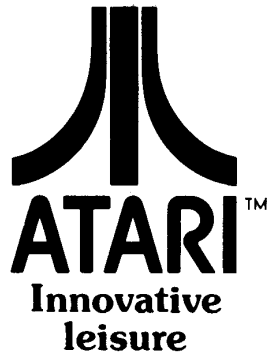
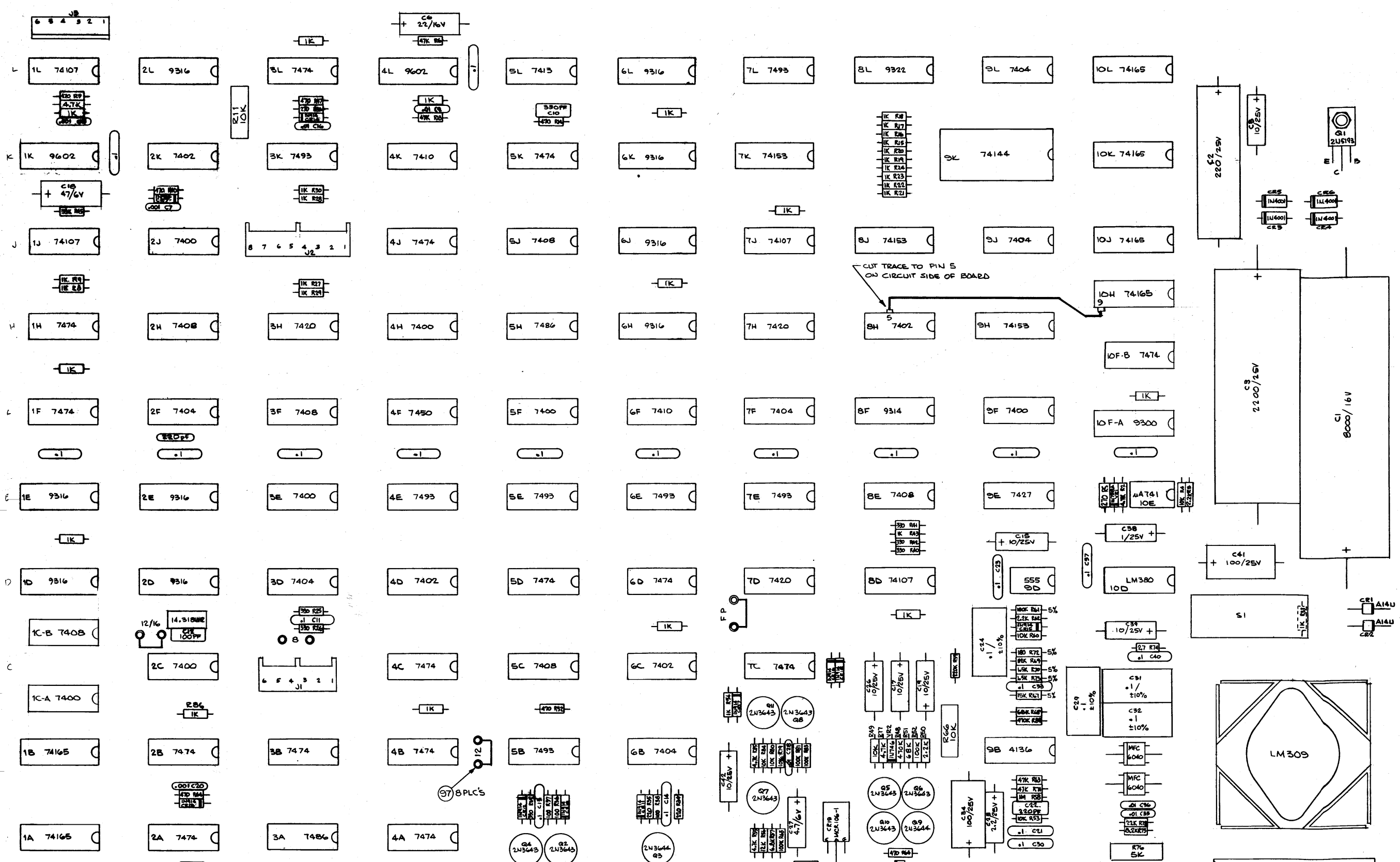


QWAK

Operation and Maintenance Manual



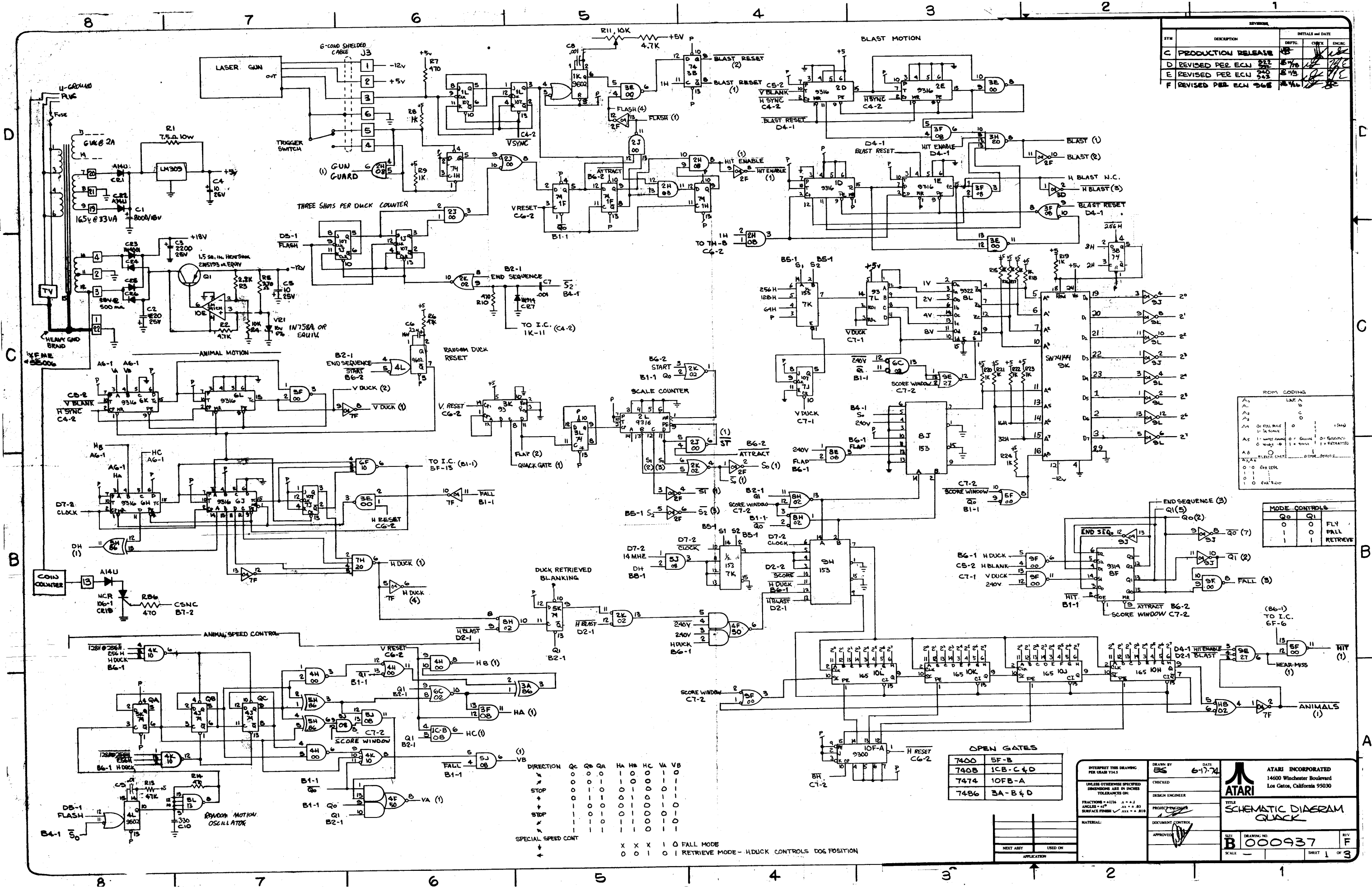


ASSEMBLY QUACK
000937 REV F

F	REV PER ECN 965
E	REV PER ECN 960, 943
D	REV PER ECN 922 & 932

SHT 3 OF 3
PRD ENG -
MFG ENG -

SYM	DESCRIPTION	INITIALS	DATE
C	PRODUCTION RELEASE	ES	6-17-74
D	REVISED PER ECN 242	ES	8-7-75
E	REVISED PER ECN 243	ES	8-15-75
F	REVISED PER ECN 246	ES	8-16-75



ROM CODING

A1	LINE A	0	1 (000)
A2	LINE B	0	1 (000)
A3	0 FALL MODE	0	1 (000)
A4	0 HUNT MODE	0	1 (000)
A5	0 NIGHT MODE	0	1 (000)
A6	0 RETRIEVE MODE	0	1 (000)
A7	0 FALL MODE	0	1 (000)
A8	0 FALL MODE	0	1 (000)
A9	0 FALL MODE	0	1 (000)
A10	0 FALL MODE	0	1 (000)

MODE CONTROLS

Q0	Q1	FLY
0	0	FLY
1	0	FALL
1	1	RETRIEVE

OPEN GATES

7400	5F-B
7408	1CB-C & D
7474	1OFB-A
7486	3A-B & D

INTERPRET THIS DRAWING PER URANI Y14.5

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:

FRACTIONS ±.016 . . . ±.02
 ANGLES ±.05 . . . ±.1
 SURFACE FINISH

MATERIAL:

DATE: 6-17-74

DESIGN ENGINEER: ES

PRODUCTION ENGINEER: [Signature]

DOCUMENT CONTROL: [Signature]

APPROVED: [Signature]

ATARI INCORPORATED
 14600 Winchester Boulevard
 Los Gatos, California 95030

ATARI

TITLE: SCHEMATIC DIAGRAM
 QUACK

DRAWING NO: B 000937

REV: F

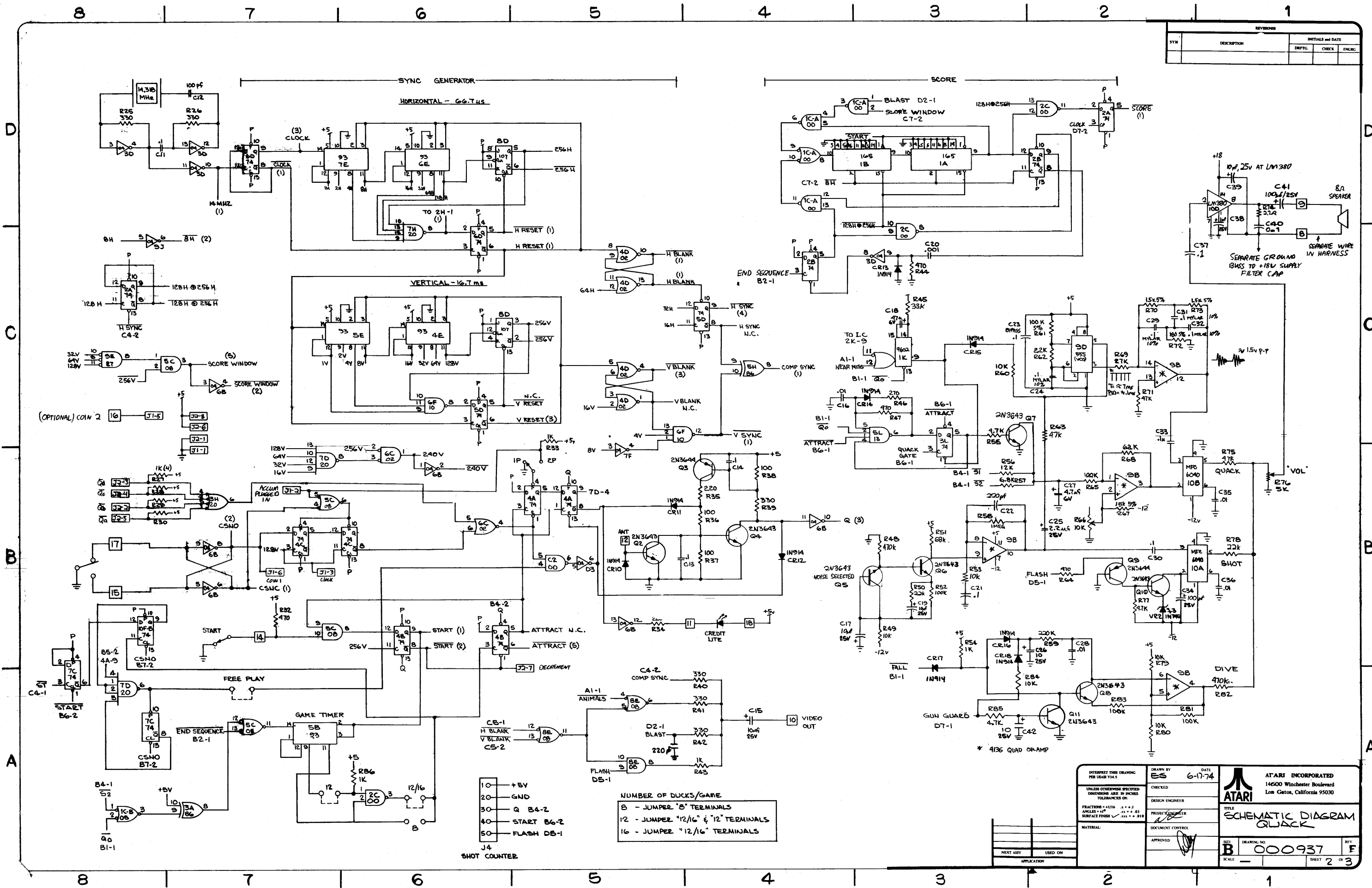
SHEET 1 OF 3

SPECIAL SPEED CONT

DIRECTION	QC	QB	QA	HA	HB	HC	VA	VB
STOP	0	0	0	1	0	0	1	0
STOP	0	0	1	0	0	0	0	1
STOP	0	1	0	0	0	0	0	0
STOP	0	1	1	0	0	0	0	0
STOP	1	0	0	0	0	0	0	0
STOP	1	0	1	0	0	0	0	0
STOP	1	1	0	0	0	0	0	0
STOP	1	1	1	0	0	0	0	0

X X X 1 0 FALL MODE
 0 0 1 0 RETRIEVE MODE - H DUCK CONTROLS DOG POSITION

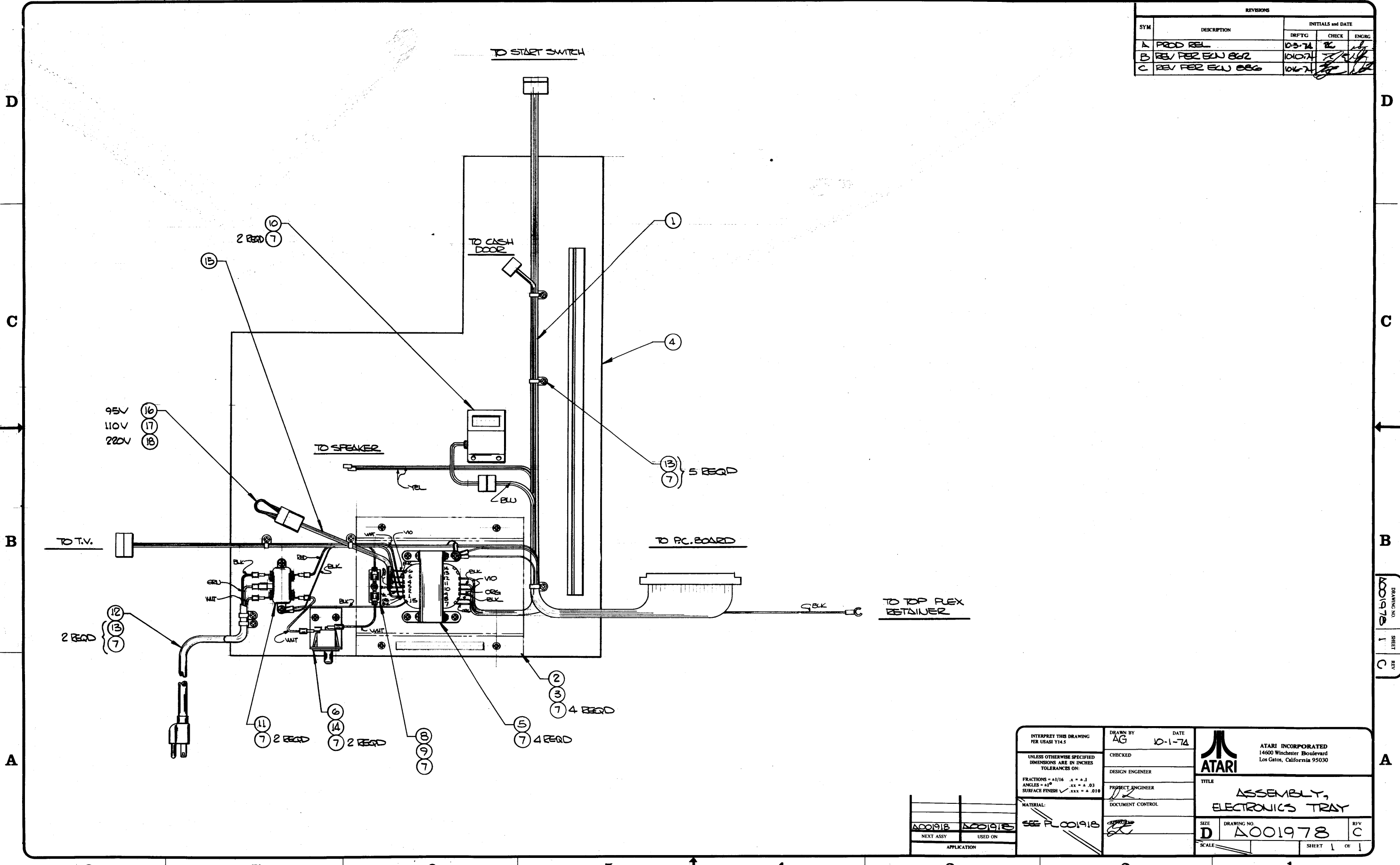
REVISIONS			
SYM	DESCRIPTION	INITIALS and DATE	



INTERPRET THIS DRAWING PER LEAD 174.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:	DRAWN BY ES 6-17-74 CHECKED DESIGN ENGINEER PROJECT ENGINEER DOCUMENT CONTROL APPROVED	ATARI INCORPORATED 14500 Winchester Boulevard Los Gatos, California 95030 ATARI TITLE SCHEMATIC DIAGRAM QUACK SIZE B DRAWING NO. 000937 REV F SCALE - SHEET 2 OF 3
-------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------	-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

8 7 6 5 4 3 2 1

REVISIONS				
SYM	DESCRIPTION	INITIALS and DATE		
		DRFTG	CHECK	ENGRG
A	PROD REL	0-5-74	AG	
B	REV PER ECU 862	10/07/74		
C	REV PER ECU 886	10/6/74		



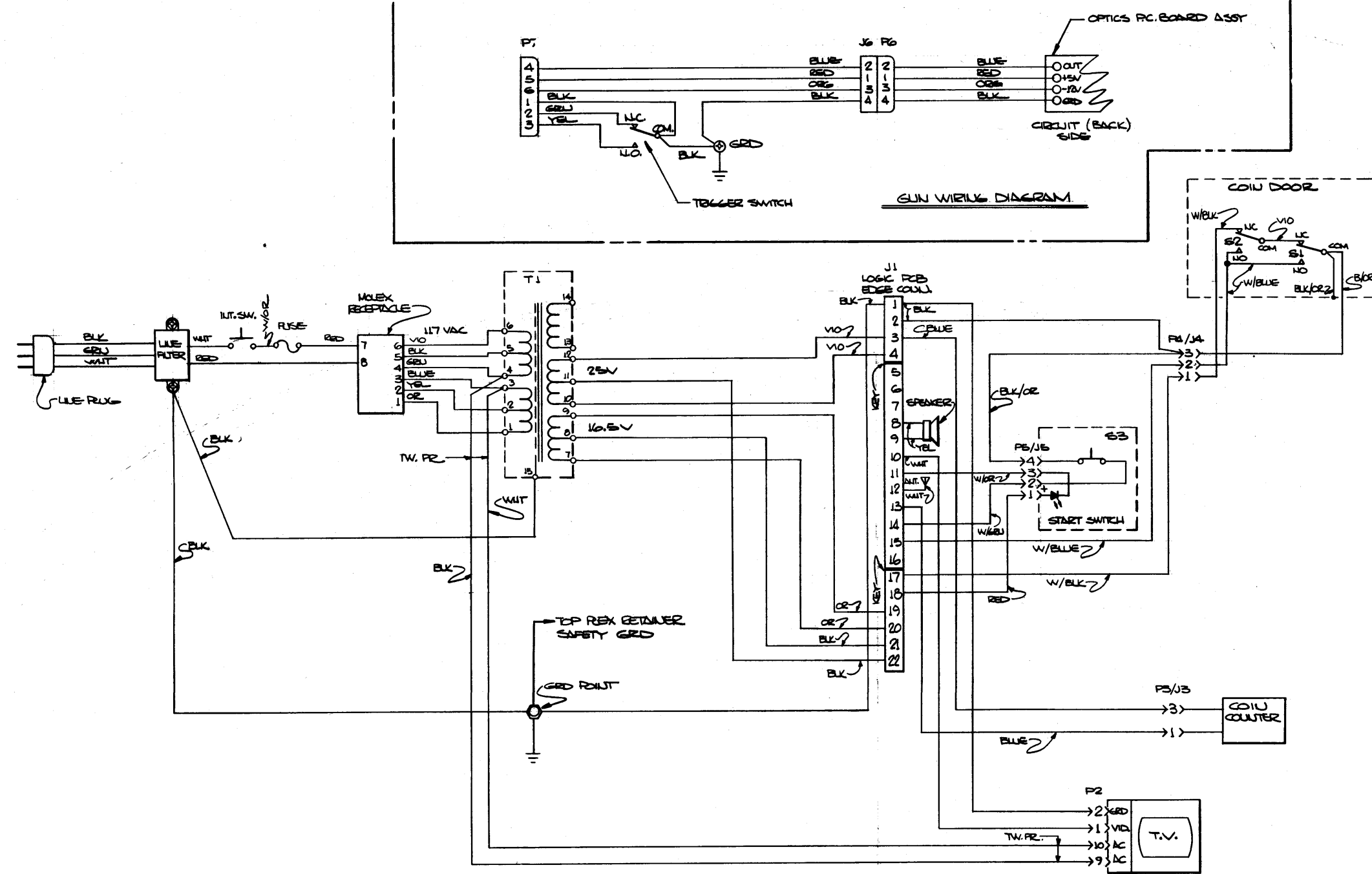
DRAWING NO. A001978
SHEET 1 OF 1

INTERPRET THIS DRAWING PER USASI Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: FRACTIONS = ±1/16 .x = ±.1 ANGLES = ±1° .xx = ±.03 SURFACE FINISH ✓ .xxx = ±.010	DRAWN BY AG	DATE 10-1-74	ATARI INCORPORATED 14600 Winchester Boulevard Los Gatos, California 95030				
	CHECKED DESIGN ENGINEER	PROJECT ENGINEER		DOCUMENT CONTROL			
MATERIAL: SEE P. 001918	APPLICATION <table border="1"> <tr> <td>NEXT ASSY</td> <td>USED ON</td> </tr> <tr> <td>A001918</td> <td>A001918</td> </tr> </table>		NEXT ASSY	USED ON	A001918	A001918	TITLE ASSEMBLY, ELECTRONICS TRAY
NEXT ASSY	USED ON						
A001918	A001918						
SIZE D		DRAWING NO. A001978	REV C				
SCALE		SHEET 1 OF 1					

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1

SYM	DESCRIPTION	INITIALS and DATE		
		DRFTG	CHECK	ENGRG
A	PROD REL	10-27-74		
B	REV PER ECU 935	11-1-74		

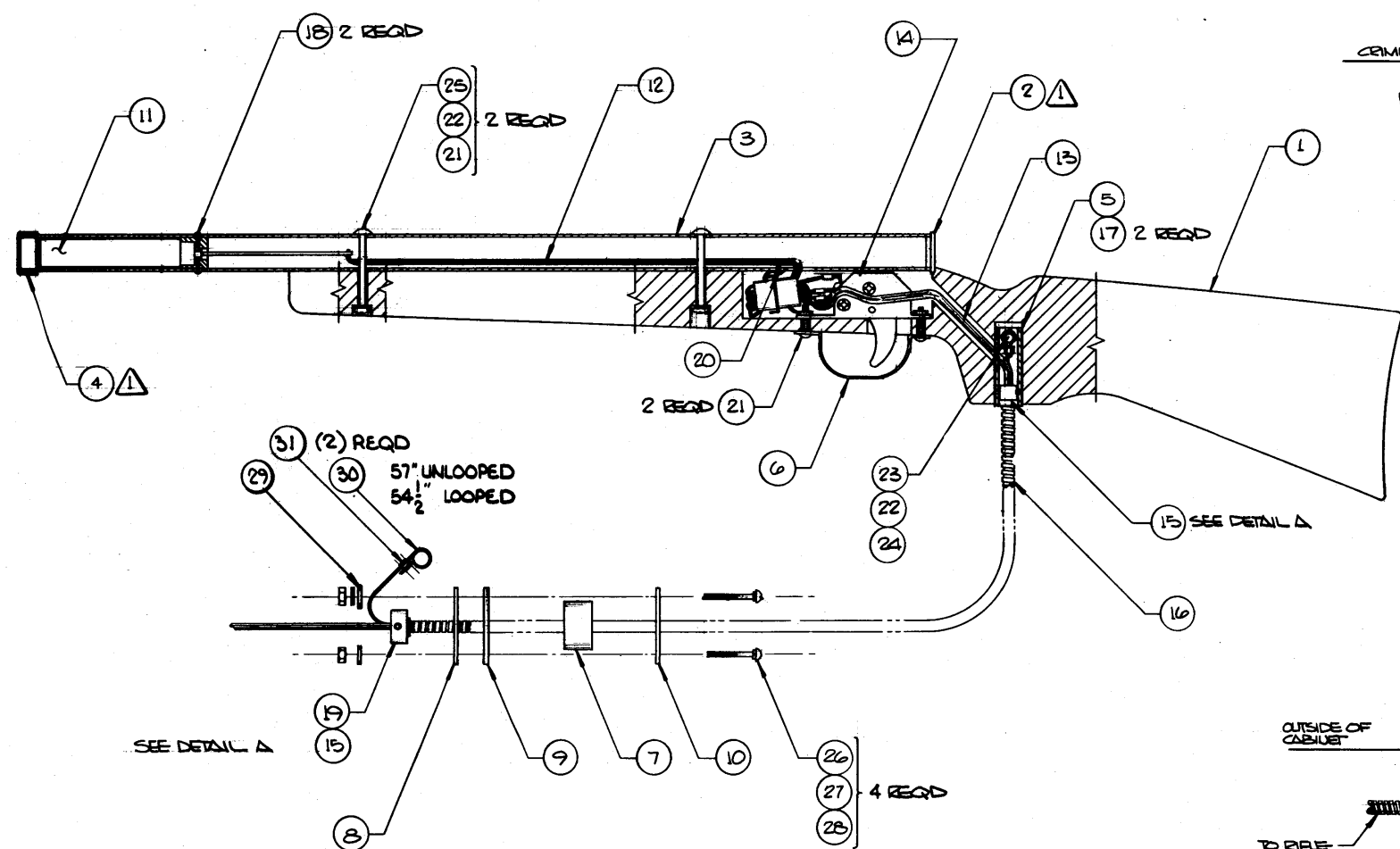
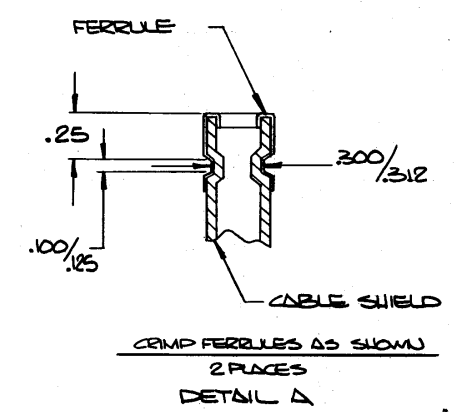


<p>INTERPRET THIS DRAWING PER USAS1 Y14.5</p> <p>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON:</p> <p>FRACTIONS - ±1/16 .5 - ±.1</p> <p>ANGLES - 45° .5 - ±.03</p> <p>SURFACE FINISH - .xxx ±.010</p>	<p>DRAWN BY: COOK DATE: 10-27-74</p> <p>CHECKED:</p> <p>DESIGN ENGINEER:</p> <p>PROJECT ENGINEER:</p> <p>DOCUMENT CONTROL:</p>	<p>ATARI INCORPORATED 14600 Winchester Boulevard Los Gatos, California 95030</p> <p>TITLE: WIRING ENCLOSURE DIAG. "QWAK"</p>
	<p>APPROVED:</p> <p>DATE:</p>	

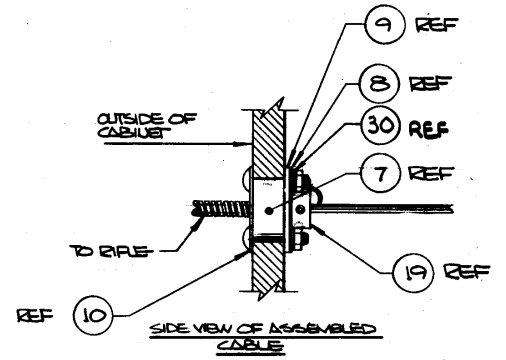
DRAWING NO. 002485 SHEET 1 OF 1

8 7 6 5 4 3 2 1

REVISIONS				
SYM	DESCRIPTION	INITIALS and DATE		
		DRFTG	CHECK	ENGRG
D	PROD REL REV 4 REDRAWN PER ECN 958	11-19-74	[Signature]	[Signature]
E	REV PER ECN 963	11-26-74	[Signature]	[Signature]
F	REVISED PER ECN 977	12-10-74	[Signature]	[Signature]

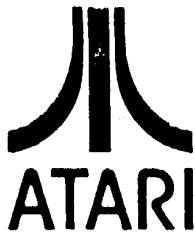


NOTES:
 (triangle) BARREL CAP (ITEM 2) & BUMPER (ITEM 4) SHALL BE SECURELY BONDED TO GUN BARREL (ITEM 3).



INTERPRET THIS DRAWING PER USAS Y14.5 UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: FRACTIONS = +1/16 .x = +.1 ANGLES = ±3° .xx = ±.03 SURFACE FINISH ✓ .xxx = ±.010	DRAWN BY: <i>COOL</i> DATE: 11-18-74 CHECKED: DESIGN ENGINEER: PROJECT ENGINEER: DOCUMENT CONTROL:	ATARI INCORPORATED 14600 Winchester Boulevard Los Gatos, California 95030 ATARI TITLE: ASSEMBLY, RIFLE
	MATERIAL: SEE PL 001840 NEXT ASSY: 1001918 USED ON: QVAL APPLICATION:	APPROVED: [Signature] DATE: 11/20/74

DRAWING NO. 1001840
 SHEET 1
 REV. F



Job Title P.C. BOARD ASSEMBLY - QUACK Dwg. P/L 000937

Parts List Specification sheet 1 of 3

Drawn R. Milner		
Checked <i>B. Little</i> 1/3	Mech. Eng.	Rev.
Proj. Eng. <i>R. Lang</i>	Elec. Eng. <i>R. Lang</i>	F

Rev.	Description	Apprv.	Rev.	Description	Apprv.
A	Release for Prod.	<i>10-13-74</i>			
B	Revise per ECN 814	<i>9-27-74</i>			
C	Rev. Per ECN 872 10-	<i>10-16-74</i>			
D	Rev per ECN 922&932	<i>[Signature]</i>			
E	Rev per ECN 940&943	<i>[Signature]</i>			
F	REV PER ECN 965	<i>[Signature]</i>			

Item	Part. No.	Qty.	Description			
	A000937	Ref	Assembly	Drawing		
1	10101/10-0101	3	Resistor, Carbon, 10%, 1/4 Watt, 100	ohm		
2	10102/10-0102	33	" " " " 1K	ohm		
3	10103/10-0103	7	" " " " 10K	ohm		
4	10105/10-0105	1	" " " " 1M	ohm		
5	10221/10-0221	2	" " " " 220	ohm		
6	10222/10-0222	3	" " " " 2.2K	ohm		
7	10223/10-0223	1	" " " " 22K	ohm		
8	10224/10-0224	1	" " " " 220K	ohm		
9	10271/10-0271	2	" " " " 270	ohm		
10	10123/10-0123	1	" " " " 12K	ohm		
11	10331/10-0331	6	" " " " 330	ohm		
12	10333/10-0333	1	" " " " 33K	ohm		
13	10471/10-0471	8	" " " " 470	ohm		
14	10472/10-0472	5	" " " " 4.7K	ohm		
15	10473/10-0473	4	" " " " 47K	ohm		
16	10474/10-0474	2	" " " " 470K	ohm		
17	10-0104	4	" " " " 100K	ohm		
18	10683/10-0683	2	" " " " 68K	ohm		
19	11104/10-5104	1	" " " 5% "	100K	ohm	
20	11152/10-5152	2	" " " " 1.5K	ohm		
21	11153/10-5153	1	" " " " 15K	ohm		
22	11181/10-5181	1	" " " " 180	ohm		
23	19-313103	2	Trimpot, 10K			
24	11270/10-20P7	1	" 10% "	2.7	ohm	
25	22502/19-311502	1	Trimpot, 5K			
26	30101/28-101101	1	Capacitor, Dipped, Mica, 100	pf		
27	30102/28-101221	2	" " " 220	pf		
28	30331/28-101331	1	" " " 330	pf		
29	34101/27-101104	21	" Ceramic, .1	uf		
30	34102/27-101102	3	" " .001	uf		
31	34104/27-101103	5	" " .01	uf		
32	32101/21-101104	4	" Mylar, 10%, .1	uf		
33	35102/24-250105	1	" Electrolytic, 1	uf, 25V		
34	35103/24-250106	8	" " 10	uf, 25V		
35	35222/24-250225	1	" " 2.2	uf, 25V		
36	35472/24-060475	1	" " 4.7	uf, 6V		
37	35473/24-060476	1	" " 47	uf, 6V		
38	35509/24-160226	1	" " 22	uf, 16V		

PARTS LIST SPECIFICATION

Dwg. P/L 000937

Title P.C. BOARD ASSY. - QUACK

sheet 2 of 3

Rev. F

Item	Part No.	Qty.	Description
39	37000/24-160808	1	Capacitor, Electrolytic, 8000 uf, 16V
40	37102/24-250227	1	" " 220 uf, 25V
41	37103/24-250107	2	" " 100 uf, 25V
42	37104/24-250228	1	" " 2200 uf, 25V
43	70000/34-2N3643	8	Transistor, 2N 3643
44	70001/34-2N3644	2	" 2N 3644
45	70004/34-2N5193	1	" 2N 5193
46	71000/31-1N914	10	Diode, 1N 914
47	71001/31-1N4001	4	Diode, 1N 4001
48	71006/31-A14F	3	Diode, 3A, A14F
49	71012/32-1N758	1	Diode, 1N 758, Zener, 10V
50	71013/32-1N746	1	Diode, 1N 746, Zener, 3.3V
51	60000/69-001	1	Switch, DPDT
52	72000/37-7400	7	Integrated Circuit, 7400
53	72001/37-7402	4	" " 7402
54	72002/37-7404	6	" " 7404
55	72003/37-7410	2	" " 7410
56	72004/37-7420	3	" " 7420
57	72006/37-7427	1	" " 7427
58	72009/37-7450	1	" " 7450
59	72010/37-7474	15	" " 7474
60	72012/37-7486	2	" " 7486
61	72014/37-7493	7	" " 7493
62	72015/37-74107	4	" " 74107
63	72016/37-74153	3	" " 74153
64	72017/37-9316	9	" " 9316
65	72018/37-555	1	" " 555
66	72025/37-9322	1	" " 9322
67	72026/37-9602	2	" " 9602
68	72027/37-7408	6	" " 7408
69	72033/37-74165	6	" " 74165
70	72036/37-9314	1	" " 9314
71	72042/37-MFC6040	2	" " MFC 6040
72	72050/37-7413	1	" " 7413
73	72051/37-ua741	1	" " ua 741
74	72048/37-LM380	1	" " LM 380
75	72052/37-RC4136D	1	" " RC 4136 D
76	72019/37-LM309	1	LM 309 K
77	72074/37-2530N	1	Custom ROM, 2530 N
78	75100/72-1610C	2	Screw, Pan Head, Phil., Stainless, #6-32 x 5/8" Lg.
79	75101/75-056	2	Washer, Lock, #6
80	75102/75-016C	2	Washer, Flat, #6
81	75103/75-916S	2	Nut, Hex, #6-32
82	75162/75-044	1	Washer, Split lock, #4
83	75163/75-014S	1	Washer, Flat, #4
84	75164/75-914S	1	Nut, Hex, #4-40
85	75188/75-1408S	1	Screw, Pan Head, Phil., Stainless, #4-40 x 1/2"
86	80086/79-42424	1	Socket, 24 Pin
87	81001/90-101	1	Crystal, 14.318180 mhz
88	83014/78-06001	1	Wakefield Heatsink
89	19112/19-809w7p5	1	Resistor, 10 Watt, Wirewound, 7.5 ohm
90	10682/10-0682	1	" Carbon, 10%, 1/4 Watt, 6.8K ohm

PARTS LIST SPECIFICATION

Dwg. P/L 000937

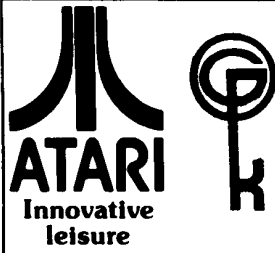
Title P.C. BOARD ASSY. - QUACK

sheet 3 of 3

Rev. F

Item	Part No.	Qty.	Description
91	10823/10-0823	1	Resistor, Carbon, 10%, ¼ Watt, 82 K ohm
92	/10-0822	1	" " " " 8.2K ohm
93	71009/35-MCR106-1	1	MCR 106-1
94	/37-9300	1	Integrated Circuit, 9300
95	/79-58017	1	Polarized Wafer, Molex #09-60-1061
96	001873	1	Printed Circuit Board
97	79-20213	8	TERMINAL

QUACK



ASSEMBLY TITLE / Assembly Electronics Tray P/L 001978

PARTS LIST SPECIFICATION

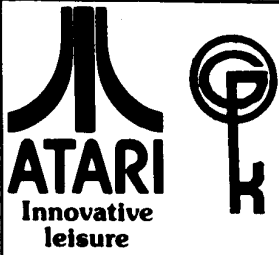
Page 1 of 1

Drawn		REV.
Checked	Mech. Eng.	C
Proj. Eng.	Elec. Eng.	

Rev.	Description	Date	Apprv.	Rev.	Description	Date	Apprv.
A	PROD REL	10/4/74	[Signature]				
B	Rev per ECN 862	10/10/74	[Signature]				
C	Rev per ECN 886	10/17/74	[Signature]				

Item	Part Number	Qty.	DESCRIPTION
1	A001994	1	Assembly, Harness
2	000622	1	Cover, Transformer
3	000871	1	Label
4	A001979	1	Assembly, Tray/Cleat
5	55006/000855	1	Transformer
6	80029/71-2121	2	AC Power Interlock Switch
7	75200/72-6602	22	Screw, SM, Pan Hd., Phil., #6 x 1/2 Lg.
8	80001/79-3201	1	Fuse Holder
9	80002/46-2011	1	Fuse, 1 amp, Slo-Blo
10	80004/47-1001	1	Counter
11	90-3001	1	Filter, Power Line
12	83015/54-041	1	Power Cord, 8'
13	78-25001	7	Cable Clamp
14	83097/000268	2	Bracket, Switch Mounting
15	A001920	1	Harness, Voltage Selection
16	*A001921-01	A/R	Shorting Block, 95V
17	*A001921-02	A/R	Shorting Block, 110V
18	*A001921-03	A/R	Shorting Block, 220V

* Install Shorting Block per Voltage Required



ASSEMBLY TITLE / ASSEMBLY, RIFLE QUACK P/L A001840

PARTS LIST SPECIFICATION Page 1 of 1

Drawn	
Checked	Mech. Eng.
Proj. Eng. <i>[Signature]</i>	Elec. Eng. <i>[Signature]</i>
	REV. F

Rev.	Description	Date	Apprv.	Rev.	Description	Date	Apprv.
D	PROD REL/ECN 958	11-19-74	<i>[Signature]</i>				
E	Rev per ECN 963	11-26-74	<i>[Signature]</i>				
F	Rev per ECN 977	12-10-74	<i>[Signature]</i>				

Item	Part Number	Qty.	DESCRIPTION
1	001847	1	Gun Stock
2	001843	1	Cap, Barrel
3	001846	1	Barrel, Gun
4	001841	1	Bumper
5	001853	1	Adapter, Cable
6	001848	1	Guard, Trigger
7	001941	1	Cable Support
8	001940	1	Clamp, Cable
9	001942	1	Mount, Shock
10	001939	1	Plate, Cable
11	A001852	1	Assembly, Optics
12	A002460	1	Assembly, Harness, Optics
13	A002458	1	Assembly, Harness, Gun
14	A001850	1	Assembly, Trigger
15	82-701	2	Ferrule
16	78-2000109L	54"	Cable, Stripwound
17	75-4103	2	Screw, Set, Cup Point, Allen, Stl, 10-24 x .19 LG.
18	73-1204	2	Screw, Drive, Rd Hd, .12 x .25 LG.
19	73-660707	1	Collar Set
20	75-6806	1	Screw, Sm, Pan Hd, #8 x .38 LG.
21	82-8812	4	Screw, Button Hd, #8-32 x .75 LG.
22	75-020S	3	Washer, Flat, Narrow Pattern, #10
23	82-302	1	Post, 1 1/4" LG.
24	82-8806	1	Screw, Button Hd Socket Cap #8-32 x .38 LG.
25	82-301	1	Post, 2" LG.
26	75-045	4	Washer, Stl, Lock # 1/4
27	75-9155	4	Nut, Stl, Hex # 1/4-20
28	75-5524N	4	Bolt, Stl, Carriage, 1/4-20x1-1/2 lg.
29	75-025S	1	Washer, Flat (1/4)
30	85-101	57"	Cable, Aircraft (unlooped) (500 lbs test)
31	78-23111	2	Sleeve, Air Cord