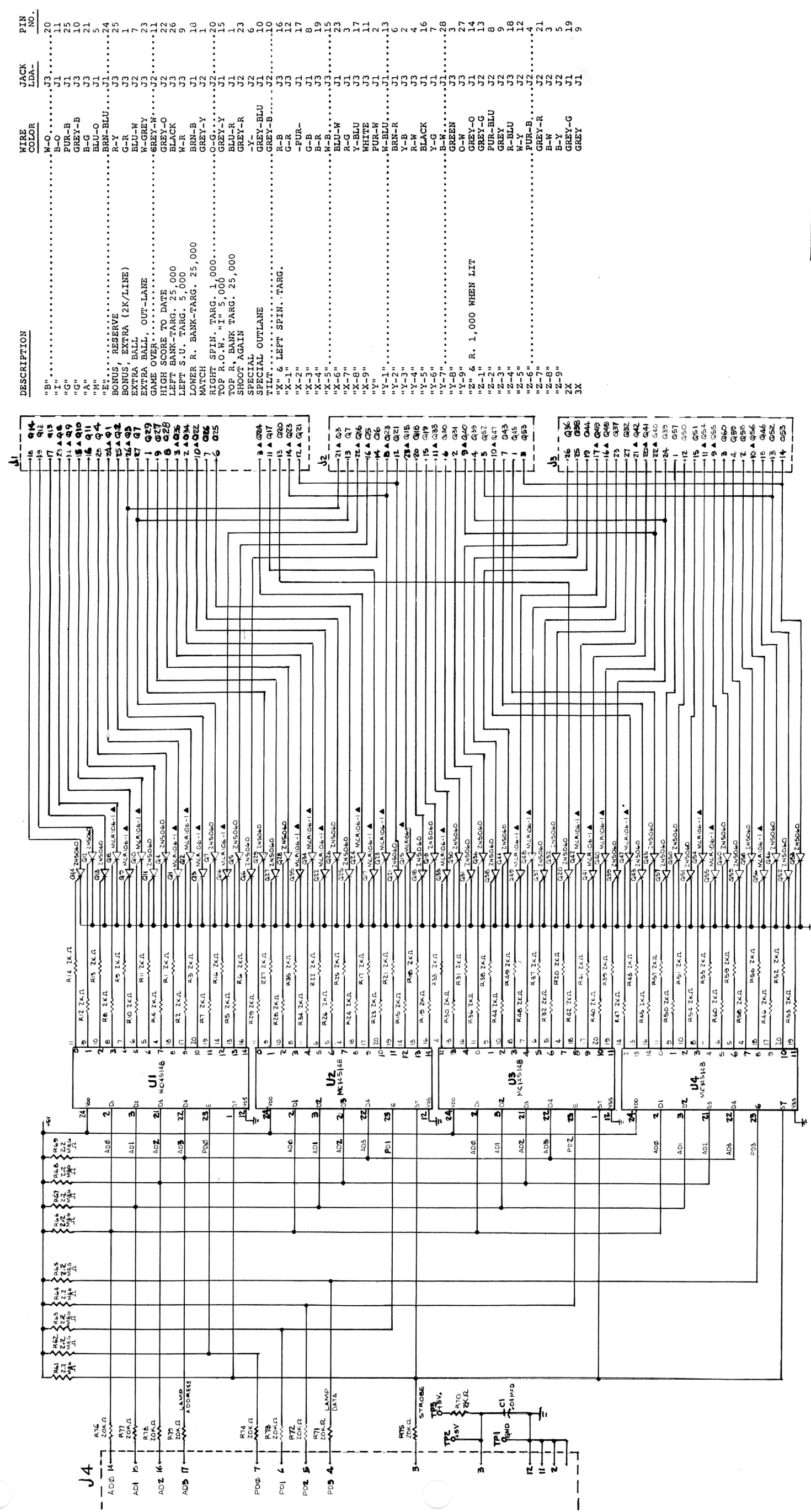


Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010. All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005. Decimal plus and minus .003. Decimal dimensions on tools plus and minus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



DESCRIPTION	WIRE COLOR	JACK	PIN NO.
"B"	W-O	J3	20
"I"	B-O	J1	11
"G"	PUR-B	J1	25
"G"	GREY-B	J3	10
"A"	B-G	J3	21
"M"	BLU-O	J1	5
"E"	BRN-BLU	J1	24
BONUS, RESERVE	R-Y	J3	25
BONUS, EXTRA (2K/LINE)	G-R	J3	1
EXTRA BALL	BLU-W	J2	7
GAME OVER, OUT-LANE	W-GREY	J3	23
HIGH SCORE TO DATE	GREY-W	J2	11
LEFT BANK-TARG. 25,000	GREY-O	J2	22
LEFT S.U. TARG. 5,000	BLACK	J3	26
LOWER R. BANK-TARG. 25,000	W-R	J3	9
MATCH SPIN TARG. 25,000	BRN-B	J1	18
RIGHT SPIN TARG. 1,000	GREY-Y	J2	1
TOP R.O.W. "I" 5,000	O-G	J2	20
TOP R. BANK TARG. 25,000	GREY-Y	J1	15
SHOOT AGAIN	BLU-R	J1	1
SPECIAL OUTLINE	GREY-R	J2	23
TILT	-Y-	J2	6
"X" & LEFT SPIN, TARG.	GREY-BLU	J1	10
"X-1"	GREY-B	J2	10
"X-2"	G-R	J3	16
"X-3"	-PUR-	J3	12
"X-4"	G-B	J1	17
"X-5"	B-R	J3	8
"X-6"	W-B	J3	19
"X-7"	BLU-W	J3	15
"X-8"	R-G	J1	23
"X-9"	Y-BLU	J3	3
"Y"	WHITE	J3	11
"Y-1"	PUR-W	J1	2
"Y-2"	W-BLU	J1	13
"Y-3"	BRN-R	J1	6
"Y-4"	Y-B	J3	2
"Y-5"	R-W	J3	4
"Y-6"	BLACK	J1	16
"Y-7"	Y-G	J1	7
"Y-8"	B-W	J1	28
"Y-9"	GREEN	J3	3
"Z"	O-W	J3	27
"Z-1"	GREY-O	J1	14
"Z-2"	GREY-G	J2	13
"Z-3"	PUR-BLU	J2	8
"Z-4"	GREY	J2	9
"Z-5"	R-BLU	J3	18
"Z-6"	W-Y	J2	12
"Z-7"	PUR-B	J2	4
"Z-8"	GREY-R	J2	21
"Z-9"	B-W	J2	3
"Z-10"	B-Y	J2	5
2X	GREY-G	J1	19
3X	GREY	J1	9

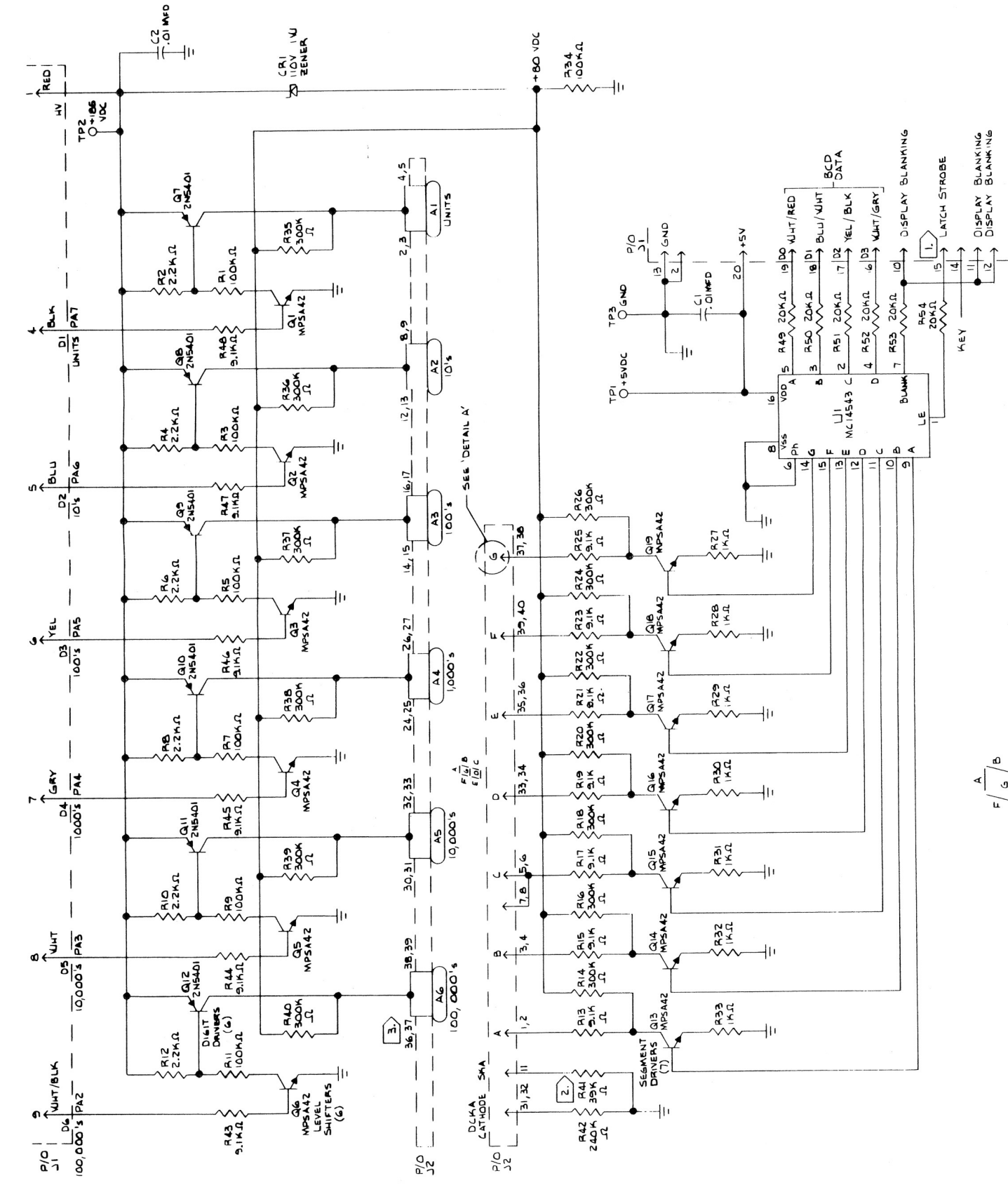
NOTES:
1. ▲ INDICATES MC145148-1 TRANSISTOR.
2. THIS DOCUMENT FOR LDA-100 REV. A AND LDA-REV. B SINGLE PC. BOARDS.

STERN ELECTRONICS INC.	
1725 DIVERSEY BLVD. CHICAGO 60614	
LAMP DRIVER SCHEMATIC	
FOR	B19 GAME
DRN. C.W.	DATE 11-15-79
MAT	APP. AMT

NOTES:
1. PIN'S 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 #

ELECTRONICS INC. Y BLVD. CHICAGO 60614	
7-DIT DISPLAY P.C.B.D.	
DATE 10-80	AMT
FIN.	APPR.

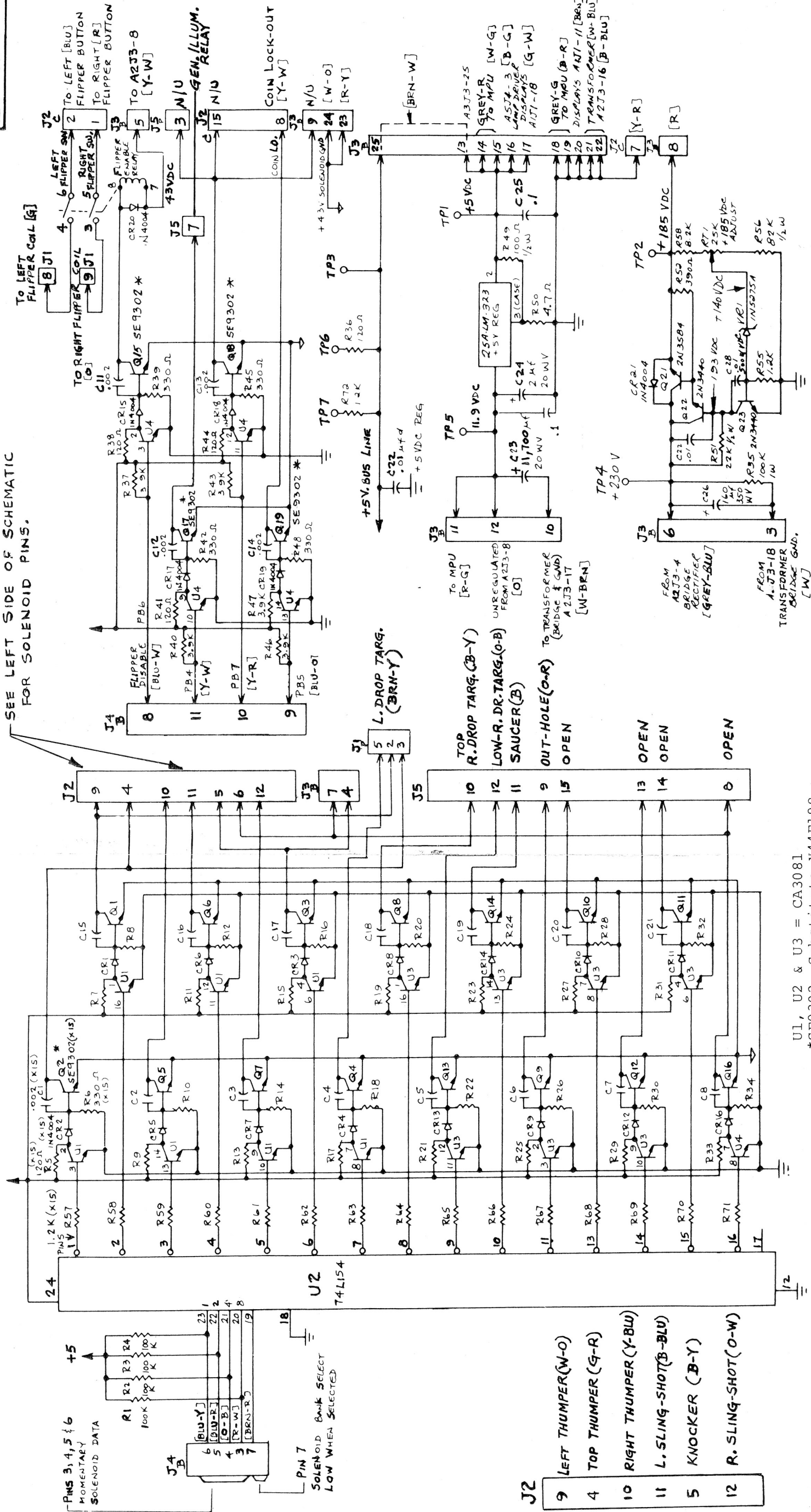
NO. 12B-434-S1	
STERN ELECTRONICS INC. 1725 DIVERSEY BLVD. CHICAGO 60614	
SCHEMATIC, DISPLAY - P.C. BOARD	
FOR GEN. USE	
DRN. 20	DATE 5-25-79
MAT	FIN.
AMT	
APPR.	



DETAIL A

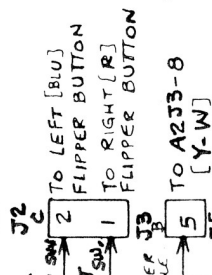
PART MUST BE FREE OF BURRS	
SCALE:	
Unless otherwise specified, all fractional dimensions carry tolerances of plus and minus .010: All decimal dimensions plus and minus .005. Exceptions: Drilled holes plus .003 minus .001. Die casting fractional plus and minus .005: Decimal plus and minus .003. Decimal dimensions on tools plus and minus .001. Angles $\pm 30^\circ$ unless otherwise specified.	
ISSUE	CHANGE
DATE	

SEE LEFT SIDE OF SCHEMATIC FOR SOLENOID PINS.



U1, U2 & U3 = CA3081
*SE9302 Substitute X44E198
Solenoid Test Display No.
is Drive Transistor (Q)
Position on SDU

- J2
- 9 LEFT THUMPER (W-O)
 - 4 TOP THUMPER (G-R)
 - 10 RIGHT THUMPER (Y-BLU)
 - 11 L. SLING-SHOT (B-BLU)
 - 5 KNOCKER (B-Y)
 - 12 R. SLING-SHOT (O-W)



3 N/U GEN. ILLUM.
J2 RELAY

LD. 8

24	[W-O]
23	[R-Y]

[BRN-W]

13 3J3-25

14	GREY-R	[W-G]
15	TO MPU	
16	ASJ4-3	[B-G]
17	LAMP DRIVER	
	DISPLAYS	[G-W]
	ATI-18	

18	GREY-G
19	TO MPOU (B-R)
20	DISPLAYS A2I-11 [BW]
21	TRANSFORMER [W-BL]
22	A2I3-16 [B-BL]

$$\sqrt{7[Y-R]}$$

∞

ELECTRONICS INC.

BLVD. CHICAGO 60614

2

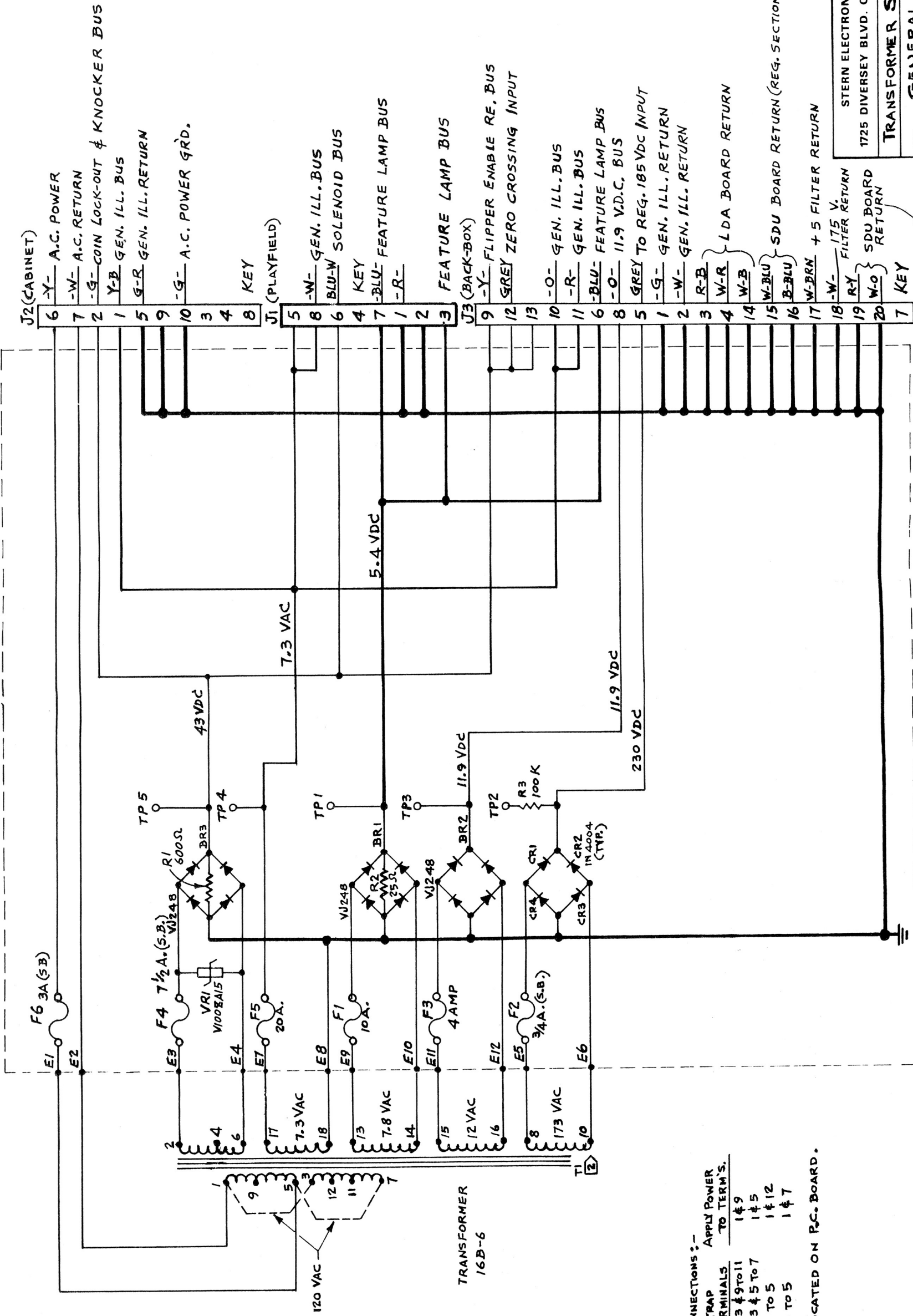
ULP SCHEMATIC

11-15-79

2

11

TA-100
P.C. BOARD



NOTES:			
1. POWER LINE CONNECTIONS:--			
AC LINE	VOLTAGE	STRAP TERMINALS	APPLY POWER TO TERM'S.
	115	1 TO 3 & 9 TO 11	1 & 9
	120	1 TO 3 & 5 TO 7	1 & 5
	220	3 TO 5	1 & 12
	240	3 TO 5	1 & 7

2 It is NOT LOCATED ON P.C. BOARD.

STERN ELECTRONICS INC.

1725 DIVERSEY BLVD. CHICAGO 60614

TRANSFORMER SCHEMATIC

FOR GENERAL USE

DRN.	DATE	AM'T
600.	8-24-79	

(SOL. DR. SECTION)

12B-432-S-121

JACK
PDA

PIN
NO.

J3.....20
J1.....11
J1.....25
J1.....10
J3.....21
J1.....5
J1.....24
J3.....25
J2.....1
J2.....7
J3.....23
J3.....26
J3.....9
J1.....18
J2.....20
J2.....15
J1.....1
J2.....23
J2.....6
J1.....10
J1.....16
J3.....12
J3.....17
J1.....23
J1.....3
J3.....17
J3.....11
J1.....2
J1.....13
J1.....6
J3.....2
J3.....4
J1.....16
J1.....7
J1.....28
J3.....3
J3.....27
J1.....14
J2.....13
J2.....8
J2.....9
J2.....18
J2.....12
J2.....4
J2.....21
J2.....3
J2.....5
J1.....19
J1.....9

12B-432-S-121

JACK
PDA

PIN
NO.

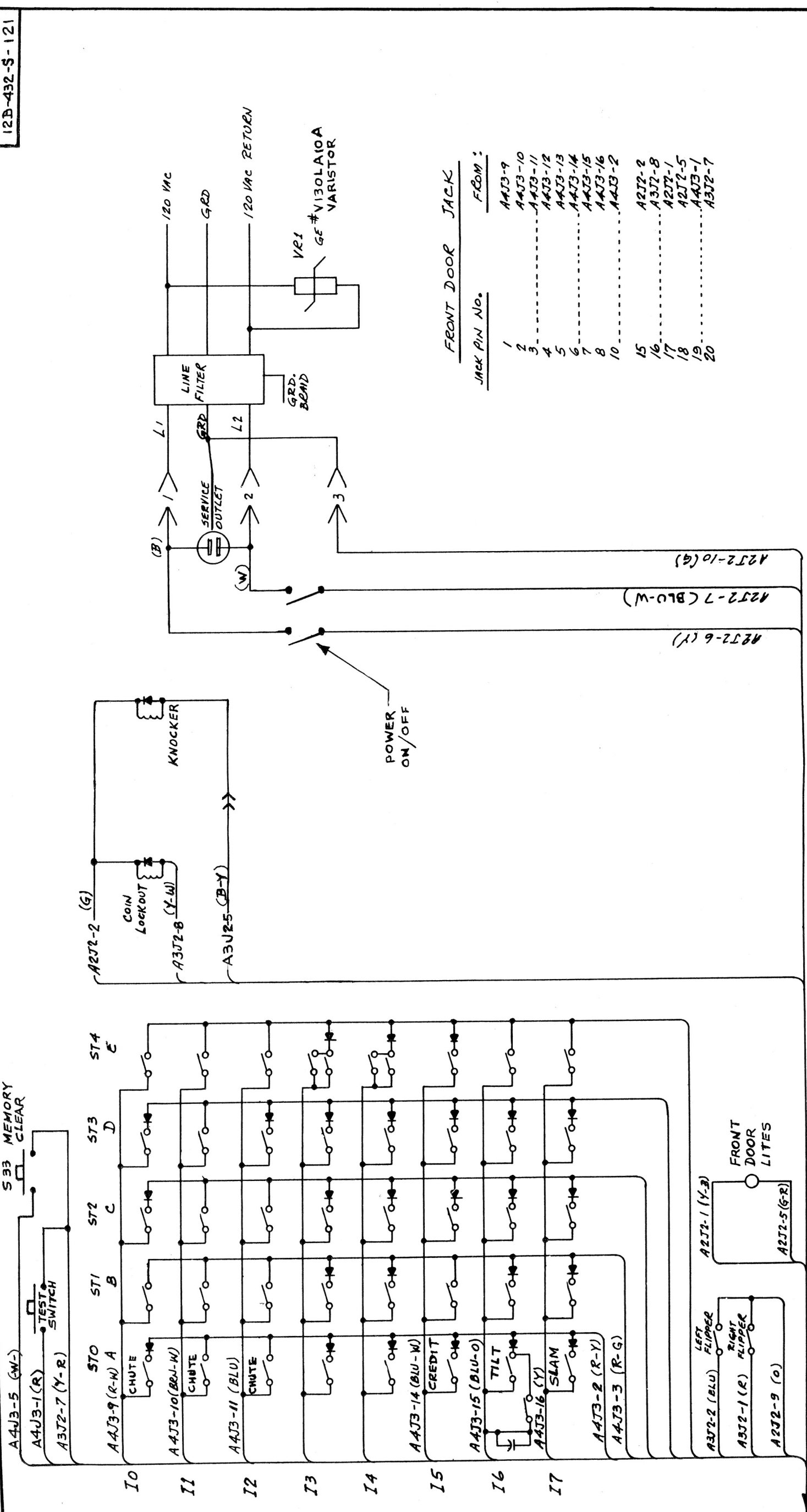
J3.....20
J1.....11
J1.....25
J1.....10
J3.....21
J1.....5
J1.....24
J3.....25
J2.....1
J2.....7
J3.....23
J3.....26
J3.....9
J1.....18
J2.....20
J2.....15
J1.....1
J2.....23
J2.....6
J1.....10
J1.....16
J3.....12
J3.....17
J1.....23
J1.....3
J3.....17
J3.....11
J1.....2
J1.....13
J1.....6
J3.....2
J3.....4
J1.....16
J1.....7
J1.....28
J3.....3
J3.....27
J1.....14
J2.....13
J2.....8
J2.....9
J2.....18
J2.....12
J2.....4
J2.....21
J2.....3
J2.....5
J1.....19
J1.....9

12B-432-S-121

JACK
PDA

PIN
NO.

J3.....20
J1.....11
J1.....25
J1.....10
J3.....21
J1.....5
J1.....24
J3.....25
J2.....1
J2.....7
J3.....23
J3.....26
J3.....9
J1.....18
J2.....20
J2.....15
J1.....1
J2.....23
J2.....6
J1.....10
J1.....16
J3.....12
J3.....17
J1.....23
J1.....3
J3.....17
J3.....11
J1.....2
J1.....13
J1.....6
J3.....2
J3.....4
J1.....16
J1.....7
J1.....28
J3.....3
J3.....27
J1.....14
J2.....13
J2.....8
J2.....9
J2.....18
J2.....12
J2.....4
J2.....21
J2.....3
J2.....5
J1.....19
J1.....9



FRONT DOOR JACK

JACK PIN No.

JACK PIN No.	FROM :
1	A4J3-9
2	A4J3-10
3	A4J3-11
4	A4J3-12
5	A4J3-13
6	A4J3-14
7	A4J3-15
8	A4J3-16
10	A4J3-2
15	A2J2-2
16	A3J2-8
17	A2J2-1
18	A2J2-5
19	A4J3-1
20	A3J2-7

STERN ELECTRONICS INC.			
1725 DIVERSEY BLVD. CHICAGO 60614			
CABINET AND FRONT DOOR WIRING			
FOR STANDARD			
DRN. C.W.	DATE 10-16-79	AMT 43	
MAT 43	FIN. 43	APPR.	

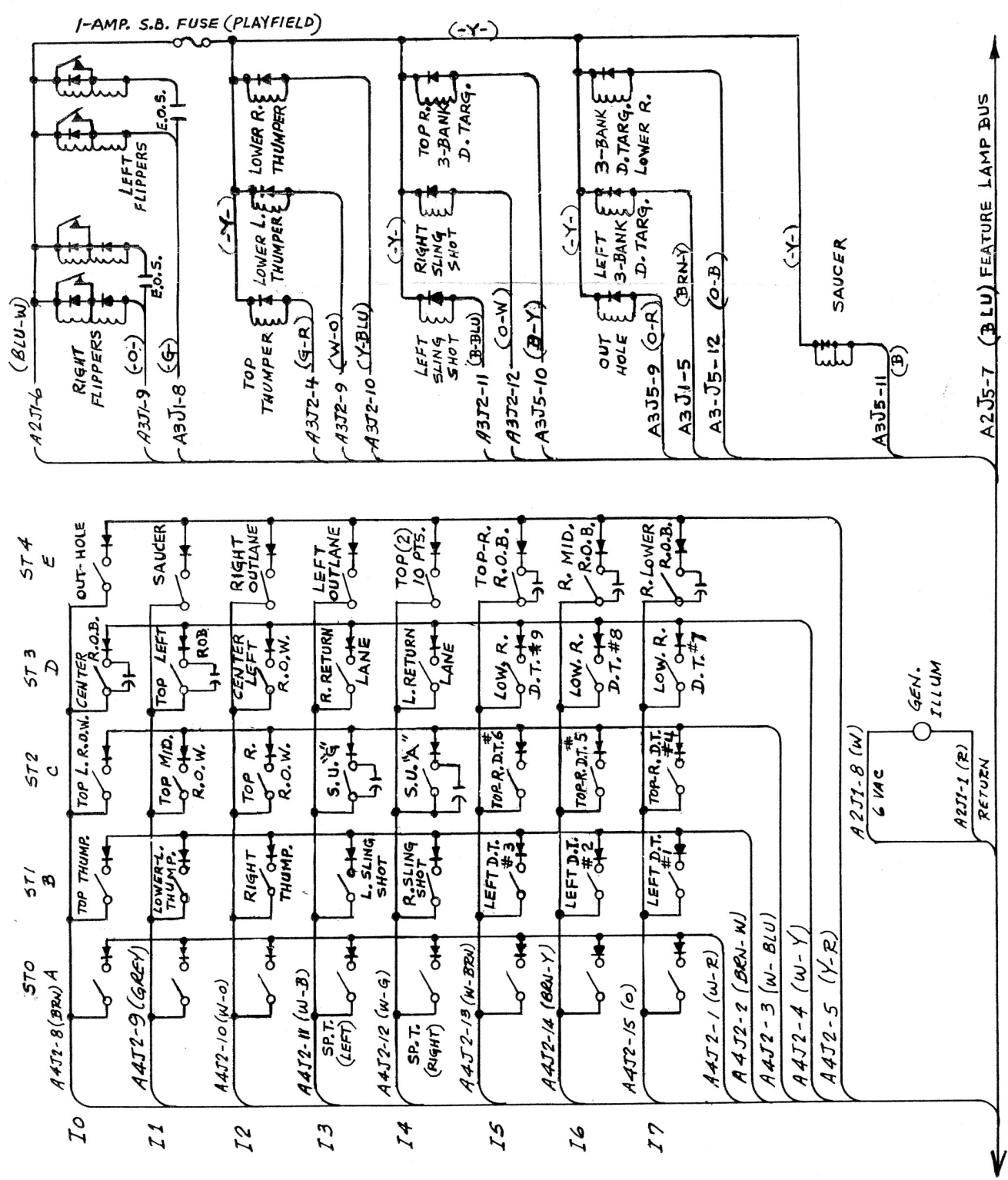
N/U = NOT USED
ALL DIODES ARE IN-4004

ISSUE	CHANGE	DATE

12B-432-S-121

DIETZEN NO. 198M ASEP-PROOF

DESCRIPTION	WIRE COLOR	JACK	PIN
"B".....	W-O.....	J3.....	20
"I".....	B-O.....	J1.....	11
"G".....	PUR-B.....	J1.....	25
"G".....	GREY-B.....	J3.....	10
"A".....	B-G.....	J3.....	21
"M".....	BLU-O.....	J1.....	5
"E".....	BRN-BLU.....	J1.....	24
BONUS, RESERVE	R-Y.....	J3.....	25
BONUS, EXTRA (2K/LINE)	G-R.....	J3.....	1
EXTRA BALL	BLU-W.....	J2.....	7
EXTRA BALL, OUT-LANE	W-GREY.....	J3.....	23
LEFT BANK-TARG. 25,000.....	BLACK.....	J3.....	26
LEFT S.U. TARG. 5,000.....	BRN-B.....	J3.....	9
LOWER R. BANK-TARG. 25,000.....	W-R.....	J1.....	18
RIGHT SPIN. TARG. 1,000.....	O-G.....	J2.....	20
TOP R.O.W. "I" 5,000.....	GREY-Y.....	J1.....	15
TOP R. BANK TARG. 25,000.....	BLU-R.....	J1.....	1
SHOOT AGAIN	GREY-R.....	J2.....	23
SPECIAL	-Y.....	J2.....	6
SPECIAL OUTLANE	GREY-BLU.....	J1.....	10
"X" & LEFT SPIN. TARG.	R-B.....	J3.....	16
"X-1".....	G-R.....	J3.....	12
"X-2".....	PUR.....	J1.....	17
"X-3".....	G-B.....	J1.....	8
"X-4".....	B-R.....	J3.....	19
"X-5".....	W-B.....	J3.....	15
"X-6".....	BLU-W.....	J1.....	23
"X-7".....	R-G.....	J1.....	3
"X-8".....	Y-BLU.....	J3.....	17
"X-9".....	WHITE.....	J3.....	11
"Y".....	PUR-W.....	J1.....	2
"Y-1".....	W-BLU.....	J1.....	13
"Y-2".....	BRN-R.....	J1.....	6
"Y-3".....	Y-B.....	J3.....	2
"Y-4".....	R-W.....	J3.....	4
"Y-5".....	BLACK.....	J1.....	16
"Y-6".....	Y-G.....	J1.....	7
"Y-7".....	B-W.....	J1.....	28
"Y-8".....	GREEN.....	J3.....	3
"Y-9".....	O-W.....	J3.....	27
"Z" & R. 1,000 WHEN LIT	GREY-O.....	J1.....	14
"Z-1".....	GREY-G.....	J2.....	13
"Z-2".....	PUR-BLU.....	J2.....	8
"Z-3".....	GREY.....	J2.....	9
"Z-4".....	R-BLU.....	J3.....	18
"Z-5".....	W-Y.....	J2.....	12
"Z-6".....	PUR-B.....	J2.....	4
"Z-7".....	GREY-R.....	J2.....	21
"Z-8".....	B-W.....	J2.....	3
"Z-9".....	B-Y.....	J2.....	5
2X.....	GREY-G.....	J1.....	19
3X.....	GREY.....	J1.....	9



PLAYFIELD
WIRING DIAGRAM
BIG GAME

NOTES:
N/U = NOT USED
ALL DIODES ARE IN - 4004
D.T. = DROP TARGET
S.U. = STAND-UP TARGET
R.O.B. = ROLL-OVER BUTTON
SP. T. = SPINNING TARGET
R.O.W. = ROLL-OVER WIRE FORM

[STERN] ELECTRONICS, INC.
1725 Diverser Parkway, Chicago, Illinois 60614
(312) 935-4600, Telex 25-4657
Toll Free Service Assistance (800) 621-6424