

TR₁
2SA102
Conv

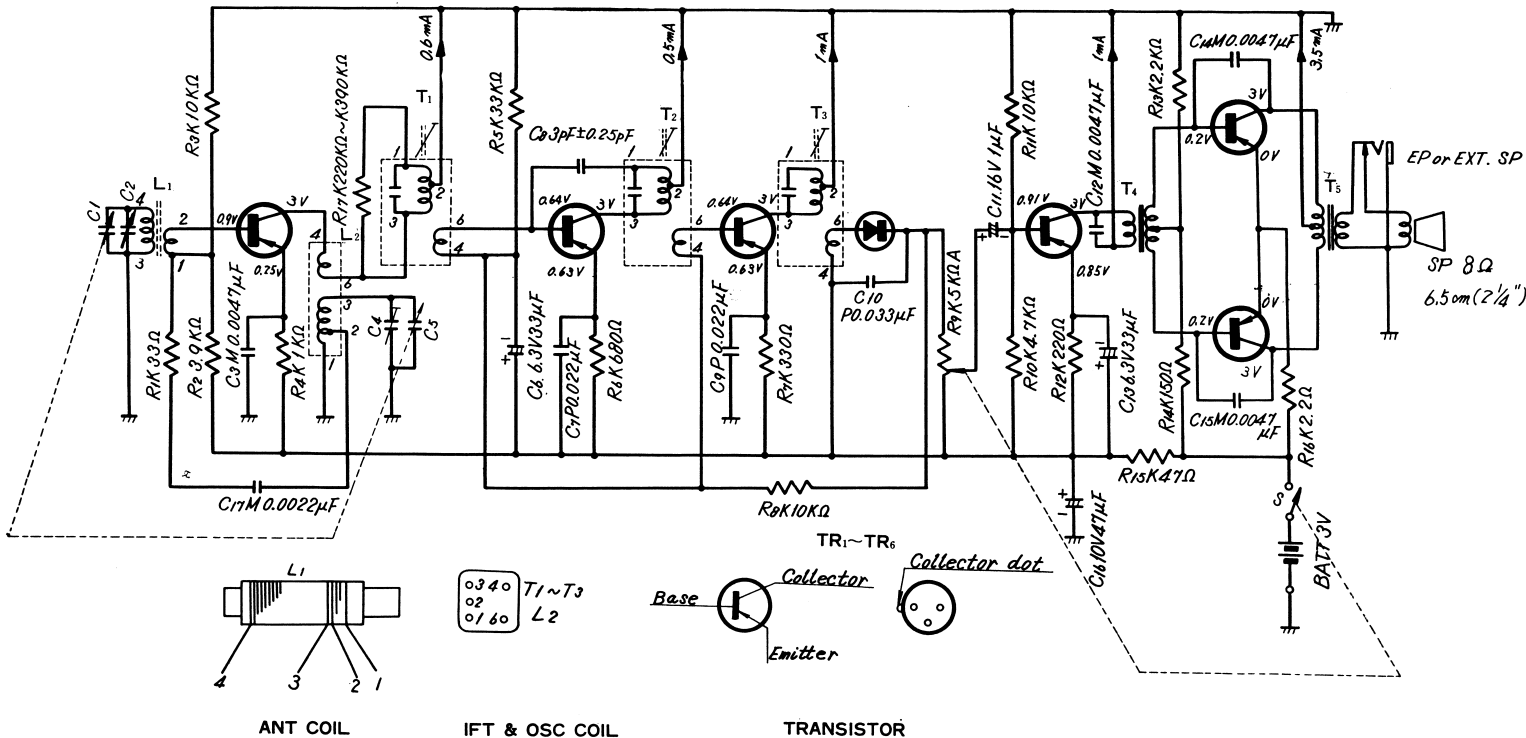
TR₁
2SA101
1st IF Amp.

TR₂
2SA101
2nd IF Amp.

D₁
0A90
Det. & AGC

TR₄
2SB175
AF Amp.

TR₅ & TR₆
2SB176×2
Power Amp.



Notes :

1. S: Power source switch in "OFF" position.
2. Voltage measurements are taken with circuit tester (10KΩ/V) from positive terminal of battery.
3. Capital letters (M, K, J, P) in the circuit diagram show allowable tolerances of resistors and capacitors as follows:
 M = ±20% K = ±10% J = ±5% P = +100%
 - 0%
4. PF = pico farad = mmf
 μF = micro farad = MF
5. Battery current: No Signal 10mA
 Maximum Output 83mA
6. All resistor values in ohms (K = 1000Ω).
7. All capacitor values in micro farads (P = μμF).

Fig. 1 Schematic Diagram.

MODEL R-1031

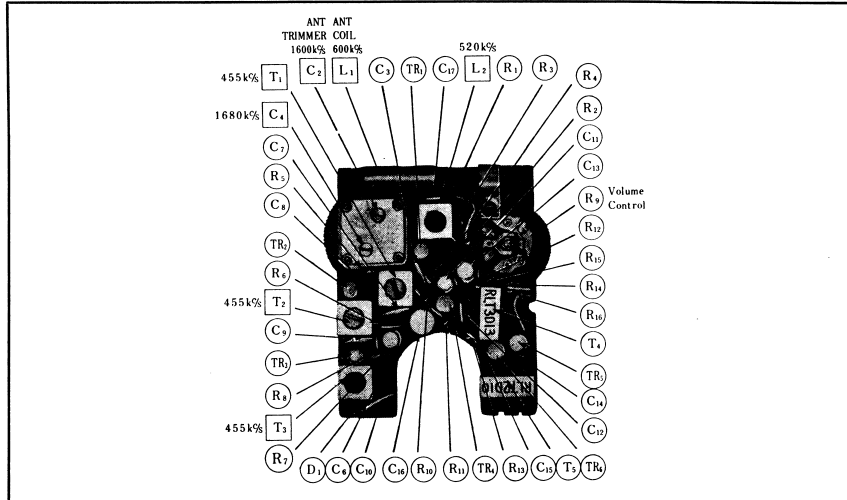


Fig. 3 Component View - parts Identification, Alignment Points.

ALIGNMENT INSTRUCTIONS

Output of signal generator should be no higher than necessary to obtain an output reading. Set volume control to maximum.					
SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	INDICATOR	ADJUST	REMARKS
1 Fashion loop of several turns of wire and radiate signal into loop of receiver.	455 kc/s (1000 c/s Mod.)	Tuning gang fully closed.	Output meter across voice coil.	T ₁ , T ₂ , T ₃	Adjust for maximum output
2 "	520 kc/s (1000 c/s Mod.)	"	"	L ₂	"
3 "	1680 kc/s (1000 c/s Mod.)	"	"	C ₄	"
4 "	600 kc/s (1000 c/s Mod.)	600 kc/s	"	L ₁	Adjust for maximum output, by sliding coil (L ₁) along ferrite core.
5 "	1400 kc/s (1000 c/s Mod.)	1400 kc/s	"	C ₂	Adjust for maximum output Repeat steps 2 through 5.

Notes: Cement the antenna bobbin with wax after completing alignment.



SPECIFICATIONS

Frequency Range:	525-1605 Kc/s
Intermediate Frequency:	455 Kc/s
Transistors:	2SA102 Converter 2SA101 1st IF Amplifier 2SA101 2nd IF Amplifier 2SB175 AF Amplifier 2SB176 Power Amp. (push-pull) 2SB176 Power Amp. (push-pull) O A 9 0 Det. & AGC
Diode:	150µV/m for 5mW Output
Sensitivity:	90mW Unidistorted
Power Output:	120mW Maximum
Battery:	3V (Two "AA" Size Penlight Batteries)
Speaker:	6cm (2 1/2") PM Dynamic Speaker
Cabinet Dimensions:	66(Wide) x 105(High) x 31.5(Deep)mm 2 1/2" x 4 1/4" x 1 1/4"
Weight:	210g. (7 1/2 oz.) with Batteries

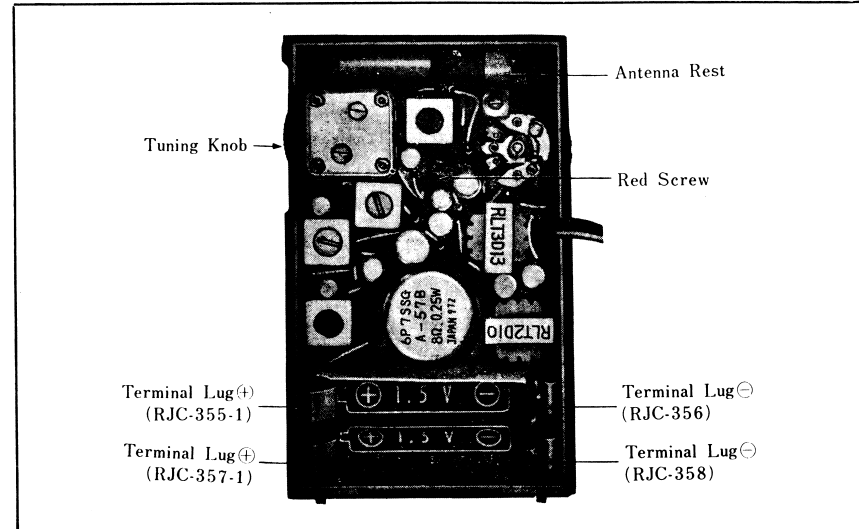


Fig. 5 Top View - Disassembly Points.

MODEL R-1031

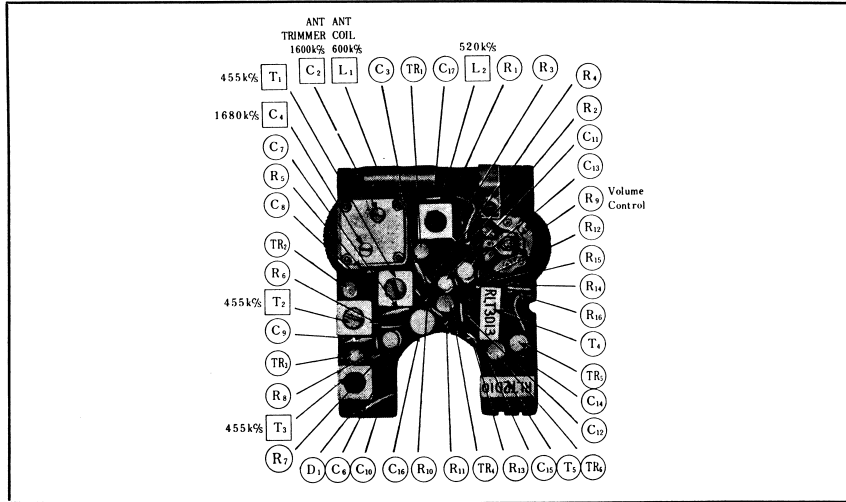


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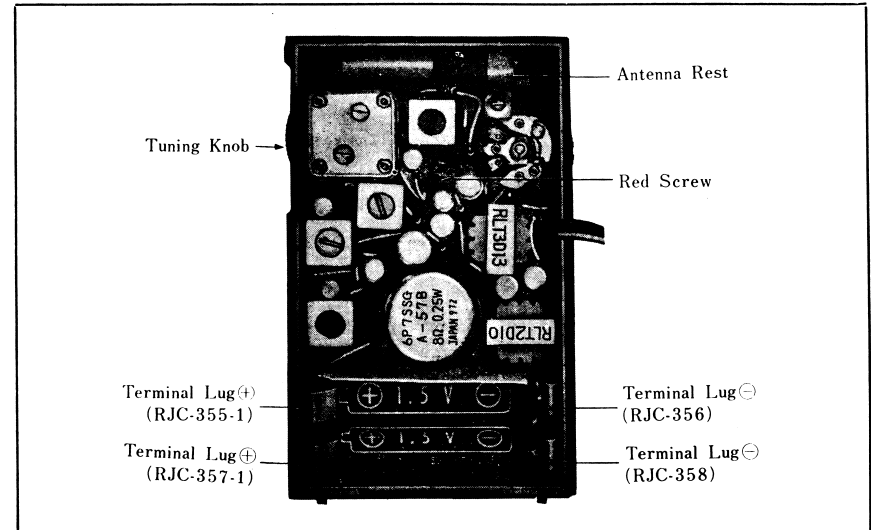


Fig. 5 Top View - Disassembly Points.