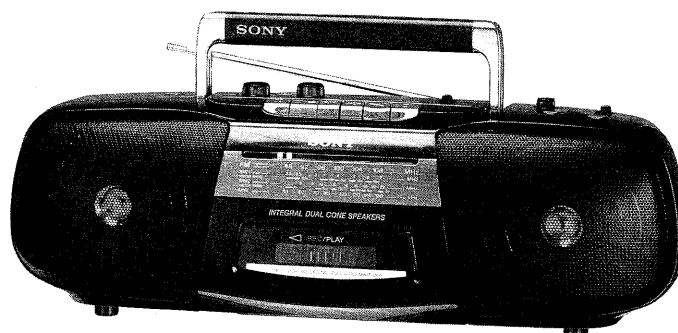


# CFS-B5S

## SERVICE MANUAL

*E Model  
East European Model*



Model Name Using Similar Mechanism	CFM-155S
Tape Transport Mechanism Type	MF-B5S

### SPECIFICATIONS

#### Frequency range

##### Saudi Arabia model

FM: 87.6–107 MHz  
MW: 530–1,605 kHz  
SW1: 2.3–7 MHz  
SW2: 7–22 MHz

##### East European model

FM: 65–108 MHz  
MW: 531–1,602 kHz  
SW1: 2.3–7 MHz  
SW2: 7–22 MHz

##### Other models

FM: 87.6–108 MHz  
MW: 530–1,605 kHz  
SW1: 2.3–7 MHz  
SW2: 7–22 MHz

#### Aerials

FM/SW: Telescopic aerial  
MW: Built-in ferrite bar aerial

#### Recording system

4-track, 2-channel stereo

#### Frequency response

80–10,000 Hz

#### Speakers

Full range: 10 cm (4 inches) dia., 3.2 ohms  
cone type x 2

#### Maximum power output

2.5 W + 2.5 W

#### Output

Headphones jack (stereo minijack) for  
16–68 ohms impedance headphones

#### Power requirements

100–120 V, 220–240 V AC,  
50/60Hz selectable  
9 V DC, six R20 (size D) batteries

#### Power consumption

14 W AC operation

#### Battery life

Batteries	FM recording	Tape playback
Sony SUM-1 (NS)	Approx. 16 hours	Approx. 8 hours
Sony AM1 alkaline	Approx. 36 hours	Approx. 21 hours

#### Dimensions

Approx. 470 x 142.5 x 159 mm  
(w/h/d)  
(18 5/8 x 5 5/8 x 6 3/8 inches) including  
projecting parts

#### Mass

Approx. 3.0 kg (6 lb 10 oz) including  
batteries

#### Accessory supplied

Mains lead (1)



Design and specifications are subject to change  
without notice.

RADIO CASSETTE-CORDER  
**SONY**®

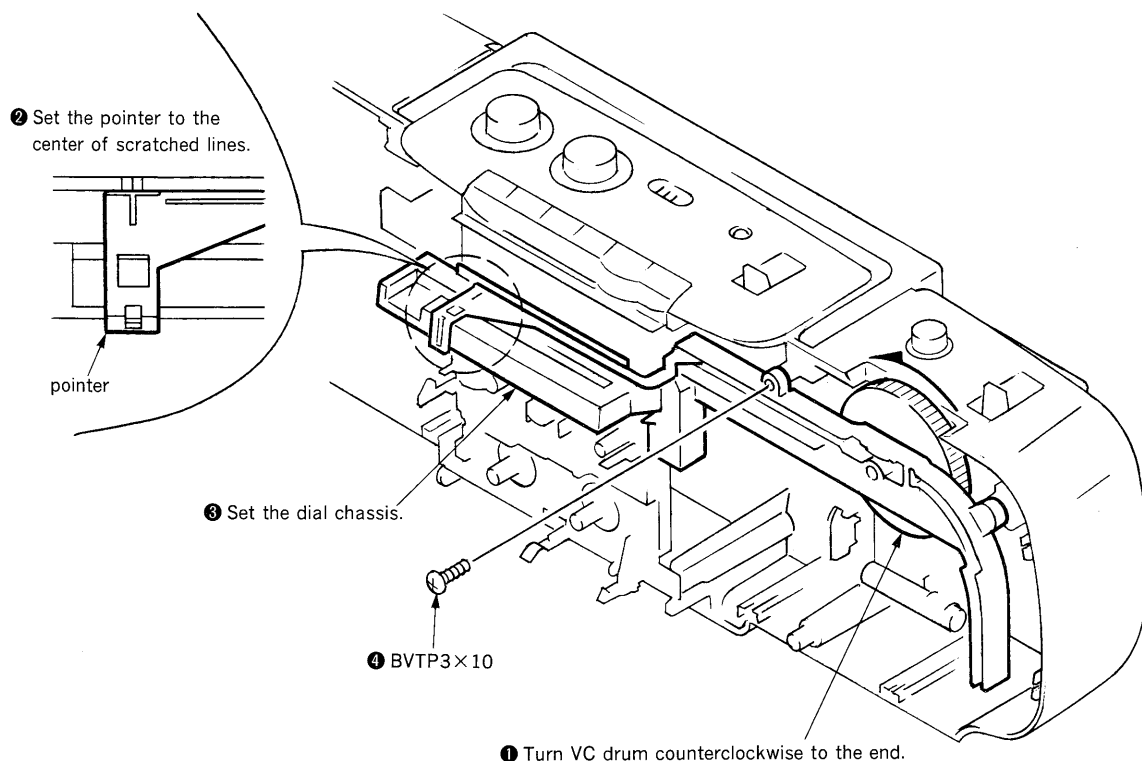
## TABLE OF CONTENTS

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### SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  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 DIAL POINTER SETTING



## SECTION 2 MECHANICAL ADJUSTMENTS

### PRECAUTION

- Clean the following parts with a denatured-alcohol-moistened swab :
 

record/playback head	pinch roller
erase head	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

### Torque Measurement

Torque	Torque meter	Meter reading
Forward	CQ-102C	25–60g•cm (0.35–0.83 oz•inch)
Forward back tension	CQ-102C	1–5g•cm (0.014–0.069 oz•inch)
Fast Forward	CQ-201B	55–140g•cm (0.76–1.94 oz•inch)
Rewind	CQ-201B	55–140g•cm (0.76–1.94 oz•inch)

### Tape Tension Measurement

Mode	Meter	Meter Reading
Forward	CQ-403A	more than 170g (more than 6.00 oz)

## SECTION 3 ELECTRICAL ADJUSTMENTS

### 3-1. TAPE RECORDER SECTION 0dB=0.775V

#### Standard Output Level

Output terminal	HP OUT
load impedance	32Ω
output signal level	0.25V (-10dB)

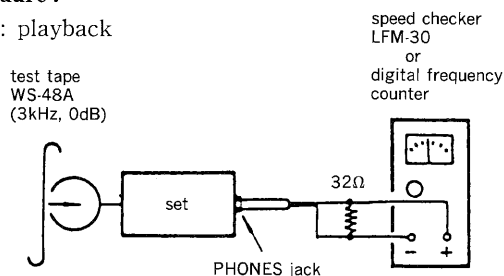
#### Test Tape

Type	Signal	Used for
WS-48A	3kHz, 0dB	tape speed adjustment
P-4-A063	6.3kHz, -10dB	head azimuth adjustment

#### Tape Speed Adjustment

##### Procedure :

Mode : playback

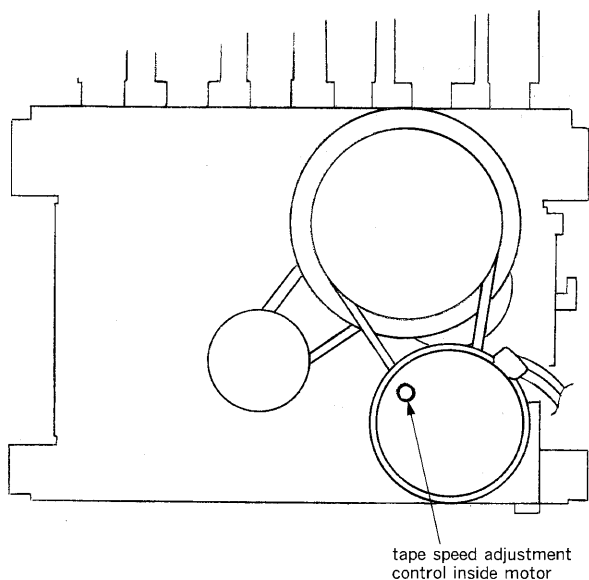


##### Adjustment Value :

Speed checker	Digital frequency counter
-1% to +1%	2,970 to 3,030Hz

Frequency difference between the beginning and the end of the tape should be within 1.5% (45Hz).

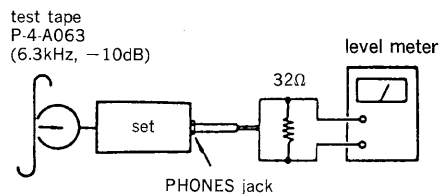
##### Adjustment Location :



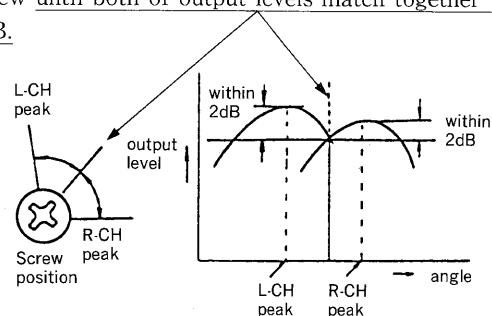
### Record/Playback Head Azimuth Adjustment

##### Procedure :

1. Mode : playback

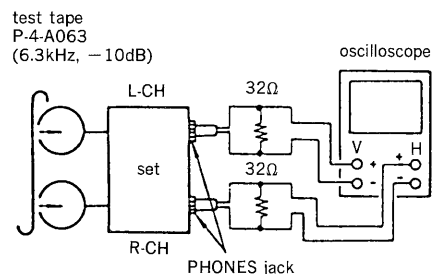


2. Turn the adjustment screw for the maximum output levels. If these levels do not match, turn the adjustment screw until both of output levels match together within 2dB.



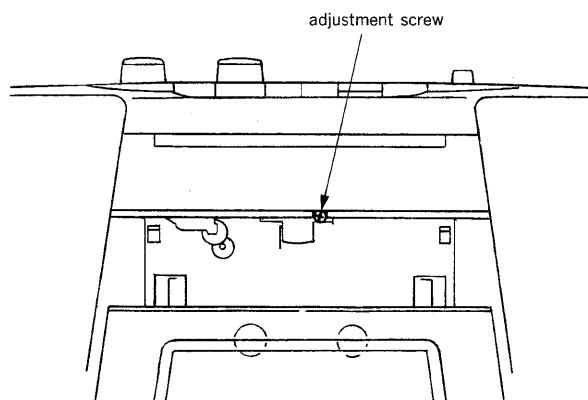
3. Phase Check

Mode : playback



Screen Pattern				
in phase	45°	90°	135°	180°
good			NG	

##### Adjustment Location :

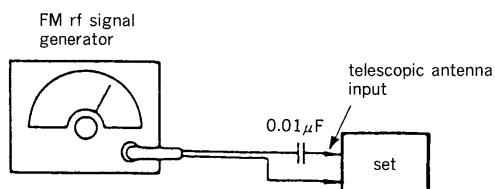


## 3-2. TUNER SECTION 0dB=1 $\mu$ V

### • FM Section

Setting :

BAND switch : FM

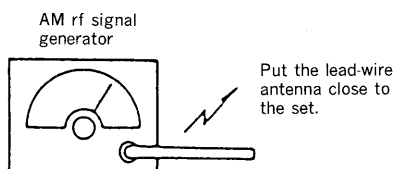


22.5kHz frequency  
deviation by 400Hz signal  
output level : as low as possible

### • MW Section

Setting :

BAND switch : MW



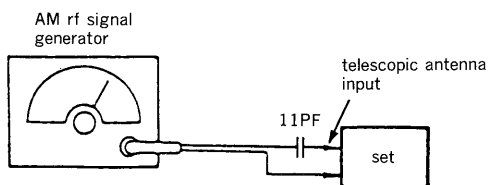
30% amplitude  
modulation by  
400Hz signal  
output level : as low as possible

### • SW Section

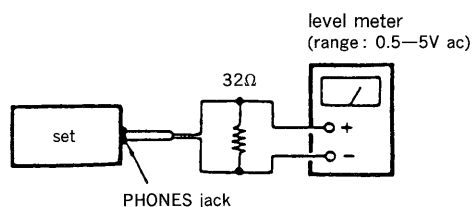
Setting :

BAND switch : SW1 or SW2

FINE TUNE control : mechanical mid



30% amplitude  
modulation 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.
- Remove telescopic antenna in FM section adjustments.

### FM FREQUENCY COVERAGE ADJUSTMENT

Adjust for a maximum reading on VTVM.

L2	CT2
86.5MHz (87.35MHz) <65.0MHz>	109.5MHz (107.8MHz) <108.0MHz>

### FM TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

L1	CT1
86.5MHz (87.35MHz) <65.0MHz>	109.5MHz (107.8MHz) <108.0MHz>

### MW TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

L3	CT3
600kHz	1,400kHz

### MW FREQUENCY COVERAGE ADJUSTMENT

Adjust for a maximum reading on VTVM.

L4	CT4
515kHz	1,680kHz

### AM IF ADJUSTMENT

Adjust for a maximum reading on VTVM.

T1
455kHz

### SW1 FREQUENCY COVERAGE ADJUSTMENT

Adjust for a maximum reading on VTVM.

L6	CT6
2.2MHz	7.3MHz

### SW1 TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

L5
2.2MHz

### SW2 FREQUENCY COVERAGE ADJUSTMENT

Adjust for a maximum reading on VTVM.

L8	CT10
6.8MHz	22.5MHz

### SW2 TRACKING ADJUSTMENT

Adjust for a maximum reading on VTVM.

L7
6.8MHz

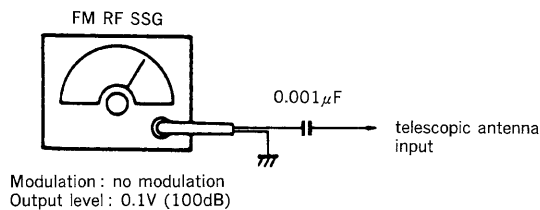
( ) : Saudi Arabia model

< > : East European model

Adjustment Location : See page 6.

## FM VCO Adjustment

Setting :



### Procedure :

1. Adjust RV1 so that the reading on the frequency counter becomes in  $76.0\text{kHz} \pm 0.5\text{kHz}$ .

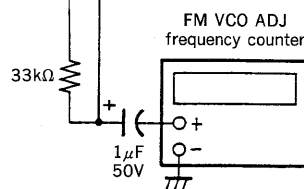
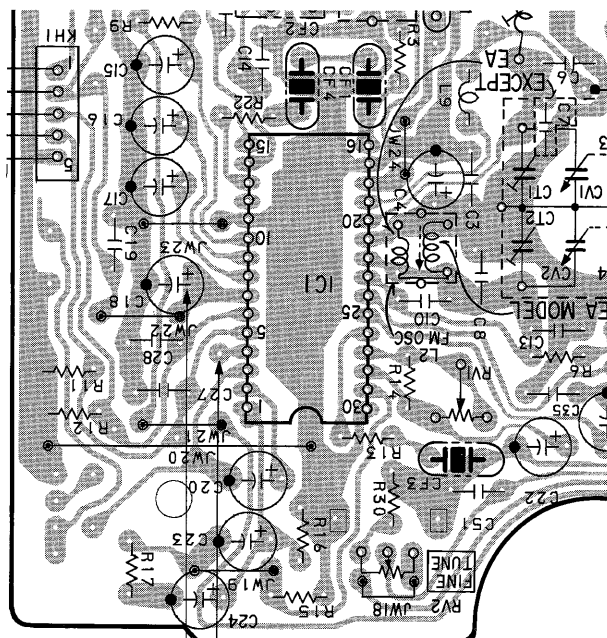
Adjustment Location : tuner board

### How To Changed The Ceramic Filters

This model is used three ceramic filters of CF1, 3 and 4. 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 one package as a spare parts.

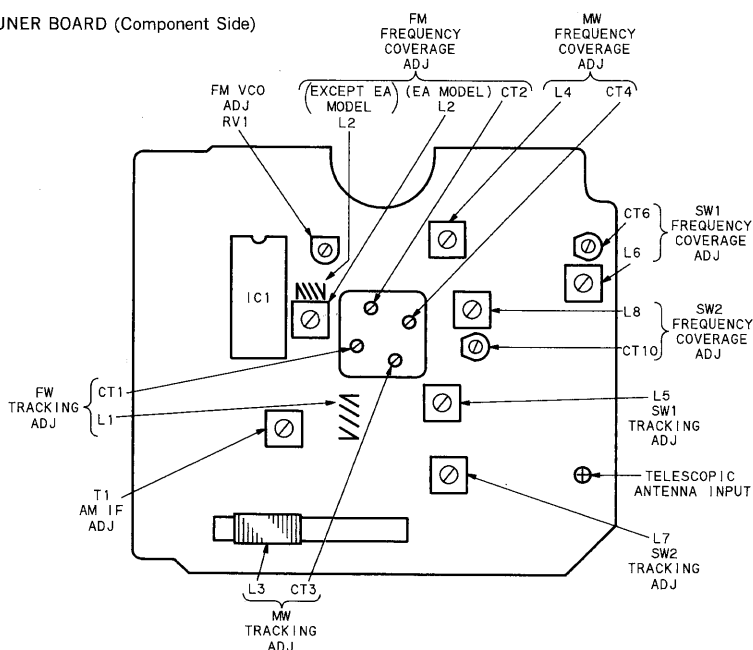
mark1	mark2	mark1	mark2	mark1	mark2	Center Frequency
red	—	red	—	red	—	10.70MHz
blue	—	blue	—	blue	—	10.67MHz
orange	—	orange	—	orange	—	10.73MHz
black	—	black	—	black	—	10.64MHz
white	—	white	—	white	—	10.76MHz
white	white	white	white	white	white	10.75MHz
yellow	—	yellow	—	yellow	—	10.79MHz

TUNER BOARD (Conductor Side)



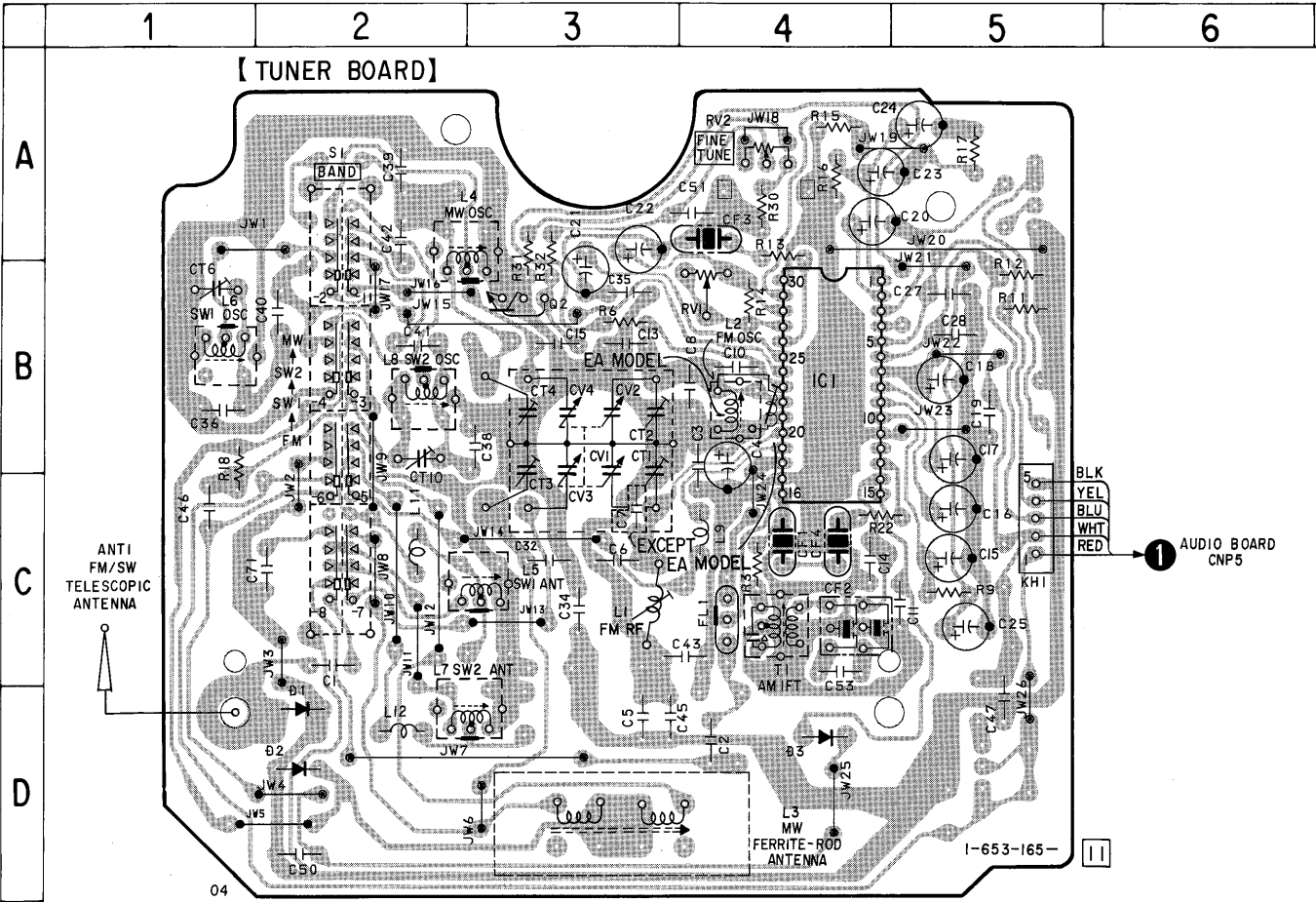
### Adjustment Location :

TUNER BOARD (Component Side)



# SECTION 4 DIAGRAMS

4-1. PRINTED WIRING BOARD—TUNER SECTION—

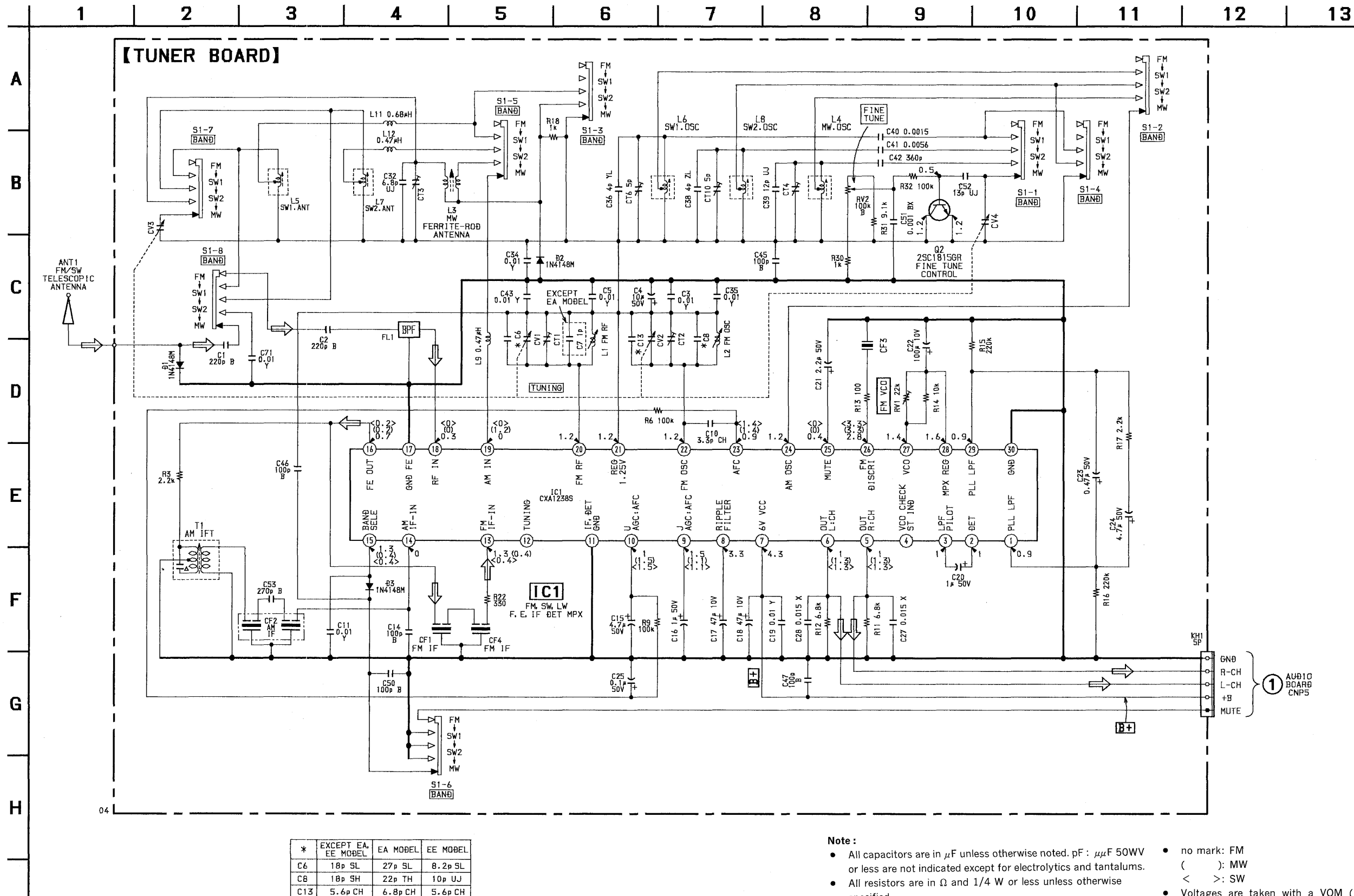


## • Semiconductor Location

Ref. No.	Location
D1	D-2
D2	D-2
D3	D-4
IC1	B-4
Q2	B-3

- Note :**
- : parts extracted from the component side.
  - : indicates side identified with part number.
  - : Pattern on the side which is seen.

## 4-2. SCHEMATIC DIAGRAM—TUNER SECTION— • Refer to page 16 for IC Block Diagram.

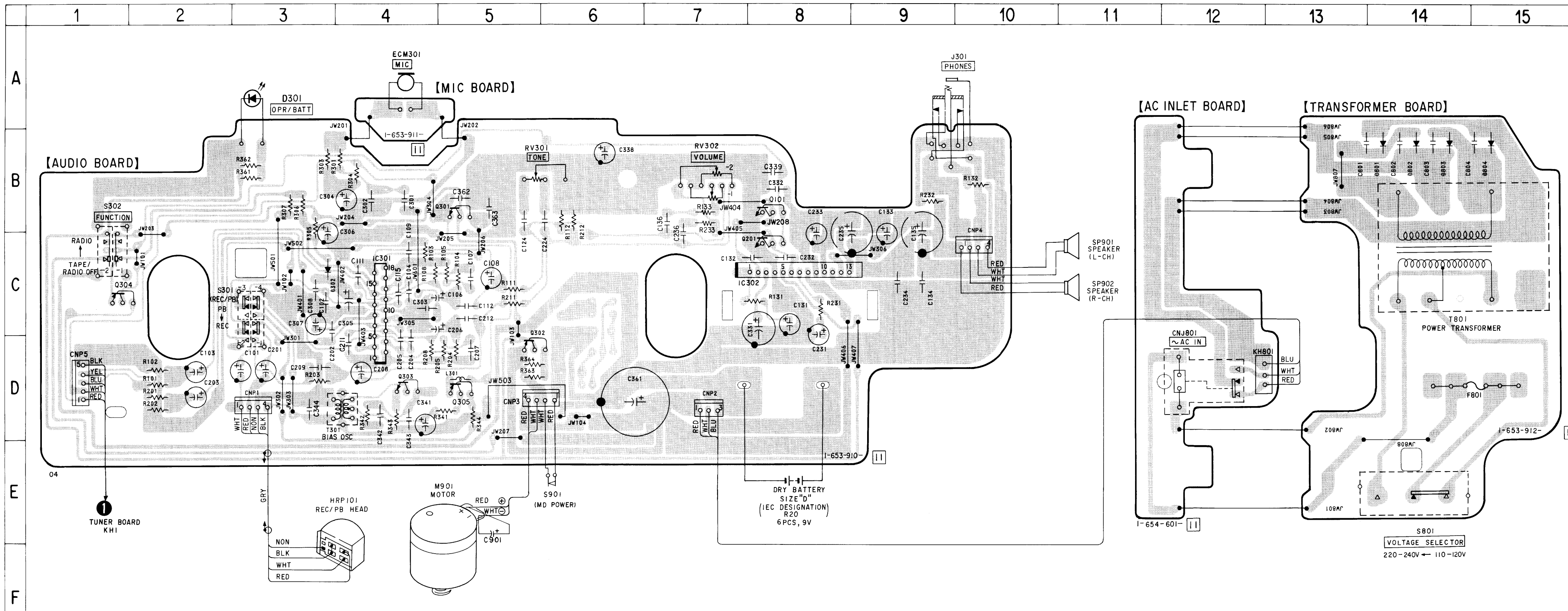




#### 4-3. PRINTED WIRING BOARDS—AUDIO SECTION—

- **Semiconductor Location**

Ref. No.	Location
D301	A-3
D302	C-3
D801	B-14
D802	B-14
D803	B-14
D804	B-15
IC301	C-4
IC302	C-8
Q101	B-8
Q201	C-8
Q301	B-5
Q302	D-5
Q303	D-4
Q304	C-1
Q305	D-5

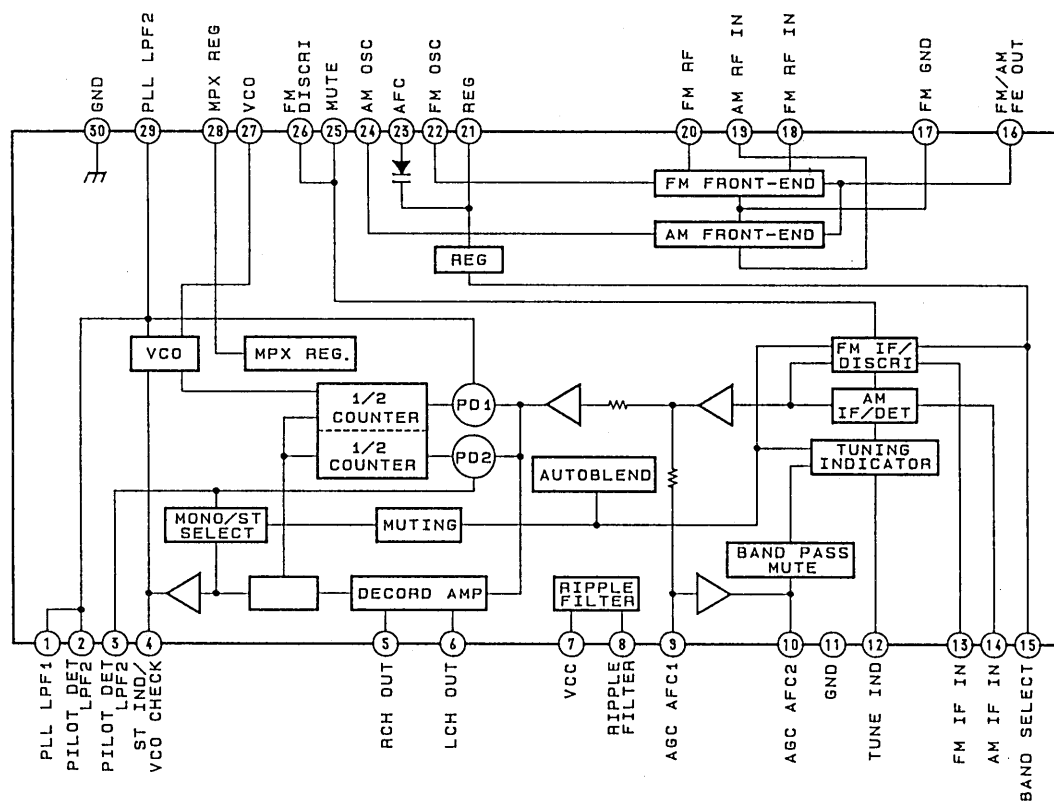


**Note :**

- ○ — : parts extracted from the component side.
- ■ : Pattern on the side which is seen.



• IC Block Diagram  
IC1 CXA1238S



## SECTION 5 EXPLODED VIEWS

### NOTE:

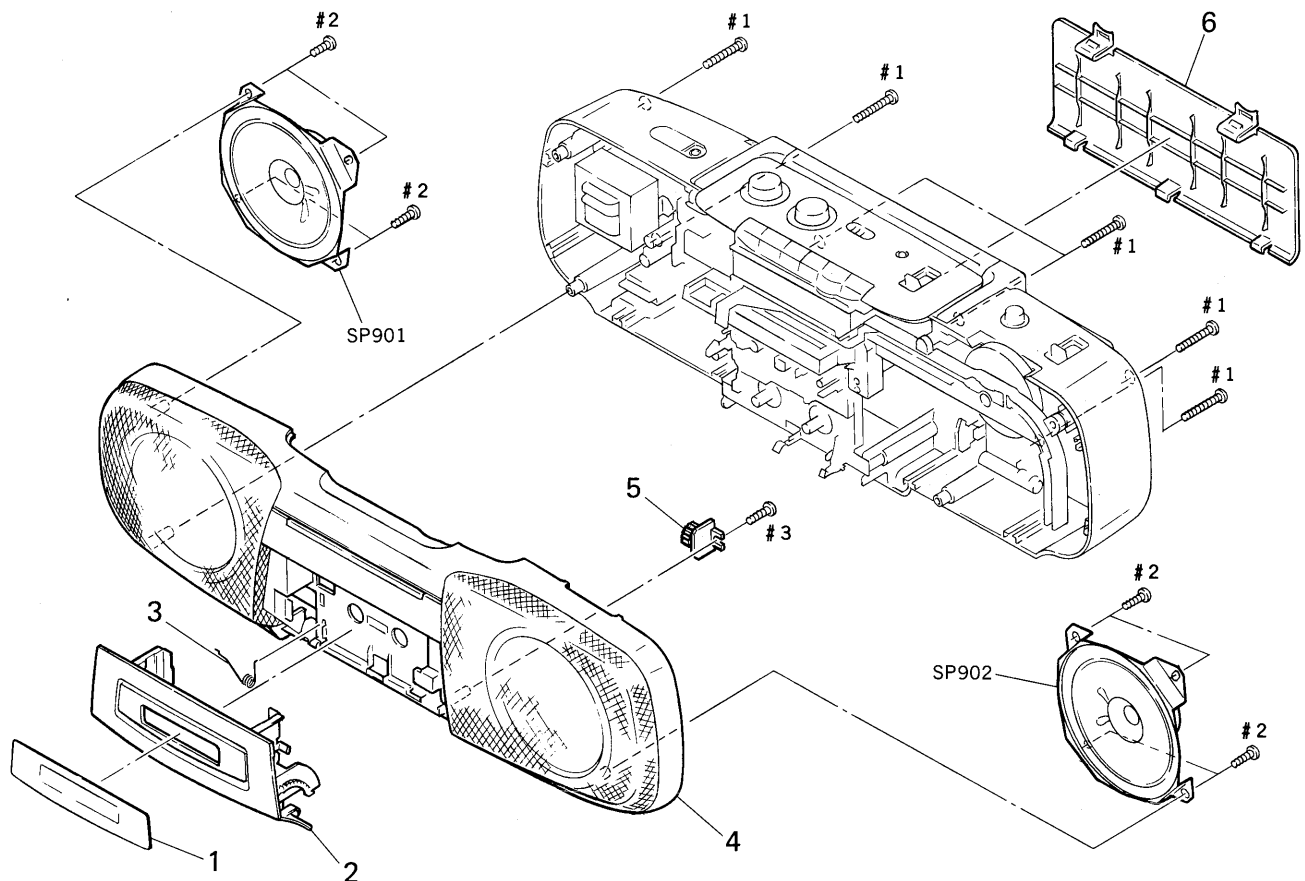
- The mechanical parts with no reference number in the exploded views are not supplied.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Abbreviation  
EA : Saudi Arabia model  
UAE : United Arab Emirates model  
EE : East European model

- -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

- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

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

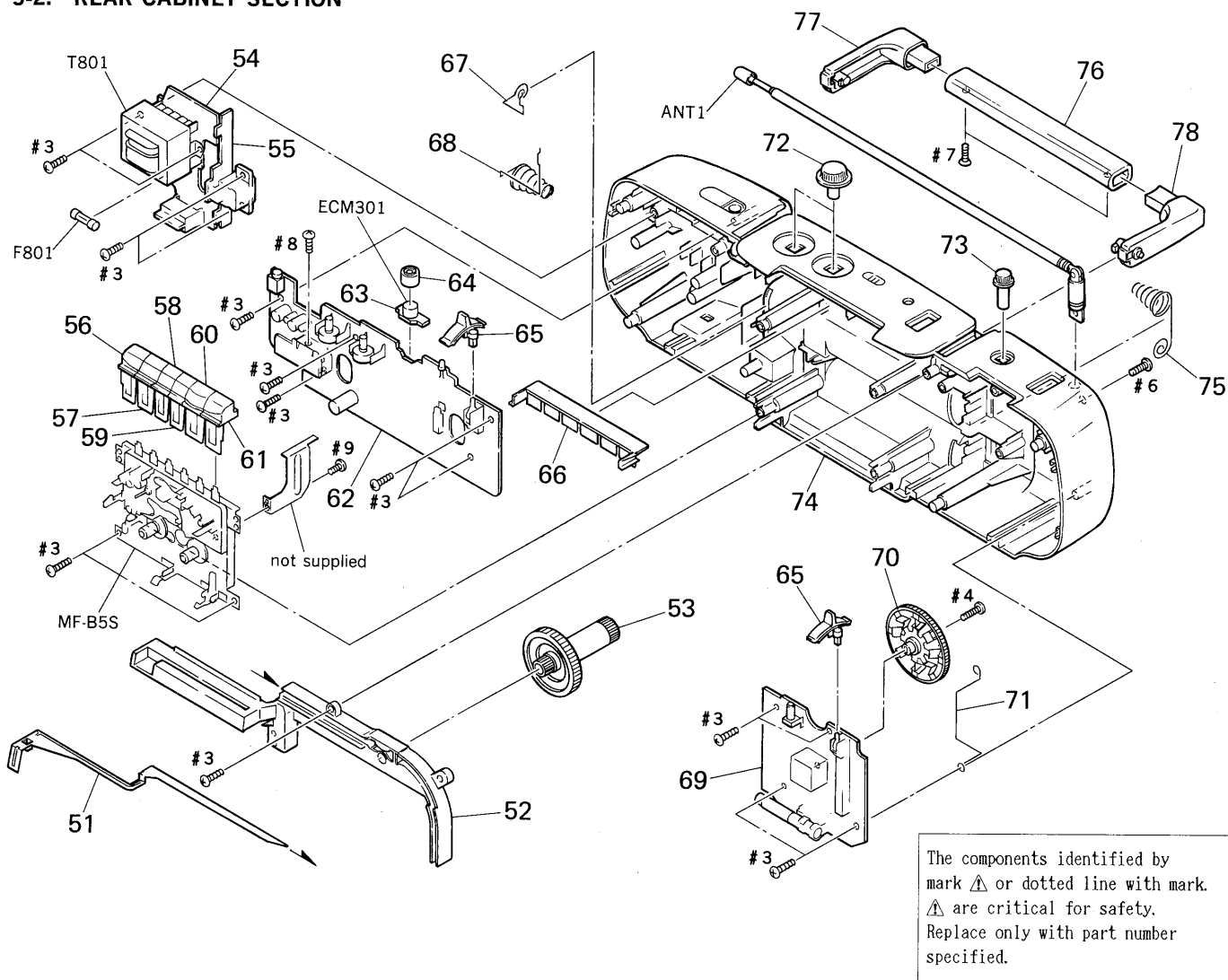
### 5-1. FRONT CABINET SECTION



Ref. No.	Part No.	Description	Remark
1	3-917-675-01	WINDOW, CASSETTE	
2	3-917-454-01	HOLDER (CASSETTE) (BLACK)	
2	3-917-454-11	HOLDER (CASSETTE) (RED) (EXCEPT EE)	
3	3-917-467-01	SPRING, CASSETTE	
4	X-3369-102-1	CABINET (FRONT) SUB ASSY (BLACK) (E, UAE)	
4	X-3369-103-1	CABINET (FRONT) SUB ASSY (BLACK) (EA)	
4	X-3369-426-1	CABINET (FRONT) SUB ASSY (RED) (E, UAE)	
4	X-3369-427-1	CABINET (FRONT) SUB ASSY (RED) (EA)	
4	X-3372-577-1	CABINET (FRONT) SUB ASSY (BLACK) (EE)	

Ref. No.	Part No.	Description	Remark
5	3-351-377-11	DAMPER	
6	3-917-646-01	LID, BATTERY CASE (BLACK)	
6	3-917-646-11	LID, BATTERY CASE (RED) (EXCEPT EE)	
SP901	1-504-684-11	SPEAKER (10CM) (L-CH)	
SP902	1-504-684-11	SPEAKER (10CM) (R-CH)	

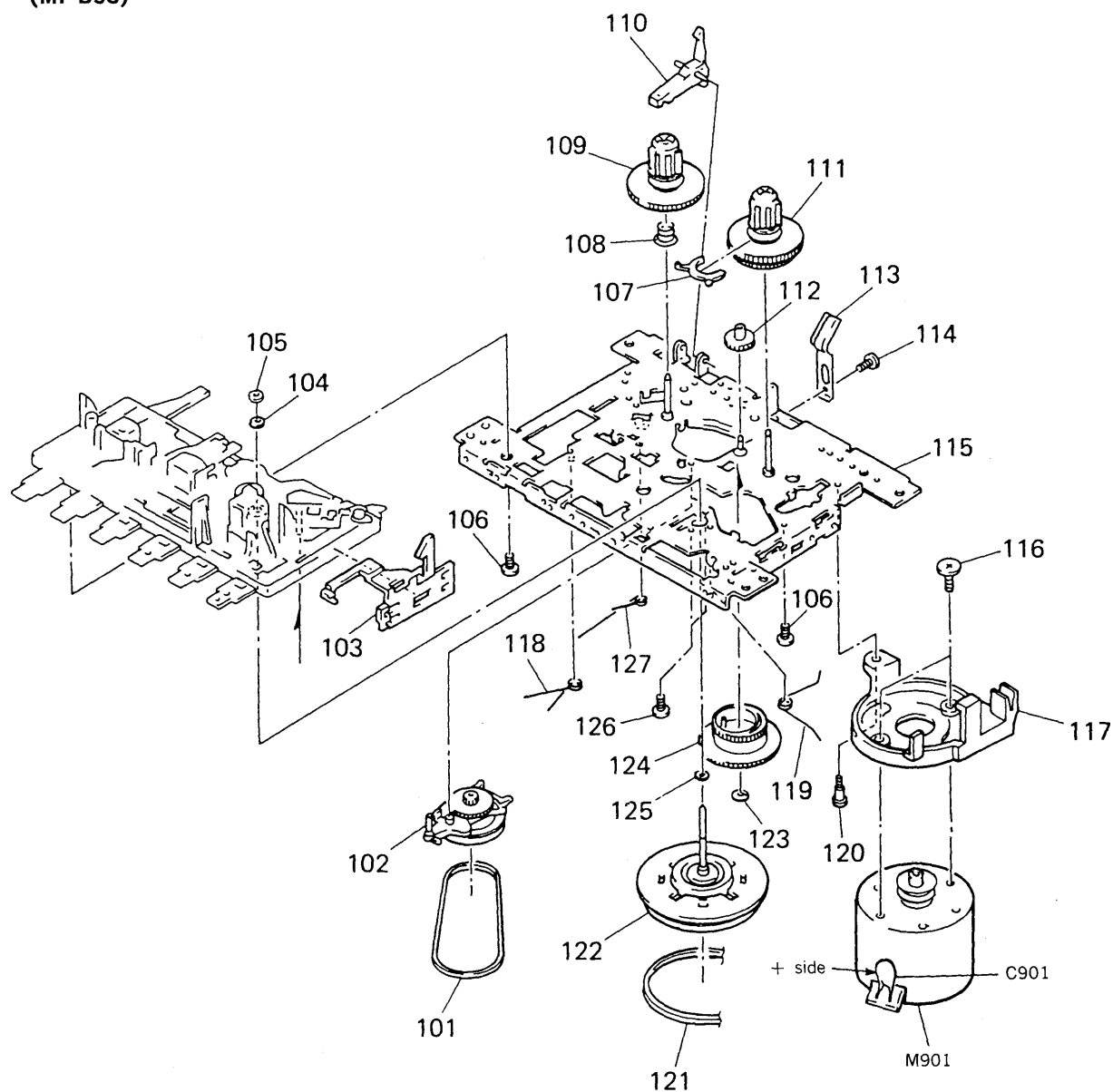
## 5-2. REAR CABINET SECTION



Ref. No.	Part No.	Description	Remark
51	3-917-463-01	POINTER	
* 52	3-917-461-01	CHASSIS (DIAL)	
53	3-917-465-01	KNOB (TUNING) (BLACK)	
53	3-917-465-11	KNOB (TUNING) (RED) (EXCEPT EE)	
* 54	1-653-912-11	TRANSFORMER BOARD	
* 55	1-654-601-11	AC INLET BOARD	
56	3-917-657-01	BUTTON (PAUSE)	
57	3-917-464-01	BUTTON (S/E)	
58	3-917-658-01	BUTTON (FF)	
59	3-917-659-01	BUTTON (REW)	
60	3-917-660-01	BUTTON (PLAY)	
61	3-917-661-01	BUTTON (REC)	
* 62	A-3269-575-A	AUDIO BOARD, COMPLETE	
* 63	1-653-911-11	MIC BOARD	
* 64	3-911-281-01	CUSHION, MIC	
65	3-917-650-01	KNOB (LEVER) (BLACK)	
65	3-917-650-11	KNOB (LEVER) (RED) (EXCEPT EE)	
* 66	3-917-649-01	BUTTON, CHASSIS MD (BLACK)	
* 66	3-917-649-11	BUTTON, CHASSIS MD (RED) (EXCEPT EE)	
67	3-917-654-01	TERMINAL (+), BATTERY	
68	3-917-655-01	TERMINAL (-), BATTERY	
* 69	A-3269-577-A	TUNER BOARD, COMPLETE (E, UAE)	
* 69	A-3269-578-A	TUNER BOARD, COMPLETE (EA)	
* 69	A-3306-013-A	TUNER BOARD, COMPLETE (EE)	

Ref. No.	Part No.	Description	Remark
70	3-917-466-01	DRUM (PVC)	
71	3-917-656-01	TERMINAL, ANTENNA	
72	3-917-647-01	KNOB (ROTARY) (BLACK)	
72	3-917-647-11	KNOB (ROTARY) (RED) (EXCEPT EE)	
73	3-917-648-01	KNOB (FINE TUNE) (BLACK)	
73	3-917-648-11	KNOB (FINE TUNE) (RED) (EXCEPT EE)	
* 74	3-917-452-01	CABINET (REAR) (BLACK) (E, EE)	
* 74	3-917-452-11	CABINET (REAR) (BLACK) (EA, UAE)	
* 74	3-917-452-21	CABINET (REAR) (RED) (E)	
* 74	3-917-452-31	CABINET (REAR) (RED) (EA, UAE)	
75	3-917-653-01	TERMINAL (+, -), BATTERY	
76	3-917-662-01	HANDLE (CENTER) (BLACK)	
76	3-917-662-11	HANDLE (CENTER) (RED) (EXCEPT EE)	
77	3-917-460-01	HANDLE (LEFT)	
78	3-917-459-01	HANDLE (RIGHT)	
ANT1	1-501-378-11	ANTENNA, TELESCOPIC	
ECM301	1-542-118-11	MICROPHONE, ELECTRET CONDENSER (MIC)	
⚠F801	1-532-611-00	FUSE, TIME-LAG (T125mA/250V)	
⚠T801	1-450-015-11	TRANSFORMER, POWER	

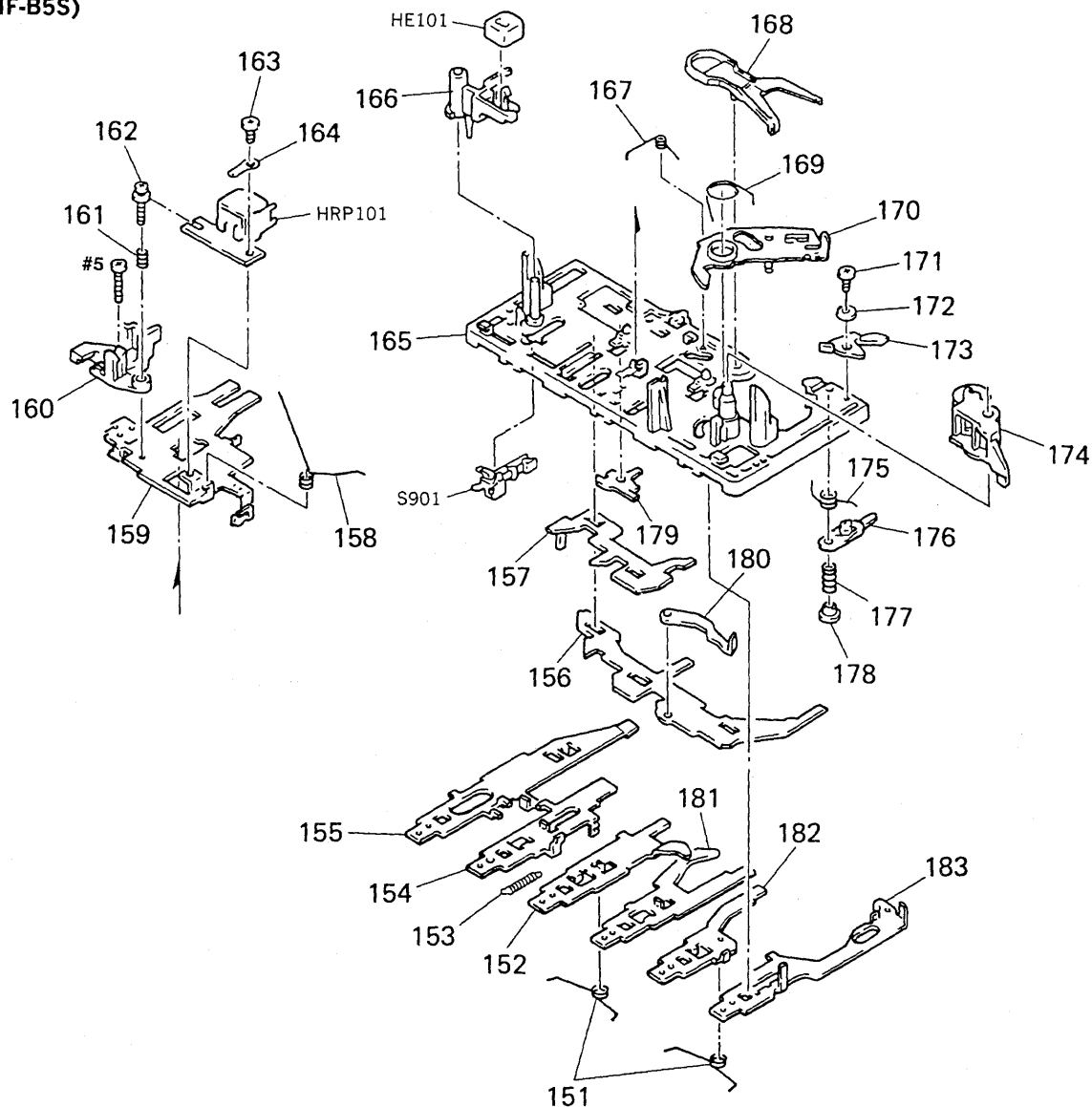
**5-3. MECHANISM DECK SECTION (1)**  
**(MF-B5S)**



Ref. No.	Part No.	Description	Remark
101	3-596-931-01	BELT, RF	
102	3-913-441-01	CLUTCH ASSY, RF	
103	3-348-366-01	LEVER, EJECT SLIDE	
104	3-913-442-01	WASHER, POLY-SLIDER	
105	3-913-434-01	WASHER, POLY-SLIDER	
106	3-348-370-01	SCREW (M2X5), P TIGHT BIND	
107	3-348-380-01	SENSOR	
108	3-913-429-01	SPRING, BACK TENSION	
109	3-913-430-01	REEL ASSY, SUPPLY	
110	3-348-368-01	LEVER, REC SAFETY	
111	3-913-431-01	REEL ASSY, TAKE-UP	
112	3-348-357-01	GEAR, FF	
113	3-348-367-01	PLATE, SP, PACK RETAINER	
114	3-913-444-01	SCREW (2X3)	
115	3-348-335-01	CHASSIS ASSY	

Ref. No.	Part No.	Description	Remark
116	3-598-855-01	MOTOR COLLER SCREW	
117	3-913-435-01	BRACKET, MOTOR	
118	3-348-337-01	SPRING	
119	3-348-336-01	SPRING	
120	3-395-995-01	SCREW, MB	
121	3-913-432-01	BELT, MAIN	
122	3-348-356-01	FLYWHEEL ASSY	
123	3-348-373-01	WASHER, POLYETHYLENE SLIDER	
124	3-348-353-01	GEAR, CAM	
125	3-913-433-01	WASHER, POLY-SLIDER	
126	3-348-371-01	SCREW (M2X4.5), CAMERA TAPPING	
127	3-348-341-01	SPRING	
C901	1-124-477-11	ELECT	47uF 20% 25V
M901	X-3372-889-1	MOTOR ASSY	

**5-4. MECHANISM DECK SECTION (2)**  
**(MF-B5S)**



Ref. No.	Part No.	Description	Remark
151	3-348-334-01	SPRING (A)	
* 152	3-394-739-01	LEVER, REW BUTTON	
153	3-913-436-01	SPRING (S), PLAY BUTTON LEVER	
* 154	3-394-738-01	LEVER, PLAY BUTTON	
* 155	3-394-737-01	LEVER, REC BUTTON	
* 156	3-348-323-01	PLATE, FUNCTION, PUSH BUTTON	
* 157	3-348-322-01	PLATE, FUNCTION, SWITCH	
158	3-394-744-01	PANEL (P) (SP)	
* 159	3-395-986-01	PANEL, HEAD	
160	3-348-344-11	BASE, HEAD	
161	3-598-845-01	SPRING	
162	3-394-749-01	SCREW (M2X7), AZIMUTH	
163	3-348-372-01	SCREW (M2X3), + BIND	
164	3-394-748-01	LUG (B3)	
165	3-348-347-01	CHASSIS (MOLD) ASSY	
166	3-348-346-01	ARM, MG	
167	3-913-437-01	SPRING, M CONTROLLER	
168	3-913-439-01	LEVER, SENSING	

Ref. No.	Part No.	Description	Remark
169	3-348-351-01	SPRING	
* 170	3-913-440-01	PLATE ASSY, GEAR	
171	3-913-443-01	SCREW (2X3), PS TIGHT	
172	3-348-378-01	COLLAR, P ARM	
* 173	3-348-377-01	ARM, P	
174	3-913-438-01	ARM ASSY, PINCH ROLLER	
175	3-348-330-11	SPRING	
176	3-348-331-02	LEVER, PAUSE	
177	3-348-332-01	SPRING	
178	3-348-333-01	STOPPER, PAUSE	
179	3-348-340-01	STOPPER, PR	
* 180	3-348-339-01	LEVER, E KICK	
* 181	3-394-740-01	LEVER, FF BUTTON	
* 182	3-394-741-01	LEVER, STOP BUTTON	
* 183	3-394-742-01	LEVER, PAUSE BUTTON	
HE101	1-500-160-11	HEAD, ERASE	
HRP101	1-500-161-11	HEAD, RECORD/PLAYBACK	
S901	1-692-978-11	SWITCH, LEAF (MD POWER)	

## SECTION 6 ELECTRICAL PARTS LIST

AC INLET

AUDIO

### 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  
EA : Saudi Arabia model  
UAE : United Arab Emirates model  
EE : East European model  
E23 : AC 110-120V area model

- 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			
*	1-654-601-11	AC INLET BOARD	*****			
		< AC INLET >				
	$\Delta$ CNJ801	1-526-838-11 INLET, AC 2P (~ AC IN)	*****			
*	A-3269-575-A	AUDIO BOARD, COMPLETE	*****			
	7-685-871-01	SCREW +BVTT 3X6 (S)				
		< CAPACITOR >				
C101	1-124-903-11	ELECT	1uF	20%	50V	
C102	1-162-301-11	CERAMIC	0.0015uF	20%	16V	
C103	1-124-902-00	ELECT	0.47uF	20%	50V	
C104	1-162-302-11	CERAMIC	0.0022uF	20%	16V	
C105	1-162-282-31	CERAMIC	100PF	10%	50V	
C106	1-124-443-00	ELECT	100uF	20%	10V	
C107	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C108	1-126-961-11	ELECT	2.2uF	20%	50V	
C109	1-162-830-11	CERAMIC	0.0018uF	10%	16V	
C111	1-162-282-31	CERAMIC	100PF	10%	50V	
C112	1-162-282-31	CERAMIC	100PF	10%	50V	
C124	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C131	1-104-664-11	ELECT	47uF	20%	10V	
C132	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C133	1-124-443-00	ELECT	100uF	20%	10V	
C134	1-130-495-11	MYLAR	0.1uF	5%	50V	
C135	1-124-471-00	ELECT	1000uF	20%	6.3V	
C136	1-161-048-00	CERAMIC	0.0056uF	10%	16V	
C201	1-124-903-11	ELECT	1uF	20%	50V	
C202	1-162-301-11	CERAMIC	0.0015uF	20%	16V	
C203	1-124-902-00	ELECT	0.47uF	20%	50V	
C204	1-162-302-11	CERAMIC	0.0022uF	20%	16V	
C205	1-162-282-31	CERAMIC	100PF	10%	50V	
C206	1-124-443-00	ELECT	100uF	20%	10V	
C207	1-162-843-11	CERAMIC	0.022uF	10%	16V	

Ref. No.	Part No.	Description	Remark			
C208	1-126-961-11	ELECT	2.2uF	20%	50V	
C209	1-162-830-11	CERAMIC	0.0018uF	10%	16V	
C211	1-162-282-31	CERAMIC	100PF	10%	50V	
C212	1-162-282-31	CERAMIC	100PF	10%	50V	
C224	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C231	1-104-664-11	ELECT	47uF	20%	10V	
C232	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C233	1-124-443-00	ELECT	100uF	20%	10V	
C234	1-130-495-11	MYLAR	0.1uF	5%	50V	
C235	1-124-471-00	ELECT	1000uF	20%	6.3V	
C236	1-161-048-00	CERAMIC	0.0056uF	10%	16V	
C301	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C302	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C303	1-162-282-31	CERAMIC	100PF	10%	50V	
C304	1-124-907-11	ELECT	10uF	20%	50V	
C305	1-126-941-11	ELECT	470uF	20%	16V	
C306	1-124-907-11	ELECT	10uF	20%	50V	
C307	1-126-966-11	ELECT	33uF	20%	25V	
C308	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C331	1-124-120-11	ELECT	220uF	20%	25V	
C332	1-162-286-21	CERAMIC	220PF	10%	50V	
C338	1-124-902-00	ELECT	0.47uF	20%	50V	
C339	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C341	1-104-664-11	ELECT	47uF	20%	10V	
C342	1-162-293-31	CERAMIC	820PF	10%	50V	
C343	1-130-487-00	MYLAR	0.022uF	5%	50V	
C344	1-130-481-00	MYLAR	0.0068uF	5%	50V	
C361	1-124-556-11	ELECT	2200uF	20%	16V	
C362	1-162-843-11	CERAMIC	0.022uF	10%	16V	
C363	1-162-843-11	CERAMIC	0.022uF	10%	16V	
		< CONNECTOR >				
CNP1	1-506-986-11	PIN, CONNECTOR (PC BOARD)	4P			
* CNP2	1-580-155-11	PIN, CONNECTOR (PC BOARD)	3P			
CNP3	1-506-986-11	PIN, CONNECTOR (PC BOARD)	4P			
CNP4	1-506-986-11	PIN, CONNECTOR (PC BOARD)	4P			
CNP5	1-506-987-11	PIN, CONNECTOR (PC BOARD)	5P			



## AUDIO

## MIC

## TRANSFORMER

Ref. No.	Part No.	Description	Remark
< DIODE >			
D301	8-719-980-67	LED MVR3338S (OPR/BATT)	
D302	8-719-987-63	DIODE 1N4148M	
< IC >			
IC301	8-759-978-54	IC BA3420AL	
IC302	8-759-820-22	IC LA4597	
< JACK >			
J301	1-566-891-11	JACK (PHONES)	
< COIL >			
L301	1-414-142-11	INDUCTOR 1uH	
< TRANSISTOR >			
Q101	8-729-904-36	TRANSISTOR DTC114YS	
Q201	8-729-904-36	TRANSISTOR DTC114YS	
Q301	8-729-142-46	TRANSISTOR 2SC2001-LK	
Q302	8-729-119-76	TRANSISTOR 2SA1175-HFE	
Q303	8-729-281-53	TRANSISTOR 2SC1815-GR	
Q304	8-729-422-57	TRANSISTOR UN4111	
Q305	8-729-119-76	TRANSISTOR 2SA1175-HFE	
< RESISTOR >			
R101	1-247-863-00	CARBON 22K 5% 1/4W	
R102	1-249-419-11	CARBON 1.5K 5% 1/4W	
R103	1-249-429-11	CARBON 10K 5% 1/4W	
R104	1-249-401-11	CARBON 47 5% 1/4W	
R105	1-249-427-11	CARBON 6.8K 5% 1/4W	
R108	1-249-437-11	CARBON 47K 5% 1/4W	
R111	1-249-429-11	CARBON 10K 5% 1/4W	
R112	1-249-431-11	CARBON 15K 5% 1/4W	
R131	1-247-807-11	CARBON 100 5% 1/4W	
R132	1-247-807-11	CARBON 100 5% 1/4W	
R133	1-249-417-11	CARBON 1K 5% 1/4W	
R201	1-247-863-00	CARBON 22K 5% 1/4W	
R202	1-249-419-11	CARBON 1.5K 5% 1/4W	
R203	1-249-429-11	CARBON 10K 5% 1/4W	
R204	1-249-401-11	CARBON 47 5% 1/4W	
R205	1-249-427-11	CARBON 6.8K 5% 1/4W	
R208	1-249-437-11	CARBON 47K 5% 1/4W	
R211	1-249-429-11	CARBON 10K 5% 1/4W	
R212	1-249-431-11	CARBON 15K 5% 1/4W	
R231	1-247-807-11	CARBON 100 5% 1/4W	
R232	1-247-807-11	CARBON 100 5% 1/4W	
R233	1-249-417-11	CARBON 1K 5% 1/4W	
R301	1-249-429-11	CARBON 10K 5% 1/4W	

Ref. No.	Part No.	Description	Remark
R303	1-249-417-11	CARBON 1K 5% 1/4W	
R304	1-249-421-11	CARBON 2.2K 5% 1/4W	
R305	1-249-407-11	CARBON 150 5% 1/4W	
R306	1-247-863-00	CARBON 22K 5% 1/4W	
R307	1-249-425-11	CARBON 4.7K 5% 1/4W	
R341	1-249-403-11	CARBON 68 5% 1/4W	
R342	1-249-435-11	CARBON 33K 5% 1/4W	
R343	1-249-393-11	CARBON 10 5% 1/4W	
R344	1-247-863-00	CARBON 22K 5% 1/4W	
R361	1-249-417-11	CARBON 1K 5% 1/4W	
R362	1-249-411-11	CARBON 330 5% 1/4W	
R363	1-249-421-11	CARBON 2.2K 5% 1/4W	
R364	1-249-441-11	CARBON 100K 5% 1/4W	
< VARIABLE RESISTOR >			
RV301	1-241-745-11	RES, VAR, CARBON 20K/20K (TONE)	
RV302	1-241-746-11	RES, VAR, CARBON 20K/20K (VOLUME)	
< SWITCH >			
S301	1-571-472-11	SWITCH, SLIDE (REC/PB)	
S302	1-570-729-11	SWITCH, LEVER SLIDE (FUNCTION)	
< TRANSFORMER >			
T301	1-433-268-00	TRANSFORMER, BIAS OSCILLATOR	
*****			
*	1-653-911-11	MIC BOARD	
*****			
< MICROPHONE >			
ECM301	1-542-118-11	MICROPHONE, ELECTRET CONDENSER (MIC)	
*****			
*	1-653-912-11	TRANSFORMER BOARD	
*****			
	1-533-217-31	HOLDER, FUSE	
< CAPACITOR >			
C801	1-101-005-00	CERAMIC 22000PF 50V	
C802	1-101-005-00	CERAMIC 22000PF 50V	
C803	1-101-005-00	CERAMIC 22000PF 50V	
C804	1-101-005-00	CERAMIC 22000PF 50V	
< DIODE >			
D801	8-719-200-02	DIODE 10E2	
D802	8-719-200-02	DIODE 10E2	
D803	8-719-200-02	DIODE 10E2	
D804	8-719-200-02	DIODE 10E2	

# TRANSFORMER

# TUNER

Ref. No.	Part No.	Description	Remark
< FUSE >			
△F801	1-532-611-00	FUSE, TIME-LAG (T125mA/250V)	
< SWITCH >			
△S801	1-552-921-00	SWITCH, POWER (VOLTAGE SELECTOR)	
< TRANSFORMER >			
△T801	1-450-015-11	TRANSFORMER, POWER	
*****			
*	A-3269-577-A	TUNER BOARD, COMPLETE (E, UAE)	
*	A-3269-578-A	TUNER BOARD, COMPLETE (EA)	
*	A-3306-013-A	TUNER BOARD, COMPLETE (EE)	
*****			
	3-917-466-01	DRUM (PVC)	
	7-621-770-87	SCREW +P 2.6X5	
< CAPACITOR >			
C1	1-162-286-21	CERAMIC 220PF 10% 50V	
C2	1-162-286-21	CERAMIC 220PF 10% 50V	
C3	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C4	1-124-907-11	ELECT 10uF 20% 50V	
C5	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C6	1-162-198-31	CERAMIC 8.2PF 10% 50V	(EE)
C6	1-162-205-31	CERAMIC 18PF 5% 50V	(E, UAE)
C6	1-162-209-31	CERAMIC 27PF 5% 50V	(EA)
C7	1-162-187-31	CERAMIC 1PF 20% 50V	(EXCEPT EA)
C8	1-102-947-00	CERAMIC 10PF 5% 50V	(EE)
C8	1-102-953-00	CERAMIC 18PF 5% 50V	(E, UAE)
C8	1-102-959-00	CERAMIC 22PF 5% 50V	(EA)
C10	1-162-193-31	CERAMIC 3.3PF 10% 50V	
C11	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C13	1-162-196-31	CERAMIC 5.6PF 10% 50V	(EXCEPT EA)
C13	1-162-197-31	CERAMIC 6.8PF 10% 50V	(EA)
C14	1-162-282-31	CERAMIC 100PF 10% 50V	
C15	1-126-963-11	ELECT 4.7uF 20% 50V	
C16	1-124-903-11	ELECT 1uF 20% 50V	
C17	1-104-664-11	ELECT 47uF 20% 10V	
C18	1-104-664-11	ELECT 47uF 20% 10V	
C19	1-162-306-11	CERAMIC 0.01uF 20% 16V	

Ref. No.	Part No.	Description	Remark
C20	1-124-903-11	ELECT 1uF 20% 50V	
C21	1-126-961-11	ELECT 2.2uF 20% 50V	
C22	1-124-443-00	ELECT 100uF 20% 10V	
C23	1-124-902-00	ELECT 0.47uF 20% 50V	
C24	1-126-963-11	ELECT 4.7uF 20% 50V	
C25	1-126-956-11	ELECT 0.1uF 20% 50V	
C27	1-162-841-11	CERAMIC 0.015uF 10% 16V	
C28	1-162-841-11	CERAMIC 0.015uF 10% 16V	
C32	1-162-197-31	CERAMIC 6.8PF 10% 50V	
C34	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C35	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C36	1-164-616-11	CERAMIC 4PF 5% 50V	
C38	1-164-617-11	CERAMIC 4PF 5% 50V	
C39	1-102-949-00	CERAMIC 12PF 5% 50V	
C40	1-136-480-11	FILM 0.0015uF 5% 100V	
C41	1-136-683-11	FILM 0.0056uF 5% 100V	
C42	1-107-734-11	FILM 360PF 5% 100V	
C43	1-162-306-11	CERAMIC 0.01uF 20% 16V	
C45	1-162-282-31	CERAMIC 100PF 10% 50V	
C46	1-162-282-31	CERAMIC 100PF 10% 50V	
C47	1-162-282-31	CERAMIC 100PF 10% 50V	
C50	1-162-282-31	CERAMIC 100PF 10% 50V	
C51	1-162-294-31	CERAMIC 0.001uF 10% 50V	
C52	1-162-202-31	CERAMIC 13PF 5% 50V	
C53	1-162-287-31	CERAMIC 270PF 10% 50V	
C71	1-162-306-11	CERAMIC 0.01uF 20% 16V	
< FILTER >			
CF1	1-577-327-81	FILTER, CERAMIC	
CF2	1-567-670-11	FILTER, CERAMIC	
CF3	1-577-327-81	FILTER, CERAMIC	
CF4	1-577-327-81	FILTER, CERAMIC	
< VARIABLE CAPACITOR >			
CT1-4	1-151-693-11	CAP, VAR (TUNING) (EXCEPT EE)	
CV1-4	1-151-693-11	CAP, VAR (TUNING) (EXCEPT EE)	
CT1-4	1-151-710-11	CAP, VAR (TUNING) (EE)	
CV1-4	1-151-710-11	CAP, VAR (TUNING) (EE)	
< TRIMMER >			
CT6	1-141-485-11	CAP, ADJ 5PF	
CT10	1-141-485-11	CAP, ADJ 5PF	
< DIODE >			
D1	8-719-987-63	DIODE 1N4148M	
D2	8-719-987-63	DIODE 1N4148M	
D3	8-719-987-63	DIODE 1N4148M	

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

# TUNER

Ref. No.	Part No.	Description	Remark
< FILTER >			
FL1	1-239-333-11	FILTER, BAND PASS (EXCEPT EE)	
FL1	1-239-831-11	FILTER, BAND PASS (EE)	
< IC >			
IC1	8-752-050-20	IC CXA1238S	
< COIL >			
L1	1-406-998-11	COIL, AIR-CORE (E, UAE)	
L1	1-422-317-31	COIL, AIR-CORE (EA)	
* L1	1-428-212-11	COIL, AIR-CORE (EE)	
L2	1-402-683-11	COIL (OSC) (EE)	
L2	1-406-868-11	COIL, AIR-CORE (E, UAE)	
L2	1-406-956-11	COIL (WITH CORE) (EA)	
L3	1-402-593-11	ANTENNA, FERRITE-ROD (MW)	
L4	1-406-253-11	COIL (OSC)	
L5	1-402-597-31	COIL (ANT)	
L6	1-406-247-11	COIL (OSC)	
L7	1-402-595-31	COIL (ANT)	
L8	1-406-246-11	COIL (OSC)	
L9	1-410-314-11	INDUCTOR 0.47uH	
L11	1-410-315-21	INDUCTOR 0.68uH	
L12	1-410-314-11	INDUCTOR 0.47uH	
< TRANSISTOR >			
Q2	8-729-281-53	TRANSISTOR 2SC1815-GR	
< RESISTOR >			
R3	1-249-421-11	CARBON 2.2K 5% 1/4W	
R6	1-249-441-11	CARBON 100K 5% 1/4W	
R9	1-249-441-11	CARBON 100K 5% 1/4W	
R11	1-249-427-11	CARBON 6.8K 5% 1/4W	
R12	1-249-427-11	CARBON 6.8K 5% 1/4W	
R13	1-247-807-11	CARBON 100 5% 1/4W	
R14	1-249-429-11	CARBON 10K 5% 1/4W	
R15	1-247-887-00	CARBON 220K 5% 1/4W	
R16	1-247-887-00	CARBON 220K 5% 1/4W	
R17	1-249-421-11	CARBON 2.2K 5% 1/4W	
R18	1-249-417-11	CARBON 1K 5% 1/4W	
R22	1-249-411-11	CARBON 330 5% 1/4W	
R30	1-249-417-11	CARBON 1K 5% 1/4W	
R31	1-247-854-11	CARBON 9.1K 5% 1/4W	
R32	1-249-441-11	CARBON 100K 5% 1/4W	
< VARIABLE RESISTOR >			
RV1	1-223-641-11	RES, ADJ, CARBON 22K	
RV2	1-223-384-11	RES, VAR, CARBON 100K (FINE TUNE)	

Ref. No.	Part No.	Description	Remark
< SWITCH >			
S1	1-571-147-11	SWITCH, LEVER SLIDE (BAND)	
< TRANSFORMER >			
T1	1-406-952-11	TRANSFORMER, IF	
*****			
MISCELLANEOUS			
*****			
ANT1	1-501-378-11	ANTENNA, TELESCOPIC	
C901	1-124-477-11	ELECT 47uF 20% 25V	
AF801	1-532-611-00	FUSE, TIME-LAG (T125mAL/250V)	
HE101	1-500-160-11	HEAD, ERASE	
HRP101	1-500-161-11	HEAD, RECORD/PLAYBACK	
M901	X-3372-889-1	MOTOR ASSY	
S901	1-692-978-11	SWITCH, LEAF (MD POWER)	
SP901	1-504-684-11	SPEAKER (10CM) (L-CH)	
SP902	1-504-684-11	SPEAKER (10CM) (R-CH)	
AT801	1-450-015-11	TRANSFORMER, POWER	
*****			
ACCESSORIES & PACKING MATERIALS			
*****			
△	1-551-983-00	CORD, POWER (E23)	
△	1-569-007-11	ADAPTOR, CONVERSION 2P (E23)	
△	1-569-008-11	ADAPTOR, CONVERSION 2P (EA)	
△	1-590-413-11	CORD, POWER (EXCEPT E23, EE)	
△	1-769-412-11	CORD, POWER (EE)	
3-759-321-11 MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH) (EXCEPT EE)			
3-759-321-21 MANUAL, INSTRUCTION (POLISH, ENGLISH, GERMAN, RUSSIAN) (EE)			
*	3-917-148-01	INDIVIDUAL CARTON (EXCEPT EE)	
*	3-917-494-01	CUSHION (L)	
*	3-917-495-01	CUSHION (R)	
*	3-939-150-01	INDIVIDUAL CARTON (EE)	
*****			

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

Ref.No.	Part No.	Description	Remark
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\*\*\*\*\*  
**HARDWARE LIST**  
 \*\*\*\*\*

#1	7-685-651-79	SCREW +BVTP 3X20 TYPE2	
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#3	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S	
#4	7-621-770-87	SCREW +P 2. 6X5	
#5	7-621-255-45	SCREW +P 2X6	
#6	7-682-548-09	SCREW +B 3X8	
#7	7-685-248-19	SCREW +KTP 3X12 TYPE2 SLIT	
#8	7-685-871-01	SCREW +BVTT 3X6 (S)	
#9	7-685-101-11	SCREW +PTP 2X3 NON-SLIT	



# CFS-B5S

## SONY<sup>®</sup> SERVICE MANUAL

*E Model*

### SUPPLEMENT-1

File this supplement with the service manual.

**Subject :** Add the Hong Kong Model

The Hong Kong model is the same as the E model except for the accessories & packing materials.

See the information on E model for details.

<u>Part No.</u>	<u>Description</u>	<u>Remark</u>
△ 1-770-019-11	ADAPTOR, CONVERSION	
△ 1-696-820-21	CORD, POWER	
* 3-923-673-01	INDIVIDUAL CARTON	

NOTE :

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