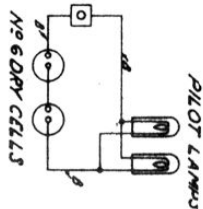


VALVE SYMBOLS LOOKING AT BOTTOM OF SOCKET.

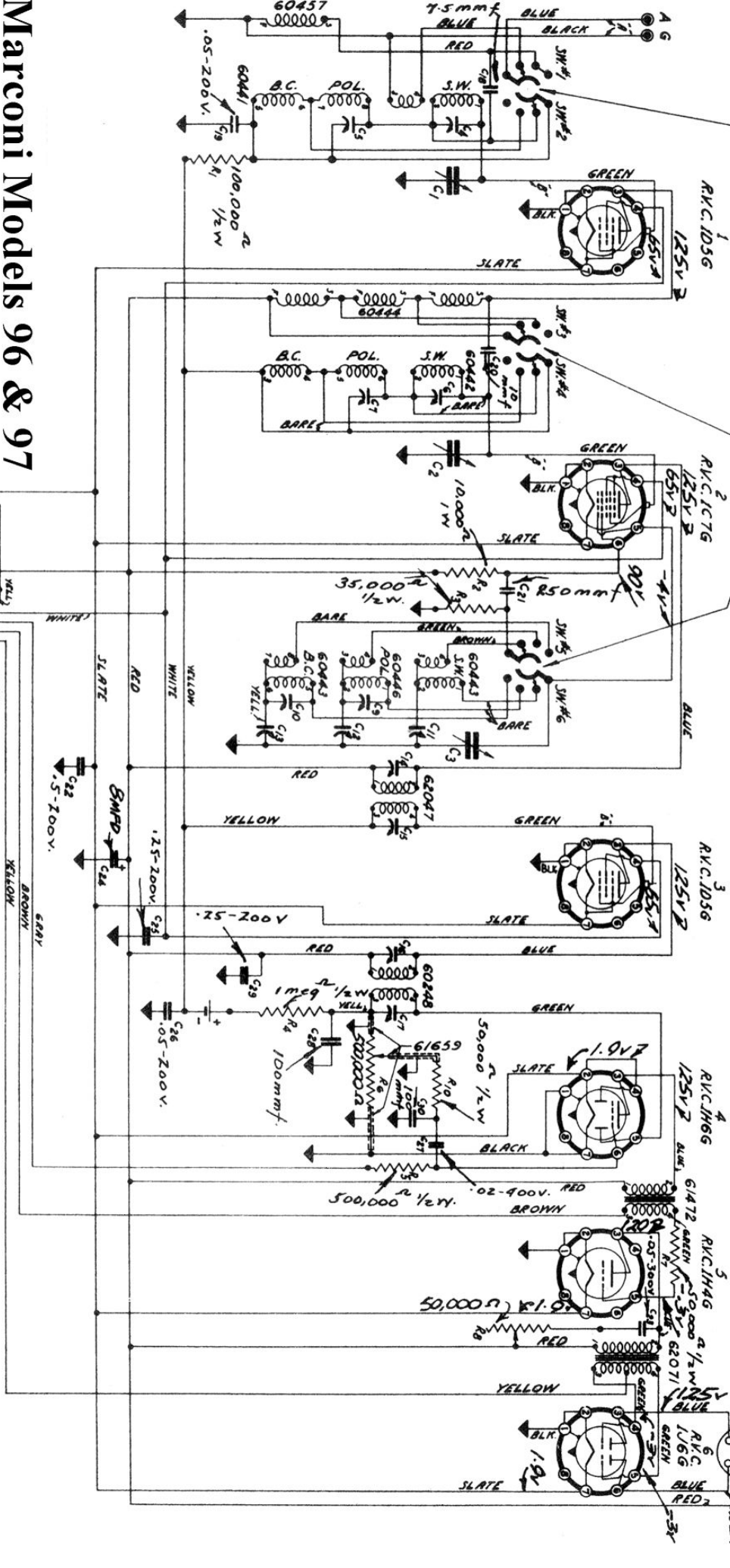
L.S. PLUG
PIN END

L.S. SOCKET
BOTTOM VIEW

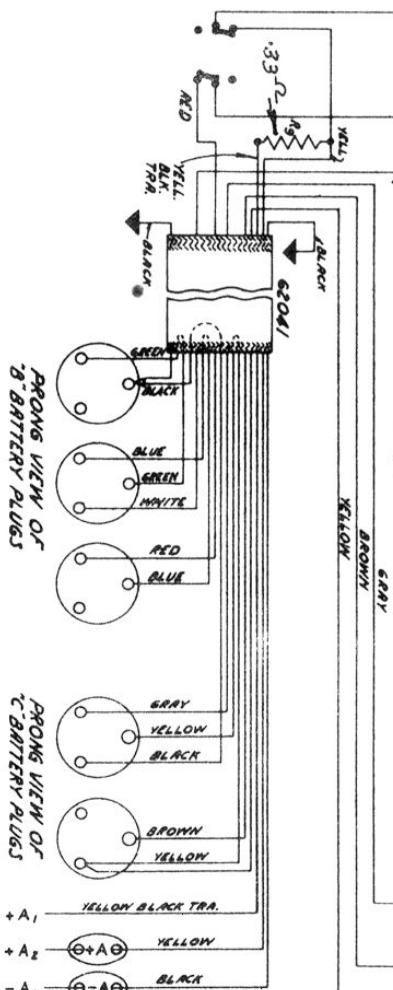
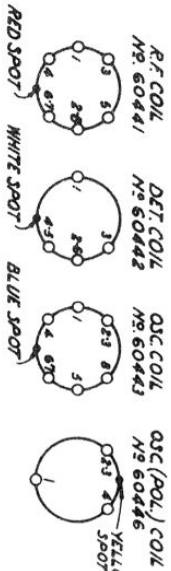
↑ DENOTES CHASSIS.
NUMBERS ON COILS & TRANSFORMERS SHOWS STARTS
& FINISHES - A-E. 000 NUMBERS = START - EVEN
NUMBERS = FINISHES.



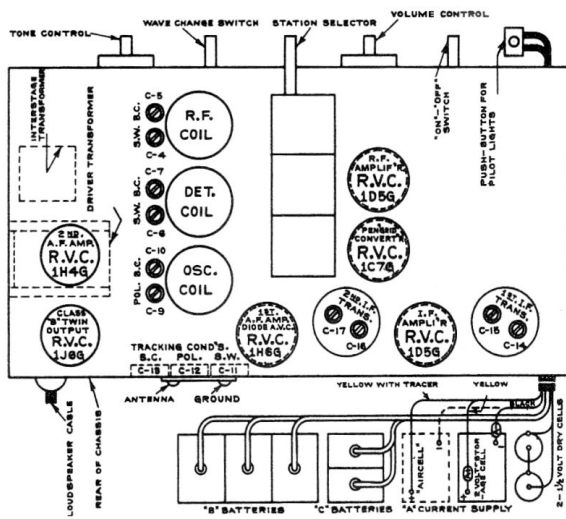
FRONT VIEW - WAVE CHANGE SWITCH NO. 60458
SWITCHES SHOWN IN S.W. POSITION



Marconi Models 96 & 97 Battery Operated Radio



NOTE: FOR AIR CELL
OPERATION USE LEADS +A1, -A1,
FOR 2V STORAGE CELL
OPERATION USE LEADS +A2, -A1



In order to properly realign this receiver the radiotrician should have available an output meter and a well attenuated test oscillator capable of giving the following frequency fundamentals:-

- 462.5 KC for I.F. alignment.
- 1500 KC and 580 KC for broadcast band alignment.
- 4800 KC and 1720 KC for police band alignment.
- 16,000 KC and 5600 KC for short wave band alignment.

The manual volume control should always be kept at maximum, and the signal from the test oscillator should be kept as low as possible. In any case the signal should not be of sufficient strength to bring the automatic volume control into operation.

If a Cathode Ray Oscillograph is used instead of an output meter the vertical plates should be connected between the junction R6, C17 and C28, i.e., the upper soldering lug on the volume control and chassis. The alignment should produce a round topped, rather than a sharp peaked image.

ALIGNMENT OF INTERMEDIATE FREQUENCY TRANSFORMERS

Set gang capacitor at minimum capacity and supply a modulated 462.5 KC signal from a test oscillator to the control grid cap of the 1C7G converter tube through a 0.1 mfd. capacitor leaving the grid connector in place. Adjust in order C17, C16, C15 and C14 for maximum output. This operation should be checked to ascertain that maximum output has been obtained.

ALIGNMENT OF BROADCAST BAND

- (1) Set gang capacitor at maximum capacity (plates meshed).
- (2) Set dial pointer in a horizontal position on the left hand side, i.e., midway between the two scales.
- (3) Rotate tuning knob until pointer is at 1500 KC.
- (4) Supply a 1500 KC signal from a test oscillator to the aerial and ground leads.

- (5) Adjust broadcast oscillator trimmer C10 to tune in the 1500 KC signal.
- (6) Adjust R.F. trimmers C7 and C5 for maximum output.
- (7) Shift test oscillator to 580 KC.
- (8) Rotate the tuning capacitor until the 580 KC signal is reached.
- (9) Adjust broadcast oscillator tracking capacitor C13 while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest reading of the output meter is obtained.
- (10) Recheck at 1500 KC.

ALIGNMENT OF POLICE BAND

- (1) Turn wavechange switch to police band — centre position.
- (2) Rotate tuning knob until pointer is at 4800 KC marking on dial.
- (3) Supply a 4800 KC signal from test oscillator to the aerial and ground leads.
- (4) Adjust police band oscillator trimmer C9 while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest reading of the output meter is obtained.
- (5) Shift test oscillator to 1720 KC.
- (6) Rotate tuning, capacitor until 1720 KC signal is reached.
- (7) Adjust police band oscillator tracking capacitor C12 while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest reading of the output meter is obtained.

ALIGNMENT OF SHORT WAVE BAND

- (1) Turn wavechange switch to short wave band extreme left.
- (2) Rotate tuning knob until pointer is at 16MC marking on dial.
- (3) Supply a 16 MC signal from test oscillator to aerial and ground leads.
- (4) Adjust short wave R.F. trimmers C6 and C4 for maximum output.
- (5) Shift test oscillator to 5600 KC.
- (6) Rotate tuning capacitor until 5600 KC signal is reached.
- (7) Adjust short wave oscillator tracking capacitor C11, while rocking the gang capacitor to and fro past the signal until the combination of adjustments giving the greatest reading of the output meter is obtained.
- (8) Recheck 16 MC alignment.

Marconi Models 96 & 97 Battery Operated Radio