

Ned. Ver. v. Historie v/d Radio

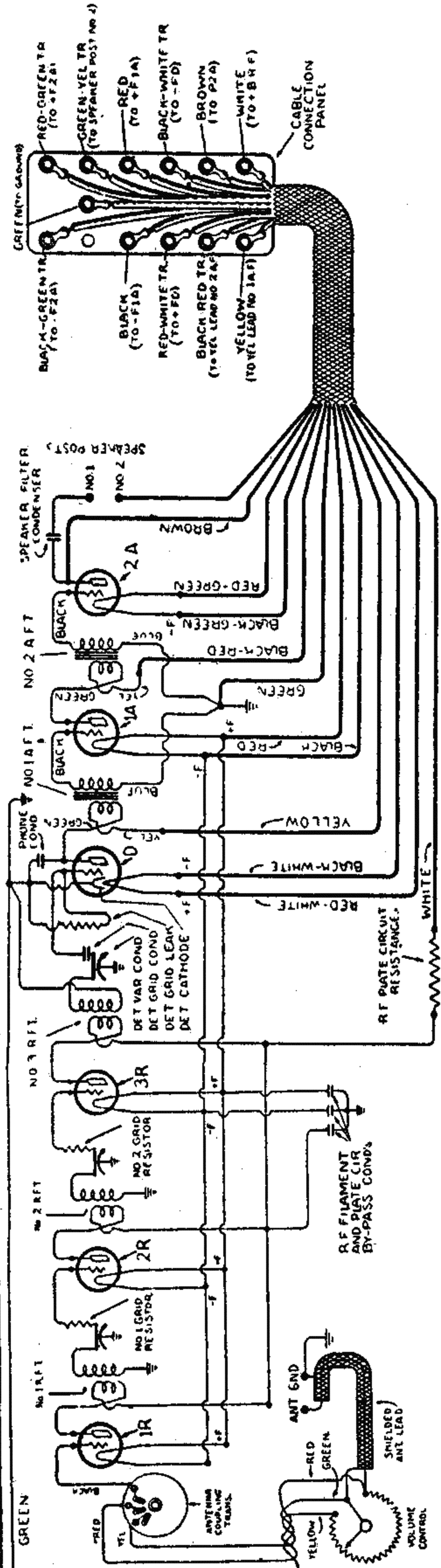
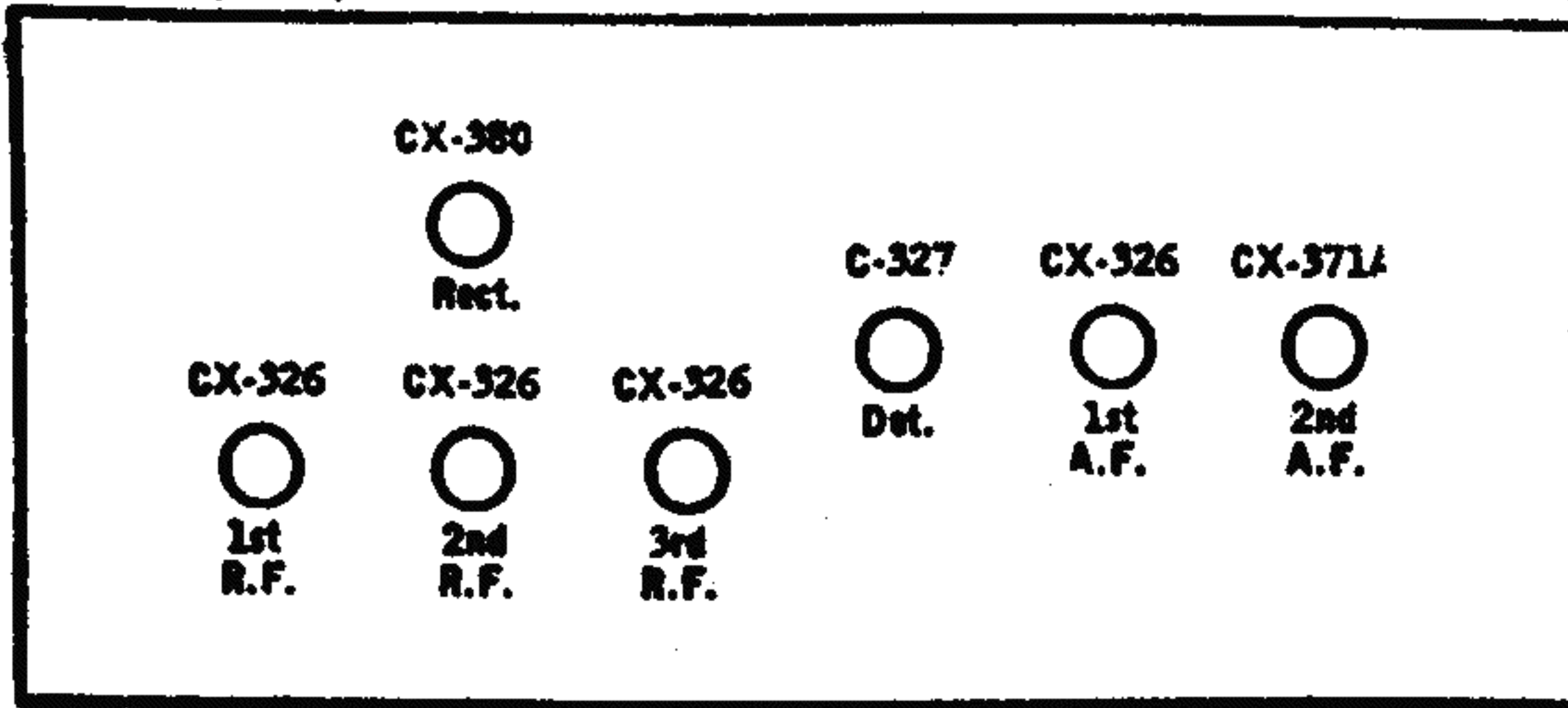
ATWATER KENT MFG. CO.

MODEL 40
MODEL 42
MODEL 52

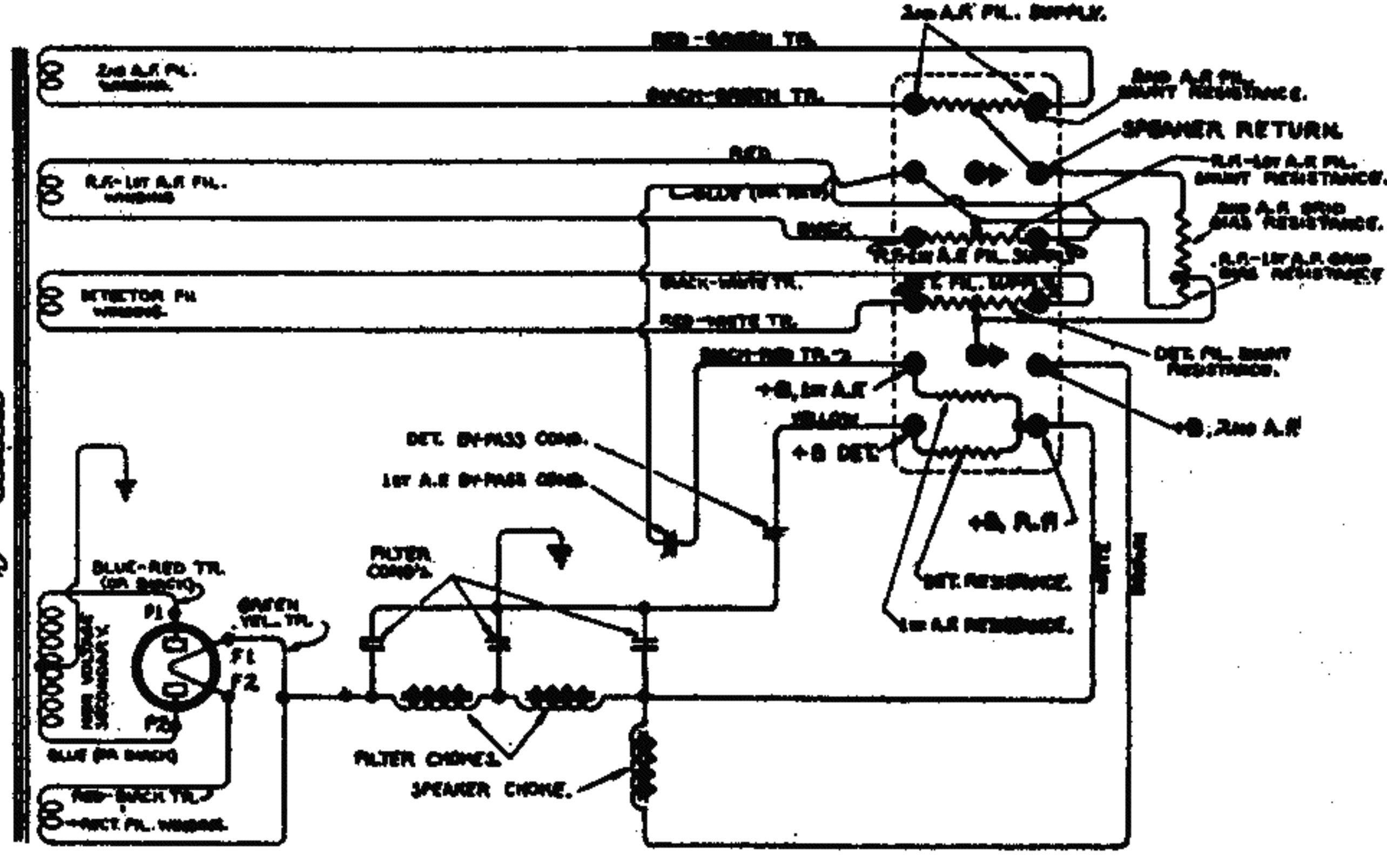


40, 42, 52

(A.C.)



Model 52 does not have the shielded antenna lead, but is provided with two twenty-foot leads which are connected to the volume control, black for antenna and black-green tracer for ground Model 56 and 57 have antenna and ground posts at the bottom of the cabinet.



SCHEMATIC DIAGRAM OF POWER UNIT IN MODELS 40, 42, 52, 56 AND 57. SOME EARLY UNITS OF THIS TYPE HAVE COLOR SCHEME SIMILAR TO UNIT IN MODEL 52 SET. NOTE THAT COLORS AS NOW STANDARDIZED CORRESPOND WITH THE COLORS OF SET-CABLE LEADS.

ATWATER-KENT—Model 40
Line Voltage 115

TYPE NO.	TYPE OF TUBE	POSITION OF TUBE 1ST R.F. DET., ETC.	READINGS, PLUS IN SOCKET OF SET								
			TUBE OUT			TUBE IN TESTER					
			A VOLTS	B VOLTS	G VOLTS	A VOLTS	B VOLTS	G VOLTS	CATHODE VOLTS	NORMAL PLATE S.A.	PLATE S.A. GRID TEST
225	1st. R.F.		1.5	145	1.25	150	10	-	4.8	8.4	3.6
226	2nd. R.F.		1.5	145	1.25	138	10	-	4.8	8.4	3.6
227	3rd. R.F.		1.5	145	1.25	138	10	-	4.2	8.0	3.6
227	Detector		2.25	157	2.0	40	-	-	2.2	2.2	0.0
226	1st. A.F.		1.5	172	1.25	130	8	-	3.8	7.4	3.8
171A	2nd. A.F.		4.2	210	4.1	148	52	-	14.4	15.4	1.0
280	Rectifier		-	-	4.5	-	-	-	16.5	-	-

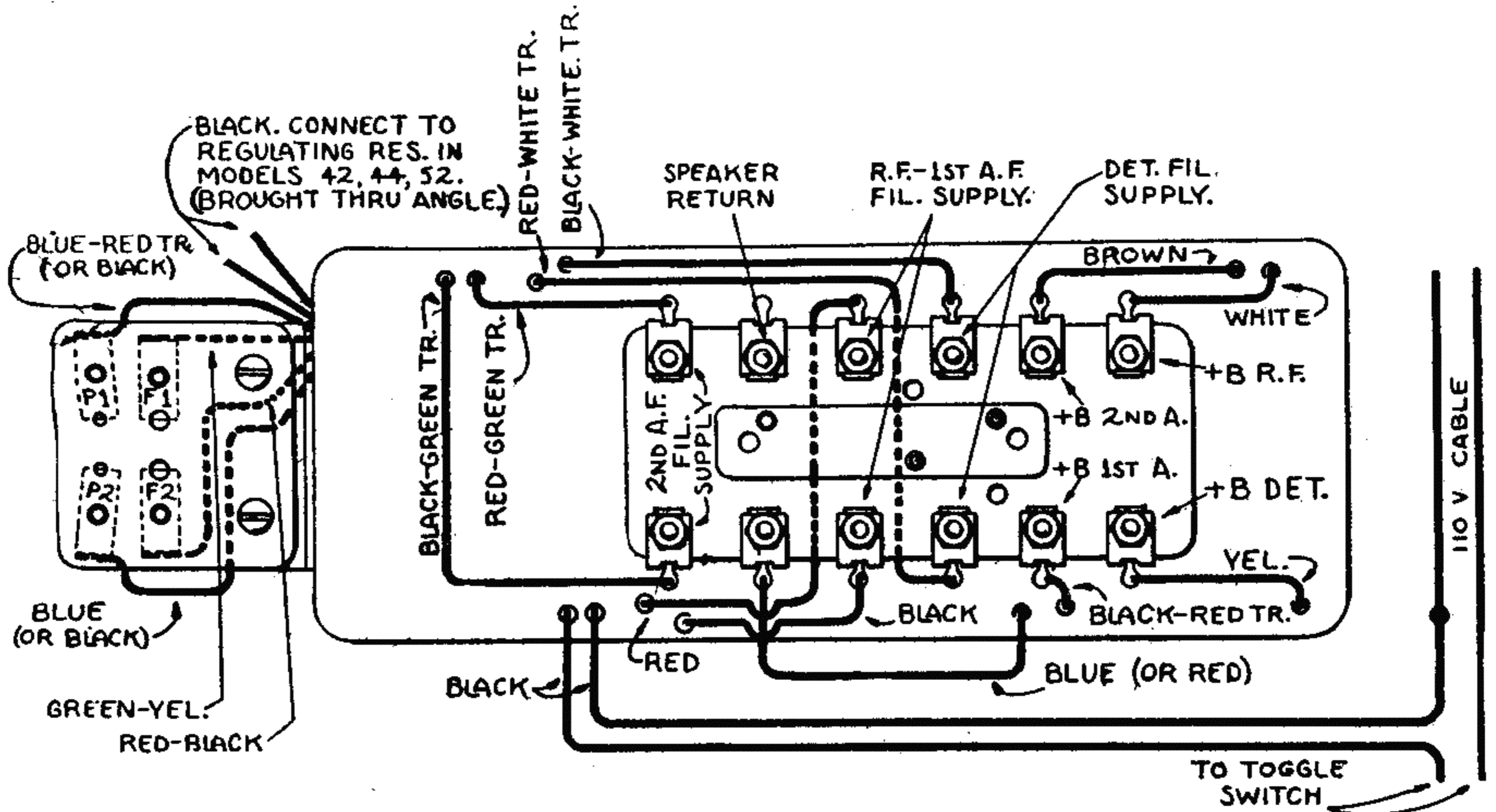
ATWATER-KENT—Models 42-44-52-56
Line Voltage 115—4th R. F.—Tube in Model 44 Only

TYPE NO.	TYPE OF TUBE	POSITION OF TUBE 1ST R.F. DET., ETC.	READINGS, PLUS IN SOCKET OF SET								
			TUBE OUT			TUBE IN TESTER					
			A VOLTS	B VOLTS	G VOLTS	A VOLTS	B VOLTS	G VOLTS	CATHODE VOLTS	NORMAL PLATE S.A.	PLATE S.A. GRID TEST
225	1st. R.F.		1.55	164	1.4	152	12	-	5.4	9.1	3.7
226	2nd. R.F.		1.55	164	1.4	152	12	-	5.7	9.2	3.5
226	3rd. R.F.		1.5	156	1.4	152	11.5	-	5.4	9.1	3.7
227	Det.		2.25	174	2.15	38	0	-	2.2	2.2	0.0
226	1st. A.F.		1.5	192	1.4	150	10.5	-	5.0	8.7	3.7
171A	2nd. A.F.		4.7	232	4.5	162	56	-	15.0	16.0	1.0
280	Rectifier		-	-	4.8	-	-	-	18.0	-	-

MODEL 40, 42, 44, 52
 Power Unit Layout
 MODEL 40, 45
 2nd Type Power Unit

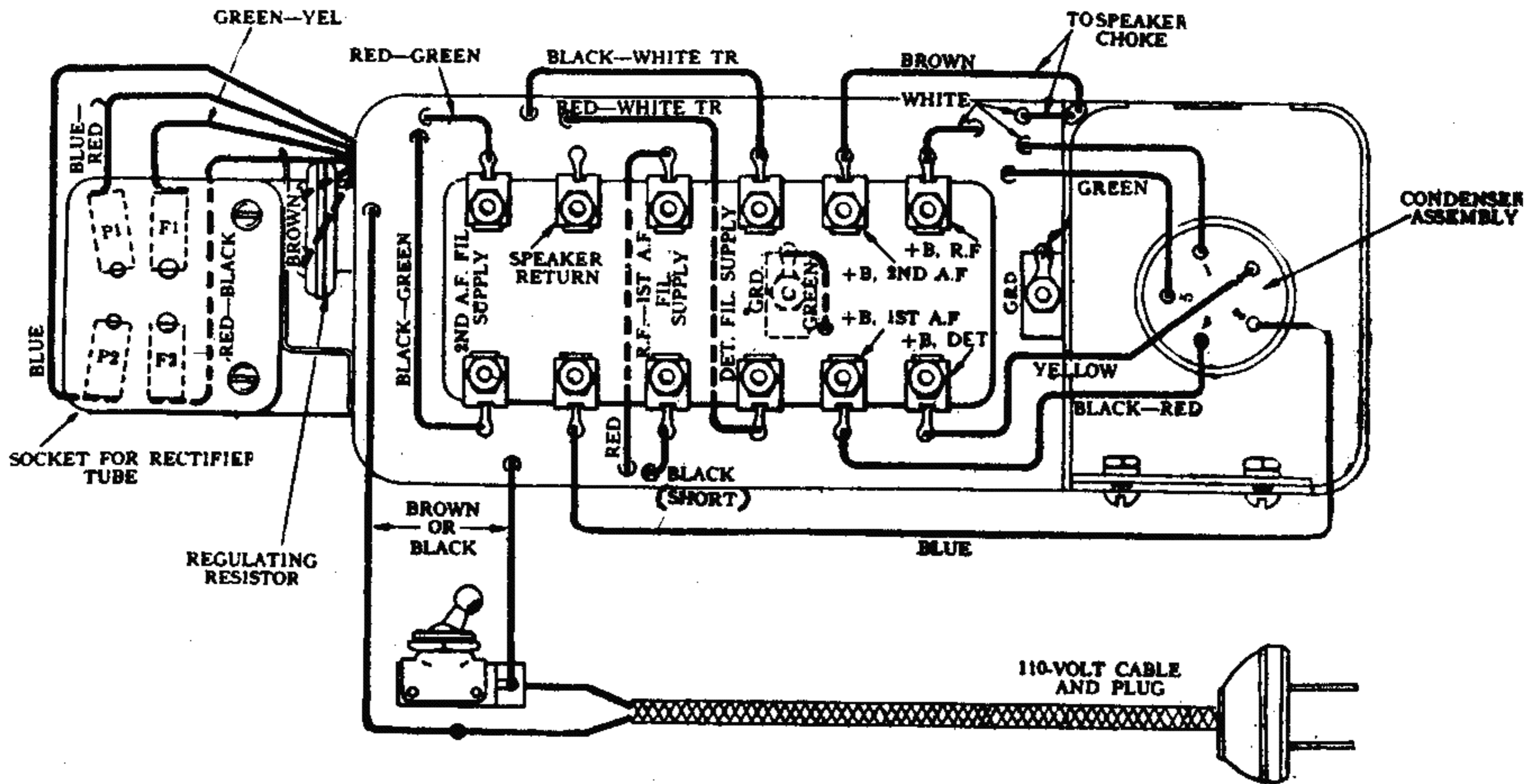
ATWATER KENT MFG. CO.

Schematic



POWER UNIT IN MODELS 40, 42, 44 AND 52, SHOWING CONNECTIONS FROM SEALED CONTAINER TO PANEL ASSEMBLY, RECTIFIER SOCKET AND REGULATING RESISTANCE

This view shows the approximate position of leads from sealed container. In Models 42, 44 and 52, a hole is cut in the rectifier-socket mounting angle and the two black leads are brought up through the hole and connect to the regulating resistance, which is mounted upright at the left-hand end of the sealed container.



VIEW SHOWING CONNECTIONS IN 2ND TYPE OF POWER UNIT FOR MODELS 40 AND 45.

This view shows the panel assembly moved to left of normal position.
 The regulating resistor is not used in these models.

ATWATER KENT MFG. CO.

MODEL 40, 42 and 52

Data

Model 40, 42 and 52

These parts are to be found in receiver chassis.

CONDENSERS

R-f filament bypass	.3 mfd # 15158	200 volts *
R-f plate bypass	.05 mfd # 15158	400 volts *
Speaker filter	.3 mfd # 14902	450 volts
Detector phone	.002 mfd # 9598	500 volts
Detector grid	.00025 mfd # 8112	500 volts
* In one can.		

RESISTORS

Volume control	400 ohms # 13604	wire wound
Grid suppressors	350 ohms # 8439	flat wire wound
R-f plate	3000 ohms # 13369	flat wire wound
Detector grid leak	2.0 megs # 15892	1 watt green

TRANSFORMERS

1st a-f primary	1000 ohms # 8060
1st a-f secondary	7000 ohms
2nd a-f primary	1700 ohms # 7661
2nd a-f secondary	3250 ohms

These parts are to be found in the power pack chassis.

See page 145

RESISTORS

Detector plate	65000 ohms # 15592	1 watt black or black and green
1st a-f plate	12500 ohms # 15941	1 watt red or purple and red or purple and yellow
R-f and 1st a-f bias	625 ohms # 13538	flat wire wound *
2nd a-f bias	2200 ohms # 13538	flat wire wound *
Line voltage **	28 ohms # 13645	flat wire wound
Filament shunt	20 ohms # 9434	flat wire wound

* # 13538 is a single unit tapped 625 and 2200 ohms

** This line voltage control used only in Models 42 and 52

CHOKES

Speaker	500 ohms
Filter	1320 ohms total

SPECIAL NOTES ON FILTER CONDENSERS

It is necessary to refer to the power pack schematic on page 145 for the first model 40 power pack.

Also to the same page for the regular run of Models 42 and 52 power packs. In these units, the three filter condensers have capacity values of 1.5 mfd each. This assembly can be recognized by the fact that the speaker choke