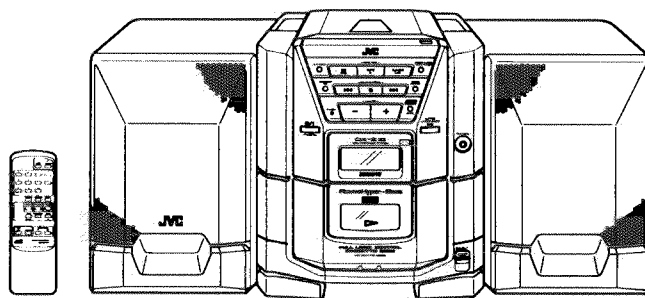


# JVC

## SERVICE MANUAL

### CD PORTABLE COMPONENT SYSTEM

# DX-E10BK B/E/EN/G



COMPACT  
**disc**  
DIGITAL AUDIO

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## ■ Description of Error Display/Indication

In addition to the normal functions, the service test modes have been incorporated in this model for confirmation and adjustment as described below:

### 1. Setting of the Service Test Mode

#### ◆ Setting Method

After the power supply has been turned on, it is possible to set this model to the service test mode from the normal function conditions:

When the three **POWER**, **PLAY MODE** and **STOP** buttons on the are pressed at the same time, this model will be set to the test mode. When this model has been set to the test mode, all of the LCDs will be turned on.

#### ◆ Release of setting

When this model has been set to the test mode, press the three **POWER**, **PLAY MODE** and **STOP** buttons at the same time, set this model to the backup mode or reset this model. Then, the test mode will be released.

### 2. Self-Diagnosis Function of CD Servo

When any error has occurred, either of the following error codes will be displayed depending on the contents of the error:

- 1) Err 1: Failure to turn on the reset switch (Internal peripheral feeding time-out)
- 2) Err 2: Failure to turn off the reset switch (Outer peripheral feeding time-out)
- 3) Err 3: Focusing failure
- 4) Err 4: TOC reading failure
- 5) Err 5: Failure to read the Q code continuously for 3 seconds
- 6) Err 6: Failure to locate the beginning of music when selecting a music
- 7) Err 7: Spindle servo failure

# 5 Wiring Connections

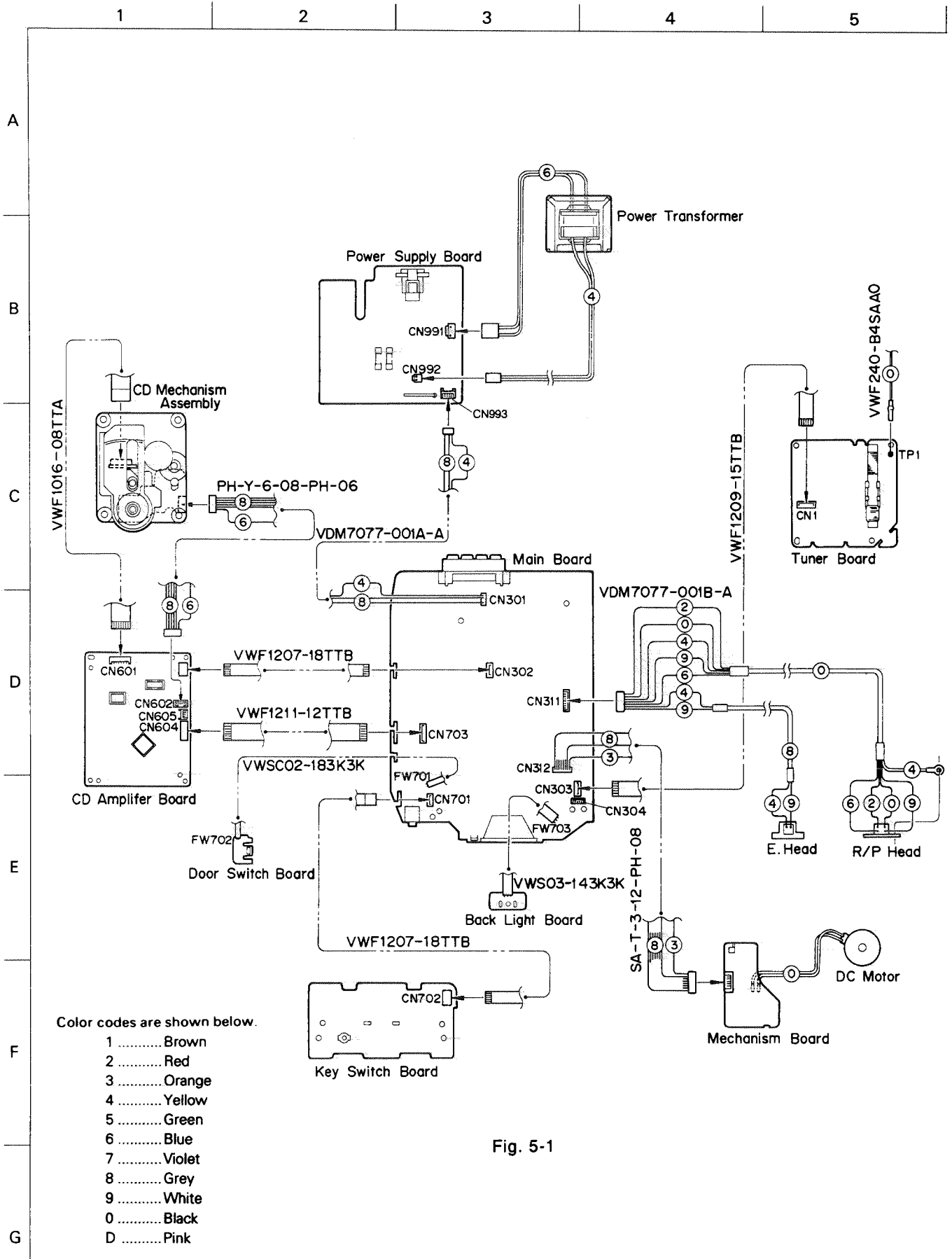
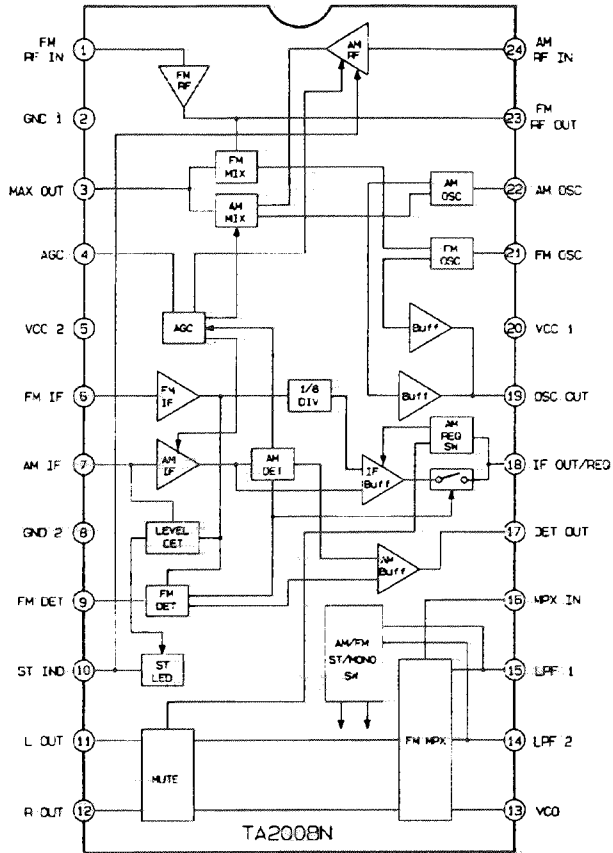
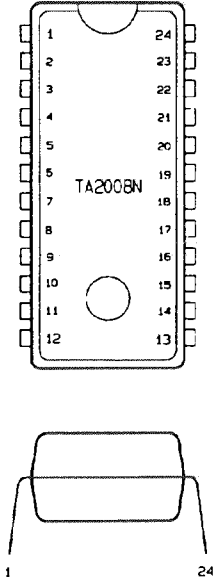


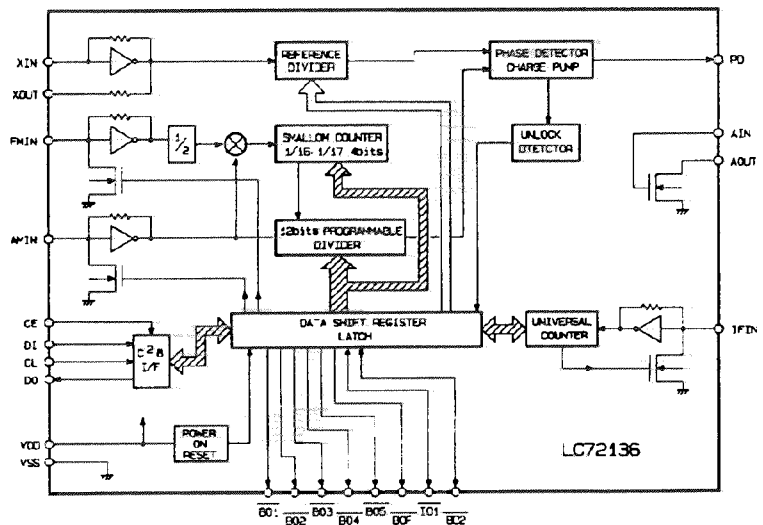
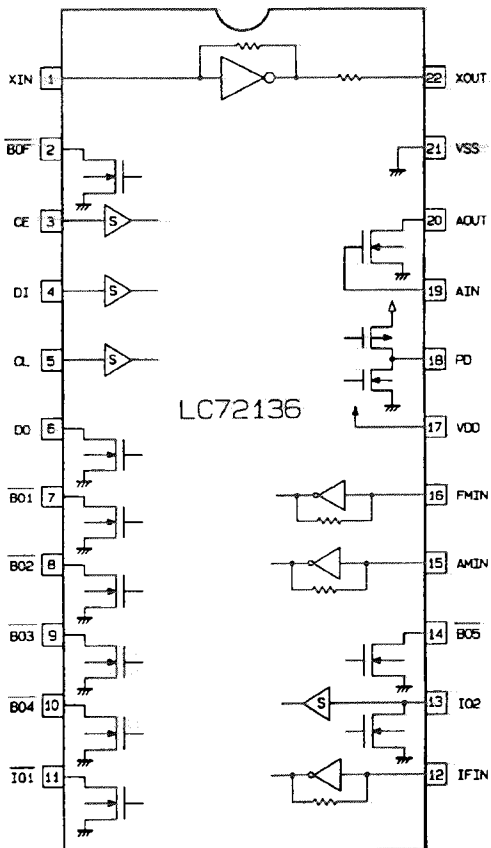
Fig. 5-1

## 6 Block diagram

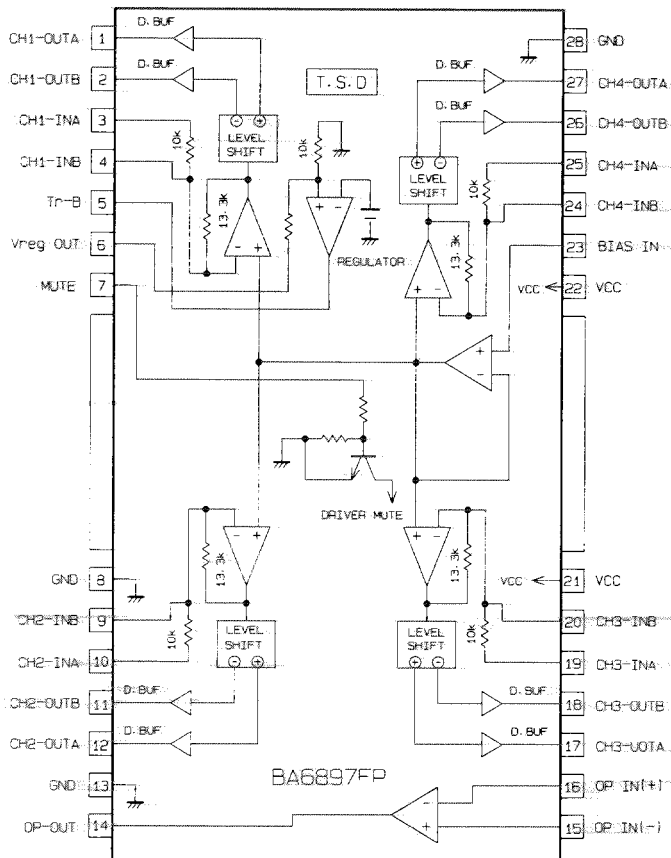
### ◆ IC2 (TA2008AN)



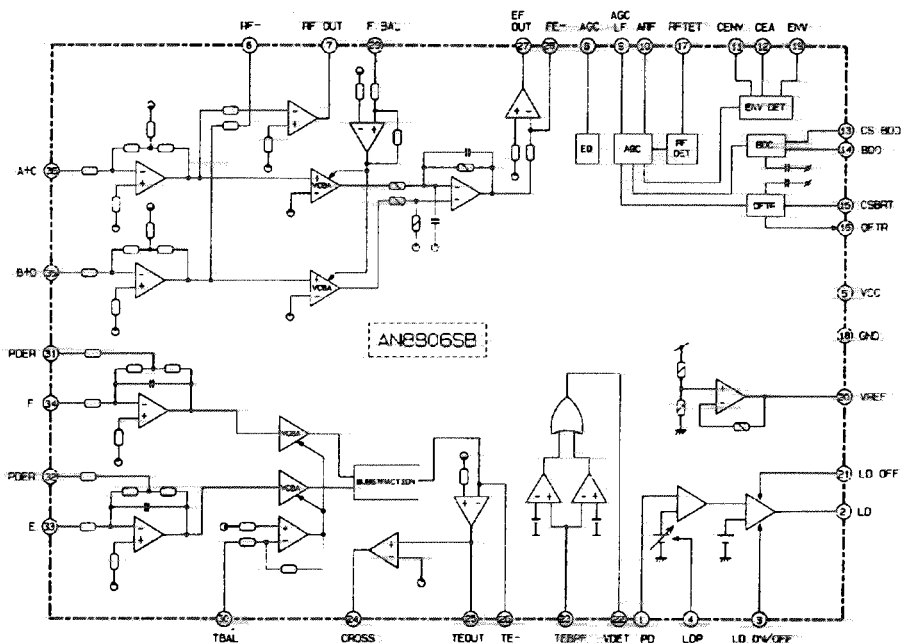
### ◆ IC3 (LC72136N) PAL



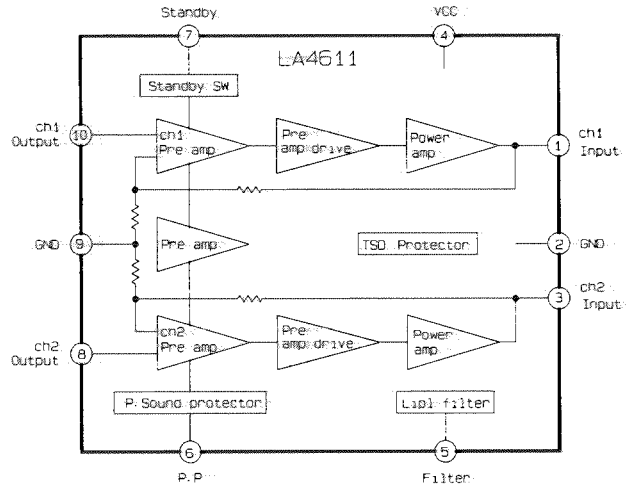
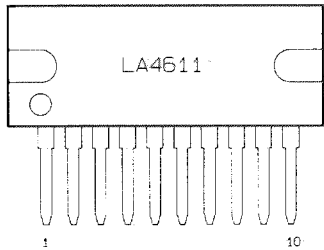
◆ IC301 (LA4611) POWER Amp.



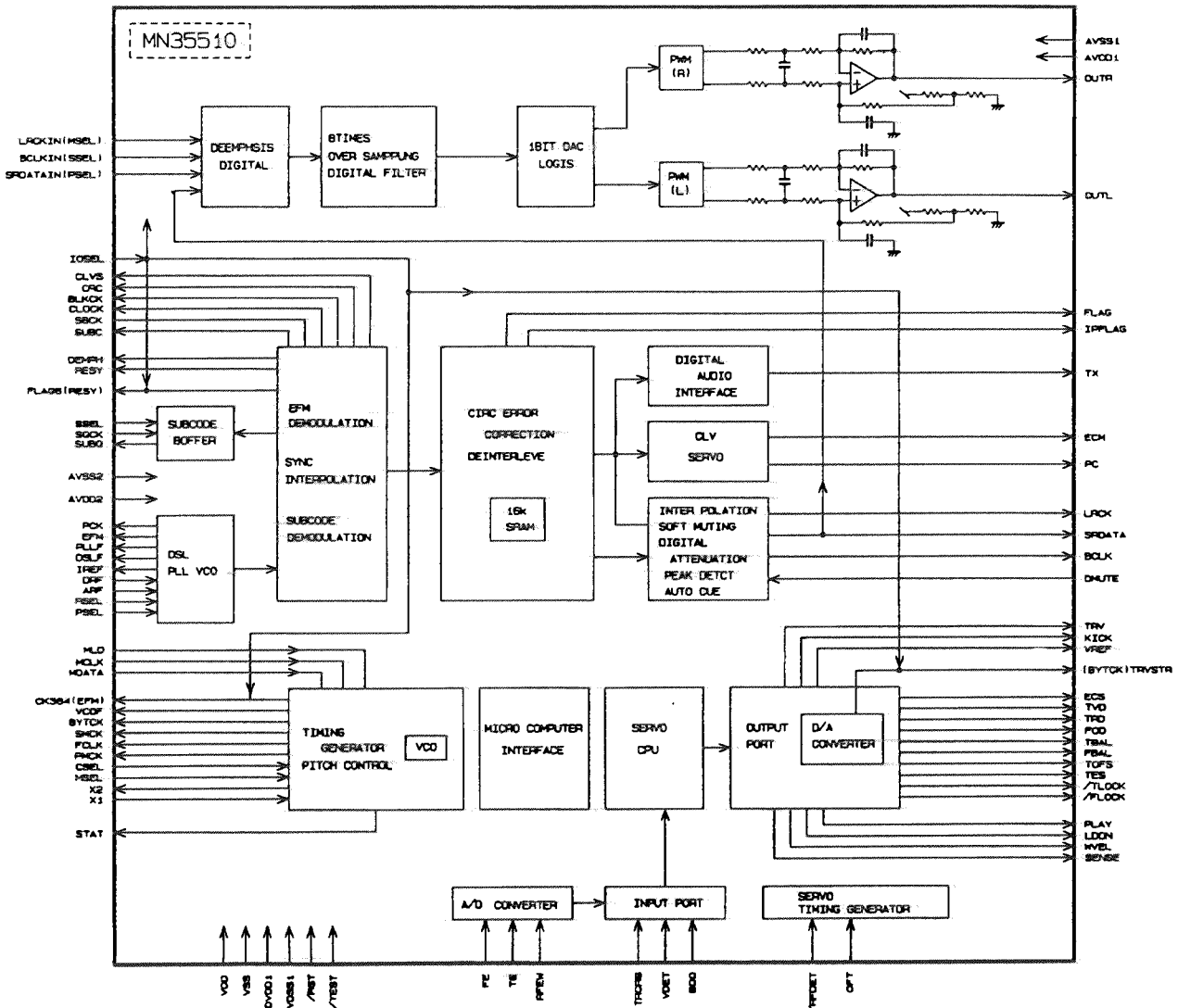
◆ IC601 (AN8906SB) RF & SERVO



◆ IC602 (BA6897FP) BTL DRIVER



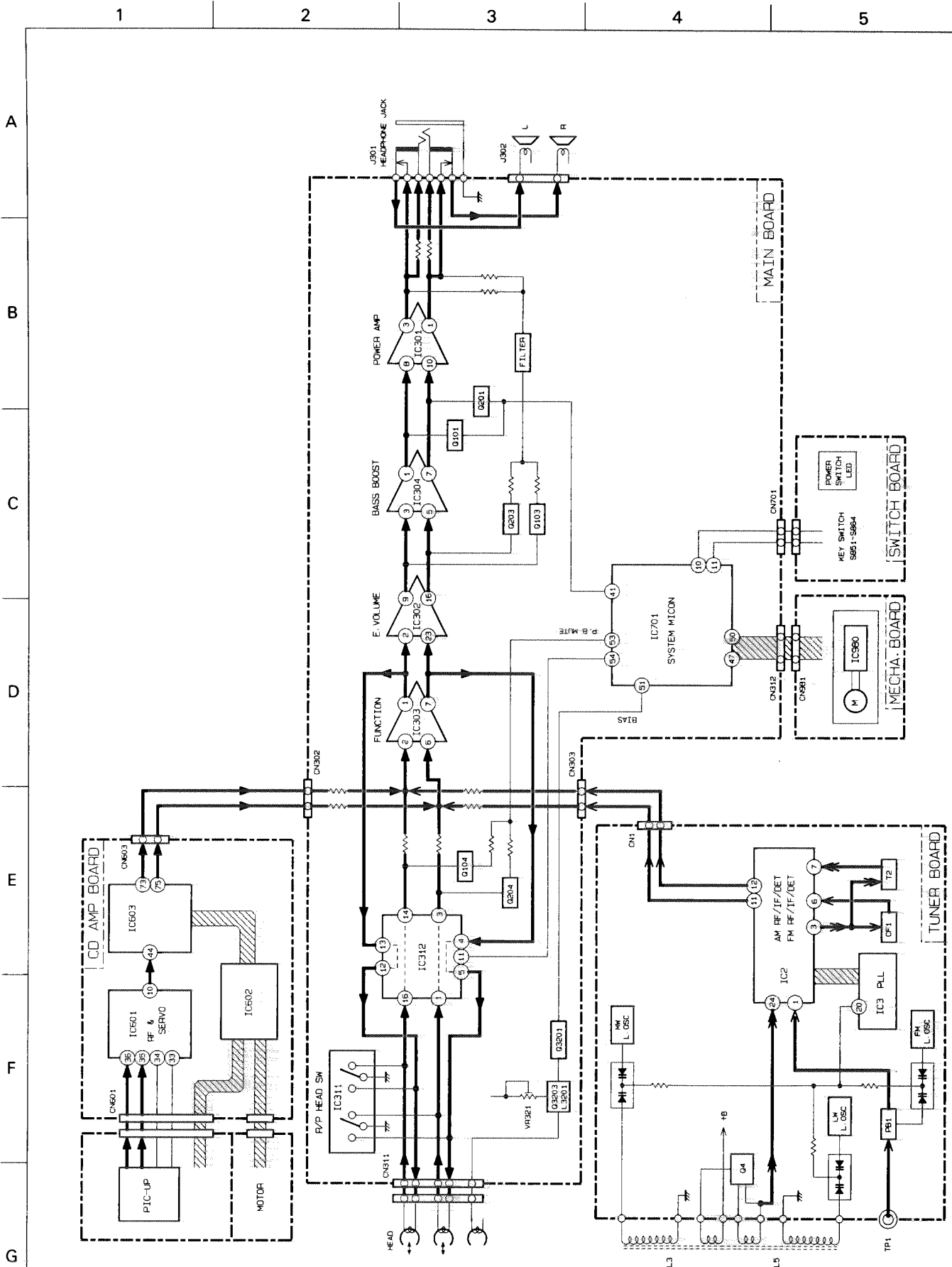
◆ IC603 (MN35510) DIGITAL SERVO



### ■ IC701 (MN171603J8X) System microprocessor pin function

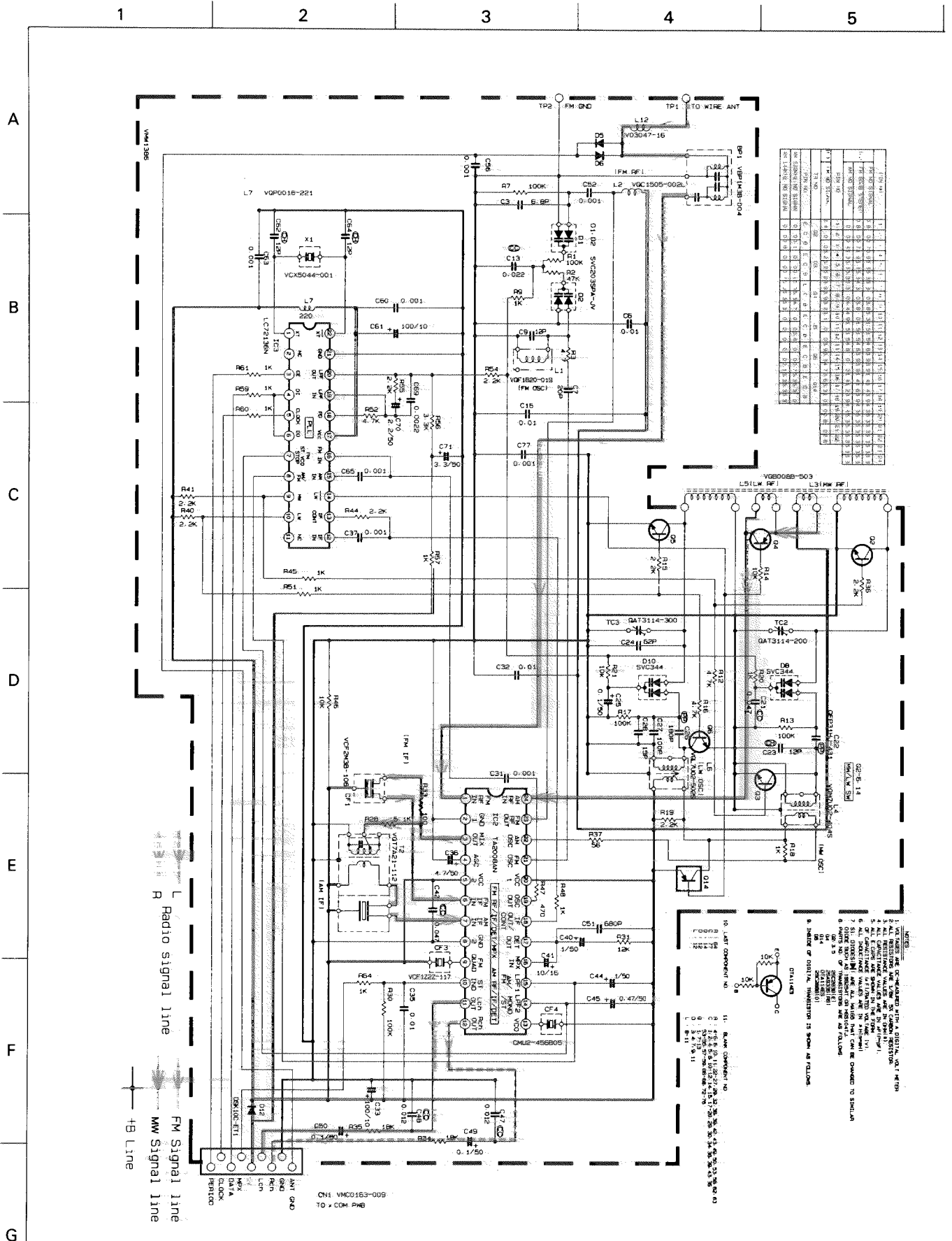
No	NAME	I/O	Discriptions	No	NAME	I/O	Discriptions
1	REST	I	REST SW	43	TUST	O	TUNER STROVE
2	NC	I	-	44	MPX	O	TUNER STEREO
3	AVSS	-	A.GND	45	NC		-
4	VER	I	VERSION DETECT	46	REC		REC DETECT
5	SAFETY		SW8V SAFETY DETECT	47	REEL PALS		REEL PALS
6	CD+B		CD+B SAFETY DETECT	48	FAST	O	FAST
7	CLOSE		CD DOOR DETECT	49	F/R		FWD/REW CONTROL
8	NC	I	-	50	M ON		MOTOR SW
9	BUP		BUCK UP DETECT	51	RECB		RECB
10	KEY1		KEY1	52	R/P	O	REC/PLAY CONTROL
11	KEY2		KEY2	53	PBMUTE		PBMUTE
12	AVDD	-	AVDD	54	RECMUTE		RECMUTE
13	VLC1	-	LCD BIAS(VDD>VLC1>VLC2>VLC3>VSS)	55	+BCTL		+B CONTROL
14	VLC2	-		56	F.CD	O	FUNCTION CD
15	VLC3	-		57	F.TU		FUNCTION TUNER
16	COM3	O	LCD COMMON	58	VOL		VOLUME (PWM)
17	COM2	O	.	59	BASS		BASS (PWM)
18	COM1	O	.	60	TRE	O	TREBLE (PWM)
19	COM0	O	.	61	MLD		MICON COMMAND LOAD
20	SEG0	O	LCD SEGMENT	62	XRST		CD LSI RESET
21	SEG1	O	.	63	BEAT2		BEAT2
22	SEG2	O	.	64	AC/DC	I	AC/DC DETECT
23	SEG3	O	.	65	NC		-
24	SEG4	O	.	66	STAT		STATUS
25	SEG5	O	.	67	NC		-
26	SEG6	O	.	68	RESET	I	RESET
27	SEG7	O	.	69	NC	I	-
28	SEG8	O	.	70	NC	O	-
29	SEG9	O	.	71	VSS	-	D.GND
30	SEG10	O	.	72	OSC2	O	OSC2
31	SEG11	O	.	73	OSC1	I	OSC1
32	SEG12	O	.	74	VDD	-	VDD
33	SEG13	O	.	75	BEAT1	O	BEAT1
34	SEG14	O	.	76	SQCK	O	SUBCODE Q CLOCK
35	SEG15	O	.	77	SUBQ	I	SUBCODE Q DATA
36	SEG16	O	.	78	MCLK	O	MICON COMMAND CLOCK
37	SEG17		.	79	MDATA	O	MICON COMMAND DATA
38	SEG18		.	80	SCK	O	SERIAL CLOCK
39	NC			81	S1	I	SERIAL DATA IN
40	POUT	O	POWER CONTROL	82	S0	O	SERIAL DATA OUT
41	SMUTE		SYSTEM MUTE	83	PIN	I	POWER KEY
42	AHB		ACTIVE HYPER BASS	84	REM	I	REMOCON IN

Signal diagram





**7 Standard schematic diagram ■ Tuner circuit**



Note  
VDH9035005TW

Fig. 7-1

**Cassette amplifier circuit**

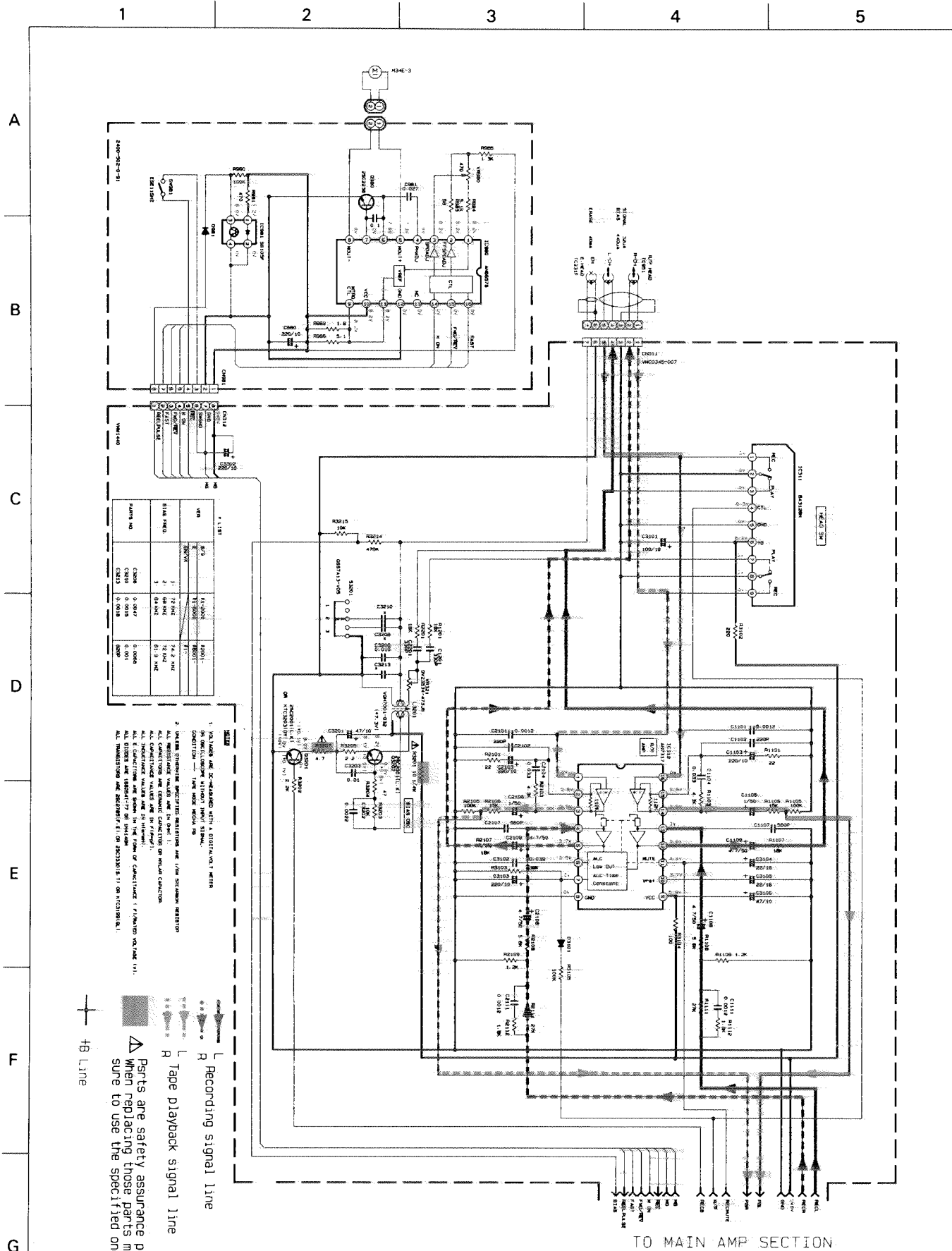


TABLE 1

WAVE	RESISTOR	CAPACITOR	IC
1	10K	100N	74LS14
2	10K	100N	74LS14
3	10K	100N	74LS14
4	10K	100N	74LS14
5	10K	100N	74LS14
6	10K	100N	74LS14
7	10K	100N	74LS14
8	10K	100N	74LS14
9	10K	100N	74LS14
10	10K	100N	74LS14
11	10K	100N	74LS14
12	10K	100N	74LS14
13	10K	100N	74LS14
14	10K	100N	74LS14
15	10K	100N	74LS14
16	10K	100N	74LS14
17	10K	100N	74LS14
18	10K	100N	74LS14
19	10K	100N	74LS14
20	10K	100N	74LS14

1. RESISTORS ARE DESIGNATED WITH A DIGIT AND A LETTER.
2. CAPACITORS ARE DESIGNATED WITH A DIGIT AND A LETTER.
3. IC'S ARE DESIGNATED WITH A DIGIT AND A LETTER.
4. ALL CONNECTIONS ARE SHOWN IN THIS CIRCUIT.
5. ALL DIMENSIONS ARE IN MILLIMETERS.
6. ALL DIMENSIONS ARE SHOWN IN THIS CIRCUIT.
7. ALL DIMENSIONS ARE SHOWN IN THIS CIRCUIT.
8. ALL DIMENSIONS ARE SHOWN IN THIS CIRCUIT.
9. ALL DIMENSIONS ARE SHOWN IN THIS CIRCUIT.
10. ALL DIMENSIONS ARE SHOWN IN THIS CIRCUIT.

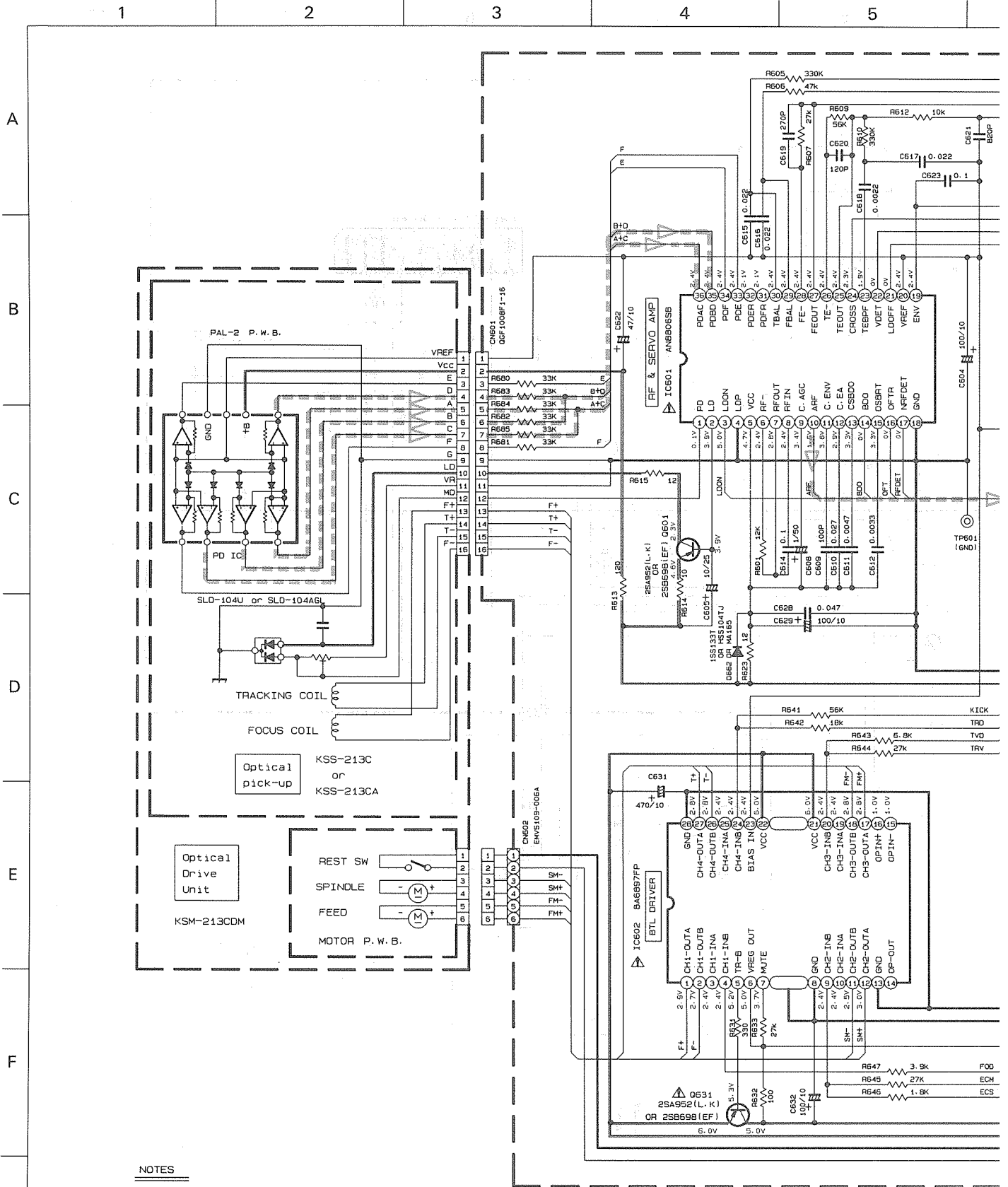
Recording signal line  
 Tape playback signal line  
 Parts are safety assurance parts. When replacing those parts make sure to use the specified one.

Note  
VDH9035005RW

Fig. 7-2



# CD amplifier circuit



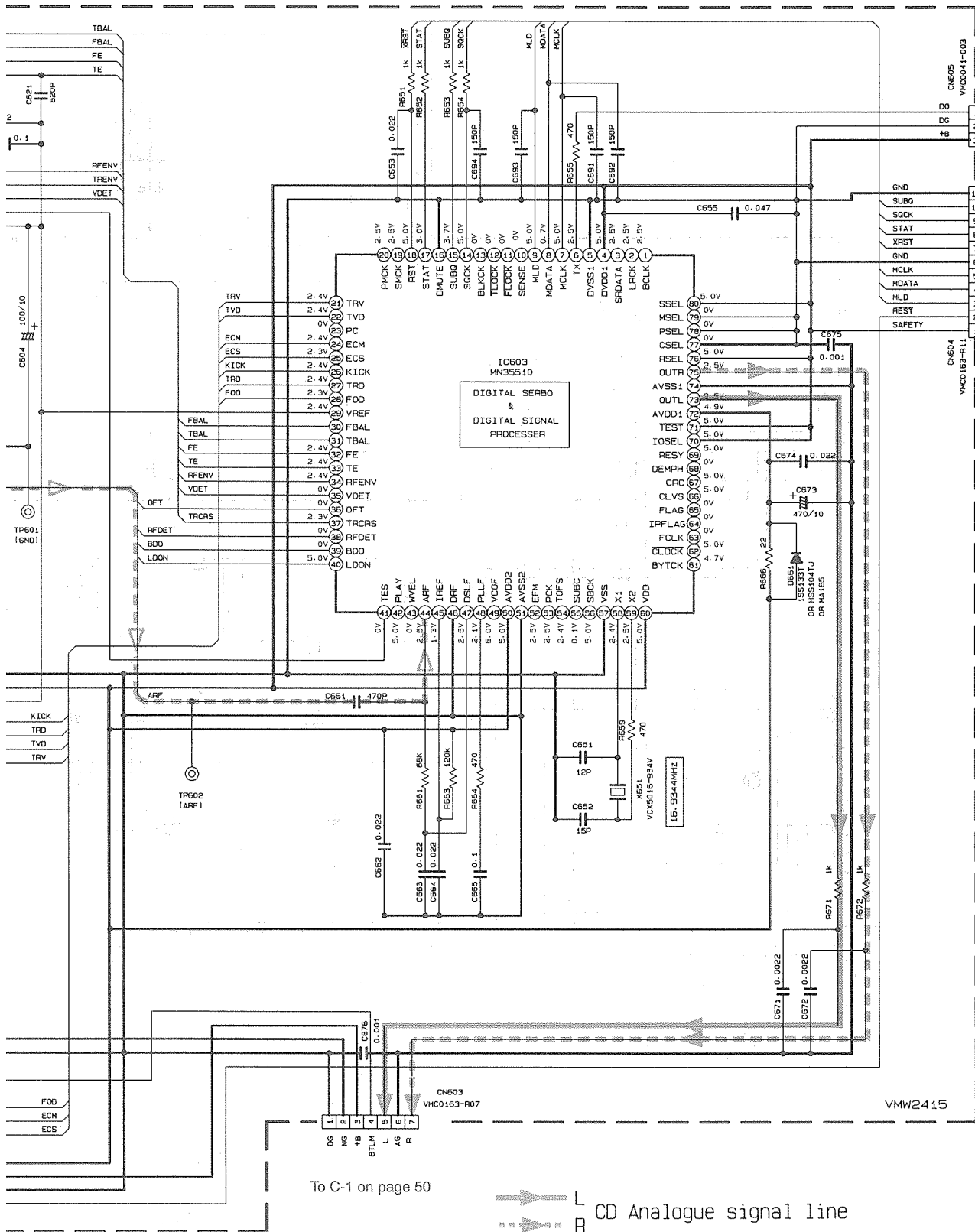
## NOTES

1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER WITH PLAY MODE.
2. UNLESS OTHERWISE SPECIFIED . RESISTORS ARE 1/6W ±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHM(Ω). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MYLAR CAPACITOR. ALL CAPACITANCE VALUES ARE IN #F(P=pF). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (#F)/RATED VOLTAGE (V).

Note  
VDH1035001CW

Fig. 7-3

6 7 8 9 10



To B-2 on page 51

To C-1 on page 50

- L CD Analogue signal line
- R Digital signal line
- +B Line



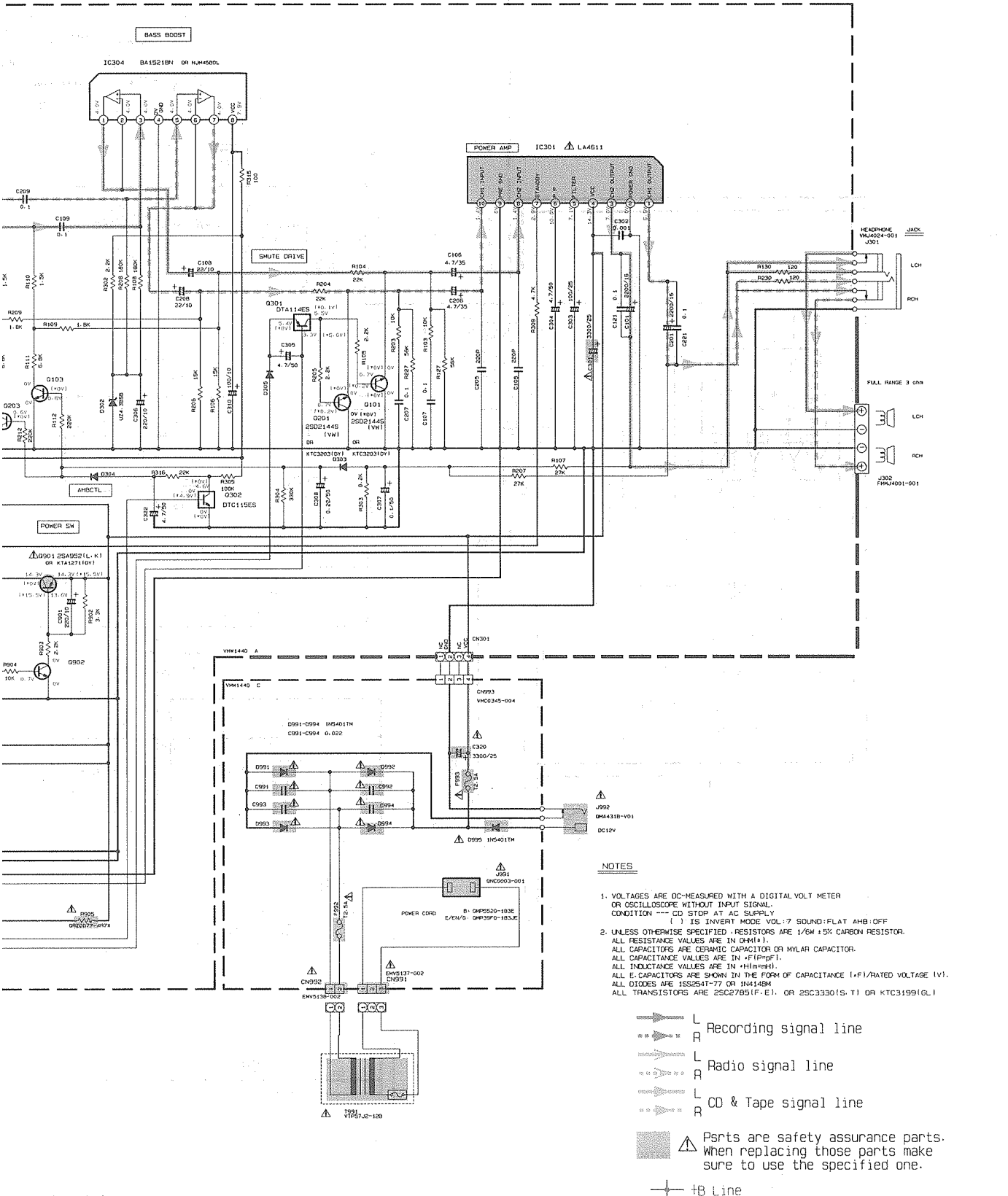
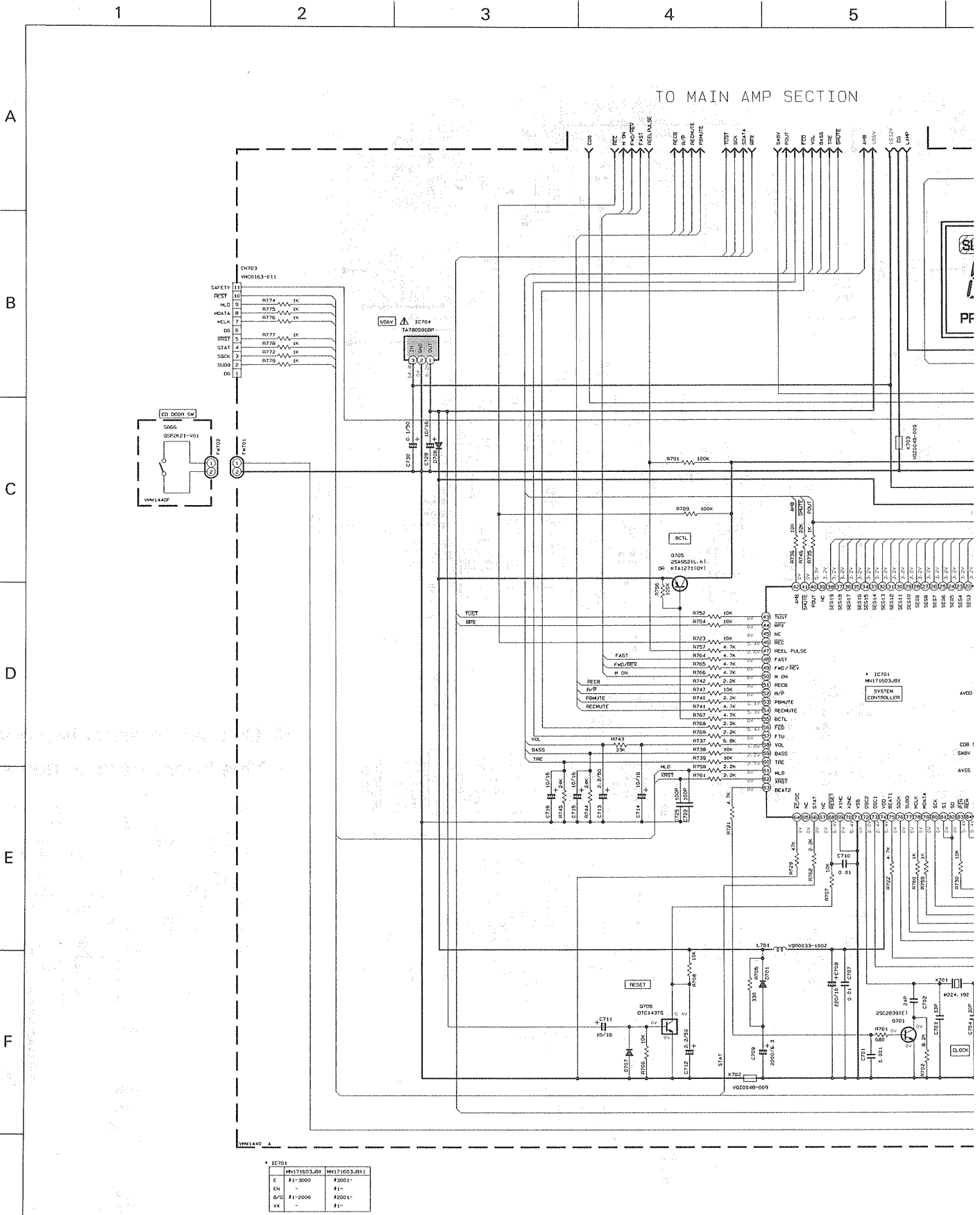


Fig. 7-4

# System control circuit



Note  
VDH9035005SV

Fig. 7-5



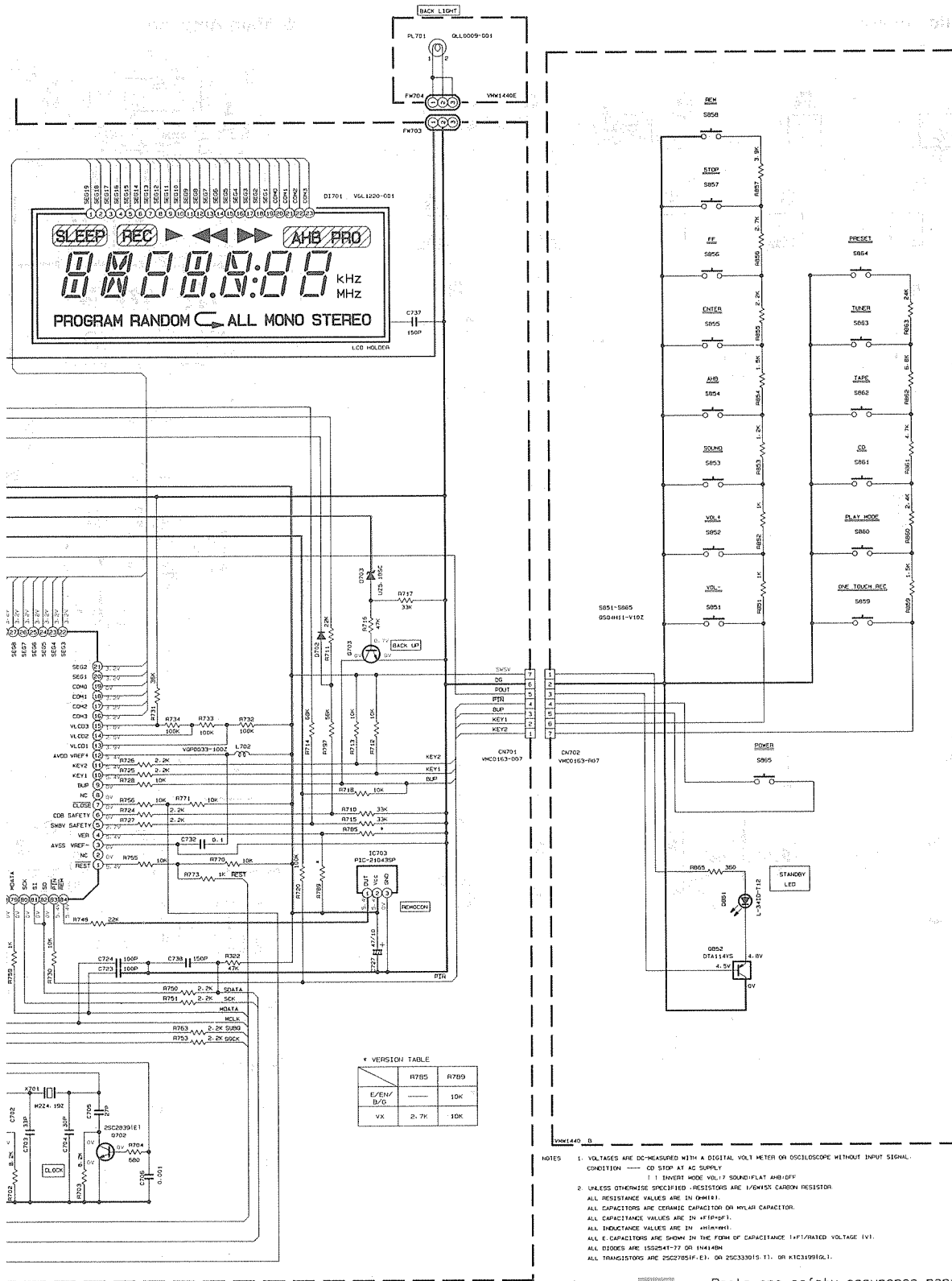
6

7

8

9

10



VERSION TABLE

	R785	R789
E/STOP		10K
B/G		
VX	2.7K	10K

- NOTES
1. VOLTAGES ARE DC-MEASURED WITH A DIGITAL VOLT METER OR OSCILLOSCOPE WITHOUT INPUT SIGNAL. CONDITION ——— GD STOP AT AC SUPPLY. ! ! INVERT MODE VOL.7 SOUND/FLAT AHD/OFF
  2. UNLESS OTHERWISE SPECIFIED -RESISTORS ARE 1/6W±5% CARBON RESISTOR. ALL RESISTANCE VALUES ARE IN OHMS(!). ALL CAPACITORS ARE CERAMIC CAPACITOR OR MLCC CAPACITOR. ALL CAPACITANCE VALUES ARE IN nF(=10<sup>-9</sup>F). ALL INDUCTANCE VALUES ARE IN mH(=10<sup>-3</sup>H). ALL E-CAPACITORS ARE SHOWN IN THE FORM OF CAPACITANCE (μF)/RATED VOLTAGE (V). ALL DIODES ARE 1SS2041-77 OR 1N4001. ALL TRANSISTORS ARE 2SC2705(F, E1), OR 2SC3330(S, T), OR KTC13199(L, S).

PARTS NAME CONSTRUCTION

DT143TS OR NR1110H	
DT114YS OR KAL107H	

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

±B Line