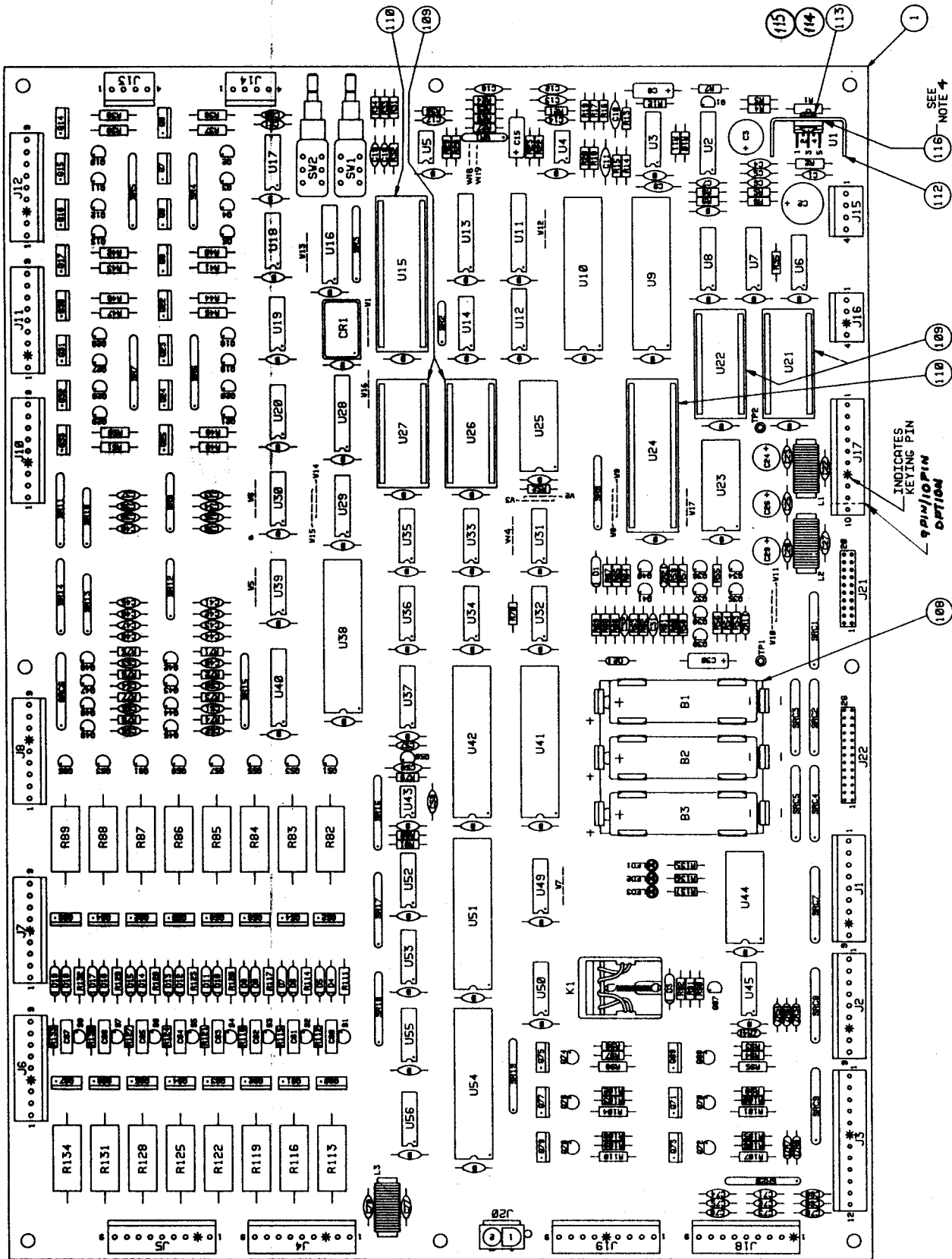


System 11A CPU Board (D-11392) Parts Information

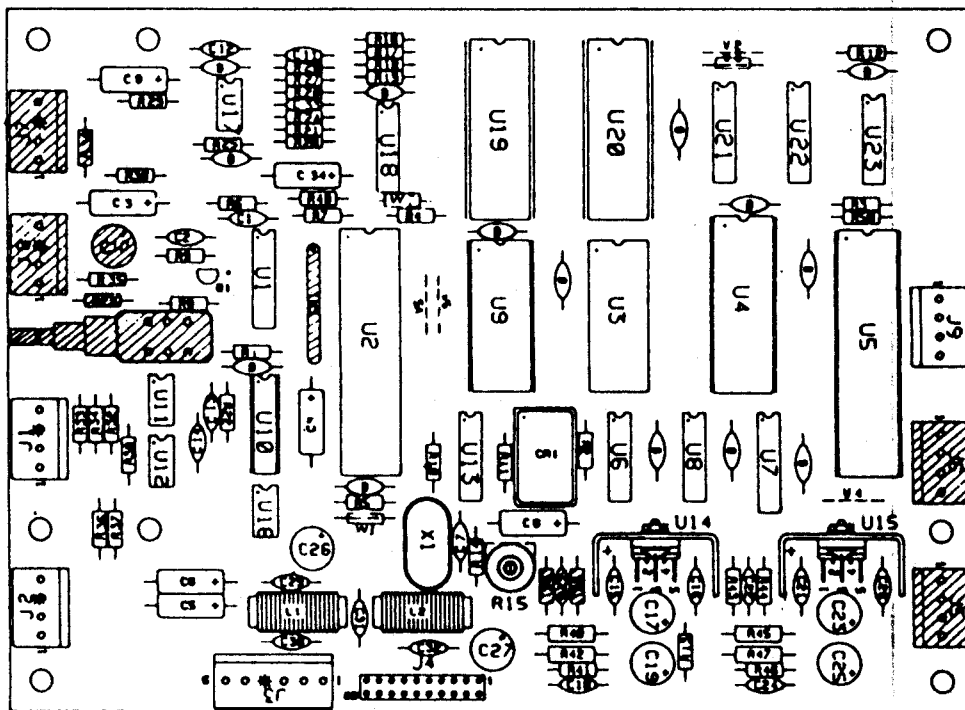
Item	Part No.	Ckt Designator	Description	Item	Part No.	Ckt Designator	Description
1	5764-12091-00		Bare P. C. Board	63	5010-10171-00	R67	Resistor, 560Ω, 5%, 1/4w, C. F.
2	5370-09691-00	U3	IC, CVSD Mod., 55536	64	5010-10170-00	R69	Resistor, 470Ω, 5%, 1/4w, C. F.
3	5370-09321-00	U4, U5	IC, Dual Op Amp, 1458	65	5010-09160-00	R59, R61, W12, W13	Resistor, 220Ω, 5%, 1/4w, C. F.
4	5281-09308-00	U16	IC, Octal Bus Xcvr, 74LS245	66	5010-09416-00	R33, R34, R135-137	Resistor, 470Ω, 5%, 1/4w, C. F.
5	5430-08972-00	U9, U10, U38, U41, U42, U51, U54	IC, PIA, MC6820/6821	67	5010-09179-00	R9	Resistor, 3.3KΩ, 5%, 1/4w, C. F.
6	5340-10139-00	U25	IC, 2K x 8 CMOS Static RAM	68	5010-09085-00	R71-R78	Resistor, 1.5KΩ, 5%, 1/4w, C. F.
7	5280-09010-00	U44	IC, 4-16 Decoder, 74154	69	5010-10361-00	R111, R114, R117, R120, R123, R126, R129, R132	Resistor, 1.2KΩ, 5%, 1/2w, C. F.
8	5281-09246-00	U7, U8, U12	IC, 2-4 Decoder, 74LS139	70	5010-08824-00	R15	Resistor, 43KΩ, 5%, 1/4w, C. F.
9	5075-09406-00	ZR3 - ZR8	Diode, Zener, 6.2v, 0.5w	71	5010-09342-00	R16	Resistor, 36KΩ, 5%, 1/4w, C. F.
10	Not Used			72	5010-08846-00	R17	Resistor, 220KΩ, 5%, 1/4w, C. F.
11	5281-09487-00	U6	IC, Dual D Flip-flop, 74LS74	73	5010-09333-00	R18	Resistor, 180KΩ, 5%, 1/4w, C. F.
12	5431-09449-00	U43	IC, Timer, MC1455	74	5010-09324-00	R19, R20, R22, R29, R30	Resistor, 27KΩ, 5%, 1/4w, C. F.
13	5310-09236-00	U29	IC, 14-b Counter, 4020	75	5010-08772-00	R21	Resistor, 15KΩ, 5%, 1/4w, C. F.
14	5281-09743-00	U32	IC, Quad 2-Input AND, 74LS08	76	5010-09356-00	R27, R28	Resistor, 820Ω, 5%, 1/4w, C. F.
15	5281-09247-00	U14	IC, Quad 2-Input NOR, 74LS02	77	5019-09783-00	SR18	SIP, 9R, 10-pin, 6.8KΩ, .125w/R, 5%
16	5281-09235-00	U35	IC, Triple 3-Input NAND, 74LS10	78	5019-09362-00	SR3, SR15, SR17, SR19, SR20	SIP, 9R, 10-pin, 4.7KΩ, .125w/R, 5%
17	5280-09013-00	U36	IC, Hex Inverter, 7404	79	5019-09808-00	SR4, SR6, SR11	SIP, 9R, 10-pin, 560Ω, .125w/R, 5%
18	5281-09499-00	U31, U34	IC, Quad 2-Input NAND, 74LS00	80	5019-09785-00	SR16	SIP, 9R, 10-pin, 2.2KΩ, .125w/R, 5%
19	5281-10014-00	U33	IC, Dual 4-Input NAND, 74LS20	81	5019-10472-00	SR14	SIP, 9R, 10-pin, 3.3KΩ, .125w/R, 5%
20	5281-09486-00	U28	IC, Octal D Flip-flop, 74LS374	82	5019-09669-00	SR8, SRC6	SIP, 9R, 10-pin, 1.0KΩ, .125w/R, 5%
21	5371-09152-00	U2	IC, D/A Converter, MC1408	83	5019-09780-00	SR9, SR10, SR12, SR13	SIP, 4R, 8-pin, 1KΩ, 5%
22	5281-09745-00	U37	IC, 3-8 Decoder, 74LS138	84	5019-09786-00	SR1, SR2	SIP, 5R, 6-pin, 4.7KΩ, .125w/R, 5%
23	5340-09878-00	U23	IC, 2K x 8 Static RAM, 2016	85	5019-09792-00	SR5, SR7	SIP, 9R, 10-pin, 2.7KΩ, .125w/R, 5%
24	5370-09156-00	U1	IC, Aud. Amp., TDA2002	86	5060-10396-00	SRC1 - SRC5, SRC7 - SRC9	SIP, 8R, 8C, 10-pin, 4.7KΩ & 470pfd
25	5281-09867-00	U11, U13, U40	IC, Octal Buffer, 74LS244	87	Not Used		
26	5280-08973-00	U17-U20, U52, U53	IC, Quad 2-Input AND, 7408	88	5043-08980-00	C14, C17-C21, C31, C32, C49-C56, C59, + 54 Bypass, marked B	Capacitor, 0.01 μfd, 50v(±80-20%), Axial
27	5280-08974-00	U55, U56	IC, Hex Inverter, 7406	89	5043-09845-00	C6, C22, C23, C25, C27, C28	Capacitor, 1K pfd, 50v(±20%), Axial
28	5310-09155-00	U30, U39	IC, Quad 2-Input NAND, MC14011	90	5043-08996-00	C1, C4, C5, C70-75, C77, C78	Capacitor, 0.1 μfd, 50v(±20%), Axial
29	5280-08948-00	U45, U50	IC, Quad 2-Input NOR, 7402	91	5040-09343-00	C8, C15	Capacitor, 10 μfd, Electr., 20v(±20%), Axial
30	5280-09309-00	U49	IC, Hex Buffer, 7407	92	5043-09844-00	C7, C41-C48	Capacitor, 47 pfd, 50v(±20%), Axial
31	5671-09019-00	LED1-LED3	LED, Red, Display	93	5040-10974-00	C3, C24, C26, C29	Capacitor, 100 μfd, Electr., 25v(±50-10%), Axial
32	5521-10506-00	CR1	Oscillator, 4 MHz	94	5040-09776-00	C2	Capacitor, 470 μfd, Electr., 16v(±50-10%), Radial
33	5162-08978-00	Q51, Q53, Q55, Q57, Q59, Q61, Q63, Q65	Transistor, NPN Darl. 2N6427, TO-92	95	5045-09796-00	C60-C67	Capacitor, 0.1 μfd, Polycarbonate Rad., 100v(±10%)
34	5191-08978-00	Q52, Q54, Q56, Q58, Q60, Q62, Q64, Q66	Transistor, PNP, TIP42, TO-220	96	5043-09065-00	C33-C40, C68, C69, C78	Capacitor, 470 pfd, 50v(±20%), Axial
35	5162-09410-00	Q6-Q9, Q14-Q17, Q22-Q25, Q30-Q33, Q69, Q71, Q73, Q75, Q77, Q79, Q80-Q87	Transistor, NPN, TIP122, TO-220	97	5040-09545-00	C30	Capacitor, 22 μfd, Electr., 10v(±50-10%), Axial
36	5160-08938-00	Q2-Q5, Q10-Q13, Q18-Q21, Q26-Q29, Q34-Q38, Q41, Q67, Q68, Q70, Q72, Q74, Q76, Q78	Transistor, NPN, 2N4401, TO-92	98	5041-09031-00	C9, C58	Capacitor, 1 μfd, Tant., 25v(±20%), Axial
37	5160-10269-00	Q1, Q40, Q42-Q49	Transistor, NPN, 2N3904, TO-92	99	5043-09030-00	C16, C57	Capacitor, 0.047 μfd, 50v(±20%), Axial
38	5190-09016-00	Q39, Q50	Transistor, PNP, 2N4403, TO-92	100	5046-09347-00	C10	Capacitor, 1800 pfd, Polystyrene, 50v(±5%)
39	5130-09014-00	S1-S8	SCR, 30v, 0.8A, 2N5060	101	5046-09350-00	C11	Capacitor, 180 pfd, Polystyrene, 100v(±5%)
40	5070-06258-00	D3-D19	Diode, 1N4001	102	5046-09346-00	C12	Capacitor, 1200 pfd, Polystyrene, 50v(±5%)
41	5070-08918-00	D2	Diode, 1N4148, 150mA	103	5046-09348-00	C13	Capacitor, 4700 pfd, Polystyrene, 50v(±5%)
42	5070-09266-00	D1	Diode, 1N5817, 1.0A	104	5551-09822-00	L1-L3	Inductor, 4.7 μH, 3A
43	5075-09018-00	ZR1	Diode, Zener, 1N5996A, 6.8v, 0.5w	105	5641-09312-00	SW1, SW2	Switch, Pushbutton, DPDT, 100v, 5A
44	5075-09059-00	ZR2	Diode, Zener, 1N5990, 3.9v, 0.5w	106	5880-09022-00	B1-B3	Battery, Alkaline, 1.5v, AA
45	5010-08992-00	R94, R97, R100, R103, R106, R109	Resistor, 560Ω, 5%, 1/4w, C. F.	107	20-9491	W18, W19	Bus Wire, Jumper
46	5010-09039-00	R56	Resistor, 10Ω, 5%, 1/4w, C. F.	108	5881-09021-00		Battery Holder, #171
47	5010-09534-00	W1, W2, W4, W5, W7, W8, W11, W14, W16, W17	Resistor, 0Ω, 5%, 1/4w, C. F.	109	5700-10176-00		IC Socket, 28 pin
48	5010-08991-00	R31, R32, R35, R52	Resistor, 4.7KΩ, 5%, 1/4w, C. F.	a)	A-5343-554-1	U26	IC, Game ROM 2, 27128
49	5010-09358-00	R5, R6, R57, R58, R64, R66, R112, R115, R118, R121, R124, R127, R130, R133	Resistor, 1.0KΩ, 5%, 1/4w, C. F.	b)	A-5343-554-2	U27	IC, Game ROM 1, 27256
50	5010-09113-00	R79	Resistor, 33KΩ, 5%, 1/4w, C. F.	c)	A-5343-554-4	U21	IC, Sound ROM 1, 27256
51	5010-08983-00	R7, R8, R10, R70, R80	Resistor, 3.3KΩ, 5%, 1/4w, C. F.	d)	A-5343-554-3	U22	IC, Sound ROM 2, 27256
52	5010-09034-00	R11-R14, R25, R26, R53, R60, R65, R90	Resistor, 10KΩ, 5%, 1/4w, C. F.	110	5700-08985-00		IC Socket, 40 pin
53	5010-09088-00	R81	Resistor, 8.8KΩ, 5%, 1/4w, C. F.	a)	5400-09150-00	U15	IC, μProcessor, 6802
54	5010-09363-00	R3	Resistor, 5.6KΩ, 5%, 1/4w, C. F.	b)	5400-09150-00	U24	IC, μProcessor, 6802
55	5010-08997-00	R23, R24, R91, R93, R96, R99, R102, R105, R108	Resistor, 2.7KΩ, 5%, 1/4w, C. F.	111	5824-09248-00	TP1, TP2	Test Point
56 ²	5012-09037-00	R113, R116, R119, R122, R125, R128, R131, R134	Resistor, 0.4Ω, 5%, 3w, Wire-Wnd.	112	5705-09199-00		Heatsink, #6030
57	5010-08993-00	R35-R51, R95, R98, R101, R104, R107, R110	Resistor, 68Ω, 5%, 1/2w, C. F.	113	4008-01003-06		Mach. Screw, 6-32 x 3/8", P-PH-S
58 ²	5012-10860-00	R82-R89	Resistor, 27Ω, 5%, 2w, C. F.	114	4406-01117-00		Nut, Hex, 6-32
59	5010-09361-00	R1	Resistor, 220Ω, 5%, 1/2w, C. F.	115	4703-00007-00		Lockwasher, #6
60	5010-09181-00	R2	Resistor, 1.0Ω, 5%, 1/2w, C. F.	116	20-9229		Thermal Compound (see Note 4)
61	5010-09161-00	R4	Resistor, 2.2Ω, 5%, 1/4w, C. F.	117	5580-08994-01	K1	Relay, 4-pole, 40Ω, 6v
62	5010-10003-00	R62, R63	Resistor, 390Ω, 5%, 1/4w, C. F.	118	5791-10862-09		Connector, 9 pin (Hdr)
							Connector, 4 pin (Hdr)
							Connector, 12 pin (Hdr)
							Connector, 26 pin Ribbon (Hdr)
							Connector, 20 pin Ribbon (Hdr)

NOTES:

- For Schematic, refer to drawing #16-8993.
- Items 56 and 58 (resistors) must be mounted 1/8" above PCB surface.
- Standard Jumper: W1, W2, W4, W5, W7, W8, W11, W14, W16, W17.
- Use thermal compound between item 24 (U1) and item 112 (heatsink).



System 11A CPU Board (D-11392) Parts Information



Background Sound & Speech Board

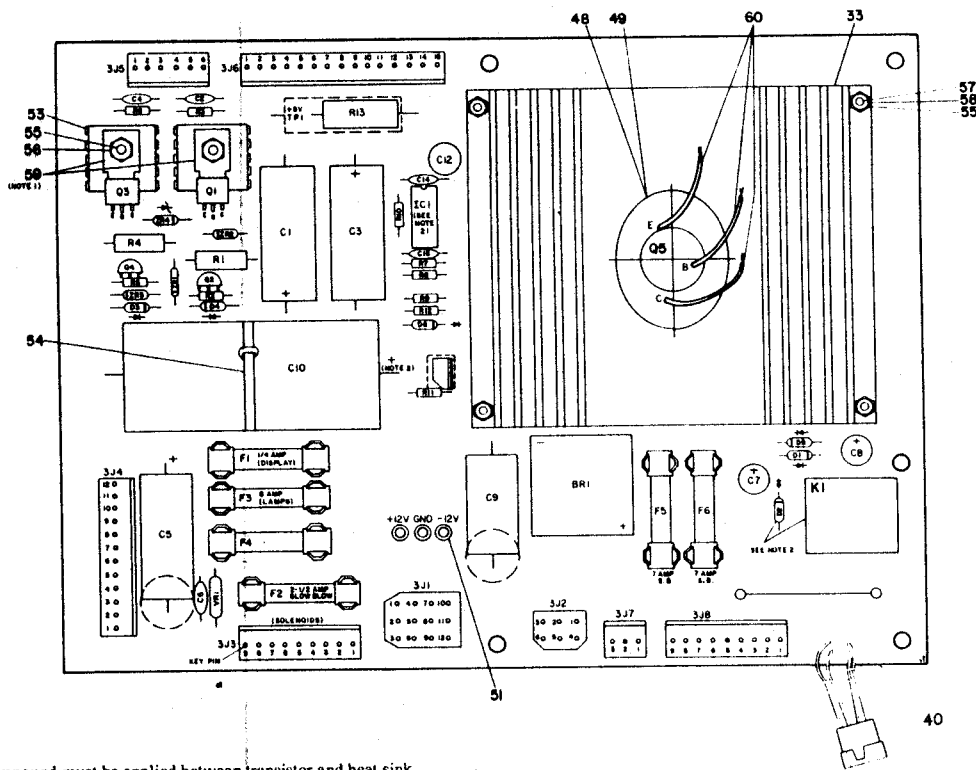
p/n D-11298-554

Item	Part No.	Ckt Designator	Description	Item	Part No.	Ckt Designator	Description
1	5766-12057-00		Bare P. C. Board	30	5010-10258-00	R14	Resistor, 1M
2	5371-09152-00	U1	IC, D/A Convtr, MC1408	31	5010-09179-00	R9	Resistor, 3.3M
3	5430-10322-00	U2	IC, PIA, MC68B21	32	5010-09534-00	W1, W3, W7	Resistor, 0Ω
4	5340-09878-00	U3	IC, RAM, 2016	33	5043-09844-00	C1	Capacitor, 47 pfd
5	5281-09487-00	U6, U23	IC, Dual Flipflop, 74LS74	34	5043-09492-00	C7, C38	Capacitor, 100 pfd
6	5281-09745-00	U7	IC, Dual Mux, 74LS138	35	5046-09350-00	C33	Capacitor, 180 pfd
7	5281-09235-00	U8	IC, Triple Nand, 74LS10	35a	5043-09065-00	C35 - C37	Capacitor, 470 pfd
8	5370-09321-00	U11, U12, U16, U17	IC, Op Amp, MC1458	36	5046-09346-00	C11	Capacitor, 1200 pfd
9	5281-09215-00	U13	IC, Hex Inv, 74LS04	37	5046-09349-00	C12	Capacitor, 4700 pfd
10	5281-10043-00	U21	IC, 74LS175	38	5043-09845-00	C20, C29 - C32	Capacitor, .001 μfd
11	5281-09246-00	U22	IC, 2-4 Dec, 74LS139	39*	5043-08980-00	C2, C13, C14, C16, C22	Capacitor, .01 μfd
12	5370-09156-00	U14, U15	IC, Aud. Amp, TDA2002	40	5043-08996-00	C18, C24	Capacitor, 0.1 μfd
a)	5705-09199-00		Heatsink, #6030B	41	5043-09365-00	C34	Capacitor, 1 μfd, 63V
b)	4006-01003-06		6-32 x 3/8 P-PH-S	42	5040-09343-00	C3 - C6, C8, C9	Capacitor, 10 μfd, electr., 20V, axial
c)	4406-01117-00		6-32 Hexnut	43	5040-10974-00	C26, C27	Capacitor, 100 μfd, electr., 35V, radial
d)	4703-00007-00		#6 Ext. Lockwasher	44	5040-09776-00	C17, C23	Capacitor, 470 μfd, electr., 16V, radial
13	5370-09691-00	U18	IC, CVSD, 55536	45	5040-12006-00	C19, C25	Capacitor, 1000 μfd, electr., 16V, radial
14	5160-10269-00	Q1	Transistor, 2N3904, NPN	46	5041-09243-00	C21	Capacitor, 10 μfd, tant., axial
15	5014-12061-00	R15	Potentiometer, 100K, Horiz.	47	5551-09822-00	L1, L2	Inductor, 4.7 μH, 3A
16	5010-09181-00	R42, R47	Resistor, 1.0Ω, 1/2w.	48	5791-10862-04	J1, J2, J8, J9	Connector, 4 pin (Hdr)
17	5010-09161-00	R41, R46	Resistor, 2.2Ω	49	5791-10862-06	J3	Connector, 6 pin (Hdr)
18	5010-09361-00	R13, R40, R45	Resistor, 220Ω	50	5791-09437-00	J4	Connector, 20 pin, (Hdr)
19	5010-09358-00	R43, R44	Resistor, 1K				Ribbon Cable
20	5010-08998-00	R10, R11, R32	Resistor, 2.2K	51	5700-10176-00		IC Socket, 28 pin
21	5010-08983-00	R6 - R8	Resistor, 3.3K	a)	A-5343-554-5	U4	IC, B/G Sp. & Sound ROM 1
22	5010-08991-00	R1 - R5, R12, R36, R48, R50	Resistor, 4.7K	b)	A-5343-554-6	U19	IC, B/G Sp. & Sound ROM 2
22a	5013-09427-00	R30	Resistor, 4.99K, 1%	52	5700-08985-00		IC Socket, 40 pin
22b	5010-09086-00	R35	Resistor, 6.8K	a)	5400-10320-00	U5	IC, μProcessor, MC68B09E
23	5010-09034-00	R16 - R19, R33, R34, R38	Resistor, 10K	53	5700-09004-00		IC Socket, 24 pin
24	5010-08772-00	R28	Resistor, 15K	a)	5370-11086-00	U9	IC, Sound Processor, YM2151
25	5010-09324-00	R22, R26, R27, R29, R37	Resistor, 27K	54	5700-09006-00		IC Socket, 16 pin
26	5010-09342-00	R21	Resistor, 36K	a)	5371-11087-00	U10	IC, D/A Conv, YM3012
27	5010-08824-00	R20	Resistor, 43K	55	5521-10931-00	CR1	Oscillator, 8 MHz
28	5010-09333-00	R24	Resistor, 180K	56	5520-09020-00	X1	Crystal, 3.58 MHz
29	5010-08846-00	R25	Resistor, 220K				

Notes: * 14 capacitors (shown on diagram with "B" symbol) also provide +5VDC filtering for ICs.

All capacitors are ceramic, 50v, axial, unless otherwise noted.

All resistors are 5%, 1/4w, Carbon Film, unless otherwise noted.

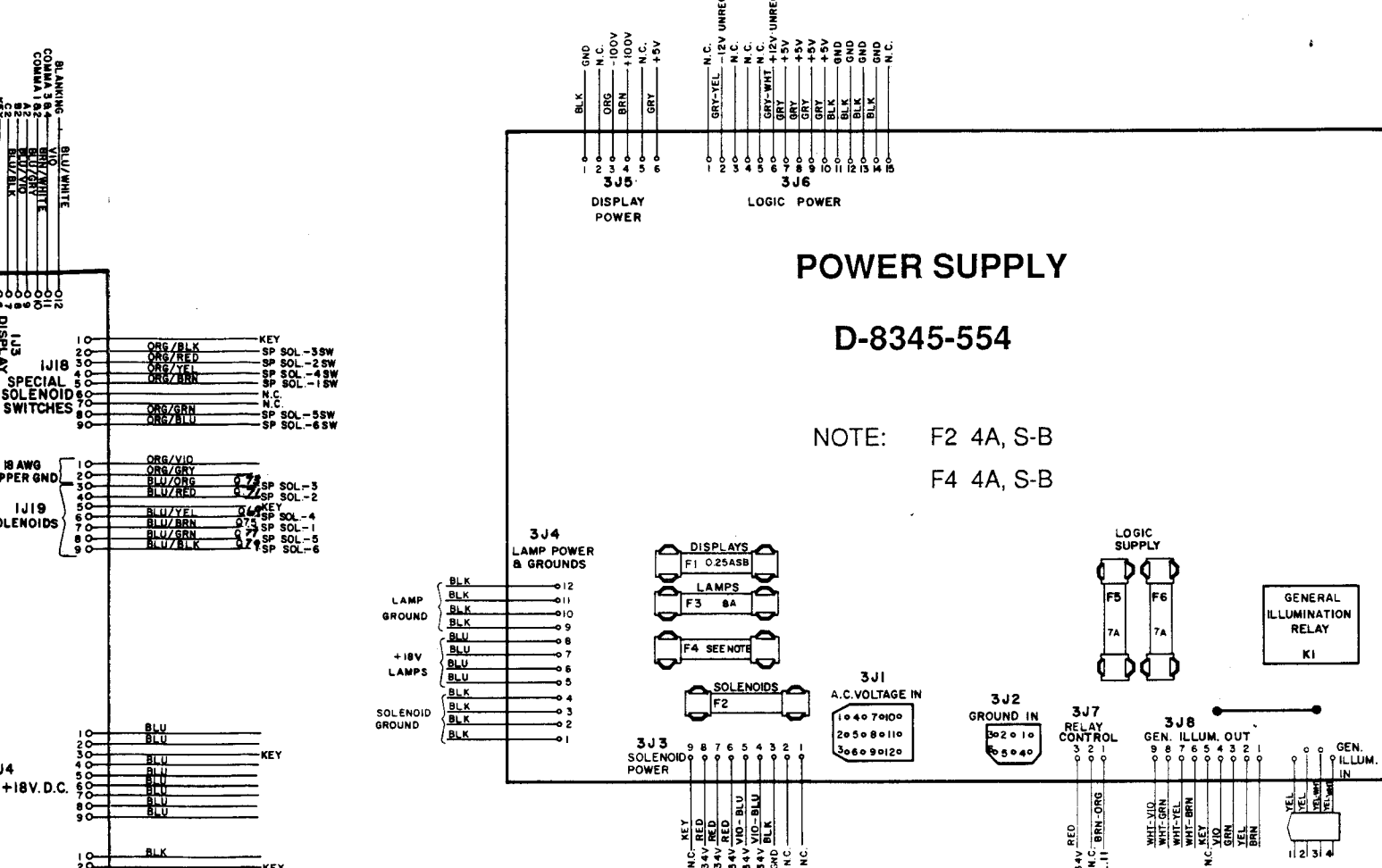


NOTES:

1. Heat sink compound must be applied between transistor and heat sink.
2. Observe index mark on integrated circuit, polarity of capacitors and diodes, and position of transistors.
3. The view of Q5 and its related heat sink and hardware is from the bottom of the heatsink, to clarify installation.

Power Supply p/n D-8345-554

Item	Part No.	Ckt Designator	Description	Item	Part No.	Ckt Designator	Description
1	5765-09466-01		Bare P. C. Board	28	5164-09057-00	Q1	Transistor, SDS201, NPN
2	5013-09426-00	R7	Resistor, 2.15K, 1%, 1/4w, Metal Film	29	5164-09056-00	Q4	Transistor, MP5D02, NPN
3	5013-09427-00	R8	Resistor, 4.99K, 1%, 1/4w, Metal Film	30	5194-09058-00	Q3	Transistor, SDS202, PNP
4	5010-09428-00	R11	Resistor, 1.5K, 2%, 1/4w, C. Film	31	5194-09055-00	Q2	Transistor, MP5D52, PNP
5	5010-09085-00	R10	Resistor, 1.5K, 5%, 1/4w	32	5162-09425-00	Q5	Transistor, 2N6057, NPN
6	5010-09541-00	R9	Resistor, 2.7K, 2%, 1/4w	33	5705-09431-00		Heat Sink
7	5010-09508-00	R12	Resistor, 270Ω, 2%, 1/4w, C. Film	34	5791-09074-00	3J6	Connector, 15 pin (Hdr)
8	5012-09429-00	R13	Resistor, 0.12Ω, 5%, 5w	35	5791-09027-00	3J3, 3J8	Connector, 9 pin (Hdr)
9	5010-09536-00	R1, R4	Resistor, 39K, 5%, 1w	36	5791-09038-00	3J2	Connector, 6 pin (Hdr)
10	5010-09061-00	R2, R5	Resistor, 680Ω, 2w	37	5791-09067-00	3J5	Connector, 6 pin (Hdr)
11	5010-09069-00	R3, R6	Resistor, 330K, 5%, 1/2w	38	5791-09043-00	3J4	Connector, 12 pin (Hdr)
12	5040-09419-00	C10	Capacitor, 18,000 mfd, electr, 20v, axial	39	5791-09435-00	3J7	Connector, 3 pin (Hdr)
13	5040-09420-00	C9	Capacitor, 1000 mfd, electr, 25v, axial or radial	40	H-11065	3J9	Cable/Connector Assembly
14	5040-09423-00	C12	Capacitor, 330 mfd, electr, 10v, radial	a)	5791-09400-00		Connector shell
15	5043-9065-00	C15	Capacitor, 470 pfd	b)	5820-09080-00		Connector pin
16	5040-9053-00	C1, C3	Capacitor, 100 mfd, electr, 150v	41	5791-09068-00	3J1	Connector, 12 pin (Hdr)
17	5040-09070-00	C5	Capacitor, 100 mfd, electr, 100v, axial or radial	42	5321-09178-00		Fuseholder
18	5043-09072-00	C2, C4	Capacitor, 0.1 mfd, 500v, disc	43	5731-06314-00	F2	Fuse, 4A, 250v, S-B
19	5043-09446-00	C14	Capacitor, 0.1 mfd, 50v, disc	44	5730-09071-00	F3	Fuse, 8A, 32v
20	5070-06258-00	D1, D2, D5, D6	Diode, 1N4001	45	5731-06314-00	F4	Fuse, 4A, 250v
21	5070-09054-00	D3, D4	Diode, 1N4004	46	5731-08761-00	F1	Fuse, 1/4A, 250v, S-B
22	5075-09059-00	ZR1, ZR3	Zener, 1N5990, 3.9v, 5%	47	5017-09064-00	VR1	Varistor
23	5075-09060-00	ZR2, ZR4	Zener, 1N4764, 100v, 5%	48	5700-09445-00		Socket
24	5460-09424-00	IC1	IC, Volt. Reg., MC1723C	49	5701-09652-00		Mica Insulator
25	5043-09443-00	C6	Capacitor, 0.1 mfd, 200v, disc	50	5580-09555-01	K1	Relay, 24VDC, 13A, DPDT
26	5040-09421-00	C7	Capacitor, 100 mfd, 25v, radial	51	5824-09428-00	TP1 - TP3	Terminal, #1502-1 (Test Post)
27	5040-09422-00	C8	Capacitor, 47 mfd, 50v, radial	52	5100-09418-00	BR1	Bridge Rectifier, 35A, 100V
				53	5705-09042-00		Heat Sink
				54	03-7947		Tie Wrap
				55	4005-01016-07		Mach. Screw, 5-40 x 7/16, RH
				56	4700-00004-00		Flatwasher, 0.146 x 3/8, 21 Ga.
				57	4701-00023-00		Lockwasher, #5, split
				58	4405-01117-00		Hex Nut, 5-40
				59	20-9229		Heat sink Thermal Compound
				60	HW-30118-4		Lead wire, 18 AWG, 3"
				61	5731-09342-00	F6, F5	Fuse, 7A, 250v, S-B



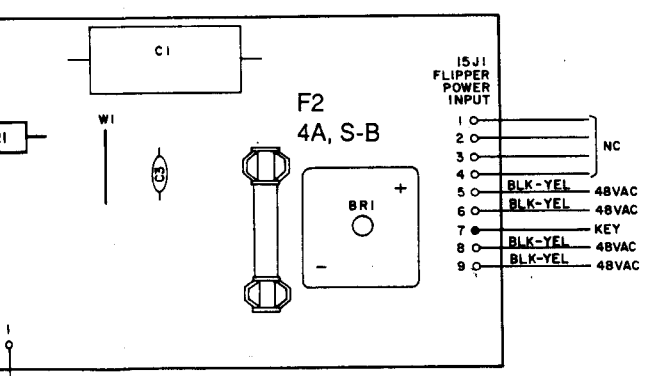
POWER SUPPLY

D-8345-554

NOTE: F2 4A, S-B
F4 4A, S-B

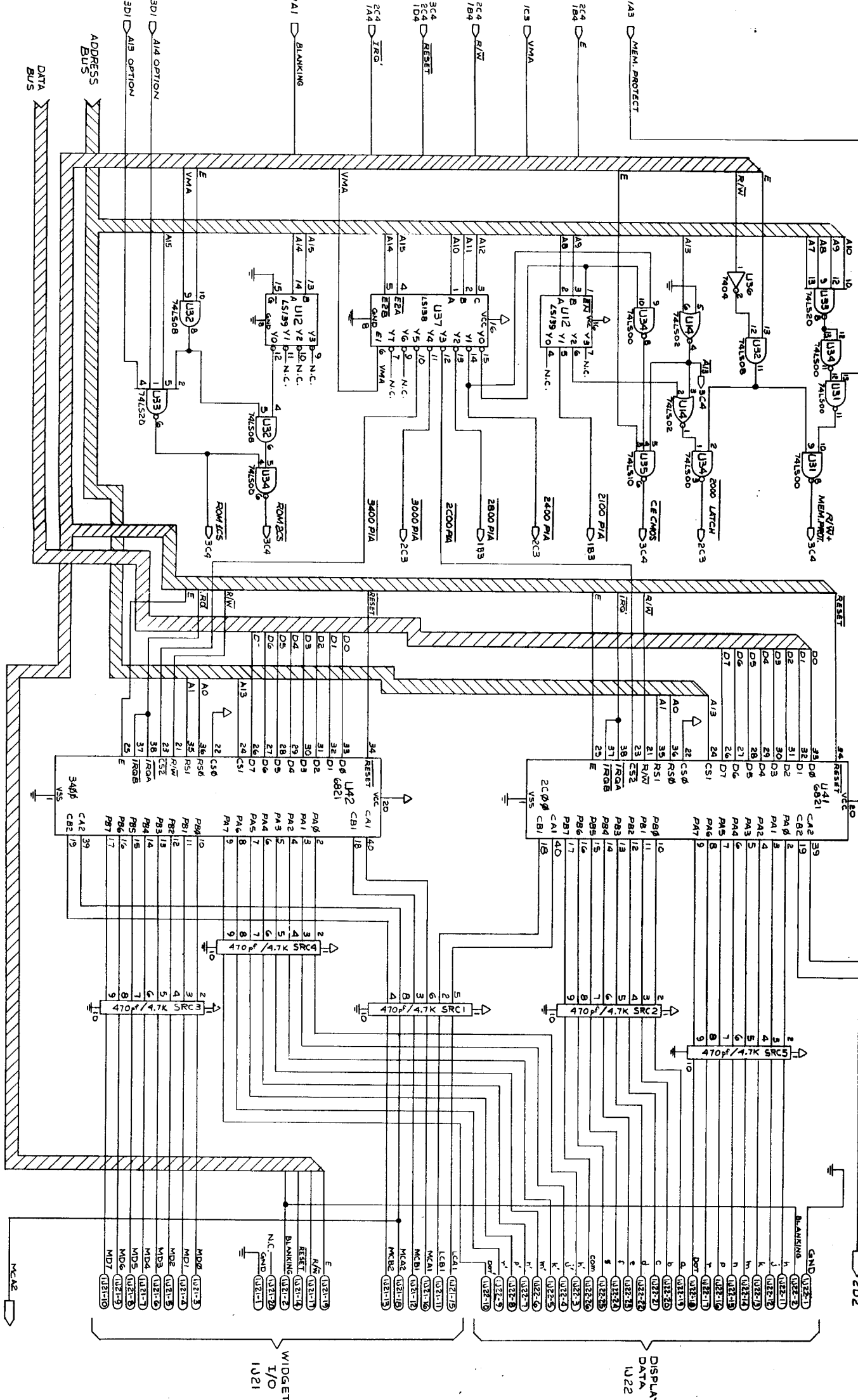
Pin	Wire Color	Connection
1	VIO	Lamp Rectifier, +18V DC
2	ORN	Solenoid Rectifier, +34V DC
3	ORN	Solenoid Rectifier, +34V DC
4	WHT	Transformer, 88.5V AC
5	---	
6	---	
7	---	
8	---	
9	WHT	Transformer, 88.5V AC
10	GRY-GRN	Transformer, 19-4V AC, 1Ø, C.T.
11	GRY	Transformer, 19-4V AC, 1Ø, C.T.
12	GRY-WHT	Transformer, 19-4V AC, C.T. Com.

Pin	Wire Color	Connection
1	---	
2	---	
3	BLK	Lamp Rectifier (Gnd)
4	---	
5	---	
6	BLK	Lamp Rectifier (Gnd)



Interboards Signals Diagrams

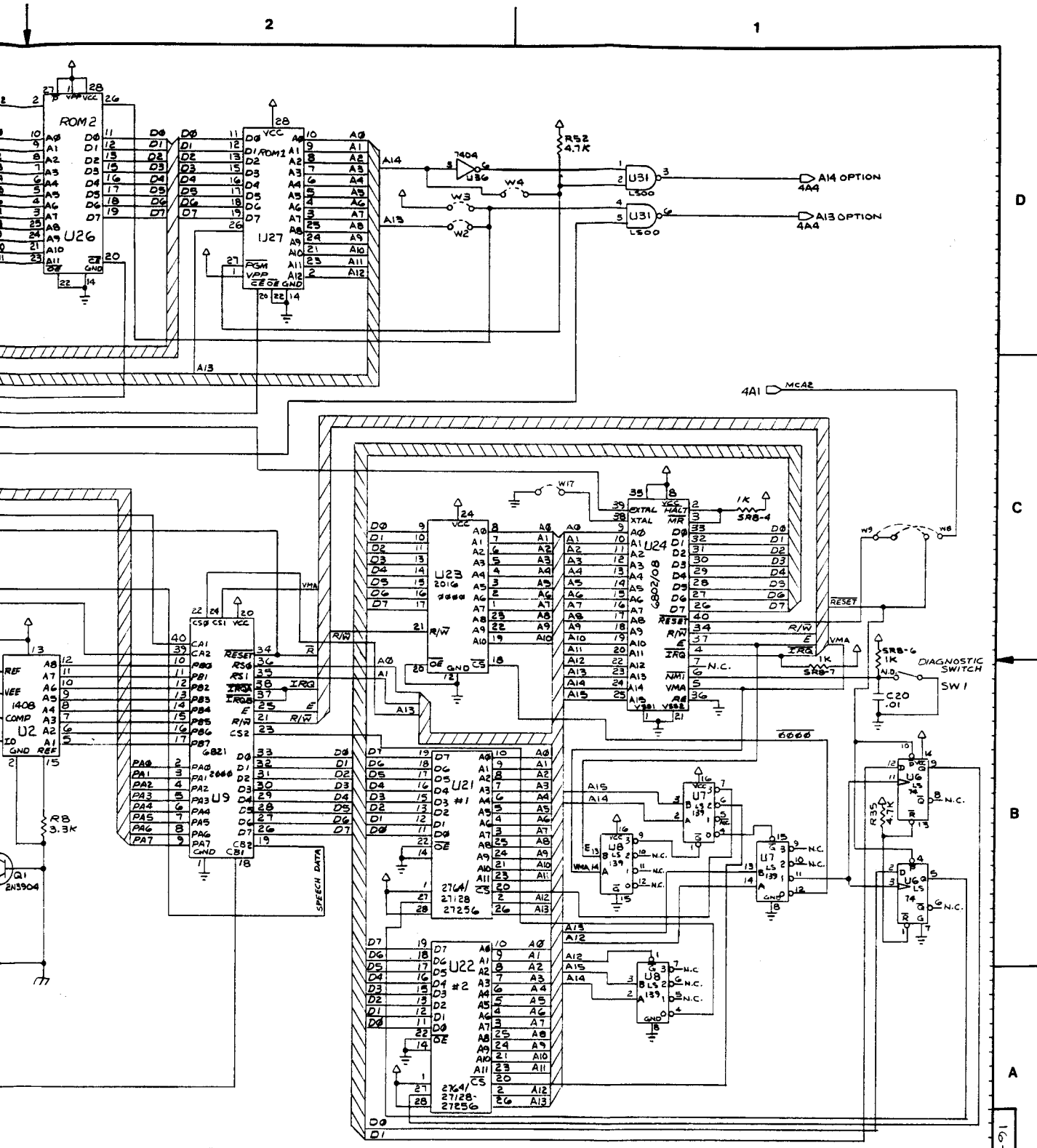
F-14 TOMCAT 54



ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION
1	3486	CA2 19	1	1	1021	WIDGET T/O 1021
2	6821	U42	1	2	1021	WIDGET T/O 1021
3	6821	U41	1	3	1021	WIDGET T/O 1021
4	6821	U40	1	4	1021	WIDGET T/O 1021
5	6821	U39	1	5	1021	WIDGET T/O 1021
6	6821	U38	1	6	1021	WIDGET T/O 1021
7	6821	U37	1	7	1021	WIDGET T/O 1021
8	6821	U36	1	8	1021	WIDGET T/O 1021
9	6821	U35	1	9	1021	WIDGET T/O 1021
10	6821	U34	1	10	1021	WIDGET T/O 1021
11	6821	U33	1	11	1021	WIDGET T/O 1021
12	6821	U32	1	12	1021	WIDGET T/O 1021
13	6821	U31	1	13	1021	WIDGET T/O 1021
14	6821	U30	1	14	1021	WIDGET T/O 1021
15	6821	U29	1	15	1021	WIDGET T/O 1021
16	6821	U28	1	16	1021	WIDGET T/O 1021
17	6821	U27	1	17	1021	WIDGET T/O 1021
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28	6821	U16	1	28	1021	WIDGET T/O 1021
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34	6821	U10	1	34	1021	WIDGET T/O 1021
35	6821	U9	1	35	1021	WIDGET T/O 1021
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37	6821	U7	1	37	1021	WIDGET T/O 1021
38	6821	U6	1	38	1021	WIDGET T/O 1021
39	6821	U5	1	39	1021	WIDGET T/O 1021
40	6821	U4	1	40	1021	WIDGET T/O 1021
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54	6821	U-10	1	54	1021	WIDGET T/O 1021
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97	6821	U-53	1	97	1021	WIDGET T/O 1021
98	6821	U-54	1	98	1021	WIDGET T/O 1021
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100	6821	U-56	1	100	1021	WIDGET T/O 1021

1
2
3

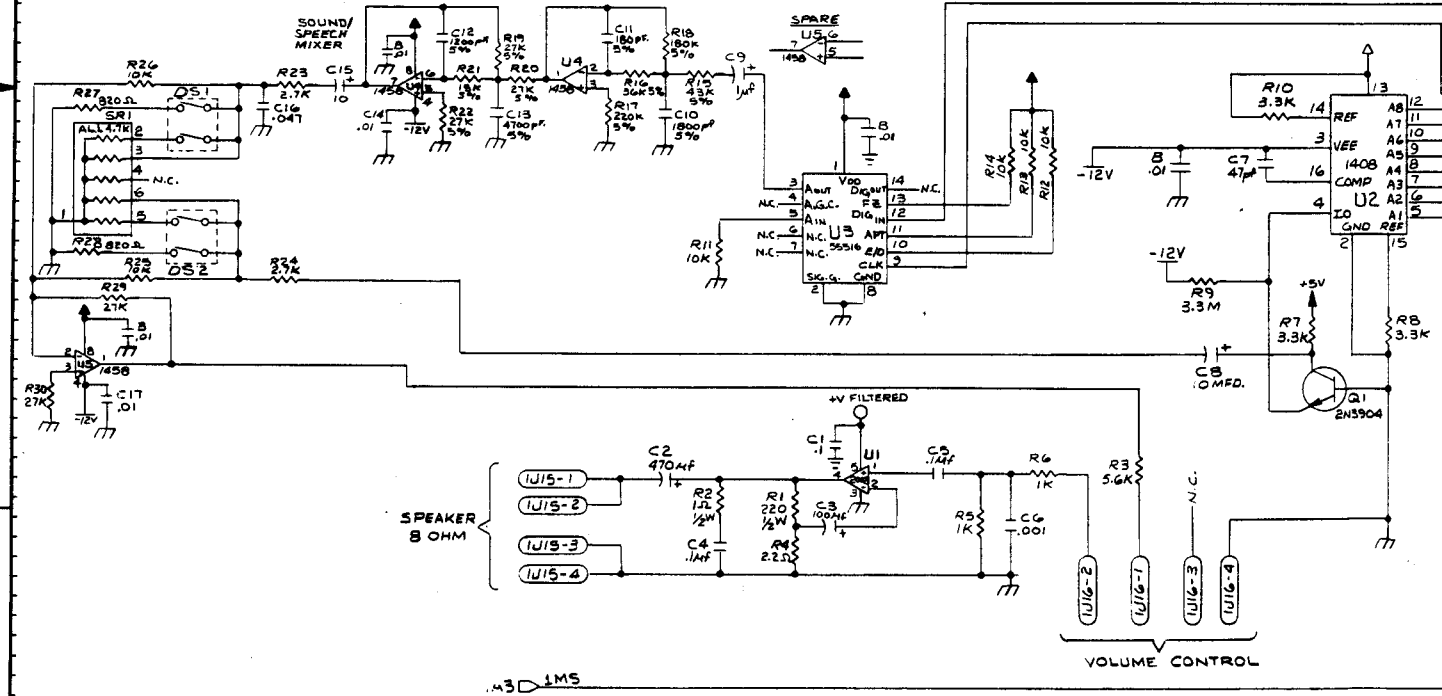
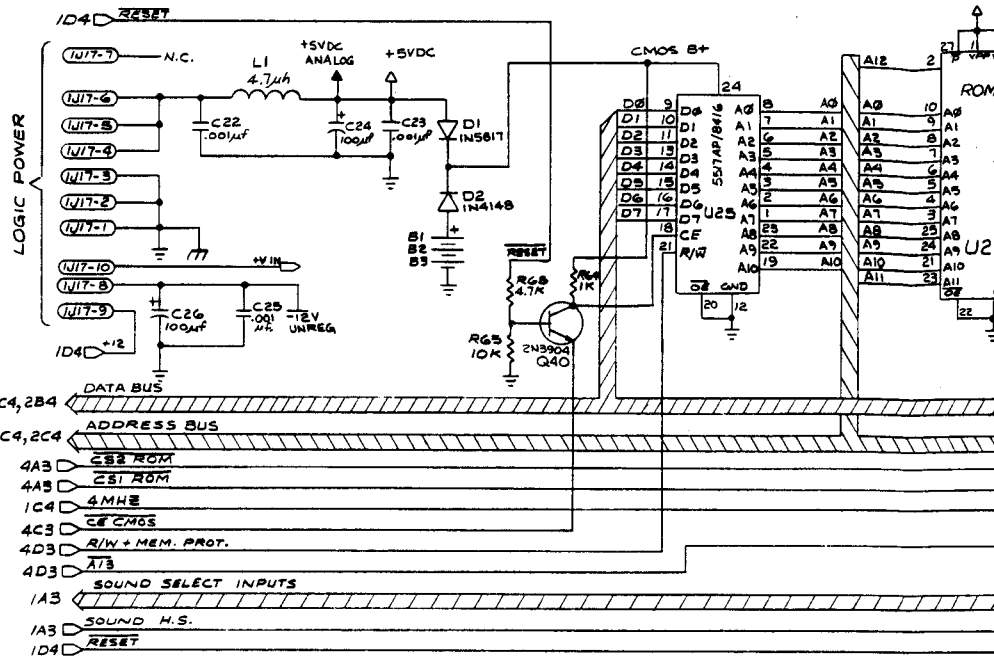
ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION
WILLIAMS ELECTRONICS, INC. 3401 N. CALIFORNIA AVE. CHICAGO, ILL.						
DO NOT SCALE WORK TO DIMENSIONS SHOWN TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONAL .005 ANGULAR .020 MAX DECIMAL .005 FILLETS .020 MAX						
PROJ ENGR	M. LOFFERRO	CHECKED BY	DATE	DATE FIRST USAGE	APPROVAL	DATE
DATE	9/20/86	DATE	9/20/86	DATE	9/20/86	DATE
REV	1	REV	1	REV	1	REV
REV	2	REV	2	REV	2	REV
REV	3	REV	3	REV	3	REV
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REV	47	REV	47	REV	47	REV
REV	48	REV	48	REV	48	REV



ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY
PROJ. ENGR M. LOFFREDO		DO NOT SCALE WORK TO DIMENSIONS SHOWN		REMOVE BURRS - BREAK SHARP EDGES		WILLIAMS ELECTRONICS, INC.	
DWN BY DATE ROSS 9/20/86		FIRST PROJECT NO. 549		TOLERANCES UNLESS OTHERWISE SPECIFIED		3401 N. CALIFORNIA AVE. CHICAGO IL. 60618	
CHECKED BY DATE M. L. 11.1		FIRST USAGE D-11391		FRACTIONAL 1/64 ANGULAR .1°		NAME SCHEMATIC, CPU SYS. 11A	
APPROVAL DATE D.W. 9/1/86		QTY -		DECIMAL ±.005 FILLETS .020 MAX		SCALE SHT. 3 OF 4	
				MATERIAL -		PART NO. 16-8993	
						REV	

Schematic, System 11A CPU Board (16-8993, Sheet 3 of 4) F-14 TOMCAT 57

REV	DESCRIPTION OF CHANGE	ECN NO
	N. P. R.	16073
		DATE
		1/6/73

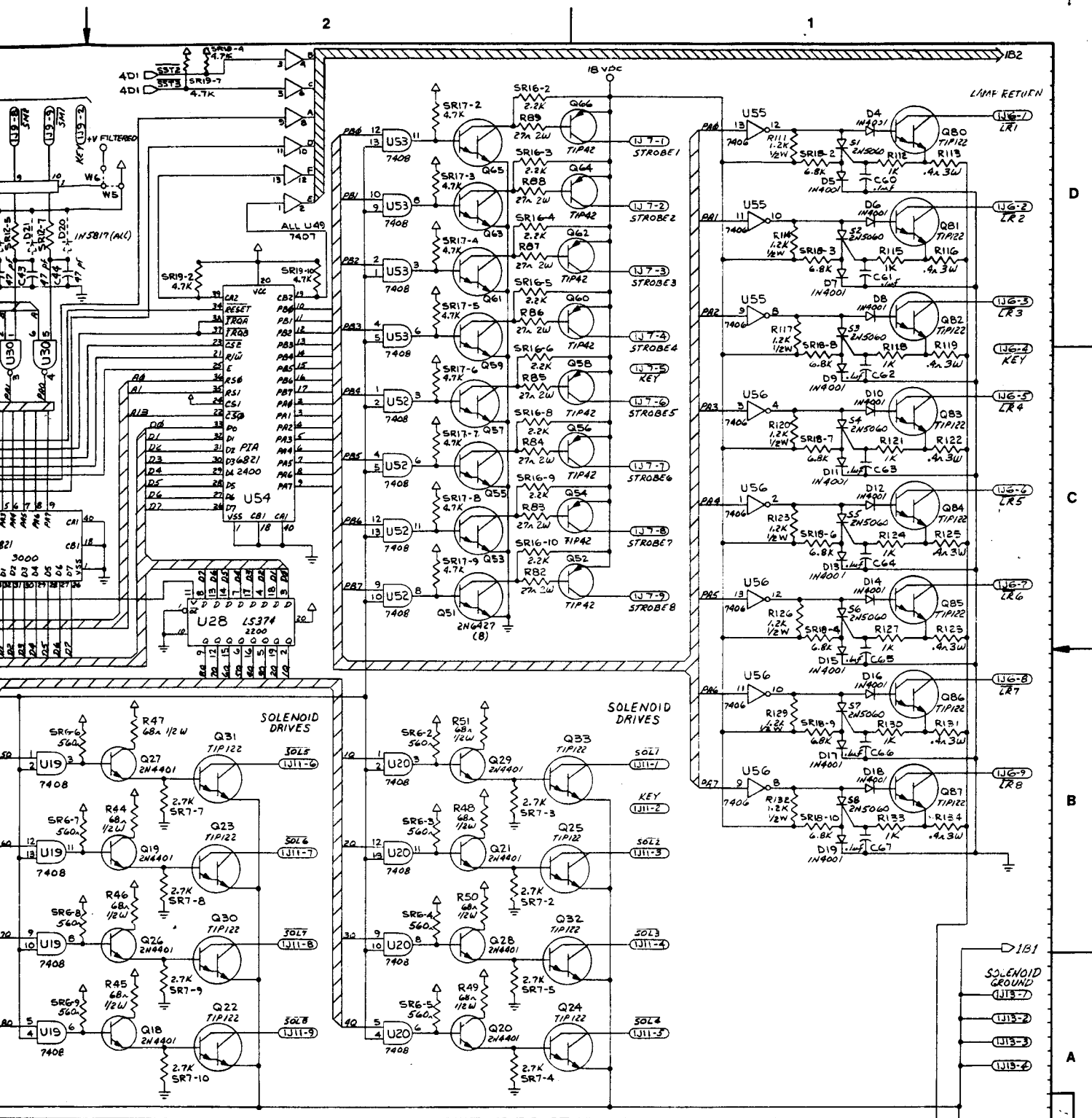


D

C

B

A



ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY
PROJ ENGR M. LOFFREDO		DO NOT SCALE WORK TO DIMENSIONS SHOWN		REMOVE BURRS - BREAK SHARP EDGES		WILLIAMS ELECTRONICS, INC.	
DOWN BY DATE ROSS 9/20/86		FIRST PROJECT NO. 549		TOLERANCES UNLESS OTHERWISE SPECIFIED		3401 N. CALIFORNIA AVE CHICAGO IL 60618	
CHECKED BY DATE 9/23/86		FIRST USAGE 0-11391		FRACTIONAL 1/16 ANGULAR ±1°		NAME SCHEMATIC, CPU SYS 11A	
APPROVAL DATE 9/23/86		QTY 1		DECIMAL ±.005 FILLETS 020 MAX		SCALE X	
				MATERIAL		SHT. 2 OF 4	
						PART NO 16-8003	
						REV A	

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