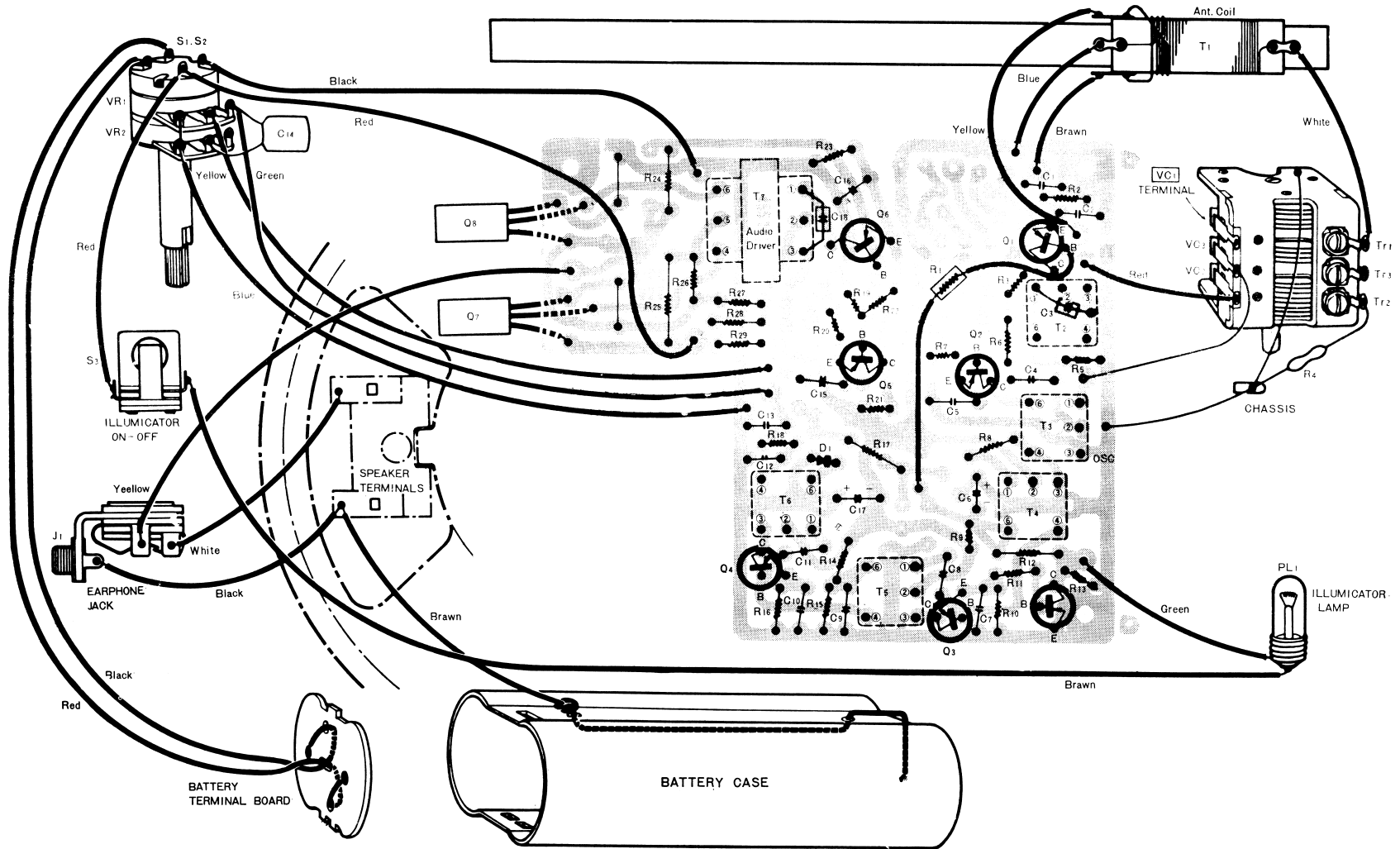


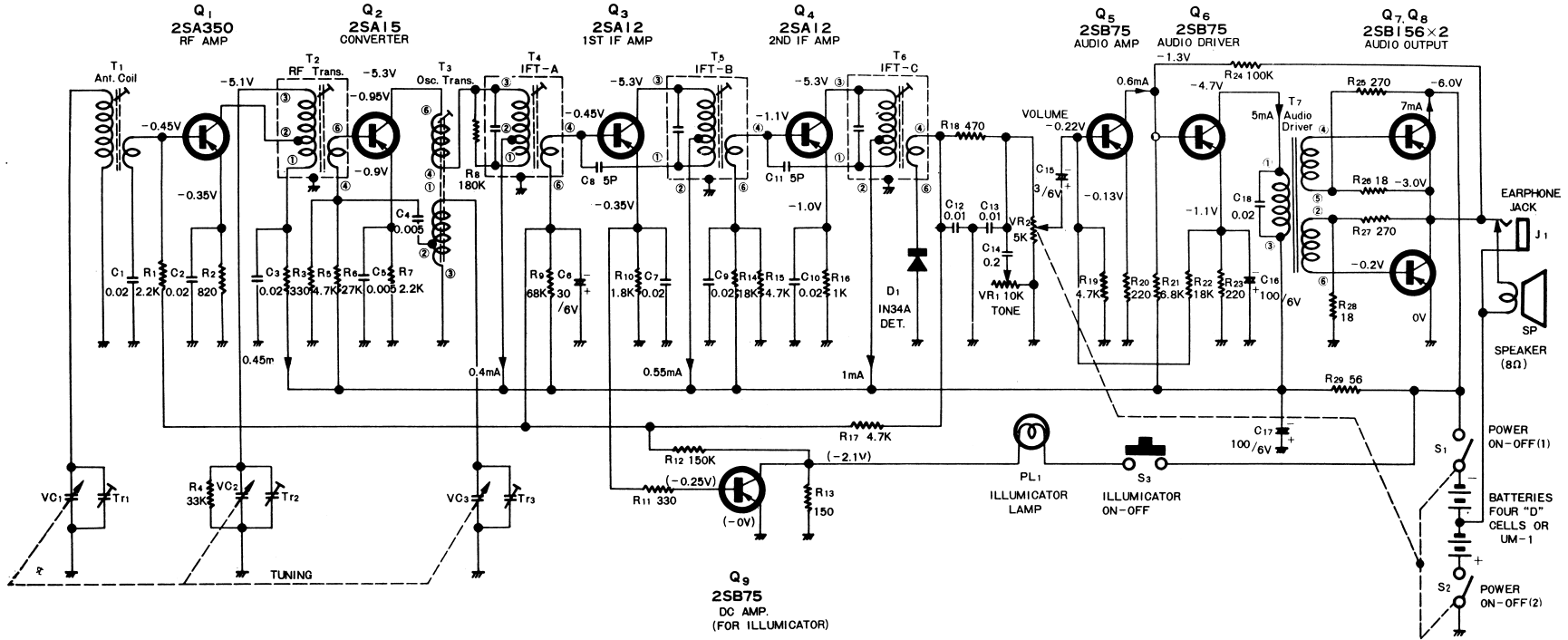


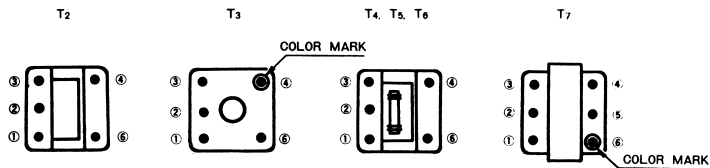
Model 9X-628 Bottom View of Printed Circuit Board



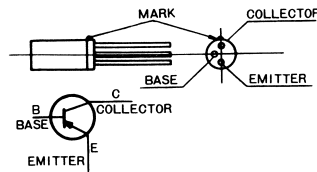
NOTE: 1.   indicate parts which are fixed on the bottom of printed circuit board.



**BOTTOM VIEW OF TRANSFORMERS**



**TRANSISTOR CONNECTION**



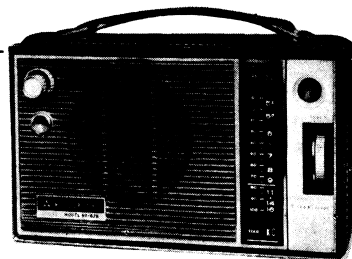
**NOTES:**

1. All resistance values are in ohms, K=1000Ω
2. All capacitance values are in μF, P=10<sup>-6</sup> μF
3. Voltage measurements are made with a VTVM from the point indicated to earth or battery (+) terminal.
4. With no signal and at minimum volume control, total battery drain should be approx. 24mA. Other current measurements are also made at no signal.
5. R<sub>4</sub> and R<sub>5</sub> is altered in production according to the gain of transistors.

# MITSUBISHI

## TRANSISTOR RADIO

### SERVICE NOTE



**MODEL : 9X-628**

**9-Transistor 1-Band Radio**

**MITSUBISHI ELECTRIC CORPORATION**

#### SPECIFICATIONS

<b>Circuit System :</b>	1-band, 9-transistor super-heterodyne
<b>Frequency Range :</b>	535~1,605 kc (Broadcast Band)
<b>Intermediate Frequency :</b>	455 kc
<b>Power Output :</b>	Undistorted : 550 mW    Maximum : 800 mW
<b>Power Source :</b>	Batteries 6 V, 4 flash-light type "D" cells UM-1 (Japan), Eveready 950 or D99, Ray-0-Vac 21 P or equivalent.
<b>Loud Speaker :</b>	4" PM speaker, Voice-coil impedance 8Ω
<b>Earphone :</b>	A magnetic earphone
<b>Antenna :</b>	Built-in ferrite-core loop (10φ×160 mm)
<b>Transistor :</b>	1-2SA350    RF amp. 1-2SA15    Frequency Converter 2-2SA12    IF amp. 2-2SB75    AF amp. 2-2SB156    Push-pull power amp. 1-2SB75    DC amp. for "Illumicator"
<b>Diode :</b>	1-1N34A    Detector, AGC
<b>Outside Dimensions :</b>	Width : 9-3/4"    Height : 5-3/4"    Depth : 3-3/4"
<b>Weight :</b>	4-5/8 lbs (2.1 kg) (including batteries)

MITSUBISHI 9X628

M43

#### ALIGNMENT REQUIREMENT

**SIGNAL GENERATOR**—Use generator which provides 455 kc and 535~1605 kc frequencies. Signal output should be modulated 30%. Keep output low enough to just give an indication to avoid AGC action.

**INDICATOR**—Connect a VTVM to the earphone jack by use of a plug or crimps.

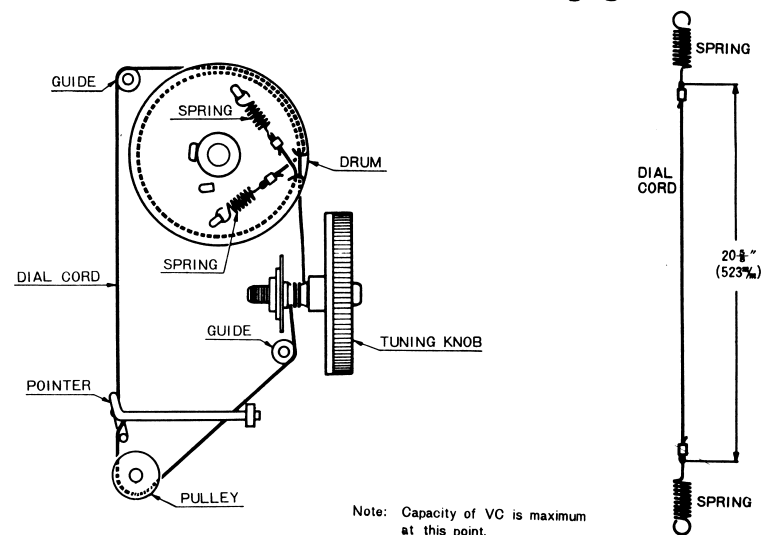
**ALIGNMENT TOOL**—Use a fiber or bakelite aligning tool that fits the slot in the screws of the trimmer and in the cores of the oscillator coils, RF coil or IFT to prevent possible body-effect or chipping of the slot.

**RECEIVER**—Set the volume control to maximum. Be sure during RF alignment that hand or any metal objects on bench do not come in close contact with antenna coil or detuning will be incorrect.

#### ALIGNMENT PROCEDURE CHART

Step	Connect Signal Generator to	Generator Frequency	Dial (VC) Setting	Adjust for Maximum
1	Terminal of VC <sub>1</sub> through 1~3 pF Capacitor	455 kc	Maximum Freq.	T <sub>6</sub> , T <sub>5</sub> & T <sub>4</sub> in order
2		600 kc	600 kc	osc. coil T <sub>3</sub>
3		"	"	RF coil T <sub>2</sub>
4		"	"	ant. coil T <sub>1</sub>
5		1400 kc	1400 kc	osc. trimmer Tr <sub>6</sub>
6		"	"	RF trimmer Tr <sub>2</sub>
7		"	"	ant. trimmer Tr <sub>1</sub>
8		Repeat Steps 2~7		

#### Model 9X-628 Dial Cord Stringing



Note: Capacity of VC is maximum at this point.