

SECTION 4
CHARTS AND DIAGRAMS

4.1 BOARD INTERCONNECTIONS

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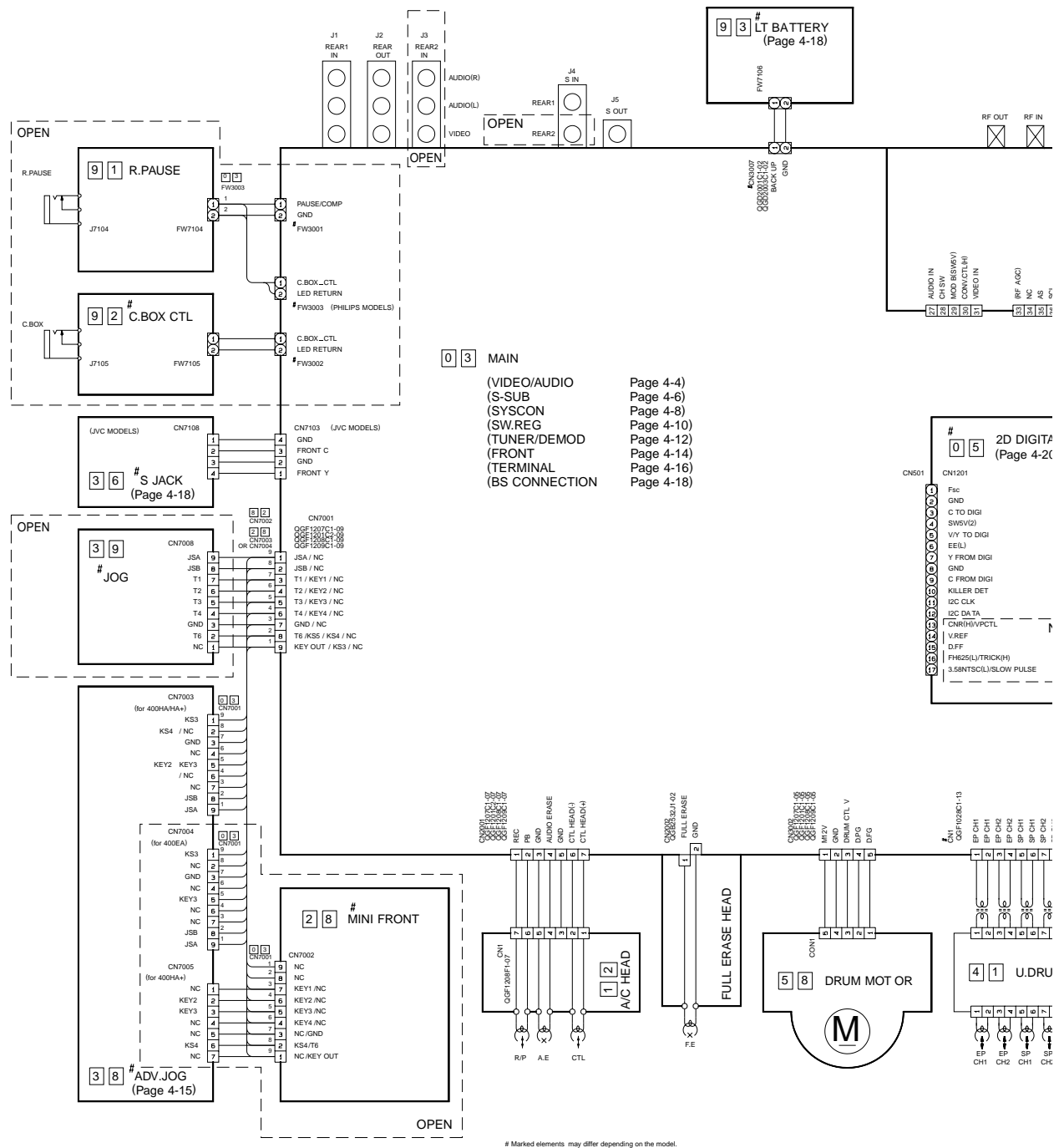
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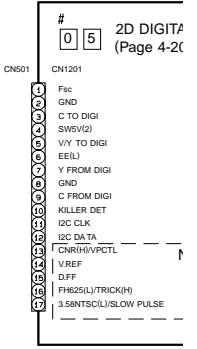
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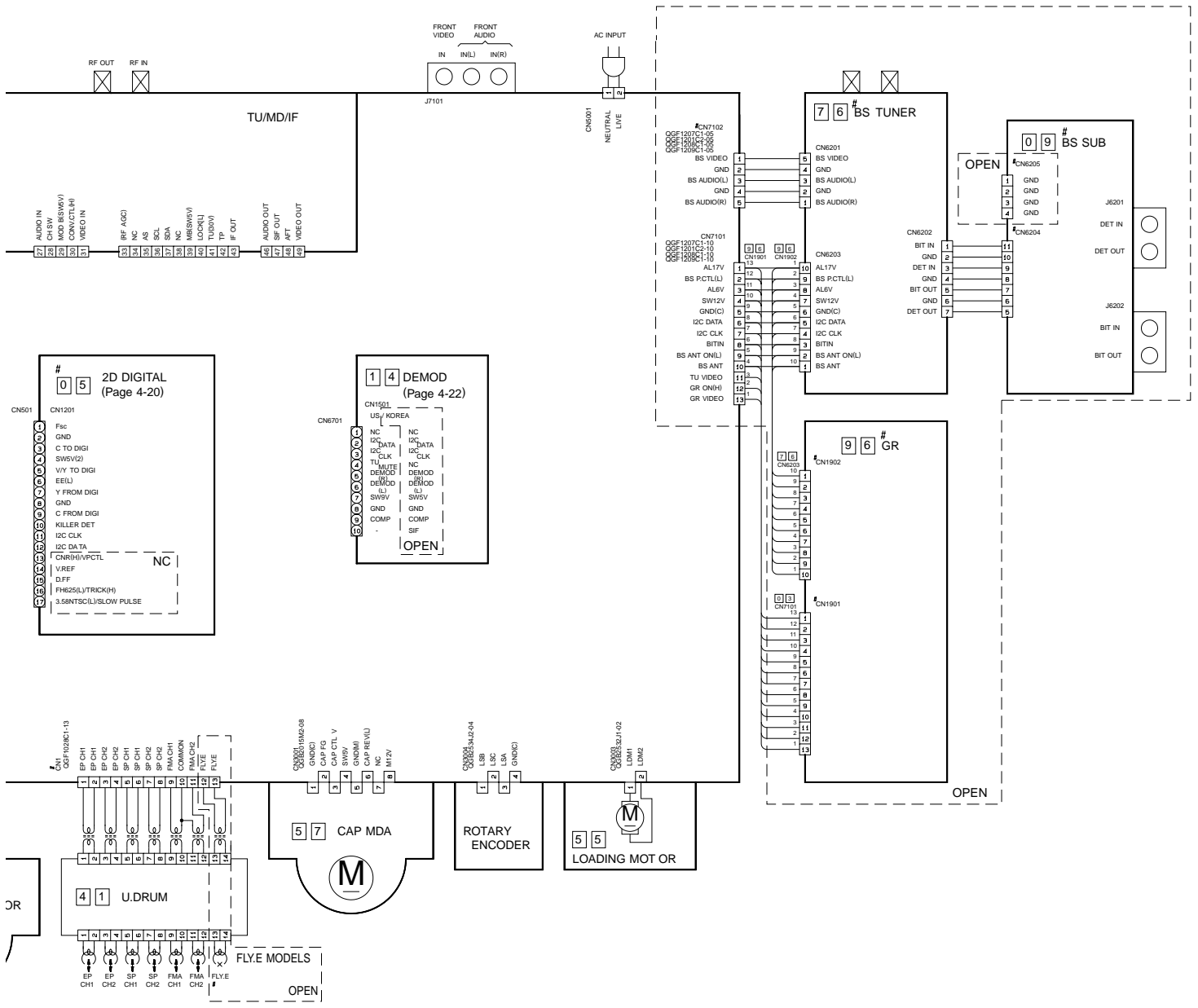
| | |
|----|----------------|
| 96 | GR |
| 93 | LT BATTERY |
| 92 | C.BOX CTL |
| 91 | R.PAUSE |
| 76 | BS TUNER |
| 58 | DRUM MOT OR |
| 57 | CAP MDA |
| 55 | LOADING MOT OR |
| 41 | U.DRUM |
| 39 | JOG |
| 38 | ADV.JOG |
| 36 | S JACK |
| 28 | MINI FRONT |
| 14 | DEM OD |
| 12 | A/C HEAD |
| 09 | BS SUB |
| 05 | 2D DIGIT AL |
| 03 | MAIN |
| NO | NAME |



0 3 MAIN
 (VIDEO/AUDIO Page 4-4)
 (S-SUB Page 4-6)
 (SYSCON Page 4-8)
 (SW.REG Page 4-10)
 (TUNER/DEM OD Page 4-12)
 (FRONT Page 4-14)
 (TERMINAL Page 4-16)
 (BS CONNECTION Page 4-18)



Marked elements may differ depending on the model. Be sure to check the parts list.



4.2 MAIN (VIDEO/AUDIO) SCHEMATIC DIAGRAM

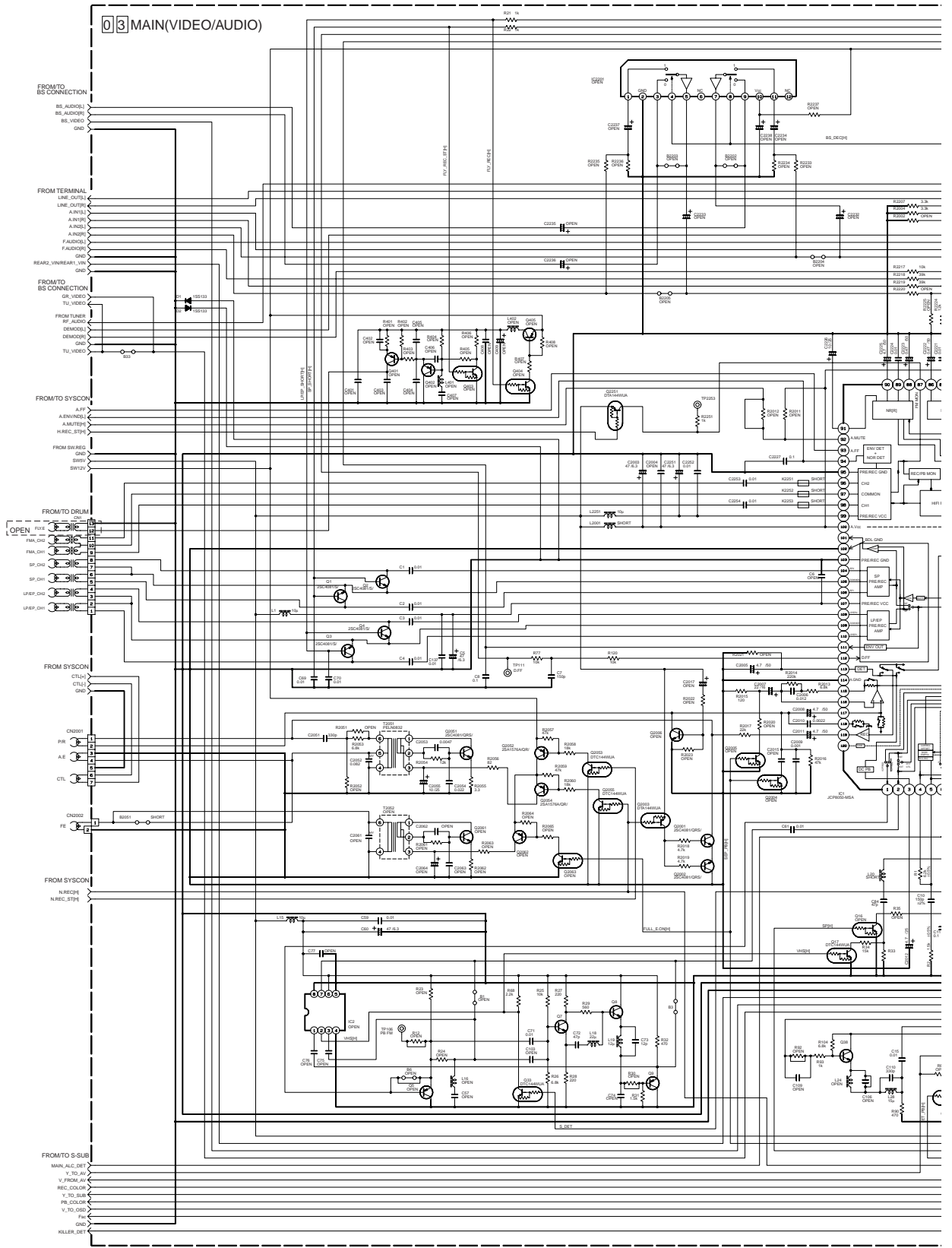
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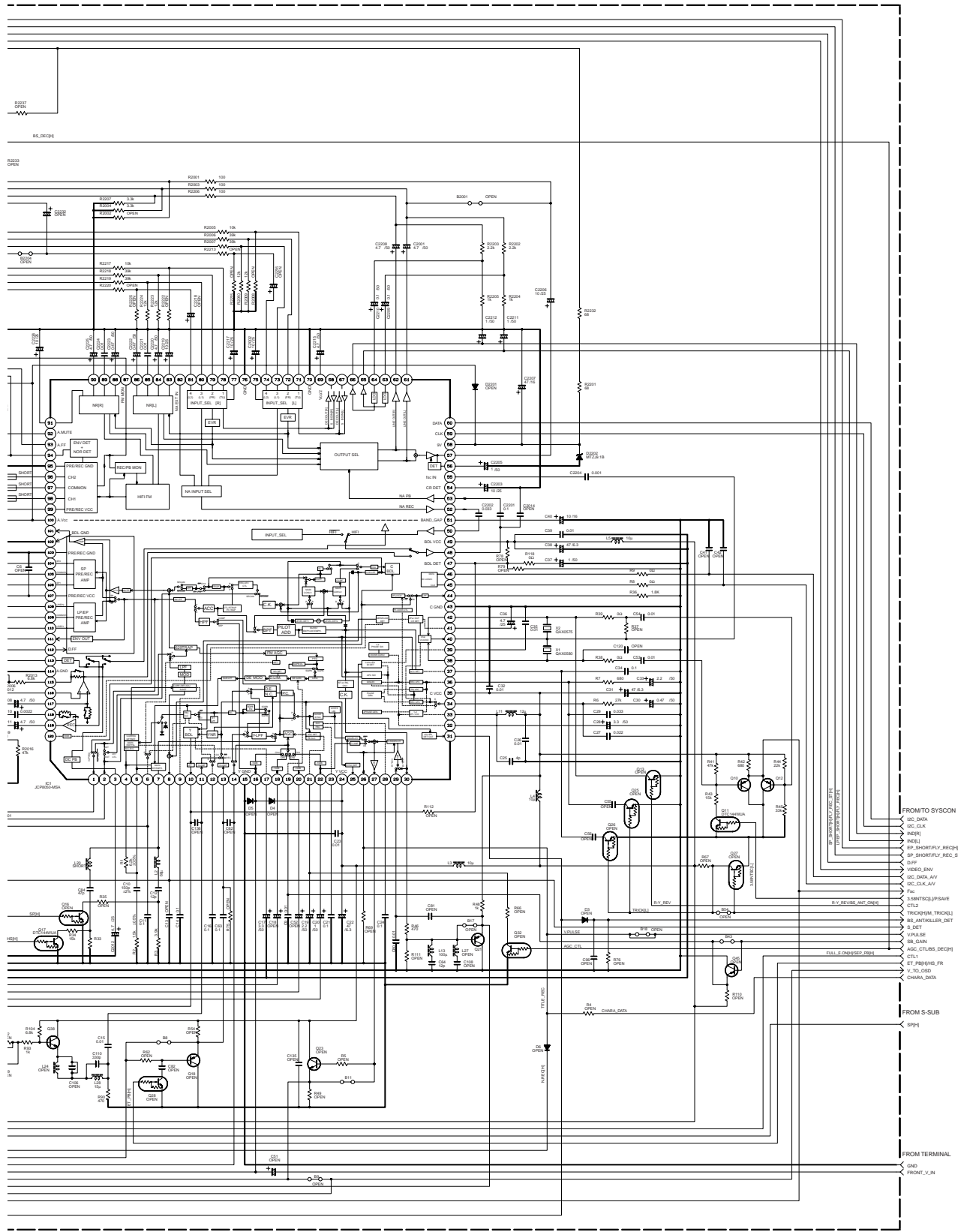
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Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.



NOTES: UNLESS OTHERWISE SPECIFIED,
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081(QRS)/
 ALL PNP TYPE TRANSISTORS ARE 2SA1576A(QR)/

| | |
|--|--------------|
| | ELECTROLYTIC |
| | CERAMIC |
| | MYLER |
| | NON POLAR |

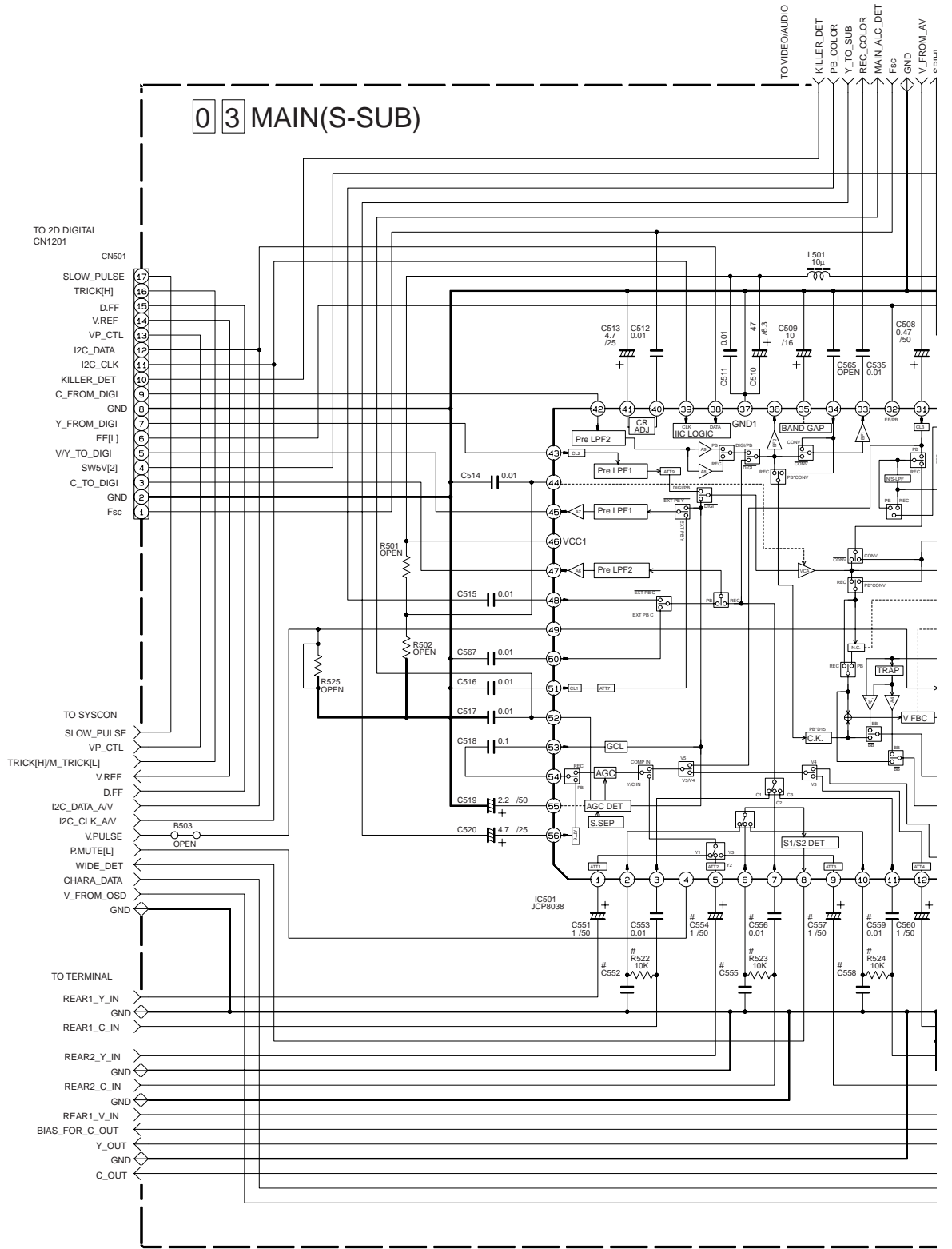
FROM TO SYSCON
 DC DATA
 DC CLK
 INDI
 INDI
 SP_SHORTFLY_RECIN
 SP_SHORTFLY_REC_ST
 CFF
 VIDEO_ENV
 DC_DATA_AV
 DC_CLK_AV
 PLS
 S_SHORTFLY_PPSAVE
 CT17
 TRICKINM_TRICKO2
 RS_AYKILLER_DET
 S_DET
 VPLUSE
 SB_GAN
 AGC_CTUBS_DETCH
 CT1
 ET_PPRESHS_FR
 V_DET_DET
 CHARA_DATA

FROM S-SUB
 SPH

FROM TERMINAL
 GND
 FROM V_IN

4.3 MAIN (S-SUB) SCHEMATIC DIAGRAM

Note

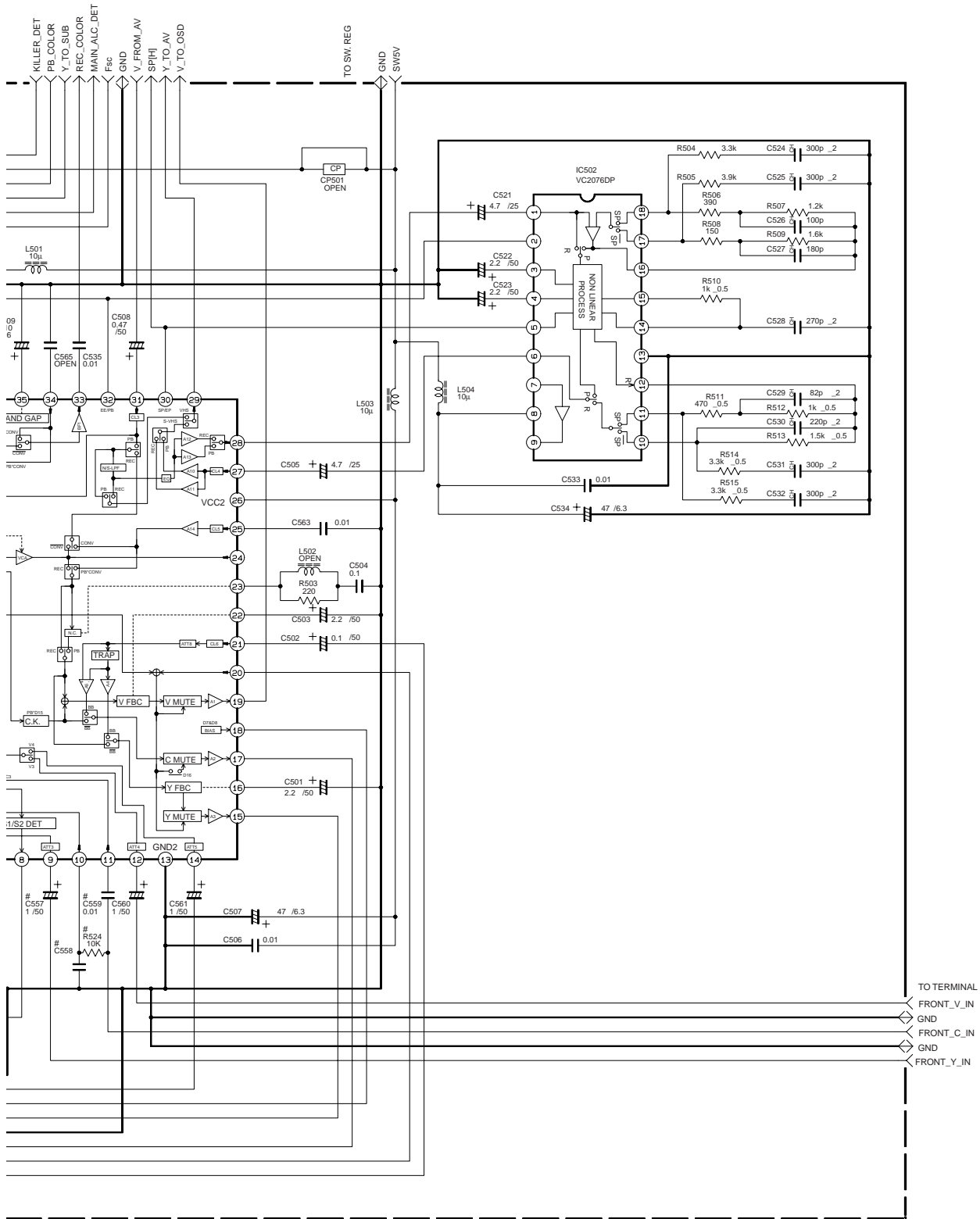


DIFFERENCE TABLE

| MODEL | SYMBOL | R523 C555 | C554 C556 | R522 C552 | R524 C558 | C557 C559 | C555 | C552 C558 |
|---------------------------|--------|--------------|--------------|--------------|--------------|--------------|------|--------------|
| S-VHS JPN F_S_IN REAR2_IN | | ○ | | ○ | | ○ | 0.01 | 0.01 |
| S-VHS JPN F_S_IN | | X | | ○ | | ○ | 0Ω | 0.01 |
| S-VHS US F_S_IN | | X | | X | | ○ | 0Ω | 0Ω |
| S-VHS US | | X | | X | | X | 0Ω | 0Ω |

○ Use
X: Not

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.



NOTES: UNLESS OTHERWISE SPECIFIED.
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ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ALL NPN TYPE TRANSISTORS ARE 2SC4081/QR/
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/

| | |
|------|------|
| C555 | C552 |
| C558 | C558 |
| 0.01 | 0.01 |
| 0Ω | 0.01 |
| 0Ω | 0Ω |
| 0Ω | 0Ω |

○: Used
X: Not used

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

4.4 MAIN (SYSCON) SCHEMATIC DIAGRAM

Note

03 MAIN [SYSCON]

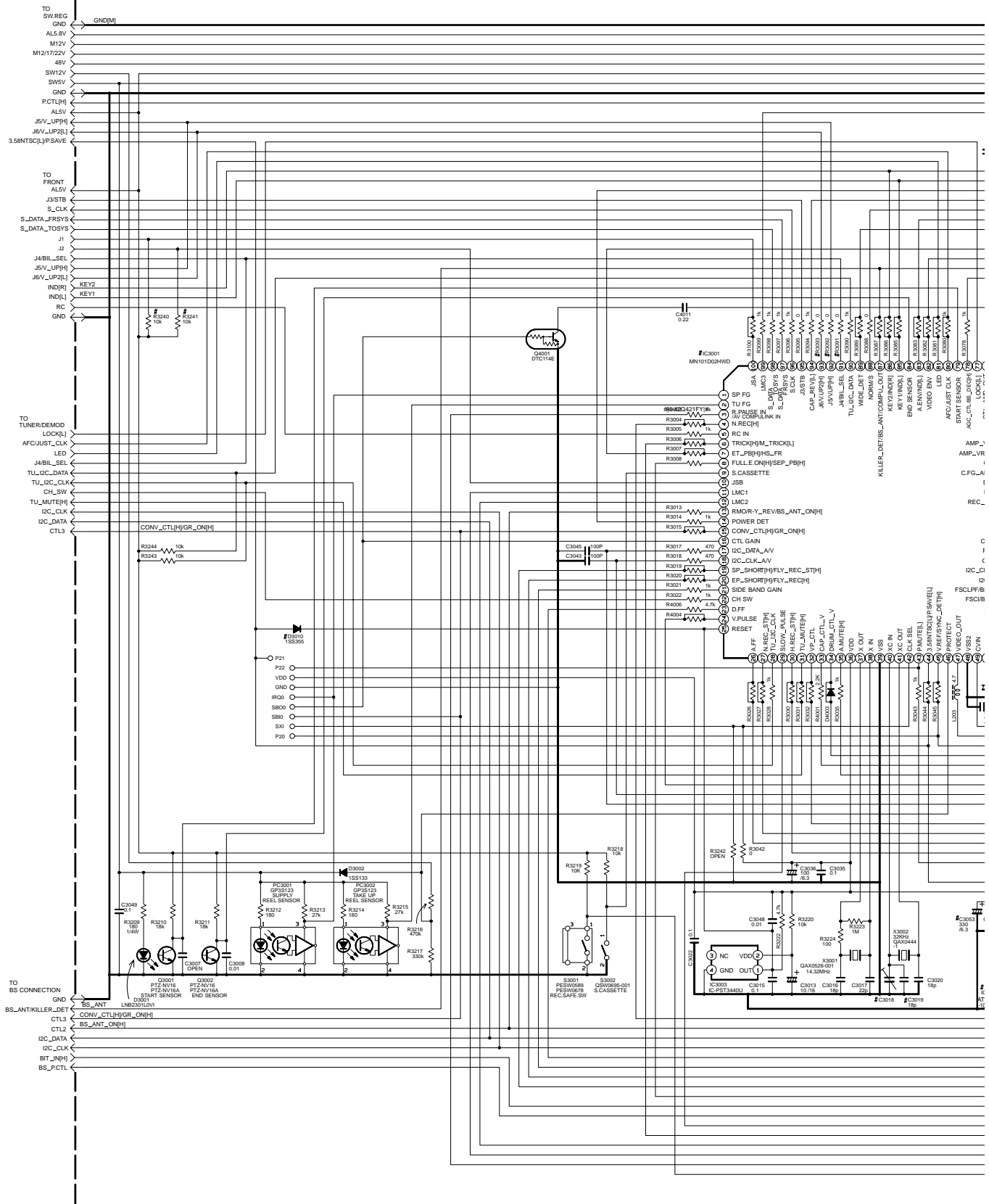
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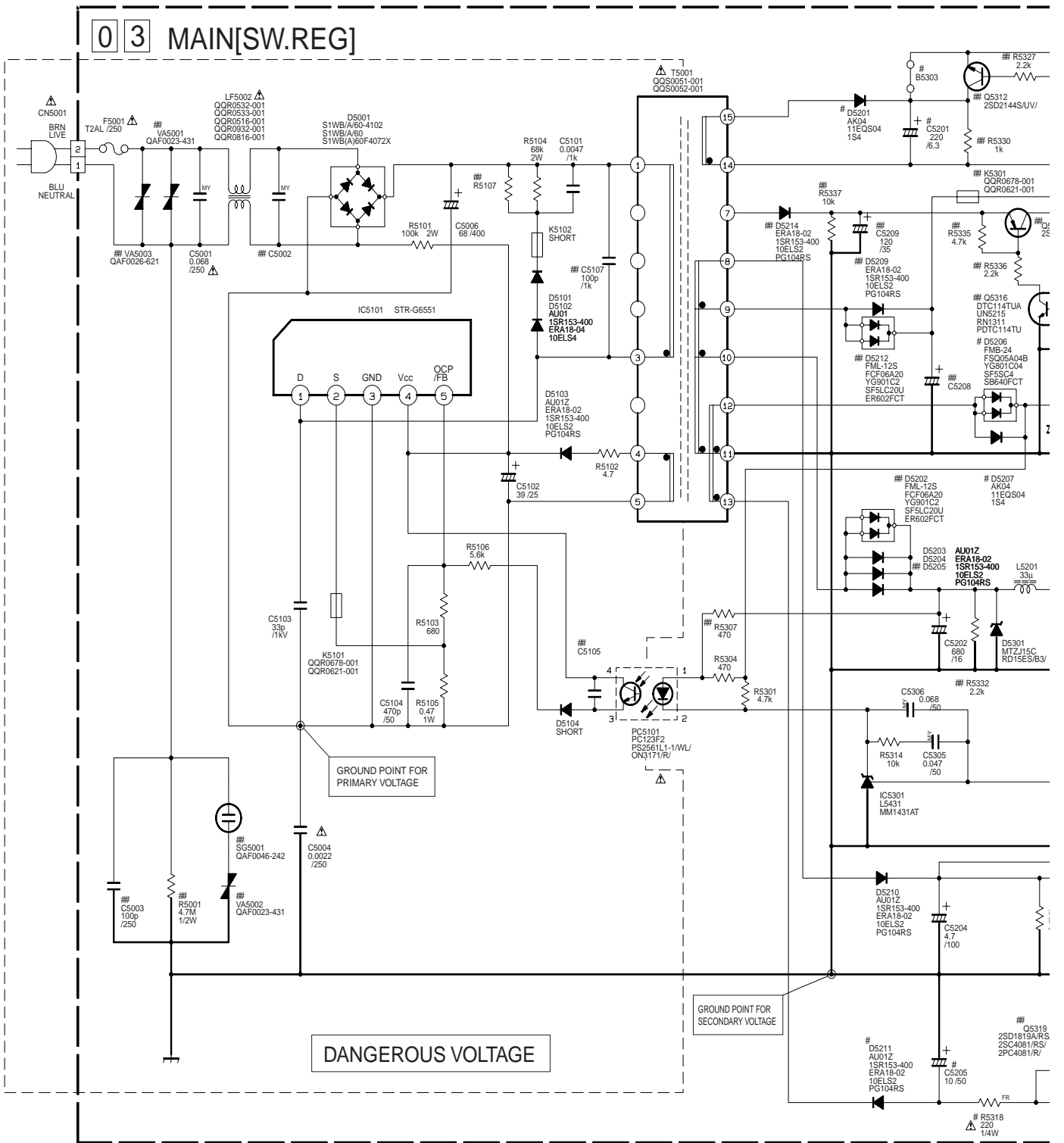


Marked elements may differ depending on the model. Be sure to check the parts list.

NOTES: UNLESS OTHERWISE SPECIFIED:
ALL RESISTANCE
ALL INDUCTANCE
ALL CAPACITANCE

4.5 MAIN (SW.REG) SCHEMATIC DIAGRAM

Not



##MARK ELEMENTS ARE NOT MOUNTED

#DDIFFERENCE TABLE 1

| | |
|------------|-------|
| LEVEL IND. | R5326 |
| -YES- | SHORT |
| -NO- | 2.2 |

#DDIFFERENCE TABLE 2

| | | | | | |
|------|-------|-------|-------|-------|-------|
| | Q5302 | Q5321 | D5206 | D5207 | C5203 |
| SVHS | YES | NO | YES | NO | 1200 |
| HIFI | NO | YES | NO | YES | 680 |

#DDIFFERENCE TABLE 3

| | | | | | |
|----------|-------------------------|-------------------------|-------|-------|----------------|
| DISPLAY | D5201 D5211 D5309 | D5310 R5318 C5201 | C5205 | R5326 | B5303 B5304 |
| FDP | | YES | | YES | YES |
| 7SEG LED | | NO | | NO | NO |

4.7 MAIN (FRONT) AND ADV. JOG SCHEMATIC DIAGRAMS

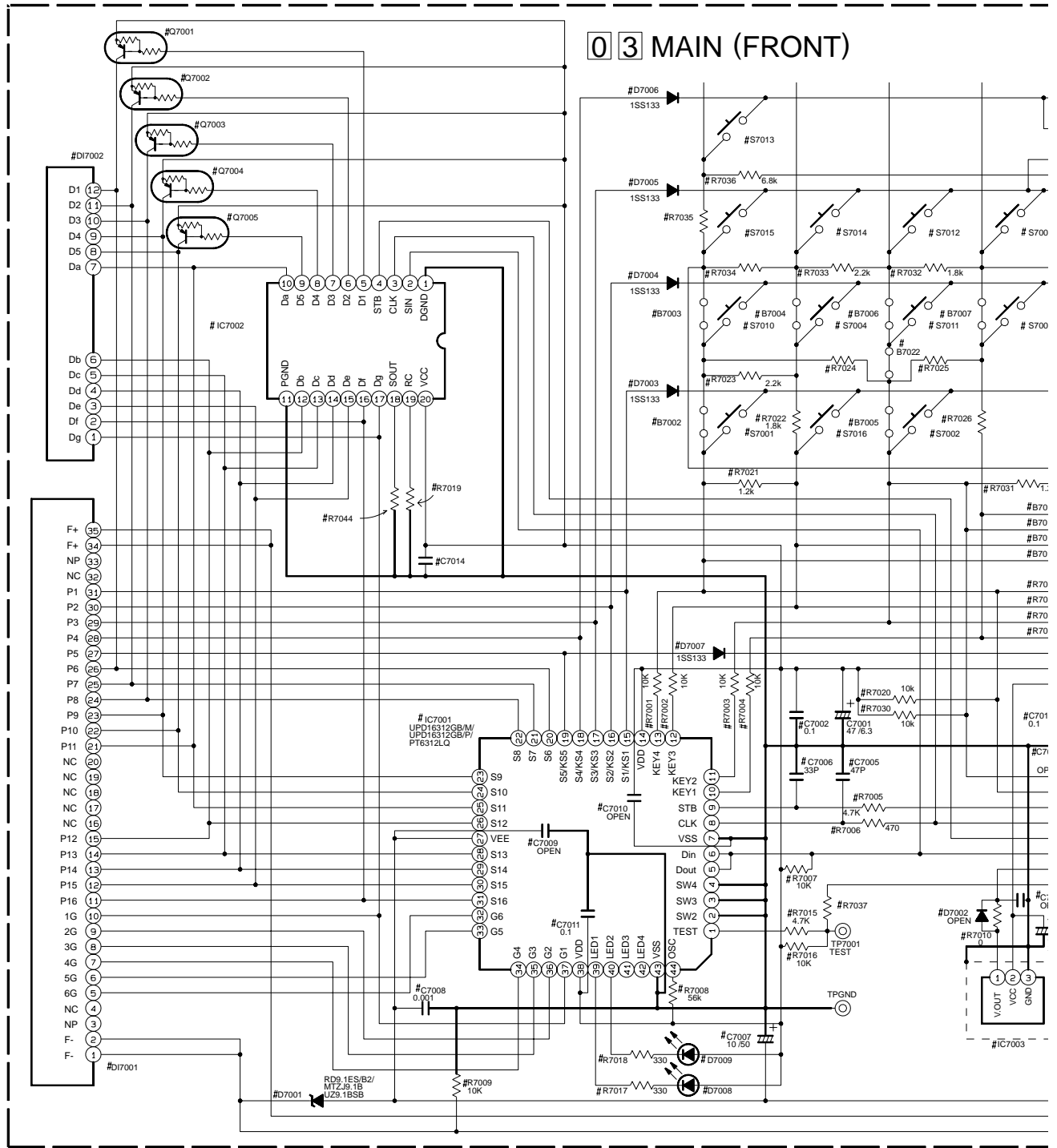
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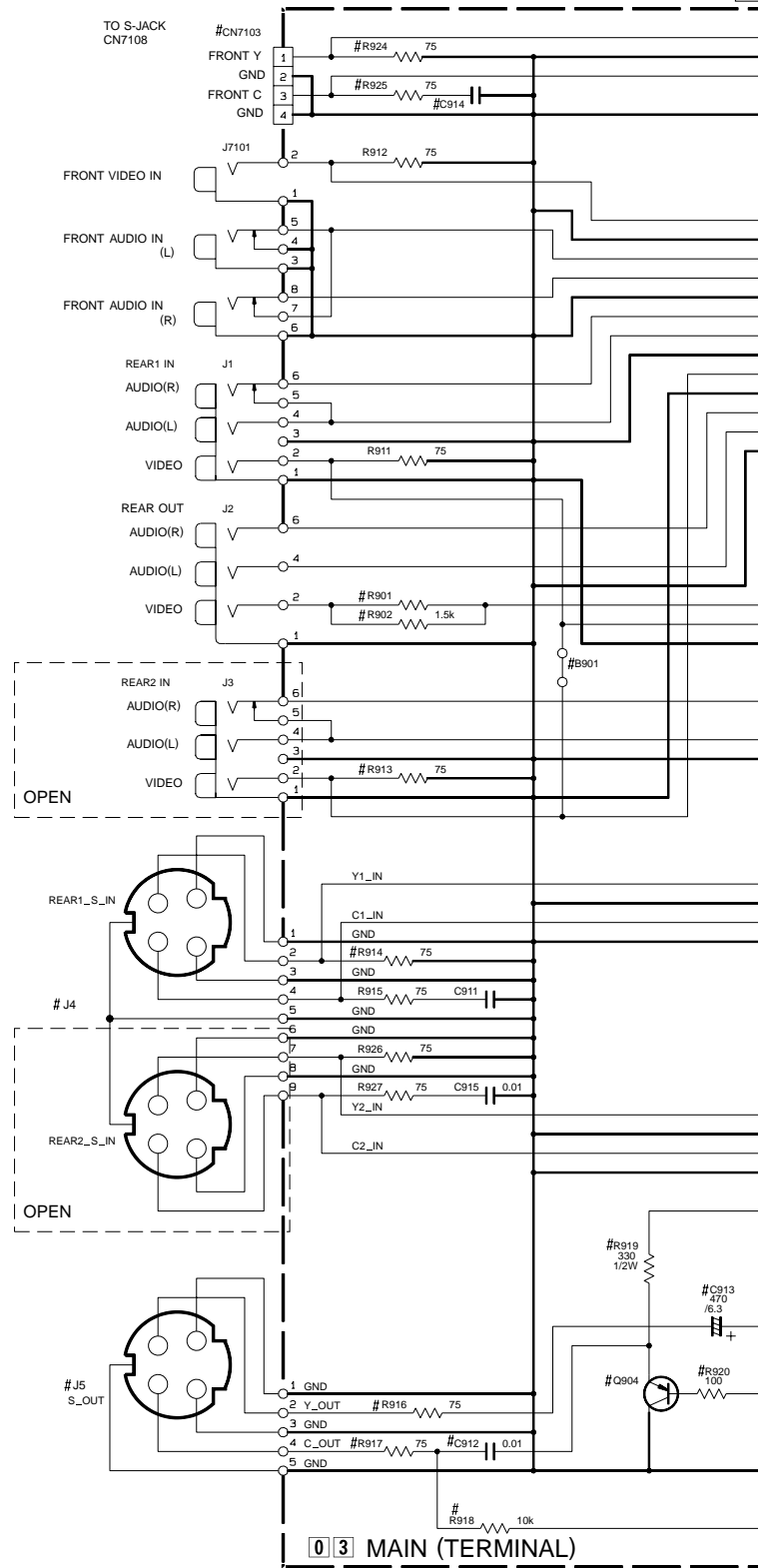
| SYMBOL | R7017 D7008 | R7018 D7009 |
|-----------|----------------|----------------|
| LED | ○ | × |
| for S7002 | ○ | × |
| for S7016 | × | ○ |

○:Used
×:Not used

| RCU | R7010 | C7004 D7002 | IC7003 |
|---------|-------|----------------|---|
| JVC | SHORT | × | GP1U291Q PNA4652MOOYC PIC-28143LJ |
| PHILIPS | SHORT | × | GP1U2900 PNA4655MOOYC PIC-28142LJ |

4.8 MAIN (TERMINAL) SCHEMATIC DIAGRAM

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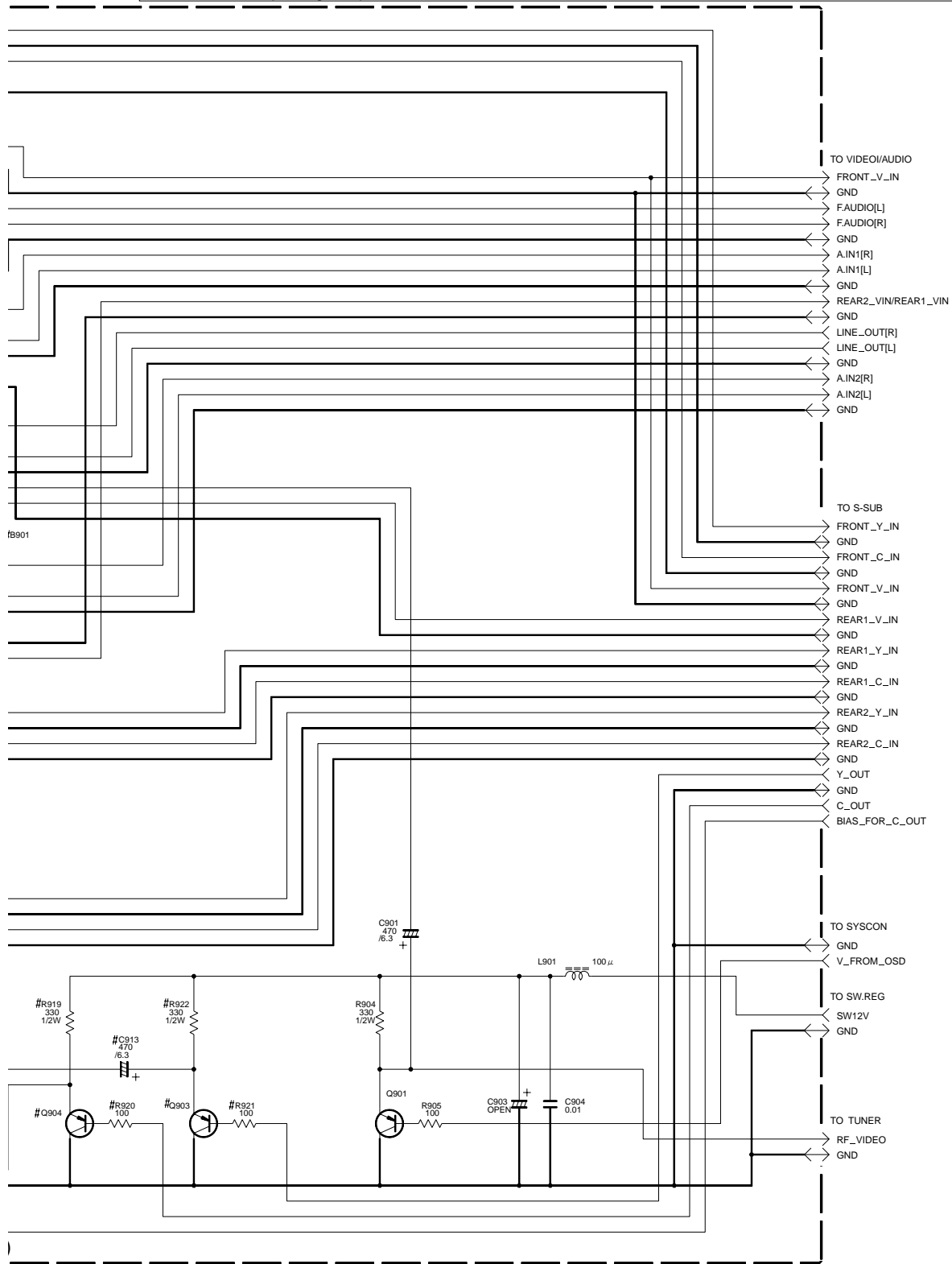
0 3 MAIN (TERMINAL)

DIFFERENCE TABLE

○ : Used
x : Not used

| MODEL | SYMBOL | R913 J3 | J4 | R924 R925 CN7103 | C914 | R926 R927 C915 | R918 | C911 | R902 R914 R919 |
|---------------------------|--------|------------|-------|------------------------|------|----------------------|------|------|----------------------|
| S-VHS JPN F_S_IN REAR2_IN | | ○ | S1/S2 | ○ | 0.01 | ○ | ○ | 0.01 | |
| S-VHS JPN F_S_IN | | x | S1 | ○ | 0.01 | x | ○ | 0.01 | |
| S-VHS US F_S_IN | | x | S1 | ○ | 0.01 | x | x | 0.01 | |
| S-VHS US | | x | S1 | x | x | x | x | 0.01 | |
| VHS | | x | x | x | x | x | x | x | |

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.



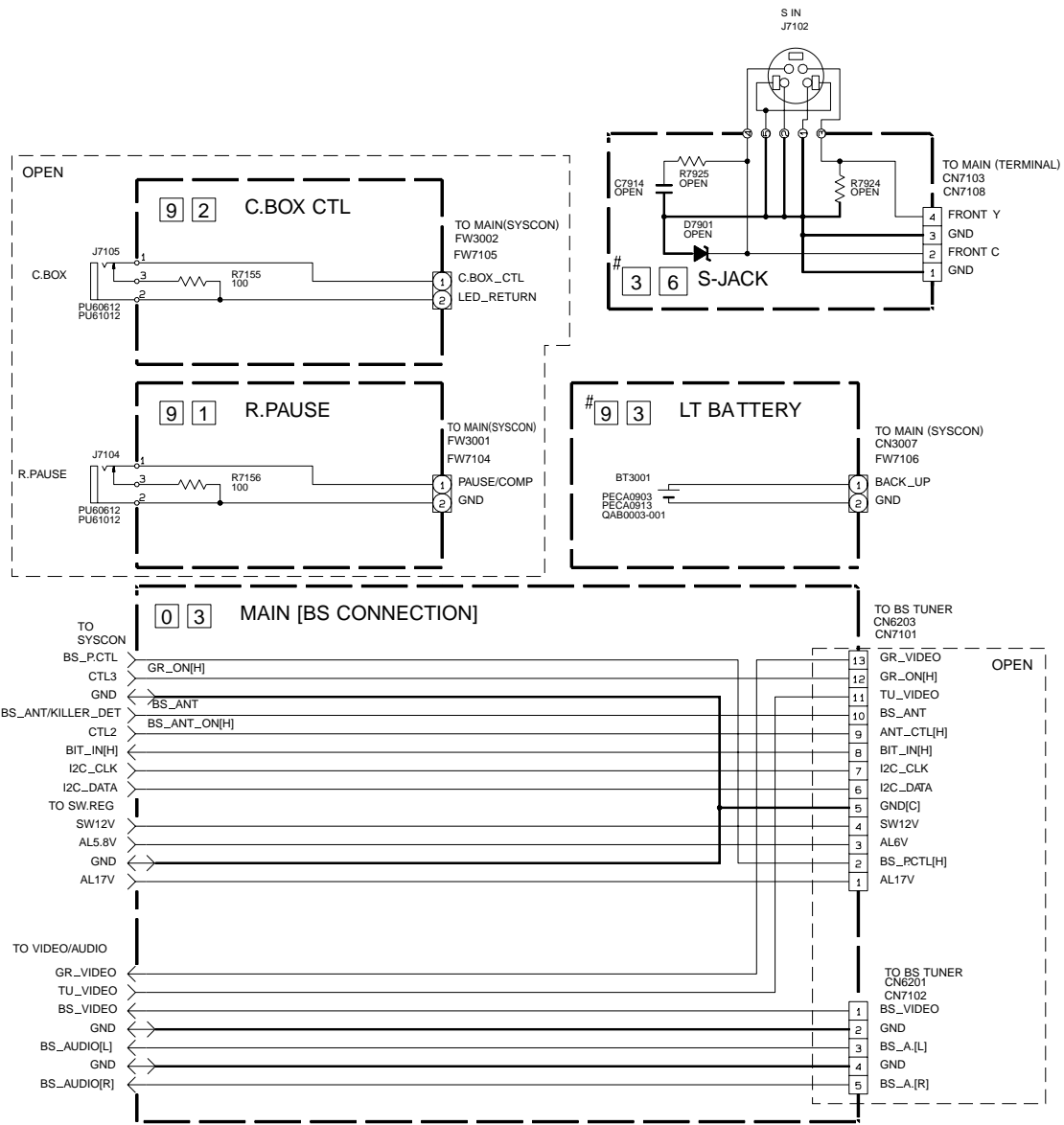
NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μF.
ALL NPN TYPE TRANSISTORS ARE 2SC4081/ORS/
ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/

| R918 | C911 | R902 R914-R917 R919-R922 | Q903,Q904 C912,C913 J5 | B901 | R901 |
|------|------|--------------------------------|------------------------------|------|------|
| ○ | 0.01 | | ○ | X | 82 |
| ○ | 0.01 | | ○ | X | 82 |
| X | 0Ω | | ○ | X | 82 |
| X | 0Ω | | ○ | X | 82 |
| X | X | | X | ○ | 75 |

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

4.9 MAIN (BS CONNECTION), S JACK AND LT BATTERY SCHEMATIC DIAGRAMS

Nc



KE

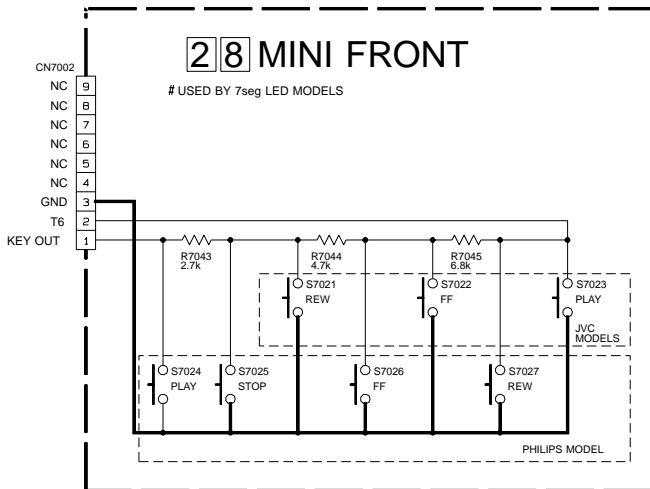
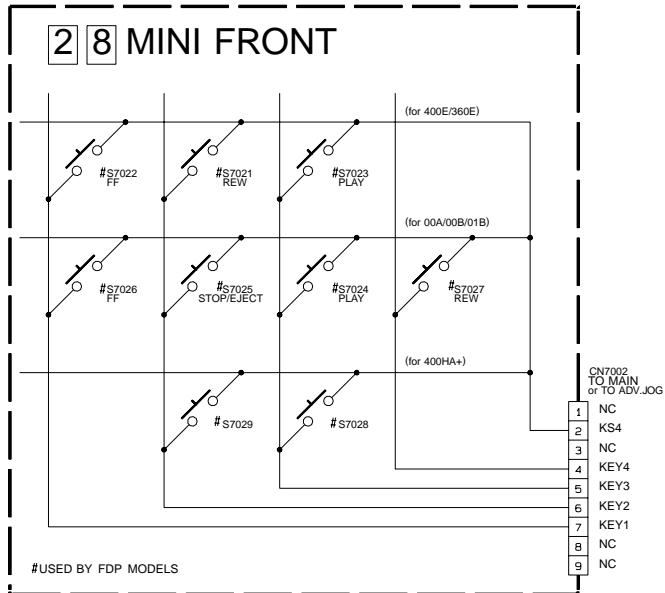
0 3

| | BS MODELS | GR MODELS |
|--------|-----------|-----------|
| CN7101 | 1-10 | 1-13 |

NOTES : UNLI
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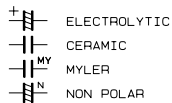
Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.

OPEN



NOTES: UNLESS OTHERWISE SPECIFIED.
ALL RESISTANCE VALUES ARE IN OHMS.
ALL INDUCTANCE VALUES ARE IN H.
ALL CAPACITANCE VALUES ARE IN μ F.

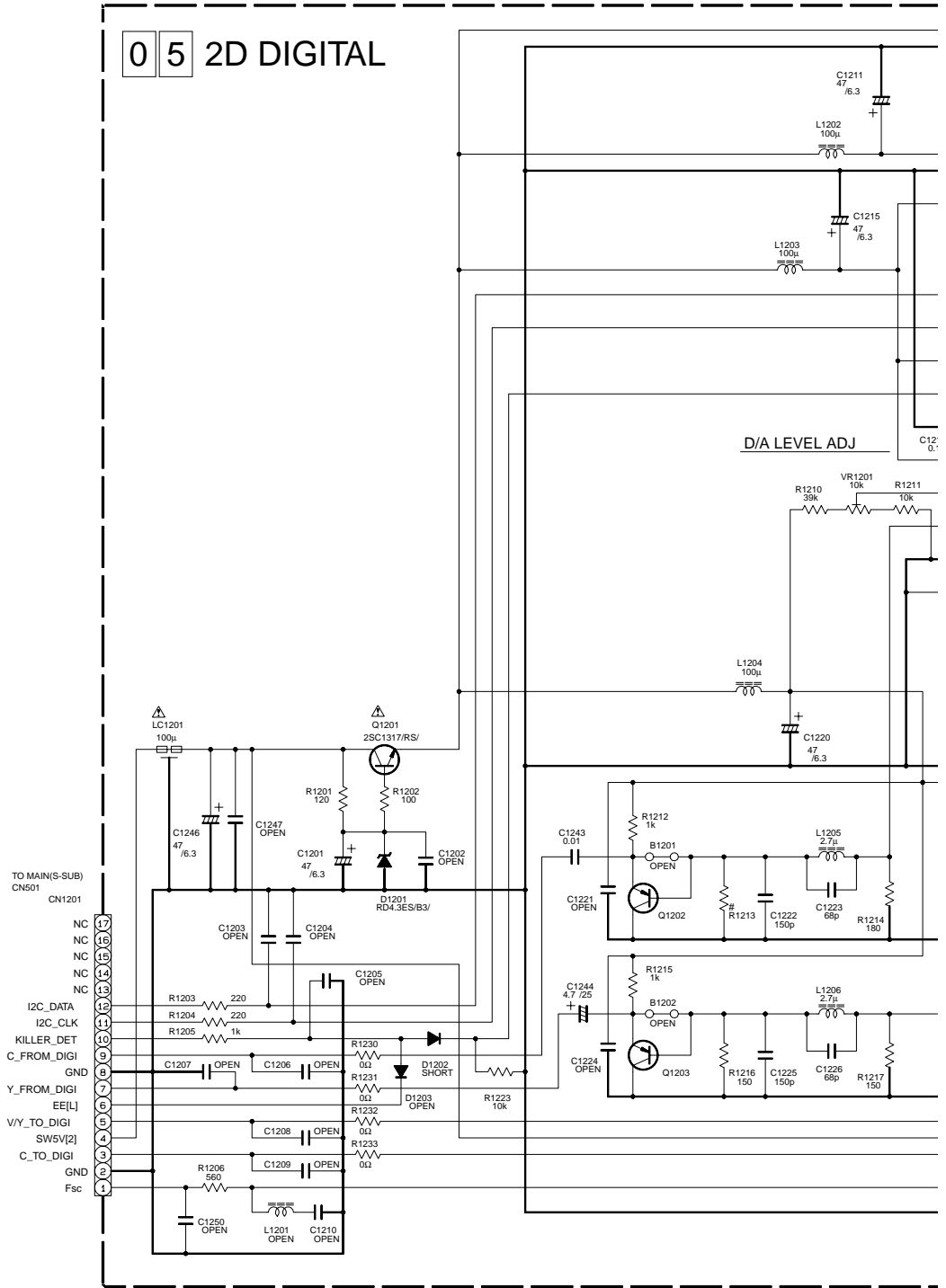
Marked elements may differ depending on the model.
Be sure to check the parts list.



4.10 2D DIGITAL SCHEMATIC DIAGRAM

Not

0 5 2D DIGITAL



DIFFERENCE TABLE

| SYMBOL | Q1206 R1225-R1228 C1248 | R1220 | R1213 |
|--------|-------------------------------|-------|-------|
| MODEL | | | |
| PCEC | ○ | X | 150 |
| OTHER | X | ○ | 180 |

○:Used
X:Not used

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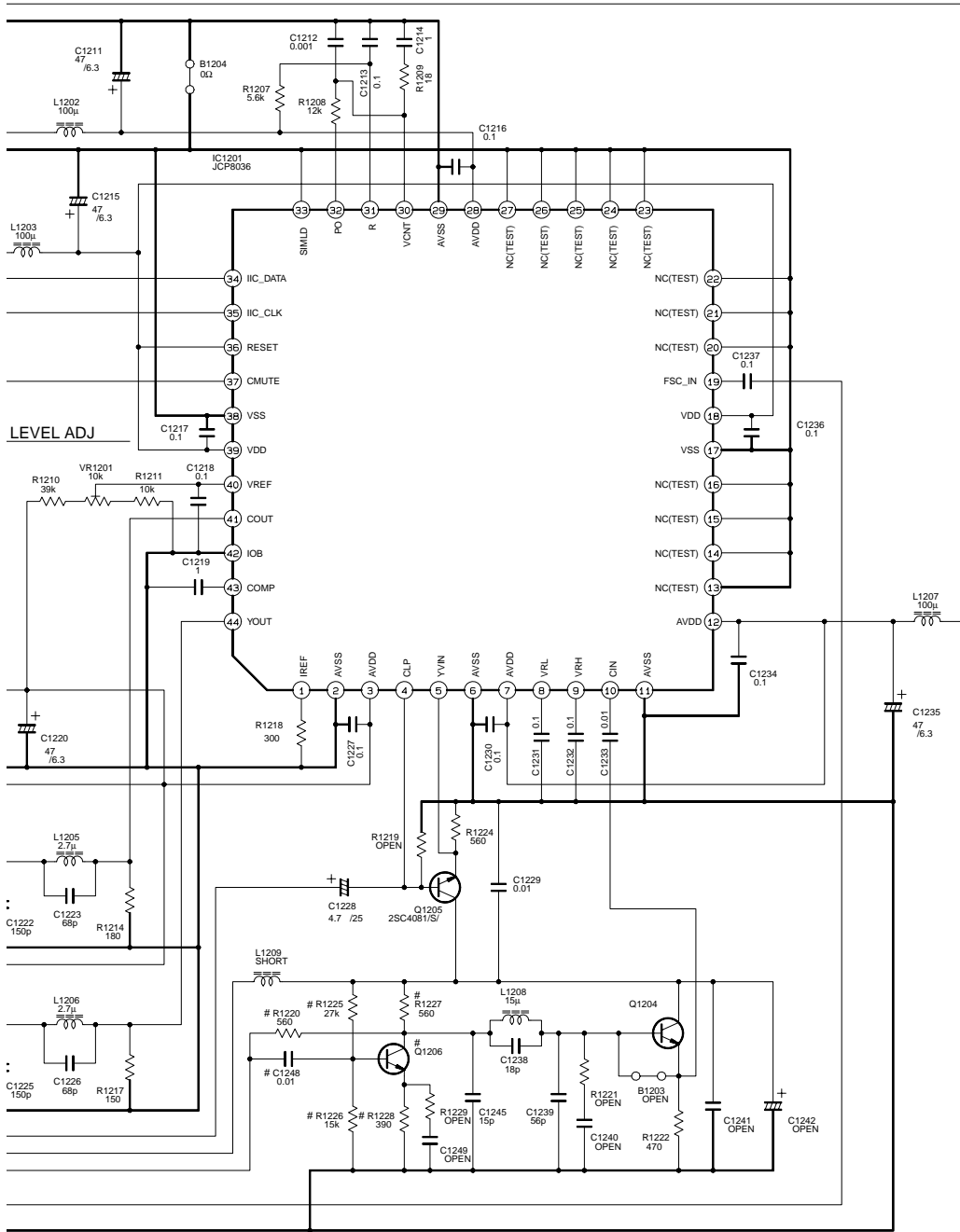
A

B

C

D

Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only. When replacing the parts, refer to the Parts List.

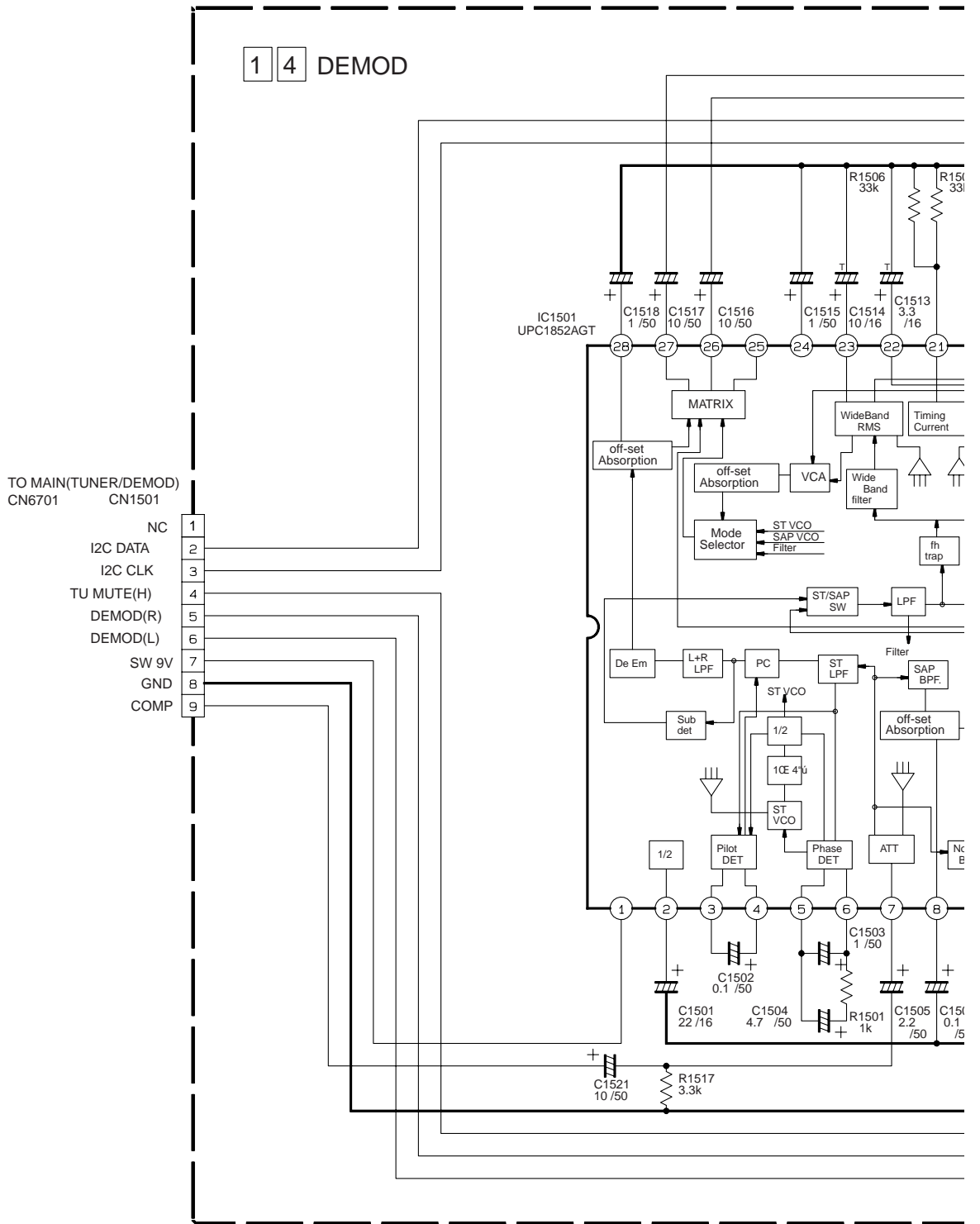


NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN µF.
 ALL NPN TYPE TRANSISTORS ARE 2SC4081/ORS/.
 ALL PNP TYPE TRANSISTORS ARE 2SA1576A/QR/.

- ELECTROLYTIC
- CERAMIC
- MYLER
- NON POLAR

4.11 DEMODULATOR SCHEMATIC DIAGRAM

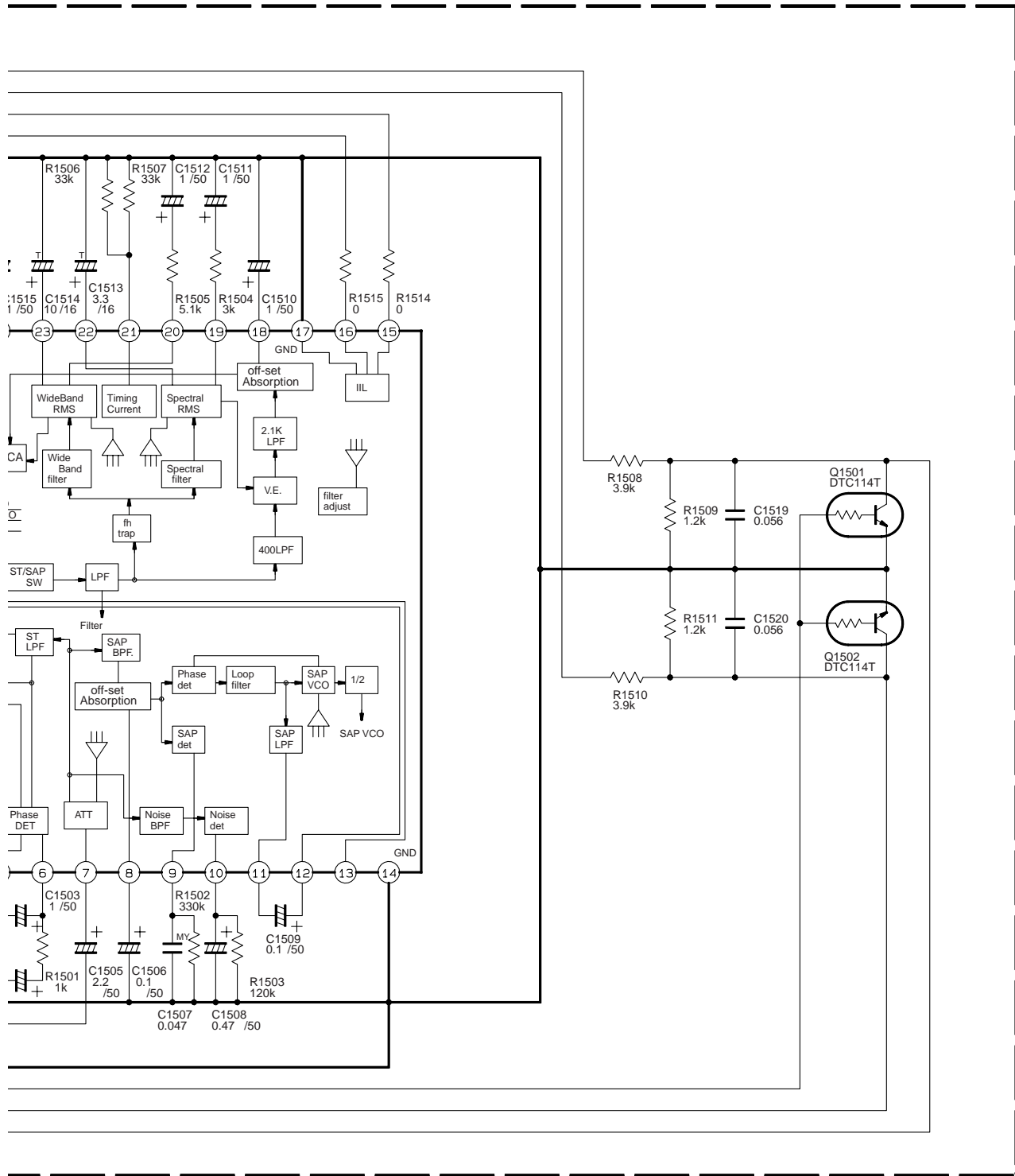
Note



NOTES: UNLESS OTHERWISE SPECIFIED.
 ALL RESISTANCE VALUES ARE IN OHMS.
 ALL INDUCTANCE VALUES ARE IN H.
 ALL CAPACITANCE VALUES ARE IN μ F.

- ELECTROLYTIC
- CERAMIC
- TANTAL

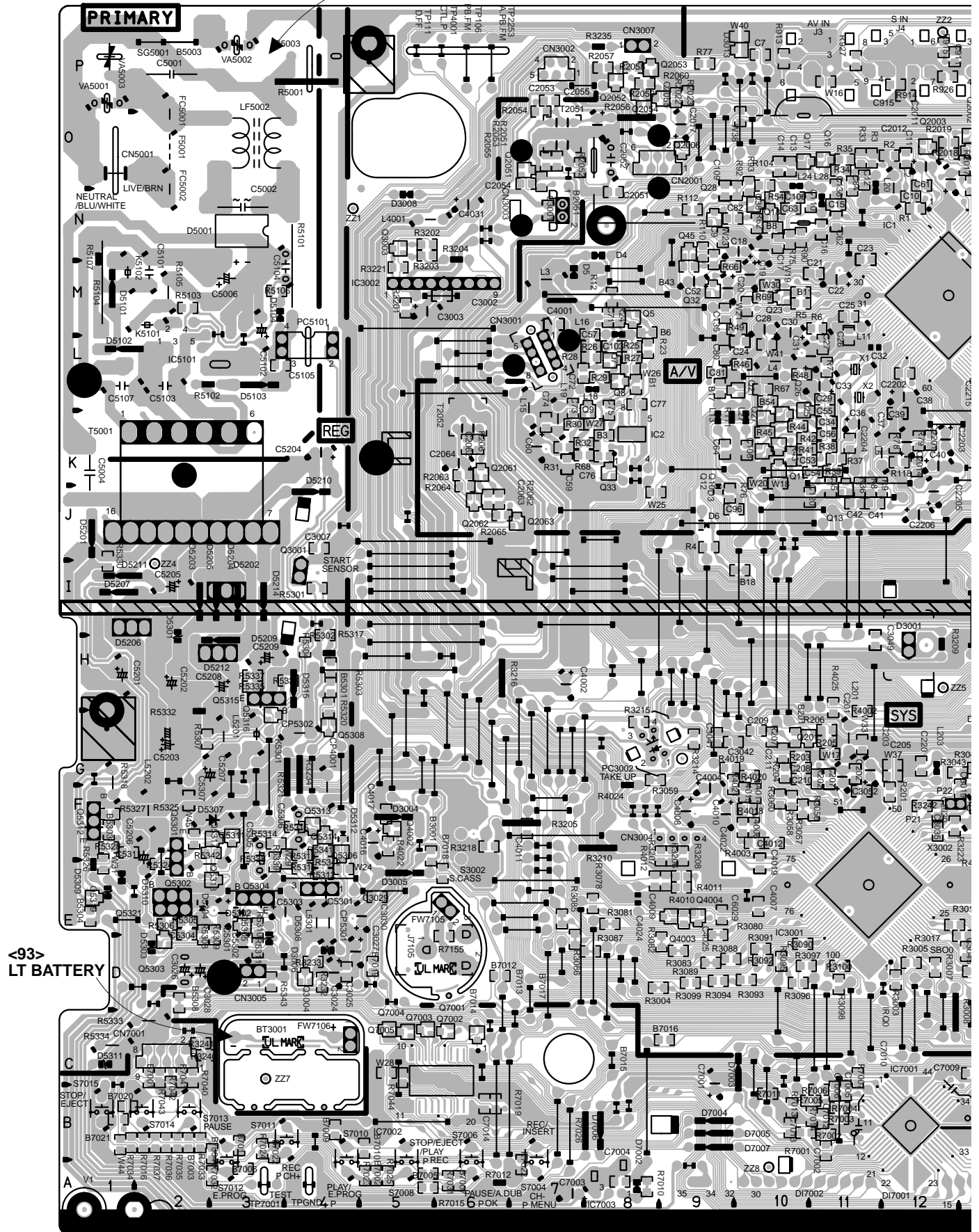
Note : The Parts Number, value and rated voltage etc. in the Schematic Diagram are for references only.
When replacing the parts, refer to the Parts List.

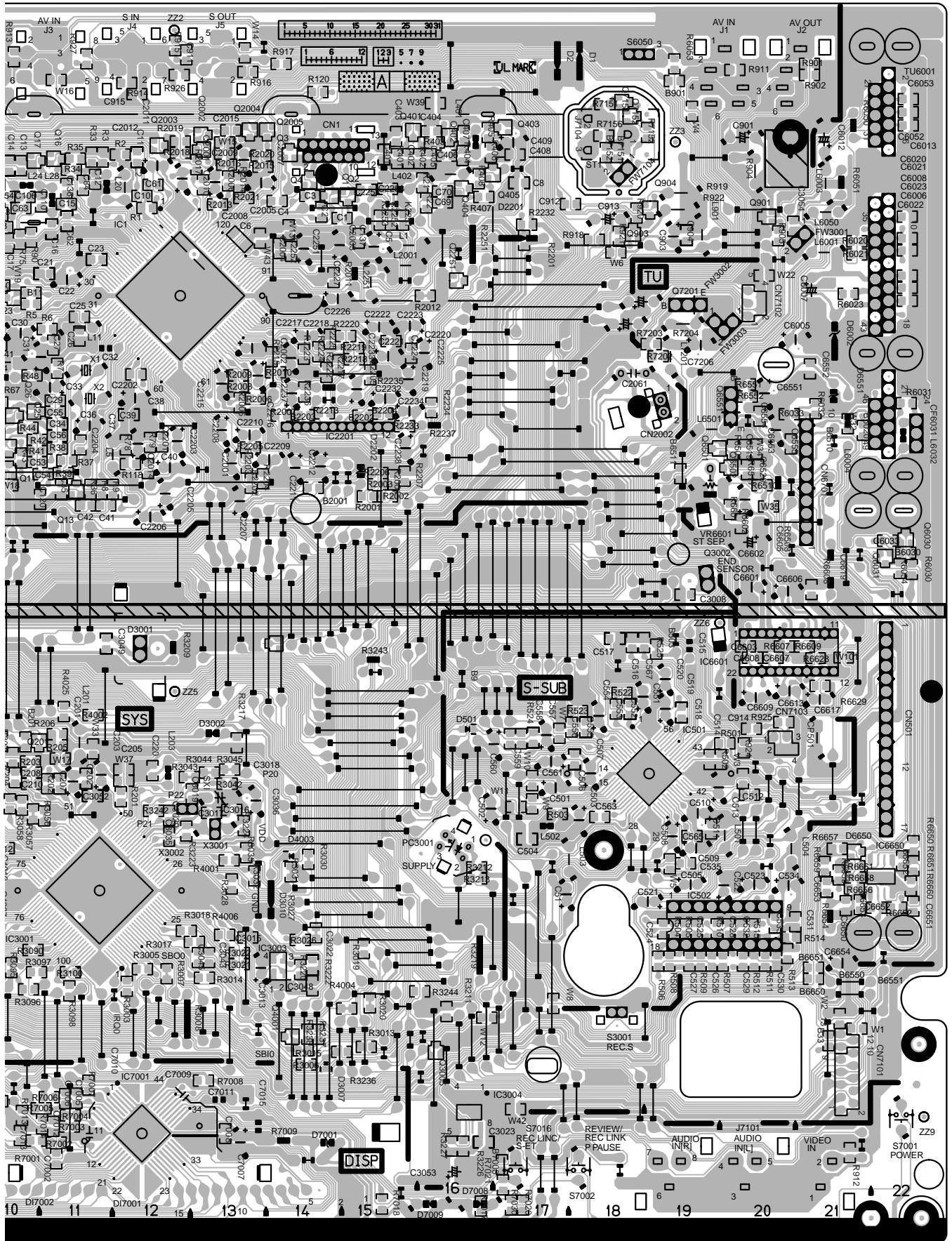


4.12 MAIN AND LT BATTERY CIRCUIT BOARDS

<03> MAIN, <93> LT BATTERY
LPB10141-001B

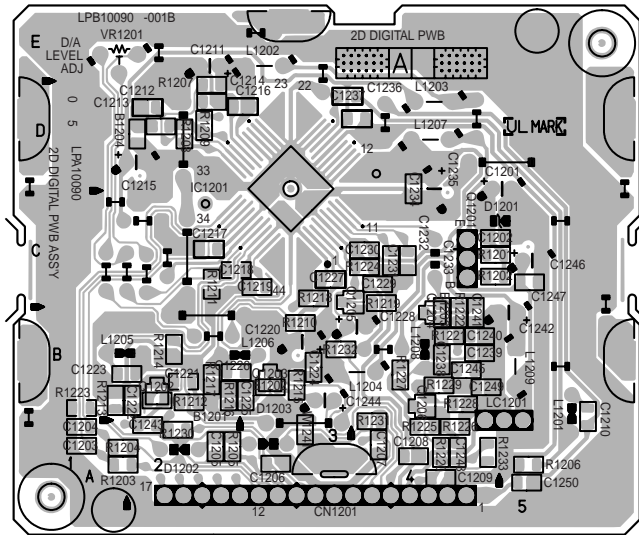
DANGEROUS VOLTAGE





4.13 2D DIGITAL AND DEMODULATOR CIRCUIT BOARDS

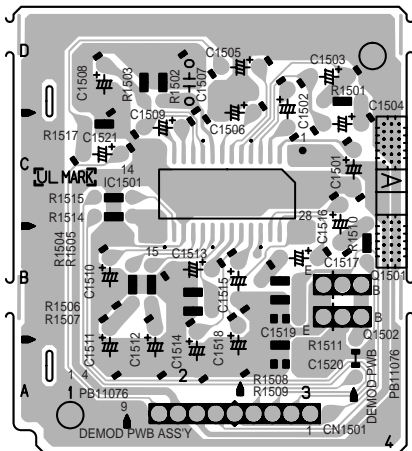
<05>2D DIGITAL LPB10090-001B



COMPONENT PARTS LOCATION GUIDE <2D DIGITAL>

| REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION | REF.NO. | LOCATION |
|------------------|----------|------------------|----------|-------------------|----------|--------------|----------|
| CAPACITOR | | | | COIL | | | |
| C1201 | A D 5D | C1230 | B C 4C | L1201 | A D 5A | R1212 | B C 2B |
| C1202 | B C 5C | C1231 | B C 4C | L1202 | A D 3E | R1213 | B C 1B |
| C1203 | B C 1A | C1232 | B C 4C | L1203 | A D 4D | R1214 | B C 2B |
| C1204 | B C 1A | C1233 | A D 4C | L1204 | A D 4B | R1215 | B C 3B |
| C1205 | B C 2A | C1234 | B C 4D | L1205 | A D 2B | R1216 | B C 2B |
| C1206 | B C 3A | C1235 | A D 4D | L1206 | A D 3B | R1217 | B C 2B |
| C1207 | B C 4A | C1236 | B C 4D | L1207 | A D 4D | R1218 | B C 3C |
| C1208 | B C 4A | C1237 | B C 3D | L1208 | A D 4B | R1219 | B C 4C |
| C1209 | B C 4A | C1238 | B C 4B | L1209 | A D 5B | R1220 | B C 4A |
| C1210 | B C 6B | C1239 | B C 5B | | | R1221 | B C 4B |
| C1211 | A D 2E | C1240 | B C 5B | | | R1222 | B C 4B |
| C1212 | B C 2D | C1241 | B C 5B | TRANSISTOR | | | |
| C1213 | B C 2D | C1242 | A D 5B | Q1201 | A D 5C | R1223 | B C 1B |
| C1214 | B C 2D | C1243 | B C 2A | Q1202 | B C 2B | R1224 | B C 4C |
| C1215 | A D 2D | C1244 | A D 3B | Q1203 | B C 3B | R1225 | B C 4A |
| C1216 | B C 3C | C1245 | B C 5B | Q1204 | B C 4B | R1226 | B C 4A |
| C1217 | B C 2C | C1246 | A D 5C | Q1205 | B C 3C | R1227 | B C 4B |
| C1218 | B C 2C | C1247 | B C 5B | Q1206 | B C 4B | R1228 | B C 4B |
| C1219 | B C 3C | C1248 | B C 4A | RESISTOR | | | |
| C1220 | A D 3B | C1249 | B C 5A | R1201 | B C 5C | R1231 | B C 2A |
| C1221 | B C 2B | C1250 | B C 5A | R1202 | B C 5C | R1232 | B C 3B |
| C1222 | B C 2B | CONNECTOR | | | | R1233 | B C 5A |
| C1223 | B C 2B | CN1201 | A D 5A | R1203 | B C 2A | VR1201 | A D 1E |
| C1224 | B C 3B | DIODE | | | | OTHER | |
| C1225 | B C 3B | D1201 | A D 5C | R1204 | B C 1A | | |
| C1226 | B C 2B | D1202 | A D 2A | R1205 | B C 2A | LC1201 | A D 5B |
| C1227 | B C 3C | D1203 | A D 3A | R1206 | B C 5A | | |
| C1228 | A D 3B | IC | | | | | |
| C1229 | B C 4C | IC1201 | B C 3D | R1207 | B C 2D | | |
| | | | | R1208 | B C 2D | | |
| | | | | R1209 | B C 2D | | |
| | | | | R1210 | B C 3B | | |
| | | | | R1211 | B C 2C | | |

<14> DEMODULATOR PB11076

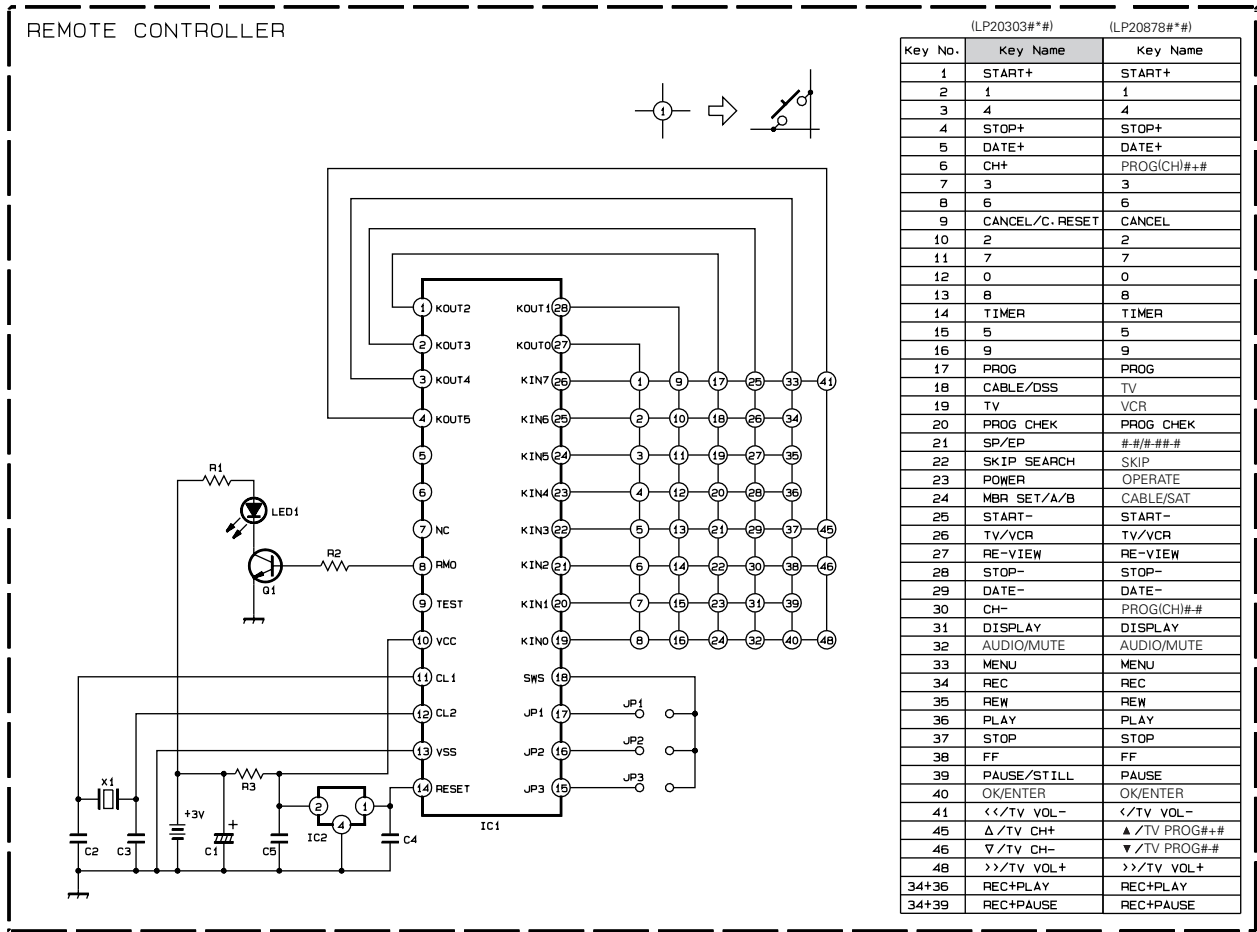


COMPONENT PARTS LOCATION GUIDE <DEMODULATOR>

| REF.NO. | LOCATION | REF.NO. | LOCATION |
|------------------|----------|-------------------|----------|
| CAPACITOR | | IC | |
| C1501 | A D 4C | IC1501 | B C 2C |
| C1502 | A D 3D | TRANSISTOR | |
| C1503 | A D 4D | Q1501 | A D 3B |
| C1504 | A D 4C | Q1502 | A D 3B |
| C1505 | A D 3D | RESISTOR | |
| C1506 | A D 3C | R1501 | A D 4C |
| C1507 | A D 2C | R1502 | A D 2C |
| C1508 | A D 1D | R1503 | A D 2C |
| C1509 | A D 2C | R1504 | A D 2B |
| C1510 | A D 1B | R1505 | A D 2B |
| C1511 | A D 1A | R1506 | A D 2B |
| C1512 | A D 2A | R1507 | A D 2B |
| C1513 | A D 2B | R1508 | A D 3B |
| C1514 | A D 2A | R1509 | A D 3B |
| C1515 | A D 3B | R1510 | A D 4B |
| C1516 | A D 3C | R1511 | A D 3A |
| C1517 | A D 3B | R1514 | A D 2B |
| C1518 | A D 3A | R1515 | A D 2C |
| C1519 | A D 3B | R1517 | A D 2C |
| C1520 | A D 3A | | |
| C1521 | A D 2C | | |
| CONNECTOR | | | |
| CN1501 | A D 3A | | |

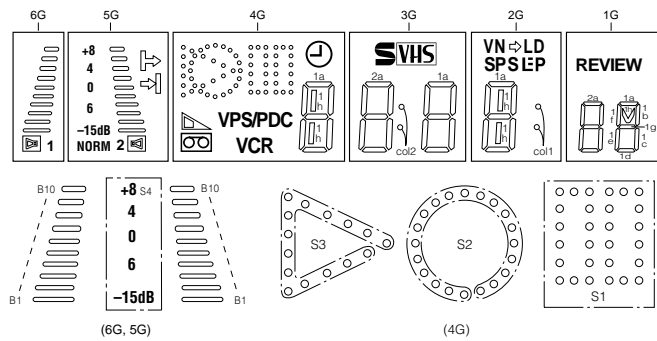
4.14 REMOTE CONTROLLER SCHEMATIC DIAGRAM

- NOTES:
 1. All parts shown in this schematic are critical for safety.
 2. This schematic is only for reference.
 Avoid replacing individual parts.
 Replace the entire unit only.

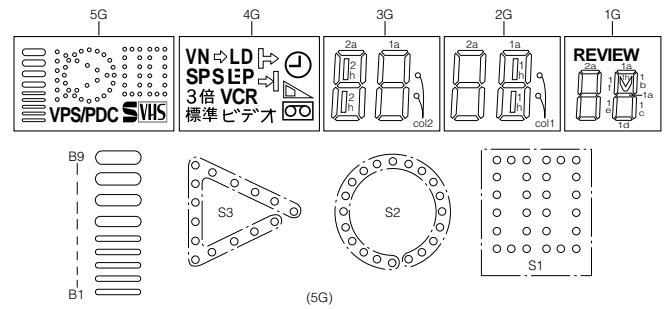


4.15 FDP GRID ASSIGNMENT AND ANODE CONNECTION

[A] (FDP with audio level indicator)



[B] (FDP without audio level indicator)



ANODE CONNECTION [A]

| | 6G | 5G | 4G | 3G | 2G | 1G |
|-----|-----|------|---------|------|------|--------|
| P 1 | — | → | S2 | 1a | 1a | 1a |
| P 2 | — | ⇨ | S1 | 1b | 1b | 1b |
| P 3 | — | S4 | S3 | 1f | 1f | 1f |
| P 4 | — | NORM | VPS/PDC | 1g | 1g | 1g |
| P 5 | 1 | 2 | Ⓢ | 1c | 1c | 1c |
| P 6 | → | ⇨ | → | 1e | 1e | 1e |
| P 7 | B10 | B10 | → | 1d | 1d | 1d |
| P 8 | B9 | B9 | VCR | col2 | 1h | 1h |
| P 9 | B8 | B8 | 1a | 2a | col1 | 2a |
| P10 | B7 | B7 | ⇨ | 1b | 2b | 2b |
| P11 | B6 | B6 | 1f | 2f | VN | 2f |
| P12 | B5 | B5 | 1g | 2g | LD | 2g |
| P13 | B4 | B4 | 1c | 2c | SP | 2c |
| P14 | B3 | B3 | 1e | 2e | S | 2e |
| P15 | B2 | B2 | 1d | 2d | ⋮ | 2d |
| P16 | B1 | B1 | 1h | 2h | LP | REVIEW |

ANODE CONNECTION [B]

| | 5G | 4G | 3G | 2G | 1G |
|-----|---------|-----|------|------|--------|
| P 1 | S2 | → | 1a | 1a | 1a |
| P 2 | S1 | ⇨ | 1b | 1b | 1b |
| P 3 | S3 | 3倍 | 1f | 1f | 1f |
| P 4 | VPS/PDC | 標準 | 1g | 1g | 1g |
| P 5 | SVHS | Ⓢ | 1c | 1c | 1c |
| P 6 | — | → | 1e | 1e | 1e |
| P 7 | — | ⇨ | 1d | 1d | 1d |
| P 8 | B9 | VCR | col2 | 1h | 1h |
| P 9 | B8 | ビデオ | 2a | 2a | 2a |
| P10 | B7 | ⇨ | 2b | 2b | 2b |
| P11 | B6 | VN | 2f | 2f | 2f |
| P12 | B5 | LD | 2g | 2g | 2g |
| P13 | B4 | SP | 2c | 2c | 2c |
| P14 | B3 | S | 2e | 2e | 2e |
| P15 | B2 | ⋮ | 2d | 2d | 2d |
| P16 | B1 | LP | 2h | col1 | REVIEW |