

# SONY

## SERVICING GUIDE

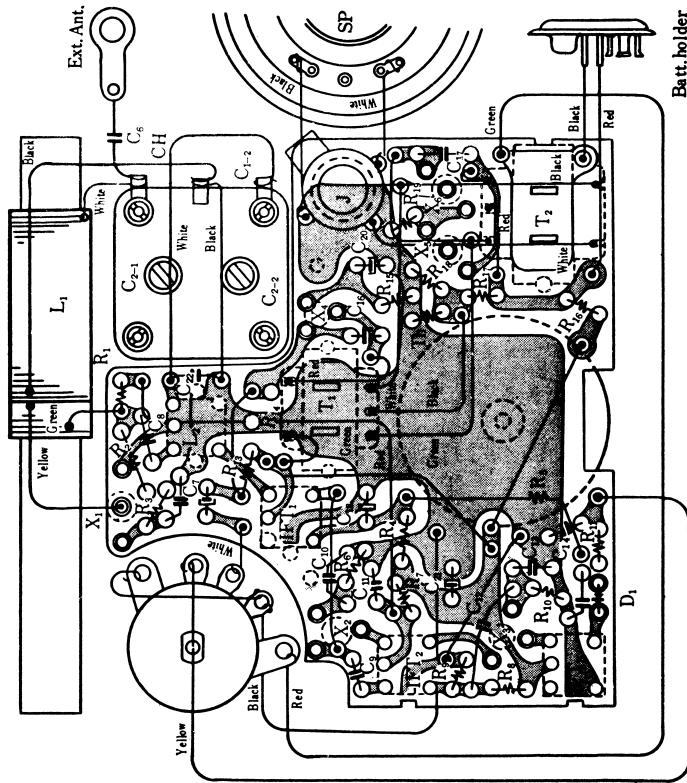
### TR - 620



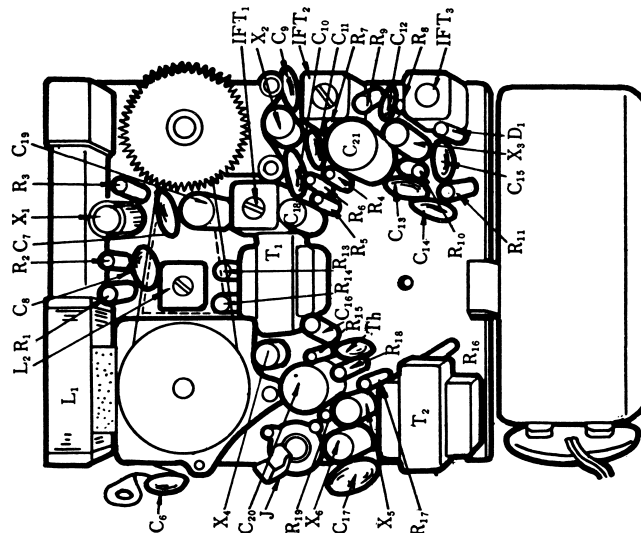
#### Specifications for TR-620

<b>Circuit:</b>	6 transistor superheterodyne
<b>Covering range:</b>	535~1605 kc
<b>IF frequency:</b>	455 kc
<b>Sensitivity:</b>	200 $\mu$ V/m at 10 mW output with built-in ferrite bar antenna 4 $\mu$ V/m with external aerial (effective height of 5 m.)
<b>Selectivity:</b>	21 db (10 kc off from 1400 kc)
<b>Output power:</b>	120 mW (undistorted)
<b>Antenna system:</b>	Built-in ferrite bar antenna with a jack for external aerial
<b>Current drain:</b>	6 mA at 0 signal
<b>Speaker:</b>	2 $\frac{1}{4}$ " PM dynamic (8 $\Omega$ ), "Flying saucer" type
<b>Battery:</b>	BL-006 P, Eveready 216 or equivalent (9 Volts)
<b>Dimensions:</b>	3 $\frac{1}{2}$ " $\times$ 2 $\frac{3}{8}$ " $\times$ 1 $\frac{3}{16}$ " (90 $\times$ 60 $\times$ 21 mm)
<b>Weight:</b>	6 ozs. (175 grs.)
<b>Color:</b>	Cream, Red, Blue and Black

Mounting diagram of TR-620  
(Printed side)



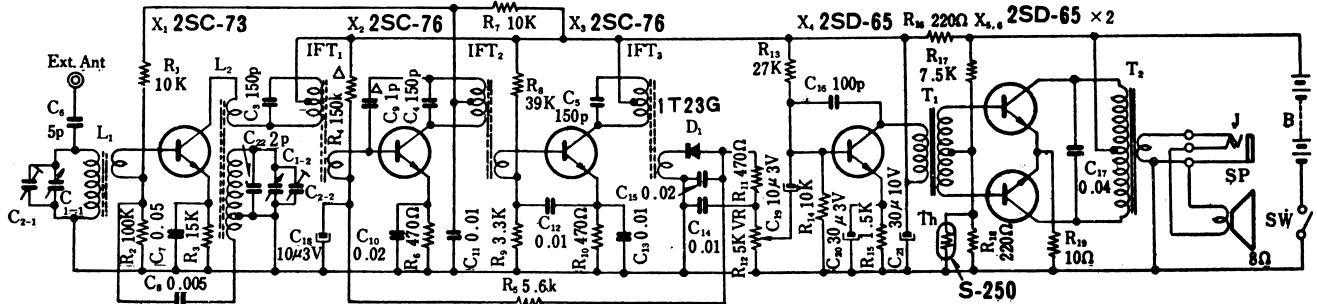
Mounting of TR-620



## Adjustment

- 1) Lower limit: 520 kc     Adjust  $L_2$   
    Upper limit: 1680 kc     "      $C_{2-2}$
- 2) Tracking adjustment  
    Checking point  
        620 kc     Adjust  $L_1$   
        1400 kc     "      $C_{2-1}$

## Schematic diagram



\* Built in IFT  
 △ To be adjusted  
 All resistors are 1/10 watt.

## Voltage & current distribution

	Collector current	Emitter voltage
$X_1$	190~250 $\mu$ A	2.85~3.75 V
$X_2$	310~390 $\mu$ A	0.145~0.18 V
$X_3$	550~680 $\mu$ A	0.26~0.32 V
$X_4$	1.1~1.4 mA	1.65~2.1 V
$X_5$	0.8~1.5 mA for 2	0.008~0.015 V
$X_6$		

(Current drain at 0 signal: Approx. 6 mA)

## List for main components

Symbol	Item	Part No.
$L_1$	Antenna coil	1-401-072-00
$L_2$	Oscillator coil	1-405-054-20
$C_1 C_2$	Tuning condenser	1-151-033-00
IFT <sub>1</sub>	IFT	1-403-057-00
IFT <sub>2</sub>	IFT	1-403-058-00
IFT <sub>3</sub>	IFT	1-403-059-00
VR	Volume control	1-221-241-00
$T_1$	Interstage transformer	1-423-021-10
$T_2$	Output transformer	1-427-025-10
SP	Speaker	1-502-021-00