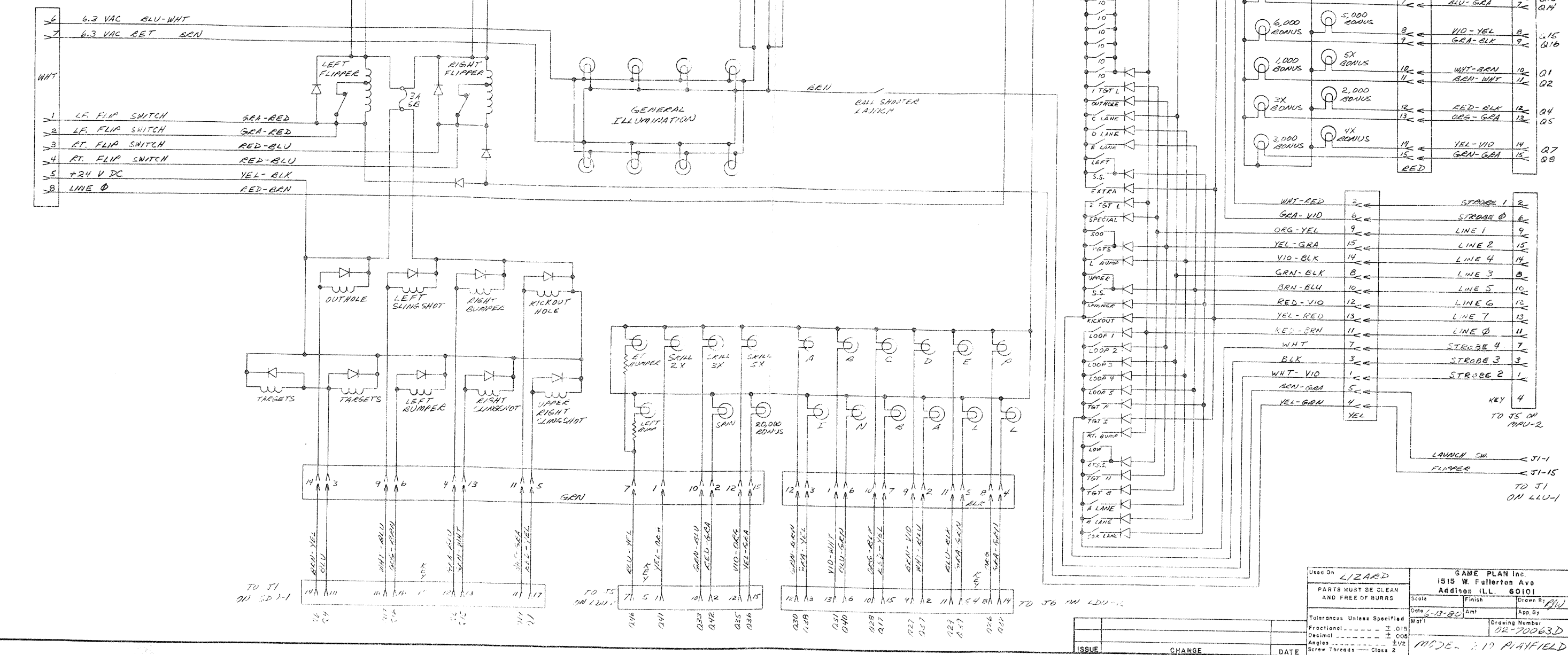




Used On <u>LIZARD</u> PARTS MUST BE CLEAN AND FREE OF BURRS Tolerances Unless Specified Fractional: ——— ± 0.5 Decimals: ——— ± 0.05 Angles: ——— ± 1/2 Screw Threads ——— Class 2	SAME PLAN Inc. 1515 W. Fullerton Ave Addison ILL. 60101 Scale _____ Finish _____ Drawn By <u>AW</u> Date <u>4-13-80</u> Amt _____ App. By _____ Mat'l _____ Drawing Number: <u>DR-70063D</u> <u>MODEL 312 PLAYFIELD</u>
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1. RECTIFIER BRIDGES ARE 25 AMP AND 200 VOLT PIV.
2. MOV 1 IS A V130LA10A FOR 120 VAC AND A V250LA20A FOR 240 VAC LINE.
3. MOV 2 IS A V82ZA12.
4. TUBE - 5A, PINBALL - 15A
5. TUBE - 5A, PINBALL - 20A

1. RECTIFIER BRIDGES ARE 25 AMP AND 200 VOLT PIV.
 2. MOV 1 IS A V130LA10A FOR 120VAC AND A V250LA20A FOR 240 VAC LINE.
 3. MOV 2 IS A VB2ZA12.
 4. TABLE - 5A, PINBALL - 15A
 5. TABLE - 5A, PINBALL - 20A

PRIMARY LINE VOLTAGE	TRAP TERMINALS	APPLY POWER TO TERMINALS
105	COM TO 1 AND 3 TO 3A	COM AND 3
115	COM TO 1 AND 4 TO 4A	COM AND 4
200	4 TO 1	COM AND 2
220	4 TO 1	COM AND 3A
240	4 TO 1	COM AND 4A

TO SOLENOID DRIVER UNIT
 J13
 P13
 J3
 1 BLU-RED UNREG +12
 2 BLU-RED UNREG +12
 3 KEY
 4 WHT-GRN SOL GND
 5 WHT-GRN SOL GND
 6 WHT-GRN LOGIC GND
 7 WHT-GRN LOGIC GND
 8 WHT-GRN SOL GND
 9 WHT-GRN SOL GND
 10 WHT-GRN SOL GND
 11 WHT-GRN SOL GND
 12 GRN-BRN 28VAC
 13 GRA +24V
 14 RED-YEL +5V
 15

TO MICROPROCESSOR UNIT
 J11
 P11
 J1
 1 RED-YEL +5V
 2 WHT-GRN LOGIC GND
 3 GRA +24V
 4 WHT-GRA DISPLAY +
 5 WHT-GRA DISPLAY +
 6 KEY
 7 WHT-GRA DISPLAY +
 8 WHT-GRN DISPLAY GND
 9 WHT-GRN DISPLAY GND
 10 WHT-GRN DISPLAY GND
 11 RED-YEL +5V
 12 RED-YEL +5V
 13 BLU-RED UNREG +12V
 14 WHT-GRN LOGIC GND
 15 WHT-GRN LOGIC GND

TO LAMP DRIVER UNIT
 J12
 P12
 J2
 1 RED-YEL +5V
 2 WHT-GRN LOGIC GND
 3 WHT-GRN LOGIC GND
 4 WHT-GRN LOGIC GND
 5 WHT-GRN LOGIC GND
 6 KEY
 7 RED +7V

TO PLAYFIELD
 J15
 P15
 1 YEL 28VAC
 2 BLU-WHT 6.3VAC
 3 BLU-WHT 6.3VAC
 4 BLU-WHT 6.3VAC
 5 BRN LAMP GND
 6 BRN LAMP GND
 7 BRN LAMP GND
 8 RED +7V
 9 RED +7V
 10 KEY
 11 GRA +24V
 12 GRA +24V
 13 GRA +24V
 14 GRA +24V
 15 GRA +24V

TO BACK GLASS INSERT
 J14
 P14
 1 BLU-WHT 6.3VAC
 2 BLU-WHT 6.3VAC
 3 BLU-WHT 6.3VAC
 4 KEY
 5 WHT-GRN LOGIC GND
 6 RED-YEL +5V
 7 BRN LAMP GND
 8 BRN LAMP GND
 9 BRN LAMP GND

TO AUX BRD
 J17
 P17
 1 RED +7V
 2 RED +24V
 3 RED +24V
 4 RED-YEL +5V
 5 RED-YEL +5V
 6 BLU-RED +12V
 7 KEY
 8 WHT-GRN GND
 9 WHT-GRN GND

TO AUX BRD
 J16
 P16
 1 RED +7V
 2 RED +24V
 3 RED +24V
 4 RED-YEL +5V
 5 RED-YEL +5V
 6 BLU-RED +12V
 7 KEY
 8 WHT-GRN GND
 9 WHT-GRN GND

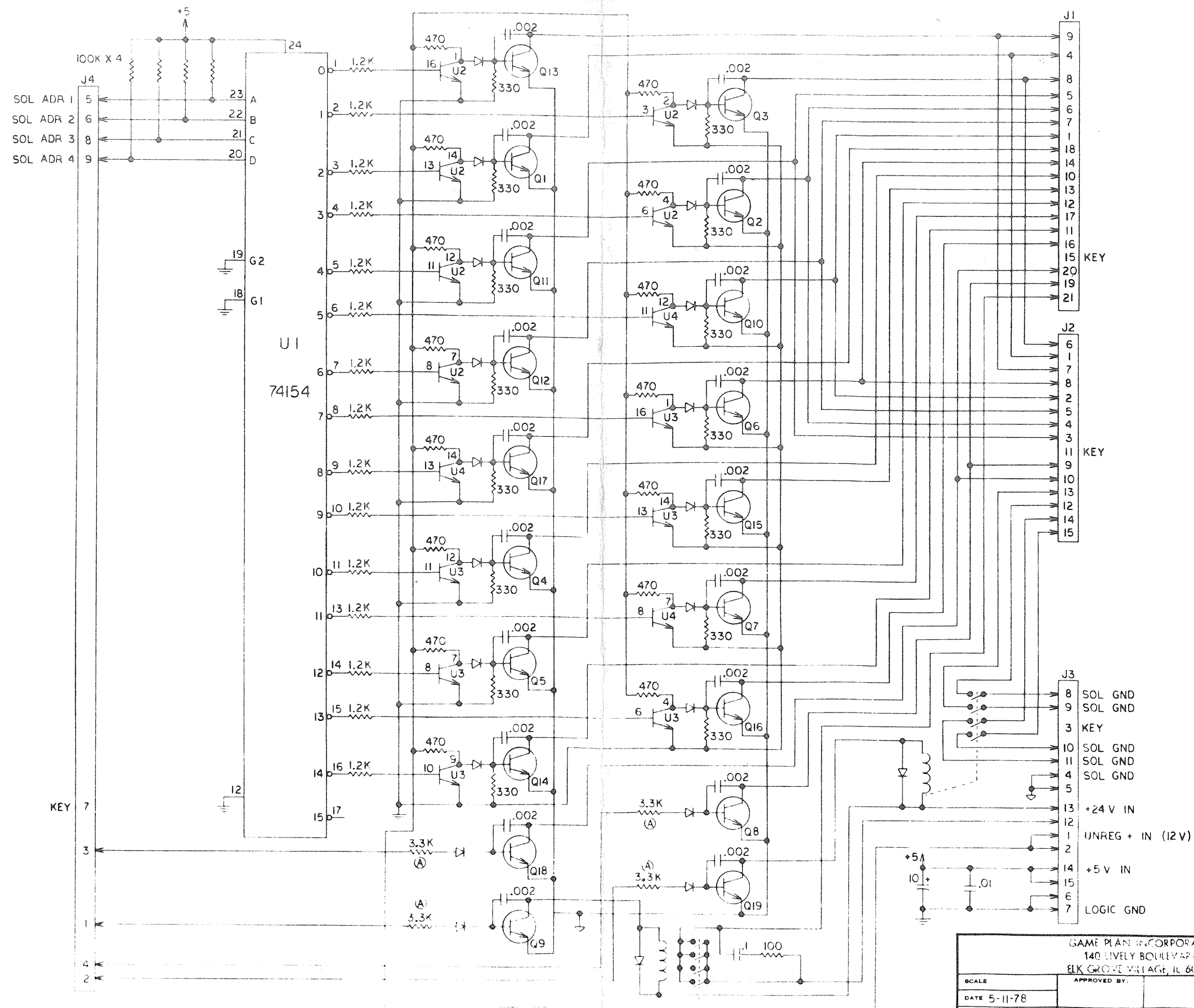
POWER XFMR CONNECTIONS		
PRIMARY LINE VOLTAGE	TRANSFORMER TERMINALS	APPLY POWER TO TERMINALS
105	COM TO 1 AND 3 TO 3A	COM AND 3
115	COM TO 1 AND 4 TO 4A	COM AND 4
200	4 TO 1	COM AND 2
220	4 TO 1	COM AND 3A
240	4 TO 1	COM AND 4A

Used On

PARTS MUST BE CLEAN
AND FREE OF BURRS

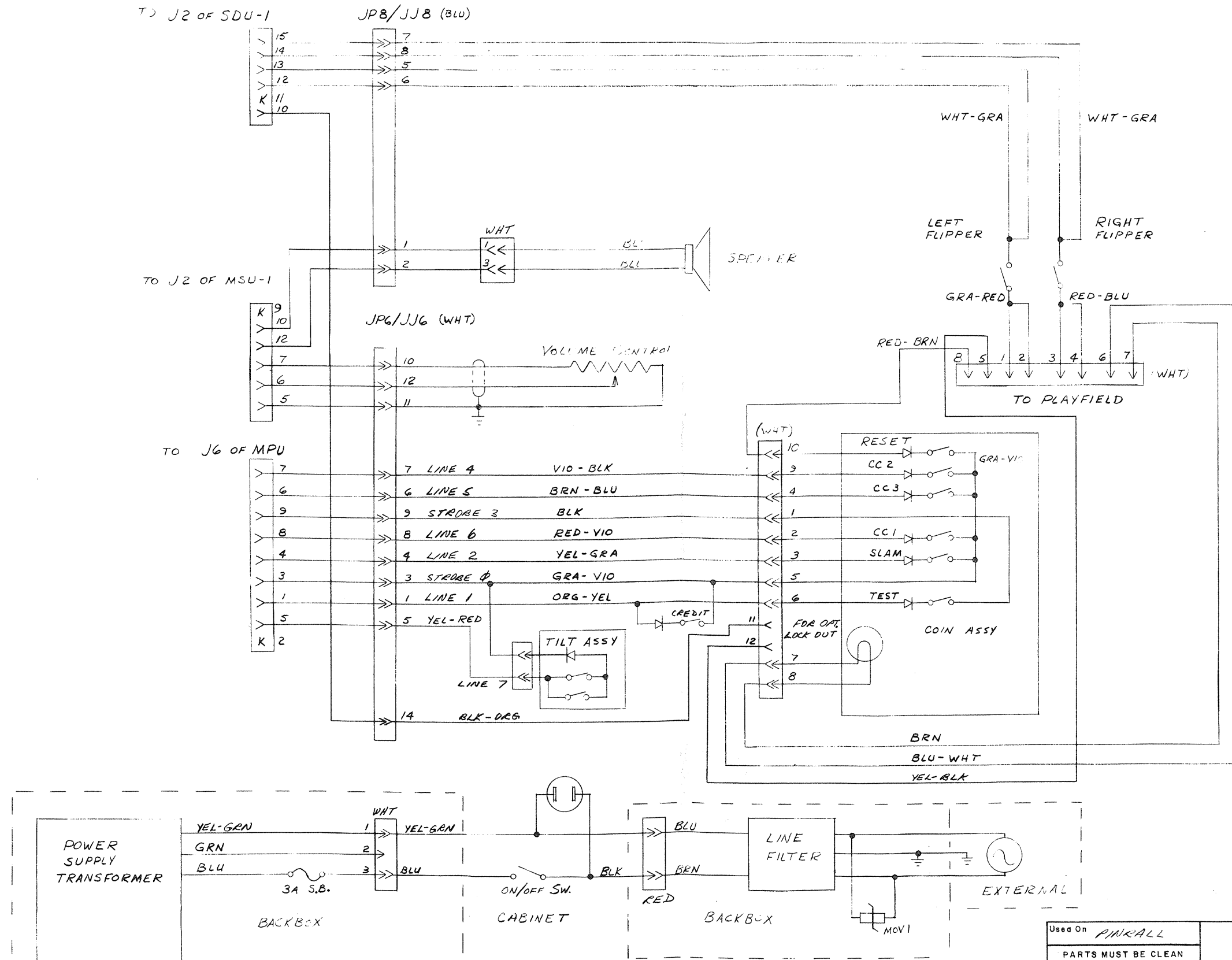
Tolerances Unless Specified	
Fractional	+ .0
Decimal	+ .0
Angles	+ .0
Screw Threads	Class 2

GAME PLAN Inc. 1515 W. Fullerton Ave Addison ILL. 60101		
Scale _____	Finish _____	Drawn By <i>JS</i>
Date <i>6-6-79</i>	Am't _____	App. By <i>JSW</i>
Mat'l _____		Drawing Number 02-70018C
PSU-1 POWER SUPPLY SCHEM.		



1. ALL DIODES ARE IN4004.
2. POWER TRANSISTORS ARE RCA 121, SE9301, 2N6388, OR EQUIV.
3. U2, U3, AND U4 ARE 6N20B1 OR 6A20B1, PINS 5 AND 15 UNL.

GAME PLAN INCORPORATED 140 LIVELY BOULEVARD ELK GROVE VILLAGE, IL 60007			
SCALE	APPROVED BY:	DRAWN BY	REVISED
DATE 5-11-78			
			A18-9-78
SDU-I SOLENOID DRIVER			DRAWING NUMBER
			02-70004C



MOV1 IS A V20LA10A FOR 120 VAC LINE.
MOV1 IS A V20LA20A FOR 240 VAC LINE.

5	BACKBOX CHANGES	6-12-80
4	LIZARD ADDITIONS	5-13-80
3	SUPER NOVA ADDITIONS	2-8-80
2	REDRAWN FROM 5-1-79	12-14-79
ISSUE	CHANGE	DATE

Used On **PINKALL**PARTS MUST BE CLEAN
AND FREE OF BURRS

Tolerances Unless Specified

Fractional $\pm .015$

Decimal $\pm .005$

Angles $\pm 1/2$

Screw Threads — Class 2

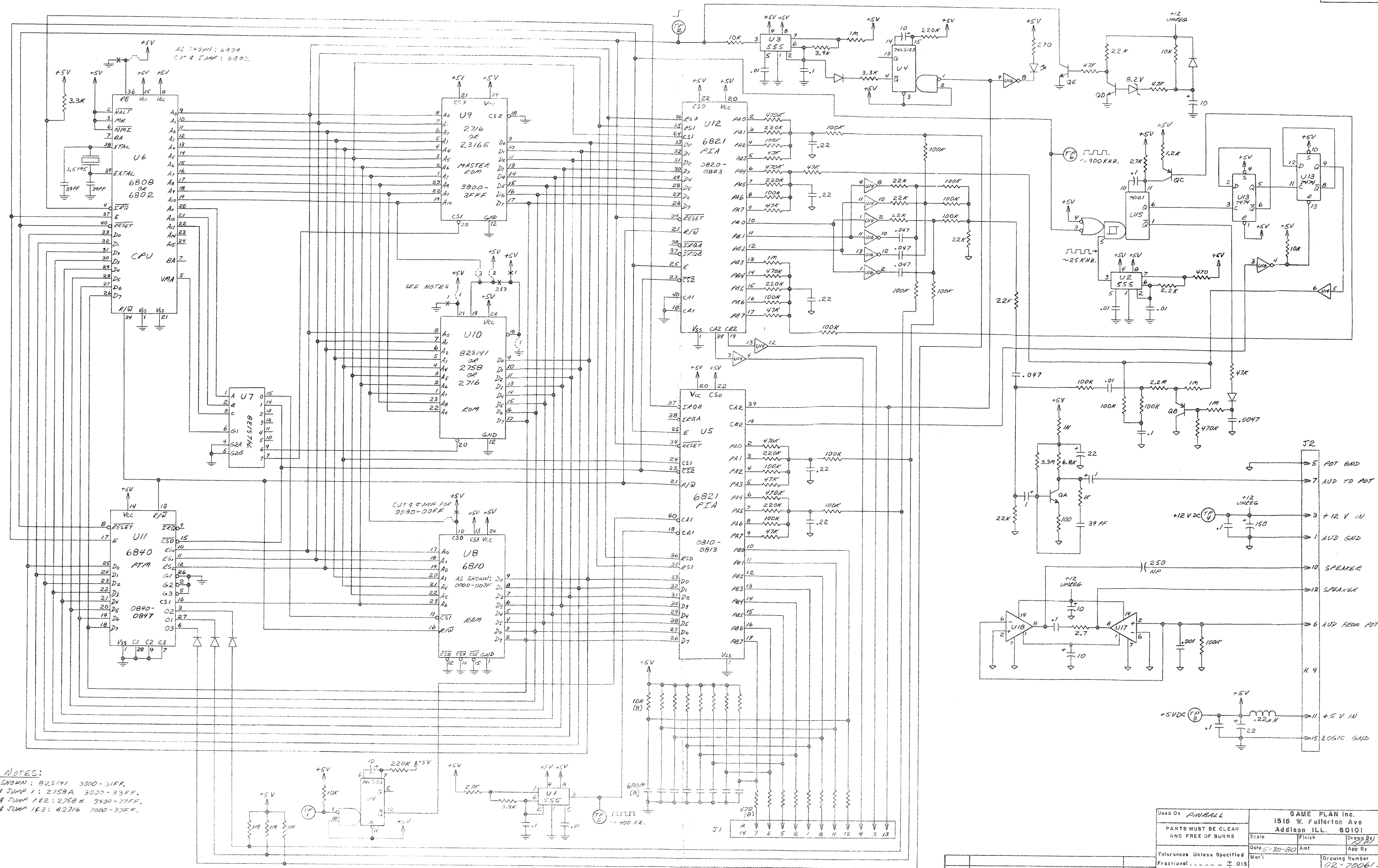
GAME PLAN Inc.
1515 W. Fullerton Ave
Addison ILL. 60101

Scale _____ Finish _____ Drawn By *RA*

Date *12/14/79* Amt _____ App. By _____

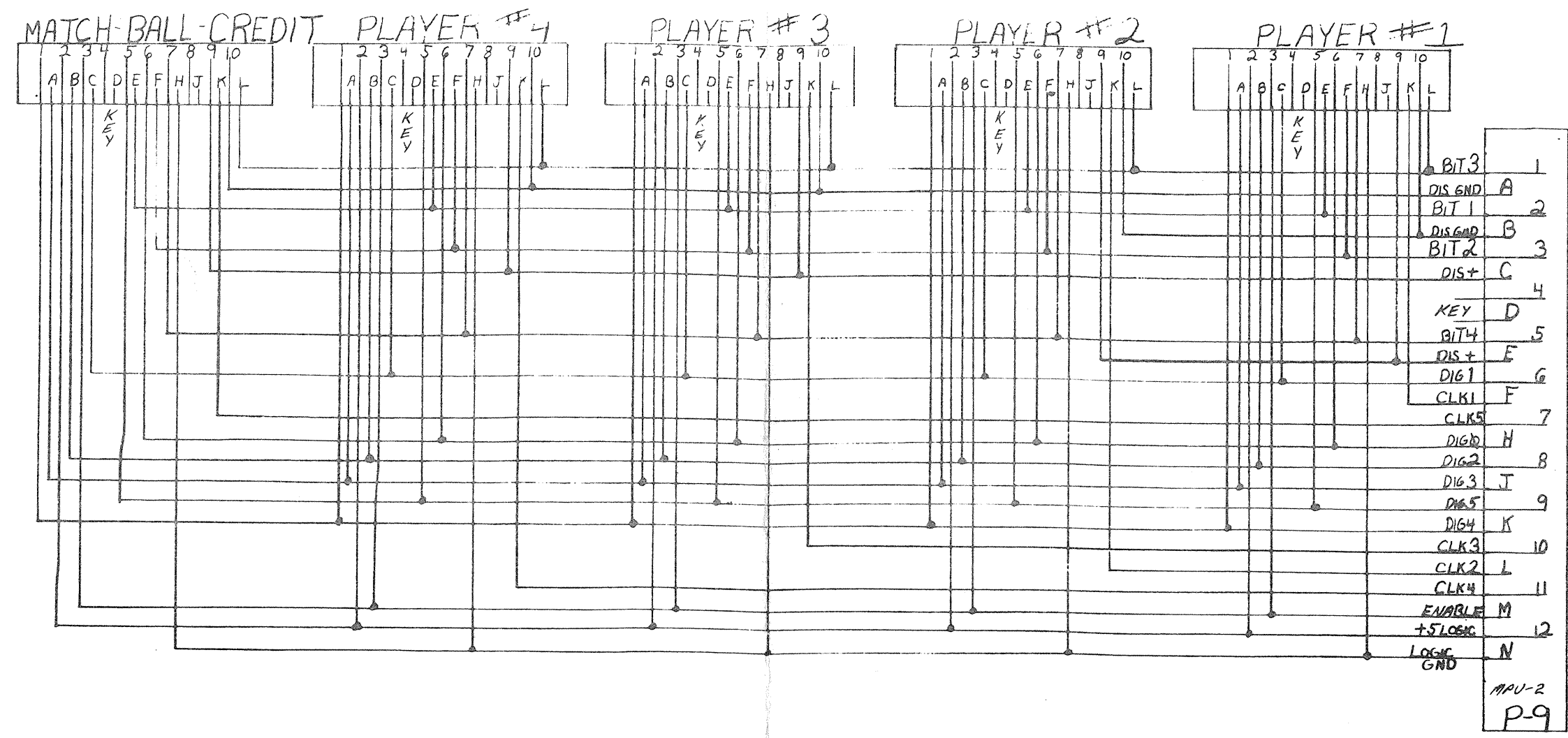
Mat'l _____ Drawing Number
02-70021C

CABINET HARNESS

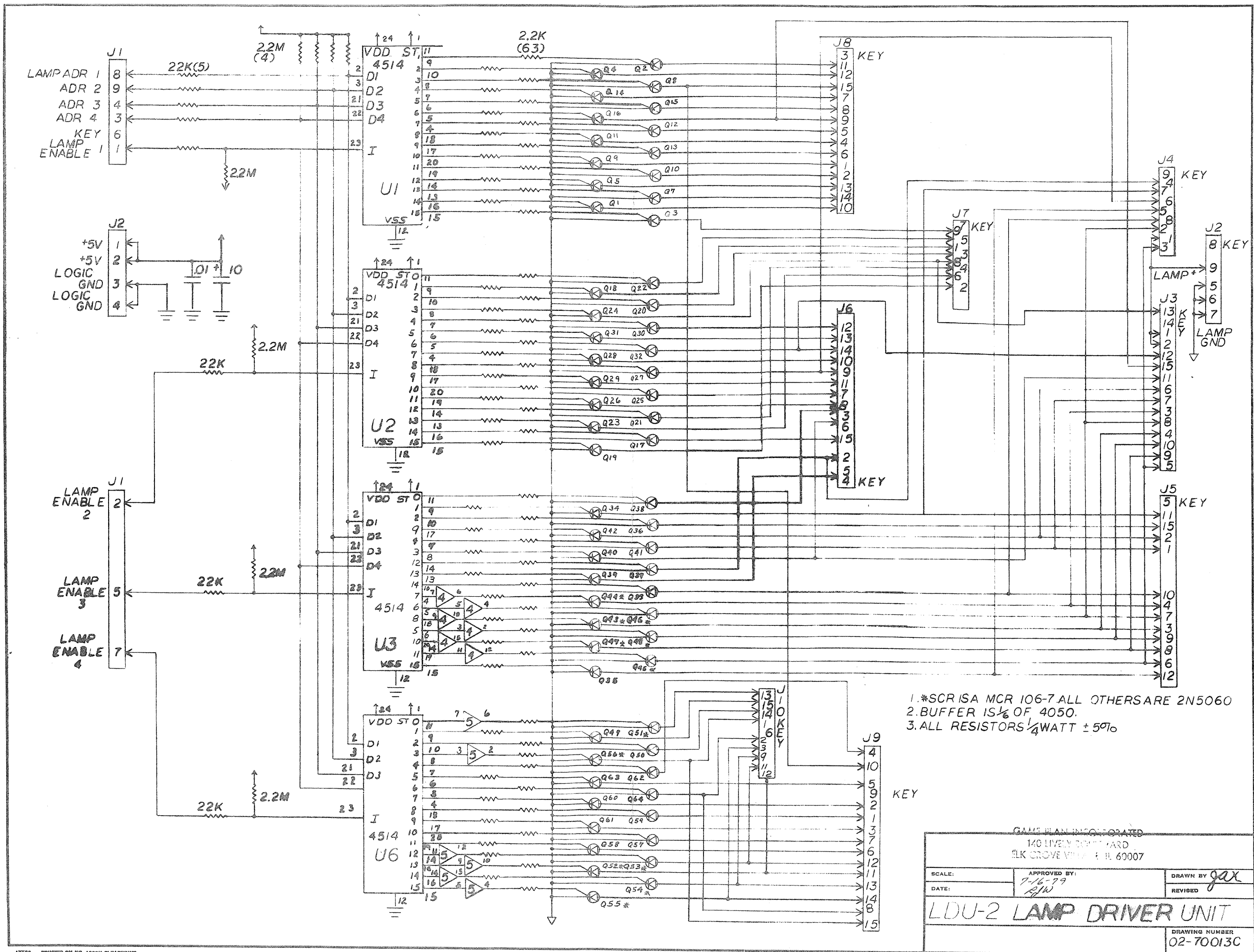


UID NOTES:
AS SHOWN: 82541 3000-31FF.
CUT & JUMP 1: 2758A 3000-33FF.
CUT & JUMP 12: 2758B 3400-37FF.
CUT & JUMP 13: 82716 3000-37FF.

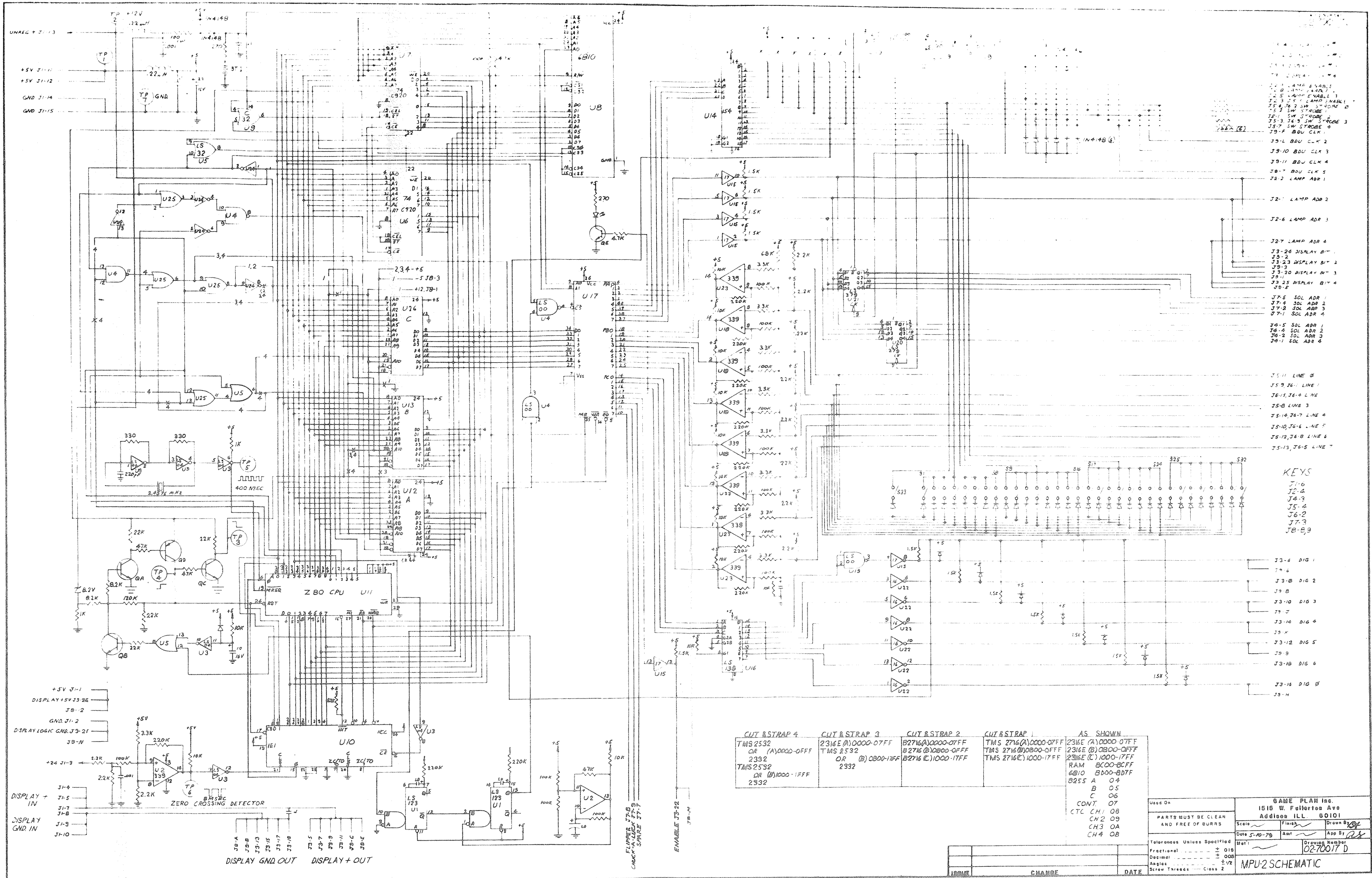
Use On	PNBALL	GAME PLAN Inc.
PARTS MUST BE CLEAN AND FREE OF BURRS	Scale	1515 W. Fullerton Ave
Tolerances Unless Specified	Finish	Addison ILL. 60101
Fractional	Mat'l	Date 5-30-80
Decimal	App By	Drawn By
Angles		App By
Screw Threads		Drawing Number
		02-70061D
		MSU-1 SCHEMATIC



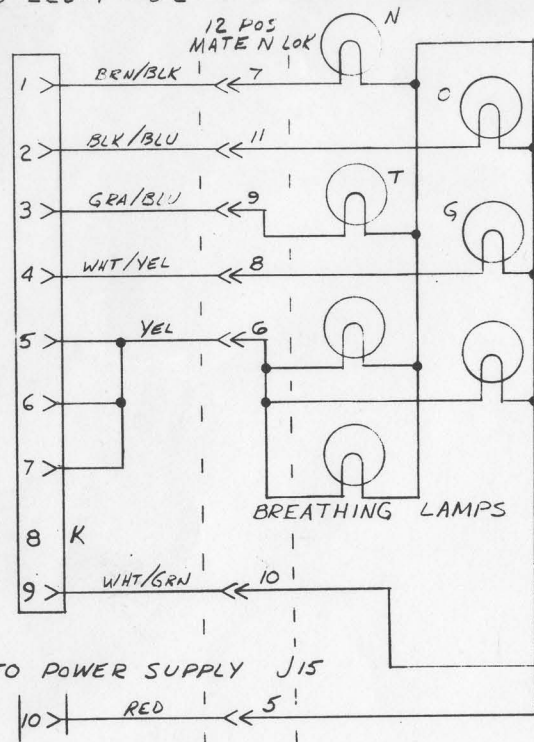
Used On		TEST DEPT.	
PARTS MUST BE CLEAN AND FREE OF BURRS		GAME PLAN Inc. 1515 W. Fullerton Ave Addison ILL 60101	
Scale	Finish	Date	Drawn By
1/8-77			
Tolerances Unless Specified	Mat	Drawing Number	
Fractional ± .015		02-70019C	
Decimal ± .005		PINBALL DISPLAY CARTRIDGE	
Angles ± 1/2			
Screw Threads Class 2			
ISSUE	CHANGE	DATE	



GAME PLAN INCORPORATED		
140 LIVELY COURT, YARD		
ELK GROVE VILLAGE, IL 60007		
SCALE:	APPROVED BY:	DRAWN BY: <i>gax</i>
DATE:	7-16-79	REVISOR:
LDU-2 LAMP DRIVER UNIT		
DRAWING NUMBER		02-70013C



TO LLU-1 J2

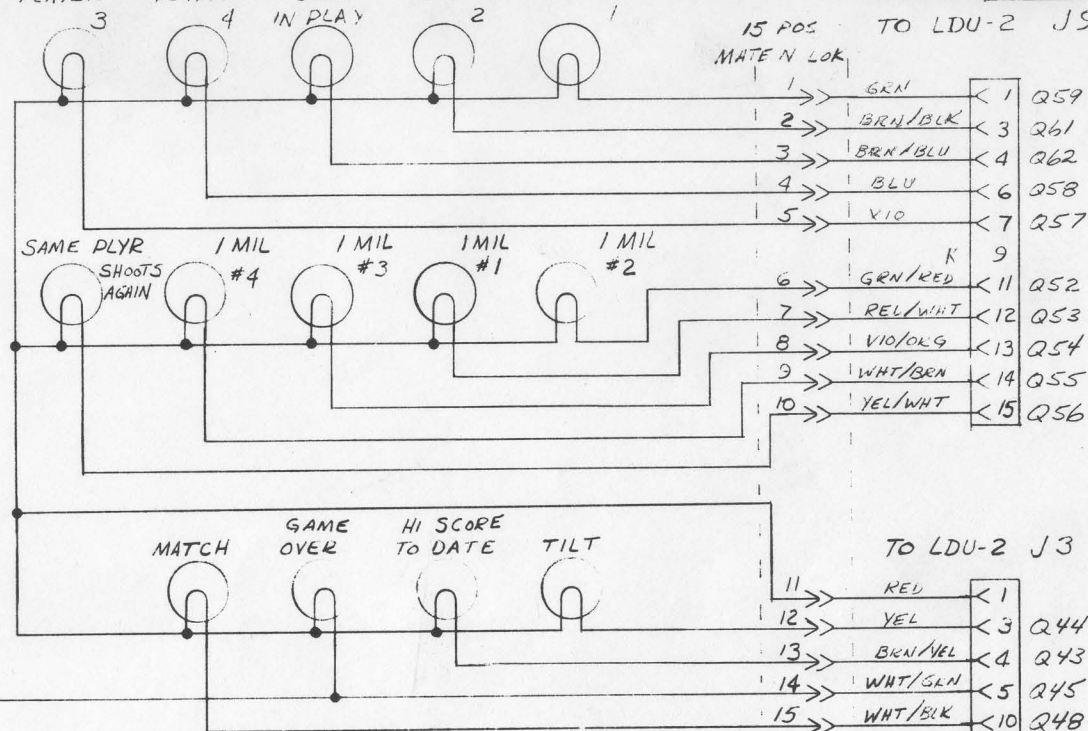


TO POWER SUPPLY J15

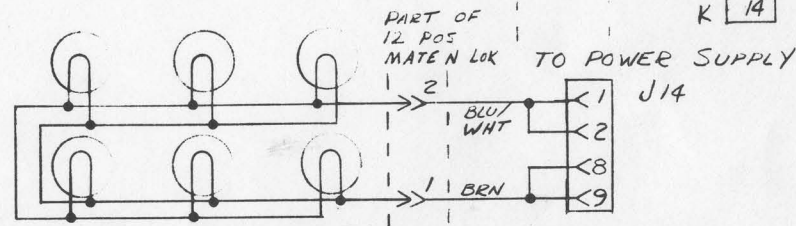
NOTES:

1. T-O-N-G LAMPS SEQUENCE IN THAT ORDER.
2. 12 POSITION MATE N LOCK HAS PINS 3, 4 & 12 OPEN.

PLAYER 3 PLAYER 4 BALL IN PLAY PLAYER 2 PLAYER 1



TO LDU-2 J3



GENERAL ILLUMINATION
6.3 VAC

Used On MODEL 210

PARTS MUST BE CLEAN
AND FREE OF BURRS

Tolerances Unless Specified
Fractional $\pm .015$
Decimal $\pm .005$
Angles $\pm 1/2$
Screw Threads — Class 2

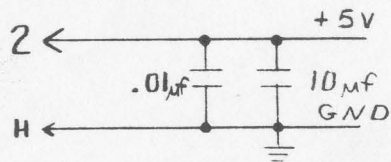
GAME PLAN Inc.
1515 W. Fullerton Ave
Addison ILL. 60101

Scale: Finish: Drawn By *RS*
Date 6/17/80 Amt: App. By

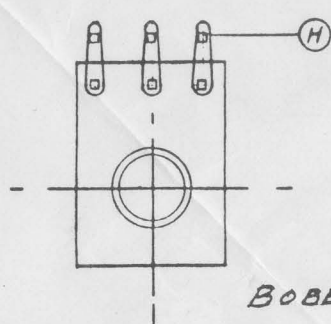
Mat'l: Drawing Number
02-70064B

INSERT WIRING
LIZARD

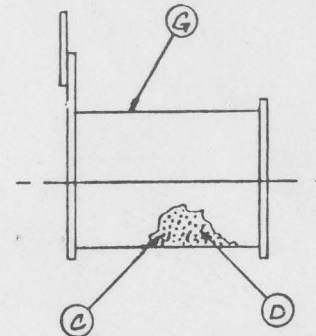
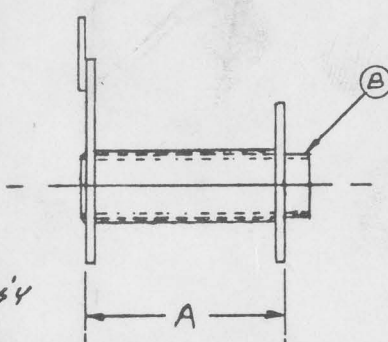
ISSUE CHANGE DATE



DRAWING NUMBER
02-70012A



BOBBIN ASSY



START — FINISH
ALLOW
1/8
SLACK

SOLENOID ASSY

	A	B	C	D	E	F	G	H
COIL NUMBER	BOBBIN	TUBE	WIRE GAGE-TYPE	NUMBER TURNS	RESISTANCE	DESIGN VOLTAGE	COIL WRAPPER	LUG NUMBER
21-50001B	03-40002N 1.562	03-40008N 1.686	No. 24 MAGNET	850	4.75 Ω	24 V.D.C.		
21-50002B	03-40002N 1.562	03-40008N 1.686	No. 25 No. 27	400 1000	2.8 Ω 13.4 Ω	24 V.D.C.		
21-50003B	03-40002N 1.562	03-40008N 1.686	No. 25	1050	7.45 Ω	24 V.D.C.		
21-50004B	03-40002N 1.562	03-40007N	No. 29	2000	33.8 Ω	24 V.D.C.		
21-50005B	03-40002N 1.562	03-40008N 1.686	No. 27	1400	15.4 Ω	24 V.D.C.		
21-50006B	"	"	No. 28	1800	25.8 Ω	24 V.D.C.		
21-50007B	03-40037B	03-40038A	No. 24	1000	8 Ω	24 V.D.C.		
21-50008B	03-40002N	03-40008N	No. 22 No. 30	375 800	1.2 Ω 21.5 Ω	24 V.D.C. 24 V.D.C.		
21-50009B	03-40037B	03-40038A	No. 23	1100	6.2 Ω	24 V.D.C.		

GAME PLAN INCORPORATED
140 LIVELY BOULEVARD
ELK GROVE VILLAGE, IL 60007

SCALE: _____	APPROVED BY: WM 11-3-77	REV: 1	DRAWN BY ED-C
DATE: 11-3-77			REVISED 4-25-78
MAT'L- AS NOTED	FINISH _____	AMT- AS REQ'D	USED ON GENERAL
SOLENOIDS			DRAWING NUMBER 21-50001B THRU —>