



PHILCO

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MODEL 444 — RUN 2.

Run 2 Models are similar in most respects to Run 1 Models. The differences are as follows:—

WAVE-CHANGE SWITCH.—New type fitted. Wiring connections and front view shown in new Circuit Diagram.

LONG WAVE AERIAL TRIMMER.—In Run 2 Models, the position of VC.10 is reversed so that adjustment is made from underneath the chassis instead of on top as for Run 1 Models. The Oscillator Coil (T.4) is also moved back one inch to allow more room for the new type wave-change switch. The alterations are shown in new Top Chassis and Under Chassis Diagrams. Tables 1 and 2 and Alignment Procedure are the same as for Run 1 Models.

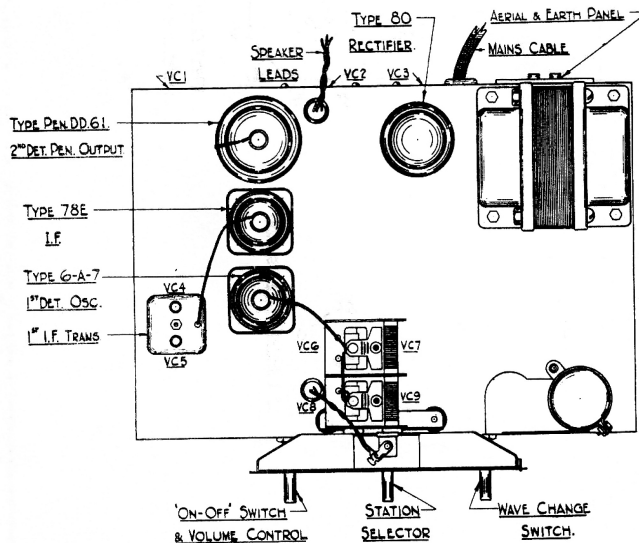
PARTS AND PRICE LIST — MODEL 444 — RUN 2.

Remove:—

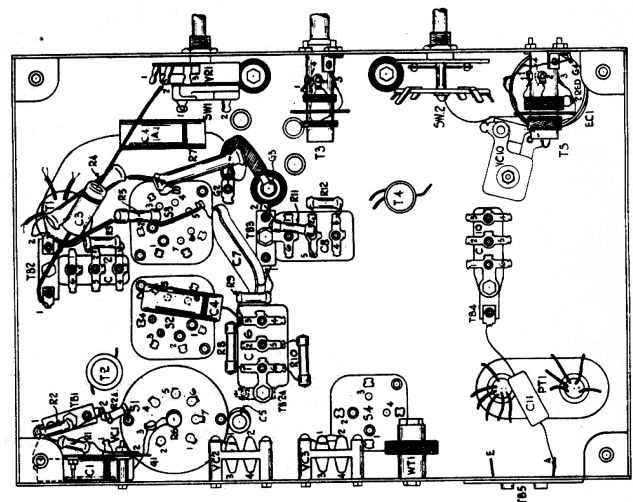
REF. NO.	DESCRIPTION.	PART NO.
S.W.2	.. Wave-change Switch	42-1164

Add:—

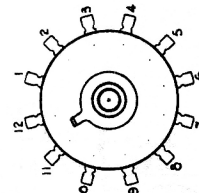
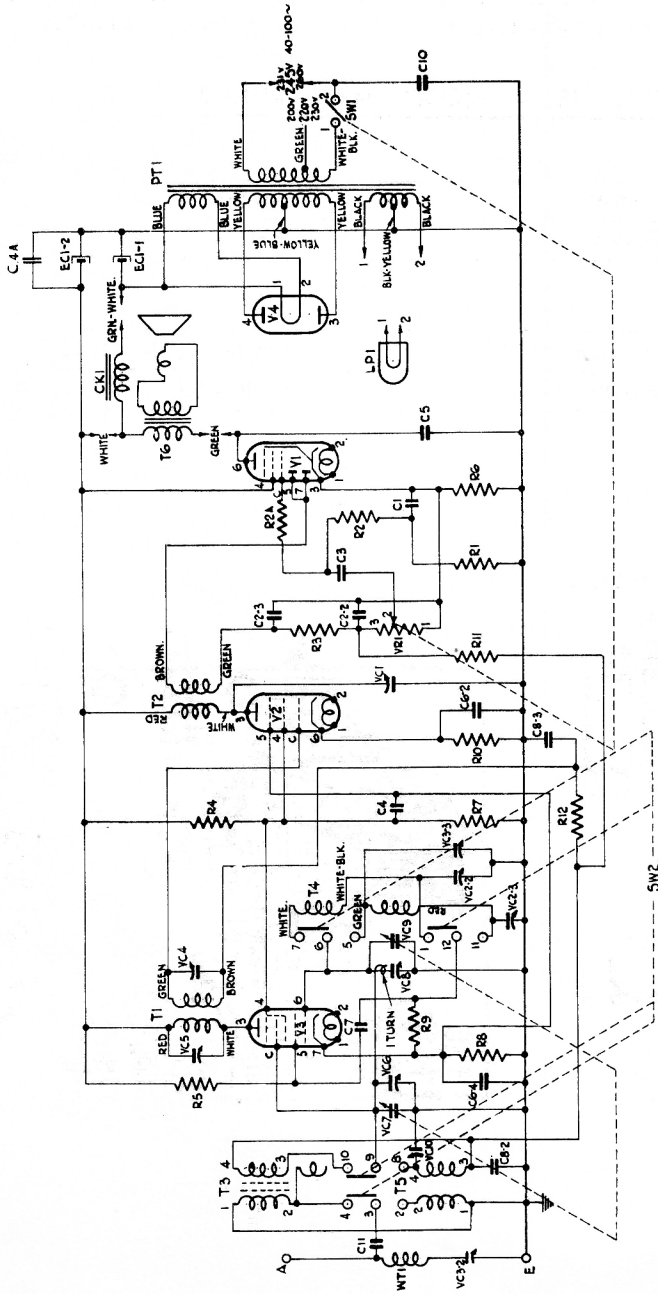
REF. NO.	DESCRIPTION.	PART NO.	LIST PRICE.
S.W.2	.. Wave-change Switch	420-1013	2/3



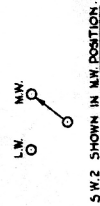
TOP CHASSIS DIAGRAM.



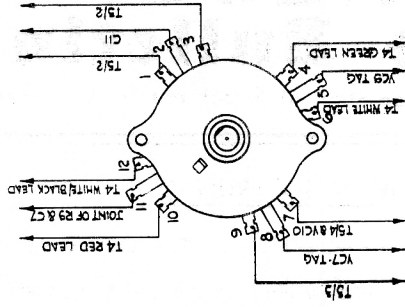
UNDER CHASSIS DIAGRAM.



FRONT VIEW OF SW2.
CHASSIS BEING UPSIDE DOWN.

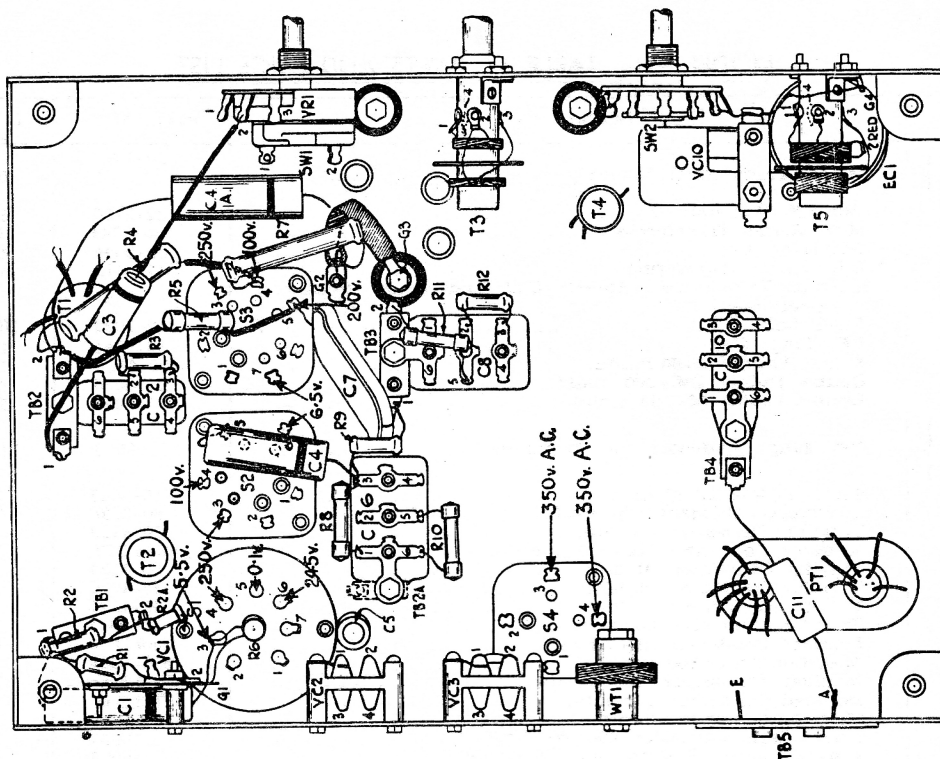


SW2 SHOWN IN M.V. POSITION.



WIRING & FRONT VIEW OF ALTERNATIVE SW2.
CHASSIS BEING UPSIDE DOWN.

SCHEMATIC DIAGRAM.



MODEL 444. UNDER CHASSIS DIAGRAM.

ALIGNMENT PROCEDURE.

Before leaving the Factory all Philco receivers are accurately aligned, but if misalignment is suspected through damage it should not be attempted without instruction in the correct adjustment of the trimming and padding condensers. It should only be carried out with the aid of an accurately calibrated Signal Generator and for this purpose the PHILCO ALL-PURPOSE SET TESTER MODEL 077 is recommended.

Connect the Output Meter across the Primary of the Output Transformer, i.e., green and white leads. With gang condenser fully closed, check that pointer reads on index line. Set wave-change switch to M.W. (clockwise rotation), turn gang open to fullest extent and Volume Control to maximum.

INTERMEDIATE FREQUENCY: The I.F. trimmers (VC's 1, 4 and 5) should first be carefully adjusted by feeding in a 451 Kc. signal from the Signal Generator to the Grid cap of the 6A7 valve (with grid lead disconnected) and the Signal Generator earthed to the Receiver chassis. Adjust the Signal Generator attenuator to give a half-scale reading on the Output Meter. The I.F. trimmers must then be adjusted for maximum output.

NOTE: It is necessary to carry out this operation several times taking particular care with VC.1: unless this is done, the I.F. will peak at the wrong place.

WAVE-TRAP: Transfer Signal Generator lead via a Standard Dummy to the Aerial socket and replace grid lead of the 6A7 valve. Feed in a 451 Kc. signal and adjust VC.3 (screw) for minimum output.

MEDIUM WAVES: Set gang condenser at 1400 Kc. Feed in a signal of 1400 Kc. and trim VC's 8 and 6 in that order for maximum output.

Feed in and tune a 600 Kc. signal. Rock gang and pad VC.2 (screw) for maximum output. Readjust trimming at 1400 Kc. and padding at 600 Kc. until no further improvement results.

LONG WAVES: Turn wave change switch to L.W. (counter clockwise rotation). Set gang condenser at 290 Kc. Feed in a signal of 290 Kc. and trim VC3 (nut) and VC10 in that order, for maximum output.

Feed in and tune a 160 Kc. signal. Rock gang and pad VC2 (nut) for maximum output. Readjust VC3 (nut) and VC10 at 290 Kc. and VC2 (nut) at 160 Kc. until no further gain can be obtained.

Check calibration.

MODEL 444. TABLE 3. PARTS AND PRICE LIST.

REF. No.	DESCRIPTION.	PART NO	LIST PRICE s. d.
T.1 VC.4 VC.5	1st I.F. Transformer Assembly	320-1047	5 6
T.2	2nd I.F. Transformer	32-2130	5 6
T.3	M.W. Aerial Transformer	320-1044	3 0
T.4	Oscillator Coil	32-2094	4 6
T.5	L.W. Aerial Transformer	320-1045	4 0
T.6	Output Transformer, Speech Coil and Cone (Speaker Complete)		
CK.1	Field Coil	360-1030	18 0
WT.1	I.F. Trap Coil	38-6851	1 0
VC.1	Single Padder 15-80 mmfd.	310-6013	1 0
VC.2	Double Padder 240+500 mmfd.	31-6099	2 3
VC.3	Double Padder 50+125 mmfd.	31-6098	2 0
VC.6 VC.7 VC.8 VC.9	Two-gang Condenser and Trimmers	31-1566	11 6
VC.10	Single Padder 15-80 mmfd.	310-6013	1 0
EC.1	Electrolytic Condenser 8+8 mfd.	30-2028	6 0
C.1	Tubular Condenser 0.1 mfd.	30-4122	6
C.2	Moulded Condenser 110+110 mmfd.	8035 D.U.	1 0
C.3	Tubular Condenser .01 mfd.	30-4124	6
C.4	Tubular Condenser .05 mfd.	30-4020	7
C.4A.	Tubular Condenser, .1 mfd.	30-4170	9
C.5	Tubular Condenser .003 mfd.	30-4042	7
C.6	Moulded Condenser .09+.09 mfd.	4989 D.G.	1 3
C.7	Mica Condenser 800 mmfd.	300-1005	8
C.8	Moulded Condenser .05+.05 mfd.	3615 D.G.	1 2
C.10	Moulded Condenser .015 mfd.	3793 S.G.	8
C.11	Mica Condenser 250 mmfd.	300-1014	6
R.1	1/4 watt Carbon Resistor. 490,000 ohms.	6097	9
R.2	1/4 watt Carbon Resistor. 490,000 ohms.	6097	9
R2A	1/4 watt Carbon Resistor. 100,000 ohms.	33-1047	9
R.3	1/4 watt Carbon Resistor. 51,000 ohms.	6098	9
R.4	1 watt Carbon Resistor. 25,000 ohms.	3656	9
R.5	1/4 watt Carbon Resistor. 10,000 ohms.	33-1000	9
R.6	Wire-wound Resistor. 140 ohms.	330-3003	9
R.7	1 watt Carbon Resistor 51,000 ohms.	4237	9
R.8	1/4 watt Carbon Resistor 700 ohms.	330-1008	9
R.9	1/4 watt Carbon Resistor. 51,000 ohms.	6098	9
R.10	1/2 watt Carbon Resistor. 800 ohms. (+5%)	330-1009	9
R.11	1/4 watt Carbon Resistor. 2 Megohms	33-1025	9
R.12	1/4 watt Carbon Resistor 2 Megohms.	33-1025	9
VR.1	Volume Control 330,000 ohms.		
SW.1	On-Off Switch	330-5004	3 6
SW.2	Wave-Change Switch	42-1164	2 2
P.T.1	Mains Transformer. 200-260v. 40-100 cycles		
S.1	7-Prong Socket, English type	320-7007	17 0
S.2	6-Prong Socket	270-6007	5
S.3	7-Prong Socket	27-6036	5
S.4	4-Prong Socket	27-6037	5
	Erinold Screw for WT1	27-6034	4
	Valve Shield	270-7022	5
	Dial Scale	28-2726	2
	Dial Scale Shield	270-5045	1 6
	Pointer and Hub Assembly	270-5046	1 3
	Pilot Bulb	380-5125	9
	Grid Clip	6608	1 4
	Rubber Bush	28-2214	5 doz.
	Rubber Buffers	4126	1
	Type Pen. D.D. 61 Double Diode Pentode Valve	5189	1
V.1	Type 78E. Variable-mu. H.F. Pentode Valve	340-2000	16 0
V.2	Type 6A7 Variable-mu. Heptode Valve	8315E	12 6
V.3	Type 80 Full Wave Rectifier Valve	34-2002E	15 0
V.4	Mains Lead and Plug	3149	8 0
	3-Way Speaker Cable	LO-1009	1 7
	Large Tuning Knob and Spring	LO-1004	10
	"Volume" Knob and Spring	270-4054	9
	"Wave-change" Knob and Spring	270-4055	5
	Knob Spring	270-4056	5
	Red Wander Plug	280-5262	2 doz.
	Black Wander Plug	380-5087	2
	Dial Screen	380-5015	1 6 doz.
	Reflector Assembly		6
			1 2