## SANYO



## 8-Transistor Portable Radio

mook 85-322AN
SERVICE MANUAL
SANYO ELECTRIC CO., LTD.
international division : SANYO electric trading co., ltd. OSAKA, JAPAN

## SPECIFICATIONS

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|  |  |

BC $530-1605 \mathrm{Kc}$
SW $3.8-12 \mathrm{Mc}$
$\cdots \cdots \ldots . . . . .455 \mathrm{kc}$
Local oscillator
Frequency mixer
1st IF amplifier
2nd IF amplifier
AF amplifier
Power amplifier
Detector \& AGC
Temperature
BC $66 ~ \mu \mathrm{~V} / \mathrm{m}$
SW $66 \mu \mathrm{~V} / \mathrm{m}$
$\begin{array}{rr}\text { OUTPUT POWER : } \cdots \cdots \cdots \cdots \cdots . . . . . . . . . . . . & 300 \mathrm{~mW} \text { distorted } \\ \text { Maximum } & 400 \mathrm{~mW}\end{array}$
DISTORTION : $\cdots \cdots \cdots \cdots \cdots \cdots . . . . . . . .$.
SIGNAL TO NOISE RATIO : ........................................................................... 5 mW output at $1 \mathrm{mV} / \mathrm{m}$ input $\quad \mathrm{BC} 30 \mathrm{~dB}$

SW 30 dB
No signal 12 mA LOUDSPEAKER : .................... $4^{\prime \prime}$ permanent dynamic speaker Voice coil impedance 4 ohms BATTERY : ............... Operates on 4 "C" size flashlight batteries
 WEIGHT : ..................................................................... 2.6 Ibs.

## ALIGNMENT PROCEDURES

(1) Alignment of Semi-fixed resistor

Apply 6 volt to the receiver as power source and make a receiver tune in no signal (station).
Connect a volt-meter (range: IV) between two points A and B as figure. Adjust the value of semi-fixed resistor in order to obtain 0.35 volt deflection.
(2) IF and Broadcast RF alignment

Apply volt-meter across the voice coil.
Volume control shonld be at maximum position. Out of signal generator should be no higher than necessary to obtain output reading in order to avoid AGC function.


| $\sim 15$ | SIGNAL GENERATOR COUPLING | SIGNAL GENERATOR FREQUENCY | $\begin{aligned} & \text { RADIO } \\ & \text { DIAL } \\ & \text { SETTING } \end{aligned}$ | ADJUST FOR MAXIMUM OUTPUT |
| :---: | :---: | :---: | :---: | :---: |
| IF ALIGNMENT |  |  |  |  |
| 1 | Radiate signal through the loop antenna, which connected with signal generator output cable. | 455 Kc | Lower end | $\begin{aligned} & \mathrm{T}-3 \\ & \mathrm{~T}-2 \\ & \mathrm{~T}-1 \end{aligned}$ |
| BROADCAST RF ALIGNMENT |  |  |  |  |
| 2 | Radiate signal through the loop antenna, which connected with signal generator output cable. | 520 Kc | Lower end | L-4 |
| 3 |  | 1650 Kc | Upper end | BC osc trim. Ct-4 |
| 4 |  | Repeat steps 2 and 3 |  |  |
| 5 |  | 600 Kc | 600 Kc | L-2 |
| 6 |  | 1400 Kc |  | BC ant. trim. Ct-2 |
| 7 |  | Repeat steps 5 and 6 |  |  |
| SHORT WAVE RF ALIGNMENT |  |  |  |  |
| 8 | Radiate signal through the loop antenna, which connected with signal generator output cable. | 6 Mc | Lower end | L-3 |
| 9 |  | 18 Mc | Upper end | SW osc trim. Ct-3 |
| 10 |  | Repeat steps 8 and 9 |  |  |
| 11 |  | 4.0 Mc | 4.0 Mc | L-1 |
| 12 |  | 11.0 Mc | 11.0 Mc | SW ant. trim. Ct-1 |
| 13 |  | Rəpeat | d 12 |  |

PARTS LIST


## MAIN PARTS LOCATION



## MAIN PARTS CONNECTION

1. Antenna coil (Ls1, L-2)

2. OSC. coil (L-3)

3. IF. trans (T-2)
4. Output trans. (T-5)

5. IF. trans. (T-3)

6. OSC. coil (L-4)


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T-1.2
4. IF. $\operatorname{tran}(T-1)$

7. Input trans. (T-4)



CIRCUIT DIAGRAM


