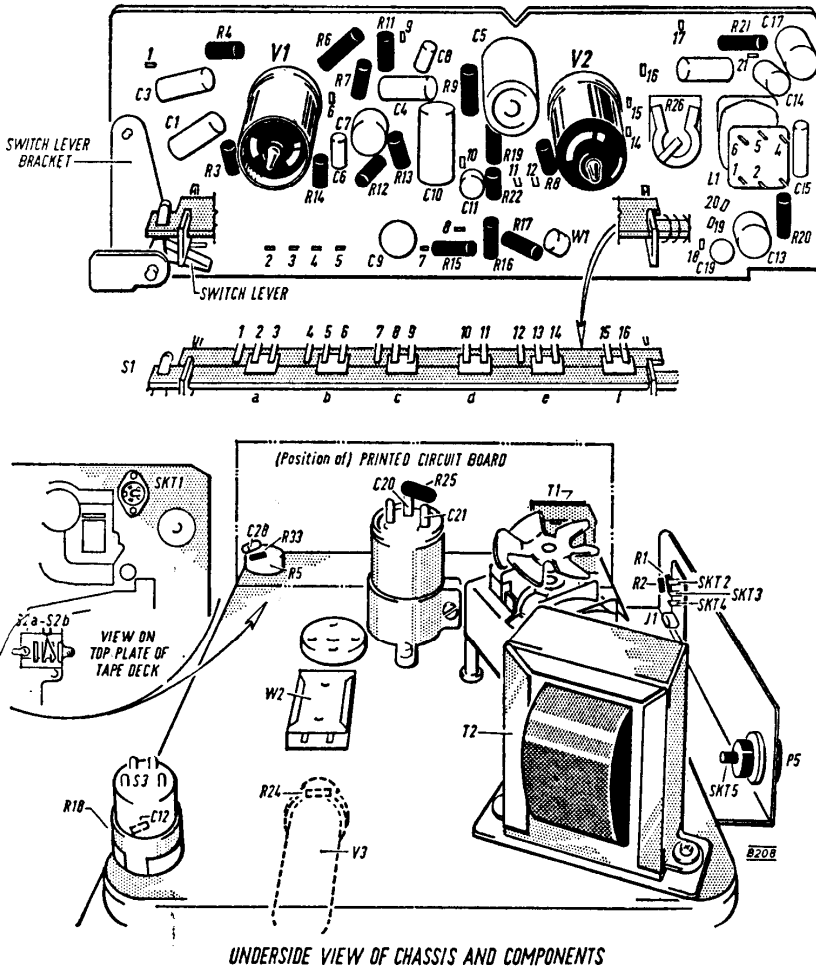


MARCONIPHONE TAPE RECORDER Model 4202

COMPONENT LOCATIONS

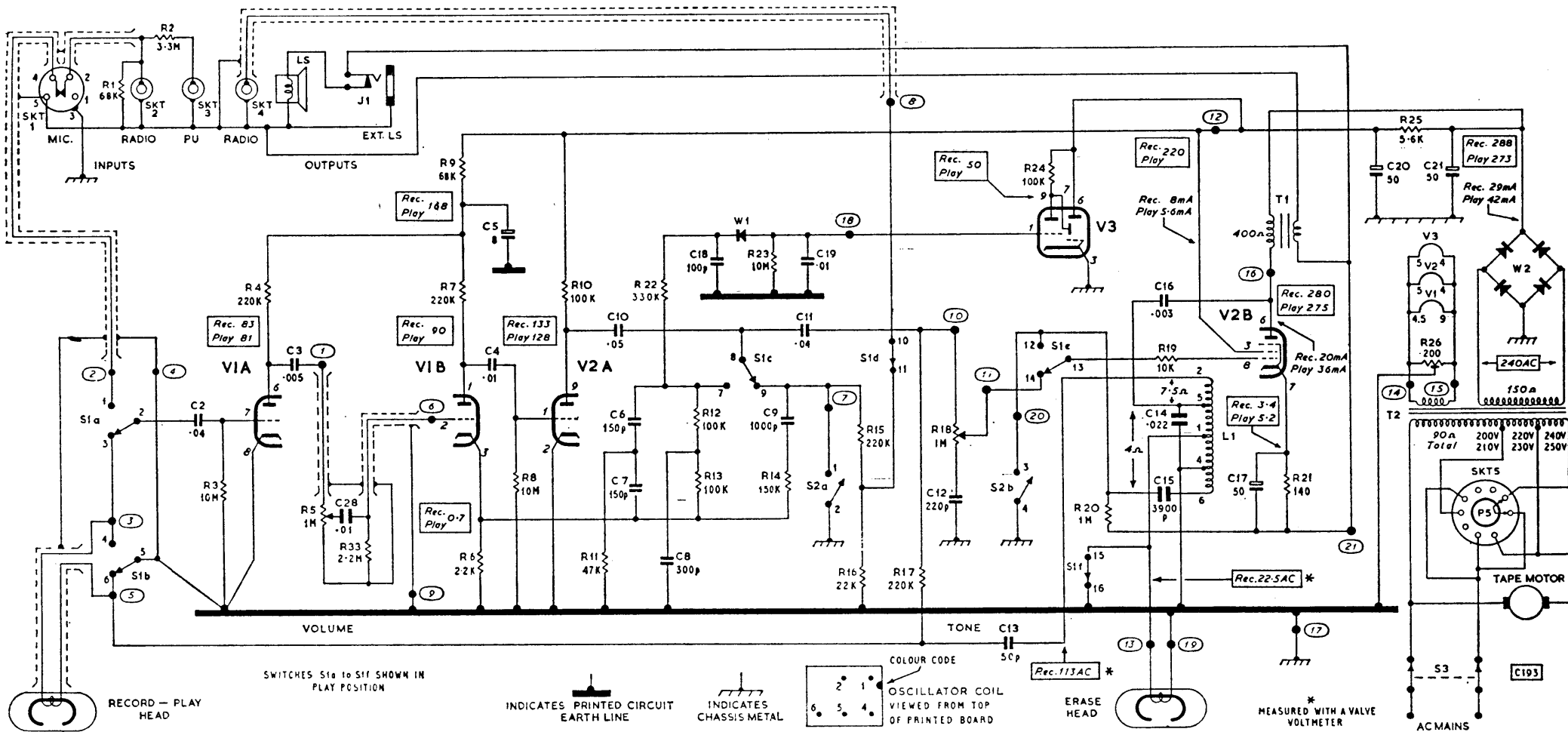


S2 is located on the Tape Deck top plate (see inset diagram).

Contact numbering for S1a-f runs in sequence from left to right.

General Description: Single-speed ($3\frac{3}{4}$ in./sec.) dual-track tape recorder with maximum spool diameter of $5\frac{3}{4}$ in. Tape deck is Thorn type DB21. For operation from A.C. mains, 200–250 volts, 50 c/s., 60 watts. Input sockets: microphone (1.5 mV. into 10 M Ω); radio (1.5 mV. into 68k, or 22k in earlier models); pick-up (75 mV. into 3.3 M or 1 M in earlier models). Output sockets: low-level radio (500 mV. at 22k); external speaker (3 watts at 3 ohms).

Valves: (V₁) ECC83; (V₂) ECL86; (V₃) EM87; (W₁) record level rectifier, part number 26484; (W₂) H.T. bridge rectifier, part number 26489.



MODEL 4202 CIRCUIT DIAGRAM.

Figures in rectangles are voltage readings taken with a 20,000 ohm/volt meter. DC resistances of coils are shown where the values exceed 1Ω.

Dismantling: For routine cleaning of top of tape deck, pull off control knobs and moulded head cover, then remove seven screws securing moulded top cover. **Chassis:** Remove knobs and covers as above, then remove two screws from each side of mechanism top plate. Remove pocket cover and then two screws securing storage compartment backing to main chassis. Complete assembly (less speaker) can now be lifted from cabinet. To disconnect speaker pull connecting leads from speaker tags. **Printed Circuit Board:** To obtain access to components behind S1a-f, printed board can be released from its mounting. Take out two small self-tapping screws securing switch lever bracket to main chassis and release spring clip fitting into slot at

other end of printed board. Assembly can now be eased away from main chassis.

Heater Balance: R26 is factory set and should not be altered unless valve change is made. To readjust: take off tape spools and set to "record" with tone control at minimum and record level control maximum. Connect sensitive valve voltmeter between junction C10/C11 and chassis. Place shorting lead across R20 to prevent oscillator functioning and plug in screened dummy microphone connector with 1000-pF. capacitor across pins 4 and 5. Allow recorder to warm up for 10 minutes, then adjust R26 for minimum reading (about 50 mV.). While setting adjustment, chassis must be electrostatically screened, particularly around V1.