

745



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Service Manual

ORDER NO.
ARZ2024

AUDIO/VIDEO STEREO RECEIVER

VSX-9700S

KUC, SD

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FRONT CONTROL A assembly (AWZ2940)

The **FRONT CONTROL A** assembly (AWZ2940) is the same as the **FRONT CONTROL A** assembly (AWZ2513) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2513	AWZ2940	
5818	ASG-711	.....	.....

VIDEO/SUR/CONTROL assembly (AWZ2942)

The **VIDEO/SUR/CONTROL** assembly (AWZ2942) is the same as the **VIDEO/SUR/CONTROL** assembly (AWZ2511) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AWZ2511	AWZ2942	
IC308	UPC78L05	.....	.....
Q309	RN2201	.....	.....
Q310	RN1201	.....	.....
Q432	.....	.....	RN2203	
D397	.....	.....	1SS252	
D398	.....	.....	S5566	
C385	CEAS100M50	.....	.....
C423	COMA682K50	.....	COMA562K50	
C473,C474	CCMSL680J50	.....	CKMYB181K50	
C475,C476	CCDSL221J50	.....	.....
VR421	ACS1020	.....	.....
R330	RD1/8PM680J	.....	RD1/8PM681J	
R397	.....	.....	RD1/8PM513J	
R421,R422	RD1/8PM513J	.....	RD1/8PM223J	
R423 - R426	RD1/8PM103J	.....	.....
R433	RD1/8PM392J	.....	RD1/8PM822J	
R434	RD1/8PM103J	.....	RD1/8PM512J	
R440,R478	RD1/8PM183J	.....	RD1/8PM433J	
R475	RD1/8PM682J	.....	RD1/8PM912J	

2. REMOTE CONTROL UNIT (AXD1139)

CONTRAST OF REMOTE CONTROL UNIT

The **REMOTE CONTROL UNIT** (AXD1139) is the same as the **REMOTE CONTROL UNIT** (AXD1100) with the exception of the following sections.

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	Name plate	AZA1190	AZA1248	
	Rubber sheet	AZA1192	AZA1247	

Contrast of miscellaneous parts

Contrast of electrical parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	IC01 (Micro computer)	PD5108-A	PD5140	

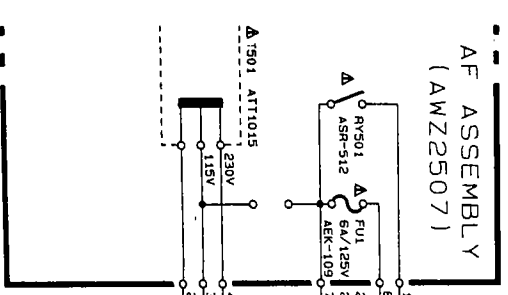
Note : The circuit of the remote control unit (AXD1100) with built-in microcomputer has been changed according to the preceding table to model (AXD1139).
The key functions of the new remote control unit have been changed according to the following table.

Mark	Switch No.	Key function name		Remarks
		AXD1100	AXD1139	
S-5		VCR CH+	VCR CH+/TAP SELECT	
S-13		▶◀ CH/FR-TM	▶◀ CH/FR-TM	
S-14		▶◀ /SEARCH	▶◀ /SEARCH	
S-11		DISC SEL/ DISPLAY CALL	DISC SEL/ DISPLAY CALL	
S-15		PROG	PROG	
S-36		1*12/13*24/ CH-RETURN BAND/DUAL	BAND/CH-RETURN	
S-32				

3. SCHEMATA

3.1 TUNER AND TUNER

POWER SUPPLY



2. REMOTE CONTROL UNIT (AXD1139)

CONTRAST OF REMOTE CONTROL UNIT

The REMOTE CONTROL UNIT (AXD1139) is the same as the REMOTE CONTROL UNIT (AXD1100) with the exception of the following sections.

Contrast of miscellaneous parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	Name plate	AZA1190	AZA1248	
	Rubber sheet	AZA1192	AZA1247	

Contrast of electrical parts

Mark	Symbol & Description	Part No.		Remarks
		AXD1100	AXD1139	
	IC01 (Micro computer)	PD5108-A	PD5140	

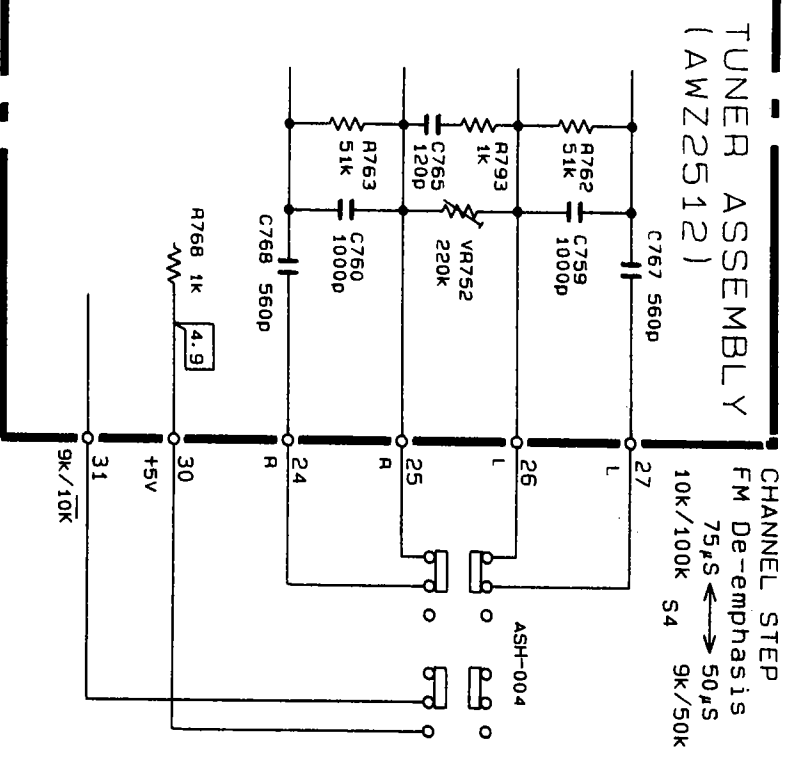
Note : The circuit of the remote control unit (AXD1100) with built-in microcomputer has been changed according to the preceding table to model (AXD1139).
The key functions of the new remote control unit have been changed according to the following table.

Mark	Switch No.	Key function name		Remarks
		AXD1100	AXD1139	
S-5	VCR CH +	VCR CH +	VCR CH + / TAPE SELECT	
S-13	▶▶▶ CHP/FR - TM	▶▶▶ CHP/FR - TM	▶▶▶ CHP/FR - TM	
S-14	▶▶▶ /SEARCH	▶▶▶ /SEARCH	▶▶▶ /SEARCH	
S-11	DISC SEL / DISPLAY CALL	DISC SEL / DISPLAY CALL	DISC SEL / DISPLAY CALL	
S-15	PROG	PROG	PROG	
S-36	1•12/13•24 / CH - RETURN	1•12/13•24 / CH - RETURN	1•12/13•24 / CH - RETURN	
S-32	BAND/DUAL	BAND/DUAL	BAND/CH - RETURN	

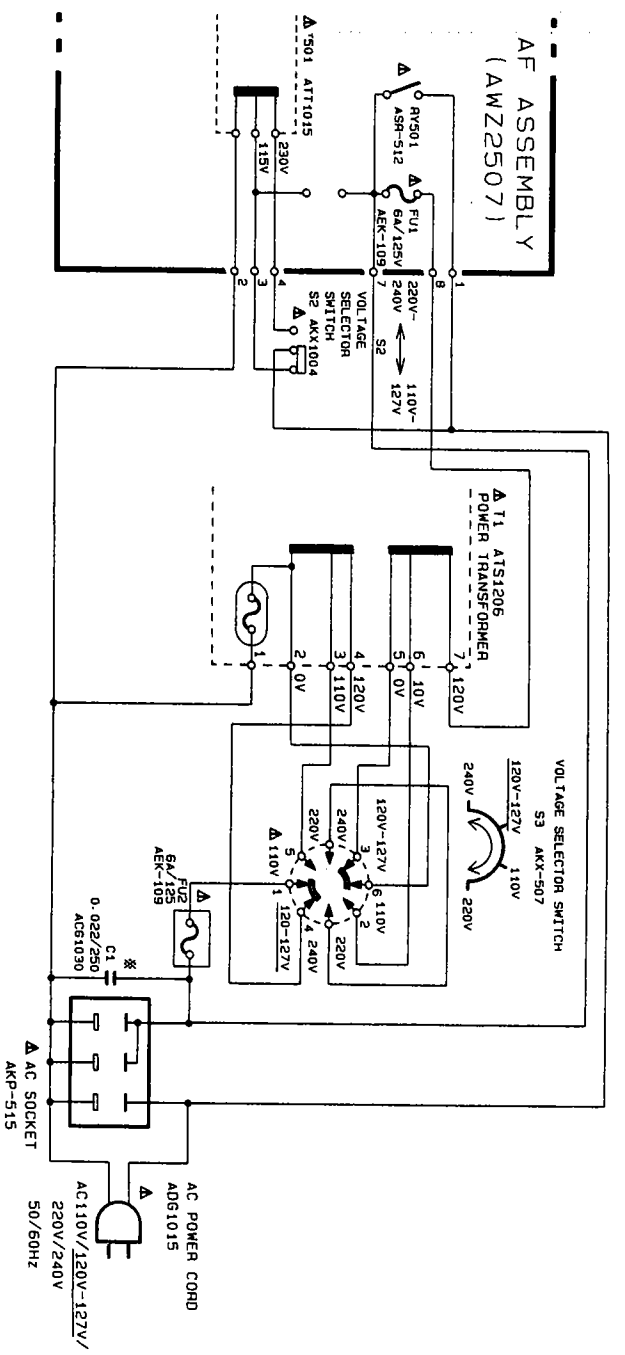
3. SCHEMATIC AND P.C.BOARDS DIAGRAM

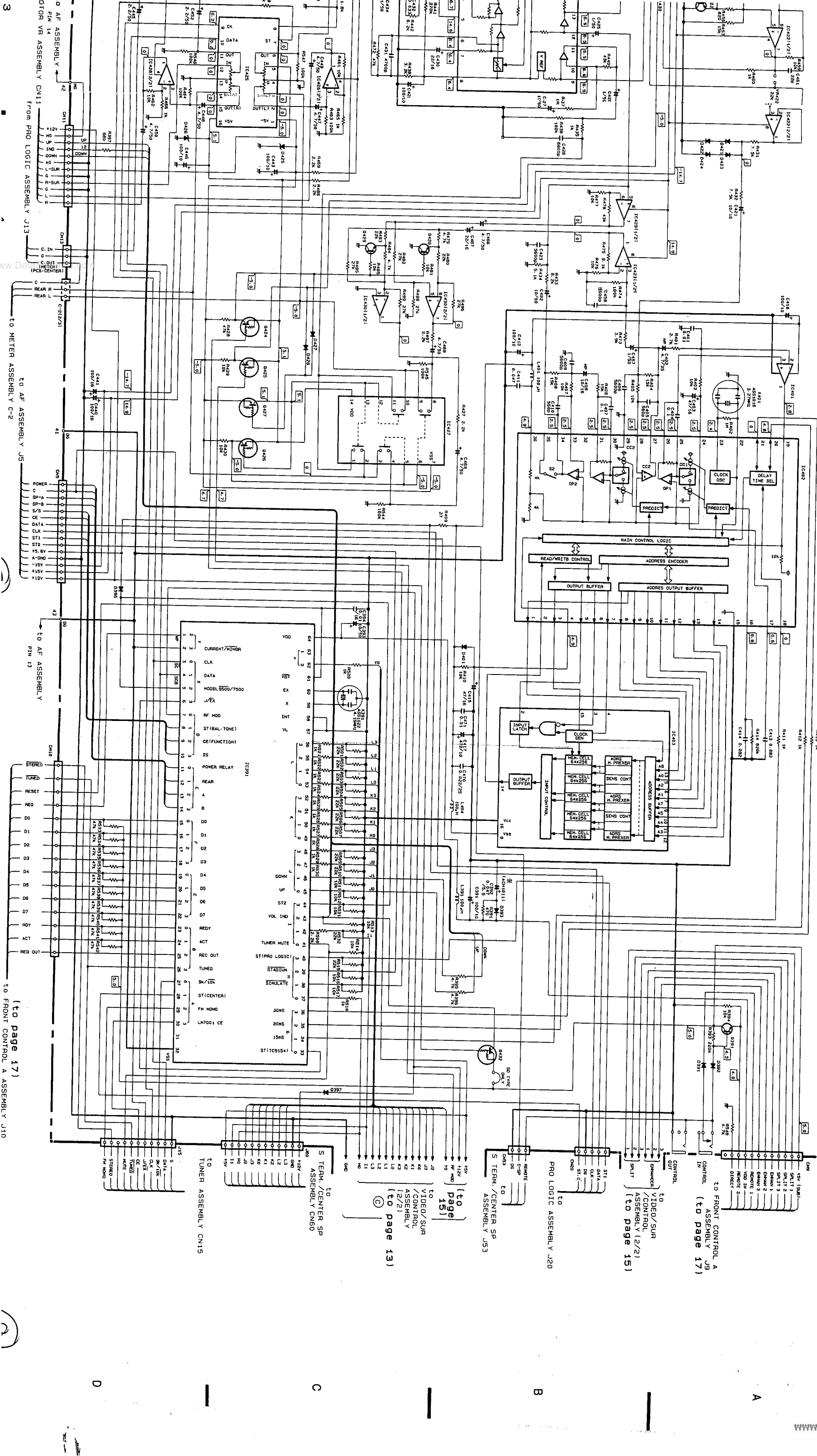
3.1 TUNER AND POWER SUPPLY assembly (SD type only)

TUNER



POWER SUPPLY





to FRONT CONTROL A ASSEMBLY J9

to VIDEO/SUR CONTROL ASSEMBLY (2/2) (to page 15)

to PRO LOGIC ASSEMBLY J20

S TERM./CENTER SP ASSEMBLY J53

to VIDEO/SUR CONTROL ASSEMBLY (2/2) (to page 13)

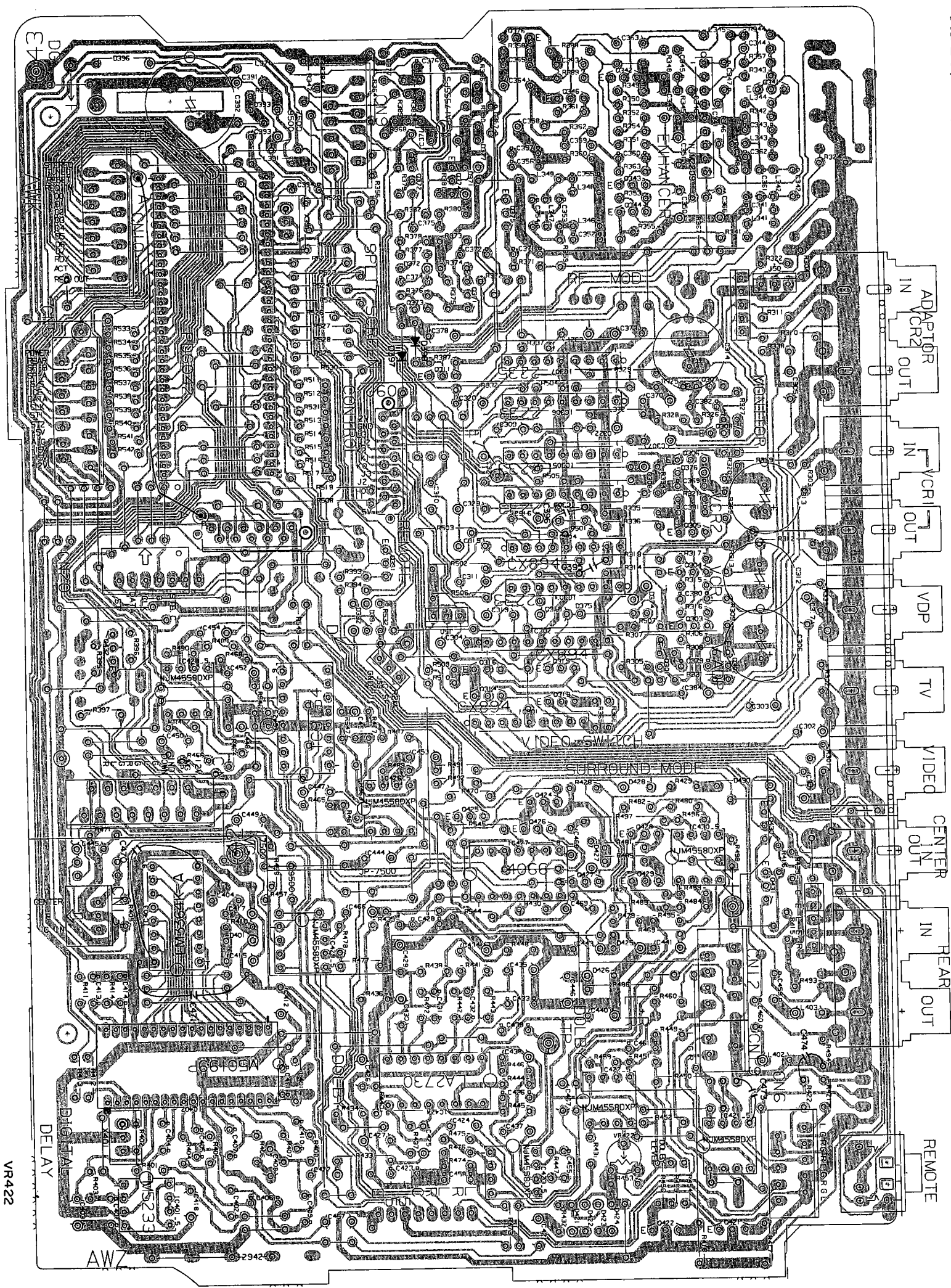
(to page 15)

S TERM./CENTER SP ASSEMBLY CN60

to TUNER ASSEMBLY CN15

(to page 17) to FRONT CONTROL A ASSEMBLY J10

VIDEO/SUR/CONTROL assembly (AWZ2942)



- Q376
- Q341 IC341
- Q302-0308
- Q430 Q431 IC430
- Q371 IC371
- Q342-Q344 Q375
- IC301-IC307 IC309
- Q424-Q429
- Q371-Q374 IC391
- Q311
- Q432 IC428
- IC403
- Q302-0308
- Q426
- Q313-Q316
- IC425
- Q391
- Q429
- Q421
- Q422
- Q423
- Q424
- Q402
- Q401
- Q422
- Q421
- Q422

C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator Type transistor
		Diode
		Resistor
		Capacitor (Polar)
		Capacitor (Non-polar)

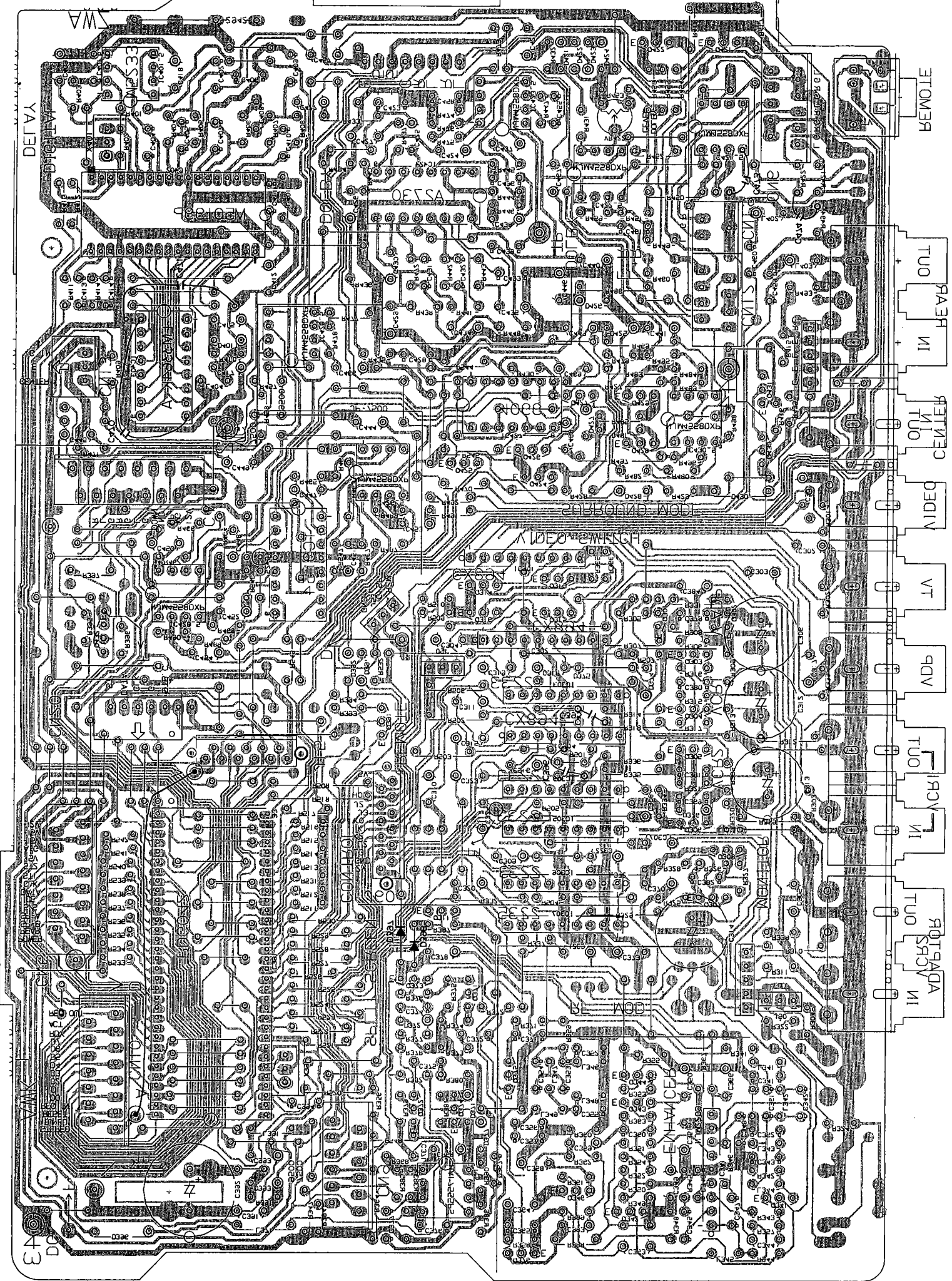
Others

P.C.B. pattern diagram indication	Part Name
IC	IC
S	Switch
RV	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.

NOTE
This P.C.B. connection diagram is viewed from the parts mounted side.
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.

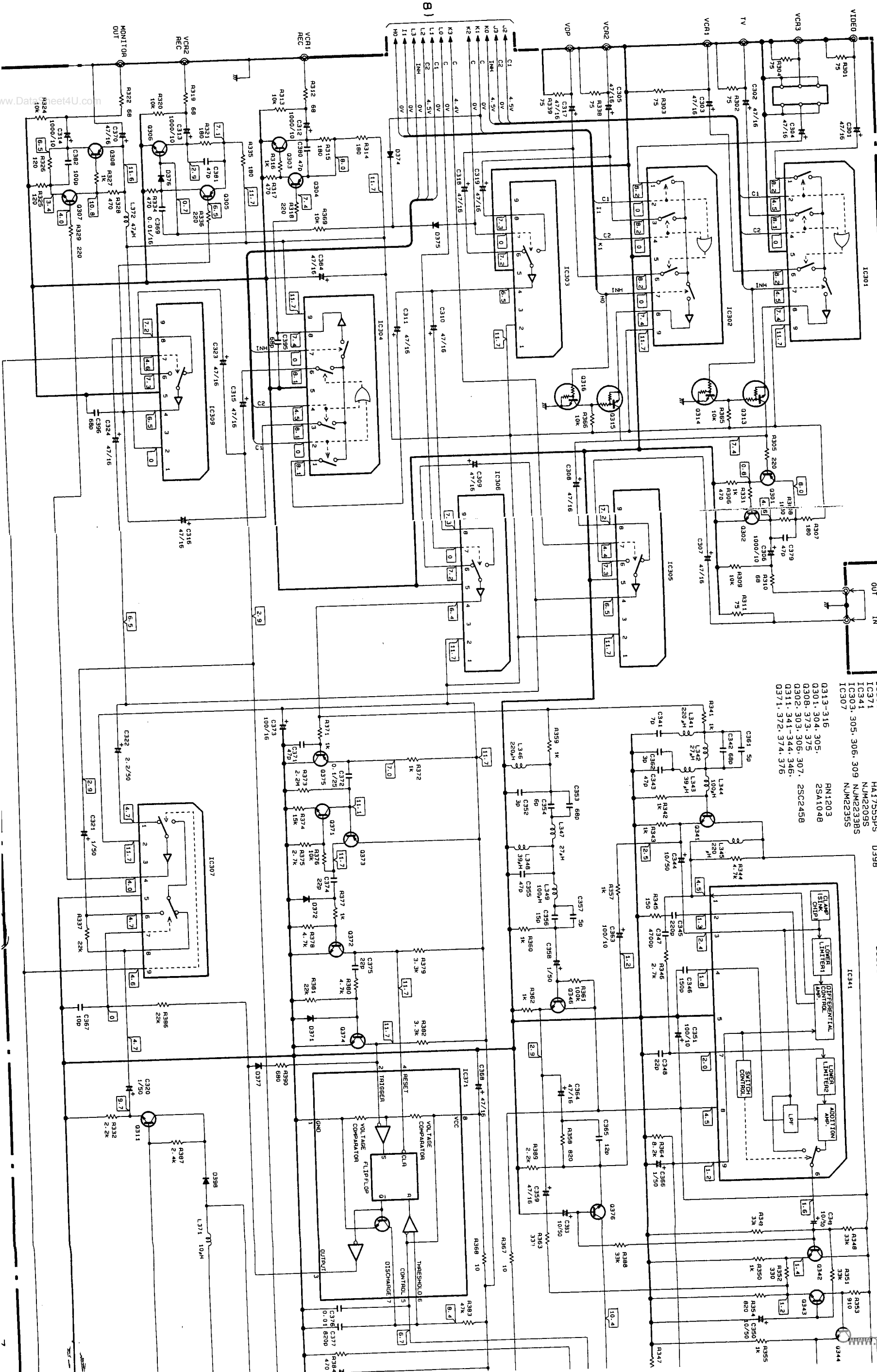
(S48S2WA) Vidm8aa8 J0RT1W0C\RU2\OEDIV



NOTE:
This picture shows the foil side of the
printed circuit.

3.3 VIDEO/SUR/CONTROL assembly (AWZ2942) (2/2)

VIDEO/SUR/CONTROL ASSEMBLY 2/2 (AWZ2942)

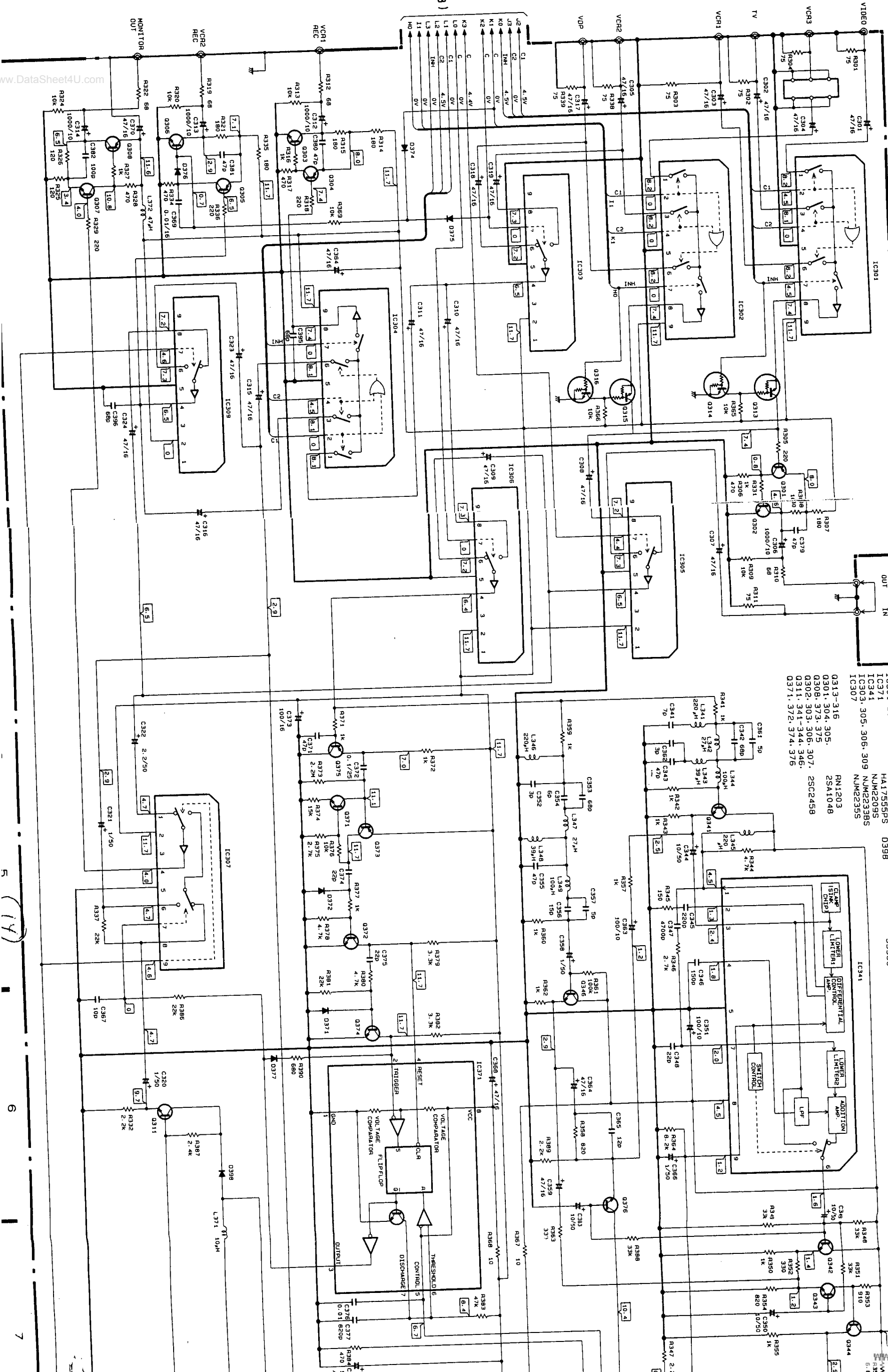


IC301-302-304	CX-894	D371-372-374-377	1SS252
IC371	HA1755SPS	D398	55566
IC341	NJM2209S		
IC303-305-306-309	NJM2238S		
IC307	NJM2235S		
IC313-316	RN1203		
IC301-304-305	2SA1048		
IC308-373-375	2SA1048		
IC302-303-306-307	2SC2458		
IC311-341-344-346			
IC371-372-374-375			

(to page 8)
to

3.3 VIDEO/SUR/CONTROL assembly (AWZ2942) (2/2)

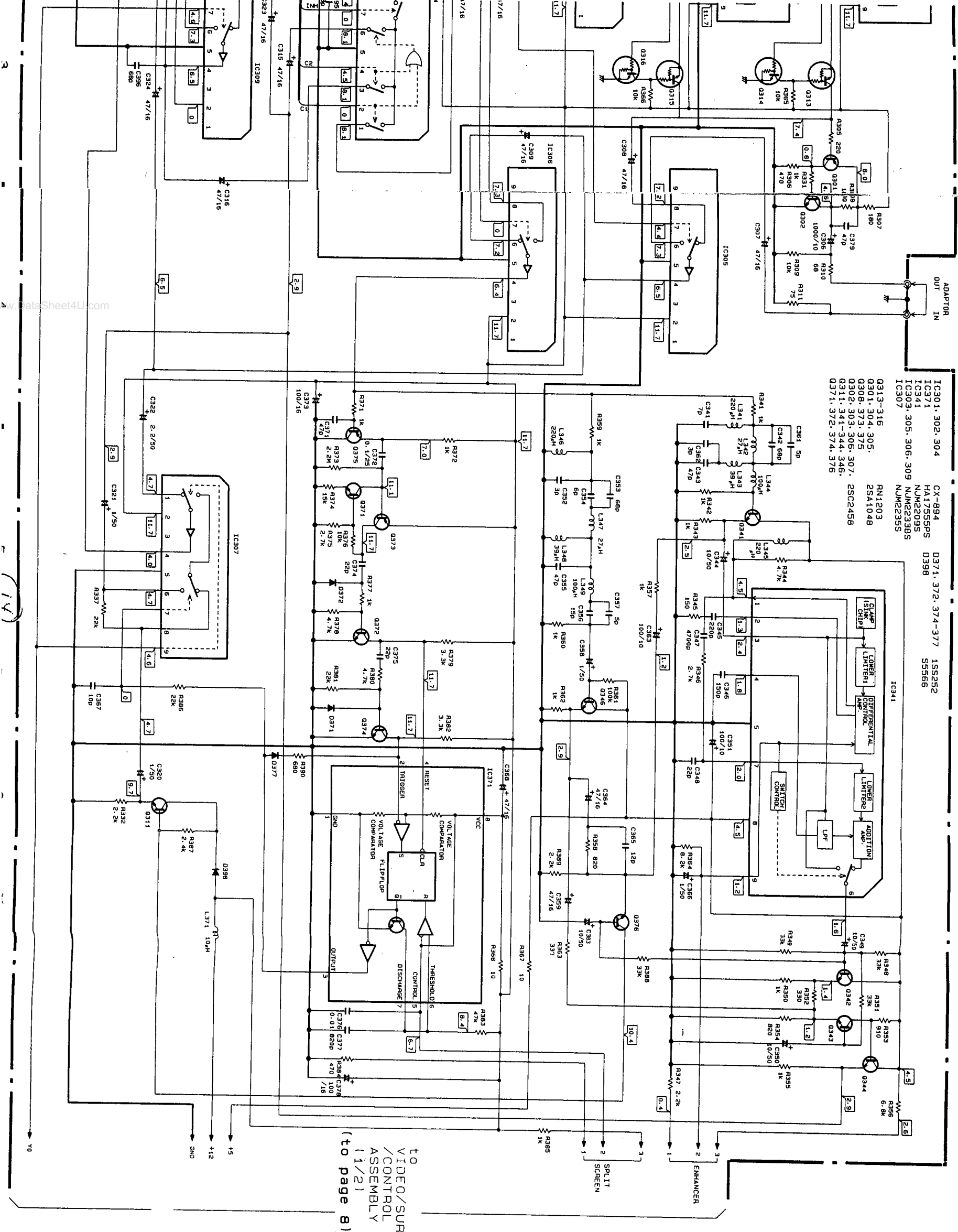
VIDEO/SUR/CONTROL ASSEMBLY 2/2 (AWZ2942)



- IC301-302-304 CX-894 1SS252
- IC301-302-304 HA1755SPS 0398
- IC307 HA1755SPS 0398
- IC308 NUM2209S
- IC309 NUM2238S
- IC310 NUM2238S
- IC311 NUM2235S
- IC312 NUM2235S
- IC313-316 RN1203
- IC313-316 2SA1048
- IC313-316 Q301, 304, 305
- IC313-316 Q308, 373, 375
- IC313-316 Q302, 303, 306, 307
- IC313-316 Q311, 341-344, 346
- IC313-316 Q371, 372, 374, 376
- IC313-316 2SC2458

(to page 8)
to

(AWZ2942)



TO VIDEO/SUR /CONTROL ASSEMBLY (1/2) (to page 8)

- 1. RESISTORS:**
 Indicated in Ω, $\frac{1}{2}W$, $\frac{1}{4}W$, $\pm 5\%$ tolerance unless otherwise noted. K: 10^3 , M: 10^6 , (F): $\pm 1\%$, (G): $\pm 2\%$, (K): $\pm 10\%$, (M): $\pm 20\%$ tolerance
- 2. CAPACITORS:**
 Indicated in capacitance (μF)/voltage (V) unless otherwise noted. p: pF. Indication without voltage is 50V except electrolytic capacitor.
- 3. VOLTAGE CURRENT:**
 □: Signal voltage at (33W + 33W 80/output (1kHz)
 □: DC voltage (V) at no input signal
 □: Value in () is DC voltage at rated power.
 ◁: mA: DC current at no input signal
- 4. OTHERS:**
 →: Signal route
 ⊕: Adjusting point.
 The Δ 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.
 * marked capacitors and resistors have parts numbers.
- This is the basic schematic diagram, but the actual circuit may vary due to improvements in design.
- 5. SWITCH**
 S1 SPEAKER IMPEDANCE SELECTOR
 A: 8 Ω MAX., - 8 Ω MIN.
 S2 Voltage selector (SD model only)
 220-240V - 110V-127V
 S3 Voltage selector (SD model only)
 110V, 120-127V, 220V, 240V
 S4 CHANNEL STEP/EM DE-EMPHASIS (SD model only)
 75 μS \leftrightarrow 50 μS
 10kHz/100kHz \leftrightarrow 9kHz/50kHz
- A**
- B**
- C**
- D**
- THE UNDERLINED INDICATES THE SWITCH POSITION**
- S801: TUNING UP
 - S802: TUNING DOWN
 - S803: ST 1
 - S804: ST 2
 - S805: ST 3
 - S806: ST 4
 - S807: ST 5
 - S808: FM
 - S809: AM
 - S810: ST 6
 - S811: ST 7
 - S812: ST 8
 - S813: ST 9
 - S814: ST 10
 - S815: RETURN
 - S816: AUTO/MANUAL
 - S817: DIRECT
 - S818: MEMORY
 - S819: MEMORY OFF
 - S820: MEMORY SCAN
 - S821: NAME
 - S822: HITS
 - S823: REAR UP
 - S824: REAR DOWN
 - S825: SIMULATED STEREO
 - S826: VIDEO SIGNAL SELECTOR
 - S827: VCR 1
 - S828: VCR 2
 - S829: VDP/CDV
 - S830: TV
 - S831: L
 - S832: R
 - S833: MUTE
 - S834: TAPE 2/DAT 2
 - S835: TAPE 1/DAT 1
 - S836: CD
 - S837: TUNER
 - S838: PHONO
 - S839: TREBLE UP
 - S840: TREBLE DOWN
 - S841: ACOUSTIC MEMORY
 - S842: ACOUSTIC SELECT
 - S843: DELAY TIME
 - S844: STADIUM
 - S845: SIMULATED
 - S846: BASS UP
 - S847: BASS DOWN
 - S848: BASS DOWN
 - S849: VCR NOISE FILTER
 - S850: ENHANCER
 - S851: SURROUND OFF
 - S852: FM MODE
 - S853: POWER STANDBY
 - S854: SURROUND TEST TONE
 - S855: CENTER MODE
 - S856: VIDEO
 - S857: SP A
 - S858: SP B
 - S859: VCR 1 REC SELECTOR
 - S860: VIDEO ADAPTOR
 - S861: VCR 1 MODE
 - S862: VCR 1 REC ENHANCER
 - S863: SP REAR
 - S864: VCR 3
 - S865: LINE
 - S866: CENTER UP
 - S867: CENTER DOWN

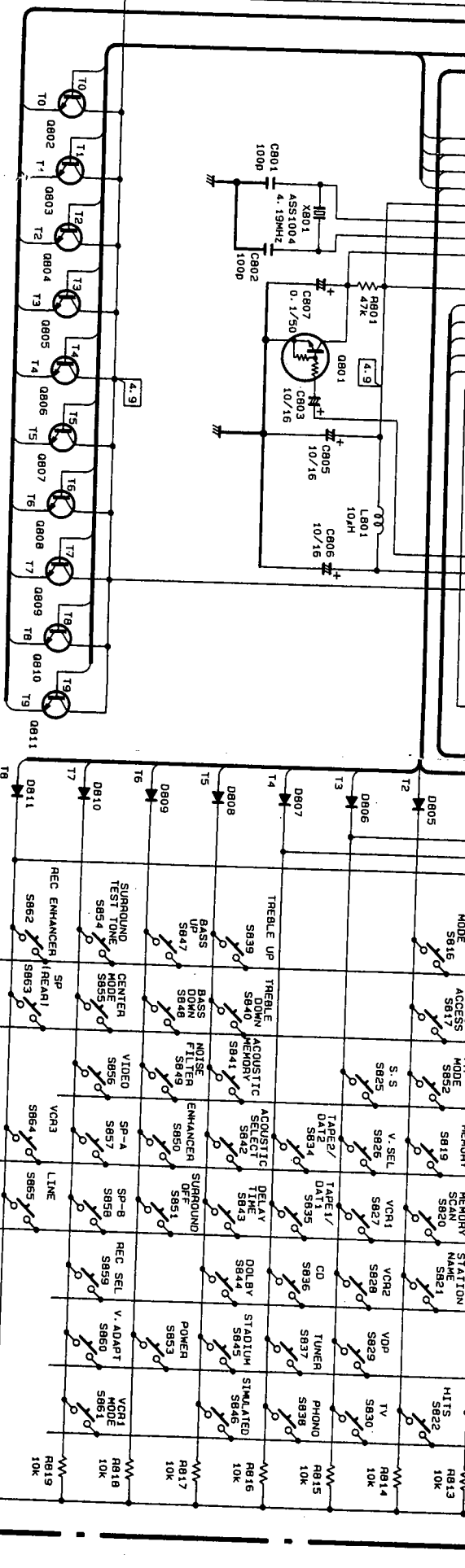
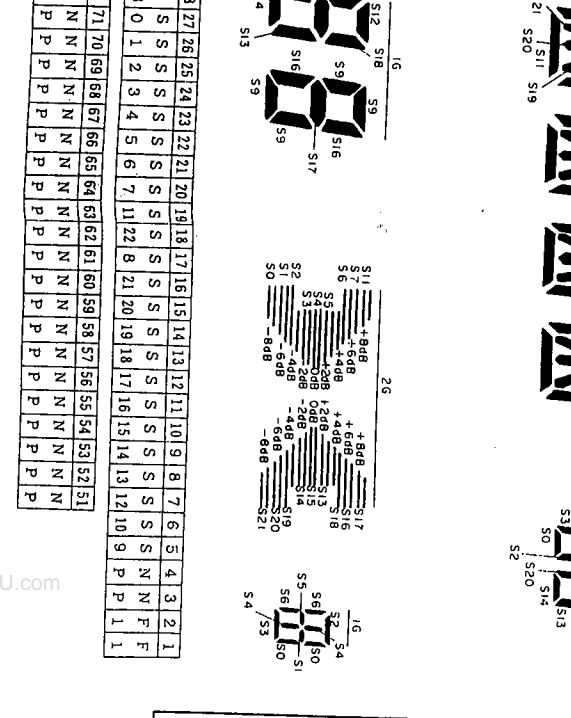
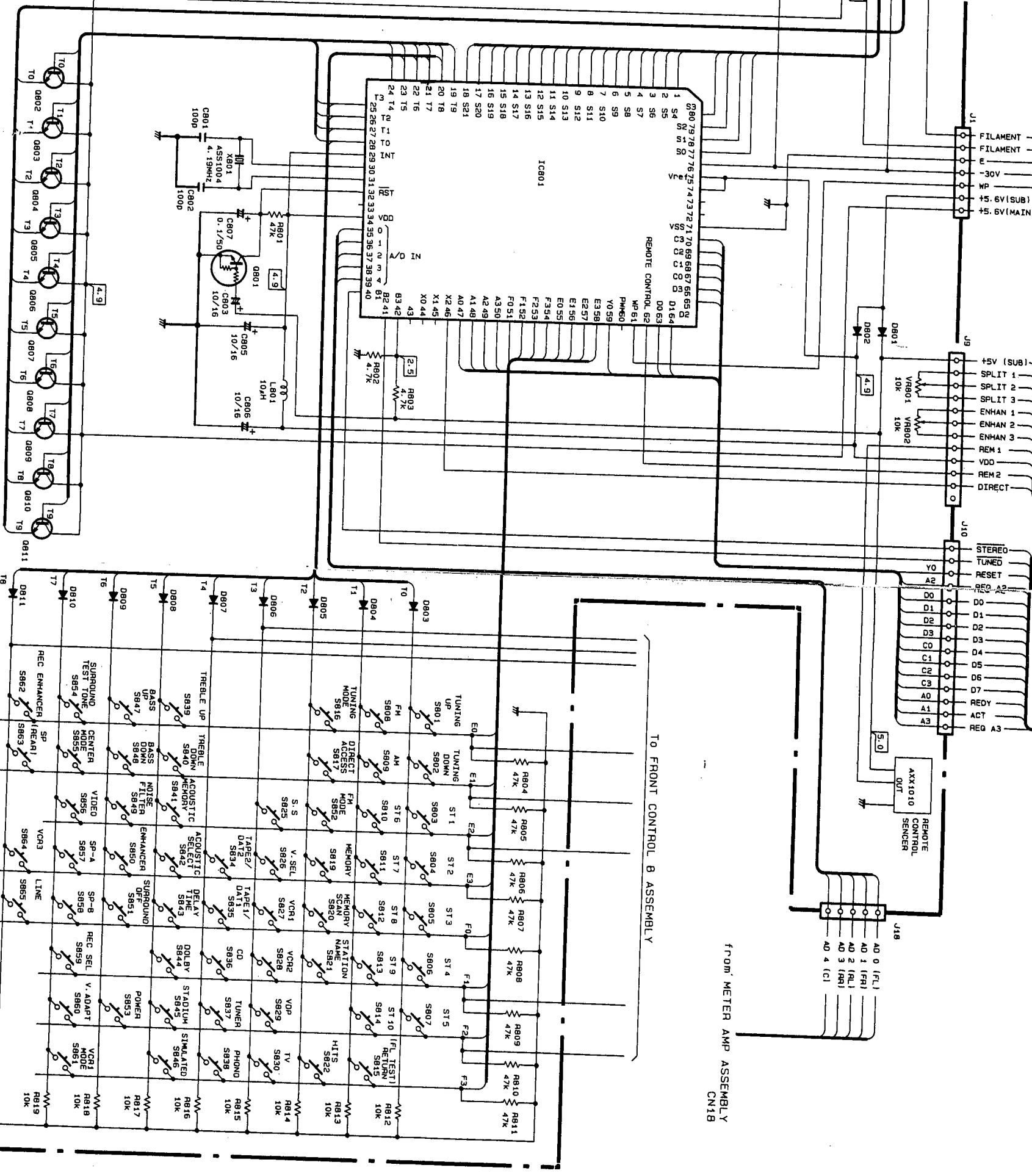
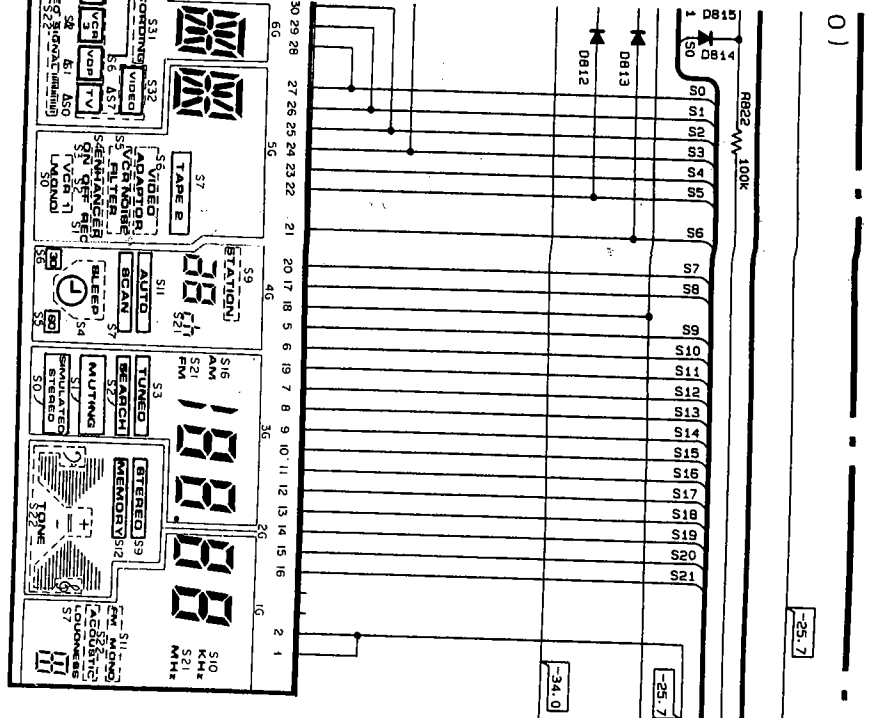
VSX-9700S/KUC1S1

FROM AF ASSEMBLY CN1 TO VIDEO/SUR/CONTROL CN9 (tp page 8)

TO VIDEO/SUR/CONTROL CN10 (tp page 8)

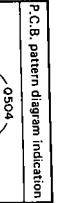
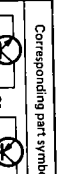
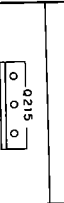
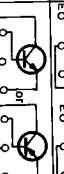
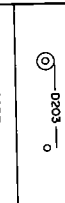

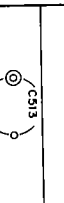
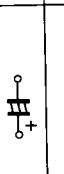
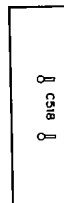
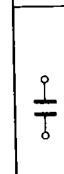


FROM METER AMP ASSEMBLY CN18

TO FRONT CONTROL B ASSEMBLY



28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
23	0	1	2	3	4	5	6	7	11	22	8	21	20	19	18	17	16	15	14	13	12	10	9	1	1	1	1
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
72	71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52	51	50	49	48	47	46	
N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N	N
P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

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.

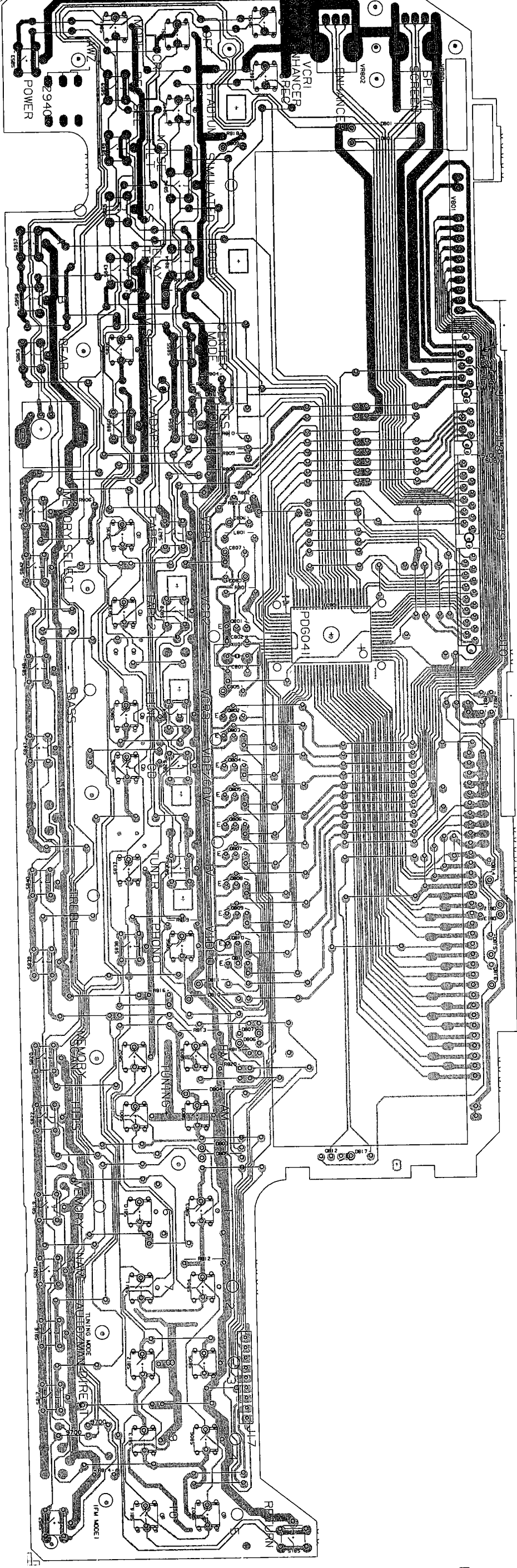
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator Type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

Others

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

FRONT CONTROL A assembly (AWZ2940)



VR801 VR802

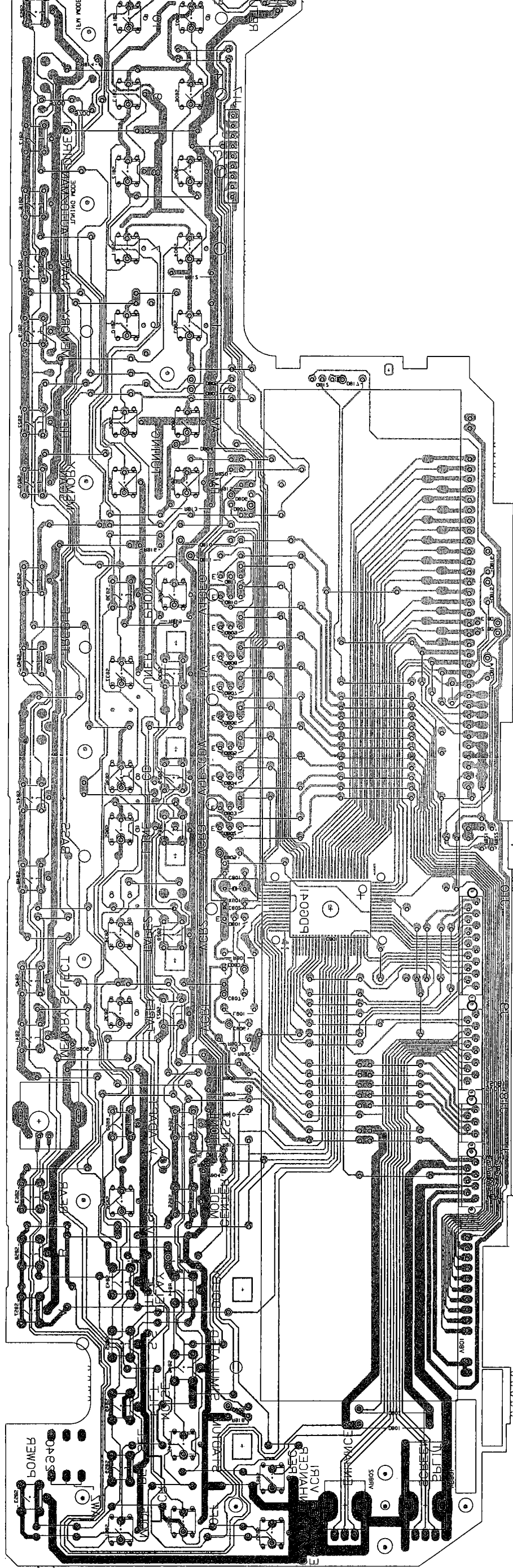
IC801

Q801 - Q812

0801 - 081S

IC801

S0901 A890V



FRONT CONTROL ADDRESS A (ADDRESS) ADDRESS A

A

D