SANYO

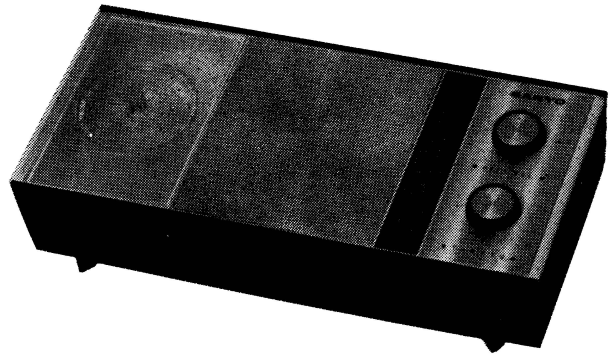
6-TRANSISTOR CIGARETTE CASE RADIO

MODEL 6C-102

SERVICE MANUAL

SANYO ELECTRIC CO., LTD.

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



SPECIFICATIONS

Frequency Range : ..... BC 540 - 1,600 Kc
Intermediate Frequency : ..... 455 Kc
Transistor Complement : ..... 2SA203 Frequency converter
2SA202×2 IF amplifiers
2SB185 AF amplifier
2SB187×2 Power amplifier
Diode : ..... 1S188 Detector & AGC(Di)
Output Power : ..... Undistorted 130 mW
Maximum 160 mW
Radiation Sensitivity : ..... 300 μV/m for 10 mW output (upper limit)
Signal to noise Ratio : ...5 mW output at 1 mV/m input 27 dB (lower limit)
Loudspeaker : ..... 2½″permanent dynamic speaker
Voice coil impedance 8 ohms
Battery : ..... Operates on three 1½ Volt size "C" Flashlight batteries
Current consumption : ..... No signal 14 mA
Maximum 150 mA
Dimensions : ..... 8½″wide×2″high×4″deep
Weight : ..... 1.21 lbs

ALIGNMENT PROCEDURES

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 output reading in order to avoid AGC function.

STEP	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	ADJUST FOR MAXIMUM OUTPUT
IF ALIGNMENT				
1	Radiate signal through the loop antenna, which connected with signal generator output cable.	455 Kc/s	lower end	T-3 T-2 T-1
BROADCAST RF ALIGNMENT				
2	Same as step 1	510 Kc/s	lower end	L-2
3		1650 Kc/s	upper end	Ct2 (osc.)
4		Repeat steps 2 and 3		
5		600 Kc/s	600 Kc/s	L-1
6		1400 Kc/s	1400 Kc/s	Ct1 (ant.)
7		Repeat steps 5 and 6		

PARTS LIST

Stock No.	Description	Q'ty
(Package & Cabinet)		
R-475164	Instruction book	1
R-435530	Individual carton	1
R-315079	Front plastic	1
R-315080	Cabinet -bottom case	1
R-395029	Battery compartment lid	1
R-265182	Control panel	1
R-265183	Speaker grille	1
R-325050	Dial scale	1
R-475163	Specification sheet	1
R-325049	Cigarette case cover	1
R-25145	Speaker retaining metal	2
R-245128	Stud nut	1
R-245129	Stud nut	1
R-S85068	Knob for tuning & volume, complete	2
(Chassis)		
R-245127	Pipe -slide rail mtg.	2
R-115142	Back plate	1
R-315070	Drum	1
R-S85086	Pointer	1
R-S85067	Tuning shaft	1
R-15113a	Coil spring	1
R-265213	Dial cover	1
R-245148	Stud nut -slide rail mtg.	1
R-44046	Cushion	2

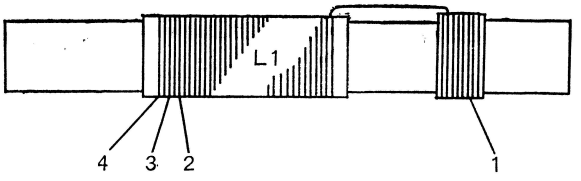
Symbol No.	Stock No.	Description	Q'ty
(Electrical)			
	R-S6268	Speaker 2½″ 8 ohms	1
R7	R-116514	Variable resistor	1
Vc1 Vc2	R-C1071	Variable capacitor	1
L2	R-W8522	Oscillator coil	1
L1	R-S85085	Antenna coil	1
T-4	R-W6533	Input trans.	1
T-5	R-W6534	Output trans.	1
T-1	R-W5T518	IF trans.	1
T-2	R-W5T519	IF trans.	1
T-3	R-W5T520	IF trans.	1
C12	R-C9081	Electrolytic capacitor (50μF 9V)	1
C9	R-C9078	〃 (5μF 6V)	1
C3 C10	R-C9080	〃 (30μF 3V)	1
	R-235057	Battery terminal +	1
	R-S85066	Battery terminal complete + −	1
	R-255062	Coil spring (BATTERY)−	1
Tr-1	2SA203	Transistor	1
Tr-2	2SA202	〃	1
Tr-3	2SA202	〃	1
Tr-4	2SB186	〃	1
Tr-5 Tr-6	2SB187	〃	1
D-1	1S188	Diode	1

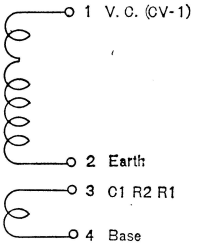
Symbol No.	Description			Q'ty
(Resistors & capacitors)				
R9	33 K ohms	±10%	½−¼W	1
R2	15 K ohms	〃	〃	1
R1 R8	6.8 K ohms	〃	〃	2
R3	4.7 K ohms	〃	〃	1
R12	2.2 K ohms	〃	〃	1
R6	270 ohms	〃	〃	1
R10	220 ohms	〃	〃	1
R11 R15 R13	100 ohms	±20%	〃	2
R14	4.7 ohms	±10%	〃	1
R5	560 ohms	〃	〃	1
R4	5.6 K ohms	〃	〃	1
C6	10 or 13pF	±10%	25V	
C5	12 15pF	±10%	25V	2 ceramic
C1	0.003μF	±20%	50V	1 mylar
C2	0.004μF	〃	〃	1 〃
C8 C12	0.02μF	〃	〃	2 〃
C4 C7 C14	0.02μF	+80% −20%	25V	3 ceramic

6-20032 Printed in Japan

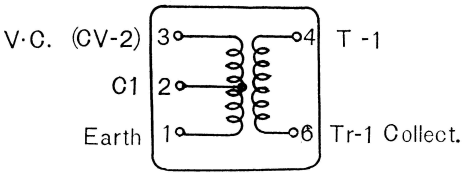
MAIN PARTS CONNECTION

1 Antenna coil

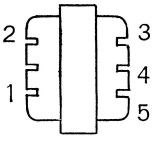


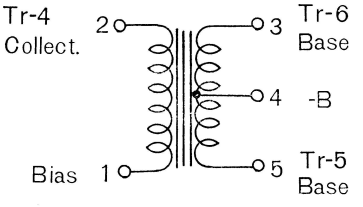


2 OSC coil(L-2.)

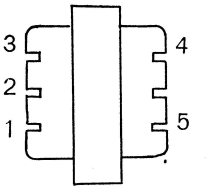


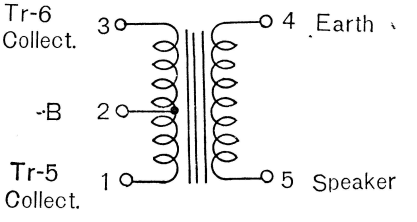
3 Input trans.



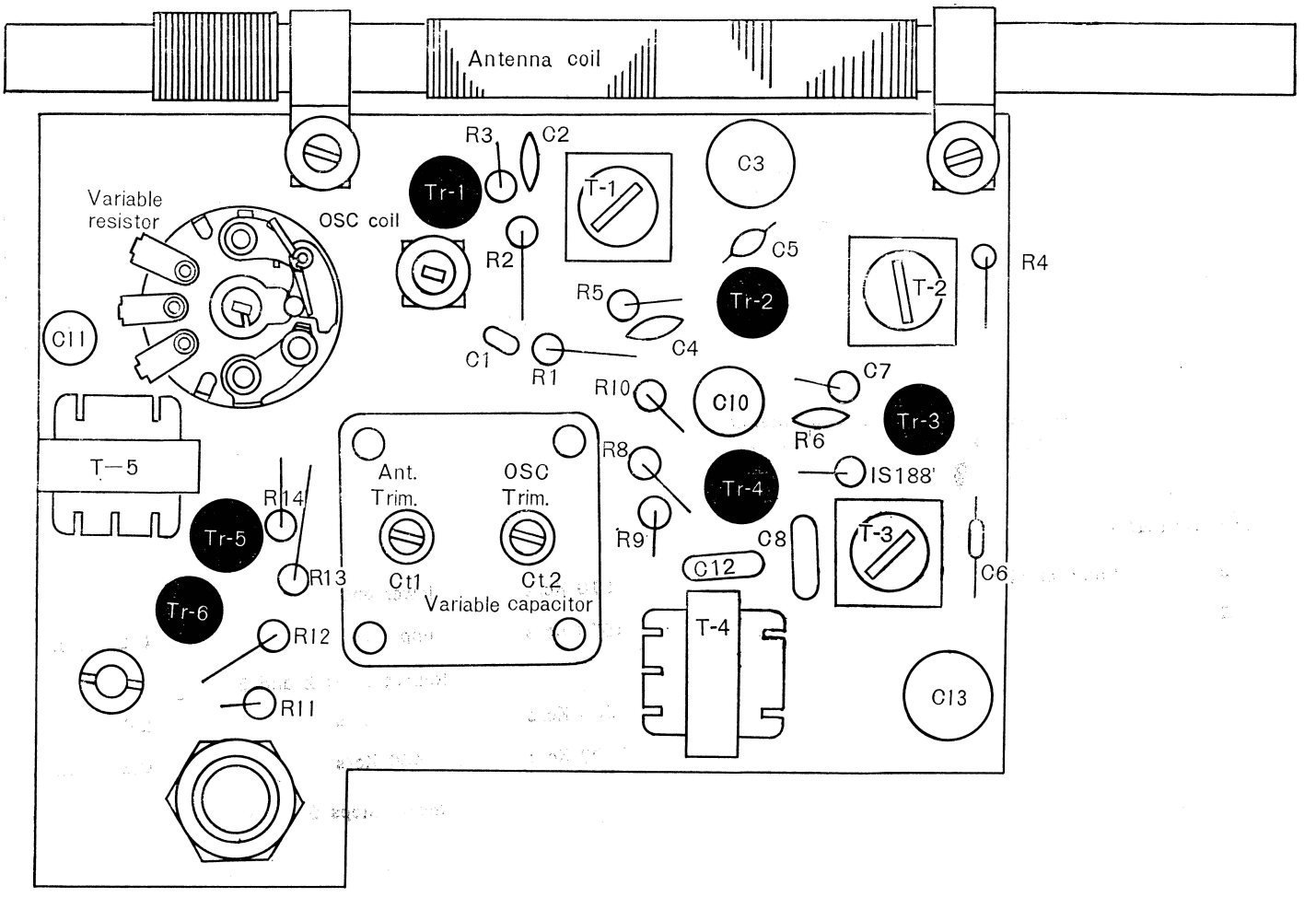


4 Output trans.

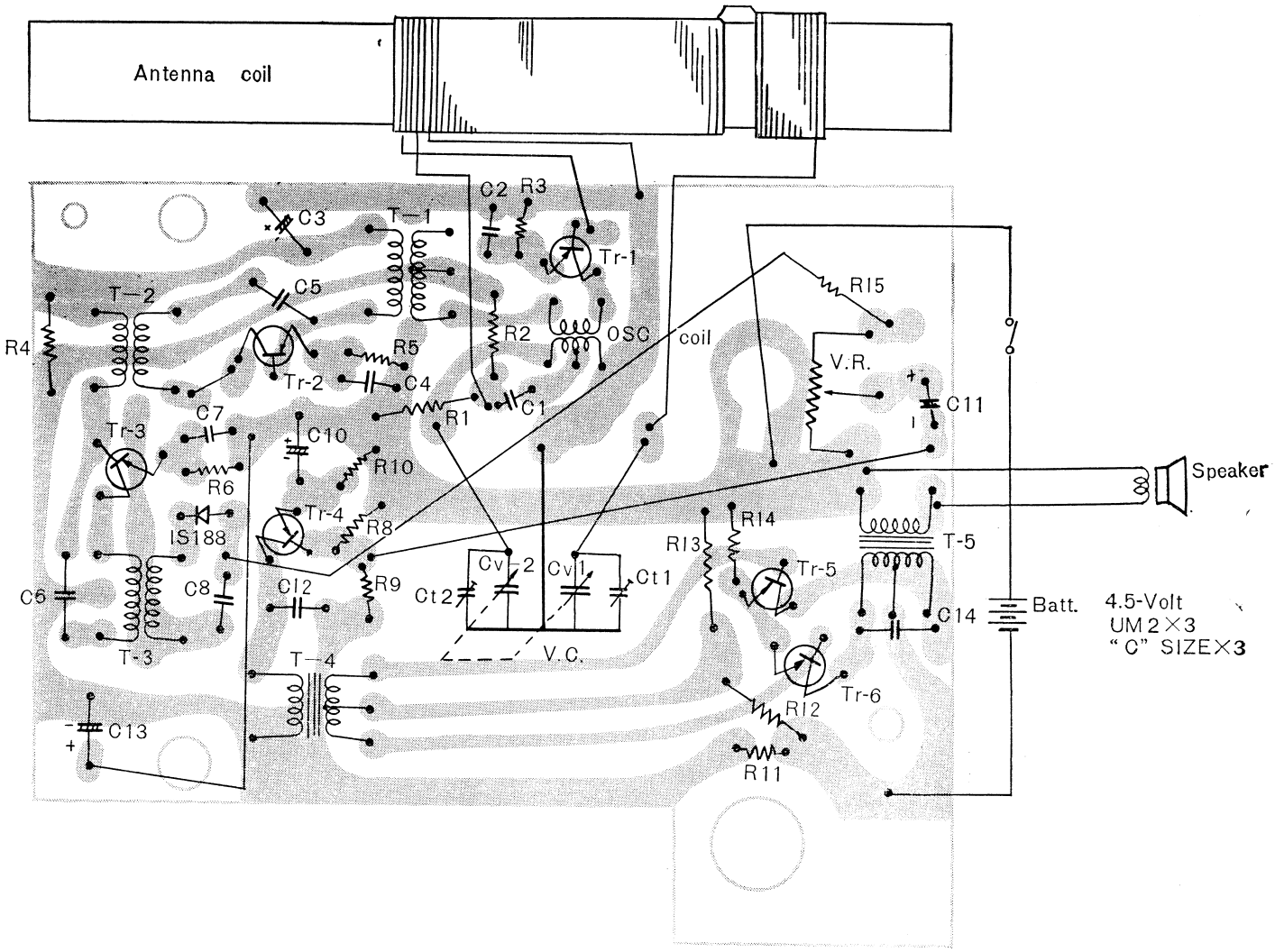




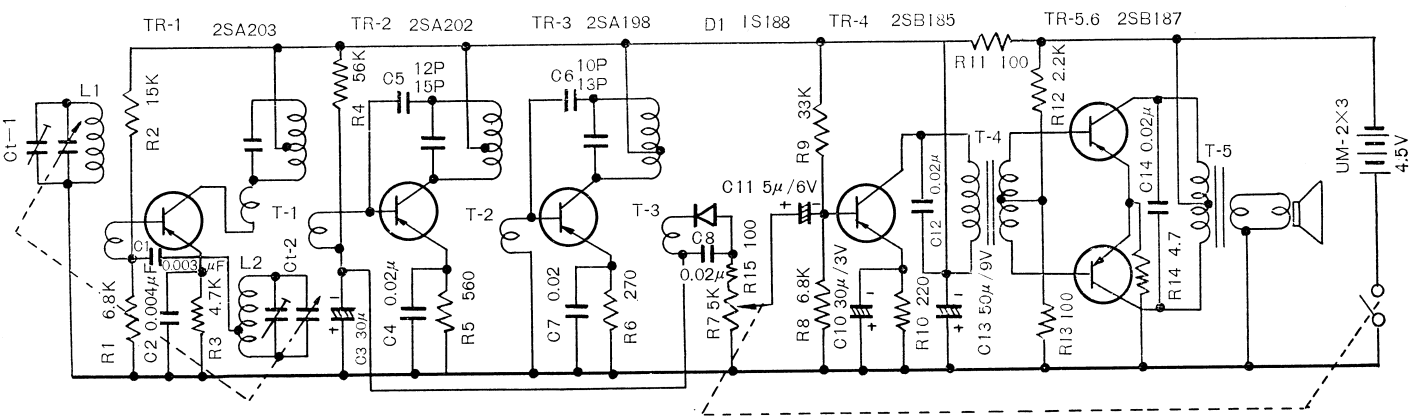
MAIN PARTS LOCATION



INTER-PARTS WIRING ILLUSTRATION



CIRCUIT DIAGRAM



NOTE: All resistance values in " ohms"
All capacitance values in " farad"
C5 12pF(Tr-2 Cc:8~12), 15pF(Tr-2 Cc:12~16)
C6 10pF(Tr-3 Cc:8~12), 13pF(Tr-3 Cc:12~16)