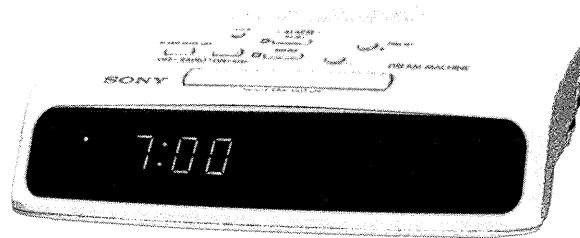


ICF-C365

SERVICE MANUAL

Canadian Model



DREAM MACHINE

SPECIFICATIONS

Time display:

12-hour system

Frequency range:

Band

FM 87.6 – 108 MHz

AM 530 – 1,610 kHz

Intermediate frequency:

FM: 10.7 MHz, AM: 455 kHz

Speaker: Approx. 6.6 cm (2 5/8 inches) dia.

Power output: 90 mW (at 10% harmonic distortion)

Power requirements:

120 V AC, 60 Hz

For power backup: 9 V DC, one 6F22 battery

Battery life: Approx. 35 hours using the Sony

S-006P(U) battery

Dimensions: Approx. 210.5 × 60 × 172 mm

(w/h/d) (8 3/8 × 2 3/8 × 6 7/8 inches) incl.

projecting parts and controls

Mass: Approx. 650 g (1lb 7 oz) not incl. battery

Design and specifications are subject to change without notice.

FM/AM CLOCK RADIO
SONY®

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SAFETY-RELATED COMPONENT WARNING !!

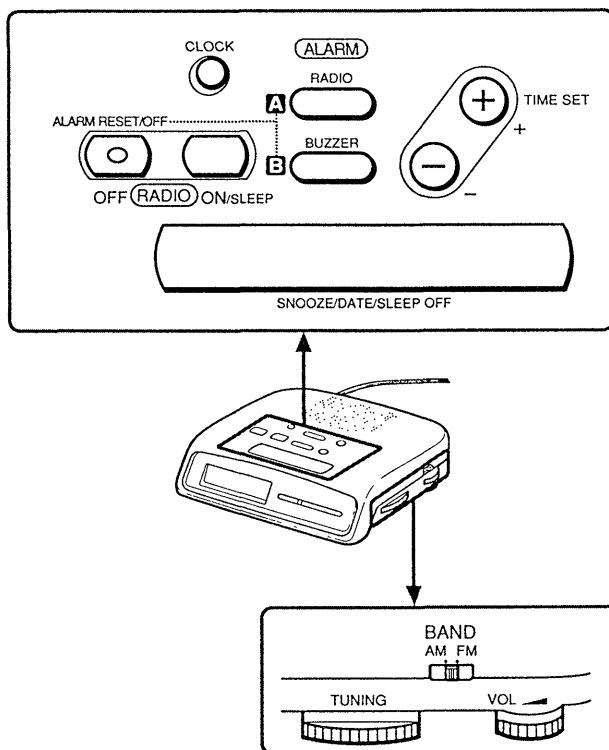
COMPONENTS IDENTIFIED BY SHADING AND MARK Δ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÉS PAR UNE TRAME ET PAR UNE MAPQUE Δ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIÈCES CONT D'UNE IMPORTANCE CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÈCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.



Installing the Battery

To keep good time, your Dream Machine needs one 6F22 battery (not supplied), in addition to house current. The battery keeps the clock operating in the event of a power interruption. Before setting the time on your Dream Machine, open the lid at the bottom of the unit, install the battery with correct polarity and then close the lid.

- After a power interruption, the displayed time may not be always correct (It may gain or lose about 10 minutes per hour).

Knowing When To Replace the Battery

To check battery power, unplug the power cord from the wall outlet and plug it in again after a few minutes. If the displayed time is incorrect, replace the battery with a new one.

Setting the Clock and the Date

Setting the Clock

1. Plug in the unit.
The display will flash "AM 12:00".
2. While holding down **CLOCK**, press either + or – under **TIME SET** till the correct time appears in the display. When you release **CLOCK**, the clock begins to operate.

- The clock system varies depending on the model you own.
12-hour system: "AM 12:00"= midnight
- To set the current time rapidly, keep pressing the + or – button while holding down **CLOCK**.

Setting the Date

1. While holding down **SNOOZE/DATE/SLEEP OFF**, press either + or – under **TIME SET** till the correct date appears in the display. Then, release **SNOOZE/DATE/SLEEP OFF**.
- To display the date, press **SNOOZE/DATE/SLEEP OFF**. The display returns to the current time when you release **SNOOZE/DATE/SLEEP OFF**.

Operating the Radio

1. Press **RADIO ON/SLEEP** to turn on the radio and adjust **VOL** (volume).
 2. Select **FM**, **AM** and tune in a station using the **TUNING** dial.
- To turn off the radio, press **RADIO OFF/ALARM RESET/OFF**.
 - To improve radio reception
FM: The FM antenna is encased in the AC power cord.
AM: Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built into the unit.

Setting the Alarm

To set the radio alarm, first tune in a station and adjust the volume.

1. While holding down **ALARM A RADIO** (for the radio) or **B BUZZER** (for the buzzer), press either + or – under **TIME SET** till the desired time appears in the display. When you release **ALARM A** or **B**, the **ALARM A** or **B** indicator stops flashing and lights up, and the current time appears in the display.
The alarm will come on at the preset time and automatically turn itself off after 59 minutes.

- If you set **ALARM A** and **ALARM B** at the same desired time, only **ALARM A** will work.
- To shut off the alarm, press **RADIO OFF/ALARM RESET/OFF**.
The alarm will come on at the preset time the next day.
- To cancel either alarm, while holding down **ALARM A** or **ALARM B**, press **RADIO OFF/ALARM RESET/OFF**.
- To doze for a few more minutes, press **SNOOZE/DATE/SLEEP OFF**.
The alarm will shut off, but will come on again after about 6 minutes. You can repeat this process as many times as you like.
- To adjust the radio alarm volume, turn **VOL**.
- To check the preset time, press **ALARM A** or **B**.

Setting the Sleep Timer

Enjoy falling asleep to the radio using the built-in sleep timer that shuts off the radio automatically at a preset time.

1. Press **RADIO ON/SLEEP**.
The radio turns on. It will go off after the preset time has passed. You can set the sleep timer of 90, 60, 45, 30 or 15 minutes.
Every push changes the display as follows.

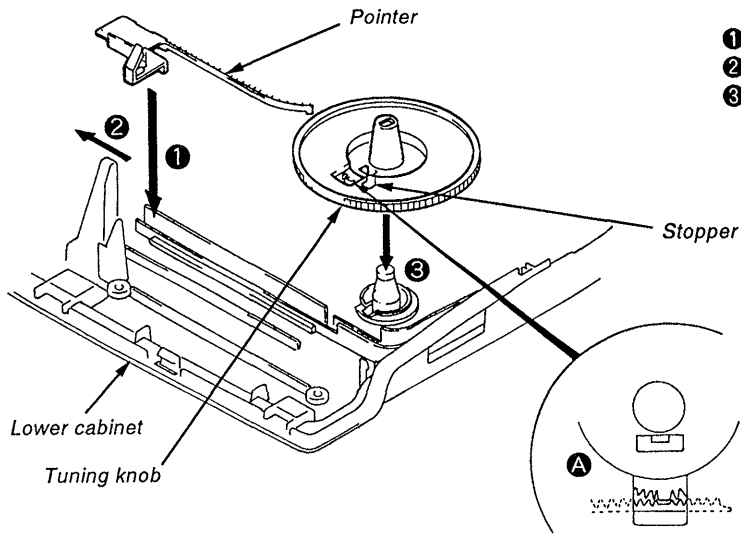
Current time → On → 90 → 60
 ↑ 15 ← 30 ← 45 ↓

The radio will play for the time you set, then shut off.

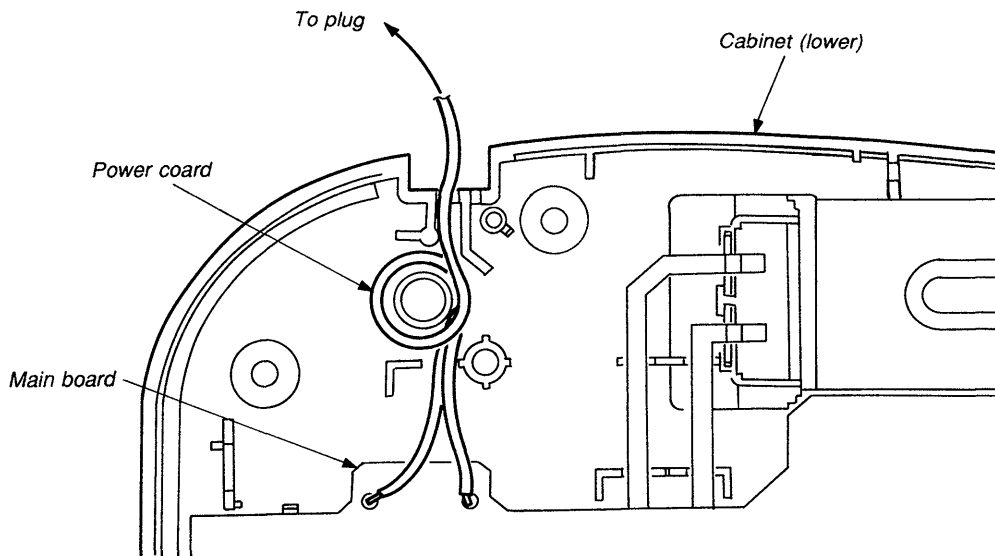
- To turn off the radio before the preset time, press **SNOOZE/DATE/SLEEP OFF**.

SECTION 2 DISASSEMBLY

2-1. DIAL POINTER SETTING



2-2. DRESSING OF POWER CORD, FM WIRE ANTENNA



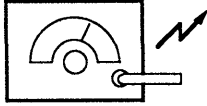
SECTION 3 ELECTRICAL ADJUSTMENTS

AM Section

Setting :

BAND switch : AM
Volume (RV1) : MIN

AM RF signal generator



Put the lead-wire antenna close to the set.

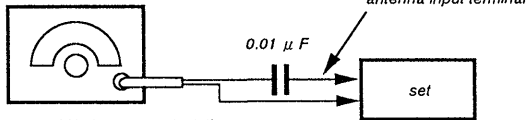
30% amplitude modulation by 400Hz signal.
Output level : as low as possible

FM Section

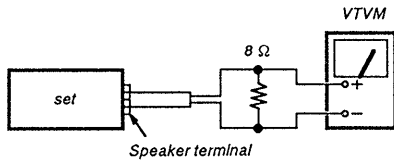
Setting :

BAND switch : FM
Volume (RV1) : MIN

FM RF signal generator



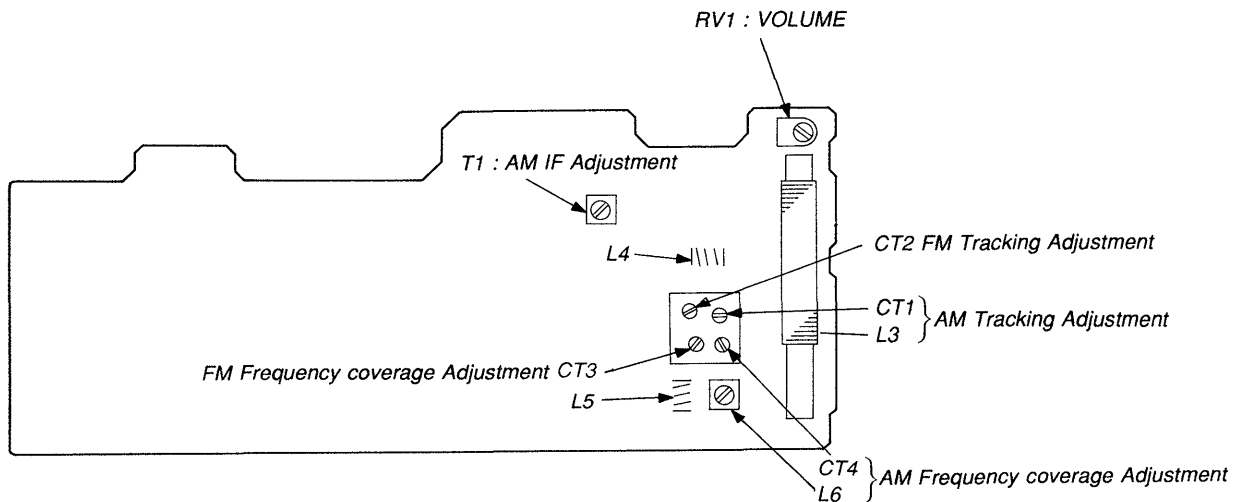
± 22.5kHz frequency deviation by 400Hz signal.
Output level : as low as possible



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

Adjustment Location :

[MAIN BOARD] – Component side –



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

AM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L6	520kHz
CT4	1,650kHz

AM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L3	680kHz
CT1	1,320kHz

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L5	86.5MHz
CT3	109.5MHz

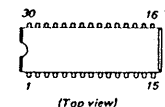
FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on VTVM.	
L4	86.5MHz
CT2	109.5MHz

SECTION 4
DIAGRAMS

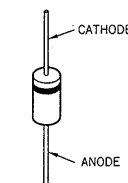
4-1. PRINTED WIRING BOARD

● Semiconductor Lead Layouts

CXA1019S
LC85631



10E2



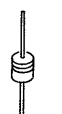
2SC2001-LK



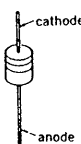
2SA1175-HFE



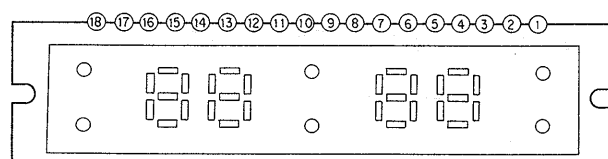
1SS133



MTZJ-5.1A
1SS119



SL-2994-54TB

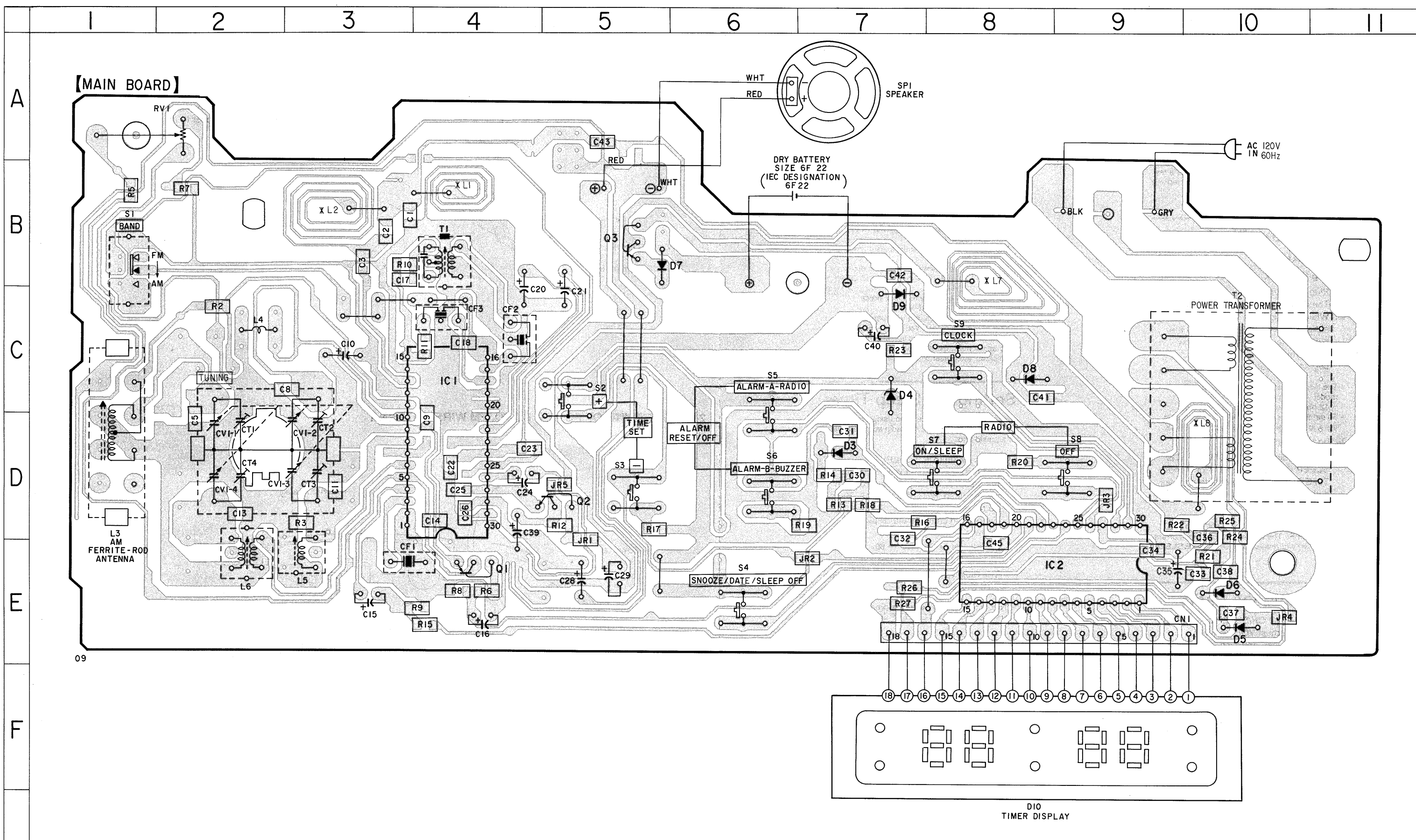


● SEMICONDUCTOR LOCATION

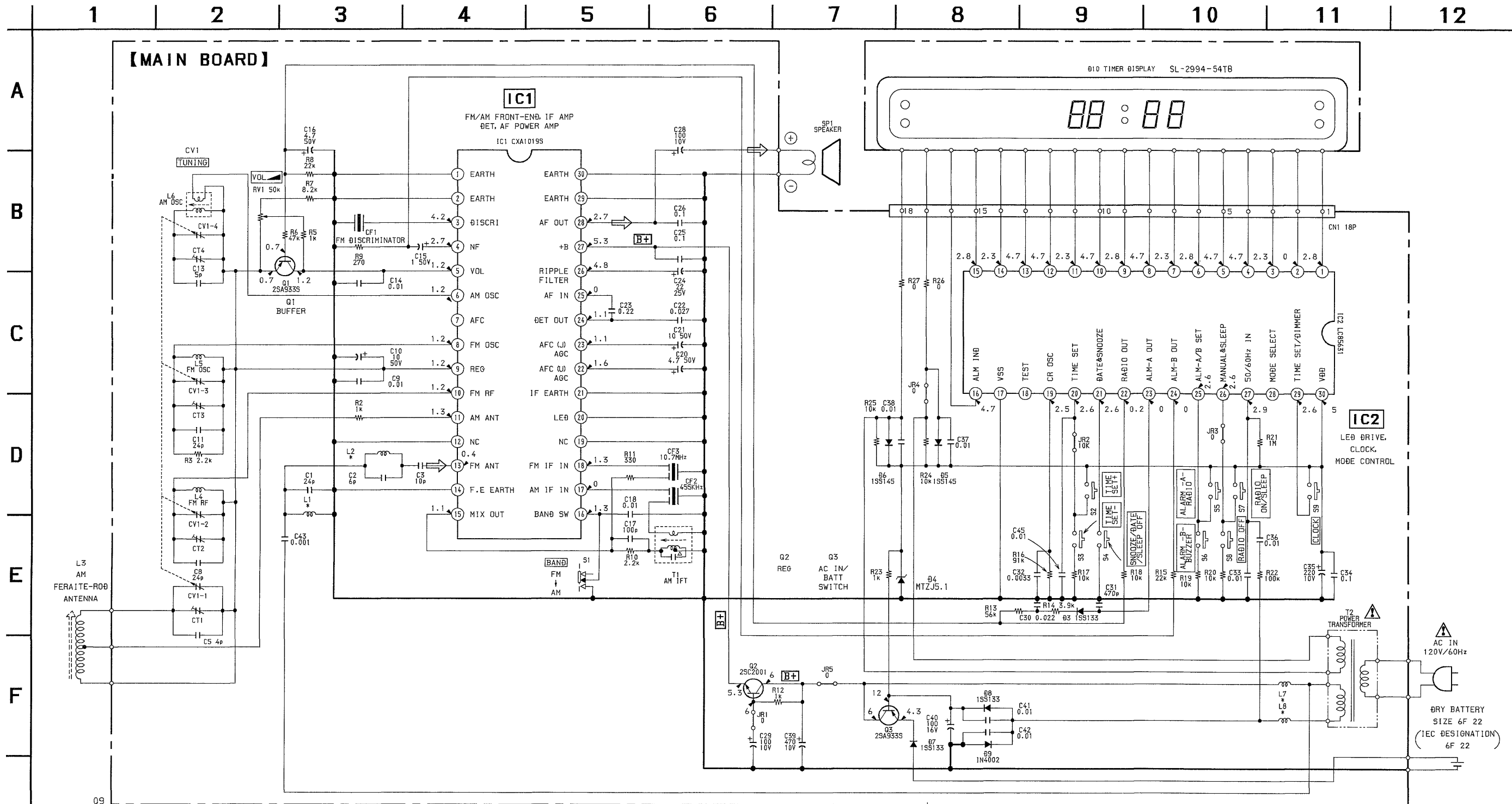
Ref. No.	Location
D3	D-7
D4	C-7
D5	E-10
D6	E-10
D7	B-5
D8	C-8
D9	C-7
D10	F-7
IC1	C-4
IC2	E-9
Q1	E-4
Q2	D-5
Q3	B-5

NOTE :

- : parts extracted from the conductor side.
- * : Printed pattern functions as a kind of coil.
- : Pattern on the side which is seen.



4-2. SCHEMATIC DIAGRAM
• See page 11 for IC BLOCK DIAGRAM.



NOTE

- All capacitors are in μF unless otherwise noted. $\text{pF} : \mu\text{F}$ 50W or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and $1/4\text{W}$ or less unless otherwise specified.
- Δ : internal component.
- \square : panel designation.
- * : Printed pattern functions as a kind of coil.

- \square B+ : B+ Line.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions. no mark: FM
- Voltages are taken with a VOM (Input impedance $10\text{M}\Omega$). Voltage variations may be noted due to normal production tolerances.

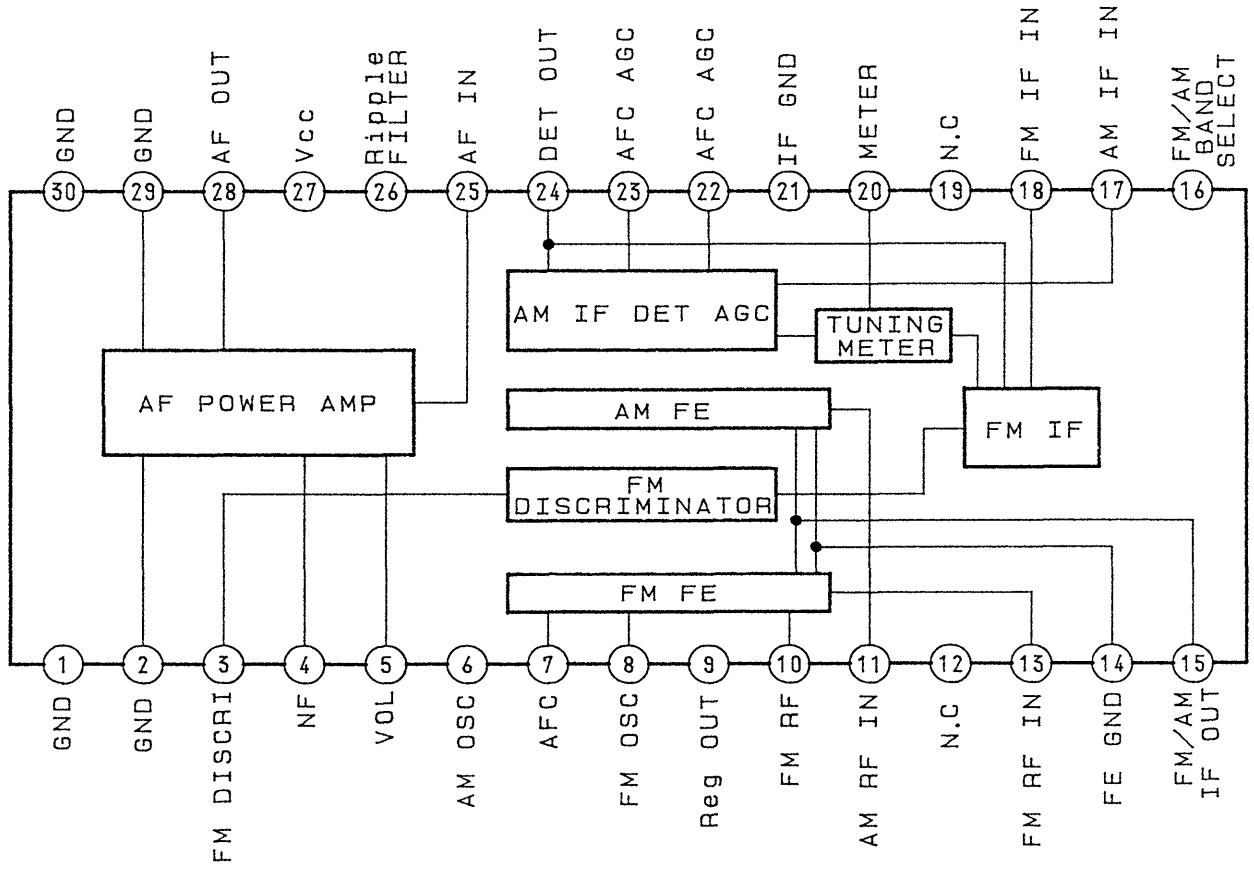
• Signal path. \Rightarrow : FM

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

Note:
Les composants identifiés par une marque Δ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

4-3. IC BLOCK DIAGRAM

IC1 CXA1019S



SECTION 5 EXPLODED VIEW

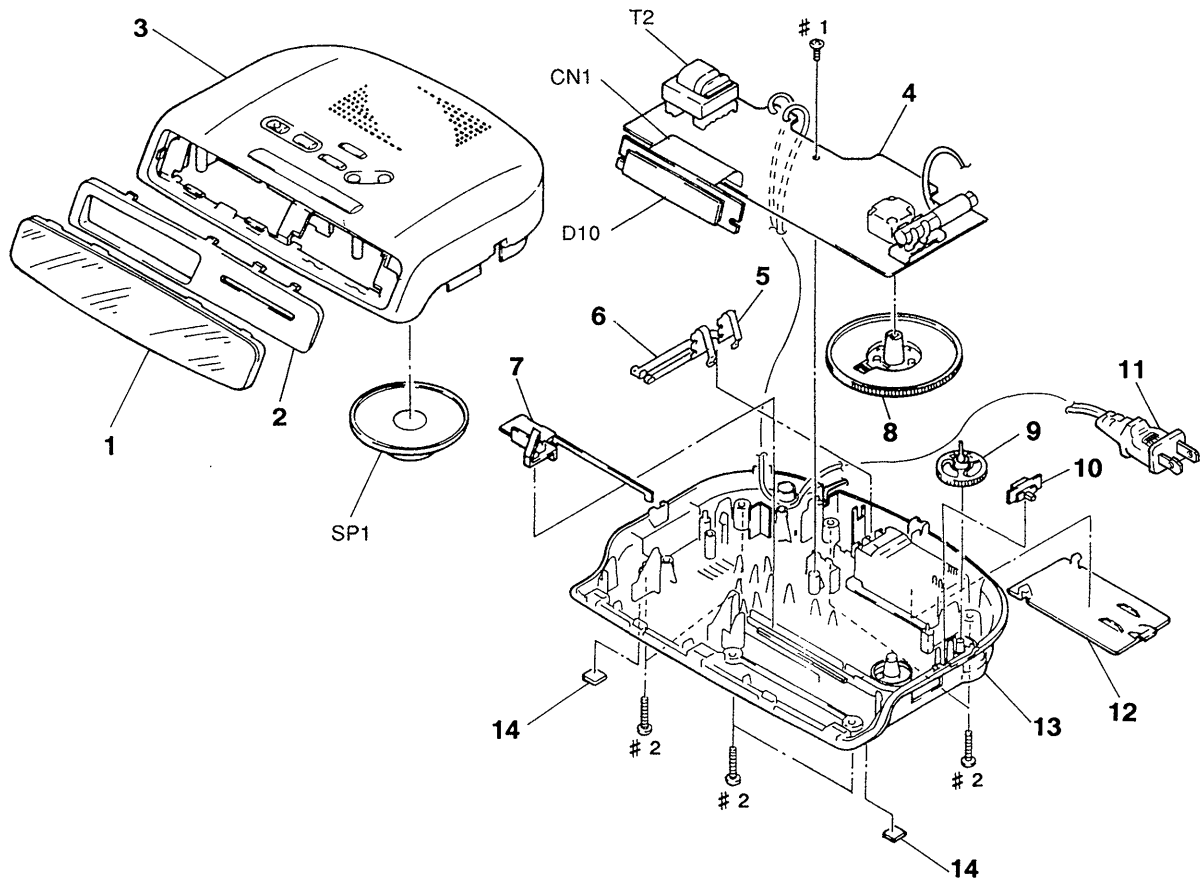
NOTE:

- -XX, -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.
- Hardware (# mark) list is given in the last of this parts list.

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

Les composants identifiés par une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.



Ref.No.	Part No.	Description
.1	3-904-444-01	WINDOW
2	3-904-445-41	PLATE, BACK
3	X-3367-061-1	CABINET (UPPER) ASSY
* 4	A-3679-542-A	MAIN BOARD, COMPLETE
5	3-369-133-01	TERMINAL (B), BATTERY
6	3-369-132-01	TERMINAL (A), BATTERY
7	3-904-446-01	POINTER
8	3-369-138-01	KNOB (T)
9	3-369-134-01	KNOB (V)
10	3-904-447-01	KNOB (BAND)

Remark	Ref.No.	Part No.	Description	Remark
		11	1-696-008-11	CORD, POWER
		12	3-369-135-01	LID, BATTERY CASE
		13	3-904-442-01	CABINET (LOWER)
		14	3-368-852-01	FOOT
		CN1	1-696-939-11	CORD, CONNECTION (18 CORE)
		D10	1-810-027-11	LED SL-2994-54TB (TIMER DISPLAY)
		SP1	1-503-082-00	SPEAKER
		T2	1-450-547-11	TRANSFORMER, POWER

MAIN

Ref. No.	Part No.	Description	Remark
Q3	8-729-119-76	TRANSISTOR 2SA1175-HFE	
		< RESISTOR >	
R2	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R3	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R5	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R6	1-216-089-91	METAL GLAZE 47K 5% 1/10W	
R7	1-216-071-00	METAL CHIP 8.2K 5% 1/10W	
R8	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R9	1-216-035-00	METAL CHIP 270 5% 1/10W	
R10	1-216-057-00	METAL CHIP 2.2K 5% 1/10W	
R11	1-216-037-00	METAL CHIP 330 5% 1/10W	
R12	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R13	1-216-091-00	METAL CHIP 56K 5% 1/10W	
R14	1-216-063-00	METAL CHIP 3.9K 5% 1/10W	
R15	1-216-081-00	METAL CHIP 22K 5% 1/10W	
R16	1-216-096-00	METAL GLAZE 91K 5% 1/10W	
R17	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R18	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R19	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R20	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R21	1-216-121-00	METAL CHIP 1M 5% 1/10W	
R22	1-216-097-00	METAL CHIP 100K 5% 1/10W	
R23	1-216-049-00	METAL CHIP 1K 5% 1/10W	
R24	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R25	1-216-073-00	METAL CHIP 10K 5% 1/10W	
R26	1-216-295-00	METAL CHIP 0 5% 1/10W	
R27	1-216-295-00	METAL CHIP 0 5% 1/10W	
		< VARIABLE RESISTOR >	
RV1	1-228-790-00	RES, VAR, CARBON 50K (VOL ▲)	
		< SWITCH >	
S1	1-571-478-11	SWITCH, SLIDE (BAND)	
S2	1-554-937-11	SWITCH, KEY BOARD (TIME SET +)	
S3	1-554-937-11	SWITCH, KEY BOARD (TIME SET -)	
S4	1-554-937-11	SWITCH, KEY BOARD (SNOOZE/DATE/SLEEP OFF)	
S5	1-554-937-11	SWITCH, KEY BOARD (ALARM-A-RADIO)	
S6	1-554-937-11	SWITCH, KEY BOARD (ALARM-B-BUZZER)	
S7	1-554-937-11	SWITCH, KEY BOARD (RADIO ON/SLEEP)	
S8	1-554-937-11	SWITCH, KEY BOARD (RADIO OFF)	
S9	1-554-937-11	SWITCH, KEY BOARD (CLOCK)	
		< TRANSFORMER >	
T1	1-404-341-00	TRANSFORMER, IF	
△T2	1-450-547-11	TRANSFORMER, POWER	

Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS *****	
△11	1-696-008-11	CORD, POWER	
CN1	1-696-939-11	CORD, CONNECTION (18 CORE)	
D10	1-810-027-11	LED SL-2994-54TB (TIMER DISPLAY)	
SP1	1-503-082-00	SPEAKER	
△T2	1-450-547-11	TRANSFORMER, POWER	

		ACCESSORIES & PACKING MATERIALS *****	
		3-757-120-11 MANUAL, INSTRUCTION (English, French, German, Spanish)	
*	3-905-279-01	INDIVIDUAL CARTON	

		***** HARDWARE LIST *****	
#1	7-685-647-79	SCREW +P 3X10 TYPE2 NON-SLIT	
#2	7-685-650-79	SCREW +P 3X16 TYPE2 NON-SLIT	

The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque △ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.
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