

6.1 AJUSTE PARA LOS TIPOS HB Y HE

SECCIÓN DEL SINTONIZADOR DE FM

- Conecte el generador de señal de FM (FG SG) al terminal FM ANTENNA 300Ω a través de una antena ficticia de 300Ω.
- Ajuste la función a FM.
- Conecte el generador de señales estéreo multiplex de FM al terminal del modulador externo del FM SG. Ajuste la modulación de la señal principal a 1 kHz/L + R/±68,25 kHz de desviación, y la señal piloto a 19 kHz/±6,75 kHz de desviación.

Paso	FM SG (1 kHz, +75 kHz de desviación)		Frecuencímetro del	Punto de ajuste	Procedimiento de ajuste
	Frecuencia	Nivel			
1	Sin señal		87,5 MHz	—	Compruebe la tensión de CC entre el terminal TP1 (VT) y masa (2,5V - 2V).
2	98,0 MHz	30 a 40 dB	98,0 MHz	T101 L107	Ajuste al máximo la tensión de CC entre la patilla (13) del IC101 y masa.
3	98,0 MHz	60 dB	98,0 MHz	L103	Ajuste la tensión de CC entre los terminales TP3 y TP4 a 0±50 mV.
4	98,0 MHz	60 dB	98,0 MHz	VR101	Ajuste la señal entre el terminal TP5 (VCO) y masa a 76 kHz (dentro de ±200 Hz).
	Sin modulación				

SECCIÓN DEL SINTONIZADOR DE AM

Sección del sintonizador de MW

- Conecte la antena de cuadro de AM suministrada entre los terminales AM ANTENNA y GND.
- Conecte el generador de señales de AM (AM SG) al terminal AM ANTENNA a través de un resistor de 10 kilohmios.
- Ajuste la función a AM (MW).

(*1) Uno es el de frecuencia de separación entre canales de 10 kHz, y el otro de 9 kHz. Por consiguiente, en el caso del modelo de separación de 10 kHz, el ajuste deberá realizarse empleando la frecuencia del ítem "separación de 10 kHz", y en el caso del modelo de 9 kHz, el ajuste deberá realizarse empleando la frecuencia del ítem "separación de 9 kHz".

(*2) Sintonice el AM SG con el SX-225.

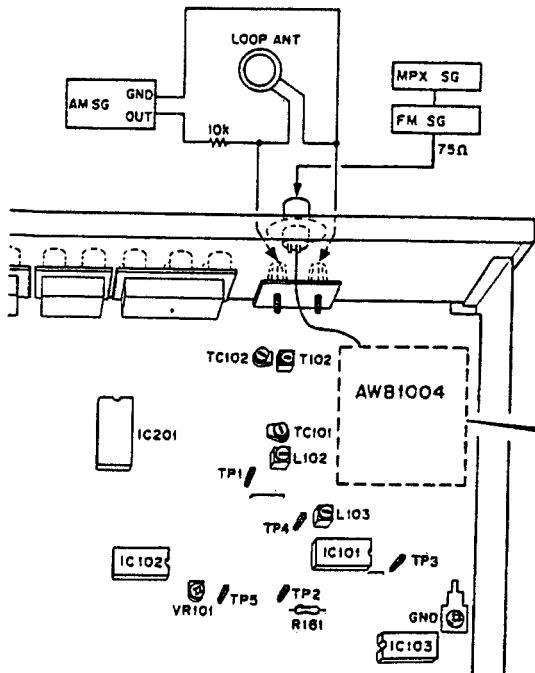
Paso	AM SG (400 Hz, modulación al 30%)			Frecuencímetro del(*1)	Punto de ajuste	Procedimiento de ajuste			
	Frecuencia (*1)		Nivel						
	Separación de 10 kHz	Separación de 9 kHz							
1	Sin señal		530 kHz	531 kHz	L102	Ajuste la tensión de CC entre el terminal TP1 (VT) y masa (1,3 ±0,1V).			
2	Sin señal		1700 kHz	1602 kHz	TC101	Ajuste la tensión de CC entre el terminal TP1 (VT) y masa (10 ±0,3V).			
3	Repita los pasos 1 y 2 hasta que ambas especificaciones sean correctas.								
4	600kHz(*2)	603kHz(*2)	76 dB	600 kHz	603 kHz	T102	Ajuste al máximo la tensión de CC entre el terminal TP2 y masa.		
5	1400kHz(*2)	1395kHz(*2)	76 dB	1400 kHz	1395 kHz	TC102			
6	Repita los pasos 4 y 5 hasta obtener la sensibilidad máxima.								
7	1000 kHz	999 kHz (*2)	45 a 65 dB	1000 kHz	999 kHz	R161 4,7 kilohmios	Sin embargo, si el indicador de sintonía no se enciende a más de 65 dB, desconecte R161 (4,7 kilohmios) del conjunto COMPLEX.		

6.2 ADJUSTMENT FOR HEZ TYPE

- This adjustment procedure is for only the adjustment (FM tuner adjustment Step I) which is different from that for the SX-225/HEZ type.

FM Tuner Adjustment

Step	FM SG (1kHz ± 75kHz deviation)		Frequency display	Adjustment point	Adjustment procedure
	Frequency	Level			
I	1 90.0MHz	30 to 40dB	90.0MHz	L902,T901,L903 (AWB1004)	Adjustment until DC voltage between IC101 13pin (FM S-METER) and ground is at maximum.
	2 106.0MHz	30 to 40dB	106.0MHz	TC901,T901,L903 (AWB1004)	
	3 90.0MHz	30 to 40dB	90.0MHz	L902 (AWB1004)	
	4 Repeat step 2 and 3 until the DC voltage between IC101 13pin (FM S-METER) and GND is at maximum. Step 3 should always be the last step performed.				
II	5 98.0MHz	30 to 40dB	98.0MHz	T902(AWB1004)	Adjustment until DC voltage between IC101 13pin (FM S-METER) and ground is at maximum.
	6 98.0MHz	60dB	98.0MHz	L103	Adjust DC voltage between terminal TP 3 and TP 4 to $0 \pm 50mV$
	7 98.0MHz	60dB	98.0MHz	VR101	Adjust signal between TP 5(VCO) and ground to 76kHz (within $\pm 200Hz$).



As the adjusting method for the AM tuner is the same as that for the HB and HE types, refer to 23 page.

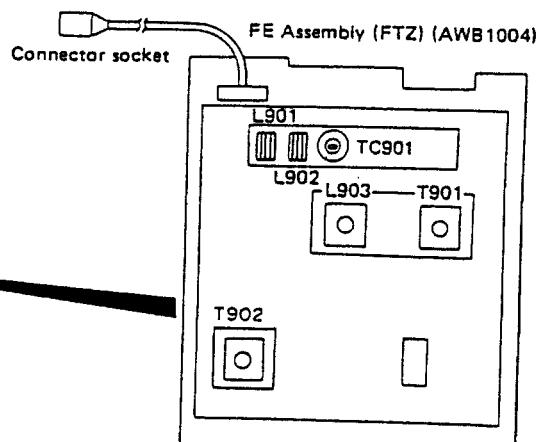
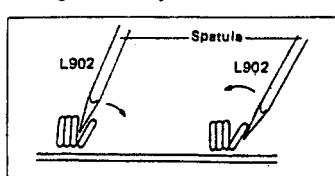


Fig. 6-2 Adjustment point of FE Assembly



To make the output maximum by opening and closing of the first right side turn of the coil.

Fig. 6-3 Adjustment tuning



Use a spatula whose an edge is thin. The spatula is not metal (ex. Glass-Cloth Epoxy Resin).

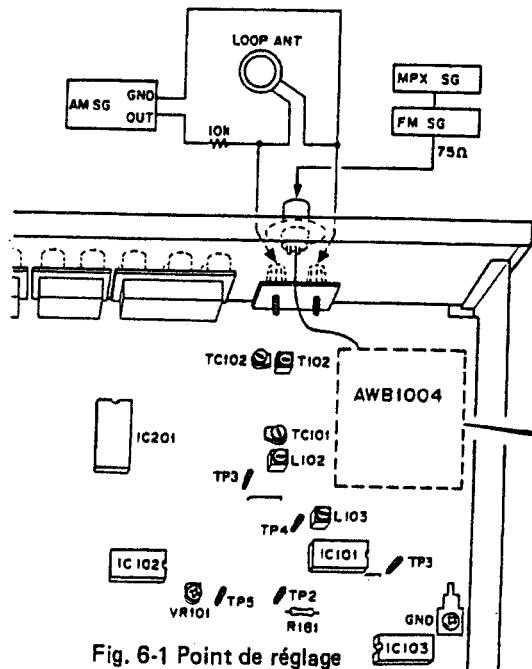
SPATULA

6.2 RÉGLAGE POUR LE TYPE HEZ

- Ce réglage n'est à effectuer que lorsque le réglage (réglage de tuner FM, Etape 1) est différent de celui pour le type SX-225/HEZ.

Réglage Tuner FM

Etape	FM SG (1 kHz, ± 75 kHz d'édart)		Affichage de fréquence	Point de réglage	Procédure de réglage
	Fréquence	Niveau			
I	1 90,0 MHz	30 à 40 dB	90,0 MHz	L902, T901, L903 (AWB1004)	Réglage jusqu'à ce que la tension CC entre la broche 13 de IC101 (S-METRE FM) et la terre soit au maximum.
	2 106,0 MHz	30 à 40 dB	106,0 MHz	TC901, T901, L903 (AWB1004)	
	3 90,0 MHz	30 à 40 dB	90,0 MHz	L902 (AWB1004)	
	4 Répéter les étapes 2 et 3 jusqu'à ce que la tension CC entre la broche 13 de IC101 (S-METRE FM) et la terre soit au maximum. L'étape 3 doit toujours être effectuée en dernier.				
II	5 98,0 MHz	30 à 40 dB	98,0 MHz	T902 (AWB1004)	Réglage jusqu'à ce que la tension CC entre la broche 13 de IC101 (S-METRE FM) et la terre soit au maximum.
	6 98,0 MHz	60 dB	98,0 MHz	L103	Régler la tension CC entre les bornes TP3 et TP4 à 0 ± 50 mV
	7 98,0 MHz	60 dB	98,0 MHz	VR101	Régler le signal entre la borne TP5 (VCO) et la terre à 76 kHz (moins de ± 200 Hz).



Pour obtenir une sortie maximale en ouvrant et fermant la spire à l'extrémité droite de la bobine.

Fig. 6-3 Accord de réglage

La méthode d'ajustement de la radio AM est la même que celle des types HB et HE, se référer à la page 24.

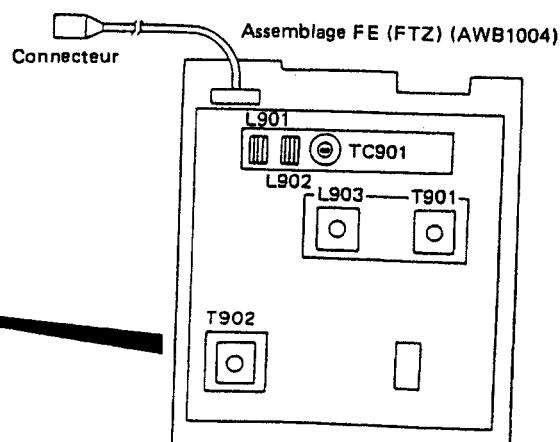


Fig. 6-2 Point de réglage de l'assemblage FE



Utiliser une spatule à bord fin. Elle ne doit pas être en métal (ex. résine époxy tissu de verre)

SPATULE

6.2 AJUSTE PARA EL TIPO HEZ

- Este procedimiento de ajuste es solamente el ajuste (paso I de ajuste del sintonizador de FM) que es diferente al del tipo SX-225/HEZ.

Ajuste del sintonizador de FM

Paso	Señal de FM (1 kHz, desviación ± 75 kHz)		Presentación de frecuencia	Punto de ajuste	Procedimiento de ajuste
	Frecuencia	Nivel			
I	1 90 MHz	30 a 40 dB	90 MHz	L902, T901, L903 (AWB1004)	Ajuste hasta que la tensión de CC entre la patilla 13 del IC101 (FM S-METER) y puesta a tierra se encuentre al máximo.
	2 106 MHz	30 a 40 dB	106 MHz	TC901, T901, L903 (AWB1004)	
	3 90 MHz	30 a 40 dB	90 MHz	L902 (AWB1004)	
	4 Repita los pasos 2 y 3 hasta que la tensión de CC entre la patilla 13 del IC101 (FM S-METER) y puesta a tierra (GND) se encuentre al máximo. El paso 3 siempre debe ser el último paso realizado.				
II	5 98 MHz	30 a 40 dB	98 MHz	T902 (AWB1004)	Ajuste hasta que la tensión de CC entre la patilla 13 del IC101 (FM S-METER) y puesta a tierra se encuentre al máximo.
	6 98,0 MHz	60 dB	98,0 MHz	L103	Ajuste la tensión de CC entre los terminales TP3 y TP4 a 0 ± 50 mV.
	7 98,0 MHz	60 dB	98,0 MHz	VR101	Ajuste la señal entre el terminal TP5 (VCO) y masa a 76 kHz (dentro de ± 200 Hz).

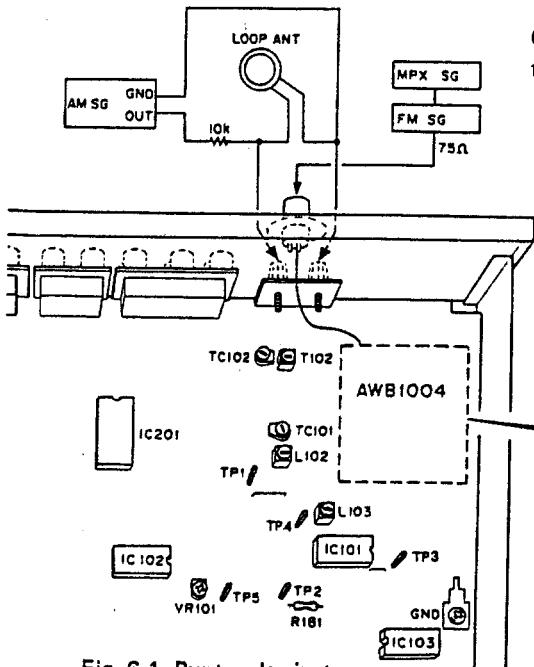
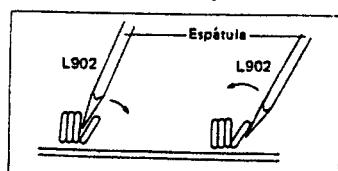


Fig. 6-1 Puntos de ajuste



Ajuste al máximo la salida abriendo y cerrando la primera espira de la derecha de la bobina.

Como el método de ajuste del sintonizador de AM es igual que para los tipos HB y HE, consulte la página 25.

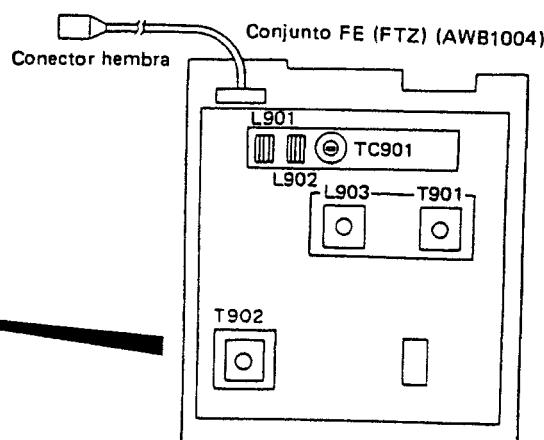


Fig. 6-2 Puntos de ajuste del conjunto FE



Emplee una espátula cuyo borde sea fino. La espátula no deberá ser de metal (p. ej. resina epoxídica con fibra de vidrio)

Fig. 6-3 Ajuste de la sintonía

ESPÁTULA

7. FOR HE AND HEZ TYPES

7.1 CONTRAST OF MISCELLANEOUS PARTS

NOTES:

- Parts without part number cannot be supplied.
- Parts marked by “◎” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- 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.

The SX-225/HE and HEZ types are the same as the SX-225/HB type with the exception of the following sections.

Mark	Symbol & Description	Part No.		
		SX-225/HB	SX-225/HE	SX-225/HEZ
	COMPLEX ASSY	AWZ2396	AWZ2396	AWZ2400
	CONTROL ASSY	AWZ2397	AWZ2397	AWZ2401
	SP SWITCH ASSY	Non supply	Non supply	Non supply
	SP TERMINAL ASSY	Non supply	Non supply	Non supply
	TRANS ASSY	...	...	Non supply
△	FE ASSY	...	...	AWB1004
△	AC power cord	ADG-063	ADG1021	ADG1010
△	Capacitor(C2)	...	...	ACE-507
△	Ceramic capacitor(C3)	...	...	CKDVB102K50
△	Fuse(FU1)	AEK-511	AEK-018	AEK-018
	Antenna set	AEA1002	AEA1002	...
	FM antenna ASSY	...	...	ADH1002
	Loop antenna ASSY	...	...	ATB-113
	Resistor	...	...	RD1/4PMF100J
	PAL socket	...	...	AKX1029
	Operating instructions(English)	ARB1163	...	...
	Operating instructions (English/German/French/Italian/ Dutch/Swedish/Spanish/Portuguese)	...	ARE1110	...
	Operating instructions(German)	...	...	ARC1128
	Nut M12	...	...	NKX2FN1
	Earth screw	...	...	ABA1047

7.2 LINE VOLTAGE SELECTION FOR HB AND HE TYPES

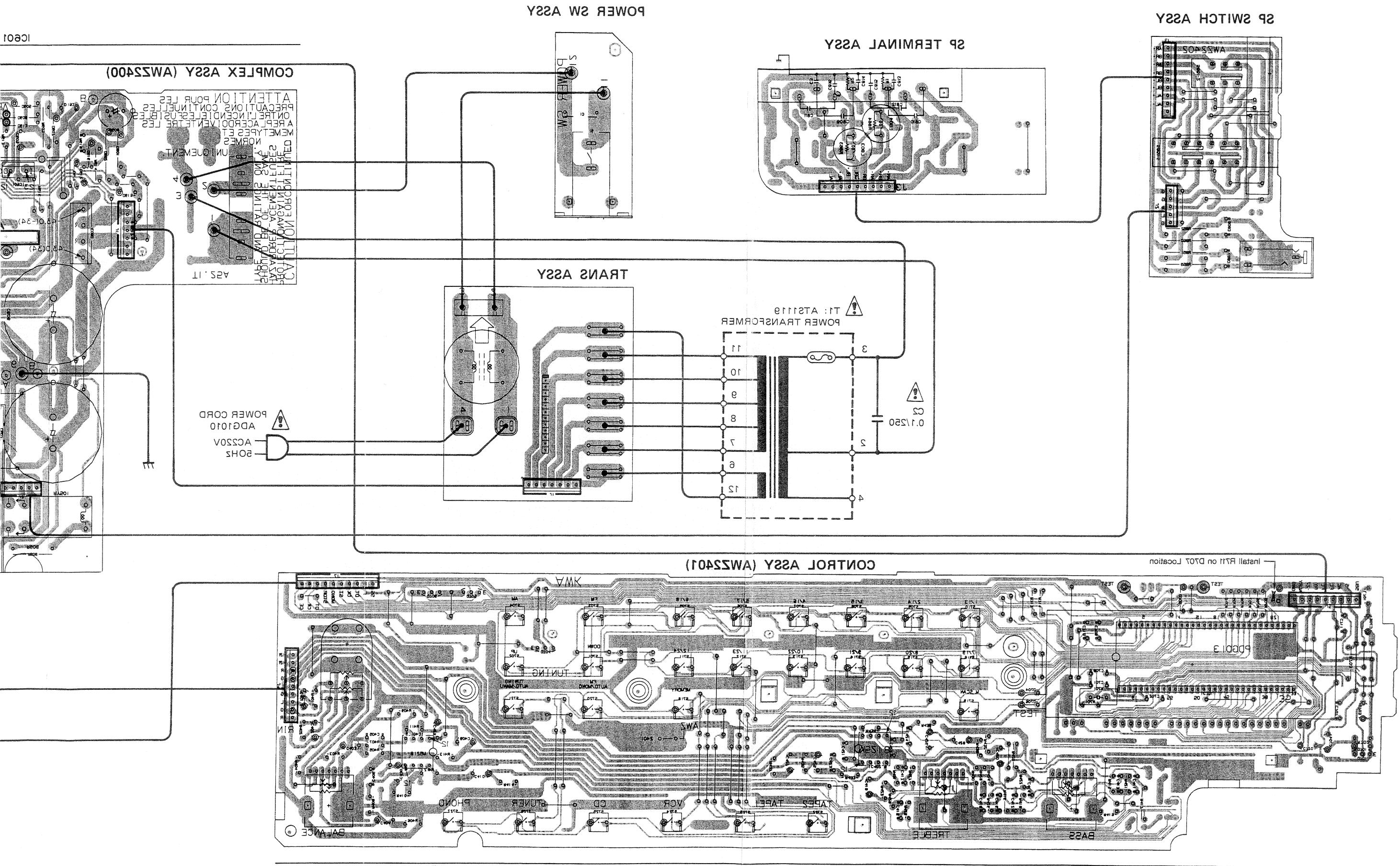
Line voltage can be changed with following steps.

1. Disconnect the AC power cord.
2. Remove the top cover.
3. Change the connection wire (To Power transformer) of Terminal No. 2 or No. 4 (BRN) as follows.

Voltage	Terminal No. 2	Terminal No. 4
220V	BRN wire	.....
240V	.....	BRN wire

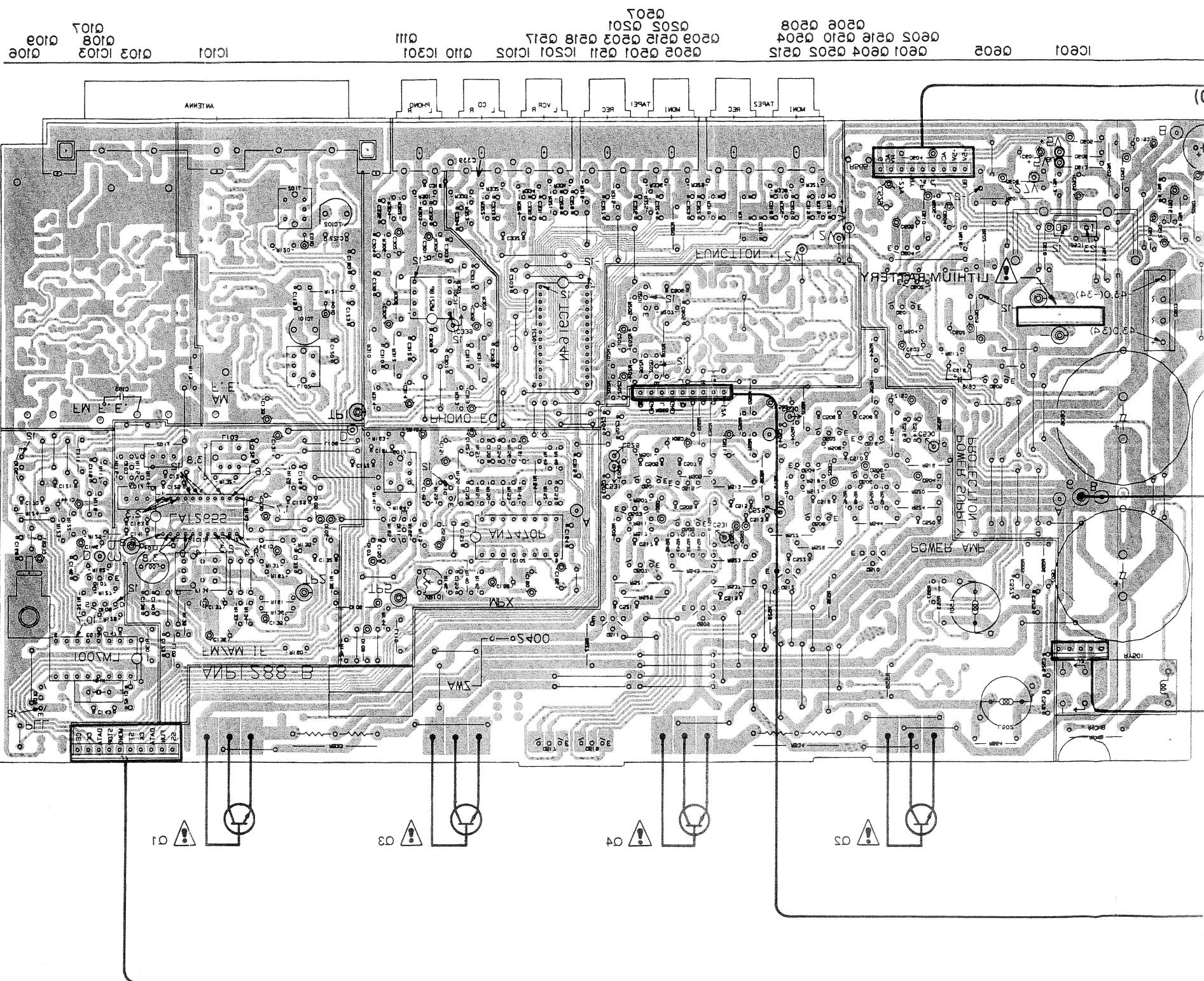
4. Stick the line voltage label on the rear panel.

Description	Part No.
220V label	AAX-193
240V label	AAX-192

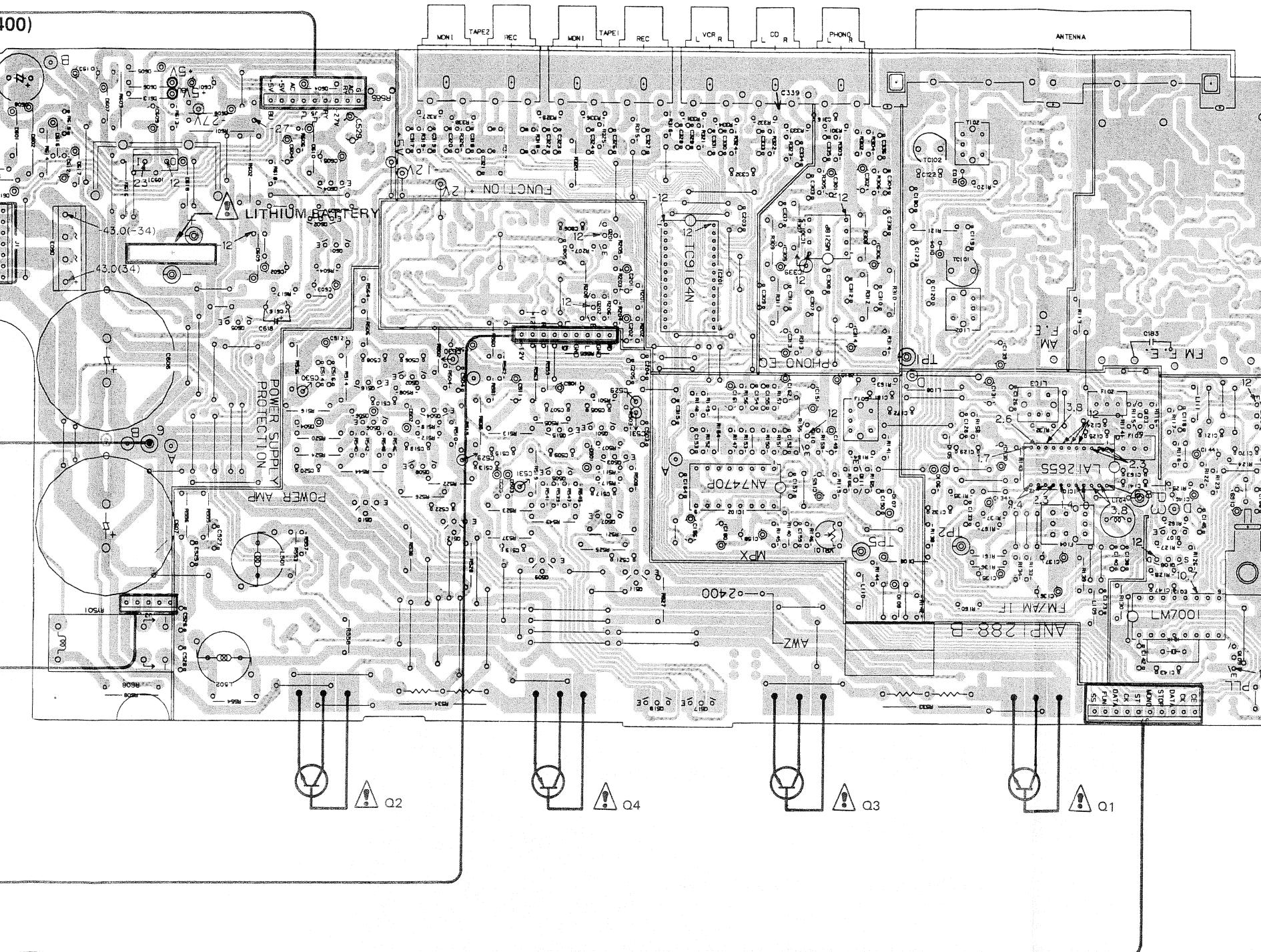


2

This P.C. B. connection diagram is viewed from the foil side.



IC601 Q605

Q506 Q508
Q602 Q516 Q510 Q504
Q601 Q604 Q502 Q512Q507
Q202 Q201
Q509 Q515 Q503 Q518 Q517
Q505 Q501 Q511 IC201 IC102
Q111 Q110 IC301Q101
Q107
Q108
Q103 IC103
Q109
Q106

NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

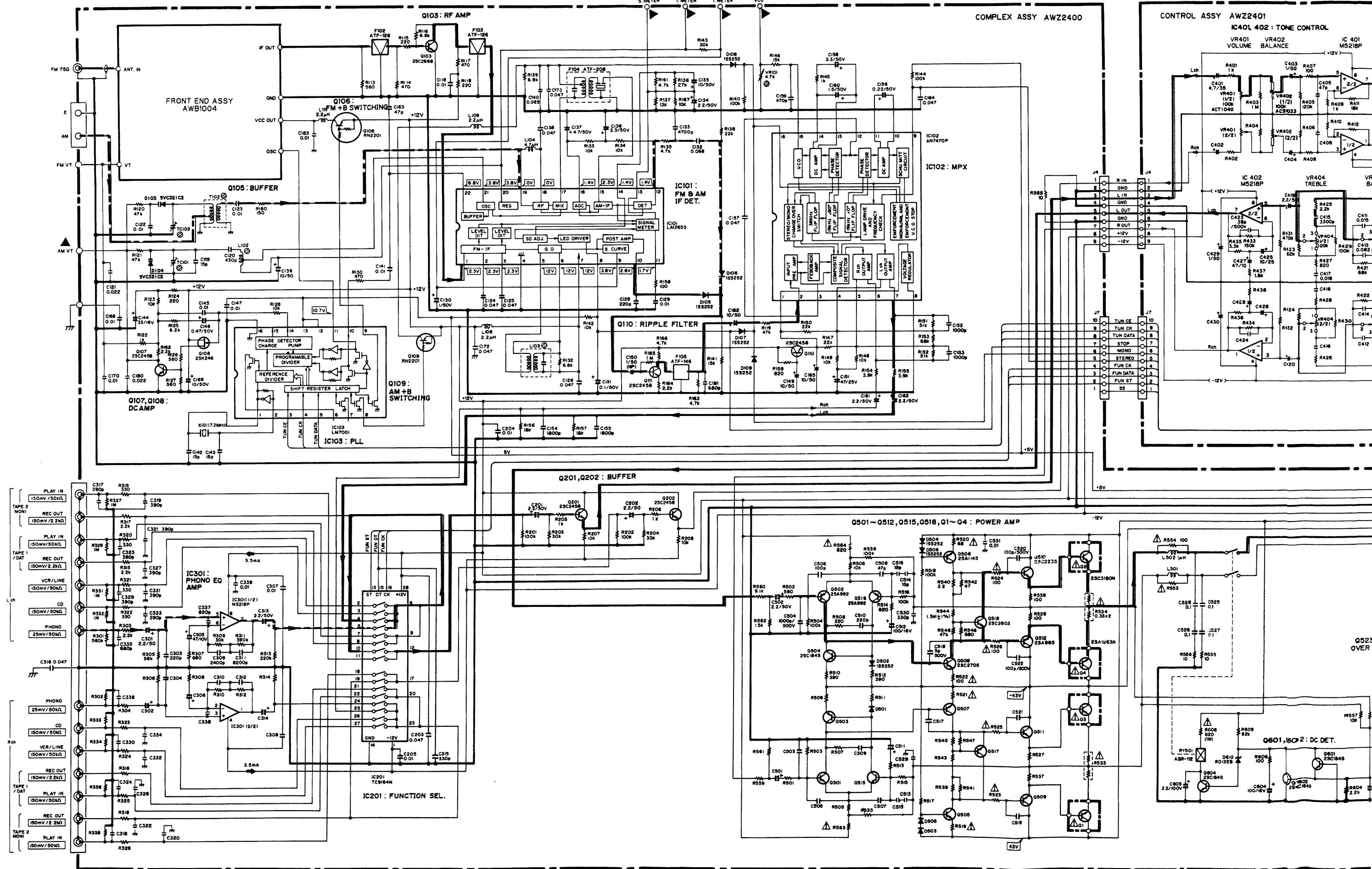
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
Q504		Transistor
Q215		Radiator type transistor
D203		Diode
R237		Resistor
C513		Capacitor (Polarity)
C518		Capacitor (Non-polarity)

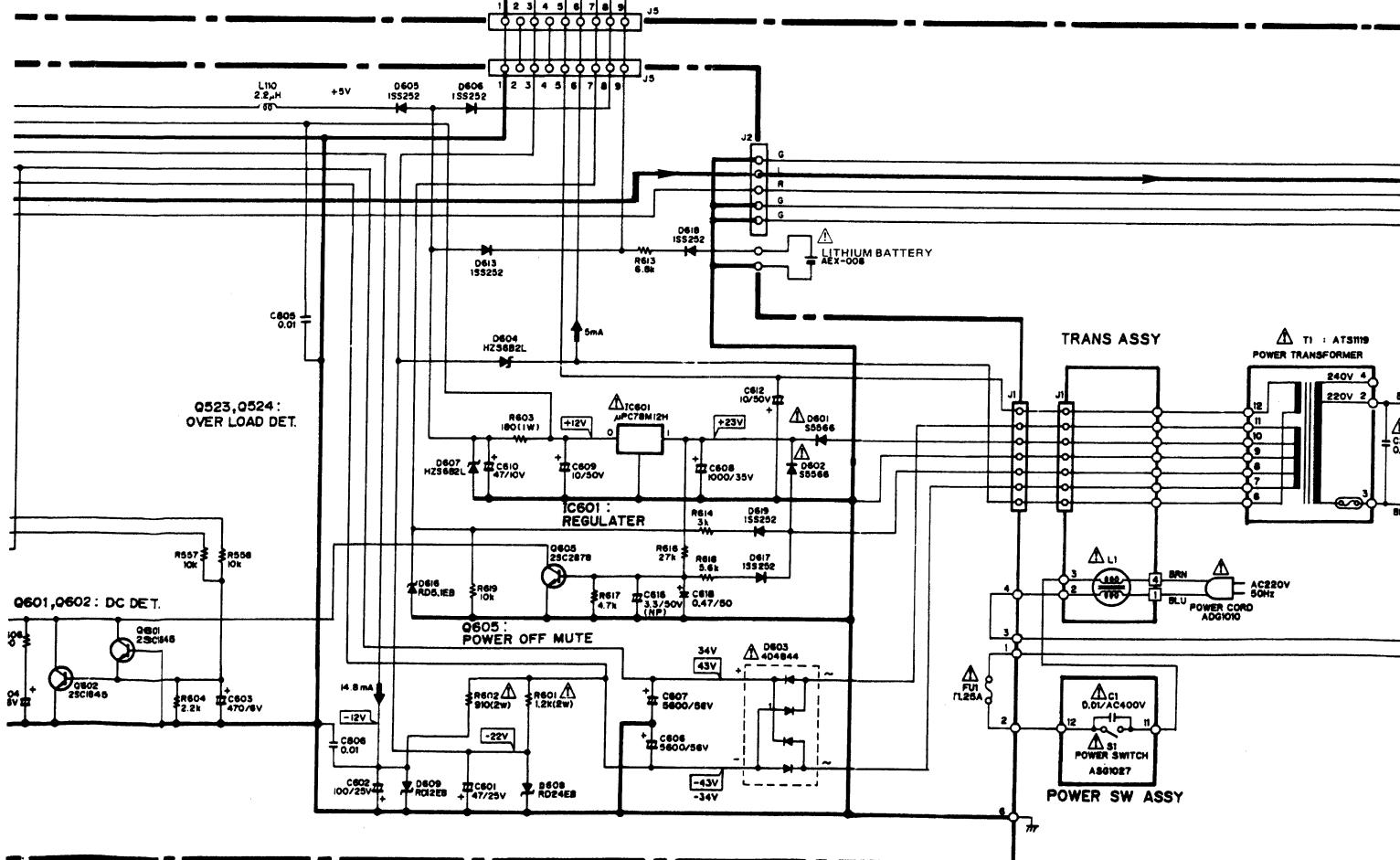
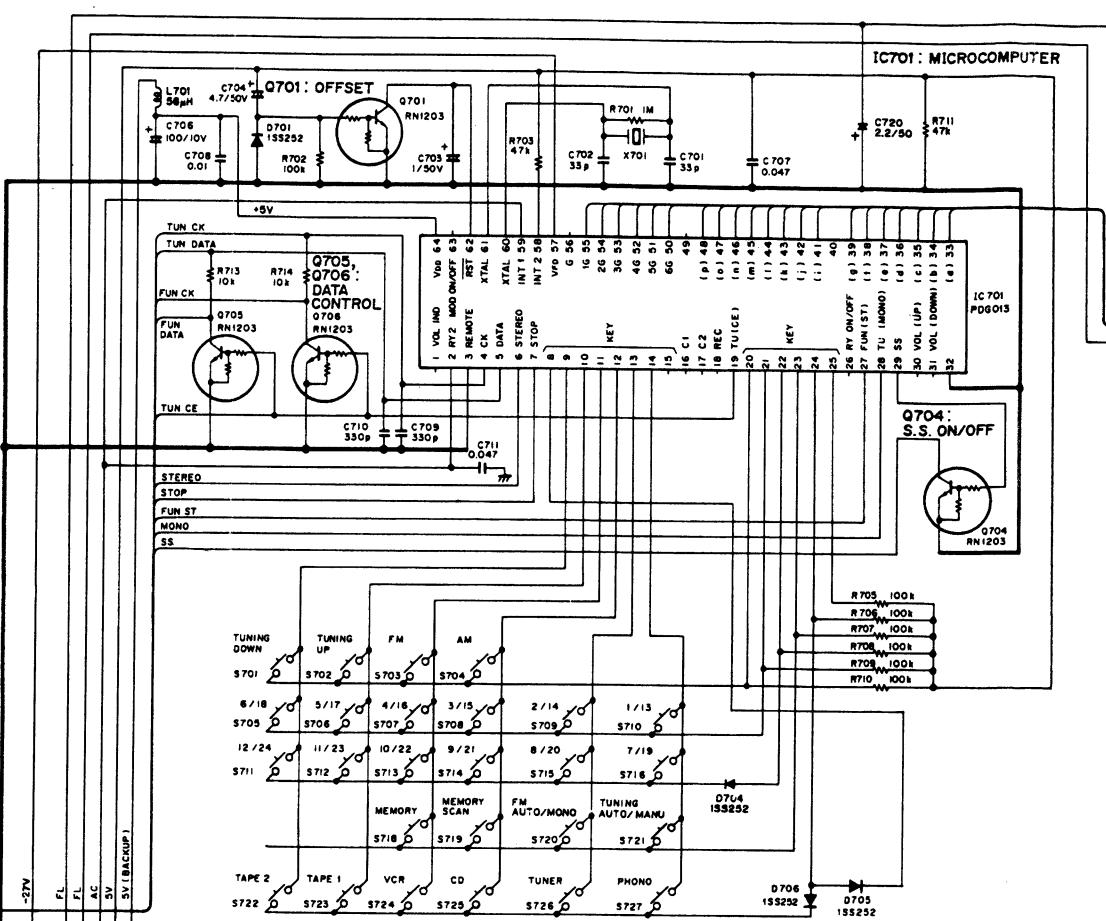
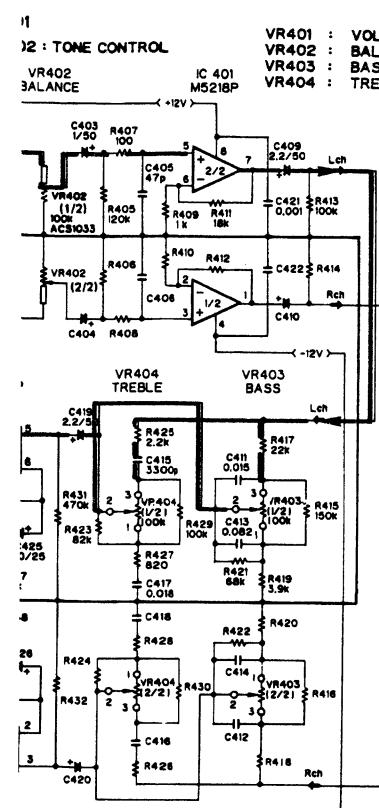
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RY	Relay
L	Coil
F	Filter
VR	Variable resistor or Semi-fixed resistor

3. The capacitor terminal marked with shows negative terminal.
4. The diode terminal marked with shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

7, 3, 2 SCHEMATIC DIAGRAM





1. RESISTORS:
Indicated in Ω , 1/8W & 1/4W, $\pm 5\%$ tolerance unless otherwise noted k, k Ω , M, M Ω , (F); $\pm 1\%$, (G); $\pm 2\%$, (K); $\pm 10\%$, (M); $\pm 20\%$ tolerance

2. CAPACITORS:
Indicated in capacity (μF)/voltage (V) unless otherwise noted p, pF. Indication without voltage is 50V except electrolytic capacitor.

3. VOLTAGE, CURRENT:
DC voltage (V) at no input signal
Value in () is DC voltage at rated power.
mA; DC current at no input signal

4. OTHERS:
→ : Signal route.
◎ : Adjusting point.

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.
• marked capacitors and resistors have parts numbers.

This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.

A

B

C

D

7.3 FOR HEZ TYPE

7.3.1 ELECTRICAL PARTS LIST FOR HEZ TYPE

NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "◎" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- 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.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

560Ω	56 × 10 ¹	561.....	RDI/4PS 5 6 □ J
47kΩ	47 × 10 ³	473.....	RDI/4PS 4 7 □ J
0.5Ω	0R5.....		RN2H □ 5 K
1Ω	010.....		RS1P □ 1 K

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

5.62kΩ	562 × 10 ¹	5621.....	RNI/4SR 5 6 2 1 F
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MISCELLANEOUS PARTS

P.C. BOARD ASSEMBLIES

Mark	Symbol & Description	Part No.
	POWER SW ASSY	
	TRANS ASSY	
	COMPLEX ASSY	AWZ2400
	CONTROL ASSY	AWZ2401
	SP SWITCH ASSY	
	SP TERMINAL ASSY	
	FE ASSY	AWB1004

OTHERS

Mark	Symbol & Description	Part No.
△	Q3, Q4 Transistor	2SA1263N
△	Q1, Q2 Transistor	2SC3180N
△	R1, R2 Resistor	RD1/4PMF100J
△	C2 Capacitor	ACE-507
	C3 Ceramic capacitor	CKDYB102K50
△	T1 Power transformer	ATS1119
	PAL socket	AKX1029
△	FU1 Fuse (T1, 25A 250V)	AEK-018
△	AC power cord	ADG1010
△	Lithium battery	AEX-008

POWER SW ASSY

SWITCH

Mark	Symbol & Description	Part No.
△	S1	ASG1027

CAPACITOR

Mark	Symbol & Description	Part No.
△	C1	ACG1003

RELAY

Mark	Symbol & Description	Part No.
	RY501	ASR-111

COILS AND TRANSFORMERS

Mark	Symbol & Description	Part No.
T102	AM antenna transformer	ATB-095
L102	AM OSC coil	ATB-114
L103	FM detector coil	ATB-079
L501, L502	AF choke coil	ATH1009
L108-L111	Inductor	LAU2R2M
L104	Inductor	LTA472J
F102	FM ceramic filter	ATF-107
F103	FM ceramic filter	ATF-119
F105	Beat eliminate filter	ATF-146
F104	AM ceramic filter	ATF-208

CAPACITORS

Mark	Symbol & Description	Part No.
TC101, TC102		ACM-015
C617		ACG1005
C606, C607		ACH1119
C517, C518		CCCSL050C500
C519, C520, C522		CCCSL101K500
C128, C303, C304, C509, C510		CCCSL221J50

Mark	Symbol & Description	Part No.
C603		CEAS471M6
C601		CEHAQ470M25
C525-C528		CFTXA104J50
C133		CKCYB472K50
C121, C140		CKCYF223Z50

Mark	Symbol & Description	Part No.
C503, C504		CKDYB102K500
C154, C155		CKDYB182K50
C315, C529, C530		CKDYB331K50
C317-C324, C326-C334		CKDYB391K50

Mark	Symbol & Description	Part No.
C181, C335, C336		CKDYB681K50
C337, C338		CKDYB821K50
C118, C122, C123, C129, C141, C145, C147, C168, C170, C183, C204, C205, C307, C308, C339, C531, C805, C806		CKDYF103Z50

Mark	Symbol & Description	Part No.
C180		CKDYF223Z50
C124, C125, C138, C157, C164, C173, C203, C316		CKDYF473M50
C126, C172		CKDYZ473M25
C152, C153		CQMA102K50

Mark	Symbol & Description	Part No.
C309, C310		CQMA242J50
C132		CQMA683J50
C311, C312		CQMA822J50
C120		CQSA431J50
C159		CQSA471J50

RESISTORS

Mark	Symbol & Description	Part No.
VR101		VRTB6VS472
△	R533, R534 (0.33 x 2)	ACN-139
R515, R516		RDR1/4PM104J
R501, R502, R559-R562		RDR1/6PU□□J
R555, R556, R565		RD1/4PMF100J
R519, R520, R527, R528, R537, R538, R553, R554		RD1/4PMF□□J
R521-R526		RFA1/4PS101J
R543, R544		RN1/4PQ1501F
R603		RS1LMF181J
R608		RS1LMF821J
R601		RS2LMF122J
R602		RS2LMF911J
R307-R312, R513, R514, R614		RD1/4PM□□J
Other resistors		RD1/8PM□□J

Mark	Symbol & Description	Part No.
C511, C512, C604		CEAS101M16
C602		CEAS101M25
C608		CEAS102M35
C605		CEAS2R2M100
C134, C161, C162, C201, C202, C301, C302, C313, C314, C501, C502		CEAS2R2M50

Mark	Symbol & Description	Part No.
C136, C158		CEAS3R3M50
C144	</td	

OTHERS

Mark	Symbol & Description	Part No.
X101	Crystal resonator	ASS1005
2P antenna terminal		AKA-023
4P pin jack		AKB1007
6P pin jack		AKB1024

CONTROL ASSY (AWZ2401)**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
IC401, IC402		M5218P
IC701		PDG013
Q701, Q704-Q706		RN1203
D701, D704-D706		1SS252

SWITCHES

Mark	Symbol & Description	Part No.
S701-S716, S718-S727		ASG1029

COIL

Mark	Symbol & Description	Part No.
L701	Inductor	LAU560K

CAPACITOR

Mark	Symbol & Description	Part No.
C424		CCCSL390K500
C701, C702		CCDCH330J50
C423		CCDSL390K500
C405, C406		CCMSL470J50
C706		CEAS101M10
C403, C404, C429, C430, C703		CEJA010M50
C425, C426		CEJA100M25
C409, C410, C419, C420, C720		CEJA2R2M50
C401, C402		CEJA4R7M35
C704		CEJA4R7M50
C427, C428		CEJA470M10
C709, C710		CKDYB331K50
C708		CKDYF103Z50
C707		CKDYF473Z50
C711		CKDYX473M25
C421, C422		CKMYB102K50
C411, C412		CQMA153J50
C417, C418		CQMA183J50
C415, C416		CQMA332J50
C413, C414		CQMA823J50

RESISTORS

Mark	Symbol & Description	Part No.
	VR403, VR404	ACS1032
	VR402	ACS1033
	VR401	ACT1040
	R435, R436	RDR1/6PU332J
	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	X701 Ceramic oscillator	ASS1004
	V701 Fluorescent indicator tube	AAV1079

SP SWITCH ASSY**SWITCH**

Mark	Symbol & Description	Part No.
	S851	SUL5LXBYS

CAPACITORS

Mark	Symbol & Description	Part No.
	C807, C808	CKDYB392K50

RESISTORS

Mark	Symbol & Description	Part No.
△	R851, R852	RS1PMF331J
	R859, R860	RS1PMF681J

OTHERS

Mark	Symbol & Description	Part No.
	Phone jack	AKN1002

SP TERMINAL ASSY**COILS**

Mark	Symbol & Description	Part No.
	L803, L804 AF choke coil	ATH-133

CAPACITORS

Mark	Symbol & Description	Part No.
	C813-C816	CKDYB681K50
	C809-C812	CKDYF103Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R863, R864	RD1/4PMF101J

OTHERS

Mark	Symbol & Description	Part No.
	8P speaker terminal	AKE-111

RESISTORS

Mark	Symbol & Description	Part No.
	All resistors	RD1/8PM□□□J

FE ASSY (AWB1004)**SEMICONDUCTORS**

Mark	Symbol & Description	Part No.
Q902		2SC2668
Q905		2SC2786
Q901, Q903, Q904		2SK241
D901-D904		1SV147-4

COILS AND TRANSFORMERS

Mark	Symbol & Description	Part No.
T901	FM RF transformer	ATC-194
T902	FM matching transformer	ATE-063
L903	FM RF coil	ATC-247
L901	FM coil	ATC1001
L904	FM coil	ATC1003
L902	FM coil	ATC1010
L905, L906	Inductor	LAU2R2M

CAPACITORS

Mark	Symbol & Description	Part No.
TC901		ACM-014
C908		CCDCH010C50
C909, C910		CCDCH020C50
C917		CCDCH050C50
C915		CCDCH080D50
C913		CCDCH150J50
C914		CCDCH330J50
C901		CCDRH100D50
C905		CCDRH330J50
C902, C904, C906		CCDRH390J50
C911		CCDSL101J50
C916		CCDTH180J50
C903, C912, C918, C919		CKDYF103Z50
C907		CKDYF223Z50

8. SPECIFICATIONS

Amplifier Section

Continuous Power Output (both channels driven, DIN)

1 kHz, T.H.D. 1%, 4 Ω.....	55 W + 55 W
1 kHz, T.H.D. 1%, 8 Ω.....	45 W + 45 W
40 Hz - 20 kHz, T.H.D. 0.07%, 8 Ω.....	38 W + 38 W

IEC power output

63 Hz - 12.5 kHz, T.H.D. 0.7%, 4 Ω.....	49 W + 49 W
63 Hz - 12.5 kHz, T.H.D. 0.7%, 8 Ω.....	45 W + 45 W

Dynamic power output

4/8 Ω.....	70/55 W
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Total Harmonic Distortion*

1 kHz, 38 W, 8 Ω.....	0.01%
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Input (Sensitivity/Impedance)

PHONO	2.5 mV/47 kΩ
CD, VCR/LINE, TAPE 1/DAT, TAPE 2	150 mV/22 kΩ

Phono Overload Level (T.H.D. 0.01%, 1,000 Hz)

PHONO	130 mV
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Output (Level/Impedance)

TAPE REC.....	150 mV/2.2 kΩ
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Frequency Response

PHONO (RIAA Equalization)	20 Hz to 20,000 Hz ± 0.5 dB
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CD, VCR/LINE, TAPE 1/DAT, TAPE 2	10 Hz to 70,000 Hz ^{+0.5dB} / _{-3.0dB}
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Signal-to-Noise Ratio (DIN, continuous power/50 mW)	
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PHONO	68 dB/59 dB
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CD, VCR/LINE, TAPE 1/DAT, TAPE 2	86 dB/60 dB
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Tone control

BASS.....	± 8dB (100Hz)
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TREBLE	± 8dB (10kHz)
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FM Tuner Section

Frequency range	87.5 MHz to 108 MHz
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Usable Sensitivity.....	10.8 dBf, IHF (0.95 μV/75 Ω)
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50 dB Quieting Sensitivity	
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MONO	15.3 dBf (1.6 μV/75 Ω)
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STEREO	37.1 dBf (19.5 μV/75 Ω)
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Sensitivity (DIN)

MONO	0.9μV/75 Ω
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STEREO	29 μV/75 Ω
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Signal-to-Noise Ratio

MONO	78 dB (at 85 dBf)
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STEREO	75 dB (at 85 dBf)
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Signal-to-Noise Ratio (DIN)

MONO	66 dB
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STEREO	60 dB
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Distortion

STEREO	0.3% (1 kHz)
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Alternate Channel Selectivity	55 dB (400 kHz)
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Stereo Separation	35 dB (1 kHz)
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Frequency Response	30 Hz to 15 kHz (± 1 dB)
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Antenna Input	300 Ω balanced, 75 Ω unbalanced
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AM Tuner Section

Frequency range	531 kHz to 1,602 kHz
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Sensitivity	
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IHF, Loop antenna.....	300 μV/m
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Selectivity	20 dB
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Signal-to-Noise Ratio	50 dB
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Antenna	AM Loop Antenna
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Miscellaneous

Power Requirements	a.c. 240 V~, 50/60 Hz
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Power Consumption	250 Watts
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Dimensions	420(W) x 120(H) x 337(D) mm
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Weight (without package)	6.2 kg (13 lb 11 oz)
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Furnished Parts

FM T-type Antenna.....	1
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AM Loop Antenna	1
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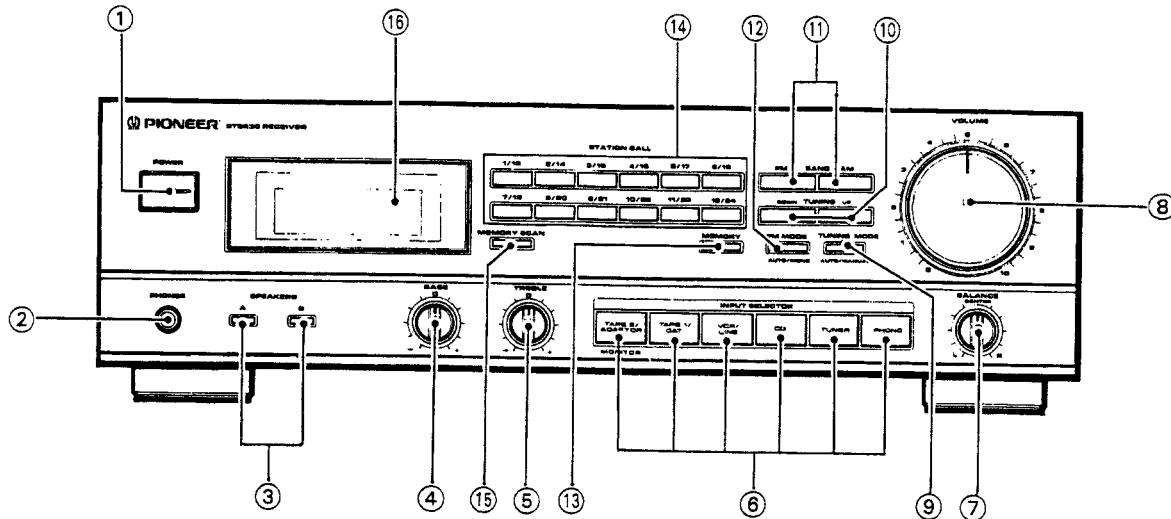
Operating Instructions	1
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NOTE:

Specifications and design subject to possible modification without notice due to improvements.

* Measured by audio spectrum analyzer.

9. PANEL FACILITIES



① POWER switch

When this switch is pressed, power is supplied to the unit. Press the switch again to turn power off.

② PHONES jack

Connect the plug on your headphones to this jack. To listen to a program through the headphones only, set both SPEAKERS A and B switches to the OFF position.

③ SPEAKERS switches (■OFF, ■ON)

These are used to select the speaker through which you wish to listen.

A: When the speakers connected to A terminals are in use.

B: When the speakers connected to B terminals are in use.

- Turn both A and B speakers to OFF position when only the headphones are in use.

NOTE:

No sound will be heard through the speakers when both A and B switches are depressed if only one set of speakers has been connected to either A or B SPEAKERS terminals.

④ BASS tone control

Use to adjust the low-frequency tone.

The center position is the "0" (normal) position. When moved to the right, low-frequency tones are emphasized; when moved to the left, low-frequency tones are de-emphasized.

⑤ TREBLE tone control

Use to adjust the high-frequency tone.

The center position is the "0" (normal) position. When moved to the right, high-frequency tones are emphasized; when moved to the left, high-frequency tones are de-emphasized.

⑥ INPUT SELECTOR switches

Use to select playback source.

[TAPE 1/DAT] — Press when listening to tape playback with a cassette deck or digital audio tape deck (DAT).

[VCR/LINE] — Press when listening to programs from a component connected to the VCR/LINE terminals.

[CD] — Press when listening to compact disc playback with a CD player.

[TUNER] — Press when listening to AM or FM broadcasts with a tuner.

[PHONO] — Press when listening to record playback on a turntable.

MONITOR switch

[TAPE 2/ADAPTOR] — Press when listening to tape playback with a cassette deck or when using a graphic equalizer.

⑦ BALANCE control

Should normally be left in the center position. Adjust balance if sound is louder from one of the speakers. If the right side is louder, turn toward the LEFT position and if the left side is louder, turn toward the RIGHT position.

⑧ VOLUME control

Use to adjust volume level.

⑨ TUNING MODE AUTO/MANUAL switch

Works during FM reception.

Use this switch to select either the AUTO mode or the MANUAL mode.

When the "AUTO" indicator is lit, the receiver is in the AUTO mode.

⑩ TUNING switches (DOWN, UP)

UP: The FM or AM band is scanned in the direction of increasing frequency.

DOWN: The FM or AM band is scanned in the direction of decreasing frequency.

(11) BAND selector switches

These switches are used to select either AM or FM reception.

AM: Push this switch for AM reception.

FM: Push this switch for FM reception.

(12) FM MODE AUTO/MONO selector switch

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts.

Auto stereo mode:

Normally leave in this mode for reception. When a stereo FM broadcast is received, it will be automatically reproduced in stereo sound.

Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increasing noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise. In this case, however, FM stereo broadcasts will be reproduced in monaural sound.

The monaural mode has been selected when the FM MONO indicator is lit.

NOTE:

This switch has no effect on reception of AM broadcasts.

(13) MEMORY switch

This is used to memorize stations. When the switch is pressed, the frequency indicator will flash. To memorize the frequency of any station, press a STATION CALL switch while the frequency indicator is flashing.

(14) STATION CALL switches

These switches are used to preset and recall desired broadcasting stations.

(15) MEMORY SCAN switch

Press this switch to scan the stations in the memory.

(16) OPERATION DISPLAY panel

- | | |
|--|---------------------------|
| (a) Indicates the function selected by the INPUT SELECTOR. | (d) FM STEREO indicator |
| (b) Indicates frequency or channel (STATION CALL number). | (e) AUTO tuning indicator |
| (c) Indicates TAPE 2 monitor | (f) FM MONO indicator |
| | (g) TUNED indicator |

