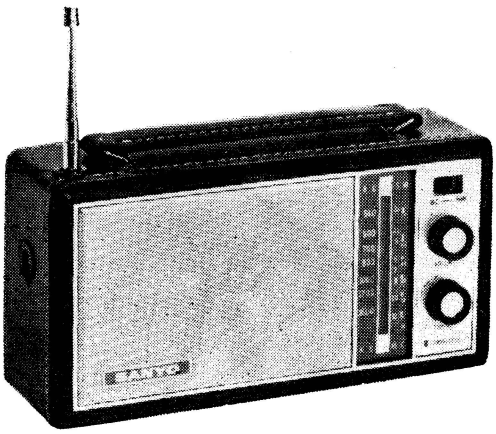
SANYO



8 - transistor BC/SW
Portable Radio

MODEL **8S-710**

SERVICE MANUAL

SANYO ELECTRIC CO., LTD.

INTERNATIONAL DIVISION: SANYO ELECTRIC TRADING CO.,LTD.
OSAKA, JAPAN

SPECIFICATIONS

FREQUENCY RANGE ..... BC ..... 530~1605 kc
SW ..... 3.9 - 12 mc

INTERMEDIATE FREQUENCY ..... 455 kc

TRANSISTORS ..... (1) 2SA222 Frequency converter
(2) 2SA202×2 IF amplifier
(3) 2SB185×3 AF amplifier
(4) 2SB187×2 Power amplifier

DIODE & THERMISTOR
(1) 1S188 (D I) Detector & AGC
(2) SDT-20 (TH) Temperature compensator

OUTPUT POWER ..... Undistorted ..... 200 mW
Maximum ..... 300 mW

SENSITIVITY ..... BC ..... 200μV/m for 10mW output
SW ..... 125μV/m for 10mW output

CURRENT DRAIN ..... No signal 10mA
Maximum 127mA

POWER SOURCE ..... Three "D" size flashlight batteries

LOUDSPEAKER ..... 3⅛" (78mm) permanent dynamic speaker
Voice coil impedance 7 ohms.

DIMENSIONS ..... 8" wide × 4¼" high × 2½" deep
(203 × 107 × 64 mm)

NET WEIGHT ..... 2¼ lbs. (1 kg) Incl. batteries

ALIGNMENT PROCEDURES

IF AND BROADCAST RF ALIGNMENT

Apply volt-meter across the voice coil. Volume control should be at maximum position.

Output of signal generator should be no higher than necessary to obtain reading in order to avoid AGC function.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	ADJUST FOR MAXIMUM OUTPUT

IF ALIGNMENT

1	High side through 0.1 μF capacitor to antenna stator lug on tuning. Low side to chassis.	455 kc	Lower end	T-3 T-2 T-1

BROADCAST RF ALIGNMENT

2	Fashion loop of several turned wire and radiate signal into loop antenna.	520 Kc	Lower end	L4
3		1,650 Kc	Upper end	BC osc. trim.
4		Repeat steps 2 and 3.		
5		600 Kc	600 Kc	L2
6		1,400 Kc	1,400 Kc	BC ant. trim.
7		Repeat steps 5 and 6.		

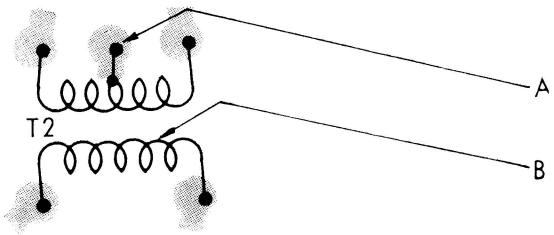
SHORT WAVE RF ALIGNMENT

8	Fashion loop of several turned wire and radiate signal into loop antenna.	3.9 Mc	Lower end	L3
9		18.5 Mc	Upper end	SW osc. trim.
10		Repeat steps 8 and 9.		
11		4 Mc	4 Mc	L1
12		11 Mc	11 Mc	SW ant. trim.
13		Repeat steps 11 and 12.		

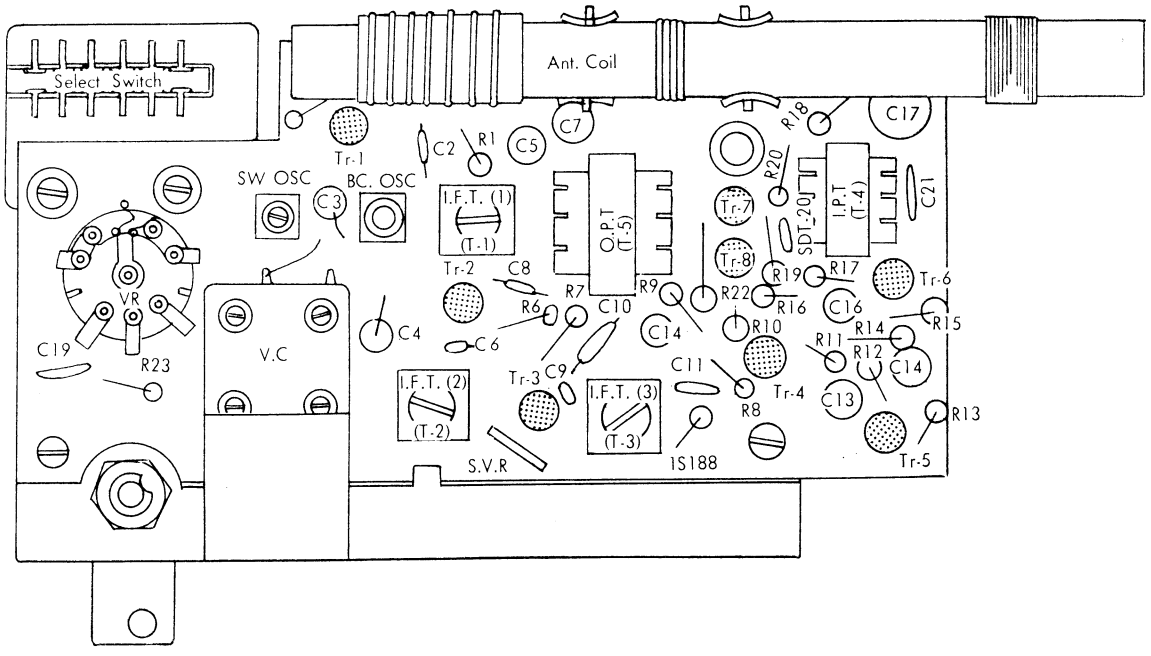
ALIGNMENT OF SEMI-FIXED RESISTOR

Apply 4.5 Volts to the receiver as source and make a receiver tune in no signal (station).

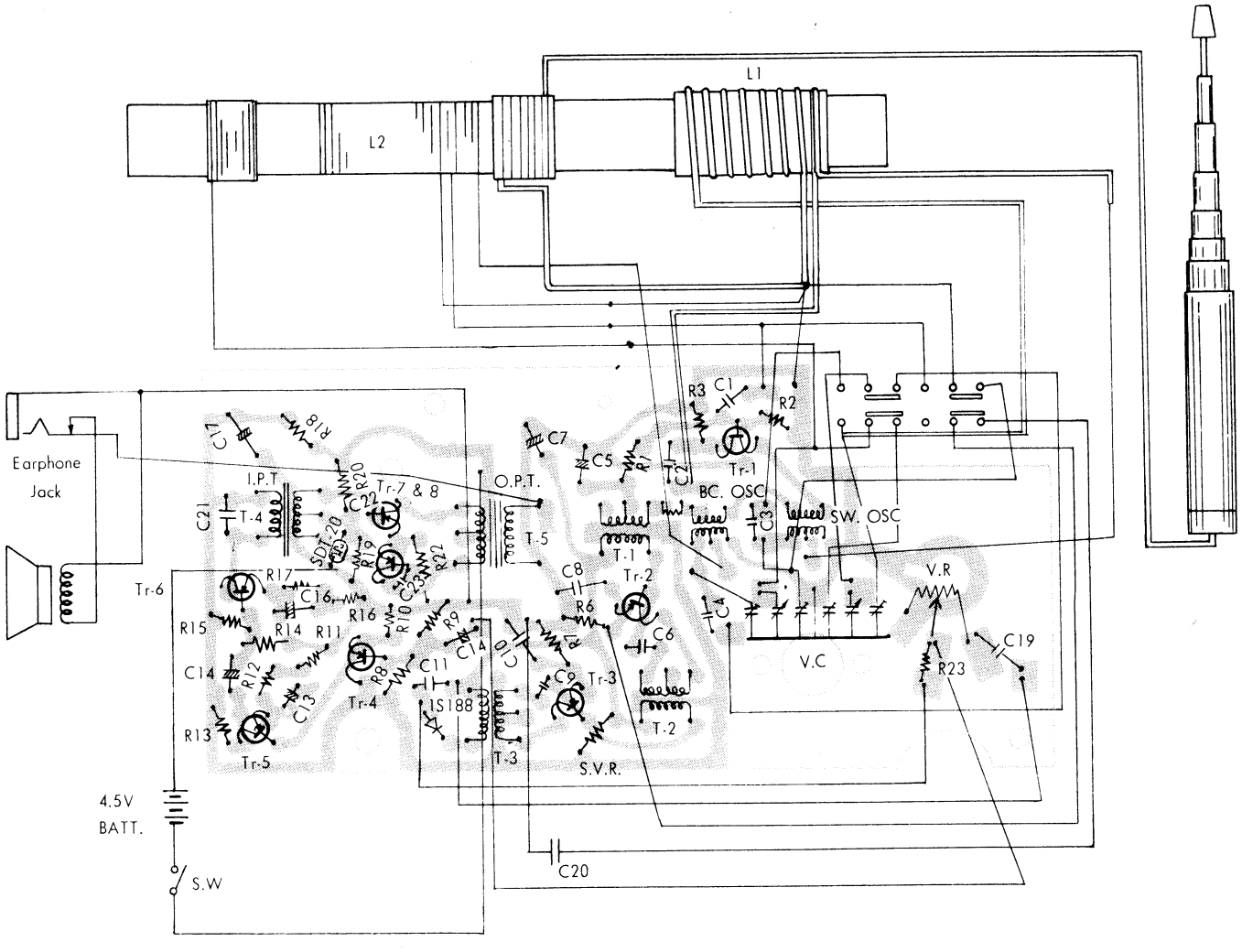
Connect an ammeter (range: 1 mA) between two points A and B as illustrated. Adjust 2nd IFT (T2) in order to obtain 300 mA deflection. Short circuit the two points by soldering after adjustment.



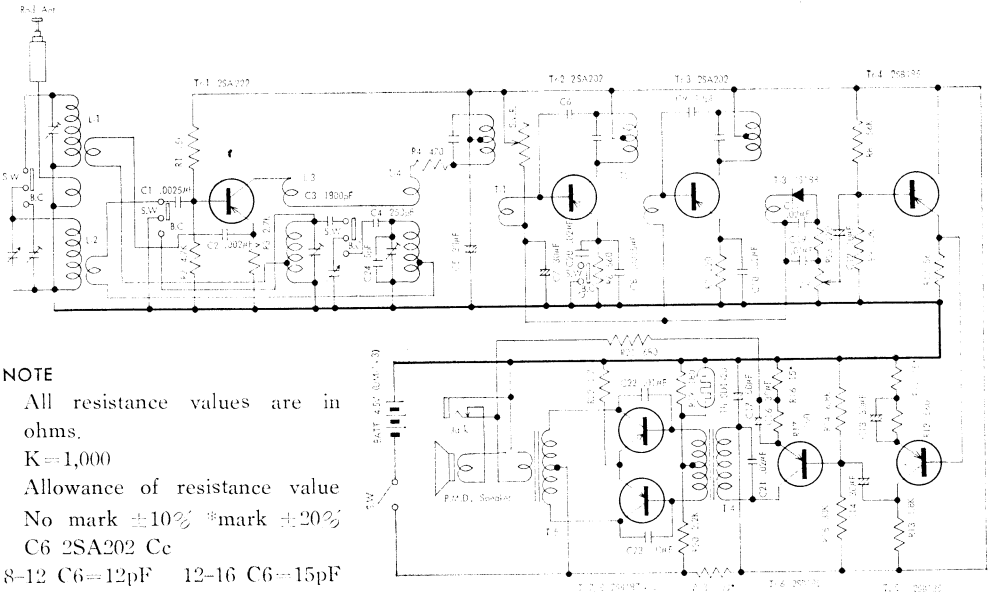
MAIN PARTS LOCATION



INTER PARTS CONNECTION



CIRCUIT DIAGRAM



NOTE

All resistance values are in ohms.

K=1,000

Allowance of resistance value

No mark ±10% *mark ±20%

C6 2SA202 Cc

8-12 C6=12pF 12-16 C6=15pF

PARTS LIST

SYMBOL NO.	STOCK NO.	DESCRIPTION

TRANSISTORS

Tr-1	2SA222	Frequency converter
Tr-2,3	2SA202	IF amplifier
Tr-4,5,6	2SB185	AF amplifier
Tr-7,8	2SB187	Power amplifier

TRANSFORMERS

T 1	R-W5T518	IF transformer
T 2	R-W5T519	IF transformer
T 3	R-W5T520	IF transformer
T 4	R-W6533	Input transformer
T 5	R-W6545	Output transformer

COILS

L1,2	R-W2547	Antenna coil
L3	R-W8525	Oscillator coil -SW-
L4	R-W8524	Oscillator coil -BC-

CONTROLS

VR	R-R116519	Variable resistor
VC	R-C1099	Variable capacitor
SVR	R-R11011	Semi-fixed resistor

LOUDSPEAKER

SP	R-S6542	Loudspeaker

SYMBOL NO.	STOCK NO.	DESCRIPTION

ELECTROLYTIC CAPACITOR

C5	R-C9023	30μF 6V
C7,13,16	R-C9080	30μF 3V
C12,14	R-C9079	10μF 3V
C17	R-C9081	50μF 9V

MISCELLANEOUS

	R-485053 a	Cabinet
	R-315067 a	Front panel
	R-315068	Dial cover
	R-265217	Dial plate
	R-265164	Punching panel
	R-265163	Badge
	R-115131	Speaker fixing metal
	R-245152	Stud nut
	R-S85089	Battery terminal complete (−)
	R-S85058	Knob complete
	R-35170	Battery cover
	R-315070a	Drum
	R-S85091	Pointer complete
	R-115172	Back plate
	R-15113a	Coil spring
		Pipe 0. 3 ∅
	R-S4544	Slide switch
	R-S6536	Earphone complete

Printed in Japan.

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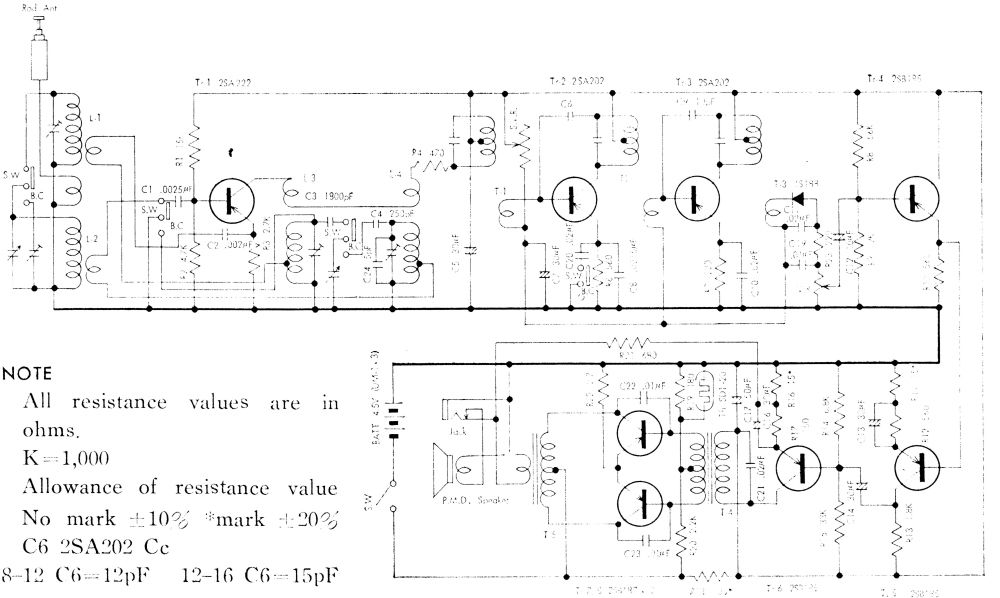

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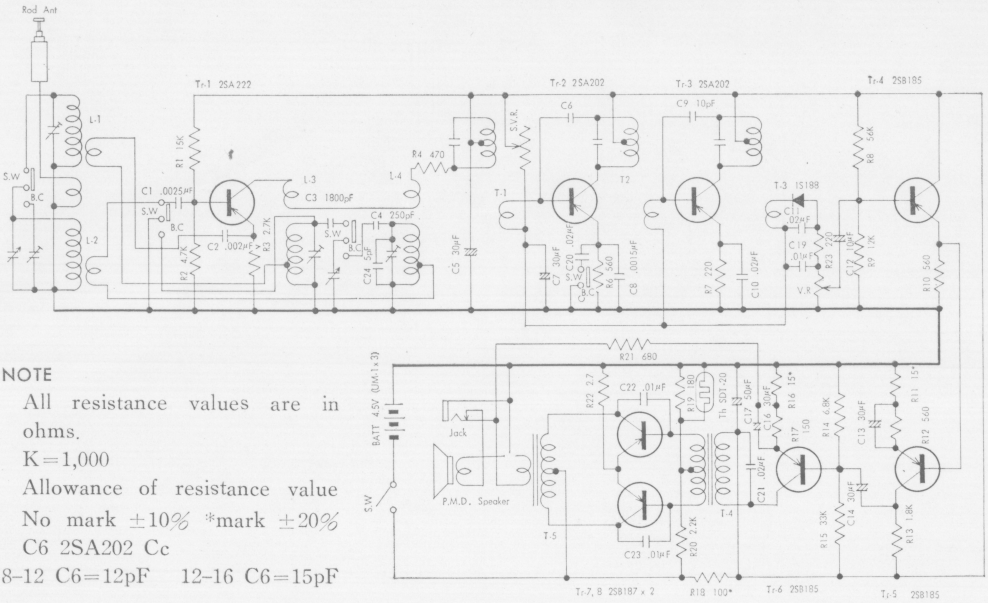

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