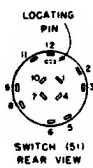
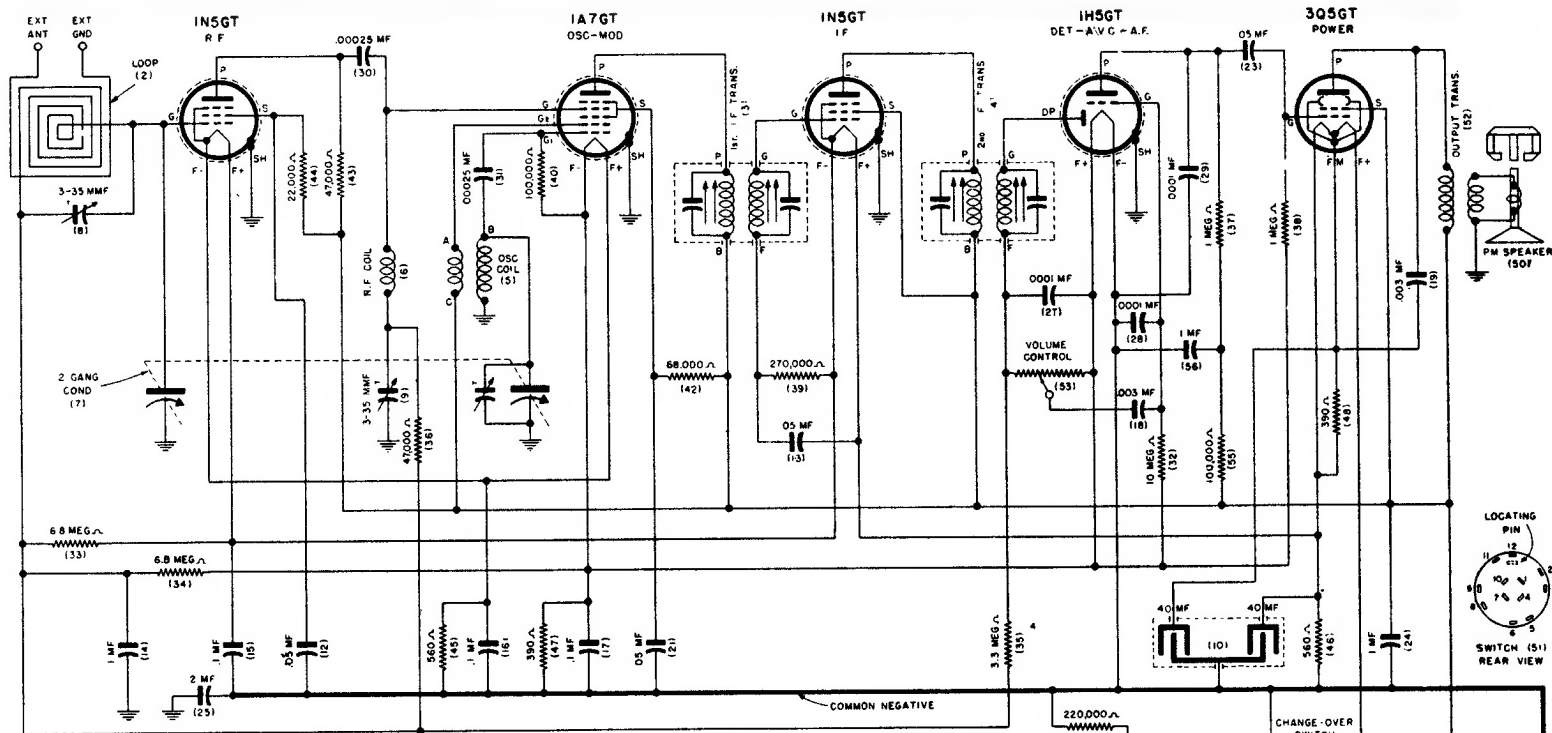
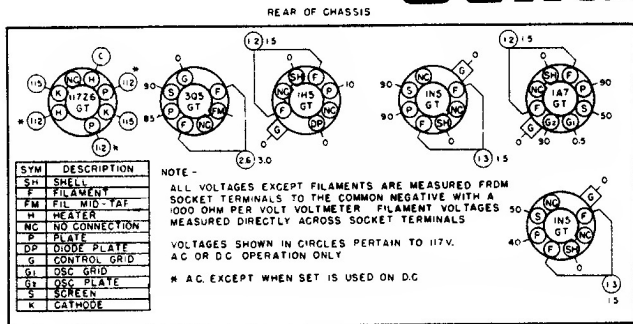


# MODEL 285P and IU-285P



## Sentinel



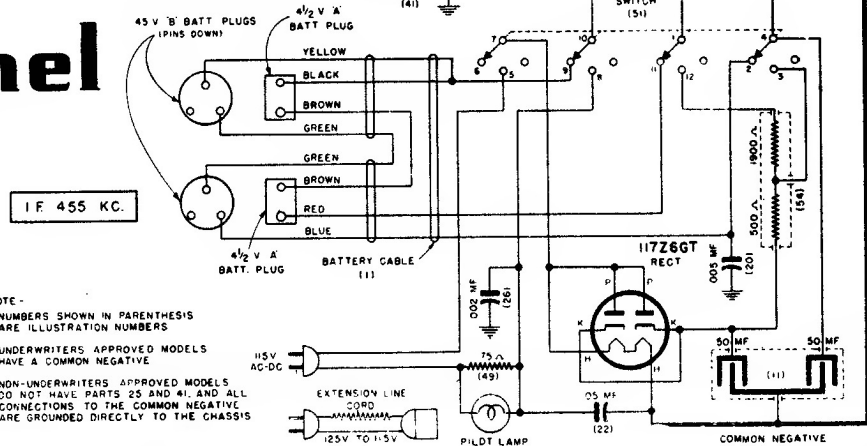
SYM	DESCRIPTION
SH	SHELL
F	FILAMENT
FM	FIL. MID-YAF
H	HEATER
NC	NO CONNECTION
P	PLATE
DP	DIODE PLATE
G	CONTROL GRID
GL	OSC. GRID
ST	OSC. PLATE
S	SCREEN
K	CATHODE

NOTE - ALL VOLTAGES EXCEPT FILAMENTS ARE MEASURED FROM SOCKET TERMINALS TO THE COMMON NEGATIVE WITH A 1000 OHM PER VOLT VOLTMETER. FILAMENT VOLTAGES MEASURED DIRECTLY ACROSS SOCKET TERMINALS.

VOLTAGES SHOWN IN CIRCLES PERTAIN TO 117V. AC OR DC OPERATION ONLY.

\* A.C. EXCEPT WHEN SET IS USED ON D.C.

VOLTAGE TABLE  
(BOTTOM VIEW OF CHASSIS)



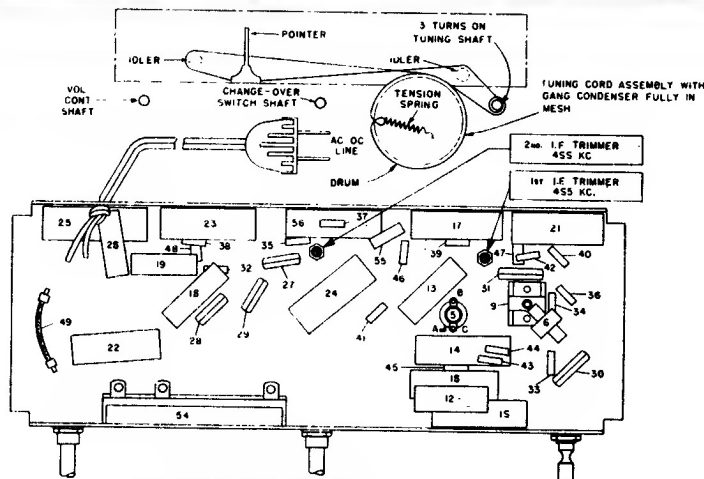
NOTE - NUMBERS SHOWN IN PARENTHESES ARE ILLUSTRATION NUMBERS.

UNDERWRITERS APPROVED MODELS HAVE A COMMON NEGATIVE.

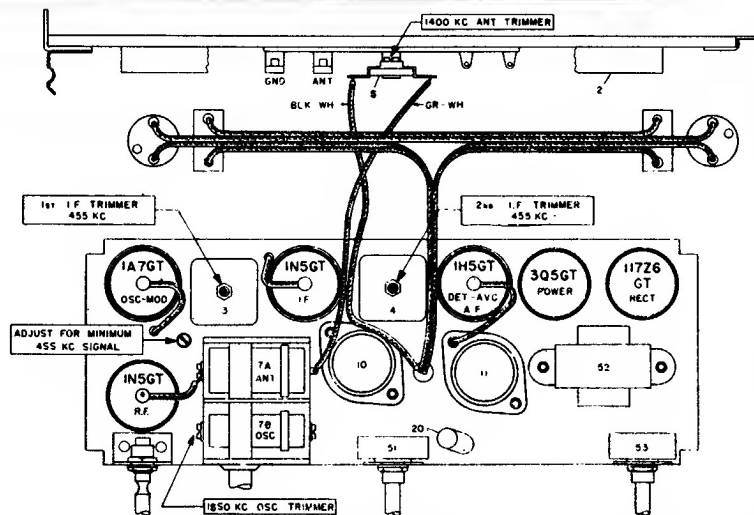
NON-UNDERWRITERS APPROVED MODELS DO NOT HAVE PARTS 25 AND 41, AND ALL CONNECTIONS TO THE COMMON NEGATIVE ARE GROUNDED DIRECTLY TO THE CHASSIS.

IF 455 KC.

# Sentinel



NOTE - PARTS 25 AND 41 ARE OMITTED ON NON-UNDERWRITERS APPROVED MODELS. SEE WIRING DIAGRAM.



Before starting alignment:

- Check tuning dial adjustment by tuning gang condenser until plates touch maximum capacity stop (completely in mesh) at which point the dial needle must be exactly even with the last line at the low frequency end of the dial calibration. If dial needle does not point exactly to last line move to correct position.
- Use an accurately calibrated test oscillator with some type of output measuring device.
- WHEN ADJUSTING 1650 KC OSCILLATOR TRIMMER AND 455 KC TRIMMER** remove chassis from cabinet and disconnect the white-green and white-black loop connection wires from the 1400 KC loop antenna trimmer. Attach a 1 megohm resistor across these wires and feed output of test oscillator across the 1 megohm resistor.
- THE 1400 KC LOOP ANTENNA TRIMMER** is accessible through hole in cabinet back. It should be adjusted only after all other adjustments have been made and with the set mounted in the cabinet and the back **IN CLOSED** position. When aligning the 1400 KC trimmer connect test oscillator output to the "ANT" and "GND" clips that are attached to the inside of the cabinet back.

MODEL 285P and IU-285P

Steps	Set receiver dial to:	TEST OSCILLATOR			Refer to parts layout diagram for location of trimmers mentioned below:
		Adjust test oscillator frequency to:	Use dummy antenna in series with output of test oscillator consisting of:	Attach output of test oscillator to	
1	Any point where no interfering signal is received	Exactly 455 K. C.	0.2 Mfd. Condenser	High side to grid of 1A7GT tube, Low side to chassis (if non-Underwriter Approved) or Common Negative (if Underwriter Approved).	Adjust each of the 2nd I.F. transformer trimmer adjustment screws for maximum output, then adjust each of the 1st I.F. transformer trimmer adjustment screws for maximum output.
2	Rotate gang condenser to maximum capacity	Exactly 455 K. C.	See paragraph (C) above	See paragraph (C) above	Adjust R. F. coil trimmer for <u>minimum</u> 455 K. C. signal.
3	Rotate gang condenser to minimum capacity	Exactly 1650 K. C.			Adjust 1650 K. C. oscillator trimmer for maximum output.
4	Approximately 1400 K. C.	Approx. 1400 K. C.	See paragraph (D) above	See paragraph (D) above	Adjust 1400 K. C. antenna trimmer for maximum output.