

4.1 OVERALL WIRING DIAGRAMS

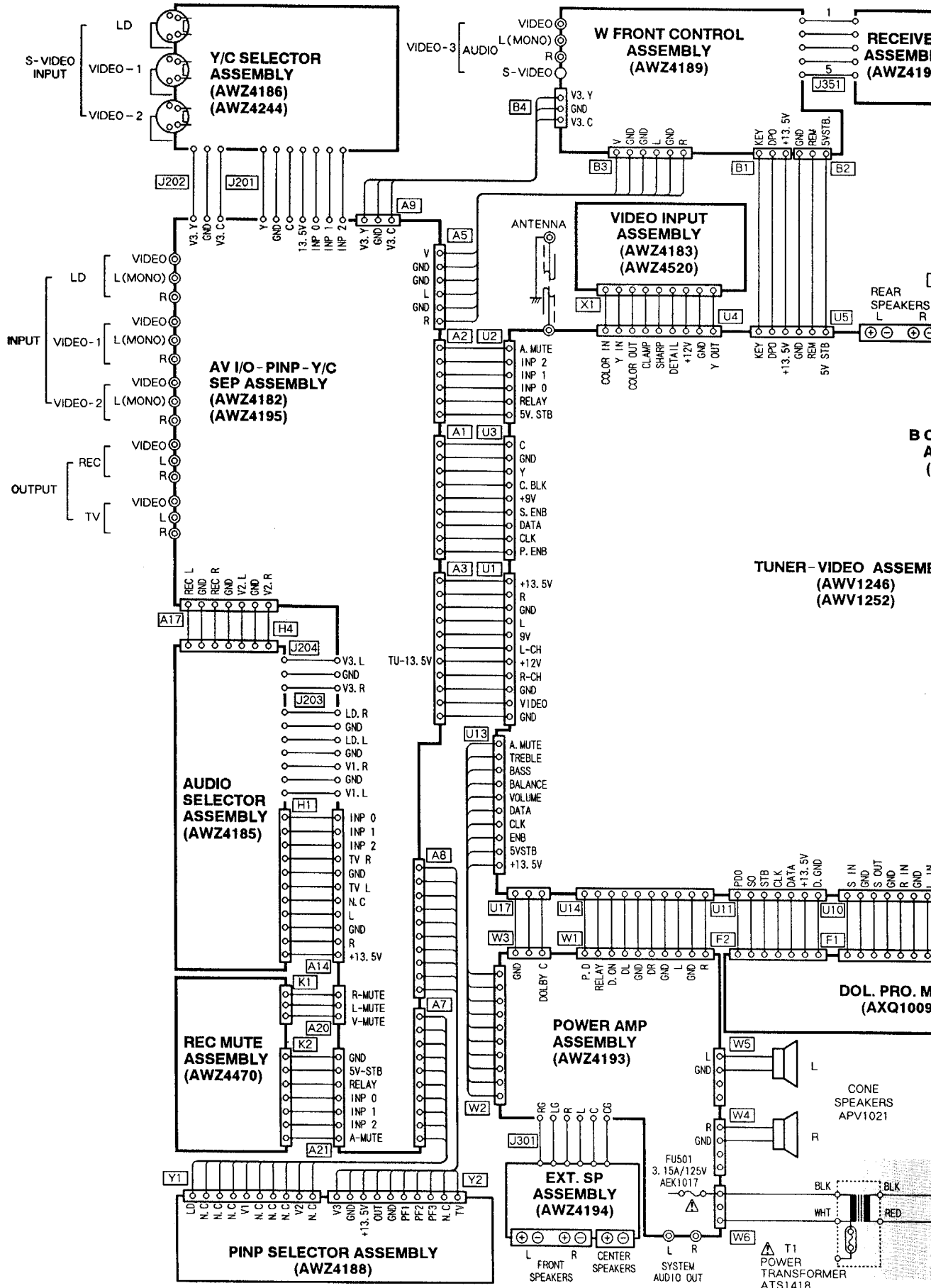
(1) SD - P5065 - K, SD - P5065 - Q, SD - P5064 - K, SD - P5064 - Q, SD - P4565 - K, SD - P4565 - Q, SD - P4564 - K

A

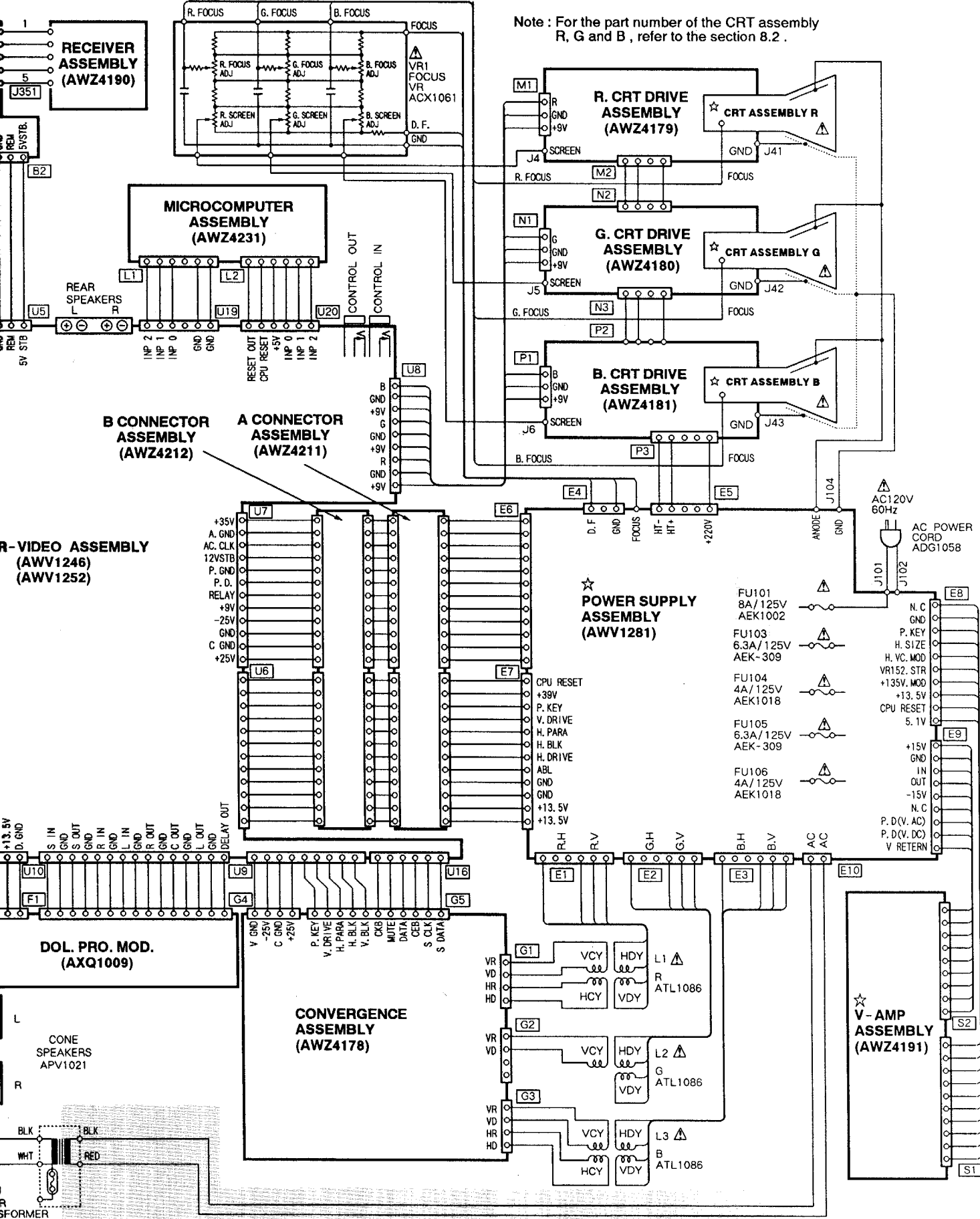
B

C

D



SD-P4564-K, SD-P4564-Q, SD-P5565-K, SD-P5564-K and SD-P5564-Q/KUX1C



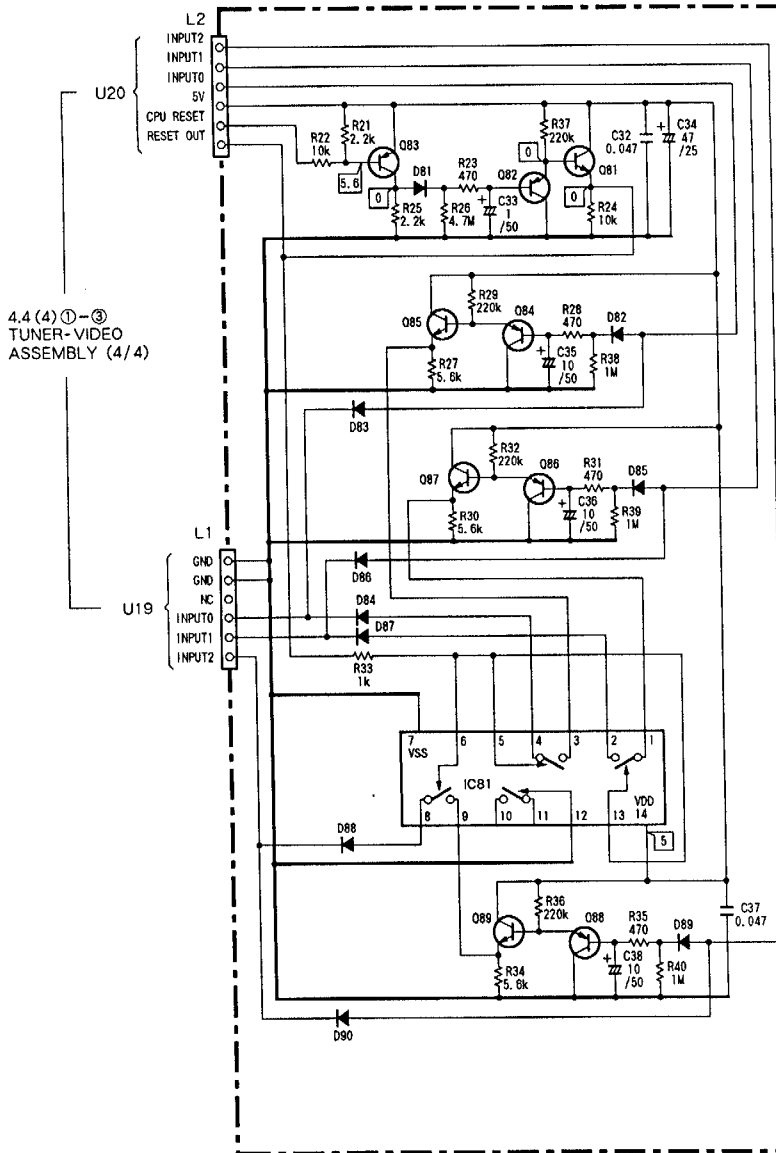
Note : For the part number of the CRT assembly R, G and B , refer to the section 8.2 .

A
B
C
D

4.6 MICROCOMPUTER ASSEMBLY

MICROCOMPUTER ASSEMBLY (AWZ4231)

IC81	TC4066B
Q81,85,87,89	2SC1740S
Q82-84,86,88	2SA933S
D81-90	1SS252

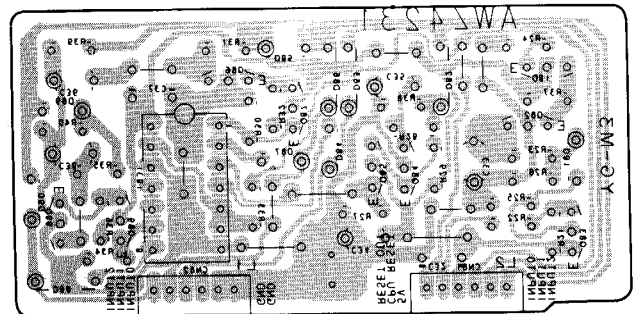
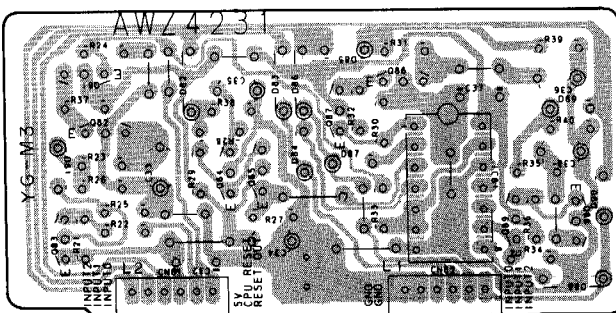


MICROCOMPUTER ASSEMBLY (AWZ4231)

MICROCOMPUTER ASSEMBLY (AWZ4231)

Q81-Q83 Q84 Q85 Q87 Q86 Q89 Q88

Q81 Q80 Q89 Q88 Q87 Q86 Q85 Q84 Q83 Q82 Q81



Note: Abbreviation listed indicate circuit connections.

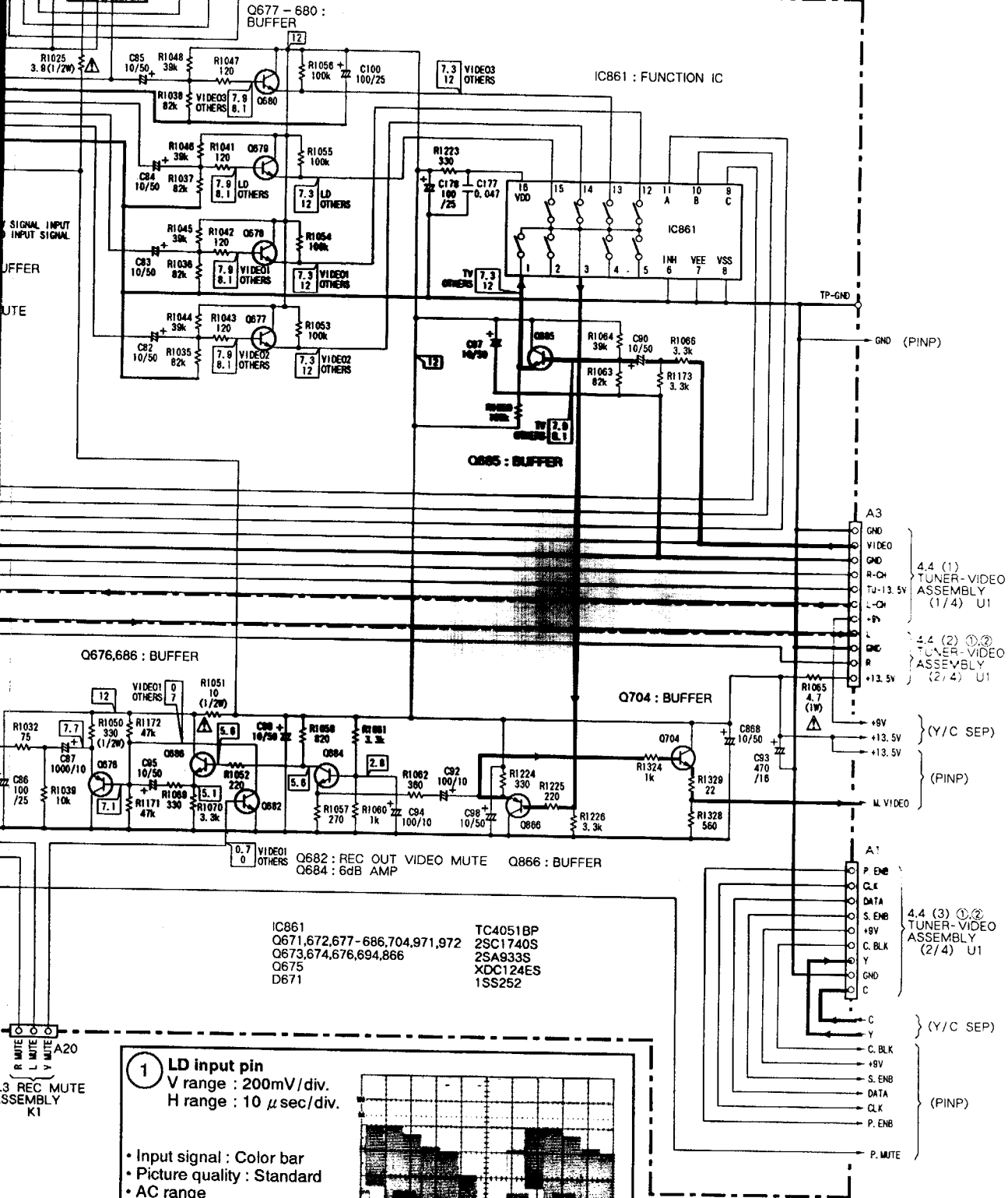
PINP : 4.2 (2) AV I/O-PINP-Y/C SEP ASSEMBLY (2/3)
 Y/C SEP : 4.2(3) ① AV I/O-PINP-Y/C SEP ASSEMBLY (3/3)

PINP SELECTOR ASSEMBLY Y2

(PINP)

AV I/O-PINP-Y/C SEP ASSEMBLY (1/3)
 (AWZ4182), (AWZ4195)

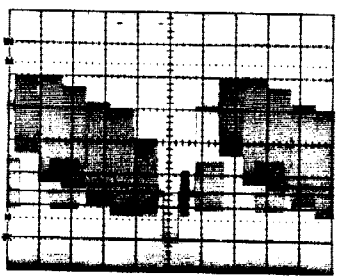
● AV I/O SECTION



A
B
C
D

① LD input pin
 V range : 200mV/div.
 H range : 10 μsec/div.

- Input signal : Color bar
- Picture quality : Standard
- AC range



4.2 AV I/O-PINP-Y/C SEP ASSEMBLY

(1) AV I/O-PINP-Y/C SEP ASSEMBLY (1/3 : AV I/O SECTION)

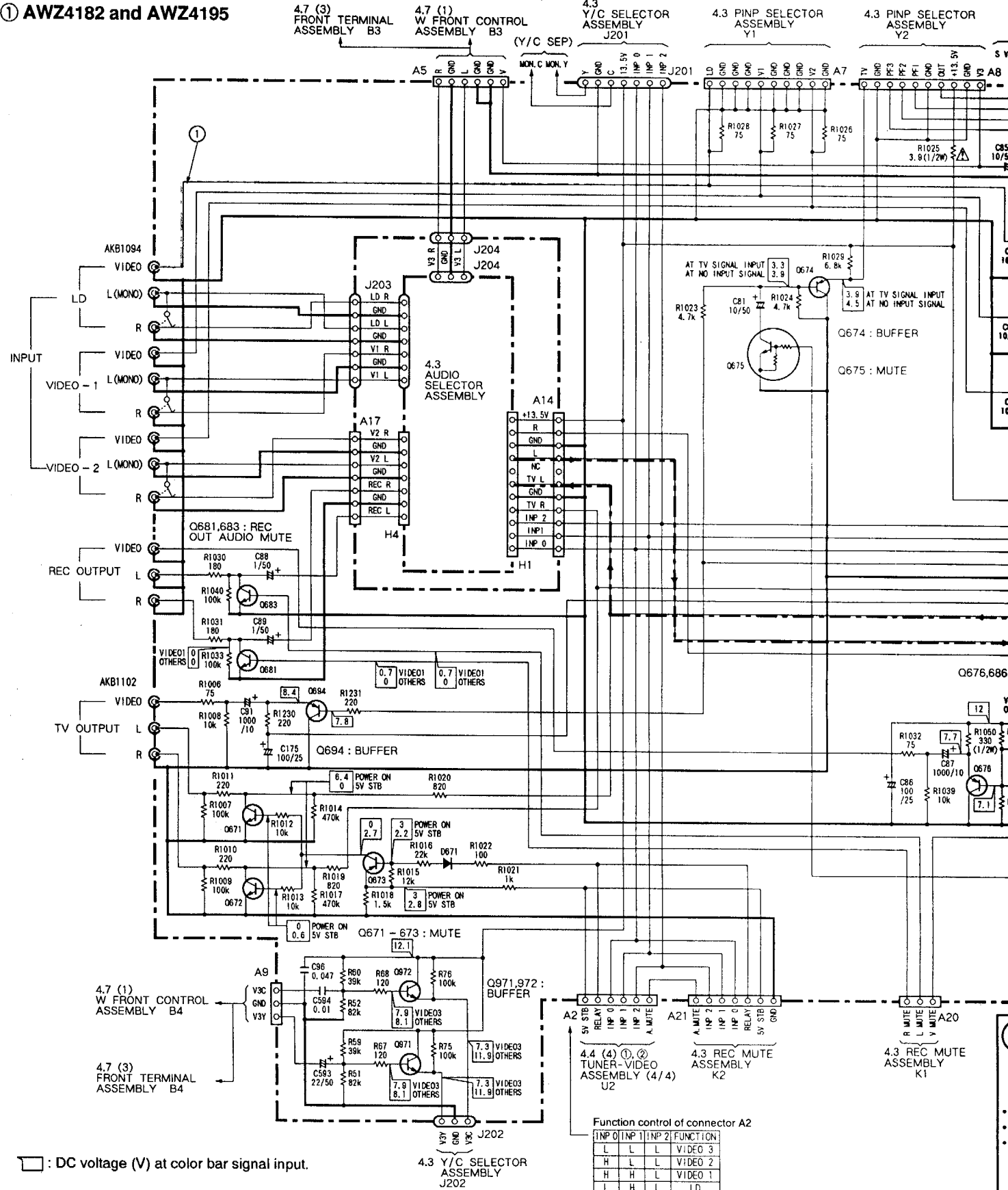
① AWZ4182 and AWZ4195

A

B

C

D

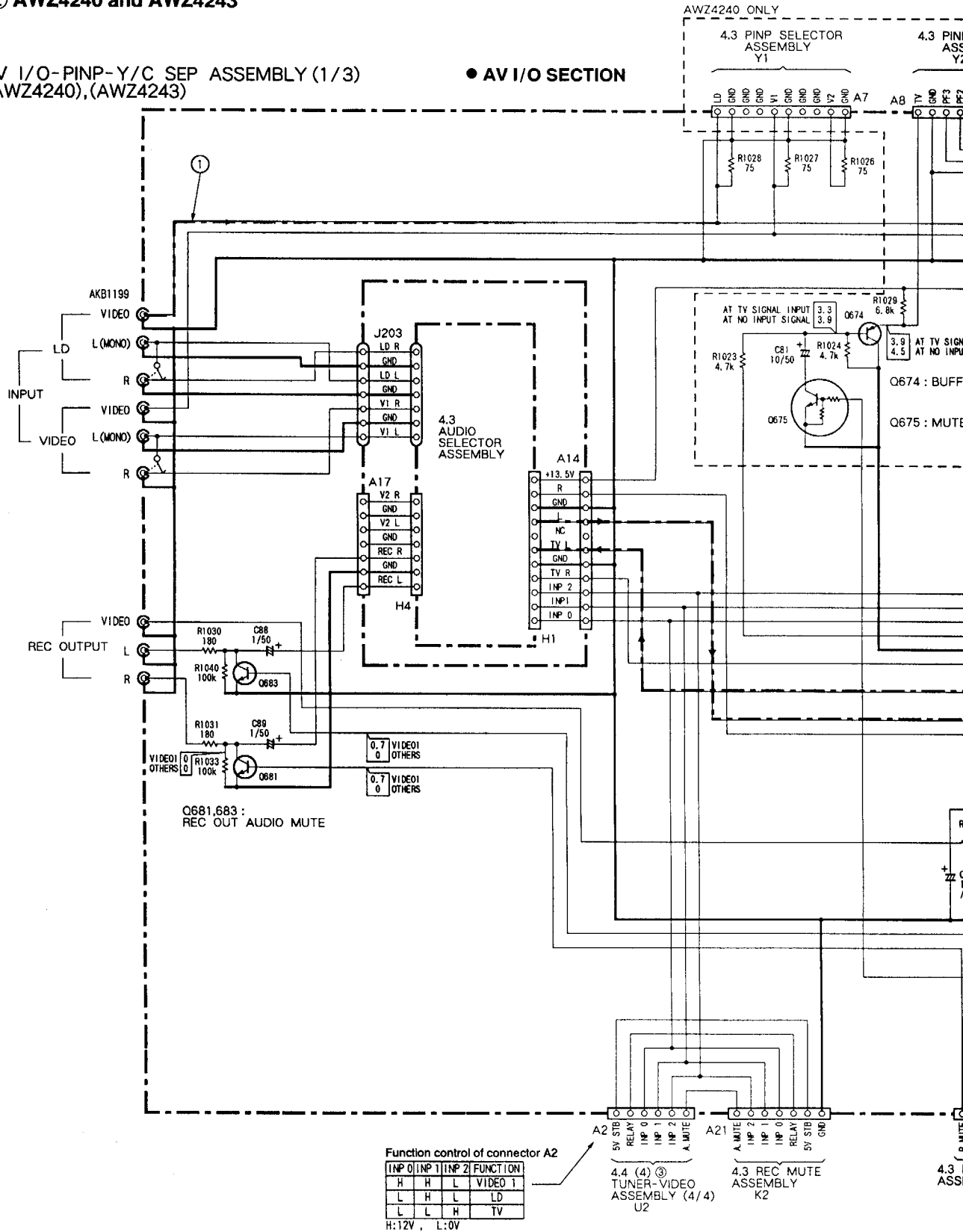


□ : DC voltage (V) at color bar signal input.

② AWZ4240 and AWZ4243

AV I/O-PINP-Y/C SEP ASSEMBLY (1/3)
(AWZ4240),(AWZ4243)

● AV I/O SECTION



□ : DC voltage (V) at color bar signal input.

Function control of connector A2

INP 0	INP 1	INP 2	FUNCTION
H	H	L	VIDEO 1
L	H	L	LD
L	L	H	TV

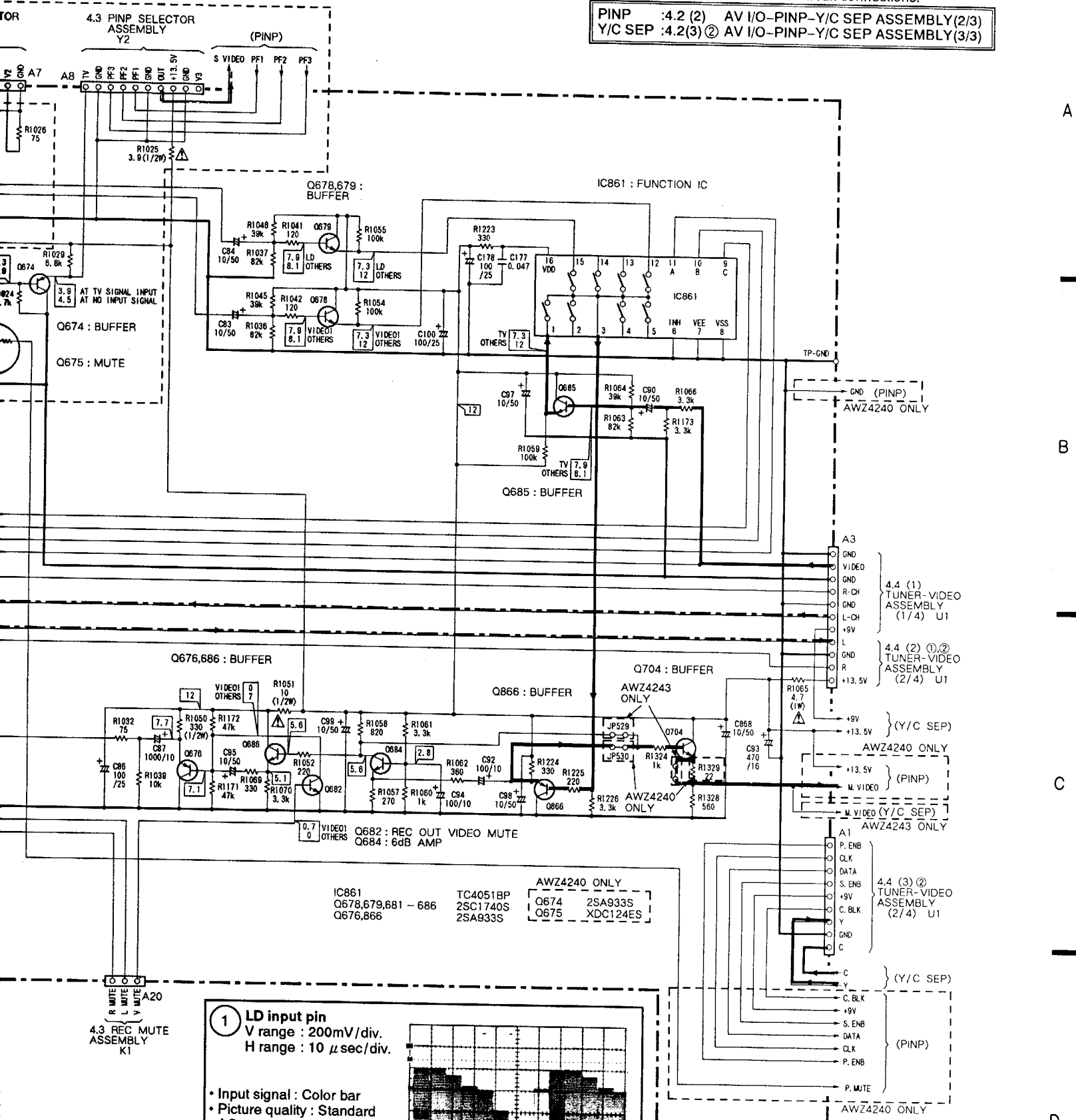
H:12V, L:0V

A2 5V STR RELAY INP 0 INP 1 INP 2 A.MUTE
 4.4 (4) ③ TUNER-VIDEO ASSEMBLY (4/4) U2
 A.MUTE INP 2 INP 1 INP 0 RELAY 5V STR GND
 4.3 REC MUTE ASSEMBLY K2

A
B
C
D

Note: Abbreviation listed indicate circuit connections.

PINP :4.2 (2) AV I/O-PINP-Y/C SEP ASSEMBLY(2/3)
 Y/C SEP :4.2(3) ② AV I/O-PINP-Y/C SEP ASSEMBLY(3/3)



① LD input pin
 V range : 200mV/div.
 H range : 10 μsec/div.

- Input signal : Color bar
- Picture quality : Standard
- AC range

(2) AV I/O-PINP-Y/C SEP ASSEMBLY (2/3 : PINP SECTION)

AV I/O-PINP-Y/C SEP ASSEMBLY (2/3) ● PINP SECTION (AWZ4182),(AWZ4195),(AWZ4240)

(AV I/O)

(Y/C SEP)

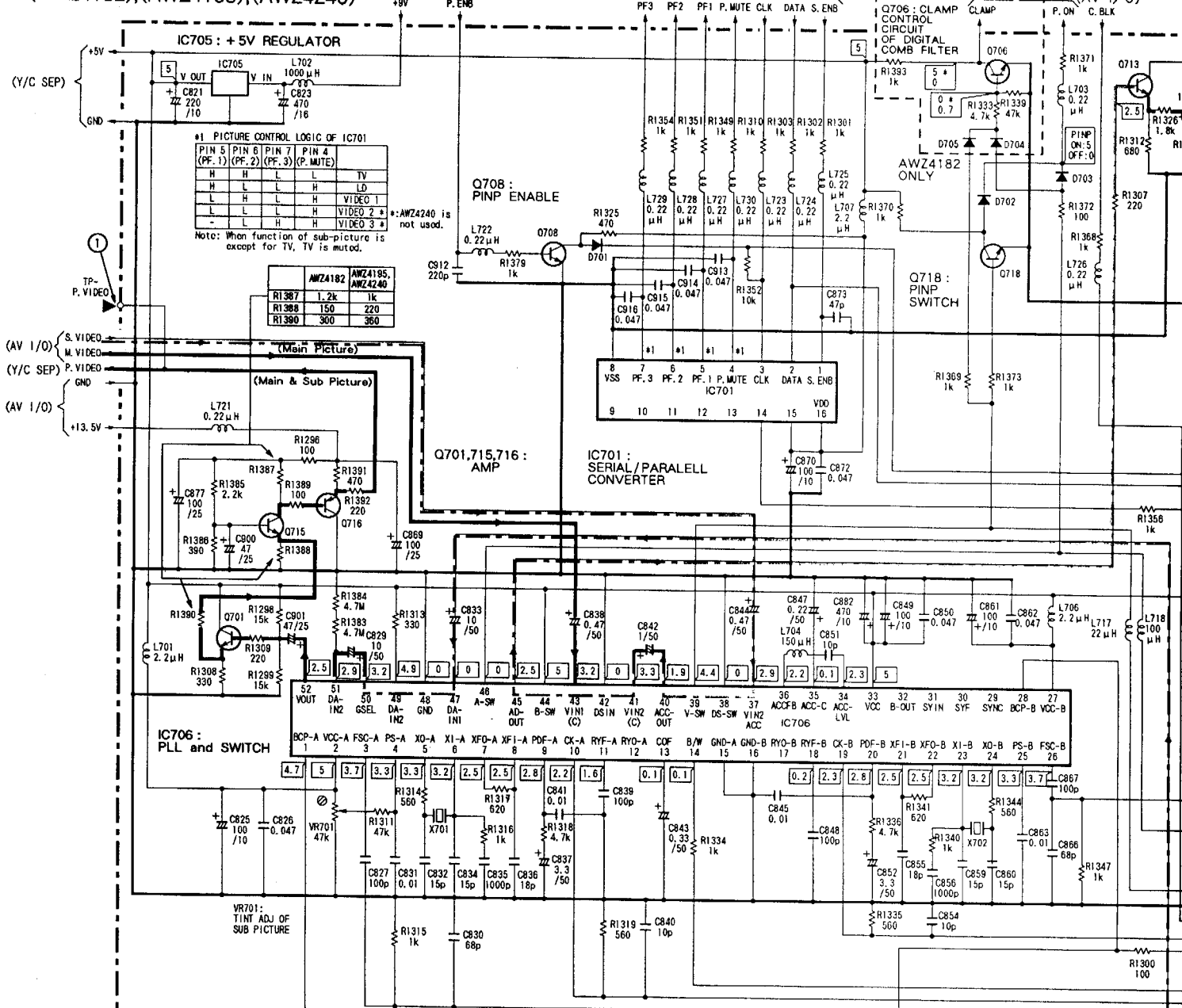
Note

A

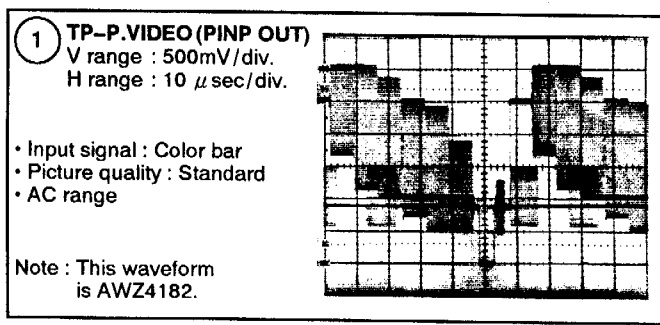
B

C

D



- | | | | |
|-----------------------|-------------|----------------|------------|
| IC701 | TC4094BP | D701 - 703 | 1SS252 |
| IC702 | MB40176PF | L701,705 - 713 | LAU2R2J |
| IC703 | MBB1C1501PF | L702 | ATH1046 |
| IC704 | MBB6153BPF | L703,721 - 730 | LAUR22M |
| IC705 | NJM78M05FAS | L704 | LAU151K |
| IC706 | MB3511P | L715 | LAU100K |
| Q701,702,708 - 710, | 2SC1740S | L717 | LAU220K |
| Q713 - 715,718 | | L718 | LAU101K |
| Q703,705,707,711,712, | 2SA933S | VR701 | VRTB6VS473 |
| Q716,717,719 | | X701,702 | ASS1056 |

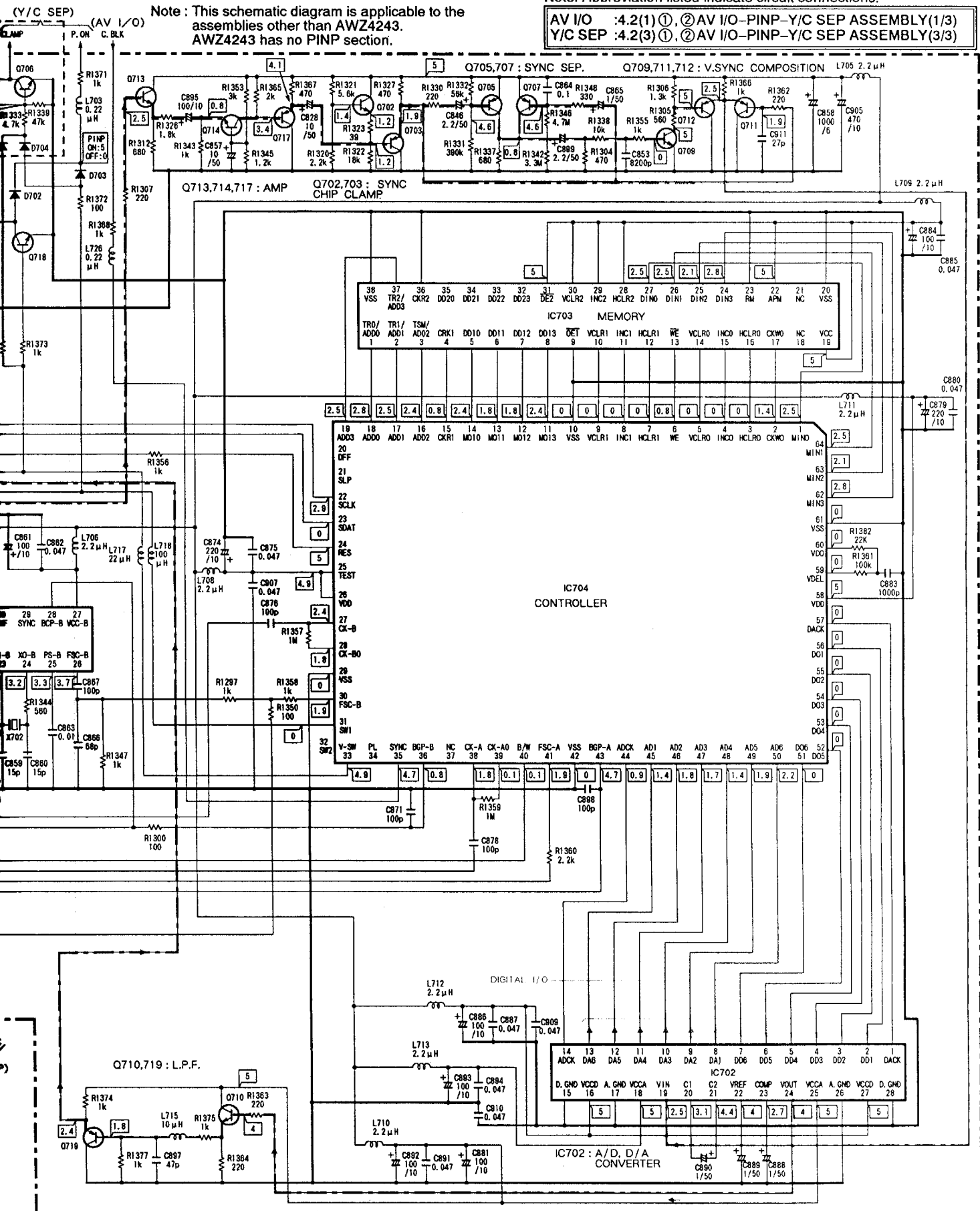


□ : DC voltage (V) at color bar signal input.
Voltage of * marked is at STILL or MULTI ON of PINP.

Note: This schematic diagram is applicable to the assemblies other than AWZ4243. AWZ4243 has no PINP section.

Note: Abbreviation listed indicate circuit connections.

AV I/O : 4.2(1) ①, ② AV I/O-PINP-Y/C SEP ASSEMBLY(1/3)
 Y/C SEP : 4.2(3) ①, ② AV I/O-PINP-Y/C SEP ASSEMBLY(3/3)

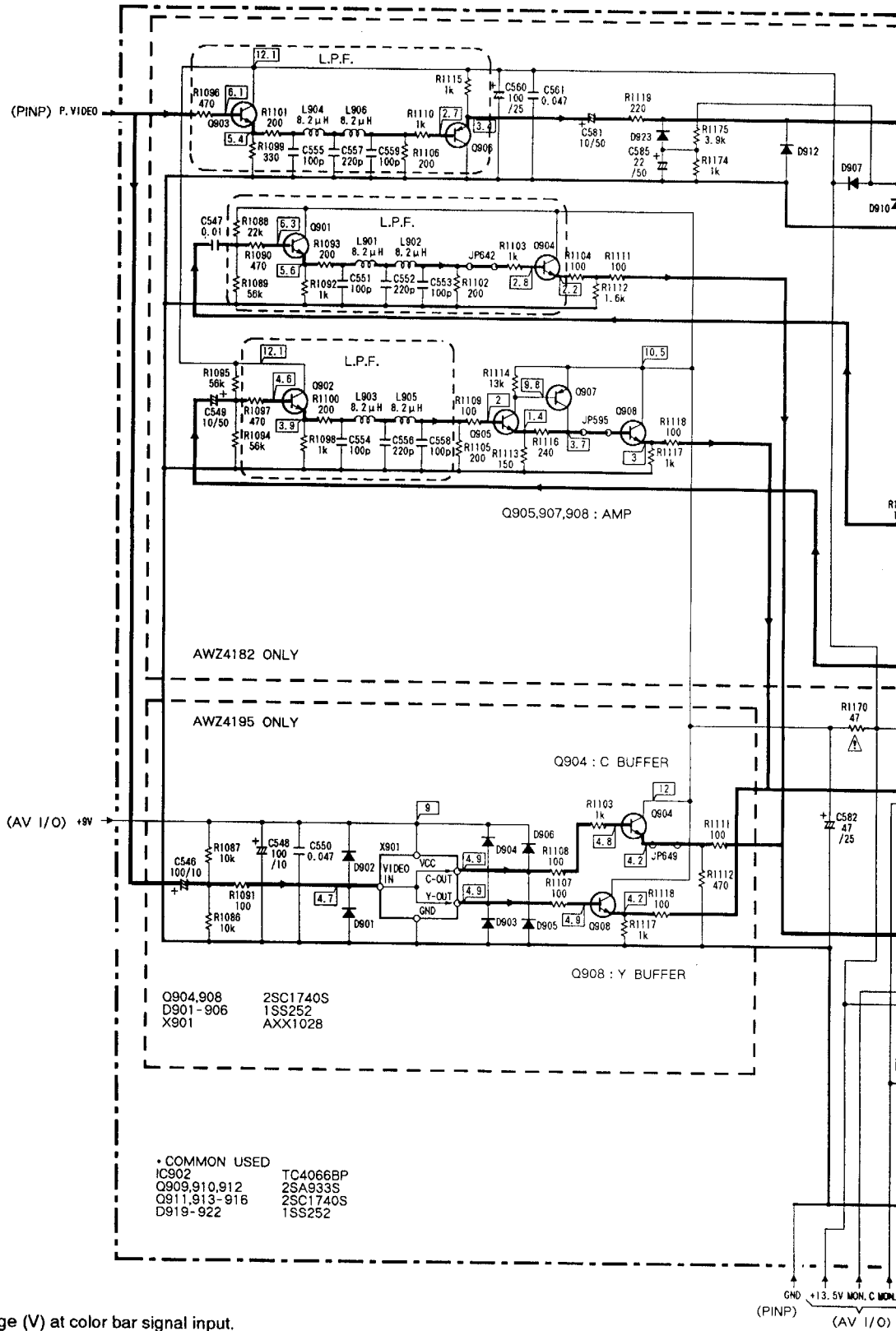


input.
or MULTI ON of PINP.

(3) AV I/O-PINP-Y/C SEP ASSEMBLY (3/3 : Y/C SEP SECTION)

① AWZ4182 and AWZ4195

AV I/O-PINP-Y/C SEP ASSEMBLY (3/3) (AWZ4182), (AWZ4195) ● Y/C SEP SECTION

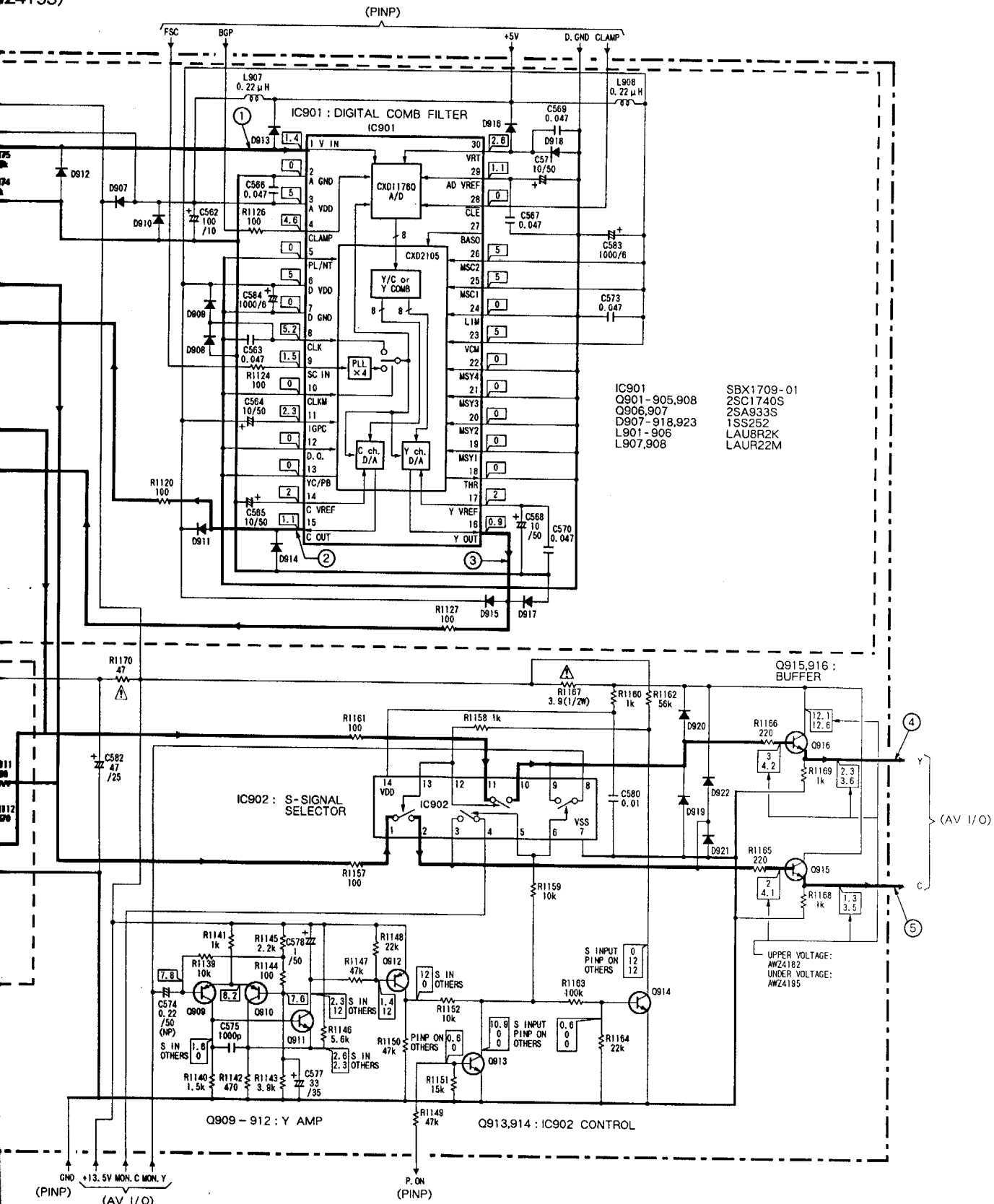


Note: Abbreviation listed indicate circuit connections.

AV I/O : 4.2(1) AV I/O-PINP-Y/C SEP ASSEMBLY(1/3)
PINP : 4.2(2) AV I/O-PINP-Y/C SEP ASSEMBLY(2/3)

ON)

Z4195)



(3) TUNER-VIDEO ASSEMBLY (3/4 : VIDEO SECTION) AND VIDEO INPUT ASSEMBLY

① TUNER-VIDEO ASSEMBLY (AWV1246 and AWV1252) and VIDEO INPUT ASSEMBLY (AWZ4183 and AWZ4520)

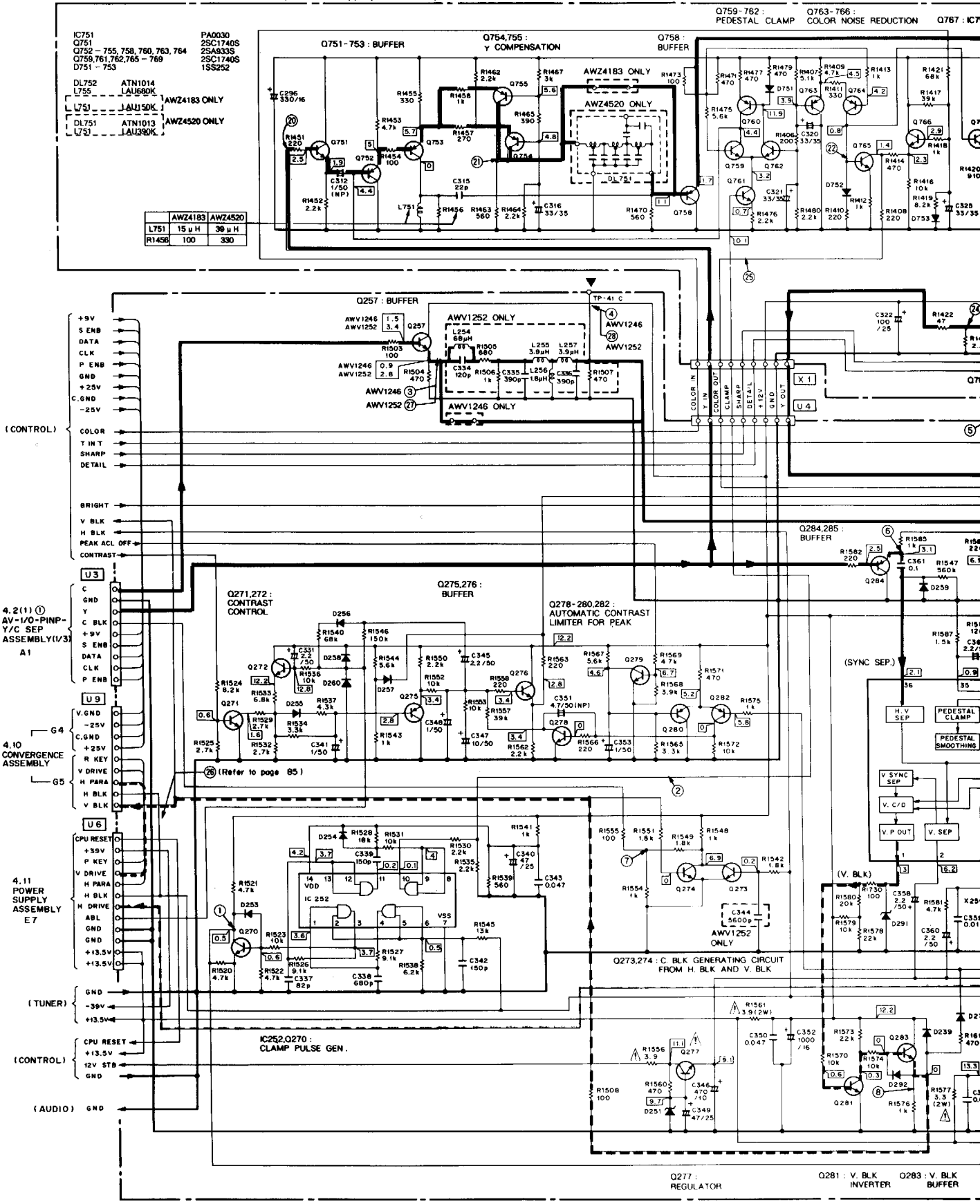
VIDEO INPUT ASSEMBLY (AWZ4183), (AWZ4520)

A

B

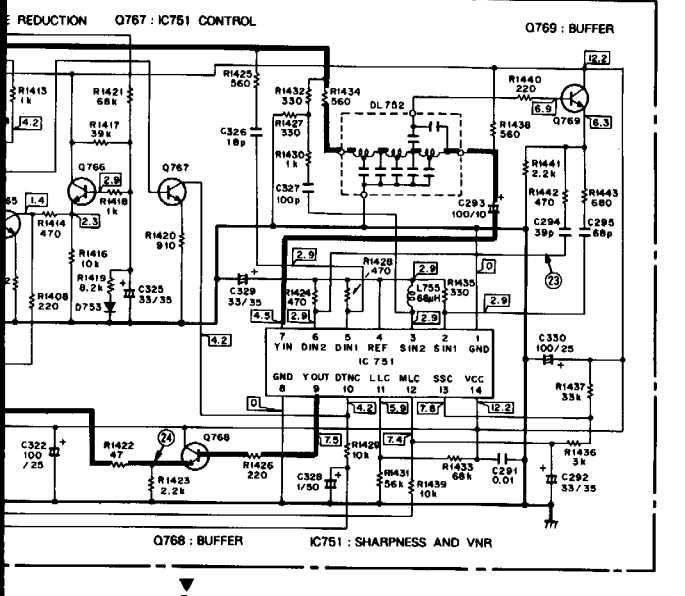
C

D

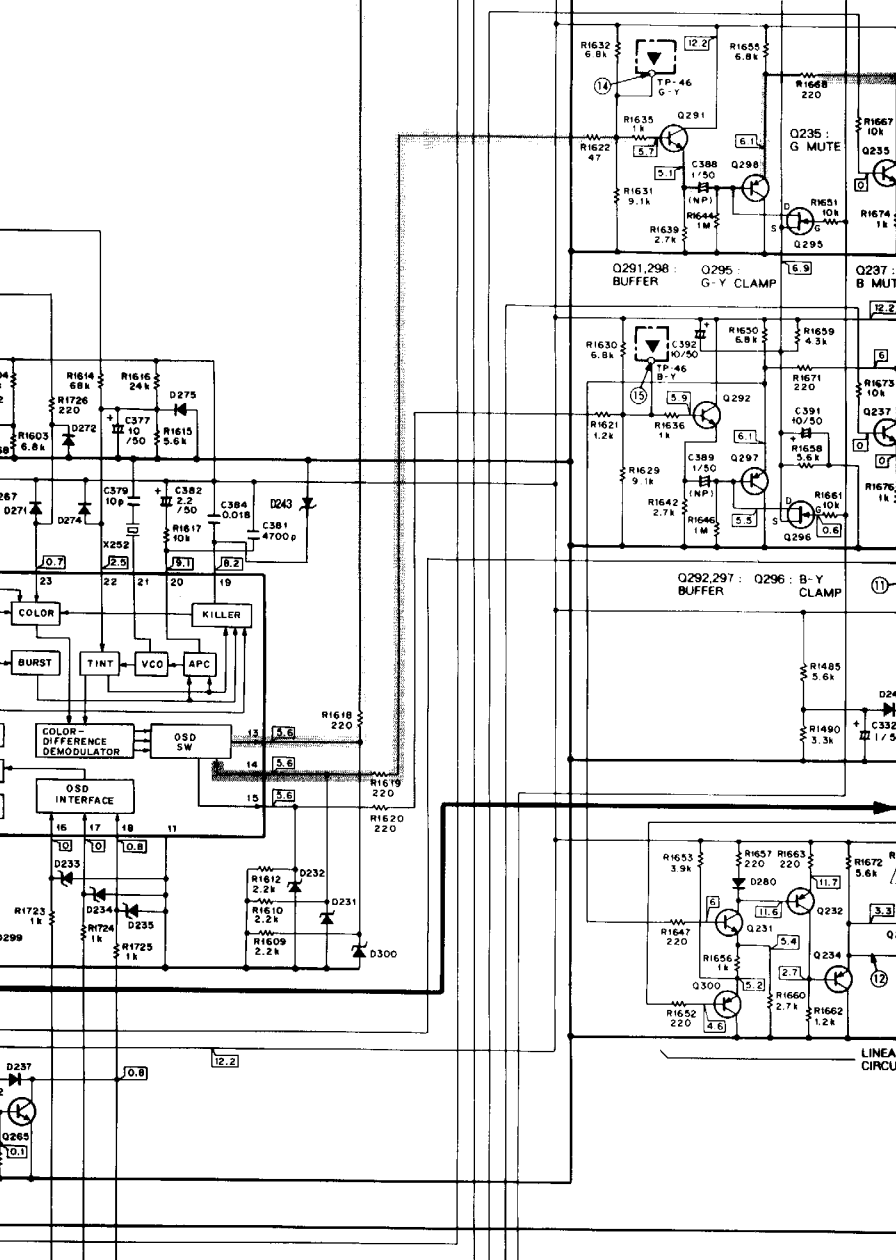
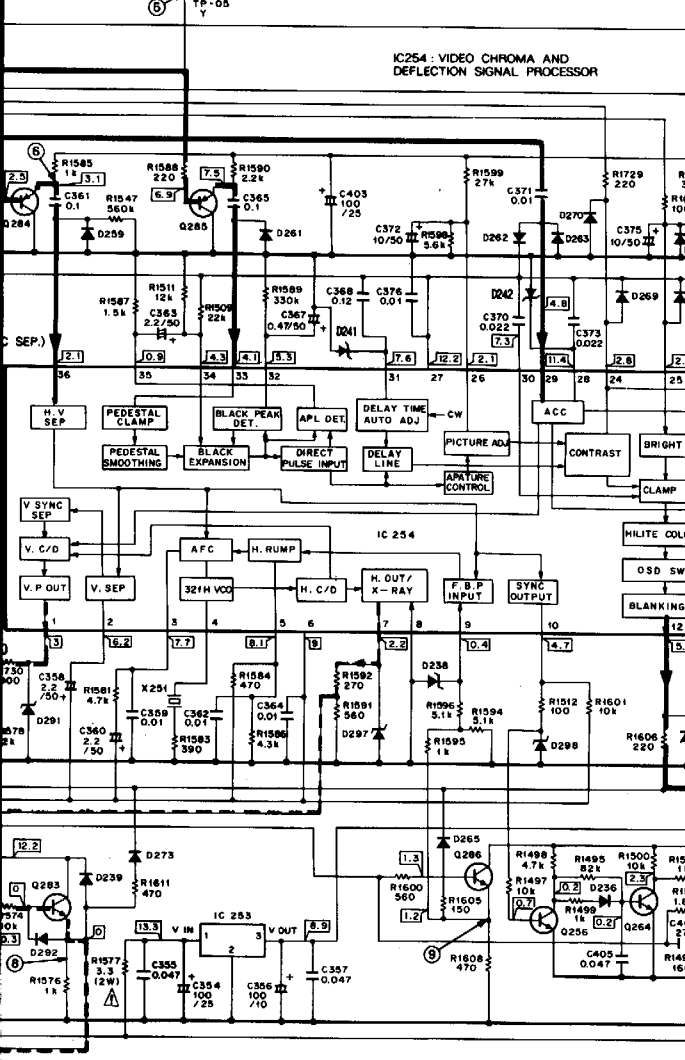


□ : DC voltage (V) at no input signal.

TUNER-VIDEO ASSEMBLY (3/4) (AWV1246), (AWV1252)
● VIDEO SECTION



- IC252
- IC253
- IC254
- Q231, 235-237, 243-245, 247, 250, 251, 256, 257, 264, 265, Q270-274, 276-279, 281, 283, Q286, 289, 291-294, Q292-294, 298-242, 246, 248, D249, 275, 280, 282, 284, 285, Q288, 290, 297, 298, 300, Q295, 296, 299, Q299, 235, D236, 237, 239, 240, 253-258, D260-263, 265, 267-275, D278-281, 288-290, 292, 299, D238, 259, 291, 297, 298, 300, D251, D282-287
- MC14011BCP
- NUM7809FAS
- TAB801AN
- ZSC1740S
- 2SA933S
- 2SK246
- RD15ESB
- 1S5252
- RD15ESB
- HZS11A1L
- 11E2
- L260-262
- LAU4R7K
- VR251
- ACP1037
- VR252
- ACP1038
- VR253
- ACP1042
- X251
- ASS1019
- X252
- ASS1020
- L254
- LAU680K
- L255, 257
- LAU39K
- L256
- LAU198M
- AWV1252 ONLY
- D241-243
- RD15ESB

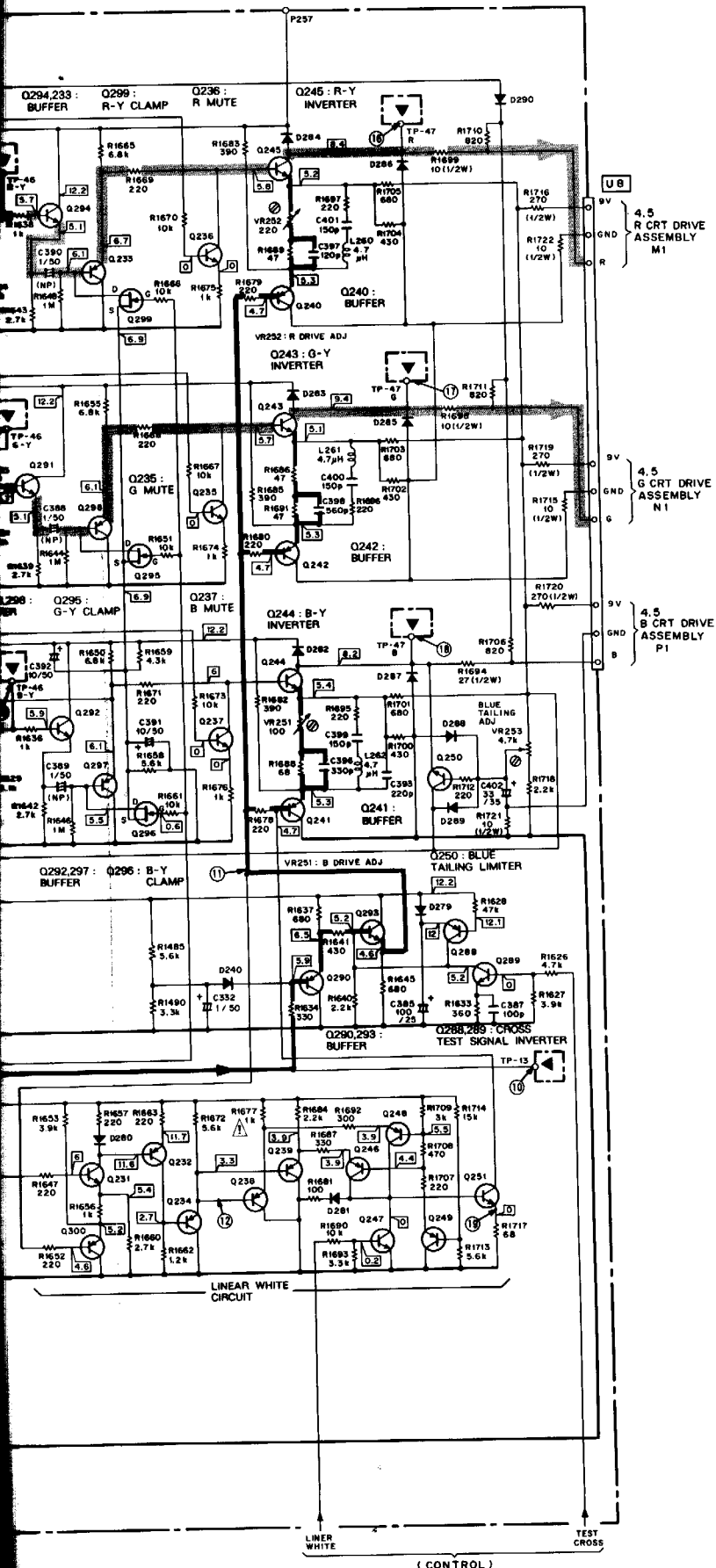


Q283: V. BLK BUFFER
IC253: REGULATOR
Q296: BUFFER
Q256, 264, 265: MUTE FOR NO SIGNAL

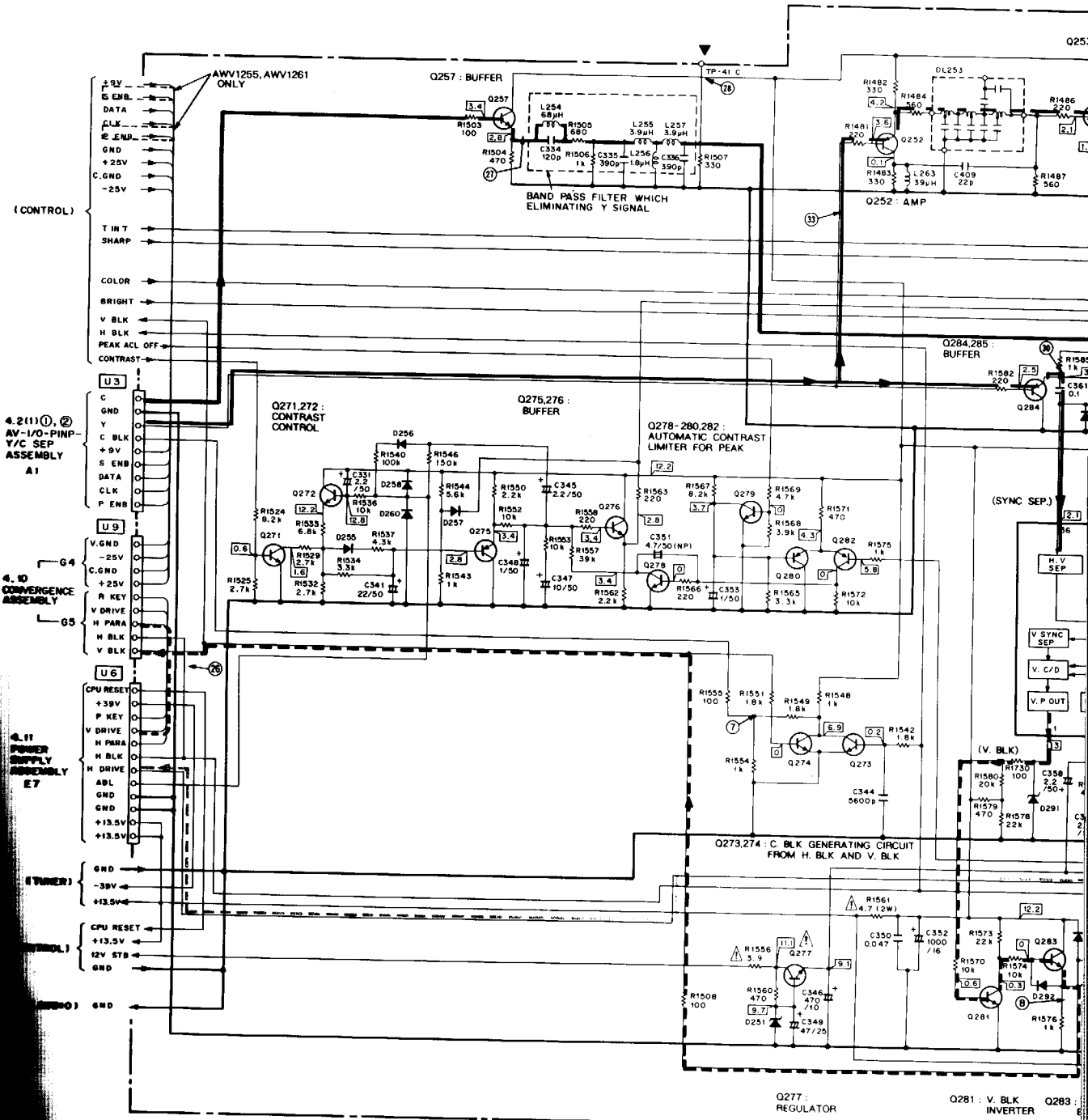
OSD RED
OSD GREEN
OSD BLUE
(CONTROL)
R-Y OFF
G-Y OFF
B-Y OFF
(CONTROL)

Note: Abbreviation listed indicate circuit connections.

TUNER : 4.4 (1) TUNER-VIDEO ASSEMBLY(1/4)
 AUDIO : 4.4 (2) ① TUNER-VIDEO ASSEMBLY(2/4)
 CONTROL: 4.4 (4) ① TUNER-VIDEO ASSEMBLY(4/4)



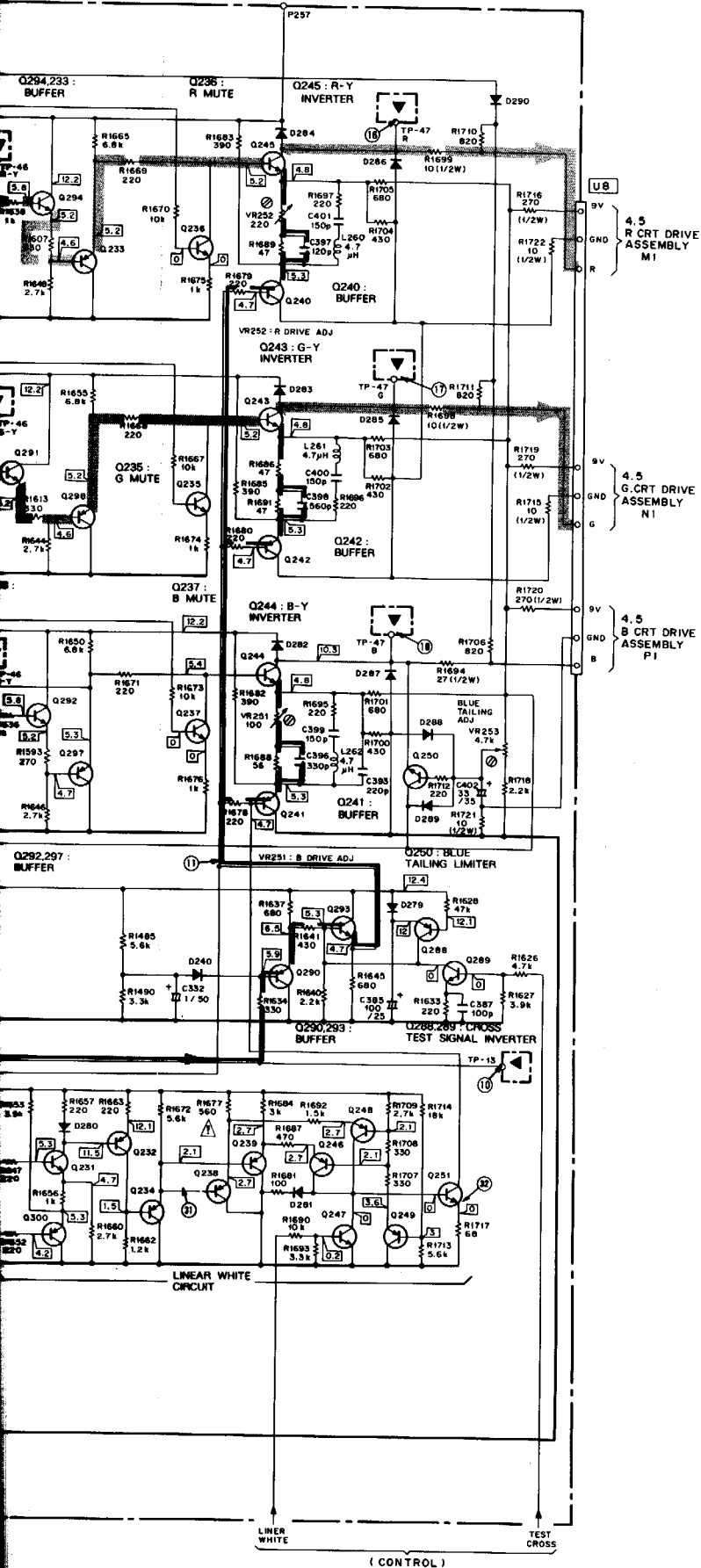
② TUNER-VIDEO ASSEMBLY (AWV1255, AWV1261 and AWV1265)



□ : DC voltage (V) at no input signal.

Note: Abbreviation listed indicate circuit connections.

TUNER	: 4.4 (1)	TUNER-VIDEO ASSEMBLY(1/4)
AUDIO	: 4.4 (2), (3)	TUNER-VIDEO ASSEMBLY(2/4)
CONTROL	: 4.4 (4), (2), (3)	TUNER-VIDEO ASSEMBLY(4/4)



A
B
C
D

(4) TUNER-VIDEO ASSEMBLY (4/4 : CONTROL SECTION)

① AWW1246 and AWW1252

TUNER-VIDEO ASSEMBLY (4/4) (AWV1246),(AWV1252)

● CONTROL SECTION

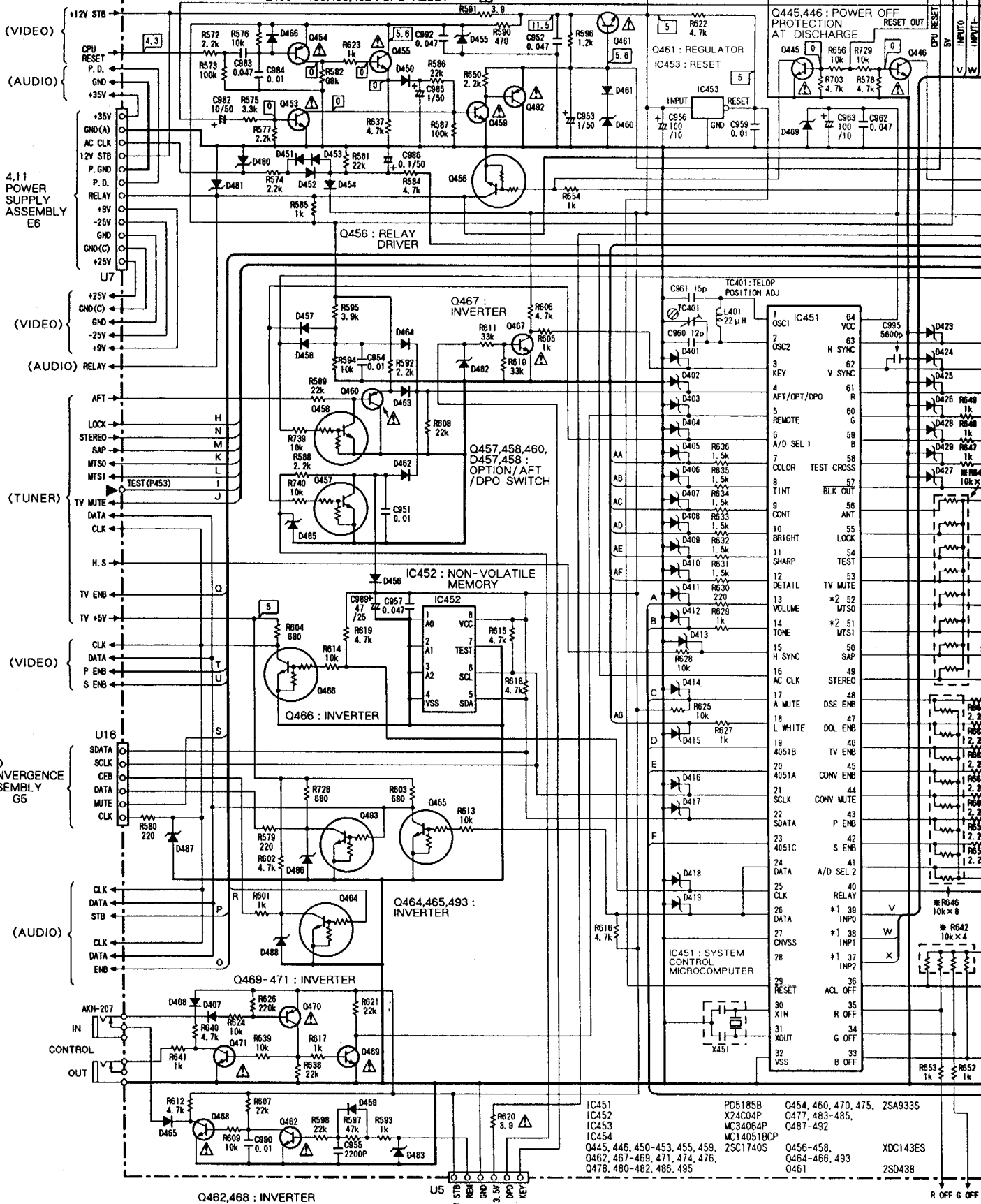
4.6 MICROCOMPUTER ASSEMBLY L2

A

B

C

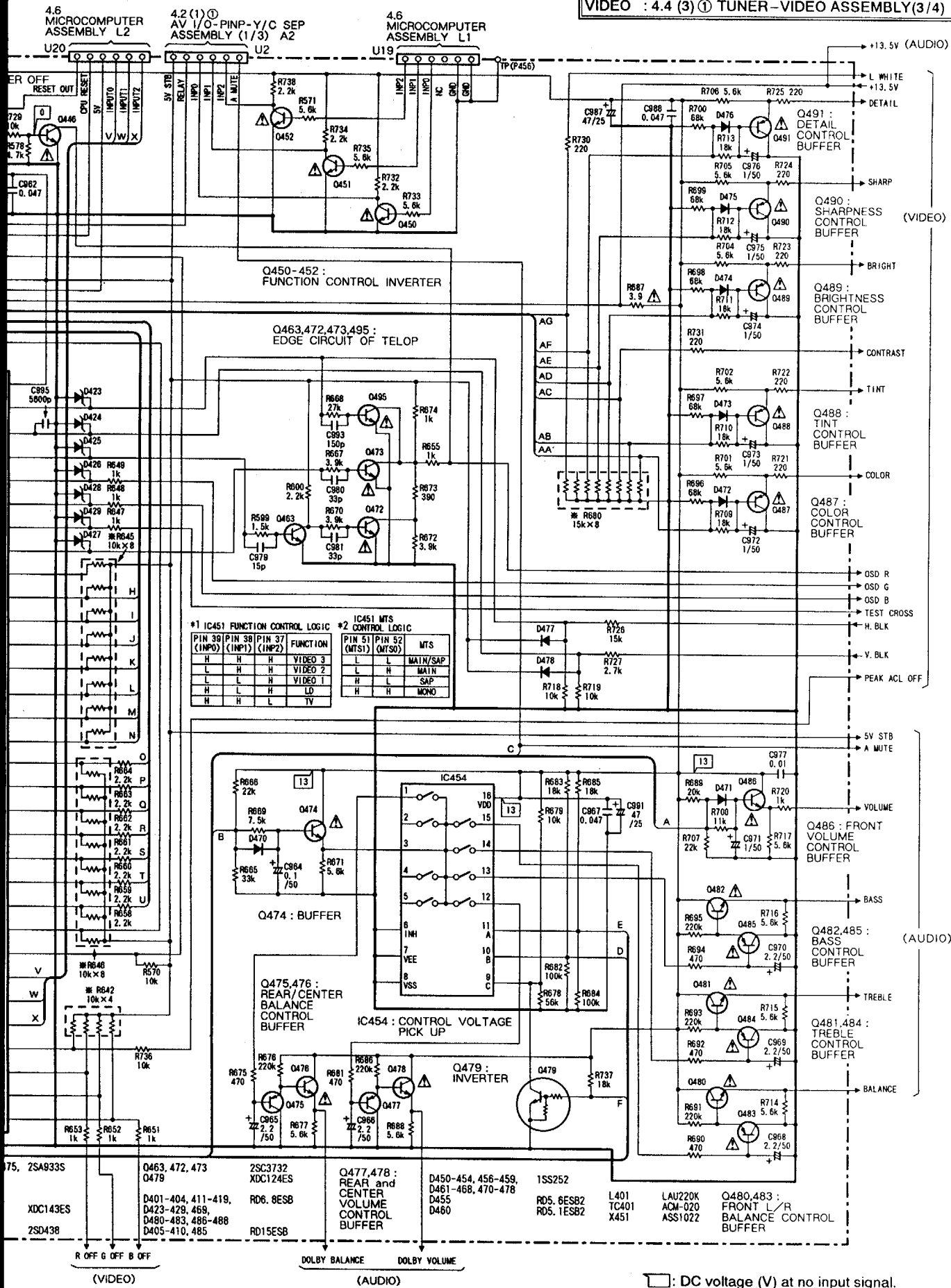
D



4.7 (1) W FRONT CONTROL ASSEMBLY B1 and B2

Note: Abbreviation listed indicate circuit connections.

TUNER : 4.4 (1) TUNER-VIDEO ASSEMBLY(1/4)
 AUDIO : 4.4 (2) ① TUNER-VIDEO ASSEMBLY(2/4)
 VIDEO : 4.4 (3) ① TUNER-VIDEO ASSEMBLY(3/4)



#1 IC451 FUNCTION CONTROL LOGIC

PIN 39 (INP0)	PIN 38 (INP1)	PIN 37 (INP2)	FUNCTION
H	H	H	VIDEO 3
L	H	H	VIDEO 2
L	L	H	VIDEO 1
H	L	L	LD
H	H	L	TV

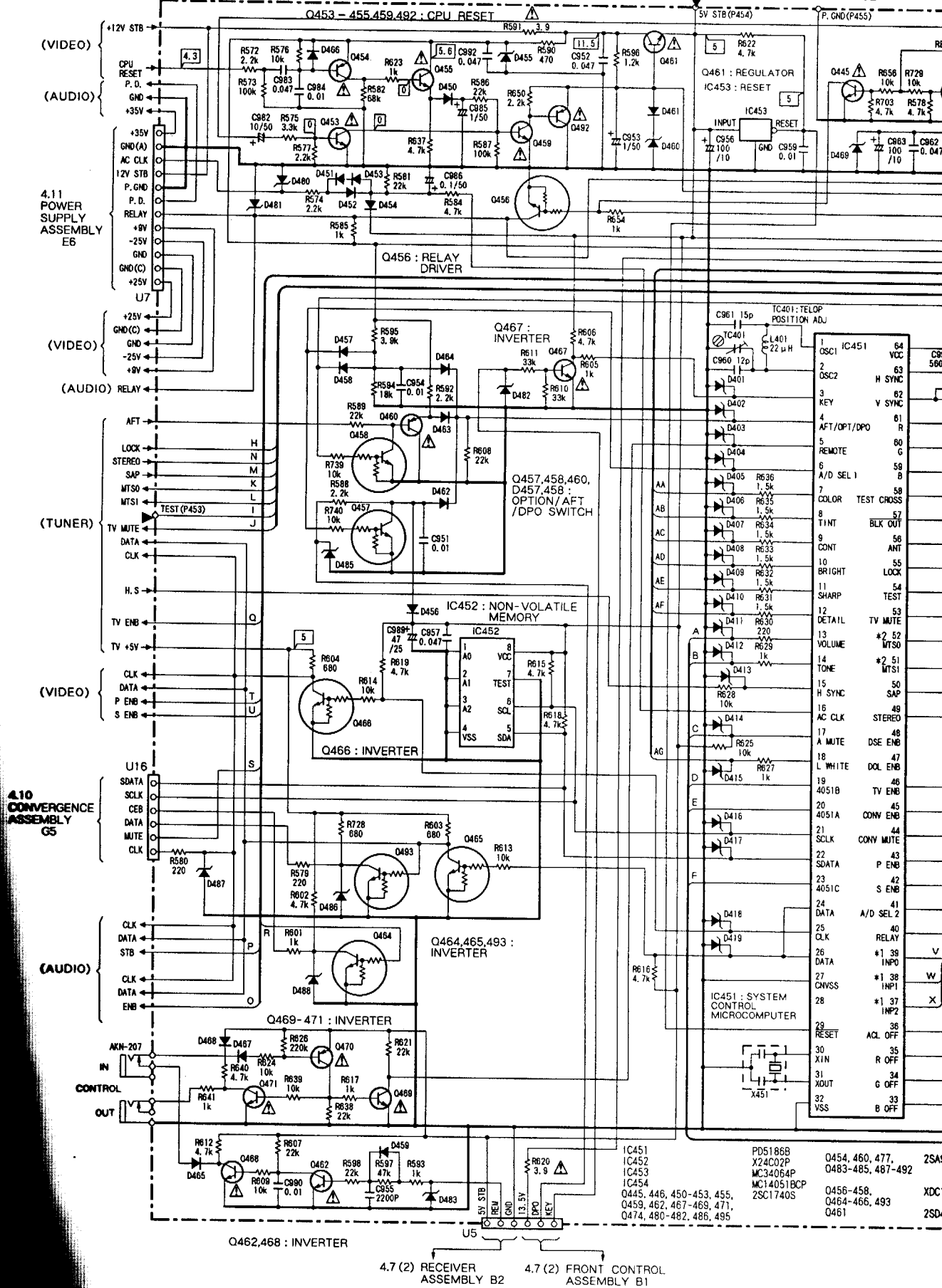
#2 IC451 MTS CONTROL LOGIC

PIN 51 (MTS1)	PIN 52 (MTS0)	MTS
L	L	MAIN/SAP
L	H	MAIN
H	L	SAP
H	H	MONO

□: DC voltage (V) at no input signal.

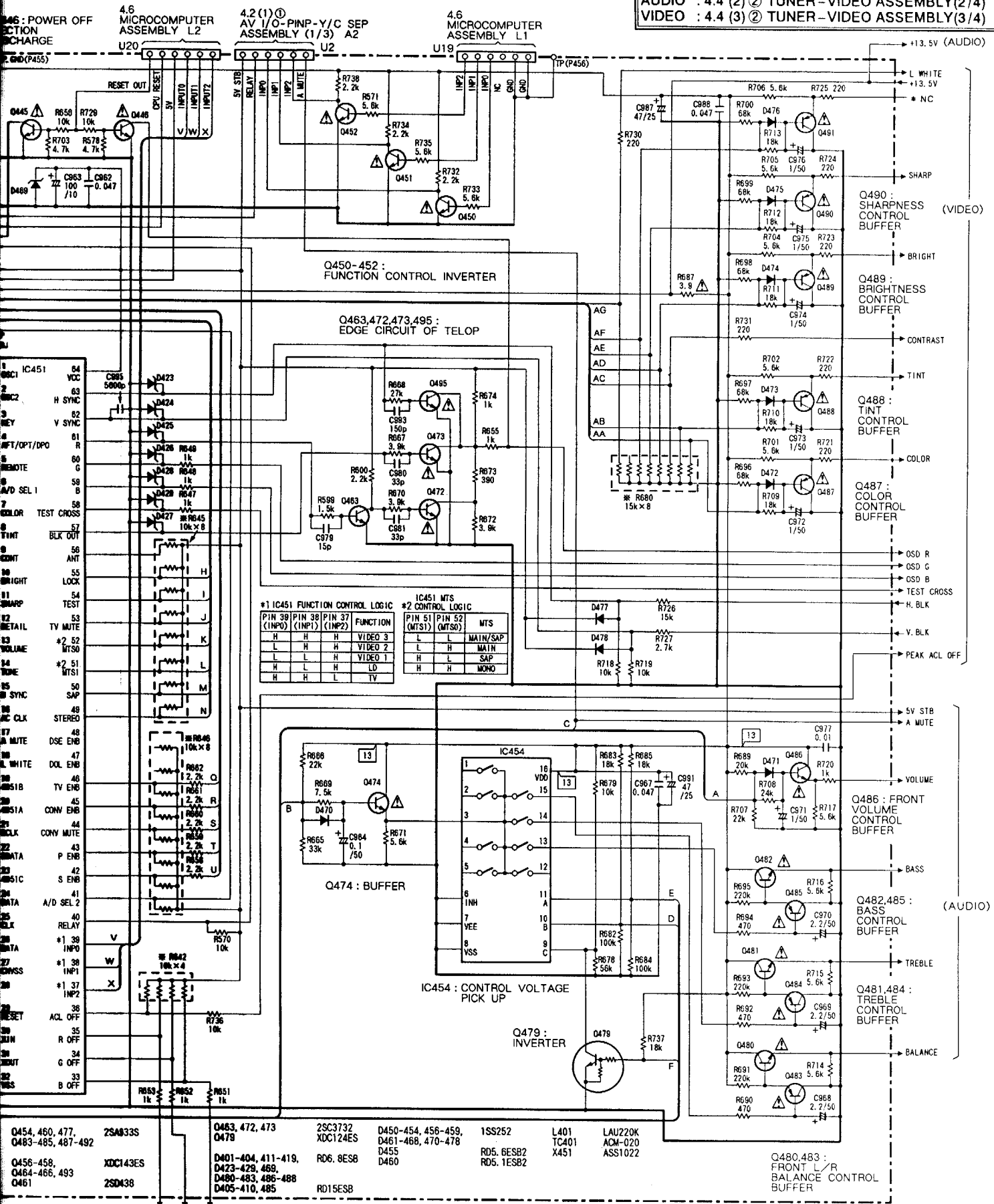
TUNER-VIDEO ASSEMBLY (4/4) (AWW1255)
● CONTROL SECTION

Q445,446 : POWER OFF PROTECTION AT DISCHARGE
P. GND (P455)



Note: Abbreviation listed indicate circuit connections.

TUNER : 4.4 (1) TUNER-VIDEO ASSEMBLY(1/4)
 AUDIO : 4.4 (2) ② TUNER-VIDEO ASSEMBLY(2/4)
 VIDEO : 4.4 (3) ② TUNER-VIDEO ASSEMBLY(3/4)



R OFF G OFF B OFF
 (VIDEO)

□ DC voltage (V) at no input signal.

* NC : Non connection

Q454, 460, 477, 483-485, 487-492
 2SA833S

Q456-458, 464-466, 493, 461
 XDC143ES
 2SD438

Q463, 472, 473, 479
 2SC3732
 XDC124ES

D450-454, 456-459, 461-466, 470-478, 455, 460
 RD6, 8ESB
 D460
 RD15ESB

1SS252
 RD5, 6ESB2
 RD5, 1ESB2

L401
 TC401
 X451

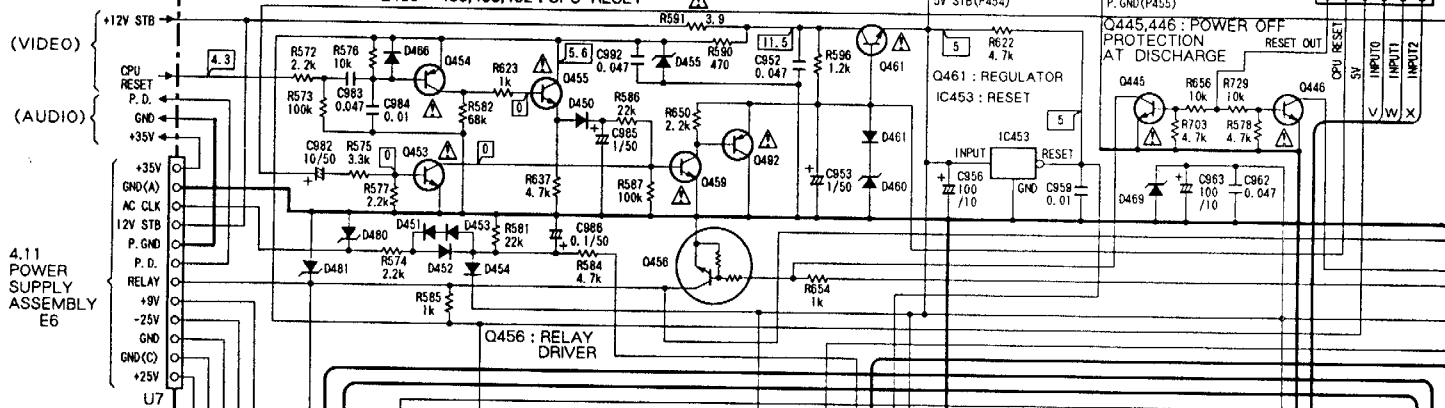
LAU220K
 ACM-020
 ASS1022

Q480,483 : FRONT L/R BALANCE CONTROL BUFFER

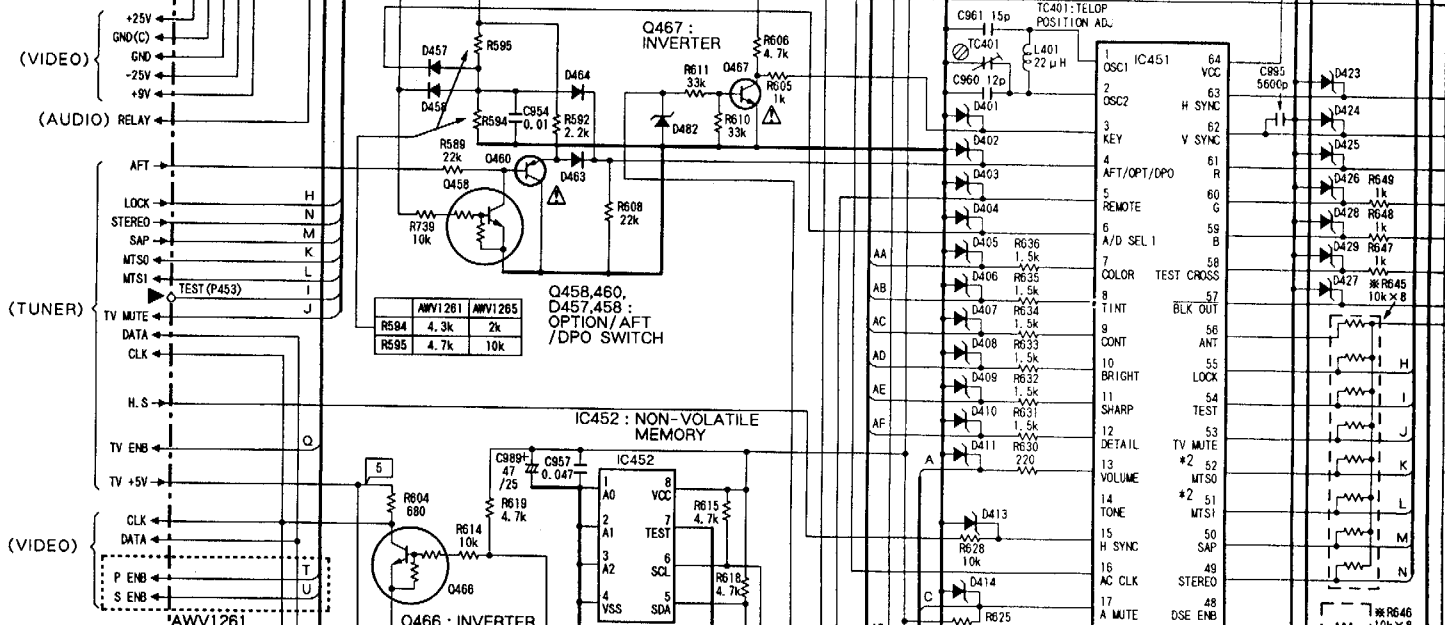
TUNER-VIDEO ASSEMBLY (4/4) (AWV1261),(AWV1265)
● CONTROL SECTION

4.6 MICROCOMPUTER ASSEMBLY L2

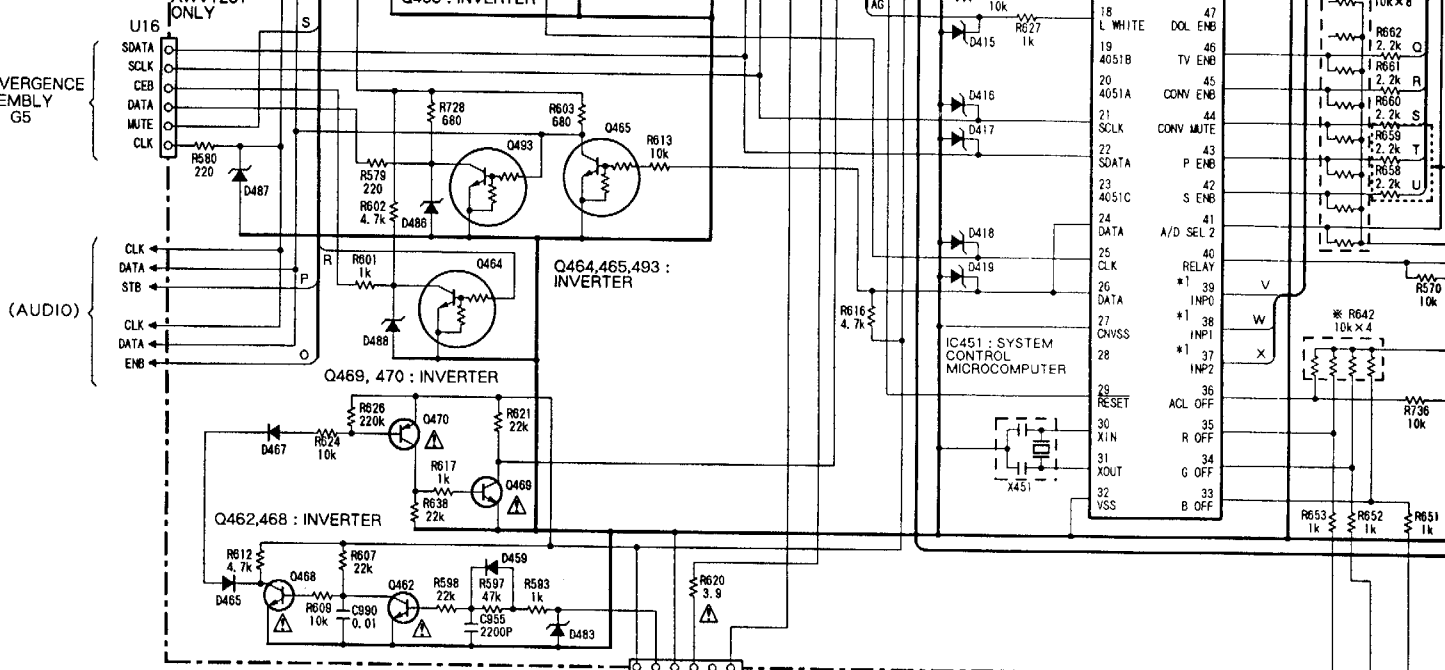
A



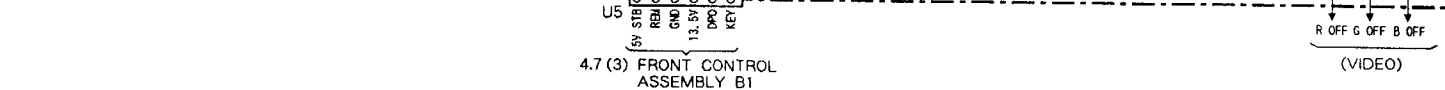
B



C

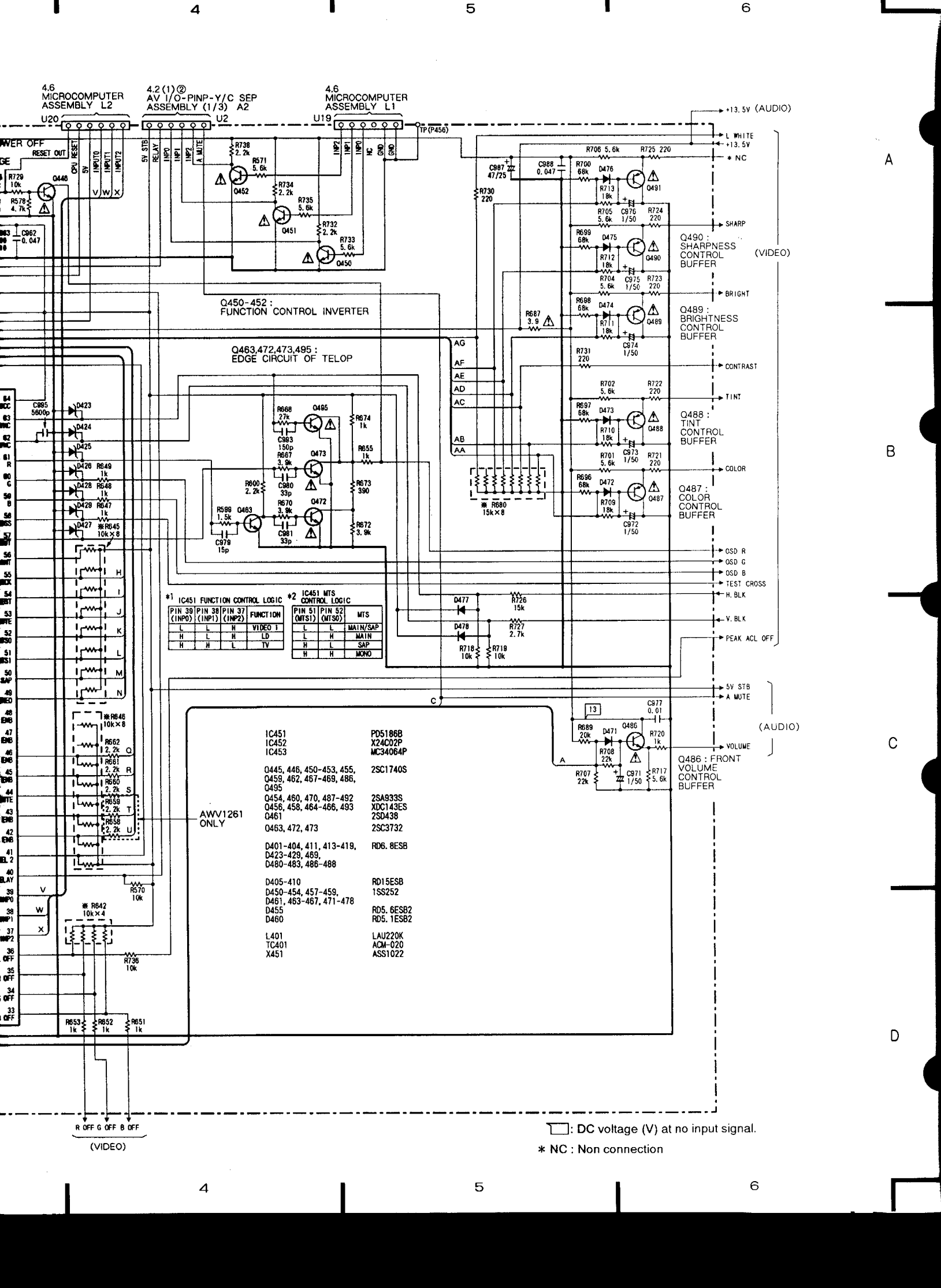


D



4.7 (3) FRONT CONTROL ASSEMBLY B1

(VIDEO)



4.6 MICROCOMPUTER ASSEMBLY L2
 4.2(1) AV I/O-PINP-Y/C SEP ASSEMBLY (1/3) A2
 4.6 MICROCOMPUTER ASSEMBLY L1

Q450-452 : FUNCTION CONTROL INVERTER

Q463,472,473,495 : EDGE CIRCUIT OF TELOP

#1 IC451 FUNCTION CONTROL LOGIC

PIN 39 (INP0)	PIN 38 (INP1)	PIN 37 (INP2)	FUNCTION
L	L	H	VIDEO 1
H	L	H	LD
H	H	L	TV

#2 IC451 MTS CONTROL LOGIC

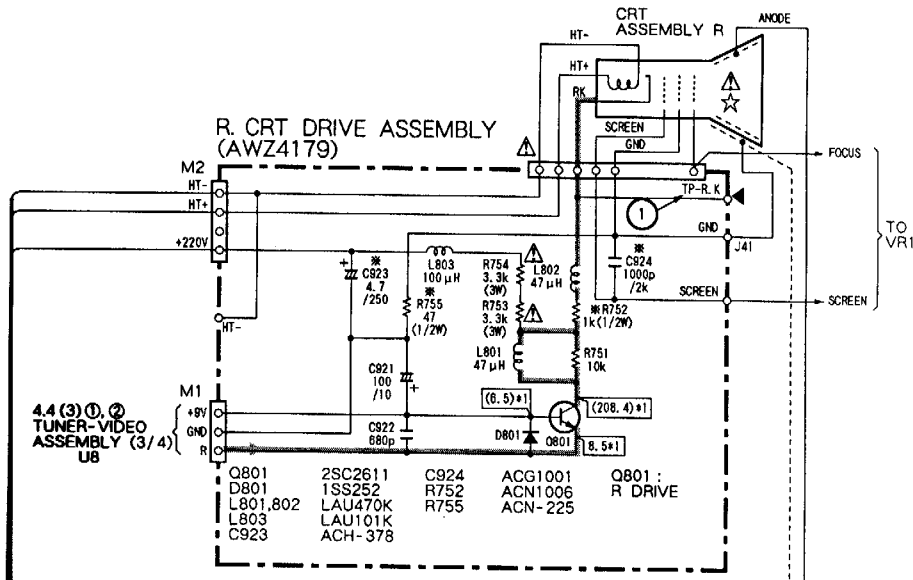
PIN 51 (MIS1)	PIN 52 (MIS0)	MTS
L	L	MAIN/SAP
L	H	MAIN
H	L	SAP
H	H	MONO

- AWV1261 ONLY
- | | |
|--|-----------|
| IC451 | PD5186B |
| IC452 | X24C02P |
| IC453 | MC34064P |
| Q445, 446, 450-453, 455, 459, 462, 467-469, 486, 495 | 2SC1740S |
| Q454, 460, 470, 487-492 | 2SA933S |
| Q456, 458, 464-466, 493 | XDC143ES |
| Q461 | 2SD438 |
| Q463, 472, 473 | 2SC3732 |
| D401-404, 411, 413-419, D423-429, 469, D480-483, 486-488 | RD6.8ESB |
| D405-410 | RD15ESB |
| D450-454, 457-459, D461, 463-467, 471-478 | 1SS252 |
| D455 | RD5.6ESB2 |
| D460 | RD5.1ESB2 |
| L401 | LAU220K |
| TC401 | ACM-020 |
| X451 | ASS1022 |

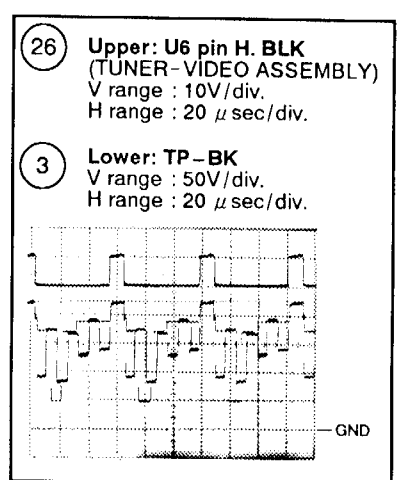
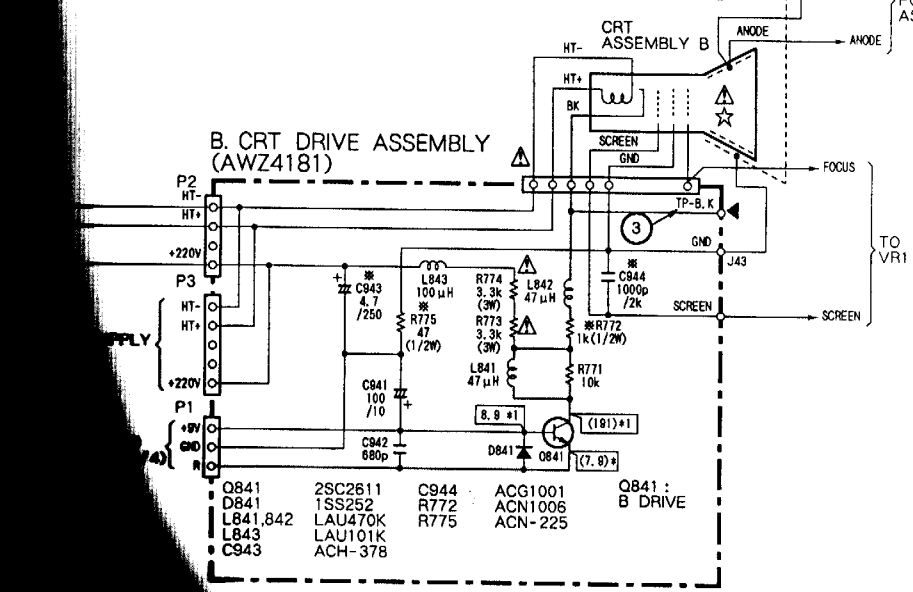
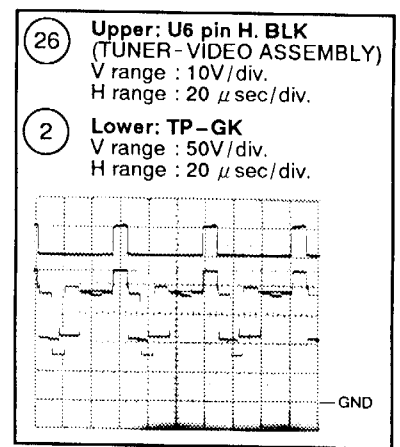
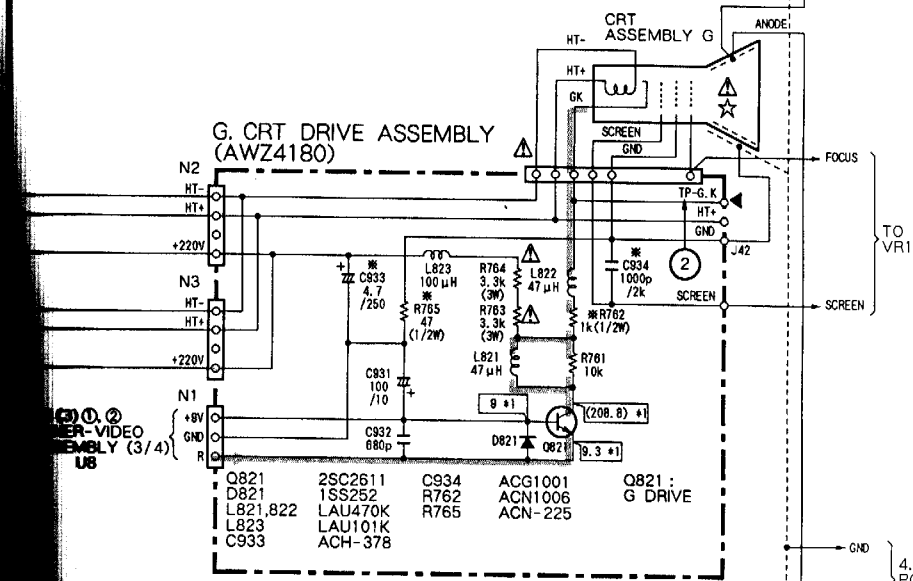
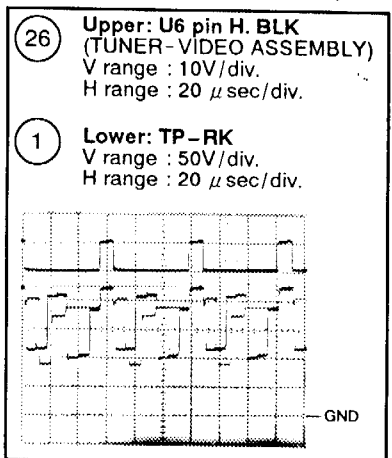
□ : DC voltage (V) at no input signal.

* NC : Non connection

NOTE : For the part number of the CRT assembly R, G and B, refer to the section 8.2.

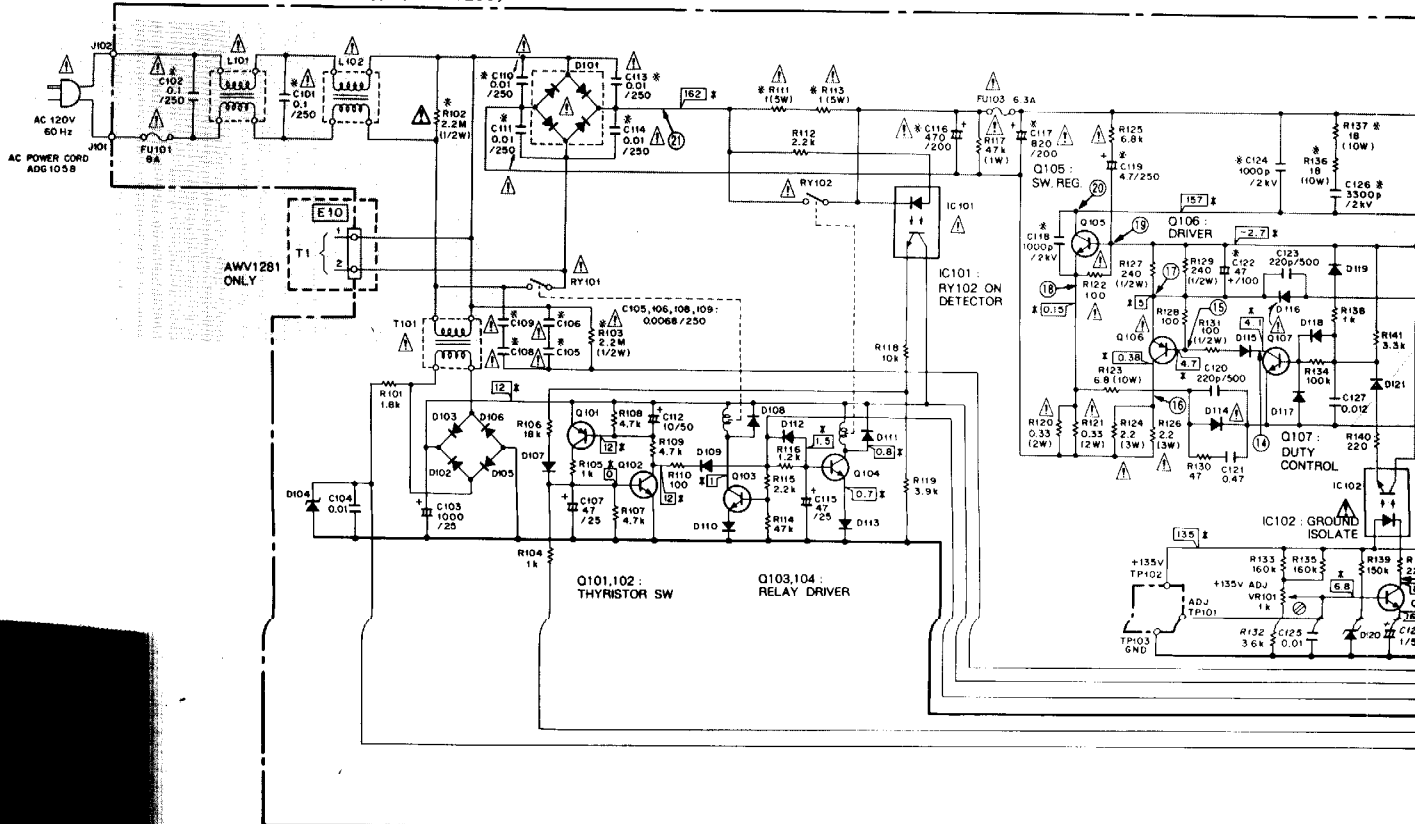


- Waveforms
- Input signal : Color bar
- Picture quality : standard
- Range : DC range (without notice)



measured with the digital voltmeter at no AC mode.

☆ POWER SUPPLY ASSEMBLY
(AWV1281), (AWV1289), (AWV1290)

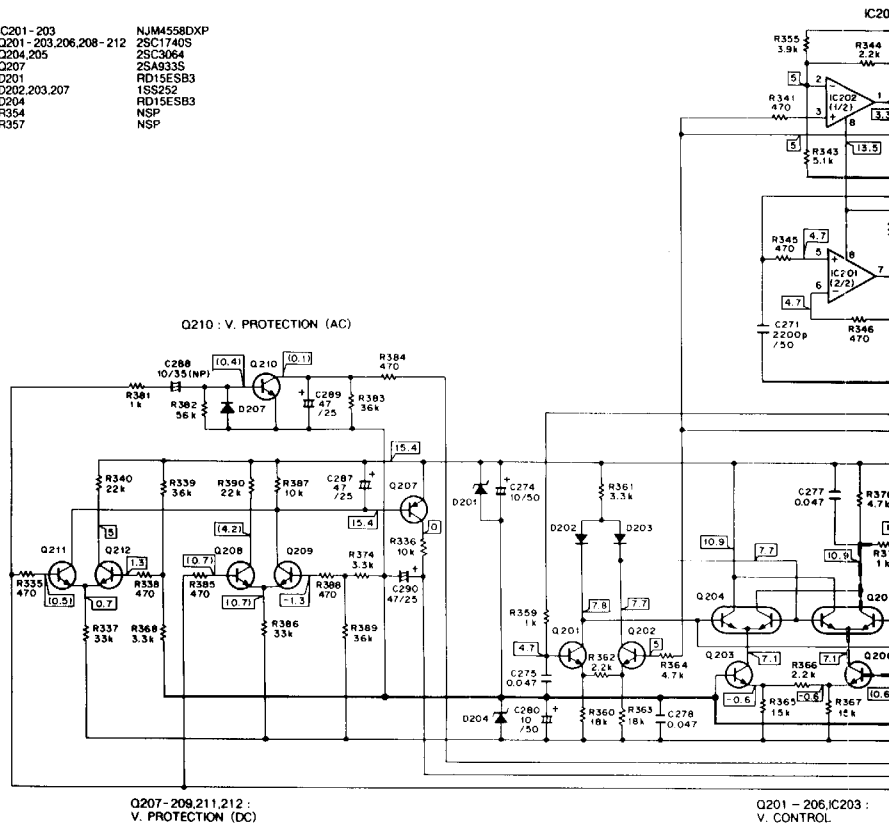


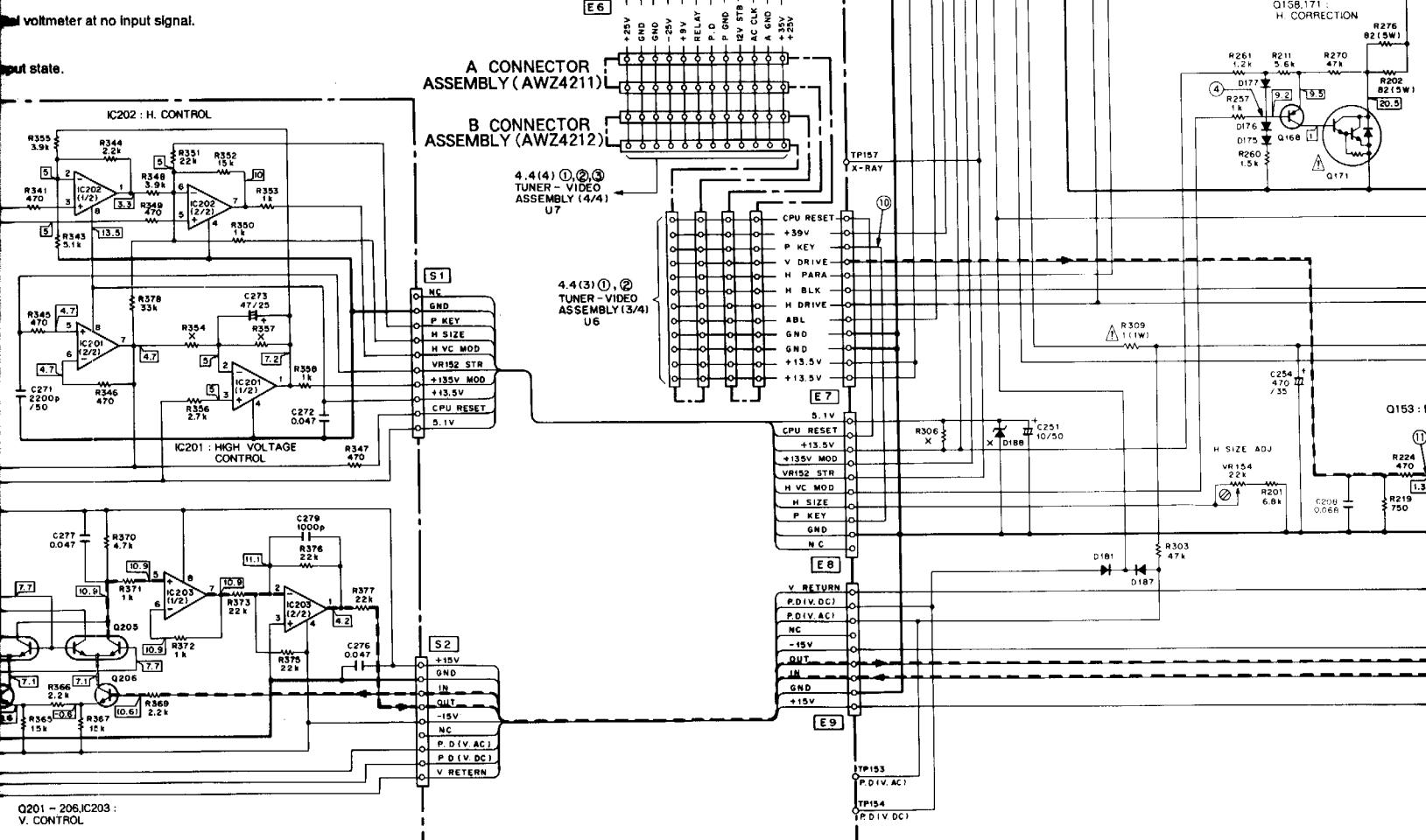
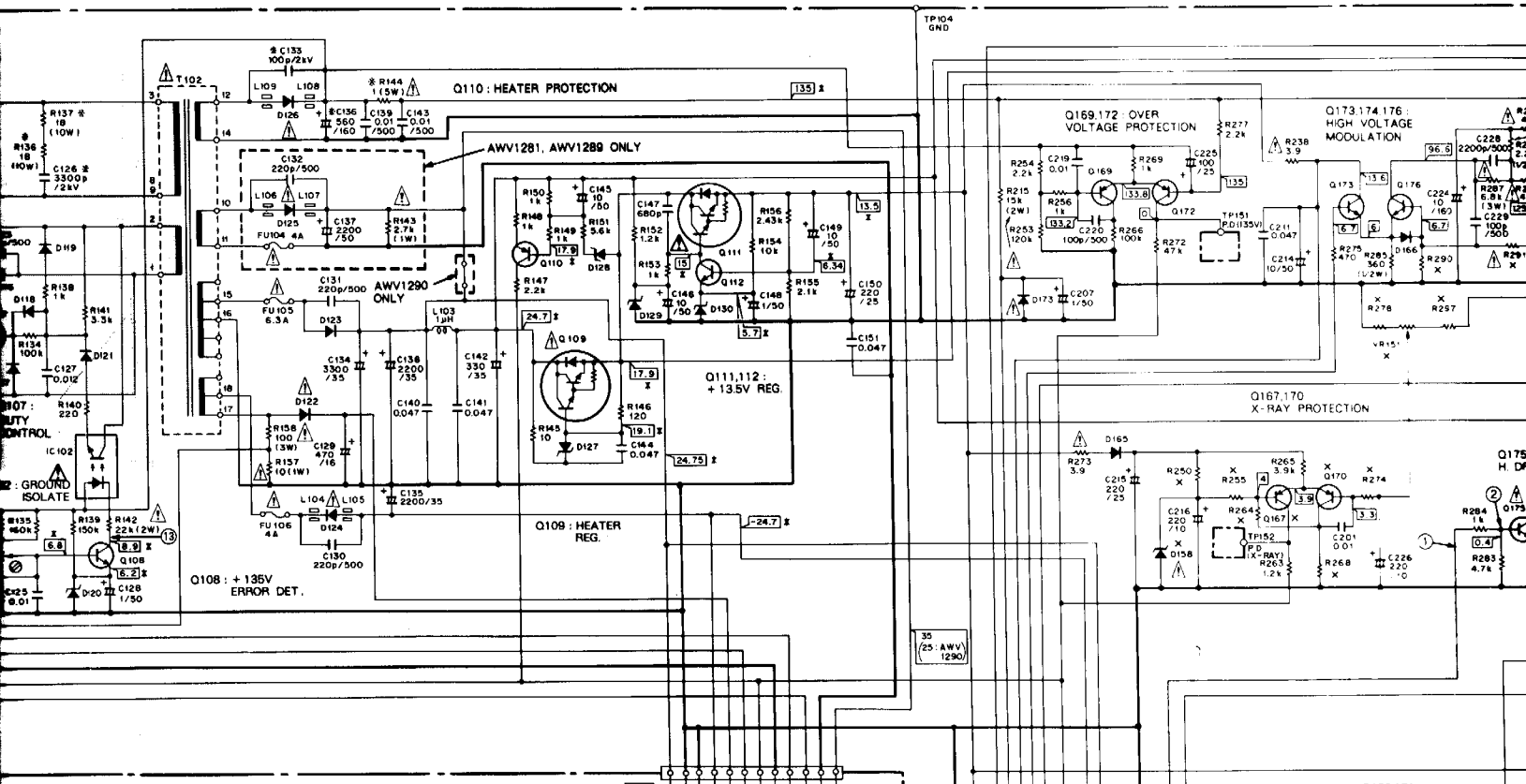
□ : DC voltage (V) is measured with digital voltmeter at no load.
Value in () is DC + AC mode.

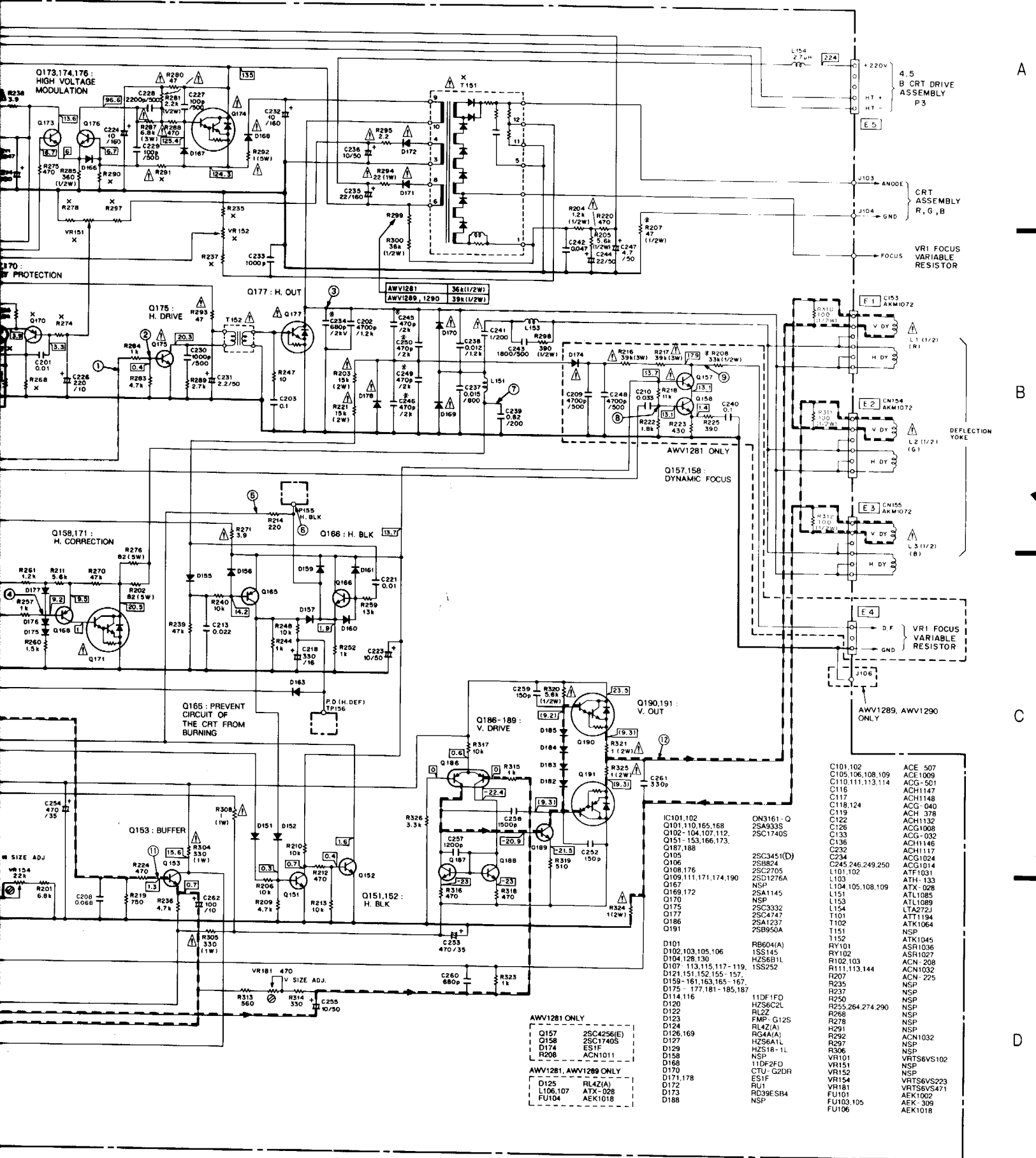
□* : DC voltage (V) at 50% white signal input state.

☆ V - AMP ASSEMBLY (AWZ4191)

- IC201-203 NJM4558DXP
- Q201-203,206,208-212 2SC1740S
- Q204,205 2SC3064
- Q207 2SA933S
- D201 RD15ESB3
- D202,203,207 1SS252
- D204 RD15ESB3
- R354 NSP
- R357 NSP







- | | |
|------------------|------------|
| C101,102 | ACE 507 |
| C105,106,108,109 | ACE1009 |
| C110,111,113,114 | ACG-501 |
| C116 | ACH1147 |
| C117 | ACH1148 |
| C118,124 | ACG-040 |
| C119 | ACH-378 |
| C122 | ACH1132 |
| C126 | ACG-1008 |
| C133 | ACG-032 |
| C136 | ACH1146 |
| C232 | ACH1117 |
| C234 | ACG1024 |
| C245,246,249,250 | ACG1014 |
| L101,102 | ATF1031 |
| L103 | ATH-133 |
| L104,105,108,109 | ATX-028 |
| L151 | ATL1085 |
| L152 | ATI1089 |
| L154 | LTAT272J |
| L155 | ATI1194 |
| T102 | ATK1064 |
| T151 | NSP |
| T152 | ATK1045 |
| RV101 | ASR1036 |
| RV102 | ASR1027 |
| R102,103 | ACN-208 |
| R111,113,144 | ACN1032 |
| R207 | ACN-225 |
| R235 | NSP |
| R237 | NSP |
| R250 | NSP |
| R253,264,274,290 | NSP |
| R268 | NSP |
| R278 | NSP |
| R291 | NSP |
| R292 | ACN1032 |
| R297 | NSP |
| R306 | NSP |
| VR101 | VRTS6VS102 |
| VR151 | NSP |
| VR152 | NSP |
| VR154 | VRTS6VS223 |
| VR181 | VRTS6VS471 |
| FU101 | AEK1002 |
| FU103,105 | AEK-309 |
| FU106 | AEK1018 |

- AWV1281 ONLY**
- Q157 25C4256(E)
 - Q158 25C17405
 - D174 ES1F
 - R208 ACN1011
- AWV1281, AWV1289 ONLY**
- D125 RL4Z(A)
 - L106,107 ATX-028
 - FU104 AEK1018