

**EKCO****TAPE RECORDER****Model RT366**

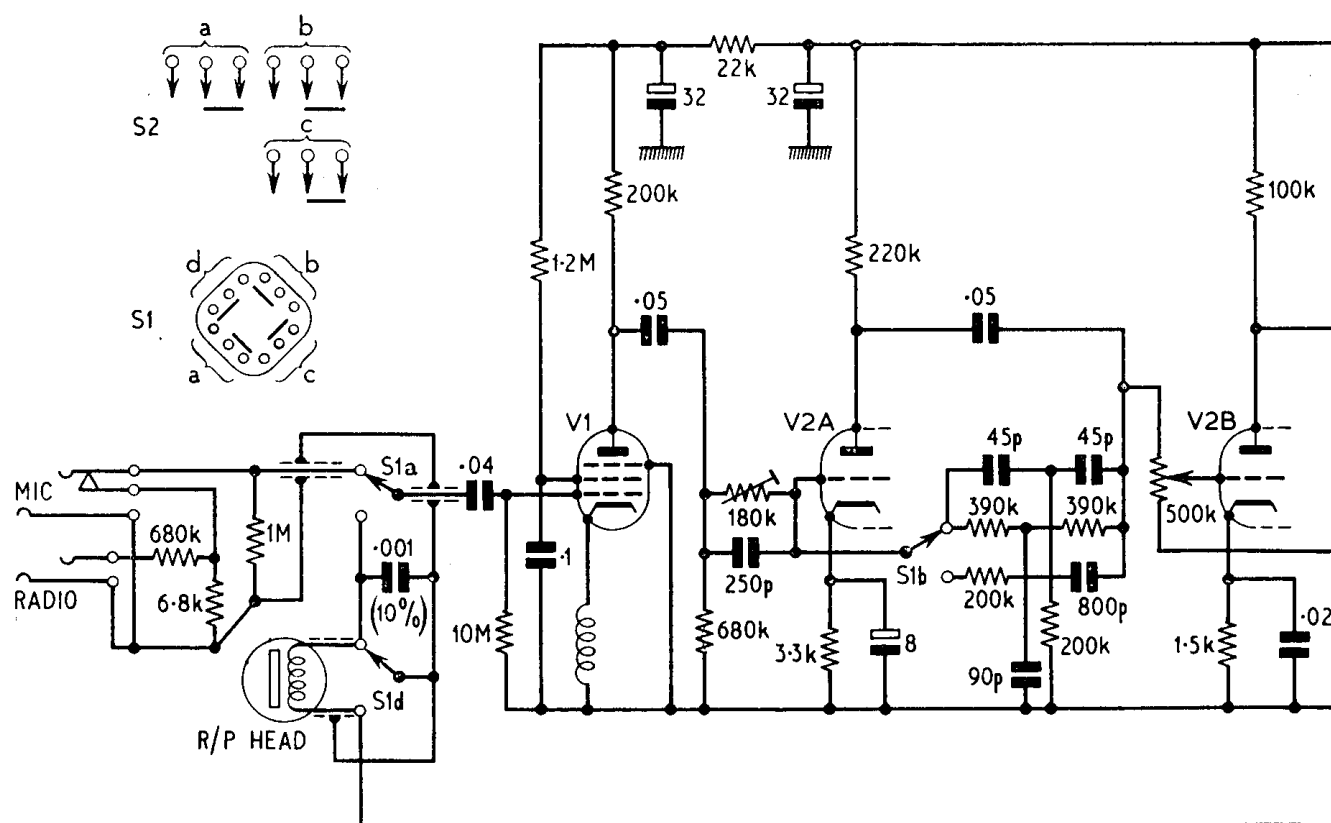
**General Description:** Single-speed ( $3\frac{3}{4}$  in./sec.), dual-track portable tape recorder with B.S.R. Type TD2 tape deck.

**Power Supply:** A.C. mains, 200–250 volts, 50 c/s. (voltage adjustment by means of flying lead on mains transformer).

**Valve Analysis:** Following measurements taken with high-sensitivity testmeter with function switch on “ playback ”.

Valves		Function	Anode, volts	Screen, volts	Cathode, volts	Cathode, mA.
V <sub>1</sub>	EF85	A.F. amplifier	62	45	—	0.9
V <sub>2A</sub>	ECC83	Tone correction	148	—	1.5	0.4
V <sub>2B</sub>	ECC83	A.F. amplifier	153	—	1.2	0.8
V <sub>3</sub>	EM84	Level indicator	51	—	—	1.4
V <sub>4</sub>	EL84	A.F. output (playback) H.F. oscillator (record)	244	260	7.5	46

**Modifications:** Later models have a redesigned erase circuit. On the model shown switch S2c short-circuits the erase head during playback;

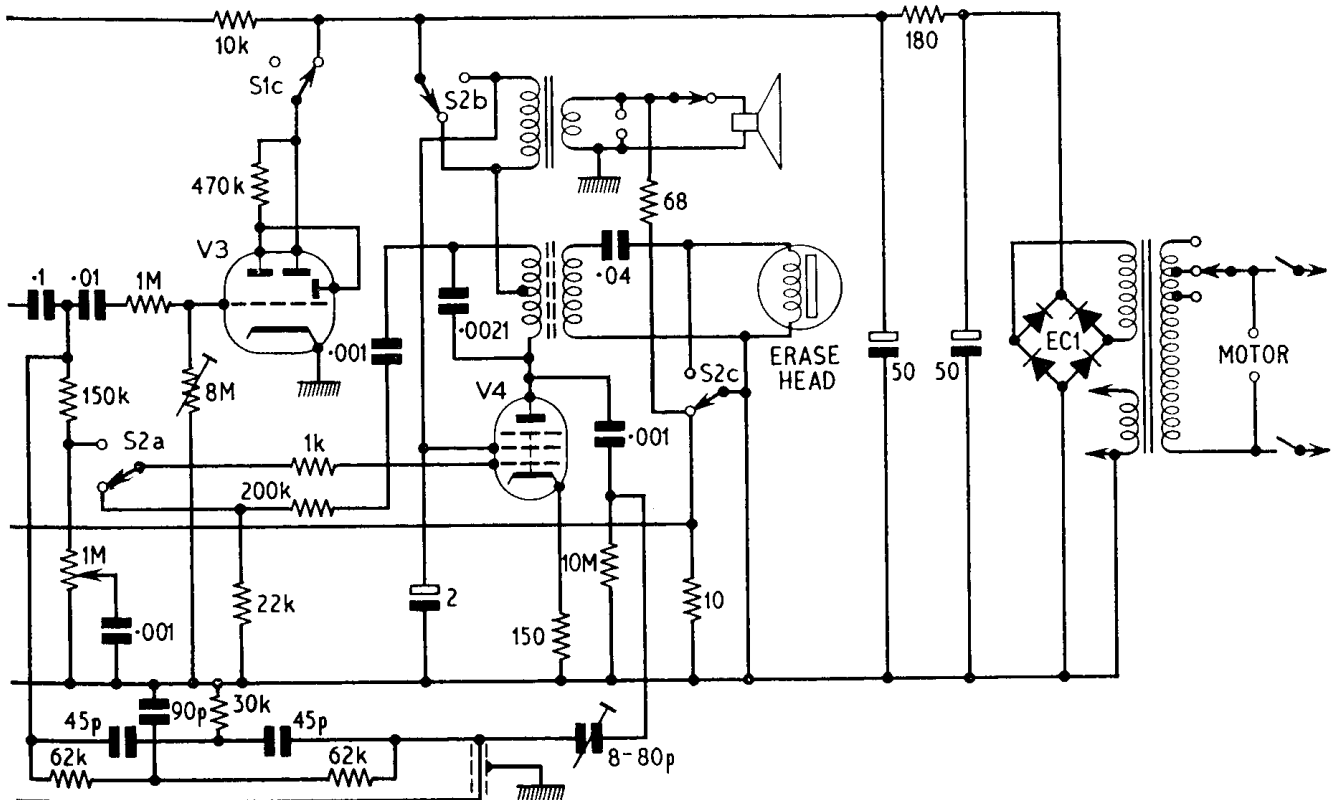


CIRCUIT DIAGRAM—

on later production models the 0.001- $\mu$ F. capacitor to the anode of V<sub>4</sub> is short-circuited on the other side to chassis. On still later models the 0.04- $\mu$ F. capacitor in the erase-head circuit is connected to the other side of the erase output coil. The contact on S<sub>2c</sub> shown connected to junction of erase head, and 0.04  $\mu$ F. is then connected to junction of a 0.001- $\mu$ F. capacitor and a 10-M $\Omega$  resistor.

**Dismantling:** Loosen grub screws and remove amplifier control knobs. Remove four screws securing escutcheon of control panel and remove escutcheon. Release the two screws in the sides of the tape deck and the two screws on the base of the cabinet. It is then possible to lift out the complete deck and amplifier to the extent of the input and loudspeaker leads. Should chassis need to be detached from deck, R/P function switch should be set to " playback " to avoid damage to switch wafer on reassembly.

**Servicing Notes:** The  $0.001\text{-}\mu\text{F.}$  capacitor connected between the R/P head and chassis should be replaced if necessary by identical type (Hunt W99, 400 volt, 10 per cent.). Oscillator output can be adjusted by setting of oscillator core for minimum output measured on valve voltmeter at end of primary winding remote from oscillator anode. Bias setting can be adjusted by an  $8\text{--}80\text{-pF.}$  trimmer (should provide 1.6 volts across  $1\text{k}$  resistor inserted in earthy lead of R/P head).

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