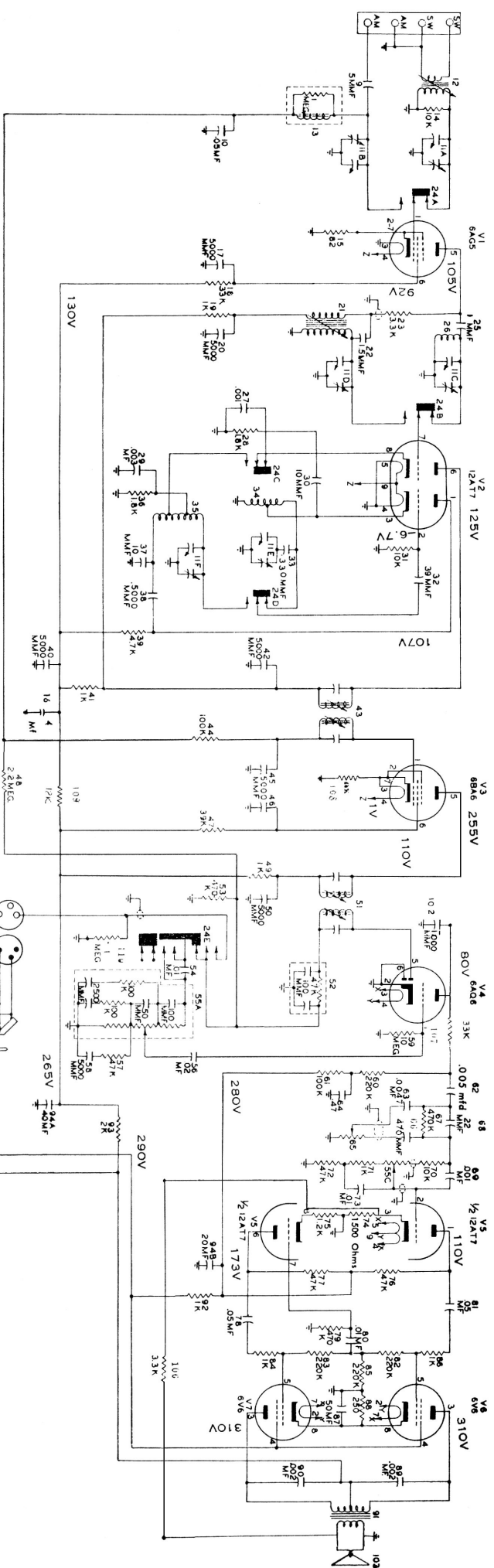


STEWART-WARNER R641 (Chanson)



VOLTAGE MEASUREMENTS

All voltages measured to receiver chassis using a 20,000 ohm per volt meter with the receiver connected to a 117 volt 60 cycle power supply

Short all antenna terminals together.

Tune receiver at the low end of the dial at a point where there is no received signal with the Volume control set to its minimum position

Set Tone controls to the maximum clockwise position. Connect both speakers to output of receiver.

All voltages were measured with the Band Switch set to the AM (middle) position

No voltage reading at a tube element indicates zero voltage or voltage which cannot be accurately measured with a 20,000 ohm per volt meter.

HUM CONTROL

This control balances out the amount of A.C. hum derived from the heater filaments of the audio tubes.

Should this hum become objectionable or if audio tube replacement is undertaken, adjustment of this control may be required and can be accomplished as follows:

1. With the receiver installed in the cabinet, set the receiver to the Phono position.
2. Turn the two Tone controls to the maximum clockwise position.
3. Turn the Volume control to the maximum clockwise position.
4. In a quiet room, adjust Hum control, located at side of chassis to the minimum hum position.

Lettered terminals in illustrations correspond to similarly lettered terminals on the circuit diagram.

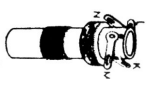


FIG. 9
AM R.F.
COIL
W521137

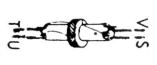


FIG. 10
AM OSC.
COIL
W500433

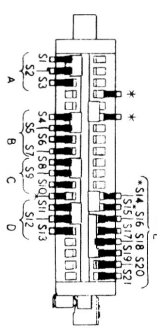
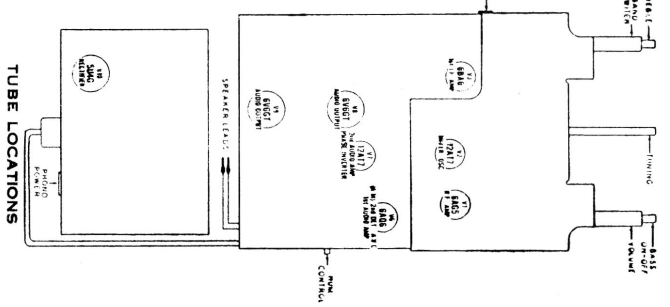


FIG. 14
BAND SWITCH
W522317



BROADCAST BAND - "AM" - ALIGNMENT PROCEDURE

1. Disconnect leads from SW-AM antenna terminal strip (labeled SW-SW-AM-AM) at back of chassis; also disconnect speaker plug and record changer plugs. Remove all chassis and speaker from cabinet. If desired, allow speaker to remain in cabinet and connect to receiver by extension leads.
2. With the gang condenser fully meshed, dial pointer should be in the position indicated by the last division below 55 on the dial. If it is set incorrectly, release clip on pointer and reposition pointer.
3. Connect an output meter across speaker voice coil.
4. Connect ground lead of signal generator to the receiver chassis.
5. Set volume control to maximum volume position and use a weak signal from the signal generator.
6. Set band switch to the "AM" (middle) position.

DUMMY ANT. IN SERIES WITH SIGNAL GENERATOR	CONNECT HIGH SIDE OF SIGNAL GENERATOR TO	SIGNAL GENERATOR FREQUENCY	RECEIVER DIAL SETTING	TRIMMER OR SLUG NUMBER	TRIMMER DESCRIPTION	TYPE OF ADJUSTMENT
.1 MFD. Condenser	Lug on trimmer #6 at top of gang (see Fig. 16 for location of trimmer)	455 KC 400 cycle AM modulated.	Any point where it does not effect the signal.	#1 & #2 #3 & #4	2nd I. F. 1st I. F.	Adjust for maximum output. Then repeat adjustment.
"	AM Antenna Terminal	1500 KC 400 cycle AM modulated.	1500 KC	#5	AM Oscillator	Adjust for maximum output.
"	AM Antenna Terminal	1500 KC 400 cycle AM modulated.	Tune to 1500 KC generator signal.	#6	AM R. F.	Adjust for maximum output.
"	AM Antenna Terminal	1500 KC 400 cycle AM modulated.	Tune to 1500 KC generator signal.	#7	AM Antenna	Adjust for maximum output.
"	AM Antenna Terminal	600 KC 400 cycle AM modulated.	Tune to 600 KC generator signal.	#8	Adjustable core of AM R. F. Coil	Adjust for maximum output.

Repeat adjustment of trimmer 6 & 7 or slug 8 until one no longer detunes the other.

SHORT WAVE - SW - ALIGNMENT PROCEDURE

1. If alignment of both AM and SW channels is required it is necessary to align the AM channel first, then align the SW channel as instructed in chart below (AM alignment procedure is given on the preceding page).
2. Disconnect all leads from antenna terminal strip (labeled SW-SW-AM-AM) at back of chassis; also disconnect speaker plug and record changer plugs. Remove chassis and speaker from cabinet. If desired, allow speaker to remain in cabinet and connect to receiver by extension leads.
3. With the gang condenser fully meshed, dial pointer should be in the position indicated by the last division below 9.5 MC on the dial. If it is set incorrectly, release clip on pointer and reposition pointer.
4. Set volume control at maximum volume position and use a weak signal from the signal generator.
5. Set band switch to the SW (extreme counter-clockwise) position.

DUMMY ANT. IN SERIES WITH SIGNAL GENERATOR	CONNECT HIGH SIDE OF SIGNAL GENERATOR TO	SIGNAL GENERATOR FREQUENCY	RECEIVER DIAL SETTING	TRIMMER OR SLUG NUMBER	TRIMMER DESCRIPTION	TYPE OF ADJUSTMENT
400 Ohm Resistor	SW Antenna Terminal	9.2 M.C.	Gang Cond. Fully Meshed	No. 10	S.W. Oscillator	Adjust for Maximum output
"	SW Antenna Terminal	15.5 M.C.	15.5 M.C.	No. 11	S.W. Oscillator	Adjust for Maximum output
"	SW Antenna Terminal	10.0 M.C.	10.0 M.C.	No. 12	S.W. R. F.	Adjust for Maximum output
"	SW Antenna Terminal	10.0 M.C.	10.0 M.C.	No. 13	S.W. Antenna	Adjust for Maximum output
"	SW Antenna Terminal	14.0 M.C.	14.0 M.C.	No. 14	S.W. R. F.	Adjust for Maximum output
"	SW Antenna Terminal	14.0 M.C.	14.0 M.C.	No. 15	S.W. Antenna	Adjust for Maximum output

Repeat adjustment No. 13, 14 and No. 11, 12 checking tracking and calibration at 12.0 M.C.