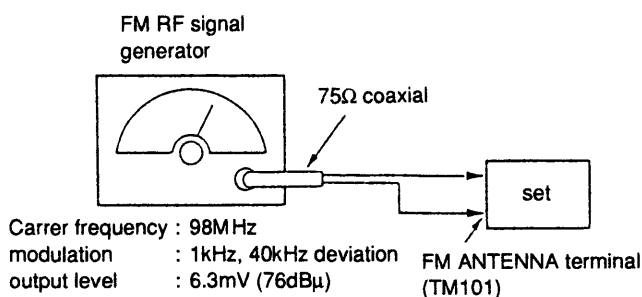
- (1) Turn OFF the power.
- (2) While pressing [5] and [MENU] together, turn ON [POWER].

SECTION 3

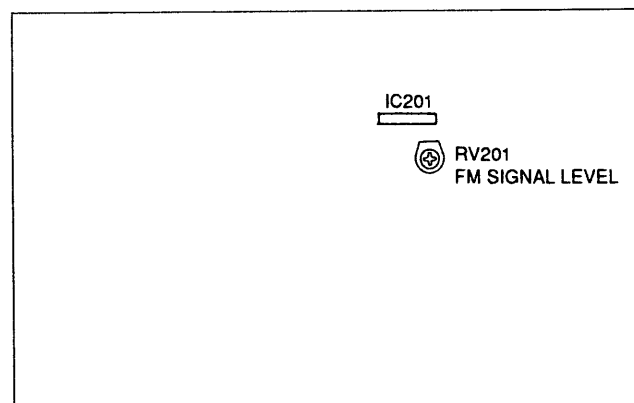
ELECTRICAL ADJUSTMENTS

FM SIGNAL LEVEL ADJUSTMENT

Adjustment Location :



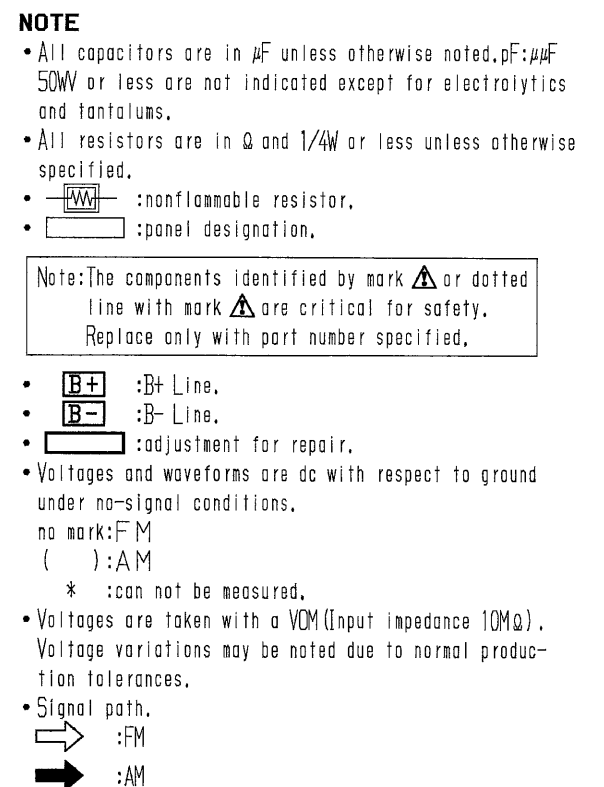
[TUNER BOARD] — Component Side —



Procedure :

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

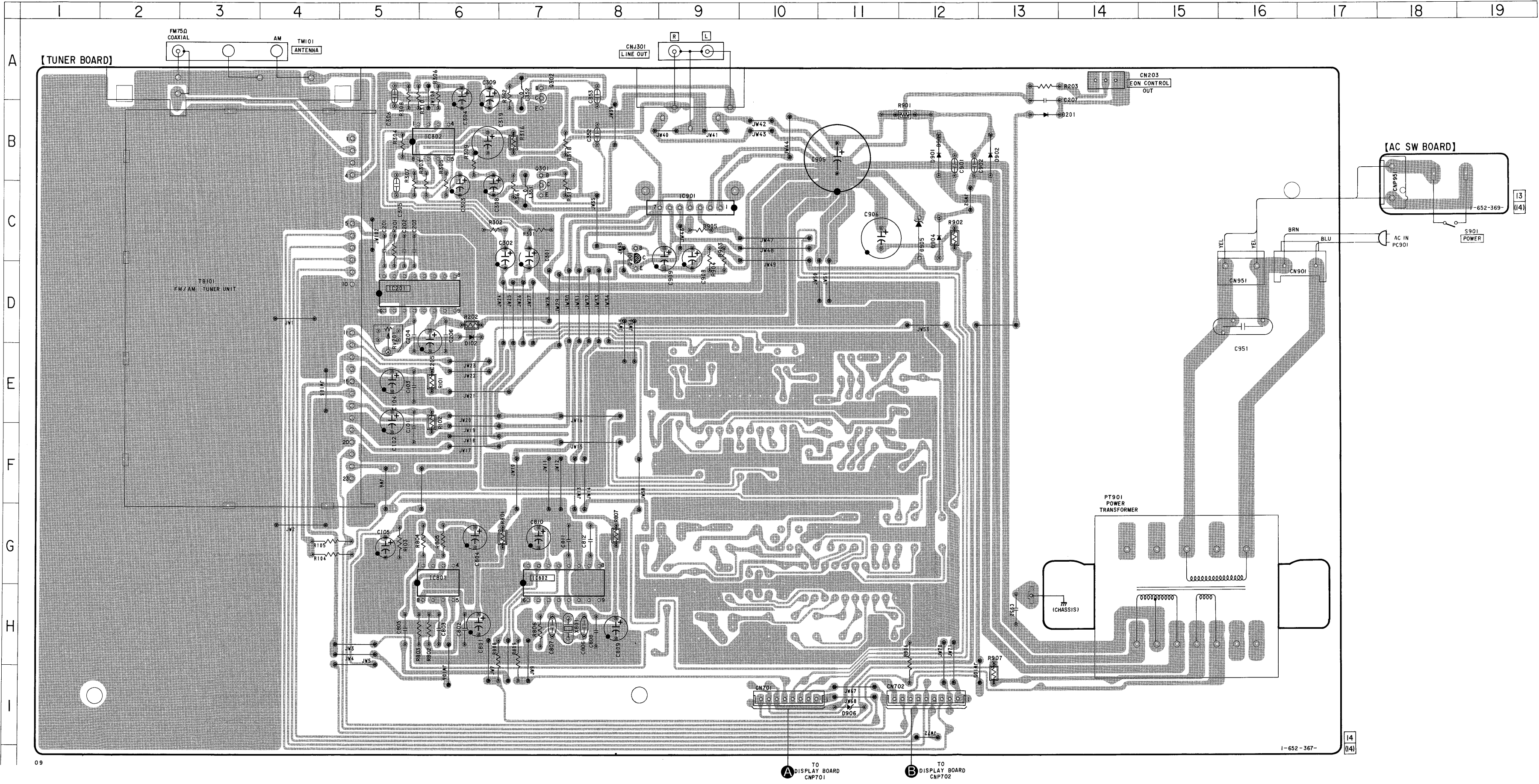
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
--	---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----



4-2. PRINTED WIRING BOARD — TUNER SECTION —

• Semiconductor Location

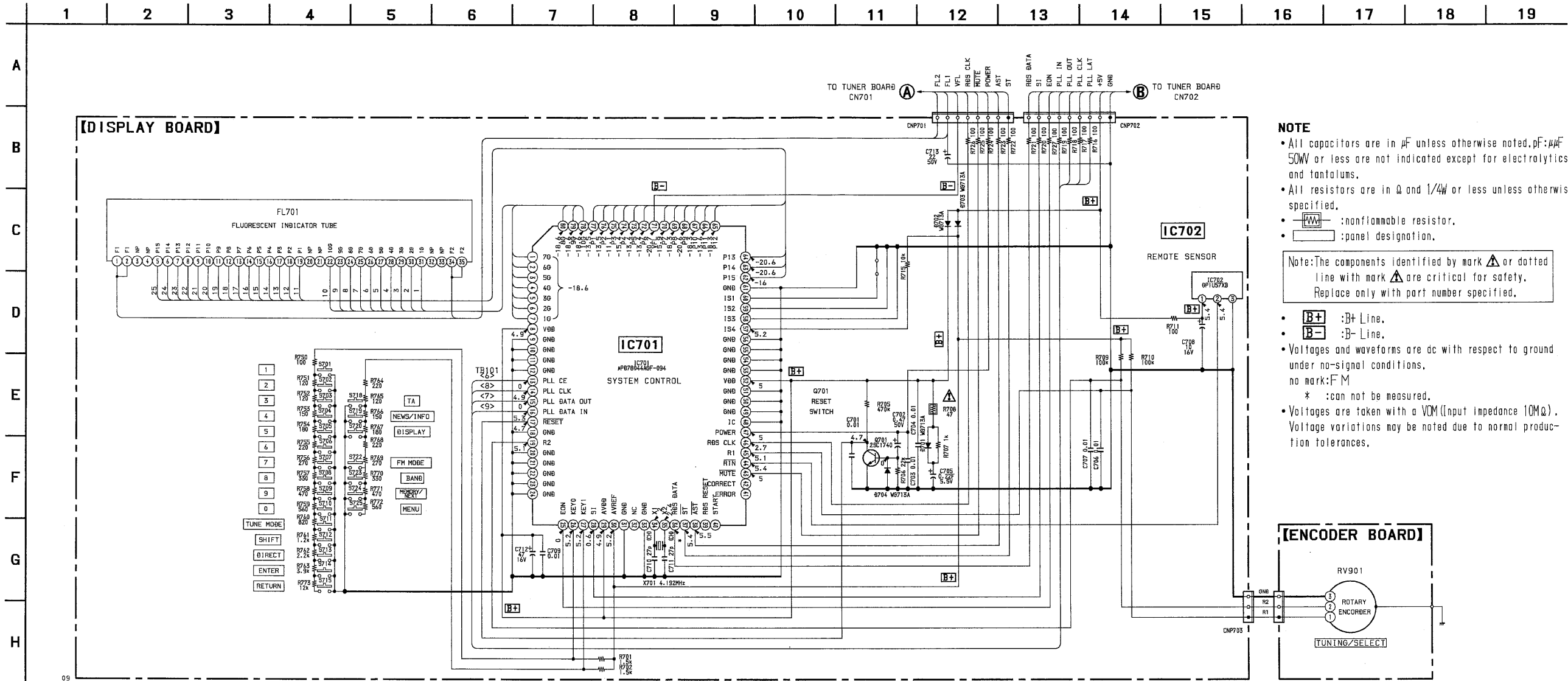
Ref. No.	Location
D102	D-6
D201	B-13
D901	B-12
D902	B-13
D904	C-12
D905	C-12
D906	I-11
IC201	D-5
IC302	B-6
IC801	G-6
IC802	G-7
IC901	C-9
Q301	C-7
Q302	A-7
Q901	C-8



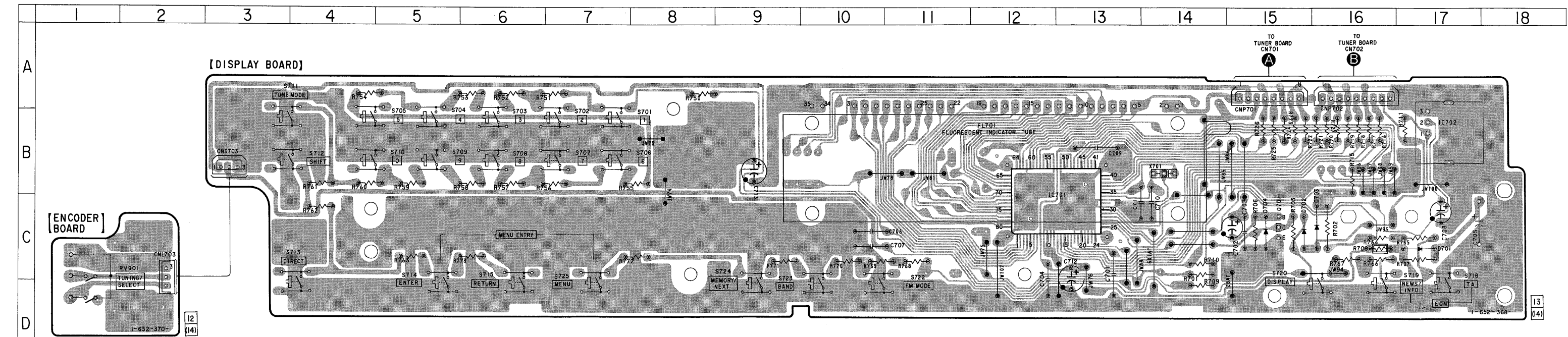
Note:

- — : parts extracted from the component side.
- : Pattern from the side which enable seeing.

4-3. SCHEMATIC DIAGRAM — DISPLAY SECTION — • See page 20 for IC Pin Function. (IC701)



4-4. PRINTED WIRING BOARD — DISPLAY SECTION —



• Semiconductor Location

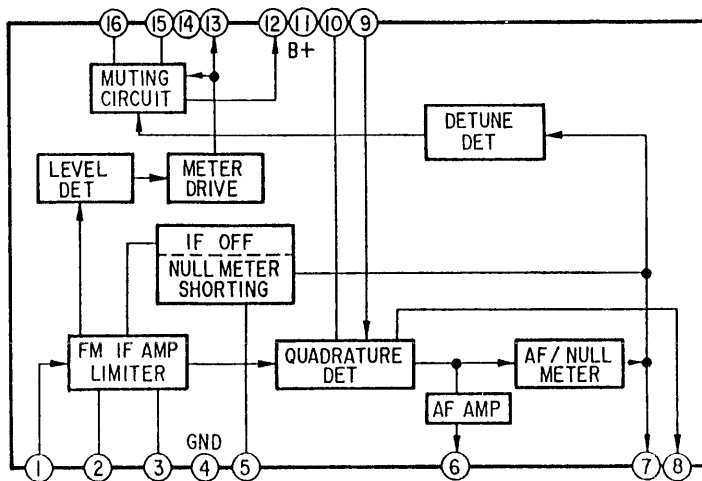
Ref. No.	Location
D701	C-17
D702	C-15
D703	C-16
D704	C-15
IC701	B-12
IC702	B-17
Q701	C-15

Note:

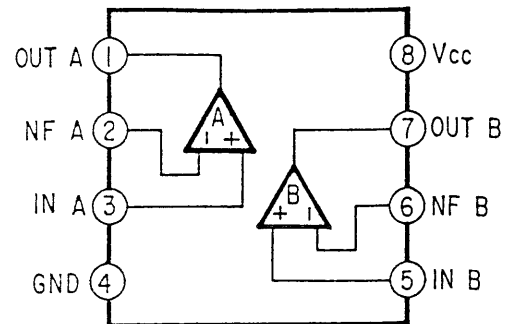
- $\circ$: parts extracted from the component side.
- $\square$: Pattern from the side which enable seeing.

4-5. IC BLOCK DIAGRAMS

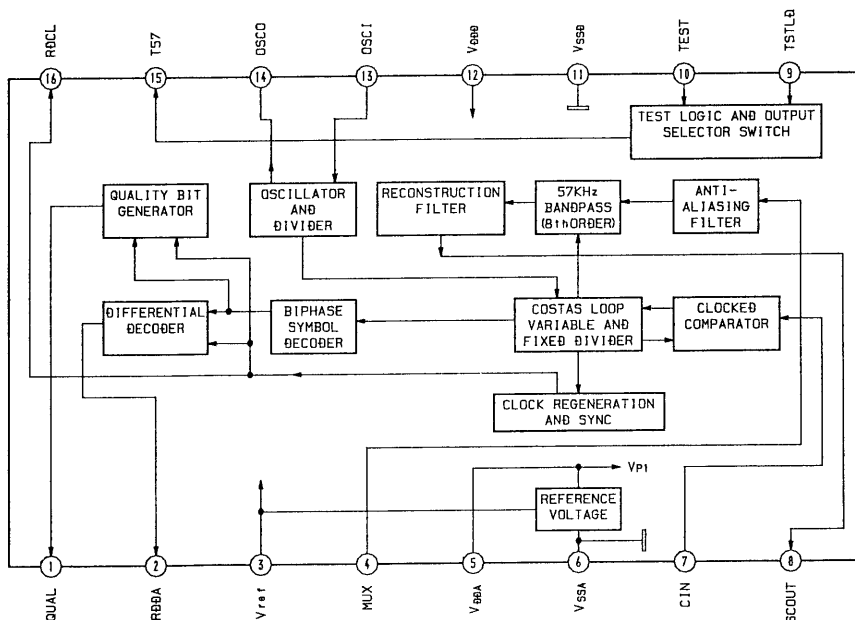
IC201 LA1235



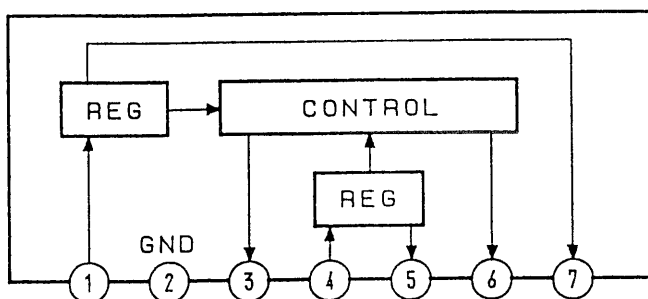
IC302, 801 M5218AP



IC802 SAA6579



IC901 LA5667



4-6. IC PIN FUNCTIONS

• IC701 SYSTEM CONTROL IC (μ PD78044AGF-094-3B9)

Pin No.	Pin Name	I/O	Function
1 to 7	7G to 1G	O	Drives indicator tube
8	VDD	—	Power supply (+5V)
9 to 12	GND	—	Not used (GND)
13	PLL CE	O	Latch to TB101
14	PLL CLK	O	Clock to TB101
15	PLL DATA OUT	O	Data to TB101
16	PLL DATA IN	I	Data from TB101
17	$\overline{\text{RESET}}$	I	System reset input
18	GND	—	Not used (GND)
19	R2	O	Rotary encoder phase detection
20	GND	—	GND of the A/D converter
21 to 24	GND	—	Not used (GND)
25	EON	O	External control
26	KEY 0	I	Key input
27	KEY 1	I	Key input
28	SI	I	Signal input
29	AVDD	—	Analog power supply of the A/D converter (+5V)
30	AVREF	I	Reference voltage of the A/D converter (+5V)
31	GND	—	Not used (GND)
32	NC	—	Not used (open)
33	GND	—	System GND
34	X1	I	Oscillation signal input (4.19 MHz)
35	X2	O	Oscillation signal output (4.19 MHz)
36	RDS-DATA	I	RDS data input
37	$\overline{\text{ST}}$	I	STEREO display detection
38	$\overline{\text{AST}}$	I	AUTO STOP signal detection
39	$\overline{\text{RDS RESET}}$	O	Not used (open)
40	START	O	Not used (open)
41	ERROR	O	Not used (open)
42	CORRECT	O	Not used (open)
43	$\overline{\text{MUTE}}$	O	Muting signal output
44	RIN	I	Remote controller input
45	R1	I	Rotary encoder number of rotations detection
46	RDS-CLK	I	RDS data clock input
47	POWER	I	Power supply on/off monitor
48	IC	I	Single chip mode detection (GND)
49 to 51	GND	—	Not used (GND)
52	VDD	—	Power supply (+5V)
53 to 56	GND	—	Not used (GND)

Pin No.	Pin Name	I/O	Function						
57	IS4	I	Model detection H: (with RDS)						
58	IS3	I	Model detection <table><tr><td>IS3</td><td>IS2</td><td>IS1</td></tr><tr><td>L</td><td>L</td><td>L</td></tr></table>	IS3	IS2	IS1	L	L	L
IS3	IS2	IS1							
L	L	L							
59	IS2	I							
60	IS1	I							
61	GND	—	Not used (GND)						
62 to 70	P15 to P7	O	Drives indicator tube						
71	VFL	—	Power supply (−30V)						
72 to 77	P6 to P1	O	Drives indicator tube						
78 to 80	10G to 8G	O	Drives indicator tube						

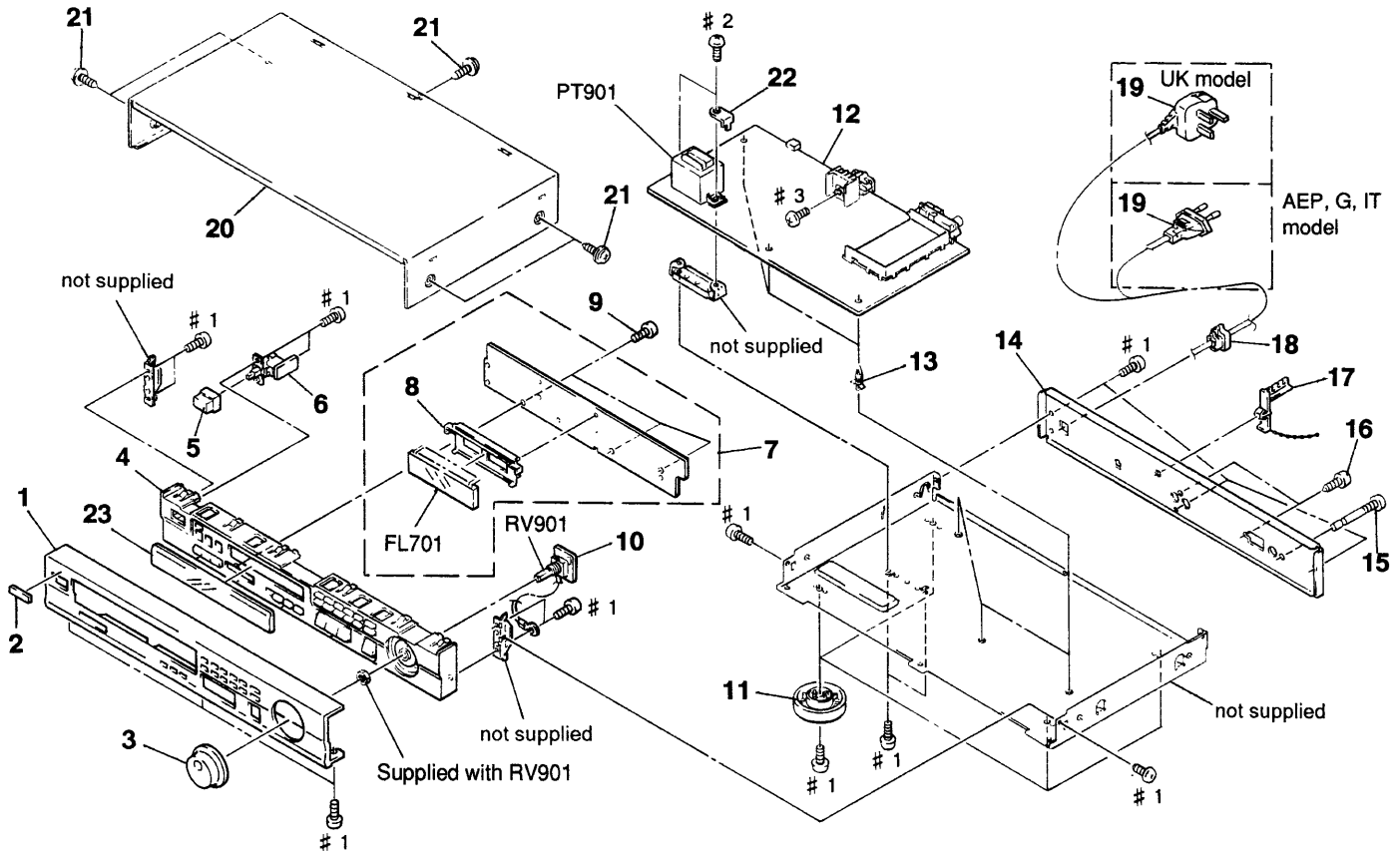
SECTION 5 EXPLODED VIEWS

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.
- 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.
- Abbreviation
G : German model
IT : Italian model

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
1	4-973-844-11	PANEL, FRONT
2	4-942-568-01	EMBLEM (NO. 5), SONY
3	4-965-471-01	KNOB (DIA. 48)
4	X-4945-898-1	BASE ASSY, PANEL
5	4-917-460-01	KNOB, POWER
* 6	1-652-369-11	AC SW BOARD
* 7	A-4377-847-A	DISPLAY BOARD, COMPLETE
* 8	4-943-107-11	HOLDER (FL TUBE)
9	4-951-620-01	SCREW (2.6X8), +BVTP
* 10	1-652-370-11	ENCODER BOARD
11	4-956-885-11	FOOT (F58175S2W)
* 12	A-4377-846-A	TUNER BOARD, COMPLETE
* 13	3-346-265-31	HOLDER, PC BOARD
* 14	4-973-843-11	PANEL, BACK (AEP, IT, G)

Ref.No.	Part No.	Description	Remark
* 14	4-973-843-31	PANEL, BACK (UK)	
15	3-704-242-01	SCREW, TERMINAL, + BVTP CLAW	
16	3-704-515-11	SCREW (BV/RING)	
17	4-956-370-12	BAND, PLUG FIXED (UK)	
18	3-703-244-00	BUSHING, CORD	
19	1-575-651-21	CORD, POWER (AEP, IT, G)	
19	1-696-907-11	CORD, POWER (UK)	
20	4-923-457-01	CASE	
21	3-704-366-01	SCREW (CASE) (M3X8)	
22	4-957-933-01	PLATE, GROUND	
* 23	4-973-920-11	WINDOW, INDICATION	
FL701	1-517-141-11	INDICATOR TUBE, FLUORESCENT	
PT901	1-423-525-11	TRANSFORMER, POWER	

SECTION 6

ELECTRICAL PARTS LIST

AC SW

DISPLAY

NOTE:

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 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.
- 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: 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
- Abbreviation
 - Abbreviation
G : German model
IT : Italian model

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
*	1-652-369-11	AC SW BOARD *****		< RESISTOR >			
		< SWITCH >		R701	1-249-419-11	CARBON 1.5K 5% 1/4W F	
Δ S901	1-572-267-51	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)		R702	1-249-419-11	CARBON 1.5K 5% 1/4W F	
*****				R705	1-247-895-00	CARBON 470K 5% 1/4W	
*	A-4377-847-A	DISPLAY BOARD, COMPLETE *****		R706	1-249-433-11	CARBON 22K 5% 1/4W	
*	4-943-107-11	HOLDER (FL TUBE)		R707	1-249-417-11	CARBON 1K 5% 1/4W F	
		< CAPACITOR >		Δ R708	1-249-401-11	CARBON 47 5% 1/4W F	
C701	1-162-306-11	CERAMIC 0.01uF 30% 16V		R709	1-249-441-11	CARBON 100K 5% 1/4W	
C702	1-124-465-00	ELECT 0.47uF 20% 50V		R710	1-249-441-11	CARBON 100K 5% 1/4W	
C703	1-162-306-11	CERAMIC 0.01uF 30% 16V		R711	1-247-807-31	CARBON 100 5% 1/4W	
C704	1-162-306-11	CERAMIC 0.01uF 30% 16V		R715	1-249-429-11	CARBON 10K 5% 1/4W	
C705	1-104-905-11	CAP, DOUBLE LAYERS 0.22F 5.5V		R716	1-247-807-31	CARBON 100 5% 1/4W	
C706	1-162-306-11	CERAMIC 0.01uF 30% 16V		R717	1-247-807-31	CARBON 100 5% 1/4W	
C707	1-162-306-11	CERAMIC 0.01uF 30% 16V		R718	1-247-807-31	CARBON 100 5% 1/4W	
C708	1-126-157-11	ELECT 10uF 20% 16V		R719	1-247-807-31	CARBON 100 5% 1/4W	
C709	1-162-306-11	CERAMIC 0.01uF 30% 16V		R720	1-247-807-31	CARBON 100 5% 1/4W	
C710	1-162-209-31	CERAMIC 27PF 5% 50V		R721	1-247-807-31	CARBON 100 5% 1/4W	
C711	1-162-209-31	CERAMIC 27PF 5% 50V		R722	1-247-807-31	CARBON 100 5% 1/4W	
C712	1-104-664-11	ELECT 47uF 20% 16V		R723	1-247-807-31	CARBON 100 5% 1/4W	
C713	1-124-916-11	ELECT 22uF 20% 63V		R724	1-247-807-31	CARBON 100 5% 1/4W	
		< DIODE >		R725	1-247-807-31	CARBON 100 5% 1/4W	
D701	8-719-911-19	DIODE 1SS119-25		R726	1-247-807-31	CARBON 100 5% 1/4W	
D702	8-719-911-19	DIODE 1SS119-25		R727	1-247-807-31	CARBON 100 5% 1/4W	
D703	8-719-911-19	DIODE 1SS119-25		R750	1-247-807-31	CARBON 100 5% 1/4W	
D704	8-719-911-19	DIODE 1SS119-25		R751	1-249-406-11	CARBON 120 5% 1/4W F	
		< FLUORESCENT INDICATOR >		R752	1-249-406-11	CARBON 120 5% 1/4W F	
FL701	1-517-141-11	INDICATOR TUBE, FLUORESCENT		R753	1-249-407-11	CARBON 150 5% 1/4W F	
		< IC >		R754	1-249-408-11	CARBON 180 5% 1/4W F	
IC701	8-759-340-31	IC uPD78044AGF-094-3B9		R755	1-247-815-91	CARBON 220 5% 1/4W	
IC702	8-749-923-43	IC GP1U57XB		R756	1-249-410-11	CARBON 270 5% 1/4W F	
		< TRANSISTOR >		R757	1-249-411-11	CARBON 330 5% 1/4W	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE		R758	1-249-413-11	CARBON 470 5% 1/4W F	
				R759	1-249-414-11	CARBON 560 5% 1/4W F	
				R760	1-249-416-11	CARBON 820 5% 1/4W F	
				R761	1-249-418-11	CARBON 1.2K 5% 1/4W F	
				R762	1-249-421-11	CARBON 2.2K 5% 1/4W F	
				R763	1-249-424-11	CARBON 3.9K 5% 1/4W F	
				R764	1-247-815-91	CARBON 220 5% 1/4W	
				R765	1-249-406-11	CARBON 120 5% 1/4W F	
				R766	1-249-407-11	CARBON 150 5% 1/4W F	
				R767	1-249-408-11	CARBON 180 5% 1/4W F	
				R768	1-247-815-91	CARBON 220 5% 1/4W	

DISPLAY ENCODER TUNER

Ref.No.	Part No.	Description	Remark	Ref.No.	Part No.	Description	Remark
R769	1-249-410-11	CARBON	270 5% 1/4W F	C102	1-124-907-11	ELECT	10uF 20% 50V
R770	1-249-411-11	CARBON	330 5% 1/4W	C103	1-162-306-11	CERAMIC	0.01uF 30% 16V
R771	1-249-413-11	CARBON	470 5% 1/4W F	C104	1-124-907-11	ELECT	10uF 20% 50V
R772	1-249-414-11	CARBON	560 5% 1/4W F	C105	1-124-463-00	ELECT	0.1uF 20% 50V
R773	1-249-430-11	CARBON	12K 5% 1/4W	C201	1-162-282-31	CERAMIC	100PF 10% 50V
< SWITCH >				C202	1-162-306-11	CERAMIC	0.01uF 30% 16V
S701	1-554-303-21	SWITCH, TACTILE (1)		C203	1-162-306-11	CERAMIC	0.01uF 30% 16V
S702	1-554-303-21	SWITCH, TACTILE (2)		C204	1-162-306-11	CERAMIC	0.01uF 30% 16V
S703	1-554-303-21	SWITCH, TACTILE (3)		C205	1-104-664-11	ELECT	47uF 20% 16V
S704	1-554-303-21	SWITCH, TACTILE (4)		C206	1-162-306-11	CERAMIC	0.01uF 30% 16V
S705	1-554-303-21	SWITCH, TACTILE (5)		C207	1-162-294-31	CERAMIC	0.001uF 10% 50V
S706	1-554-303-21	SWITCH, TACTILE (6)		C301	1-126-962-11	ELECT	3.3uF 20% 50V
S707	1-554-303-21	SWITCH, TACTILE (7)		C302	1-126-962-11	ELECT	3.3uF 20% 50V
S708	1-554-303-21	SWITCH, TACTILE (8)		C303	1-124-907-11	ELECT	10uF 20% 50V
S709	1-554-303-21	SWITCH, TACTILE (9)		C304	1-124-907-11	ELECT	10uF 20% 50V
S710	1-554-303-21	SWITCH, TACTILE (0)		C305	1-110-335-11	MYLAR	100PF 5% 50V
S711	1-554-303-21	SWITCH, TACTILE (TUNE MODE)		C306	1-110-335-11	MYLAR	100PF 5% 50V
S712	1-554-303-21	SWITCH, TACTILE (SHIFT)		C308	1-126-962-11	ELECT	3.3uF 20% 50V
S713	1-554-303-21	SWITCH, TACTILE (DIRECT)		C309	1-126-962-11	ELECT	3.3uF 20% 50V
S714	1-554-303-21	SWITCH, TACTILE (ENTER)		C319	1-104-664-11	ELECT	47uF 20% 16V
S715	1-554-303-21	SWITCH, TACTILE (RETURN)		C352	1-130-471-00	MYLAR	0.001uF 5% 50V
S718	1-554-303-21	SWITCH, TACTILE (TA)		C353	1-130-471-00	MYLAR	0.001uF 5% 50V
S719	1-554-303-21	SWITCH, TACTILE (NEWS/INFO)		C801	1-104-664-11	ELECT	47uF 20% 16V
S720	1-554-303-21	SWITCH, TACTILE (DISPLAY)		C802	1-162-306-11	CERAMIC	0.01uF 30% 16V
S722	1-554-303-21	SWITCH, TACTILE (FM MODE)		C803	1-162-306-11	CERAMIC	0.01uF 30% 16V
S723	1-554-303-21	SWITCH, TACTILE (BAND)		C804	1-124-907-11	ELECT	10uF 20% 50V
S724	1-554-303-21	SWITCH, TACTILE (MEMORY/NEXT)		C805	1-162-288-31	CERAMIC	330PF 10% 50V
S725	1-554-303-21	SWITCH, TACTILE (MENU)		C806	1-102-527-11	CERAMIC	82PF 5% 50V
< VIBRATOR >				C807	1-101-880-00	CERAMIC	47PF 5% 50V
X701	1-760-422-11	VIBRATOR, CRYSTAL (4.192MHz)		C808	1-162-306-11	CERAMIC	0.01uF 30% 16V
*****				C809	1-104-664-11	ELECT	47uF 20% 16V
*	1-652-370-11	ENCODER BOARD	*****	C810	1-124-925-11	ELECT	2.2uF 20% 100V
< VARIABLE RESISTOR >				C811	1-162-306-11	CERAMIC	0.01uF 30% 16V
RV901	1-467-703-11	ENCODER, ROTARY (TUNING/SELECT)		C812	1-162-291-31	CERAMIC	560PF 10% 50V
*****				C901	1-101-004-00	CERAMIC	0.01uF 50V
*	A-4377-846-A	TUNER BOARD, COMPLETE	*****	C902	1-101-004-00	CERAMIC	0.01uF 50V
	4-957-933-01	PLATE, GROUND		C905	1-124-618-11	ELECT	2200uF 20% 35V
	7-685-646-81	SCREW +BVTP 3X8 TYPE2		C906	1-124-484-11	ELECT	220uF 20% 35V
< CAPACITOR >				C908	1-124-907-11	ELECT	10uF 20% 50V
C101	1-162-306-11	CERAMIC	0.01uF 30% 16V	C909	1-104-664-11	ELECT	47uF 20% 16V
				△C951	1-161-741-00	CERAMIC	0.001uF 10% 400V
				C952	1-162-306-11	CERAMIC	0.01uF 30% 16V
				< CONNECTOR >			
				CN203	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL)	
				* CN701	1-568-935-11	PIN, CONNECTOR 8P	
				* CN702	1-568-936-11	PIN, CONNECTOR 9P	
				CN901	1-580-230-11	PIN, CONNECTOR (PC BOARD) 2P	
				CN951	1-564-321-00	PIN, CONNECTOR 2P	
				CNJ301	1-568-250-11	JACK, PIN 2P (LINE OUT)	

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 >							
D102	8-719-911-19	DIODE 1SS119-25		R318	1-249-414-11	CARBON 560 5% 1/4W F	
D201	8-719-911-19	DIODE 1SS119-25		R361	1-249-437-11	CARBON 47K 5% 1/4W	
D901	8-719-970-02	DIODE 1SR139-400		R362	1-249-437-11	CARBON 47K 5% 1/4W	
D902	8-719-970-02	DIODE 1SR139-400		△R801	1-249-401-11	CARBON 47 5% 1/4W F	
D904	8-719-970-02	DIODE 1SR139-400		R802	1-249-441-11	CARBON 100K 5% 1/4W	
D905	8-719-924-13	DIODE MTZJ-22B		R803	1-249-441-11	CARBON 100K 5% 1/4W	
D906	8-719-921-40	DIODE MTZJ-4. 7C		R804	1-249-433-11	CARBON 22K 5% 1/4W	
< IC >				R805	1-249-426-11	CARBON 5. 6K 5% 1/4W	
IC201	8-759-812-35	IC LA1235		R806	1-249-421-11	CARBON 2. 2K 5% 1/4W F	
IC302	8-759-634-51	IC M5218AP		△R807	1-249-401-11	CARBON 47 5% 1/4W F	
IC801	8-759-634-51	IC M5218AP		R808	1-247-815-91	CARBON 220 5% 1/4W	
IC802	8-759-169-99	IC SAA6579		R809	1-247-807-31	CARBON 100 5% 1/4W	
IC901	8-759-820-09	IC LA5667		△R901	1-249-389-11	CARBON 4. 7 5% 1/4W F	
< COIL >				△R902	1-249-415-11	CARBON 680 5% 1/4W F	
L351	1-410-509-11	INDUCTOR 10uH		R903	1-249-441-11	CARBON 100K 5% 1/4W	
L352	1-410-509-11	INDUCTOR 10uH		R904	1-249-437-11	CARBON 47K 5% 1/4W	
< TRANSFORMER >				R905	1-249-437-11	CARBON 47K 5% 1/4W	
△PT901	1-423-525-11	TRANSFORMER, POWER		R906	1-249-437-11	CARBON 47K 5% 1/4W	
< TRANSISTOR >				△R907	1-249-393-11	CARBON 10 5% 1/4W F	
Q301	8-729-922-37	TRANSISTOR 2SD2144S-UVW		< VARIABLE RESISTOR >			
Q302	8-729-922-37	TRANSISTOR 2SD2144S-UVW		RV201	1-241-765-11	RES, ADJ, CARBON 22K	
Q901	8-729-900-65	TRANSISTOR DTA144ES		< ENCAPSULATED >			
< RESISTOR >				TB101	1-233-355-11	ENCAPSULATED COMPONENT	
△R101	1-249-401-11	CARBON 47 5% 1/4W F		< TERMINAL >			
△R102	1-249-393-11	CARBON 10 5% 1/4W F		TM101	1-537-488-11	TERMINAL BOARD (ANT) (ANTENNA)	
R103	1-247-883-00	CARBON 150K 5% 1/4W		< VIBRATOR >			
R104	1-249-417-11	CARBON 1K 5% 1/4W F		X801	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz)	
R105	1-249-429-11	CARBON 10K 5% 1/4W		*****			
R201	1-249-411-11	CARBON 330 5% 1/4W		MISCELLANEOUS			
△R202	1-249-405-11	CARBON 100 5% 1/4W F		*****			
R203	1-249-393-11	CARBON 10 5% 1/4W F		△19	1-575-651-21	CORD, POWER (AEP, IT, G)	
R301	1-249-441-11	CARBON 100K 5% 1/4W		△19	1-696-907-11	CORD, POWER (UK)	
R302	1-249-441-11	CARBON 100K 5% 1/4W		FL701	1-517-141-11	INDICATOR TUBE, FLUORESCENT	
R303	1-249-441-11	CARBON 100K 5% 1/4W		△PT901	1-423-525-11	TRANSFORMER, POWER	
R304	1-249-441-11	CARBON 100K 5% 1/4W		*****			
R305	1-249-423-11	CARBON 3. 3K 5% 1/4W F		ACCESSORIES & PACKING MATERIALS			
R306	1-249-423-11	CARBON 3. 3K 5% 1/4W F		*****			
R307	1-249-420-11	CARBON 1. 8K 5% 1/4W F		1-501-374-11	ANTENNA, LOOP		
R308	1-249-420-11	CARBON 1. 8K 5% 1/4W F		1-501-594-11	ANTENNA (FM)		
R309	1-249-413-11	CARBON 470 5% 1/4W F		1-558-271-11	CORD, CONNECTION (AUDIO 108cm)		
R310	1-249-413-11	CARBON 470 5% 1/4W F		1-765-383-11	CORD (WITH CONNECTOR)		
△R316	1-249-401-11	CARBON 47 5% 1/4W F		(EON connecting cable)			
R317	1-249-414-11	CARBON 560 5% 1/4W F					

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
	3-800-227-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, PORTUGUESE) (AEP, IT, UK)	
	3-800-227-21	MANUAL, INSTRUCTION (GERMAN, DUTCH, SWEDISH, ITALIAN) (AEP, IT)	
	3-800-227-31	MANUAL, INSTRUCTION (GERMAN) (G)	
*	3-948-574-01	SHEET (ROLL), PROTECTION	
*	4-966-661-01	CUSHION	
*	4-966-660-41	INDIVIDUAL CARTON	

		***** HARDWARE LIST *****	
#1	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3	
#2	7-682-548-04	SCREW +BVTT 3X8 (S)	
#3	7-685-646-81	SCREW +BVTP 3X8 TYPE2	