

Service Manual

ORDER NO.
RRV4598

AV Receiver

VSX-530-K VSX-430-K

THIS MANUAL IS APPLICABLE TO THE FOLLOWING MODEL(S) AND TYPE(S).

Model	Type	Power Requirement	Remarks
VSX-530-K	CUXEVSM	AC 120 V	
VSX-430-K	SYXEVS	AC 220 V to 230 V	

This service manual should be used together with the following manual(s).

Model No.	Order No.	Remarks
VSX-523-K	RRV4418	VSX-523-K/CUXESM

For SPECIFICATIONS and PANEL FACILITIES, refer to the operating instructions.

1. EXPLODED VIEWS AND PARTS LIST

NOTES: ● Parts marked by “NSP” are generally unavailable because they are not in our Master Spare Parts List.

● 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.

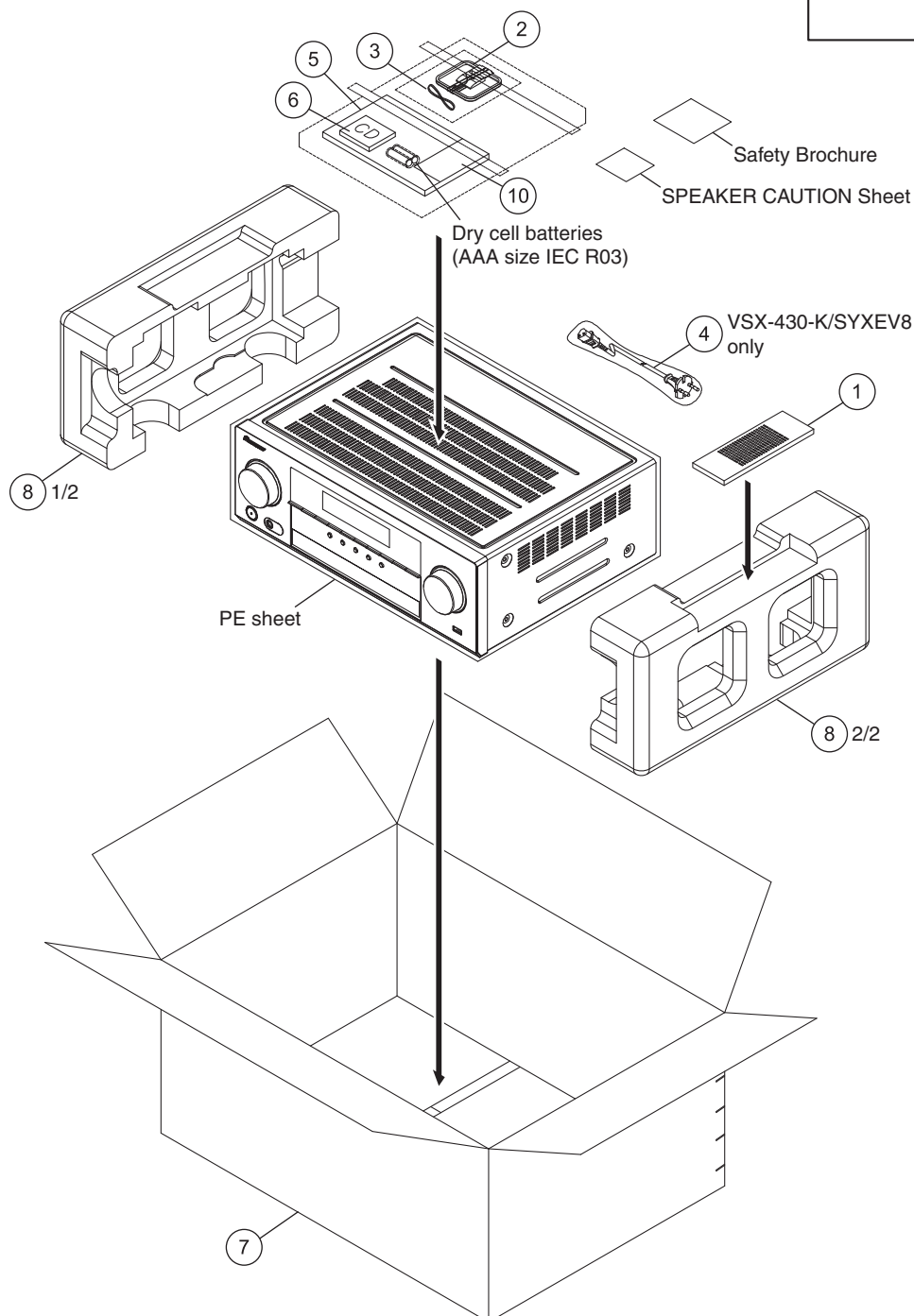
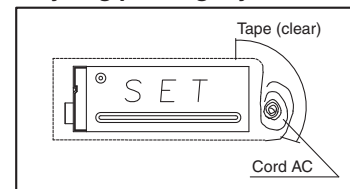
● Screws adjacent to ▼ mark on product are used for disassembly.

● For the applying amount of lubricants or glue, follow the instructions in this manual.

(In the case of no amount instructions, apply as you think it appropriate.)

1.1 PACKING SECTION

Poly bag packing style



VSX-530-K

(1) PACKING SECTION PARTS LIST

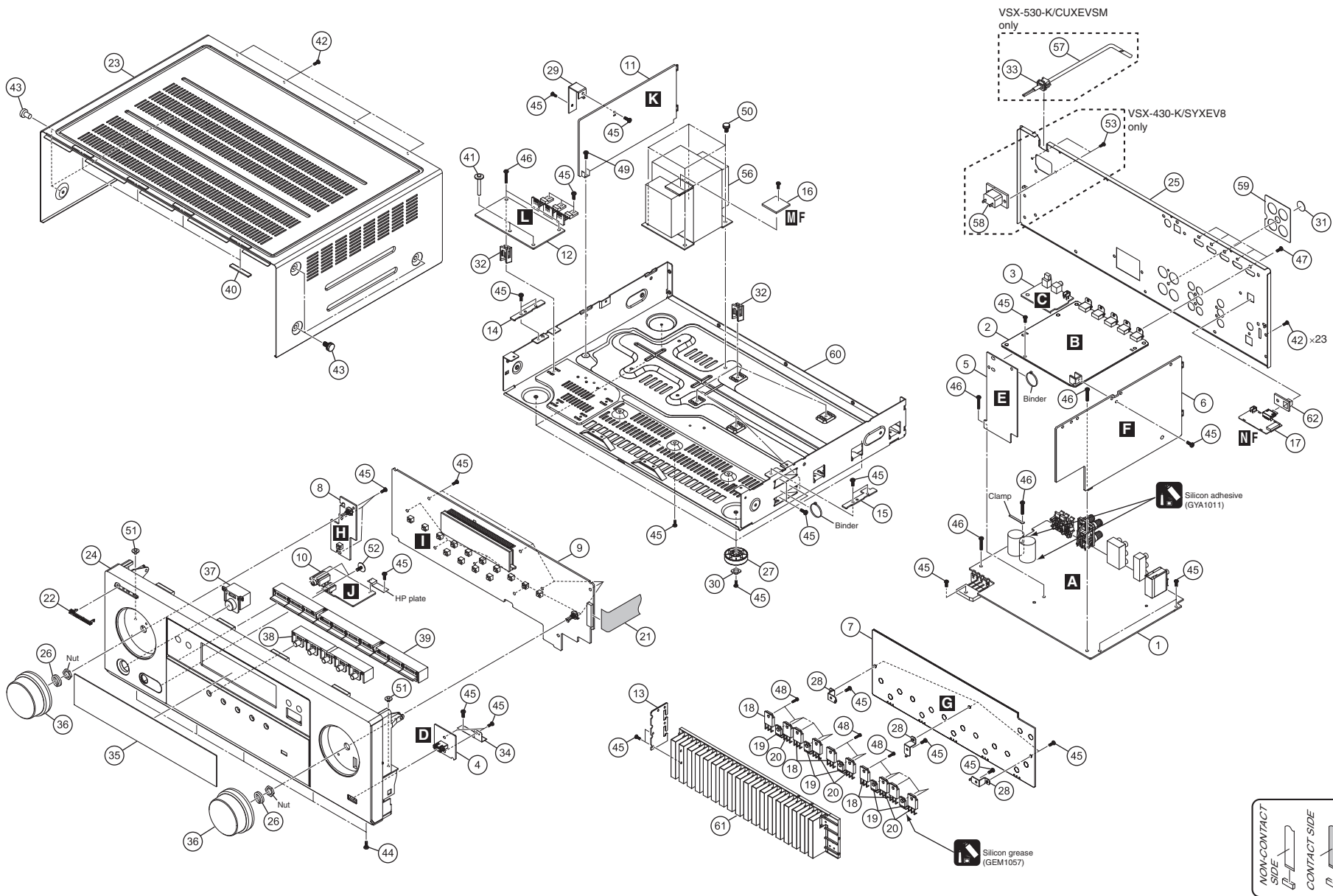
Mark	No.	Description	Part No.
	1	Remote control	AXD7741
	2	AM Loop Antenna	E601019000010S
	3	FM Wire Antenna	E605010140010S
⚠	4	Power Cord	See Contrast table (2)
	5	Quick Start Guide	See Contrast table (2)
	6	Operating Instructions (CD-ROM)	See Contrast table (2)
	7	Box, Gift	See Contrast table (2)
	8	Cushion Snow 423	6230213384100S
	9	•••••	
NSP	10	Warranty Card	ARY7172

(2) CONTRAST TABLE

VSX-530-K/CUXEVSM and VSX-430-K/SYXEV8 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-530-K /CUXEVSM	VSX-430-K /SYXEV8
⚠	4	Power Cord	Not used	L068250160070S
	5	Quick Start Guide	5707000010050S	5707000010060S
	6	Operating Instructions (CD-ROM)	6517000002180S	6517000002190S
	7	Box, Gift	60072125800F0S	60072125800G0S

1.2 EXTERIOR SECTION



VSX-530-K

(1) EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.	
	1 MAIN Assy	See Contrast table (2)	32	PCB Support (ABS)	4070001601020S	
	2 D-MAIN Assy	7028077971010	33	Stopper	See Contrast table (2)	A
	3 OPTCO Assy	7028077923010	34	Plate	4470212736000S	
	4 FUSB Assy	7028077963010	35	Window	50772131130T0S	
	5 CONCT Assy	7028077965010				
			36	Knob	5080212431000S	
	6 CPU Assy	See Contrast table (2)	37	Standby Button	5090213741100S	
	7 AMP5 Assy	70280745410R0	38	5 Key Button	5090214561200S	
	8 INSEL Assy	7028077964010	39	10 Key Button	5090214571200S	
	9 FRONT Assy	See Contrast table (2)	40	Sheet	1210210235000SV	
	10 HP Assy	7028077962010				
			41	Screw	1500001206020SV	
⚠	11 SMPS Assy	See Contrast table (2)	42	Screw	BBT30P100FTB	B
	12 REG Assy	See Contrast table (2)	43	Screw	1500040083B10SV	
	13 WG Assy	70280745420R0	44	Screw	BBZ30P080FTB	
	14 G-L Assy	7028077925010	45	Screw	BBZ30P080FTC	
	15 G-R Assy	7028077926010				
			46	Screw	BBZ30P180FTC	
	16 NTC Assy	7028077924010	47	Screw	BSZ30P040FTB	
	17 BT Assy	7028077941010	48	Screw	B018230141H11SV	
	18 Semi, TR/GE PNP 2SB	J5011560Y0000S	49	Screw	B020230063B10-IL	
	19 Semi, TR/GE NPN 2SC	J502396400010S	50	Screw	B028940101B11-IL	
	20 Semi, TR/GE NPN 2SD	J5032390Y0000S				
			51	Screw	1500001206010SV	C
	21 Cable, Flat Card 1.0 mm	N711250822480S	52	Screw	1500001456010SV	
	22 Pioneer Badge B (PLS)	XAM3006	53	Screw	See Contrast table (2)	
	23 Cabinet VSX-523	3008212076000V	54	•••••		
	24 Panel	See Contrast table (2)	55	•••••		
	25 Back Chassis 530CU	3207215246000S				
			⚠	56 Power Trans	See Contrast table (2)	
	26 Spring	3720210556000S	⚠	57 Power Cord	See Contrast table (2)	
	27 Foot (PLS)	4000210391010S	⚠	58 AC Inlet	See Contrast table (2)	
	28 HS Bracket	4010056906010S		59 Sheet	1210210772100SV	
	29 SMPS Bracket	401021488600DS		60 Chassis	See Contrast table (2)	D
	30 Cushion	4050211605000SV				
			61	Heatsink	2120212168010S	
	31 SP Screw Cushion	4050211745100SV	62	BT Cover	4310216061100S	

(2) CONTRAST TABLE

VSX-530-K/CUXEVSM and VSX-430-K/SYXEV8 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-530-K /CUXEVSM	VSX-430-K /SYXEV8
⚠	1	MAIN Assy	7028077921010	7028077921020
	6	CPU Assy	7028077931010	7028077931020
	9	FRONT Assy	7028077961010	7028077961020
	11	SMPS Assy	70280733610W0	70280733610Y0
	12	REG Assy	7028077922010	7028077922020
⚠	24	Panel	3067215861010S	3067215861140S
	33	Stopper	4380040162010S	Not used
	53	Screw	Not used	CBZ30P080FTB
	56	Power Trans	8200960611680S	8200960611690S
⚠	57	Power Cord	L068125101710S	Not used
⚠	58	AC Inlet	Not used	G430040807010S
	60	Chassis	3200214556211S	3207215246100S

2. CONTRAST OF MISCELLANEOUS PARTS

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.

- 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 47 k ohm (tolerance is shown by J = 5%, and K = 10%).

560 Ω $\rightarrow$ 56×10^1 $\rightarrow$ 561 RD1/4PU $\begin{matrix} 5 & 6 & 1 \end{matrix}$ J

47 k Ω $\rightarrow$ 47×10^3 $\rightarrow$ 473 RD1/4PU $\begin{matrix} 4 & 7 & 3 \end{matrix}$ J

0.5 Ω $\rightarrow$ R50 RN2H $\begin{matrix} R & 5 & 0 \end{matrix}$ K

1 Ω $\rightarrow$ 1R0 RS1P $\begin{matrix} 1 & R & 0 \end{matrix}$ K

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

5.62 k Ω $\rightarrow$ 562×10^1 $\rightarrow$ 5621 RN1/4PC $\begin{matrix} 5 & 6 & 2 & 1 \end{matrix}$ F

CONTRAST TABLE

VSX-523-K/CUXESM, VSX-530-K/CUXEVSM and VSX-430-K/SYXEV8 are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-523-K /CUXESM	VSX-530-K /CUXEVSM	VSX-430-K /SYXEV8	Remarks
NSP	PCB ASSEMBLIES					
	No.1	1..PCB TTL ASSY MAIN	7025HK1211010-IL	7025HK1408010	7025HK1408020	
	No.12	2..MAIN ASSY	7028073311010-IL	7028077921010	7028077921020	
	No.3	2..REG ASSY	7028073312010-IL	7028077922010	7028077922020	
	No.16	2..OPTCO ASSY	7028073313010-IL	7028077923010	7028077923010	
	No.13	2..NTC ASSY	Not used	7028077924010	7028077924010	
	No.14	2..WG ASSY	7028073315010-IL	Not used	Not used	
	No.15	2..G-L ASSY	7028073316010-IL	7028077925010	7028077925010	
	No.15	2..G-R ASSY	7028073317010-IL	7028077926010	7028077926010	
	No.9	1..PCB TTL ASSY FRONT	7025HK1211011-IL	7025HK1408011	7025HK1408021	
	No.10	2..FRONT ASSY	7028073321010-IL	7028077961010	7028077961020	
	No.10	2..HP ASSY	Not used	7028077962010	7028077962010	
	No.4	2..HPMIC ASSY	7028073322010-IL	Not used	Not used	
	No.8	2..FUSB ASSY	7028073323010-IL	7028077963010	7028077963010	
	No.5	2..INSEL ASSY	7028073324010-IL	7028077964010	7028077964010	
	No.5	2..CONCT ASSY	7028073325010-IL	7028077965010	7028077965010	
NSP	No.2	1..PCB TTL ASSY DMAIN	7025HK1211012-IL	7025HK1408012	7025HK1408022	
	No.2	2..D-MAIN ASSY	7028073351010-IL	7028077971010	7028077971010	
	No.6	1..PCB TTL ASSY CPU	7025HK1211013-IL	7025HK1408013	7025HK1408023	
	No.6	2..CPU ASSY	7028073331010-IL	7028077931010	7028077931020	
	No.7	1..PCB TTL ASSY AMP5	7025HK1211014-IL	7025HK1408014	7025HK1408024	
	No.13	2..AMP5 ASSY	7028073341010-IL	70280745410R0	70280745410R0	
	No.13	2..WG ASSY	Not used	70280745420R0	70280745420R0	
	No.11	1..PCB TTL ASSY SMPS	7025HK1211015-IL	7025HK1408015	7025HK1408025	
	No.11	2..SMPS ASSY	7028073361010-IL	70280733610W0	70280733610Y0	
	No.17	1..PCB TTL ASSY BT	Not used	7025HK1408016	7025HK1408026	
	No.17	2..BT ASSY	Not used	7028077941010	7028077941010	

Notes : For PCB ASSEMBLIES, Refer to "CONTRAST OF PCB ASSEMBLIES".

CONTRAST OF PCB ASSEMBLIES

CF OPTCO ASSY

Although 7028073313010-IL and 7028077923010 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

DF FUSB ASSY

Although 7028073323010-IL and 7028077963010 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

EF CONCT ASSY

7028073325010-IL and 7028077965010 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073325010-IL	7028077965010
	CN109 CN, Wafer	L109012511520-IL	L109012511540S

Note: This list is not complete. Only components that are available as service part are listed!

GF AMP5 ASSY

7028073341010-IL and 70280745410R0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073341010-IL	70280745410R0
	Q1	J5001024Y0050-IL	J5000992FA050-IL
	Q452	J5000992FA050-IL	J5001024Y0050-IL

Note: This list is not complete. Only components that are available as service part are listed!

HF INSEL ASSY

Although 7028073324010-IL and 7028077964010 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

IF FRONT ASSY

7028073321010-IL, 7028077961010 and 7028077961020 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073321010-IL	7028077961010	7028077961020
	IC701	J127163150020-IL	J127197044010-IL	J127197044010-IL
	D701, D702	K500052009011-IL	Not used	Not used
⚠	R779, R780	C060001063050-IL	C060001063050-IL	C0602R2063050-IL
	S9701 SW, Encoder	G121122400230-IL	G121122400231S	G121122400231S

Note: This list is not complete. Only components that are available as service part are listed!

JF HPMIC ASSY / HP ASSY

7028073322010-IL (HPMIC Assy) and 7028077962010 (HP Assy) are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073322010-IL	7028077962010
	IC902	J121458001010-IL	Not used
	JA702 Jack, D3.5	G40132340000Y-IL	Not used

Note: This list is not complete. Only components that are available as service part are listed!

KF SMPS ASSY

7028073361010-IL, 70280733610W0 and 70280733610Y0 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028073361010-IL	70280733610W0	70280733610Y0
	C112	Not used	D041330088050S	D041330088050S
	R106	Not used	C060012466050-IL	C060012466050-IL
	CN9100 CN, Wafer 7.92 mm	L108396030010-IL	L108396030010-IL	Not used

The mounting positions of the additional parts are described in the circuit diagram and PCB diagram of the parent manual.

Note: This list is not complete. Only components that are available as service part are listed!

LF REG ASSY

Although 7028073312010-IL, 7028077922010 and 7028077922020 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

G-L, G-R and WG ASSEMBLIES

There is no service parts.

A PCB PARTS LIST

• CONTRAST OF PCB ASSEMBLIES for VSX-530-K/CUXEVSM and VSX-430-K/SYXEVS

A F MAIN ASSY

7028077921010 and 7028077921020 are constructed the same with the exception of some components, including the following:

Mark	Symbol and Description	7028077921010	7028077921020
	601 Tuner, FM/AM	E903004100781S	E903104100781S

Note: This list is not complete. Only components that are available as service part are listed!

F F CPU ASSY

Although 7028077931010 and 7028077931020 are different and are NOT COMPATIBLE! Some components on these assy's are different. Since these different components are not available as service part, they are not listed.

• PCB PARTS LIST

Mark	No.	Description	Part No.
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A F MAIN ASSY (7028077921010)

SEMICONDUCTORS

	IC 401-403	J121458000050-IL
	IC 1009	BD3473KS2-K
	IC 1200	J127410500010-IL
	Q 14,15	J522305200050-IL
	Q 16	J520015301210-IL
	Q 17	J5000916Y0050-IL
	Q 19,20	J522305200050-IL
	D 7	K047100600220-IL
	D 9400	K06606R84P430-IL
	D 9401	K06606R84P430-IL

MISCELLANEOUS

	JA 101 TER,BOARD SCREW 4P	G612405E0200Y-IL
	JA 102 TER,BOARD PUSH 6P	G596601SA010Y-IL
	JA 401 TER,RCA 6PIN	G603610A0001Y-IL
	JA 402 TER,RCA 3PIN	G606305AW140Y-IL
	JA 403 TER,RCA 1PIN	G600107A0000Y-IL
	RY 2 RELAY	G680060103010-IL
	RY 3 RELAY	G680060103010-IL
	RY 4 RELAY	G680060103010-IL
	RY 5 RELAY	G680240202080S
	CN 9013,9016,9110 CN,WAFER	L109012511540S
	CN 9015 CN,WAFER	L109012511340S
	601 TUNER,FM/AM	E903004100781S

RESISTORS

	R 5,7,9,11,13,25	C060010065050-IL
	R 6,8,10,12,14	C060010066050-IL
	R 15,16	C060033166050-IL
	R 64	C060022063050-IL
	R 66	C0604R7065050-IL
	R 588,589	C060010165060-IL

CAPACITORS

	C 55,58	D040682088010-IL
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Mark	No.	Description	Part No.
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B F D-MAIN ASSY (7028077971010)

SEMICONDUCTORS

	IC 2	J122214300010S
	IC 1605,1606	J046205101010S
	IC 1808	TC7WHU04FK-TRB
	IC 1812	TC7SH08FUS1-TLB
	IC 2004	NJM2831F33-TLB
	IC 2005,2006	S-1170B50UC-OUJ-TRB
	IC 2008	MM3529A32P-TRB
	IC 2011	J080458800010-IL
	IC 2014	J040742570040-IL
	IC 2018	J001986466020S
	IC 2022	J040741570110-IL
	Q 2026,2040	J543608000010-IL

MISCELLANEOUS

	JA 1601,9601-9604 HDMI JACK	AKP7286- -K
	X 2002 CRYSTAL (24.576 MHz)	E80024R576890S
	X 2003 CRYSTAL (4 MHz)	E80004R000990S

F F CPU ASSY (7028077931010)

SEMICONDUCTORS

	IC 204	J000241600170-IL
	IC 301	J126111733630S

MISCELLANEOUS

	CN 201 CN,WAFER	L109012513340S
	CN 203 CN,WAFER	L109012511140S
	CN 210 CN,WAFER	L109012511340S
	X 201 CRYSTAL (16 MHz)	E80016R000890S

CAPACITORS

	C 3042	D040102081060-IL
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M F NTC ASSY (7028077924010)

MISCELLANEOUS

	TH 80,81 THERMISTOR	F340160801030S
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N F BT ASSY (7028077941010)

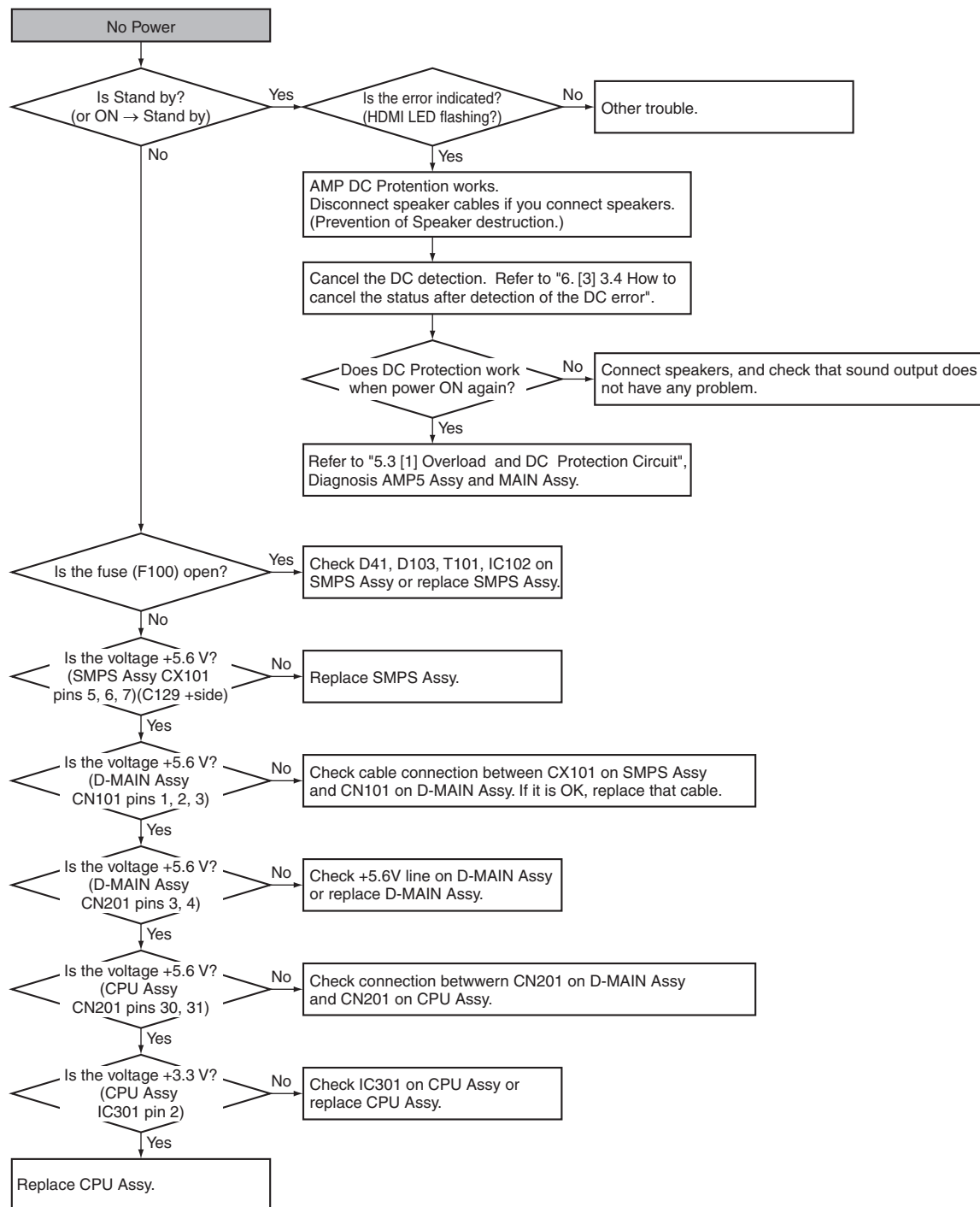
There is no service parts.

3. DIAGNOSIS

3.1 TROUBLESHOOTING

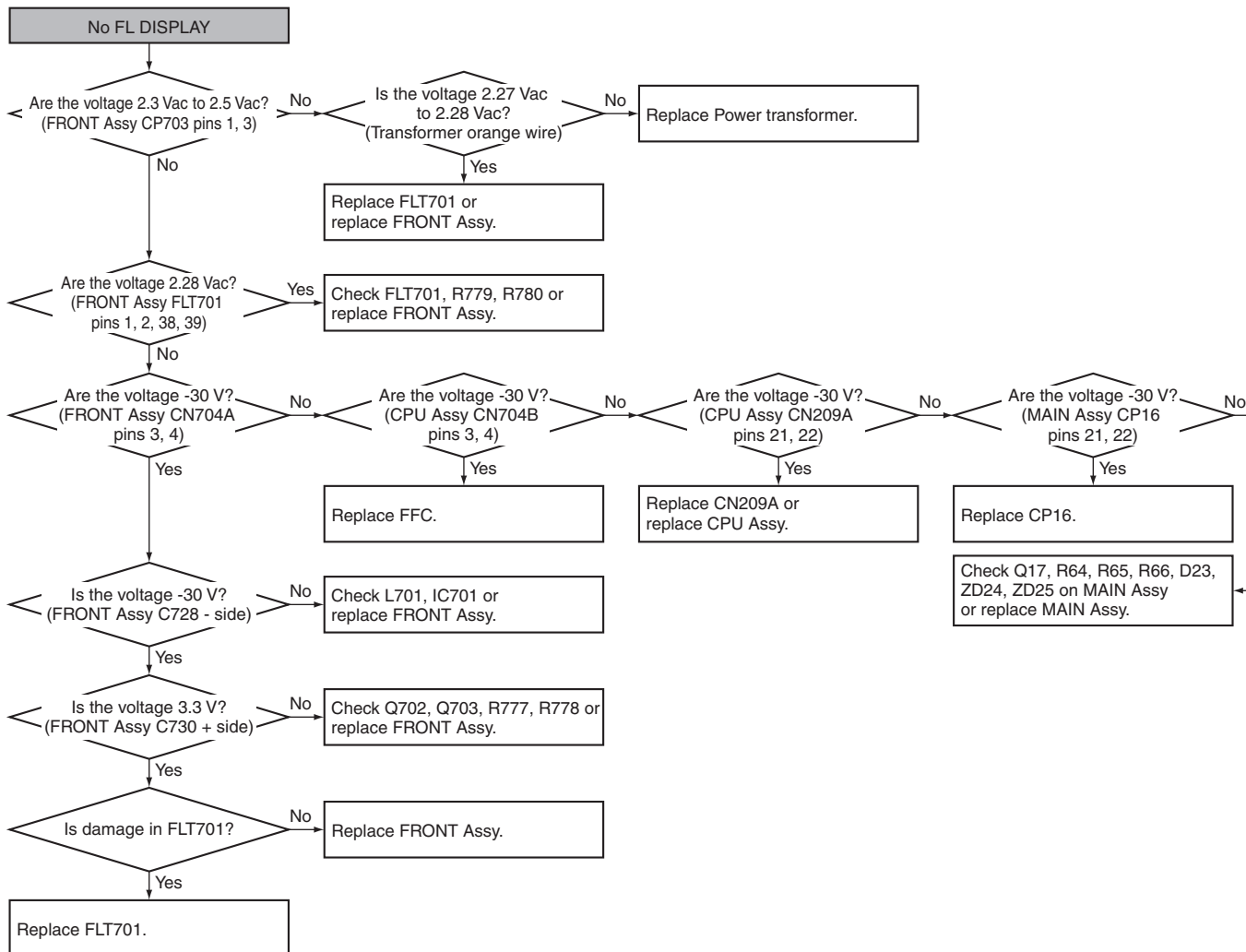
No Power

This is just for general reference and does not including every single case.



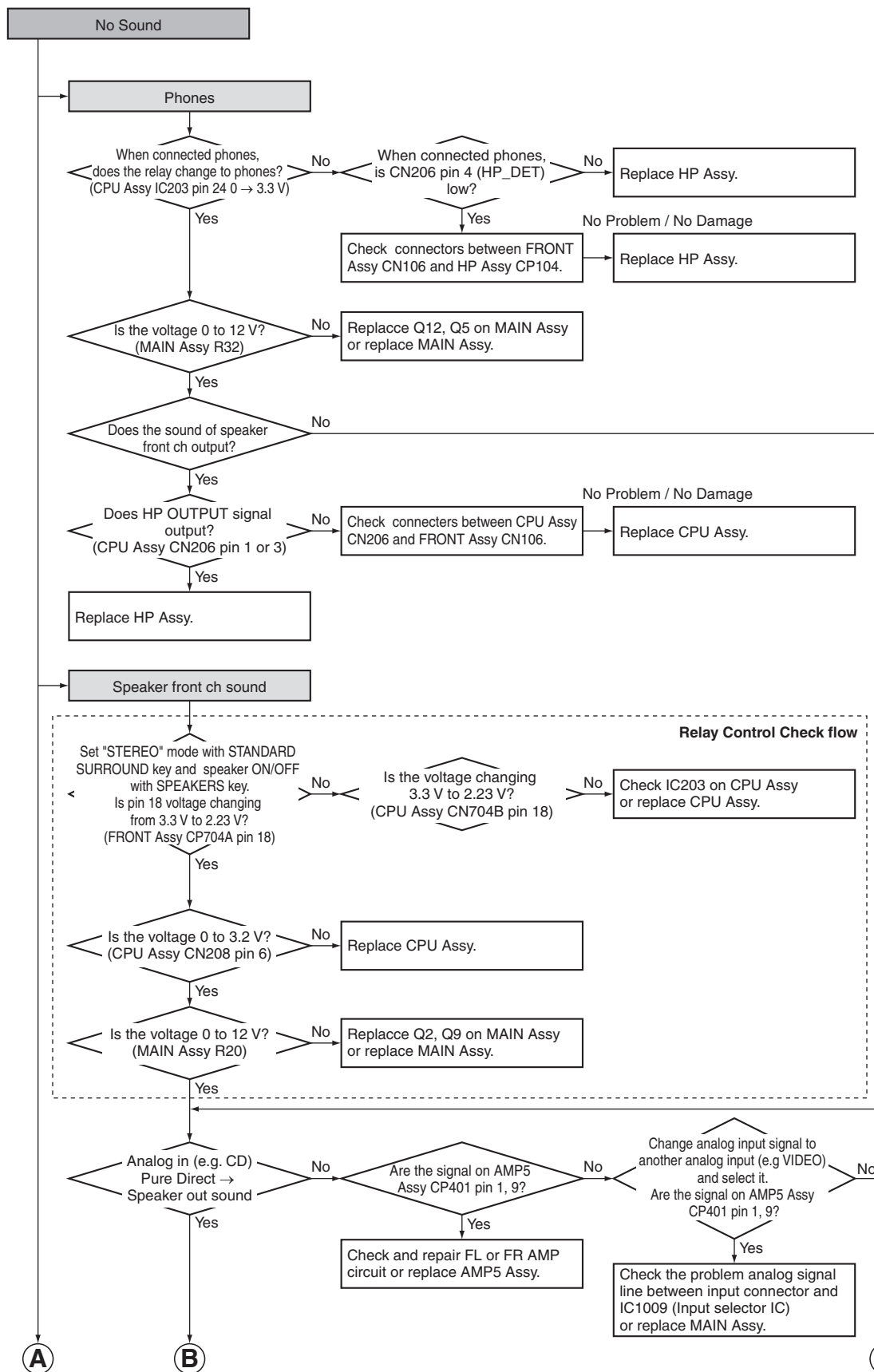
No FL DISPLAY

This is just for general reference and does not including every single case.

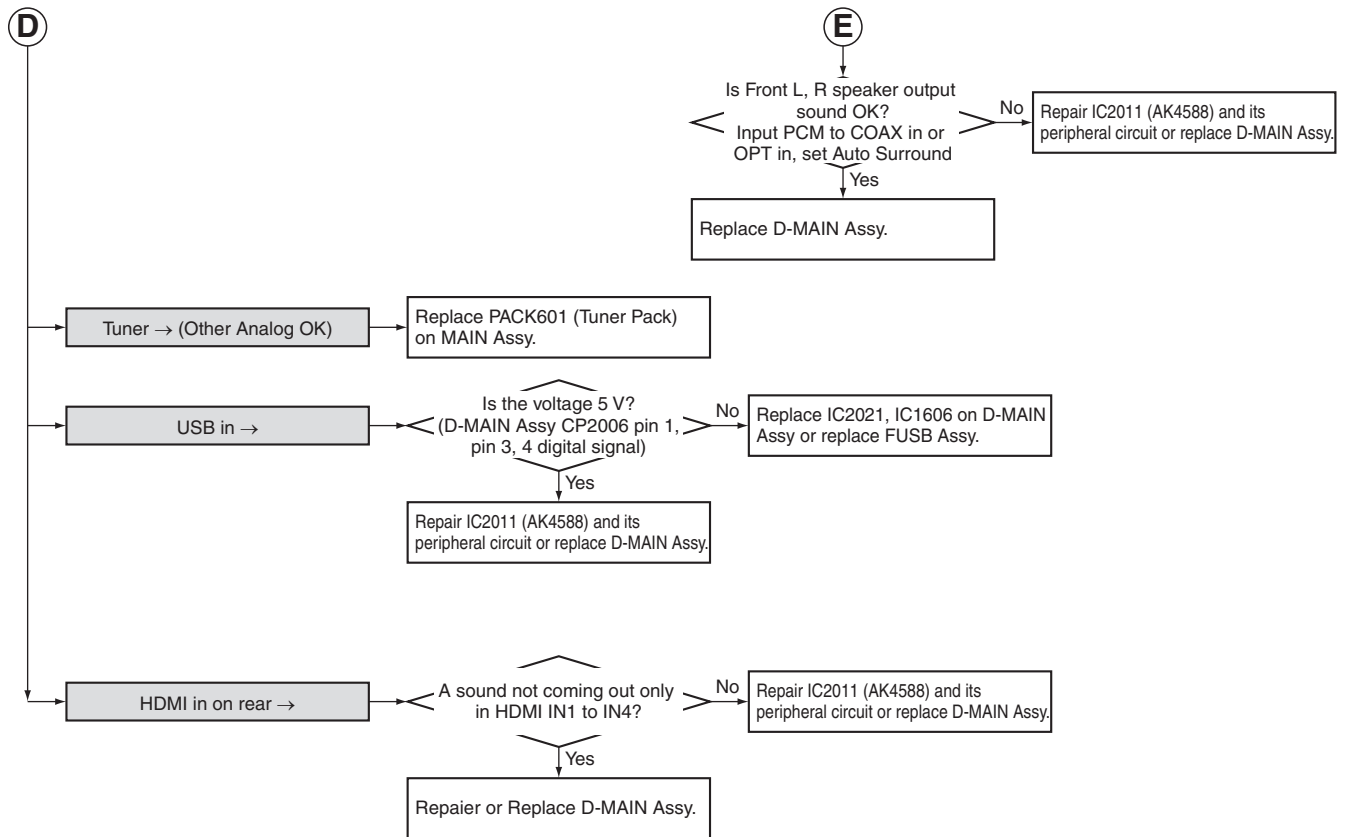


No Sound

This is just for general reference and does not including every single case.

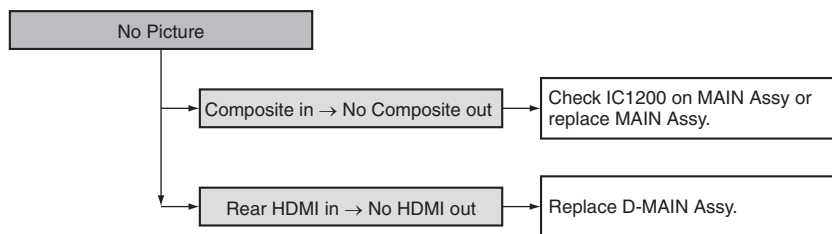






No Picture

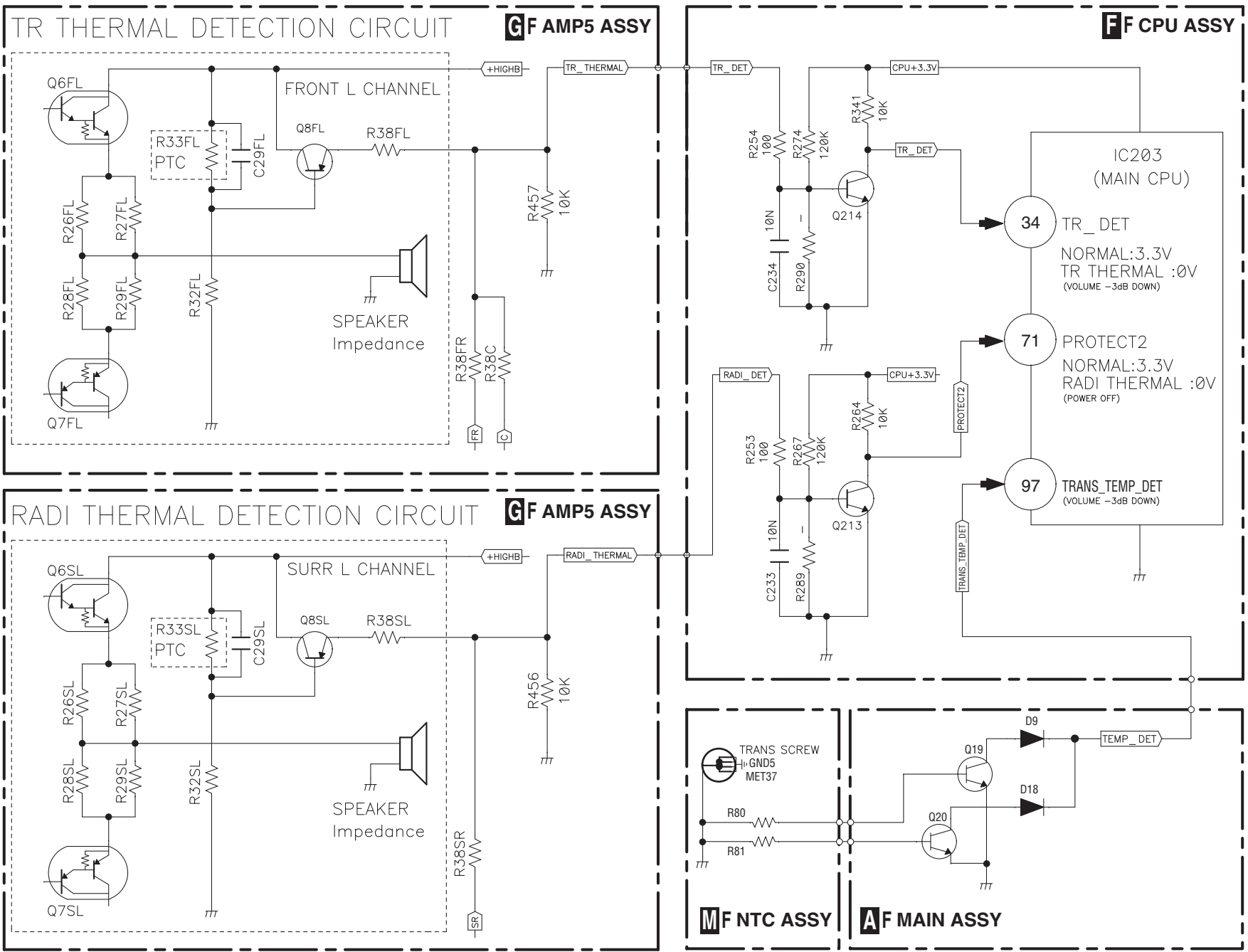
This is just for general reference and does not including every single case.



4



[2] TEMP Protection Circuit



VSX-530-K

3.3 PAIRING WITH THE UNIT (INITIAL REGISTRATION)

- A In order for the unit to playback music stored on a Bluetooth capable device, pairing must first be performed. Pairing should be performed when first using the unit with the Bluetooth capable device, or when the pairing data on the device has been erased for any reason.

Pairing is a step required to allow communication using Bluetooth wireless technology to be carried out.

- Pairing is only performed the first time that you use the unit and the Bluetooth capable device together.
- In order to allow communication using Bluetooth wireless technology to take place, pairing must be performed on both the unit and the Bluetooth capable device.
- After pressing the **BT** and switching to **BT Audio** function, perform the pairing procedure on the Bluetooth capable device.

If pairing has been performed correctly, you will not need to perform the pairing procedures for the unit as shown below.

Please refer to the user's manual for your Bluetooth capable device for more details.

1 Press the  RECEIVER and turn the power to the unit on.

- B **2 Press the BT.**

3 Turn on the power to the Bluetooth capable device that you wish to pair with, and perform pairing procedure on it.

Note

- This unit will be displayed as "Pioneer AVR" on all Bluetooth capable devices that you have.

Pairing will start.

- Place the Bluetooth capable device close to the unit.
- Please refer to the user's manual for your Bluetooth capable device for details on when pairing can be performed and the procedures required for pairing.
- When PIN code entry is requested, enter "0000." (This unit does not accept any PIN code setting other than "0000.")

4 Confirm on the Bluetooth capable device that pairing has been completed.

- C If pairing with the Bluetooth capable device has been completed correctly "CONNECT" will be displayed.

D

E

F

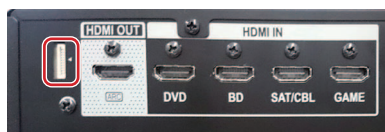
4. EACH SETTING AND ADJUSTMENT

4.1 UPDATING OF THE FIRMWARE (IC3: SUB MICROCOMPUTER)

- The updating jig (GGF1642) in this Section is the same as that used for updating of the MAIN microcomputer of the base model (VSX-523-K/CUXESM).
- The software for updating to be used on a PC is "FLASH MCU Programmer for FM0+/FM3/FM4." Please download it from Service Website.
- The updating procedure for MAIN microcomputer is same as the base model (VSX-523-K/CUXESM). Please refer to the Service Manual (RRV4418) for VSX-523 regarding it.

[Preparations]

1. Install the software for updating on the PC.
2. Unplug the power cord of the main unit.
Connect the FFC of the updating jig for updating to the main unit.
(Orient the FFC so that the conductive surface of the connector faces the triangular ▲ symbol.)



Rear side

3. Start the software for updating on the PC.

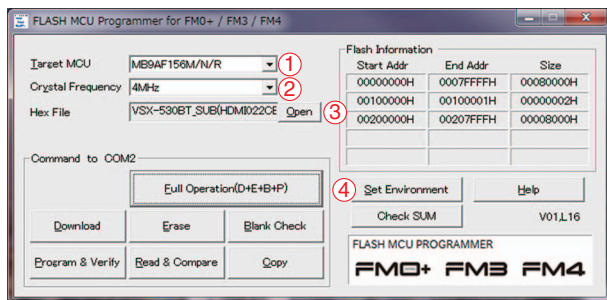
[Procedures]

To perform updating, proceed as follows:

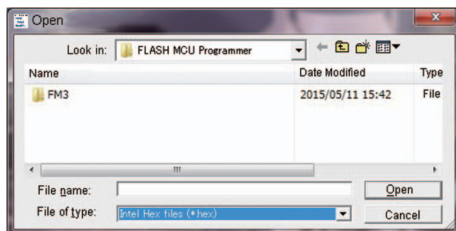
1. Set the values for Target MCU and Crystal Frequency, as follows:

Target MCU: MB9AF156M/N/R ①

Crystal Frequency: 4MHz ②



2. Specify the software file to be updated.
Click on "Open" ③ to open the File Selection window.
Select Intel Hex files (*.hex) in File Type.

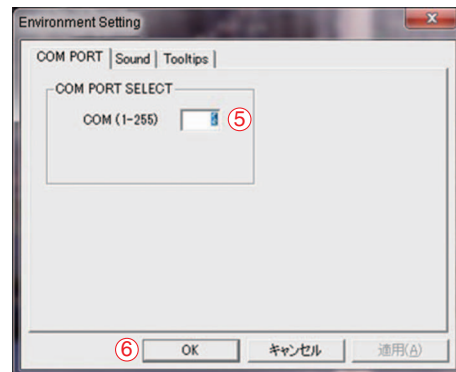


3. Specify the COM PORT.

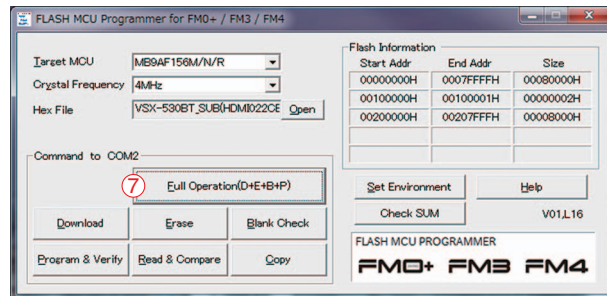
Click on "Set Environment" ④ to open the Environment Setting window.

Assign the COM PORT number ⑤, according to the environment.

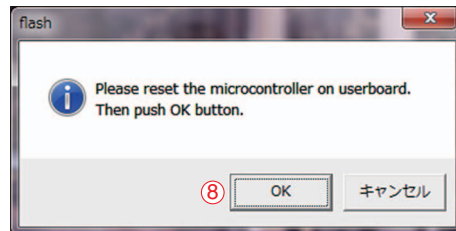
Click on "OK" ⑥ to close the Environment Setting window.



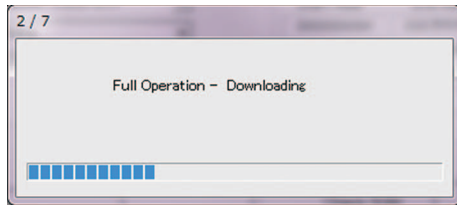
4. Click on "Full Operation (D+E+B+P)" ⑦.



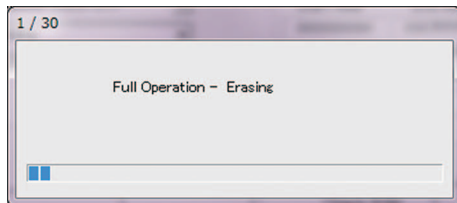
5. After the window shown below is displayed, turn the main unit on.
6. Press the Reset button of the updating jig for updating.
7. Click on "OK" ⑧.



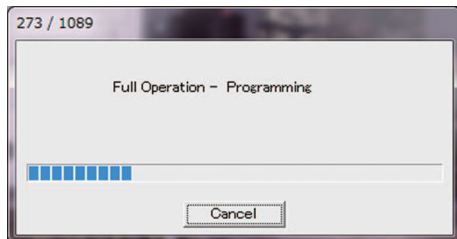
- A 8. The indications in the window change, as indicated below:



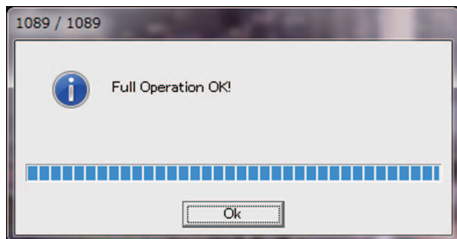
B



C



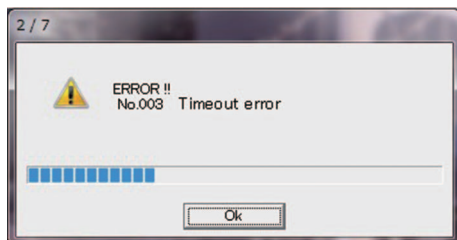
9. Updating has been successfully completed if "Full Operation OK!" is displayed.



D

Note:

If an error message like the one shown below is displayed, after checking the connection of the updating jig for updating and the COM PORT setting, start updating again from Step 1.



E

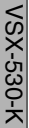
10. Turn the main unit off then disconnect the updating jig for updating.

F

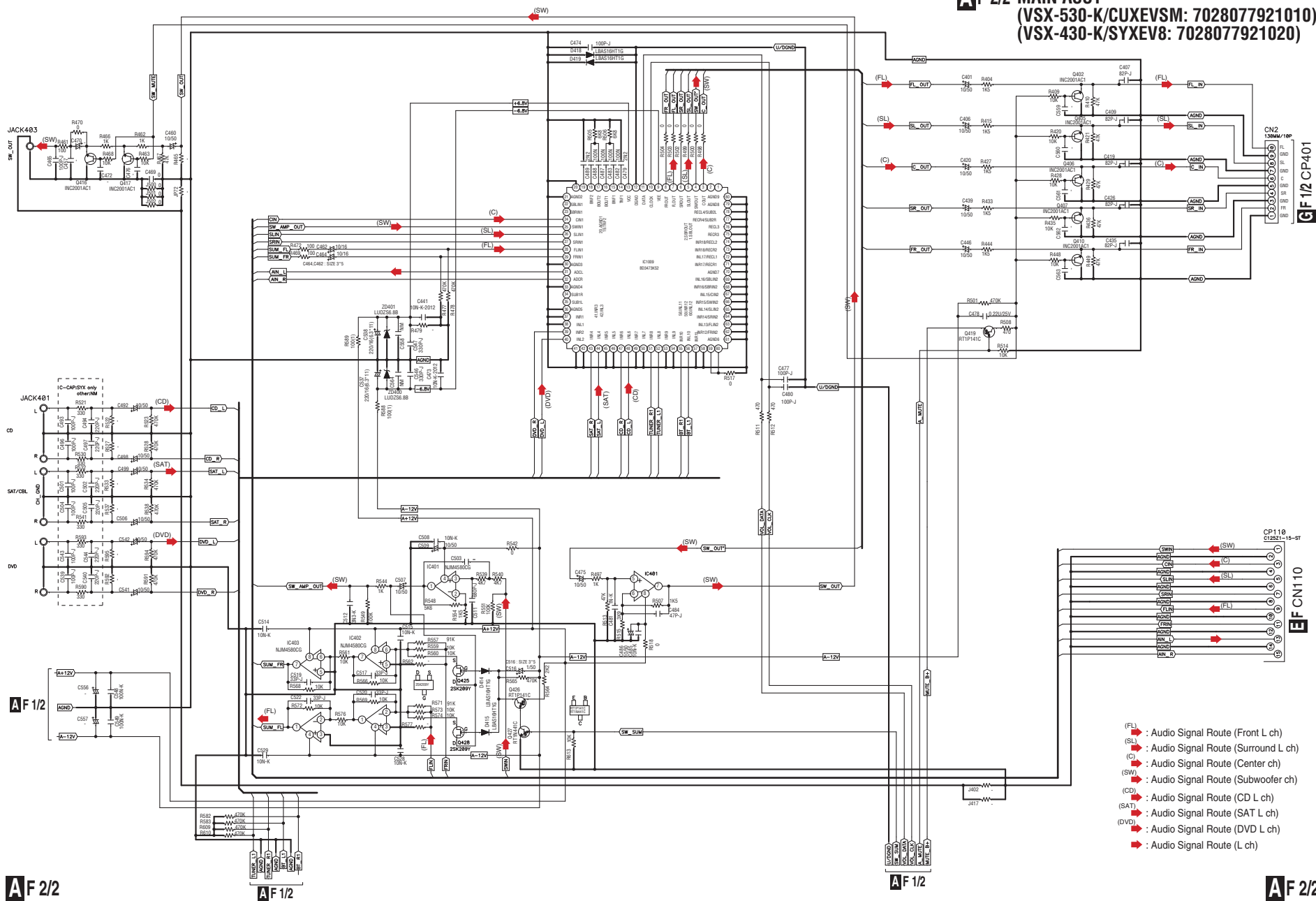
11. Perform Factory Reset on the main unit.

5. SCHEMATIC DIAGRAM

5.1 MAIN ASSY (1/2)



(VSX-530-K/CUXEVSM: 7028077921010)
(VSX-430-K/SYXEV8: 7028077921020)

**A**F 2/2

B F 2/4

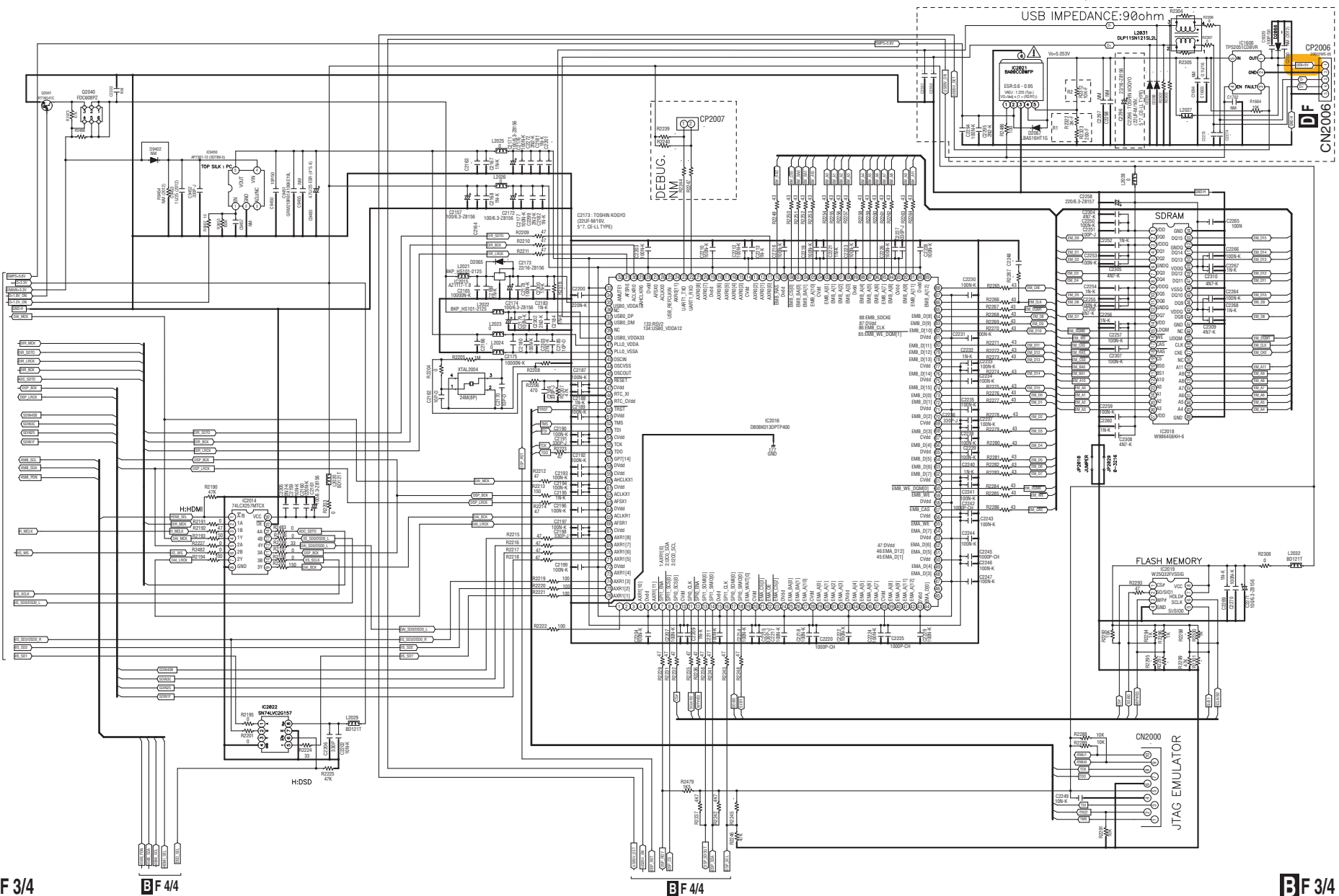
5.5 D-MAIN ASSY (3/4)

9

7

B F 3/4 D-MAIN ASSY
(7028077971010)

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.



VSX-530-K

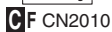
B F 2/4

23

B F 3/4

B F 3/4

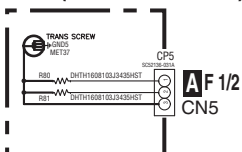
FF
CN203A



4

FF
CN210

MF NTC ASSY
(7028077924010)



VSX-530-K

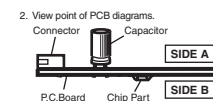
M_F N_F

6. PCB CONNECTION DIAGRAM

6.1 MAIN ASSY

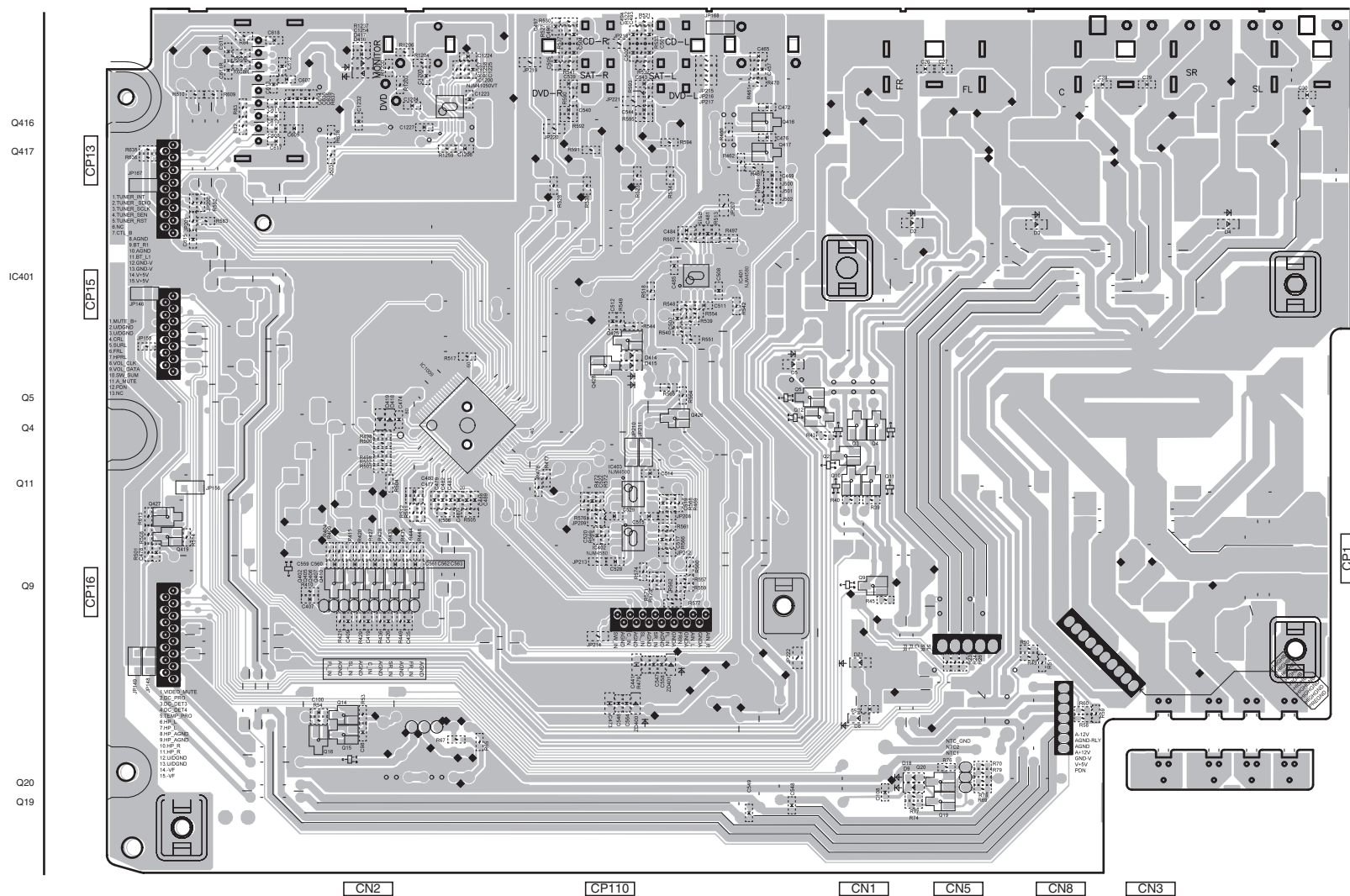
SIDE A

AF MAIN ASSY

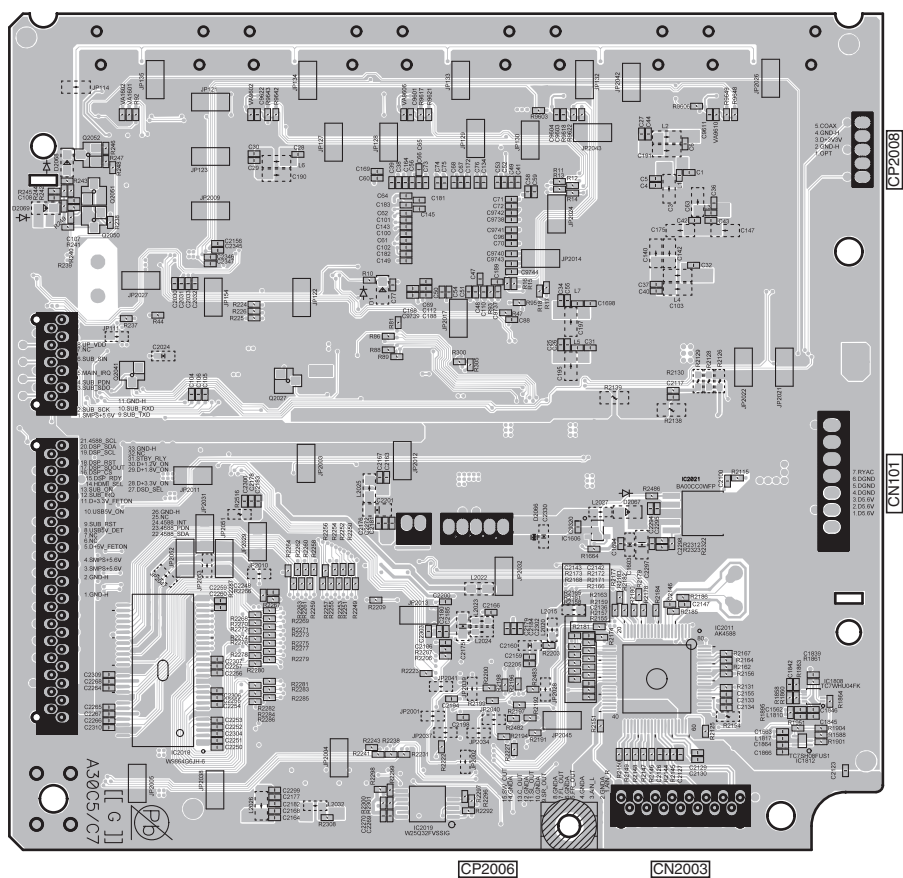
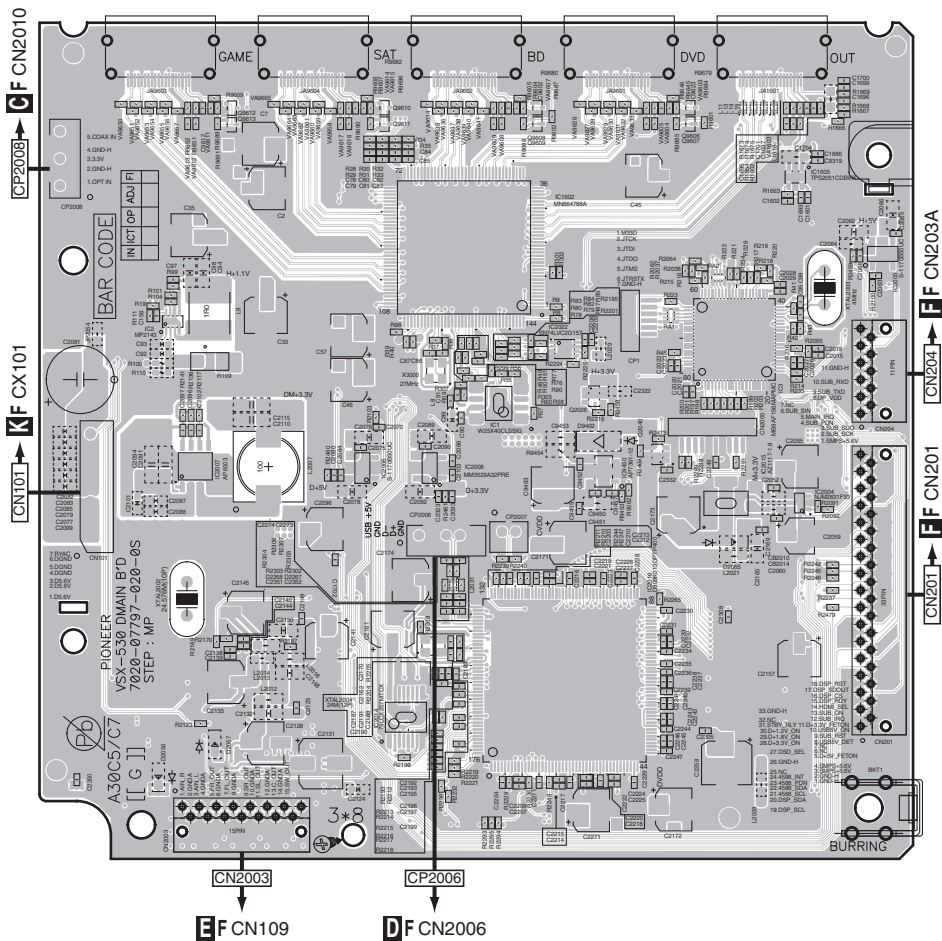


VSX-530-K

27 **A**F**A** **F**

AF MAIN ASSY

SIDE B

BF D-MAIN ASSY**SIDE A****BF D-MAIN ASSY**

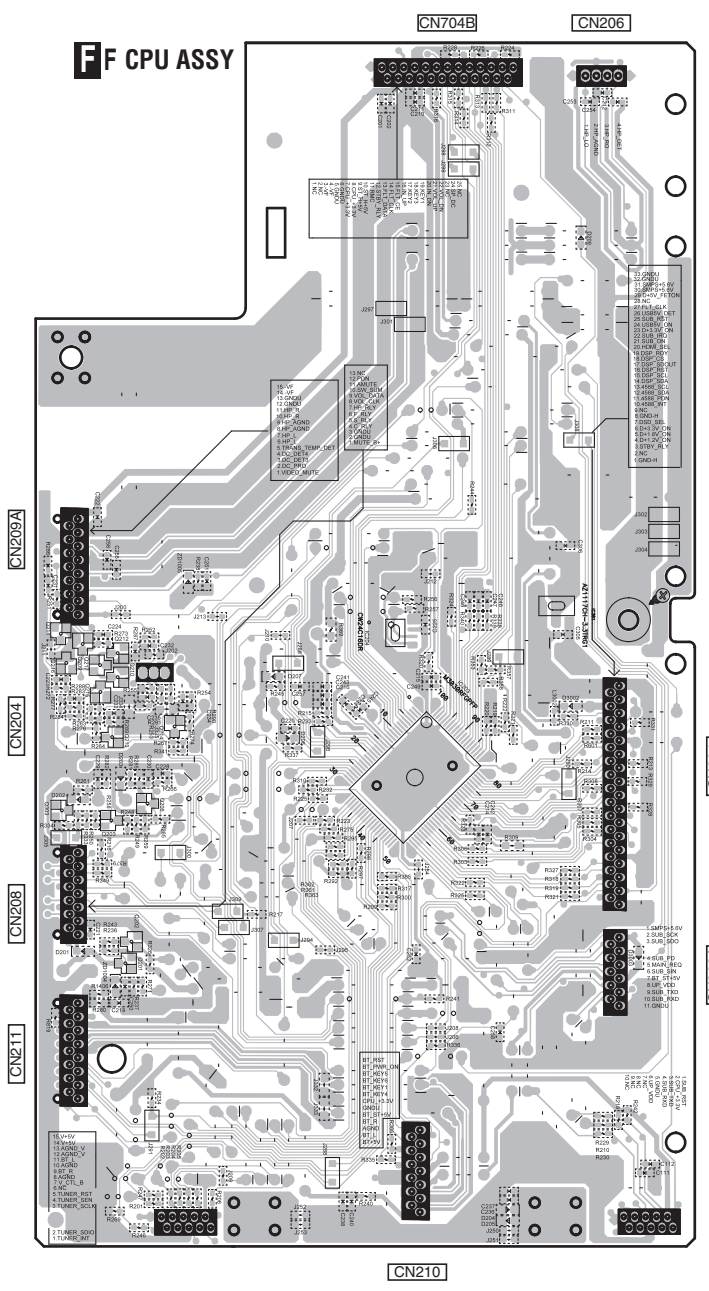
IC2	Q9612	Q9610	IC1602	Q9608	Q9606	IC1605	IC2005
	Q9613	Q9611		Q9609	Q9607	IC3	
IC2007		IC2006	IC2008	IC1	IC2022	IC2015	IC2004
					IC2016 Q2026		

Q2052	Q2041	Q2027	IC1606	IC2021	IC1808
Q2051	IC2018		IC2011		IC1812
Q2050					

6.3 CPU ASSY

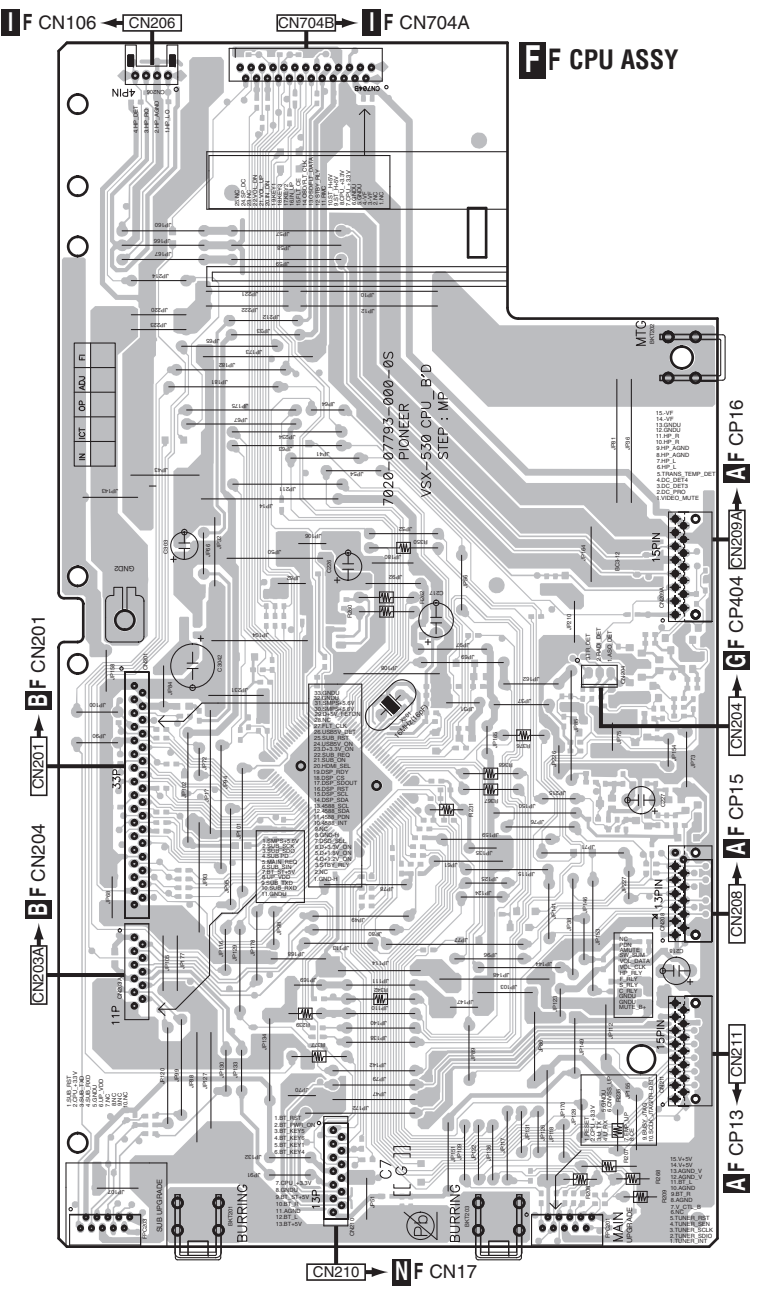
1 2 3 4

SIDE B



F

SIDE A



F

30 1 2 3 4

VSX-530-K

SIDE A

A



SIDE B



F

M_F N_F

8