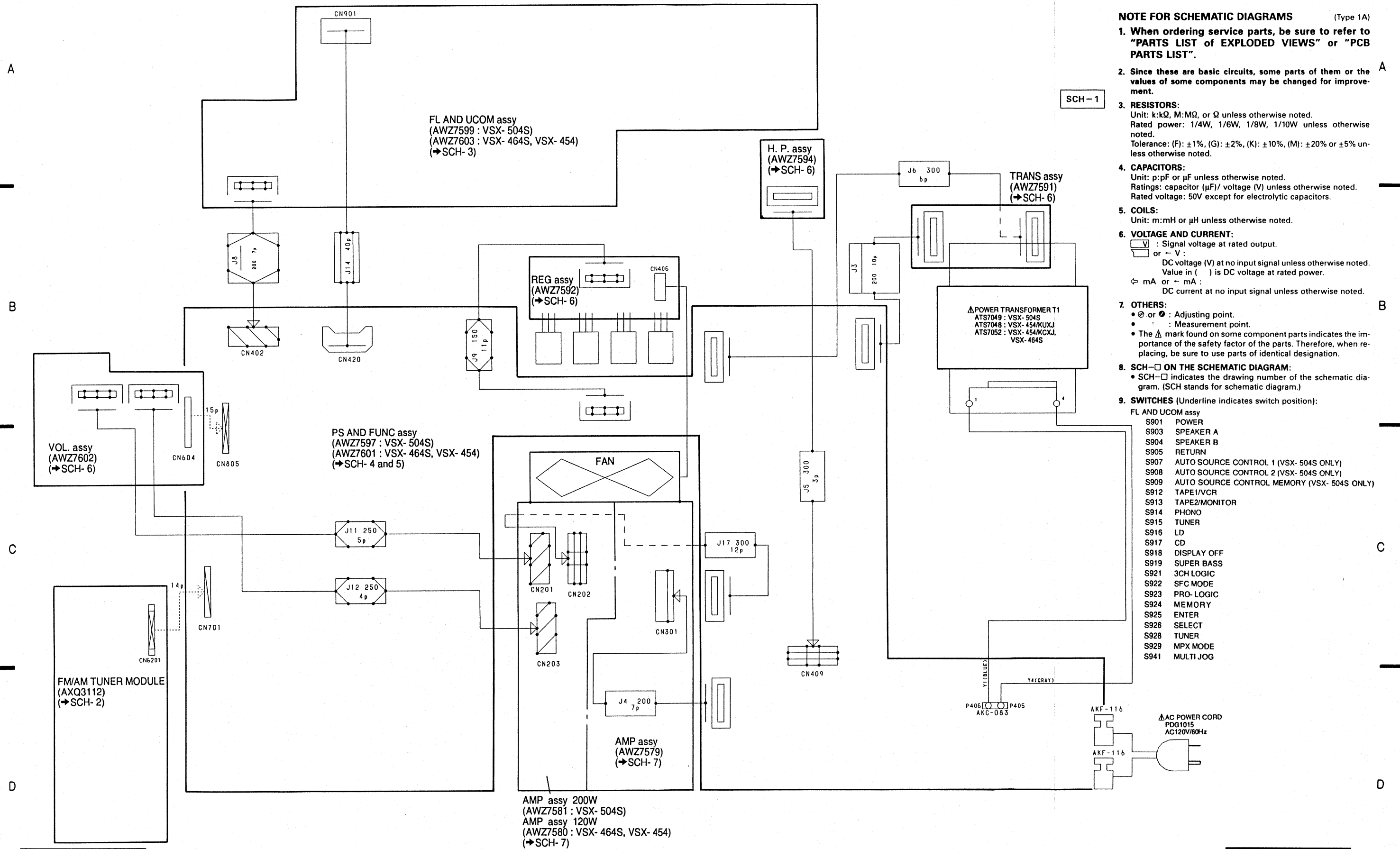


4. SCHEMATIC AND PCB CONNECTION DIAGRAMS

4.1 OVERALL SCHEMATIC DIAGRAM



NOTE FOR SCHEMATIC DIAGRAMS (Type 1A)

1. When ordering service parts, be sure to refer to "PARTS LIST of EXPLODED VIEWS" or "PCB PARTS LIST".

2. Since these are basic circuits, some parts of them or the values of some components may be changed for improvement.

3. RESISTORS:
Unit: k: kΩ, M: MΩ, or Ω unless otherwise noted.
Rated power: 1/4W, 1/6W, 1/8W, 1/10W unless otherwise noted.
Tolerance: (F): ±1%, (G): ±2%, (K): ±10%, (M): ±20% or ±5% unless otherwise noted.

4. CAPACITORS:
Unit: p:pF or μF unless otherwise noted.
Ratings: capacitor (μF)/ voltage (V) unless otherwise noted.
Rated voltage: 50V except for electrolytic capacitors.

5. COILS:
Unit: m:mH or μH unless otherwise noted.

6. VOLTAGE AND CURRENT:
V: Signal voltage at rated output.
or - V :
DC voltage (V) at no input signal unless otherwise noted.
Value in () is DC voltage at rated power.
mA or - mA :
DC current at no input signal unless otherwise noted.

7. OTHERS:
⊙ or ⊙ : Adjusting point.
⊙ : Measurement point.
The Δ mark found on some component parts indicates the importance of the safety factor of the parts. Therefore, when replacing, be sure to use parts of identical designation.

8. SCH-□ ON THE SCHEMATIC DIAGRAM:
SCH-□ indicates the drawing number of the schematic diagram. (SCH stands for schematic diagram.)

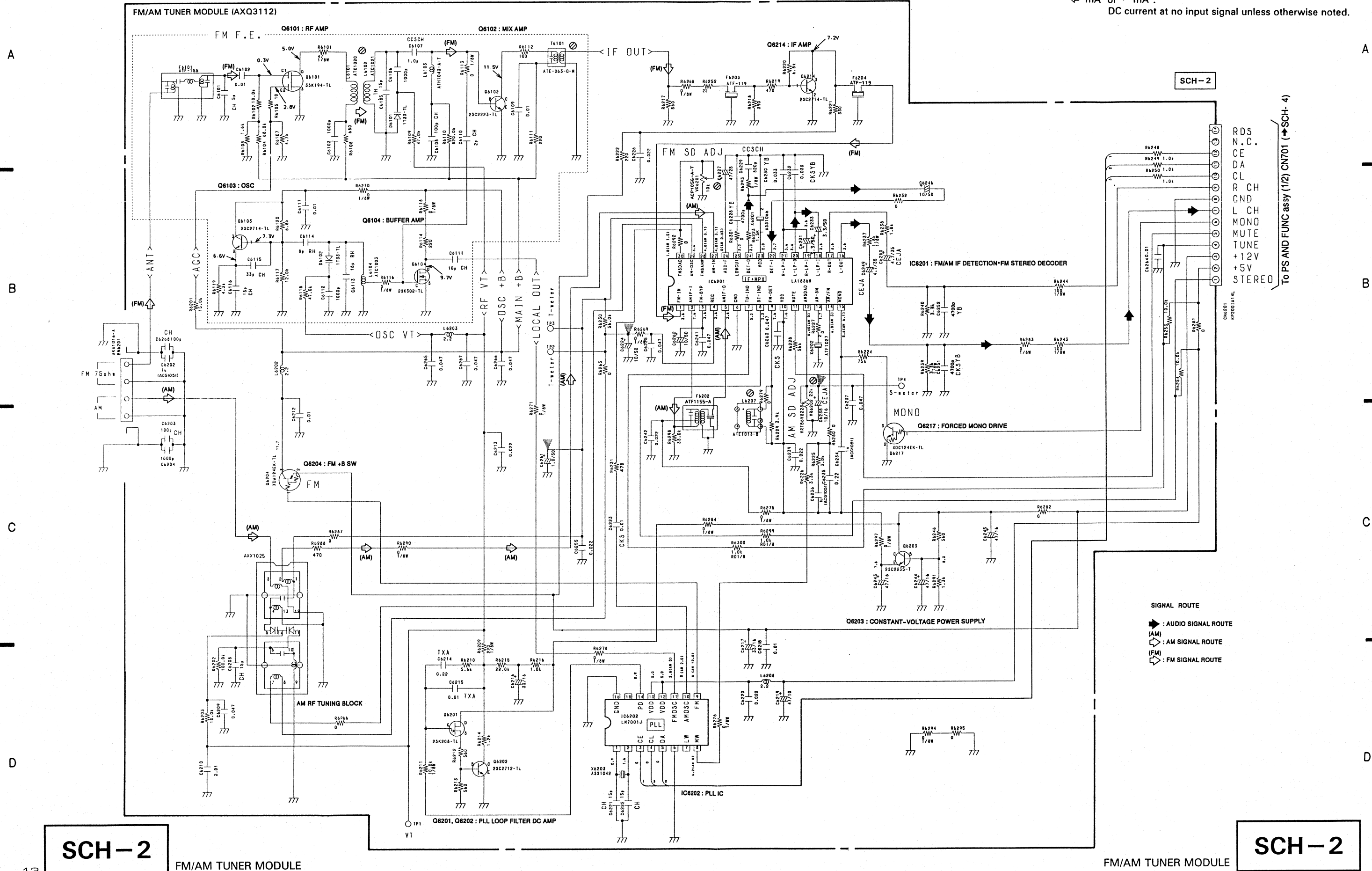
9. SWITCHES (Underline indicates switch position):

SCH-1 OVERALL SCHEMATIC DIAGRAM

4.2 FM/AM TUNER MODULE

NOTE: VOLTAGE AND CURRENT

- mV : Signal voltage at FM 1kHz, 100% MOD.
- or \pm V : DC voltage (V) at no input signal unless otherwise noted. Value in () is DC voltage at rated power.
- \leftarrow mA or \pm mA : DC current at no input signal unless otherwise noted.



SCH-2

SCH-2

FM/AM TUNER MODULE

FM/AM TUNER MODULE

FM/AM TUNER MODULE

A

Q6101

B

Q6204
Q6102 Q6214

Q6103
Q6104

C

IC6202

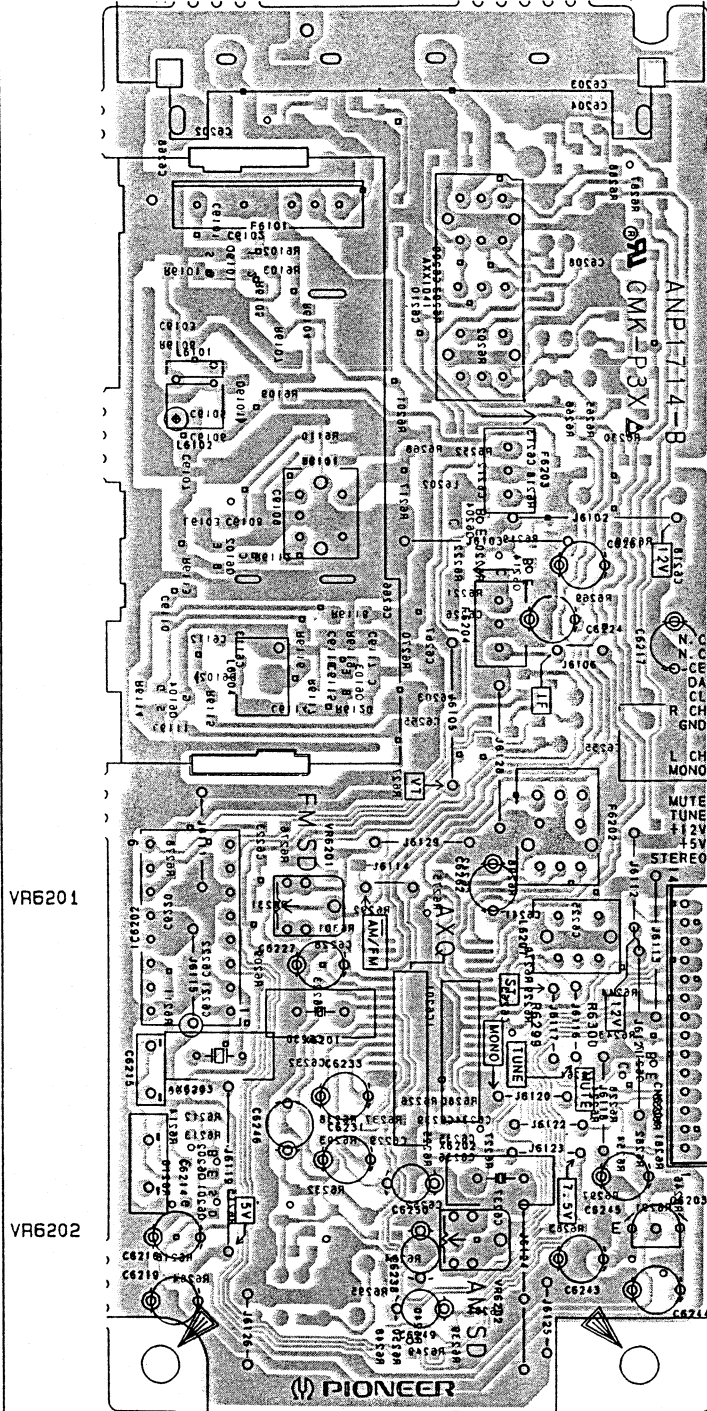
IC6201

Q6217

Q6202
Q6201

Q6203

D



NOTE FOR PCB DIAGRAMS:

1. Part numbers in PCB diagrams match those in the schematic diagrams.
2. A comparison between the main parts of PCB and schematic diagrams is shown below.

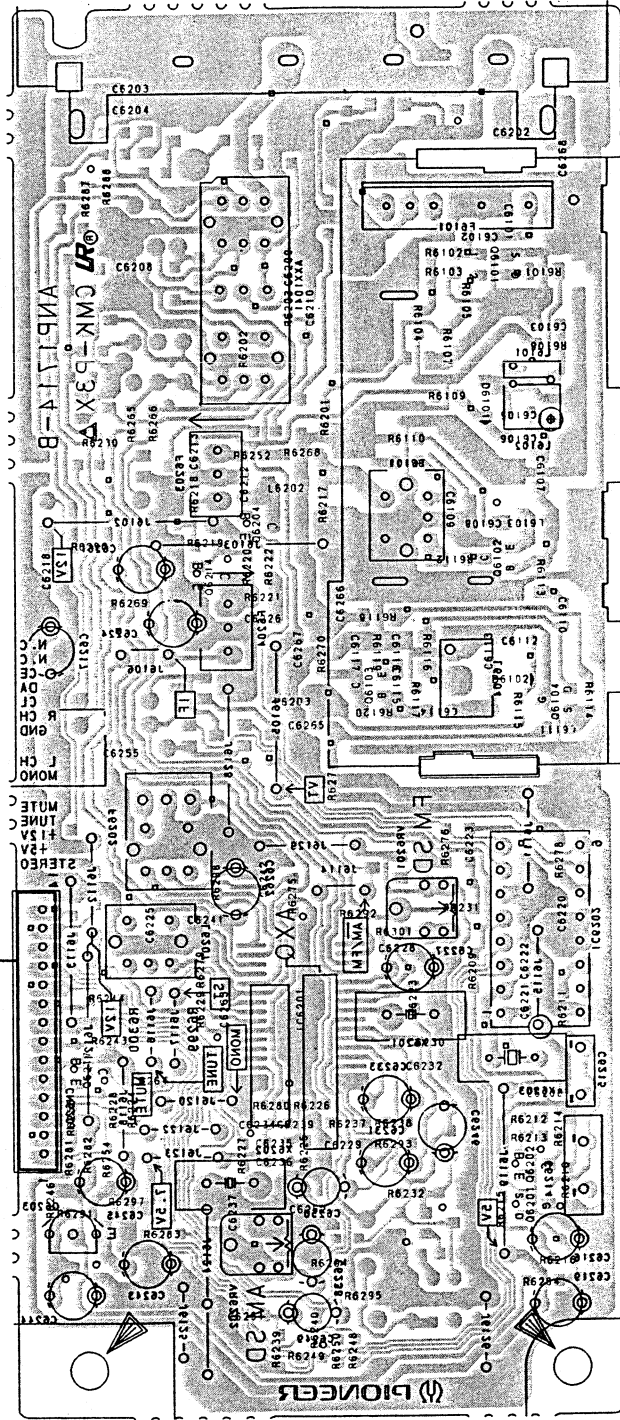
Symbol in PCB Diagrams	Symbol in Schematic Diagrams	Part Name
<p>Q504</p>	<p>Q504</p> <p>Q504</p>	Transistor
<p>D203</p> <p>D203</p>	<p>D203</p>	Diode
<p>C513</p> <p>C513</p>	<p>C513</p>	Capacitor (Polarized)

3. The transistor terminal marked with E or □ shows the emitter.
4. The diode terminal marked with ⊕ or ⊖ shows cathode side.
5. The capacitor terminal marked with ⊕ or ⊖ shows negative terminal.

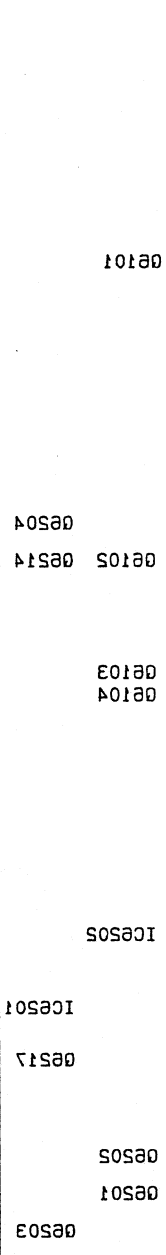
To PS AND FUNC assy CN701

- This diagram is viewed from the mounted parts side.

FM/AM TUNER MODULE



To PS AND FUNC Assy CN101



• This diagram is viewed from the foil side.

*1: V2X-2042KUX1, KCX1 ONLY

A

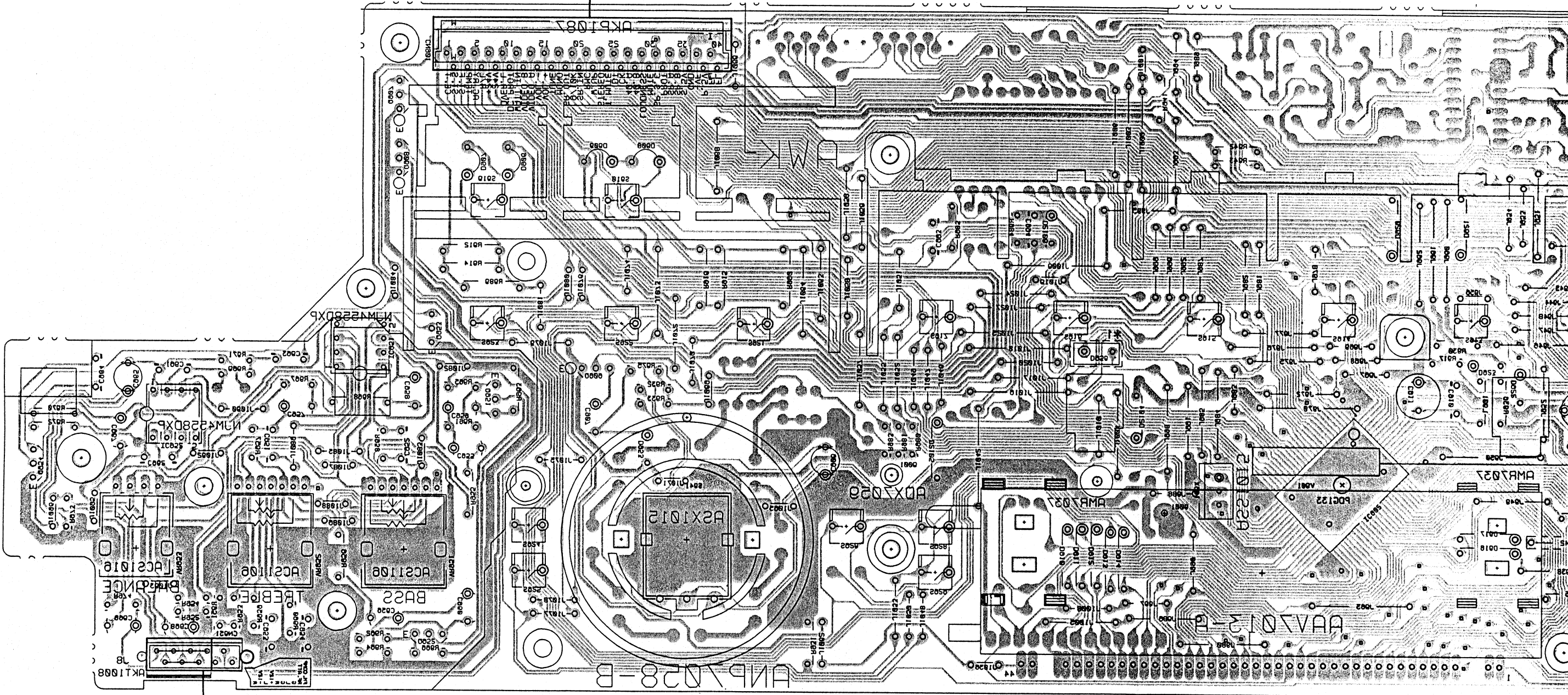
B

C

D

To P2 AND FUNC assy CNA50

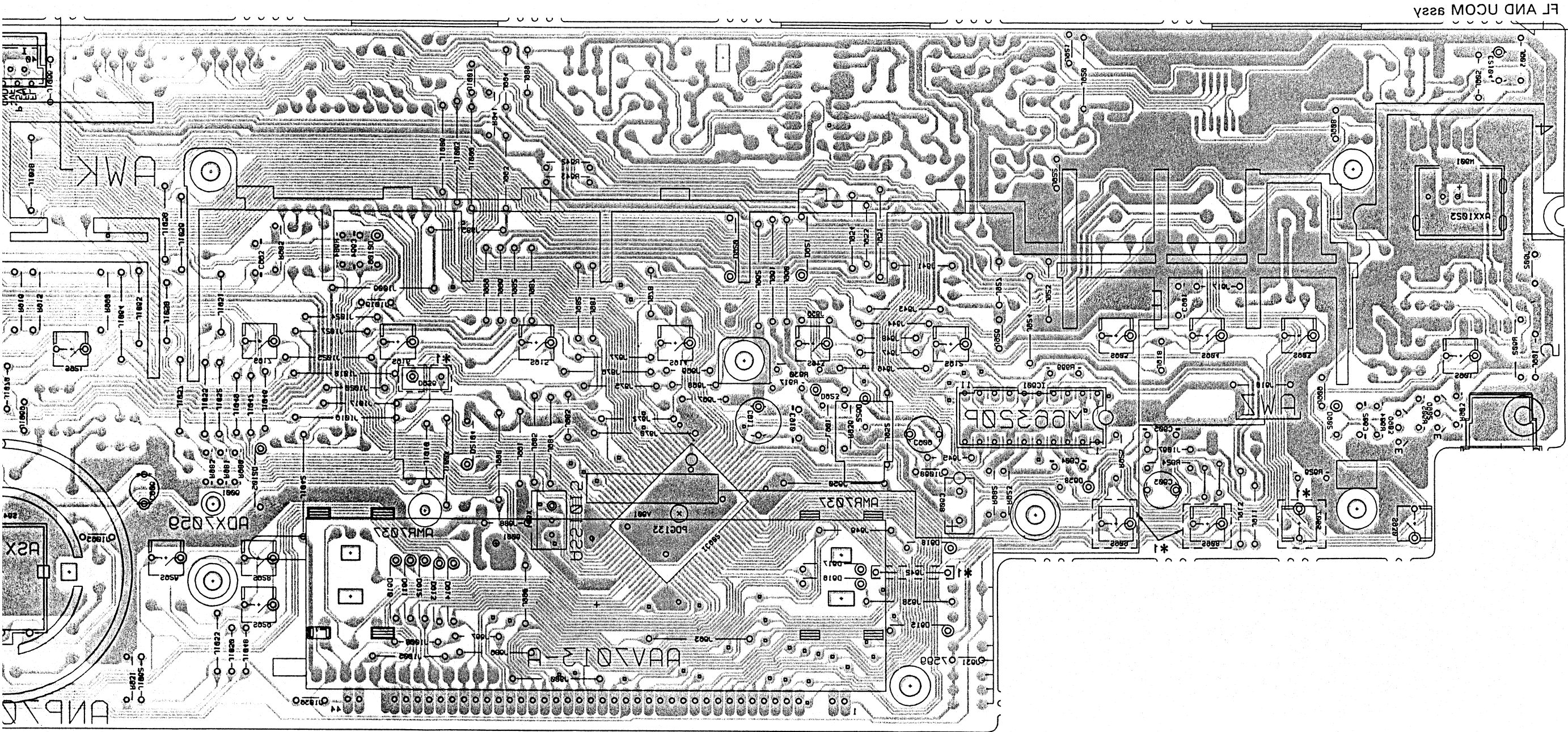
To P2 AND FUNC assy CNA05



IC005
 0000
 0021
 0025 0027 0028 IC021
 VA021
 VA022
 VA023
 IC025
 0024

• This diagram is viewed from the foil side.

*1: V2X-2042/KX1, KCX1 ONLY



FL AND UCOM assy

A

B

C

D

IC05

IC01

0305 0303

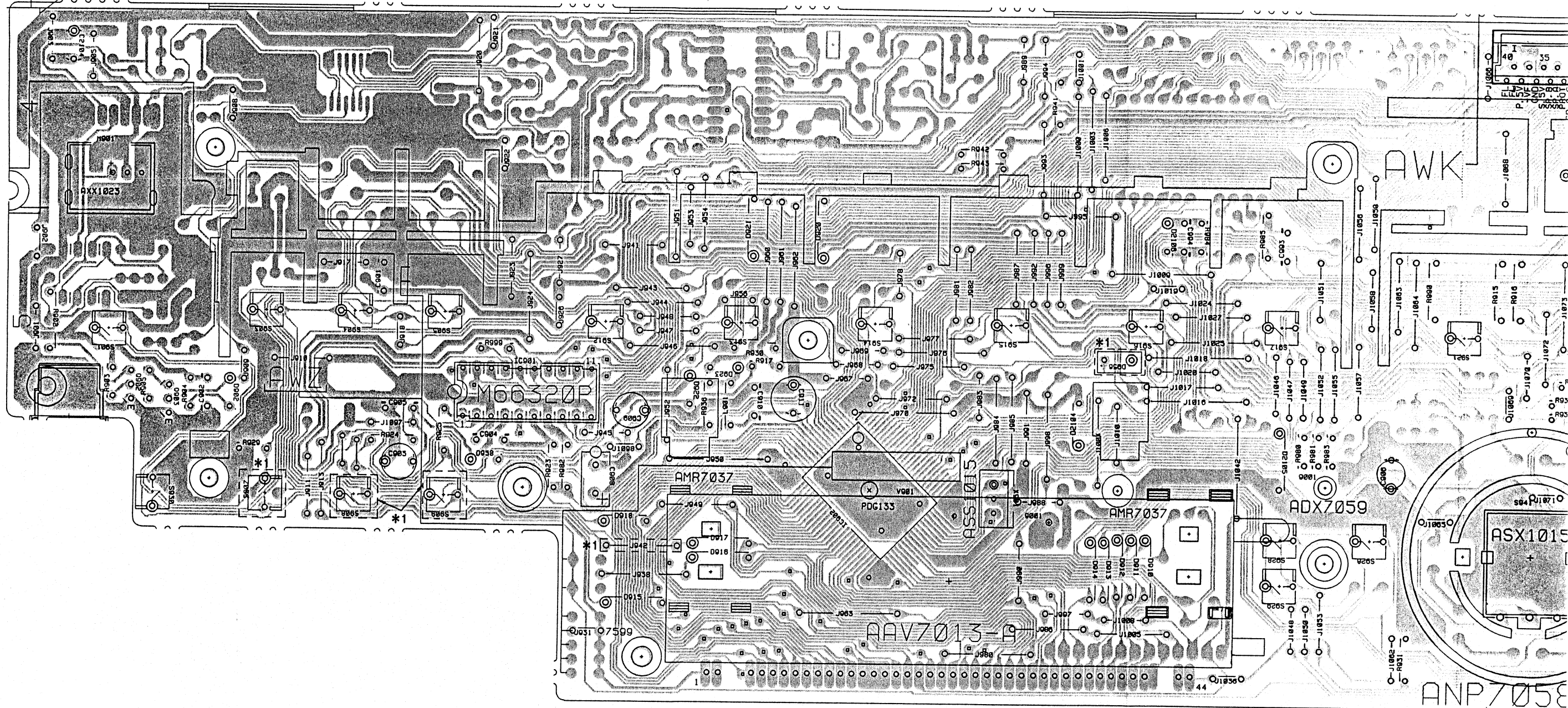
• This diagram is viewed from the foil side.

4.3 FL AND UCOM ASSY

*1: VSX- 504S/KUXJ, KCXJ ONLY

A

FL AND UCOM assy



Q902 Q903

IC901

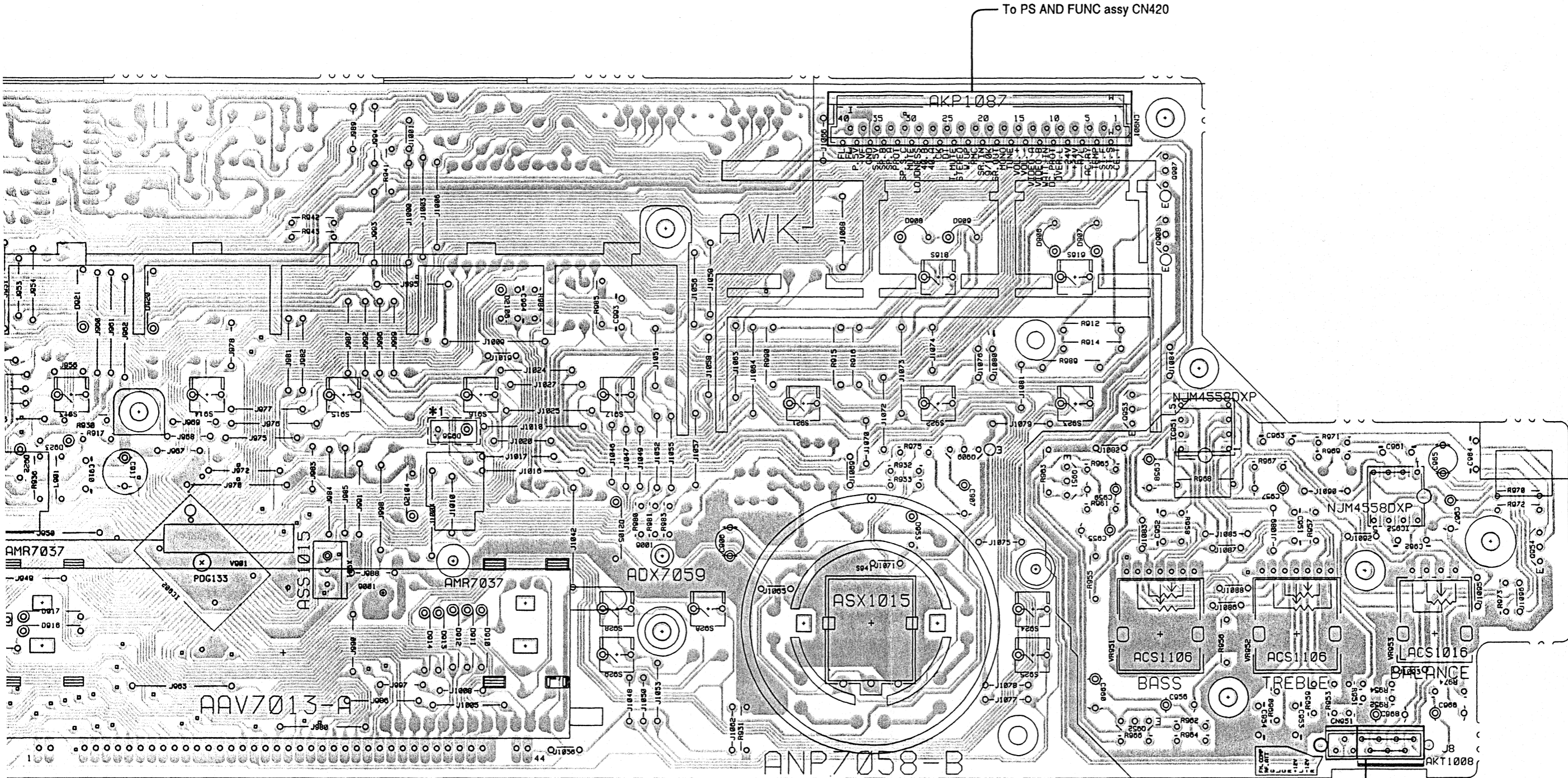
IC902

D

• This diagram is viewed from the mounted parts side.

*1: VSX-504S/KUXJ, KCXJ ONLY

To PS AND FUNC assy CN420



• This diagram is viewed from the mounted parts side.

To PS AND FUNC assy CN402

4.3 FL AND UCOM ASSY

To PS AND FUNC assy (1/2) CN420 (→SCH- 4)

A

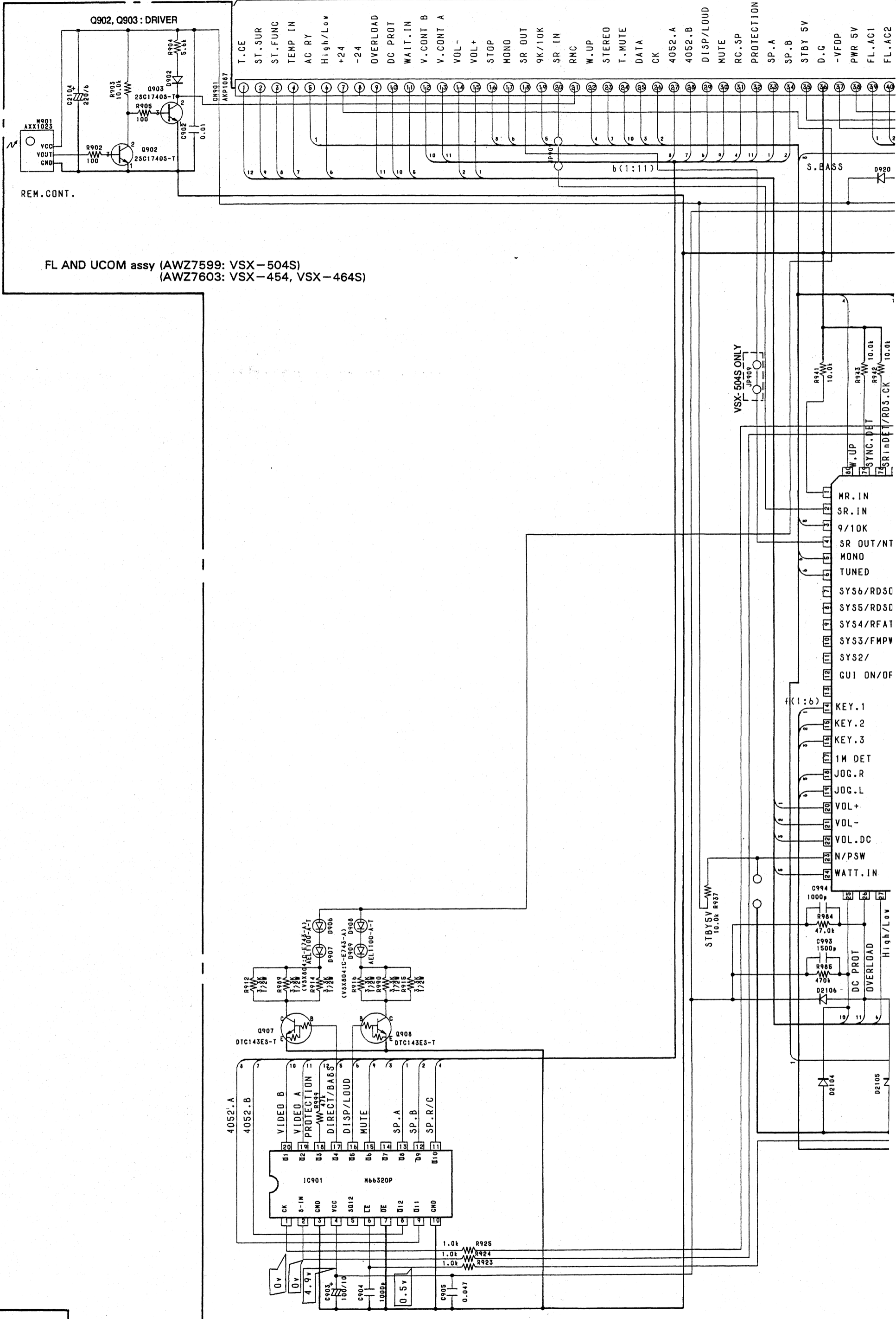
B

C

D

E

F



FL AND UCOM assy (AWZ7599: VSX-504S)
(AWZ7603: VSX-454, VSX-464S)

SCH-3

FL AND UCOM ASSY

1

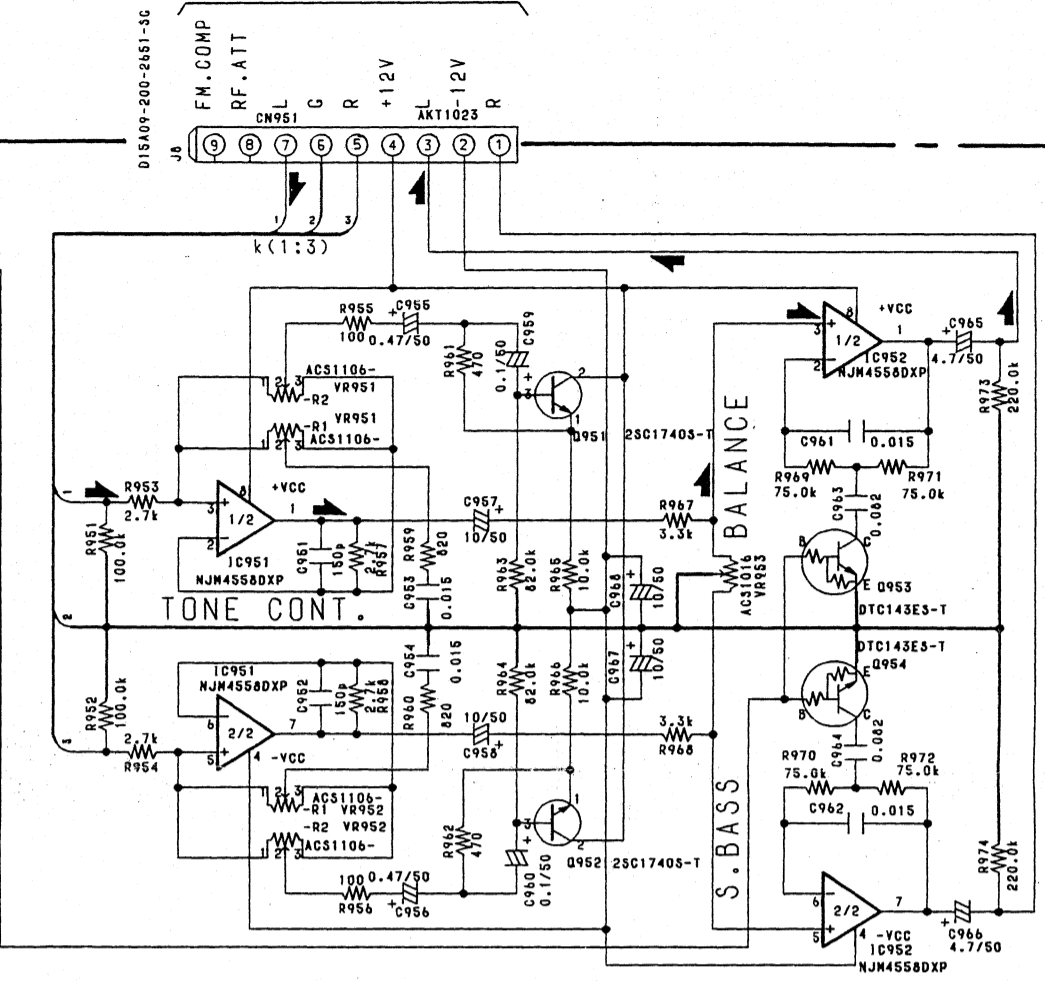
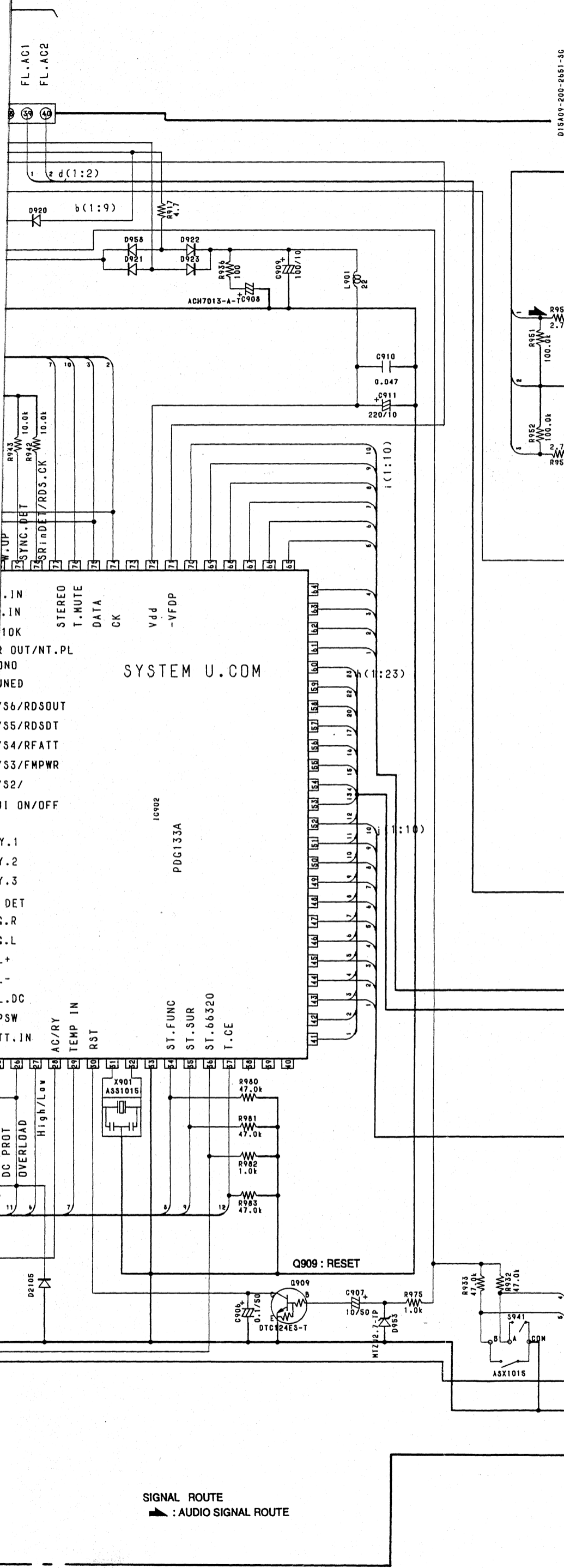
2

3

4

Y812

To PS AND FUNC assy (1/2)
CN402 (→SCH- 4)



SIGNAL ROUTE
▲ : AUDIO SIGNAL ROUTE

4.4 PS AND FUNC ASSY

A

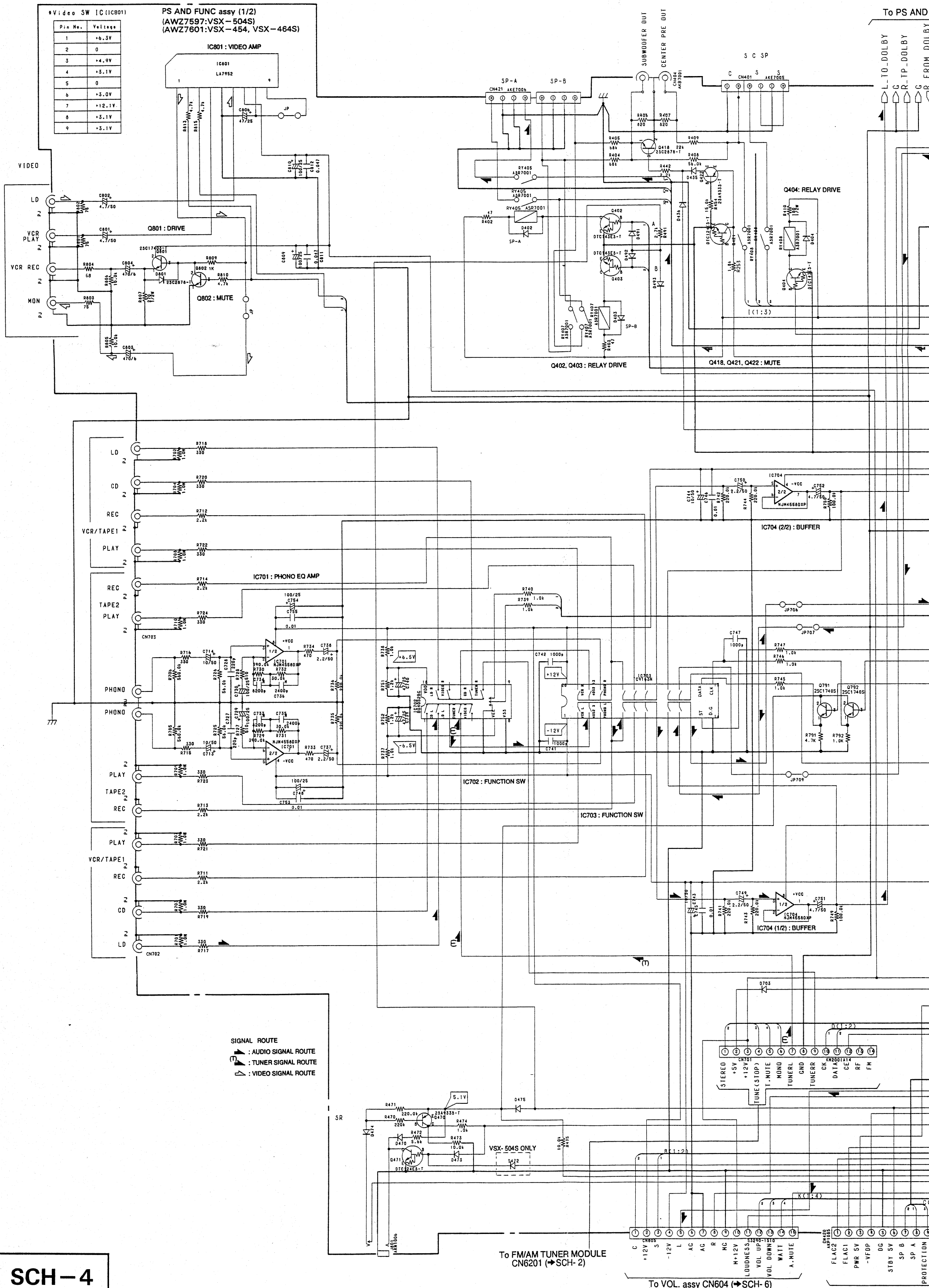
B

C

D

E

F



Video SW IC (IC801)

Pin No.	Voltage
1	+6.3V
2	0
3	+4.9V
4	+5.1V
5	0
6	+3.0V
7	+12.1V
8	+3.1V
9	-3.1V

PS AND FUNC assy (1/2)
(AWZ7597:VSX-504S)
(AWZ7601:VSX-454, VSX-464S)

IC801: VIDEO AMP
LA7952

Q801: DRIVE

Q802: MUTE

Q402, Q403: RELAY DRIVE

Q404: RELAY DRIVE

Q418, Q421, Q422: MUTE

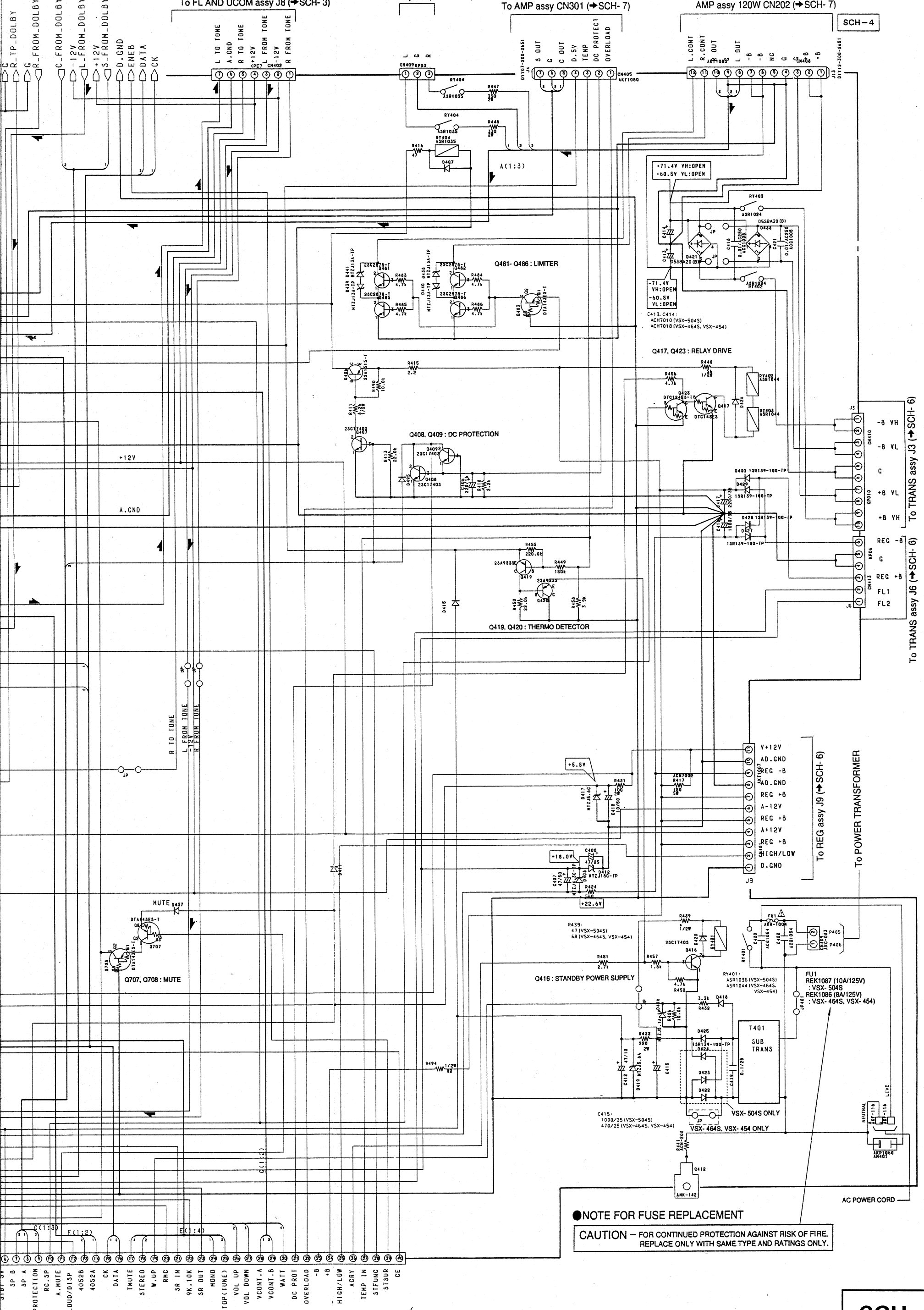
SIGNAL ROUTE
 (▶) : AUDIO SIGNAL ROUTE
 (◀) : TUNER SIGNAL ROUTE
 (◁) : VIDEO SIGNAL ROUTE

SCH-4

PS AND FUNC ASSY (1/2)

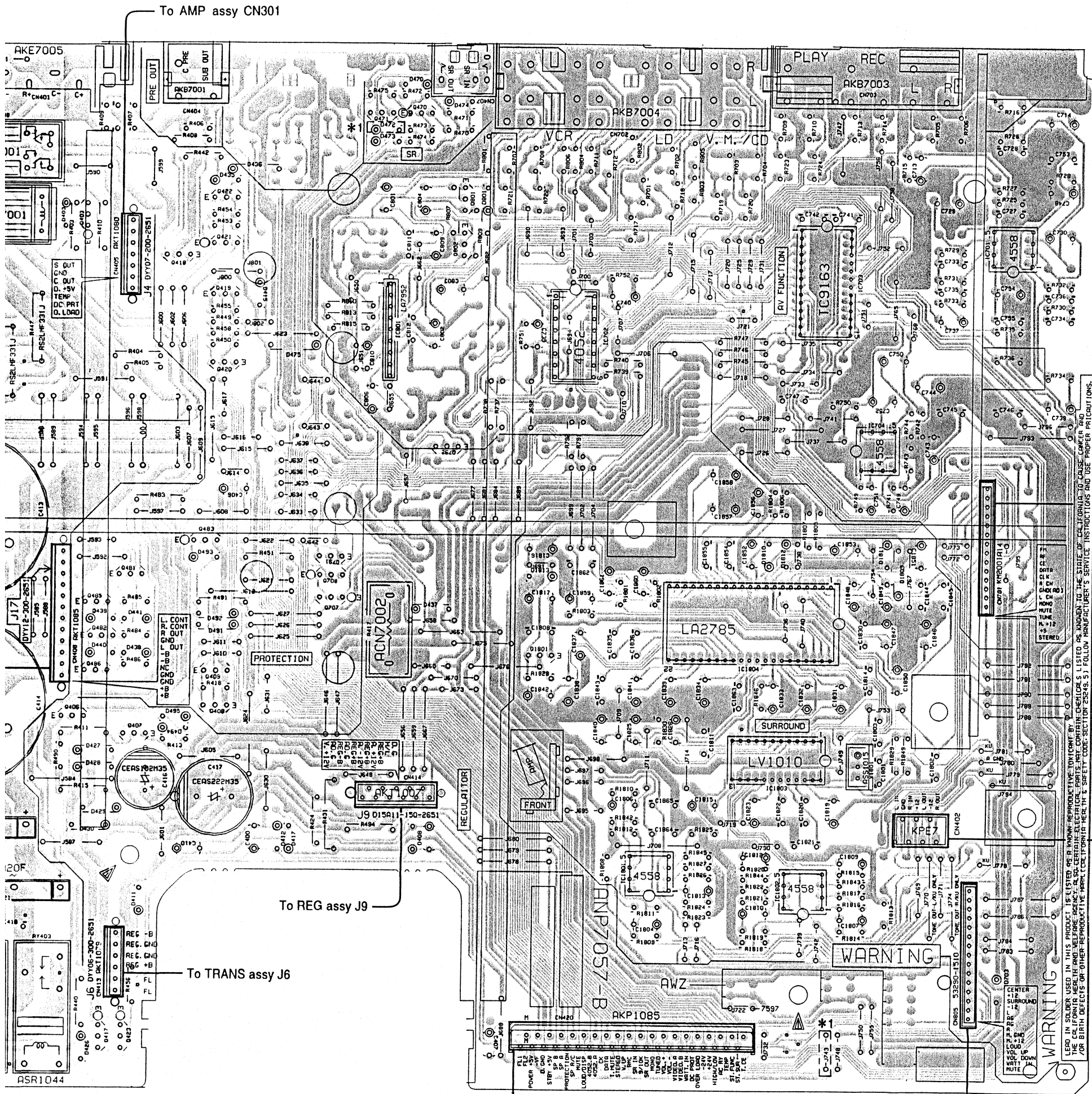
To FM/AM TUNER MODULE
CN6201 (→SCH-2)

To VOL. assy CN604 (→SCH-6)



NOTE FOR FUSE REPLACEMENT
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.

A
B
C
D
E
F



- Q404 Q470 Q471
- Q416 Q422 Q801 Q403 Q802 IC701 Q421 Q802 IC703 Q418 IC703 Q419 IC703 Q402 IC801 IC702 Q420 IC704

To FM/AM TUNER MODULE CN6201

- Q483 Q481 Q708 Q485 Q707 IC804 Q482 Q1801 Q486 Q406 Q409 IC803

To FL AND UCOM assy J8

- IC801 IC802

To AMP assy CN301

To TRANS assy J6

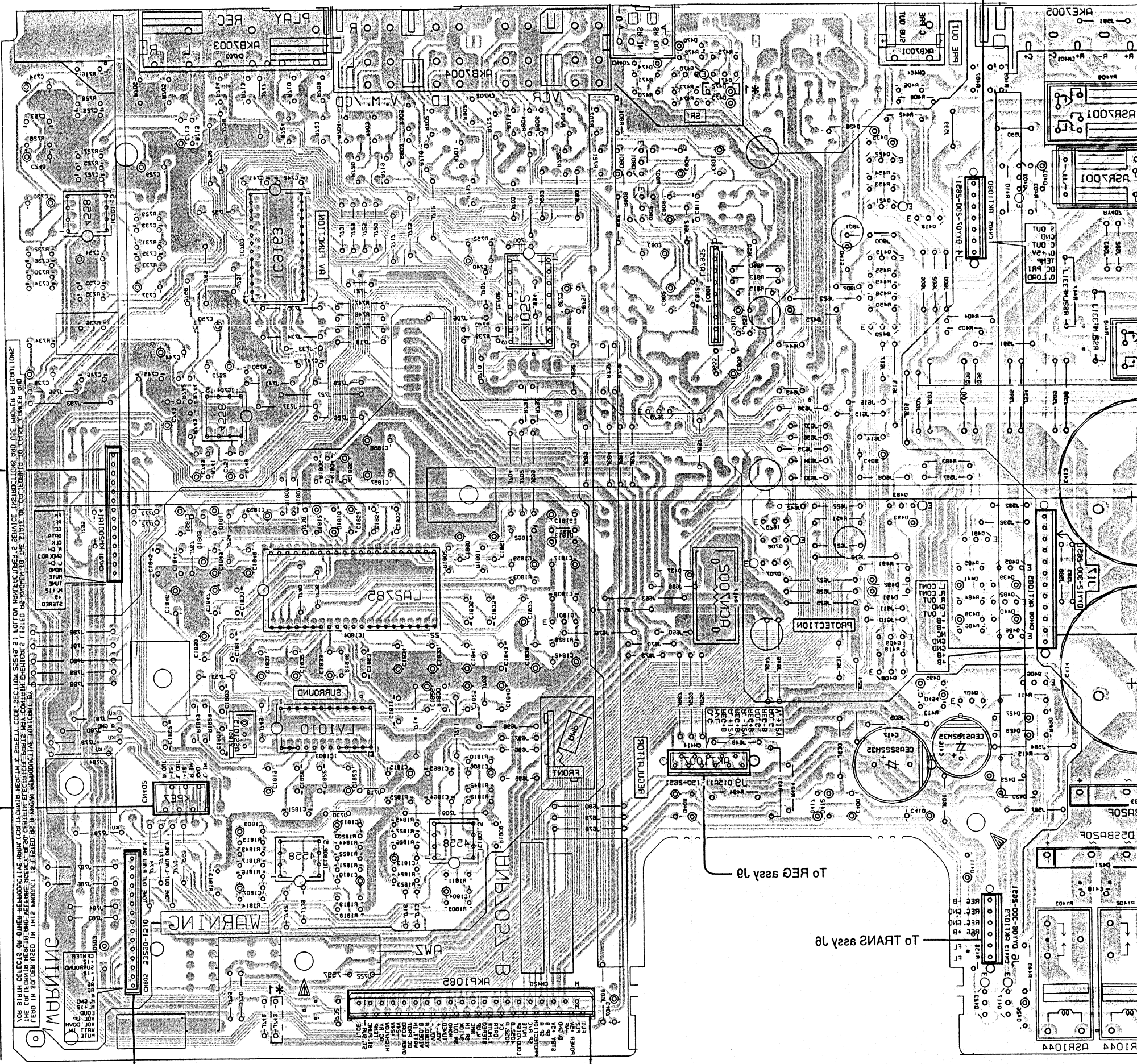
To REG assy J9

To FL AND UCOM assy CN901

To VOL. assy CN604

A
B
C
D

- Q417 Q423



Q453 Q413
 IC805 IC801
 IC803 IC204
 IC804 IC203
 Q483 Q481 Q482 Q485 Q488 Q408
 Q478 Q479 Q455 Q403 Q451 Q418 Q405
 Q471 Q470

To FM/TUNER MODULE CN801
 To FL AND UCOM Assy 18
 To REG Assy 19
 To TRANS Assy 18
 To FL AND UCOM Assy CN801
 To VOLT Assy CN804

FOR BINARY OBJECTS ON OTHER MEMORANDUMS MARK LOCATIONS HEREIN. 2. RULE 11. CODE SECTION 5528 2.1 BOTTOM MEMORANDUMS 2.2 SERVICE. THE LOCATION AND USE NUMBER AND
 THE COPY NUMBER OF THE MEMORANDUM AND THE DATE OF THE COPY. 3. THE COPY NUMBER OF THE MEMORANDUM AND THE DATE OF THE COPY. 4. THE COPY NUMBER OF THE MEMORANDUM AND THE DATE OF THE COPY.
 WARNING

V2X-5042, V2X-4642, V2X-454

PCB-3

A

B

C

D

32

e

8

7

e

2

4

To AMP Assy CN301

To REG Assy 19

To TRANS Assy 18

To FL AND UCOM Assy CN801

To VOLT Assy CN804

To FM/TUNER MODULE CN801

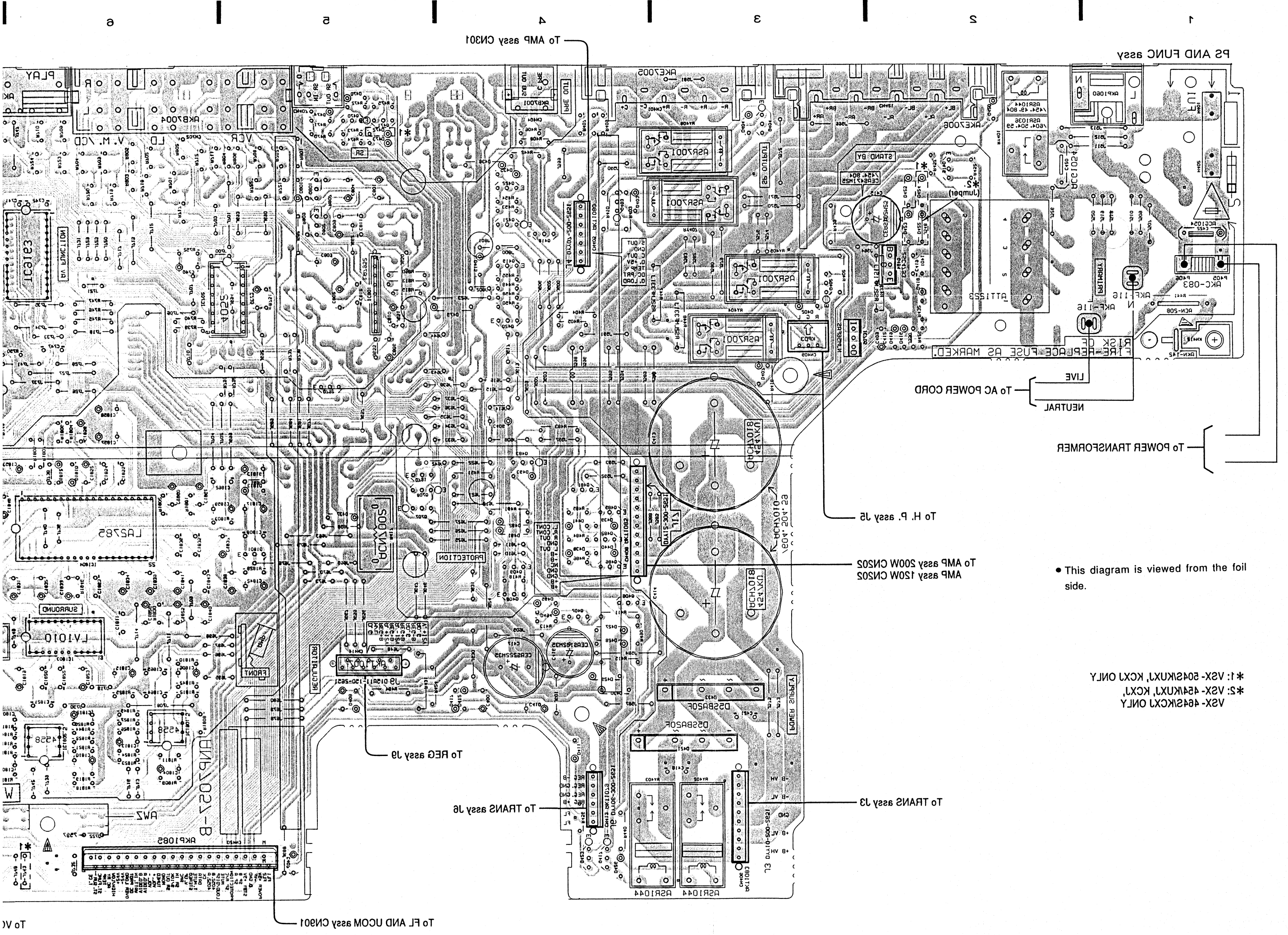
To FL AND UCOM Assy 18

To REG Assy 19

To TRANS Assy 18

To FL AND UCOM Assy CN801

To VOLT Assy CN804



• This diagram is viewed from the foil side.

*S: A2X-484KX17, KCX1
 *1: A2X-2042KX17, KCX1 ONLY

A
 B
 C
 D

To FL AND UCOM assy CN301

To TRANS assy 13

To AMP assy 500W CNS05

To AMP assy 150W CNS05

To H.P. assy 12

TO POWER TRANSFORMER

NEUTRAL

LIVE

To AC POWER CORD

To REG assy 18

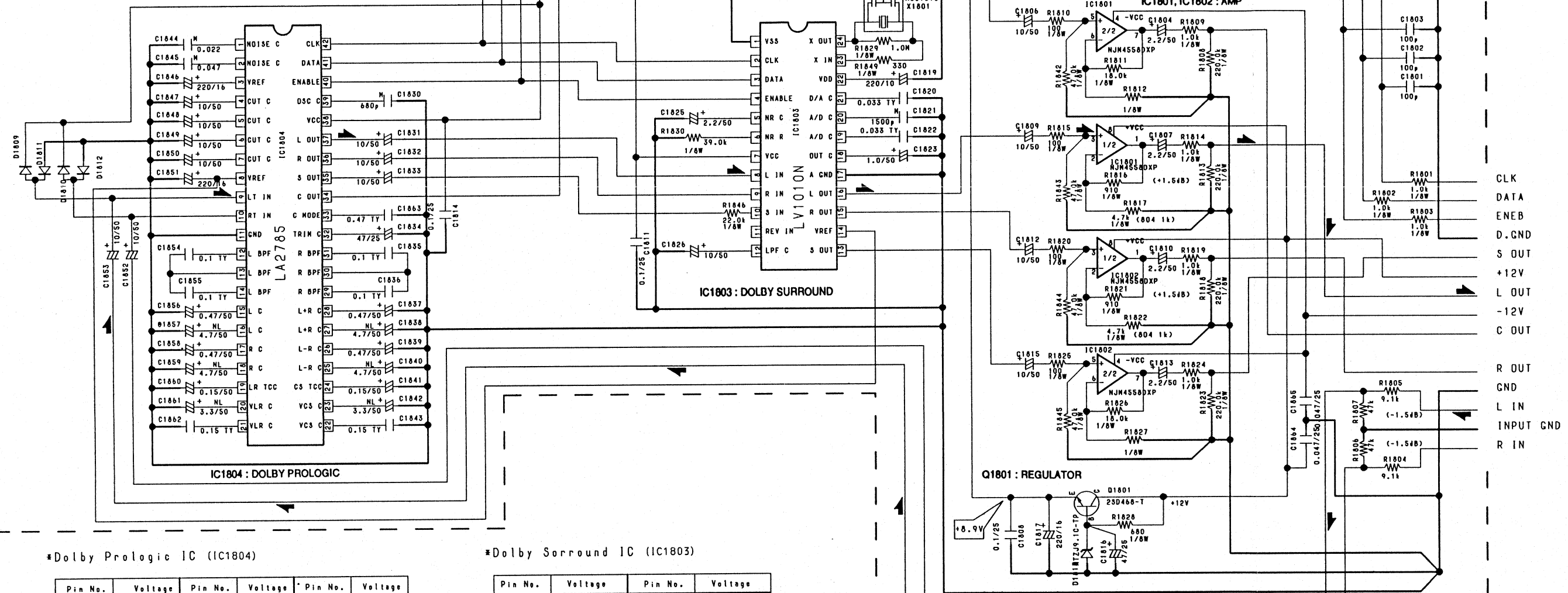
To FL AND UCOM assy CN301

To AMP assy CM301

P2 AND FUNC assy

SCH-5

PS AND FUNC assy (2/2) (AWZ7597:VSX-504S)
(AWZ7601:VSX-454, VSX-464S)



*Dolby Prologic IC (IC1804)

Pin No.	Voltage	Pin No.	Voltage	Pin No.	Voltage
1	4.3V	15	4.2V	29	4.2V
2	4.3V	16	4.7V	30	4.2V
3	4.2V	17	4.2V	31	4.2V
4	4.2V	18	4.9V	32	4.2V
5	4.2V	19	4.2V	33	4.2V
6	4.2V	20	4.2V	34	4.2V
7	4.2V	21	4.2V	35	4.2V
8	4.2V	22	4.2V	36	4.2V
9	4.2V	23	4.2V	37	4.2V
10	4.2V	24	4.2V	38	8.4V
11	0V	25	4.9V	39	—
12	4.2V	26	4.2V	40	4.7V
13	4.2V	27	4.7V	41	0V
14	4.2V	28	4.2V	42	0V

*Dolby Surround IC (IC1803)

Pin No.	Voltage	Pin No.	Voltage
1	—	13	+4.2V
2	0V	14	+4.2V
3	0V	15	+4.2V
4	+4.7V	16	+4.2V
5	+2.4V	17	—
6	+0.7V	18	+4.2V
7	+8.4V	19	+4.2V
8	+4.2V	20	+4.2V
9	+4.2V	21	+4.2V
10	+4.2V	22	+4.8V
11	+4.2V	23	—
12	+4.2V	24	—

SIGNAL ROUTE
▲ : AUDIO SIGNAL ROUTE

R1812, R1827:
3.9k (VSX-504S)
5.6k (VSX-464S, VSX-454)

To PS AND FUNC assy (1/2) (SCH-4)

SCH-5

PS AND FUNC ASSY (2/2)

SCH-5

PS AND FUNC ASSY (2/2)

VSX-504S, VSX-464S, VSX-454

4.5 VOL. ASSY, TRANS ASSY, REG ASSY AND H. P. ASSY

A

B

C

D

A

B

C

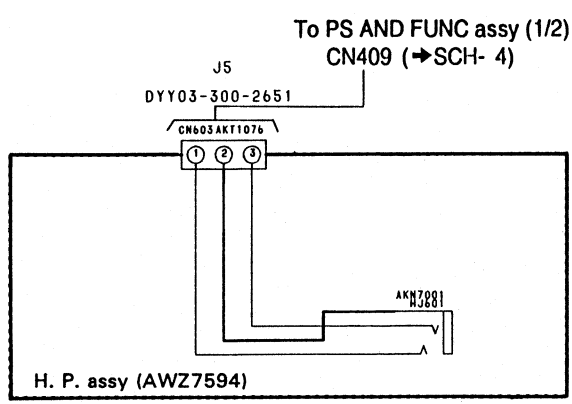
D

3

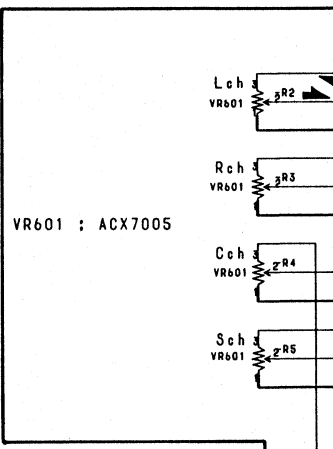
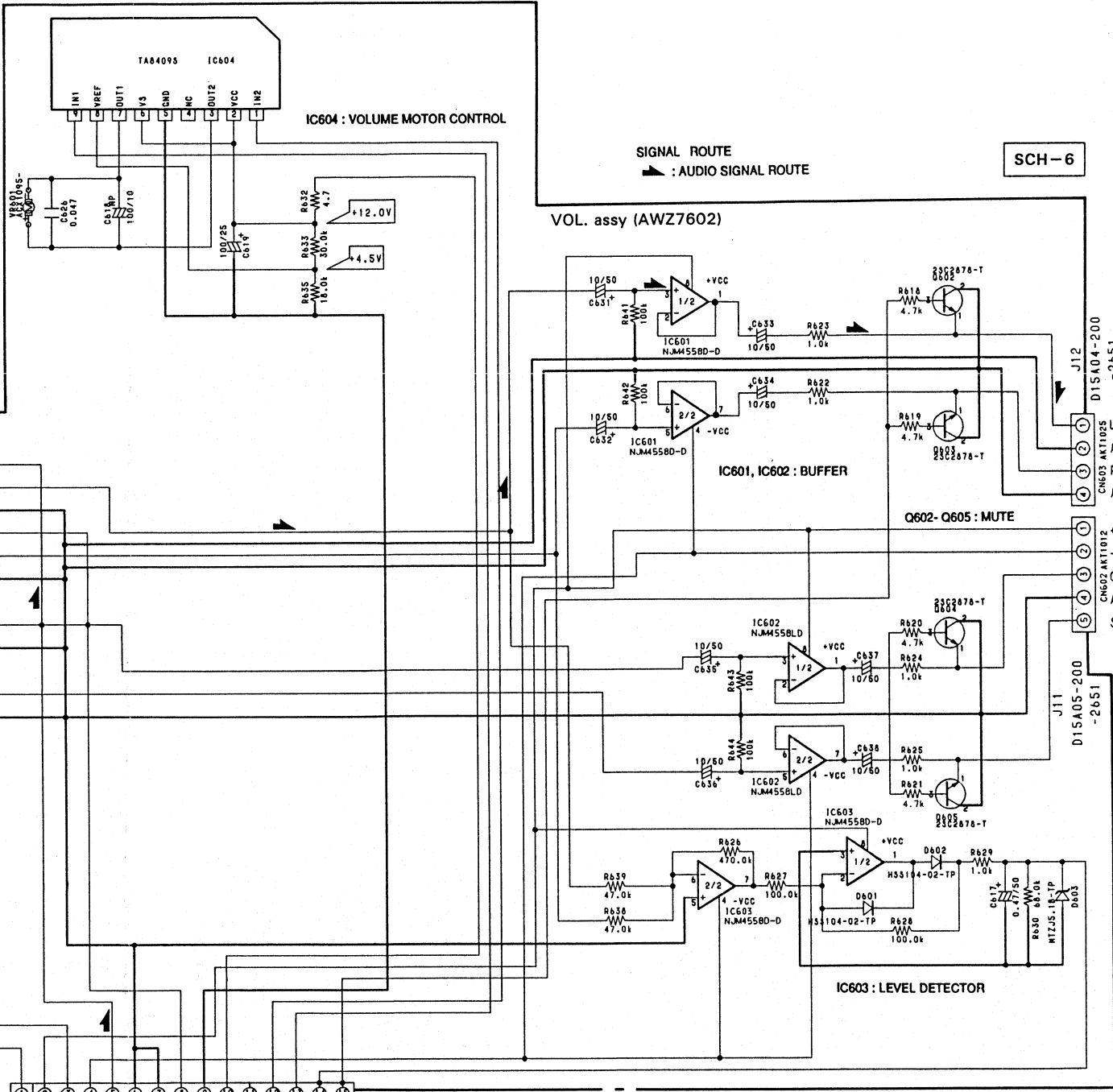
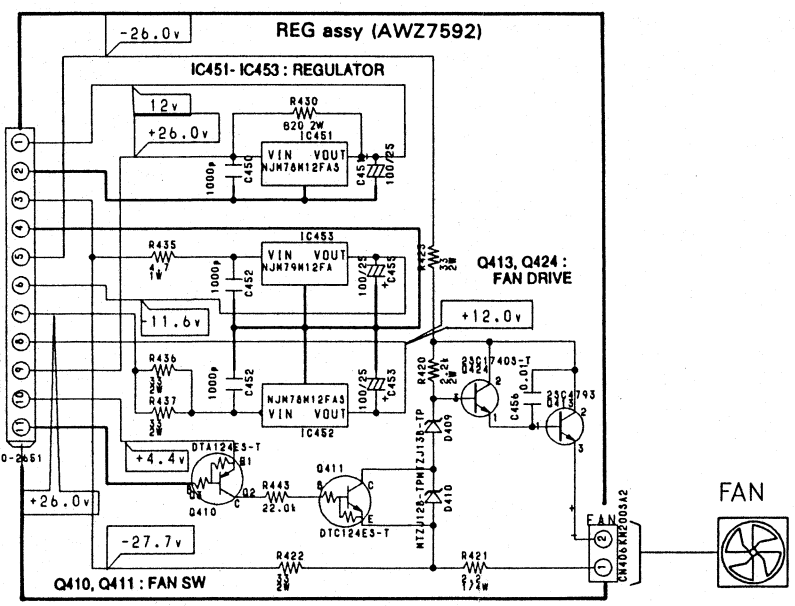
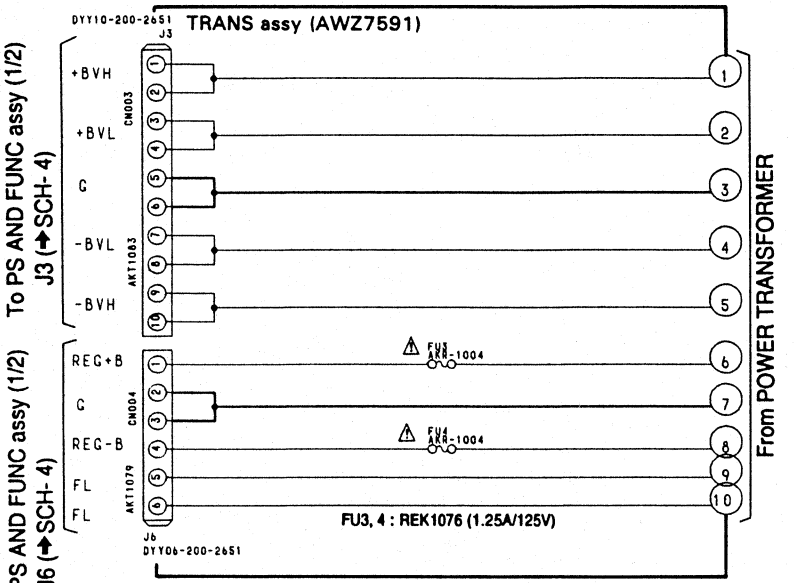
4

5

6



NOTE FOR FUSE REPLACEMENT
CAUTION - FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH SAME TYPE AND RATINGS ONLY.



To PS AND FUNC assy (1/2)
CN805 (→SCH- 4)

To AMP assy 200W CN203 (→SCH- 7)
AMP assy 120W CN203 (→SCH- 7)

To AMP assy 200W CN201
AMP assy 120W CN201 (→SCH- 7)

SCH-6

VOL. ASSY, TRANS ASSY,
REG ASSY, H. P. ASSY

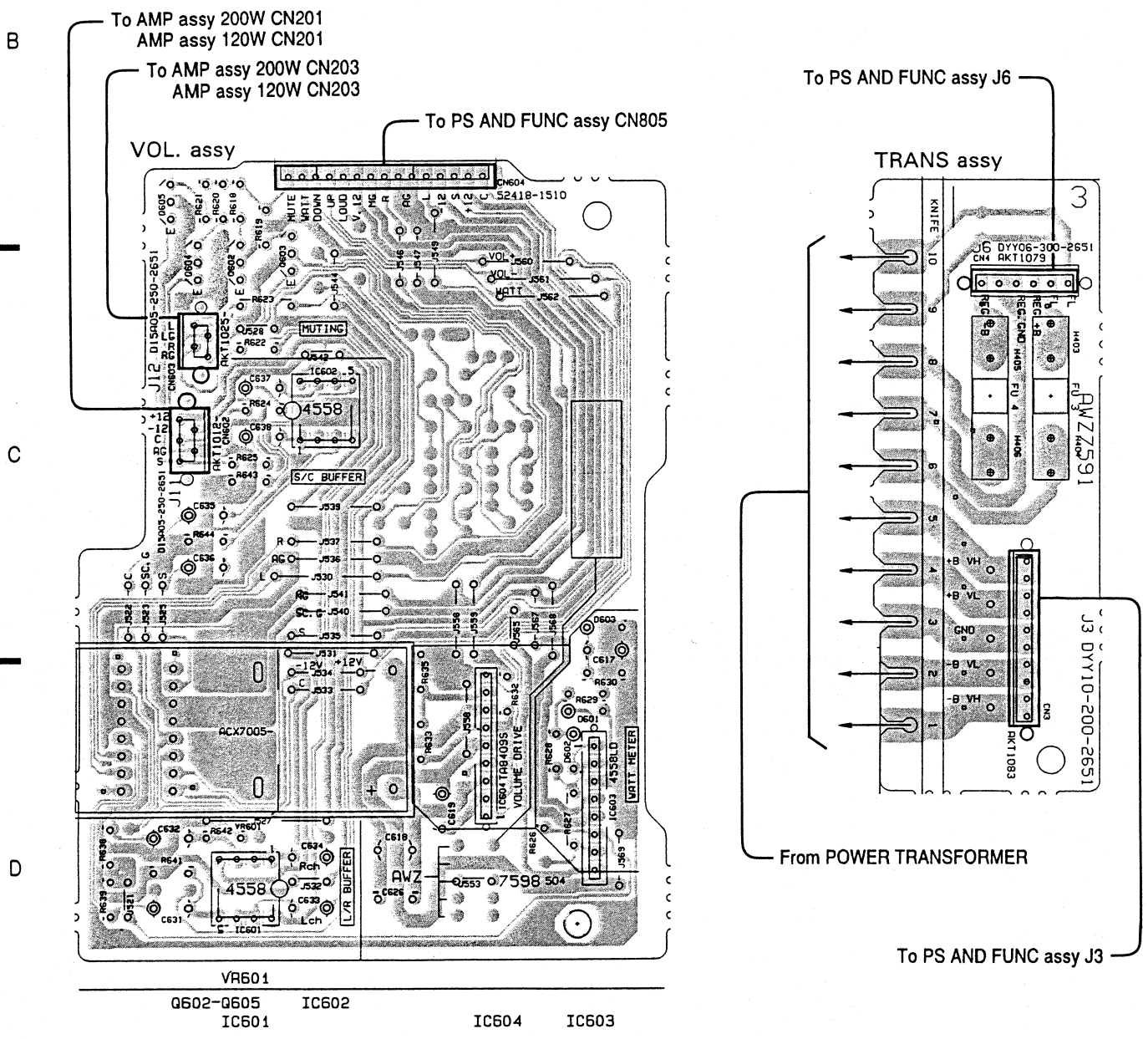
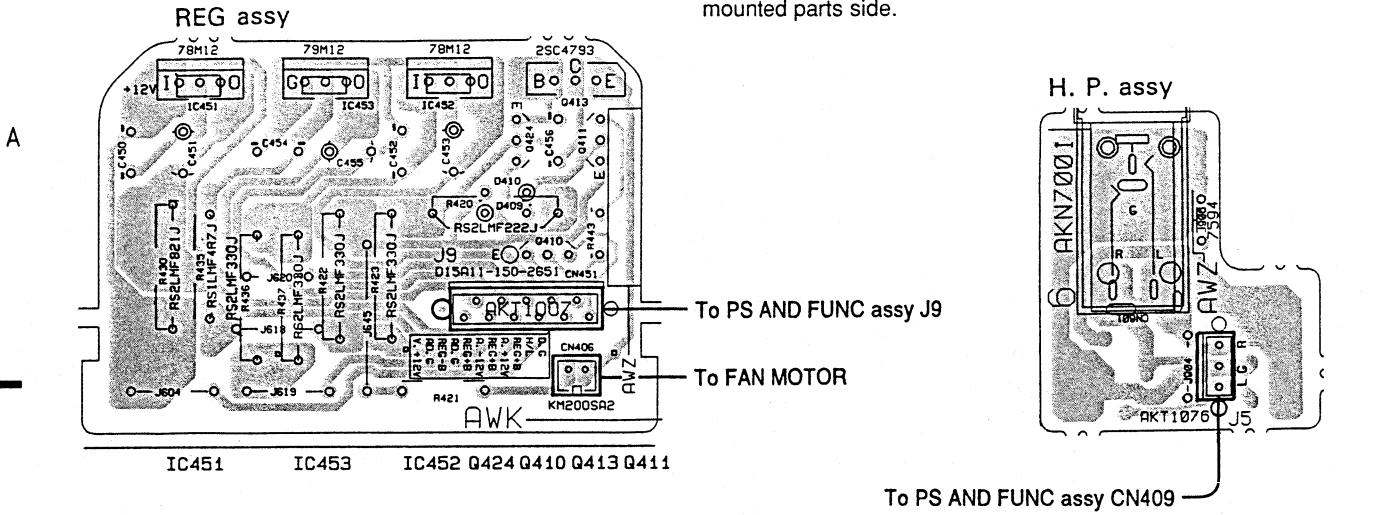
VOL. ASSY, TRANS ASSY,
REG ASSY, H. P. ASSY

SCH-6

VSX-504S, VSX-464S, VSX-454

PCB-4

• This diagram is viewed from the mounted parts side.

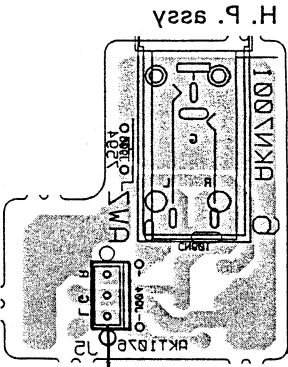


PCB-4

• This diagram is viewed from the foil side.

A

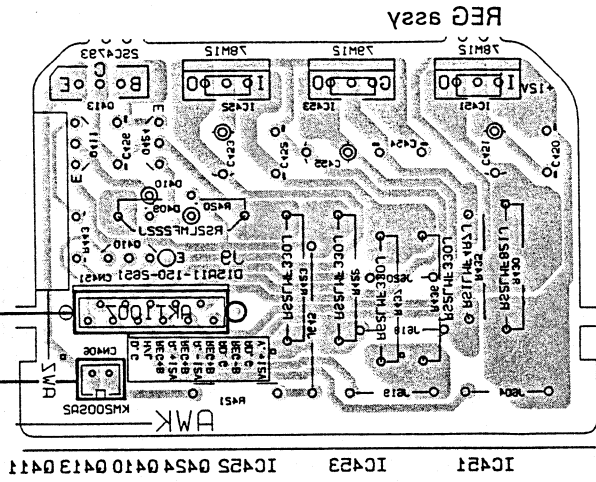
A



To PS AND FUNC assy C1408

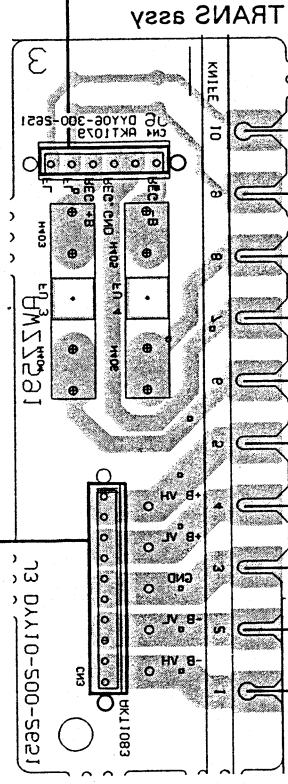
To PS AND FUNC assy 1a

TO FAN MOTOR



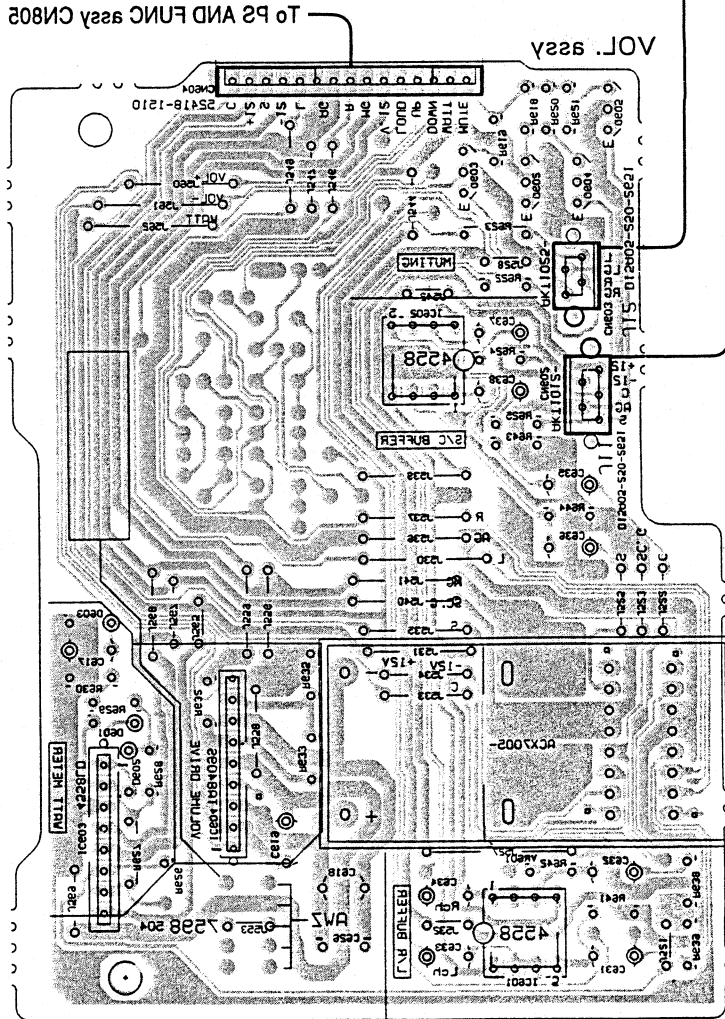
B

B



Flow POWER TRANSFORMER

To PS AND FUNC assy 13



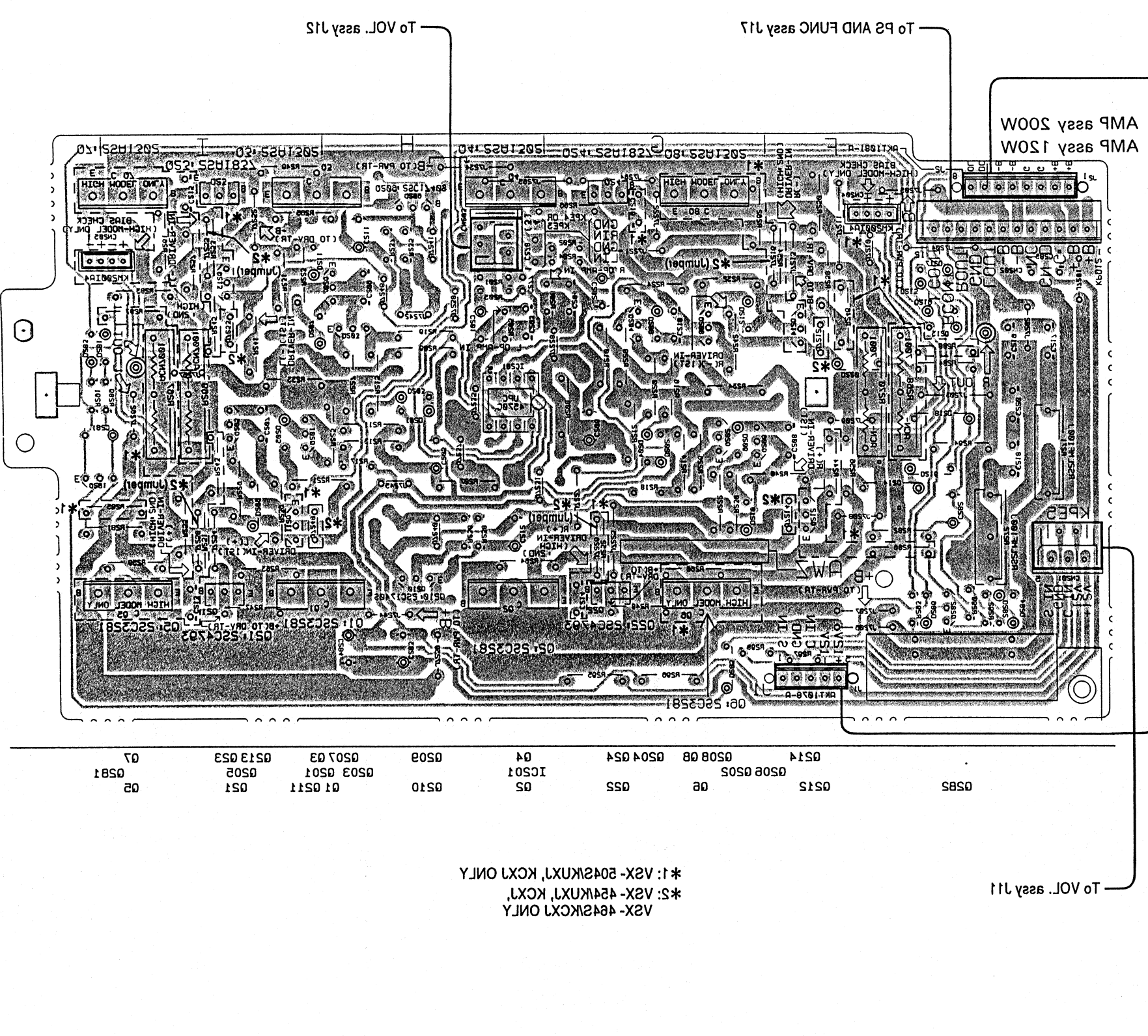
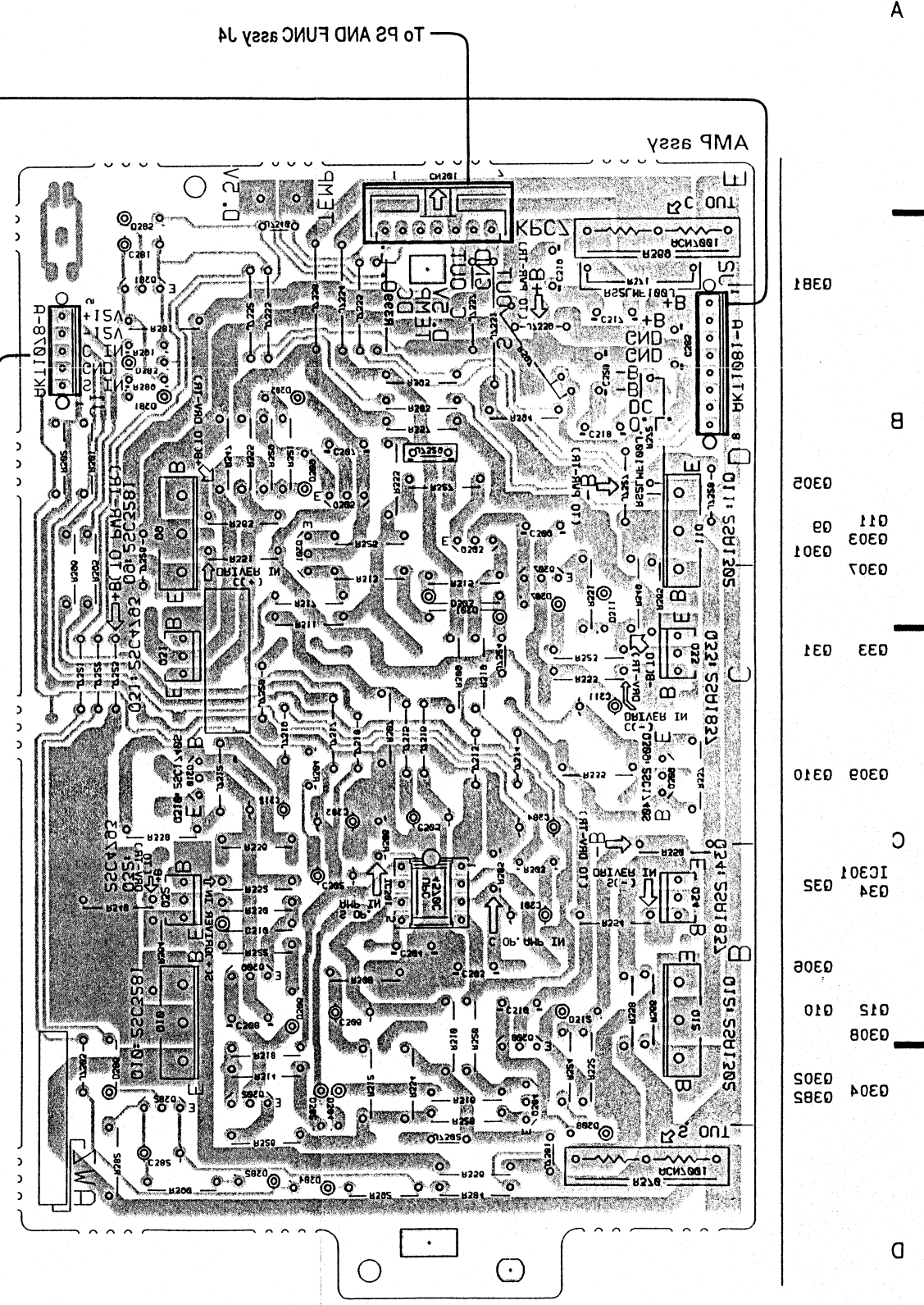
IC801 IC802 IC803 IC804

VR801 8005-0802

D

D

This diagram is viewed from the foil side.



AMP Assy 200W(AWZ7581: VSX-504S)
AMP Assy 120W(AWZ7580: VSX-454, VSX-464S)

*1: VSX-504S ONLY
*2: VSX-464S, VSX-454 ONLY

To VOL. Assy J11 (SCH-6)
To VOL. Assy J12 (SCH-6)

To PS AND FUNC Assy (1/2)
J17 (SCH-4)

	VSX-504S	VSX-464S	VSX-454
R211, R212	B20 1/4W	B20 1/4W	B20 1/4W
R213-R216	27 1/4W	27 1/4W	27 1/4W
R233, R234	5 6A	3 9A	
R235, R236	3 0A	1 5A	
R237, R238	B20	680	
R239-R242	100	47	

A
B
C
D

A
B
C
D

AMP Assy (AWZ7579)

CENTER POWER AMP

SURROUND POWER AMP

SIGNAL ROUTE
▲ : AUDIO SIGNAL ROUTE

AMP ASSY, AMP ASSY 200W,
AMP ASSY 120W

SCH-7

SCH-7

AMP ASSY, AMP ASSY 200W,
AMP ASSY 120W