

FERGUSON TAPE RECORDER Model 441TR

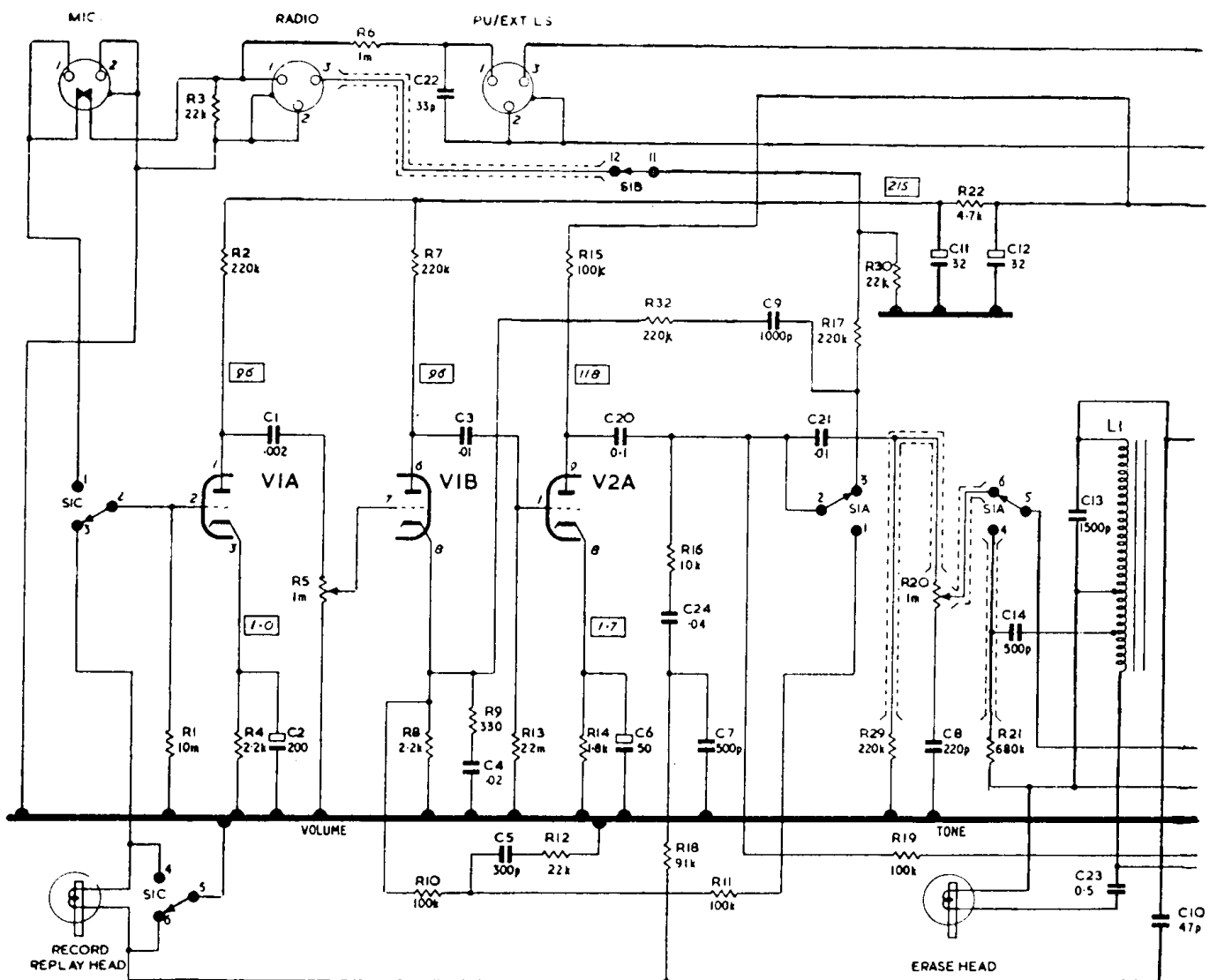
General Description: Single-speed ($3\frac{3}{4}$ in./sec.), dual-track, portable tape recorder with B.S.R. "Monardeck". Weight about $15\frac{1}{2}$ lb.

Power Supply: A.C. mains, 200-250 volts, 50 c/s., 60 watts.

Valves: (V1) ECC83; (V2) ECL82; (V3) EM84. W1 rectifier, Type EC1; W2 level indicator rectifier, type S.T.C. M1.

Servicing Notes: Voltages shown on diagram measured with 20,000-ohms/volt meter. To check oscillator output, connect valve voltmeter between junction of L1/C15 and chassis. R.F. voltage should be about 130 volts and within range 110-150 volts.

Humdinger Adjustment: R28 has been set during manufacture, and should not require altering, but if necessary following procedure should be carefully followed: Chassis must be electrostatically screened, particularly around V1 and input sockets. Shallow metal box of suitable size connected to chassis metalwork may be used. Take off tape spools and set to "record". Connect sensitive valve voltmeter between junction C20/R16 and chassis.



CIRCUIT DIAGRAM—

Short-circuit R21 to disconnect oscillator and plug in dummy microphone connector with a 1000-pF. capacitor strapped across pin tags. Allow recorder to warm up for 10 minutes, then adjust R28 for minimum meter reading (about 80 mV.).

Cleaning: Do not allow screw-driver or any iron or steel to come into contact with recording heads. Working faces of heads, capstan and pinch wheel need occasional cleaning. Use soft cloth, dampened with methylated spirit and place over matchstick or wooden spill to clean tape guides and drive components, as well as recording and erase heads. Do not use petrol or carbon tetrachloride for this cleaning.

Chassis Removal: Remove spools, triangular cover moulding and control knobs. If necessary use single turn of strong cord to remove knobs. Remove four retaining screws from tape-deck cover and lift off cover. Deck, complete with chassis and socket panel, is also secured by four screws—remove these and lift out assembly.

Component Notes: C13 2%. C10, R2 (high stability) 5%. R10, R11, R16, R23 (½ W.), R25 (½ W.), R26 (½ W.), R27, C5, C9 10%. C15 750 v. (300 v. A.C. in later models). R5 log., R20 lin. L1 14 ohms, T1 (primary) 430 ohms, T2 90 and 240 ohms.

