# SANYO



8 - Transistor Portaple Rabio

MODEL **85-718** 

# SERVICE MANUAL

SANYO ELECTRIC CO., LTD.

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

#### **SPECIFICATIONS**

FREQUENCY RANGE	SENSITIVITY BC 160 $\mu$ V/m for 10mW output SW 220 $\mu$ V/m for 10mW output
INTERMEDIATE FREQUENCY	CURRENT DRAIN No signal 15 mA
TRANSISTORS (1) 2SA222 Frequency converter	Maximum ····· 125 mA
(2) 2SA202 ····· 1st IF amplifier	POWER SOURCE Three penlight batteries
(3) 2SA198 2nd IF amplifier	LOUDSPEAKER 2½"(6.5cm) permanent dynamic speaker
(4) 2SB185 × 3 ······ AF amplifier	Voice coil impedance 8 ohms
(5) $2SB187 \times 2 \dots$ Power amplifier	DIMENSIONS $5\frac{1}{8}$ " wide $\times$ $3\frac{1}{4}$ " high $\times$ $1\frac{5}{8}$ " deep
DIODE 1S188 Detector & AGC	WEIGHT 1 lbs (0.45kg) incl. batteries
OUTPUT POWER Undistorted 150 mW	
Maximum 220 mW	

# **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 reading in order to avoid AGC function.

1	SIGNAL	SIGNAL	RADIO	ADJUST FOR
STED	GENERATOR			
DIEL	GENERATOR	GENERATOR	DIAL	MAXIMUM
i	COUPLING	FREQUENCY	SETTING	OUTPUT

#### IF ALIGNMENT

1	High side through 0.1 mF capacitor to antenna stator lug on tuning. Low side to chassis.	455 Ke	Lower end	T-3 T-2 T-1
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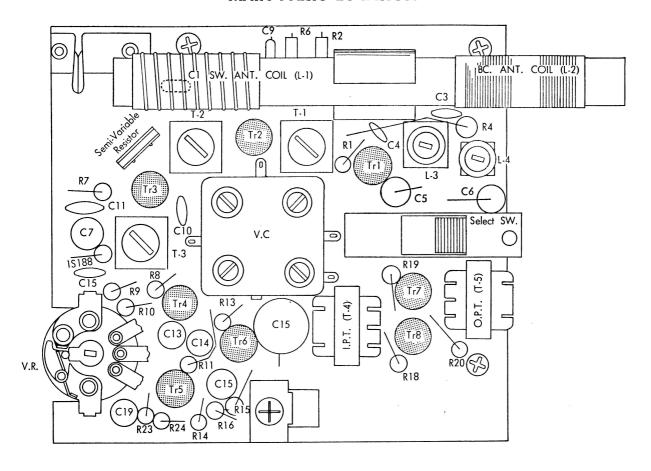
#### BROADCAST RF ALIGNMENT

2		520 Kc	Lower end	L4
3	Fashion loop	1,650 Kc	Upper end	BC OSC TRIM.
4	of several turns	Rep	eat steps 2 a	nd 3.
5	of wire and radiate signal	600 Kc	600 Kc	L2
6	into loop	1,400 Kc	1,400 Kc	BC ANT. TRIM.
7	antenna.	Rep	eat Steps 5 a	nd 6.

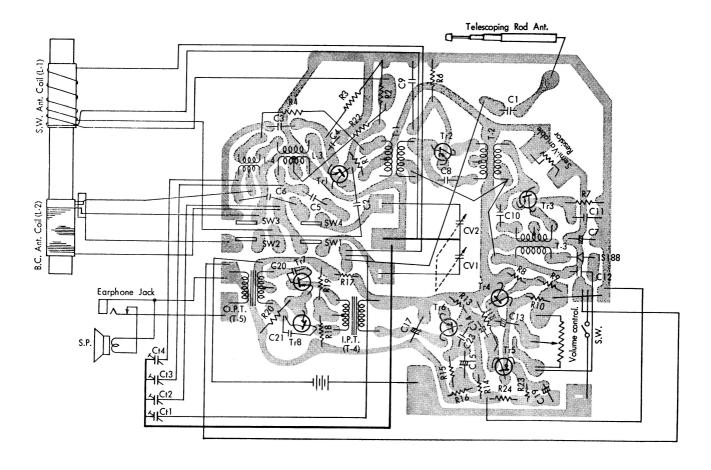
#### SHORT WAVE RF ALIGNMENT

8		3.9 Mc	Lower end	L3
9	Fashion loop of	18.5 Mc	Upper end	SW OSC TRIM.
10	several turn of wire and radi-	Rep	eat steps 8 as	nd 9.
11	ate signal loop	4 Mc	4 Mc	L1
12	into antenna·	11 Mc	11 Mc	SW ANT. TRIM.
13		Rep	eat steps 11	and 12.

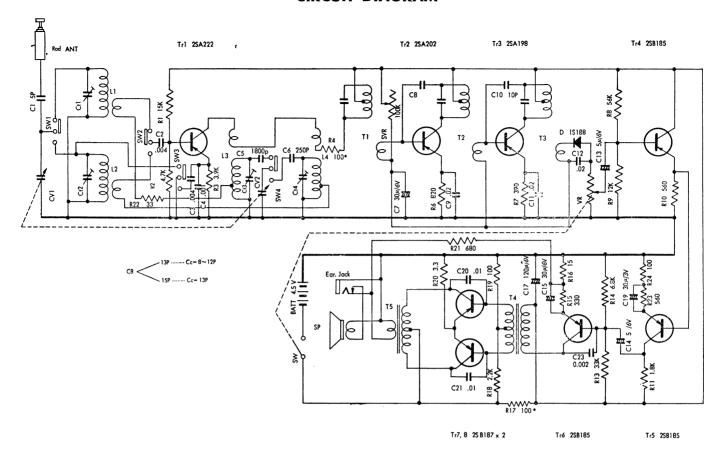
#### MAIN PARTS LOCATION



### INTER PARTS CONNECTION



# **CIRCUIT DIAGRAM**



# **PARTS LIST**

SYMBOL STOCK NO.	DESCRIPTION	SYMBOL STOCK NO.	DESCRIPTION

#### **TRANSISTORS**

Tr-1	2SA222	Frequency converter
<b>Tr-</b> 2	2SA202	1st IF amplifier
Tr-3	2SA198 2SB185 × 3 2SB187 × 2	2nd IF amplifier
Tr-4, 5, 6	$2SB185 \times 3$	AF amplifier
$T_{r-7} 8$	2SB187 × 2	Power amplifier

#### ELECTROLYTIC CAPACITOR

C7,15-19	R-C9023	30	$\mu F$	6V		
C13,14	R-C9078	5	$\mu F$	6V		
C17	R-C9086a	120	$\mu \mathrm{F}$	6V		

# TRANSFORMERS

T 1	R-W5T534	1st IF tr	ansformer	
T 2	R-W5T535	2nd "	"	
Т 3	R-W5T536	3rd "	<i>"</i>	
T 4	R-W6533	Input	<i>"</i>	
T 5	R-W6546	Output	"	

#### CONTROLS

VR	R-R116511	Variable resistor
VC	R-C1099	Variable capacitor
SVR	R-R11011	Semi–variable resistor

#### COILS

L1,2   R-W2544   Antenna coil L 3   R-W8147a   Oscillator coil L 4   R-W8526   " "	
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#### LOUDSPEAKER

SP R-S6268 Loudspeaker	SP	R-S6268	Loudspeaker
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#### MISCELLANEOUS

R-315090 R-315087 R-325076 R-325076 R-265227 R-265227 R-265228 R-265228 R-265229 R-355054 R-25137L S-255054 R-S8377b R-S8377b R-S8107 R-S4268 R-31534a R-S4268 R-31534a R-36546 R-31534a R-365052 R-325073 R-325073 R-325074 R-325075b R-265225a R-115175a R-115175a R-15042 R-15042 R-15042 R-15042 R-1602276 R-15042 R-1602076 R-265225a R-15042 R-15042 R-1602076 R-1602076 R-265225a R-1602076 R-160207	MISCELLANEOUS	
	R-315087 R-325076 R-265227 R-265228 R-265228 R-265229 R-355054 R-25137L S-255054 R-S8377b R-S2107 R-S4268 R-S1534a R-S6546 R-485054 R-485054 R-485054 R-3250751 R-3250751 R-3250754 R-3250754 R-3250754 R-3250758 R-115175a	Back cover Dial plate Front panel Decoration metal - Back cover -  " " - For cabinet -  Badge Battery cover  " terminal  " " complete Socket Slide switch Rod antenna Earphone complete Leather case Earphone case Knob  " Drum Back plate Rail Pointer complete Coil spring