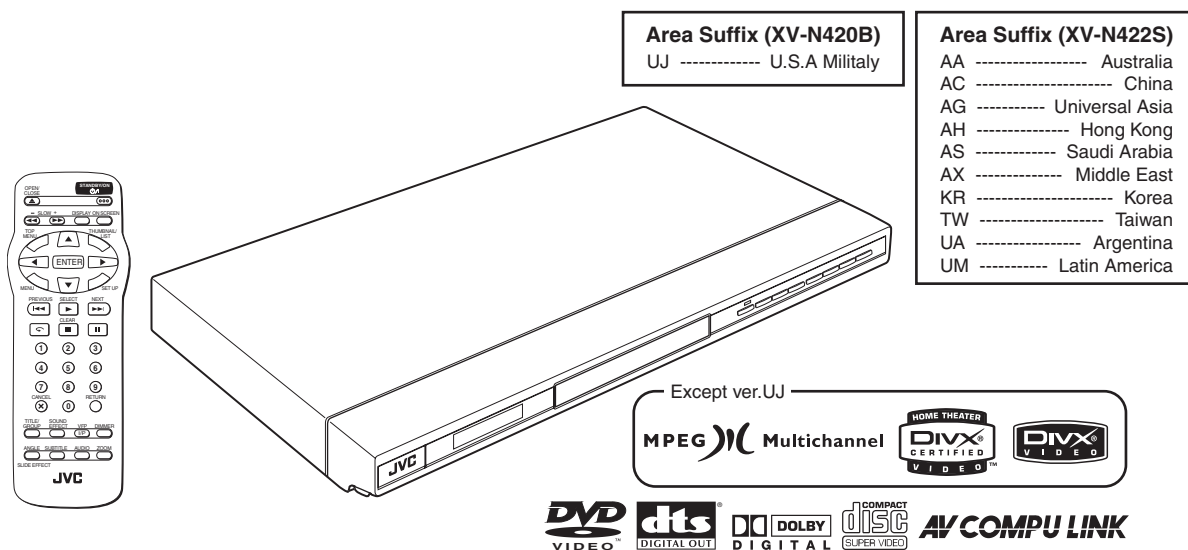


JVC

SERVICE MANUAL

DVD PLAYER

**XV-N420BUJ2, XV-N422SAA2, XV-N422SAC2,
XV-N422SAG2, XV-N422SAH2, XV-N422SAS2,
XV-N422SAX2, XV-N422SKR2, XV-N422STW2,
XV-N422SUA2, XV-N422SUM2**



XV-N420BUJ2C, XV-N422SAA2C, XV-N422SAC2C, XV-N422SAG2C, XV-N422SAH2C, XV-N422SAS2C
XV-N422SAX2C, XV-N422SKR2C, XV-N422STW2C, XV-N422SUA2C, XV-N422SUM2C

This model is a model to which Pick up of "XV-N420B, XV-N422S" that has already been put on the market and "Circumference circuit of pick up" are changed.
Please see page 1-3 for details.

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2	SPECIFIC SERVICE INSTRUCTIONS	1-4
3	DISASSEMBLY	1-4
4	ADJUSTMENT	1-4
5	TROUBLESHOOTING	1-4

SPECIFICATION

	XV-N420SUJ2	XV-N422SAA2,XV-N422SAC2,XV-N422SAG2, XV-N422SAH2,XV-N422SAS2,XV-N422SAX2, XV-N422STW2,XV-N422SUA2,XV-N422SUM2	XV-N422SKR2
General			
Readable discs	DVD VIDEO, DVD-R (Video format), DVD-RW (Video format), SVCD, Video CD, Audio CD (CD-DA), CD-R/RW (CD-DA, SVCD, Video CD, MP3/WMA format, JPEG)	DVD VIDEO, DVD-R (Video format), DVD-RW (Video format), SVCD, Video CD, Audio CD (CD-DA), CD-R/RW (CD-DA, SVCD, Video CD, MP3/WMA format, JPEG, DivX)	
Video format	NTSC, 480i/480p selectable	NTSC : 525i/525p PAL : 625i/625p	
Other			
Power requirements	AC 110V - 240 V~, 50 Hz/60 Hz (Only for the Australia model: AC 220 V - 240 V~,50Hz)		AC 220V ~, 60 Hz
Power consumption	11.0 W (POWER ON), 1.0 W (STANDBY mode)		
Mass	1.5 kg		
Dimensions (W × H × D)	435mm × 44mm × 203.5 mm		
Video outputs			
COMPONENT (pin jacks)	Y Output: 1.0 Vp-p (75 Ω)		
	Pb/Pr Output: 0.7Vp-p (75 Ω)		
VIDEO (pin jack)	1.0 Vp-p (75 Ω)		
S-VIDEO (S jacks)	Y Output: 1.0 Vp-p (75 Ω)		
	C Output: 286mVp-p (75 Ω)		
Horizontal resolution	500 lines or more		
Audio outputs			
ANALOG OUT (pin jack)	2.0 Vrms (10 kΩ)		
DIGITAL OUT (COAXIAL)	0.5 Vp-p (75 Ω termination)		
Audio characteristics			
Frequency response	CD (sampling frequency 44.1 kHz):2 Hz to 20 kHz		
	DVD (sampling frequency 48 kHz):2 Hz to 22 kHz (4 Hz to 20 kHz for DTS and Dolby Digital bitstream signals)		
	DVD (sampling frequency 96 kHz):2 Hz to 44 kHz		
Wow and flutter	Unmeasurable (less than +- 0.002%)		
Total harmonic distortion	less than 0.009%		

- Manufactured under license from Dolby Laboratories. “Dolby” and the double-D symbol are trademarks of Dolby Laboratories.
- “DTS” and “DTS Digital Out” are trademarks of Digital Theater Systems, Inc.
- “Official DivX Certified™ product”
“Plays DivX^R 5, DivX^R 4, DivX^R 3, and DivX^R VOD video content (in compliance with DivX Certified™ technical requirements)” “DivX, DivX Certified, and associated logos are trademarks of DivXNetworks, Inc. and are used under license.”
- This product incorporates copyright protection technology that is protected by U.S. patents and other intellectual property rights. Use of this copyright protection technology must be authorized by Macrovision, and is intended for home and other limited viewing uses only unless otherwise authorized by Macrovision. Reverse engineering or disassembly is prohibited.
- “CONSUMERS SHOULD NOTE THAT NOT ALL HIGH DEFINITION TELEVISION SETS ARE FULLY COMPATIBLE WITH THIS PRODUCT AND MAY CAUSE ARTIFACTS TO BE DISPLAYED IN THE PICTURE. IN CASE OF 525 OR 625 PROGRESSIVE SCAN PICTURE PROBLEMS, IT IS RECOMMENDED THAT THE USER SWITCH THE CONNECTION TO THE “STANDARD DEFINITION” OUTPUT. IF THERE ARE QUESTIONS REGARDING OUR TV SET COMPATIBILITY WITH THIS MODEL 525p AND 625p DVD PLAYER, PLEASE CONTACT OUR CUSTOMER SERVICE CENTER.”

For this service manual

This model is a model to which Pick up of "XV-N420B,XV-N422S" that has already been put on the market and "Circumference circuit of pick up" are changed.

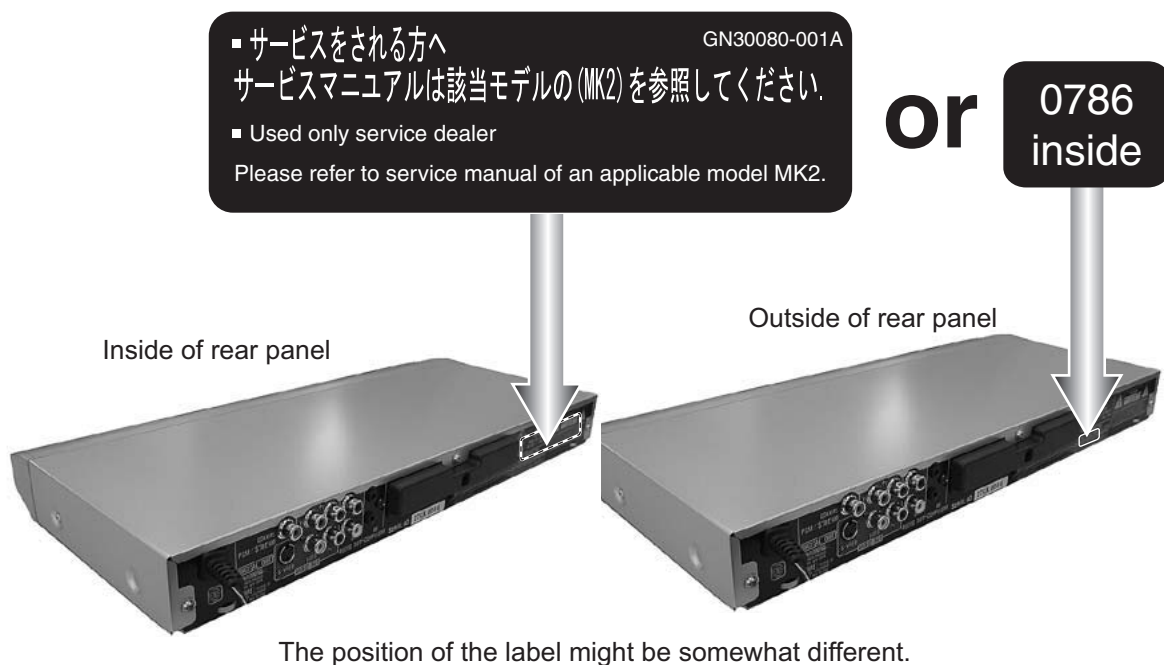
< When the label in figure is pasted in the main body >

The circumference circuit of pick up and pick up is different from the model to whom the label is not pasted by the same model name, and use this manual, please.

Please already refer to the issued service manual when the label is not pasted.

The already published service manual

* ISSUE No.YD067 2005/5 XV-N420B, XV-N422S for Asia



SECTION 1 PRECAUTION

Please refer to "XV-N420B, XV-N422S for Asia (issue number : YD067)" about this section.

SECTION 2 SPECIFIC SERVICE INSTRUCTIONS

Please refer to "XV-N420B, XV-N422S for US,UC (issue number : YD054)" about this section.

SECTION 3 DISASSEMBLY

Please refer to "XV-N420B, XV-N422S for US,UC (issue number : YD054)" about this section.

SECTION 4 ADJUSTMENT

Please refer to "XV-N420B, XV-N422S for US,UC (issue number : YD054)" about this section.

SECTION 5 TROUBLESHOOTING

Please refer to "XV-N420B, XV-N422S for US,UC (issue number : YD054)" about this section.



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(No.YD067B)



Printed in Japan
VPT

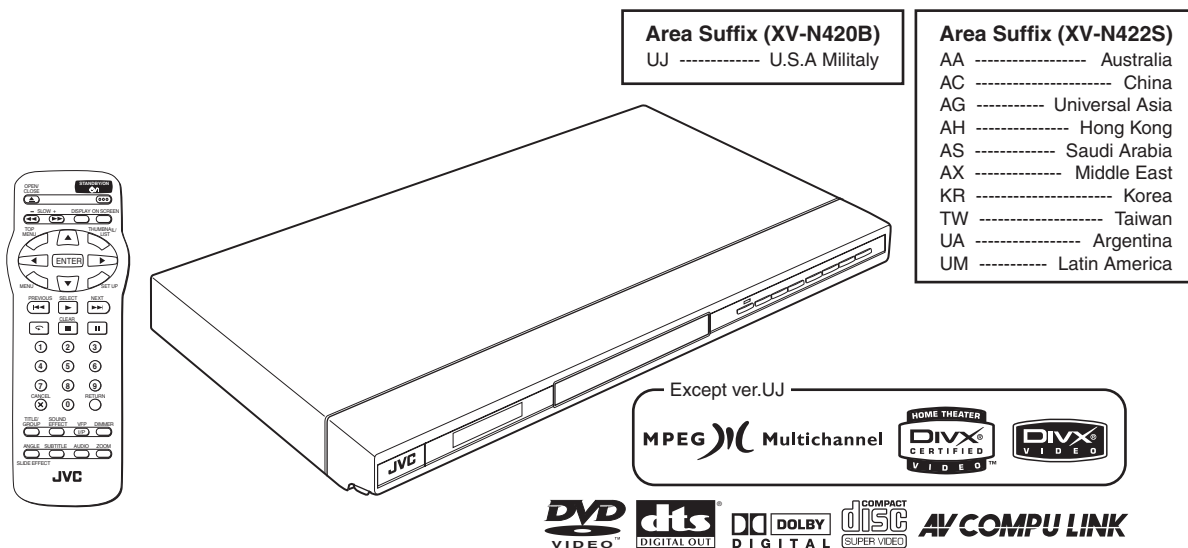
JVC

SCHEMATIC DIAGRAMS

DVD PLAYER

**XV-N420BUJ2,XV-N422SAA2,XV-N422SAC2,
XV-N422SAG2,XV-N422SAH2,XV-N422SAS2,
XV-N422SAX2,XV-N422SKR2,XV-N422STW2,
XV-N422SUA2,XV-N422SUM2**

CD-ROM No.SML200602



XV-N420BUJ2C,XV-N422SAA2C,XV-N422SAC2C,XV-N422SAG2C,XV-N422SAH2C,XV-N422SAS2C
XV-N422SAX2C,XV-N422SKR2C,XV-N422STW2C,XV-N422SUA2C,XV-N422SUM2C

This model is a model to which Pick up of "XV-N420B,XV-N422S" that has already been put on the market and "Circumference circuit of pick up" are changed. Please see page 1-3 for details.

CHARTS AND DIAGRAMS

NOTES OF SCHEMATIC DIAGRAM

Safety precautions

The Components identified by the symbol  are critical for safety. For continued safety, replace safety critical components only with manufacturer's recommended parts.

1. Units of components on the schematic diagram

Unless otherwise specified.

- 1) All resistance values are in ohm. 1/6 W, 1/8 W (refer to parts list).
Chip resistors are 1/16 W.
K: K Ω (1000 Ω), M: M Ω (1000K Ω)
- 2) All capacitance values are in μ F, (P: PF).
- 3) All inductance values are in μ H, (m: mH).
- 4) All diodes are 1SS133, MA165 or 1N4148M (refer to parts list).

Note: The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

2. Indications of control voltage

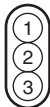
AUX : Active at high.

$\overline{\text{AUX}}$ or AUX(L) : Active at low.

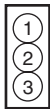
3. Interpreting Connector indications



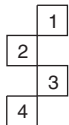
Removable connector



Wire soldered directly on board



Non-removable Board connector



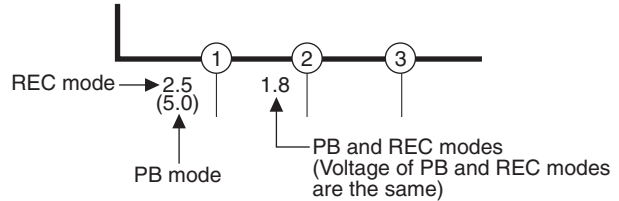
Board to Board



Connected pattern on board
The arrows indicate signal path

4. Voltage measurement

- 1) Regulator (DC/DC CONV) circuits
REC : Colour bar signal.
PB : Alignment tape (Colour bar).
— : Unmeasurable or unnecessary to measure.
- 2) Indication on schematic diagram
Voltage indications for REC and PB mode on the schematic diagram are as shown below.



Note: If the voltages are not indicated on the schematic diagram, refer to the voltage charts.

6. Indication of the parts for adjustments

The parts for the adjustments are surrounded with the circle as shown below.

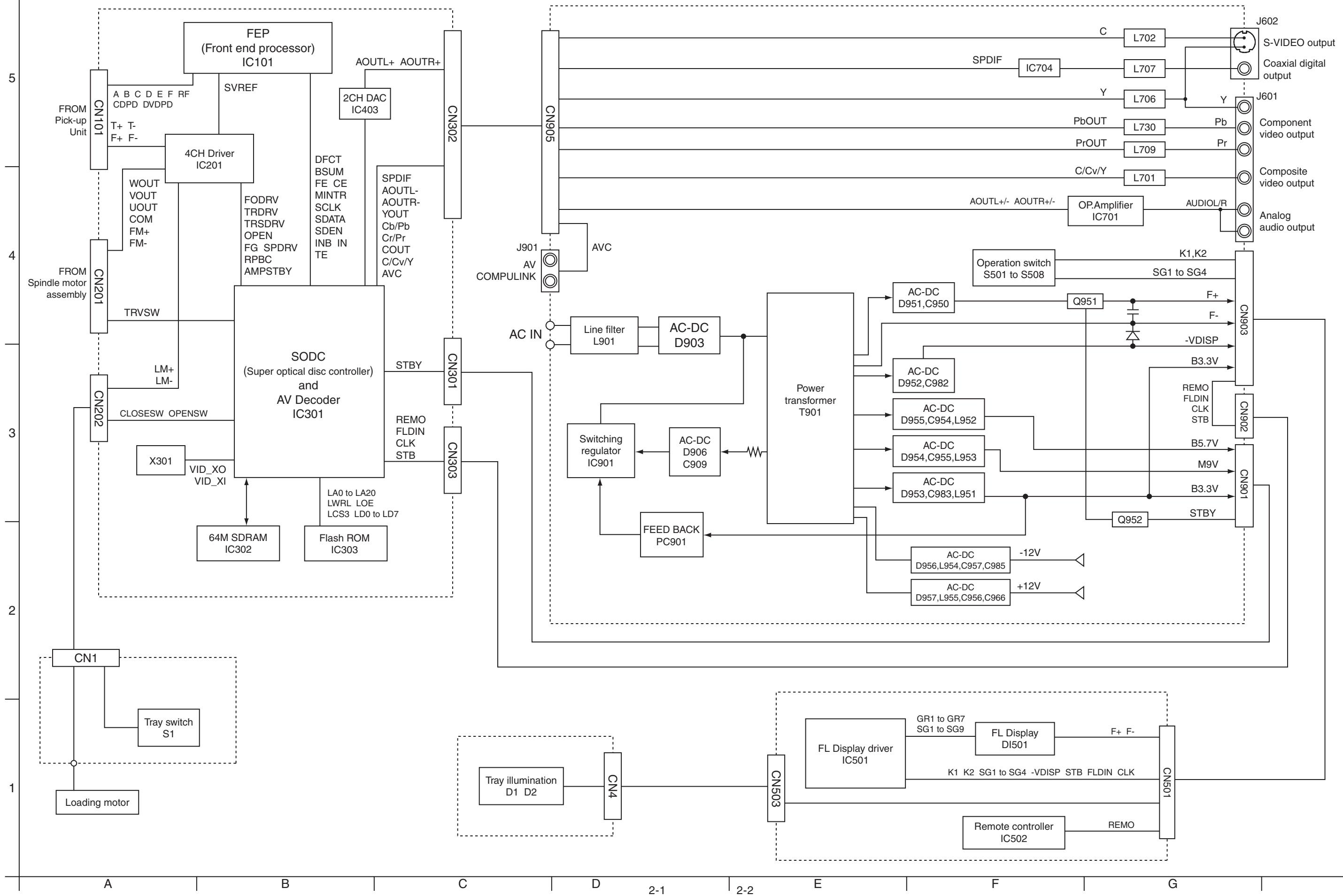


7. Indication of the parts not mounted on the circuit board

"OPEN" is indicated by the parts not mounted on the circuit board.



Block diagram



Standard schematic diagrams

Servo control section

5

4

3

2

1

To pick-up unit

To spindle motor assembly

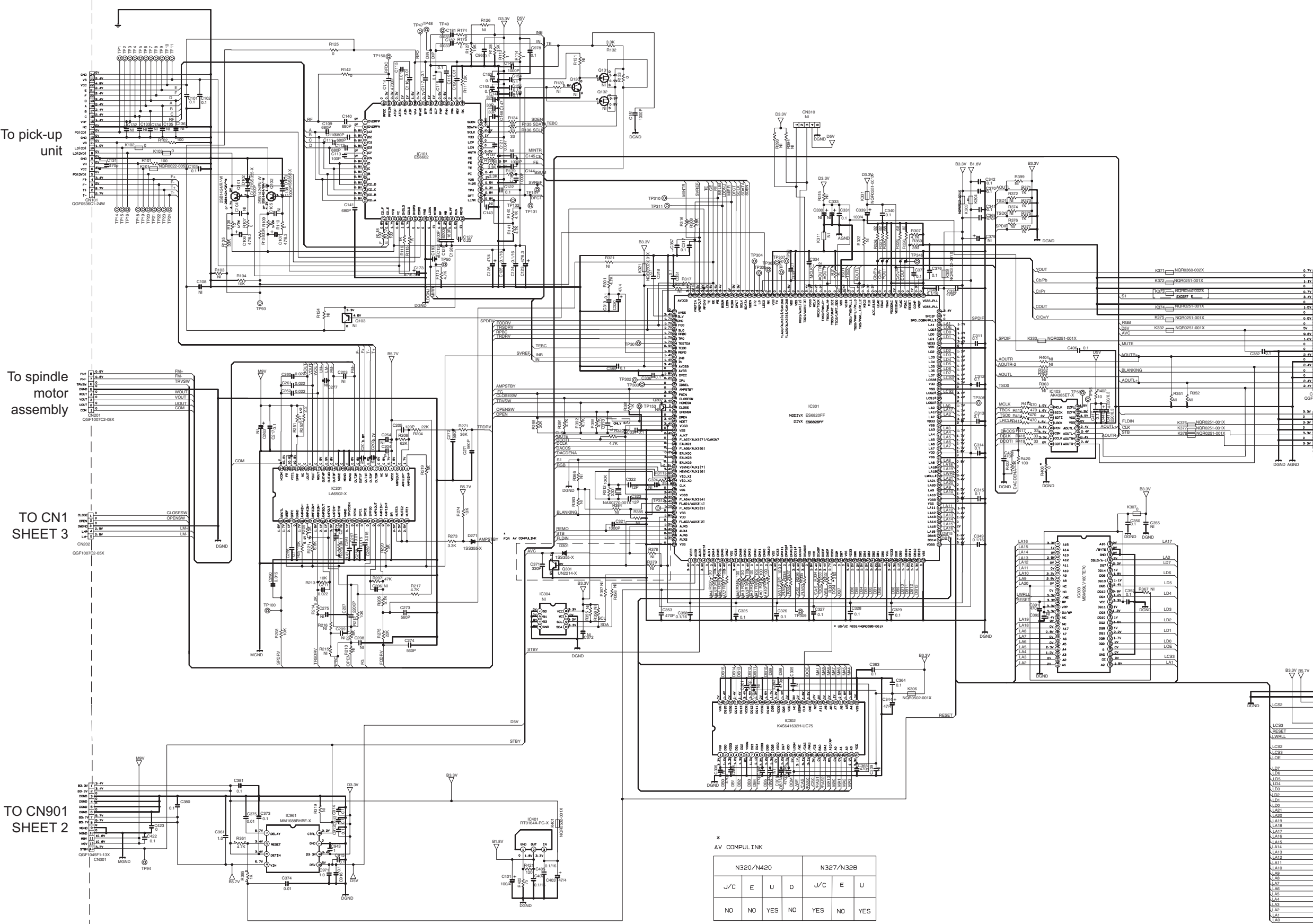
TO CN1 SHEET 3

TO CN901 SHEET 2

TO CN905 SHEET 2

TO CN902 SHEET 2

Not use



* AV. COMPULINK

N320/N420				N327/N328		
J/C	E	U	D	J/C	E	U
NO	NO	YES	NO	YES	NO	YES

Refer to the "U" in a table

MODEL N322/N422 MARK2
XV-N320/N420/N327/N328/P313

gns10037001a1_rev0
SHEET 1

Power supply and AV output terminal section

5

4

3

2

1

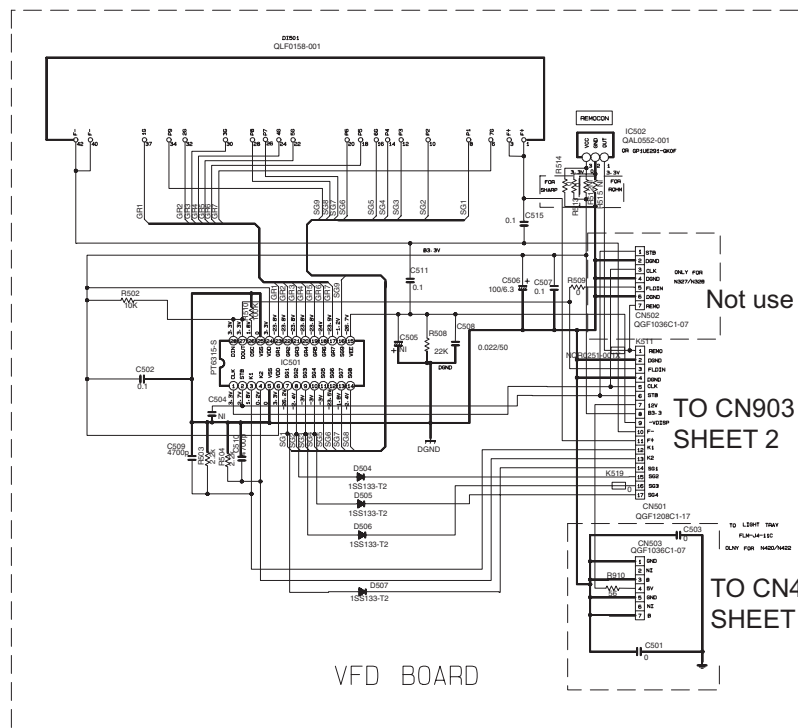
DANGEROUS VOLTAGE

* NOTE

VER.	J/C	D	U	E
C907	47U	56U	47U	33U
D905	BUSWIRE	BUSWIRE	1F4G-T2	1F4G-T2
R902	270	270	270	220
F901	QMF51U1-1R6-J8 1.6A-125		QMF51U1-1R6-J8 T1.6A-250	
D906	1SS133-T2		1SS244-T2	
D956	1SS133-T2		1SS244-T2	
D957	1SS133-T2		1SS244-T2	
L901	QGR1384-001		QGR0978-001	

Refer to the "U" in a table

⚠ Parts are safety assurance parts.
When replacing those parts make
sure to use the specified one.



VFD BOARD

TO CN302
SHEET 1

N320/N420					N327/N328				
J/C	E	U	D		J/C	E	U		
NO	NO	YES	NO		YES	NO	YES		

Refer to the "U" in a table

SYSTEM BOARD

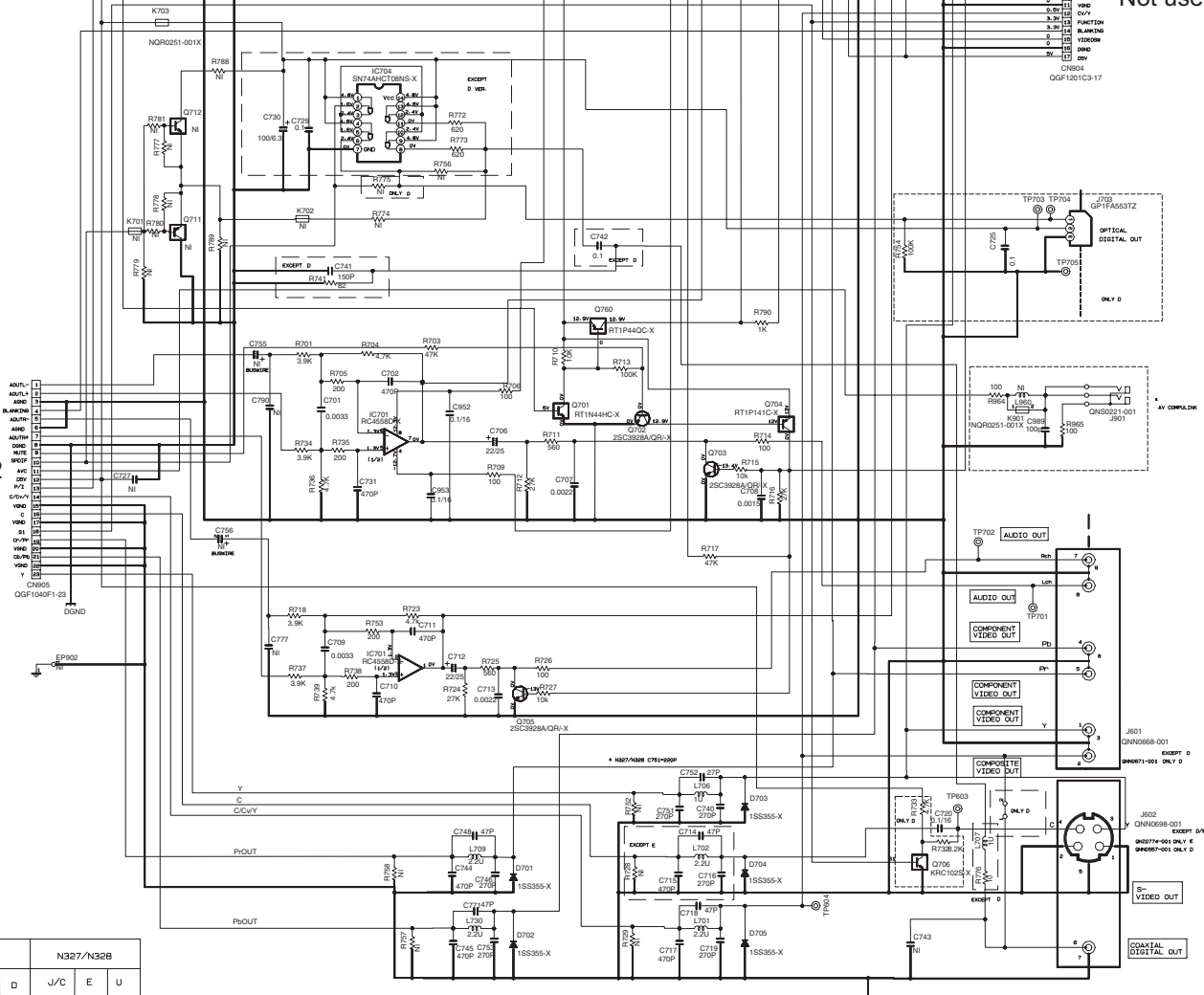
TO CN302
SHEET 1

TO CN301
SHEET 1

TO CN303
SHEET 1

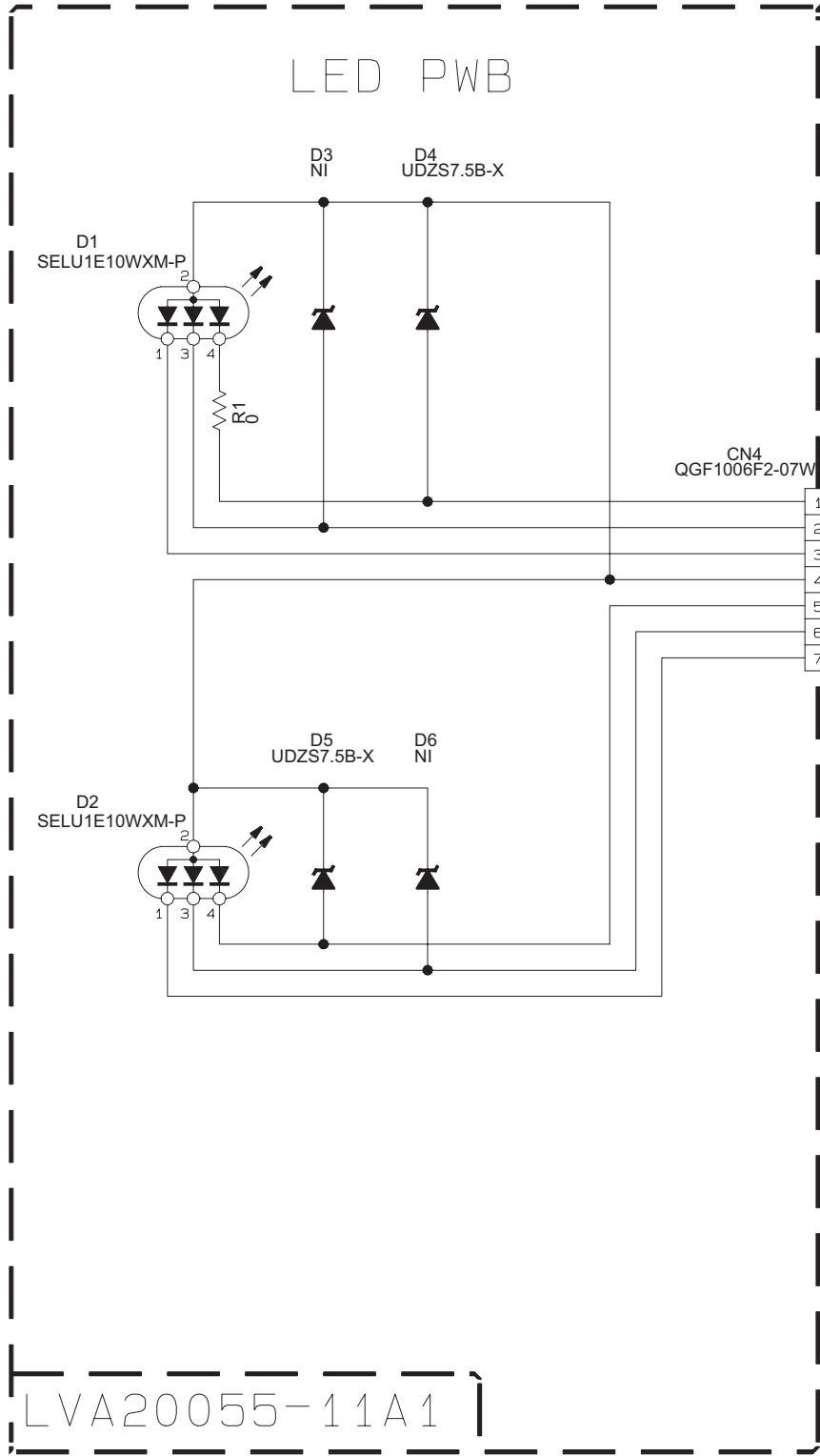
TO CN501
SHEET 2

Not use

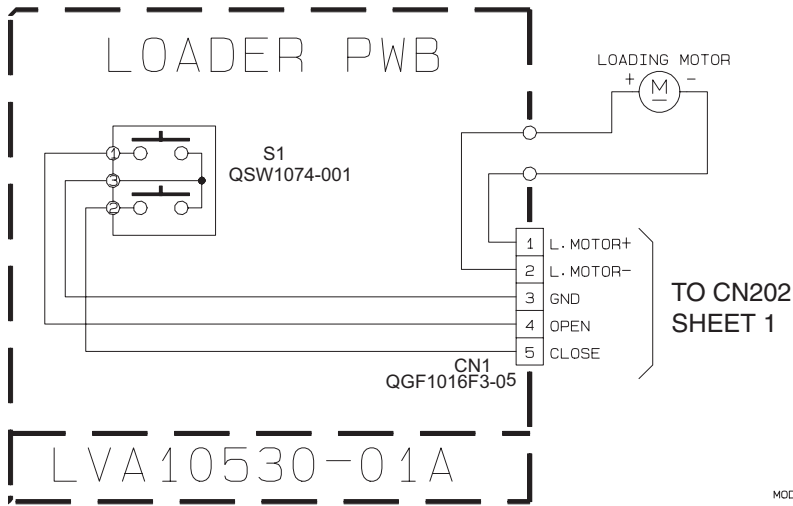


MODEL N322/N422 MARK2
XV-N320/N420/N327/N328/P313

■ Mechanism switch and LED board section



TO CN503
SHEET 2

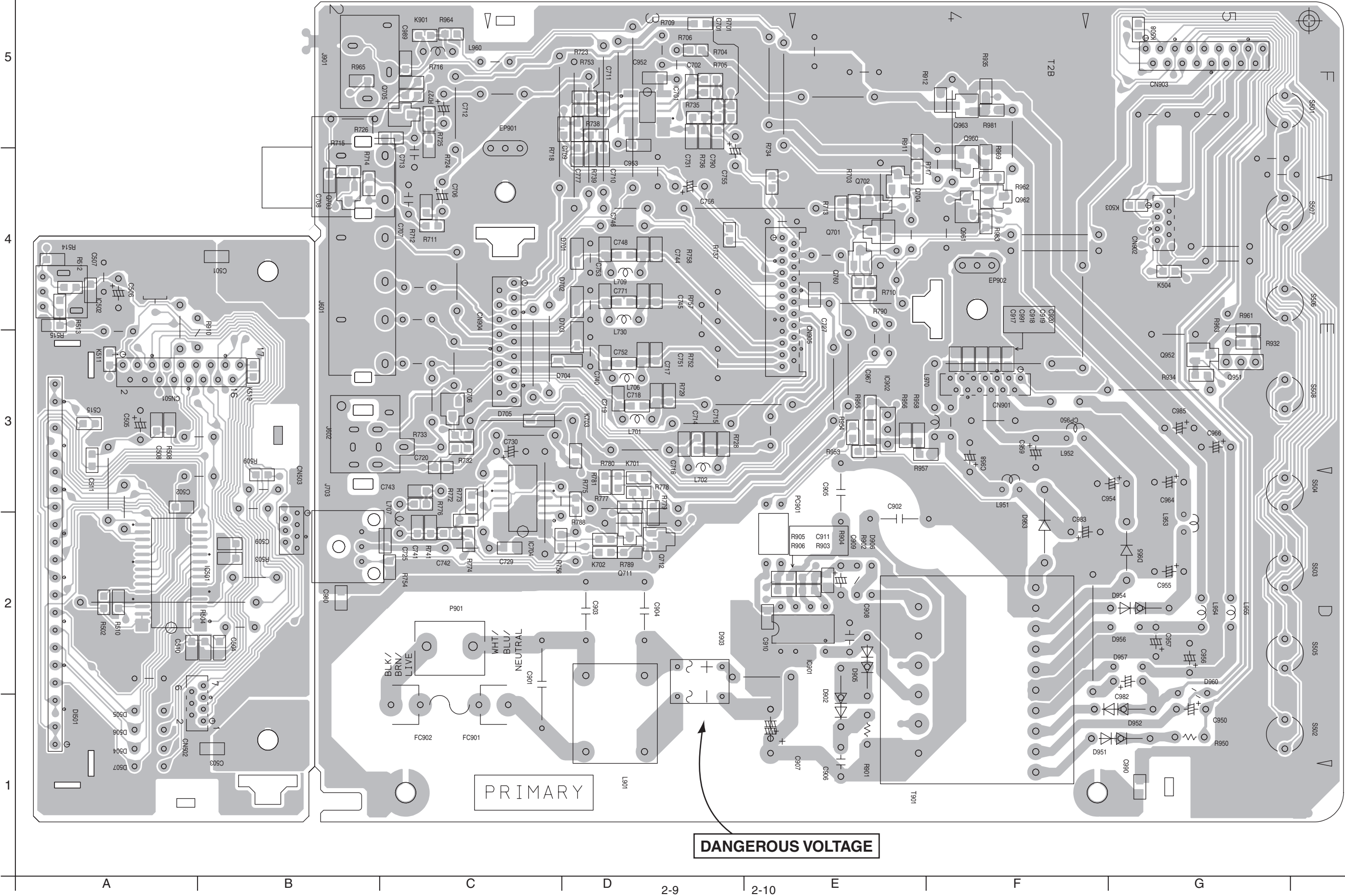


TO CN202
SHEET 1

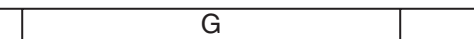
MODEL
FLM-J4-11
/s/T/3002201A1.001

Printed circuit boards

■ Main board <01>



5





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