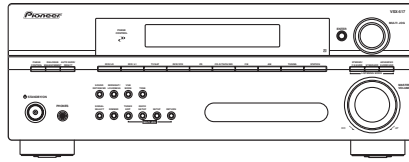


Service Manual



VSX-517-K

ORDER NO.
RRV3550

AUDIO/VIDEO MULTI-CHANNEL RECEIVER

VSX-517-K

VSX-517-S

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

Model	Type	Power Requirement	Remarks
VSX-517-K	KUCXJ	AC 120 V	
VSX-517-S	KUCXJ	AC 120 V	



For details, refer to "Important Check Points for Good Servicing".

SAFETY INFORMATION



This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

WARNING

This product contains lead in solder and certain electrical parts contain chemicals which are known to the state of California to cause cancer, birth defects or other reproductive harm.

Health & Safety Code Section 25249.6 – Proposition 65



NOTICE

(FOR CANADIAN MODEL ONLY)

Fuse symbols  (fast operating fuse) and/or  (slow operating fuse) on PCB indicate that replacement parts must be of identical designation.

REMARQUE

(POUR MODÈLE CANADIEN SEULEMENT)

Les symboles de fusible  (fusible de type rapide) et/ou  (fusible de type lent) sur CCI indiquent que les pièces de remplacement doivent avoir la même désignation.

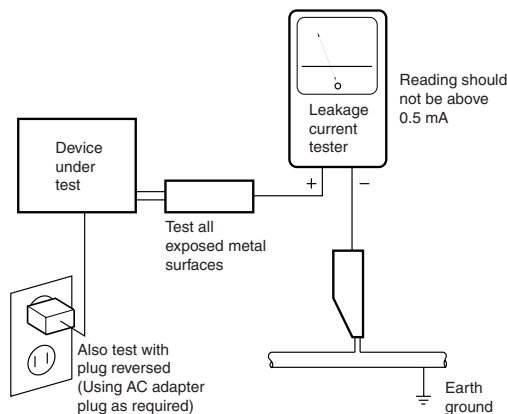
(FOR USA MODEL ONLY)

1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60 Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5 mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a Δ on the schematics and on the parts list in this Service Manual.

The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

[Important Check Points for Good Servicing]

In this manual, procedures that must be performed during repairs are marked with the below symbol. Please be sure to confirm and follow these procedures.

1. Product safety



Please conform to product regulations (such as safety and radiation regulations), and maintain a safe servicing environment by following the safety instructions described in this manual.

- ① Use specified parts for repair.

Use genuine parts. Be sure to use important parts for safety.

- ② Do not perform modifications without proper instructions.

Please follow the specified safety methods when modification (addition/change of parts) is required due to interferences such as radio/TV interference and foreign noise.

- ③ Make sure the soldering of repaired locations is properly performed.

When you solder while repairing, please be sure that there are no cold solder and other debris. Soldering should be finished with the proper quantity. (Refer to the example)

- ④ Make sure the screws are tightly fastened.

Please be sure that all screws are fastened, and that there are no loose screws.

- ⑤ Make sure each connectors are correctly inserted.

Please be sure that all connectors are inserted, and that there are no imperfect insertion.

- ⑥ Make sure the wiring cables are set to their original state.

Please replace the wiring and cables to the original state after repairs. In addition, be sure that there are no pinched wires, etc.

- ⑦ Make sure screws and soldering scraps do not remain inside the product.

Please check that neither solder debris nor screws remain inside the product.

- ⑧ There should be no semi-broken wires, scratches, melting, etc. on the coating of the power cord.

Damaged power cords may lead to fire accidents, so please be sure that there are no damages. If you find a damaged power cord, please exchange it with a suitable one.

- ⑨ There should be no spark traces or similar marks on the power plug.

When spark traces or similar marks are found on the power supply plug, please check the connection and advise on secure connections and suitable usage. Please exchange the power cord if necessary.

- ⑩ Safe environment should be secured during servicing.

When you perform repairs, please pay attention to static electricity, furniture, household articles, etc. in order to prevent injuries. Please pay attention to your surroundings and repair safely.

2. Adjustments



To keep the original performance of the products, optimum adjustments and confirmation of characteristics within specification. Adjustments should be performed in accordance with the procedures/instructions described in this manual.

3. Lubricants, Glues, and Replacement parts



Use grease and adhesives that are equal to the specified substance. Make sure the proper amount is applied.

4. Cleaning



For parts that require cleaning, such as optical pickups, tape deck heads, lenses and mirrors used in projection monitors, proper cleaning should be performed to restore their performances.

5. Shipping mode and Shipping screws



To protect products from damages or failures during transit, the shipping mode should be set or the shipping screws should be installed before shipment. Please be sure to follow this method especially if it is specified in this manual.

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F

1. SPECIFICATIONS

Amplifier section

- **Continuous power output (stereo)**
Front . . . 110 W (20Hz to 20kHz, THD 0.2 %, 8 Ω)¹
- **Rated power output (surround / 20 Hz to 20 kHz, THD 0.07 %, 8 Ω)**
Front 90 W per channel
Center 90 W
Surround 90 W per channel
- **Rated power output (surround / 1 kHz, THD 1 %, 8 Ω)**
Front 120 W per channel
Center 120 W
Surround 120 W per channel

Audio section

- **Input (Sensitivity/Impedance)**
CD, DVR/VCR, CD-R/TAPE/MD, DVD/LD, TV/SAT 200 mV/47 kΩ
- **Frequency response**
CD, DVR/VCR, CD-R/TAPE/MD, DVD/LD, TV/SAT 5 Hz to 100 000 Hz ± 3 dB
- **Output (Level/Impedance)**
DVR/VCR REC, CD-R/TAPE/MD REC 200 mV/2.2 kΩ
- **Tone control**
Bass ± 6 dB (100 Hz)
Treble ± 6 dB (10 kHz)
Loudness +10 dB/+5 dB (100 Hz/10 kHz) (at volume level -50 dB)
- **Signal-to-Noise Ratio (IHF, short circuited, A network)**
CD, DVR/VCR, CD-R/TAPE/MD, DVD/LD, TV/SAT 96 dB
- **Signal-to Noise Ratio [EIA, at 1 W (1 kHz)]**
CD, DVR/VCR, CD-R/TAPE/MD, DVD/LD, TV/SAT 79 dB

Video Section

- **Input (Sensitivity/Impedance)**
DVR/VCR, DVD/LD, TV/SAT 1 Vp-p/75 Ω
- **Output (Level/Impedance)**
DVR/VCR, MONITOR OUT 1 Vp-p/75 Ω
- **Frequency response**
DVR/VCR, DVD/LD, TV/SAT \Rightarrow MONITOR 5 Hz to 7 MHz ± 3 dB
Signal-to-Noise Ratio 55 dB
Crosstalk 50 dB

Note
Specifications and the design are subject to possible modifications without notice, due to improvements.

Manufactured under license from Dolby Laboratories. "Dolby", "Pro Logic" and the double-D symbol are trademarks of Dolby Laboratories.

"DTS" is a registered trademark of DTS, Inc. and "DTS 96/24" is a trademark of DTS, Inc.

Accessories



AM loop antenna (ATB7013)

FM wire antenna (ADH7030)

Remote control (XXD3135)

AA size IEC R6 Dry cell batteries (x2)

Component video section

- **Input (Sensitivity)**
DVD/LD, TV/SAT 1 Vp-p/75 Ω
- **Output (Level/Impedance)**
MONITOR OUT 1 Vp-p/75 Ω
- **Frequency response**
DVD/LD, TV/SAT \Rightarrow MONITOR 5 Hz to 40 MHz ± 3 dB
Signal-to-Noise Ratio 60 dB

FM Tuner Section

- Frequency Range 87.5 MHz to 108 MHz
- Usable Sensitivity Mono: 13.2 dBf, IHF (1.3 μ V/ 75 Ω)
50 dB Quieting Sensitivity Mono: 20.2 dB Stereo: 38.6 dBf
- Signal-to-Noise Ratio Mono: 73 dB (at 85 dBf) Stereo: 70 dB (at 85 dBf)
- Distortion Stereo: 0.5 % (1 kHz)
- Alternate Channel Selectivity 60 dB (400 kHz)
- Stereo Separation 40 dB (1 kHz)
- Frequency Response 30 Hz to 15 kHz (± 1 dB)
- Antenna Input (DIN) 75 Ω unbalanced

AM Tuner Section

- Frequency Range 530 kHz to 1700 kHz
- Sensitivity (IHF, Loop antenna) 350 μ V/m
- Signal-to-Noise Ratio 50 dB
- Antenna Loop antenna

Miscellaneous

- Power requirements AC 120 V / 60 Hz
- Power consumption 320 W / 430 VA
In standby 0.5 W
- Dimensions 420 (W) mm x 158 (H) mm x 352.5 (D) mm
16⁹/₁₆ (W) in. x 6¹/₄ (H) in. x 13⁷/₈ (D) in.
- Weight (without package) 8.6 kg (19 lb)

Furnished Parts

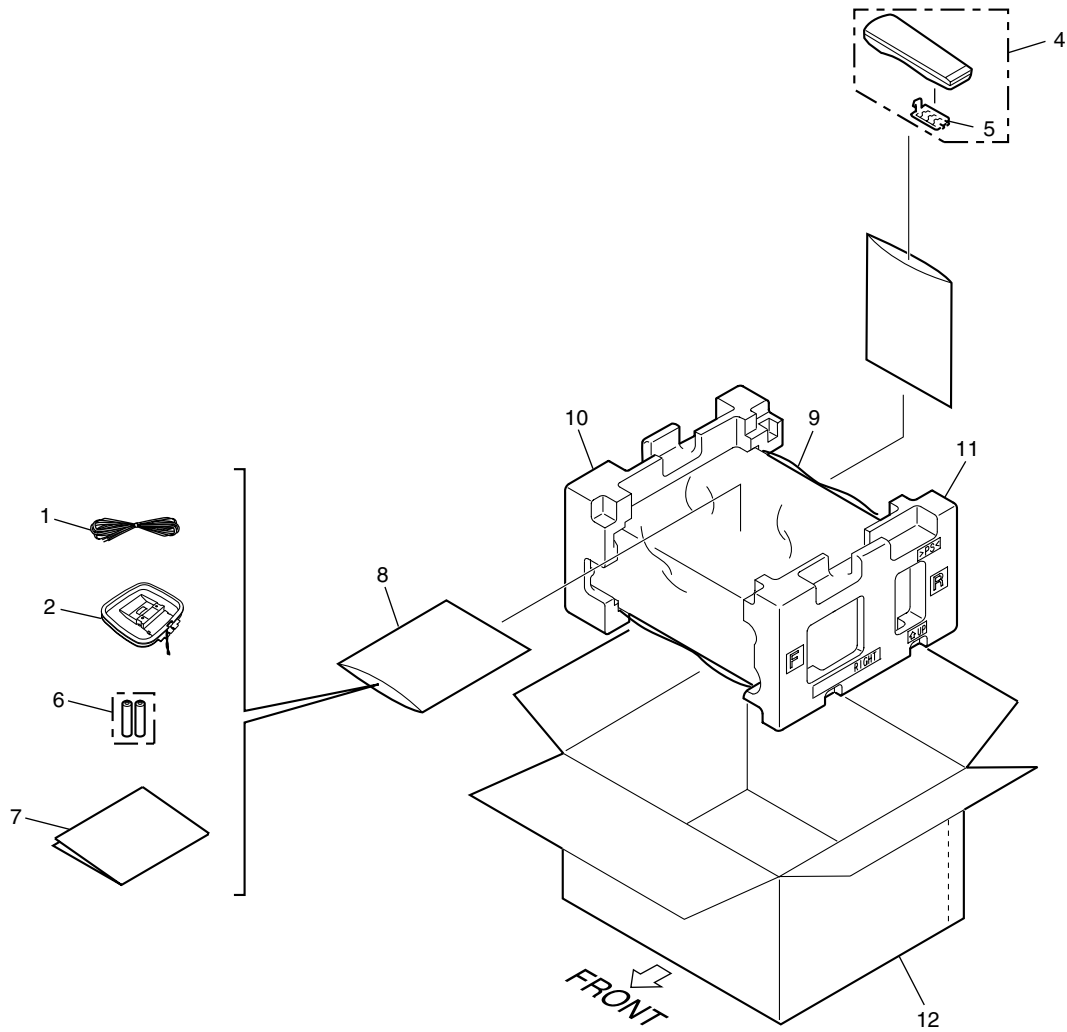
- AM loop antenna 1
- FM wire antenna 1
- Dry cell batteries (AA size IEC R6) 2
- Remote control 1
- Operating instructions

Note
1 Continuous average power output of 110 watts* per channel, min., at 8 ohms, from 20 Hz to 20 000 Hz with no more than 0.2 %** total harmonic distortion (front).
* Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifiers.
** Measured by Audio Spectrum Analyzer.

2. EXPLODED VIEWS AND 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.
 - Screws adjacent to \blacktriangledown 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.)

2.1 PACKING SECTION



5 6 7 8

(1) PACKING SECTION PARTS LIST

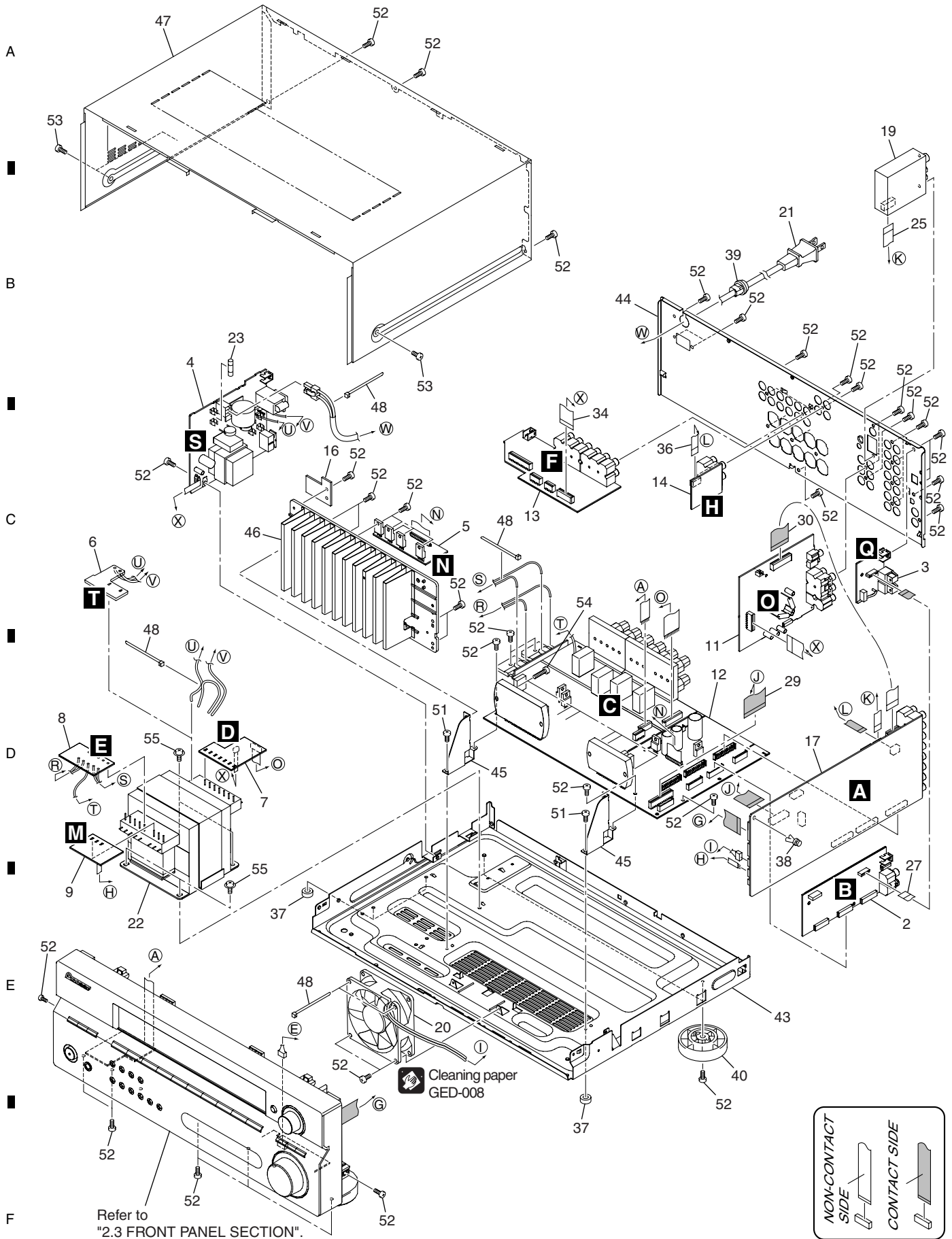
<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>
1	FM Wire Antenna	ADH7030
2	AM Loop Antenna	ATB7013
3	•••••	
4	Remote Control	XXD3135
5	Battery Cover	XZN3139
NSP 6	Dry Cell Battery (AA, R6)	XEX3002
7	Operating Instructions (English)	XRE3138
NSP 8	Polyethylene Bag (0.06*230*340)	AHG7117
9	Packing Sheet	AHG7069
10	Left Pad V3	XHA3158
11	Right Pad V3	XHA3159
12	Packing Case	See Contrast table (2)

(2) CONTRAST TABLE

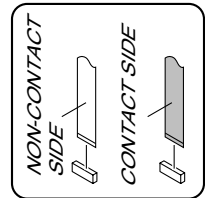
VSX-517-K/KUCXJ and VSX-517-S/KUCXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-517-K /KUCXJ	VSX-517-S /KUCXJ
	12	Packing Case	XHD3679	XHD3680

2.2 EXTERIOR SECTION



Cleaning paper
GED-008



5 6 7 8

(1) EXTERIOR SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	•••••		31	•••••	
2	DSP Assy	AWX8812	32	•••••	
3	DIGITAL INPUT Assy	XWZ4211	33	•••••	
4	PRIMARY Assy	XWZ4215	34	7P Flexible Cable/30V	XDD3235
5	REGULATOR Assy	XWZ4271	35	•••••	
6	TRANS1 Assy	XWZ4224	36	7P Flexible Cable/30V	XDD3235
7	TRANS2 Assy	XWZ4243	NSP 37	Spacer	AEB7092
8	TRANS3 Assy	XWZ4246	38	Push Rivet	AEC7205
9	TRANS4 Assy	XWZ4225	39	Cord Stopper	CM-22C
10	•••••		40	Insulator	AMR7198
11	VIDEO Assy	XWZ4207	41	•••••	
12	POWER PACK Assy	XWZ4232	42	•••••	
13	COMPONENT VIDEO Assy	XWZ4247	NSP 43	Chassis 816	XNA3026
14	5.1CH INPUT Assy	XWZ4249	44	Rear Panel	See Contrast table (2)
15	•••••		45	Heatsink Angle V3	XNG3145
16	BIND Assy	XWZ4252	NSP 46	Heatsink	XNH3043
17	MAIN Assy	XWK3300	47	Bonnet	See Contrast table (2)
18	•••••		NSP 48	Binder (BK-1)	ZCA-BK1
19	FM/AM TUNER Unit	AXX7210	49	•••••	
⚠ 20	DC Fan Motor	XXM3012	50	•••••	
⚠ 21	AC Power Cord	ADG7024	51	Screw	BBZ30P060FCC
⚠ 22	Power Transformer (T1501)	XTS3106	52	Screw	BBZ30P080FNI
⚠ 23	Fuse (FU1 : 10 A)	REK1154	53	Screw	See Contrast table (2)
24	•••••		54	Screw	BBZ30P140FTC
25	11P Flexible Cable/30V	XDD3189	55	Screw	BBZ40P080FNI
26	•••••				
27	10P Flexible Cable/30V	XDD3196			
28	•••••				
29	17P Flexible Cable/30V	XDD3203			
30	13P Flexible Cable/30V	XDD3220			

(2) CONTRAST TABLE

VSX-517-K/KUCXJ and VSX-517-S/KUCXJ are constructed the same except for the following:

Mark	No.	Symbol and Description	VSX-517-K /KUCXJ	VSX-517-S /KUCXJ
	44	Rear Panel	XNC3484	XNC3485
	47	Bonnet	XZN3183	XZN3184
	53	Screw	BBZ30P080FTB	BBZ30P080FNI

2.3 FRONT PANEL SECTION

A

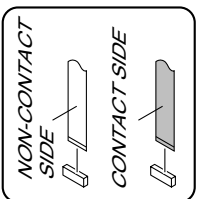
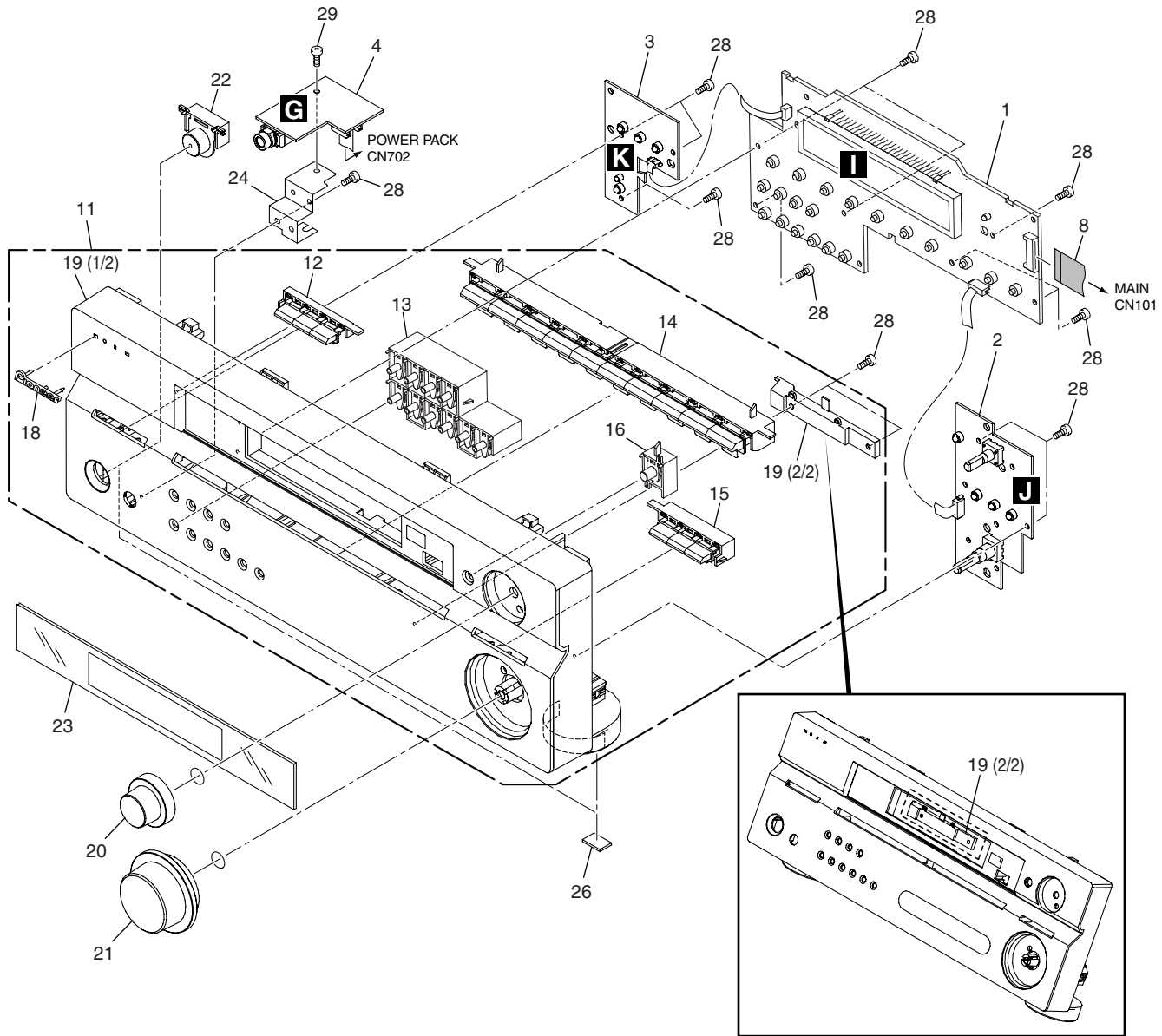
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5 6

(1) FRONT PANEL SECTION PARTS LIST

Mark No.	Description	Part No.	Mark No.	Description	Part No.
1	FRONT DISPLAY Assy	XWZ4202	16	JOG Button	See Contrast table (2)
2	ROTARY ENCODER Assy	XWZ4205	17	•••••	
3	POWER KEY Assy	XWZ4206	18	Pioneer Name Plate	See Contrast table (2)
4	HEADPHONE Assy	XWZ4265	19	Front Panel	See Contrast table (2)
5	•••••		20	JOG Knob	See Contrast table (2)
6	•••••		21	VOL Knob	See Contrast table (2)
7	•••••		22	STANDBY Button	See Contrast table (2)
8	17P Flexible Cable/30V	XDD3200	23	D Panel PC	XAK3569
9	•••••		24	Earth Plate HP V2 (M)	XNG3131
10	•••••		25	•••••	
NSP 11	Front Panel Assy	See Contrast table (2)	26	Rubber Sheet	AEB1111
12	TUNER Button	See Contrast table (2)	27	•••••	
13	SUB Button	See Contrast table (2)	28	Screw	BPZ30P080FTC
14	FUNCTION Button	See Contrast table (2)	29	Screw	BBZ30P080FNI
15	LISTEN Button	See Contrast table (2)			

(2) CONTRAST TABLE

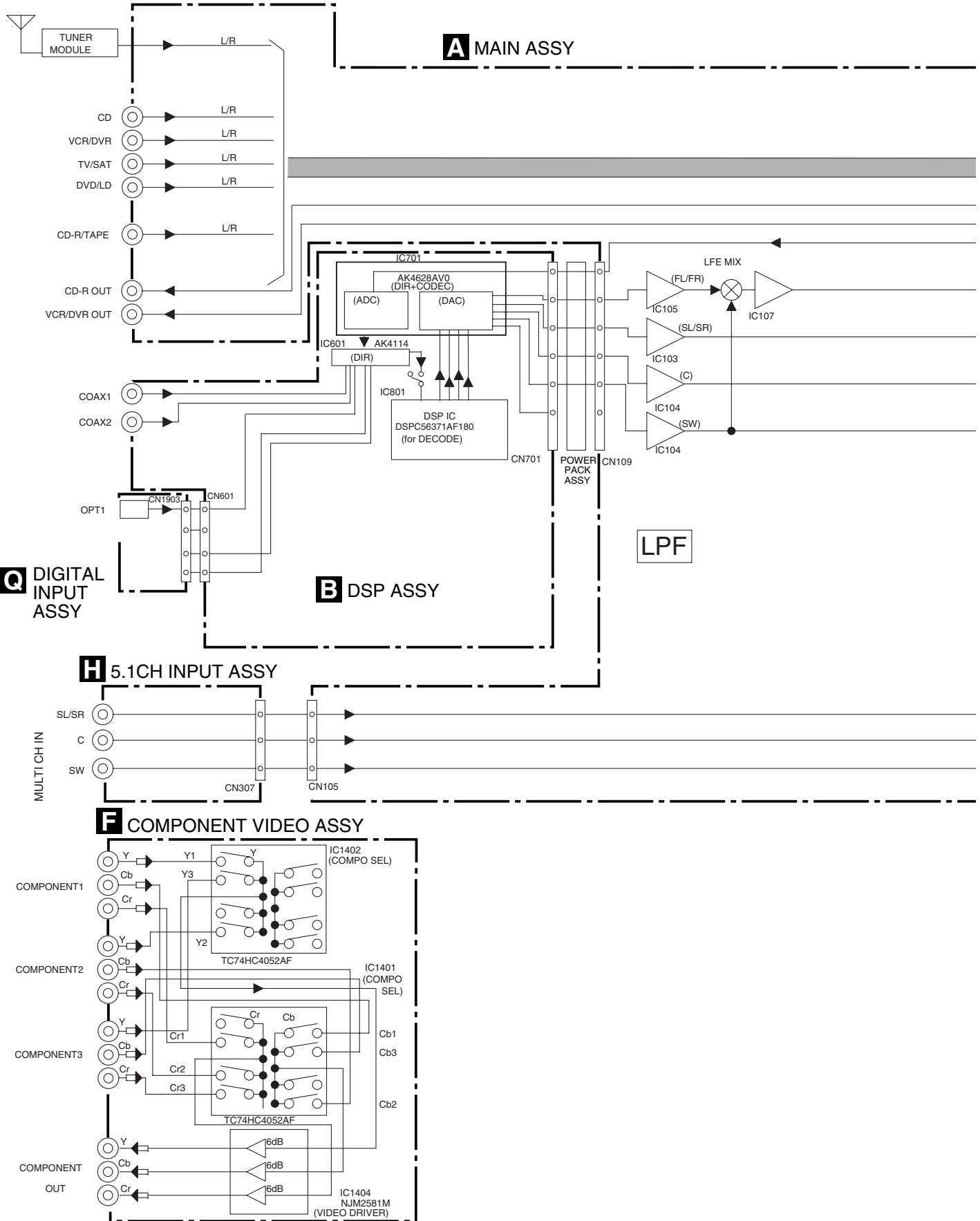
VSX-517-K/KUCXJ and VSX-517-S/KUCXJ are constructed the same except for the following:

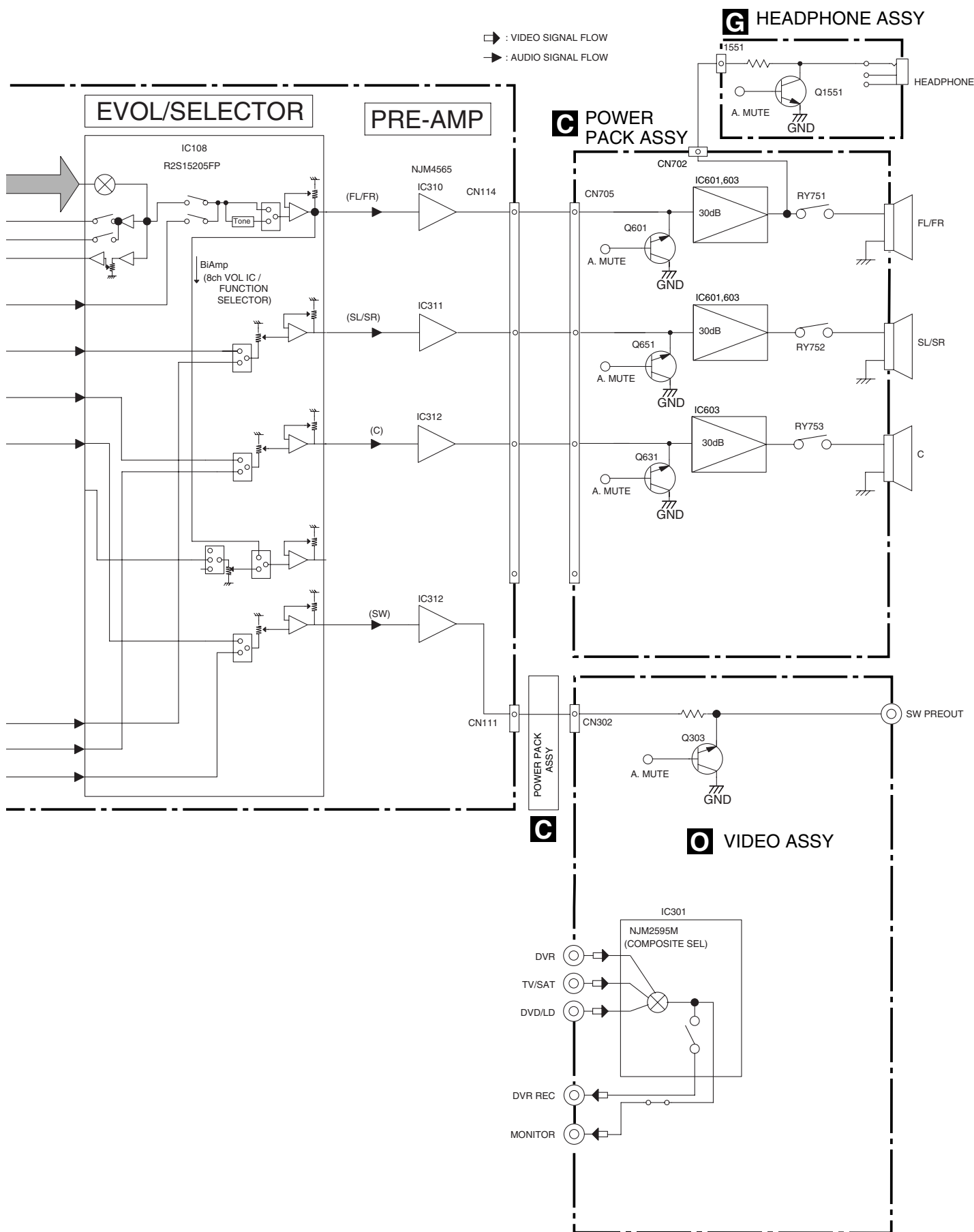
Mark	No.	Symbol and Description	VSX-517-K /KUCXJ	VSX-517-S /KUCXJ
NSP	11	Front Panel Assy	XXG3292	XXG3293
	12	TUNER Button	XAD3230	XAD3248
	13	SUB Button	XAD3231	XAD3249
	14	FUNCTION Button	XAD3232	XAD3250
	15	LISTEN Button	XAD3233	XAD3251
	16	JOG Button	XAD3240	XAD3252
	18	Pioneer Name Plate	XAM3006	VAM1129
	19	Front Panel	XMB3262	XMB3263
	20	JOG Knob	XAB3052	XAB3055
	21	VOL Knob	XAB3053	XAB3057
	22	STANDBY Button	XAD3202	XAD3203

3. BLOCK DIAGRAM AND SCHEMATIC DIAGRAM

3.1 BLOCK DIAGRAM

A

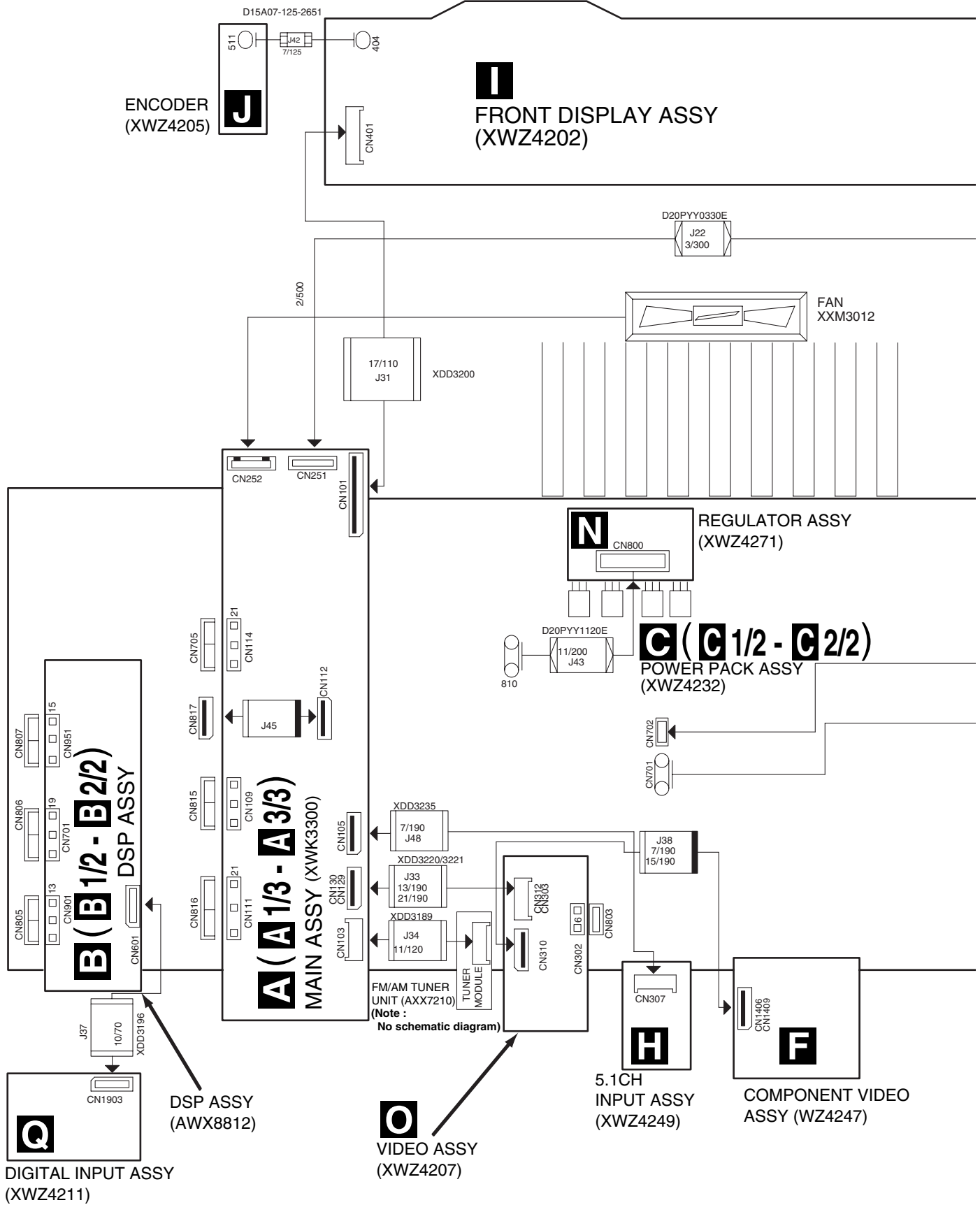


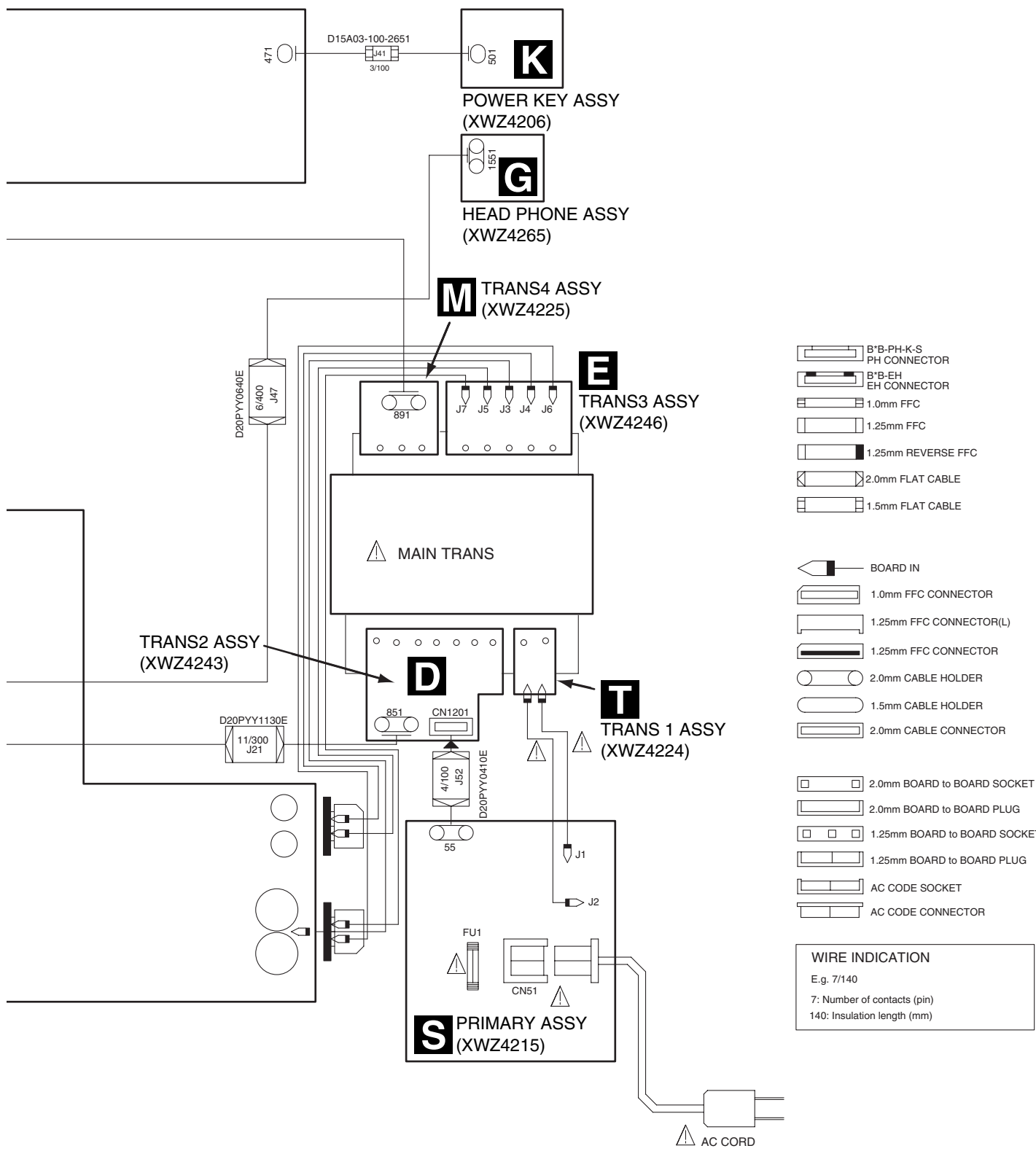



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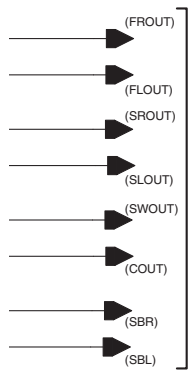
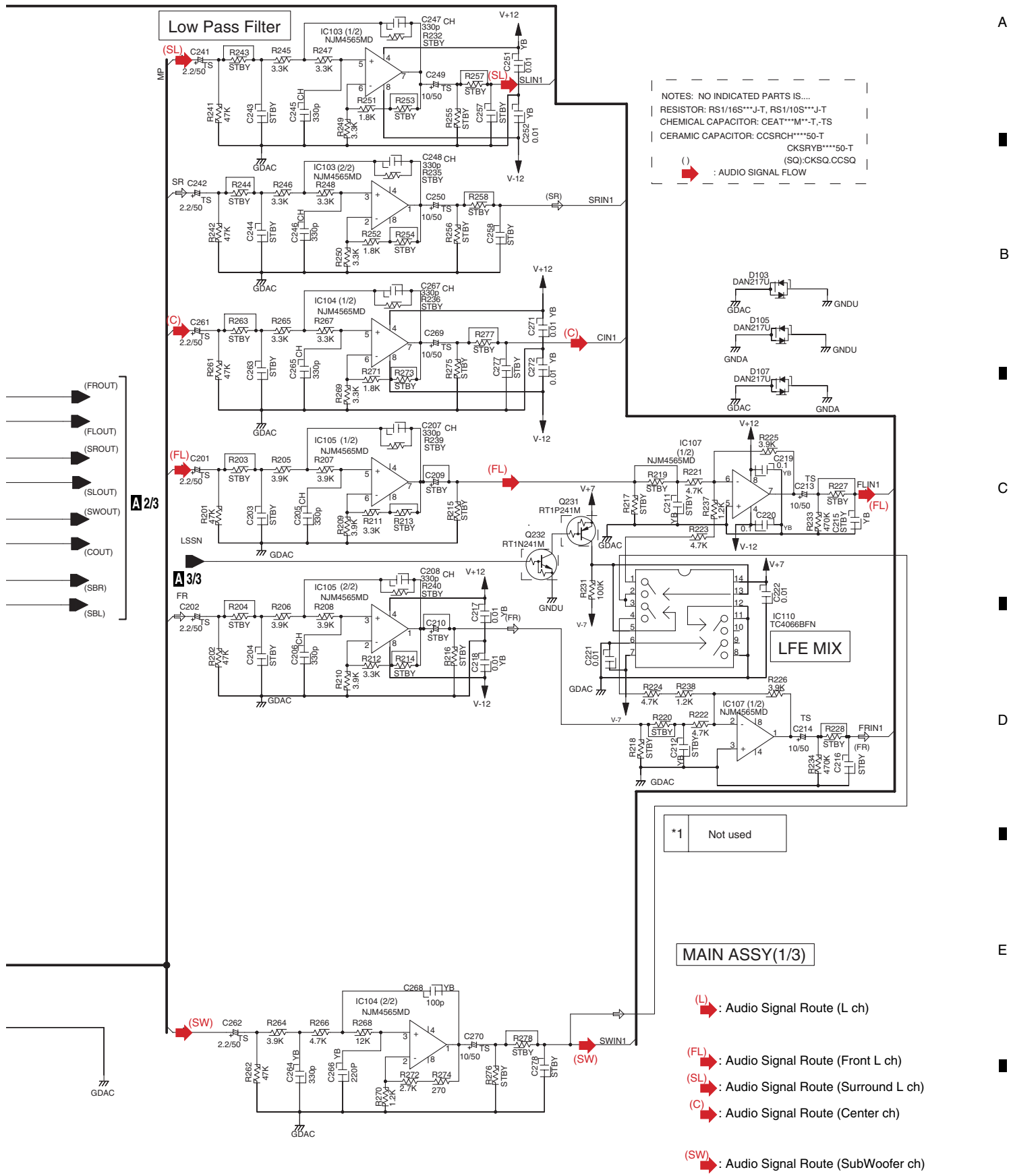
3.2 OVERALL WIRING CONNECTION DIAGRAM

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- When ordering service parts, be sure to refer to "EXPLODED VIEWS and PARTS LIST" or "PCB 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.
-  : The power supply is shown with the marked box.



A 2/3

A 3/3

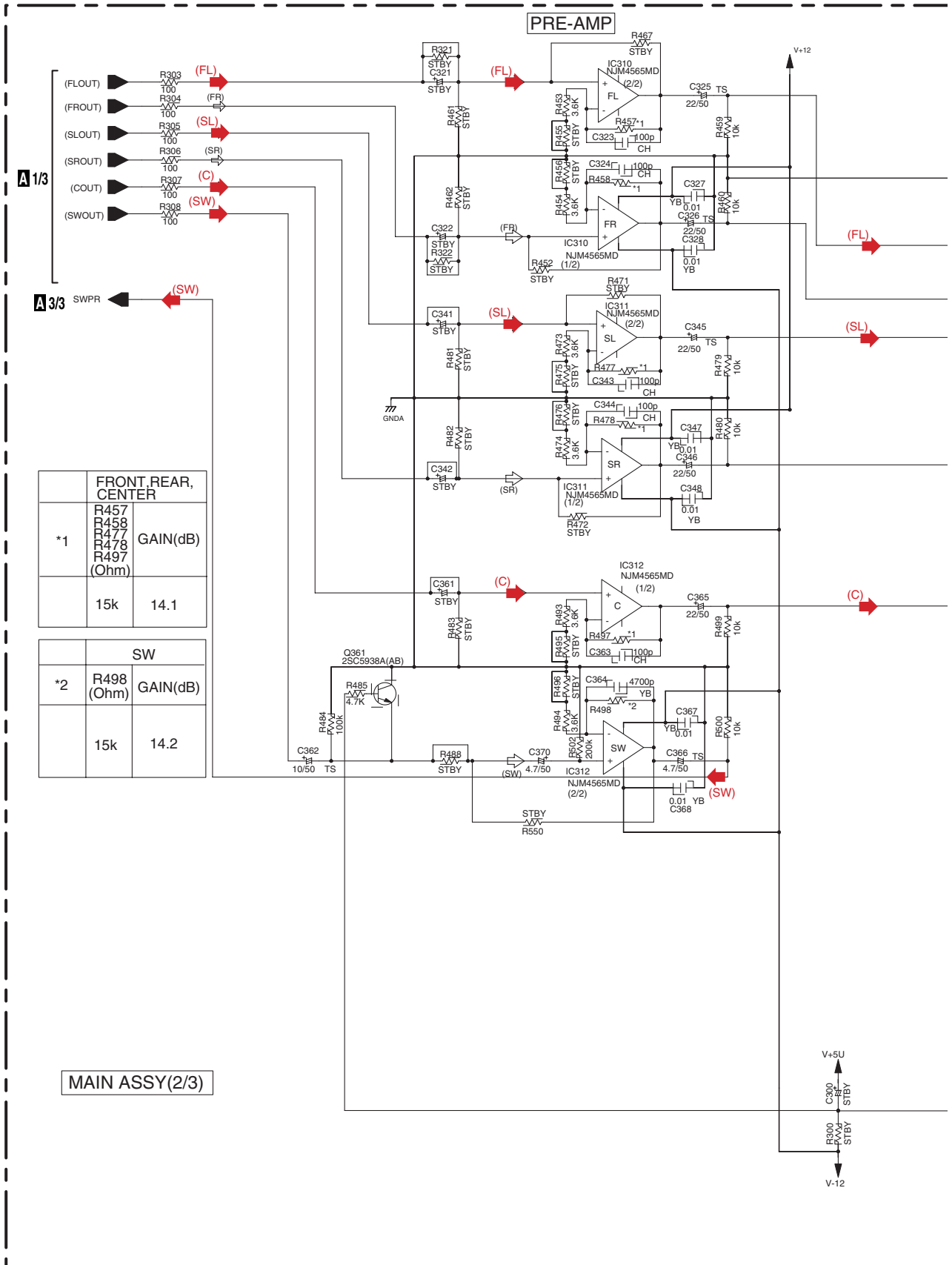
*1 Not used

MAIN ASSY(1/3)

A 1/3

3.4 MAIN ASSY (2/3)

A 2/3 MAIN ASSY (XWK3300)



A 2/3

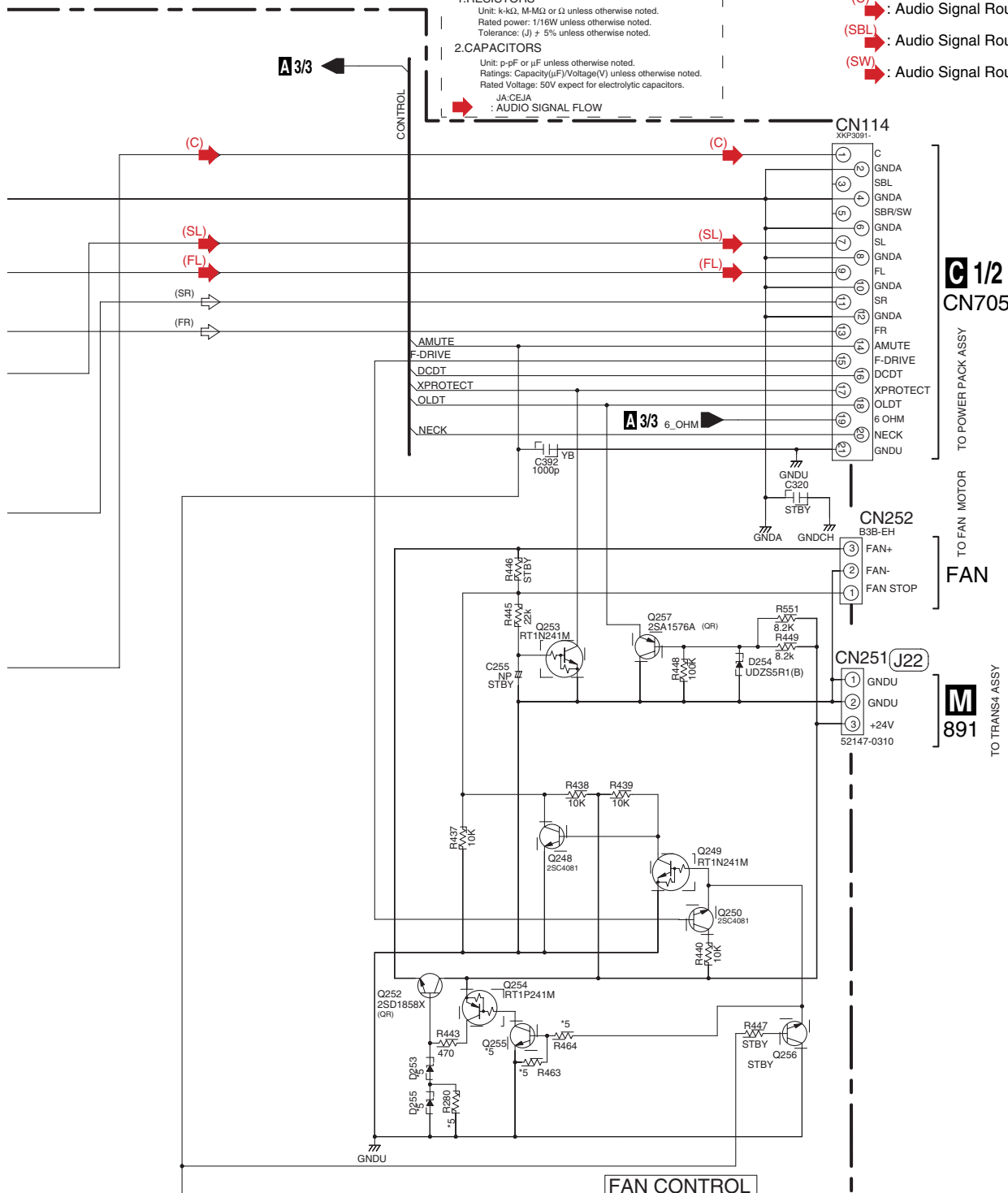
- (FL) : Audio Signal Route (Front L ch)
- (SL) : Audio Signal Route (Surround L ch)
- (C) : Audio Signal Route (Center ch)
- (SBL) : Audio Signal Route (Surround Back L ch)
- (SW) : Audio Signal Route (SubWoofer ch)

NOTE

1.RESISTORS
Unit: k-k Ω , M-M Ω or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) \pm 5% unless otherwise noted.

2.CAPACITORS
Unit: p-pF or μ F unless otherwise noted.
Ratings: Capacity(μ F)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.

JA:CEJA
: AUDIO SIGNAL FLOW



*5	
D253	UDZS27(B)
D255	-
R280	0
Q255	RT1N241M
R463	-
R464	0

A

B

C

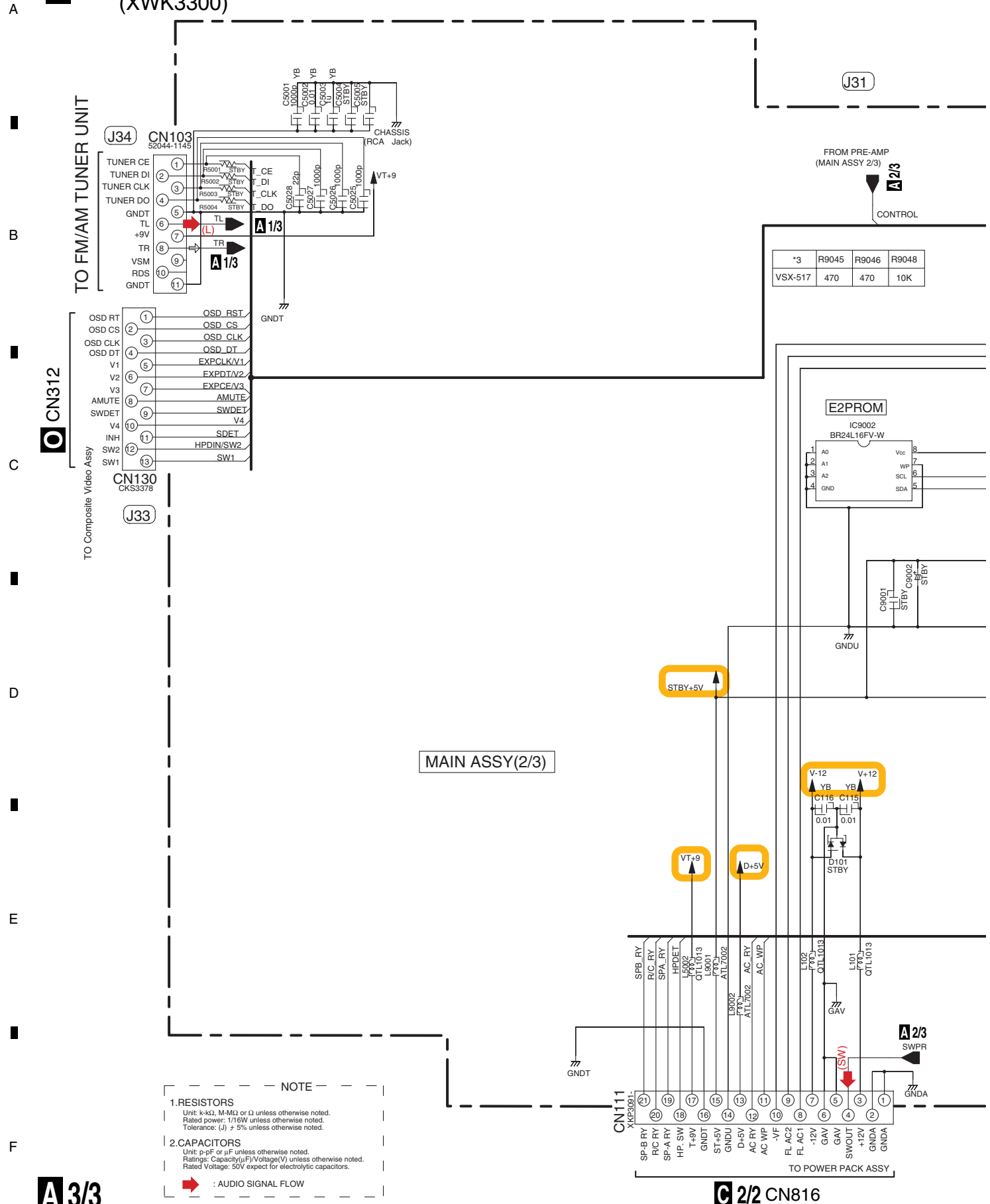
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3.5 MAIN ASSY (3/3)

A 3/3 MAIN ASSY (XWK3300)



NOTE

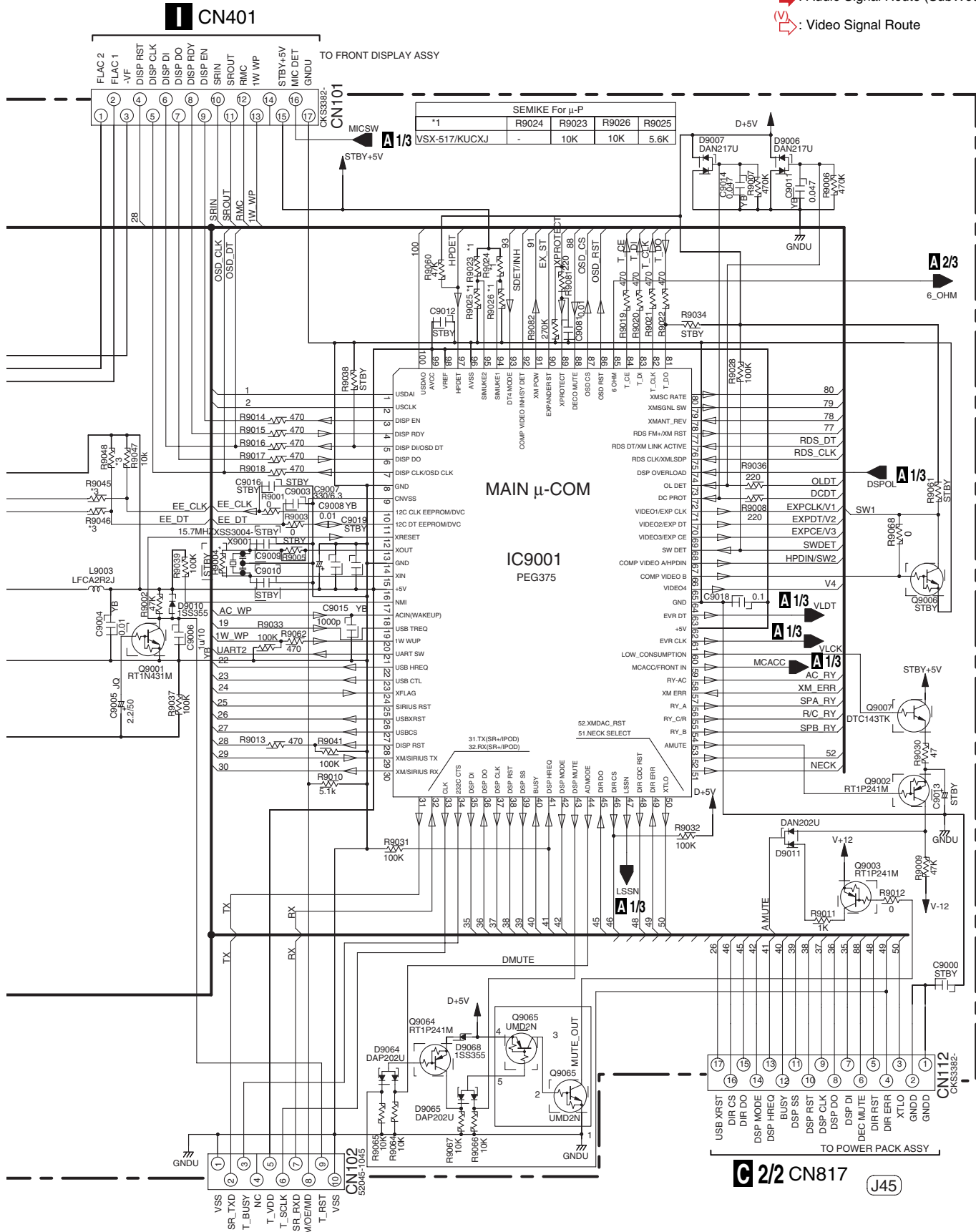
1. RESISTORS
 Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
 Rated power: 1/4W unless otherwise noted.
 Tolerance: (J) ± 5% unless otherwise noted.

2. CAPACITORS
 Unit: p-pF or μF unless otherwise noted.
 Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
 Rated Voltage: 50V expect for electrolytic capacitors.

➔ : AUDIO SIGNAL FLOW

A 3/3

- (L) : Audio Signal Route (L ch)
- (SW) : Audio Signal Route (SubWoofer ch)
- (V) : Video Signal Route



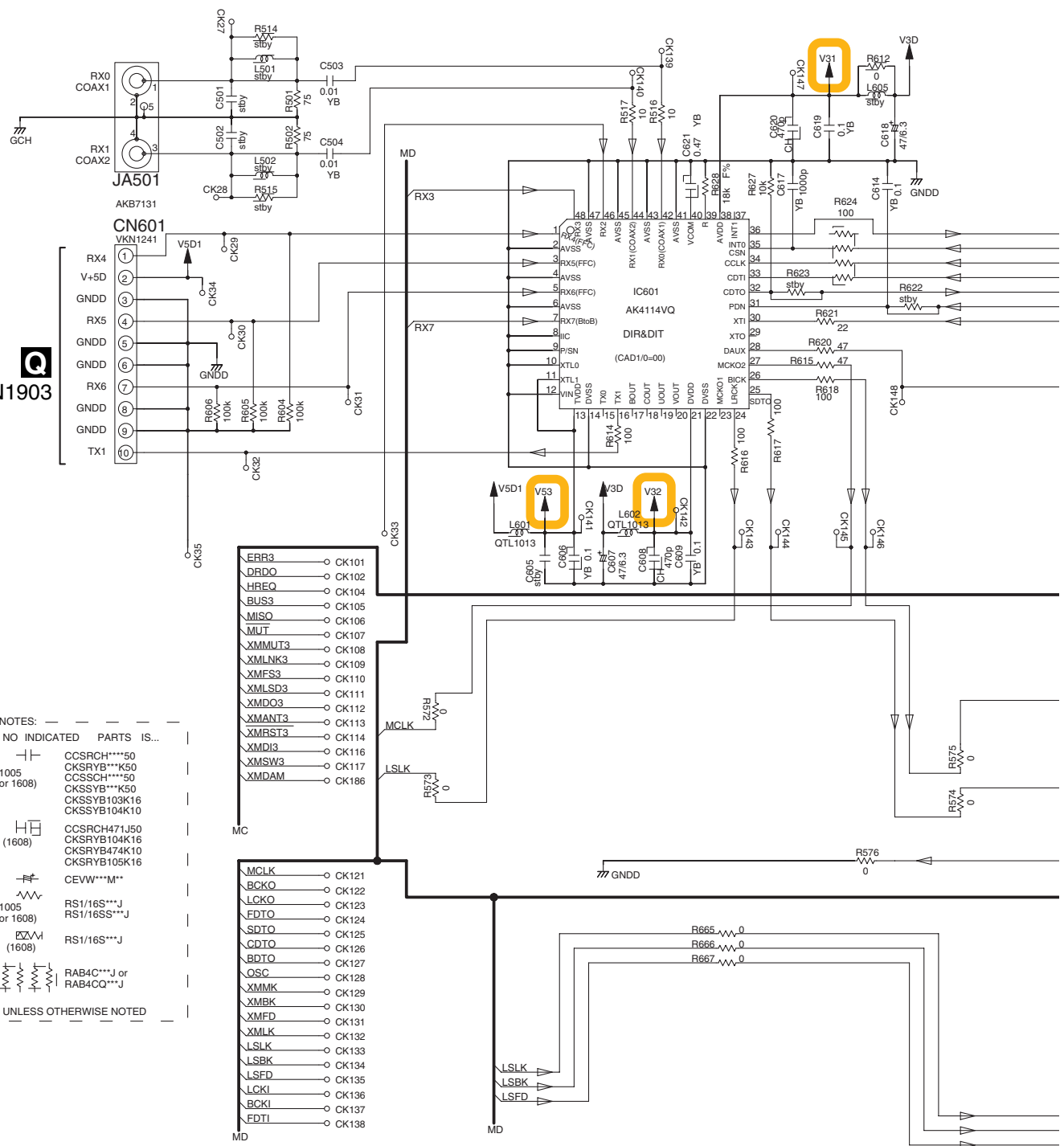
FOR FLASH U-COM

VSX-517-K

A 3/3

3.6 DSP ASSY (1/2)

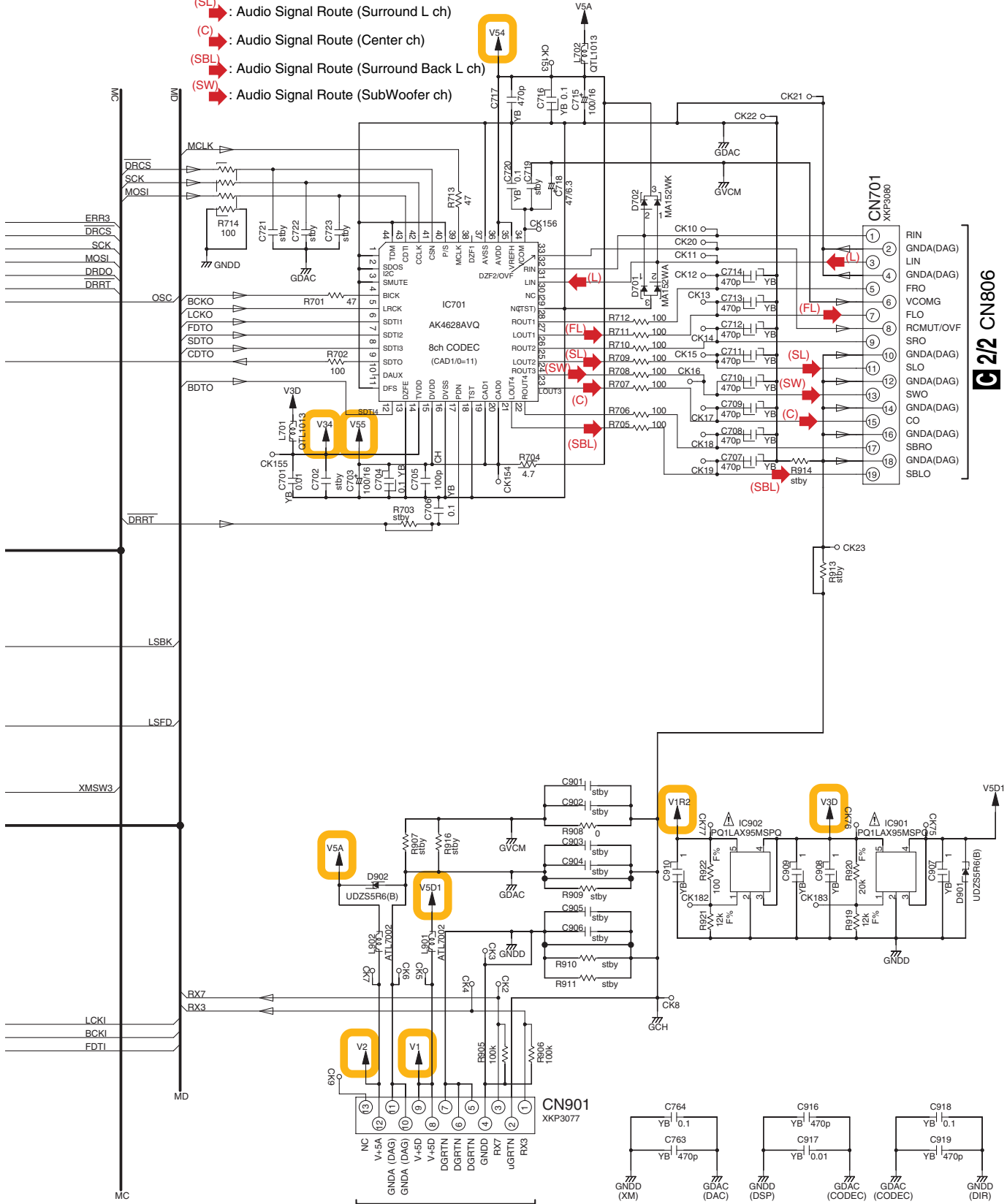
B 1/2 DSP ASSY (AWX8812)



NOTES: — — — — —
 NO INDICATED PARTS IS...
 (1005 or 1608) CCSRCH***50
 CKSRYP***K50
 CCSRCH***50
 CKSSYB***K50
 CKSSYB103K16
 CKSSYB104K10
 (1609) CCSRCH471J50
 CKSRYP104K16
 CKSRYP474K10
 CKSRYP105K16
 CEVW***M**
 (1005 or 1608) RS1/16S***J
 RS1/16SS***J
 (1609) RS1/16S***J
 RAB4C***J or RAB4CQ***J
 UNLESS OTHERWISE NOTED

- ERR3 ○ CK101
- DRDO ○ CK102
- HRFQ ○ CK104
- BUS3 ○ CK105
- MISO ○ CK106
- MUT ○ CK107
- XMMUT3 ○ CK108
- XMLNK3 ○ CK109
- XMFS3 ○ CK110
- XMLSD3 ○ CK111
- XMDO3 ○ CK112
- XMANT3 ○ CK113
- XMRST3 ○ CK114
- XMDI3 ○ CK116
- XMSW3 ○ CK117
- XMDAM ○ CK186
- MCLK ○ CK121
- BCKO ○ CK122
- LCKO ○ CK123
- FDTO ○ CK124
- SDTO ○ CK125
- CDTO ○ CK126
- BDTO ○ CK127
- OSC ○ CK128
- XMMK ○ CK129
- XMBK ○ CK130
- XMFD ○ CK131
- XMLK ○ CK132
- LSLK ○ CK133
- LSBK ○ CK134
- LSFD ○ CK135
- LCKI ○ CK136
- BCKI ○ CK137
- FDTI ○ CK138

- (L) : Audio Signal Route (L ch)
- (FL) : Audio Signal Route (Front L ch)
- (SL) : Audio Signal Route (Surround L ch)
- (C) : Audio Signal Route (Center ch)
- (SBL) : Audio Signal Route (Surround Back L ch)
- (SW) : Audio Signal Route (SubWoofer ch)



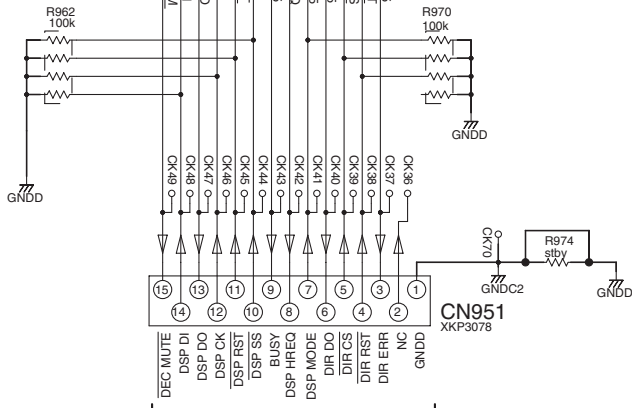
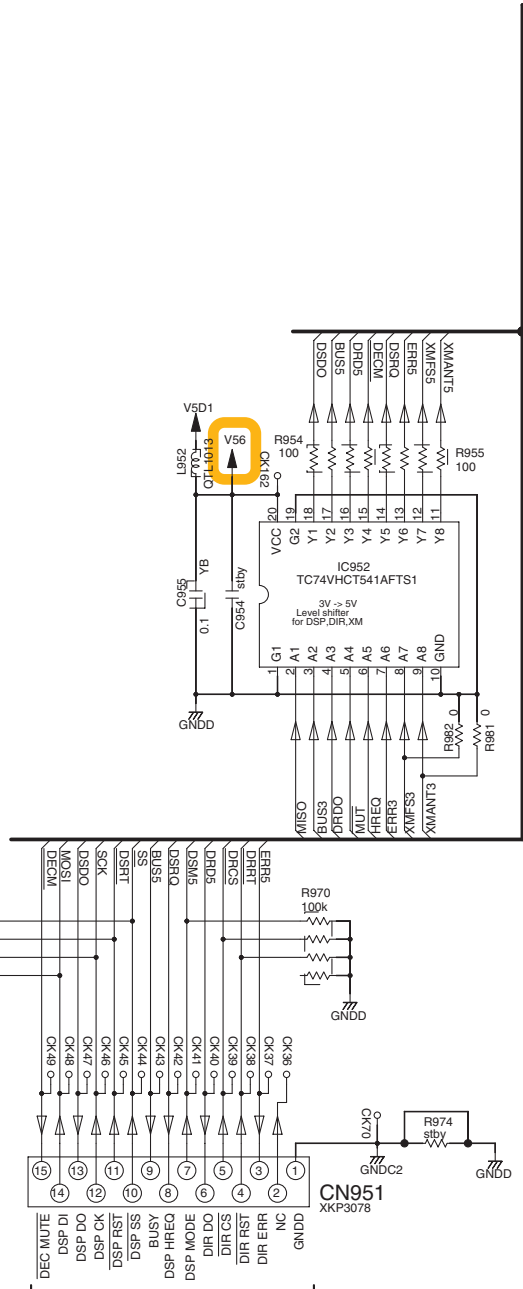
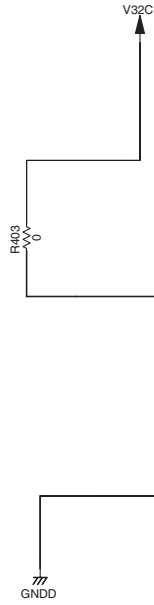
C 2/2 CN806

C 2/2 CN805

B 1/2

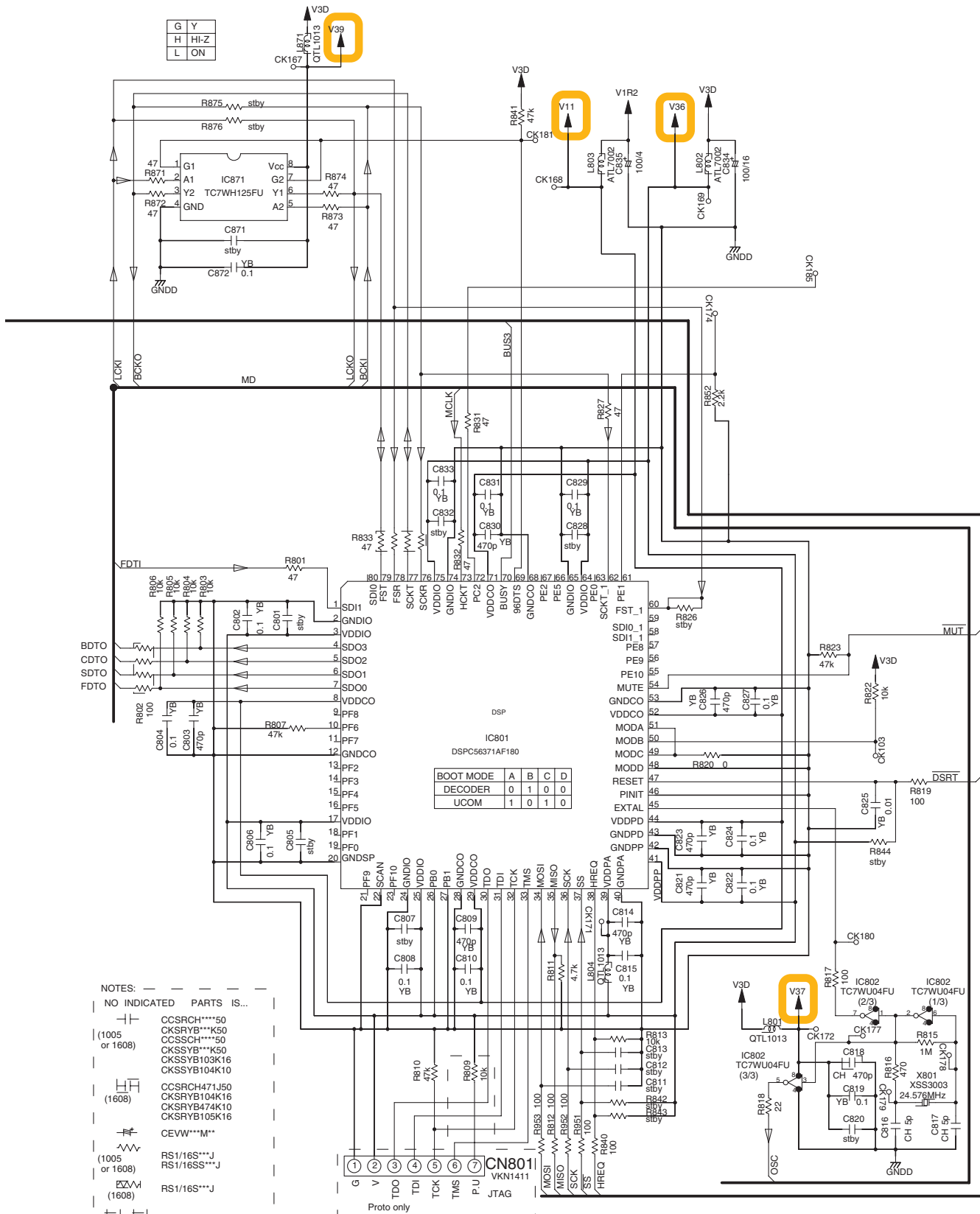
3.7 DSP ASSY (2/2)

B 2/2 DSP ASSY (AWX8812)



C 2/2 CN807

A
B
C
D
E
F



NOTES: - - - - -

NO INDICATED PARTS IS...

CCSRCH***50
CKSRYPB***K50
CCSSCH***50
CKSSYPB***K50
CKSSYPB103K16
CKSSYPB104K10

CCSRCH471J50
CKSRYPB104K16
CKSRYPB474K10
CKSRYPB105K16

CEVW***M**

RS1/16S***J
RS1/16SS***J

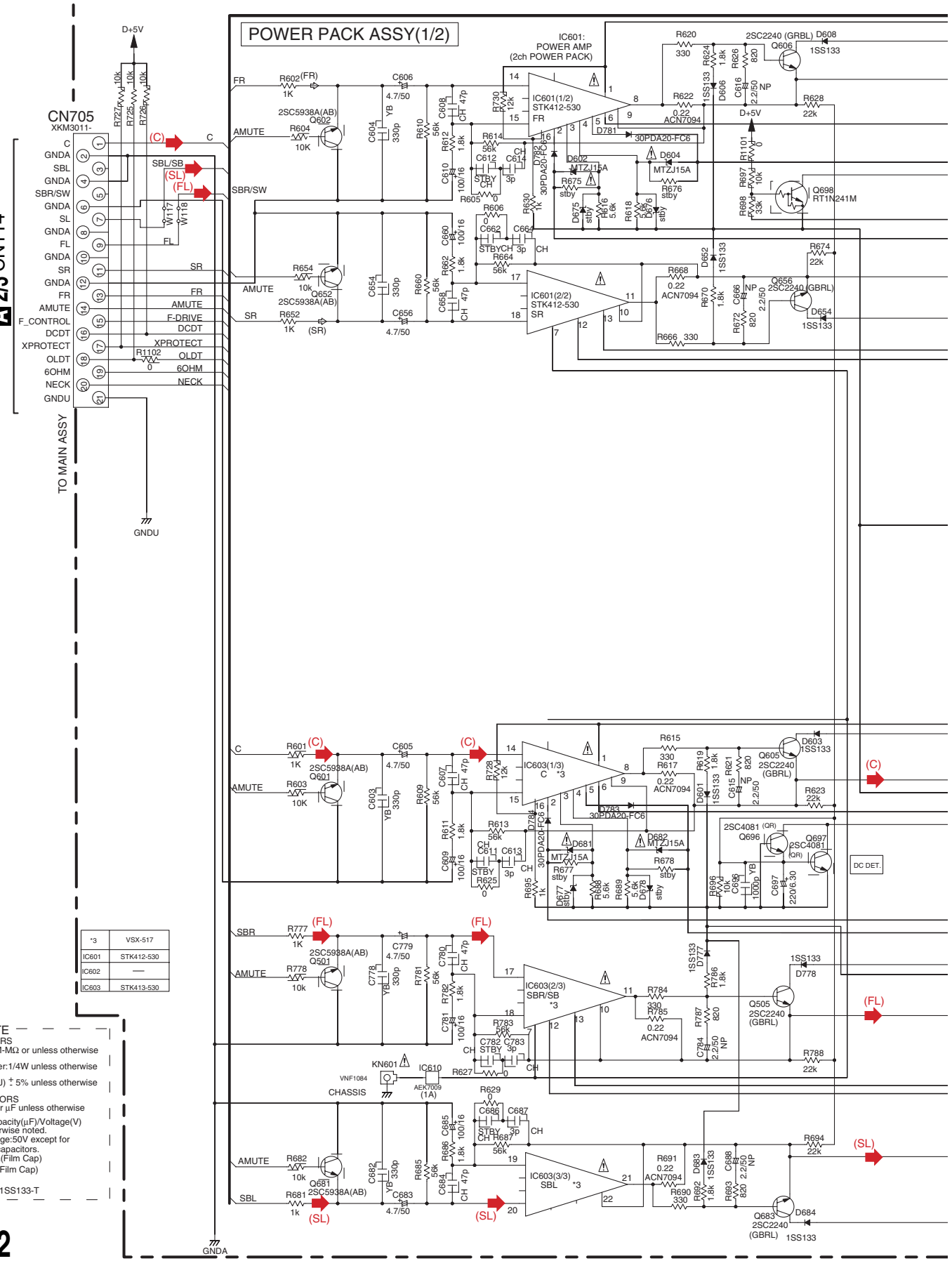
RS1/16S***J

RAB4C***J or
RAB4CO***J

UNLESS OTHERWISE NOTED

3.8 POWER PACK ASSY (1/2) , TRANS2 and TRANS3 ASSYS

C 1/2 POWER PACK ASSY (XWZ4232)



*3	VSX-517
IC601	STK412-530
IC602	—
IC603	STK413-530

- NOTE
- RESISTORS
Unit:k- Ω ,M-M Ω or unless otherwise noted.
Rated power:1/4W unless otherwise noted.
Tolerance:(J) \pm 5% unless otherwise noted.
 - CAPACITORS
Unit: p-pF or μ F unless otherwise noted.
Ratings: Capacity(μ F)/Voltage(V) unless otherwise noted.
Rated Voltage:50V except for electrolytic capacitors.
BA:COMBA(Film Cap)
M:COMMA(Film Cap)
 - DIODES
Indicated in 1SS133-T

C 1/2

VSX-517-K

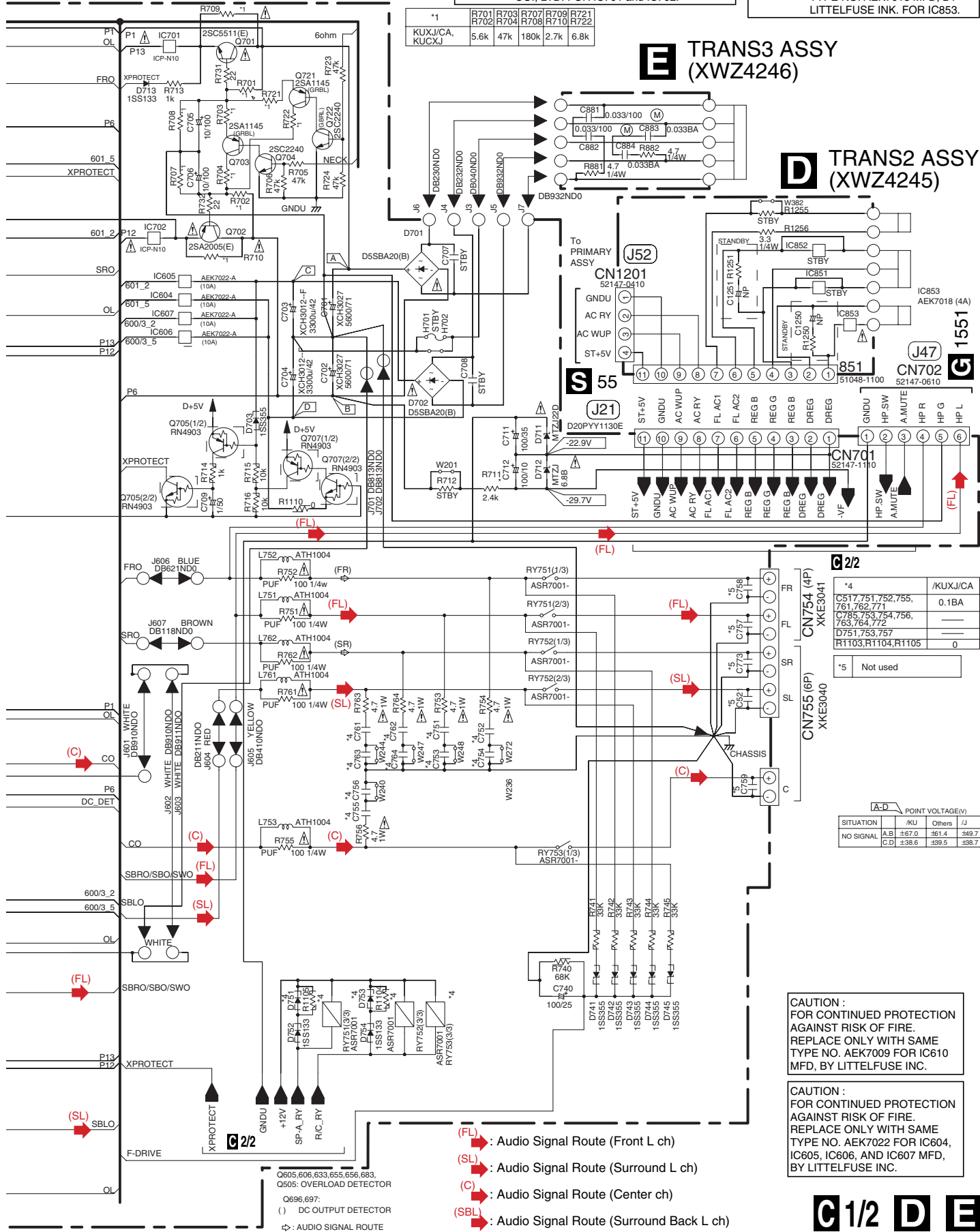
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. ICP-N10, MFD BY ROHM CO., LTD. FOR IC701 and IC702.

CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. AEK7018 MFD, BY LITTELFUSE INC. FOR IC853.

*1	R701	R703	R707	R709	R721
	R702	R704	R708	R710	R722
	KUXJ/CA,				
	KUCXJ	5.6k	47k	180k	2.7k 6.8k

E TRANS3 ASSY (XWZ4246)

D TRANS2 ASSY (XWZ4245)



- (FL) : Audio Signal Route (Front L ch)
- (SL) : Audio Signal Route (Surround L ch)
- (C) : Audio Signal Route (Center ch)
- (SBL) : Audio Signal Route (Surround Back L ch)

Q605,606,633,655,656,683,
Q505: OVERLOAD DETECTOR
Q696,697:
() DC OUTPUT DETECTOR
⇨: AUDIO SIGNAL ROUTE

*4		/KUXJ/CA
	C517,751,752,755, 761,762,771	0.1BA
	C785,793,754,756, 763,764,772	
	D751,753,772	
	R1103,R1104,R1105	0
*5	Not used	

POINT VOLTAGE(V)			
SITUATION	A/B	K/U	Others
NO SIGNAL	±67.0	±61.4	±49.7
	±38.6	±39.5	±38.7

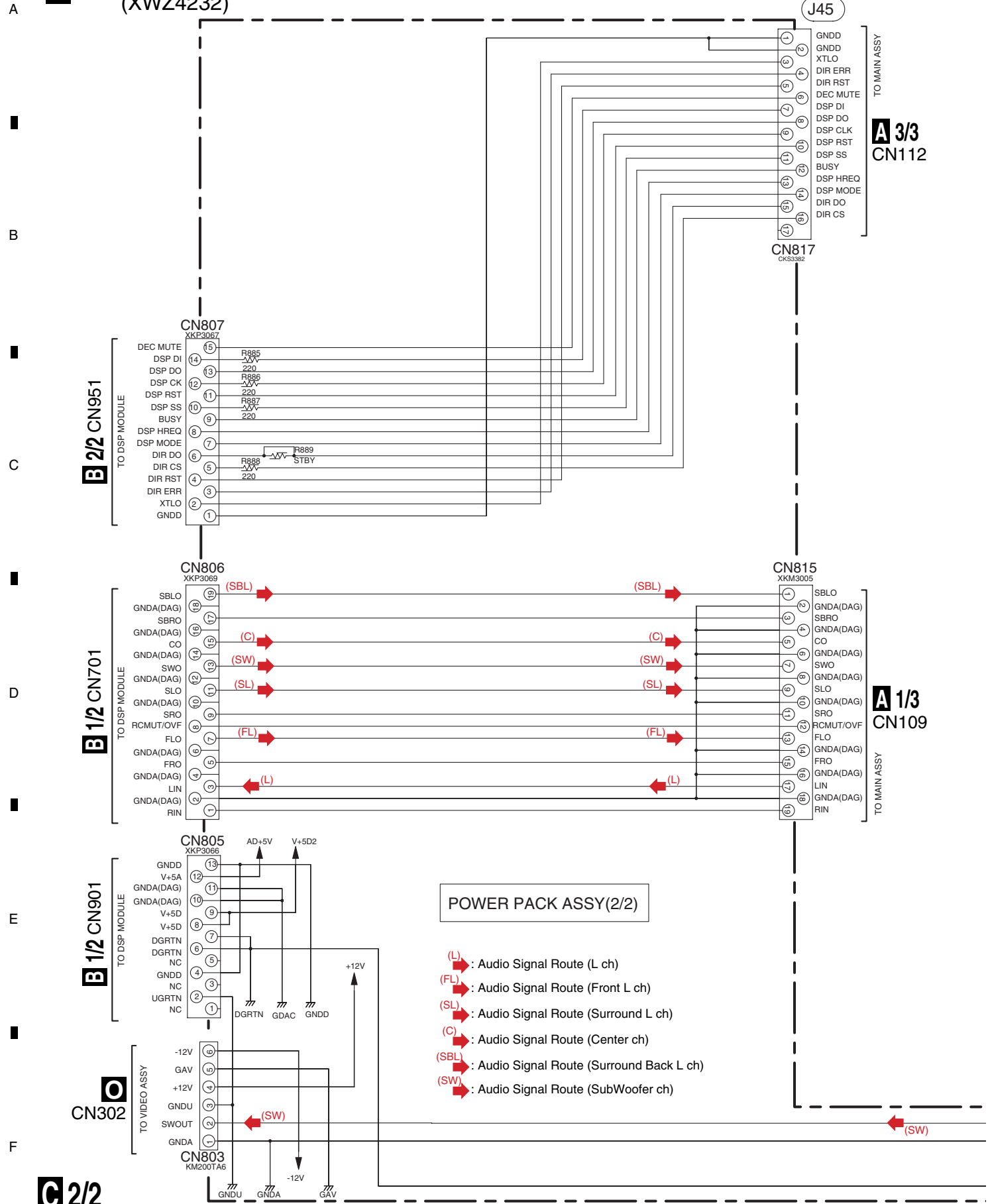
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. AEK7009 FOR IC610 MFD, BY LITTELFUSE INC.

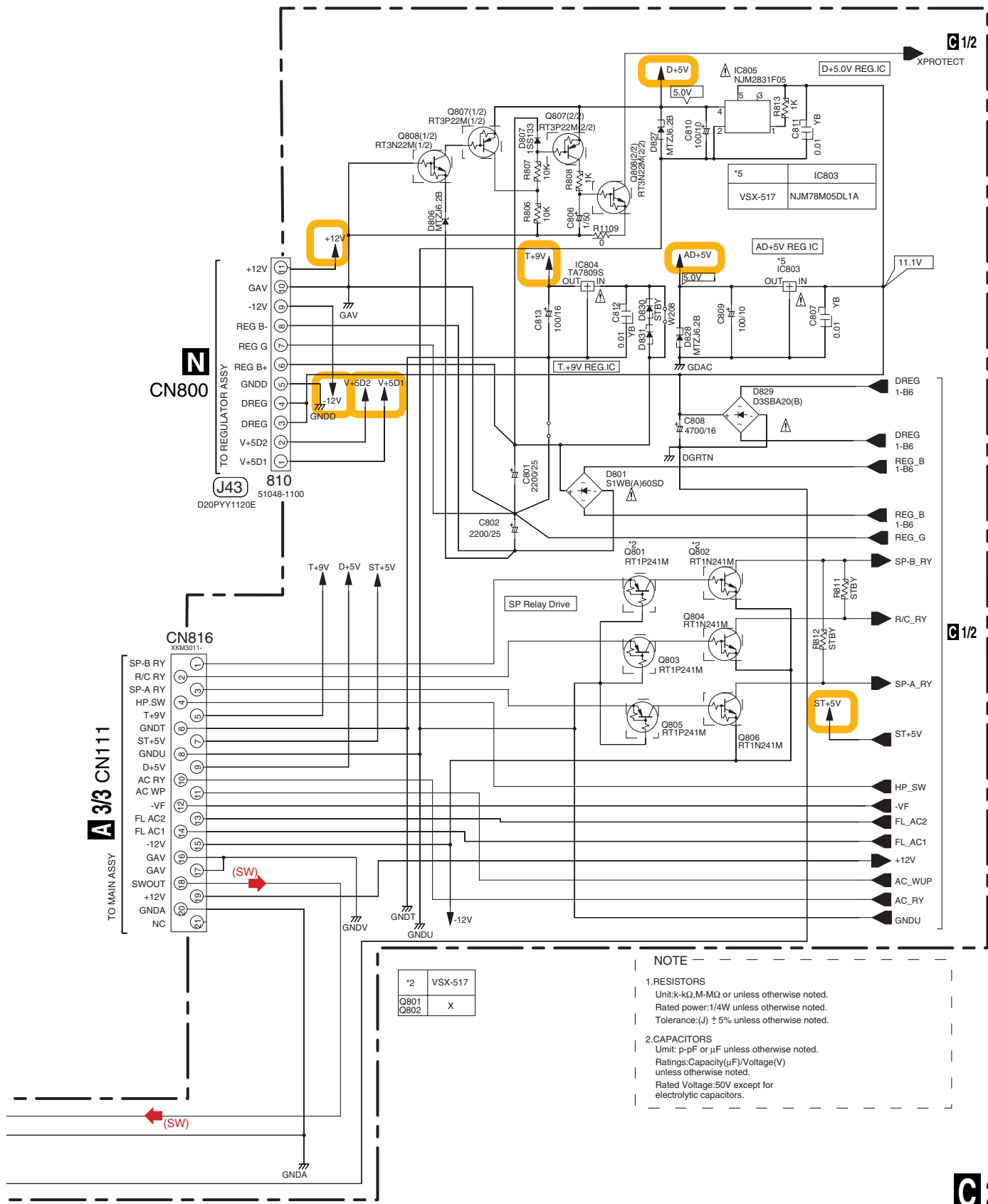
CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. AEK7022 FOR IC604, IC605, IC606, AND IC607 MFD, BY LITTELFUSE INC.

C 1/2 D E

3.9 POWER PACK ASSY (2/2)

C 2/2 POWER PACK ASSY (XWZ4232)





N
CN800

A 3/3 CN11

C 1/2

C 1/2

*2	VSX-517
Q801	X
Q802	X

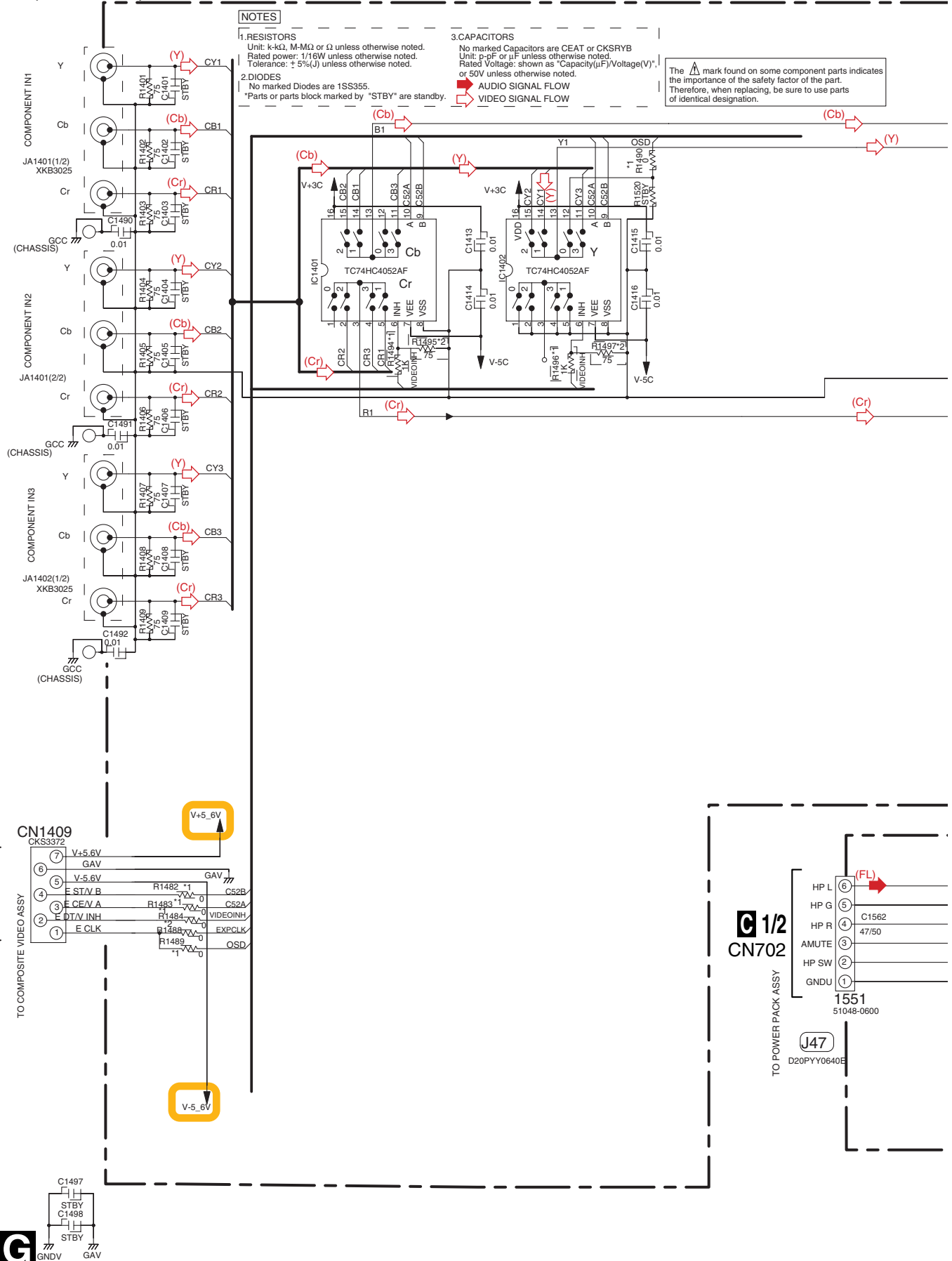
NOTE

1. RESISTORS
Unit:k- Ω ,M-M Ω or unless otherwise noted.
Rated power:1/4W unless otherwise noted.
Tolerance:(J) \pm 5% unless otherwise noted.

2. CAPACITORS
Unit: p-pF or μ F unless otherwise noted.
Ratings:Capacity(μ F)/Voltage(V) unless otherwise noted.
Rated Voltage:50V except for electrolytic capacitors.

3.10 COMPONENT VIDEO, HEAD PHONE and 5.1CH INPUT ASSYS

F COMPONENT VIDEO ASSY (XWZ4247)



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.

CN310

C 1/2 CN702

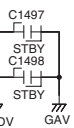
1551
51048-0600

J47

TO POWER PACK ASSY

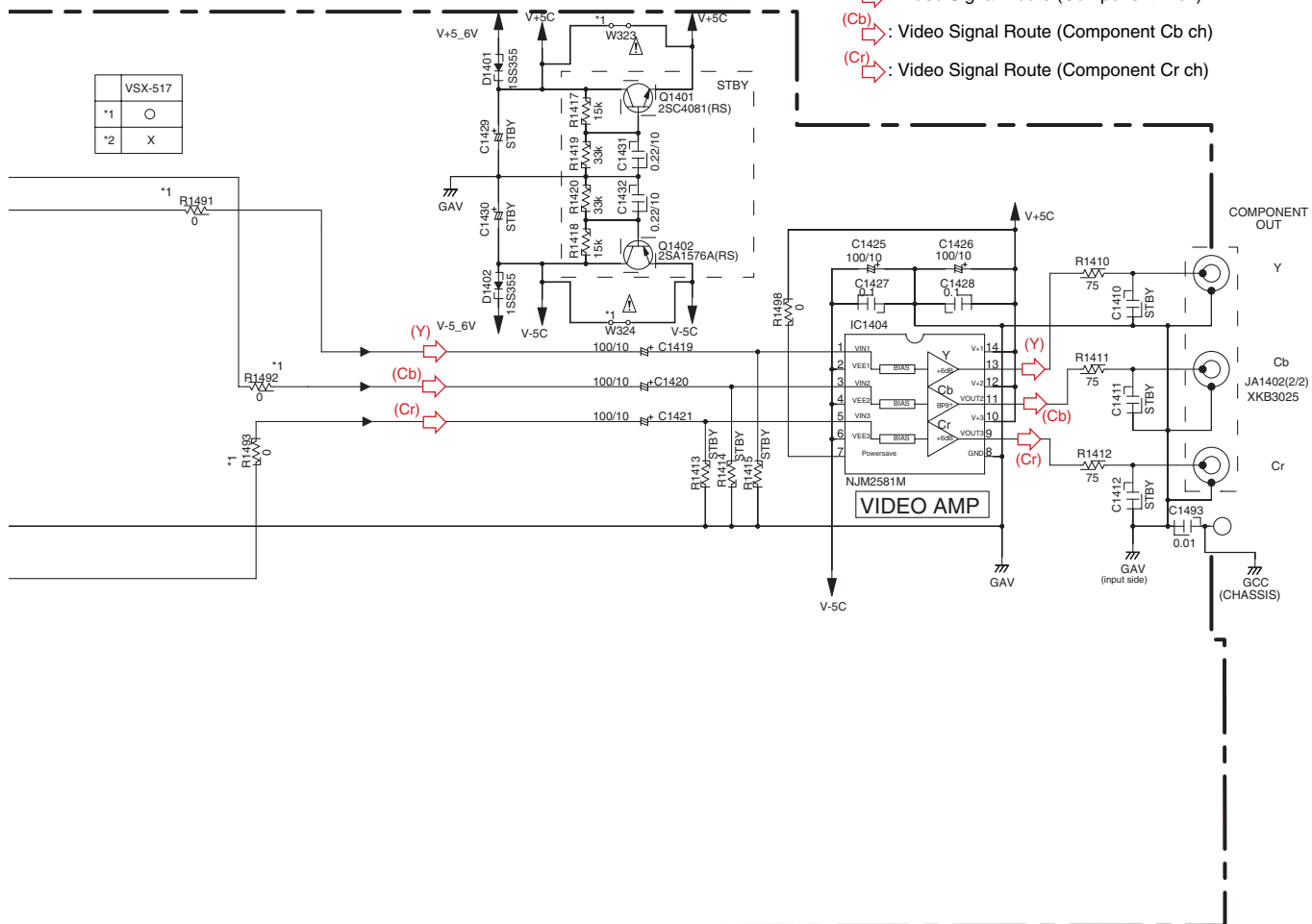
7	V+5.6V	GAV		
6	GAV		R1482	CS2B
5	V-5.6V		R1483	CS2A
4	E ST/V B		R1484	VIDEOINH
3	E CE/V A		R1485	EXPLCLK
2	E DT/V INH		R1486	OSD
1	E CLK		R1489	

6	HP L	(FL)
5	HP G	
4	HP R	C1562 47/50
3	AMUTE	
2	HP SW	
1	GNDU	

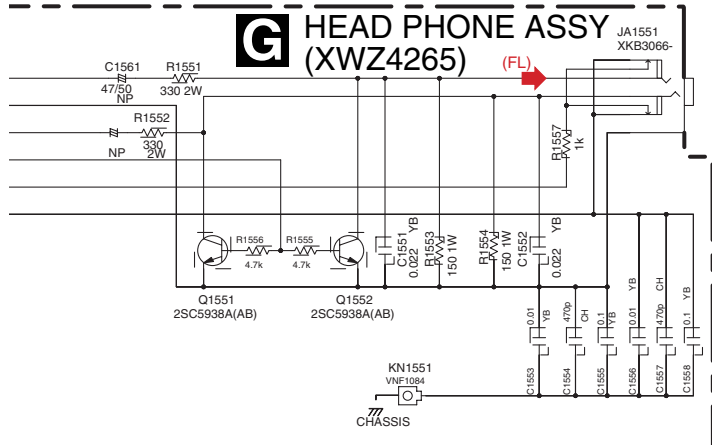


VSX-517	
*1	○
*2	X

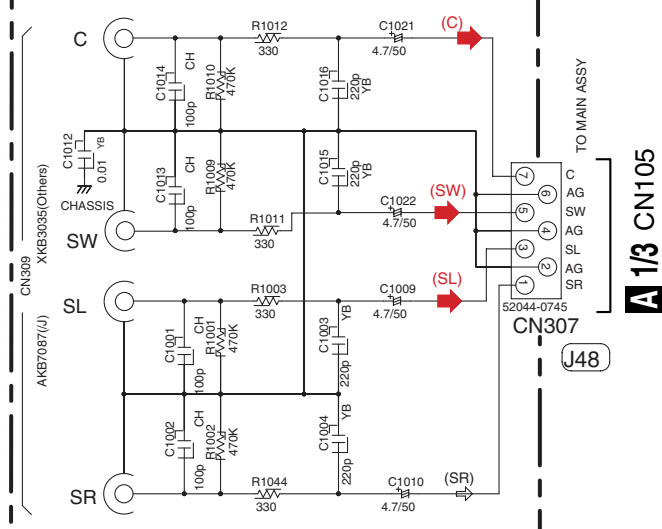
(Y) : Video Signal Route (Component Y ch)
 (Cb) : Video Signal Route (Component Cb ch)
 (Cr) : Video Signal Route (Component Cr ch)



G HEAD PHONE ASSY (XWZ4265)



H 5.1CH INPUT ASSY (XWZ4249)



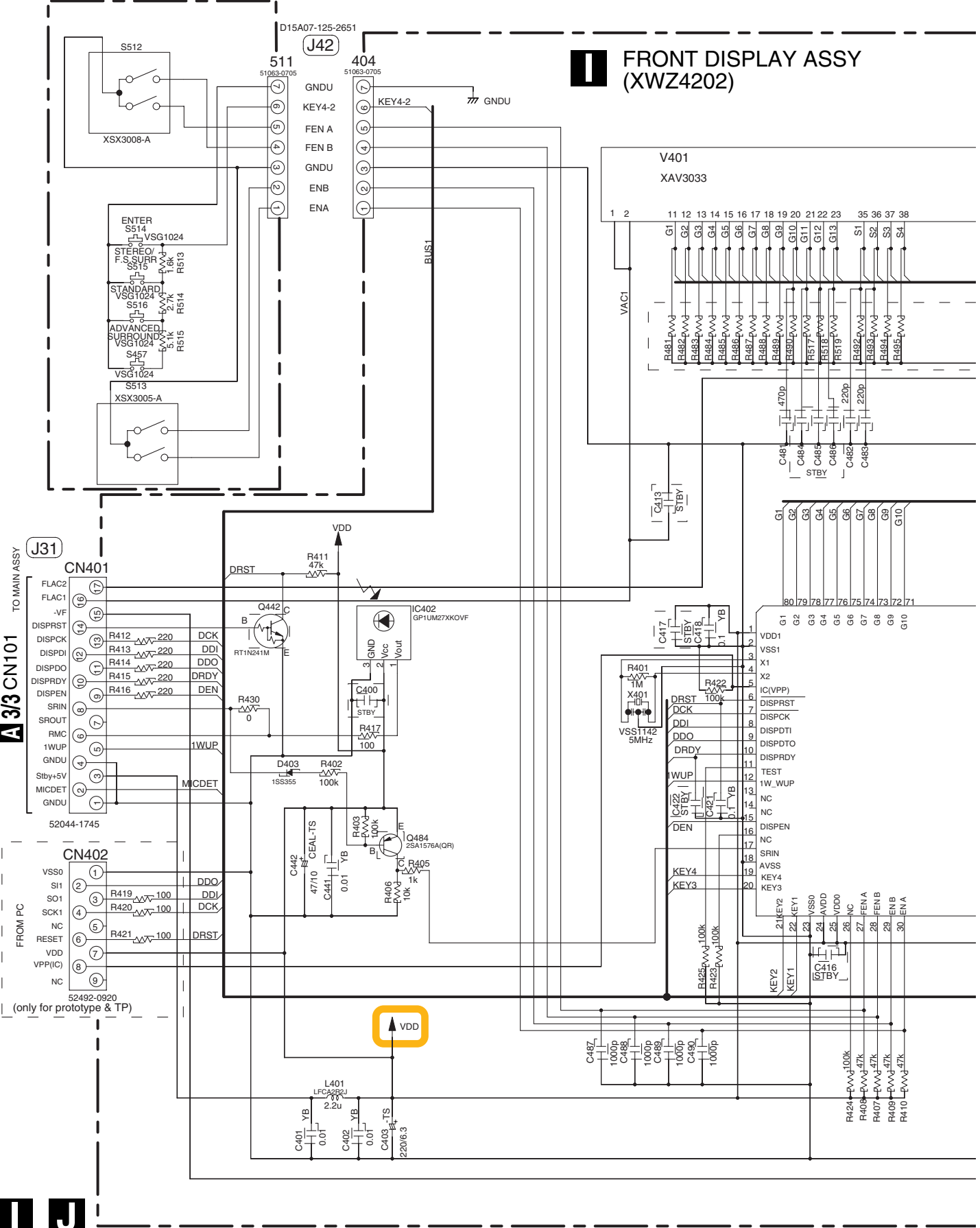
(FL) : Audio Signal Route (Front L ch)
 (SL) : Audio Signal Route (Surround L ch)
 (C) : Audio Signal Route (Center ch)
 (SW) : Audio Signal Route (SubWoofer ch)

F G H

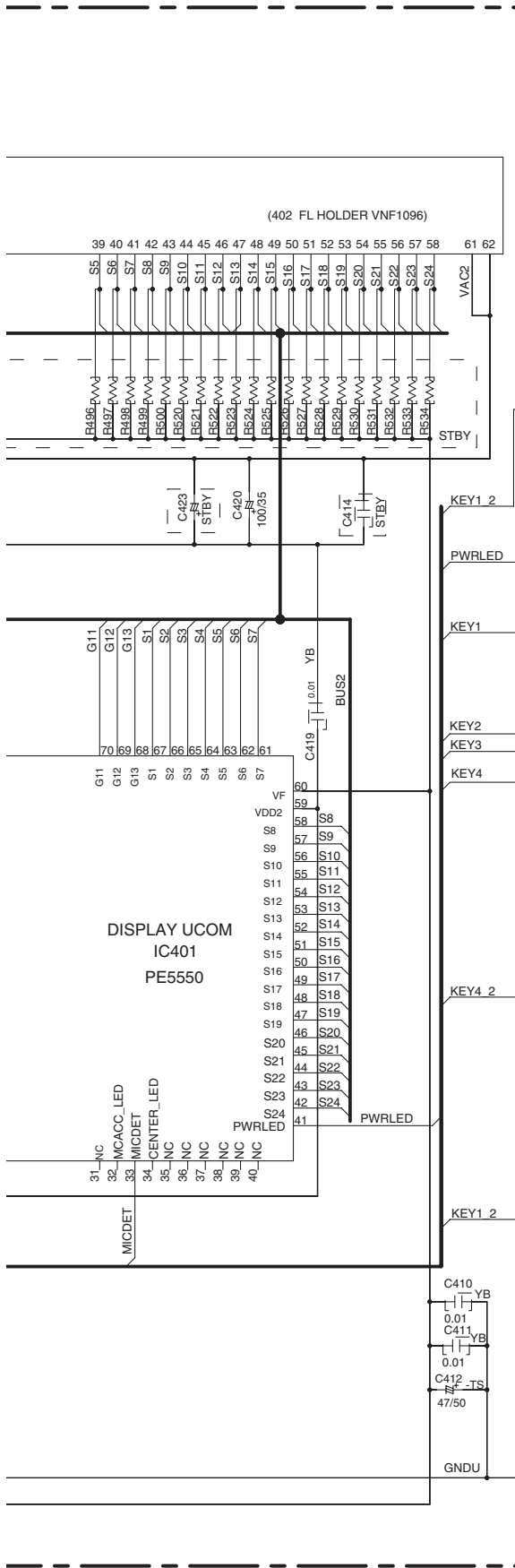
3.11 ROTARY ENCODER, FRONT DISPLAY and POWER KEY ASSYS

J ROTARY ENCODER ASSY (XWZ4205)

I FRONT DISPLAY ASSY (XWZ4202)



A
B
C
D
E
F



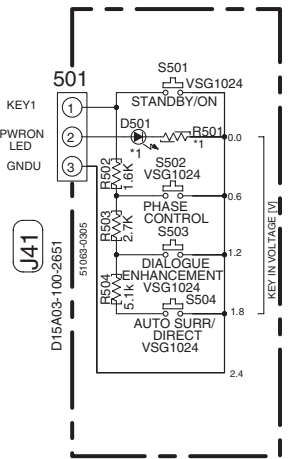
NOTE

1. RESISTORS
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) ± 5% unless otherwise noted.

2. CAPACITORS
Unit: p-pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.

3. TACT SWITCHES
Indicated in VSG1024

K POWER KEY ASSY (XWZ4206)

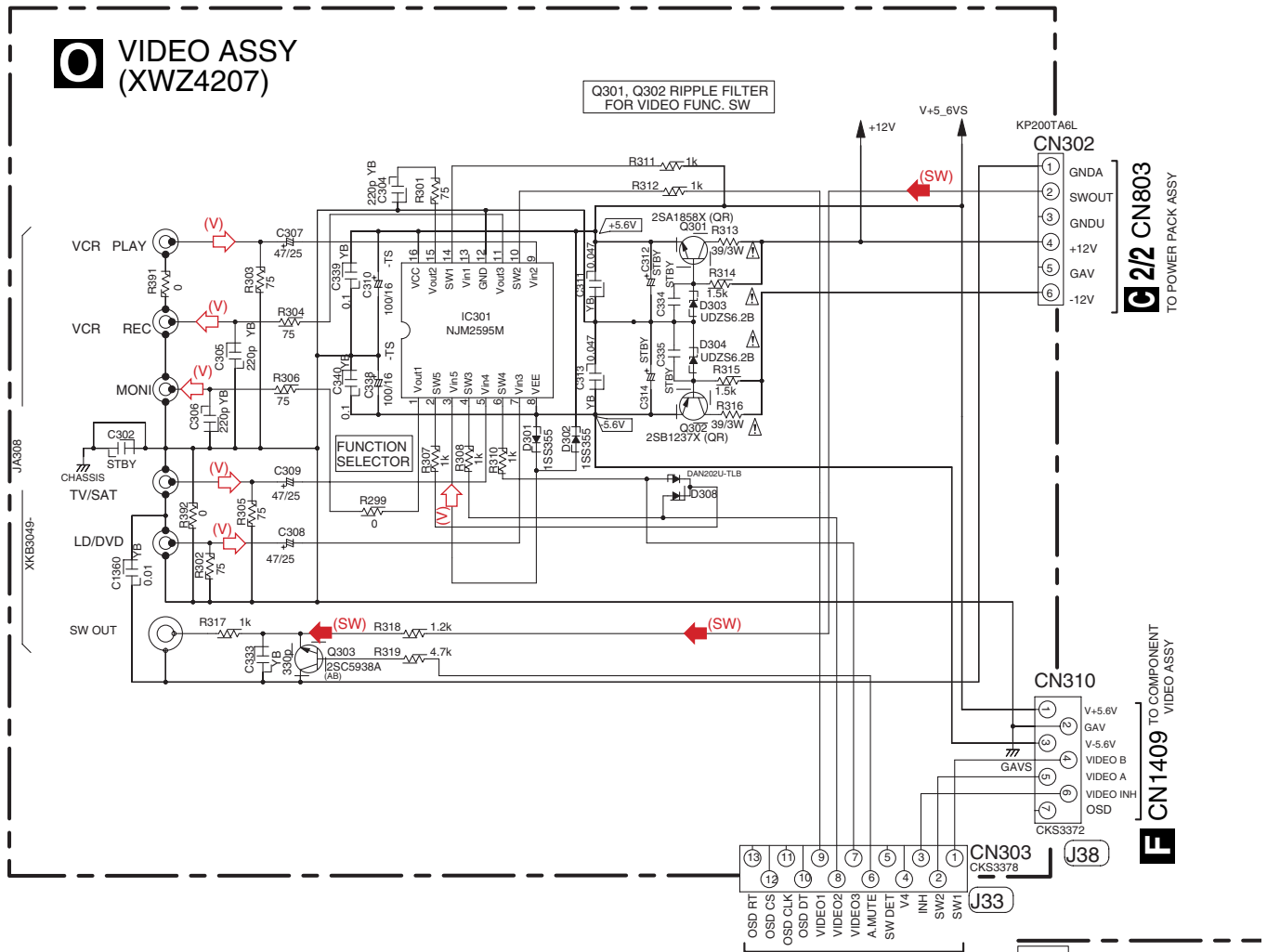


*1	VSX-517
D501	No use
R501	No use



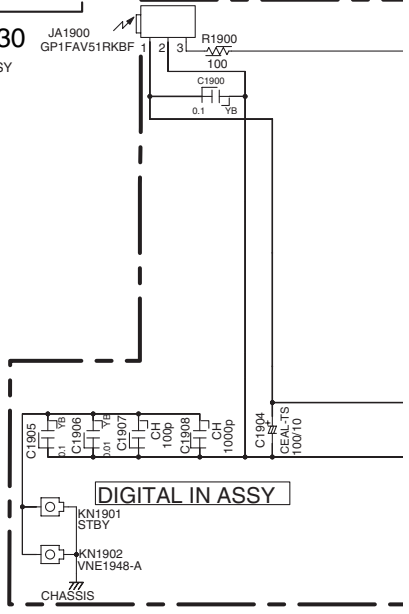
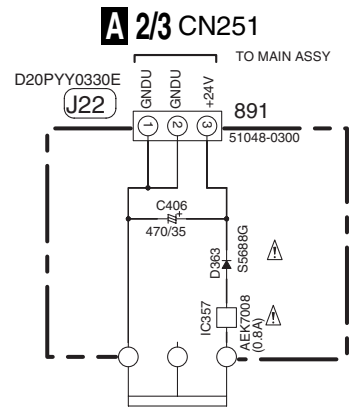
3.12 TRANS4, REGULATOR, VIDEO, DIGITAL INPUT, PRIMARY and TRANS1 ASSY

VIDEO ASSY (XWZ4207)



CAUTION : FOR CONTINUED PROTECTION AGAINST RISK OF FIRE. REPLACE ONLY WITH SAME TYPE NO. AEK7008 MFD, BY LITTELFUSE INK. FOR IC357.

M TRANS4 ASSY (XWZ4225)



- : Video Signal Route
- : Audio Signal Route (L ch)
- : Audio Signal Route (SubWoofer ch)

- NOTE**
- RESISTORS**
Unit: k-kΩ, M-MΩ or Ω unless otherwise noted.
Rated power: 1/16W unless otherwise noted.
Tolerance: (J) ± 5% unless otherwise noted.
 - CAPACITORS**
Unit: p-pF or μF unless otherwise noted.
Ratings: Capacity(μF)/Voltage(V) unless otherwise noted.
Rated Voltage: 50V expect for electrolytic capacitors.



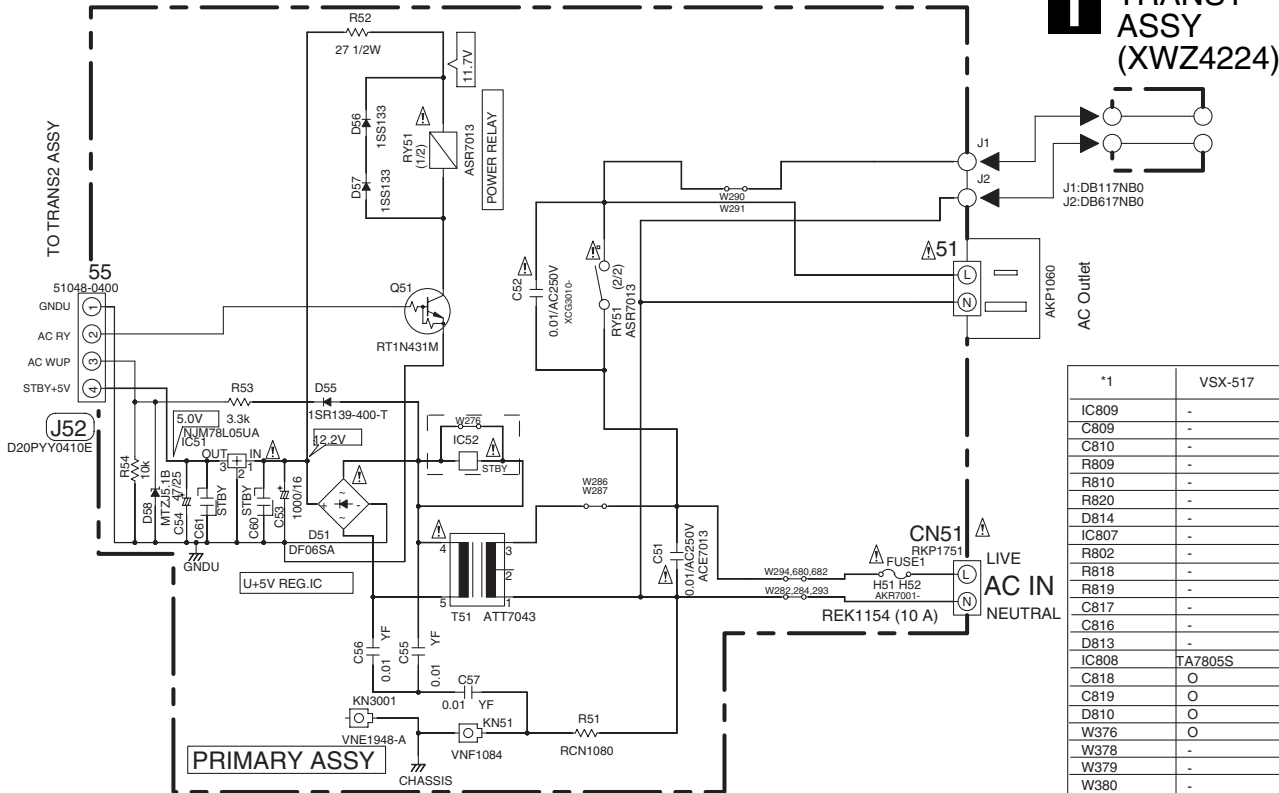
• NOTE FOR FUSE REPLACEMENT

CAUTION -FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE WITH SAME TYPE AND RATINGS OF FUSE.

S PRIMARY ASSY (XWZ4215)

T TRANS1 ASSY (XWZ4224)

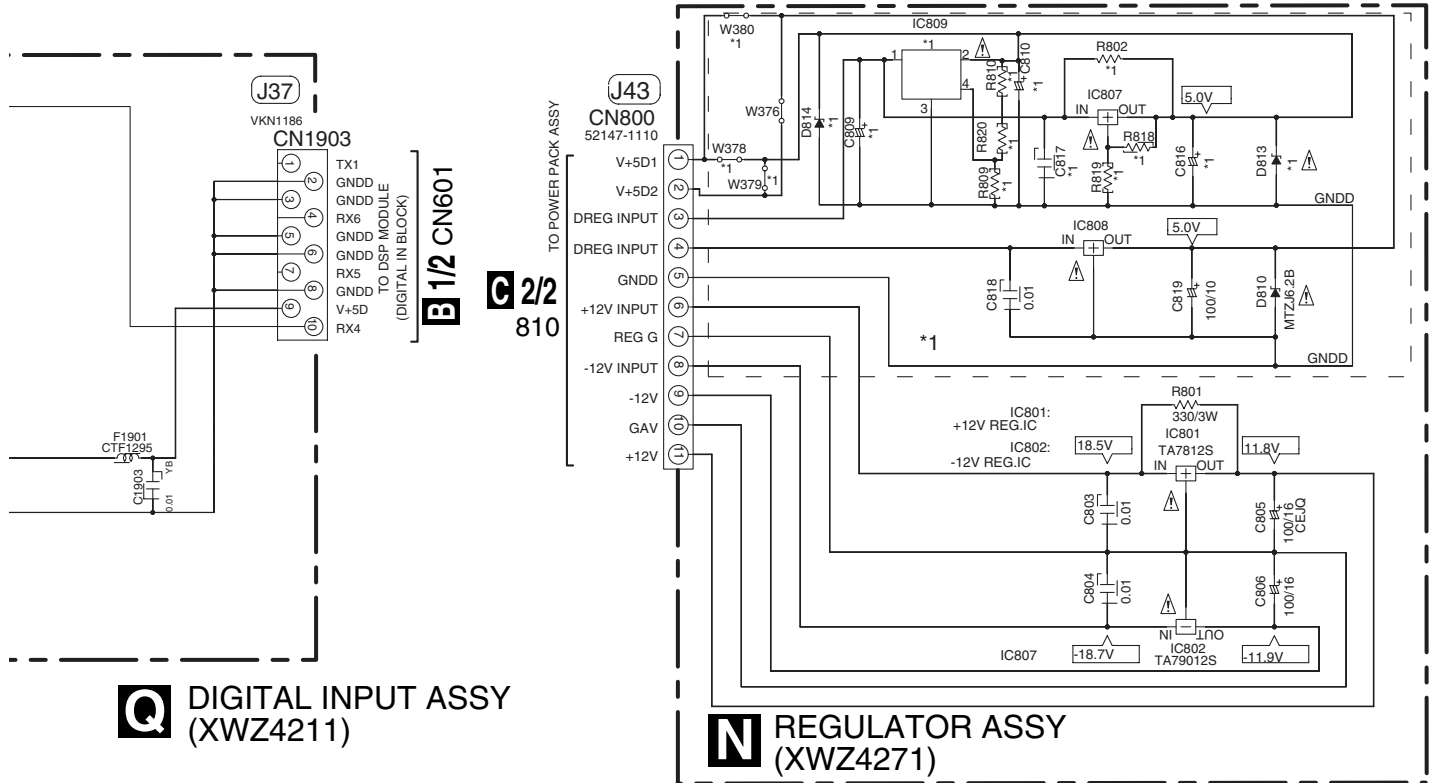
D CN1201



*1	VSX-517
IC809	-
C809	-
C810	-
R809	-
R810	-
R820	-
DB14	-
IC807	-
R802	-
R818	-
R819	-
C817	-
C816	-
DB13	-
IC808	TA7805S
C818	O
C819	O
DB10	O
W376	O
W378	O
W379	-
W380	-

Q DIGITAL INPUT ASSY (XWZ4211)

N REGULATOR ASSY (XWZ4271)


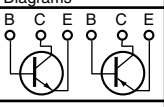

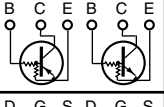

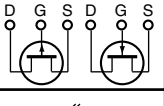

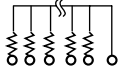




N Q S T

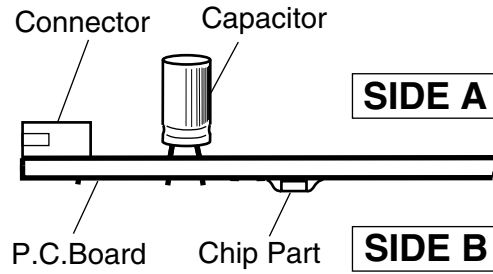
4. PCB CONNECTION DIAGRAM

NOTE FOR PCB DIAGRAMS :

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

Symbol In PCB Diagrams	Symbol In Schematic Diagrams	Part Name
		Transistor
		Transistor with resistor
		Field effect transistor
		Resistor array
		3-terminal regulator

3. The parts mounted on this PCB include all necessary parts for several destinations.
For further information for respective destinations, be sure to check with the schematic diagram.
4. View point of PCB diagrams.



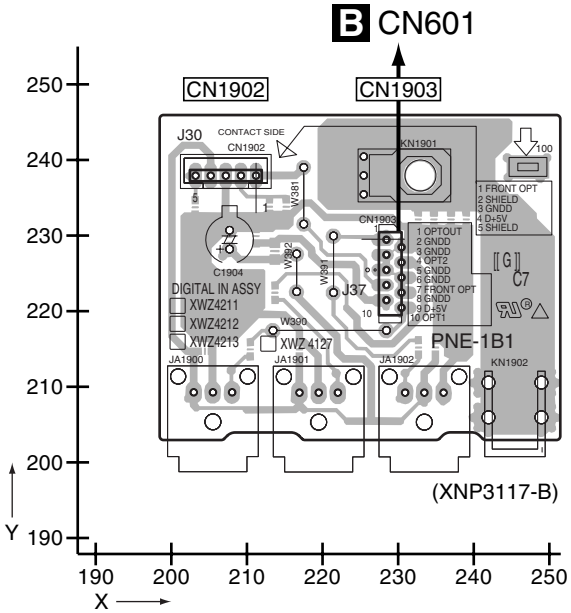
5 6 7 8

4.1 DIGITAL INPUT ASSY

SIDE A

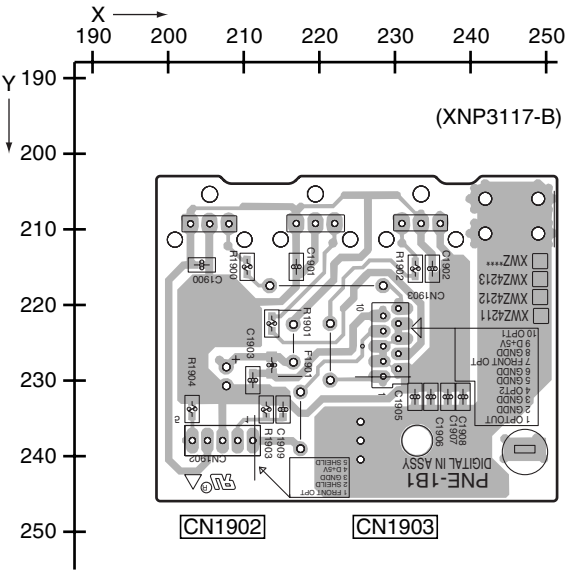
SIDE A

Q DIGITAL INPUT ASSY



SIDE B

SIDE B



Q DIGITAL INPUT ASSY

Q

Q

4.2 MAIN ASSY

SIDE A

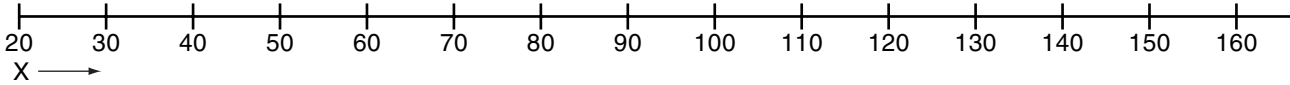
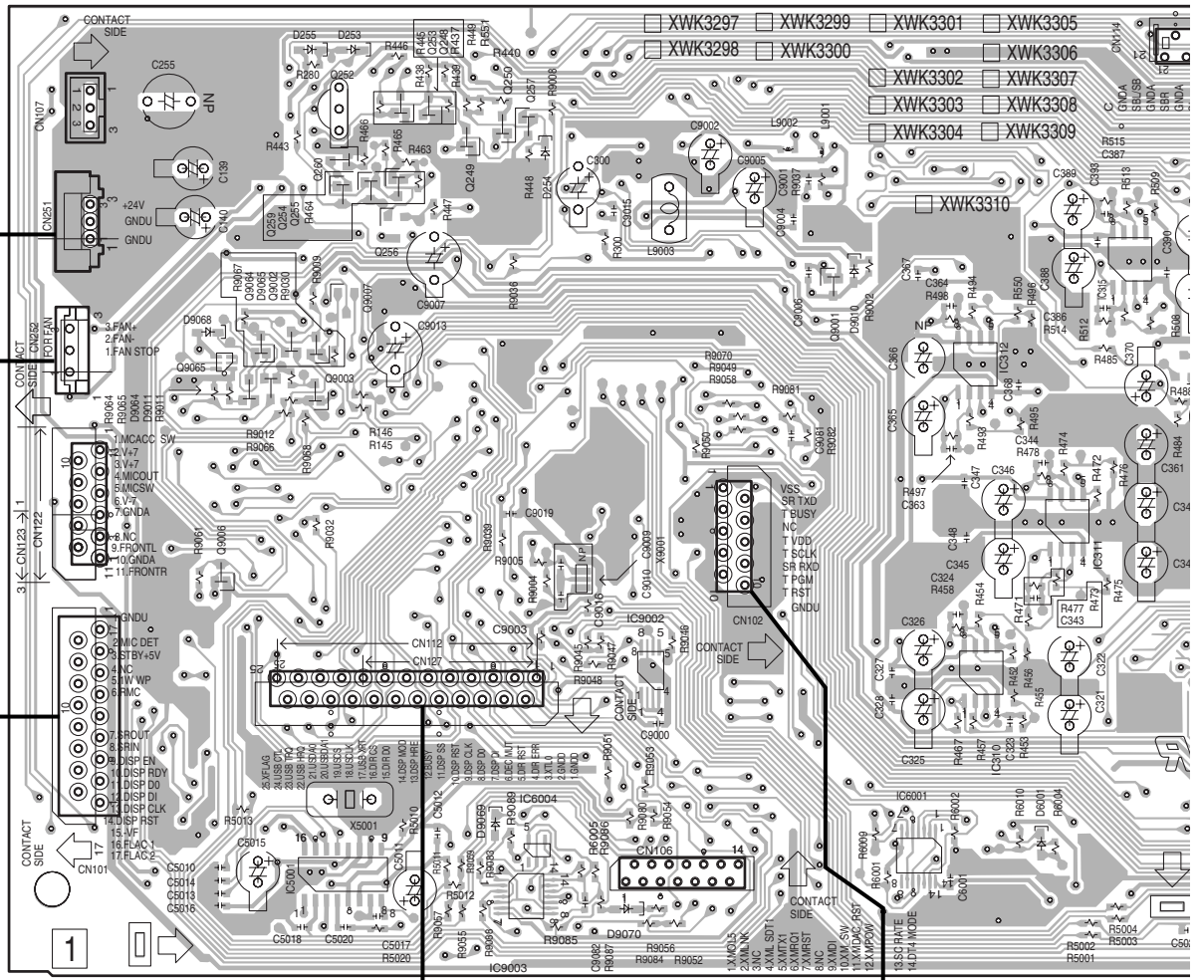
A MAIN ASSY

DC Fan Motor

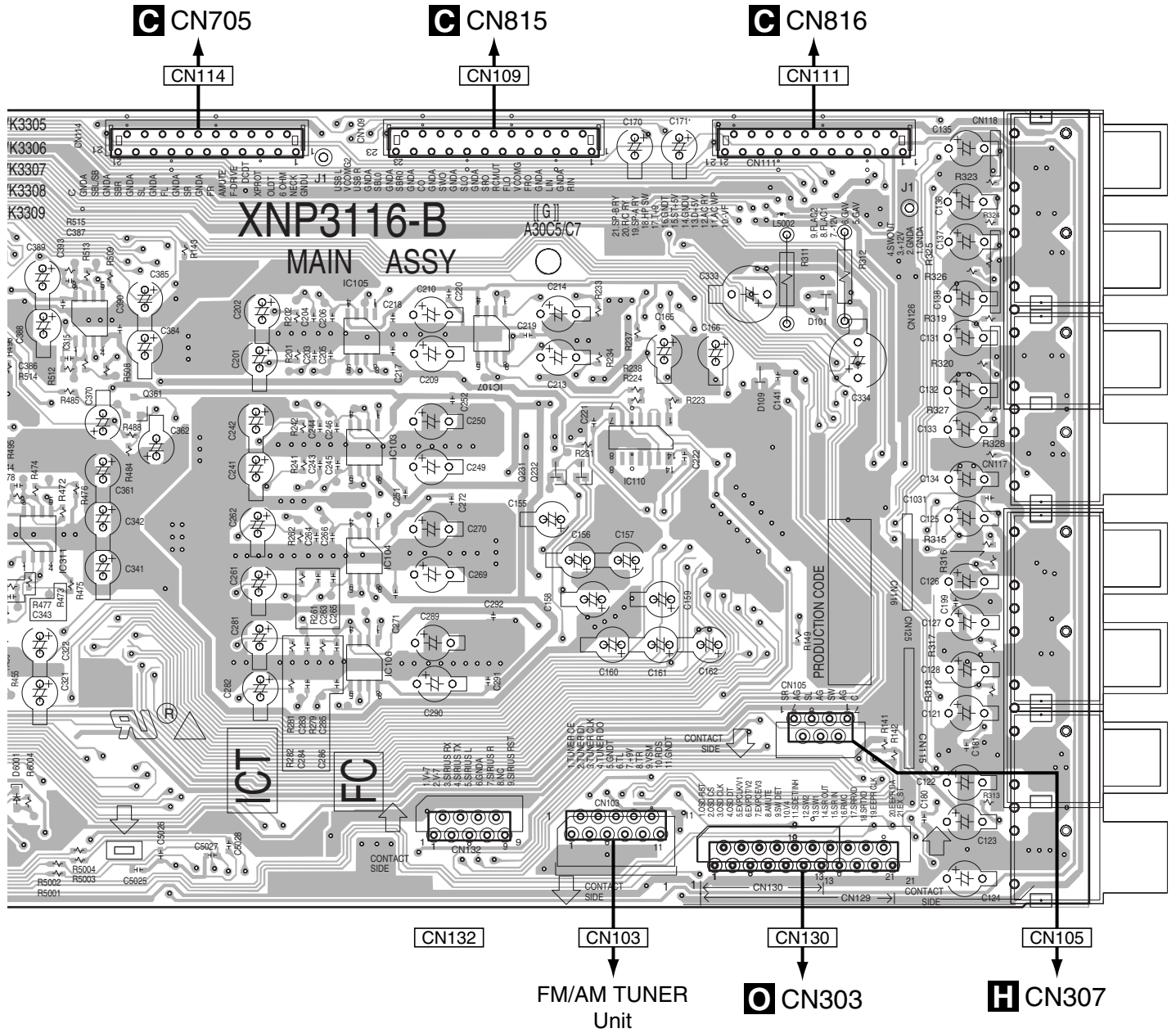
CN401

CN817

for FLASH



A



150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300

1

2

3

4

SIDE B

A

A MAIN ASSY

CN111

CN109

CN114

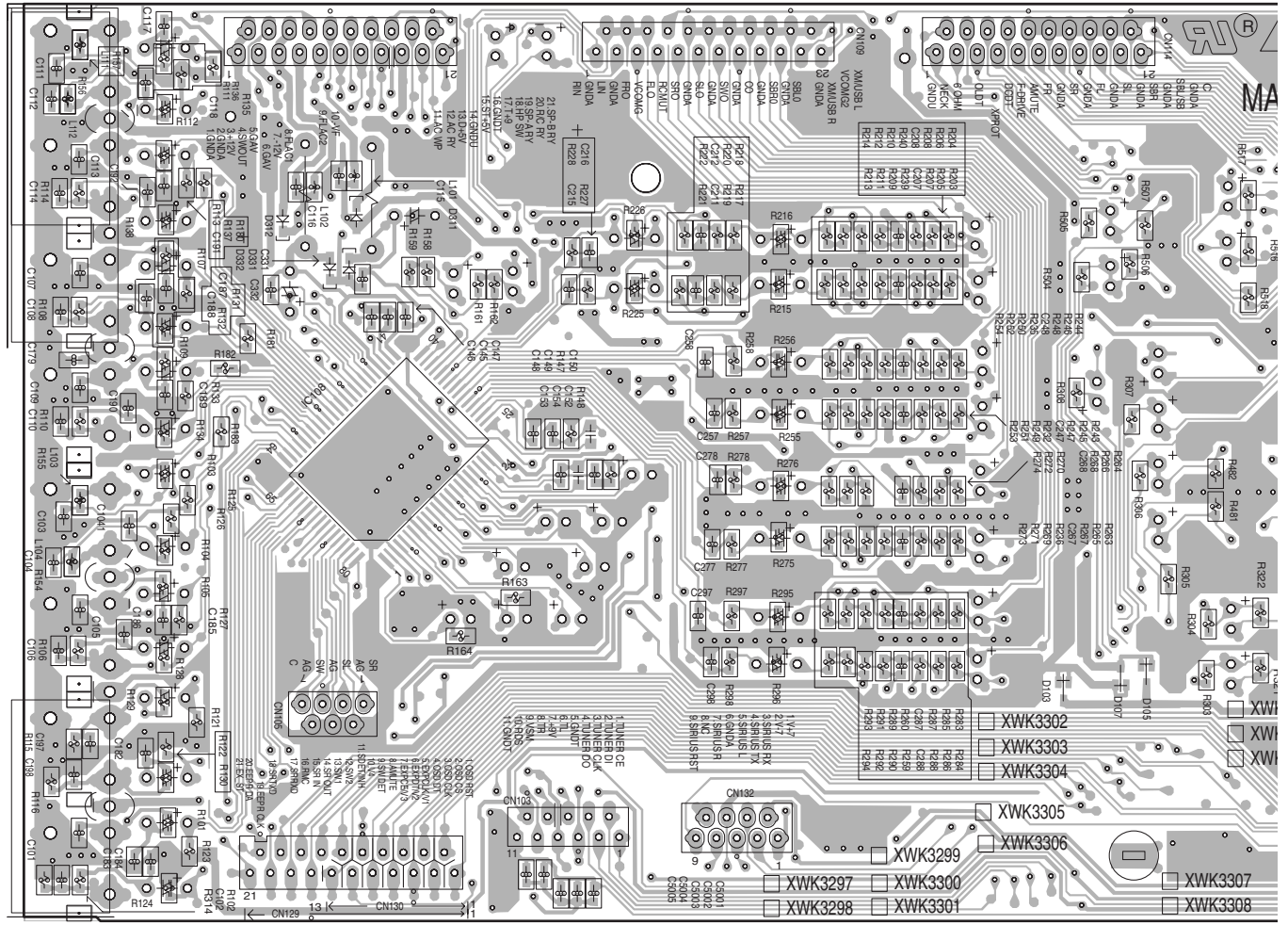
B

C

D

E

F

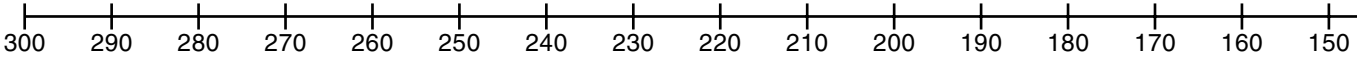


CN105

CN130

CN103

CN132



A

40

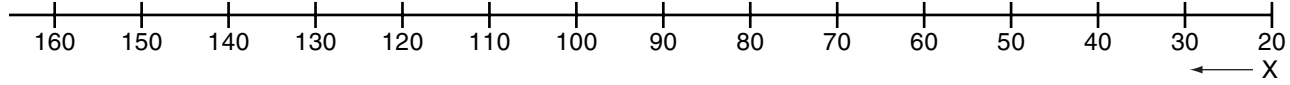
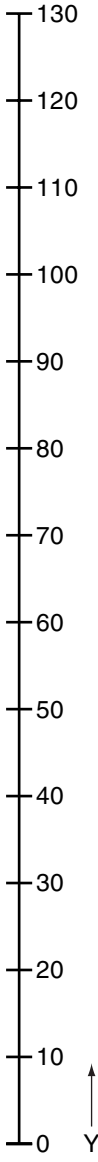
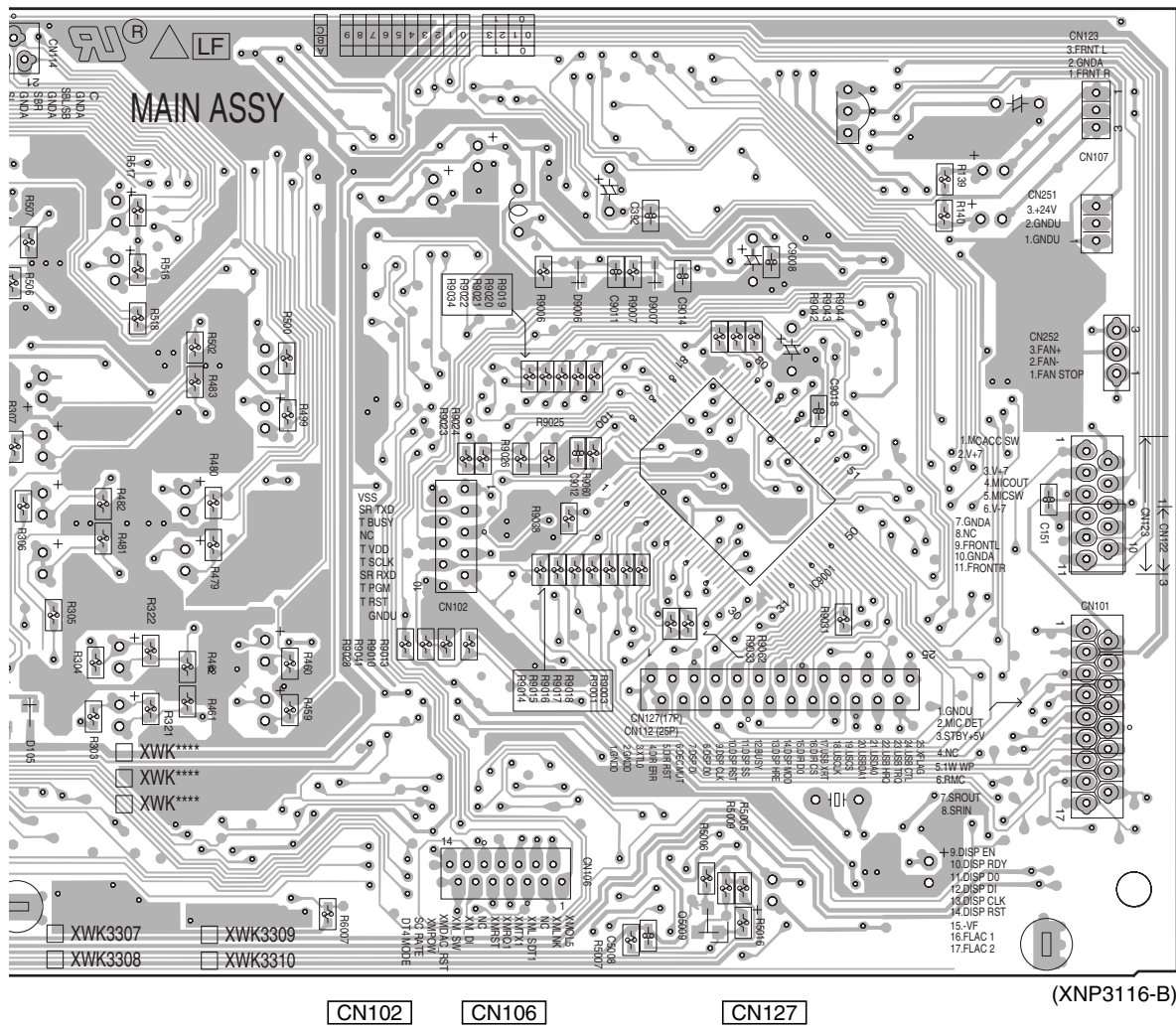
VSX-517-K

1

2

3

4



4.3 DSP ASSY

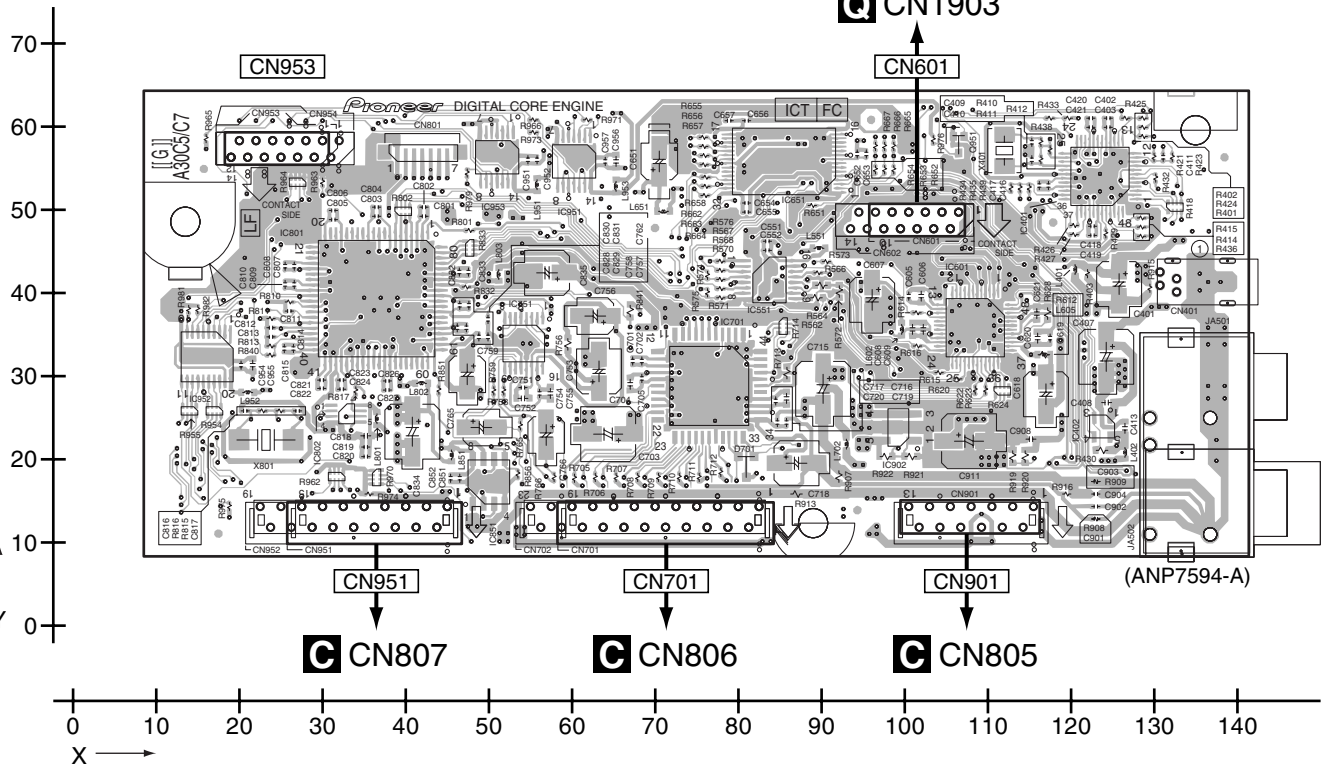
SIDE A

B DSP ASSY

SIDE A

A

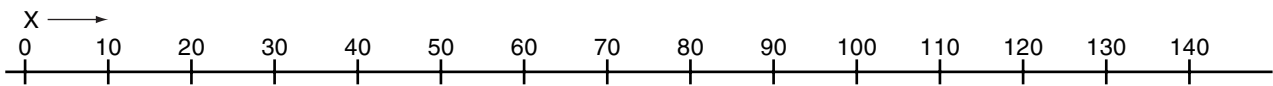
Q CN1903



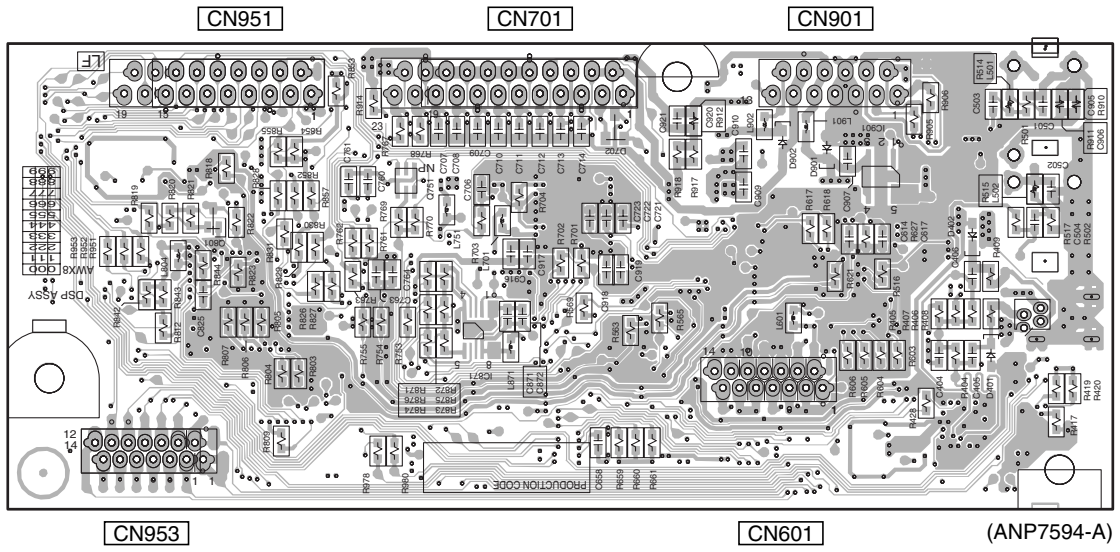
SIDE B

SIDE B

D



SIDE B



B

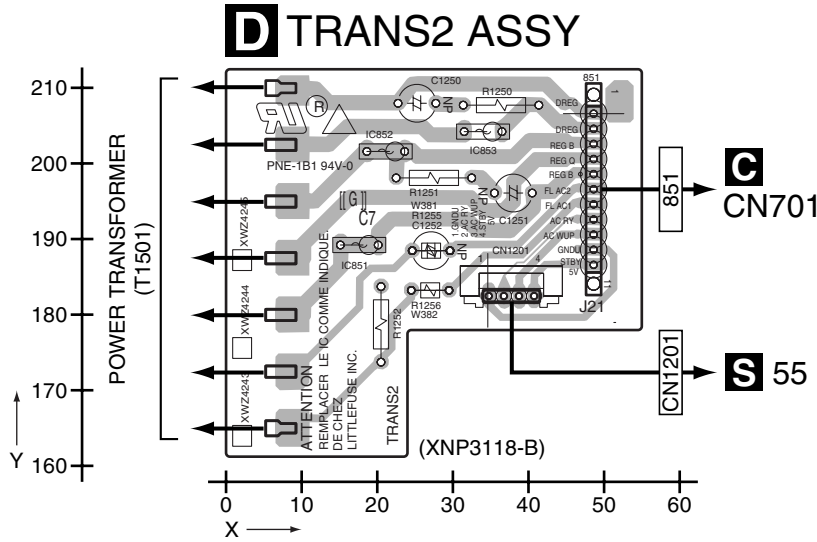
B DSP ASSY

VSX-517-K

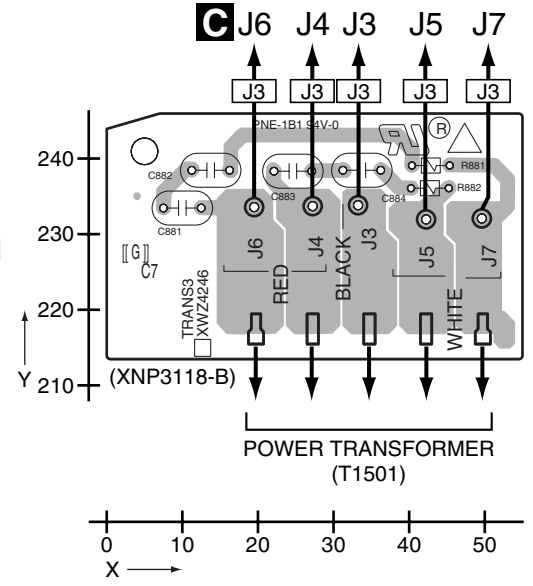
4.4 TRANS2 and TRANS3 ASSYS

SIDE A

SIDE A

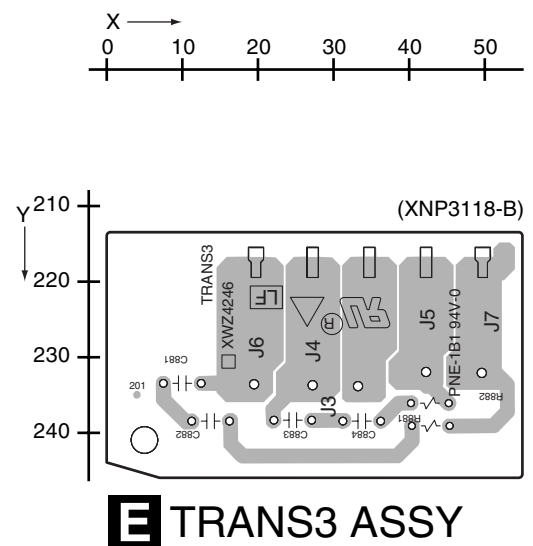
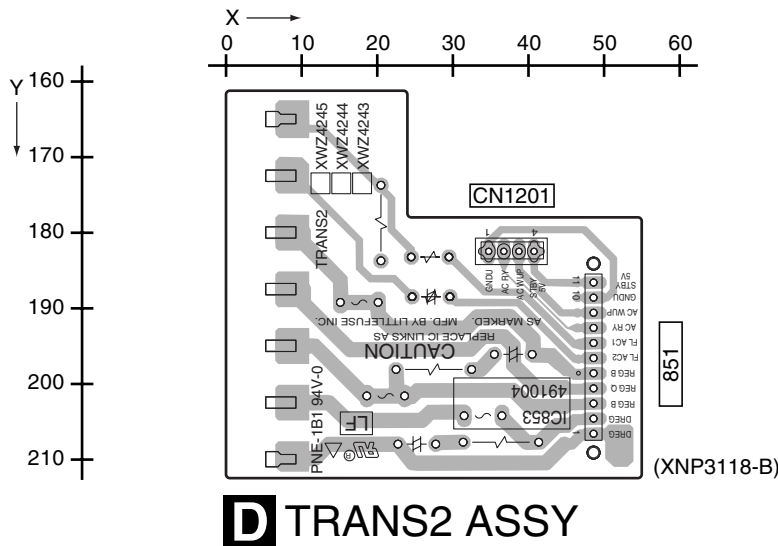


E TRANS3 ASSY



SIDE B

SIDE B

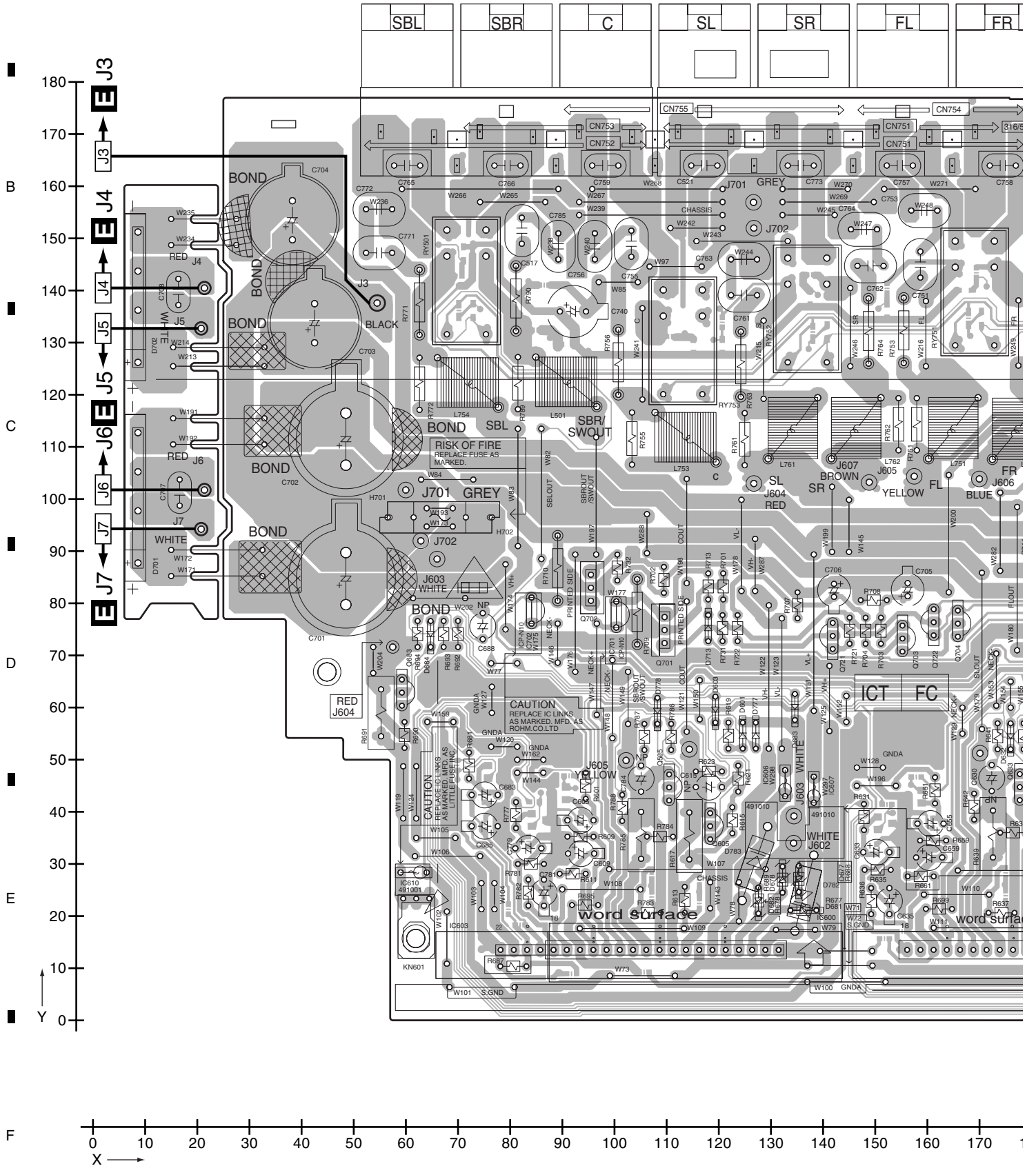


D E

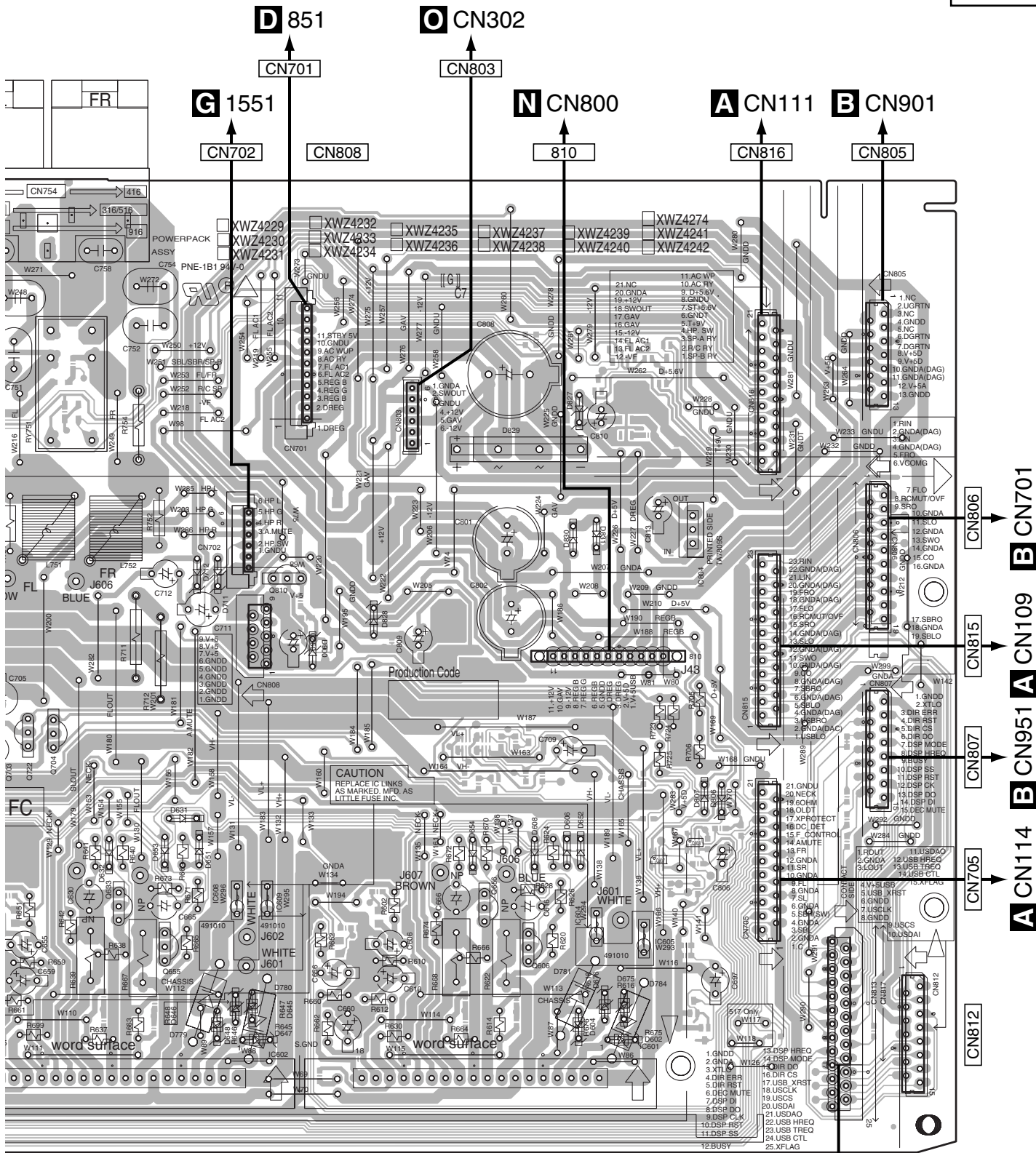
4.5 POWER PACK ASSY

SIDE A

POWER PACK ASSY



SIDE A



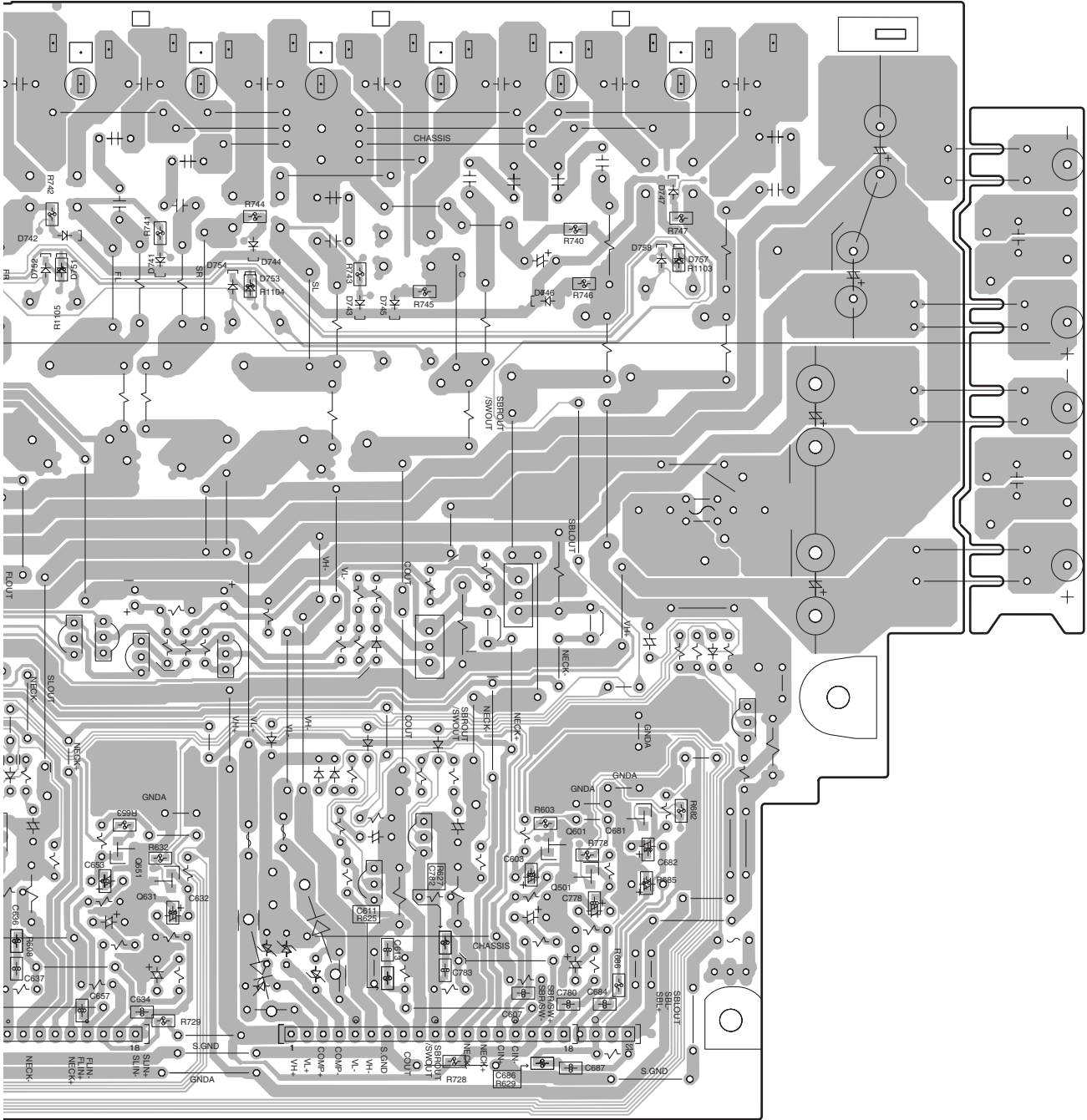
160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 310

C

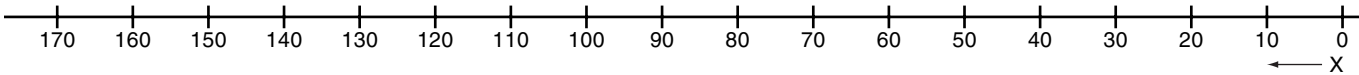
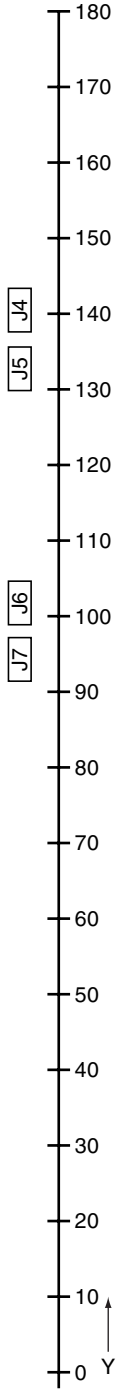
SIDE B

A

J3



(XNP3118-B)



4.6 COMPONENT VIDEO ASSY

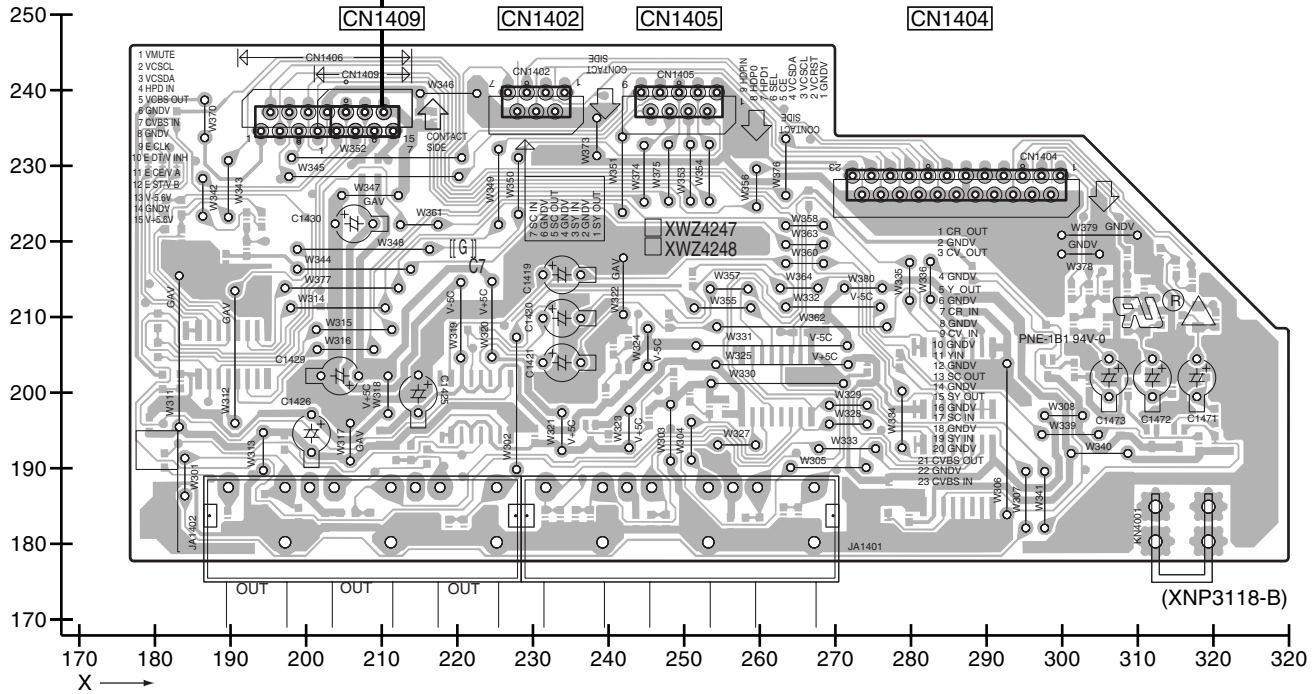
1 2 3 4

SIDE A

SIDE A

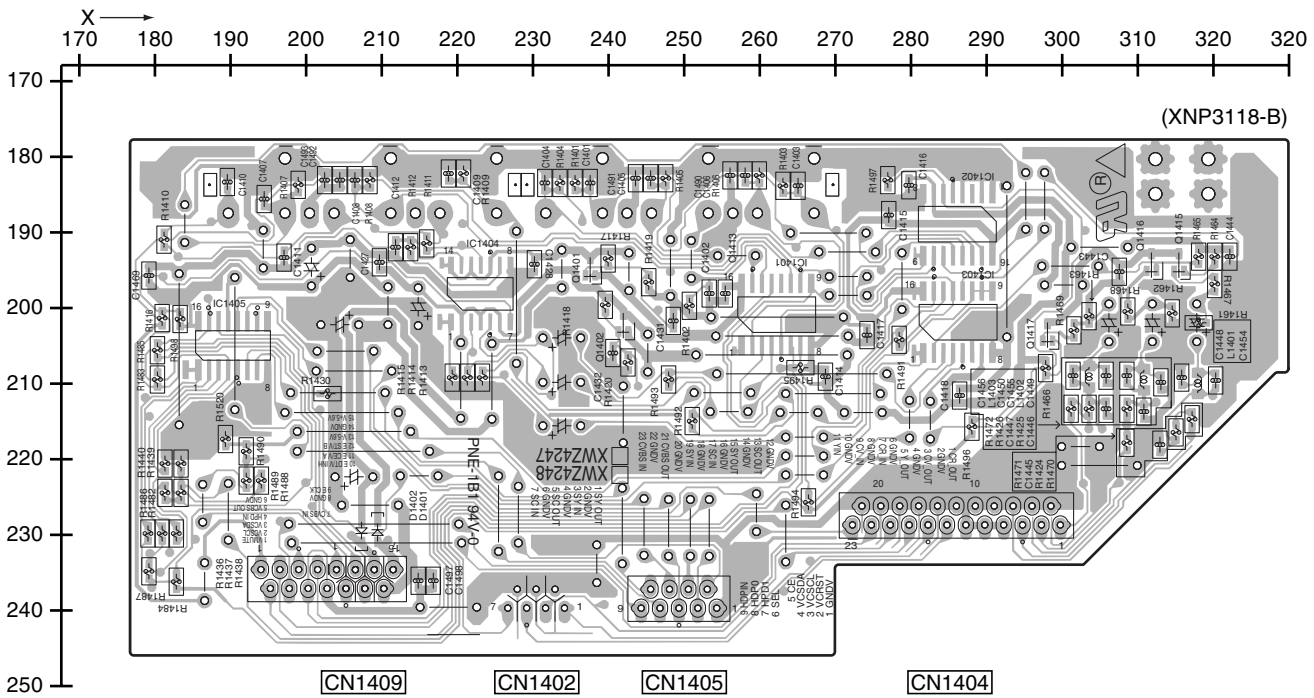
COMPONENT VIDEO ASSY

○ CN310



SIDE B

SIDE B



F

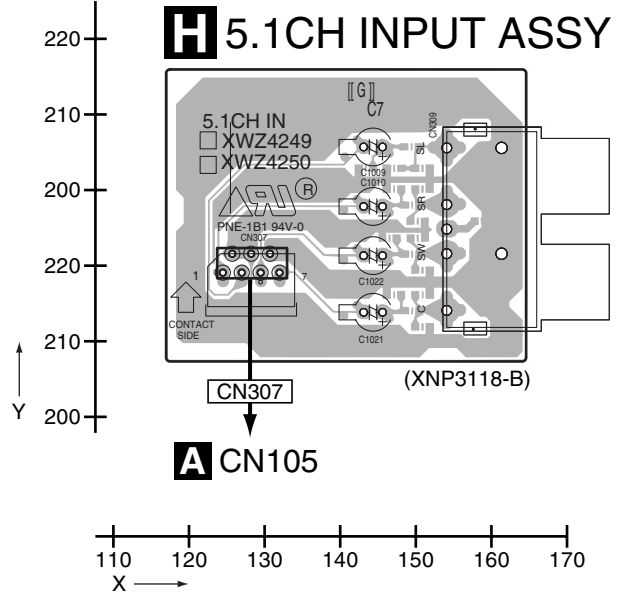
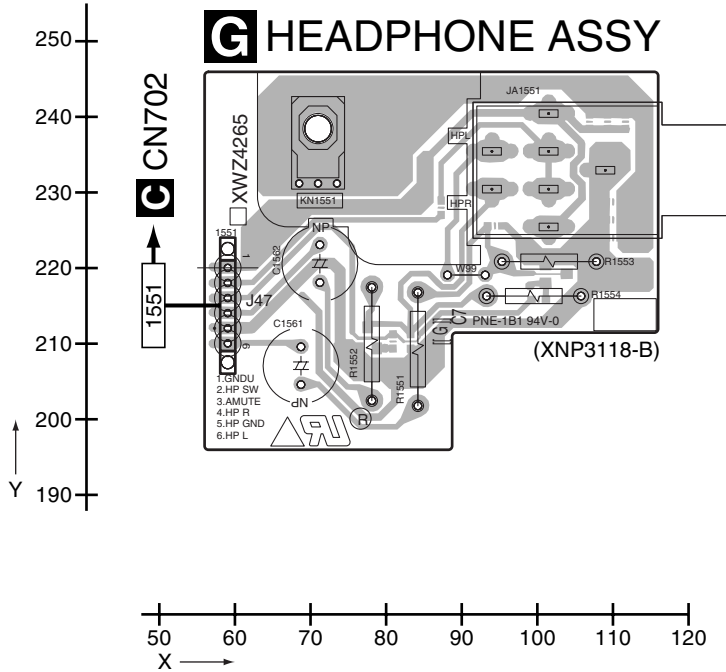
COMPONENT VIDEO ASSY

1 2 3 4

4.7 HEADPHONE and 5.1CH INPUT ASSYS

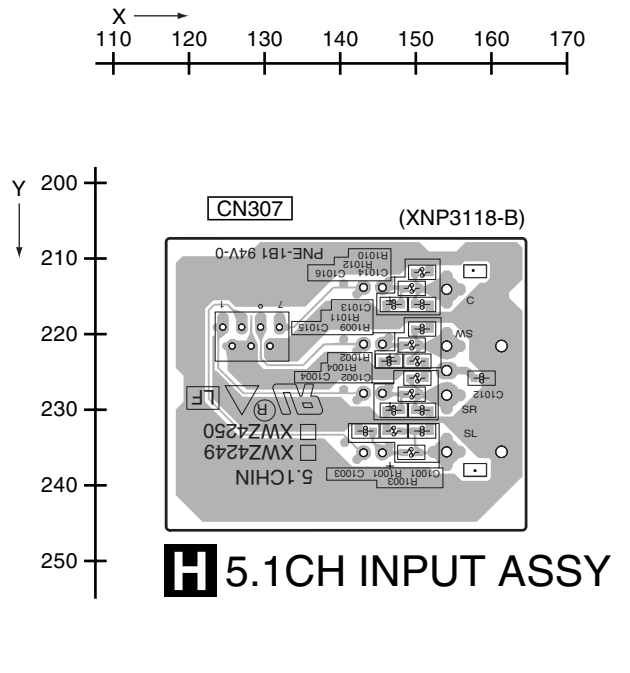
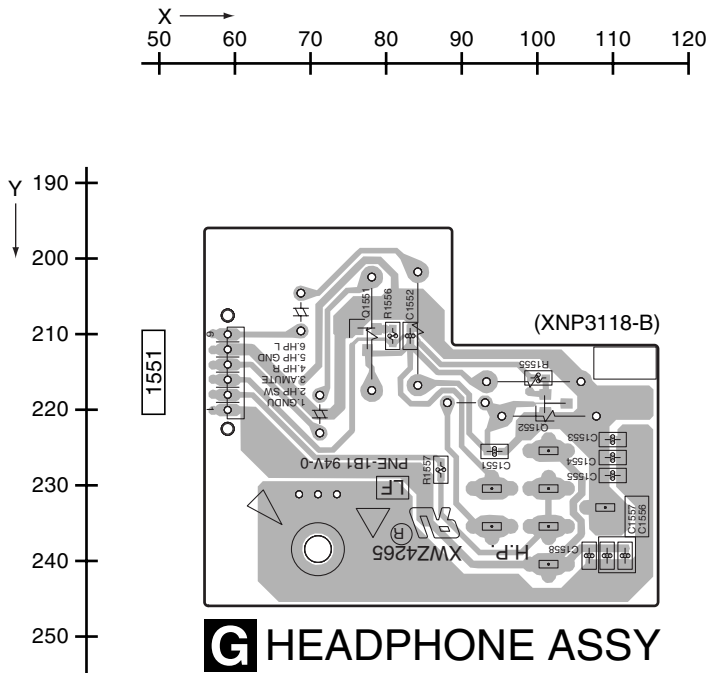
SIDE A

SIDE A



SIDE B

SIDE B

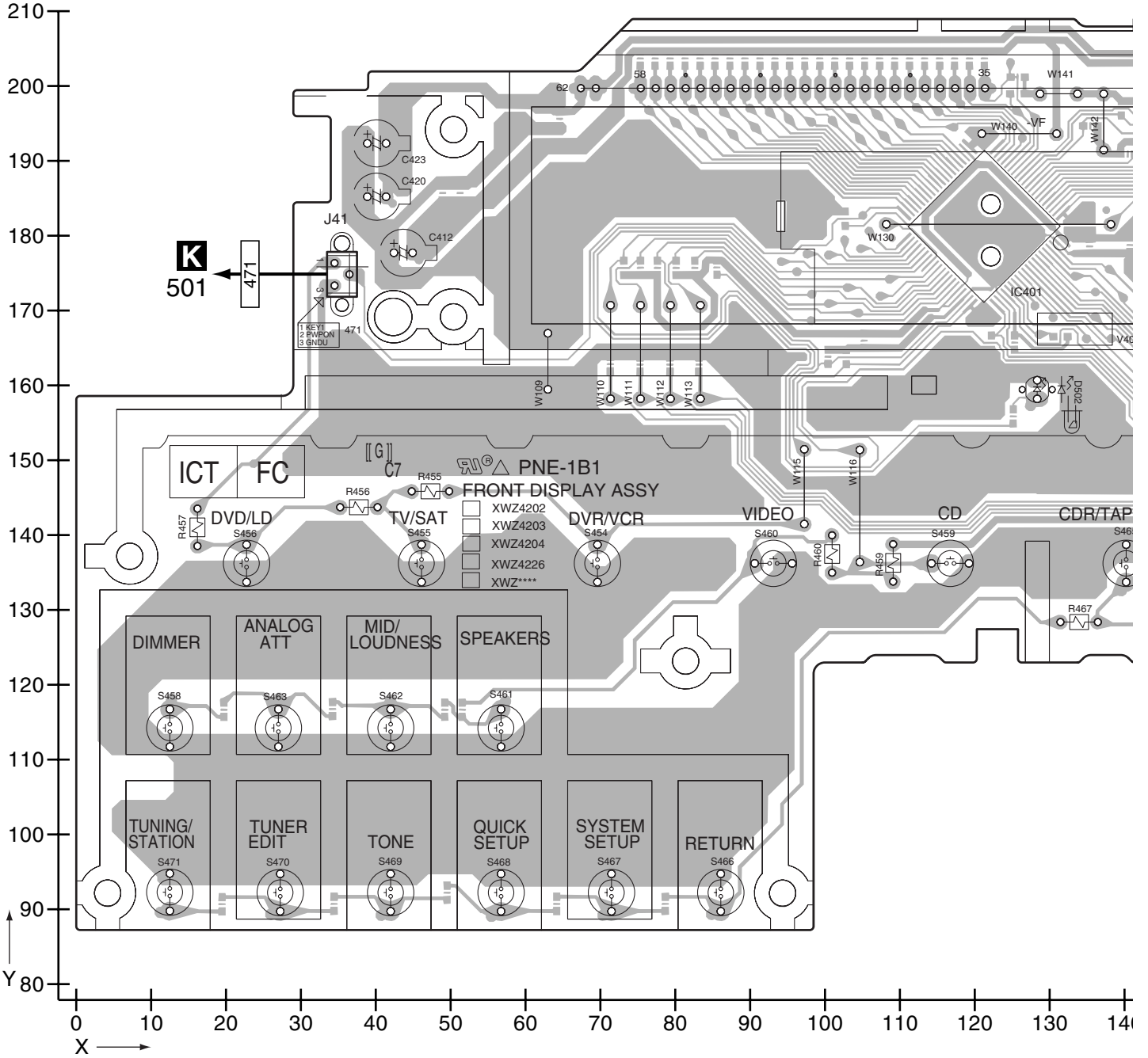


G H

4.8 FRONT DISPLAY ASSY

SIDE A

FRONT DISPLAY ASSY



SIDE A

A

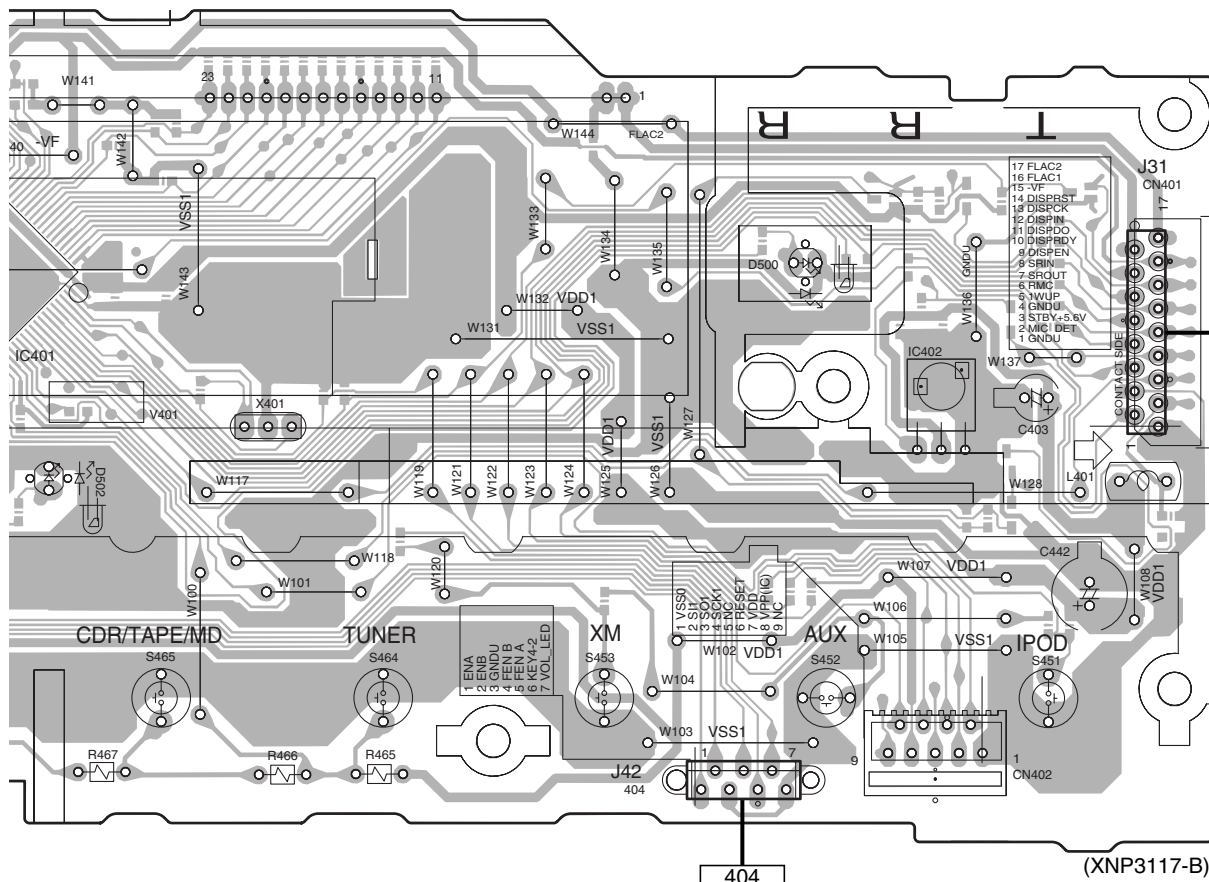
B

C

D

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F

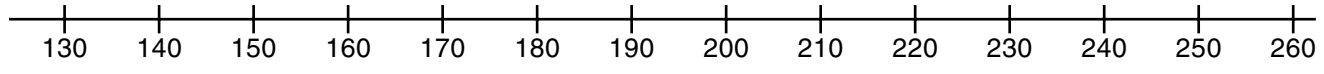


CN401

A CN101

404
J 511

(XNP3117-B)



SIDE B

A

B

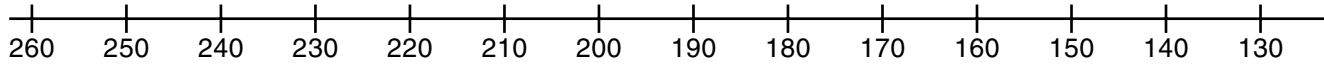
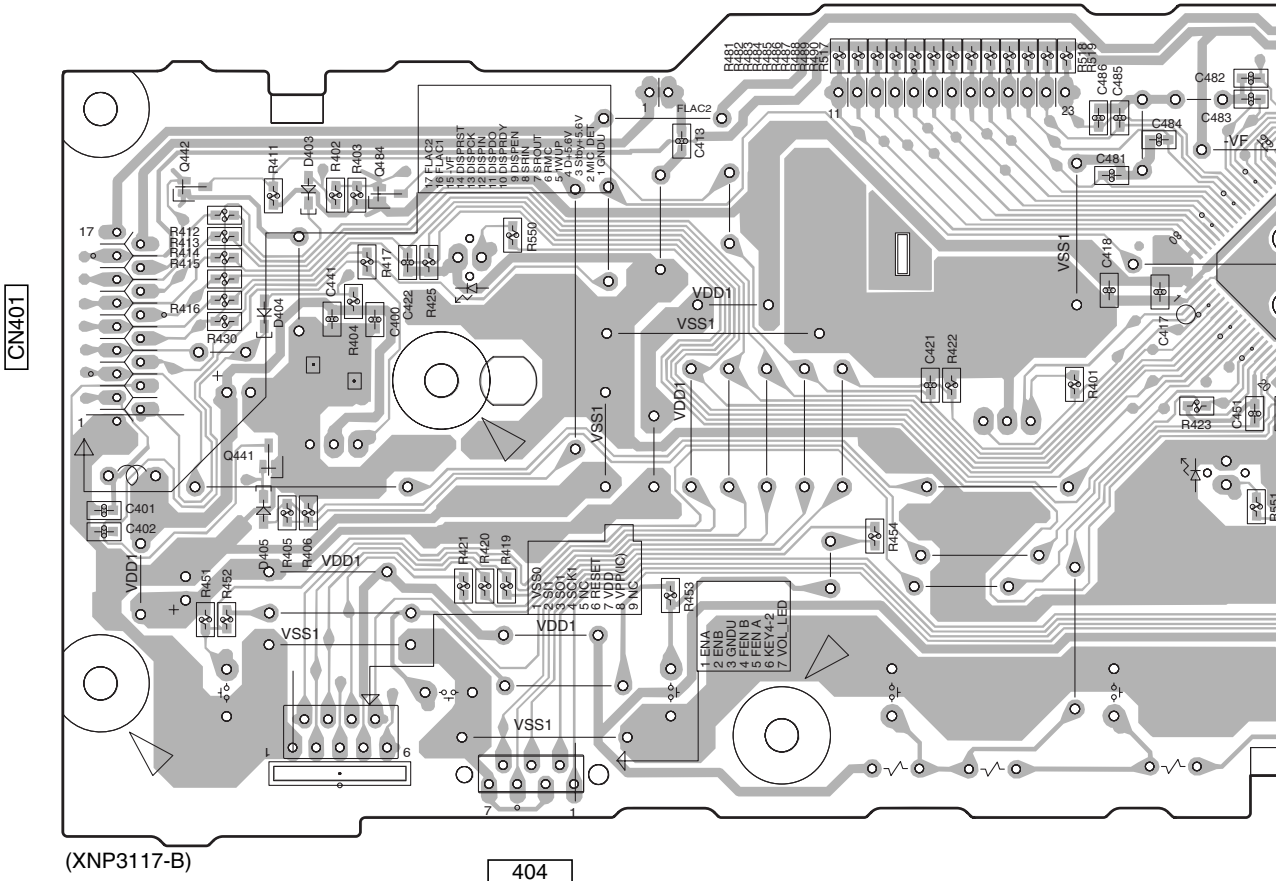
C

D

E

F

FRONT DISPLAY ASSY



SIDE B

A

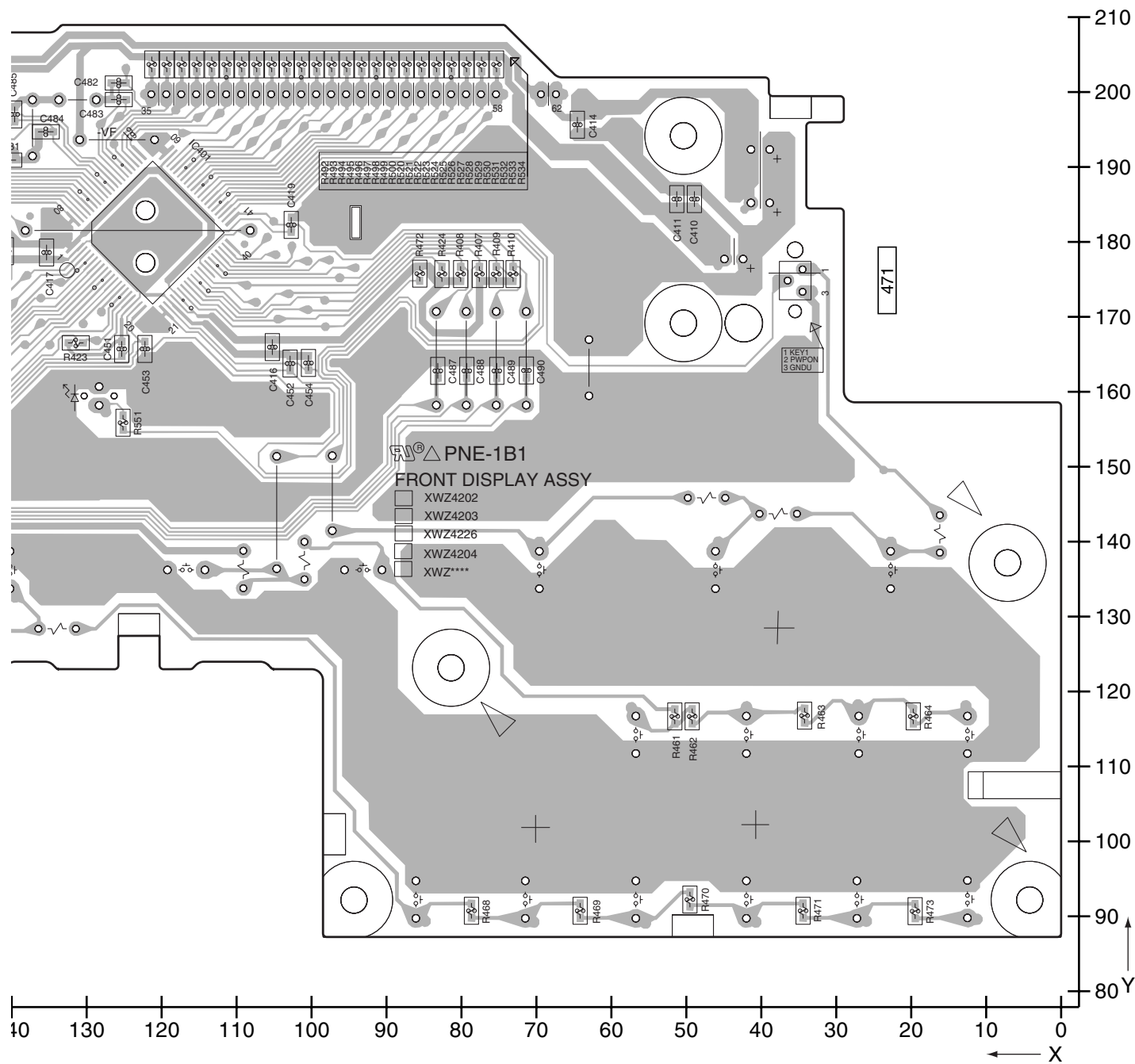
B

C

D

E

F

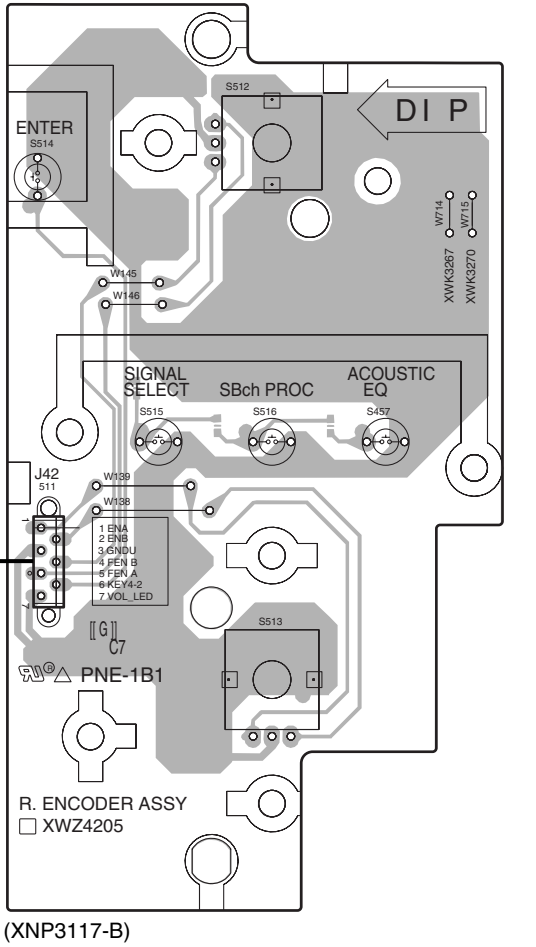


4.9 ROTARY ENCODER and POWER KEY ASSYS

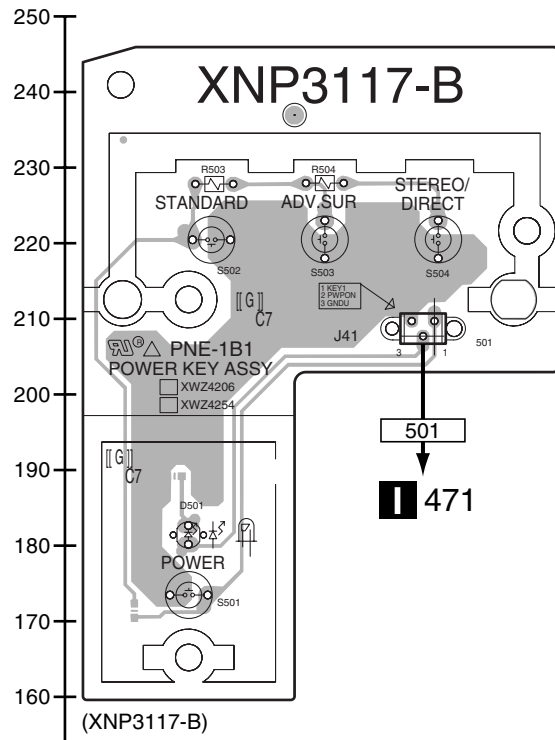
SIDE A

SIDE A

J ROTARY ENCODER ASSY



K POWER KEY ASSY



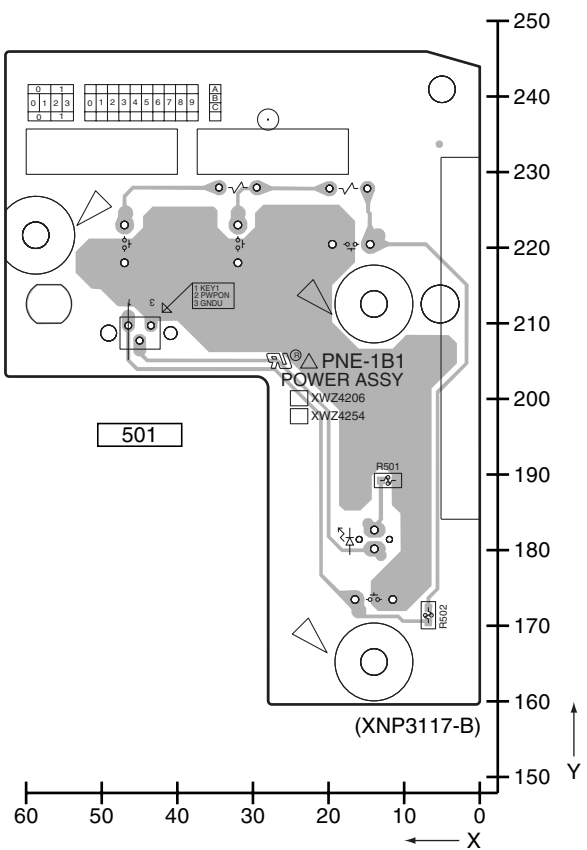
J K

SIDE B

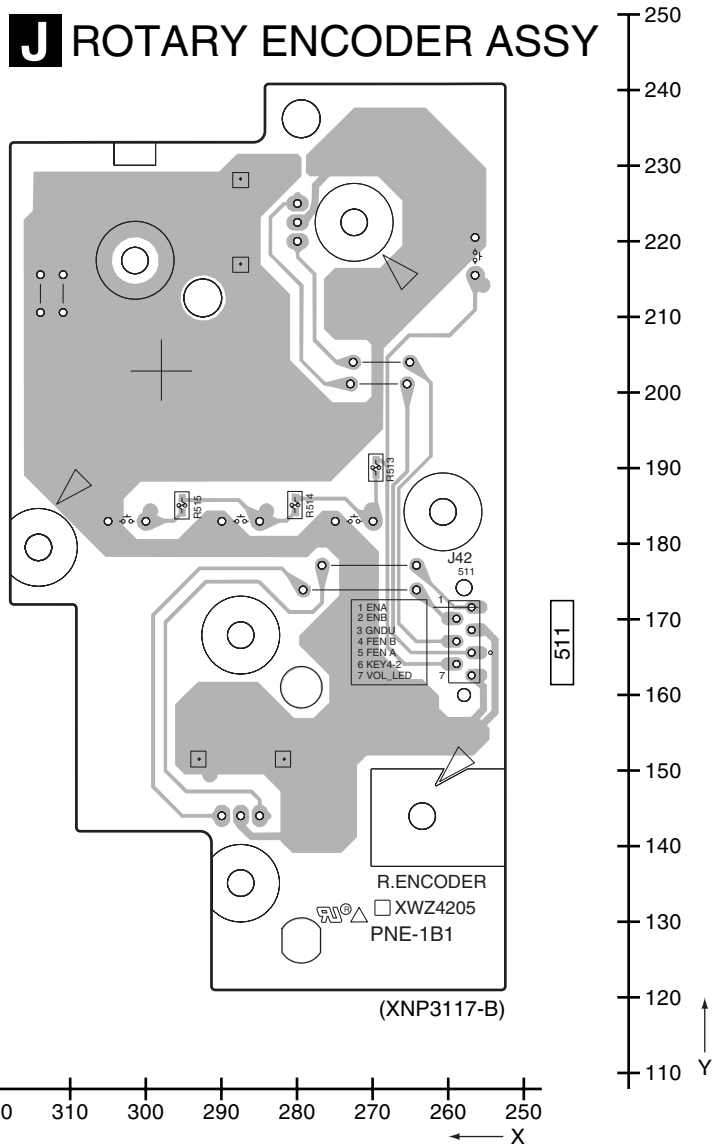
SIDE B

A

K POWER KEY ASSY



J ROTARY ENCODER ASSY



B

C

D

E

J **K**

4.10 TRANS4 and REGULATOR ASSYS

1

2

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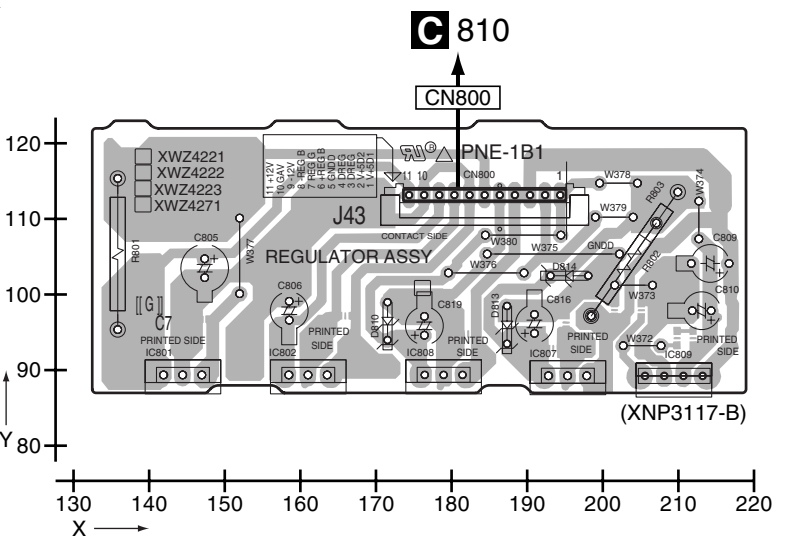
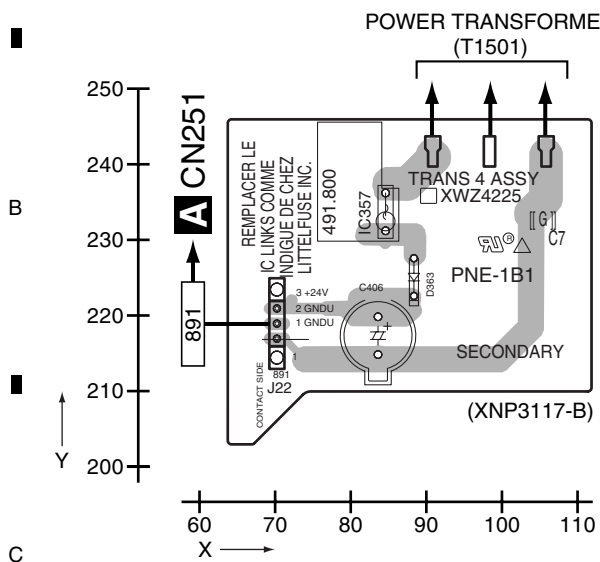
4

A SIDE A

SIDE A

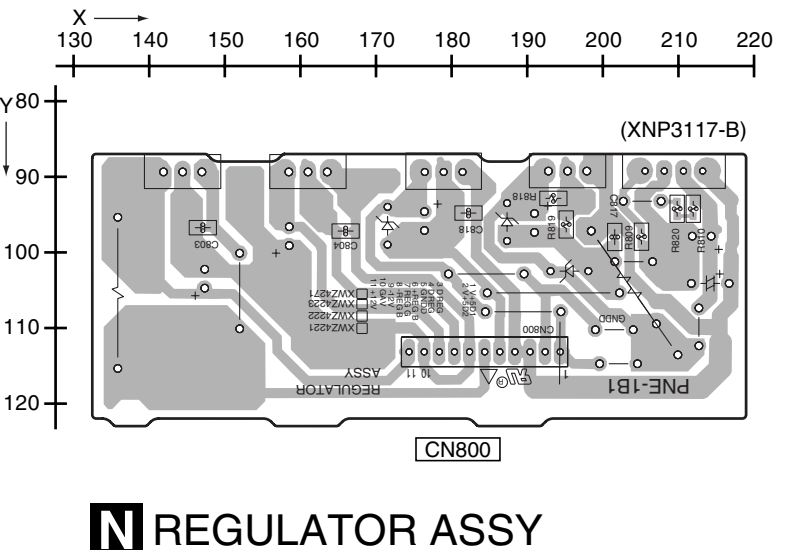
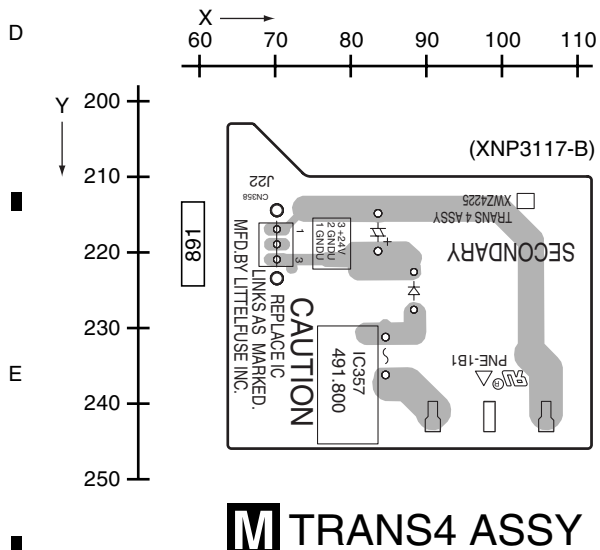
M TRANS4 ASSY

N REGULATOR ASSY



SIDE B

SIDE B



M TRANS4 ASSY

N REGULATOR ASSY

M N

1

2

3

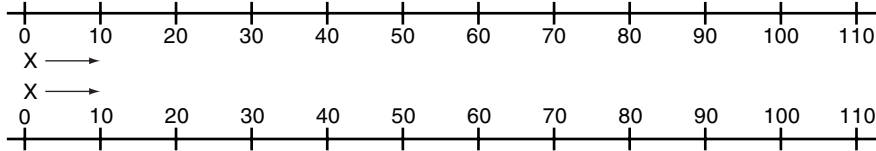
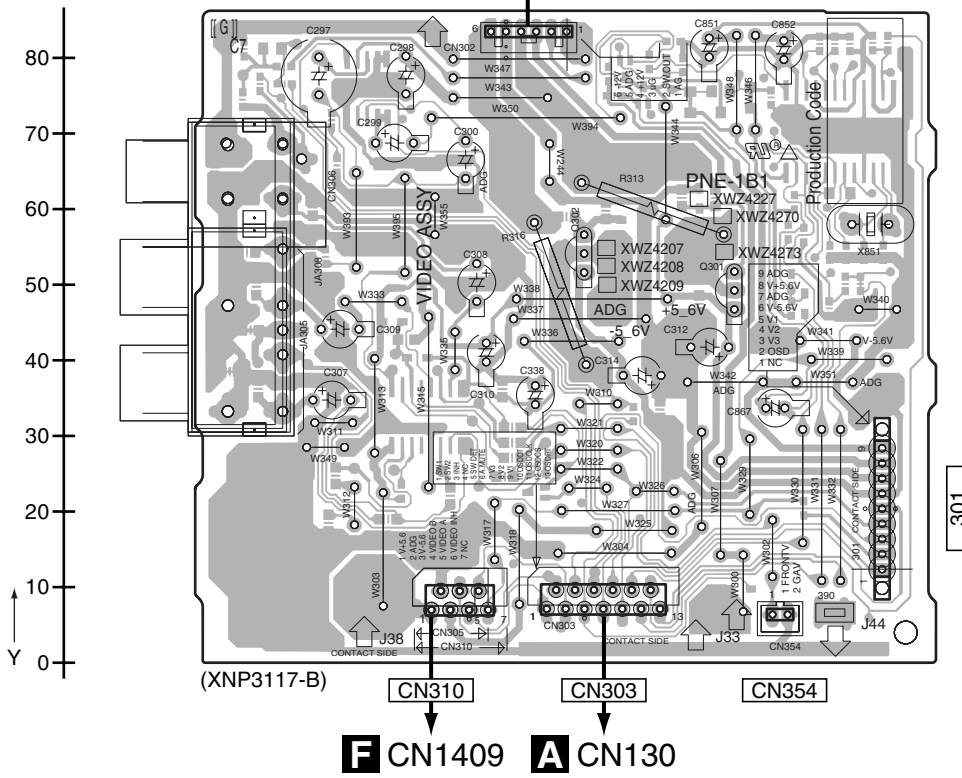
4

4.11 VIDEO ASSY

SIDE A

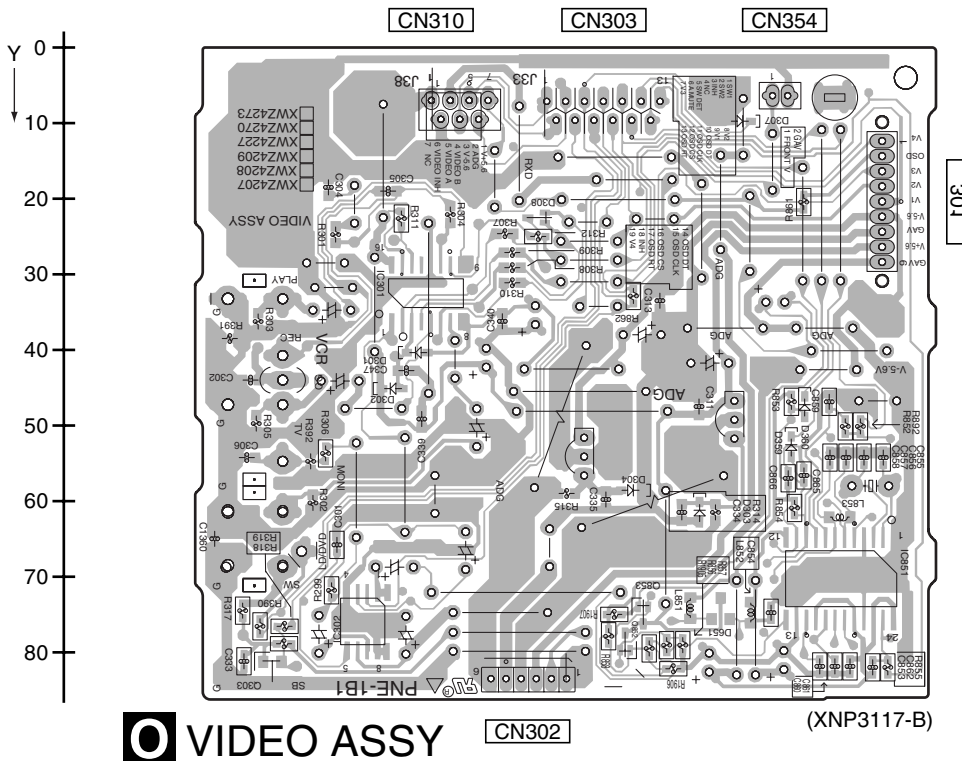
VIDEO ASSY **CN302** **CN803**

SIDE A



SIDE B

SIDE B



VIDEO ASSY **CN302**

(XNP3117-B)

VSX-517-K

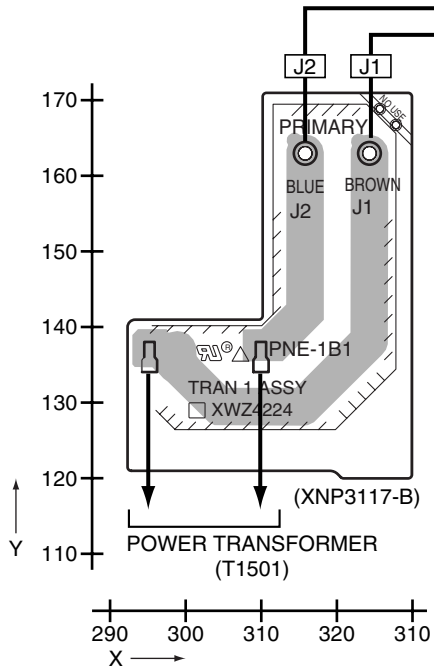


4.12 PRIMARY and TRANS1 ASSYS

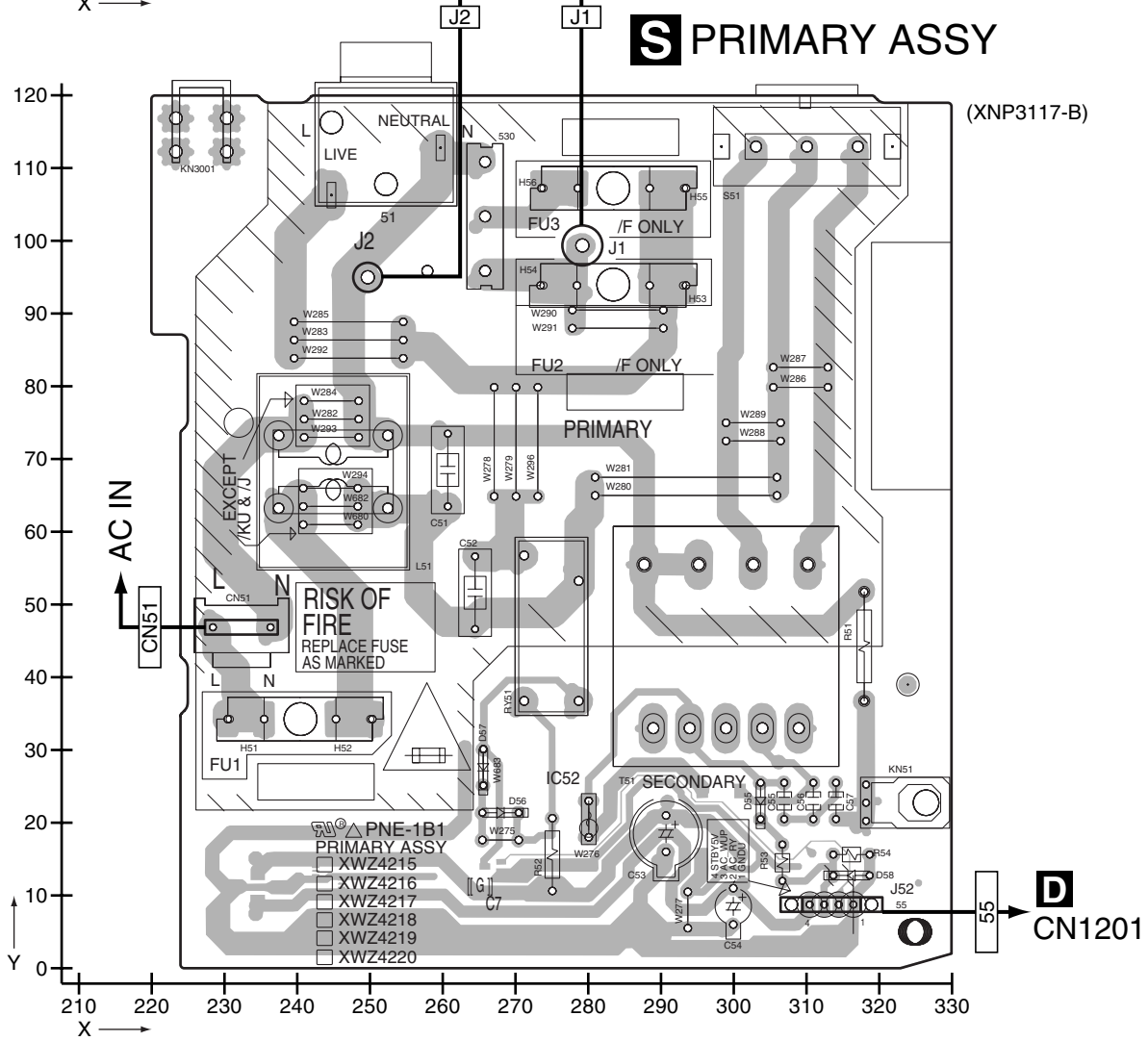
SIDE A

SIDE A

T TRANS1 ASSY



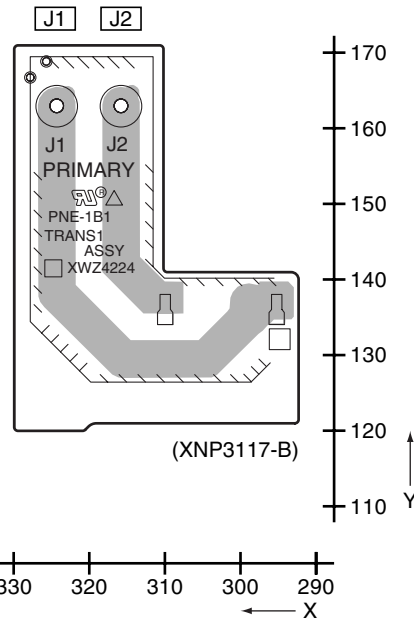
S PRIMARY ASSY



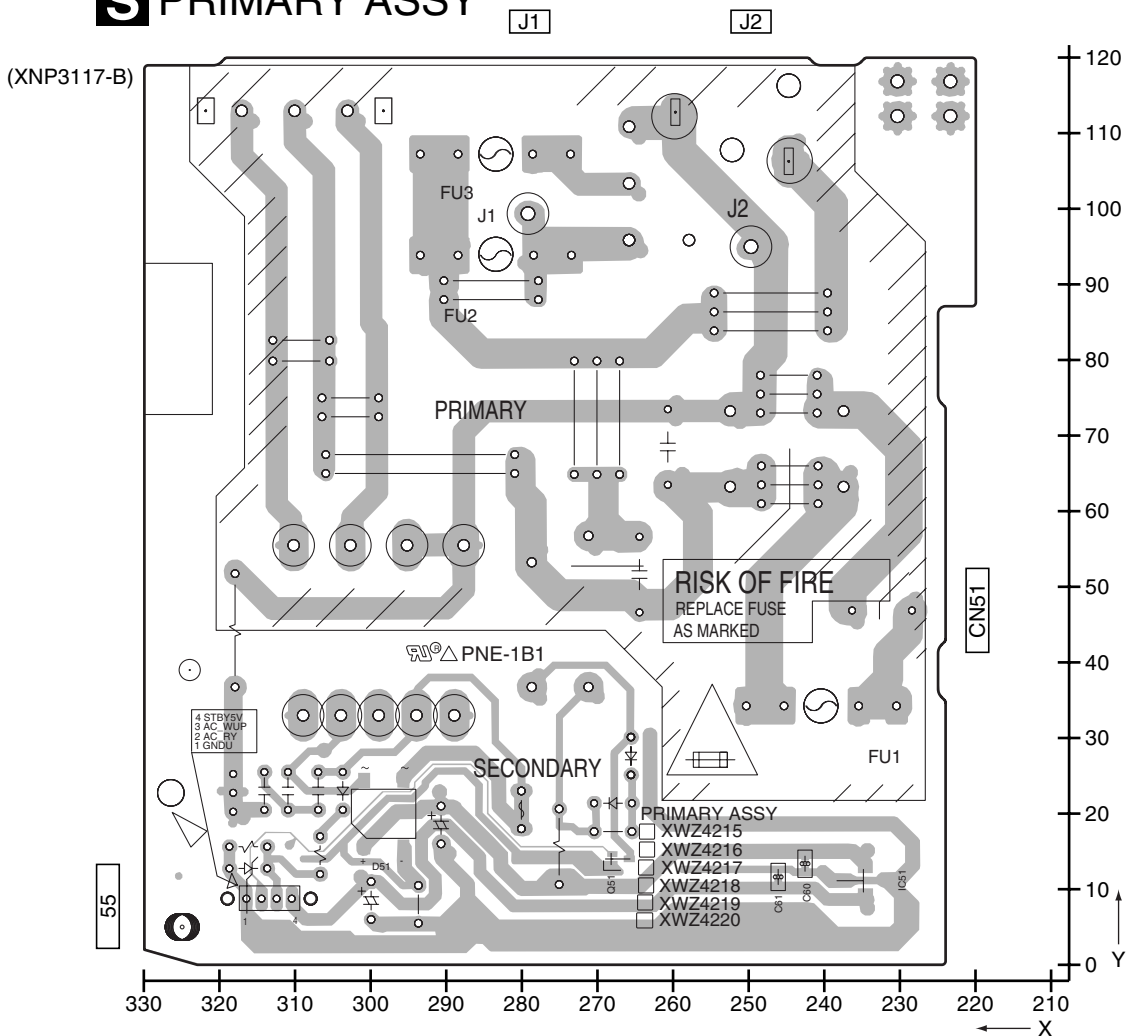
SIDE B

SIDE B

T TRANS1 ASSY



S PRIMARY ASSY



S T

5. 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.

● 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 Ω \rightarrow 56 x 10¹ \rightarrow 561 RD1/4PU 5 6 7 J
 47k Ω \rightarrow 47 x 10³ \rightarrow 473 RD1/4PU 4 7 3 J
 0.5 Ω \rightarrow R50 RN2H R 5 0 K
 1 Ω \rightarrow 1R0 RS1P 7 R 0 K

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

5.62k Ω \rightarrow 562 x 10¹ \rightarrow 5621 RN1/4PC 5 6 2 1 F

● Meaning of the figures and others in the parentheses in the parts list.

Example IC 301 is on the point (face A, 91 of x-axis, and 111 of y-axis) of the corresponding PC board.

IC 301 (A, 91, 111) IC NJM2068V

Mark No.	Description	Part No.	Mark No.	Description	Part No.
-----------------	--------------------	-----------------	-----------------	--------------------	-----------------

LIST OF ASSEMBLIES

	1..MAIN ASSY	XWK3300
	1..DSP ASSY	AWX8812
NSP	1..AMP ASSY	XWK3286
	2..POWER PACK ASSY	XWZ4232
	2..TRANS2 ASSY	XWZ4243
	2..TRANS3 ASSY	XWZ4246
	2..COMPONENT VIDEO ASSY	XWZ4247
	2..5.1CH INPUT ASSY	XWZ4249
	2..BIND ASSY	XWZ4252
	2..HEAD PHONE ASSY	XWZ4265
NSP	1..COMPLEX ASSY	XWK3270
	2..FRONT DISPLAY ASSY	XWZ4202
	2..ROTARY ENCODER ASSY	XWZ4205
	2..POWER KEY ASSY	XWZ4206
	2..VIDEO ASSY	XWZ4207
	2..DIGITAL INPUT ASSY	XWZ4211
	2..PRIMARY ASSY	XWZ4215
	2..TRANS1 ASSY	XWZ4224
	2..TRANS4 ASSY	XWZ4225
	2..REGULATOR ASSY	XWZ4271
	1..FM/AM TUNER UNIT	AXX7210

A MAIN ASSY MISCELLANEOUS

	IC 103 (A,198,72) DUAL OP-AMP	NJM4565MD
	IC 104 (A,198,56) DUAL OP-AMP	NJM4565MD
	IC 105 (A,198,87) DUAL OP-AMP	NJM4565MD
	IC 107 (A,216,88) DUAL OP-AMP	NJM4565MD
	IC 108 (B,255,64) 8CH E-VOL	R2S15205FP(P)
	IC 110 (A,237,73) IC	TC4066BFN
	IC 310 (A,142,42) DUAL OP-AMP	NJM4565MD
	IC 311 (A,152,60) DUAL OP-AMP	NJM4565MD
	IC 312 (A,142,78) DUAL OP-AMP	NJM4565MD
	IC 9001(B,82,64) CPU	PEG377A
	IC 9002(A,104,42) EEPROM	BR24L16FV-W
	Q 231 (A,225,69) DIGITAL TR(SC-70)	RT1P241M
	Q 232 (A,229,69) TRANSISTOR	RT1N241M
	Q 248 (A,79,108) TRANSISTOR	2SC4081
	Q 249 (A,83,104) TRANSISTOR	RT1N241M
	Q 250 (A,87,105) TRANSISTOR	2SC4081
	Q 252 (A,68,105) TRANSISTOR	2SD1858X
	Q 253 (A,75,108) TRANSISTOR	RT1N241M
	Q 254 (A,72,98) DIGITAL TR(SC-70)	RT1P241M
	Q 255 (A,75,98) TRANSISTOR	RT1N241M
	Q 257 (A,90,105) TRANSISTOR	2SA1576A
	Q 361 (A,166,78) TRANSISTOR	2SC5938A
	Q 9001(A,125,87) DIGITAL TR(SC-70)	RT1N431M
	Q 9002(A,66,80) DIGITAL TR(SC-70)	RT1P241M
	Q 9003(A,65,75) DIGITAL TR(SC-70)	RT1P241M

Mark No.	Description	Part No.
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AMP ASSY MISCELLANEOUS

	J 6 BOARD IN WIRE	DB230ND0
	J 604 BOARD IN WIRE	DB211ND0
	J 605 BOARD IN WIRE	DB410ND0
	J 606 BOARD IN WIRE	DB621ND0
	J 607 BOARD IN WIRE	DB118ND0

COMPLEX ASSY

MISCELLANEOUS

	J 41 JUMPER WIRE	D15A03-100-2651
	J 42 JUMPER WIRE	D15A07-125-2651

	Q 9007(A,69,85) TRANSISTOR	DTC143TK
	Q 9064(A,59,80) DIGITAL TR(SC-70)	RT1P241M
	Q 9065(A,55,78) TRANSISTOR	UMD2N
	D 103 (B,173,35) DIODE	DAN217U
	D 105 (B,163,37) DIODE	DAN217U
	D 107 (B,166,37) DIODE	DAN217U
	D 253 (A,70,114) DIODE	UDZS27(B)
	D 254 (A,92,102) DIODE	UDZS5R1(B)
	D 311 (B,259,93) DIODE	1SS355
	D 312 (B,268,93) DIODE	1SS355
	D 331 (B,260,87) DIODE	UDZS6R8(B)
	D 332 (B,263,87) DIODE	UDZS6R8(B)
	D 9006(B,99,89) DIODE	DAN217U
	D 9007(B,91,89) DIODE	DAN217U
	D 9010(A,128,88) DIODE	1SS355

5			6			7			8		
Mark No.	Description	Part No.	Mark No.	Description	Part No.	Mark No.	Description	Part No.	Mark No.	Description	Part No.
D 9011(A,60,75)	DIODE	DAN202U	R 221 (B,220,84)			R 221 (B,220,84)		RS1/16S472J			
D 9064(A,58,75)	DIODE	DAP202U	R 222 (B,219,91)			R 222 (B,219,91)		RS1/16S472J			
D 9065(A,63,80)	DIODE	DAP202U	R 223 (A,242,78)			R 223 (A,242,78)		RS1/16S472J			A
D 9068(A,53,81)	DIODE	1SS355	R 224 (A,236,78)			R 224 (A,236,78)		RS1/16S472J			
L 101 (B,260,98)	CHIP SOLID INDUCTOR	QTL1013	R 225 (B,225,84)			R 225 (B,225,84)		RS1/16S392J			
L 102 (B,265,97)	CHIP SOLID INDUCTOR	QTL1013	R 226 (B,225,91)			R 226 (B,225,91)		RS1/16S392J			
L 5002(A,257,104)	CHIP SOLID INDUCTOR	QTL1013	R 231 (A,229,72)			R 231 (A,229,72)		RS1/16S104J			
L 9001(A,124,102)	CHIP SOLID INDUCTOR	ATL7002	R 233 (A,231,91)			R 233 (A,231,91)		RS1/16S474J			
L 9002(A,120,103)	CHIP SOLID INDUCTOR	ATL7002	R 234 (A,231,84)			R 234 (A,231,84)		RS1/16S474J			
L 9003(A,106,98)	RADIAL INDUCTOR	LFCA2R2J	R 237 (A,237,88)			R 237 (A,237,88)		RS1/16S122J			
X 9001(A,96,53)	CERAMIC RESONATOR (15.7 MHz)	XSS3004	R 238 (A,236,80)			R 238 (A,236,80)		RS1/16S122J			
CN101 (A,41,27)	CONNECTOR	CKS3382	R 241 (A,190,69)			R 241 (A,190,69)		RS1/16S473J			
CN102 (A,113,63)	CONNECTOR	52045-1045	R 242 (A,190,74)			R 242 (A,190,74)		RS1/16S473J			
CN103 (A,227,17)	11P CONNECTOR	52044-1145	R 245 (B,188,69)			R 245 (B,188,69)		RS1/16S332J			B
CN105 (A,266,34)	CONNECTOR	CKS3372	R 246 (B,188,75)			R 246 (B,188,75)		RS1/16S332J			
CN109 (A,230,113)	19P SOCKET	XKP3054	R 247 (B,190,69)			R 247 (B,190,69)		RS1/16S332J			
CN111 (A,274,113)	21P SOCKET	XKP3091	R 248 (B,190,75)			R 248 (B,190,75)		RS1/16S332J			
CN112 (A,91,41)	CONNECTOR	CKS3382	R 249 (B,197,69)			R 249 (B,197,69)		RS1/16S332J			
CN114 (A,189,113)	21P SOCKET	XKP3091	R 250 (B,197,75)			R 250 (B,197,75)		RS1/16S332J			
CN125 (A,302,42)	6P PIN JACK	XKB3055	R 251 (B,199,69)			R 251 (B,199,69)		RS1/16S182J			
CN130 (A,247,13)	CONNECTOR	CKS3378	R 252 (B,199,75)			R 252 (B,199,75)		RS1/16S182J			
CN142 8P PIN JACK		XKB3067	R 261 (A,189,53)			R 261 (A,189,53)		RS1/16S473J			
CN251 (A,39,92)	3P JUMPER CONNECTOR	52147-0310	R 262 (A,189,59)			R 262 (A,189,59)		RS1/16S473J			
CN252 (A,37,77)	3P TOP POST	B3B-EH	R 264 (B,186,60)			R 264 (B,186,60)		RS1/16S392J			
			R 265 (B,188,53)			R 265 (B,188,53)		RS1/16S332J			C
			R 266 (B,188,60)			R 266 (B,188,60)		RS1/16S472J			
			R 267 (B,190,53)			R 267 (B,190,53)		RS1/16S332J			
RESISTORS											
R 103 (B,283,62)		RS1/16S222J	R 268 (B,190,60)			R 268 (B,190,60)		RS1/16S123J			
R 104 (B,283,52)		RS1/16S222J	R 269 (B,197,53)			R 269 (B,197,53)		RS1/16S332J			
R 105 (B,283,48)		RS1/16S331J	R 270 (B,197,60)			R 270 (B,197,60)		RS1/16S122J			
R 106 (B,293,40)		RS1/16S331J	R 271 (B,199,53)			R 271 (B,199,53)		RS1/16S182J			
R 107 (B,283,88)		RS1/16S331J	R 272 (B,199,60)			R 272 (B,199,60)		RS1/16S272J			
R 108 (B,293,81)		RS1/16S331J	R 274 (B,202,60)			R 274 (B,202,60)		RS1/16S271J			
R 109 (B,283,75)		RS1/16S331J	R 280 (A,65,112)			R 280 (A,65,112)		RS1/16S0R0J			
R 110 (B,293,68)		RS1/16S331J	R 303 (B,156,37)			R 303 (B,156,37)		RS1/16S101J			
R 111 (B,283,112)		RS1/16S222J	R 304 (B,155,43)			R 304 (B,155,43)		RS1/16S101J			D
R 112 (B,283,106)		RS1/16S222J	R 305 (B,160,49)			R 305 (B,160,49)		RS1/16S101J			
R 113 (B,283,101)		RS1/16S331J	R 306 (B,164,61)			R 306 (B,164,61)		RS1/16S101J			
R 114 (B,293,96)		RS1/16S331J	R 307 (B,165,68)			R 307 (B,165,68)		RS1/16S101J			
R 129 (B,283,34)		RS1/16S331J	R 308 (B,171,72)			R 308 (B,171,72)		RS1/16S101J			
R 130 (B,283,25)		RS1/16S331J	R 311 (A,258,102)	METAL OXIDE RESISTOR		R 311 (A,258,102)	METAL OXIDE RESISTOR	RS1LMF101J			
R 145 (A,71,73)		RS1/16S102J	R 312 (A,266,102)	METAL OXIDE RESISTOR		R 312 (A,266,102)	METAL OXIDE RESISTOR	RS1LMF101J			
R 146 (A,71,74)		RS1/16S102J	R 437 (A,81,108)			R 437 (A,81,108)		RS1/16S103J			
R 147 (B,233,67)		RS1/16S472J	R 438 (A,79,112)			R 438 (A,79,112)		RS1/16S103J			
R 148 (B,228,62)		RS1/16S472J	R 439 (A,80,112)			R 439 (A,80,112)		RS1/16S103J			
R 149 (A,259,45)		RS1/16S104J	R 440 (A,87,108)			R 440 (A,87,108)		RS1/16S103J			
R 180 (B,278,97)		RS1/16S0R0J	R 443 (A,63,104)			R 443 (A,63,104)		RS1/16S471J			E
R 181 (B,273,78)		RS1/16S0R0J	R 445 (A,73,107)			R 445 (A,73,107)		RS1/16S223J			
R 182 (B,275,75)		RS1/16S0R0J	R 448 (A,90,102)			R 448 (A,90,102)		RS1/16S104J			
R 183 (B,276,67)		RS1/16S0R0J	R 449 (A,83,108)			R 449 (A,83,108)		RS1/16S822J			
R 201 (A,189,85)		RS1/16S473J	R 453 (A,147,36)			R 453 (A,147,36)		RS1/16S362J			
R 202 (A,189,90)		RS1/16S473J	R 454 (A,142,48)			R 454 (A,142,48)		RS1/16S362J			
R 205 (B,189,85)		RS1/16S392J	R 457 (A,141,36)			R 457 (A,141,36)		RS1/16S153J			
R 206 (B,189,91)		RS1/16S392J	R 458 (A,140,47)			R 458 (A,140,47)		RS1/16S153J			
R 207 (B,191,85)		RS1/16S392J	R 459 (B,133,38)			R 459 (B,133,38)		RS1/16S103J			
R 208 (B,191,91)		RS1/16S392J	R 460 (B,133,43)			R 460 (B,133,43)		RS1/16S103J			
R 209 (B,198,85)		RS1/16S392J	R 464 (A,77,99)			R 464 (A,77,99)		RS1/16S0R0J			F
R 210 (B,198,91)		RS1/16S392J	R 473 (A,151,53)			R 473 (A,151,53)		RS1/16S362J			
R 211 (B,200,85)		RS1/16S332J	R 474 (A,152,66)			R 474 (A,152,66)		RS1/16S362J			
R 212 (B,200,91)		RS1/16S332J	R 477 (A,149,52)			R 477 (A,149,52)		RS1/16S153J			

	Mark No.	Description	Part No.	Mark No.	Description	Part No.
	R 478	(A,150,65)	RS1/16S153J	CAPACITORS		
	R 479	(B,142,57)	RS1/16S103J	C 115	(B,262,98)	CKSRYB103K50
A	R 480	(B,142,62)	RS1/16S103J	C 116	(B,267,97)	CKSRYB103K50
	R 484	(A,165,71)	RS1/16S104J	C 117	(B,283,116)	CCSRCH220J50
	R 485	(A,157,80)	RS1/16S472J	C 118	(B,285,109)	CCSRCH220J50
	R 493	(A,141,71)	RS1/16S362J	C 121	(A,280,34)	CEAT100M50
	R 494	(A,141,84)	RS1/16S362J	C 122	(A,280,25)	CEAT100M50
		R 497	(A,139,69)	RS1/16S153J	C 125	(A,280,62)
B	R 498	(A,139,83)	RS1/16S153J	C 126	(A,280,53)	CEAT100M50
	R 499	(B,133,72)	RS1/16S103J	C 127	(A,280,47)	CEAT100M50
	R 500	(B,133,79)	RS1/16S103J	C 128	(A,280,40)	CEAT100M50
	R 502	(B,144,80)	RS1/16S204J	C 131	(A,280,87)	CEAT100M50
	R 551	(A,85,108)	RS1/16S822J	C 132	(A,280,80)	CEAT100M50
	R 9001	(B,94,54)	RS1/16S0R0J	C 133	(A,280,74)	CEAT100M50
C	R 9002	(A,129,89)	RS1/16S473J	C 134	(A,280,67)	CEAT100M50
	R 9003	(B,92,54)	RS1/16S0R0J	C 135	(A,280,114)	CEAT100M50
	R 9006	(B,103,89)	RS1/16S474J	C 136	(A,280,106)	CEAT100M50
	R 9007	(B,93,89)	RS1/16S474J	C 137	(A,280,101)	CEAT100M50
	R 9008	(A,93,107)	RS1/16S221J	C 138	(A,280,93)	CEAT100M50
	R 9009	(A,65,85)	RS1/16S473J	C 141	(A,256,82)	CKSRYB104K50
D	R 9010	(B,115,45)	RS1/16S512J	C 145	(B,256,81)	CCSRCH101J50
	R 9011	(A,63,76)	RS1/16S102J	C 146	(B,258,81)	CCSRCH101J50
	R 9012	(A,63,73)	RS1/16S0R0J	C 147	(B,253,81)	CKSRYB103K50
	R 9013	(B,112,45)	RS1/16S471J	C 148	(B,238,67)	CKSRYB223K25
	R 9014	(B,104,54)	RS1/16S471J	C 149	(B,235,67)	CKSRYB473K25
	R 9015	(B,102,54)	RS1/16S471J	C 150	(B,231,67)	CKSOYB154K16
E	R 9016	(B,100,54)	RS1/16S471J	C 151	(B,45,62)	CKSRYB103K50
	R 9017	(B,98,54)	RS1/16S471J	C 152	(B,230,62)	CKSRYB223K25
	R 9018	(B,96,54)	RS1/16S471J	C 153	(B,234,62)	CKSRYB473K25
	R 9019	(B,98,76)	RS1/16S471J	C 154	(B,232,62)	CKSOYB154K16
	R 9020	(B,99,76)	RS1/16S471J	C 155	(A,226,62)	CEAT101M10
	R 9021	(B,101,76)	RS1/16S471J	C 156	(A,229,56)	CEAT101M10
F	R 9022	(B,103,76)	RS1/16S471J	C 157	(A,236,56)	CEAT101M10
	R 9023	(B,112,67)	RS1/16S103J	C 158	(A,232,50)	CEAT101M10
	R 9025	(B,103,67)	RS1/16S562J	C 159	(A,241,50)	CEAT101M10
	R 9026	(B,106,67)	RS1/16S103J	C 160	(A,234,44)	CEAT101M10
	R 9028	(B,119,45)	RS1/16S104J	C 161	(A,241,44)	CEAT101M10
	R 9030	(A,68,79)	RS1/16S470J	C 162	(A,248,44)	CEAT101M10
G	R 9031	(B,69,48)	RS1/16S104J	C 165	(A,240,86)	CEAT1R0M50
	R 9032	(A,66,59)	RS1/16S104J	C 166	(A,248,86)	CEAT1R0M50
	R 9033	(B,89,48)	RS1/16S104J	C 179	(B,294,76)	CKSRYB103K50
	R 9036	(A,88,89)	RS1/16S221J	C 180	(A,277,19)	CKSRYB103K50
	R 9037	(A,124,99)	RS1/16S104J	C 199	(A,281,50)	CKSRYB103K50
	R 9039	(A,87,57)	RS1/16S104J	C 201	(A,183,85)	CEAT2R2M50
H	R 9041	(B,117,45)	RS1/16S104J	C 202	(A,184,92)	CEAT2R2M50
	R 9045	(A,97,46)	RS1/16S471J	C 205	(A,193,85)	CCSRCH331J50
	R 9046	(A,107,46)	RS1/16S471J	C 206	(A,194,90)	CCSRCH331J50
	R 9047	(A,98,46)	RS1/16S103J	C 207	(B,193,85)	CCSRCH331J50
	R 9048	(A,98,43)	RS1/16S103J	C 208	(B,193,91)	CCSRCH331J50
	R 9060	(B,98,68)	RS1/16S473J	C 213	(A,223,84)	CEAT100M50
I	R 9062	(B,87,48)	RS1/16S471J	C 214	(A,223,90)	CEAT100M50
	R 9064	(A,54,74)	RS1/16S103J	C 217	(A,202,85)	CKSRYB103K50
	R 9065	(A,56,74)	RS1/16S103J	C 218	(A,202,90)	CKSRYB103K50
	R 9066	(A,62,72)	RS1/16S103J	C 219	(A,221,87)	CKSRYB104K16
	R 9067	(A,57,83)	RS1/16S103J	C 220	(A,210,93)	CKSRYB104K16
	R 9068	(A,64,71)	RS1/16S0R0J	C 221	(A,230,75)	CKSRYB103K50
J	R 9081	(A,120,72)	RS1/16S221J	C 222	(A,243,70)	CKSRYB103K50
	R 9082	(A,122,69)	RS1/16S274J	C 241	(A,183,70)	CEAT2R2M50
				C 242	(A,183,77)	CEAT2R2M50
				C 245	(A,194,69)	CCSRCH331J50

5	6	7	8
<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u> <u>Description</u> <u>Part No.</u>
C 246 (A,194,74)		CCSRCH331J50	
C 247 (B,193,69)		CCSRCH331J50	
C 248 (B,193,75)		CCSRCH331J50	
C 249 (A,205,69)		CEAT100M50	
C 250 (A,205,75)		CEAT100M50	
C 251 (A,204,65)		CKSRYP103K50	
C 252 (A,211,78)		CKSRYP103K50	
C 261 (A,183,54)		CEAT2R2M50	
C 262 (A,183,62)		CEAT2R2M50	
C 264 (A,191,59)		CCSRCH331J50	
C 265 (A,194,53)		CCSRCH331J50	
C 266 (A,194,59)		CCSRCH221J50	
C 267 (B,193,53)		CCSRCH331J50	
C 268 (B,193,60)		CCSRCH101J50	
C 269 (A,205,54)		CEAT100M50	
C 270 (A,205,60)		CEAT100M50	
C 271 (A,203,51)		CKSRYP103K50	
C 272 (A,210,64)		CKSRYP103K50	
C 323 (A,146,36)		CCSRCH101J50	
C 324 (A,140,49)		CCSRCH101J50	
C 325 (A,136,39) ELECT. CAPACITOR		CEAT220M50	
C 326 (A,136,46) ELECT. CAPACITOR		CEAT220M50	
C 327 (A,132,42)		CKSRYP103K50	
C 328 (A,132,39)		CKSRYP103K50	
C 333 (A,255,93)		CEAT101M10	
C 334 (A,268,81)		CEAT101M10	
C 343 (A,149,51)		CCSRCH101J50	
C 344 (A,150,66)		CCSRCH101J50	
C 345 (A,145,56) ELECT. CAPACITOR		CEAT220M50	
C 346 (A,145,63) ELECT. CAPACITOR		CEAT220M50	
C 347 (A,140,64)		CKSRYP103K50	
C 348 (A,141,58)		CKSRYP103K50	
C 362 (A,169,70)		CEAT100M50	
C 363 (A,139,68)		CCSRCH101J50	
C 364 (A,139,84)		CKSRYP472K50	
C 365 (A,136,73) ELECT. CAPACITOR		CEAT220M50	
C 366 (A,136,80) ELECT. CAPACITOR		CEANP4R7M50	
C 367 (A,135,88)		CKSRYP103K50	
C 368 (A,147,75)		CKSRYP103K50	
C 370 (A,161,74)		CEAT4R7M50	
C 392 (B,91,95)		CKSRYP102K50	
C 1031(A,286,65)		CCSRCH220J50	
C 1041(B,287,55)		CCSRCH220J50	
C 5001(B,230,10)		CKSRYP102K50	
C 5002(B,232,10)		CKSRYP103K50	
C 5003(B,234,10)		CKSRYP105K10	
C 5025(A,166,12)		CKSRYP102K50	
C 5026(A,170,14)		CKSRYP102K50	
C 5027(A,177,14)		CKSRYP102K50	
C 5028(A,179,16)		CCSRCH220J50	
C 9004(A,121,94)		CKSRYP103K50	
C 9005(A,116,99)		CEJQ2R2M50	
C 9006(A,122,88)		CKSRYP105K10	
C 9007(A,79,92) ELECT. CAPACITOR		CEAT331M6R3	
C 9008(B,77,90)		CKSRYP103K50	
C 9011(B,95,89)		CKSRYP473K16	
C 9014(B,87,88)		CKSRYP473K16	
C 9015(A,100,95)		CKSRYP102K50	
C 9018(B,72,72)		CKSRYP104K50	
C 9081(A,120,69)		CKSRYP103K50	
			B DSP ASSY
			MISCELLANEOUS
		IC 601 (A,109,36) DA I/F TRANSCEIVER	AK4114VQ
		IC 701 (A,77,29) CODEC IC	AK4628AVQ
		IC 801 (A,37,39) DSP IC	DSPC56371AF180
		IC 802 (A,33,26) IC	TC7WU04FU
		IC 871 (B,65,43) IC	TC7WH125FU
		⚠ IC 901 (B,114,24) REGULATOR IC	PQ1LAX95MSPQ
		⚠ IC 902 (A,99,24) REGULATOR IC	PQ1LAX95MSPQ
		IC 952 (A,16,32) IC	TC74VHCT541AFTS1
		D 701 (A,81,19) DIODE	MA152VA
		D 702 (B,82,18) DIODE	MA152VK
		D 901 (B,107,21) DIODE	UDZS5R6(B)
		D 902 (B,102,20) DIODE	UDZS5R6(B)
		L 601 (B,103,41) CHIP SOLID INDUCTOR	QTL1013
		L 602 (A,100,36) CHIP SOLID INDUCTOR	QTL1013
		L 701 (B,68,30) CHIP SOLID INDUCTOR	QTL1013
		L 702 (A,93,22) CHIP SOLID INDUCTOR	QTL1013
		L 801 (A,37,25) CHIP SOLID INDUCTOR	QTL1013
		L 802 (A,42,29) CHIP SOLID INDUCTOR	ATL7002
		L 803 (A,51,42) CHIP SOLID INDUCTOR	ATL7002
		L 804 (B,29,34) CHIP SOLID INDUCTOR	QTL1013
		L 871 (B,69,45) CHIP SOLID INDUCTOR	QTL1013
		L 901 (B,105,18) CHIP SOLID INDUCTOR	ATL7002
		L 902 (B,100,18) CHIP SOLID INDUCTOR	ATL7002
		L 952 (A,21,28) CHIP SOLID INDUCTOR	QTL1013
		JA 501 (A,142,22) JACK	AKB7131
		X 801 (A,23,22) CRYSTAL RESONATOR (24.576MHZ)	XSS3003
		CN601 (A,107,50) 10P CONNECTOR	VKN1241
		CN701 (A,83,14) 19P SOCKET	XKP3080
		CN901 (A,116,14) 13P SOCKET	XKP3077
		CN951 (A,45,14) 15P SOCKET	XKP3078
			RESISTORS
		R 403 (A,122,42)	RS1/16SS0R0J
		R 501 (B,131,16)	RS1/16S750J
		R 502 (B,134,30)	RS1/16S750J
		R 516 (B,114,36)	RS1/16S100J
		R 517 (B,130,30)	RS1/16S100J
		R 572 (A,92,40)	RS1/16S0R0J
		R 573 (A,91,44)	RS1/16SS0R0J
		R 574 (A,76,42)	RS1/16SS0R0J
		R 575 (A,76,40)	RS1/16SS0R0J
		R 576 (A,78,44)	RS1/16SS0R0J
		R 604 (B,114,46)	RS1/16S104J
		R 605 (B,112,46)	RS1/16S104J
		R 606 (B,110,46)	RS1/16S104J
		R 612 (A,117,33)	RS1/16S0R0J
		R 614 (A,102,38)	RS1/16SS101J
		R 615 (A,104,30)	RS1/16SS470J
		R 616 (A,102,34)	RS1/16SS101J
		R 617 (B,105,31)	RS1/16S101J
		R 618 (B,107,31)	RS1/16S101J
		R 620 (A,106,30)	RS1/16SS470J
		R 621 (B,108,36)	RS1/16S220J
		R 624 (A,112,28) RESISTOR ARRAY	RAB4CCQ101J
		R 627 (B,112,32)	RS1/16S103J
		R 628 (A,117,38)	RS1/16S1802F

	1	2	3	4		
	<u>Mark No.</u>	<u>Description</u>	<u>Part No.</u>	<u>Mark No.</u> <u>Description</u>	<u>Part No.</u>	
	R 665	(A,99,58)	RS1/16SS0R0J	R 981	(A,14,38)	RS1/16SS0R0J
A	R 666	(A,98,58)	RS1/16SS0R0J	R 982	(A,15,38)	RS1/16SS0R0J
	R 667	(A,97,58)	RS1/16SS0R0J	CAPACITORS		
	R 701	(B,78,35)	RS1/16S470J	C 503	(B,127,16)	CKSRYB103K50
	R 702	(B,75,35)	RS1/16S101J	C 504	(B,132,30)	CKSRYB103K50
	R 704	(B,70,27)	RS1/16S4R7J	C 606	(A,102,40)	CKSRYB104K16
	R 705	(A,60,18)	RS1/16SS101J	C 607	(A,96,39)	CEVW470M6R3
	R 706	(A,63,18)	RS1/16SS101J	C 608	(A,101,36)	CCSRCH471J50
	R 707	(A,65,18)	RS1/16SS101J			
	R 708	(A,68,18)	RS1/16SS101J	C 609	(A,102,36)	CKSRYB104K16
	R 709	(A,70,18)	RS1/16SS101J	C 614	(B,110,32)	CKSRYB104K16
	R 710	(A,73,18)	RS1/16SS101J	C 617	(B,114,32)	CKSRYB102K50
B	R 711	(A,75,18)	RS1/16SS101J	C 618	(A,117,28)	CEVW470M6R3
	R 712	(A,78,18)	RS1/16SS101J	C 619	(A,118,35)	CKSSYB104K10
	R 713	(A,86,30)	RS1/16S470J			
	R 714	(A,85,36) RESISTOR ARRAY	RAB4CQ101J	C 620	(A,116,35)	CCSRCH471J50
	R 801	(A,48,48)	RS1/16SS470J	C 621	(A,116,38)	CKSRYB474K10
	R 802	(A,40,50) RESISTOR ARRAY	RAB4CQ101J	C 701	(A,67,32)	CKSSYB103K16
	R 803	(B,44,48)	RS1/16S103J	C 703	(A,64,23)	CEVW101M16
	R 804	(B,42,48)	RS1/16S103J	C 704	(A,67,29)	CKSRYB104K16
	R 805	(B,39,42)	RS1/16S103J	C 705	(A,68,30)	CCSSCH101J50
	R 806	(B,37,42)	RS1/16S103J	C 706	(B,66,26)	CKSRYB104K16
	R 807	(B,35,42)	RS1/16S473J	C 707	(B,60,19)	CKSRYB471K50
	R 810	(A,26,39)	RS1/16SS473J	C 708	(B,63,19)	CKSRYB471K50
C	R 811	(A,24,37)	RS1/16SS472J	C 709	(B,65,19)	CKSRYB471K50
	R 812	(B,27,43)	RS1/16S101J	C 710	(B,68,19)	CKSRYB471K50
	R 813	(A,24,34)	RS1/16SS103J	C 711	(B,70,19)	CKSRYB471K50
	R 815	(A,25,26)	RS1/16SS105J	C 712	(B,73,19)	CKSRYB471K50
	R 816	(A,23,26)	RS1/16SS471J	C 713	(B,75,19)	CKSRYB471K50
	R 817	(A,34,28)	RS1/16SS101J	C 714	(B,78,19)	CKSRYB471K50
	R 818	(B,35,23)	RS1/16S220J	C 715	(A,90,29)	CEVW101M16
	R 819	(B,26,29)	RS1/16S101J	C 716	(A,86,27)	CKSRYB104K16
	R 820	(B,28,29)	RS1/16S0R0J	C 717	(A,85,27)	CKSSYB471K50
	R 822	(B,36,30)	RS1/16S103J	C 718	(A,87,20)	CEVW470M6R3
	R 823	(B,36,36)	RS1/16S473J	C 720	(A,85,24)	CKSSYB104K10
D	R 827	(B,48,38)	RS1/16S470J	C 763	(B,53,36)	CKSRYB471K50
	R 831	(B,42,31)	RS1/16S470J	C 764	(B,55,36)	CKSRYB104K16
	R 832	(A,47,41)	RS1/16SS470J	C 802	(A,42,50)	CKSSYB104K10
	R 833	(A,48,45) RESISTOR ARRAY	RAB4CQ470J	C 803	(A,37,49)	CKSSYB471K50
	R 840	(A,24,33)	RS1/16SS101J	C 804	(A,37,50)	CKSSYB104K10
	R 841	(A,67,38)	RS1/16S473J	C 806	(A,31,50)	CKSSYB104K10
	R 852	(B,43,27)	RS1/16S222J	C 808	(A,26,43)	CKSSYB104K10
	R 871	(B,59,36)	RS1/16S470J	C 809	(A,27,41)	CKSSYB471K50
	R 872	(B,61,36)	RS1/16S470J	C 810	(A,26,41)	CKSSYB104K10
	R 873	(B,61,44)	RS1/16S470J	C 814	(A,27,33)	CKSSYB471K50
E	R 874	(B,59,44)	RS1/16S470J	C 815	(A,25,33)	CKSSYB104K10
	R 905	(B,118,17)	RS1/16S104J	C 816	(A,21,26)	CCSSCH5R0C50
	R 906	(B,120,15)	RS1/16S104J	C 817	(A,27,26)	CCSSCH5R0C50
	R 908	(A,123,13)	RS1/16SS0R0J	C 818	(A,35,23)	CCSRCH471J50
	R 919	(A,113,20)	RS1/16S1202F	C 819	(A,35,22)	CKSSYB104K10
	R 920	(A,115,20)	RS1/16S2002F	C 821	(A,30,30)	CKSSYB471K50
	R 921	(A,101,20)	RS1/16S1202F	C 822	(A,30,29)	CKSSYB104K10
	R 922	(A,98,20) CHIP RESISTOR	RS1/16S1000F	C 823	(A,32,30)	CKSSYB471K50
	R 951	(B,25,33)	RS1/16S101J	C 824	(A,32,28)	CKSSYB104K10
	R 952	(B,23,33)	RS1/16S101J	C 825	(B,32,39)	CKSRYB103K50
	R 953	(B,21,33)	RS1/16S101J	C 826	(A,38,29)	CKSSYB471K50
F	R 954	(A,17,26) RESISTOR ARRAY	RAB4CQ101J	C 827	(A,38,28)	CKSSYB104K10
	R 955	(A,14,26) RESISTOR ARRAY	RAB4CQ101J	C 829	(A,47,36)	CKSSYB104K10
	R 962	(A,32,18) RESISTOR ARRAY	RAB4CQ104J	C 830	(A,47,39)	CKSSYB471K50
	R 970	(A,37,18) RESISTOR ARRAY	RAB4CQ104J	C 831	(A,48,39)	CKSSYB104K10

Mark No.	Description	Part No.	Mark No.	Description	Part No.
C 833 (A,48,43)		CKSSYB104K10	D 606 (A,259,57)	DIODE	1SS133
C 834 (A,41,23)		CEWW101M16	D 608 (A,253,52)	DIODE	1SS133
C 835 (A,57,42)	CHIP ELECT.CAPACITOR	CEWW101M4			
C 872 (B,70,41)		CKSRYB104K16	D 652 (A,262,57)	DIODE	1SS133
C 907 (B,110,23)		CKSRYB105K16	D 654 (A,242,52)	DIODE	1SS133
			D 681 (A,139,21)	ZENER DIODE	MTZJ15A
C 908 (A,115,22)		CKSRYB105K16	D 682 (A,128,21)	ZENER DIODE	MTZJ15A
C 909 (B,97,26)		CKSRYB105K16	D 683 (A,135,58)	DIODE	1SS133
C 910 (B,97,22)		CKSRYB105K16			
C 916 (B,69,34)		CKSRYB471K50	D 684 (A,65,72)	DIODE	1SS133
C 917 (B,71,34)		CKSRYB103K50	⚠ D 701 (A,9,88)	DIODE	D5SBA20(B)
			⚠ D 702 (A,9,126)	DIODE	D5SBA20(B)
C 918 (B,81,36)		CKSRYB104K16	D 703 (B,252,76)	DIODE	1SS355
C 919 (B,82,36)		CKSRYB471K50	D 711 (A,196,103)	ZENER DIODE	MTZJ22D
C 955 (A,22,31)		CKSRYB104K16			

C POWER PACK ASSY MISCELLANEOUS

⚠ IC 601 (A,265,14)	POWER PACK 2CH	STK412-530	D 712 (A,192,103)	DIODE	MTZJ6R8(B)
⚠ IC 603 (A,132,14)	POWER PACK 3CH	STK413-530	D 713 (A,118,78)	DIODE	1SS133
⚠ IC 604 (A,265,43)	PROTECTOR(10A)	AEK7022	D 741 (B,152,136)	DIODE	1SS355
⚠ IC 605 (A,273,41)	PROTECTOR(10A)	AEK7022	D 742 (B,167,140)	DIODE	1SS355
⚠ IC 606 (A,133,48)	PROTECTOR(10A)	AEK7022	D 743 (B,121,129)	DIODE	1SS355
⚠ IC 607 (A,138,47)	PROTECTOR(10A)	AEK7022	D 744 (B,138,139)	DIODE	1SS355
⚠ IC 610 (A,59,28)	PROTECTOR(1A)	AEK7009	D 745 (B,115,129)	DIODE	1SS355
⚠ IC 701 (A,100,80)	IC PROTECTOR	ICP-N10	D 752 (B,170,135)	DIODE	1SS355
⚠ IC 702 (A,84,81)	IC PROTECTOR	ICP-N10	D 754 (B,141,132)	DIODE	1SS355
⚠ IC 803 (B,238,94)	REGULATOR IC	NJM78M05DL1A	D 777 (A,127,57)	DIODE	1SS133
⚠ IC 804 (A,282,111)	REGULATOR IC	TA7809S	D 778 (A,108,57)	DIODE	1SS133
⚠ IC 805 (B,270,132)	LDO REGULATOR(5V)	NJM2831F05	D 781 (A,264,35)	DIODE	30PDA20-FC6
Q 501 (B,86,38)	TRANSISTOR	2SC5938A	D 782 (A,135,17)	DIODE	30PDA20-FC6
Q 505 (A,111,47)	TRANSISTOR	2SC2240	D 783 (A,129,37)	DIODE	30PDA20-FC6
Q 601 (B,89,44)	TRANSISTOR	2SC5938A	D 784 (A,267,17)	DIODE	30PDA20-FC6
Q 602 (B,224,43)	TRANSISTOR	2SC5938A	⚠ D 801 (B,221,113)	BRIDGE DIODE	S1WB(A)60SD
Q 605 (A,118,40)	TRANSISTOR	2SC2240	D 806 (A,287,62)	DIODE	MTZJ6R2(B)
Q 606 (A,252,40)	TRANSISTOR	2SC2240	D 807 (A,284,67)	DIODE	1SS133
Q 652 (B,219,37)	TRANSISTOR	2SC5938A	D 827 (A,262,133)	DIODE	MTZJ6R2(B)
Q 656 (A,244,47)	TRANSISTOR	2SC2240	D 828 (A,224,99)	DIODE	MTZJ6R2(B)
Q 681 (B,77,48)	TRANSISTOR	2SC5938A	⚠ D 829 (A,239,128)	DIODE	D3SBA20(B)
Q 683 (A,59,65)	TRANSISTOR	2SC2240	L 751 (A,160,108)	COIL	ATH1004
Q 696 (B,284,22)	TRANSISTOR	2SC4081	L 752 (A,173,108)	COIL	ATH1004
Q 697 (B,282,26)	TRANSISTOR	2SC4081	L 753 (A,120,107)	COIL	ATH1004
Q 698 (B,246,67)	TRANSISTOR	RT1N241M	L 761 (A,130,108)	COIL	ATH1004
Q 707 (B,241,74)	CHIP TRANSISTOR	RN4903	L 762 (A,142,108)	COIL	ATH1004
Q 721 (A,142,71)	TRANSISTOR	2SA1145	J 43	JUMPER WIRE 11P	D20PY1120E
Q 722 (A,161,74)	TRANSISTOR	2SC2240	KN601 (A,65,23)	WRAPPING TERMINAL	VNF1084
Q 803 (B,265,140)	DIGITAL TR(SC-70)	RT1P241M	RY751 (A,173,130)	RELAY	ASR7001
Q 804 (B,268,145)	TRANSISTOR	RT1N241M	RY752 (A,141,126)	RELAY	ASR7001
Q 805 (B,277,146)	DIGITAL TR(SC-70)	RT1P241M	RY753 (A,117,120)	RELAY	ASR7001
Q 806 (B,271,145)	TRANSISTOR	RT1N241M	CN701 (A,212,134)	11P JUMPER CONNECTOR	52147-1110
Q 807 (B,276,53)	TRANSISTOR	RT3P22M	CN702 (A,201,106)	6P JUMPER CONNECTOR	52147-0610
Q 808 (B,283,56)	TRANSISTOR	RT3N22M	CN705 (A,295,40)	21P PLUG	XKM3011
D 601 (A,125,57)	DIODE	1SS133	CN754	SP TERMINAL 4-P(V0)	XKE3041
D 602 (A,272,21)	ZENER DIODE	MTZJ15A	CN755	SP TERMINAL 6-P(V0)	XKE3040
D 603 (A,119,57)	DIODE	1SS133	CN803 (A,231,129)	6P PLUG	KM200TA6
D 604 (A,261,21)	ZENER DIODE	MTZJ15A	CN805 (A,317,153)	13P PLUG	XKP3066
			CN806 (A,317,120)	19P PLUG	XKP3069
			CN807 (A,317,82)	15P PLUG	XKP3067
			CN815 (A,295,79)	19P PLUG	XKM3005
			CN816 (A,295,126)	21P PLUG	XKM3011
			CN817	CONNECTOR	CKS3382
			810 (A,277,90)	11P CABLE HOLDER	51048-1100

RESISTORS

R 601 (A,95,48)	RD1/4PU102J
R 602 (A,228,42)	RD1/4PU102J

Mark No.	Description	Part No.	Mark No.	Description	Part No.
R 603	(B,91,47)	RS1/16S103J	△ R 709	(A,104,72) METAL OXIDE RESISTOR	RS1LMF272J
R 604	(B,225,47)	RS1/16S103J	△ R 710	(A,89,93) METAL OXIDE RESISTOR	RS1LMF272J
R 605	(B,250,23)	RS1/16S0R0J	△ R 711	(A,181,86) METAL OXIDE RESISTOR	RS2LMF242J
A					
R 606	(B,241,28)	RS1/16S0R0J	R 713	(A,118,86)	RD1/4PU102J
R 609	(A,91,35)	RD1/4PU563J	R 714	(B,252,68)	RS1/16S102J
R 610	(A,225,35)	RD1/4PU563J	R 715	(B,250,75)	RS1/16S103J
R 611	(A,90,28)	RD1/4PU182J	R 716	(B,247,75)	RS1/16S103J
R 612	(A,223,28)	RD1/4PU182J	R 721	(A,145,77)	RD1/4PU682J
R 613	(A,114,21)	RD1/4PU563J	R 722	(A,124,78)	RD1/4PU682J
R 614	(A,247,21)	RD1/4PU563J	R 723	(A,276,78)	RD1/4PU473J
R 615	(A,123,36)	RD1/4PU331J	R 724	(A,279,83)	RD1/4PU473J
R 616	(A,270,29)	RD1/4PU562J	R 725	(A,276,74)	RD1/4PU103J
△ R 617	(A,114,31) RESISTOR (0.22, 5W)	ACN7094	R 726	(B,291,59)	RS1/16S103J
B					
R 618	(A,266,29)	RD1/4PU562J	R 727	(B,287,59)	RS1/16S103J
R 619	(A,122,52)	RD1/4PU182J	R 728	(B,106,9)	RS1/16S123J
R 620	(A,257,36)	RD1/4PU331J	R 730	(B,214,14)	RS1/16S123J
R 621	(A,124,49)	RD1/4PU821J	R 731	(A,121,73)	RD1/4PU220J
△ R 622	(A,248,31) RESISTOR (0.22, 5W)	ACN7094	R 732	(A,101,89)	RD1/4PU220J
R 623	(A,116,48)	RD1/4PU223J	R 740	(B,87,141)	RS1/16S683J
R 624	(A,257,52)	RD1/4PU182J	R 741	(B,152,140)	RS1/16S333J
R 625	(B,116,22)	RS1/16S0R0J	R 742	(B,169,143)	RS1/16S333J
R 626	(A,258,49)	RD1/4PU821J	R 743	(B,121,134)	RS1/16S333J
R 627	(B,107,28)	RS1/16S0R0J	R 744	(B,137,143)	RS1/16S333J
R 628	(A,250,48)	RD1/4PU223J	R 745	(B,110,131)	RS1/16S333J
R 629	(B,92,9)	RS1/16S0R0J	△ R 751	(A,158,119) CARBON FILM RESISTOR	RD1/4PUF101J
R 630	(A,230,21)	RD1/4PU102J	△ R 752	(A,185,120) CARBON FILM RESISTOR	RD1/4PUF101J
R 652	(A,215,36)	RD1/4PU102J	△ R 753	(A,156,126) METAL OXIDE RESISTOR	RS1LMF4R7J
R 654	(B,219,41)	RS1/16S103J	△ R 754	(A,181,126) METAL OXIDE RESISTOR	RS1LMF4R7J
R 660	(A,220,29)	RD1/4PU563J	△ R 755	(A,103,117) CARBON FILM RESISTOR	RD1/4PUF101J
R 662	(A,216,20)	RD1/4PU182J	△ R 756	(A,101,120) METAL OXIDE RESISTOR	RS1LMF4R7J
R 664	(A,238,21)	RD1/4PU563J	△ R 761	(A,125,117) CARBON FILM RESISTOR	RD1/4PUF101J
R 666	(A,240,35)	RD1/4PU331J	△ R 762	(A,155,119) CARBON FILM RESISTOR	RD1/4PUF101J
△ R 668	(A,239,31) RESISTOR (0.22, 5W)	ACN7094	△ R 763	(A,124,132) METAL OXIDE RESISTOR	RS1LMF4R7J
R 670	(A,245,52)	RD1/4PU182J	△ R 764	(A,149,139) METAL OXIDE RESISTOR	RS1LMF4R7J
R 672	(A,240,57)	RD1/4PU821J	R 777	(A,81,37)	RD1/4PU102J
R 674	(A,236,38)	RD1/4PU223J	R 778	(B,85,42)	RS1/16S103J
R 681	(A,72,51)	RD1/4PU102J	R 781	(A,87,30)	RD1/4PU563J
R 682	(B,70,49)	RS1/16S103J	R 782	(A,84,22)	RD1/4PU182J
R 685	(B,75,37)	RS1/16S563J	R 783	(A,104,21)	RD1/4PU563J
R 686	(B,80,21)	RS1/16S182J	R 784	(A,111,35)	RD1/4PU331J
R 687	(A,83,10)	RD1/4PU563J	△ R 785	(A,105,31) RESISTOR (0.22, 5W)	ACN7094
R 688	(A,135,30)	RD1/4PU562J	R 786	(A,111,57)	RD1/4PU182J
R 689	(A,132,30)	RD1/4PU562J	R 787	(A,106,57)	RD1/4PU821J
R 690	(A,60,52)	RD1/4PU331J	R 788	(A,102,38)	RD1/4PU223J
△ R 691	(A,55,55) RESISTOR (0.22, 5W)	ACN7094	R 806	(B,283,48)	RS1/16S103J
R 692	(A,70,72)	RD1/4PU182J	R 807	(B,278,48)	RS1/16S103J
R 693	(A,67,77)	RD1/4PU821J	R 808	(B,283,52)	RS1/16S102J
R 694	(A,62,72)	RD1/4PU223J	R 813	(B,274,130)	RS1/16S102J
R 695	(A,97,22)	RD1/4PU102J	R 885	(B,310,57)	RS1/16S221J
R 696	(B,281,38)	RS1/16S103J	R 886	(B,310,61)	RS1/16S221J
R 697	(B,255,68)	RS1/16S103J	R 887	(B,310,65)	RS1/16S221J
R 698	(B,243,67)	RS1/16S333J	R 888	(B,315,22)	RS1/16S221J
R 701	(A,121,86)	RD1/4PU562J	R 1101	(B,273,68)	RS1/16S0R0J
R 702	(A,110,87)	RD1/4PU562J	R 1102	(B,274,61)	RS1/16S0R0J
R 703	(A,151,72)	RD1/4PU473J	R 1103	(B,70,136)	RS1/16S0R0J
R 704	(A,148,77)	RD1/4PU473J	R 1104	(B,138,132)	RS1/16S0R0J
R 705	(A,283,85)	RD1/4PU473J	R 1105	(B,168,135)	RS1/16S0R0J
R 706	(A,283,75)	RD1/4PU473J	R 1109	(B,285,56)	RS1/16S0R0J
R 707	(A,135,77)	RD1/4PU184J	R 1110	(B,241,68)	RS1/16S0R0J
R 708	(A,147,81)	RD1/4PU184J			

5	6
Mark No. Description	Part No.
CAPACITORS	
C 603 (B,94,39)	CKSRYB331K50
C 604 (B,227,38)	CKSRYB331K50
C 605 (A,96,38)	CEAT4R7M50
C 606 (A,230,38)	CEAT4R7M50
C 607 (B,95,20)	CCSRCH470J50
C 608 (B,230,17)	CCSRCH470J50
C 609 (A,91,32)	CEAT101M16
C 610 (A,225,32)	CEAT101M16
C 613 (B,116,27)	CCSRCJ3R0C50
C 614 (B,250,28)	CCSRCJ3R0C50
C 615 (A,116,45)	CEANP2R2M50
C 616 (A,250,45)	CEANP2R2M50
C 654 (B,217,33)	CKSRYB331K50
C 656 (A,215,33)	CEAT4R7M50
C 658 (B,221,17)	CCSRCH470J50
C 660 (A,219,25)	CEAT101M16
C 664 (B,241,24)	CCSRCJ3R0C50
C 666 (A,239,49)	CEANP2R2M50
C 682 (B,75,43)	CKSRYB331K50
C 683 (A,78,43)	CEAT4R7M50
C 684 (B,82,18)	CCSRCH470J50
C 685 (A,78,37)	CEAT101M16
C 687 (B,87,8)	CCSRCJ3R0C50
C 688 (A,75,78)	CEANP2R2M50
C 696 (B,281,36)	CKSRYB102K50
C 697 (A,286,34)	CEAT221M6R3
C 701 (A,49,80) E-CAP 5600/71	XCH3027
C 702 (A,49,107) E-CAP 5600/71	XCH3027
C 703 (A,43,130) ELECT.CAPACITOR	XCH3012
C 704 (A,38,150) ELECT.CAPACITOR	XCH3012
C 705 (A,156,81) ELECT. CAPACITOR	CEAT100M2A
C 706 (A,142,84) ELECT. CAPACITOR	CEAT100M2A
C 709 (A,257,73)	CEAT1R0M50
C 711 (A,195,99) ELECT. CAPACITOR	CEAT101M35
C 712 (A,189,105)	CEAT101M10
C 740 (A,90,136)	CEAT101M25
C 751 (A,159,143) FILM CAPACITOR	CQMBA104J50
C 752 (A,181,150) FILM CAPACITOR	CQMBA104J50
C 755 (A,103,147) FILM CAPACITOR	CQMBA104J50
C 761 (A,122,139) FILM CAPACITOR	CQMBA104J50
C 762 (A,152,145) FILM CAPACITOR	CQMBA104J50
C 778 (B,84,34)	CKSRYB331K50
C 779 (A,81,33)	CEAT4R7M50
C 780 (B,88,18)	CCSRCH470J50
C 781 (A,87,27)	CEAT101M16
C 783 (B,107,24)	CCSRCJ3R0C50
C 784 (A,105,49)	CEANP2R2M50
C 801 (A,248,114) ELECT. CAPACITOR	CEAT222M25
C 802 (A,249,100) ELECT. CAPACITOR	CEAT222M25
C 806 (A,288,55)	CEAT1R0M50
C 807 (B,227,93)	CKSRYB103K25
C 808 (A,245,142) ELECT. CAPACITOR	CEAT472M16
C 809 (A,232,95)	CEAT101M10
C 810 (A,266,133)	CEAT101M10
C 811 (B,279,128)	CKSRYB103K25
C 812 (B,278,109)	CKSRYB103K25
C 813 (A,276,118)	CEAT101M16

7	8
Mark No. Description	Part No.
D TRANS2 ASSY	
MISCELLANEOUS	
△ IC 853 (A,32,204) PROTECTOR(4A)	AEK7018
J 21 JUMPER WIRE 11P	D20PY1130E
CN1201(A,35,183) 4P JUMPER CONNECTOR	52147-0410
△ 851 (A,49,207) 11P CABLE HOLDER	51048-1100
E TRANS3 ASSY	
RESISTORS	
R 881 (A,40,239)	RD1/4PU4R7J
R 882 (A,40,236)	RD1/4PU4R7J
CAPACITORS	
C 881 (A,13,234) MYLAR FILM CAPACITOR	CQMA333K2E
C 882 (A,16,239) MYLAR FILM CAPACITOR	CQMA333K2E
C 883 (A,27,238) FILM CAPACITOR	CQMBA333J50
C 884 (A,36,239) FILM CAPACITOR	CQMBA333J50
F COMPONENT VIDEO ASSY	
MISCELLANEOUS	
IC 1401(B,262,201) LOGIC IC	TC74HC4052AF
IC 1402(B,286,189) LOGIC IC	TC74HC4052AF
IC 1404(B,223,198) VIDEO IC	NJM2581M
D 1401(B,210,230) DIODE	1SS355
D 1402(B,207,230) DIODE	1SS355
JA 1401(A,250,175) 6P RCA PINJACK	XKB3025
JA 1402(A,208,175) 6P RCA PINJACK	XKB3025
CN1409(A,204,235) CONNECTOR	CKS3372
RESISTORS	
R 1401(B,236,184)	RS1/16S750J
R 1402(B,251,200)	RS1/16S750J
R 1403(B,263,184)	RS1/16S750J
R 1404(B,234,184)	RS1/16S750J
R 1405(B,248,183)	RS1/16S750J
R 1406(B,260,183)	RS1/16S750J
R 1407(B,199,184)	RS1/16S750J
R 1408(B,209,183)	RS1/16S750J
R 1409(B,221,182)	RS1/16S750J
R 1410(B,181,191)	RS1/16S750J
R 1411(B,216,192)	RS1/16S750J
R 1412(B,214,192)	RS1/16S750J
R 1482(B,184,225)	RS1/16S0R0J
R 1483(B,180,210)	RS1/16S0R0J
R 1484(B,183,236)	RS1/16S0R0J
R 1489(B,192,223)	RS1/16S0R0J
R 1490(B,192,219)	RS1/16S0R0J
R 1491(B,279,204)	RS1/16S0R0J
R 1492(B,251,215)	RS1/16S0R0J
R 1493(B,248,210)	RS1/16S0R0J
R 1494(B,267,226)	RS1/16S102J
R 1496(B,288,216)	RS1/16S102J
R 1498(B,183,202)	RS1/16S0R0J
CAPACITORS	
C 1413(B,256,198)	CKSRYB103K50
C 1414(B,269,209)	CKSRYB103K50
C 1415(B,277,188)	CKSRYB103K50
C 1416(B,280,184)	CKSRYB103K50
C 1419(A,231,216)	CEAT101M10

Mark No. Description**Part No.****Mark No. Description****Part No.**

C	1420(A,231,210)	CEAT101M10
C	1421(A,231,204)	CEAT101M10
C	1425(A,215,202)	CEAT101M10
C	1426(A,201,197)	CEAT101M10
C	1427(B,210,194)	CKSRYB104K50
C	1428(B,230,194)	CKSRYB104K50
C	1490(B,256,183)	CKSRYB103K50
C	1491(B,244,183)	CKSRYB103K50
C	1492(B,205,183)	CKSRYB103K50
C	1493(B,203,183)	CKSRYB103K50

C	1004(B,147,230)	CKSRYB221K50
C	1009(A,146,236)	CEAT4R7M50
C	1010(A,146,228)	CEAT4R7M50
C	1012(B,159,226)	CKSRYB103K50
C	1013(B,151,219)	CCSRCH101J50
C	1014(B,151,216)	CCSRCH101J50
C	1015(B,147,224)	CKSRYB221K50
C	1016(B,147,216)	CKSRYB221K50
C	1021(A,146,214)	CEAT4R7M50
C	1022(A,146,221)	CEAT4R7M50

G HEAD PHONE ASSY**I FRONT DISPLAY****MISCELLANEOUS****MISCELLANEOUS**

Q	1551(B,78,211) TRANSISTOR	2SC5938A
Q	1552(B,102,219) TRANSISTOR	2SC5938A
J	47 JUMPER WIRE	D20PYY0640E
JA	1551(A,117,233) HEADPHONE JACK	XKB3066
KN	1551(A,69,231) WRAPPING TERMINAL	VNF1084
	1551(A,59,220) 6P CABLE HOLDER	51048-0600

IC	401 (B,121,181) DISPLAY U-COM	PE5550A
IC	402 (A,223,169) REMOTE RECEIVER UNIT	GP1UM27XK0VF
Q	442 (B,238,190) TRANSISTOR	RT1N241M
Q	484 (B,217,189) TRANSISTOR	2SA1576A
D	403 (B,226,189) DIODE	1SS355

RESISTORS

⚠ R	1551(A,84,202) METAL OXIDE RESISTOR	RS2LMF331J
⚠ R	1552(A,78,203) METAL OXIDE RESISTOR	RS2LMF331J
⚠ R	1553(A,108,221) METAL OXIDE RESISTOR	RS1LMF151J
⚠ R	1554(A,93,216) METAL OXIDE RESISTOR	RS1LMF151J
R	1555(B,100,216)	RS1/16S472J
R	1556(B,81,210)	RS1/16S472J
R	1557(B,87,228)	RS1/16S102J

L	401 (A,242,159) RADIAL INDUCTOR	LFCA2R2J
V	401 (A,189,200) FL TUBE	XAV3033
S	451 (A,234,139) SWITCH	VSG1024
S	452 (A,213,136) SWITCH	VSG1024
S	453 (A,187,134) SWITCH	VSG1024

CAPACITORS

C	1551(B,94,226)	CKSRYB223K50
C	1552(B,83,210)	CKSRYB223K50
C	1553(B,110,224)	CKSRYB103K50
C	1554(B,110,226)	CCSRCH471J50
C	1555(B,110,229)	CKSRYB104K16

S	454 (A,70,134) SWITCH	VSG1024
S	455 (A,46,134) SWITCH	VSG1024
S	456 (A,23,134) SWITCH	VSG1024
S	458 (A,13,112) SWITCH	VSG1024
S	459 (A,114,136) SWITCH	VSG1024

CAPACITORS

C	1556(B,112,239)	CKSRYB103K50
C	1557(B,109,239)	CCSRCH471J50
C	1558(B,107,239)	CKSRYB104K16
C	1561(A,69,205) ELECT. CAPACITOR	CEANP470M50
C	1562(A,71,223) ELECT. CAPACITOR	CEANP470M50

S	460 (A,91,136) SWITCH	VSG1024
S	461 (A,57,112) SWITCH	VSG1024
S	462 (A,42,112) SWITCH	VSG1024
S	463 (A,27,112) SWITCH	VSG1024
S	464 (A,164,134) SWITCH	VSG1024

H 5.1CH INPUT ASSY**MISCELLANEOUS**

CN	307 (A,125,219) 7P CONNECTOR	52044-0745
CN	309 (A,167,225) PIN JACK(4P)	XKB3035

S	465 (A,140,134) SWITCH	VSG1024
S	466 (A,86,90) SWITCH	VSG1024
S	467 (A,72,90) SWITCH	VSG1024
S	468 (A,57,90) SWITCH	VSG1024
S	469 (A,42,90) SWITCH	VSG1024

RESISTORS

R	1001(B,147,233)	RS1/16S474J
R	1002(B,150,226)	RS1/16S474J
R	1003(B,149,236)	RS1/16S331J
R	1004(B,150,228)	RS1/16S331J
R	1009(B,150,224)	RS1/16S474J

S	470 (A,27,90) SWITCH	VSG1024
S	471 (A,13,90) SWITCH	VSG1024
X	401 (A,149,165) CERAMIC RESONATOR (5.00 MHz)	VSS1142

CAPACITORS

C	1001(B,151,233)	CCSRCH101J50
C	1002(B,151,230)	CCSRCH101J50
C	1003(B,143,233)	CKSRYB221K50

CN	401 (A,246,165) 17P CONNECTOR	52044-1745
	471 (A,35,176) CABLE HOLDER(3P)	51063-0305
	404 (A,197,127) CABLE HOLDER(7P)	51063-0705
	402 FL HOLDER(FE)	VNF1096

RESISTORS

R	401 (B,144,169)	RS1/16S105J
R	402 (B,223,189)	RS1/16S104J
R	403 (B,220,189)	RS1/16S104J
R	405 (B,228,155)	RS1/16S102J
R	406 (B,226,155)	RS1/16S103J
R	407 (B,78,176)	RS1/16S473J
R	408 (B,80,176)	RS1/16S473J
R	409 (B,75,176)	RS1/16S473J
R	410 (B,73,176)	RS1/16S473J
R	411 (B,229,189)	RS1/16S473J
R	412 (B,234,187)	RS1/16S221J

5	6
Mark No. Description	Part No.
R 413 (B,234,184)	RS1/16S221J
R 414 (B,234,182)	RS1/16S221J
R 415 (B,234,180)	RS1/16S221J
R 416 (B,234,178)	RS1/16S221J
R 417 (B,219,182)	RS1/16S101J
R 422 (B,157,169)	RS1/16S104J
R 423 (B,131,167)	RS1/16S104J
R 424 (B,83,176)	RS1/16S104J
R 425 (B,213,182)	RS1/16S104J
R 430 (B,234,175)	RS1/16S0R0J
R 451 (B,236,144)	RS1/16S472J
R 452 (B,234,144)	RS1/16S681J
R 453 (B,187,147)	RS1/16S821J
R 454 (B,166,153)	RS1/16S122J
R 455 (A,45,146)	RD1/4PU681J
R 456 (A,35,144)	RD1/4PU821J
R 457 (A,16,139)	RD1/4PU122J
R 459 (A,109,134)	RD1/4PU472J
R 460 (A,101,135)	RD1/4PU681J
R 461 (B,52,117)	RS1/16S821J
R 462 (B,49,117)	RS1/16S122J
R 463 (B,34,117)	RS1/16S162J
R 464 (B,20,117)	RS1/16S272J
R 465 (A,161,128)	RD1/4PU472J
R 466 (A,151,128)	RD1/4PU681J
R 467 (A,131,128)	RD1/4PU821J
R 468 (B,79,91)	RS1/16S122J
R 469 (B,64,91)	RS1/16S162J
R 470 (B,50,92)	RS1/16S272J
R 471 (B,34,91)	RS1/16S512J
R 472 (B,86,176)	RS1/16S472J
R 473 (B,19,91)	RS1/16S133J
CAPACITORS	
C 401 (B,247,155)	CKSRYB103K50
C 402 (B,247,153)	CKSRYB103K50
C 403 (A,234,168)	CEAT221M6R3
C 410 (B,49,186)	CKSRYB103K50
C 411 (B,51,186)	CKSRYB103K50
C 412 (A,42,178)	CEAT470M50
C 418 (B,141,179)	CKSRYB104K16
C 419 (B,103,182)	CKSRYB103K50
C 420 (A,39,185) ELECT. CAPACITOR	CEAT101M35
C 421 (B,160,169)	CKSRYB104K16
C 441 (B,223,176)	CKSRYB103K50
C 442 (A,239,146)	CEAL470M10
C 451 (B,125,166)	CKSRYB102K50
C 452 (B,103,164)	CKSRYB102K50
C 453 (B,122,166)	CKSRYB102K50
C 454 (B,100,164)	CKSRYB102K50
C 481 (B,140,191)	CCSRCH471J50
C 482 (B,126,201)	CCSRCH221J50
C 483 (B,126,199)	CCSRCH221J50
C 487 (B,83,163)	CKSRYB102K50
C 488 (B,79,163)	CKSRYB102K50
C 489 (B,75,163)	CKSRYB102K50
C 490 (A,22,149)	CKSRYB102K50

J ROTARY ENCODER ASSY

7	8
Mark No. Description	Part No.
MISCELLANEOUS	
S 457 (A,300,183) SWITCH	VSG1024
S 512 (A,288,223) ROTARY ENCODER (JOG)	XSX3008
S 513 (A,288,152) ROTARY ENCODER	XSX3005
S 514 (A,257,216) SWITCH	VSG1024
S 515 (A,270,183) SWITCH	VSG1024
S 516 (A,285,183) SWITCH	VSG1024
511 (A,257,172) CABLE HOLDER(7P)	51063-0705
RESISTORS	
R 513 (B,270,190)	RS1/16S162J
R 514 (B,280,185)	RS1/16S272J
R 515 (B,295,185)	RS1/16S512J
K POWER KEY ASSY	
MISCELLANEOUS	
S 501 (A,12,174) SWITCH	VSG1024
S 502 (A,20,221) SWITCH	VSG1024
S 503 (A,32,218) SWITCH	VSG1024
S 504 (A,47,218) SWITCH	VSG1024
501 (A,47,210) CABLE HOLDER(3P)	51063-0305
RESISTORS	
R 502 (B,7,171)	RS1/16S162J
R 503 (A,15,228)	RD1/4PU272J
R 504 (A,30,228)	RD1/4PU512J
M TRANS4 ASSY	
MISCELLANEOUS	
△ IC 357 (A,85,236) PROTECTOR(800MA)	AEK7008
D 363 (A,88,223) DIODE	S5688G
J 22 JUMPER WIRE	D20PY0330E
891 (A,70,221) 3P CABLE HOLDER	51048-0300
CAPACITORS	
C 406 (A,84,220) ELECT. CAPACITOR	CEAT471M35
N REGULATOR ASSY	
MISCELLANEOUS	
△ IC 801 (A,147,89) REGULATOR IC	TA7812S
△ IC 802 (A,164,89) REGULATOR IC	TA79012S
△ IC 808 (A,181,89) IC	TA7805S
D 810 (A,172,94) DIODE	MTZJ6R2(B)
CN800 (A,194,113) 11PJUMPER CONNECTOR	52147-1110
RESISTORS	
△ R 801 (A,136,95) METAL OXIDE RESISTOR	RS3LMF331J
CAPACITORS	
C 803 (B,147,97)	CKSRYB103K25
C 804 (B,166,97)	CKSRYB103K25
C 805 (A,147,105)	CEJQ101M16
C 806 (A,159,99)	CEAT101M16
C 818 (B,182,95)	CKSRYB103K25
C 819 (A,176,95)	CEAT101M10
O VIDEO ASSY	
MISCELLANEOUS	
IC 301 (B,46,32) VIDEO SW IC	NJM2595M

O VIDEO ASSY

MISCELLANEOUS

IC 301 (B,46,32) VIDEO SW IC NJM2595M

Mark No. Description

△	Q 301 (A,86,47)	TRANSISTOR
△	Q 302 (A,66,52)	TRANSISTOR
	Q 303 (B,25,83)	TRANSISTOR
A	D 301 (B,44,40)	DIODE
	D 302 (B,41,45)	DIODE
	D 303 (B,82,61)	DIODE
	D 304 (B,73,59)	DIODE
	D 308 (B,60,23)	DIODE
	JA308 (A,14,51)	6P PIN JACK

	CN302 (A,64,84)	6P SOCKET
	CN303 (A,62,7)	CONNECTOR
	CN310 (A,46,7)	CONNECTOR

RESISTORS

B	R 299 (B,33,72)
	R 301 (B,34,25)
	R 302 (B,31,60)
	R 303 (B,23,36)
	R 304 (B,49,22)

	R 305 (B,23,50)
	R 306 (B,32,54)
	R 307 (B,56,25)
	R 308 (B,57,29)
	R 310 (B,57,31)

C	R 311 (B,42,23)
	R 312 (B,60,25)
△	R 313 (A,85,57) METAL OXIDE RESISTOR
	R 314 (B,84,61)
	R 315 (B,64,59)

△	R 316 (A,67,39) METAL OXIDE RESISTOR
	R 317 (B,21,75)
	R 318 (B,27,79)
	R 319 (B,27,77)
	R 391 (B,20,38)

	R 392 (B,30,55)
--	-----------------

CAPACITORS

	C 304 (B,33,19)
	C 305 (B,41,19)
	C 306 (B,22,54)
	C 307 (A,31,35)
	C 308 (A,52,53)

	C 309 (A,32,44)
	C 310 (A,54,42)
	C 311 (B,82,48)
	C 313 (B,76,34)
	C 333 (B,21,81)

E	C 338 (A,60,37)
	C 339 (B,45,49)
	C 340 (B,56,36)
	C 1360(B,18,65)

Q DIGITAL INPUT ASSY**MISCELLANEOUS**

F	1901(B,214,228)	INDUCTOR
	JA1900(A,206,201)	OPT. LINK IN
	KN1902(A,249,206)	SCREW PLATE
F	CN1903(A,229,230)	CONNECTOR

2SD1858X
2SB1237X
2SC5938A
1SS355

1SS355
UDZS6R2(B)
UDZS6R2(B)
DAN202U
XKB3049

KP200TA6L
CKS3378
CKS3372

RS1/16S0R0J
RS1/16S750J
RS1/16S750J
RS1/16S750J
RS1/16S750J

RS1/16S750J
RS1/16S750J
RS1/16S102J
RS1/16S102J
RS1/16S102J

RS1/16S102J
RS1/16S102J
RS3LMF390J
RS1/16S152J
RS1/16S152J

RS3LMF390J
RS1/16S102J
RS1/16S122J
RS1/16S472J
RS1/16S0R0J

RS1/16S0R0J

CKSRYB221K50
CKSRYB221K50
CKSRYB221K50
CEAT470M25
CEAT470M25
CEAT470M25
CEAT101M16
CKSRYB473K25
CKSRYB473K25
CKSRYB331K50

CEAT101M16
CKSRYB104K25
CKSRYB104K25
CKSRYB103K50

CTF1295
GP1FAV51RKBF
VNE1948
VKN1186

RESISTORS**Mark No. Description**

R 1900(B,211,215)

CAPACITORS

C 1900(B,205,215)
C 1903(B,211,230)
C 1904(A,208,228)
C 1905(B,233,232)
C 1906(B,235,232)

C 1907(B,237,232)
C 1908(B,239,232)

Part No.

RS1/16S101J

CKSRYB104K25
CKSRYB103K50
CEAL101M10
CKSRYB104K25
CKSRYB103K50

CCSRCH101J50
CKSRYB102K50

S PRIMARY ASSY**MISCELLANEOUS**

△	IC 51 (B,236,11)	IC	NJM78L05UA
	Q 51 (B,267,14)	DIGITAL TR(SC-70)	RT1N431M
△	D 51 (B,298,20)	BRIDGE DIODE	DF06SA
	D 55 (A,304,21)	DIODE	1SR139-400
	D 56 (A,271,21)	DIODE	1SS133

D 57 (A,266,25)	DIODE	1SS133
D 58 (A,314,13)	DIODE	MTZJ5R1(B)
H 51 (A,231,34)	FUSE CLIP	AKR7001
H 52 (A,250,34)	FUSE CLIP	AKR7001
J 52	JUMPER WIRE	D20PY0410E

KN51 (A,318,25)	WRAPPING TERMINAL	VNF1084	
KN3001(A,223,117)	SCREW PLATE	VNE1948	
△	RY51 (A,271,57)	JOE LOWPOWER RELAY	ASR7013
△	T 51 (A,288,56)	STANDBY TRANSFORMER	ATT7043
△	CN51 (A,236,47)	AC CODE SOCKET	RKP1751

55 (A,317,9)	4P CABLE HOLDER	51048-0400
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RESISTORS

△	R 51 (A,318,37)	RESISTOR(2.2M, 1/2W)	RCN1080
	R 52 (A,275,11)		RD1/2PM270J
	R 53 (A,307,12)		RD1/4PU332J
	R 54 (A,319,16)		RD1/4PU103J

CAPACITORS

△	C 51 (A,261,64)	FILM CAPACITOR	ACE7013
△	C 52 (A,265,57)	SAFETY CAPACITOR	XCG3010
	C 53 (A,291,21)	ELECT. CAPACITOR	CEAT102M16
	C 54 (A,300,11)		CEAT470M25
	C 55 (A,307,21)		CKPUYF103Z25

C 56 (A,311,21)	CKPUYF103Z25
C 57 (A,314,21)	CKPUYF103Z25

T TRANS1 ASSY

TRANS1 ASSY has no service part.

6. ADJUSTMENT

There is no information to be shown in this chapter.

7. GENERAL INFORMATION

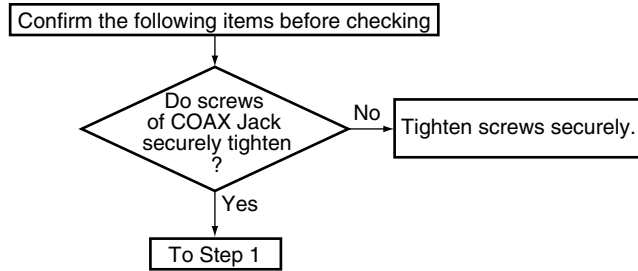
7.1 DIAGNOSIS

7.1.1 DSP TROUBLESHOOTING

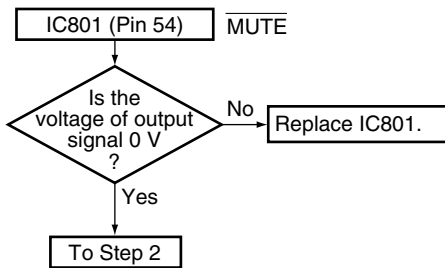
■ Troubleshooting for all destination

- When a sound is not out in the multi-CH signal playback mode or surround mode with the digital signal input. (SurroundBack is not output by setting.)
- Suppose CR to be poor contact and that is not damaged.
- This shows failure analysis of DSP Assy.

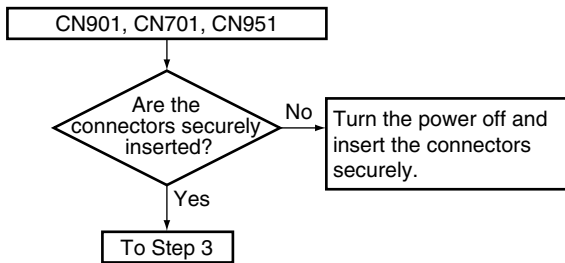
Step 0: Preliminary confirmation



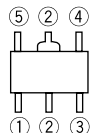
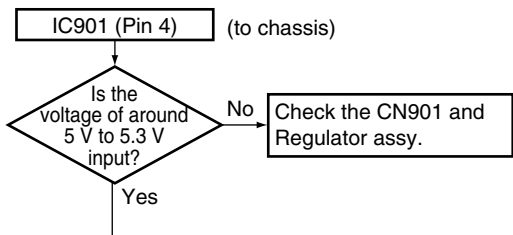
Step 1: MUTE pin



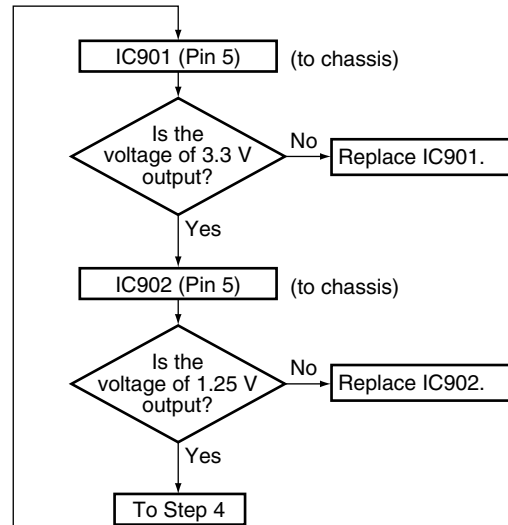
Step 2: BtoB connector



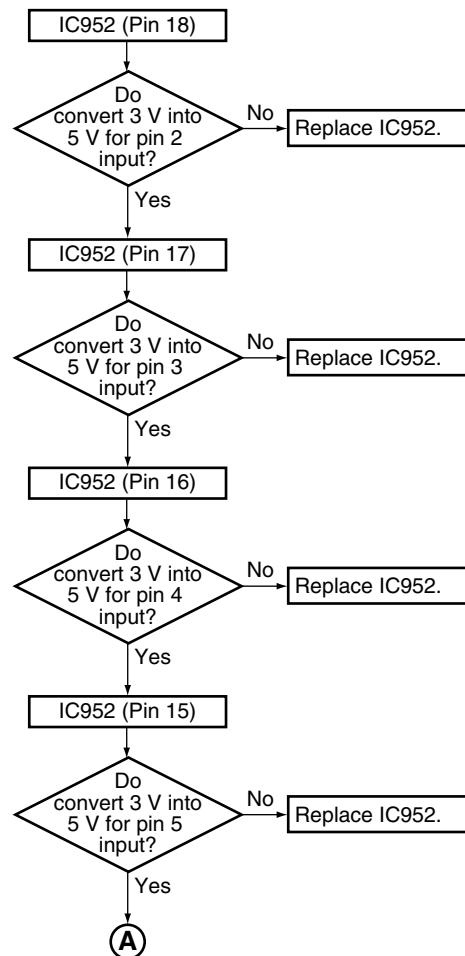
Step 3: Regulator IC



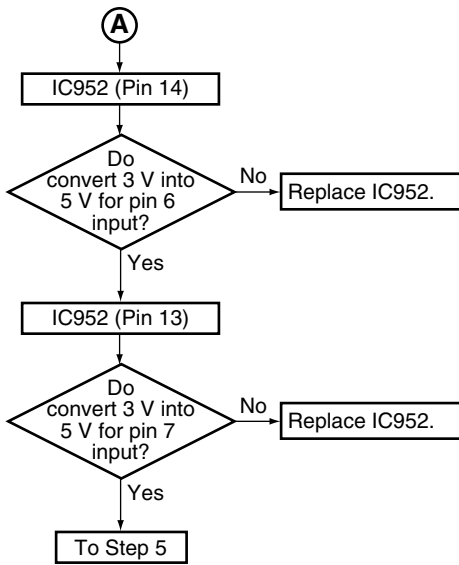
Part name and Pin arrangement of IC901 and IC902



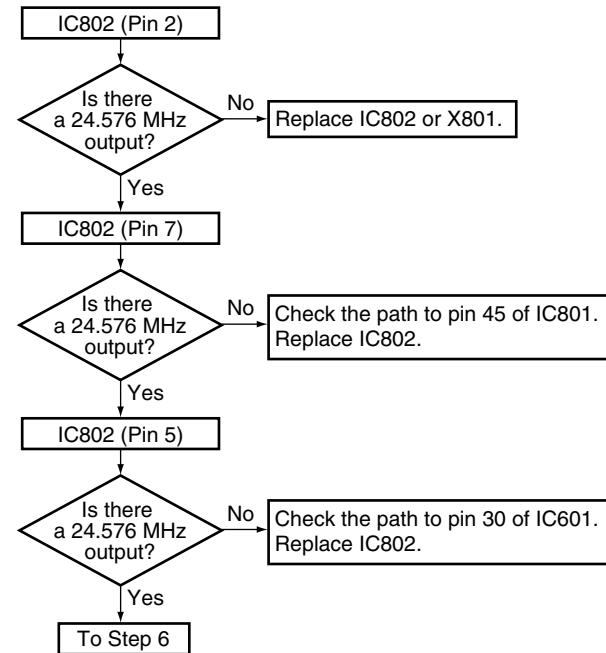
Step 4: 3 V to 5 V conversion



A
B
C
D
E
F

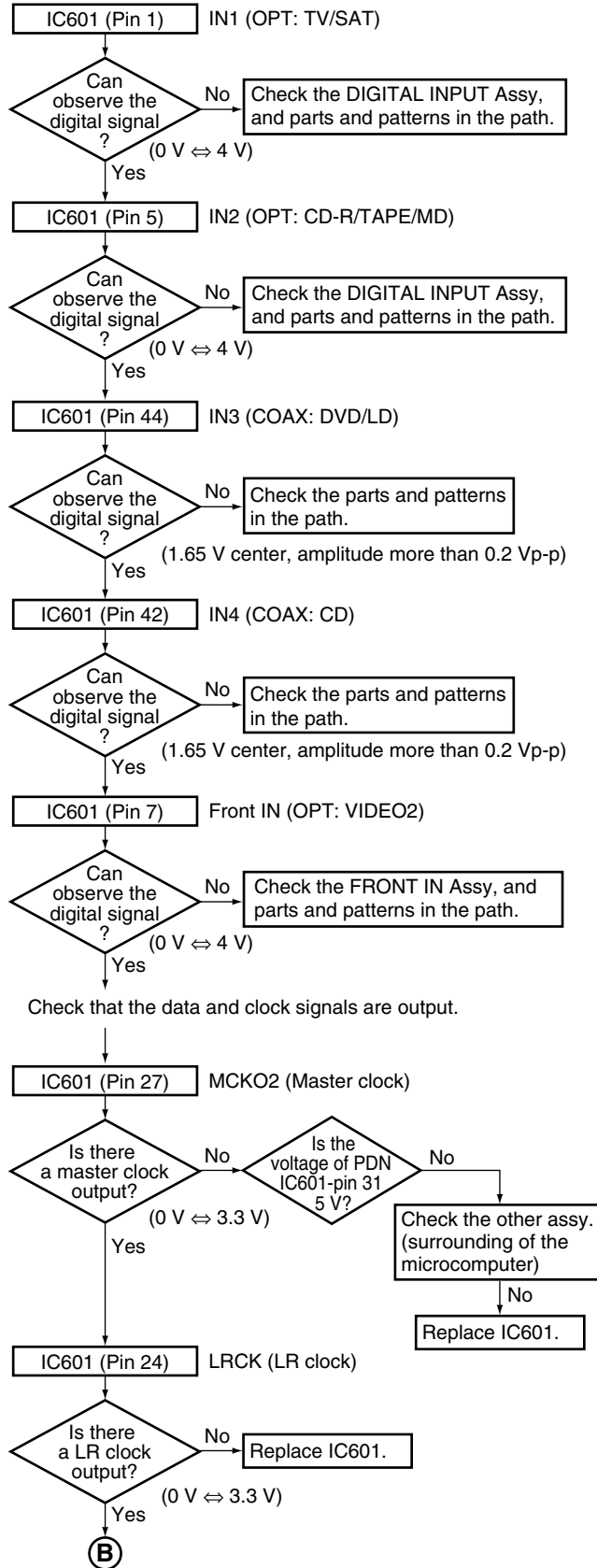


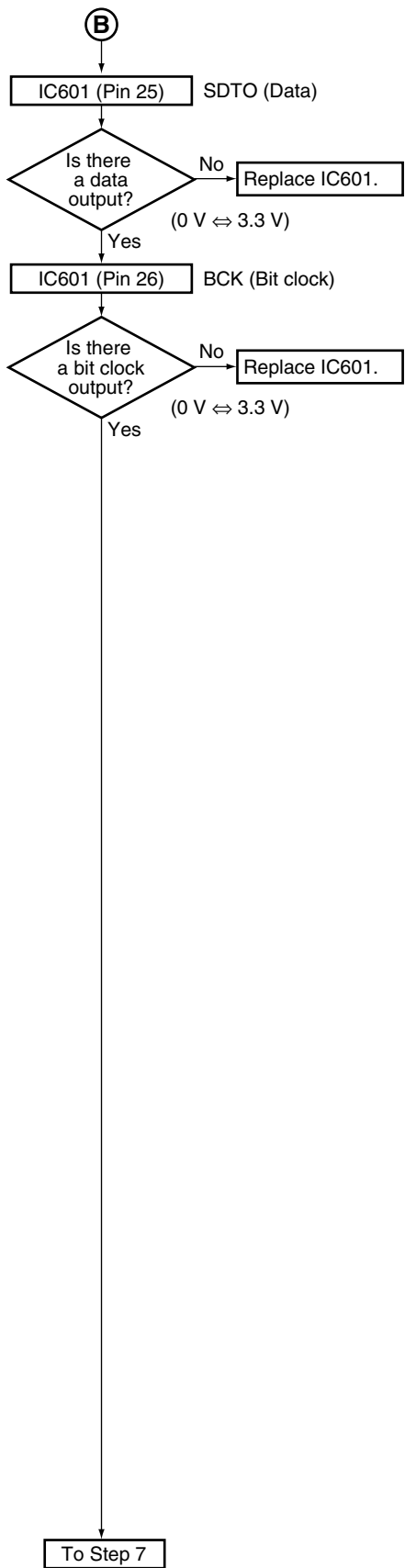
Step 5: X'tal



Step 6: DIR

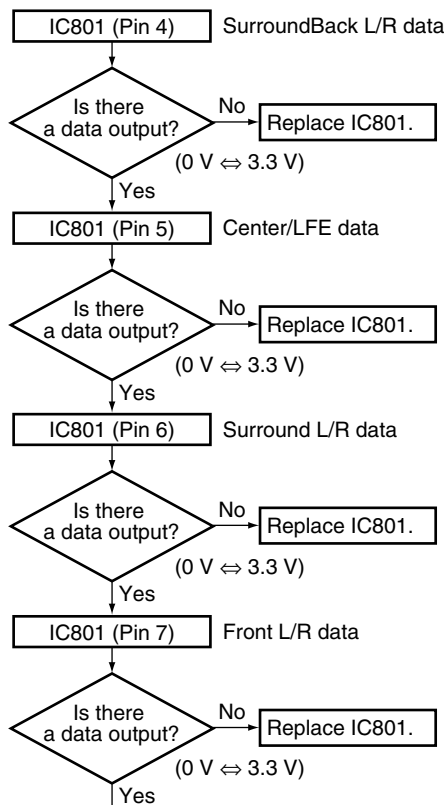
Check that the SPDIF signal is output.
Check that changes by pulling out and inserting the digital input lines.



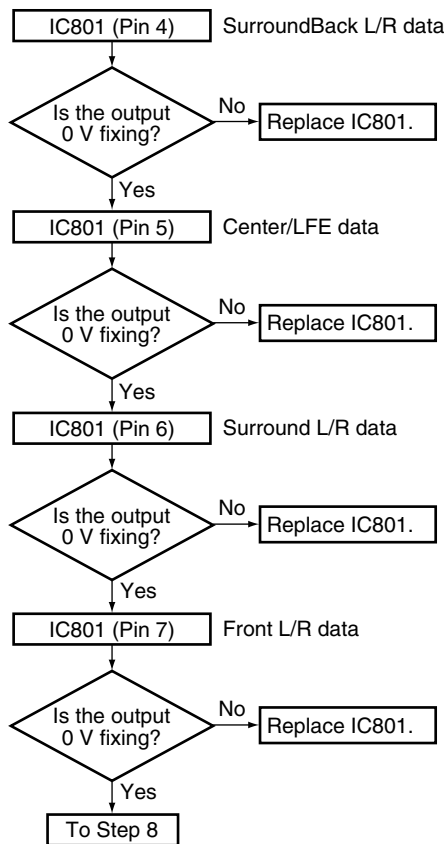


Step 7: DSP output (digital)

Digital output of each CH when inputting the digital signal with audio.

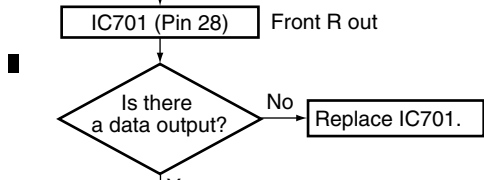
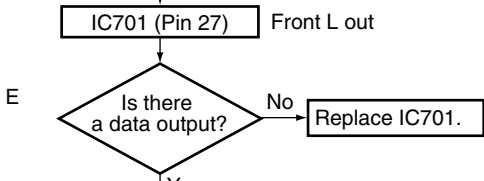
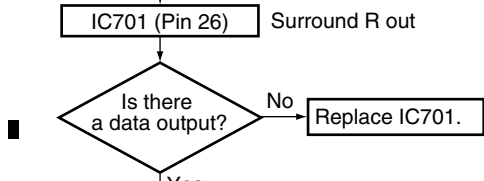
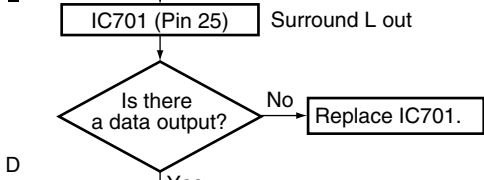
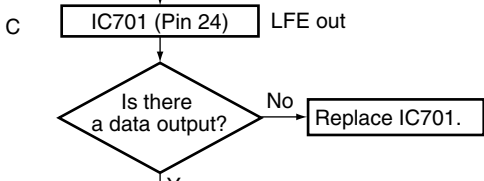
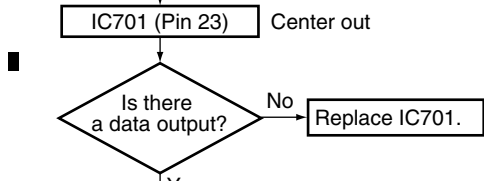
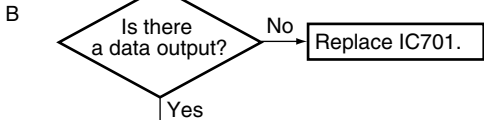
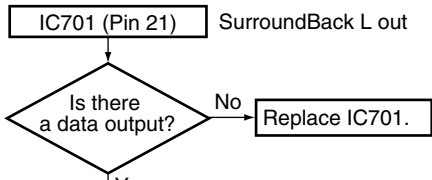


Digital output of each CH when inputting the digital signal (-∞ dB (no audio)).



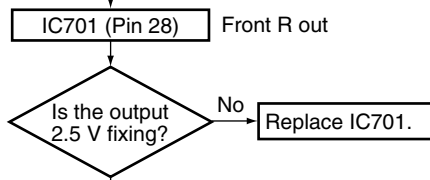
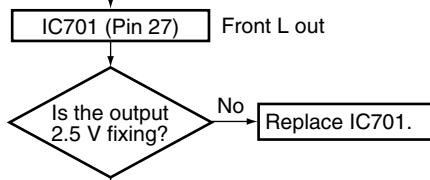
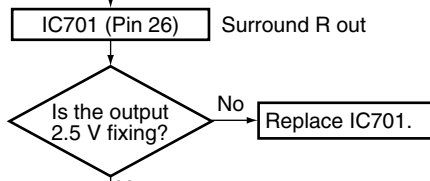
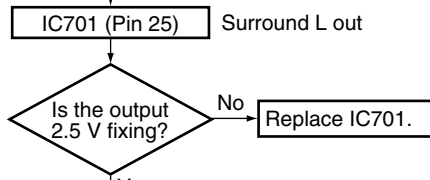
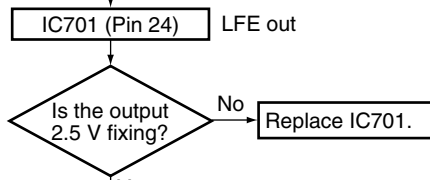
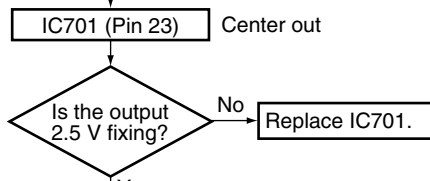
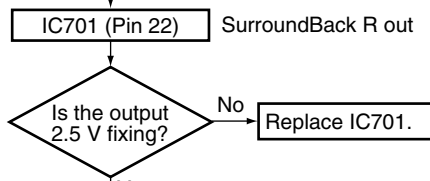
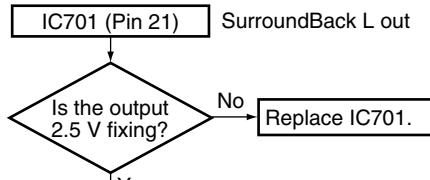
Step 8: Codec output (analog)

A Analog output of each CH when inputting the digital signal with audio.



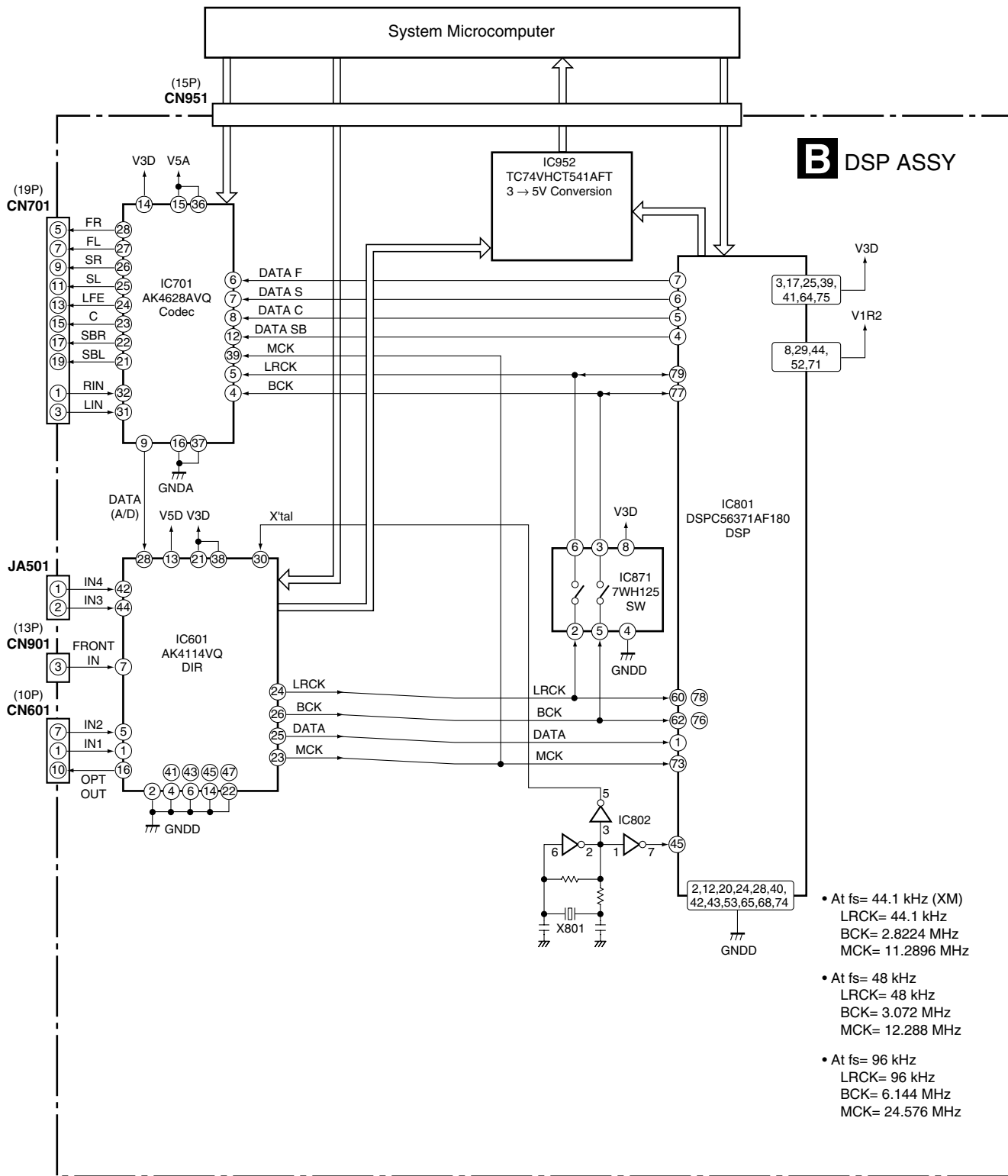
F

Analog output of each CH when inputting the digital signal (-∞ dB (no audio)).



End

DSP Block Diagram



7.1.2 DISASSEMBLY

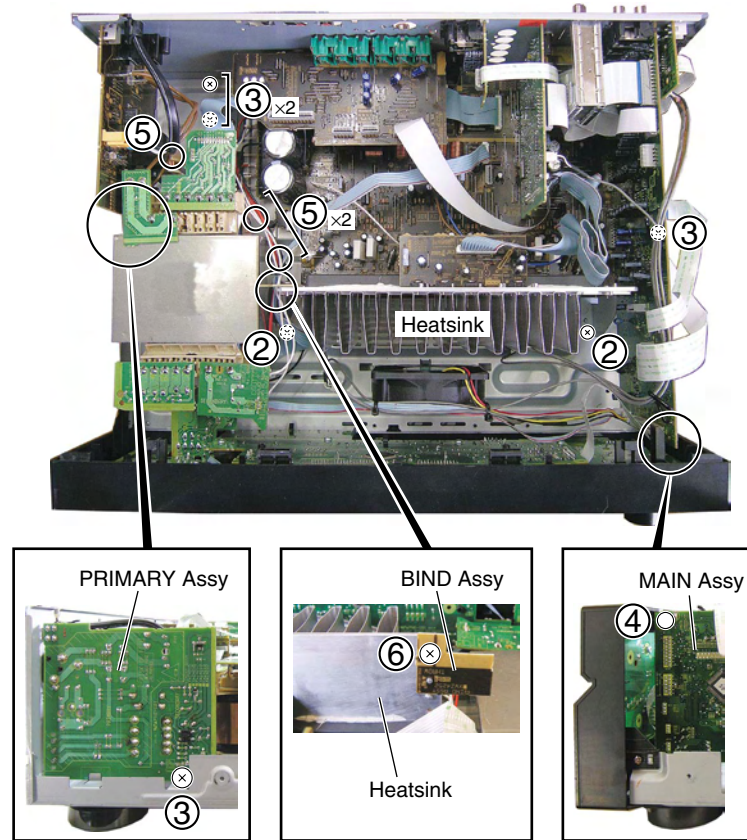
Note: Even if the unit shown in the photos and illustrations in this manual may differ from your product, the procedures described here are common.

Diagnosis of the Unit

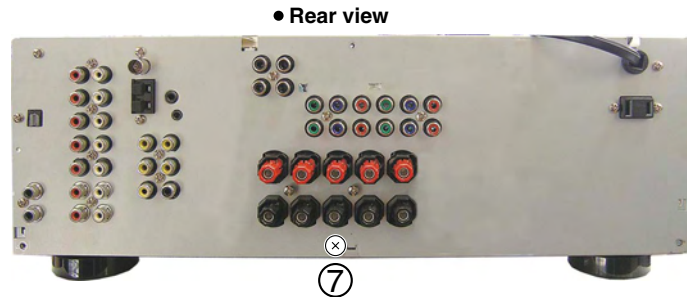
Caution:

Heatsink section in work becomes hot, and be careful with it.

- ① Remove the bonnet by removing the six screws.
- ② Remove the two screws.
- ③ Remove the four screws.
- ④ Remove the push rivet.
- ⑤ Release the three binders.
- ⑥ Remove the BIND Assy by removing the one screw.

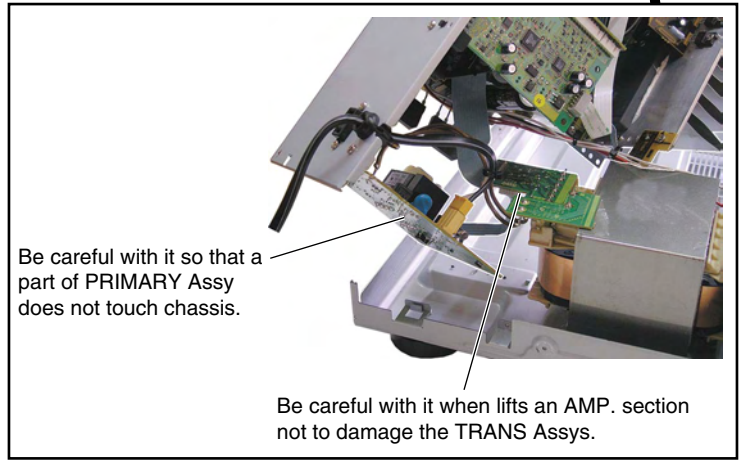
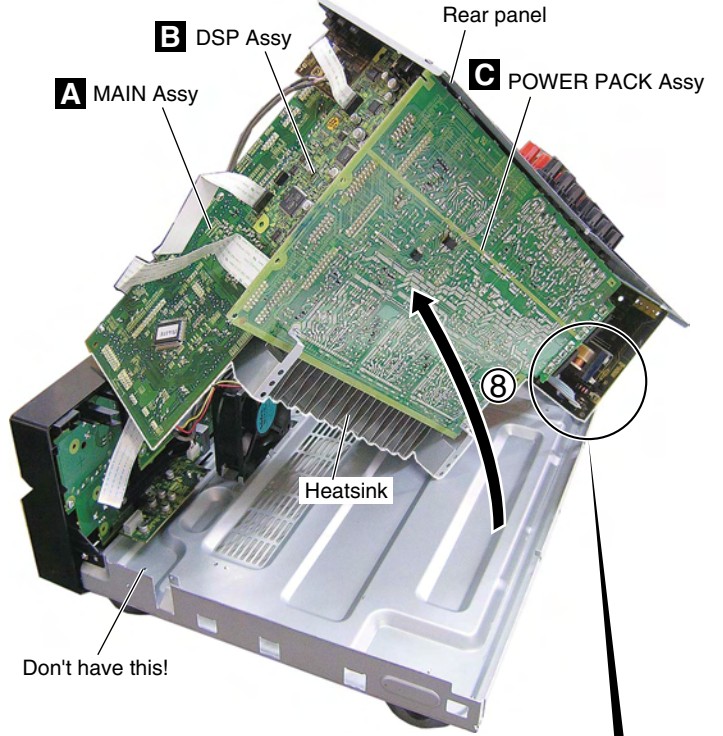


- ⑦ Remove the one screw.



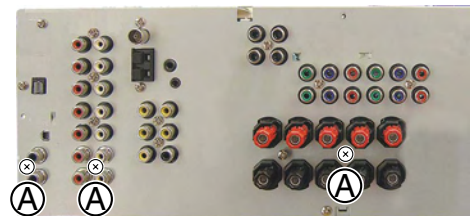
A
B
C
D
E
F

⑧ Arrange the unit as shown in the photo below.



Caution:

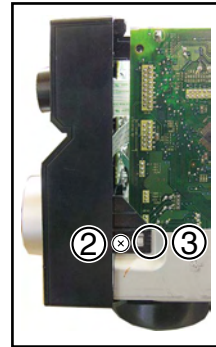
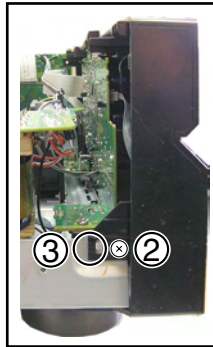
During diagnosis, be sure NOT to remove the three screws marked (A) in the above photo. There is the case that a product does not work normally when removes these screws.



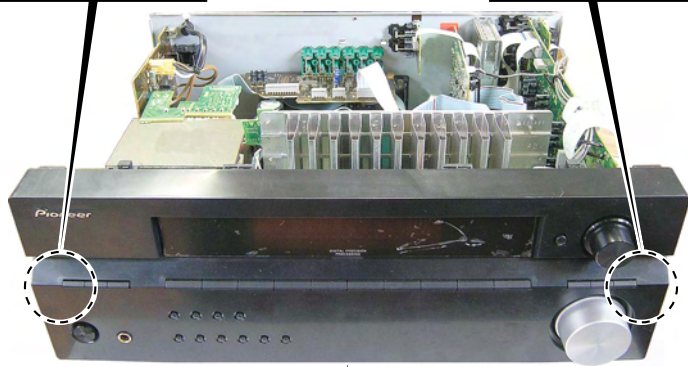
Front Panel Section

A

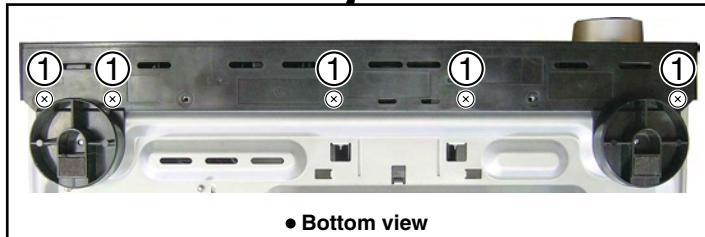
- ① Remove the five screws.
- ② Remove the two screws.
- ③ Unhook the two hooks.



B



C

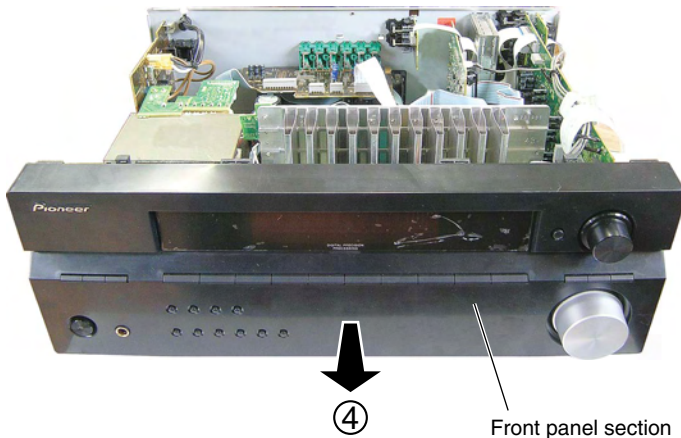


D



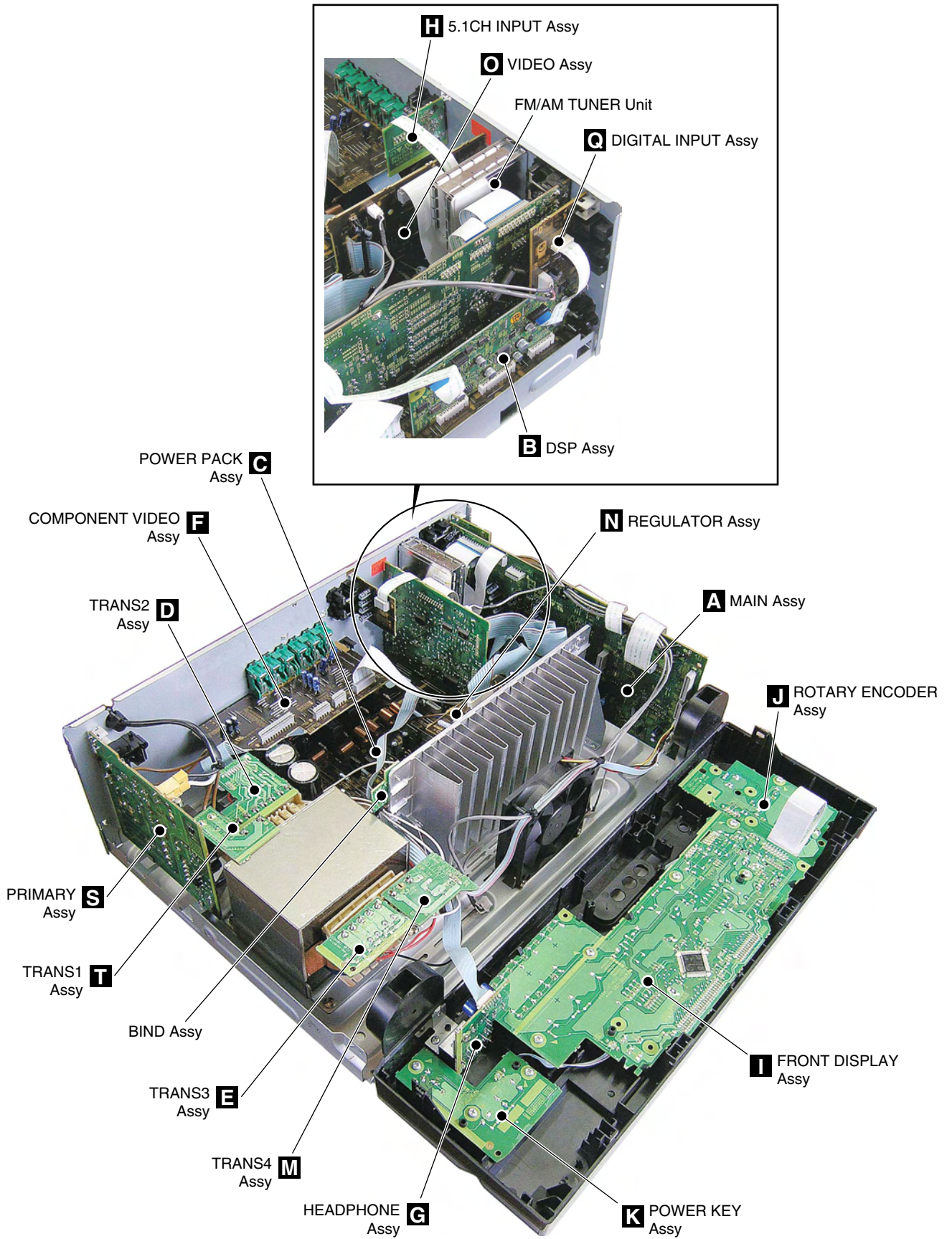
- ④ Remove the front panel section.

E



F

PCB Location



• Pin Function

No.	Port	Pin Name	I/O	Pin Function
1	P96/ANEX1/SOUT4	USDAI	O	Data out to USB
2	P95/ANEX0/CLK4	USCLK	O	Clock signal from USB
3	P94/DA1/TB4IN	DISP EN	O	Enable signal to display u-com
4	P93/DA0/TB3IN	DISP RDY	I	Ready signal from display u-com
5	P92/TB2IN/SOUT3	DISP DI/OSD DT	O	Data out to display u-com
6	P91/TB1IN/SIN3	DISP DO	I	Data in from display u-com
7	P90/TB0IN/CLK3	DISP CLK/OSD CLK	O	Clock signal to display u-com
8	BYTE	GND	I	Ground
9	CNVss	CNVSS	I	Terminate to GND with resistor
10	P87/XCIN	I2C CK EEPROM/DVC	O	I2C bus for EEPROM, DVC
11	P86/XCOUT	I2C DT EEPROM/DVC	I/O	I2C bus for EEPROM, DVC
12	RESET	XRESET	I	Reset signal input
13	XOUT	XOUT	O	X'tal output
14	VSS	GND	I	Ground
15	XIN	XIN	I	X'tal input
16	VCC	5V	I	Power supply
17	P85/NMI	NMI	I	Pull-up to +5 V with resistor
18	P84/INT2	ACIN(WAKEUP)	I	AC pulse in
19	P83/INT1 P85/NMI	USB TREQ	I	Request from TCC760 to main u-com
20	P82/INT0	1W WUP	I	Wake up signal from display u-com (pull-down)
21	P81/TA4IN/U	UART SW	O	XM/SIRIUS UART BUS SWITCH control
22	P80/TA4OUT/U	USB HREQ	O	Request from main u-com to TCC760
23	P77/TA3IN	USB CTL	O	From main u-com to USB power switch IC
24	P76/TA3OUT	USB XFLAG	I	From USB power switch IC to main u-com
25	P75/TA2IN/W	SIRIUS RST	O	Reset signal to SIRIUS
26	P74/TA2OUT/W	USB XRST	O	Reset signal to USB (pull-down)
27	P73/CTS2/RTS2/TA1IN/V	USB CS	O	From main u-com to TCC760
28	P72/CLK2/TA1OUT/V	DISP RST	O	Reset signal to display u-com
29	P71/RXD2/SCL/TA0IN/TB5IN	XM/SIRIUS RX	I	
30	P70/TXD2/SDA/TA0OUT	XM SIRIUS TX	O	Pull-up
31	P67/TXD1	TX (SR+)	O	SR+ communication
32	P66/RxD1	RX (SR+)	I	SR+ communication
33	P65/CLK1	CLK	O	It is necessary when writing for JIG
34	P64/CTS1/RTS1/CLKS1	232C CTS	O	For rewriting 232C (Admit communication)
35	P63/TXD0	DSP DI	O	Data output signal for communication with DSP and DIR
36	P62/RxD0	DSP DO	I	Data input signal for communication with DSP
37	P61/CLK0	DSP CLK	O	Clock signal for communication with DSP and DIR
38	P60/CTS0/RTS0	DSP RST	O	Reset signal for DSP
39	P57/RDY/CLKOUT	DSP SS	O	Strobe select signal to DSP
40	P56/ALE	BUSY	I	Use it in MCACC
41	P55/HOLD	DSP HREQ	I	DSP error detect signal
42	P54/HLDA	DSP MODE	O	Mode select of DSP (ROM/RAM)
43	P53/BCLK	DSP MUTE	O	DSP ASSY mute
44	P52/RD	ADMODE	O	DSP ASSY
45	P51/WRH/BHE	DIR DO	I	Data input signal for communication with DIR/DAC
46	P50/WRL/WR	DIR CS	O	Chip select signal for communication with DIR/DAC
47	P47/CS3	LSSN	O	DSP ASSY
48	P46/CS2	DIR CDC RST	O	Reset signal for DIR CODEC
49	P45/CS1	DIR ERR	I	lock/unlock signal
50	P44/CS0	XTL0	O	DIR X'tal change

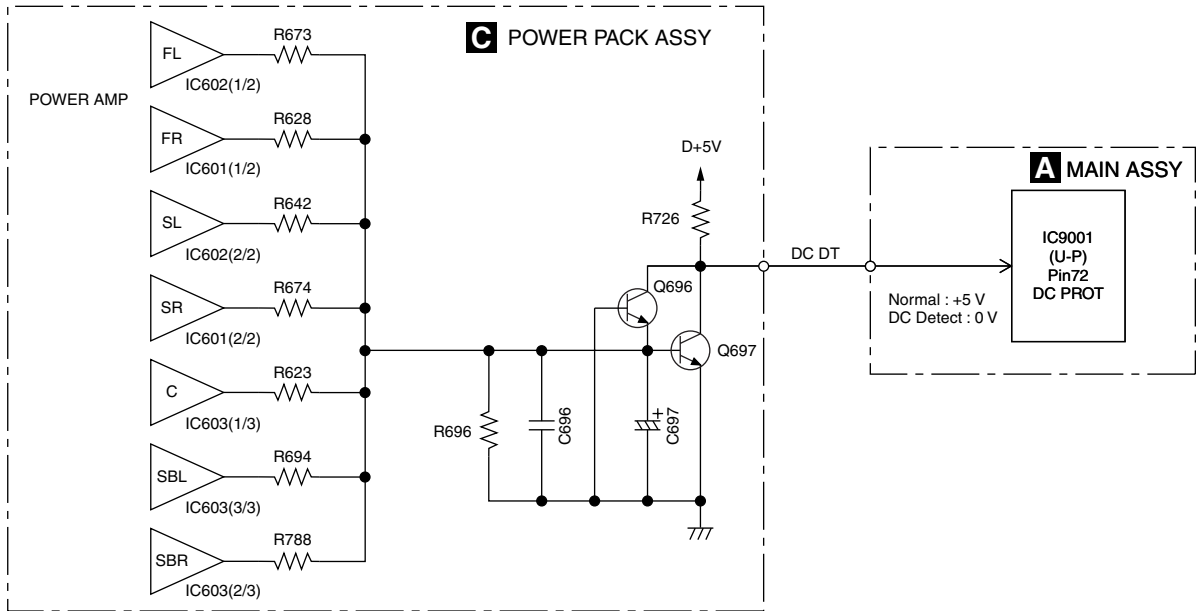
• Pin Function

No.	Port	Pin Name	I/O	Pin Function
51	P43/A19	NECK SELECT	O	For 8ohm spk impedance: *H at Adv , Sandard, 5.1Multich, speaker A+B (7ch model). For 6 ohm spk impedance: L
52	P42/A18	XM DAC_RST	O	
53	P41/A17	AMUTE	O	System mute
54	P40/A16	RY_B	O	Speaker B relay-on / OFF at 916, 816 and 516. This RY_B is used for SW relay at 316.
55	P37/A15	RY_C/R	O	Rear one / center relay-on / OFF
56	P36/A14	RY_A	O	Speaker A relay-on / OFF
57	P35/A13	XM_ERR	I	
58	P34/A12	RY-AC	O	AC relay on/off
59	P33/A11	MCACC/FRONT IN	O	For analog switching control
60	P32/A10	LOW_CONSUMPTION	O	When 1 minutes passed after power off and then go into stop mode and port L, else H.
61	P31/A9	EVR CLK	O	Clock signal for Function and E-volume
62	Vcc	5V	I	
63	P30/A8/_/D7	EVR DT	O	Data signal for Function and E-volume
64	Vss	GND	I	
65	P27/A7/(D7/D6)	VIDEO4	O	917: SYNC DETECT , others: COMONENT VIDEO INH
66	P26/A6/(D6/D5)	COMP VideoB	O	Component terminal control
67	P25/A5/(D5/D4)	COMP VideoA/HPDIN	O	917: HDMI HOT PLUG DETECT, others: COMPONENT VIDEO A
68	P24/A4/(D4/D3)	SW DET	I	"H": SW YES, "L": SW NO
69	P23/A3/(D3/D2)	VIDEO3/EXP CE	O	917: EXPANDER CE , others: VIDEO3
70	P22/A2/(D2/D1)	VIDEO2/EXP DT	O	917: EXPANDER DATA ,others: VIDEO2
71	P21/A1/(D1/D0)	VIDEO1/EXP CLK	O	917: EXPANDER CLK , others: VIDEO1
72	P20/A0/(D0/_)	DC PROT	I	Amplifier DC detection. H:Normal, L:Abnormal
73	P17/D15/INT5	OL DET	I	Amplifier overload detection. H:Normal, L:Abnormal
74	P16/D14/INT4	DSP OVERLOAD	I	ANALOG OVER LOAD detect (H : detect)
75	P15/D13/INT3	RDS CLK/XM LSDP	I	RDS clock in signal
76	P14/D12	RDS DT/XM LINKACTIVE	I	RDS data in signal
77	P13/D11	RDS FM+/XM RST	O	RDS power supply. FM: Low, AM:High
78	P12/D10	XM ANT_REV	I	
79	P11/D9	XM SGNL_SW	O	
80	P10/D8	XM SC_RATE	O	
81	P07/D7	TUNER DO	I	Data input signal for tuner control
82	P06/D6	TUNER CLK	O	Clock signal for tuner control
83	P05/D5	TUNER DI	O	Data output signal for tuner control
84	P04/D4	TUNER CE	O	Chip select signal for tuner control
85	P03/D3	6 OHM	O	If stop mode, port L, else according to setting (J model No connect)
86	P02/D2	OSD RST	O	
87	P01/D1	OSD CS	O	
88	P00/D0	DECO MUTE	I	1st DSP detect port
89	P107/AN7/KI3	XPROTECT	I	Power supply abnormal condition detection. H: Normal, L: Abnormal.
90	P106/AN6/KI2	EXPANDER ST	O	Master volume ATT control (-15dB or less : L)
91	P105/AN5/KI1	XM PWR	O	
92	P104/AN4/KI0	Comp Video INH/SY DET	I/O	917: SYNC DETECT , others: COMONENT VIDEO INH
93	P103/AN3	XM DT4_MODE	I	
94	P102/AN2	SIMUKE1	I	Input 1 to switch region
95	P101/AN1	SIMUKE2	I	Input 2 to switch region
96	AVSS	AVSS	I	connects with VCC.
97	P100/AN0	HP DET	I	HP detection H:detected.
98	VREF	VREF	I	connects with VCC.
99	AVcc	AVCC	I	connects with VCC.
100	P97/ADTRG/SIN4	USDAO	I	data input from USB

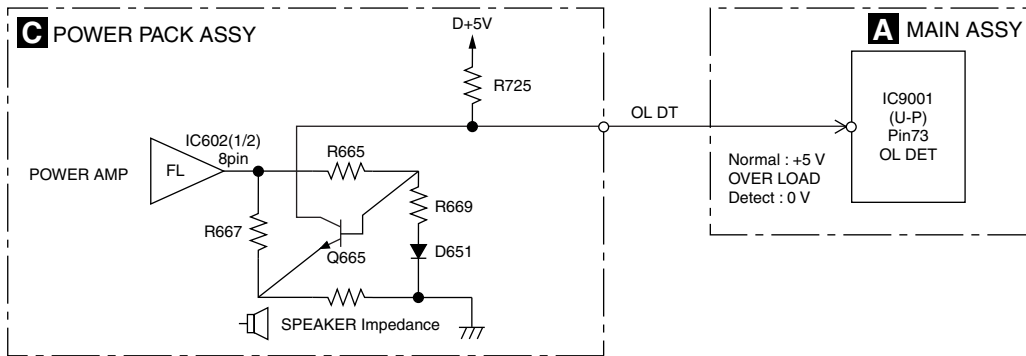
7.3 EXPLANATION

7.3.1 DETECTION CIRCUIT

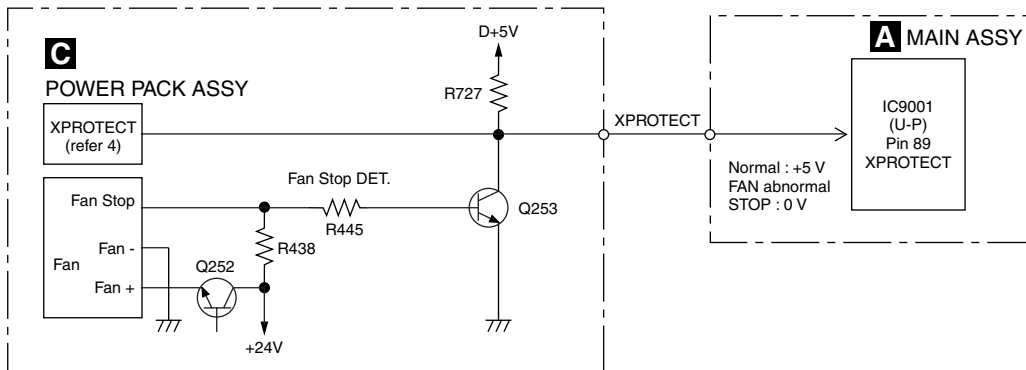
1. DC Derection Circuit Diagram : Example of VSX-917V/KUXJ/CA



2. Overload Detection Circuit Diagram: Example of VSX-917V/KUXJ/CA FRONT Channel



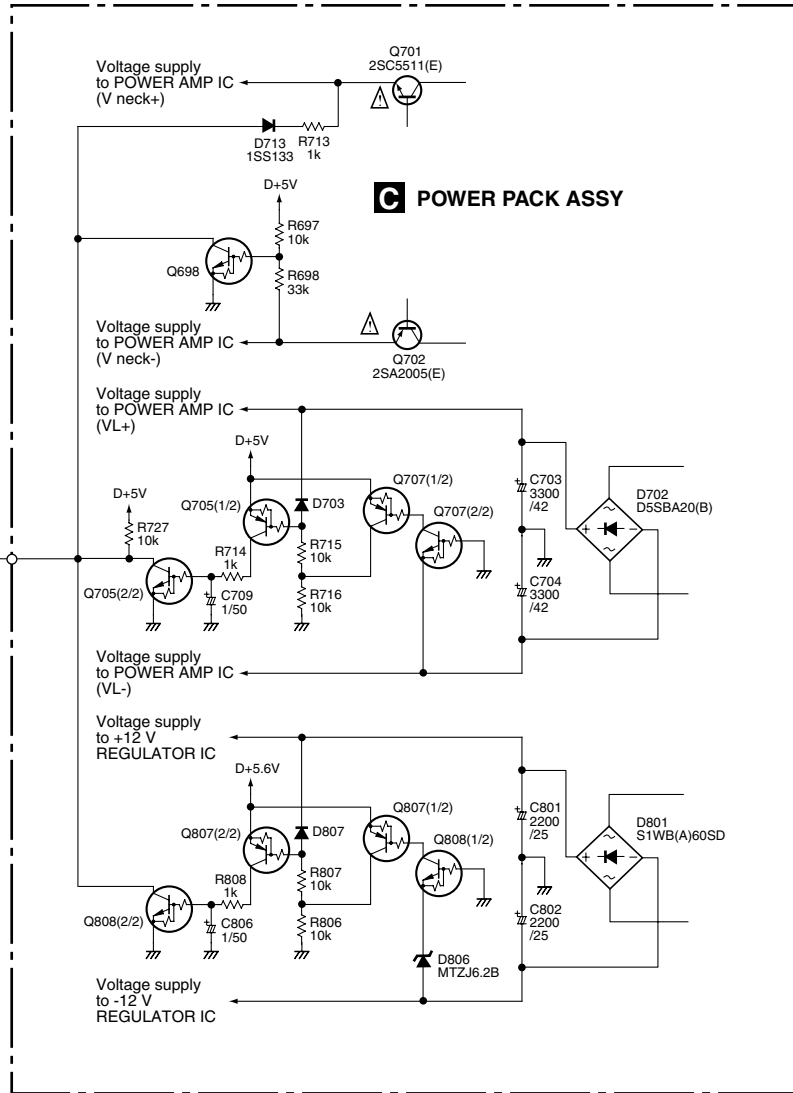
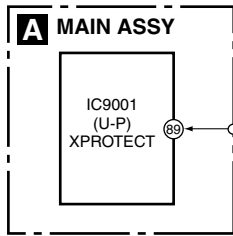
3. Fan Stop Protection Circuit Diagram



4. XPROTECT Detection Circuit Diagram

A When below 6 kind of voltage supply become to be short circuit to GND, XPROTECT circuit work and U-P input port voltage change from +5 V to 0 V. The U-P detect this condition as ERROR.

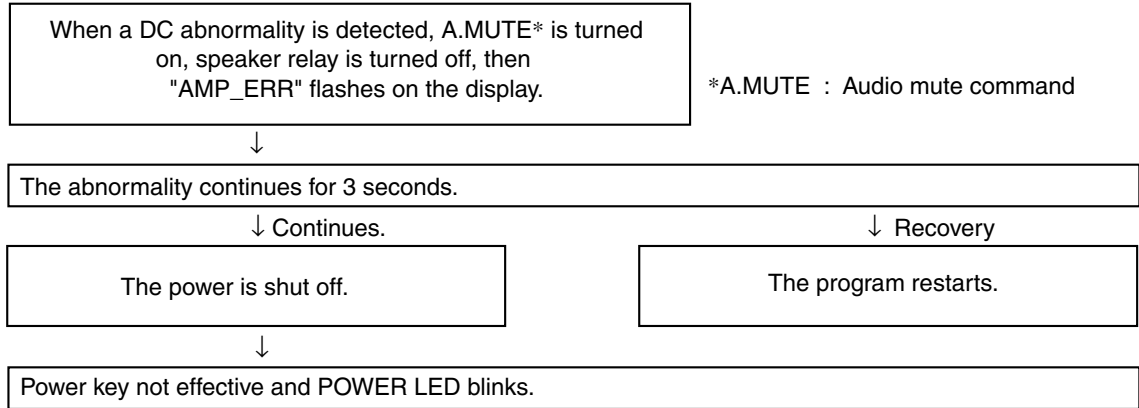
- Voltage supply to POWER AMP IC (V neck+)
- Voltage supply to POWER AMP IC (V neck-)
- Voltage supply to POWER AMP IC (VL+)
- Voltage supply to POWER AMP IC (VL-)
- Voltage supply to +12 V REGULATOR IC
- Voltage supply to -12 V REGULATOR IC



1. DC-abnormality detection

DC detection is only enabled 2 seconds after power-on.
 If there is a fault in the power amplifier or a high-level signal lower than 5 Hz is input, the DC_DET port becomes "L".
 If the "L" is detected, the microprocessor will perform as following flow chart.

In the case of simultaneous detection with the overload protection circuit, DC-abnormality detection is performed preferentially to overload detection.



*A.MUTE : Audio mute command

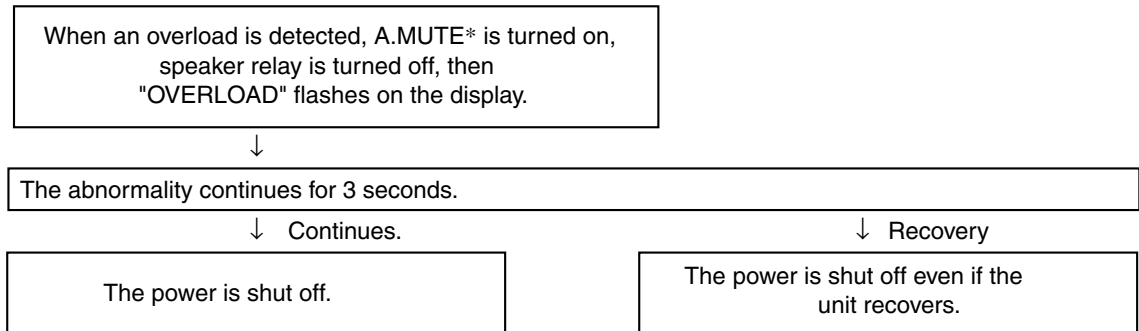
However, when the following keys are pushed so that the key input of a line and the service can be carried out, power can be on.

- ① TESTMODE ON (A55F+A55F)
- ② When power off, push FRONT ENTER key + AUTO SURR/DIRECT key continuously 2sec. (②: When a DC abnormality is detected and the power is shut off.)

Any other key input from front panel or remote control will not be detected.

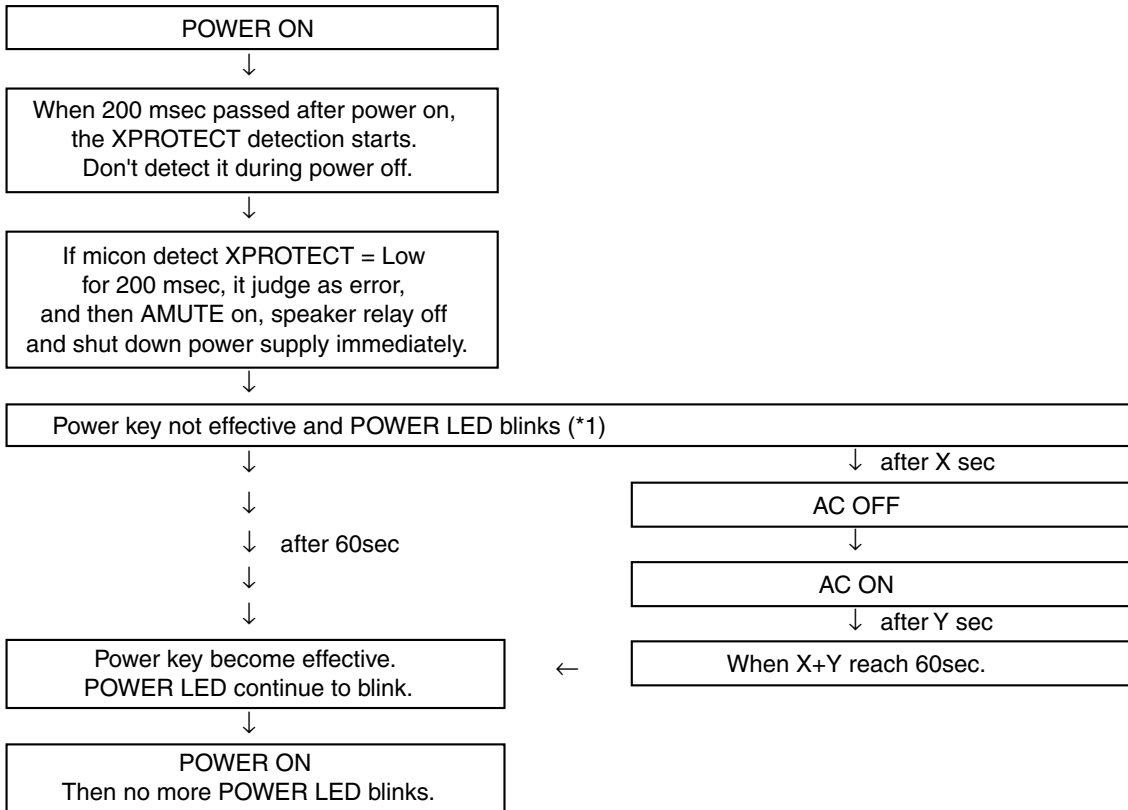
2. Overload detection

If the speaker terminals are short-circuited or low-load driving is detected, the OL_DET port becomes "L".
 If the "L" is detected, the microprocessor will perform as following flow chart.



3. XPROTECT detection

XPROTECT is started to be monitored 200msec after power on.
 XPROTECT port is checked every 20msec.
 If Low level (ERROR) is recognized during consecutive 9 times, micon judge it as XPROTECT ERROR.
 It processes more preferentially than DC abnormal detection and overload detection.



(*1) However, when the following keys are pushed so that the key input of a line and the service can be carried out, power can be on.

- ① TESTMODE ON (A55F+A55F)
 - ② When power off, push FRONT ENTER key + AUTO SURR/DIRECT key continuously 2sec.
 (Effective, only when power-off is carried out by DC detection / XPROTECT detection)
- Any other key input from front panel or remote control will not be detected.

4. Fan stop detection operation flow in the XPROTECT detection

If the fan is forcibly stopped or become out of order, the 'XPROTECT' port becomes "L". Then an abnormality of fan is detected.

- Detection routine and recovery is same as "3. XPROTECT detection".

7.3.3 AMPLIFIER FAILURE DIAGNOSIS FLOW CHART

■ Amplifier failure diagnosis flow chart

When DC detection is activated ("AMP_ERR" flashes on the display), failure (damage) of the power amplifier section is considered.

Caution:

When releasing the lock state of power key before repair, please be careful because there is the possibility that more damages will occur when turning on the power once again!

• According to a symptom, perform the following confirmation beforehand.

1) Are there any Fuses and IC protectors open?

↓

2) After turn on the power, confirm that the supply voltage of the point that can be measured is appropriate. (Particularly the supply voltage of the power Tr and drive step)

↓

3) Whether the voltage of pin2 and pin5 of IC601, IC602 or IC603 is equal to (VL-0.7V). If not (eg, equal to VH), then change the corresponding power pack IC601, IC602 or IC603.

↓

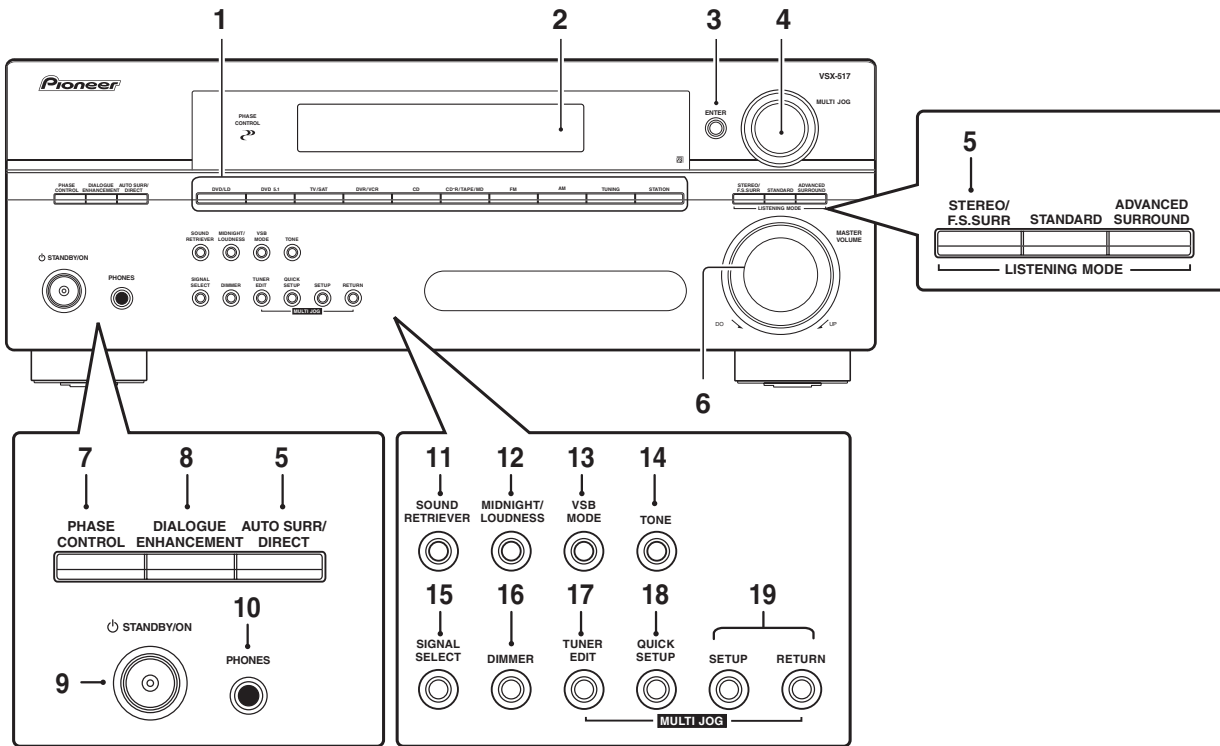
4) Furthermore, check the output DC voltage of each channel of power pack IC601, IC602 and IC603 to limit the failure channel and identify the defect power pack.

↓

• After identify the failure channel, check that each part is not damaged (resistor, diode... etc. value / open / short)

8. PANEL FACILITIES

Front panel



1 Input select buttons

Selects an input source.

2 Character display

See Display.

3 ENTER

The **MULTI JOG** dial performs a number of tasks. Use it to select options after pressing the designated **MULTI JOG** buttons.

5 LISTENING MODE buttons

STEREO/F.S.SURR

Switches between stereo playback and Front Stage Surround Advance modes.

STANDARD

Press for Standard decoding and to switch between the various **Pro Logic II** options.

ADVANCED SURROUND

Switches between the various surround modes.

AUTO SURR/DIRECT

Switches between Auto surround mode (Auto playback) and Stream Direct playback. Stream Direct playback bypasses the tone controls for the most accurate reproduction of a source.

6 MASTER VOLUME

7 PHASE CONTROL

Press to switch on/off Phase Control.

8 DIALOGUE ENHANCEMENT

Use to make dialog stand out when watching TV or a movie.

9 STANDBY/ON

10 PHONES jack

Use to connect headphones (when connected, there is no sound output from the speakers).

11 SOUND RETRIEVER

Press to restore CD quality sound to compressed audio sources.

12 MIDNIGHT/LOUDNESS

Switches to Midnight/Loudness listening.

13 VSB MODE

Press to switch on/off Virtual Surround Back (VSB) mode.

14 TONE

Press this button to access the bass and treble controls, which you can then adjust with the **MULTI JOG** dial.

15 SIGNAL SELECT

Selects an input signal.

16 DIMMER

Dims or brightens the display.

17 TUNER EDIT

Memorizes/names stations for recall.

18 QUICK SETUP

See Using the Quick Setup.

19 System Setup menu controls

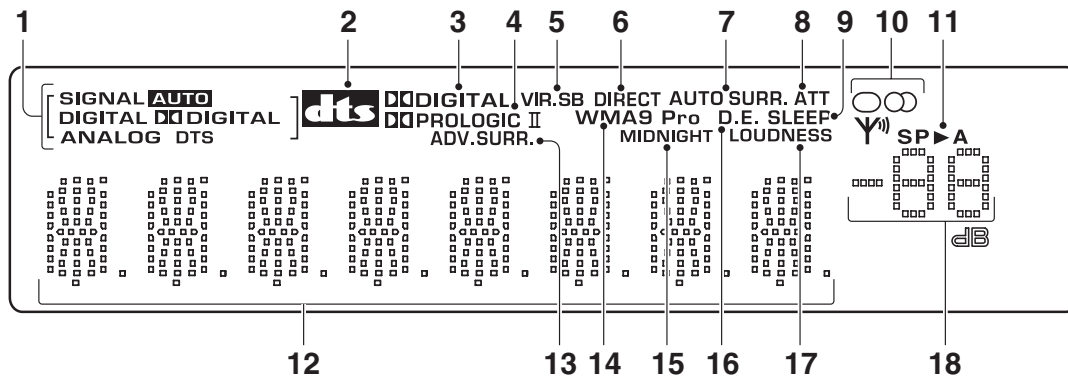
SETUP

Use with the **MULTI JOG** dial to access the System Setup menu.

RETURN

Confirms and exits the current menu.

Display



1 SIGNAL SELECT indicators

Lights to indicate the type of input signal assigned for the current component:

AUTO

Lights when **AUTO** signal select is on.

DIGITAL

Lights when a digital audio signal is detected.

DTS

Lights when a source with DTS encoded audio signals is detected.

DIGITAL

Lights when a Dolby Digital encoded signal is detected.

ANALOG

Lights when an analog signal is detected.

2 **dts**

Lights to indicate decoding of a DTS multichannel signal.

3 **DIGITAL**

Lights to indicate decoding of a Dolby Digital multichannel signal.

4 **PRO LOGIC II**

Lights to indicate Pro Logic II decoding (see Listening in surround sound for more on this).

5 **VIR.SB**

Lights during Virtual surround back processing.

6 **DIRECT**

Lights when source Stream Direct playback is in use. Stream Direct playback bypasses the tone controls for the most accurate reproduction of a source.

7 **AUTO SURR.**

Lights when the Auto Surround feature is switched on (see Auto playback).

8 **ATT**

Lights when **ANALOG ATT** is used to attenuate (reduce) the level of the analog input signal.

9 **SLEEP**

Lights when the receiver is in sleep mode.

10 **Tuner indicators**

○ / **MONO**

Lights when the mono mode is set using the **MPX** button.

⊞ / **STEREO**

Lights when a stereo FM broadcast is being received in auto stereo mode.

Υ[®] / **TUNED**

Lights when a broadcast is being received.

11 **Speaker indicator**

Shows if the speaker system is on or not.

SP ▶ A means the speakers are switched on.

SP ▶ means the headphones are connected.

12 **Character display**

13 **ADV.SURR (Advanced Surround)**

Lights when one of the Advanced Surround modes has been selected.

14 **WMA9 Pro**

Lights to indicate decoding of a WMA9 Pro signal.

15 **MIDNIGHT**

Lights during Midnight listening.

16 **D.E.**

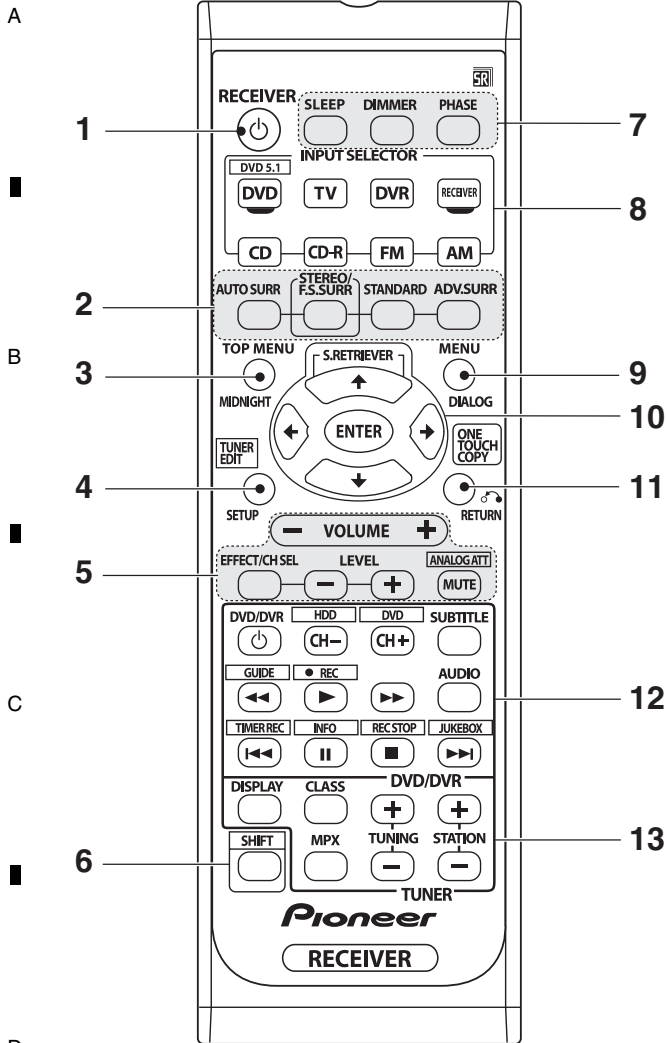
Lights when Dialog Enhancement is switched on.

17 **LOUDNESS**

Lights during Loudness listening.

18 **Master volume level**

Remote control



1 RECEIVER Switches the receiver between standby and on.

2 Listening mode buttons

AUTO SURR

Switches between Auto surround mode (Auto playback) and Stream Direct playback. Stream Direct playback bypasses the tone controls for the most accurate reproduction of a source.

STANDARD

Press for Standard decoding and to switch between Pro Logic II options.

STEREO/F.S. SURR

Switches between stereo playback and Front Stage Surround Advance modes.

ADV. SURR

Switches between the various surround modes.

3 TOP MENU

Displays the disc *é*topí menu of a DVD.

MIDNIGHT/LOUDNESS

Switches to Midnight or Loudness listening.

4 TUNER EDIT*

Memorizes/names stations for recall .

SETUP

Press to access the System Setup menu. Also functions as the **SETUP** button for DVD/DVR units.

5 RECEIVER CONTROL buttons

VOLUME +/-

Use to set the listening volume.

EFFECT/CH SEL

Press repeatedly to select a channel, then use **LEVEL +/-** to adjust the level.

Also adjusts the level of the Advanced Surround effects as well as Dolby Pro Logic II Music parameters. You can then use the **LEVEL +/-** buttons to make these adjustments.

LEVEL +/-

Use to adjust the effect and channel levels.

MUTE

Mutes/unmutes the sound.

ANALOG ATT*

Attenuates (lowers) the level of an analog input signal to prevent distortion.

6 SHIFT

Press to access the *é*boxedí commands (above the buttons) on the remote. These buttons are marked with an asterisk (*) in this section.

7 SLESLEEP

Press to change the amount of time before the receiver switches into standby (**30 min - 60 min - 90 min - Off**). You can check the remaining sleep time at any time by pressing **SLEEP** once.

DIMMER

Dims or brightens the display.

PHASE

Press to switch on/off Phase Control.

8 INPUT SELECTOR buttons

Press to select an input source.

DVD/DVR

Press to use the remote DVD/DVR controls.

RECEIVER

Use to switch to the receiver controls on the remote control. Use when setting up surround sound for the receiver.

9 MEMENU

Displays the disc menu of DVD-Video discs. It also displays TV menus.

DIALOG

Use to make dialog stand out when watching TV or a movie.

10 $\uparrow\downarrow\leftarrow\rightarrow$ /ENTER

Use the arrow buttons when setting up your surround sound system. Also used for DVD menus.

\uparrow (S.RETRIEVER)*

Press to restore CD quality sound to compressed audio sources.

11 RETURN

Confirm and exit the current menu screen.

ONE TOUCH COPY*

Copies the currently playing title from DVD to HDD or vice-versa.

12 DVD/DVR control buttons

Use these buttons to control a Pioneer DVD player or recorder connected to your system (press **SHIFT** to access the commands bordered by a rectangle).

13 TUNER controls

The **TUNING +/-** buttons can be used to find radio frequencies and the **STATION +/-** buttons can be used to select preset radio stations.

DISPLAY

Switch the display between station preset name and frequency.

CLASS

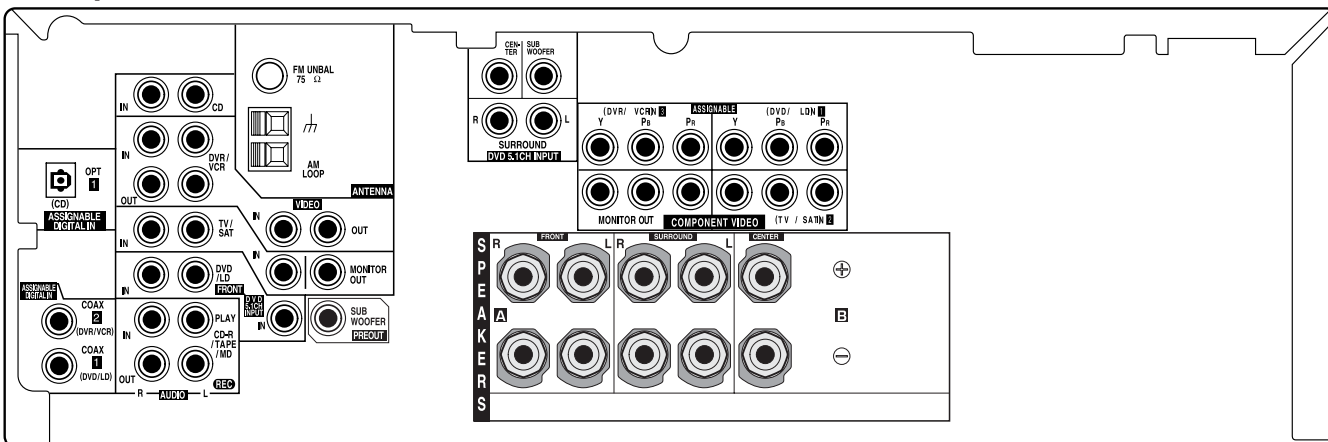
Switches between the three banks (classes) of station presets.

MPX

Use to switch between auto stereo and mono reception of FM broadcasts. If the signal is weak then switching to mono will improve the sound quality.

Button	What it does
DVD/ DVR/ \odot	Turns DVD power on/off.
CH +/-	Switches channels.
SUBTITLE	Displays/changes the subtitles on multilingual DVD-Video discs.
AUDIO	Changes audio language or channel.
\blacktriangleright	Starts/resumes normal playback.
\parallel	Pauses/unpauses a disc.
\blacksquare	Stops playback.
$\blacktriangleleft/\blacktriangleright$	Press to start fast reverse/forward scanning.
$\blacktriangleleft\blacktriangleleft$	Skips to the start of the current track or chapter, then previous tracks/chapters.
$\blacktriangleright\blacktriangleright$	Skips to the next track or chapter.
HDD/ DVD*	Switch between the hard disk and DVD controls for DVD/HDD recorders.
GUIDE*	Displays the guides on a DVD/DVR.
\bullet REC*	Starts recording.
TIMER REC*	Accesses the timerrecording menu.
INFO*	Displays additional EPG information.
REC STOP*	Stops recording.
JUKEBOX*	Switches to the Jukebox feature.

Rear panel



CLEANING



A

Before shipping out the product, be sure to clean the following positions by using the prescribed cleaning tools:

Position to be cleaned	Cleaning tools
Fans	Cleaning paper : GED-008

B

C

D

E

F