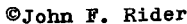




Sonora Radio & Telev., Corp.

Sonora Radio & Telev., Corp.			
	Model: RET	Chassis:	Year: Pre 1949
	Power:	Circuit:	IF:
	Tubes:		
	Bands:		
Resources			
Riders 17 (XVII) SONORA 17-3			
Riders 17 (XVII) SONORA 17-4			
Riders 17 (XVII) SONORA 17-5			

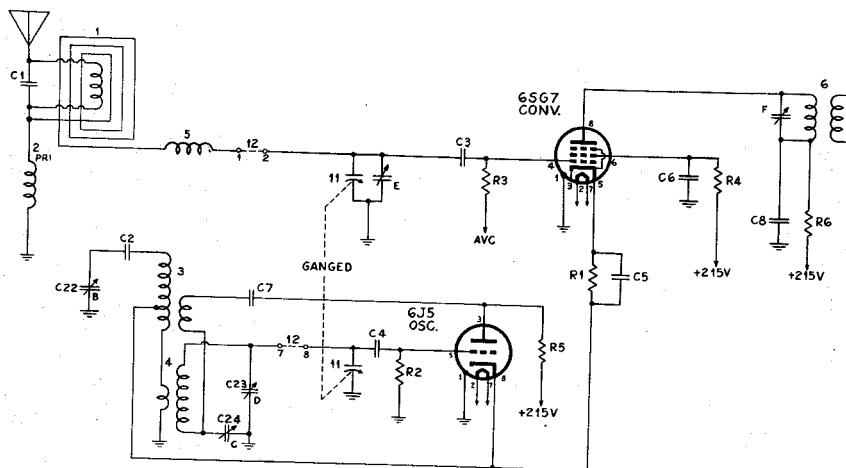


"clarified schematics"

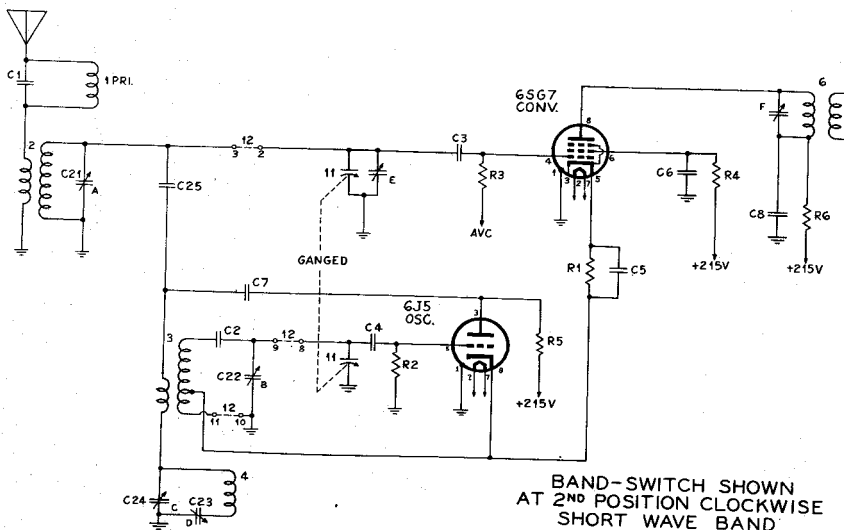
PAGE 17-4 SONORA

MODEL RET

SONORA RADIO & TELEV. CORP.



BAND-SWITCH SHOWN
AT 1ST POSITION
BROADCAST BAND
535-1720 KC.



BAND-SWITCH SHOWN
AT 2ND POSITION CLOCKWISE
SHORT WAVE BAND
5.65-18.3 MC.

SONORA RADIO & TELEV. CORP.

Lack of sensitivity and poor tone quality may be due to any one or a combination of causes such as weak or defective tubes or speaker, open or grounded bias resistor, bypass condenser, etc. Never attempt to redesign set until all other possible sources of trouble have been first thoroughly investigated and definitely proved not to be the cause.

NOTE: IT IS ABSOLUTELY NECESSARY THAT AN ACCURATELY CALIBRATED TEST OSCILLATOR WITH SOME TYPE OF OUTPUT MEASURING DEVICE BE USED WHEN ALIGNING THE RECEIVER AND THAT THE PROCEDURE BE CAREFULLY FOLLOWED. OTHERWISE THE RECEIVER WILL BE INSENSITIVE AND THE DIAL CALIBRATION WILL BE INCORRECT. THE TRIMMERS WILL BE REFERRED TO BY THEIR FUNCTION AS INDICATED ON THE PARTS DIAGRAM.

ALIGNMENT PROCEDURE

GENERAL DATA. The alignment of this receiver requires the use of a test oscillator that will cover the frequencies of 455, 600, 1400, 1720, 6000, 15000, and 18300 KC, and an output meter to be connected across the primary or secondary of the output transformer. If possible, all alignments should be made with the volume control on maximum and the test oscillator output as low as possible to prevent the AVC from operating and giving false readings.

CORRECT ALIGNMENT PROCEDURE. The intermediate frequency (I.F.) stages should be aligned properly as the first step. After the I.F. transformers have been properly adjusted and pecked, the Broadcast and Short Wave bands should be adjusted.

I.F. ALIGNMENT. Remove the chassis and loop antenna from the cabinet and set them up on an open bench. The test oscillator exactly as described in the General Data should be used. The test oscillator should be taken to have no iron or other metal near the loop. Do not make this set-up on a metal bench. With the Band Switch set to the Broadcast Band and with the gang condenser set at minimum, adjust the test oscillator to 455 KC and connect the output to the grid of the first detector tube 6B57 through a .05 or .1 mfd. condenser. The ground on the test oscillator should be connected to the receiver ground. Align all four I.F. trimmers to peak or maximum reading on the output meter.

BROADCAST BAND ALIGNMENT. With the Band Switch turned

to the Broadcast Position, connect the test oscillator to the antenna set through a 100 mmfd. (0001) condenser, and the ground on the test oscillator to the receiver ground. With the gang condenser set at minimum capacity, set the test oscillator at 1720 KC, and adjust the oscillator (for 1720 KC trimmer). For the antenna adjustment set the test oscillator at 1400 KC, and tune in the signal on the gang condenser. Adjust the antenna trimmer (or 1400 KC trimmer) for maximum signal. Next set the test oscillator at 600 KC, and tune in the signal on the gang condenser. Adjust the 600 KC pad while rocking the gang to obtain maximum output.

SHORT WAVE BAND ALIGNMENT. With the band switch turned to the S.W. position, connect the test oscillator to the antenna with a 400 ohm dummy and the ground on the test oscillator to the ground connection on the receiver. Adjust the S.W. oscillator to give a maximum output with the dial at 18300 KC (extreme end). Set the test oscillator at 15000 KC and tune in the signal with the dial. Adjust the antenna trimmer for maximum output. With a strong signal input turn the dial to approximately 1 MC. lower in frequency and pick up the signal. If the signal is weak, adjust the antenna trimmer to return the dial to 18300 KC to reduce the capacity in the oscillator trimmer until a second signal is received. Proceed in this manner until the alignment of the antenna and feedback for image before with the alignment of the antenna and feedback for image frequency. Check the sensitivity at 6000 KC to determine if the coils and mica pad are not defective.

TUNING RANGE

This receiver is designed to operate over two tuning ranges: the broadcast band which extends from 535 to 1720 Kilocycles (KC) (174 to 560 Meters), and the International Short Wave Band which extends from 545 to 18.3 Megacycles (MC) (16.4 to 53 Meters).

DIAL CALIBRATION. (STANDARD BROADCAST BAND). The outside scale is calibrated from 55 to 170 (Standard Broadcast). This band covers all Standard Broadcast frequencies of the United States,

Canada, Mexico, Cuba, and many Central and South American Countries. Add a zero to figures on the scale to obtain kilocycles. **DIAL CALIBRATION.** (SHORT WAVE BAND). The entire inside scale is devoted to short wave American and foreign broadcasts. This scale is calibrated from 5 to 18 megacycles (MC). Consult the Sonora Short-Wave Station list for the proper frequency and time for short wave reception.