

SYM	DESCRIPTION
SM	SHELL
F	FILAMENT
P	PLATE
S	SCREEN
G	CONTROL GRID
G <sub>1</sub>	OSC. GRID
S <sub>1</sub>	OSC. PLATE
DP	DIODE PLATE
NC	NO CONNECTION

ALL VOLTAGES EXCEPT FILAMENTS ARE MEASURED FROM SOCKET CONTACTS TO CHASSIS WITH A 1000 OHM PER VOLT VOLTMETER AND 90V. 'B' SUPPLY. FILAMENT VOLTAGES ARE MEASURED DIRECTLY ACROSS SOCKET TERMINALS WITH A 1.5 VOLT 'A' SUPPLY.

'A' BATTERY DRAIN - 200 MA  
'B' BATTERY DRAIN - 9 MA

VOLTAGE TABLE  
(BOTTOM VIEW OF CHASSIS)

I.F. - 455 KC.

NOTE  
NUMBERS SHOWN IN PARENTHESES  
ARE ILLUSTRATION NUMBERS

# Sentinel Radio

## MODEL 289-T

### FOUR-TUBE

Be sure to follow procedure carefully and in the order given—otherwise the receiver will be insensitive and the dial calibration incorrect. For alignment procedure read tabulations from left to right. If more than one adjustment is required on any one band, make the adjustment marked (1) first, (2) next, etc.

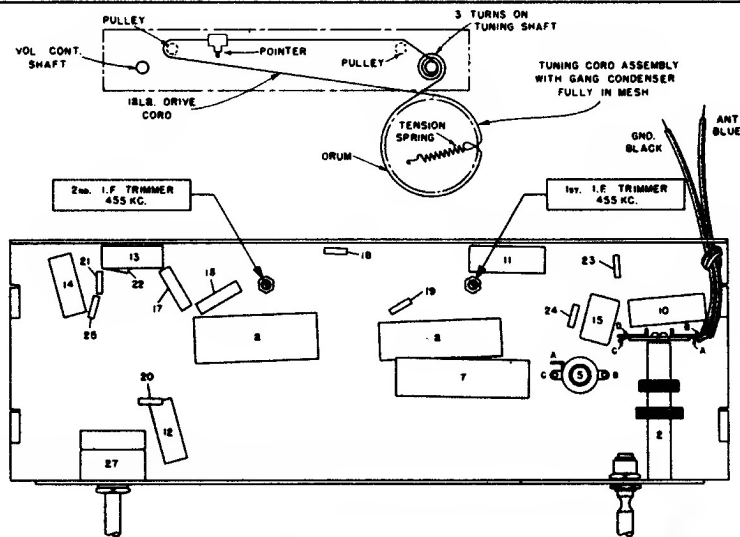
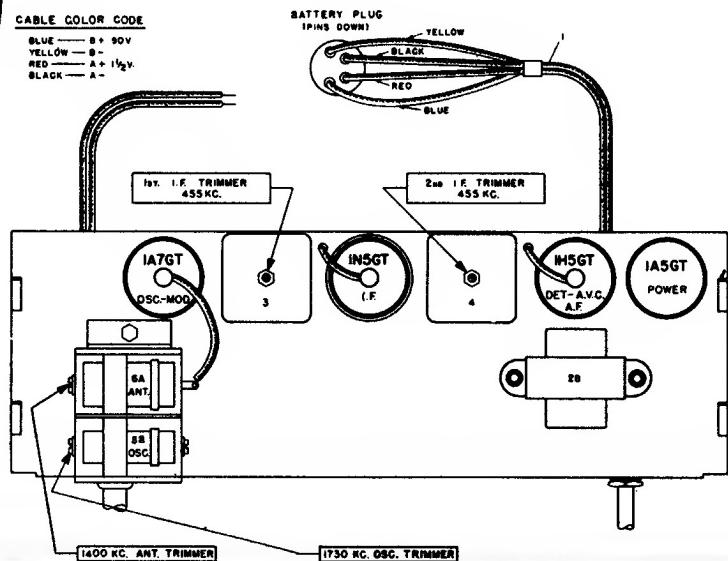
Before starting alignment:

- (a) 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.
- (b) Use an accurately calibrated test oscillator with some type of output measuring device.

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	I.F. Any point where no interfering signal is received	455 K. C.	.02 MFD. condenser	High side to grid terminal of 1A7GT tube DO NOT REMOVE CAP. Low side to receiver black ground lead.	Adjust each of the second I. F. transformer trimmers for maximum output—then adjust each of the first I. F. trimmers for maximum output.
2	Exactly 1730 K. C.	Exactly 1730 K. C.	.00025 MFD. condenser	Receiver blue antenna lead Receiver black ground lead	Adjust 1730 K. C. oscillator trimmer for maximum output.
3	Exactly 1400 K. C.	Exactly 1400 K. C.	.00025 MFD. condenser	Receiver blue antenna lead Receiver black ground lead	While rocking gang condenser adjust 1400 K. C. antenna trimmer for maximum output.

**CABLE COLOR CODE**

BLUE — 8 + 90V  
 YELLOW — 8 -  
 RED — + + 1½V.  
 BLACK — A -



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*Radio*  
**MODEL 289-T**