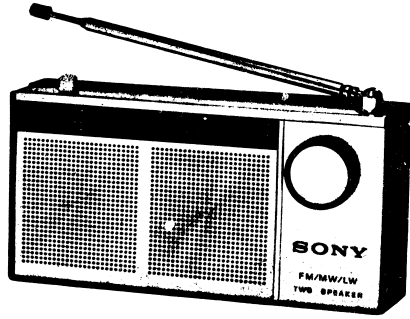


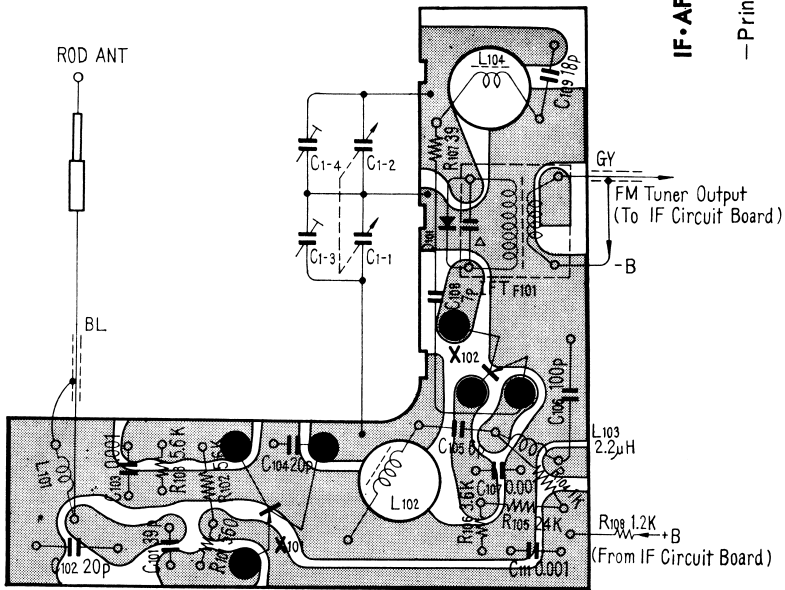
S25-1



Sony 4F-53L

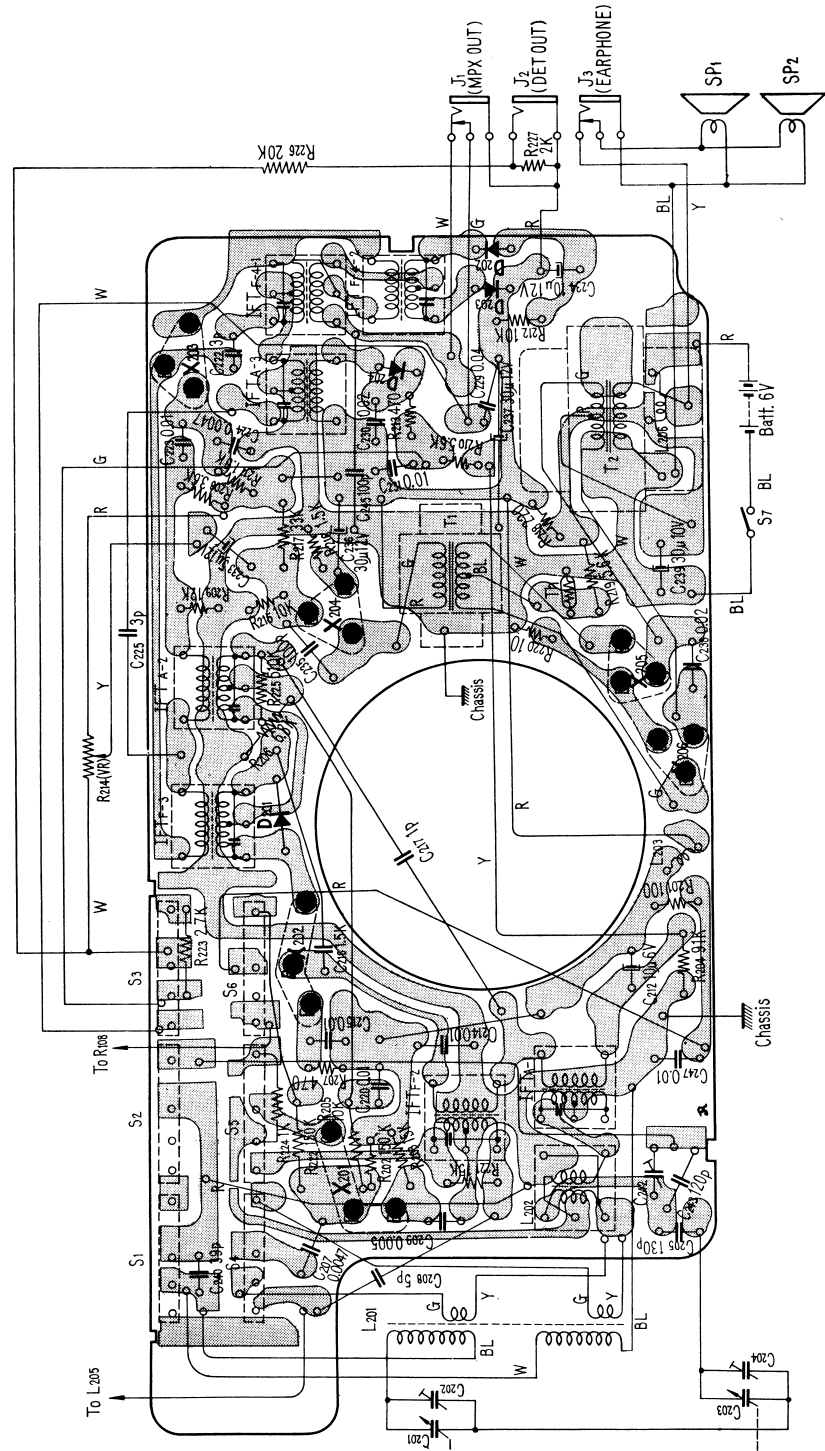
FM Tuner Section

— Printed Side —



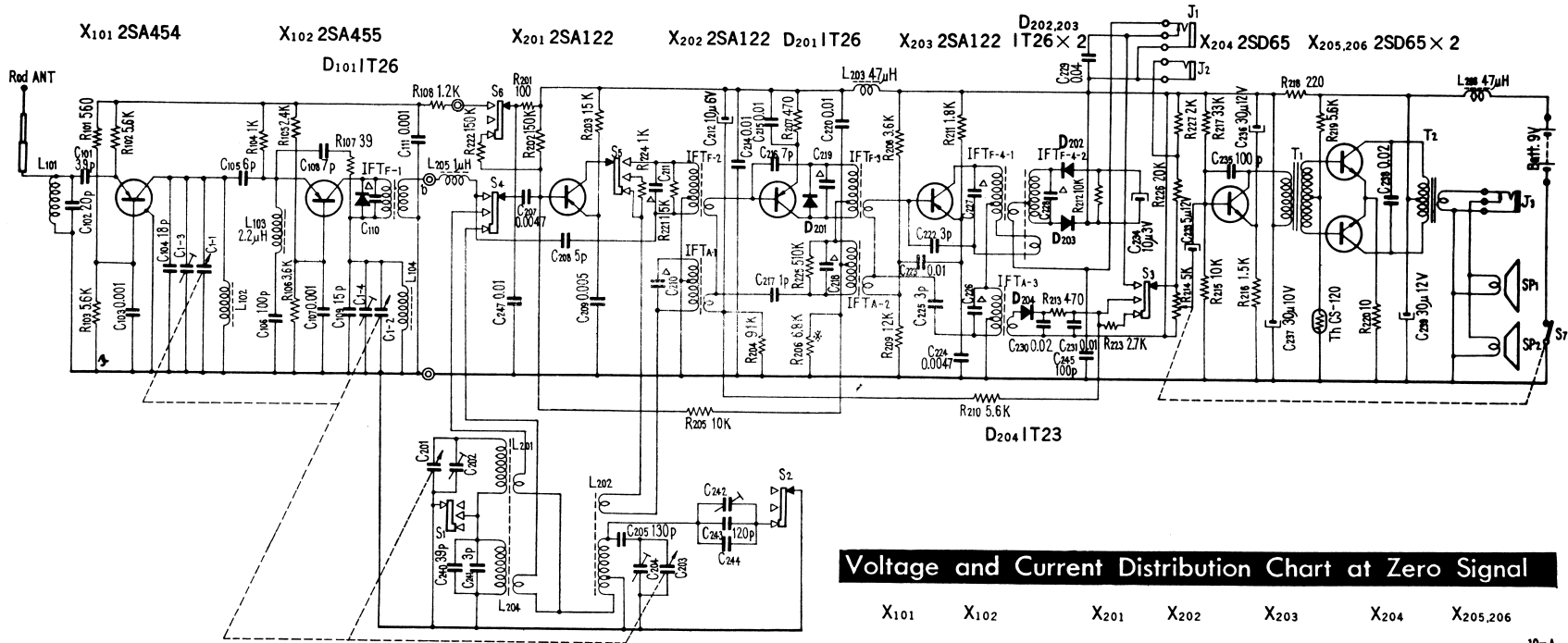
IF-AF Section

— Printed Side —



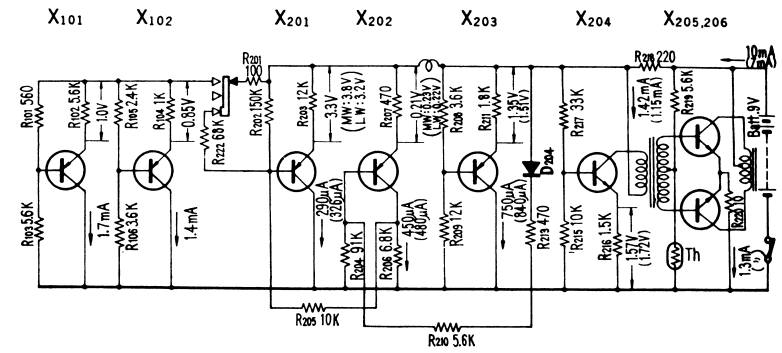
S25-1

Sony 4F-53L



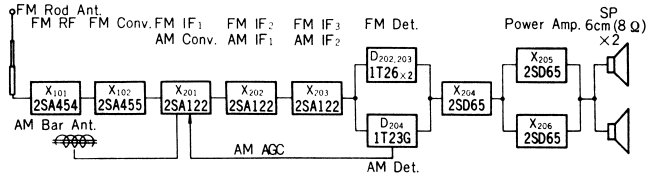
* To be adjusted
Capacitors marked with Δ are built in relative IF Transformers.

Voltage and Current Distribution Chart at Zero Signal



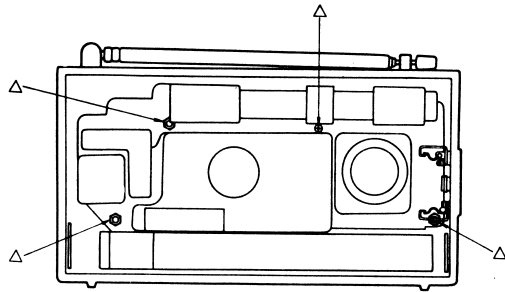
Values in the parenthesis are for "AM".

Block Diagram

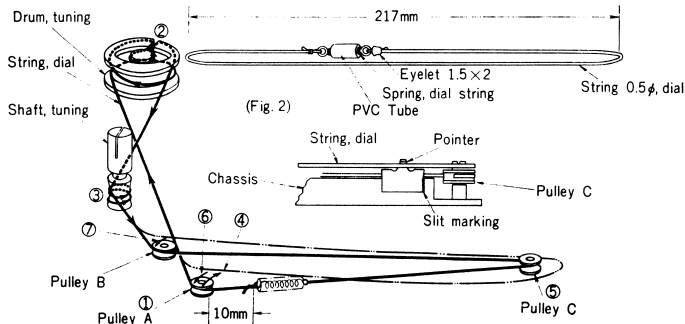


Removal of Chassis

- (1) Remove the Tuning Knob by pulling it out.
- (2) Remove the Back Cover from the Cabinet by turning the Screw located on the cabinet bottom counter-clockwise with Coin.
- (3) Remove the Triple Jack from the Cabinet by pulling it out.
- (4) Unsolder the white lead at the telescopic antenna terminal coming from the Circuit Board for FM Tuner.
- (5) Remove three Nuts and a Screw marked with Δ shown in Fig. 1.
- (6) Remove the Chassis from the Cabinet gently taking care not to cut the leads.



To String the Dial Cord



(Fig. 1)

Adjustment and Alignment

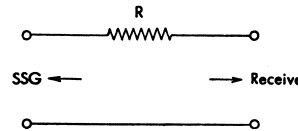
a) Frequency Coverage Adjustment

	Lower Limit	Adjust	Upper Limit	Adjust
FM	85.5 Mc	Core and Gap of FM OSC Coil (L ₁₀₄)	109.5 Mc	FM OSC Trimmer (C ₁₀₄)
MW	525 Kc	Core of AM OSC Coil (L ₂₀₂)	1,680 Kc	MW OSC Trimmer (C ₂₀₄)
LW	145 Kc	LW OSC Trimmer (C ₂₄₂)		

b) Tracking Adjustment

	Lower Checking Point	Adjust	Upper Checking Point	Adjust
FM	85.5 Mc	Core and Gap of FM PF Coil (L ₁₀₂)	109.5 Mc	FM RF Trimmer (C ₁₀₂)
MW	620 Kc	Position of MW ANT Coil (L ₂₀₁)	1,400 Kc	MW ANT Trimmer (C ₂₀₂)
LW	200 Kc	Position of LW ANT Coil (L ₂₀₄)		

Note: Dummy Antenna used when FM Band is adjusted



☆ Input impedance of receiver is 100Ω.

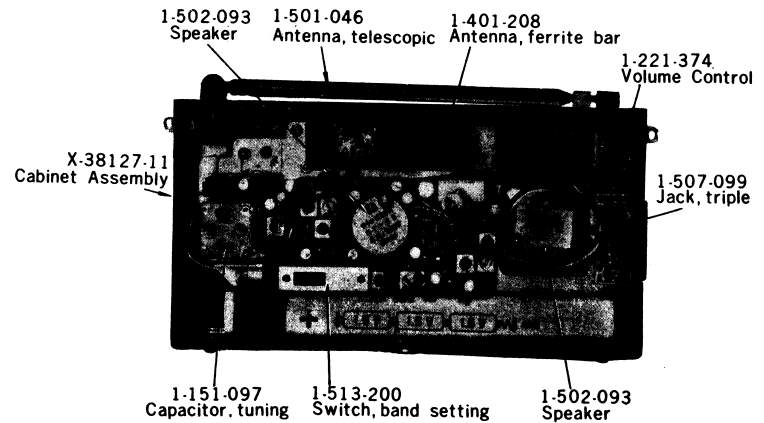
☆ R is then calculated as follows.

$$R = 100 - R_s [\Omega]$$

where R_s is output impedance of SSG which is usually 50Ω or 75Ω.

Before FM Band is adjusted, unsolder lead (white) at telescopic antenna terminal and connect SSG to telescopic antenna lead and ground of receiver through Dummy Antenna as shown in Fig. 2.

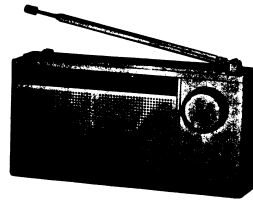
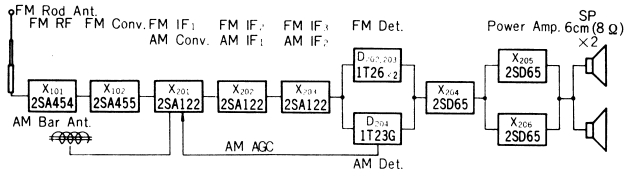
Major Parts Location



(Fig. 3)

S3-1 SONY MODEL 4F-53L

Block Diagram



Adjustment and Alignment

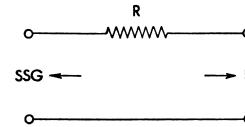
a) Frequency Coverage Adjustment

	Lower Limit	Adjust	Upper Limit	Adjust
FM	85.5 Mc	Core and Gap of FM OSC Coil (L ₁₀₄)	109.5 Mc	FM OSC Trimmer (C ₁₀₄)
MW	525 Kc	Core of AM OSC Coil (L ₂₀₂)	1,680 Kc	MW OSC Trimmer (C ₂₀₄)
LW	145 Kc	LW OSC Trimmer (C ₂₄₂)		

b) Tracking Adjustment

	Lower Checking Point	Adjust	Upper Checking Point	Adjust
FM	85.5 Mc	Core and Gap of FM RF Coil (L ₁₀₂)	109.5 Mc	FM RF Trimmer (C ₁₀₂)
MW	620 Kc	Position of MW ANT Coil (L ₂₀₁)	1,400 Kc	MW ANT Trimmer (C ₂₀₂)
LW	200 Kc	Position of LW ANT Coil (L ₂₀₄)		

Note: Dummy Antenna used when FM Band is adjusted



☆ Input impedance of receiver is 100Ω.
 ☆ R is then calculated as follows.

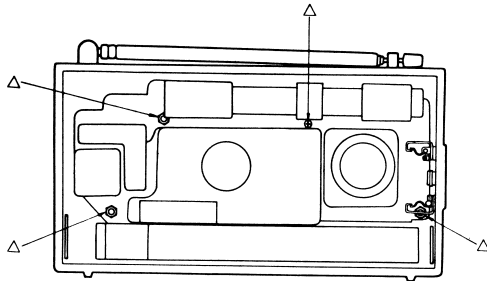
$$R = 100 - R_s [\Omega]$$
 where R_s is output impedance of SSG which is usually 50Ω or 75Ω.

(Fig. 2)

Before FM Band is adjusted, unsolder lead (white) at telescopic antenna terminal and connect SSG to telescopic antenna lead and ground of receiver through Dummy Antenna as shown in Fig. 2.

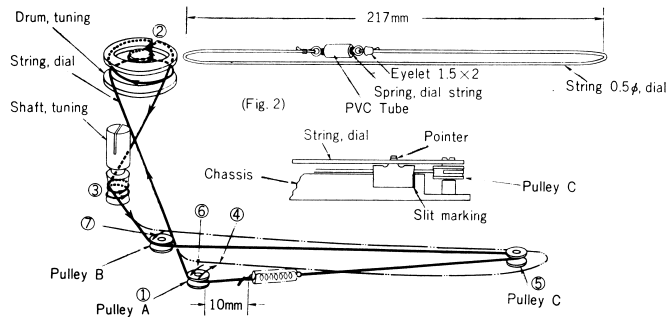
Removal of Chassis

- Remove the Tuning Knob by pulling it out.
- Remove the Back Cover from the Cabinet by turning the Screw located on the cabinet bottom counter-clockwise with Coin.
- Remove the Triple Jack from the Cabinet by pulling it out.
- Unsolder the white lead at the telescopic antenna terminal coming from the Circuit Board for FM₂Tuner.
- Remove three Nuts and a Screw marked with △ shown in Fig. 1.
- Remove the Chassis from the Cabinet gently taking care not to cut the leads.

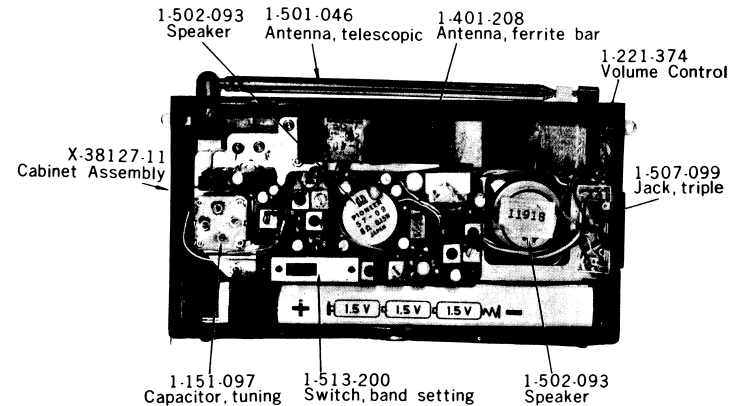


(Fig. 1)

To String the Dial Cord



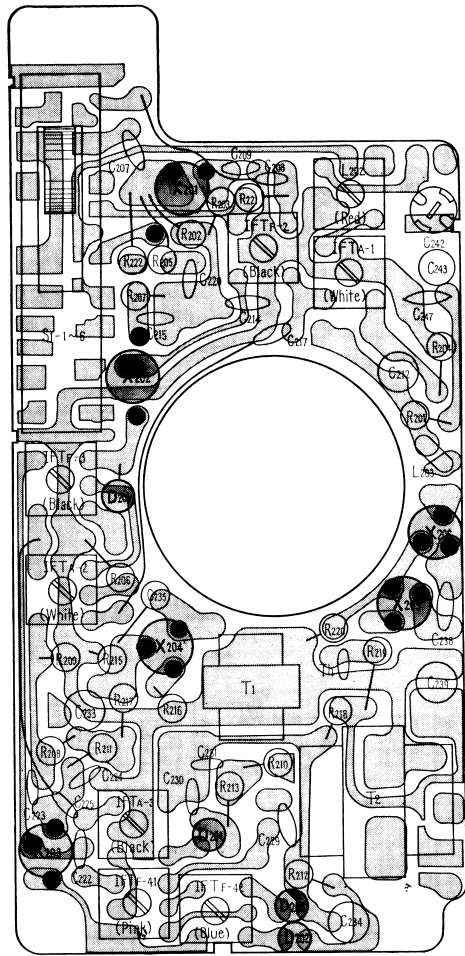
Major Parts Location



(Fig. 3)

IF-AF Section

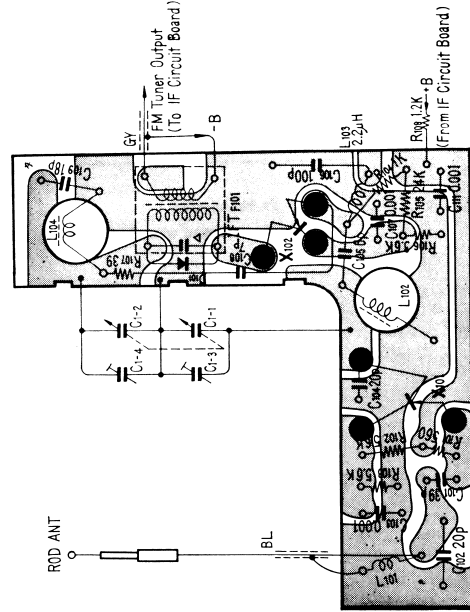
--- Parts Side ---



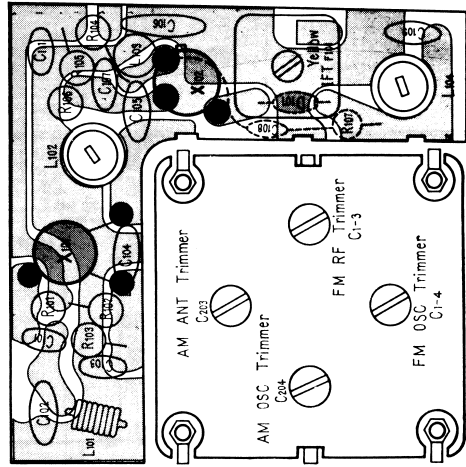
Mounting Diagram

FM Tuner Section

--- Printed Side ---

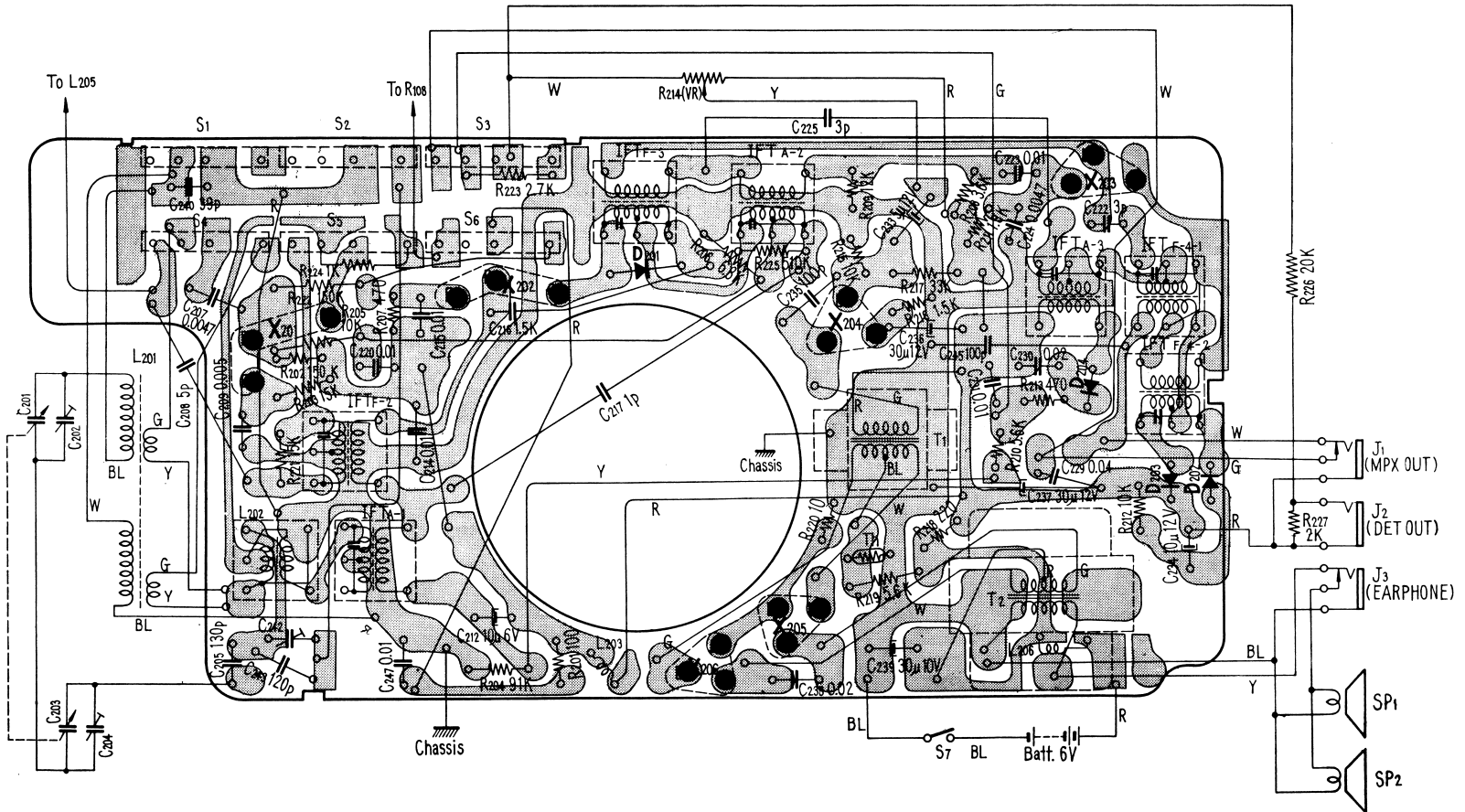


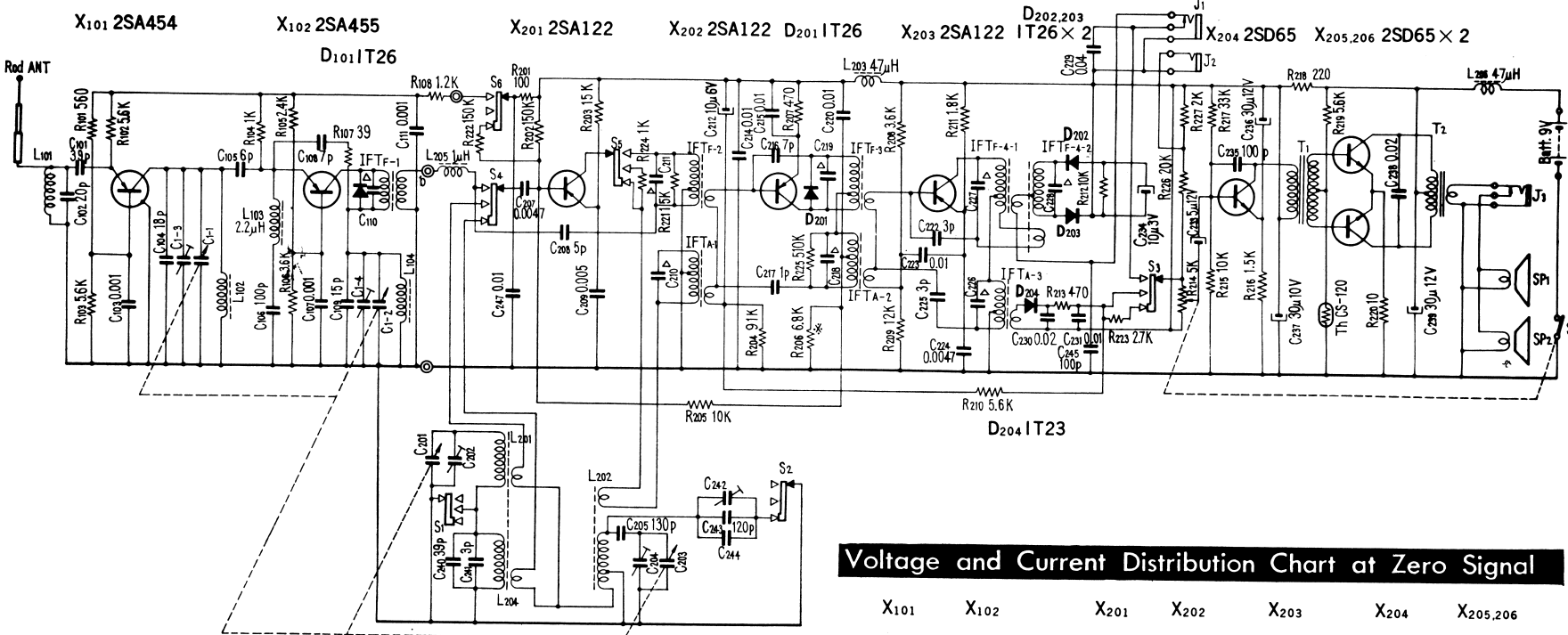
--- Parts Side ---



IF-AF Section

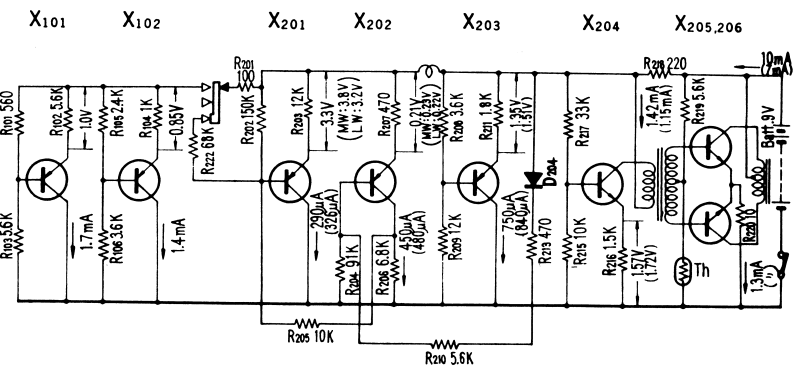
-Printed Side-





※ To be adjusted
 Capacitors marked with Δ are built in relative IF Transformers.

Voltage and Current Distribution Chart at Zero Signal



Values in the parenthesis are for "AM".