

ATWATER KENT RADIO

SERVICE DATA

With

PARTS AND PRICE LIST FOR

MODEL 91, 91-B, 91-C, 188, 188-F, 228, 228-F, 228-D, 228-Q,
260, 260-F, 469, 469-F, 567 and 567-F.

SERVICE DATA

FOR NEW COMPACT MODELS

The compact Models 228, 228-F, 228-D, 228-Q, 567 and 567-F employ the same highly developed chassis and speakers as Model 92, 92-F, 82-D, 82-Q, 90 and 90-F, respectively. For diagrams and parts list on these new compact models, refer to the following pages:

INTERMEDIATE FREQUENCIES

Model 91, 91-B, and 91-C Super-Heterodyne Motor Car Radio has an intermediate frequency of 260 kilocycles. The 2nd harmonic of the regular 130 kilocycle oscillator may be used in aligning the I. F. trimmers on this model.

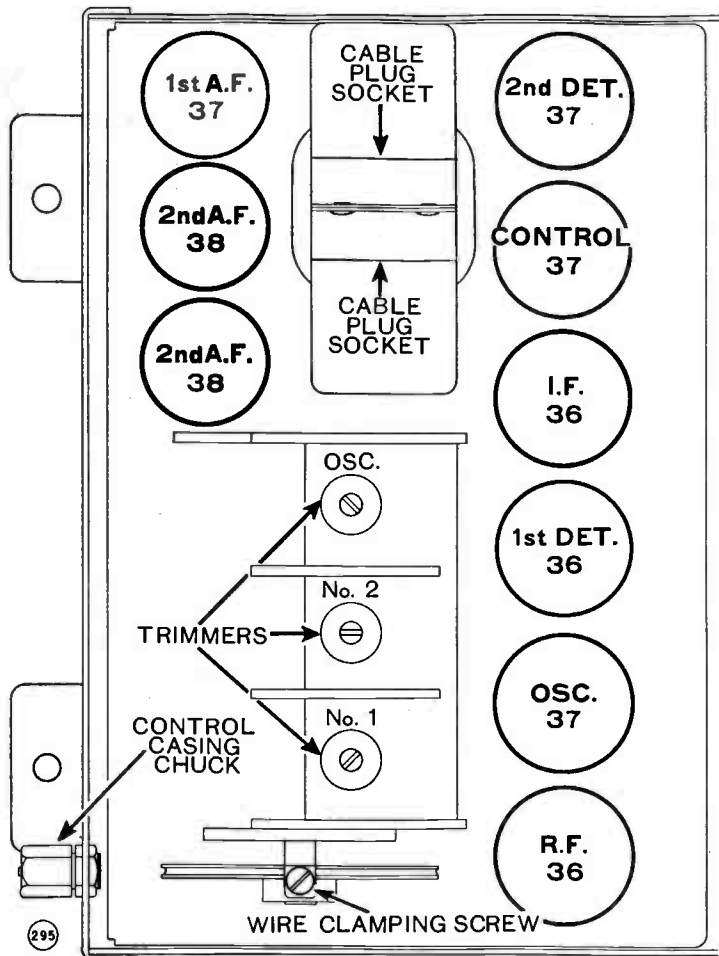
All other receivers described in this supplement employ the super-heterodyne circuit with an intermediate frequency of 130 kilocycles.

MODEL NUMBER	CHASSIS AND SPEAKER SAME AS USED IN—	FOR DIAGRAMS SEE PAGES—	FOR VOLTAGES SEE PAGES—	FOR PARTS LIST SEE PAGES—
228, 228-F	92, 92-F	342 to 345	362 and 363	383, and 367 to 372
228-D	82-D (2nd type)	328 and 329	363	383, 366, and 310 to 319
228-Q	82-Q (2nd type)	330 and 331	363	383, 366, and 310 to 319
567, 567-F	90, 90-F	340 and 341	362 and 363	383, and 367 to 372

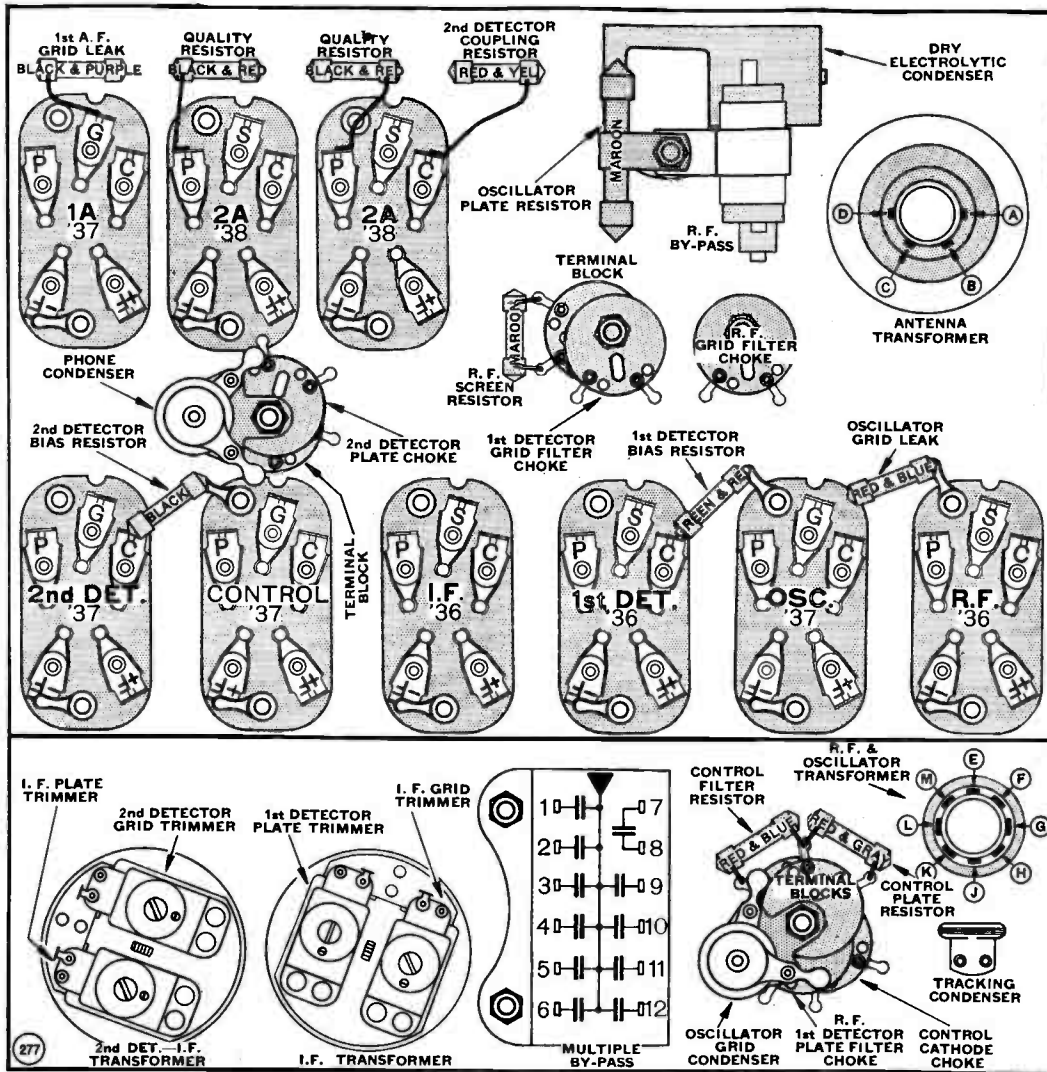
TABULATED DATA FOR MODELS DESCRIBED IN THIS SUPPLEMENT

Model No.	Power Supply	Part No. Complete	Part No. of Chassis	Part No. of Speaker	Auto-matic Vol. Control	Tone Control	Range Control	Switch	R.F.	TUBES							
										1st Det.	I.F.	2nd Det.	1st A.F.	2nd A.F.	Control Osc. Tube	Rect.	
91	Battery	27700	26250-C	27900	No	Yes	No	No	36	36	36	37	37	38 (2)	37	37	—
91-B	Battery	28000	27310-C	27900	No	Yes	No	No	36	36	36	37	37	38 (2)	37	37	—
91-C	Battery	28100	27310-C	27900	No	Yes	No	No	36	36	36	37	37	38 (2)	37	37	—
188	110-V., 60-C.	28400	28400-C	28700	No	Yes	Yes	Yes	58	58	58	57	47	—	56	56	80
188-F	110-V., 25-C.	29300	29300-C	28700	No	Yes	Yes	Yes	58	58	58	57	47	—	56	56	80
228	110-V., 60-C.	28300	28300-C	17300	No	Yes	Yes	Yes	35	35	35	24	47	—	27	27	80
228-F	110-V., 25-C.	29200	29200-C	17300	No	Yes	Yes	Yes	35	35	35	24	47	—	27	27	80
228-D	110-V., D. C.	28600	28600-C	18600	No	No	Yes	No	—	36	36	36	37	33	37	—	—
228-Q	Battery	28500	28500-C	18400	No	Yes	Yes	Yes	32	32	32	30	33	33	30	—	—
260	110-V., 60-C.	28900	28900-C	28800	Yes	Yes	Yes	Yes	58	58	58 (2)	56	56	47 (2)	56	*	80
260-F	110-V., 25-C.	29500	29500-C	28800	Yes	Yes	Yes	Yes	58	58	58 (2)	56	56	47 (2)	56	*	80
469	110-V., 60-C.	29000	29000-C	28800	Yes	Yes	Yes	Yes	58	58	58	56	47 (2)	—	56	56	80
469-F	110-V., 25-C.	29400	29400-C	28800	Yes	Yes	Yes	Yes	58	58	58	56	47 (2)	—	56	56	80
567	110-V., 60-C.	28200	28200-C	17300	No	No	Yes	No	35	35	35	24	47	—	27	—	80
567-F	110-V., 25-C.	29100	29100-C	17300	No	No	Yes	No	35	35	35	24	47	—	27	—	80

*In Model 260, 260-F, the 2nd-detector tube acts as the automatic volume control tube.



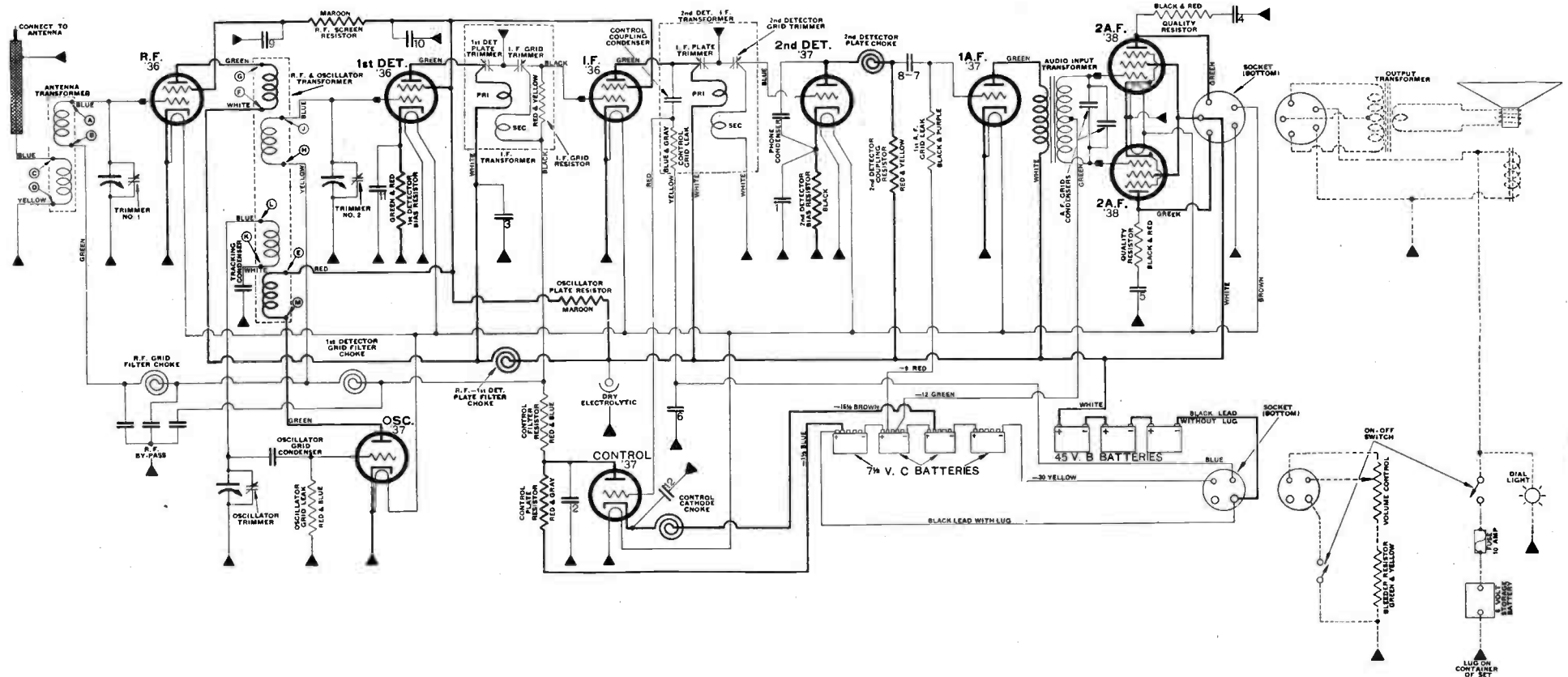
TOP VIEW OF MODEL 91, 91-B AND 91-C CHASSIS SHOWING LOCATION OF TUBES.



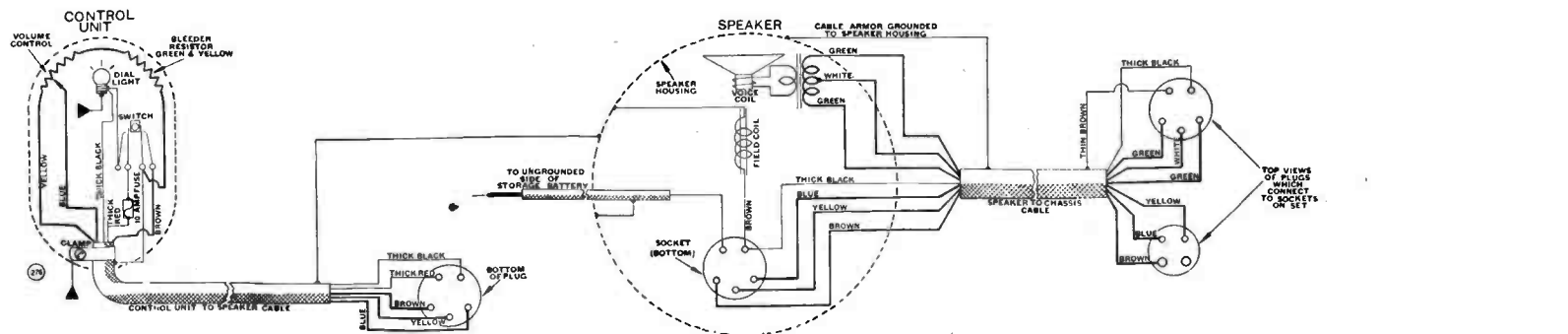
BOTTOM CHART OF MODEL 91, 91-B AND 91-C.

ATWATER KENT RADIO
MODEL 91, 91-B, 91-C MOTOR CAR RADIO
 (Intermediate Frequency, 260 Kilocycles)

MODEL 91, 91-B AND 91-C MOTOR CAR RADIO (Intermediate Frequency, 260 Kilocycles)

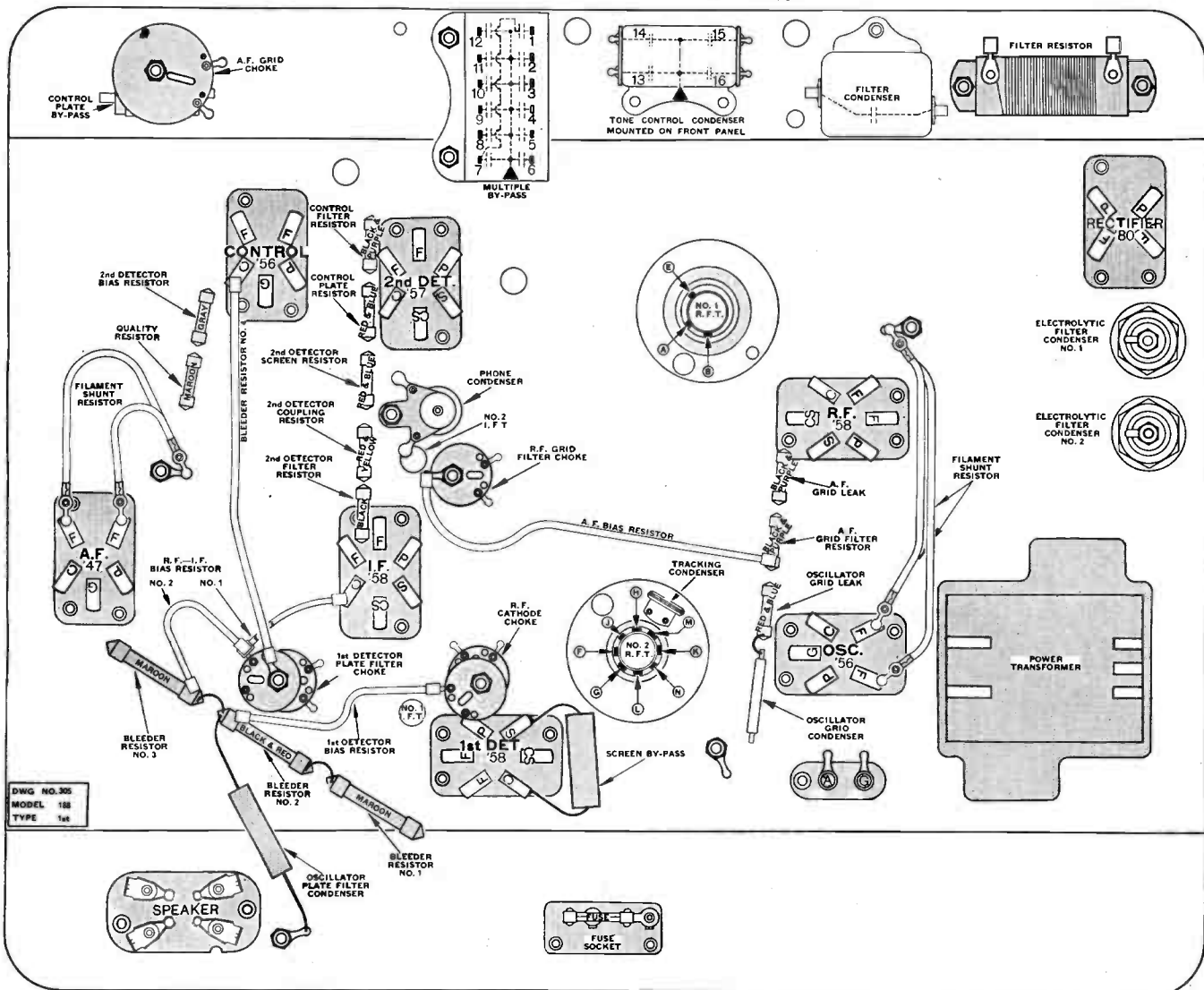
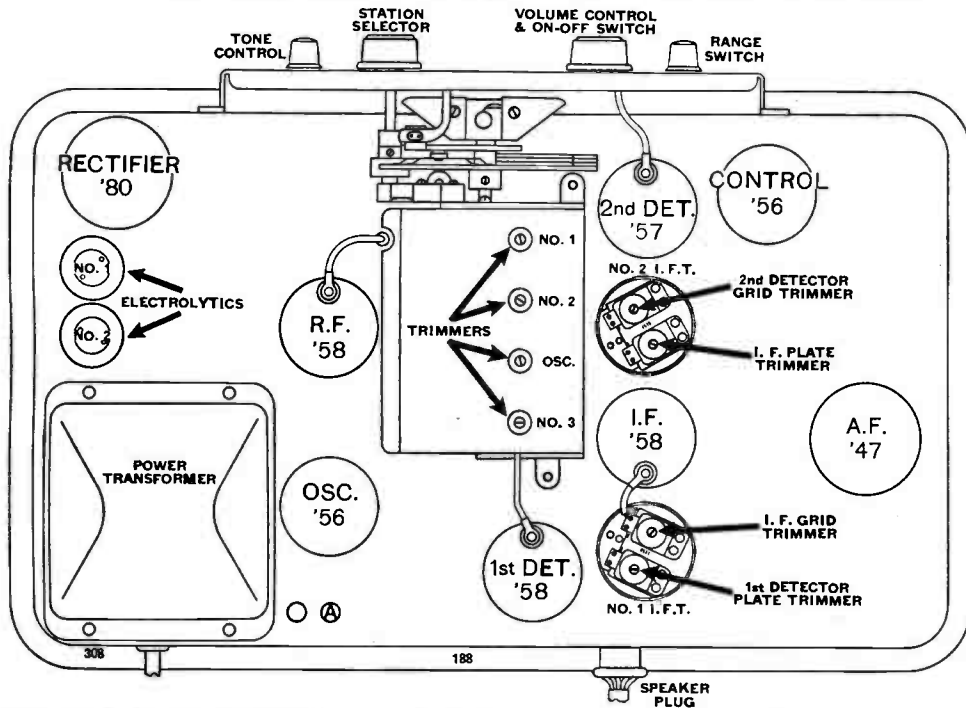


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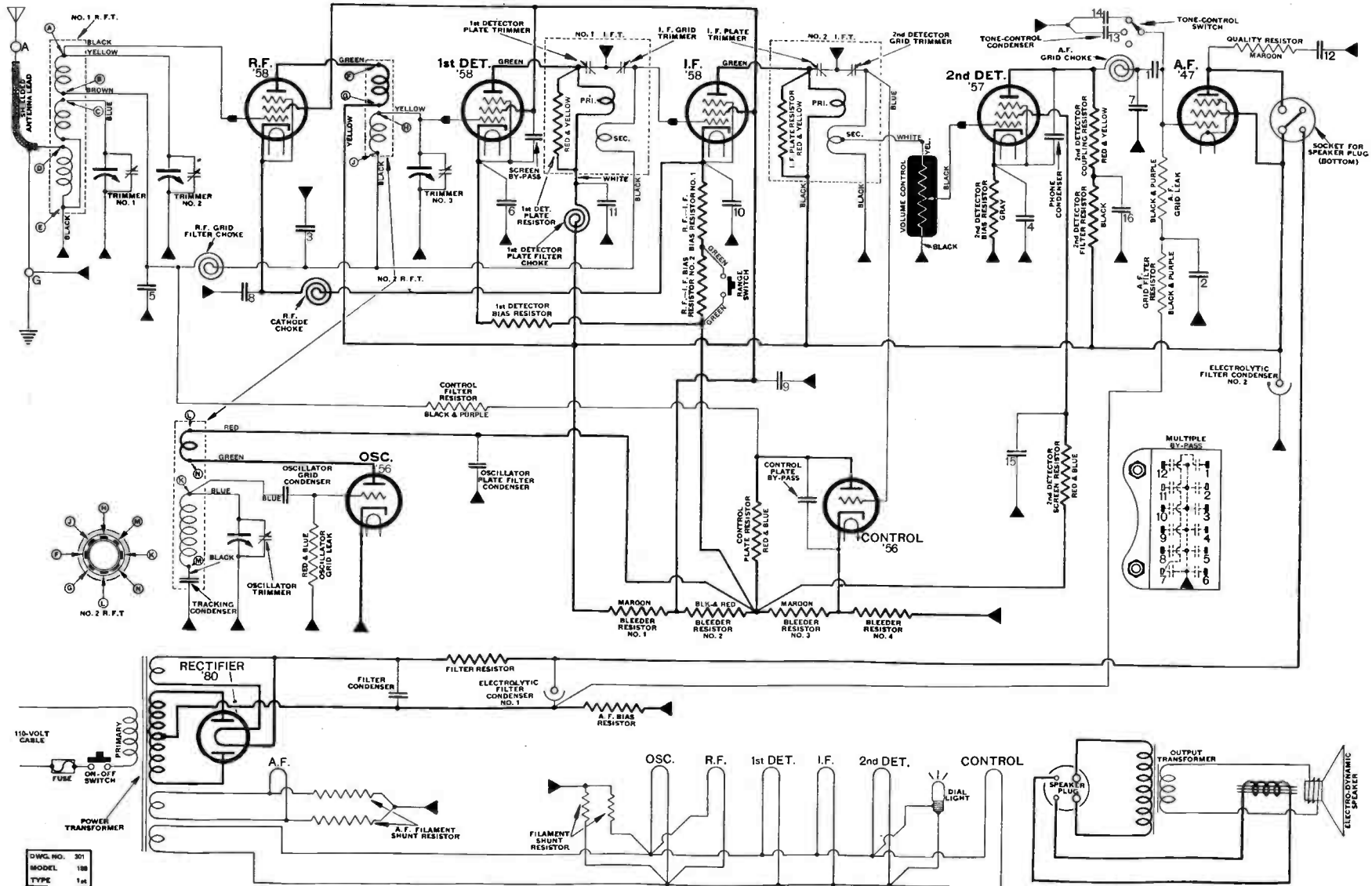


The wiring of the control unit and speaker in Model 91 is the same as in Model 81.

ATWATER KENT RADIO MODEL 188, 188-F TOP VIEW AND CHART



No. 2 R. F. T. includes the oscillator transformer. See note on Page 377.



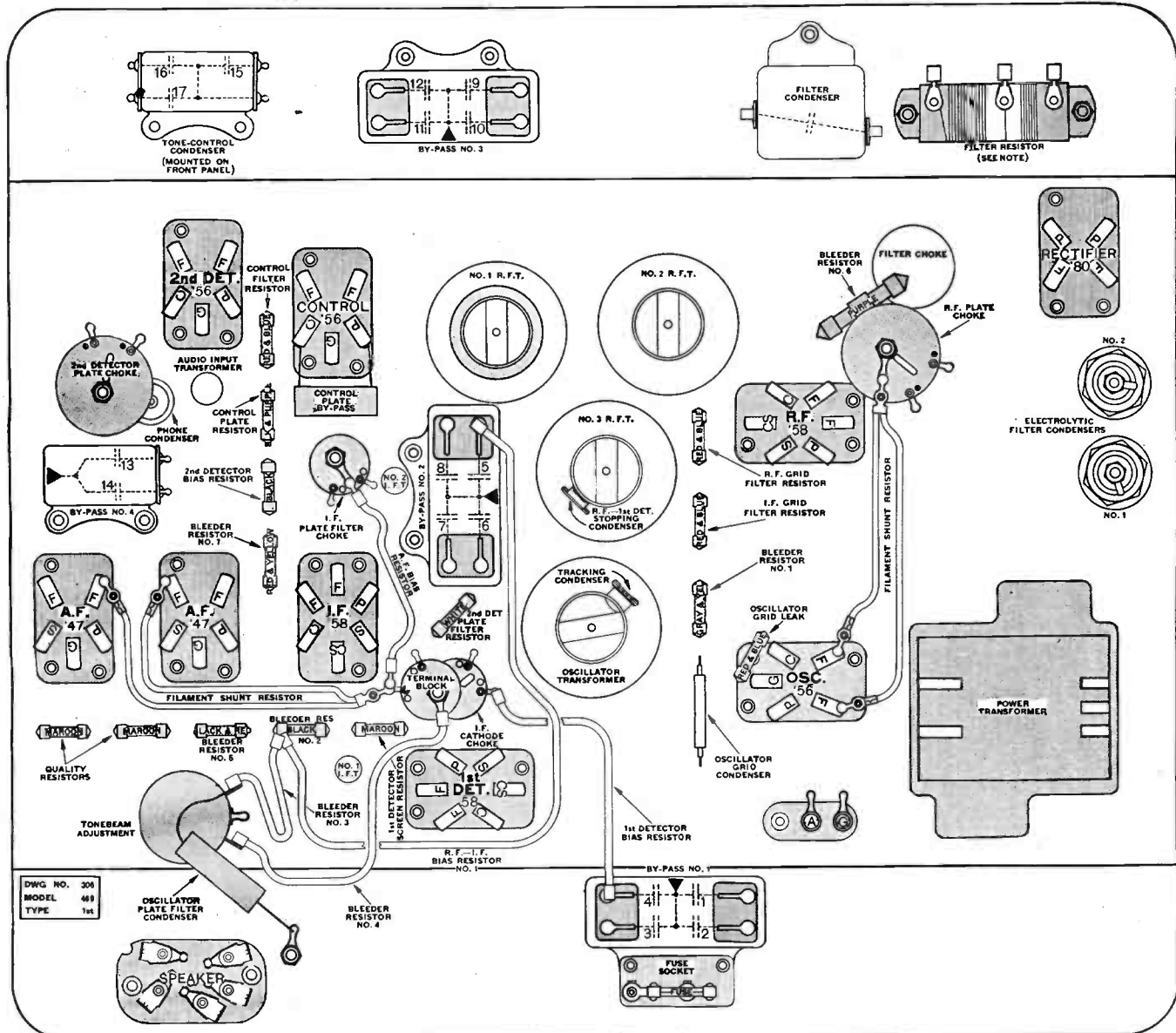
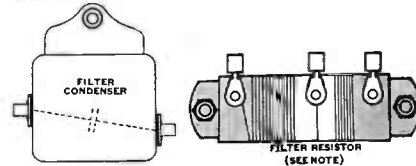
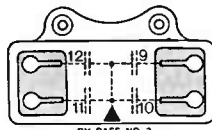
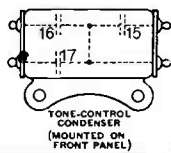
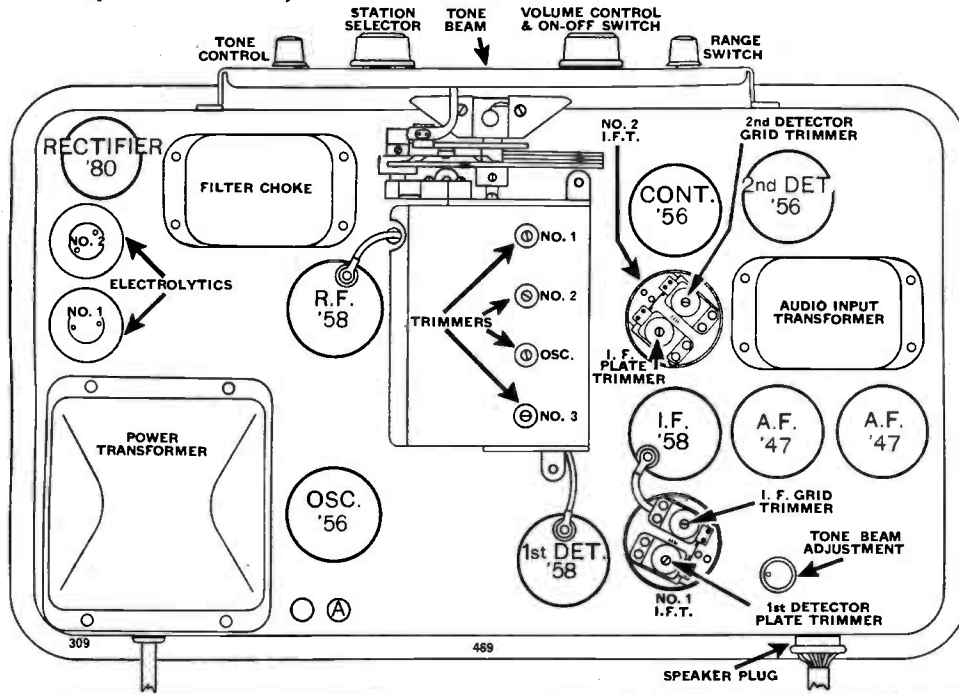
In late-type sets, bleeder No. 2 is black. In late-type Models 188 and 188-F, the oscillator grid winding on No. 2 R. F. T. is split into two separate sections, thus making five coils instead of four on this transformer. Also, a small compensating condenser (No. 16360) is connected across contacts K and M of No. 2 R. F. T.

The late-type No. 23028 R. F. transformer group, which incorporates these changes, supersedes the early-type group. The early-type group is not supplied for service. When installing the late group in place of an early group, it is essential to remove the early-type 1st detector bias resistor No. 21030, and install in its place a late-type 1st detector bias resistor No. 16320. A No. 16320 flexible resistor is provided for this purpose with each No. 23028 R. F. transformer group.

It is also necessary to connect the blue lead from the oscillator grid condenser (125 mmf.) to the extra terminal at the side of No. 2 R. F. T. instead of to terminal K. The extra terminal is the center tap of the oscillator grid coil.

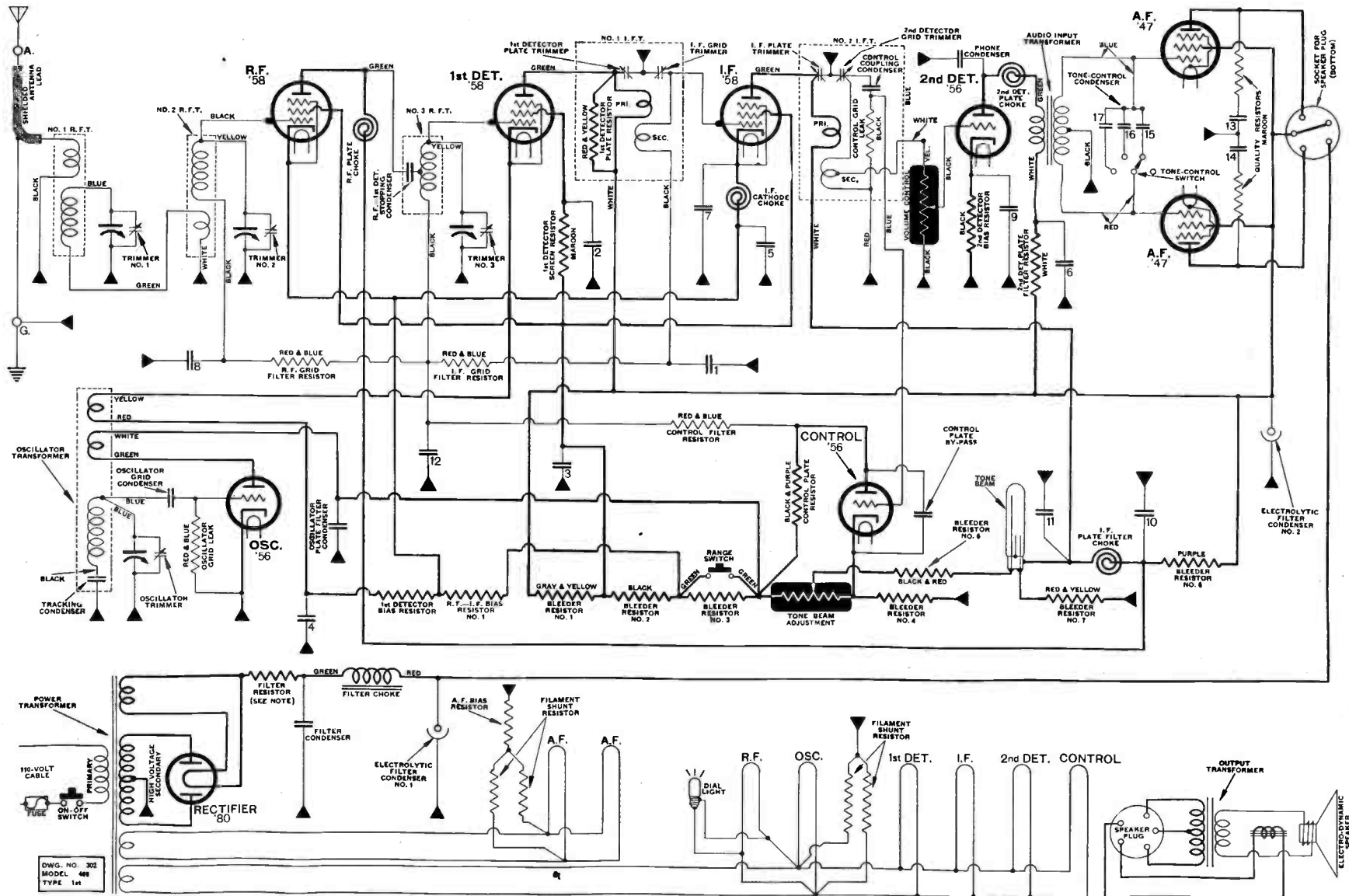
ATWATER KENT RADIO
MODEL 188

MODEL 469, 469-F TOP VIEW AND CHART



DWG NO. 309
MODEL 469
TYPE 1st

Refer to note under diagram on Page 379.



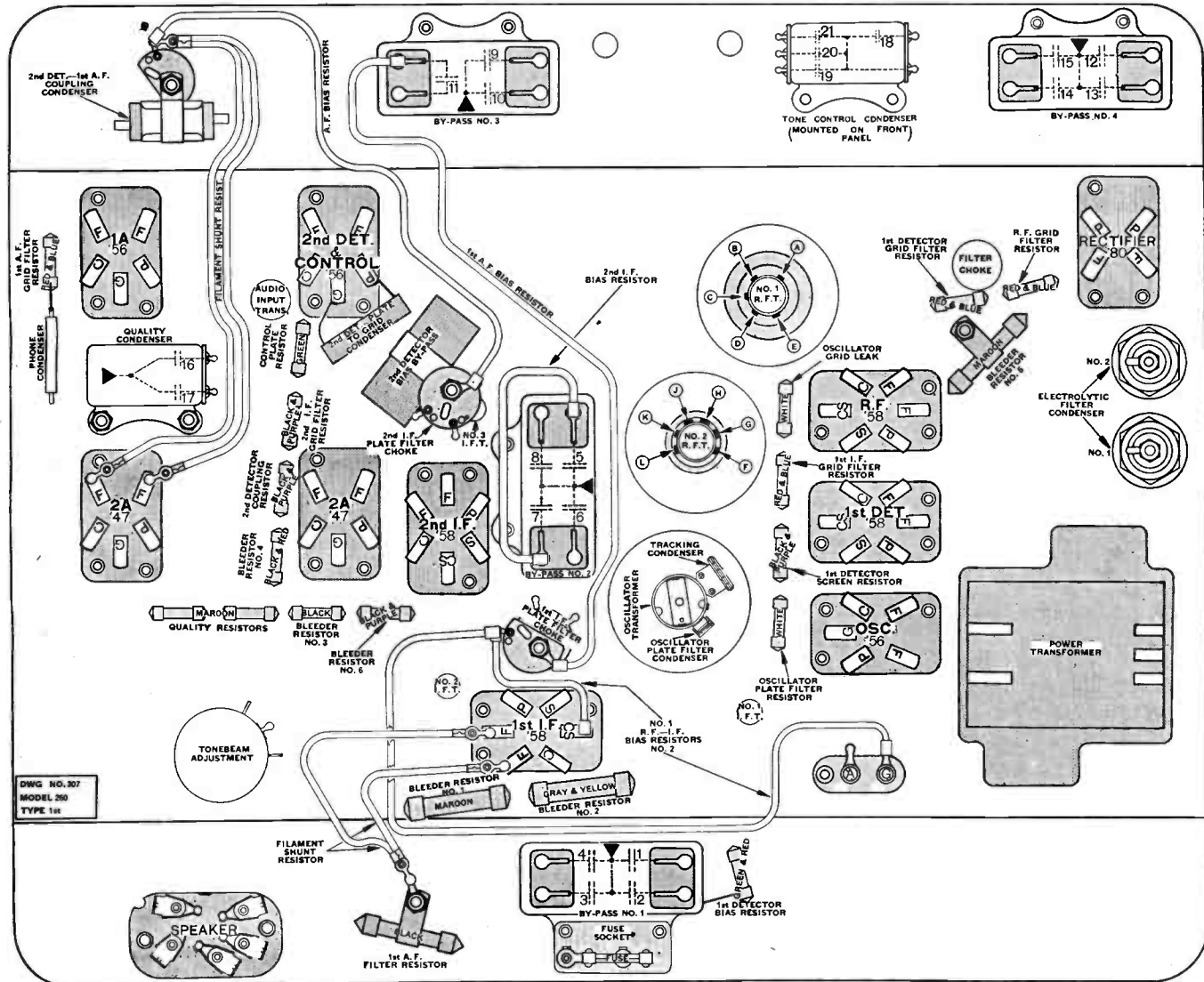
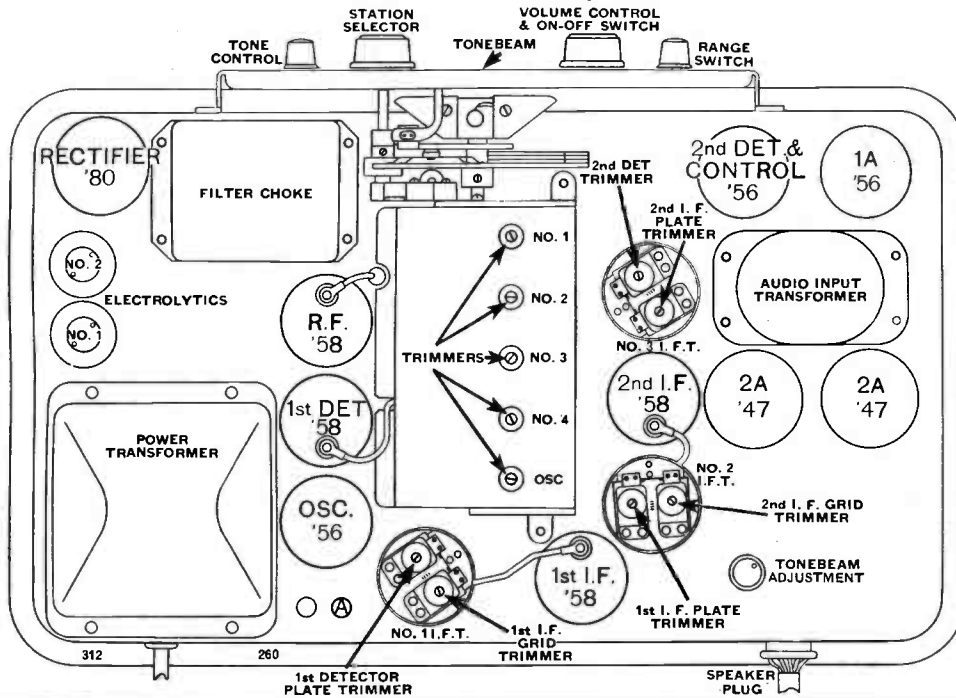
Early-type Model 469 receivers employed a T-12-A power transformer which necessitated the use of a filter resistor (No. 19180-X) as shown above. Later types of this model use a T-23 power transformer which does not require the filter resistor. The T-12-A transformer is not supplied for service, being superseded by the T-23. When installing T-23 in place of a defective T-12-A, it is necessary to remove or short circuit the filter-resistor.

In late-type 469, the 2nd detector filter resistor is sealed inside the audio input transformer, which has six leads: The white lead is for connection to condenser 6, and a yellow lead is for connection to plus B. When replacing an early-type audio input transformer, with the late-type, it is necessary to remove the external 2nd-detector filter resistor.

ATWATER KENT RADIO
MODEL 469, 469-F

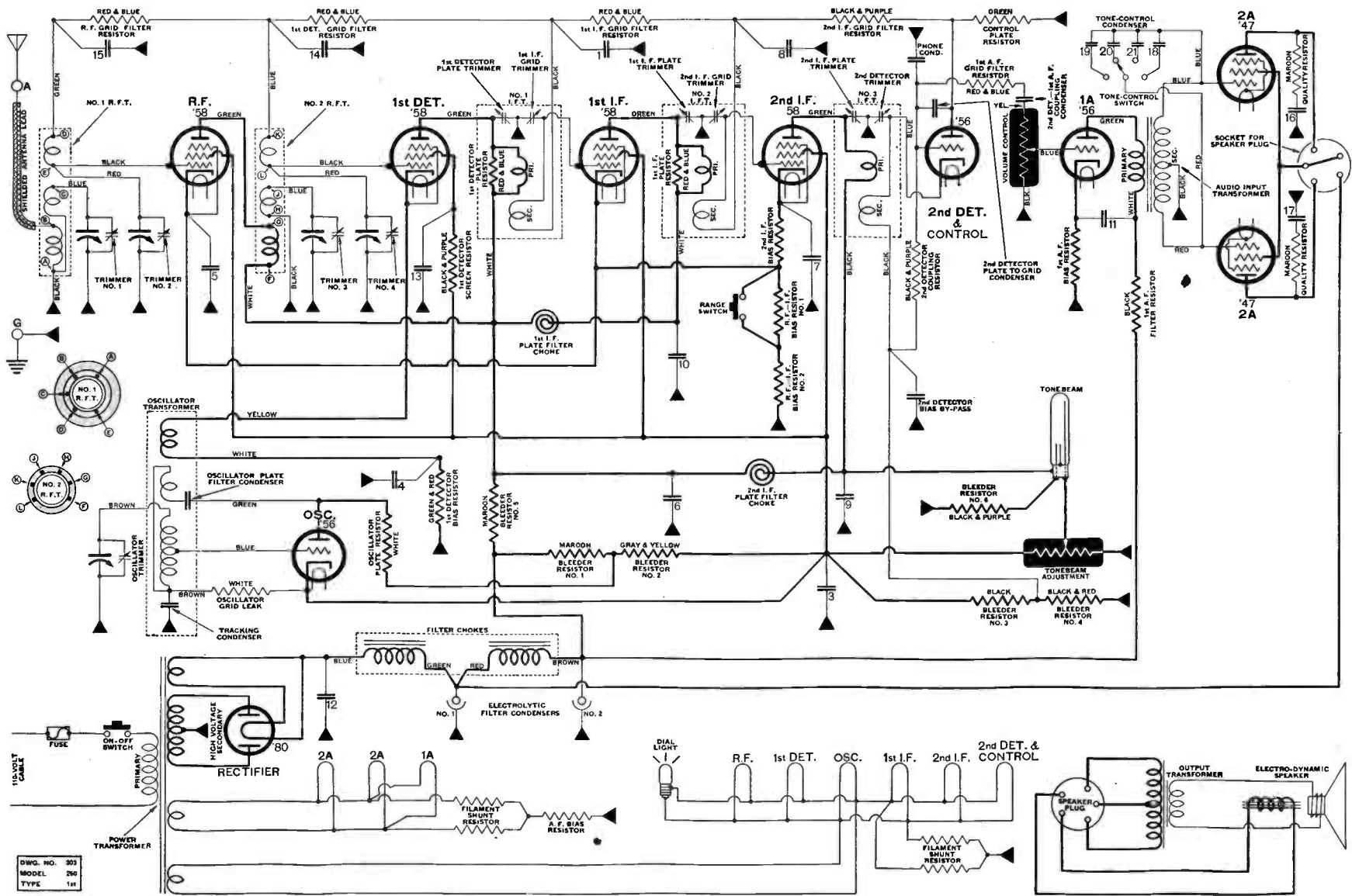
ATWATER KENT RADIO MODEL 260, 260-F TOP VIEW AND CHART (1st Type)

Below Serial No. 8422101

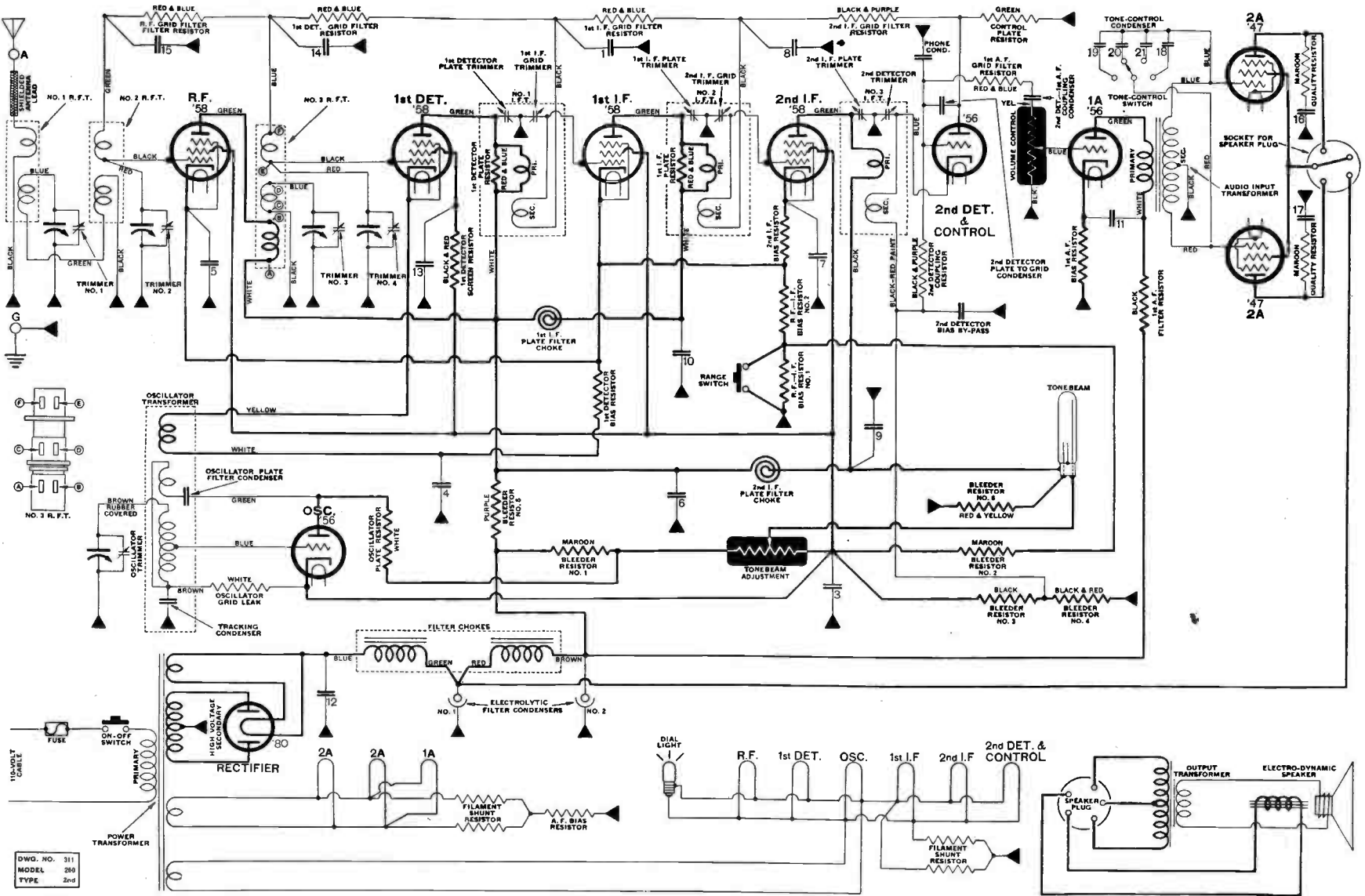


DWG NO. 307
MODEL 260
TYPE 100

ATWATER KENT RADIO
MODEL 260, 260-F (1st Type)
 Below Serial No. 8422101



DWG. NO. 303
 MODEL 260
 TYPE 1st



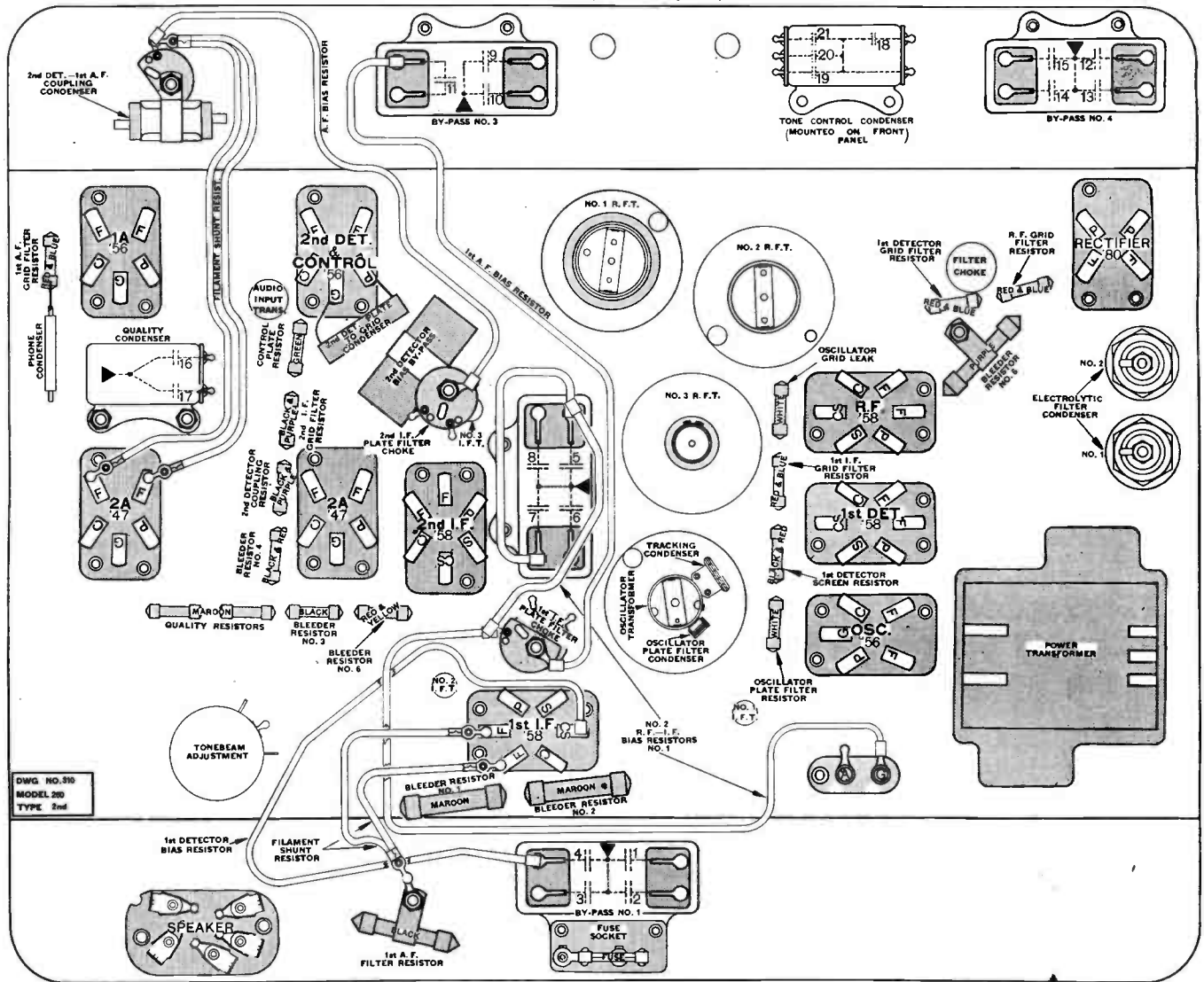
DWG. NO. 311
 MODEL 260
 TYPE 2nd

MODEL 260, 260-F (2nd Type)

Above Serial No. 8422101

ATWATER KENT RADIO

MODEL 260, 260-F CHART (2nd Type) Above Serial No. 8422101



The flexible resistor connected to condensers 5 and 7 is the 2nd I. F. bias resistor.

MODEL 228, 228-F

For parts not listed below, see Models 90, 90-F on Pages 367 to 372.

23137 Cabinet, complete.....	\$7.60	22616 Insulating case for electrolytic.....	\$.10
22991 Escutcheon.....	.65	22836 Mounting nut for electrolytic.....	.05
23133 Cloth screen.....	.75	22791 Case connector soldering lug.....	.01
22804 Dial knob.....	.30	22653 I. F. Transformer shield cap.....	.10
22052 Knob for volume control or tone control.....	.30	22768 Panel card F-985.....	net .01
22538 Electrolytic condenser No. 1 or No. 2.....	2.50	22820 Instruction card F-989.....	net .01

MODEL 228-D, 228-Q

For parts not listed below, see Models 82-D and 82-Q (2nd-type) on pages 366, 310 to 319.

23137 Cabinet, complete.....	\$7.60	22052 Knob for volume control or tone control.....	\$.30
22991 Escutcheon.....	.65	22653 I. F. Transformer shield cap.....	.10
23133 Cloth screen.....	.75	22832 Instruction card F-991.....	(228-D) net .01
22804 Dial knob.....	.30	22831 Instruction card F-990.....	(228-Q) net .01

MODEL 567, 567-F

For parts not listed below, see Models 90, 90-F on pages 367 to 372.

23136 Cabinet, complete.....	\$7.60	22616 Insulating case for electrolytic.....	\$.10
22989 Escutcheon.....	.65	22836 Mounting nut for electrolytic.....	.05
23132 Cloth screen.....	.75	22791 Case connector soldering lug.....	.01
22804 Dial knob.....	.30	22654 I. F. Transformer shield cap.....	.10
22052 Knob for volume control or tone control.....	.30	22767 Panel card F-984.....	net .01
22538 Electrolytic condenser No. 1 or No. 2.....	2.50	22828 Instruction card F-988.....	net .01

No. 28700 SPEAKER USED IN MODEL 188, 188-F

Parts for No. 28700 speaker are the same as used on the No. 24600 speaker listed on Page 318.

No. 28800 SPEAKER USED IN MODEL 260, 260-F, 469, 469-F

Parts for No. 28800 speaker are the same as used on the No. 19800 speaker listed on Page 318.

PRICES SUBJECT TO CHANGE WITHOUT NOTICE.

ATWATER KENT RADIO

PARTS LIST, MODEL 91, No. 27700, SUPER-HETERODYNE MOTOR CAR RADIO

Part No.	Name of Part	List Price
22605	CHASSIS AND BATTERY CONTAINER (Less lid and accessories)	\$ 3.00
22712	Gasket rubber, per foot	.05
21049	Container lid	1.00
21148	Battery container cardboard	net .25
21331	Battery top pad	net .03
21061	Mounting bolt 13" long	.10
21142	Mounting bolt washer	.01
21141	Mounting bolt lockwasher	.70/c
21064	Wing nut	.05
26270	VARIABLE CONDENSER STATOR, ROTOR AND FRAME (with leads)	6.00
4887	Variable condenser mounting screw	.30/c
18844	Rotor connection (long)	.10
20119	Trimmer mica	.03
21126	Control pulley	.75
21583	Control pulley set screw	.05
21479	Control pulley clamp screw	.02
21582	Control pulley clamp washer	.01
21127	Control pulley spring	.55
20928	Spring centering ring	.05

SOCKETS

21041	Tube socket (9 used)	.35
21396	Socket bracket	.35
19547	Self-tapping screw 3/8" long	.02
21336	Socket (4 prongs)	.30
21337	Socket (5 prongs)	.35
17377	Socket insulator	.25/c
8249	Socket mounting rivet	.50/c
9678	Solder clip	.50/c

No. 27900, SPEAKER USED IN MODEL 91, 91-B, 91-C

21161	DIAPHRAGM assembly	\$ 2.25
19469	Diaphragm holding segment	.15
19471	Diaphragm spider washer (fibre)	.30/c
19459	Diaphragm spider washer (hex. metal)	.02
21165	Speaker housing with socket	2.00
21337	Socket (5 prongs)	.35
17377	Socket insulator	.25/c
21053	Grill	1.00
19484	Cone housing	1.75
14842	Cone housing mounting screw	.01
8188	Cone housing mounting nut	.01
19475	Cardboard ring	.10
22440	FIELD COIL	3.00
21508	Field coil insulator	.02
20147	Field coil insulating washer (front)	.05
19479	Field coil insulating washer (back)	.50/c
19454	Top pole plate	.65
19538	Pole plate mounting screw	.03
17433	Pole plate mounting lock washer	.50/c

No. 26460, CONTROL UNIT USED IN MODEL 91, 91-B, 91-C

26460	CONTROL UNIT COMPLETE	\$13.75
22742	Control case with nameplate	1.45
22447	Nameplate	.45
21499	Control unit base	1.00
21502	Control case insulation	.10
21495	Control case mounting screw	.02
21503	Steering column clamp	.45
21504	Leather for steering column clamp	.20
21505	Steering column clamp screw	.05
17432	Steering column clamp lock washer	.50/c
21507	Steering column clamp set screw	.05
21324	Steering column cable strap	.05
21579	DIAL STRIP	.25
21494	Dial lamp socket	.25
21407	Dial lamp	.25
21323	Dial knob	.30
21478	Dial knob shaft and gear	.60
21479	Dial knob shaft screw	.02
21481	Dial knob shaft spring washer	.01
21482	Dial gear	.80
21479	Dial gear bearing screw	.02
21483	Dial gear washer	.01
21484	STATION SELECTOR CABLE 9' 11" (less sheathing)	.60

TRANSFORMERS

22743	R. F. Transformer group (Includes antenna, R. F. and oscillator transformer)	\$ 2.00
22427	Antenna transformer shield	.35
22569	I. F. transformer	2.00
22571	2nd Det. I. F. transformer	2.00
22437	I. F. or 2nd Det. I. F. transformer shield	.50
26280	Audio transformer	4.50

CHOKES

19210	1st Det. grid filter choke	.25
19210	R. F. Grid filter choke	.25
19210	2nd Det. plate choke	.25
19210	R. F. 1st Det. plate filter choke	.25
19210	Control cathode choke	.25

TUBULAR RESISTORS

See Page 388

22472	DRY ELECTROLYTIC CONDENSER	.80
22432	Mounting clamp	.05

FIXED CONDENSERS

25690	Multiple by-pass condenser	2.00
26040	R. F. by-pass condenser	.50
22433	R. F. by-pass condenser clamp	.05
17440	Phone condenser	.50
26050	Tracking condenser	.20
26440	Control coupling condenser	.35
21160	Oscillator grid condenser	.35
24760	DOUBLE I. F. TRIMMER COND.	.95
21838	ANTENNA CABLE	.25
21837	Antenna cable rubber bushing	.05
22027	Antenna cable bushing clamp	.05

14367	Pole plate mounting nut	\$.02
22830	OUTPUT TRANSFORMER	3.00
19463	Output transformer strap	.10
21128	SPEAKER-TO-CHASSIS CABLE and plugs, 10'	4.80
22018	Speaker-to-chassis cable bushing clamp (outside)	.05
22019	Speaker-to-chassis cable bushing clamp (inside)	.05
15739	Cable clamp	.02
21132	Cable insulating sleeve	.05
21059	Rubber bushing	.05
21315	Cable clamp	.05
15079	Cable plug (4 prong)	.65
18582	Cable plug (5 prong)	.65
21164	Armored lead to ungrounded side of battery (5 ft. long)	.50
21162	Armored lead clamp	.05
21263	Dash rubber bushing	.10
21062	Speaker mounting bolt	.10
21141	Speaker mounting bolt lockwasher	.70/c
21142	Speaker mounting bolt washer	.01

21851	Station selector cable sheathing 9'	\$ 2.15
21485	Station selector cable clamping plate	.10
21486	Station selector cable clamping screw	.02
21487	Station selector cable chuck complete	.60
21147	Station selector cable staple	.50/c
21488	CONTROL UNIT-TO-SPEAKER CABLE and plug (5' 2")	2.40
18582	Plug (5 prong)	.65
21489	Cable clamp	.05
21486	Cable clamp screw	.02
21491	LOCK SWITCH	.75
21585	Lock switch lock washer	.02
21584	Lock switch mounting nut	.10
20976	Switch key	.10
21406	Fuse 10 amp	.15
21493	Fuse socket	.35
21495	Fuse socket mounting screw	.02
21495	Dial lamp socket mounting screw	.02
21496	VOLUME CONTROL	1.10
21325	Volume control knob	.30
21497	Volume control mounting nut	.05
22597	Volume control fibre washer (large)	.05
21586	Volume control fibre washer (small)	.02

THIS LIST SUPERSEDES ALL PREVIOUS LISTS. PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ATWATER KENT RADIO

MISCELLANEOUS PARTS FOR MODEL 91, 91-B, 91-C

Part No.	Name of Part	List Price
21153	Lead to grounded side of battery 36" long	.15
21151	Terminal	.06
23260	Generator condenser	1.25
21144	Distributor suppressor (long)	.60
21143	Plug suppressor (short)	.60
21065	Gasket for chassis and battery container	.30
21068	Antenna lead rubber bushing	.05
22530	Terminal block	.05
19623	Grid lead and cap	.12
22542	Instructions F-979	net .10
22593	Shipping container	net .65
23450	PLATE ANTENNA (Complete)	4.00
21557	Antenna plate	3.25

Part No.	Name of Part	List Price
21559	Antenna plate mounting bolt	\$.10
21558	Porcelain insulator	.12
21561	Wood spacing block	.01
21369	Insulating washer	.03
21562	Iron washer	.01
21141	Lock washer	.70/c
21563	Nut	.02
21442	Instruction sheet	net .50/c
23520	IGNITION FILTER (furnished only when defective filter is returned to distributor)	4.25
21624	Condenser for ignition filter No. 23520 (furnished only when defective condenser is returned to distributor)	2.00
23530	Choke for ignition filter	2.00

EXTRA-LENGTH CABLES

Part No.	Name of Part	List Price
21652	Station selector cable, per foot	\$.06
21654	Speaker-to-chassis cable, per foot	.35
21655	Control unit-to-speaker cable, per foot	.35
21656	Speaker-to-chassis cable (with plugs) 15 ft. long	6.55

Extra-length station-selector-cable sheathing for Model 81 and 91 is furnished only in sections of 10, 15 or 30 feet.
 10 feet No. 21653 station-selector-cable sheathing \$ 2.50
 15 feet No. 21653 station-selector-cable sheathing 3.75
 30 feet No. 21653 station-selector-cable sheathing 7.50

PARTS LIST, MODEL 91-B, No. 28000

Parts not listed below will be found under Model 91, No. 27700 listed above.

22745	Chassis container complete	4.00
22699	Container, less cover and accessories	2.50
21918	Container cover	1.00
21062	Mounting bolt	.10
21824	Mounting nut	\$.02
21823	Thumb screw	.05
23052	Shielded "B" Battery cable 8' 10"	1.00
23134	Shielded "B" battery cable per ft.	.12
21068	"B" battery cable bushing	.05

PARTS LIST, MODEL 91-C, No. 28100

22746	Chassis container complete	4.00
22541	Container less lid and accessories	2.50
21939	Container lid	.75
22688	Container lid gasket (cork)	.10
21943	Mounting strap 1 3/4" x 12"	.10
23052	Shielded "B" battery cable 8' 10"	1.00
23134	Shielded "B" battery cable per ft.	.12
21068	"B" Battery cable bushing	.05

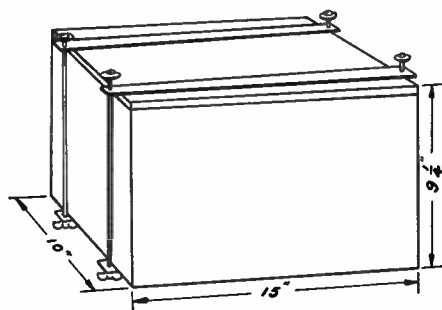
PARTS AND PRICE LIST, MODEL 91-B and 91-C, "B" BATTERY CONTAINERS

LONG TYPE No. 21932

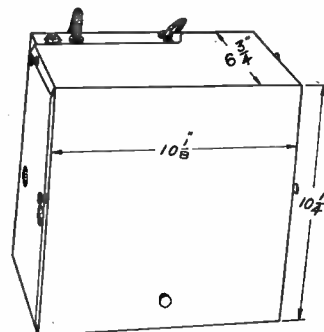
21932	Long "B" battery container, complete	3.50
21928	Container, less lid and accessories	2.50
21924	Container lid	1.00
21068	"B" battery cable bushing	.05

SQUARE TYPE No. 21933

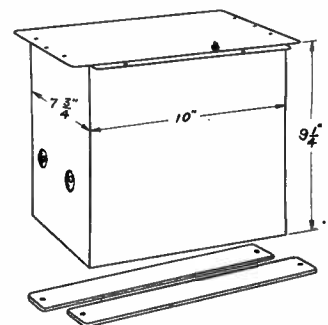
21933	Square "B" battery container, complete	3.50
21906	Container, less lid and accessories	2.50
21909	Container lid	1.00
21068	"B" battery cable bushing	.05



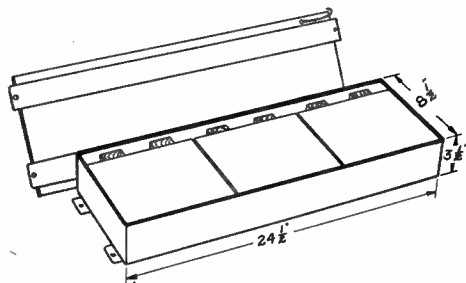
MODEL 91 CHASSIS AND BATTERY CONTAINER.
(For Under-floor Mounting.)



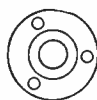
MODEL 91-B CHASSIS AND "C" BATTERY CONTAINER No. 22745.
(For Dash Mounting.)



MODEL 91-C CHASSIS AND "C" BATTERY CONTAINER No. 22746.
(May Be Mounted Under Floor or Through Hole Cut in Floor Boards.)

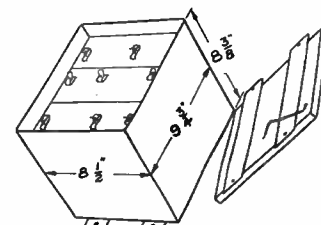


LONG TYPE "B" BATTERY CONTAINER No. 21932.
(For Use with Model 91-B or 91-C.)



No. 22027 No. 22019 No. 22018
CABLE BUSHING CLAMPS.

The No. 22018 and 22019 clamps are each made in two sections to permit quick attachment on the cable.



SQUARE TYPE "B" BATTERY CONTAINER No. 21933.
(For Use with Model 91-B or 91-C.)

THIS LIST SUPERSEDES ALL PREVIOUS LISTS. PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ATWATER KENT RADIO

PARTS AND PRICE LIST
FOR MODEL 188, 260 AND 469

NAME OF PART	188,	260,	469,	NAME OF PART	188,	260,	469,
	188-F	260-F	469-F		188-F	260-F	469-F
	(1st Type)				(1st Type)		
FRONT PANEL, with braces and escutcheon.....	23029 \$2.50	23057 \$2.50	23139 \$2.50	Power-transformer cover, 25 cycle.....	23073 \$.50	23073 \$.50	23073 \$.50
Left-hand panel brace.....	22679 .10	22679 .10	22679 .10	AUDIO INPUT TRANSFORMER.....	26940	26950	26950
Right-hand panel brace.....	22664 .10	22664 .10	22664 .10	R. F. TRANSFORMER GROUP.....	23028	23058*	23059
ESCUTCHEON.....	22758 1.00	22704 1.00	22988 1.00	R. F. transformer shield.....	22678	22678	22678
Escutcheon rivet.....	8272 .02	8272 .02	8272 .02	Base for R. F. or osc. trans. shield.....	.15	.15	.15
DIAL PLATE.....	22693 .30	22693 .30	22693 .30	OSCILLATOR TRANSFORMER.....	27080	27040	27040
Dial-plate rivet.....	18295 .20/c	18295 .20/c	18295 .20/c	Oscillator-transformer shield.....	22678	22678	22678
Dial-lamp socket and reflector.....	26860 .40	26860 .40	26860 .40	No. 1 I. F. TRANSFORMER, less trimmers.....	22771	22913	22771
Dial lamp (3.2 volts).....	19644 .25	19644 .25	19644 .25	No. 2 I. F. transformer, less trimmers.....	22772	22913	22917
Dial knob.....	22804 .30	22804 .30	22804 .30	No. 3 I. F. transformer, less trimmers.....	22915	22915	22915
VOLUME CONTROL, complete less leads..	20389 3.45	20389 3.45	20389 3.45	I. F. transformer shield.....	21877	21877	21877
Volume-control mounting bracket.....	22643 .20	22643 .20	22643 .20	I. F. T. shield cap, with hole.....	22654	22654	22654
Volume-control mounting nut.....	18649 .03	18649 .03	18649 .03	I. F. T. shield cap, without hole.....	22653	22653	22653
Volume-control knob.....	17244 .30	17244 .30	17244 .30	I. F. T. shield insulator.....	23172	23172	23172
TONE-CONTROL condenser.....	20010 1.00	21530 1.00	27390 1.00	FILTER-CHOKE UNIT.....	26960	26970	26970
Tone-control switch, complete.....	20730 .75	24540 .75	24540 .75	Filter-choke cover or lid.....	17302		
Tone-control-switch base.....	20274 .60	18148 .60	18148 .60	R. F. plate choke.....	19210		17015
Tone-control-switch shaft and blade.....	22297 .15	22297 .15	22297 .15	R. F. grid filter or cathode choke.....	.25		
Tone-control-switch shaft key.....	20096 .30/c	20096 .30/c	20096 .30/c	1st-detector plate filter choke.....	19210		
Tone-control-switch knob.....	21963 .20	21963 .20	21963 .20	I. F. plate filter or cathode choke.....	.25		
TONEBEAM.....	22011	22011	22011	2nd-detector plate or A. F. grid choke.....	17390	19210	19210
Tonebeam socket.....	21959 .70	21959 .70	21959 .70	FILTER CONDENSER UNIT, paper and foil type.....	26620	26620	26620
Tonebeam-socket insulator.....	21898 .01	21898 .01	21898 .01	Filter condenser No. 1 or 2 (electrolytic).....	1.00	1.00	1.00
Tonebeam-socket mounting strap.....	21899 .05	21899 .05	21899 .05	Mounting nut.....	22538	22538	22538
Tonebeam clamping spring.....	22658 .05	22658 .05	22658 .05	Mounting lockwasher.....	2.50	2.50	2.50
Tonebeam shield (fibre).....	23033 .01	23033 .01	23033 .01	Insulating bushing.....	22836	22836	22836
TONEBEAM ADJUSTMENT potentiometer.....	26540 1.25	27190 1.25	27190 1.25	Insulating washer.....	.05	.05	.05
Potentiometer mounting insulation.....	22655 .05	22655 .05	22655 .05	Case connector soldering lug.....	22863	22863	22863
Potentiometer knob.....	22052 .20	22052 .20	22052 .20	SMALL FIXED CONDENSERS.....	22775		
Potentiometer label.....	22926 .01 net	22926 .01 net	22926 .01 net	Control coupling condenser.....	.50/c		
POWER TRANSFORMER, 60 cycle.....	26720 7.50	26920 8.25	26930 8.25	Control-plate by-pass condenser.....	22774		
Power transformer, 25 cycle.....	27430 9.50	27440 10.75	27450 10.75	Control-plate by-pass condenser clamp.....	.02		
Power-transformer cover, 60 cycle.....	22748 .50	22748 .50	22748 .50	Oscillator grid condenser.....	22791		
Power-transformer cover spring.....	22676 .05	22676 .05	22676 .05	Oscillator plate filter condenser.....	.01		

*In 2nd-type Model 260, after serial No. 8422101, the R. F. transformer group is No. 23154, list price \$3.00.

PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ATWATER KENT RADIO

PARTS AND PRICE LIST (Continued)

FOR MODEL 188, 260 AND 469

NAME OF PART	188,	260,	469,	NAME OF PART	188,	260,	469,
	188-F	260-F	469-F		188-F	260-F	469-F
		(1st Type)			(1st Type)		
Tracking condenser.....	26690 \$.25	26690 \$.25	26690 \$.25	Filament shunt resistor.....	17077 \$.15	17077 \$.15	17077 \$.15
Phone condenser.....	17440 .50	26670 .25	17440 .50	SOCKET for Type '47 and '56.....	22734 .20	22734 .20	22734 .20
Screen by-pass.....	26660 .25			Socket for Type '57 and '58.....	22733 .20	22733 .20	22733 .20
2nd-detector bias by-pass cond.....		26550 .50		Rectifier socket*.....	22689 .30	22689 .30	22689 .30
Clamp for above.....		22684 .05		Speaker socket.....	21336 .30	21337 .35	21337 .35
2nd-detector—1st-A. F. coupling cond.....		23250 .35		Speaker-socket insulator.....	22669 .02	22671 .02	22671 .02
Clamp for above.....		22057 .05		Socket eyelet.....	8249 .50/c	8249 .50/c	8249 .50/c
2nd-detector plate-to-grid condenser.....		26820 .20		Fuse socket.....	18449 .15	18449 .15	18449 .15
DOUBLE I. F. TRIMMER CONDENSER..	24760 .95	24760 .95	24760 .95	Fuse-socket insulator.....	22723 .25/c	22723 .25/c	22723 .25/c
BY-PASS CONDENSER, MULTIPLE TYPE (Other by-pass condensers are listed on page 388).....	24250 2.00			TUBE SHIELD.....	22683 .15	22683 .15	22683 .15
VARIABLE CONDENSER rotor, stator and frame.....	23031 6.00	23056 7.50	23031 6.00	Tube-shield base.....	22681 .03	22681 .03	22681 .03
Variable-condenser cover.....	22708 .35	22707 .45	22708 .35	110-VOLT DOUBLE CONDUCTOR CABLE AND PLUG.....	19566 1.90	19566 1.90	19566 1.90
Rotor connection.....	20235 .10	20235 .10	20235 .10	110-volt plug (male).....	18897 .15	18897 .15	18897 .15
Dial-knob shaft.....	22692 .05	22692 .05	22692 .05	110-volt cable bushing.....	16741 .05	16741 .05	16741 .05
Dial-knob-shaft bracket.....	22578 .35	22578 .35	22578 .35	Bushing retaining spring.....	16742 .05	16742 .05	16742 .05
Dial rubber and bushing.....	22657 .15	22657 .15	22657 .15	BINDING-POST BASE.....	18363 .05	18363 .05	18363 .05
Dial pointer.....	22645 .05	22645 .05	22645 .05	Binding post, marked A.....	19536 .20	19536 .20	19536 .20
Dial-pointer shim.....	18823 .02	18823 .02	18823 .02	Binding post, plain.....	8215 .20	8215 .20	8215 .20
Dial gear and balance weight.....	22697 .75	22697 .75	22697 .75	RANGE SWITCH.....	17242 1.00	17242 1.00	17242 1.00
Pointer-control arm.....	22717 .30	22717 .30	22717 .30	Range-switch knob.....	21963 .20	21963 .20	21963 .20
Trimmer mica.....	20119 .03	20119 .03	20119 .03	MISCELLANEOUS PARTS			
Trimmer sealing wax.....	.50/lb.			Cloth Screen.....	23286 1.00	23287 1.00	23287 1.00
FLEXIBLE AND WIRE-WOUND RESIST- ORS (For tubular resistors, see page 388)				Line fuse (2 amps).....	18534 .05	18534 .05	18534 .05
R. F.—I. F. bias resistor No. 1.....	20040 .20	17380 .20	20040 .20	Control-grid lead and cap.....	19623 .12	19623 .12	19623 .12
R. F.—I. F. bias resistor No. 2.....	21030 .20	25950 .20		Shielded antenna lead.....	22614 .15	22614 .15	22614 .15
1st-detector bias resistor.....	16320 .20	** .20	16320 .20	Double terminal block.....	22530 .05	22530 .05	22530 .05
2nd-I. F. bias resistor.....		20040 .20		Rubber pad (1 1/8" by 3/4").....	22095 .01	22095 .01	22095 .01
1st-A. F. bias resistor.....		21030 .20		Bottom plate.....	22865 1.30	22865 1.30	22865 1.30
A. F. bias resistor.....	25840 .20		25840 .20	Ground clamp assembly.....	13989 .30	13989 .30	13989 .30
2nd-A. F. bias resistor.....		21420 .20		Instruction and log card.....	22833 F-992		
Bleeder resistor No. 3.....			20520 .20	Instruction folder.....		22615 F-1008	22615 F-1008
Bleeder resistor No. 4.....		20380 .20	20380 .20	Panel card.....	22760 F-986	22738 F-993	22875 F-994
Filter resistor.....	19180 1.00			Shipping container.....	.01 net .65 net	.01 net .65 net	.01 net .65 net

*Early Models use a No. 22735 rectifier socket which is of similar design to the new sockets for the 58 tubes. No. 22735 and No. 22689 are of different size and are not interchangeable.

**In 2nd-type Model 260, the first detector bias resistor is No. 20120, list price \$0.20.
PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

ATWATER KENT RADIO TUBULAR RESISTORS

(Large Size, 1 1/4 inches—Continued)

EXTRA LARGE SIZE

27210	Maroon	.....	\$ .30
27220	Gray-yellow	.....	.30

LARGE SIZE, 1 1/4 INCHES LONG

15285	Gray	.....	.50
15544	Yellow	.....	.25
15545	Maroon	.....	.25
15592	Black	.....	.25
15891	Black-red	.....	.25
15892	Green	.....	.25
16282	Blue-red	.....	.25
16724	White	.....	.25

19346	Green-red	.....	\$ .30
19581	Red-yellow	.....	.25
19649	Black-purple	.....	.25
20151	Purple	.....	.25
20223	Red-gray	.....	.25
21784	Gray-green (Superseded by 22211)	.....	.25
22211	Yellow-gray	.....	.25
22407	Black-yellow-red	.....	.25

SMALL SIZE, 1 INCH LONG

20920	Red-yellow	.....	\$ .25
20930	Black-purple	.....	.25
20940	Green	.....	.25
20950	Maroon	.....	.25
20960	Gray-yellow	.....	.25
20970	Gray	.....	.25
20980	Red-blue	.....	.25
21040	Black	.....	.25
21050	Blue-gray	.....	.25
23120	Red-black	.....	.25
23130	Red-gray	.....	.25
23170	Green-yellow	.....	.25
26160	White	.....	.25
26410	Green-red	.....	.25

When replacing a tubular resistor, use a resistor of the same identifying color and size.

BY-PASS AND TONE-CONTROL CONDENSERS

Part No.	*Code Markings	List Price	Part No.	*Code Markings	List Price	Part No.	*Code Markings	List Price
15262	B-1, H-1, H-9, H-20	\$1.00	16940	H-22, L-10	\$1.10	21430	H-39, L-37-A	\$1.00
15263	B-2, H-2	.90	17360	H-27, L-32	1.10	21440	H-40, L-44-A	1.00
15640	H-16	1.00	17370	H-25, H-26, L-3, L-39	1.10	21450	B-10, L-36-A	.50
15770	H-15	1.00	18350	H-28, L-49	1.10	21530	L-42-A, B-11	1.00
15780	H-17	1.10	19150	H-29	1.00	22050	H-41	1.00
15790	H-18, H-21	1.00	19160	H-30	1.00	22570	J-3	2.00
15837	B-3 (Superseded by 16233)	1.00	19560	H-31	1.00	23140	J-4	2.00
15870	B-7, L-28	1.00	19690	H-32	1.00	23310	H-42 (Superseded by 21180) **	
16060	H-24, L-29 (304) (Superseded by 18350)	***	19710	H-33	1.00	23330	H-43	1.00
16233	H-4, H-10	.90	19980	H-34	1.00	23590	L-55-A, H-44	1.00
16461	H-6, H-12	.75	19990	H-35	1.00	23610	L-57-A, H-45	1.00
16462	H-5, H-11	1.00	20010	B-8	1.00	24250	LB-30, J-5	2.00
16490	B-6, L-12	1.00	20350	H-36	1.00	25690	LB-34, J-6	2.00
16745	H-7, H-8, H-13	1.00	20830	L-B-9, J-2, J-1	2.00	27120	H-46, L-66-A	1.00
16828	B-5	.50	21170	H-37	1.00	27140	H-47	1.00
16880	H-23, L-26 (439)	1.10	21180	H-38	1.00	27390	B-14	1.00
			21250	B-9	1.00			

*For information about code markings, see Page 253. **Do not use 23310 in place of 21180. ***See note on Page 243.

VOLTAGE TABLE

91, 91-B, 91-C, 188, 188-F, 260, 260-F, 469, 469-F

The voltages listed in this table are only approximate and are measured values, not actual operating values.

Use 250-volt scale of a 1000-ohm-per-volt voltmeter.

TONEBEAM ADJUSTMENT FULL COUNTER CLOCKWISE;
RANGE SWITCH AT LOCAL.

All plates, screen and grid measurements are made from cathode in heater-type tubes, and from —F in plain-filament-type tubes.

LINE VOLTAGE = 110 VOLTS

VOLTAGES ACROSS BLEEDER AND BIAS RESISTORS

RESISTOR	188 188-F	260 260-F 1st type	260 260-F 2nd type	469 469-F
Bleeder No. 1	50	92	90	50
Bleeder No. 2	85	108	75	110
Bleeder No. 3	70	73	55	8
Bleeder No. 4	11	20	15	12
Bleeder No. 5	—	88	30	Slight
Bleeder No. 6	—	50	85	35
Bleeder No. 7	—	—	—	55
1st-detector bias	5	2	1	3
R. F. I. F. bias No. 1	Slight	4	6	1
R. F. I. F. bias No. 2	7	2	2	—
2nd-I. F. bias	—	Slight	Slight	—
2nd-detector bias	5	—	—	15
1st-A. F. bias	—	5	5	—
A. F. bias	12	15	15	15
Tonebeam adjustment	—	95	120	65

TUBE	CIRCUIT	91 91-B 91-C	188 188-F	260 260-F 1ST TYPE	260 260-F 2ND TYPE	469 469-F
R. F. TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	130	130	200	250	125
	SCREEN GRID	80 2	75 3	90 2	70 1	110 2
1ST-DET. TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	125	130	200	250	160
	SCREEN GRID	75 5	75 1	20 1	60 2	100 5
I. F. TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	130	130	200	250	125
	SCREEN GRID	85 2	75 4	90 2	70 1	110 2
2ND-DET. TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	60	95	**	**	170
	SCREEN GRID	— 9	55 4	** **	** **	— 15
1ST-A. F. TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	130	205	115	110	230
	SCREEN GRID	— 3	215 3	— 2	— 1	235 15
2ND-A. F. TUBE	FILAMENT	6	—	2.4	2.4	—
	PLATE	127	—	230	225	—
	SCREEN GRID	130 12	— —	235 15	230 15	— —
OSC TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	100	85	35	40	75
	GRID	*	*	*	*	*
CONTROL TUBE	FILAMENT	6	2.4	2.4	2.4	2.4
	PLATE	5	40	**	**	14
	GRID	2.5	10	**	**	10

* The measured oscillator grid voltage will vary dependent on several factors. In some cases, no reading will be secured for grid bias. In other cases, the reading will be only slight, or it may be as high as 10 volts.

** In Model 260 and 260-F, the 2nd-detector also functions as automatic-volume-control tube. The voltages that can be read at this socket are as follows: 1st type, cathode to ground 20 volts, grid to ground 7 volts. 2nd type, cathode to ground 15 volts, grid to ground 5 volts.