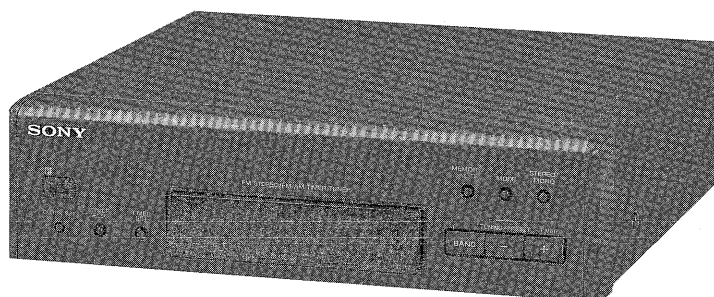


ST-H3600/H6600

SERVICE MANUAL

E Model
Australian Model
ST-H3600

E Model
ST-H6600



ST-H3600 and ST-H6600 are the tuner section in FH-E737CD/E838CD and FH-E939CD respectively.

Photo : ST-H6600

SPECIFICATIONS

System	FM stereo, FM/AM superheterodyne tuner
FM tuner section	
Tuning range	87.5 — 108 MHz
Antenna terminals	75 ohm unbalanced
Intermediate frequency	10.7 MHz
AM tuner section	
Tuning range	MW: 531 — 1,602 kHz SW: 3.20 — 21.75MHz
Antenna	AM loop antenna. External antenna terminals
Intermediate frequency	450 kHz

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FM STEREO/FM-AM TUNER
SONY®



SECTION 1
SERVICING NOTES

SUPPLY OF POWER DURING SERVICES

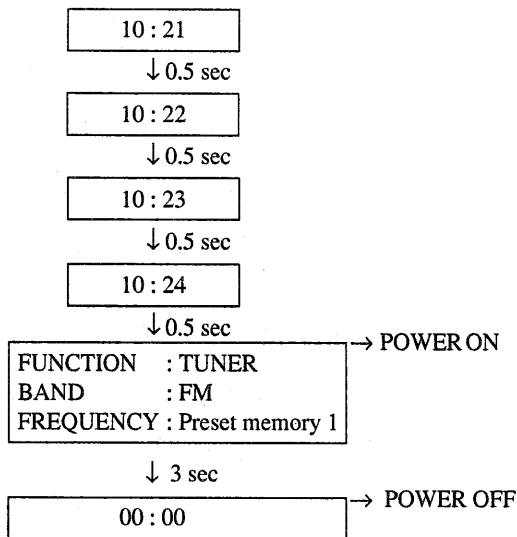
Because the equipment is not provided with any power supply, it is operated with power supplied from the amplifier TA-H2600, H3600 or H5600 used in the series. The equipment requires the following 4 types of voltages. Therefore, connect the equipment to TA-H2600, H3600 or H5600 for services such as repairing with power supplied, because it will be too complicated to supply these voltages individually.

VOLTAGE	MAJOR CIRCUIT IN USE
AC 3.9V	FL tube filament voltage (VF)
DC -24V	Display controller IC701 grid voltage (VG)
DC 5.6V	Display controller IC701, Tuner PLL IC81 Vcc
DC 12V	Tuner RF, FM/AM DET IC21 Vcc

SERVICE MODE TO CHECK TIMER ON-OFF

It is possible to check whether the timer normally functions while being connected with an amplifier.

- (1) Connect the equipment to the amplifier TA-H2600, H3600 or H5600 and set the POWER switch to STANDBY state.
- (2) Set the time of the tuner to any time.
- (3) Press 3 switches "BAND", "-" and "MEMORY/NEXT" at the same time (while pressing "BAND" and "-" beforehand, finally press "MEMORY/NEXT")
- (4) FL display tube



- (5) Completion

Note : After completion of the checking above, data preset in the memory IC702 is erased while resetting the memory to the following state upon shipping from the works, so be sure to recover the same frequency as that before the repairing.

• Frequencies initially preset

	FM	MW		SW
		9kHz STEP	10kHz STEP	
1	87.5MHz	531kHz	530kHz	3.20MHz
2	88.0MHz	603kHz	620kHz	3.50MHz
3	98.0MHz	999kHz	1050kHz	5.00MHz
4	100.0MHz	1404kHz	1490kHz	6.50MHz
5	108.0MHz	1602kHz	1710kHz	7.30MHz
6	*1	*2	*2	9.50MHz
7				10.00MHz
8				15.00MHz
9				20.00MHz
10				21.75MHz
11-20	*1			

*1 The same frequency values are set for the preset memory No.6 - No.10, No.11 - No.15 and No.16 - No.20 as for No.1 - No.5 respectively.

*2 The same frequency values are set for the preset memory No.6 - No.10 as for No.1 - No.5.

HOW TO FORCEFULLY TURN POWER ON

The equipment is not provided with any power switch. Therefore, power ON/OFF is controlled in the amplifier side. However, even without an amplifier, power is supplyable to the equipment according to the following methods provided any type of power is available, e.g. using a special jig or supplying the 4 types of voltages individually.

(When power is supplied from the amplifier, power is turned ON only for the tuner.)

- (1) Supply power.
- (2) Press 3 switches "STEREO/MONO", "-" and "MEMORY/NEXT" at the same time. (Press "STEREO/MONO" and "-" beforehand, and finally press "MEMORY/NEXT.")

However, when the equipment is started up by the methods above, service modes TIMER ON/OFF and FL tube and key input checking are not operable.

SECTION 2

GENERAL

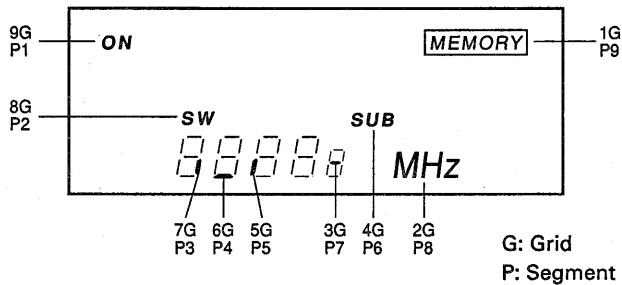
SERVICE MODE TO CHECK FL TUBE AND KEY INPUT

It is possible to check FL tube all ON grid, segment and key input.

- (1) Connect the equipment to the amplifier TA-H2600, H3600 or H5600 and remove the AC cord of the amplifier out of the AC receptacle.
- (2) While pressing 3 switches "BAND", "-" and "MEMORY/NEXT" at the same time, insert the AC cord of the amplifier into the receptacle.
- (3) Thus, all FL display tubes light up. By pressing "+" or "TIMER CONTROL" in this state, partial lighting or key input checking, respectively, is effected.

Partial lighting: Indicates the mode to check complete connection between the grid and segment of the FL tube. The condition is normal when the following indication is effected. By pressing "+" or "-" in the partial lighting mode, the status returns to key input checking or all ON in (3),

Key input checking: Shows the mode to check key input into 9 keys on the front panel. "0" is indicated at first and,



every time a different key is pressed, indicated number is increased. After completion of pressing all 9 keys, "PASS" is indicated. (Once a key is pressed, pressing it again is rejected.)

- (4) After the completion of the checking, the equipment recovers normal operation by once removing the AC cord and inserting it again into the AC receptacle.

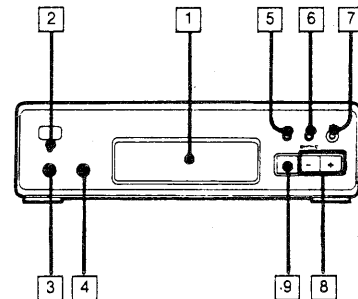
This section is extracted from instruction manual.

Parts Identification

Refer to the pages indicated in ● for use of the buttons.

Tuner Section

- 1 Display window
- 2 CLOCK SET button (24)
- 3 TIMER SELECT button
- 4 TIMER SET button
- 5 MEMORY/NEXT button (24) (60)
- 6 MODE button (68) (62)
- 7 STEREO/MONO (stereo/monaural) button
- 8 TUNING PRESET/TIMER +/- buttons
- 9 BAND selector (68)



Clock Setting

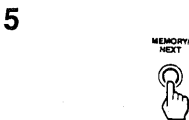
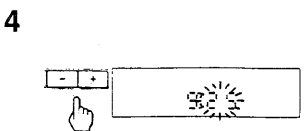
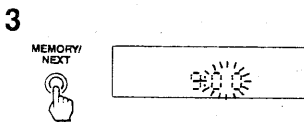
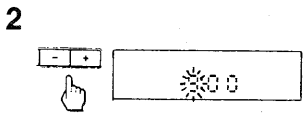
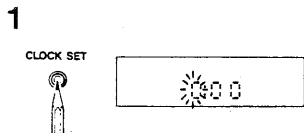
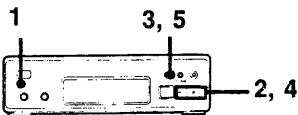
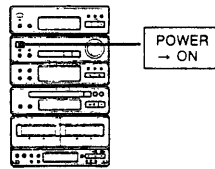
Setting the Clock

Example: Set to 9:25 in the morning.

- 1 Press CLOCK SET.
 - 2 Set the hour with the - or + button.
 - 3 Press MEMORY/NEXT.
 - 4 Set the minute with the - or + button.
 - 5 Press MEMORY/NEXT.
- The clock starts operating.

Information on the time

The European and U.K. model shows the time in 24-hour cycle.
The model for other countries shows the time in 12-hour cycle.
AM 12:00 = midnight
PM 12:00 = noon



When a power interruption occurs
If the power is recovered within several hours, there is no need to reset the clock, timer, and Wake Up Volume settings. If the power interruption is long, all the above settings are erased, and "0.00" ("AM 12:00") will flash on the display.

To change the frequency display to the time display
Press CLOCK DISP. on the remote commander. Press it again to change to the frequency display.

Changing the MW tuning interval (except for the European and U.K. model)

The MW tuning interval is preset at the factory to 9 kHz.
If you use the system where the frequency allocation system is different from the preset interval, change the interval as follows.
1 Turn on the power.
2 Turn in an MW station.
3 Turn off the power.
4 Turn the power back on while pressing TUNING +.
To reset the interval, follow the same procedure.

Important

When the interval is changed, stored stations will be erased from the memory.

Radio

The automatic tuning allows you to receive stations whose signal is strong enough. When the signal is too weak, use the manual tuning.

Tuning in Automatically

- 1 Press BAND repeatedly until the desired band appears.
As you press BAND, the band changes as follows:
European and U.K. model:
FM → MW → LW
Model for other countries:
FM → SW → MW
- 2 Press MODE so that the TUNING indicator lights up.
- 3 Keep - or + depressed for more than 1 second.
"AUTO" appears on the display and the unit tunes in a station automatically.

Repeat step 3 until the desired station appears.

Tuning in Manually

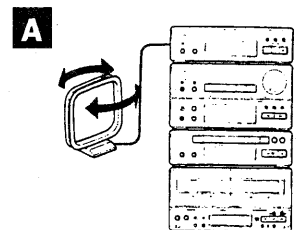
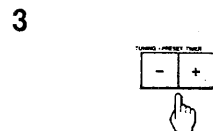
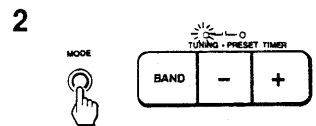
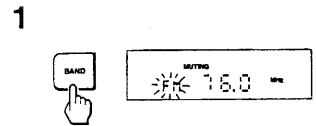
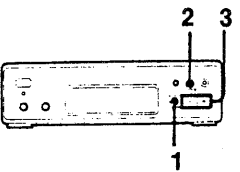
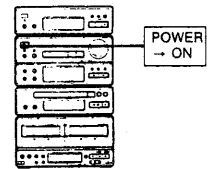
- 1 Press BAND repeatedly until the desired band appears.
- 2 Press MODE so that the TUNING indicator lights up.
- 3 Press - or + repeatedly until the desired station appears.

Indicator on the display

TUNED: Appears when a station of sufficient signal strength is tuned in.
STEREO: Appears when an FM stereo program of sufficient signal strength is received.

Antenna adjustment **A**

For MW and LW (SW) reception, find the best location for the supplied AM loop antenna.



Radio

Storing Stations

You can store up to 20 FM stations and 10 MW stations and 10 LW (SW) stations in a desired sequence, so that you can tune in the stored station directly by entering the preset station number. This operation is not possible with the remote commander.

1 Tune in the desired station.

2 Press MEMORY/NEXT. "MEMORY" and the preset station numbers appear on the display.

3 While "MEMORY" is on (for several seconds), press - or + to select a desired preset number.

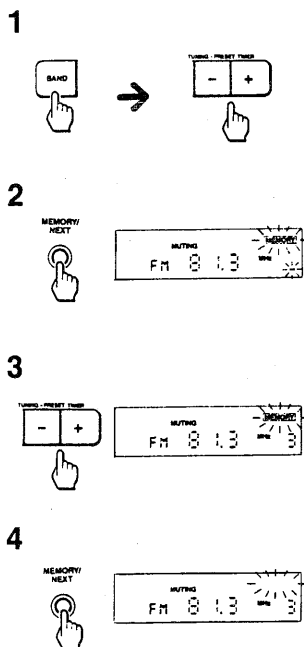
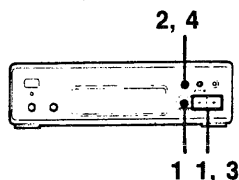
4 Press MEMORY/NEXT. "MEMORY" disappears, and the station is stored.

Repeat step 1 to 4 for each station to be stored.

If you cannot store a station successfully
Press MEMORY/NEXT again so that "MEMORY" appears, and then proceed with steps 3 and 4 above. Be sure to operate while "MEMORY" is on (about 4 seconds).

When you have selected the wrong preset station number
Press MEMORY/NEXT again and then proceed with the steps 3 and 4.

To change the preset station
Store a desired station at the desired preset number by proceeding with the above steps. The station previously preset will be erased. Erasing only is not possible.



Radio

To Tune in a Preset Station

Notes:

• When you use the remote commander for the following operations make sure that the display of the remote commander shows "TUNER". If not, press TUNER on the remote commander.

• You cannot operate the buttons on the lid if the lid is open.

1 Press BAND to select a desired band.

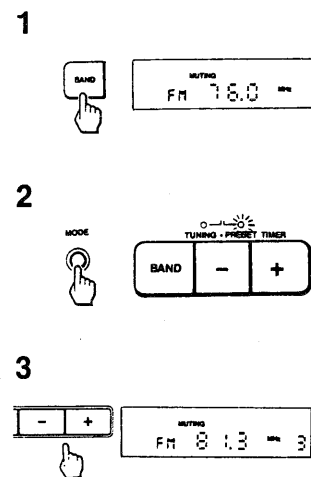
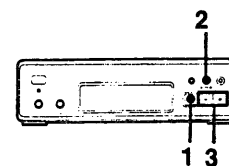
2 Press MODE so that the PRESET indicator lights up.

3 Press - or + (◀ or ▶ on the remote commander) to select the desired preset station number.

To tune in a preset station directly

Possible only with the remote commander.

1 Press BAND to select a desired band.
2 Press the numeric buttons to select the desired preset station number.



SECTION 3 ELECTRICAL ADJUSTMENTS

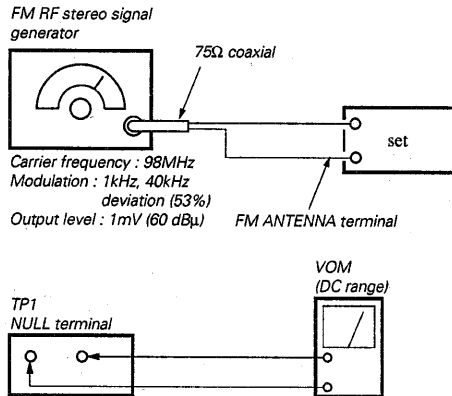
PRECAUTIONS IN REPAIRING

If the FM front-end unit fails, it is difficult to repair the inner circuits, so replace the entire front end unit.

FM SECTION

FM DISCRIMINATOR ALIGNMENT (NULL CHECK)

Setting :
BAND : FM



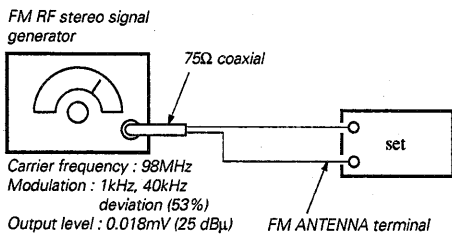
Procedure :

1. Tune the set to 98MHz.
2. Adjust T21 for 0V reading on the VOM.

Note : FM TUNING LEVEL adjustment should be made after FM discriminator alignment.

FM TUNING LEVEL ADJUSTMENT

Setting :
BAND : FM

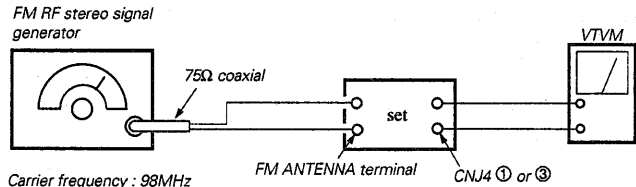


Procedure :

1. Tune the set to 98MHz.
2. Adjust RV23 so that the TUNED LED goes on.

FM STEREO SEPARATION ADJUSTMENT

Setting :
BAND : FM



Procedure :
Tune the set to 98MHz.

FM stereo Signal generator Output channel	VTVM connection	VTVM reading (dB)
L-CH	L-CH	Ⓐ
R-CH	L-CH	Ⓑ Adjust RV21 for minimum reading.
R-CH	R-CH	Ⓒ
L-CH	R-CH	Ⓓ Adjust RV21 for minimum reading.

L-CH Stereo separation : Ⓐ - Ⓑ

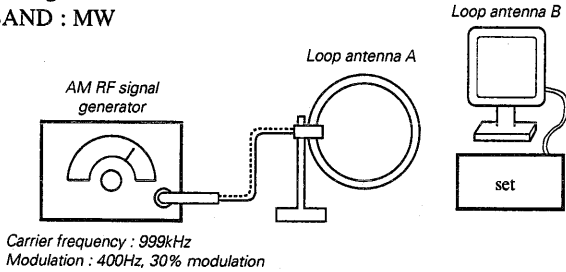
R-CH Stereo separation : Ⓒ - Ⓓ

The separations of both channels should be equal.

AM SECTION

AM TUNING LEVEL ADJUSTMENT

Setting :
BAND : MW



Procedure :

1. Set loop antenna A so that the loop antenna B input level becomes 4mV (68dB/m).
2. Tune the set to 999kHz.
3. Adjust the RV22 so that the TUNED LED goes on.

SW1/SW2 CONTROL VOLTAGE ADJUSTMENT (Frequency Coverage Adjustment)

Setting :
BAND : SW

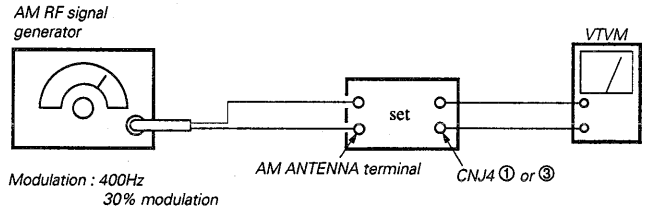
Procedure :

1. Connect digital voltmeter to diode D77 center lead and ground.
2. Adjust for a following value reading on digital voltmeter.

	Set frequency	Adjustment part	Reading on digital voltmeter
SW1	f min. 3.2MHz	T62	1.05V
	f max. 7.3MHz	CT62	8.7V
SW2	f min. 9.5MHz	T64	1.05V
	f max. 21.75MHz	CT64	8.7V

SW1/SW2 TRACKING ADJUSTMENT

Setting :
BAND : SW



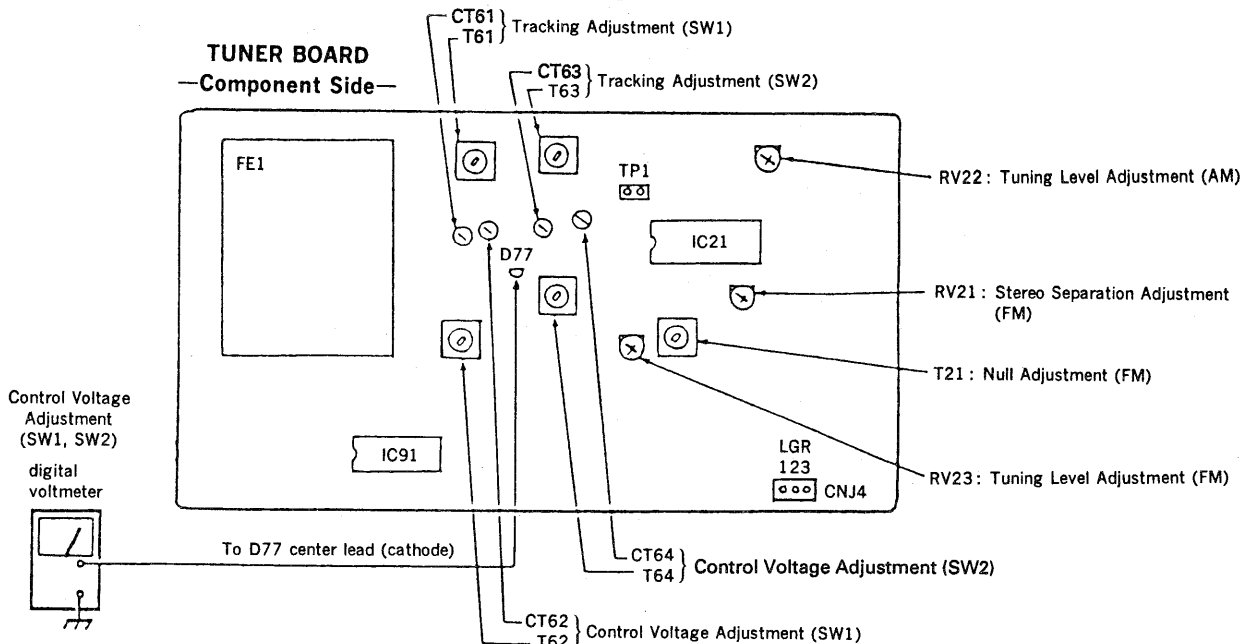
Procedure :

Adjust for a maximum reading on VTVM.

	Set frequency	Adjustment part
SW1	f low. 3.5MHz	T61
	f high. 6.5MHz	CT61
SW2	f low. 10.0MHz	T63
	f high. 20.0MHz	CT63

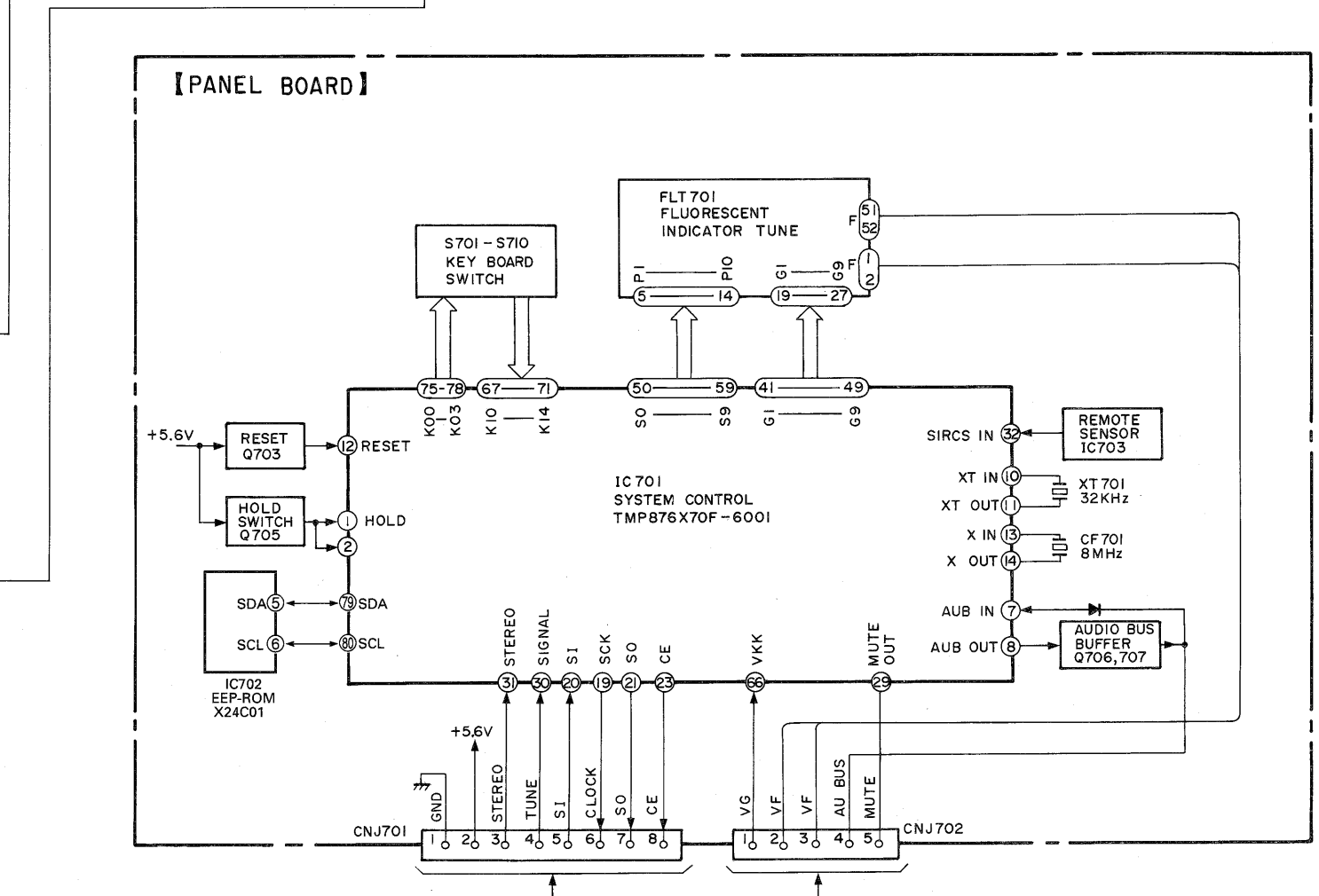
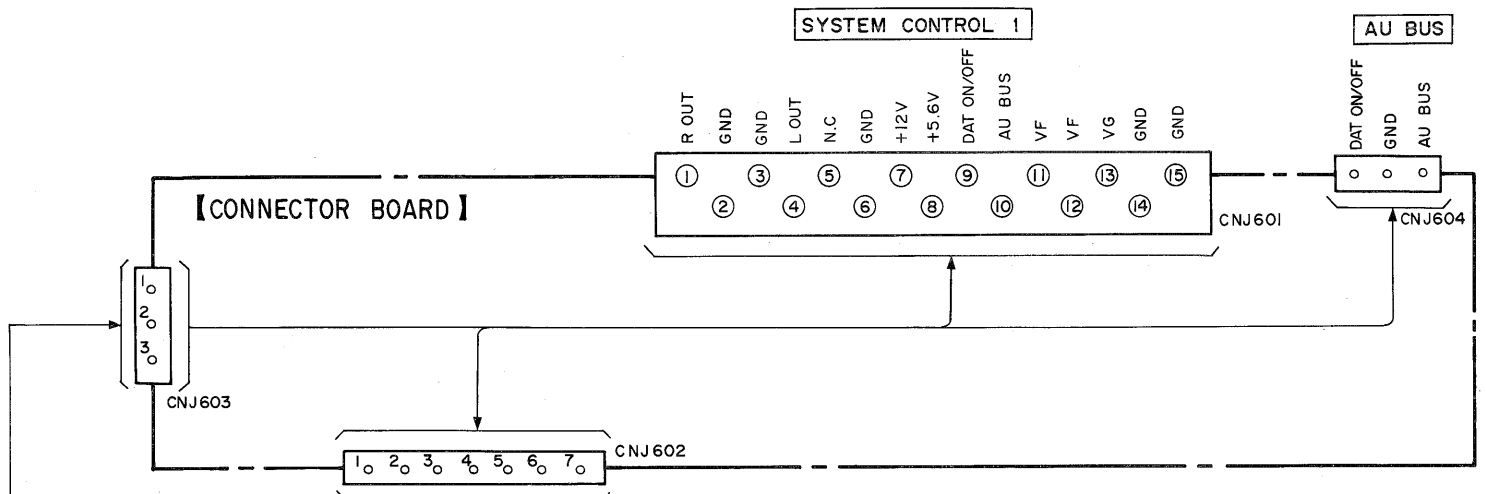
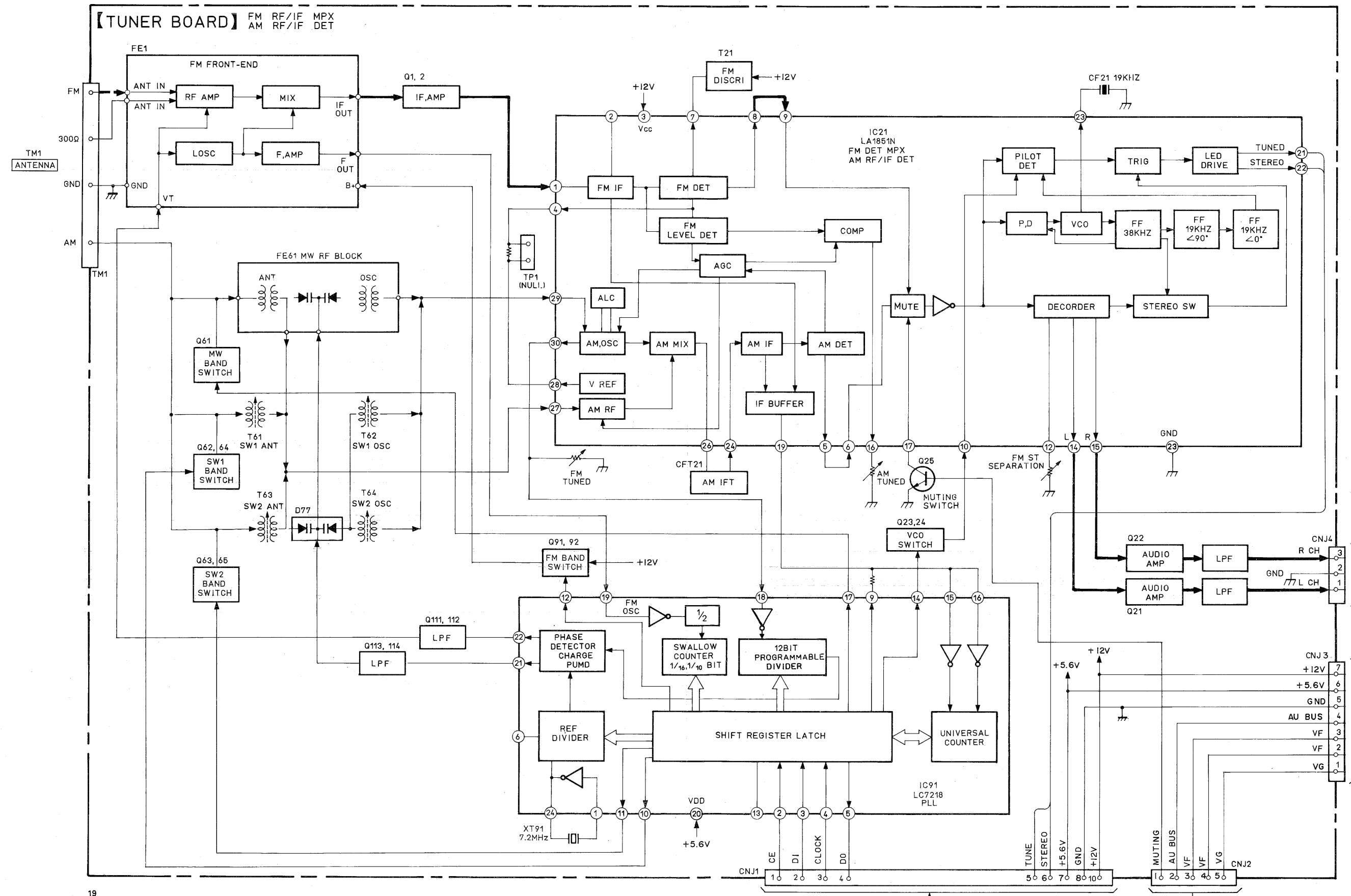
- Repeat the procedures is each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

[PARTS ARRANGEMENT DIAGRAM FOR ADJUSTMENTS]



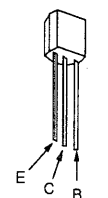
SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM

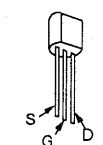


4-2. SEMICONDUCTOR LEAD LAYOUTS

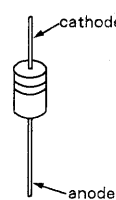
DTA114ES
DTC114ES
2SC2603-EF
2SC2669-OY
2SC3113-AB



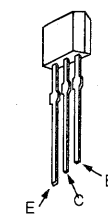
2SK246-GR3



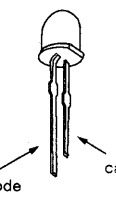
UZ-4.3BSA
1SS120



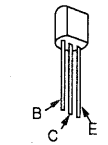
2SA1175-HFE
2SC2785-HFE



SEL2210S-D



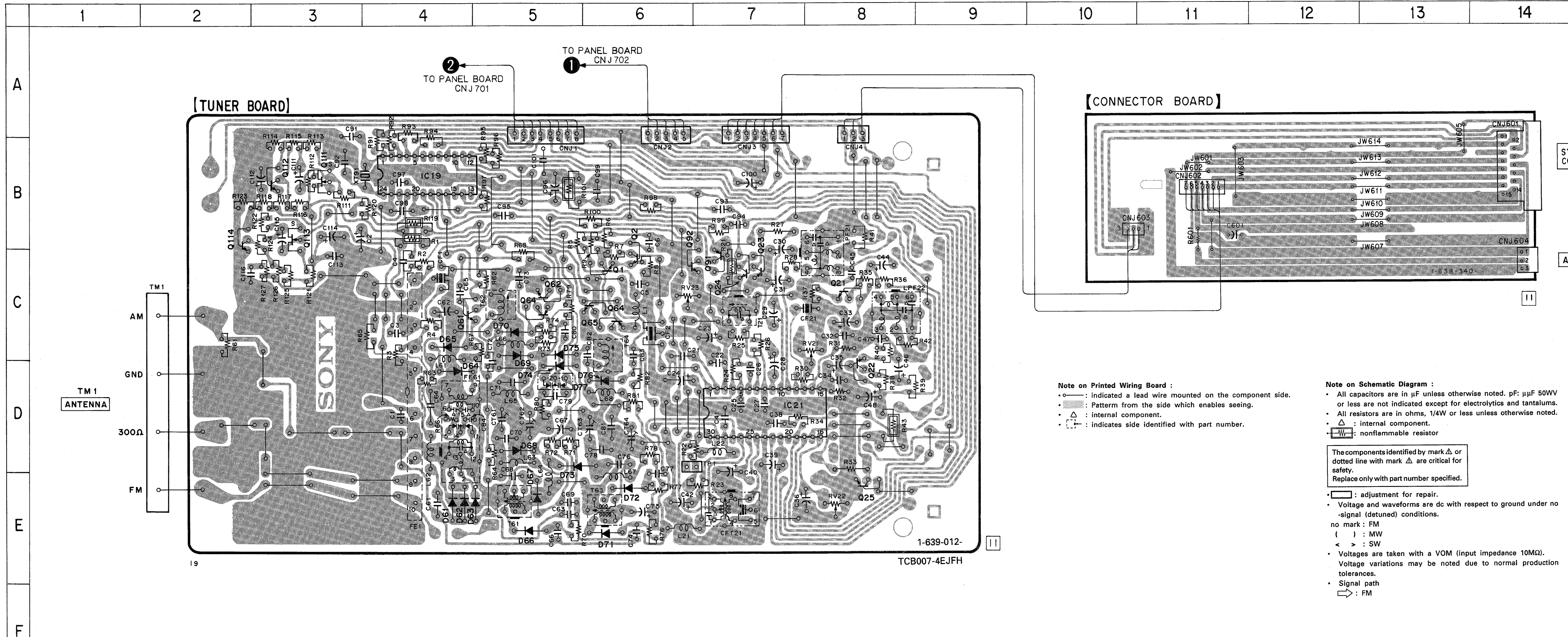
2SA1317-SU
2SC3330-T



• SEMICONDUCTOR LOCATION

Ref.No.	Location	
	H3600	H6600
D61	E-4	E-4
D62	E-4	E-4
D63	E-4	E-4
D64	D-4	D-4
D65	C-4	C-4
D66	E-5	E-5
D67	E-4	E-4
D68	D-5	D-5
D69	C-5	C-5
D70	C-5	C-5
D71	E-6	E-6
D72	E-6	E-6
D73	D-5	D-5
D74	C-5	C-5
D75	C-5	C-5
D76	D-6	D-6
D701	G-4	B-5
D702	G-4	B-2
D708	G-4	B-3
D710	G-2	B-2
D711	G-3	B-3
D712	G-7	A-9
D714	G-9	B-5
D715	G-10	B-9
D716	G-9	B-9
D717	G-8	A-9
D718	G-8	B-2
IC19	B-4	B-4
IC21	D-7	D-7
IC701	G-6	B-6
IC702	G-9	B-9
IC703	G-7	B-9
Q1	C-6	C-6
Q2	C-6	C-6
Q21	C-8	C-8
Q22	D-8	D-8
Q23	C-7	C-7
Q24	C-7	C-7
Q25	E-8	E-8
Q61	C-4	C-4
Q62	C-5	C-5
Q64	C-6	C-6
Q65	C-6	C-6
Q91	C-7	C-7
Q92	C-7	C-7
Q111	B-3	B-3
Q112	B-3	B-3
Q113	C-3	C-3
Q114	C-2	C-2
Q701	G-3	A-2
Q702	F-3	A-2
Q703	G-8	B-8
Q705	H-9	B-8
Q706	G-8	B-9
Q707	G-9	B-9

4-3. PRINTED WIRING BOARD - TUNER SECTION -



Note on Printed Wiring Board :

- : indicated a lead wire mounted on the component side.
- ▨ : Pattern from the side which enables seeing.
- △ : internal component.
- : indicates side identified with part number.

Note on Schematic Diagram :

- All capacitors are in μF unless otherwise noted. pF: μF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in ohms, 1/4W or less unless otherwise noted.
- △ : internal component.
- ▨ : nonflammable resistor.

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

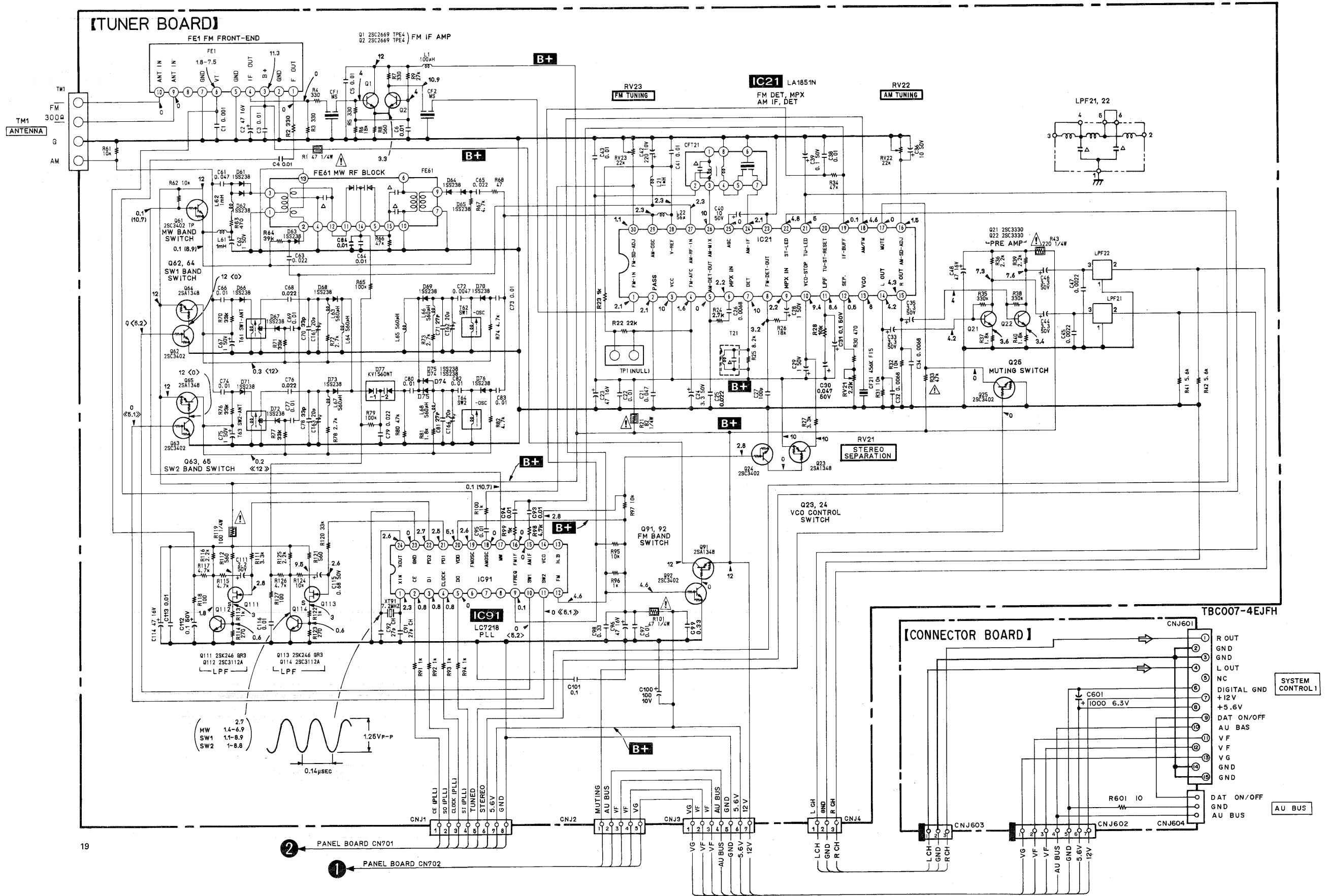
□ : adjustment for repair.

- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- () : MW
- < > : SW
- Voltages are taken with a VOM (input impedance 10M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path
- ⇒ : FM

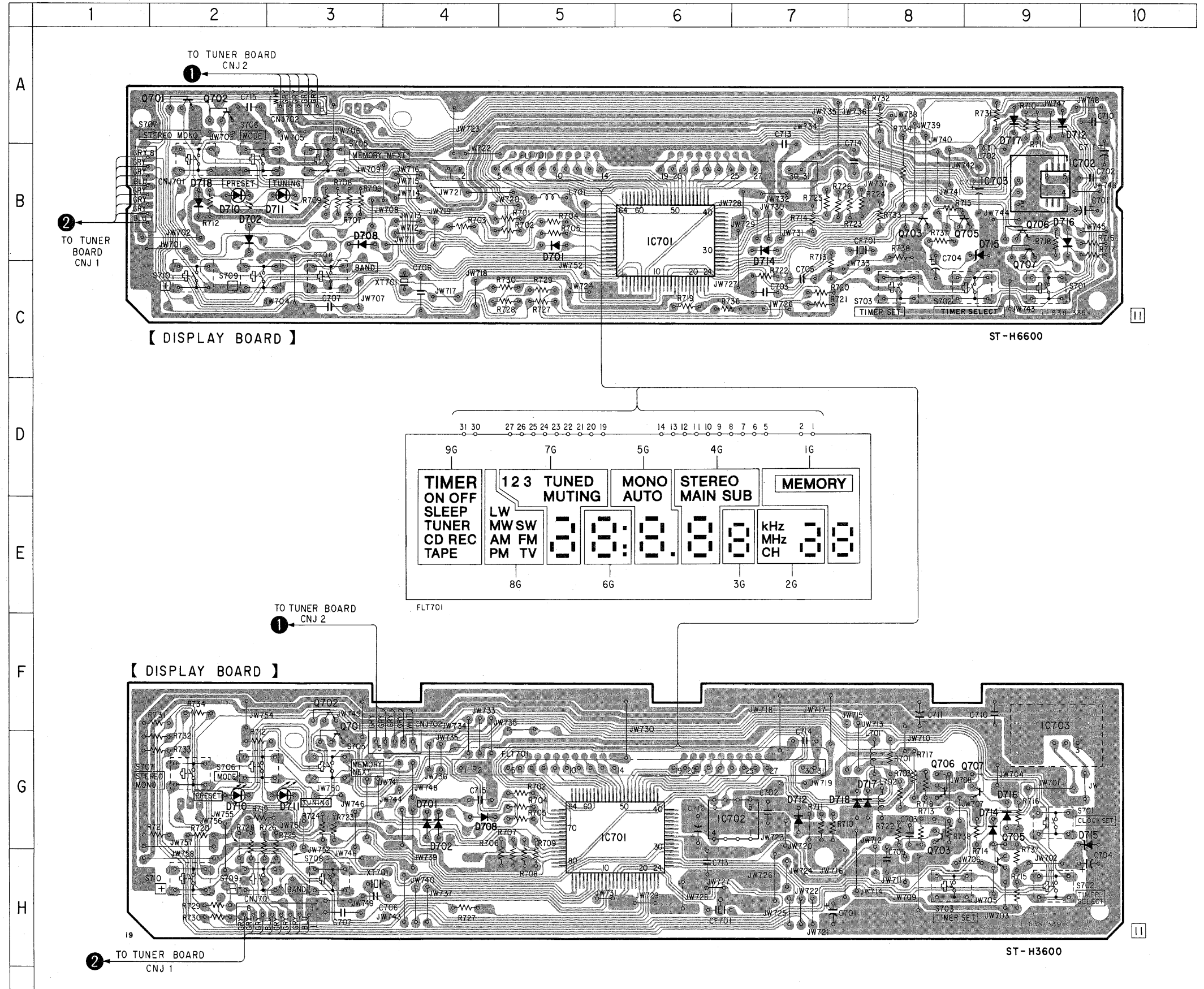
4-4. SCHEMATIC DIAGRAM - TUNER SECTION -

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

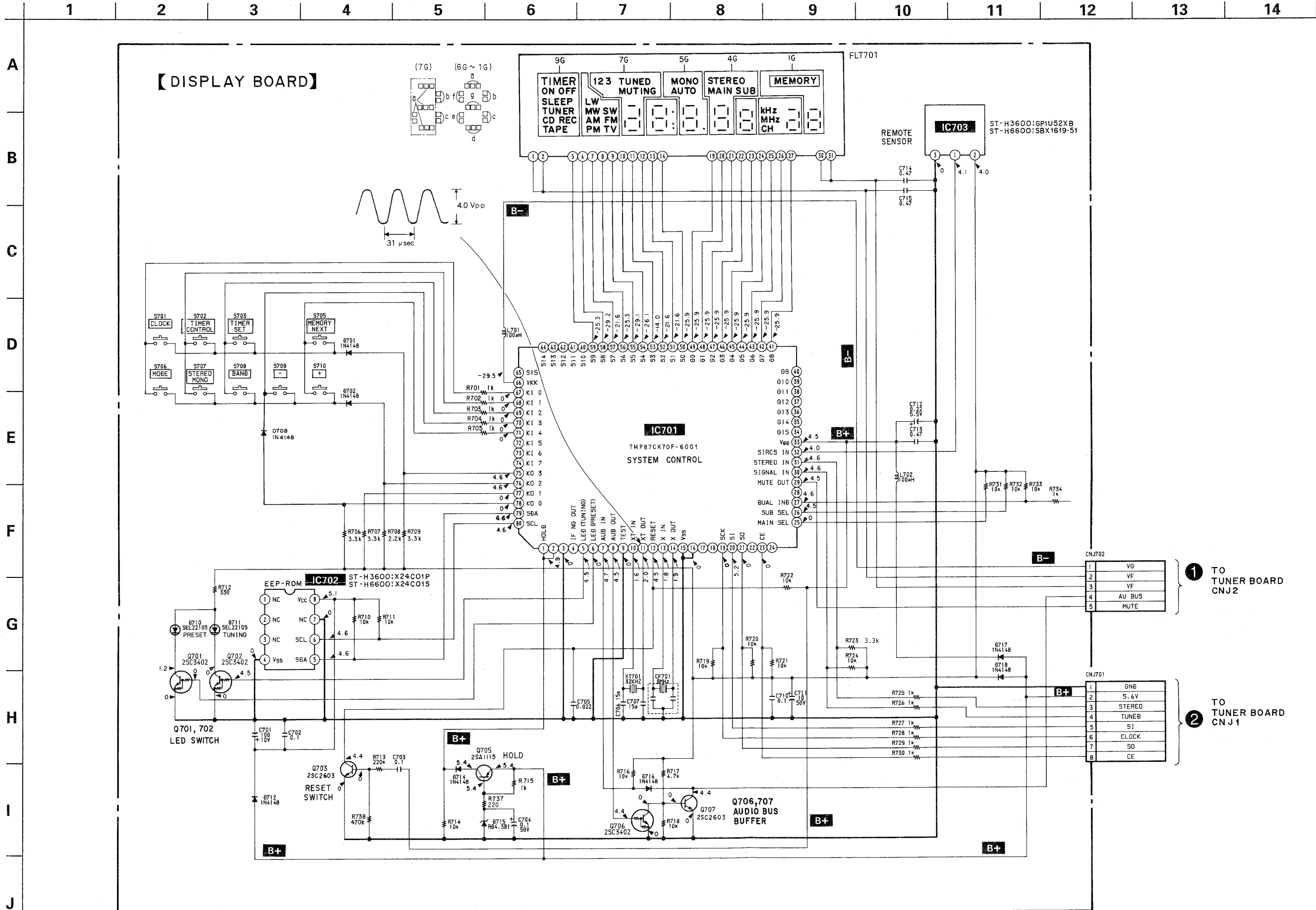
A
B
C
D
E
F
G
H
I
J



4-5. PRINTED WIRING BOARD - DISPLAY SECTION - • See page 14 for note. • See page 11 for semiconductor lead layouts and location.

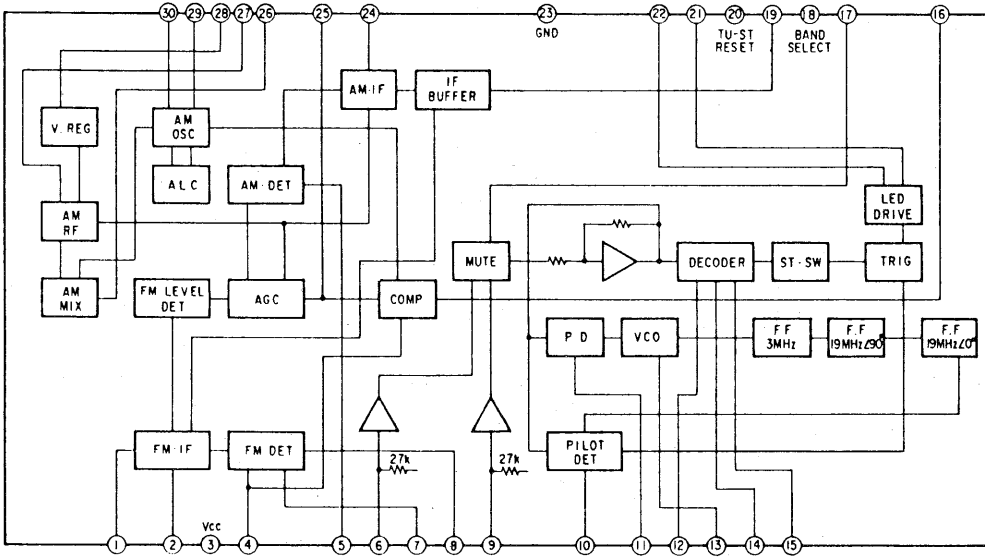


4-6. SCHEMATIC DIAGRAM - DISPLAY SECTION - See page 14 for note.

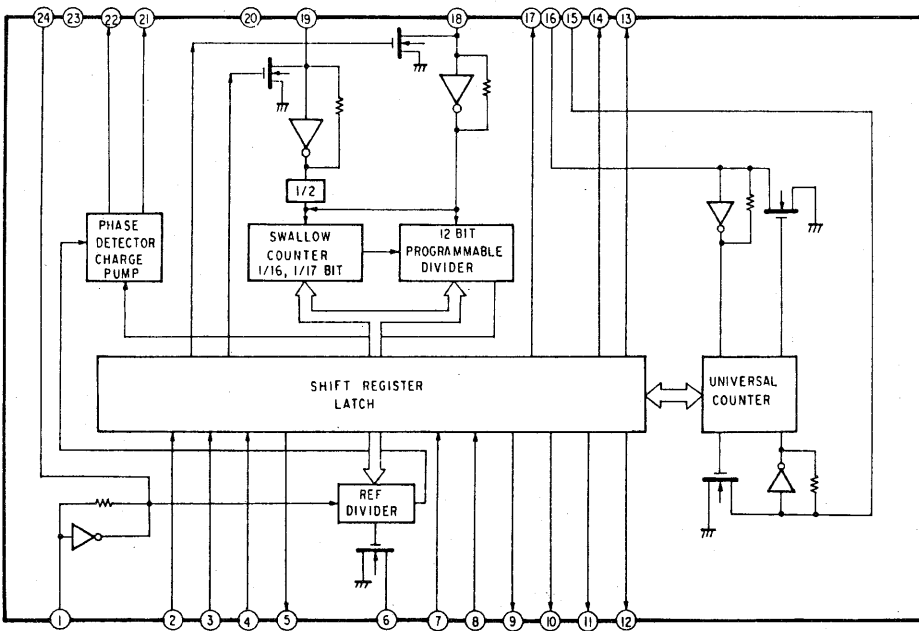


4-7. IC BLOCK DIAGRAMS

IC21 LA1851N



IC81 LC7218



4-8. PIN FUNCTION OF IC701 SYSTEM CONTROLLER (TMP87CK70F-6001)

The terminals work to control tuner section (IC21, 81), FL tube display and reading and writing of IC702 (preset data), etc. according to key input and signal from the remote controller.

PIN No.	PIN NAME	I/O	ACTIVE	PIN FUNCTION
1	HOLD	I	↓	HOLD detecting interrupt terminal
2	HOLD RESET	I	↑	HOLD resetting interrupt terminal
3		I		Not in use
4	IF NGOUT	O	H	IF count NG output
5	LED1	O	H	TUNING LED ON
6	LED2	O	H	PRESET LED ON
7	AUB IN	I	L	AUDIO BUS input
8	AUB OUT	O	L	AUDIO BUS output
9	TEST	I	H	Test terminal
10	XT IN	I		Low frequency oscillator connection terminal (32KHz)
11	XT OUT	O		Low frequency oscillator connection terminal (32KHz)
12	RESET	I	L	Reset signal input
13	X IN	I		High frequency oscillator connection terminal (8MHz)
14	X OUT	O		High frequency oscillator connection terminal (8MHz)
15	VSS			GND
16		I		Not in use
17, 18		O		Not in use
19	SCK	O		PLL serial clock output
20	SI	I		PLL serial data input
21	SO	O		PLL serial data output
22				Not in use
23	CE	O	H	PLL chip enable
24				Not in use
25	MAIN SEL	O	L	Main sound selection terminal (Not in use)
26	SUB SEL	O	L	Sub sound selection terminal (Not in use)
27	DUAL IND	I	L	Sound dual signal detection terminal (Not in use)
28				Not in use
29	MUTE OUT	O	L	MUTING output
30	SIGNAL IN	I	L	TUNED input
31	STEREO IN	I	L	STEREO input
32	SIRCS IN	I	L	SIRCS input
33	VDD			+5V
34 - 40		O		Not in use
41 - 49	G0 - G8	O	H	FL tube digit output
50 - 59	S0 - S9	O	H	FL tube segment output
60 - 65		O	H	Not in use
66	VKK			FL tube driving power supply
67 - 71	KI0 - KI4	I	H	Key input
72		I		Not in use
73, 74				Not in use
75 - 78	KO0 - KO3	O	H	Key output
79	SDA	I/O		Data input/output for EEPROM
80	SCL	O		Clock output for EEPROM

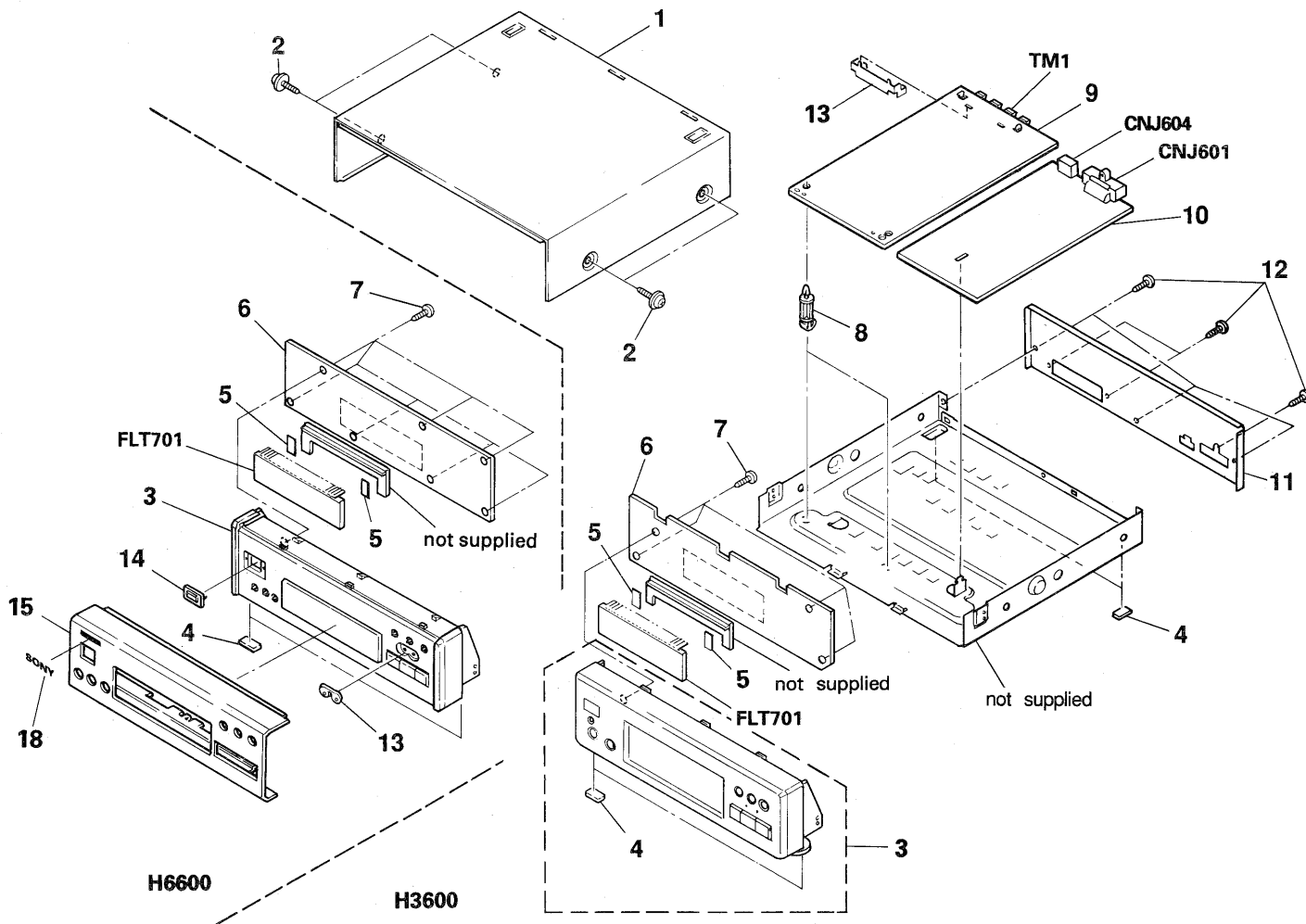
SECTION 5 EXPLODED VIEW

NOTE:

- -XX, -X mean standardized parts, so they may have some differences 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.

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

(1) CHASSIS SECTION



Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
1	4-944-423-11	CASE (K206522) (H3600)		10	1-638-340-11	CONNECTOR BOARD (H3600)	
	4-932-844-01	CASE (H6600)			1-638-336-11	CONNECTOR BOARD (H6600)	
2	3-363-099-01	SCREW (CASE +3X8 TP2)		11	* 4-942-893-61	PANEL, BACK (H3600)	
3	X-4941-544-1	PANEL ASSY, FRONT (H3600)			* 4-942-893-11	PANEL, BACK (H6600)	
	X-4942-523-1	PANEL ASSY, FRONT (H6600)		12	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
4	4-930-336-01	FOOT (FELT)		13	4-944-427-01	INDICATOR (H6600)	
5	4-932-810-11	CUSHION (FL)		14	4-944-425-01	FILTER (H6600)	
6	* A-4341-564-A	DISPLAY BOARD, COMPLETE (H3600)		15	4-944-429-11	PANEL (ST), FRONT (H6600)	
	* A-4341-557-A	DISPLAY BOARD, COMPLETE (H6600)		16	* 4-924-988-11	PLATE (ST), GROUND	
7	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S		17	7-682-547-09	SCREW +BVTT 3X6 (S) (H6600)	
8	* 4-914-008-01	HOLDER, PCB		18	4-942-636-01	EMBLEM (NO. 3. 5), SONY (H6600)	
9	A-4303-370-A	TUNER BOARD (TCB007-4EJFH), COMPLETE					

SECTION 6

TUNER

ELECTRICAL PARTS LIST

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.
- -XX, -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

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
	A-4303-370-A	TUNER BOARD (TCB007-4EJFH), COMPLETE ***** < CAPACITOR >		C48	1-124-477-11	ELECT 47uF 20% 16V	
C1	1-162-294-11	CERAMIC CHIP 0.001uF 20% 25V		C61	1-101-006-00	CERAMIC 0.047uF 50V	
C2	1-124-477-11	ELECT 330uF 20% 16V		C62	1-124-791-11	ELECT 1.0uF 20% 50V	
C3	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C63	1-163-063-00	CERAMIC CHIP 0.022uF 25V	
C4	1-162-294-31	CERAMIC CHIP 0.001uF 20% 25V		C64	1-161-379-00	CERAMIC 0.01uF 30% 16V	
C5	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C65	1-163-063-00	CERAMIC CHIP 0.022uF 25V	
C6	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C66	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C7	1-102-942-00	CERAMIC 5pF 0.5pF 50V		C67	1-124-791-11	ELECT 1.0uF 20% 50V	
C21	1-101-006-00	CERAMIC 0.047uF 50V		C68	1-101-005-00	CERAMIC 0.022uF 50V	
C22	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C69	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C23	1-124-477-11	ELECT 47uF 20% 25V		C70	1-102-963-00	CERAMIC 33pF 5% 50V	
C24	1-123-382-00	ELECT 3.3uF 20% 50V		C71	1-102-961-00	CERAMIC 27pF 5% 50V	
C25	1-163-063-00	CERAMIC CHIP 0.022uF 25V		C72	1-163-017-00	CERAMIC CHIP 0.047uF 20% 12V	
C26	1-163-019-00	CERAMIC CHIP 0.0068uF 20% 12V		C73	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C27	1-162-516-11	CERAMIC CHIP 100pF 10% 50V		C74	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C28	1-124-791-11	ELECT 1.0uF 20% 50V		C75	1-124-791-11	ELECT 1.0uF 20% 50V	
C29	1-124-791-11	ELECT 1.0uF 20% 50V		C76	1-101-005-00	CERAMIC 0.022uF 50V	
C30	1-124-902-00	ELECT 0.47uF 20% 50V		C77	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C31	1-124-463-00	ELECT 0.1uF 20% 50V		C78	1-102-963-00	CERAMIC 33pF 5% 50V	
C32	1-130-481-00	CERAMIC CHIP 0.0068uF 20% 12V		C79	1-101-005-00	CERAMIC 0.022uF 50V	
C33	1-123-382-00	ELECT 3.3uF 20% 50V		C80	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C34	1-130-481-00	CERAMIC CHIP 0.0068uF 20% 12V		C81	1-102-961-00	CERAMIC 27pF 5% 50V	
C35	1-123-382-00	ELECT 3.3uF 20% 50V		C82	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C36	1-123-875-11	ELECT 10uF 20% 50V		C83	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C38	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C84	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C39	1-124-463-00	ELECT 0.1uF 20% 50V		C91	1-102-961-00	CERAMIC 27pF 5% 50V	
C40	1-124-907-11	ELECT 10uF 20% 50V		C92	1-102-961-00	CERAMIC 27pF 5% 50V	
C41	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C93	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C42	1-126-176-11	ELECT 220uF 20% 10V		C94	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C43	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V		C95	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C44	1-123-382-00	ELECT 3.3uF 20% 100V		C96	1-124-477-11	ELECT 47uF 20% 16V	
C45	1-161-375-00	CERAMIC CHIP 0.0022uF 20% 25V		C97	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V	
C46	1-123-382-00	ELECT 3.3uF 20% 50V		C98	1-136-171-00	FILM 0.33uF 5% 50V	
C47	1-161-375-00	CERAMIC CHIP 0.0022uF 20% 25V		C99	1-136-171-00	FILM 0.33uF 5% 50V	
				C100	1-124-443-00	ELECT 100uF 20% 10V	
				C101	1-164-159-11	CERAMIC 0.1uF 50V	
				C111	1-124-257-00	ELECT 2.2uF 20% 50V	

TUNER

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
C112	1-124-463-00	ELECT 0.1uF 20% 50V				< ENCAPSULATED COMPONENT >	
C113	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V					
C114	1-124-477-11	ELECT 47uF 20% 16V		FE61	1-236-464-11	ENCAPSULATED COMPONENT	
C115	1-124-254-00	ELECT 0.68uF 20% 50V				< IC >	
C116	1-163-059-00	CERAMIC MELF 0.01uF 20% 16V					
		< FILTER >		IC21	8-759-821-45	IC LA1851N	
CF1	1-567-389-11	FILTER, CERAMIC		IC91	8-759-820-91	IC LC7218	
CF2	1-567-389-11	FILTER, CERAMIC				< INDUCTOR >	
		< OSCILLATOR >		L1	1-410-521-11	MICRO INDUCTOR 100uH	
CF21	1-577-075-11	OSCILLATOR, CERAMIC (456kHz)		L21	1-410-171-11	MICRO INDUCTOR 1uH	
		< IF TRANSFORMER >		L22	1-410-518-41	MICRO INDUCTOR 56uH	
CFT21	1-404-853-11	TRANSFORMER, IF (CERAMIC FILTER)		L61	1-410-171-11	MICRO INDUCTOR 1uH	
		< CONNECTOR >		L62	1-410-171-11	MICRO INDUCTOR 1uH	
CNJ1	* 1-568-276-11	SOCKET, CONNECTOR 10P		L63	1-410-624-11	MICRO INDUCTOR 560uH	
CNJ2	* 1-568-272-11	SOCKET, CONNECTOR 6P		L64	1-410-624-11	MICRO INDUCTOR 560uH	
CNJ3	* 1-568-419-11	PIN, CONNECTOR 9P		L65	1-410-624-11	MICRO INDUCTOR 560uH	
CNJ4	* 1-568-372-11	PIN, CONNECTOR 3P		L66	1-410-624-11	MICRO INDUCTOR 560uH	
CNJ5	* 1-568-268-11	SOCKET, CONNECTOR 2P		L67	1-410-624-11	MICRO INDUCTOR 560uH	
		< TRIMMER >		L68	1-410-624-11	MICRO INDUCTOR 560uH	
CT61	1-141-227-00	CAP, TRIMMER				< LOW PASS FILTER >	
CT62	1-141-227-00	CAP, TRIMMER		LPF21	1-235-164-00	FILTER, LOW PASS	
CT63	1-141-227-00	CAP, TRIMMER		LPF22	1-235-164-00	FILTER, LOW PASS	
CT64	1-141-227-00	CAP, TRIMMER				< TRANSISTOR >	
		< DIODE >		Q1	8-729-230-99	TRANSISTOR 2SC2669-0Y	
D61	8-719-903-27	DIODE ISS168		Q2	8-729-230-99	TRANSISTOR 2SC2669-0Y	
D62	8-719-903-27	DIODE ISS168		Q21	8-729-820-24	TRANSISTOR 2SC3330-T	
D63	8-719-903-27	DIODE ISS168		Q22	8-729-820-24	TRANSISTOR 2SC3330-T	
D64	8-719-903-27	DIODE ISS168		Q23	8-729-900-61	TRANSISTOR DTA114ES	
D65	8-719-903-27	DIODE ISS168		Q24	8-729-900-80	TRANSISTOR DTC114ES	
D66	8-719-903-27	DIODE ISS168		Q25	8-729-900-80	TRANSISTOR DTC114ES	
D67	8-719-903-27	DIODE ISS168		Q61	8-729-900-80	TRANSISTOR DTC114ES	
D68	8-719-903-27	DIODE ISS168		Q62	8-729-900-80	TRANSISTOR DTC114ES	
D69	8-719-903-27	DIODE ISS168		Q63	8-729-900-80	TRANSISTOR DTC114ES	
D70	8-719-903-27	DIODE ISS168		Q64	8-729-900-61	TRANSISTOR DTA114ES	
D71	8-719-903-27	DIODE ISS168		Q65	8-729-900-61	TRANSISTOR DTA114ES	
D72	8-719-903-27	DIODE ISS168		Q91	8-729-900-61	TRANSISTOR DTA114ES	
D73	8-719-903-27	DIODE ISS168		Q92	8-729-900-80	TRANSISTOR DTC114ES	
D74	8-719-903-27	DIODE ISS168		Q111	8-729-202-67	TRANSISTOR 2SK246GR3	
D75	8-719-903-27	DIODE ISS168		Q112	8-729-230-93	TRANSISTOR 2SC3113-AB	
D76	8-719-903-27	DIODE ISS168		Q113	8-729-202-67	TRANSISTOR 2SK246GR3	
D77	8-719-976-30	DIODE KV1560N		Q114	8-729-230-93	TRANSISTOR 2SC3113-AB	
		< FM FRONT END >				< RESISTOR >	
FE1	1-463-862-21	FRONT END, FM		R1	△ 1-249-401-11	CARBON (SMALL) 47	5% 1/4W F
				R2	1-249-329-11	CARBON MELF 330	5% 1/8W
				R3	1-249-329-11	CARBON MELF 330	5% 1/8W

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.

TUNER

Ref. No.	Part No.	Description	Remarks	Ref. No.	Part No.	Description	Remarks
R4	1-249-329-11	CARBON MELF 330	5% 1/8W	R93	1-249-335-11	CARBON MELF 1K	5% 1/8W
R5	1-249-329-11	CARBON MELF 330	5% 1/8W	R94	1-249-335-11	CARBON MELF 1K	5% 1/8W
R6	1-249-350-11	CARBON MELF 18K	5% 1/8W	R95	1-249-347-11	CARBON MELF 10K	5% 1/8W
R7	1-249-329-11	CARBON MELF 330	5% 1/8W	R96	1-249-335-11	CARBON MELF 1K	5% 1/8W
R8	1-249-332-11	CARBON MELF 560	5% 1/8W	R97	1-249-347-11	CARBON MELF 10K	5% 1/8W
R9	1-249-352-11	CARBON MELF 27K	5% 1/8W	R98	1-249-343-11	CARBON MELF 4.7K	5% 1/8W
R21	△ 1-249-404-00	CARBON (SMALL) 82	5% 1/4W F	R99	1-249-335-11	CARBON MELF 1K	5% 1/8W
R22	1-249-433-11	CARBON (SMALL) 22K	5% 1/4W	R100	1-249-335-11	CARBON MELF 1K	5% 1/8W
R23	1-249-335-11	CARBON MELF 1K	5% 1/8W	R101	△ 1-249-401-11	CARBON (SMALL) 47	5% 1/4W F
R24	1-249-340-11	CARBON MELF 2.7K	5% 1/8W	R111	1-249-341-11	CARBON MELF 3.3K	5% 1/8W
R25	1-249-346-11	CARBON MELF 8.2K	5% 1/8W	R112	1-249-332-11	CARBON MELF 560	5% 1/8W
R26	1-249-350-11	CARBON MELF 18K	5% 1/8W	R113	1-249-335-11	CARBON MELF 1K	5% 1/8W
R27	1-249-423-11	CARBON (SMALL) 3.3K	5% 1/4W	R114	1-249-328-11	CARBON MELF 270	5% 1/8W
R28	1-249-347-11	CARBON MELF 10K	5% 1/8W	R115	1-249-343-11	CARBON MELF 4.7K	5% 1/8W
R30	1-249-331-11	CARBON MELF 470	5% 1/8W	R116	1-249-339-11	CARBON MELF 2.2K	5% 1/8W
R31	1-249-347-11	CARBON MELF 10K	5% 1/8W	R117	1-249-343-11	CARBON MELF 4.7K	5% 1/8W
R32	1-249-347-11	CARBON MELF 10K	5% 1/8W	R118	1-249-323-11	CARBON MELF 100	5% 1/8W
R33	△ 1-249-437-11	CARBON (SMALL) 47K	5% 1/4W F	R119	△ 1-249-405-11	CARBON (SMALL) 100	5% 1/4W F
R34	1-249-355-11	CARBON MELF 47K	5% 1/8W	R120	1-249-353-11	CARBON MELF 33K	5% 1/8W
R35	1-249-365-11	CARBON MELF 330	5% 1/8W	R121	1-249-332-11	CARBON MELF 560	5% 1/8W
R36	1-249-339-11	CARBON MELF 2.2K	5% 1/8W	R122	1-249-335-11	CARBON MELF 1K	5% 1/8W
R37	1-249-338-11	CARBON MELF 1.8K	5% 1/8W	R123	1-249-328-11	CARBON MELF 270	5% 1/8W
R38	1-249-365-11	CARBON MELF 330	5% 1/8W	R124	1-249-347-11	CARBON MELF 10K	5% 1/8W
R39	1-249-339-11	CARBON MELF 2.2K	5% 1/8W	R125	1-249-339-11	CARBON MELF 2.2K	5% 1/8W
R40	1-249-338-11	CARBON MELF 1.8K	5% 1/8W	R126	1-249-343-11	CARBON MELF 4.7K	5% 1/8W
R41	1-249-344-11	CARBON MELF 5.6K	5% 1/8W	R127	1-249-323-11	CARBON MELF 100	5% 1/8W
R42	1-249-344-11	CARBON MELF 5.6K	5% 1/8W			< VARIABLE RESISTOR >	
R43	△ 1-249-409-11	CARBON (SMALL) 220	5% 1/4W F	RV21	1-238-598-61	RES, ADJ, CARBON 2.2K	
R61	1-249-347-11	CARBON MELF 10K	5% 1/8W	RV22	1-238-601-11	RES, ADJ, CARBON 22K	
R62	1-249-347-11	CARBON MELF 10K	5% 1/8W	RV23	1-238-601-11	RES, ADJ, CARBON 22K	
R63	1-249-331-11	CARBON MELF 470	5% 1/8W			< TRANSFORMER >	
R64	1-249-354-11	CARBON MELF 39K	5% 1/8W	T21	1-404-807-11	TRANSFORMER, DISCRIMINATOR	
R65	1-249-359-11	CARBON MELF 100K	5% 1/8W	T61	1-402-447-11	COIL (ANT SW1)	
R66	1-249-355-11	CARBON MELF 47K	5% 1/8W	T62	1-402-448-11	COIL (ANT SW2)	
R67	1-249-343-11	CARBON MELF 4.7K	5% 1/8W	T62	1-406-345-11	COIL (OSC SW1)	
R68	1-249-319-11	CARBON MELF 47	5% 1/8W	T64	1-406-345-11	COIL (OSC SW2)	
R70	1-249-353-11	CARBON MELF 33K	5% 1/8W			< TERMINAL >	
R71	1-249-353-11	CARBON MELF 33K	5% 1/8W	TM1	* 1-536-708-00	TERMINAL BOARD, PUSH 4P (ANTENNA)	
R72	1-249-340-11	CARBON MELF 2.7K	5% 1/8W			< CONNECTOR PIN >	
R73	1-249-340-11	CARBON MELF 2.7K	5% 1/8W	TP1	* 1-560-060-00	PIN, CONNECTOR 2P	
R74	1-249-343-11	CARBON MELF 4.7K	5% 1/8W			< CRYSTAL VIBRATOR >	
R76	1-249-353-11	CARBON MELF 33K	5% 1/8W	XT91	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)	
R77	1-249-353-11	CARBON MELF 33K	5% 1/8W			*****	
R78	1-249-340-11	CARBON MELF 2.7K	5% 1/8W				
R79	1-249-359-11	CARBON MELF 100K	5% 1/8W				
R80	1-249-355-11	CARBON MELF 47K	5% 1/8W				
R81	1-249-338-11	CARBON MELF 1.8K	5% 1/8W				
R82	1-249-343-11	CARBON MELF 4.7K	5% 1/8W				
R91	1-249-335-11	CARBON MELF 1K	5% 1/8W				
R92	1-249-335-11	CARBON MELF 1K	5% 1/8W				

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

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

DISPLAY

CONNECTOR

Ref. No.	Part No.	Description			Remarks
R727	1-249-417-11	CARBON	1K	5%	1/4W
R728	1-249-417-11	CARBON	1K	5%	1/4W
R729	1-249-417-11	CARBON	1K	5%	1/4W
R730	1-249-417-11	CARBON	1K	5%	1/4W
R731	1-249-429-11	CARBON	10K	5%	1/4W
R732	1-249-429-11	CARBON	10K	5%	1/4W
R733	1-249-429-11	CARBON	10K	5%	1/4W
R734	1-249-417-11	CARBON	1K	5%	1/4W
R735	1-249-411-11	CARBON	330	5%	1/4W
R736	1-249-429-11	CARBON	10K	5%	1/4W
R737	1-249-409-11	CARBON	220	5%	1/4W
R738	1-247-895-00	CARBON	470K	5%	1/4W

< SWITCH >

S701	1-554-303-21	SWITCH, TACTILE (CLOCK)
S702	1-554-303-21	SWITCH, TACTILE (TIMER CONTROL)
S703	1-554-303-21	SWITCH, TACTILE (TIMER SET)
S705	1-554-303-21	SWITCH, TACTILE (MEMORY NEXT)
S706	1-554-303-21	SWITCH, TACTILE (MODE)
S707	1-554-303-21	SWITCH, TACTILE (STEREO/MONO)
S708	1-554-303-21	SWITCH, TACTILE (BAND)
S709	1-554-303-21	SWITCH, TACTILE (TUNING -)
S710	1-554-303-21	SWITCH, TACTILE (TUNING +)

< CRYSTAL VIBRATOR >

XT701	1-527-997-21	VIBRATOR, CRYSTAL (32kHz)
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ST-H3600/H6600

SONY SERVICE MANUAL

E Model
Australian Model
ST-H3600
E Model
ST-H6600

CORRECTION-1

Correct your service manual as shown below.

 : indicates corrected portion.

Page	INCORRECT			CORRECT	
23	<u>No.</u>	<u>Part No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Description</u>
	3	X-4941-544-1	PANEL ASSY, ASSY (H3600)	X-4941-544-1	PANEL ASSY, ASSY (H3600)
		X-4942-523-1	PANEL ASSY, ASSY (H6600)	X- 4941 -523-1	PANEL ASSY, ASSY (H6600)