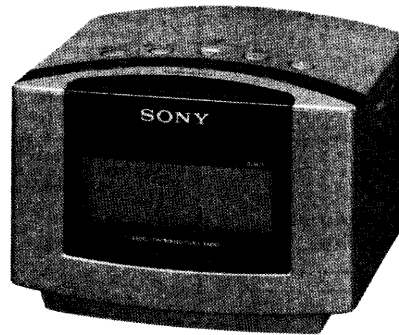


ICF-C50

SERVICE MANUAL

AEP Model



SPECIFICATIONS

Time display

United Kingdom	12hour
Other Countries	24hour

Frequency range:

Band	
FM	87.5 - 108.0 MHz
AM	530 - 1605 kHz

Speaker: Approx. 6.6 cm ($2\frac{5}{8}$ inches) dia. 8 ohms.

Power output:

100mW (at 10% harmonic distortion)

Power requirements:

220 V - 230 V AC, 50 Hz

Dimensions: Approx. 133 x 91 x 140 mm
($5\frac{1}{4}$ x $3\frac{1}{2}$ x $5\frac{1}{2}$ inches) (w/h/d) incl.
projecting parts and controls

Mass: Approx. 675g (1 lb 8 oz)

Design and specifications subject to change without notice.

FEATURES

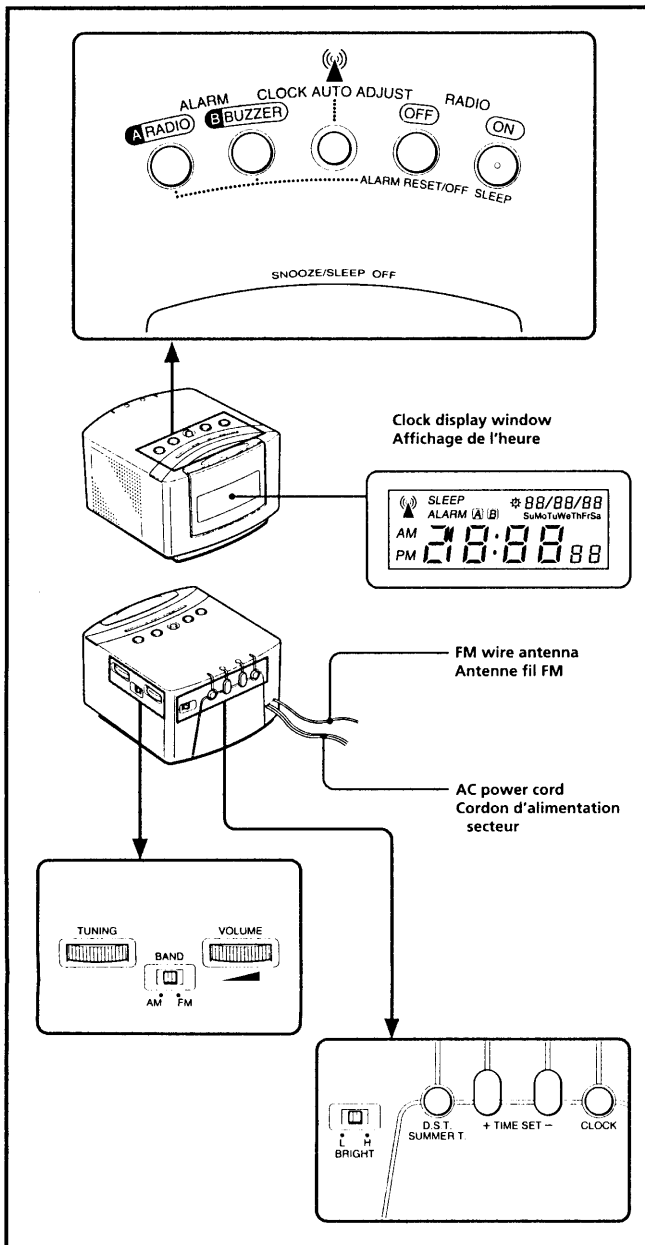
- Radio Controlled Clock Auto Adjust System
- Dual alarm
- Sleep Function



FM/AM RADIO
CONTROLLED CLOCK RADIO
SONY®

This section is extracted from instruction manual.

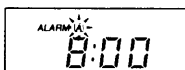
SECTION 1 GENERAL



Setting the Alarm

You can set the radio alarm to **ALARM A**, and buzzer alarm to **ALARM B**. To set the radio alarm, first tune in a station as described in "Operating the Radio" and adjust the volume.

1. Turn off the radio.
2. While holding down **ALARM A** or **B**, press **TIME SET +** or **-** until the desired time appears in the display. When you release **ALARM A** or **B**, the alarm setting is completed.



The radio or buzzer will automatically sound at the preset time, and automatically turn itself off after 60 minutes.

- To turn off the alarm manually, press **ALARM RESET/OFF**. The alarm will come on at the preset time on the next day.
- To cancel the alarm before the alarm time, while holding down **ALARM A** or **B**, press **ALARM RESET/OFF**.
- To check the preset time, press **ALARM A** or **B**.

Notes

- The buzzer sound level is fixed, and independent of the **VOLUME** control.
- If you set **ALARM A** and **ALARM B** to the same desired time, only **ALARM A** will work.
- Even if you are listening to the radio, you can set the radio or buzzer alarm.
- The alarm settings has a backup for about 10 minutes, when there is a service interruption for more than 10 minutes, the alarm setting memories will be cancelled.

To Doze a Few More Minutes

1. Press **SNOOZE/SLEEP OFF**. The radio or buzzer will shut off but will automatically come on again after about 8 minutes. You can repeat this process as many times as you like.

- You can reset the alarm time while activating the snooze function.

To Use Both Sleep Timer and Alarm Function

You can fall asleep to the radio sound and you will be awakened by the radio or buzzer alarm at the preset time.

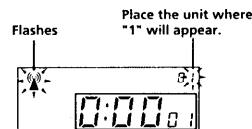
1. Set the alarm. (See "Setting the Alarm".)
2. Set the sleep timer. (See "Setting the Sleep Timer".)

Setting the Clock and Date

Setting the Clock Automatically

This radio has Radio Controlled Clock Auto Adjust System that adjusts to the current time. The Radio Controlled Clock Auto Adjust System receives the clock data (Year, month, date, hour, minute, second and D.S.T.) on a certain radio wave and radio controls the clock time. Be sure to set the radio where reception would be easier.

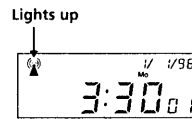
1. Set the radio. Choose a place where there is good reception as possible.
2. Plug in the unit. The Clock Auto Adjust function will automatically operate and "1" will flash in the display.



Counting starts when the number at the upper righthand corner of the display (for the first time) changes to 1.

3. When the clock auto adjust has been completed, the clock will start to operate and "1" will appear in the display.

United Kingdom: 12 hour display;
AM 12:00 = midnight
Other Countries: 24 hour display;
0:00 = midnight

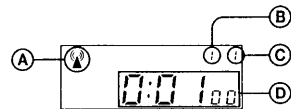


- To stop Clock Auto Adjust during operation**
Press **CLOCK AUTO ADJUST**.

What is Clock Auto Adjust System?

The clock data that is sent has total of 60 units (this total unit is called 1 frame), the data is sent 1 unit for every second. This radio receives this data one by one from data No. 1 to data No. 60. When the radio receives the first frame and then starts to receive the second frame for confirmation. When the 2nd frame has been confirmed, then the clock time data reception has been completed. When the unit is plugged in, this function will operate until the time receives completely.

The Display during Clock Auto Adjust Mode



Ⓐ Reception indicator	Will flash during Clock Auto Adjust mode. Will appear when Clock Auto Adjust mode is completed.
Ⓑ Reception indicator (frame data)	1: 1 frame data when received 0: 1 frame data when not received
Ⓒ Reception indicator (unit data)	1: 1 unit data when received 0: 1 unit data when not received
Ⓓ Duration of Clock Auto Adjust mode	Maximum 10 hours displayed, even though the Clock Auto Adjust mode is not completed after 10 hours, the operation is still continued.

When the LCD display is difficult to see.

Change the Bright switch to either H (High) or L (Low) for better display.

About Radio Reception

The radio controlled signal is transmitted from the areas shown below.

England: Teddington, Middlesex
52° 22' N, 01° 11' W
Germany: Mainflingen
50° 01' N, 09° 00' E

- The U.K. models will receive the radio signal from England. The current time of England will be displayed.
- The other models will receive the radio signal from Germany. The current time of Germany will be displayed.
- There may be areas where radio reception is weak.

Once the Clock Auto Adjust has been completed

If the reception has not changed, you do not have to set the clock again.

The Clock Auto Adjust function will automatically operate everynight at AM 3:05 to keep the correct time. If the reception is incomplete after 12 minutes, the time setting will return to the original time and "1" will disappear from the display.

If you want to Restart the Clock Auto Adjust

Press **CLOCK AUTO ADJUST**.

While the Clock is operating, "1" will start to flash indicating that the Clock Auto Adjust function is operating. If the reception has been completed "1" will be displayed and the clock time will change to the current time. If the reception is incomplete after 12 minutes, the time setting will return to the original time and "1" will disappear from the display.

About Daylight Saving Time (summer time) indication

The changing of the summer time will be automatically changed by Clock Auto Adjust function. The change of summer time will have a time lag.
Winter Time → Summer Time: about 1 hour and 10 minutes time lag.
Summer Time → Winter Time: about 10 minutes time lag.
During the Summer Time mode "1" will appear in the display.

To Change the Display to the Daylight Saving Time (summer time) Indication

Press **D.S.T. + SUMMER T**.

"1" will appear and the time indication changes to the summer time. To cancel the summer time indication, press **D.S.T. + SUMMER T** button again.

Manual Setting the Clock

1. Press **CLOCK** for more than 1 second. The "Year" will start to flash in the display.
2. Press **TIME SET +** or **-** until the correct number appears in the display.
3. Press **CLOCK** once. The next category will flash in the display.
4. Repeat steps 2 and 3 to set the month, date, hour, minute. After setting the minute, press and release **CLOCK** to start the counting of the seconds.

Note

- If you stop during the clock setting, after about a minute the previous display will return.
- To set the current time exactly to the second, release the **CLOCK** with the radio or telephone time signal at step 4 (above).

Operating the Radio

1. Press **RADIO ON**.
2. Select **BAND (FM or AM)** for ICF-C50, **FM/MW or LW** for ICF-C50L.
3. Tune in to a station using **TUNING**.
4. Adjust **VOLUME**.

- To turn off the radio, press **RADIO OFF**.

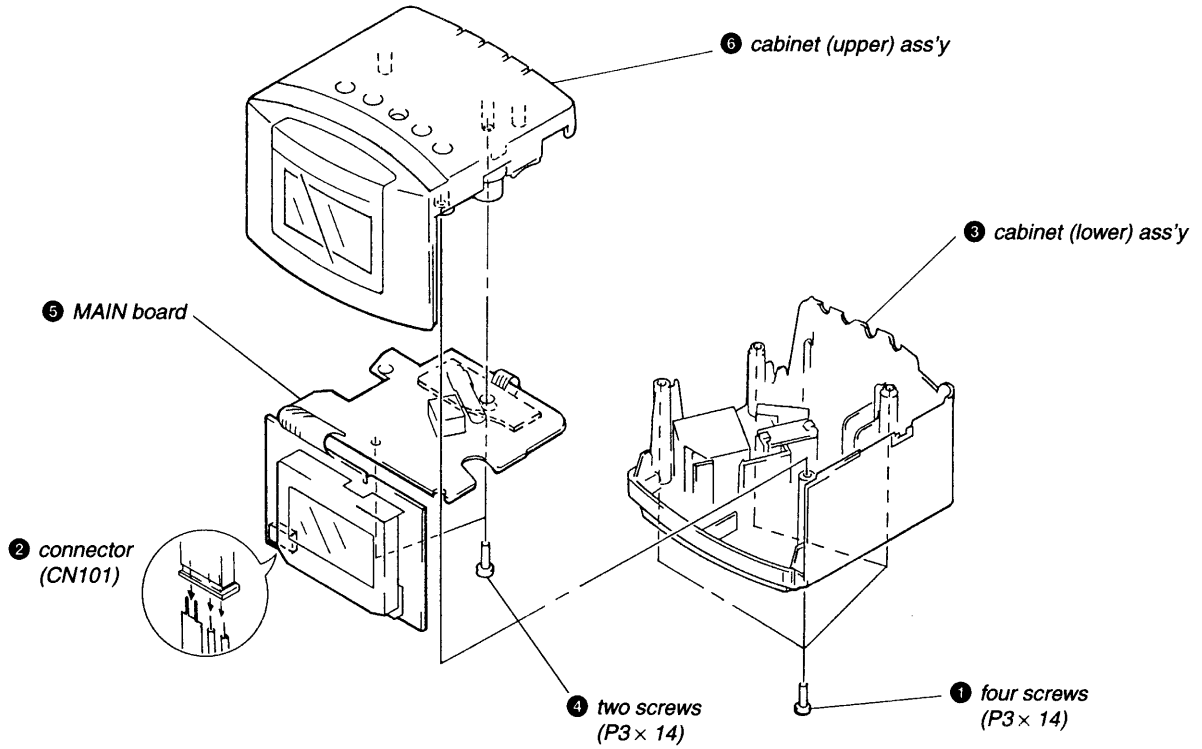
To Improve Radio Reception

FM: Extend the FM wire antenna to improve FM reception.
AM(MW)/LW: Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built into the unit.

SECTION 2 DISASSEMBLY

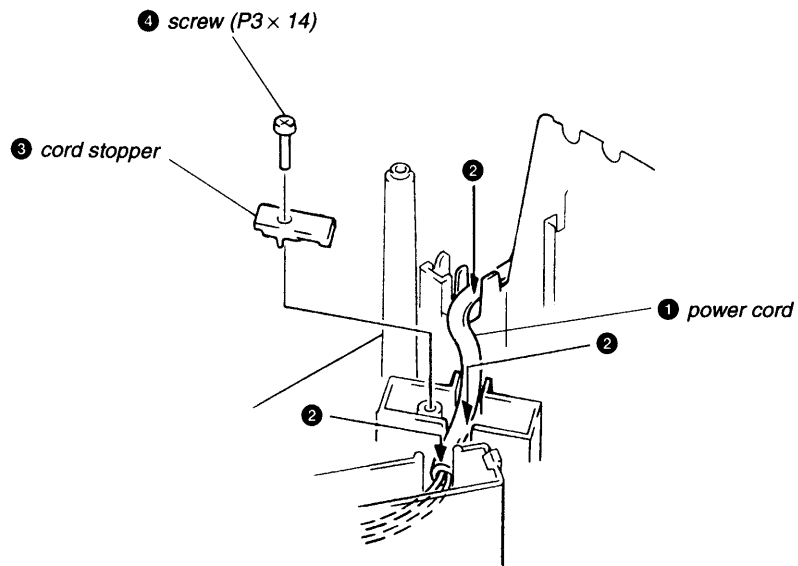
Note: Follow the disassembly procedure in the numerical order given.

CABINET (UPPER/LOWER) ASSY, MAIN BOARD



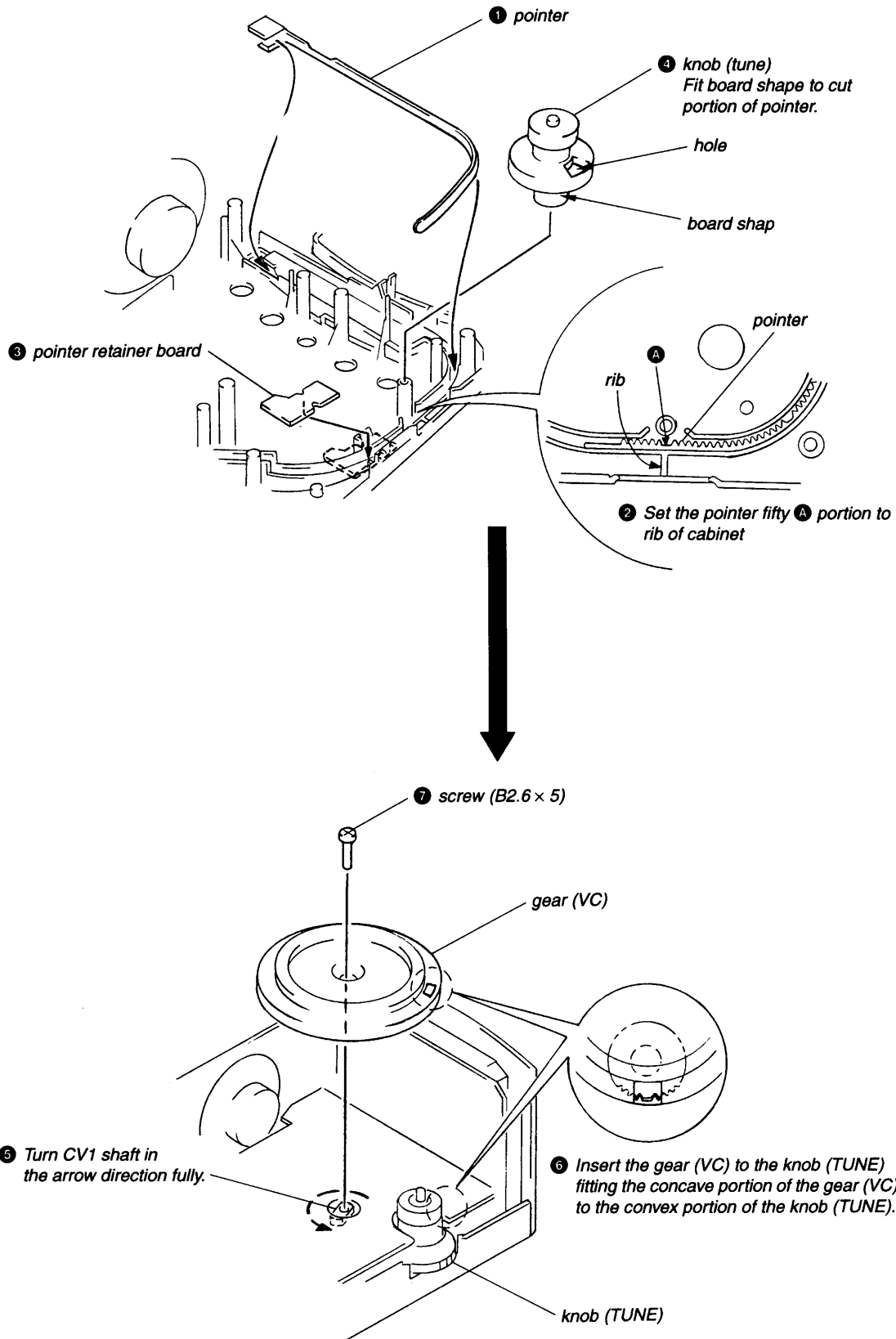
POWER CORD DRESSING

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



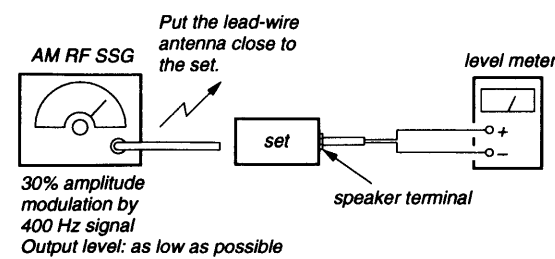
SECTION 3 DIAL POINTER SETTING

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



SECTION 4 ELECTRICAL ADJUSTMENTS

AM SECTION



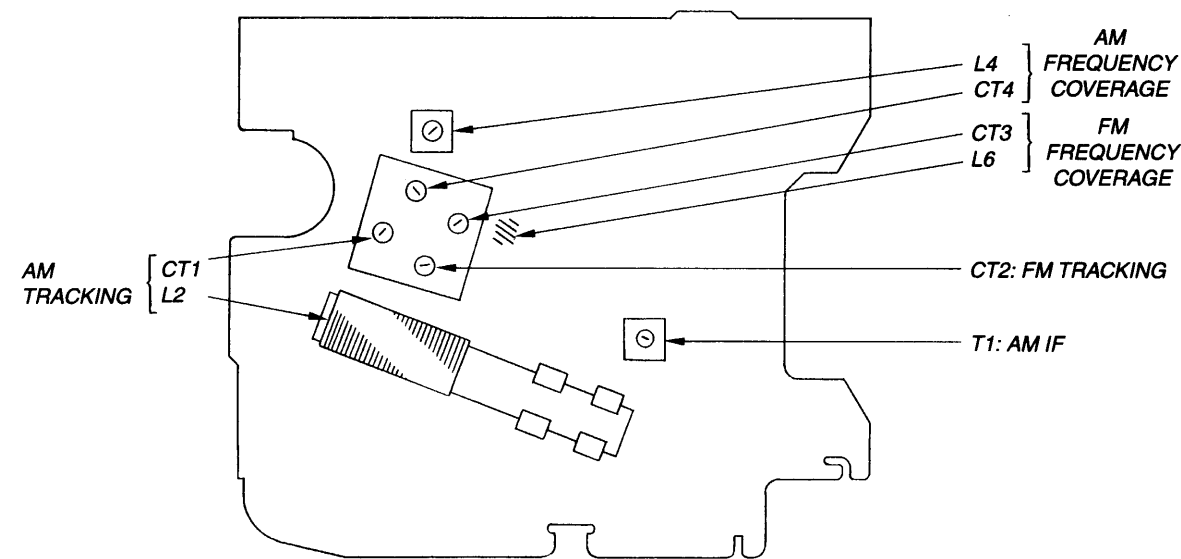
Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L4	CT4
520 kHz	1,650 kHz

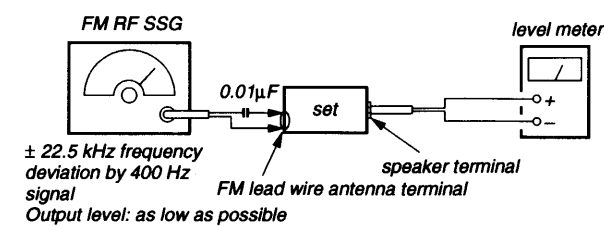
AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2	CT1
600 kHz	1,400 kHz

AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	
455 kHz	

• Adjusting Location: MAIN board (Component Side)



FM SECTION



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

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L6	CT3
86.5 MHz	109.5 MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CT2	
Frequency maximum	

SEE ADDITIONAL INFORMATION

• HOW TO CHANGE THE CERAMIC FILTERS

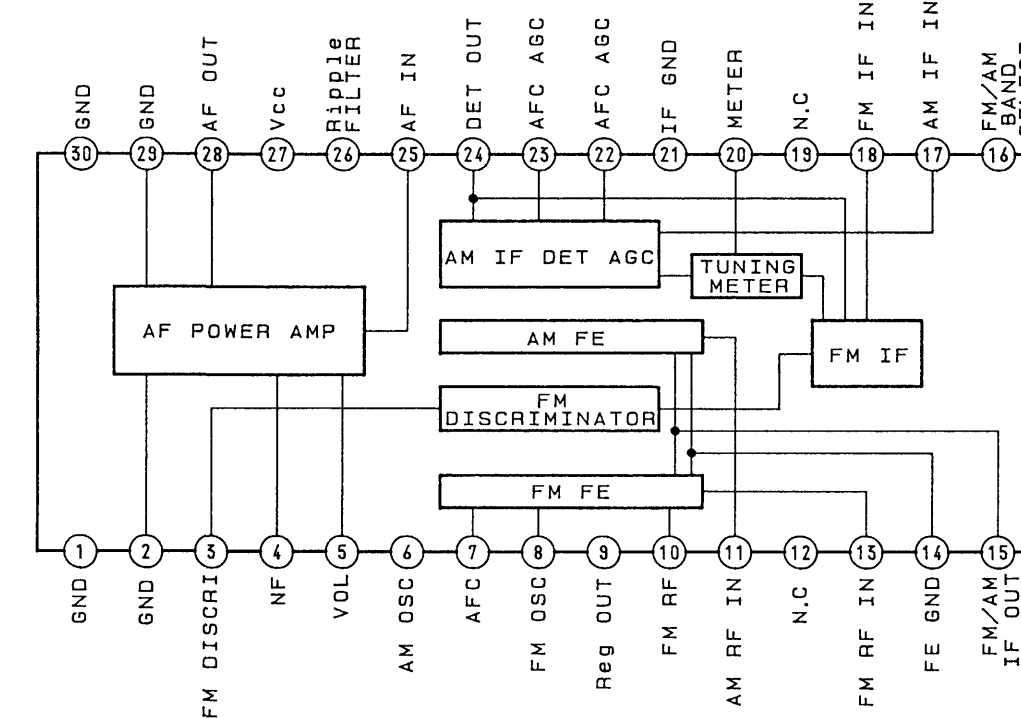
This model is used two ceramic filters of CF2, CF3. You must use same type of color marked ceramic filters in order to meet same specifications. Therefore, the ceramic filter must change two pieces together since it's supply two pieces in one package as a spare parts.

Mark	Center frequency
red	10.70MHz
blue	10.67MHz
orange	10.73MHz
black	10.64MHz
white	10.76MHz

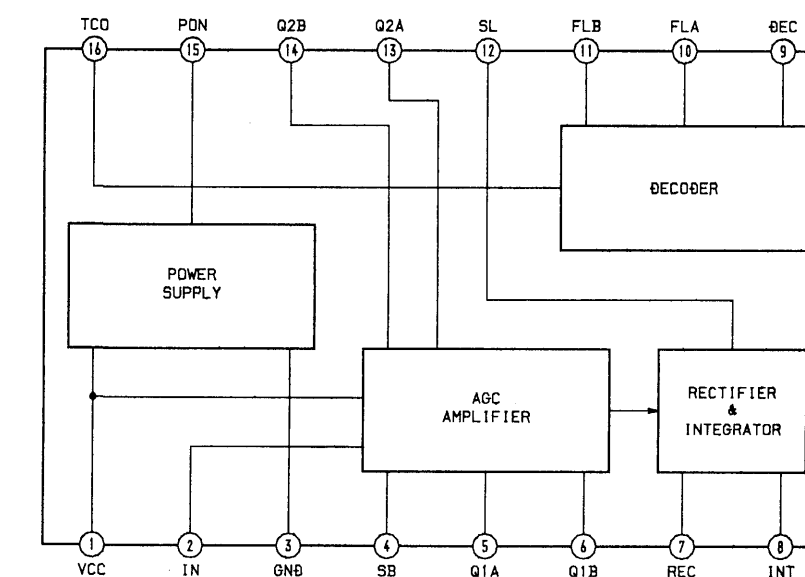
SECTION 5 DIAGRAMS

• IC Block Diagrams

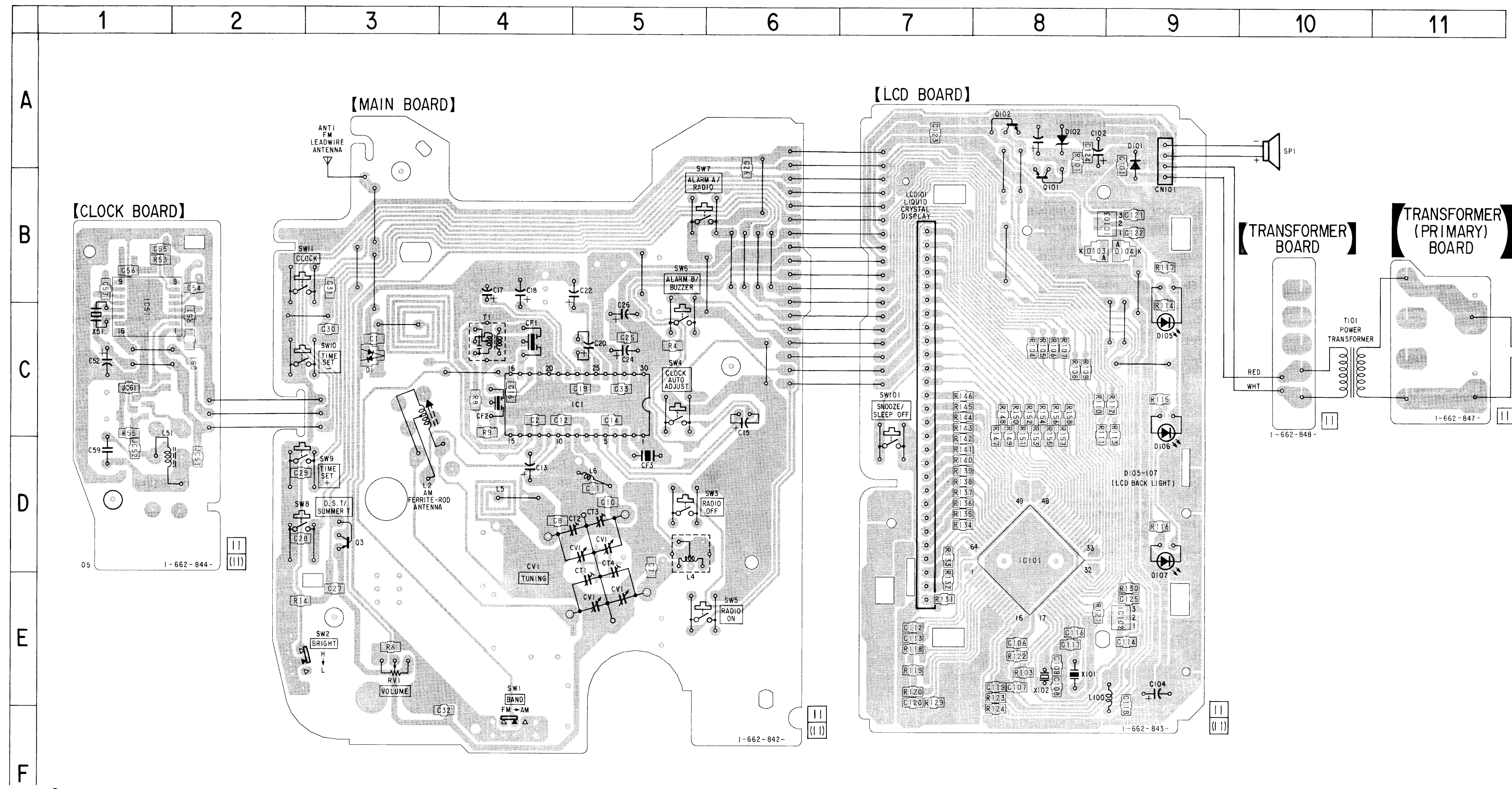
IC1 CXA1019S



IC51 U4224B



5-1. PRINTED WIRING BOARDS

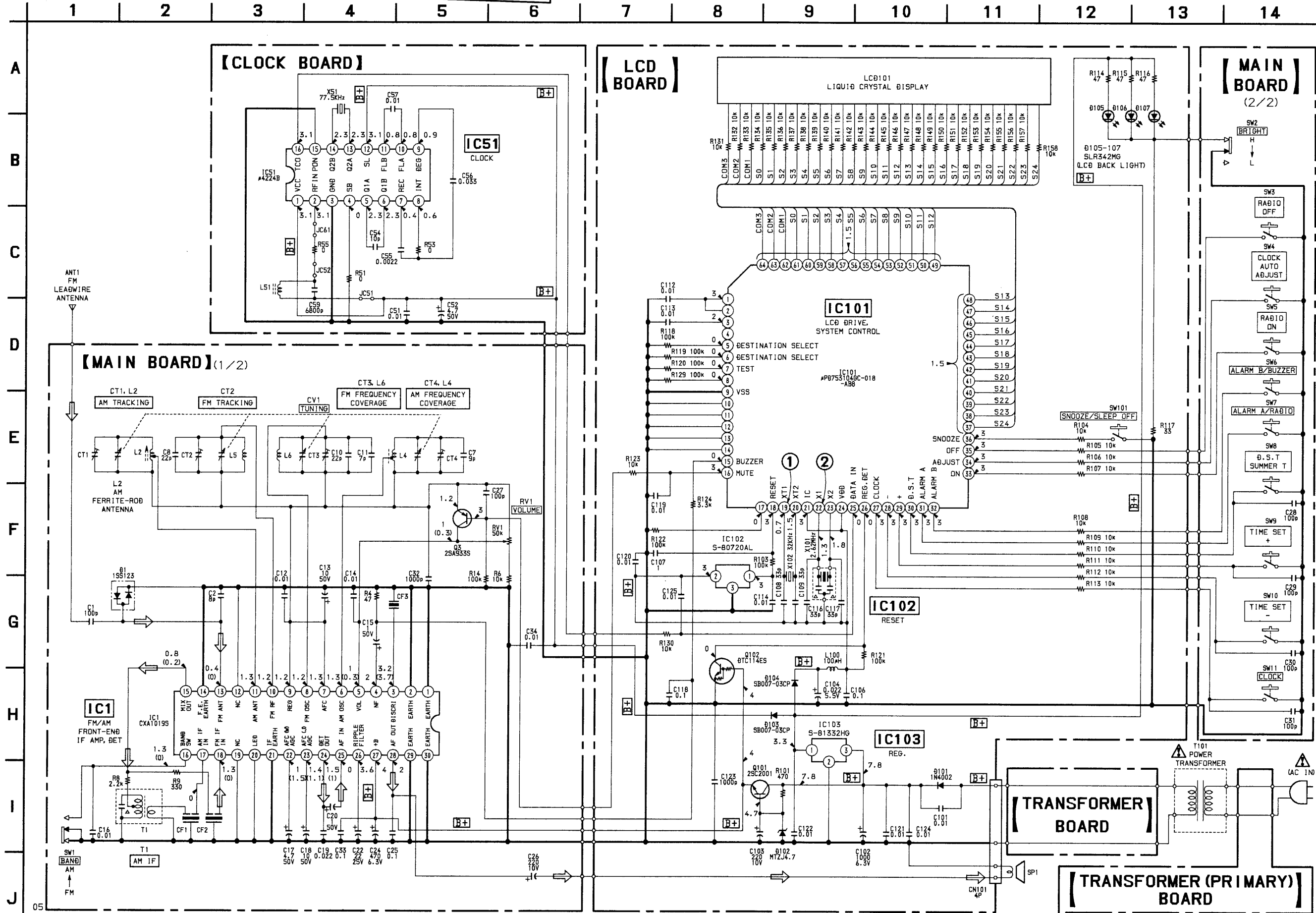


• Semiconductor Location

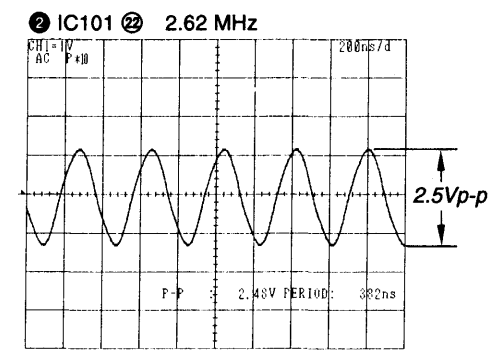
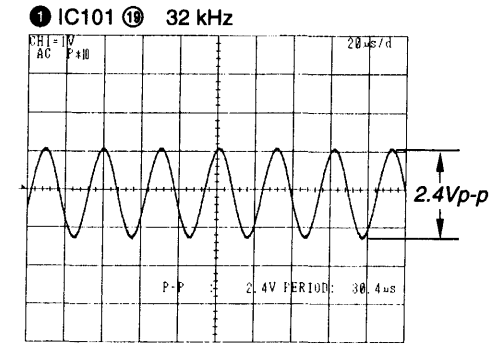
Ref. No.	Location
D1	C-3
D101	A-9
D102	A-8
D103	B-8
D104	B-9
D105	C-9
D106	D-9
D107	E-9
IC1	C-5
IC51	C-1
IC101	D-8
IC102	E-9
IC103	B-9
Q3	D-3
Q101	B-8
Q102	A-8

Note:
 • — : parts extracted from the component side.
 • — : parts extracted from the conductor side.
 • Δ : internal component.

SEE ADDITIONAL INFORMATION



• Waveforms



- Note:**
- All capacitors are in μF unless otherwise noted. pF: μpF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}$ W or less unless otherwise specified.
 - Δ : internal component.
 - \square : panel designation.

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

- B+ : B+ Line.
- \square : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark : FM
- () : AM
- Voltages are taken with a VOM (Input impedance 10 M Ω). Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \Rightarrow : FM

• IC Pin Function Description
LCD BOARD IC101 μPD753104GC-018-AB8

Pin No.	Pin Name	I/O	Function
1	-	-	Not used
2	-	-	
3	-	-	
4	-	-	
5	DESTINATION SELECT	I	Destination select terminal
6	DESTINATION SELECT	I	
7	TEST	I	Test terminal
8	-	-	Not used
9	VSS	-	Ground
10	-	-	Not used (Connected to ground)
11	-	-	
12	-	-	
13	-	-	
14	-	-	
15	BUZZER	O	Buzzer output
16	MUTE	O	Mute output "L": Mute
17	-	-	Not used
18	RESET	I	Reset input
19	XT1	I	Connected to oscillator (32.768kHz)
20	XT2	-	
21	IC	-	fixed at "H"
22	X1	I	Connected to oscillator (2.62 MHz)
23	X2	I	
24	VDD	-	Power supply (+4 V)
25	DATA IN	I	Data input
26	REG. DET	I	Power failure detection "H": Power failure
27	CLOCK	I	Key (CLOCK) input "L": On
28	-	I	Key (-) input "L": On
29	+	I	Key (+) input "L": On
30	D.S.T	I	Key (D.S.T) input "L": On
31	ALARM A	I	Key (ALARM A) input "L": On
32	ALARM B	I	Key (ALARM B) input "L": On
33	ON	I	Key (ON) input "L": On
34	ADJUST	I	Key (ADJUST) input "L": On
35	OFF	I	Key (OFF) input "L": On

Pin No.	Pin Name	I/O	Function
36	SNOOZE	I	Key (SNOOZE) input "L": On
37	S24	O	LCD segment output
38	S23	O	
39	S22	O	
40	S21	O	
41	S20	O	
42	S19	O	
43	S18	O	
44	S17	O	
45	S16	O	
46	S15	O	
47	S14	O	
48	S13	O	
49	S12	O	
50	S11	O	
51	S10	O	
52	S9	O	
53	S8	O	
54	S7	O	
55	S6	O	
56	S5	O	
57	S4	O	
58	S3	O	
59	S2	O	
60	S1	O	
61	S0	O	
62	COM1	O	LCD common output
63	COM2	O	
64	COM3	O	

SECTION 6
EXPLODED VIEWS

SEE ADDITIONAL INFORMATION

NOTE:

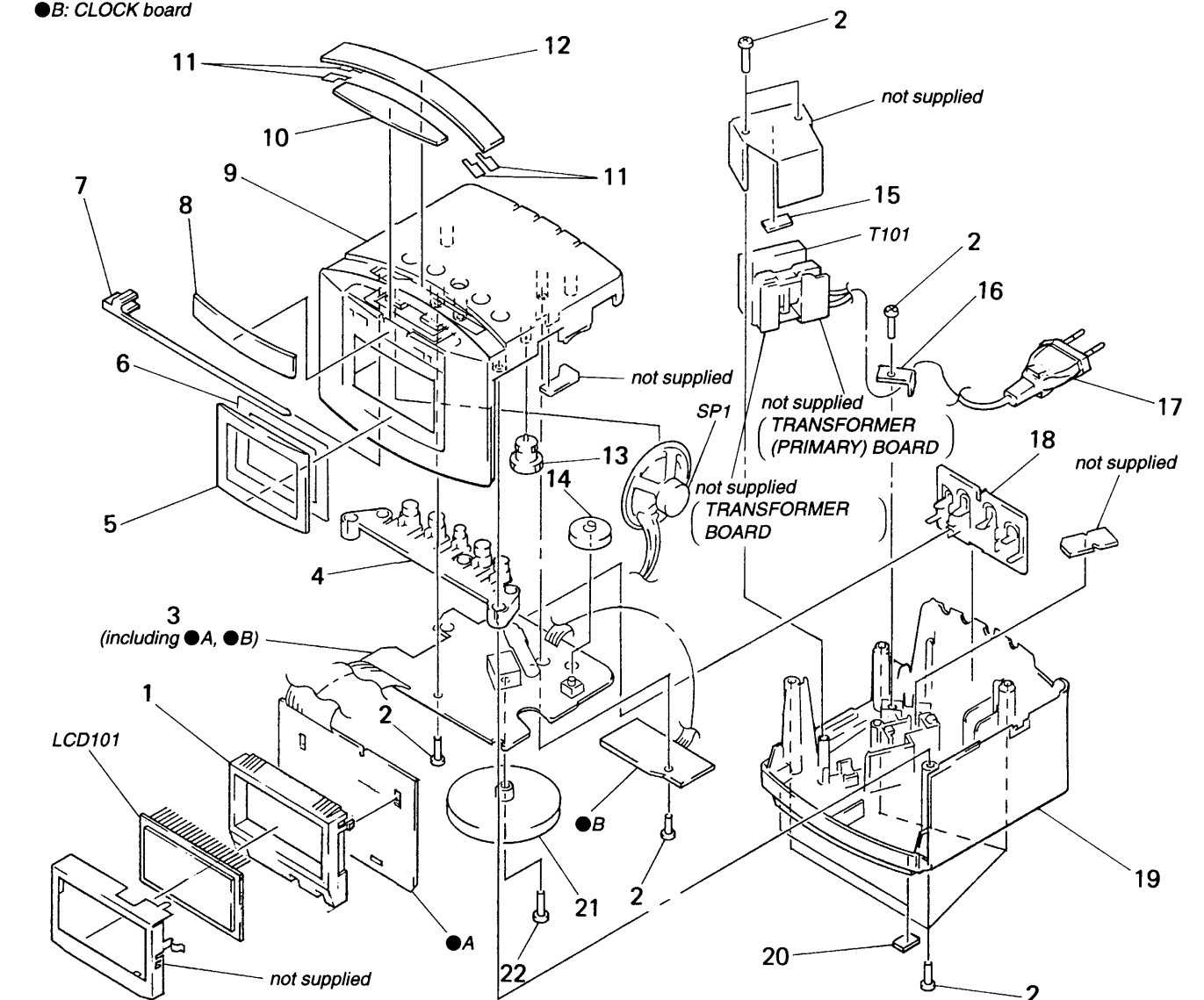
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts Example: KNOB, BALANCE (WHITE) ... (RED)

Parts Color Cabinet's Color

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

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

- A: LCD board
- B: CLOCK board



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
* 1	3-937-950-01	HOLDER (LCD)		14	3-368-840-41	KNOB (VOL)	
2	7-685-649-79	SCREW +P 3X14 TYPE2 NON-SLIT		15	9-911-840-XX	CUSHION	
* 3	A-3662-600-A	MAIN BOARD, COMPLETE		* 16	3-884-408-00	STOPPER, CORD	
4	3-937-948-01	BUTTON (MAIN)		Δ17	1-555-795-00	CORD, POWER	
5	3-937-951-01	PLATE, TRANSPARENT		18	3-937-949-01	BUTTON (CLOCK)	
* 6	3-937-943-01	SHEET, ADHESIVE		19	3-937-947-01	CABINET (LOWER)	
7	3-937-955-01	POINTER		20	3-368-852-01	FOOT	
8	3-937-957-01	PANEL, FRONT		21	3-937-954-01	GEAR (VC)	
9	3-937-946-01	CABINET (UPPER)		22	3-364-941-11	SCREW (+B) (2.6X5), NYLOK	
10	3-937-956-01	BUTTON (SNOOZE/SLEEP OFF)		LCD101	1-801-471-11	DISPLAY PANEL, LIQUID CRYSTAL	
* 11	3-007-061-01	SHEET (DIAL SCALE), ADHESIVE		SP1	1-504-748-21	SPEAKER (6.6CM)	
12	3-937-952-01	SCALE, DIAL		ΔT101	1-450-923-11	TRANSFORMER, POWER	
13	3-937-953-01	KNOB (TUNE)					

SEE ADDITIONAL INFORMATION

SECTION 7 ELECTRICAL PARTS LIST

CLOCK

LCD

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
All resistors are in ohms.
METAL: Metal-film resistor.
METAL OXIDE: Metal oxide-film resistor.
F: nonflammable

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

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

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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CLOCK BOARD (INCLUDED MAIN BOARD) *****				LCD BOARD (INCLUDED MAIN BOARD) *****			
< CAPACITOR >				< CAPACITOR >			
C51	1-163-031-11	CERAMIC CHIP	0.01uF 50V	C101	1-163-031-11	CERAMIC CHIP	0.01uF 50V
C52	1-126-963-11	ELECT	4.7uF 20% 50V	C102	1-126-916-11	ELECT	1000uF 20% 6.3V
C54	1-163-227-11	CERAMIC CHIP	10PF 0.5PF 50V	C103	1-126-923-11	ELECT	220uF 20% 10V
C55	1-164-161-11	CERAMIC CHIP	0.0022uF 10% 50V	C104	1-125-691-11	CAPACITOR	0.022F 0 0
C56	1-163-989-11	CERAMIC CHIP	0.033uF 10% 25V	C106	1-164-004-11	CERAMIC CHIP	0.1uF 10% 25V
C57	1-163-031-11	CERAMIC CHIP	0.01uF 50V	C107	1-164-346-11	CERAMIC CHIP	1uF 16V
C59	1-136-291-11	FILM	0.0068uF 5% 100V	C108	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
< IC >				< CAPACITOR >			
IC51	8-759-435-84	IC	U4224B-CFLG3	C109	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
< CHIP CONDUCTOR >				< CAPACITOR >			
JC51	1-216-295-00	CONDUCTOR, CHIP	(2012)	C112	1-164-232-11	CERAMIC CHIP	0.01uF 50V
JC52	1-216-295-00	CONDUCTOR, CHIP	(2012)	C113	1-164-232-11	CERAMIC CHIP	0.01uF 50V
JC61	1-216-295-00	CONDUCTOR, CHIP	(2012)	< CAPACITOR >			
< COIL >				< CAPACITOR >			
L51	1-402-405-11	ANTENNA, FERRITE-ROD (MW)		C114	1-163-031-11	CERAMIC CHIP	0.01uF 50V
< RESISTOR >				< CAPACITOR >			
R51	1-216-295-00	CONDUCTOR, CHIP	(2012)	C116	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
R53	1-216-295-00	CONDUCTOR, CHIP	(2012)	C117	1-163-239-11	CERAMIC CHIP	33PF 5% 50V
R55	1-216-295-00	CONDUCTOR, CHIP	(2012)	C118	1-163-038-00	CERAMIC CHIP	0.1uF 25V
< VIBRATOR >				< CAPACITOR >			
X51	1-767-219-11	VIBRATOR, CRYSTAL (77.5kHz)		C119	1-163-031-11	CERAMIC CHIP	0.01uF 50V
*****				< CONNECTOR >			
				CN101	1-580-183-11	SOCKET, CONNECTOR 4P	
				< DIODE >			
				D101	8-719-052-88	DIODE	1N4002
				D102	8-719-921-37	DIODE	MTZJ-4.7
				D103	8-719-941-04	DIODE	SB007-03CP
				D104	8-719-941-04	DIODE	SB007-03CP

LCD **MAIN**

Ref. No.	Part No.	Description	Remark
D105	8-719-989-83	DIODE SLR34MG3FN. P	
D106	8-719-989-83	DIODE SLR34MG3FN. P	
D107	8-719-989-83	DIODE SLR34MG3FN. P	
< IC >			
IC101	8-759-445-20	IC uPD753104GC-018-AB8	
IC102	8-759-281-70	IC S-80720AL-AX-T1	
IC103	8-759-085-76	IC S-81332HG-KC-T1	
< LIQUID CRYSTAL DISPLAY >			
LCD101	1-801-471-11	DISPLAY PANEL, LIQUID CRYSTAL	
< TRANSISTOR >			
Q101	8-729-011-92	TRANSISTOR 2SC2001TP-K1K2	
Q102	8-729-900-80	TRANSISTOR DTC114ES	
< RESISTOR >			
R101	1-216-041-00	METAL CHIP 470 5% 1/10W	
R103	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R104	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R105	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R106	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R107	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R108	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R109	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R110	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R111	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R112	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R113	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R114	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R115	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R116	1-216-017-00	METAL GLAZE 47 5% 1/10W	
R117	1-216-013-00	METAL GLAZE 33 5% 1/10W	
R118	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R119	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R120	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R121	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R122	1-216-097-00	METAL GLAZE 100K 5% 1/10W	
R123	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R124	1-216-061-00	METAL CHIP 3.3K 5% 1/10W	
R130	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R131	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R132	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R133	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R134	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R135	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R136	1-216-073-00	METAL CHIP 10K 5% 1/10W	

Ref. No.	Part No.	Description	Remark
R137	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R138	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R139	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R140	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R141	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R142	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R143	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R144	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R145	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R146	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R147	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R148	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R149	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R150	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R151	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R152	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R153	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R154	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R155	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R156	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R157	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R158	1-216-073-00	METAL CHIP 10K 5% 1/10W	
< SWITCH >			
SW101	1-554-303-21	SWITCH, TACTILE (SNOOZE/SLEEP OFF)	
< VIBRATOR >			
X101	1-579-825-11	VIBRATOR, CRYSTAL (2.62MHz)	
X102	1-567-098-41	VIBRATOR, CRYSTAL (32kHz)	

*	A-3662-600-A MAIN BOARD, COMPLETE (INCLUDING CLOCK AND LCD BOARDS)		

	3-368-840-41	KNOB (VOL)	
*	3-937-950-01	HOLDER (LCD)	
< CAPACITOR >			
C1	1-163-251-11	CERAMIC CHIP 100PF 5% 50V	
C2	1-163-091-00	CERAMIC CHIP 8PF 50V	
C7	1-163-092-00	CERAMIC CHIP 9PF 0.25PF 50V	
C8	1-163-235-11	CERAMIC CHIP 22PF 5% 50V	
C10	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C11	1-163-700-11	CERAMIC CHIP 7PF 0.25PF 50V	
C12	1-164-232-11	CERAMIC CHIP 0.01uF 50V	
C13	1-126-964-11	ELECT 10uF 20% 50V	
C14	1-163-031-11	CERAMIC CHIP 0.01uF 50V	
C15	1-124-903-11	ELECT 1uF 20% 50V	

Ref. No.	Part No.	Description	Remark
C16	1-163-031-11	CERAMIC CHIP	0. 01uF 50V
C17	1-126-963-11	ELECT	4. 7uF 20% 50V
C18	1-126-964-11	ELECT	10uF 20% 50V
C19	1-163-037-11	CERAMIC CHIP	0. 022uF 10% 25V
C20	1-124-903-11	ELECT	1uF 20% 50V
C22	1-128-551-11	ELECT	22uF 20% 25V
C24	1-126-935-11	ELECT	470uF 20% 6. 3V
C25	1-163-038-00	CERAMIC CHIP	0. 1uF 25V
C26	1-126-923-11	ELECT	220uF 20% 10V
C27	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C28	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C29	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C30	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C31	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C32	1-163-251-11	CERAMIC CHIP	100PF 5% 50V
C33	1-163-038-00	CERAMIC CHIP	0. 1uF 25V
C34	1-163-031-11	CERAMIC CHIP	0. 01uF 50V
< FILTER >			
CF1	1-577-072-11	FILTER, CERAMIC	
CF2	1-579-632-51	FILTER, CERAMIC	
CF3	1-579-632-51	FILTER, CERAMIC	
< VARIABLE CAPACITOR >			
CV1-4	1-141-529-11	CAP, VAR (TUNING)	
CT1-4	1-141-529-11	CAP, VAR	
< DIODE >			
D1	8-719-800-76	DIODE 1SS226	
< IC >			
IC1	8-752-055-05	IC CXA1019S	
< COIL >			
L2	1-402-405-11	ANTENNA, FERRITE-ROD (MW)	
L4	1-406-028-00	COIL, OSC (MW)	
L6	1-428-222-11	COIL, AIR-CORE	
< TRANSISTOR >			
Q3	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< RESISTOR >			
R4	1-216-017-00	METAL GLAZE	47 5% 1/10W
R6	1-216-073-00	METAL CHIP	10K 5% 1/10W
R8	1-216-057-00	METAL CHIP	2. 2K 5% 1/10W
R9	1-216-037-00	METAL CHIP	330 5% 1/10W
R14	1-216-097-00	METAL GLAZE	100K 5% 1/10W

Ref. No.	Part No.	Description	Remark
< VARIABLE RESISTOR >			
RV1	1-241-542-11	RES, VAR, CARBON 50K (VOLUME)	
< SWITCH >			
SW1	1-571-850-81	SWITCH, SLIDE (BAND)	
SW2	1-571-850-81	SWITCH, SLIDE (BRIGHT)	
SW3	1-554-303-21	SWITCH, TACTILE (RADIO OFF)	
SW4	1-554-303-21	SWITCH, TACTILE (CLOCK AUTO ADJUST)	
SW5	1-554-303-21	SWITCH, TACTILE (RADIO ON)	
SW6	1-554-303-21	SWITCH, TACTILE (ALARM B/BUZZER)	
SW7	1-554-303-21	SWITCH, TACTILE (ALARM A/RADIO)	
SW8	1-554-303-21	SWITCH, TACTILE (D. S. T/SUMMER T)	
SW9	1-554-303-21	SWITCH, TACTILE (TIME SET +)	
SW10	1-554-303-21	SWITCH, TACTILE (TIME SET -)	
SW11	1-554-303-21	SWITCH, TACTILE (CLOCK)	
< TRANSFORMER >			
T1	1-404-790-11	TRANSFORMER, IF	

MISCELLANEOUS			

△17	1-555-795-00	CORD, POWER	
LCD101	1-801-471-11	DISPLAY PANEL, LIQUID CRYSTAL	
SP1	1-504-748-21	SPEAKER (6. 6CM)	
△T101	1-450-923-11	TRANSFORMER, POWER	

ACCESSORIES & PACKING MATERIALS			

	3-856-647-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, DUTCH, GERMAN, ITALIAN)	
*	3-937-937-01	INDIVIDUAL CARTON	

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

ICF-C50

SONY

AEP Model

SERVICE MANUAL

SUPPLEMENT-1

File this supplement with the service manual.

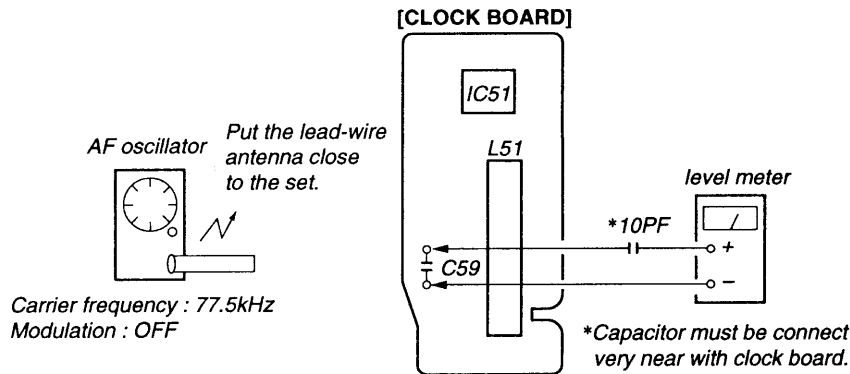
Subject:

1. Antenna Adjustment (L51)
2. Capacitor Modification

(ENG-97003)

1. ANTENNA ADJUSTMENT

Setting:



Procedure :

1. To adjust L51 coil for level meter's output to be maximum.
2. To confirm tracking condition by tracking bar.
(* If you do not have tracking bar, you can omit this process.)
3. Fix L51 by wax.
(Re-melt wax by solder iron)

2. CAPACITOR MODIFICATION

➤: Indicates changed portion.

Page	Former	New																								
11	<p>– CLOCK BOARD –</p>	<p>– CLOCK BOARD –</p>																								
17	<table border="1"> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>C55</td> <td>1-164-161-11</td> <td>CERAMIC CHIP 0.0022µF 10% 50V</td> <td></td> </tr> <tr> <td>C56</td> <td>1-163-989-11</td> <td>CERAMIC CHIP 0.033µF 10% 25V</td> <td></td> </tr> </tbody> </table>	Ref. No.	Part No.	Description	Remark	C55	1-164-161-11	CERAMIC CHIP 0.0022µF 10% 50V		C56	1-163-989-11	CERAMIC CHIP 0.033µF 10% 25V		<table border="1"> <thead> <tr> <th>Ref. No.</th> <th>Part No.</th> <th>Description</th> <th>Remark</th> </tr> </thead> <tbody> <tr> <td>C55</td> <td>1-163-017-00</td> <td>CERAMIC CHIP 0.0047µF 10% 50V</td> <td>➤</td> </tr> <tr> <td>C56</td> <td>1-163-809-11</td> <td>CERAMIC CHIP 0.047µF 10% 25V</td> <td>➤</td> </tr> </tbody> </table>	Ref. No.	Part No.	Description	Remark	C55	1-163-017-00	CERAMIC CHIP 0.0047µF 10% 50V	➤	C56	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	➤
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ICF-C50

SONY.

AEP Model

SERVICE MANUAL



















SUPPLEMENT-2

File this supplement with the service manual.

Subject: Black and White Type Modification

(ENG-97017)

 : Indicates changed portion.

Page	Former				New			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
16	4	3-937-948-01	BUTTON (MAIN)		4	3-937-948-01	BUTTON (MAIN) (SILVER)	
					4	3-937-948-11	BUTTON (MAIN) (WHITE)	
					4	3-937-948-21	BUTTON (MAIN) (BLACK)	
	9	3-937-946-01	CABINET (UPPER)		9	3-937-946-01	CABINET (UPPER) (SILVER)	
					9	3-937-946-21	CABINET (UPPER) (WHITE)	
					9	3-937-946-31	CABINET (UPPER) (BLACK)	
	13	3-937-953-01	KNOB (TUNE)		13	3-937-953-01	KNOB (TUNE) (SILVER)	
					13	3-937-953-11	KNOB (TUNE) (BLACK)	
					13	3-937-953-21	KNOB (TUNE) (WHITE)	
					14	3-368-840-21	KNOB (VOL) (BLACK)	
	14	3-368-840-41	KNOB (VOL)		14	3-368-840-41	KNOB (VOL) (SILVER)	
					14	3-368-840-51	KNOB (VOL) (WHITE)	
	18	3-937-949-01	BUTTON (CLOCK)		18	3-937-949-01	BUTTON (CLOCK) (SILVER)	
					18	3-937-949-11	BUTTON (CLOCK) (BLACK)	
					18	3-937-949-21	BUTTON (CLOCK) (WHITE)	
	19	3-937-947-01	CABINET (LOWER)		19	3-937-947-01	CABINET (LOWER) (SILVER)	
					19	3-937-947-31	CABINET (LOWER) (WHITE)	
					19	3-937-947-41	CABINET (LOWER) (BLACK)	
				23	3-018-061-01	SHEET, BLIND (WHITE TYPE ONLY)	