

Service Manual

Radio Cassette
RX-F80S

FM-AM DETACHABLE STEREO RADIO CASSETTE RECORDER



■ SPECIFICATIONS

General:

Power Requirement: AC; 110~115/115~127/200~220/
230~250 V, 50/60 Hz
Battery; [Amp./Speaker Part]
9 V (six "C" size Flashlight
Batteries)
(National UM-2 or equivalent)
[Tuner/Deck Part]
3 V (two "AA" size Penlight
Batteries)
(National UM-3 or equivalent)
Car battery; with optional car adaptor
RP-917

Power Consumption: 13 W (AC only)
Power Output: Built-in Speaker; 7 W (3.5 W×2) . . . MPO
(max)
Headphones; 60 mW (30 mW×2) . . . RMS
(max)

Speaker: 10 cm (4") PM Dynamic Speaker (3Ω)
Input: [Amp./Speaker Part]
AC IN and DC IN
[Tuner/Deck Part]
Mic; sensitivity 0.25 mV/applicable
microphone impedance 200~600Ω
(recommended microphone RP-8135)

Output: [Amp./Speaker Part]
Line Out; sensitivity 420 mV/10 kΩ under
EXT SP; 3~8Ω
Headphones; 8~32Ω
[Tuner/Deck Part]
Headphones; 32Ω

Dimensions: [Amp./Speaker Part]
391 mm (W)×126 mm (H)×99 mm (D)
(15 $\frac{13}{32}$ ×4 $\frac{31}{32}$ ×3 $\frac{29}{32}$)"
[Tuner/Deck Part]
154 mm (W)×89 mm (H)×41.5 mm (D)
(5 $\frac{25}{32}$ ×3 $\frac{15}{32}$ ×1 $\frac{5}{8}$)"
Weight: [Amp./Speaker Part with Tuner/Deck Part]
2.1 kg (4 lb 10 oz) without batteries
[Tuner/Deck Part]
430 g (15 oz) without batteries

Radio Section:

Radio Frequency
Range: FM; 87.5~108 MHz
AM; 520~1610 kHz (577~186 m)
Intermediate Frequency: FM; 10.7 MHz
AM; 455 kHz
Sensitivity: FM; 4 μV (-6 dB Limiter)
AM; 80 μV/m/50 mW output

Tape Deck Section:

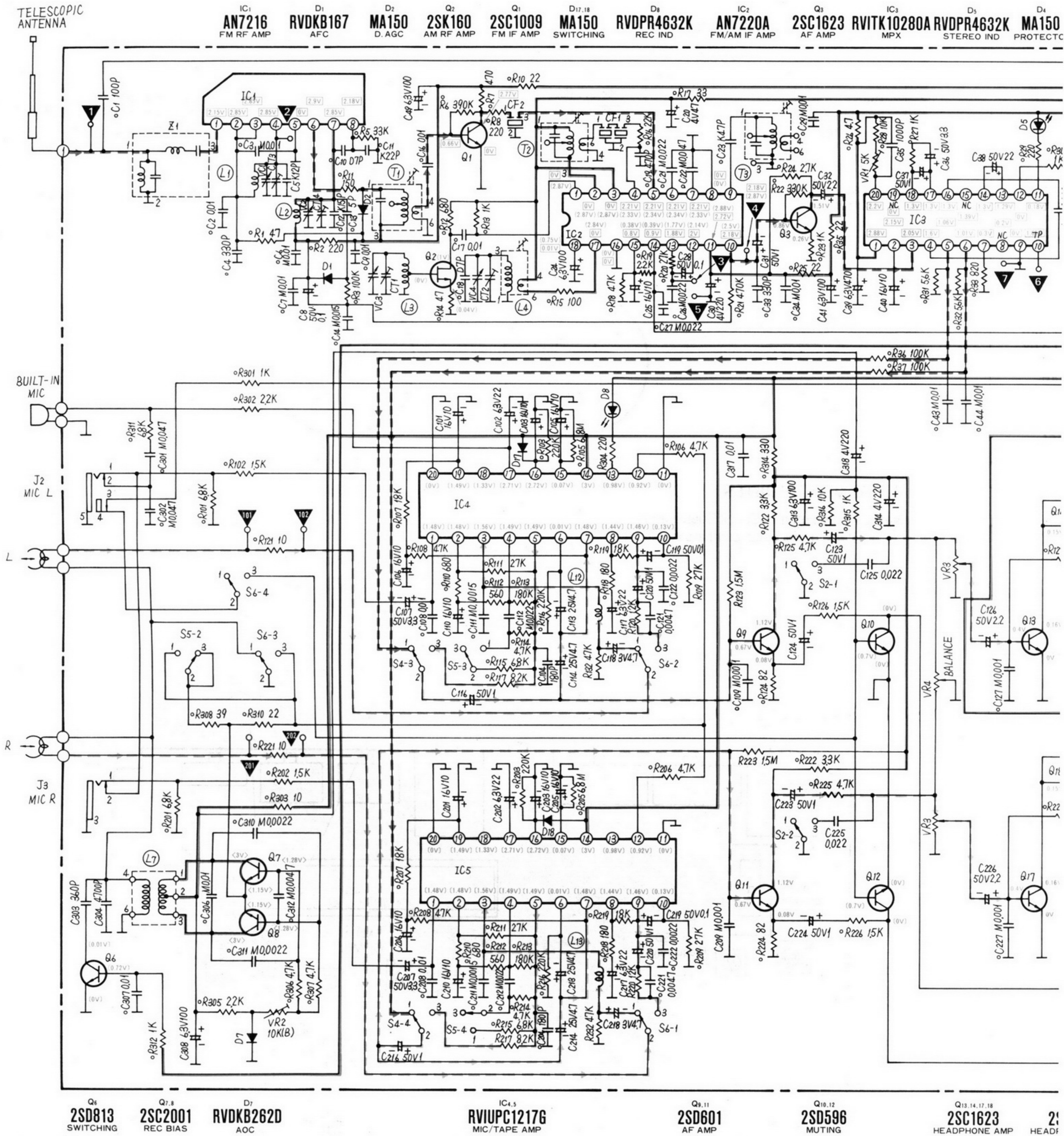
Frequency Range: 60~10,000 Hz (with normal tape)
60~11,000 Hz (with CrO₂ tape)
Recording system: AC bias, MAGNET erase
Tape Speed: 4.8 cm/s, (1 $\frac{7}{8}$ ips)
Wow and Flutter: 0.3% (WRMS)
Program Time: 1 hour with C-60 cassette tape
Track System: 4-track 2 channel stereo recording and
playback

Specifications are subject to change without notice.

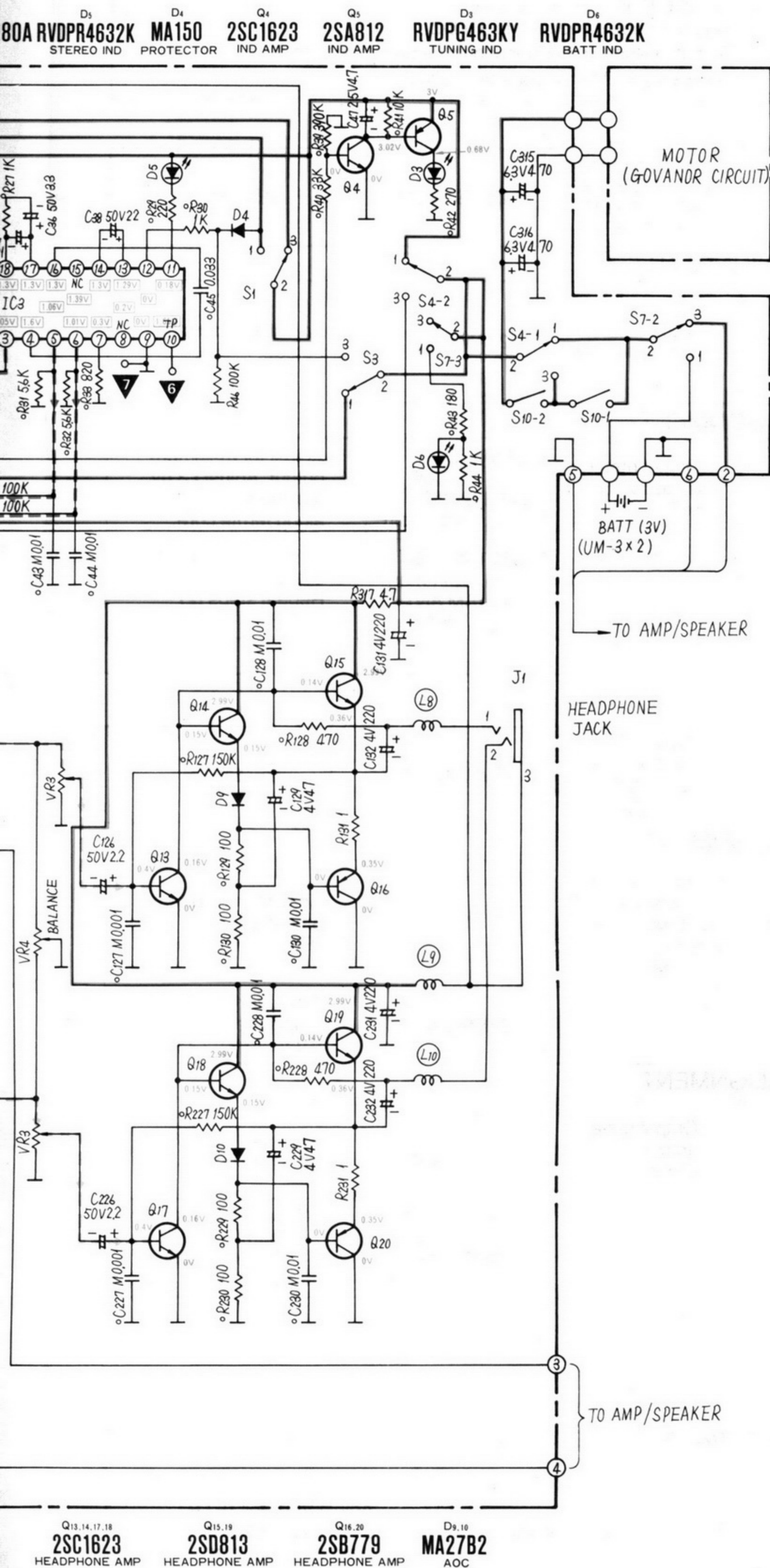
Panasonic

Matsushita Electric Trading Co., Ltd.
P.O. Box 288, Central Osaka, Japan

SCHEMATIC DIAGRAM MODEL RX-F80S (TUNER/DECK)



TUNER/DECK PART)

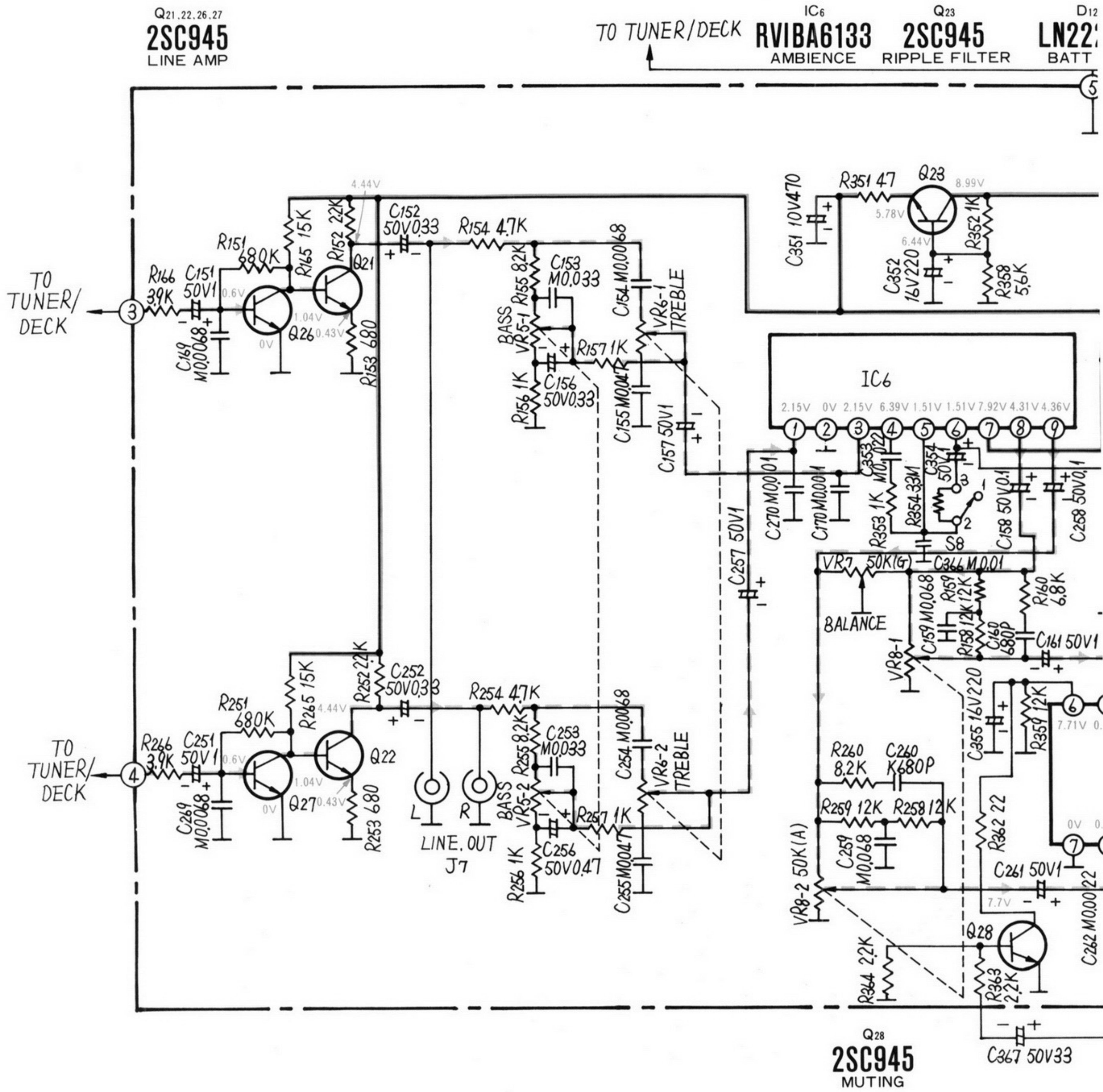


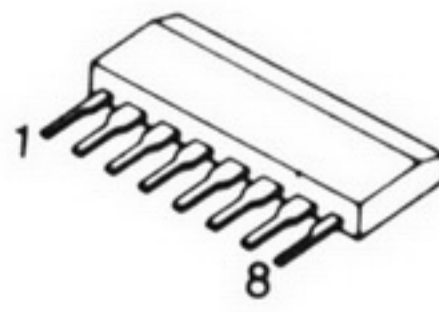
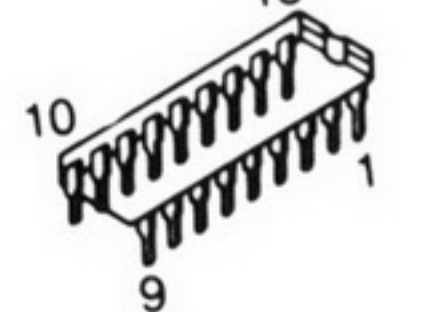
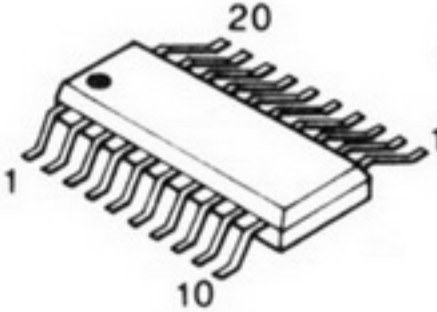
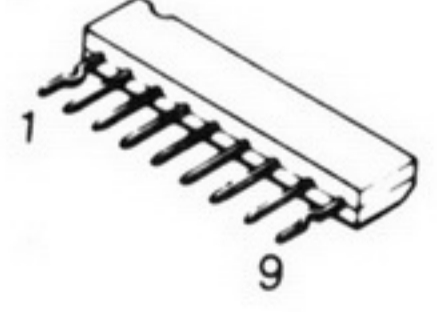
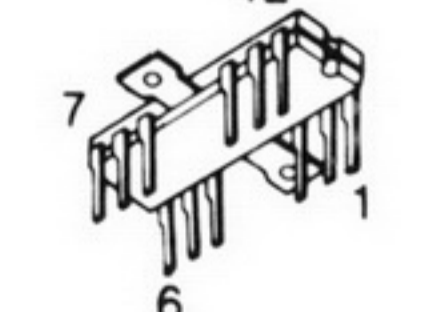
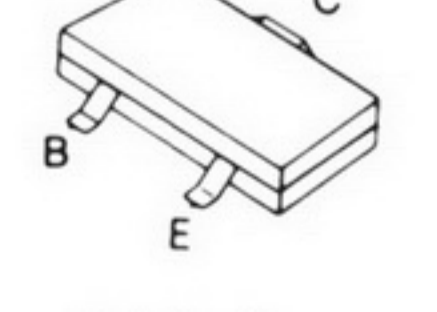
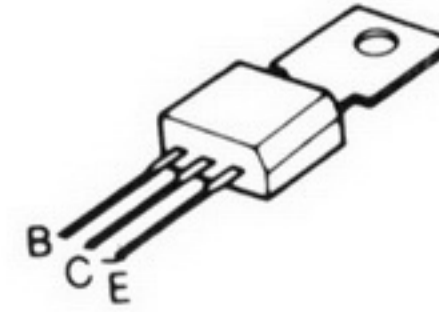
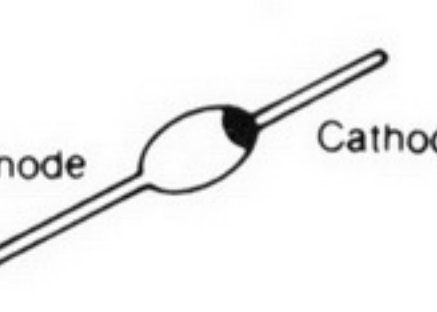
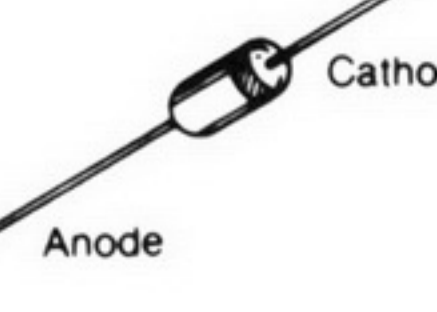
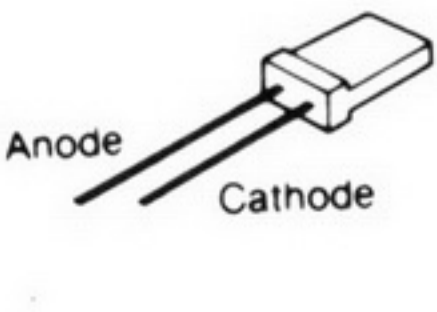
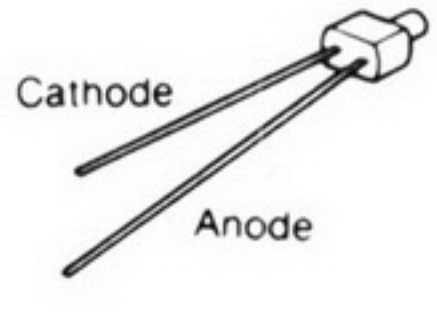
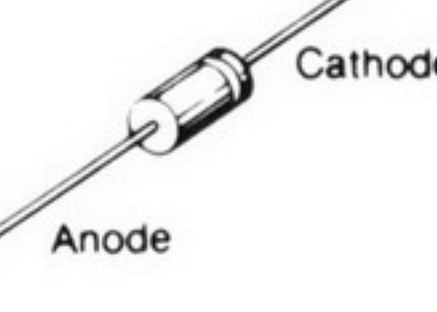
- ⊕ Voltage Line
- Radio (FM) Signal Line
- Tape (Playback) Signal Line
- Tape (Record) Signal Line

Notes:

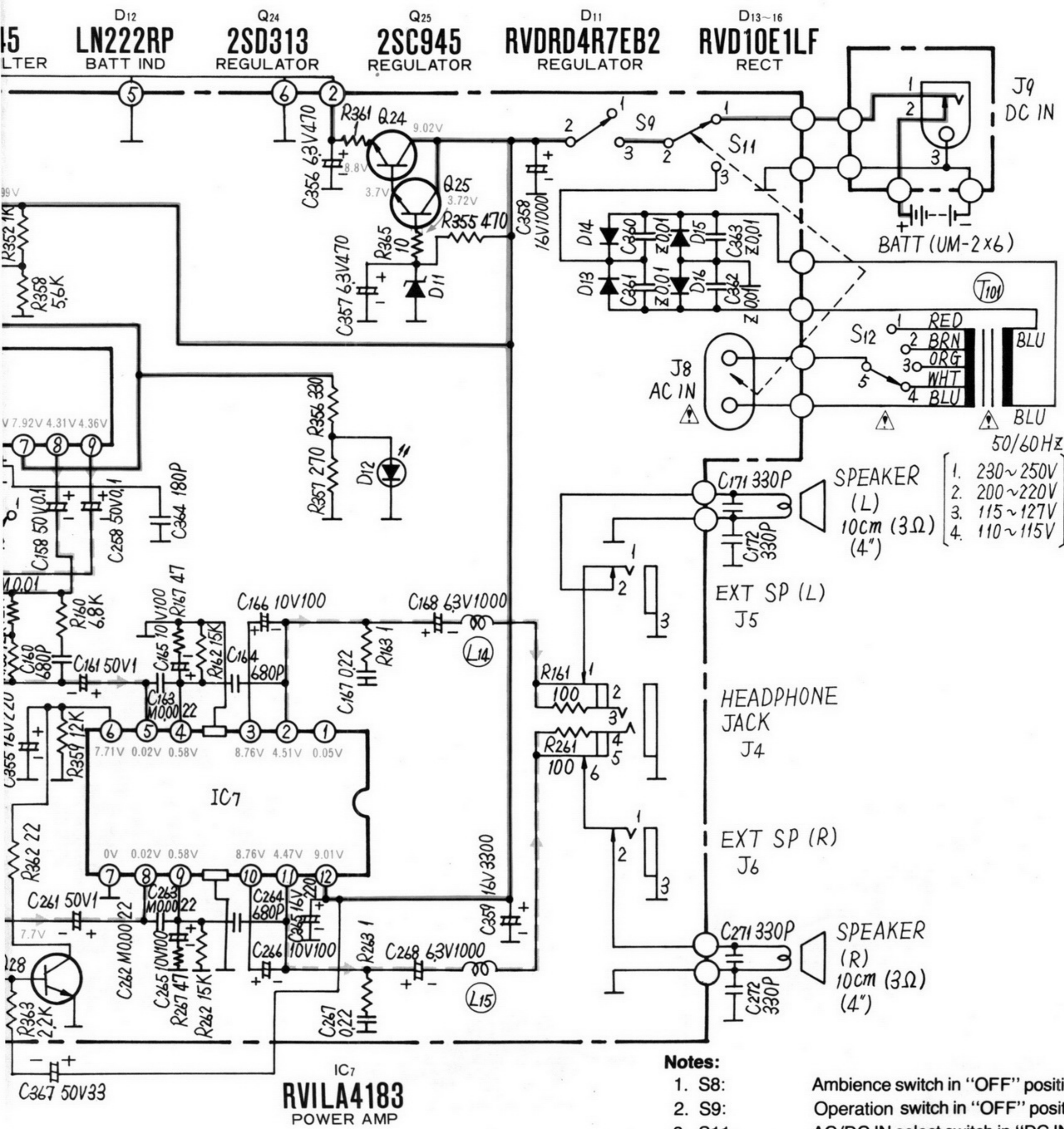
1. S1: Band switch in "FM" position. (1 ... AM, 3 ... FM)
2. S2-1, S2-2: Tone switch in "High" position. (1 ... High, 3 ... Low)
3. S3: Mode/beat proof switch in "STEREO/I" position. (1 ... STEREO/I, 3 ... MONO/II)
4. S4-1~S4-4: Function switch in "RADIO" position. (1 ... RADIO, 3 ... TAPE/OFF)
5. S5-2~S5-4: Tape select switch in "NORMAL" position. (1 ... METAL, 3 ... NORMAL)
6. S6-1~S6-4: Record/playback switch in "playback" position. (1 ... Playback, 3 ... Recording)
7. S7-2, S7-4: Power select switch in "ON" position. (1 ... OFF, 3 ... ON)
8. S10: Motor ON/OFF switch in "OFF" position.
9. VR1: VCO oscillator frequency adjust VR.
10. VR2: Bias current adjustment VR.
11. VR3: Volume control.
12. VR4: Balance control.
13. The mark (▼) shows test point e.g. ▼ = test point 1.
14. DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
 - ... FM position, () ... AM position,
 - < > ... Playback position, [] ... Recording position.
15. Battery current: No signal 87 mA (TUNER/DECK)
 Maximum output (radio) 104 mA (TUNER/DECK)
 Maximum output (tape) 212 mA (TUNER/DECK)
16. For resistors and capacitors, using chips except ○ mark.

SCHEMATIC DIAGRAM MODEL RX-F80S (AMP/9)



 <p>IC1</p>	 <p>IC2</p>	 <p>IC3,4,5</p>	 <p>IC6</p>	 <p>IC7</p>	 <p>Q1,3~6, 9~20</p>
 <p>Q24</p>	 <p>Anode Cathode D1,7</p>	 <p>Anode Cathode D2,4,9~11, 17,18</p>	 <p>Anode Cathode D3,5,6,8</p>	 <p>Cathode Anode D12</p>	 <p>Anode Cathode D13~16</p>

CIRCUIT BOARD AND WIRING DIAGRAM (AMP/SPEAKER PART)



- Notes:**
- S8: Ambience switch in "OFF" position. (1 . . OFF, 3 . . ON)
 - S9: Operation switch in "OFF" position. (1 . . OFF, 3 . . ON)
 - S11: AC/DC IN select switch in "DC IN" position.
 - S12: Voltage select switch.
 - VR5: Bass control.
 - VR6: Treble control.
 - VR7: Balance control.
 - VR8: Volume control.
 - DC voltage measurement are taken with electronics voltmeter from negative terminal of battery.
 - Battery current: No signal 110 mA
 (TUNER/DECK IN SET)
 Maximum output (radio) 1A
 (TUNER/DECK IN SET)
 Maximum output (tape) 1.06A
 (TUNER/DECK IN SET)
 - Important safety notice
 Components identified by Δ mark have special characteristics.
 important for safety.
 When replacing any of these components, use only manufacturer's specified parts.

