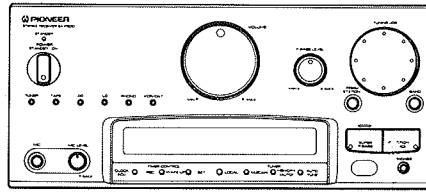


Service Manual



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).

CONTENTS

1. SPECIFICATIONS	2	5. SCHEMATIC AND PCB CONNECTION	
2. PANEL FACILITIES	3	DIAGRAMS	9
3. EXPLODED VIEWS, PACKING AND		6. PCB PARTS LIST	36
PARTS LIST	5	7. ADJUSTMENTS	41
4. BLOCK DIAGRAM	8	8. FOR HB TYPE	43

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 μV/75 ohms)

Sensitivity (DIN)

MONO (S/N 26 dB) 1 μV/75 ohms

STEREO (S/N 46 dB) 50 μV/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)

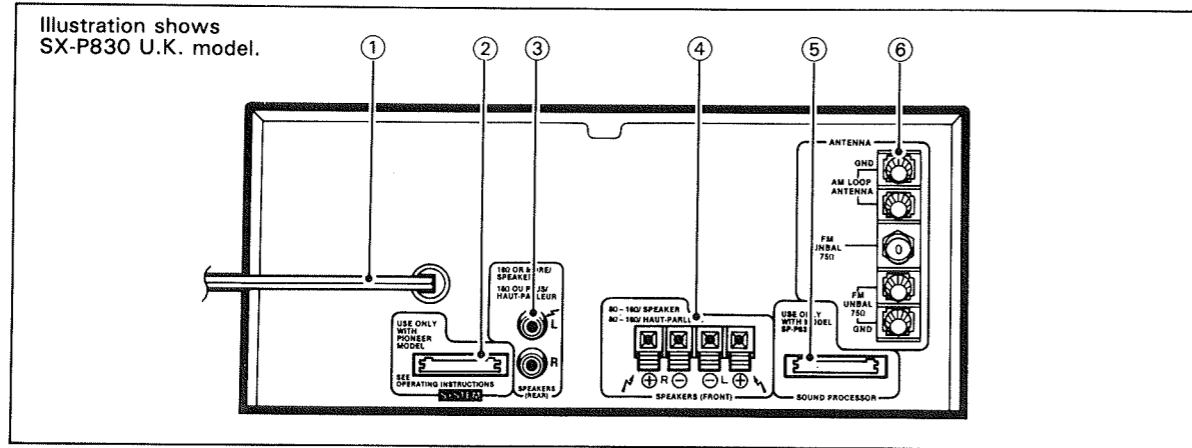
Sensitivity (IHF, Loop antenna) 350 μV/m

Antenna Loop Antenna

NOTE:

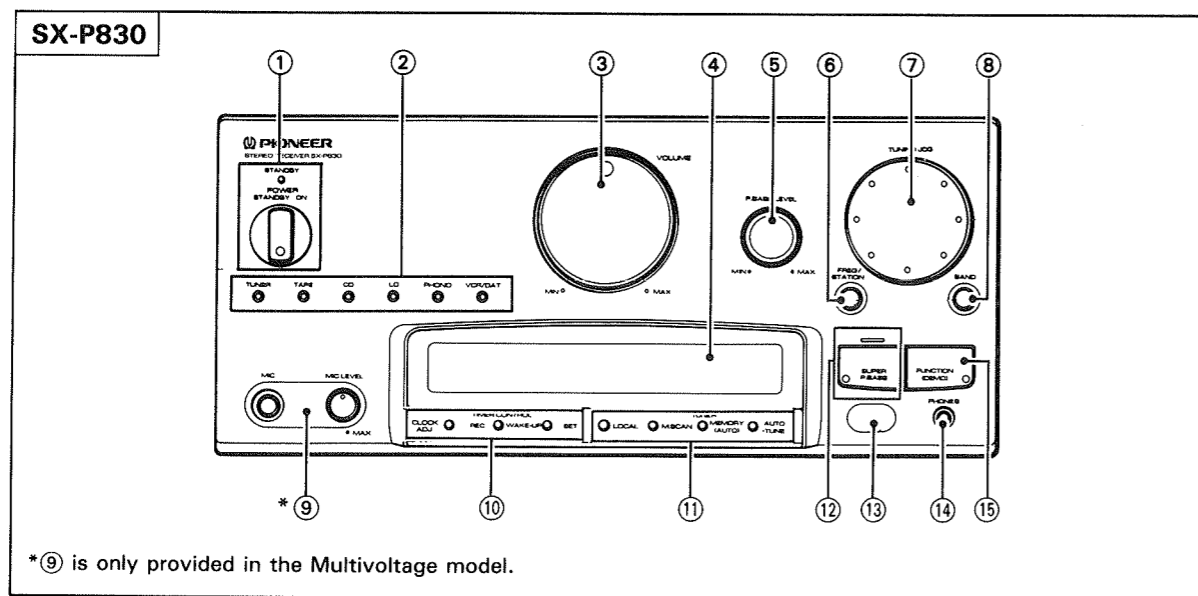
The specifications and design of this product are subject to change without notice, due to improvements.

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.

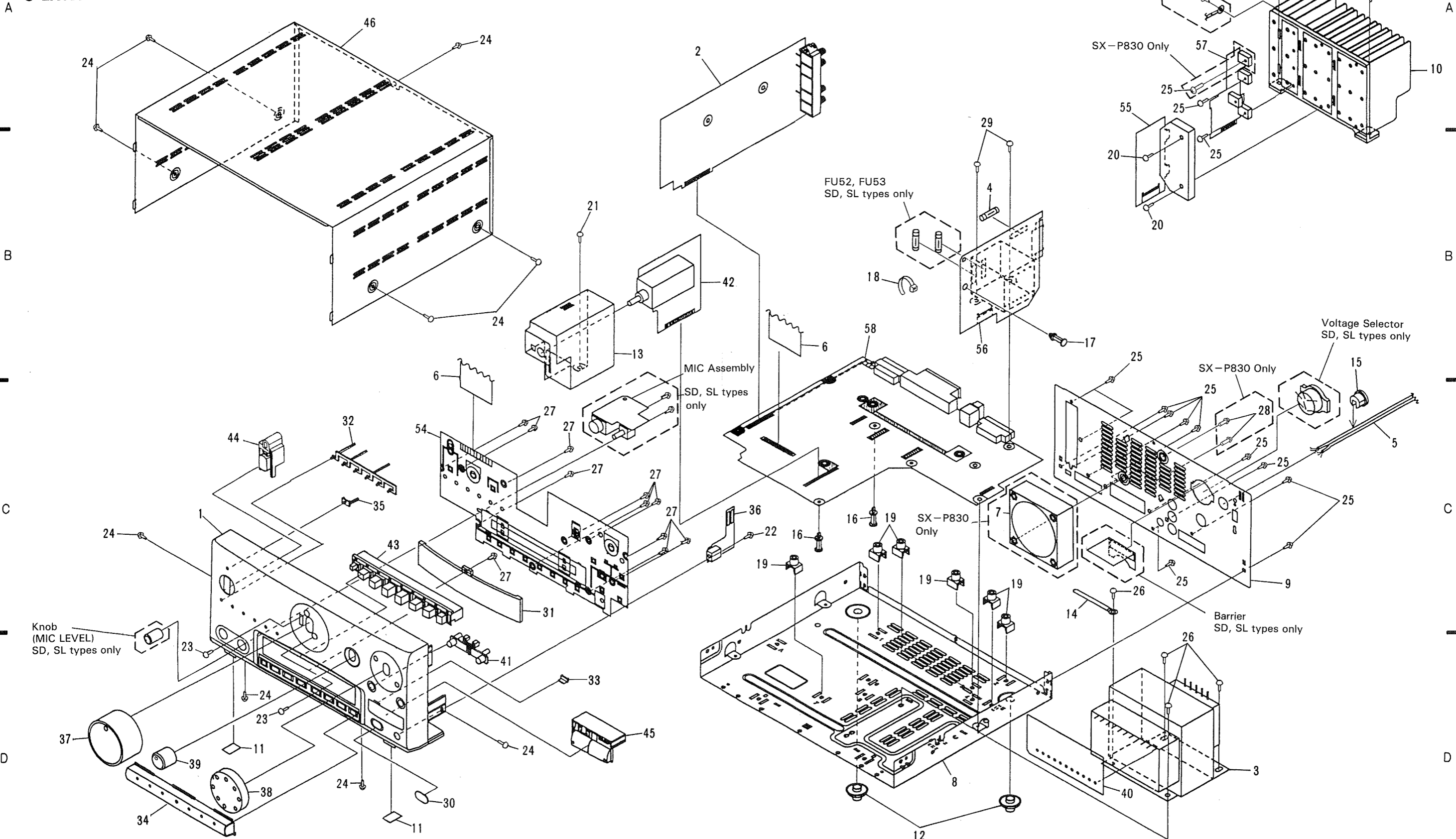


- ① **POWER STANDBY/ON switch, STANDBY indicator**
This is the switch for electric power.
ON: When set to the ON position, power is supplied and the unit becomes operational.
STANDBY: When set to the STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow 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.

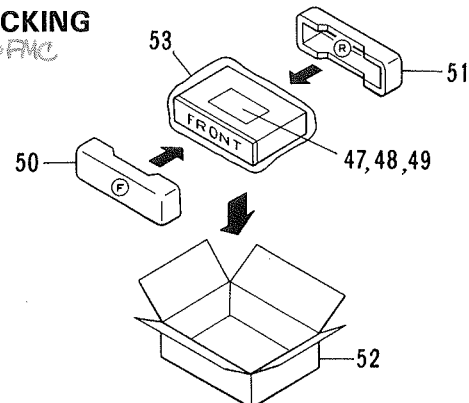
NOTES:

- 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 (Si-A48029)		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				

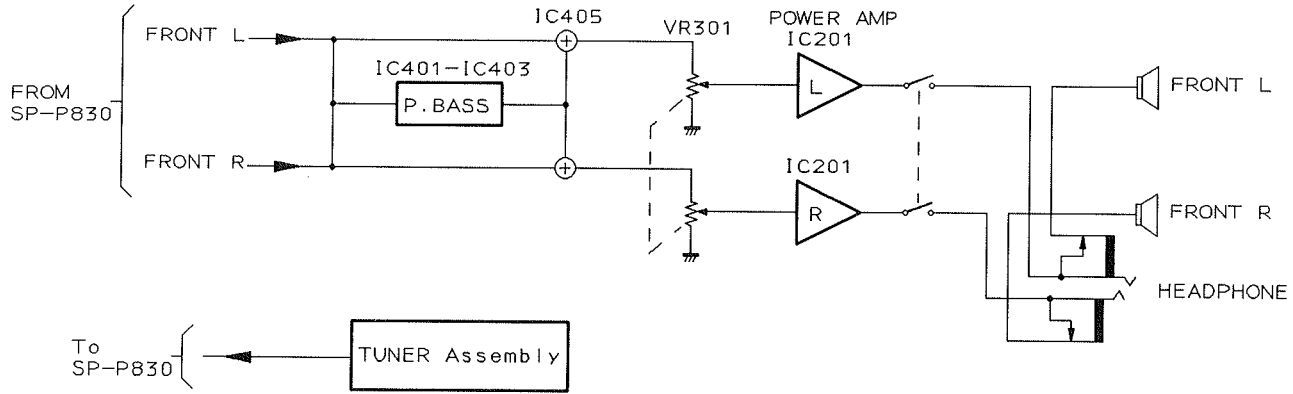
PACKING



4. BLOCK DIAGRAM

4.1 FOR SX-P830

A



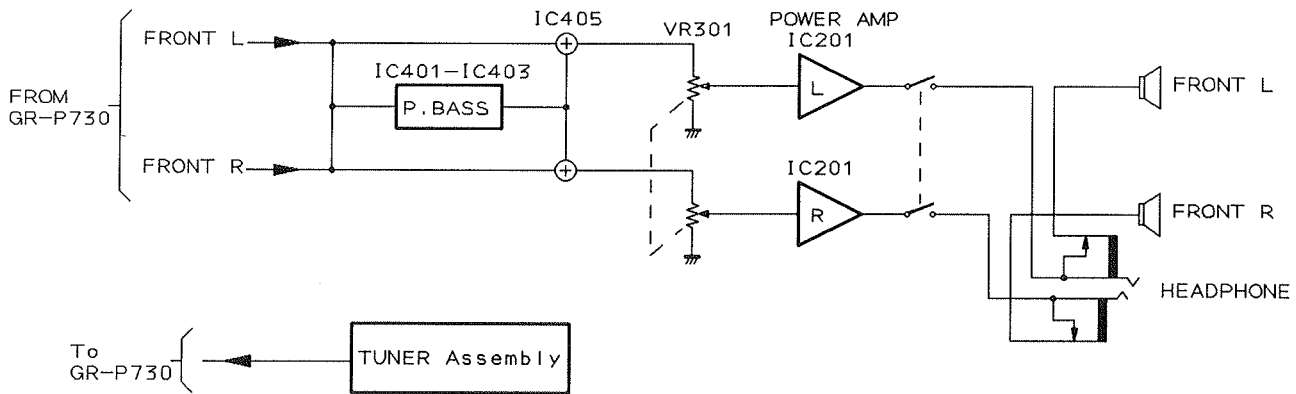
A

B

B

4.2 FOR SX-P730

C



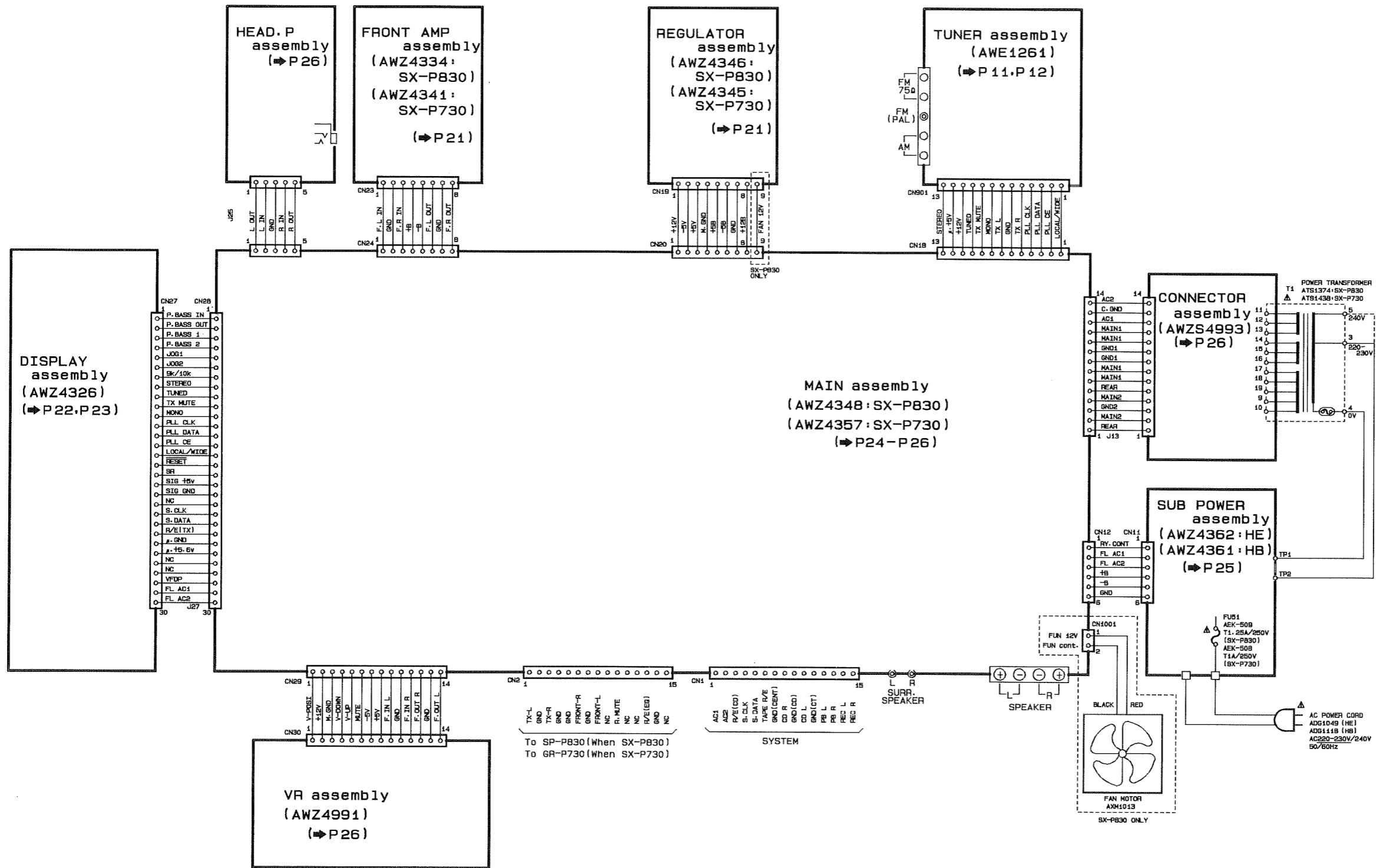
C

D

D

5. SCHEMATIC AND PCB CONNECTION DIAGRAMS

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

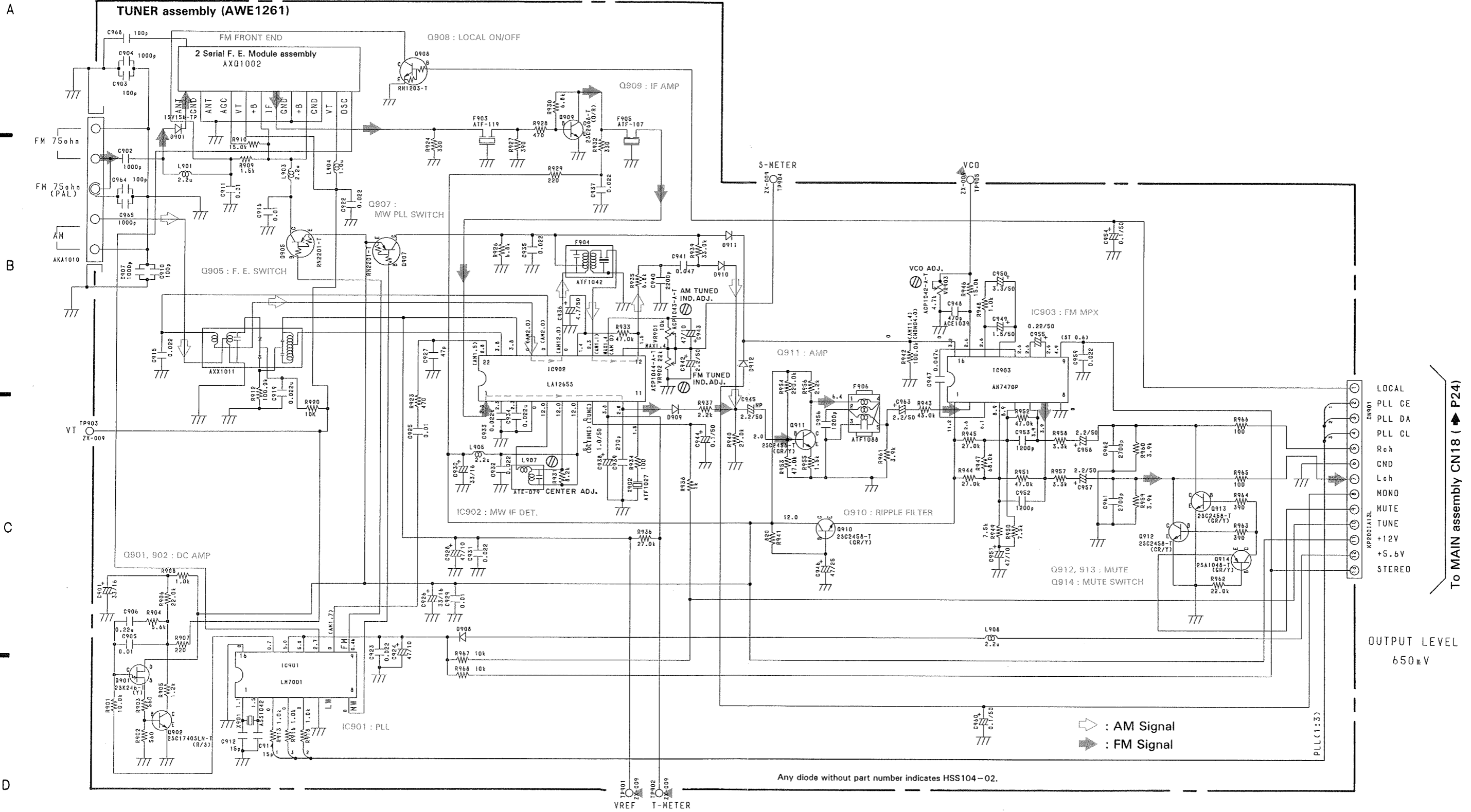


- Note:** Type 1
- When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".
 - Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.
 - RESISTORS:**
Unit: k:kΩ, M:MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.
 - CAPACITORS:**
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.
 - COILS:**
Unit: m:mH or μH unless otherwise noted.
 - VOLTAGE AND CURRENT:**
Ⓛ: Signal voltage at rated output.
Ⓜ: DC voltage (V) at no input signal unless otherwise noted. Value in () is DC voltage at rated power.
ⓂV: Signal voltage at FM 1kHz, 100% MOD.
ⓂA or Ⓜ: DC current at no input signal unless otherwise noted.
 - OTHERS:**
•→: Signal route.
⊗: Adjusting point.
⊕ (Red): Measurement point.
The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.
 - SWITCHES** (Underline indicates switch position):

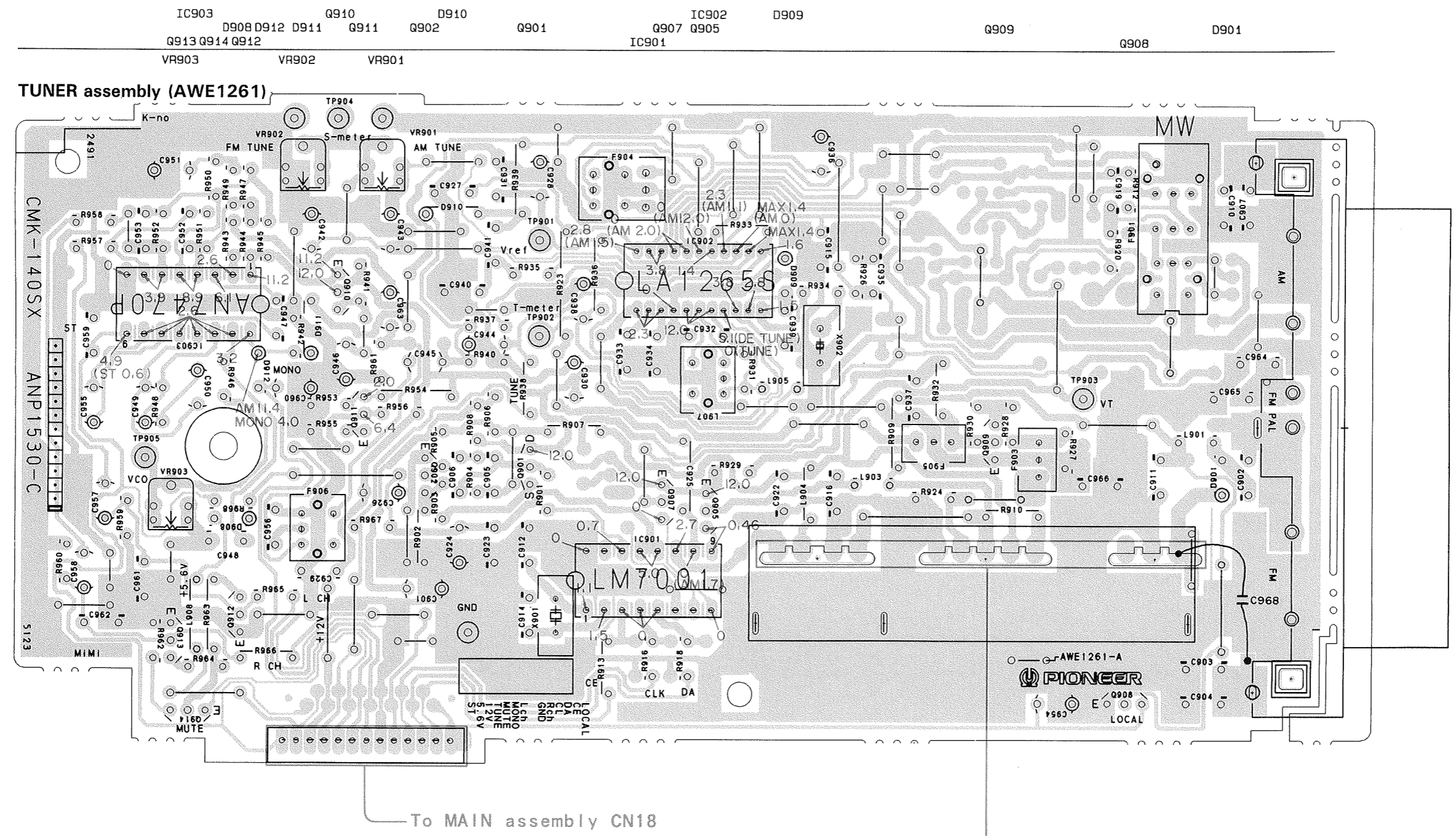
DISPLAY assembly

S1001	CLOCK ADJ.
S1002	REC
S1003	WAKE-UP
S1004	SET
S1005	NALLOW/LOCAL
S1006	M. SCAN
S1007	MEMORY (AUTO)
S1008	AUTO TUNE
S1009	FUNCTION
S1010	SUPER P. BASS
S1011	FREQ/STATION
S1012	BAND
S1013	POWER STANDBY/ON
S1030	TUNING JOG

5.2 TUNER ASSEMBLY



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



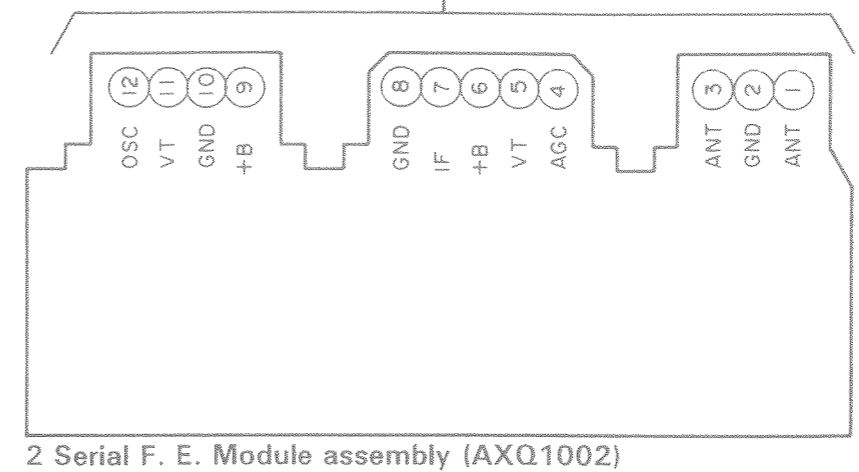
- NOTE
1. This P.C.B connection diagram is viewed from the parts mounted side.
 2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

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

Others

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

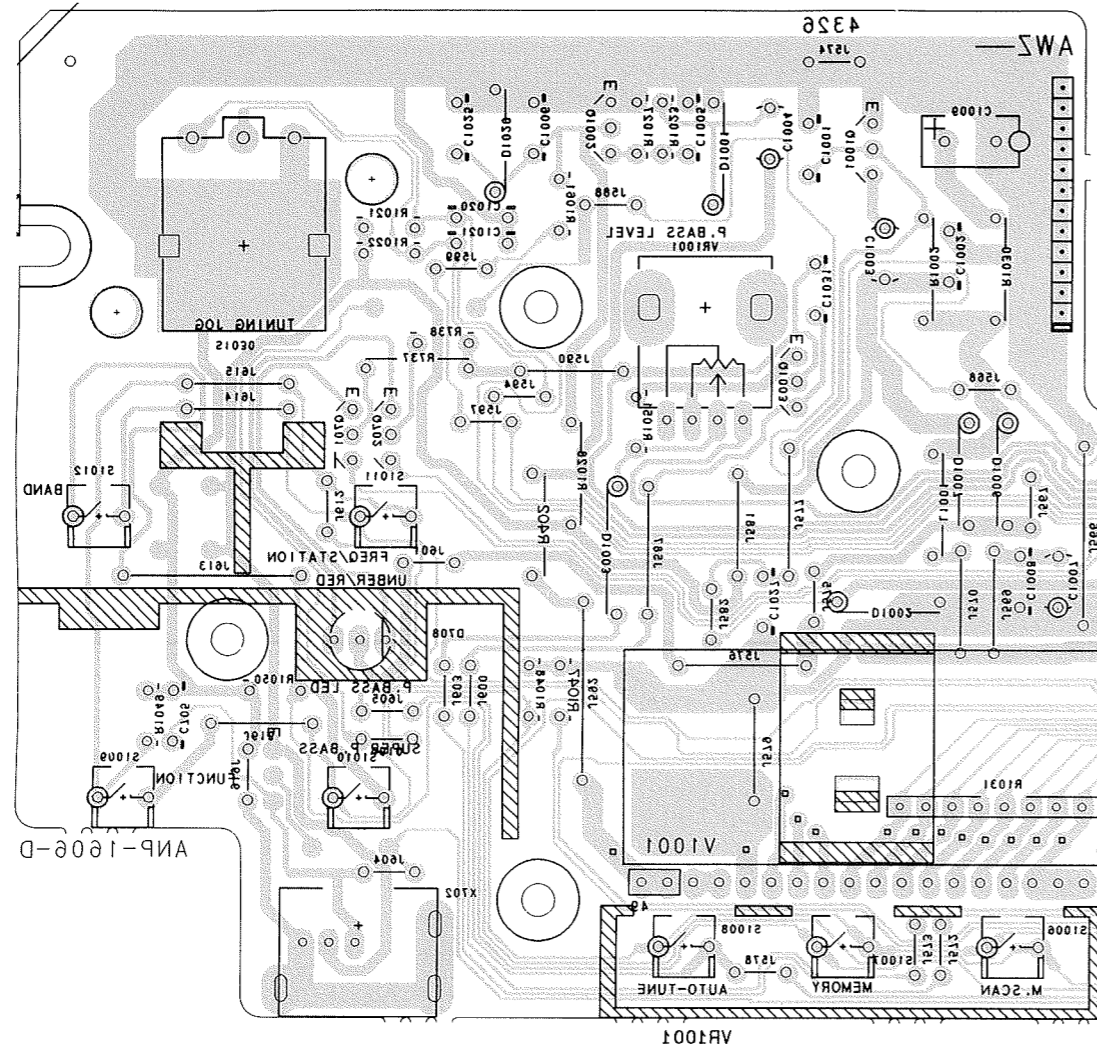
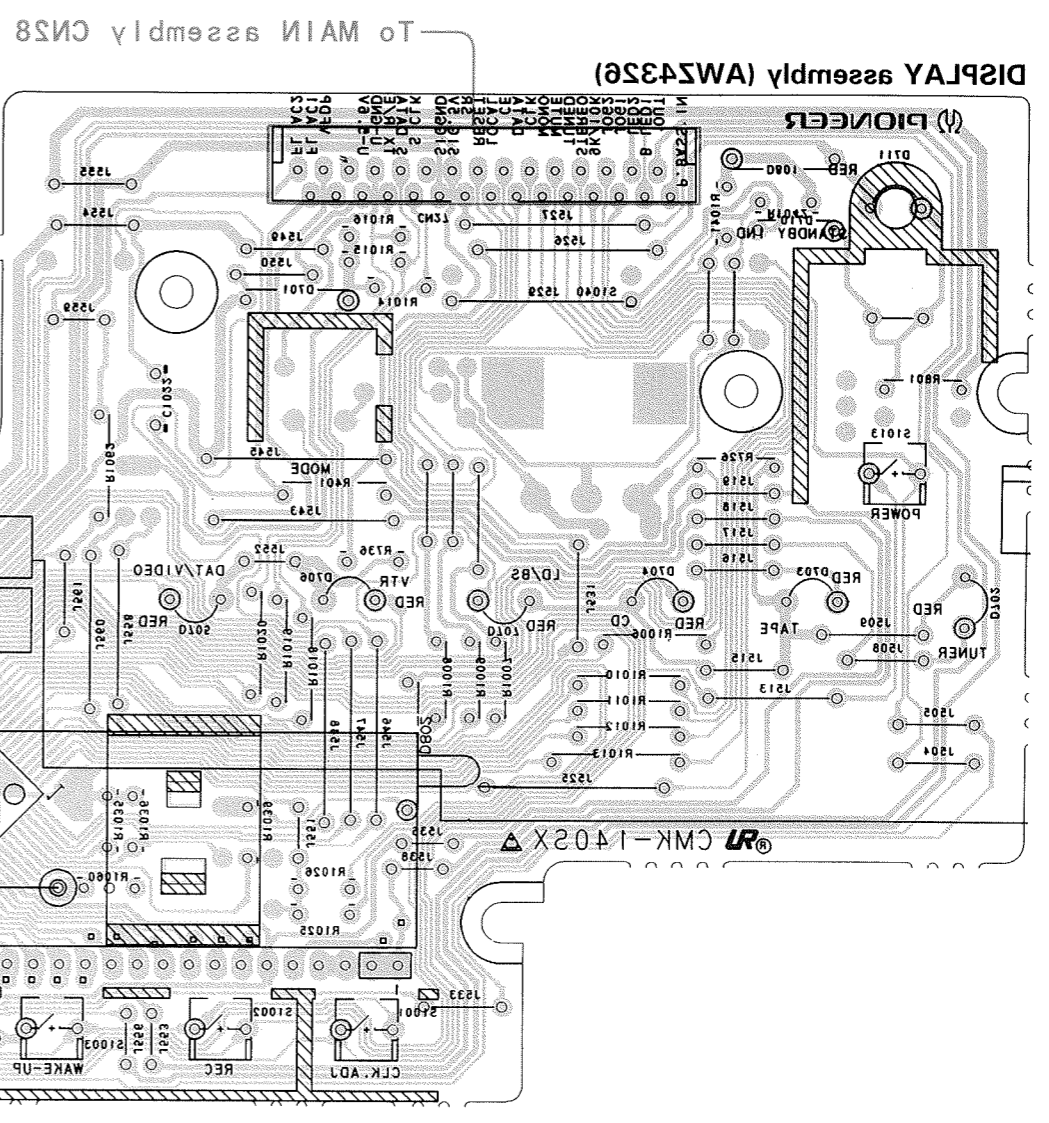
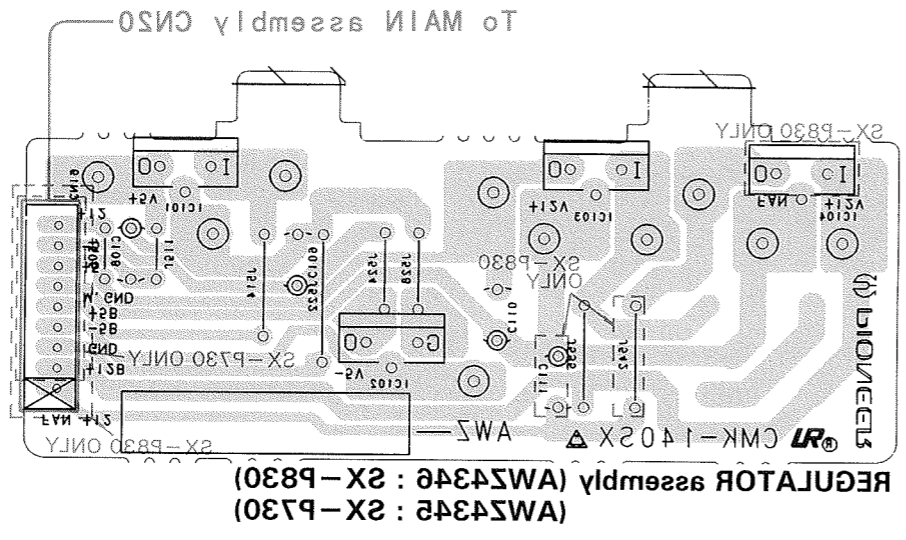
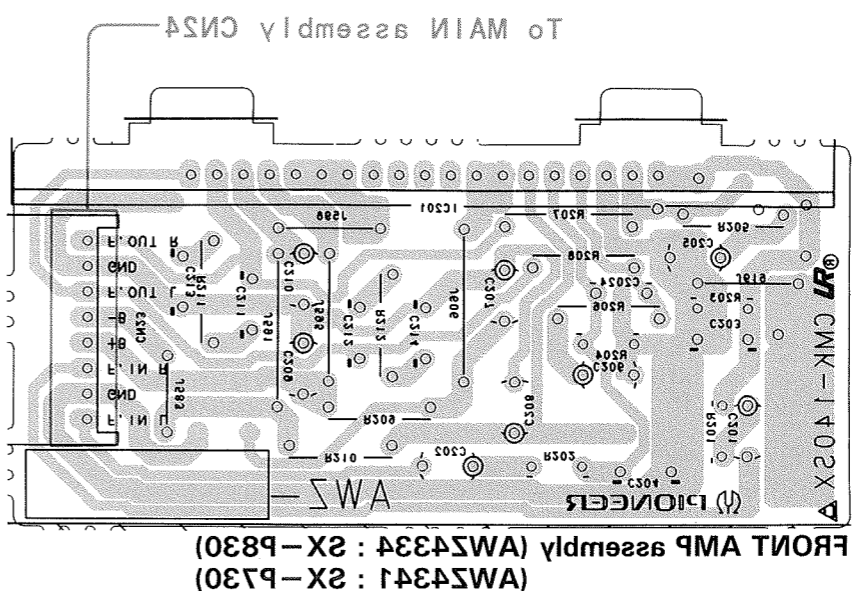
3. The capacitor terminal marked with ⊕ (double circles) shows negative terminal.
4. The diode terminal marked with ⊕ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



2 Serial F. E. Module assembly (AXQ1002)

2.3 DISPLAY ASSEMBLY, FRONT AMP ASSEMBLY AND REGULATOR ASSEMBLY

This PCB connection diagram is viewed from the foil side.



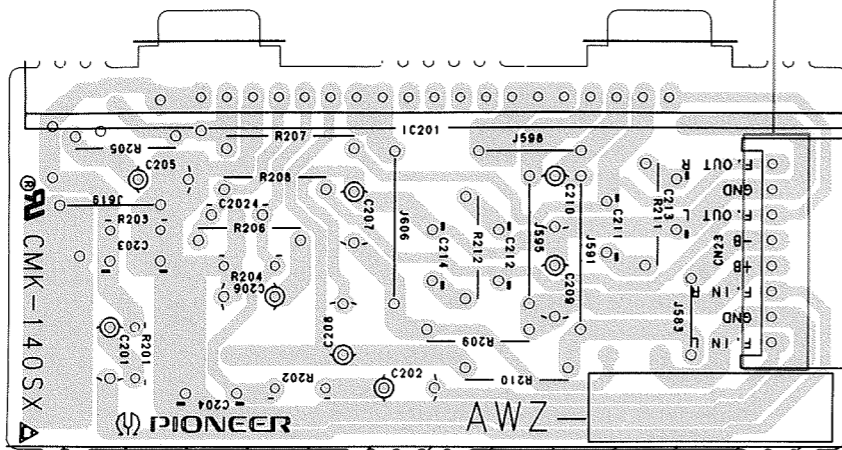
D205 D203 D204 D207 D805 D208 D201 D202 D1001 D1010-D1014 D1005 D1006 D1007 D1003 D1004 D1001 D1003 D1050 D1003 D208 D205 D201
 AR1001

5.3 DISPLAY ASSEMBLY, FRONT AMP ASSEMBLY AND REGULATOR ASSEMBLY

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

A

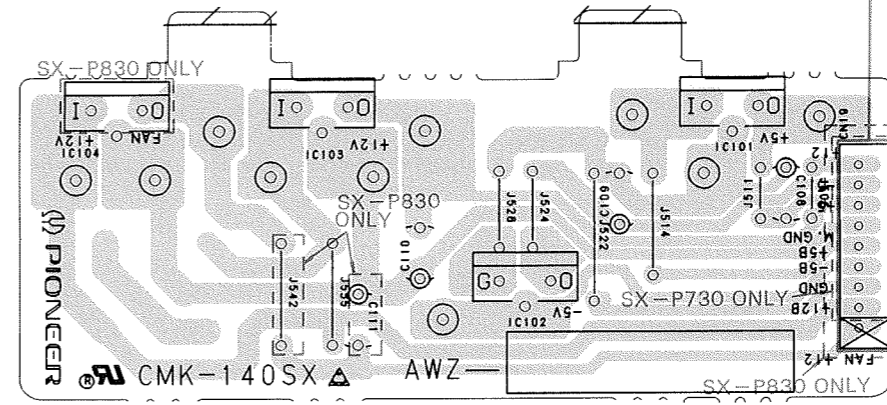
To MAIN assembly CN24



**FRONT AMP assembly (AWZ4334 : SX-P830)
(AWZ4341 : SX-P730)**

B

To MAIN assembly CN20

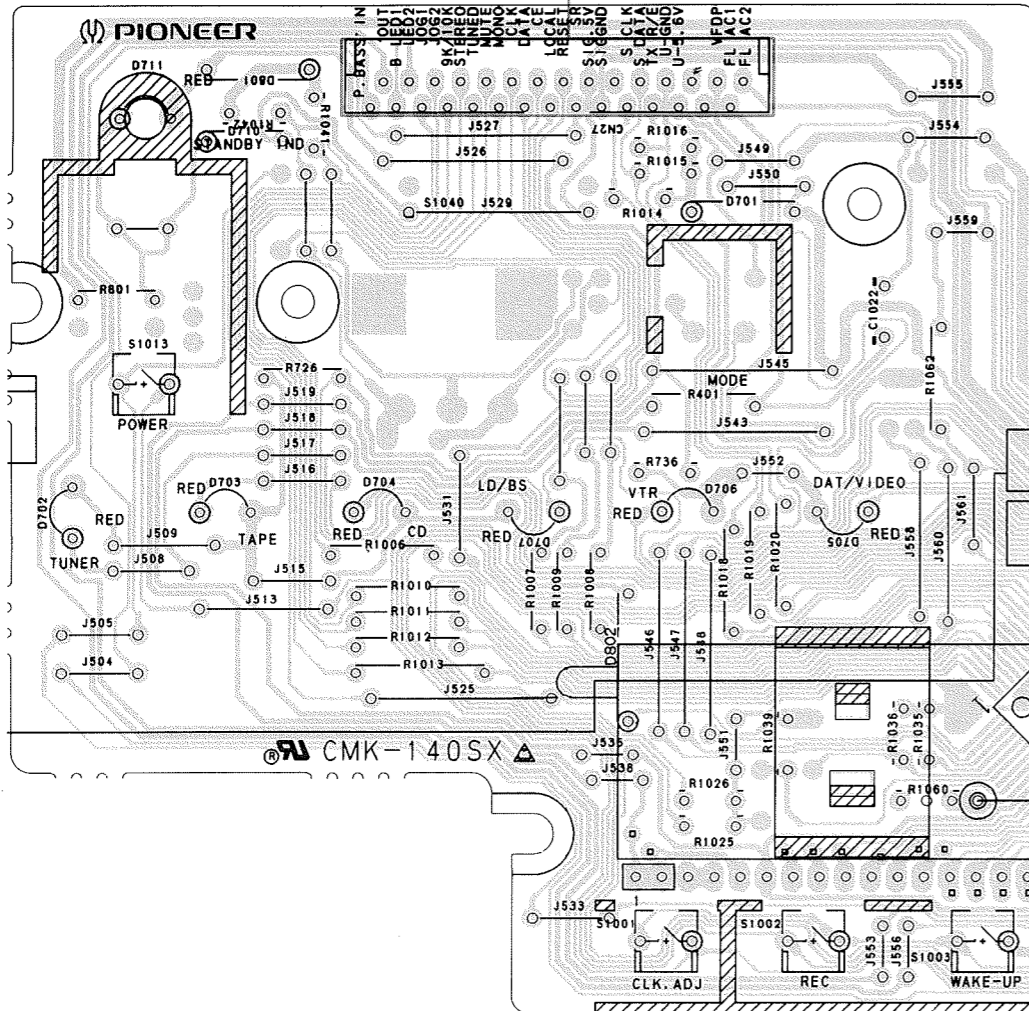


**REGULATOR assembly (AWZ4346 : SX-P830)
(AWZ4345 : SX-P730)**

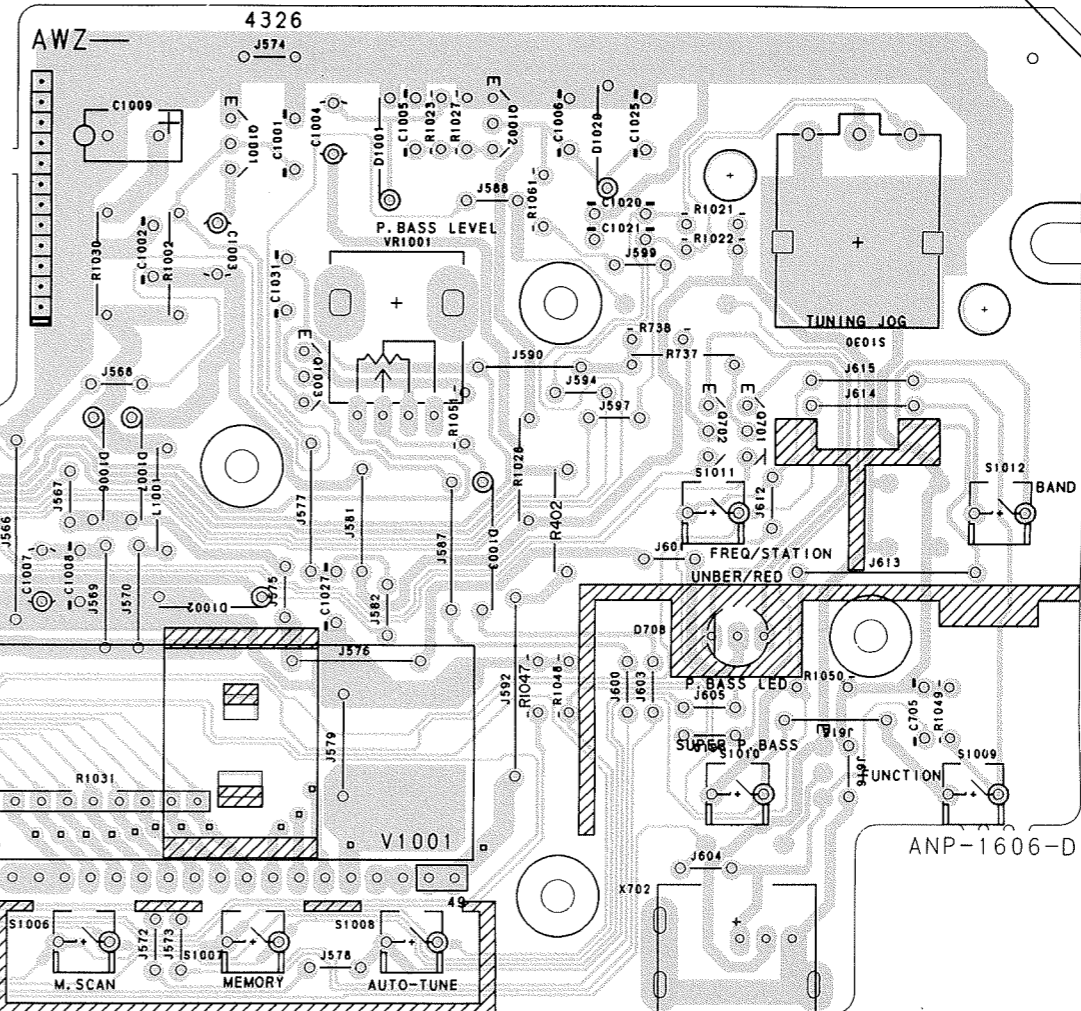
A

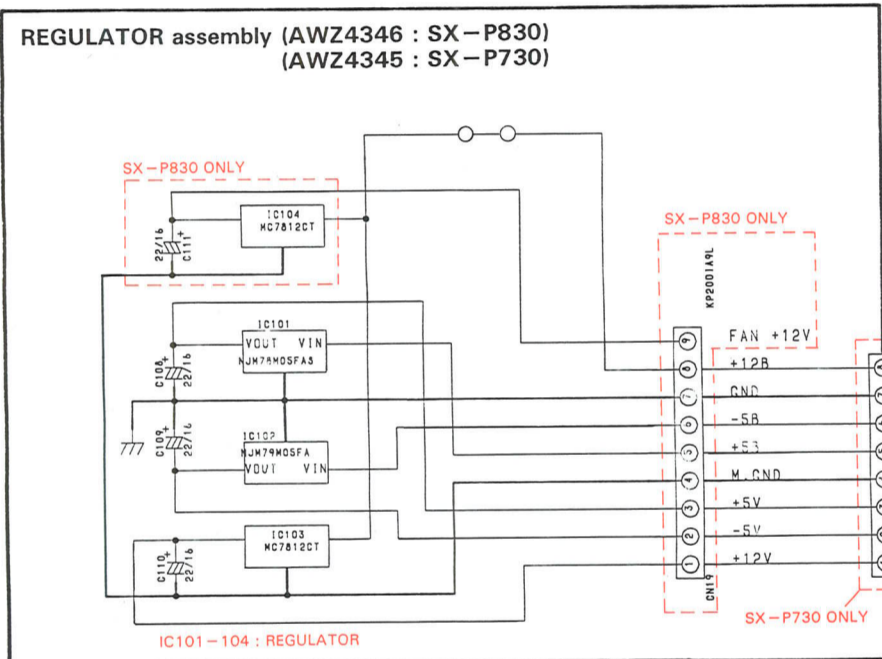
To MAIN assembly CN28

DISPLAY assembly (AWZ4326)

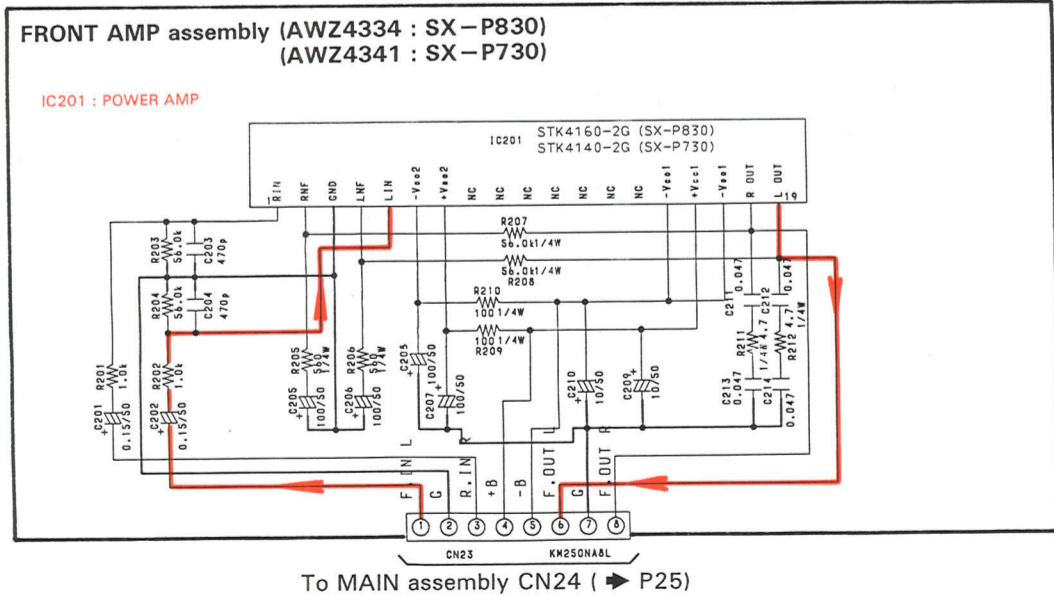


C





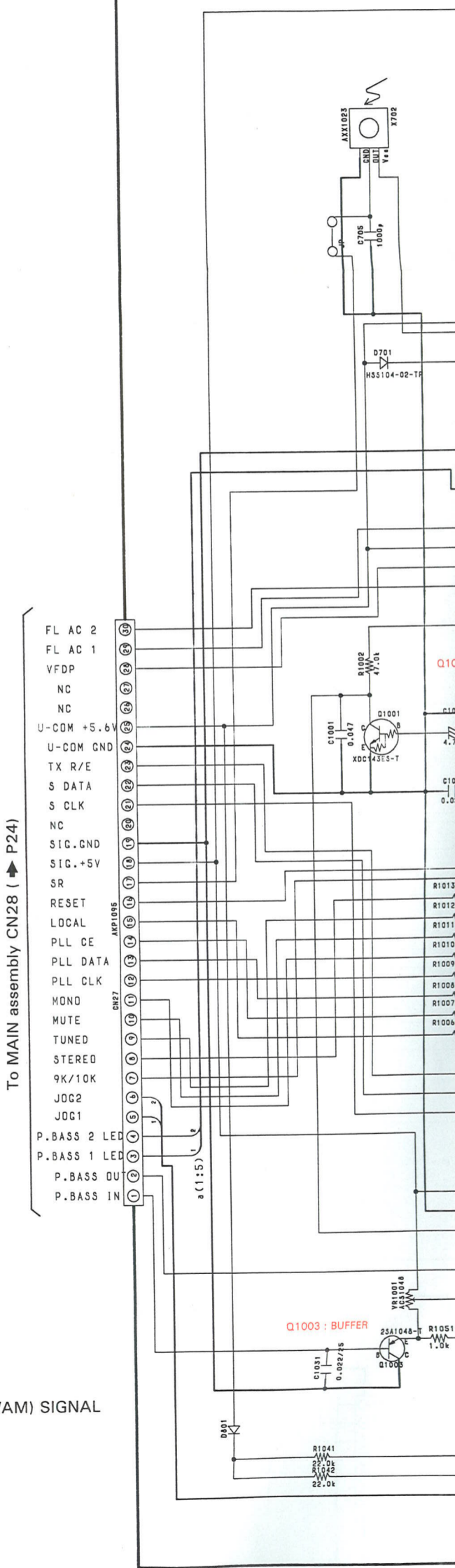
To MAIN assembly CN20 (→ P25)

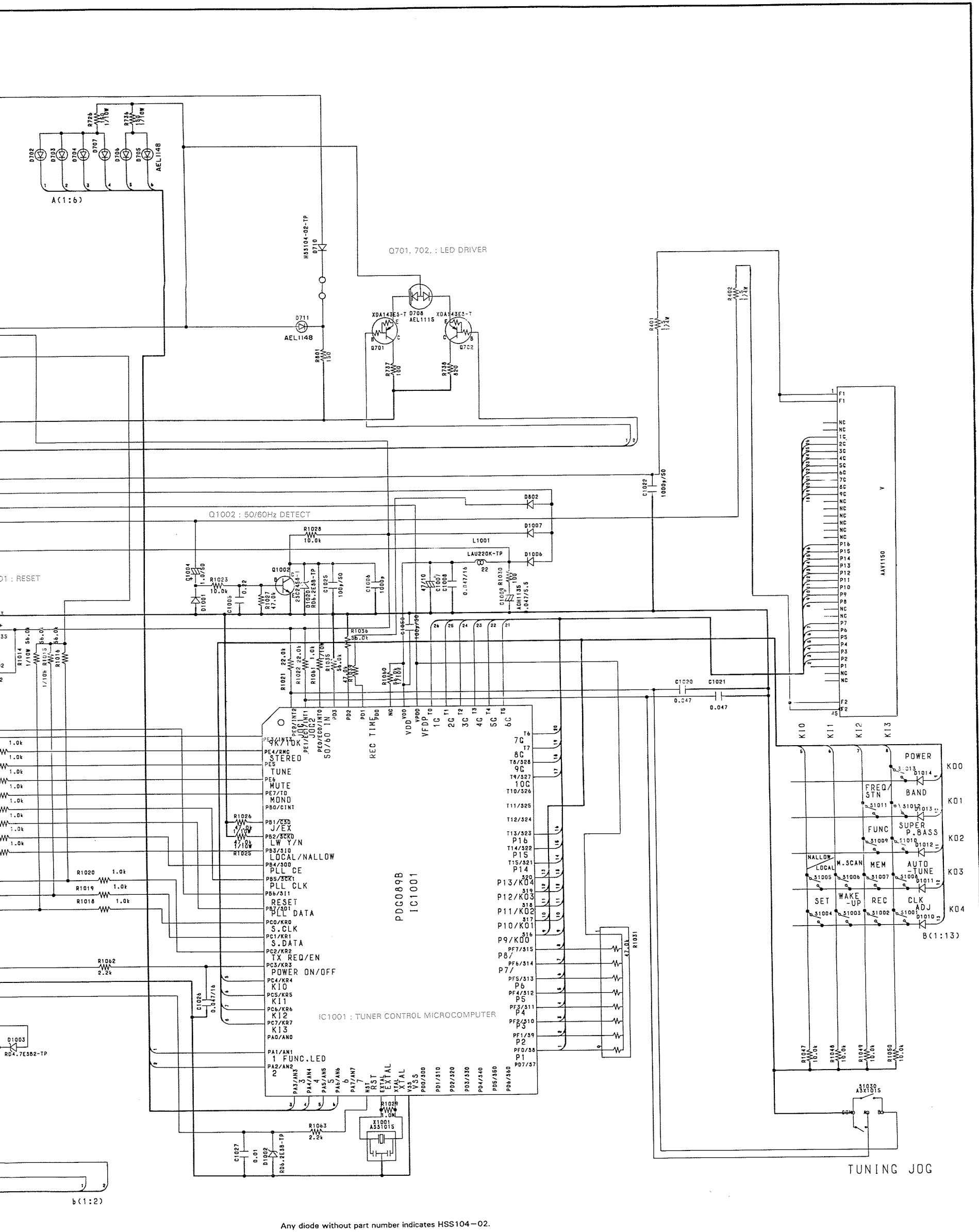


To MAIN assembly CN24 (→ P25)

— : MAIN (TUNER FM/AM) SIGNAL

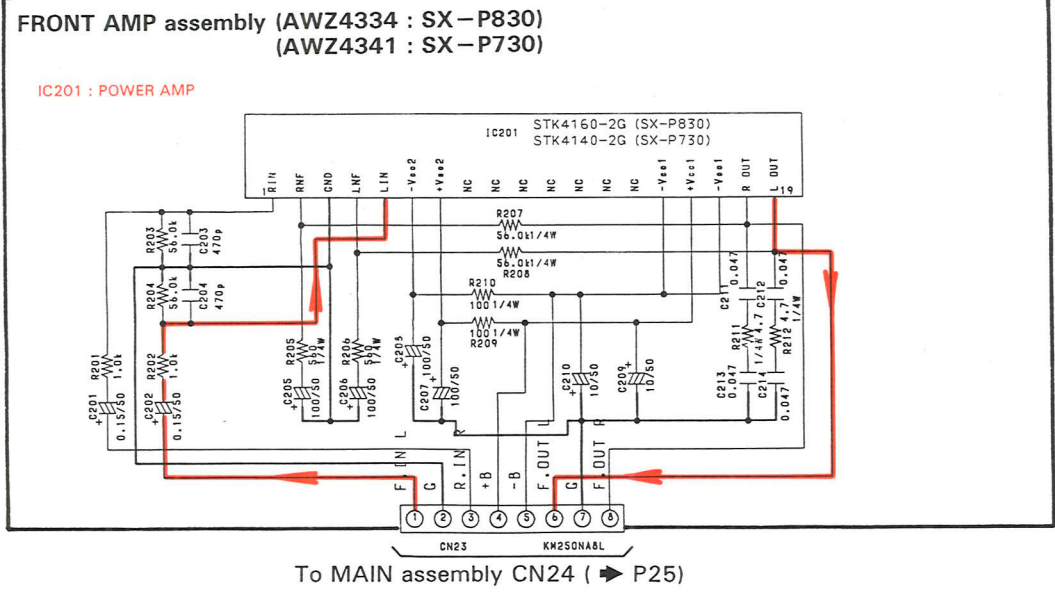
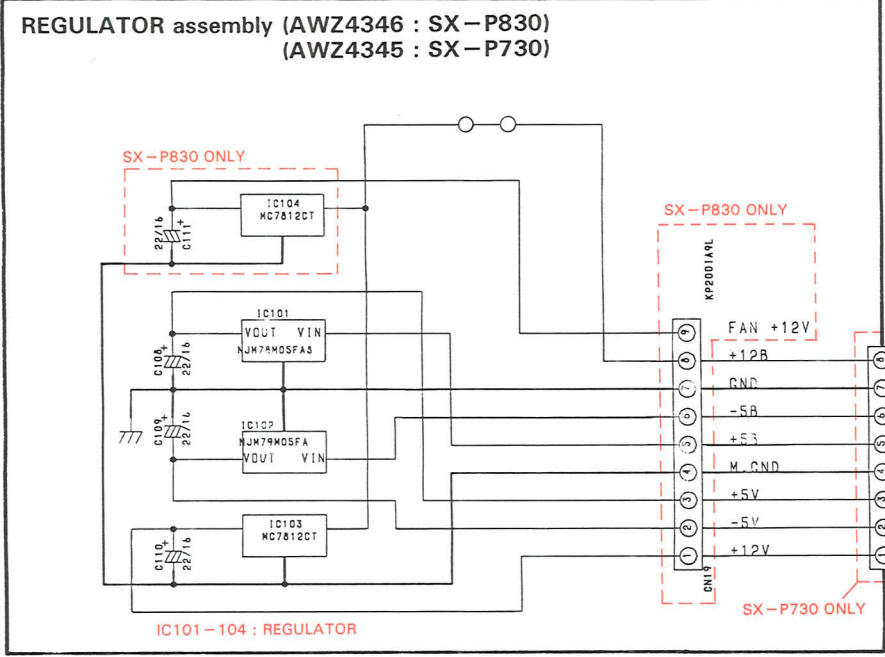
DISPLAY assembly (AWZ4326)





Any diode without part number indicates HSS104-02.

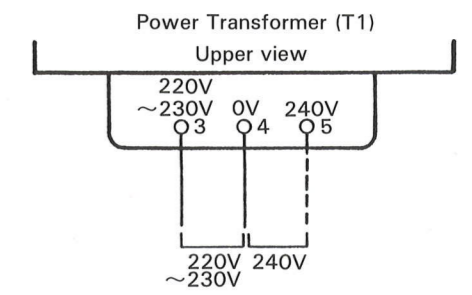
A
B
C
D
E
F



Line Voltage Selection

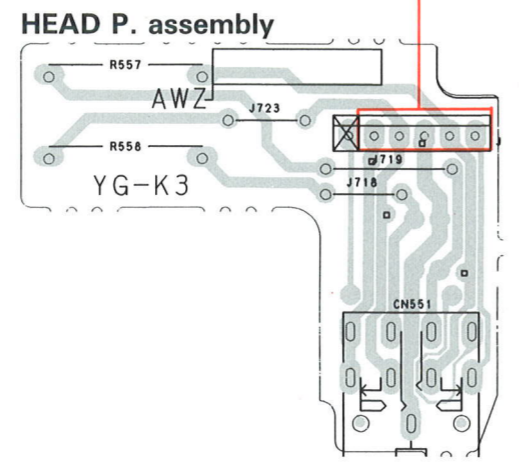
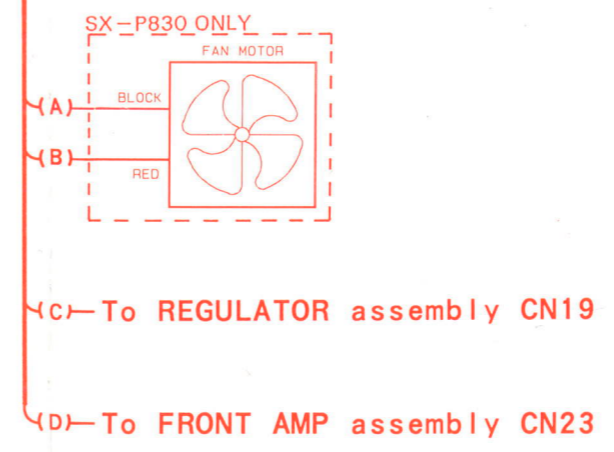
Line voltage can be changed with the following steps.

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



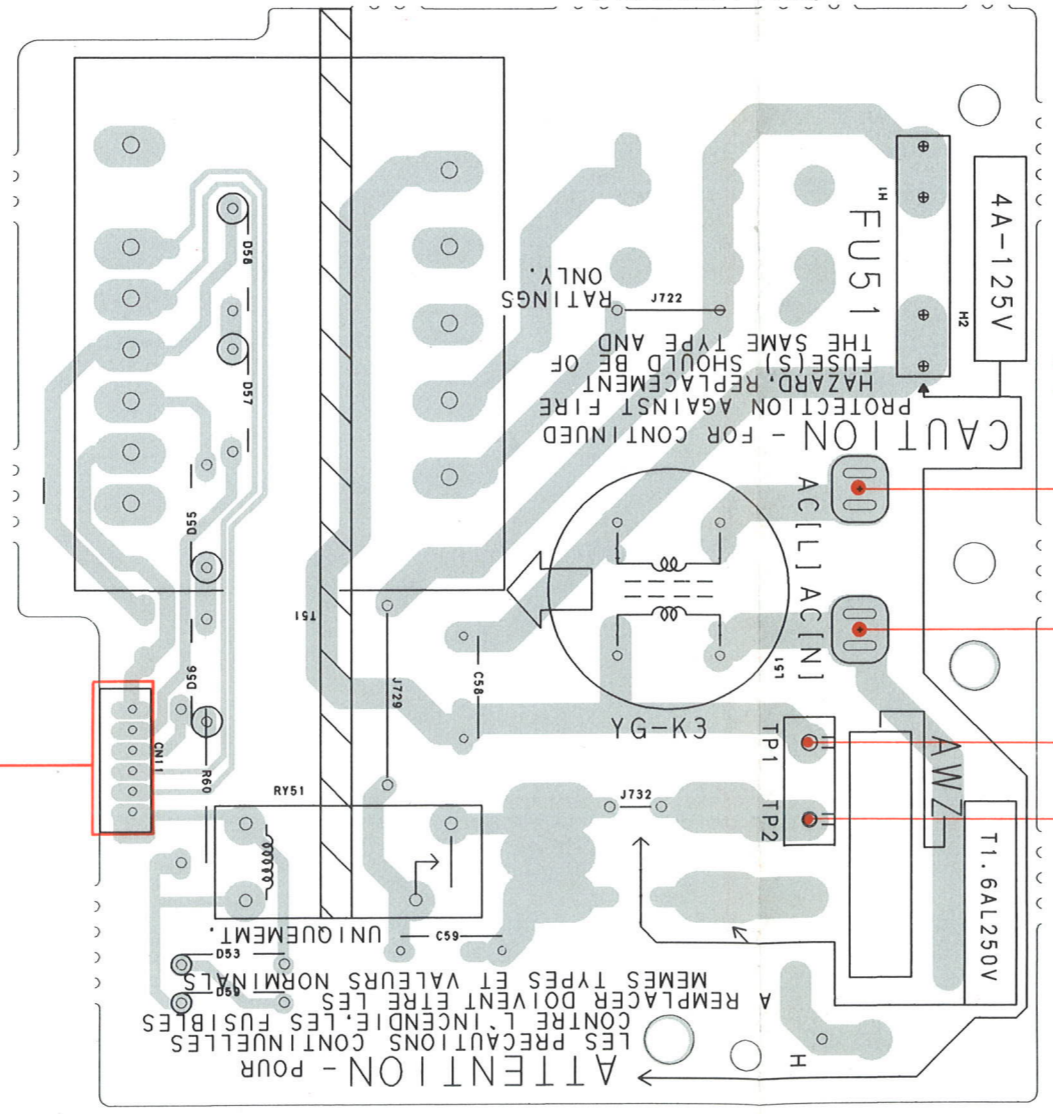
4. Stick the line voltage label on the rear panel.

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



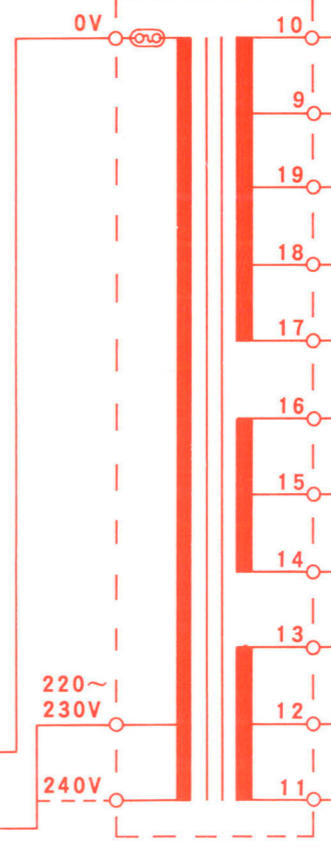
This PCB connection diagram is viewed from the parts mounted side.

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

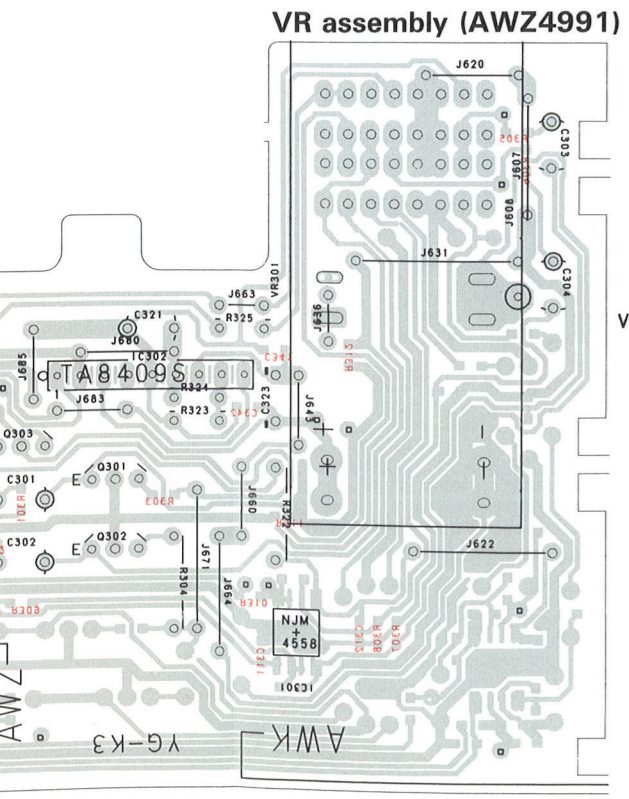
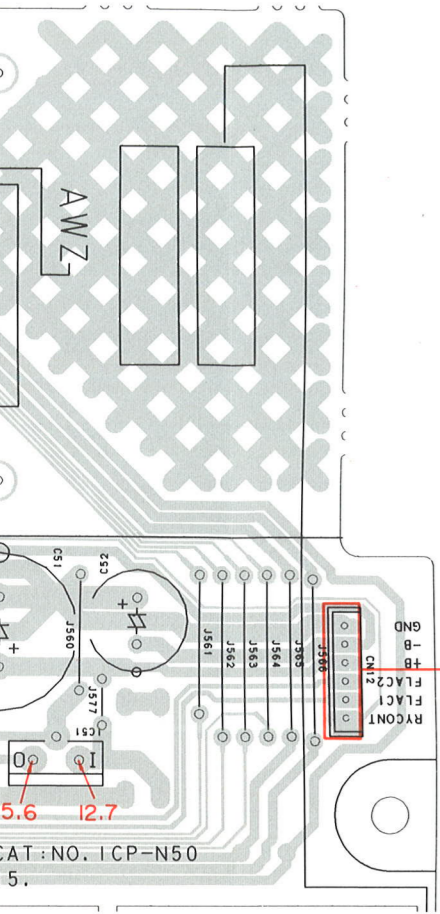
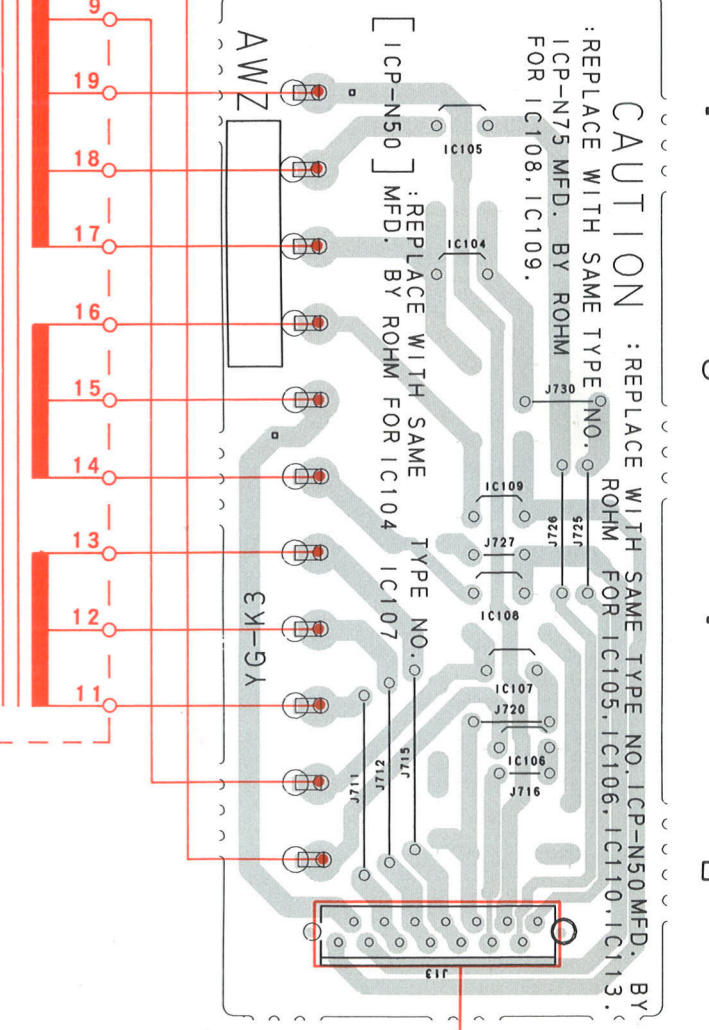


AC POWER CORD
AC 220~230V /240V
50/60Hz

T1
POWER TRANSFORMER



CONNECTOR assembly (AWZ4993)

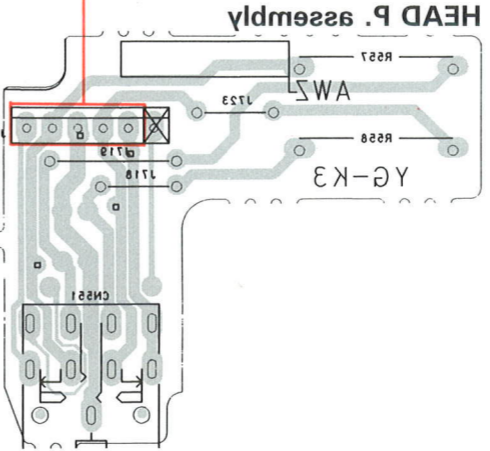
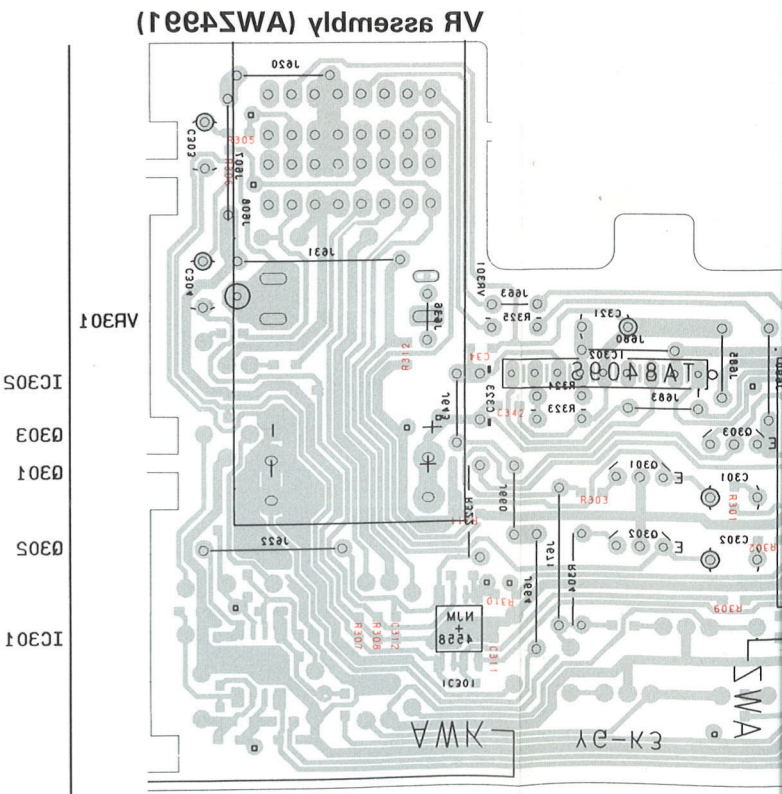
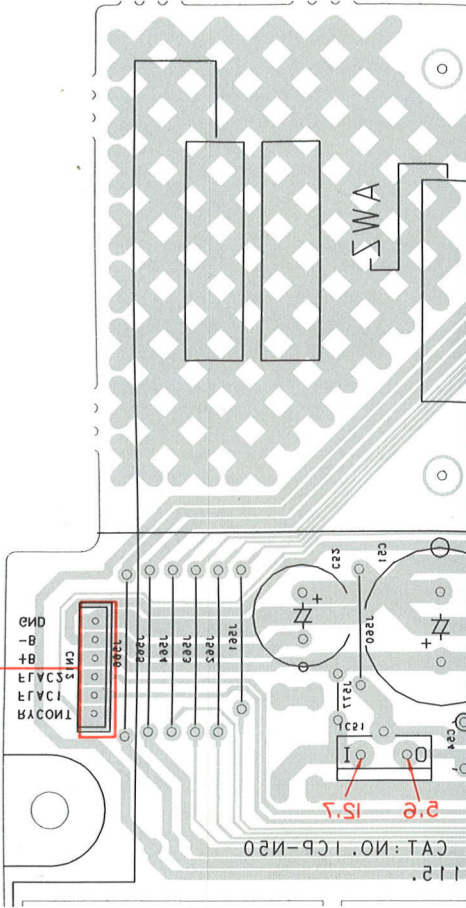


A

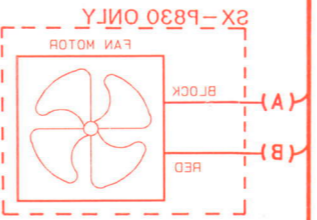
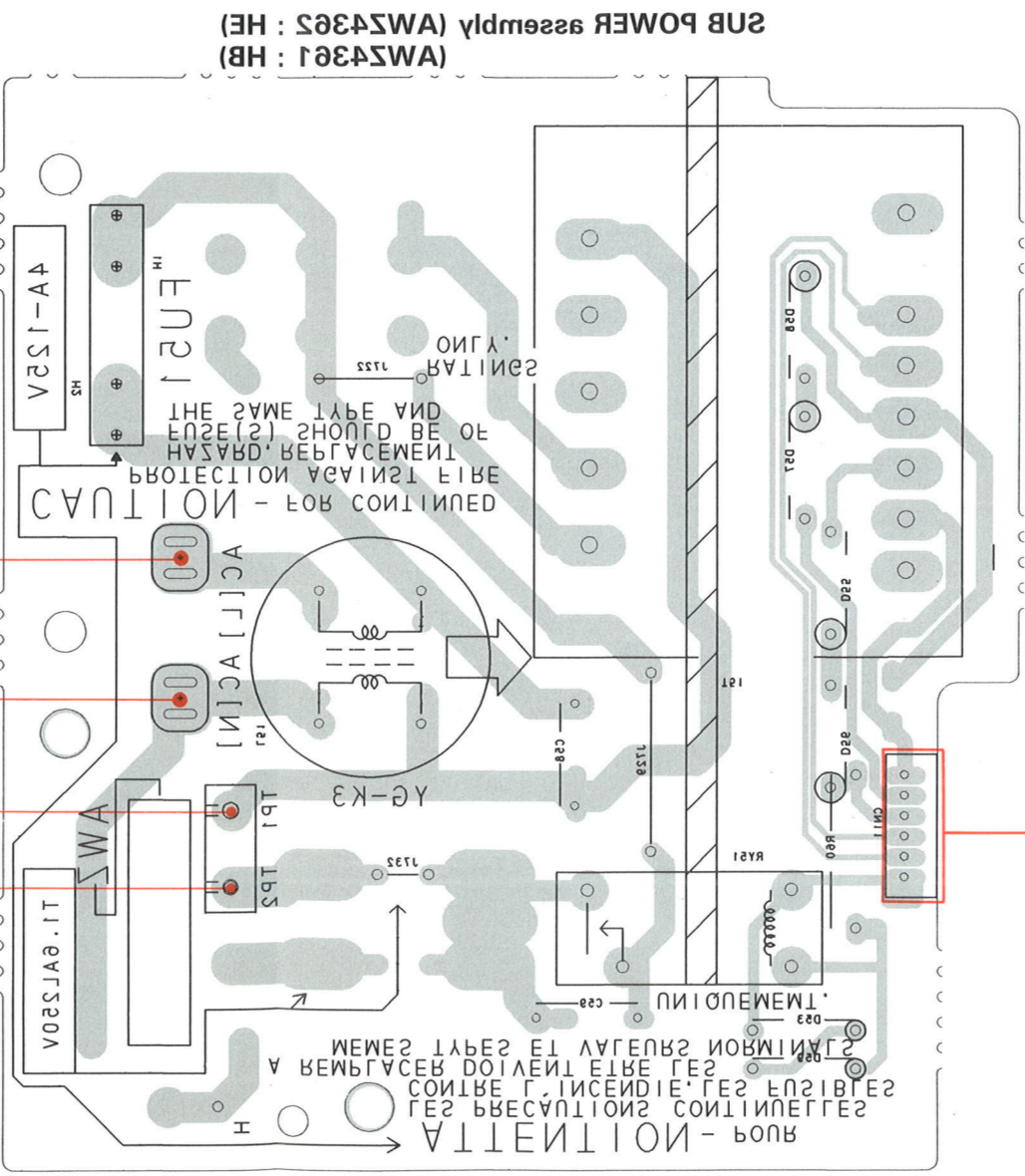
B

C

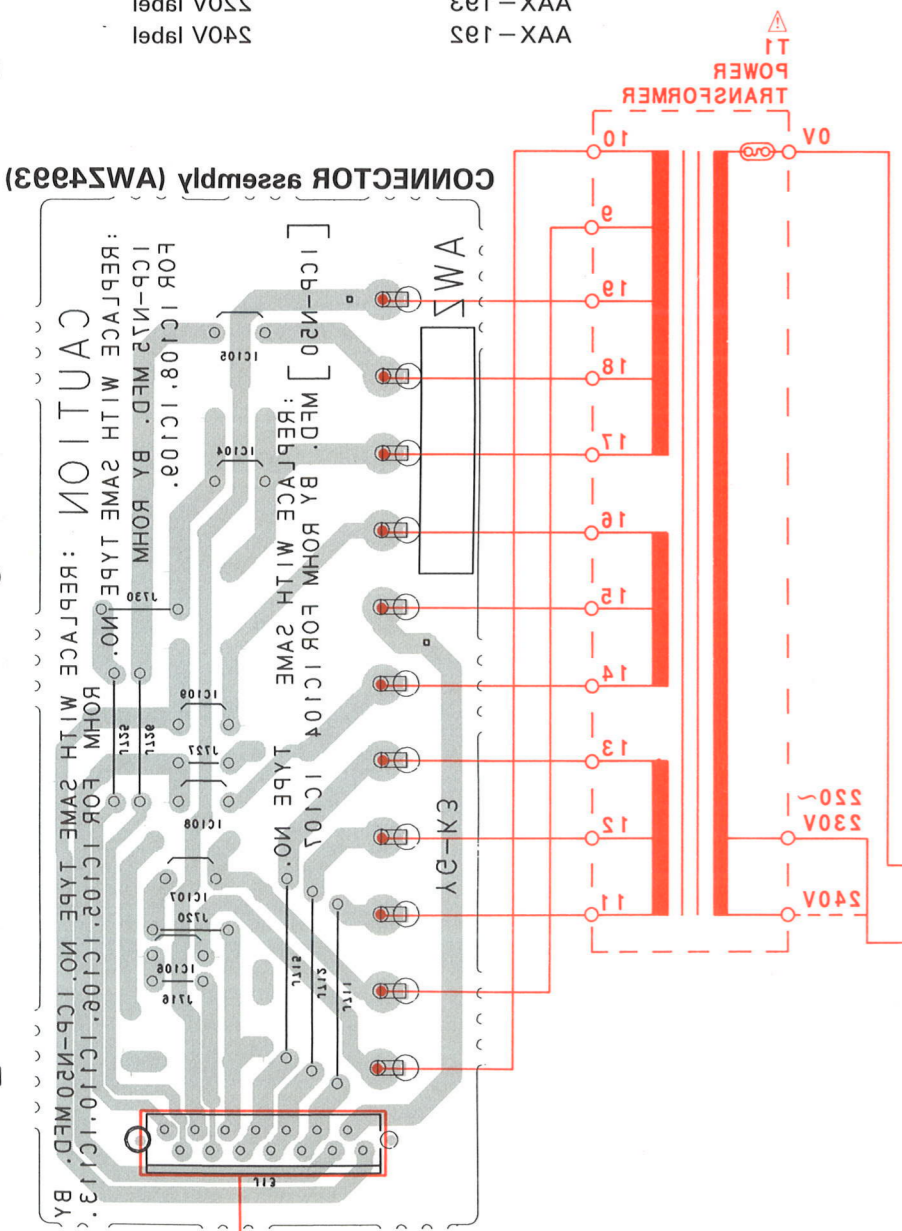
D



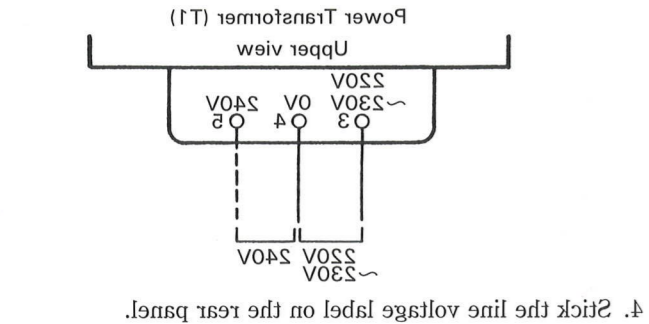
This PCB connection diagram is viewed from the foil side.



(D) - TO FRONT AMP assembly CN23
(C) - TO REGULATOR assembly CN19



Part No.	Description
AAx-192	240V label
AAx-193	250V label



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.

6. PCB PARTS LIST

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.
- 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 × 10¹ → 561 RD1/8PM \square \square \square J

47kΩ → 47 × 10³ → 473 RD1/4PS \square \square \square J

0.5Ω → 0R5 RN2H \square \square \square K

1Ω → 010 RS1P \square \square \square K

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

5.62kΩ → 562 × 10¹ → 5621 RN1/4PC \square \square \square F

6.1 FOR SX-P830/HE

Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
LIST OF ASSEMBLIES				CAPACITORS			
●		TUNER ASSEMBLY	AWE1261		C948 (470p/50V)	ACE1039	
●		DISPLAY ASSEMBLY	AWZ4326		C912, C914	CCDCH150J50	
●		FRONT AMP ASSEMBLY	AWZ4334		C968	CCDSL101J50	
●		REGULATOR ASSEMBLY	AWZ4346		C939	CCDSL271J50	
●		MAIN ASSEMBLY	AWZ4348		C927	CCDSL470J50	
●		SUB POWER ASSEMBLY	AWZ4362		C945	CEANP2R2M50	
NSP		HEAD P. ASSEMBLY	AWZ4375		C938	CEAS010M50	
●		VR ASSEMBLY	AWZ4991		C944, C954, C960	CEASOR1M50	
●		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				
	F904		ATF1042		RESISTORS		
	F906		ATF1088		VR903 (4.7k)	ACP1042	
	L904		LAU010K		VR901 (10k)	ACP1043	
	L901, L903, L905, L908		LAU2R2K		VR902 (22k)	ACP1044	
					Other Resistors	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

Mark	No.	Description	Parts No.
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		STK4160-20

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

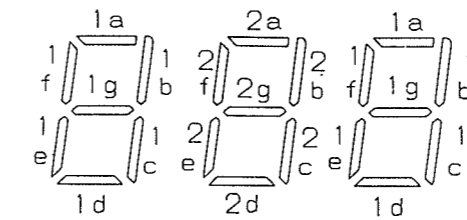
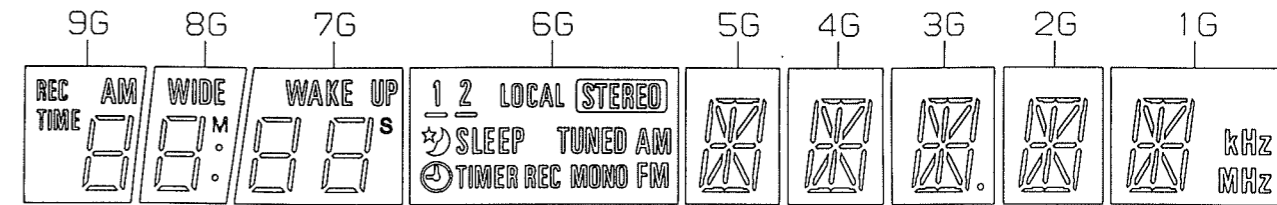
	Q102		2SA1048
	Q51-Q54, Q101, Q153-Q155, Q158,		2SC2458
	Q401, Q405, Q1002		
	Q161, Q1001		XDC143ES

	D701, D1001		1S1555
	D401		1SS226
	D101		D3SBA20 (A)
	D118, D120, D710, D1002		HSS104-02
	D51		RD10EB

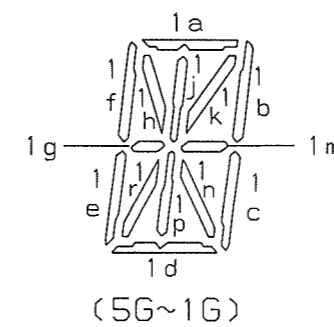
Mark	No.	Description	Parts No.	Mark	No.	Description	Parts No.
	D116, D117		RD11EB		R408, R409		RS1/10S113J
	D54		RD16ESB		R436		RS1/10S152J
	D52		RD16ESB1		R429		RS1/10S153J
	D121, D709 (SI-A48007)		RD6.2EB		R1002		RS1/10S182J
	D702		RD6.2ESB2		R453, R454		RS1/10S221J
	D102-D107, D122, D123		S5566		R419, R703-R706, R709, R767, R768, R781		RS1/10S222J
	TH1001		NTH2218F		R124		RS1/10S223J
RELAY					R427		RS1/10S224J
	RY151		ASR1035		R407		RS1/10S272J
					R434		RS1/10S273J
COILS					R401, R402, R430		RS1/10S333J
	L251, L252		ATH-133		R489		RS1/10S334J
	L701		LAU220K		R133		RS1/10S472J
CAPACITORS					R115, R428		RS1/10S473J
	C103, C104 (3300/50V)		ACH1066		R445, R446		RS1/10S561J
	C401, C402, C408		CEAS010M50		R406, R418, R439, R440		RS1/10S562J
	C122		CEAS100M50		R759, R760, R766, R782, R783, R791, R792, R796, R904-R906, R908, R909		RS1/10S563J
	C105, C106		CEAS102M35		R420, R421, R441		RS1/10S622J
	C121, C123		CEAS221M16		R442		RS1/10S622J
	C52		CEAS221M50		R426		RS1/10S682J
	C51		CEAS222M25		R443, R444		RS1/10S822J
	C113		CEAS222M35		R128, R129, R432		RS1/10S823J
	C405, C410		CEAS2R2M50		R112		RS2LMF221J
	C124		CEAS330M50		R113, R557, R558		RS2LMF331J
	C702		CEAS470M16		R101, R102		RS2LMFR22J
	C54, C57		CEHAQ470M16		R54		RS3LMF821J
	C55		CEHAQ470M50		Other Resistors		RD1/8PM□□□J
	C412		CEJA2R2M50				
	C411		CEJAR68M50				
	C111, C112		CKCYF103Z50	OTHERS			
	C704		CKCYF473Z50	X701 (4.00MHz)		ASS1025	
	C413		CKSQYB183K50	2P PIN JACK		AKB1146	
	C404, C409		CKSQYB333K50	4P SPEAKER TERMINAL		AKE-109	
	C403, C901, C902		CKSQYF104Z50	CN1 15P SOCKET		AKP1090	
	C701, C703, C706-C708		CKSQYF473Z50	CN2 15P SOCKET		AKP1092	
	C414		CKSQYF683Z50	CN28 30P SOCKET		AKP1094	
	C1027		CQMA104K250				
RESISTORS				SUB POWER ASSEMBLY			
	R134		RD1/2PM182J	SEMICONDUCTORS			
	R251, R252		RD1/4PMFL100J	D53, D59		RD5.6ESB	
	R1001		RN1/4PC3601F	D55-D58		S5566	
	R123, R135, R141, R715, R716, R772, R776, R779, R780, R910, R914, R917, R918, R920, R921, R923-R926, R949, R956, R999, R1003-R1006		RS1/10S000J	RELAY			
	R55-R59, R110, R114, R435, R449		RS1/10S102J	RY51		ASR1027	
	R117, R118, R122, R403, R404, R422-R425, R947, R948		RS1/10S103J	COIL & TRANSFORMER			
	R125, R405, R433, R798		RS1/10S104J	L51		ATF-151	
	R702		RS1/10S105J	T51		ATT1221	
	R126		RS1/10S112J	CAPACITORS			
				C58, C59 (0.01/400V)		ACG1003	

AAV1150 (DISPLAY ASSEMBLY : V1001)

- FL Tube
- Grid Assignment



(9G, 8G) (7G)



(5G~1G)

● 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	-	°	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	-	-	-	°	-	kHz
P16	-	-	WAKEUP	1 2	-	-	-	-	MHz

● Pin Connection

PIN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45					
CONNECTION	F	F	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
	1	1	P	P	C	C	G	G	G	G	G	G	G	G	G	G	C	C	C	C	C	C	C	C	C	C	6	5	4	3	2	1	0	9	8	C	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
	D701		1S1555		R126		RS1/10S112J
	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
	D116, D117		RD11EB		R419, R703-R706, R709, R767,		RS1/10S222J
	D52, D54		RD16ESB1		R768, R781		
	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
					R401, R402, R430		RS1/10S333J
RELAY					R489		RS1/10S334J
	RY151		ASR1035		R133		RS1/10S472J
COILS					R115, R428		RS1/10S473J
	L251, L252		ATH-133		R445, R446		RS1/10S561J
	L701		LAU220K		R406, R418, R439, R440		RS1/10S562J
CAPACITORS					R759, R760, R766, R782-R784,		RS1/10S563J
	C103, C104(3300/50V)		ACH1066		R791, R792, R796, R904-R906,		
	C401, C402, C408		CEAS010M50		R908, R909		
	C122		CEAS100M50		R420, R421, R441, R442		RS1/10S622J
	C105, C106		CEAS102M35		R426		RS1/10S682J
	C121, C123		CEAS221M16		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
	C702		CEAS470M16		R54		RS3LMF821J
	C54, C57		CEHAQ470M16		Other Resistors		RD1/8PM□□□□
	C55		CEHAQ470M50				
	C412		CEJA2R2M50		OTHERS		
	C411		CEJAR68M50		X701 (4.00MHz)		ASS1025
	C111, C112		CKCYF103Z50		4P SPEAKER TERMINAL		AKE-109
	C704		CKCYF473Z50		CN1 15P SOCKET		AKP1090
	C413		CKSQYB183K50		CN2 15P SOCKET		AKP1092
	C404, C409		CKSQYB333K50		CN28 30P SOCKET		AKP1094
	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				

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.

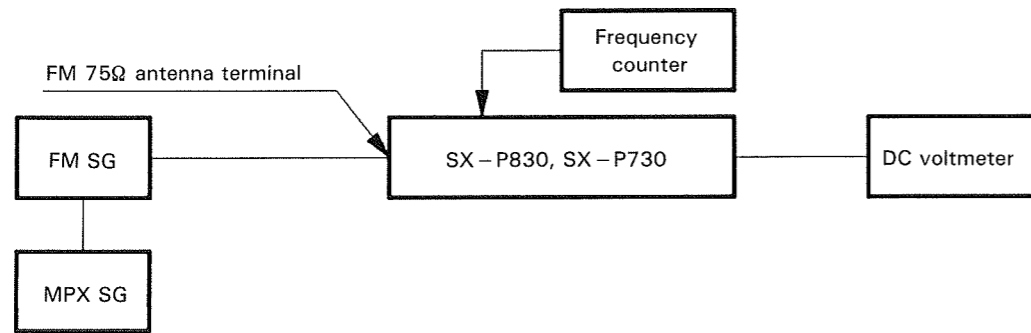


Fig. 7-1 FM Adjustment Connection Diagram

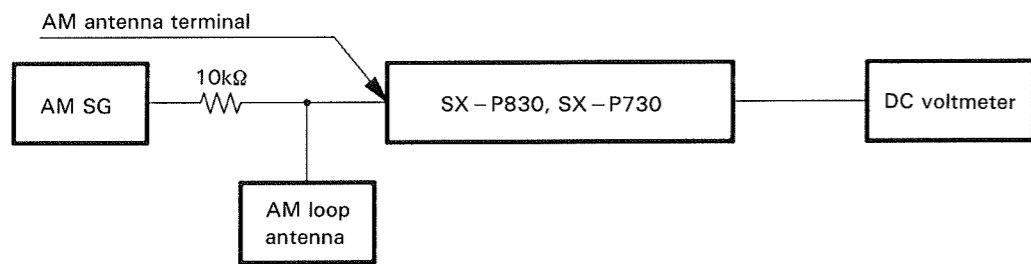


Fig. 7-2 AM (MW) Adjustment Connection Diagram

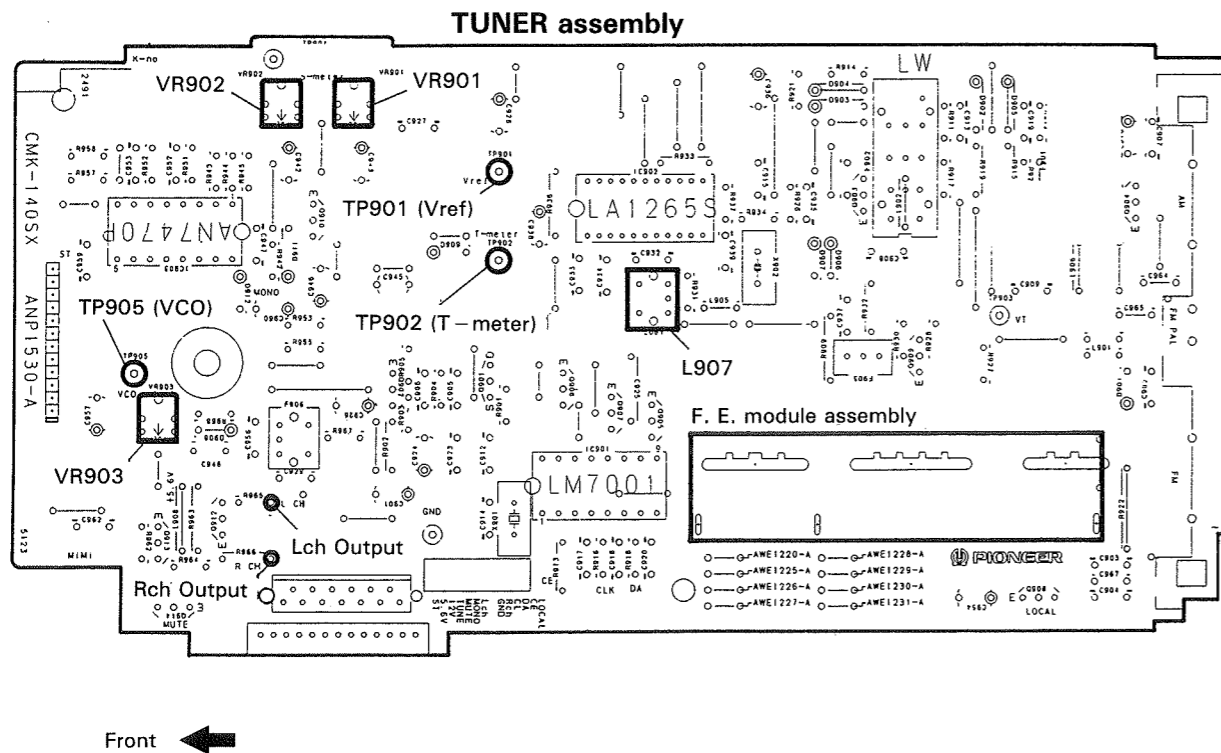


Fig. 7-3 Adjustment Points

6.2 FOR SX-P730/HE

Mark	No.	Description	Parts No.
RESISTORS			
	R60		RS2LMF390J
	OTHERS (SEE A50001)		
	▲ H0001.0002		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□□□J

CONNECTOR ASSEMBLY

SEMICONDUCTORS

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

LIST OF ASSEMBLIES

Mark	No.	Description	Parts No.
●		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

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 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 “ \odot ” 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	
\odot	SUB POWER assembly	AWZ4362	AWZ4361	*1
Δ	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	
\odot	SUB POWER assembly	AWZ4362	AWZ4361	*1
Δ	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.