

BATTERIES USED IN THIS RECEIVER		
TYPE	MANUFACTURER'S NUMBER	
6 Volt "A"	Olin No. 4919	Eveready No. 724
67 1/2 Volt "B"	Olin No. 1712	Eveready No. 457

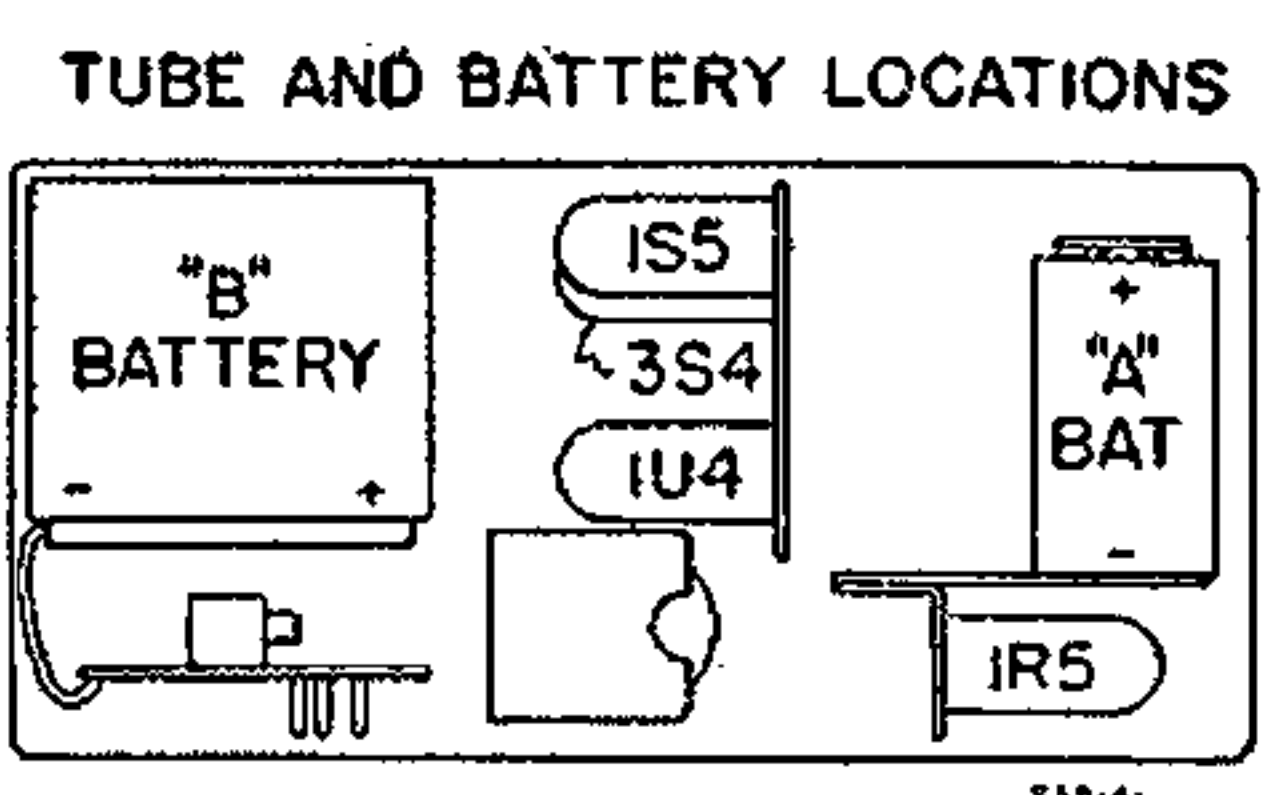
POWER SUPPLY PLUG
 PLUG INTO RECEPTACLE IN RECEIVER. INSERT PLUG ALL THE WAY. FOR BATTERY OPERATION REMOVE PLUG.

A.C.-D.C. OPERATION—Insert three-prong plug into socket on side of receiver. Plug Rectifier Unit into 105-125 volt wall outlet. Rectifier Unit will normally operate warm. Keep unit free from dust and in a well ventilated location. *OPERATE RECTIFIER UNIT IN HORIZONTAL POSITION ONLY.* If set is inoperative on D.C., reverse plug in wall outlet.

BATTERY OPERATION — Remove the three-prong plug from the receiver; the self-contained batteries will then supply power. Removal of Rectifier Unit from wall outlet is desirable.

BATTERY REPLACEMENT

1. Remove power supply plug from set.
2. Slide the button on the release catch near the handle in the direction of the arrow. This loosens the bottom shell and permits it to be swung open on the hinge, making the batteries accessible.
3. Insert the batteries as shown in the diagram.
4. To reassemble, hold the chassis face down with the batteries in place. Close the bottom shell over the chassis and press the handle end of the shell so that it snaps into place.



INSTRUCTIONS FOR VOLTAGE AND RESISTANCE READINGS

- 1—DC Voltage measurements are at 20,000 ohms per volt; AC voltages measured at 1,000 ohms.
- 2—Socket connections are shown as bottom views.
- 3—Measured values are from socket pin to common negative.
- 4—Line voltage maintained at 117 volts for voltage readings.
- 5—Nominal tolerance on component values makes possible a variation of $\pm 15\%$ in voltage and resistance readings.
- 6—Volume control at maximum; no signal applied for voltage measurements

VOLTAGE READINGS

SYMBOL	TUBE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7
1	1R5	OV	78VDC	50VDC	1-3.2VDC	OV	OV	1.3VDC
2	1U4	2.5VDC	78VDC	78VDC	50VDC	2.5VDC	OV	3.8VDC
3	1S5	1.3VDC	78VDC	2VDC	17VDC	26VDC	OV	2.5VDC
4	3S4	3.8VDC	75VDC	OV	78VDC	5.2VDC	75VDC	5.2VDC

† Taken with vacuum tube voltmeter.
NOTE: OV equivalent to zero volts.

RESISTANCE READINGS

SYMBOL	TUBE	PIN 1	PIN 2	PIN 3	PIN 4	PIN 5	PIN 6	PIN 7
1	1R5	0 ohm	5400 ohm	20K ohm	100K ohm	0 ohm	4.3 meg.	*
2	1U4	*	5400 ohm	5400 ohm	20K ohm	*	2 meg.	*
3	1S5	*	5400 ohm	1 meg.	3.3 meg.	470K ohm	10 meg.	*
4	3S4	*	6000 ohm	1.5 meg.	5400 ohm	*	6000 ohm	*

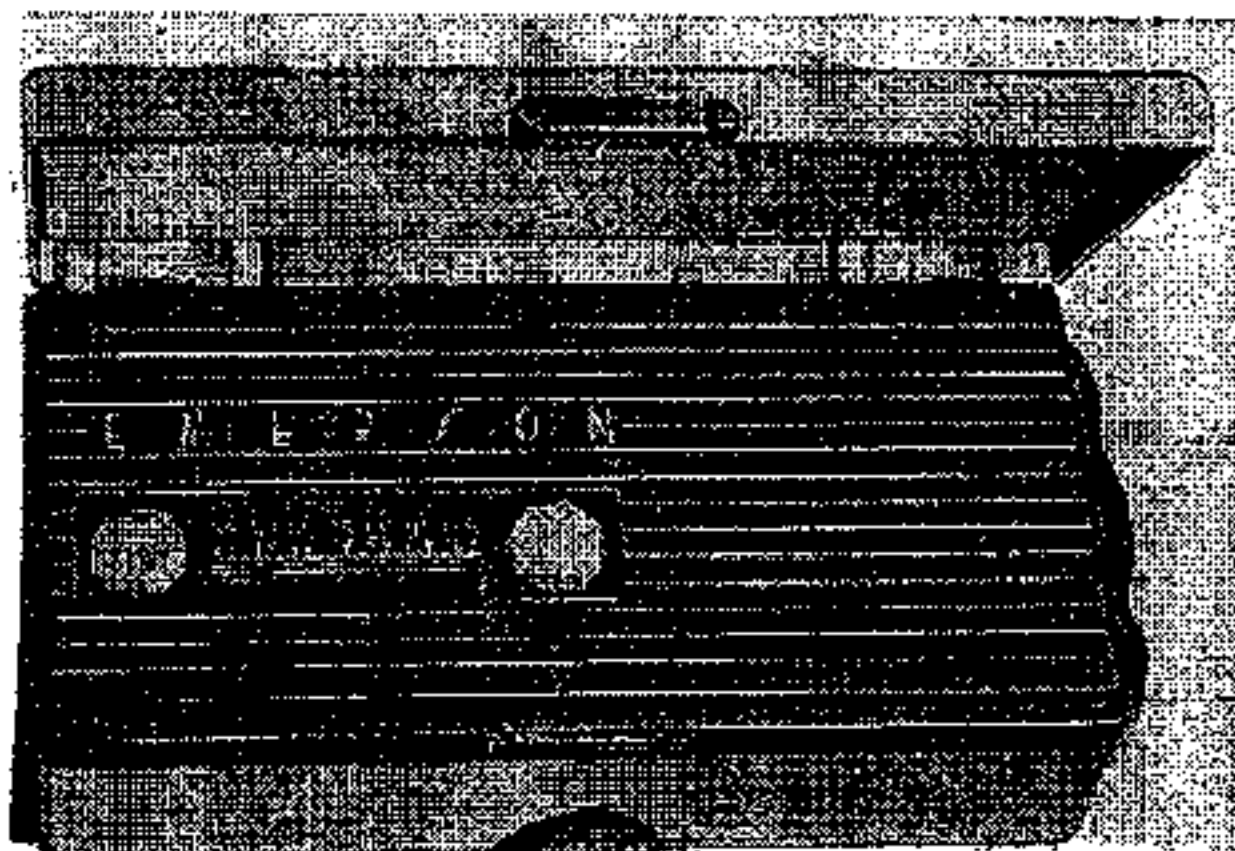
* Do not use ohmmeter to measure filament resistance.

ALIGNMENT INSTRUCTIONS

Use battery power when available. If AC power is used, use an isolation transformer when available. If not, connect a .1 mfd. capacitor in series with low side of the signal generator and B—.

Volume control should be at maximum position; output of signal generator should be no higher than necessary to obtain an output reading. Use an insulated alignment screwdriver for adjusting.

	DUMMY ANTENNA	SIGNAL GENERATOR COUPLING	SIGNAL GENERATOR FREQUENCY	RADIO DIAL SETTING	OUTPUT METER	ADJUST	REMARKS
1	.1 mfd.	High side to Pin 6 (grid) of 1R5. Low side to B—.	455KC	Tuning cap. fully open.	Across voice coil.	A1, A2, A3, A4	Adjust for maximum output. If AC power is used without an isolation transformer reduce dummy ant. to 200 mmf. to reduce hum modulation.
2		Loop	1620KC	"	"	A5	Fashion loop of several turns of wire and radiate signal into loop of receiver. Adjust for maximum output.
3		"	600KC	Tune for maximum output.	"	A6	Rock tuning cap. and adjust for maximum output. Repeat Steps 2 and 3 until no further improvement can be made.



DESCRIPTION

TYPE: Three-way pocket portable superheterodyne.

FREQUENCY RANGE: 540-1600 kc.

TYPE OF TUBES:

1—1R5, oscillator-modulator

1—1U4, i-f amplifier

1—1S5, 2nd detector, a.v.c., a-f amplifier

1—3S4, pentode output

POWER SUPPLY: A.C.-D.C. (105-125 volts) or self-contained batteries

VOLTAGE RATING:

"A" Battery—6 volts

"B" Battery—67.5 volts

POWER CONSUMPTION: 11 watts

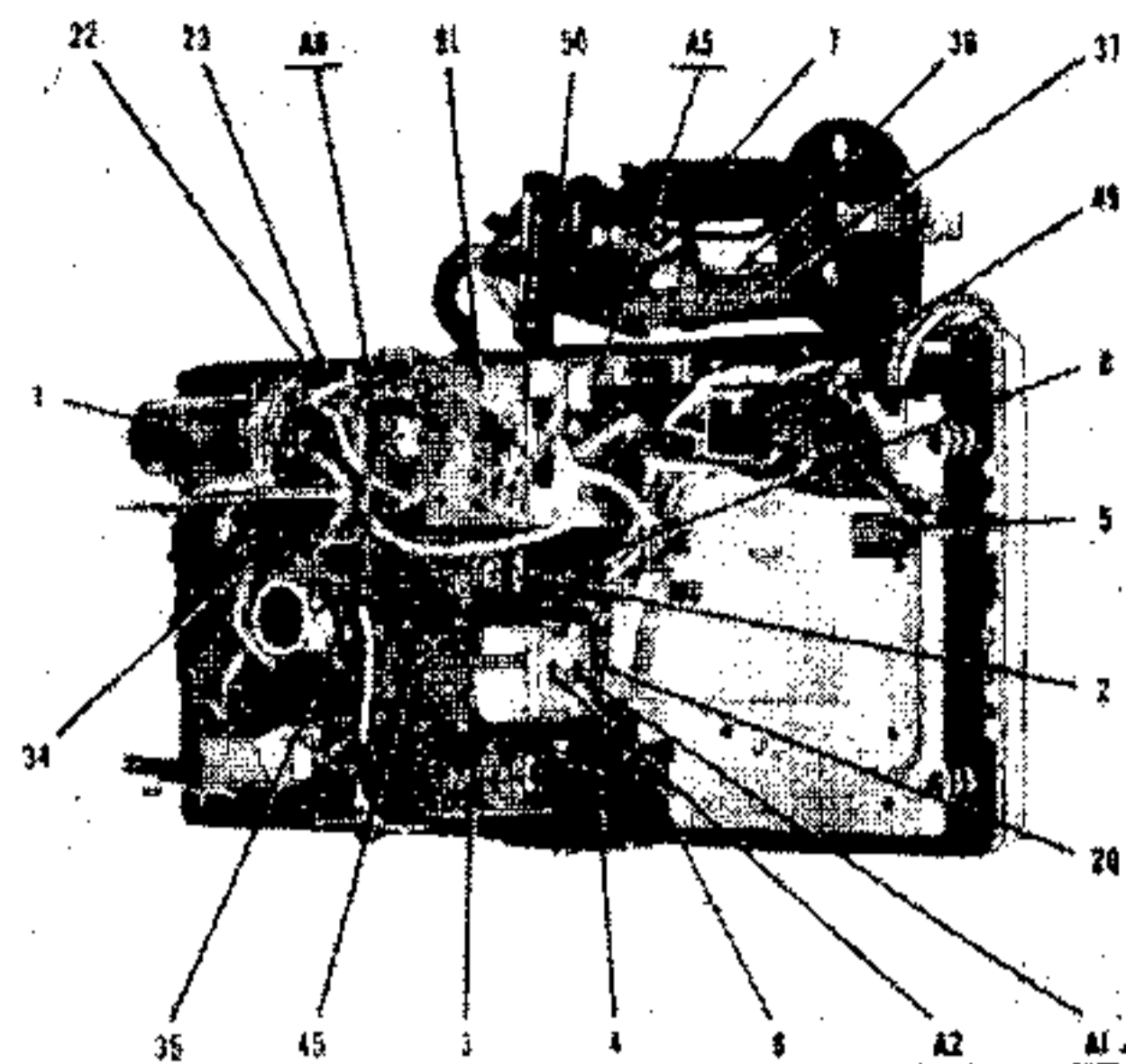
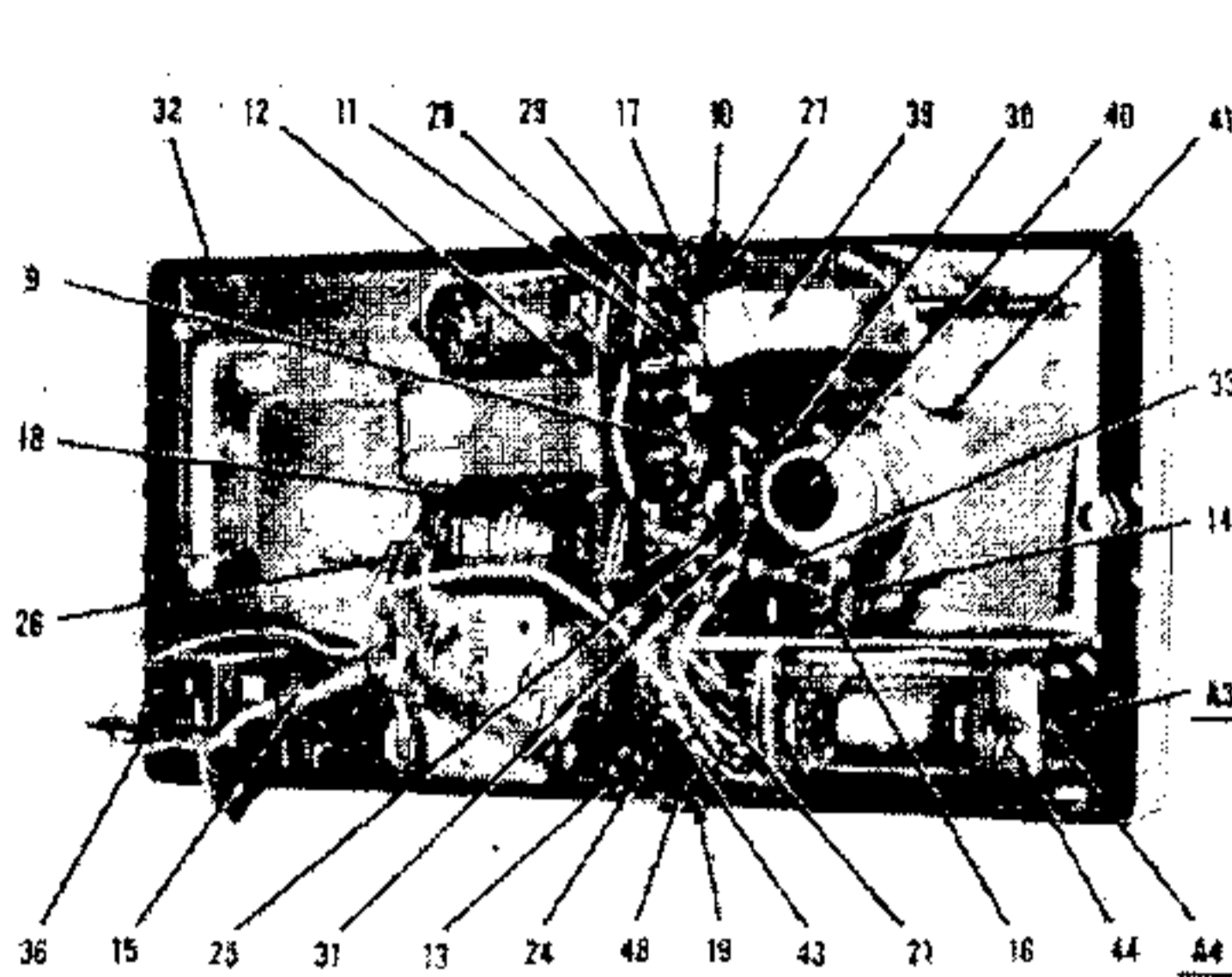
CURRENT DRAIN:

"A" Battery—60 ma.

"B" Battery—8 ma.

EMERSON RADIO AND PHONO. CORP.

MODEL 569



REPLACEMENT PARTS LIST

Symbol	† Part No.	DESCRIPTION	Symbol	† Part No.	DESCRIPTION
1	1R5	Converter	33	340530	Filament string, 1500 ohm, ½ watt resistor
2	1U4	IF amplifier	34	370432	Filament string, 560 ohm, 1 watt resistor
3	1S5	Det.—AVC—audio amplifier	35	370432	Filament string, 560 ohm, 1 watt resistor
4	3S4	Power output	36	340610	Filter string, 3300 ohm, ½ watt resistor
5A	925082	Filter (electrolytic), 80 mfd., 150 volt condenser	37	394019	Filament dropping, 2150 ohm, 10 watt resistor
B		Filter (electrolytic), 20 mfd., 150 volt condenser	38	394018	Rectifier ballast, 120 ohm, 3 watt resistor
6	925083	Filament bypass (elect.), 100 mfd., 25 volt condenser	39	734019	Output transformer
7	923006	Line filter, .03 mfd., 600 volt condenser	40	180029	3" PM speaker
8	920494	Line isolation, .05 mfd., 200 volt condenser	41		Cone—part of 180029
9	920550	Output plate bypass, .002 mfd., 200 volt condenser	42	700008	Loop antenna
10	920497	Audio coupling, .001 mfd., 200 volt condenser	43	716021	Oscillator coil
11	920499	AF screen bypass, .01 mfd., 100 volt condenser	44	720028	Input IF transformer
12	920497	Audio coupling, .001 mfd., 200 volt condenser	45	720028	Output IF transformer
13	920498	IF grid filter, .02 mfd., 100 volt condenser	46	Olin 4919	6-volt "A" battery
14	920498	Converter screen decoupling, .02 mfd., 100 volt condenser	47	Olin 1712	67½" "B" battery
15	920498	AVC filter, .02 mfd., 100 volt condenser	48	510019	On-off switch
16	920494	Filament bypass, .05 mfd., 200 volt condenser	49	510008	Change-over switch
17	928013	AF plate bypass, 100 mmf., 300 volt condenser	50	817001	Dry disc rectifier
18	928104	Diode RF filter, 212 mmf., 300 volt condenser	51	920029	2-gang tuning capacitor
19	928013	Oscillator grid capacitor, 100 mmf., 300 volt condenser		470330	Power supply unit
20	390025	Volume control, 1 megohm, resistor		585013	Plug and cable assembly
21	340970	Oscillator grid, 100K ohm, ½ watt resistor		585014	"B" battery cable
22	341390	IF grid, 5.6 megohm, ½ watt resistor		460064	Plastic bottom shell, black
23	351330	IF grid, 3.3 megohm, ½ watt resistor		460066	Plastic bottom shell, ivory
24	340410	Parasitic suppressor, 470 ohm, ½ watt resistor		460067	Plastic bottom shell, green
25	340770	Converter screen dropping, 15K ohm, ½ watt resistor		460028	Plastic lid, black
26	351330	AVC network, 3.3 megohm, ½ watt resistor		460038	Plastic lid, ivory
27	351450	AF grid, 10.0 megohm, ½ watt resistor		460068	Plastic lid, green
28	351330	AF screen, 3.3 megohm, ½ watt resistor		630058	Plastic loop cover, black
29	351130	AF plate, 470K ohm, ½ watt resistor		410254	Metal front
30	341250	Output grid, 1.5 megohm, ½ watt resistor		460031	Knob, black
31	341390	Bias, 5.6 megohm, ½ watt resistor		460037	Knob, ivory
32	351130	Line isolation, 470K ohm, ½ watt resistor		460061	Knob, green
				541170	Knob retaining clip
				460089	Handle, extruded plastic
				410519	Handle ring
				410298	Release catch, male
				410299	Release catch, female
				411055	Reinforcing plate, cover release catch
				410143	Lid hinge, spring loaded
				410144	Lid hinge stop
				470259	Hinge assembly, shell to metal front
				520038	Dial crystal
				520041	Dial backplate
				525016	Dial pointer
				280038	Drive shaft
				587326	Dial drive spring
				410150	"A" battery contact spring
				555000	"A" Battery contact assembly