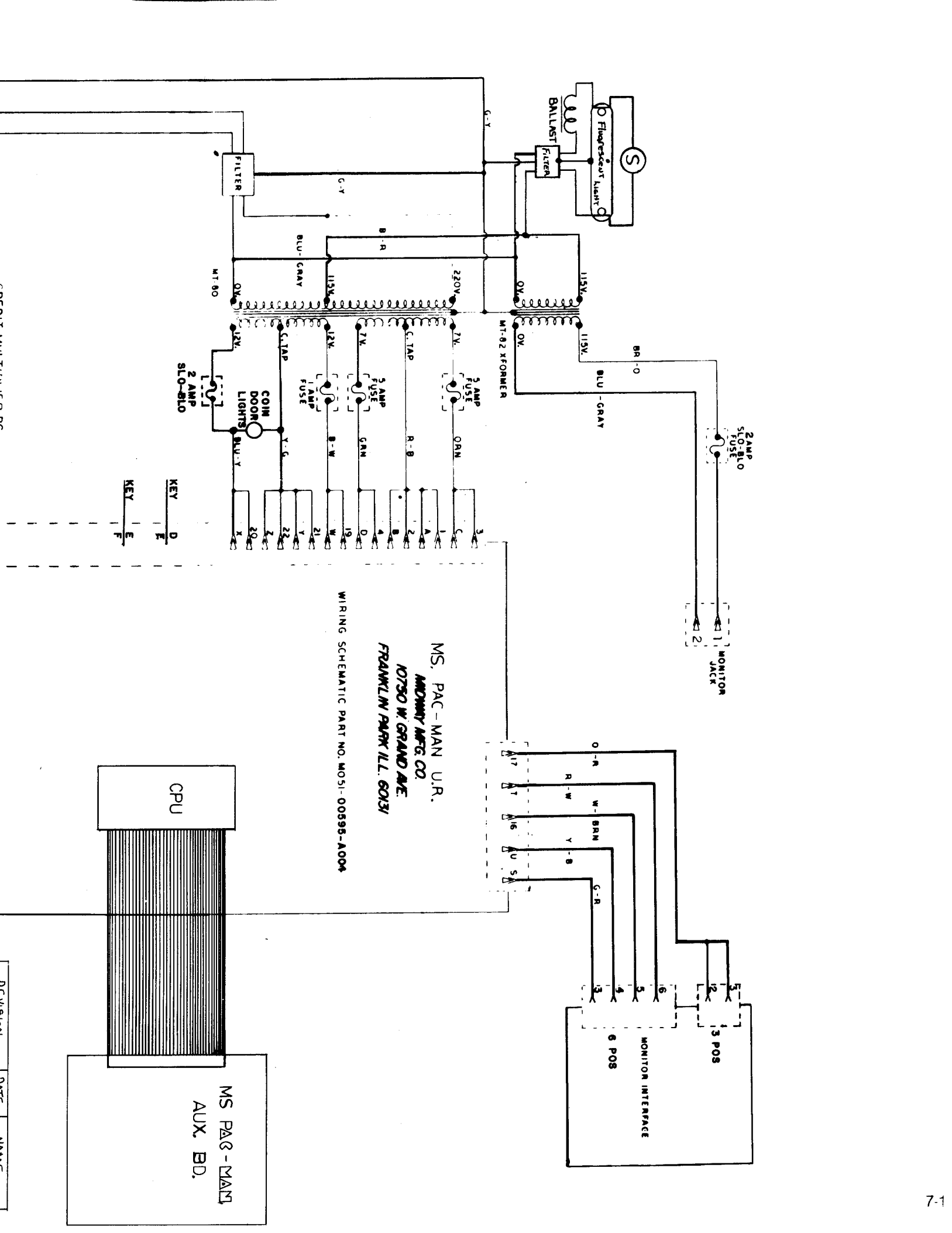
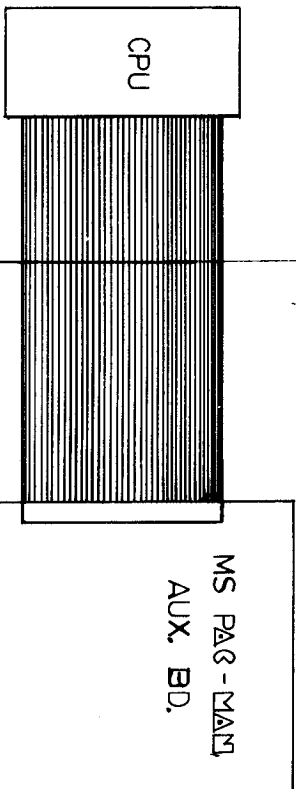


VII Schematics and Wiring Diagrams



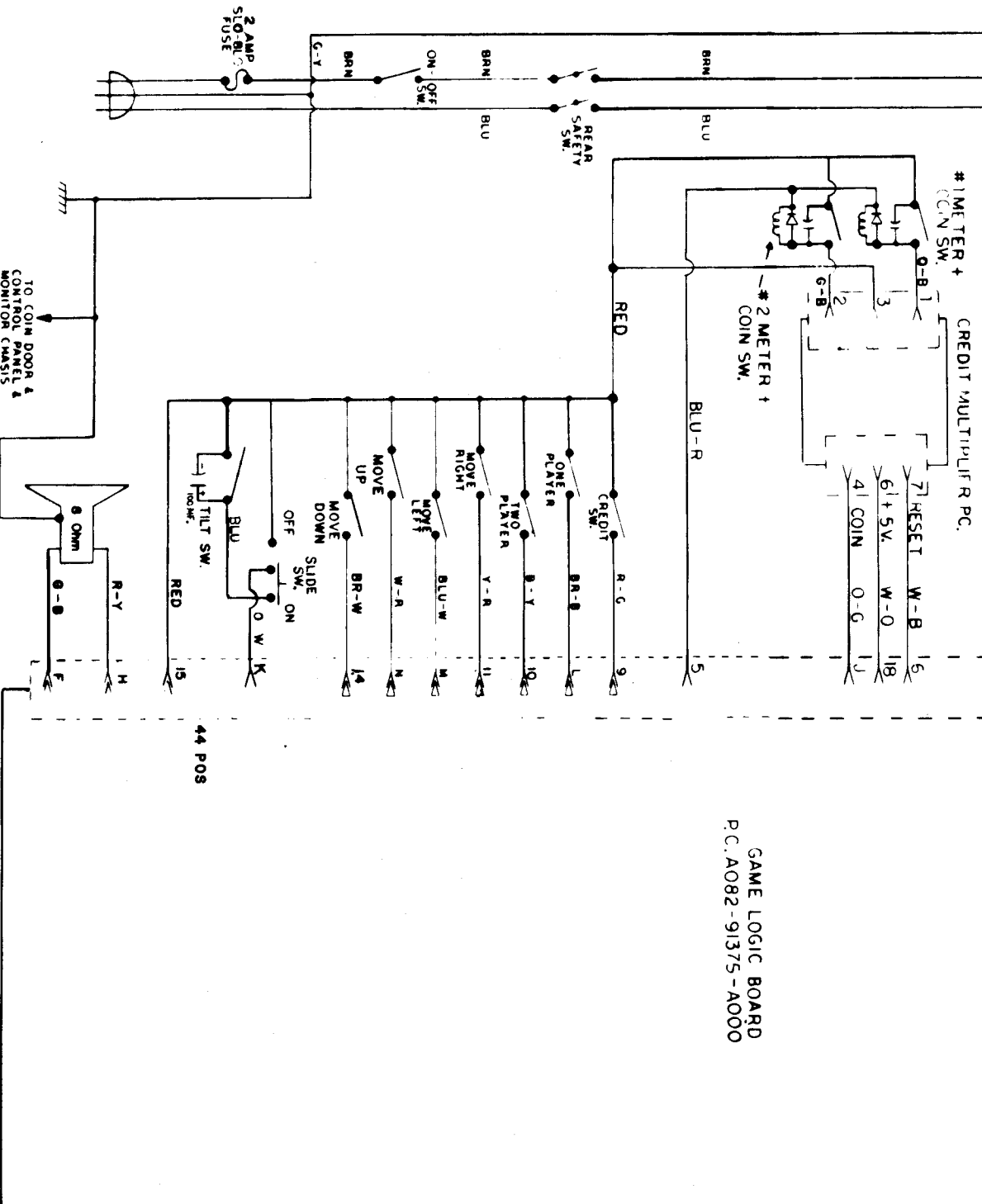
MS, PAC-MAN U.R.
 ANDREW MFG CO.
 10750 W. GRAND AVE.
 FRANKLIN PARK ILL. 60131

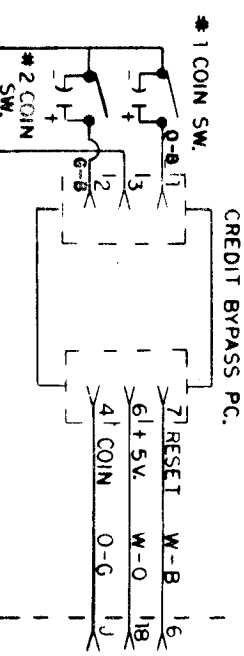
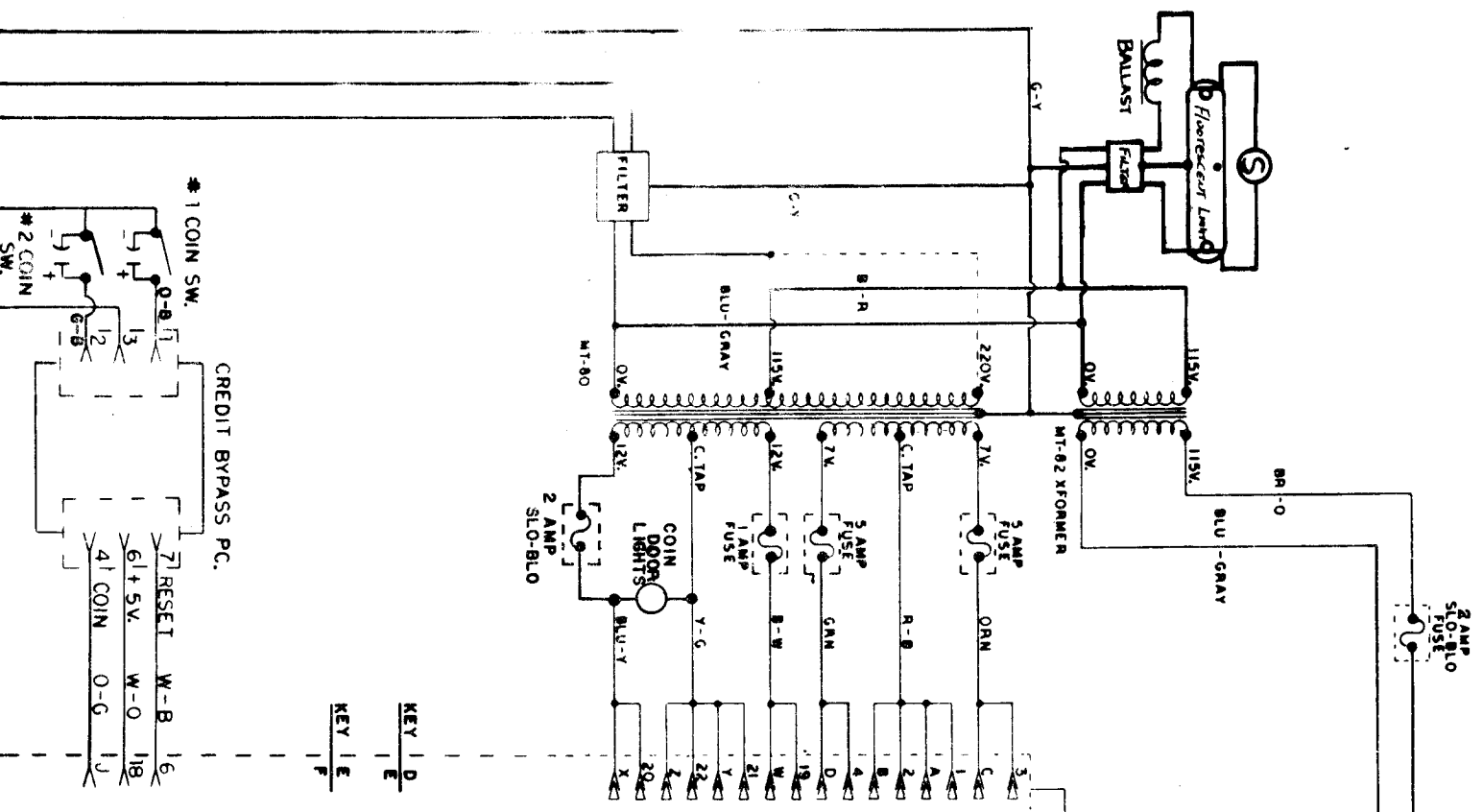
WIRING SCHEMATIC PART NO. MOSI-00595-A004



REVISION #	DATE	NAME
1	2/7/81	V. CARPUSO

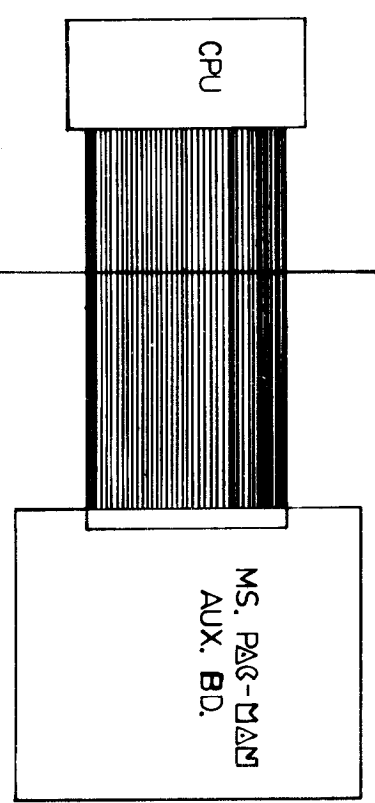
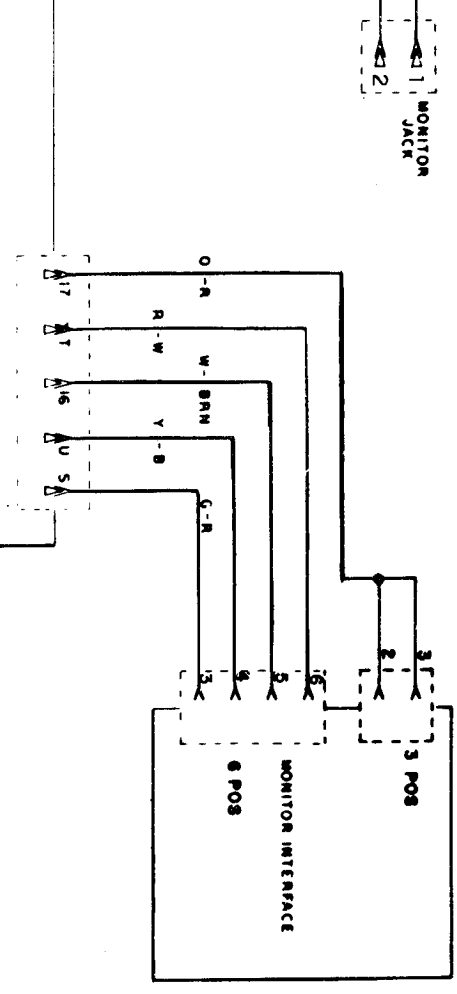
GAME LOGIC BOARD
P.C. A082-91375-A000



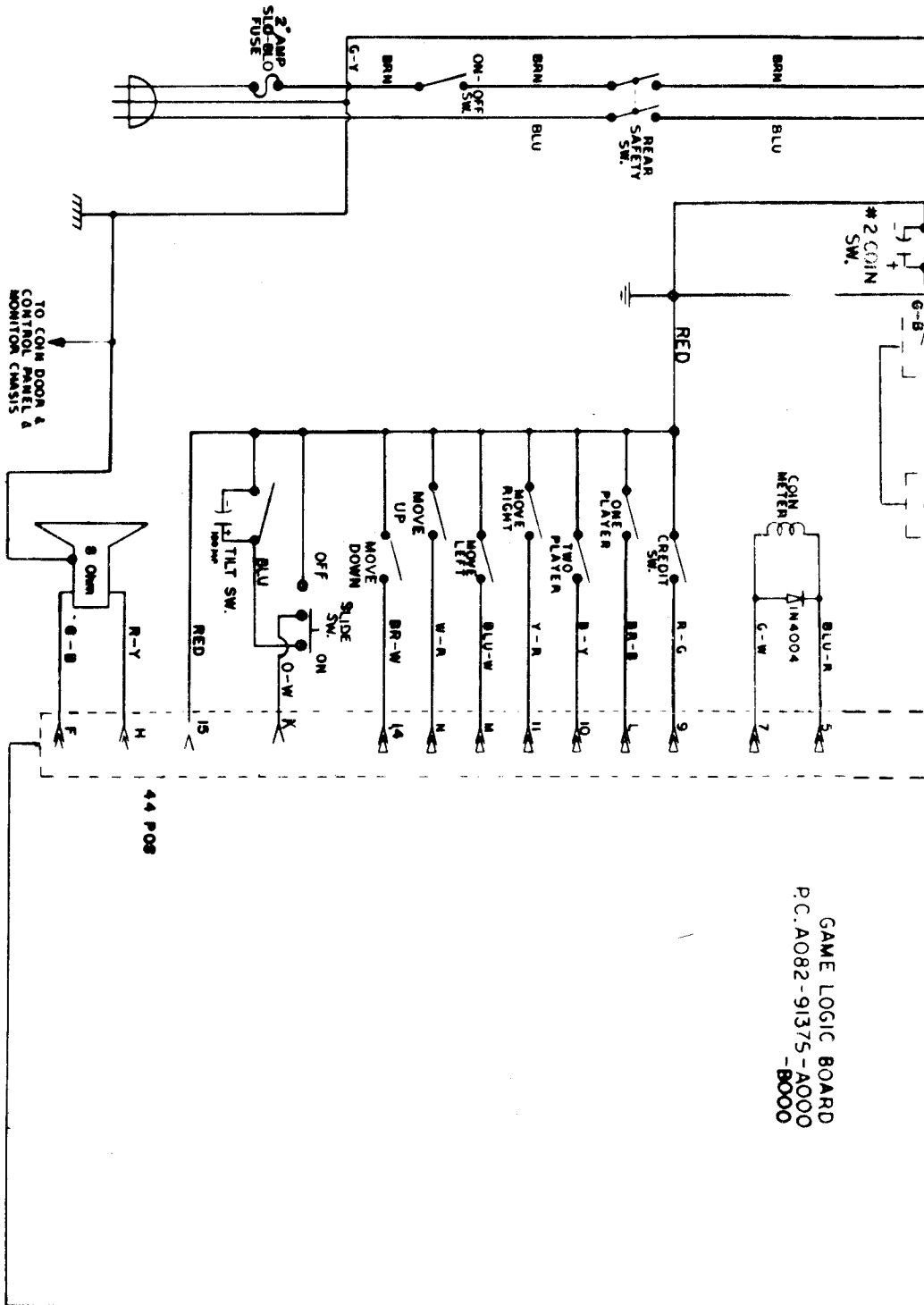


KEY D
 E
 KEY E
 F

MS. PAC-MAN U.R.
 ARCADE MFG. CO.
 10750 W. GRAND AVE.
 FRANKLIN PARK ILL. 60131
 WIRING SCHEMATIC PART NO. MOSI-00896-A003



DATE	NAME
12/1/81	V. Caporusso

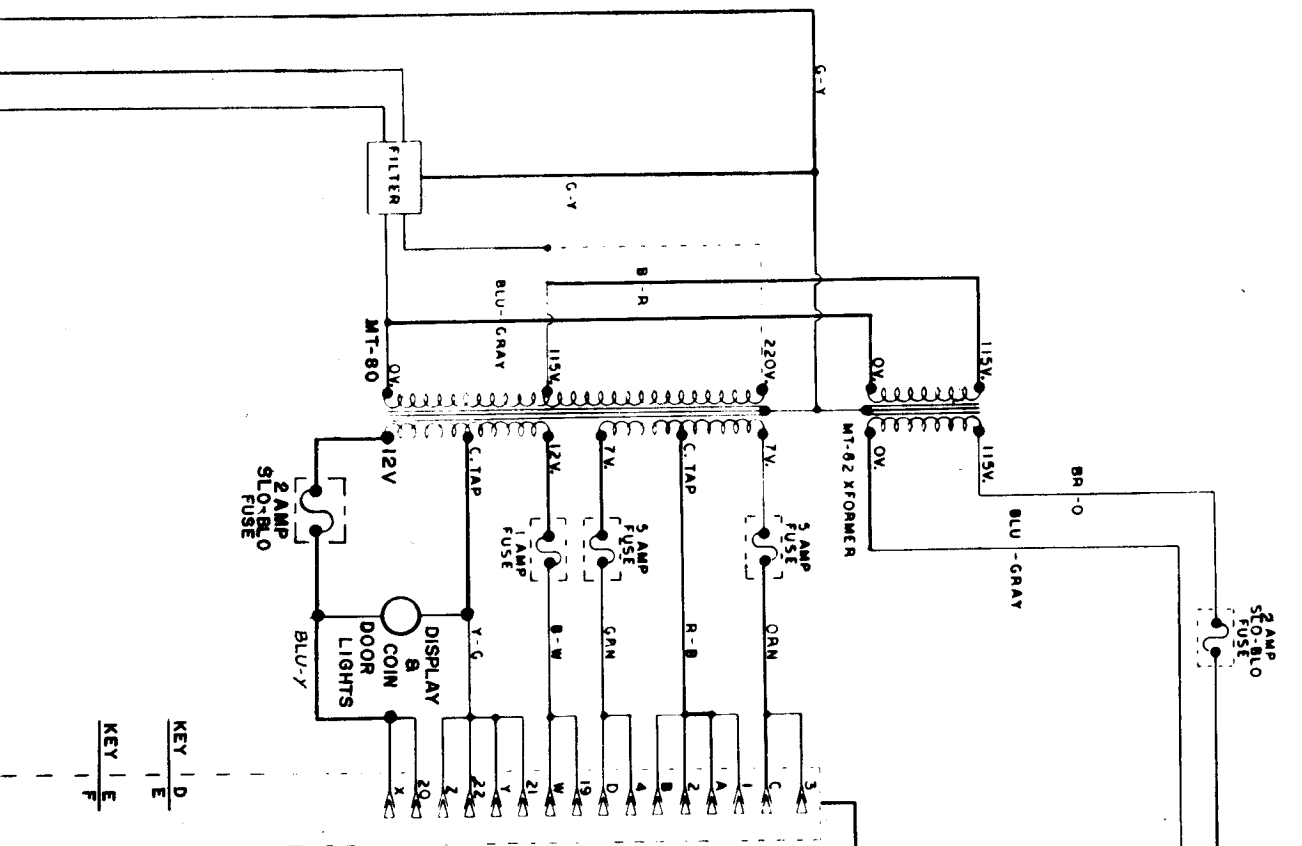


GAME LOGIC BOARD
 P.C. A082-91375-A000
 -B000

44 POS

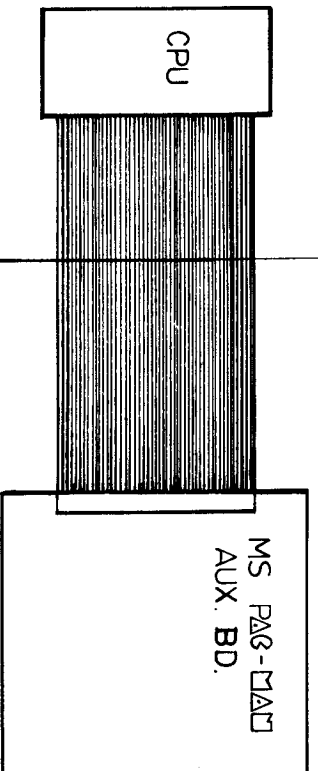
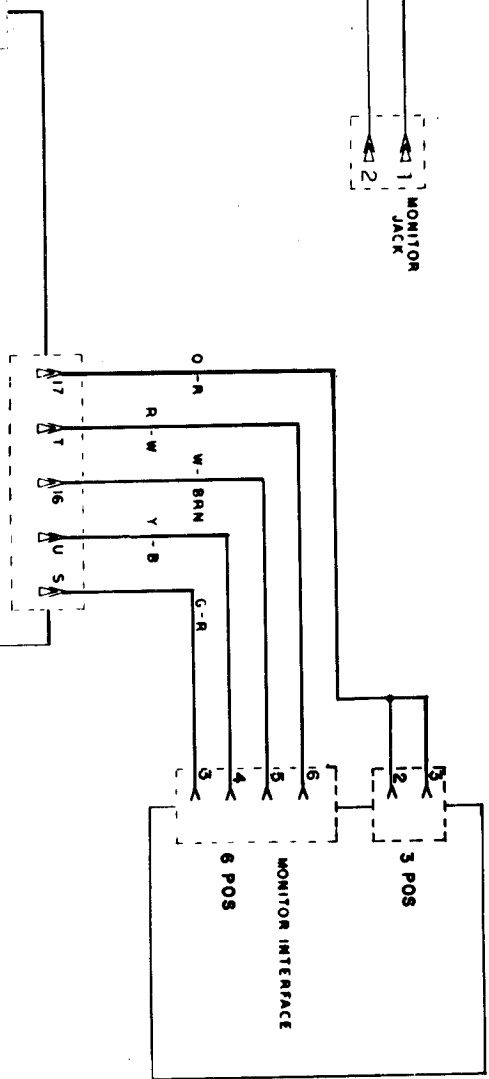
REVISION	DATE
FLUORESCENT LIGHTS	12/7/80

#1 METER A
CREDIT MULTIPLIER PC.

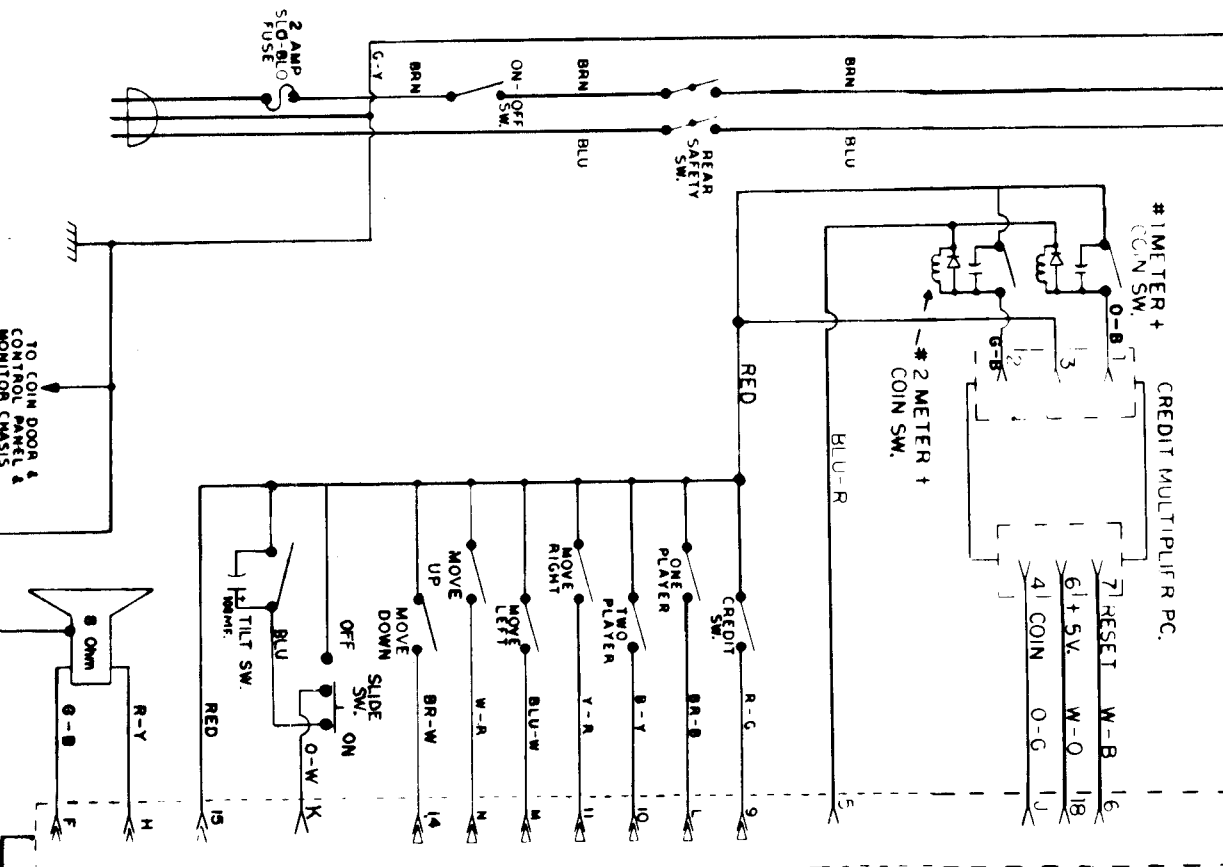


KEY D
KEY E
KEY F

MS PAC - MAN MINI
ANDWAY MFG CO.
10750 W. GRAND AVE.
FRANKLIN PARK ILL. 60131
WIRING SCHEMATIC PART NO. MOSI-00602-A004

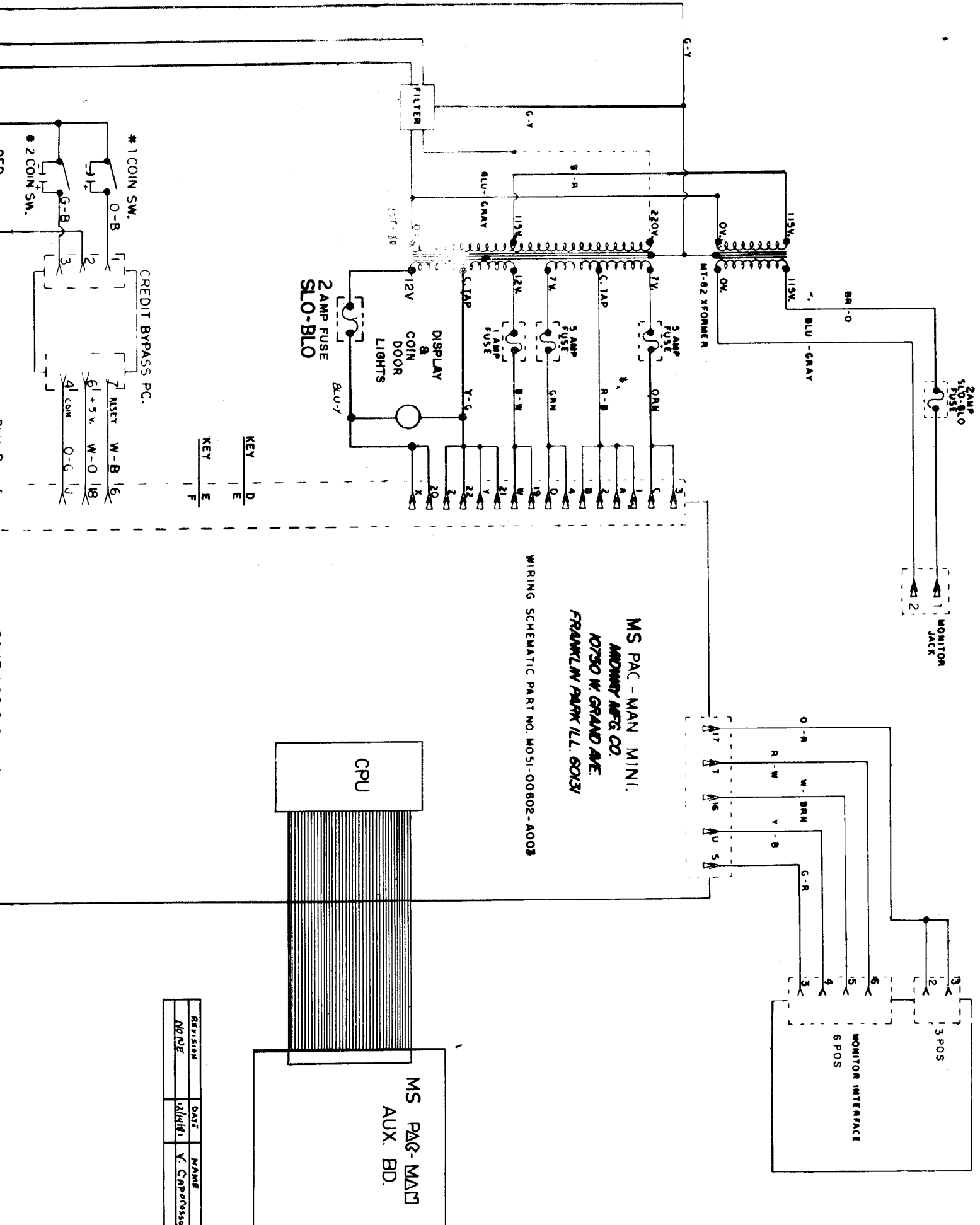


REVISION	DATE	NAME
10000	12/14/81	V. Caporosso



GAME LOGIC BOARD
P.C. A082-91375-A000.

Revision	Date	Name
K00AE	12/14/61	V. Caporosso

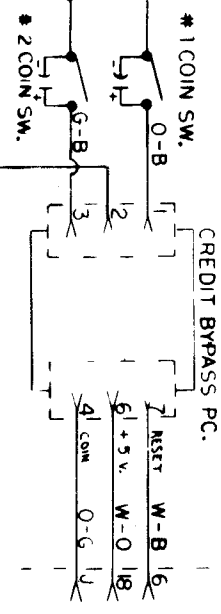


MS PAC - MAN MINI.
 MADDEN AFG CO.
 10750 W. GRAND AVE.
 FRANKLIN PARK ILL. 60131

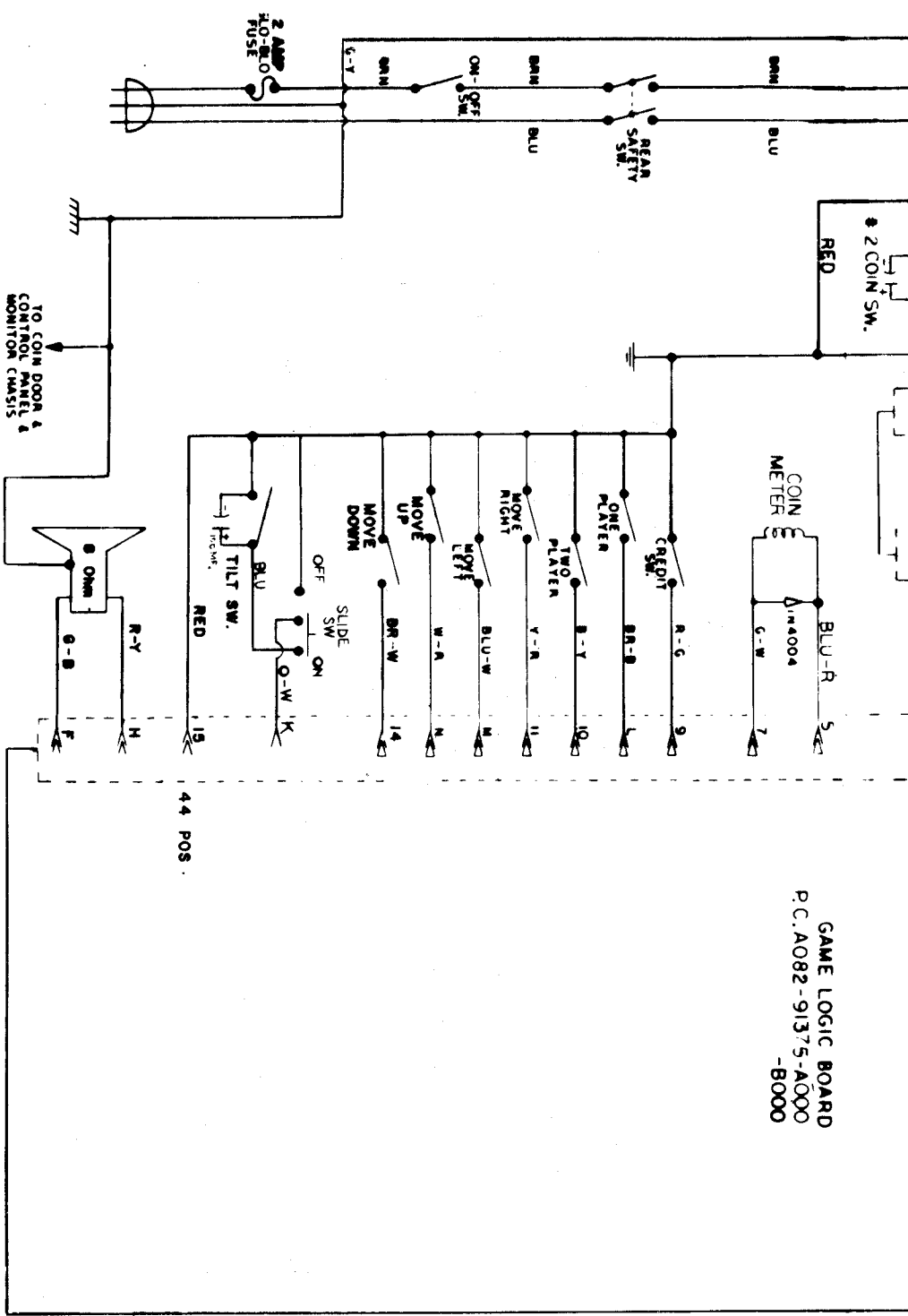
WIRING SCHEMATIC PART NO. MOSI-00802-A003

KEY

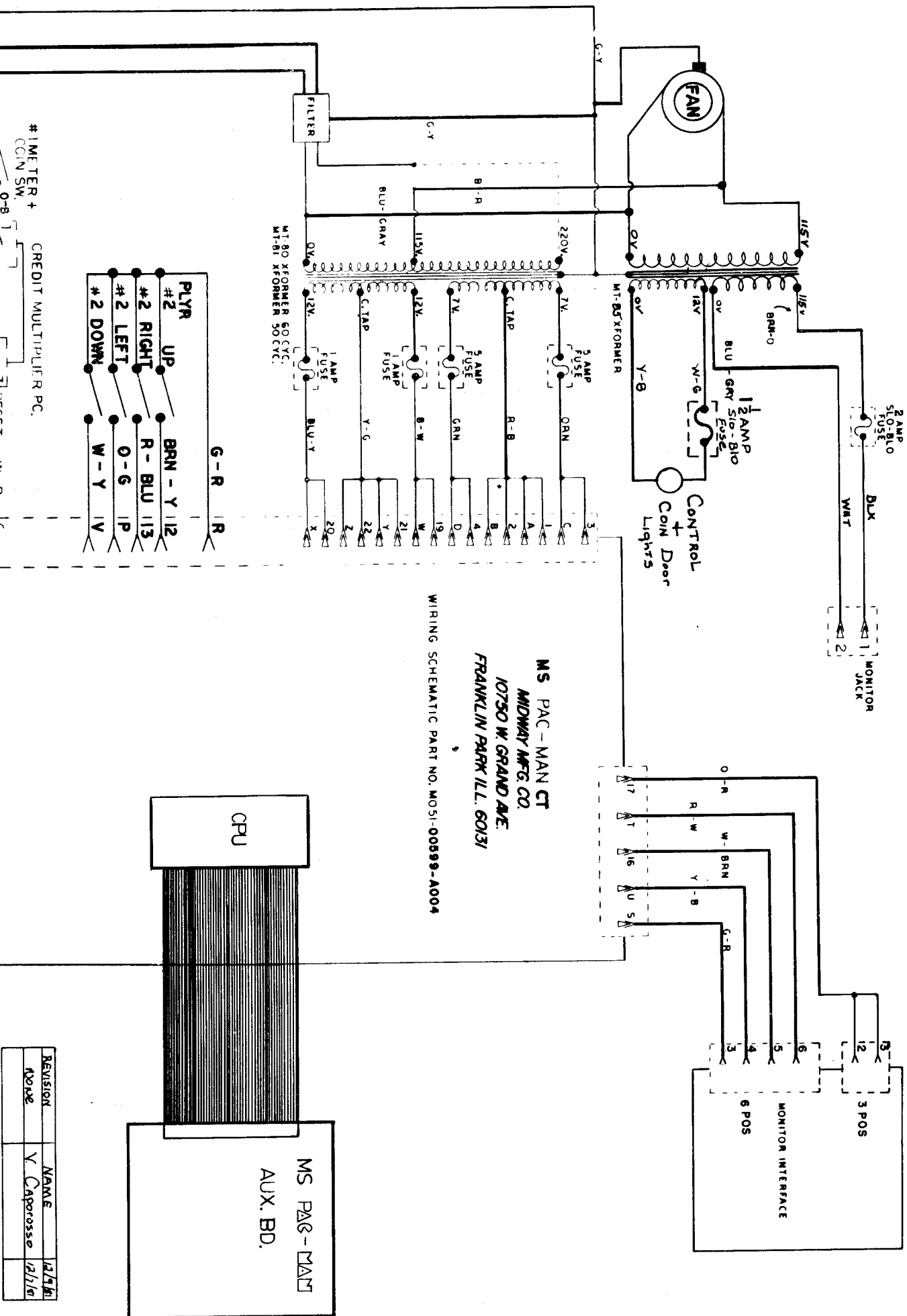
D
E
F



REVISION	DATE	NAME
NONE	1/1/81	V. CAPAROSSO



GAME LOGIC BOARD
 P.C. A082-91375-A000
 -B000



MS PAC - MAN CT
 MIDWAY MFG. CO.
 10750 W. GRAND AVE.
 FRANKLIN PARK ILL. 60131

WIRING SCHEMATIC PART NO. MOSI-00599-A004

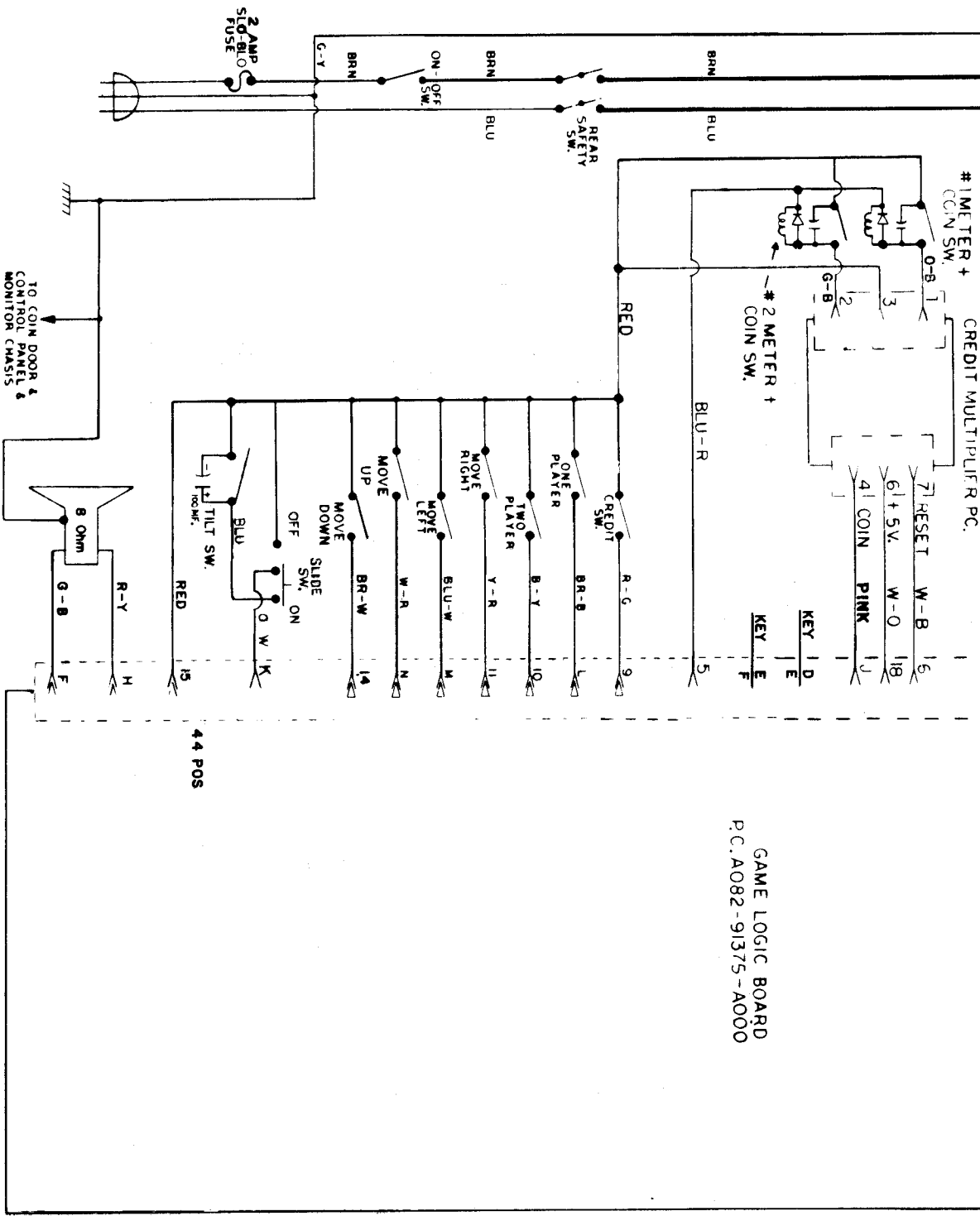
CPU

MS PAG-MAN
 AUX. BD.

#1 METER +
 C.C.N SW.

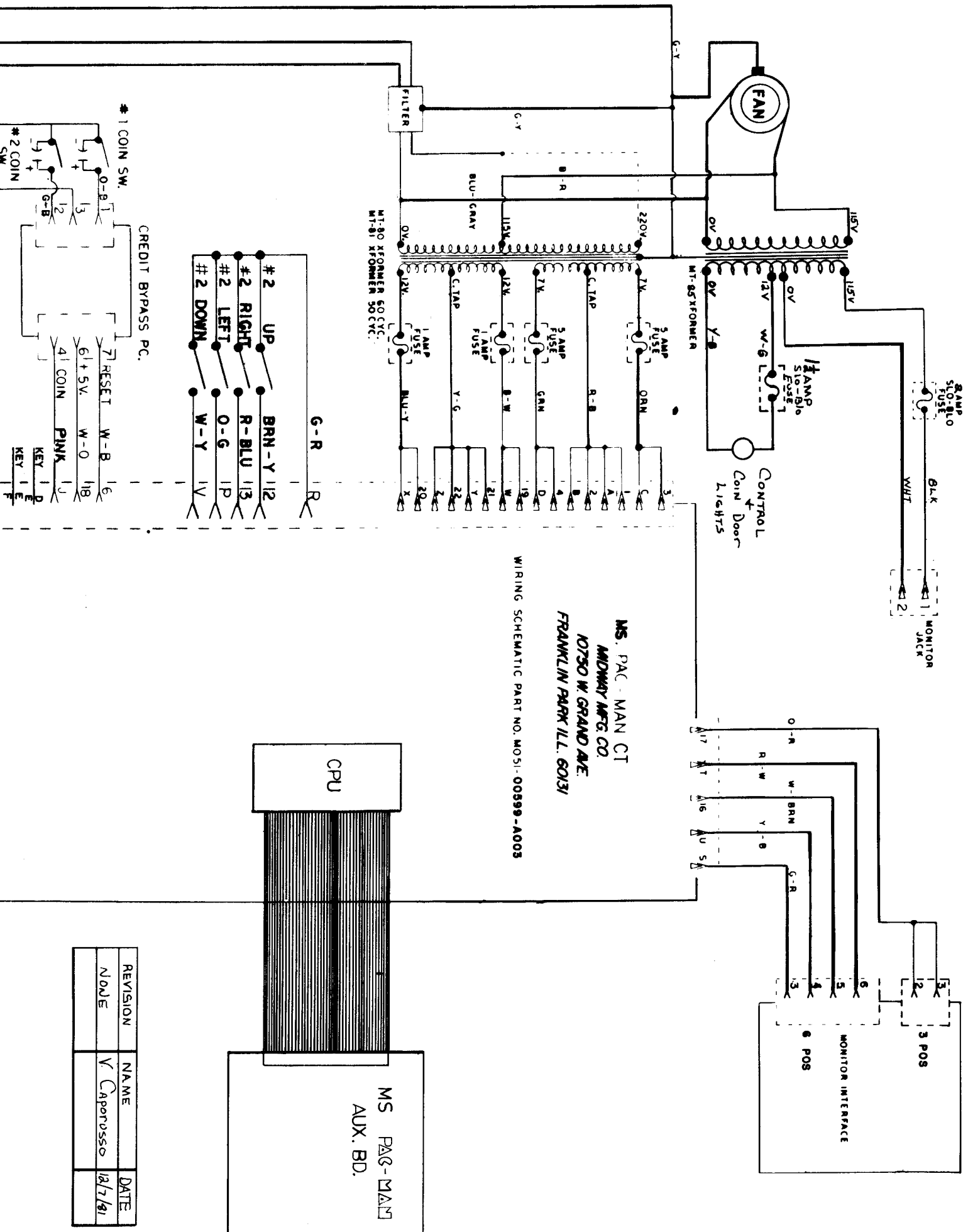
CREDIT MULTIPLIER PC.

REVISION	NAME	DATE
1000	V. Caporosso	12/1/81



GAME LOGIC BOARD
P.C. A082-91375-A000

DATE	V Caporosso	2/1/61
------	-------------	--------



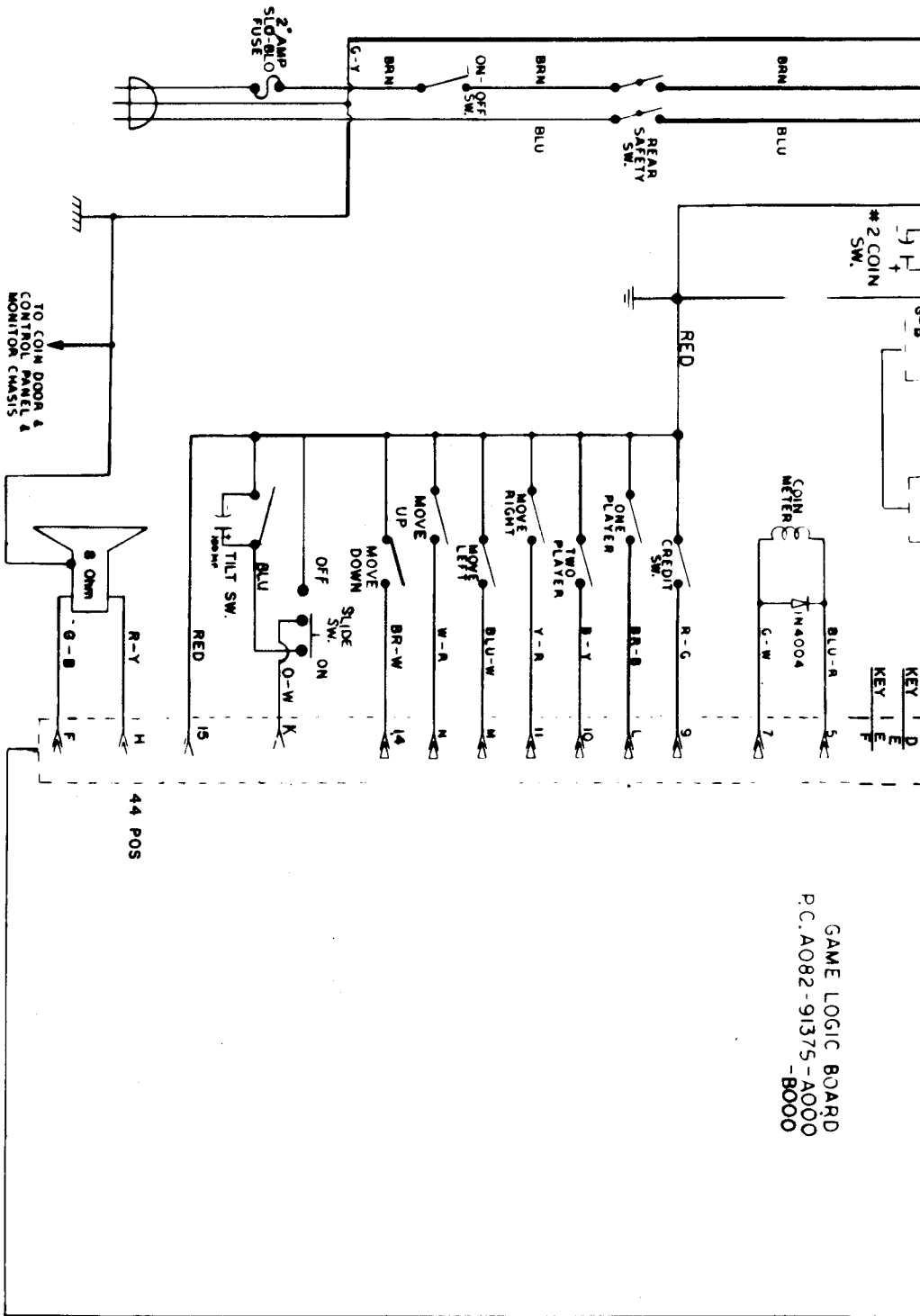
MS. PAC-MAN CT
 MIDWAY MFG CO.
 10750 W. GRAND AVE.
 FRANKLIN PARK ILL. 60131

WIRING SCHEMATIC PART NO. MOSI-00599-A003

MT-80 XFORMER 50 CYC.
 MT-81 XFORMER 50 CYC.

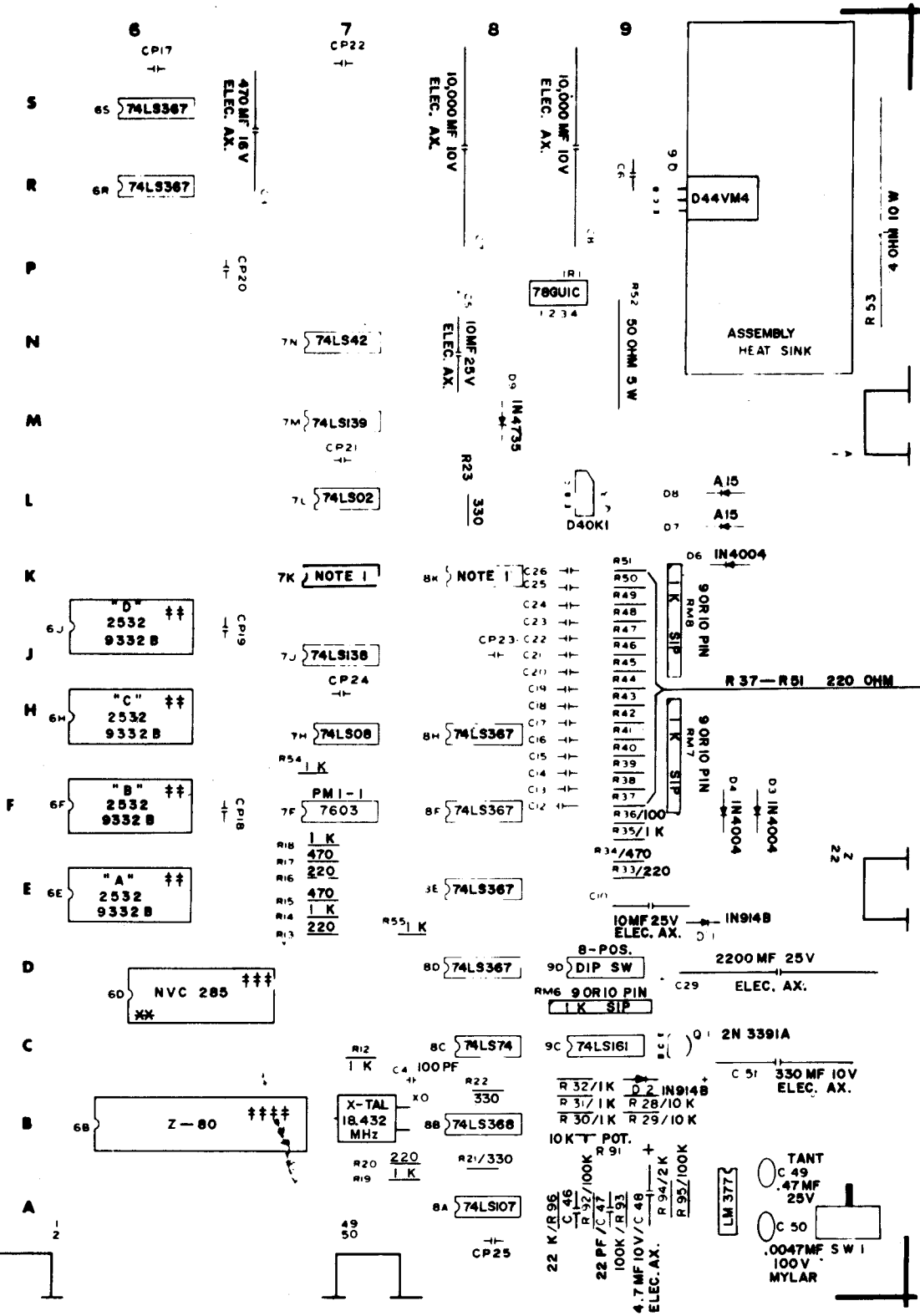
CREDIT BYPASS PC.

REVISION	NAME	DATE
None	V Caporosso	12/7/81



GAME LOGIC BOARD
 P.C. A082-91375-A000
 -B000

44 POS



XX NOTE : THIS LOCATION CAN UTILIZE EITHER
 (A) CUSTOM CHIP NVC285 OR (B) PLUG IN PC A082-91383-B000 Z-80 SYNC BUSS CONTROLLER (285)

XX NOTE : THIS LOCATION CAN UTILIZE EITHER
 (A) CUSTOM CHIP NVC284 OR (B) PLUG IN PC A082-91384-B000 V-RAM ADDRESSER (284)

M051-00932-B026

USED ON PAC-MAN "B"

MIDWAY MFG. CO.
 FRANKLIN PK ILL

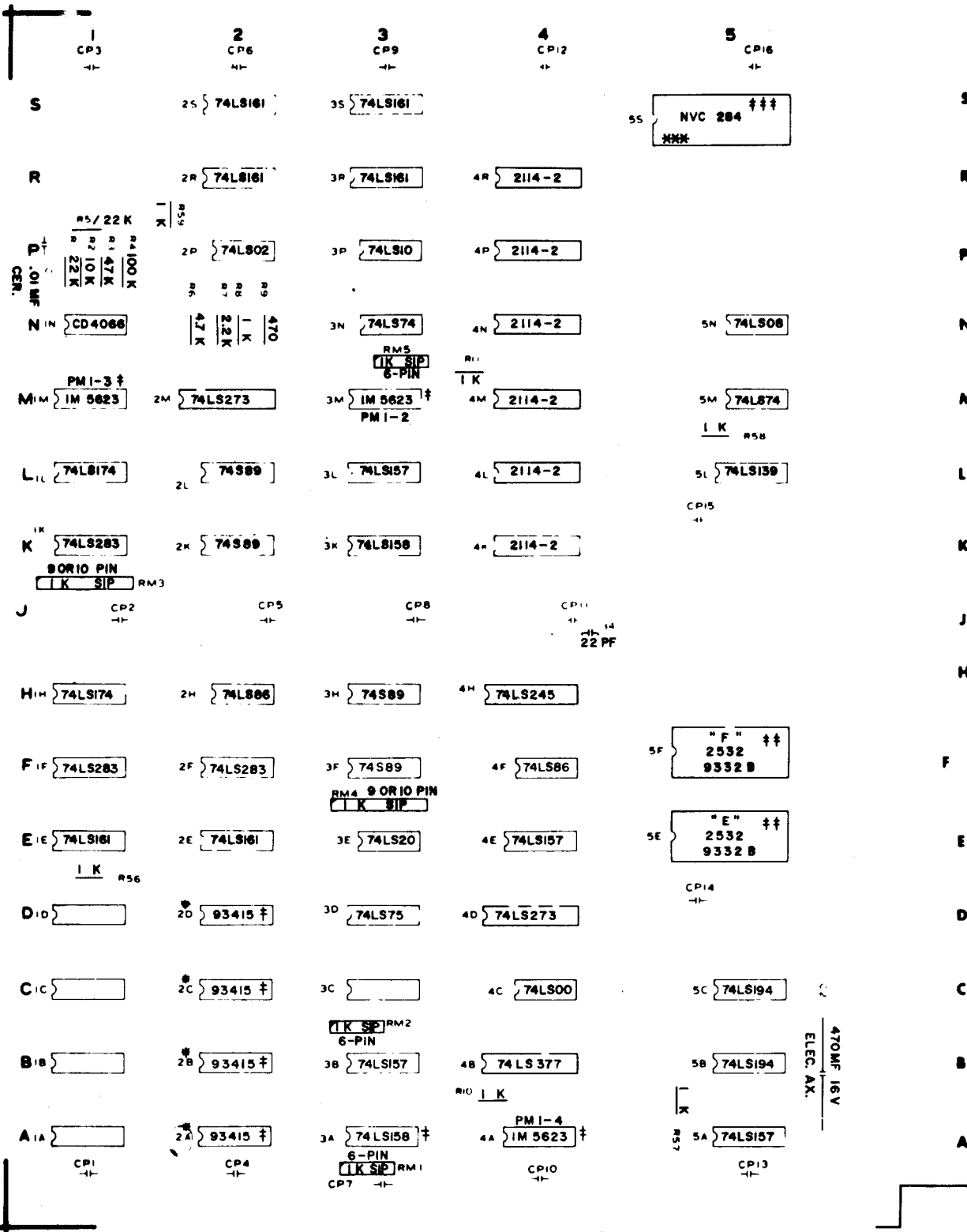
DO NOT SCALE DWG		HEAT TREAT	SCALE
DIM TOLERANCES UNLESS SPECIFIED		MAT'L	NO REQ'D PER
CONCENTRICITY FOR DIA	0.005	FINISH	
AXIAL TYPICAL	0.005		
UNLESS OTHERWISE SPECIFIED	0.005		
MULTI-DIA	+0.02 0.00	DATE	10/9/80

ASSEMBLY DRAWING
 PAC-MAN

REVISIONS

NO.	DESCRIPTION

PART NO.
 A082-91375-B000



* RAM HEAT SINK ASSEMBLY

NOTE 1: PLACE EITHER 74LS259 IN LOC. 8 K
OR CD4099 IN LOC. 7 K

UNMARKED CAPS ARE .1µF CER. AX.

RESISTOR UNIT = Ohm

† - 16 PIN SOCKET (9 PER)

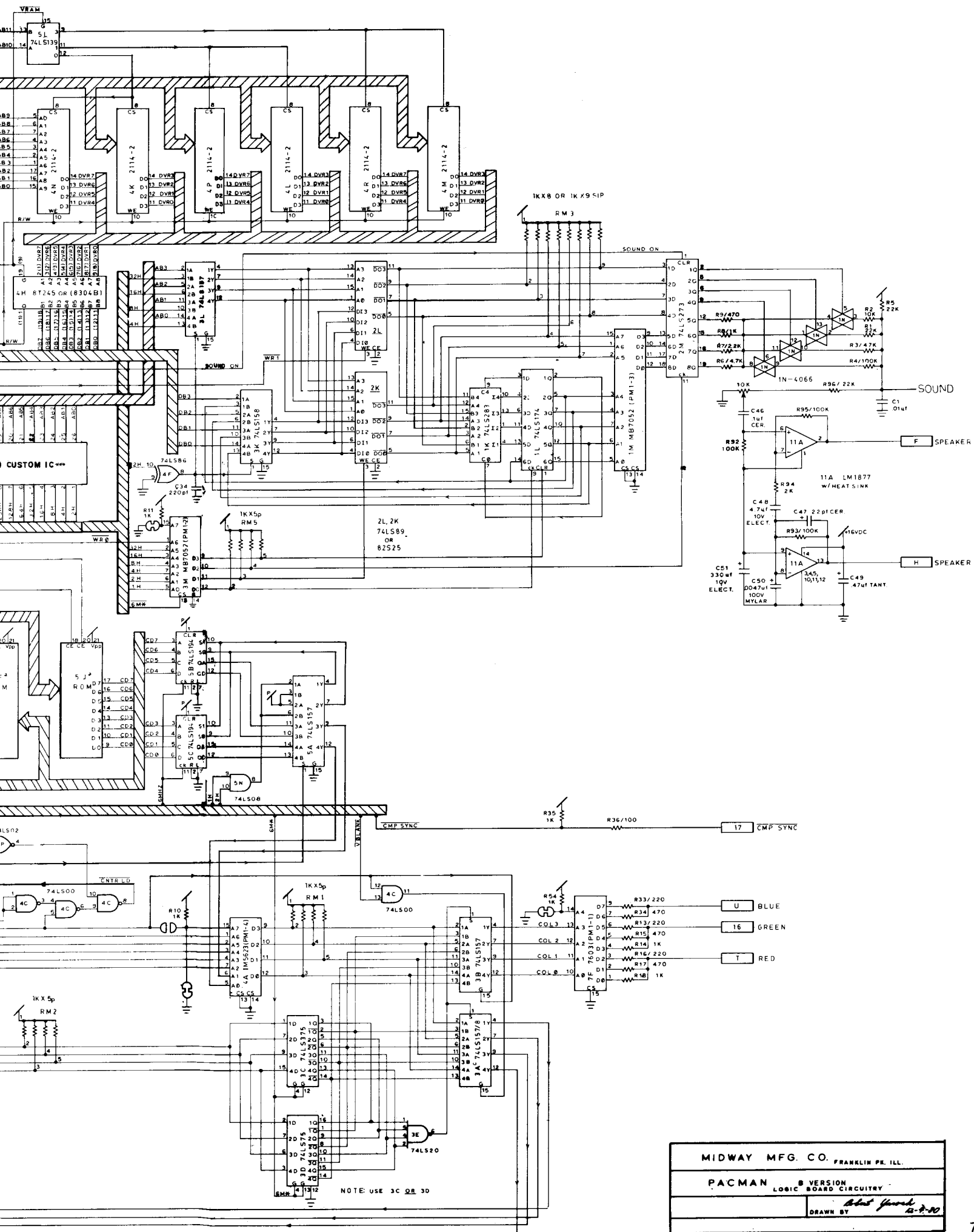
‡ - 24 PIN SOCKET (6 PER)

‡‡ - 28 PIN SOCKET (2 PER)

‡‡‡ - 40 PIN SOCKET (1 PER)

XX NOTE :

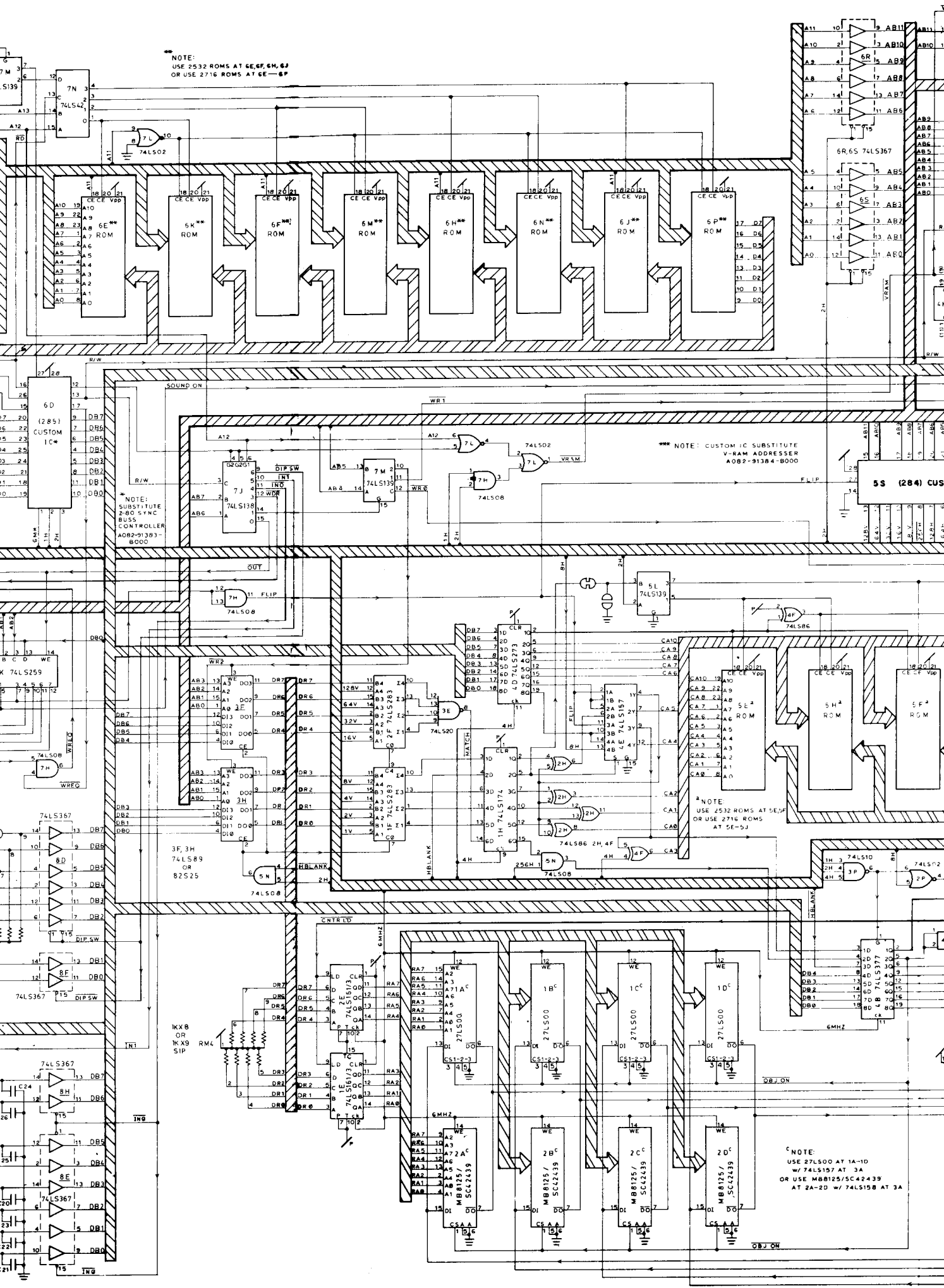
XXX NOTE :



NOTE: USE 3C OR 3D

MIDWAY MFG. CO. FRANKLIN PK. ILL.	
PACMAN B VERSION LOGIC BOARD CIRCUITRY	
DRAWN BY <i>Blair Ford</i> 12-9-80	

NOTE:
 USE 2532 ROMS AT 6E, 6F, 6H, 6J
 OR USE 2716 ROMS AT 6E—6F

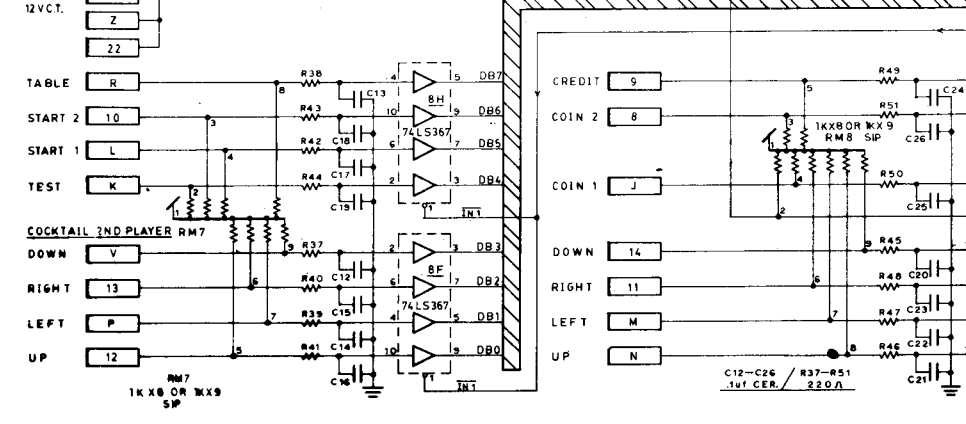
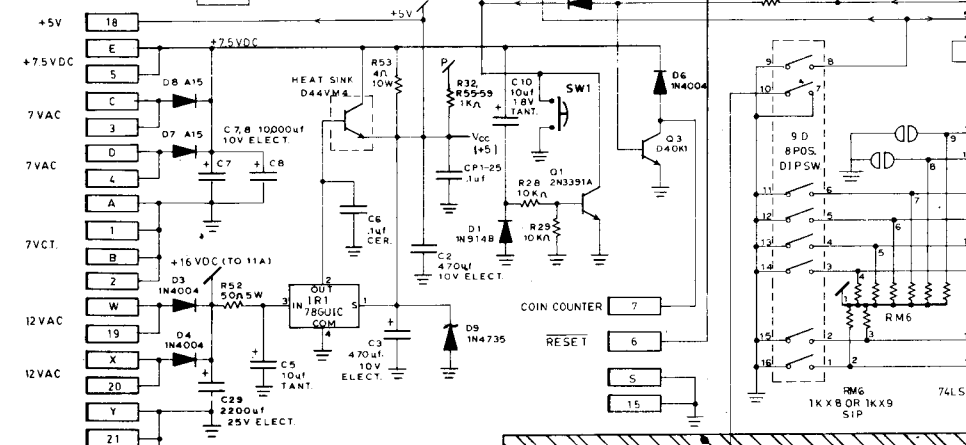
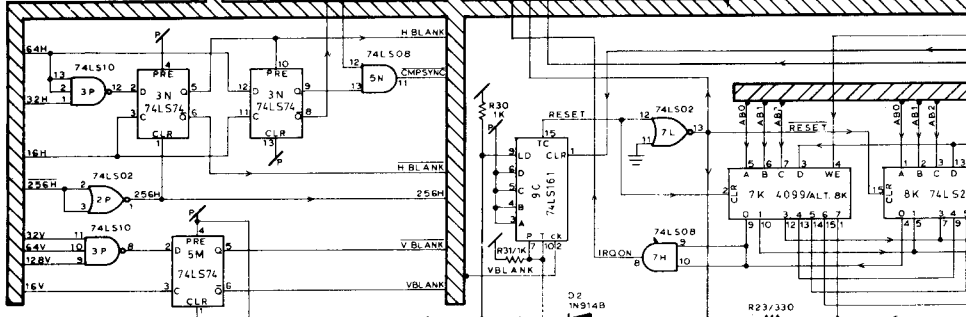
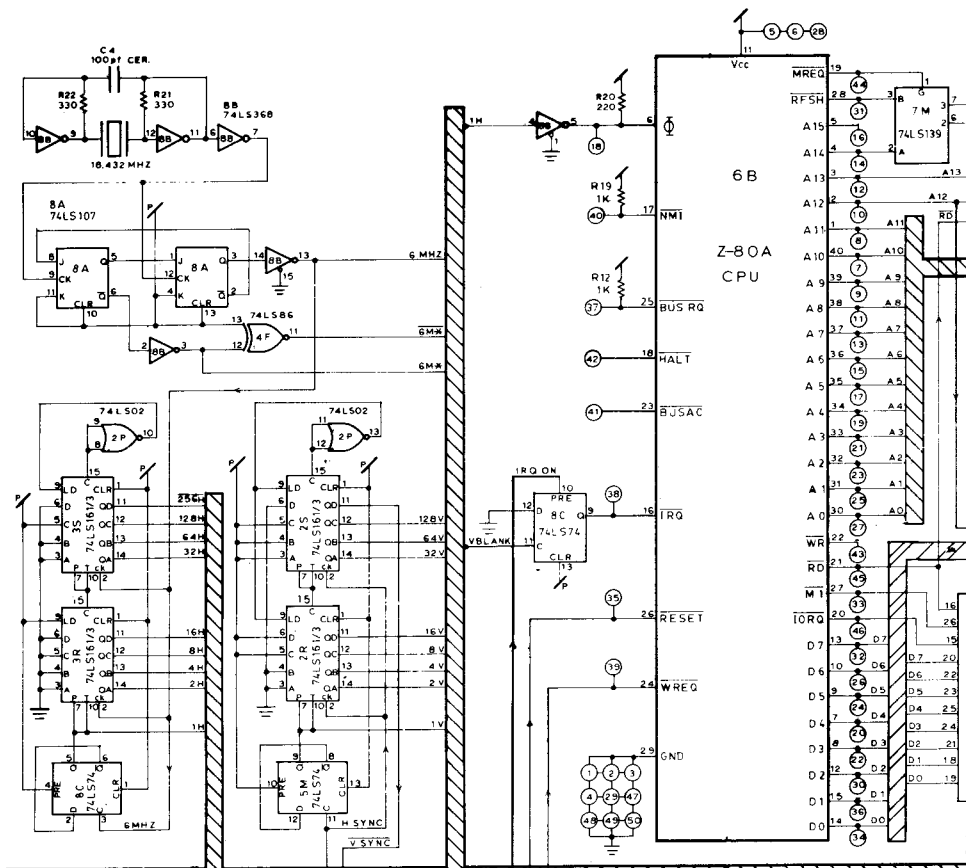


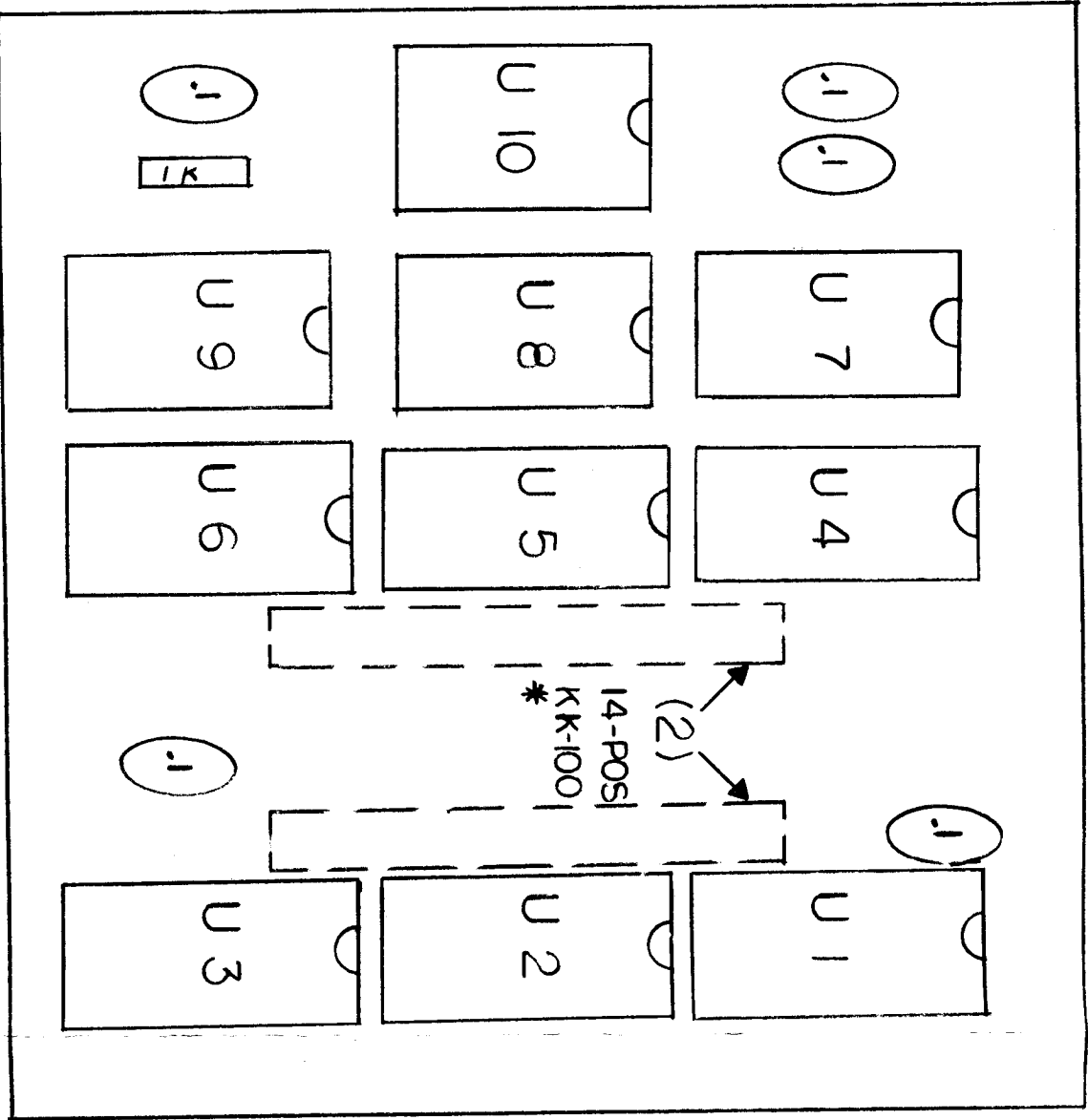
NOTE:
 SUBSTITUTE
 2-80 SYNC
 BUSS
 CONTROLLER
 A082-91383-
 B000

NOTE: CUSTOM IC SUBSTITUTE
 V-RAM ADDRESSER
 A082-91384-B000

NOTE
 USE 2532 ROMS AT 5E, 5F
 OR USE 2716 ROMS
 AT 5E-5J

NOTE:
 USE 27LS00 AT 1A-1D
 W/ 74LS157 AT 3A
 OR USE MB8125/SC42439
 AT 2A-2D W/ 74LS158 AT 3A





- U1, U2, U3, -74LS257
- U4, U5, U6, -74LS157
- U7, U8, U9, -74LS86
- U10 -74LS02
- .1 MF 50V - (5)
- AX CER
- 1K 1/4w - (1)
- (2) - 14-POS. KK-100
- * MOUNTED ON SOLDER SIDE

MOSI-00932-B034

DO NOT SCALE DWG.

DRN. MM	DATE 10-27-80
CONCENTRICITY T.I.R. .003	
FRACTIONAL.....1/164	
DECIMAL.....1.005	
HOLE DIA.....+.002-.000	

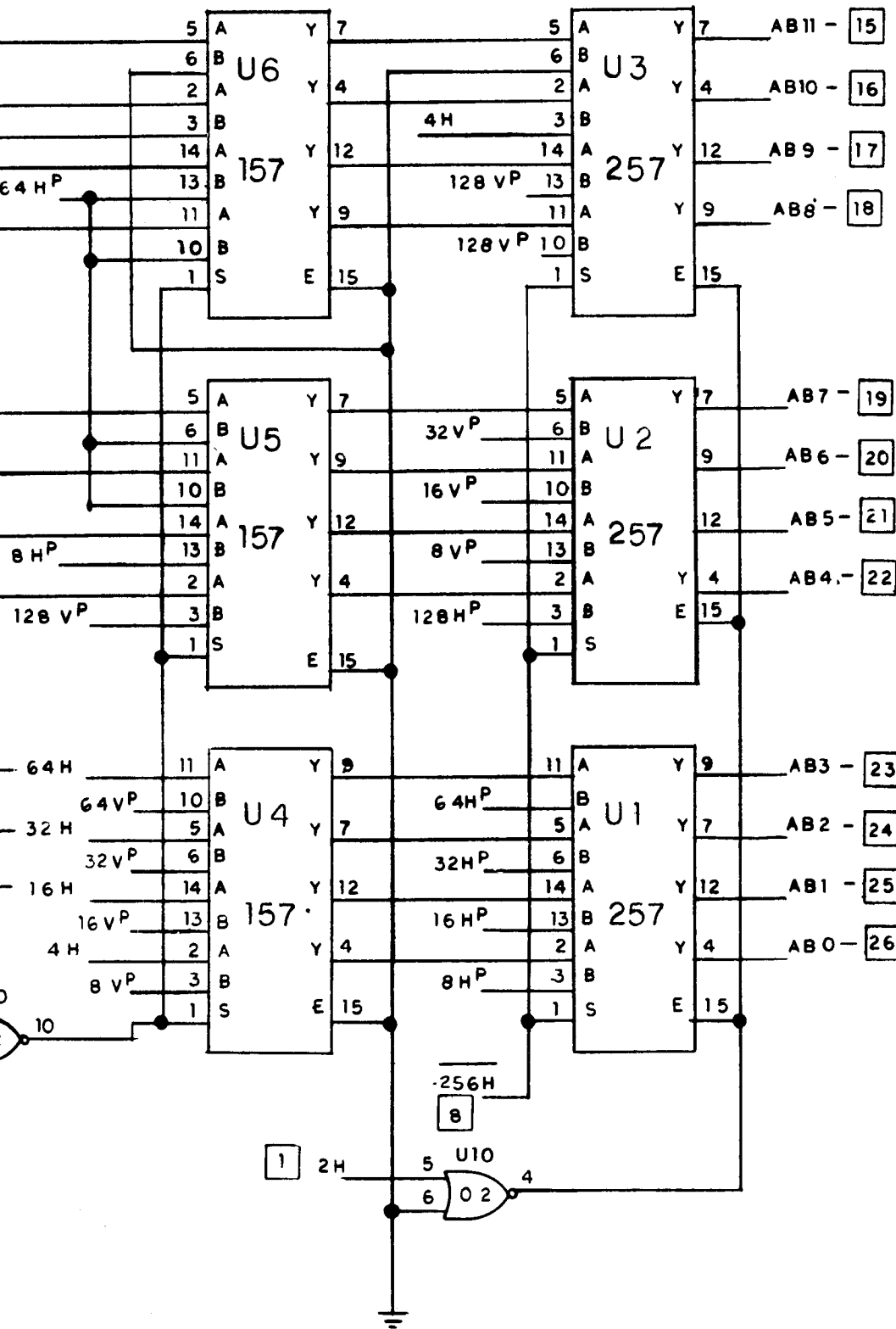
HEAT TREAT	MAT'L.
	FINISH

SCALE	USED ON PAC-MAN
V-RAM ADDRESSER (284)	NO. REQ'D I-PER.
COMPONENT - LAY-OUT	

MIDWAY MFG. CO.
FRANKLIN PK. ILL.

PART NO.	A082-91384-B000
----------	-----------------

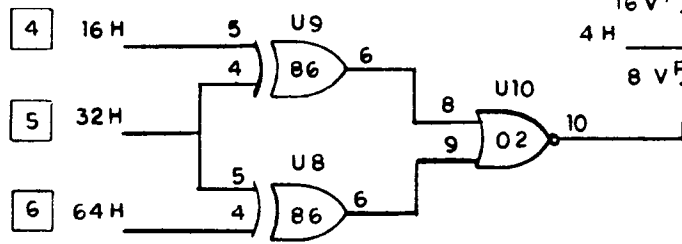
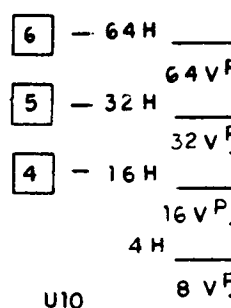
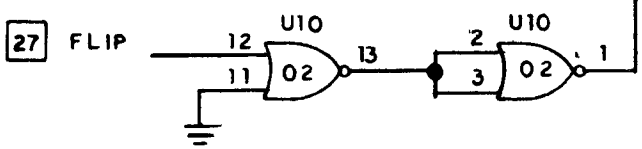
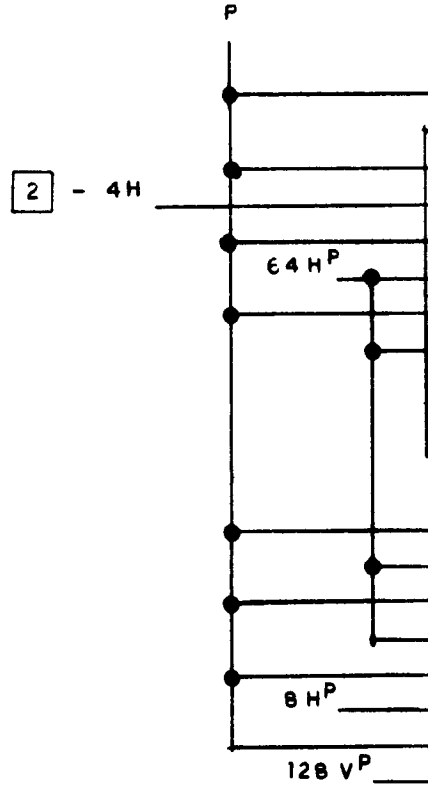
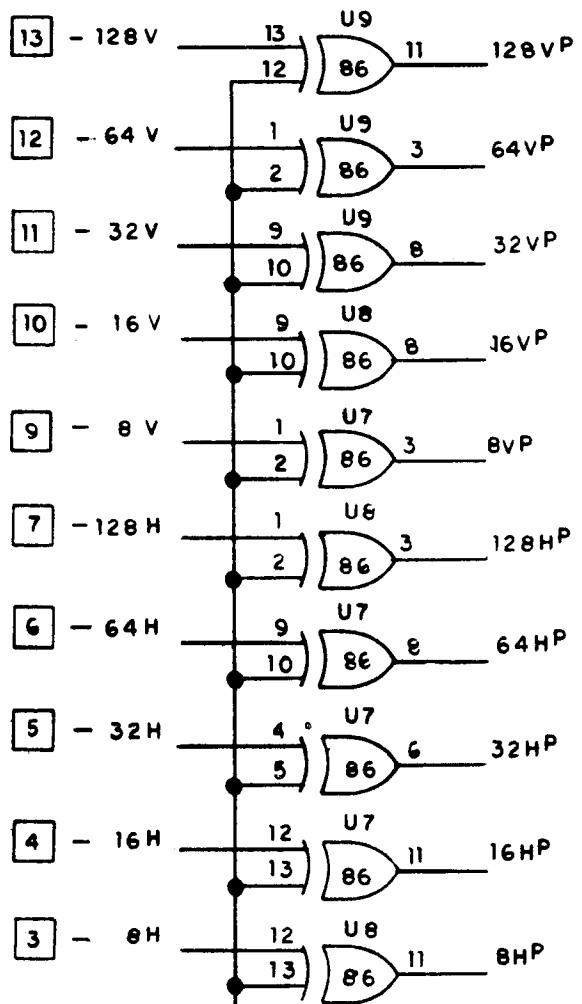
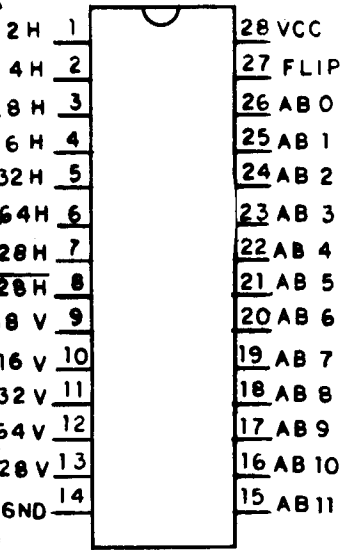
REVISIONS	

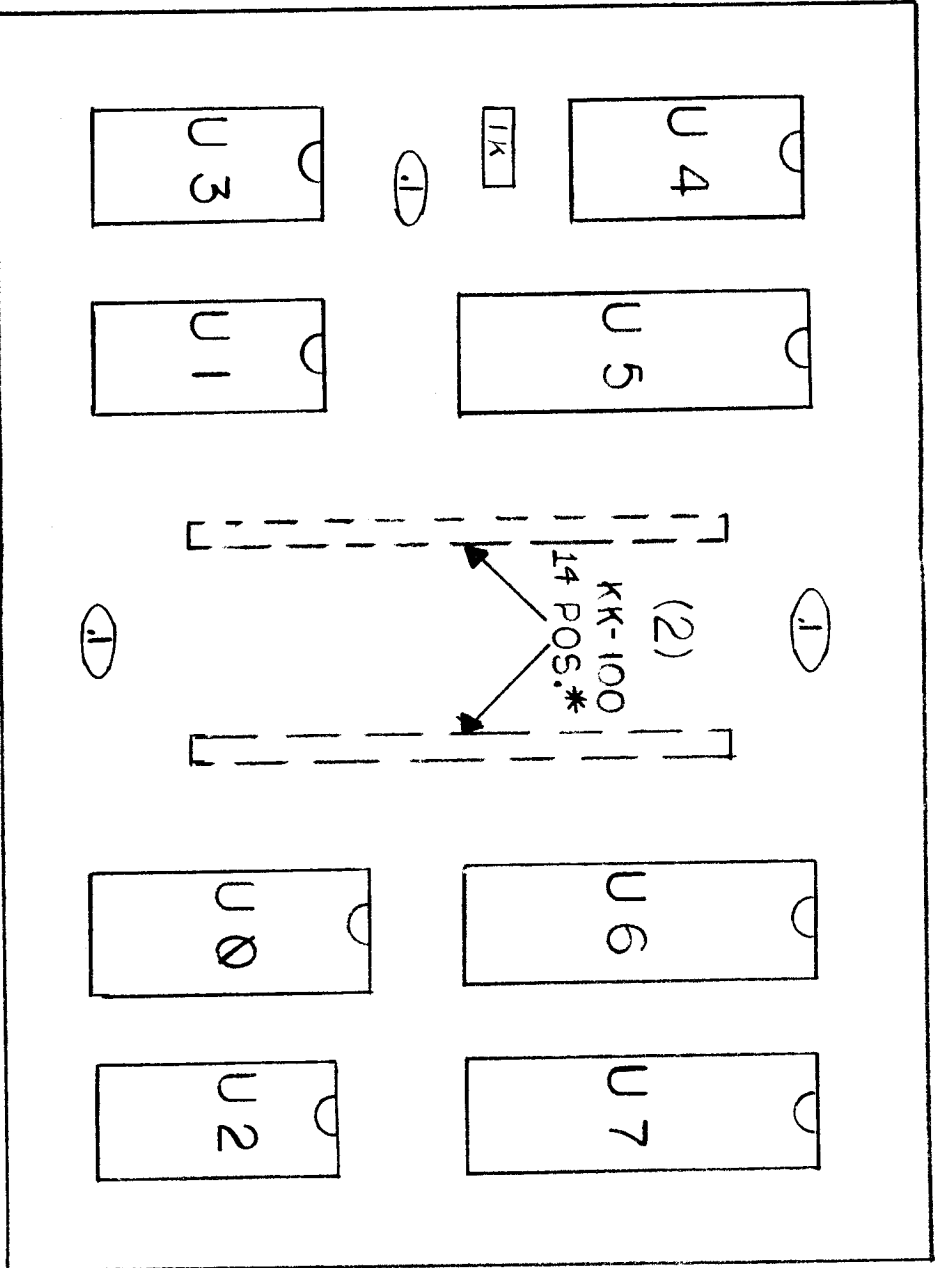


= 28 PIN CONNECTOR
 P = PULL UP

MIDWAY MFG. CO FRANKLIN PARK ILL	
DRN M.M	CKD
DATE NOV 25 80	NO. REQ'D 1
USED ON PAC-MAN	
DESC. V RAM ADDRESSER (NVC-284)	
PART NO. A082-91384-B000	

SCHEMATIC PART NO. M051 00932 B032



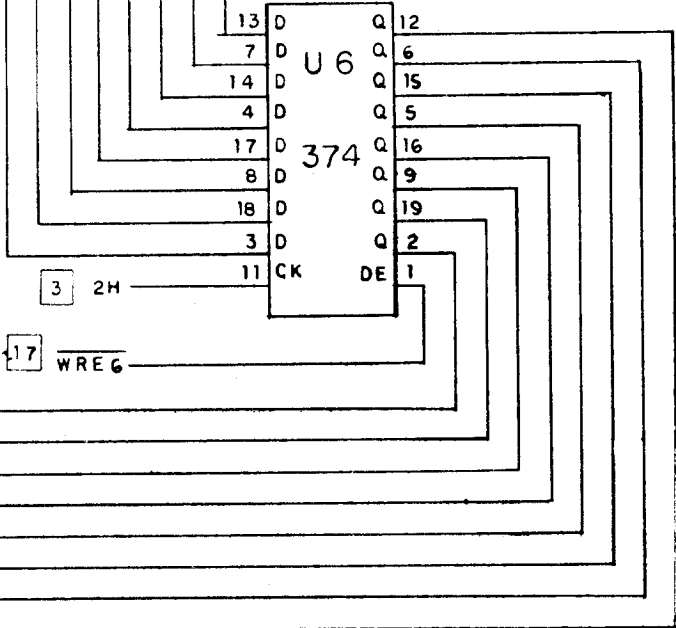
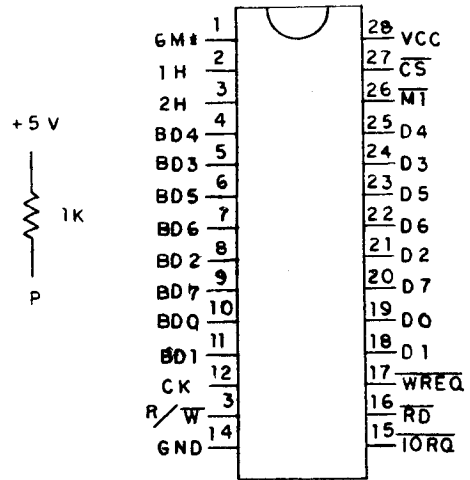
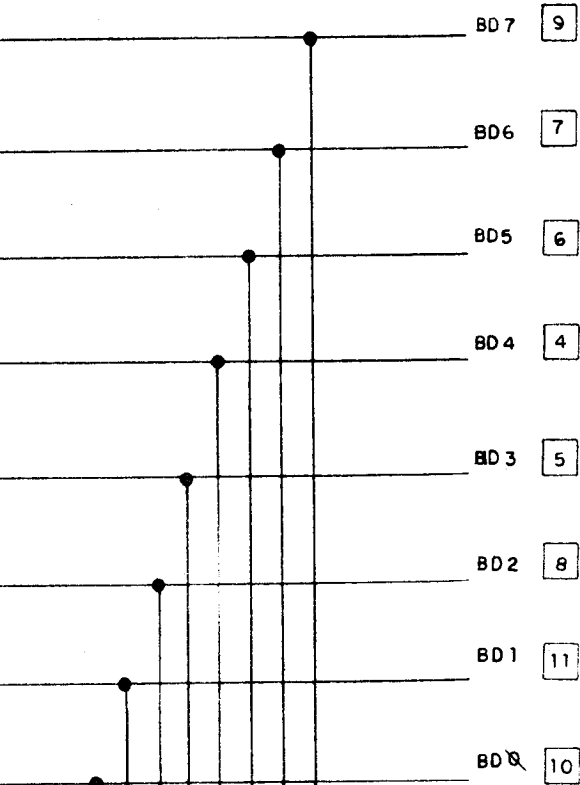
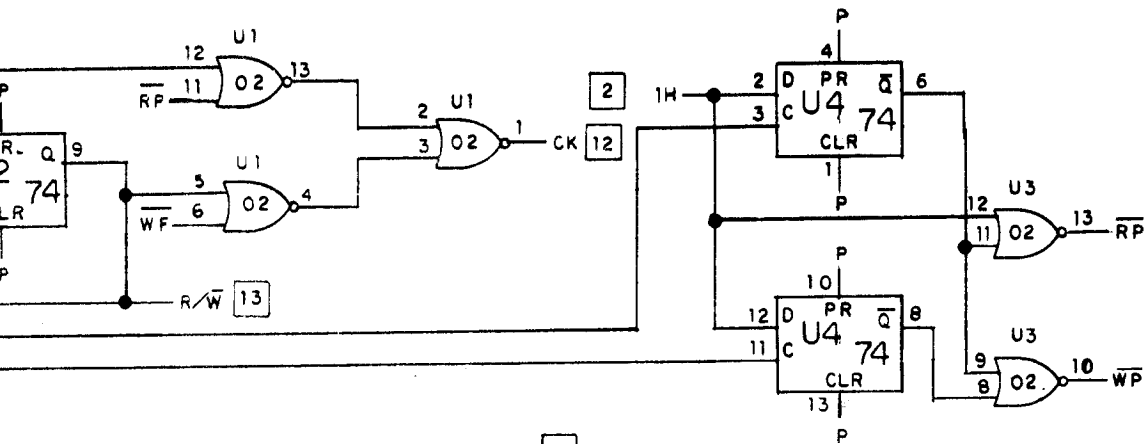


- U0-74LS139
- U1-74LS02
- U2-74LS74
- U3-74LS02
- U4-74LS74
- U5-74LS244
- U6-74LS374
- U7-74LS374
- (3)-.1MF 50V AX. CER.
- (1)-1K $\frac{1}{4}$ W RESIS.
- * MOUNTED ON SOLDER SIDE

M051-00932-B031

REVISIONS	

DO NOT SCALE DWG.		HEAT TREAT		SCALE		USED ON PAC-MAN		MIDWAY MFG. CO.	
DIM. TOLERANCES UNLESS SPECIFIED		MAT'L.		NO. REQ'D 1-PER		FRANKLIN PK. ILL.			
CONCENTRICITY T.I.R. .003		DRN. M.M.		Z-80 SYNC BUSS CONTROLLER(285)		PART NO.			
FRACTIONAL..... ± 1/64		CKD. P.S.		COMPONENT LAYOUT		AOE 2-91383-8000			
DECIMAL..... ± .005		DATE 10-23-80							
HOLE DIA..... ± .002-.000									



NOTES:

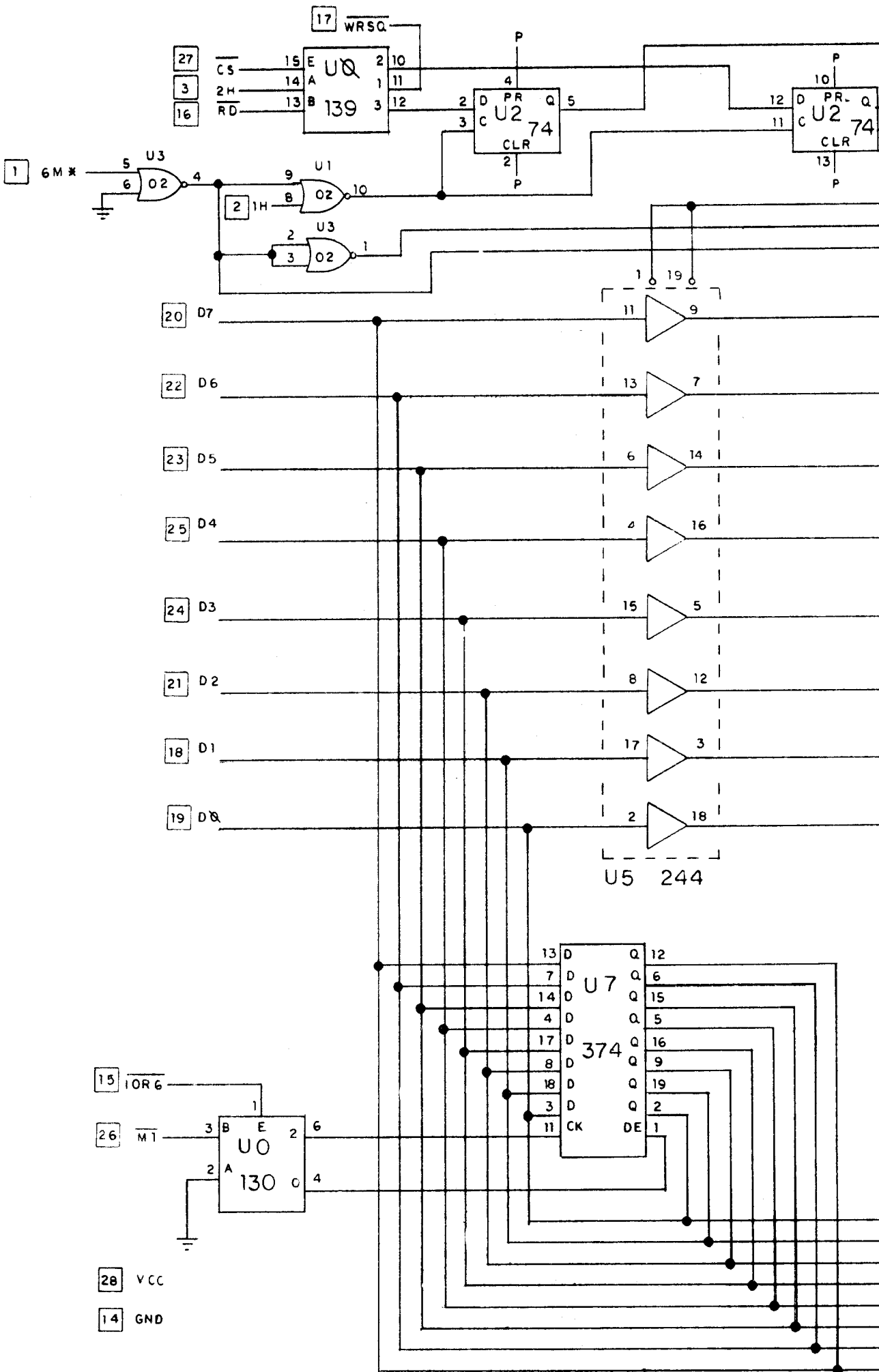
= 28 PIN CONNECTOR

P = PULL UP

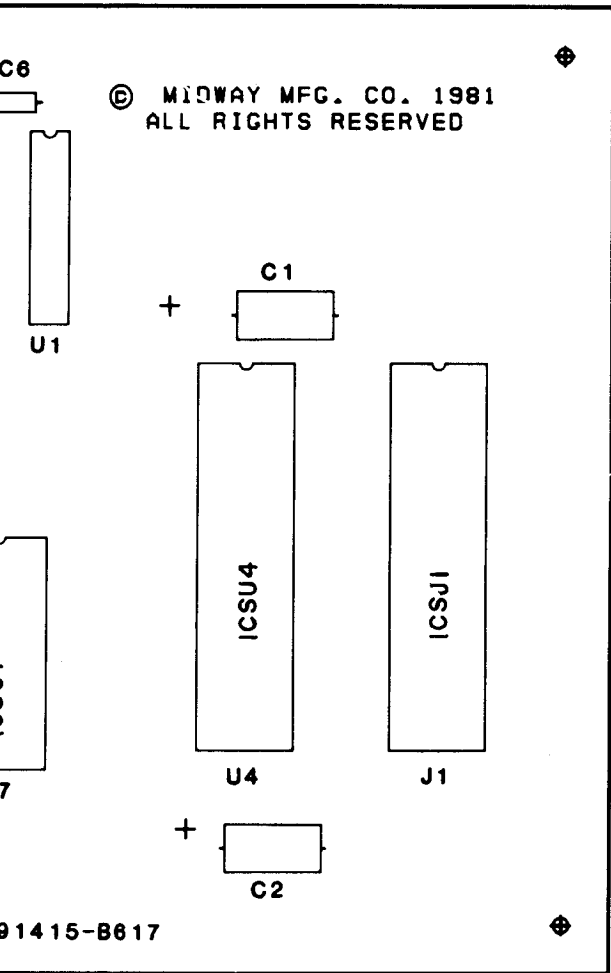
MIDWAY MFG, CO.
FRANKLIN PARK ILL

DRN. M.M	CKD.
DATE. NOV-21-80	NO. REQ'D 1
USED ON.	
DESC. Z 80 SYNC BUS CONTROLLER (285)	
PART NO. A082-91383-B000	

SCHEMATIC PART NO. M051-00932-B030



CROSS REFERENCE LIST



DESCRIPTION	QUAN.	DESIGNATION	PART NO.
.1MF AX. CER. CAP	4	C3-C6	0508-00800-0900
10MF AX. ELEC.	2	C1, C2	0508-00800-1100
CG820	1	U0	0066-014CX-XXQX
CG821	1	U1	0066-015CX-XXQX
CG822	1	U2	0066-016CX-XXQX
CG823	1	U3	0066-017CX-XXQX
Z-80A	1	U4	0932-00807-0000
EPROM 2532	1	U6	0595-00803-0200
" "	1	U7	0595-00803-0300
" 2716	1	U5	0595-00803-0100
20 PIN IC SOCKET	4	ICSU0-ICSU3	0508-00804-0100
24 PIN " "	3	ICSU5-ICSU7	0508-00804-0500
40 PIN " "	2	ICSU4, ICSJ1	0508-00804-1800
CABLE ASS'Y 40-PIN	1	J1	0595-00804-0200
MS. PAC-MAN AUX. P.C. BOARD	1		A080-91415-B617

ALL RIGHTS RESERVED & PROPERTY OF MIDWAY MFG. CO.

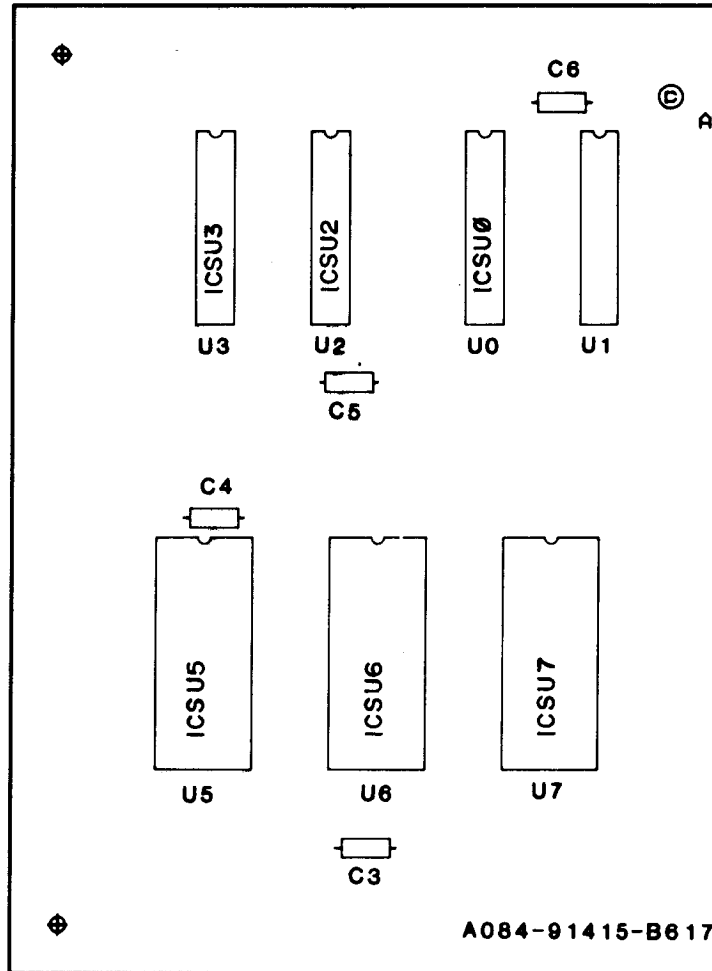
MIDWAY MFG. CO.
 BANGOR, ILL. 60131 A BALLY CO.

ASSEMBLY DRAWING
 PAC-MAN AUX P.C.
 91415-8617

REVISIONS	
PART NO.	MO51-00617-B001


DESIGNATION LIST

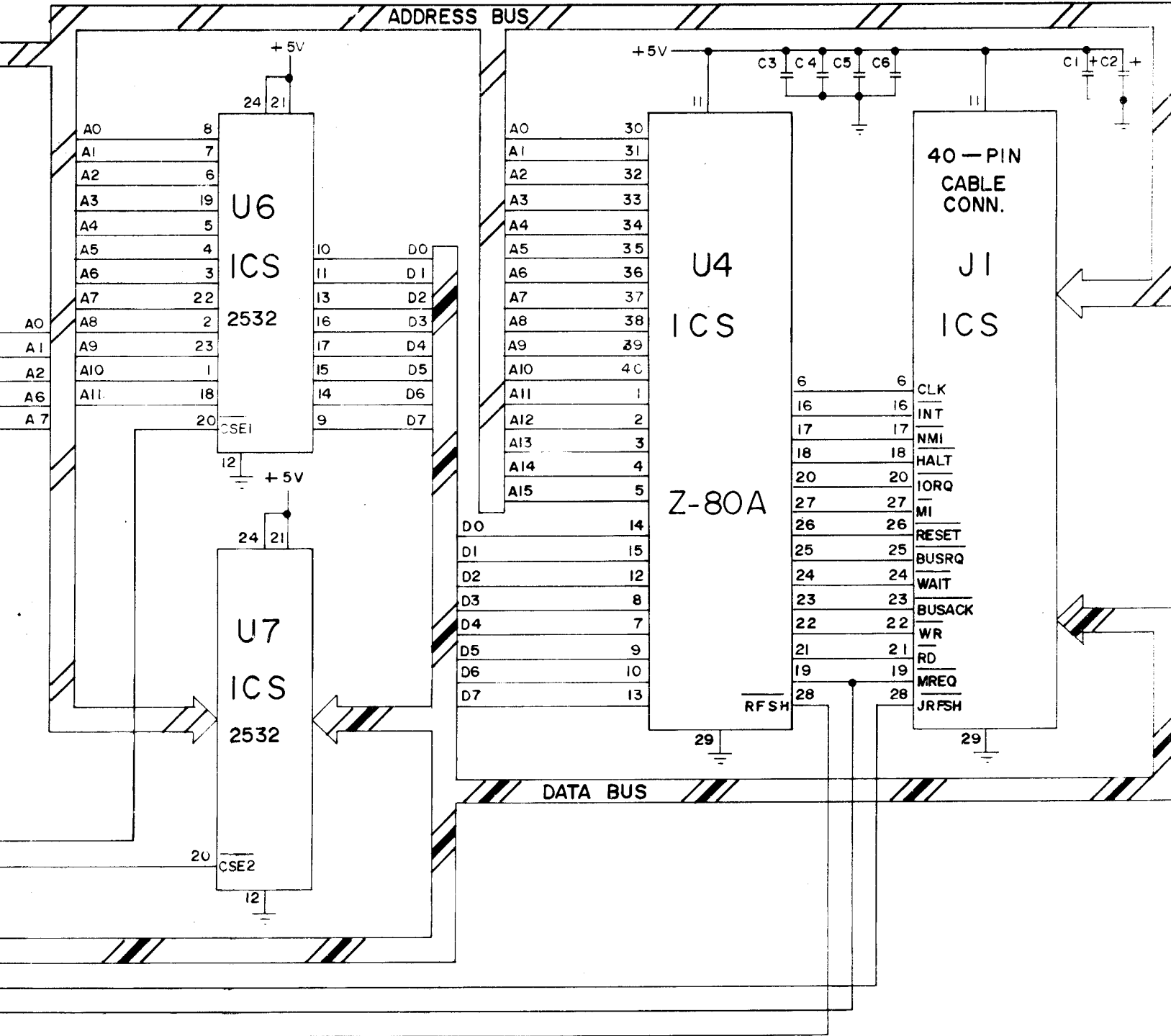
<u>DESIGNATION</u>	<u>DESCRIPTION</u>
C1,C2	10MF ELEC. CAP.
C3-C6	.1MF CER.CAP
ICU0	CG820
" U1	CG821
" U2	CG822
" U3	CG823
" U4	Z-80A
" U5	EPROM 2716
" U6,U7	EPROM 2532
ICSU0-ICSU3	20 PIN IC SOCKET
" U4	40 PIN " "
" U5-ICSU7	24 PIN " "
" J1	40PIN " "
J1	CABLE ASS'Y. 40-PIN
PCB	MS.PAC-MAN AUX. P.C. BOARD



PROJECT ENG : J. SZERSZEN

THIS DWG IS CONFIDENTIAL & PROPERTY

<p>DIM. TOLERANCES UNLESS OTHERWISE SPEC CONCENTRICITY T. R. .002 FRACTIONAL ± 1/64 DECIMAL ± .005 HOLE DIA + .002-- .000 ANGLE ± 1/2° DO NOT SCALE DWG</p>	<p>FIRST USED ON: MS. PAC-MAN</p>			 <p>MIDWAY FRANKLIN PK., IL.</p>
	<p>DATE <i>M. M.</i></p>	<p>DATE 12/29/81</p>	<p>SCALE FULL</p>	
	<p>MECH CHK</p>	<p>DATE</p>		
	<p>ELEC CHK</p>	<p>FINISH</p>		
<p>ASSEMBLY DRAWING MS. PAC-MAN AUX P A084 - 91415- B617</p>				



NOTE:

C1, C2 - 10 MF ELEC. CAP
 C3-C6 - 1MF CER CAP

ZERSZEN

THIS DRAWING IS THE PROPERTY OF MIDWAY MFG CO

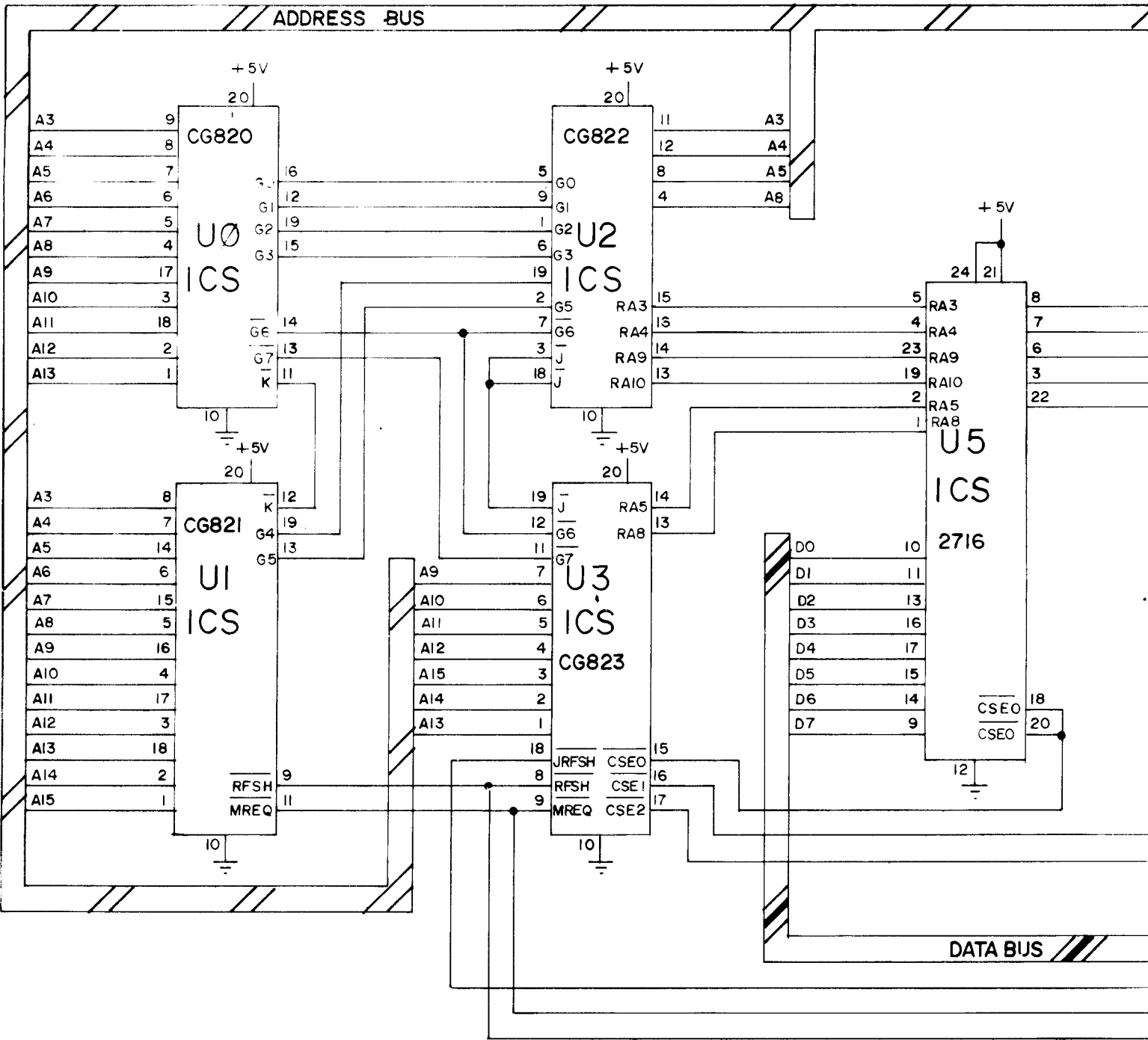
MS. PAC-MAN



MS. PAC-MAN P.C.
 A084-91415-8617
 SCHEMATIC

REVISIONS

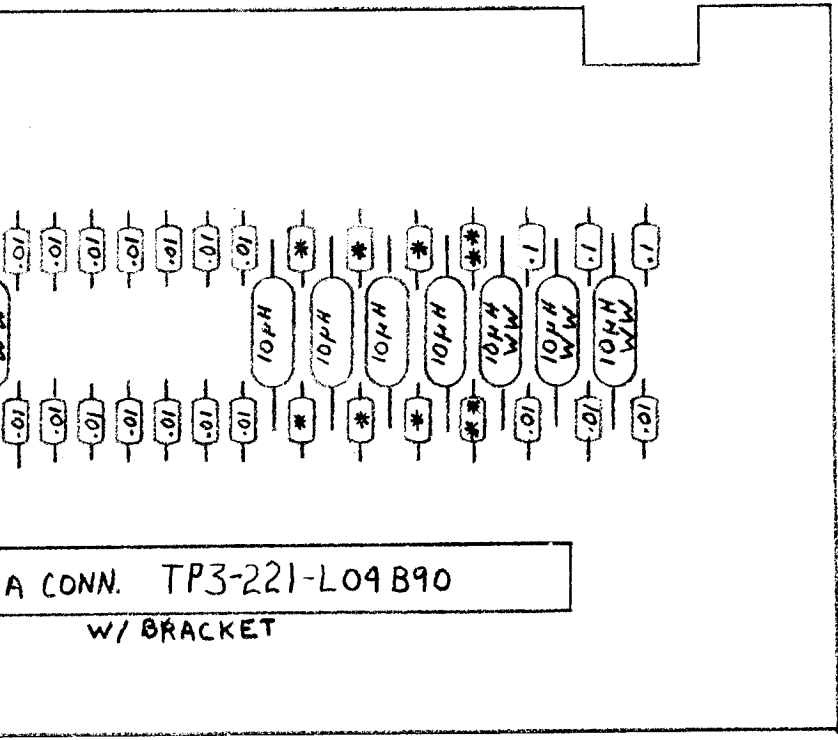
M051 00617 B002



PROJECT ENG: J. SZEP

DIM TOLERANCES
UNLESS OTHERWISE SPEC
CONCENTRICITY
FRACTIONAL
E-M
HOLE DIA
ANNU
DO NOT SCALE DWG

77

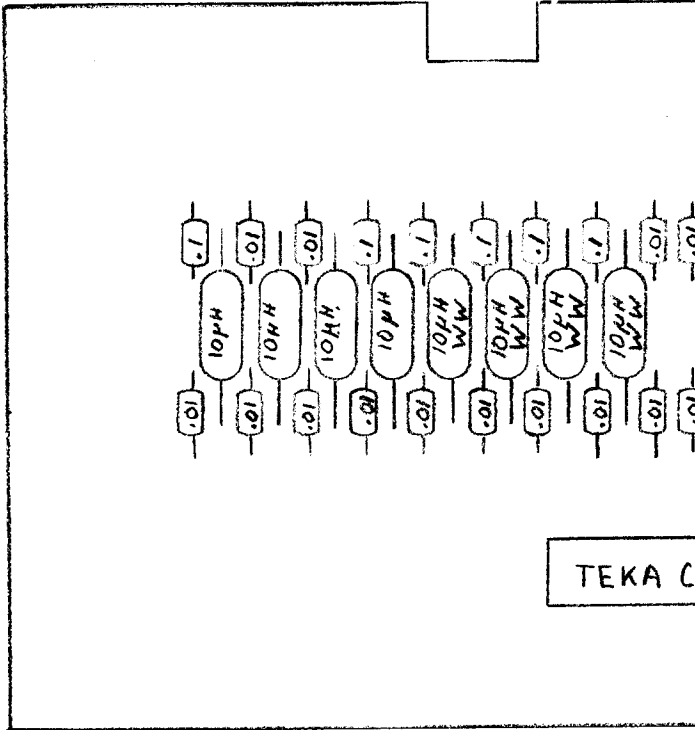


* 100 Pf
 ** 470 Pf

A CONN. TP3-221-L04B90
 W/ BRACKET

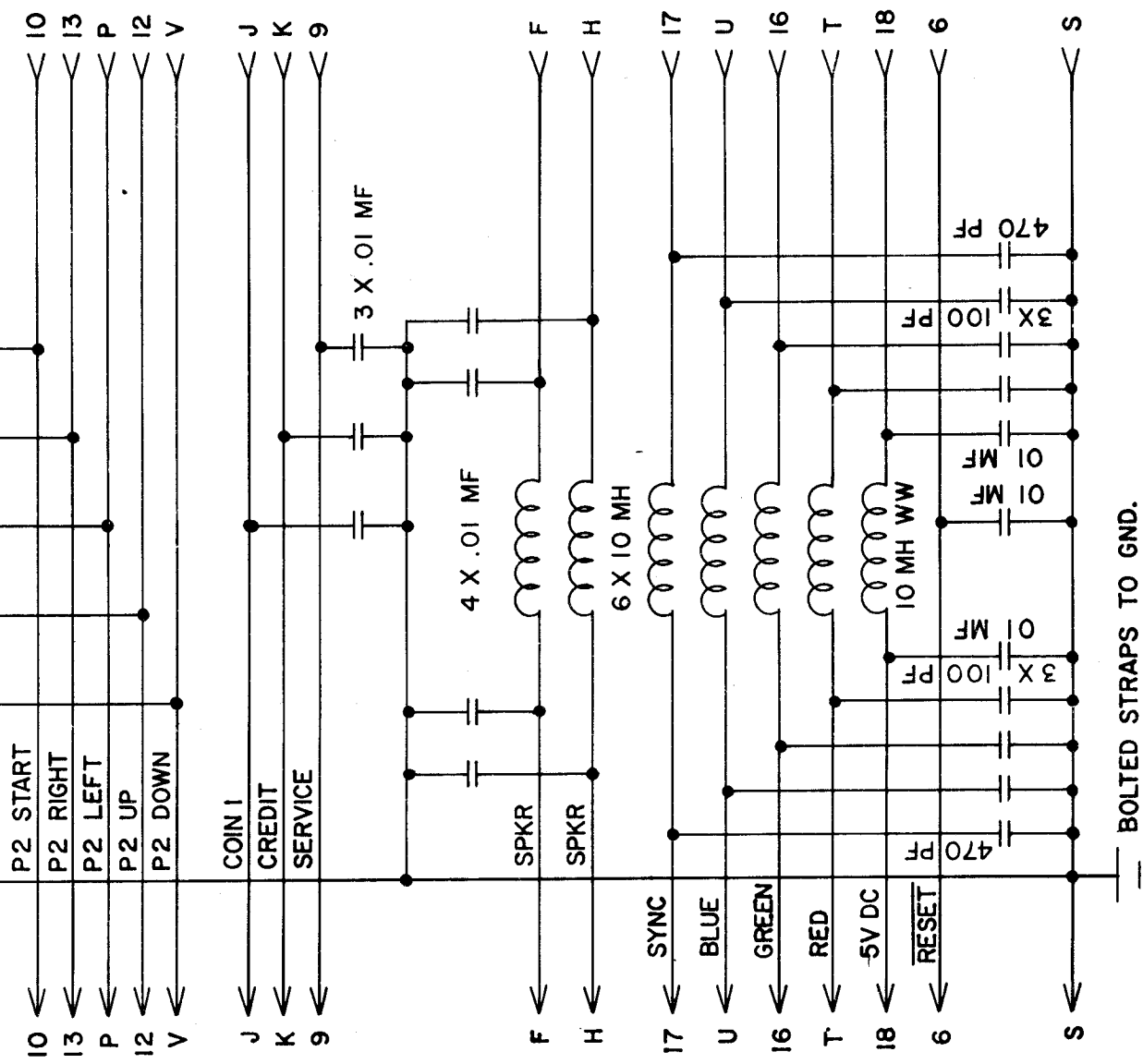
REVISIONS		

	HEAT TREAT	SCALE	USED ON	MIDWAY MFG. CO. FRANKLIN PK. ILL.
		FULL	PAC-MAN	
	MAT'L.		NO. REQ'D	
	FINISH	ASSMB. DRWG	1 PER	
2-11-81		PAC-MAN FILTER P.C		PART NO. A082-91389-0000

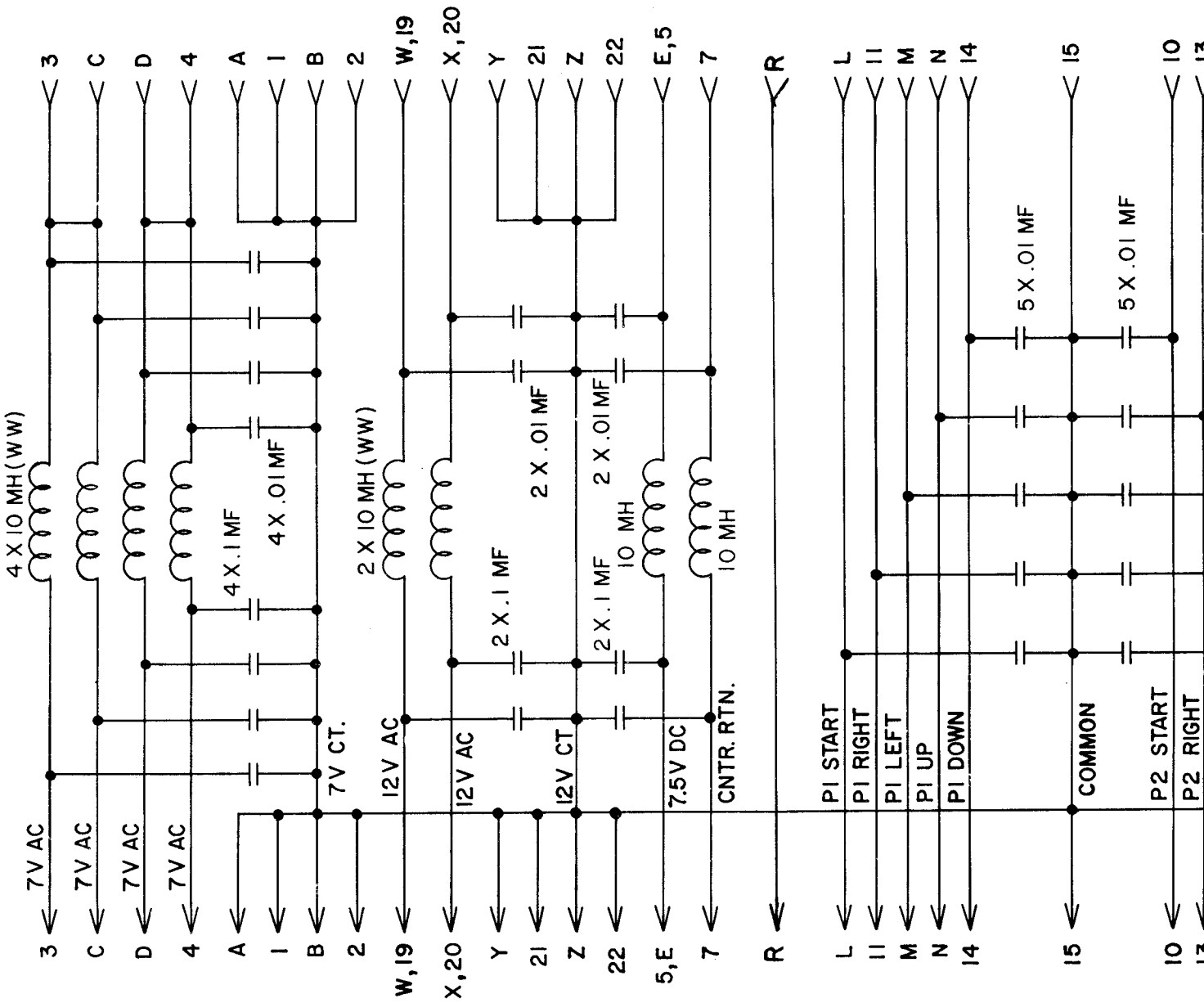


M051-00932-D037

DO NOT SCALE DWG.	
DIM. TOLERANCES UNLESS SPECIFIED	DRN. TJK
CONCENTRICITY T.I.R. .003	CKD.
FRACTIONAL..... ± 1/64	DATE 02-11
DECIMAL..... ± .005	
HOLE DIA..... +.002-.000	

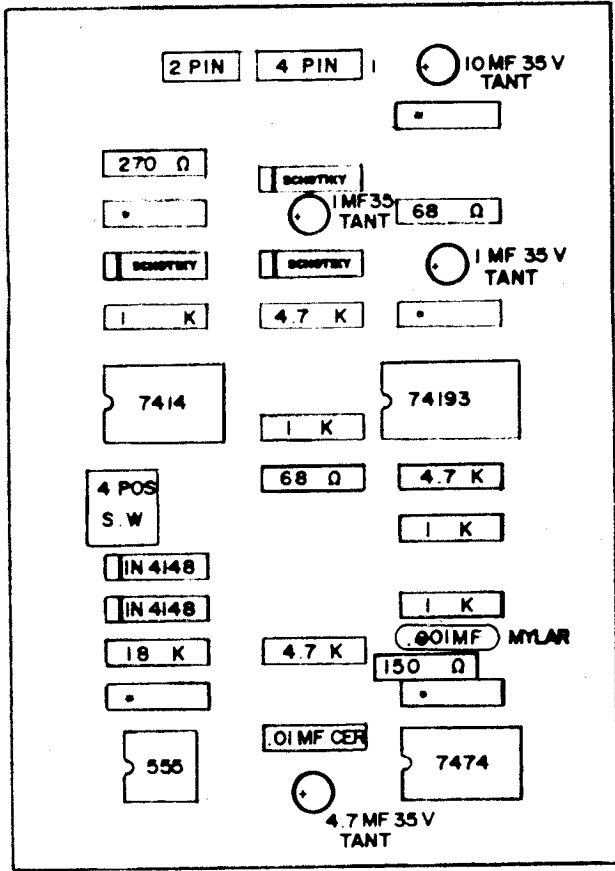


HEAT TREAT		SCALE		USED ON	PAC-MAN	MIDWAY MFG. CO.	
MATERIAL				NO REQ'D	1 PER		
FINISH		SCHEMATIC DIAGRAM				PART NO	
		PAC-MAN FILTER P.C.				A082-91389-0000	
REVISIONS							



M051-00932-D038

DO NOT SCALE DWG	
DIM TOLERANCES UNLESS SPECIFIED	DWN <i>CV</i>
CONCENTRICITY ± 0.04	CHKD
FRACTIONAL ± 0.04	DATE 02-11-81
DECIMAL ± 0.05	
HOLE DIA ± 0.02 ± 0.05	



1 MF 50 V CER. AX.

SCHOTTKY DIODE - IN5818 OR IN5817

M051-00932-A027

USED ON PAC-MAN

NO REQ'D

SCALE

HEAT TREAT

MAT'L

FINISH

ASSEMBLY DRAWING
CREDIT MULTIPLIER P.C

MIDWAY MFG. CO.

FRANKLIN PK ILL

PART NO.

A082-91348-C000

REVISIONS

DO NOT SCALE DWG

DIM TOLERANCES UNLESS SPECIFIED

CONCENTRICITY TYP 003

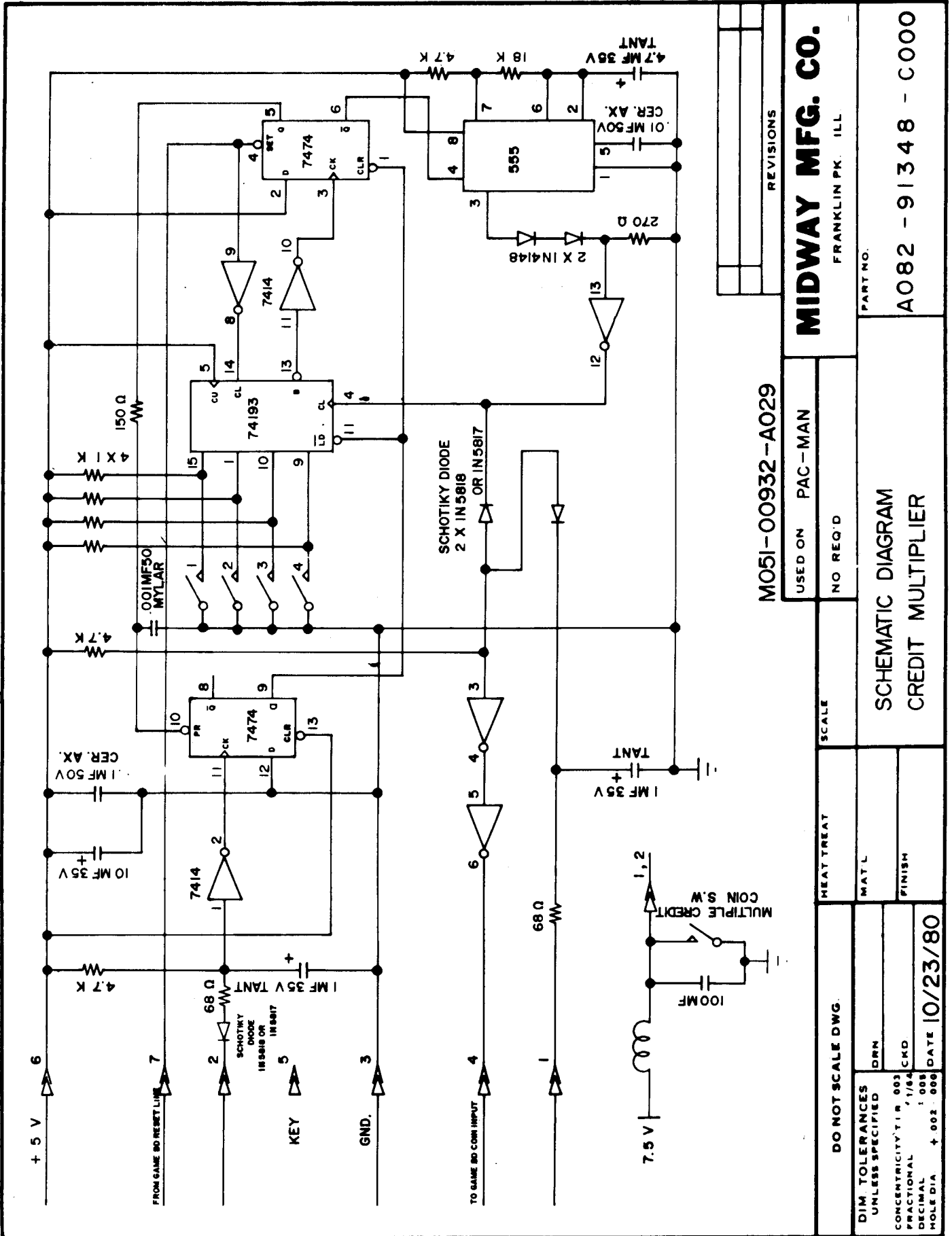
FRACTIONAL DECIMAL

MOLE DIA + 003 000

DRN *cy*

CMO

DATE 10/22/80



REVISIONS	
MIDWAY MFG. CO.	
FRANKLIN PK. ILL	
PART NO. A082-91348-C000	
M051-00932-A029	
USED ON	PAC-MAN
SCALE	NO REQ'D
SCHEMATIC DIAGRAM	
CREDIT MULTIPLIER	
HEAT TREAT	MAT'L
FINISH	
DO NOT SCALE DWG.	
DIM TOLERANCES UNLESS SPECIFIED	DRN
CONCENTRICITY 1/16	003
FRACTIONAL DECIMAL	1/84
MOLE DIA	1.008
DATE	10/23/80