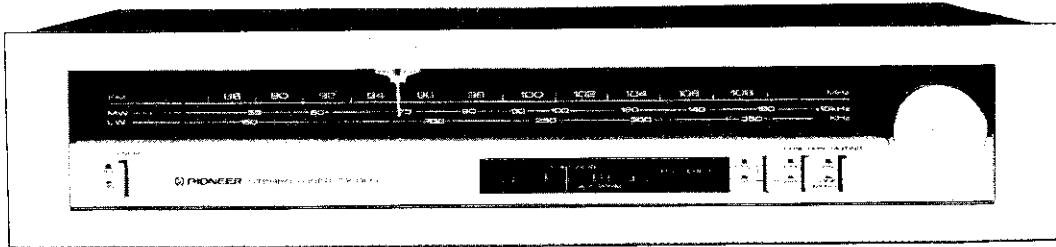


LW/MW/FM STEREO TUNER

TX-408L

SERVICE MANUAL



 PIONEER®

DISASSEMBLY

Bonnet Case

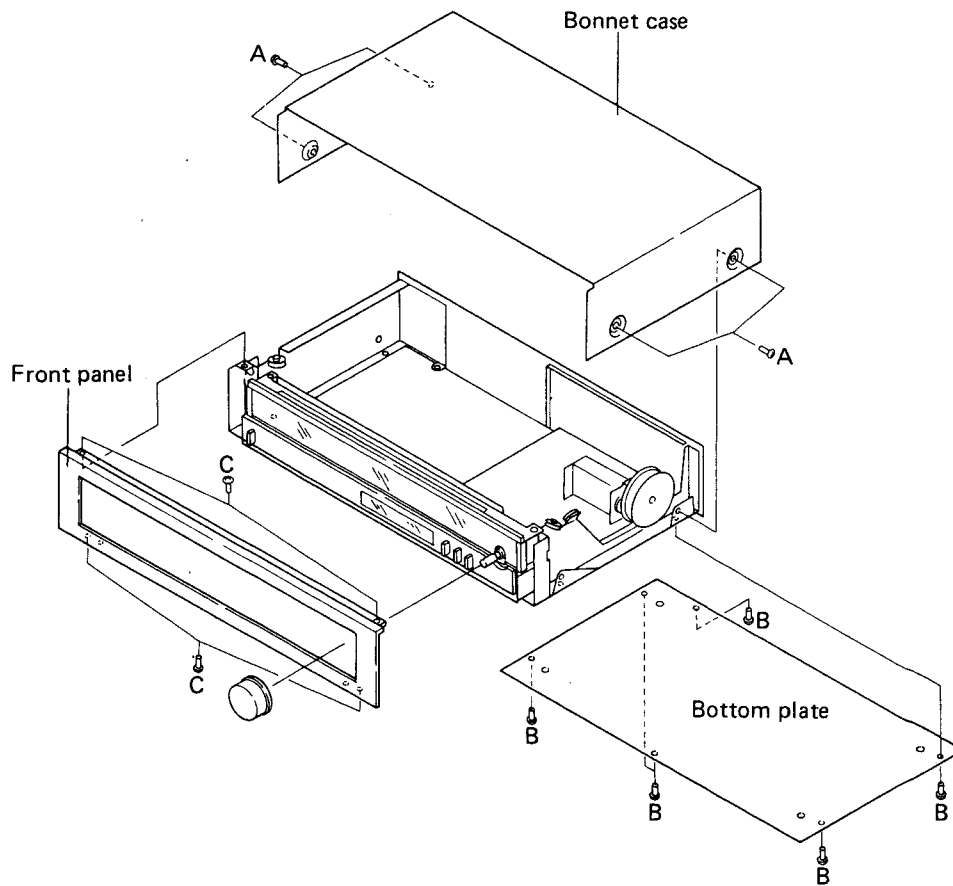
Remove the four screws (A).

Bottom Plate

Remove the six screws (B).

Front Panel

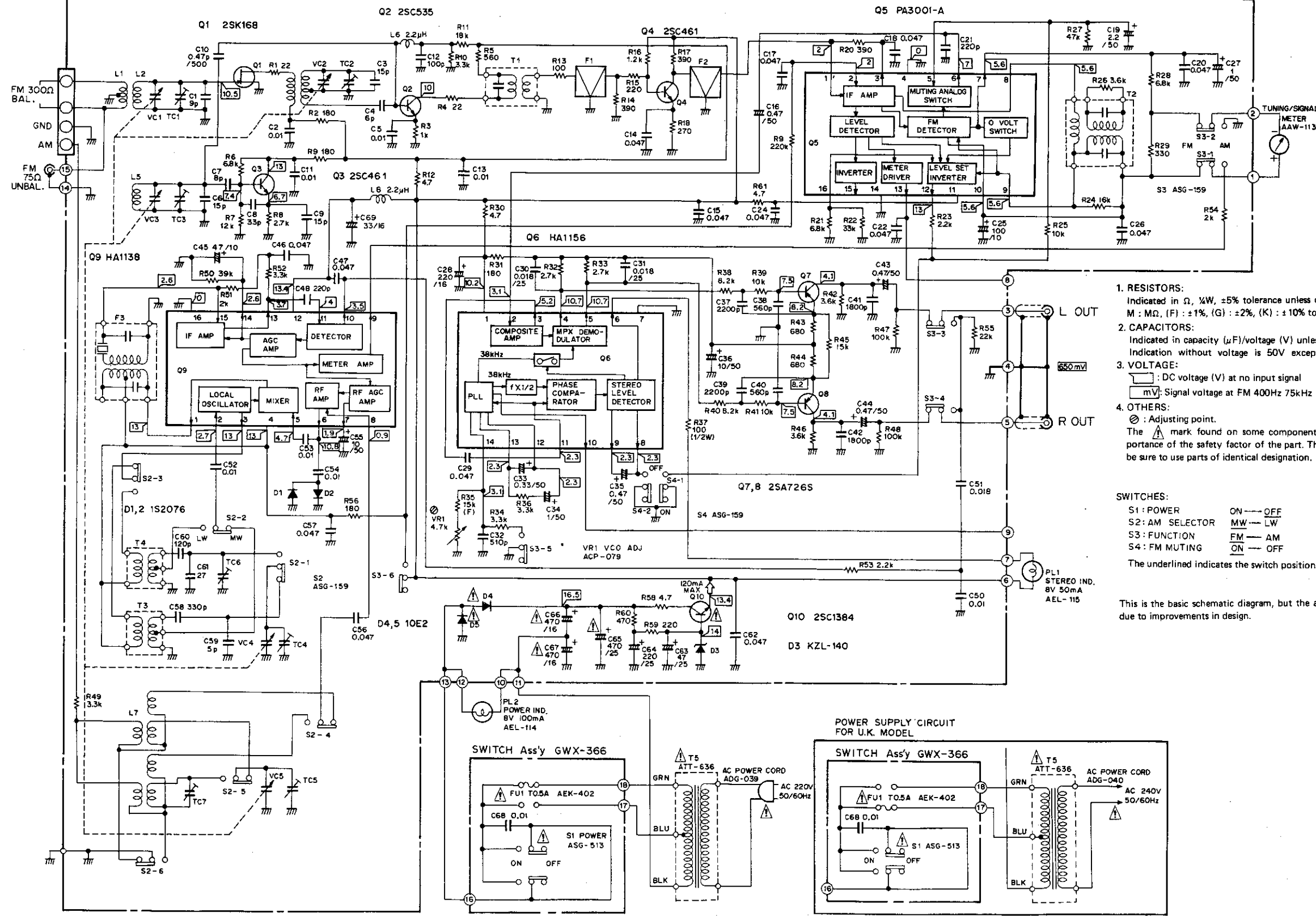
Pull off the tuning knob, and remove the four screws (C).



SCHEMATIC DIAGRAM

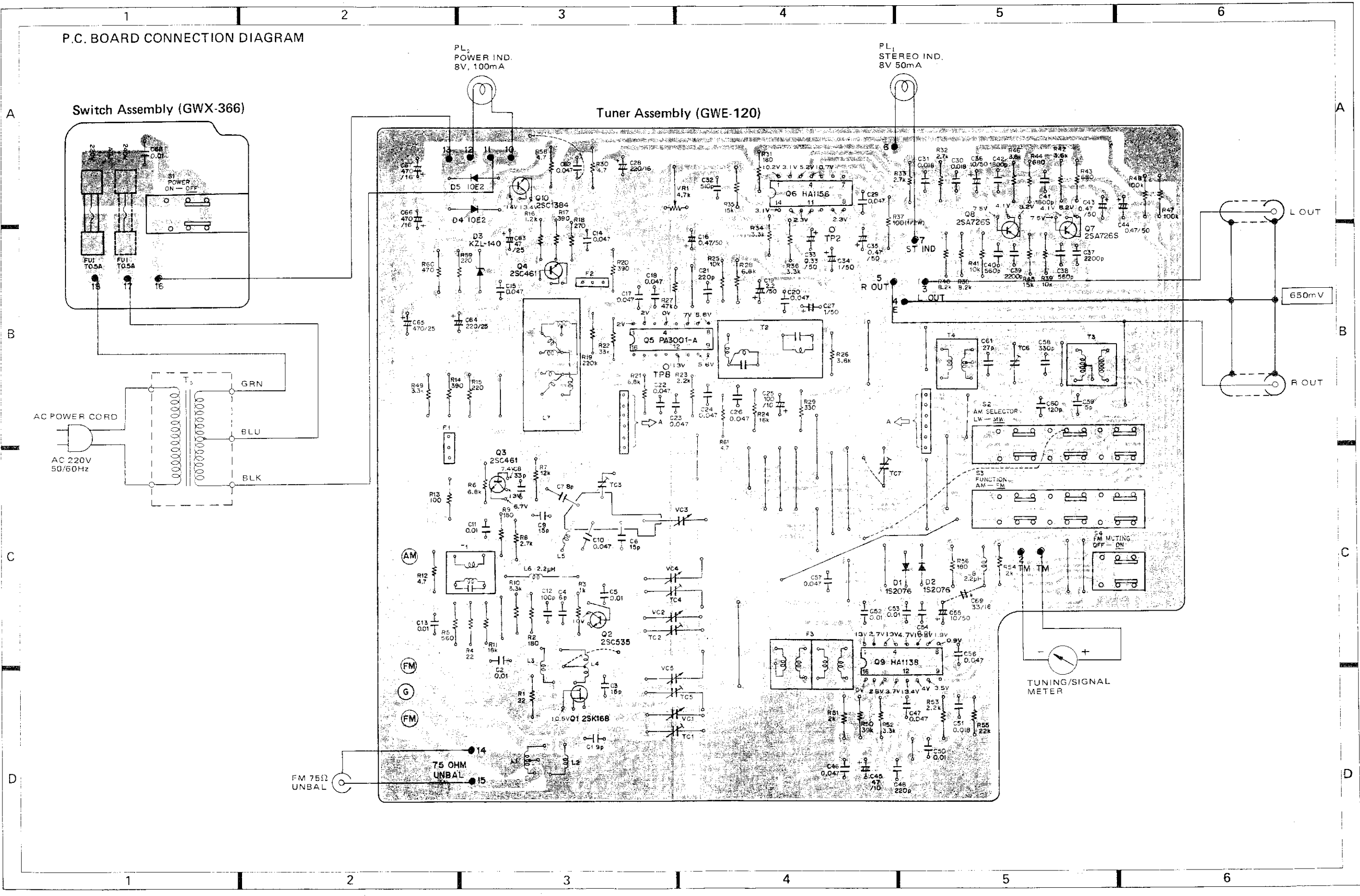
TUNER Ass'y GWE-120

NOTE:
The indicated semiconductors are representative ones only. Other alternative semiconductors may be used and are listed in the parts list.



1. RESISTORS:
Indicated in Ω , $\frac{1}{4}W$, $\pm 5\%$ tolerance unless otherwise noted k : k Ω , M : M Ω , (F) : $\pm 1\%$, (G) : $\pm 2\%$, (K) : $\pm 10\%$ tolerance
 2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p : pF
Indication without voltage is 50V except electrolytic capacitor.
 3. VOLTAGE:
 \square : DC voltage (V) at no input signal
 \square mV : Signal voltage at FM 400Hz 75kHz DEV.
 4. OTHERS:
 \otimes : Adjusting point.
The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- SWITCHES:
S1 : POWER ON \dashrightarrow OFF
S2 : AM SELECTOR MW \dashrightarrow LW
S3 : FUNCTION FM \dashrightarrow AM
S4 : FM MUTING ON \dashrightarrow OFF
- The underlined indicates the switch position.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

P.C. BOARD CONNECTION DIAGRAM



Switch Assembly (GWX-366)

Tuner Assembly (GWE-120)

AC POWER CORD

AC 220V
50/60Hz

FM 75Ω
UNBAL

75 OHM
UNBAL


TUNING/SIGNAL
METER

650mV

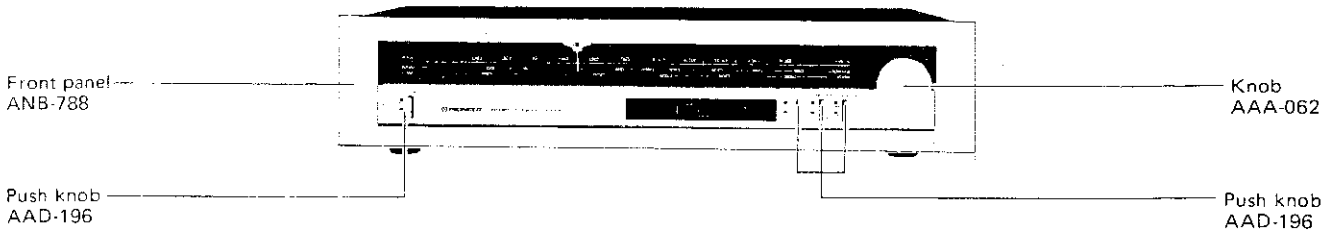
L OUT

R OUT

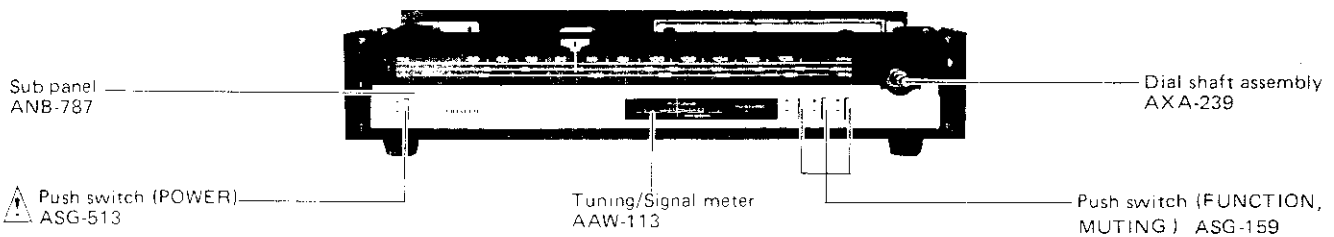
PARTS LOCATION

- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

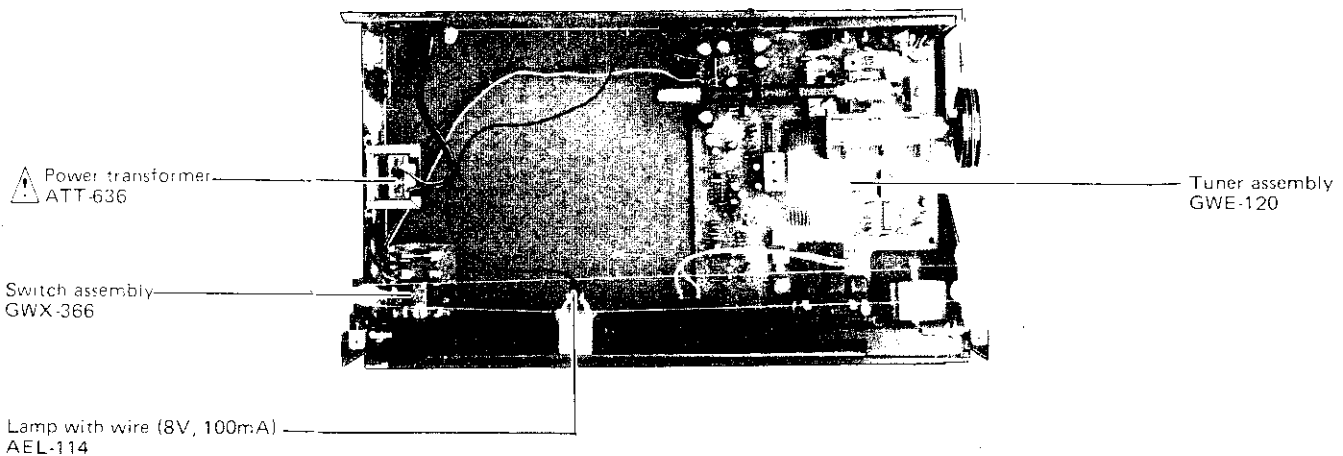
Front Panel View



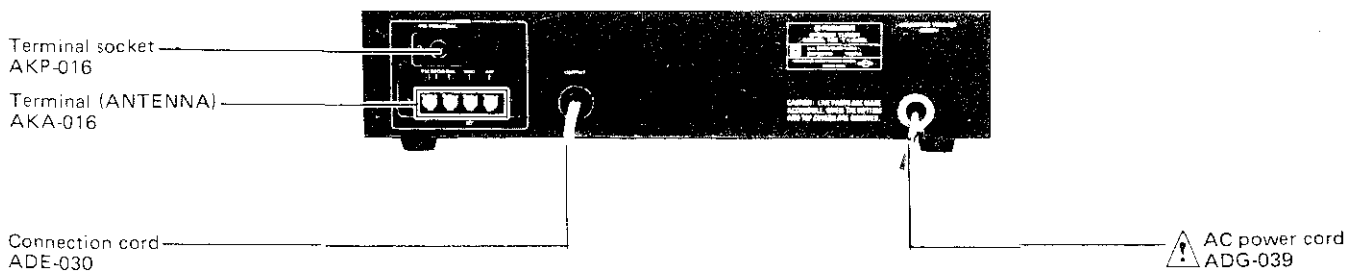
Front View with Panel Removed



Top View

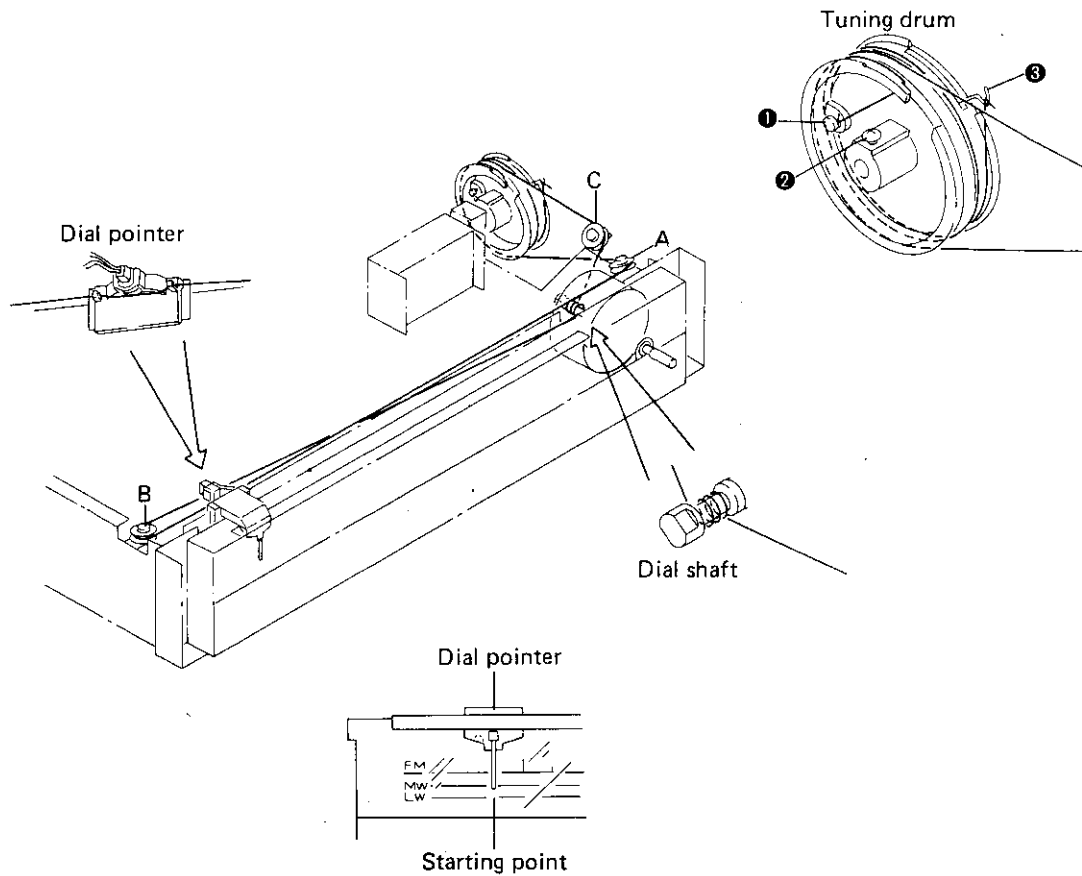


Rear Panel View



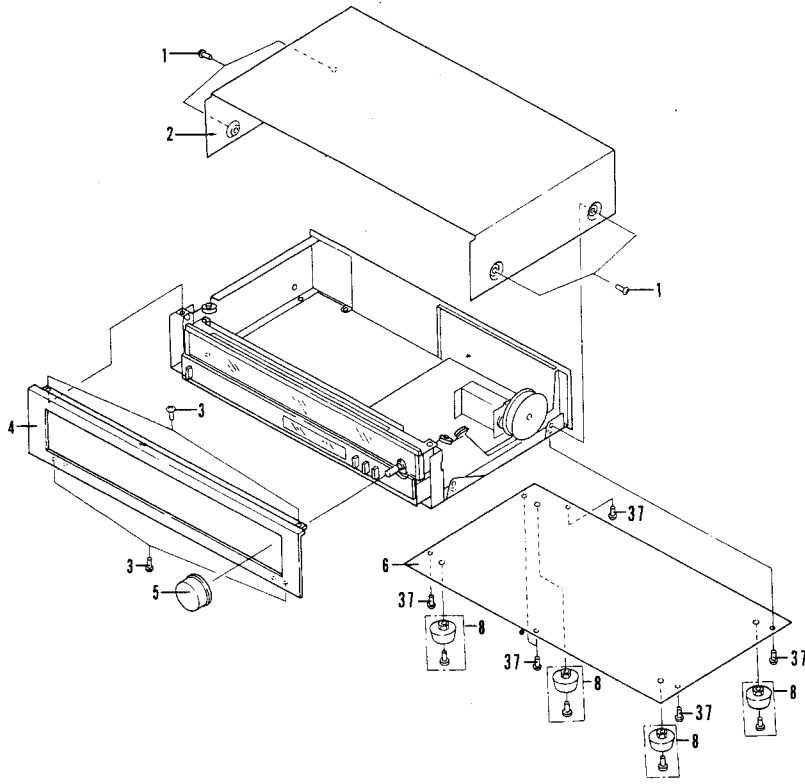
DIAL CORD STRINGING

1. Remove the bonnet case and front panel as described in the "Disassembly" section on page 6.
2. Remove the tuning drum from the shaft of the tuning capacitor.
3. Tie one end of the cord to the stud ❶ located inside the tuning drum.
4. Rotate the tuning capacitor right around until the rotor blades are fully intermeshed.
5. Secure the tuning drum back onto the tuning capacitor shaft, making sure that the securing screw ❷ faces directly upward.
6. Pass the cord out through the small opening in the circumference of the tuning drum (see diagram), and then take it over pulleys A and B in that sequence.
7. Wind the cord around the dial shaft 3 times.
8. Pass it over pulley C, wind it around the tuning drum 2 times, and finally tie it to the spring hook ❸ so that it is tensioned.
9. Turn the dial shaft, and check that the cord moves smoothly.
10. Cut off any excess cord.
11. Turn the dial shaft counter-clockwise as far as it will go.
12. Align the dial pointer with the starting point of the dial scale, and then pass the cord over it.
13. Check that the dial pointer is in line with the starting point of the dial scale.
14. Finally apply the locking paint to the cord securing positions (stud ❶ and spring hook ❸) and the dial pointer connection.

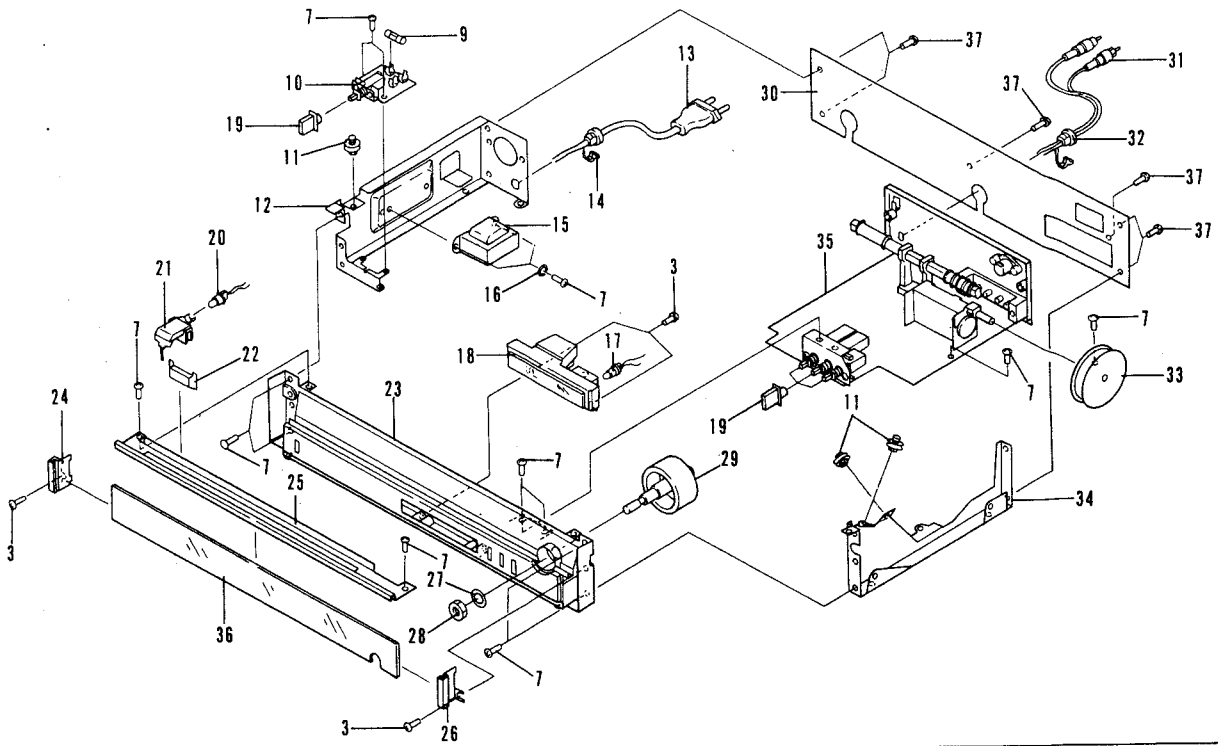


EXPLODED VIEW

Exterior Components



Interior Components



Parts List of Exploded View

NOTES:

- Parts without part number cannot be supplied.
- The \triangle mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.

Key No.	Part No.	Description	Key No.	Part No.	Description
1.	ABA-079	Screw (4x8)	20.	AEL-114	Lamp with wire (8V, 100mA)
2.	ANE-260	Bonnet case	21.		Dial pointer assembly
3.	ABA-082	Screw (3x10)	22.		Smother
4.	ANB-788	Front panel	23.	ANB-787	Sub panel
5.	AAA-062	Knob	24.		Side cover L
6.		Bottom plate	25.		Plate
7.	ABA-066	Screw (3x8)	26.		Side plate R
8.	AEC-589	Foot assembly	27.	B22-016	Washer
\triangle 9.	AEK-401	Fuse (T 0.5A)	28.	B71-004	Nut M9
10.	GWX-366	Switch assembly	29.	AXA-239	Dial shaft
11.		Pulley assembly	30.		Rear panel
12.		Frame L	31.	ADE-030	Connection cord
\triangle 13.	ADG-039	AC power cord	32.	AEC-337	Strain relief
14.	AEC-327	Strain relief	33.		Tuning drum assembly
\triangle 15.	ATT-636	Power transformer	34.		Frame R
16.	ABE-046	Washer	35.	GWE-120	Tuner assembly
17.	AEL-115	Lamp with wire (8V, 50mA)	36.	ANB-789	Glass plate
18.	AAW-113	Tuning/Signal meter	37.	ABA-246	Screw
19.	AAD-196	Push knob			

MISCELLANEA

Miscellaneous Parts

Part No.	Symbol & Description
△ ATT-636	T5 Power transformer
AEL-115	PL1 Lamp with wire (8V, 50mA)
AEL-114	PL2 Lamp with wire (8V, 100mA)
△ AEK-401	FU1 Fuse (T 0.5A)

External Appearance of Transistors and ICs

