

# Service Manual

**PIONEER®**  
The Art of Entertainment

ORDER NO.  
ARP2702

AUDIO/VIDEO STEREO RECEIVER

# VSX-D902S

KU, KC, SD

- Refer to the service manual ARP2287 for VSX-95 and VSX-9900S.
- This manual is applicable to VSX-D902S/KU, KC and SD.

## CONTRAST OF MISCELLANEOUS PARTS

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

**VSX-D902S/KU, KC, SD and VSX-95/KUC have the same construction except for the following:**

| Mark | Symbol & Description     | Part No.     |                           |                | Remarks |
|------|--------------------------|--------------|---------------------------|----------------|---------|
|      |                          | VSX - 95/KUC | VSX - D902S/<br>KU and KC | VSX - D902S/SD |         |
| ⊙    | MAIN FUNCTION assembly   | AWZ3673      | AWZ3560                   | AWZ3560        |         |
| ⊙    | SUB FUNCTION assembly    | AWZ3674      | AWZ3561                   | AWZ3561        |         |
| ⊙    | VIDEO FUNCTION assembly  | AWZ3675      | AWZ3562                   | AWZ3562        |         |
| ⊙    | ENHANCER assembly        | AWZ3676      | AWZ4161                   | AWZ3563        |         |
| ⊙    | OSD assembly             | AWZ3634      | AWZ3634                   | .....          |         |
| NSP  | TERMINAL assembly        | .....        | .....                     | AWZ3565        | * 1     |
| ⊙    | PS. $\mu$ - COM assembly | AWZ3571      | AWZ4511                   | AWZ3571        |         |

\* 1 : TERMINAL assembly of VSX - D902S/SD is in same location as OSD assembly of VSX - 95.

**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan  
**PIONEER ELECTRONICS SERVICE INC.** P.O. Box 1760, Long Beach, California 90801 U.S.A.  
**PIONEER ELECTRONICS OF CANADA, INC.** 300 Allstate Parkway Markham, Ontario L3R 0P2 Canada  
**PIONEER ELECTRONIC [EUROPE] N.V.** Haven 1087 Keetberglaan 1, 9120 Melsele, Belgium  
**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.** 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911  
**© PIONEER ELECTRONIC CORPORATION 1993**

SF MAR. 1993 Printed in Japan

**VSX-D902S**

| Mark | Symbol & Description                                      | Part No.         |                    |                    |                    | Remarks              |
|------|-----------------------------------------------------------|------------------|--------------------|--------------------|--------------------|----------------------|
|      |                                                           | VSX – 95/<br>KUC | VSX – D902S/<br>KU | VSX – D902S/<br>KC | VSX – D902S/<br>SD |                      |
| ⚠    | S2 Line voltage selector<br>(AC110V – 127V/220V – 240V)   | .....            | .....              | .....              | AKX1004            | * 3                  |
| ⚠    | S3 Slide switch (9k/10k)                                  | .....            | .....              | .....              | ASH – 004          | * 3                  |
| ⚠    | S4 Line voltage selector<br>(AC110V/120 – 127V/220V/240V) | .....            | .....              | .....              | AKX – 507          | * 3                  |
| ⚠    | T Power transformer                                       | ATS1360          | ATS1360            | ATS1360            | ATS1361            |                      |
| ⚠    | C2 Ceramic capacitor (0.1/250V)                           | .....            | .....              | .....              | ACE – 507          | * 3                  |
| ⚠    | FU1 Fuse (10A/125V)                                       | AEK1035          | AEK1035            | AEK1035            | .....              |                      |
| ⚠    | FU1 Fuse (5A/125V)                                        | .....            | .....              | .....              | AEK – 126          |                      |
| ⚠    | FU2 Fuse (5A/125V)                                        | .....            | .....              | .....              | AEK – 126          | (Page 8, No. 74) * 4 |
| ⚠    | FU3, FU4 Fuse (6.3A/125V)                                 | AEK – 309        | AEK – 309          | AEK – 309          | AEK – 127          |                      |
| ⚠    | AC power cord                                             | ADG1072          | ADG1058            | ADG1058            | ADG1051            |                      |
| ⚠    | Fuse holder (For FU2)                                     | .....            | .....              | .....              | AKR1001            | (Page 8, No. 73) * 4 |
|      | AC cord spacer                                            | ANG1153          | .....              | .....              | .....              |                      |
|      | Strain relief                                             | .....            | AEP – 113          | AEP – 113          | AEC – 882          | * 3                  |
|      | Name plate                                                | AAM1001          | AAM1058            | AAM1058            | AAM1058            |                      |
|      | FL filter                                                 | AAK2169          | AAK2168            | AAK2168            | AAK2168            |                      |
|      | Leg assembly                                              | AMR1158          | .....              | .....              | .....              |                      |
|      | Front panel                                               | ANB1480          | ANB1547            | ANB1547            | ANB1547            |                      |
|      | Bonnet case                                               | ANE1307          | AZN1804            | AZN1804            | AZN1804            |                      |
|      | Wood collar                                               | AEC1165          | .....              | .....              | .....              |                      |
| NSP  | Chassis                                                   | ANA1144          | ANA1124            | ANA1124            | ANA1124            |                      |
|      | Side board R                                              | AMS1056          | .....              | .....              | .....              |                      |
|      | Side board L                                              | AMS1057          | .....              | .....              | .....              |                      |
|      | Screw (For Side board)                                    | ABA1086          | .....              | .....              | .....              |                      |
|      | Screw (For Side board)                                    | VSZ40P170FZK     | .....              | .....              | .....              |                      |
|      | Screw (For Slide switch, S3)                              | .....            | .....              | .....              | BMZ26P040FZK       |                      |
|      | Screw (For Bonnet case)                                   | .....            | FBT40P080FZK       | FBT40P080FZK       | FBT40P080FZK       |                      |
|      | Screw                                                     | ABA1137          | .....              | .....              | .....              | (Page 4, No. 18) * 4 |
|      | Screw                                                     | ABA1138          | .....              | .....              | .....              | (Page 4, No. 19) * 4 |
|      | Top pad                                                   | AHA1033          | .....              | .....              | .....              |                      |
|      | Bottom pad                                                | AHA1034          | .....              | .....              | .....              |                      |
|      | Front, rear pad                                           | .....            | AHA1164            | AHA1164            | AHA1164            | * 3                  |
|      | Packing case                                              | AHD2122          | AHD2514            | AHD2514            | AHD2515            |                      |
|      | Operating instructions (English)                          | ARB1333          | ARB1420            | ARB1420            | ARB1420            |                      |
|      | Operating instructions (French)                           | .....            | .....              | ARC1412            | .....              |                      |
|      | Supplementary operating instructions<br>(English)         | ARR1125          | .....              | .....              | .....              |                      |
|      | Remote control unit (CU – VSX031)                         | AXD1223          | .....              | .....              | .....              |                      |
|      | Remote control unit (CU – VSX023)                         | .....            | AXD1207            | AXD1207            | AXD1207            | * 2                  |
| NSP  | Fuse holder angle                                         | .....            | .....              | .....              | ANG – 528          | (Page 8) * 4         |
| NSP  | Barrier                                                   | AEC1276          | .....              | .....              | .....              |                      |
| NSP  | Rear panel                                                | ANC1734          | .....              | .....              | .....              |                      |
| NSP  | Rear panel                                                | .....            | ANC2067            | ANC2067            | ANC2068            |                      |
| NSP  | Bottom plate                                              | ANF1083          | ANF1068            | ANF1068            | ANF1068            |                      |

\* 2 : Remote control unit of VSX – D902S is identical to that of VSX – 9900S.

\* 3 : Refer to page 4.

\* 4 : Refer to the service manual for VSX – 95.

**VSX-D902S****MAIN FUNCTION assembly****AWZ3560 and AWZ3673 have the same construction except for the following:**

| Mark | Symbol & Description             | Part No.           |                    | Remarks |
|------|----------------------------------|--------------------|--------------------|---------|
|      |                                  | AWZ3673            | AWZ3560            |         |
|      | CN Pin jack 8P<br>CN Pin jack 6P | AKB1182<br>AKB1154 | AKB1127<br>AKB1138 |         |

**SUB FUNCTION assembly****AWZ3561 and AWZ3674 have the same construction except for the following:**

| Mark | Symbol & Description             | Part No.           |                    | Remarks |
|------|----------------------------------|--------------------|--------------------|---------|
|      |                                  | AWZ3674            | AWZ3561            |         |
|      | CN Pin jack 6P<br>CN Pin jack 8P | AKB1178<br>AKB1179 | AKB1140<br>AKB1144 |         |

**VIDEO FUNCTION assembly****AWZ3562 and AWZ3675 have the same construction except for the following:**

| Mark | Symbol & Description             | Part No.           |                    | Remarks |
|------|----------------------------------|--------------------|--------------------|---------|
|      |                                  | AWZ3675            | AWZ3562            |         |
|      | CN Pin jack 3P<br>CN Pin jack 2P | AKB1170<br>AKB1173 | AKB1143<br>AKB1118 |         |

**ENHANCER assembly****AWZ3563, AWZ4161 and AWZ3676 have the same construction except for the following:**

| Mark | Symbol & Description | Part No. |         |         | Remarks |
|------|----------------------|----------|---------|---------|---------|
|      |                      | AWZ3676  | AWZ3563 | AWZ4161 |         |
|      | CN Pin jack 3P       | AKB1170  | AKB1143 | AKB1143 |         |

**PS.  $\mu$  -COM assembly****AWZ4511 and AWZ3571 have the same construction except for the following:**

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | AWZ3571  | AWZ4511 |         |
|      | Speaker terminal 8P  | AKE1011  | AKE1036 |         |

# VSX-D902S

## TERMINAL assembly

### NOTES:

- Parts marked by "NSP" are generally unavailable because they are not in our Master Spare Parts List.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "⊙" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex.1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J=5%, and K=10%).

560  $\Omega$   $\rightarrow 56 \times 10^1 \rightarrow 561$  ..... RD1/8PM  $\begin{bmatrix} 5 & 6 & 1 \end{bmatrix}$  J  
 47k  $\Omega$   $\rightarrow 47 \times 10^3 \rightarrow 473$  ..... RD1/4PS  $\begin{bmatrix} 4 & 7 & 3 \end{bmatrix}$  J  
 0.5  $\Omega$   $\rightarrow 0R5$  ..... RN2H  $\begin{bmatrix} 0 & R & 5 \end{bmatrix}$  K  
 1  $\Omega$   $\rightarrow 010$  ..... RS1P  $\begin{bmatrix} 0 & 1 & 0 \end{bmatrix}$  K

Ex.2 When there are 3 effective digits (such as in high precision metal film resistors).

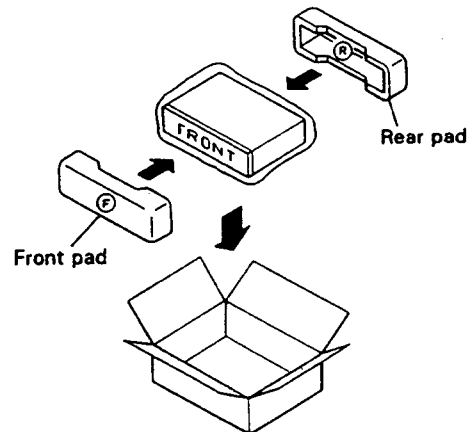
5.62k  $\Omega$   $\rightarrow 562 \times 10^1 \rightarrow 5621$  ..... RN1/4PC  $\begin{bmatrix} 5 & 6 & 2 & 1 \end{bmatrix}$  F

| Mark              | No.      | Description       | Parts No.   |
|-------------------|----------|-------------------|-------------|
| <b>CAPACITORS</b> |          |                   |             |
|                   | C751-754 | CERAMIC CAPACITOR | CKCYB102K50 |
| <b>RESISTORS</b>  |          |                   |             |
|                   |          | All resistors     | RD1/8PM474J |
| <b>OTHERS</b>     |          |                   |             |
|                   |          | PIN JACK 1P       | AKB1139     |
|                   |          | PIN JACK 2P       | AKB1142     |
| CN                |          | PIN JACK 4P       | AKB1181     |

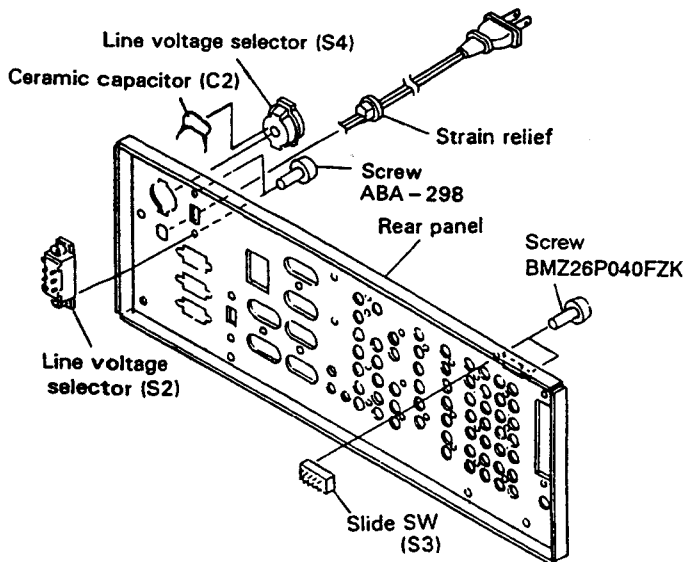
### Note:

For schematic diagram and PCB connection diagram of VSX - D902S/SD, refer to pages 52 - 54 of the service manual for VSX - 95 and VSX - 9900S.

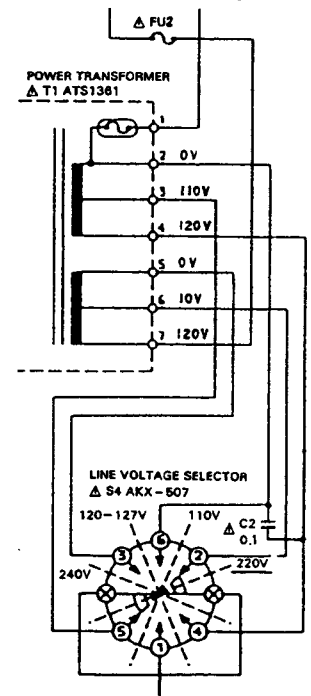
### ● PACKING (VSX-D902S)



### ● EXPLODED VIEW (VSX-D902S/SD)



### ● SCHEMATIC DIAGRAM (VSX-D902S/SD)

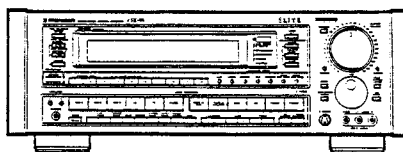




3912

**PIONEER**  
The Art of Entertainment

# Service Manual



ORDER NO.  
ARP2287

AUDIO/VIDEO STEREO RECEIVER

# VSX-95

## VSX-9900S

VSX-95 AND VSX-9900S HAVE THE FOLLOWING :

| Type | Model  |           | Power Requirement                          | Remarks |
|------|--------|-----------|--------------------------------------------|---------|
|      | VSX-95 | VSX-9900S |                                            |         |
| KUC  | ○      | ○         | AC120V only                                |         |
| SD   | —      | ○         | AC110V, 120V-127V, 220V, 240V (switchable) |         |

- This manual is applicable to the VSX-95/KUC, VSX-9900S/KUC and SD types.
- As to the VSX-9900S/KUC and SD types, refer to pages 111-113.

## CONTENTS

|                                                               |    |                                         |     |
|---------------------------------------------------------------|----|-----------------------------------------|-----|
| 1. SAFETY INFORMATION .....                                   | 2  | 5. ADJUSTMENTS .....                    | 96  |
| 2. EXPLODED VIEWS, PACKING AND PARTS LIST .....               | 3  | 6. IC INFORMATION .....                 | 100 |
| 3. SCHEMATIC DIAGRAMS AND P.C.BOARDS CONNECTION DIAGRAM ..... | 10 | 7. REMOTE CONTROL UNIT (CU-VSX03) ..... | 106 |
| 4. PCB's PARTS LIST .....                                     | 86 | 8. FOR VSX-9900S/KUC AND SD TYPES ..... | 111 |
|                                                               |    | 9. PANEL FACILITIES .....               | 114 |
|                                                               |    | 10. SPECIFICATIONS .....                | 121 |

**PIONEER ELECTRONIC CORPORATION** 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan

**PIONEER ELECTRONICS SERVICE INC.** P.O. Box 1760, Long Beach, California 90801 U.S.A.

**PIONEER ELECTRONICS OF CANADA, INC.** 505 Cochrane Drive, Markham, Ontario L3R 8E3 Canada

**PIONEER ELECTRONIC [EUROPE] N.V.** Keetberglaan 1, 9120 Beveren, Belgium

**PIONEER ELECTRONICS AUSTRALIA PTY. LTD.** 178-184 Boundary Road, Braeside, Victoria 3195, Australia TEL: [03] 580-9911

© PIONEER ELECTRONIC CORPORATION 1991

YO JULY 1991 Printed in Japan

3912

This service manual is intended for qualified service technicians; it is not meant for the casual do-it-yourselfer. Qualified technicians have the necessary test equipment and tools, and have been trained to properly and safely repair complex products such as those covered by this manual.

Improperly performed repairs can adversely affect the safety and reliability of the product and may void the warranty. If you are not qualified to perform the repair of this product properly and safely, you should not risk trying to do so and refer the repair to a qualified service technician.

#### WARNING

Lead in solder used in this product is listed by the California Health and Welfare agency as a known reproductive toxicant which may cause birth defects or other reproductive harm (California Health & Safety Code, Section 25249.5).

When servicing or handling circuit boards and other components which contain lead in solder, avoid unprotected skin contact with the solder. Also, when soldering do not inhale any smoke or fumes produced.

## 1. SAFETY INFORMATION

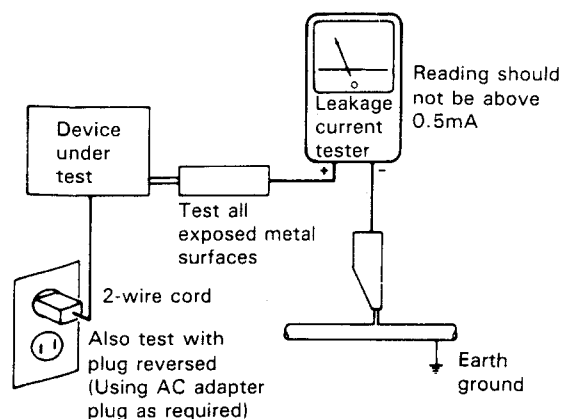
(FOR USA MODEL ONLY)

### 1. SAFETY PRECAUTIONS

The following check should be performed for the continued protection of the customer and service technician.

#### LEAKAGE CURRENT CHECK

Measure leakage current to a known earth ground (water pipe, conduit, etc.) by connecting a leakage current tester such as Simpson Model 229-2 or equivalent between the earth ground and all exposed metal parts of the appliance (input/output terminals, screwheads, metal overlays, control shaft, etc.). Plug the AC line cord of the appliance directly into a 120V AC 60Hz outlet and turn the AC power switch on. Any current measured must not exceed 0.5mA.



AC Leakage Test

ANY MEASUREMENTS NOT WITHIN THE LIMITS OUTLINED ABOVE ARE INDICATIVE OF A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED BEFORE RETURNING THE APPLIANCE TO THE CUSTOMER.

### 2. PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in the appliance have special safety related characteristics. These are often not evident from visual inspection nor the protection afforded by them necessarily can be obtained by using replacement components rated for voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this Service Manual.

Electrical components having such features are identified by marking with a  $\Delta$  on the schematics and on the parts list in this Service Manual. The use of a substitute replacement component which does not have the same safety characteristics as the PIONEER recommended replacement one, shown in the parts list in this Service Manual, may create shock, fire, or other hazards.

Product Safety is continuously under review and new instructions are issued from time to time. For the latest information, always consult the current PIONEER Service Manual. A subscription to, or additional copies of, PIONEER Service Manual may be obtained at a nominal charge from PIONEER.

## 2. EXPLODED VIEWS, PACKING AND PARTS LIST

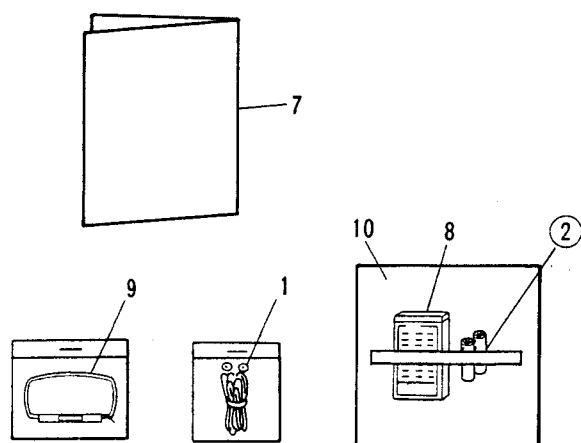
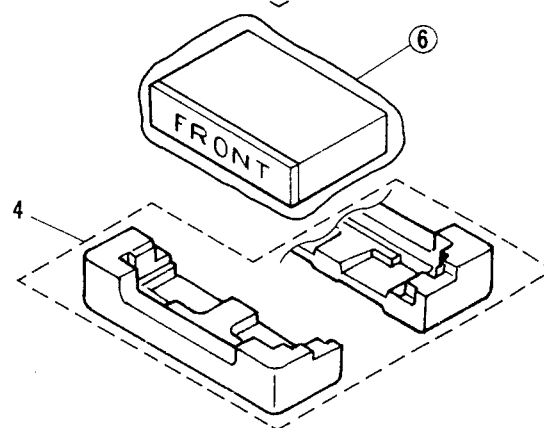
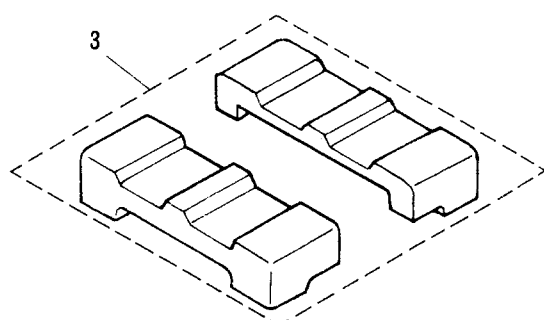
### NOTES:

- Parts without part number cannot be supplied.
- The  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "◎" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

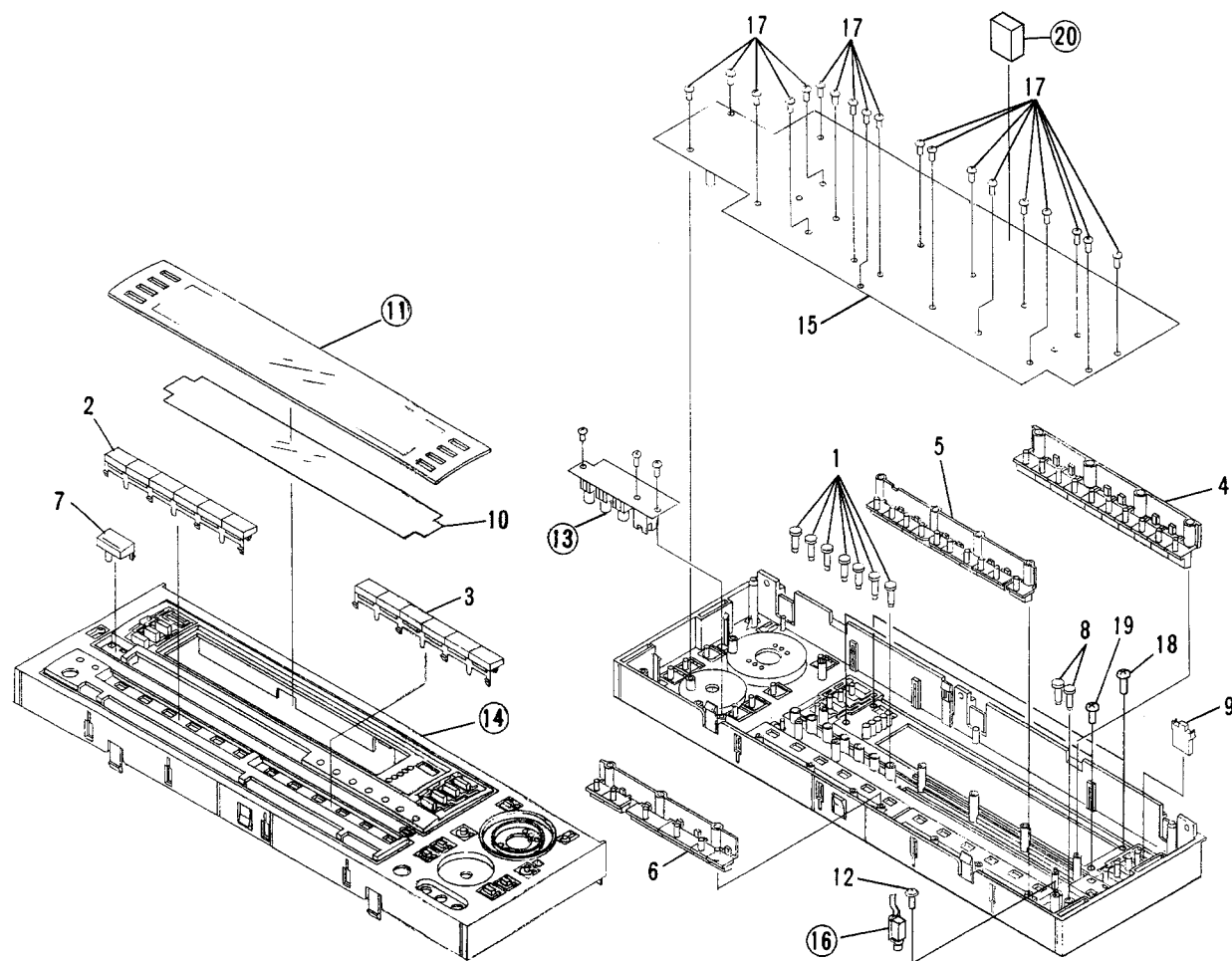
### 2.1 PACKING

#### Parts list of Packing

| Mark No. | Description                         | Parts No. |
|----------|-------------------------------------|-----------|
| 1        | FM ANTENNA                          | ADH1004   |
| 2        | ALKALINE DRY CELL BATTERY (LR6, AA) |           |
| 3        | TOP PAD                             | AHA1033   |
| 4        | BOTTOM PAD                          | AHA1034   |
| 5        | PACKING CASE                        | AHD2122   |
| 6        | PACKING SHEET                       |           |
| 7        | OPERATING INSTRUCTIONS (English)    | ARB1333   |
| 8        | REMOTE CONTROL UNIT (CU-VSX031)     | AXD1223   |
| 9        | LOOP ANTENNA                        | ATB1005   |
| 10       | SPACER                              | AHB1069   |



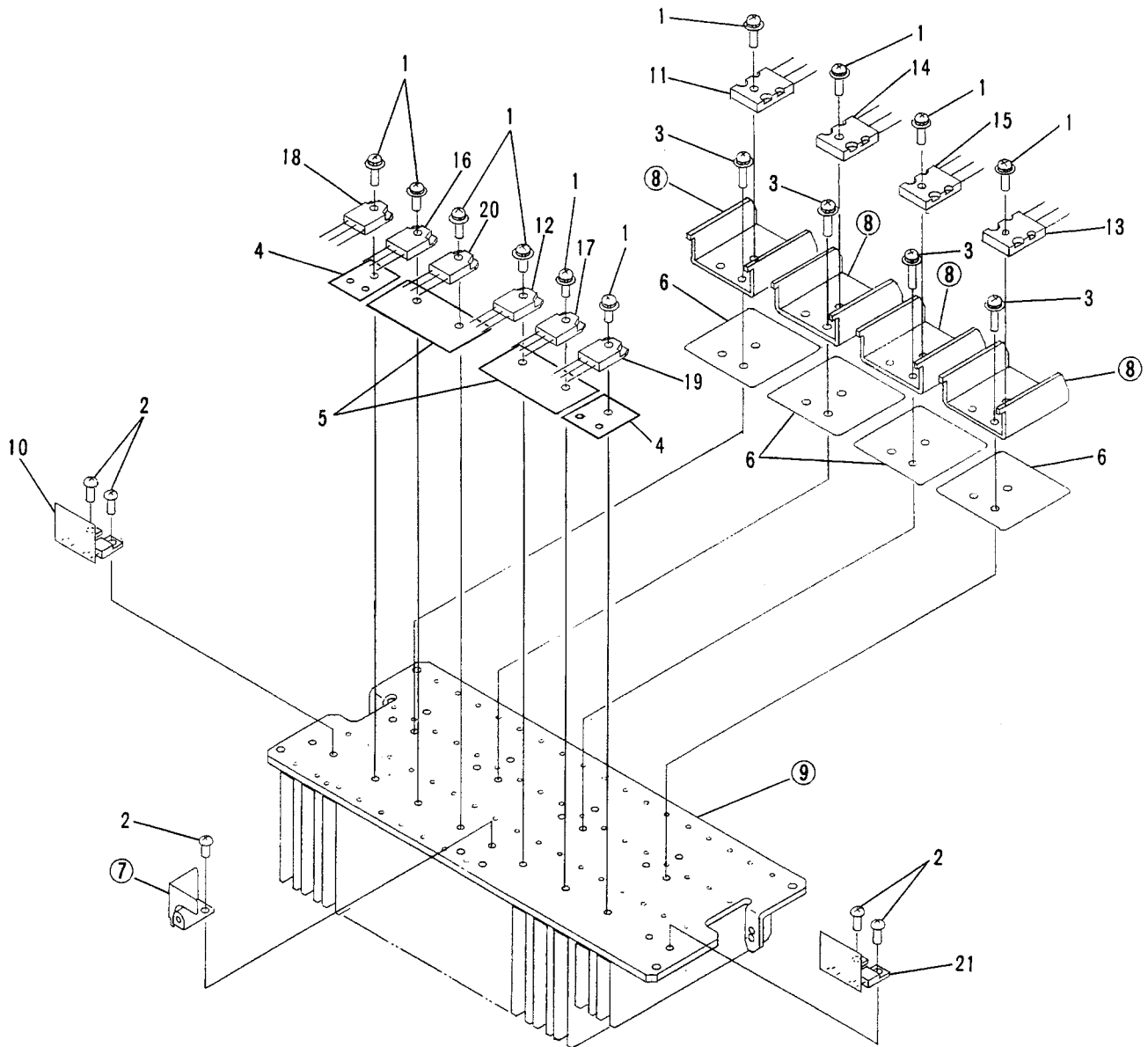
2.2 FRONT PANEL SECTION



Parts list of Front panel section

| Mark | No. | Description                       | Parts No. | Mark | No. | Description               | Parts No.    |
|------|-----|-----------------------------------|-----------|------|-----|---------------------------|--------------|
|      | 1   | KIN BUTTON<br>(SURROUND MODE)     | AAD1609   |      | 11  | PVC PANEL (PLS)           |              |
|      | 2   | FUNCTION KNOB<br>(INPUT SELECTOR) | AAD2004   |      | 12  | PWB SCREW                 | ABA1085      |
|      | 3   | FUNCTION KNOB<br>(INPUT SELECTOR) | AAD2005   | ●    | 13  | FRONT VIDEO ASSEMBLY      |              |
|      | 4   | STATION BUTTON (PLS)              | AAD2006   |      | 14  | PANEL BASE                |              |
|      | 5   | TUNING BUTTON (PLS)               | AAD2007   |      | 15  | FRONT CONTROL<br>ASSEMBLY | AWZ3569      |
|      | 6   | BALANCE BUTTON (PLS)              | AAD2008   |      | 16  | HEADPHONE ASSEMBLY        |              |
|      | 7   | POWER BUTTON (PLS)                | AAD2009   |      | 17  | SCREW                     | BBZ26P080FMC |
|      | 8   | BUTTON (SPEAKER)                  | AAD2030   |      | 18  | SCREW                     | ABA1137      |
|      | 9   | LENS                              | AAK2144   |      | 19  | SCREW                     | ABA1138      |
|      | 10  | FL FILTER                         | AAK2169   |      | 20  | CUSHION RUBBER            |              |

## 2.3 HEAT SINK SECTION



### Parts list of Heat sink section

| Mark | No. | Description          | Parts No. | Mark | No. | Description          | Parts No. |
|------|-----|----------------------|-----------|------|-----|----------------------|-----------|
|      | 1   | SCREW (STEEL)        | ABA-297   | ⚠    | 11  | TRANSISTOR (Q1)      | 2SC3211   |
|      | 2   | SCREW                | ABA-298   | ⚠    | 12  | TRANSISTOR (Q10)     | 2SA1253N  |
|      | 3   | SCREW (STEEL)        | ABA1105   | ⚠    | 13  | TRANSISTOR (Q2)      | 2SC3211   |
|      | 4   | MICA SHEET           | AEC-818   | ⚠    | 14  | TRANSISTOR (Q3)      | 2SA1302   |
|      | 5   | MICA SHEET           | AEC1140   | ⚠    | 15  | TRANSISTOR (Q4)      | 2SA1302   |
|      | 6   | MICA SHEET           | AEE1033   | ⚠    | 16  | TRANSISTOR (Q5)      | 2SC3101N  |
|      | 7   | PCB SUPPORT          |           | ⚠    | 17  | TRANSISTOR (Q6)      | 2SC3101N  |
|      | 8   | SUB HEAT SINK        |           | ⚠    | 18  | TRANSISTOR (Q7)      | 2SA1253N  |
|      | 9   | HEAT SINK            |           | ⚠    | 19  | TRANSISTOR (Q8)      | 2SA1253N  |
| ●    | 10  | REGULATOR 1 ASSEMBLY | AWZ3574   | ⚠    | 20  | TRANSISTOR (Q9)      | 2SC3101N  |
|      |     |                      |           | ●    | 21  | REGULATOR 2 ASSEMBLY | AWZ3575   |

## 2.4 EXTERIOR

### Parts list of Exterior

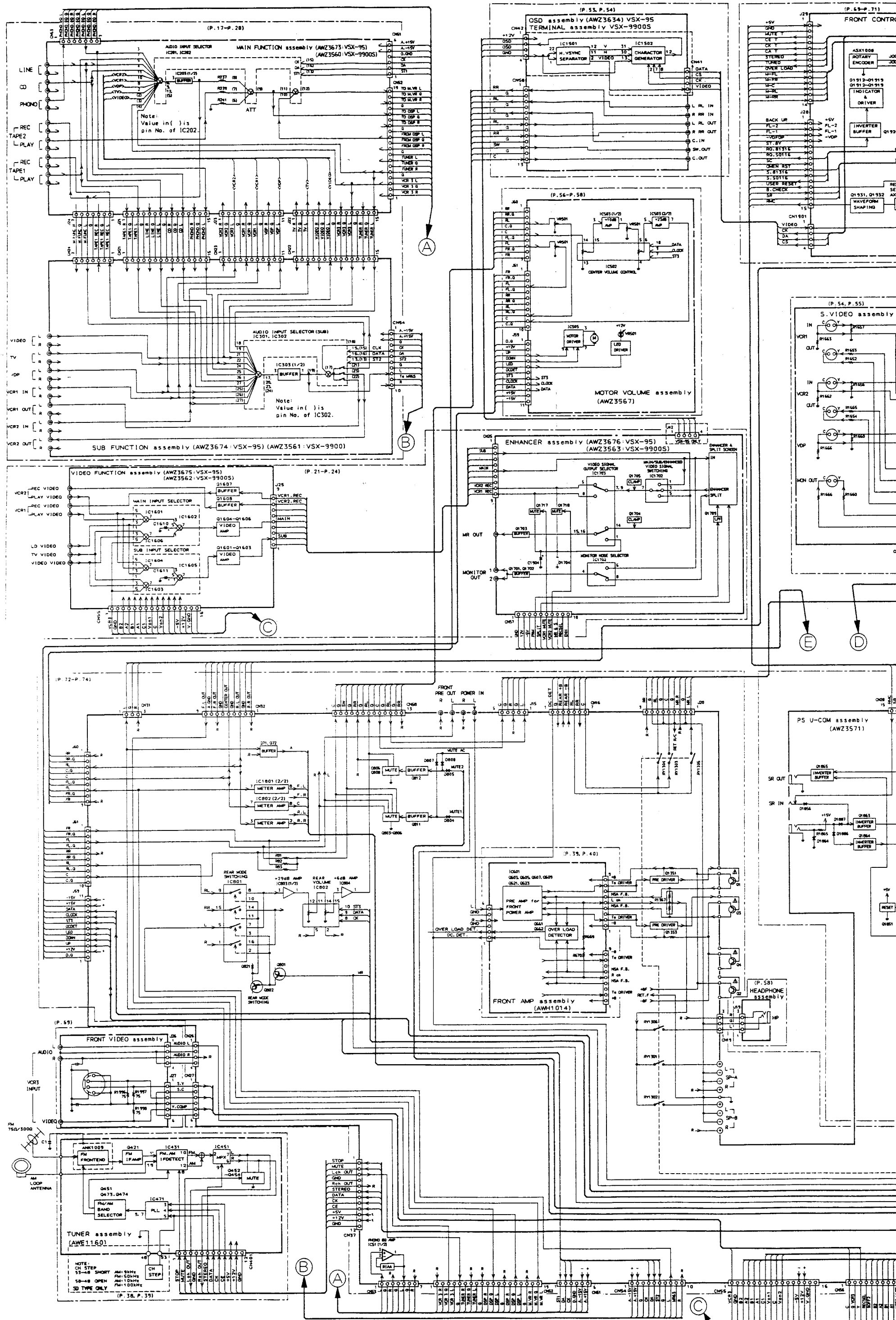
| Mark | No. | Description                   | Parts No.    | Mark | No. | Description                     | Parts No.    |
|------|-----|-------------------------------|--------------|------|-----|---------------------------------|--------------|
|      | 1   | ROTARY KNOB (JOG)             | AAA1009      | ●    | 51  | S.VIDEO ASSEMBLY                | AWZ3564      |
|      | 2   | MASTER VOL ASSEMBLY           | AAB1235      | ●    | 52  | R.C.AMP ASSEMBLY                | AWZ3568      |
|      | 3   | NAME PLATE (METAL)            |              |      | 53  | SCREW                           | VMZ30P060FMC |
| ●    | 4   | PS.μ-COM ASSEMBLY             | AWZ3571      | △    | 54  | FUSE (8A, FU1)                  | AEK1035      |
| ●    | 5   | R.C.REG.POWER SUPPLY ASSEMBLY | AWZ3572      | △    | 55  | FUSE (6.3A, FU3)                | AEK-309      |
|      | 6   | TRANS ASSEMBLY                | AWZ3573      | △    | 56  | FUSE (6.3A, FU4)                | AEK-309      |
|      | 7   | SCREW (STEEL)                 | ABA-283      | △    | 57  | FUSE (1.25A, FU5)               | AEK-120      |
|      | 8   | SCREW (STEEL)                 | ABA-297      | △    | 58  | FUSE (1.25A, FU6)               | AEK-120      |
|      | 9   | SCREW                         | ABA-298      |      | 59  | FERRITE CORE (L)                | ATX1017      |
|      | 10  | SCREW (STEEL)                 | ABA1006      |      | 60  | POWER TRANSFORMER (T)           | ATS1360      |
|      | 11  | SCREW (STEEL)                 | ABA1009      | ●    | 61  | OSD ASSEMBLY                    | AWZ3634      |
|      | 12  | SCREW (STEEL)                 | ABA1011      | ●    | 62  | MAIN FUNCTION ASSEMBLY          | AWZ3673      |
|      | 13  | SCREW                         | ABA1034      | ●    | 63  | SUB FUNCTION ASSEMBLY           | AWZ3674      |
|      | 14  | SCREW (STEEL)                 | ABA1086      | ●    | 64  | VIDEO FUNCTION ASSEMBLY         | AWZ3675      |
|      | 15  | NUT                           | ABN1016      | ●    | 65  | ENHANCER ASSEMBLY               | AWZ3676      |
| △    | 16  | AC POWER CORD                 | ADG1072      | ●    | 66  | BARRIER ASSEMBLY                | AWZ3825      |
|      | 17  | SPACER RING                   |              | ●    | 67  | FRONT AMP ASSEMBLY              | AWH1014      |
|      | 18  | DAMPER SHEET A                |              | △    | 68  | SPEAKER IMPEDANCE SELECTOR (S1) | AKX1004      |
|      | 19  | CUSHION (RUBBER)              |              |      | 69  | SCREW                           | VMZ26P040FZK |
|      | 20  | NYLON BINDER                  |              |      | 70  | CERAMIC CAPACITOR (C1)          | CKDYF103Z50  |
|      | 21  | WOOD COLLAR                   | AEC1165      |      |     |                                 |              |
|      | 22  | SHEET B                       |              |      |     |                                 |              |
|      | 23  | SHEET C                       |              |      |     |                                 |              |
|      | 24  | BARRIER                       |              |      |     |                                 |              |
|      | 25  | SPACER                        |              |      |     |                                 |              |
|      | 26  | HOLDER                        |              |      |     |                                 |              |
|      | 27  | NYLON RIVET                   | AEP-035      |      |     |                                 |              |
|      | 28  | SCREW                         | VBZ40P160FZK |      |     |                                 |              |
|      | 29  | TERMINAL SCREW                |              |      |     |                                 |              |
|      | 30  | PLUG                          | AKM1061      |      |     |                                 |              |
|      | 31  | LEG ASSEMBLY                  | AMR1158      |      |     |                                 |              |
|      | 32  | LEG ASSEMBLY                  | AMR1159      |      |     |                                 |              |
|      | 33  | SIDE BOARD R                  | AMS1056      |      |     |                                 |              |
|      | 34  | SIDE BOARD L                  | AMS1057      |      |     |                                 |              |
|      | 35  | CHASSIS                       |              |      |     |                                 |              |
|      | 36  | FRONT PANEL                   | ANB1480      |      |     |                                 |              |
|      | 37  | REAR PANEL                    |              |      |     |                                 |              |
|      | 38  | PANEL STAY                    |              |      |     |                                 |              |
| ●    | 39  | R.C.SPEAKER ASSEMBLY          | AWZ3566      |      |     |                                 |              |
|      | 40  | METAL BONNET                  | ANE1307      |      |     |                                 |              |
|      | 41  | BOTTOM PLATE                  |              |      |     |                                 |              |
|      | 42  | AC CORD SPACER                | ANG1153      |      |     |                                 |              |
|      | 43  | HEAT SINK HOLDER              |              |      |     |                                 |              |
|      | 44  | CASE (TUNER)                  |              |      |     |                                 |              |
|      | 45  | COVER (TUNER)                 |              |      |     |                                 |              |
|      | 46  | CASE (DSP)                    |              |      |     |                                 |              |
| ●    | 47  | MOTOR VOLUME ASSEMBLY         | AWZ3567      |      |     |                                 |              |
| ●    | 48  | TUNER ASSEMBLY                | AWE1160      |      |     |                                 |              |
| ●    | 49  | DSP ASSEMBLY                  | AWZ3570      |      |     |                                 |              |
|      | 50  | SCREW                         | FBT40P080FZK |      |     |                                 |              |

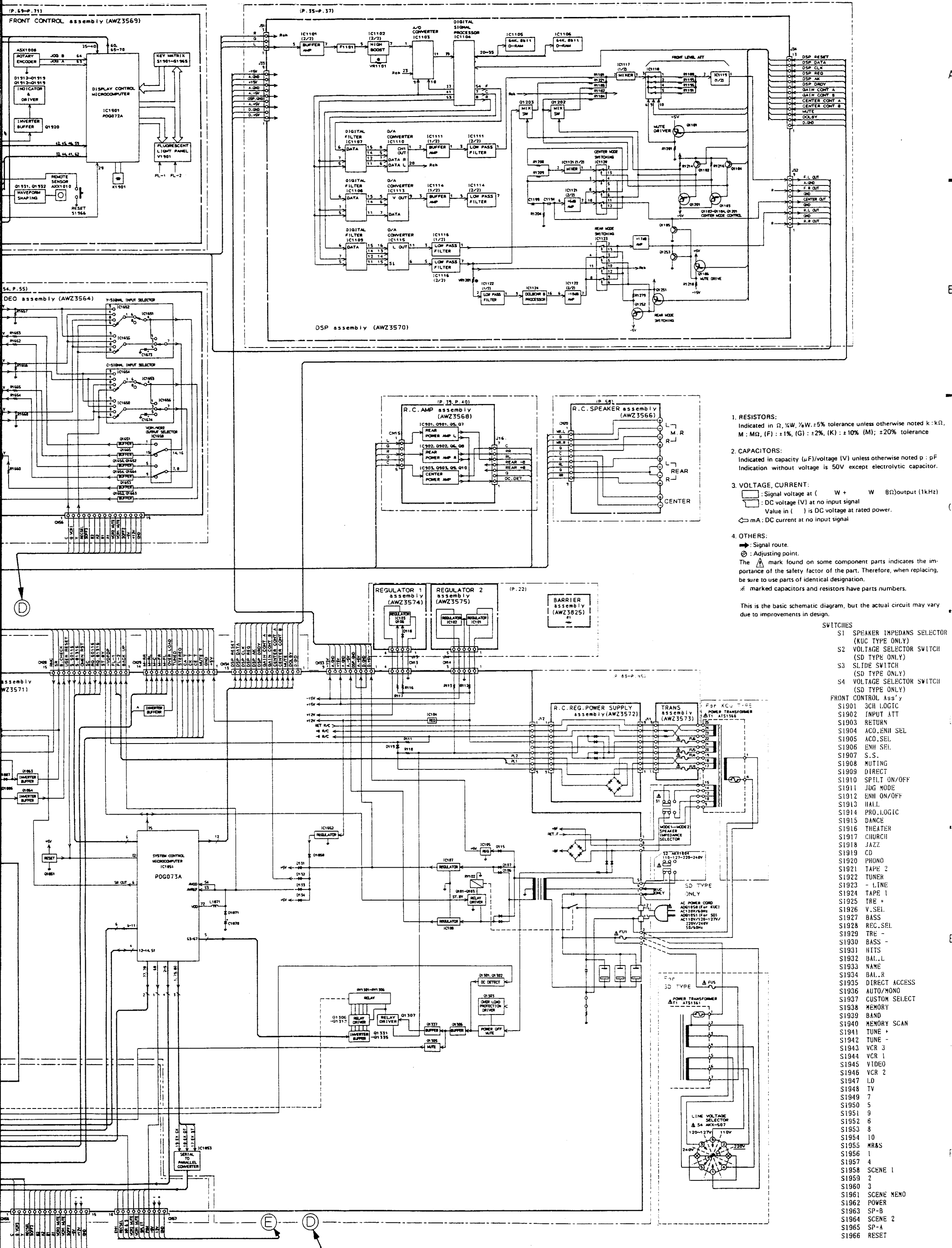


## VSX-95

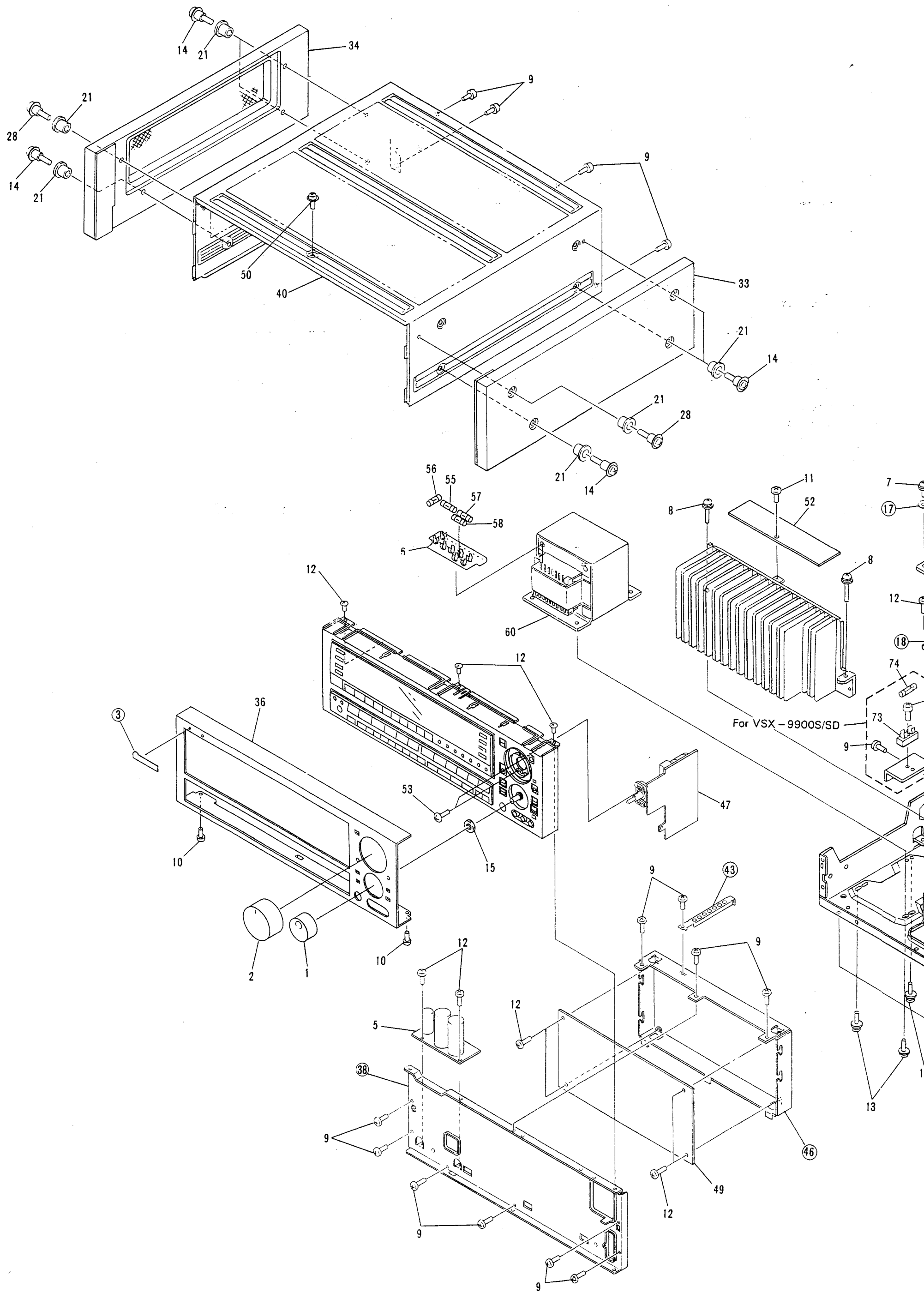
## 3. SCHEMATIC DIAGRAMS AND P.C.BOARDS CONNECTION DIAGRAM

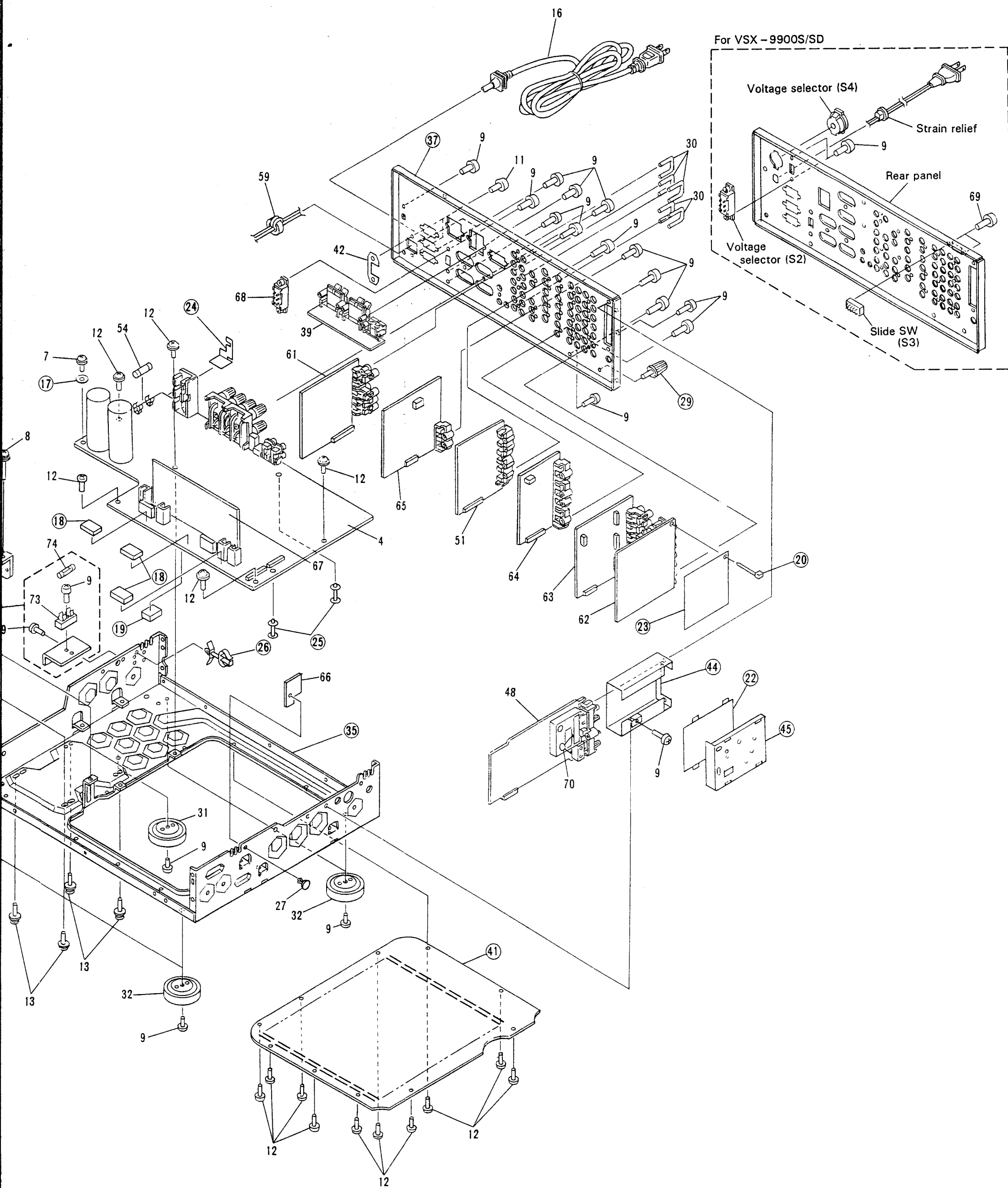
## 3.1 OVER ALL SCHEMATIC DIAGRAM





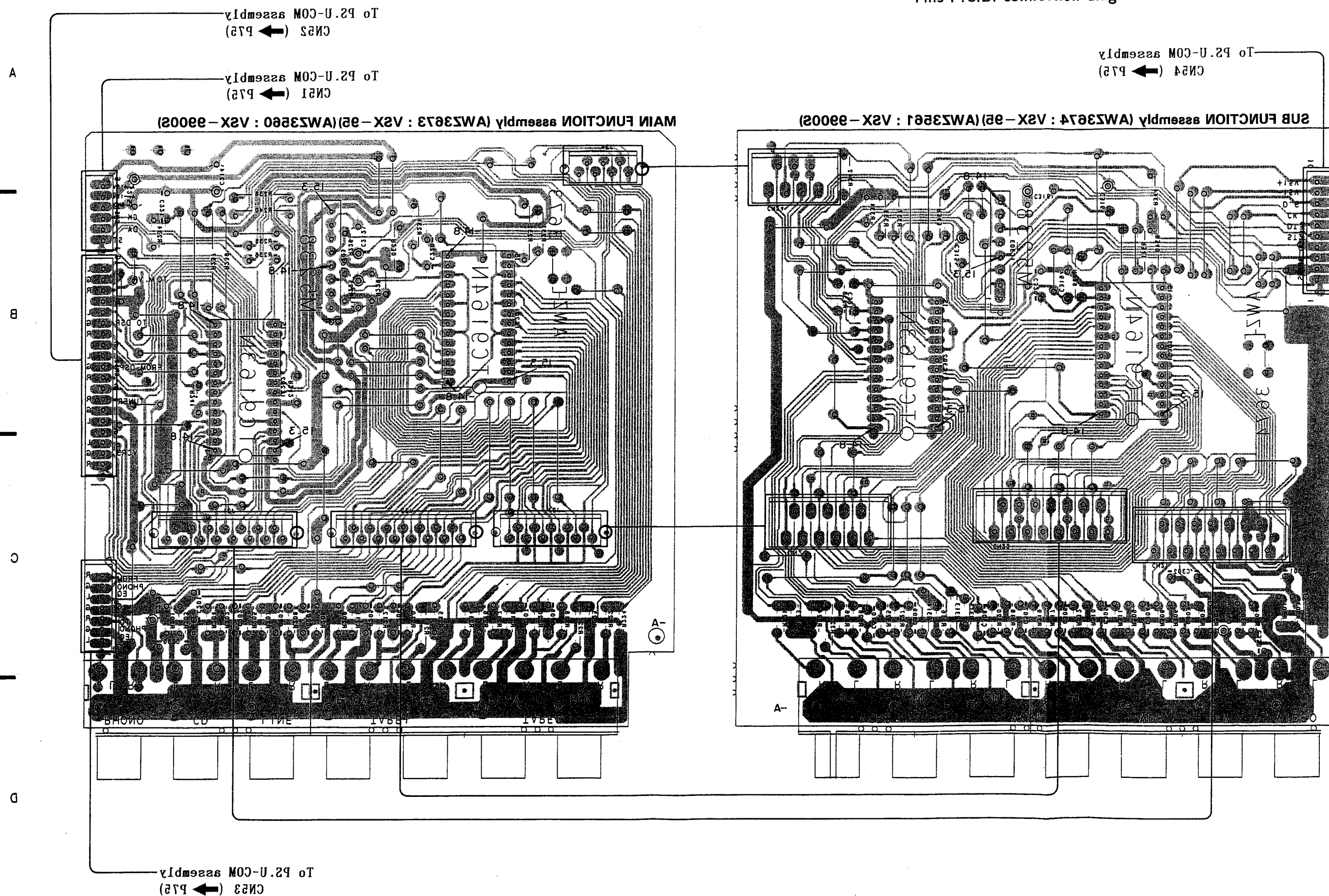








This P.C.B. connection diagram is viewed from the foil side.



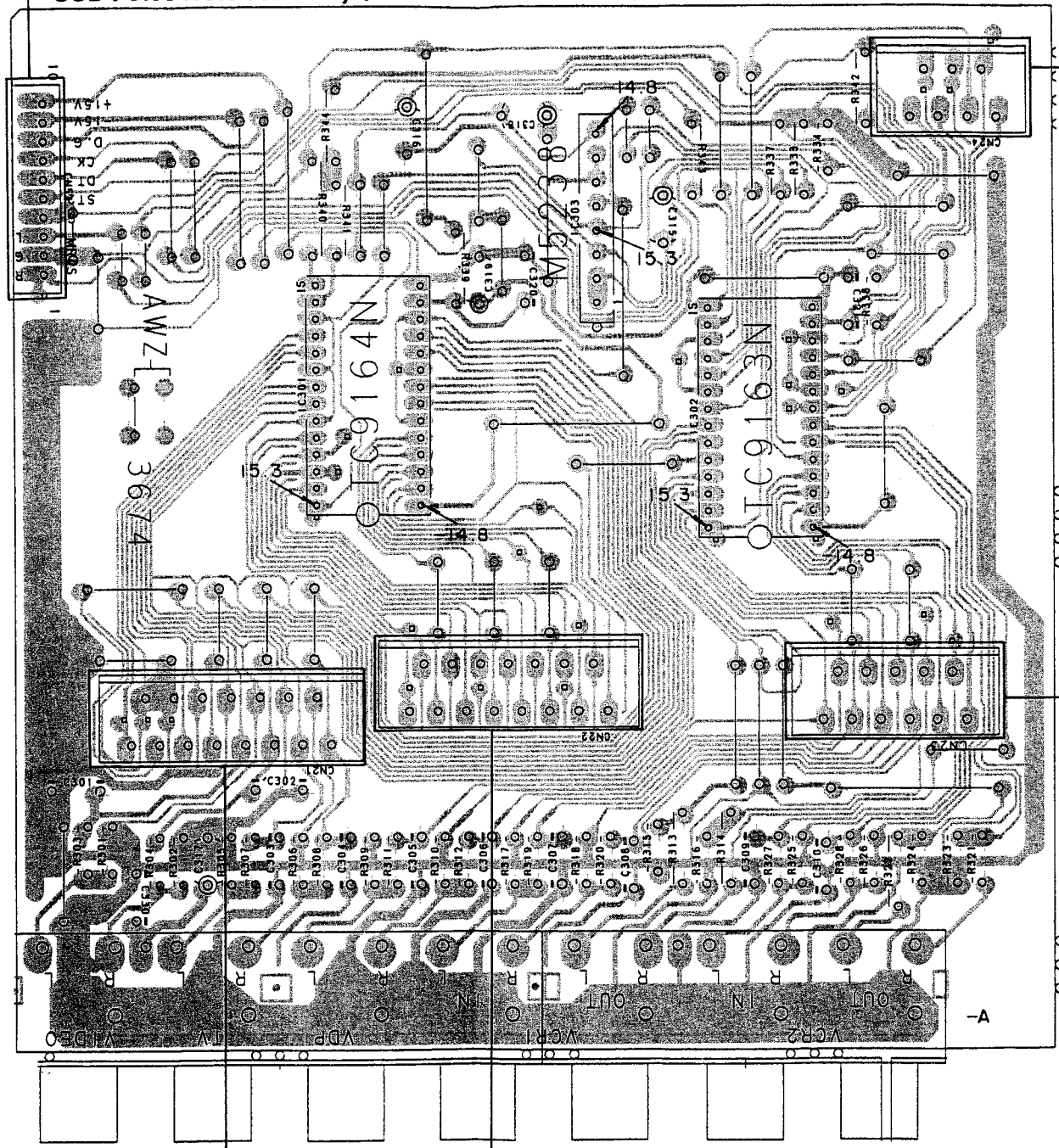


3.2 MAIN FUNCTION (AWZ3673) and SUB FUNCTION assembly (AWZ3674)

A

To PS.U-COM assembly  
CN54 (➡ P75)

SUB FUNCTION assembly (AWZ3674 : VSX-95)(AWZ3561 : VSX-9900S)



B

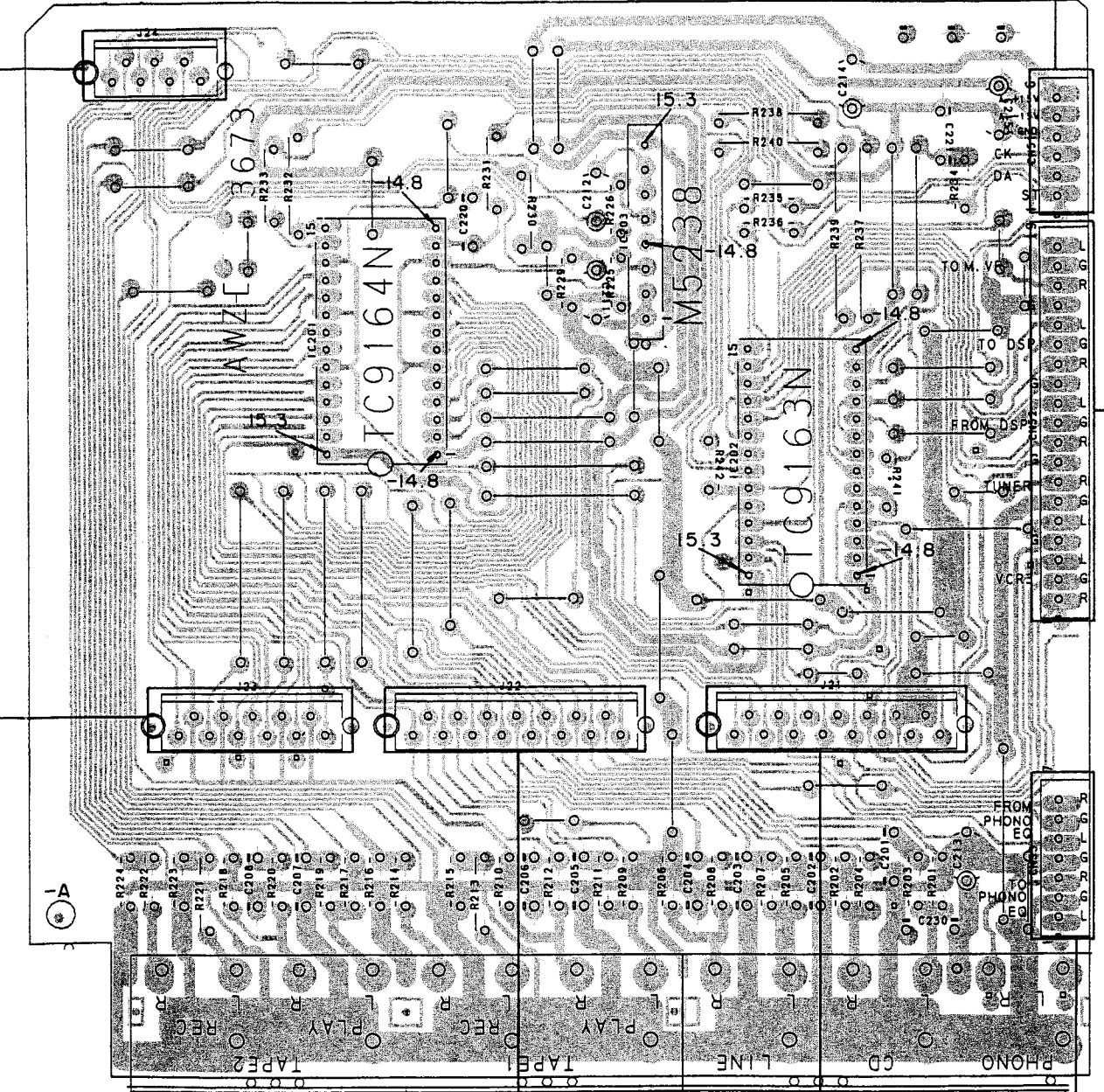
C

D

To PS.U-COM assembly  
CN52 (➡ P75)

To PS.U-COM assembly  
CN51 (➡ P75)

MAIN FUNCTION assembly (AWZ3673 : VSX-95)(AWZ3560 : VSX-9900S)



A

B

C

D

To PS.U-COM assembly  
CN53 (➡ P75)

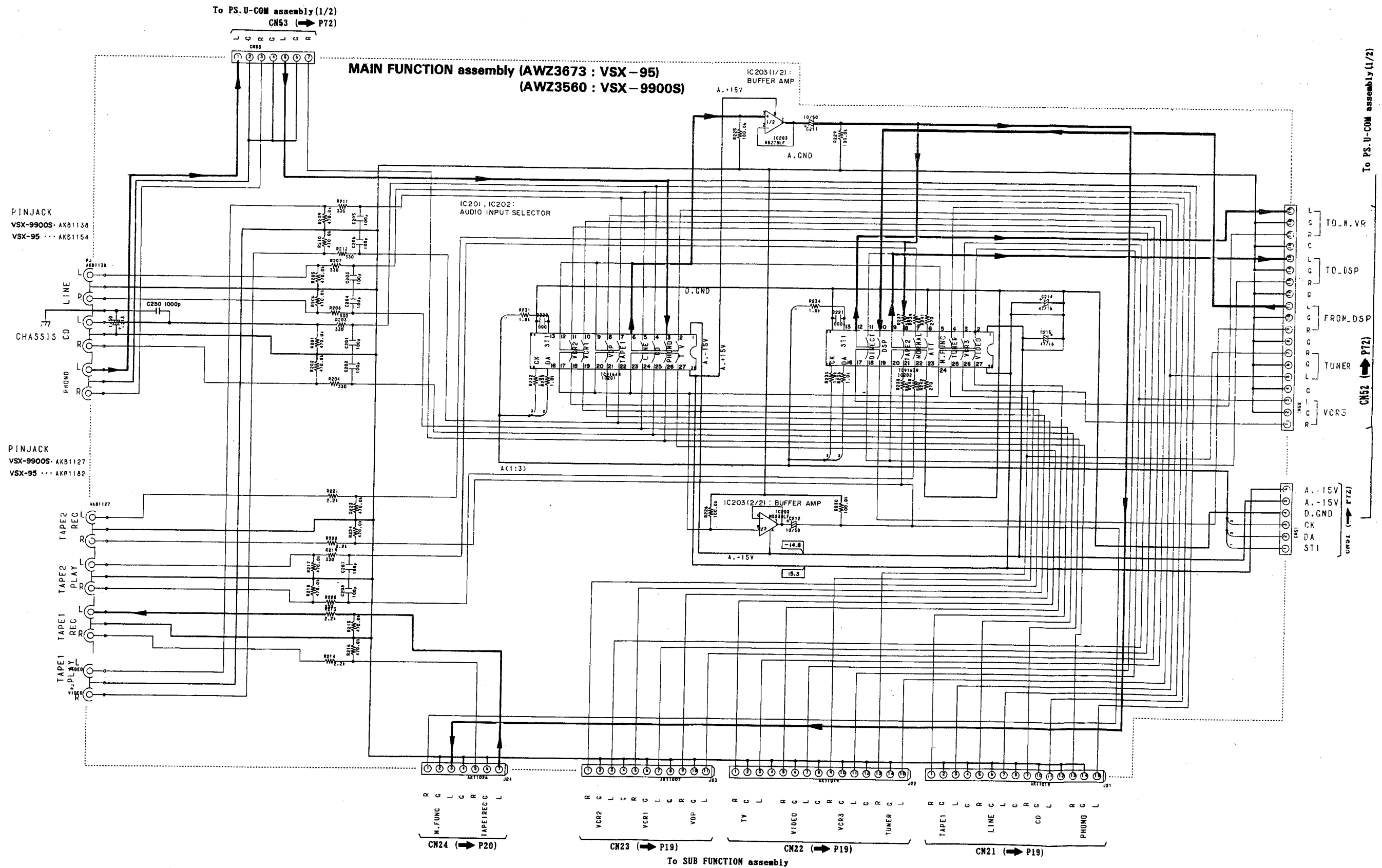


A

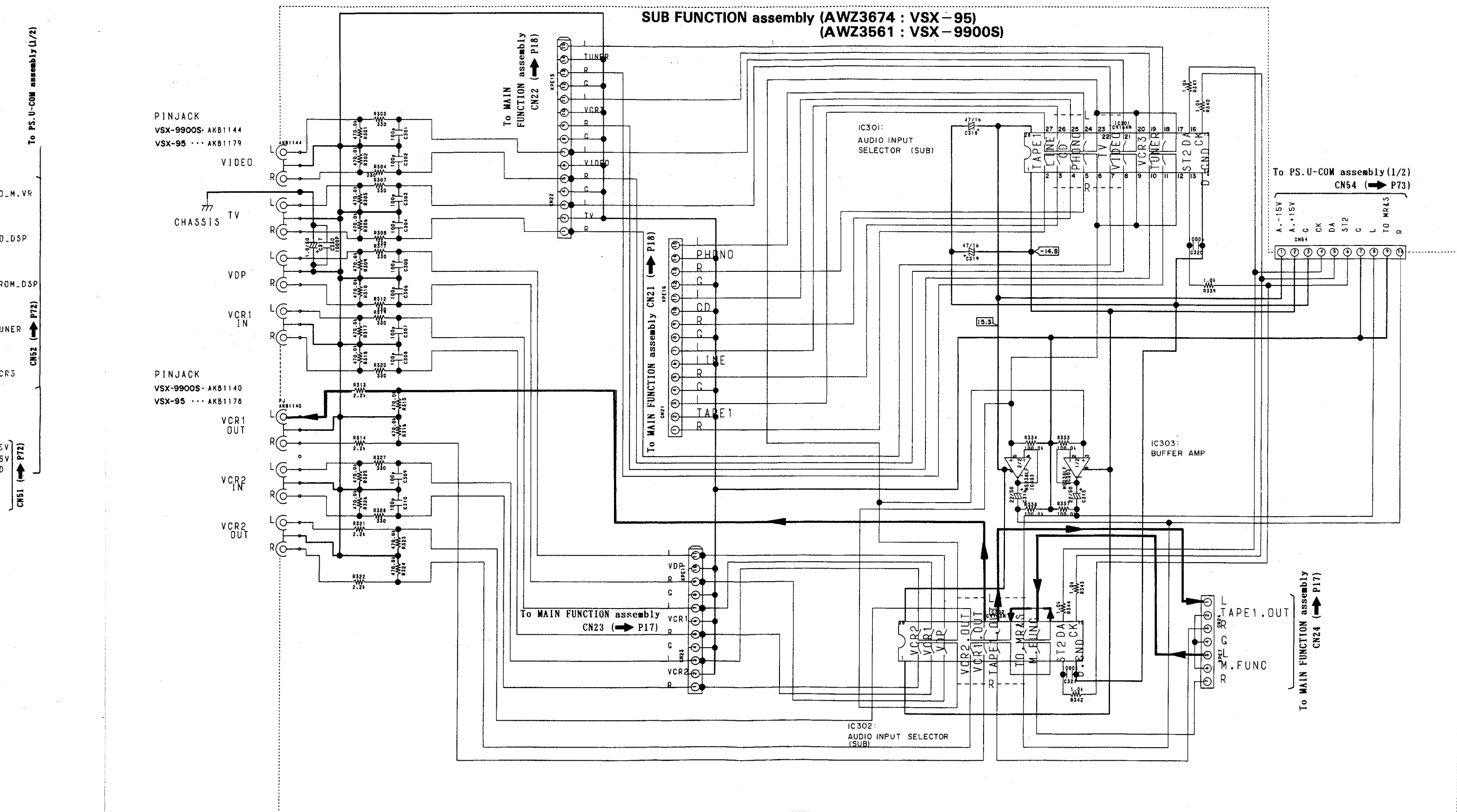
B

C

D







**B**

D

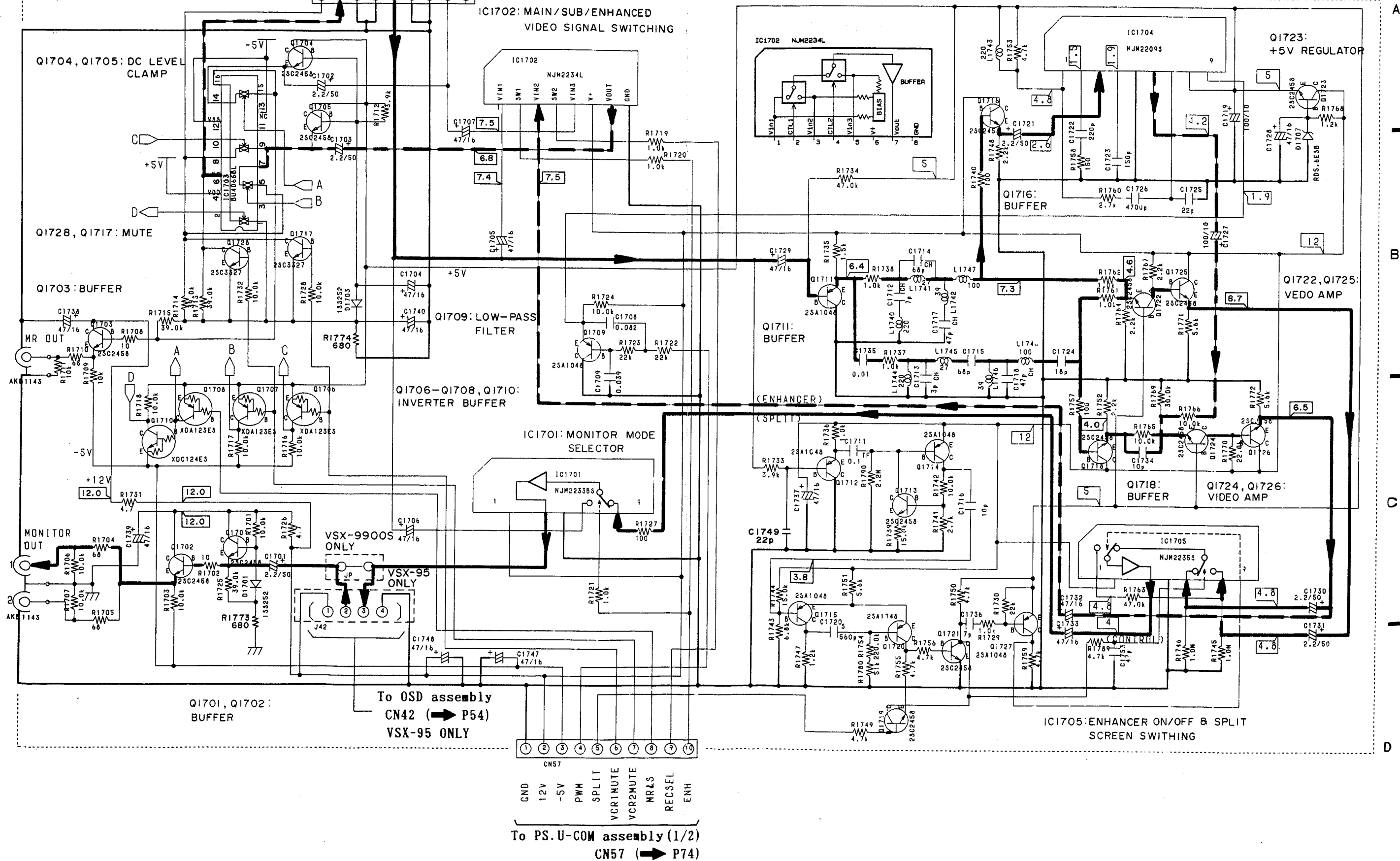
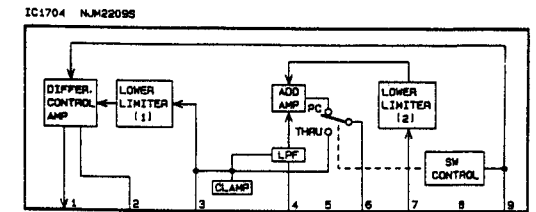
# ENHANCER assembly (AWZ3676 : VSX-95) (AWZ3563 : VSX-9900S)

To VIDEO FUNCTION assembly  
J25 (→ P22)

REC1 REC2 Main Sub  
KPE9 CN25

VIDEO SIGNAL ROUTE  
ENHANCED SIGNAL REC ROUTE

IC1704:  
ENHANCER





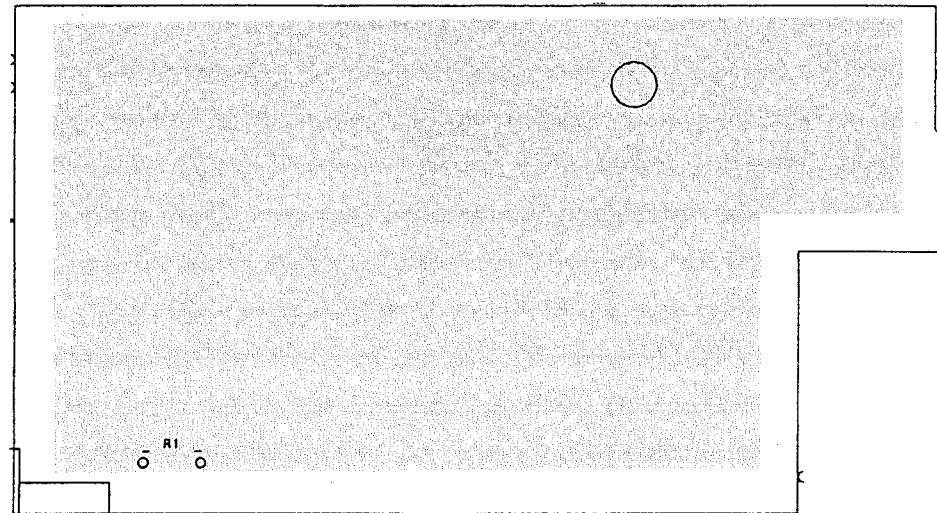
**A**

B

C

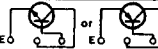
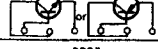
D

### BARRIER assembly (AWZ3825)



**NOTE**

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

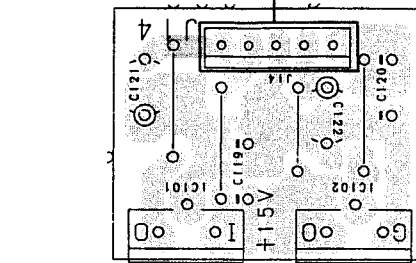
| P.C.B. pattern diagram indication                                                   | Corresponding part symbol                                                           | Part Name                |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------|
|  |  | Transistor               |
|  |  | Radiator type transistor |
|  |  | Diode                    |
|  |  | Resistor                 |
|  |  | Capacitor (Polarity)     |
|  |  | Capacitor (Non-polarity) |

**Others**

| P.C.B. pattern diagram indication | Part Name                                   |
|-----------------------------------|---------------------------------------------|
| IC                                | IC                                          |
| S                                 | Switch                                      |
| RY                                | Relay                                       |
| L                                 | Coil                                        |
| F                                 | Filter                                      |
| VR                                | Variable resistor or<br>Semi-fixed resistor |

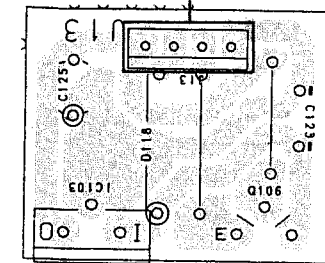
3. The capacitor terminal marked with  $\ominus$  (double circles) shows negative terminal.
4. The diode terminal marked with  $\ominus$  (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

To PS.U-COM assembly-  
CN14 (➡ P76)



**REGULATOR 2 assembly (AWZ3575)**

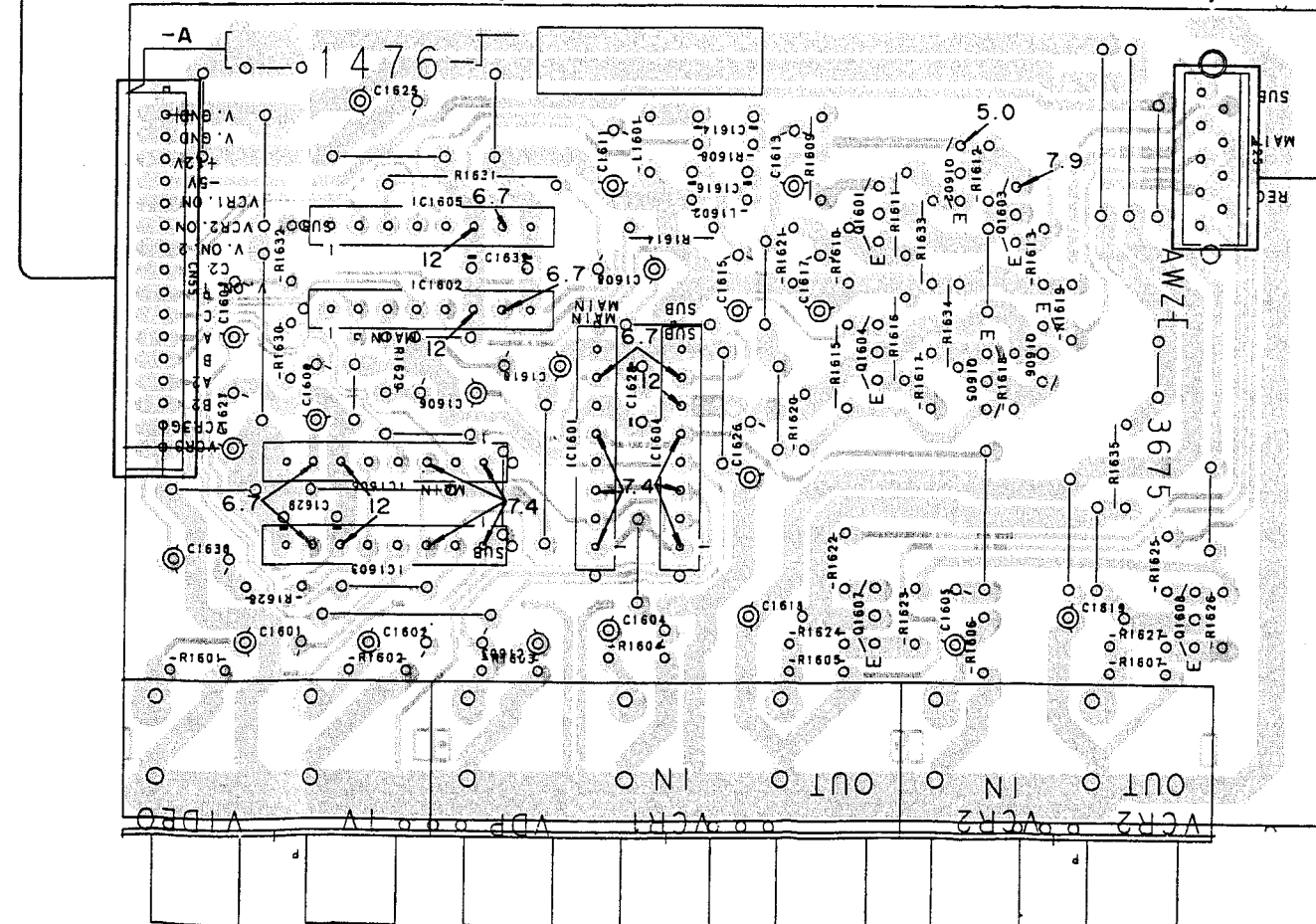
To PS.U-COM assembly-  
CN13 (➡ P75)



**REGULATOR 1 assembly (AWZ3574)**

—To PS.U-COM assembly  
CN55 (➡ P75)

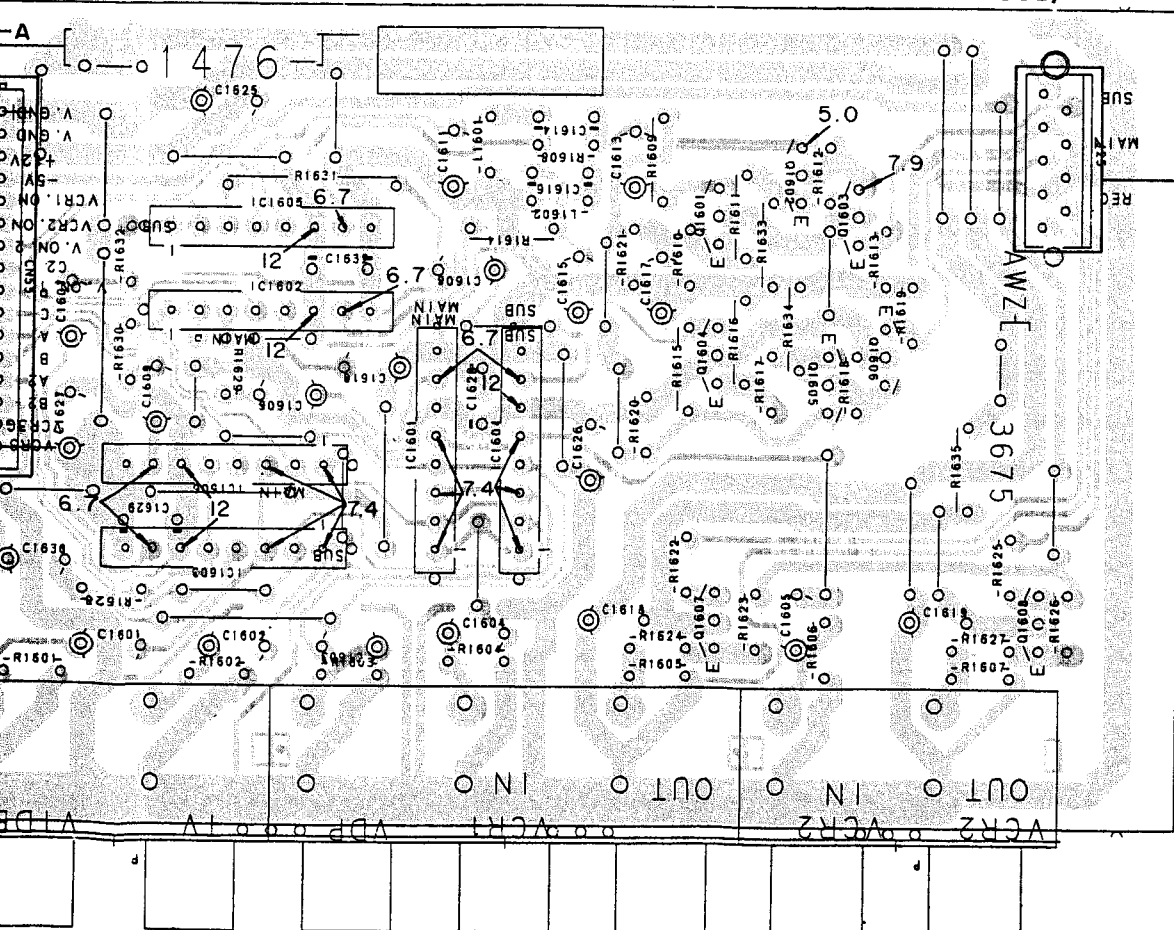
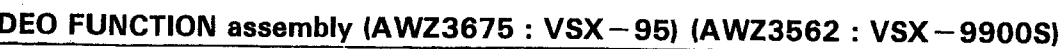
**VIDEO FUNCTION assembly (AWZ3675 : VSX-95) (AWZ3562 : VSX-9900S)**



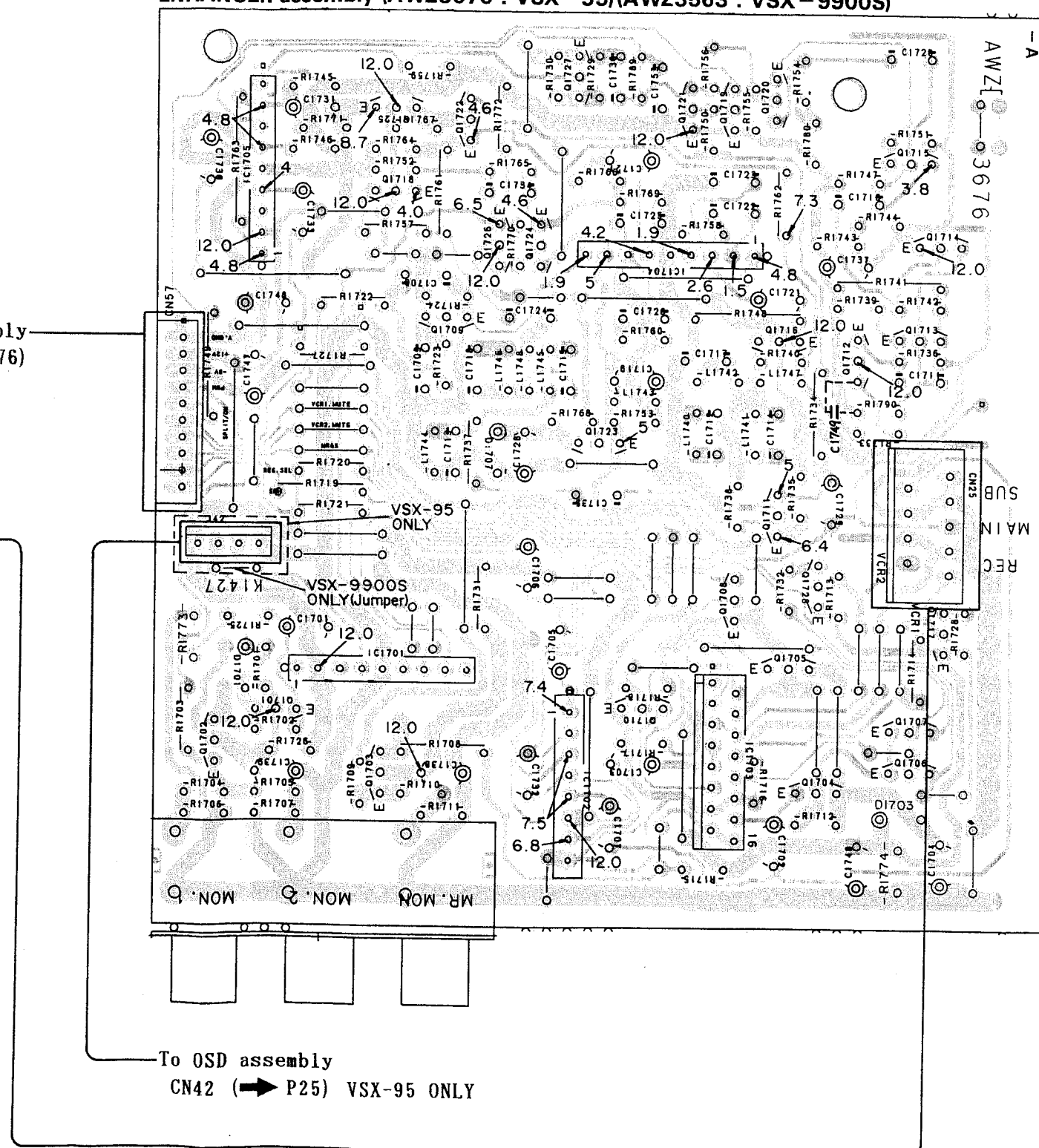
To PS.U-COM assembly—  
CN57 (➡ P76)

EN

—To  
C



**ENHANCER assembly (AWZ3676 : VSX-95)(AWZ3563 : VSX-9900S)**



|        |        |
|--------|--------|
| Q1727  |        |
| Q1725  | Q1720  |
| Q1722  | Q1719  |
|        | Q1721  |
|        | Q1715  |
| IC1705 |        |
| Q1718  |        |
| Q1726  | Q1714  |
| Q1724  | IC1704 |
|        |        |
| Q1709  |        |
|        | Q1716  |
|        | Q1713  |
|        | Q1712  |
|        |        |
| Q1723  |        |
|        | Q1711  |
|        |        |
|        | Q1728  |
|        | Q1708  |
|        |        |
|        | Q1717  |
| IC1701 | Q1705  |
| Q1701  | Q1710  |
| Q1702  | Q1707  |
|        | IC1703 |
| Q1703  | Q1706  |
|        | Q1704  |
| IC1702 |        |



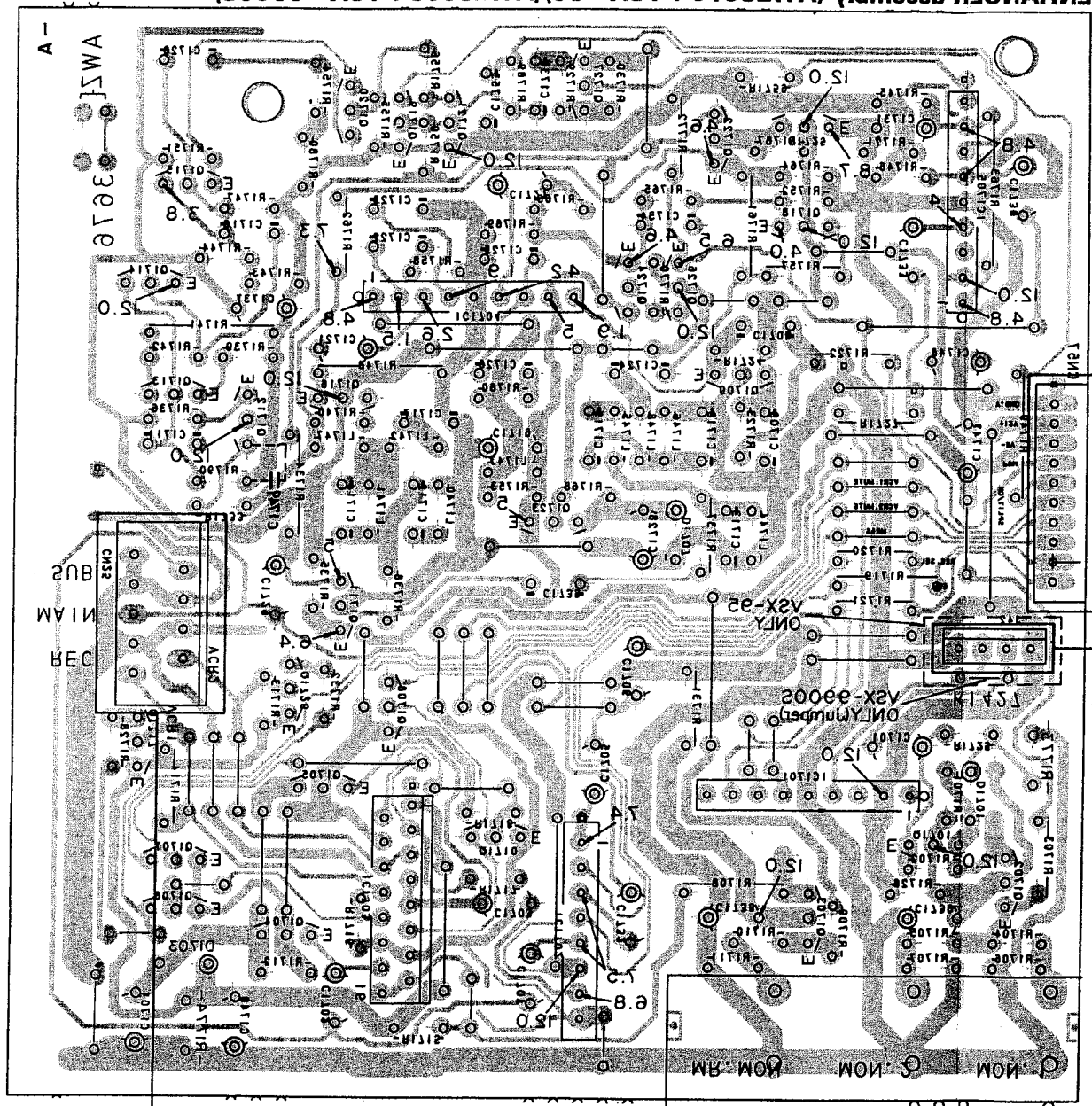
A

B

C

D

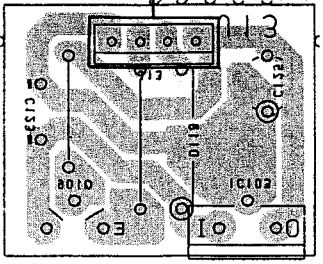
ENHANCER assembly (AW33676 : V2X - 95) (AW33673 : V2X - 95002)



- 01151
- 01152
- 01153
- 01154
- 01155
- 01156
- 01157
- 01158
- 01159
- 01160
- 01161
- 01162
- 01163
- 01164
- 01165
- 01166
- 01167
- 01168
- 01169
- 01170
- 01171
- 01172
- 01173
- 01174
- 01175
- 01176
- 01177
- 01178
- 01179
- 01180
- 01181
- 01182
- 01183
- 01184
- 01185
- 01186
- 01187
- 01188
- 01189
- 01190
- 01191
- 01192
- 01193
- 01194
- 01195
- 01196
- 01197
- 01198
- 01199
- 01200
- 01201
- 01202
- 01203
- 01204
- 01205
- 01206
- 01207
- 01208
- 01209
- 01210
- 01211
- 01212
- 01213
- 01214
- 01215
- 01216
- 01217
- 01218
- 01219
- 01220
- 01221
- 01222
- 01223
- 01224
- 01225
- 01226
- 01227
- 01228
- 01229
- 01230
- 01231
- 01232
- 01233
- 01234
- 01235
- 01236
- 01237
- 01238
- 01239
- 01240
- 01241
- 01242
- 01243
- 01244
- 01245
- 01246
- 01247
- 01248
- 01249
- 01250
- 01251
- 01252
- 01253
- 01254
- 01255
- 01256
- 01257
- 01258
- 01259
- 01260
- 01261
- 01262
- 01263
- 01264
- 01265
- 01266
- 01267
- 01268
- 01269
- 01270
- 01271
- 01272
- 01273
- 01274
- 01275
- 01276
- 01277
- 01278
- 01279
- 01280
- 01281
- 01282
- 01283
- 01284
- 01285
- 01286
- 01287
- 01288
- 01289
- 01290
- 01291
- 01292
- 01293
- 01294
- 01295
- 01296
- 01297
- 01298
- 01299
- 01300
- 01301
- 01302
- 01303
- 01304
- 01305
- 01306
- 01307
- 01308
- 01309
- 01310
- 01311
- 01312
- 01313
- 01314
- 01315
- 01316
- 01317
- 01318
- 01319
- 01320
- 01321
- 01322
- 01323
- 01324
- 01325
- 01326
- 01327
- 01328
- 01329
- 01330
- 01331
- 01332
- 01333
- 01334
- 01335
- 01336
- 01337
- 01338
- 01339
- 01340
- 01341
- 01342
- 01343
- 01344
- 01345
- 01346
- 01347
- 01348
- 01349
- 01350
- 01351
- 01352
- 01353
- 01354
- 01355
- 01356
- 01357
- 01358
- 01359
- 01360
- 01361
- 01362
- 01363
- 01364
- 01365
- 01366
- 01367
- 01368
- 01369
- 01370
- 01371
- 01372
- 01373
- 01374
- 01375
- 01376
- 01377
- 01378
- 01379
- 01380
- 01381
- 01382
- 01383
- 01384
- 01385
- 01386
- 01387
- 01388
- 01389
- 01390
- 01391
- 01392
- 01393
- 01394
- 01395
- 01396
- 01397
- 01398
- 01399
- 01400
- 01401
- 01402
- 01403
- 01404
- 01405
- 01406
- 01407
- 01408
- 01409
- 01410
- 01411
- 01412
- 01413
- 01414
- 01415
- 01416
- 01417
- 01418
- 01419
- 01420
- 01421
- 01422
- 01423
- 01424
- 01425
- 01426
- 01427
- 01428
- 01429
- 01430
- 01431
- 01432
- 01433
- 01434
- 01435
- 01436
- 01437
- 01438
- 01439
- 01440
- 01441
- 01442
- 01443
- 01444
- 01445
- 01446
- 01447
- 01448
- 01449
- 01450
- 01451
- 01452
- 01453
- 01454
- 01455
- 01456
- 01457
- 01458
- 01459
- 01460
- 01461
- 01462
- 01463
- 01464
- 01465
- 01466
- 01467
- 01468
- 01469
- 01470
- 01471
- 01472
- 01473
- 01474
- 01475
- 01476
- 01477
- 01478
- 01479
- 01480
- 01481
- 01482
- 01483
- 01484
- 01485
- 01486
- 01487
- 01488
- 01489
- 01490
- 01491
- 01492
- 01493
- 01494
- 01495
- 01496
- 01497
- 01498
- 01499
- 01500
- 01501
- 01502
- 01503
- 01504
- 01505
- 01506
- 01507
- 01508
- 01509
- 01510
- 01511
- 01512
- 01513
- 01514
- 01515
- 01516
- 01517
- 01518
- 01519
- 01520
- 01521
- 01522
- 01523
- 01524
- 01525
- 01526
- 01527
- 01528
- 01529
- 01530
- 01531
- 01532
- 01533
- 01534
- 01535
- 01536
- 01537
- 01538
- 01539
- 01540
- 01541
- 01542
- 01543
- 01544
- 01545
- 01546
- 01547
- 01548
- 01549
- 01550
- 01551
- 01552
- 01553
- 01554
- 01555
- 01556
- 01557
- 01558
- 01559
- 01560
- 01561
- 01562
- 01563
- 01564
- 01565
- 01566
- 01567
- 01568
- 01569
- 01570
- 01571
- 01572
- 01573
- 01574
- 01575
- 01576
- 01577
- 01578
- 01579
- 01580
- 01581
- 01582
- 01583
- 01584
- 01585
- 01586
- 01587
- 01588
- 01589
- 01590
- 01591
- 01592
- 01593
- 01594
- 01595
- 01596
- 01597
- 01598
- 01599
- 01600
- 01601
- 01602
- 01603
- 01604
- 01605
- 01606
- 01607
- 01608
- 01609
- 01610
- 01611
- 01612
- 01613
- 01614
- 01615
- 01616
- 01617
- 01618
- 01619
- 01620
- 01621
- 01622
- 01623
- 01624
- 01625
- 01626
- 01627
- 01628
- 01629
- 01630
- 01631
- 01632
- 01633
- 01634
- 01635
- 01636
- 01637
- 01638
- 01639
- 01640
- 01641
- 01642
- 01643
- 01644
- 01645
- 01646
- 01647
- 01648
- 01649
- 01650
- 01651
- 01652
- 01653
- 01654
- 01655
- 01656
- 01657
- 01658
- 01659
- 01660
- 01661
- 01662
- 01663
- 01664
- 01665
- 01666
- 01667
- 01668
- 01669
- 01670
- 01671
- 01672
- 01673
- 01674
- 01675
- 01676
- 01677
- 01678
- 01679
- 01680
- 01681
- 01682
- 01683
- 01684
- 01685
- 01686
- 01687
- 01688
- 01689
- 01690
- 01691
- 01692
- 01693
- 01694
- 01695
- 01696
- 01697
- 01698
- 01699
- 01700
- 01701
- 01702
- 01703
- 01704
- 01705
- 01706
- 01707
- 01708
- 01709
- 01710
- 01711
- 01712
- 01713
- 01714
- 01715
- 01716
- 01717
- 01718
- 01719
- 01720
- 01721
- 01722
- 01723
- 01724
- 01725
- 01726
- 01727
- 01728
- 01729
- 01730
- 01731
- 01732
- 01733
- 01734
- 01735
- 01736
- 01737
- 01738
- 01739
- 01740
- 01741
- 01742
- 01743
- 01744
- 01745
- 01746
- 01747
- 01748
- 01749
- 01750
- 01751
- 01752
- 01753
- 01754
- 01755
- 01756
- 01757
- 01758
- 01759
- 01760
- 01761
- 01762
- 01763
- 01764
- 01765
- 01766
- 01767
- 01768
- 01769
- 01770
- 01771
- 01772
- 01773
- 01774
- 01775
- 01776
- 01777
- 01778
- 01779
- 01780
- 01781
- 01782
- 01783
- 01784
- 01785
- 01786
- 01787
- 01788
- 01789
- 01790
- 01791
- 01792
- 01793
- 01794
- 01795
- 01796
- 01797
- 01798
- 01799
- 01800
- 01801
- 01802
- 01803
- 01804
- 01805
- 01806
- 01807
- 01808
- 01809
- 01810
- 01811
- 01812
- 01813
- 01814
- 01815
- 01816
- 01817
- 01818
- 01819
- 01820
- 01821
- 01822
- 01823
- 01824
- 01825
- 01826
- 01827
- 01828
- 01829
- 01830
- 01831
- 01832
- 01833
- 01834
- 01835
- 01836
- 01837
- 01838
- 01839
- 01840
- 01841
- 01842
- 01843
- 01844
- 01845
- 01846
- 01847
- 01848
- 01849
- 01850
- 01851
- 01852
- 01853
- 01854
- 01855
- 01856
- 01857
- 01858
- 01859
- 01860
- 01861
- 01862
- 01863
- 01864
- 01865
- 01866
- 01867
- 01868
- 01869
- 01870
- 01871
- 01872
- 01873
- 01874
- 01875
- 01876
- 01877
- 01878
- 01879
- 01880
- 01881
- 01882
- 01883
- 01884
- 01885
- 01886
- 01887
- 01888
- 01889
- 01890
- 01891
- 01892
- 01893
- 01894
- 01895
- 01896
- 01897
- 01898
- 01899
- 01900
- 01901
- 01902
- 01903
- 01904
- 01905
- 01906
- 01907
- 01908
- 01909
- 01910
- 01911
- 01912
- 01913
- 01914
- 01915
- 01916
- 01917
- 01918
- 01919
- 01920
- 01921
- 01922
- 01923
- 01924
- 01925
- 01926
- 01927
- 01928
- 01929
- 01930
- 01931
- 01932
- 01933
- 01934
- 01935
- 01936
- 01937
- 01938
- 01939
- 01940
- 01941
- 01942
- 01943
- 01944
- 01945
- 01946
- 01947
- 01948
- 01949
- 01950
- 01951
- 01952
- 01953
- 01954
- 01955
- 01956
- 01957
- 01958
- 01959
- 01960
- 01961
- 01962
- 01963
- 01964
- 01965
- 01966
- 01967
- 01968
- 01969
- 01970
- 01971
- 01972
- 01973
- 01974
- 01975
- 01976
- 01977
- 01978
- 01979
- 01980
- 01981
- 01982
- 01983
- 01984
- 01985
- 01986
- 01987
- 01988
- 01989
- 01990
- 01991
- 01992
- 01993
- 01994
- 01995
- 01996
- 01997
- 01998
- 01999
- 02000

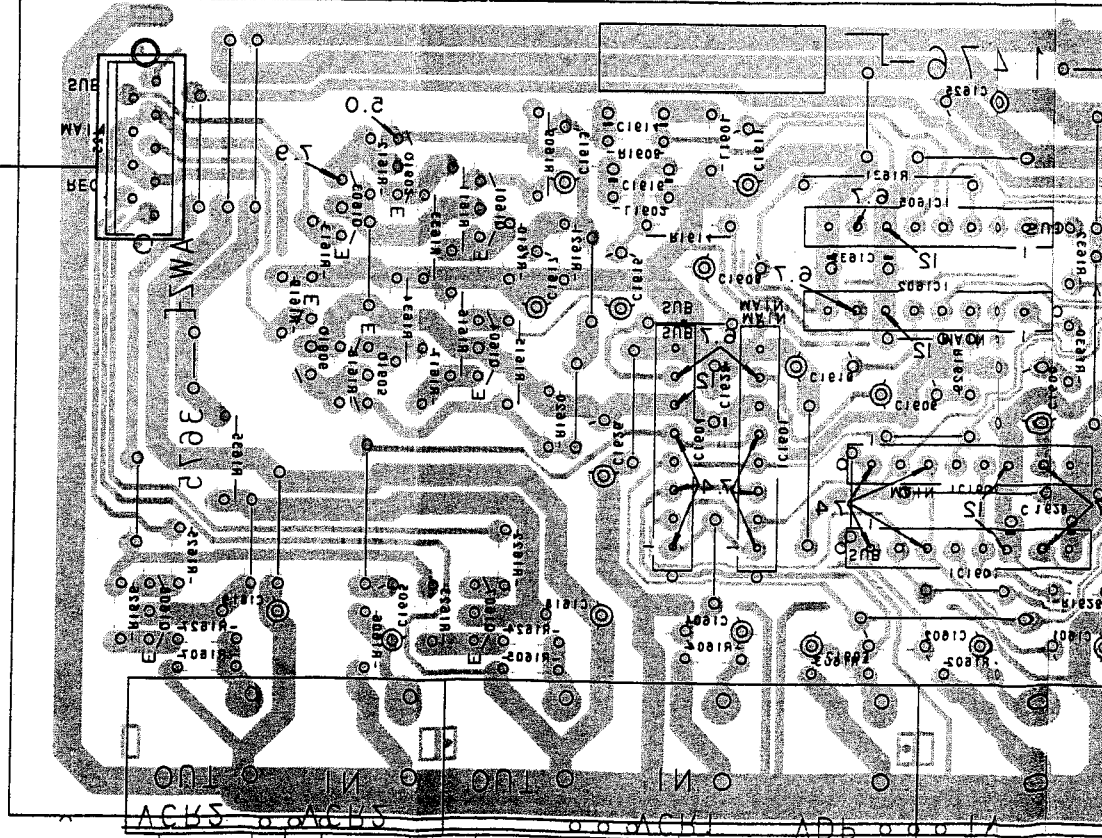
CH45 (P25) V2X-95 ONLY  
To O2D assembly

REGULATOR 1 assembly (AW33274)



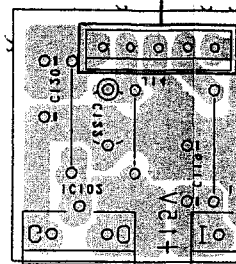
CH25 (P26) To P2-U-COM assembly

FUNCTION assembly (AW33675 : V2X - 95) (AW33673 : V2X - 95002)



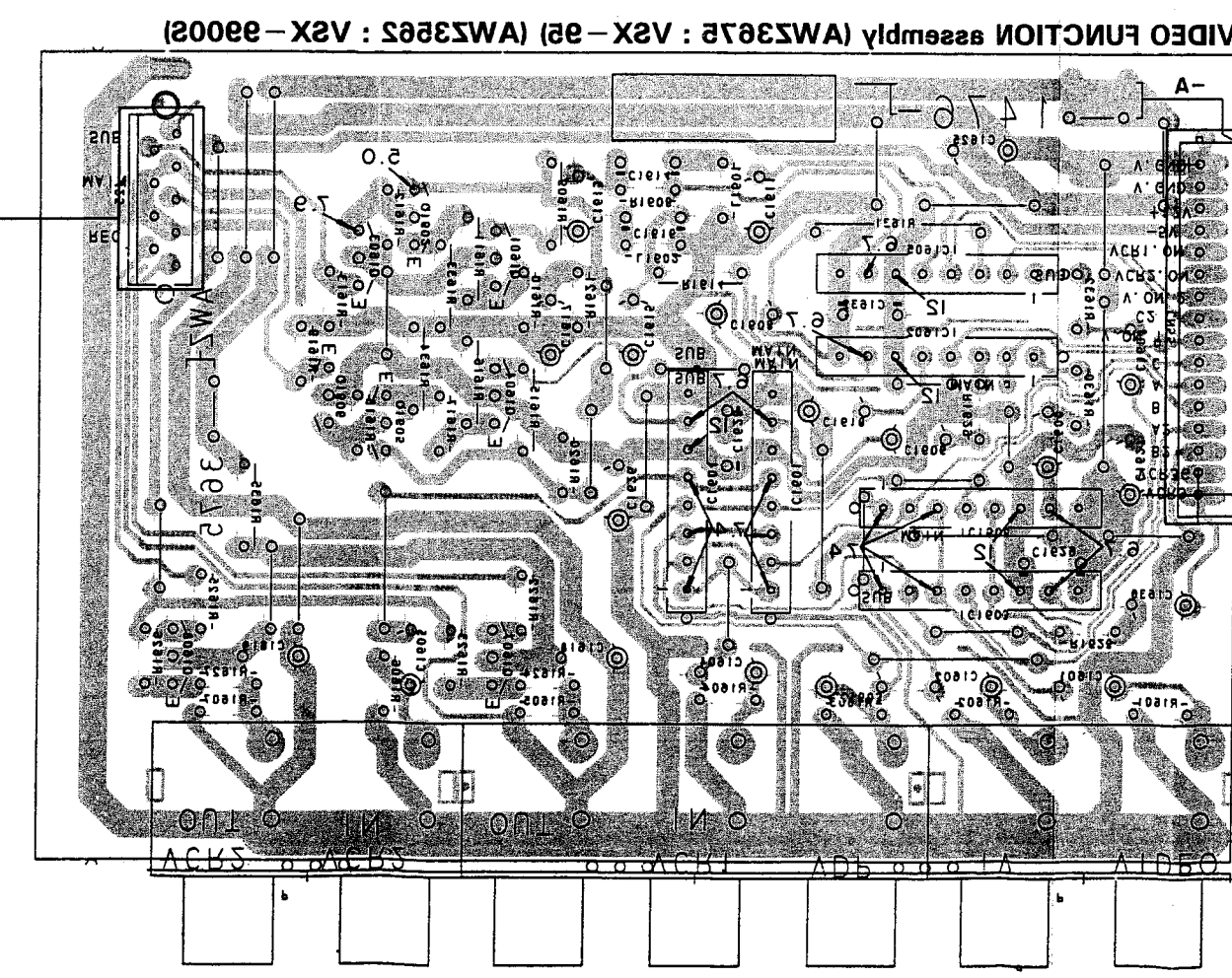
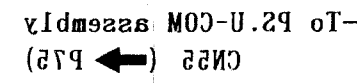
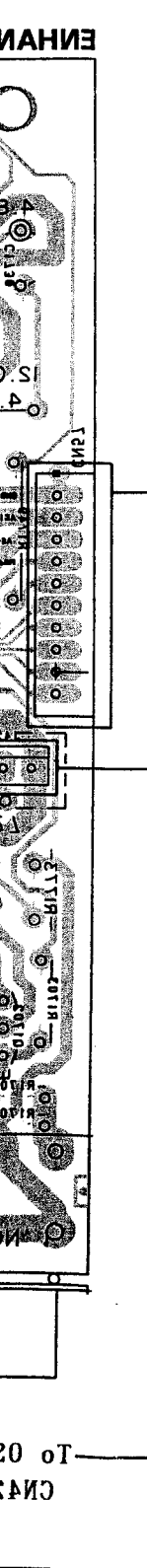
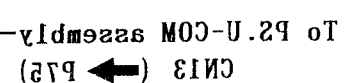
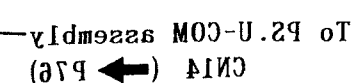
CH25 (P26) To P2-U-COM assembly

REGULATOR 2 assembly (AW33275)

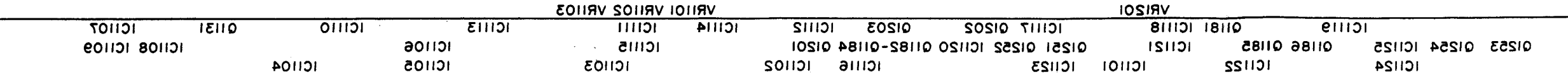


CH13 (P25) To P2-U-COM assembly



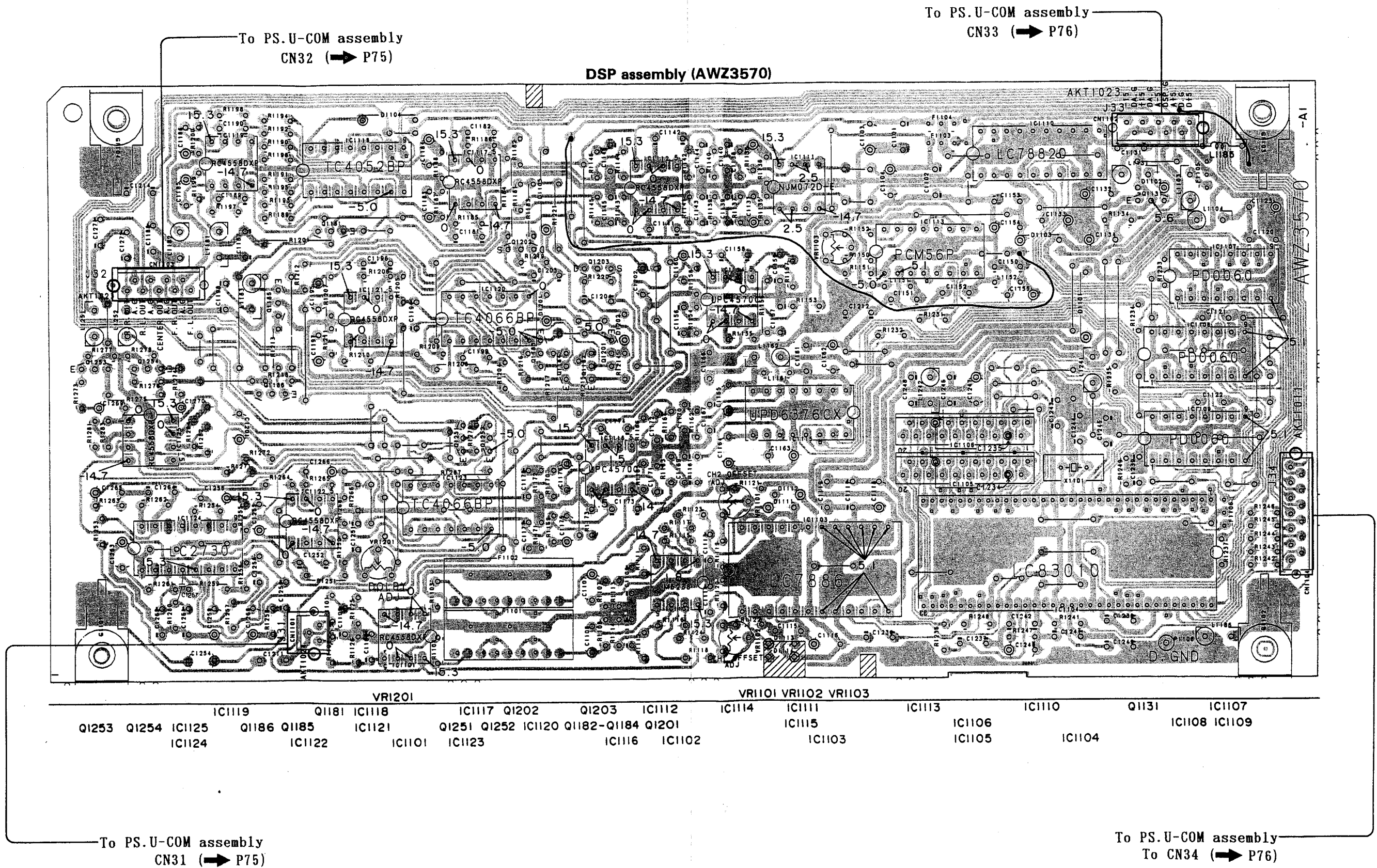






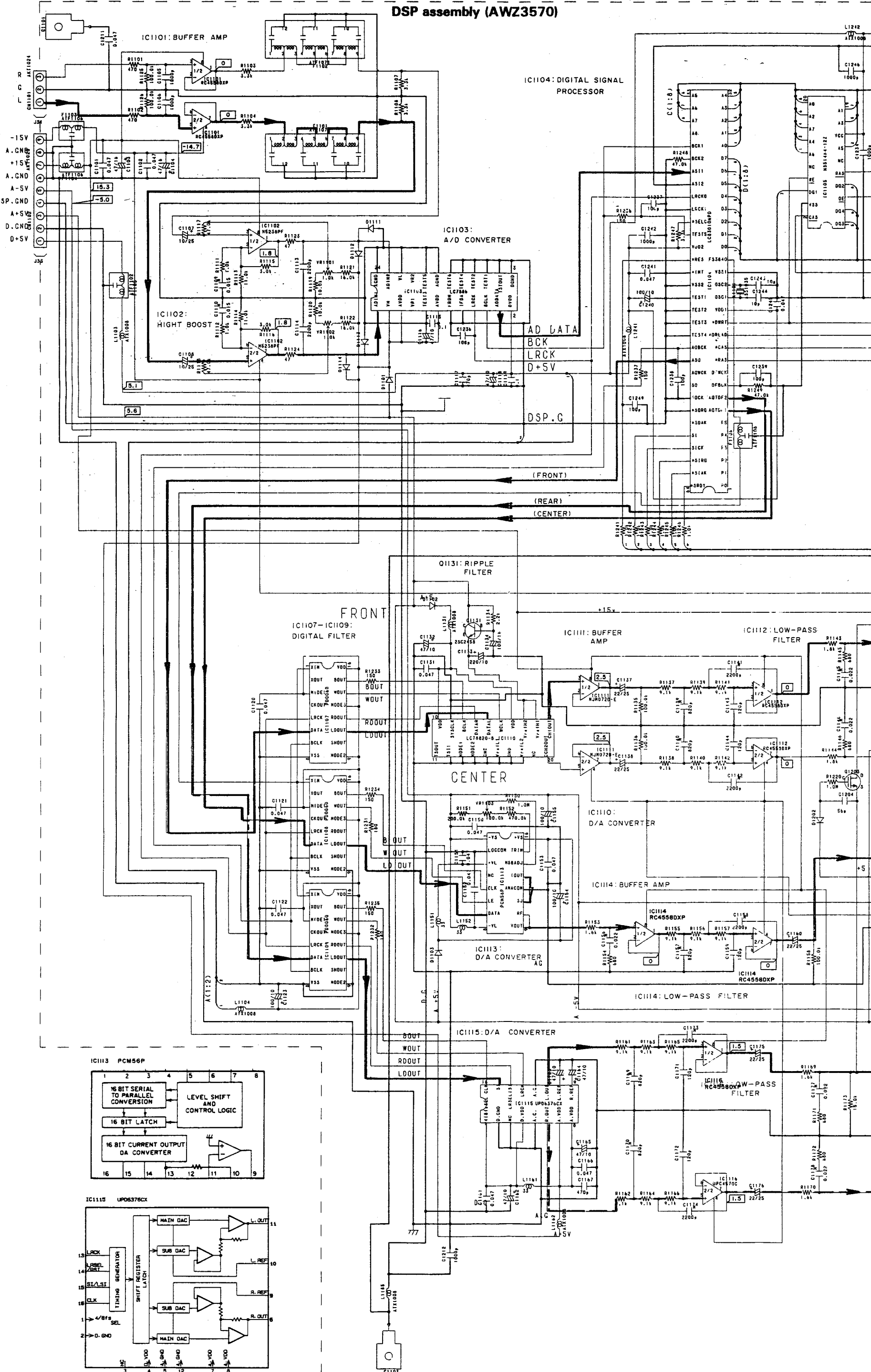


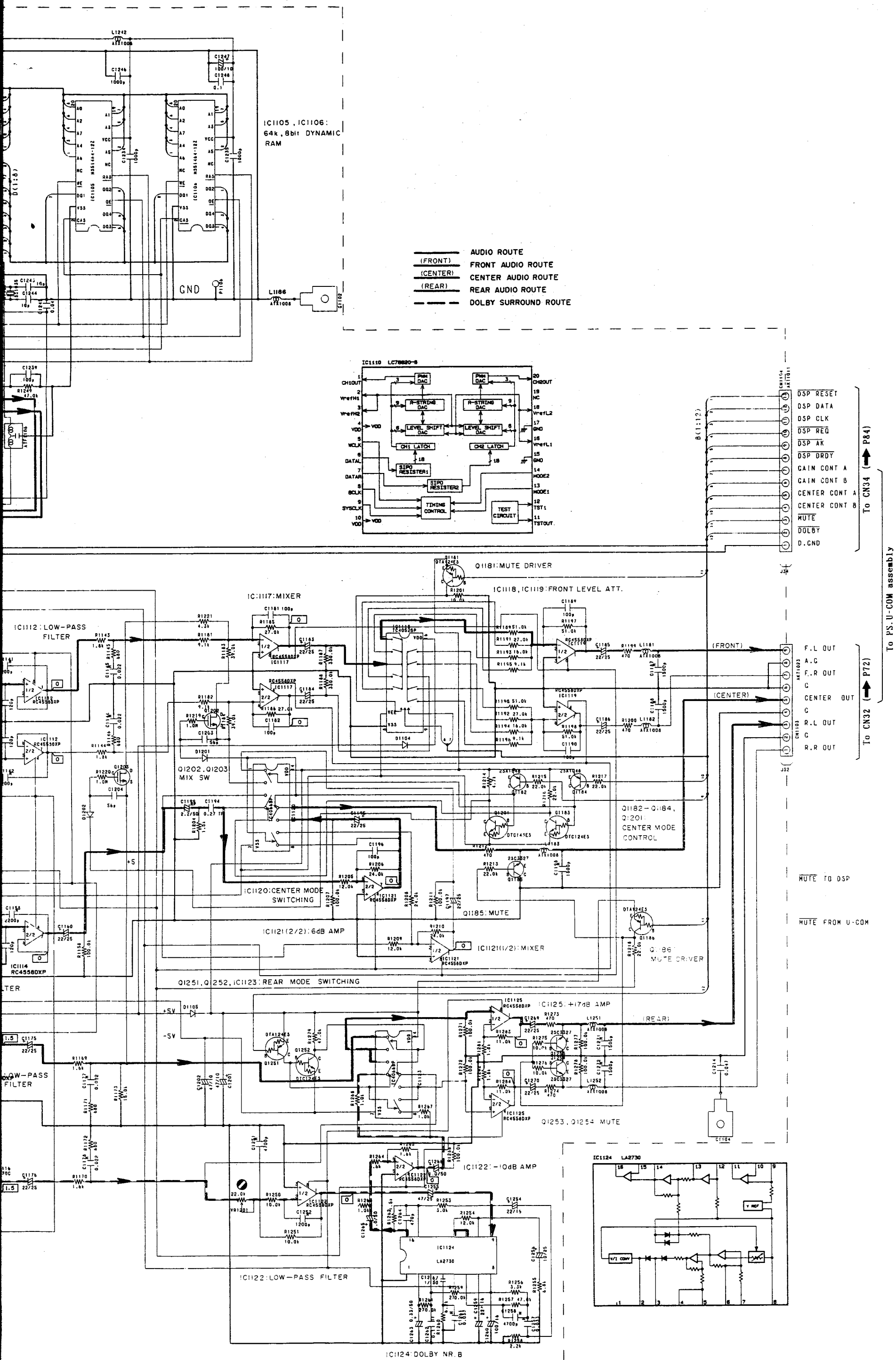
### 3.4 DSP assembly (AWZ3570)





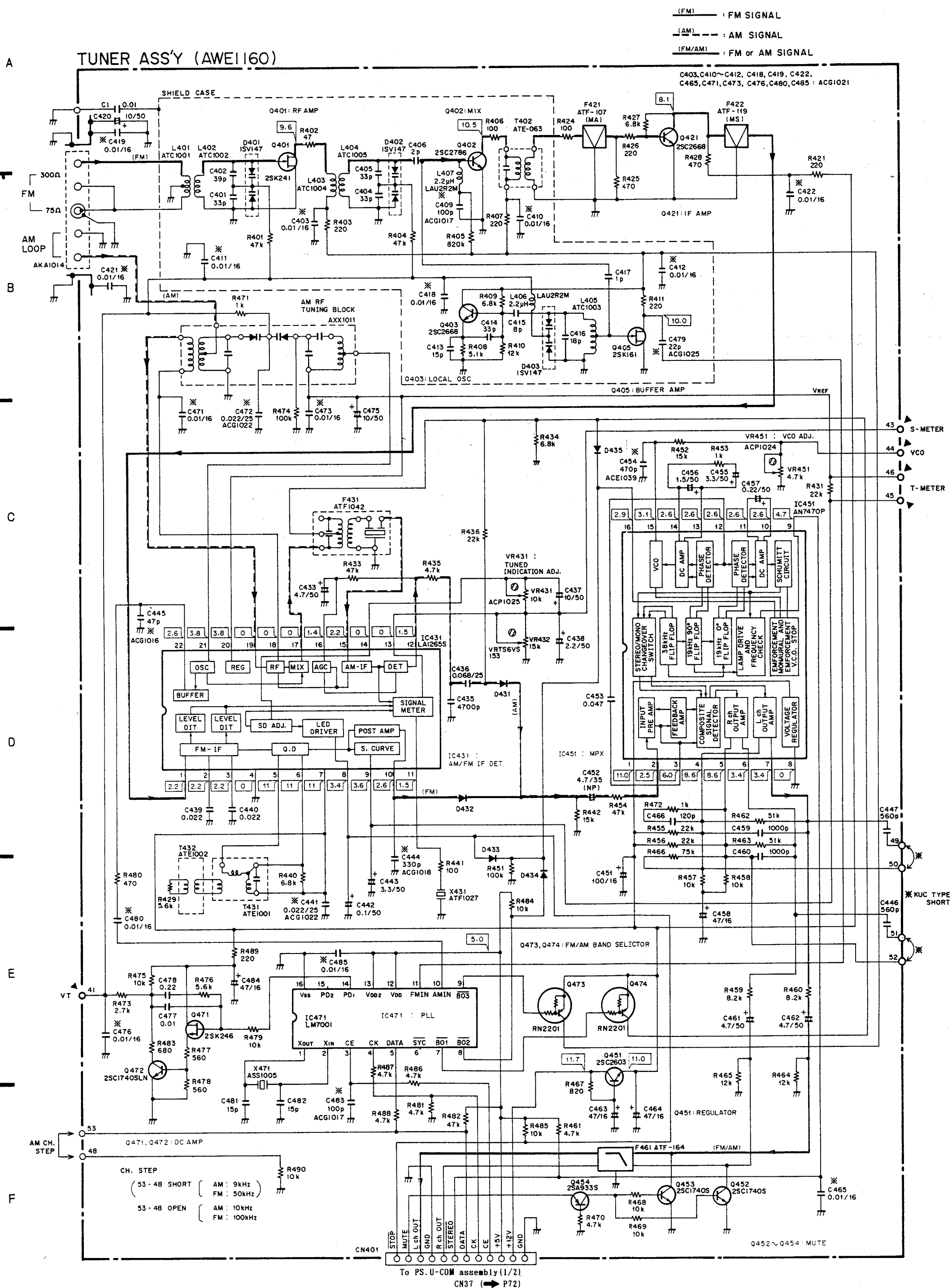
## DSP assembly (AWZ3570)

To PS-U-COM assembly  
To CN33 (P84) To CN31 (P72)





**3.5 TUNER (AWE1160), FRONT AMP (AWH1014) and R. C. AMP assembly (AWZ3568)**



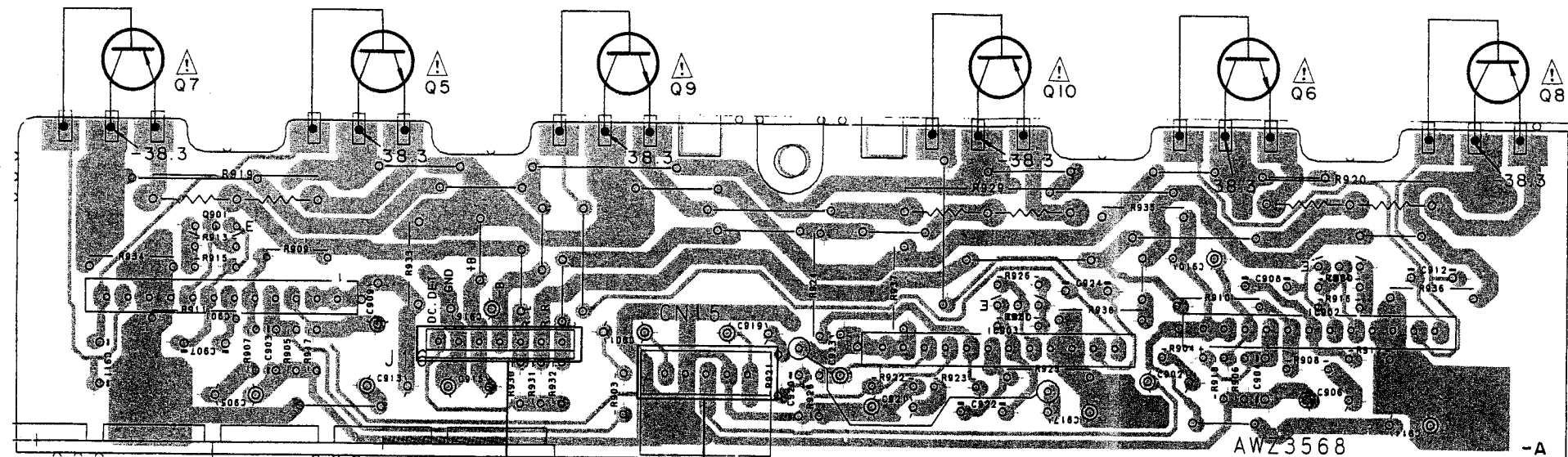
To PS. U-COM assembly (1/2)  
( P74)

※ KUC TYPE  
SHORT





A



To PS.U-COM assembly  
CN16 (→ P76)

To PS.U-COM assembly  
J15 (→ P76)

R. C. AMP assembly (AWZ3568)

Q605 Q607 IC601

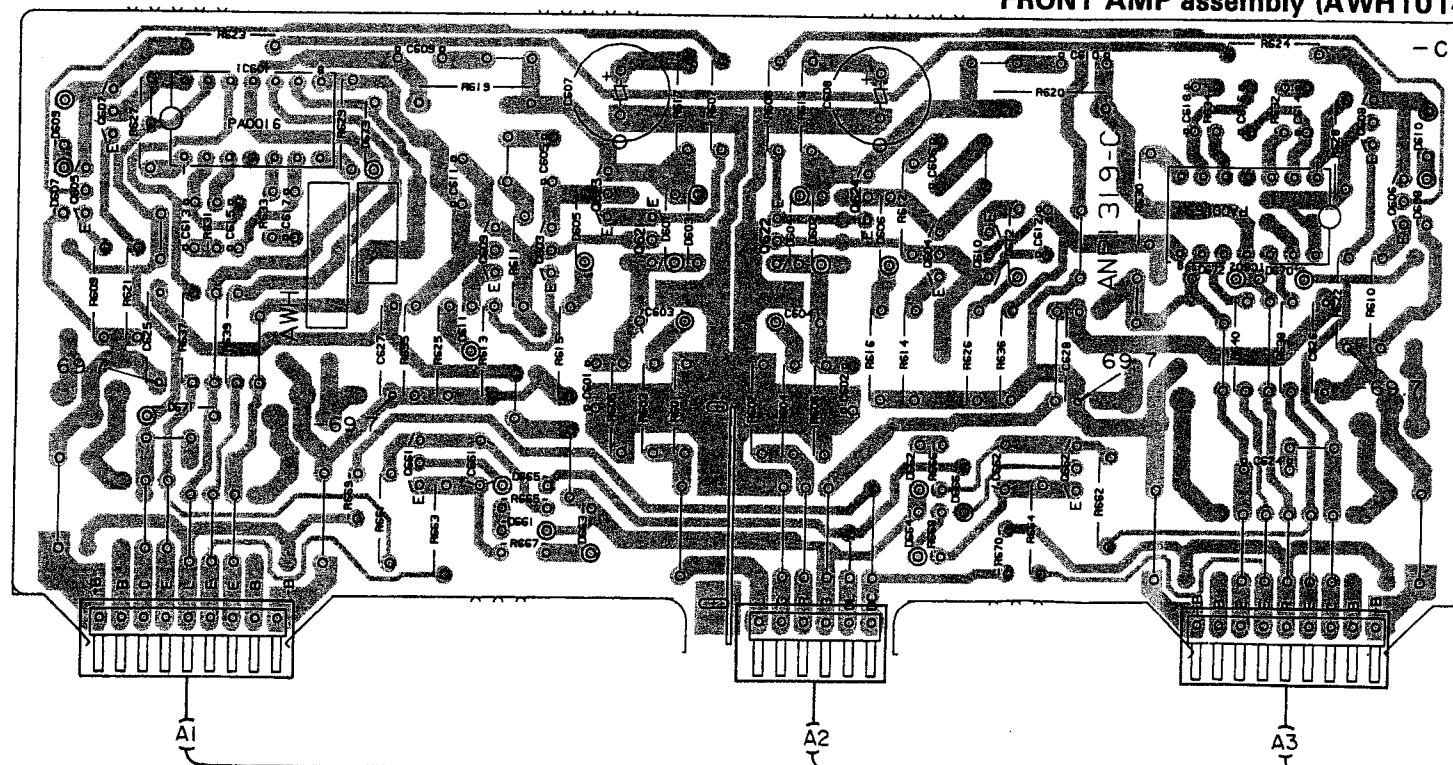
Q609 Q603 Q623 Q621  
Q661

Q622 Q624 Q604 Q610

Q662

IC602 Q608 Q606

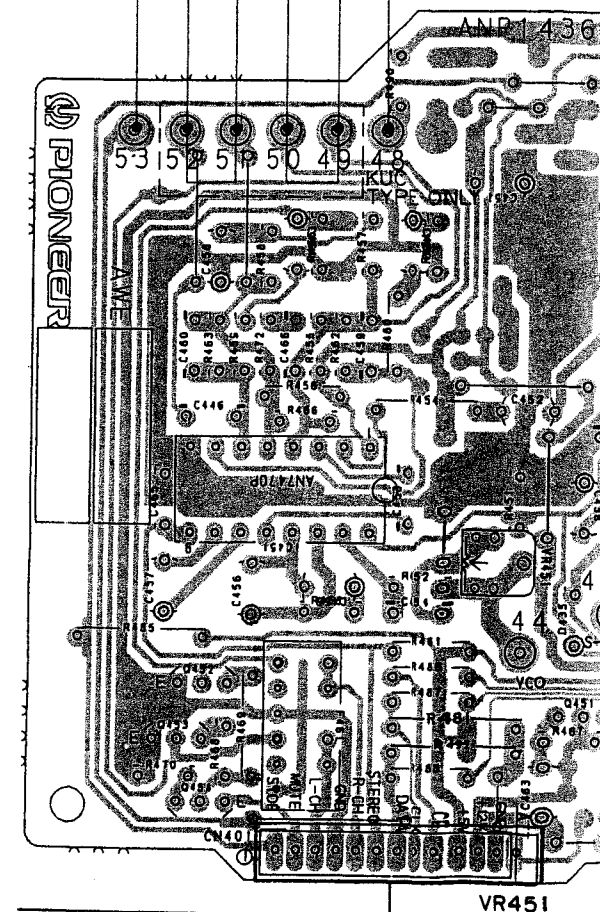
FRONT AMP assembly (AWH1014)



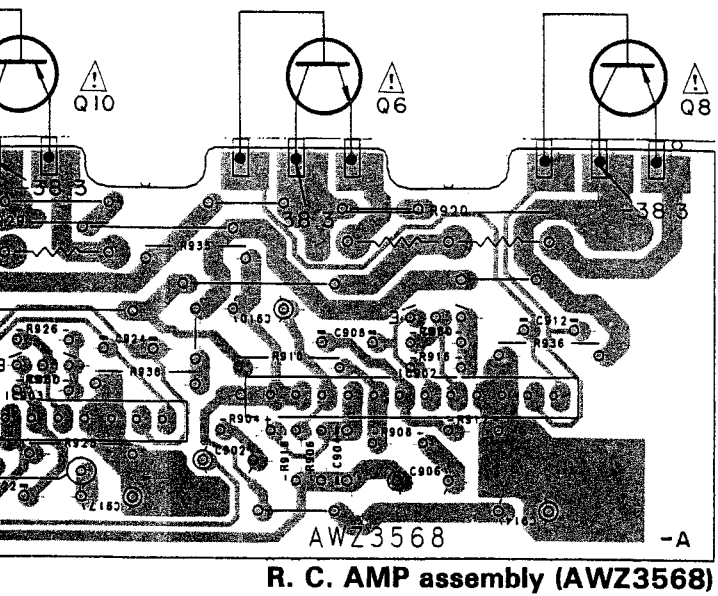
To PS.U-COM assembly  
B,D,F (→ P75,P76)

SD TYPE ONLY

AM: 9kHz / FM: 50kHz → AM: 10kHz / FM: 100kHz

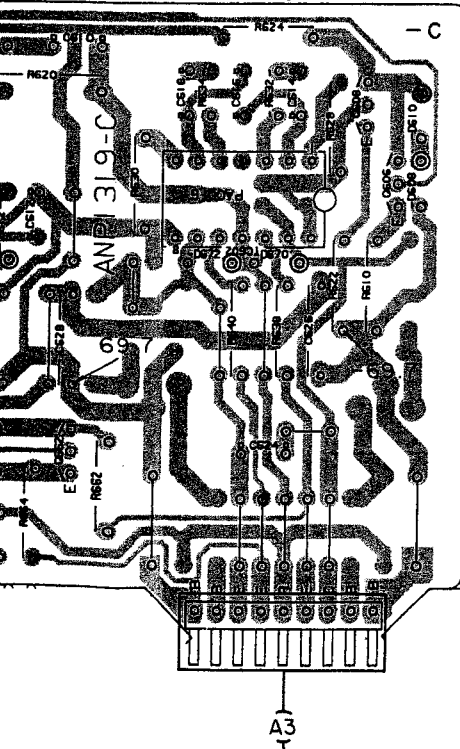






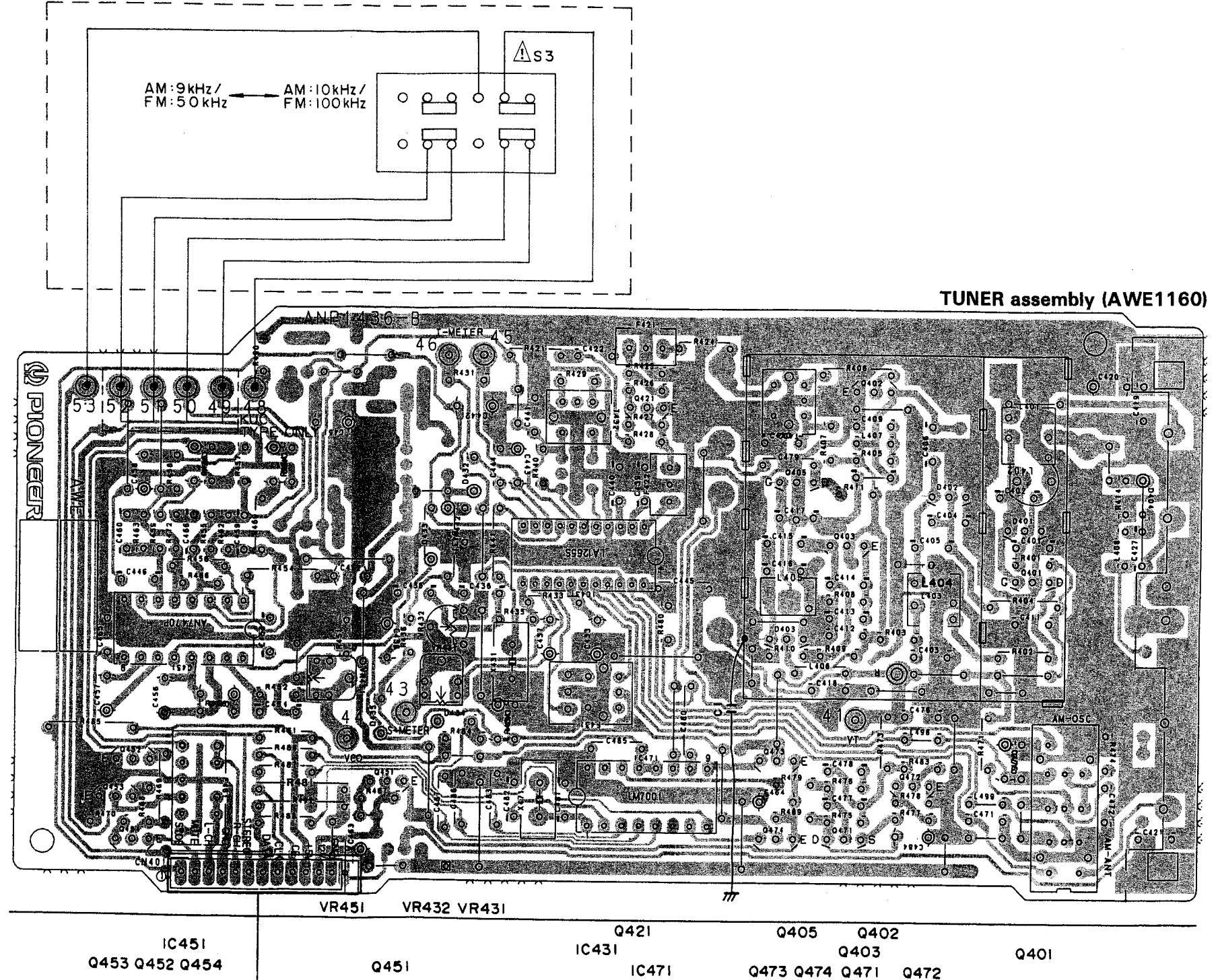
assembly  
P76)

Q610 IC602 Q608 Q606  
Q662  
FRONT AMP assembly (AWH1014)



To PS.U-COM assembly  
B, D, F (P75, P76)

SD TYPE ONLY



To PS.U-COM assembly  
CN37 (P75)

#### NOTE

1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name                |
|-----------------------------------|---------------------------|--------------------------|
| Q504<br>E O                       |                           | Transistor               |
| Q215<br>O O                       |                           | Radiator type transistor |
| Q203<br>O                         |                           | Diode                    |
| R237<br>O                         |                           | Resistor                 |
| C513<br>O                         |                           | Capacitor (Polarity)     |
| C518<br>O                         |                           | Capacitor (Non-polarity) |

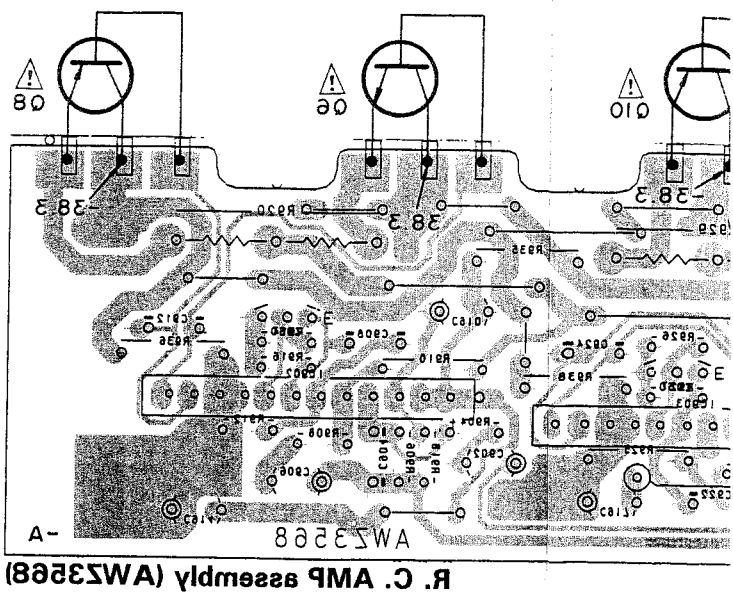
#### Others

| P.C.B. pattern diagram indication | Part Name                                |
|-----------------------------------|------------------------------------------|
| IC                                | IC                                       |
| S                                 | Switch                                   |
| RY                                | Relay                                    |
| L                                 | Coil                                     |
| F                                 | Filter                                   |
| VR                                | Variable resistor or Semi-fixed resistor |

3. The capacitor terminal marked with (O) (double circles) shows negative terminal.
4. The diode terminal marked with (O) (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.

D

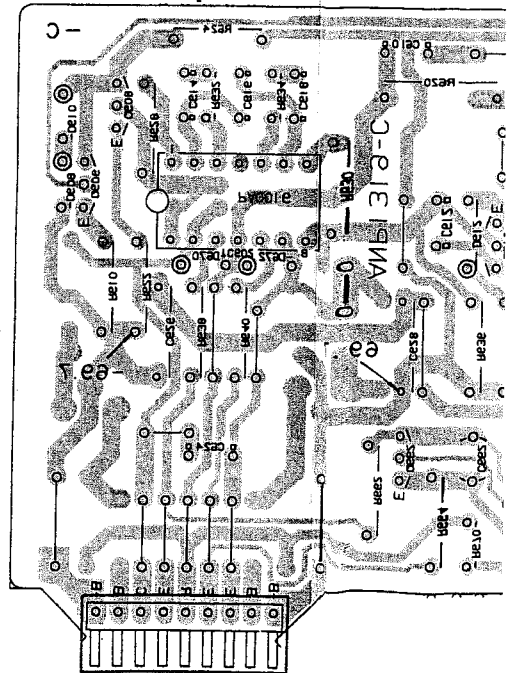




assembly  
P16

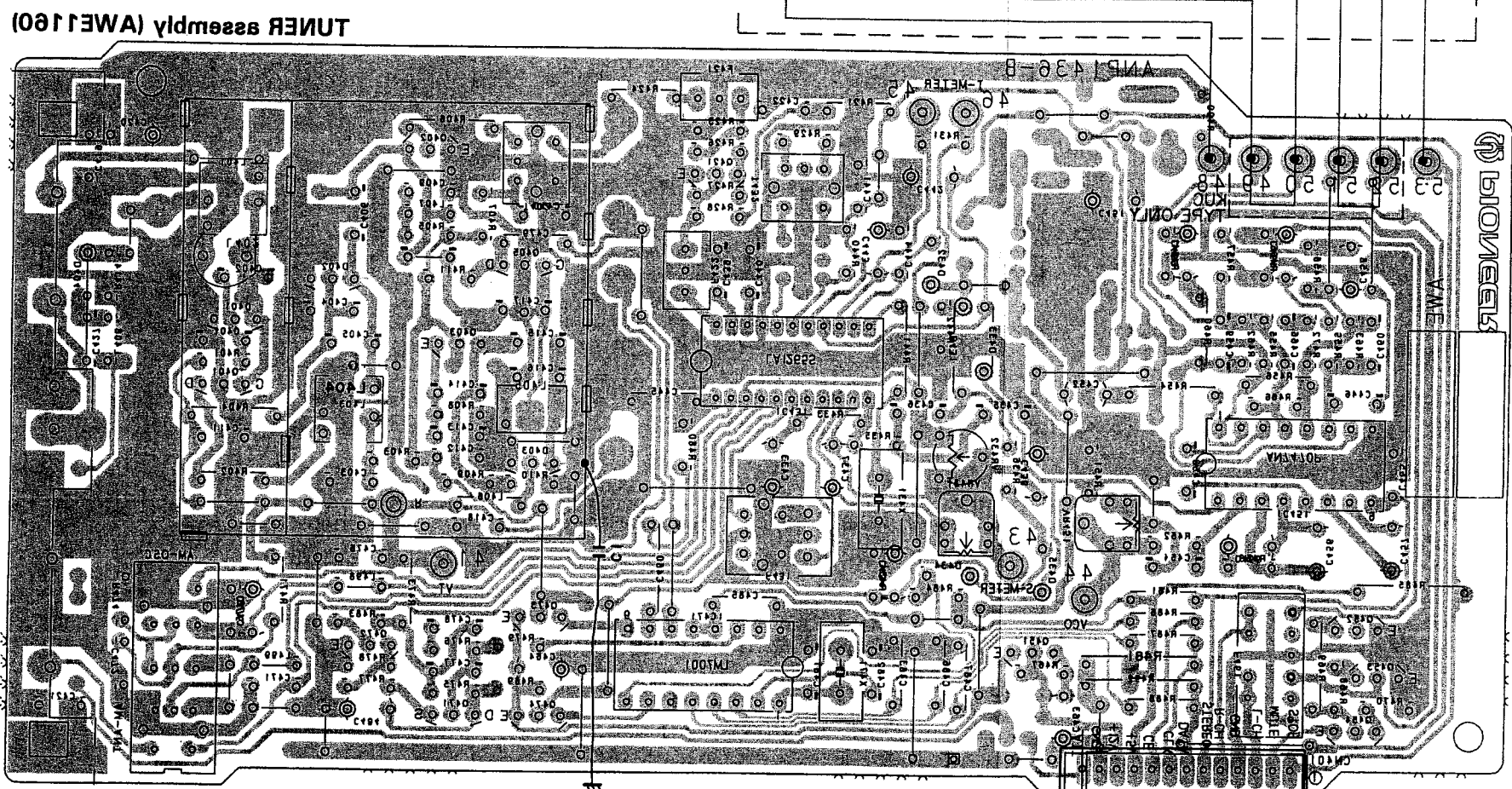
0610  
0605 0608 0606

FRONT AMP assembly (AWH1014)



A3

To P2 U-COM assembly  
P16 P16



To P2 U-COM assembly  
CN32 P16

0423 0425 0424  
IC421

0421

IC421

0423 0424 0421 0425

0401

VR421 VR435 VR431

0421

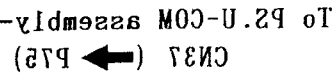
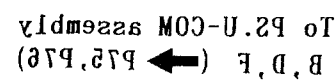
0402 0403

0401

FM: 20KHZ  
AM: 30KHZ  
FM: 100KHZ  
AM: 10KHZ

2D TYPE ONLY







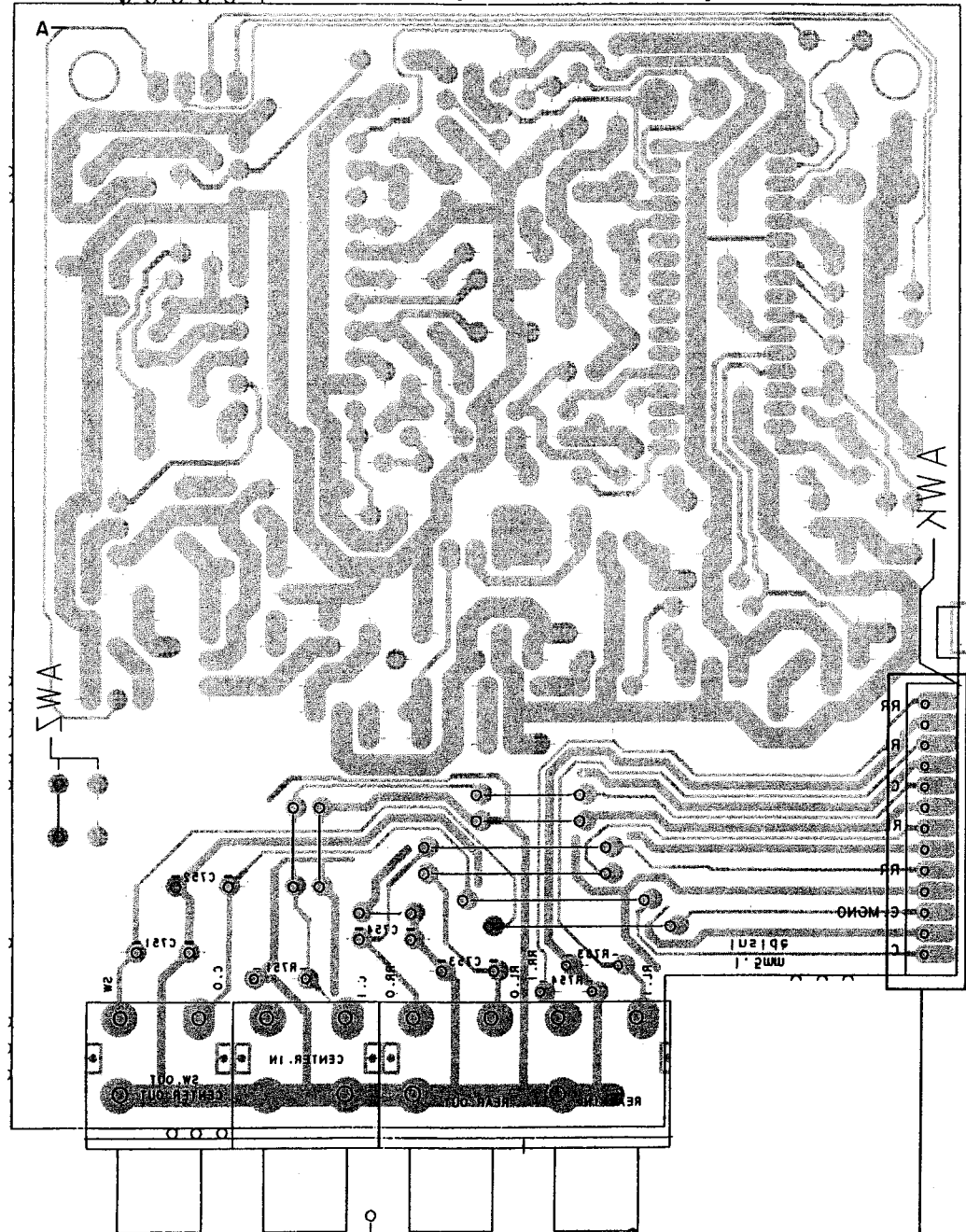
A

B

C

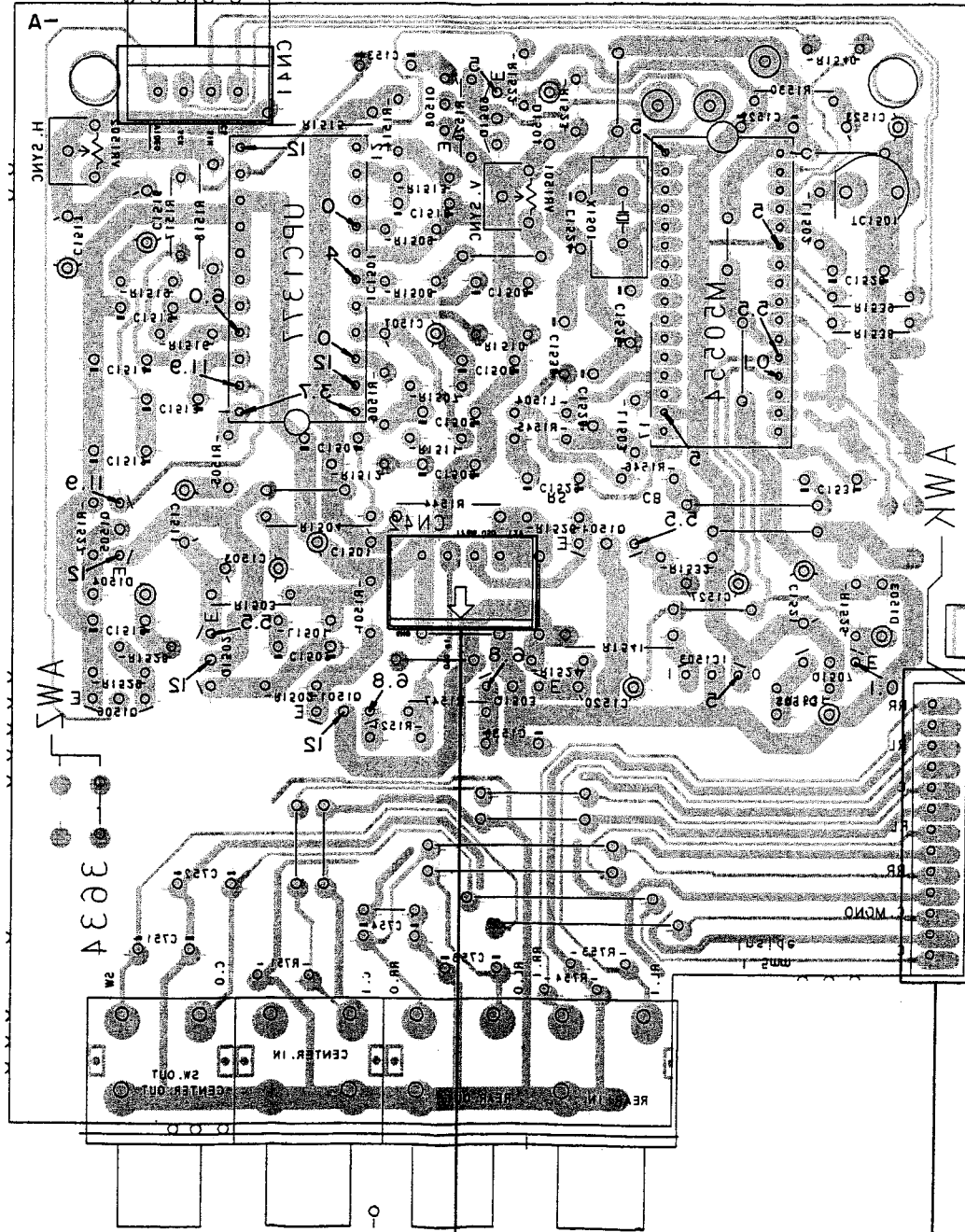
D

TERMINAL assembly (V2X - 99002 only)



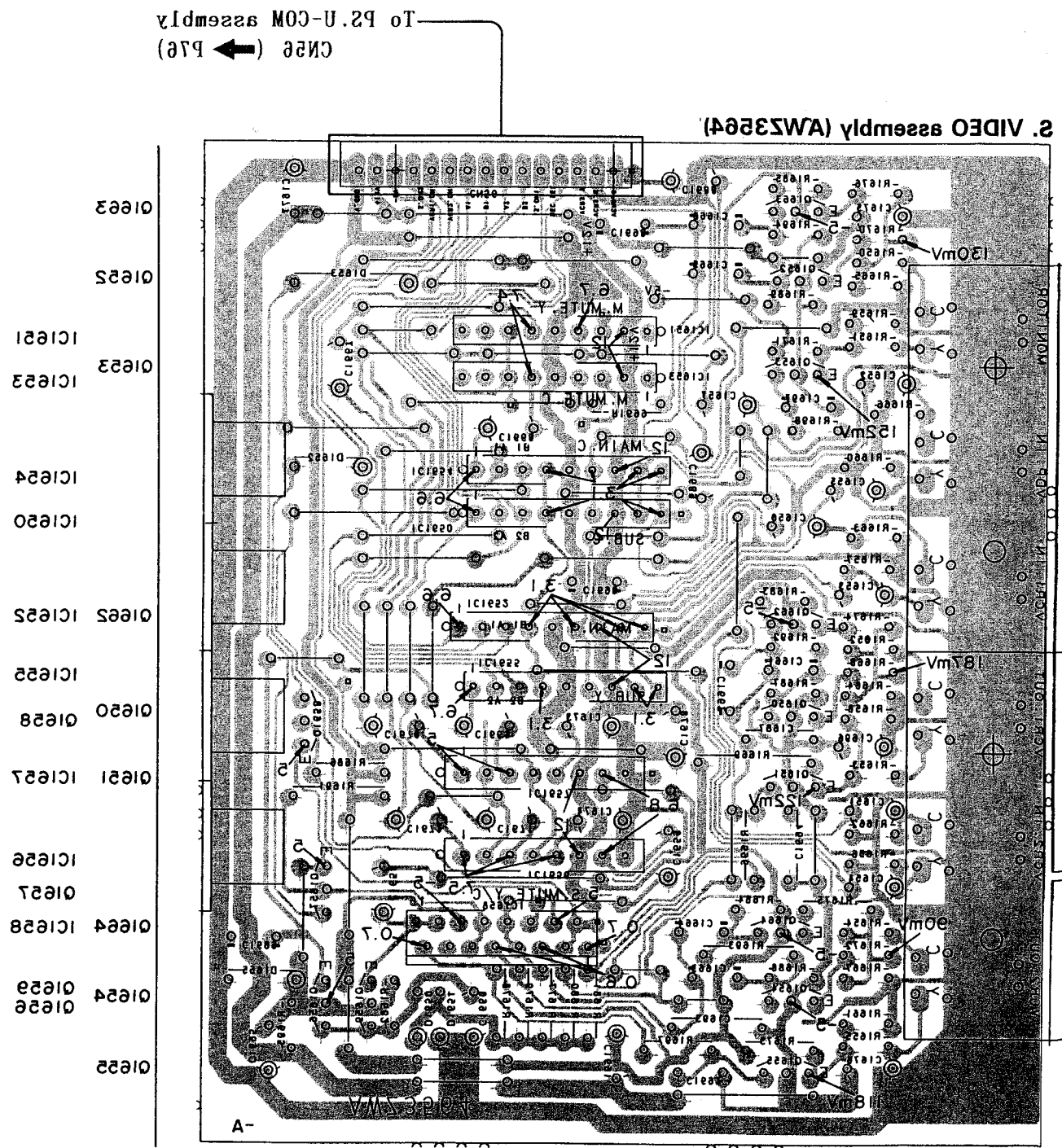
P2-U-COM assembly  
CN28 (P28) →

OSD assembly (AW33634 : V2X - 95 only)  
To FRONT CONTROL assembly  
CN1901 (P66) →



assembly (P66) →  
To ENHANCER assembly  
P45 (P56) →



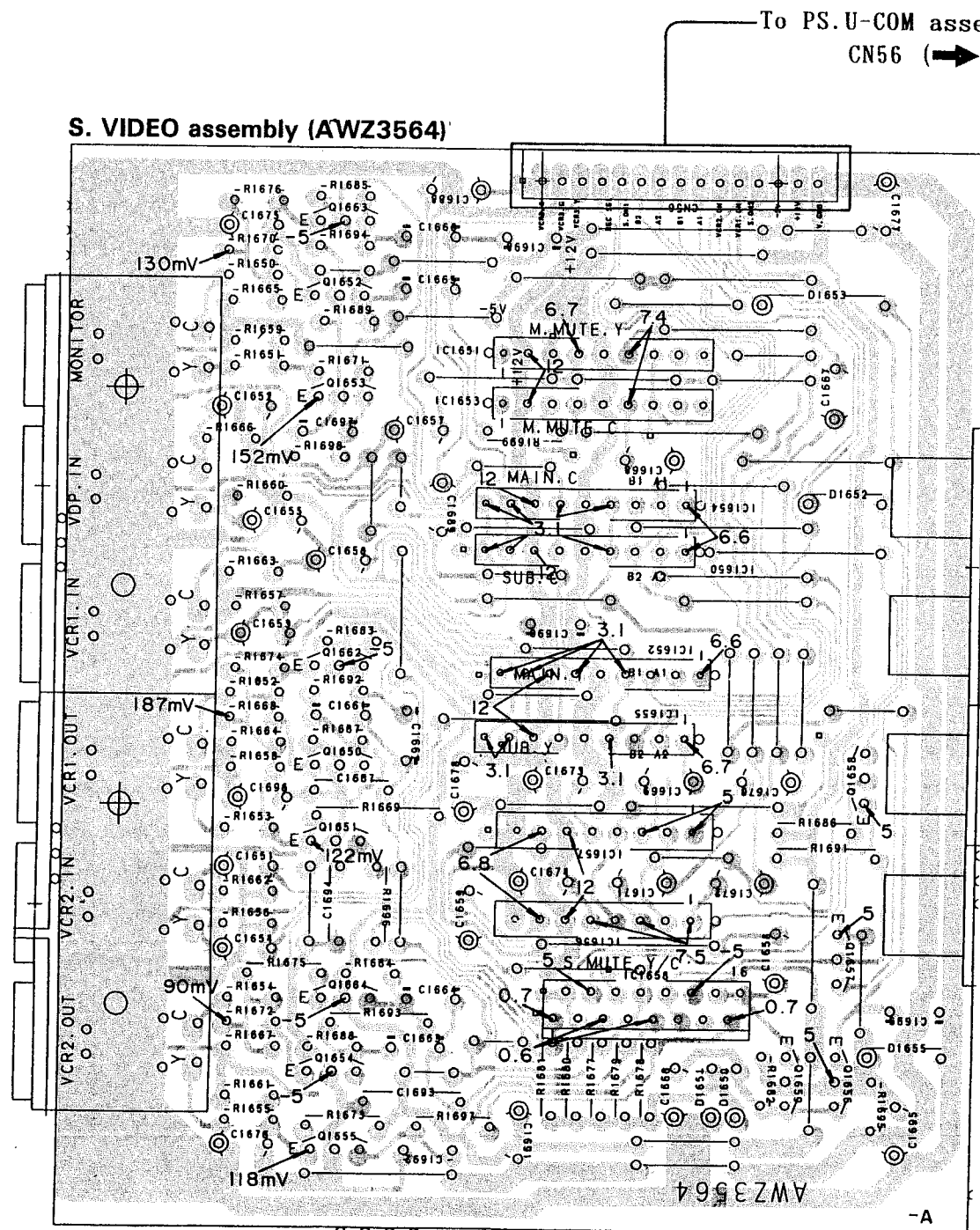




## 3.6 OSD (AWZ3634) and S. VIDEO assembly (AWZ3564)

A

S. VIDEO assembly (AWZ3564)



B

C

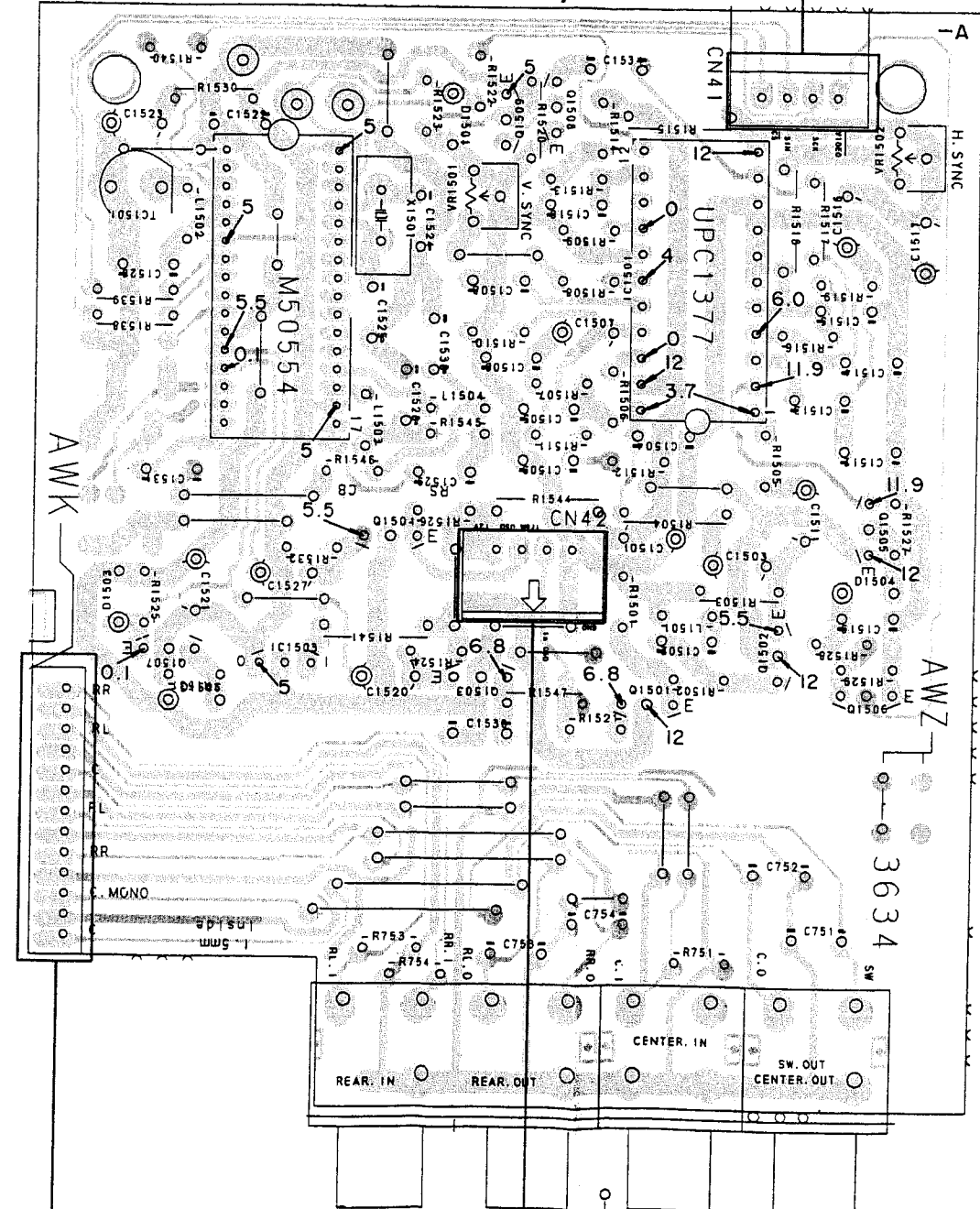
D

Q1663  
Q1652  
IC1651  
Q1653 IC1653  
IC1654  
IC1650  
Q1662 IC1652  
IC1655  
Q1650 Q1658  
Q1651 IC1657  
IC1656  
Q1657  
Q1664 IC1658  
Q1654 Q1659  
Q1656  
Q1655

To PS.U-COM assembly  
CN56 (→ P76)

To FRONT CONTROL assembly  
CN1901 (→ P66)

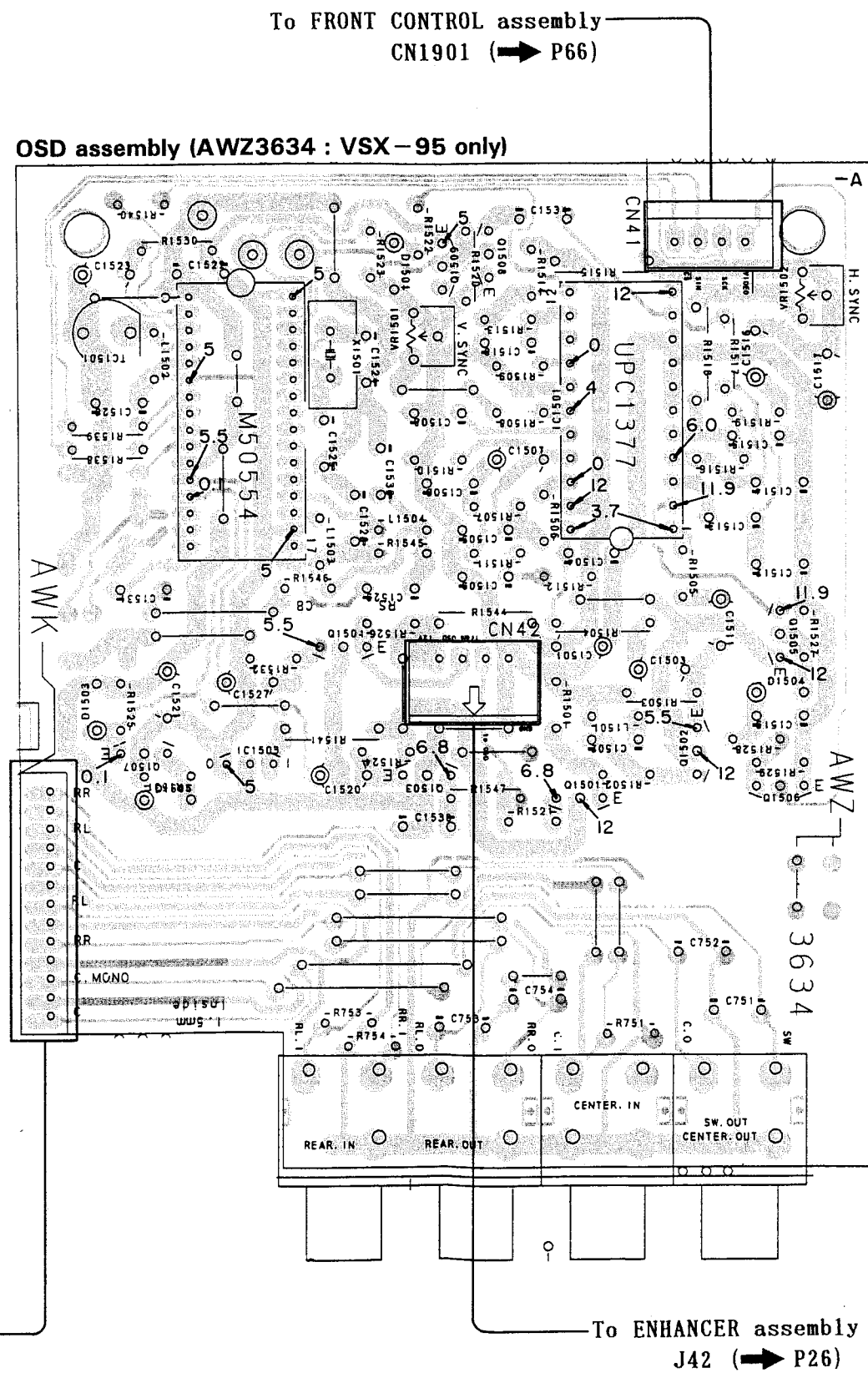
OSD assembly (AWZ3634 : VSX-95 only)



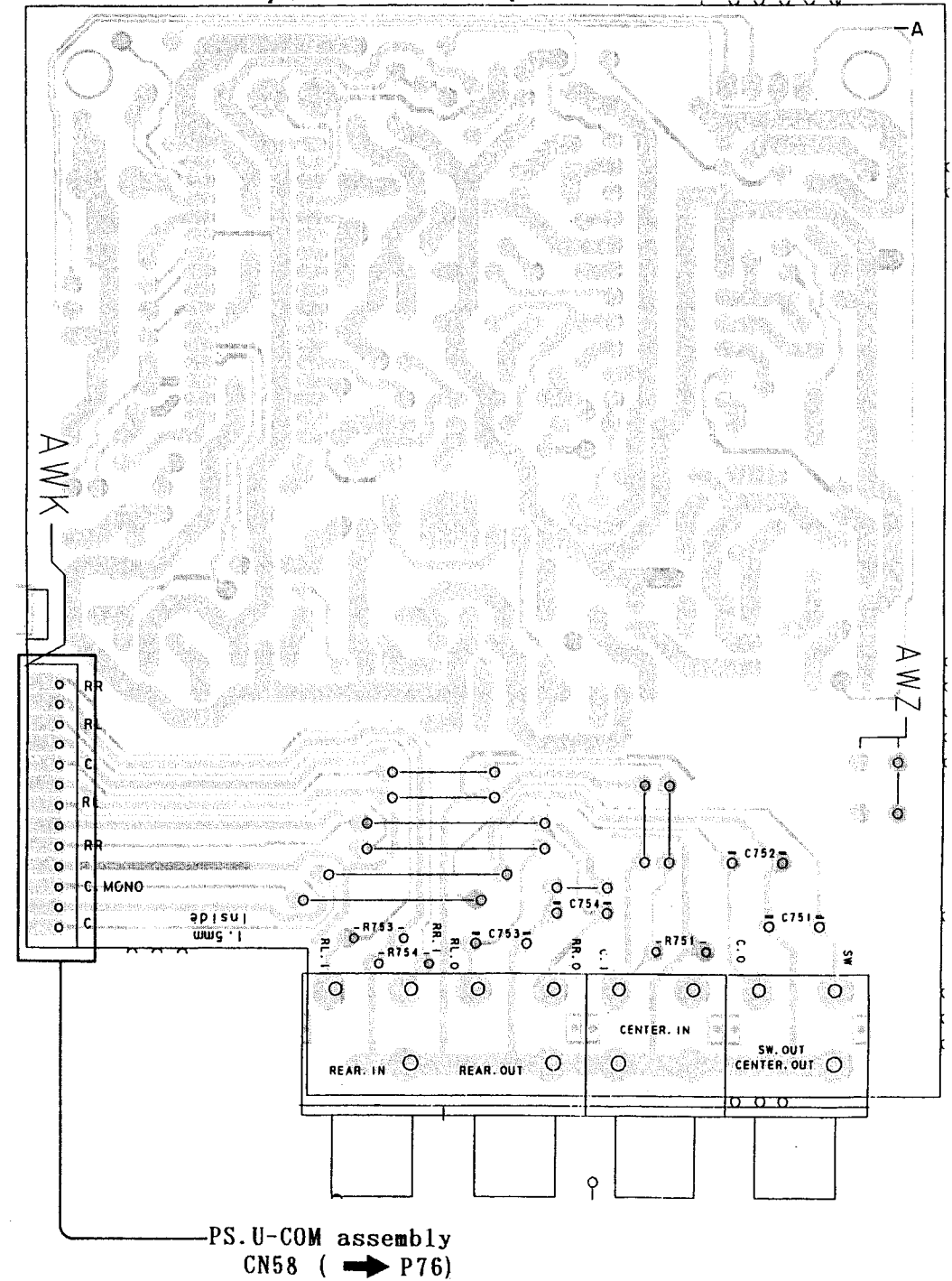
Q1509 Q1508  
VR1502  
VR1501  
IC1502 IC1501  
Q1504 Q1505  
Q1507 Q1502  
IC1503  
Q1503 Q1506  
Q1501

To PS.U-COM assembly  
CN58 (→ P76)

To ENHANCER assembly  
J42 (→ P26)

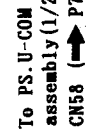


TERMINAL assembly (VSX-9900S only)

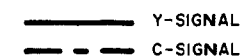








IC1650, IC1653, IC1654, IC1656: C-SIGNAL INPUT SELECTOR

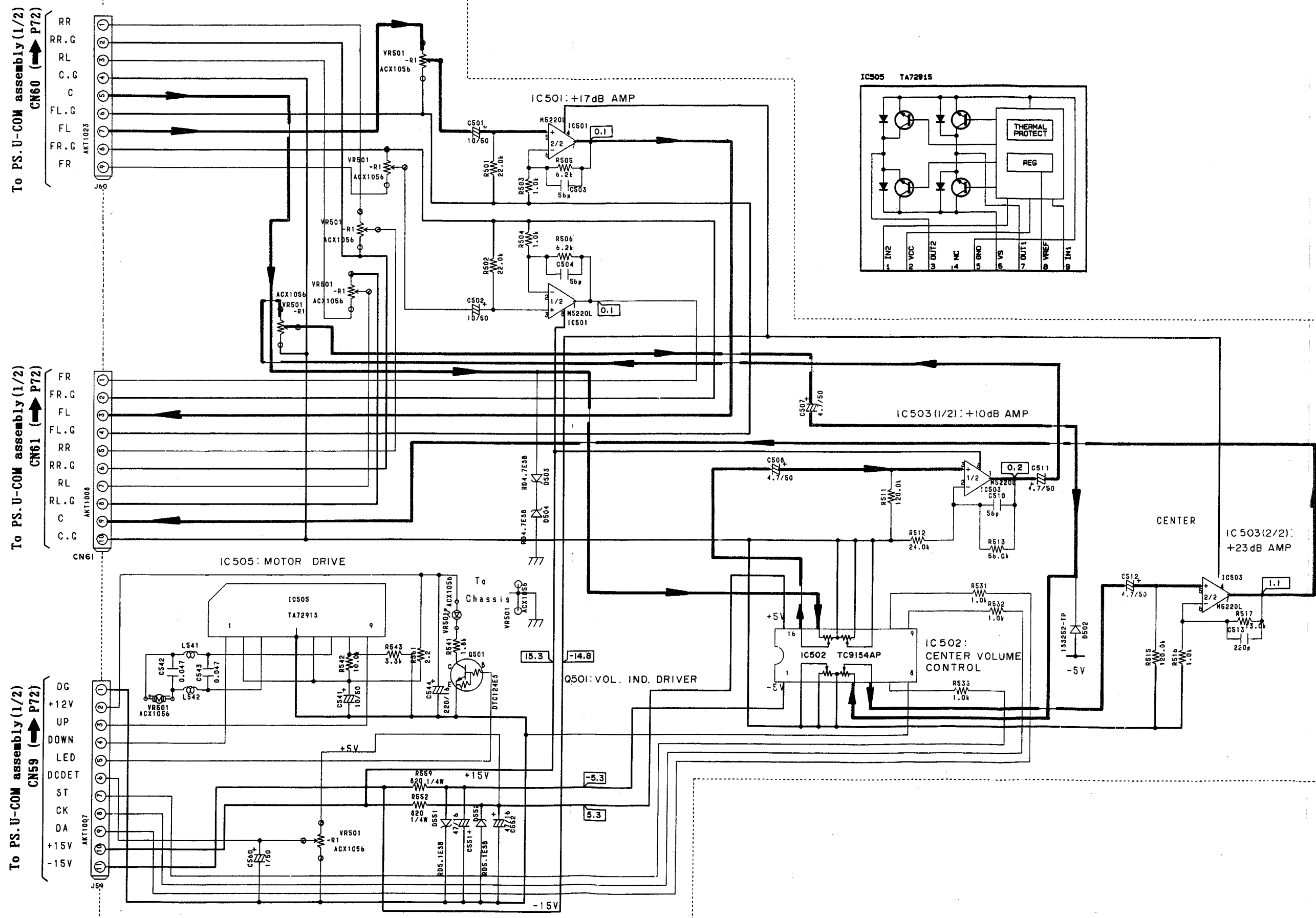


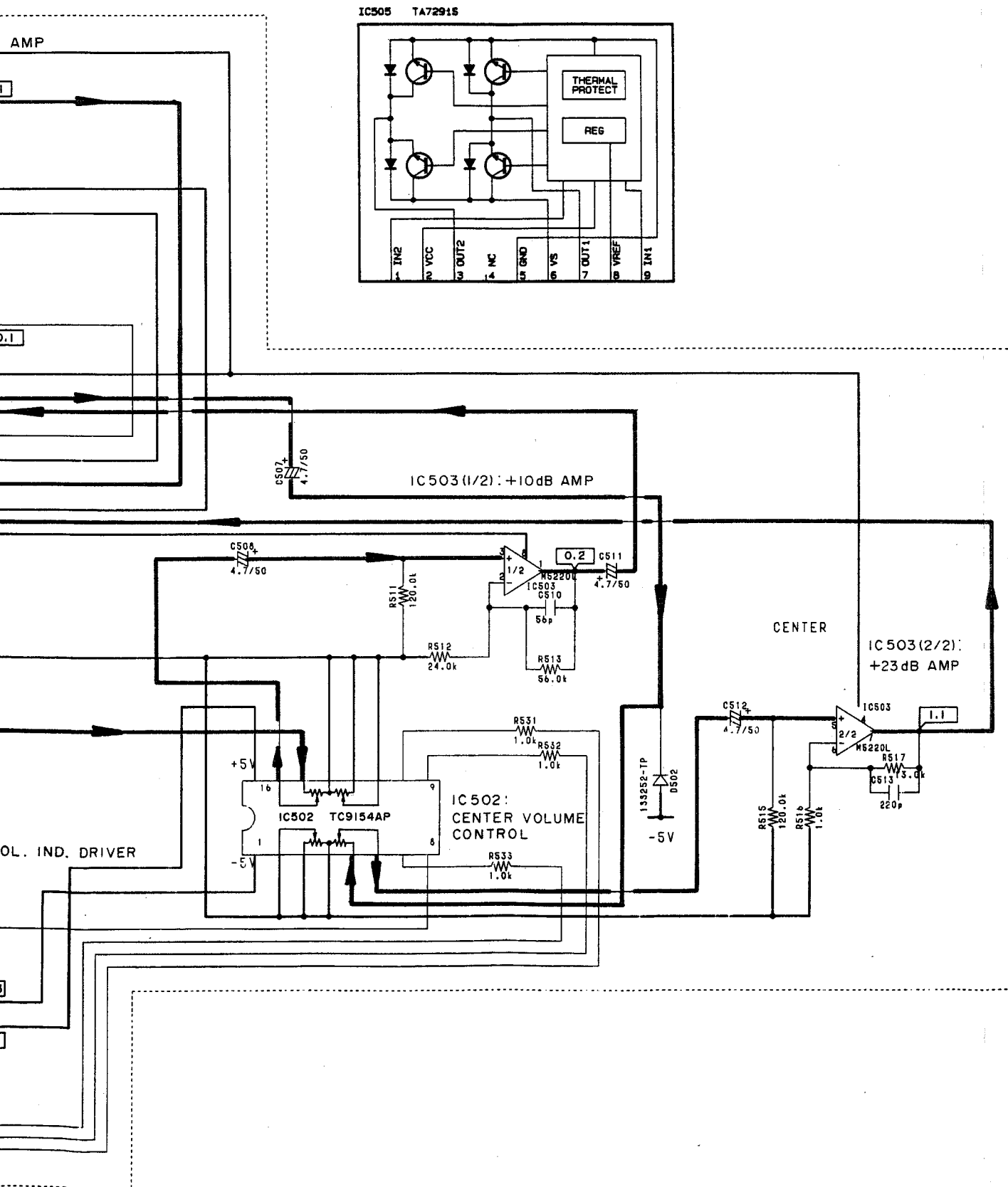
D



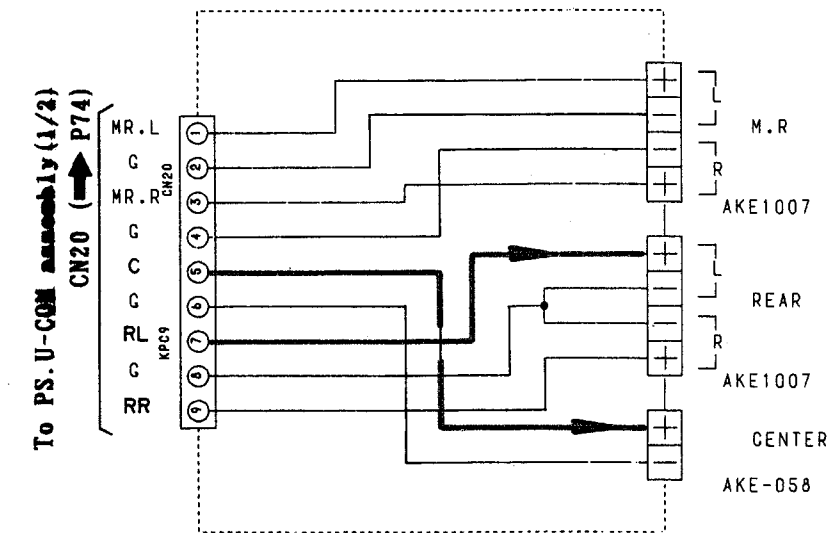
## 3.7 MOTOR VOLUME (AWZ3567), HEADPHONE and R. C. SPEAKER assembly (AWZ3566)

## MOTOR VOLUME assembly (AWZ3567)





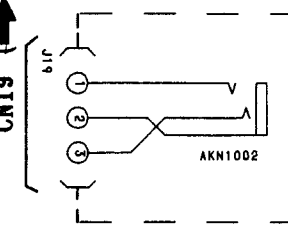
**R. C. SPEAKER assembly (AWZ3566)**



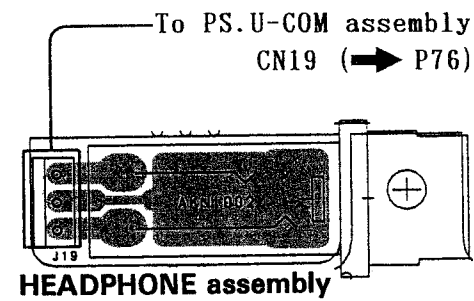
**HEADPHONE assembly**

To PS. U-COM assembly (1/2)  
CN19 (↗ P74)

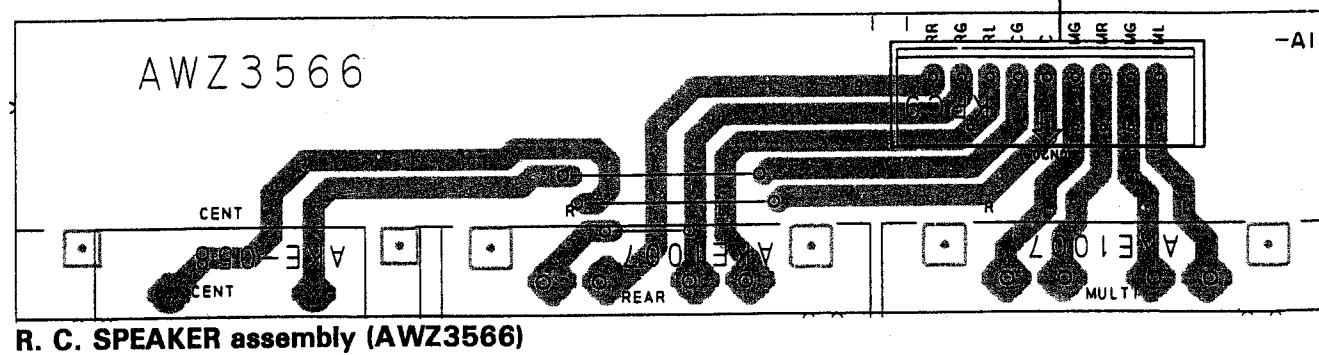
AKN1002







To PS.U-COM assembly  
CN20 (→ P76)



## NOTE

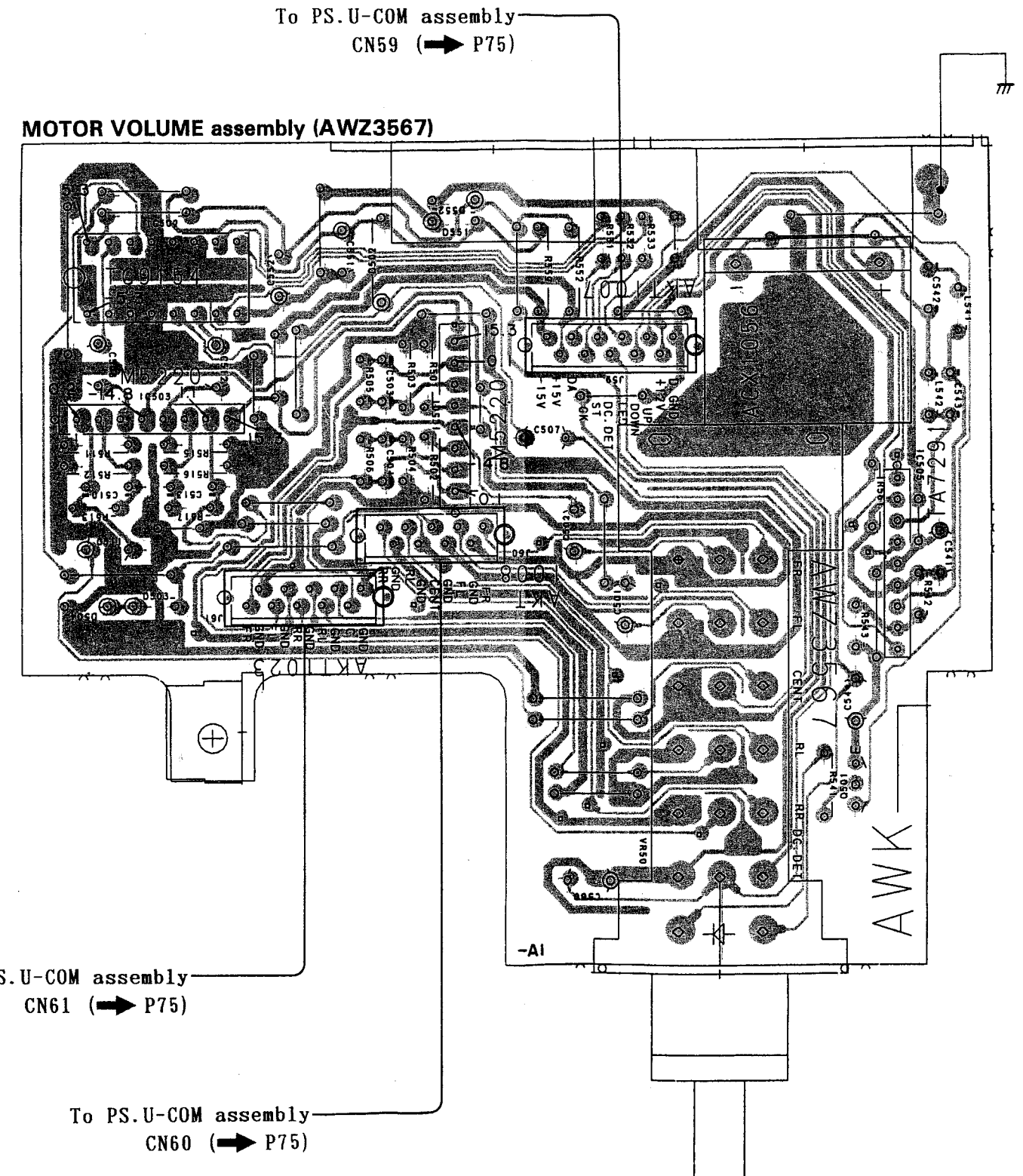
1. This P.C.B. connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name                |
|-----------------------------------|---------------------------|--------------------------|
|                                   |                           | Transistor               |
|                                   |                           | Resistor type transistor |
|                                   |                           | Diode                    |
|                                   |                           | Resistor                 |
|                                   |                           | Capacitor (Polarity)     |
|                                   |                           | Capacitor (Non-polarity) |

## Others

| P.C.B. pattern diagram indication | Part Name                                |
|-----------------------------------|------------------------------------------|
|                                   | IC                                       |
|                                   | Switch                                   |
|                                   | Relay                                    |
|                                   | Coil                                     |
|                                   | Filter                                   |
|                                   | Variable resistor or Semi-fixed resistor |

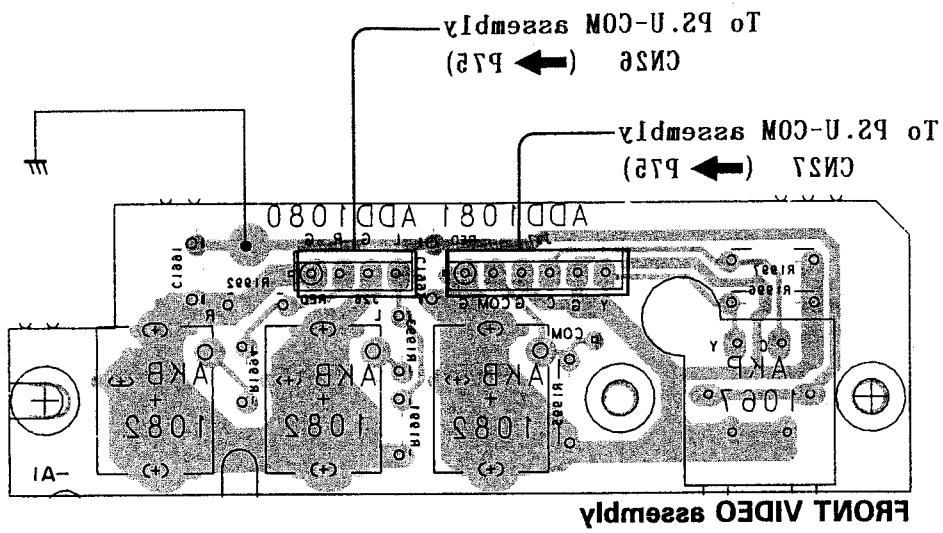
3. The capacitor terminal marked with @ (double circles) shows negative terminal.
4. The diode terminal marked with @ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.







A

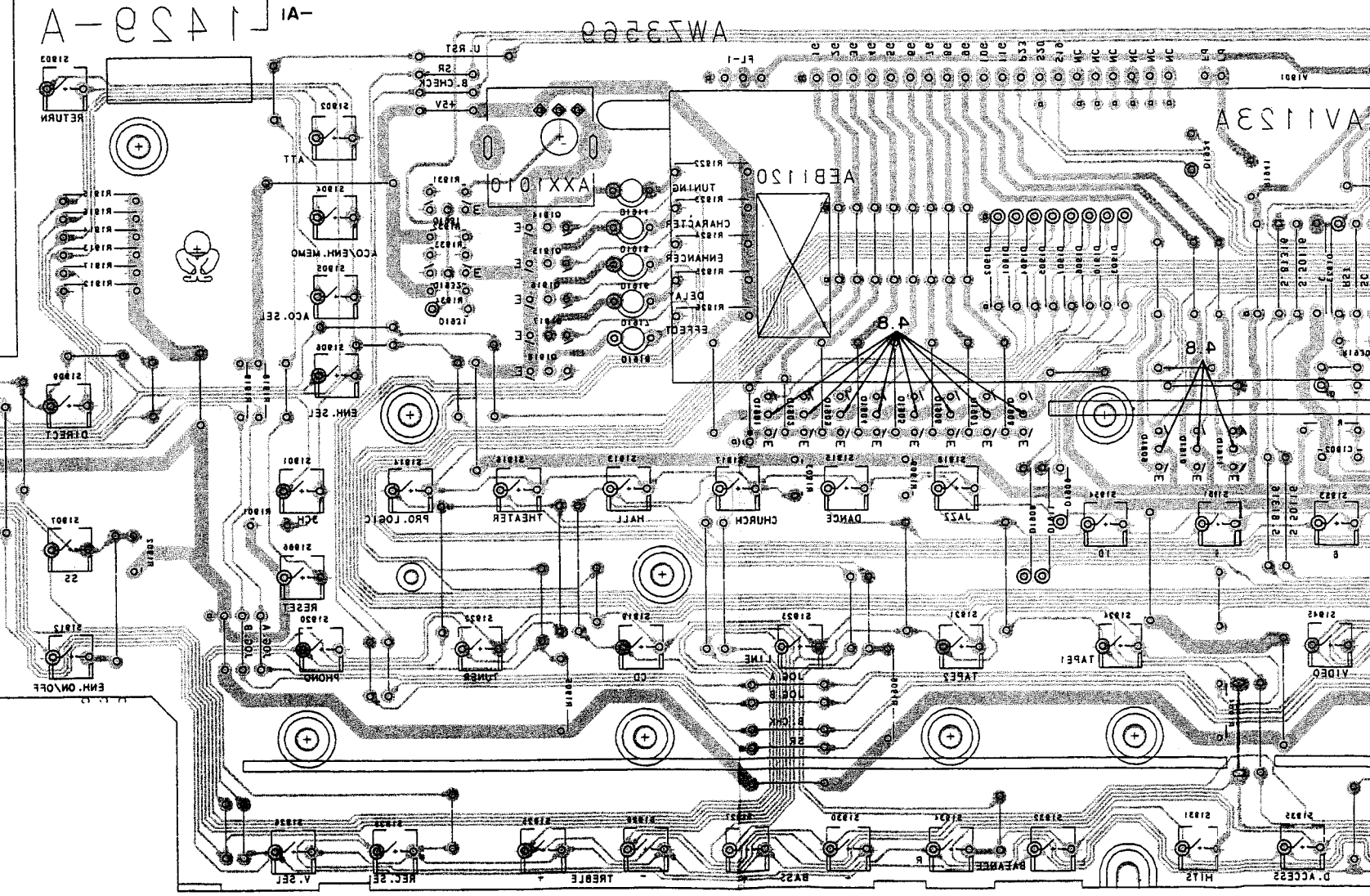


B

C

D

FRONT CONTROL assembly (AW3556a)



0101-0108 0101-0108 0101-0108

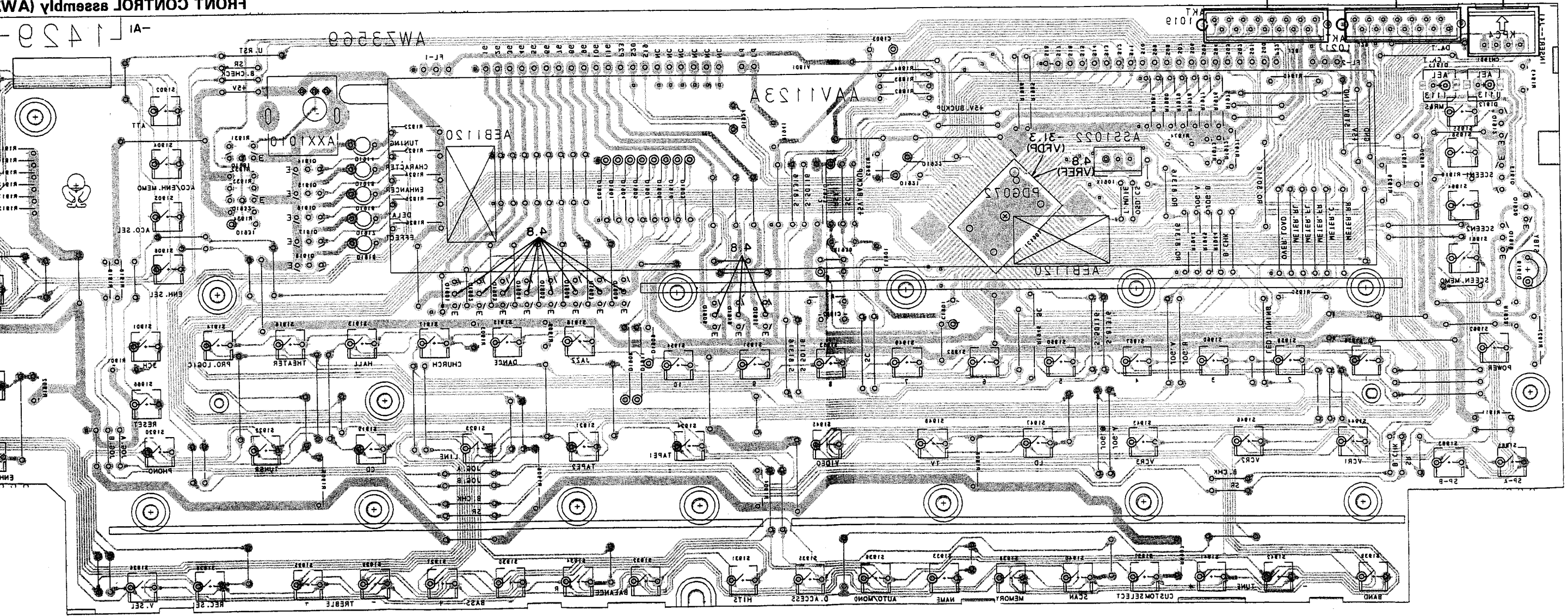
0101-0108 0101-0108 0101-0108

0101-0108 0101-0108 0101-0108



FRONT CONTROL assembly (AW)

1459-1A



To P2-U-COM assembly  
CN28 (P28)  
To P2-U-COM assembly  
CN29 (P29)  
To P2-U-COM assembly  
CN41 (P21,P22)  
To 02D or TERMINAL assembly

01A14-01A18 01A31 01A35

01A101-01A08

01A11 01A10 01A09

01A101

01A01 01A13 01A15



# 3.8 FRONT CONTROL (AWZ3569) and FRONT VIDEO assembly

A

To OSD or TERMINAL assembly  
CN41 (→ P51,P52)

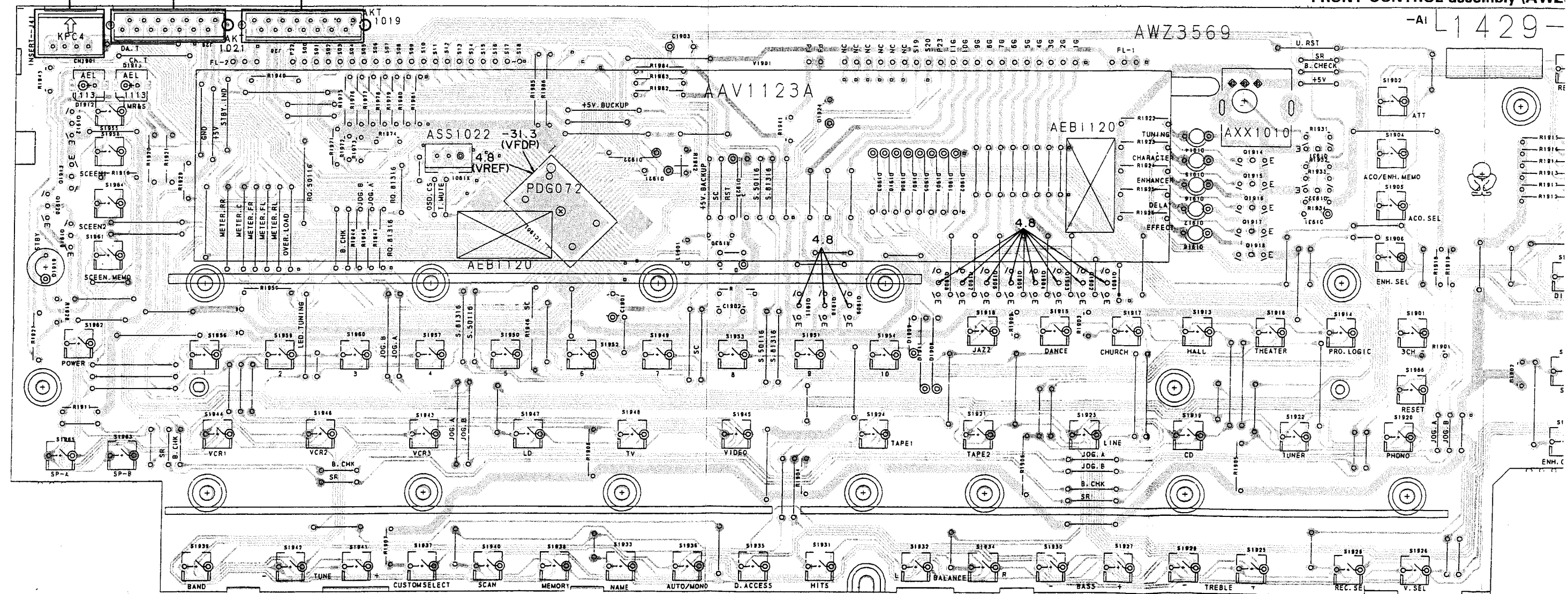
To PS.U-COM assembly  
CN29 (→ P75)

To PS.U-COM assembly  
CN28 (→ P76)

FRONT CONTROL assembly (AWZ)

B

C



D

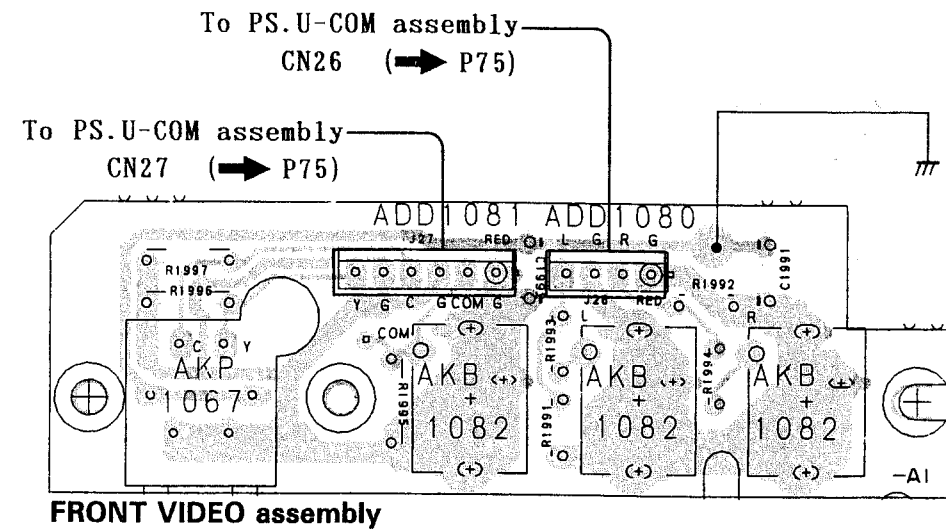
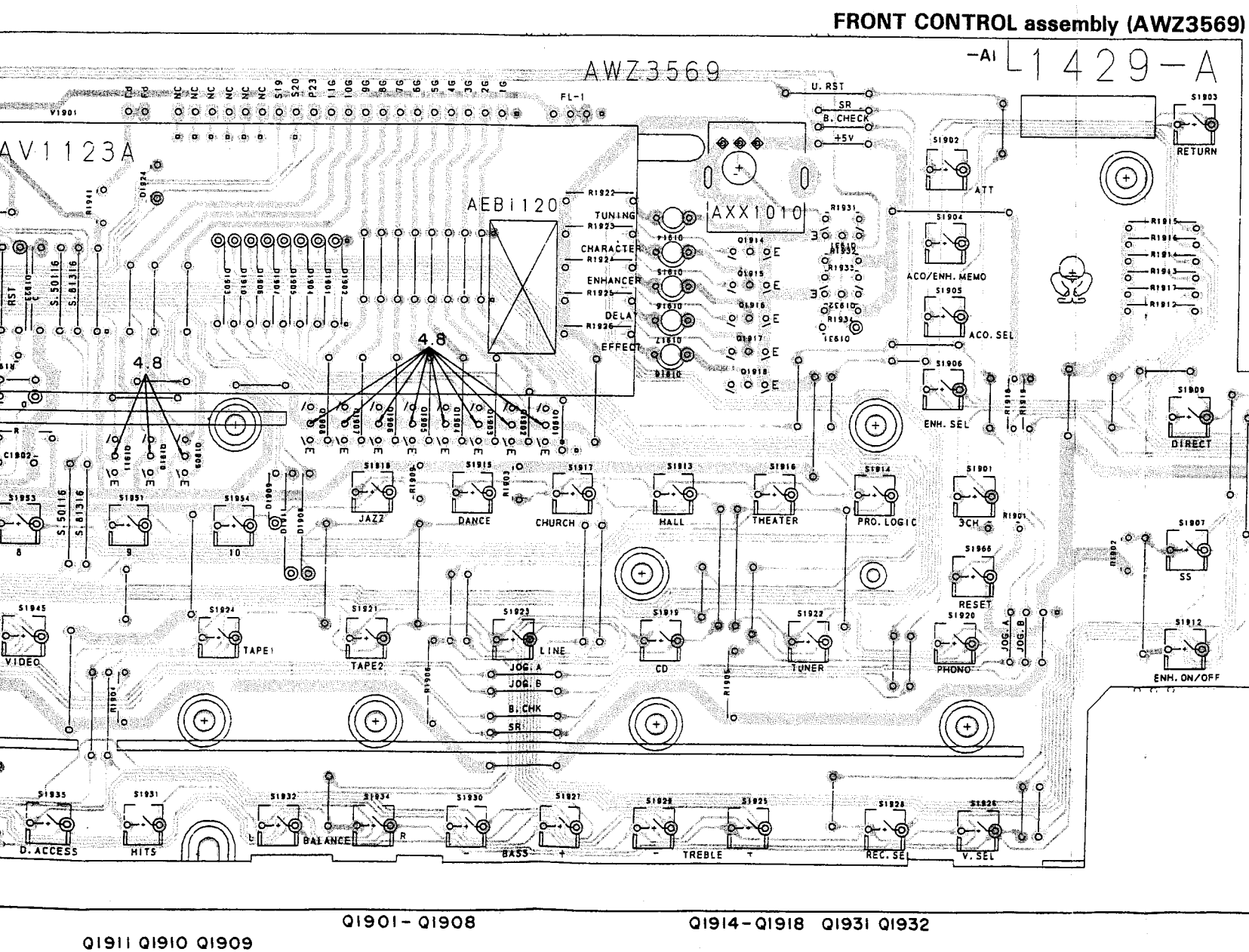
Q1920 Q1919 Q1913 Q1912

IC1901

Q1911 Q1910 Q1909

Q1901-Q1908

Q1914-Q1918 Q1931 Q1932



## NOTE

1. This P.C.B connection diagram is viewed from the parts mounted side.
2. The parts which have been mounted on the board can be replaced with those shown with the corresponding wiring symbols listed in the following Table.

| P.C.B. pattern diagram indication | Corresponding part symbol | Part Name                |
|-----------------------------------|---------------------------|--------------------------|
| Q504                              |                           | Transistor               |
| Q215                              |                           | Radiator type transistor |
| D203                              |                           | Diode                    |
| R237                              |                           | Resistor                 |
| C513                              |                           | Capacitor (Polarity)     |
| C518                              |                           | Capacitor (Non-polarity) |

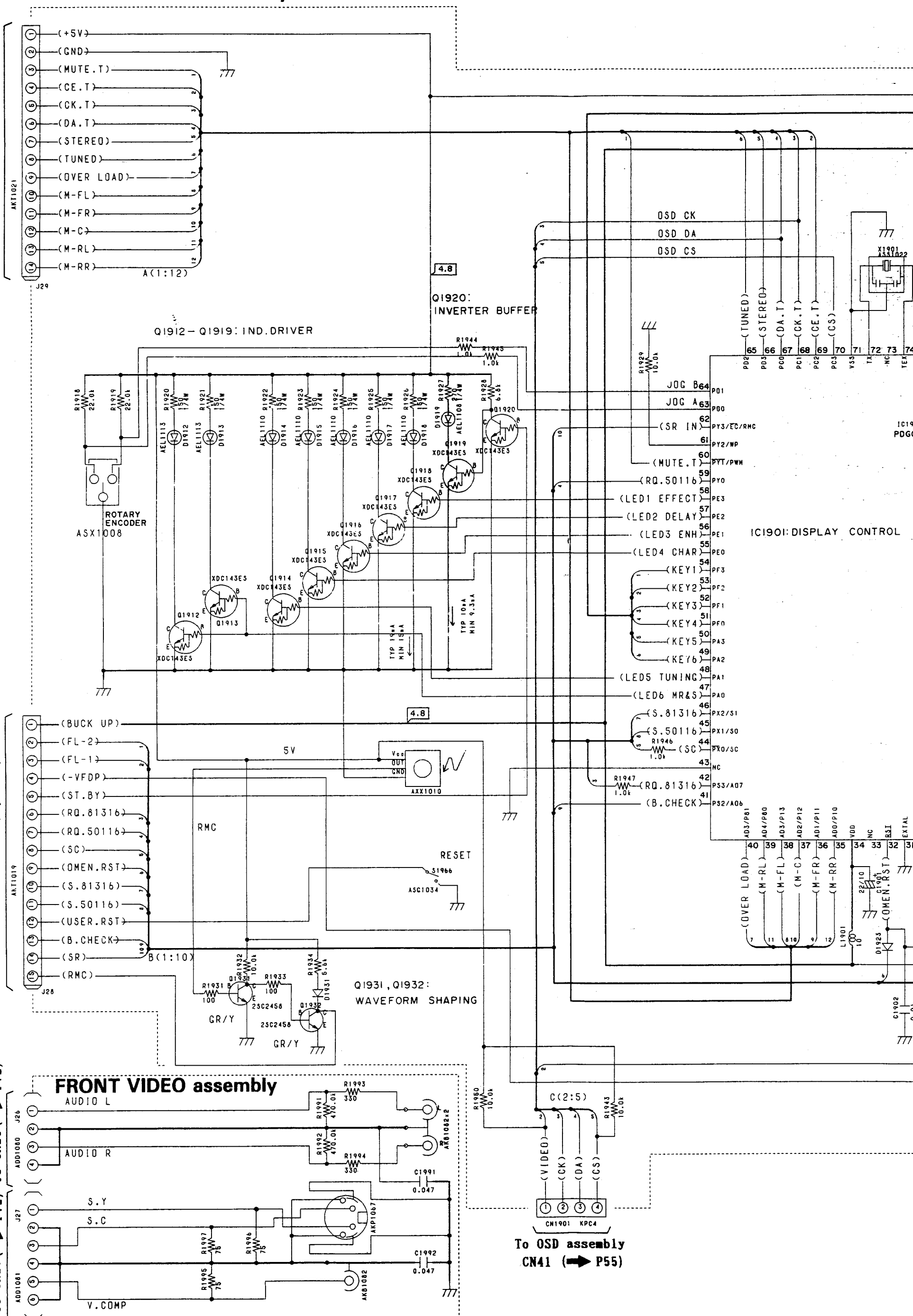
## Others

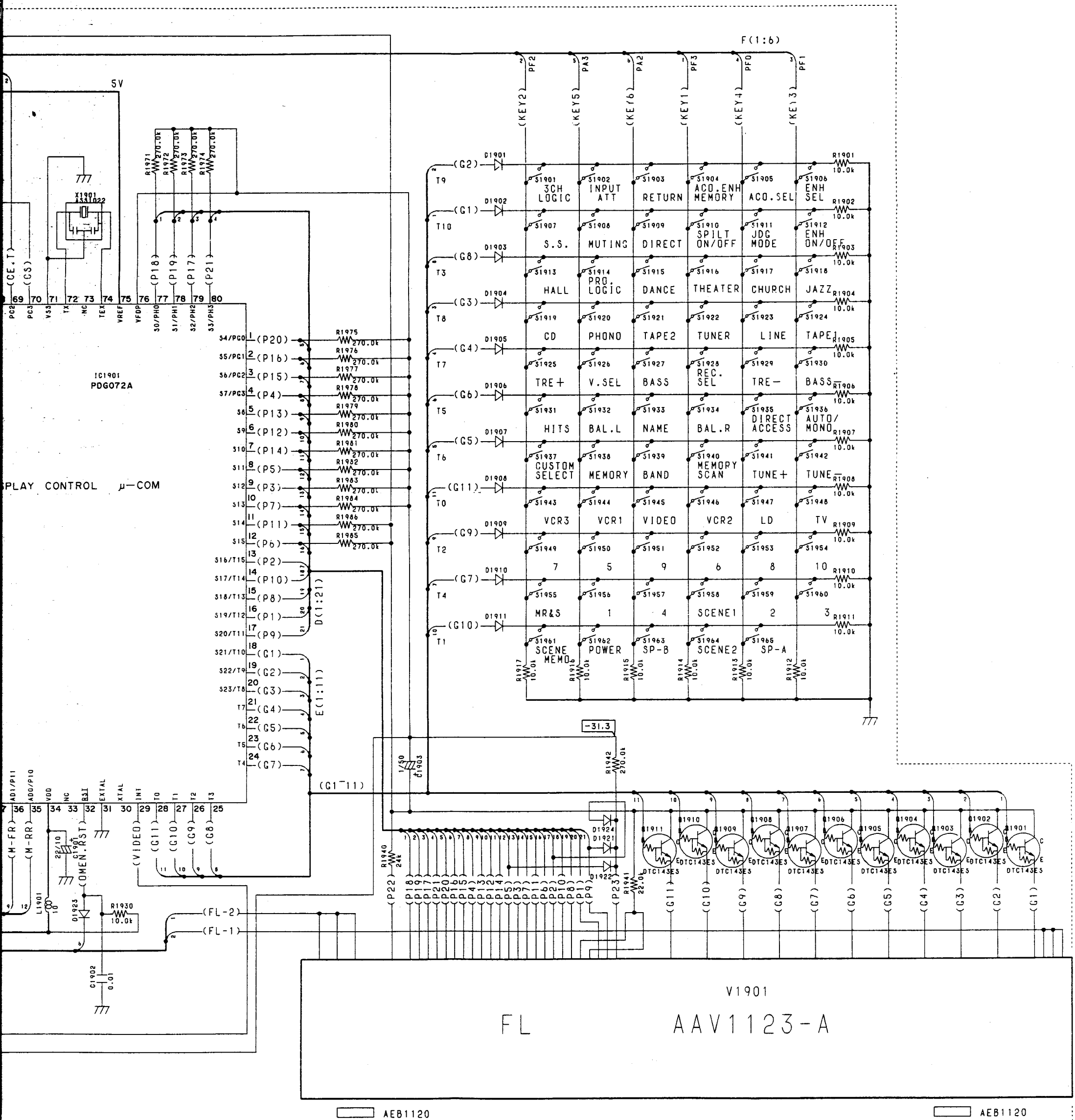
| P.C.B. pattern diagram indication | Part Name                                |
|-----------------------------------|------------------------------------------|
| IC                                | IC                                       |
| S                                 | Switch                                   |
| RY                                | Relay                                    |
| L                                 | Coil                                     |
| F                                 | Filter                                   |
| VR                                | Variable resistor or Semi-fixed resistor |

3. The capacitor terminal marked with ⊖ (double circles) shows negative terminal.
4. The diode terminal marked with ⊖ (double circles) shows cathode side.
5. The transistor terminal to which E is affixed shows the emitter.



To PS. U-COM assembly (1/2)  
To CN27 (➡ P72) To CN26 (➡







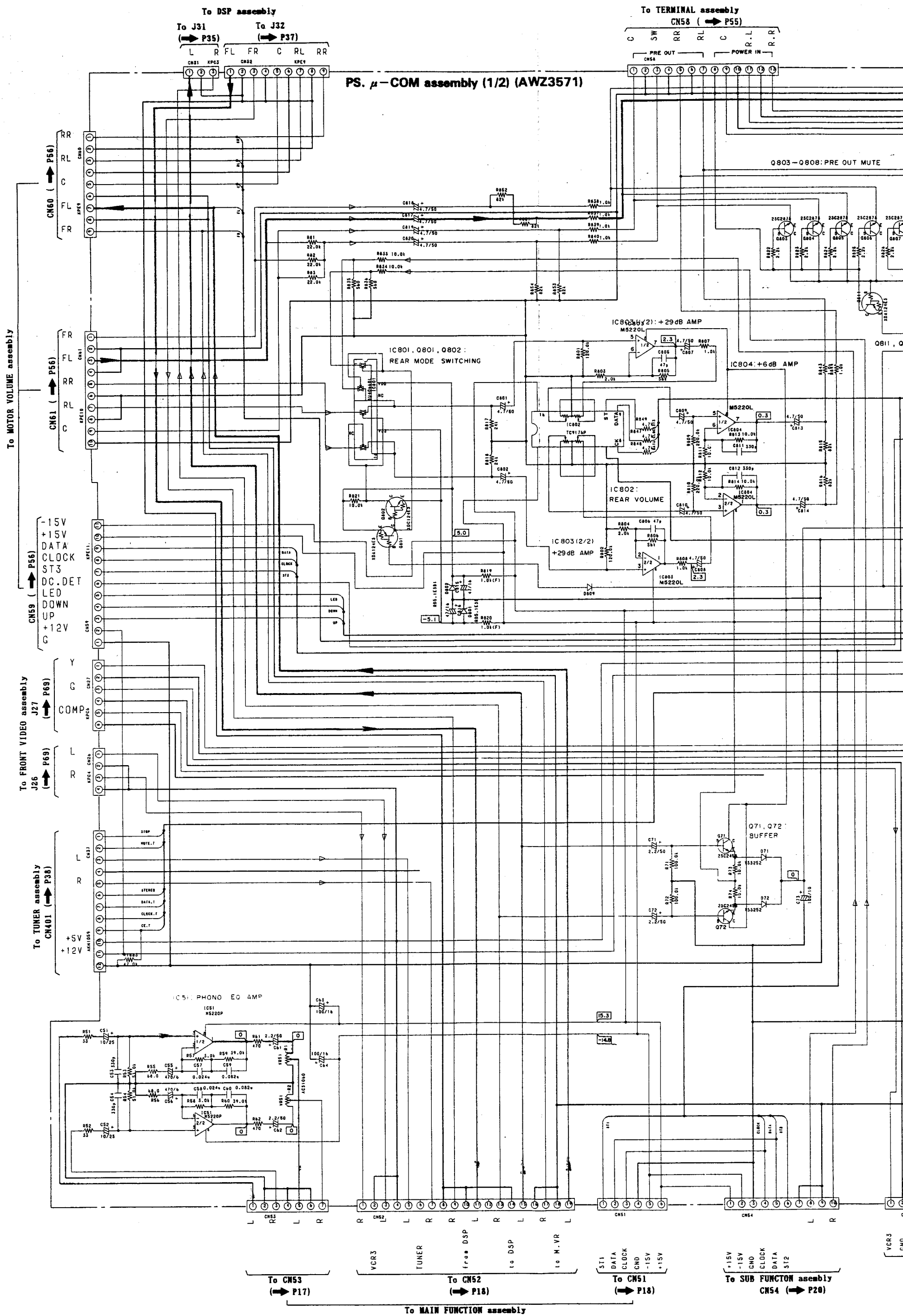
VSX-95

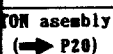
2

3

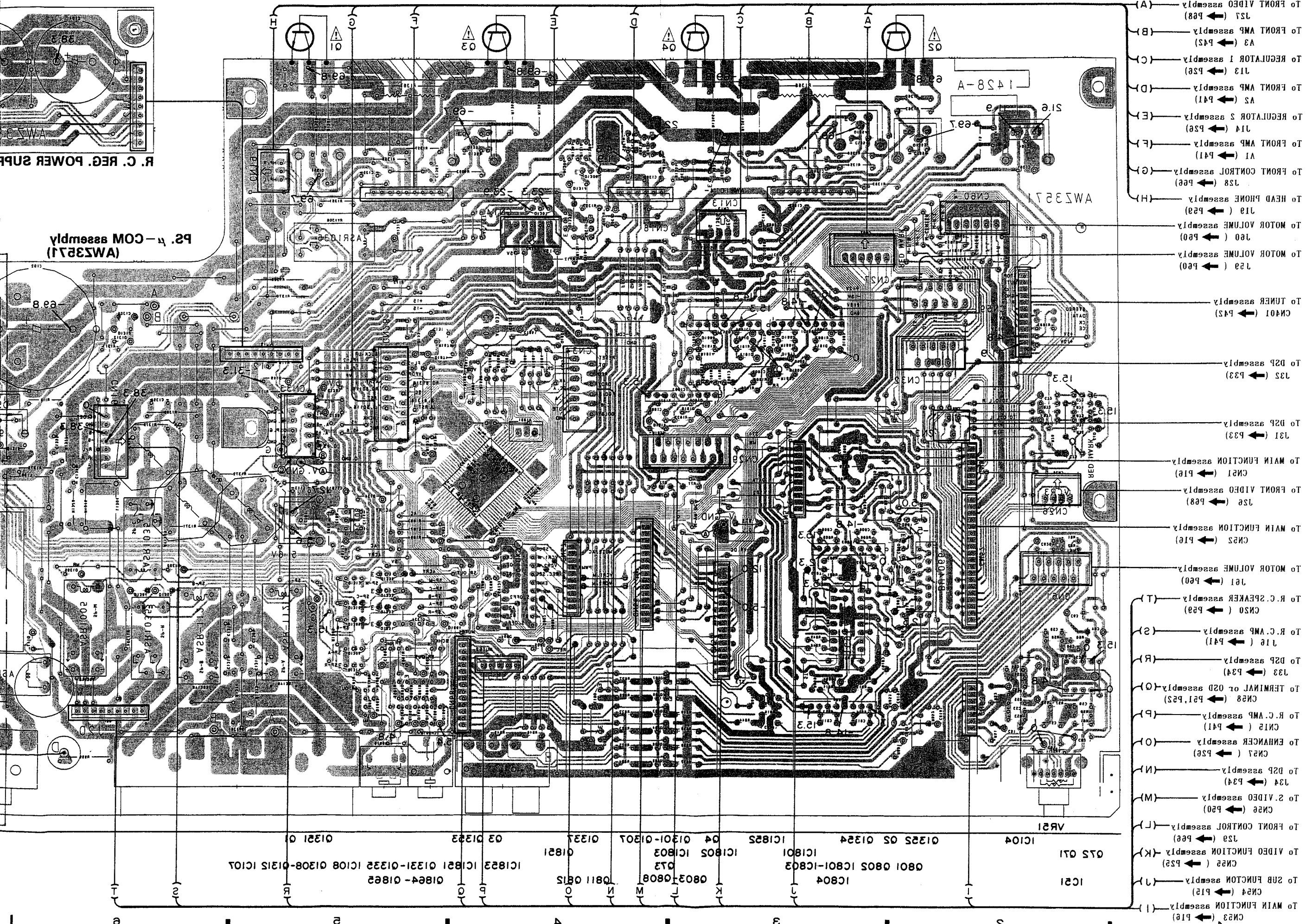
4

5

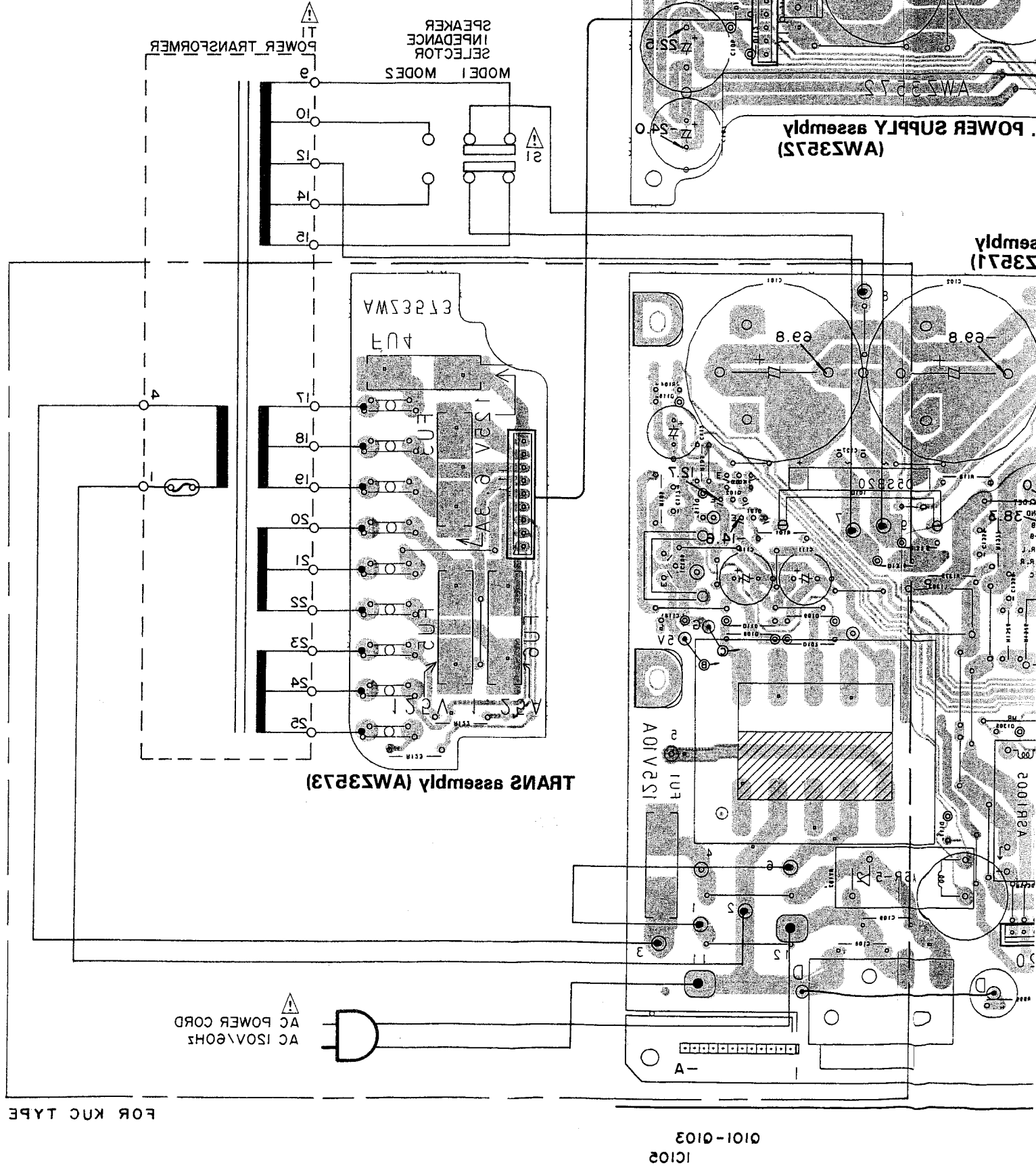
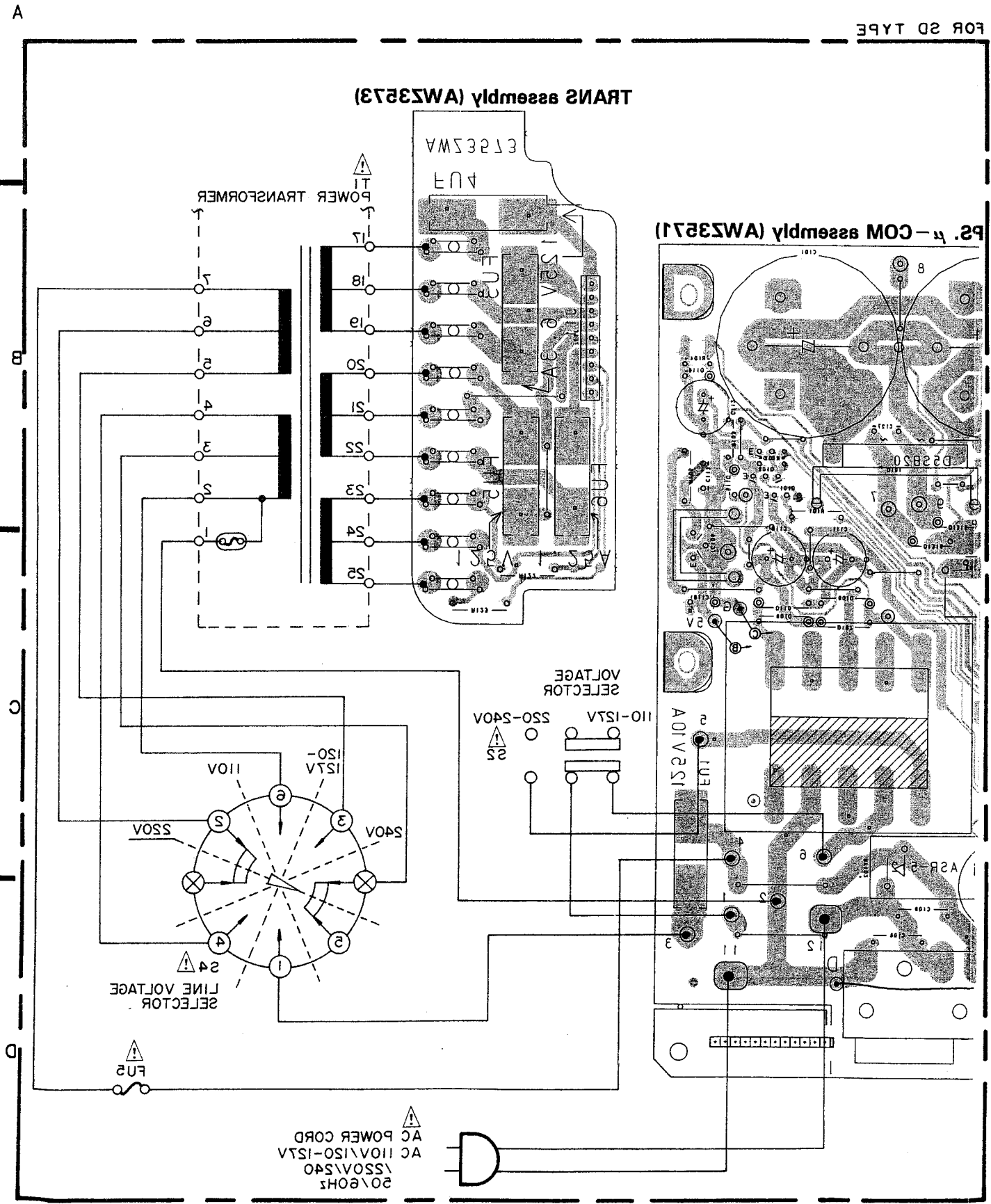
3.9 PS.  $\mu$ -COM (AWZ3571), R. C. REG POWER SUPPLY (AWZ3572) and TRANS assembly (AWZ3573)



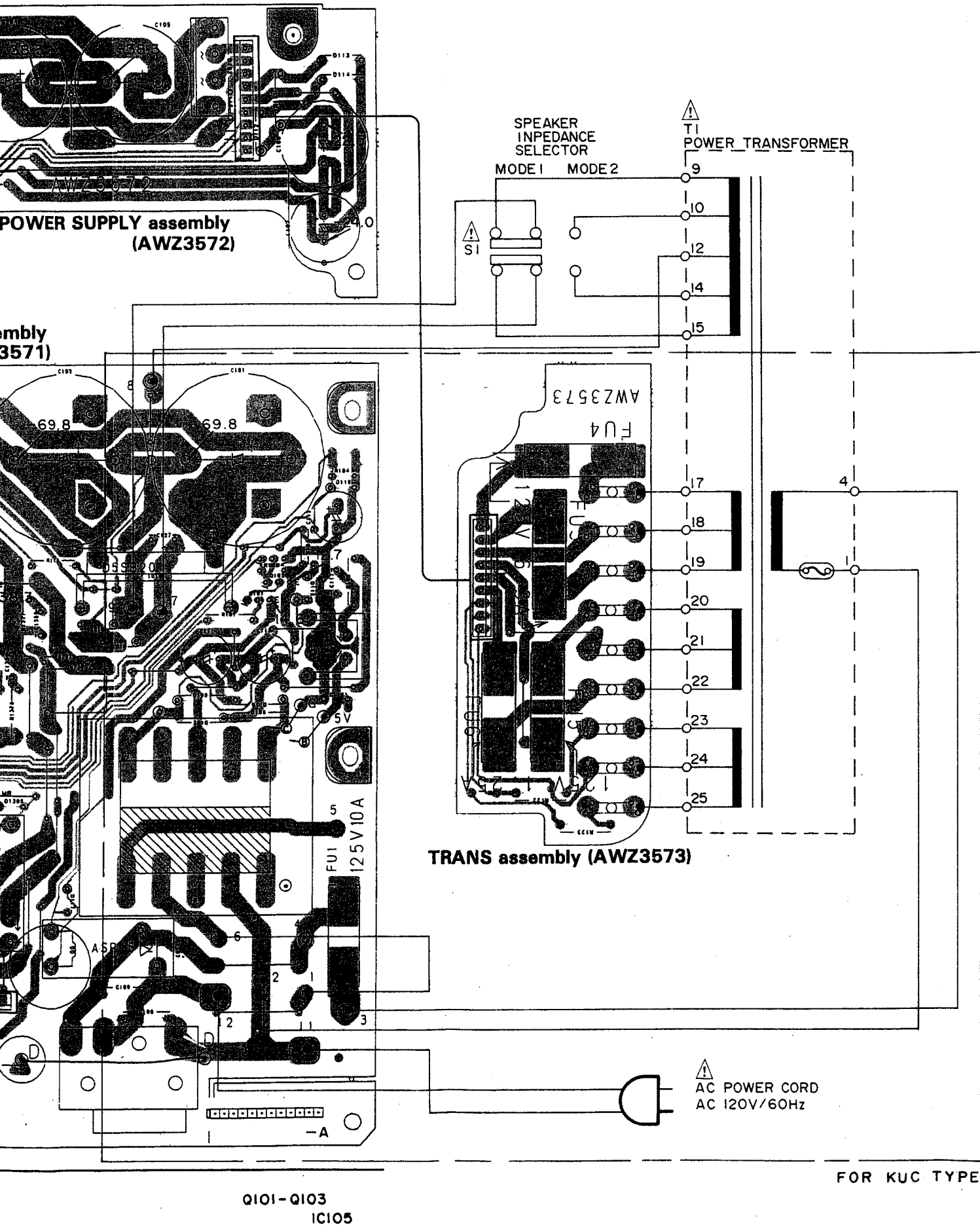








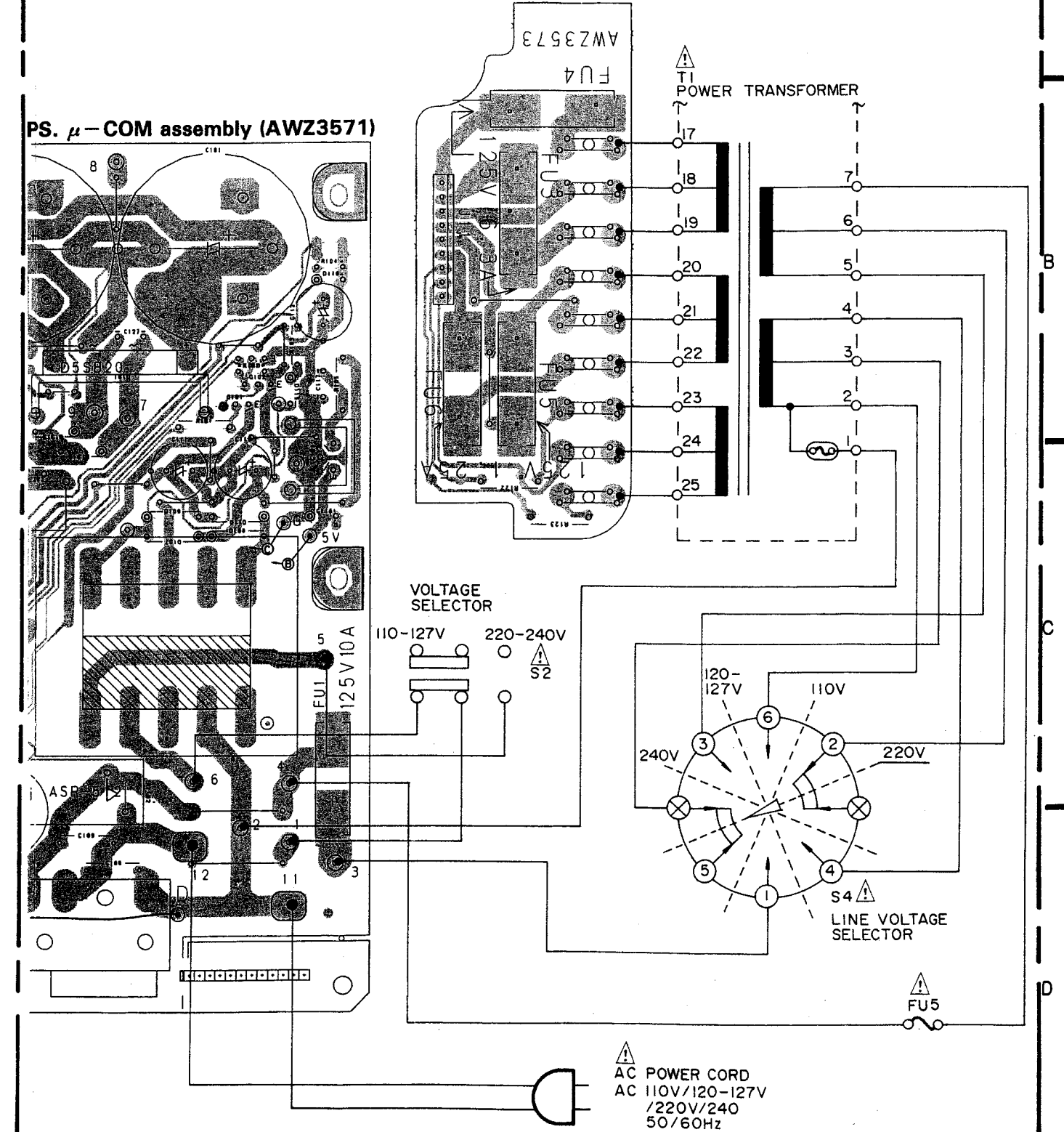




FOR SD TYPE

PS.  $\mu$ -COM assembly (AWZ3571)

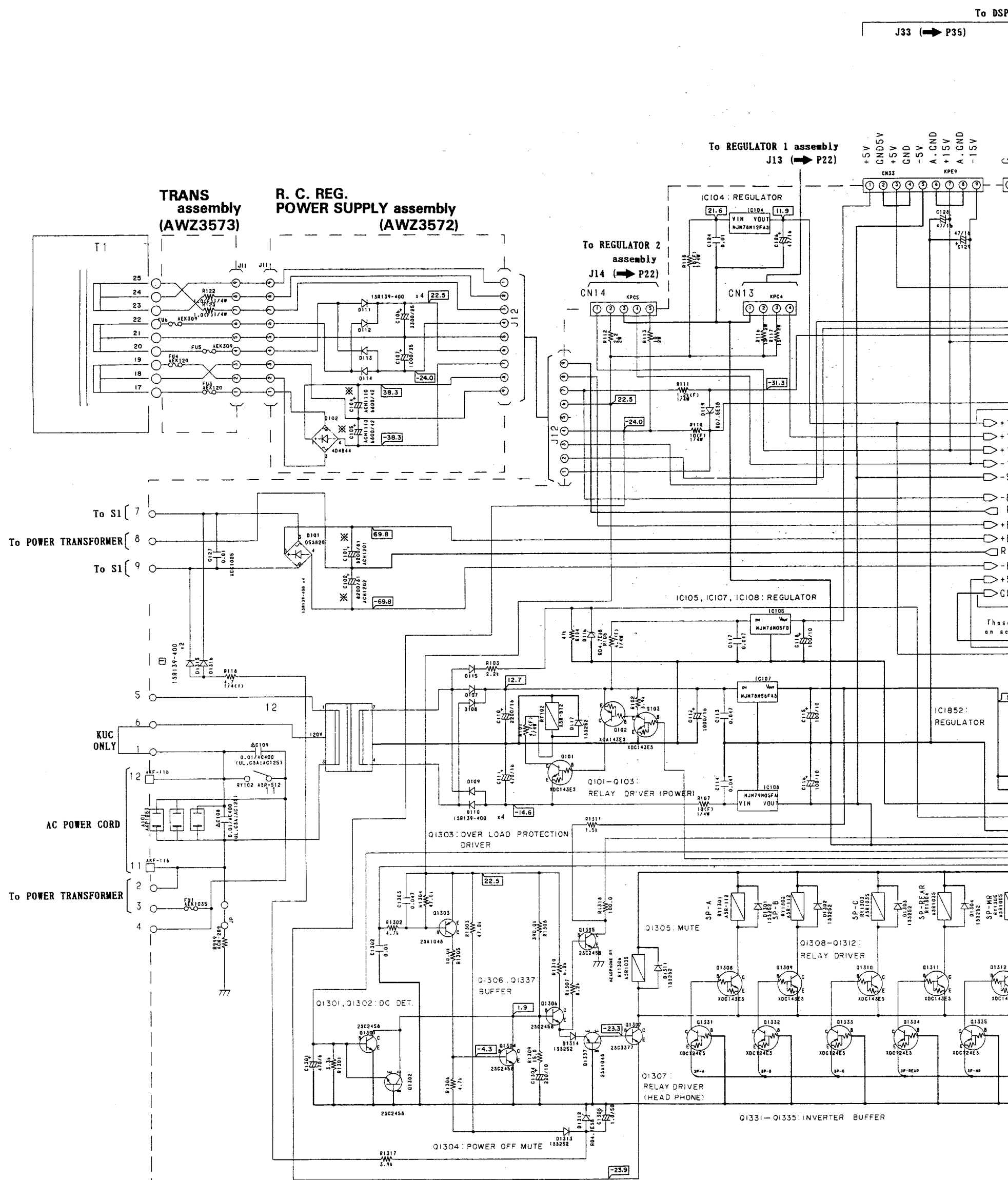
TRANS assembly (AWZ3573)









A  
B  
C  
D  
E  
F

\* LOGIC TABLE FOR VIDEO CONTROL SECTION

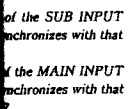
| Input Selector Condition |                  | Pins No.          |   |   |   |   |   |   |   |   |    |                  |    |    |    |    |
|--------------------------|------------------|-------------------|---|---|---|---|---|---|---|---|----|------------------|----|----|----|----|
|                          |                  | IC1853 (CXD1067P) |   |   |   |   |   |   |   |   |    | IC1851 (PDG073A) |    |    |    |    |
|                          |                  | 1                 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11               | 12 | 13 | 14 | 15 |
| MAIN                     | VCR1             | -                 | H | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VCR2             | -                 | L | H | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VCR3             | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | LD               | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | TV               | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VIDEO            | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
| SUB                      | AUDIO (CD...etc) | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VCR1             | -                 | H | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VCR2             | -                 | L | H | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | VCR3             | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | LD               | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | TV               | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
| AUDIO (CD...etc)         | VIDEO            | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |
|                          | AUDIO (CD...etc) | -                 | L | L | - | - | - | - | L | L | L  | -                | -  | -  | -  | L  |

| Switches Condition |     | Pins No. |    |   |   |   |   |
|--------------------|-----|----------|----|---|---|---|---|
|                    |     | 1        | 2  | 3 | 4 | 5 | 6 |
| SPLIT SCREEN       | ON  | H        | -  | - | - | - | - |
|                    | OFF | L        | -  | - | - | - | - |
| REC SEL            | ON  | -        | +1 | H | - | - | - |
|                    | OFF | -        | +2 | L | - | - | - |
| ENHANCER           | ON  | -        | -  | - | - | H | - |
|                    | OFF | -        | -  | - | - | L | - |
| MRS                | ON  | -        | -  | - | - | - | L |
|                    | OFF | -        | -  | - | - | - | H |

Note)

\*1: Changes according to the status of the SUB INPUT SELECTOR. The status of H/L synchronizes with that of the SUB INPUT SELECTOR.

\*2: Changes according to the status of the MAIN INPUT SELECTOR. The status of H/L synchronizes with that of the MAIN INPUT SELECTOR.





# VSX-95

## 4. PCB's PARTS LIST

### NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|              |                  |          |                                         |
|--------------|------------------|----------|-----------------------------------------|
| 560 $\Omega$ | $56 \times 10^1$ | 561..... | RD1/4PS $\square$ $\square$ $\square$ J |
| 47k $\Omega$ | $47 \times 10^3$ | 473..... | RD1/4PS $\square$ $\square$ $\square$ J |
| 0.5 $\Omega$ | 0R5.....         |          | RN2H $\square$ $\square$ $\square$ K    |
| 1 $\Omega$   | 010.....         |          | RS1P $\square$ $\square$ $\square$ K    |

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

|                |                   |           |                                                   |
|----------------|-------------------|-----------|---------------------------------------------------|
| 5.62k $\Omega$ | $562 \times 10^1$ | 5621..... | RN1/4SR $\square$ $\square$ $\square$ $\square$ F |
|----------------|-------------------|-----------|---------------------------------------------------|

| Mark No.                          | Description    | Parts No.  | Mark No.          | Description       | Parts No.   |
|-----------------------------------|----------------|------------|-------------------|-------------------|-------------|
| <b>● TUNER assembly (AWE1160)</b> |                |            | <b>CAPACITORS</b> |                   |             |
| <b>SEMICONDUCTORS</b>             |                |            | C401              | CERAMIC CAPACITOR | CCDRH330J50 |
| IC431                             | AM/FM IC       | LA1265S    | C402              | CERAMIC CAPACITOR | CCDRH390J50 |
| IC451                             | MPX IC         | AN7470P    | C403              | CERAMIC CAPACITOR | ACG1021     |
| IC471                             | PLL IC         | LM7001     |                   | (0.01 $\mu$ F)    |             |
|                                   |                |            | C404, 405         | CERAMIC CAPACITOR | CCDRH330J50 |
| Q401                              | MOS-FET        | 2SK241     | C406              | CERAMIC CAPACITOR | CCDCH020C50 |
| Q402                              | TRANSISTOR     | 2SC2786    | C409              | CERAMIC CAPACITOR | ACG1017     |
| Q403                              | TRANSISTOR     | 2SC2668    |                   | (100p)            |             |
| Q405                              | N-FET          | 2SK161     | C410-412          | CERAMIC CAPACITOR | ACG1021     |
| Q421                              | TRANSISTOR     | 2SC2668    |                   | (0.01 $\mu$ F)    |             |
|                                   |                |            | C413              | CERAMIC CAPACITOR | CCDCH150J50 |
| Q451                              | TRANSISTOR     | 2SC2603    | C414              | CERAMIC CAPACITOR | CCDCH330J50 |
| Q452, 453                         | TRANSISTOR     | 2SC1740S   |                   |                   |             |
| Q454                              | TRANSISTOR     | 2SA933S    | C415              | CERAMIC CAPACITOR | CCDCH080D50 |
| Q471                              | N-FET          | 2SK246     | C416              | CERAMIC CAPACITOR | CCDTH180J50 |
| Q472                              | TRANSISTOR     | 2SC1740SLN | C417              | CERAMIC CAPACITOR | CCDCH010C50 |
|                                   |                |            | C418, 419         | CERAMIC CAPACITOR | ACG1021     |
| Q473, 474                         | TRANSISTOR     | RN2201     |                   | (0.01 $\mu$ F)    |             |
| D401-403                          | VARI-CAP DIODE | 1SV147     | C420              | ELECTR.CAPACITOR  | CEAS100M50  |
| D431-435                          | DIODE          | 1SS252     |                   |                   |             |
| <b>COILS &amp; TRANSFORMERS</b>   |                |            | C421, 422         | CERAMIC CAPACITOR | ACG1021     |
| F421                              | CERAMIC FILTER | ATF-107    |                   | (0.01 $\mu$ F)    |             |
| F422                              | CERAMIC FILTER | ATF-119    | C433              | ELECTR.CAPACITOR  | CEAS4R7M50  |
| F431                              | CERAMIC FILTER | ATF1042    | C435              | CERAMIC CAPACITOR | CKCYF472Z50 |
| F461                              | FILTER         | ATF-164    | C436              | CERAMIC CAPACITOR | CKCYX683M25 |
|                                   |                |            | C437              | ELECTR.CAPACITOR  | CEAS100M50  |
| L401                              | COIL           | ATC1001    |                   |                   |             |
| L402                              | COIL           | ATC1002    | C438              | ELECTR.CAPACITOR  | CEAS2R2M50  |
| L403                              | COIL           | ATC1004    | C439, 440         | CERAMIC CAPACITOR | CKCYF223Z50 |
| L404                              | COIL           | ATC1005    |                   | CERAMIC CAPACITOR | ACG1022     |
| L405                              | COIL           | ATC1003    |                   | (0.022 $\mu$ F)   |             |
|                                   |                |            | C442              | ELECTR.CAPACITOR  | CEAS0R1M50  |
| L406, 407                         | AXIAL INDUCTOR | LAU2R2M    | C443              | ELECTR.CAPACITOR  | CEAS3R3M50  |
|                                   |                |            |                   |                   |             |
| T402                              | IF TRANSFORMER | ATE-063    | C444              | CERAMIC CAPACITOR | ACG1018     |
| T431                              | IF TRANSFORMER | ATE1001    |                   | (330p)            |             |
| T432                              | IF TRANSFORMER | ATE1002    | C445              | CERAMIC CAPACITOR | ACG1016     |
|                                   |                |            |                   | (47p)             |             |

| Mark No.         | Description                       | Parts No.   |
|------------------|-----------------------------------|-------------|
| C446, 447        | MYLOR FILM CAPACITOR              | CQMA561J50  |
| C451             | ELECTR.CAPACITOR                  | CEAS101M16  |
| C452             | ELECTR.CAPACITOR                  | CEANP4R7M35 |
| C453             | CERAMIC CAPACITOR                 | CKCYF473Z50 |
| C454             | CAPACITOR (470p)                  | ACE1039     |
| C455             | ELECTR.CAPACITOR                  | CEAS3R3M50  |
| C456             | ELECTROLYTIC CAPACIT              | CEAS1R5M50  |
| C457             | ELECTR.CAPACITOR                  | CEASR22M50  |
| C458             | ELECTR.CAPACITOR                  | CEAS470M16  |
| C459, 460        | MYLOR FILM CAPACITOR              | CQMA102J50  |
| C461, 462        | ELECTR.CAPACITOR                  | CEAS4R7M50  |
| C463, 464        | ELECTR.CAPACITOR                  | CEAS470M16  |
| C465             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| C466             | CERAMIC CAPACITOR                 | CCCSL121J50 |
| C471             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| C472             | CERAMIC CAPACITOR (0.022 $\mu$ F) | ACG1022     |
| C473             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| C475             | ELECTR.CAPACITOR                  | CEAS100M50  |
| C476             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| C477             | CERAMIC CAPACITOR                 | CKCYF103Z50 |
| C478             | AUDIO FILM CAPACITOR              | CFTXA224J50 |
| C479             | CERAMIC CAPACITOR (22p)           | ACG1025     |
| C480             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| C481, 482        | CERAMIC CAPACITOR                 | CCDCH150J50 |
| C483             | CERAMIC CAPACITOR (100p)          | ACG1017     |
| C484             | ELECTR.CAPACITOR                  | CEAS470M16  |
| C485             | CERAMIC CAPACITOR (0.01 $\mu$ F)  | ACG1021     |
| <b>RESISTORS</b> |                                   |             |
| VR431            | VR (10K)                          | ACP1025     |
| VR432            | VR                                | VRTS6VS153  |
| VR451            | VR (4.7K)                         | ACP1024     |
|                  | Other resistors                   | RD1/8PM□□□J |
| <b>OTHERS</b>    |                                   |             |
|                  | ANTENNA TERMINAL 4-P              | AKA1014     |
|                  | AM RF TUNING BLOCK                | AXX1011     |
| X431             | CERAMIC RESONATOR                 | ATF1027     |
| X471             | CRYSTAL RESONATOR                 | ASS1005     |

| Mark No.                                             | Description      | Parts No.    |
|------------------------------------------------------|------------------|--------------|
| <b>● PS. <math>\mu</math>-COM assembly (AWZ3571)</b> |                  |              |
| <b>SEMICONDUCTORS</b>                                |                  |              |
| IC104                                                | REGULATOR IC     | NJM78M12FAS  |
| IC105                                                | REGULATOR IC     | NJM78M05FD   |
| IC107                                                | REGULATOR IC     | NJM78M56FAS  |
| IC108                                                | REGULATOR IC     | NJM79M05FA   |
| IC1801-1803                                          | OP-AMP IC        | NJM4558S-X   |
| IC1851                                               | CONTROL MCU      | PDG073A      |
| IC1852                                               | REGULATOR IC     | M5278L56 (A) |
| IC1853                                               | PORT-EXPANDER IC | CXD1067P     |
| IC51                                                 | OP-AMP-IC        | M5220P       |
| IC801                                                | LOGIC IC         | BU4066BL     |
| IC802                                                | E-VR IC          | TC9176P      |
| IC803, 804                                           | OP-AMP IC        | M5220L       |
| Q101                                                 | TRANSISTOR       | XDC143ES     |
| Q102                                                 | TRANSISTOR       | XDA143ES     |
| Q103                                                 | TRANSISTOR       | XDC143ES     |
| Q1301, 1302                                          | TRANSISTOR       | 2SC2458      |
| Q1303                                                | TRANSISTOR       | 2SA1048      |
| Q1304-1306                                           | TRANSISTOR       | 2SC2458      |
| Q1307                                                | TRANSISTOR       | 2SC3377      |
| Q1308-1312                                           | TRANSISTOR       | XDC143ES     |
| Q1331-1335                                           | TRANSISTOR       | XDA143ES     |
| Q1337                                                | TRANSISTOR       | 2SA1048      |
| Q1351, 1352                                          | TRANSISTOR       | 2SC3298      |
| Q1353, 1354                                          | TRANSISTOR       | 2SA1306      |
| Q1851                                                | TRANSISTOR       | XDC124ES     |
| Q1863, 1864                                          | TRANSISTOR       | 2SA1048      |
| Q1865                                                | TRANSISTOR       | 2SC2458      |
| Q71-73                                               | TRANSISTOR       | 2SC2458      |
| Q801                                                 | TRANSISTOR       | XDA124ES     |
| Q802                                                 | TRANSISTOR       | XDC124ES     |
| Q803-808                                             | TRANSISTOR       | 2SC3327      |
| Q811, 812                                            | TRANSISTOR       | XDA124ES     |
| D101                                                 | DIODE            | D5SB20       |
| D107-110                                             | DIODE            | 1SR139-400   |
| D115                                                 | DIODE            | 1SS252       |
| D116                                                 | ZENER DIODE      | RD4.7ESB     |
| D117                                                 | DIODE            | 1SS252       |
| D119                                                 | ZENER DIODE      | RD7.5ESB     |
| D1301-1305                                           | DIODE            | 1SS252       |
| D131, 1311                                           | DIODE            | 1SS252       |
| D1312                                                | ZENER DIODE      | RD4.7ESB     |
| D1313, 1314                                          | DIODE            | 1SS252       |
| D1315, 1316                                          | DIODE            | 1SR139-400   |
| D132, 133                                            | DIODE            | 1SR139-400   |
| D134                                                 | DIODE            | 1SS252       |
| D1801-1810                                           | DIODE            | 1SS252       |
| D1811-1815                                           | ZENER DIODE      | RD5.6ESB3    |



| Mark No.                       | Description          | Parts No.    | Mark No.         | Description          | Parts No.    |
|--------------------------------|----------------------|--------------|------------------|----------------------|--------------|
| D1850                          | DIODE                | 1SS252       | C1360, 1361      | POLYESTER CAPACITOR  | CQMXA103J100 |
| D1856-1858                     | DIODE                | 1SS252       | C1801-1805       | ELECTR.CAPACITOR     | CEASR47M50   |
| D1861-1863                     | DIODE                | 1SS252       | C1851            | ELECTR.CAPACITOR     | CEAS0R1M50   |
| D1864                          | ZENER DIODE          | RD5.1ESB2    | C1852            | ELECTR.CAPACITOR     | CEAS4R7M50   |
| D1871                          | DIODE                | 1SR139-400   | C1856, 1857      | CERAMIC CAPACITOR    | CKCYF103Z50  |
| D71, 72                        | DIODE                | 1SS252       | C1871            | ELECTR.CAPACITOR     | CEAS101M10   |
| D801                           | ZENER DIODE          | RD5.1ESB     | C1872            | CEA (47000/5.5V)     | ACH1037      |
| D802                           | ZENER DIODE          | RD5.1ESB1    | C1873            | ELECTR.CAPACITOR     | CEAS4R7M50   |
| D804, 805                      | DIODE                | 1SS252       | C1899            | ELECTR.CAPACITOR     | CEAS470M16   |
| D807-809                       | DIODE                | 1SS252       | C51, 52          | ELECTR.CAPACITOR     | CEAS100M25   |
| <b>RELAYS</b>                  |                      |              | C53, 54          | CERAMIC CAPACITOR    | CKCYB331K50  |
| RY102                          | RELAY                | ASR-512      | C55, 56          | ELECTROLYTIC CAPACIT | CEAS471M6    |
| RY1301, 1302                   | RELAY                | ASR-112      | C57, 58          | AUDIO FILM CAPACITOR | CFTXA243J50  |
| RY1303, 1304                   | RELAY                | ASR1035      | C59, 60          | AUDIO FILM CAPACITOR | CFTXA823J50  |
| RY1305                         | RELAY                | ASR1005      | C61, 62          | ELECTR.CAPACITOR     | CEAS2R2M50   |
| RY1306                         | RELAY                | ASR1035      | C63, 64          | ELECTR.CAPACITOR     | CEAS101M16   |
| <b>COILS &amp; TRANSFORMER</b> |                      |              | C71, 72          | ELECTR.CAPACITOR     | CEAS2R2M50   |
| L1301, 1302                    | COIL                 | ATH1004      | C73              | ELECTR.CAPACITOR     | CEAS101M10   |
| L1303, 1304                    | COIL                 | ATH1011      | C801, 802        | ELECTR.CAPACITOR     | CEAS4R7M50   |
| L1305                          | COIL                 | ATH1004      | C805, 806        | CERAMIC CAPACITOR    | CCCSL470J50  |
| L1871                          | AXIAL INDUCTOR       | LAU100K      | C807-810         | ELECTR.CAPACITOR     | CEAS4R7M50   |
| T101                           | POWER TRANSFORMER    | ATT1121      | C811, 812        | CERAMIC CAPACITOR    | CKCYB331K50  |
| <b>CAPACITORS</b>              |                      |              | C813, 814        | ELECTR.CAPACITOR     | CEAS4R7M50   |
| C101                           | CAPACITOR (8200/81)  | ACH1201      | C815, 816        | ELECTR.CAPACITOR     | CEAS470M16   |
| C102                           | CAPACITOR (8200/81)  | ACH1202      | C817-820         | ELECTR.CAPACITOR     | CEAS4R7M50   |
| C108, 109                      | CKA (0.01/AC400V)    | ACG1003      | <b>RESISTORS</b> |                      |              |
| C110                           | ELECTR.CAPACITOR     | CEAS222M16   | VR51             | VR                   | ACS1060      |
| C111                           | ELECTR.CAPACITOR     | CEAS471M16   | R101, 105        | CARBON FILM RESISTOR | RD1/4PMF4R7J |
| C112                           | ELECTR.CAPACITOR     | CEAS102M16   | R107, 110        | CARBON FILM RESISTOR | RD1/4PMF100J |
| C113, 114                      | CERAMIC CAPACITOR    | CKCYF473Z50  | R111             | CARBON FILM RESISTOR | RD1/4PMF122J |
| C115, 116                      | ELECTR.CAPACITOR     | CEAS101M10   | R112             | METAL OXIDE RESISTOR | RS2LMF2R2J   |
| C117                           | CERAMIC CAPACITOR    | CKCYF473Z50  | R113             | METAL OXIDE RESISTOR | RS2LMF100J   |
| C118                           | ELECTR.CAPACITOR     | CEAS101M10   | R115             | CARBON FILM RESISTOR | RD1/4PMF100J |
| C124                           | CERAMIC CAPACITOR    | CKCYF103Z50  | R116, 117        | METAL OXIDE RESISTOR | RS2LMF150J   |
| C126                           | ELECTR.CAPACITOR     | CEAS470M16   | R118             | FUSIBLE RESISTOR     | RFA1/4PS4R7J |
| C127                           | CKA (0.01/AC250V)    | ACG1005      | R1351-1354       | CARBON FILM RESISTOR | RD1/4PMF101J |
| C128, 129                      | ELECTR.CAPACITOR     | CEAS470M16   | R1355-1358       | CARBON FILM RESISTOR | RD1/4PMF470J |
| C1301                          | ELECTROLYTIC CAPACIT | CEAS471M6    | R1359, 1360      | FUSIBLE RESISTOR     | RFA1/4PS4R7J |
| C1302                          | CERAMIC CAPACITOR    | CKCYF103Z50  | R1361-1364       | CARBON FILM RESISTOR | RD1/4PMF4R7J |
| C1303                          | CERAMIC CAPACITOR    | CKCYF473Z50  | R1365, 1366      | FUSIBLE RESISTOR     | RFA1/4PS4R7J |
| C1304                          | ELECTR.CAPACITOR     | CEAS221M10   | R1367, 1368      | RESISTOR (0.33, 5W)  | ACN1087      |
| C1305                          | ELECTR.CAPACITOR     | CEAS010M50   |                  |                      |              |
| C1309                          | AUDIO FILM CAPACITOR | CFTXA104J50  |                  |                      |              |
| C131                           | ELECTR.CAPACITOR     | CEAS471M10   |                  |                      |              |
| C1310-1312                     | AUDIO FILM CAPACITOR | CFTXA104J50  |                  |                      |              |
| C1351-1354                     | CERAMIC CAPACITOR    | CCDSL101K500 |                  |                      |              |
| C1355, 1356                    | AUDIO FILM CAPACITOR | CFTXA104J50  |                  |                      |              |
| C1358                          | AUDIO FILM CAPACITOR | CFTXA104J50  |                  |                      |              |

| Mark No.    | Description           | Parts No.    |
|-------------|-----------------------|--------------|
| R1369, 1370 | METAL OXIDE RESISTOR  | RS2LMF331J   |
| R1371-1374  | METAL OXIDE RESISTOR  | RS1LMF100J   |
| R1375-1380  | CARBON FILM RESISTOR  | RD1/4PMF100J |
| R1865       | CARBON FILM RESISTOR  | RD1/4PM222J  |
| R819, 820   | CARBON FILM RESISTOR  | RD1/4PMF102J |
| R999        | RESISTOR (2.2M, 1/2W) | ACN-209      |
|             | Other resistors       | RD1/8PM□□□J  |

## OTHERS

|          |                     |         |
|----------|---------------------|---------|
|          | TERMINAL 4P         | AKB1141 |
|          | SPEAKER TERMINAL 8P | AKE1011 |
|          | JACK (CONTROL)      | AKN1006 |
|          | JACK (REMOTE)       | AKN1020 |
|          | AC OUTLET (3P)      | AKP1053 |
| CN13     | CONNECTOR (4P)      | KPC4    |
| CN16     | CONNECTOR (7P)      | KPC7    |
| CN26     | CONNECTOR (4P)      | KPC4    |
| CN27     | JUMPER CONNECTOR    | KPC6    |
| CN28     | CONNECTOR (15P)     | KPE15   |
| CN29     | CONNECTOR (14P)     | KPE14   |
| CN31     | CONNECTOR (3P)      | KPE3    |
| CN32, 33 | CONNECTOR (9P)      | KPE9    |
| CN34     | CONNECTOR (13P)     | KPE13   |
| CN59     | CONNECTOR (11P)     | KPE11   |
| CN60     | CONNECTOR (9P)      | KPE9    |
| CN61     | CONNECTOR (10P)     | KPE10   |
| X1851    | CRYSTAL RESONATOR   | ASS1015 |
|          | FRONT AMP ASSEMBLY  | AWH1014 |

| Mark No.   | Description                   | Parts No.    |
|------------|-------------------------------|--------------|
| CAPACITORS |                               |              |
| C601, 602  | CERAMIC CAPACITOR             | CCCSL221J50  |
| C603, 604  | ELECTR. CAPACITOR             | CEAS2R2M50   |
| C605, 606  | CERAMIC CAPACITOR             | CKCYB331K50  |
| C607, 608  | ELECTROLYTIC CAPACIT          | CEXA471M16   |
| C609, 610  | MICA CAPACITOR                | CMA150J500   |
| C611, 612  | CERAMIC CAPACITOR             | CCCSL020C500 |
| C613, 614  | CERAMIC CAPACITOR             | CCCSL680J50  |
| C615, 616  | CERAMIC CAPACITOR             | CCCSL151J50  |
| C617, 618  | CERAMIC CAPACITOR             | CCCSL680J50  |
| C625-628   | CERAMIC CAPACITOR (0.047/150) | ACG-009      |
| C661, 662  | ELECTROLYTIC CAPACIT          | CEANP010M100 |
| RESISTORS  |                               |              |
| R601-604   | CARBON FILM RESISTOR          | RD1/4PM□□□J  |
| R605, 606  | CARBON FILM RESISTOR          | RDR1/4PM223J |
| R607-612   | CARBON FILM RESISTOR          | RD1/4PM□□□J  |
| R613-616   | FUSIBLE RESISTOR              | RFA1/4PS101J |
| R617, 618  | CARBON FILM RESISTOR          | RDR1/4PM751J |
| R619, 620  | CARBON FILM RESISTOR          | RDR1/2PM223J |
| R621, 622  | FUSIBLE RESISTOR              | RFA1/4PS121J |
| R623, 624  | CARBON FILM RESISTOR          | RD1/4PM104J  |
| R625, 625  | FUSIBLE RESISTOR              | RFA1/4PS470J |
| R637-640   | CARBON FILM RESISTOR          | RD1/4PMF470J |
| R661-664   | CARBON FILM RESISTOR          | RD1/4PMF222J |
|            | Other resistors               | RD1/8PM□□□J  |

## ● FRONT AMP assembly (AWH1014)

The FRONT AMP assembly (AWH1014) is a part of PS.  $\mu$ -COM assembly (AWZ3571).

## SEMICONDUCTORS

|            |             |         |
|------------|-------------|---------|
| IC601, 602 | AUDIO IC    | PA0045  |
| Q603, 604  | TRANSISTOR  | 2SC2240 |
| Q605, 606  | TRANSISTOR  | 2SA970  |
| Q607, 608  | TRANSISTOR  | 2SA1145 |
| Q609, 610  | TRANSISTOR  | 2SC2705 |
| Q621-624   | TRANSISTOR  | 2SA992  |
| Q661, 662  | TRANSISTOR  | 2SC2240 |
| D601-612   | DIODE       | 1SS252  |
| D661-666   | DIODE       | 1SS252  |
| D670-673   | ZENER DIODE | RD12ESB |

## ● R.C.REG. POWER SUPPLY assembly (AWZ3572)

## SEMICONDUCTORS

|          |       |            |
|----------|-------|------------|
| D102     | DIODE | 4D4B4      |
| D111-114 | DIODE | 1SR13)-400 |

## CAPACITORS

|           |                                |            |
|-----------|--------------------------------|------------|
| C104, 105 | ELECTROLYTIC CAPACIT (6800/42) | ACH1110    |
| C106      | ELECTR. CAPACITOR              | CEAS32M25  |
| C107      | ELECTROLYTIC CAPACIT           | CEAS102M35 |



**SX-95**

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

● **TRANS assembly (AWZ3573)****RESISTORS**

|           |                      |              |
|-----------|----------------------|--------------|
| R122, 123 | CARBON FILM RESISTOR | RD1/4PMF010J |
|-----------|----------------------|--------------|

**FRONT VIDEO assembly****CAPACITORS**

|             |                   |             |
|-------------|-------------------|-------------|
| C1991, 1992 | CERAMIC CAPACITOR | CKCYX473M25 |
|-------------|-------------------|-------------|

**RESISTORS**

|               |             |
|---------------|-------------|
| All resistors | RD1/8PM□□□J |
|---------------|-------------|

**OTHERS**

|                     |         |
|---------------------|---------|
| PIN JACK 1P (VCR 3) | AKB1082 |
| SOCKET (S VIDEO)    | AKP1067 |

● **R.C.SPEAKER assembly (AWZ3566)****OTHERS**

|                      |         |
|----------------------|---------|
| SPEAKER TERMINAL 2-P | AKE-058 |
| SPEAKER TERMINAL 4-P | AKE1007 |
| CN20 CONNECTOR (9P)  | KPC9    |

● **MOTOR VOLUME assembly (AWZ3567)****SEMICONDUCTORS**

|       |                     |          |
|-------|---------------------|----------|
| IC501 | OP-AMP IC           | M5220L   |
| IC502 | E-VR IC             | TC9154AP |
| IC503 | OP-AMP IC           | M5220L   |
| IC505 | MECHANISM DRIVER IC | TA7291S  |

|      |            |          |
|------|------------|----------|
| Q501 | TRANSISTOR | XDC124ES |
|------|------------|----------|

|           |             |          |
|-----------|-------------|----------|
| D502      | DIODE       | 1SS252   |
| D503, 504 | ZENER DIODE | RD4.7ESB |
| D551, 552 | ZENER DIODE | RD5.1ESB |

**COILS**

|           |                |         |
|-----------|----------------|---------|
| L541, 542 | AXIAL INDUCTOR | LAU560K |
|-----------|----------------|---------|

**CAPACITORS**

|           |                   |             |
|-----------|-------------------|-------------|
| C501, 502 | ELECTR.CAPACITOR  | CEAS100M50  |
| C503, 504 | CERAMIC CAPACITOR | CCCSL560J50 |
| C507, 508 | ELECTR.CAPACITOR  | CEAS4R7M50  |
| C510      | CERAMIC CAPACITOR | CCCSL560J50 |
| C511, 512 | ELECTR.CAPACITOR  | CEAS4R7M50  |

|           |                   |             |
|-----------|-------------------|-------------|
| C513      | CERAMIC CAPACITOR | CCCSL221J50 |
| C541      | ELECTR.CAPACITOR  | CEAS100M50  |
| C542, 543 | CERAMIC CAPACITOR | CKCYF473Z50 |

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

|           |                  |            |
|-----------|------------------|------------|
| C544      | ELECTR.CAPACITOR | CEAS221M16 |
| C551, 552 | ELECTR.CAPACITOR | CEAS470M16 |

|      |                  |            |
|------|------------------|------------|
| C560 | ELECTR.CAPACITOR | CEAS010M50 |
|------|------------------|------------|

**RESISTORS**

|       |    |         |
|-------|----|---------|
| VR501 | VR | ACX1056 |
|-------|----|---------|

|           |                      |             |
|-----------|----------------------|-------------|
| R552, 559 | CARBON FILM RESISTOR | RD1/4PM821J |
|-----------|----------------------|-------------|

|                 |             |
|-----------------|-------------|
| Other resistors | RD1/8PM□□□J |
|-----------------|-------------|

● **FRONT CONTROL assembly (AWZ3569)****SEMICONDUCTORS**

|        |                    |         |
|--------|--------------------|---------|
| IC1901 | SYSTEM CONTROL MCU | PDG072A |
|--------|--------------------|---------|

|             |            |          |
|-------------|------------|----------|
| Q1901-1918  | TRANSISTOR | XDC143ES |
| Q1919       | TRANSISTOR | XDC124ES |
| Q1920       | TRANSISTOR | XDC143ES |
| Q1931, 1932 | TRANSISTOR | 2SC2458  |

|             |           |         |
|-------------|-----------|---------|
| D1901-1911  | DIODE     | 1SS252  |
| D1912, 1913 | LED       | AEL1113 |
| D1914-1918  | LED       | AEL1100 |
| D1919       | LED (RED) | AEL1108 |
| D1921-1924  | DIODE     | 1SS252  |

|       |       |        |
|-------|-------|--------|
| D1931 | DIODE | 1SS252 |
|-------|-------|--------|

**SWITCHES**

|            |        |         |
|------------|--------|---------|
| S1901-1966 | SWITCH | ASG1034 |
|------------|--------|---------|

|       |                |         |
|-------|----------------|---------|
| S1970 | ROTARY ENCODER | ASX1008 |
|-------|----------------|---------|

**COIL**

|       |                |         |
|-------|----------------|---------|
| L1901 | AXIAL INDUCTOR | LAU100K |
|-------|----------------|---------|

**CAPACITORS**

|       |                         |              |
|-------|-------------------------|--------------|
| C1901 | ELECTR.CAPACITOR        | CEJA220M10   |
| C1902 | AXIAL CERAMIC CAPACITOR | CKPUYF103Z25 |
| C1903 | ELECTR.CAPACITOR        | CEAS010M50   |

**RESISTORS**

|            |                      |             |
|------------|----------------------|-------------|
| R1920-1926 | CARBON FILM RESISTOR | RD1/4PM151J |
|------------|----------------------|-------------|

|       |                      |             |
|-------|----------------------|-------------|
| R1927 | CARBON FILM RESISTOR | RD1/4PM271J |
|-------|----------------------|-------------|

|                 |             |
|-----------------|-------------|
| Other resistors | RD1/8PM□□□J |
|-----------------|-------------|

**OTHERS**

|                      |         |
|----------------------|---------|
| FL SPACER            | AEB1120 |
| REMOTE RECEIVER UNIT | AXX1010 |

| Mark No. | Description           | Parts No. |
|----------|-----------------------|-----------|
| CN1901   | CONNECTOR (4P)        | KPC4      |
| V1901    | FL TUBE               | AAV1123   |
| X1901    | CERAMIC<br>OSCILLATOR | ASS1022   |

| Mark No.    | Description    | Parts No. |
|-------------|----------------|-----------|
| L1103, 1104 | FERRITE BEAD   | ATX1008   |
| L1131       | FERRITE BEAD   | ATX1008   |
| L1151, 1152 | AXIAL INDUCTOR | LAU330K   |
| L1161       | AXIAL INDUCTOR | LAU330K   |
| L1162       | FERRITE BEAD   | ATX1008   |
| L1181-1185  | FERRITE BEAD   | ATX1008   |
| L1241, 1242 | FERRITE BEAD   | ATX1008   |
| L1251, 1252 | FERRITE BEAD   | ATX1008   |
| L1186       | FERRITE BEAD   | ATX1008   |

### ● DSP assembly (AWZ3570)

#### SEMICONDUCTORS

|              |                   |             |
|--------------|-------------------|-------------|
| IC1101       | OP-AMP IC         | RC4558DXP   |
| IC1102       | OP AMP            | M5238PF     |
| IC1103       | A/D CONVERTER     | LC7886      |
| IC1104       | DSP IC            | LC83010NPD  |
| IC1105, 1106 | MEMORY IC         | MS51464-12Z |
| IC1107-1109  | IC DIGITAL FILTER | PD0060      |
| IC1110       | D/A CONVERTER     | LC78820-B   |
| IC1111       | IC                | NJM072D-E   |
| IC1112       | OP-AMP IC         | RC4558DXP   |
| IC1113       | IC                | PCM56P      |
| IC1114       | IC                | RC4558DXP   |
| IC1115       | D/A CONVERTER     | UPD6376CX   |
| IC1116       | IC                | RC4558DXP   |
| IC1117       | OP-AMP IC         | RC4558DXP   |
| IC1118       | LOGIC IC          | TC4052BP    |
| IC1119       | OP-AMP IC         | RC4558DXP   |
| IC1120       | LOGIC IC          | TC4066BP    |
| IC1121, 1122 | OP-AMP IC         | RC4558DXP   |
| IC1123       | LOGIC IC          | TC4066BP    |
| IC1124       | DOLBY-B IC        | LA2730      |
| IC1125       | OP-AMP IC         | RC4558DXP   |
| Q1131        | TRANSISTOR        | 2SC2458     |
| Q1181        | TRANSISTOR        | XDA124ES    |
| Q1182        | TRANSISTOR        | 2SA1048     |
| Q1183        | TRANSISTOR        | XDC124ES    |
| Q1184        | TRANSISTOR        | 2SA1048     |
| Q1185        | TRANSISTOR        | 2SC3327     |
| Q1186        | TRANSISTOR        | XDA124ES    |
| Q1201        | TRANSISTOR        | XDC143ES    |
| Q1202, 1203  | N-FET             | 2SK373      |
| Q1251        | TRANSISTOR        | XDA124ES    |
| Q1252        | TRANSISTOR        | XDC124ES    |
| Q1253, 1254  | TRANSISTOR        | 2SC3327     |
| D1101-1105   | DIODE             | 1SS252      |
| D1111-1114   | DIODE             | 1SS252      |
| D1201, 1202  | DIODE             | 1SS252      |

#### COILS

|             |        |         |
|-------------|--------|---------|
| F1101, 1102 | FILTER | ATF1071 |
| F1103, 1104 | FILTER | ATF1106 |
| F1105       | FILTER | ATF1102 |
| F1106       | FILTER | ATF1106 |

#### CAPACITORS

|             |                         |             |
|-------------|-------------------------|-------------|
| C1101, 1102 | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1103, 1104 | ELECTR.CAPACITOR        | CEAS470M16  |
| C1105, 1106 | CERAMIC CAPACITOR       | CKDYB102K50 |
| C1107, 1108 | ELECTR.CAPACITOR        | CEAS100M25  |
| C1109, 1110 | MYLOR FILM<br>CAPACITOR | CQMA153J50  |
| C1113, 1114 | CERAMIC CAPACITOR       | CKDYB222K50 |
| C1115       | CERAMIC CAPACITOR       | CKDYX104M25 |
| C1116       | ELECTR.CAPACITOR        | CEAS470M10  |
| C1117       | CERAMIC CAPACITOR       | CKDYB471K50 |
| C1118       | ELECTR.CAPACITOR        | CEAS470M10  |
| C1119       | CERAMIC CAPACITOR       | CKDYX104M25 |
| C1120-1122  | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1123       | ELECTR.CAPACITOR        | CEAS101M10  |
| C1131       | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1132       | ELECTR.CAPACITOR        | CEAS470M10  |
| C1133       | ELECTR.CAPACITOR        | CEAS221M10  |
| C1134       | ELECTR.CAPACITOR        | CEAS101M16  |
| C1137, 1138 | ELECTR.CAPACITOR        | CEAS220M25  |
| C1139, 1140 | MYLOR FILM<br>CAPACITOR | CQMA821J50  |
| C1141, 1142 | MYLOR FILM<br>CAPACITOR | CQMA222J50  |
| C1143, 1144 | CERAMIC CAPACITOR       | CCDCH121J50 |
| C1145, 1146 | MYLOR FILM<br>CAPACITOR | CQMA223J50  |
| C1150-1153  | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1154, 1155 | ELECTR.CAPACITOR        | CEAS101M10  |
| C1156       | MYLOR FILM<br>CAPACITOR | CQMA223J50  |
| C1157       | MYLOR FILM<br>CAPACITOR | CQMA821J50  |
| C1158       | MYLOR FILM<br>CAPACITOR | CQMA222J50  |
| C1159       | CERAMIC CAPACITOR       | CCDCH121J50 |
| C1160       | ELECTR.CAPACITOR        | CEAS220M25  |
| C1161       | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1162-1165  | ELECTR.CAPACITOR        | CEAS470M10  |
| C1166       | CERAMIC CAPACITOR       | CKDYX473M25 |
| C1167       | CERAMIC CAPACITOR       | CKDYB471K50 |
| C1169, 1170 | MYLOR FILM<br>CAPACITOR | CQMA821J50  |
| C1171, 1172 | CERAMIC CAPACITOR       | CCDCH121J50 |
| C1173, 1174 | MYLOR FILM<br>CAPACITOR | CQMA222J50  |



VSX-95

| Mark No.    | Description          | Parts No.   |
|-------------|----------------------|-------------|
| C1175, 1176 | ELECTR.CAPACITOR     | CEAS220M25  |
| C1177, 1178 | MYLOR FILM CAPACITOR | CQMA223J50  |
| C1181, 1182 | CERAMIC CAPACITOR    | CCDCH101J50 |
| C1183-1186  | ELECTR.CAPACITOR     | CEAS220M25  |
| C1187, 1188 | MYLOR FILM CAPACITOR | CQMA152K50  |
| C1189, 1190 | CERAMIC CAPACITOR    | CCDCH101J50 |
| C1194       | AUDIO FILM CAPACITOR | CFTXA274J50 |
| C1195       | ELECTR.CAPACITOR     | CEAS220M25  |
| C1196       | CERAMIC CAPACITOR    | CCDCH101J50 |
| C1197       | ELECTR.CAPACITOR     | CEAS220M25  |
| C1198       | MYLOR FILM CAPACITOR | CQMA152K50  |
| C1199       | ELECTR.CAPACITOR     | CEANP2R2M50 |
| C1201, 1202 | ELECTR.CAPACITOR     | CEAS470M10  |
| C1203, 1204 | CERAMIC CAPACITOR    | CCDCH560J50 |
| C1211       | CERAMIC CAPACITOR    | CKDYX473M25 |
| C1212       | CERAMIC CAPACITOR    | CKDYB102K50 |
| C1214       | CERAMIC CAPACITOR    | CKDYX473M25 |
| C1234, 1235 | CERAMIC CAPACITOR    | CKDYB102K50 |
| C1236-1239  | CERAMIC CAPACITOR    | CCDCH101J50 |
| C1240       | ELECTR.CAPACITOR     | CEAS101M10  |
| C1241       | CERAMIC CAPACITOR    | CKDYX473M25 |
| C1242       | CERAMIC CAPACITOR    | CKDYB102K50 |
| C1243, 1244 | CERAMIC CAPACITOR    | CCDCH100D50 |
| C1245       | CERAMIC CAPACITOR    | CKDYX473M25 |
| C1246       | CERAMIC CAPACITOR    | CKDYB102K50 |
| C1247       | ELECTR.CAPACITOR     | CEAS101M10  |
| C1248       | CERAMIC CAPACITOR    | CKDYX104M25 |
| C1249       | CERAMIC CAPACITOR    | CCDCH101J50 |
| C1251       | MYLOR FILM CAPACITOR | CQMA472J50  |
| C1252       | MYLOR FILM CAPACITOR | CQMA122J50  |
| C1254       | ELECTR.CAPACITOR     | CEAS220M16  |
| C1255       | ELECTR.CAPACITOR     | CEAS470M25  |
| C1256       | ELECTR.CAPACITOR     | CEAS100M25  |
| C1257       | MYLOR FILM CAPACITOR | CQMA333K50  |
| C1258       | MYLOR FILM CAPACITOR | CQMA472K50  |
| C1259       | ELECTR.CAPACITOR     | CEAS220M16  |
| C1260       | ELECTR.CAPACITOR     | CEAS101M16  |
| C1261       | MYLOR FILM CAPACITOR | CQMA333K50  |
| C1262       | AUDIO FILM CAPACITOR | CFTXA104J50 |
| C1267       | ELECTR.CAPACITOR     | CEAS010M50  |
| C1263       | ELECTR.CAPACITOR     | CEASR33M50  |
| C1264       | CERAMIC CAPACITOR    | CKDYB471K50 |
| C1265, 1266 | ELECTR.CAPACITOR     | CEAS010M50  |
| C1269, 1270 | ELECTR.CAPACITOR     | CEAS220M25  |
| C1271, 1272 | MYLOR FILM CAPACITOR | CQMA152K50  |

| Mark No.         | Description     | Parts No.   |
|------------------|-----------------|-------------|
| <b>RESISTORS</b> |                 |             |
| VR1101, 1102     | VR              | VRTB6VS102  |
| VR1103           | VR              | VRTB6VS104  |
| VR1201           | VR              | VRTB6VS223  |
|                  | Other resistors | RD1/8PM□□□J |

| Mark No.      | Description       | Parts No. |
|---------------|-------------------|-----------|
| <b>OTHERS</b> |                   |           |
| X1101         | CRYSTAL RESONATOR | ASS1035   |

**HEADPHONE assembly**

| Mark No.      | Description      | Parts No. |
|---------------|------------------|-----------|
| <b>OTHERS</b> |                  |           |
|               | JACK (HEADPHONE) | AKN1002   |

**● S. VIDEO assembly (AWZ3564)**

| Mark No.              | Description  | Parts No. |
|-----------------------|--------------|-----------|
| <b>SEMICONDUCTORS</b> |              |           |
| IC1650                | VIDEO SEITCH | LA7952    |
| IC1651                | E-SW IC      | NJM2233BS |
| IC1652                | VIDEO SEITCH | LA7952    |
| IC1653                | E-SW IC      | NJM2233BS |
| IC1654, 1655          | VIDEO SEITCH | LA7952    |
| IC1656, 1657          | E-SW IC      | NJM2234L  |
| IC1658                | LOGIC IC     | BU4066BL  |
| Q1650-1656            | TRANSISTOR   | 2SC2458   |
| Q1657, 1658           | TRANSISTOR   | XDA124ES  |
| Q1659                 | TRANSISTOR   | 2SC2458   |
| Q1662-1664            | TRANSISTOR   | 2SA1048   |
| D1650-1653            | DIODE        | 1SS252    |
| D1655                 | ZENER DIODE  | RD5.1ESB1 |

| Mark No.          | Description       | Parts No.    |
|-------------------|-------------------|--------------|
| <b>CAPACITORS</b> |                   |              |
| C1650-1652        | ELECTR.CAPACITOR  | CEAS4R7M50   |
| C1653-1655        | ELECTR.CAPACITOR  | CEAS470M16   |
| C1657-1659        | ELECTR.CAPACITOR  | CEAS4R7M50   |
| C1660             | ELECTR.CAPACITOR  | CEAS101M10   |
| C1661-1666        | CERAMIC CAPACITOR | CKCYX103M25  |
| C1667-1674        | ELECTR.CAPACITOR  | CEAS470M16   |
| C1675-1677        | ELECTR.CAPACITOR  | CEAS101M16   |
| C1678             | ELECTR.CAPACITOR  | CEAS470M16   |
| C1687             | AXIAL CERAMIC C.  | CCPUSL470J50 |
| C1688             | ELECTR.CAPACITOR  | CEAS4R7M50   |
| C1689             | ELECTR.CAPACITOR  | CEAS470M16   |
| C1690             | CERAMIC CAPACITOR | CKCYF473Z50  |
| C1691             | ELECTR.CAPACITOR  | CEAS470M25   |
| C1692-1694        | AXIAL CERAMIC C.  | CCPUSL470J50 |
| C1695             | ELECTR.CAPACITOR  | CEAS101M10   |
| C1696             | ELECTR.CAPACITOR  | CEAS470M25   |
| C1697, 1698       | CERAMIC CAPACITOR | CCCSL101J50  |
| C1699             | CERAMIC CAPACITOR | CCCSL330J50  |

| Mark No.         | Description   | Parts No.   |
|------------------|---------------|-------------|
| <b>RESISTORS</b> |               |             |
|                  | All resistors | RD1/8PM□□□J |

|               |                  |         |
|---------------|------------------|---------|
| <b>OTHERS</b> |                  |         |
|               | SOCKET (S.TERM.) | AKP1065 |

### ● R.C.AMP assembly (AWZ3568)

#### SEMICONDUCTORS

|           |              |          |
|-----------|--------------|----------|
| IC901-903 | PREDRIVER-IC | UPC1270H |
| Q901-903  | TRANSISTOR   | 2SC2458  |

#### CAPACITORS

|           |                      |             |
|-----------|----------------------|-------------|
| C901, 902 | ELECTR.CAPACITOR     | CEAS2R2M50  |
| C903, 904 | CERAMIC CAPACITOR    | CKMYB102K50 |
| C905, 906 | ELECTROLYTIC CAPACIT | CEHAQ101M10 |
| C907, 908 | CERAMIC CAPACITOR    | CCMSL270J50 |
| C909, 910 | ELECTR.CAPACITOR     | CEHAQ100M50 |
| C911, 912 | AUDIO FILM CAPACITOR | CFTXA333J50 |
| C913, 914 | ELECTROLYTIC CAPACIT | CEAS4R7M100 |
| C915, 916 | ELECTR.CAPACITOR     | CEAS100M50  |
| C917      | ELECTROLYTIC CAPACIT | CEAS4R7M100 |
| C919      | ELECTR.CAPACITOR     | CEAS2R2M50  |
| C920      | CERAMIC CAPACITOR    | CKMYB102K50 |
| C921      | ELECTROLYTIC CAPACIT | CEHAQ101M10 |
| C922      | CERAMIC CAPACITOR    | CCMSL270J50 |
| C923      | ELECTR.CAPACITOR     | CEHAQ100M50 |
| C924      | AUDIO FILM CAPACITOR | CFTXA333J50 |

#### RESISTORS

|           |                     |              |
|-----------|---------------------|--------------|
| R919, 920 | RESISTOR (0.22, 2W) | ACN-131      |
| R929      | RESISTOR (0.22, 2W) | ACN-131      |
| R933-938  | FUSIBLE RESISTOR    | RFA1/4PS4R7J |
|           | Other resistors     | RD1/8PM□□□J  |

### ● REGULATOR 1 assembly (AWZ3574)

#### SEMICONDUCTORS

|       |              |             |
|-------|--------------|-------------|
| IC103 | REGULATOR IC | NJM78M12FAS |
| Q106  | TRANSISTOR   | 2SA1306     |
| D118  | DIODE        | 1SS252      |

#### CAPACITORS

|      |                   |             |
|------|-------------------|-------------|
| C123 | CERAMIC CAPACITOR | CKCYF103Z50 |
| C125 | ELECTR.CAPACITOR  | CEAS470M16  |

| Mark No.                                | Description | Parts No. |
|-----------------------------------------|-------------|-----------|
| <b>● REGULATOR 2 assembly (AWZ3575)</b> |             |           |

#### SEMICONDUCTORS

|       |              |             |
|-------|--------------|-------------|
| IC101 | REGULATOR IC | NJM78M15FAS |
| IC102 | REGULATOR IC | NJM79M15FA  |

#### CAPACITORS

|           |                   |             |
|-----------|-------------------|-------------|
| C119, 120 | CERAMIC CAPACITOR | CKCYF103Z50 |
| C121, 122 | ELECTR.CAPACITOR  | CEAS470M16  |

### ● OSD assembly (AWZ3634)

#### SEMICONDUCTORS

|             |              |              |
|-------------|--------------|--------------|
| IC1501      | TV IC        | UPC1377C     |
| IC1502      | OSD IC       | M50554-003SP |
| IC1503      | REGULATOR IC | UPC78L05     |
| Q1501, 1502 | TRANSISTOR   | 2SC2458      |
| Q1503, 1504 | TRANSISTOR   | 2SA1048      |
| Q1505       | TRANSISTOR   | XDA124ES     |
| Q1506, 1507 | TRANSISTOR   | 2SC2458      |
| Q1508       | TRANSISTOR   | XDC124ES     |
| Q1509       | TRANSISTOR   | XDA124ES     |
| D1501       | ZENER DIODE  | RD5.1ESB1    |
| D1503-1505  | DIODE        | 1SS252       |

#### COILS

|             |                |         |
|-------------|----------------|---------|
| L1501       | AXIAL INDUCTOR | LAU390K |
| L1502       | AXIAL INDUCTOR | LAU150K |
| L1503, 1504 | AXIAL INDUCTOR | LAU270K |

#### CAPACITORS

|             |                      |             |
|-------------|----------------------|-------------|
| TC1501      | CERAMIC TRIMMER      | ACM-020     |
| C1501       | ELECTR.CAPACITOR     | CEAS101M16  |
| C1502       | CERAMIC CAPACITOR    | CCCSL560J50 |
| C1503       | ELECTR.CAPACITOR     | CEAS010M50  |
| C1504       | CERAMIC CAPACITOR    | CKCYB561K50 |
| C1505, 1506 | MYLOR FILM CAPACITOR | CQMA333J50  |
| C1507       | ELECTR.CAPACITOR     | CEAS010M50  |
| C1508       | AUDIO FILM CAPACITOR | CFTXA105J50 |
| C1509       | CERAMIC CAPACITOR    | CKCYF473Z50 |
| C1510       | MYLOR FILM CAPACITOR | CQMA333J50  |
| C1511       | ELECTR.CAPACITOR     | CEAS010M50  |
| C1512       | CERAMIC CAPACITOR    | CKCYB152K50 |
| C1513       | AUDIO FILM CAPACITOR | CFTXA823J50 |
| C1514       | CERAMIC CAPACITOR    | CKCYB472K50 |
| C1515       | PL.STYRENE CAPACITOR | CQSA562J50  |
| C1516       | ELECTR.CAPACITOR     | CEAS2R2M50  |



## /SX-95

| Mark No.         | Description                 | Parts No.    |
|------------------|-----------------------------|--------------|
| C1517            | ELECTR.CAPACITOR            | CEAS101M16   |
| C1518            | CERAMIC CAPACITOR           | CCCSL101J50  |
| C1519            | AUDIO FILM<br>CAPACITOR     | CFTXA104J50  |
| C1520            | ELECTR.CAPACITOR            | CEAS2R2M50   |
| C1521            | ELECTR.CAPACITOR            | CEAS101M10   |
| C1522            | CERAMIC CAPACITOR           | CKCYF103Z50  |
| C1523            | ELECTR.CAPACITOR            | CEAS220M25   |
| C1524, 1525      | CERAMIC CAPACITOR           | CCCH150J50   |
| C1526            | CERAMIC CAPACITOR           | CCCSL330J50  |
| C1527            | ELECTR.CAPACITOR            | CEAS470M16   |
| C1528            | CERAMIC CAPACITOR           | CCCSL220J50  |
| C1529            | CERAMIC CAPACITOR           | CKCYF103Z50  |
| C1530            | CERAMIC CAPACITOR           | CCCSL220J50  |
| C1531            | CERAMIC CAPACITOR           | CKCYF103Z50  |
| C1534            | CERAMIC CAPACITOR           | CCCSL220J50  |
| C751-754         | CERAMIC CAPACITOR           | CKCYB102K50  |
| <b>RESISTORS</b> |                             |              |
| VR1501           | VR                          | VRTS6HS103   |
| VR1502           | VR                          | VRTS6HS472   |
| R1515            | CARBON FILM<br>RESISTOR     | RD1/4PMF100J |
| R1518            | METALFILM<br>RESISTER       | RN1/4PC1202F |
| R1544            | CARBON FILM<br>RESISTOR     | RD1/4PM4R7J  |
|                  | Other resistors             | RD1/8PM□□□J  |
| <b>OTHERS</b>    |                             |              |
|                  | PIN JACK 1P<br>(SUB WOOFER) | AKB1139      |
|                  | PIN JACK 2P<br>(CENTER AMP) | AKB1142      |
| CN               | PIN JACK 4P<br>(REAR AMP)   | AKB1181      |
| CN42             | CONNECTOR 4P                | KPC4         |
| X1505            | CRYSTAL<br>RESONATOR        | ASS1056      |

## ● MAIN FUNCTION assembly (AWZ3673)

## SEMICONDUCTORS

|       |         |         |
|-------|---------|---------|
| IC201 | E-SW IC | TC9164N |
| IC202 | E-SW IC | TC9163N |
| IC203 | OP AMP  | M5238LF |

## CAPACITORS

|           |                   |             |
|-----------|-------------------|-------------|
| C201-208  | CERAMIC CAPACITOR | CCCSL101J50 |
| C211, 212 | ELECTR.CAPACITOR  | CEAS100M50  |
| C213      | ELECTR.CAPACITOR  | CEAS010M50  |
| C214, 215 | ELECTR.CAPACITOR  | CEAS470M16  |
| C220, 221 | CERAMIC CAPACITOR | CKCYB102K50 |
| C230      | CERAMIC CAPACITOR | CKCYB102K50 |

| Mark No.         | Description                       | Parts No.   |
|------------------|-----------------------------------|-------------|
| <b>RESISTORS</b> |                                   |             |
|                  | All resistors                     | RD1/8PM□□□J |
| <b>OTHERS</b>    |                                   |             |
|                  | PHONO JACK 6P                     | AKB1154     |
| CN               | PIN JACK 8P<br>(TAPE1/DAT, TAPE2) | AKB1182     |

## ● SUB FUNCTION assembly (AWZ3674)

## SEMICONDUCTORS

|       |         |         |
|-------|---------|---------|
| IC301 | E-SW IC | TC9164N |
| IC302 | E-SW IC | TC9163N |
| IC303 | OP AMP  | M5238LF |

## CAPACITORS

|           |                   |             |
|-----------|-------------------|-------------|
| C301-310  | CERAMIC CAPACITOR | CCCSL101J50 |
| C315, 316 | ELECTR.CAPACITOR  | CEAS220M50  |
| C317      | ELECTR.CAPACITOR  | CEAS010M50  |
| C318, 319 | ELECTR.CAPACITOR  | CEAS470M16  |
| C320, 321 | CERAMIC CAPACITOR | CKCYB102K50 |

|      |                   |             |
|------|-------------------|-------------|
| C330 | CERAMIC CAPACITOR | CKCYB102K50 |
|------|-------------------|-------------|

## RESISTORS

|  |               |             |
|--|---------------|-------------|
|  | All resistors | RD1/8PM□□□J |
|--|---------------|-------------|

## OTHERS

|          |                                     |         |
|----------|-------------------------------------|---------|
| CN       | 6P PIN JACK<br>(CD, CDV, TV, VIDEO) | AKB1178 |
| CN       | 8P PIN JACK (VCR1, 2)               | AKB1179 |
| CN21, 22 | CONNECTOR (15P)                     | KPE15   |
| CN23     | CONNECTOR (11P)                     | KPE11   |
| CN24     | CONNECTOR (7P)                      | KPE7    |

## ● VIDEO FUNCTION assembly (AWZ3675)

## SEMICONDUCTORS

|             |            |          |
|-------------|------------|----------|
| IC1601-1606 | E-SW IC    | NJM2234L |
| Q1601-1608  | TRANSISTOR | 2SC2458  |

## COILS

|             |                |         |
|-------------|----------------|---------|
| L1601, 1602 | AXIAL INDUCTOR | LAUR22M |
|-------------|----------------|---------|

## CAPACITORS

|             |                   |             |
|-------------|-------------------|-------------|
| C1601-1605  | ELECTR.CAPACITOR  | CEAS470M16  |
| C1606-1609  | ELECTR.CAPACITOR  | CEAS101M10  |
| C1610, 1611 | ELECTR.CAPACITOR  | CEAS470M16  |
| C1613       | ELECTR.CAPACITOR  | CEAS470M16  |
| C1614       | CERAMIC CAPACITOR | CCCSL270J50 |

## VSX-95

| Mark No.    | Description       | Parts No.   |
|-------------|-------------------|-------------|
| C1615       | ELECTR.CAPACITOR  | CEAS470M16  |
| C1616       | CERAMIC CAPACITOR | CCCSL270J50 |
| C1617-1619  | ELECTR.CAPACITOR  | CEAS470M16  |
| C1625-1627  | ELECTR.CAPACITOR  | CEAS470M16  |
| C1628, 1629 | CERAMIC CAPACITOR | CKDYX473M25 |
| C1630       | ELECTR.CAPACITOR  | CEAS470M16  |
| C1632       | CERAMIC CAPACITOR | CKDYX473M25 |

## RESISTORS

All resistors RD1/8PM□□□J

## OTHERS

|    |                        |         |
|----|------------------------|---------|
| CN | PIN JACK 3P (VIDEO IN) | AKB1170 |
| CN | PIN JACK 2P (VIDEO IN) | AKB1173 |

## ● ENHANCER assembly (AWZ3676)

## SEMICONDUCTORS

|        |          |           |
|--------|----------|-----------|
| IC1701 | E-SW IC  | NJM2233BS |
| IC1702 | E-SW IC  | NJM2234L  |
| IC1703 | LOGIC IC | BU4066BL  |
| IC1704 | E-SW IC  | NJM2209S  |
| IC1705 | E-SW IC  | NJM2235S  |

|             |            |          |
|-------------|------------|----------|
| Q1701-1705  | TRANSISTOR | 2SC2458  |
| Q1706-1708  | TRANSISTOR | XDA124ES |
| Q1709       | TRANSISTOR | 2SA1048  |
| Q1710       | TRANSISTOR | XDC124ES |
| Q1711, 1712 | TRANSISTOR | 2SA1048  |

|             |            |         |
|-------------|------------|---------|
| Q1713       | TRANSISTOR | 2SC2458 |
| Q1714, 1715 | TRANSISTOR | 2SA1048 |
| Q1716       | TRANSISTOR | 2SC2458 |
| Q1717       | TRANSISTOR | 2SC3327 |
| Q1718, 1719 | TRANSISTOR | 2SC2458 |

|            |            |         |
|------------|------------|---------|
| Q1720      | TRANSISTOR | 2SA1048 |
| Q1721-1726 | TRANSISTOR | 2SC2458 |
| Q1727      | TRANSISTOR | 2SA1048 |
| Q1728      | TRANSISTOR | 2SC3327 |

|            |             |          |
|------------|-------------|----------|
| D1701-1704 | DIODE       | 1SS252   |
| D1707      | ZENER DIODE | RD5.6ESB |

## COILS

|             |                |         |
|-------------|----------------|---------|
| L1740       | AXIAL INDUCTOR | LAU221K |
| L1741       | AXIAL INDUCTOR | LAU270K |
| L1742       | AXIAL INDUCTOR | LAU390K |
| L1743, 1744 | AXIAL INDUCTOR | LAU221K |
| L1745       | AXIAL INDUCTOR | LAU270K |

|             |                |         |
|-------------|----------------|---------|
| L1746       | AXIAL INDUCTOR | LAU390K |
| L1747, 1748 | AXIAL INDUCTOR | LAU101K |

| Mark No.   | Description | Parts No. |
|------------|-------------|-----------|
| CAPACITORS |             |           |

|            |                      |             |
|------------|----------------------|-------------|
| C1701-1703 | ELECTR.CAPACITOR     | CEAS2R2M50  |
| C1704-1707 | ELECTR.CAPACITOR     | CEAS470M16  |
| C1708      | AUDIO FILM CAPACITOR | CFTXA823J50 |
| C1709      | AUDIO FILM CAPACITOR | CFTXA393J50 |

|             |                      |             |
|-------------|----------------------|-------------|
| C1711       | AUDIO FILM CAPACITOR | CFTXA104J50 |
| C1712       | CERAMIC CAPACITOR    | CCCCH070D50 |
| C1713       | CERAMIC CAPACITOR    | CCCCH030C50 |
| C1714, 1715 | CERAMIC CAPACITOR    | CCCCH680J50 |
| C1716       | CERAMIC CAPACITOR    | CCCSL100D50 |

|             |                       |             |
|-------------|-----------------------|-------------|
| C1717, 1718 | CERAMIC CAPACITOR     | CCCCH470J50 |
| C1719       | ELECTR.CAPACITOR      | CEAS101M10  |
| C1720       | PL. STYRENE CAPACITOR | CQMA561J50  |

|       |                   |             |
|-------|-------------------|-------------|
| C1721 | ELECTR.CAPACITOR  | CEAS2R2M50  |
| C1722 | CERAMIC CAPACITOR | CCCSL221J50 |

|       |                   |             |
|-------|-------------------|-------------|
| C1723 | CERAMIC CAPACITOR | CCCSL151J50 |
| C1724 | CERAMIC CAPACITOR | CCCCH180J50 |
| C1725 | CERAMIC CAPACITOR | CCCSL220J50 |
| C1726 | CERAMIC CAPACITOR | CKCYB472K50 |
| C1727 | ELECTR.CAPACITOR  | CEAS101M10  |

|             |                   |             |
|-------------|-------------------|-------------|
| C1728, 1729 | ELECTR.CAPACITOR  | CEAS470M16  |
| C1730, 1731 | ELECTR.CAPACITOR  | CEAS2R2M50  |
| C1732, 1733 | ELECTR.CAPACITOR  | CEAS470M16  |
| C1734       | CERAMIC CAPACITOR | CCCSL100D50 |
| C1735       | CERAMIC CAPACITOR | CKDYF103Z50 |

|             |                   |             |
|-------------|-------------------|-------------|
| C1736       | CERAMIC CAPACITOR | CCCSL070D50 |
| C1737-1740  | ELECTR.CAPACITOR  | CEAS470M16  |
| C1747, 1748 | ELECTR.CAPACITOR  | CEAS470M16  |
| C1753       | CERAMIC CAPACITOR | CCCSL470J50 |
| C1749       | CERAMIC CAPACITOR | CCDSL220J50 |

## RESISTORS

All resistors RD1/8PM□□□J

## OTHERS

|      |                         |         |
|------|-------------------------|---------|
| CN   | PIN JACK 3P (VIDEO OUT) | AKB1170 |
| CN25 | CONNECTOR (9P)          | KPE9    |

## ● BARRIER assembly (AWZ3825)

## RESISTORS

|    |                     |             |
|----|---------------------|-------------|
| R1 | CARBONFILM RESISTOR | RD1/8PM102J |
|----|---------------------|-------------|



**SX-95****5. ADJUSTMENTS****5.1 TUNER SECTION**

1. Connect the wires as shown in Fig. 5-1 (FM ANT. terminal : 75Ω).
2. When the SD model is used, set the band select switch to AM : 10kHz/FM : 100kHz.

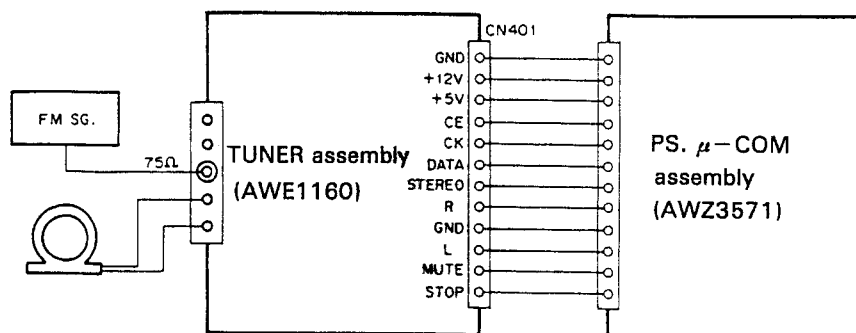


Fig. 5-1

**FM Section**

Note: Stereo modulation: Main 1kHz L+R  $\pm 68.25\text{kHz}$   
Pilot 19 kHz  $\pm 6.75\text{kHz}$

| Order | Item                                              | SSG       |                              |                    | Receiving frequency | Adjustment          |                                                                                                                      |
|-------|---------------------------------------------------|-----------|------------------------------|--------------------|---------------------|---------------------|----------------------------------------------------------------------------------------------------------------------|
|       |                                                   | Frequency | Modulation                   | Level              |                     | Adjustment location | Remarks                                                                                                              |
| 1     | Checking front end VT                             | No signal |                              |                    | 108MHz              | —                   | Check that the voltage between terminal 41 and ground is $8.7 \pm 2.0\text{V}$ .                                     |
| 2     | Checking front end VT                             |           |                              |                    | 87.5MHz             | —                   | Check that the voltage between terminal 41 and ground is $3.4 \pm 1.5\text{V}$ .                                     |
| 3     | Increasing front end sensitivity                  | 98MHz     |                              | Weak input         | 98MHz               | L402, L404, T402    | Set the voltage between terminal 43 and ground to maximum, and check that the practical sensitivity is as specified. |
| 4     | Center adjustment                                 | 98MHz     |                              | 60dB $\mu\text{V}$ | 98MHz               | L431                | Adjust the voltage between terminals 45 and 46 to $0 \pm 50\text{mV}$ .                                              |
| 5     | Checking monophonic distortion                    | 98MHz     | 1kHz $\pm 75\text{kHz}$ dev. | 60dB $\mu\text{V}$ | 98MHz               | —                   | Check that the monophonic distortion is as specified.                                                                |
| 6     | Adjusting VCO                                     |           | OFF                          | 60dB $\mu\text{V}$ |                     | VR451               | Adjust the output of terminal 44 to $76.0\text{kHz} \pm 1.0\text{kHz}$ .                                             |
| 7     | Adjusting stereo distortion                       | 98MHz     | L-ONLY<br>R-ONLY             | 60dB $\mu\text{V}$ | 98MHz               | T402                | Minimize the distortion within 1/4 rotation of the core, and check conformity to the specification.                  |
| 8     | Checking separation                               | 98MHz     | L-ONLY<br>R-ONLY             | 60dB $\mu\text{V}$ | 98MHz               | —                   | Check that the separation of L→R and R→L is as specified.                                                            |
| 9     | Checking lighting levels of TUNED and STEREO IND. | 98MHz     | STEREO                       |                    | 98MHz               | —                   | Check that the lighting levels of TUNED and STEREO IND. are as Specified.                                            |

**AM Section**

| Order | Item                                   | SSG       |                    |                             | Receiving frequency | Adjustment          |                                                                             |
|-------|----------------------------------------|-----------|--------------------|-----------------------------|---------------------|---------------------|-----------------------------------------------------------------------------|
|       |                                        | Frequency | Modulation         | Level                       |                     | Adjustment location | Remarks                                                                     |
| 1     | Checking front end VT                  | No signal |                    |                             | 1700kHz             | —                   | Check that the voltage between terminal 41 and ground is $7.5 \pm 1.0V$ .   |
| 2     | Checking front end VT                  |           |                    |                             | 530kHz              | —                   | Check that the voltage between terminal 41 and ground is $1.5 \pm 0.5V$ .   |
| 3     | Checking front end sensitivity         | 1000kHz   | 400kHz<br>30% MOD. | Practical sensitivity level | 1000kHz             | —                   | Check that the practical sensitivity (maximum sensitivity) is as specified. |
| 4     | Adjusting lighting level of TUNED IND. | 1000kHz   |                    |                             | 1000kHz             | VR431               | Adjust the lighting level of TUNED IND. to $55dB\mu V/m \pm 3dB$ .          |

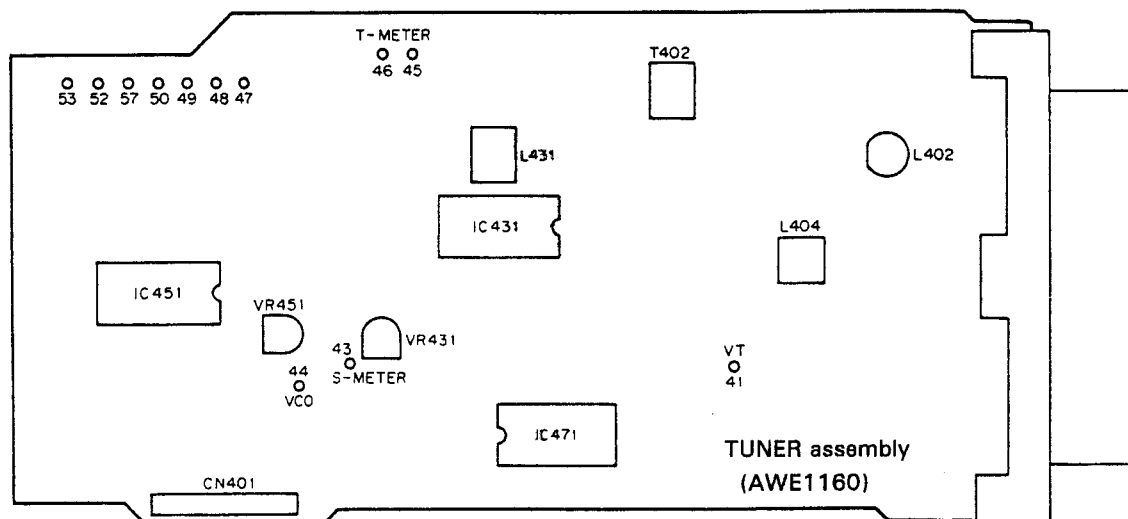


Fig. 5-2 Adjustment points



/SX-95

## 5.2 DSP ASSEMBLY SECTION

(Refer to Fig. 5-4)

- Set the MUSTER VOLUME to the minimum.

### 1) A/D DC Bias Adjustment

- Set the INPUT SELECTOR to LINE. Set the LINE INPUT terminal to input disabled.
- Adjust the output voltage of pins 1 (ADIN1) and 23 (ADIN2) of IC1103 (LC7886) as follows :
  - a) Measure the value of pin 3 (AVDD) of IC1103. Divide the value in half and record that value ( $1/2$  AVDD).
  - b) Adjust the voltage of pin 1 (ADIN1) at VR1101 to the recorded value ( $1/2$  AVDD)  $\pm 0.005V$ .
  - c) Adjust the voltage of pin 23 (ADIN2) at VR1102 to the recorded value ( $1/2$  AVDD)  $\pm 0.005V$ .

### 2) Dolby Level Adjustment

- Input sine wave signal of 1kHz, 260mV to the LINE input. Rch only.
- Set the INPUT SELECTOR to the LINE.
- Set the SURROUND MODE switches to the DANCE.
- Turn the JOG dial to set the EFFECT level to "5."
- Check value of R1264.
- Adjust with VR1201 so that the output of the R1263 lead (A) (nothing is connected) of the DSP assembly becomes the following :
  - 50mV  $\pm 5mV$  when R1264 is 5.6k $\Omega$ .
  - 63mV  $\pm 5mV$  when R1264 is 7.5k $\Omega$ .

#### NOTE :

- VR 1103 is for adjusting distortion factor.
- Adjust it to the mechanical center position.

## 5.3 OSD ASSEMBLY SECTION

(Refer to Fig. 5-4)

### 1) Adjusting H. SYNC and V. SYNC for Superimposed Display.

- Adjust the VR1502 so that the application of power without any signal causes the OSD assembly's TP (H. sync) to show a frequency of  $15.75kHz \pm 50Hz$ .
- Adjust the VR1501 so that the application of power without any signal causes the OSD assembly's TP (V. sync) to show a frequency of  $53Hz \pm 1Hz$ .

### 2) Adjusting the Superimposed Display in the Center

- Connect the VIDEO OUT (TO MONITOR TV) terminal to a monitor TV.
- Select one of JASS THEATERS of the SURROUND MODE switch.
- Turn the JOG dial to display "Effect Level 100". Then adjust the TC1501 to center the superimposed display "Effect Level 100", leaving equal margin on both right and left of the TV screen.

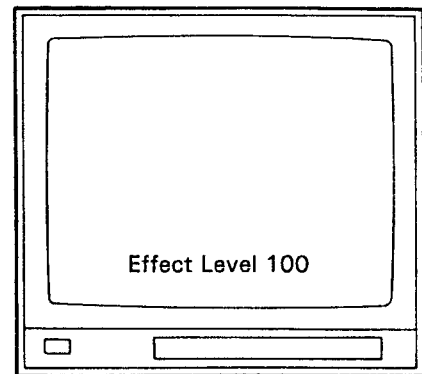


Fig. 5-3

Manufactured under license from Dolby Laboratories Licensing Corporation. Additionally licensed under one or more of the following patents: U.S. numbers 3,632,886, 3,746,792 and 3,959,590; Canadian numbers 1,004,603 and 1,037,877. "Dolby" and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

Manufactured under license from Dolby Laboratories Licensing Corporation. DOLBY and the double-D symbol  are trademarks of Dolby Laboratories Licensing Corporation.

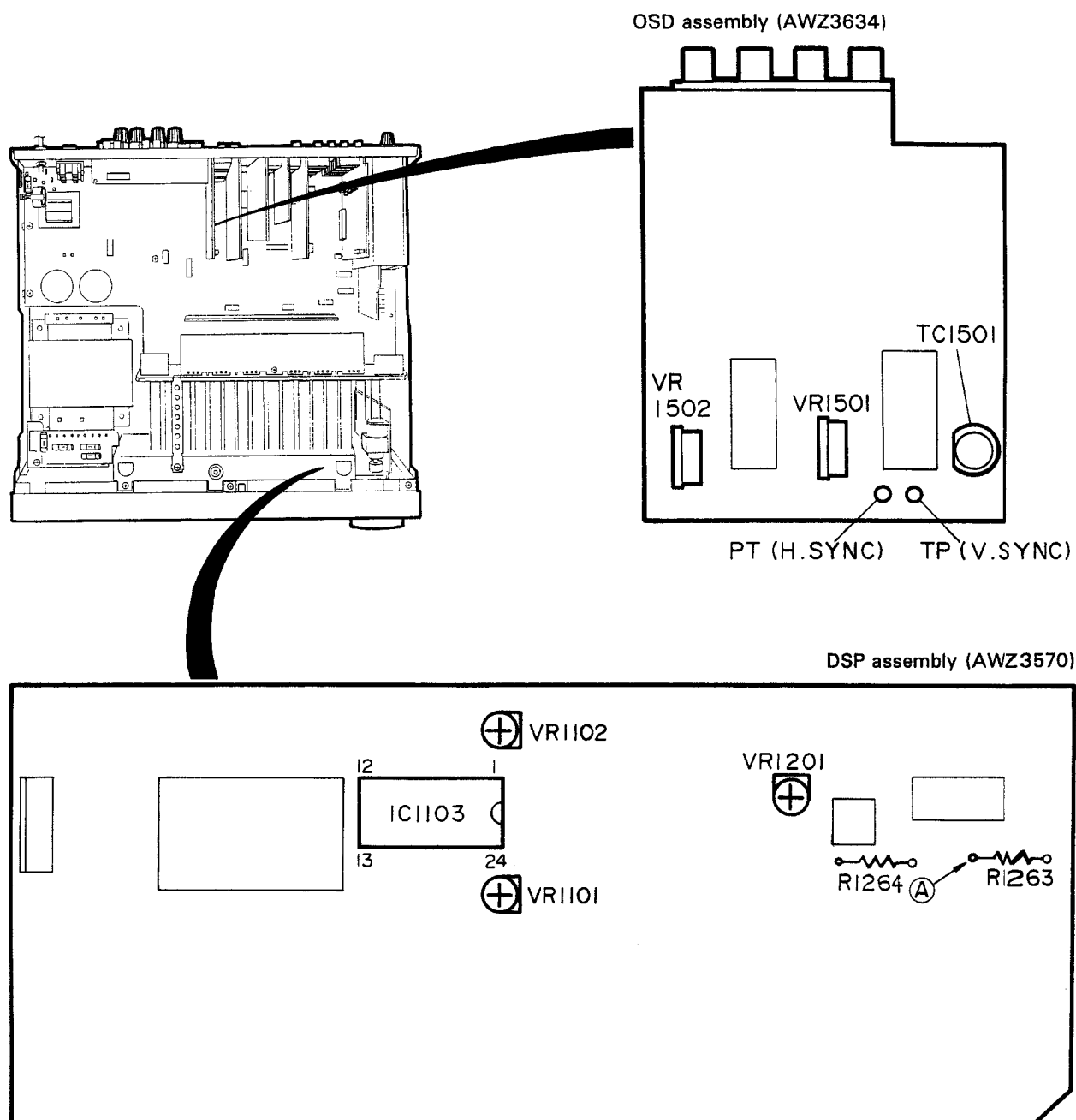
**VSX-95**

Fig. 5-4 Adjustment points



/SX-95

## 6. IN INFORMATION

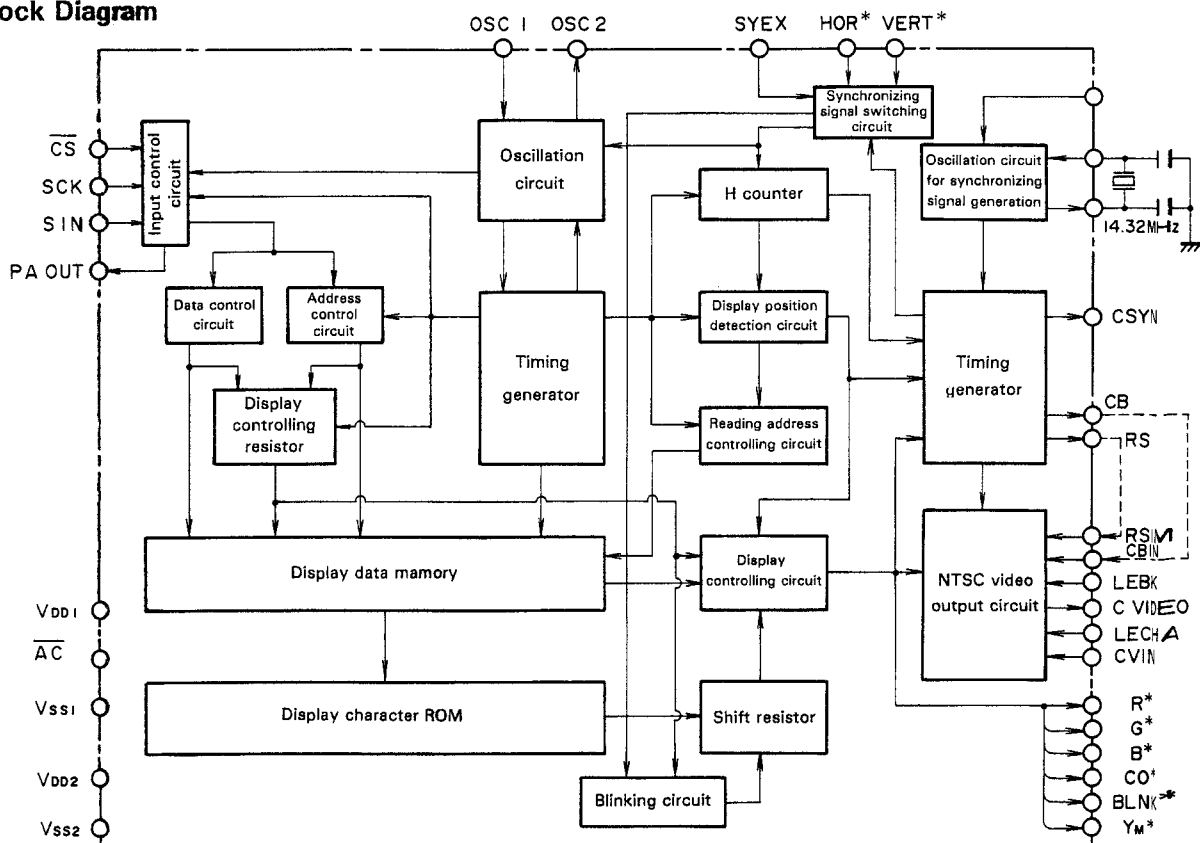
### ■ IC1502 (M50554-003SP) : OSD IC

#### • Pin Function

| No. | Symbol          | Pin Name                                         | Description                                                                                                                                                                                                                                                                                                                                                                                  |
|-----|-----------------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1   | Vss1            | Ground terminal                                  | Connect to GND using a digital ground terminal.                                                                                                                                                                                                                                                                                                                                              |
| 2   | SCK             | Serial clock input                               | Collects serial data of SIN at the leading edge of SCK when the CS terminal is LOW. Hysteresis input. Equipped with a pull-up resistor.                                                                                                                                                                                                                                                      |
| 3   | $\overline{AC}$ | Auto clear input                                 | Resets the IC internal circuit when the mode is LOW. Equipped with a pull-up resistor. Hysteresis input.                                                                                                                                                                                                                                                                                     |
| 4   | OSC1            | Oscillation circuit external terminal            | An external terminal for the display oscillation circuit. The standard oscillation frequency is approximately 7MHz. The oscillation frequency determines the horizontal display position and the character width on the TV monitor.                                                                                                                                                          |
| 5   | OSC2            |                                                  |                                                                                                                                                                                                                                                                                                                                                                                              |
| 6   | N/P             | NTSC/PAL switching input                         | A synchronizing signal switching terminal for NTSC or PAL. Synchronizing signals in NTSC are generated when the mode is HIGH. Synchronizing signals in PAL are generated when the mode is LOW. Equipped with a pull-up resistor.                                                                                                                                                             |
| 7   | $\overline{CS}$ | Chip select input                                | A chip select terminal. Goes LOW when performing serial data transmission. Equipped with a pull-up resistor.                                                                                                                                                                                                                                                                                 |
| 8   | SIN             | Serial date input                                | Inputs data and address of memory for the display controlling resistor and the display data. Equipped with a pull-up resistor.                                                                                                                                                                                                                                                               |
| 9   | PAOUT           | Parity output                                    | An odd parity output. Detects a 1-bit error in a word of SIN.                                                                                                                                                                                                                                                                                                                                |
| 10  | SYEX            | Synchronizing signal switching input             | A switching terminal of the external or internal synchronizing signals. Changes to the external synchronizing signal when the mode is HIGH. Changes to internal synchronizing signal when the mode is LOW. SYEX structures the logical or of the EX resistor of address 243 in the display controlling resistor and the internal synchronization priority. Equipped with a pull-up resistor. |
| 11  | Vss2            | Ground terminal                                  | Connect to GND using an analog ground terminal.                                                                                                                                                                                                                                                                                                                                              |
| 12  | CVIDEO          | Composite video output                           | An output terminal of compound video signals. Outputs 2Vp-p compound video signals. During the superimpose mode, outputs by superimposing character output to the CVIN signal.                                                                                                                                                                                                               |
| 13  | CVIN            | Compound video input                             | An input terminal of compound video signals. During the superimpose mode, character output, etc. will be superimposed to the compound video signal.                                                                                                                                                                                                                                          |
| 14  | LEBK            | Blanking level                                   | An input terminal to determine the blanking level of the video signal.                                                                                                                                                                                                                                                                                                                       |
| 15  | LECHA           | Character level input                            | An input terminal to determine the character output level of the video signal. The color of characters is white.                                                                                                                                                                                                                                                                             |
| 16  | CBIN            | Color burst signal input                         | Converts the CB output to the color burst signal level of the video signal at the external circuit and inputs it.                                                                                                                                                                                                                                                                            |
| 17  | RSIN            | Character background carrier color signal input  | Converts the RS output to the carrier color signal level of the video signal at the external circuit and inputs it.                                                                                                                                                                                                                                                                          |
| 18  | VDD2            | Power terminal                                   | Connect to +5V using an analog power terminal.                                                                                                                                                                                                                                                                                                                                               |
| 19  | RS              | Character background carrier color signal output | A carrier color signal output for color character background. Outputs signals with a phase angle to the color burst signal CB. Amplification: 5V                                                                                                                                                                                                                                             |
| 20  | CB              | Color burst signal output                        | Output color burst signals of 3.58MHz for NTSC and 4.43MHz for PAL.                                                                                                                                                                                                                                                                                                                          |

| No. | Symbol | Pin Name                                              | Description                                                                                                                                                   |
|-----|--------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 21  | YM*    | Luminance signal output                               | Outputs the luminance signal. Can select polarity when specifying the font ROM.                                                                               |
| 22  | BLNK*  | Character background output                           | Outputs the character background signal. Can select polarity when specifying the font ROM.                                                                    |
| 23  | CO*    | Character output                                      | Outputs the character signal. Can select polarity when specifying the font ROM.                                                                               |
| 24  | B*     | Blue output                                           | A blue output terminal. Can select polarity when specifying the font ROM.                                                                                     |
| 25  | G*     | Green output                                          | A green output terminal. Can select polarity when specifying the font ROM.                                                                                    |
| 26  | R*     | Red output                                            | A red output terminal. Can select polarity when specifying the font ROM.                                                                                      |
| 27  | CSYN   | Compound synchronizing signal output                  | Outputs compound synchronizing signal in NTSC or PAL. Negative polarity. Amplification: 5V                                                                    |
| 28  | OSCOUT | Oscillation circuit for synchronous signal generation | an external terminal of the oscillation circuit for synchronizing signal generation. Uses an oscillation frequency of 14.32MHz for NTSC and 17.73MHz for PAL. |
| 29  | OSCIN  |                                                       |                                                                                                                                                               |
| 30  | HOR*   | Horizontal synchronizing signal                       | Inputs the horizontal synchronizing signal. Hysteresis input. Can select polarity when specifying the font ROM.                                               |
| 31  | VERT*  | Vertical synchronizing signal                         | Inputs the vertical synchronizing signal. Hysteresis input. Can select polarity when specifying the font ROM.                                                 |
| 32  | VDD    | Power terminal                                        | Connect to +5V using a digital power terminal.                                                                                                                |

### • Block Diagram





/SX-95

## ■ IC1901 (PDG072A) : DISPLAY CONTROL $\mu$ -COM)

### • Pin Function

| No. | Pin Name | I/O | Description                   | Logic |
|-----|----------|-----|-------------------------------|-------|
| 1   | S4/PG0   | O   | Segment output                |       |
| 2   | S5/PG1   | O   | Segment output                |       |
| 3   | S6/PG2   | O   | Segment output                |       |
| 4   | S7/PG3   | O   | Segment output                |       |
| 5   | S8/PK0   | O   | Segment output                |       |
| 6   | S9/PK1   | O   | Segment output                |       |
| 7   | S10/PK2  | O   | Segment output                |       |
| 8   | S11/PK3  | O   | Segment output                |       |
| 9   | S12/PJ0  | O   | Segment output                |       |
| 10  | S13/PJ1  | O   | Segment output                |       |
| 11  | S14/PJ2  | O   | Segment output                |       |
| 12  | S15/PJ3  | O   | Segment output                |       |
| 13  | S16/T15  | O   | Segment output                |       |
| 14  | S17/T14  | O   | Segment output                |       |
| 15  | S18/T13  | O   | Segment output                |       |
| 16  | S19/T12  | O   | Segment output                |       |
| 17  | S20/T11  | O   | Segment output                |       |
| 18  | S21/T10  | O   | Grid output & Key Scan output |       |
| 19  | S22/T9   | O   | Grid output & Key Scan output |       |
| 20  | S23/T8   | O   | Grid output & Key Scan output |       |
| 21  | T7       | O   | Grid output & Key Scan output |       |
| 22  | T6       | O   | Grid output & Key Scan output |       |
| 23  | T5       | O   | Grid output & Key Scan output |       |
| 24  | T4       | O   | Grid output & Key Scan output |       |
| 25  | T3       | O   | Grid output & Key Scan output |       |

| No. | Pin Name                    | I/O | Description                                                                                                                                                  | Logic |
|-----|-----------------------------|-----|--------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| 26  | T2                          | O   | Grid output & Key Scan output                                                                                                                                |       |
| 27  | T1                          | O   | Grid output & Key Scan output                                                                                                                                |       |
| 28  | T0                          | O   | Grid output & Key Scan output                                                                                                                                |       |
| 29  | INT                         | I   | Detection of video signal existence. When the video signal is not input, output the video signal (blue) to video out terminal.<br>L...Exist<br>H...Not exist |       |
| 30  | TX                          | —   | Not used                                                                                                                                                     |       |
| 31  | TEX                         | I   | Not used                                                                                                                                                     |       |
| 32  | $\overline{\text{RST}}$     | I   | RESET input                                                                                                                                                  |       |
| 33  | NC                          | —   |                                                                                                                                                              |       |
| 34  | VDD                         | —   | +5V Power supply                                                                                                                                             |       |
| 35  | PI0/AD0                     | I   | DC input for Level meter                                                                                                                                     |       |
| 36  | PI1/AD1                     | I   | DC input for Level meter                                                                                                                                     |       |
| 37  | PI2/AD2                     | I   | DC input for Level meter                                                                                                                                     |       |
| 38  | PI3/AD3                     | I   | DC input for Level meter                                                                                                                                     |       |
| 39  | PBO/AD4                     | I   | DC input for Level meter                                                                                                                                     |       |
| 40  | PB1/AD5                     | I   | Over load Det.                                                                                                                                               |       |
| 41  | PB2/AD6                     | I   | Remote control B input                                                                                                                                       |       |
| 42  | PB3/AD7                     | I   | RQ. I (Request input)                                                                                                                                        |       |
| 43  | $\overline{\text{EC}}$      |     |                                                                                                                                                              |       |
| 44  | PX0/ $\overline{\text{SC}}$ | I   | CK Communication                                                                                                                                             |       |
| 45  | PX1/SO                      | O   | SO                                                                                                                                                           |       |
| 46  | PX2/SI                      | I   | SI                                                                                                                                                           |       |
| 47  | PA0                         | O   | LED (MR&S) control output                                                                                                                                    |       |
| 48  | PA1                         | O   | LED (TUNING) control output                                                                                                                                  |       |
| 49  | PA2                         | I   | Key scan input                                                                                                                                               |       |

| No. | Pin Name | I/O | Description                                             | Logic |
|-----|----------|-----|---------------------------------------------------------|-------|
| 50  | PA3      | I   | Key scan input                                          |       |
| 51  | PF0      | I   | Key scan input                                          |       |
| 52  | PF1      | I   | Key scan input                                          |       |
| 53  | PF2      | I   | Key scan input                                          |       |
| 54  | PF3      | I   | Key scan input                                          |       |
| 55  | PE0      | O   | LED (CHARACT) control output                            |       |
| 56  | PE1      | O   | LED (ENHANCE) control output                            |       |
| 57  | PE2      | O   | LED (DELAY) control output                              |       |
| 58  | PE3      | O   | LED (EFFECT) control output                             |       |
| 59  | PY0      | O   | RQ. O (Communication between PDG073A)                   |       |
| 60  | PY1/PWM  | O   | MUTE for TUNER                                          |       |
| 61  | PY2/WP   | I   | Not used                                                |       |
| 62  | PY3/REM  | I   | Remote control input                                    |       |
| 63  | PD0      | I   | Rotary Encoder IN1                                      |       |
| 64  | PD1      | I   | Rotary Encoder IN2                                      |       |
| 65  | PD2      | I   | Tuned                                                   |       |
| 66  | PD3      | I   | Stereo                                                  |       |
| 67  | PC0      | O   | DATA. T, 9K/10K<br>Tuner control OSD DATA               |       |
| 68  | PC1      | O   | CK. T, $J/\overline{EX}$ OSD CK                         |       |
| 69  | PC2      | O   | CS. T                                                   |       |
| 70  | PC3      | O   | OSD CS                                                  |       |
| 71  | Vss      | —   | GND                                                     |       |
| 72  | XTAL     | O   | MAIN CLK output/Connected to ceramic oscillator (4.19M) |       |
| 73  | NC       | —   | NC                                                      |       |
| 74  | EXTAL    | I   | MAIN CLK input/Connected to ceramic oscillator (4.19M)  |       |

| No. | Pin Name | I/O | Description                                  | Logic |
|-----|----------|-----|----------------------------------------------|-------|
| 75  | VREF     | —   | Reference voltage input/<br>Connected to VDD |       |
| 76  | VFDP     | —   | Power supply for FL                          |       |
| 77  | S0       | O   | Segment output                               |       |
| 78  | S1       | O   | Segment output                               |       |
| 79  | S2       | O   | Segment output                               |       |
| 80  | S3       | O   | Segment output                               |       |



## VSX-95

■ IC1851 (PDG073A) : SYSTEM CONTROL  $\mu$ -COM

## • Pin Function

| No. | Pin Name | I/O | Description                                  | ACT |
|-----|----------|-----|----------------------------------------------|-----|
| 1   | PA1      | O   | CLOCK for CXD1067                            | H   |
| 2   | PA0      | O   | VIDEO control (VON2)                         |     |
| 3   | PB7      | O   | VIDEO control (C2)                           |     |
| 4   | PB6      | O   | VIDEO control (VON1)                         |     |
| 5   | PB5      | O   | VIDEO control (C1)                           |     |
| 6   | PB4      | O   | Serial IC CLOCK                              | L   |
| 7   | PB3      | O   | Serial IC DATA                               |     |
| 8   | PB2      | O   | Strobe for MAIN TC9163.9164                  | H   |
| 9   | PB1      | O   | Strobe for SUB TC9163.9164                   | H   |
| 10  | PB0      | O   | Strobe for VR TC9154.9176                    | H   |
| 11  | PC7      | O   | Multiroom ON (H) /OFF (L)                    |     |
| 12  | PC6      | O   | VR LED "H" = ON                              | H   |
| 13  | PC5      | O   | VR UP                                        | H   |
| 14  | PC4      | O   | VR DN                                        | H   |
| 15  | PC3      | O   | Not used (L)                                 |     |
| 16  | PC2      | O   | Not used (L)                                 |     |
| 17  | PC1      | O   | Not used (L)                                 |     |
| 18  | PC0      | O   | DOLBY                                        |     |
| 19  | PD7      | O   | MUTE                                         |     |
| 20  | PD6      | O   | CENTER CONTROL B                             |     |
| 21  | PD5      | O   | CENTER CONTROL A                             |     |
| 22  | PD4      | O   | GAIN CONTROL B                               |     |
| 23  | PD3      | O   | GAIN CONTROL A                               | L   |
| 24  | PD2      | O   | REQ OUT (Communication between $\mu$ -COM)   | L   |
| 25  | PD1      | O   | CLOCK OUT (Communication between $\mu$ -COM) |     |
| 26  | PD0      | O   | DATA OUT (Communication between $\mu$ -COM)  |     |
| 27  | PH3      | O   | DSP CTL D-REDY                               |     |

| No. | Pin Name                 | I/O | Description                                | ACT |
|-----|--------------------------|-----|--------------------------------------------|-----|
| 28  | PH2                      | O   | DSP CTL RESET. D DSP                       |     |
| 29  | PH1                      | O   | DSP CTL RQ                                 |     |
| 30  | PH0                      | O   | Front $\mu$ -COM RESET output              | L   |
| 31  | MP                       | I   | Connected to GND                           | -   |
| 32  | $\overline{\text{RST}}$  | I/O | RESET input                                | L   |
| 33  | Vss                      | -   | Connected to GND                           | -   |
| 34  | XTAL                     | O   | Connected to ceramic oscillator (8MHz).    | -   |
| 35  | EXTAL                    | I   | Connected to ceramic oscillator (8MHz).    | -   |
| 36  | $\overline{\text{CSO}}$  | I   | Not used (Pull-down)                       | -   |
| 37  | S10                      | I   | Not used (Pull-down)                       | -   |
| 38  | S00                      | O   | DSP CTL DATA                               |     |
| 39  | $\overline{\text{SCKO}}$ | O   | DSP CTL CLOCK                              | L   |
| 40  | PF7                      | I   | DSP CTL $\overline{\text{AK}}$             | "L" |
| 41  | PF6                      | I   | REQ IN (Communication between $\mu$ -COM)  | L   |
| 42  | PF5                      | I   | DATA IN (Communication between $\mu$ -COM) |     |
| 43  | PF4                      | I   | Not used (Pull-down)                       | -   |
| 44  | PF3                      | I   | Not used (Pull-down)                       | -   |
| 45  | PF2                      | I   | Not used (Pull-down)                       | -   |
| 46  | PF1                      | I   | Not used (Pull-down)                       | -   |
| 47  | PF0                      | I   | Not used (Pull-down)                       | -   |
| 48  | AN3                      | I   | Not used (Pull-down)                       | -   |
| 49  | AN2                      | I   | Not used (Pull-down)                       | -   |
| 50  | AN1                      | I   | Not used (Pull-down)                       | -   |
| 51  | AN0                      | I   | VR position detector input                 | -   |
| 52  | AVss                     | -   | GND for A/D                                | -   |
| 53  | AVREF                    | -   | Reference voltage for A/D                  | -   |
| 54  | AVDD                     | -   | Power supply for A/D                       | -   |

| No. | Pin Name        | I/O | Description                    | ACT |
|-----|-----------------|-----|--------------------------------|-----|
| 55  | PG7             | I   | Not used (Pull-down)           | —   |
| 56  | PG6             | I   | Not used (Pull-down)           | —   |
| 57  | PG5             | I   | Not used (Pull-down)           | —   |
| 58  | PG4             | I   | Not used (Pull-down)           | —   |
| 59  | PG3             | I   | Not used (Pull-down)           | —   |
| 60  | PG2             | I   | Not used (Pull-down)           | —   |
| 61  | PG1             | I   | Not used (Pull-down)           | —   |
| 62  | PG0             | I   | Not used (Pull-down)           | —   |
| 63  | PE7             | O   | Speaker (REAR) relay control   | H   |
| 64  | PE6             | O   | Speaker A relay control        | H   |
| 65  | PE5             | O   | Speaker B relay control        | H   |
| 66  | PE4             | O   | Speaker (CENTER) relay control | H   |
| 67  | PE3             | O   | Speaker (SUB) relay control    | H   |
| 68  | PE2             | O   | PWM output for enhancer        | H   |
| 69  | PE1/INT2        | I   | Not used (Pulldown)            | —   |
| 70  | PE0/INT0        | I   | AC 50/60Hz input               | L   |
| 71  | NMI             | I   | Not used (Pulldown)            | —   |
| 72  | V <sub>DD</sub> | —   | Power supply                   | —   |
| 73  | V <sub>SS</sub> | —   | GND                            | —   |
| 74  | NC              | —   | Connected to V <sub>DD</sub>   | —   |
| 75  | PA7             | O   | AC Relay control               | H   |
| 76  | PA6             | O   | SR OUT                         | L   |
| 77  | PA5             | O   | MAIN MUTE                      | H   |
| 78  | PA4             | O   | SUB MUTE                       | H   |
| 79  | PA3             | O   | Strobe for CXP1067             | H   |
| 80  | PA2             | O   | DATA for CXP1067               |     |



/SX-95

## 7. REMOTE CONTROL UNIT [CU – VSX031 (AXD1223)] [CU – VSX023 (AXD1207)]

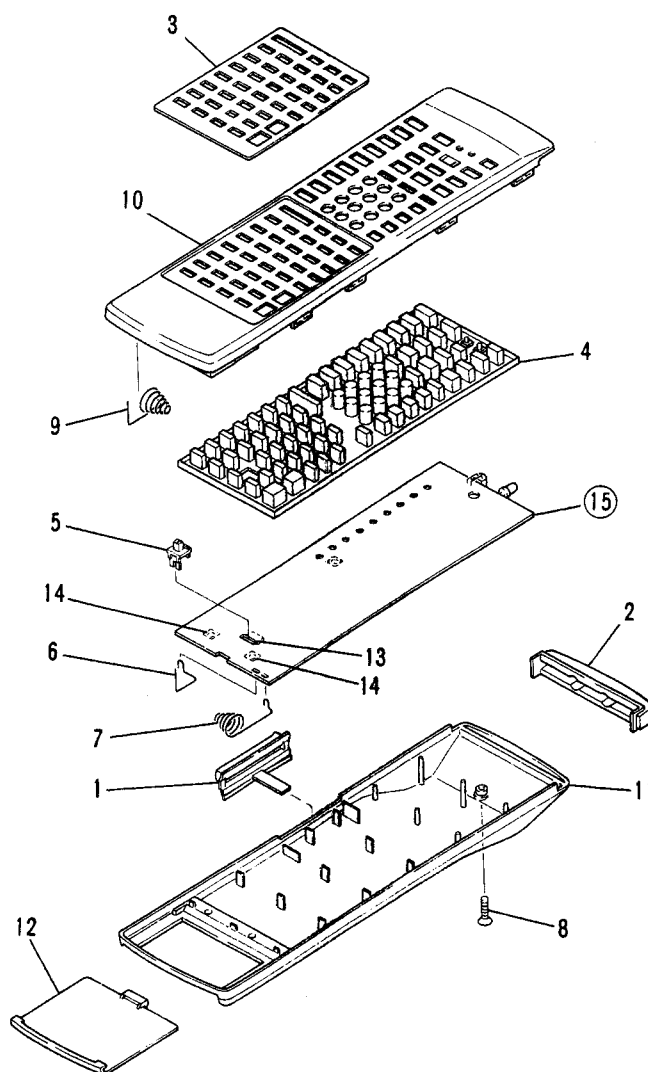
### 7.1 EXPLODED VIEW AND PARTS LIST

#### NOTES:

- Parts without part number cannot be supplied.
- The  $\triangle$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

#### Parts list of Exterior

| Mark No. | Description            | Parts No. |
|----------|------------------------|-----------|
| 1        | MODE CHECK KEY         | AZA1335   |
| 2        | FILTER                 | AZA1336   |
| 3        | PLATE (AXD1223)        | AZA1346   |
| 3        | PLATE (AXD1207)        | AZA1345   |
| 4        | RUBBER SHEET (AXD1223) | AZA1348   |
| 4        | RUBBER SHEET (AXD1207) | AZA1347   |
| 5        | KNOB                   | AZA1349   |
| 6        | TERMINAL (+)           | AZB1327   |
| 7        | TERMINAL (–)           | AZB1328   |
| 8        | SCREW                  | AZB1329   |
| 9        | TERMINAL (C)           | AZB1330   |
| 10       | CASE (A)               | AZN2089   |
| 11       | CASE (B)               | AZN2090   |
| 12       | BATTERY COVER          | AZN2091   |
| 13       | SLIDE SW               | AZS1117   |
| 14       | TACT SW                | AZS1118   |
| 15       | P. C. BOARD            |           |



## 7.2 ELECTRICAL PARTS LIST

### NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by J = 5%, and K = 10%).

|              |                  |          |                               |
|--------------|------------------|----------|-------------------------------|
| 560 $\Omega$ | $56 \times 10^1$ | 561..... | RD1/4PS $\square$ $\square$ J |
| 47k $\Omega$ | $47 \times 10^3$ | 473..... | RD1/4PS $\square$ $\square$ J |
| 0.5 $\Omega$ | 0R5.....         |          | RN2H $\square$ $\square$ K    |
| 1 $\Omega$   | 010.....         |          | RS1P $\square$ $\square$ K    |

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

|                |                   |           |                                         |
|----------------|-------------------|-----------|-----------------------------------------|
| 5.62k $\Omega$ | $562 \times 10^1$ | 5621..... | RN1/4SR $\square$ $\square$ $\square$ F |
|----------------|-------------------|-----------|-----------------------------------------|

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

### SEMICONDUCTORS

|        |                   |            |
|--------|-------------------|------------|
| IC1    | $\mu$ -COM        | ACM001-017 |
| IC2    | IC                | AZC1564    |
| IC3    | LOGIC IC          | MC74HC138F |
| Q1, 2  | CHIP TRANSISTOR   | 2SC3052E   |
| Q3, 4  | POWER TRANSFORMER | 2SD1622    |
| D1     | DIODE             | DWA010-TE  |
| D10-17 | LED               | AZC1573    |
| D2-6   | DIODE             | DWA010-TE  |
| D7     | LED               | SLR-938C   |
| D8     | DIODE             | SPS-503C-3 |
| D9     | LED               | AZC1573    |

### CAPACITORS

|       |                        |             |
|-------|------------------------|-------------|
| C1, 2 | CERAMIC CAPACITOR      | CCDSL330J50 |
| C3    | CERAMIC CAPACITOR      | CCDSL221J50 |
| C4    | CERAMIC CAPACITOR      | CKDYX104M25 |
| C5    | ELECTROLYTIC CAPACITOR | CEAS470M10  |
| C6    | CERAMIC CAPACITOR      | CKDYB103K50 |
| C7    | ELECTROLYTIC CAPACITOR | CEAS221M10  |
| C8    | ELECTROLYTIC CAPACITOR | CEAS4R7M50  |

### RESISTORS

|       |                      |                                         |
|-------|----------------------|-----------------------------------------|
| R7, 8 | CARBON FILM RESISTOR | RD1/4PMFL1R5J                           |
|       | Other resistors      | RD1/8PM $\square$ $\square$ $\square$ J |

### OTHERS

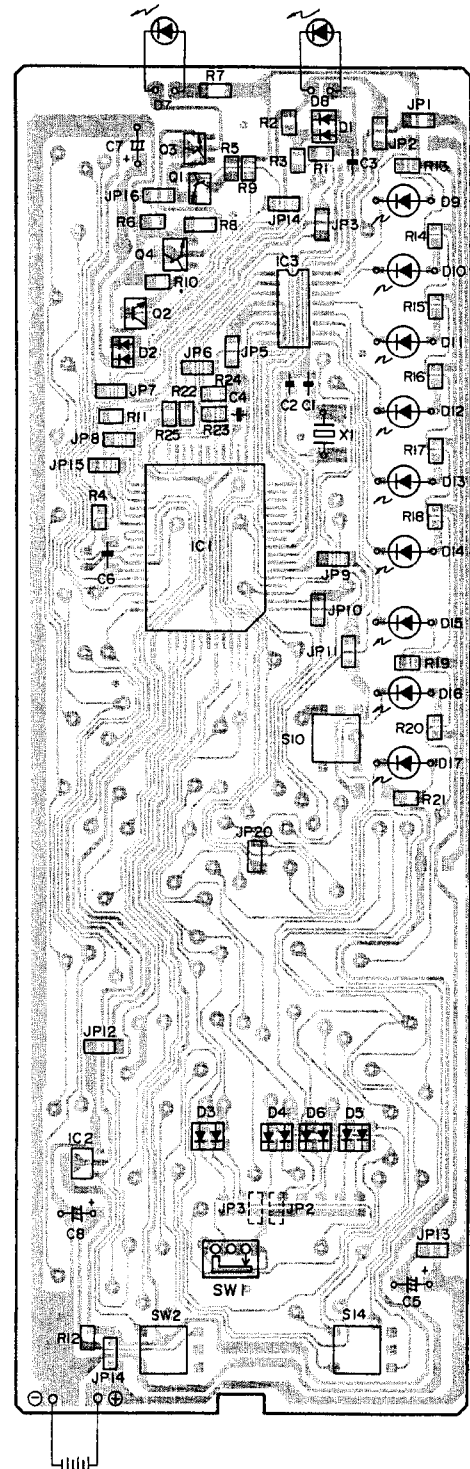
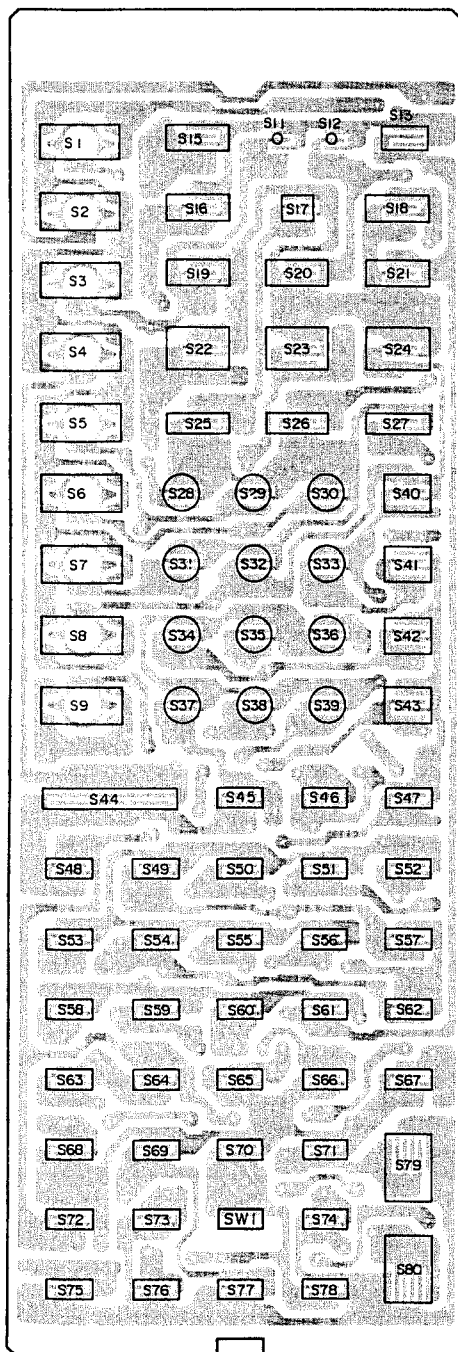
|    |           |         |
|----|-----------|---------|
| X1 | RESONATOR | AZC1570 |
|----|-----------|---------|



## VSX-95

## 7.3 P. C. BOARD PATTERN

-  : Indicates a chip resistor.  
 : Indicates a chip capacitor.  
 : Indicates a chip transistor.  
 : Indicates a chip diode.



## 7.4 SCHEMATIC DIAGRAM

## NOTE)

JP2 : The terminal for switching Fc (carrier frequency of the fixed code). This terminal is set at OPEN (Fc = 40kHz) when delivered. If a product of another manufacturer accidentally receives the PIONEER code, short the terminal so that Fc will be 36.7kHz. (In which case, the learned code and preset code do not change.)

JP3 : This remote control saves the learned data, timing data in ROM and other data (such as code data) in RAM. ROM already contains the timing data for other primary manufacturers. JP3 is a terminal for switching whether or not to use that pre-loaded timing data during learning.

This terminal is set at OPEN when delivered. If "data is learned but the product does not operate," there is the rare possibility that learned timing data is affected by the timing data for another primary manufacturer in ROM, causing the receiving product to be deactivated. In such a case, short JP3 to clear all the learned data and restart data learning, so that the data precision is increased. (In which case, the learned data in RAM is shared as is.)

## NOTE:

- : Indicates a chipresistor.
- : Indicates a chipcapacitor.
- : Indicates a chiptransistor.
- : Indicates a chipdiode.

## 1. RESISTORS:

Indicated in  $\Omega$ , 1/4W, 1/8W,  $\pm 5\%$  tolerance unless otherwise noted k: k $\Omega$ , M: M $\Omega$ , (F):  $\pm 1\%$ , (G):  $\pm 2\%$ , (K):  $\pm 10\%$ , (M):  $\pm 20\%$  tolerance.

## 2. CAPACITORS:

Indicated in capacity ( $\mu$ F)/voltage (V) unless otherwise noted p: pF. Indication without voltage is 50V except electrolytic capacitor.

## 3. OTHERS:

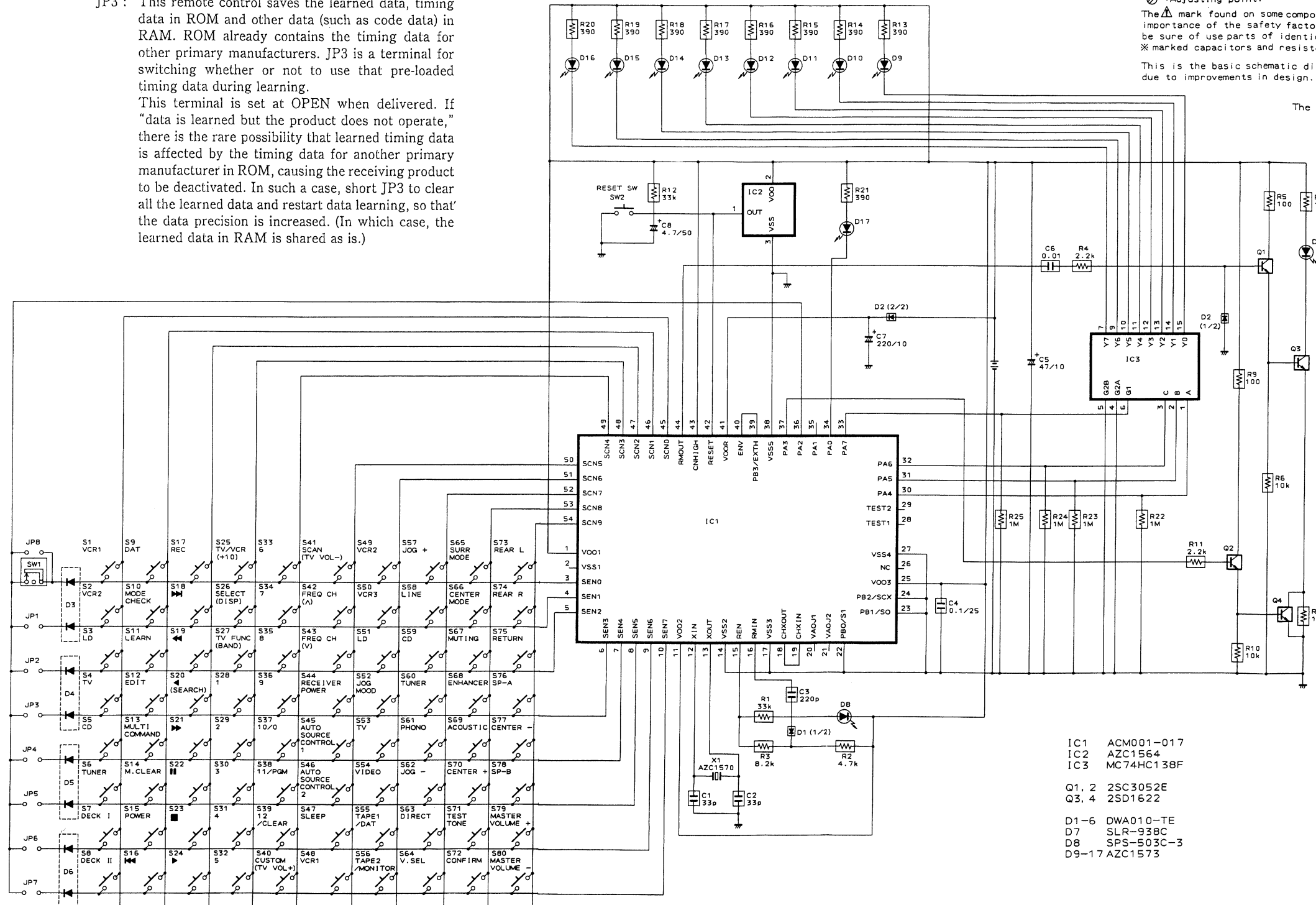
- : Signal route.
- ⊙ : Adjusting point.

The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure of use parts of identical designation.  
\* marked capacitors and resistors have parts numbers.

This is the basic schematic diagram but the actual circuit may vary due to improvements in design.

The underline indicates the switch position

- SW1: CENT. BAL./REAR REAR BAL.
- SW2: RESET
- S1: VCR1
- S2: VCR2
- S3: LD
- S4: TV
- S5: CD
- S6: TUNER
- S7: DECK I
- S8: DECK II
- S9: DAT
- S10: MODE CHECK
- S11: LEARN
- S12: EDIT
- S13: MULTI COMMAND
- S14: M. CLEAR
- S15: POWER
- S16:
- S17: REC
- S18:
- S19:
- S20: (SEARCH)
- S21:
- S22:
- S23:
- S24:
- S25: TV/VCR (+10)
- S26: SELECT (DISP)
- S27: TV FUNC (BAND)
- S28: 1
- S29: 2
- S30: 3
- S31: 4
- S32: 5
- S33: 6
- S34: 7
- S35: 8
- S36: 9
- S37: 10/0
- S38: 11/PGM
- S39: 12/CLEAR
- S40: CUSTOM (TV VOL+)
- S41: SCAN (TV VOL-)
- S42: FREQ CH (A)
- S43: FREQ CH (V)
- S44: RECEIVER POWER
- S45: AUTO SOURCE CONTROL 1
- S46: AUTO SOURCE CONTROL 2
- S47: SLEEP
- S48: VCR1
- S49: VCR2
- S50: VCR3
- S51: LD
- S52: JOG MODE
- S53: TV
- S54: VIDEO
- S55: TAPE1/DAT
- S56: TAPE2/MONITOR
- S57: JOG +
- S58: LINE
- S59: CD
- S60: TUNER
- S61: PHONO
- S62: JOG -
- S63: DIRECT
- S64: V. SEL
- S65: SURR MODE
- S66: CENTER MODE
- S67: MUTING
- S68: ENHANCER
- S69: ACOUSTIC
- S70: CENTER +
- S71: TEST TONE
- S72: CONFIRM
- S73: REAR L
- S74: REAR R
- S75: RETURN
- S76: SP-A
- S77: CENTER -
- S78: SP-B
- S79: MASTER VOLUME +
- S80: MASTER VOLUME -



IC1: ACM001-017  
IC2: AZC1564  
IC3: MC74HC138F

Q1, 2: 2SC3052E  
Q3, 4: 2SD1622

D1-6: DWA010-TE  
D7: SLR-938C  
D8: SPS-503C-3  
D9-17: AZC1573



8. FOR VSX – 9900S/KUC AND SD TYPES  
CONTRAST OF MISCELLANEOUS PARTS

- NOTES:
- Parts without part number cannot be supplied.
  - The ⚠ mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
  - Parts marked by “⦿” are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.

The VSX – 9900S/KUC and SD types are the same as the VSX – 95/KUC type with the exception of the following sections.

| Mark | Symbol & Description                                           | Part No.              |                          |                         | Remarks |
|------|----------------------------------------------------------------|-----------------------|--------------------------|-------------------------|---------|
|      |                                                                | VSX – 95/<br>KUC type | VSX – 9900S/<br>KUC type | VSX – 9900S/<br>SD type |         |
| ⦿    | MAIN FUNCTION assembly                                         | AWZ3673               | AWZ3560                  | AWZ3560                 | *       |
| ⦿    | SUB FUNCTION assembly                                          | AWZ3674               | AWZ3561                  | AWZ3561                 |         |
| ⦿    | VIDEO FUNCTION assembly                                        | AWZ3675               | AWZ3562                  | AWZ3562                 |         |
| ⦿    | ENHANCER assembly                                              | AWZ3676               | AWZ3563                  | AWZ3563                 |         |
| ⦿    | OSD assembly                                                   | AWZ3634               | .....                    | .....                   |         |
|      | TERMINAL assembly                                              | .....                 | Non Supply               | Non Supply              |         |
| ⚠    | S2 Voltage selector switch<br>(AC110V – 127V/220V – 240V)      | .....                 | .....                    | AKX1004                 |         |
| ⚠    | S3 Slide switch (9k/10k)                                       | .....                 | .....                    | ASH – 004               |         |
| ⚠    | S4 Voltage selector switch<br>(AC110V, 120 – 127V, 220V, 240V) | .....                 | .....                    | AKX – 507               |         |
| ⚠    | T Power transformer                                            | ATS1360               | ATS1360                  | ATS1361                 |         |
| ⚠    | FU1 Fuse (8A/125V)                                             | AEK1035               | AEK1035                  | .....                   |         |
| ⚠    | FU1 Fuse (5A/125V)                                             | .....                 | .....                    | AEK – 126               |         |
| ⚠    | FU2 Fuse (5A/125V)                                             | .....                 | .....                    | AEK – 126               |         |
| ⚠    | FU3, FU4 Fuse (6.3A/125V)                                      | AEK – 309             | AEK – 309                | AEK – 127               |         |
| ⚠    | AC Power cord                                                  | ADG1072               | ADG1058                  | ADG1051                 |         |
| ⚠    | Fuse holder                                                    | .....                 | .....                    | AKR – 038               |         |
|      | AC cord spacer                                                 | ANG1153               | .....                    | .....                   |         |
|      | Strain relief                                                  | .....                 | AEP – 113                | AEC – 882               |         |
|      | FL filter                                                      | AAK2169               | AAK2168                  | AAK2168                 |         |
|      | Leg assembly                                                   | AMR1158               | .....                    | .....                   |         |
|      | Front panel                                                    | ANB1480               | ANB1479                  | ANB1479                 |         |
|      | Bonnet case                                                    | ANE1302               | AZN1804                  | AZN1804                 |         |
|      | Wood collar                                                    | AEC1165               | .....                    | .....                   |         |
|      | Screw                                                          | ABA1086               | .....                    | .....                   |         |
|      | Screw                                                          | VBZ40P160FZK          | .....                    | .....                   |         |
|      | Screw                                                          | .....                 | .....                    | VMZ26P040FZK            |         |

\* : TERMINAL assembly of VSX9900S is in same location as OSD assembly of VSX – 95.

| Mark | Symbol & Description                 | Part No.              |                          |                         | Remarks |
|------|--------------------------------------|-----------------------|--------------------------|-------------------------|---------|
|      |                                      | VSX – 95/<br>KUC type | VSX – 9900S/<br>KUC type | VSX – 9900S/<br>SD type |         |
|      | Top pad                              | AHA1033               | .....                    | .....                   |         |
|      | Bottom pad                           | AHA1034               | .....                    | .....                   |         |
|      | Front, rear pad                      | .....                 | AHA1164                  | AHA1164                 |         |
|      | Packing case                         | AHD2122               | AHD2120                  | AHD2121                 |         |
|      | Operating instructions<br>(English)  | ARB1333               | ARB1332                  | ARB1332                 |         |
|      | Remote control unit<br>(CU – VSX031) | AXD1223               | .....                    | .....                   |         |
|      | Remote control unit<br>(CU – VSX023) | .....                 | AXD1207                  | AXD1207                 |         |
|      |                                      |                       |                          |                         |         |
|      |                                      |                       |                          |                         |         |
|      |                                      |                       |                          |                         |         |

⦿ MAIN FUNCTION assembly (AWZ3560)

The MAIN FUNCTION assembly (AWZ3560) is the same as the MAIN FUNCTION assembly (AWZ3673) with the exception of the following sections.

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | AWZ3673  | AWZ3560 |         |
|      | CN Pin jack 8P       | AKB1182  | AKB1127 |         |

⦿ SUB FUNCTION assembly (AWZ3561)

The SUB FUNCTION assembly (AWZ3561) is the same as the SUB FUNCTION assembly (AWZ3674) with the exception of the following sections.

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | AWZ3674  | AWZ3561 |         |
|      | CN Pin jack 6P       | AKB1178  | AKB1140 |         |
|      | CN Pin jack 8P       | AKB1179  | AKB1144 |         |

⦿ VIDEO FUNCTION assembly (AWZ3562)

The VIDEO FUNCTION assembly (AWZ3562) is the same as the VIDEO FUNCTION assembly (AWZ3675) with the exception of the following sections.

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | AWZ3675  | AWZ3562 |         |
|      | CN Pin jack 3P       | AKB1170  | AKB1143 |         |
|      | CN Pin jack 2P       | AKB1173  | AKB1118 |         |

## ● ENHANCER assembly (AWZ3563)

The ENHANCER assembly (AWZ3563) is the same as the ENHANCER assembly (AWZ3676) with the exception of the following sections.

| Mark | Symbol & Description | Part No. |         | Remarks |
|------|----------------------|----------|---------|---------|
|      |                      | AWZ3676  | AWZ3563 |         |
|      | CN Pin jack 3P       | AKB1170  | .....   |         |

## TERMINAL assembly

### NOTES:

- Parts without part number cannot be supplied.
- Parts marked by "●" are not always kept in stock. Their delivery time may be longer than usual or they may be unavailable.
- The  $\Delta$  mark found on some component parts indicates the importance of the safety factor of the part. Therefore, when replacing, be sure to use parts of identical designation.
- When ordering resistors, first convert resistance values into code form as shown in the following examples.

Ex. 1 When there are 2 effective digits (any digit apart from 0), such as 560 ohm and 47k ohm (tolerance is shown by ! = 5%, and K = 10%).

|              |                  |          |                             |
|--------------|------------------|----------|-----------------------------|
| 560 $\Omega$ | $56 \times 10^1$ | 561..... | RD1/4PS $\Delta$ $\Delta$ J |
| 47k $\Omega$ | $47 \times 10^3$ | 473..... | RD1/4PS $\Delta$ $\Delta$ J |
| 0.5 $\Omega$ | 0R5.....         |          | RN2H $\Delta$ $\Delta$ K    |
| 1 $\Omega$   | 010.....         |          | RS1P $\Delta$ $\Delta$ K    |

Ex. 2 When there are 3 effective digits (such as in high precision metal film resistors).

|                |                   |           |                                      |
|----------------|-------------------|-----------|--------------------------------------|
| 5.62k $\Omega$ | $562 \times 10^1$ | 5621..... | RN1/4SR $\Delta$ $\Delta$ $\Delta$ F |
|----------------|-------------------|-----------|--------------------------------------|

| Mark No. | Description | Parts No. |
|----------|-------------|-----------|
|----------|-------------|-----------|

### CAPACITORS

|          |                   |             |
|----------|-------------------|-------------|
| C751-754 | CERAMIC CAPACITOR | CKCYB102K50 |
|----------|-------------------|-------------|

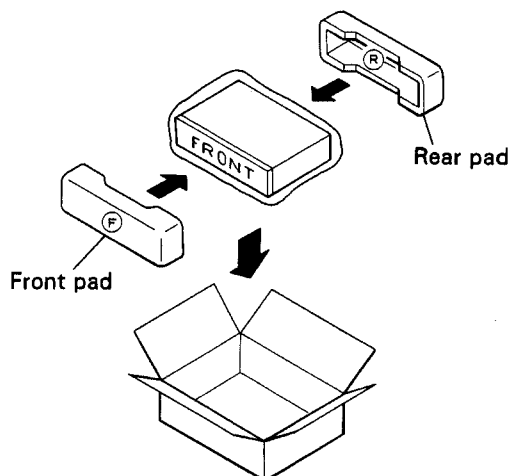
### RESISTORS

|               |             |
|---------------|-------------|
| All resistors | RD1/8PM474J |
|---------------|-------------|

### OTHERS

|    |             |         |
|----|-------------|---------|
|    | PIN JACK 1P | AKB1139 |
|    | PIN JACK 2P | AKB1142 |
| CN | PIN JACK 4P | AKB1181 |

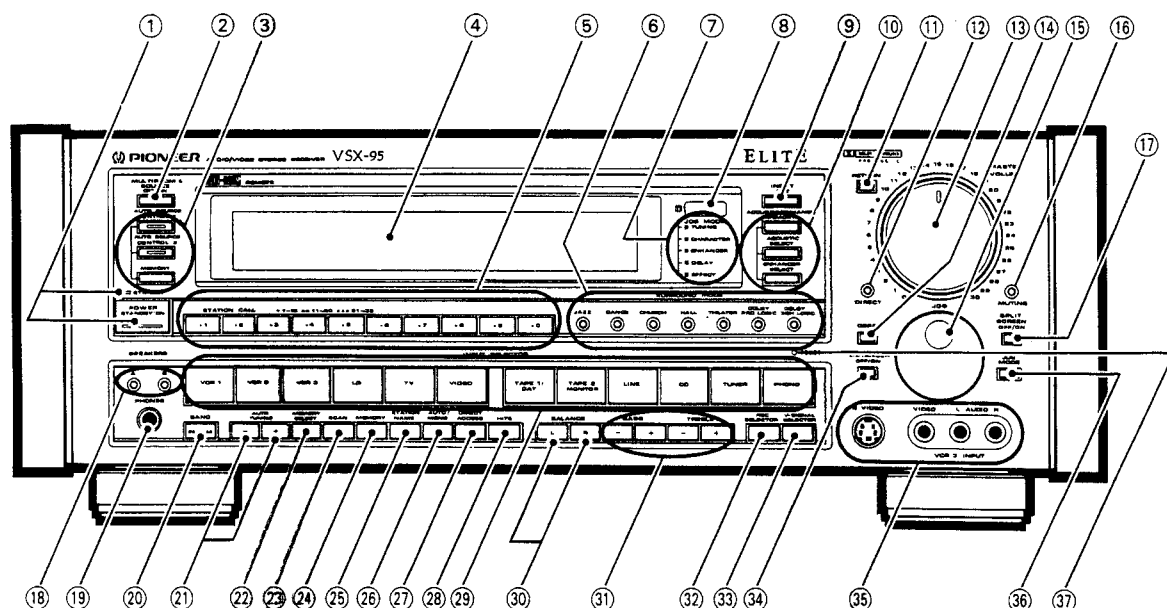
## ● PACKING (VSX - 9900S)





## 9. PANEL FACILITIES

### FRONT PANEL FACILITIES



#### ① POWER STANDBY/ON switch/indicator

This is the switch for electric power.

**ON** ..... When set to the ON position, power is supplied and the unit becomes operational.

**STANDBY** .. When set to STANDBY position, the main power flow is cut and the unit is no longer fully operational. A minute flow of power feeds the unit to maintain operation readiness.

The STANDBY indicator lights when the power is STANDBY, and goes out during ON.

#### ② MULTI ROOM & SOURCE button

Use in combination with the separately sold MR-100 Multi-Room remote control unit.

When this button is on, the source selected with the INPUT SELECTOR at that time is set to the Sub room function. The selected sub-function's sound is output through SUB ROOM SPEAKERS, and the video signal is output through the MULTI-ROOM & SOURCE VIDEO OUT jack. If you install speaker systems connected to the MULTI-ROOM SPEAKERS terminals in a different room, you can enjoy different sources in two different rooms with a single main unit.

#### ③ AUTO SOURCE CONTROL, MEMORY buttons

##### AUTO SOURCE CONTROL 1, 2:

These buttons are for memorizing and recalling your current settings. Both 1 and 2 can be used to memorize settings. If you connect another component, such as a CD player, to the CONTROL OUT jack on the rear panel, the signals to switch power on and start play are also transmitted.

##### MEMORY:

Use when memorizing settings to an AUTO SOURCE CONTROL button.

#### ④ Display section

#### ⑤ STATION CALL (RANDOM 30 CH) buttons

- These buttons are used to preset and recall desired broadcasting stations. You can also preset AUTO/MONO button settings.

#### Station call operation example:

If you press the **[\*2]** button:

- Once — station 2 is selected.
- Twice — station 12 is selected.
- Three times — station 22 is selected.

#### NOTE:

Pressing the STATION CALL buttons when a component other than TUNER is selected causes the INPUT SELECTOR setting to switch to TUNER.

- They are also used when performing direct access tuning.

#### ⑥ SURROUND MODE buttons

#### ⑦ JOG MODE indicators

The indicator for the mode that can currently be operated by the JOG dial lights. If it is not the mode you want to operate, switch to the desired mode with the JOG MODE button (⑩).

#### ⑧ Remote sensor window

#### ⑨ INPUT ATT button

Use this when there is distortion due to excessively high input signal level. When this is switched ON, -10 dB attenuator operates, and the INPUT ATT indicator in the display section lights.

#### ⑩ ACOUSTIC/ENHANCER MEMORY, SELECT buttons

##### ACOUSTIC/ENHANCER MEMORY:

Use to operate acoustic memory and enhancer memory.

##### ACOUSTIC SELECT:

Use this to store desired sound quality settings in memory. Also use it to recall memorized sound quality settings from memory. For further details concerning memory operation.

##### ENHANCER SELECT:

Use this to store a desired enhancer effect in memory, and to recall a desired enhancer effect. For further details concerning memory operation.

When the enhancer has been memorized, then the enhancer will be automatically switched ON when this button is pressed.

## FRONT PANEL FACILITIES

### ⑪ RETURN button

Pressing this button returns the receiver to the following settings, the sound level being controlled by MASTER VOLUME control knob.

- TAPE 2 MONITOR OFF
- SURROUND MODE OFF
- SPEAKERS A ON
- MUTING OFF
- BALANCE CENTER
- INPUT SELECTOR TUNER
- STATION CALL 1 CH\*

\* When a station is not memorized in 1 CH, station search will automatically proceed from the frequency displayed.

### ⑫ DIRECT button

Press this to listen to source sound without passing the audio signal through sound quality and balance adjusting circuitry.

The surround mode, and rear and center speakers are automatically switched off.

### ⑬ MASTER VOLUME control

Use to adjust the sound volume from the front, center and rear speakers. When you adjust volume by remote control, the indicator on the knob flashes.

When the MULTI ROOM & SOURCE switch is ON, volume level in sub room cannot be adjusted with this knob. To adjust sub room volume, point the remote control at the MR-100 in the sub room and operate.

### ⑭ DSSS (Digital Simulated Stereo System) button

Operate this when inputting a monaural signal to enjoy a simulated stereo sound. You can use it when a monaural signal is input into both the left and right channels or when a monaural signal is input into only one of the channels.

### ⑮ JOG dial

This lets you control the following five functions.

- (1) Tuner frequency (manual tuning).
- (2) Selection of letters for station naming.
- (3) Video enhancer effect level adjustment.
- (4) Surround's delay time selection.
- (5) Surround's total effect level adjustment.

You can select which function you want to control with the JOG MODE button ⑮, but the mode automatically switches when a function changes. For example, if you press the STATION NAME button, the JOG MODE automatically switches to the CHARACTER mode.

### ⑯ MUTING button

Press to temporarily cut off the sound volume. When pressed again, the sound will return to its previous level.

### ⑰ SPLIT SCREEN OFF/ON button

If you turn the ENHANCER OFF/ON button ON to add the video enhancer effect, and then turn this button on, the right side of the picture will have the enhancer effect added, and the left side will be without the enhancer effect. The signal that has passed through the enhancer is output through the TO MONITOR TV jacks and VCR OUT jacks. A split screen picture is output from the TO MONITOR TV jacks. However, S jack output is not affected by enhancer or split screen.

### ⑱ SPEAKERS A, B buttons

These are ON/OFF buttons for the speaker systems. When switched ON, SPEAKERS indicators (A, B) in the display section light.

### ⑲ PHONES jack

Connect the plug on your headphones to this jack. To hear only through the headphones, set all SPEAKERS A and B buttons to the OFF position.

#### NOTE:

*There are no ON/OFF switches for the rear and center speakers, so when you want to listen only on headphones, switch surround OFF. If you want to listen with surround ON, reduce rear and center volume levels using the remote control.*

### ⑳ BAND button (FM/AM)

Use this to switch between FM and AM frequency band reception.

### ㉑ AUTO TUNING buttons (Down (-), Up (+))

+ : Performs tuning in ascending frequency order.

- : Performs tuning in descending frequency order.

### ㉒ CUSTOM MEMORY SELECT button

Recall a genre name with this button.

### ㉓ SCAN button

Operates when the INPUT SELECTOR is set to TUNER. Station frequencies assigned to the STATION CALL buttons are tuned in, one after another, beginning with the current station no., for approximately 5 seconds each. Press the button again and reception of the station presently being received will continue. Station frequencies not assigned station numbers in the memory are skipped.

When you have selected a CUSTOM MEMORY genre, memory scan is performed on the stations in that genre.

### ㉔ MEMORY button

Pressing this button will result in the memorization of the current broadcast band, reception frequency, and FM AUTO/MONO mode.

This button is also used to input station names and custom memory operation.

### ㉕ STATION NAME button

This button is used when inputting station names.

### ㉖ AUTO/MONO button

Use to select the auto stereo mode or monaural mode when listening to FM broadcasts. The monaural mode has been selected when the FM MONO indicator in the display section is lit.

#### Auto stereo mode:

Normally, leave in this mode for reception. When a stereo broadcast is received, it will be automatically reproduced in stereo.

During stereo broadcast reception, the STEREO indicator in the display section lights.

#### Monaural mode:

When receiving distant stations or stations with weak broadcast signals, the input signal may be weak, thus resulting in increased noise during FM stereo broadcasts. In this event, setting the receiver to the monaural mode will reduce the noise; however, FM stereo broadcasts will be reproduced in monaural sound.

#### NOTE:

*This button has no effect on reception of AM broadcasts.*

### ㉗ DIRECT ACCESS button

When this button is pressed, the STATION CALL buttons function as 10-key number buttons for direct input of the desired reception frequency.

When frequencies that cannot be received are entered, the entered frequency value flashes, before reception of the previous frequency resumes.

### ㉘ HITS (Hyper Intelligent Tuning System) button

- If the HITS button is pressed at the currently displayed station frequency, the receiver searches up and down the frequency for the next station and stops at the first one it finds.

- If the HITS button is pressed during STATION NAME input the receiver performs a memory search in order of ascending station number for memorized stations whose names begin with the same letter as the station just input.

- If the HITS button is pressed during input of numbers or DIRECT ACCESS tuning, the receiver sets the remaining digits, which have not yet been input, to "0", searches for the corresponding frequencies, and stops on the first station it finds.



## FRONT PANEL FACILITIES

**NOTE:**

- The system searches for stations within successive 1 MHz ranges for FM and 100 kHz ranges for AM. During DIRECT ACCESS tuning, it searches up and down for a station until it reaches the edges of the band. If no receivable station is found within the band range, the receiver returns to the state it was in before the HITS button was pressed.
- If the upper (or lower) frequency limit of the receiver is encountered during HITS operation, the receiver stops searching in that direction but continues to search in the other.

**29 INPUT SELECTOR buttons****• Video input selector**

**VCR 1:** Press when performing playback on a first VCR unit.

**VCR 2:** Press when performing playback on a second VCR unit.

**VCR 3:** Press when performing playback on a third VCR unit.

**LD:** Press when performing playback on an LD player.

**TV:** Press to watch TV broadcasts from the TV tuner connected to the rear panel TV IN jacks.

**VIDEO:** Press when performing playback on a VCR connected to VIDEO IN jack.

**• Audio input selector**

**TAPE 1/DAT:** Press when performing playback on a DAT or cassette deck.

**TAPE 2 MONITOR:** Press when performing playback on a second cassette deck.

**LINE:** Press when performing playback on an audio component connected to the LINE IN jacks.

**CD:** Press when playing compact discs on a CD player.

**TUNER:** Press when listening to radio broadcasts.

**PHONO:** Press when playing records on a turntable.

**NOTE:**

Because of the digital processing performed by this unit's Digital Signal Processor, high level input may result in distortion. This is particularly true when using a turntable with a high output cartridge. In this case, adjust the volume level with the PHONO LEVEL control on the rear panel so that it is the same as other inputs. If there is distortion due to excessively high input level from another component, use the INPUT ATT button to adjust input level.

**30 BALANCE buttons**

Use to adjust the sound volume balance between left and right speakers.

**L:** Press to decrease the sound on the right side.

**R:** Press to decrease the sound on the left side.

Press L and R together to bring the volume balance back to standard (Left = Right).

**Example:** When pressing and holding the "R" button.

**31 Tone control buttons****BASS:**

Use to adjust the low-frequency level. Press the + button to increase low-frequency level, and the - button to decrease it.

When both sides (+, -) of the BASS control are pressed simultaneously, the base response will be set to the flat (normal) condition. "BASS C" is shown in the display section.

**TREBLE:**

Use to adjust the high-frequency level. Press the + button to increase high-frequency level, and the - button to decrease it.

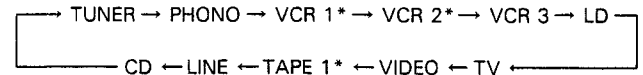
When both sides (+, -) of the TREBLE control are pressed simultaneously, the treble response will be set to the flat (normal) condition. "TREBLE C" is shown in the display section.

Adjust TONE CONTROL settings are indicated in the display section for several seconds.

**32 REC SELECTOR button**

You can select the component to be recorded from, on TAPE 1, VCR 1, VCR 2, without using the INPUT SELECTOR.

Each time you press the REC SELECTOR button, the components change in the following order.



When the REC SELECTOR has been through all the components once, REC SELECTOR switches off.

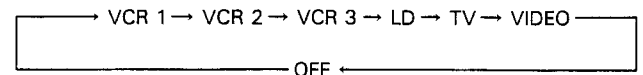
Recording between units marked with the "\*" is possible in the following relationships.

From TAPE 1 on VCR 1 and 2, from VCR 1 on VCR 2 and TAPE 1, and from VCR 2 on VCR 1 and TAPE 1.

Do not select the component you wish to record on (for example, VCR 1), with the REC SELECTOR.

**33 V (Video) SIGNAL SELECTOR button**

Press this to switch VIDEO OUT (TO MONITOR TV) and VCR VIDEO OUT in the following sequence: (Audio does not change)



Indications are only displayed during operation.

There is no picture when it is OFF.

**34 ENHANCER OFF/ON button**

Use to switch the video enhancer effect ON/OFF during playback or recording of a video.

When it is switched ON, adjust the degree of effect with the JOG dial 16. If you turn ON the SPLIT SCREEN OFF/ON button 17, the right half of the screen shows a picture with the enhancer ON, and the left half of the screen shows a picture with the enhancer OFF.

The enhancer has no effect on S jack and MULTI-ROOM & SOURCE VIDEO OUT jack video signals.

**35 VCR 3 INPUT jacks**

Video components such as a VCR or TV camera, etc. can be connected here.

**36 JOG MODE button**

Use this to select the mode you want to control with the JOG dial 16. The selected mode is indicated by the JOG MODE indicators 7.

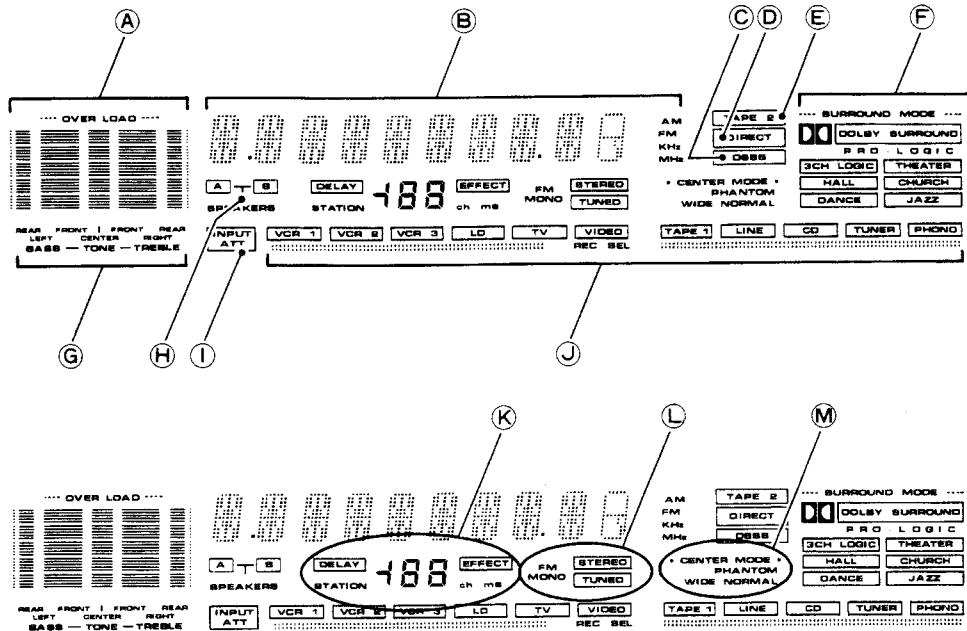
**37 Reset button**

Use this when normal operation becomes impossible because of external influences such as static electricity or lightning, or when operation is impossible even when operation buttons are pressed. Press this button to return to normal operating conditions.

If you press this button when the power is ON, the unit switches to POWER STANDBY, and the entire contents of the memory are erased.

## FRONT PANEL FACILITIES

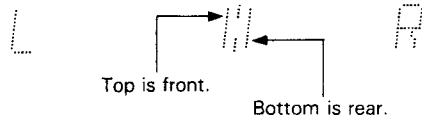
## DISPLAY SECTION

**A Level/Tone meters**

The level meter is usually displayed. If the input level is too high, the display switches, and the OVER LOAD indicator lights. During Tone control operation, the display switches accordingly.

**B Character display/Balance meter**

- Character display indicates such information as function, received frequency, station name, acoustic memory, and enhancer memory, etc.
- Front and rear left/right balance is indicated. This is displayed during balance adjustment, after which indications return to character display.

**C DSSS indicator**

Lights when the DSSS button is ON.

**D DIRECT indicator**

This lights when the Direct mode is switched ON.

**E TAPE 2 indicator**

Lights when the TAPE 2 MONITOR button is in the ON position.

**F SURROUND MODE indicators**

These display the selected surround mode. When all indicators are out, surround is OFF.

**G Meter mode indicator**

Indicates the display modes mentioned in (A).

**H SPEAKERS indicators**

Shows which speaker system (or systems) are switched ON.

**I INPUT ATT indicator**

This lights when the INPUT ATT button is switched ON.

**J REC selector indicators**

- The recording source selected with the REC SELECTOR button is usually displayed.

**K Station call no./Delay time/Surround effect/Enhancer level display**

- Usually, the STATION indicator and "ch" light to display the station call number.
- When adjusting surround delay time, the DELAY indicator and ms light to display delay time.
- When adjusting surround effect level, the EFFECT indicator lights, and effect level from 5 to 100 is displayed.
- When adjusting enhancer level, enhancer level from -50 to 50 is displayed.

**L Tuning indicators**

**FM MONO:** This lights when you select MONO with the AUTO/MONO button. When this indicator is lit, reception of FM stereo broadcasts is also monaural.

**STEREO:** When the FM MONO indicator is out (auto stereo mode), this lights when receiving an FM stereo broadcast.

**TUNED:** Lights when a station is tuned.

**M CENTER MODE indicators**

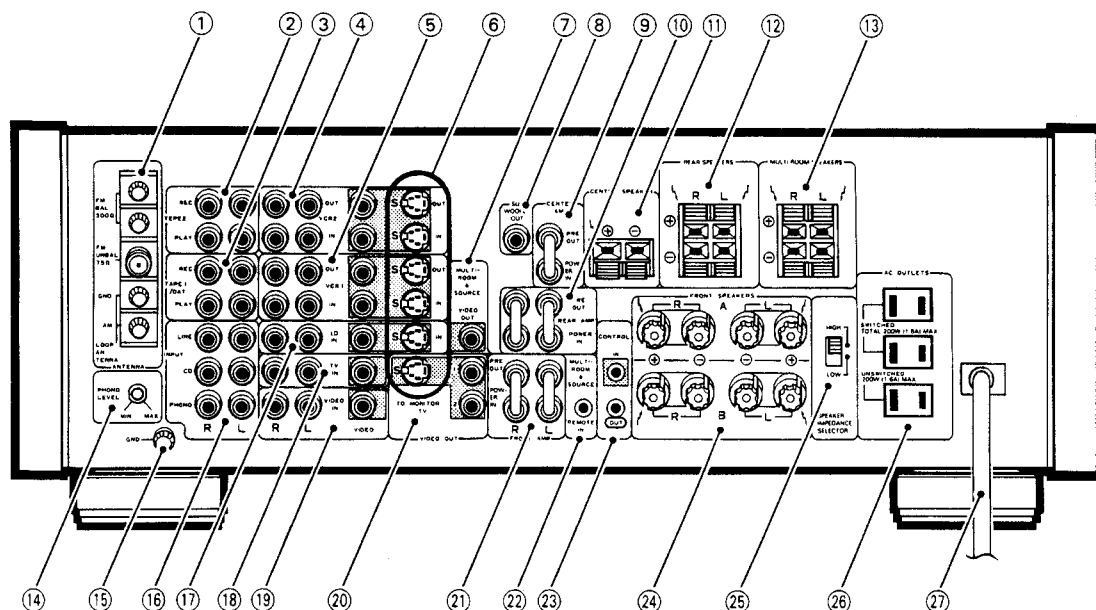
These display the center mode (NORMAL, WIDE, PHANTOM) during THEATER, DOLBY PRO LOGIC SURROUND or DOLBY 3CH LOGIC operation.

**Warning indication:**

Display section indicators will flash to indicate that operation is not possible in a particular situation when you press a button. With Multi-Room & Source, the button itself flashes.



## REAR PANEL FACILITIES



### ① FM/AM ANTENNA terminals

Use these antenna terminals for reception of normal FM and AM broadcasts.

Attach the accessory AM Loop and FM T-type antennas, here.

- For details regarding antenna connection, see the section "HINTS FOR BETTER RECEPTION".

### ② TAPE 2 jacks

Connect a second cassette deck to these jacks.

#### Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck should be connected to the REC side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

#### Connection for Playback

Connect the TAPE PLAY jack on the cassette deck to the PLAY side of the TAPE 2 jack on the receiver with a pin plug connecting cord.

### ③ TAPE 1/DAT jacks

Connect a DAT (digital audio tape deck) or your primary analog cassette deck to these jacks.

#### Connection for Recording

The tape recording jack (TAPE REC) on the cassette deck or DAT should be connected to the REC side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

Audio recording from TAPE 2 is not possible.

#### Connection for Playback

Connect the TAPE PLAY jack on the cassette deck or DAT to the PLAY side of the TAPE 1/DAT jack on the receiver with a pin plug connecting cord.

### ④ VCR 2 jacks

#### [VIDEO IN]

Connect to the VCR 2 VIDEO OUTPUT jacks.

#### [AUDIO IN (L, R)]

Connect to the VCR 2 AUDIO OUTPUT jacks.

#### [VIDEO OUT]

Connect to the VCR 2 VIDEO INPUT jacks.

#### [AUDIO OUT (L, R)]

Connect to the VCR 2 AUDIO INPUT jacks.

### ⑤ VCR 1 jacks

#### [VIDEO IN]

Connect to the VCR 1 VIDEO OUTPUT jacks.

#### [AUDIO IN (L, R)]

Connect to the VCR 1 AUDIO OUTPUT jacks.

#### [VIDEO OUT]

Connect to the VCR 1 VIDEO INPUT jacks.

#### [AUDIO OUT (L, R)]

Connect to the VCR 1 AUDIO INPUT jacks.

### ⑥ S (connector) video jacks

When used in conjunction with a VCR, Video disc player (LaserDisc player) or TV monitor equipped with S video jacks, connect to these jacks.

### ⑦ MULTI-ROOM & SOURCE VIDEO OUT jack

When using the Multi-Room & Source function, use this to connect the TV monitor for use in the Sub room.

### ⑧ SUB WOOFER OUT jack

If you want to boost the low frequencies, or you want to use the unit in a 3D system, connect to a sub woofer power amplifier.

## REAR PANEL FACILITIES

### ⑨ CENTER AMP jacks

#### [POWER IN]

When a separate preamplifier is used for surround center speaker and this unit is used as a power amplifier, connect the preamplifier to this jack.

#### [PRE-OUT]

When a separate power amplifier is used to drive the surround center speaker, connect the power amplifier to this jack.

### ⑩ REAR AMP jacks

#### [PRE OUT]

When a separate power amplifier is used to drive the rear speakers, connect the power amplifier to these jacks.

#### [POWER IN]

When a separate preamplifier is used for rear speakers and this unit is used as a power amplifier, connect the preamplifier to these jacks.

### ⑪ CENTER SPEAKERS terminals

Connecting the surround center channel speaker system.

#### Speaker impedance:

Use a center speaker with a nominal impedance of 8  $\Omega$ .

#### NOTE:

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdown may occur when conductors come into contact with each other.*

### ⑫ REAR SPEAKERS terminals

Connect the rear speakers to these terminals.

#### Speaker impedance

Connect speaker systems with a nominal impedance of between 8 and 16  $\Omega$ .

#### NOTE:

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

### ⑬ MULTI-ROOM SPEAKERS terminals

Connect to the Multi-room speakers.

#### Speaker impedance

Connect speaker systems with a nominal impedance of between 8 and 16  $\Omega$ .

#### NOTE:

*Do not allow any of the cord's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdowns may occur when conductors come into contact with each other.*

### ⑭ PHONO LEVEL control

Use to adjust turntable input level. If distortion occurs when you are using a high-output cartridge, adjust the volume level until it's the same as another input, such as TUNER.

### ⑮ GND terminal

Connect the turntable ground lead to this terminal.

### ⑯ Audio INPUT jacks

**PHONO**..... Connect to turntable.

**CD**..... Connect to compact disc player.

**LINE**..... Connect to the audio output jacks of an additional audio component.

### ⑰ LD jacks (input)

#### [VIDEO IN]

When watching the video image from an LD player or a VCR used for playback, connect its VIDEO OUTPUT jack here.

#### [AUDIO IN (L, R)]

When playing back the audio channel from an LD player (CD CDV LD player) or a VCR for playback, connect its AUDIO OUTPUT jacks here.

### ⑱ TV jacks (input)

Use these jacks if you wish to connect a TV tuner with both video and audio outputs.

#### [VIDEO IN]

Connect the TV tuner's VIDEO OUTPUT to this jack.

#### [AUDIO IN (L, R)]

Connect the TV tuner's AUDIO OUTPUT to these jacks.

### ⑲ VIDEO jacks (input)

Connect the output jacks of video components.

For example, connect a playback-only VCR or a video camera.

### ⑳ VIDEO OUT TO MONITOR TV jacks (output)

Use to connect a TV monitor or a TV set with video input terminals for watching program materials from a VCR or Video disc player (LD player) connected to this unit.

### ㉑ FRONT AMP jacks

#### [PRE-OUT]

When a separate power amplifier is used to drive the front speakers, connect the power amplifier to these jacks.

#### [POWER IN]

When a separate preamplifier is connected and this unit is used as power amplifier, connect the preamplifier to these jacks.

### ㉒ MULTI-ROOM & SOURCE REMOTE IN jack

When using the MULTI-ROOM & SOURCE function, connect to the separately sold MR-100 Multi-Room remote control unit.

### ㉓ CONTROL IN, OUT jacks

Used for system control with other Pioneer components bearing the **SR** mark.

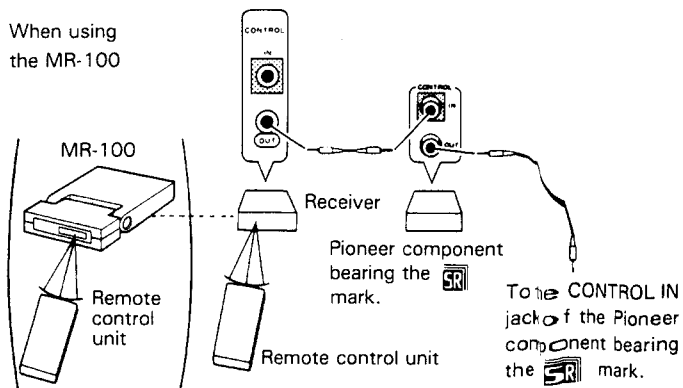
**IN:** For connection from the CONTROL OUT jack of another component (TV, etc.).

**OUT:** For connection to the CONTROL IN jack of another component.

#### NOTE:

*The receiver's remote sensor does not function when a plug is inserted in the IN jack. To operate, point the remote control unit at the remote sensor on the component to which the receiver's IN jack is connected.*

When using the MR-100





## REAR PANEL FACILITIES

**②④ FRONT SPEAKERS terminals**

**A:** Connect to the first set of speakers.

**B:** Connect to a second set of speakers.

**Speaker impedance:**

Refer to ②⑤ SPEAKER IMPEDANCE SELECTOR switch.

**NOTE:**

*Do not allow any of the code's conductors to protrude from the terminals or touch any other conductors. Malfunctioning or breakdown may occur when conductors come into contact with each other.*

**②⑤ SPEAKER IMPEDANCE SELECTOR switch**

Set this switch to match the impedance of your front speakers.

**I** When using one pair of speakers:

| Impedance of a speaker              | Selector position |
|-------------------------------------|-------------------|
| 8 $\Omega$ to less than 16 $\Omega$ | HIGH              |
| 4 $\Omega$ to less than 8 $\Omega$  | LOW               |

**II** When using two pairs of speakers:

Select LOW as the selector switch position and use speakers with a nominal impedance of between 8 and 16  $\Omega$ .

**NOTE:**

*Turn off the receiver's power before changing the impedance selector switch setting.*

**②⑥ AC OUTLETS****SWITCHED TOTAL 200 W (1.6 A) MAX**

Power supplied through these outlets is turned on and off by the receiver's POWER switch. Total electrical power consumption of connected equipment should not exceed 200 W (1.6 A).

**UNSWITCHED 200 W (1.6 A) MAX**

Power flows continually to this outlet, regardless of whether the receiver is switched ON or OFF. Electrical power consumption of the connected equipment should not exceed 200 W (1.6 A).

**NOTE:**

*Do not connect appliances with high power consumption such as heaters, irons, or television sets to these AC OUTLETS in order to avoid overheating and fire risk.*

*This can cause the receiver to malfunction.*

**CAUTION:**

**DO NOT CONNECT MONITOR OR TV SET.**

**②⑦ AC Power cord**

Connect to AC wall socket.

**NOTE:**

*This unit should be disconnected by removing the power plug from the wall socket when not in regular use, e.g. when on vacation.*

## 10. SPECIFICATIONS

### Amplifier section

#### OUTPUT POWER (POWER AMP IN)

##### (Front)

Continuous average power output of 130 watts\* per channel, min., at 8 ohms, from 20 Hz to 20,000 Hz with no more than 0.005 %\*\* total harmonic distortion.

Rear, center ..... 40 W + 40 W, 40 W (1 kHz, 0.08 %, 8  $\Omega$ )

### Audio section

#### Damping Factor

1 kHz, 8  $\Omega$  ..... 100

#### Input (Sensitivity/Impedance)

PHONO MM ..... 2.5 mV/47 k $\Omega$

CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,

LD, VCR 1, VCR 2, VCR 3 ..... 150 mV/47 k $\Omega$

POWER AMP IN ..... 1 V/47 k $\Omega$

#### Phono Overload Level (T.H.D. 0.08 %, 1 kHz)

PHONO MM ..... 150 mV

#### Output (Level/Impedance)

TAPE 1/DAT REC, TAPE 2 REC, VCR 1 OUT, VCR 2 OUT

..... 150 mV/2.2 k $\Omega$

PRE AMP OUT ..... 1 V/220  $\Omega$

#### Frequency Response

PHONO MM ..... 20 Hz to 20,000 Hz  $\pm$  0.3 dB

CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,

LD, VCR 1, VCR 2, VCR 3 ..... 5 Hz to 100,000 Hz  $\pm$  0.5 dB

#### Tone Control

BASS .....  $\pm$  8 dB (100 Hz)

MIDDLE .....  $\pm$  8 dB (1 kHz)

TREBLE .....  $\pm$  8 dB (10 kHz)

Loudness Contour ..... +6 dB (100 Hz)

+3 dB (10 kHz)

#### Signal-to-Noise Ratio (IHF, short-circuited, A network)

PHONO MM ..... 82 dB

CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,

LD, VCR 1, VCR 2, VCR 3 ..... 98 dB

#### Signal-to-Noise Ratio [EIA, at 1 W (1 kHz)]

PHONO MM ..... 77 dB

CD, LINE, TAPE 1/DAT, TAPE 2, VIDEO, TV,

LD, VCR 1, VCR 2, VCR 3 ..... 80 dB

### VIDEO Section

#### Input (Sensitivity/Impedance)

VCR 1, VCR 2, VCR 3, LD, TV, VIDEO,

ADAPTOR ..... 1 Vp-p/75  $\Omega$

#### Output (Level/Impedance)

VCR 1, VCR 2, ADAPTOR, MONITOR ..... 1 Vp-p/75  $\Omega$

#### Frequency Response

VCR 1, VCR 2, VCR 3, LD, TV, VIDEO,

ADAPTOR  $\rightarrow$  MONITOR ..... 5 Hz — 10 MHz  $\pm$  0.5 dB

Signal-to-Noise Ratio ..... 55 dB

Cross Talk ..... 55 dB (3.58 MHz)

Enhancer .....  $\pm$  3 dB (2 MHz)

### [S terminals]

#### Input (Sensitivity/impedance)

VCR 1, VCR 2, LD ..... Luminance signal: 1 Vp-p/75  $\Omega$

Color difference signal: 0.286 Vp-p/75  $\Omega$

#### Output (Level/impedance)

VCR 1, VCR 2, TO MONITOR TV... Luminance signal: 1 Vp-p/75  $\Omega$

Color difference signal: 0.286 Vp-p/75  $\Omega$

#### Frequency response

Luminance signal ..... 5 Hz to 10 MHz,  $\pm$  0.5 dB

#### Signal-to-Noise Ratio

Luminance signal ..... 55 dB

Cross talk ..... 55 dB (3.58 MHz)

### Surround section

#### Input (Sensitivity/Impedance)

REAR POWER AMP IN ..... 1 V/47 k $\Omega$

CENTER POWER AMP IN ..... 1 V/47 k $\Omega$

#### Output (Level/Impedance)

REAR PRE AMP OUT ..... 1 V/470  $\Omega$

CENTER PRE AMP OUT ..... 1 V/470  $\Omega$

### FM Tuner Section

Frequency Range ..... 87.5 MHz to 108 MHz

Usable Sensitivity ..... Mono; 10.8 dBf, IHF (0.95  $\mu$ V/75  $\Omega$ )

50 dB Quieting Sensitivity ..... Mono; 15.3 dBf, (1.6  $\mu$ V/75  $\Omega$ )

Stereo; 37.0 dBf, (19.5  $\mu$ V/75  $\Omega$ )

Signal-to-Noise Ratio ..... Mono; 80 dB ( $\pm$  65 dBf)

Stereo; 76 dB ( $\pm$  85 dBf)

Distortion ..... Mono; 0.08 % (100 Hz)

0.08 % (1 kHz)

0.2 % (6 kHz)

Stereo; 0.2 % (100 Hz)

0.15 % (1 kHz)

0.3 % (6 kHz)

Capture Ratio ..... 1.0 dB

Alternate Channel Selectivity ..... 65 dB (400 kHz)

Stereo Separation ..... 50 dB (1 kHz)

Frequency Response ..... 30 Hz to 15 kHz  $\pm$  0.5 dB

Image Interference Ratio ..... 50 dB

IF Interference Ratio ..... 80 dB

AM Suppression Ratio ..... 55 dB

Spurious Interference Ratio ..... 70 dB

Antenna Input ..... 300  $\Omega$  balanced

75  $\Omega$  unbalanced

### AM Tuner Section

Frequency range ..... When 10 kHz step: 530 kHz — 1700 kHz

When 9 kHz step: 531 kHz — 1602 kHz

Sensitivity (IHF, Loop antenna) ..... 300  $\mu$ V/m

Selectivity ..... 30 dB

Signal-to-Noise Ratio ..... 50 dB

Image Interference Ratio ..... 40 dB

Antenna ..... Loop antenna



## SPECIFICATIONS

### Miscellaneous

|                                |                                          |
|--------------------------------|------------------------------------------|
| Power requirements .....       | AC 120V, 60 Hz                           |
| Power consumption .....        | 600 W, 790 VA                            |
| In standby condition .....     | 3 W                                      |
| AC Outlets .....               | SWITCHED x 2: TOTAL 200 W MAX            |
|                                | UNSWITCHED x 1: 200 W MAX                |
| Dimensions .....               | 420 (W) x 162 (H) x 421 (D).mm           |
|                                | 16-9/16 (W) x 6-3/8 (H) x 16-9/16 (D) in |
| Weight (without package) ..... | 14.6 kg (32 lb 3 oz)                     |

### Furnished Parts

|                                               |   |
|-----------------------------------------------|---|
| FM T-type antenna .....                       | 1 |
| AM Loop antenna .....                         | 1 |
| Size "AA" Alkaline batteries (LR6/AM-3) ..... | 2 |
| Remote control unit .....                     | 1 |
| Operating Instructions .....                  | 1 |

#### NOTE:

*Specifications and the design subject to possible modifications without notice due to improvements.*

\* *Measured pursuant to the Federal Trade Commission's Trade Regulation rule on Power Output Claims for Amplifier.*

\*\* *Measured by Audio Spectrum Analyzer.*