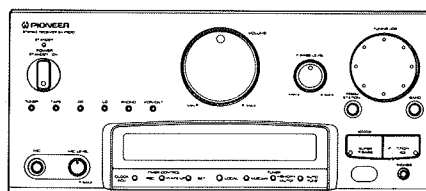


Service Manual

PIONEER®
The Art of Entertainment



ORDER NO.
ARP2630

STEREO RECEIVER

SX-P830

SX-P730

SX-P830 AND SX-P730 HAVE THE FOLLOWING :

Type	Model		Power Requirement	Remarks
	SX-P830	SX-P730		
HE	○	○	AC220V-230V, 240V (Switchable)*	
HB	○	○	AC220V-230V, 240V (Switchable)*	
HEWZI	○	○	AC220V-230V, 240V (Switchable)*	
SD	○	○	AC110V, 120-127V, 220V, 240V (Switchable)	
SL	○	○	AC110V, 120V, 220V, 240V (Switchable)	

* Change the connection of the power transformer's primary wiring.

- This manual is applicable to the following : SX-P830/HE and HB ; SX-P730/HE and HB.
- For the following : SX-P830/HB ; SX-P730/HB, refer to page 43.
- For the following : SX-P830/HEWZI, SD and SL ; SX-P730/HEWZI, SD and SL, refer to the service manual ARP2631 for SX-P830 and SX-P730.
- These products are systems components.
Each of these products does not function properly when independent ; to avoid malfunctions, be sure to connect it to the prescribed system component (s), otherwise damage may result.
These product's accessories etc. are packed with their related component (s).

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1. SPECIFICATIONS

STEREO RECEIVER: SX-P830

Amplifier Section

< For Multivoltage model >

Continuously Average Power Output is 40 Watts* per channel, min., at 8 ohms from 40 Hertz to 17,000 Hertz, with no more than 0.9% total harmonic distortion

* Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers

Continuous power output (DIN)

U.K., European models 42 W + 42 W
(1 kHz, T.H.D 1%, 8 ohms)

Continuous power output (RMS)

U.K., European models 50 W + 50 W
(1 kHz, T.H.D 5%, 8 ohms)

Multivoltage models 57 W + 57 W

Music power (DIN) (1 kHz, T.H.D 1%, 8 ohms)

U.K., European models 65 W + 65 W
Multivoltage models 75 W + 75 W

Peak music power

(Multivoltage models only) 375 W

Total harmonic distortion,

1 kHz, 25 W, 8 ohms 0.1 % **

• European models:

Above specifications are for when power supply is 230 V.

Electrical Section, Other

Power requirements

U.K. models AC 240 V, 50/60 Hz
European models AC 220-230 V, 50/60 Hz
Multivoltage models AC 110/120—127/
220/240 V (switchable), 50/60 Hz

Power consumption

U.K. models 285 W
European models 285 W
Multivoltage models 295 W

External dimensions

260 (W) × 117 (H) × 264 (D) mm

Weight

U.K., European models 4.9 kg
Multivoltage models 5.1 kg

** Measured with audio spectrum analyzer.

STEREO RECEIVER: SX-P730

Amplifier Section

< For Multivoltage model >

Continuously Average Power Output is 25 Watts* per channel, min., at 8 ohms from 40 Hertz to 20,000 Hertz, with no more than 0.9% total harmonic distortion

* Measured pursuant to the Federal Trade Commission's Trade Regulation rules on Power Output Claims for Amplifiers

Continuous power output (DIN)

U.K., European models 28 W + 28 W
(1 kHz, T.H.D 1%, 8 ohms)

Continuous power output (RMS)

U.K., European models 36 W + 36 W
(1 kHz, T.H.D 5%, 8 ohms)

Multivoltage models 36 W + 36 W

Music power (DIN)

(1 kHz, T.H.D 1%, 8 ohms) 50 W + 50 W

Peak music power

(Multivoltage models only) 275 W

Total harmonic distortion,

1 kHz, 20 W, 8 ohms 0.1 % **

• European models:

Above specifications are for when power supply is 230 V.

Electrical Section, Other

Power requirements

U.K. models AC 240 V, 50/60 Hz
European models AC 220-230 V, 50/60 Hz
Multivoltage models AC 110/120—127/
220/240 V (switchable), 50/60 Hz

Power consumption

195 W

External dimensions

260 (W) × 117 (H) × 264 (D) mm

Weight

U.K., European models 4.4 kg

Multivoltage models 4.6 kg

** Measured with audio spectrum analyzer.

SX-P830/SX-P730

FM Tuner Section

Reception frequency range 87.5—108.0 MHz

Usable Sensitivity MONO: 12.8 dBf, IHF
(1.2 μ V/75 ohms)

Sensitivity (DIN)

MONO (S/N 26 dB) 1 μ V/75 ohms

STEREO (S/N 46 dB) 50 μ V/75 ohms

Signal-to-Noise Ratio

(IHF, 85 dBf Input) MONO: 77 dB

Signal-to-Noise Ratio (DIN) MONO: 66 dB

STEREO: 60 dB

Distortion STEREO: 0.5%, 1 kHz

Antenna input 75 ohms unbalanced

AM Tuner Section

Frequency range

U.K., European models 531 kHz to 1,602 kHz

Multivoltage model 531 kHz to 1,602 kHz
(9 kHz step)

530 kHz to 1,700 kHz

(10 kHz step)

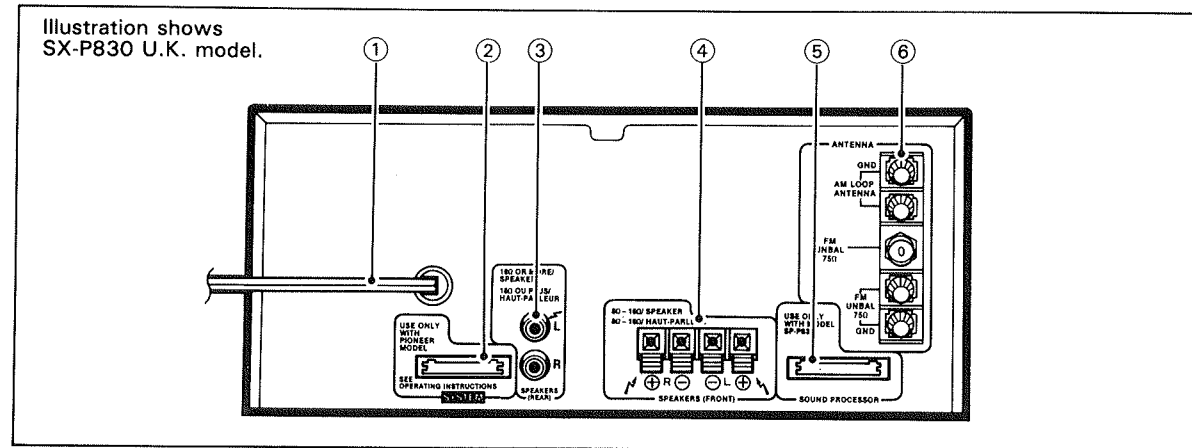
Sensitivity (IHF, Loop antenna) 350 μ V/m

Antenna Loop Antenna

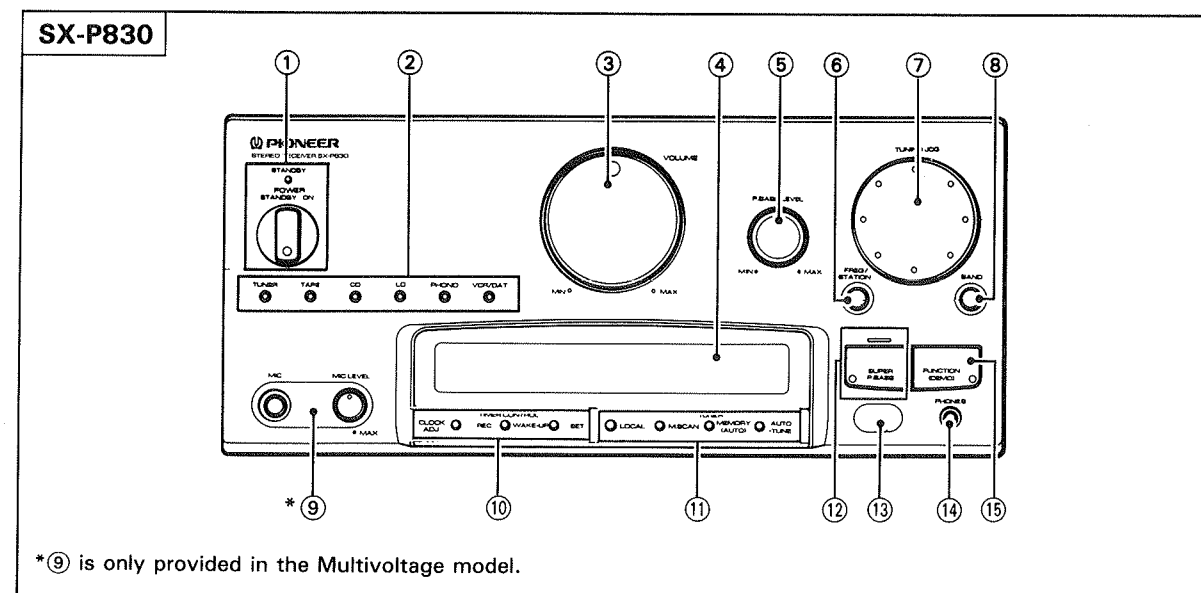
NOTE:

The specifications and design of this product are subject to change without notice, due to improvements.

2. PANEL FACILITIES



- ① **Power cord**
Connect this to the AC wall socket.
- ② **SYSTEM jack**
Connect the system cable here.
- ③ **SPEAKERS (REAR) jack (SX-P830 only)**
Connect the surround speaker systems.
NOTE:
Connect a speaker system with a nominal impedance of 16Ω or more.
- ④ **SPEAKERS (FRONT) terminals**
L: Connect the left speaker system as seen from the listening position.
R: Connect the right speaker system as seen from the listening position.
NOTE:
Connect a speaker system with a nominal impedance ranging from 8Ω to 16Ω.
- ⑤ **SOUND PROCESSOR jack SX-P830**
SOUND CONTROLLER jack SX-P730
Connect the SOUND FIELD PROCESSOR (or SOUND IMAGE CONTROLLER) system cable here.
- ⑥ **FM/AM ANTENNA terminals**
Antennas must be connected to these terminals: otherwise station reception is not possible.



① POWER STANDBY/ON switch, STANDBY indicator

This is the switch for electric power.

ON: When set to the ON position, power is supplied and the unit becomes operational.

STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness. The STANDBY indicator lights and the receiver section display indicates only the time.

② Function indicators (TUNER, TAPE, CD, LD, PHONO, VCR/DAT)

These indicators are selected by the FUNCTION button.

③ VOLUME control

④ Display

⑤ P.BASS LEVEL control

P.BASS stands for Proper Bass Active Supply System, and refers to the built-in system for emphasizing low sound ranges.

This unit is equipped with the super P.BASS to allow you to select two kinds of bass reproduction, depending on the kind of music source and your own preference. This knob can be used to adjust the super P.BASS level when the SUPER P.BASS button is set to ON.

⑥ FREQ./STATION button

Use to select the display mode (frequency mode or station mode).

- **Frequency mode:** Display indicates the frequency of the tuned station, and the current time.
- **Station mode:** Display indicates the frequency of the tuned station together with the recorded station number assigned to that station.

⑦ TUNING JOG control

Use to set the time and tune the receiver's reception frequency.

⑧ BAND button

Use to select FM or AM bands.

⑨ MIC (microphone) jack and MIC LEVEL (microphone level) control [on Multivoltage model only]

⑩ TIMER CONTROL buttons (CLOCK ADJ, REC, WAKE-UP, SET)

Use these buttons to set the current clock time and the timer for timed recording and playback.

⑪ TUNER buttons

- **LOCAL button:** Set to ON when receiving very nearby stations (the strong signals may otherwise produce high levels of static).
- **M.SCAN (memory scan) button:** Automatically scans (for about five seconds each) each of the stations stored in the station memory.
- **MEMORY (AUTO) button:** Use to save broadcasting stations in the station memory.
- **AUTO-TUNE button:** If this button is set ON, the frequency changes automatically and the tuning stops at the first station that is received.

⑫ SUPER P.BASS button/indicator

Use this button to select from among the two types of super P.BASS effect desired, then use the P.BASS level control to adjust the level as desired.

The indicator changes as follows each time the button is pressed:

orange → red → off

⑬ Remote sensor window

⑭ Headphone jack (PHONES)

⑮ FUNCTION (DEMO) button

Use this button to select the desired source.

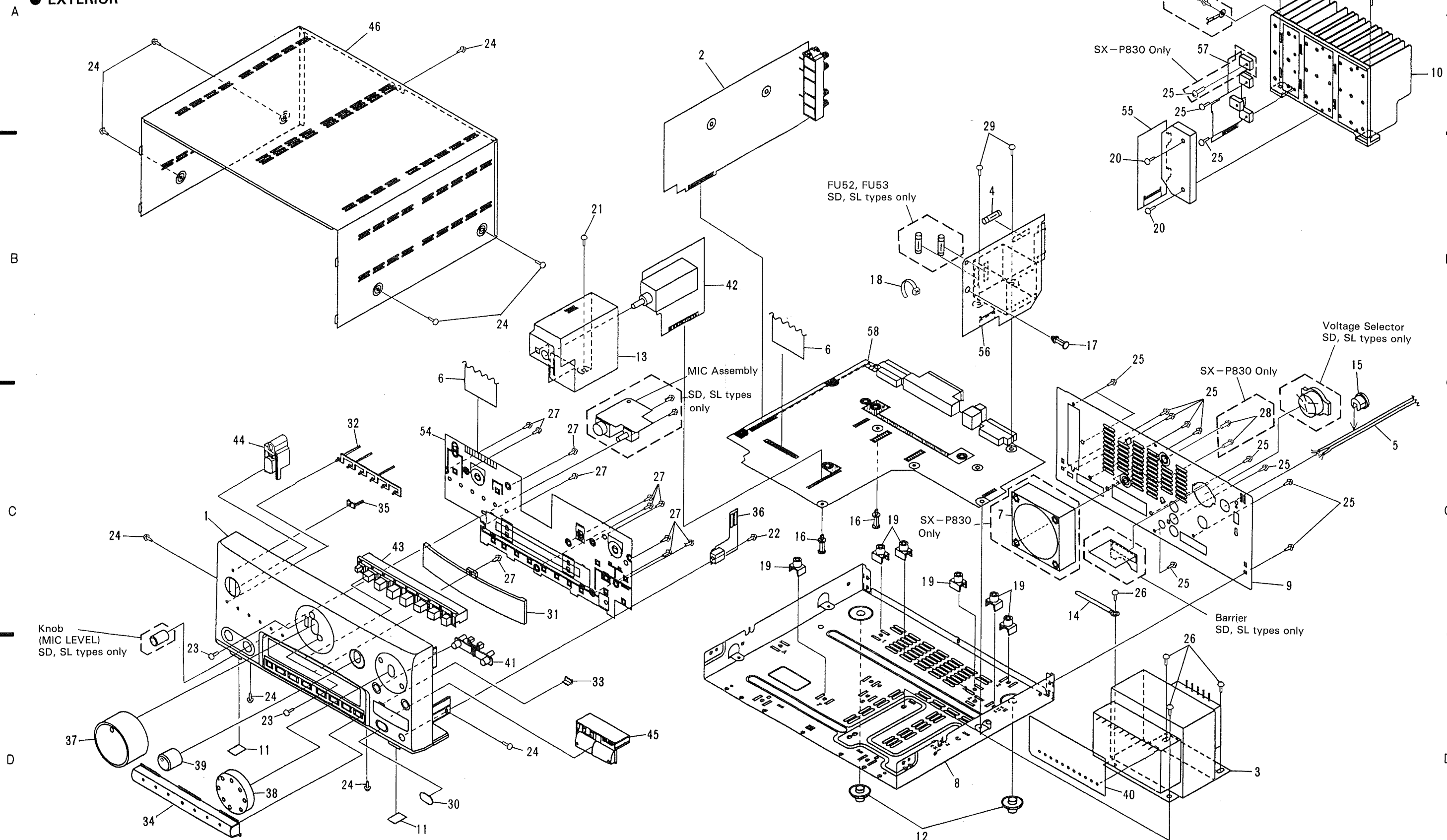
The settings change as follows each time this button is pressed.

TUNER → TAPE → CD → LD
VCR/DAT ← PHONO ←

3. EXPLODED VIEWS, PACKING AND PARTS LIST

FOR SX-P830 AND SX-P730

● EXTERIOR



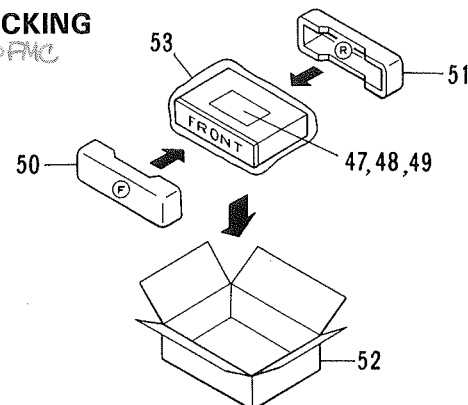
NOTE : Screws adjacent to ▼ mark on the product
are used for disassembly.

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The Δ 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.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

Parts list of Exterior and Packing

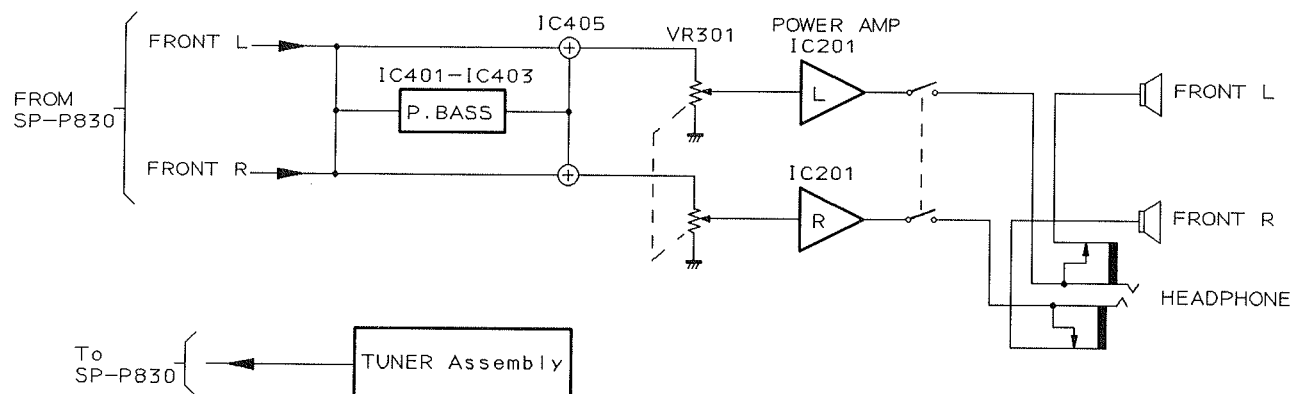
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	1	FRONT PANEL (For SX-P830)	AMB2042	NSP	36	HEAD P. ASSEMBLY	AWZ4375
		FRONT PANEL (For SX-P730)	AMB2044		37	VOL KNOB (PLS)	AAB1292
	2	TUNER ASSEMBLY	AWE1261		38	JOG KNOB (PLS)	AAB1293
Δ	3	POWER TRANSFORMER (T1) (For SX-P830)	ATS1374	●	39	P-BASS KNOB (PLS)	AAB1311
Δ		POWER TRANSFORMER (T1) (For SX-P730)	ATS1438		40	CONNECTOR ASSEMBLY	AWZ4993
Δ	4	FUSE (T1.25A/250V, FU51) (For SX-P830)	AEK-509		41	BAND BUTTON (PLS)	AAD2291
Δ		FUSE (T1A/250V, FU51) (For SX-P730)	AEK-508	●	42	VR ASSEMBLY	AWZ4991
Δ	5	AC POWER CORD	ADG1049		43	HINGE BUTTON (PLS)	AAD2294
	6	CABLE (J27)	ADD1100		44	POWER BUTTON (PLS)	AAD2343
Δ	7	FAN MOTOR (SX-P830 only)	AXM1013		45	P-BASS BUTTON (PLS)	AAD2344
NSP	8	CHASSIS	ANA1155		46	BONNET	ANE1309
NSP	9	REAR PANEL (For SX-P830)	ANC1939		47	OPERATING INSTRUCTIONS (German, Italian)	ARC1379
NSP		REAR PANEL (For SX-P730)	ANC1944		48	OPERATING INSTRUCTIONS (English, French)	ARE1252
NSP	10	HEAT SINK (For SX-P830)	ANH1352		49	OPERATING INSTRUCTIONS (Dutch, Swedish, Spanish, Portuguese)	ARE1254
NSP		HEAT SINK (For SX-P730)	ANH1437		50	FRONT PAD	AHA1567
	11	STOPPER	AEB1111		51	REAR PAD	AHA1568
	12	LEG ASSEMBLY	REC-434		52	PACKING CASE (For SX-P830)	AHD2363
NSP	13	SHIELD BOX	ANK1179			PACKING CASE (For SX-P730)	AHD2364
NSP	14	BINDER	AEC-826		53	PACKING SHEET	AHG1093
	15	STRAIN RELIEF	AEC-882	●	54	DISPLAY ASSEMBLY	AWZ4326
NSP	16	PCB SPACER (3×8)	AEC1371	●	55	FRONT AMP ASSEMBLY (For SX-P830)	AWZ4334
	17	PCB SPACER (3×12)	AEC1372	●		FRONT AMP ASSEMBLY (For SX-P730)	AWZ4341
NSP	18	BINDER	AEC1384		56	SUB POWER ASSEMBLY	AWZ4362
NSP	19	PCB MOLD	AMR2115		57	REGULATOR ASSEMBLY (For SX-P830)	AWZ4346
	20	SCREW	ABA-258	●		REGULATOR ASSEMBLY (For SX-P730)	AWZ4345
	21	SCREW (3×14)	ABA1024	●	58	MAIN ASSEMBLY (For SX-P830)	AWZ4348
	22	SCREW (2.6×8)	ABA1095	●		MAIN ASSEMBLY (For SX-P730)	AWZ4357
	23	SCREW	BBZ26P080FMC				
	24	SCREW	BBZ30P060FZK				
	25	SCREW	BBZ30P080FZK				
	26	SCREW	BBZ40P060FZK				
	27	SCREW	BPZ26P080FMC				
	28	SCREW (SX-P830 only)	PPZ50P100FZK				
	29	SCREW (Si-A48029)	VBZ30P160FMC				
	30	REMOCON FILTER	AAK2208				
	31	DECORATIVE PLATE (TUNER)	AAK2319				
	32	FUNCTION LENS (PLS)	AAK2320				
	33	P-BASS LENS (PLS)	AAK2321				
	34	PANEL SHEET (PLS)	AAK2373				
	35	POWER LENS (PLS)	AAK2442				

● PACKING


4. BLOCK DIAGRAM

4.1 FOR SX-P830

A



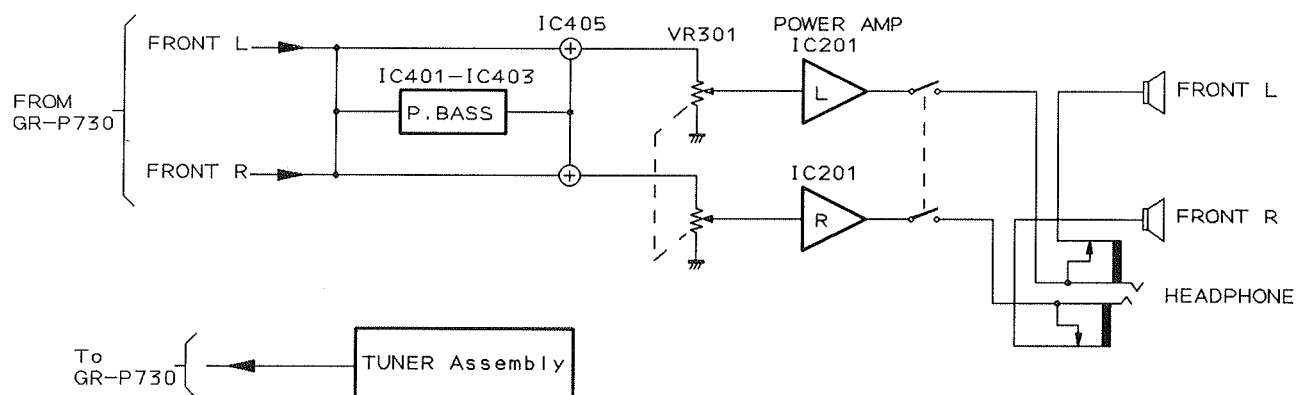
A

B

B

4.2 FOR SX-P730

C

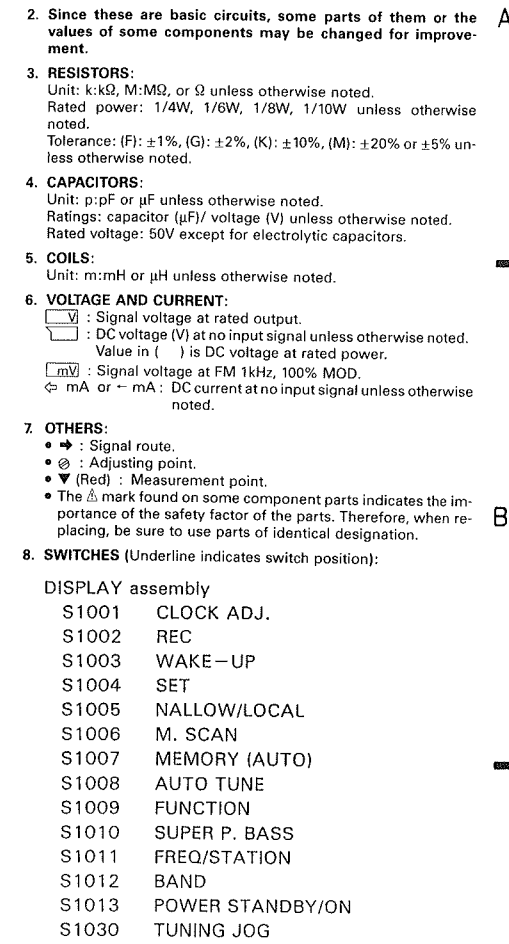


C

D

D

5.1 OVERALL SCHEMATIC DIAGRAM (FOR SX-P830 AND SX-P730)



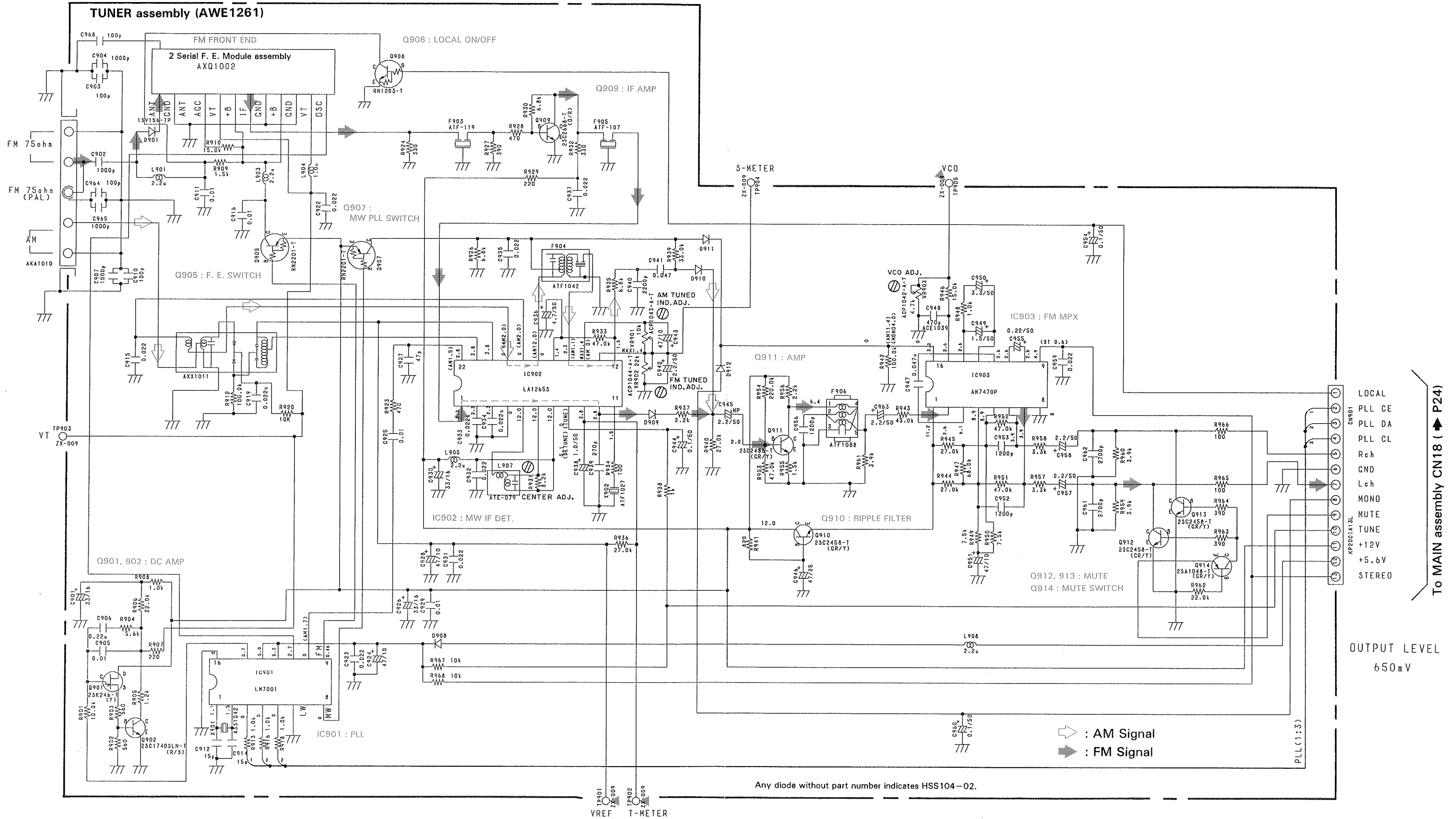
5.2 TUNER ASSEMBLY

A

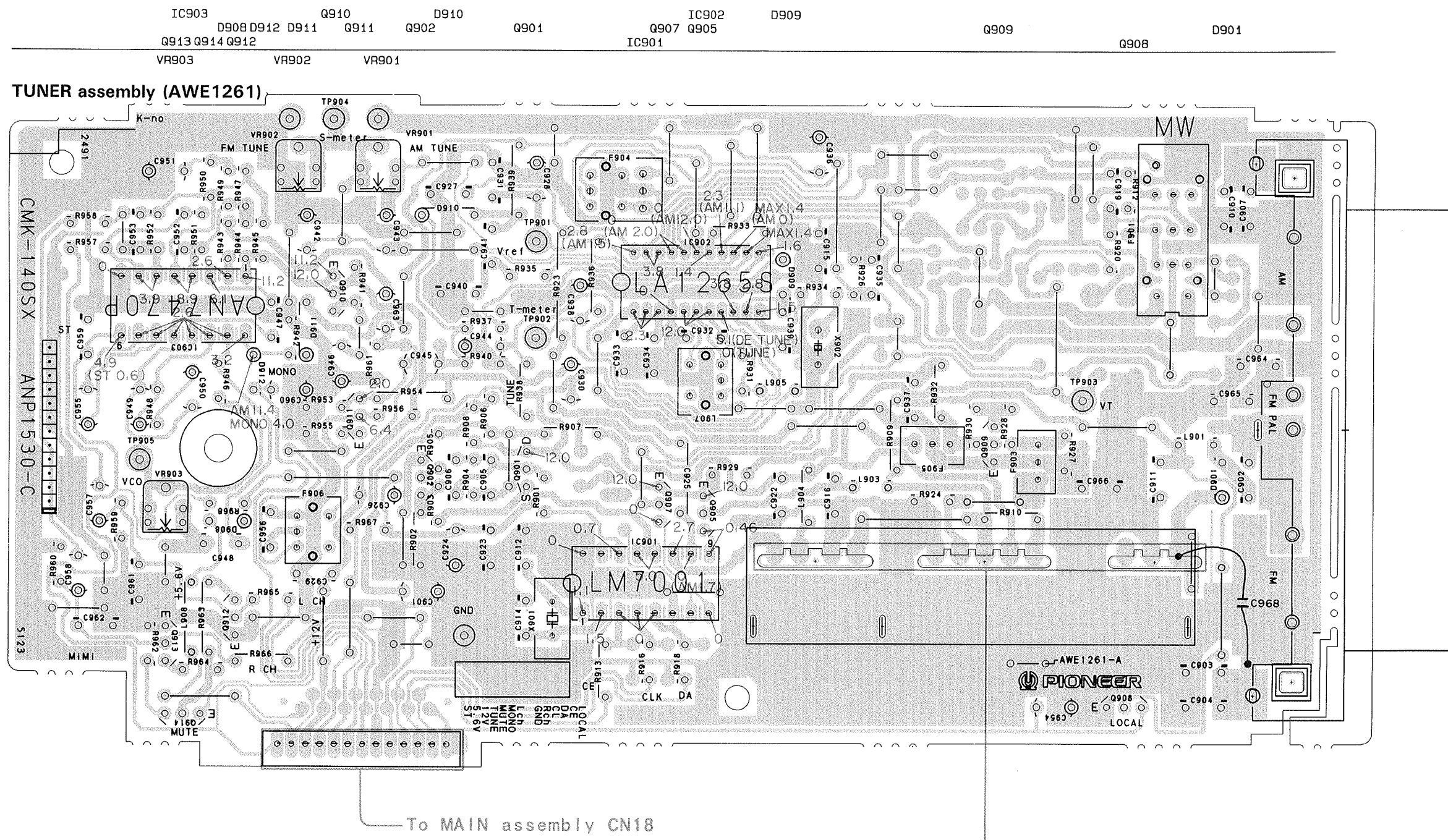
B

C

D



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

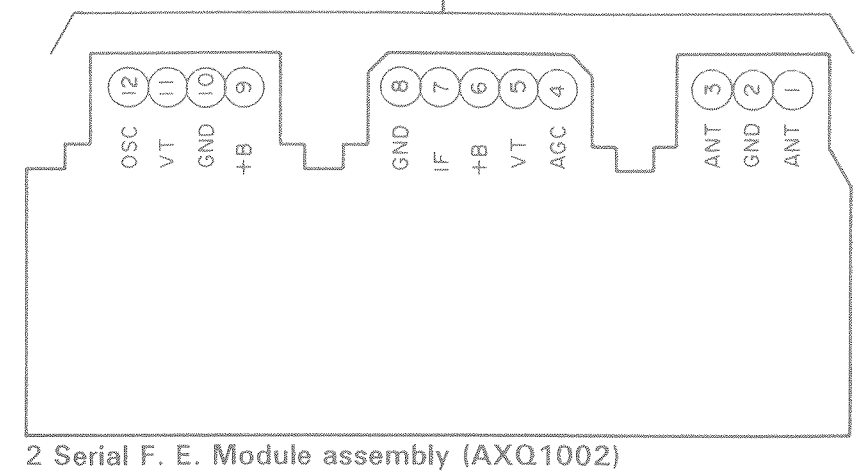


- NOTE
1. This P.C.B. connection diagram is viewed from the parts mounted side.
 2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

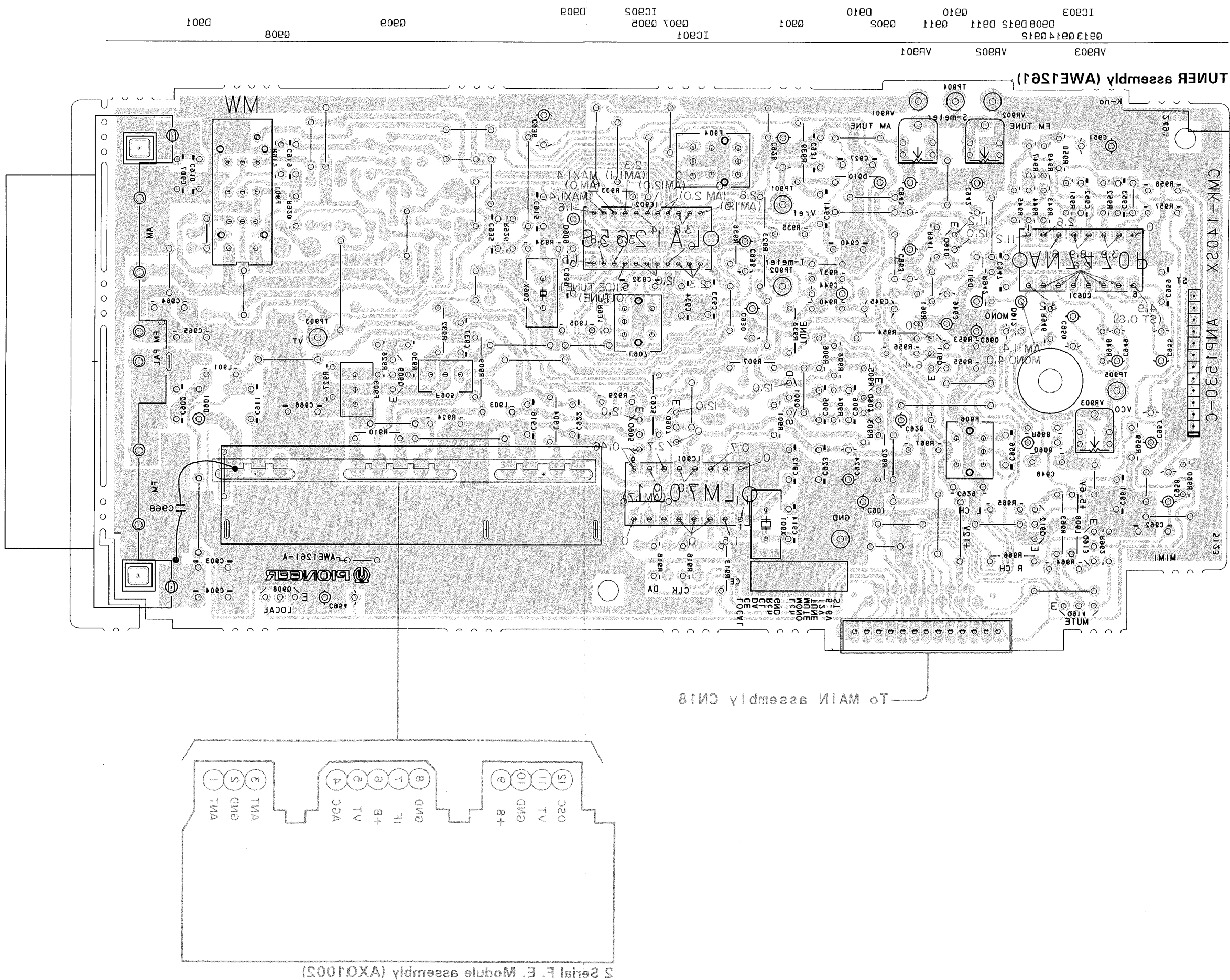
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator type transistor
		Diode
		Resistor
		Capacitor (Polarized)
		Capacitor (Non-polarized)

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

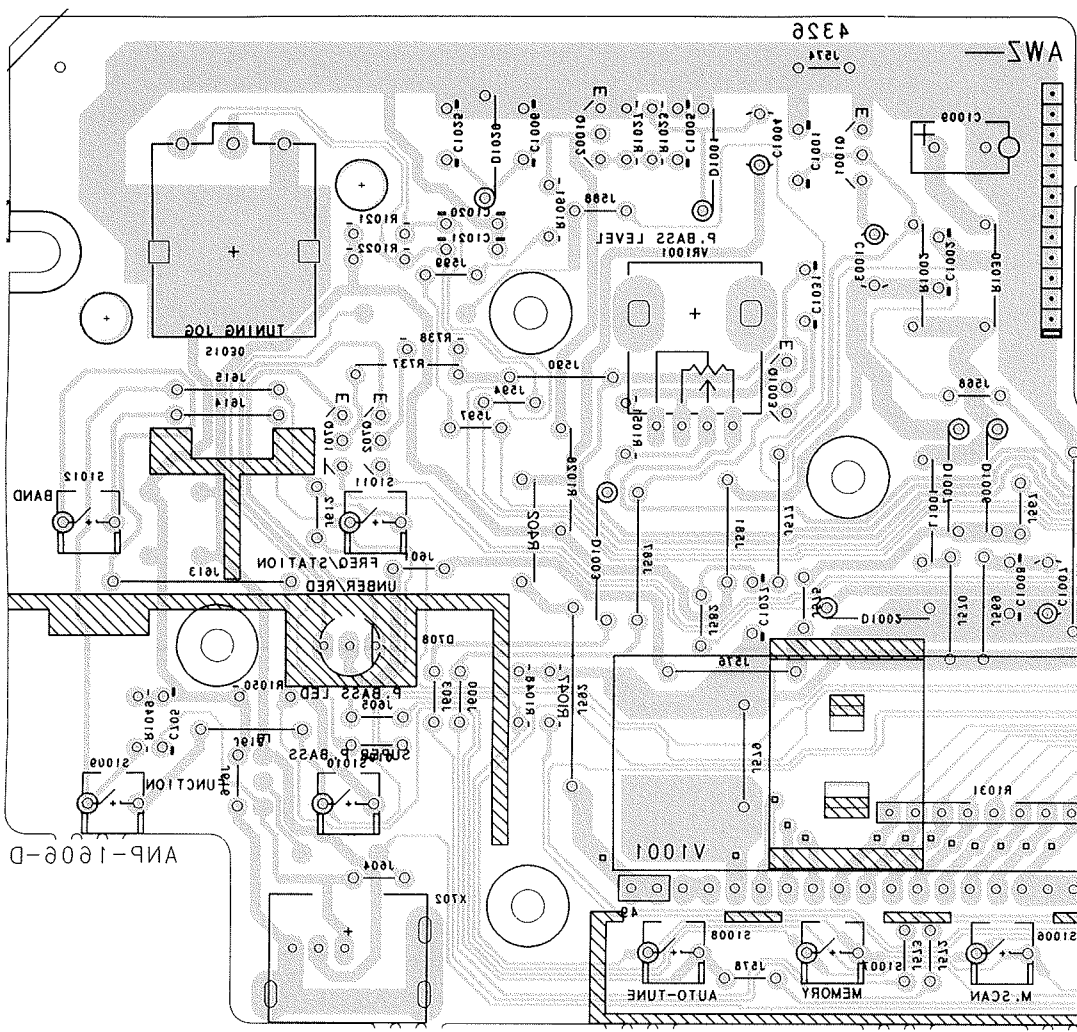
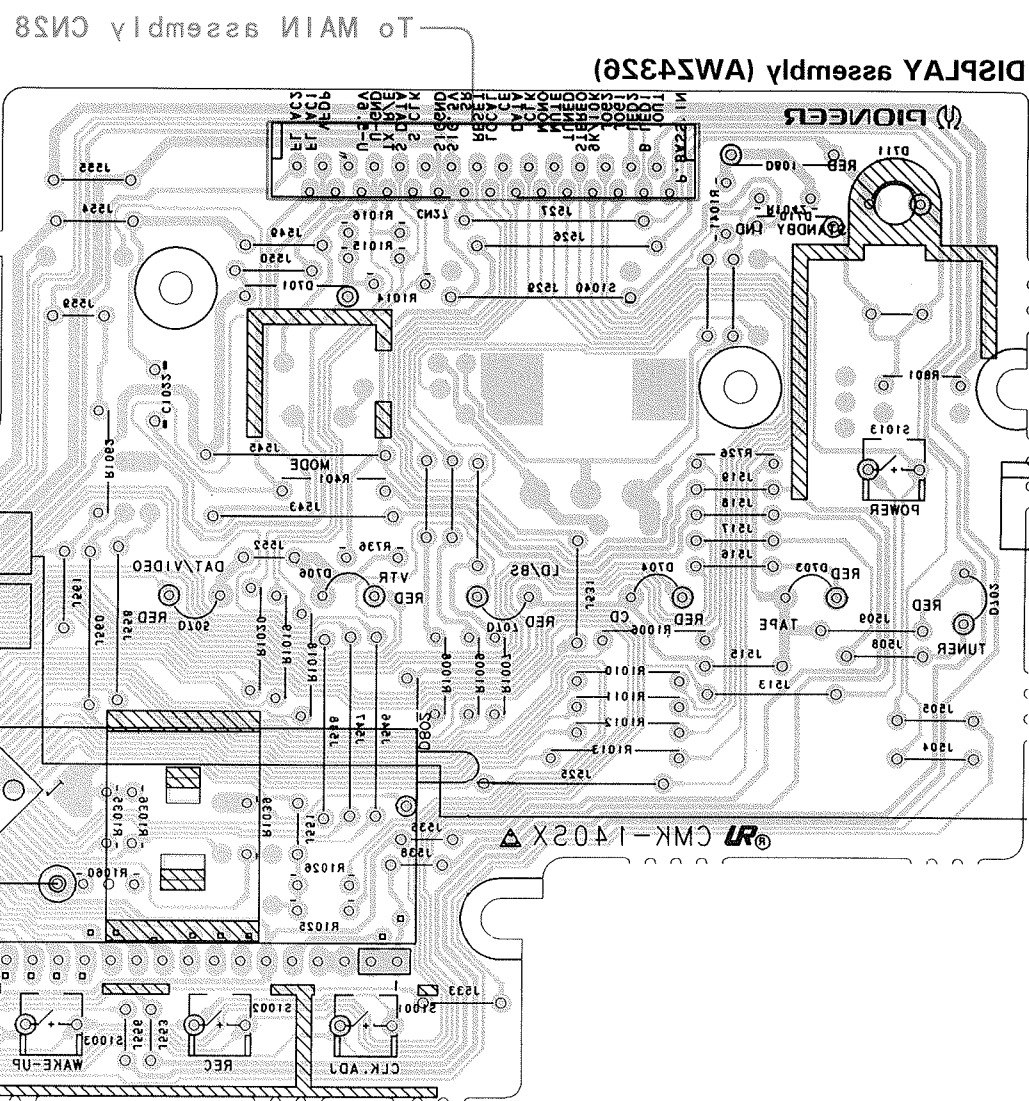
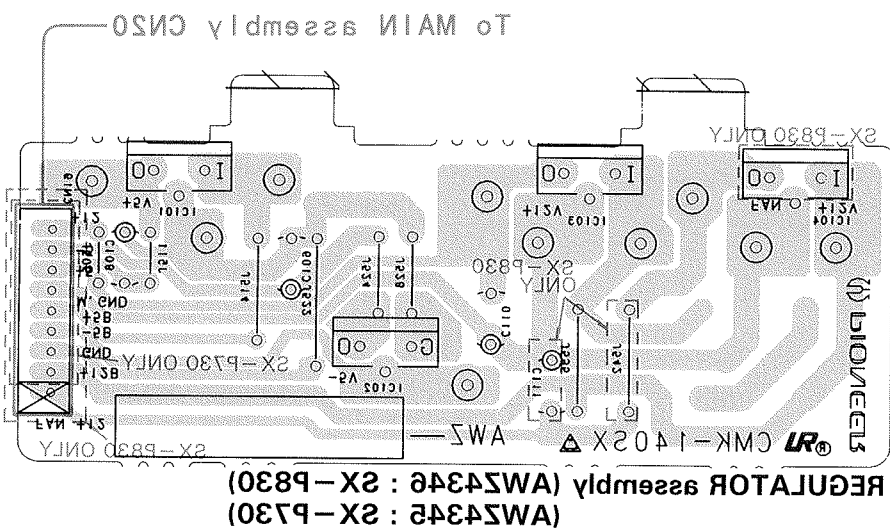
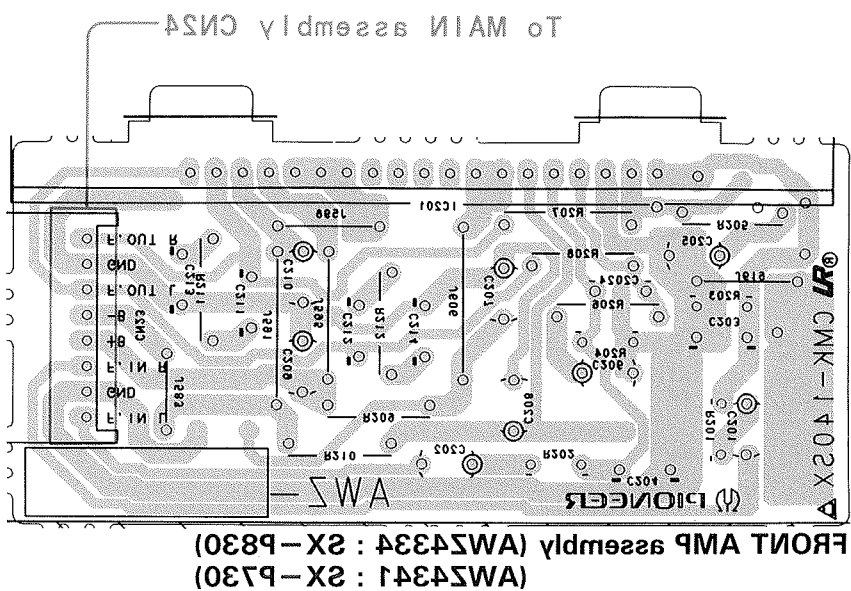
3. The capacitor terminal marked with ⊕ (double circles) shows negative terminal.
4. The diode terminal marked with ⊕ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



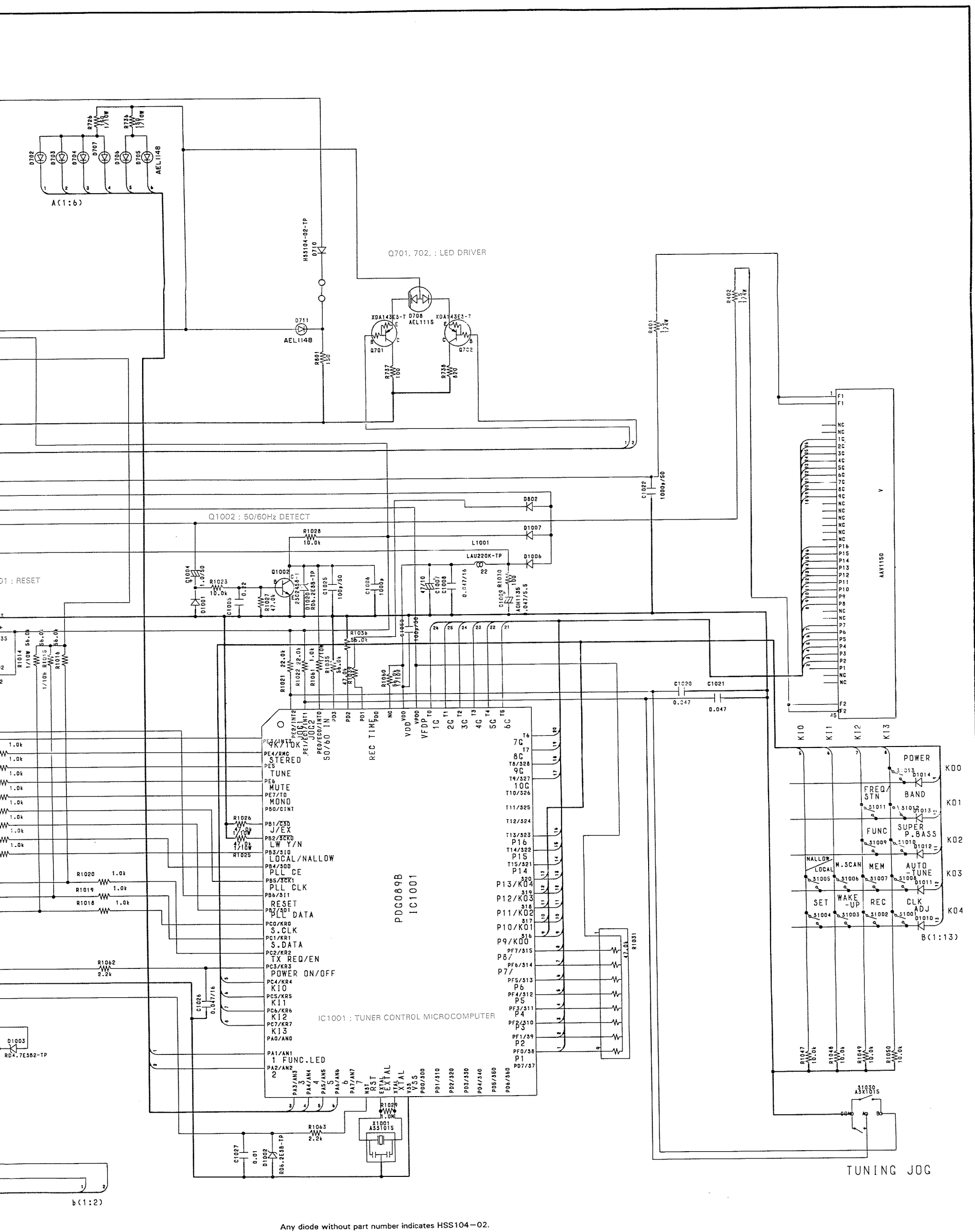
This PCB connection diagram is viewed from the foil side.



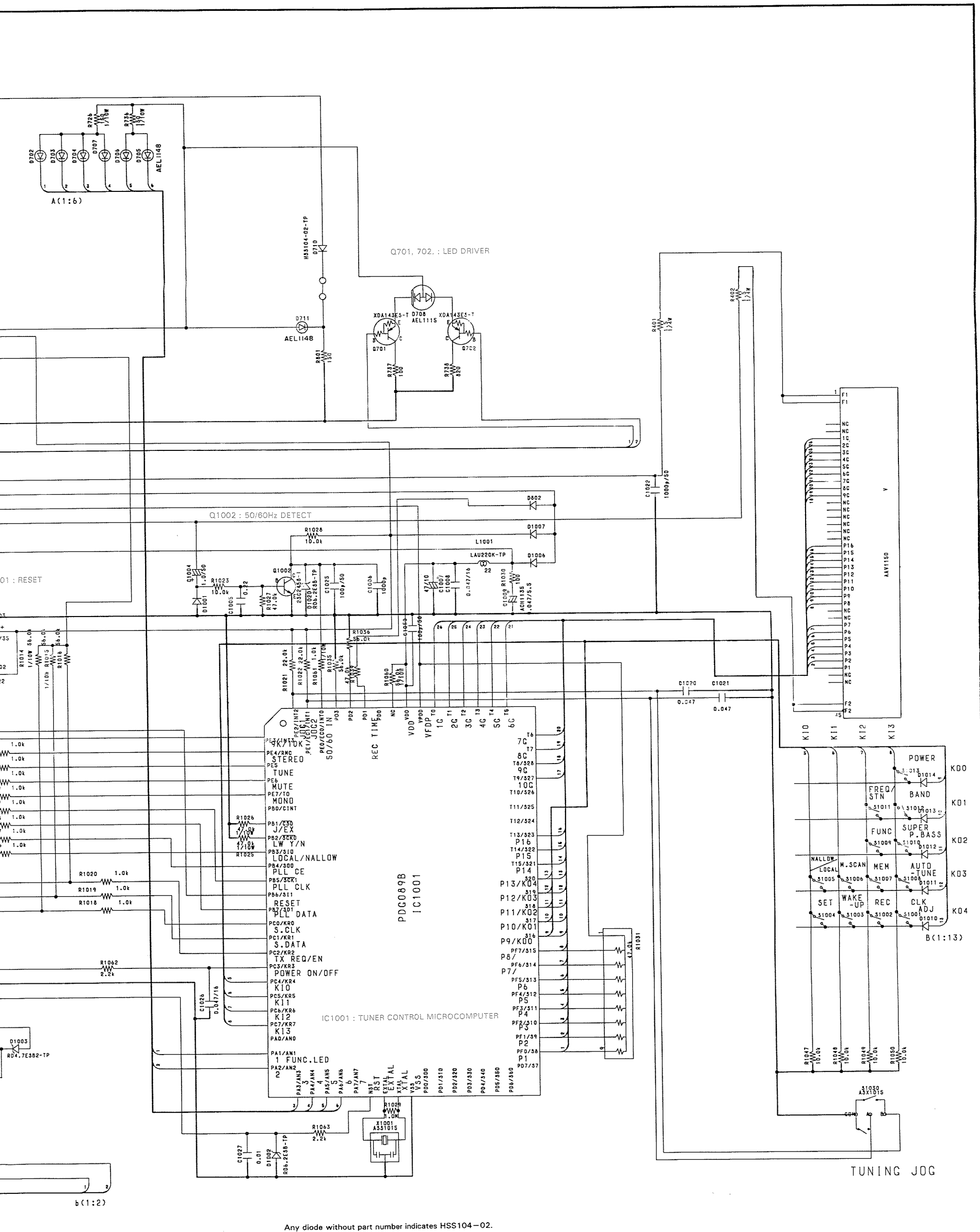
This PCB connection diagram is viewed from the foil side.



D205	D203	D204	D207	D805 D206	D201	D1001	D1010-D1014	D1005	D1003	D1001	D1003	D1001	D1050	D208
D205 D207	D203 D208	D204	D207	D805 D206	D201	D1001	D1010-D1014	D1005	D1003	D1001	D1003	D1001	D1050	D208



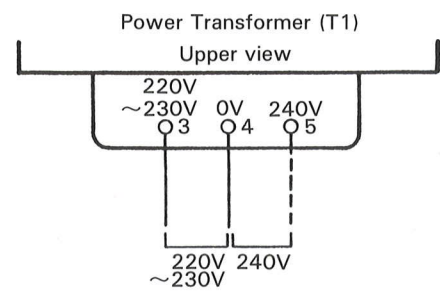
Any diode without part number indicates HSS104-02.



Line Voltage Selection

Line voltage can be changed with the following steps.

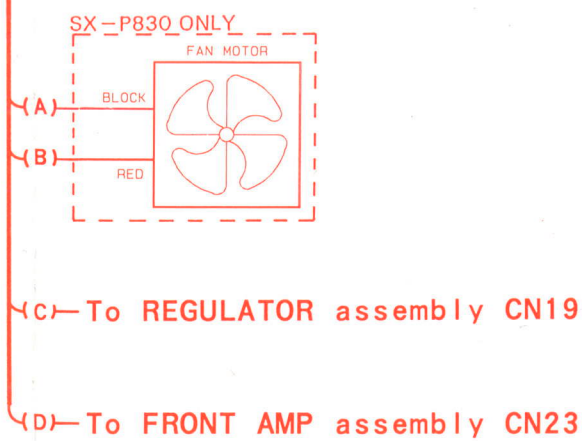
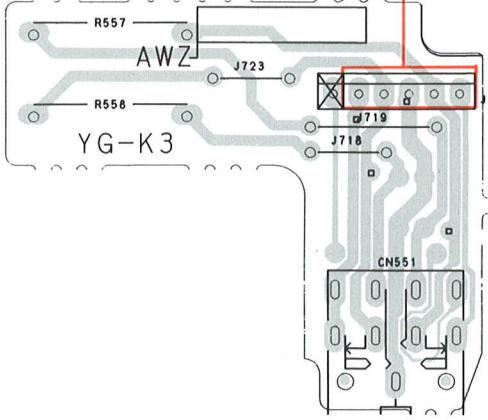
- 1. Disconnect the AC Power cord.
- 2. Remove the top cover.
- 3. Change the connection with the power transformer (T1) primary taps.



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

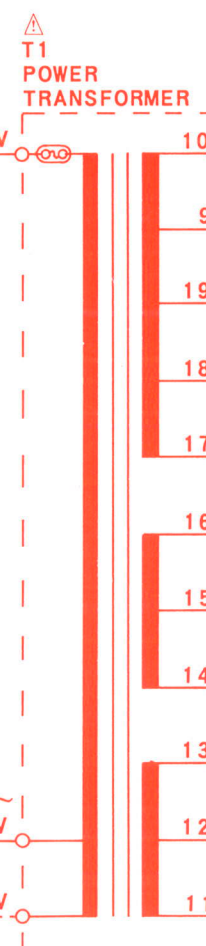
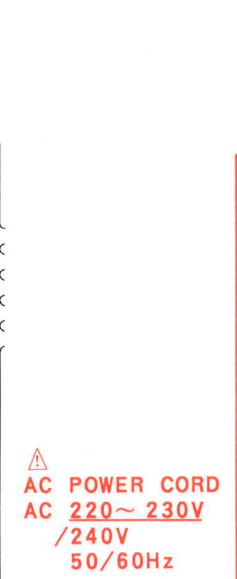
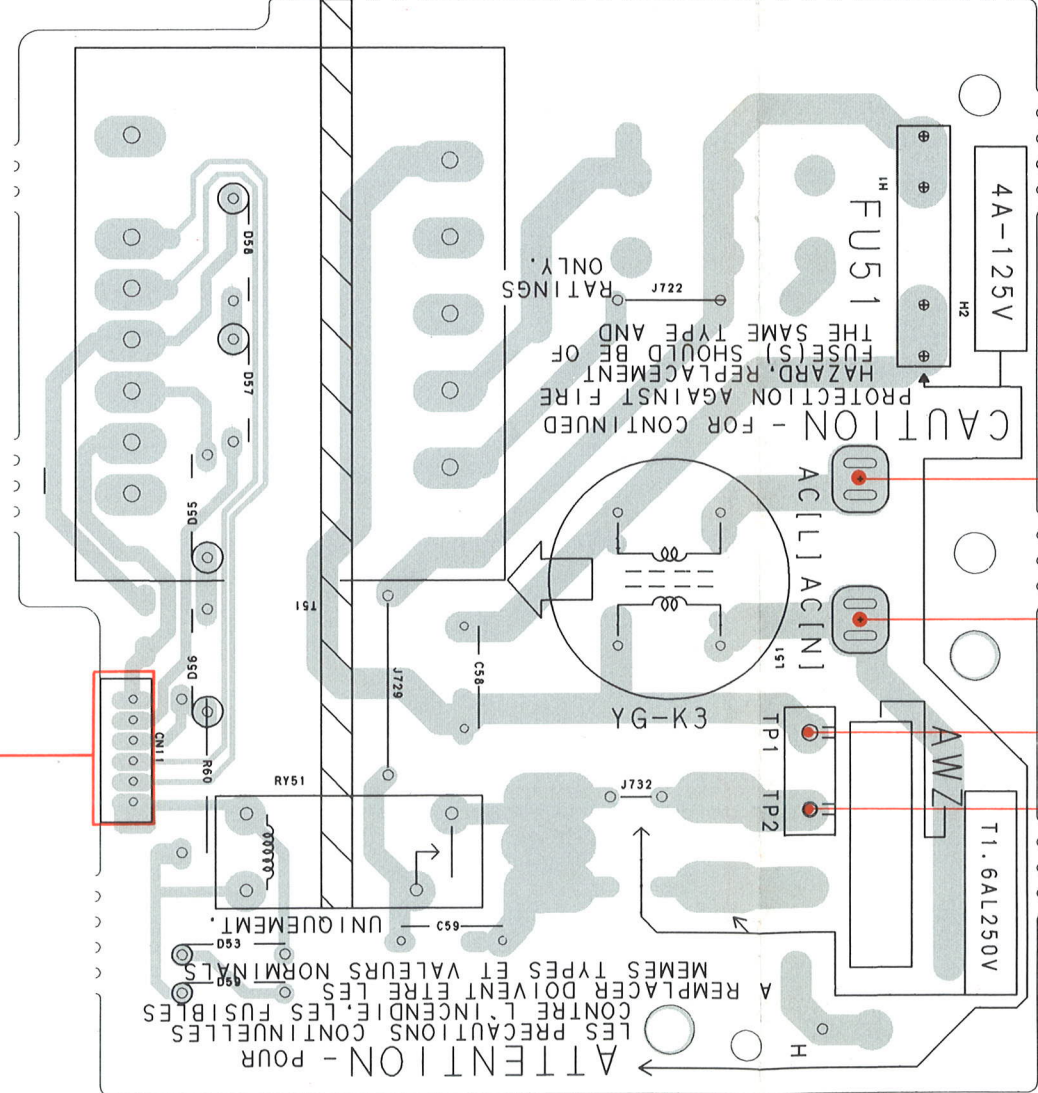
Part No.	Description
AAX-193	220V label
AAX-192	240V label

HEAD P. assembly

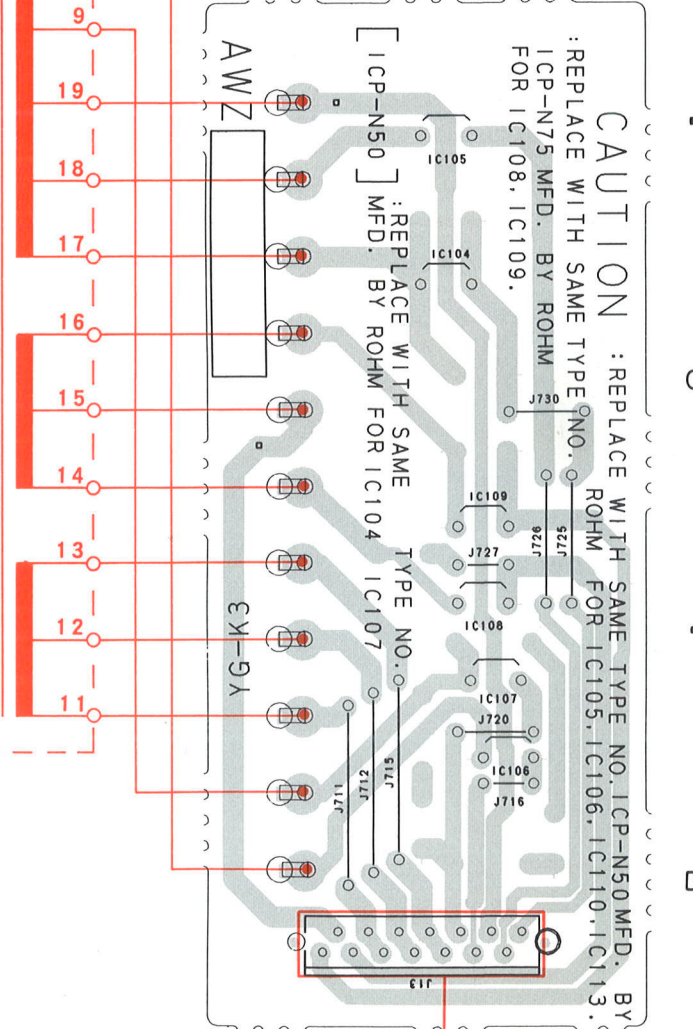


This PCB connection diagram is viewed from the parts mounted side.

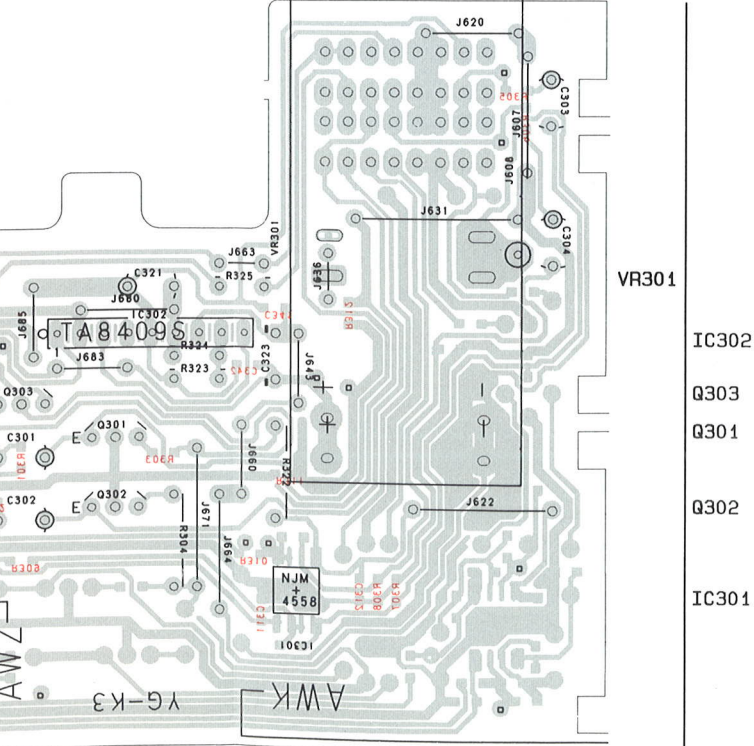
SUB POWER assembly (AWZ4362 : HE)
(AWZ4361 : HB)

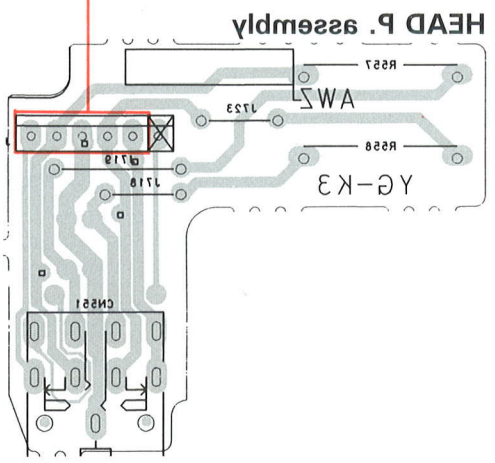
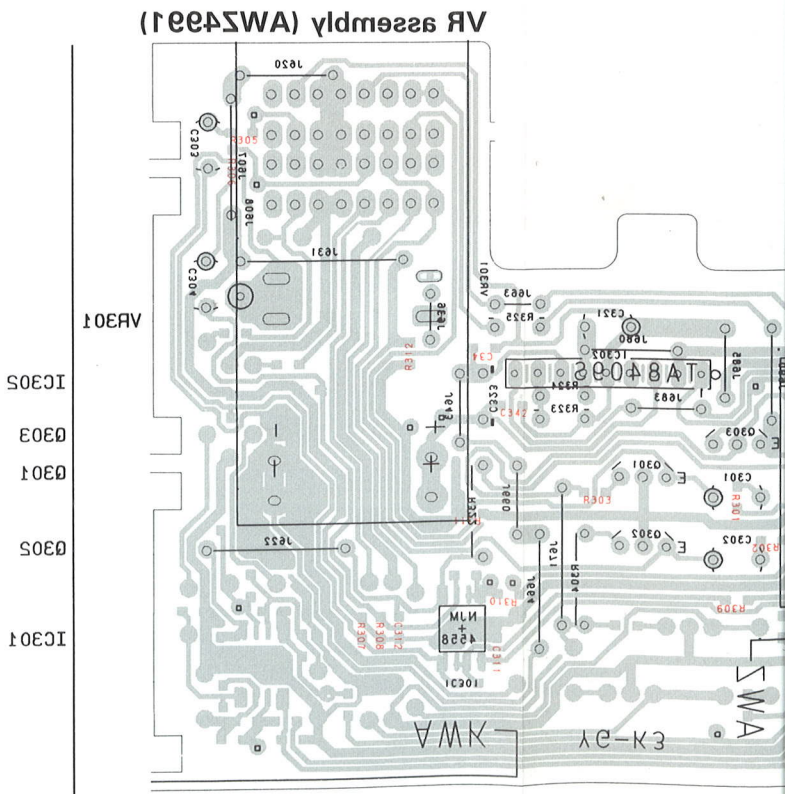
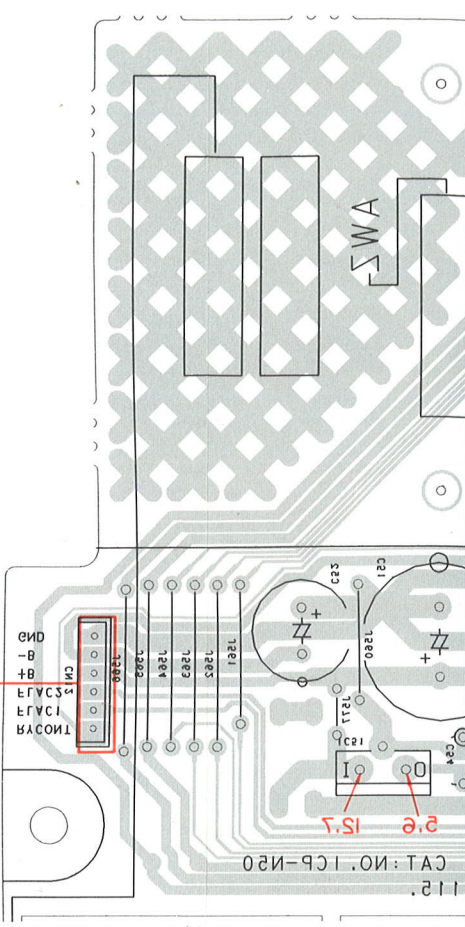


CONNECTOR assembly (AWZ4993)

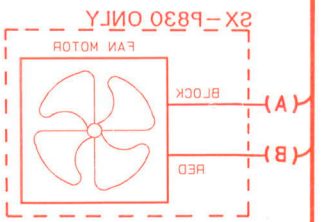


VR assembly (AWZ4991)



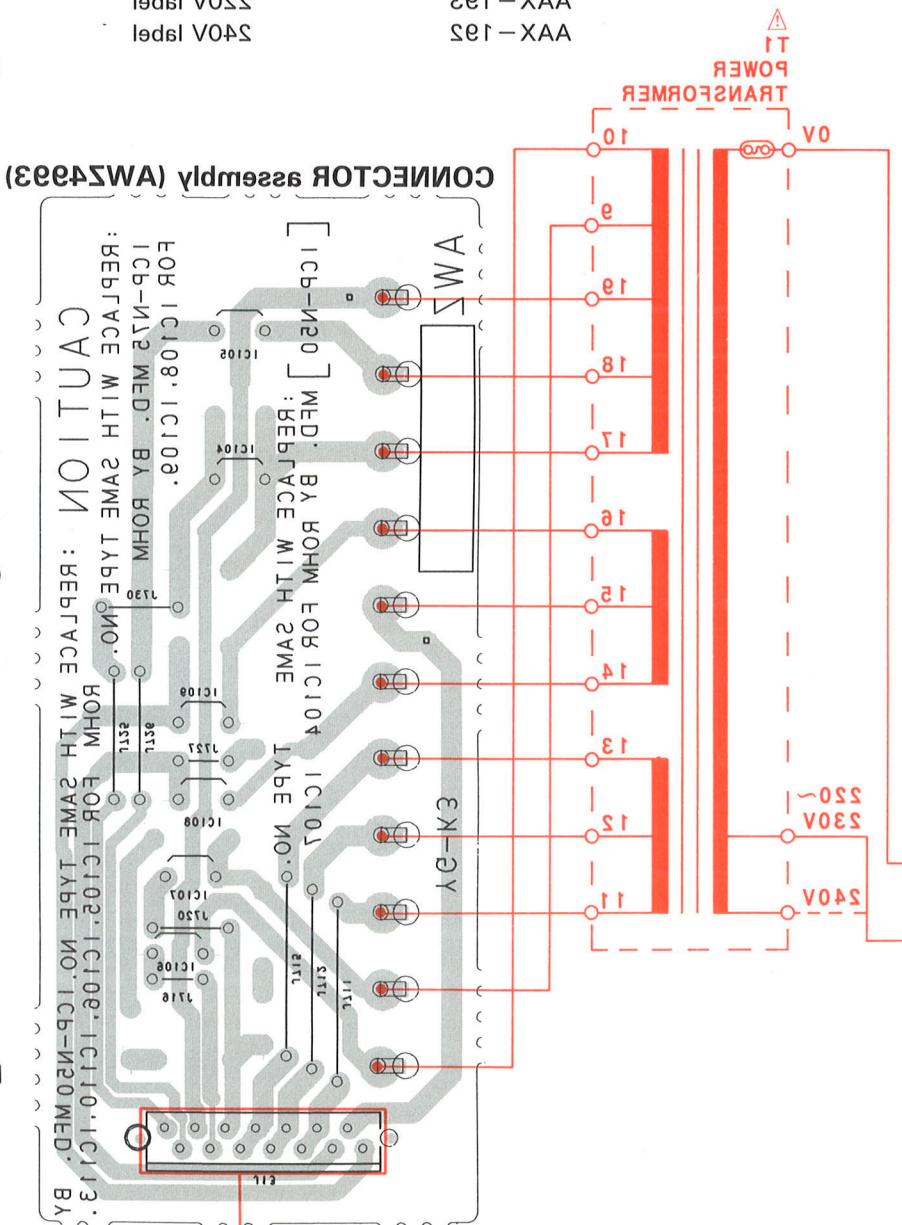
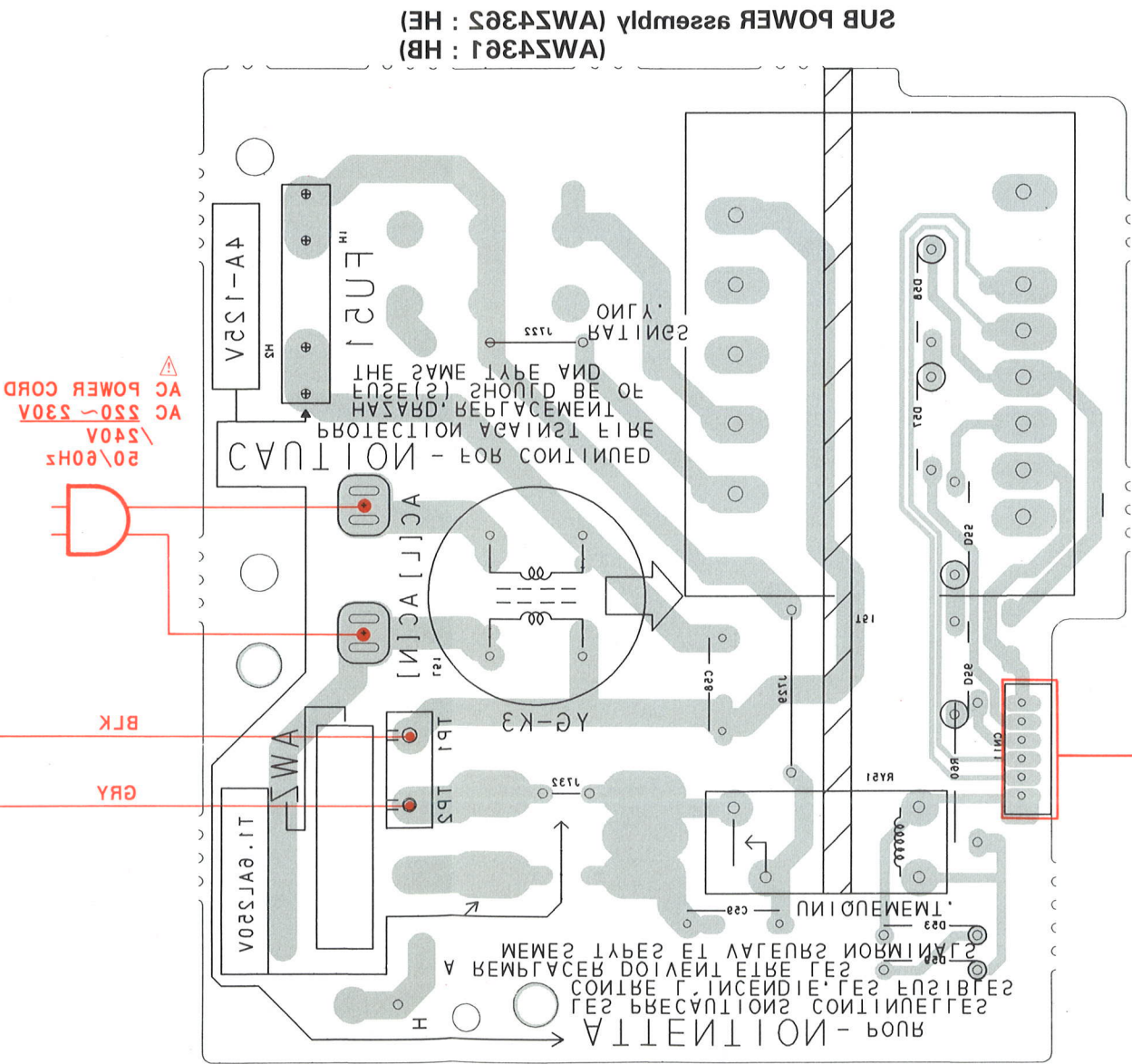


This PCB connection diagram is viwed from the foil side.



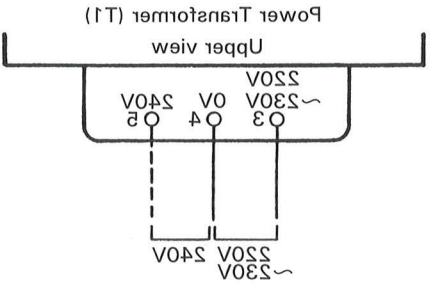
(D) To FRONT AMP assembly CN23

(C) To REGULATOR assembly CN19



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

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



sqst yrsmirg

3. Change the connection with the power transformer (T1).
 2. Remove the top cover.
 1. Disconnect the AC Power cord.
- Line voltage can be changed with the following steps.

Line voltage can be changed with the following steps.

Line Voltage Selection

6. PCB PARTS LIST

NOTES:

- Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- Parts marked by “ $\odot$ ” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- 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%).
 $560\Omega \rightarrow 56 \times 10^1 \rightarrow 561$ RD1/8PM $\triangle$ $\square$ $\square$ J
 $47k\Omega \rightarrow 47 \times 10^3 \rightarrow 473$ RD1/4PS $\triangle$ $\square$ $\square$ J
 $0.5\Omega \rightarrow 0R5$ RN2H $\triangle$ $\square$ $\square$ K
 $1\Omega \rightarrow 010$ RS1P $\triangle$ $\square$ $\square$ K
Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).
 $5.62k\Omega \rightarrow 562 \times 10^1 \rightarrow 5621$ RN1/4PC $\triangle$ $\square$ $\square$ $\square$ F

6.1 FOR SX – P830/HE

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES				CAPACITORS			
$\odot$		TUNER ASSEMBLY	AWE1261		C948 (470p/50V)	ACE1039	
$\odot$		DISPLAY ASSEMBLY	AWZ4326		C912, C914	CCDCH150J50	
$\odot$		FRONT AMP ASSEMBLY	AWZ4334		C968	CCDSL101J50	
$\odot$		REGULATOR ASSEMBLY	AWZ4346		C939	CCDSL271J50	
$\odot$		MAIN ASSEMBLY	AWZ4348		C927	CCDSL470J50	
$\odot$		SUB POWER ASSEMBLY	AWZ4362		C945	CEANP2R2M50	
NSP		HEAD P. ASSEMBLY	AWZ4375		C938	CEAS010M50	
$\odot$		VR ASSEMBLY	AWZ4991		C944, C954, C960	CEAS0R1M50	
$\odot$		CONNECTOR ASSEMBLY	AWZ4993		C949	CEAS1R5M50	
					C942, C957, C958, C963	CEAS2R2M50	
TUNER ASSEMBLY					C901, C926, C930	CEAS330M16	
SEMICONDUCTORS					C950	CEAS3R3M50	
	IC903	AN7470P			C924, C928, C943, C951	CEAS470M10	
	IC902	LA1265S			C946	CEAS470M25	
	IC901	LM7001			C936	CEAS4R7M50	
	Q914	2SA1048			C955	CEASR22M50	
	Q902	2SC1740SLN			C905	CFTXA103J50	
	Q910 – Q913	2SC2458			C906	CFTXA224J50	
	Q909	2SC2668			C952, C953, C956	CKDYB122K50	
	Q901	2SK246			C940	CKDYB222K50	
	Q908	RN1203			C961, C962	CKDYB272K50	
	Q905, Q907	RN2201			C902	CKDYF102Z50	
	D901	1SV156			C915, C919, C922, C932 – C935, C937	CKDYF223Z50	
	D908 – D912	HSS104 – 02			C941, C947	CKDYF473Z50	
					C903, C910, C964	CKPUYB101K50	
COILS					C904, C907, C965	CKPUYB102K50	
	L907	ATE – 079			C911, C916, C925, C929	CKPUYF103Z25	
	F905	ATF – 107			C923, C931, C959	CKPUYF223Z25	
	F903	ATF – 119			RESISTORS		
	F904	ATF1042			VR903 (4.7k)	ACP1042	
	F906	ATF1088			VR901 (10k)	ACP1043	
					VR902 (22k)	ACP1044	
	L904	LAU010K			Other Resistors		
	L901, L903, L905, L908	LAU2R2K				RD1/8PM $\square$ $\square$ $\square$ J	

Mark	No.	Description	Parts No.
OTHERS			
	X901 (7.200MHz)		ASS1042
	X902		ATF1027
	4P ANTENNA TERMINAL WITH PAL		AKA1010
	AM RF TUNING BLOCK		AXX1011
	2 SERIAL F. E. MODULE ASSEMBLY		AXQ1002

Note :
2 Serial F. E. module assembly has no service part.

DISPLAY ASSEMBLY

SEMICONDUCTORS			
	IC1001		PDG089B
	Q1003		2SA1048
	Q1002		2SC2458
	Q701, Q702		XDA143ES
	Q1001		XDC143ES
	D702 – D707, D711		AEL1148
	D708		AEL1115
	D701, D710, D801, D802, D1001, D1006, D1007, D1010 – D1014		HSS104 – 02
	D1003		RD4.7ESB2
	D1002, D1020		RD6.2ESB

SWITCHES			
	S1001 – S1013		ASG1034
	S1030		ASX1015

COIL			
	L1001		LAU220K

CAPACITORS			
	C1009		ACH1135
	C1004		CEAS010M50
	C1003		CEAS4R7M50
	C1007		CEJA470M10
	C1005		CFTXA224J50
	C1006		CKDYB102K50
	C1002		CKDYF223Z50
	C705, C1025, C1050		CKPUYB101K50
	C1022		CKPUYB102K50
	C1027		CKPUYF103Z25
	C1031		CKPUYF223Z25
	C1001, C1008, C1020, C1021, C1026		CKPUYF473Z16

RESISTORS			
	VR1001 (10k – B)		ACS1048
	R1031		RA8S473J
	R401, R402		RD1/4PMF1R5J
	Other Resistors		RD1/8PM $\square$ $\square$ $\square$ J

Mark	No.	Description	Parts No.
OTHERS			
		REMOTE SENSOR UNIT	AXX1023
	X1001 (8.00MHz)		ASS1015
	CN27 30P SOCKET		AKP1095
	V1001 FL TUBE		AAV1150

FRONT AMP ASSEMBLY

SEMICONDUCTORS			
	IC201		STK4160 – 2C
CAPACITORS			
	C209, C210		CEAS100M50
	C205 – C208		CEAS101M50
	C201, C202		CEASR15M50
	C203, C204		CQMA471J50
	C211 – C214		CQMA473J50

RESISTORS			
	R211, R212		RD1/4PM4R7
	R209, R210		RD1/4PMFL1
	R205, R206		RDR1/4PM56
	R207, R208		RDR1/4PM56
	Other Resistors		RD1/8PM $\square$ $\square$ $\square$ J

REGULATOR ASSEMBLY

SEMICONDUCTORS			
	IC103, IC104		MC7812CT
	IC101		NJM78M05FA
	IC102		NJM79M05FA

CAPACITORS			
	C109 – C111		CEAS220M16
	C108		CEJA220M16

MAIN ASSEMBLY

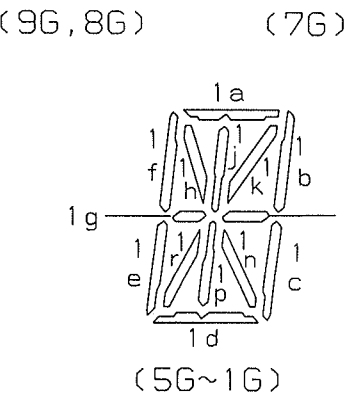
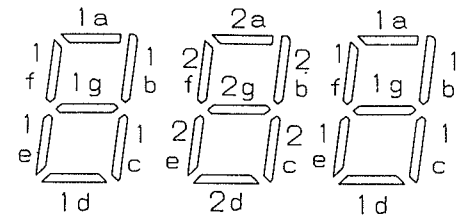
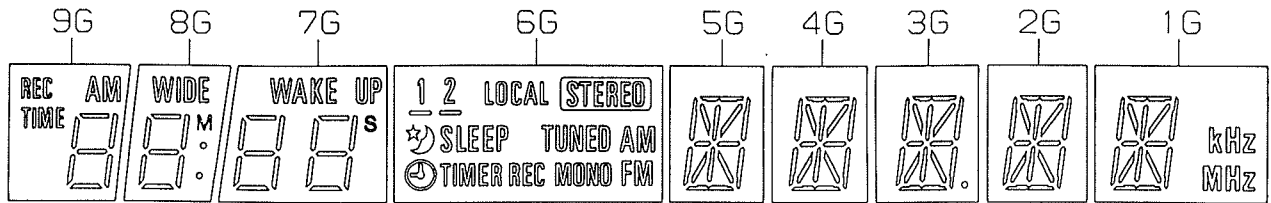
SEMICONDUCTORS			
	IC114		ICP – N50
	IC401		M5222L
	IC402 – IC405		NJM4558M – 1
	IC51		NJM78M56FA
	IC701		PD5199A
	Q102		2SA1048
	Q51 – Q54, Q101, Q153 – Q155, Q158, Q401, Q405, Q1002		2SC2458
	Q161, Q1001		XDC143ES
	D701, D1001		1S1555
	D401		1SS226
	D101		D3SBA20 (A)
	D118, D120, D710, D1002		HSS104 – 02
	D51		RD10EB

Mark	No.	Description	Parts No.
	D116, D117 D54 D52 D121, D709 (SI-A48007) D702 D102-D107, D122, D123	RD11EB RD16ESB RD16ESB1 RD6.2EB RD6.2ESB2 S5566	
	TH1001	NTH2218F	
RELAY			
	RY151	ASR1035	
COILS			
	L251, L252 L701	ATH-133 LAU220K	
CAPACITORS			
	C103, C104 (3300/50V) C401, C402, C408 C122 C105, C106 C121, C123	ACH1066 CEAS010M50 CEAS100M50 CEAS102M35 CEAS221M16	
	C52 C51 C113 C405, C410 C124	CEAS221M50 CEAS222M25 CEAS222M35 CEAS2R2M50 CEAS330M50	
	C702 C54, C57 C55 C412 C411	CEAS470M16 CEHAQ470M16 CEHAQ470M50 CEJA2R2M50 CEJAR68M50	
	C111, C112 C704 C413 C404, C409 C403, C901, C902	CKCYF103Z50 CKCYF473Z50 CKSQYB183K50 CKSQYB333K50 CKSQYF104Z50	
	C701, C703, C706-C708 C414 C1027	CKSQYF473Z50 CKSQYF683Z50 CQMA104K250	
RESISTORS			
	R134 R251, R252 R1001 R123, R135, R141, R715, R716, R772, R776, R779, R780, R910, R914, R917, R918, R920, R921, R923-R926, R949, R956, R999, R1003-R1006	RD1/2PM182J RD1/4PMFL100J RN1/4PC3601F RS1/10S000J	
	R55-R59, R110, R114, R435, R449 R117, R118, R122, R403, R404, R422-R425, R947, R948 R125, R405, R433, R798 R702 R126	RS1/10S102J RS1/10S103J RS1/10S104J RS1/10S105J RS1/10S112J	

Mark	No.	Description	Parts No.
	R408, R409 R436 R429 R1002 R453, R454	RS1/10S113J RS1/10S152J RS1/10S153J RS1/10S182J RS1/10S221J	
	R419, R703-R706, R709, R767, R768, R781 R124 R427 R407 R434	RS1/10S222J RS1/10S223J RS1/10S224J RS1/10S272J RS1/10S273J	
	R401, R402, R430 R489 R133 R115, R428 R445, R446	RS1/10S333J RS1/10S334J RS1/10S472J RS1/10S473J RS1/10S561J	
	R406, R418, R439, R440 R759, R760, R766, R782, R783, R791, R792, R796, R904-R906, R908, R909 R420, R421, R441 R442	RS1/10S562J RS1/10S563J RS1/10S622J RS1/10S622J	
	R426 R443, R444 R128, R129, R432 R112 R113, R557, R558	RS1/10S682J RS1/10S822J RS1/10S823J RS2LMF221J RS2LMF331J	
	R101, R102 R54	RS2LMFR22J RS3LMF821J	
	Other Resistors	RD1/8PM□□□J	
OTHERS			
	X701 (4.00MHz) 2P PIN JACK 4P SPEAKER TERMINAL CN1 15P SOCKET CN2 15P SOCKET CN28 30P SOCKET	ASS1025 AKB1146 AKE-109 AKP1090 AKP1092 AKP1094	
SUB POWER ASSEMBLY			
SEMICONDUCTORS			
	D53, D59 D55-D58	RD5.6ESB S5566	
RELAY			
	RY51	ASR1027	
COIL & TRANSFORMER			
	L51 T51	ATF-151 ATT1221	
CAPACITORS			
	C58, C59 (0.01/400V)	ACG1003	

AAV1150 (DISPLAY ASSEMBLY : V1001)

- FL Tube
- Grid Assignment



● Anode Connection

	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1	1a	1a	1a	-	1a	1a	1a	1a	1a
P2	1b	1b	1b	(1)	1b	1b	1b	1b	1b
P3	1c	1c	1c	(2)	1c	1c	1c	1c	1c
P4	1d	1d	1d	LOCAL	1d	1d	1d	1d	1d
P5	1e	1e	1e	STEREO	1e	1e	1e	1e	1e
P6	1f	1f	1f	SLEEP	1f	1f	1f	1f	1f
P7	1g	1g	1g	TIMER	1g	1g	1g	1g	1g
P8	TIME	WIDE	s	REC	1h	1h	1h	1h	1h
P9	AM	M	2a	TUNED	1j	1j	1j	1j	1j
P10	-	o (c o o)	2b	MONO	1k	1k	1k	1k	1k
P11	REC	-	2c	AM	1m	1m	1m	1m	1m
P12	-	-	2d	FM	1n	1n	1n	1n	1n
P13	-	-	2e	-	1p	1p	1p	1p	1p
P14	-	-	2f	-	1r	1r	1r	1r	1r
P15	-	-	2g	-	-	-	o (d p)	-	kHz
P16	-	-	WAKEUP	1 2	-	-	-	-	MHz

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	0	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	3	3	3	3	3	3	3	3	3	4	4	4	4	4	4			
CONNECTION	F	F	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	P	P	P	P	P	P	P	P	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	F
	1	1	P	P	C	C	G	G	G	G	G	G	G	G	G	G	C	C	C	C	C	6	5	4	3	2	1	0	9	8	C	7	6	5	4	3	2	1	C	C	P	P	2	2	

- NOTE 1) F1, F2 --- Filament
2) NP ----- No pin
3) NC ----- No connection
4) 1G~9G --- Grid

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	Q102	Q154 (Si-A48007)	2SA1048		R117, R118, R122, R403, R404,		RS1/10S103J
	Q51–Q54, Q101, Q153–Q155, Q158,		2SC2458		R422–R425, R947, R948		
	Q401, Q405				R125, R405, R433, R798		RS1/10S104J
	Q161		XDC143ES		R702		RS1/10S105J
					R126		RS1/10S112J
	D701		1S1555				
	D401		1SS226		R408, R409		RS1/10S113J
	D101		D3SBA20 (A)		R436		RS1/10S152J
	D118, D120		HSS104–02		R429		RS1/10S153J
	D51		RD10EB		R453, R454		RS1/10S221J
					R419, R703–R706, R709, R767,		RS1/10S222J
	D116, D117		RD11EB		R768, R781		
	D52, D54		RD16ESB1				
	D121, D709 (Si-A48007)		RD6.2EB		R124		RS1/10S223J
	D702		RD6.2ESB2		R427		RS1/10S224J
	D102–D107, D122, D123		S5566		R407		RS1/10S272J
					R434		RS1/10S273J
RELAY					R401, R402, R430		RS1/10S333J
	RY151		ASR1035				
					R489		RS1/10S334J
COILS					R133		RS1/10S472J
	L251, L252		ATH–133		R115, R428		RS1/10S473J
	L701		LAU220K		R445, R446		RS1/10S561J
					R406, R418, R439, R440		RS1/10S562J
CAPACITORS							
	C103, C104(3300/50V)		ACH1066		R759, R760, R766, R782–R784,		RS1/10S563J
	C401, C402, C408		CEAS010M50		R791, R792, R796, R904–R906,		
	C122		CEAS100M50		R908, R909		
	C105, C106		CEAS102M35		R420, R421, R441, R442		RS1/10S622J
	C121, C123		CEAS221M16		R426		RS1/10S682J
					R443, R444		RS1/10S822J
	C52		CEAS221M50		R128, R129, R432		RS1/10S823J
	C51		CEAS222M25		R112 (Si-A48007)		RS2LMF151J
	C113		CEAS222M35		R113 "		RS2LMF271J
	C405, C410		CEAS2R2M50		R557, R558		RS2LMF331J
	C124		CEAS330M50		R101, R102		RS2LMFR22J
					R54		RS3LMF821J
	C702		CEAS470M16				
	C54, C57		CEHAQ470M16		Other Resistors		RD1/8PM□□□J
	C55		CEHAQ470M50				
	C412		CEJA2R2M50	OTHERS			
	C411		CEJAR68M50		X701 (4.00MHz)		ASS1025
					4P SPEAKER TERMINAL		AKE–109
	C111, C112		CKCYF103Z50		CN1 15P SOCKET		AKP1090
	C704		CKCYF473Z50		CN2 15P SOCKET		AKP1092
	C413		CKSQYB183K50		CN28 30P SOCKET		AKP1094
	C404, C409		CKSQYB333K50				
	C403, C901, C902		CKSQYF104Z50				
	C701, C703, C706–C708		CKSQYF473Z50	Note :	The other assemblies of SX–P730/HE are the same		
	C414		CKSQYF683Z50		as those of SX–P830/HE.		
	C1027		CQMA104K250		Refer to “ 6.1 FOR SX–P830 ”.		
RESISTORS							
	R134		RD1/2PM182J				
	R251, R252		RD1/4PMFL100J				
	R123, R135, R141, R715, R716, R772,		RS1/10S000J				
	R776, R779, R780, R910, R914, R917,						
	R918, R920, R921, R923–R926,						
	R949, R956, R999						
	R55–R59, R110, R114, R435, R449		RS1/10S102J				

Note : The other assemblies of SX–P730/HE are the same as those of SX–P830/HE.
Refer to “ 6.1 FOR SX–P830 ”.

7. ADJUSTMENTS

7.1 ADJUSTMENT OF THE FM TUNER SECTION

- Set the mode selector to FM BAND.
- Connect the wiring as shown in Fig. 7–1.

Step No.	Adjustment Title	FM SG (1kHz±75kHz dev.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (MHz)	Level (dBμV)			
1	Center Adjustment	98	80	98.0MHz	L907	Adjust so that the DC voltage between the TP901 (Vref) and TP902 (T–meter) becomes 0V±50mV.
2	VCO Adjustment	Non modulation	80	98.0MHz	VR903	Adjust so that the output of the TP905 (VCO) becomes 76kHz±0.5kHz.
3	TUNED IND. Lighting Level	98 *1 (Stereo modulation)	18 (±3dB)	98.0MHz	VR902	Adjust so that the indicators of TUNED STEREO IND. start to light up.

Note :
Perform steps 1 and 3 when the 2 serial F. E. module assembly is replaced.
Confirm VCO (step 2) and adjust if improper.

*1 Stereo modulation : Main 1kHz L+R ±68.25kHz dev.
Pilot 19kHz ±6.75kHz dev.

7.2 ADJUSTMENT OF AM (MW) TUNER SECTION

- Set the mode selector to AM (MW) BAND.
- Connect the wiring as shown in Fig. 7–2.

Step No.	Adjustment Title	AM SG (400Hz 30% Mod.)		Reception Frequency Display	Adjustment Location	Specifications
		Frequency (kHz)	Level (dBμV/m)			
1	TUNED IND. Lighting level	999	55 (±5dB)	999kHz	VR901	Adjust so that the indicators of TUNED IND. start to light up.

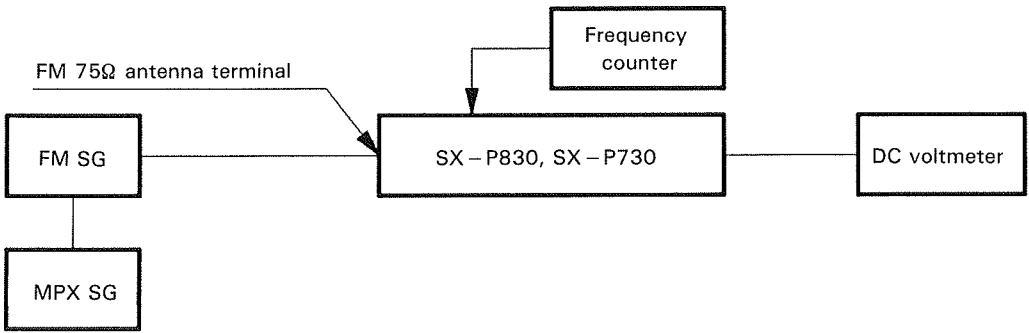


Fig. 7-1 FM Adjustment Connection Diagram

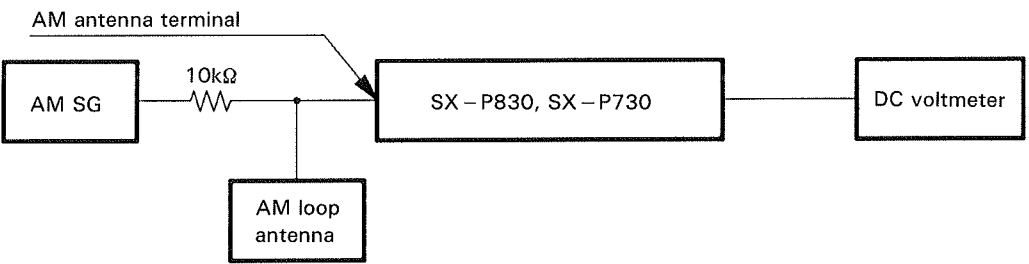


Fig. 7-2 AM (MW) Adjustment Connection Diagram

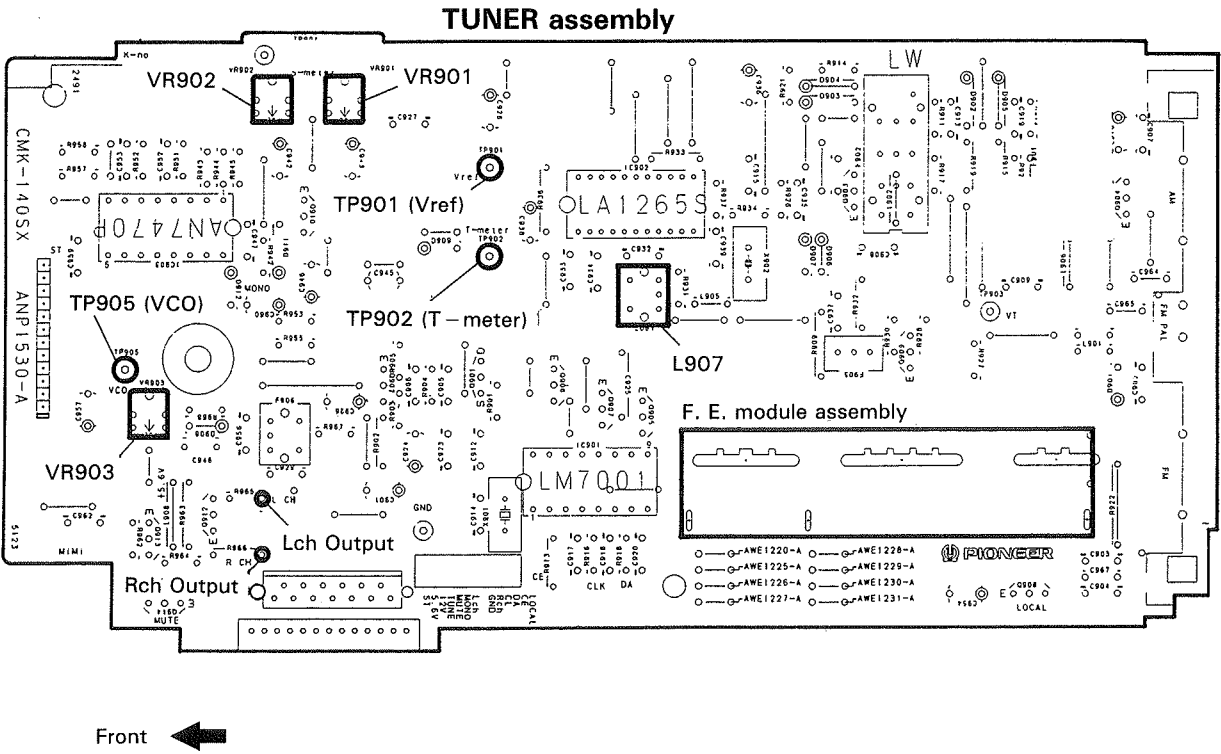


Fig. 7-3 Adjustment Points

6.2 FOR SX-P730/HE

Mark	No.	Description	Parts No.
RESISTORS			
	R60		RS2LMF390J
	OTHERS (SEE A50001)		
	AKR1003		
HEAD P. ASSEMBLY			
OTHERS			
	CN551 MINI JACK		AKN1028

VR ASSEMBLY

SEMICONDUCTORS			
	IC302		TA8409S
	IC301		UPC4570G2
	Q301, Q302		2SC2878
	Q303		RN2203

CAPACITORS			
	C321		CEAS101M16
	C301, C302		CEXA2R2M50
	C303, C304		CEYA2R2M50
	C323		CKCYX104M16
	C305		CKPUYF223Z25

	C341, C342		CKSQYF104Z50
	C311, C312		CKSQYF473Z50

RESISTORS			
	VR301 (100k-4B x 2 50k-6B)		ACX1064
	R321, R322		RDR1/4PM390J
	R311, R312		RS1/10S000J
	R305, R306		RS1/10S102J
	R307, R308		RS1/10S104J
	R309, R310		RS1/10S221J
	R301-R303		RS1/10S472J
	Other Resistors		RD1/8PM□□□□

CONNECTOR ASSEMBLY

SEMICONDUCTORS			
	IC104-IC107		ICP-N50
	IC108, IC109		ICP-N75

LIST OF ASSEMBLIES

	TUNER ASSEMBLY		AWE1261
	DISPLAY ASSEMBLY		AWZ4326
	FRONT AMP ASSEMBLY		AWZ4341
	REGULATOR ASSEMBLY		AWZ4345
	MAIN ASSEMBLY		AWZ4357

	SUB POWER ASSEMBLY		AWZ4362
NSP	HEAD P. ASSEMBLY		AWZ4375
	VR ASSEMBLY		AWZ4991
	CONNECTOR ASSEMBLY		AWZ4993

FRONT AMP ASSEMBLY

SEMICONDUCTORS			
	IC201		STK4140-2G

CAPACITORS			
	C209, C210		CEAS100M50
	C201, C202		CEASR15M50
	C205-C208		CEXA101M50
	C203, C204		CQMA471J50
	C211-C214		CQMA473J50

RESISTORS			
	R211, R212		RD1/4PM4R7
	R205, R206		RD1/4PM561J
	R209, R210		RD1/4PMFL1
	R207, R208		RDR1/4PM561

	Other Resistors		RD1/8PM□□□□
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REGULATOR ASSEMBLY

SEMICONDUCTORS			
	IC103		MC7812CT
	IC101		NJM78M05FA
	IC102		NJM79M05FA

CAPACITORS			
	C109, C110		CEAS220M16
	C108		CEJA220M16

MAIN ASSEMBLY

SEMICONDUCTORS			
	IC114		ICP-N50
	IC401		M5222L
	IC402-IC405		NJM4558M-I
	IC51		NJM78M56FA
	IC701		PD5199A

8. FOR HB TYPE

NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- 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.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

8.1 FOR SX – P830/HB

SX – P830/HB and SX – P830/HE have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		SX – P830/HE	SX – P830/HB	
●	SUB POWER assembly	AWZ4362	AWZ4361	*1
$\triangle$	AC power cord	ADG1049	ADG1118	
NSP	Rear panel	ANC1939	ANC1938	
	Operating instructions (German, Italian)	ARC1379		
	Operating instructions (Dutch, Swedish, Spanish, Portuguese)	ARE1254		

*1 : Although AWZ4361 and AWZ4362 are different in part number, they have the same service parts.

8.2 FOR SX – P730/HB

SX – P730/HB and SX – P730/HE have the same construction except for the following :

Mark	Symbol & Description	Part No.		Remarks
		SX – P730/HE	SX – P730/HB	
●	SUB POWER assembly	AWZ4362	AWZ4361	*1
$\triangle$	AC power cord	ADG1049	ADG1118	
NSP	Rear panel	ANC1944	ANC1943	
	Operating instructions (German, Italian)	ARC1379		
	Operating instructions (Dutch, Swedish, Spanish, Portuguese)	ARE1254		

*1 : Although AWZ4361 and AWZ4362 are different in part number, they have the same service parts.