NATIONAL TAPE RECORDER Models RQ-300S and RQ-300SE

General Description: Six-transistor, mains operated, two-track, two-speed tape recorder. Power output 700 mW. maximum. Frequency response 100–7000 c/s. at $3\frac{3}{4}$ i.p.s. Microphone input socket 10,000-ohm impedance. On record, an A.C. bias (35 kc/s.) is used, the erase head has 7 ±2 mA. D.C. flowing through it.

Power Supplies: Model RQ-300S—A.C. 110/220 volt, 50 c/s. (60 c/s.) mains. Model RQ-300SE—A.C. 110/220 volt, 50 c/s. (60 c/s.) mains. Model RQ-300S (3-pin plug)—A.C. 240 volt, 50 c/s. Models RQ-300SE and RQ-300S (3-pin plug) are electrically similar to Model RQ-300S.

To Remove Case Body: Pull up and remove case-cover. Remove two screws, holding case body. Remove neon level indicator from case body. (Mechanical part can be inspected and adjusted in this condition.)

To Remove Bottom Cover Case: Remove two screws, holding mechanism and one screw, holding A.C. cord. Take out mechanism from cover case. In this condition, motor and electric circuit be inspected and adjusted. Reel-table will come off if the unit is turned upside down.

To Remove Drive Belt: Remove two screws from upper chassis. Pull up and remove upper chassis from flywheel and reel-pulley.

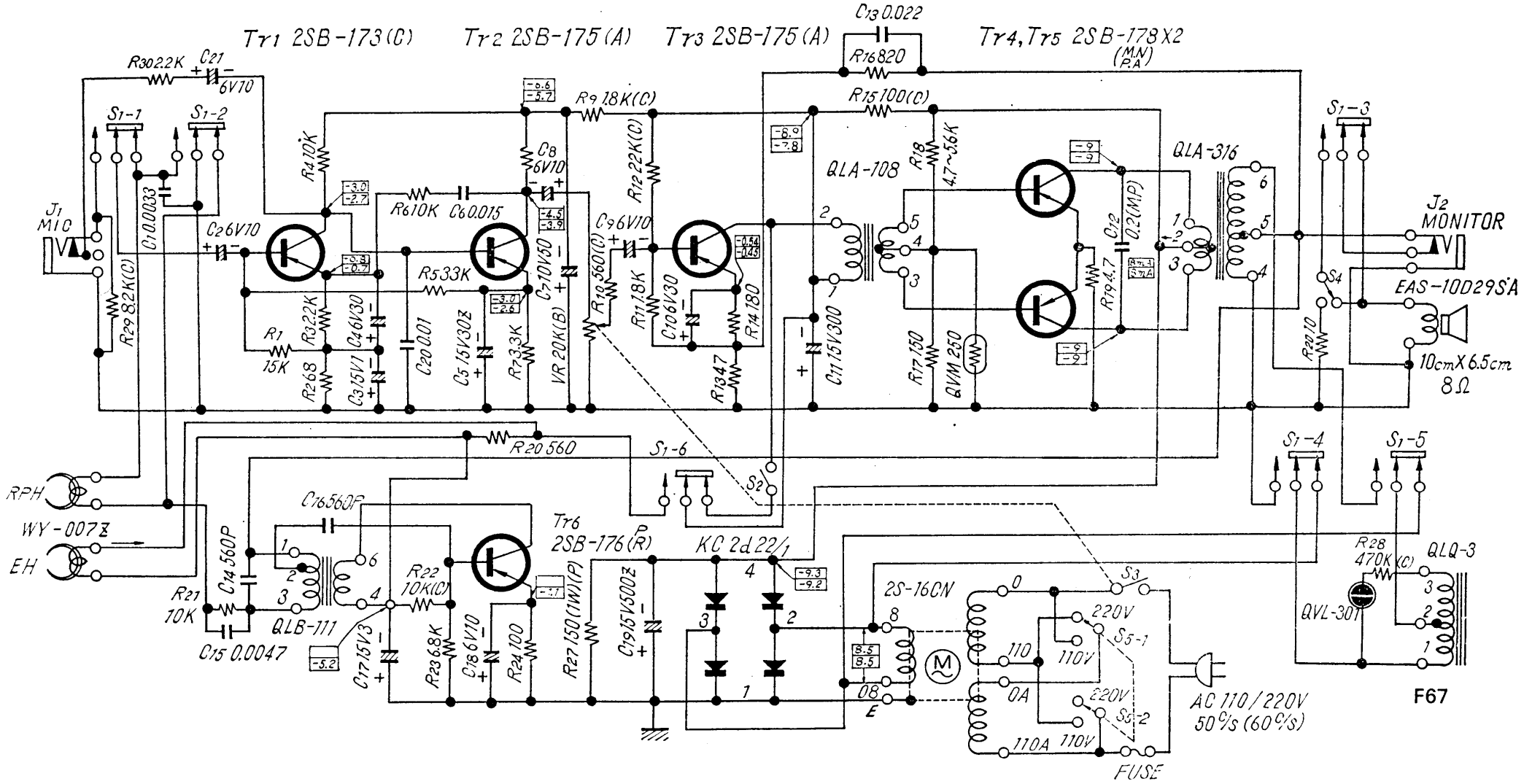
To Remove Motor: Remove pin and washer, holding idler. Lift upper-chassis and remove idler. Remove soldered lead-wires from motor-terminals. Remove motor after removing holding screws. When replacing motor, reinstall it in the reverse sequence.

To Remove Head: Remove head-shield plate, by removing holding screw. Remove five lead wires from head. Remove head after removing two head-adjusting screws.

To Remove Printed Circuit Board: Remove three screws holding printed circuit board. Take out printed circuit board from baseplate.

Note:

1. $S_{1-1} \sim S_{1\sim 6}$: Record/Playback selector switch (shown in play position).
2. S_2: Stop switch.
3. S_3 : Power ON/OFF switch (coupled with VR).
4. 44 : Monitor switch.
5. S_5: Voltage selector switch.
6. All resistance in ohms, K = 1000 ohms
   All resistance in $\frac{1}{4}$ wattage. But (C) = $\frac{1}{2}$ or $\frac{1}{4}$ wattage.
7. All capacitance in microfarads. P = microfarads.
8. Values indicated in ☐ are D.C. to chassis ground with no signal applied.
   The upper values should be measured during playback and the lower values during recording.



CIRCUIT DIAGRAM—NATIONAL TAPE RECORDER MODEL RQ-300S