

# ICF-C290/C290L

## SERVICE MANUAL

Ver 1.1 1998.10  
With SUPPLEMENT 1  
(9-925-745-81)



Photo: ICF-C290

*AEP Model*  
ICF-C290/C290L

*UK Model*

*E Model*

*Australian Model*  
ICF-C290

### SPECIFICATIONS

**Time display:**

UK, North and South America and Australia:

12-hour system

Other countries: 24-hour system

**Frequency range:**

	Band	ICF-C290	ICF-C290L
Italy	FM	87.5 - 108 MHz	-
	AM	526.5 - 1,606.5 kHz	-
Other countries	FM	87.5 - 108 MHz	87.5 - 108 MHz
	AM	530 - 1,605 kHz	-
	LW	-	153 - 255 kHz

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

**Power output:** 150 mW (at 10 % harmonic distortion)

**Power requirements:**

North and South America: 120 V AC, 60 Hz

Other countries: 220 - 230 V AC, 50 Hz

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

**Battery life:** Approx. 80 hours, using Sony S-006P(U) battery

**Dimensions:** Approx. 192 × 52 × 155 mm (w/h/d) (7 5/8 × 2 1/8 × 6 1/8 inches) incl. projecting parts and controls

**Mass:**

Approx. 520 g (1 lb 2 oz.) not incl. battery

UK model only: Approx. 575 g (1 lb 4 oz.) not incl. battery

Design and specifications are subject to change without notice.

ICF-C290  
FM/AM CLOCK RADIO  
ICF-C290L  
FM/LW CLOCK RADIO



# SONY®

## SERVICING NOTES

### HOW TO CHANGED THE CERAMIC FILTERS

This model is used two ceramic filters of CF2 and CF3.

You must used same type of color marked ceramic filters in order to meet same specifications.

Therefore, the ceramic filter must changed two pieces together since it's supply two pieces in one package as a spare parts.

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

### Notes on chip component replacement

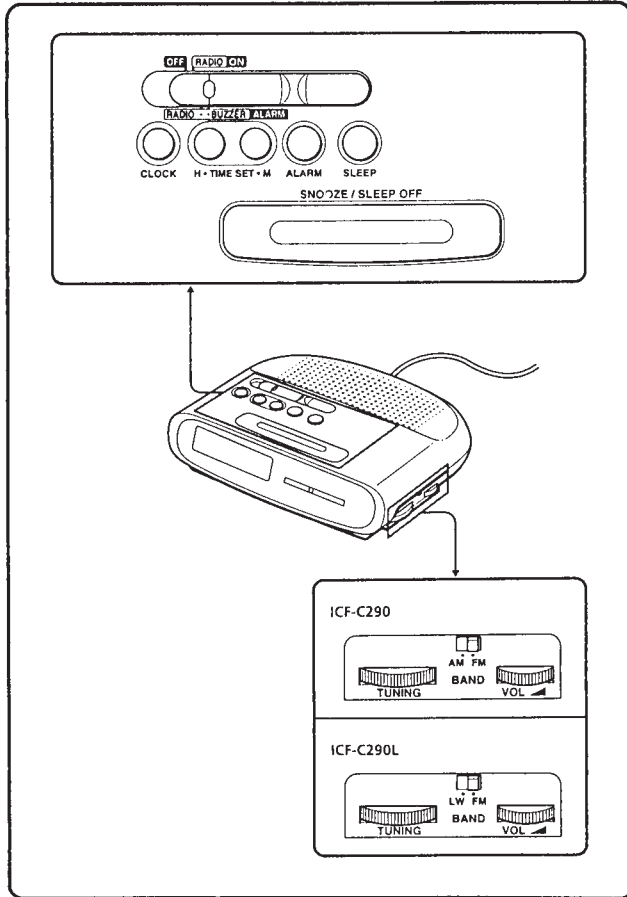
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

### 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.



## Features

- Power back-up function to keep the clock operating during a power interruption, using a 6F22 battery (not supplied).

## 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 AC 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

- 1 Plug in the unit. The display will flash "AM 12:00" or "0:00".
- 2 To set the hour, while holding down **CLOCK**, press **TIME SET H**. When the correct hour appears in the display, release **CLOCK**.
- 3 To set the minute, while holding down **CLOCK**, press **TIME SET M**. When the correct minute appears in the display, release **CLOCK**. The clock will begin to operate when you release **TIME SET M**.

- The clock system varies depending on the model you own.  
12-hour system: "AM 12:00" = midnight  
24-hour system: "0:00" = midnight
- Each press on **TIME SET H** or **TIME SET M** advances the displayed number by one.
- The minute digits advance to "00" after "59". The hour digits do not advance by pressing **TIME SET M**.
- To adjust the time exactly to the second, release **TIME SET H** or **TIME SET M** simultaneously with the time signal.

## Operating the Radio

- 1 Set the function selector to **RADIO ON** to turn on the radio and adjust **VOL** (volume).
  - 2 Select **BAND** and tune in to a station using **TUNING**.  
**FM/AM:** ICF-C290 only  
**FM/LW:** ICF-C290L only
- To turn off the radio, set the Function selector to **OFF**.
  - To improve radio reception  
**FM:** Since the AC power cord acts as an antenna, extend the cord to improve FM reception.  
**AM/LW:** 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 to a station and adjust the volume.

- 1 To set the hour for alarm, while holding down **ALARM**, press **TIME SET H**. When the desired hour appears in the display, release **ALARM**.
- 2 To set the minute for alarm, while holding down **ALARM**, press **TIME SET M**. When the desired minute appears in the display, release **ALARM**.
- 3 Set the Function selector to the alarm sound of your choice (**RADIO** or **BUZZER**). The alarm will come on at the preset time and automatically turn itself off after 119 minutes.

- To shut off the alarm, set the function selector to **OFF**.
- To sound the alarm at the preset time the next day, set the function selector to **RADIO** or **BUZZER** again.
- To cancel either alarm, set the function selector to **OFF**.
- To doze a few more minutes, press **SNOOZE / SLEEP OFF**. The alarm will shut off, but will come on again after about 9 minutes. You can repeat this process as many times as you like.
- To adjust the radio alarm volume, turn **VOL**. The buzzer volume is fixed.
- To check the preset time, press **ALARM**.

## Setting the Sleep Timer

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

- 1 While listening to the radio, set the function selector to **OFF**.
  - 2 Press **SLEEP**. The radio turns on. It will go off after 59 minutes.
- To turn off the radio before the preset time, press **SNOOZE / SLEEP OFF**.
  - Every time you press **SLEEP**, the sleep timer is reset to 59 minutes.
  - When you set the function selector to **RADIO** or **BUZZER**, if the preset alarm time comes while the sleep timer is operating, the radio or buzzer sounds depending on which you set.

## To Use Both Sleep Timer and Alarm Function

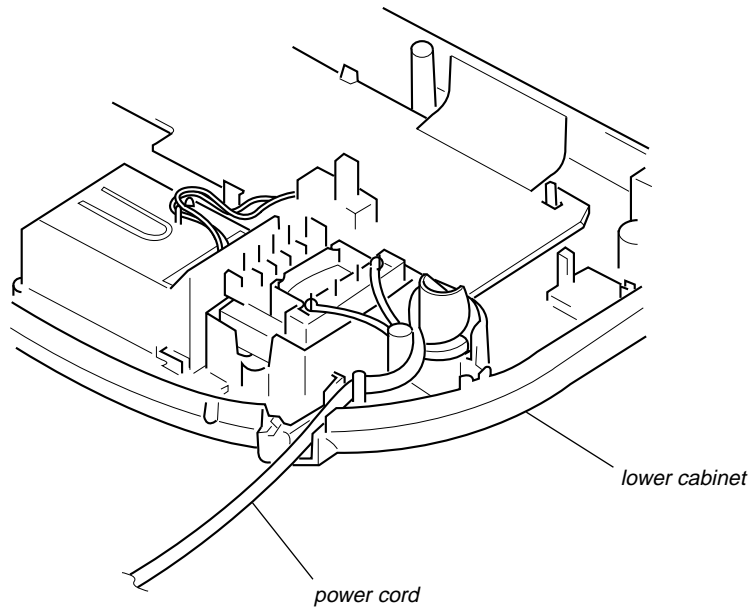
You can fall asleep to the radio sound and you will be awakened by the radio/buzzer alarm at the preset time.

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

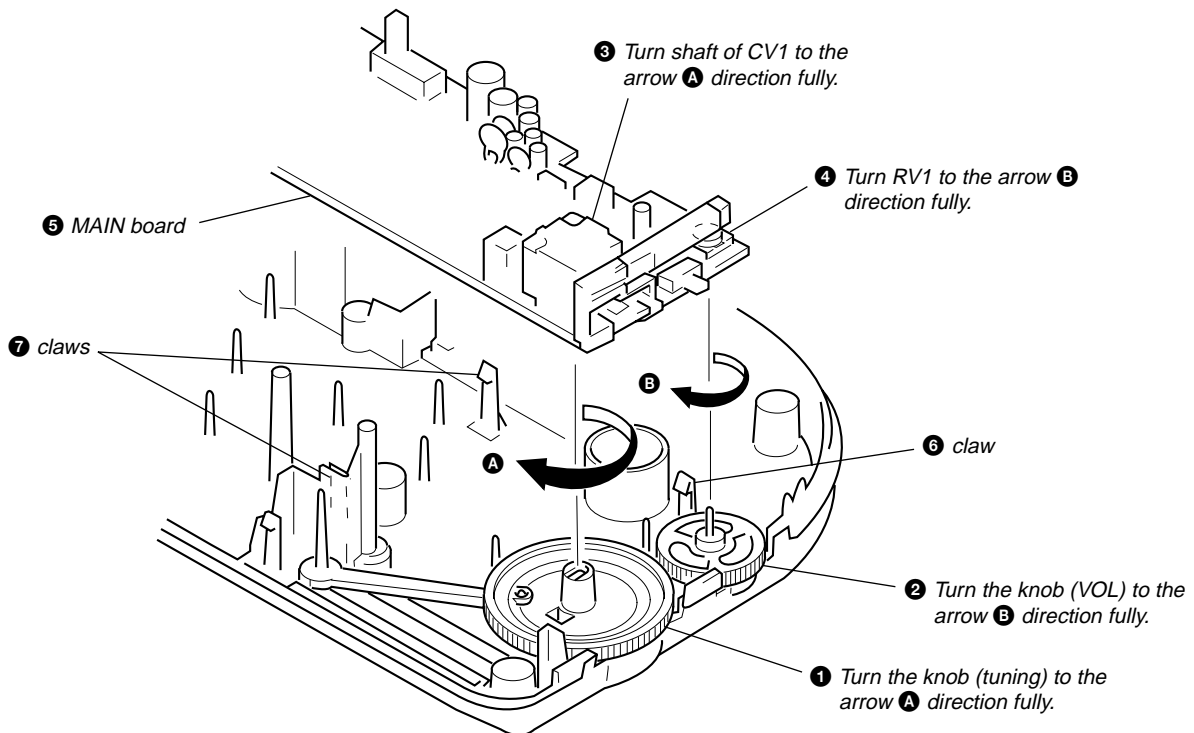
## SECTION 2 SETTING

### SETTING THE POWER CORD

Set the power cord as illustrated below, then install the lower cabinet.



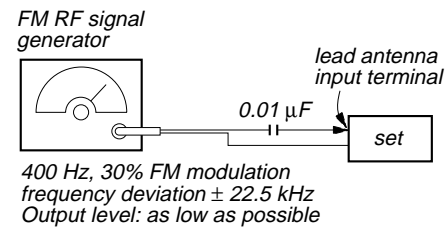
### KNOB SETTING



## SECTION 3 ELECTRICAL ADJUSTMENTS

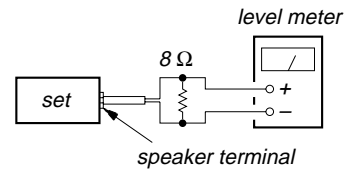
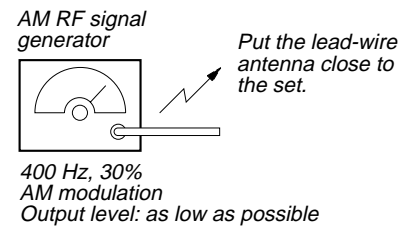
### FM SECTION

**Setting:**  
BAND switch: FM



### AM SECTION

**Setting:**  
BAND switch: AM/LW



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

( ) : Italian model

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	86.5 MHz (87.35 MHz)
CT3	109.5 MHz (108.25 MHz)

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CT2	109.5 MHz (108.25 MHz)

AM FREQUENCY COVERAGE ADJUSTMENT (C290)	
Adjust for a maximum reading on level meter.	
L4	520 kHz (516.5 kHz)
CT4	1,650 kHz (1,631.5 kHz)

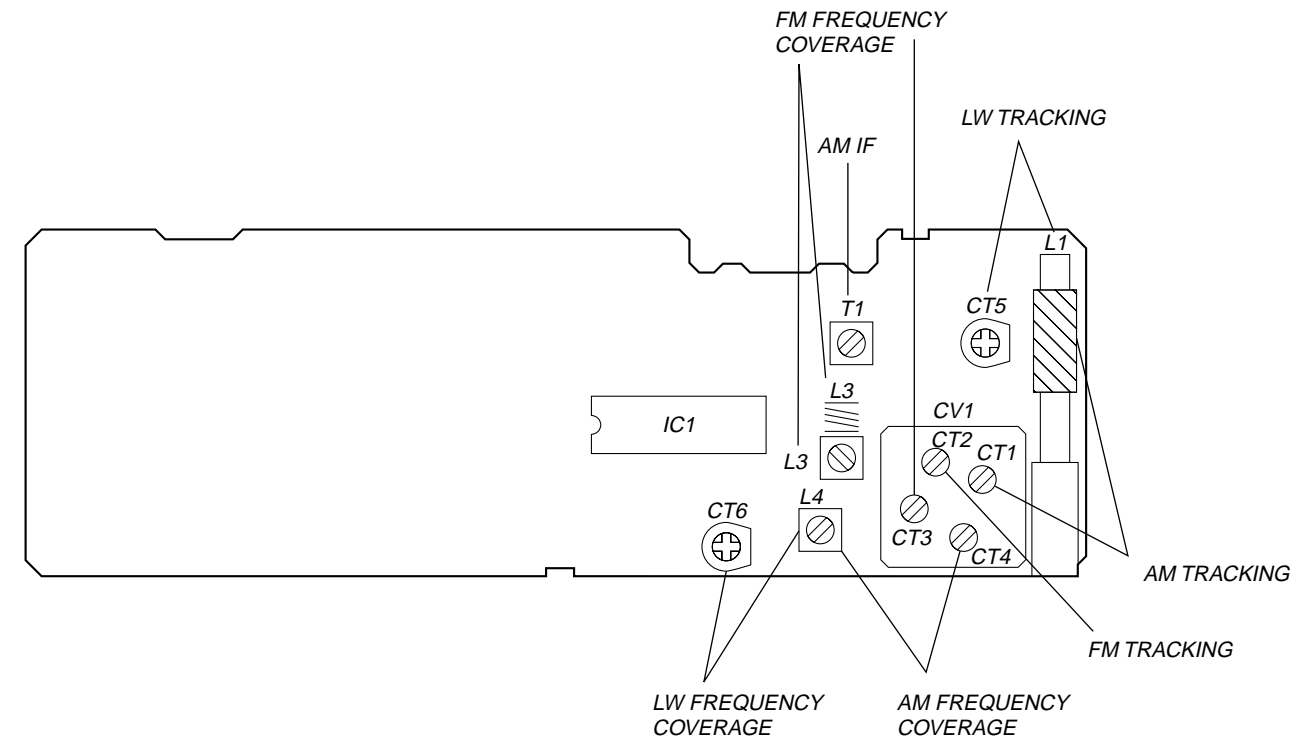
AM TRACKING ADJUSTMENT (C290)	
Adjust for a maximum reading on level meter.	
L1	600 kHz
CT1	1,400 kHz

LW FREQUENCY COVERAGE ADJUSTMENT (C290L)	
Adjust for a maximum reading on level meter.	
L4	145 kHz
CT6	265 kHz

LW TRACKING ADJUSTMENT (C290L)	
Adjust for a maximum reading on level meter.	
L1	160 kHz
CT5	240 kHz

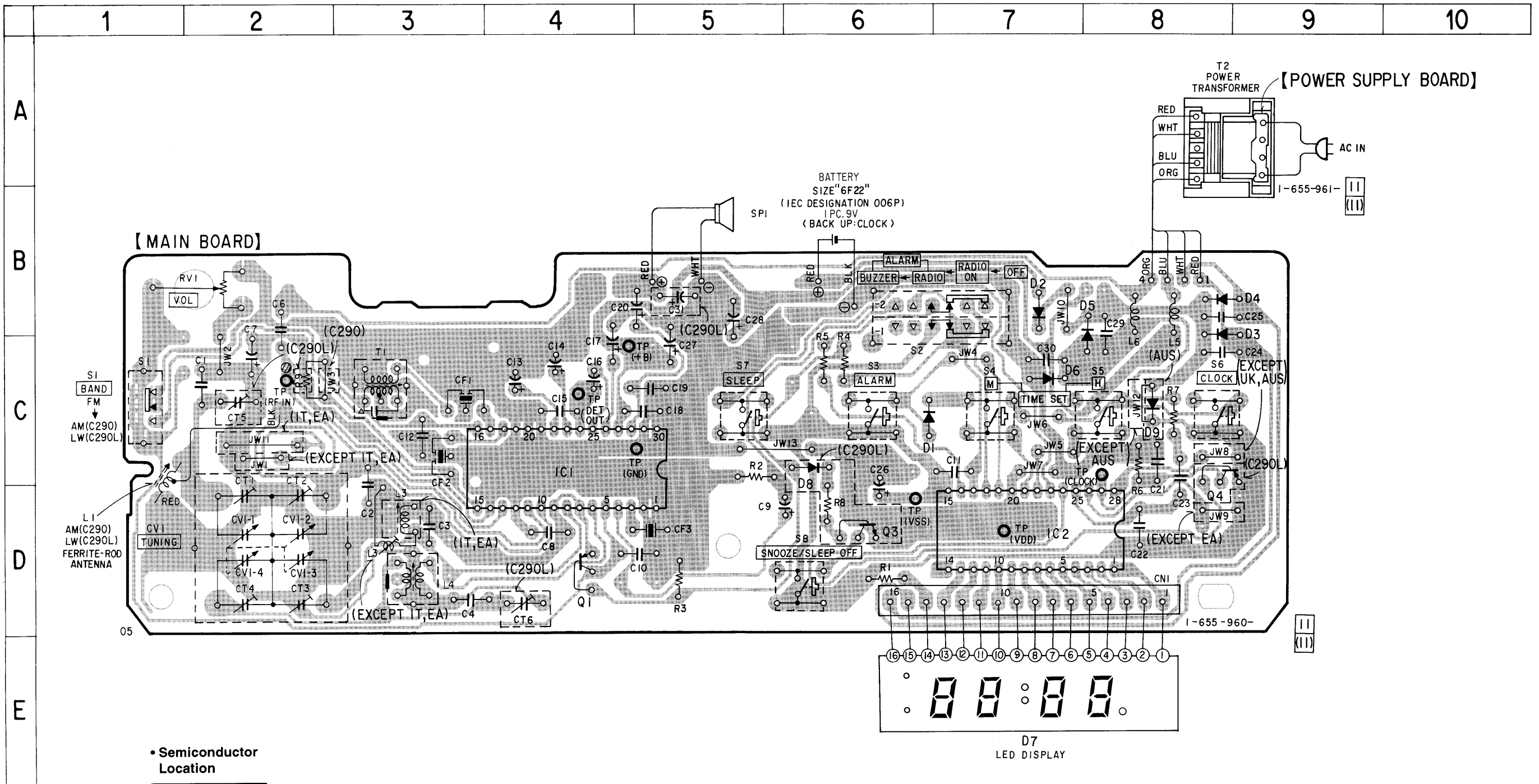
AM IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	455 kHz

**Adjustment Location:** MAIN board (Conductor Side)



SECTION 4  
DIAGRAMS

4-1. PRINTED WIRING BOARD (EXCEPT E MODEL)



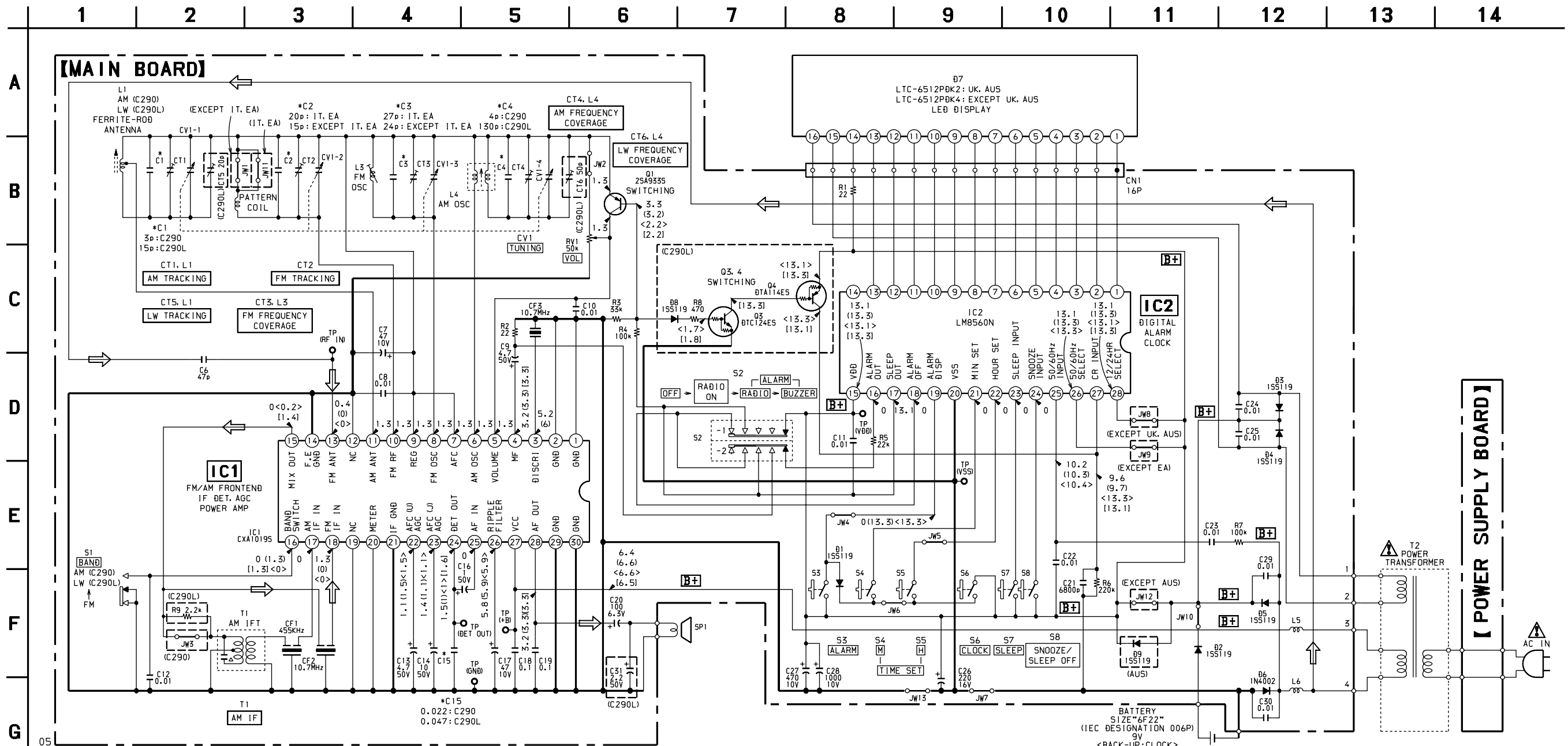
• Semiconductor Location

Ref. No.	Location
D1	C-7
D2	B-7
D3	C-9
D4	B-9
D5	B-8
D6	C-7
D7	E-7
D8	D-6
D9	C-8
IC1	C-4
IC2	D-7
Q1	D-4
Q3	D-6
Q4	C-9

Note on Printed Wiring Board:

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : indicates side identified with part number.
- △ : internal component.
- Abbreviation
  - IT : Italian model
  - AUS: Australian model
  - EA : Saudi Arabia model

4-2. SCHEMATIC DIAGRAM (EXCEPT E MODEL) • See page 15 for IC Block Diagrams.

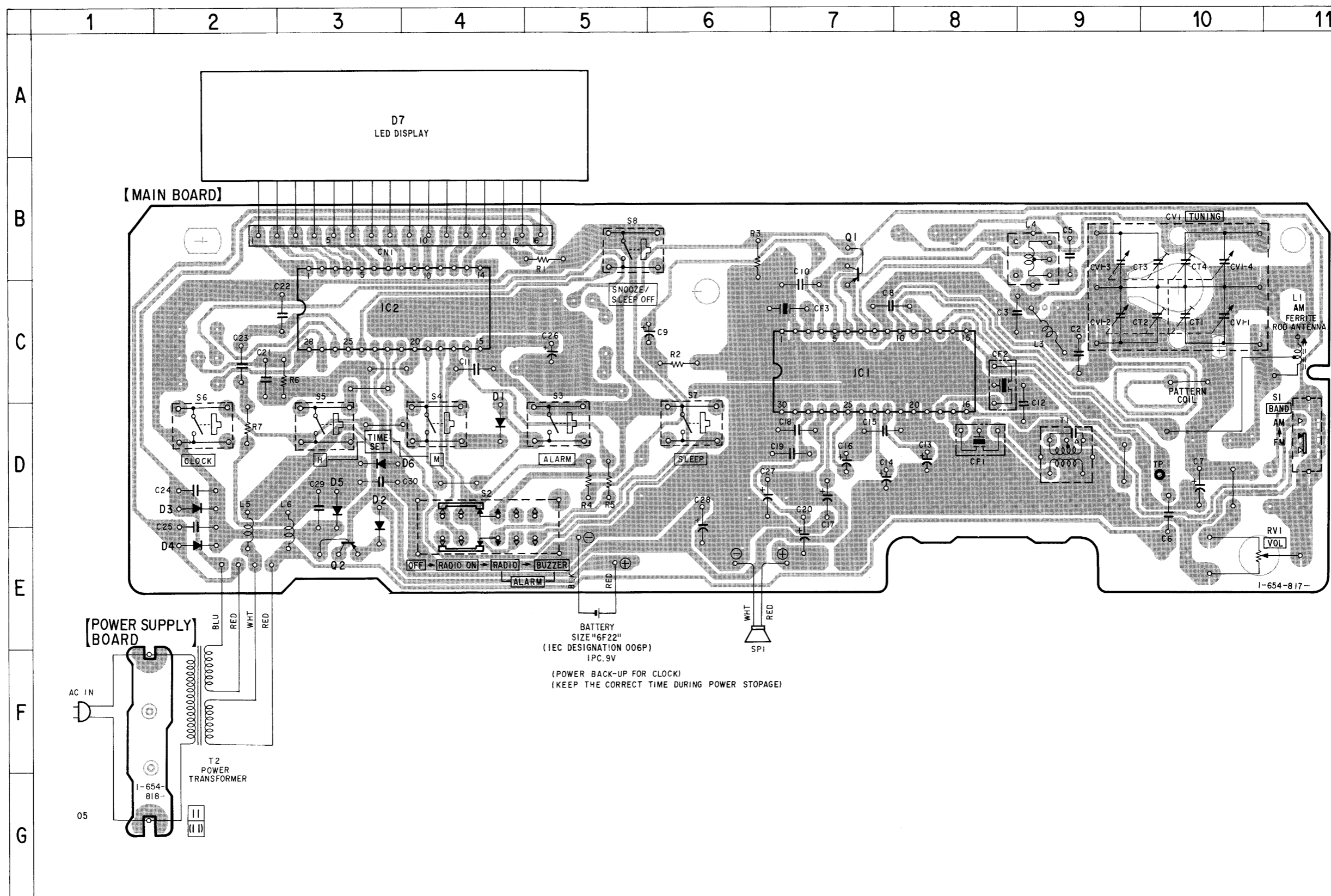


**NOTE**

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF} : \mu\text{F}$
- 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\Delta$  : internal component.
- $\square$  : panel designation.
- $\text{B+}$  : B+ Line.
- Voltage is dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM < >: LW (C290L)
- ( ) : AM (C290) [ ] : FM (C290L)
- 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
- Abbreviation  
IT : Italian model  
AUS : Australian model  
EA : Saudi Arabia model

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

4-3. PRINTED WIRING BOARDS (E MODEL)



• Semiconductor Location

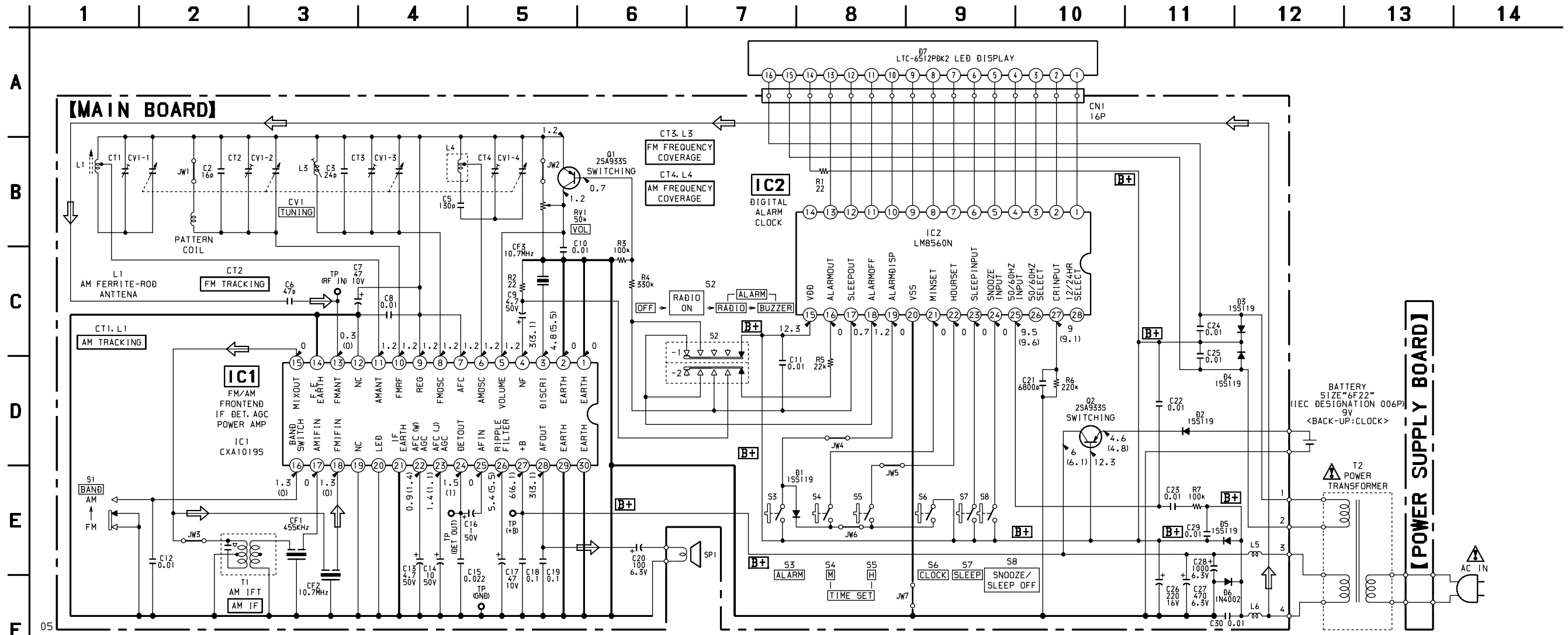
Ref. No.	Location
D1	D-4
D2	E-3
D3	D-2
D4	E-2
D5	D-3
D6	D-3
D7	A-3
IC1	C-7
IC2	C-3
Q1	B-7
Q2	E-3

**Note on Printed Wiring Board:**

- : parts extracted from the component side.
- : parts extracted from the conductor side.
- : indicates side identified with part number.
- △ : internal component.



4-4. SCHEMATIC DIAGRAM (E MODEL) • See page 15 for IC Block Diagrams.



NOTE

- All capacitors are in  $\mu\text{F}$  unless otherwise noted.  $\text{pF}:\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $1/4\text{W}$  or less unless otherwise specified.
- $\triangle$  : internal component.
- $\square$  : panel designation.

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

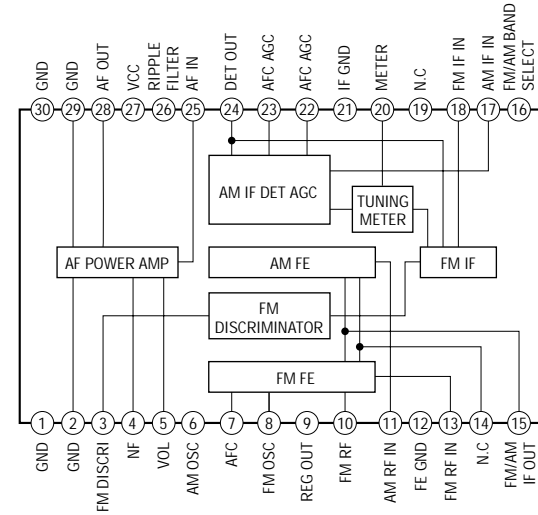
- $\square$  : B+ Line.
- $\square$  : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.  
no mark: FM  
( ) : AM
- Voltages are taken with a VOM (Input impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production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



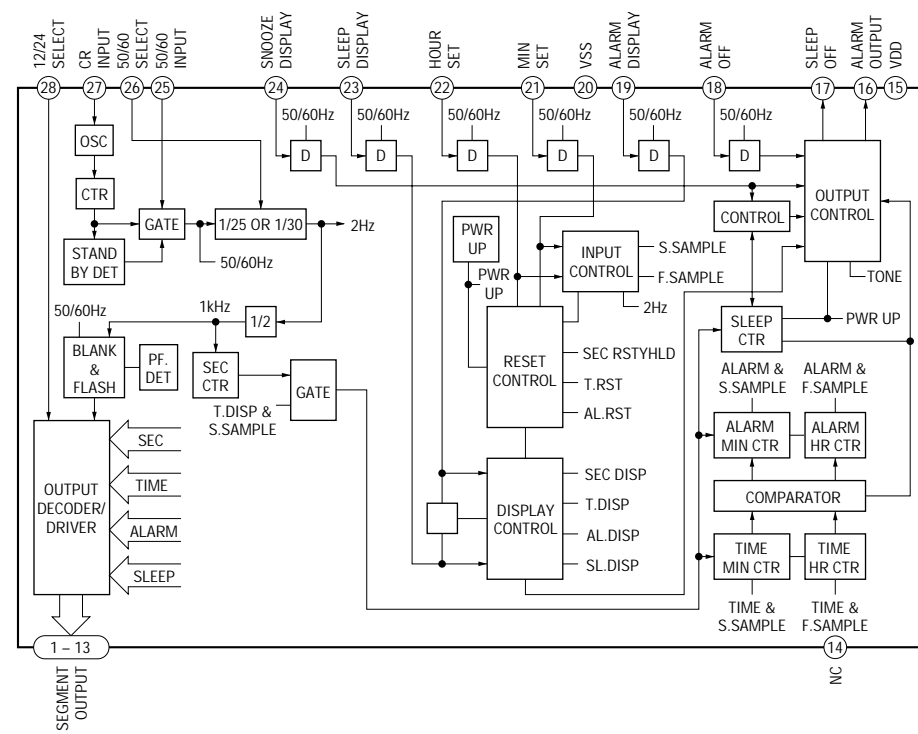
## SECTION 5 EXPLODED VIEW

### • IC Block Diagrams

#### IC1 CXA1019S



#### IC2 LM8560N



### NOTE:

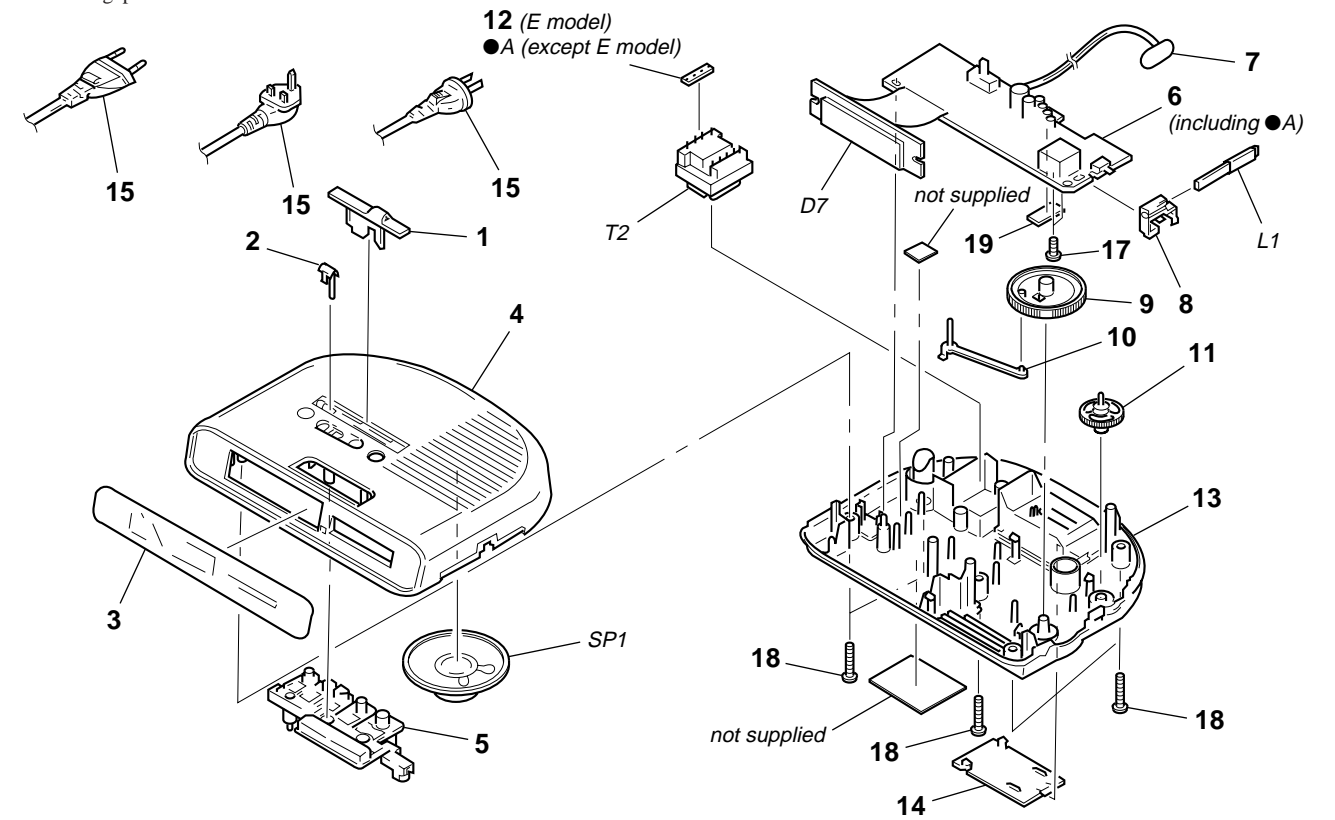
- XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts  
Example:  
KNOB, BALANCE (WHITE) . . . (RED)

↑                                    ↑  
Parts Color    Cabinet's Color

- Abbreviation  
AUS : Australian  
EA : Saudi Arabia  
IT : Italian  
SP : Singapore

- 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.



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-018-229-01	KNOB (FUNCTION) (BLACK)		* 12	1-654-818-11	POEWR SUPPLY BOARD (C290: E)	
1	3-018-229-11	KNOB (FUNCTION) (WHITE)		13	3-018-227-01	CABINET (LOWER) (BLACK) (C290)	
2	3-919-270-01	MARKER		13	3-018-227-11	CABINET (LOWER) (WHITE) (C290)	
3	3-018-230-01	SCALE, DIAL (C290: AEP, IT, EA, SP)		13	3-018-227-21	CABINET (LOWER) (BLACK) (C290L)	
3	3-018-230-11	SCALE, DIAL (C290: AUS, UK, E)		13	3-018-227-31	CABINET (LOWER) (WHITE) (C290L)	
3	3-018-230-21	SCALE, DIAL (C290L)		14	3-369-135-21	LID, BATTERY CASE	
4	3-018-226-01	CABINET (UPPER) (BLACK)		△ 15	1-555-795-00	CORD, POWER (C290: AEP, IT, EA, SP/C290L)	
4	3-018-226-11	CABINET (UPPER) (WHITE)		△ 15	1-558-566-21	CORD, POWER (C290: E)	
5	3-018-228-01	BUTTON (BLACK)		△ 15	1-765-458-11	CORD, POWER (C290: AUS)	
5	3-018-228-11	BUTTON (WHITE)		△ 15	1-769-578-11	CORD, POWER (C290: UK)	
* 6	A-3662-242-A	MAIN BOARD, COMPLETE (C290L)		17	7-621-770-87	SCREW +P 2.6X5 (C290: E)	
* 6	A-3662-244-A	MAIN BOARD, COMPLETE (C290: AUS)		18	7-685-649-79	SCREW +P 3X14 TYPE2 NON-SLIT	
* 6	A-3662-246-A	MAIN BOARD, COMPLETE (C290: AEP, SP)		* 19	3-905-767-01	PLATE, SHIELD (C290L)	
* 6	A-3662-247-A	MAIN BOARD, COMPLETE (C290: IT)		D7	1-809-515-11	DIODE LTC-6512PDK2 (C290: AUS, UK, E)	
* 6	A-3662-248-A	MAIN BOARD, COMPLETE (C290: UK)		D7	1-809-515-21	DIODE LTC-6512PDK4 (C290: AEP, IT, EA, SP/C290L)	
* 6	A-3662-801-A	MAIN BOARD, COMPLETE (C290: EA)		L1	1-501-765-11	ANTENNA, FERRITE-ROD (AM) (C290: EXCEPT E)	
* 6	A-3679-648-A	MAIN BOARD, COMPLETE (C290: E)		L1	1-501-742-11	ANTENNA, FERRITE-ROD (MW) (C290: E)	
7	1-535-804-21	SNAP, BATTERY		L1	1-501-777-11	ANTENNA, FERRITE-ROD (LW) (C290L)	
8	3-919-271-01	HOLDER (ANTENNA) (C290: E)		L1	1-504-748-11	SPEAKER (6.6CM)	
8	3-922-610-01	HOLDER (ANTENNA) (C290: EXCEPT E/C290L)		SP1	1-504-748-11	SPEAKER (6.6CM)	
9	3-919-267-01	KNOB (TUNE) (C290: E)		△ T2	1-427-927-11	TRANSFORMER, POWER (C290: E)	
9	3-922-609-01	KNOB (TUNE) (C290: EXCEPT E/C290L)		△ T2	1-427-928-11	TRANSFORMER, POWER (C290: EXCEPT E/C290L)	
10	3-919-269-01	POINTER					
11	3-919-268-01	KNOB (VOL)					

# SECTION 6 ELECTRICAL PARTS LIST

**MAIN**

**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
- **Abbreviation**  
AUS: Australian      EA: Saudi Arabia  
IT : Italian          SP : Singapore

- 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:  $\mu$ , for example:  
uA. . :  $\mu$ A. .      uPA. . :  $\mu$ PA. .  
uPB. . :  $\mu$ PB. .    uPC. . :  $\mu$ PC. .  
uPD. . :  $\mu$ PD. .
- **CAPACITORS**  
uF:  $\mu$ F
- **COILS**  
uH:  $\mu$ H

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  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
*	A-3662-242-A	MAIN BOARD, COMPLETE (C290L)		C14	1-124-907-11	ELECT	10uF 20% 50V
*	A-3662-244-A	MAIN BOARD, COMPLETE (C290: AUS)		C15	1-101-005-00	CERAMIC	22000PF 50V (C290)
*	A-3662-246-A	MAIN BOARD, COMPLETE (C290: AEP, SP)					
*	A-3662-247-A	MAIN BOARD, COMPLETE (C290: IT)		C15	1-162-847-11	CERAMIC	0.047uF 10% 16V (C290L)
*	A-3662-248-A	MAIN BOARD, COMPLETE (C290: UK)					
*	A-3662-801-A	MAIN BOARD, COMPLETE (C290: EA)		C16	1-124-903-11	ELECT	1uF 20% 50V
*	A-3679-648-A	MAIN BOARD, COMPLETE (C290: E)		C17	1-104-664-11	ELECT	47uF 20% 10V
		*****		C18	1-162-851-11	CERAMIC	0.1uF 10% 16V
				C19	1-162-851-11	CERAMIC	0.1uF 10% 16V
*	1-535-804-21	SNAP, BATTERY		C20	1-126-968-11	ELECT	100uF 20% 6.3V
	3-905-767-01	PLATE, SHIELD (C290L)		C21	1-161-049-00	CERAMIC	0.0068uF 10% 50V (C290: E)
	3-919-271-01	HOLDER (ANTENNA) (C290: E)					
	3-922-610-01	HOLDER (ANTENNA) (C290: EXCEPT E/C290L)		C21	1-162-837-11	CERAMIC	0.0068uF 10% 16V (C290: EXCEPT E/C290L)
	7-621-770-87	SCREW +P 2.6X5 (C290: E)					
		< CAPACITOR >		C22	1-101-004-00	CERAMIC	0.01uF 50V
C1	1-102-936-00	CERAMIC	3.0PF +-0.25PF 50V (C290: EXCEPT E)	C23	1-101-004-00	CERAMIC	0.01uF 50V
C1	1-102-951-00	CERAMIC	15PF 5% 50V (C290L)	C24	1-101-004-00	CERAMIC	0.01uF 50V
C2	1-102-951-00	CERAMIC	15PF 5% 50V (C290: AUS, AEP, UK, SP/C290L)	C25	1-101-004-00	CERAMIC	0.01uF 50V
C2	1-102-952-00	CERAMIC	16PF 5% 50V (C290: E)	C26	1-126-934-11	ELECT	220uF 20% 16V
C2	1-102-958-00	CERAMIC	20PF 5% 50V (C290: IT, EA)	C27	1-124-472-11	ELECT	470uF 20% 10V (C290: EXCEPT E/C290L)
C3	1-102-960-00	CERAMIC	24PF 5% 50V (C290: AUS, AEP, UK, E, SP/C290L)	C27	1-126-941-11	ELECT	470uF 20% 6.3V (C290: E)
C3	1-102-961-00	CERAMIC	27PF 5% 50V (C290: IT, EA)	C28	1-124-471-00	ELECT	1000uF 20% 6.3V (C290: E)
C4	1-101-081-00	CERAMIC	130PF 5% 50V (C290L)	C28	1-126-926-11	ELECT	1000uF 20% 10V (C290: EXCEPT E/C290L)
C4	1-102-937-00	CERAMIC	4.0PF +-0.25PF 50V (C290: EXCEPT E)	C29	1-101-004-00	CERAMIC	0.01uF 50V
C5	1-101-081-00	CERAMIC	130PF 5% 50V (C290: E)	C30	1-101-004-00	CERAMIC	0.01uF 50V
C6	1-101-880-00	CERAMIC	47PF 5% 50V	C31	1-126-961-11	ELECT	2.2uF 20% 50V (C290L)
C7	1-104-664-11	ELECT	47uF 20% 10V			< FILTER >	
C8	1-101-004-00	CERAMIC	0.01uF 50V	CF1	1-577-072-11	FILTER, CERAMIC (C290)	
C9	1-126-963-11	ELECT	4.7uF 20% 50V	CF1	1-578-677-11	FILTER, CRYSTAL (C290L)	
C10	1-101-004-00	CERAMIC	0.01uF 50V	CF2	1-760-144-61	FILTER, CERAMIC	
				CF3	1-760-144-61	FILTER, CERAMIC	
C11	1-101-004-00	CERAMIC	0.01uF 50V			< CONNECTOR >	
C12	1-101-004-00	CERAMIC	0.01uF 50V	* CN1	1-769-137-11	CORD, CONNECTION (16 CORE)	
C13	1-126-963-11	ELECT	4.7uF 20% 50V			< TRIMMER >	
				CT5	1-141-227-00	CAP, TRIMMER 20PF (C290L)	

# ICF-C290/C290L

## MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
CT6	1-141-260-00	CAP, TRIMMER 50PF (C290L)		R4	1-249-441-11	CARBON 100K 5% 1/4W (C290: EXCEPT E/C290L)	
		< VARIABLE CAPACITOR >		R5	1-249-433-11	CARBON 22K 5% 1/4W	
CT1-4	1-141-526-11	CAP, VAR (C290: E)		R6	1-247-887-00	CARBON 220K 5% 1/4W	
CT1-4	1-141-529-11	CAP, VAR (C290: EXCEPT E/C290L)		R7	1-249-441-11	CARBON 100K 5% 1/4W	
CV1	1-141-526-11	CAP, VAR (TUNING) (C290: E)		R8	1-249-413-11	CARBON 470 5% 1/4W (C290L)	
CV1	1-141-529-11	CAP, VAR (TUNING) (C290: EXCEPT E/C290L)		R9	1-249-421-11	CARBON 2.2K 5% 1/4W (C290L)	
		< DIODE >				< VARIABLE RESISTOR >	
D1	8-719-921-19	DIODE 1SS119-25TG		RV1	1-228-790-00	RES, VAR, CARBON 50K (VOL)	
D2	8-719-921-19	DIODE 1SS119-25TG				< SWITCH >	
D3	8-719-921-19	DIODE 1SS119-25TG		S1	1-762-231-11	SWITCH, SLIDE (BAND)	
D4	8-719-921-19	DIODE 1SS119-25TG		S2	1-762-232-11	SWITCH, SLIDE (OFF/RADIO ON/ALARM)	
D5	8-719-921-19	DIODE 1SS119-25TG		S3	1-762-233-11	SWITCH, KEYBOARD (ALARM)	
D6	8-719-052-88	DIODE 1N4002		S4	1-762-233-11	SWITCH, KEYBOARD (M•TIME SET)	
D7	1-809-515-11	DIODE LTC-6512PDK2 (C290: AUS, UK, E)		S5	1-762-233-11	SWITCH, KEYBOARD (TIME SET•H)	
D7	1-809-515-21	DIODE LTC-6512PDK4 (C290: AEP, IT, EA, SP/C290L)		S6	1-762-233-11	SWITCH, KEYBOARD (CLOCK)	
D8	8-719-921-19	DIODE 1SS119-25TG (C290L)		S7	1-762-233-11	SWITCH, KEYBOARD (SLEEP)	
D9	8-719-921-19	DIODE 1SS119-25TG (C290: AUS)		S8	1-762-233-11	SWITCH, KEYBOARD (SNOOZE/SLEEP OFF)	
		< IC >				< TRANSFORMER >	
IC1	8-752-055-05	IC CXA1019S		T1	1-404-790-11	TRANSFORMER, IF	
IC2	8-759-821-46	IC LM8560N				*****	
		< COIL >				MISCELLANEOUS	
L1	1-501-742-11	ANTENNA, FERRITE-ROD (MW) (C290: E)				*****	
L1	1-501-765-11	ANTENNA, FERRITE-ROD (C290: EXCEPT E)		△ 15	1-555-795-00	CORD, POWER (C290: AEP, IT, EA, SP/C290L)	
L1	1-501-777-11	ANTENNA, FERRITE-ROD (LW) (C290L)		△ 15	1-558-566-21	CORD, POWER (C290: E)	
L3	1-428-163-11	COIL, AIR-CORE (C290: AUS, AEP, UK, E, SP/C290L)		△ 15	1-765-458-11	CORD, POWER (C290: AUS)	
L3	1-460-018-11	COIL (WITH CORE) (C290: IT, EA)		△ 15	1-769-578-11	CORD, POWER (C290: UK)	
L4	1-406-028-00	COIL, OSC (MW) (C290: EXCEPT E/C290L)		SP1	1-504-748-11	SPEAKER (6.6CM)	
L4	1-411-175-11	COIL (MW OSC) (C290: E)		△ T2	1-427-927-11	TRANSFORMER, POWER (C290: E)	
L5	1-411-136-11	COIL, AIR-CORE		△ T2	1-427-928-11	TRANSFORMER, POWER (C290: EXCEPT E/C290L)	
L6	1-411-136-11	COIL, AIR-CORE				*****	
		< TRANSISTOR >				ACCESSORIES & PACKING MATERIALS	
Q1	8-729-119-76	TRANSISTOR 2SA1175-HFE				*****	
Q2	8-729-119-76	TRANSISTOR 2SA1175-HFE (C290: E)		*	3-324-066-01	SHEET, PROTECTION (C290: E)	
Q3	8-729-029-86	TRANSISTOR DTC124ESA (C290L)			3-861-255-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, DUTCH, ITALIAN) (C290: IT, UK/C290L)	
Q4	8-729-422-57	TRANSISTOR UN4111 (C290L)			3-861-255-21	MANUAL, INSTRUCTION (ENGLISH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE) (C290: AEP)	
		< RESISTOR >			3-861-255-31	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH, ARABIC) (C290: AUS, EA, E, SP)	
R1	1-249-397-11	CARBON 22 5% 1/4W					
R2	1-249-397-11	CARBON 22 5% 1/4W					
R3	1-249-435-11	CARBON 33K 5% 1/4W (C290: EXCEPT E/C290L)					
R3	1-249-441-11	CARBON 100K 5% 1/4W (C290: E)					
R4	1-247-891-00	CARBON 330K 5% 1/4W (C290: E)					

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

# ICF-C290/C290L

**SONY**<sup>®</sup>

## SERVICE MANUAL

1998. 10

*AEP Model*

*ICF-C290/C290L*

*UK Model*

*E Model*

*Australian Model*

*ICF-C290*

## SUPPLEMENT-1

File this supplement with the service manual.

**Subject: Addition of CET (East European, Russia) and Argentina Model (ICF-C290)**

### Addition of CET (East European, Russia) and Argentina model

CET (East European, Russia) and Argentina model have been added.

They are the same as ICF-C290 (AEP model) which is not described in this supplement-1.

Refer to ICF-C290/C290L original service manual (9-925-745-00) for other information.

### DIFFERENCE TABLE

Page	ICF-C290 (AEP model)				ICF-290 (CET, AR model)			
	Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
16, 18	△ 15	1-555-795-00	CORD, POWER (C290: AEP, IT, EA, SP/C290L)		△ 15	1-790-124-11	CORD, POWER (C290: AR)	
18		3-861-255-21	MANUAL, INSTRUCTION (ENGLISH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE) (C290: AEP)			3-861-255-61	MANUAL, INSTRUCTION (ENGLISH, POLISH, CZECH, HUNGARIAN) (C290: CET)	

- Abbreviation  
EA : Saudi Arabia  
IT : Italian  
SP : Singapore  
AR : Argentina

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