

### COSSOR MODEL 3468 RECEIVER (Contd.)

**Removing Power Pack** (not necessary to examine set).—Remove four nuts underneath cabinet, and to reach underside of chassis remove the metal plate.

**General Notes.**—The circuit of power pack is easily understood, and there should be no difficulty in this part of the set. The mains transformer connections are:—Front

of front bobbin, three leads, set filaments with C.T. Rear of front bobbin, three leads, rect. filaments with C.T. to grey speaker lead and C13.

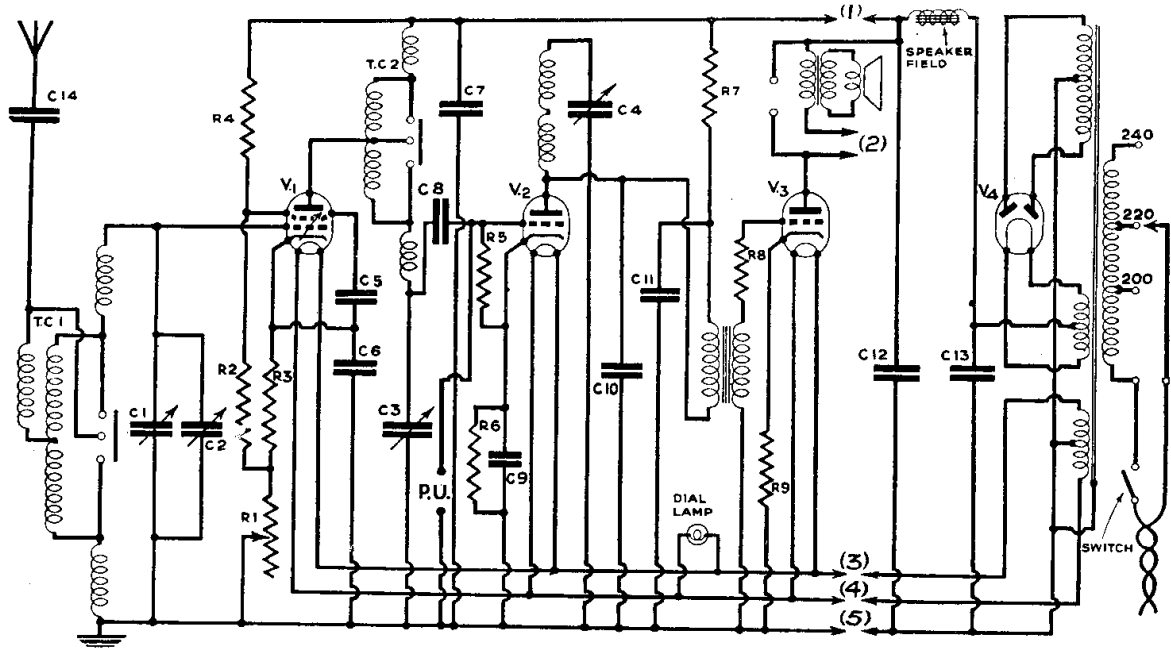
Middle bobbin, rect. anodes with C.T. to chassis. Rear bobbin, mains tapings. It is necessary to check by the resistance readings which are the ends of the windings and which the tapings.

**Replacing Chassis.**—Lay chassis inside cabinet, insert the three holding screws and re-connect the mains leads to the switch.

Replace the cover on the power pack and fix with the nuts underneath.

Clip the mains lead and the power pack cable and replace the knobs.

To prevent a crocodile meter clip causing shorts between screen-grid valve anode caps and the metallising, insulate it by enclosing it in a rubber thimble of the kind used in offices. The lead should pass through a small hole in the top of the thimble.



Split medium wave windings are an interesting feature in the circuit of the Cosmor model 3468 receiver. As a whole the circuit is planned on orthodox lines.

## BURGOYNE DE LUXE "B" MODEL

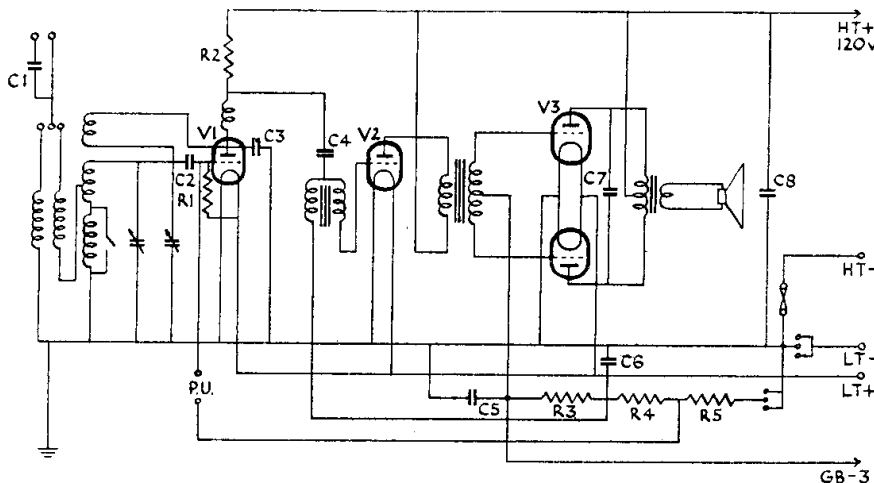
**Circuit.**—The detector valve, PM1HL (V1), operates as a leaky grid detector with reaction applied to the aerial coil. Gramophone connections are made to the grid of V1 and to a tapping on a G.B. potentiometer.

The coupling to the next valve is by auto transformer.

The driver valve, PM2DX (V2), is biased from a tapping on the G.B. potentiometer which consists of R3, R4 and R5 connected

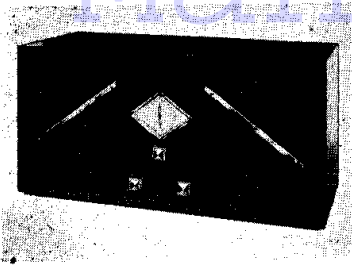
across the G.B. A typical driver transformer couples the driver to the class B output valve.

The output valve, PM2BA, operates with bias taken from the full negative potential of (Continued on opposite page.)



Detector, driver and a Class B valve (shown here as two valves) are utilised in the Burgoyne De Luxe Class B three. The provision of bias for the pick-up connection and the driver valve from a potentiometer across the G.B. battery is a novelty.

## BURGOYNE DE LUXE CLASS B (Contd.)



Twin speakers are provided in the De Luxe Class B three by Burgoyne Wireless (1930), Ltd. In other respects the set is similar to the standard Class B three.

the battery in use. The anode circuits are stabilised by a condenser C7 connected immediately across the anodes.

The speakers are matched, and the speech coils are connected in parallel.

### Batteries and Switching.—

H.T., Drydex S48, Large black plug H.T.—  
Small do. —3 or—4.5 v.  
Red plug, +120.

The switch in either L.W. or M.W. position connects the L.T. — lead to the H.T. — (fused) and chassis, and at the same time connects the potentiometer across the G.B.

**Quick Tests.**—These consist of touching the socket labelled "Gram." and observing the clicks produced when making routine valve tests.

**Removing Chassis.**—Remove batteries and pull out the L.S. connectors on the small panel.

Remove the three knobs (grub screw) and the one-hole fixing nut of the tuning condenser.

Lastly, remove two wood screws at back of chassis.

**General Notes.**—The condenser C6 may be found connected to the junction of R4 and R5, instead of as shown in the diagram.

The V1 grid leak is connected between the pick-up socket (V1 grid) and the positive

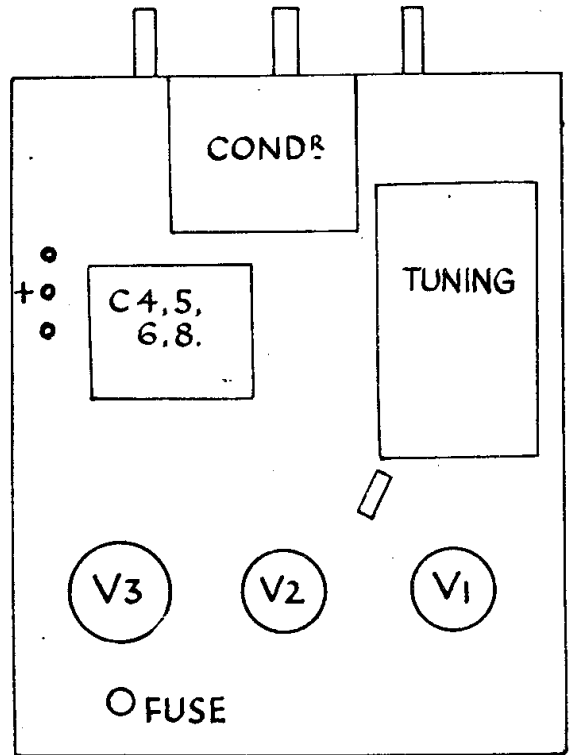
socket of V2, and wrongly appears to belong to V2.

Switch contacts are easily cleaned, and both the switch and the reaction condenser are fixed in slots. If either has to be replaced it is advisable to mark the exact position of the nut before removal.

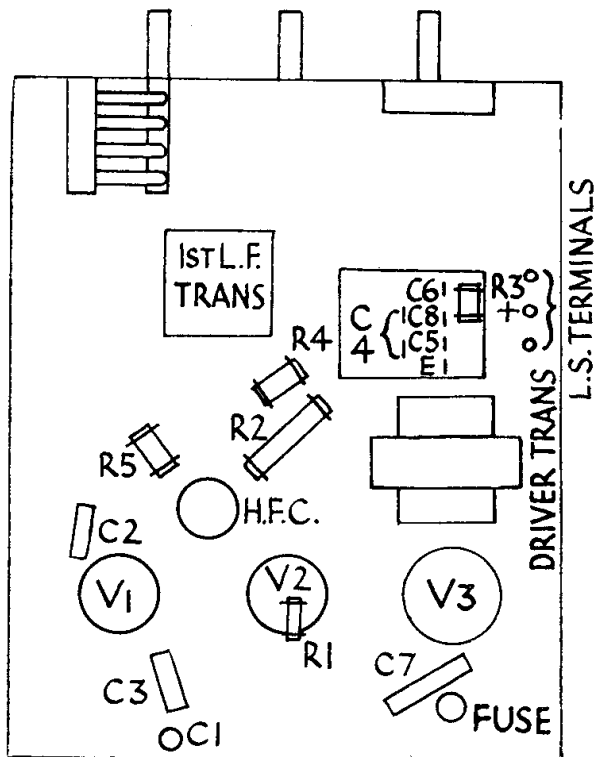
The correct connections for the small auto

transformer are:—C4 to OP and IS (joined), 1P to tapping between R3 and R4, and O.S. to grid of V2.

**Replacing Chassis.**—Push L.T. leads through into L.T. compartment and slide chassis into position. Insert holding screws behind chassis and replace the condenser locking nut and the knobs.



The diagram on the right shows how the parts on the top of the chassis of the Burgoyne Class B receiver are arranged.



The majority of components are underneath the Burgoyne chassis, as the layout on the left indicates. A precaution to observe concerning the switch and reaction condenser is given under "General Notes."

### VALVE READINGS

With 4.5 v. bias and new 120 v. H.T. No signal.

Valve.	Type.	Electrode.	Volts.	M.A.
1	PM1HL ...	anode	72	1.7
2	PM2DX ...	anode	120	2.3
3	PM2BA ...	each anode	120	2.2

### RESISTANCES

R.	Purpose.	Ohms.
1	V1 grid leak ...	2 meg.
2	V1 anode coupling ...	30,000
3	G.B. ptr. ...	180
4	G.B. ptr. ...	500
5	G.B. ptr. ...	300
—	Primary of output trans.	290+290

### CONDENSERS

C.	Purpose.	Mfd.
1	Series aerial ...	.0005
2	V1 grid ...	.0003
3	V1 anode by-pass ...	.0005
4	L.F. coupling to auto trans-former ...	.8
5	Decoupling G.B. to V3 ...	.8
6	Decoupling G.B. to V2 ...	.8
7	Stabilising V3 anodes ...	.004
8	Across H.T. ...	.8