



Radio Service Bulletin—No. 16

Model 41 Receiver

The Model 41 Receiver is for use on 100–130 volts Direct Current only

Table 1—TUBE SOCKET READINGS
Line Voltage 115

Tube	Circuit	Filament	Plate	Screen Grid	Control Grid	Plate Mills
24	1 R. F.	2.1	100	75	.4	2.7
24	2 R. F.	2.1	100	75	.4	2.7
24	Detector	2.1	45	15	1.8	...
27	1 A. F.	2.4	87	..	.2	2.7
71-A	2 A. F.	5	85	..	13	15
71-A	2 A. F.	5	85	..	13	15

Readings must be taken with volume control on full.

Always use high-resistance voltmeter, preferably 1000 ohms per volt, when checking voltages in the Receiver. For reading plate and screen voltages, use a 250- or 300-volt scale. Voltage readings taken with meters having less than 250,000 ohms resistance will be lower than voltages given in the table.

Table 2—RESISTOR VALUES

No. on Figs. 2 and 3	Terminals	Ohms Resistance
(17) — (36)	.....	5,000
(23)	.....	13,000
(19) — (34)	.....	25,000
(7) — (13)	.....	33,000
(24)	.....	70,000
(20) — (26)	.....	100,000
(25) — (28)	.....	500,000
(33)	.....	250
(37)	{ 1-2	4
	{ 2-3	2
(38)	(Note: 20-inch — External)	53

Table 3—CONDENSER CAPACITIES
(Other than Filter Condenser)

No. on Figs. 2 and 3	MFD. Capacity
(27)	.01
(6) — (12) — (16) — (18)	.05
(9) — (22)	.25
(21)	.0005

(32) Filter Condenser Part No. 4067

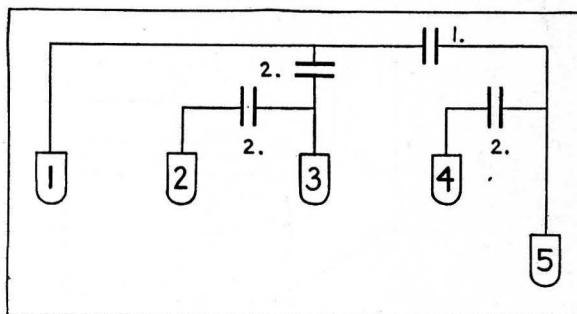


Fig. 1

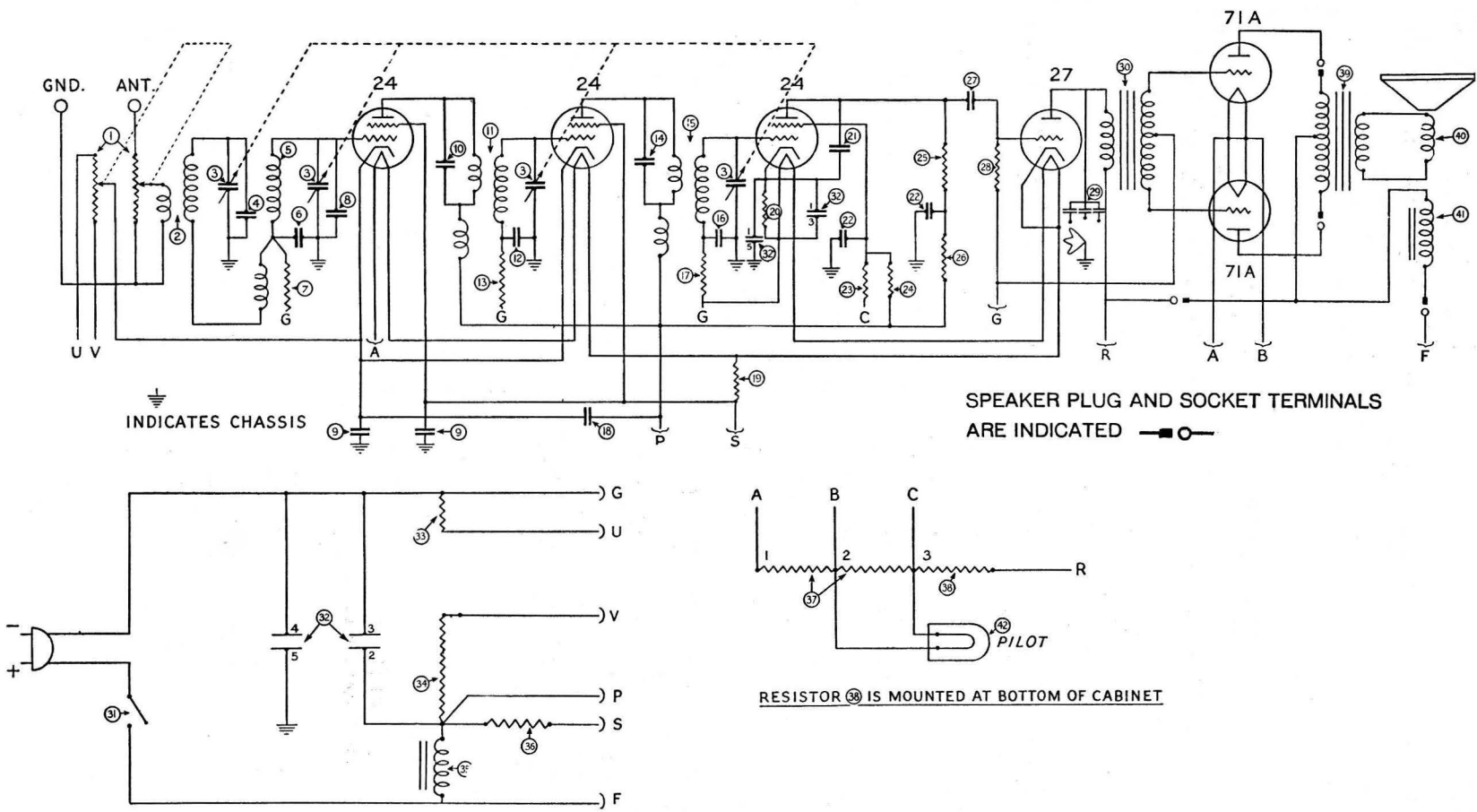
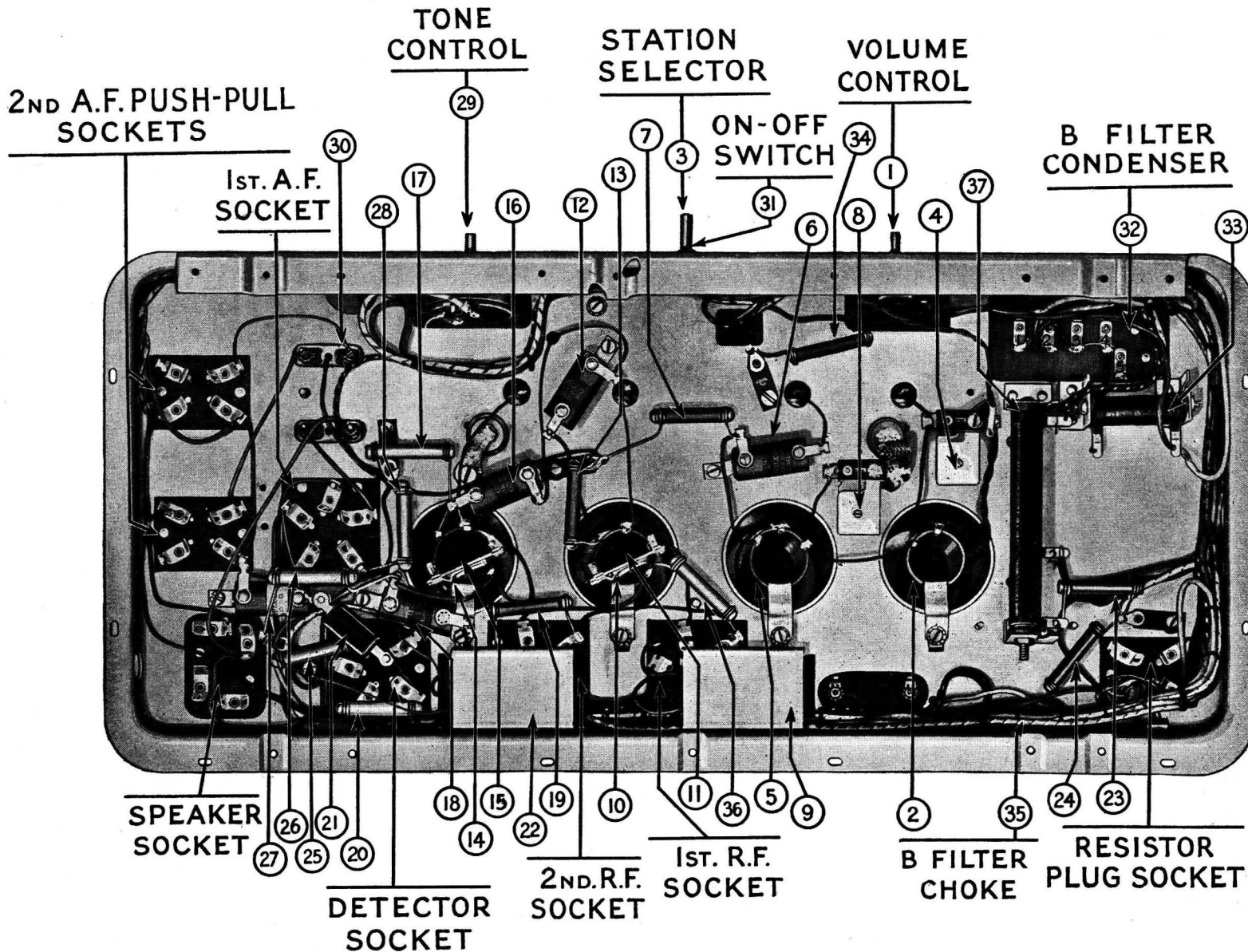


Fig. 2



GENERAL

This Receiver is for use on 100 to 130 volts direct current. It must not be connected to an alternating current line.

The resistor plug must be placed in the socket at the rear right-hand corner of the base. This socket is used for an 80 rectifier tube in some of the A.C. models. No rectifier is required with this Receiver, although if a tube is placed in this socket no damage will be done.

The field coil of the speaker used with this Receiver is of low resistance. It is not the same as the field coil used with the A.C. Electric Receiver. If by mistake, a speaker from an A.C. Electric Receiver is plugged into the D.C. Receiver, no damage will be done, but only an extremely weak, distorted signal will be obtained. If a speaker from a D.C. Electric Receiver is plugged into an A.C. Receiver, again no damage will be done, but the reception will be weak and distorted.

COMPENSATING

Always use an oscillator signal when adjusting compensating condensers. With the Receiver set up for operation, adjust the oscillator and Receiver so the signal is tuned in between 120 and 140 on the tuning scale. Have the Receiver volume control turned on full. Adjust the oscillator so that the received signal is very weak. Using a fibre wrench turn down on the adjusting nut of the first compensating condenser until it is quite tight. This purposely throws the first stage out of balance while adjusting the second stage.

After tightening this first adjusting nut compensate the second condenser in the usual manner, that is, tune the Receiver very carefully to the oscillator signal and adjust the compensating condenser for the maximum signal. After this adjustment has been made, adjust the first compensating condenser in the same manner.

REPLACEMENT PARTS

No. on Figs. 2 and 3	Description	Part No.	No. on Figs. 2 and 3	Description	Part No.
①	Volume Control	4094	③⑤	Choke	3422
②	First R. F. Transformer	3884-A	③⑥	Resistor	3526
③	Tuning Condenser	4069-E	③⑦	Resistor	4057
④	Compensating Condenser	3772-A	③⑧	Resistor	4058
⑤	Second R. F. Transformer	3884-B	③⑨	Output Transformer	2848
⑥	By-Pass Condenser	3584-D	④⑩	Voice Coil and Cone	2814-B
⑦	Resistor	3525	④⑪	Field Coil	2799
⑧	Compensating Condenser	3772-A	④⑫	Pilot Lamp	3463
⑨	By-Pass Condenser	3557-A		Resistor Conn. Plug	4071
⑩	Coupling Condenser	3892-A		Knobs (Large)	3580-A
⑪	Third R. F. Transformer	3884-C		Knobs (Small)	3579-A
⑫	By-Pass Condenser	3584-D		Knobs (Switch)	3676-A
⑬	Resistor	3525		Spring (Knob)	3305
⑭	Coupling Condenser	3892-A		Grid Clip	4060
⑮	Fourth R. F. Transformer	3884-C		Grid Clip Insulator	4061
⑯	By-Pass Condenser	3584-D		Condenser Shield	4065
⑰	Resistor	3526		Tube Shield	3878-A
⑱	By-Pass Condenser	3584-D		Cushion (Condenser Brace)	3914
⑲	Resistor	3656		Rubber Washer (Cond. Brace)	3915
⑳	Resistor	3767		Rubber Washer (Condenser)	3920
㉑	By-Pass Condenser	3774		Speaker Plug and Cable	L-1056-A
㉒	By-Pass Condenser	3557-A		Rubber Washer (Furniture)	3558
㉓	Resistor	3766		Pilot Insulator	4054
㉔	Resistor	3542		Pilot Guard	4055
㉕	Resistor	3769		Condenser Brush	3748
㉖	Resistor	3767		R. F. Transformer Shield	3862
㉗	By-Pass Condenser	3897-A		Bottom Plate	3406
㉘	Resistor	3769		Compensating Condenser Nut	3151
㉙	Tone Control	4037-A		Tuning Scale	3794
㉚	Input Transformer	3872		Condenser Cable	3484
㉛	On-Off Switch	3517		Condenser Cable Spring	3012
㉜	Filter Condenser Block	4067		Pilot Lamp	3463
㉝	Resistor	4142		4-hole Tube Socket	3423-A
㉞	Resistor	3656		5-hole Tube Socket	3442-A

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