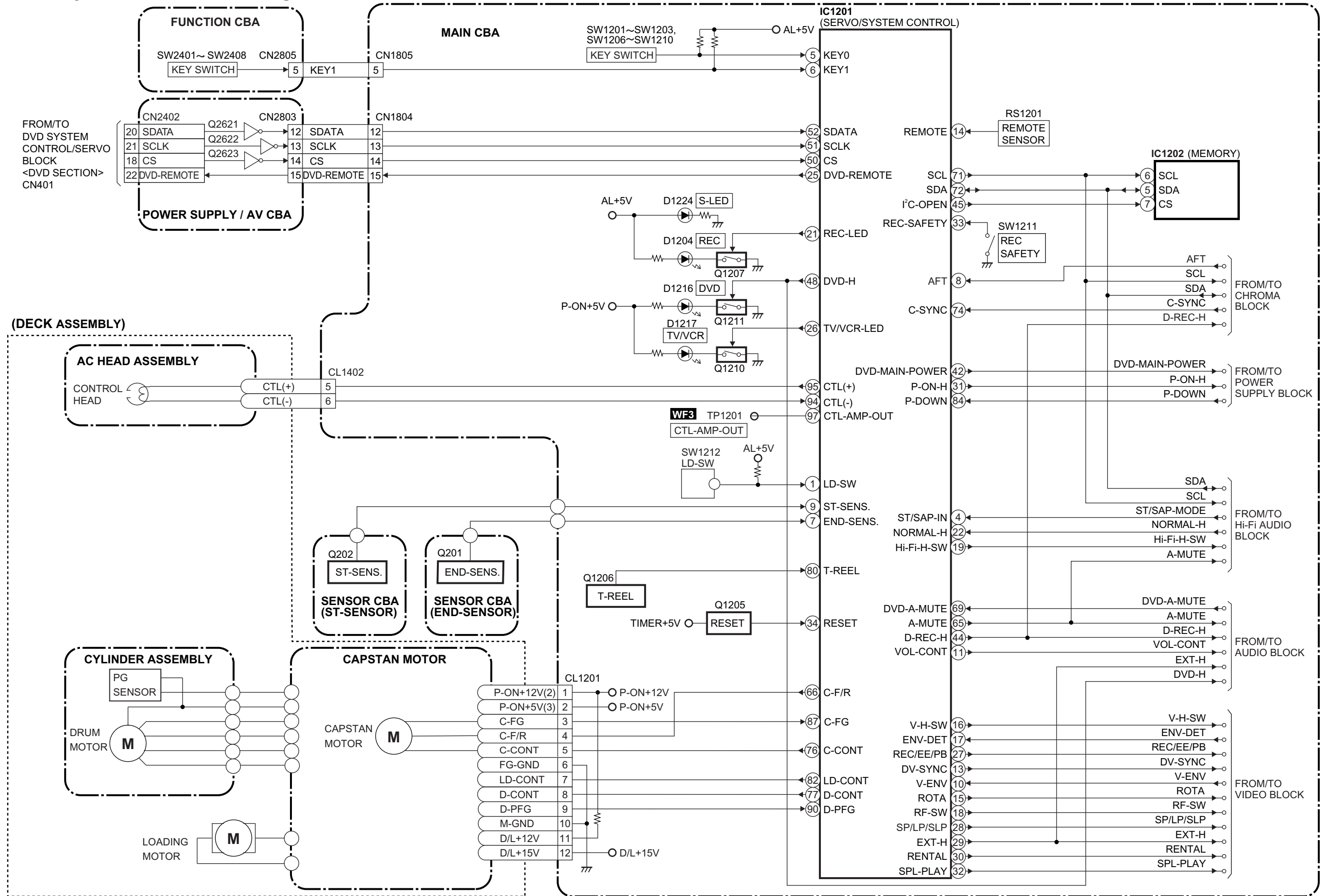


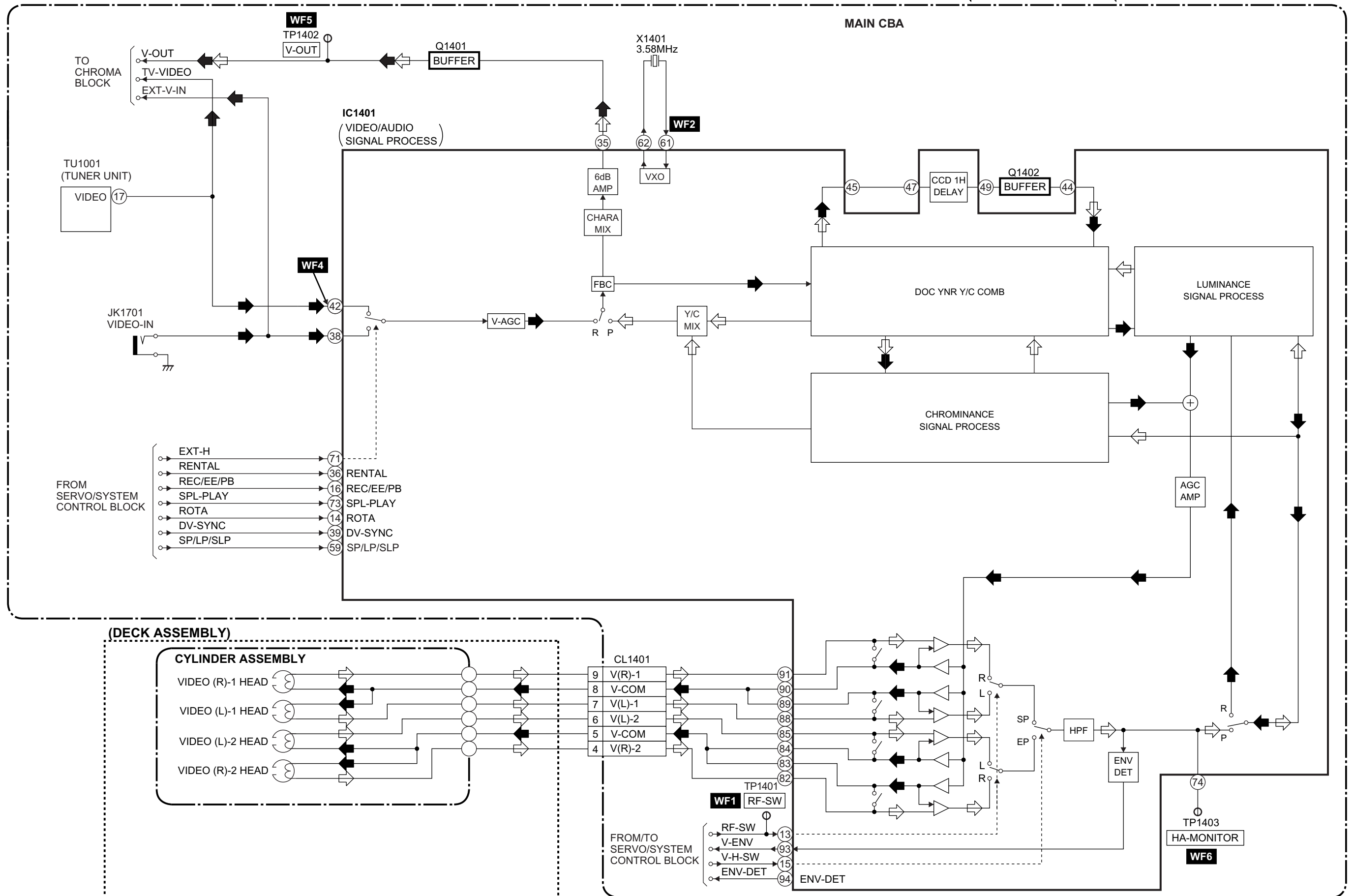
BLOCK DIAGRAMS <TV/VCR Section>

Servo/System Control Block Diagram

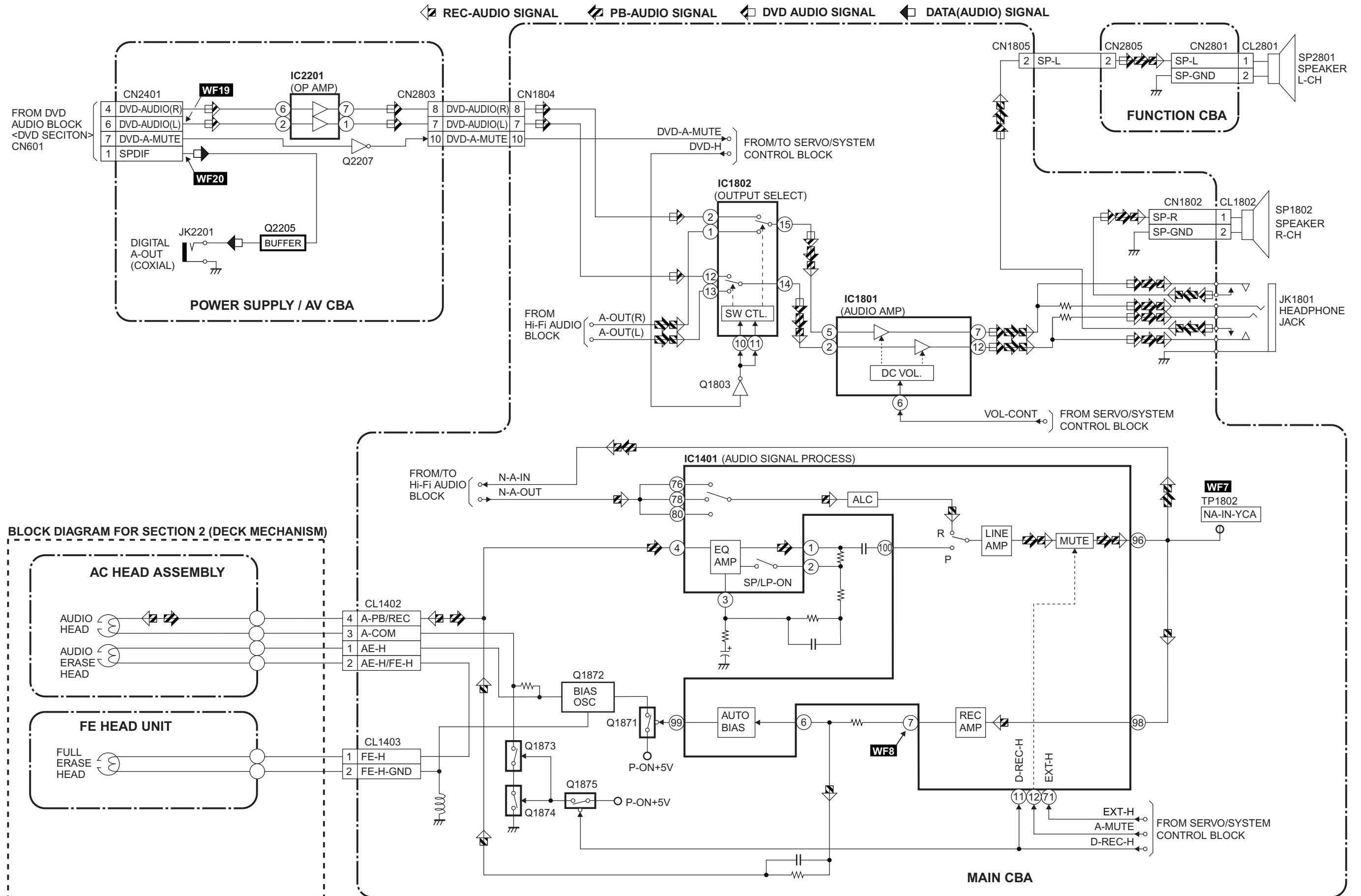


Video Block Diagram



REC VIDEO SIGNAL ← PB VIDEO SIGNAL ← MODE: SP/REC



Audio Block Diagram

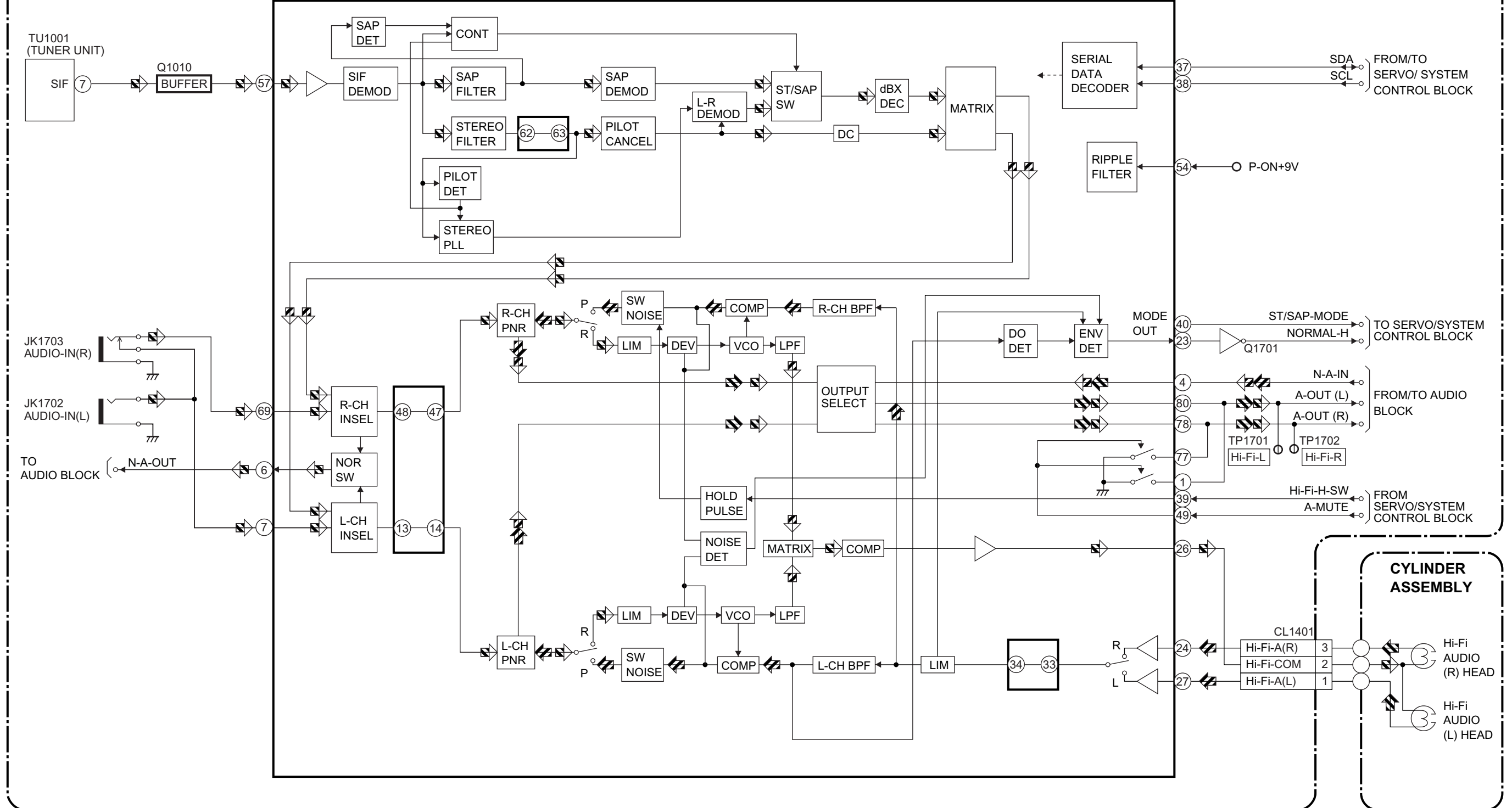


Hi-Fi Audio Block Diagram

 PB-AUDIO SIGNAL
  REC-AUDIO SIGNAL

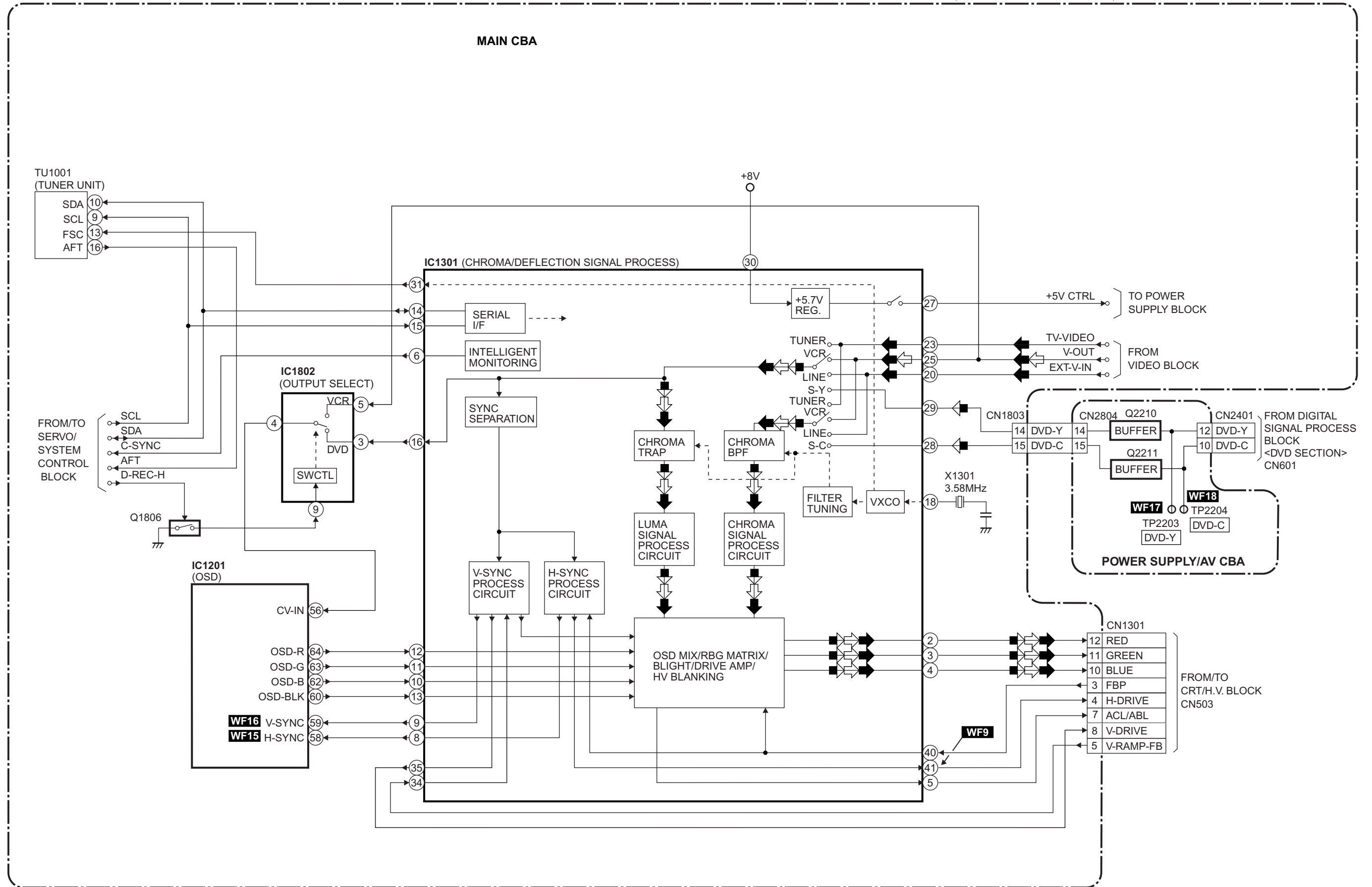
MAIN CBA

IC1751(MTS/ SAP/ Hi-Fi AUDIO PROCESS/ Hi-Fi HEAD AMP)

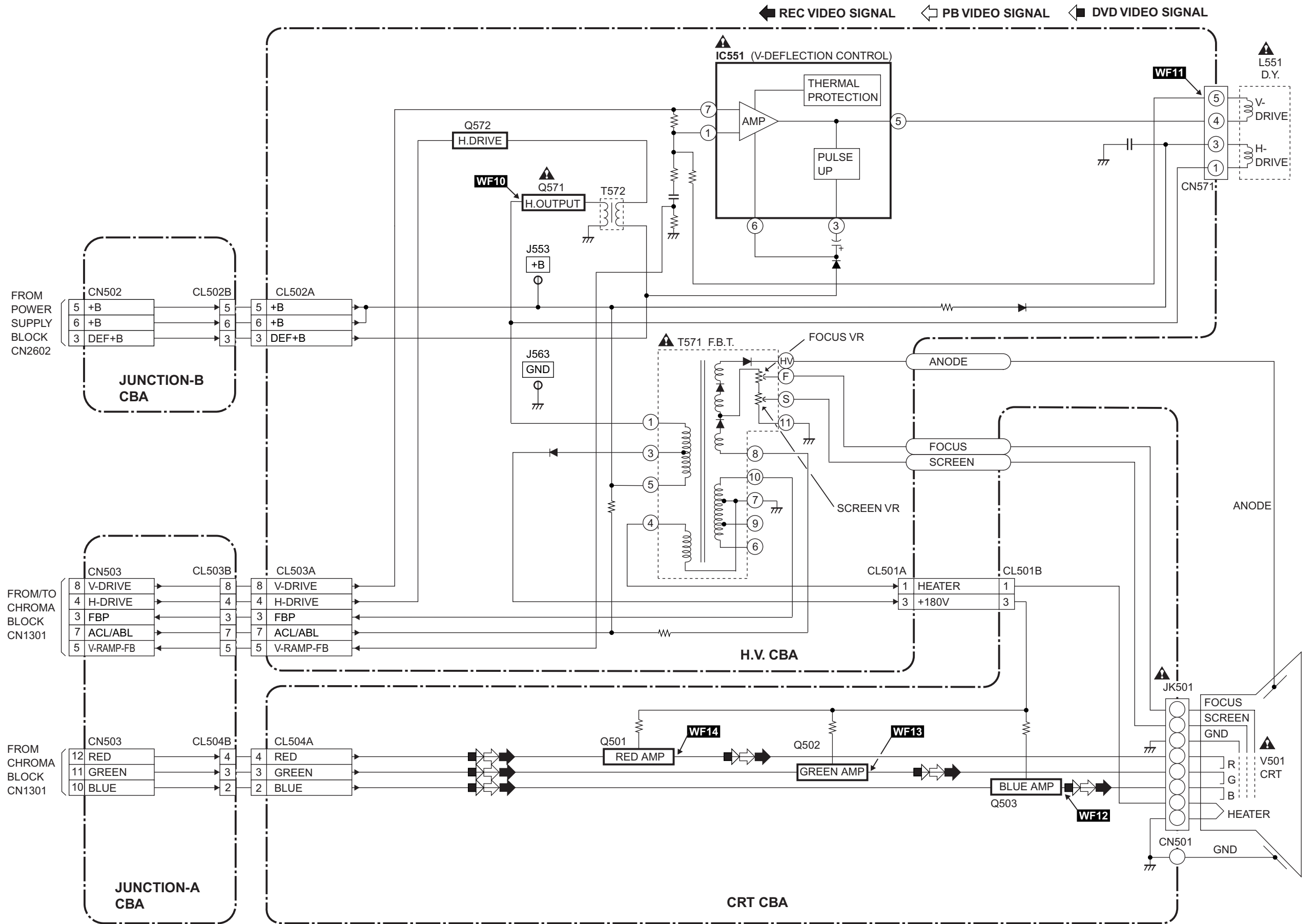


Chroma Block Diagram

← REC VIDEO SIGNAL ← PB VIDEO SIGNAL ← DVD VIDEO SIGNAL



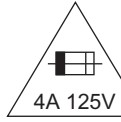
CRT/H.V. Block Diagram



Power Supply Block Diagram

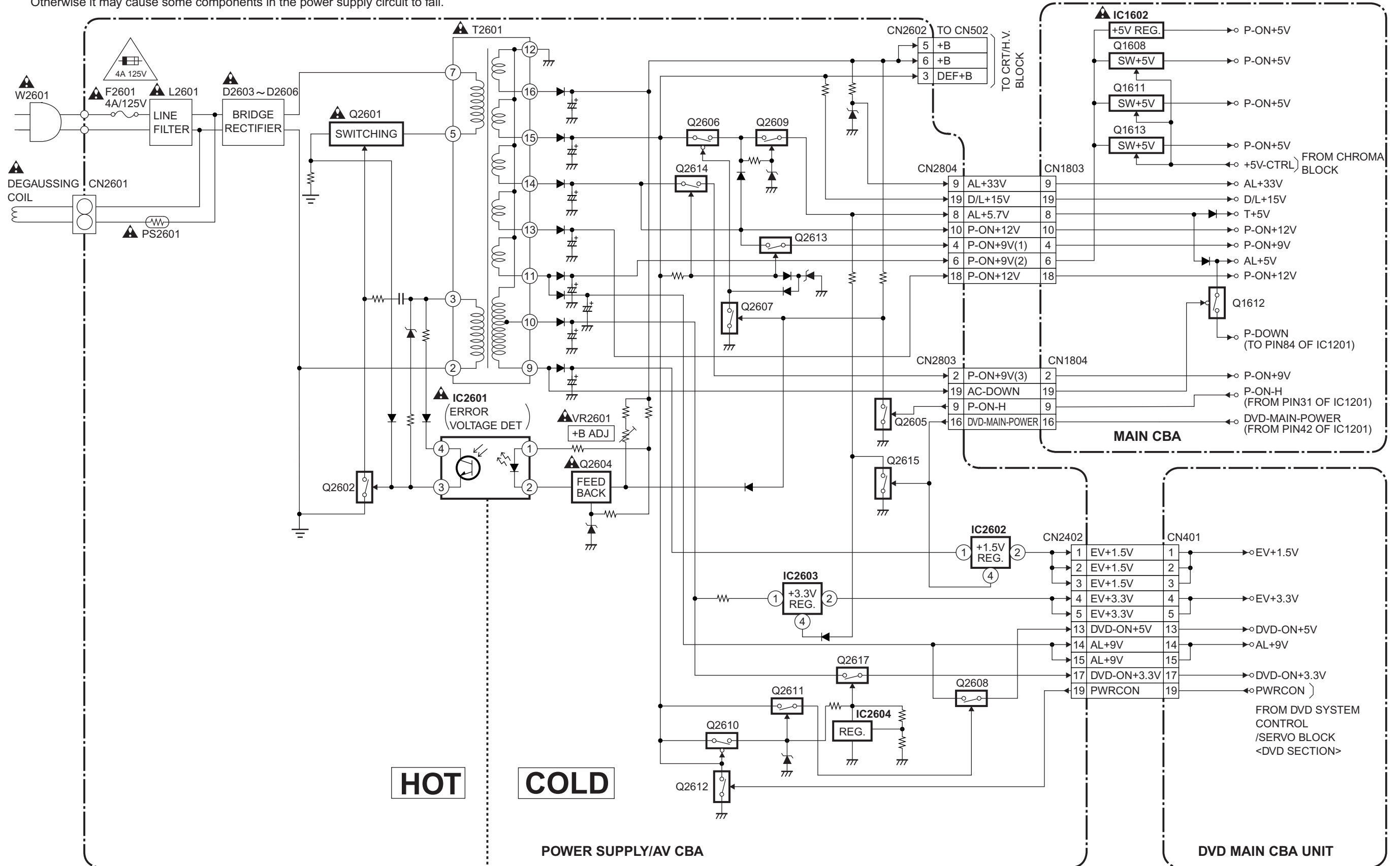
CAUTION !

Fixed voltage power supply circuit is used in this unit.
 If Main Fuse (F2601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
 Otherwise it may cause some components in the power supply circuit to fail.



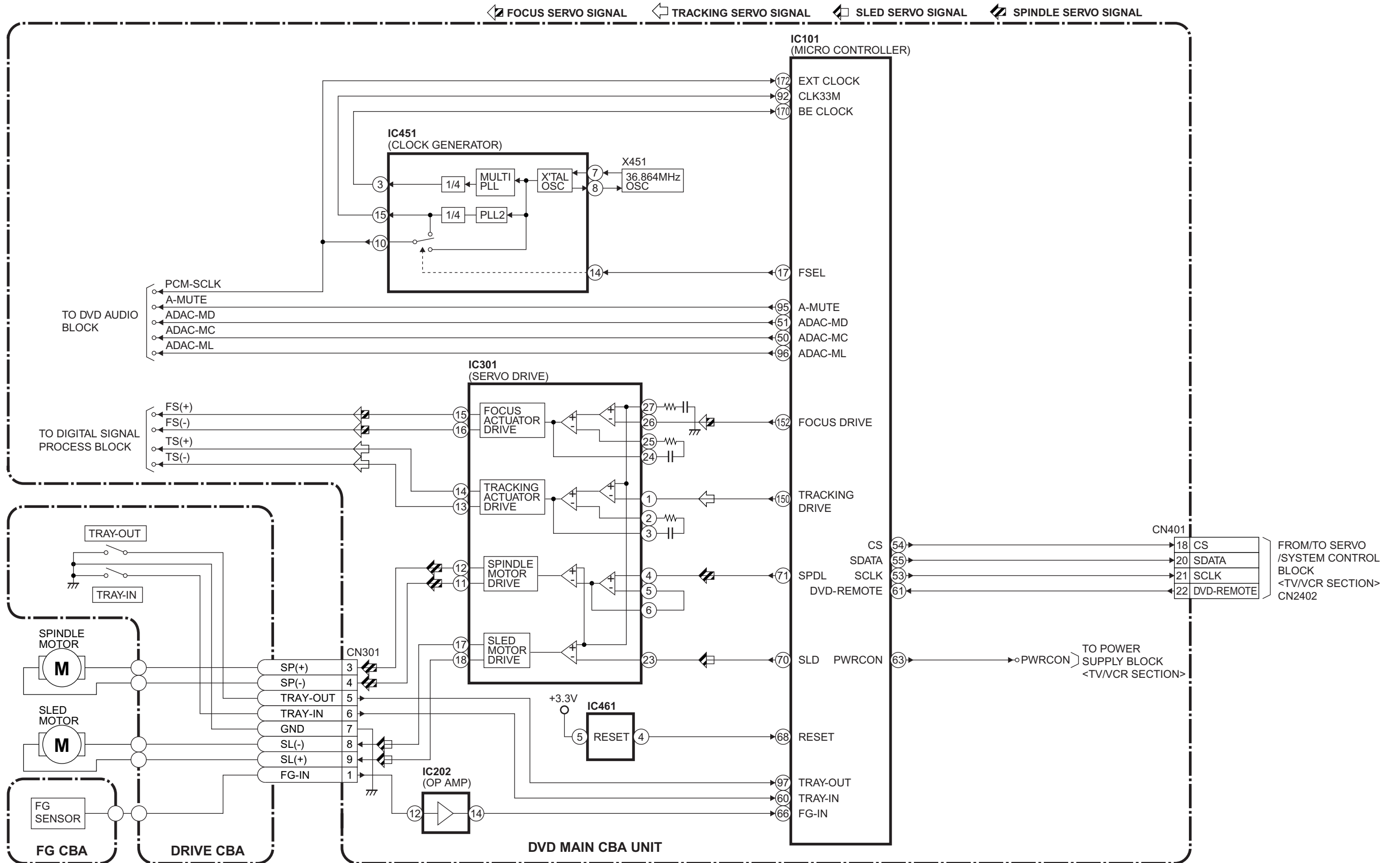
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE,
 REPLACE ONLY WITH SAME TYPE 4 A, 125V FUSE.
ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE 4A, 125V.

NOTE :
 The voltage for parts in hot circuit is measured using hot GND as a common terminal.



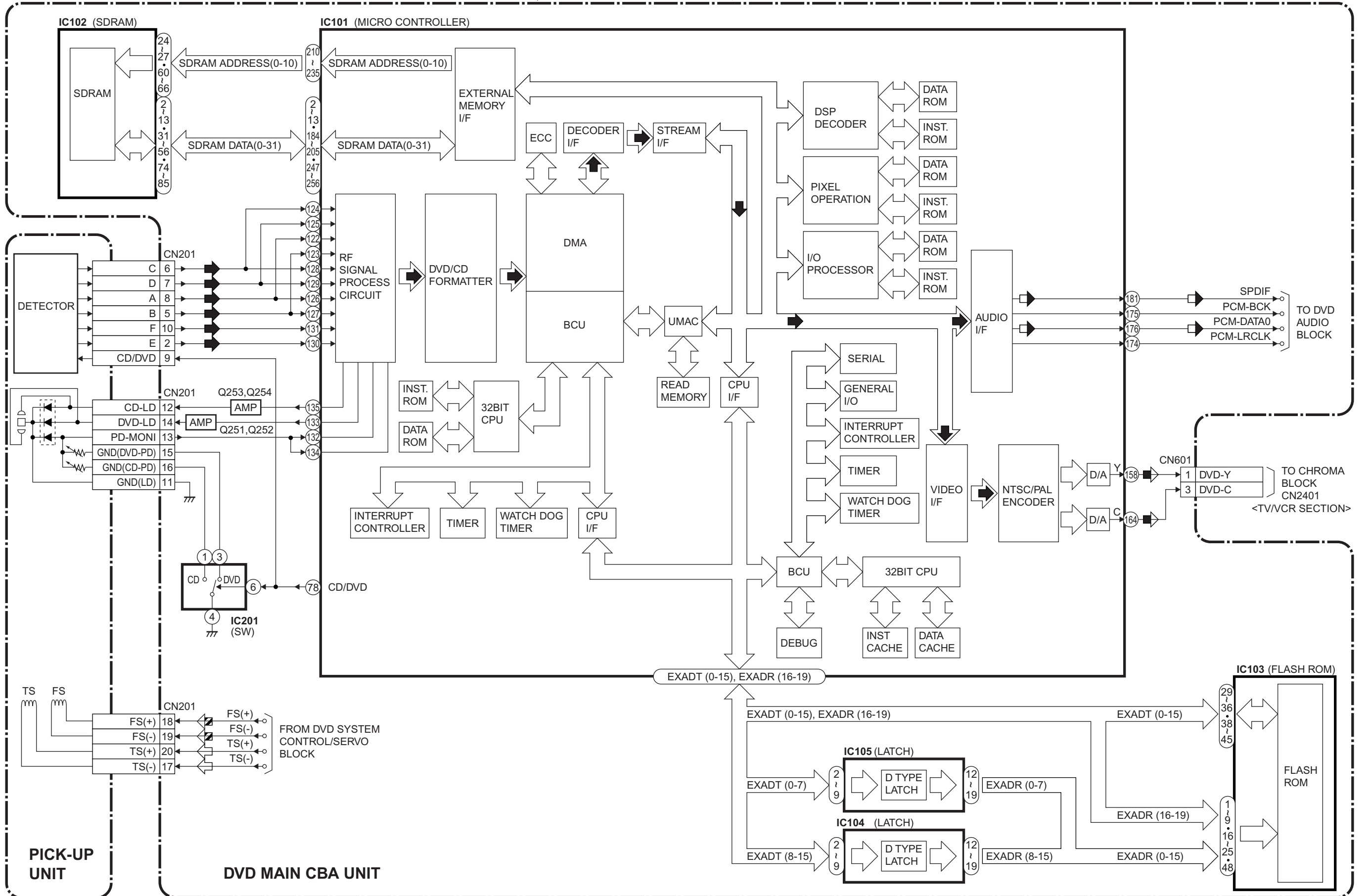
BLOCK DIAGRAMS < DVD Section >

DVD System Control/Servo Block Diagram

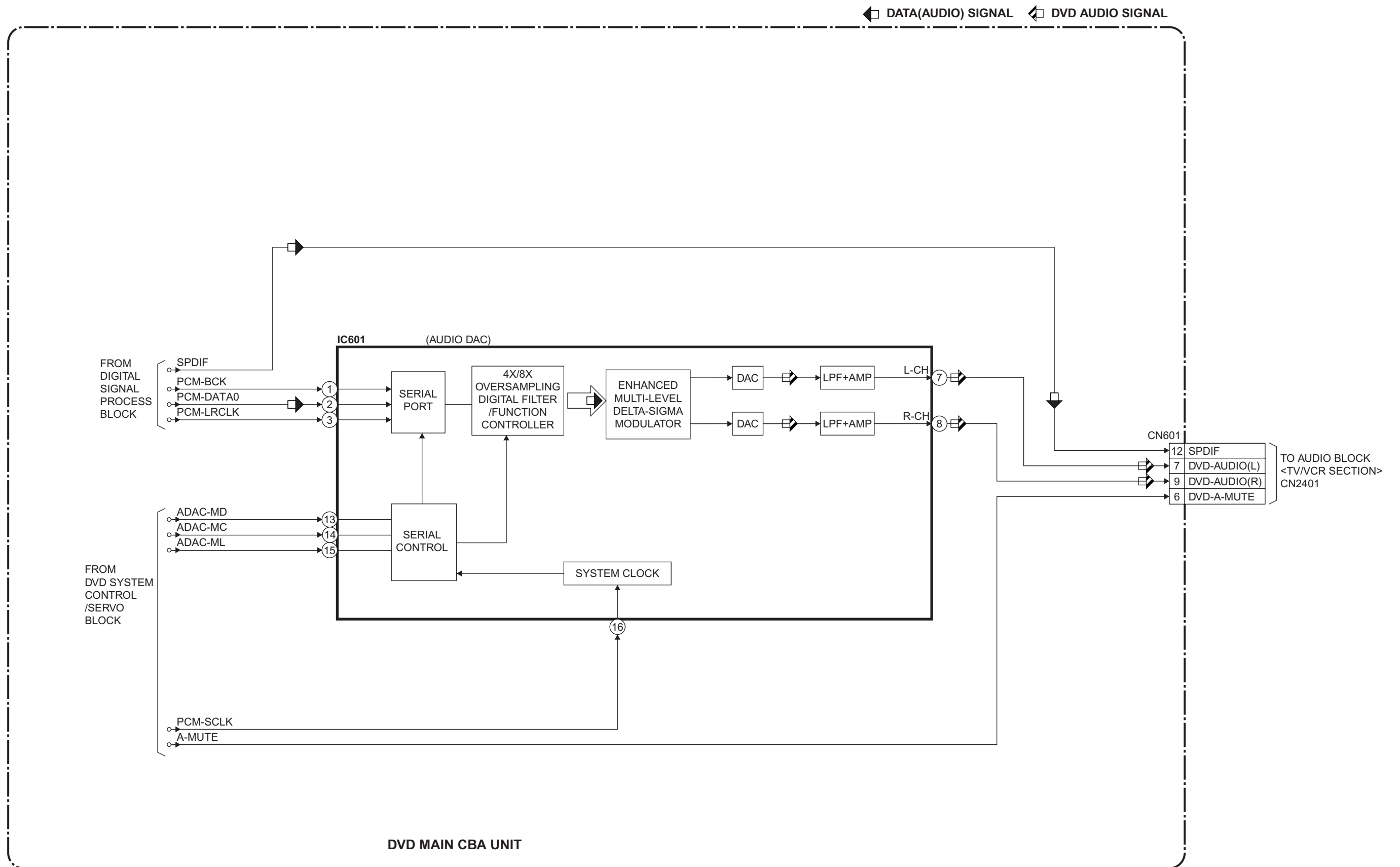


Digital Signal Process Block Diagram

DATA(VIDEO/AUDIO) SIGNAL
 DVD VIDEO SIGNAL
 DATA(AUDIO) SIGNAL
 FOCUS SERVO SIGNAL
 TRACKING SERVO SIGNAL



DVD Audio Block Diagram



SCHEMATIC DIAGRAMS / CBA'S AND TEST POINTS

Standard Notes

Warning

Many electrical and mechanical parts in this chassis have special characteristics. These characteristics often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the mark "▲" in the schematic diagram and the parts list. Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

Note:

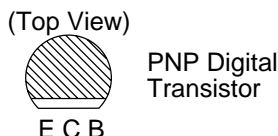
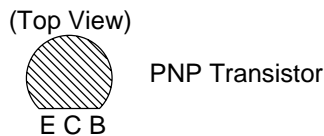
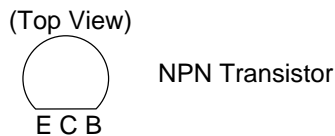
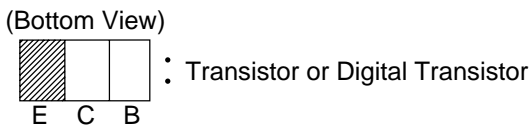
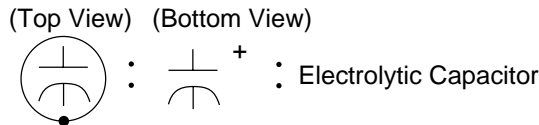
1. Do not use the part number shown on these drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since these drawings were prepared.
2. All resistance values are indicated in ohms ($K=10^3$, $M=10^6$).
3. Resistor wattages are 1/4W or 1/6W unless otherwise specified.
4. All capacitance values are indicated in μF ($P=10^{-6}\mu F$).
5. All voltages are DC voltages unless otherwise specified.

Capacitor Temperature Markings

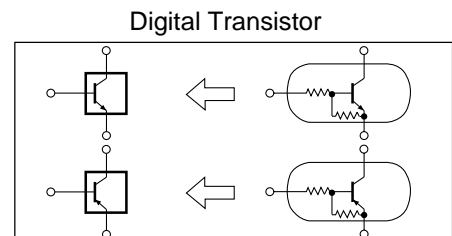
| Mark | Capacity change rate | Standard temperature | Temperature range |
|------|----------------------|----------------------|-------------------|
| (B) | $\pm 10\%$ | 20°C | -25~+85°C |
| (F) | +30 -80% | 20°C | -25~+85°C |
| (SR) | $\pm 15\%$ | 20°C | -25~+85°C |
| (Z) | +30 -80% | 20°C | -10~+70°C |

Capacitors and transistors are represented by the following symbols.

CBA Symbols



Schematic Diagram Symbols



LIST OF CAUTION, NOTES, AND SYMBOLS USED IN THE SCHEMATIC DIAGRAMS ON THE FOLLOWING PAGES:

1. **CAUTION:** FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE_A,_V FUSE.

ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE_A,_V.

2. CAUTION:

Fixed Voltage (or Auto voltage selectable) power supply circuit is used in this unit.

If Main Fuse (F2601) is blown, first check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply. Otherwise it may cause some components in the power supply circuit to fail.

3. Note:

(1) Do not use the part number shown on the drawings for ordering. The correct part number is shown in the parts list, and may be slightly different or amended since the drawings were prepared.

(2) To maintain original function and reliability of repaired units, use only original replacement parts which are listed with their part numbers in the parts list section of the service manual.

4. Wire Connectors

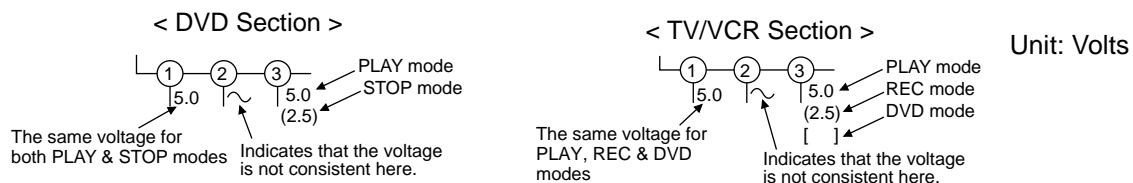
(1) Prefix symbol "CN" means "connector" (can disconnect and reconnect).

(2) Prefix symbol "CL" means "wire-solder holes of the PCB" (wire is soldered directly).

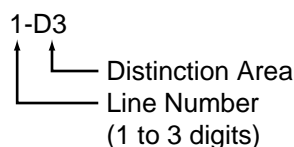
5. Note: Mark "•" is a leadless (chip) component

6. Mode: SP/REC

7. Voltage indications for PLAY and REC modes on the schematics are as shown below:

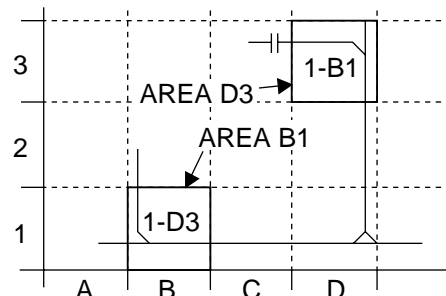


8. How to read converged lines



Examples:

1. "1-D3" means that line number "1" goes to area "D3".
2. "1-B1" means that line number "1" goes to area "B1".



9. Test Point Information

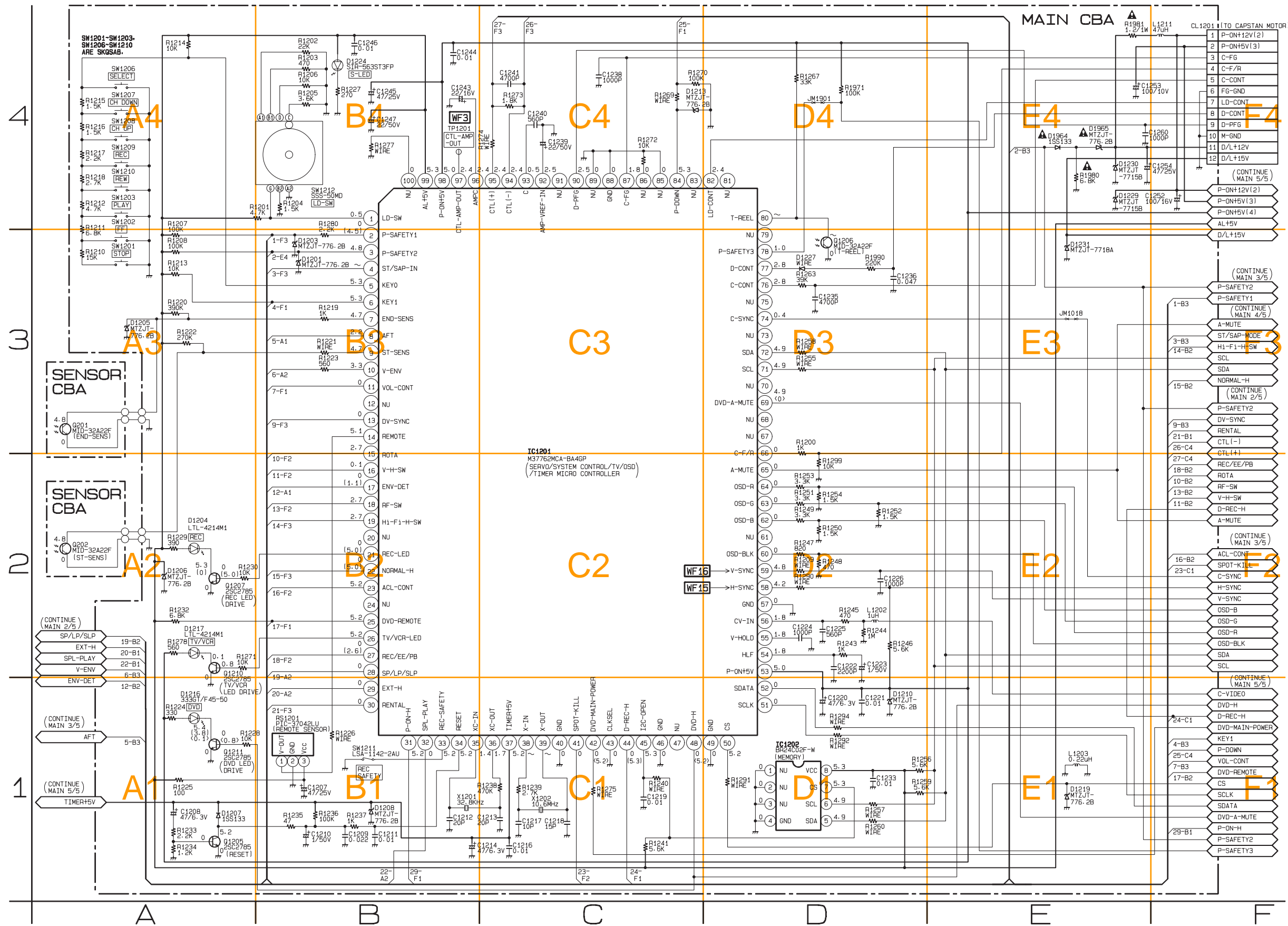
⊙ : Indicates a test point with a jumper wire across a hole in the PCB.

□> : Used to indicate a test point with a component lead on foil side.

⊘ : Used to indicate a test point with no test pin.

● : Used to indicate a test point with a test pin.

Main 1/5 Schematic Diagram < TV/VCR Section >

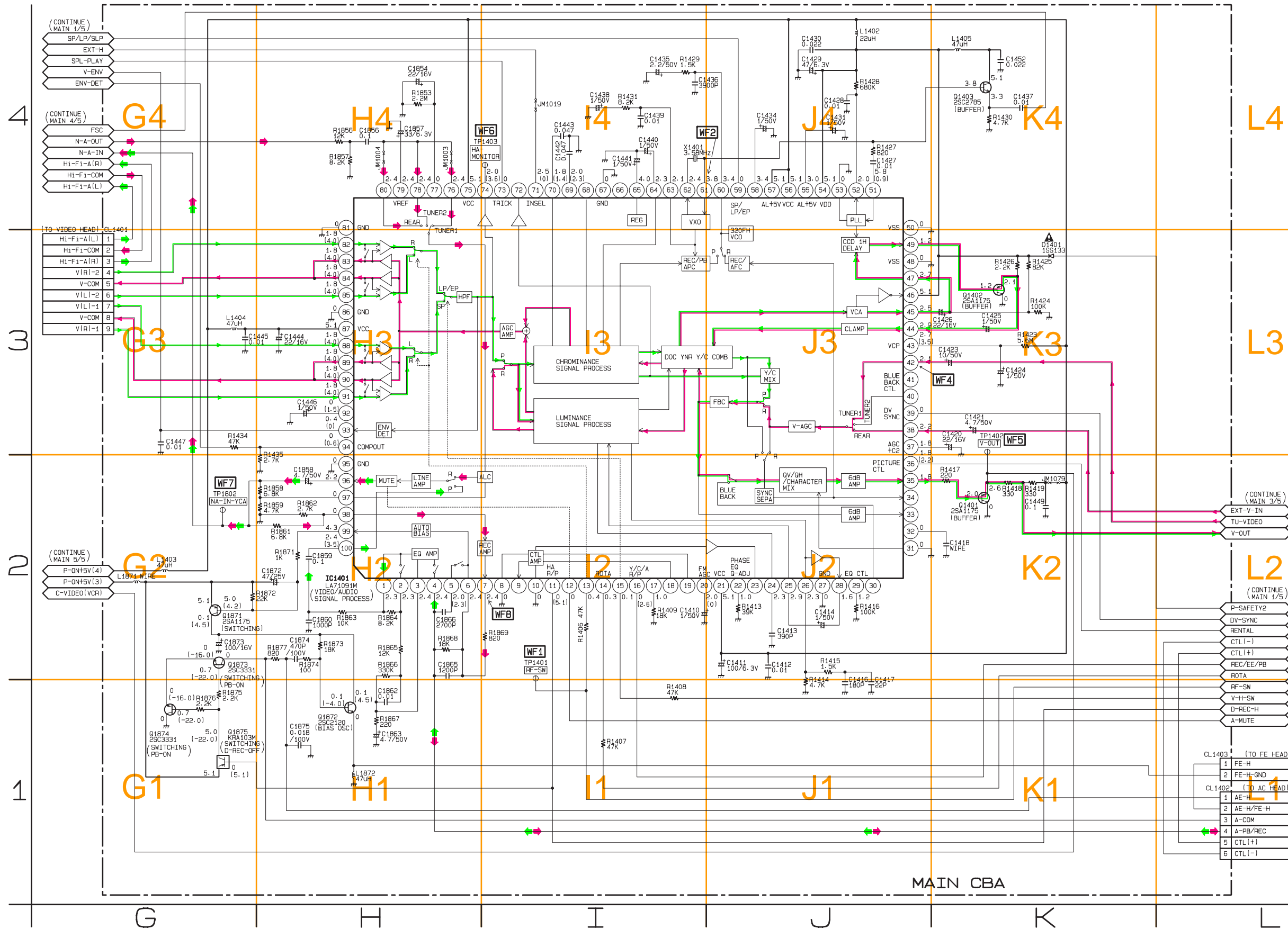


MAIN 1/5

| Ref No. | Position |
|-------------|----------|
| ICS | |
| IC1201 | C-2 |
| IC1202 | D-1 |
| TRANSISTORS | |
| Q1205 | A-1 |
| Q1206 | D-3 |
| Q1207 | A-2 |
| Q1210 | A-2 |
| Q1211 | A-1 |
| CONNECTOR | |
| CL1201 | F-4 |
| TEST POINT | |
| TP1201 | B-4 |

Main 2/5 Schematic Diagram < TV/VCR Section >

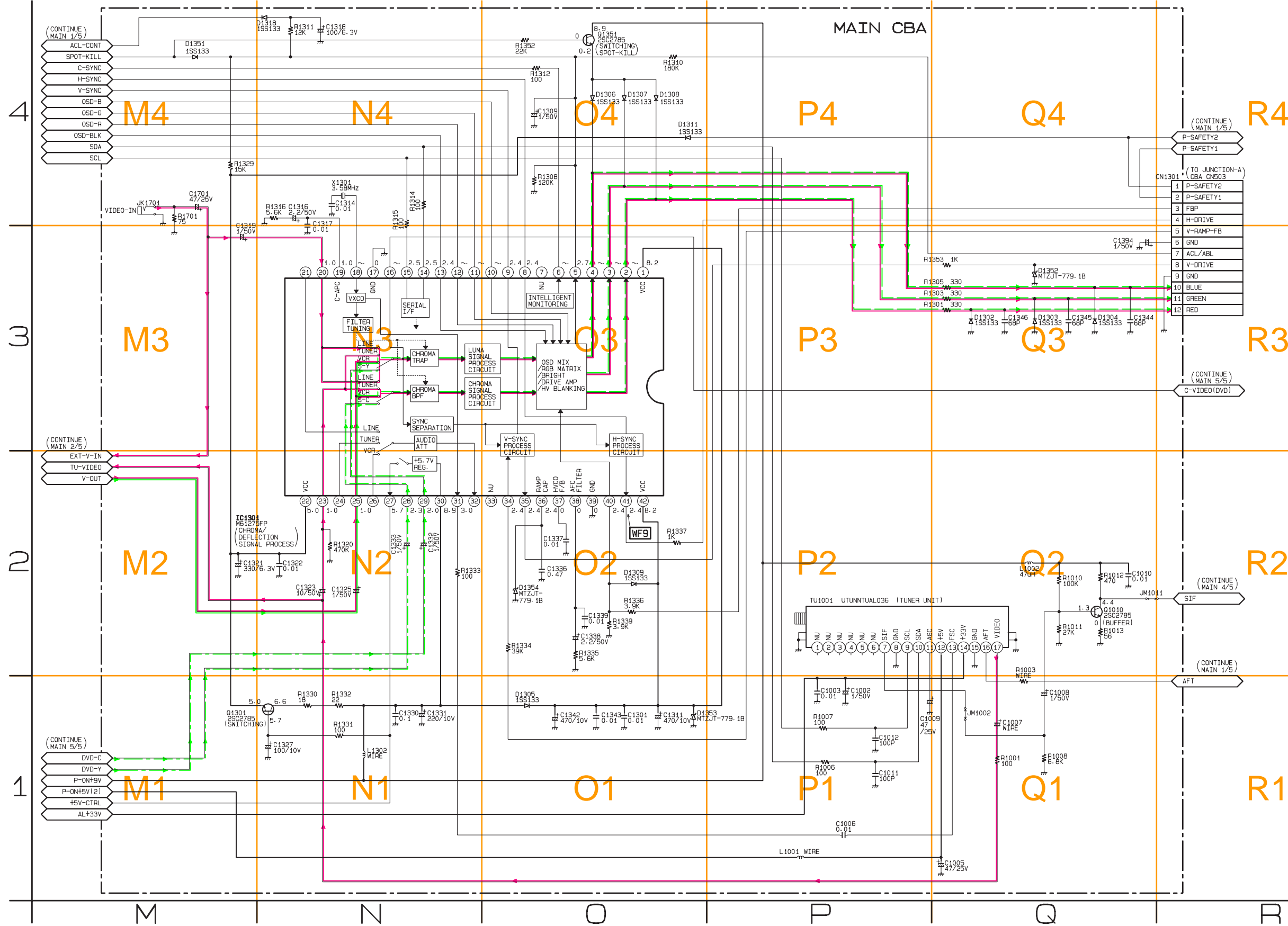
— REC VIDEO SIGNAL — PB VIDEO(TV/VCR/LINE) SIGNAL
← REC AUDIO SIGNAL ← PB AUDIO (TV/VCR/LINE) SIGNAL



| MAIN 2/5 | |
|-------------|----------|
| Ref No. | Position |
| IC1401 | H-2 |
| TRANSISTORS | |
| Q1401 | K-2 |
| Q1402 | K-3 |
| Q1403 | K-4 |
| Q1871 | G-2 |
| Q1872 | H-1 |
| Q1873 | G-2 |
| Q1874 | G-1 |
| Q1875 | G-1 |
| CONNECTORS | |
| CL1401 | G-3 |
| CL1402 | L-1 |
| CL1403 | L-1 |
| TEST POINTS | |
| TP1401 | I-1 |
| TP1402 | K-3 |
| TP1403 | I-4 |
| TP1802 | G-2 |

Main 3/5 Schematic Diagram < TV/VCR Section >

— REC VIDEO SIGNAL
— PB VIDEO(TV/VCR/LINE) SIGNAL
- - - DVD VIDEO SIGNAL
- · - · - PB VIDEO(TV/VCR/LINE)+DVD VIDEO SIGNAL



MAIN 3/5

| Ref No. | Position |
|-------------|----------|
| IC1301 | N-2 |
| TRANSISTORS | |
| Q1010 | Q-2 |
| Q1301 | N-1 |
| Q1351 | O-4 |
| CONNECTOR | |
| CN1301 | R-4 |

(CONTINUE MAIN 1/5)

| Pin | Signal |
|-----|-----------|
| 1 | P-SAFETY2 |
| 2 | P-SAFETY1 |
| 3 | FBP |
| 4 | H-DRIVE |
| 5 | V-RAMP-FB |
| 6 | GND |
| 7 | ACL/ABL |
| 8 | V-DRIVE |
| 9 | GND |
| 10 | BLUE |
| 11 | GREEN |
| 12 | RED |

(TO JUNCTION-A CBA CN503)

(CONTINUE MAIN 5/5)
C-VIDEO(DVD)

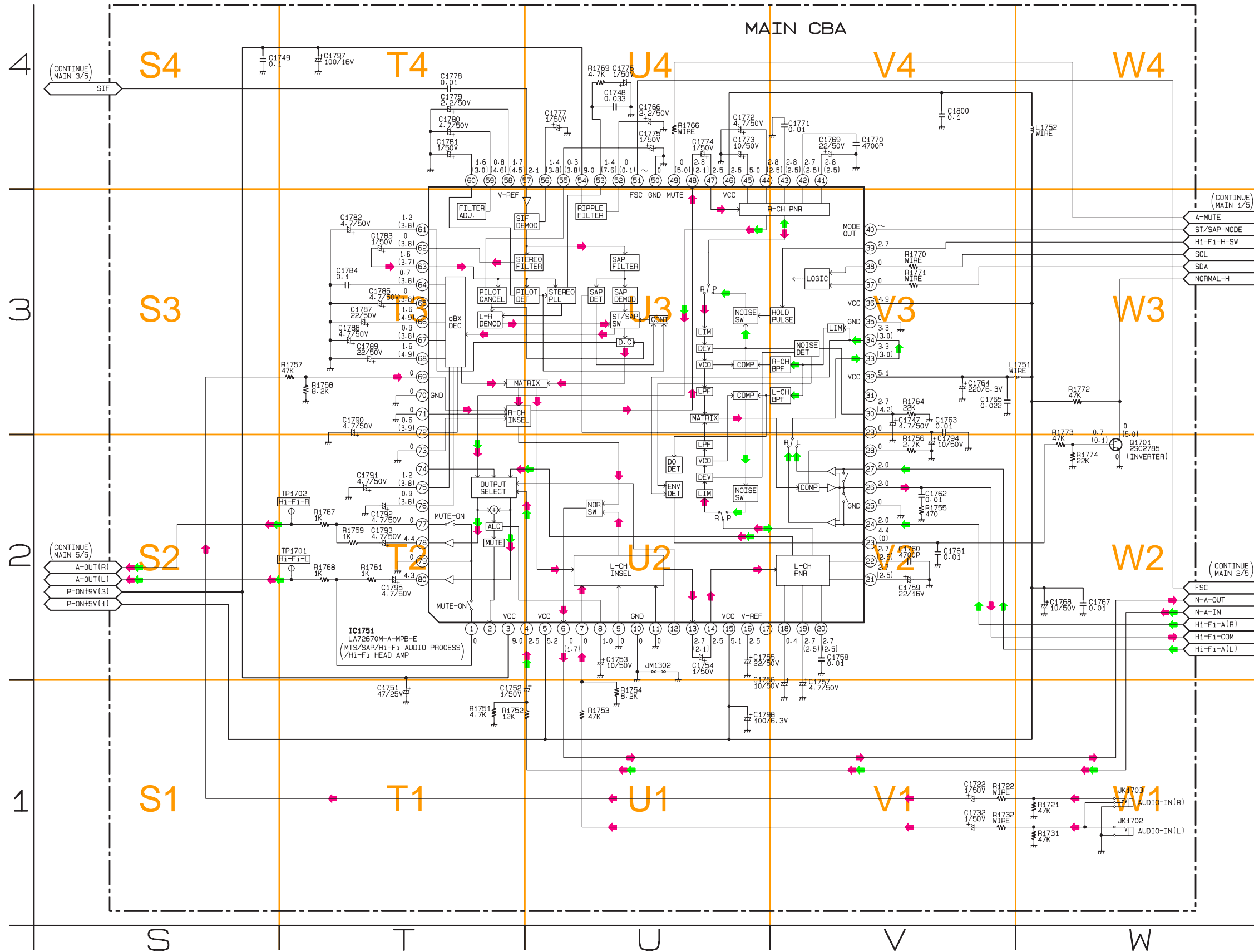
(CONTINUE MAIN 4/5)
SIF

(CONTINUE MAIN 1/5)
AFT

Main 4/5 Schematic Diagram < TV/VCR Section >

← REC AUDIO SIGNAL

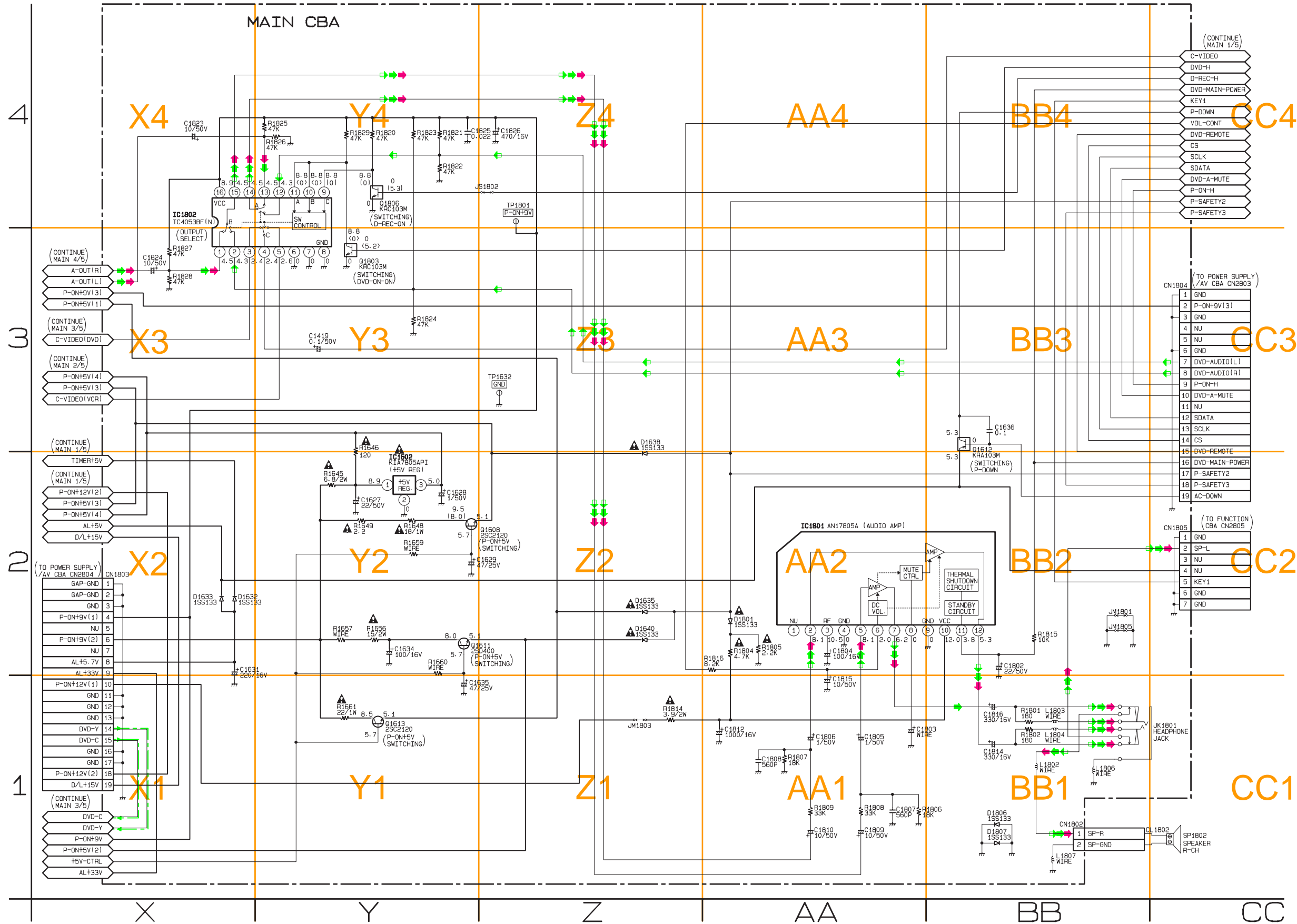
← PB AUDIO (TV/VCR/LINE) SIGNAL



| MAIN 4/5 | |
|-------------|----------|
| Ref No. | Position |
| IC1751 | T-2 |
| TRANSISTOR | |
| Q1701 | W-2 |
| TEST POINTS | |
| TP1701 | T-2 |
| TP1702 | T-2 |

Main 5/5 Schematic Diagram < TV/VCR Section >

← REC AUDIO SIGNAL
← DVD VIDEO SIGNAL
← PB AUDIO (TV/VCR/LINE) SIGNAL
← DVD AUDIO SIGNAL



| MAIN 5/5 | |
|-------------|----------|
| Ref No. | Position |
| ICS | |
| IC1602 | Y-2 |
| IC1801 | AA-2 |
| IC1802 | X-4 |
| TRANSISTORS | |
| Q1608 | Y-2 |
| Q1611 | Y-2 |
| Q1612 | BB-3 |
| Q1613 | Y-1 |
| Q1803 | Y-3 |
| Q1806 | Y-4 |
| CONNECTORS | |
| CN1802 | BB-1 |
| CN1803 | X-2 |
| CN1804 | CC-3 |
| CN1805 | CC-2 |
| TEST POINTS | |
| TP1632 | Z-3 |
| TP1801 | Z-4 |

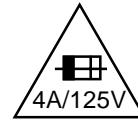
Power Supply/AV 1/2 Schematic Diagram < TV/VCR Section >

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F2601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

NOTE :

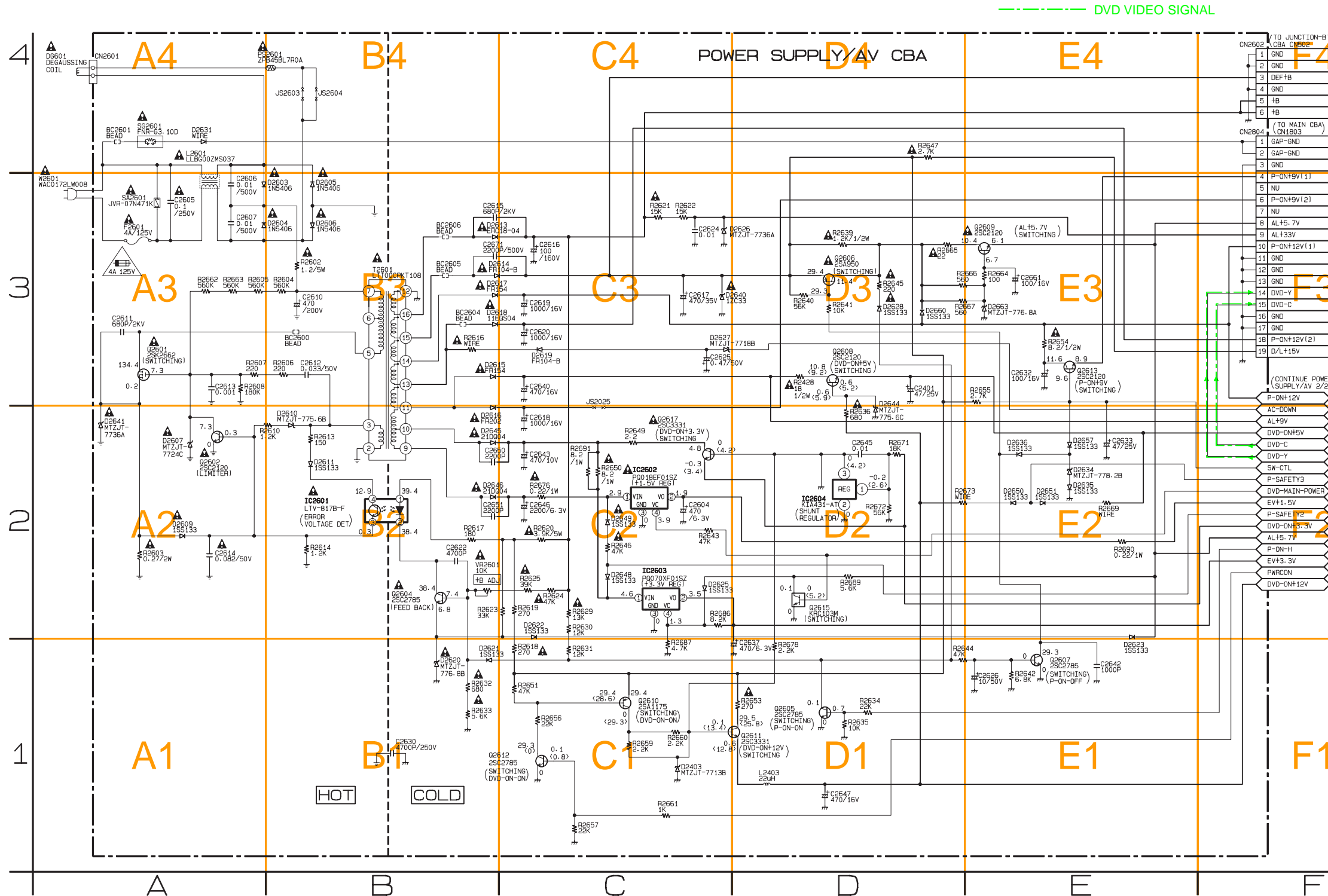
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A, 125V FUSE.
ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE 4A, 125V.

VOLTAGE CHART (Power off mode)

| Ref. No. | 1 | 2 | 3 | 4 |
|----------|------|-------|------|-----|
| IC2601 | 13.2 | 12.1 | 0.3 | 2.3 |
| IC2602 | 2 | 0 | 0 | 0 |
| IC2603 | 1.8 | 0.3 | 0 | 1.9 |
| IC2604 | 0 | 0 | 0.2 | --- |
| Ref. No. | S | D | G | |
| Q2601 | 0 | 140.7 | 1.4 | |
| Ref. No. | E | C | B | |
| Q2602 | 0 | 1.4 | 0.3 | |
| Q2603 | 0 | 4.9 | 0 | |
| Q2604 | 6.8 | 12.1 | 7.4 | |
| Q2605 | 0 | 8.0 | 0 | |
| Q2606 | 10.3 | 10.2 | 9.6 | |
| Q2607 | 0 | 0.1 | 0.7 | |
| Q2608 | 0.1 | 9.8 | 0.2 | |
| Q2609 | 5.9 | 9.3 | 6.6 | |
| Q2610 | 10.3 | 0.2 | 10.2 | |
| Q2611 | 0.2 | 10.3 | 0.3 | |
| Q2612 | 0 | 10.2 | 0 | |
| Q2613 | 0.9 | 4.6 | 1.4 | |
| Q2614 | 0.9 | 4.6 | 1.4 | |
| Q2615 | 0 | 2.5 | 0 | |
| Q2617 | 0.2 | 1.8 | 0.5 | |



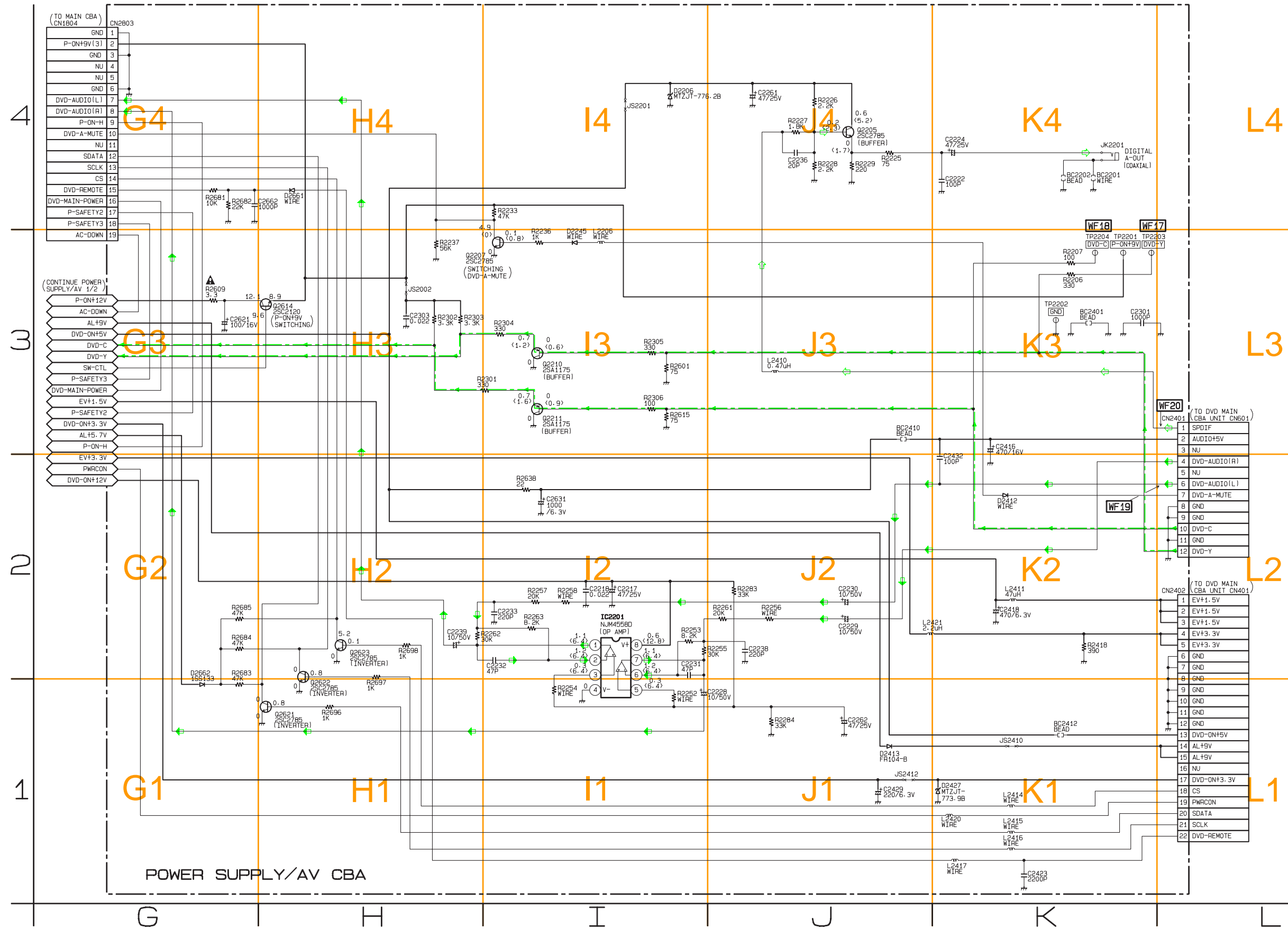
| Ref. No. | Position |
|-------------------|----------|
| ICS | |
| IC2601 | B-2 |
| IC2602 | C-2 |
| IC2603 | C-2 |
| IC2604 | D-2 |
| TRANSISTORS | |
| Q2601 | A-3 |
| Q2602 | A-2 |
| Q2604 | B-2 |
| Q2605 | D-1 |
| Q2606 | D-3 |
| Q2607 | E-1 |
| Q2608 | D-3 |
| Q2609 | E-3 |
| Q2610 | C-1 |
| Q2611 | D-1 |
| Q2612 | C-1 |
| Q2613 | E-3 |
| Q2615 | D-2 |
| Q2617 | C-2 |
| CONNECTORS | |
| CN2601 | A-4 |
| CN2602 | F-4 |
| CN2804 | F-4 |
| VARIABLE RESISTOR | |
| VR2601 | B-2 |

POWER SUPPLY/AV 1/2

| Ref. No. | Position |
|-------------------|----------|
| ICS | |
| IC2601 | B-2 |
| IC2602 | C-2 |
| IC2603 | C-2 |
| IC2604 | D-2 |
| TRANSISTORS | |
| Q2601 | A-3 |
| Q2602 | A-2 |
| Q2604 | B-2 |
| Q2605 | D-1 |
| Q2606 | D-3 |
| Q2607 | E-1 |
| Q2608 | D-3 |
| Q2609 | E-3 |
| Q2610 | C-1 |
| Q2611 | D-1 |
| Q2612 | C-1 |
| Q2613 | E-3 |
| Q2615 | D-2 |
| Q2617 | C-2 |
| CONNECTORS | |
| CN2601 | A-4 |
| CN2602 | F-4 |
| CN2804 | F-4 |
| VARIABLE RESISTOR | |
| VR2601 | B-2 |

Power Supply/AV 2/2 Schematic Diagram < TV/VCR Section >

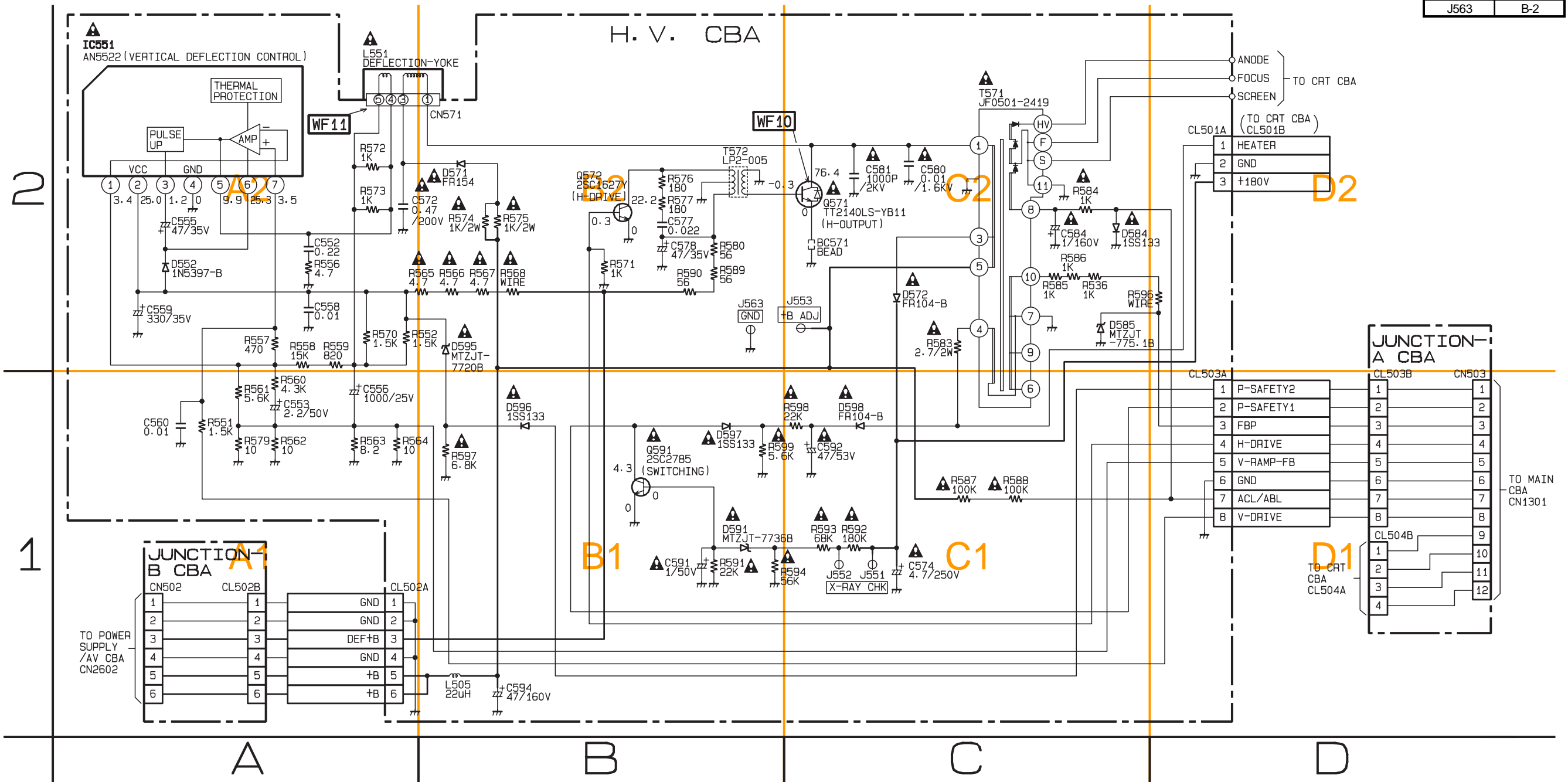
- - - - - DVD VIDEO SIGNAL
← DVD AUDIO SIGNAL
← DATA (AUDIO) SIGNAL



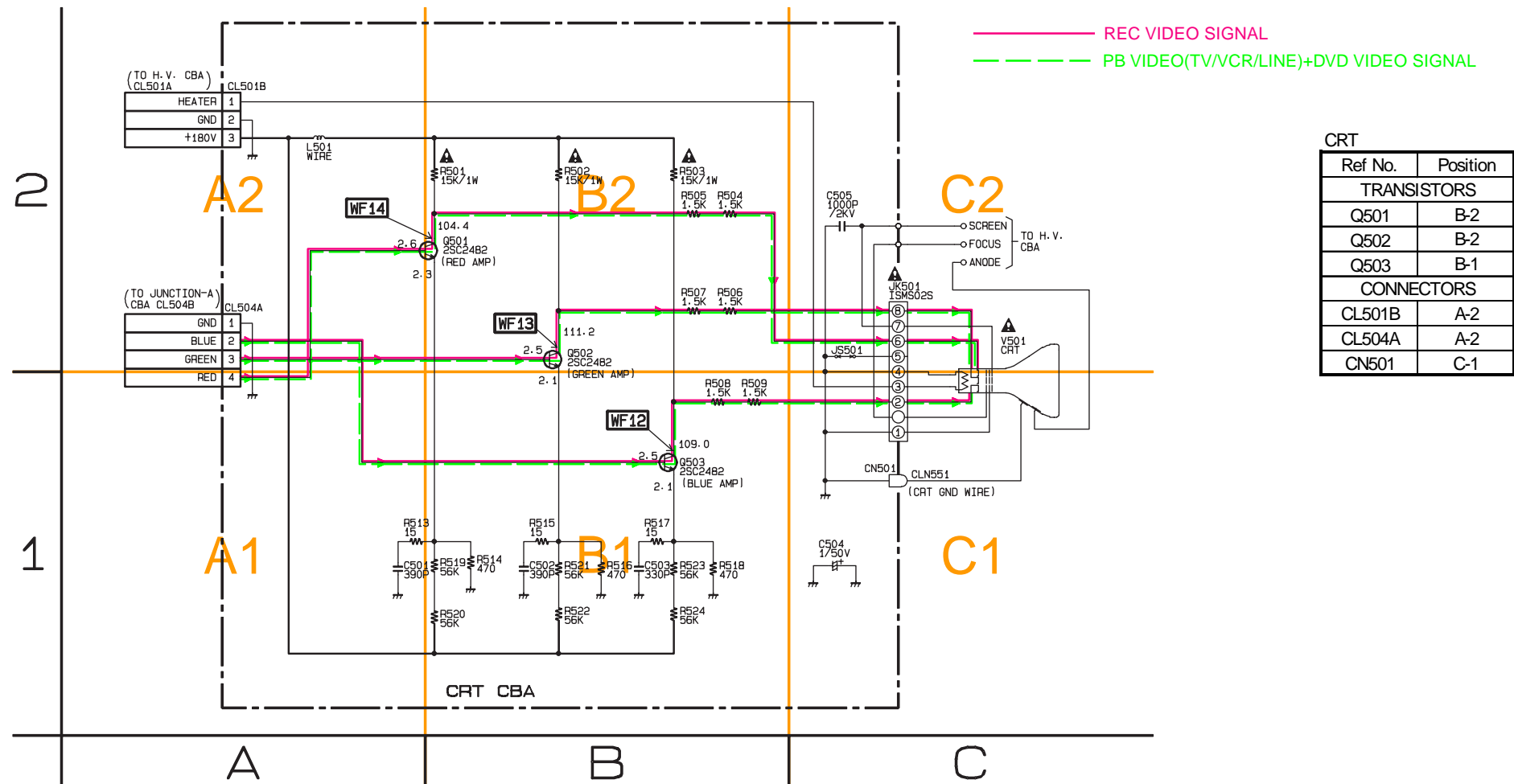
| POWER SUPPLY/AV 2/2 | |
|---------------------|----------|
| Ref No. | Position |
| IC | |
| IC2201 | I-2 |
| TRANSISTORS | |
| Q2205 | J-4 |
| Q2207 | I-3 |
| Q2210 | I-3 |
| Q2211 | I-3 |
| Q2614 | H-3 |
| Q2621 | H-1 |
| Q2622 | H-1 |
| Q2623 | H-2 |
| CONNECTORS | |
| CN2401 | L-3 |
| CN2402 | L-2 |
| CN2803 | G-4 |
| TEST POINTS | |
| TP2201 | K-3 |
| TP2202 | K-3 |
| TP2203 | K-3 |

H.V. Schematic Diagram < TV/VCR Section >

| H.V. | |
|-------------|----------|
| Ref No. | Position |
| IC | |
| IC551 | A-2 |
| TRANSISTORS | |
| Q571 | C-2 |
| Q572 | B-2 |
| Q591 | B-1 |
| CONNECTORS | |
| CL501A | D-2 |
| CL502A | A-1 |
| CL503A | D-1 |
| CN571 | B-2 |
| TEST POINTS | |
| J551 | C-1 |
| J552 | C-1 |
| J553 | C-2 |
| J563 | B-2 |

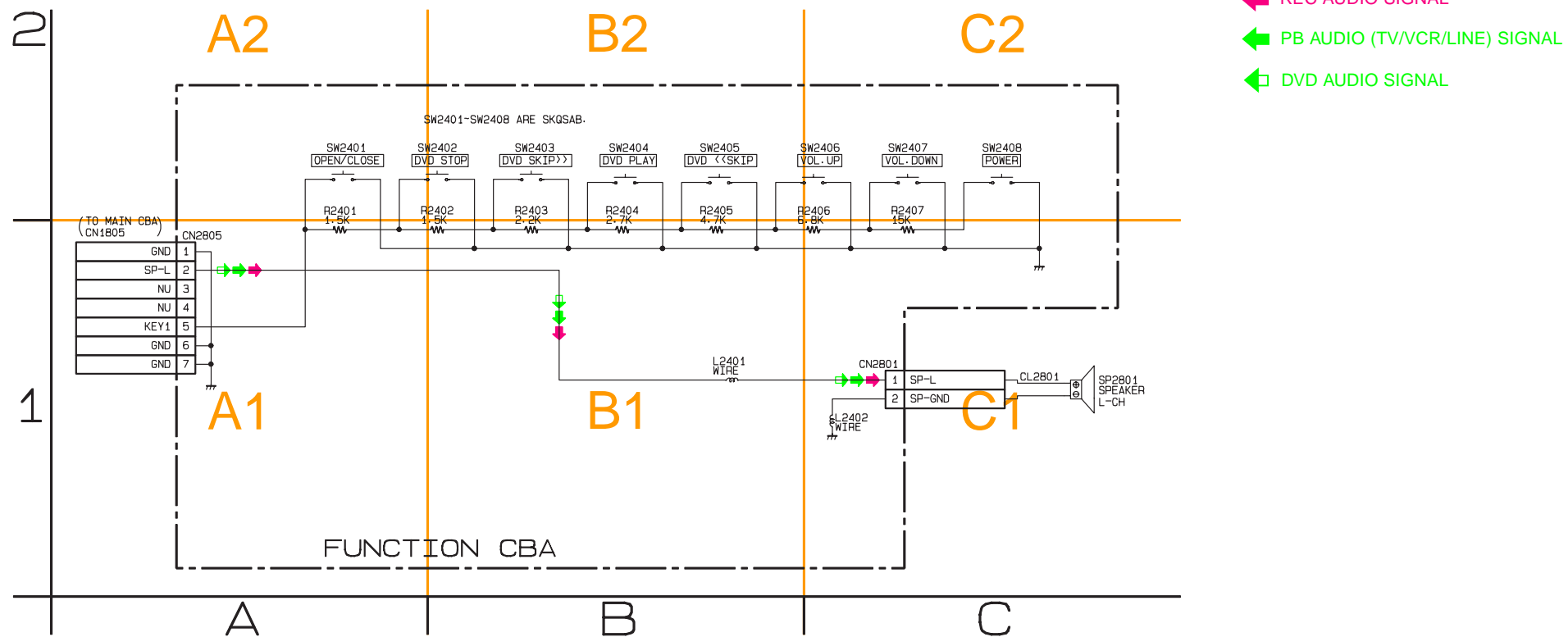


CRT Schematic Diagram < TV/VCR Section >



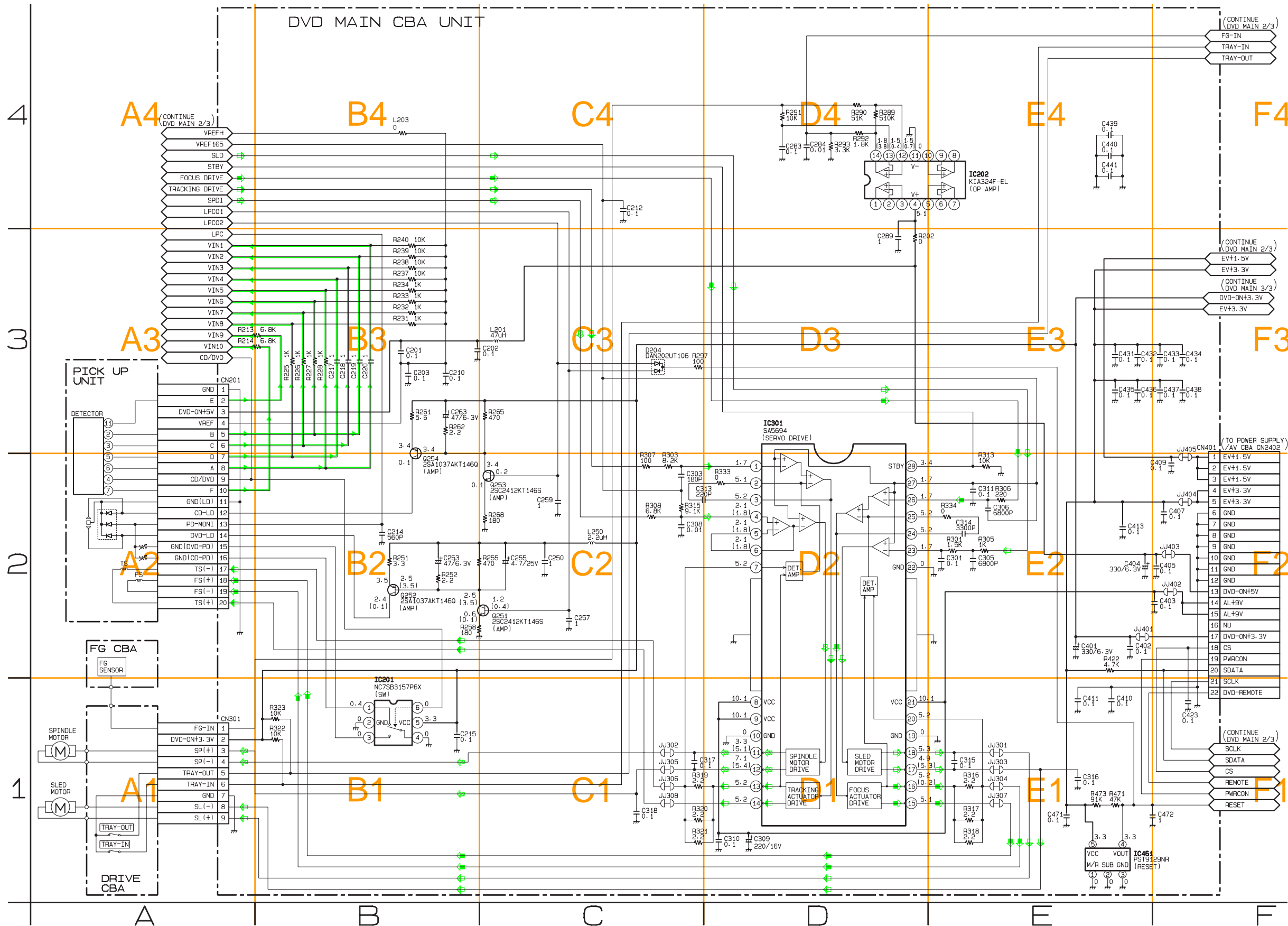
Function Schematic Diagram < TV/VCR Section >

TD860SCCRT



DVD Main 1/3 Schematic Diagram < DVD Section >

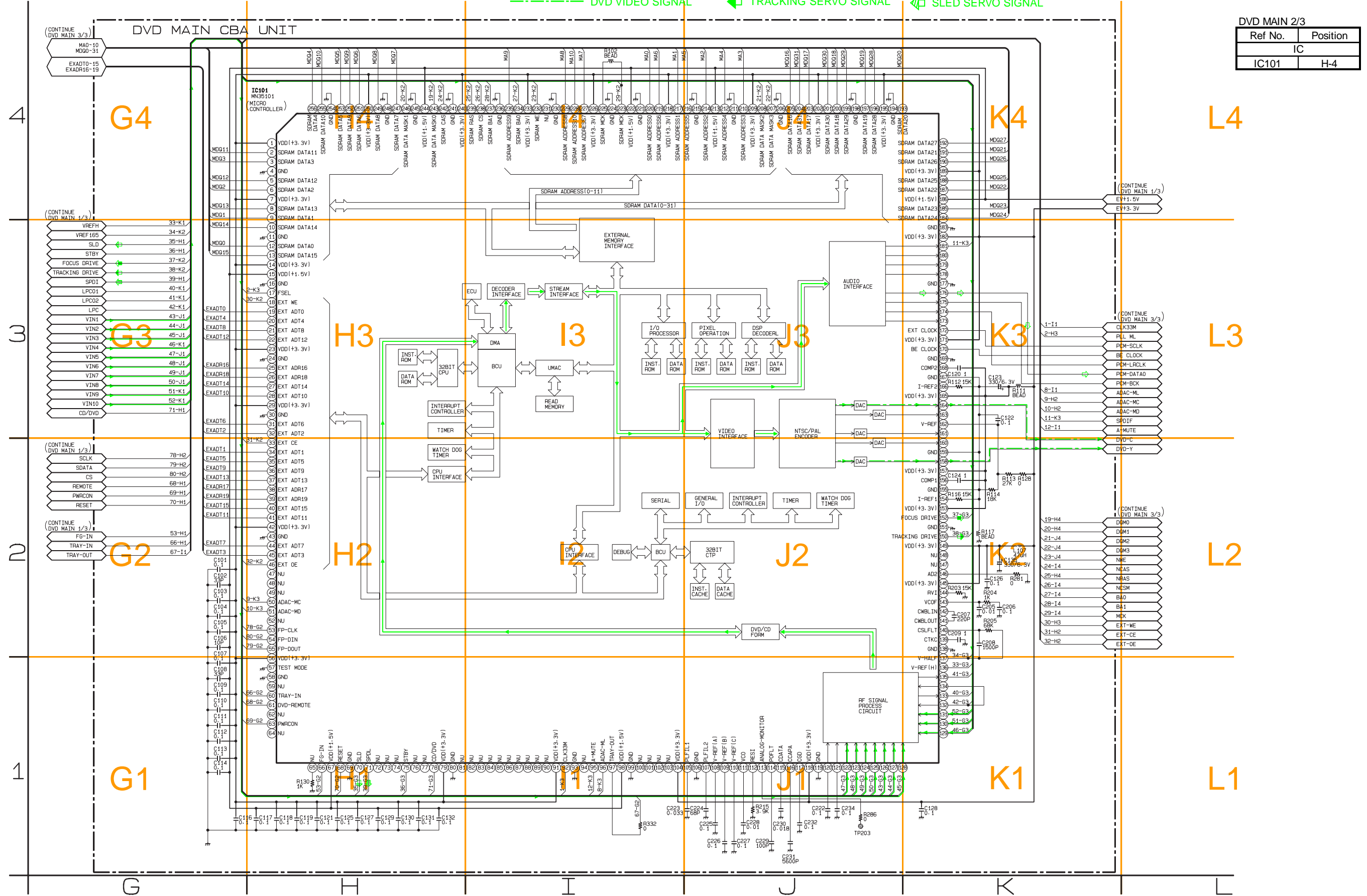
— DATA(VIDEO+AUDIO)
 ◀ FOCUS SERVO SIGNAL
 ◀ SPINDLE SERVO SIGNAL
◀ TRACKING SERVO SIGNAL
◀ SLED SERVO SIGNAL



| DVD MAIN 1/3 | |
|--------------|----------|
| Ref No. | Position |
| ICS | |
| IC201 | B-1 |
| IC202 | E-4 |
| IC301 | D-2 |
| IC461 | E-1 |
| TRANSISTORS | |
| Q251 | C-2 |
| Q252 | B-2 |
| Q253 | C-2 |
| Q254 | B-2 |
| CONNECTORS | |
| CN201 | A-3 |
| CN301 | A-1 |
| CN401 | F-2 |

DVD Main 2/3 Schematic Diagram < DVD Section >

——— DATA(VIDEO+AUDIO) ◀ FOCUS SERVO SIGNAL ◀ SPINDLE SERVO SIGNAL ◀ DATA (AUDIO) SIGNAL
- - - - - DVD VIDEO SIGNAL ◀ TRACKING SERVO SIGNAL ◀ SLED SERVO SIGNAL

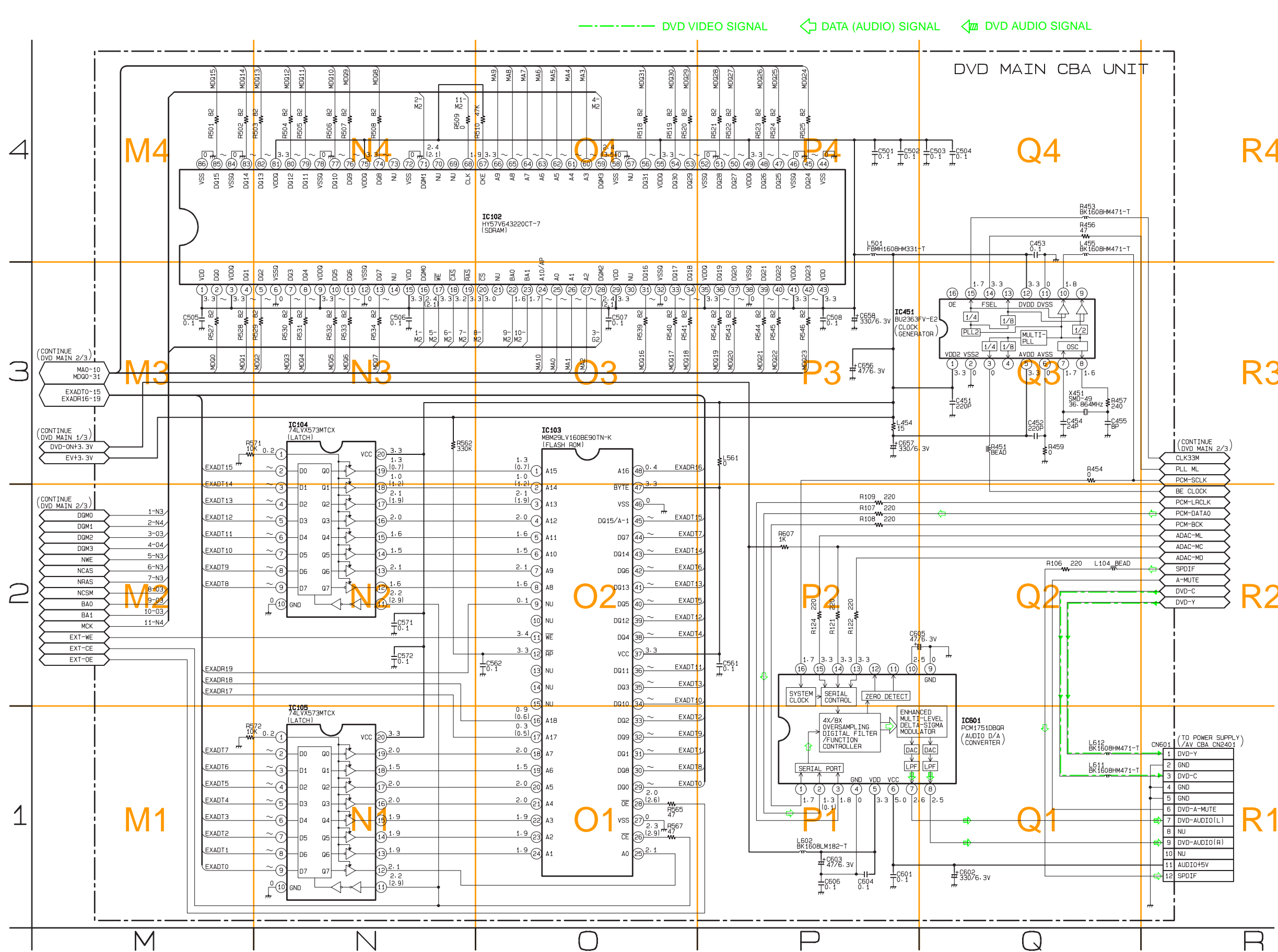


| DVD MAIN 2/3 | |
|--------------|----------|
| Ref No. | Position |
| IC | |
| IC101 | H-4 |

IC101 VOLTAGE CHART

| PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP | PIN.NO | PLAY | STOP |
|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|--------|------|------|
| 1 | 3.3 | 3.3 | 33 | 2.2 | 2.9 | 65 | 0.1 | 0.1 | 97 | 3.4 | 3.4 | 129 | 2.0 | 2.0 | 161 | ---- | ---- | 193 | ~ | ~ | 225 | 1.9 | 1.9 |
| 2 | ~ | ~ | 34 | ~ | ~ | 66 | 1.2 | 2.5 | 98 | 1.6 | 1.6 | 130 | 2.2 | 2.2 | 162 | 1.4 | 1.4 | 194 | 0 | 0 | 226 | 3.3 | 3.3 |
| 3 | ~ | ~ | 35 | ~ | ~ | 67 | 1.6 | 1.6 | 99 | 0 | 0 | 131 | 2.3 | 2.3 | 163 | ---- | ---- | 195 | 3.3 | 3.3 | 227 | ~ | ~ |
| 4 | 0 | 0 | 36 | ~ | ~ | 68 | 3.4 | 3.4 | 100 | ---- | ---- | 132 | 0.4 | 0.1 | 164 | 0.9 | 0.9 | 196 | ~ | ~ | 228 | ~ | ~ |
| 5 | ~ | ~ | 37 | ~ | ~ | 69 | 0 | 0 | 101 | ---- | ---- | 133 | 1.2 | 0.4 | 165 | 3.3 | 3.3 | 197 | ~ | ~ | 229 | ~ | ~ |
| 6 | ~ | ~ | 38 | 0.3 | 0.5 | 70 | 1.7 | 1.7 | 102 | ---- | ---- | 134 | 0.4 | 0.1 | 166 | 1.5 | 1.5 | 198 | 0 | 0 | 230 | 0 | 0 |
| 7 | 3.3 | 3.3 | 39 | 0.1 | 0.1 | 71 | 2.4 | 1.7 | 103 | ---- | ---- | 135 | 0.2 | 0.2 | 167 | 0 | 0 | 199 | ~ | ~ | 231 | ---- | ---- |
| 8 | ~ | ~ | 40 | ~ | ~ | 72 | ---- | ---- | 104 | 3.3 | 3.3 | 136 | 2.3 | 2.3 | 168 | 2.1 | 2.1 | 200 | ~ | ~ | 232 | 3.3 | 3.3 |
| 9 | ~ | ~ | 41 | ~ | ~ | 73 | ---- | ---- | 105 | 0.9 | 0.9 | 137 | 1.7 | 1.7 | 169 | 0 | 0 | 201 | ~ | ~ | 233 | 3.3 | 3.3 |
| 10 | ~ | ~ | 42 | 3.3 | 3.3 | 74 | ---- | ---- | 106 | 0 | 0 | 138 | 0 | 0 | 170 | 0.8 | 0.8 | 202 | 3.3 | 3.3 | 234 | 1.6 | 1.6 |
| 11 | 0 | 0 | 43 | 0 | 0 | 75 | 3.4 | 3.4 | 107 | 0.8 | 0.8 | 139 | 1.7 | 1.7 | 171 | 3.3 | 3.3 | 203 | ~ | ~ | 235 | ~ | ~ |
| 12 | ~ | ~ | 44 | ~ | ~ | 76 | ---- | ---- | 108 | 1.6 | 1.6 | 140 | 1.7 | 1.7 | 172 | 1.6 | 1.6 | 204 | ~ | ~ | 236 | 0 | 0 |
| 13 | ~ | ~ | 45 | ~ | ~ | 77 | ---- | ---- | 109 | 2.1 | 2.1 | 141 | 1.7 | 1.7 | 173 | ---- | ---- | 205 | ~ | ~ | 237 | 1.7 | 1.7 |
| 14 | 3.3 | 3.3 | 46 | 2.0 | 2.6 | 78 | 0.1 | 0.1 | 110 | 2.6 | 2.6 | 142 | 1.7 | 1.7 | 174 | 1.8 | 1.8 | 206 | 0 | 0 | 238 | 3.0 | 3.0 |
| 15 | 1.5 | 1.5 | 47 | ---- | ---- | 79 | 3.3 | 3.3 | 111 | 2.0 | 2.0 | 143 | 0.5 | 0.5 | 175 | 1.7 | 1.7 | 207 | 2.4 | 3.5 | 239 | 3.3 | 3.3 |
| 16 | 0 | 0 | 48 | ---- | ---- | 80 | 0 | 0 | 112 | 0.7 | 0.9 | 144 | 1.6 | 1.6 | 176 | 1.4 | 0.1 | 208 | 2.4 | 2.1 | 240 | 3.3 | 3.3 |
| 17 | 3.4 | 3.4 | 49 | ---- | ---- | 81 | ---- | ---- | 113 | 2.1 | 2.1 | 145 | 3.3 | 3.3 | 177 | 0 | 0 | 209 | 3.3 | 3.3 | 241 | 0 | 0 |
| 18 | 3.4 | 3.4 | 50 | 3.4 | 3.4 | 82 | ---- | ---- | 114 | 1.8 | 1.8 | 146 | 1.8 | 1.8 | 178 | ---- | ---- | 210 | ~ | ~ | 242 | 3.2 | 3.2 |
| 19 | ~ | ~ | 51 | 3.4 | 3.4 | 83 | ---- | ---- | 115 | 1.4 | 1.4 | 147 | ---- | ---- | 179 | ---- | ---- | 211 | 0 | 0 | 243 | 2.4 | 2.1 |
| 20 | ~ | ~ | 52 | ---- | ---- | 84 | ---- | ---- | 116 | 0.3 | 0.3 | 148 | ---- | ---- | 180 | ---- | ---- | 212 | ~ | ~ | 244 | 1.5 | 1.5 |
| 21 | ~ | ~ | 53 | 3.4 | 3.4 | 85 | ---- | ---- | 117 | 1.6 | 1.6 | 149 | 3.3 | 3.3 | 181 | 1.7 | 1.7 | 213 | 1.5 | 1.5 | 245 | 0 | 0 |
| 22 | ~ | ~ | 54 | 3.4 | 3.4 | 86 | ---- | ---- | 118 | 3.3 | 3.3 | 150 | 1.7 | 1.7 | 182 | 3.3 | 3.3 | 214 | ~ | ~ | 246 | 2.4 | 2.1 |
| 23 | 3.3 | 3.3 | 55 | 3.3 | 3.3 | 87 | ---- | ---- | 119 | 0 | 0 | 151 | 0 | 0 | 183 | 0 | 0 | 215 | 0 | 0 | 247 | ~ | ~ |
| 24 | 0 | 0 | 56 | 3.3 | 3.3 | 88 | ---- | ---- | 120 | 1.9 | 1.9 | 152 | 1.7 | 1.7 | 184 | ~ | ~ | 216 | ~ | ~ | 248 | 0 | 0 |
| 25 | 0.4 | 0.4 | 57 | 0 | 0 | 89 | ---- | ---- | 121 | 1.9 | 1.9 | 153 | 3.3 | 3.3 | 185 | ~ | ~ | 217 | ~ | ~ | 249 | ~ | ~ |
| 26 | 0.9 | 0.6 | 58 | 0 | 0 | 90 | ---- | ---- | 122 | 2.4 | 2.4 | 154 | 1.4 | 1.4 | 186 | 1.5 | 1.5 | 218 | 3.3 | 3.3 | 250 | 3.3 | 3.3 |
| 27 | ~ | ~ | 59 | ---- | ---- | 91 | 3.3 | 3.3 | 123 | 2.4 | 2.4 | 155 | 0 | 0 | 187 | ~ | ~ | 219 | ~ | ~ | 251 | ~ | ~ |
| 28 | ~ | ~ | 60 | 3.4 | 3.4 | 92 | 1.7 | 1.5 | 124 | 2.4 | 2.4 | 156 | 2.2 | 2.2 | 188 | ~ | ~ | 220 | ~ | ~ | 252 | ~ | ~ |
| 29 | 3.3 | 3.3 | 61 | 3.1 | 3.1 | 93 | 0 | 0 | 125 | 2.4 | 2.4 | 157 | 3.3 | 3.3 | 189 | 3.3 | 3.3 | 221 | 0 | 0 | 253 | ~ | ~ |
| 30 | 0 | 0 | 62 | ---- | ---- | 94 | ---- | ---- | 126 | 2.0 | 2.0 | 158 | 0.7 | 0.7 | 190 | ~ | ~ | 222 | 1.5 | 1.5 | 254 | 0 | 0 |
| 31 | ~ | ~ | 63 | 3.4 | 3.4 | 95 | 3.4 | 0.1 | 127 | 2.0 | 2.0 | 159 | 0 | 0 | 191 | ~ | ~ | 223 | 1.9 | 1.9 | 255 | ~ | ~ |
| 32 | ~ | ~ | 64 | ---- | ---- | 96 | 3.4 | 3.4 | 128 | 2.0 | 2.0 | 160 | ---- | ---- | 192 | ~ | ~ | 224 | 0 | 0 | 256 | ~ | ~ |

DVD Main 3/3 Schematic Diagram < DVD Section >

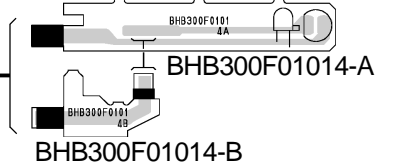
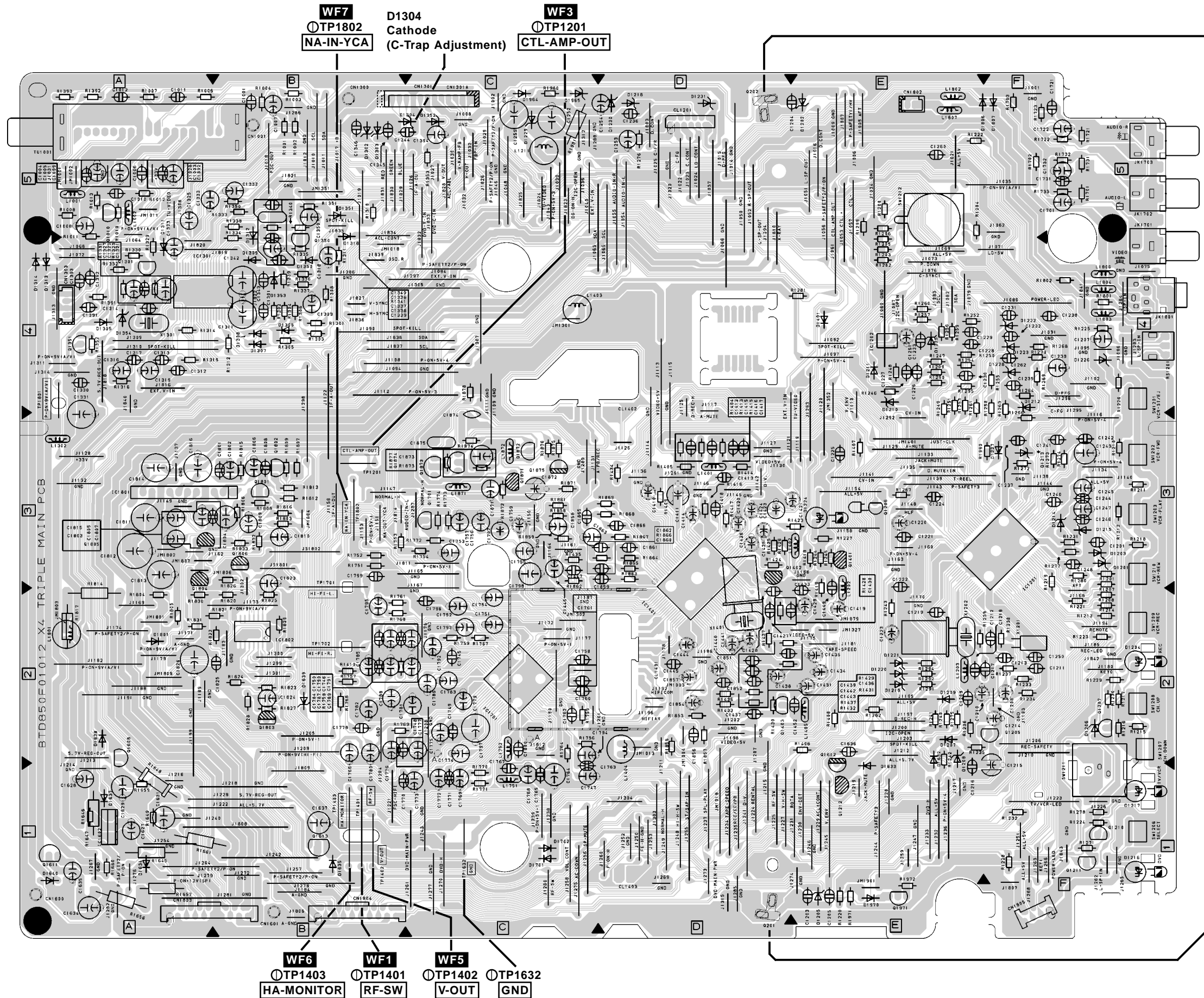


DVD MAIN 3/3

| Ref No. | Position |
|-----------|----------|
| ICS | |
| IC102 | O-4 |
| IC103 | O-3 |
| IC104 | N-3 |
| IC105 | N-1 |
| IC451 | Q-3 |
| IC601 | Q-1 |
| CONNECTOR | |
| CN601 | R-1 |

Main CBA Top View < TV/VCR Section >

Sensor CBA Top View



MAIN CBA

| Ref No. | Position |
|-------------|----------|
| ICs | |
| IC1201 | F-3 |
| IC1202 | E-4 |
| IC1301 | A-4 |
| IC1401 | D-2 |
| IC1602 | A-1 |
| IC1751 | C-2 |
| IC1801 | A-3 |
| IC1802 | B-2 |
| TRANSISTORS | |
| Q1010 | A-5 |
| Q1205 | F-2 |
| Q1206 | E-3 |
| Q1207 | F-2 |
| Q1210 | F-1 |
| Q1211 | F-1 |
| Q1301 | A-4 |
| Q1351 | A-4 |
| Q1401 | E-3 |
| Q1402 | D-3 |
| Q1403 | D-2 |
| Q1608 | A-2 |
| Q1611 | A-1 |
| Q1612 | E-2 |
| Q1613 | B-1 |
| Q1701 | C-3 |
| Q1803 | B-2 |
| Q1806 | B-3 |
| Q1871 | C-3 |
| Q1872 | C-3 |
| Q1873 | C-3 |
| Q1874 | C-3 |
| Q1875 | C-3 |
| CONNECTORS | |
| CL1201 | D-5 |
| CL1401 | D-2 |
| CL1402 | D-4 |
| CL1403 | D-1 |
| CN1301 | C-5 |
| CN1802 | E-5 |
| CN1803 | A-1 |
| CN1804 | B-1 |
| CN1805 | F-1 |
| TEST POINTS | |
| TP1201 | B-3 |
| TP1401 | B-1 |
| TP1402 | B-1 |
| TP1403 | B-1 |
| TP1632 | C-1 |
| TP1701 | B-3 |
| TP1702 | B-2 |
| TP1801 | A-4 |
| TP1802 | B-3 |

Main CBA Bottom View < TV/VCR Section >

WF8
PIN 7
OF IC1401

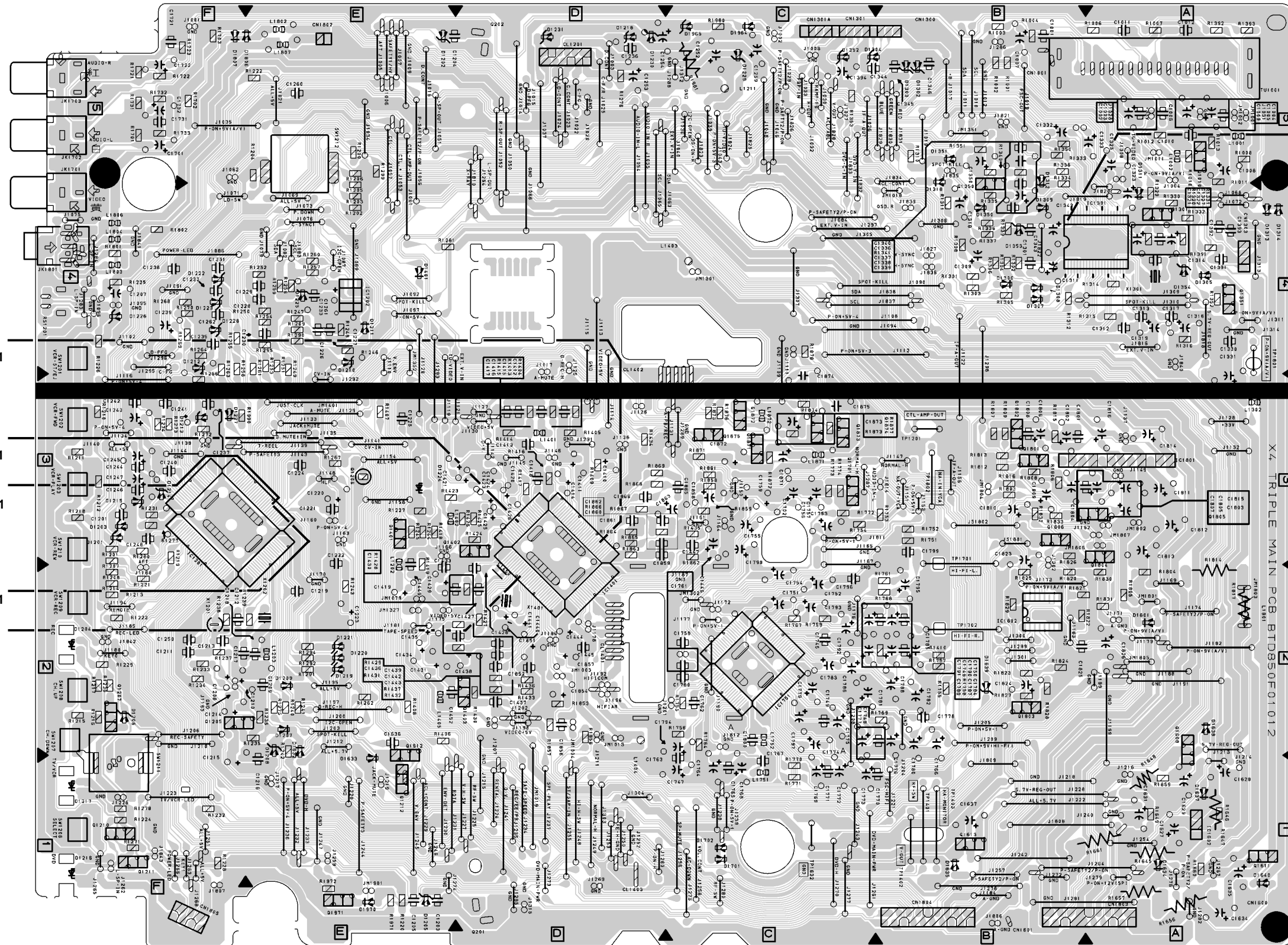
WF4
PIN 42
OF IC1401

WF16
PIN 59
OF IC1201

WF15
PIN 58
OF IC1201

WF2
PIN 61
OF IC1401

WF9
PIN 41
OF IC1301

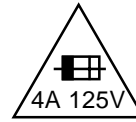


X4 TRIPLE MAIN PCB BTD850F01012

Power Supply / AV CBA Top View < TV/VCR Section >

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
If Main Fuse (F2601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
Otherwise it may cause some components in the power supply circuit to fail.

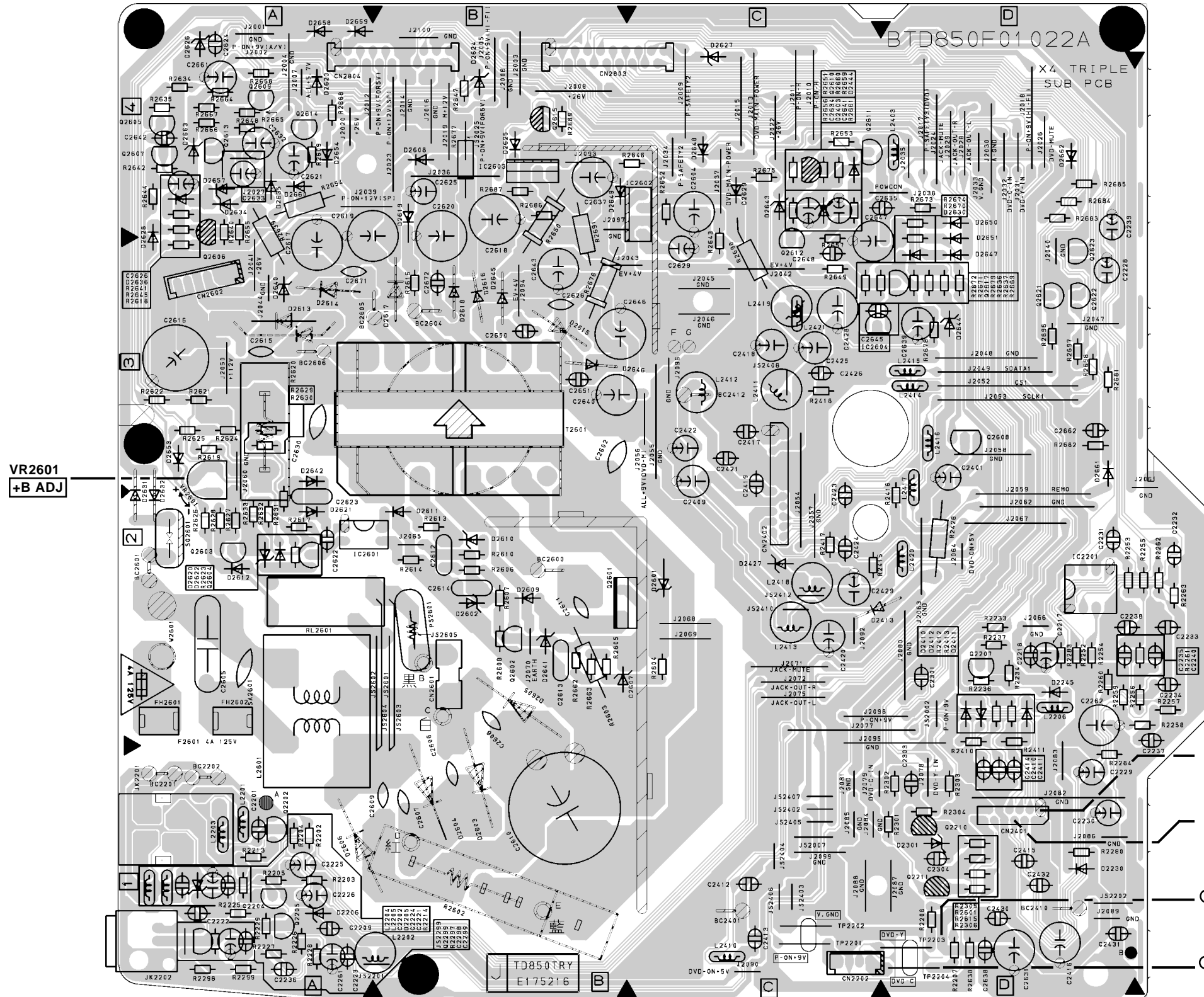


CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A, 125V FUSE.
ATTENTION: UTILISER UN FUSIBLE DE RECHANGE DE MÊME TYPE DE 4A, 125V.

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :

The voltage for parts in hot circuit is measured using hot GND as a common terminal.



POWER SUPPLY/AV CBA

| Ref No. | Position |
|-------------------|----------|
| ICS | |
| IC2201 | D-2 |
| IC2601 | A-2 |
| IC2602 | C-4 |
| IC2603 | B-4 |
| IC2604 | C-3 |
| TRANSISTORS | |
| Q2205 | A-1 |
| Q2207 | D-2 |
| Q2210 | D-1 |
| Q2211 | D-1 |
| Q2601 | B-2 |
| Q2602 | B-2 |
| Q2604 | A-2 |
| Q2605 | A-4 |
| Q2606 | A-4 |
| Q2607 | A-4 |
| Q2608 | D-3 |
| Q2609 | A-4 |
| Q2610 | C-4 |
| Q2611 | C-4 |
| Q2612 | C-3 |
| Q2613 | A-4 |
| Q2614 | A-4 |
| Q2615 | B-4 |
| Q2617 | D-3 |
| Q2621 | D-3 |
| Q2622 | D-3 |
| Q2623 | D-3 |
| CONNECTORS | |
| CN2401 | D-1 |
| CN2402 | C-2 |
| CN2601 | B-2 |
| CN2602 | A-3 |
| CN2803 | B-4 |
| CN2804 | A-4 |
| TEST POINTS | |
| TP2201 | C-1 |
| TP2202 | C-1 |
| TP2203 | D-1 |
| TP2204 | D-1 |
| VARIABLE RESISTOR | |
| VR2601 | A-3 |

WF20
PIN 1
OF CN2401

WF19
PIN 6
OF CN2401

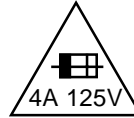
WF17
TP2203
DVD-Y

WF18
TP2204
DVD-C

Power Supply / AV CBA Bottom View < TV/VCR Section >

CAUTION !

Fixed voltage (or Auto voltage selectable) power supply circuit is used in this unit.
 If Main Fuse (F2601) is blown, check to see that all components in the power supply circuit are not defective before you connect the AC plug to the AC power supply.
 Otherwise it may cause some components in the power supply circuit to fail.

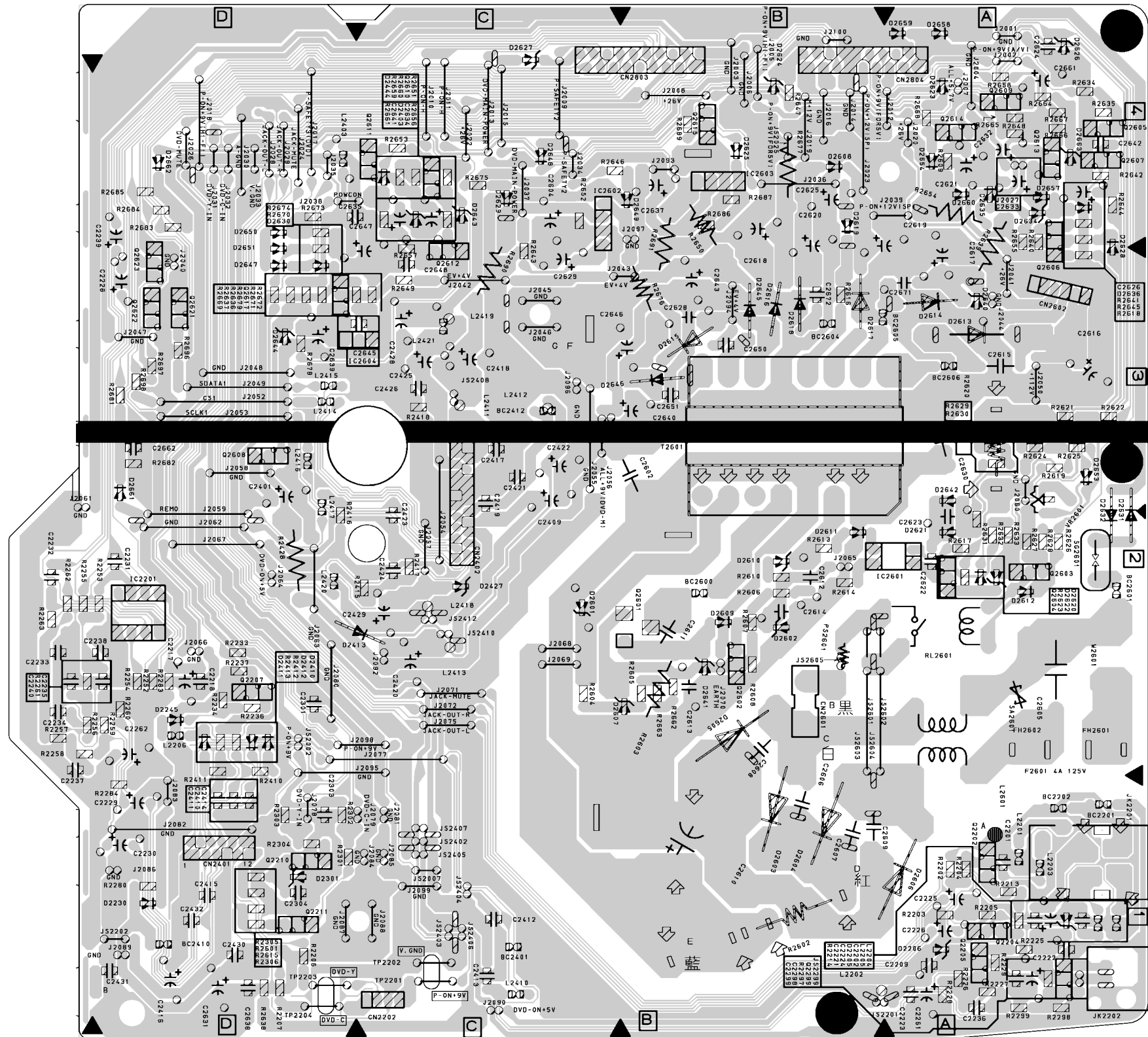


CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 4A, 125V FUSE.
ATTENTION: UTILISER UN FUSIBLE DE REMPLACEMENT DE MÊME TYPE DE 4A, 125V.

BECAUSE A HOT CHASSIS GROUND IS PRESENT IN THE POWER SUPPLY CIRCUIT, AN ISOLATION TRANSFORMER MUST BE USED. ALSO, IN ORDER TO HAVE THE ABILITY TO INCREASE THE INPUT SLOWLY, WHEN TROUBLESHOOTING THIS TYPE POWER SUPPLY CIRCUIT, A VARIABLE ISOLATION TRANSFORMER IS REQUIRED.

NOTE :

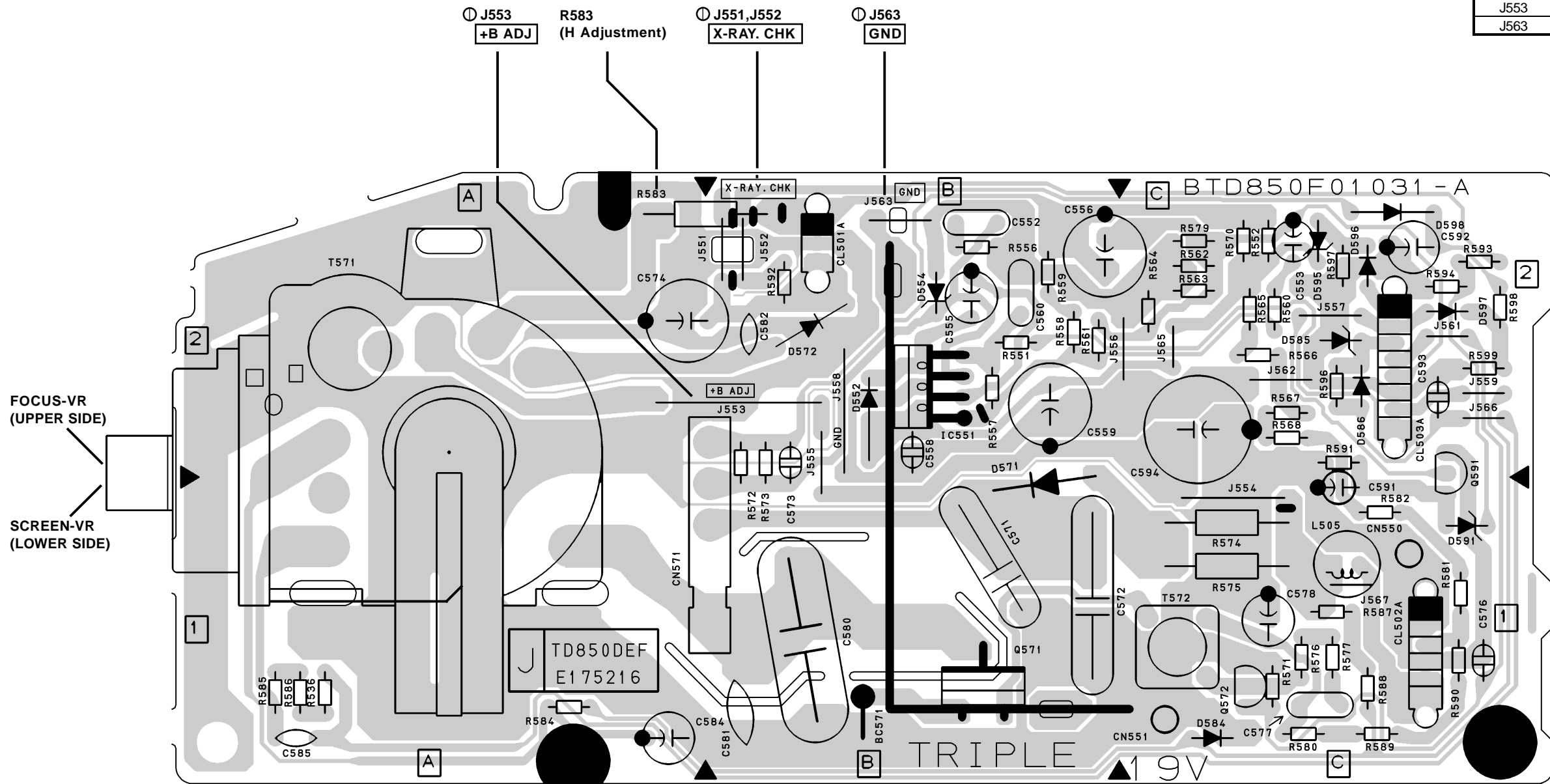
The voltage for parts in hot circuit is measured using hot GND as a common terminal.



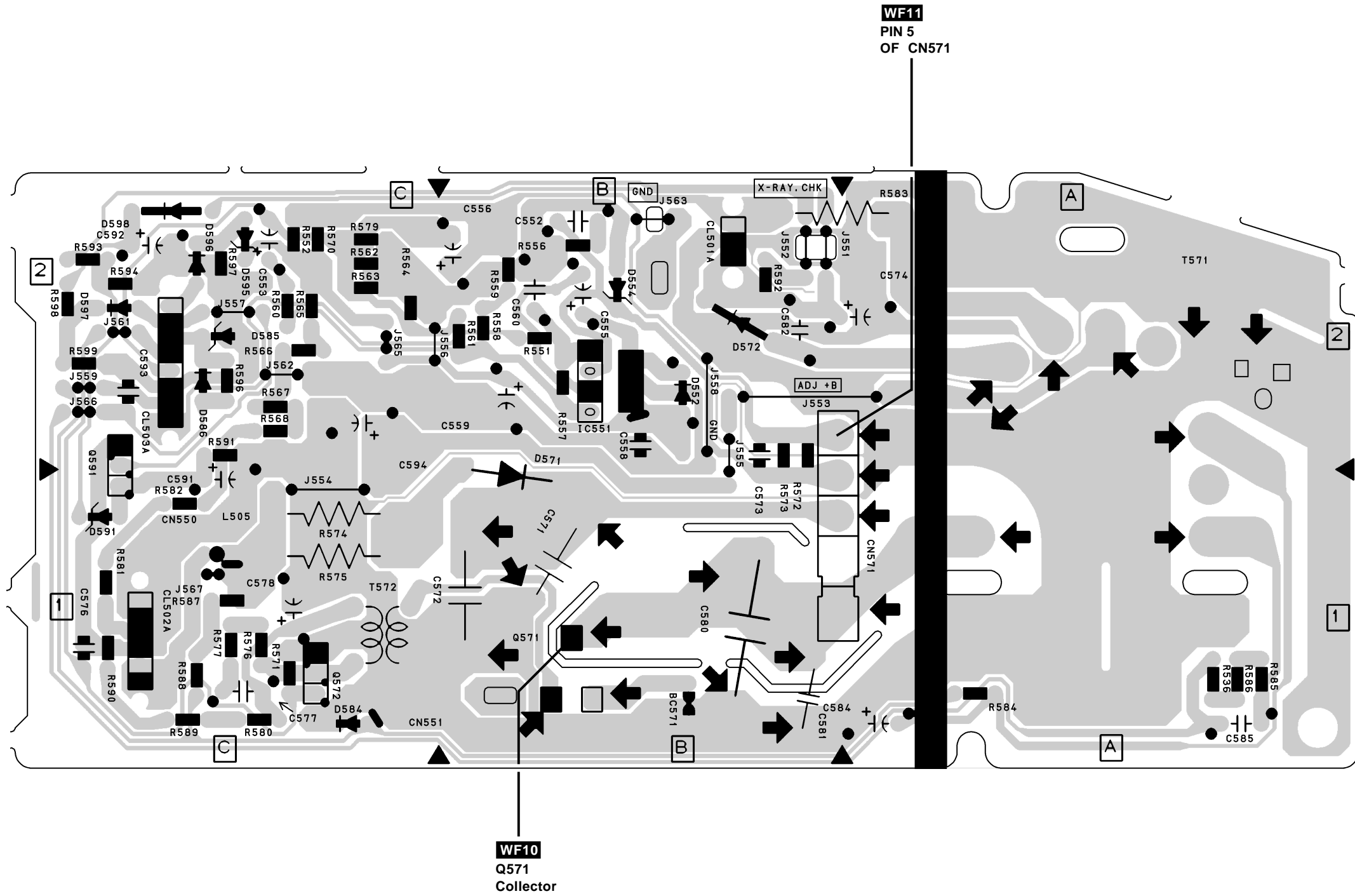
H.V. CBA Top View < TV/VCR Section >

H.V. CBA

| Ref No. | Position |
|-------------|----------|
| IC | |
| IC551 | B-2 |
| TRANSISTORS | |
| Q571 | B-1 |
| Q572 | C-1 |
| Q591 | C-2 |
| CONNECTORS | |
| CL501A | B-2 |
| CL502A | C-1 |
| CL503A | C-2 |
| CN571 | A-1 |
| TEST POINTS | |
| J551 | B-2 |
| J552 | B-2 |
| J553 | B-2 |
| J563 | B-2 |



H.V. CBA Bottom View < TV/VCR Section >

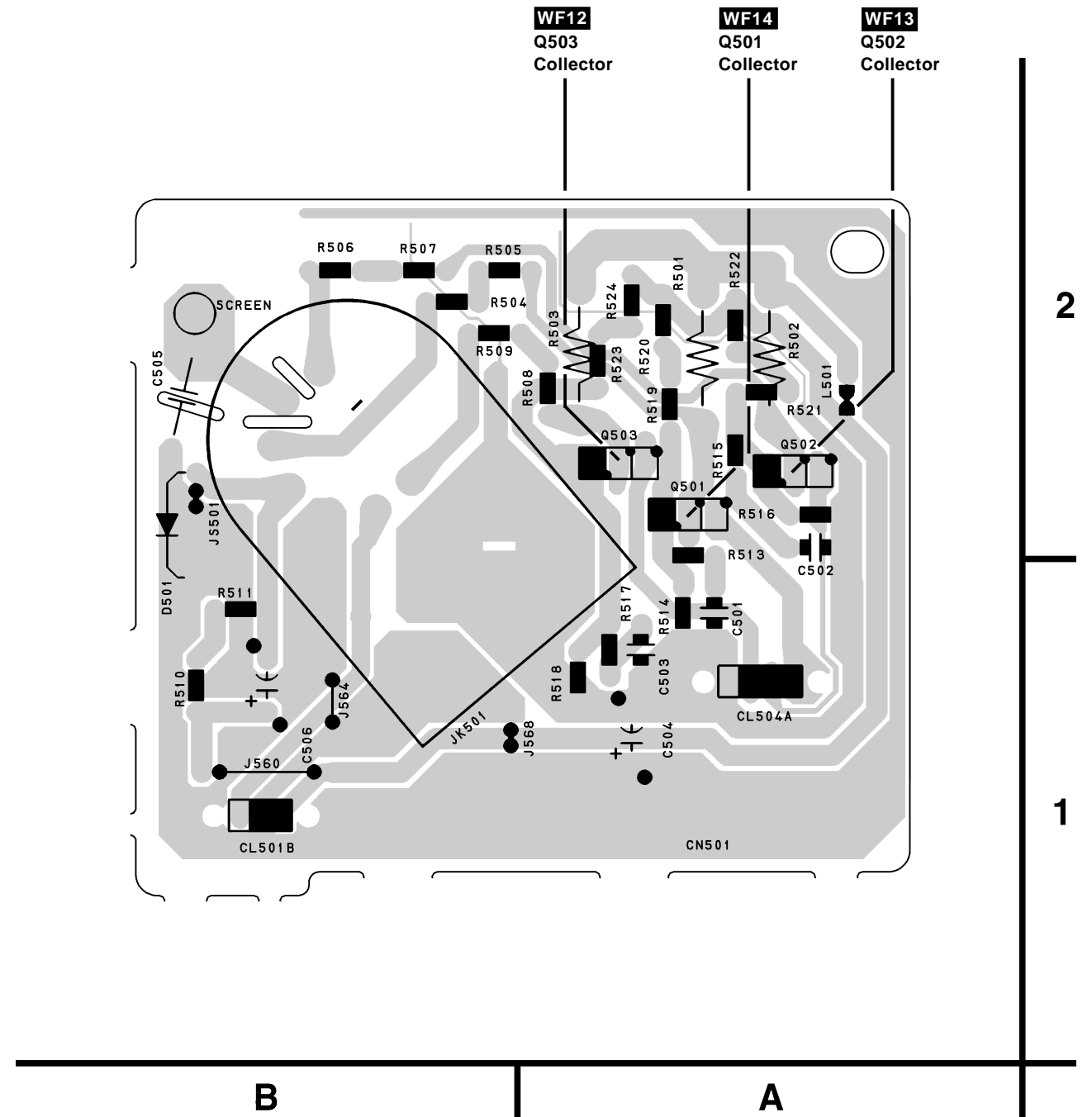
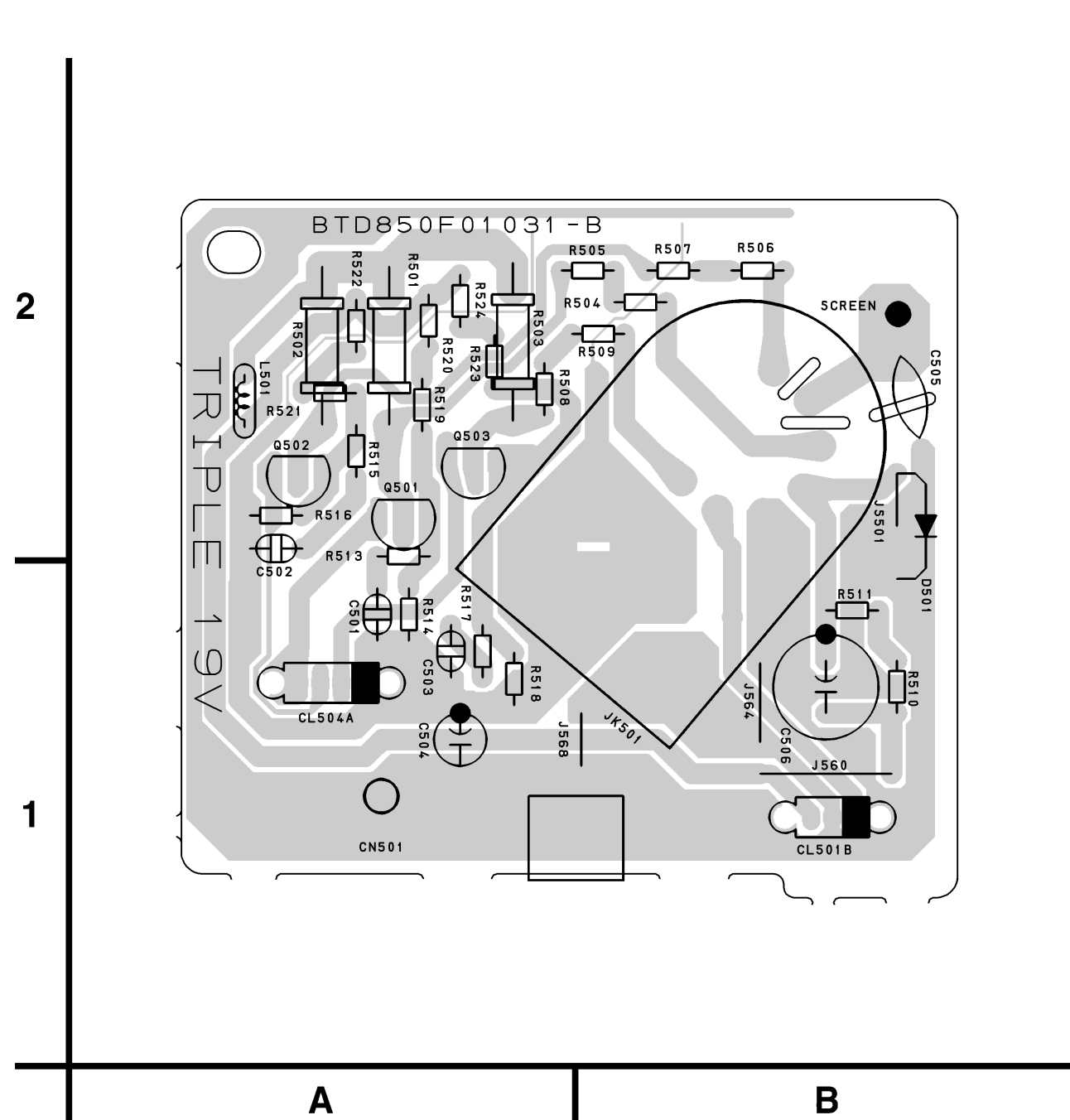


CRT CBA Top View < TV/VCR Section >

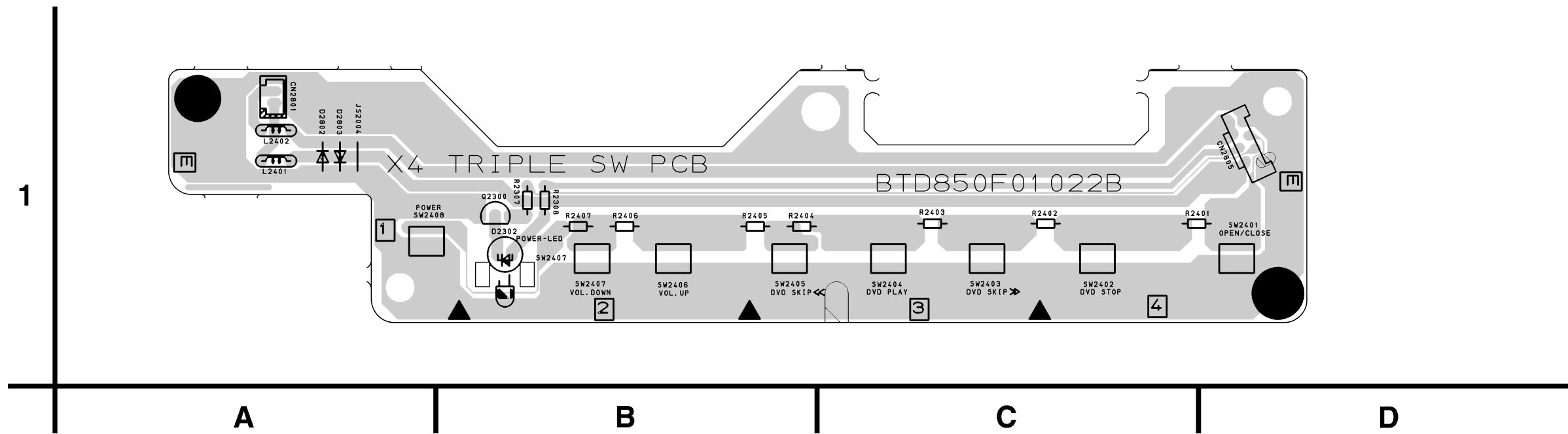
CRT CBA Bottom View < TV/VCR Section >

CRT CBA

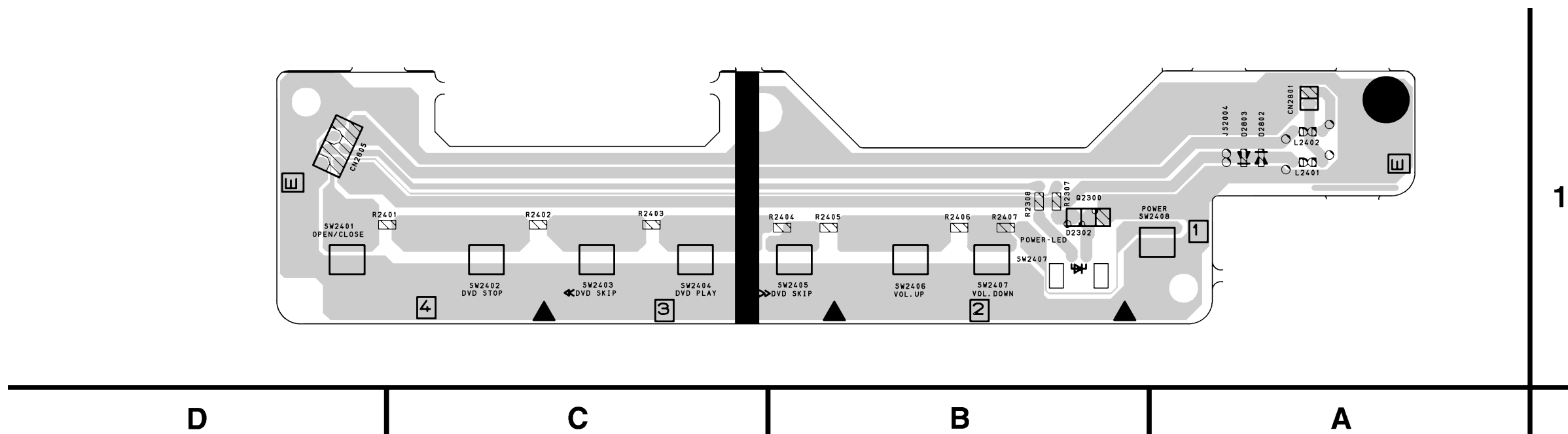
| Ref No. | Position |
|-------------|----------|
| TRANSISTORS | |
| Q501 | A-2 |
| Q502 | A-2 |
| Q503 | A-2 |
| CONNECTORS | |
| CL501B | B-1 |
| CL504A | A-1 |
| CN501 | A-1 |



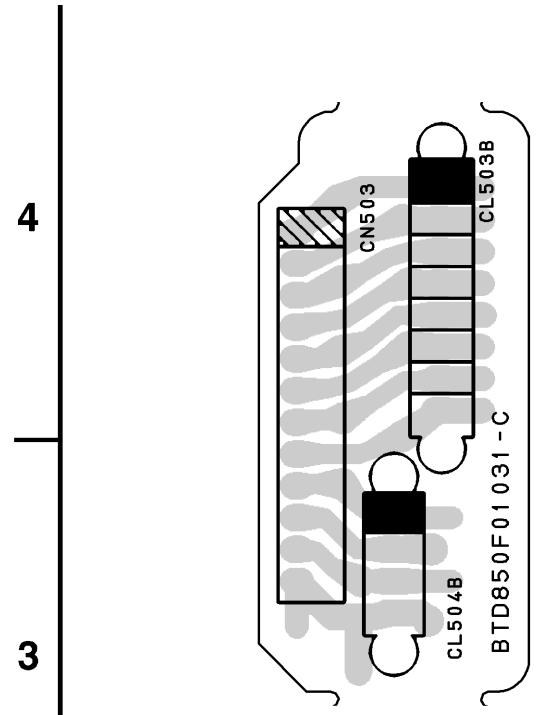
Function CBA Top View < TV/VCR Section >



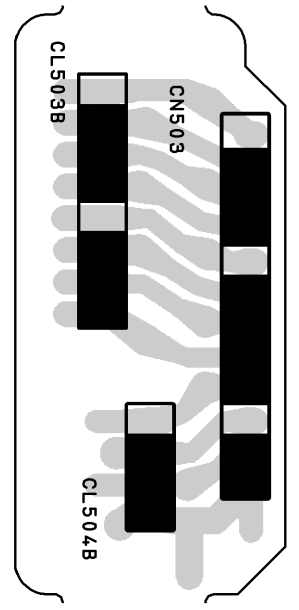
Function CBA Bottom View < TV/VCR Section >



Junction-A CBA
Top View < TV/VCR Section >

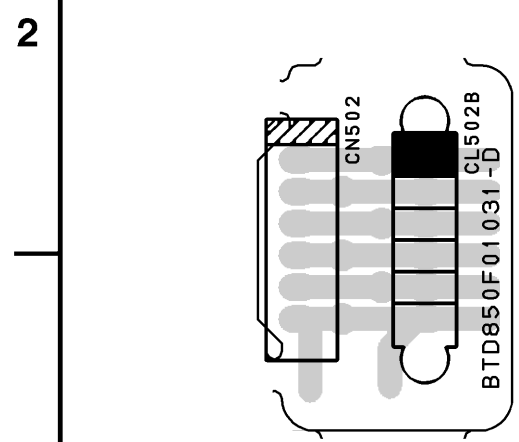


Junction-A CBA
Bottom View < TV/VCR Section >

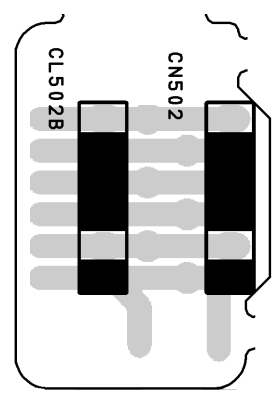


BTD850F01031-C

Junction-B CBA
Top View < TV/VCR Section >



Junction-B CBA
Bottom View < TV/VCR Section >



BTD850F01031-D

A | **B** | **C** | **D**

WAVEFORMS

Input:

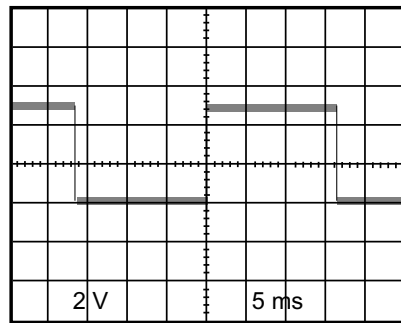
NTSC Color Bar Signal (with 1kHz Audio Signal) --- WF1~WF16

DVD Video (Power on (Stop) MODE) --- WF17, WF18

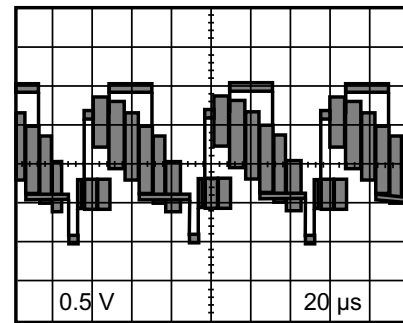
CD (1KHz Play) --- WF19, WF20

INITIAL POSITION: Unplug unit from AC outlet for at least five minutes, reconnect to AC outlet and then turn power on.

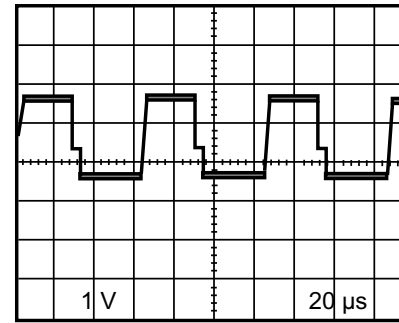
(Brightness---Center Color---Center Tint --- Center Contrast---Approx 70%)



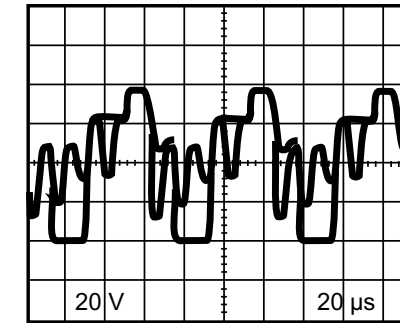
WF1 MAIN 2/5 SCHEMATIC DIAGRAM
TP1401 RF-SW



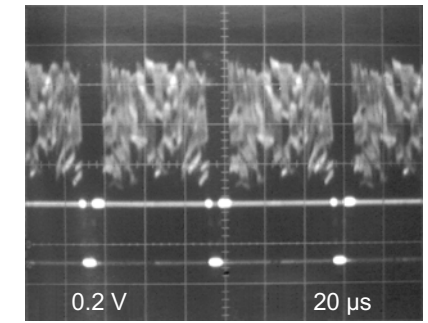
WF5 MAIN 2/5 SCHEMATIC DIAGRAM
TP1402 V-OUT



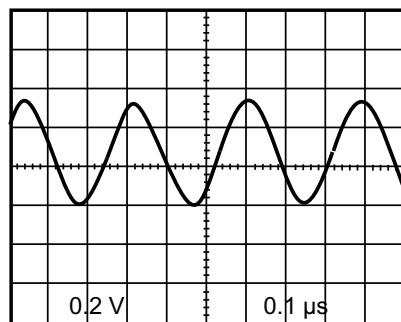
WF9 MAIN 3/5 SCHEMATIC DIAGRAM
IC1301 PIN 41



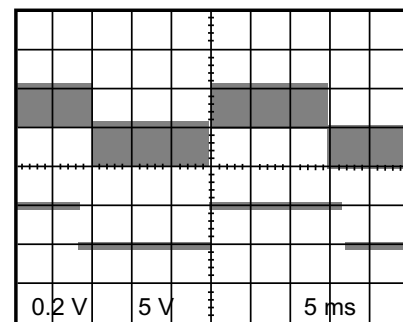
WF13 CRT SCHEMATIC DIAGRAM
Q502 COLLECTOR



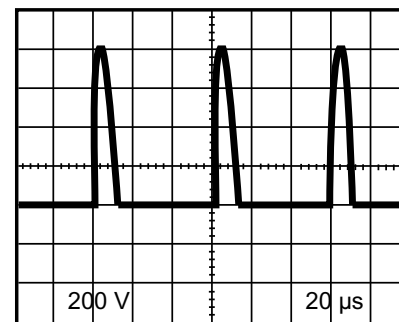
WF17 POWER SUPPLY/AV 2/2
SCHEMATIC DIAGRAM
TP2203 DVD-Y



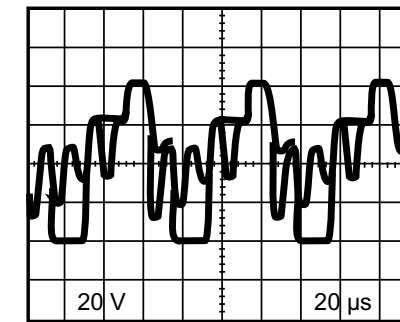
WF2 MAIN 2/5 SCHEMATIC DIAGRAM
IC1401 PIN 61



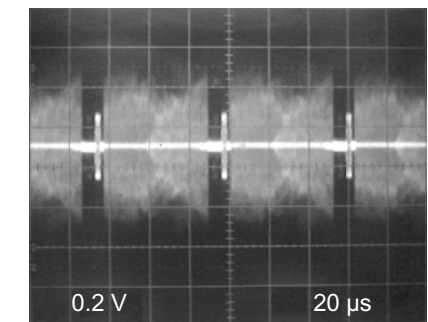
Upper: **WF6** Lower: **WF1**
MAIN 2/5 SCHEMATIC DIAGRAM
TP1403 HA-MONITOR



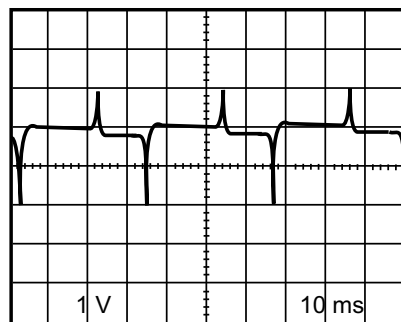
WF10 H.V. SCHEMATIC DIAGRAM
Q571 COLLECTOR



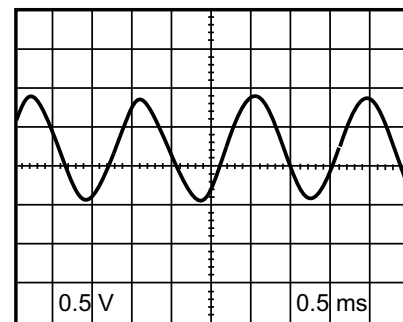
WF14 CRT SCHEMATIC DIAGRAM
Q501 COLLECTOR



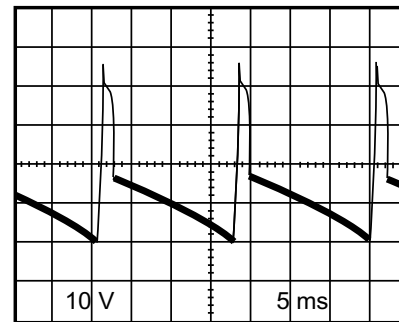
WF18 POWER SUPPLY/AV 2/2
SCHEMATIC DIAGRAM
TP2204 DVD-C



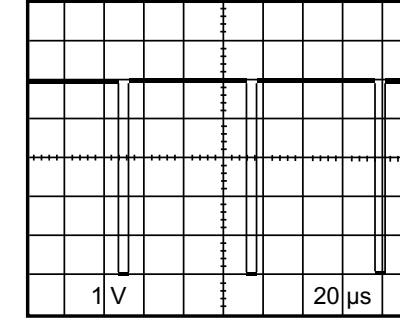
WF3 MAIN 1/5 SCHEMATIC DIAGRAM
TP1201 CTL-AMP-OUT



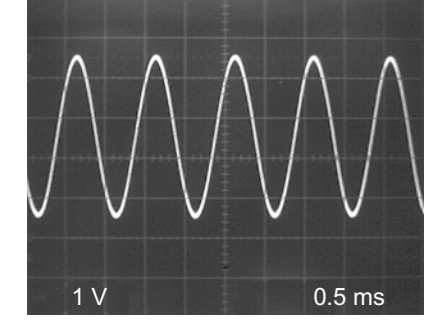
WF7 MAIN 2/5 SCHEMATIC DIAGRAM
TP1802 NA-IN-YCA



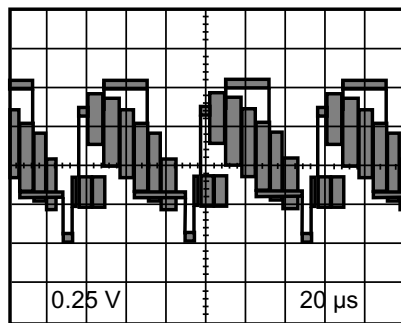
WF11 H.V. SCHEMATIC DIAGRAM
CN571 PIN 5



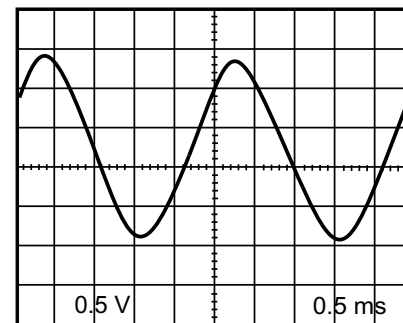
WF15 MAIN 1/5 SCHEMATIC DIAGRAM
IC1201 PIN 58



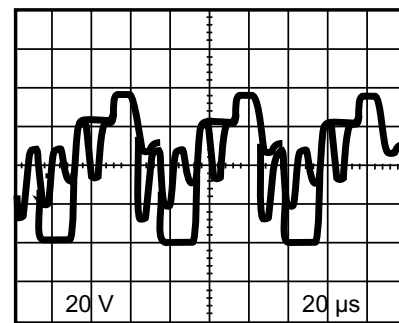
WF19 POWER SUPPLY/AV 2/2
SCHEMATIC DIAGRAM
CN2401 PIN 6



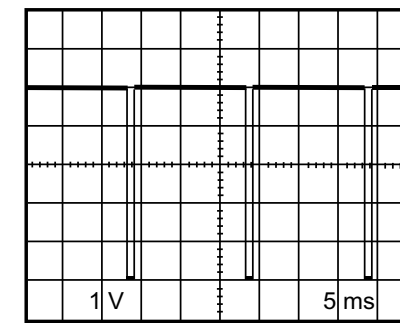
WF4 MAIN 2/5 SCHEMATIC DIAGRAM
IC1401 PIN 42



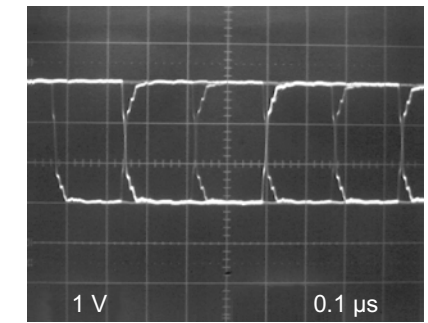
WF8 MAIN 2/5 SCHEMATIC DIAGRAM
IC1401 PIN 7



WF12 CRT SCHEMATIC DIAGRAM
Q503 COLLECTOR



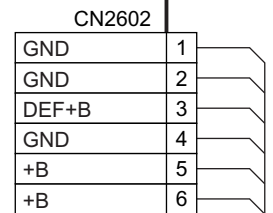
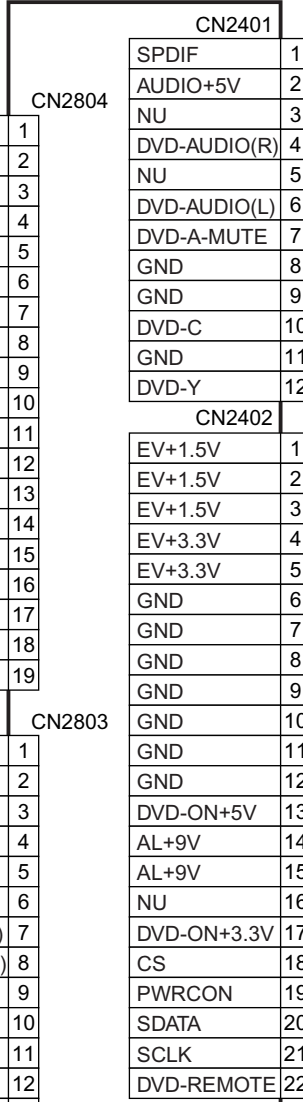
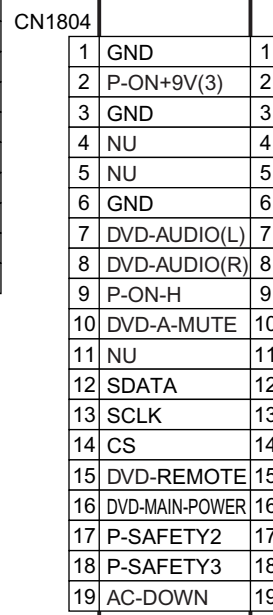
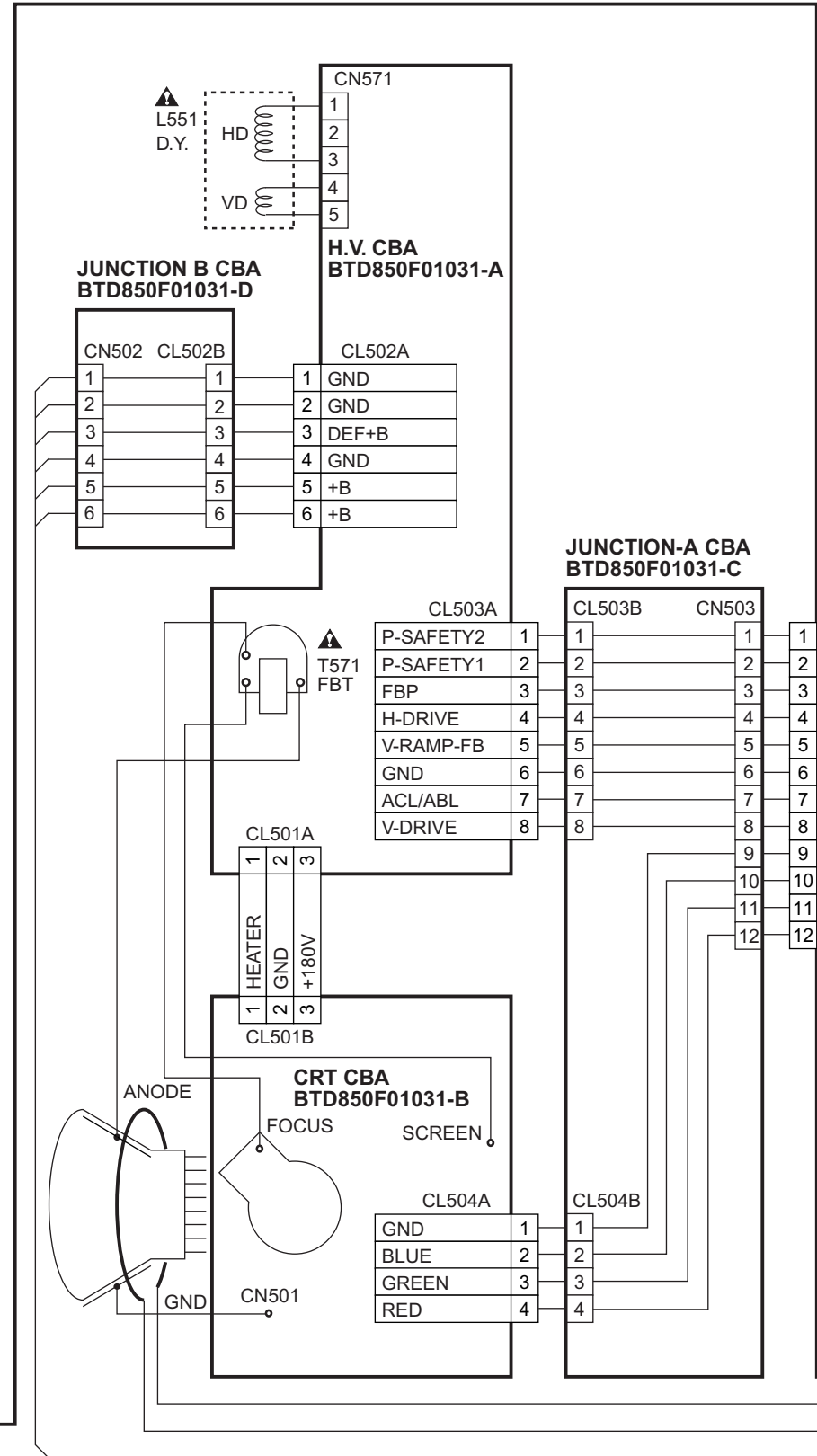
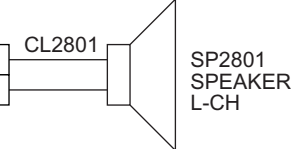
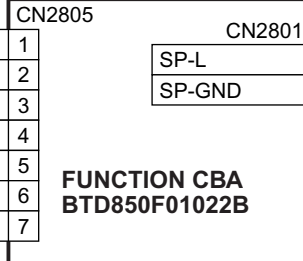
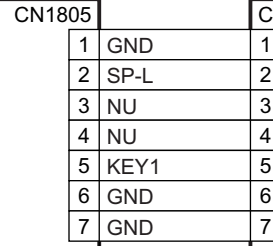
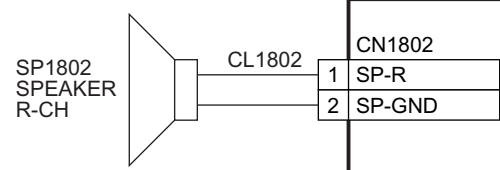
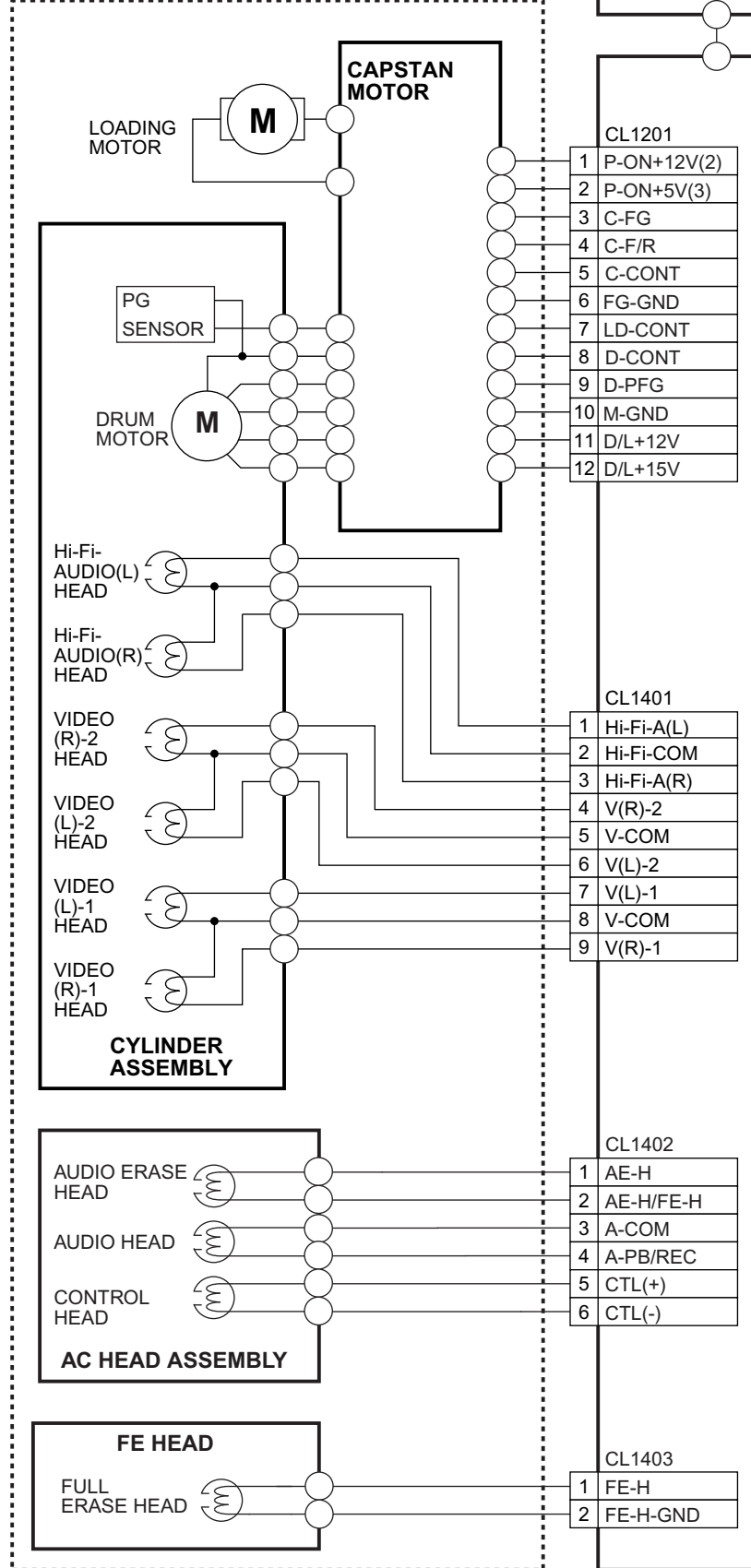
WF16 MAIN 1/5 SCHEMATIC DIAGRAM
IC1201 PIN 59



WF20 POWER SUPPLY/AV 2/2
SCHEMATIC DIAGRAM
CN2401 PIN 1

WIRING DIAGRAM < TV/VCR SECTION >

WIRING DIAGRAM FOR SECTION 2 (DECK MECHANISM)



CONTINUE WIRING DIAGRAM (DVD SECTION)

WIRING DIAGRAM < DVD SECTION >

