

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**

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

**Contrast of electrical parts**

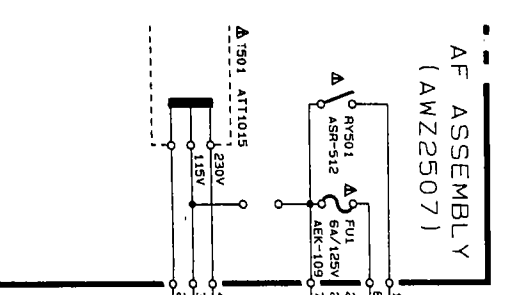
Note : The circuit of the remote control unit (AXD1100) with built-in microcomputer has been changed according to the preceding table to model (AXD1139).  
The key functions of the new remote control unit have been changed according to the following table.

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**

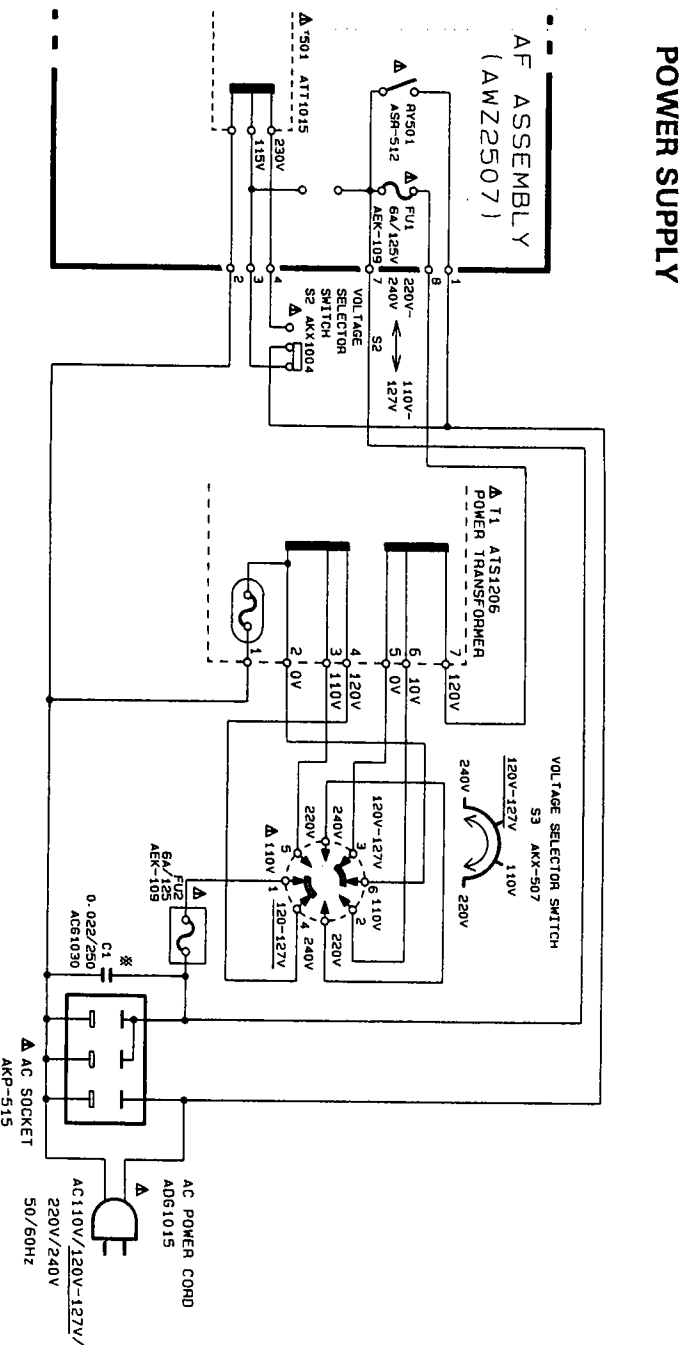
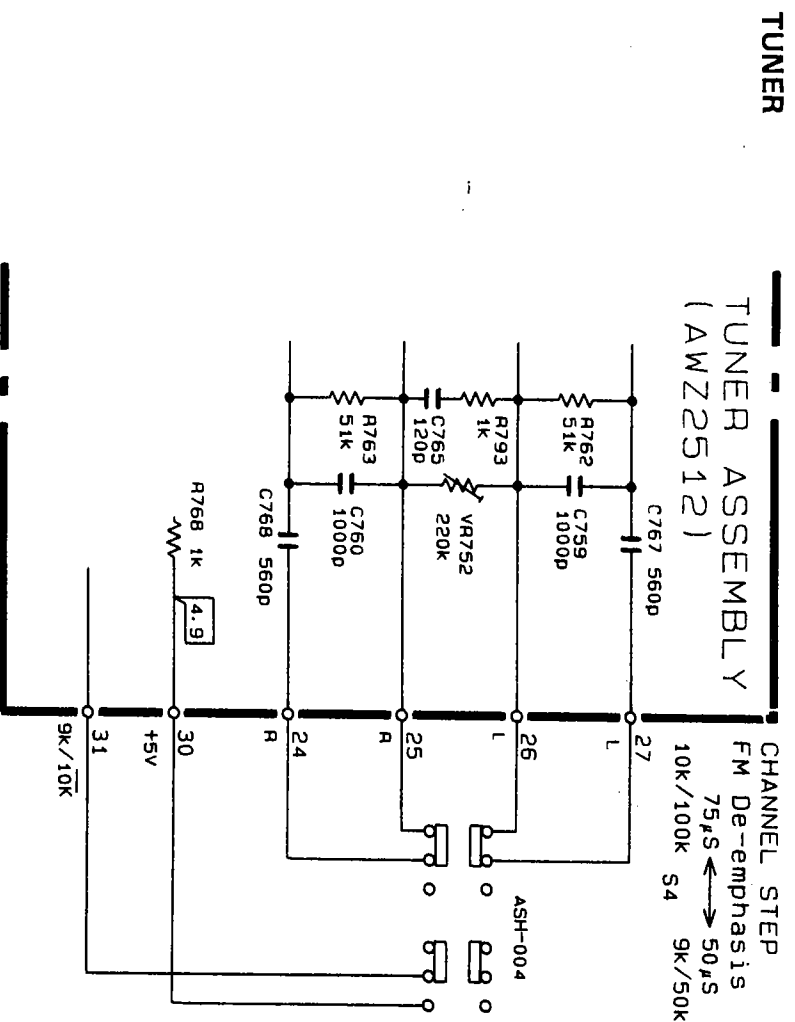
**3.1 TUNER AND TUNER**

**POWER SUPPLY**



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

#### 3.1 TUNER AND POWER SUPPLY assembly (SD type only)



## 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	

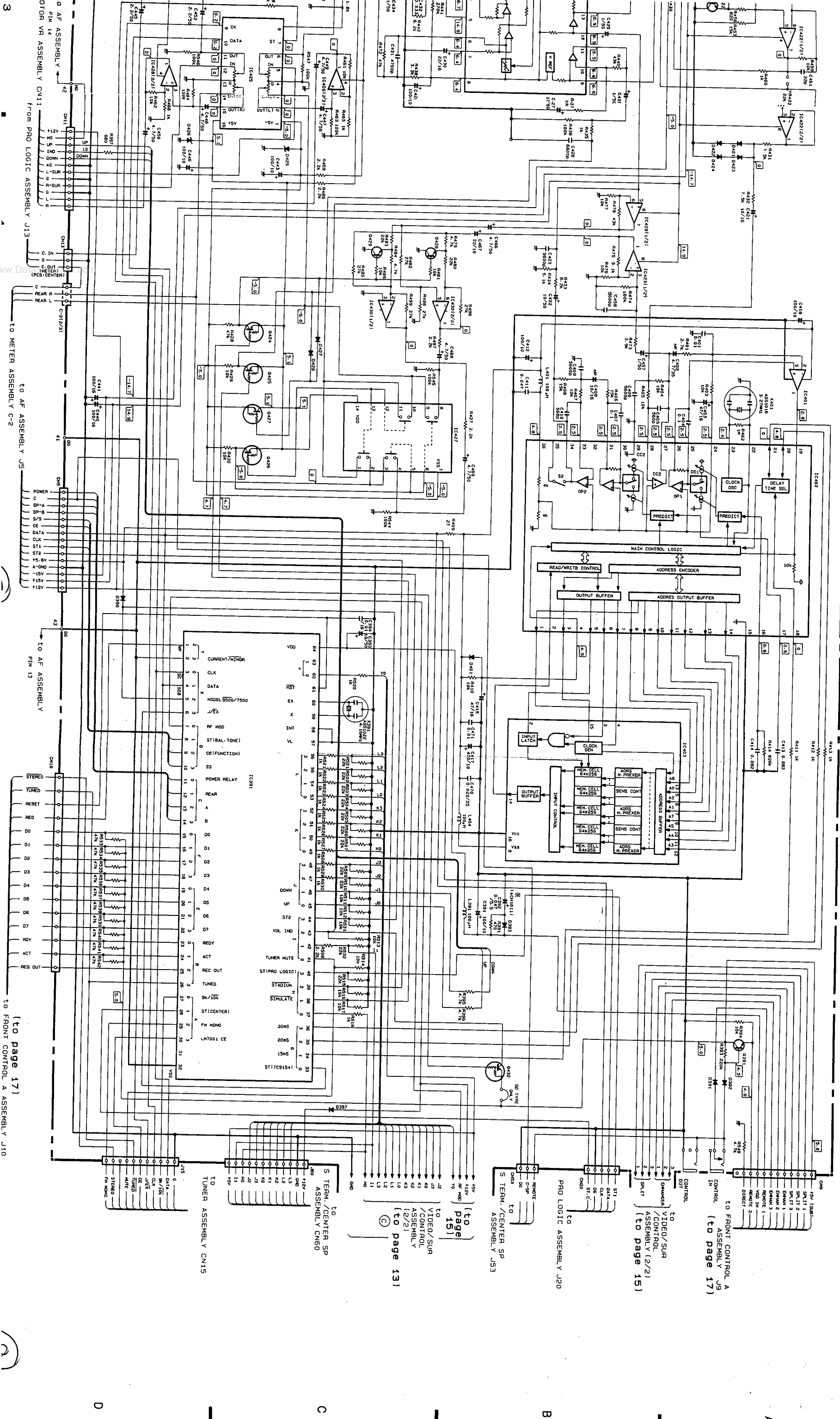
DEO/SUR/CONTROL

CONTROL A assembly

Remarks

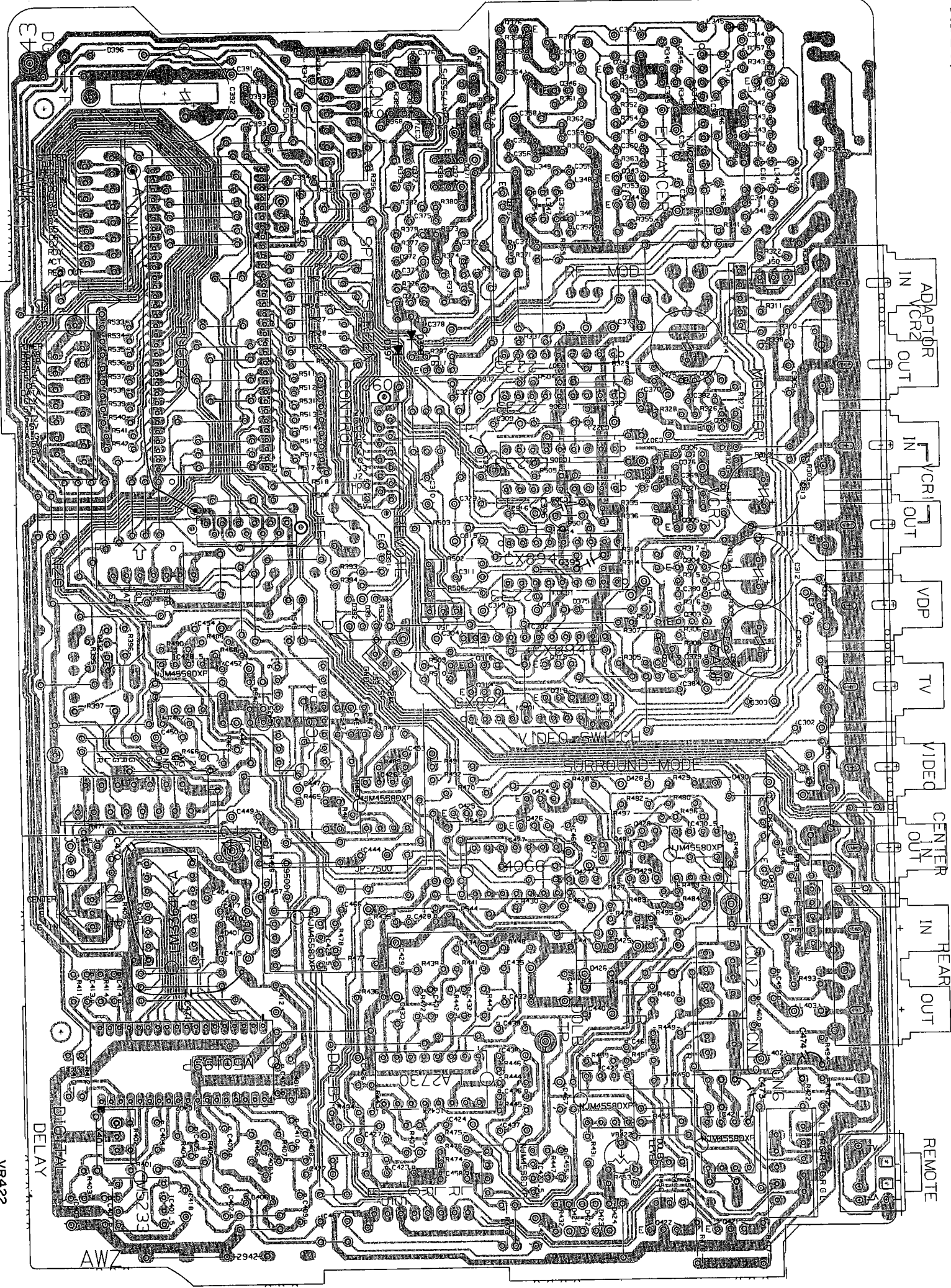
Remarks





TO AF ASSEMBLY  
 MOTOR VR ASSEMBLY CN11  
 FROM PRO LOGIC ASSEMBLY J13  
 TO METER ASSEMBLY C-2  
 TO AF ASSEMBLY J5  
 TO FRONT CONTROL A ASSEMBLY J10  
 TO FRONT CONTROL A ASSEMBLY J9  
 PRO LOGIC ASSEMBLY J20  
 VIDEO/SUR CONTROL ASSEMBLY (2/2)  
 VIDEO/SUR CONTROL ASSEMBLY (1/2)  
 S TERM./CENTER SP ASSEMBLY J53  
 S TERM./CENTER SP ASSEMBLY CN60  
 TO TUNER ASSEMBLY CN15  
 TO FRONT CONTROL A ASSEMBLY J10  
 TO FRONT CONTROL A ASSEMBLY J9  
 TO VIDEO/SUR CONTROL ASSEMBLY (2/2)  
 TO VIDEO/SUR CONTROL ASSEMBLY (1/2)  
 TO S TERM./CENTER SP ASSEMBLY J53  
 TO S TERM./CENTER SP ASSEMBLY CN60  
 TO TUNER ASSEMBLY CN15

VIDEO/SUR/CONTROL assembly (AWZ2942)



OTE  
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.

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

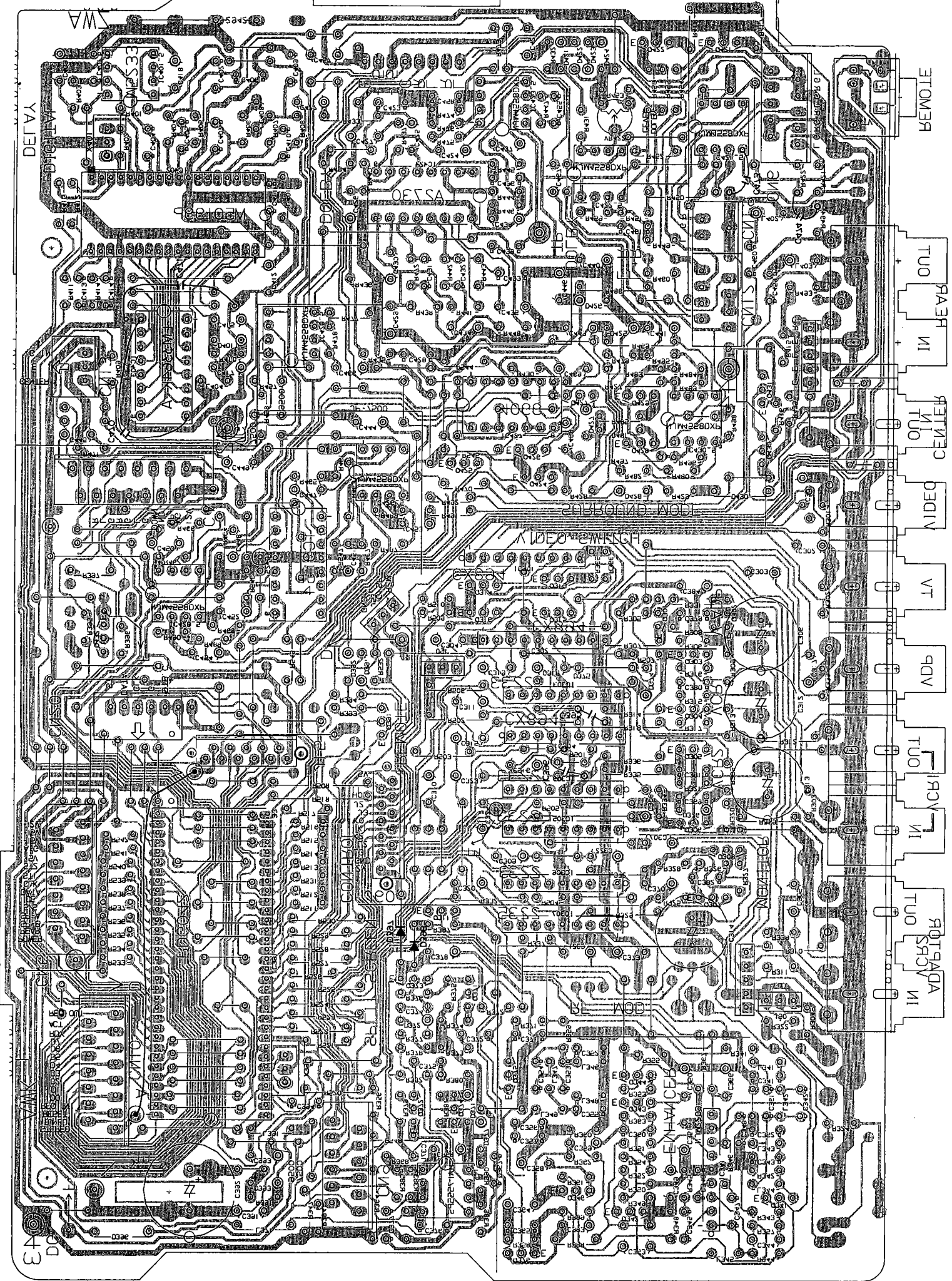
Others

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

- The capacitor terminal marked with ⊕ (double circles) shows negative terminal.
- The diode terminal marked with ⊕ (double circles) shows cathode side.
- The transistor terminal to which E is affixed shows the emitter.

- Q341 IC341
- Q346 Q342-Q344 Q375
- IC371 IC371
- IC391 IC391
- Q302-Q308
- IC301-IC307 IC309
- Q391 Q391
- Q313-Q316
- IC425 IC425
- Q430 Q431 IC430
- Q424-Q429
- IC426 IC426
- IC429 IC429
- IC402 IC402
- IC403 IC403
- IC401 IC401
- IC421 IC421
- IC423 IC423
- Q422 Q422

(S4E82WA) Vidm8aa8 J0RTW0C\RUE\OEDIV



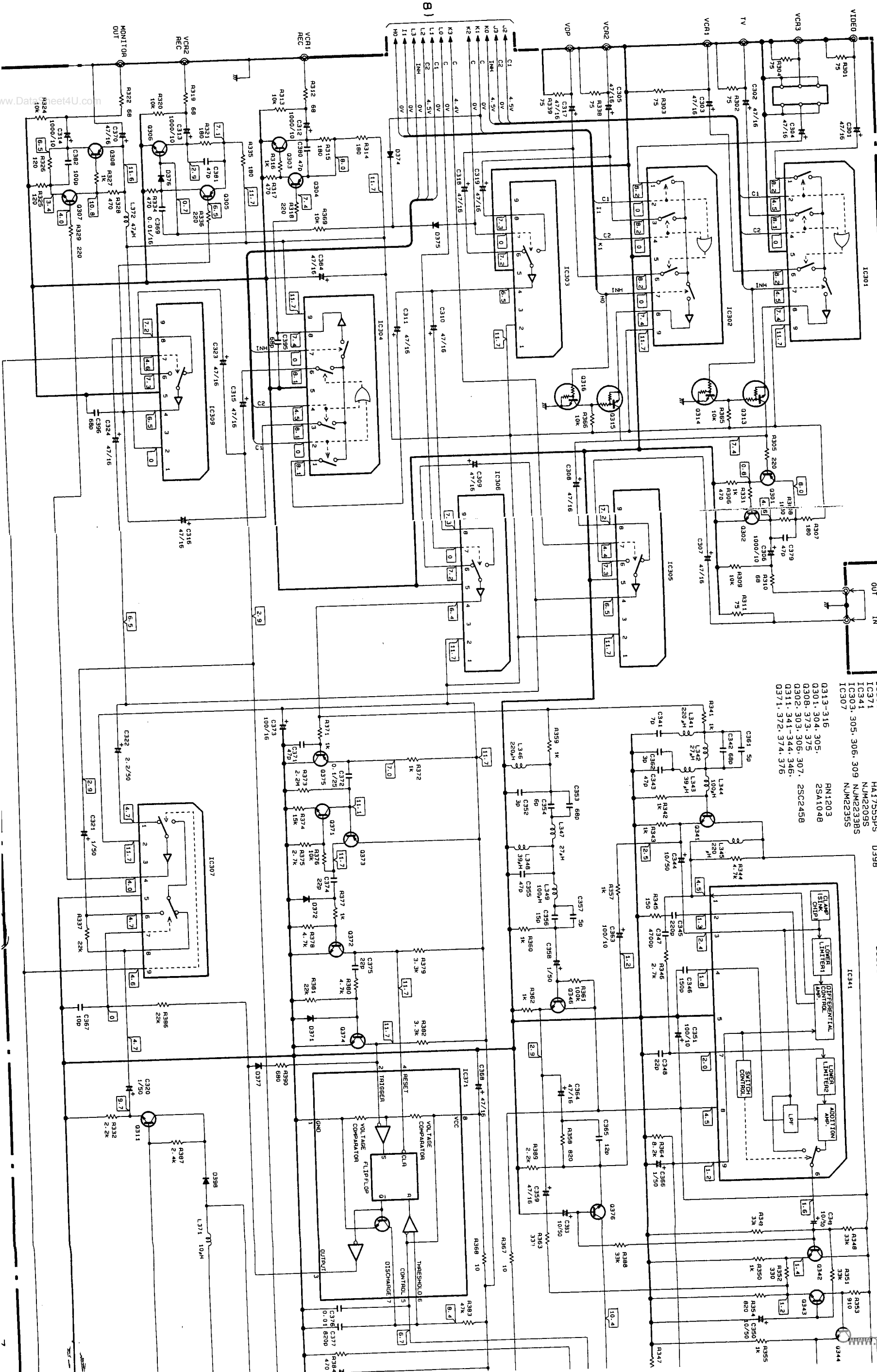
- IS40 SS40 IC401
- IS41 SS41 IC402
- IS42 SS42 IC403
- IS43 SS43 IC404
- IS44 SS44 IC405
- IS45 SS45 IC406
- IS46 SS46 IC407
- IS47 SS47 IC408
- IS48 SS48 IC409
- IS49 SS49 IC410
- IS50 SS50 IC411
- IS51 SS51 IC412
- IS52 SS52 IC413
- IS53 SS53 IC414
- IS54 SS54 IC415
- IS55 SS55 IC416
- IS56 SS56 IC417
- IS57 SS57 IC418
- IS58 SS58 IC419
- IS59 SS59 IC420
- IS60 SS60 IC421
- IS61 SS61 IC422
- IS62 SS62 IC423
- IS63 SS63 IC424
- IS64 SS64 IC425
- IS65 SS65 IC426
- IS66 SS66 IC427
- IS67 SS67 IC428
- IS68 SS68 IC429
- IS69 SS69 IC430
- IS70 SS70 IC431
- IS71 SS71 IC432
- IS72 SS72 IC433
- IS73 SS73 IC434
- IS74 SS74 IC435
- IS75 SS75 IC436
- IS76 SS76 IC437
- IS77 SS77 IC438
- IS78 SS78 IC439
- IS79 SS79 IC440
- IS80 SS80 IC441
- IS81 SS81 IC442
- IS82 SS82 IC443
- IS83 SS83 IC444
- IS84 SS84 IC445
- IS85 SS85 IC446
- IS86 SS86 IC447
- IS87 SS87 IC448
- IS88 SS88 IC449
- IS89 SS89 IC450
- IS90 SS90 IC451
- IS91 SS91 IC452
- IS92 SS92 IC453
- IS93 SS93 IC454
- IS94 SS94 IC455
- IS95 SS95 IC456
- IS96 SS96 IC457
- IS97 SS97 IC458
- IS98 SS98 IC459
- IS99 SS99 IC460
- IS00 SS00 IC461

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)



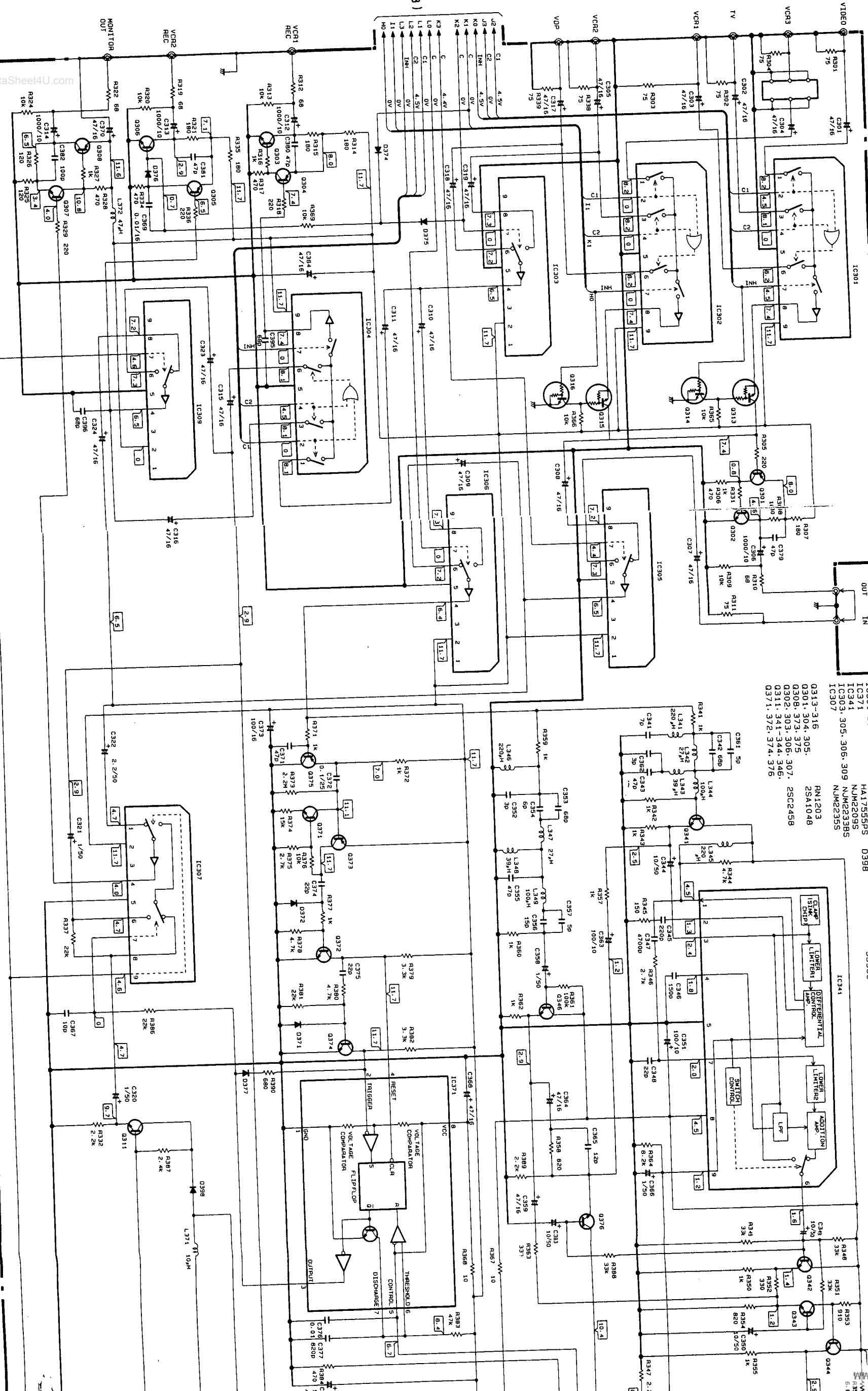
IC301-302-304	CX-894	0371-372-374-377	1SS252
IC371	HA1755SPS	0398	55566
IC341	NJM2209S		
IC303-305-306-309	NJM2238S		
IC307	NJM2235S		
IC313-316	RN1203		
IC301-304-305	2SA1048		
IC308-373-375	2SA1048		
IC302-303-306-307	2SC2458		
IC311-341-344-346			
IC371-372-374-376			

(to page 8)  
to



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

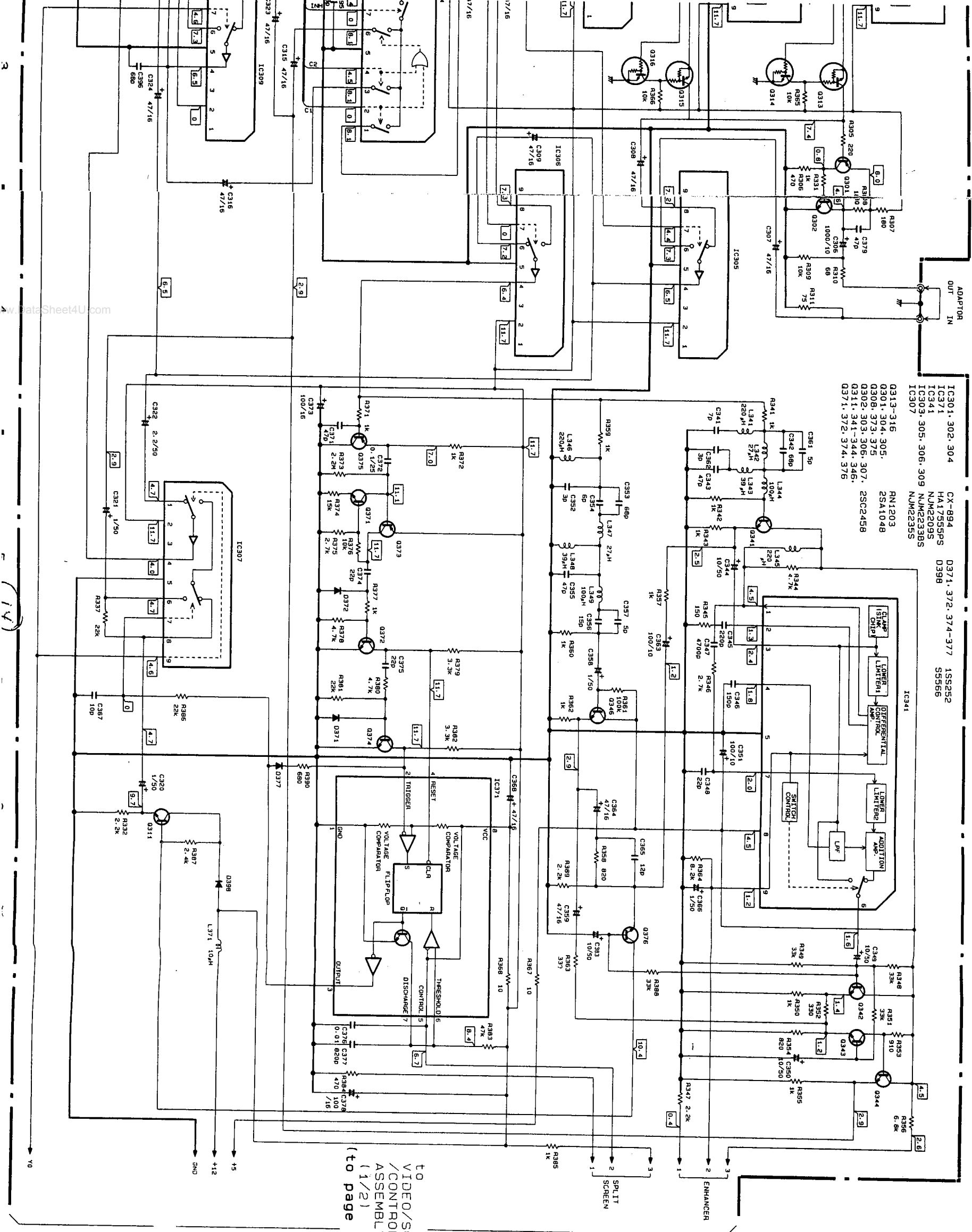
VIDEO/SUR/CONTROL ASSEMBLY 2/2 (AWZ2942)



- IC301-302-304 CX-894
- IC301-302-304 HA1755SPS
- IC303-305-306-309 NUM2209S
- IC303-305-306-309 NUM2238S
- IC307 NUM2235S
- IC313-316 RN1203
- Q301-304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000

(to page 8)  
to

(AWZ2942)



IC301, 302, 304	CX-894	D371, 372, 374-377	1SS252
IC371	HA1755SPS	D398	5S566
IC341	NJM2209S		
IC303, 305, 306, 309	NJM2238S		
IC307	NJM2235S		
IC313-316	RN1203		
Q301, 304, 305	2SA1048		
Q308, 373, 375	2SC2458		
Q302, 303, 306, 307	2SC2458		
Q311, 341-344, 346			
Q371, 372, 374, 376			

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: kΩ, M: MΩ, (F):  $\pm 1\%$ , (G):  $\pm 2\%$ , (K):  $\pm 10\%$ , (M):  $\pm 20\%$  tolerance
2. CAPACITORS:  
Indicated in capacitance ( $\mu F$ )/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  
 : mA: DC current at no input signal
4. 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 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, B 8Ω MAX. - 8Ω 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  $\mu S$   $\leftrightarrow$  50  $\mu S$   
10kHz/100kHz  $\leftrightarrow$  9kHz/50kHz
- 8801: TUNING UP  
8802: TUNING DOWN  
8803: ST 1  
8804: ST 2  
8805: ST 3  
8806: ST 4  
8807: ST 5  
8808: FM  
8809: AM  
8810: ST 6  
8811: ST 7  
8812: ST 8  
8813: ST 9  
8814: ST 10  
8815: RETURN  
8816: AUTO/MANUAL  
8817: DIRECT  
8818: MEMORY  
8820: MEMORY SCAN  
8821: NAME  
8822: HITS  
8823: REAR UP  
8824: REAR DOWN  
8825: SIMULATED  
STEREO  
8826: VIDEO SIGNAL  
SELECTOR  
8827: VCR 1  
8828: VCR 2  
8829: VDP/CDV  
8830: TV  
8831: L  
8832: R  
8833: MUTE  
8834: TAPE 2/DAT 2  
8835: TAPE 1/DAT 1  
8836: CD  
8837: TUNER  
8838: PHONO  
8839: TREBLE UP  
8840: TREBLE DOWN  
8841: ACOUSTIC  
MEMORY  
8842: ACOUSTIC  
SELECT  
8843: DELAY TIME  
8845: STADIUM  
8846: SIMULATED  
8847: BASS UP  
8848: BASS DOWN  
8849: VCR NOISE  
FILTER  
8850: ENHANCER  
8851: SURROUND OFF  
8852: FM MODE  
8853: POWER STANDBY  
8854: SURROUND TEST  
TONE  
8855: CENTER MODE  
8856: VIDEO  
8857: SP A  
8858: SP B  
8859: VCR 1 REC  
SELECTOR  
8860: VIDEO ADAPTOR  
8861: VCR 1 MODE  
8862: VCR 1 REC  
8863: SP REAR  
8864: VCR 3  
8865: LINE  
8866: CENTER UP  
8867: CENTER DOWN

THE UNDERLINED INDICATES THE SWITCH POSITION

VSX-9700S/KUC1S1





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.

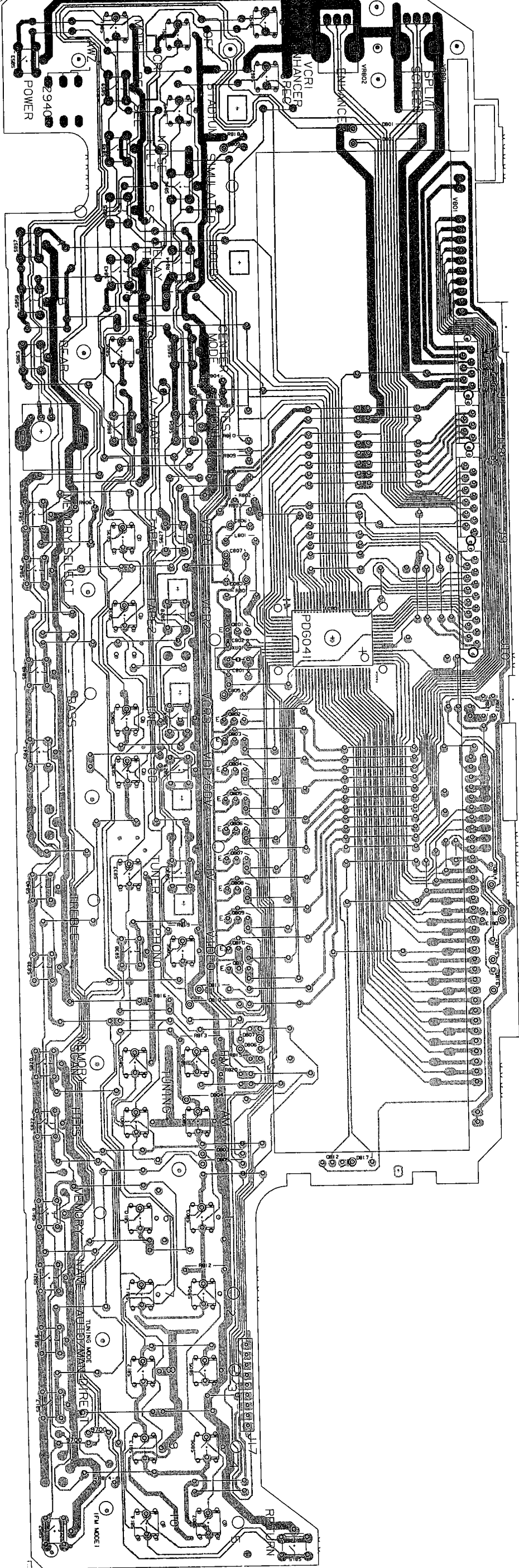
P.C.B. pattern diagram indication	Corresponding part symbol	Part Name
		Transistor
		Radiator Type transistor
		Diode
		Resistor
		Capacitor (Polarity)
		Capacitor (Non-polarity)

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

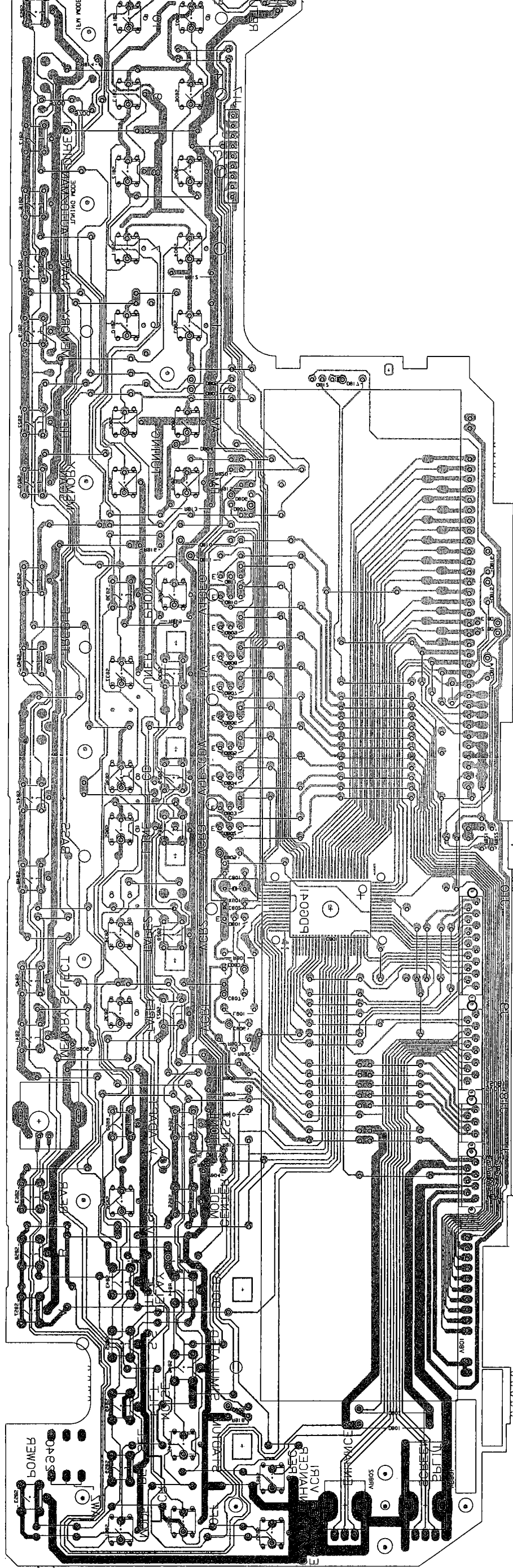
Q801 - Q812

D

0801 - 081S

IC801

0801 1081S



FRONT CONTROL ADDRESS A LOGIC UNIT (0801)

A

5

3

4

2