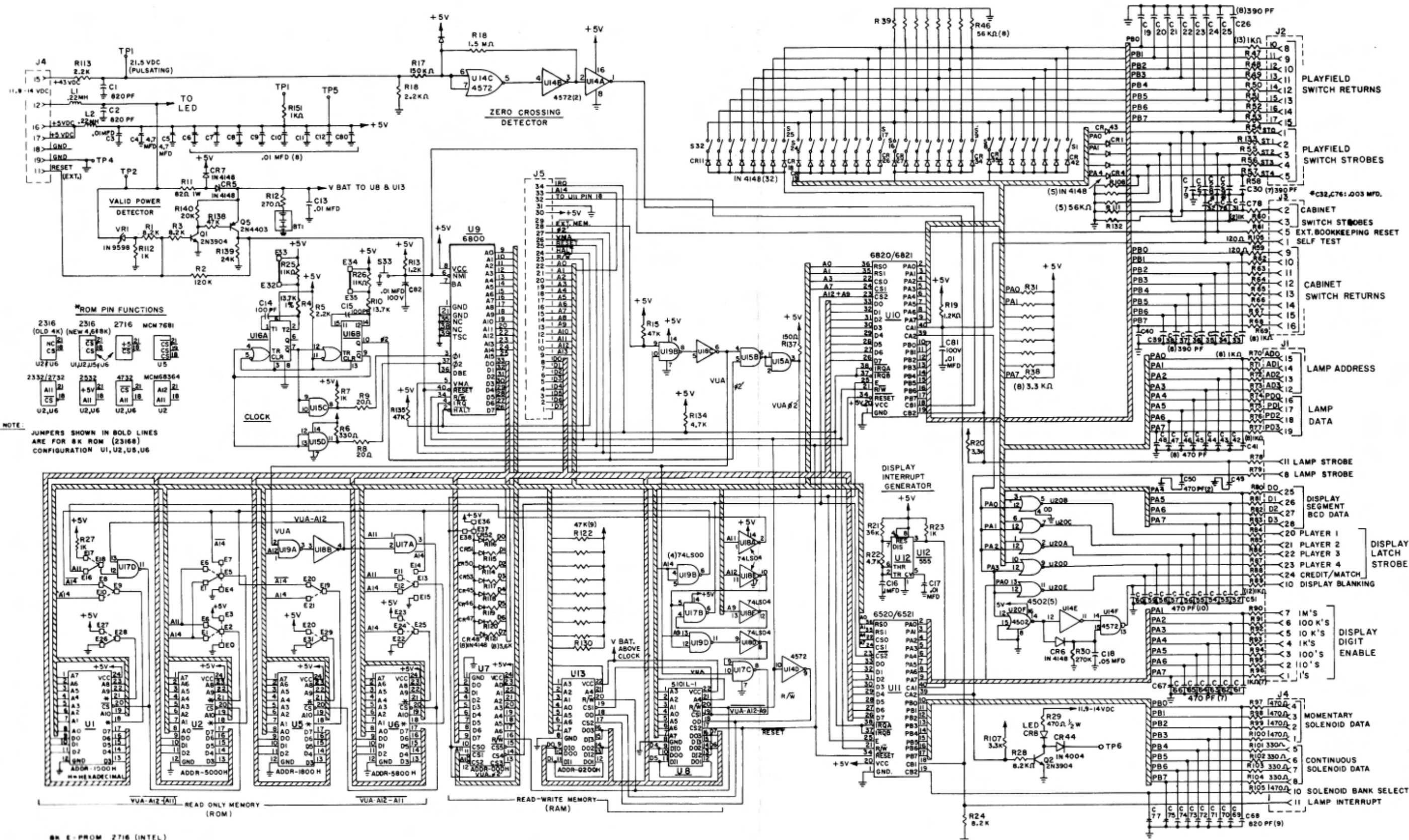
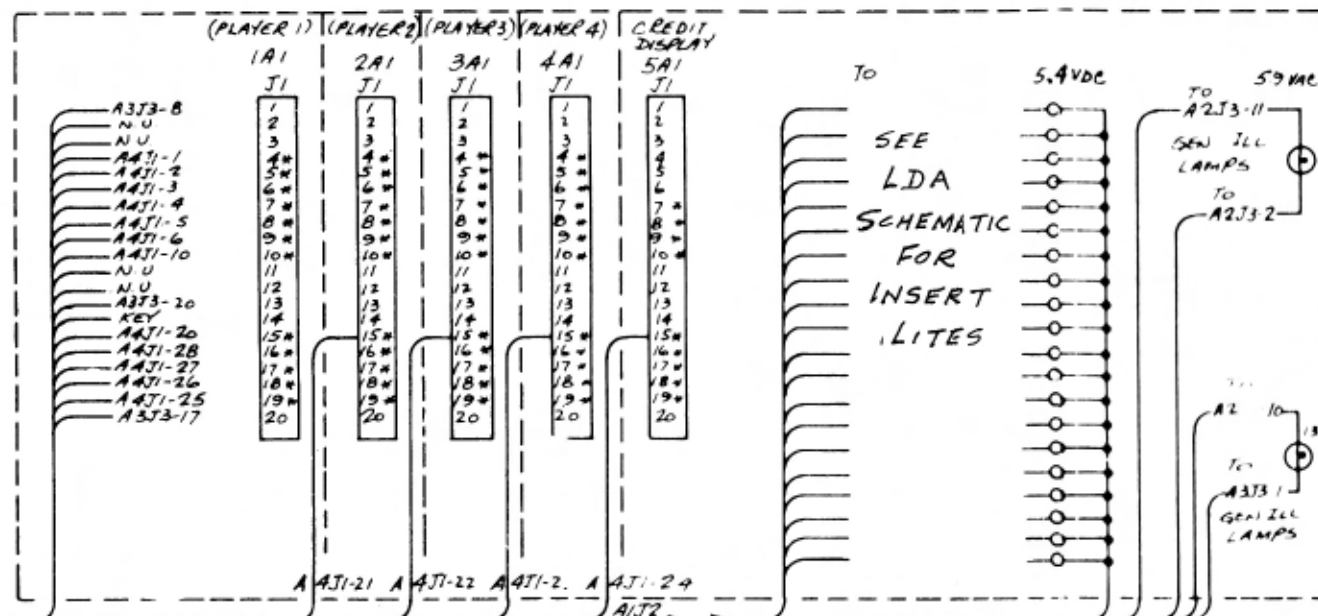


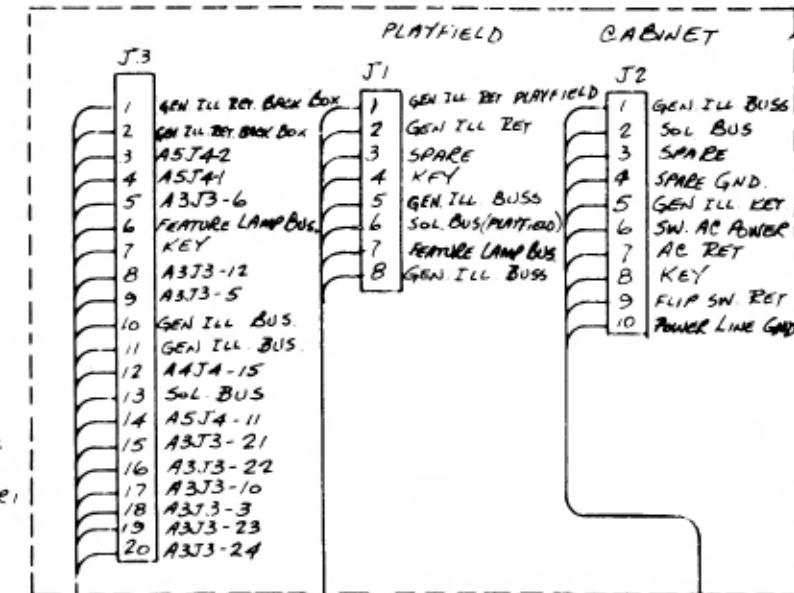


A1 INSERT

FROM	A1J2
A2J3-6	1
A5J2-18	2
A2J3-2	3
A2J3-11	4
A5J2-23	5
A5J2-15	6
A5J2-22	7
A5J2-8	8
A5J2-1	9
A5J2-2	10
A5J2-11	11
A5J2-10	12
A5J2-7	13
A5J2-4	14
A5J2-20	15
A5J2-16	16
A5J2-14	17
A2J3-10	18
A2J3-1	19
	20
	21
	22
	23



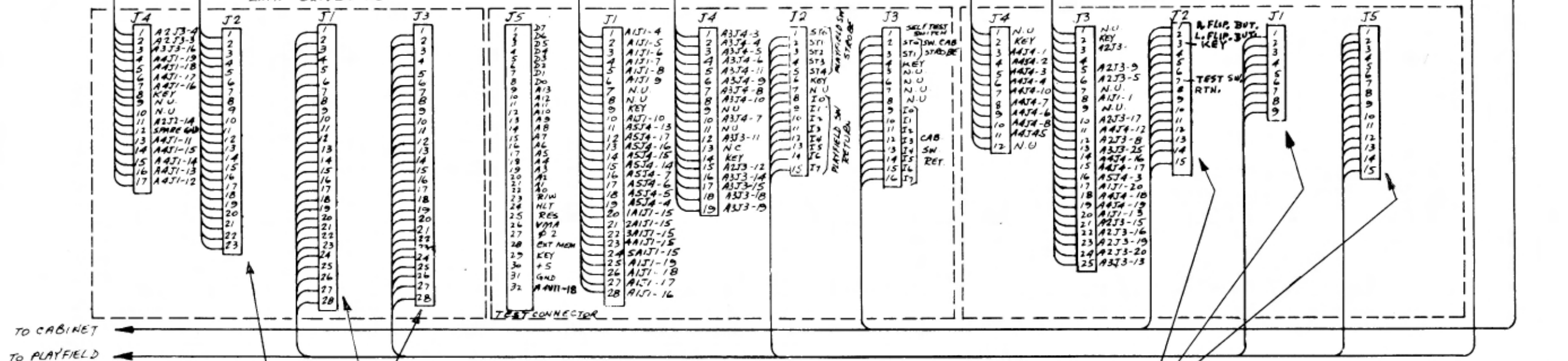
A2 TRANSFORMER



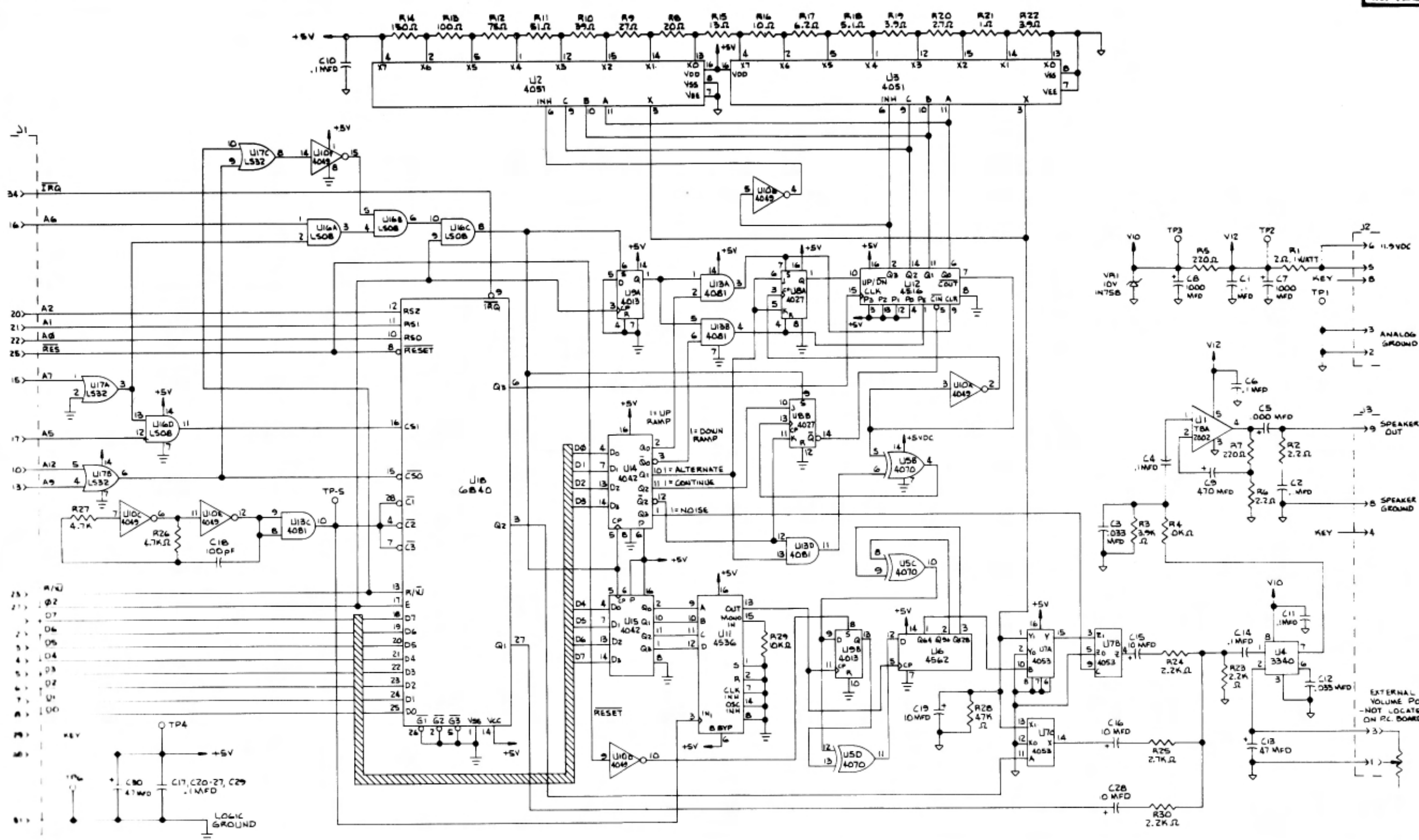
LAMP DRIVER A5

MPU - A4

VOLTAGE REGULATOR / SOLENOID DRIVER A3



STERN ELECTRONICS INC.		
1725 DIVERSEY BLVD. CHICAGO 60614		
WIRING DIAGRAM		
FOR SOLID STATE		
DRN. CW	DATE	AMT
MAT	FIN.	APPR.



STERN ELECTRONICS INC.
1725 DIVERSEY BLVD. CHICAGO 60614

SCHEMATIC, ELECTRONIC SOUNDS

FOR SOLID STATE

DRN. ٤٧٠	DATE 8-21-79	AM'T
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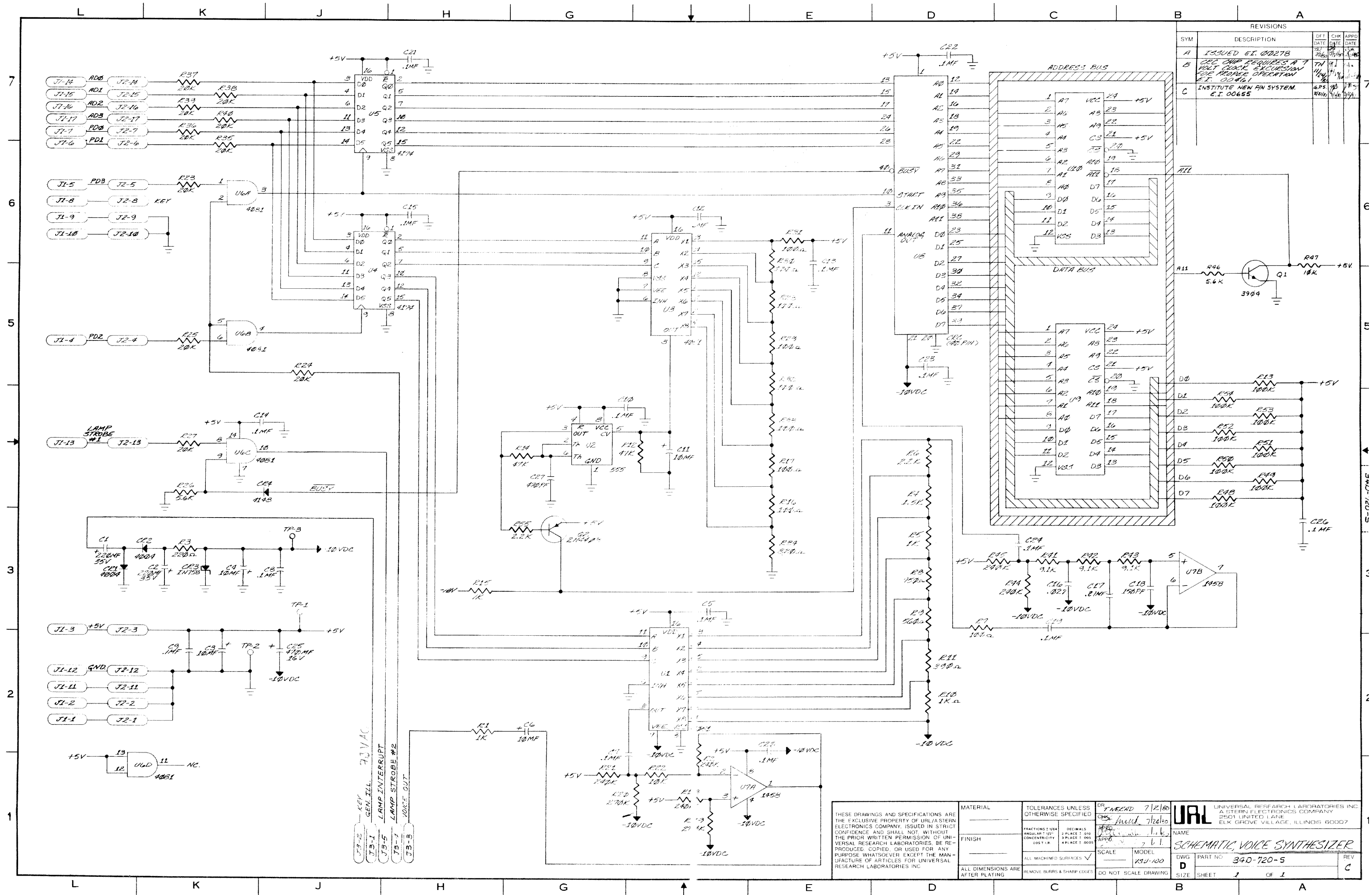
MAT	FIN.	APPR
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SCALE:

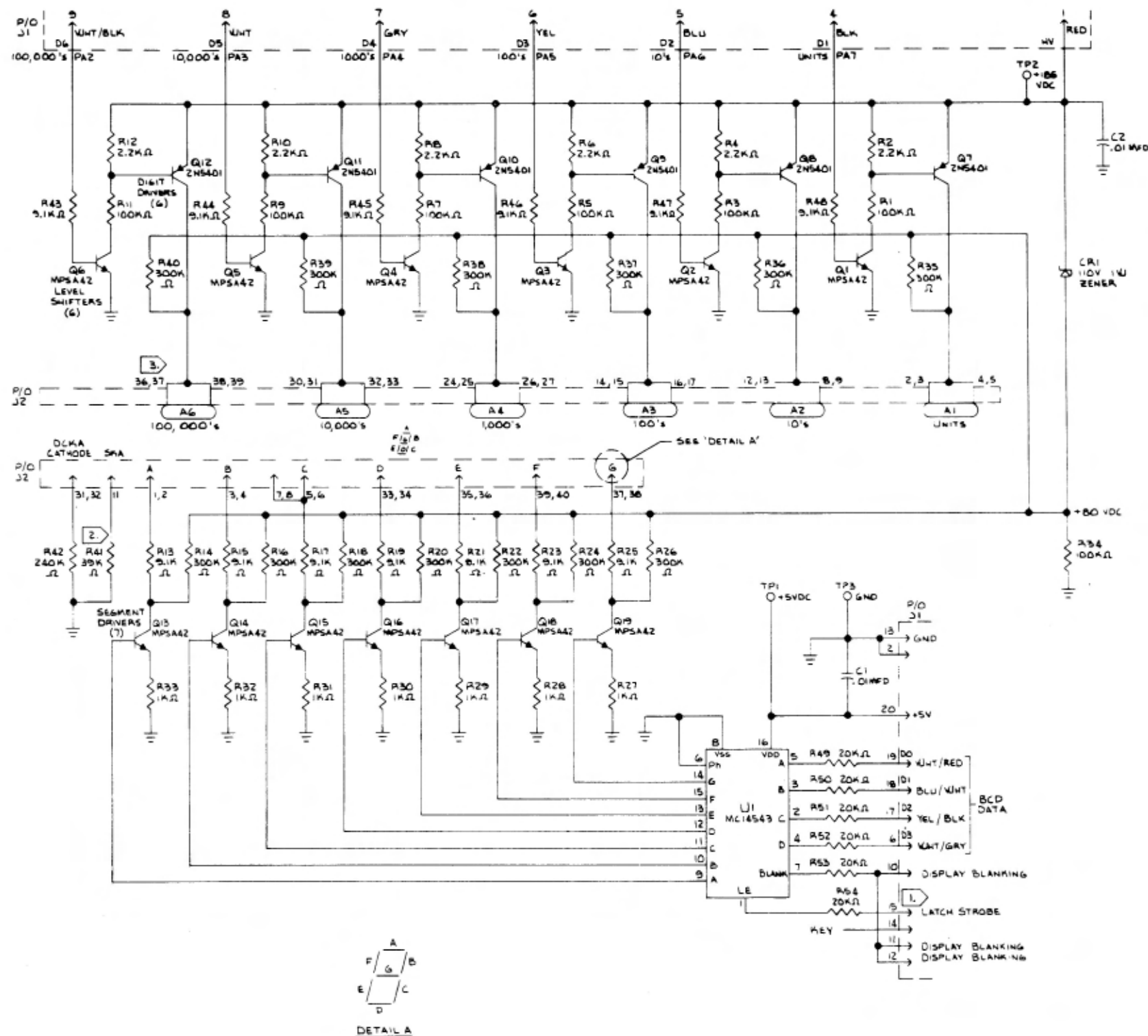
PART MUST BE FREE OF BURRS

Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010: All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005: Decimal plus and minus .003. Decimal dimensions on tools plus and minus .001. Angles $\pm 30'$ unless otherwise specified.

ISSUE	CHANGE	DATE



- NOTES:
1. PIN # WIRE COLOR
 PLAYER #1 BLK/WHT
 PLAYER #2 YEL/RED
 PLAYER #3 ORG/BLU
 PLAYER #4 BRN/ORG
 MATCH/BALL RED/BLK
 2. OMIT FOR BECKMAN DISPLAYS
 3. 36, 37 DENOTES
 BECKMAN DISPLAY TERMINAL
 PANTEX DISPLAY TERMINAL



ISSUE	CHANGE	DATE

SCALE: $\frac{1}{8}$ PART MUST BE FREE OF BURRS

Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010. All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005. Decimal plus and minus .003. Decimal dimensions on tools plus and minus .001. Angles $\pm 30'$ unless otherwise specified.

STERN ELECTRONICS INC.		
1725 DIVERSEY BLVD. CHICAGO 60614		
SCHEMATIC, DISPLAY - P.C. BOARD		
FOR GEN. USE		
DRN. $\frac{1}{2}$	DATE 5-25-77	AMT $\frac{1}{2}$
MAT $\frac{1}{2}$	FIN. $\frac{1}{2}$	APPR.

PLAYER # 1	BLK/WHT
PLAYER # 2	ORG/BLU
PLAYER # 3	RED/YEL
PLAYER # 4	BRN/ORG
HATCH BALL	RED/BLACK

- ```

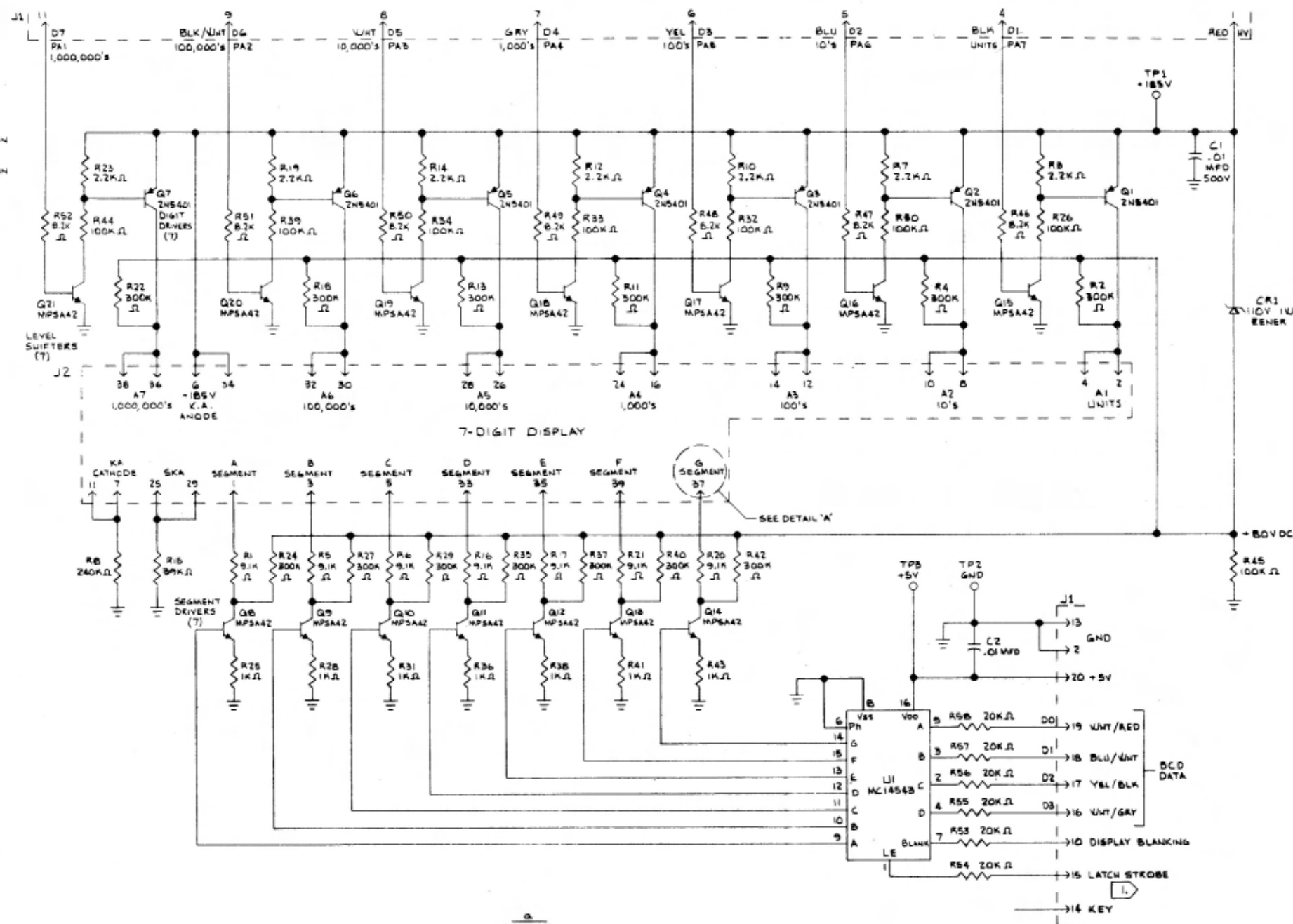
2 LAST 'C' NUMBER USED C2
 LAST 'CR' NUMBER USED CR1
 LAST 'J' NUMBER USED J2
 LAST 'G' NUMBER USED G21
 LAST 'R' NUMBER USED R58
 LAST 'TP' NUMBER USED TP3
 LAST 'U' NUMBER USED U1

```

3. ON P.C. BOARD LEGEND:

NOMENCLATURE DD IS THE ABBREVIATION  
FOR DIGIT DRIVER

NOMENCLATURE LS IS THE ABBREVIATION FOR LEVEL SHIFTER



DETAIL 'A'

SCALE: 1/2

PART MUST BE FREE OF BURRS

Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010: All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005: Decimal plus and minus .003. Decimal dimensions on tools plus and minus .001. Angles  $\pm 30'$  unless otherwise specified.

**STERN ELECTRONICS INC.**  
1725 DIVERSEY BLVD. CHICAGO 60614

SCHEMATIC, 7 DIGIT DISPLAY P.C. BD.

FOR GEN. USE

DRN. B.A.

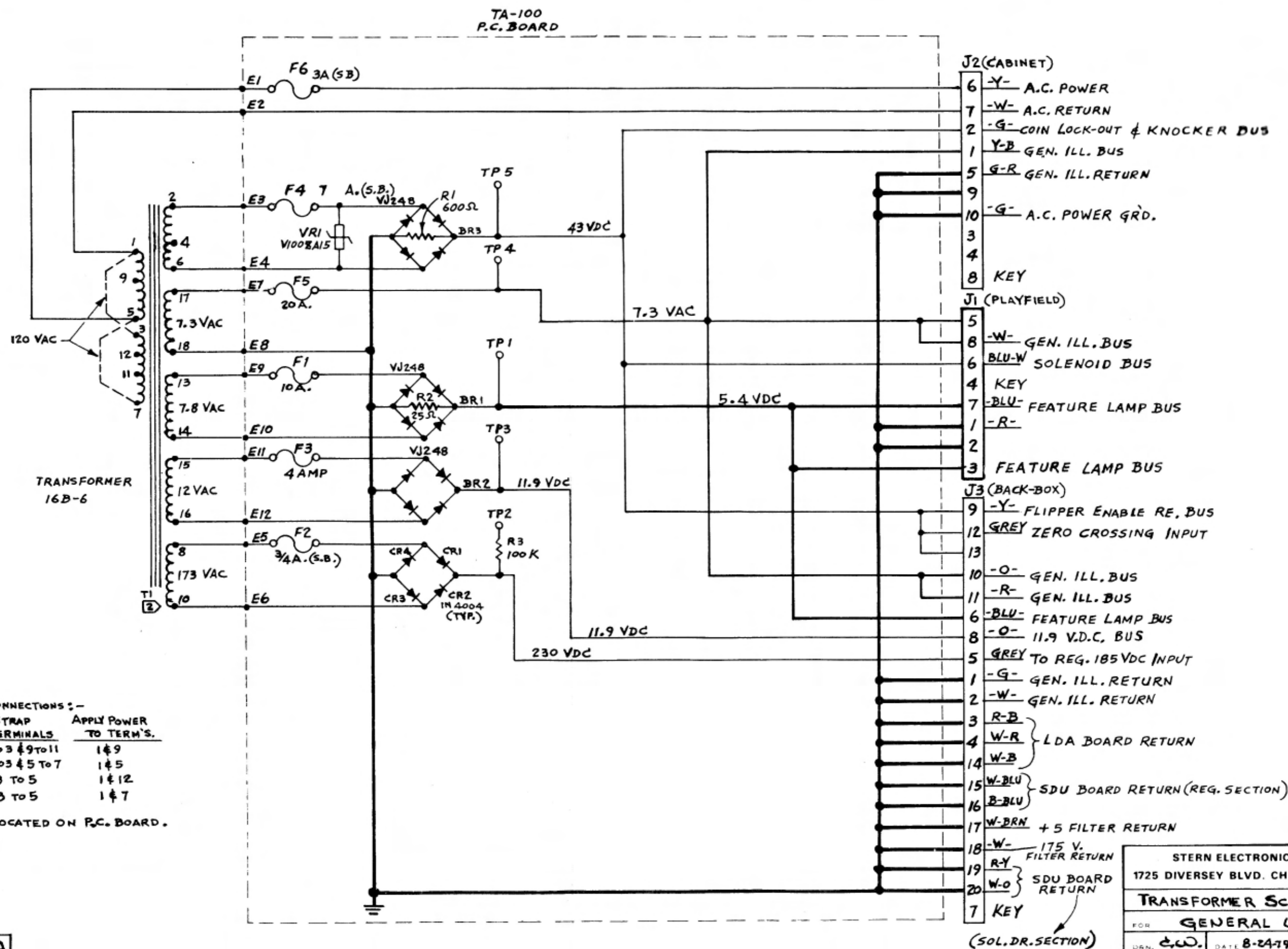
DATE 1-10-80

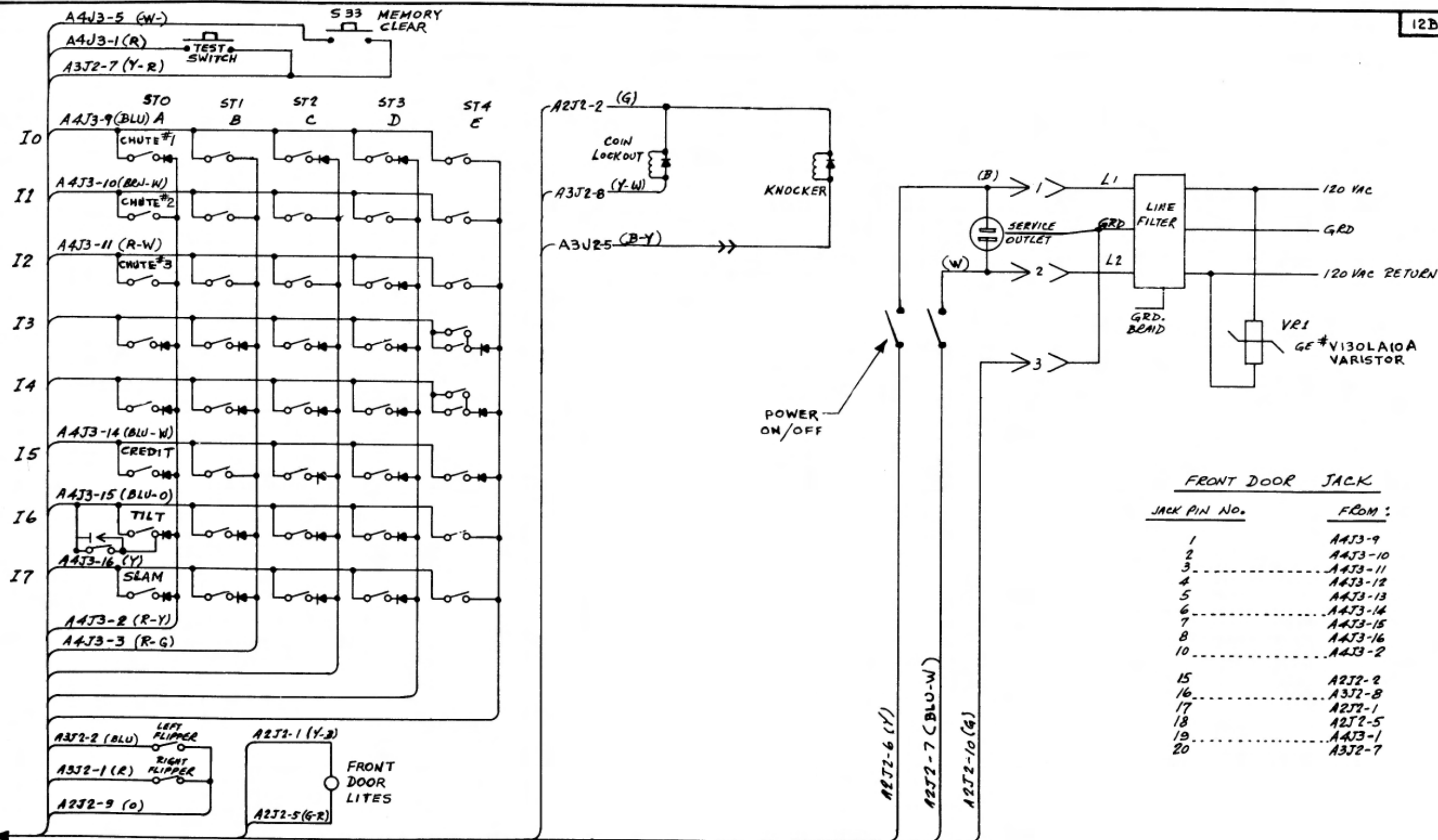
AMT 

MAT

|      |          |
|------|----------|
| FIN. | <i>H</i> |
|------|----------|

APPN.

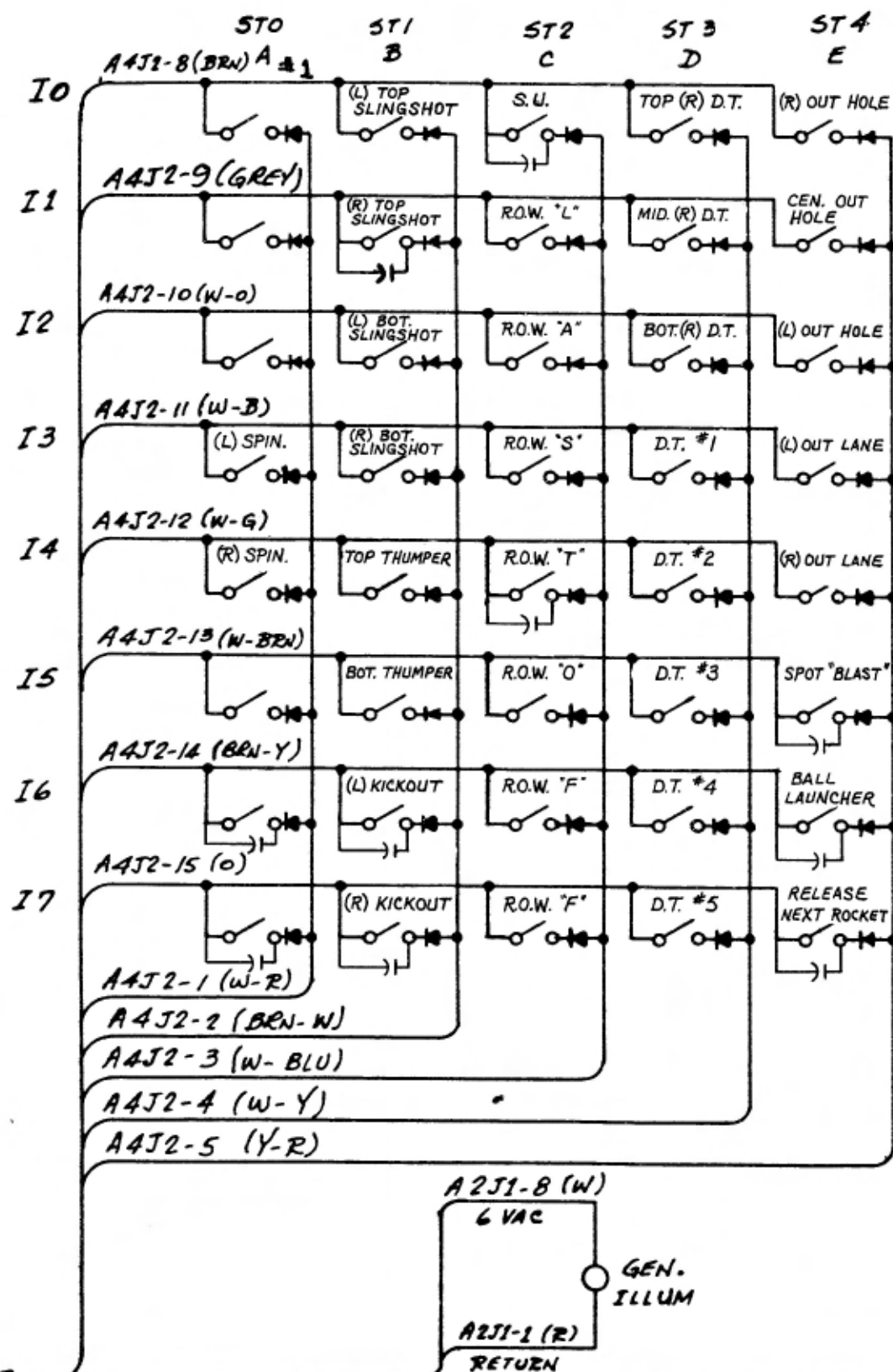




N/U = NOT USED  
ALL DIODES ARE IN-4004

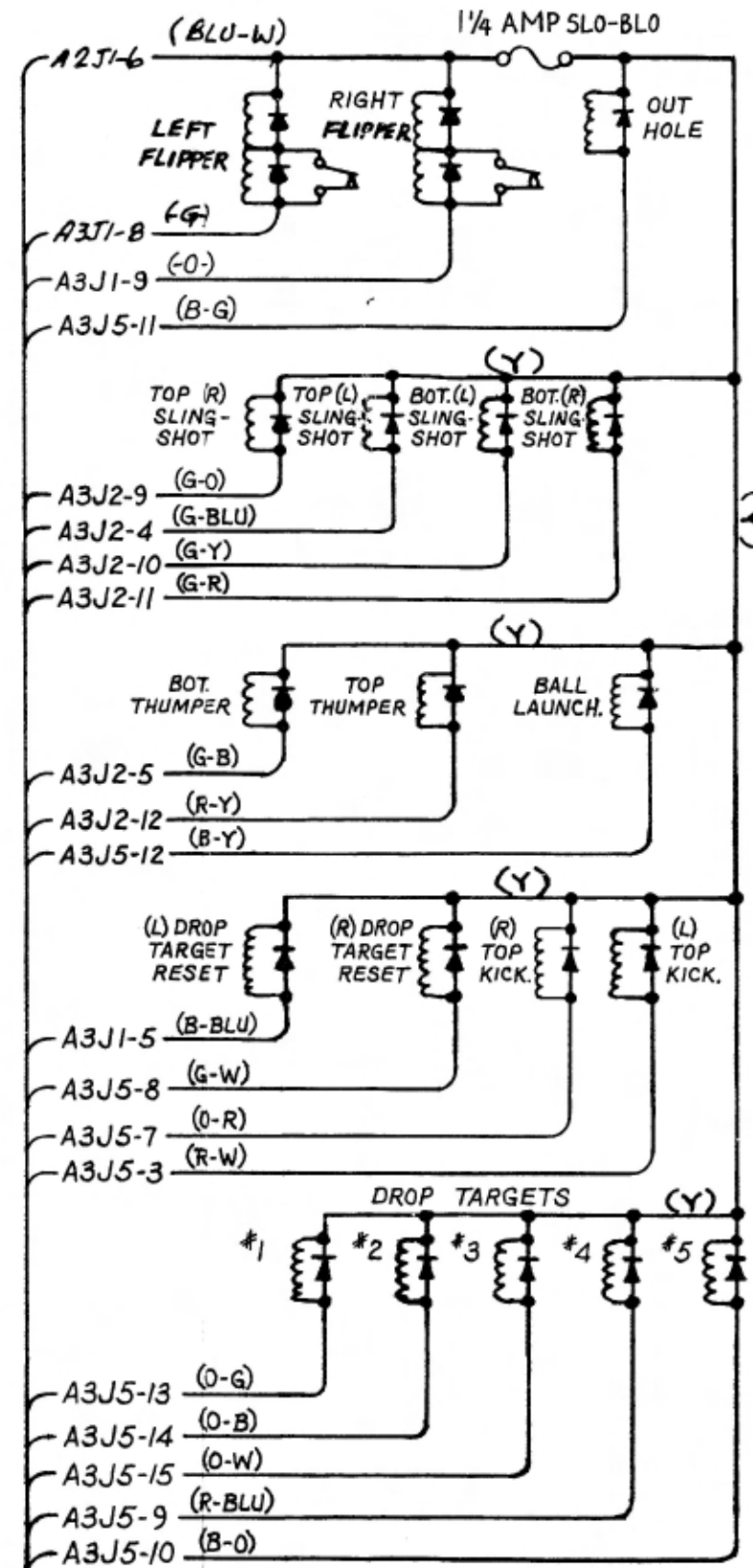
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|-------|--------|------|
| ISSUE | CHANGE | DATE |
|       |        |      |
|       |        |      |
|       |        |      |

|                                   |               |        |
|-----------------------------------|---------------|--------|
| STERN ELECTRONICS INC.            |               |        |
| 1725 DIVERSEY BLVD. CHICAGO 60614 |               |        |
| CABINET AND FRONT DOOR WIRING     |               |        |
| FOR STANDARD                      |               |        |
| DRN. C.W.                         | DATE 10-16-79 | AMT 25 |
| MAT 25                            | FIN. CD       | APPR.  |



R.O.W. = ROLL-OVER WIRE FORM  
S.U. = STAND-UP TARGET  
D.T. = DROP TARGET

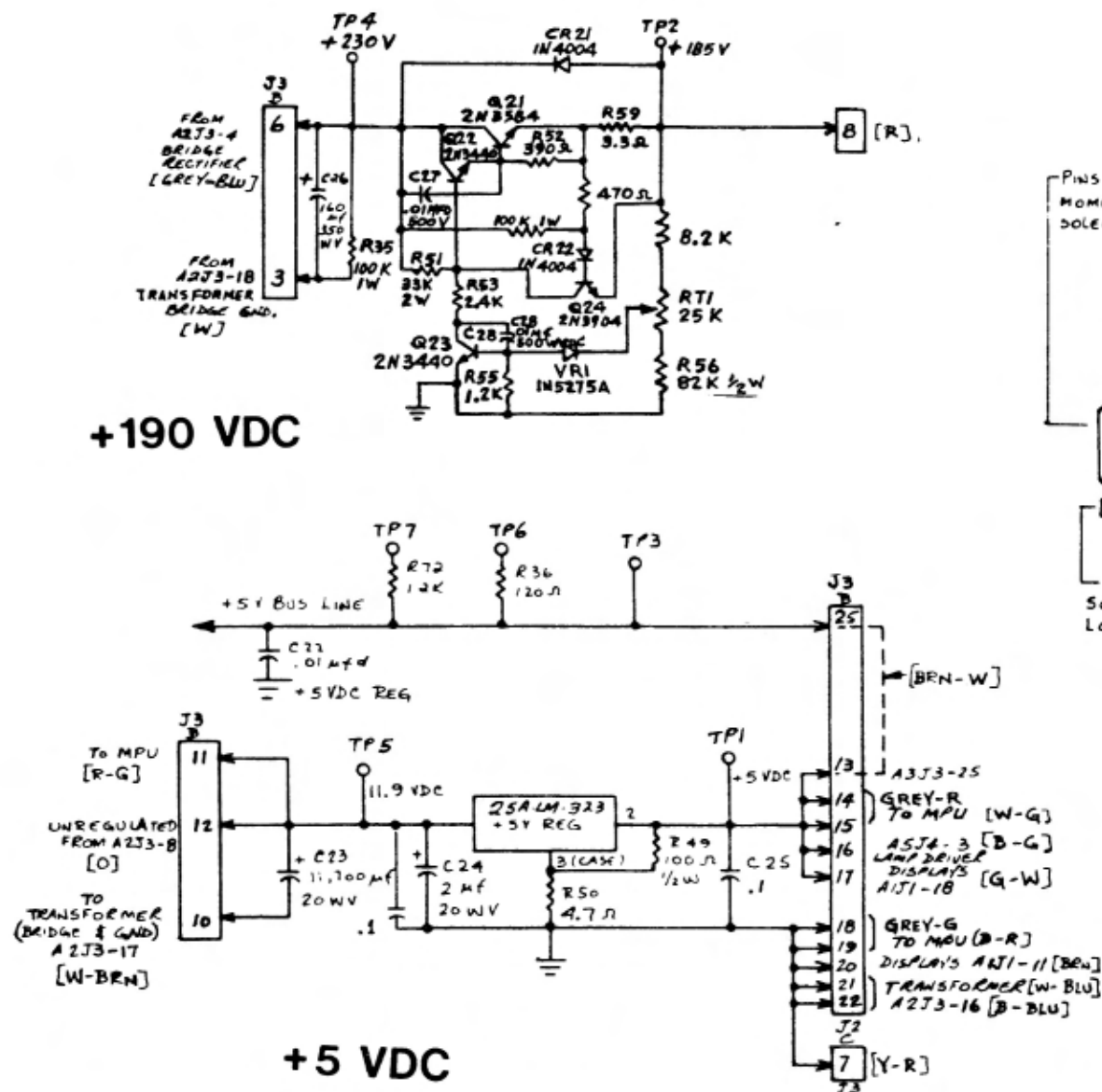
### PLAYFIELD



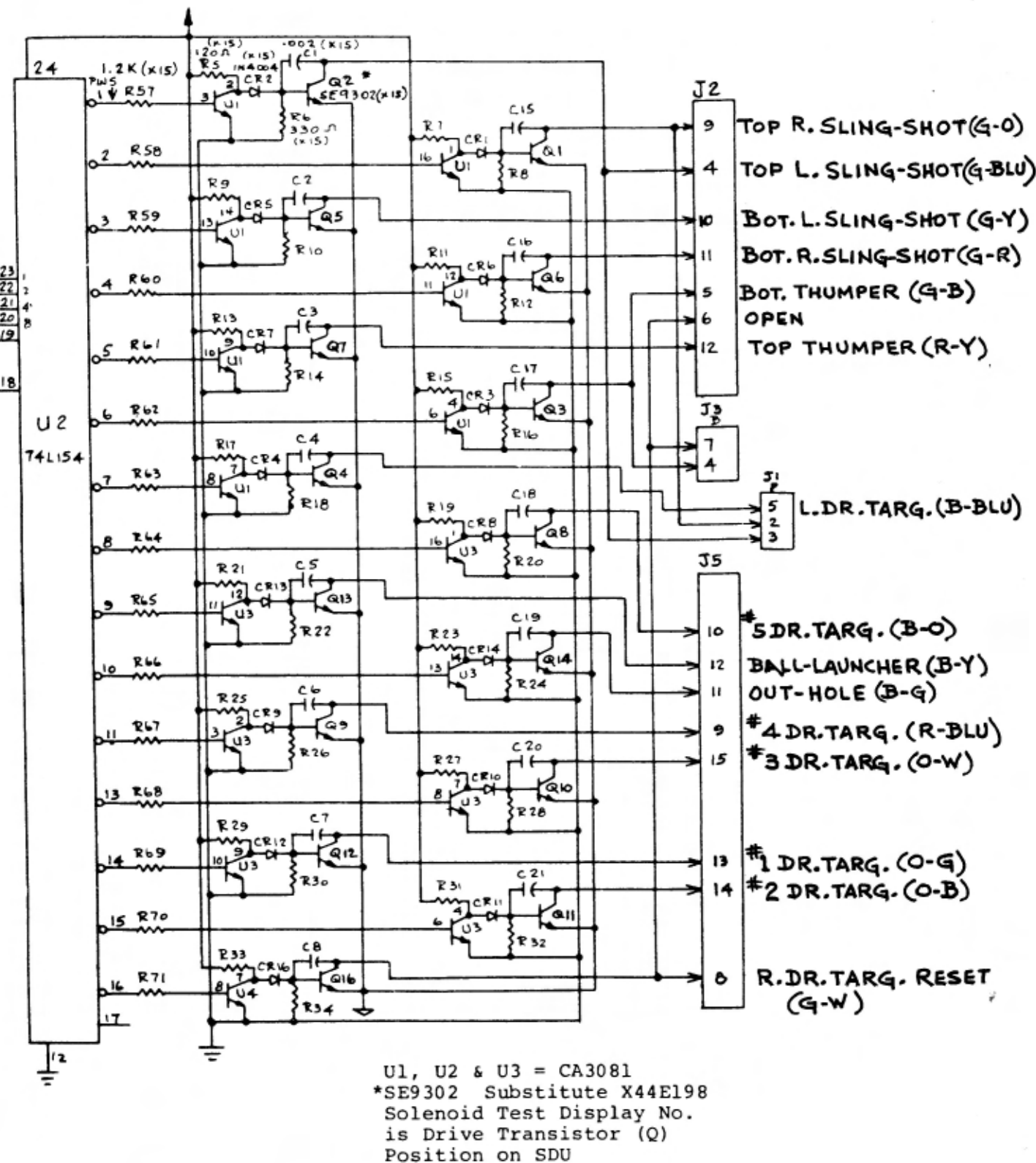
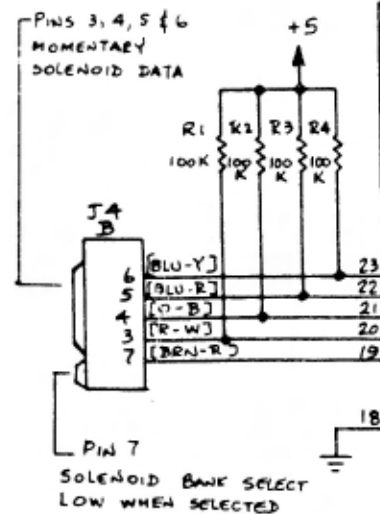
### FLIGHT 2000

| DESCRIPTION              | WIRE COLOR | JACK LDA | PIN NO. |
|--------------------------|------------|----------|---------|
| B ROLL-OVER BOTTOM LEFT  | W-BLU      | J3       | 3       |
| L ROLL-OVER TOP          | W-GREY     | J3       | 23      |
| A ROLL-OVER TOP          | GREY-BLU   | J1       | 10      |
| S ROLL-OVER TOP          | GREY-Y     | J1       | 15      |
| T ROLL-OVER TOP          | R-W        | J3       | 4       |
| O ROLL-OVER TOP          | R-B        | J3       | 16      |
| F ROLL-OVER BOTTOM LEFT  | GREY-O     | J1       | 14      |
| F ROLL-OVER BOTTOM RIGHT | PUR-W      | J1       | 2       |
| BONUS 1,000              | BRN-B      | J1       | 18      |
| BONUS 2,000              | BLU-R      | J1       | 1       |
| BONUS 3,000              | BRN        | J3       | 26      |
| BONUS 4,000              | G-R        | J3       | 1       |
| BONUS 5,000              | GREY-G     | J1       | 19      |
| BONUS 6,000              | GREY       | J1       | 9       |
| BONUS 7,000              | R-Y        | J3       | 25      |
| BONUS 8,000              | O-G        | J3       | 12      |
| BONUS 9,000              | PUR        | J1       | 17      |
| BONUS 10,000             | G-B        | J1       | 8       |
| BONUS MULTIPLIER 1X      | W-B        | J3       | 15      |
| BONUS MULTIPLIER 2X      | BLU-W      | J1       | 23      |
| BONUS MULTIPLIER 3X      | R-G        | J1       | 3       |
| BONUS MULTIPLIER 4X      | Y-BLU      | J3       | 17      |
| BONUS MULTIPLIER 5X      | W          | J3       | 11      |
| FIRST STAGE GO LEFT      | Y-BLU      | J2       | 7       |
| FIRST STAGE GO TOP       | Y-BLU      | J2       | 7       |
| GAME OVER                | GREY-W     | J2       | 11      |
| HIGH SCORE TO DATE       | GREY-O     | J2       | 22      |
| LEFT HAND CORNER B       | Y-G        | J3       | 02      |
| LEFT HAND CORNER L       | W-BLU      | J1       | 13      |
| LEFT HAND CORNER A       | BRN-R      | J1       | 6       |
| LEFT HAND CORNER S       | B-W        | J1       | 28      |
| LEFT HAND CORNER T       | R-W        | J3       | 4       |
| LEFT HAND CORNER O       | O-W        | J3       | 27      |
| LEFT HAND CORNER F       | Y-G        | J1       | 7       |
| LEFT HAND CORNER F       | B          | J1       | 16      |
| MATCH                    | GREY-Y     | J2       | 1       |
| RELEASE NEXT ROCKET      | B-R        | J3       | 19      |
| RIGHT BANK               | BRN-BLU    | J1       | 24      |
| RIGHT SPINNER -500       | PUR-B      | J1       | 4       |
| RIGHT SPINNER -1,000     | R          | J3       | 22      |
| RIGHT SPINNER -1,500     | B          | J3       | 13      |
| RIGHT SPINNER -2,000     | W-BRN      | J1       | 27      |
| SECOND STAGE GO LEFT     | W-BLU      | J2       | 5       |
| SECOND STAGE GO TOP      | W-BLU      | J2       | 5       |
| SHOOT AGAIN (BACKBOX)    | GREY-R     | J2       | 21      |
| SHOOT AGAIN (PLAYFIELD)  | GREY-R     | J1       | 26      |
| SPECIAL LANE             | W          | J2       | 16      |
| SPECIAL LANE TOP         | PUR-W      | J2       | 30      |
| SPECIAL OUT LANE LEFT    | W-G        | J2       | 15      |
| SPECIAL OUT LANE RIGHT   | G-W        | J2       | 14      |
| SPOT BLAST               | G-B        | J3       | 21      |
| TILT                     | GREY-B     | J2       | 10      |
| #1 AT 5 BANK             | GREY-B     | J3       | 10      |
| #2 AT 5 BANK             | PUR-B      | J1       | 25      |
| #3 AT 5 BANK             | B-O        | J1       | 11      |
| #4 AT 5 BANK             | W-O        | J3       | 20      |
| #5 AT 5 BANK             | R-BLU      | J3       | 18      |
| ALL SYSTEMS GO LEFT      | BLU-Y      | J2       | 20      |
| ALL SYSTEMS GO TOP       | BRN-O      | J1       | 12      |
| LEFT SPINNER             | BLU-O      | J1       | 05      |

A2J5-7(BLU) FEATURE LAMP BUS  
A2J5-3(BLU)



**CONTINUOUS SOLENOIDS**



## MOMENTARY SOLENOIDS

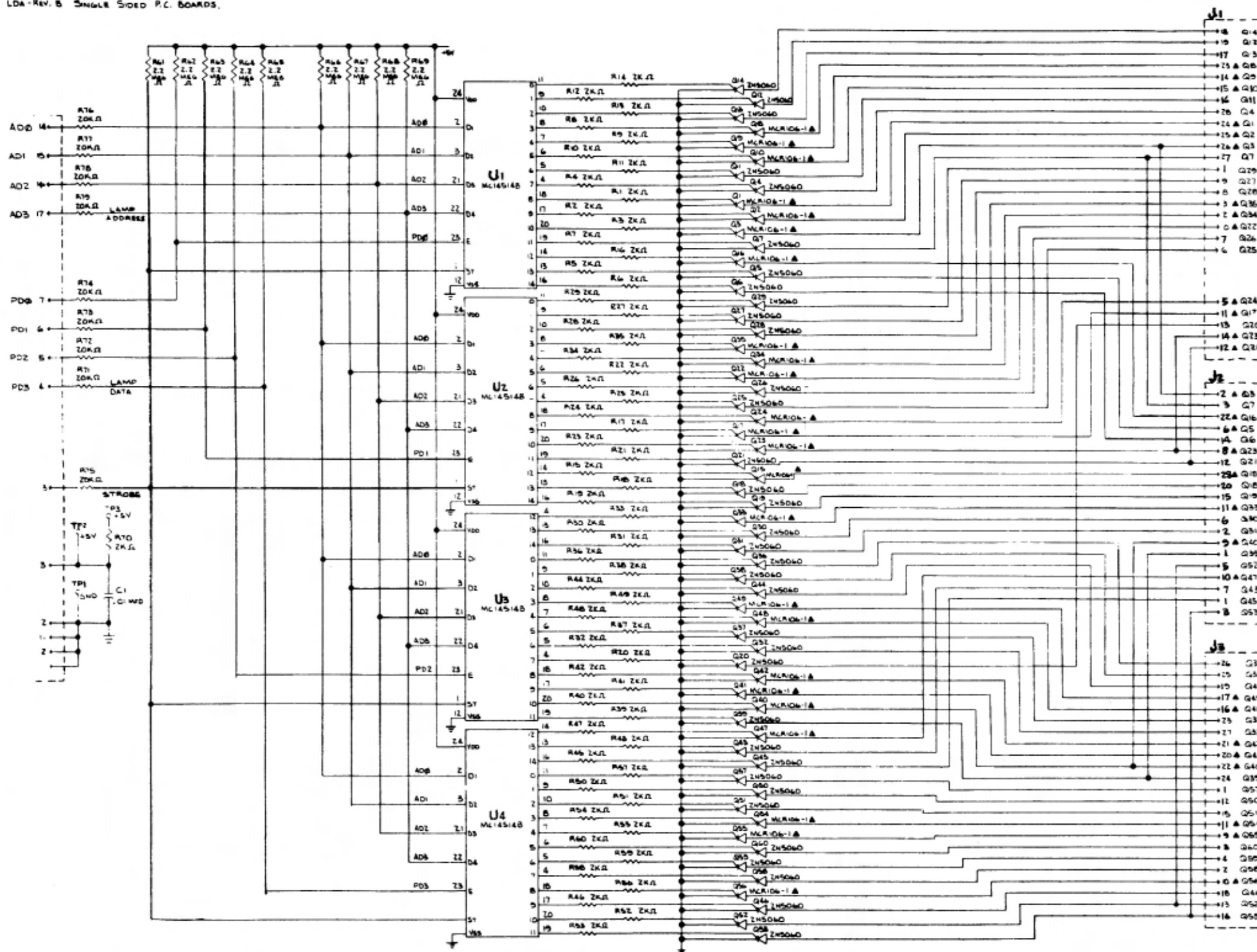
## SOLENOID DRIVER/VOLTAGE REGULATOR SCHEMATIC FOR FLIGHT-2000

# NOTES:

1. ▲ INDICATES MCR106-1 TRANSISTOR.
2. THIS DOCUMENT FOR LDA100 REV. A AND LDA-REV. B SINGLE SIDED P.C. BOARDS.

12B-431S-128

SHEET #1 OF 3



| DESCRIPTION              | WIRE COLOR | JACK LDA | PIN NO. |
|--------------------------|------------|----------|---------|
| B ROLL-OVER BOTTOM LEFT  | W-BLU      | J3       | 3       |
| L ROLL-OVER TOP          | W-GREY     | J3       | 23      |
| A ROLL-OVER TOP          | GREY-BLU   | J1       | 10      |
| S ROLL-OVER TOP          | GREY-Y     | J1       | 15      |
| T ROLL-OVER TOP          | R-W        | J3       | 4       |
| O ROLL-OVER TOP          | R-B        | J3       | 16      |
| F ROLL-OVER BOTTOM LEFT  | GREY-O     | J1       | 14      |
| F ROLL-OVER BOTTOM RIGHT | PUR-W      | J1       | 2       |
| BONUS 1,000              | BRN-B      | J1       | 18      |
| BONUS 2,000              | BLU-R      | J1       | 1       |
| BONUS 3,000              | BRN        | J3       | 26      |
| BONUS 4,000              | G-R        | J3       | 1       |
| BONUS 5,000              | GREY-G     | J1       | 19      |
| BONUS 6,000              | GREY       | J1       | 9       |
| BONUS 7,000              | R-Y        | J3       | 25      |
| BONUS 8,000              | O-G        | J3       | 12      |
| BONUS 9,000              | PUR        | J1       | 17      |
| BONUS 10,000             | G-B        | J1       | 8       |
| BONUS MULTIPLIER 1X      | W-B        | J3       | 15      |
| BONUS MULTIPLIER 2X      | BLU-W      | J1       | 23      |
| BONUS MULTIPLIER 3X      | R-G        | J1       | 3       |
| BONUS MULTIPLIER 4X      | Y-BLU      | J3       | 17      |
| BONUS MULTIPLIER 5X      | W          | J3       | 11      |
| FIRST STAGE GO LEFT      | Y-BLU      | J2       | 7       |
| FIRST STAGE GO TOP       | Y-BLU      | J2       | 7       |
| GAME OVER                | GREY-W     | J2       | 11      |
| HIGH SCORE TO DATE       | GREY-O     | J2       | 22      |
| LEFT HAND CORNER B       | Y-G        | J3       | 02      |
| LEFT HAND CORNER L       | W-BLU      | J1       | 13      |
| LEFT HAND CORNER A       | BRN-R      | J1       | 6       |
| LEFT HAND CORNER S       | B-W        | J1       | 28      |
| LEFT HAND CORNER T       | R-W        | J3       | 4       |
| LEFT HAND CORNER O       | O-W        | J3       | 27      |
| LEFT HAND CORNER F       | Y-G        | J1       | 7       |
| LEFT HAND CORNER F       | B          | J1       | 16      |
| MATCH                    | GREY-Y     | J2       | 1       |
| RELEASE NEXT ROCKET      | B-R        | J3       | 19      |
| RIGHT BANK               | BRN-BLU    | J1       | 24      |
| RIGHT SPINNER -500       | PUR-B      | J1       | 4       |
| RIGHT SPINNER -1,000     | R          | J3       | 22      |
| RIGHT SPINNER -1,500     | B          | J3       | 13      |
| RIGHT SPINNER -2,000     | W-BRN      | J1       | 27      |
| SECOND STAGE GO LEFT     | W-BLU      | J2       | 5       |
| SECOND STAGE GO TOP      | W-BLU      | J2       | 5       |
| SHOOT AGAIN (BACKBOX)    | GREY-R     | J2       | 21      |
| SHOOT AGAIN (PLAYFIELD)  | GREY-R     | J1       | 26      |
| SPECIAL LANE             | W          | J2       | 16      |
| SPECIAL LANE TOP         | PUR-W      | J2       | 30      |
| SPECIAL OUT LANE LEFT    | W-G        | J2       | 15      |
| SPECIAL OUT LANE RIGHT   | G-W        | J2       | 14      |
| SPOT BLAST               | G-B        | J3       | 21      |
| TILT                     | GREY-B     | J2       | 10      |
| #1 AT 5 BANK             | GREY-B     | J3       | 10      |
| #2 AT 5 BANK             | PUR-B      | J1       | 25      |
| #3 AT 5 BANK             | B-O        | J1       | 11      |
| #4 AT 5 BANK             | W-O        | J3       | 20      |
| #5 AT 5 BANK             | R-BLU      | J3       | 18      |
| ALL SYSTEMS GO LEFT      | BLU-Y      | J2       | 20      |
| ALL SYSTEMS GO TOP       | BLU-O      | J1       | 12      |
| LEFT SPINNER             | BLU-O      | J1       | 05      |

12B-431S-128

| ISSUE | CHANGE | DATE |
|-------|--------|------|
|       |        |      |
|       |        |      |
|       |        |      |

SCALE:

PART MUST BE FREE OF BURRS

Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010: All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005: Decimal plus and minus .003. Decimal dimensions on tools plus and minus .001. Angles ±30° unless otherwise specified.

STERN ELECTRONICS INC.  
1725 DIVERSEY BLVD. CHICAGO 60614

LAMP DRIVER SCHEMATIC

FOR FLIGHT 2000

| URN  | DATE | AMT   |
|------|------|-------|
| B.A. |      |       |
| MAT  | FIN. | APPR. |
|      |      |       |