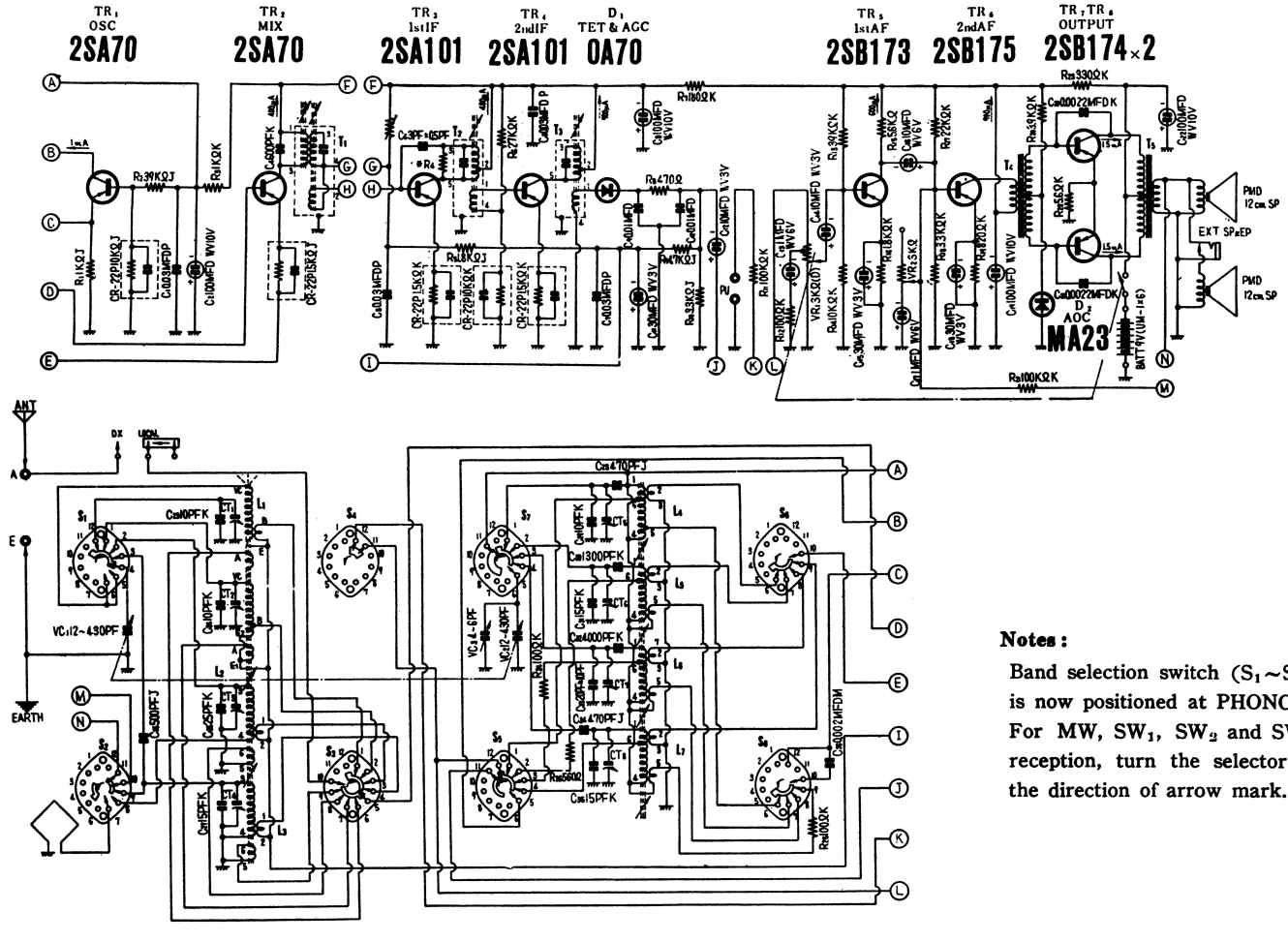
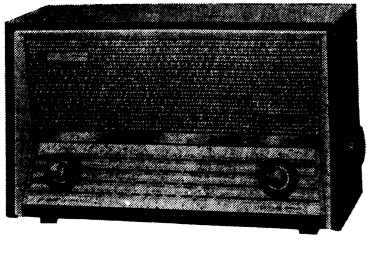


Notes :

Band selection switch ($S_1 \sim S_6$) is now positioned at PHONO. For MW, SW_1, SW_2 and SW_3 reception, turn the selector in the direction of arrow mark.

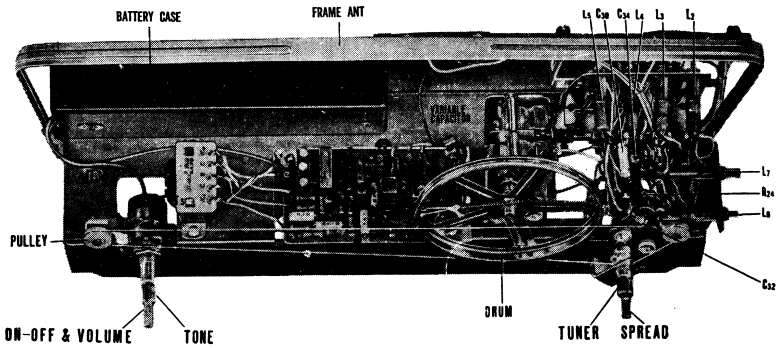
SPECIFICATIONS

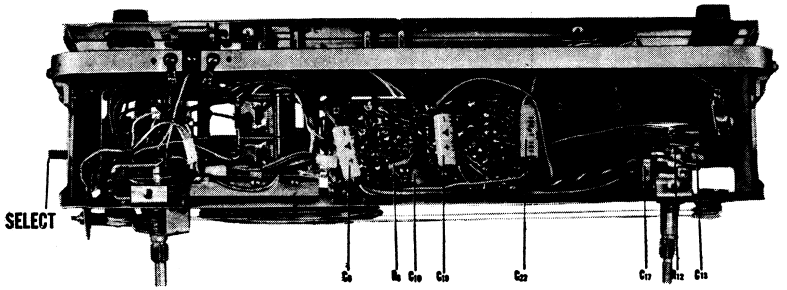
Frequency Range :	MW 535～1605KC (561～187m)
	SW_1 1.6～4.6MC (187～65.2m)
	SW_2 4.6～12MC (65.2～25.0m)
	SW_3 12～26.1MC (25.0～11.5m)
Intermediate Frequency :	455KC
Sensitivity :	MW 100μV/M/50mW
	SW_1 100μV/M/50mW
	SW_2 100μV/M/50mW
	SW_3 100μV/M/50mW
Power Output :	500mW undistorted
	800mW maximum
Batteries :	Six No. 1 (D size) flashlight dry cells 1.5V×6=9V
Speakers :	Two 12cm (5″) PM dynamic speakers

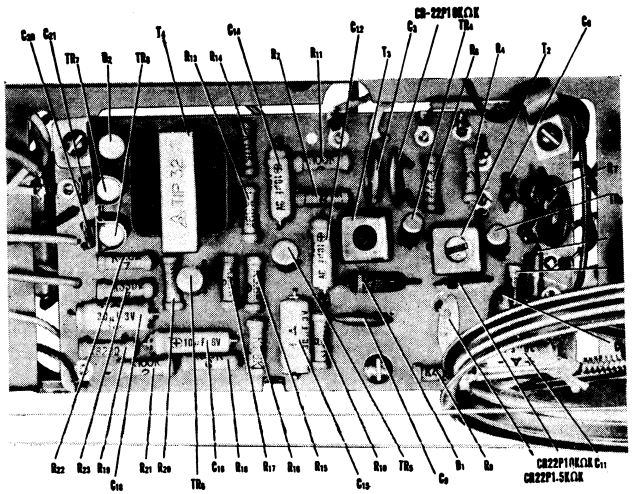


NATIONAL RADIO MODEL BT-452

MAIN PARTS LOCATIONS







ALIGNMENT PROCEDURE

OUTPUT METER ..... Connect Output Meter across speaker voice coil. (EXT. SP terminal)

OUTPUT LEVEL ..... Attenuate Test Oscillator output always to maintain 0.8 volt on Output Meter to prevent overloading of the receiver.

TEST OSCILLATOR ..... Modulate Test Oscillator at 1000 c/s and connect the lead wires of Test Oscillator output to Radiation loop coil.

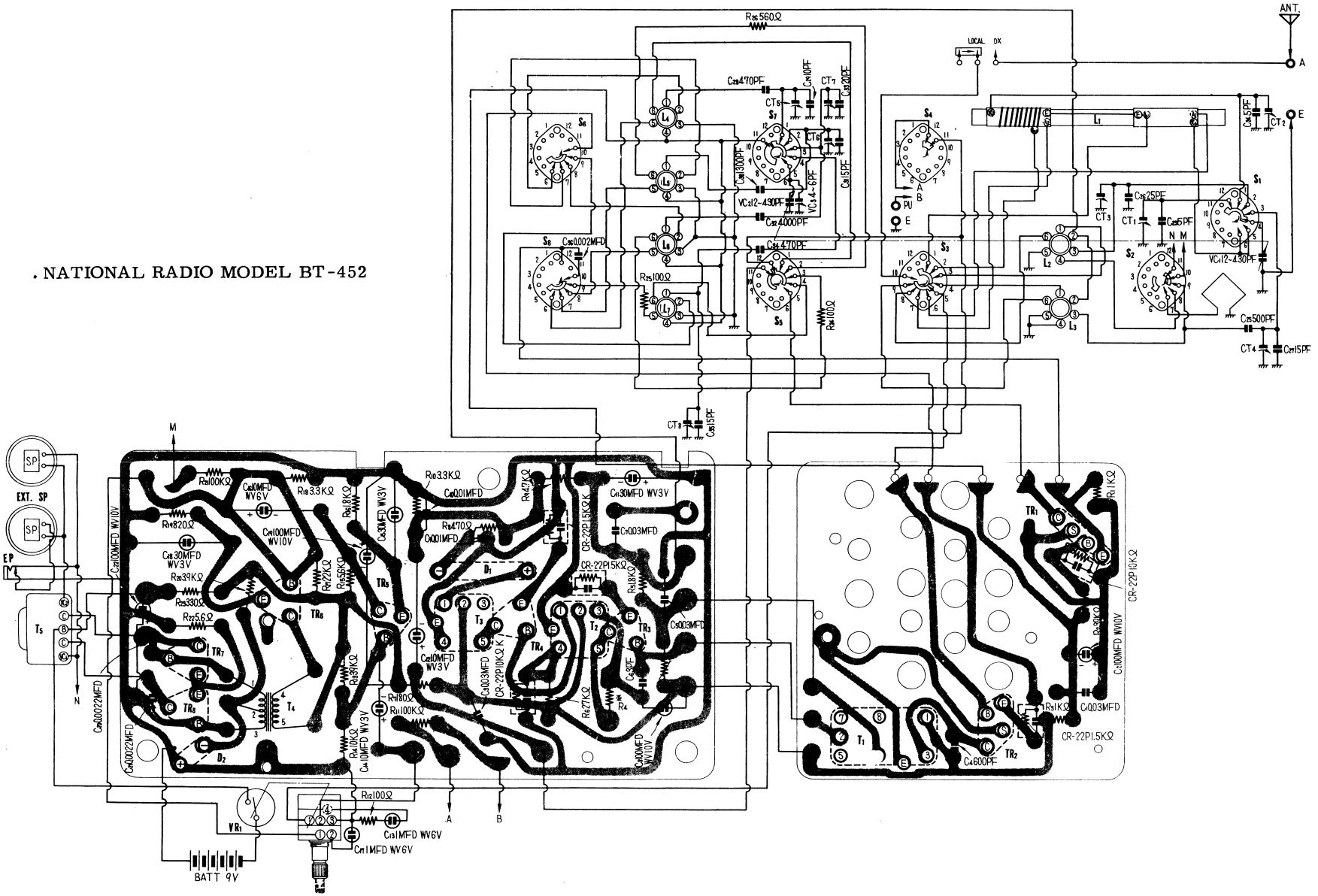
RADIO RECEIVER..... Place the radio receiver 20cm away from Radiation Loop Coil.
Set volume control to maximum slide switch to "DX", tone control switch to "HIGH" and fine tuner control to "SET".

Note: When adjusting, set the rotor of the spread variable capacitor at the position of its half part being out.

Step	Band Switch Position	Test Oscillator		Radio Receiver	
		Connection to radio receiver	Dial setting	Dial setting	Adjusting for maximum output
1	MW	Use radiation loop coil (See Fig. 1)	455 KC	Quiet point 530 KC	Top screws of IF transformer
2			600 KC	600 KC	Screw of L_4 (OSC coil) inductance of L_1 (MW ANT)
3			1500 KC	1500 KC	Screw of CT_5 (Trimmer) Screw of CT_1 (Trimmer)
4			600 KC & 1500 KC	600 KC & 1500 KC	Repeat steps (2) and (3)
5	SW_1		1.8 MC	1.8 MC	Screw of L_5 (OSC coil) inductance of L_1 (SW_1 ANT)
6			4.5 MC	4.5 MC	Screw of CT_6 (Trimmer) Screw of CT_2 (Trimmer)
7			1.8 MC or 4.5 MC	1.8 MC or 4.5 MC	Repeat steps (5) and (6)
8	SW_2	Through dummy antenna in screw with "A-E" terminal.	5 MC	5 MC	Screw of L_6 (OSC coil) Screw of L_2 (ANT coil)
9			12 MC	12 MC	Screw of CT_7 (Trimmer) Screw of CT_3 (Trimmer)
10			5 MC or 12 MC	5 MC or 12 MC	Repeat steps (8) and (9)
11	SW_3		12 MC	12 MC	Screw of L_7 (OSC coil) Screw of L_3 (ANT coil)
12			26 MC	26 MC	Screw of CT_8 (Trimmer) Screw of CT_4 (Trimmer)
13			12 MC or 26 MC	12 MC or 26 MC	Repeat steps (11) and (12)

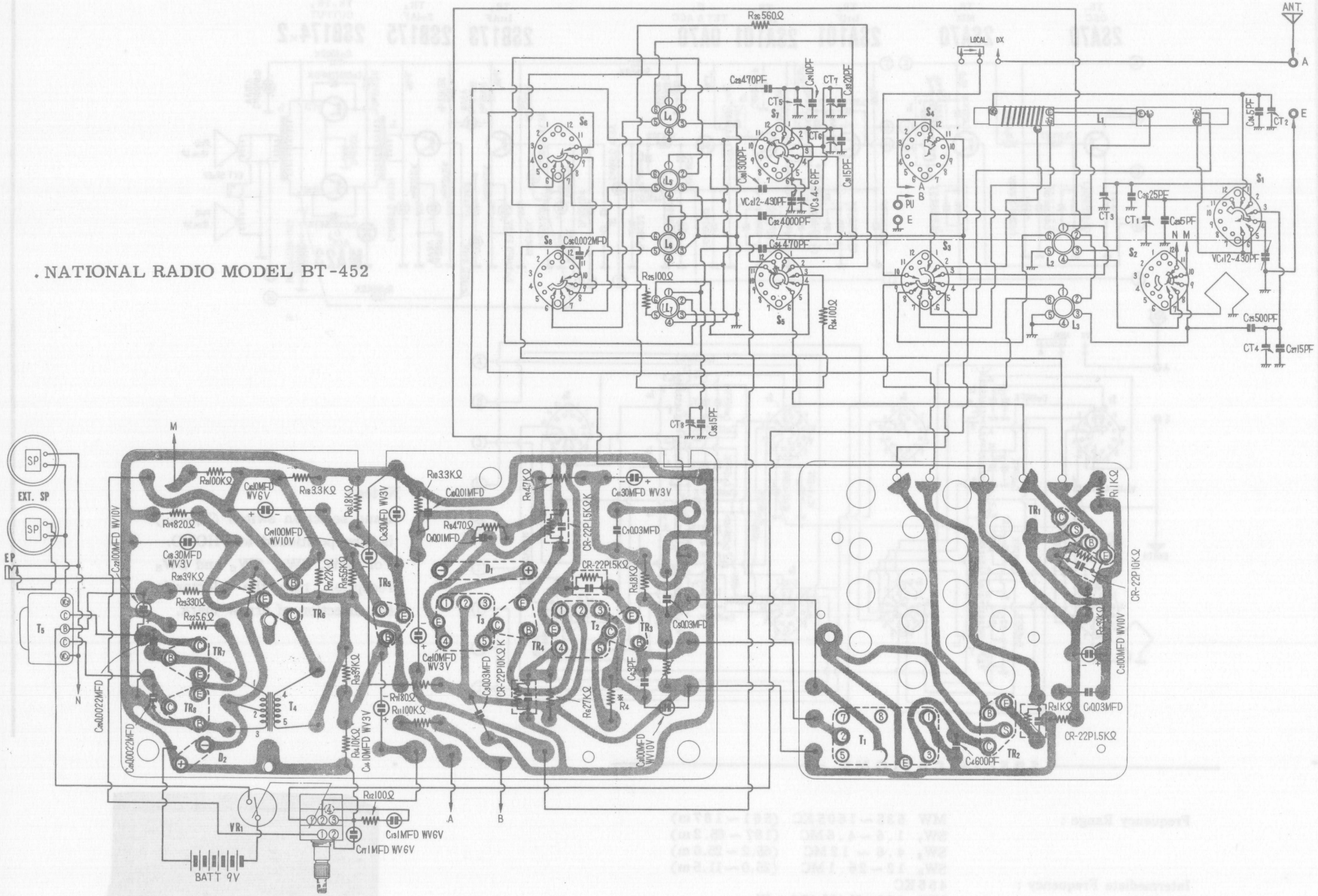
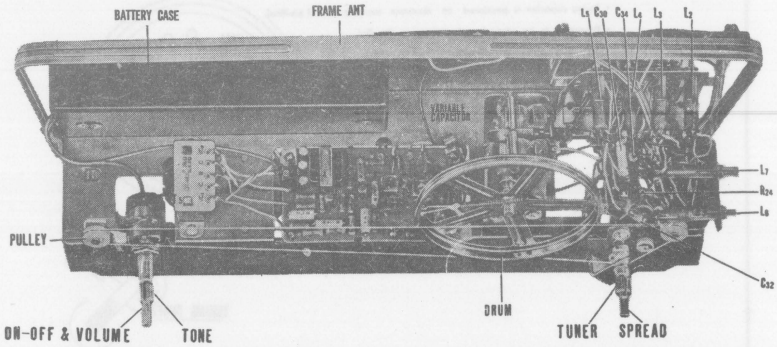
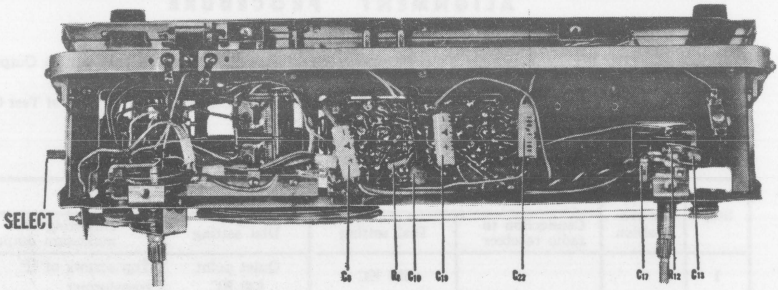
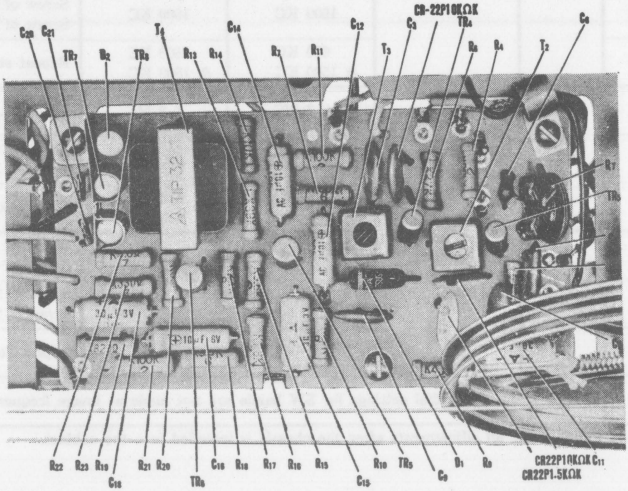
— PRINTED CIRCUIT BOARD —

. NATIONAL RADIO MODEL BT-452



PRINTED CIRCUIT BOARD

. NATIONAL RADIO MODEL BT-452



MAIN PARTS LOCATIONS