

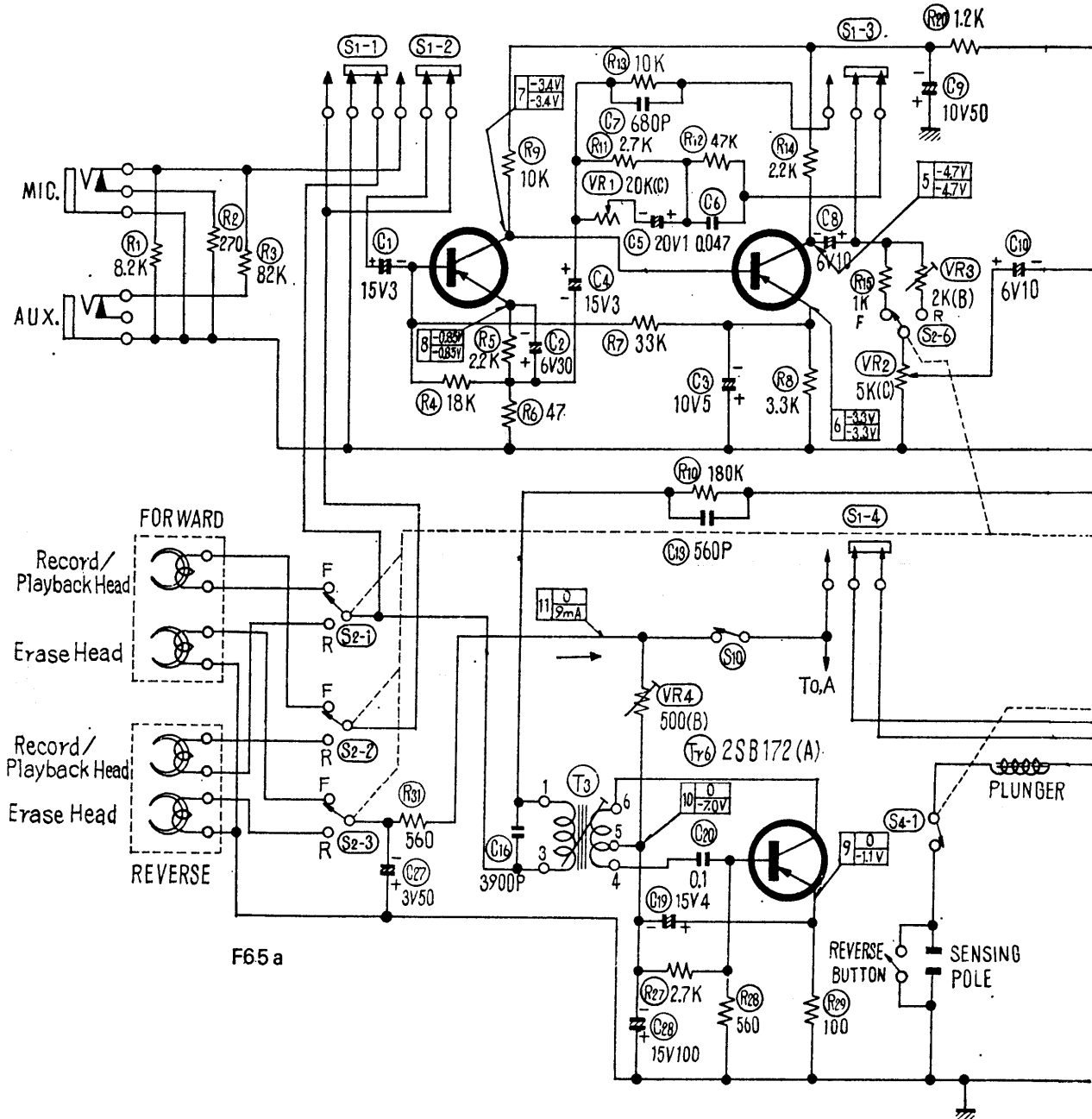
NATIONAL TAPE RECORDER

Model RQ-158S

General Description: Nine-transistor, automatic reverse, voice operated, two-track, two-speed tape recorder. Power supply 9-volt battery; life more than 15 hours. Audio output 1.5 W. maximum. Frequency response

(T1) 2SB173(A)

(T2) 2SB175(B)



CIRCUIT DIAGRAM—NATIONAL TAPE RECORDER MODEL RQ-158S (PART)

Note:

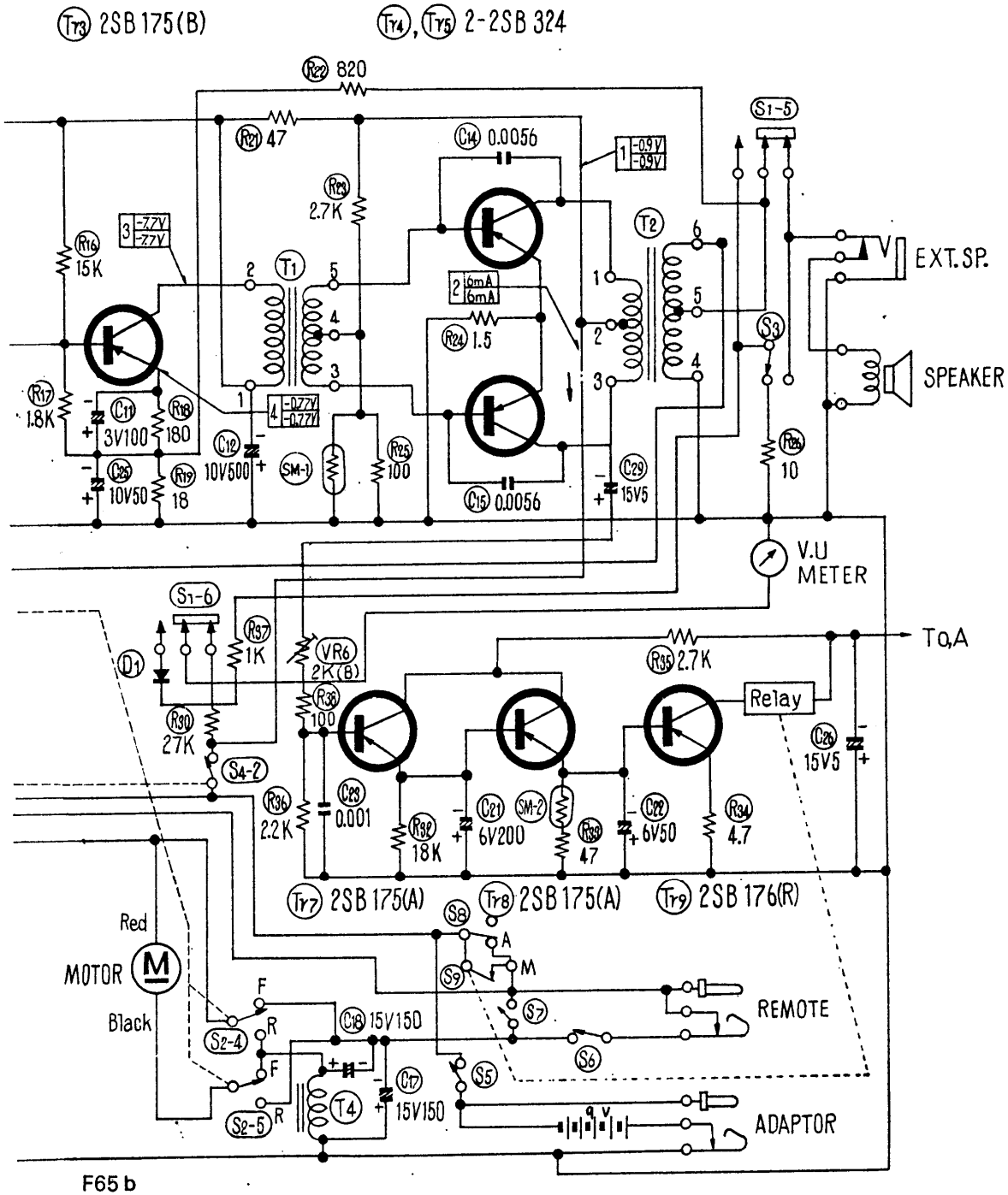
1. S1: Record/Playback selector switch (shown in playback position).
2. S2: Head selector switch (shown in normal forward position).
3. S3: Monitor selector switch.
4. S4-1: Plunger power switch.
5. S4-2: Stop switch (" OFF " when in F.F. and rewind modes).
6. S5: Power switch.
7. S6: Instant stop switch.
8. S7: Remote cut-off switch (" ON " when in F.F. and rewind modes).

120-8000 c/s. at $3\frac{3}{4}$ i.p.s. Microphone socket 8 kΩ impedance and auxiliary socket 80 kΩ impedance. Bias frequency 35 kc/s.

Diode: D (OA70).

Thermistors: SM₁ (MT-8I). SM₂ (5A-120).

Transistors: Tr₁ (2SB173A). Tr₂ and Tr₃ (2SB175B). Tr₄ and Tr₅ (2SB324). Tr₆, Tr₇ and Tr₈ (2SB175A). Tr₉ (2SB176R).



CIRCUIT DIAGRAM—NATIONAL TAPE RECORDER MODEL RQ-158S (PART)

9. S8: Voice Operation (AUTO/MANUAL) selector switch.
10. S9: Relay contacts.
11. S10: Leaf Switch ("ON" when in PLAY and record modes).
12. All resistance in ohms $\frac{1}{4}$ watts unless otherwise indicated.
K = 1000 ohms M = 1,000,000 ohms.
13. All capacitance in μ F. unless otherwise indicated. P = $\mu\mu$ F.
14. Values indicated in \square are D.C. to chassis ground with no signal applied.
15. The upper values should be measured during playback and the lower values during recording.