

Models 5 and 6

The "Minaki"

Radio Receivers

Specifications

Tubes:

	Stage
224	1st R.F.
224	2nd R.F.
224	Detector
247	Audio
280	Rectifier

Controls:

Left—Volume control and switch
Right—Tuning

Loudspeaker:

D.C. Dynamic

Power Supply:

Model 5—110 volt A.C. 60 cycles
Model 6—110 volt A.C. 25 cycles

Antenna:

Overall length not to exceed 75 feet, including lead-in.

NOMENCLATURE

C-1 Antenna Trimmer Condenser
 C-2 Tuning Condenser
 C-3 Tuning Condenser
 C-4 Tuning Condenser
 C-5 Alignment Condenser
 C-6 Alignment Condenser
 C-7 Coupling Capacity
 C-8 Coupling Capacity
 C-9 Audio Coupling Condenser .006 mfd.
 C-10 Det. Plate By-pass .0001 mfd.
 C-11 R.F. Cathode By-pass .05 mfd.
 C-12 R.F. Plate By-pass .05 mfd.
 C-13 R.F. Screen By-pass .25 mfd.
 C-14 R.F. Plate By-pass .05 mfd.
 C-15 Det. Cathode By-pass 1.00 mfd.
 C-16 Det. Screen By-pass .25 mfd.
 C-17 Audio Grid By-pass .01 mfd.
 C-18 Audio Plate By-pass .01 mfd.
 C-19 Filter Condenser 4. mfd.
 C-20 Field Condenser .08 mfd.
 C-21 Filter Condenser 4 mfd.
 S-1 Switch

R-1 Volume Control 10,000 ohms.
 R-2 R.F. Cathode Resistor 300 ohms.
 R-3 Det. Cathode Resistor 50,000 ohms.
 R-4 Det. Screen Resistor 2 megohms.
 R-5 Det. Plate Resistor 1 megohm.
 R-6 Audio Grid Resistor ½ megohm.
 R-7 Audio Grid Resistor 100,000 ohms.
 R-8 Mid Tap Resistor.
 R-9 Divider Resistor 50,000 ohms.
 R-10 Screen Resistor 50,000 ohms.
 R-11 Screen Resistor 10,000 ohms.
 R-12 Audio Bias Resistor 400 ohms.

L-1 Antenna Coil.
 L-2 Primary } of R.F. Coil.
 L-3 Secondary }
 L-4 Primary } of R.F. Coil.
 L-5 Secondary }

T-1 Audio Output Transformer.
 T-2 Power Transformer.

SOCKET VOLTAGES

The following table of average socket voltages is only approximate, as considerable variation may occur due to differences in line voltage, tubes, and the type of set analyzer employed.

Stage	Tube	Fil.	Plate	Screen	Cathode	Grid	Plate M.A.
1st R.F.	224	2.3	250	90	2.5	2.5	4.5
2nd R.F.	224	2.3	250	90	2.5	2.5	4.5
Detector	224	2.3	*150	*20	3.0	1.5	.5
Audio	247	2.3	250	250	..	*16	32
Rectifier	280	4.8	Plate current of each plate—20				

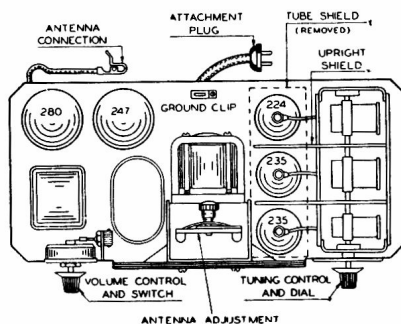
BY-PASS ASSEMBLY

Where one or more by-pass capacitors have shorted, the complete block should be replaced with part K-936. (K-936 replaces No. 102178). This is a specially designed high and low voltage capacitor block, with the following code colouring:—

White Leads (2)..... .01 mf.—350 volts.
 Red Leads (3)..... .25 mf.—175 volts.
 Green Leads (1)..... 1 mf.—175 volts.
 Black Lead (1)..... .05 mf.—175 volts.
 Yellow Leads (2)..... .05 mf.—350 volts.

VOLUME CONTROLS

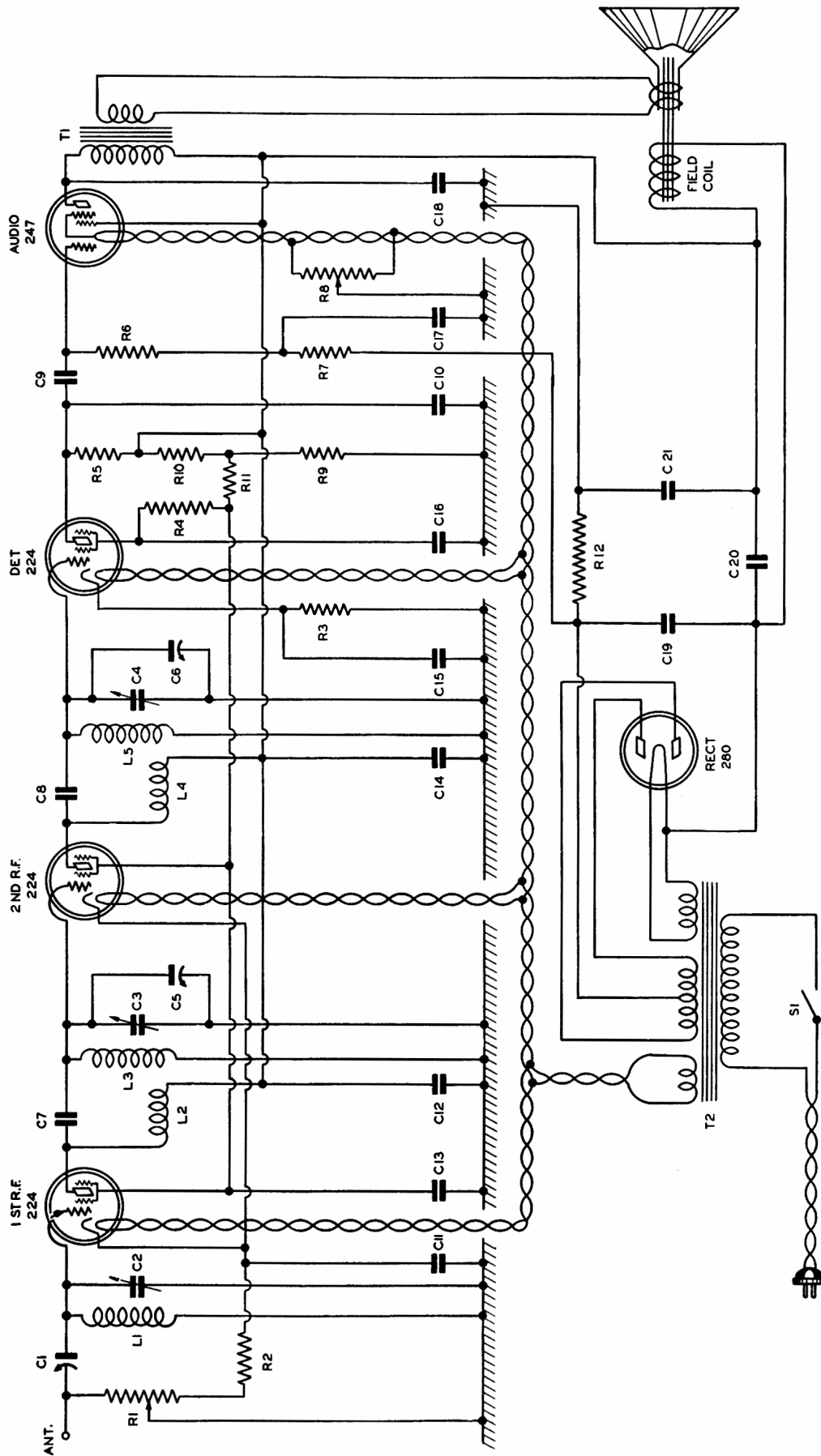
Some models of this receiver use type 35A tubes in the R.F. stages while others use type 24A. The volume controls are different in both cases. For sets using type 24A tubes, volume control part No. K-841 should be used (K-841 replaces Nos. 101916 and 102099). For sets using type 35-A tubes volume control K-968 should be used. (K-968 replaces No. 102342).



THE "MINAKI" COMPACT CHASSIS
 Model No. 5 (60 Cycle), Model No. 6 (25 Cycle)

LOUDSPEAKER

This model used two series loudspeakers, one having a fibre and the other a copper centralising piece diaphragm. When diaphragm is being replaced, servicemen should note which diaphragm is needed. The part number for the fibre centralising piece diaphragm is No. 102394 and for the copper No. 102282.



Schematic Diagram—Model 5 and 6 Receivers