

B.R.C.**Model 2017**

General Description: Four-speed transistor portable record reproducer with Acos GP-67-2 crystal cartridge.

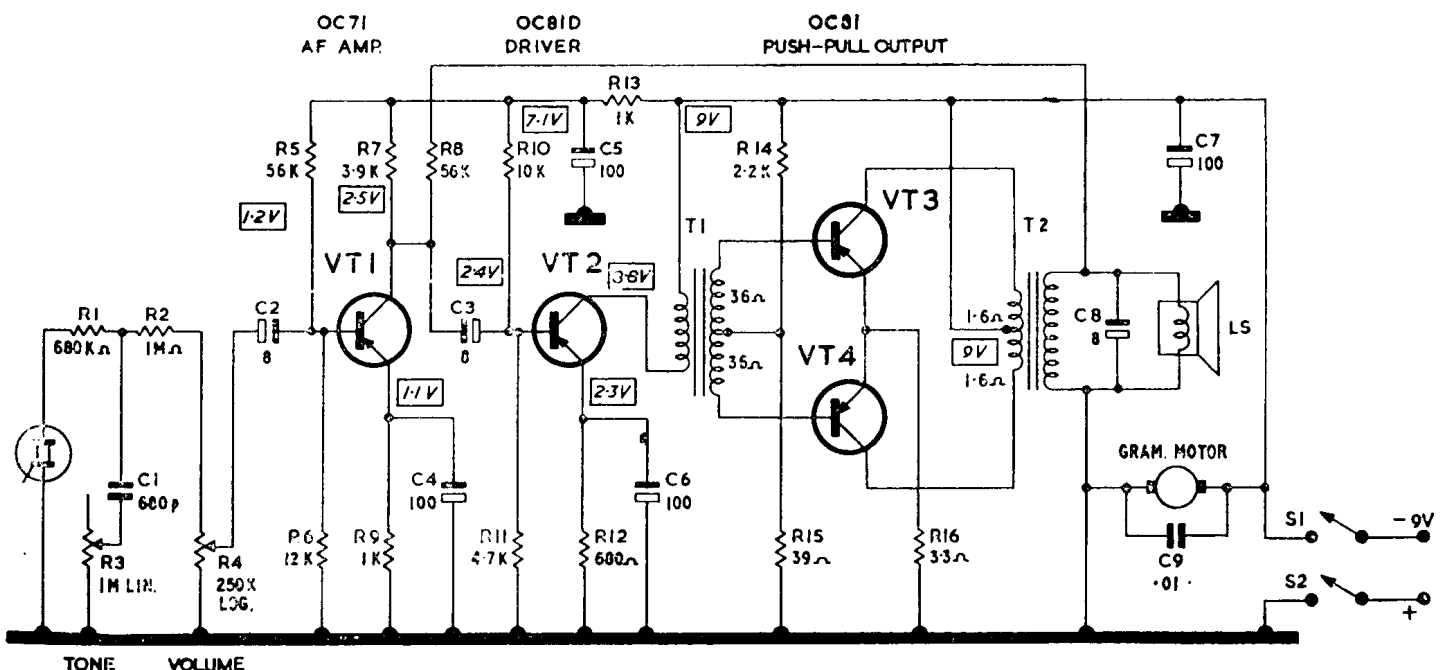
Power Supply: 9-volt battery (BB30, T6010 or PP10). Consumption about 80 mA. with motor running and no signal input.

Transistors: (VT₁) OC71; (VT₂) OC81D; (VT_{3, 4}) OC81. Typical voltages measured with 20,000-ohms/volt meter shown on circuit diagram.

Dismantling: To remove record player: loosen two brass turnbuckle screws securing record-player board and lift front of board up until its underside becomes accessible. Remove four spring clips from motor-plate support spindles and unsolder battery and pick-up connections from tag panels beneath motor plate.

Record Player Servicing: Check unit thoroughly for mechanical faults before servicing drive motor. Never rotate turntable faster than normal speed, as this is liable to upset motor governor. Motor must not be oiled. Note that if unit has been in storage for long period the motor may take 5 or 10 minutes to reach correct speed.

Faults: *Turntable slow on all speeds,* (a) motor voltage low (check connections and test with new battery); (b) worn brushes (replace); (c) motor speed low (check speed and if slightly low rotate both governor contact-adjusting screws clockwise $\frac{1}{16}$ turn—access hole under label, turn rotor through 180° to adjust each screw); (d) turntable bearing tight (turntable should take at least 30 seconds to stop from 33 r.p.m. with drive disengaged—if faulty lubricate and check straightness of pivot on base-plate); (e) excessive pick-up playing weight (adjust counterbalance spring). *Turntable slow on 33 r.p.m.:* slip in drive between motor and turntable; a check pulley alignment, b check idler pulley is free from grease; if a and b correct, increase idler-pulley spring tension. *Motor fails to start or runs very slowly:* open-circuit in motor or supply connections. *Excessive "wow", particularly at 45 r.p.m.:* idler pulley partly engaging with adjacent larger diameter pulley (check and adjust if necessary).



CIRCUIT DIAGRAM—B.R.C. MODEL 2017