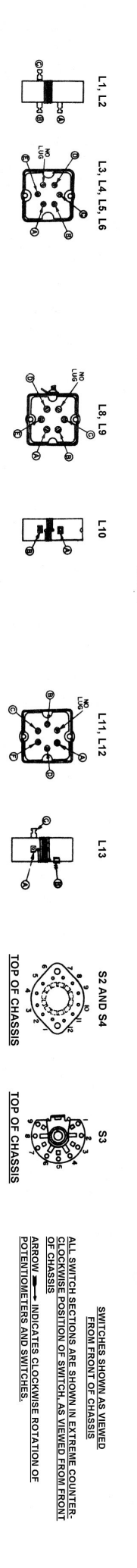


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Philips CM95A

BAND CHANGE SWITCH IN THIRD POSITION FROM EXTREME COUNTERCLOCKWISE

PHONO UNIT



SWITCHES SHOWN AS VIEWED FROM FRONT OF CHASSIS

ALL SWITCH SECTIONS ARE SHOWN IN EXTREME COUNTER-CLOCKWISE POSITION OF SWITCH, AS VIEWED FROM FRONT OF CHASSIS

ARROW  INDICATES CLOCKWISE ROTATION OF POTENTIOMETERS AND SWITCHES.

ALIGNMENT OF RECEIVER
Turn the volume control to the full clockwise position for maximum output and the tone control to the extreme clockwise position. Set the performance switch to the left position. With the variable capacitor to the left position.

Equipment Required

OUTPUT INDICATOR: A high resistance A.C. voltmeter and an output transformer.

SIGNAL GENERATOR: A generator capable of supplying modulated signals between 455 kc and 22 Mc.

Equipment Connections and Alignment Procedure

OUTPUT INDICATOR: Connect the A.C. voltmeter to the external loudspeaker connection located in the rear of the receiver. During the alignment, keep the output below 1.25 A.C. volts across this jack. If the meter is not sensitive enough to indicate 1.25 volts, connect the secondary of an output transformer to the external speaker connection and connect the A.C. voltmeter across the primary. When using the latter method, the maximum output reading should be kept below 30 A.C. volts. When the output indication increases, regulate the signal generator attenuator to restore the original indication.

SIGNAL GENERATOR: Connect the ground lead of the signal generator to the "ground" terminal in the rear of the receiver and the output lead to the points indicated in the chart below, in series with the specified resistor of capacitor. The 400 ohm resistor must be located at the receiver antenna terminal.

ALIGNMENT PROCEDURE

Operation Steps	SIGNAL GENERATOR Output connections to Receiver	Frequency	Range Indicator	Tuning Capacitor	See Notes	Adjust in stated order for Maximum Output
1	To 6SK7GT Control Grid (4) Through .05 ufd. Capacitor	455 kc	Black Pos.1	Min.		2nd. I.F. Trimmers C34, C35.
2	To Stator C27 Through .05 ufd. Capacitor	455 kc	Pos.1	Min.	A	1st. I.F. Trimmers C47, C46.
3	To Antenna Terminal Through 200 ufd. Capacitor	570 kc	Pos.1	570 kc		Broadcast Padder C34 BC-RF Coil L8
4	To Antenna Terminal Through 200 ufd. Capacitor	1600 kc	Pos.1	1600 kc	B	BC-Osc. Trimmer C32 BC-RF Trimmer C23 BC-Ant. Trimmer C2
5	To Antenna Terminal Through 400 ohms Resistance	7.0 Mc	Pos.2	7.0 Mc	C	SW Osc. Trimmer C36 SW RF Trimmer C24 SW Ant. Trimmer C3
6	To Antenna Terminal Through 400 ohms Resistance	2.9 Mc	Pos.2	2.9 Mc	D	SW Osc. Coil L12
7	To Antenna Terminal Through 400 ohms Resistance	21.5 Mc	Pos.5	21.5 Mc	C	BS Osc. Trimmer C43
8	To Antenna Terminal Through 400 ohms Resistance	15.2 Mc	Pos.5	15.2 Mc	D	BS Osc. Coil L13
9	To Antenna Terminal Through 400 ohms Resistance	21.5 Mc	Pos.5	21.5 Mc	B	BS RF Trimmer C22 BS Ant. Trimmer C11
10	To Antenna Terminal Through 400 ohms Resistance	15.2 Mc	Pos.5	15.2 Mc	F	BS RF Coil L10 BS Ant. Coil L2
11	To Antenna Terminal Through 400 ohms Resistance	11.6 Mc	Pos.4	11.6 Mc	C	BS Osc. Trimmer C42 BS RF Trimmer C20 BS Ant. Trimmer C10
12	To Antenna Terminal Through 400 ohms Resistance	9.6 Mc	Pos.3	9.6 Mc	C	BS Osc. Trimmer C40 BS RF Trimmer C18 BS Ant. Trimmer C8

* or through a standard dummy antenna.

ALIGNMENT NOTES

Note "A" - After step 2 has been completed, do not make any further adjustments to the 2nd I.F. Trimmers C54 and C53.

Note "B" - After operation 4 has been completed, re-tune to 570 kc and repeat operation 3, then repeat operation 4.

Note "C" - Unscrew oscillator trimmer capacitor to minimum capacity (counterclockwise). Turn

adjustment clockwise until first output peak is obtained. Make adjustments using this peak.

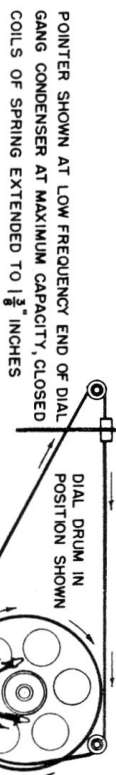
Note "D" - Check high frequency end of dial for accuracy, adjust oscillator trimmer slightly if necessary.

Note "E" - Rock tuning capacitor while adjusting antenna trimmer for maximum output.

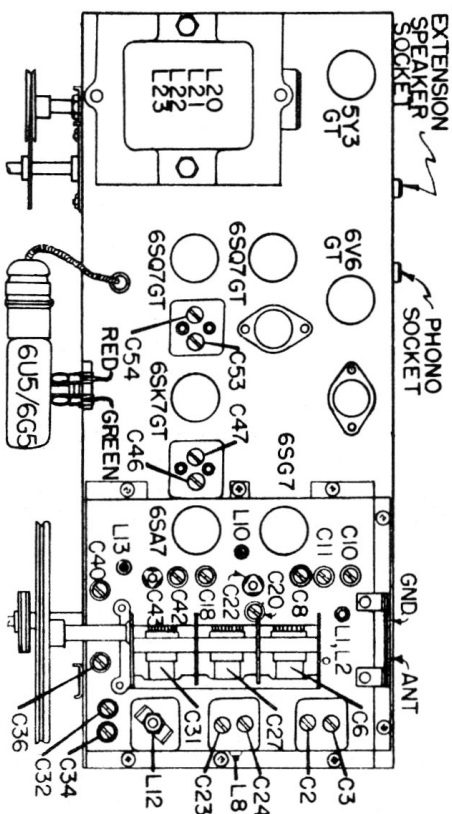
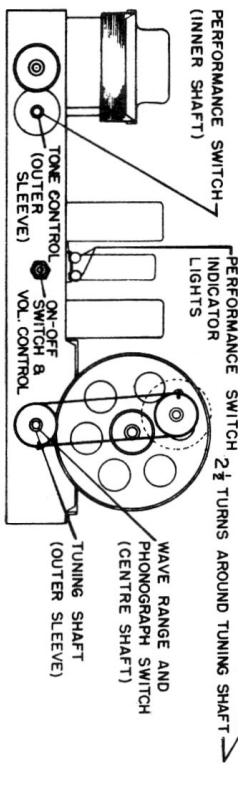
Note "F" - Repeat operation 9.

TUBE SOCKET VOLTAGES

PIN	6SG7	6SA7	6SK7GT	6SQ7GT	6V6GT	5Y3GT	6U5/6G5
1	-	-	-	-	-	-	6.3 ac
2	-	-	-	-	-	-	305
3	-	245	-	1.25	13.2	260	*
4	*	95	*	-	-	245	300 ac 245
5	-	-	3	-	-	-	-
6	105	-	100	140	160	-	300 ac -
7	6.3 ac 6.3 ac	6.3 ac	6.3 ac	6.3 ac	6.3 ac	6.3 ac	-
8	245	*	225	-	-	11	305



THE RANGE INDICATOR SHOULD BE IN POSITION "P" WHEN THE WAVE RANGE SWITCH IS IN THE EXTREME COUNTER-CLOCKWISE POSITION.



Philips CM95A

