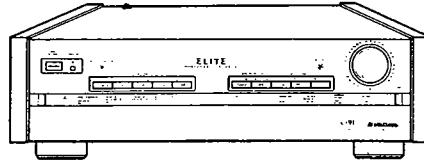


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 **PIONEER**
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Service Manual



**ORDER NO.
ARZ1636**

STEREO CONTROL AMPLIFIER

C-91

PIONEER ELECTRONIC CORPORATION 4-1, Meguro 1-Chome, Meguro-ku, Tokyo 153, Japan
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PIONEER ELECTRONIC CORPORATION 1988



AF assembly (AWZ2078)
SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	C138,C139	CEXA220M50
	C121,C122	CEYANP330M50
	C131,C132	CKCYF103Z50
	C103,C104	CMA151J500
	C101,C102	CMA181J500
	C115,C116	CO5XA122J160

RESISTORS

Mark	Symbol & Description	Part No.
	R135,R136,R145,R146	RDR1/2PM□□□F
	R137,R138,R141,R142	RDR1/2PM□□□J
	R131-R134,R161-R164	RD1/4PMFL680J
	R152	RD1/4PM100J
	R153-R159	RD1/8PM□□□J
	Other resistors	RDR1/4PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 2P (PHONO)	AKB1001

Control assembly (AWZ1055)
SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC304,IC305	M74LS42P
	IC301	PDE012
	IC302,IC303	PD0012A
	Q301,Q302	2SC2458
	D301-D306	1SS131

COILS

Mark	Symbol & Description	Part No.
	X301 Ceramic resonator	ASS-046
	L301 Inductor (1mH)	ATH-098

CAPACITORS

Mark	Symbol & Description	Part No.
	C305,C306	CCDCH101J50
	C301,C304	CEANL470M16
	C307-C310	CEAS100M25
	C302,C303	CKDYB103K50
	C313	CKDYB103K500
	C311,C312	CKDYF103Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R301 Resistor array	RA4S103J
	R310 Resistor array	RA8S103J
	Other resistors	RD1/8PM□□□J

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	C443,C444	CFTXA823J50
	C498	CKDYB102K50
	C501,C502	CKDYB103K50
	C481,C482	CKDYB331K50
	C439,C440	CMA101J500

RESISTORS

Mark	Symbol & Description	Part No.
	R497 Resistor array	RA8S103J
	R502 Resistor array	RA8S103J
	R465,R466	RD1/2PM822J
	R469-R496,R498,R499,R503,	RD1/8PM□□□J
	R504,R535-R542,R573-R580	RS1LMF221J
	R553,R554	
	Other resistors	RDR1/4PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 4P (TAPE1, AUDIO ADAP, VCR1)	AKB-115
	Terminal 6P	AKB-117
	Terminal 6P	AKB1005
	Terminal 6P	AKB1066

Video assembly (AWZ2046)
SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC708	LC7570
	IC709	PD0012A
	IC707	TC4011BP
	IC701-IC706	TC4066BP
	IC710	TC4069UBP

CAPACITORS

Mark	Symbol & Description	Part No.
	C717 (47000 μF/5.5V)	ACH1070
	C745	CCCH121J50
	C740,C742	CCCH330J50
	C764	CCCH470J50
	C763	CCCH680J50

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	D713 Zener diode	RD13EB
	D714 Zener diode	RD13ESB3
	D721-D723 Zener diode	RD18EB
	D753 Zener diode	RD2.7ESB
	D709,D710 Zener diode	RD20ESB2

RESISTORS

Mark	Symbol & Description	Part No.
	D729,D730 Zener diode	RD4.3ESB1
	D750 Zener diode	RD5.6ESB2
	D743 Zener diode	RD6.2ESB2
	D712 Zener diode	RD6.8ESB2
	D711 Zener diode	
	D724-D726,D731-D733,	1SS252
	D735-D742,D744,D746,D751,	
	D752	
	D715-D718	10E2FD
	D701-D708,D747	S5566

COILS

Mark	Symbol & Description	Part No.
	L701-L704 Inductor (100 μH)	ATH-050
	L712 Inductor (5.6 μH)	ATH-065
	L708 Inductor (15 μH)	ATH-075
	L705,L711 Inductor (10 μH)	ATH-078
	L714 Inductor (47 μH)	ATH-082
	L716,L717 Inductor (1mH)	ATH-098
	L710 Inductor (33 μH)	ATH-100
	L706,L707,L713 Inductor (56 μH)	ATH-104
	DL701 Delay cable	ATL-034

CAPACITORS

Mark	Symbol & Description	Part No.
	C749,C787,C794	CCCSL101J50
	C739,C785	CCCSL221J50
	C743,C793	CCCSL270J50
	C747,C759,C768,C771	CCCSL330J50
	C766	CCCSL390J50

Mark	Symbol & Description	Part No.
	C781	CEAS010M50
	C718,C719,C723,C744,C754,	CEAS100M25
	C792,C796	CEAS100M50
	C722	CEAS101M10
	C708,C710,C724,C725,C738,	
	C751,C760,C783,C784	
	C748,C750,C769,C772,C776,	CEAS101M16
	C777	
	C703-C706,C712	CEXA101M25
	C729,C732,C733,D736,	CEAS102M10
	C773-C775	
	C791	CEAS102M6
	C713	CEAS101M25
	C711	CEAS102M25

5. SCHEMATIC DIAGRAM

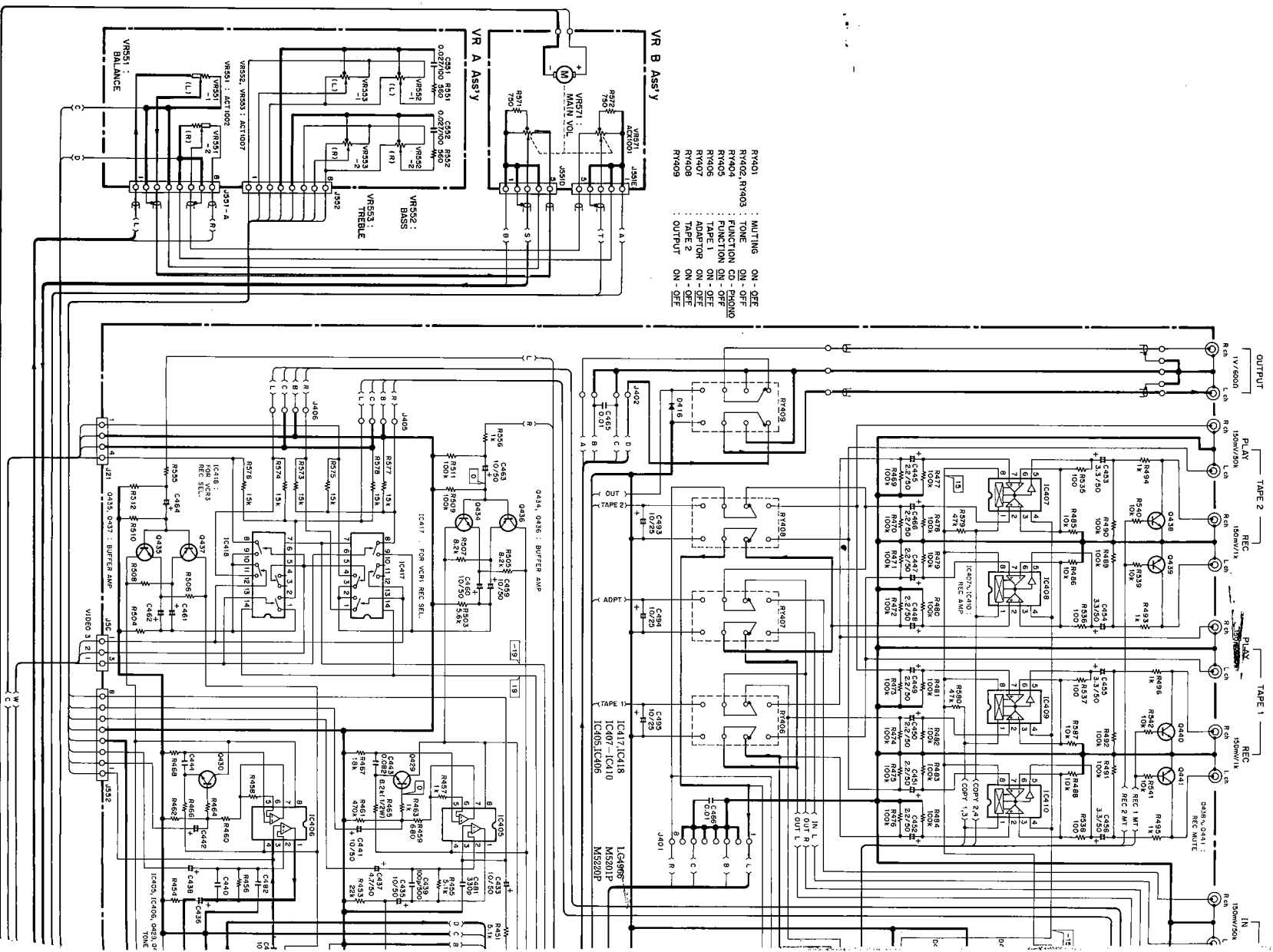
- RESISTORS:**
Indicated in Ω, 1/4W, and 1/8W, ±5% tolerance unless otherwise noted. K, M, ML, (M), (F), ±1%, (G), ±2%, (K), ±10%, (M), ±20% tolerance
- CAPACITORS:**
Indicated in capacity (μF)/voltage (V) unless otherwise noted. p, pf, indication without voltage is 50V except electrolytic capacitor.
- VOLTAGE, CURRENT:**
V: Signal voltage at no input signal value in () is DC voltage at rated power.
W + W, 80 output (1 KH)
- OTHERS:**
→: Signal route.
⊙: Adjusting point.
⚠: 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.
X: marked capacitors and resistors have parts numbers.
The underlined indicates the switch position.

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

5. SWITCH
S1: Power switch ON - OFF

- S341: V. D. P.
- S342: VIDEO 1
- S343: VIDEO 2
- S344: VIDEO 3
- S345: VAUX
- S346: CD
- S347: PHONO
- S348: TUNER
- S349: TAPE 1
- S350: TAPE 2
- S351: RESEL
- S352: AUDIO ADAPTOR
- S353: VIDEO ADAPTOR
- S354: ENHANCER
- S355: HIGH CUT
- S356: SUBSONIC FILTER
- S357: MODE
- S358: DUBBING
- S359: PHONO SELECTOR
- S360: MUTE
- S361: VIDEO FUNCTION
- S362: STAND-BY
- S391: TONE

The underlined indicates the switch position.



Mark	Symbol & Description	Part No.
	C752,C753	CEAS220M16
	C756	CEAS221M10
	C728,C731,C735	CEAS221M16
	C761	CEAS331M16
	C714,C801	CEAS332M25
	C780	CEAS4R7M50
	C737,C741,C788,C789	CEAS470M10
	C758,C770	CEAS470M16
	C727,C730,C734,C778	CEAS470M25
	C709,C726,C757	CEAS471M10
	C701,C702	CEAS471M35
	C707	CEHAQ101M10
	C715,C716	CEHAQ101M25
	C746,C762	CKCYF102Z50
	C755,C765,C767,C782,C797	CKCYF103Z50
	C720,C721	CKCYF473Z50

Mark	Symbol & Description	Part No.
	R750 Resistor array	RA7S103J
	R795,R800,R835,R883,R887, R891	RD1/2PM□□□J
	R779,R781,R789,R791,R901, R903	RD1/4PM□□□J
	R867	FEA1/4PL680J
△	R912-R914	FEA1/4PS□□□J
△	R904	RS1LMF4R7J
△	Other resistors	RD1/8PM□□□J

Mark	Symbol & Description	Part No.
	Terminal 3P (VIDEO1, VIDEO3)	AKB-134
	Terminal 3P (V ADAPTOR)	AKB1067
	Terminal 1P (MON.)	AKB1068
	Mini Jack (REMOTE CONTROL)	AKN-207
	5P DIN socket (RF:MOD)	AKP-081

Video assembly (AWQ1004)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	IC601-IC606	CX-894
	IC608,IC609	TC4053BP
	IC607	TC4066BP
	Q601,Q602,Q605,Q608,Q609, Q610	2SA1048
	Q619	2SA965
	Q613,Q615,Q617	2SC2235
	Q603,Q604,Q607,Q608,Q611, Q612,Q620	2SC2458
	Q614,Q616,Q618	2SK246

Mark	Symbol & Description	Part No.
	D602,D604,D606 Zener diode	RD13ESB2
	D607 Zener diode	RD5.1ESB1
	D608-D619	1SS252
	D601,D603,D605	11E2
	D620	RD6.8ESB2

CAPACITORS

Mark	Symbol & Description	Part No.
	C619,C620,C625,C626,C631, C632	CCCSL330J50
	C622,C628,C634	CEAS101M10
	C601,C603,C605,C607,C609, C611,C613,C615,C617,C624, C630,C636,C642	CEAS101M16
	C621,C627,C633	CEAS102M10
	C637-C640	CEAS330M25
	C623,C629,C635	CEAS331M16
	C602,C604,C606,C608,C610, C612,C614,C616,C618	CEAS470M16
	C641	CEAS470M25
	C643,C644	CKDYX473M25

RESISTORS

Mark	Symbol & Description	Part No.
	R670 Resistor array	RA6S104J
	R609,R610,R615,R616,R623, R624,R629,R630,R637,R638, R643,R644	RD1/2PM□□□J
	R649	RD1/4PM222J
	R650	RS1LMF4R7J
△	Other resistors	RD1/8PM□□□J

OTHERS

Mark	Symbol & Description	Part No.
	4P Mini DIN socket (VCR1, VCR3, TV/AUX IN, MONITOR OUT)	AKP1016

SW.A assembly (AWZ1056)

SEMICONDUCTORS

Mark	Symbol & Description	Part No.
	D349,D351,D353,D355,D357, D368-D372	AEL-451
	D341-D348,D359-D366, D373-D381	AEL1004
	D350,D352,D354,D356,D358	AEL1005

SWITCHES

Mark	Symbol & Description	Part No.
	S341-S362 Tact switch (MUTE, VIDEO ADAP- TOR, TAPE1, V/AUX, V.D.P, VIDEO1, CD, TAPE2, ENHANCER, MODE, VIDEO FUNCTION, DUBING, HI CUT, REC SEL, PHONO, VIDEO2, VIDEO3, TUNER, AUDIO ADAPTOR, SUB- SONIC FILTER, PHONO SELECTOR, STAND BY)	ASSG-711

RESISTORS

Mark	Symbol & Description	Part No.
	R342,R343 Resistor array	RA4S391J
	R346 Resistor array	RA5S391J
	Other resistors	RD1/8PM□□□J

SW.B assembly

SWITCH

Mark	Symbol & Description	Part No.
	S391 Tact switch (TONE)	ASG-711

VR.A assembly

CAPACITORS

Mark	Symbol & Description	Part No.
	C551,C552 Polyester capacitor	COMXA273J100

RESISTORS

Mark	Symbol & Description	Part No.
	VR551 Variable resistor (50k x 2)	ACT1002
	VR552,VR553 Variable resistor (10k x 2)	ACT1007
	R551,R552	RDRI/4PM561J

VR.B assembly

RESISTORS

Mark	Symbol & Description	Part No.
	VR571 Variable resistor (15k x 2)	ACX1017
	R571,R572	RDRI/4PM751J

Terminal assembly

CAPACITORS

Mark	Symbol & Description	Part No.
	C798-C800	CKCYF473Z50

RESISTORS

Mark	Symbol & Description	Part No.
	R911	RD1/8PM750J

OTHERS

Mark	Symbol & Description	Part No.
	Terminal 1P (VIDEO2 OUT, VIDEO2 IN)	AKB1004

VR assembly

SEMICONDUCTOR

Mark	Symbol & Description	Part No.
	D745	1SS252

RESISTORS

Mark	Symbol & Description	Part No.
	VR701-VR703 Variable resistor (1k)	ACT1003

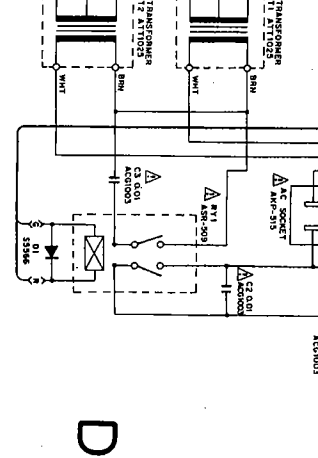
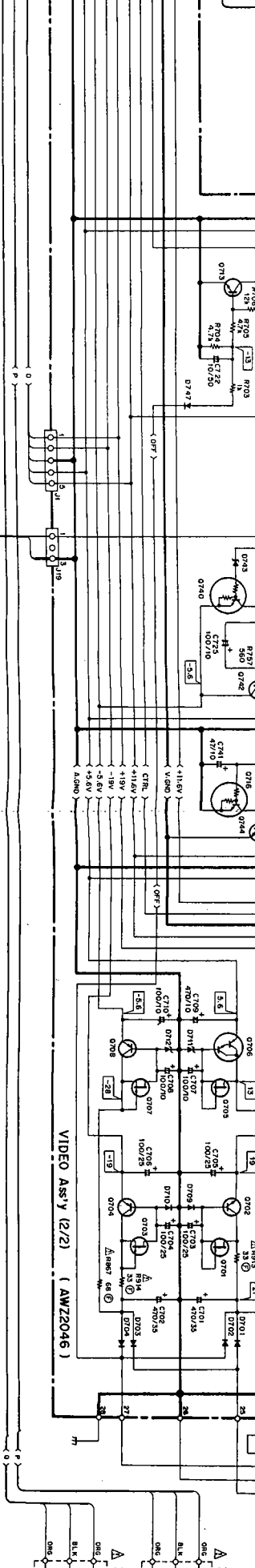
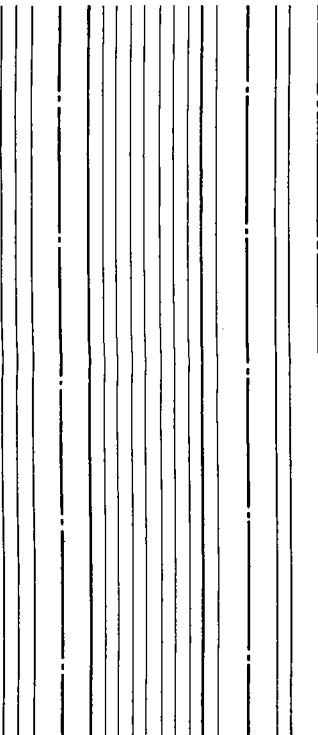
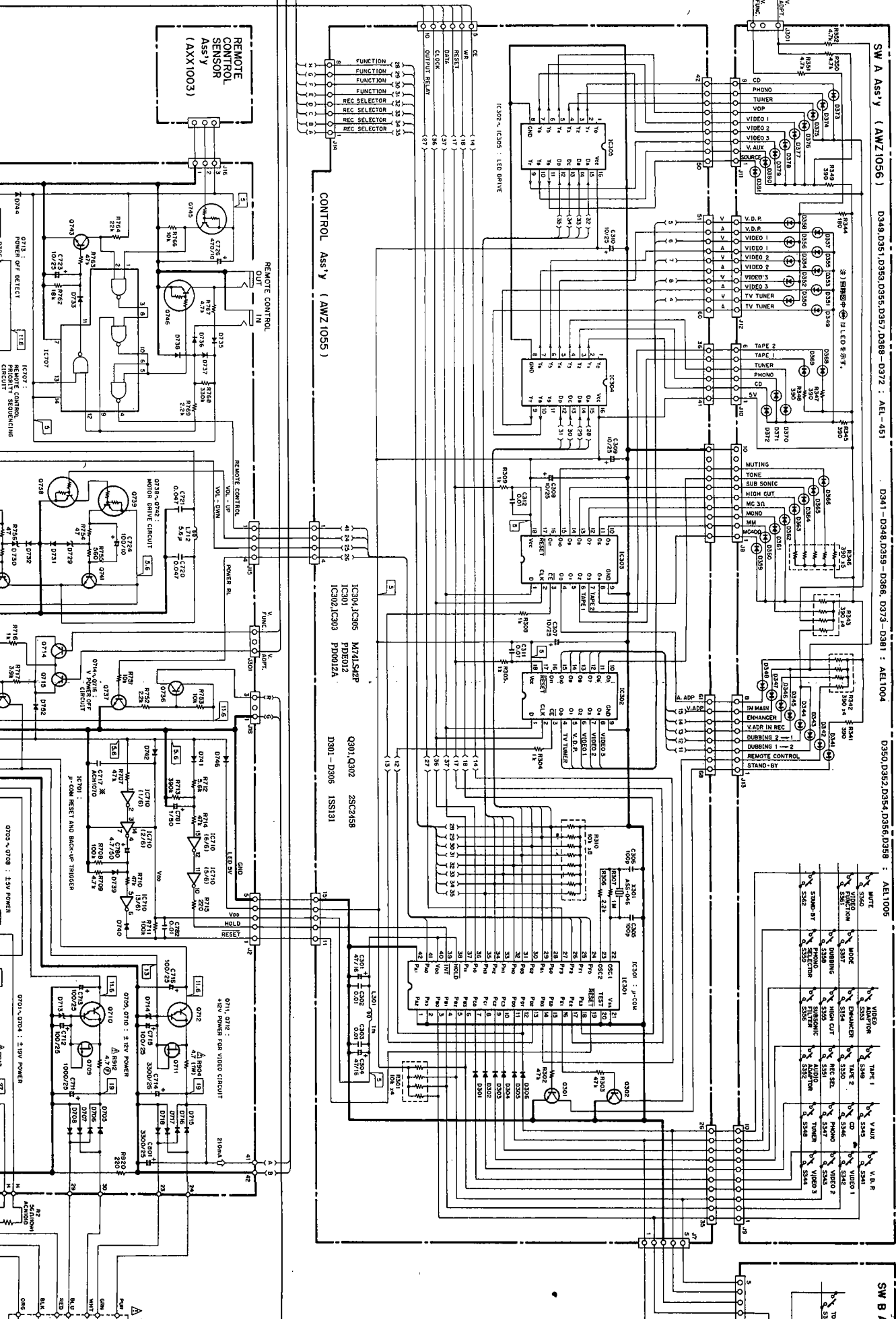
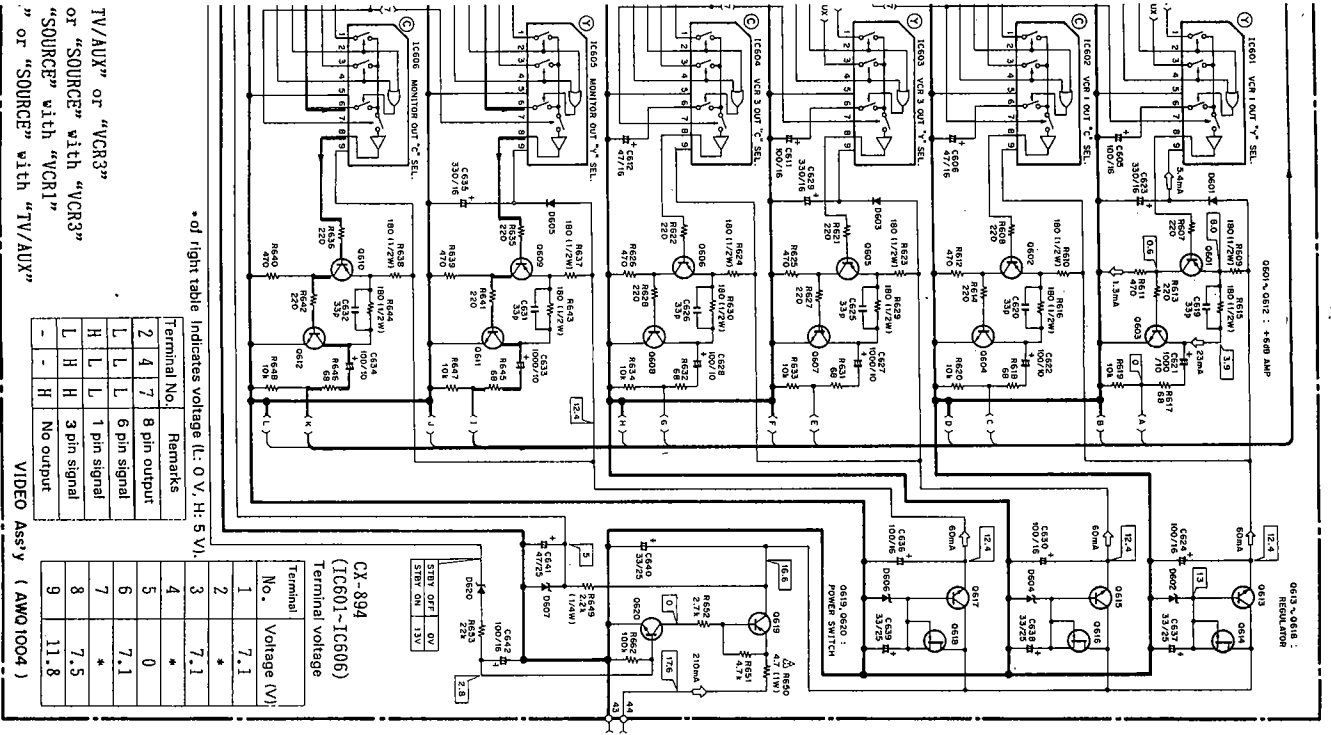
Fuse assembly

COIL

Mark	Symbol & Description	Part No.
△	L715 Line filter	ATF-163

01-IC806 CX-894
 08-IC809 TC4058BP
 07 TC4058BP
 0801-0802,0805,0806,0809, 25A1048
 0819 25A985
 0813,0815,0817 25C235
 0803,0804,0807,0808,0811, 25C248
 0812,0820 25C248
 0814,0816,0818 25X248

D802,D804,D806 D807,D818
 D808-D818 D801,D803,D805
 R01,3E582
 R05,1E581
 1S522
 11E2



REC SEL...SOURCE, VPP IN-MONI OUT
 VIDEO ADAPTOR "MONI OUT"
 VIDEO ADAPTOR "OFF"
 REC SEL...SOURCE, VPP IN-MONI OUT
 VIDEO ADAPTOR "REC MONI"
 VIDEO ADAPTOR "OFF"
 ENHANCER "ON", VIDEO ADAPTOR "OFF"

