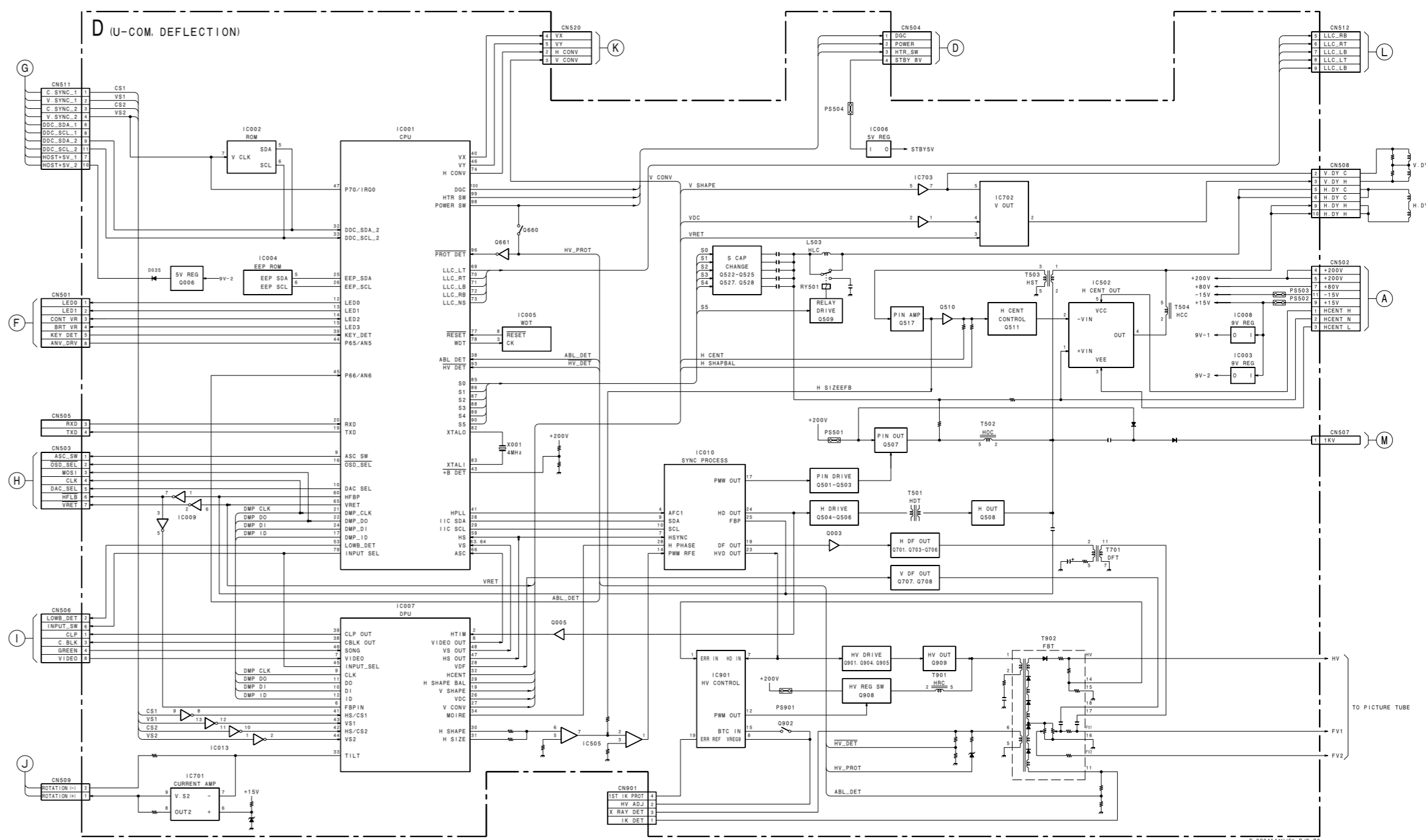
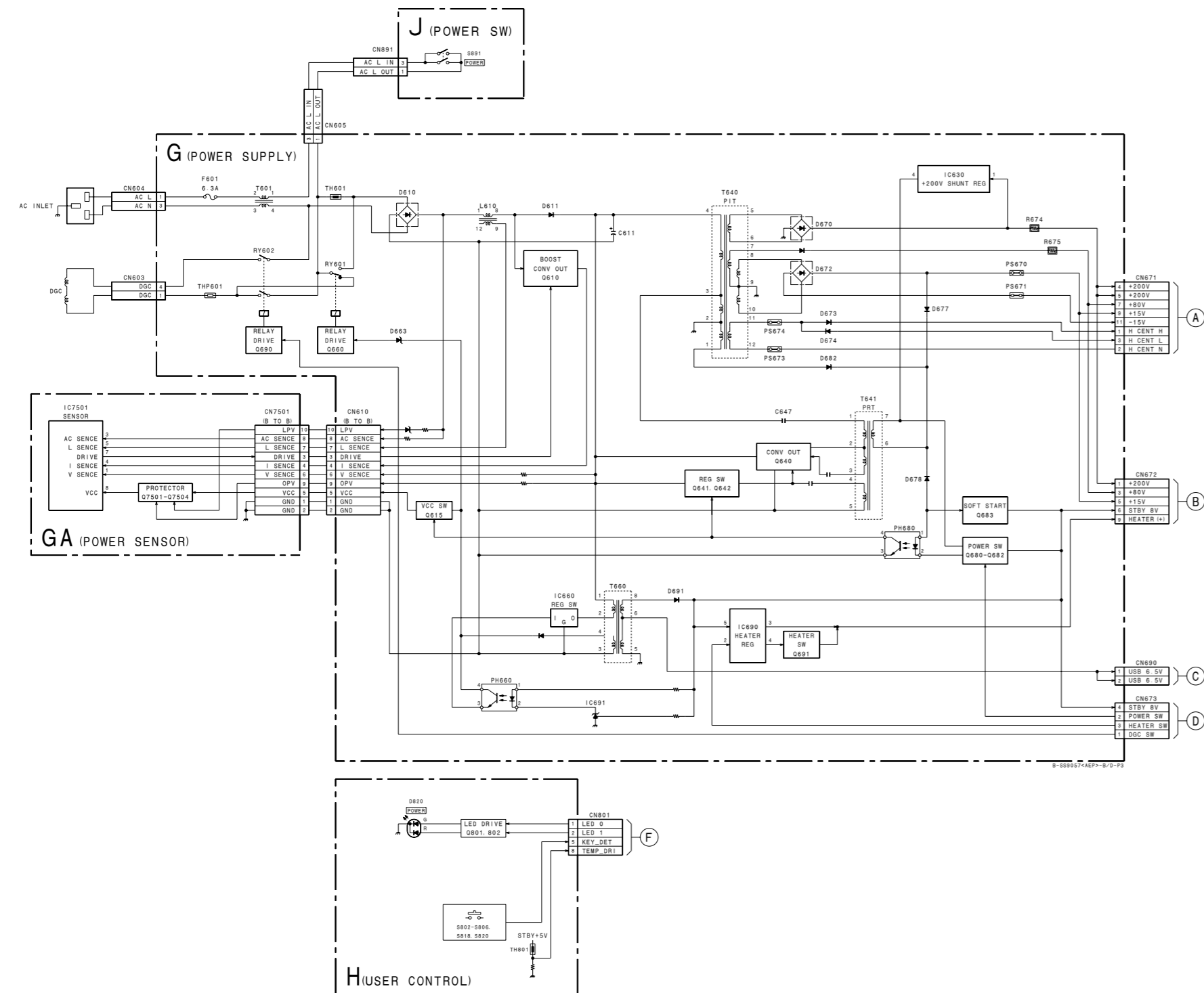
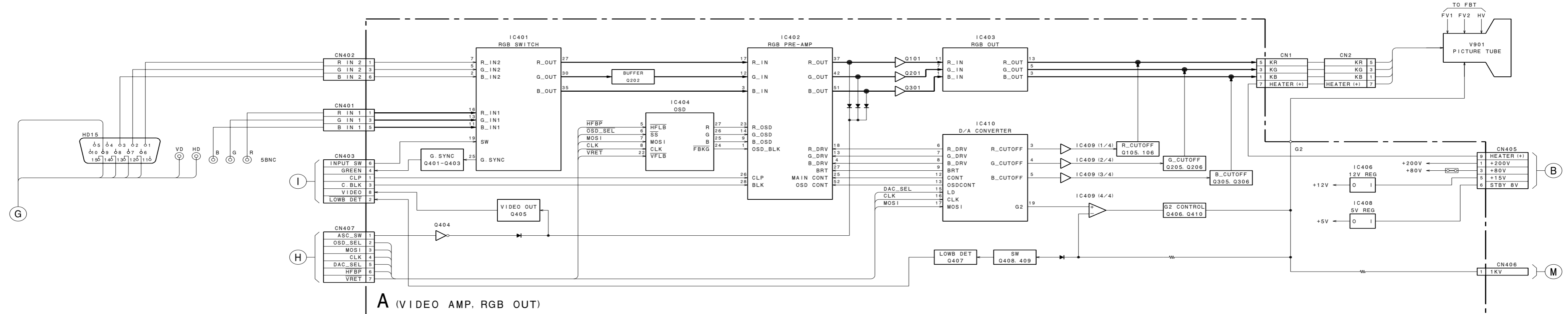


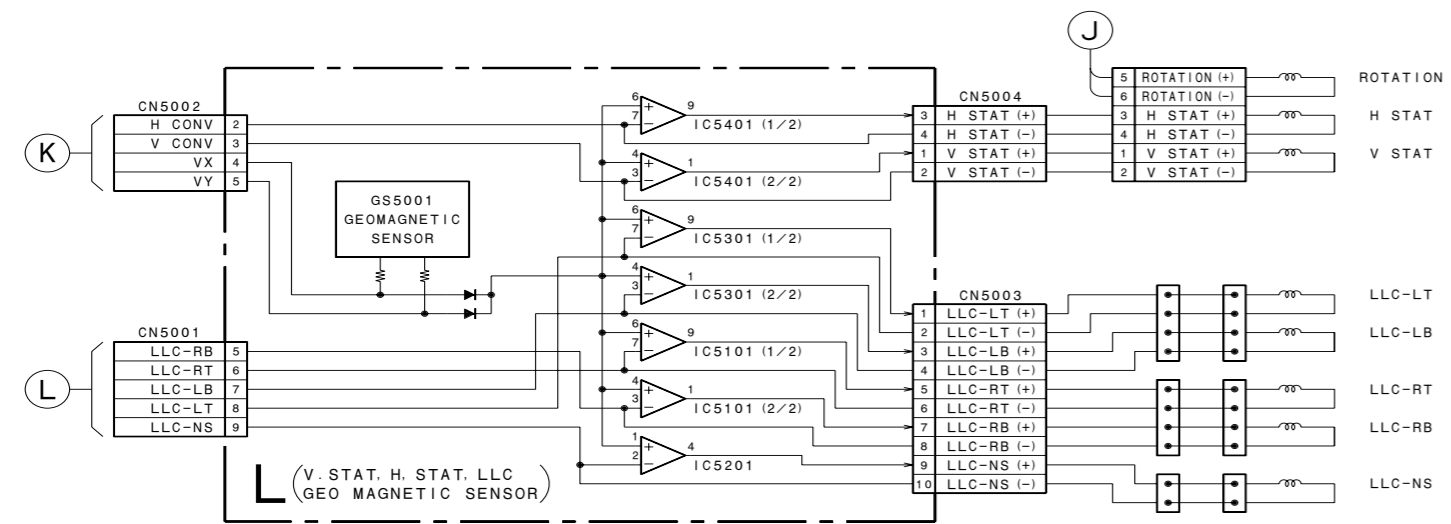
SECTION 5
DIAGRAMS

5-1. BLOCK DIAGRAMS

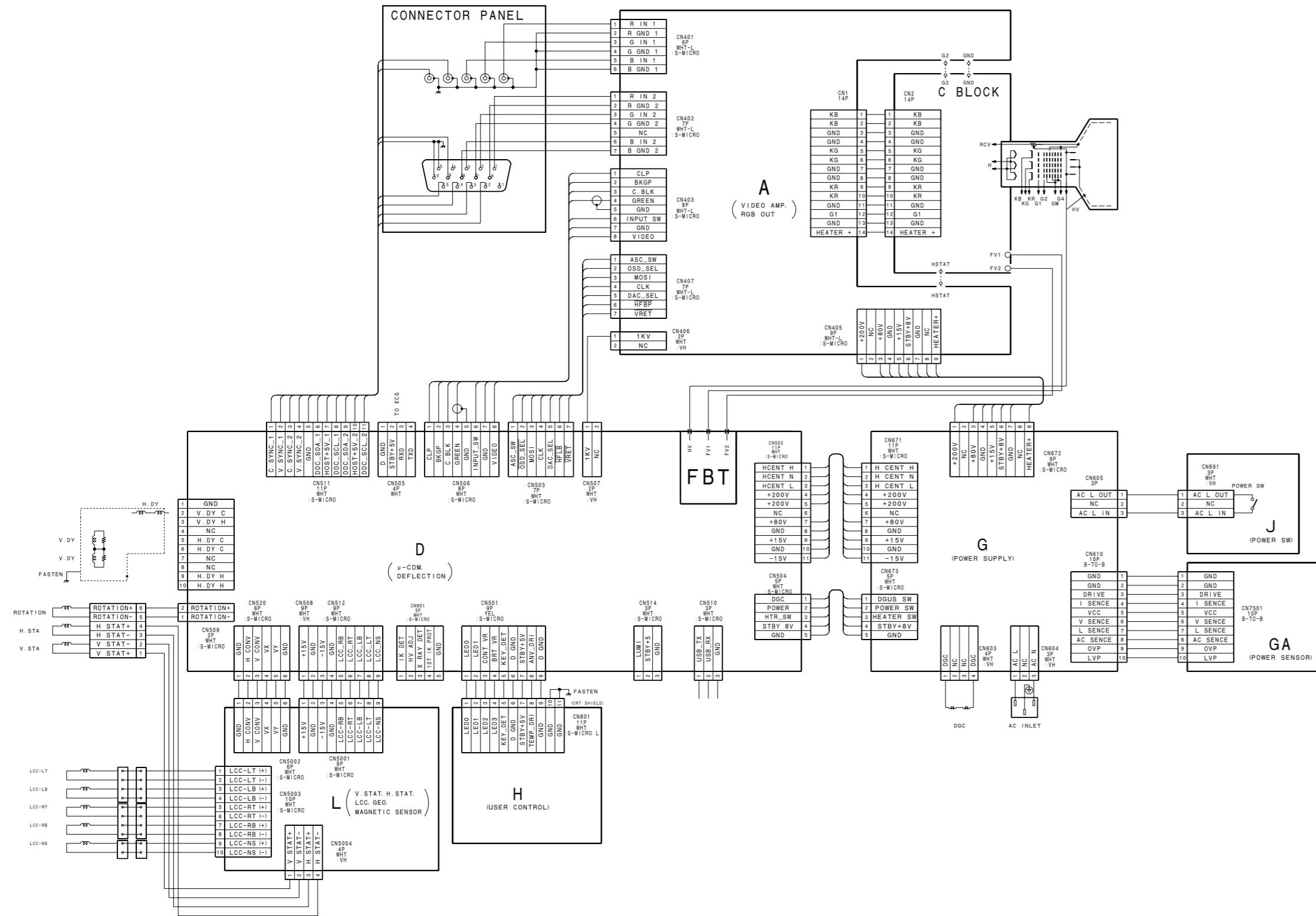




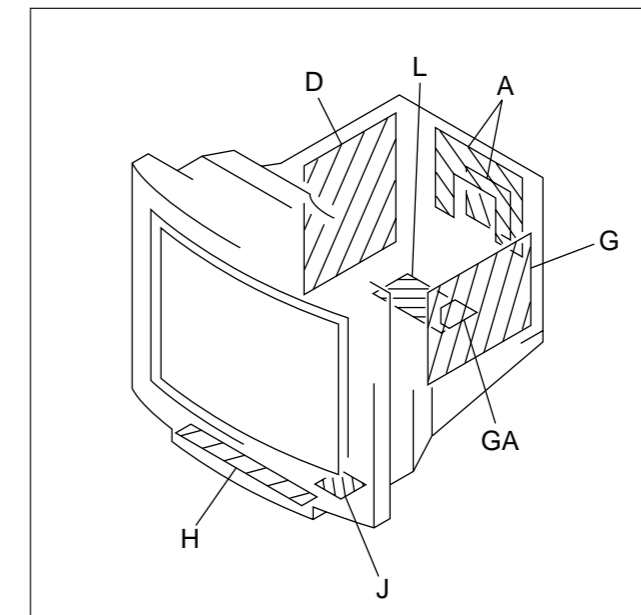
B-S53414<U/C>-B/D-P1



5-2. FRAME SCHEMATIC DIAGRAM



5-3. CIRCUIT BOARDS LOCATION



Note: The components identified by shading and mark are critical for safety. Replace only with part number specified.

Note: Les composants identifiés par un tramé et une marque sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- All voltages are in V.
- Readings are taken with a 10 M digital multimeter.
- Readings are taken with a color-bar signal input.
- Voltage variations may be noted due to normal production tolerances.
- * : Can not be measured.
- Circled numbers are waveform references.
- : B + bus.
- : B - bus.

Terminal name of semiconductors in silk screen printed circuit (*)

Device	Printed symbol	Terminal name	Circuit
① Transistor		Collector Base Emitter	
② Transistor		Collector Base Emitter	
③ Diode		Cathode Anode	
④ Diode		Cathode Anode (NC)	
⑤ Diode		Anode (NC)	
⑥ Diode		Common Anode Cathode	
⑦ Diode		Common Anode Cathode	
⑧ Diode		Common Anode Anode	
⑨ Diode		Common Anode Anode	
⑩ Diode		Common Cathode Cathode	
⑪ Diode		Common Cathode Cathode	
⑫ Transistor (FET)		Drain Source Gate	
⑬ Transistor (FET)		Drain Source Gate	
⑭ Transistor (FET)		Source Drain Gate	
⑮ Transistor		Emitter Collector Base	

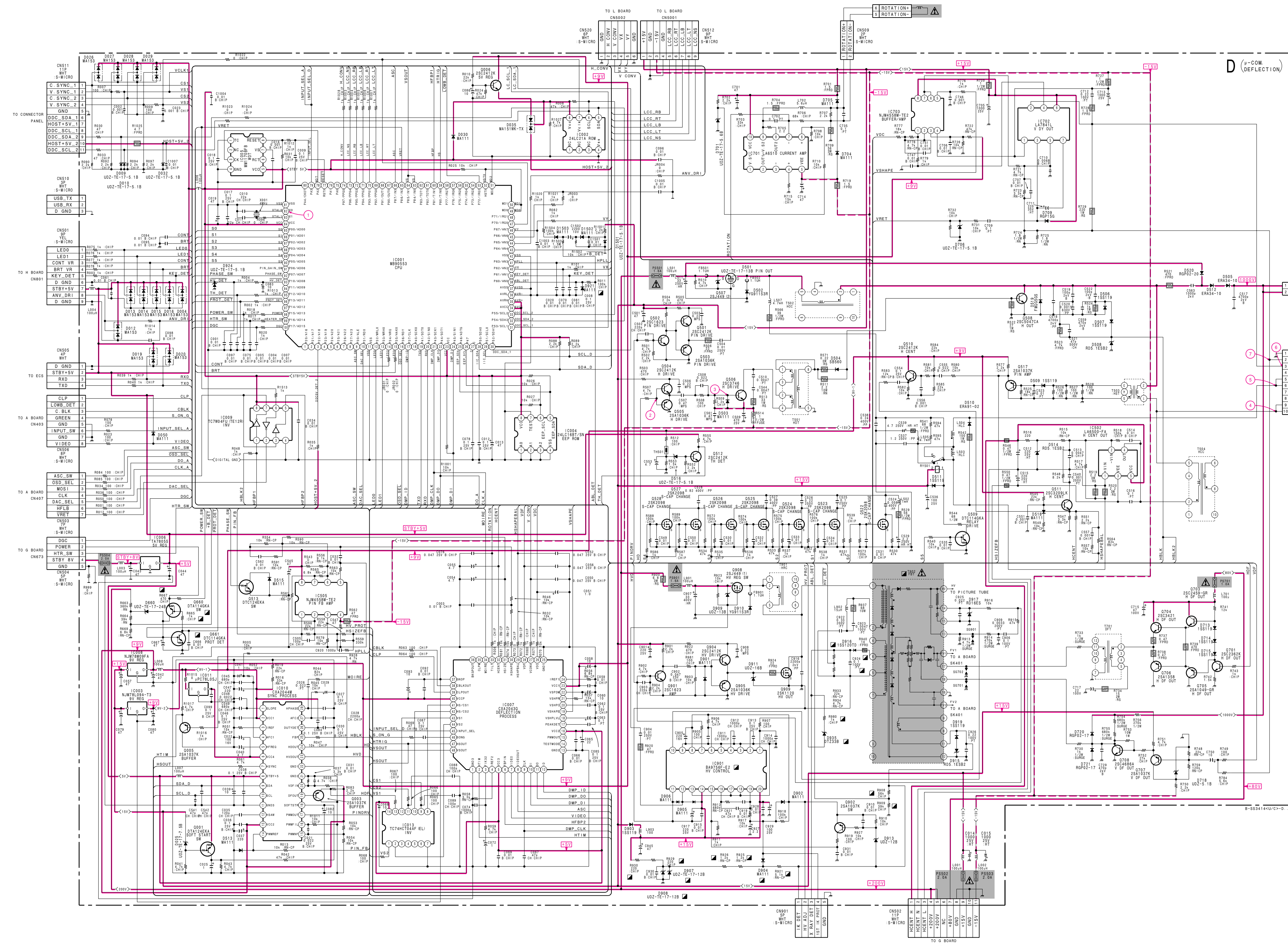
- Discrete semiconductor
(Chip semiconductors that are not actually used are included.) Ver.1.4

5-4. SCHEMATIC DIAGRAMS AND PRINTED WIRING BOARDS

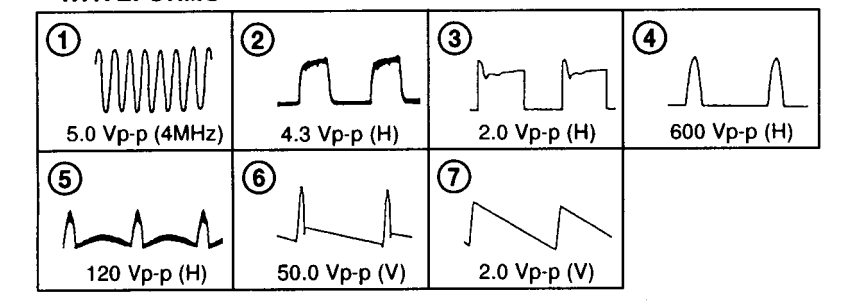
- Note:
- All capacitors are in μF unless otherwise noted. (pF: μF)
 - Capacitors without voltage indication are all 50 V.
 - Indication of resistance, which does not have one for rating electrical power, is as follows.
- Pitch: 5 mm
- Rating electrical power 1/4 W (CHIP : 1/10 W)
- All resistors are in ohms.
 - : nonflammable resistor.
 - : fusible resistor.
 - : internal component.
 - : panel designation, and adjustment for repair.
 - All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
 - : earth-ground.
 - : earth-chassis.
 - The components identified by in this basic schematic diagram have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation. Should replacement be required, replace only with the value originally used.
 - When replacing components identified by , make the necessary adjustments indicated. (See page 18)
 - When replacing the part in below table, be sure to perform the related adjustment.

	Part replaced ()
HV Regulator Circuit Check	D Board IC901, T902 • Mounted D board
HV Protector Circuit Check	D Board Q660, Q661, D916, D935, C924, R665, R667, R940, R980, T902 • Mounted D board G Board PH680, Q680, Q683, D680, R680, R685, R686, R687, R688, R689 • Mounted G board
Beam Current Protector Circuit Check	D Board IC901, D904, D907, D908, R011, R908, R909, R921, R925, R926, R929, R930, T902 • Mounted D board

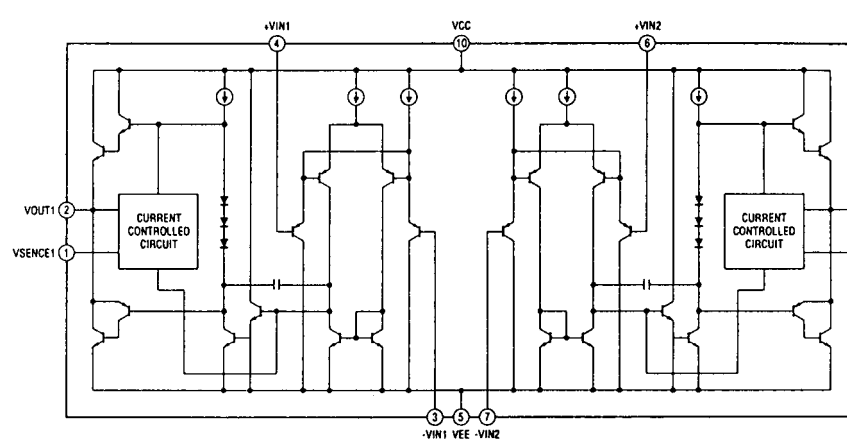
(1) Schematic Diagram of D Board



• D BOARD WAVEFORMS



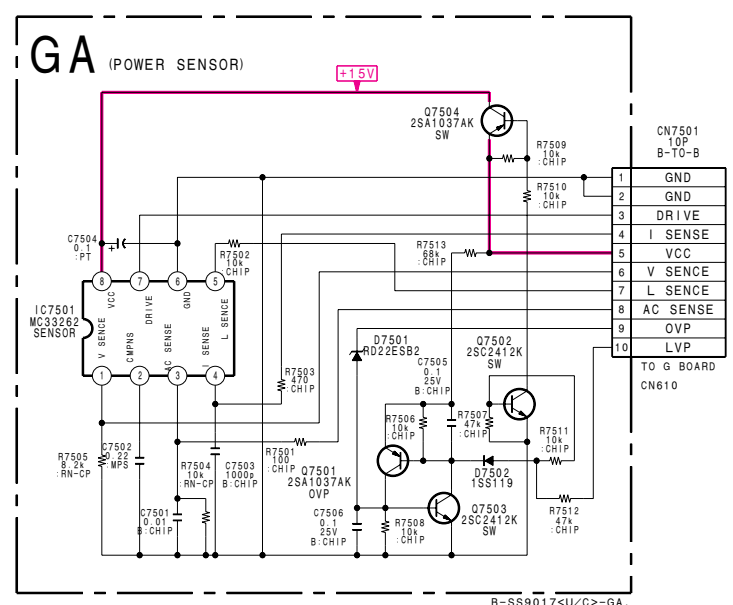
• D BOARD IC701 LA6510



• D BOARD VOLTAGE LIST

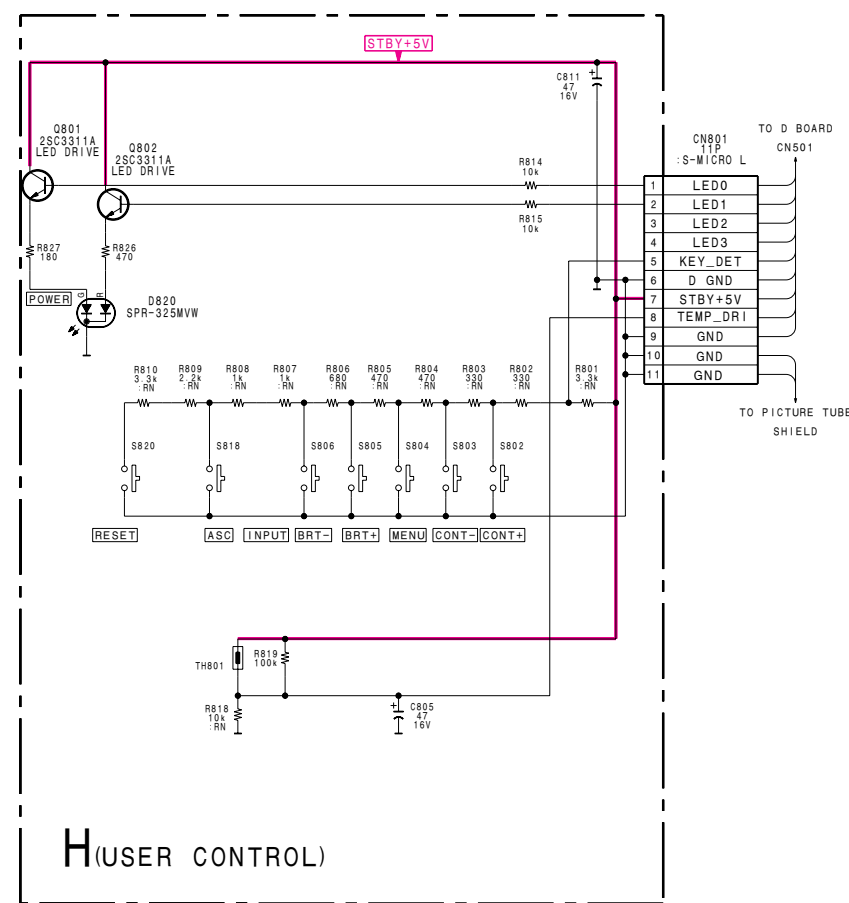
Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]
IC002	5	1.1	11	0	
	6	4.2	12	0	
	7	0	15	0	
IC004	5	4.8	16	8.4	
	6	4.8	19	9.2	
IC005	1	0.4	Q003	B	5.1
	3	4.7		C	0
	7	1.5		E	5.7
	8	4.8	Q005	B	2.5
IC009	1	-0.1		C	0
	3	4.5		E	3.1
	5	0.3	Q501	B	11.2
	6	0.3		C	13.8
	7	4.3		E	10.8
IC010	1	4.0	Q502	B	0.2
	3	3.0		C	11.2
	4	2.6	Q503	B	11.2
	5	2.3		E	10.9
	6	2.6	Q504	B	2.5
	9	4.6		C	12.0
	10	4.8		E	2.5
	12	5.4	Q505	B	2.5
	14	4.5		E	2.4
	16	5.4	Q506	B	-14.0
	17	1.0		C	-0.2
	18	1.0		E	-14.0
	19	5.1	Q507	G	19.4
	20	3.7		D	41.8
	23	0.8	Q508	B	-1.4
	24	2.5		C	41.0
	25	-0.1	Q509	B	0
	26	4.0		C	14.1
	27	4.0		E	4.5
	28	4.4			
IC012	5	0.6	Q510	B	4.1
	6	3.9		E	3.9
IC013	1	0	Q511	B	3.2
	2	4.9		C	33.5
	8	0.6		E	2.6
	9	3.6	Q517	B	4.6
	10	4.9		E	5.1
	11	0	Q522	G	0
	13	5.7		D	15.2
IC014	1	3.5	Q523	G	4.7
	3	3.5		D	0
	5	2.7	Q524	G	4.7
	9	0		D	0
	10	0.1	Q525	G	4.7
	12	4.9		D	0
	13	4.9	Q527	G	4.7
	14	3.2		D	0
	15	3.2		D	0
IC015	1	0.5	Q528	G	4.7
	2	4.2		D	0
	3	0.5	Q660	B	4.2
	4	0.5		C	0
	5	0		E	4.2
	6	0	Q661	B	0
	8	0		C	4.2
	9	0			
	13	0			
IC502	1	41.4	Q701	B	5.7
	2	41.4		C	36.0
	3	33.7		E	5.1
	4	42.3	Q703	B	37.9
	5	48.3		E	37.4
IC505	1	4.5	Q704	B	37.4
	2	0		E	37.0
	3	0	Q705	B	36.0
	5	0		E	36.6
	7	-10.0			
IC701	1	14.2	Q706	B	36.6
	2	14.2		E	37.0
	3	0	Q707	B	-0.6
	4	3.6		C	-5.0
	6	3.0		E	0
	7	3.0	Q708	B	0.6
	8	-0.7		C	477.0
	9	-0.7			
IC702	2	0.4	Q901	B	0.9
	3	13.5		C	9.1
	4	1.2		E	0.9
	5	1.2	Q902	B	9.0
	7	-13.0		C	0
IC703	1	1.2	Q904	B	8.6
	2	1.6		C	13.0
	3	1.6		E	8.4
	5	2.8	Q905	B	8.6
	6	2.8		E	8.4
	7	2.8			
IC801	1	9.3	Q908	G	196.6
	2	5.6		D	40.1
	4	1.1			
	7	0.9	Q909	G	8.4
	8	9.3		D	40.4
	10	0			

(2) Schematic Diagrams of G, GA, H, J, L and U3 Boards



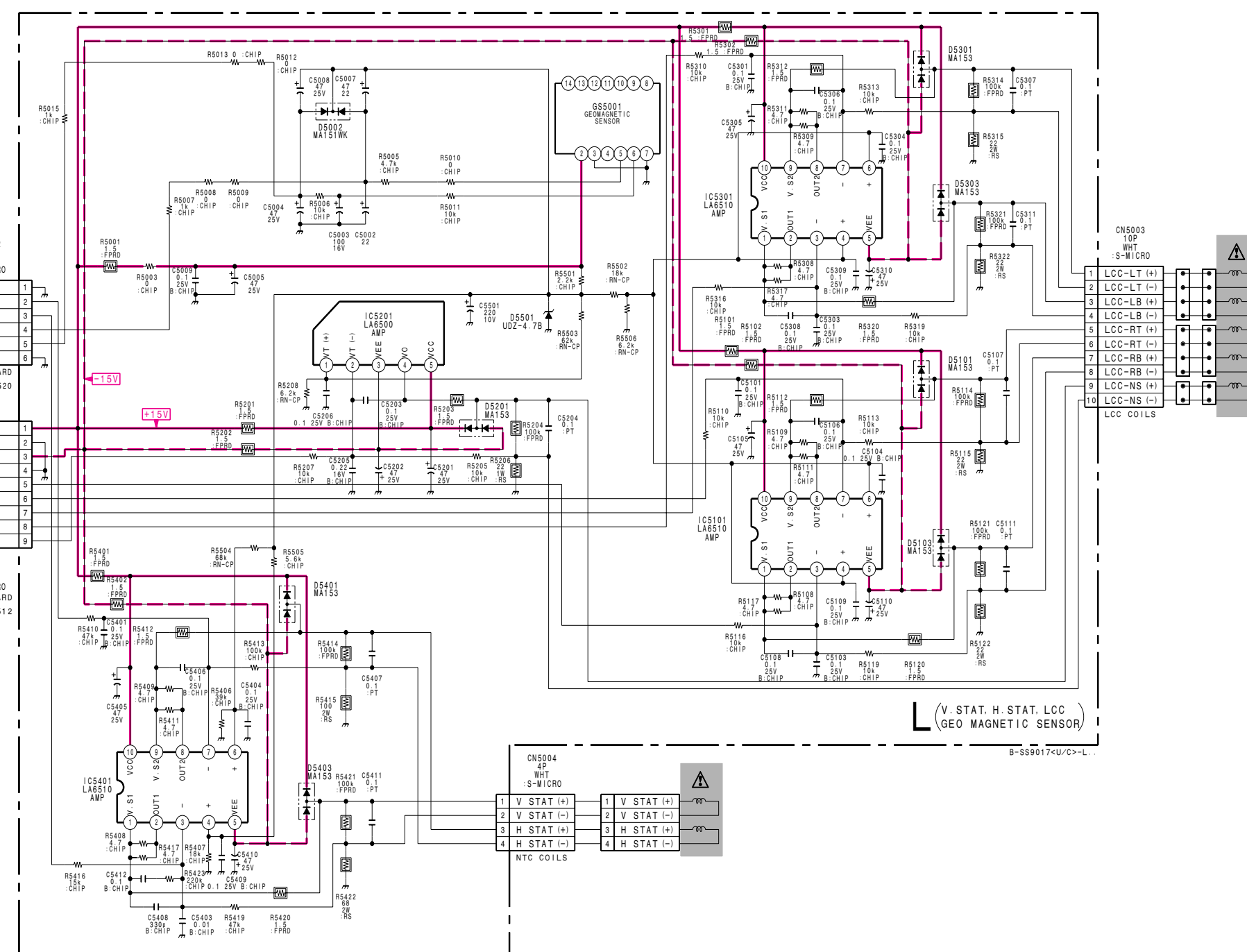
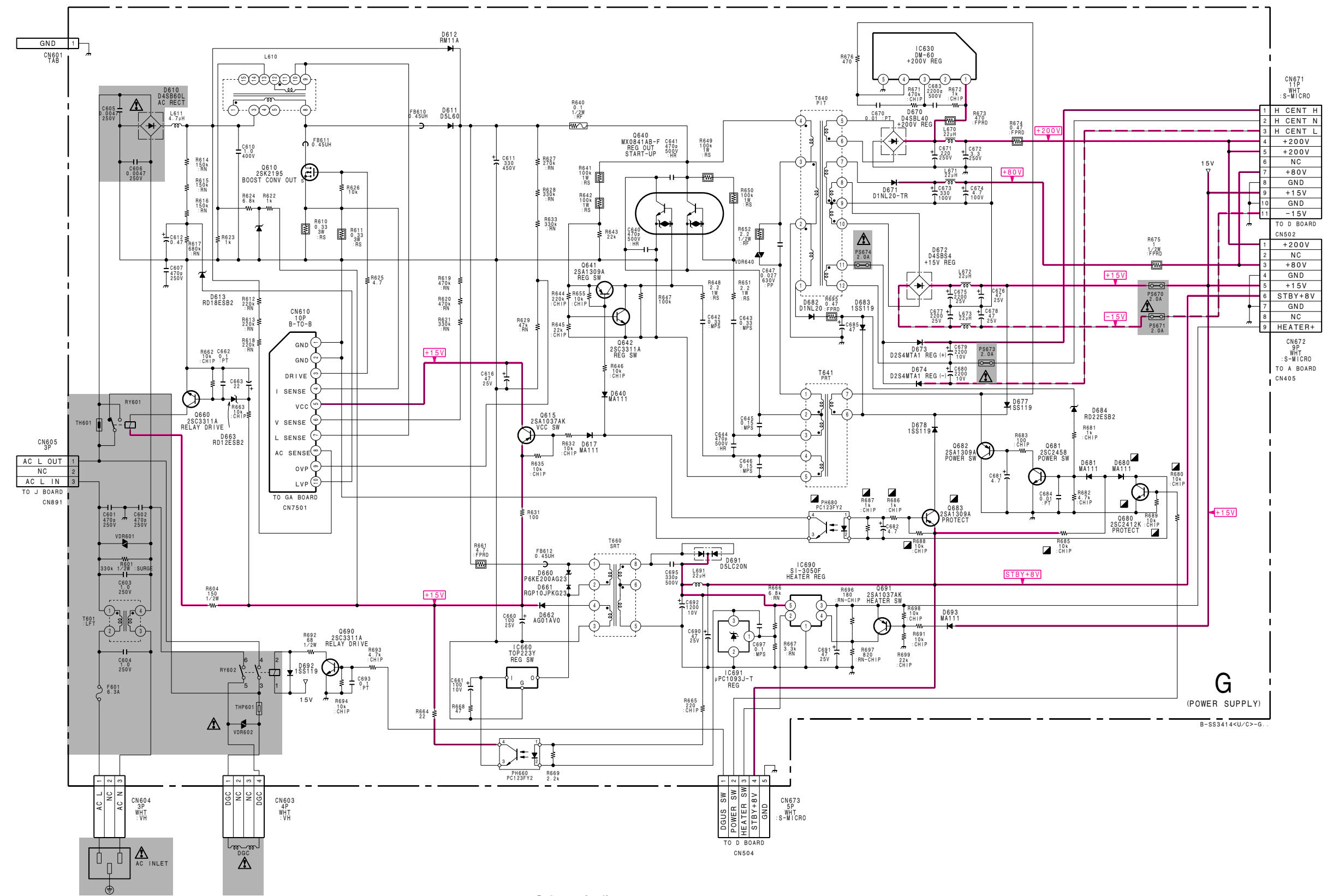
GA BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
IC7501	1	2.6
	2	2.5
	3	1.7
	4	0.2
	5	0
	7	8.6
	7501	B
7501	C	0
	E	14.0
Q7502	B	0.7
	C	0.1
Q7503	B	0
	C	14.0
Q7504	B	13.4

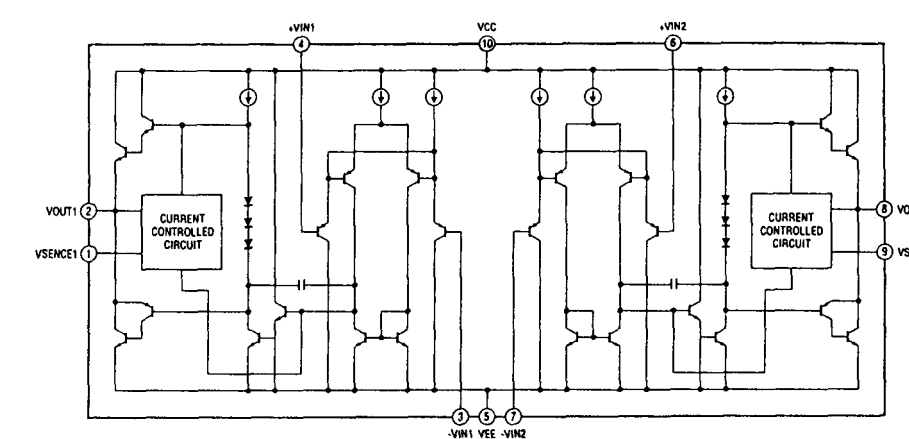


G BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
IC630	3	2.5
	4	11.6
IC660	IN	6.1
	OUT	410.0
IC690	2	5.0
	3	6.7
	4	5.3
	4	16.7
PH660	1	4.5
	2	3.3
	3	2.0
	4	6.1
PH680	1	1.3
	2	0.1
	3	0
	4	0.1
	11	-1.5
Q610	G	8.7
	D	102.4
	S	0.2
	8	0.2
Q615	B	13.6
	C	14.2
	E	14.3
Q640	B1	-2.0
	C1	199.2
	C2	408.0
Q641	B	1.1
	C	-2.0
	E	2.0
Q642	B	-1.8
	C	-2.0
Q660	B	0.9
	C	0.3
Q680	B	0.8
	C	0
Q681	B	0.3
	C	11.7
Q682	B	11.7
	E	11.7
Q683	B	7.5
	C	8.3
Q690	B	0
	C	15.0
Q691	B	8.6
	C	5.3
	E	6.7



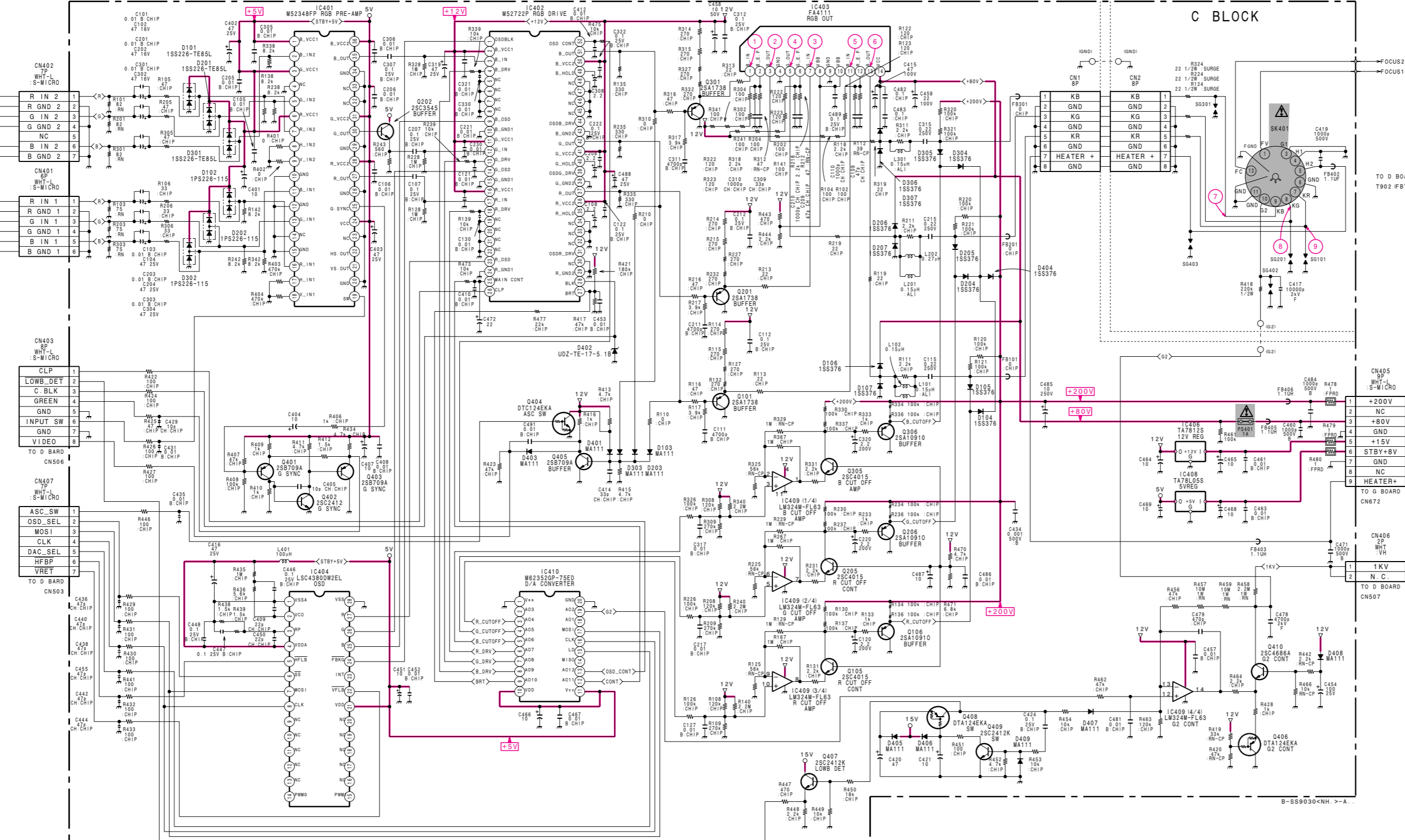
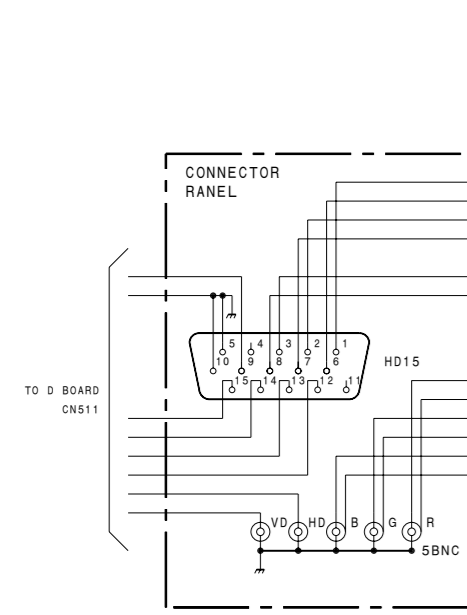
L BOARD IC5101, 5301, 5401 LA6510



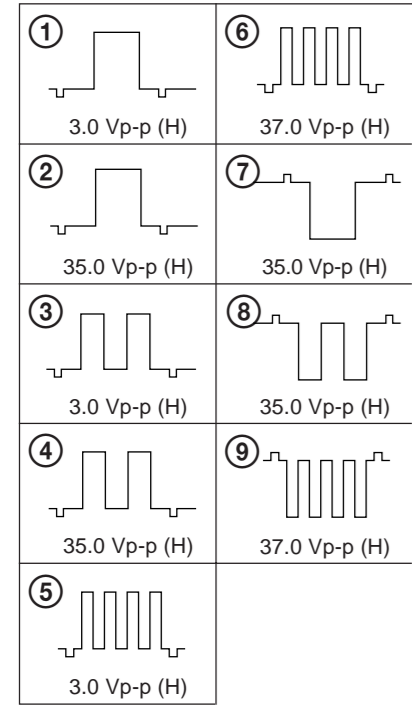
L BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]
SS5001	5	2.8
	6	2.8
	6	2.8
IC5101	1	1.0
	2	1.0
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	-0.2
	9	-0.2
	IC5201	1
2		1.2
4		1.1
4		1.1
IC5301	1	-0.2
	2	-0.2
	3	1.2
	4	1.2
	6	1.2
	7	1.2
	8	0.4
	9	0.4
	IC5401	1
2		0.6
3		3.4
4		3.4
6		1.8
7		1.8
8		0.4
9		0.4

(3) Schematic Diagram of A Board

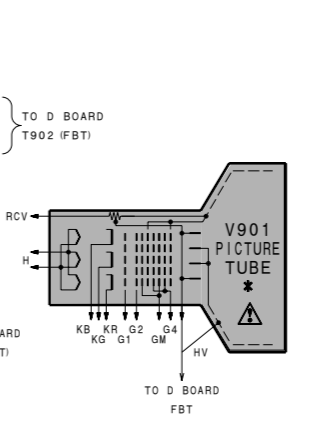


• A BOARD WAVEFORMS



A (VIDEO AMP, RGB OUT)

C BLOCK



• A BOARD VOLTAGE LIST

Ref.	Pin No.	Voltage [V]	Ref.	Pin No.	Voltage [V]	
IC402	1	1.1	Q106	B	112.6	
	3	2.8		E	113.3	
	4	3.7		Q201	B	2.7
	9	1.1			E	3.5
	12	2.8		Q205	B	7.4
	13	3.8			C	109.9
	14	1.1		Q206	B	109.9
	17	2.8			E	110.4
	18	3.9		Q301	B	2.7
	23	1.1			E	3.4
	25	3.3		Q305	B	7.4
	26	0.7			C	113.1
	27	2.4		Q306	B	113.1
28	1.2	E	113.7			
35	4.4	Q401	B	3.6		
37	2.7		C	0.7		
40	4.7	Q406	B	7.9		
42	2.7		E	9.0		
49	4.4	Q410	B	9.7		
51	2.7		C	484.0		
52	2.1	Q410	C	9.1		
			B	87.0		
IC403	1	3.4	SK401	KR	87.0	
	2	2.8		KG	87.0	
IC405	3	53.6	Q105	B	7.3	
	5	52.7		Q105	B	112.6
	6	2.9			C	6.5
	7	3.4				
	8	9.8				
	10	9.8				
	11	3.5				
	12	2.9				
	13	52.3				

• A BOARD IC402 M52722P

