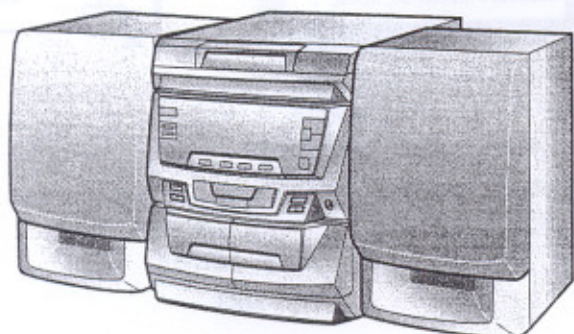


SHARP SERVICE MANUAL

No. S5728CDC410H/



CD-C410H CP-C410

COMPACT
disc
DIGITAL AUDIO

CD-C410H and CP-C410 constitute CD-C410H.

• In the interests of user-safety the set should be restored to its original condition and only parts identical to those specified be used.

• **Note for users in UK**

Recording and playback of any material may require consent which SHARP is unable to give. Please refer particularly to the provisions of Copyright Act 1956, the Dramatic and Musical Performers Protection Act 1956, the Performers Protection Acts 1963 and 1972 and to any subsequent statutory enactments and orders.

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SAFETY PRECAUTION FOR SERVICE MANUAL

Precaution to be taken when replacing and servicing the Laser Pickup.

The AEL (Accessible Emission Level) of Laser Power Output for this model is specified to be lower than Class I Requirements. However, the following precautions must be observed during servicing to protect your eyes against exposure to the laser beam.

- (1) When the cabinet has been removed, the power is turned on without a compact disc, and the Pickup is on a position outer than the lead-in position, the Laser will light for several seconds to detect a disc. Do not look into the Pickup Lens.
- (2) The Laser Power Output of the Pickup inside the unit and replacement service parts have already been adjusted prior to shipping.
- (3) No adjustment to the Laser Power should be attempted when replacing or servicing the Pickup.
- (4) Under no circumstances look directly into the Pickup Lens at any time.
- (5) CAUTION - Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.

VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.

VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.

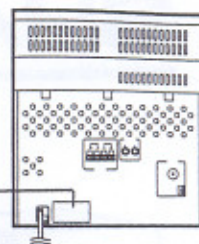
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.

Laser Diode Properties

Material: GaAlAs
Wavelength: 780 nm
Emission Duration: continuous
Laser Output: max. 0.6 mW

(Except for UK)

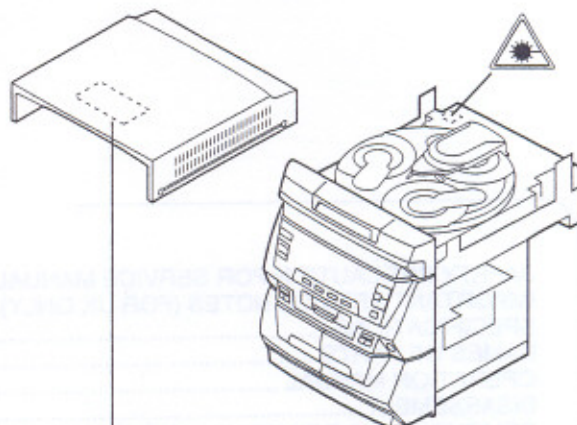
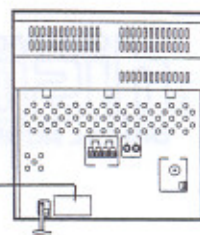
CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1



LASER KLASSE 1
LUOKAN 1 LASERLAITE
KLASS 1 LASERAPPARAT
LASER TŘÍDY 1
LASER TRIEDY 1

(For UK)

CLASS 1 LASER PRODUCT
APPAREIL À LASER DE CLASSE 1
PRODUCTO LASER DE CLASE 1



CAUTION-INVISIBLE LASER RADIATION WHEN OPEN. DO NOT STARE INTO BEAM OR VIEW DIRECTLY WITH OPTICAL INSTRUMENTS.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN MED OPTISKA INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLNING VED ÅBNING. SE IKKE IND I STRÅLEN-ELLER IKKE MED OPTISKE INSTRUMENTER.
VARO! AVATTAESSA OLET ALTTIINA NÄKYMÄTÖN LASERSÄTEILYLLE. ÄLÄ TUIJOTA SÄTEESEEN ÄLÄKÄ KATSO SITÄ OPTISEN LAITTEEN LÄPI.
VARNING-OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STIRRA EJ IN I STRÅLEN OCH BETRAKTA EJ STRÅLEN GENOM OPTISKT INSTRUMENT.
ADVERSEL-USYNLIG LASERSTRÅLNING NÄR DEKSEL ÅPNES. STIR IKKE INN I STRÅLEN ELLER SE DIREKTE MED OPTISKE INSTRUMENTER.

CD-C410H

TAPE1

TAPE2

A

B

C

D

E

F

G

H

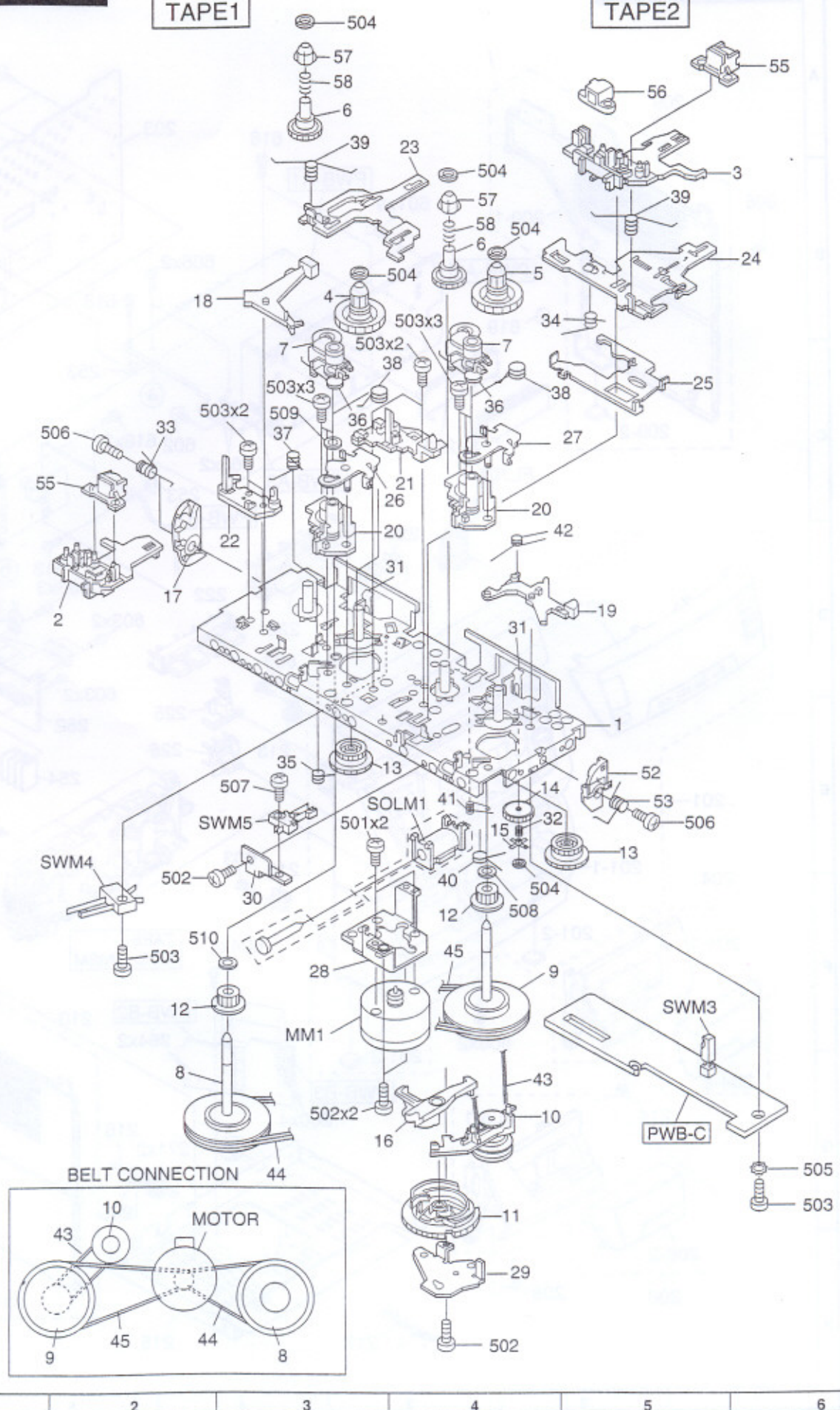
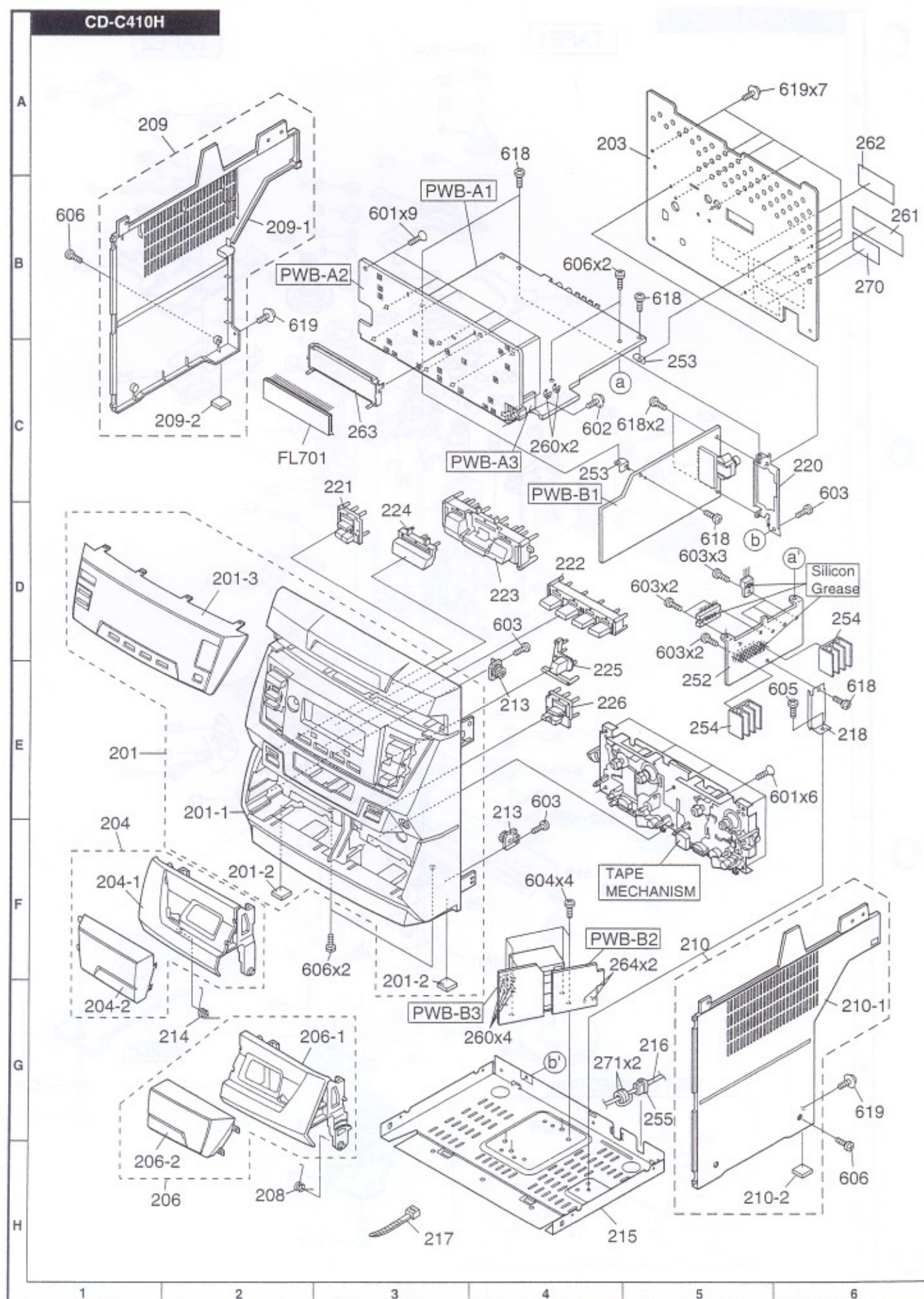


Figure 8 TAPE MECHANISM EXPLODED VIEW



CD-C410H

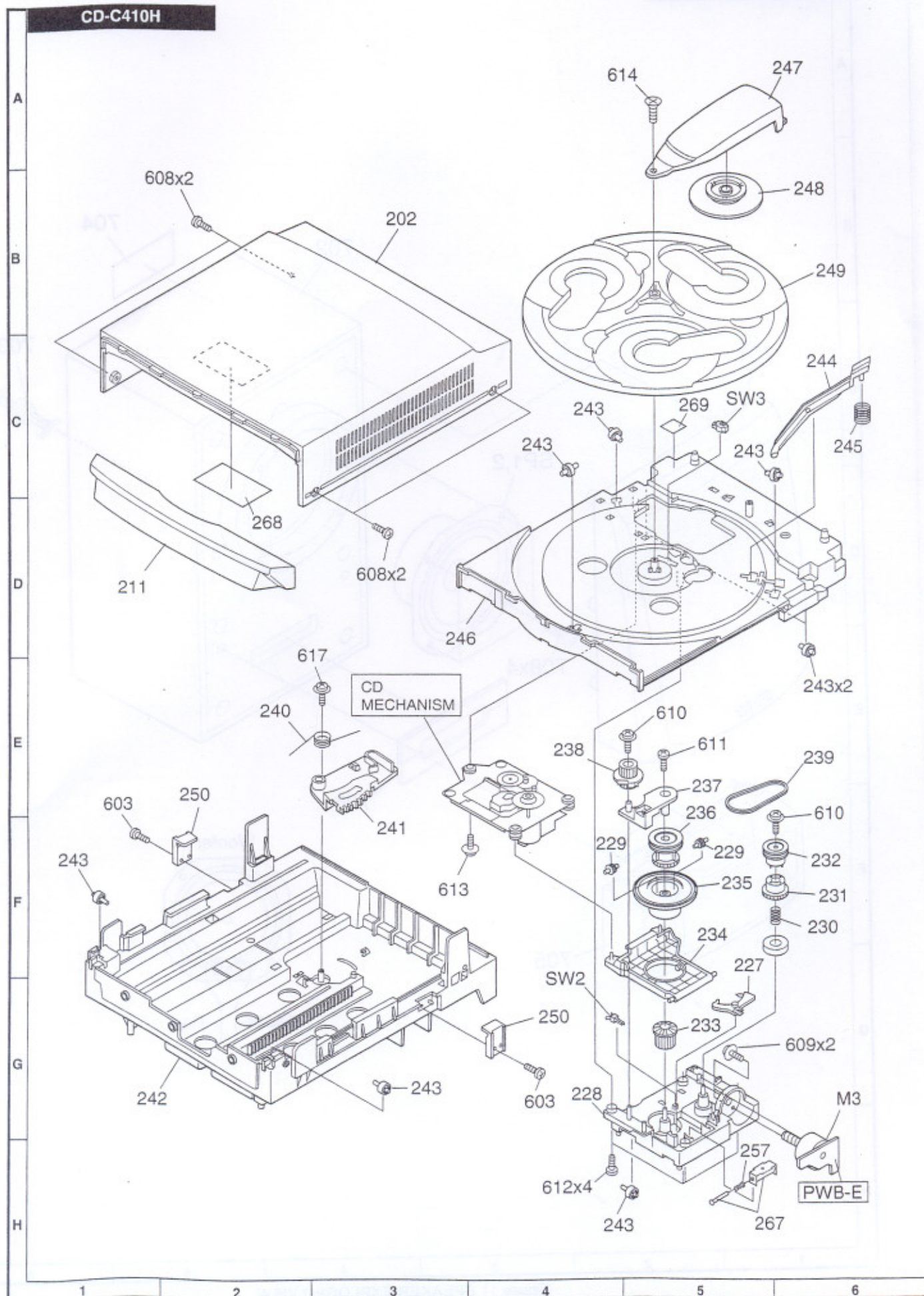


Figure 10 CABINET EXPLODED VIEW (2/2)

CP-C410

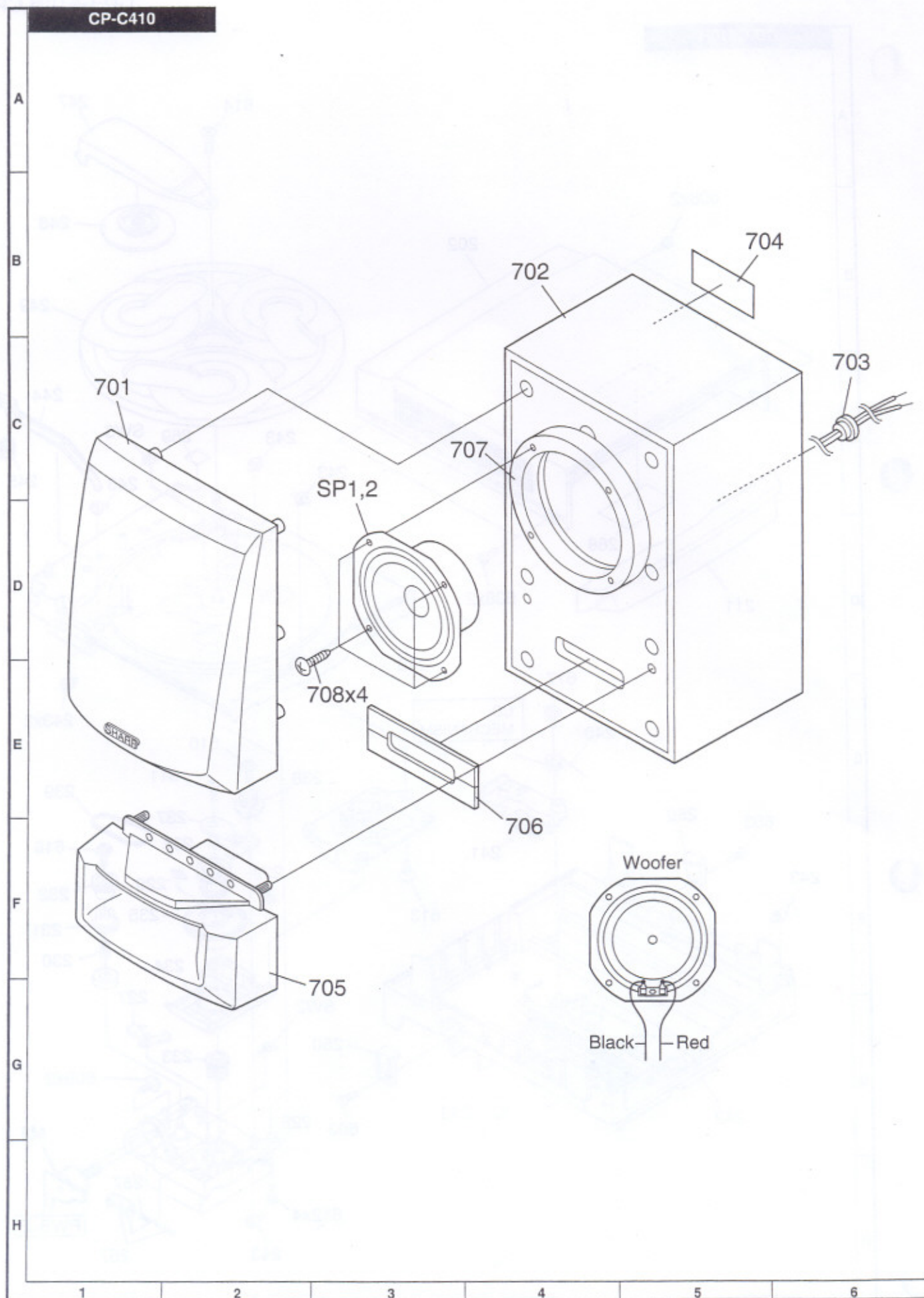


Figure 11 SPEAKER EXPLODED VIEW

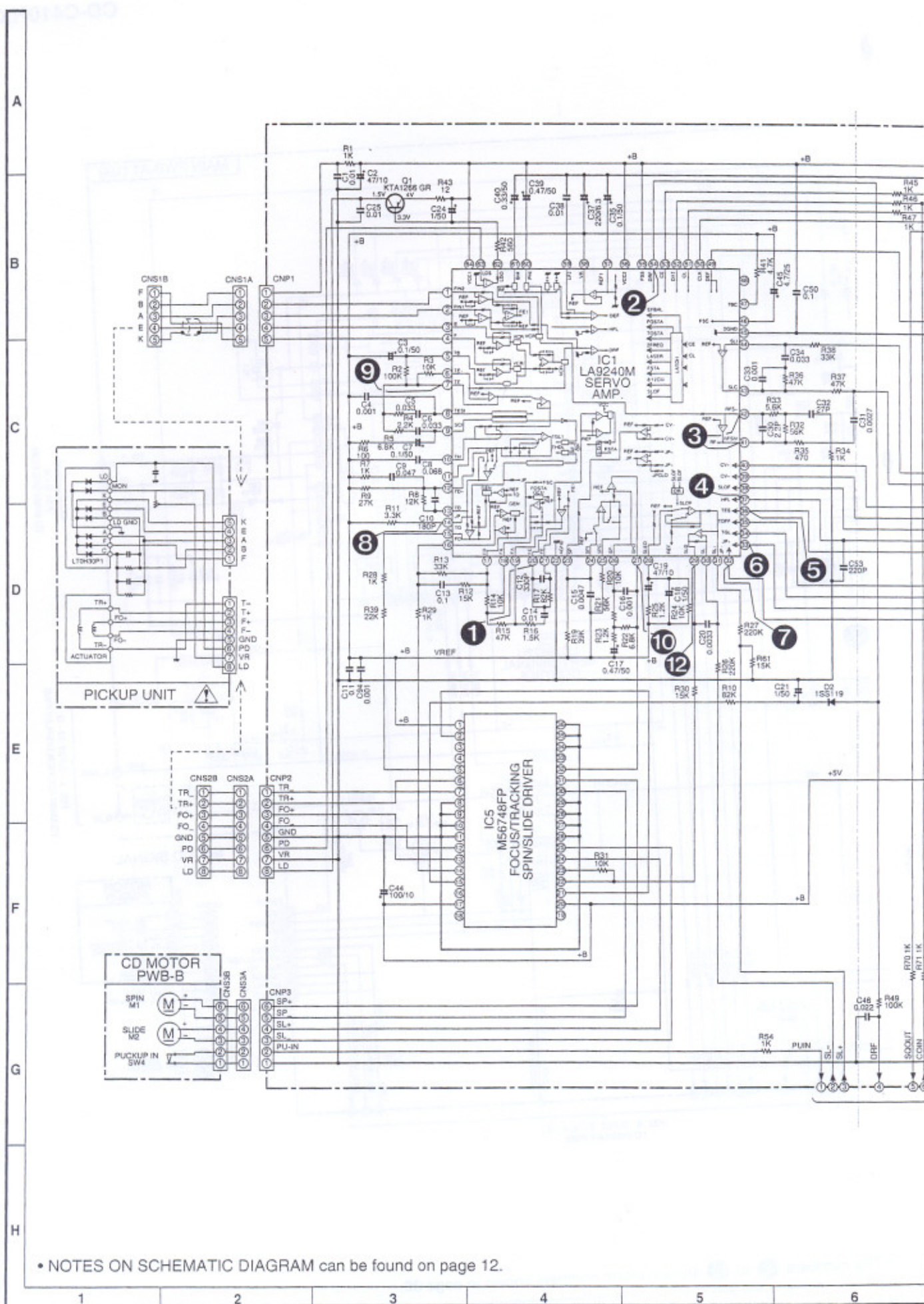
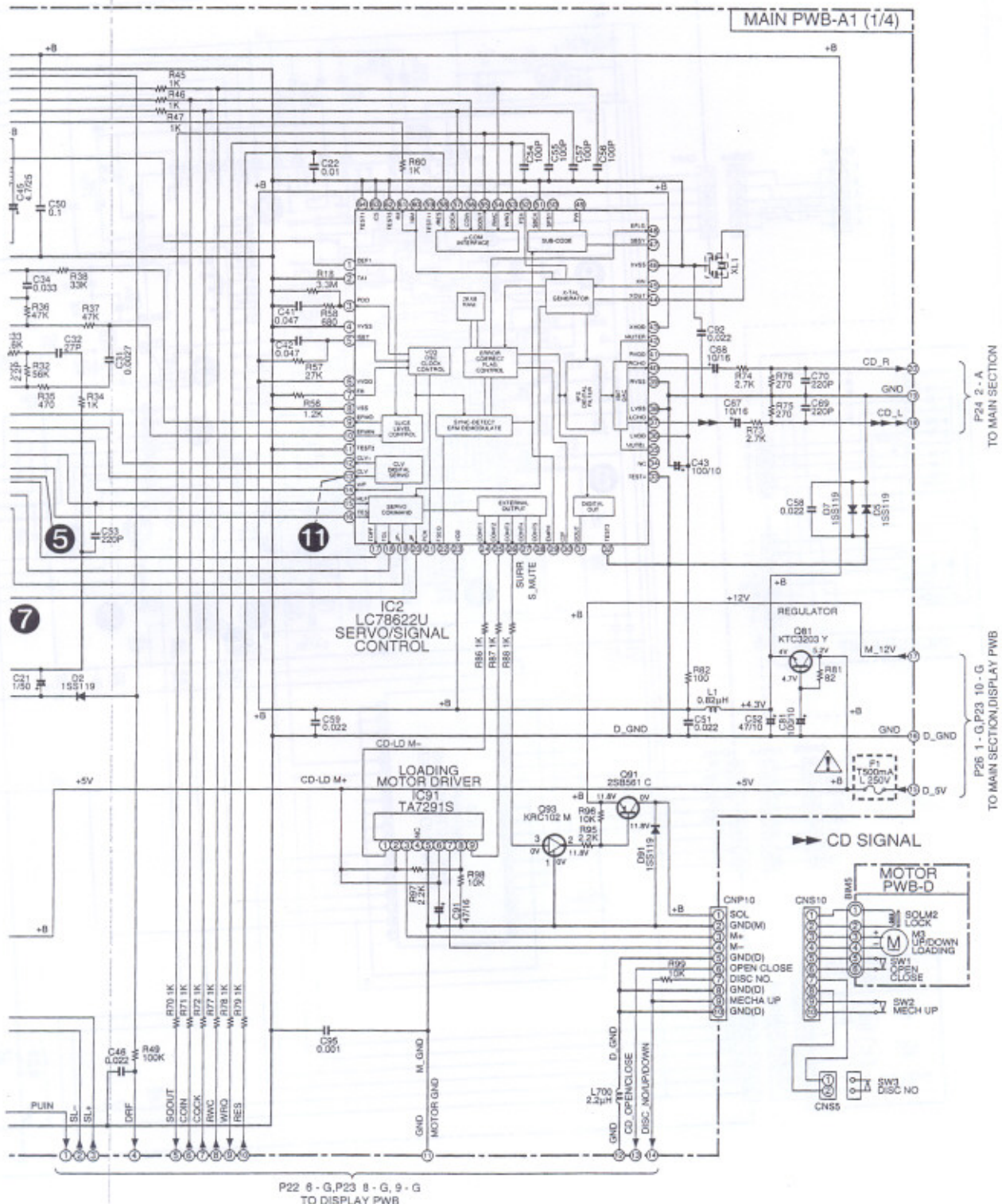


Figure 20 SCHEMATIC DIAGRAM (1/10)



• The numbers 1 to 12 are waveform numbers shown in page 30.

7	8	9	10	11	12
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Figure 21 SCHEMATIC DIAGRAM (2/10)



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DISPLAY PWB-A2

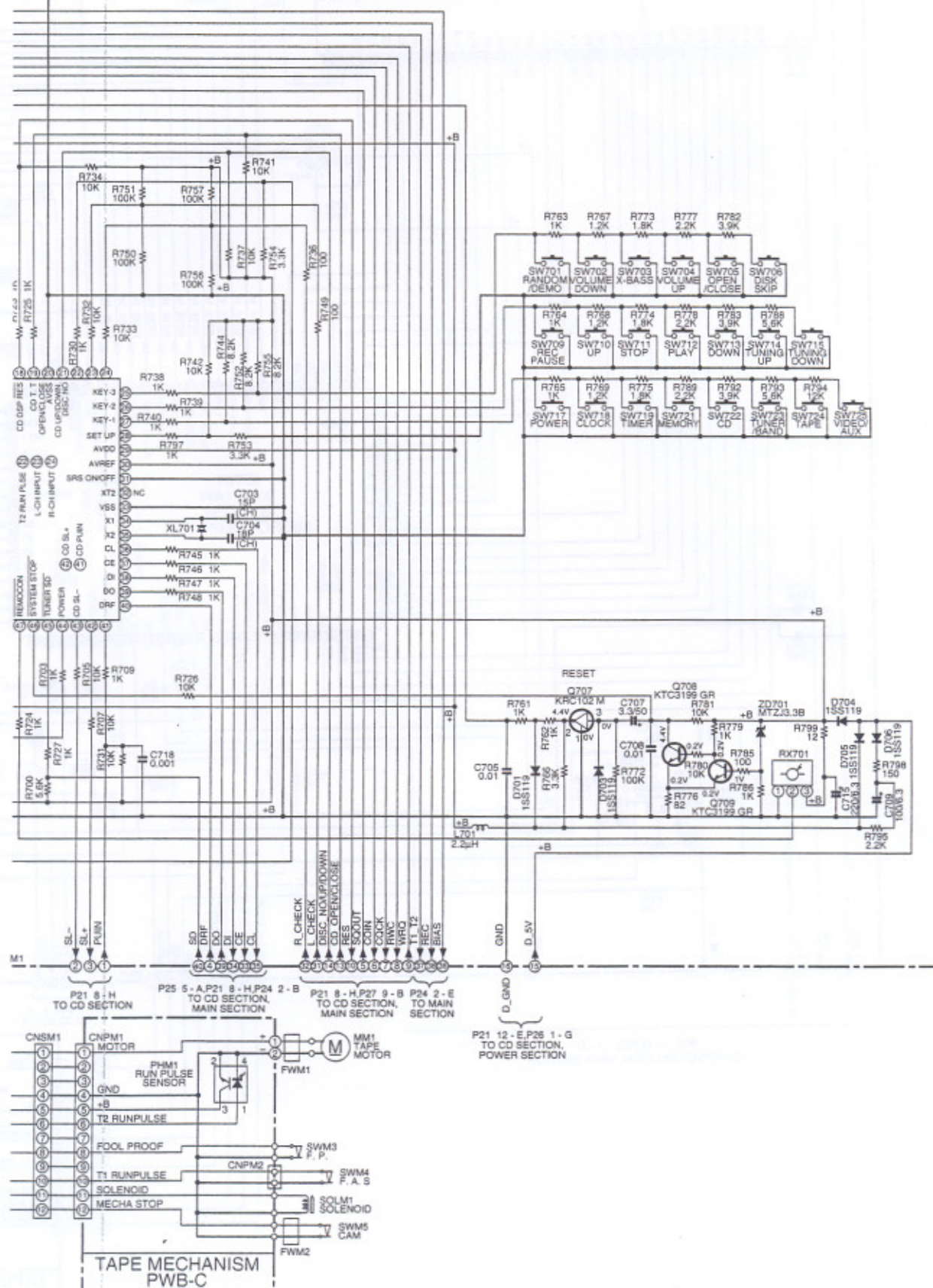


Figure 23 SCHEMATIC DIAGRAM (4/10)

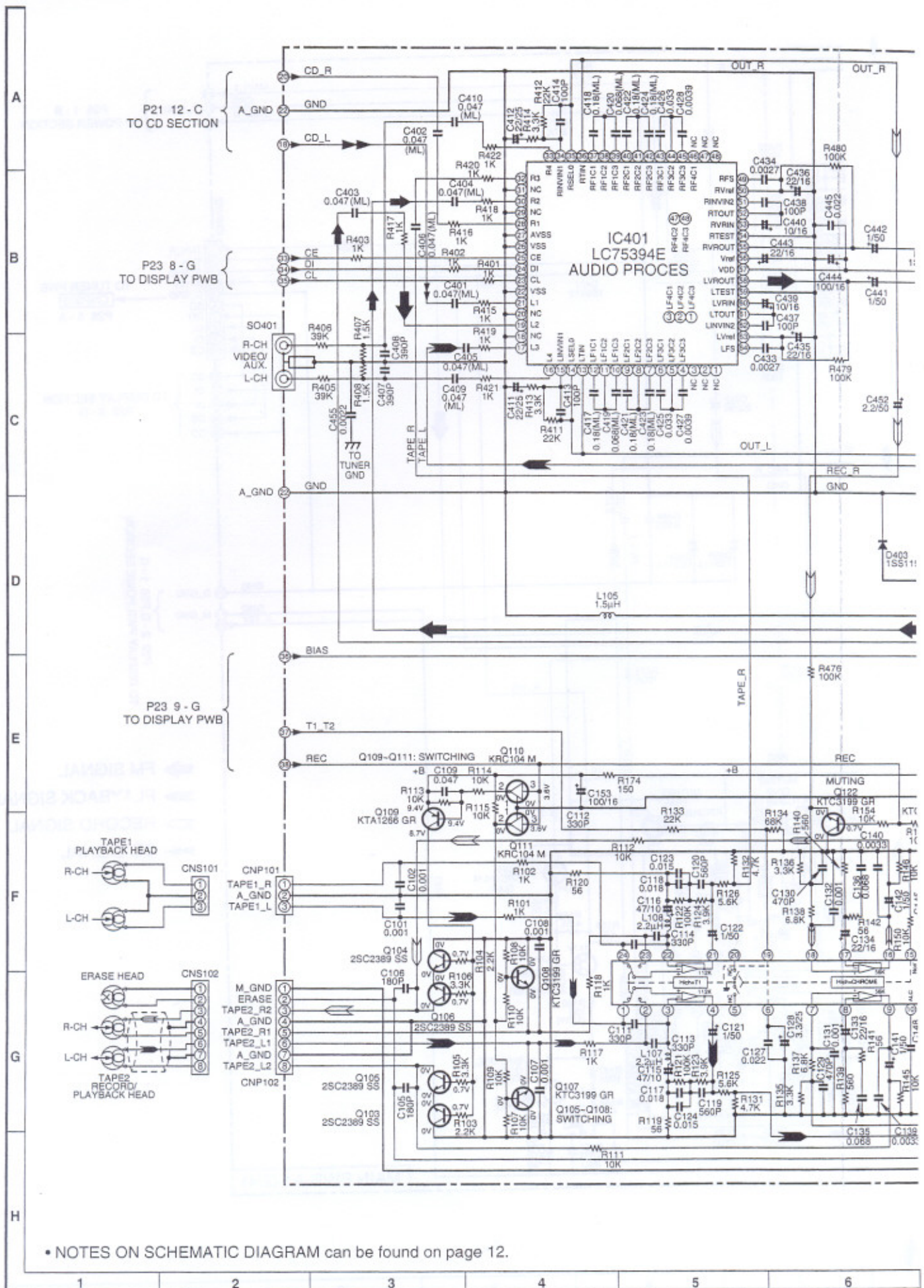


Figure 24 SCHEMATIC DIAGRAM (5/10)

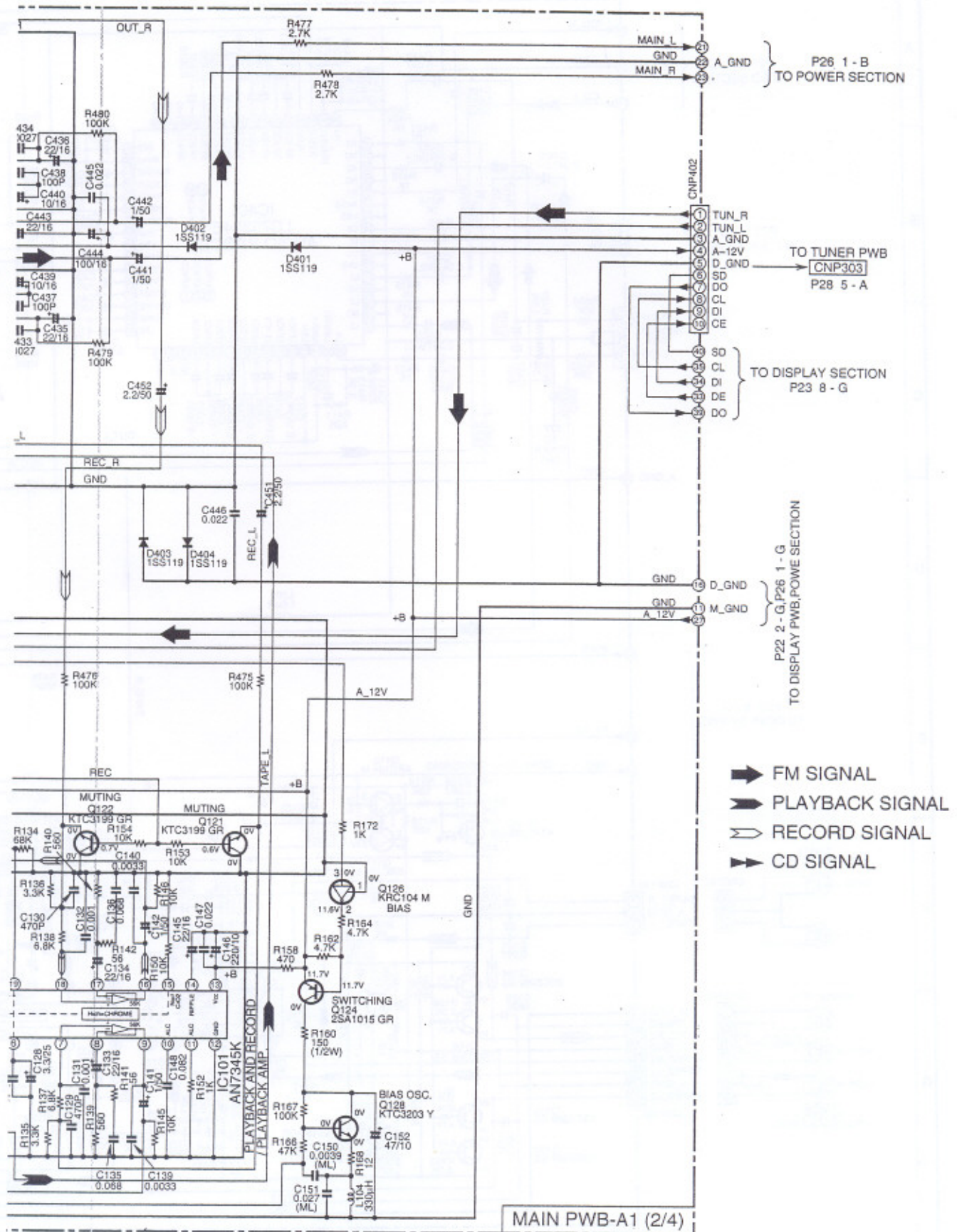


Figure 25 SCHEMATIC DIAGRAM (6/10)



- 26 -

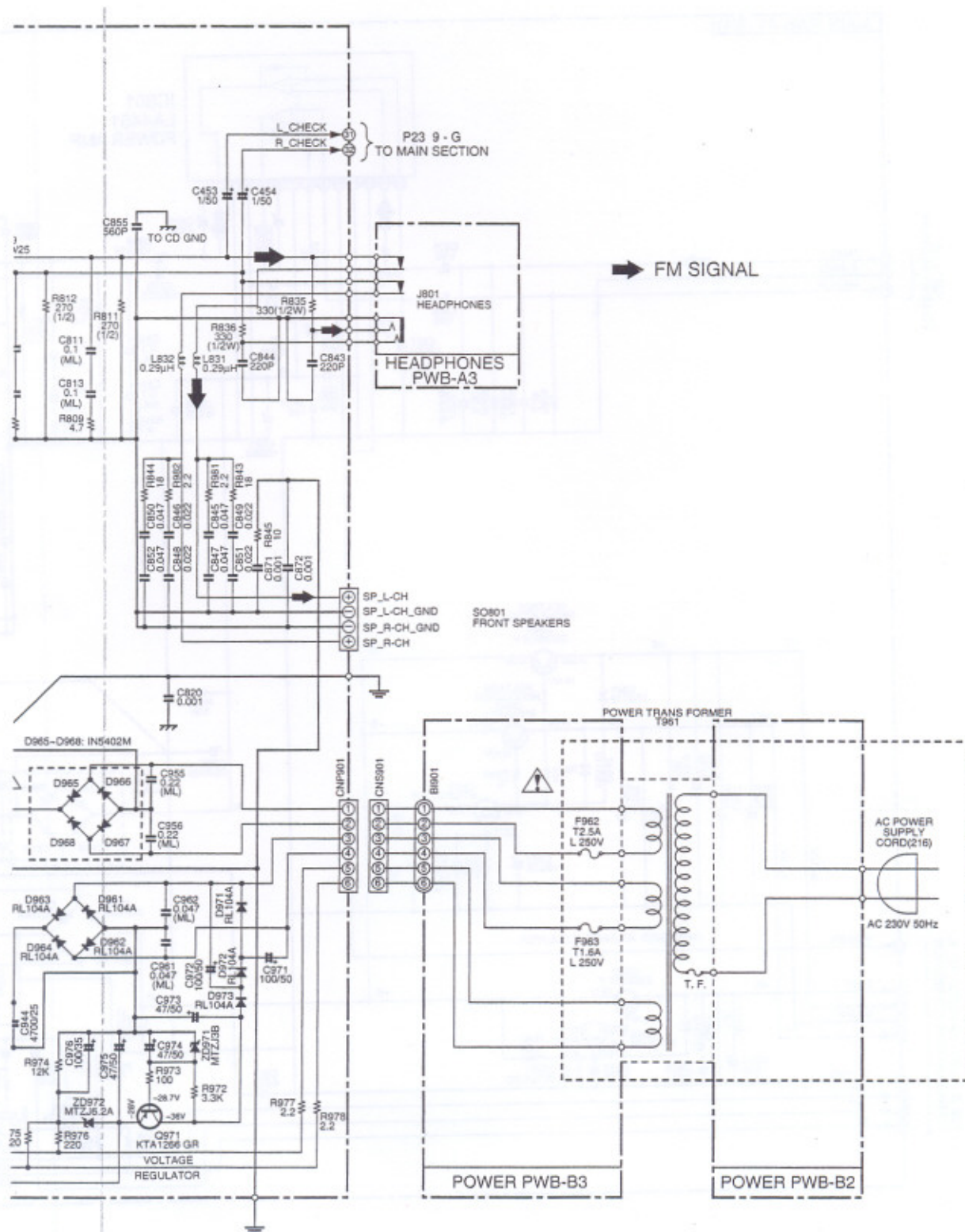
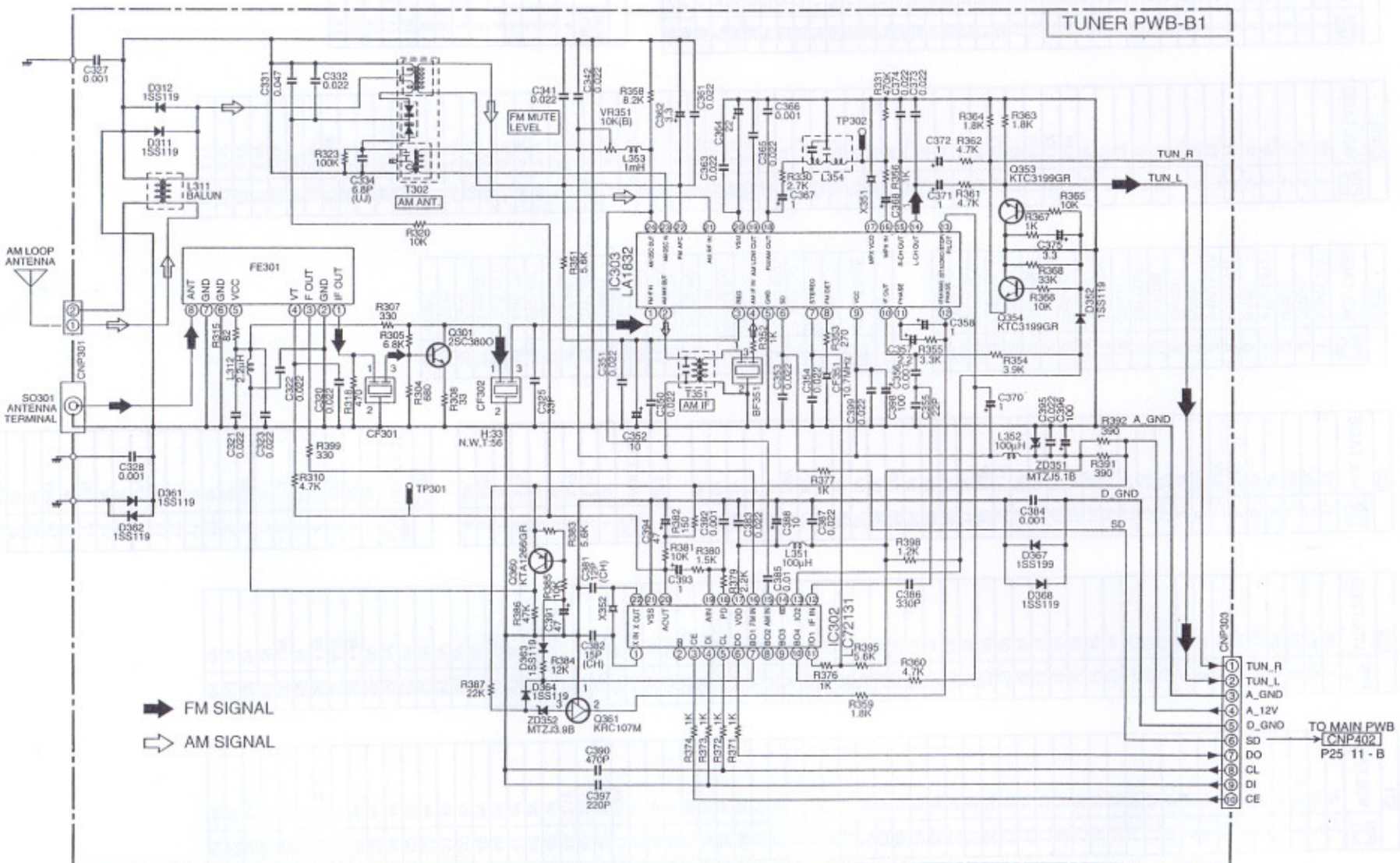


Figure 27 SCHEMATIC DIAGRAM (8/10)



• NOTES ON SCHEMATIC DIAGRAM can be found on page 12.

Figure 28 SCHEMATIC DIAGRAM (9/10)

IC1		IC2		IC5		IC302		IC401		IC701			
PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE	PIN NO.	VOLTAGE
1	2V	1	0V	1	2V	1	1.2V(1.2V)	1	5V	1	-24.7V	41	0.41V
2	2V	2	0V	2	2V	2	0V(0V)	2	5V	2	-24.7V	42	0V
3	2.1V	3	0V	3	0V	3	0V(0V)	3	5V	3	-24.7V	43	0V
4	2.1V	4	0V	4	2V	4	4.6V(4.6V)	4	5V	4	-24.7V	44	4.4V
5	2V	5	1.8V	5	2V	5	0V(0V)	5	5V	5	-24.7V	45	0V
6	2V	6	4V	6	2.2V	6	4.5V(4.5V)	6	5V	6	-24.7V	46	4.4V
7	2V	7	0V	7	2.2V	7	0.4V(11.3V)	7	5V	7	-24.7V	47	4.4V
8	2V	8	0V	8	0V	8	0V(0V)	8	5V	8	4.4V	48	0V
9	2V	9	2V	9	0V	9	0V(0V)	9	5V	9	0V	49	2.7V
10	2V	10	2V	10	0V	10	1.1V(0V)	10	5V	10	4.4V	50	11.7V
11	2V	11	0V	11	0V	11	5.5V(5.5V)	11	5V	11	4.4V	51	11.7V
12	2V	12	0V	12	0V	12	0V(0V)	12	5V	12	0.24V	52	4.4V
13	2V	13	0V	13	2.2V	13	0.5V(0.1V)	13	5V	13	0V	53	4.4V
14	2V	14	4V	14	0V	14	0V(0V)	14	5V	14	4.4V	54	4.4V
15	2V	15	0V	15	2V	15	0V(2.6V)	15	5.1V	15	4.4V	55	0V
16	2V	16	0V	16	0V	16	1.5V(0V)	16	4.7V	16	0.12V	56	0V
17	2V	17	4V	17	0V	17	5.6V(5.3V)	17	4.7V	17	0V	57	4.4V
18	2V	18	4V	18	0V	18	1.2V(1V)	18	0V	18	4.4V	58	0V
19	2V	19	0V	19	0.7V	19	1.2V(1V)	19	4.7V	19	0V	59	0V
20	2V	20	0V	20	5.2V	20	3.8V(1.2V)	20	0V	20	0V	60	0V
21	2V	21	2V	21	2V	21	0V(0V)	21	4.7V	21	0V	61	-21.2V
22	0V	22	0V	22	2V	22	2.8V(2.6V)	22	0V	22	3.8V	62	-18V
23	2V	23	4V	23	2V			23	0V	23	0V	63	-11.5V
24	2V	24	0V	24	2V			24	4.4V	24	0V	64	-27.8V
25	2V	25	0V	25	2.2V			25	0V	25	4.4V	65	-24.5V
26	2V	26	0V	26	0V			26	0V	26	4.4V	66	-14.8V
27	2V	27	0V	27	0V			27	0V	27	4.4V	67	-24.5V
28	2V	28	0V	28	0V			28	4.7V	28	0.6V	68	-21.2V
29	2V	29	0V	29	0V			29	0V	29	4.4V	69	-27.8V
30	1.8V	30	4V	30	2.2V			30	4.7V	30	0V	70	-18V
31	1.8V	31	2V	31	2.2V			31	0V	31	4.4V	71	-28V
32	0V	32	0V	32	2V			32	4.7V	32	0V	72	-11.5V
33	0V	33	0V	33	2V			33	4.7V	33	2V	73	-24.4V
34	4V	34	0V	34	0V			34	5.1V	34	2V	74	-24.4V
35	4V	35	4V	35	0V			35	5.1V	35	0V	75	14.7V
36	0V	36	3.8V	36	0V			36	5.1V	36	0V	76	-27.8V
37	0V	37	1.7V	37	0V			37	5.1V	37	4.4V	77	-24.4V
38	4V	38	0V	38	0V			38	5.1V	38	4.4V	78	-27.8V
39	0V	39	0V	39	0V			39	5.1V	39	4.4V	79	-27.8V
40	0V	40	1.7V	40	0V			40	5.1V	40	0V	80	-24.8V
41	0.3V	41	4V	41	0V			41	5.1V				
42	2V	42	4V	42	0V			42	5.1V				
43	2.1V	43	4V	43	0V			43	5.1V				
44	2.1V	44	1.8V	44	0V			44	5.1V				
45	0V	45	1.7V	45	0V			45	5.1V				
46	2V	46	0V	46	0V			46	5.1V				
47	2V	47	0V	47	0V			47	5.1V				
48	0V	48	1.8V	48	0V			48	5V				
49	0V	49	0V	49	0V			49	5.1V				
50	2V	50	2V	50	0V			50	5.1V				
51	4V	51	0V	51	0V			51	5.1V				
52	4V	52	2V	52	0V			52	5.1V				
53	0V	53	0V	53	0V			53	5.1V				
54	4V	54	0V	54	0V			54	0V				
55	4V	55	0V	55	0V			55	5.1V				
56	4V	56	4.4V	56	0V			56	5.1V				
57	2.1V	57	4.4V	57	0V			57	10.2V				
58	2.1V	58	4.4V	58	0V			58	5.1V				
59	0V	59	0V	59	0V			59	0V				
60	0V	60	1.6V	60	0V			60	5.1V				
61	2V	61	2V	61	0V			61	5.1V				
62	3.4V	62	0V	62	0V			62	5.1V				
63	0V	63	0V	63	0V			63	5.1V				
64	4V	64	0V	64	0V			64	5.1V				

IC303	
PIN NO.	VOLTAGE
1	2V(2V)
2	2V(2V)
3	7.2V(8.2V)
4	0.5V(0.8V)
5	2V(2V)
6	0V(0V)
7	5.5V(5.5V)
8	0V(0V)
9	2.6V(2.6V)
10	2.6V(2.6V)
11	6.3V(8.2V)
12	1.2V(1.2V)
13	1.4V(0V)
14	2.2V(2V)
15	1.3V(1.4V)
16	2V(1.9V)
17	2V(2V)
18	1.6V(1.6V)
19	0.6V(0.7V)
20	7.2V(8.2V)
21	7.2V(8.2V)
22	2V(2V)
23	2V(2V)
24	2V(2V)

IC801	
PIN NO.	VOLTAGE
1	24.7V
2	14.19V
3	0V
4	0V
5	14.05V
6	24.8V
7	27.8V(C420V/31.8V(C2700))
8	1.24V
9	5.3mV
10	26.7V
11	0V
12	2.25V
13	5.2mV
14	1.23V

IC91	
PIN NO.	VOLTAGE
1	0V
2	5.1V
3	0.1V
4	0V
5	0V
6	5.1V
7	0V
8	4.2V
9	0V

IC101	
PIN NO.	VOLTAGE
1	0V
2	0V
3	0.6V
4	3V
5	0V
6	1.3V
7	0V
8	0.6V
9	3V
10	3V
11	0V
12	0V
13	6V
14	3.7V
15	0V
16	3V
17	0.6V
18	0V
19	0.8V
20	0V
21	3V
22	0.6V
23	0V
24	0V

Figure 29 SCHEMATIC DIAGRAM (10/10)