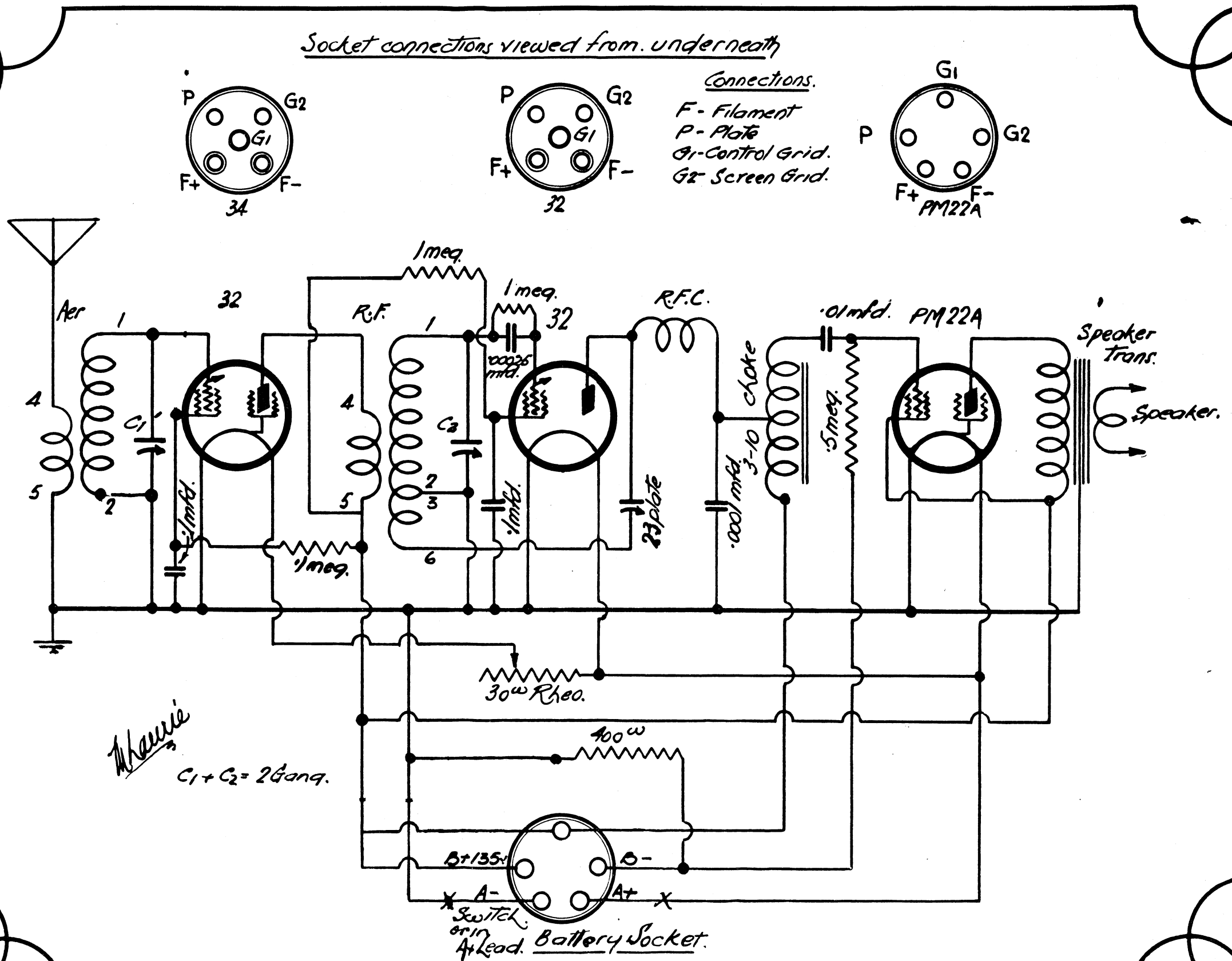
# RADIOKES 3 VALVE BATTERY RECEIVER SET

**TYPE 12-48 . . . . . £5-12-6.**

*Accumulator and Batteries, Valves and Speaker Extra*

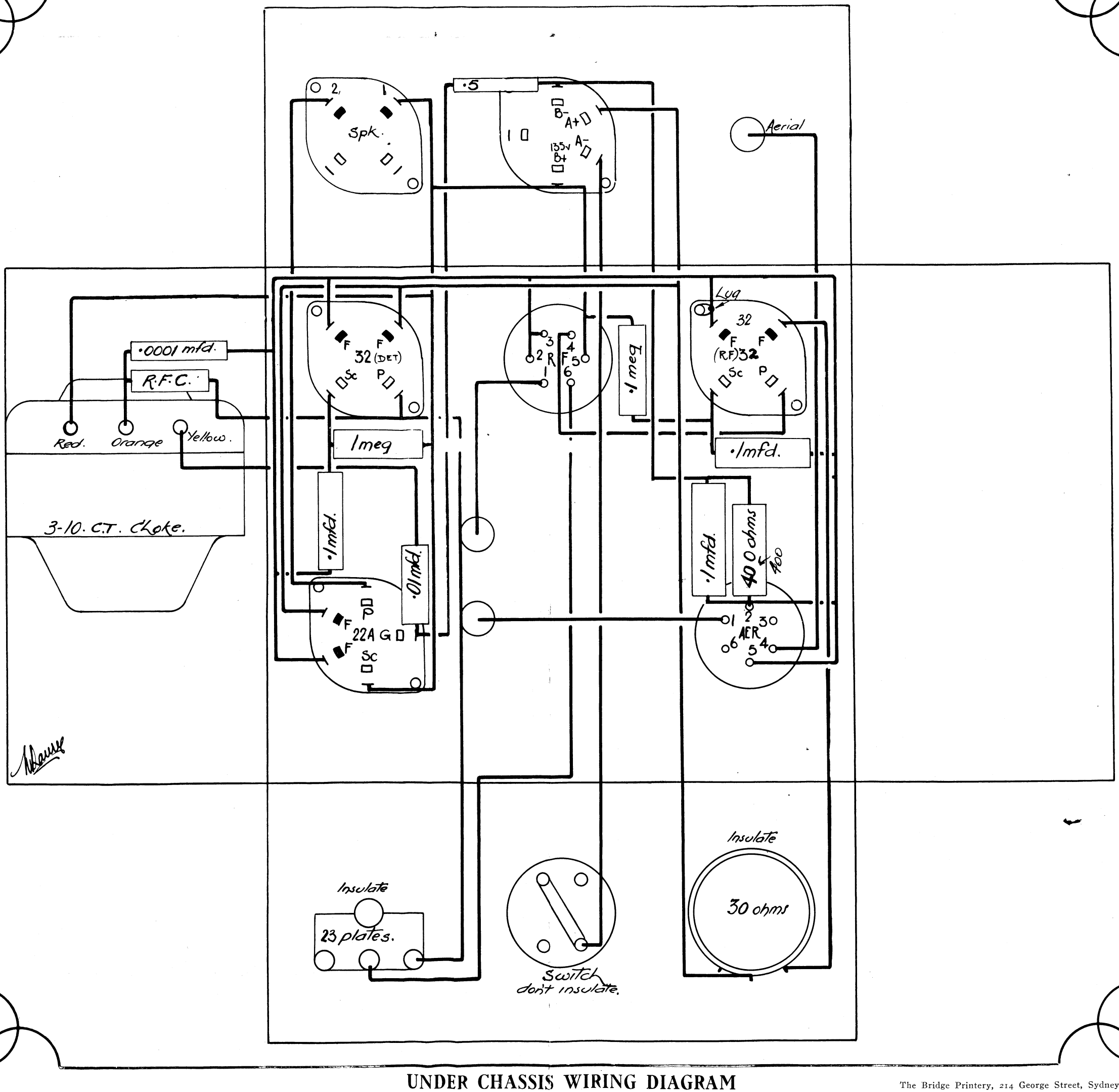



CIRCUIT DIAGRAM

# ASSEMBLY INSTRUCTIONS

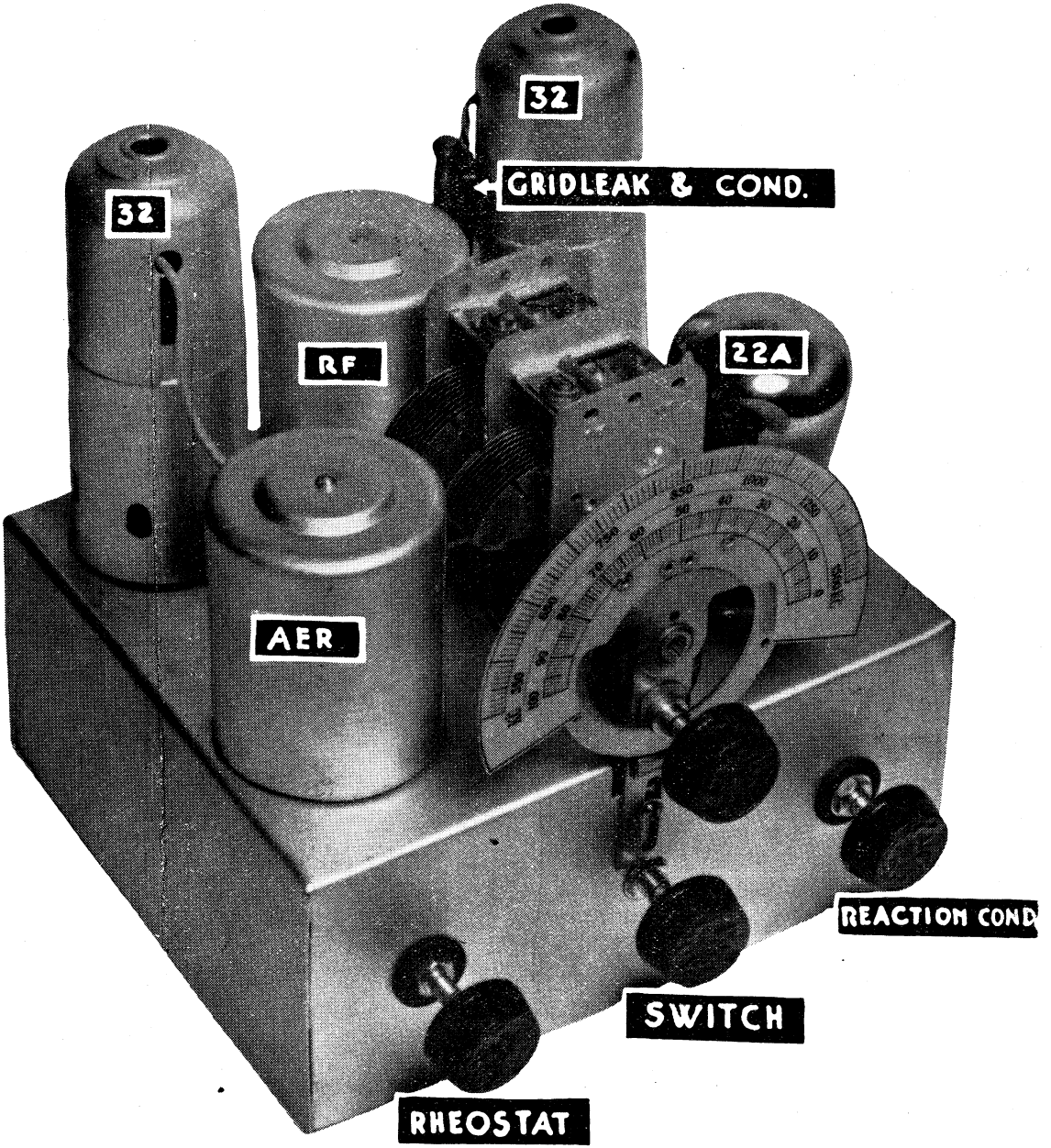
Commence by soldering two leads about 5in. long to the fixed plate lugs (which are nearest the chassis) of the 2-gang condenser. Then mount the condenser to the chassis, pushing the leads through the holes provided.

Mount the valve sockets. The 5-pin sockets are for the PM22A and the battery plug. Next mount the coils. You will see which is the aerial by looking at the bakelite bases, which are stamped. Continue by mounting the battery switch, then the volume controlling rheostat and the reaction control, both of which are insulated from the chassis. Do not mount the dial until the very last, otherwise it may be damaged by turning the set upside down to do the wiring. The 3-10 audio choke and the R.F. choke are not mounted yet. Mount the aerial and earth terminals and the set is ready to be wired up.

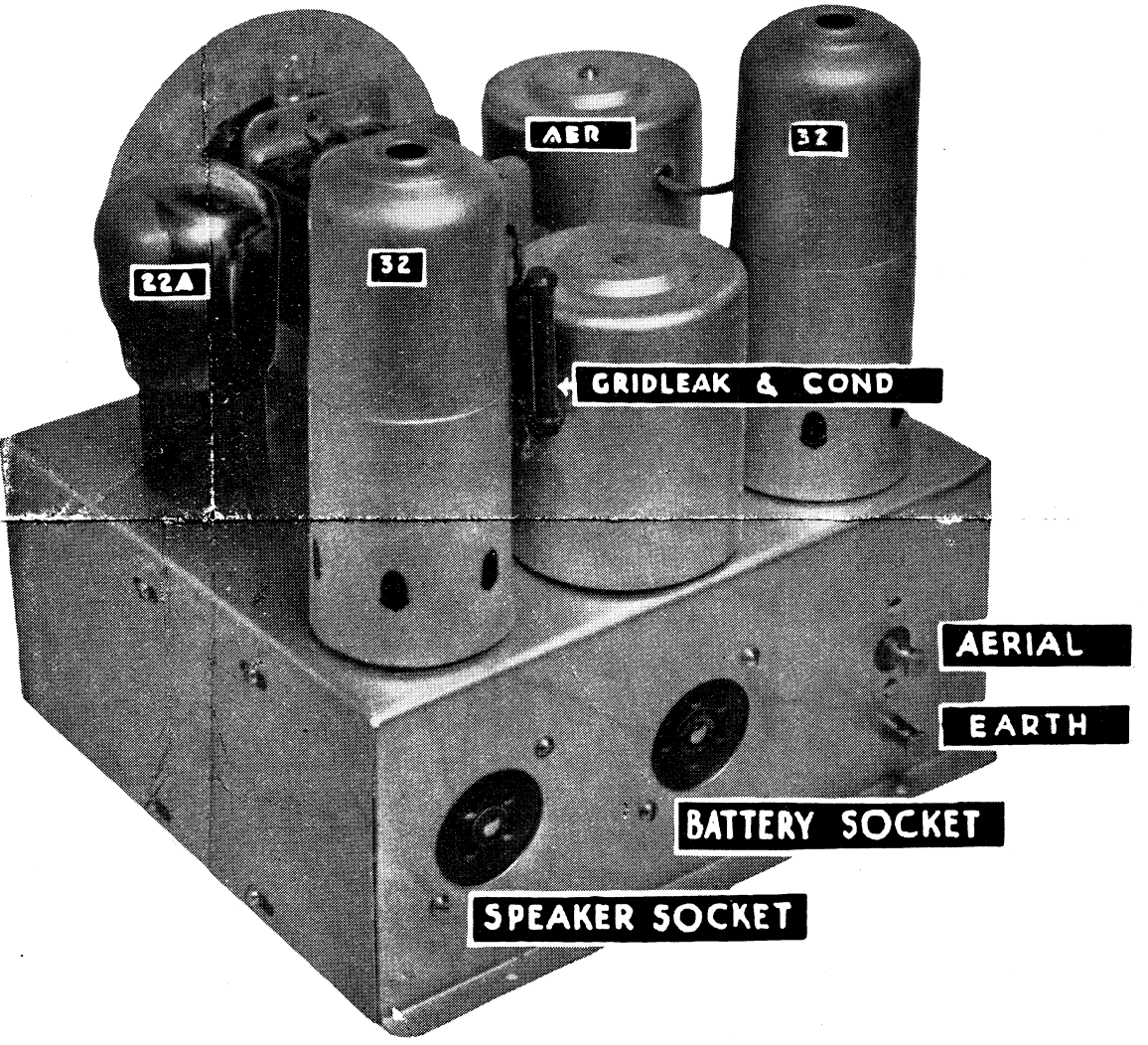



# UNDER CHASSIS WIRING DIAGRAM

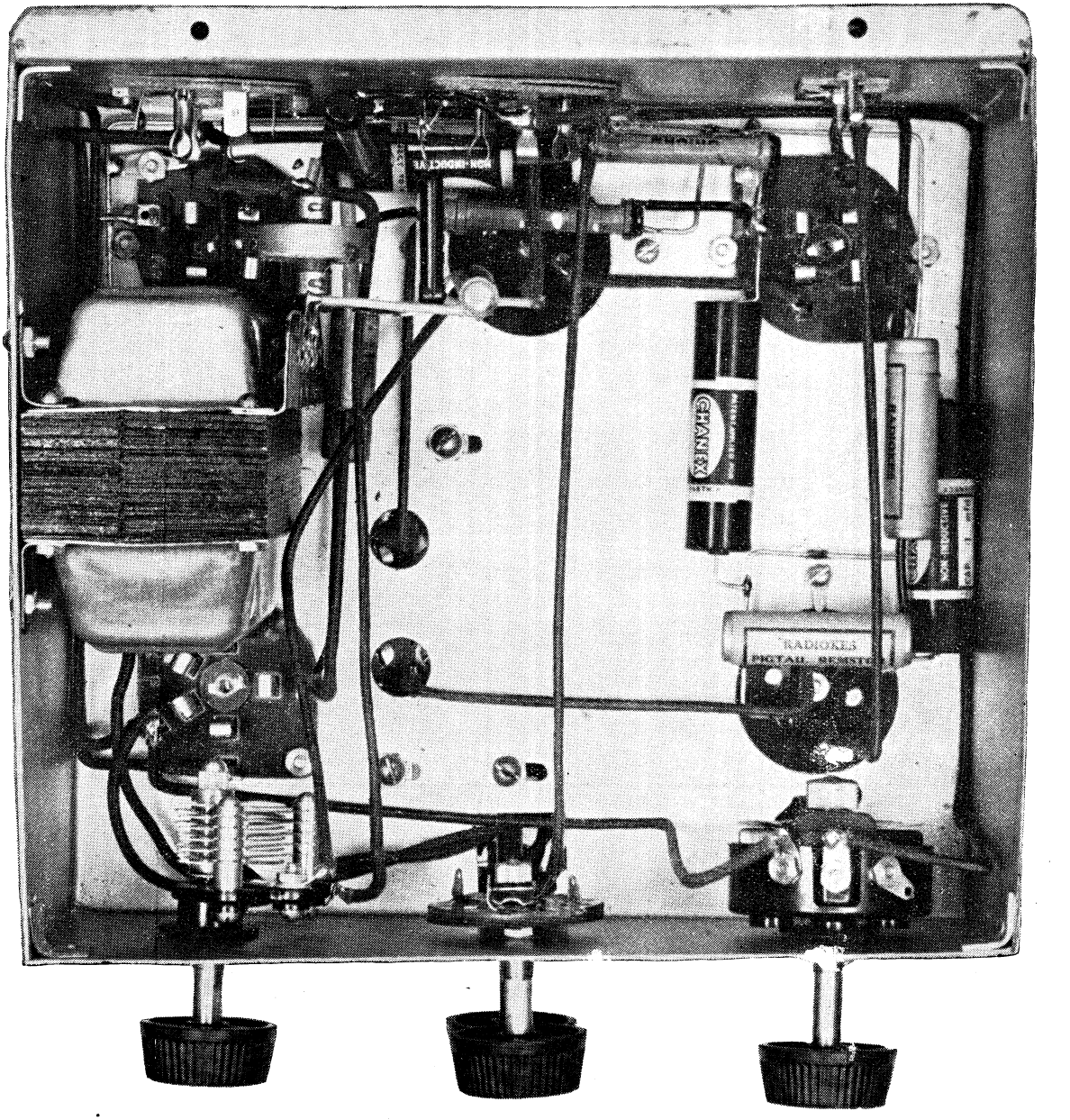
The Bridge Printery, 214 George Street, Sydney.




FRONT VIEW—Showing Positions of Components




**BACK VIEW—Showing Positions of Battery and Speaker Sockets, etc.**




**UNDER CHASSIS VIEW—Showing Lay-out and Wiring.**

# WIRING INSTRUCTIONS

Commence the wiring by soldering a tinned copper insulated lead to the F terminal on the PM 22A socket nearest the rear of the chassis. Continue the wire to the F terminal of the 32 (Det.) socket nearest the rear of the chassis; also for the sake of rigidity, with the aid of a solder lug, anchor the lead to the bolt, right in the corner of the 32 (Det.) socket nearest the last solder joint. Carry the wire parallel to the rear of the chassis and anchor it to the nearest corner bolt of the 32 (R.F.) socket with the aid of a solder lug. Carry the wire on and solder it to the F terminal of the 32 (R.F.) socket nearest the remaining holding down bolt of the aerial coil. Make a solder joint and complete this lead by soldering it on to the lug marked 5 and 2 of the aerial coil. This completes the lead which will, in future, be referred to as the earth wire.

Starting at the terminal marked A+ on the battery plug socket, run a wire to the remaining F terminal on the 32 (Det.) valve socket; from there on to the remaining F terminal on the 22A socket. Continue the wire on to the nearest terminal of the rheostat; from the middle terminal of the rheostat run a wire to the remaining F terminal on the 32 (R.F.) socket.

From terminal 2 on the aerial coil, join one end of the 400 ohm. Maxome and one end of a .1 mfd. condenser. Connect the remaining end of the 400 ohm to the terminal marked B— on the battery socket and the remaining end of the .1 mfd. to same.

Terminal No. 1 on the aerial coil joins to a lead from the fixed plates of the gang condenser, section nearest the front of the chassis. Next join a lead from the aerial terminal to No. 4 on the aerial coil. From the terminal marked P on the 32 (R.F.) socket, join a lead to the terminal marked 4 on the R.F. coil. From the remaining terminal on the 32 (R.F.) valve socket connect one end of a .1 condenser and one end of a .1 meg. resistor (brown body, black end, yellow dot). The other end of the condenser goes to earth and the other end of the .1 meg. resistor to the terminal marked B+ 135V on the battery socket. From the same terminal on the socket connect one end of a 1 meg. resistor (Brown body, Black end and Green dot)—the other end going to SC (G2) of 32 (Det.) socket.

Also, to the terminal marked SC (G2) on the 32 (Det.) socket join one end of a .1 mfd. condenser, the other end going to earth. From the B+ terminal join a wire to the detector coil marked 5.

The remaining wire on the gang condenser joins to terminal marked 1 on the detector (R.F.) coil, 2 and 3 on the detector (R.F.) coil are joined together and then to earth. From No. 6 on the detector coil join a wire to the remaining plates of the reaction condenser, that is the lug in the middle of the condenser.

Join a wire from one terminal of the switch (it does not matter which terminal) to the battery socket marked A—. From the battery socket terminal marked B— connect one end of a .5 meg resistor (green body, black end, yellow dot); the other end of the resistor joins to the 22A socket marked G (G1).

From the battery socket terminal marked B+ run a wire to the speaker socket lug marked 1. Carry the wire on to the 22A socket terminal marked SC (G2). From the speaker socket lug marked 2 run a wire to the 22A socket lug marked P. Next mount the 3-10 audio high impedance choke with the terminal strip nearest the rear of the chassis.

To the terminal, colour coded yellow, join one end of a .01 mfd. condenser, the other end of the condenser connect to G on the 22A socket (G1.) To the 3.10 terminal, orange, connect one end of the R.F. choke and one end of the .0001 fixed condenser. The other end of the R.F. choke joins to P on the 32 (Det.) valve socket and also to the fixed plate connection of the reaction condenser. The other end of the .0001 condenser connects to earth. The red terminal of the 3-10 choke connects to B+ 135 volt, also 5 on the R.F. (Det.) coil.

This completes the wiring, which should be thoroughly checked against the diagrams.

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