

ICF-1000L

SERVICE MANUAL

Ver 1.0 2000.07

*AEP Model
UK Model*



SPECIFICATIONS

Frequency range:

FM: 87.5 – 108.0 MHz
SW: 5.95 – 18 MHz
MW: 530 – 1 605 kHz
LW: 153 – 255 kHz

Speaker:

Approx. 10.2 cm (4 1/8 inches) dia. 8 Ω

Power output:

1W (at 10% harmonic distortion)

Output:

Ⓢ jack (ϕ 3.5 mm minijack)

Power requirements:

With the supplied AC power cord:
220 – 230 V AC, 50 Hz
With four R6 (size AA) batteries: 6V DC

Dimensions:

Approx. 299 x 139.5 x 83.2 mm (w/h/d)
(11 7/8 x 5 1/2 x 3 3/8 inches) incl. projecting parts and control.

Mass:

Approx. 1100 g (2 lb 7 oz) incl. batteries

Supplied accessory:

AC power cord(1)

Design and specifications are subject to change without notice.

FM/SW/MW/LW 4 BAND RADIO

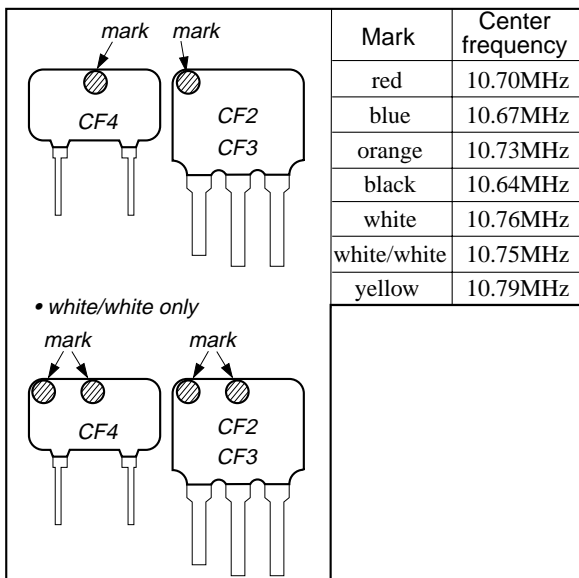
SONY[®]

TABLE OF CONTENTS

Specifications	1
1. GENERAL	
Choosing Power Sources	3
Operating the Radio Manual Tuning	3
2. DISASSEMBLY	
2-1. Cabinet (Rear)	4
2-2. Power Board	4
2-3. AC IN Board, AMP Board	5
2-4. Main Board, Key Board	5
2-5. Setting the Pointer	6
3. ELECTRICAL ADJUSTMENT	
3-1. MW Section	7
3-2. LW Section	7
3-3. SW Section	7
3-4. FM Section	7
4. DIAGRAMS	
4-1. Block Diagram	9
4-2. Printed Wiring Boards (1/2)	11
4-3. Printed Wiring Boards (2/2)	13
4-4. Schematic Diagrams	15
5. EXPLODED VIEWS	
5-1. Rear Cabinet Section	18
5-2. Front Cabinet Section	19
5-3. Chassis Section	20
6. ELECTRICAL PARTS LIST	21

• HOW TO CHANGE THE CERAMIC FILTER

This model is used three ceramic filters of CF2, CF3 and CF4. You must use same type of color marked ceramic filters in order to meet same specifications. Therefore, the ceramic filter must change three pieces together since it's supply three pieces in package as a spare parts.



Notes on chip component replacement

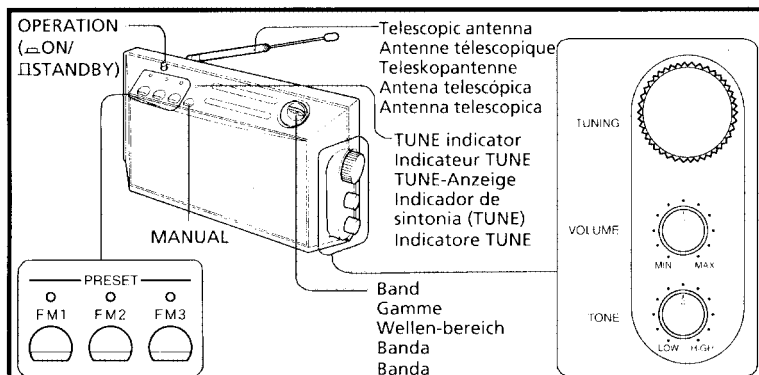
- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

SAFETY-RELATED COMPONENT WARNING!!

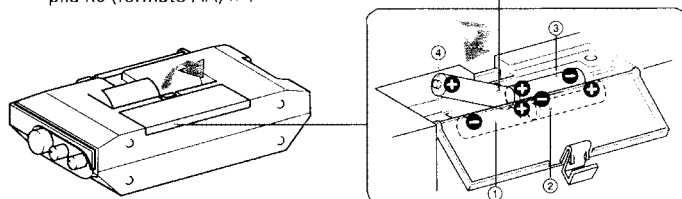
COMPONENTS IDENTIFIED BY MARK \triangle OR DOTTED LINE WITH MARK \triangle ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1 GENERAL

This section is extracted from instruction manual.

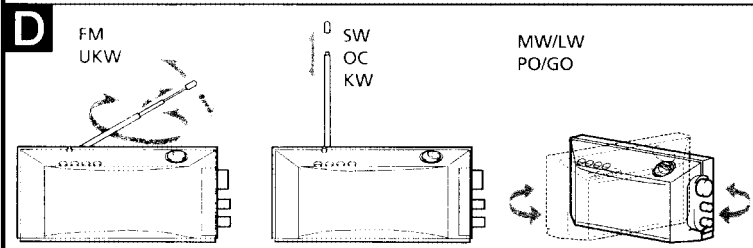


A Insert the ⊖ side of the battery first.
Insérez le côté ⊖ de la pile en premier.
Batterie mit der ⊖ Seite zuerst einlegen.
Inserte en primer lugar el lado ⊖ de las pilas
Inserire prima il lato ⊖ della pila.



B AC power cord (supplied)
Cordon d'alimentation secteur
Netzkaabel (mitgeliefert)
Cable de alimentación de CA (suministrado)
Cavo di alimentazione CA in dotazione

C FM preset tuning indicators
Voyants d'accord des préréglages FM
UKW-Vorwahlsenderanzeige
Indicadores de sintonia memorizada de FM
Indicatori di sintonia preselezionata FM



Choosing Power Sources

Batteries (See Fig. A)

- 1 Open the lid of the battery compartment.
- 2 Insert four R6 (size AA) batteries (not supplied) with correct polarity.
- 3 Close the lid.

Battery Life (approximate hours)

	Sony alkaline LR6 (size AA)	Sony R6 (size AA)
FM reception	30	15
SW/MW/LW reception	36	18

Replacing batteries

Replace all the batteries with new ones when the batteries become exhausted. The time to replace them is:

- When the sound becomes weak or distorted, or
- When FM PRESET indicator (FM1, FM2, or FM3) or TUNE indicator fades away, and the sound of the radio begins to be interrupted.

Notes on batteries

- Insert the batteries with correct polarity.
- Do not charge the dry batteries.
- Do not use different types of batteries at the same time.
- When you replace the batteries, replace all with new ones.
- When the unit is not being used for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.
- If a battery leakage occurs, wipe the battery compartment with a soft cloth before inserting new ones.

House Current (See Fig. B)

- 1 Connect the AC power cord supplied to the AC IN jack of the radio.
- 2 Plug into a wall outlet.

Operating the Radio

Manual tuning

- 1 Press OPERATION (⏻) to turn on the radio.
- 2 Press MANUAL.
- 3 Select a desired band, and tune in a station using TUNING. TUNE (tuning) indicator lights up when a station is tuned in.
- 4 Adjust the volume using VOLUME.
- 5 Adjust the tone to your preference using TONE. To obtain clear treble, turn to "HIGH". To reinforce bass, set to "LOW".

- To turn off the radio, press OPERATION (⏻).

Note

When the FM preset indicator is being lit, you cannot use the manual tuning. If you tune in a station manually, press MANUAL again.

FM preset tuning (See Fig. C)

You can preset up to 3 FM stations (one station for each PRESET FM1, FM2, FM3 buttons).

- 1 Press PRESET FM1.
- 2 Turn VOLUME a little to get sound.
- 3 Open the lid of the FM preset tuning controls located on the rear of the unit.
- 4 Tune in a desired FM station using the FM1 preset tuning control. Turn the control to "MAX" for higher frequencies, and to "MIN" for lower frequencies. When the station is tuned in, the TUNE indicator will light up. The stations is now preset. Preset on the FM2 and FM3 buttons in the same way.
- 5 Adjust the volume using VOLUME.

To change the preset station

Preset a new station on a desired button.

To Tune in a Preset Station

The desired FM station will be received simply by pressing the FM1, FM2, FM3 button.

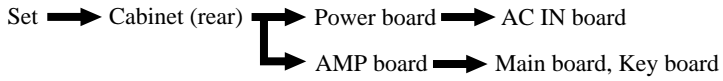
- To turn off the radio, press OPERATION (⏻). When you turn on the radio again, the station previously turned in will be received.
- To tune in preset station after replacing batteries or disconnecting the power cord, press PRESET FM1, FM2 or FM3 again.
- To listen with an earphone (not supplied) connect the earphone to the Ⓜ (earphone) jack. The speaker is deactivated when an earphone is connected.

To improve Receiving condition (See Fig. D)

- **FM:** Extend the telescopic antenna and adjust its length, direction and angle for the best reception.
- **SW:** Extend the telescopic antenna vertically.
- **MW/LW:** Rotate the unit horizontally for optimum reception. A ferrite bar antenna is built into the unit.

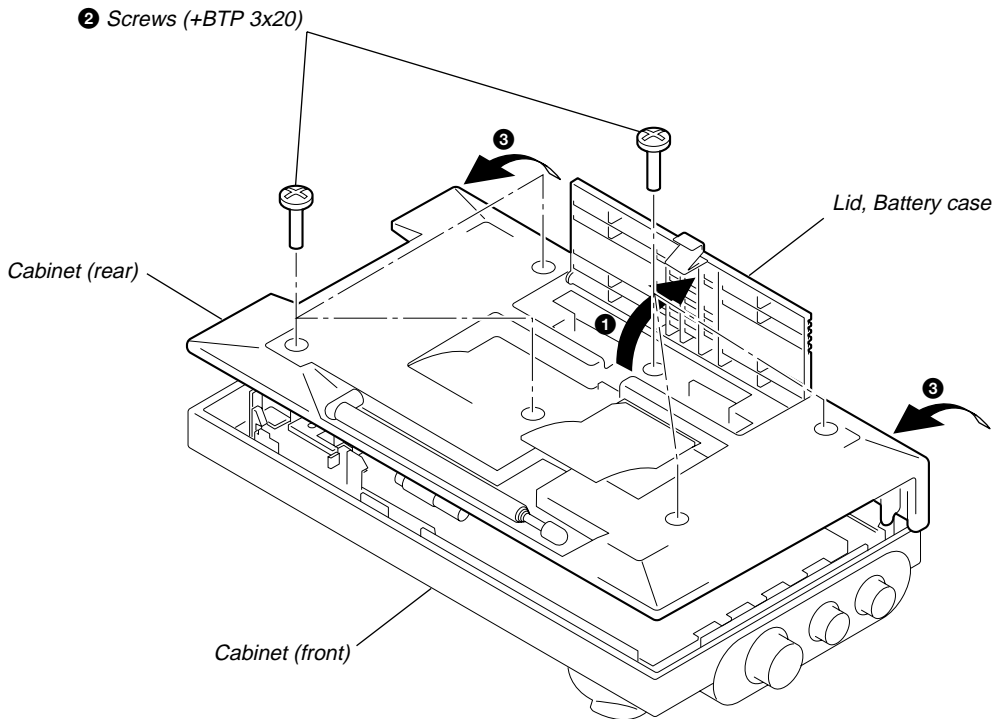
SECTION 2 DISASSEMBLY

●The equipment can be removed using the following procedure.

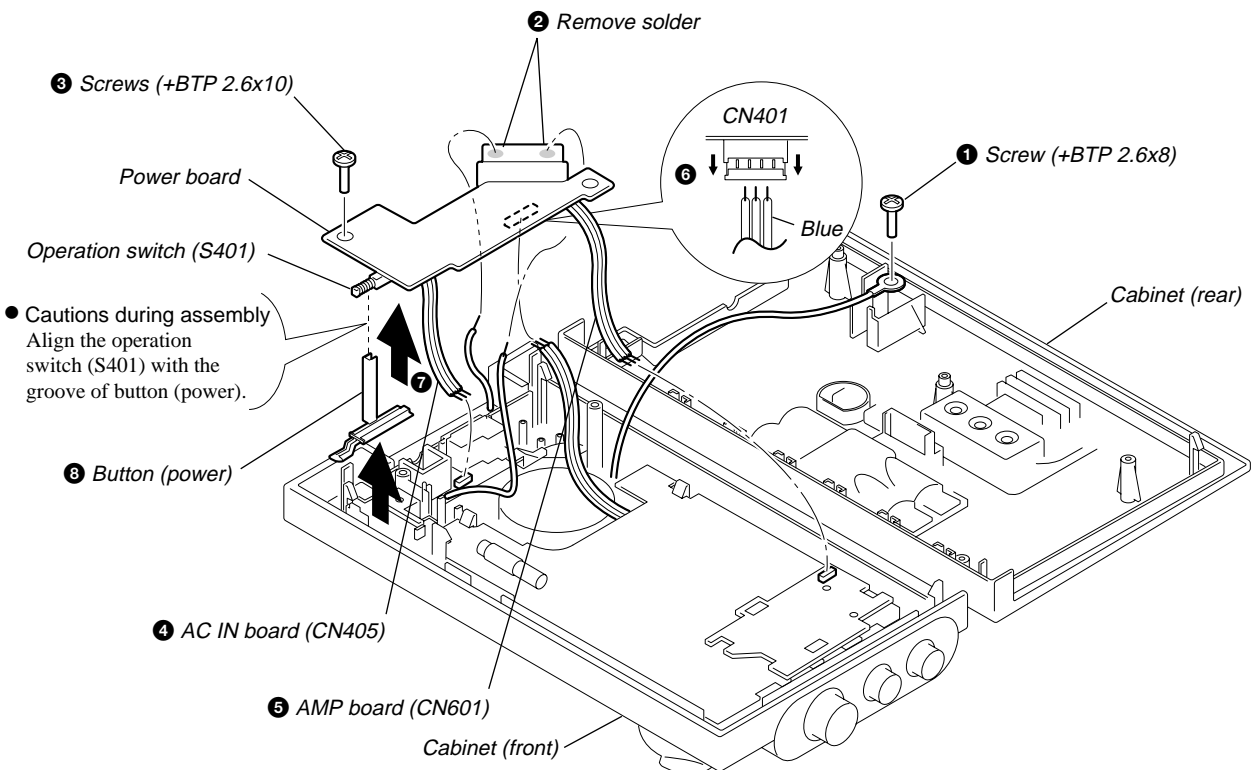


Note: Follow the disassembly procedure in the numerical order given.

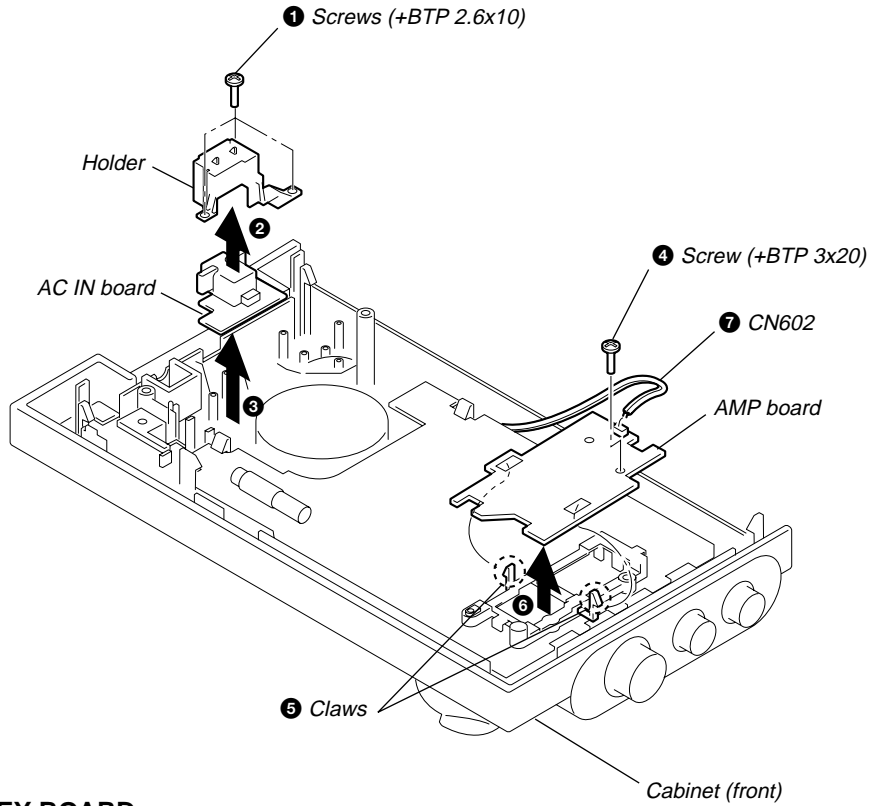
2-1. CABINET (REAR)



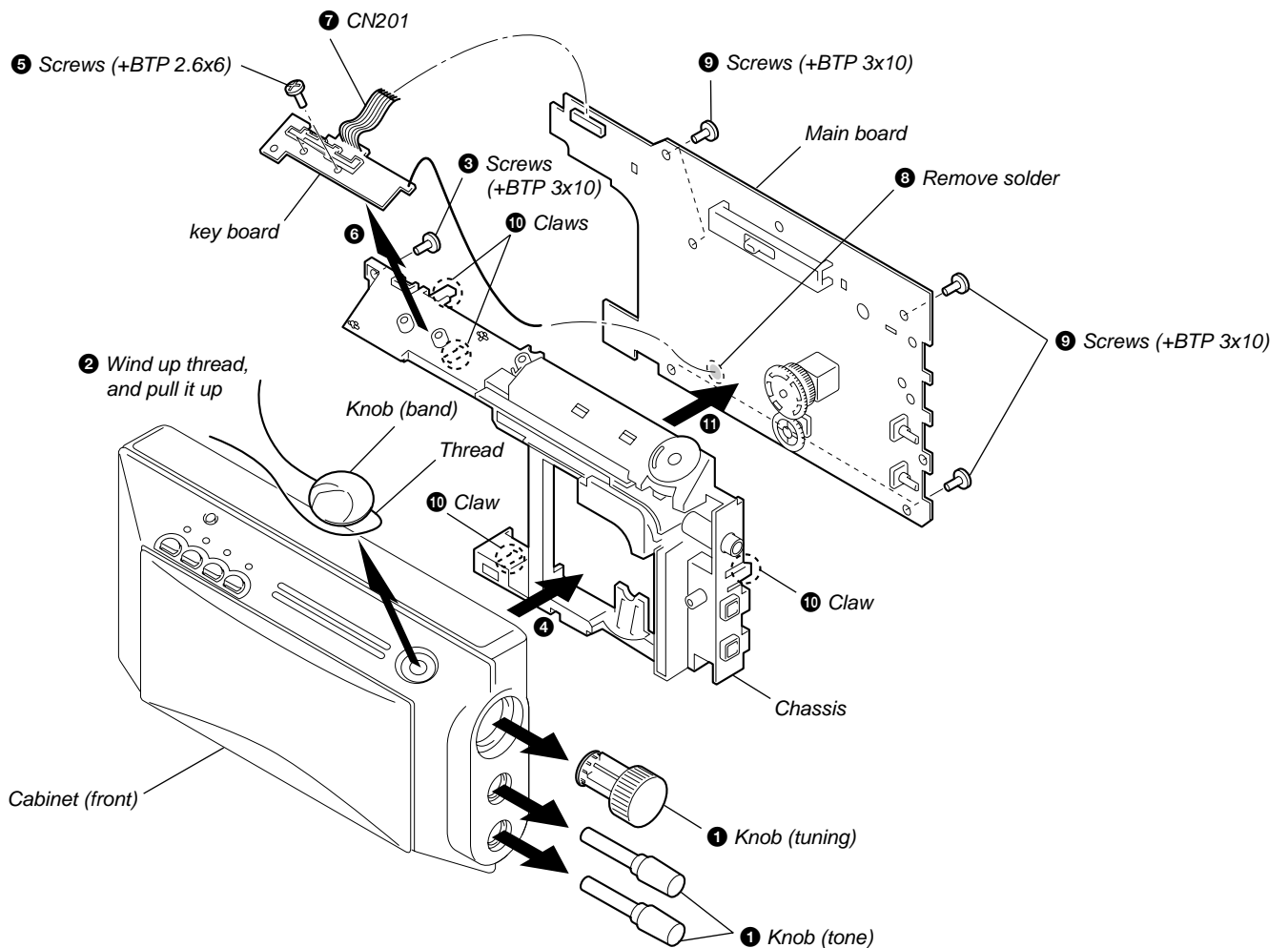
2-2. POWER BOARD



2-3. AC IN BOARD, AMP BOARD

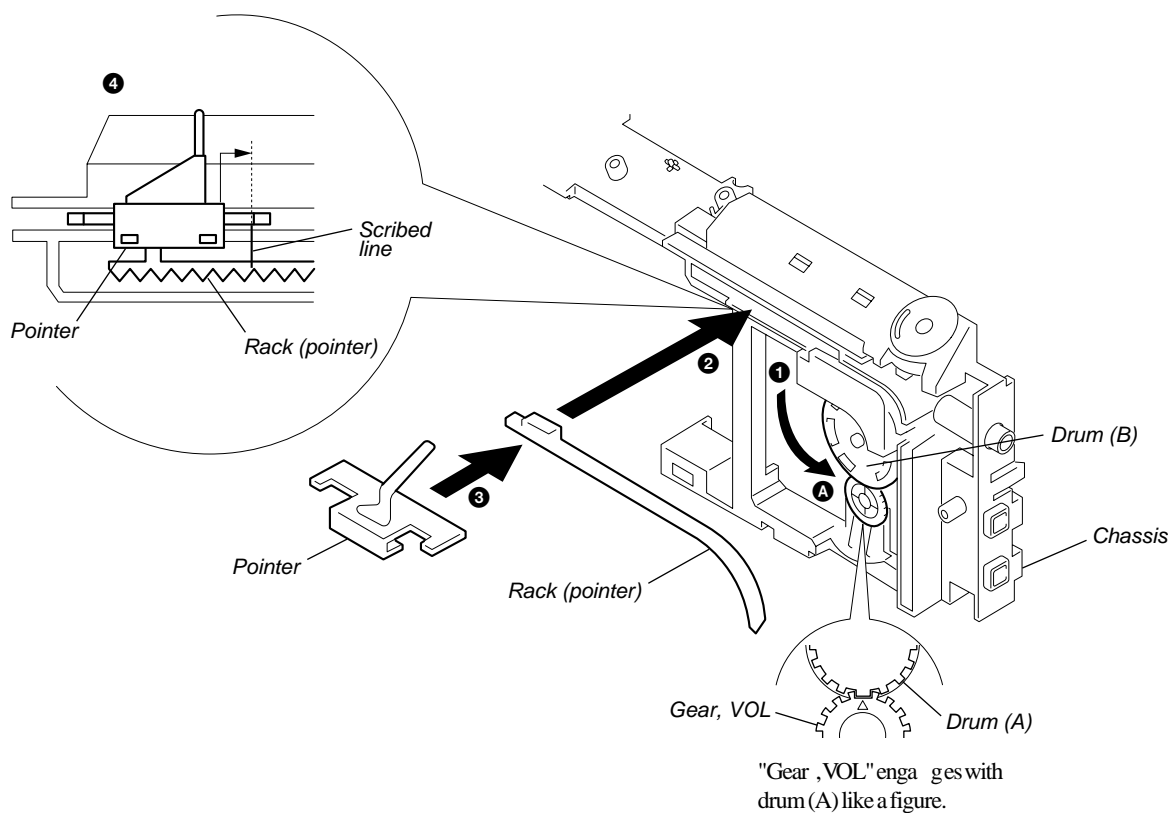


2-4. MAIN BOARD, KEY BOARD



2-5. SETTING THE POINTER

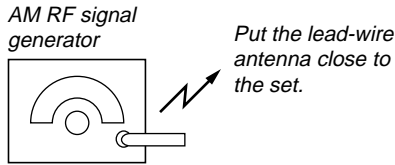
- 1 Turn the drum (B) in the direction of **A** until it stopped.
- 2 Insert the rack (pointer) into the chassis groove.
- 3 Install the pointer .
- 4 Slid the pointer and align it with the groove on the scribed



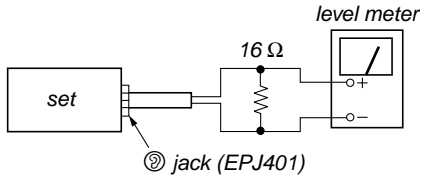
SECTION 3 ELECTRICAL ADJUSTMENTS

3-1. MW SECTION

BAND switch : MW



400Hz, 30%
AM modulation
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.

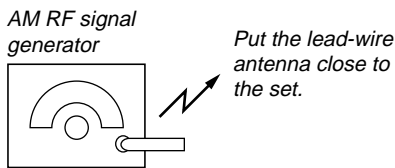
MW IF ADJUSTMENT	
Adjust for a maximum reading on level meter.	
T1	455kHz

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

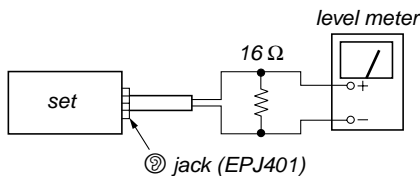
MW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2-1	600kHz
CT1	1,400kHz

3-2. LW SECTION

BAND switch : LW



400Hz, 30%
AM modulation
Output level: as low as possible



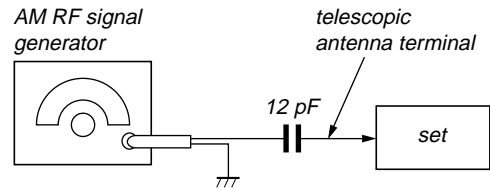
- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

LW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
CT6	145kHz
< confirmation >	265kHz

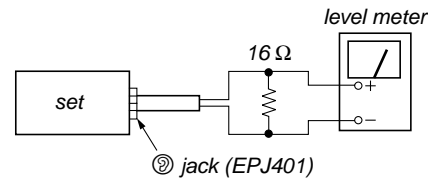
LW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L2-2	160kHz
CT2	240kHz

3-3. SW SECTION

BAND switch : SW



400Hz, 30%
AM modulation
Output level: as low as possible



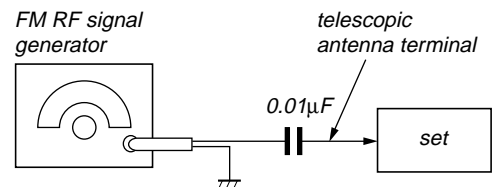
- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

SW FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L5	5.8MHz
CT5	18.5MHz

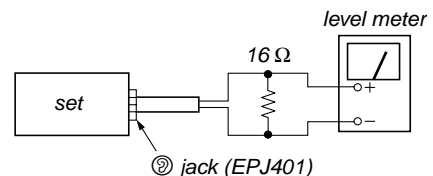
SW TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L3	5.8MHz
CT3	18.5MHz

3-4. FM SECTION

BAND switch : FM



400Hz, 30% FM modulation
frequency deviation ± 22.5 kHz
Output level: as low as possible



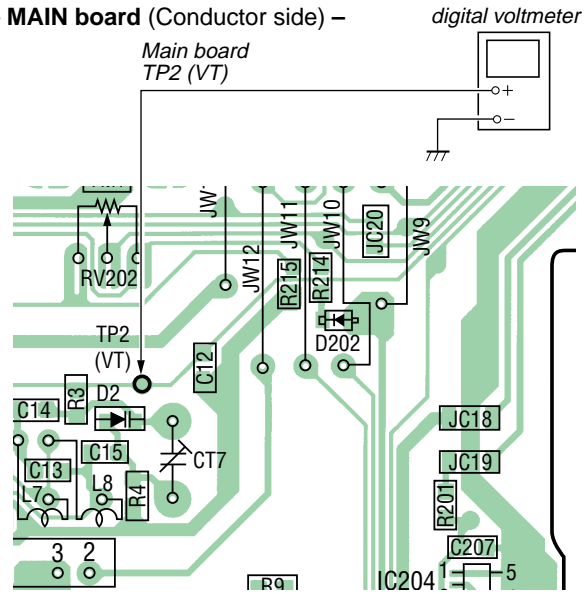
- Repeat the procedures in each adjustment several times, and the frequency coverage and tracking adjustments should be finally done by the trimmer capacitors.

FM FREQUENCY COVERAGE ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L9	86.5MHz
CT8	109.5MHz

FM TRACKING ADJUSTMENT	
Adjust for a maximum reading on level meter.	
L7, L8	86.5MHz
CT7	109.5MHz

• Connecting Digital Voltmeter

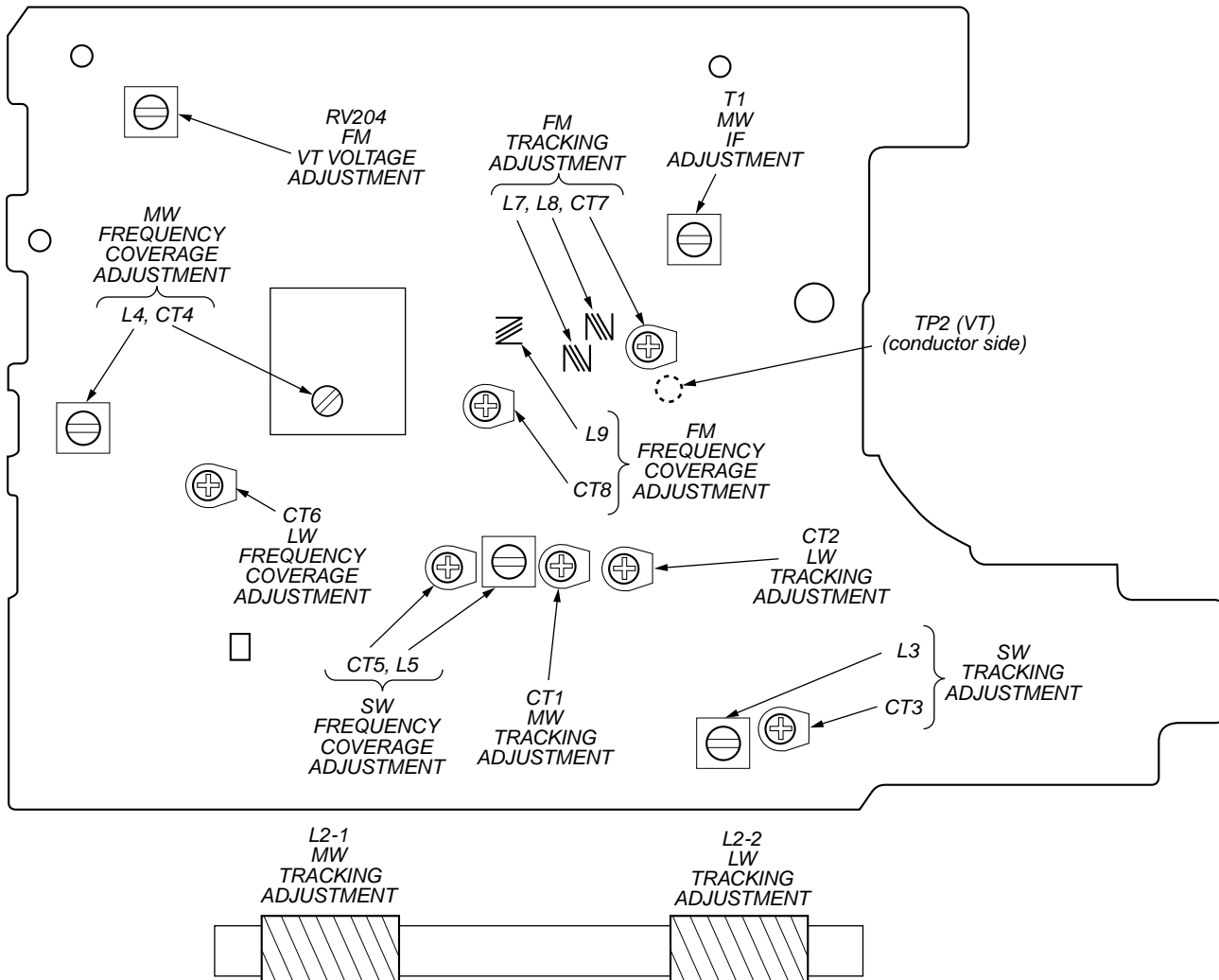
– MAIN board (Conductor side) –



FM VT VOLTAGE ADJUSTMENT	
Frequency Display	86.5MHz
Reading on Digital Voltmeter	Adjustment value : 1.0V Standard value : 0.9 – 1.1V
Adjustment Part	RV204

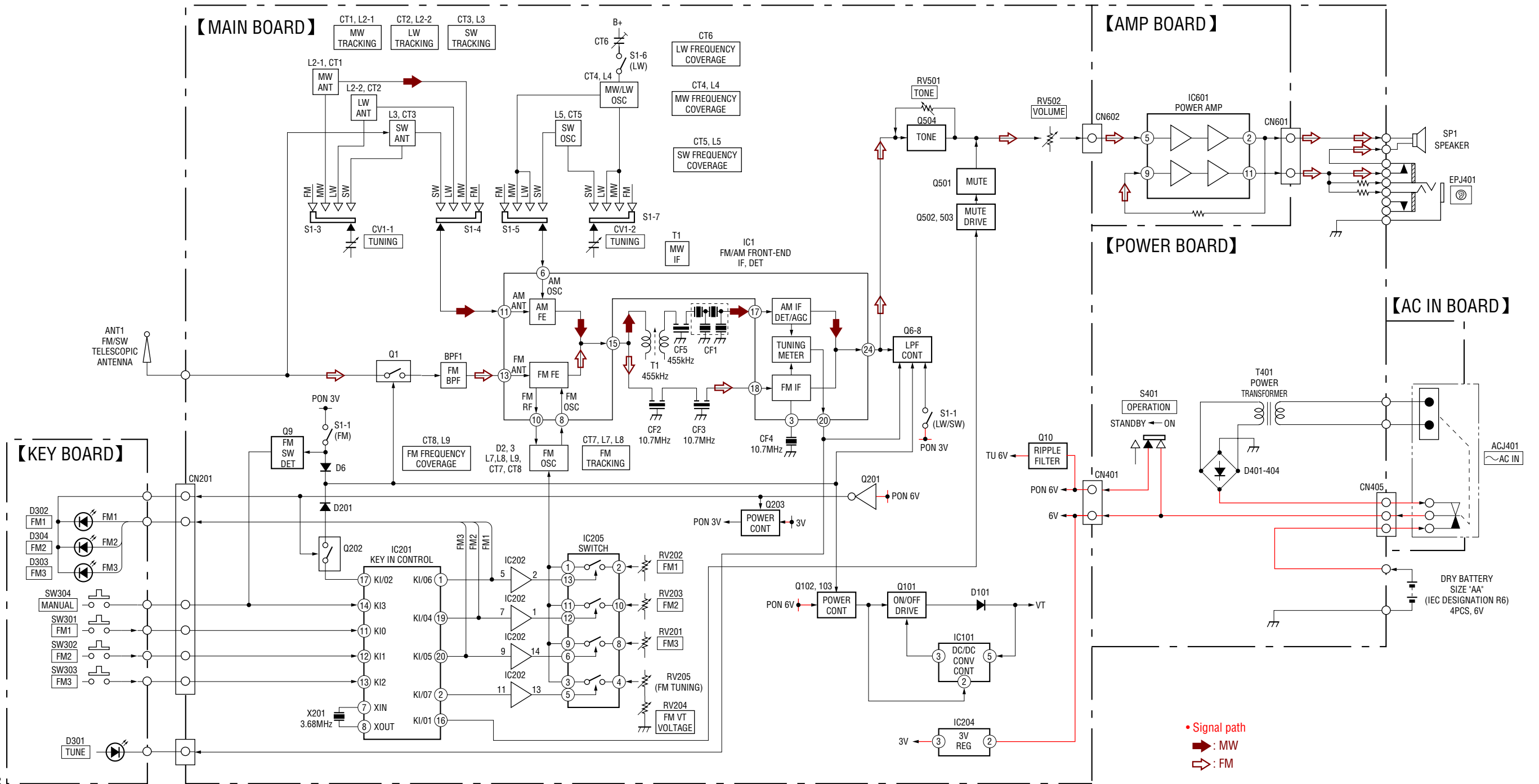
Adjustment Location : Main board

– MAIN BOARD (Component side) –

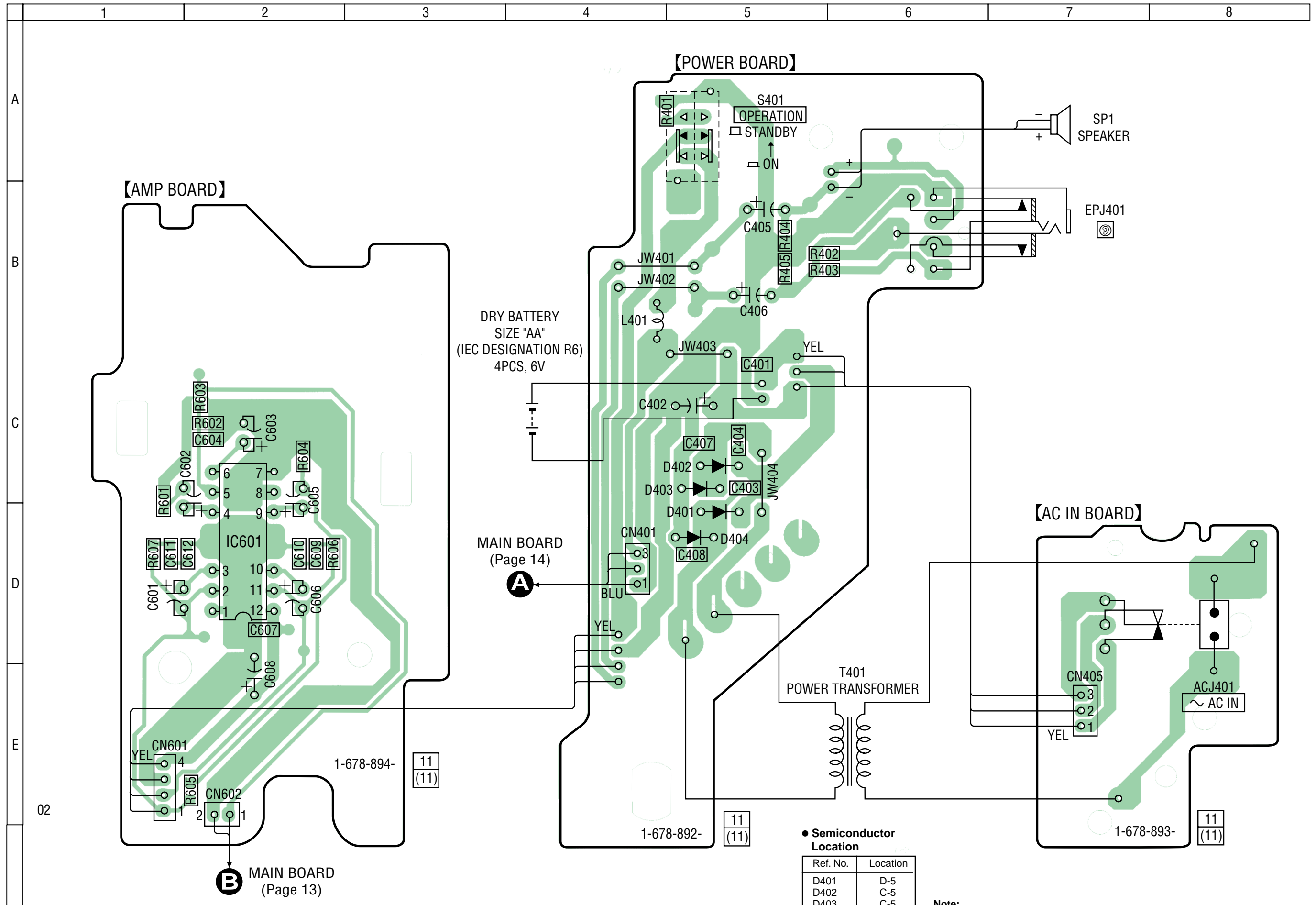


SECTION 4
DIAGRAMS

4-1. BLOCK DIAGRAM



4-2. PRINTED WIRING BOARDS (1/2)



DRY BATTERY
SIZE "AA"
(IEC DESIGNATION R6)
4PCS, 6V

MAIN BOARD
(Page 14)
A

B MAIN BOARD
(Page 13)

● Semiconductor Location

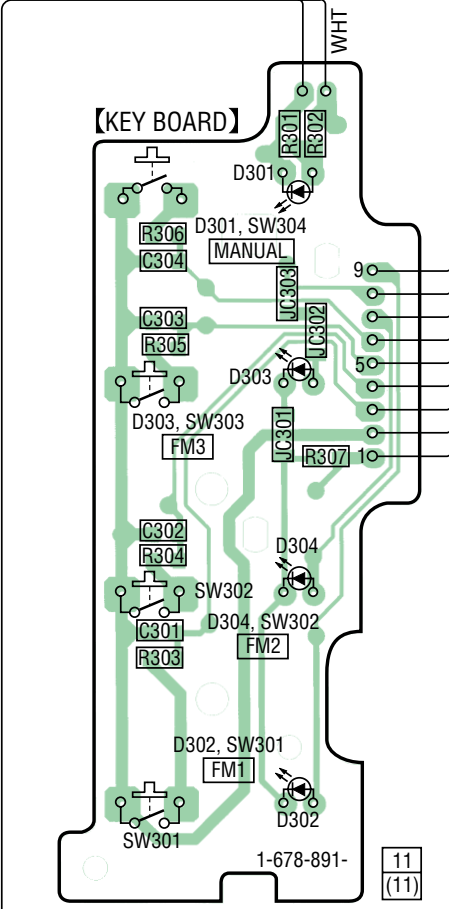
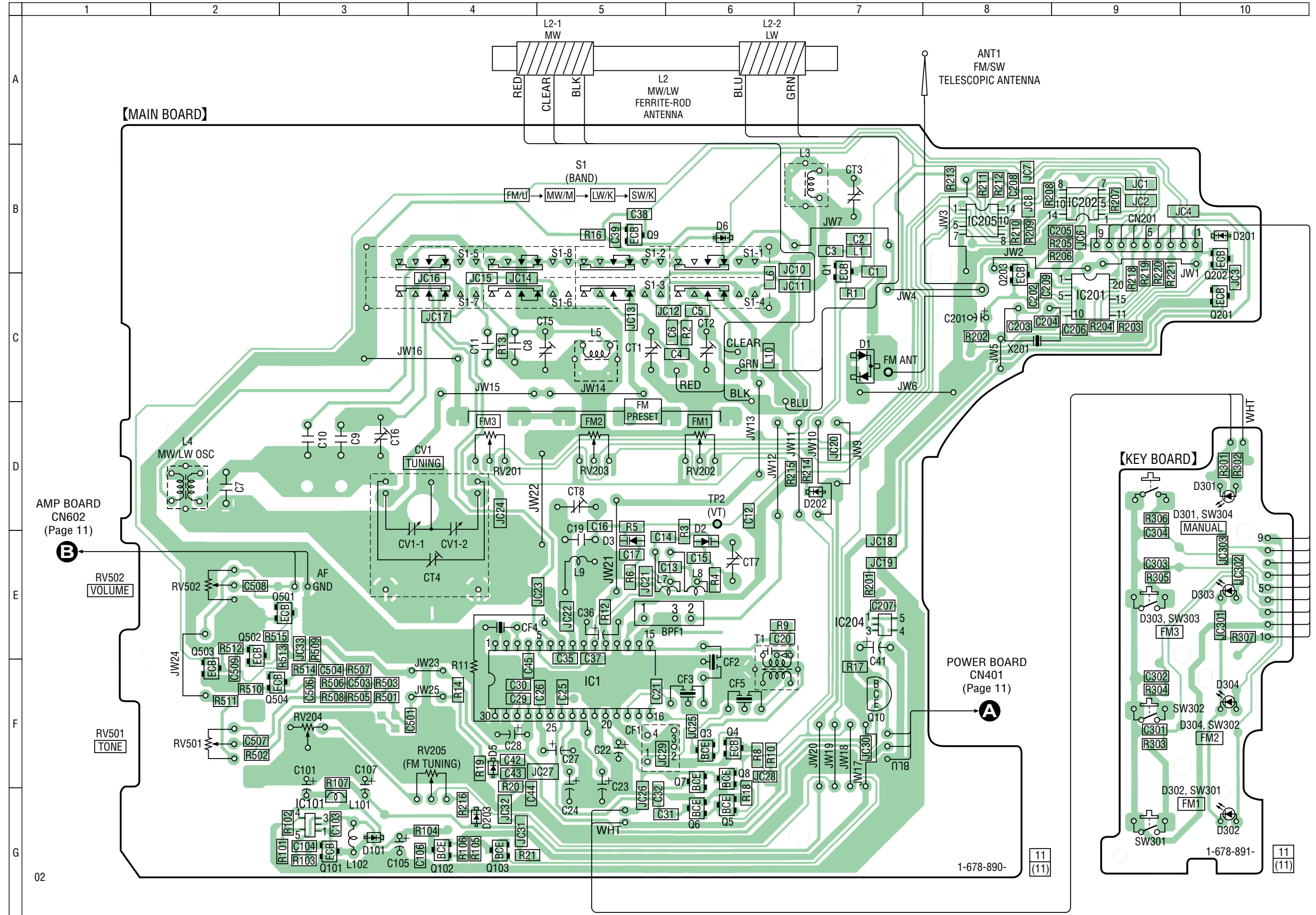
Ref. No.	Location
D401	D-5
D402	C-5
D403	C-5
D404	D-5
IC601	D-2

Note:
 ● : parts extracted from the component side.
 ● (green) : Pattern from the side which enables seeing.

4-3. PRINTED WIRING BOARDS (2/2)

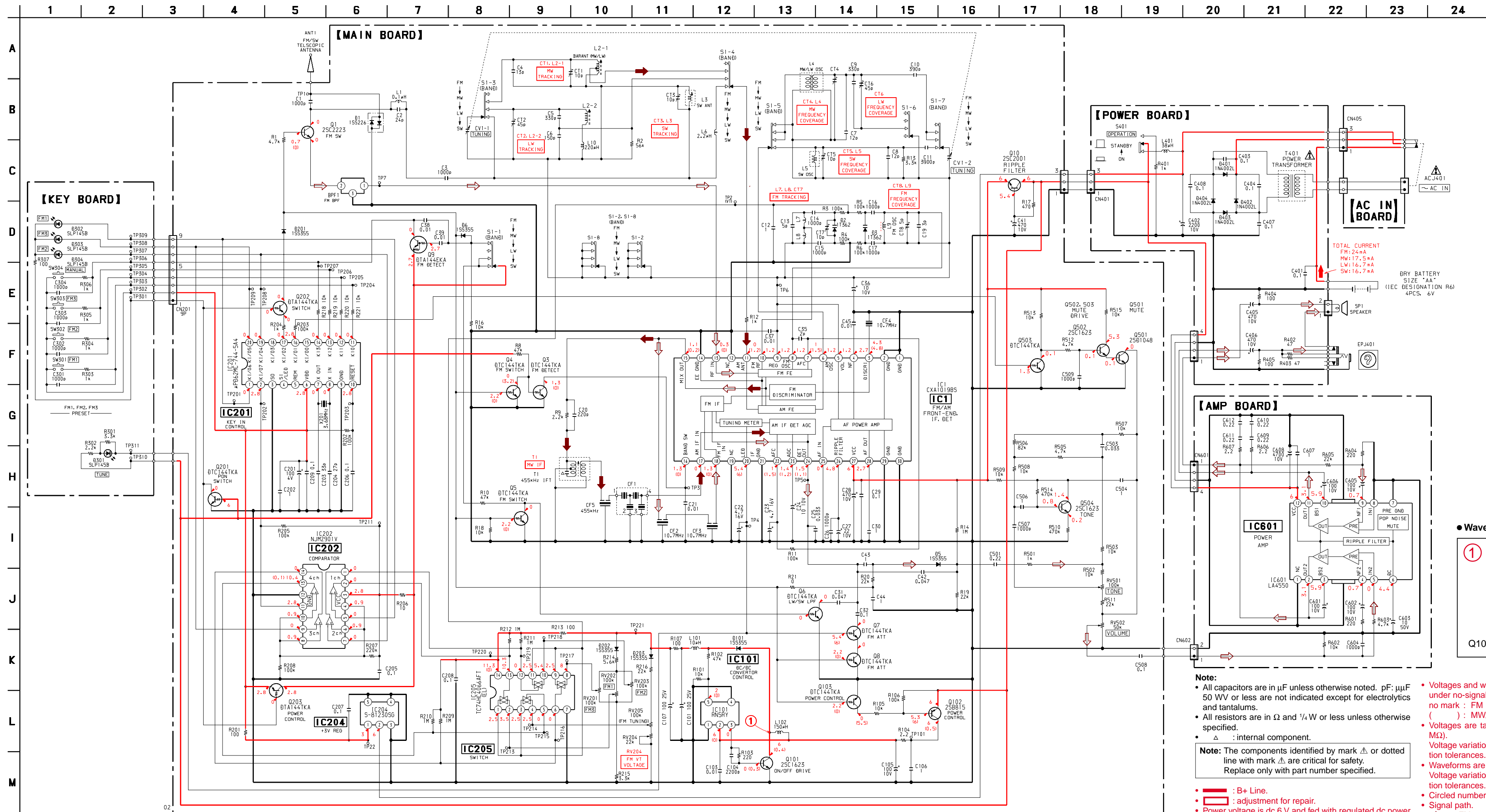
● Semiconductor Location

Ref. No.	Location
D1	C-7
D2	E-6
D3	E-5
D5	F-4
D6	B-6
D101	G-3
D201	B-10
D202	D-7
D203	G-4
D301	D-10
D302	G-10
D303	E-10
D304	F-10
IC1	F-5
IC101	G-3
IC201	C-9
IC202	B-9
IC204	E-7
IC205	B-8
Q1	B-7
Q3	F-6
Q4	F-6
Q5	G-6
Q6	G-6
Q7	F-6
Q8	B-5
Q9	B-5
Q10	F-7
Q101	G-3
Q102	G-4
Q103	G-4
Q201	C-10
Q202	B-10
Q203	C-8
Q501	E-3
Q502	E-2
Q503	F-2
Q504	F-2



Note:

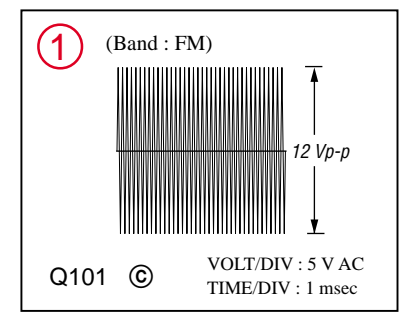
- : parts extracted from the component side.
- △ : internal component.
- : Pattern from the side which enables seeing.



TOTAL CURRENT
 FM: 24 mA
 MW: 17.5 mA
 LW: 16.7 mA
 SW: 16.7 mA

DRY BATTERY
 SIZE "AA"
 (IEC DESIGNATION R6)
 4PCS. 6V

● Waveform



- Note:**
- All capacitors are in μF unless otherwise noted. pF : μF 50 WV or less are not indicated except for electrolytics and tantalums.
 - All resistors are in Ω and $\frac{1}{4}\text{W}$ or less unless otherwise specified.
 - Δ : internal component.
- Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

- Volts and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- () : MW/LW/SW
- Volts are taken with a VOM (Input impedance 10 $\text{M}\Omega$).
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a VOM (Input impedance 10 $\text{M}\Omega$).
- Waveforms are taken with an oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Signal path.
- \square : FM
- \blacktriangleright : MW

- --- : B+ Line.
- --- : adjustment for repair.
- Power voltage is dc 6 V and fed with regulated dc power supply from battery terminal.

SECTION 5 EXPLODED VIEWS

NOTE :

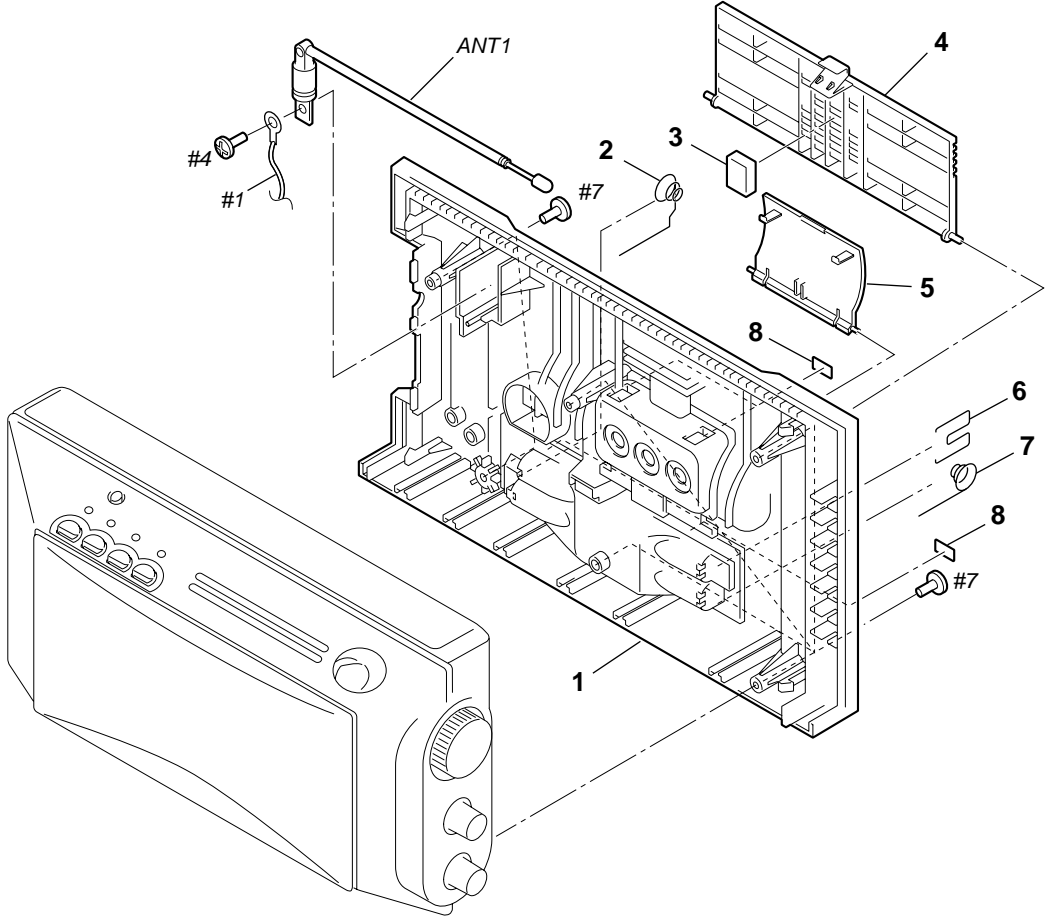
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts
Example :
KNOB, BALANCE (WHITE) ••• (RED)
 ↑ ↑
 Parts color Cabinet's color

- 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 and accessories and packing materials are given in the last of this parts list.

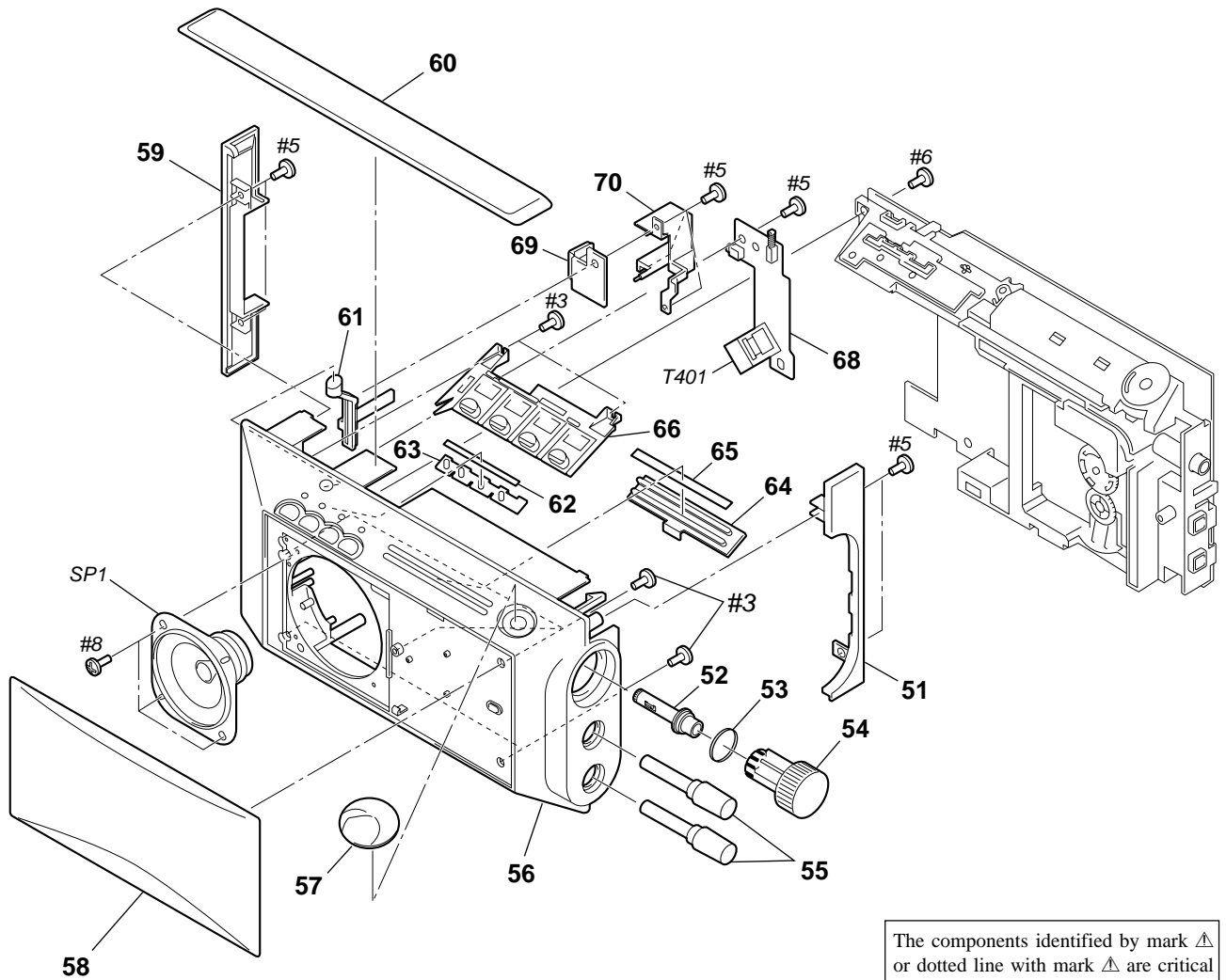
The components identified by mark \triangle or dotted line with mark \triangle are critical for safety.
Replace only with part number specified.

5-1. REAR CABINET SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
1	3-047-918-01	CABINET (REAR)(GRAY)		5	3-047-921-01	COVER (PRESET)(GRAY)	
1	3-047-918-11	CABINET (REAR)(BROWN)		5	3-047-921-11	COVER (PRESET)(BROWN)	
2	3-047-934-01	TERMINAL (+/-), BATTERY		6	3-047-930-01	TERMINAL (+), BATTERY	
3	9-911-815-02	CUSHION, CABINET		7	3-047-932-01	TERMINAL (-), BATTERY	
4	3-047-919-01	LID, BATTERY CASE(GRAY)		* 8	3-546-152-02	CUSHION	
4	3-047-919-11	LID, BATTERY CASE(BROWN)		ANT1	1-501-222-71	ANTENNA, TELESCOPIC (FM)	

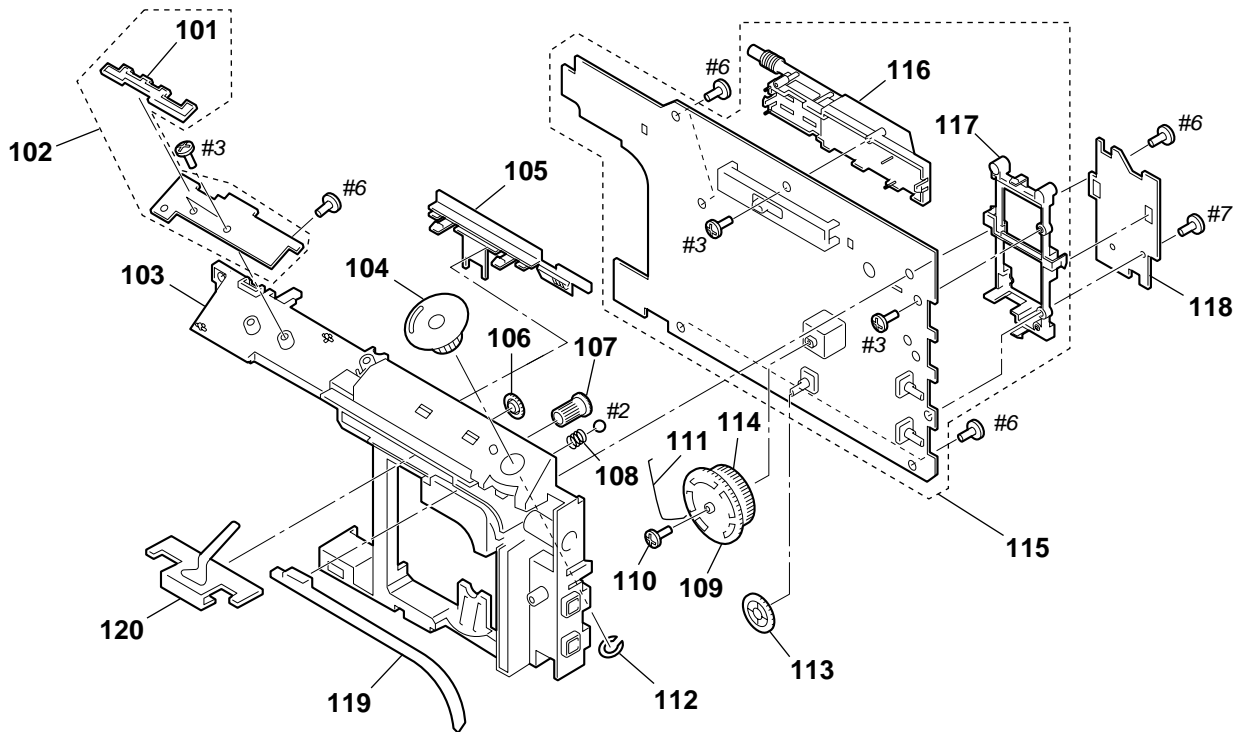
5-2. FRONT CABINET SECTION



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

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
51	3-047-923-01	WOOD (C), SIDE(GRAY)		60	3-047-936-11	WOOD (A), SIDE(BROWN)	
51	3-047-923-11	WOOD (C), SIDE(BROWN)		61	3-047-933-01	BUTTON (POWER)	
52	3-043-336-01	SHAFT (TUNING)		62	3-220-209-01	SHEET (LIGHT GUIDE PLATE)	
53	3-045-680-01	SPRING (TUNING)		63	3-047-927-01	PLATE, LIGHT GUIDE	
54	3-047-931-01	KNOB (TUNING)		64	3-047-926-01	PLATE, TRANSPARENT	
55	3-047-929-01	KNOB (CONTROL)		65	3-220-208-01	SHEET (TRANSPARENT PLATE)	
56	3-047-916-01	CABINET (FRONT)(GRAY)		66	3-047-928-01	BUTTON (PRESET)	
56	3-047-916-11	CABINET (FRONT)(BROWN)		* 68	1-678-892-11	POWER BOARD	
57	3-043-343-21	KNOB (BAND)		* 69	1-678-893-11	AC IN BOARD	
58	X-3379-581-1	NET ASSY (GRAY)		70	3-047-924-01	HOLDER	
58	X-3379-582-1	NET ASSY (BROWN)		SP1	1-529-803-11	SPEAKER (10.3cm)	
59	3-047-937-01	WOOD (B), SIDE(GRAY)		\triangle T401	1-435-504-11	TRANSFORMER, POWER	
59	3-047-937-11	WOOD (B), SIDE(BROWN)					
60	3-047-936-01	WOOD (A), SIDE(GRAY)					

5-3. CHASSIS SECTION



Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
101	3-047-925-01	HOLDER (LED)		111	3-363-366-11	SPRING, DRUM	
* 102	A-3683-227-A	KEY BOARD, COMPLETE		112	3-048-207-01	RING (BAND)	
103	3-043-330-01	CHASSIS		113	3-043-341-01	GEAR, VOL	
104	3-043-344-01	GEAR (BAND)		114	3-043-342-01	DRUM (A), VC	
105	3-043-345-01	SLIDER (BAND)		* 115	A-3683-226-A	MAIN BOARD, COMPLETE	
106	3-043-350-01	GEAR (B), MIDWAY		116	3-043-346-01	HOLDER, FERRITE-ROD ANTENNA	
107	3-043-349-01	GEAR (A), MIDWAY		117	3-220-210-01	CHASSIS, SUB	
108	3-043-721-01	SPRING (BAND)		* 118	1-678-894-11	AMPLIFIER BOARD	
* 109	3-363-397-01	DRUM (B)		119	3-043-348-01	RACK (POINTER)	
110	3-364-941-11	SCREW (+B) (2.6X5), NYLOK		120	3-043-347-01	POINTER	

SECTION 6 ELECTRICAL PARTS LIST

AC IN AMPLIFIER

KEY 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, -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
*	1-678-893-11	AC IN BOARD *****		*	A-3683-227-A	KEY BOARD, COMPLETE *****	
Δ ACJ401	1-526-838-11	INLET, AC 2P(~ AC IN)			3-047-925-01	HOLDER (LED)	
*****						< CAPACITOR >	
*	1-678-894-11	AMPLIFIER BOARD *****		C301	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
		< CAPACITOR >		C302	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C601	1-104-665-11	ELECT 100uF 20% 10V		C303	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C602	1-104-665-11	ELECT 100uF 20% 10V		C304	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C603	1-126-964-11	ELECT 10uF 20% 50V				< DIODE >	
C604	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		D301	8-719-080-08	LED SLP145B-51(TUNE)	
C605	1-104-665-11	ELECT 100uF 20% 10V		D302	8-719-080-08	LED SLP145B-51(FM1)	
C606	1-104-665-11	ELECT 100uF 20% 10V		D303	8-719-080-08	LED SLP145B-51(FM3)	
C607	1-115-156-11	CERAMIC CHIP 1uF 10V		D304	8-719-080-08	LED SLP145B-51(FM2)	
C608	1-126-929-11	ELECT 4700uF 20% 10V				< JUMPER >	
C609	1-165-128-11	CERAMIC CHIP 0.22uF 16V		JC301	1-216-296-91	SHORT 0	
C610	1-165-128-11	CERAMIC CHIP 0.22uF 16V		JC302	1-216-296-91	SHORT 0	
C611	1-165-128-11	CERAMIC CHIP 0.22uF 16V		JC303	1-216-864-11	METAL CHIP 0 5% 1/16W	
C612	1-165-128-11	CERAMIC CHIP 0.22uF 16V				< RESISTOR >	
		< CONNECTOR >		R301	1-216-827-11	METAL CHIP 3.3K 5% 1/16W	
* CN601	1-568-270-11	SOCKET, CONNECTOR 4P		R302	1-216-825-11	METAL CHIP 2.2K 5% 1/16W	
* CN602	1-568-268-11	SOCKET, CONNECTOR 2P		R303	1-216-821-11	METAL CHIP 1K 5% 1/16W	
		< IC >		R304	1-216-821-11	METAL CHIP 1K 5% 1/16W	
IC601	8-759-802-46	IC LA4550		R305	1-216-821-11	METAL CHIP 1K 5% 1/16W	
		< RESISTOR >		R306	1-216-821-11	METAL CHIP 1K 5% 1/16W	
R601	1-216-813-11	METAL CHIP 220 5% 1/16W		R307	1-216-809-11	METAL CHIP 100 5% 1/16W	
R602	1-216-833-11	METAL CHIP 10K 5% 1/16W				< SWITCH >	
R603	1-216-829-11	METAL CHIP 4.7K 5% 1/16W		SW301	1-692-444-11	SWITCH, KEY BOARD(FM1)	
R604	1-216-813-11	METAL CHIP 220 5% 1/16W		SW302	1-692-444-11	SWITCH, KEY BOARD(FM2)	
R605	1-216-837-11	METAL CHIP 22K 5% 1/16W		SW303	1-692-444-11	SWITCH, KEY BOARD(FM3)	
R606	1-216-789-11	METAL CHIP 2.2 5% 1/16W		SW304	1-692-444-11	SWITCH, KEY BOARD(MANUAL)	
R607	1-216-789-11	METAL CHIP 2.2 5% 1/16W		*****			
*****				*	A-3683-226-A	MAIN BOARD, COMPLETE *****	
					3-043-346-01	HOLDER, FERRITE-ROD ANTENNA	
					3-220-210-01	CHASSIS, SUB	
					7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	

MAIN

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< BAND PASS FILTER >					
BPF1	1-236-022-11	FILTER, BAND PASS		C207	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
		< CAPACITOR >		C208	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C1	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V		C209	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C2	1-162-975-11	CERAMIC CHIP 24PF 5% 50V		C501	1-164-489-11	CERAMIC CHIP 0.22uF 10% 16V	
C3	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V		C503	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V	
C4	1-164-185-11	CERAMIC CHIP 13PF 5% 50V		C504	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C5	1-162-959-11	CERAMIC CHIP 330PF 5% 50V		C506	1-109-982-11	CERAMIC CHIP 1uF 10% 10V	
C6	1-162-955-11	CERAMIC CHIP 150PF 5% 50V		C507	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C7	1-102-949-00	CERAMIC 12PF 5% 50V		C508	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V	
C8	1-102-949-00	CERAMIC 12PF 5% 50V		C509	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V	
C9	1-136-355-11	FILM 330PF 5% 100V				< FILTER >	
C10	1-104-732-11	FILM 390PF 5% 100V		CF1	1-567-845-11	FILTER, CERAMIC	
C11	1-136-682-11	FILM 0.0039uF 5% 100V		CF2	1-577-600-81	FILTER, CERAMIC	
C12	1-109-982-11	CERAMIC CHIP 1uF 10% 10V		CF3	1-577-600-81	FILTER, CERAMIC	
C13	1-162-936-11	CERAMIC CHIP 5PF 0.25PF 50V		CF4	1-577-600-81	FILTER, CERAMIC	
C14	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V		CF5	1-781-790-11	FILTER, AM CERAMIC	
C15	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V				< CONNECTOR >	
C16	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V		CN201	1-580-188-11	SOCKET, CONNECTOR 9P	
C17	1-164-357-11	CERAMIC CHIP 0.001uF 5% 50V				< TRIMMER >	
C19	1-164-039-11	CERAMIC 3PF 5% 50V		CT1	1-141-354-21	CAP, TRIMMER 10PF(MW TRACKING)	
C20	1-162-957-11	CERAMIC CHIP 220PF 5% 50V		CT2	1-141-320-11	CAP, TRIMMER 45PF(LW TRACKING)	
C21	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		CT3	1-141-354-21	CAP, TRIMMER 10PF(SW TRACKING)	
C22	1-124-259-11	ELECT 4.7uF 20% 16V		CT4	1-151-679-11	CAP, VAR(TUNING)(MW FREQUENCY COVERAGE)	
C23	1-124-259-11	ELECT 4.7uF 20% 16V		CT5	1-141-354-21	CAP, TRIMMER 10PF(SW FREQUENCY COVERAGE)	
C24	1-124-261-00	ELECT 10uF 20% 50V		CT6	1-141-320-11	CAP, TRIMMER 45PF(LW FREQUENCY COVERAGE)	
C25	1-164-677-11	CERAMIC CHIP 0.033uF 10% 16V		CT7	1-141-304-21	CAP, TRIMMER 10PF(FM TRACKING)	
C26	1-162-964-11	CERAMIC CHIP 0.001uF 10% 50V		CT8	1-141-299-11	CAP, CERAMIC TRIMMER 5PF(FM FREQUENCY COVERAGE)	
C27	1-124-234-00	ELECT 22uF 20% 16V				< VARIABLE CAPACITOR >	
C28	1-126-925-11	ELECT 470uF 20% 10V		CV1	1-151-679-11	CAP, VAR(TUNING)	
C29	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V				< DIODE >	
C30	1-115-156-11	CERAMIC CHIP 1uF 10% 10V		D1	8-719-800-76	DIODE 1SS226	
C31	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V		D2	8-713-100-11	DIODE 1T362	
C32	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V		D3	8-713-100-11	DIODE 1T362	
C35	1-162-932-11	CERAMIC CHIP 2PF 0.25PF 50V		D5	8-719-988-61	DIODE 1SS355TE-17	
C36	1-124-261-00	ELECT 10uF 20% 50V		D6	8-719-988-61	DIODE 1SS355TE-17	
C37	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		D101	8-719-988-61	DIODE 1SS355TE-17	
C38	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		D201	8-719-988-61	DIODE 1SS355TE-17	
C39	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		D202	8-719-988-61	DIODE 1SS355TE-17	
C41	1-126-925-11	ELECT 470uF 20% 10V		D203	8-719-988-61	DIODE 1SS355TE-17	
C42	1-165-176-11	CERAMIC CHIP 0.047uF 10% 16V				< IC >	
C43	1-109-982-11	CERAMIC CHIP 1uF 10% 10V		IC1	8-752-037-02	IC CXA1019S	
C44	1-115-156-11	CERAMIC CHIP 1uF 10% 10V		IC101	8-759-448-77	IC RN5RY202A-TL	
C45	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		IC201	8-759-680-16	IC IC UPD62MC-744-5A4-E2	
C101	1-128-111-11	ELECT 100uF 20% 25V		IC202	8-759-273-87	IC NJM2901V(TE2)	
C103	1-162-970-11	CERAMIC CHIP 0.01uF 10% 25V		IC204	8-759-198-63	IC S-81230SG-QB-T1	
C104	1-162-966-11	CERAMIC CHIP 0.0022uF 10% 50V		IC205	8-759-523-03	IC TC74HC4066AFT(EL)	
C105	1-124-584-00	ELECT 100uF 20% 10V					
C106	1-115-156-11	CERAMIC CHIP 1uF 10% 10V					
C107	1-128-111-11	ELECT 100uF 20% 25V					
C201	1-124-584-00	ELECT 100uF 20% 10V					
C202	1-115-156-11	CERAMIC CHIP 1uF 10% 10V					
C203	1-162-921-11	CERAMIC CHIP 33PF 5% 50V					
C204	1-162-920-11	CERAMIC CHIP 27PF 5% 50V					
C205	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V					
C206	1-107-826-11	CERAMIC CHIP 0.1uF 10% 16V					

Ref. No.	Part No.	Description	Remark	Ref. No.	Part No.	Description	Remark
		< JUMPER >		Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JC1	1-216-296-91	SHORT 0		Q102	8-729-800-71	TRANSISTOR 2SB815B7-TB	
JC2	1-216-296-91	SHORT 0		Q103	8-729-027-60	TRANSISTOR DTC144TKA-T146	
JC3	1-216-864-11	METAL CHIP 0	5% 1/16W	Q201	8-729-027-60	TRANSISTOR DTC144TKA-T146	
JC4	1-216-296-91	SHORT 0		Q202	8-729-027-39	TRANSISTOR DTA144TKA-T146	
JC6	1-216-864-11	METAL CHIP 0	5% 1/16W	Q203	8-729-027-39	TRANSISTOR DTA144TKA-T146	
JC7	1-216-864-11	METAL CHIP 0	5% 1/16W	Q501	8-729-800-37	TRANSISTOR 2SD1048-X7	
JC8	1-216-296-91	SHORT 0		Q502	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JC10	1-216-296-91	SHORT 0		Q503	8-729-027-60	TRANSISTOR DTC144TKA-T146	
JC11	1-216-296-91	SHORT 0		Q504	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
JC12	1-216-864-11	METAL CHIP 0	5% 1/16W			< RESISTOR >	
JC13	1-216-864-11	METAL CHIP 0	5% 1/16W	R1	1-216-829-11	METAL CHIP 4.7K 5%	1/16W
JC14	1-216-296-91	SHORT 0		R2	1-216-842-11	METAL CHIP 56K 5%	1/16W
JC15	1-216-864-11	METAL CHIP 0	5% 1/16W	R3	1-216-845-11	METAL CHIP 100K 5%	1/16W
JC16	1-216-864-11	METAL CHIP 0	5% 1/16W	R4	1-216-845-11	METAL CHIP 100K 5%	1/16W
JC17	1-216-296-91	SHORT 0		R5	1-216-845-11	METAL CHIP 100K 5%	1/16W
JC18	1-216-296-91	SHORT 0		R6	1-216-845-11	METAL CHIP 100K 5%	1/16W
JC19	1-216-296-91	SHORT 0		R8	1-216-841-11	METAL CHIP 47K 5%	1/16W
JC20	1-216-864-11	METAL CHIP 0	5% 1/16W	R9	1-216-825-11	METAL CHIP 2.2K 5%	1/16W
JC21	1-216-296-91	SHORT 0		R10	1-216-841-11	METAL CHIP 47K 5%	1/16W
JC22	1-216-296-91	SHORT 0		R11	1-247-879-11	CARBON 100K 5%	1/4W
JC23	1-216-296-91	SHORT 0		R12	1-216-821-11	METAL CHIP 1K 5%	1/16W
JC24	1-216-864-11	METAL CHIP 0	5% 1/16W	R13	1-216-827-11	METAL CHIP 3.3K 5%	1/16W
JC25	1-216-864-11	METAL CHIP 0	5% 1/16W	R14	1-216-857-11	METAL CHIP 1M 5%	1/16W
JC26	1-216-296-91	SHORT 0		R16	1-216-833-11	METAL CHIP 10K 5%	1/16W
JC27	1-216-296-91	SHORT 0		R17	1-216-817-11	METAL CHIP 470 5%	1/16W
JC28	1-216-864-11	METAL CHIP 0	5% 1/16W	R18	1-216-833-11	METAL CHIP 10K 5%	1/16W
JC29	1-216-864-11	METAL CHIP 0	5% 1/16W	R19	1-216-837-11	METAL CHIP 22K 5%	1/16W
JC30	1-216-864-11	METAL CHIP 0	5% 1/16W	R20	1-216-837-11	METAL CHIP 22K 5%	1/16W
JC31	1-216-296-91	SHORT 0		R21	1-216-864-11	METAL CHIP 0 5%	1/16W
JC32	1-216-296-91	SHORT 0		R101	1-216-833-11	METAL CHIP 10K 5%	1/16W
JC33	1-216-864-11	METAL CHIP 0	5% 1/16W	R102	1-216-841-11	METAL CHIP 47K 5%	1/16W
		< COIL >		R103	1-216-813-11	METAL CHIP 220 5%	1/16W
L1	1-410-981-22	INDUCTOR CHIP 0.1uH		R104	1-216-789-11	METAL CHIP 2.2 5%	1/16W
L2	1-754-133-11	ANTENNA, FERRITE-ROD (LW/MW TRACKING)		R105	1-216-833-11	METAL CHIP 10K 5%	1/16W
L3	1-402-538-11	SW COIL (ANT) (SW TRACKING)		R106	1-216-845-11	METAL CHIP 100K 5%	1/16W
L4	1-406-092-11	COIL, OSC (MW FREQUENCY COVERAGE)		R107	1-216-809-11	METAL CHIP 100 5%	1/16W
L5	1-406-413-11	COIL, SW (OSC)(SW FREQUENCY COVERAGE)		R201	1-216-809-11	METAL CHIP 100 5%	1/16W
L6	1-410-997-22	INDUCTOR CHIP 2.2uH		R202	1-216-845-11	METAL CHIP 100K 5%	1/16W
L7	1-428-290-11	COIL, AIR-CORE(FM TRACKING)		R203	1-216-845-11	METAL CHIP 100K 5%	1/16W
L8	1-428-229-11	COIL, AIR-CORE(FM TRACKING)		R204	1-216-821-11	METAL CHIP 1K 5%	1/16W
L9	1-419-767-11	COIL, AIR-CORE(FM FREQUENCY COVERAGE)		R205	1-216-845-11	METAL CHIP 100K 5%	1/16W
L10	1-414-406-11	INDUCTOR 220uH		R206	1-216-797-11	METAL CHIP 10 5%	1/16W
L101	1-412-006-31	INDUCTOR CHIP 10uH		R207	1-216-849-11	METAL CHIP 220K 5%	1/16W
L102	1-410-335-11	INDUCTOR 150uH		R208	1-216-845-11	METAL CHIP 100K 5%	1/16W
		< TRANSISTOR >		R209	1-216-857-11	METAL CHIP 1M 5%	1/16W
Q1	8-729-102-07	TRANSISTOR 2SC2223-F13		R210	1-216-857-11	METAL CHIP 1M 5%	1/16W
Q3	8-729-027-60	TRANSISTOR DTC144TKA-T146		R211	1-216-857-11	METAL CHIP 1M 5%	1/16W
Q4	8-729-027-60	TRANSISTOR DTC144TKA-T146		R212	1-216-857-11	METAL CHIP 1M 5%	1/16W
Q5	8-729-027-60	TRANSISTOR DTC144TKA-T146		R213	1-216-809-11	METAL CHIP 100 5%	1/16W
Q6	8-729-027-60	TRANSISTOR DTC144TKA-T146		R214	1-216-830-11	METAL CHIP 5.6K 5%	1/16W
Q7	8-729-027-60	TRANSISTOR DTC144TKA-T146		R215	1-216-827-11	METAL CHIP 3.3K 5%	1/16W
Q8	8-729-027-60	TRANSISTOR DTC144TKA-T146		R216	1-216-837-11	METAL CHIP 22K 5%	1/16W
Q9	8-729-027-38	TRANSISTOR DTA144EKA-T146		R218	1-216-833-11	METAL CHIP 10K 5%	1/16W
Q10	8-729-142-46	TRANSISTOR 2SC2001-LK		R219	1-216-833-11	METAL CHIP 10K 5%	1/16W
				R220	1-216-833-11	METAL CHIP 10K 5%	1/16W

ICF-1000L

MAIN

POWER

Ref. No.	Part No.	Description	Remark
R221	1-216-833-11	METAL CHIP 10K	5% 1/16W
R501	1-216-821-11	METAL CHIP 1K	5% 1/16W
R502	1-216-833-11	METAL CHIP 10K	5% 1/16W
R503	1-216-833-11	METAL CHIP 10K	5% 1/16W
R505	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R506	1-216-844-11	METAL CHIP 82K	5% 1/16W
R507	1-216-833-11	METAL CHIP 10K	5% 1/16W
R508	1-216-833-11	METAL CHIP 10K	5% 1/16W
R509	1-216-833-11	METAL CHIP 10K	5% 1/16W
R510	1-216-817-11	METAL CHIP 470	5% 1/16W
R511	1-216-837-11	METAL CHIP 22K	5% 1/16W
R512	1-216-829-11	METAL CHIP 4.7K	5% 1/16W
R513	1-216-833-11	METAL CHIP 10K	5% 1/16W
R514	1-216-853-11	METAL CHIP 470K	5% 1/16W
R515	1-216-833-11	METAL CHIP 10K	5% 1/16W
< VARIABLE RESISTOR >			
RV201	1-241-377-11	RES, VAR, CARBON 100K(FM3)	
RV202	1-241-377-11	RES, VAR, CARBON 100K(FM1)	
RV203	1-241-377-11	RES, VAR, CARBON 100K(FM2)	
RV204	1-241-765-11	RES, ADJ, CARBON 22K(FM VT VOLTAGE)	
RV205	1-223-621-11	RES, VAR, CARBON 100K(FM TUNING)	
RV501	1-227-240-11	RES, VAR, CARBON 100K(TONE)	
RV502	1-225-498-11	RES, VAR, CARBON 50K(VOLUME)	
< SWITCH >			
S1	1-571-172-21	SWITCH, SLIDE(BAND)	
< TRANSFORMER >			
T1	1-404-902-11	TRANSFORMER, IF (MW IF)	
< VIBRATOR >			
X201	1-579-452-11	OSCILLATOR, CERAMIC(3.68MHz)	

*	1-678-892-11	POWER BOARD	*****
< CAPACITOR >			
C401	1-107-826-11	CERAMIC CHIP 0.1uF	10% 16V
C402	1-126-927-11	ELECT 2200uF	20% 10V
C403	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C404	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C405	1-126-925-11	ELECT 470uF	20% 10V
C406	1-126-925-11	ELECT 470uF	20% 10V
C407	1-164-156-11	CERAMIC CHIP 0.1uF	25V
C408	1-164-156-11	CERAMIC CHIP 0.1uF	25V
< CONNECTOR >			
CN401	1-568-269-11	SOCKET, CONNECTOR 3P	
CN405	1-568-269-11	SOCKET, CONNECTOR 3P	
< DIODE >			
D401	8-719-031-85	DIODE 1N4002L	
D402	8-719-031-85	DIODE 1N4002L	

Ref. No.	Part No.	Description	Remark
D403	8-719-031-85	DIODE 1N4002L	
D404	8-719-031-85	DIODE 1N4002L	
< JACK >			
EPJ401	1-566-891-21	JACK (⊙)	
< JUMPER >			
JC402	1-216-296-91	SHORT 0	
< COIL >			
L401	1-410-294-11	INDUCTOR 38uH	
< RESISTOR >			
R401	1-216-821-11	METAL CHIP 1K	5% 1/16W
R402	1-216-805-11	METAL CHIP 47	5% 1/16W
R403	1-216-805-11	METAL CHIP 47	5% 1/16W
R404	1-216-809-11	METAL CHIP 100	5% 1/16W
R405	1-216-809-11	METAL CHIP 100	5% 1/16W
< SWITCH >			
S401	1-571-042-11	SWITCH, PUSH (1 KEY)(OPERATION)	

MISCELLANEOUS			

SP1	1-529-803-11	SPEAKER (10.3cm)	
ANT1	1-501-222-71	ANTENNA, TELESCOPIC (FM)	
T401	1-435-504-11	TRANSFORMER, POWER	

ACCESSORIES & PACKING MATERIALS			

△	1-696-562-11	CORD, POWER (AEP)	
△	1-751-115-11	CORD, POWER (UK)	
	3-049-016-11	MANUAL, INSTRUCTION(ENGLISH,FRENCH, GERMAN,SPANISH,ITALIAN,DUTCH,SWEDISH, PORTUGUESE,FINNISH,DANISH)	

HARDWARE LIST			

#1	7-623-508-01	LUG, 3	
#2	7-671-112-11	BALL, STEEL	
#3	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	
#4	7-685-534-14	SCREW +BTP 2.6X8 TYPE2 N-S	
#5	7-685-535-19	SCREW +BTP 2.6X10 TYPE2 N-S	
#6	7-685-547-19	SCREW +BTP 3X10 TYPE2 N-S	
#7	7-685-551-14	SCREW +BTP 3X20 TYPE2 N-S	
#8	7-685-903-11	SCREW +PTPWH 3X6 (TYPE2)	

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