

PHILIPS**CAR RADIO****Model N4G93VT**

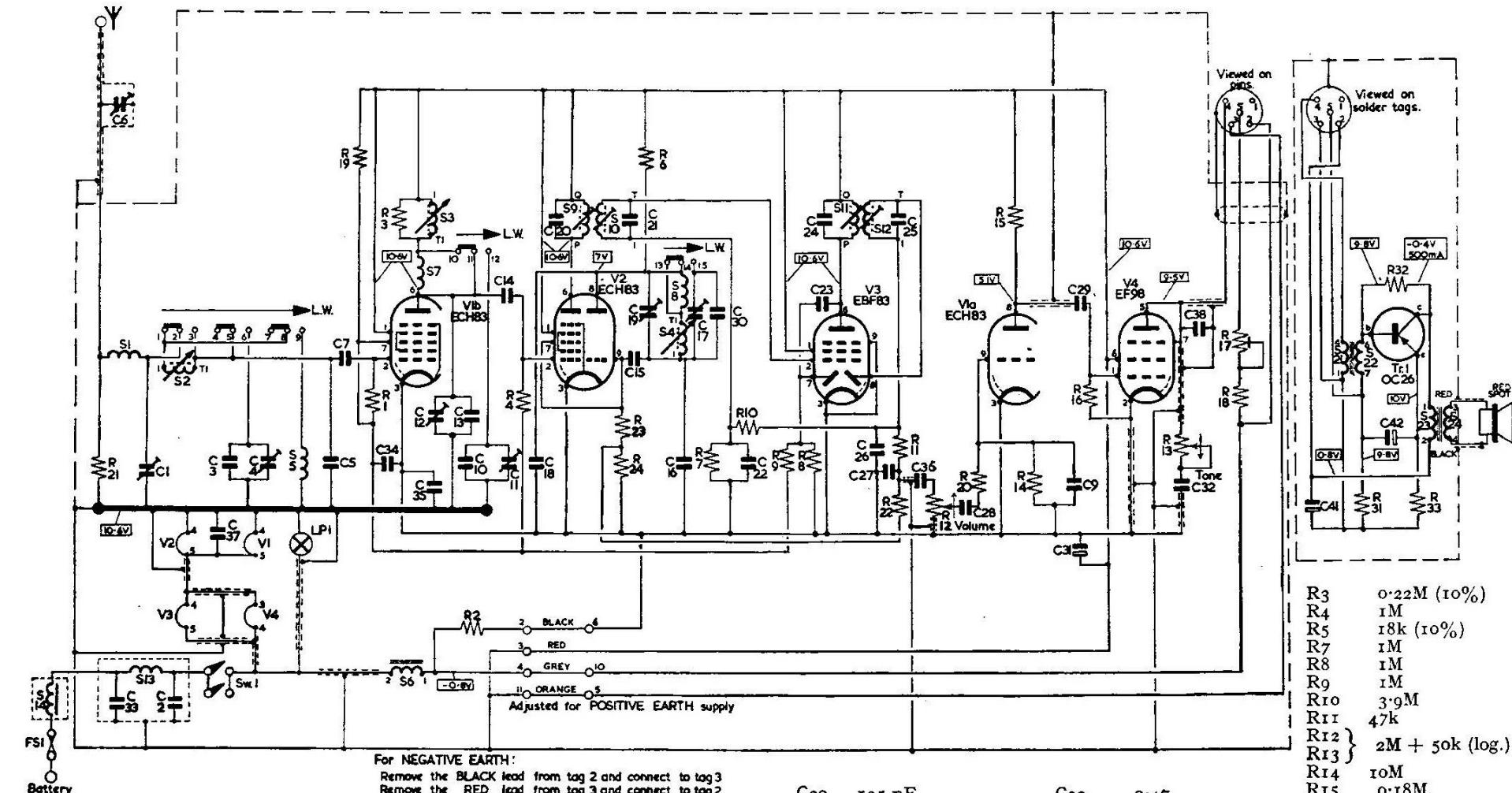
General Description: Four-valve (plus output transistor), two-waveband, "hybrid"-type car radio with 12-volt "H.T." line, with push-button station selection and wave-change and with continuously variable tone control. Also known as Model 493VT.

Power Supply: 12-volt car battery. Shown for positive-earth systems on circuit diagram but with instructions for modifying for negative-earth systems. Consumption approximately 1.5 amps.

Wavebands: M.W. 192-580 m.; L.W. 1050-2000 m.

Valves: (V₁) ECH83; (V₂) ECH83; (V₃) EBF83; (V₄) EF98. Transistor (Tri) OC26.

Notes: Fuse FS1 3 amp.; pilot lamp, L₁, 12 volts, 3-watts (Type 12842). Typical voltages shown on circuit diagram, taken with respect to the negative size of C₃₁ using a 20,000-ohms/volt meter. Receiver switched to M.W. under no-signal conditions with input of 12 volts, 1.5 amps. The arrows on the potentiometers indicate movement of wiper when knob is turned in a clockwise direction. S₂, S₃ and S₄ are ganged together, Sw₁ is ganged to R₁₂.



CIRCUIT DIAGRAM—PHILIPS MODEL N4G93VT

Capacitors.

C ₁	50 pF.	C ₈	4700 pF.	C ₁₄	22 pF. (10%)
C ₂	0·47	C ₉	47 pF.	C ₁₅	100 pF.
C ₃	220 pF.	C ₁₀	180 pF. (10%)	C ₁₆	220 pF. (5%)
C ₄	275 pF.	C ₁₁	400 pF.	C ₁₇	30 pF.
C ₅	92 pF. (1%)	C ₁₂	30 pF.	C ₁₈	220 pF. (5%)
C ₇	100 pF.	C ₁₃	27 pF.	C ₁₉	30 pF.

C ₂₀	195 pF.	C ₃₃	0·47
C ₂₁	195 pF.	C ₃₄	0·047
C ₂₂	4700 pF.	C ₃₅	0·47
C ₂₃	33 pF.	C ₃₆	4700 pF.
C ₂₄	195 pF.	C ₃₇	0·1
C ₂₅	195 pF.	C ₃₈	0·01 (10%)
C ₂₆	100 pF.	C ₄₁	1000 (15 v.)
C ₂₇	100 pF.	C ₄₂	2000 (6 v.)
C ₂₈	4700 pF.		
C ₂₉	4700 pF.		
C ₃₀	12 pF. (10%)		
C ₃₁	100 (12 v.)		
C ₃₂	0·22		

Resistors.

R ₁	1M
R ₂	100

R ₃	0·22M (10%)
R ₄	1M
R ₅	18k (10%)
R ₇	1M
R ₈	1M
R ₉	1M
R ₁₀	3·9M
R ₁₁	47k
R ₁₂	2M + 50k (log.)
R ₁₃	10M
R ₁₄	0·18M
R ₁₅	10M
R ₁₆	100 (W.W.)
R ₁₇	56 (5·5 W., W.W.)
R ₁₈	10M
R ₁₉	47k
R ₂₀	0·33M (10%)
R ₂₁	0·39M (10%)
R ₂₂	15k
R ₂₃	33k
R ₂₄	6·2 (5%, W.W.)
R ₂₅	470 (10%, 1 W.)
R ₂₆	1 (10%, 1 W.)