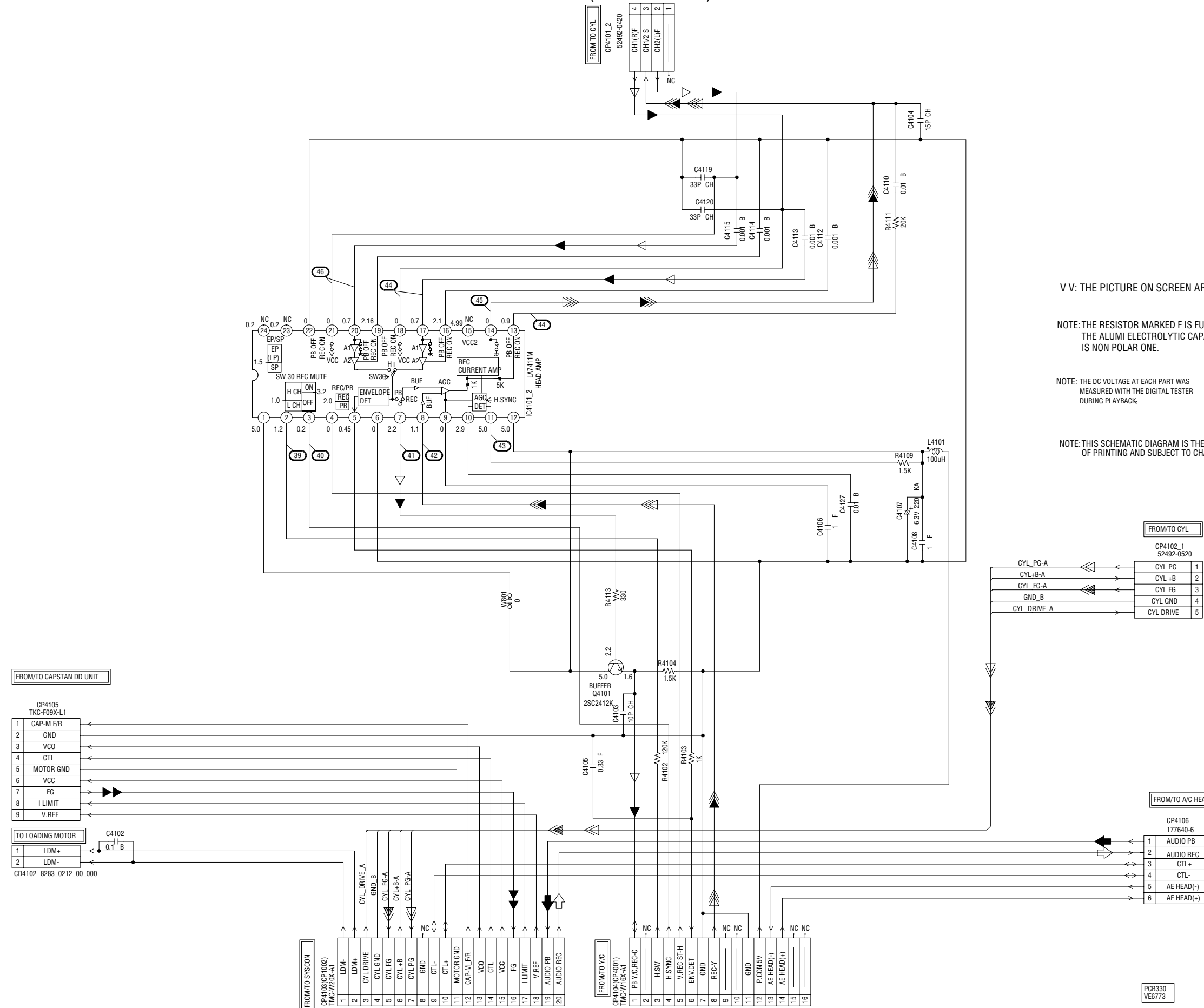


AIWA VX-T147 HEAD AMP SCHEMATIC DIAGRAM

(HEAD AMP PCB)



V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR.
THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE .

FROM/TO CYL

CP4102_1 52492-0520	
CYL PG-A	CYL PG 1
CYL+B-A	CYL +B 2
CYL FG-A	CYL FG 3
GND_B	CYL GND 4
CYL DRIVE A	CYL DRIVE 5

FROM/TO CAPSTAN DD UNIT

CP4105 TKC-F09X-L1	
1 CAP-M F/R	
2 GND	
3 VCO	
4 CTL	
5 MOTOR GND	
6 VCC	
7 FG	
8 I LIMIT	
9 V.REF	

TO LOADING MOTOR

CD4102 8283_0212_00_000	
1 LDM+	
2 LDM-	

FROM/TO A/C HEAD

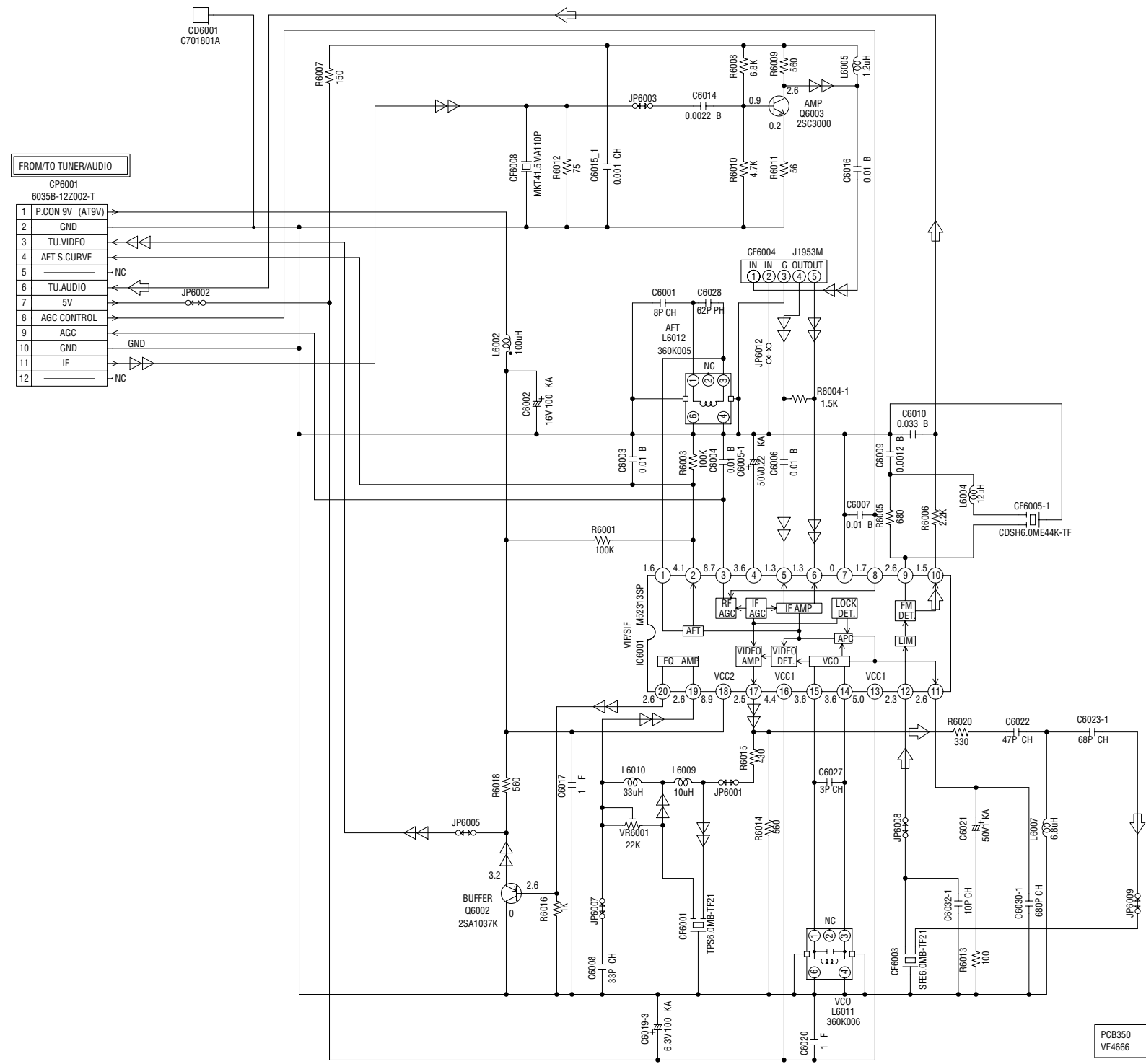
CP4106 177640-6	
1 AUDIO PB	
2 AUDIO REC	
3 CTL+	
4 CTL-	
5 AE HEAD(-)	
6 AE HEAD(+)	

- ◀ CAPSTAN AFC SIGNAL
- ◀ RECORD LUMINANCE SIGNAL
- ▶ PLAYBACK LUMINANCE SIGNAL
- ◀ RECORD COLOR SIGNAL
- ◀ PLAYBACK COLOR SIGNAL
- ◀ AUDIO SIGNAL(REC)
- ▶ AUDIO SIGNAL(PB)
- ◀ CYLINDER AFC SIGNAL
- ◀ CYLINDER APC SIGNAL

PCB330
VE6773

IF SCHEMATIC DIAGRAM

(IF PCB)



FROM TO TUNER/AUDIO	
1	P.CON 9V (AT9V)
2	GND
3	TU.VIDEO
4	AFT S.CURVE
5	NC
6	TU.AUDIO
7	5V
8	AGC CONTROL
9	AGC
10	GND
11	IF
12	NC

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

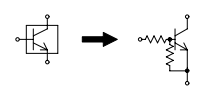
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

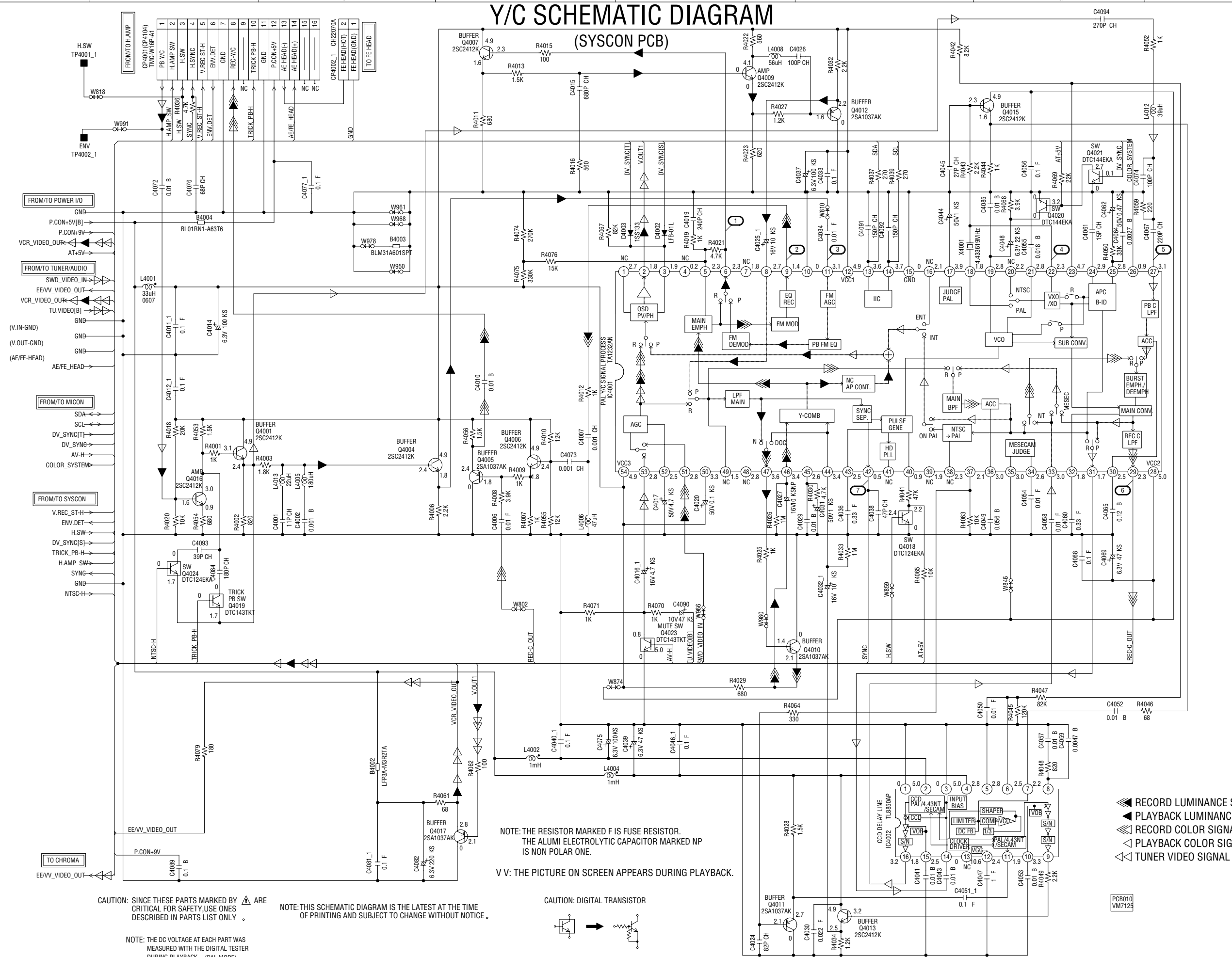
CAUTION: DIGITAL TRANSISTOR



TUNER VIDEO SIGNAL
 AUDIO SIGNAL(REC)

Y/C SCHEMATIC DIAGRAM

(SYSCON PCB)



NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR.
THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP
IS NON POLAR ONE.

V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR



CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

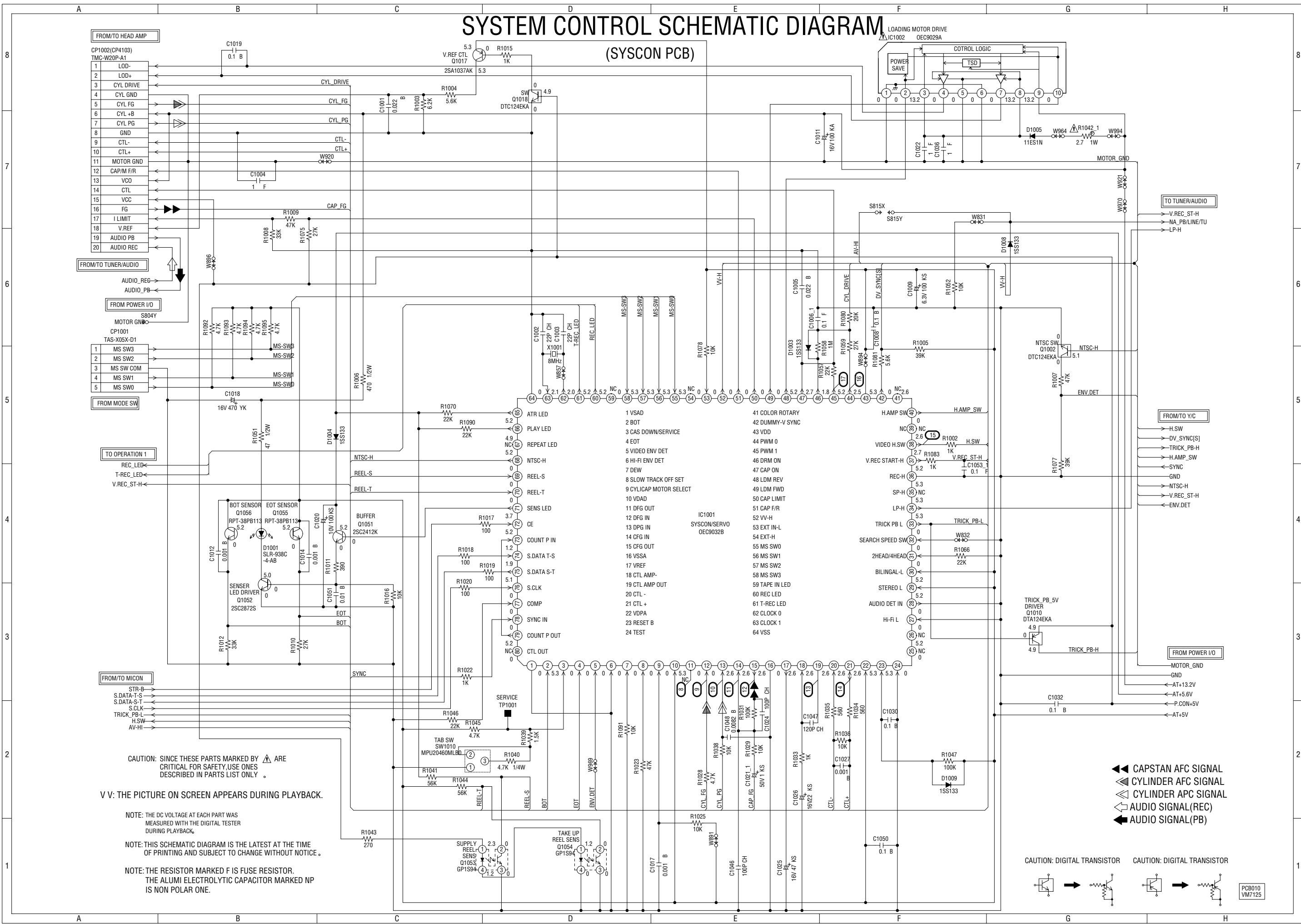
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK. (PAL MODE)

- ▶ RECORD LUMINANCE SIGNAL
- ▶▶ RECORD LUMINANCE SIGNAL
- ▶▶▶ RECORD COLOR SIGNAL
- ▶▶▶▶ PLAYBACK COLOR SIGNAL
- ▶▶▶▶▶ TUNER VIDEO SIGNAL
- ▶▶▶▶▶▶ TUNER VIDEO SIGNAL

PCB010
VM7125

SYSTEM CONTROL SCHEMATIC DIAGRAM

(SYSCON PCB)



CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY USE ONES DESCRIBED IN PARTS LIST ONLY.

V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

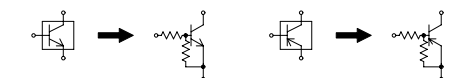
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

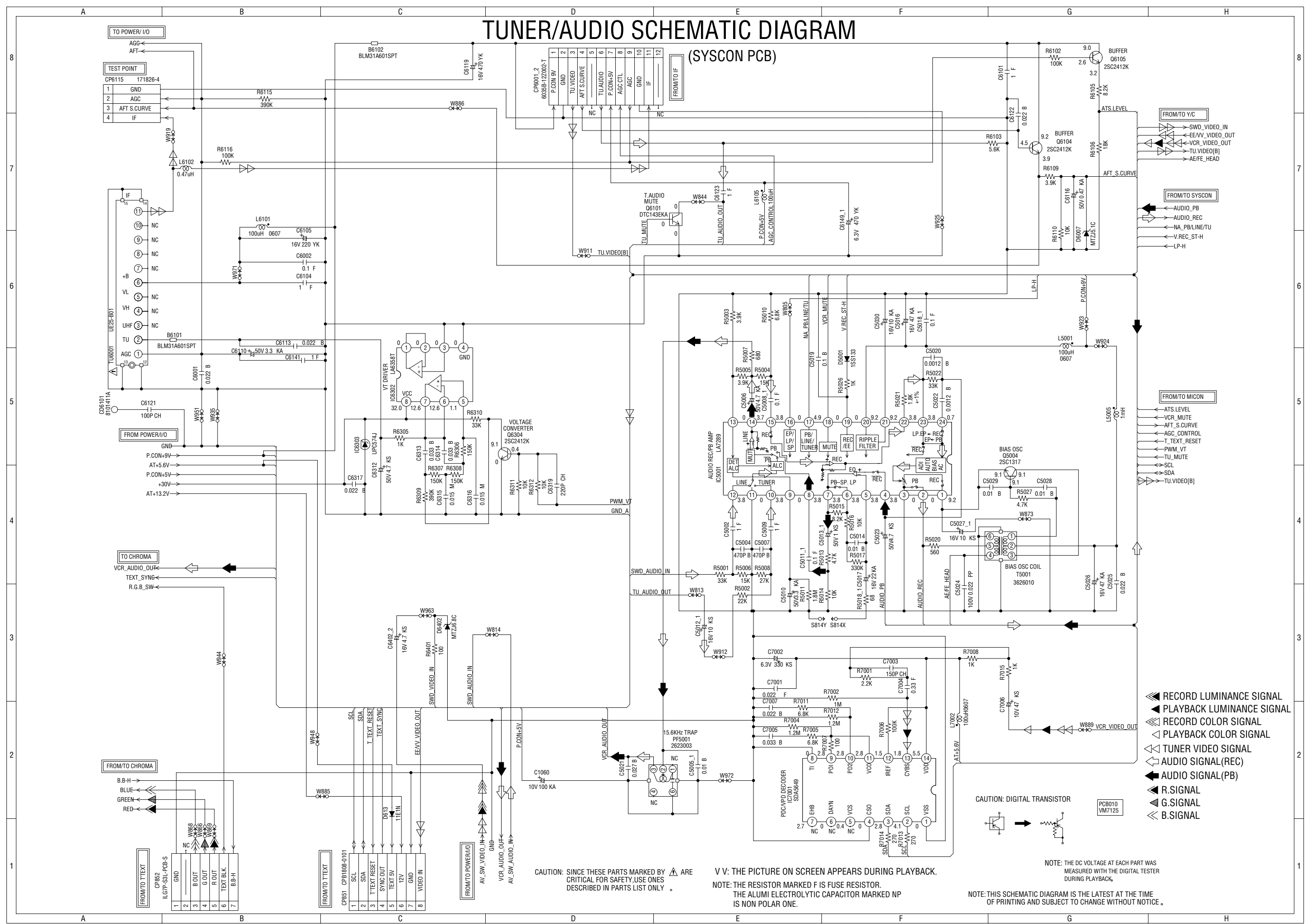
- CAPSTAN AFC SIGNAL
- CYLINDER AFC SIGNAL
- CYLINDER APC SIGNAL
- AUDIO SIGNAL(REC)
- AUDIO SIGNAL(PB)

CAUTION: DIGITAL TRANSISTOR



TUNER/AUDIO SCHEMATIC DIAGRAM

(SYSCON PCB)



- ▶ RECORD LUMINANCE SIGNAL
- ▶ PLAYBACK LUMINANCE SIGNAL
- ▶ RECORD COLOR SIGNAL
- ▶ PLAYBACK COLOR SIGNAL
- ▶ TUNER VIDEO SIGNAL
- ▶ AUDIO SIGNAL (REC)
- ▶ AUDIO SIGNAL (PB)
- ▶ R.SIGNAL
- ▶ G.SIGNAL
- ▶ B.SIGNAL

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.
 NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR.
 THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

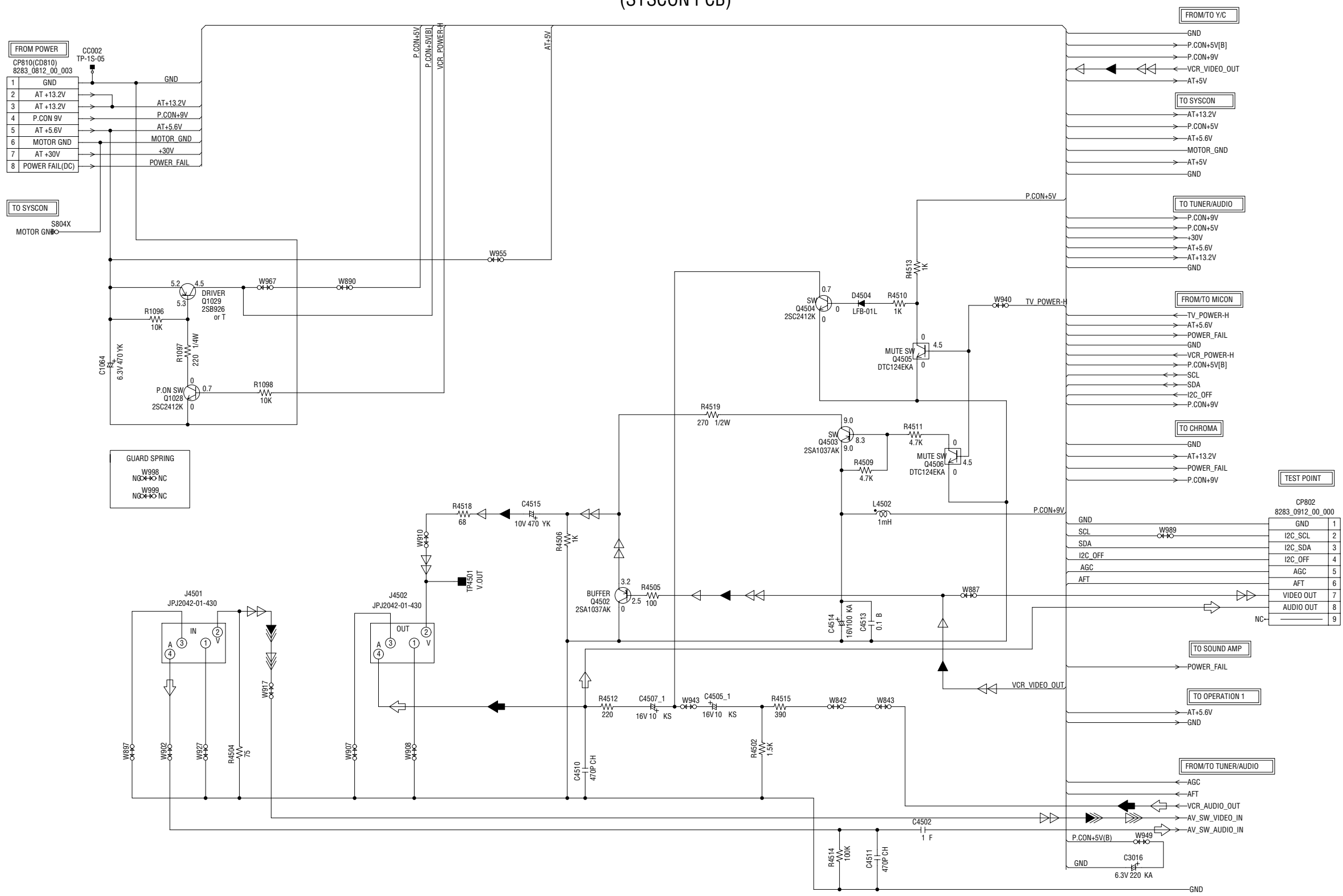
CAUTION: DIGITAL TRANSISTOR

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

POWER/IN/OUT SCHEMATIC DIAGRAM

(SYSICON PCB)



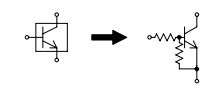
CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.
NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR.
THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: DIGITAL TRANSISTOR

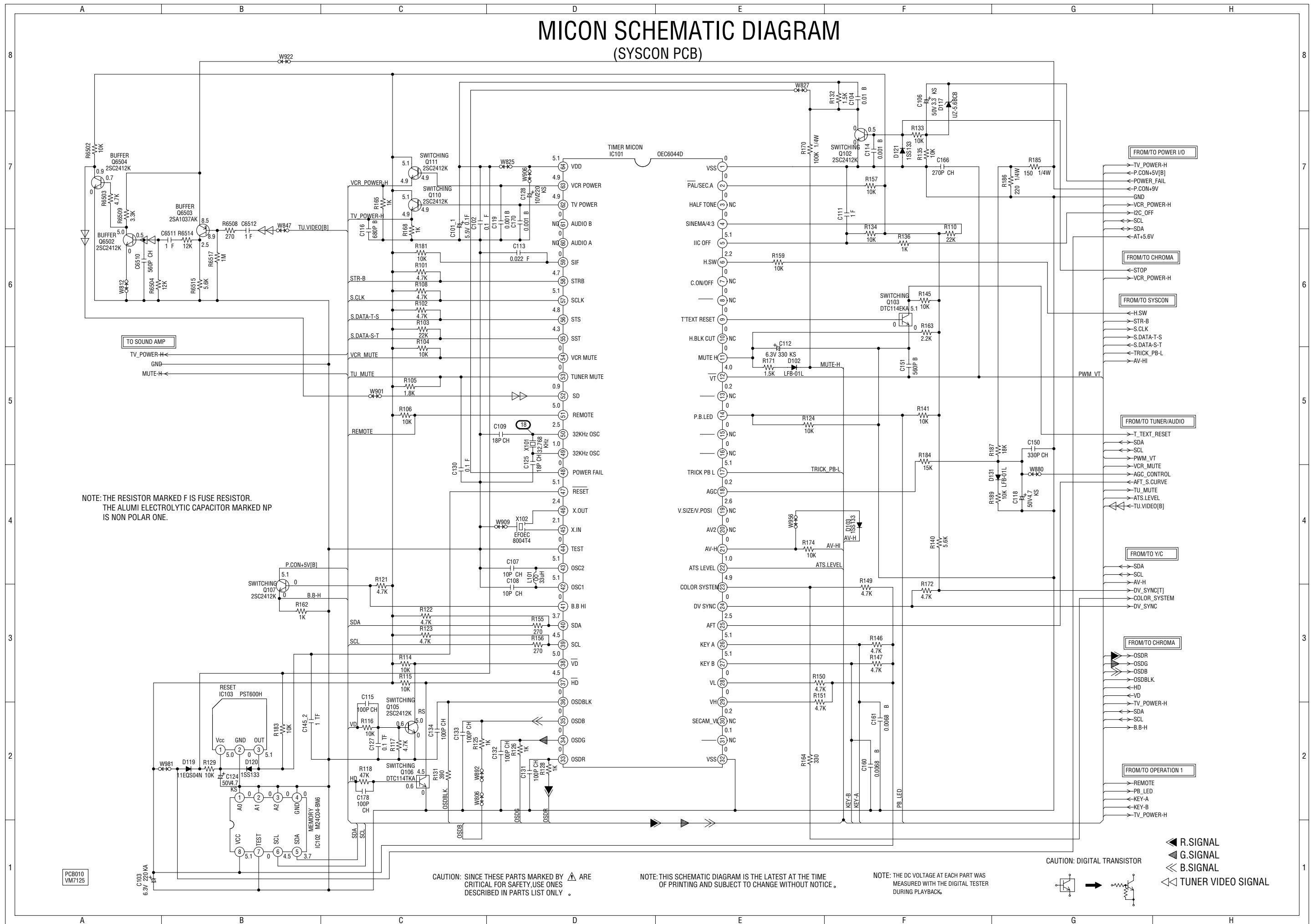


- RECORD LUMINANCE SIGNAL
- RECORD COLOR SIGNAL
- TUNER VIDEO SIGNAL
- AUDIO SIGNAL (PB)
- AUDIO SIGNAL (REC)
- PLAYBACK LUMINANCE SIGNAL
- PLAYBACK COLOR SIGNAL

PCB010 VM7125

MICON SCHEMATIC DIAGRAM

(SYSCON PCB)



NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR.
THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP
IS NON POLAR ONE.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

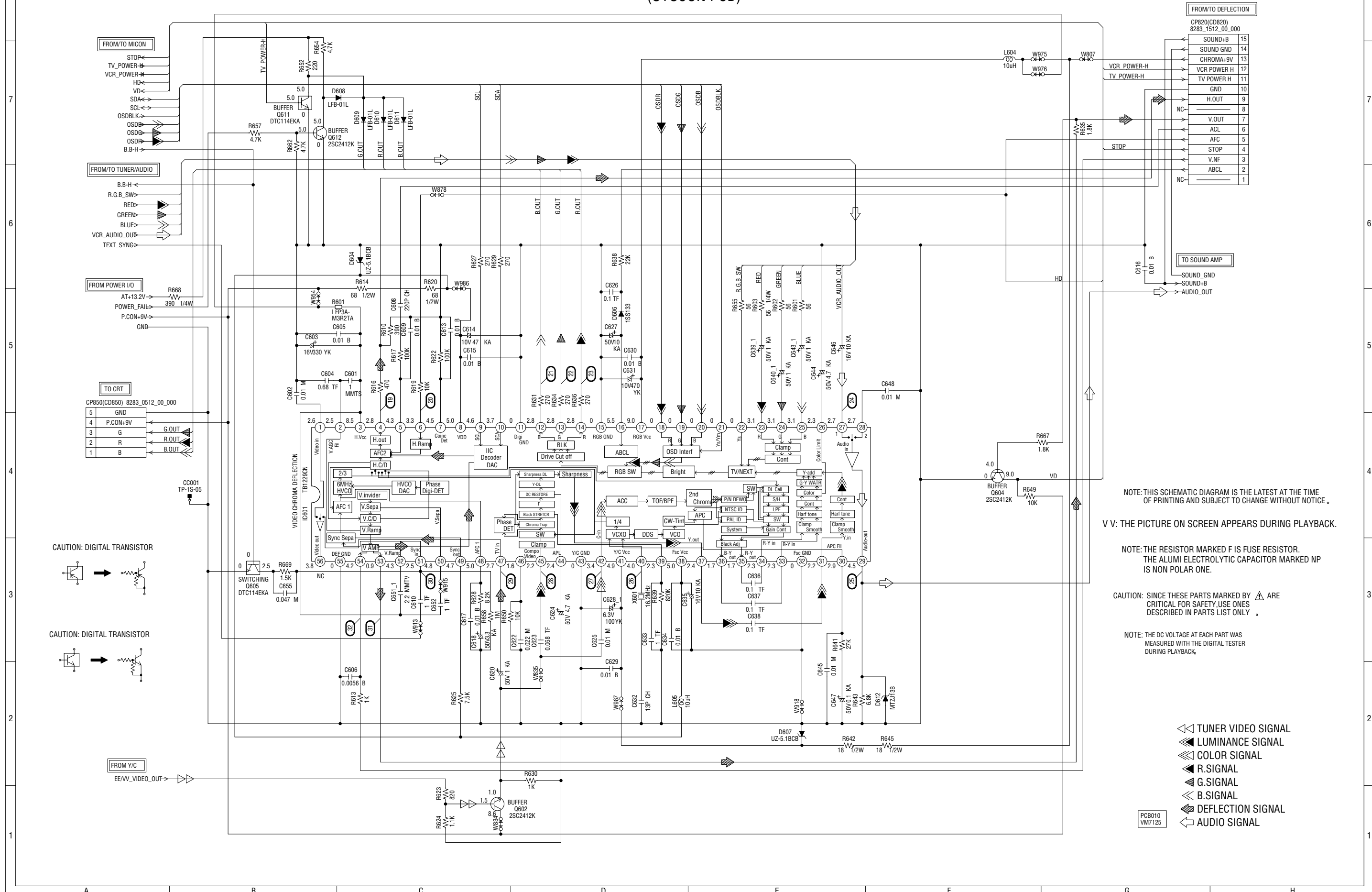
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR

- R.SIGNAL
- G.SIGNAL
- B.SIGNAL
- TUNER VIDEO SIGNAL

CHROMA SCHEMATIC DIAGRAM (SYSCON PCB)



FROM/TO DEFLECTION

CP820/CD820	8283_1512_00_000
SOUND+B	15
SOUND GND	14
CHROMA+9V	13
VCR POWER H	12
TV POWER H	11
GND	10
H.OUT	9
NC	8
V.OUT	7
ACL	6
AFC	5
STOP	4
V.NF	3
ABCL	2
NC	1

TO SOUND AMP

SOUND_GND	
SOUND+B	
AUDIO_OUT	

TO CRT

CP850/CD850	8283_0512_00_000
5 GND	
4 P.CON+9V	G.OUT
3 G	R.OUT
2 R	B.OUT
1 B	

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

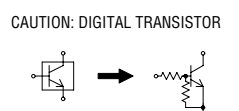
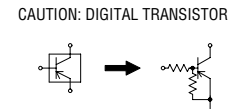
V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

CAUTION: SINCE THESE PARTS MARKED BY **A** ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

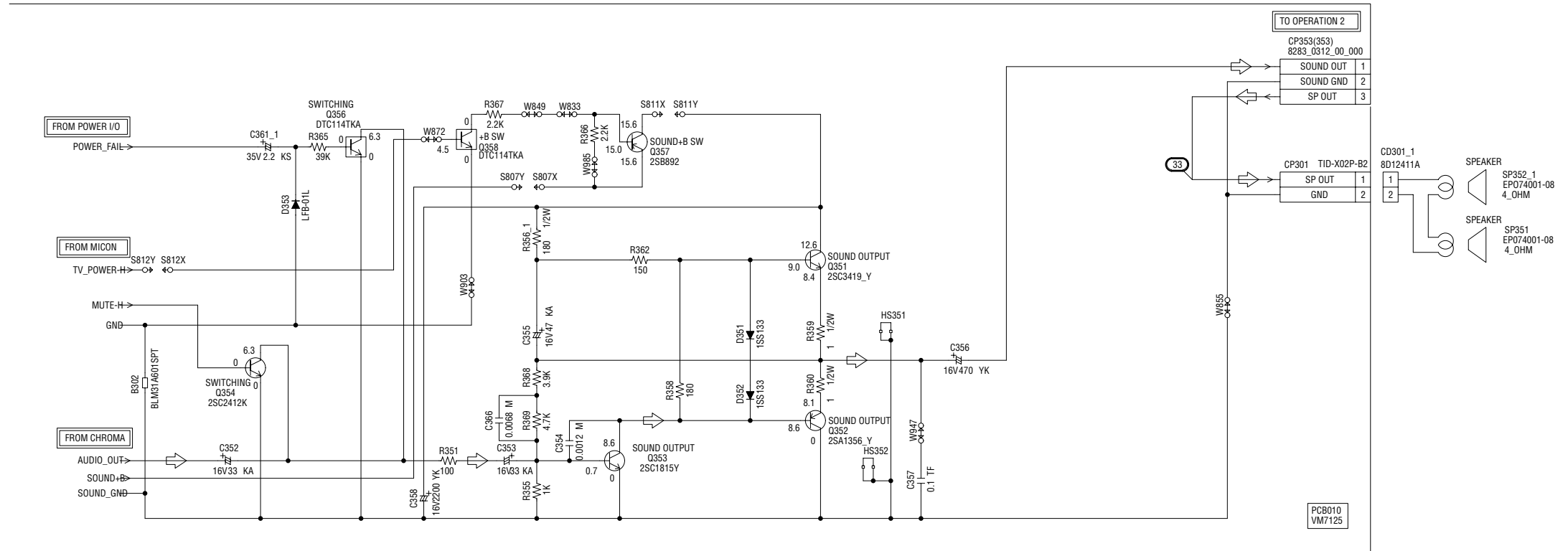
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

- ◀◀ TUNER VIDEO SIGNAL
- ◀ LUMINANCE SIGNAL
- ◀◀◀ COLOR SIGNAL
- ◀ R.SIGNAL
- ◀ G.SIGNAL
- ◀ B.SIGNAL
- ◀◀◀ DEFLECTION SIGNAL
- ◀◀◀ AUDIO SIGNAL



SOUND AMP SCHEMATIC DIAGRAM

(SYSCON PCB)



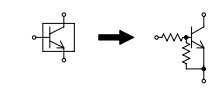
CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

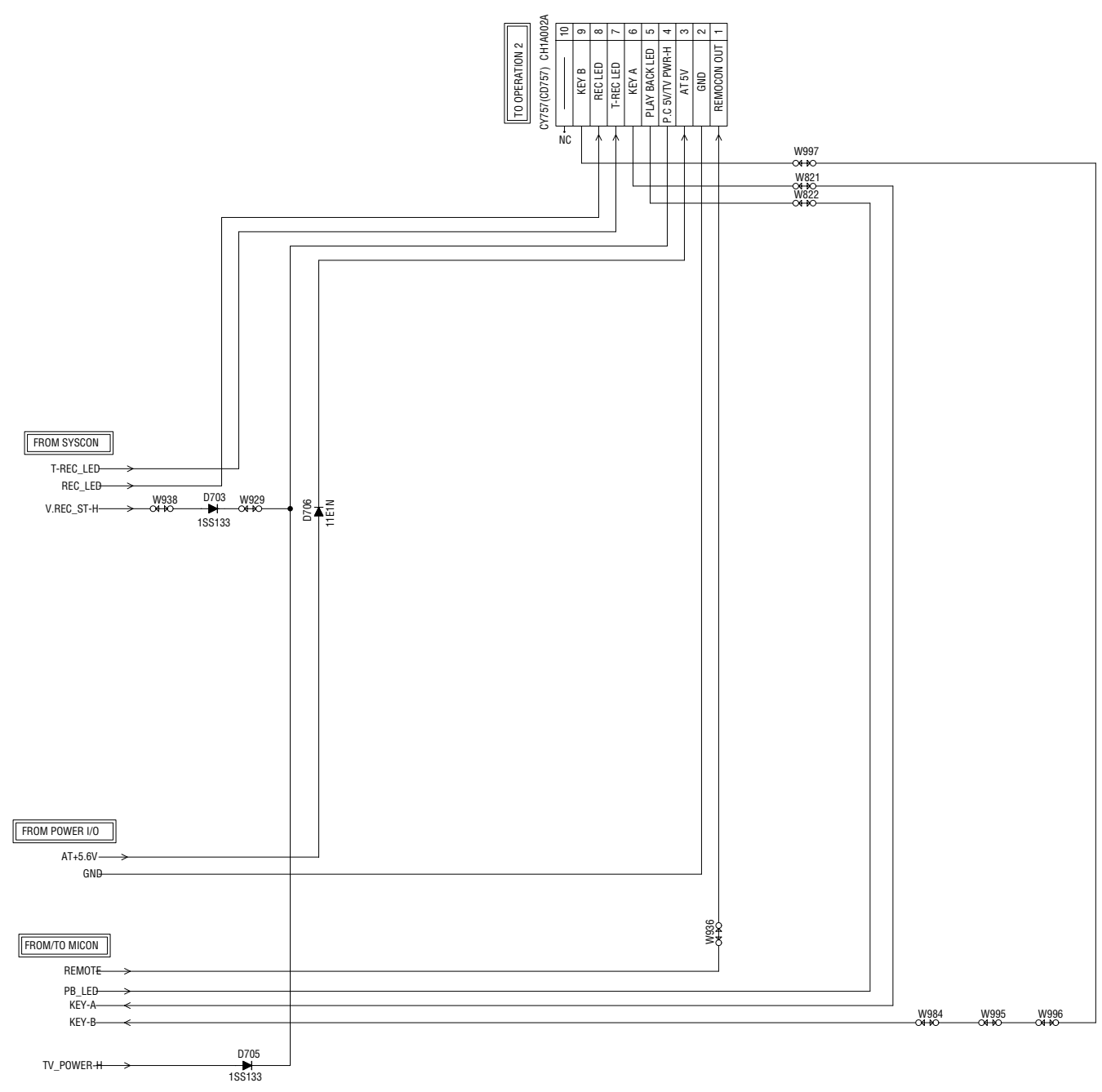
NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

CAUTION: DIGITAL TRANSISTOR



AUDIO SIGNAL

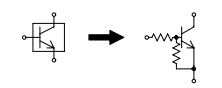
OPERATION 1 SCHEMATIC DIAGRAM (SYSCON PCB)



PCB010
VM7125

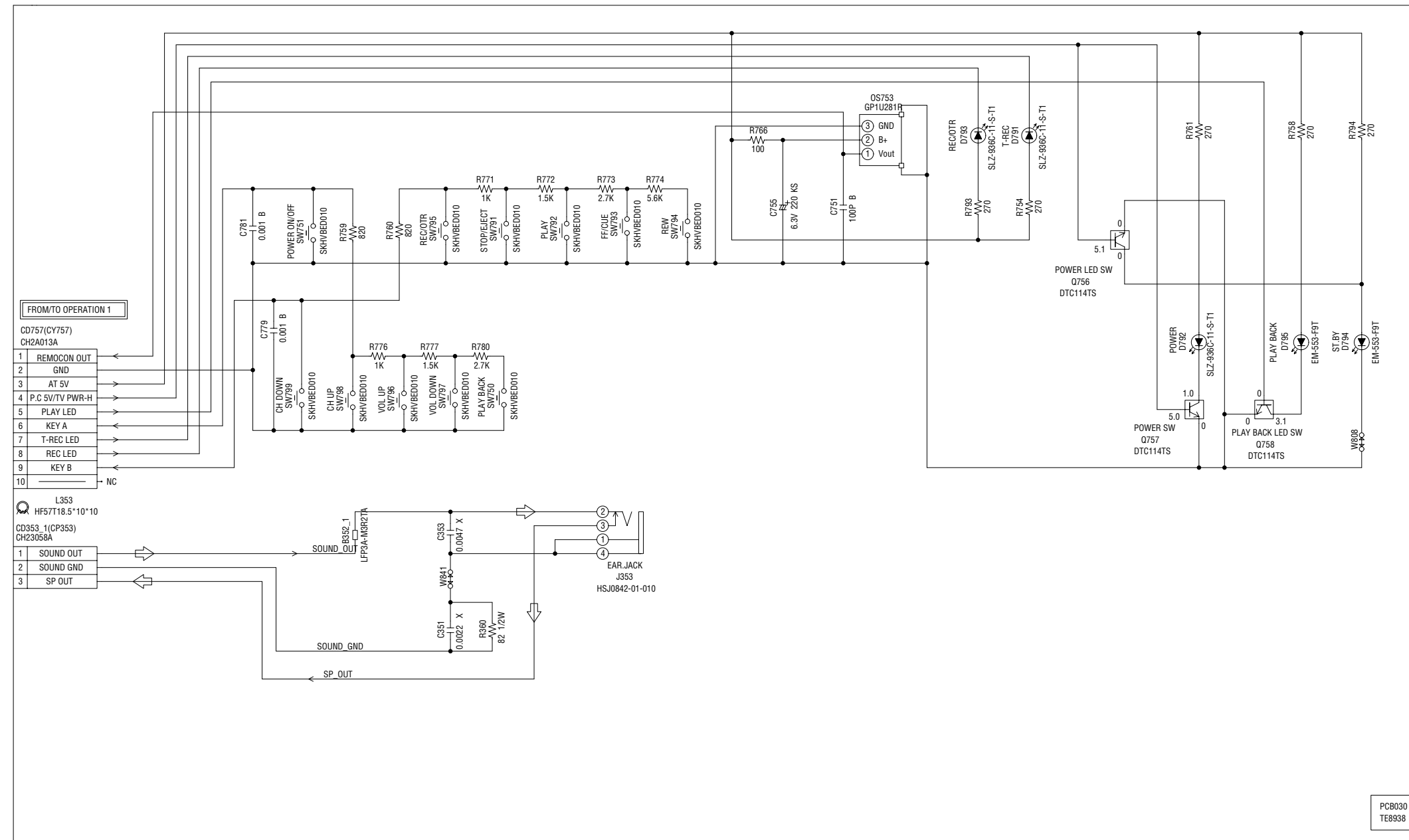
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: DIGITAL TRANSISTOR



OPERATION 2 SCHEMATIC DIAGRAM

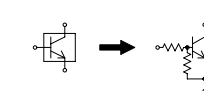
(OPERATION PCB)



NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: DIGITAL TRANSISTOR

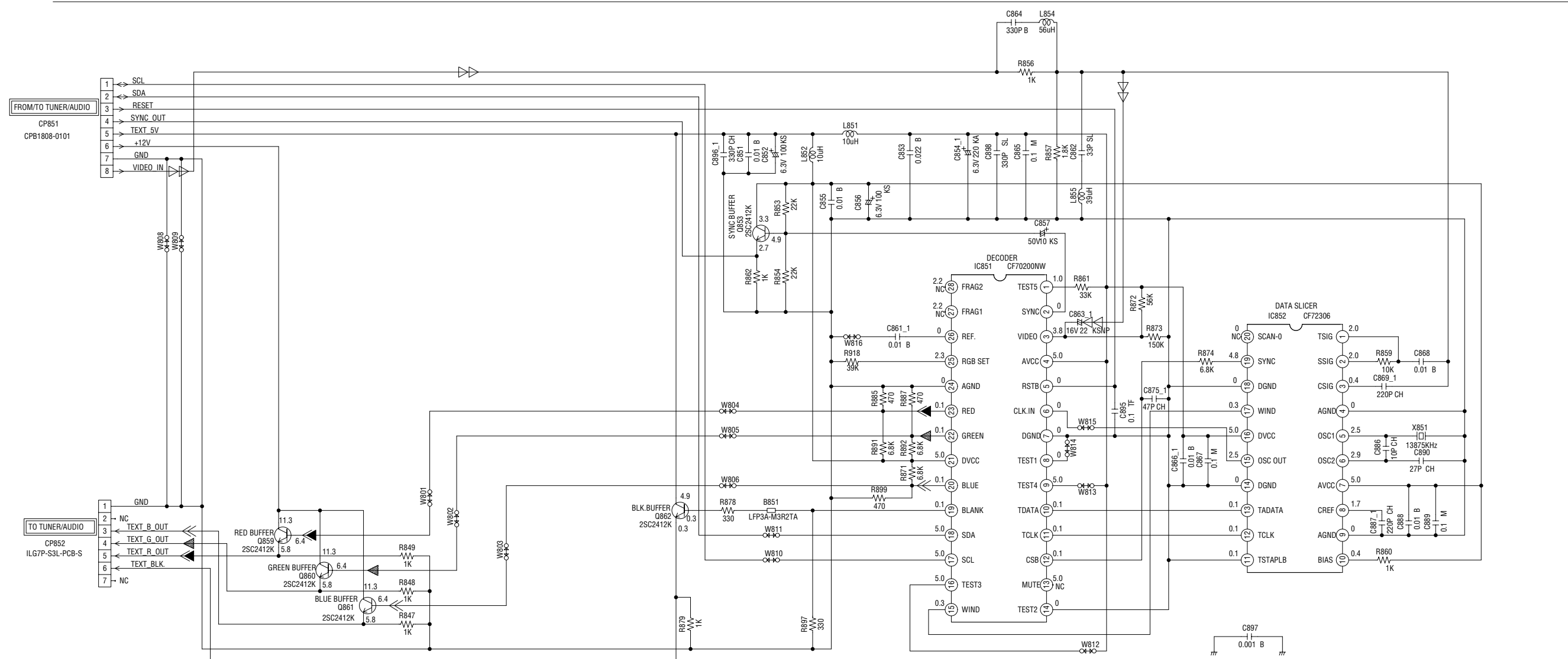


← AUDIO SIGNAL

PCB030
TE8938

T'TEXT SCHEMATIC DIAGRAM

(T'TEXT PCB)



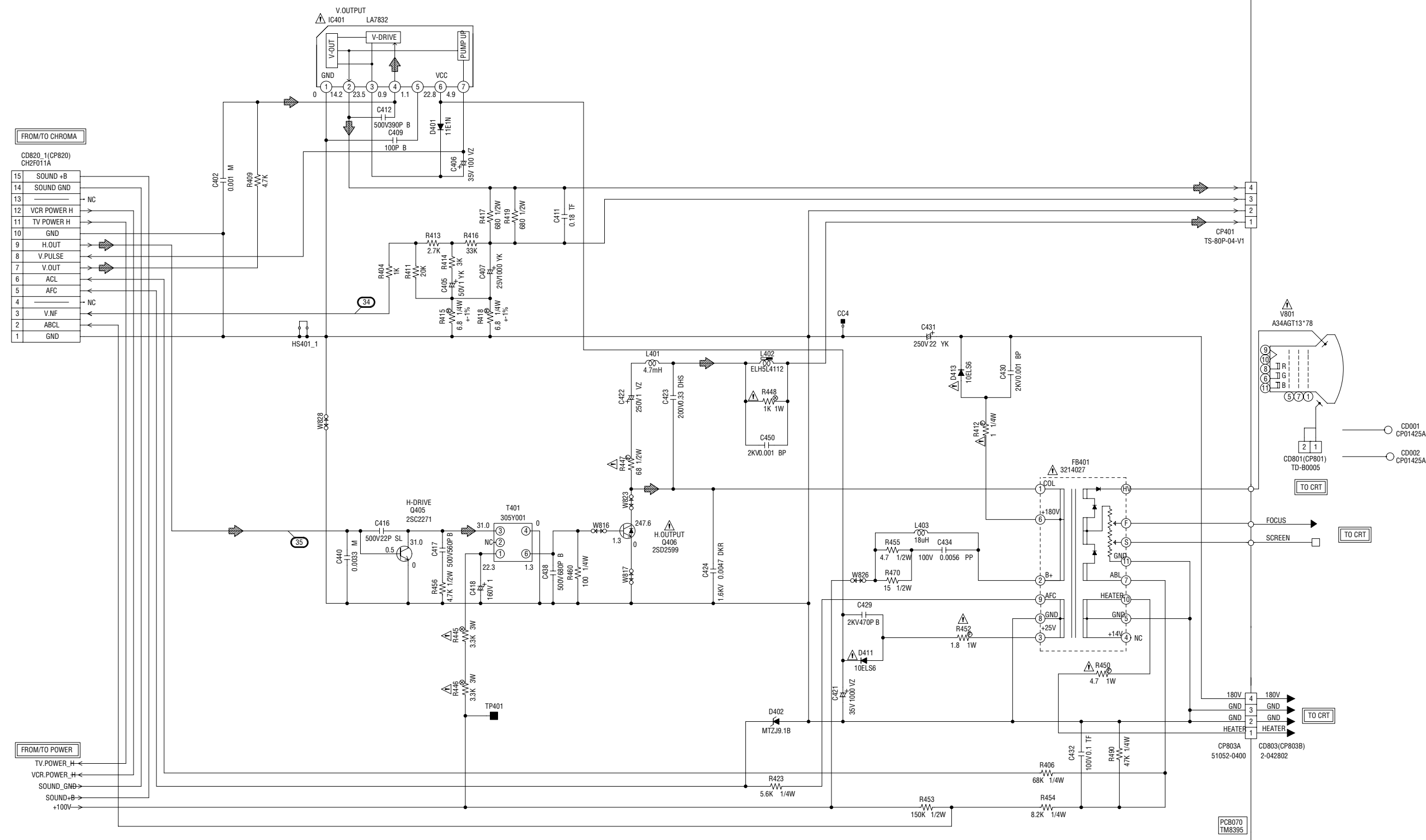
NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

- R.SIGNAL
- G.SIGNAL
- B.SIGNAL
- TUNER VIDEO SIGNAL

DEFLECTION SCHEMATIC DIAGRAM (MAIN PCB)



FROM/TO CHROMA

15	SOUND +B
14	SOUND GND
13	NC
12	VCR POWER H
11	TV POWER H
10	GND
9	H.OUT
8	V.PULSE
7	V.OUT
6	ACL
5	AFC
4	NC
3	V.NF
2	ABCL
1	GND

FROM/TO POWER

TV.POWER_H
VCR.POWER_H
SOUND_GND
SOUND+B
+100V

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

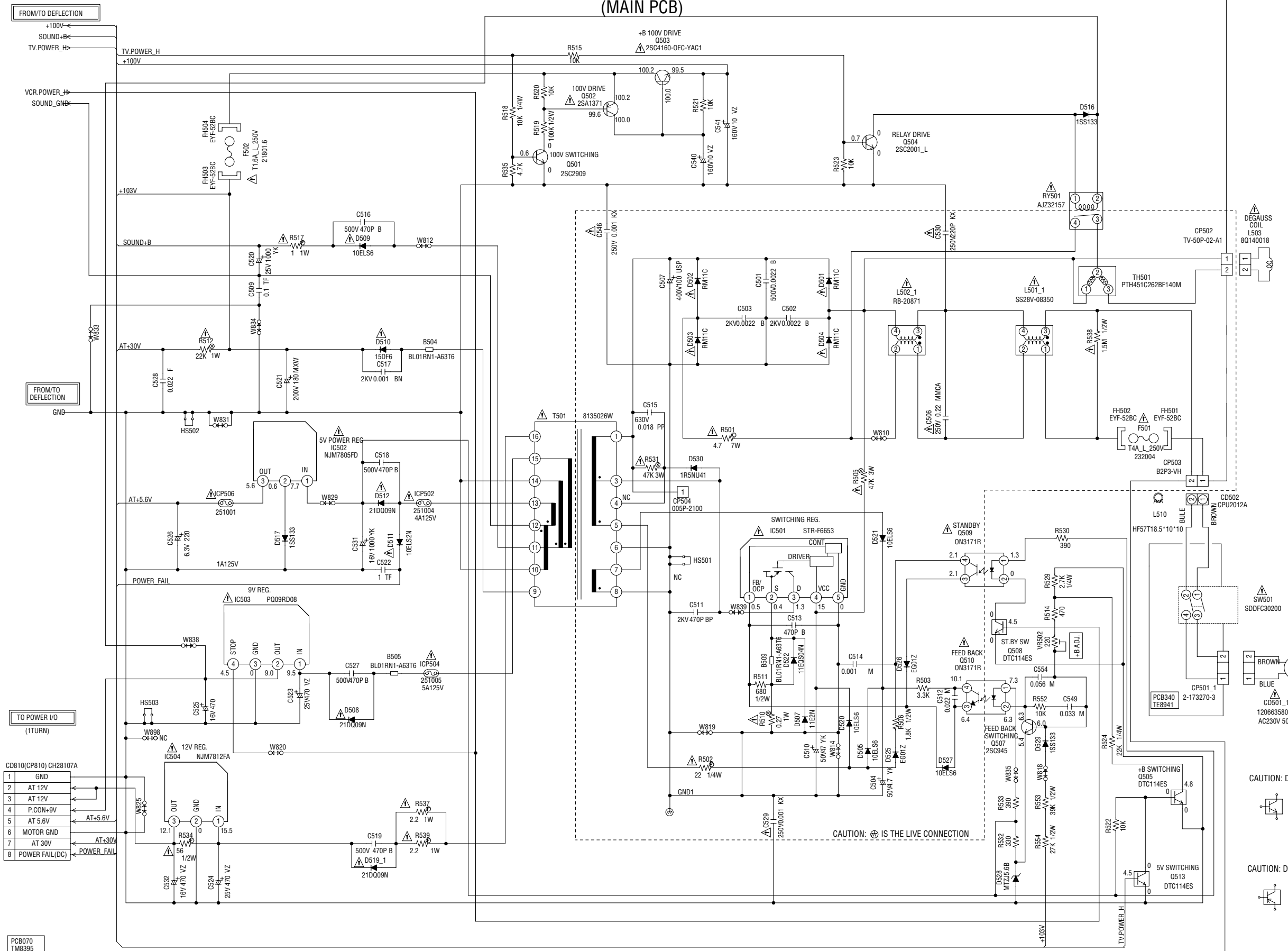
NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

CAUTION: SINCE THESE PARTS MARKED BY Δ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

DEFLECTION SIGNAL

POWER SCHEMATIC DIAGRAM

(MAIN PCB)



TO POWER I/O
(1TURN)

1	GND
2	AT 12V
3	AT 12V
4	P.CON+9V
5	AT 5.6V
6	MOTOR GND
7	AT 30V
8	POWER FAIL(DC)

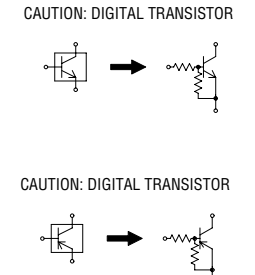
PCB070
TM8395

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

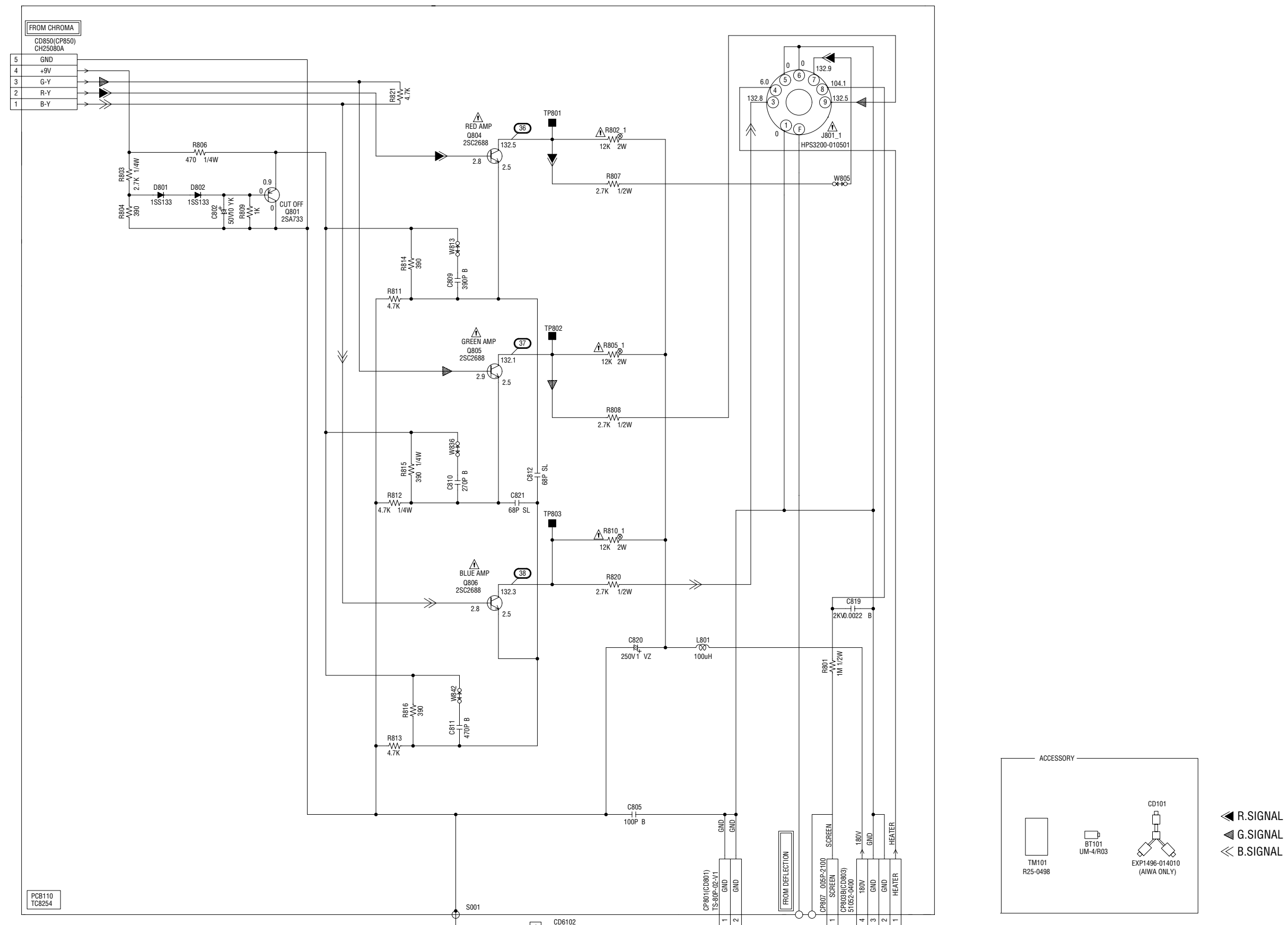
NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

CAUTION: SINCE THESE PARTS MARKED BY Δ ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.



CRT SCHEMATIC DIAGRAM

(CRT PCB)



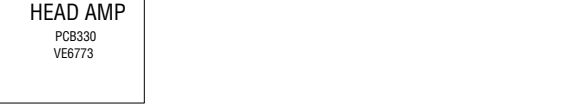
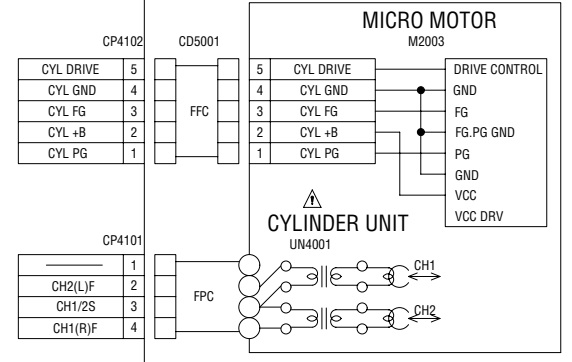
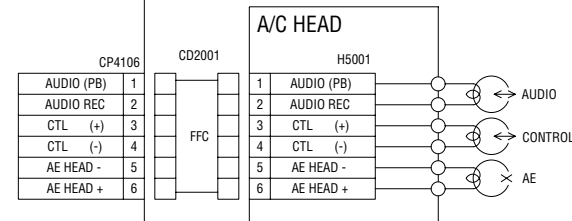
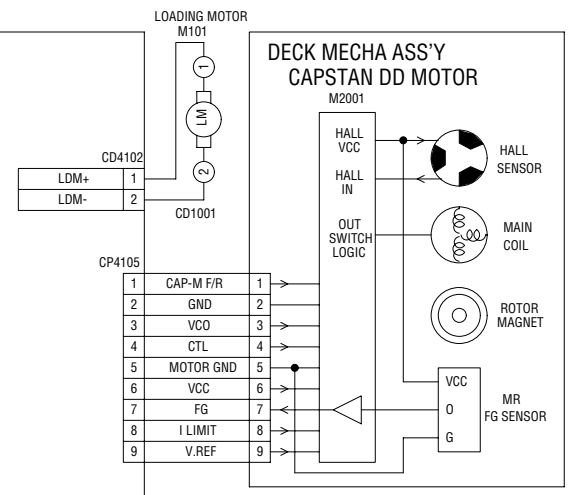
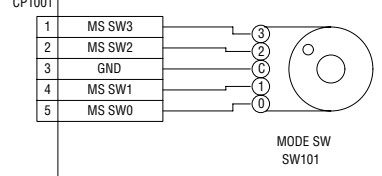
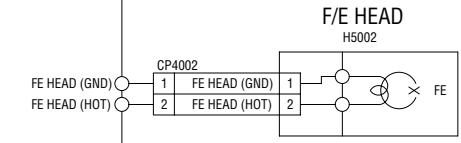
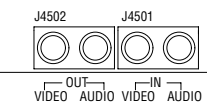
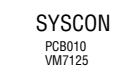
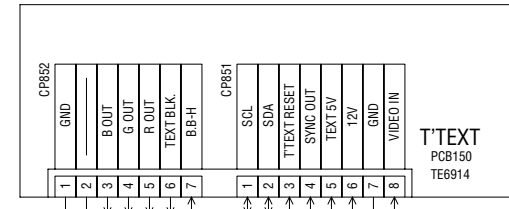
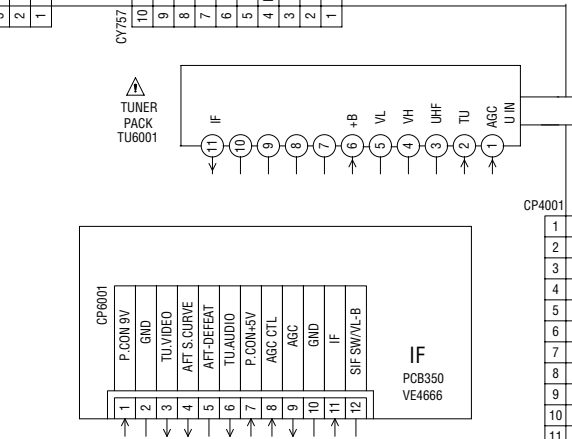
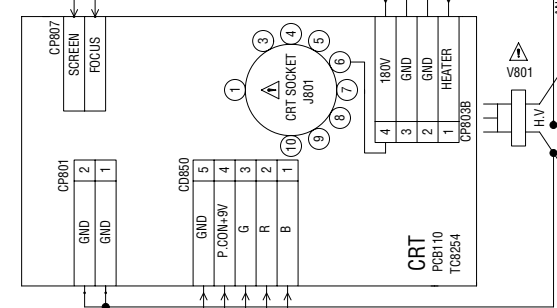
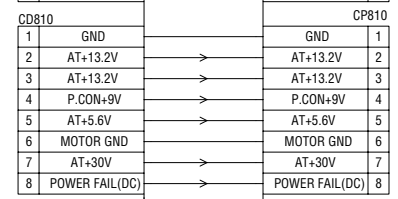
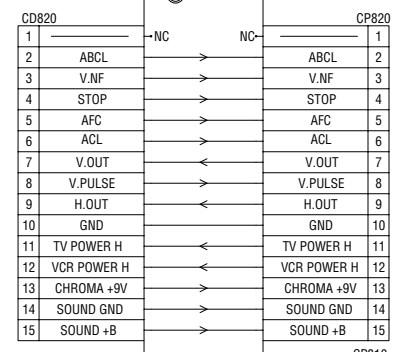
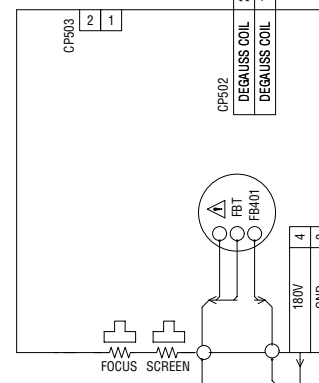
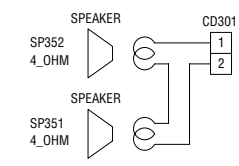
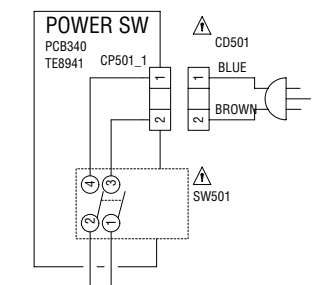
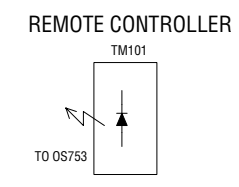
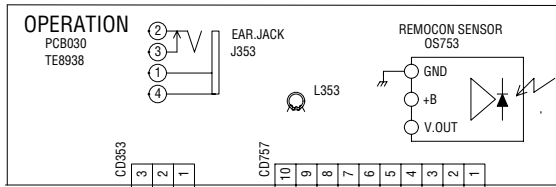
CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

NOTE: THE RESISTOR MARKED F IS FUSE RESISTOR. THE ALUMI ELECTROLYTIC CAPACITOR MARKED NP IS NON POLAR ONE.

NOTE: THIS SCHEMATIC DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

NOTE: THE DC VOLTAGE AT EACH PART WAS MEASURED WITH THE DIGITAL TESTER DURING PLAYBACK.

INTERCONNECTION DIAGRAM



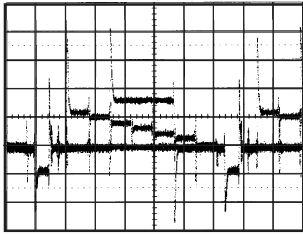
V V: THE PICTURE ON SCREEN APPEARS DURING PLAYBACK.

CAUTION: SINCE THESE PARTS MARKED BY ARE CRITICAL FOR SAFETY, USE ONES DESCRIBED IN PARTS LIST ONLY.

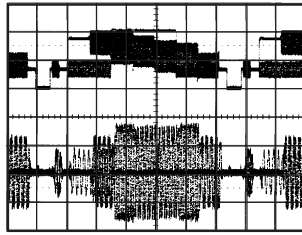
NOTE: THIS INTERCONNECTION DIAGRAM IS THE LATEST AT THE TIME OF PRINTING AND SUBJECT TO CHANGE WITHOUT NOTICE.

WAVEFORMS

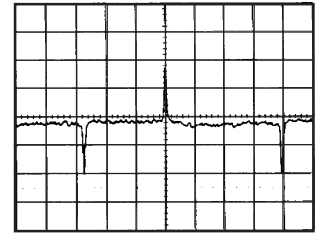
Y/C



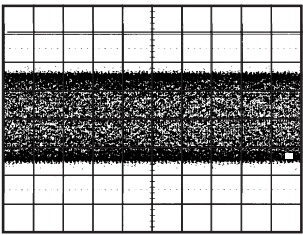
① REC
200mV. 10 μ s/div



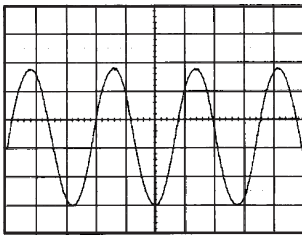
⑦ REC
2V. 10 μ s/div



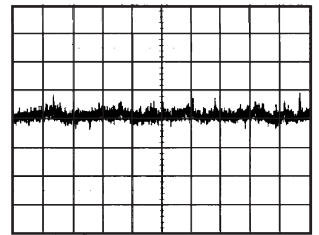
⑬ REC/PB
0.5V 5ms/div



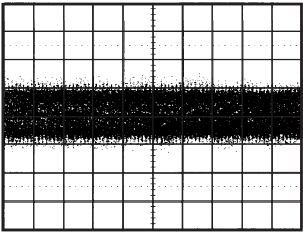
② REC
200mV. 0.5ms/div



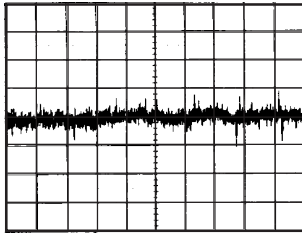
⑧ REC/PB
0.5V. 0.5ms/div



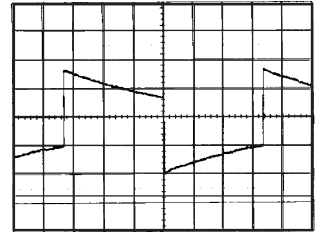
⑭ REC/PB
20mV 5ms/div



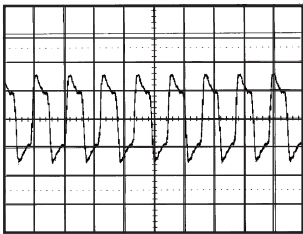
③ PB
200mV. 0.5ms/div



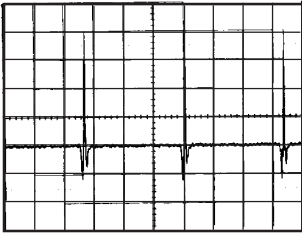
⑨ REC/PB
20mV. 0.5ms/div



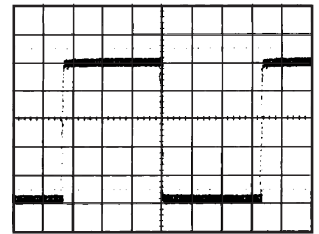
⑭ REC/PB
2V 5ms/div



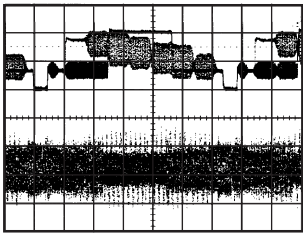
④ REC
200mV. 0.2 μ s/div



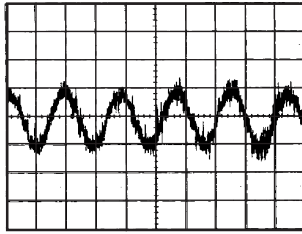
⑩ REC/PB
200mV. 10ms/div



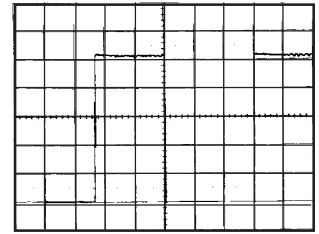
⑮ REC/PB
0.5V 5ms/div



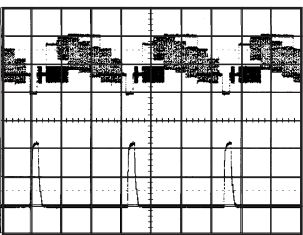
⑤ PB
50mV 10 μ s/div



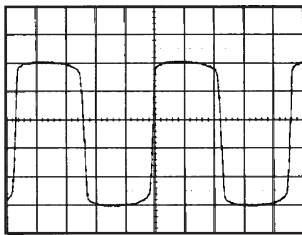
⑪ REC/PB
20mV. 0.5ms/div



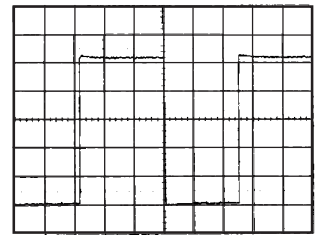
⑯ REC/PB
1V 2 μ s/div



⑥ REC
100mV. 20 μ s/div



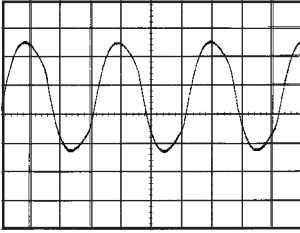
⑫ REC/PB
0.5V 0.2ms/div



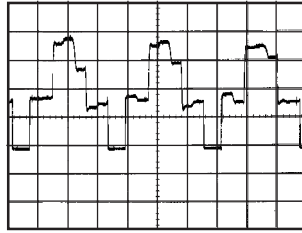
⑰ REC/PB
1V 2 μ s/div

WAVEFORMS

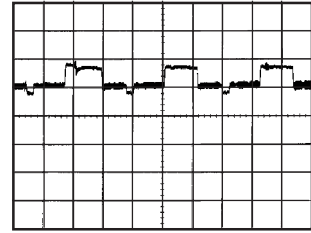
MICON



⑱ 1V 10 μ s/div

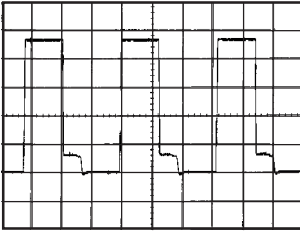


⑳ 1V 20 μ s/div color

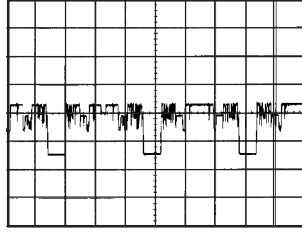


㉑ 1V 20 μ s/div

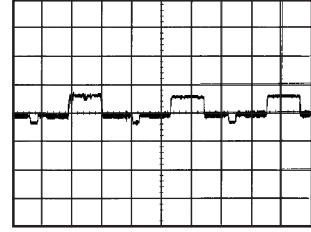
CHROMA



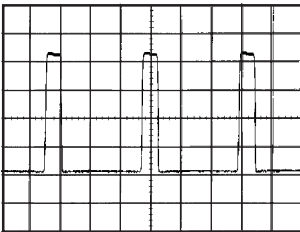
⑲ 1V 20 μ s/div



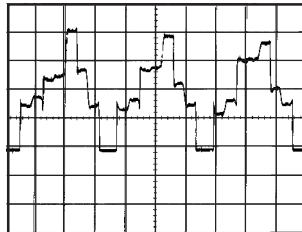
㉓ 2V 20 μ s/div



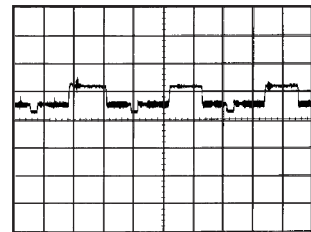
㉔ 1V 20 μ s/div



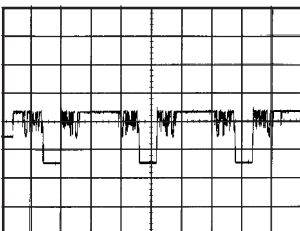
⑳ 2V 20 μ s/div



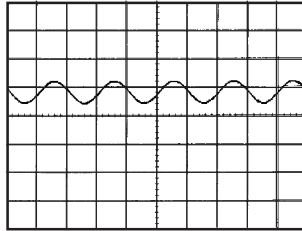
㉓ 1V 20 μ s/div color



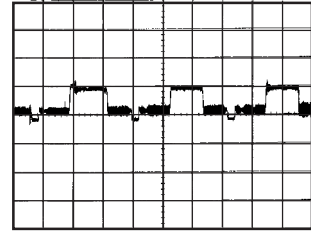
㉙ 1V 20 μ s/div



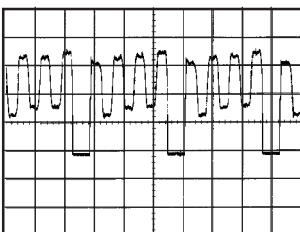
㉑ 2V 20 μ s/div



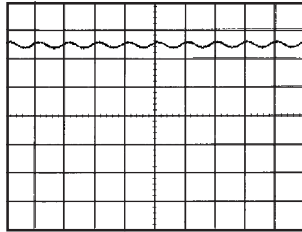
㉔ 1V 500 μ s/div



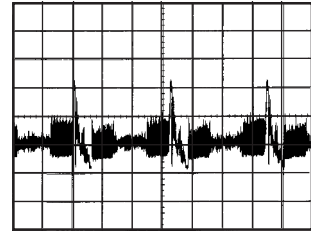
㉚ 1V 20 μ s/div



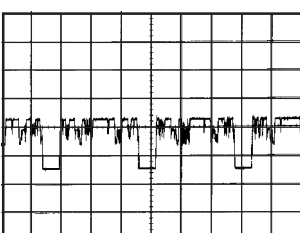
㉑ 1V 20 μ s/div color



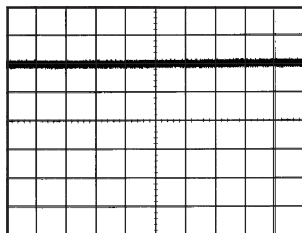
㉕ 1V 1ms/div



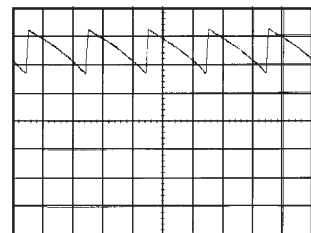
㉛ 1V 20 μ s/div



㉒ 2V 20 μ s/div



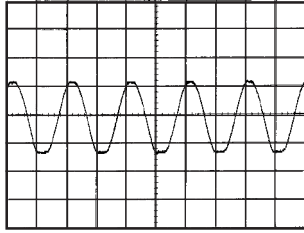
㉖ 1V 5 μ s/div



㉜ 1V 10ms/div

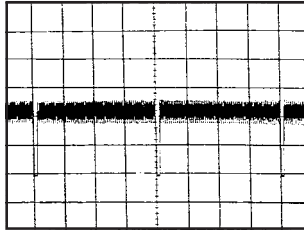
WAVEFORMS

SOUND AMP

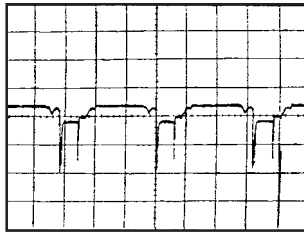


③③ 5V. 500 μ s/div

DEFLECTION

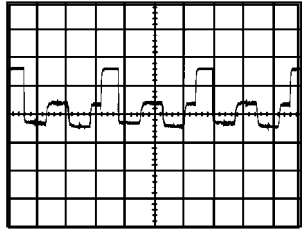


③④ 2V. 5ms/div

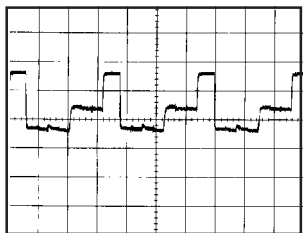


③⑤ 5V. 20 μ s/div

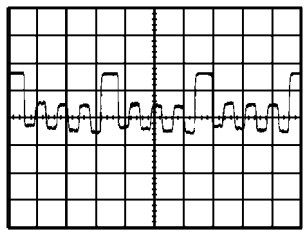
CRT



③⑥ 50V. 20 μ s/div

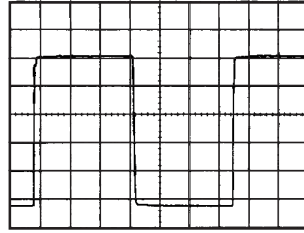


③⑦ 50V. 20 μ s/div

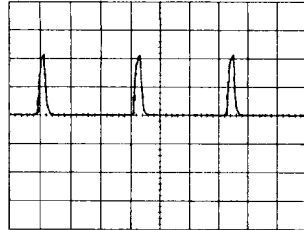


③⑧ 50V. 20 μ s/div

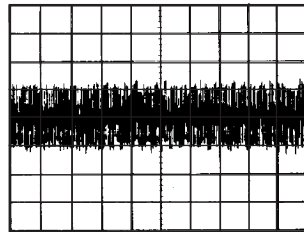
HEAD AMP



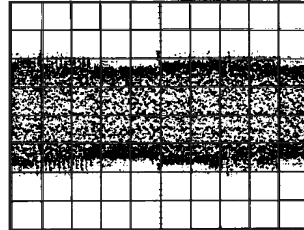
③⑨ REC/PB
500mV. 5ms/div



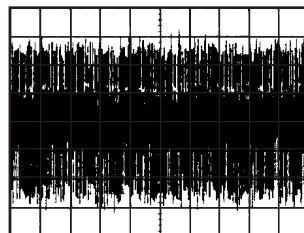
④⑩ REC/PB
1V. 20 μ s/div



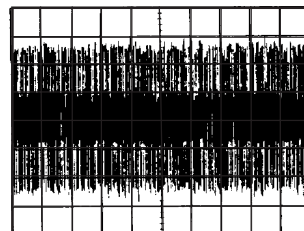
④① PB
500V. 0.1s/div



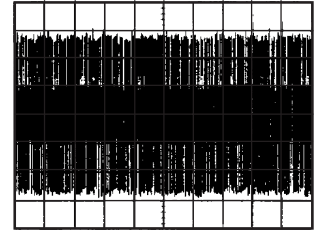
④② REC
50mV. 10 μ s/div



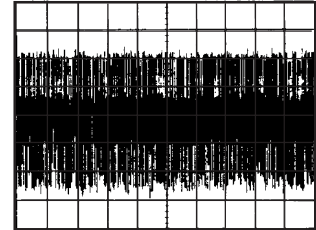
④③ REC/PB
10mV. 1s/div



④④ PB
50mV 50ms/div



④⑤ REC
500mV. 50ms/div



④⑥ PB
50mV. 0.1s/div

NOTE: The following waveforms were measured at the point of the corresponding balloon number in the schematic diagram.