

ELECTRONAMO



STERN

ELECTRONICS, INC.

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I. INSTALLATION

Assemble the game as follows:

Bolt legs to cabinet. Using flat washers under bolt heads, bolt back box to cabinet. Feed cable connectors and ground braid through cable port in back box. Screw ground braid to braid in back box. Insert connectors so they are completely seated on printed circuit board assemblies.

On all games there are some items that must be checked after shipment. Making these visual inspections may avoid time consuming service work later. Minor troubles caused by abusive handling in shipment are unavoidable. Cable connectors may be loosened, switches (especially tilt switches) may go out of adjustment. Plumb bob tilt switches should always be adjusted after game is set on location and leg levelers are adjusted.

Visual inspections before plugging in line cord:

1. Check wiring of transformer to correspond to location voltage.
2. Check the transformer for any foreign material shorting across wiring lugs.
3. Check that fuses are firmly seated and making good contact.
4. Check wire on coils for proper soldering. Cold solder connections may not show up in factory inspection, but vibration in shipment may break contact.
5. Check switches for loose solder or other foreign material that may have come loose in shipment and could cause shorting of contacts.
6. Check for any wires that may have become disconnected.
7. Check that all cable connectors are completely seated on printed circuit board assemblies.
8. Check that cables are clear of all moving parts.

Check adjustment of the three (normally open) tilt switches:

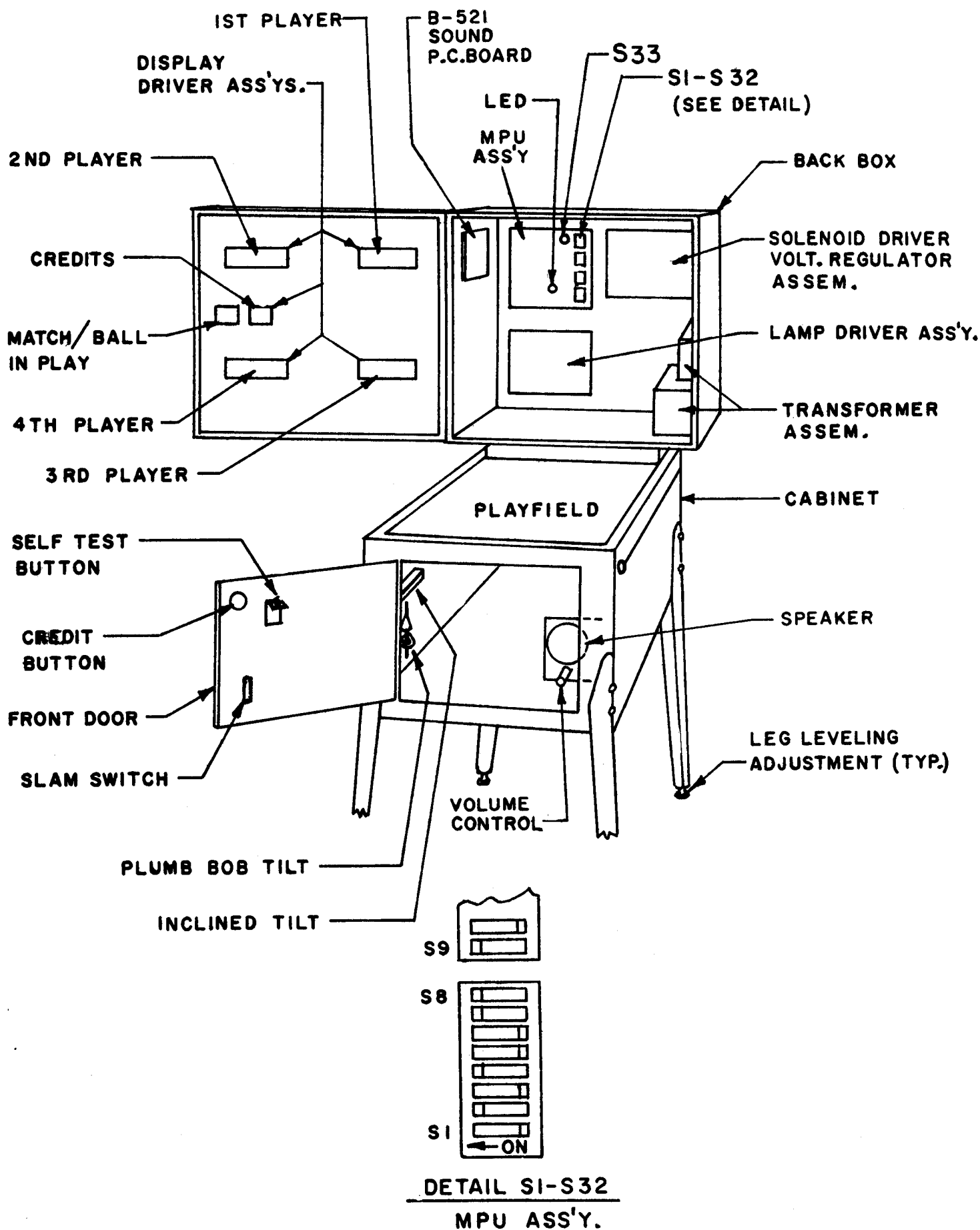
1. Plumb bob tilt on left side of cabinet near front door.
2. Ball tilt above plumb bob tilt. Insert the smaller ball (gold 15/16" dia.) into the ball tilt assembly, and adjust the bracket so the ball will roll free to contact the switch blade, if front of cabinet is raised.
3. Panel tilt on bottom of playfield panel.

NOTE

TO PROTECT SOLID STATE COMPONENTS
BEFORE TOUCHING ANY COMPONENT IN THE
BACK BOX, DISCHARGE ANY POSSIBLE STATIC
BUILD-UP BY TOUCHING ANY GROUND
CIRCUIT, e.g. SIDE ARMOR, GROUND BRAID.

ELECTRONIC PIN BALL GAME

Figure 1



II. GENERAL GAME OPERATION

PLACE BALL INTO PLAYFIELD BY OUTHOLE:

COIN GAME. Coin should be rejected. Plug in line cord. For proper game operation grounding circuit must be used. Move power ON-OFF Toggle Switch at bottom right front corner of cabinet to "ON" position. The game will play a tune to announce game-readiness. Drop targets are reset, scores are reset to zero, alternating with the "high Game to Date," and the game is ready for play. Coin Game. The game should accept the coin and post credits* for coins accepted (Adjustable). Pressing the credit button on the door will cause the outhole kicker to move the ball to the shooter lane. The 1st player-up lite becomes lit. A tune* is played to announce play-readiness.

One player is registered each time the credit button is pressed (one to four can play). The credits are reduced by one each time the credit button is pressed until the credits are reduced to zero. Credit button is in-operative after 4 player's are registered.

Shooting the ball initiates play. Rebound switches score 10-points or 100 points, or 300 points and advances bonus. Thumper-bumper scores 100 points in 5 ball, 1000 points in 3 ball.

When the ball enters the outhole, the bonus score is added to the players score. The player-up and/or ball in play on the back box is advanced one position. The bonus score starts at 1,000 points. The outhole kicker moves the ball to the shooter lane and play is resumed. This continues until each player has played the allowable number of balls per game (adjustable). At this time the "Game Over" light becomes lit. A random Match* number appears and the "Match" light becomes lit. If the match number is the same as the last two digits in the player's score a free game is awarded.

Extra Ball won during the course of the game is played immediately after the player's regular ball enters the outhole. The player-up and/or ball in play are not advanced for extra ball play. Bonus score is added to the player's score and the bonus is set to 1,000 points before the game moves the extra ball for play.

At the end of the game, a "High Game to Date" is alternately flashed with all player scores. If the "High Game to Date" is beat, this feature* can award up to 3 free games.

Tilting the game results in loss of the ball in play. The flippers, thumper-bumpers, etc., go "dead". Bonus score is not added. The purpose of the tilt penalty is to discourage the player from jostling the machine in an attempt to prolong play. Game action becomes normal after the outhole kicker moves the ball to the shooter lane.

Slamming the machine results in the loss of the game. All feature lights go out and the game becomes "dead" through a built-in time delay circuit. The purpose of the time delay circuit is to discourage abuse of the machine. After the delay, the "Game Over" light lites and the game readiness tune is played. The time delay occurs anytime one of the slam switches is made to contact.

There is a slam switch on the front door. One on the tilt board and one on the playfield. (Any number of slam switches could be installed by the operator, to meet his individual requirement). The switch should be adjusted to have approximately 1/16" gap between the contacts. The weighed blade should be adjusted to attain the desired sensitivity. Decreasing gap between contacts will make the switch more sensitive. Opening the gap will reduce sensitivity.

Some tunes and features can be disabled by operator is so desired. * See back box adjustments. *****

III. FRONT DOOR GAME ADJUSTMENTS:

HIGH SCORE FEATURE ADJUSTMENTS:

The game is designed to award an extra ball or a free game (option) at three score levels. (See High Score Feature in game book). The recommended levels are on the score card on the game.

Any level from 10,000 or 990,000 can be set, as desired. It is also possible to reset or turn off (00) any or all of the levels, if desired.

1. Push and release Self-Test button at one second intervals five times or until number 01 appears on the Match/Ball in Play display.
2. The number on the Player Score Displays is the first score level*. It can be increased, if desired, by holding the credit button in. To decrease the score level, reset to '00', and then hold the credit button in. Release the credit button when the desired High Score appears. Note that the level changes 10,000 points at a time. If the number '00' is left on the displays, the high score feature is eliminated for that level.
3. Repeat steps 1 and 2 for the second and third high score levels. The number '02' and '03' on the Match/Ball-in-Play display are for the second and third levels, respectively.

NOTE: Only One Extra Ball Can Be Achieved Per Ball In Play.

HIGH GAME TO DATE FEATURE:

The game is designed to award up to 3 free games (option) when "High Game to Date" is beat. For the recommended, factory present level, see game book.

It is recommended that the level, which will build with game play, be periodically reset to the factory recommended level to encourage game play. The adjustment procedure is the same as for the High Score Feature Adjustment, Steps 1 and 2. Continue pushing the Self-Test button until the number '04' appears on the Match/Ball-in-Play display and then do Step 2.

Any level from '00' to 990,000 can be set as described. It is to be noted that '00' does not turn off the feature, as it does on High Score feature. The feature is turned off by positioning switches to the "OFF" position.

*Can be quickly set to '00' by pressing S33 on the MPU assembly in the back box.

IV. FEATURE OPERATION & SCORING

BONUS SCORE FEATURE:

A bonus score of 1,000 to 19,000 may be scored. The game starts with a bonus score of 1,000. The bonus score advances one step at a time, each time the ball goes into the top eject hole, every FOURTH spin of the spinning target, each time the ball goes over the rollover switch in the upper left lane. Single bonus advances are also scored when either of the two rebound rubbers are hit in the middle of the playfield or the stationary target is made. The two outlanes advance the bonus 3 steps as does the center eject when lit and the upper left lane when lit. The bonus is collected when the ball goes into the outhole or the side lane (upper left).

3 BANK DROP TARGET FEATURE:

Each target scores 500 points.

- | | |
|-----------------------|---|
| 1st TIME DOWN: | Double bonus is awarded. The lower 2X lite goes out when the ball goes into the outhole and the Bonus Score is collected. |
| 2nd TIME DOWN: | Triple Bonus is awarded. The lower 3X lite goes out when the ball goes into the outhole and three times the lit Bonus Score is collected. |
| 3rd TIME DOWN: | Five times the Bonus is awarded. The lower 5X lite goes out when the ball leaves the playfield and the bonus score is collected. |

EVERYTIME all drop targets are down an additional 6,000 points is awarded.

5 BANK DROP TARGET FEATURE:

Each target scores 500 points:

- 1st TIME DOWN:** Lites "Lights Extra Ball Lane" (Adjustable to By-pass).
- 2nd TIME DOWN:** Lites Extra Ball Lane (Right return lane) and lites "Score Special"
- 3rd TIME DOWN:** Scores special adjustable to:
 - 1) Go Out - 1 special per ball
 - 2) Open Ended - Continues to award special every time

SPECIAL LITE FEATURE

Adjustable to Award

- 1) 1 free game
- 2) 1 extra ball
- 3) 1 free game and 1 extra ball
- 4) 100,000 points

EVERYTIME all drop targets are down an additional 10,000 points is awarded.

EXTRA BALL FEATURE:

When the 5 Bank Target is made for the 2nd time, the right return lane is lite for extra ball. The ball going thru the lane when lit awards an extra ball and lites the Shoot Again lite, the ball into the outhole also collects the bonus.

SPINNER FEATURE:

Spinner scores 100 points, when the bonus reaches 10,000, the Spinner Scores 1,000 when lit lite lights, and the Spinner Scores 1,000 points. Every Fourth spin of the spinner advances the bonus 1,000 points.

ROLLOVER BUTTON & LEFT RETURN LANE:

The rollover button is located in the turn around lane, (upper right). When the ball rolls over the button 100 points are scored and the "9,000 when lit" lite is turned on at the left return lane. The ball rolling over the wire form scores 9,000 points and turns off the lite.

STATIONARY TARGET:

The stationary target scores 5,000 points and advances bonus one step, also lites Eject Hole and side lane for extra bonus steps.

EJECT POCKET:

The eject pocket scores 500 points and one bonus advance unless the Stationary Target has been made, then the Eject Pocket is worth 5,000 points and three bonus advances.

THE SIDE LANE (UPPER LEFT):

The kicker located in the side lane scores the Lit Bonus Value and kicks the ball to the top of the playfield. The rollover wire form located in the side lane scores 1,000 points and one bonus step advance unless the lite is lit (by hitting the stationary target), then the wire form scores 5,000 and 3 bonus step advances when the ball travels over it.

THUMPER-BUMPER:

Thumper-Bumper score 100 points on 5 balls and 1,000 points on 3 ball.

OUTLANES:

Score 3,000 and 3 Bonus Advances.

V. GAME ADJUSTMENTS

A. Playfield Post Adjustments:

Posts that control left and right outlane openings on playfield can be moved to make access to outlanes conservative or liberal for ball to enter. See Figure 2.

Conservative entry will decrease playing time and scoring.

Liberal entry will increase playing time and scoring.

B. Back Box Game Adjustments:

Each game has thirty-two switches located on the MPU module, located in the back box, that allow play to be customized to the location. See Figure 1. Credits per coin, maximum credits, credit display, balls per game, match feature, high game feature, special award and melody are selectable by means of the switches. The switches contained in four sixteen lead packages numbered S1-8, S9-16, S17-24 and S25-32 for easy identification. The "On toggle" position is marked on the assembly. **TURN OFF POWER BEFORE MAKING ADJUSTMENTS. MAKE ADJUSTMENTS BEFORE TURNING POWER BACK ON.**

MPU SWITCH ASSIGNMENT

1 thru 5	Coin Chute No. 2 Center
6	High Score
7	Balls Per Game
8	Chime Melody
9 thru 13	Coin Chute No. 3
14	Center Saucer Upper and Left Lane
15-16	High Game To Date
17 thru 19	Max. Credits
20	Credit Display
21	Match Feature
22	Special Selection
23	Electronic Sound
24	Bonus Countdown
25	Not Used
26	Extra Ball Lane
27	Not Used
28 thru 30	Coin Chute No. 1
31-32	Special Award

1. **HIGH SCORE FEATURE:**

The game is designed to award an Extra Ball or Free Game at one, two or three high score levels. See Front Door Game Adjustments.

AWARD	SWITCH 6
EXTRA BALL	OFF
REPLAY	ON

2. **BALL PER GAME:**

NO. of BALLS PER GAME	SWITCH 7
5	ON
3	OFF

3. **MELODY OPTION:**

The game is designed to play melodies to announce power-up, credit, etc. Some tunes are adjustable by Switch 8.

GAME MELODY	SWITCH 8	MELODY
POWER-UP.....	ON	Full Melody
"	OFF	Full Melody
COIN.....	ON	Full Melody
"	OFF	2 Tones Only
CREDIT BUTTON.....	ON	Full Melody
"	OFF	2 Tones Only
GAME OVER.....	ON	Full Melody
"	OFF	Full Melody

4. Top eject pocket and side lane lamps after making the stationary target.

SW 14	ON	(Stay ON FOR THE ENTIRE BALL)
SW 14	OFF	(Goes OFF AFTER BEING MADE)

5. **HIGH GAME TO DATE FEATURE:**

The game is designed to award up to 3 free games as an option of high score to date is beat. Each this happens, the winning score becomes the new high game score to beat. This score is displayed on all 4 player score displays at the end of each game as an incentive to play.

	SWITCH	
NOVELTY	16	15
1 FREE GAME	OFF	OFF
2 FREE GAMES	OFF	ON
3 FREE GAMES	ON	OFF
	ON	ON

6. **MAXIMUM CREDITS:**

The maximum credits accepted by the machine limits the number of games that can be accumulated by coining, by winning replays or both. The maximum number of credits are adjustable by means of switches 17, 18, and 19. Eight credit limits are available. Switch settings are listed below:

MAXIMUM CREDITS	19	18	17
5.....	OFF	OFF	OFF
10.....	OFF	OFF	ON
15.....	OFF	ON	OFF
20.....	OFF	ON	ON
25.....	ON	OFF	OFF
30.....	ON	OFF	ON
35.....	ON	ON	OFF
40.....	ON	ON	ON

7. **CREDIT DISPLAY:**

CREDITS DISPLAY	SWITCH 20
YES	ON
NO	OFF

8. **MATCH FEATURE:**

When the **MATCH FEATURE** is On, a random number appears in the "**MATCH/BALL in PLAY**" window and the word **MATCH** is illuminated. If the number matches the tens digit in a player's score a free game is awarded. The **MATCH** features creates an incentive to play.

MATCH	SWITCH 21
ON	ON
OFF	OFF

9. **SPECIAL:**

The number of replays made per ball from the **5 BANK DROP TARGET** can be controlled as follows;

	SWITCH 22
1 Special per ball-	ON
Opened Ended -	OFF

10. **ELECTRONIC SOUND:**

The game will produce two different sets of sounds.

	SWITCH 23
Electronic Chimes	OFF
Computer type sounds	ON

11. **BONUS COUNTDOWN:**

The method of bonus countdown can be adjusted as follows:

	SWITCH 24
1,000 Steps	ON
Multiple Steps	OFF

11. EXTRA BALL:

This option can be adjusted as follows:

NO EXTRA BALL (BYPASS)
AWARD EXTRA BALL

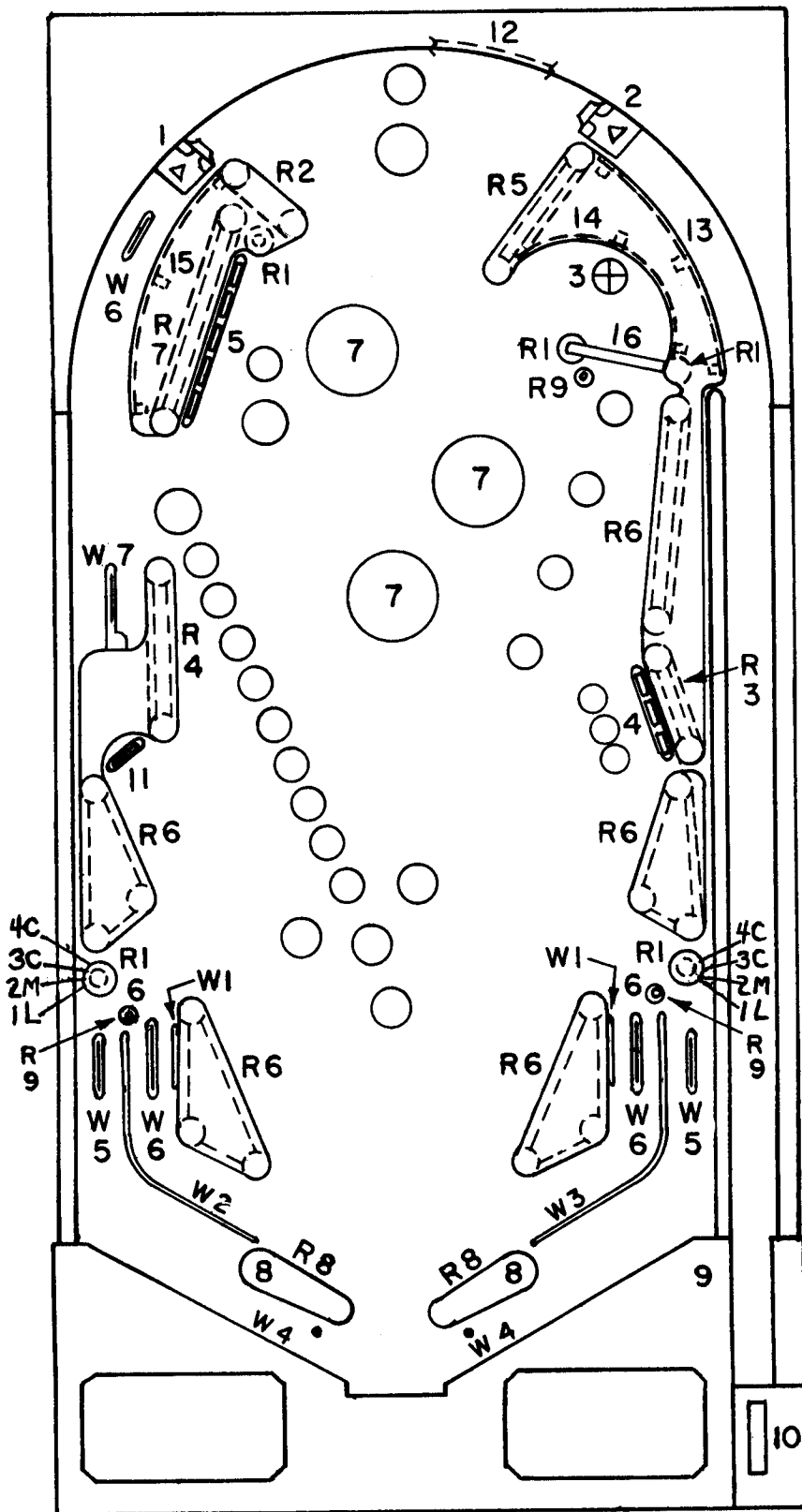
SWITCH 26
OFF
ON

12. SPECIAL AWARD:

Award received for hitting the 5 Bank Drop Target Down; the required number of times can be adjusted as follows:

AWARD	SWITCHES	POSITION
FREE BALL	31	ON
	32	OFF
FREE GAME	31	OFF
	32	ON
100,000 POINTS	31	OFF
	32	OFF
FREE BALL AND	31	ON
FREE GAME	32	ON

LECTRONAMO — Playfield Chart



POST ADJUSTMENT

1C- Conservative
2M- Medium
3L- Liberal

Figure 2

RUBBER RINGS

R1-7A-120-031
R2-7A-120-100
R3-7A-120-150
R4-7A-120-200
R5-7A-120-225
R6-7A-120-250
R7-7A-120-300
R8-7A-121-Y
R9-7A-125

GUIDE WIRE & ROLL OVER WIRE

W1-6A-101
W2-6A-219
W3-6A-227
W4-2A-142-1
W5-A-383
W6-A-149
W7-A-501

PLAYFIELD PLASTIC SHIELDS

Top Arch Set 13C-102-1L & 1R
Lectronamo Set 13A-105-1 to-6

MISCELLANEOUS PARTS

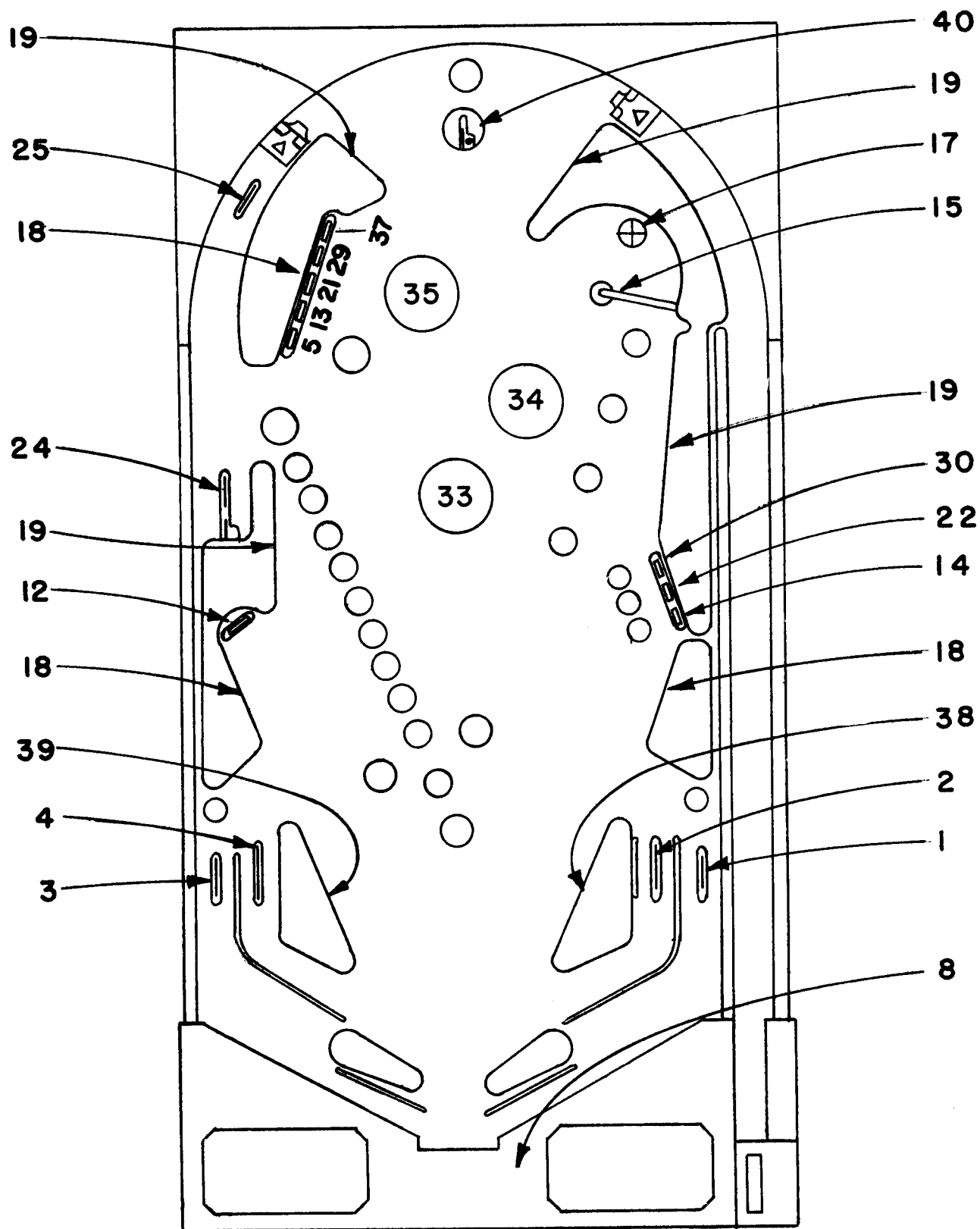
1. Ball Gate, A-104-L
2. Ball Gate, A-104-R
3. Roll Over Button 4B-241
4. Bank Target D-393-3C
5. Bank Target D-393-5A
6. Ball Guide Post 2A-200
7. Thumper Cap 13A-12-1
8. Flipper & Shaft A-192
Flipper 4B-122-Y
9. Instruction Plate 14B-1-3
10. Shooter Gauge 14A-2-2
11. Target Ass'y A-461
12. Top Arch Rail 6B-222
13. Guide Rail Ass'y A-514
14. Guide Rail Ass'y A-289
15. Guide Rail Ass'y A-515
16. Spin Target B-439-3

VI. SWITCH IDENTIFICATION Self Test Display Numbers

SWITCH NO.	SWITCH LOCATION	SWITCH NO.	SWITCH LOCATION
1	RIGHT OUTLANE	21	#3 TARGET (5-BANK)
2	RIGHT RETURN LANE	22	#2 TARGET (3-BANK)
3	LEFT OUTLANE	23	
4	LEFT RETURN LANE	24	KICKER
5	#1 TARGET (5-BANK)	25	1000 ADVANCE BONUS
6	CREDIT BUTTON	26	
7	TILT	27	
8	OUT-HOLE	28	
9	COIN #3 (RIGHT)	29	#4 TARGET (5-BANK)
10	COIN #1 (CENTER)	30	#3 TARGET (3-BANK)
11	COIN #2 (LEFT)	31	
12	TARGET (STAND-UP)	32	
13	#2 TARGET (5-BANK)	33	CENTER THUMPER
14	#3 TARGET (3-BANK)	34	RIGHT THUMPER
15	SPIN-TARGET	35	LEFT THUMPER
16	SLAM-TILT (3)	36	
17	ROLL-OVER BUTTON	37	#5 TARGET (5-BANK)
18	300 ADVANCE BONUS (3)	38	RIGHT SLING-SHOT
19	10 POINTS (3)	39	LEFT SLING-SHOT
20		40	SAUCER

NOTES: 1. Flipper Button Cabinet Switches Do Not Appear On Test

SWITCHES



SWITCHES NOT ON PLAYFIELD :

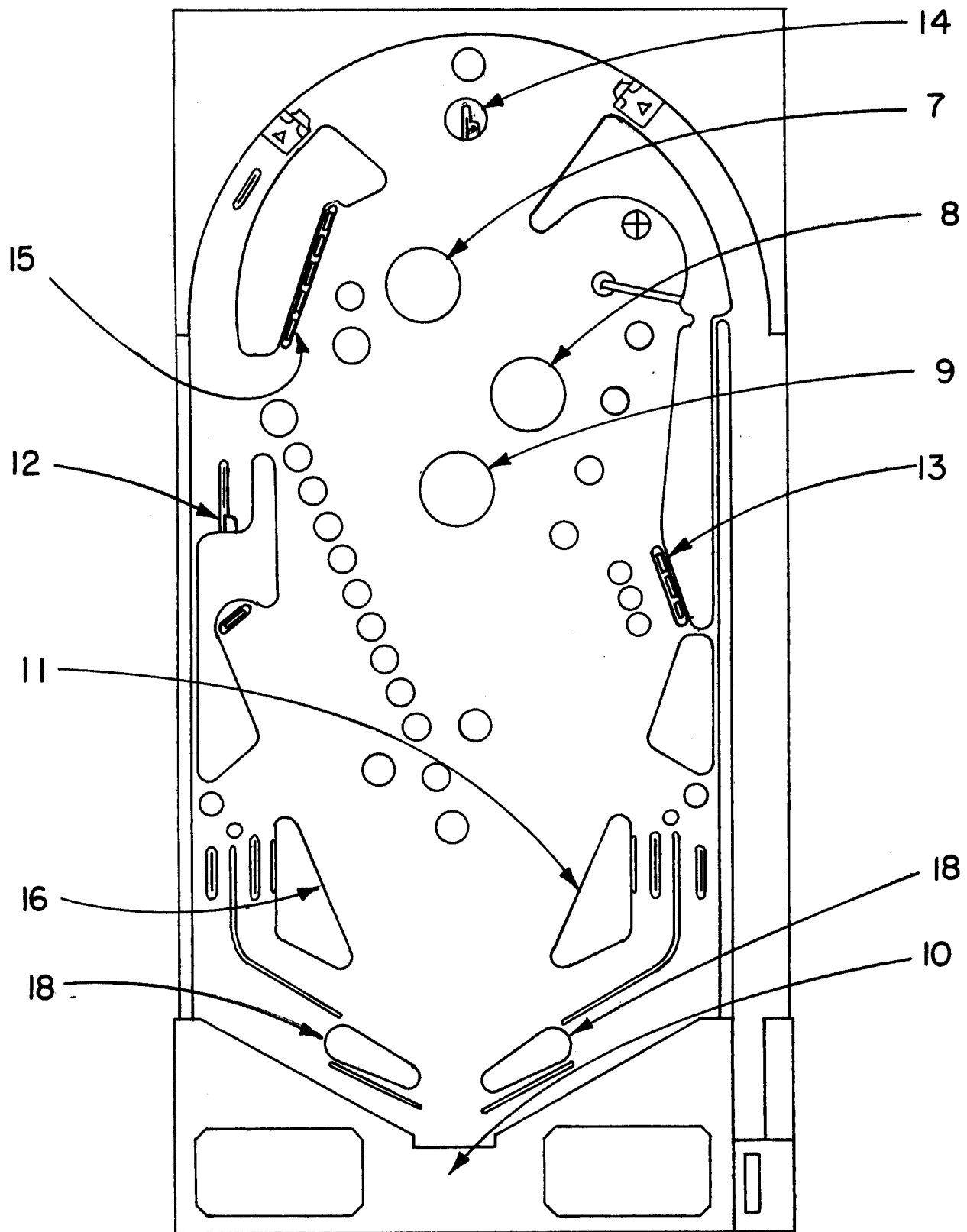
6 CREDIT BUTTON
 7 ROLL TILT
 7 PENDULUM
 9 RIGHT CHUTE

11 LEFT CHUTE
 10 CENTER CHUTE
 16 TILTBOARD VIB.
 16 DOOR & PLAYFIELD VIB.

VII. SOLENOID IDENTIFICATION **Self Test Display Numbers**

SOLENOID NO.		SOLENOID LOCATION
7	.....	LEFT THUMPER
8	.....	RIGHT THUMPER
9	.....	CENTER THUMPER
10	.....	OUT-HOLE
11	.....	RIGHT SLING-SHOT
12	.....	KICKER
13	.....	3-BANK DROP TARGET
14	.....	SAUCER
15	.....	5-BANK DROP TARGET
16	.....	LEFT SLING SHOT
17	.....	KNOCKER
18	.....	FLIPPERS
19	.....	COIN LOCK-OUT

SOLENOIDS



SOLENOIDS NOT ON PLAYFIELD:

17 KNOCKER

19 LOCK-OUTS

VIII. PARTS LIST GAME #105 LECTRONAMO

MISCELLANEOUS

PART NUMBER

Transformer (Domestic or Export).....	16B-3
Transformer & Rectifier Board.....	C-464
Bulbs, #44.....	8A-101

ASSEMBLY COILS

Coin Lockout.....	C-36-5500
Flipper Left & Right (2).....	J-25-500/34-5050
Knocker.....	N-26-1200
Outhole Kicker.....	J-26-1100
Saucer Eject (1).....	J-28-2300
Thumper-Bumper 3.....	J-26-1200
Sling-Shot (2).....	J-26-1200
Drop Target Reset (2).....	B-27-2300

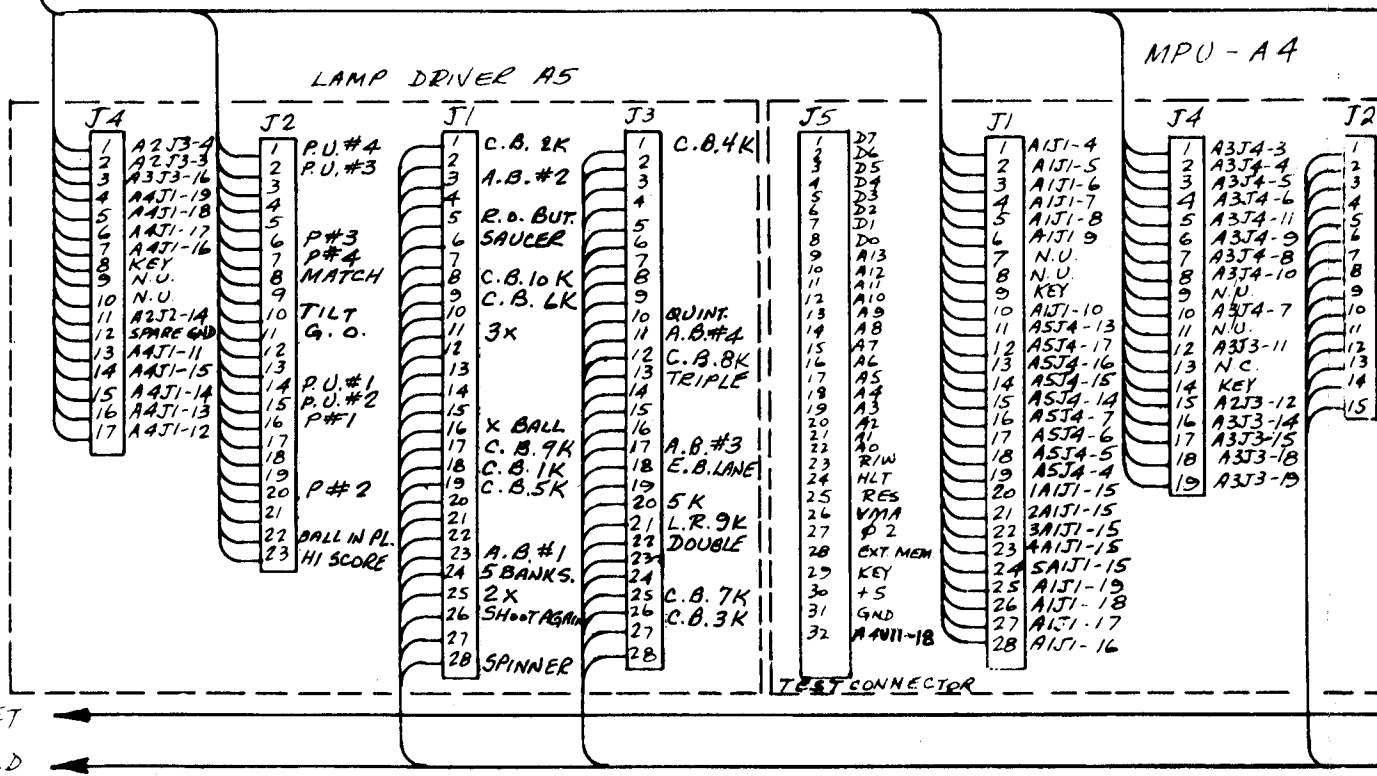
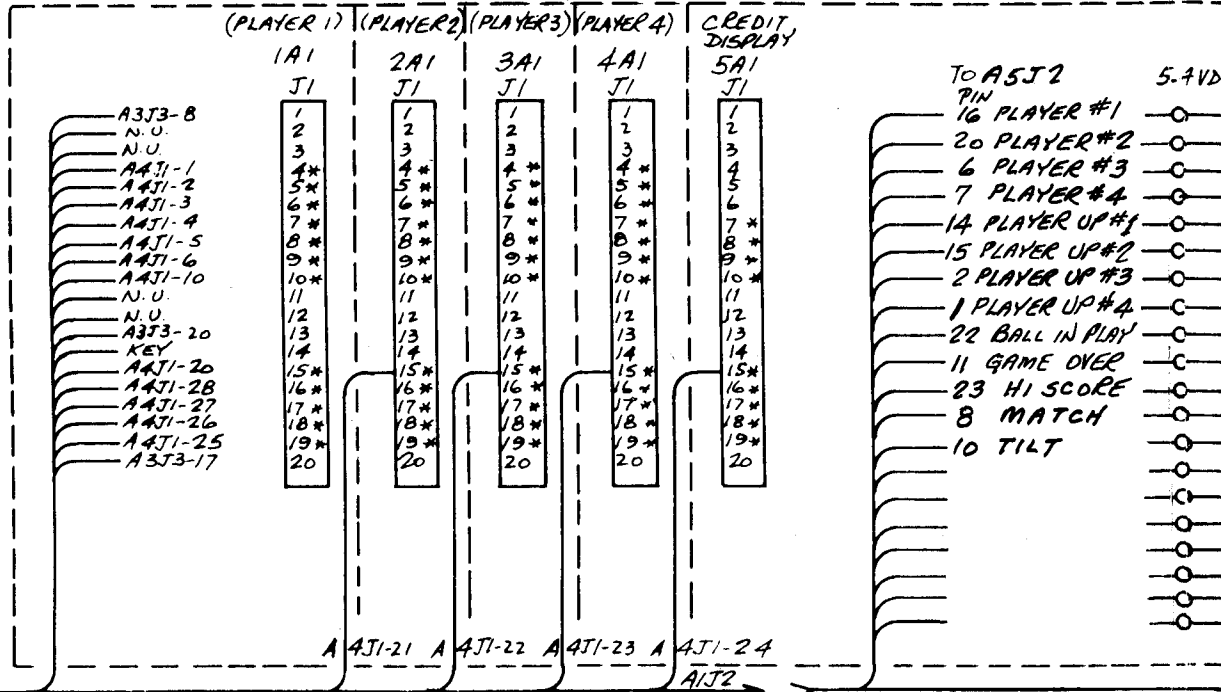
MODULES

Lamp Driver.....	B-431
Display Driver (5 Used).....	A-434
Solenoid Driver/Voltage Regulator.....	B-432
MPU.....	C-433-105
Rectifier Board.....	A-430
Sound Module.....	B-521

PLAYFIELD PARTS..... SEE PLAYFIELD DIAGRAM

A1 INSERT

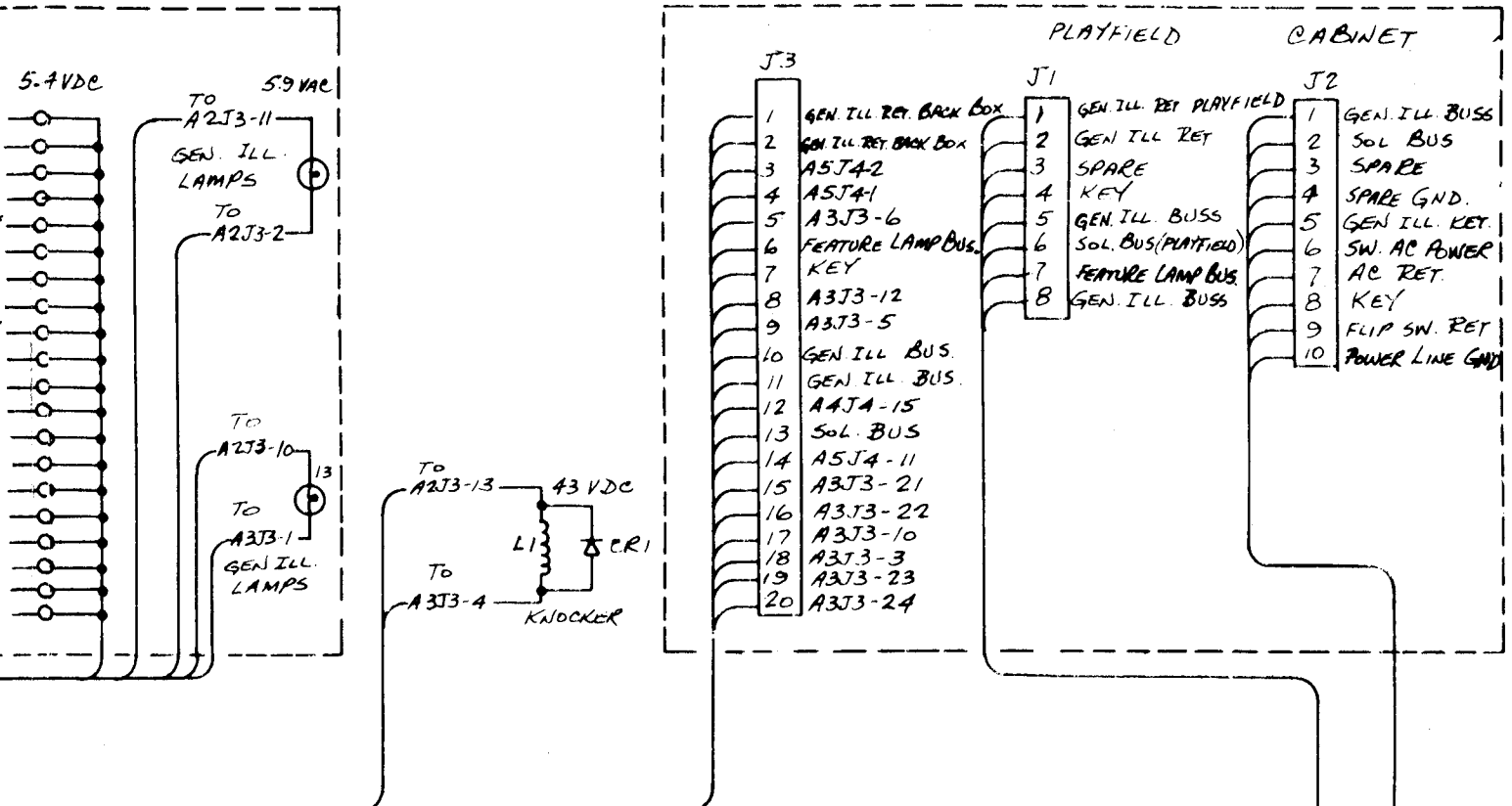
FROM	A1J2 PIN
A2J3-6	1
A5J2-1A	2
A2J3-2	3
A2J3-11	4
A5J2-23	5
A5J2-15	6
A5J2-22	7
A5J2-8	8
A5J2-1	9
A5J2-2	10
A5J2-11	11
	12
A5J2-10	13
A5J2-7	14
A5J2-6	15
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A5J2-16	17
A2J3-10	18
A2J3-1	19
	20
	21
	22
	23



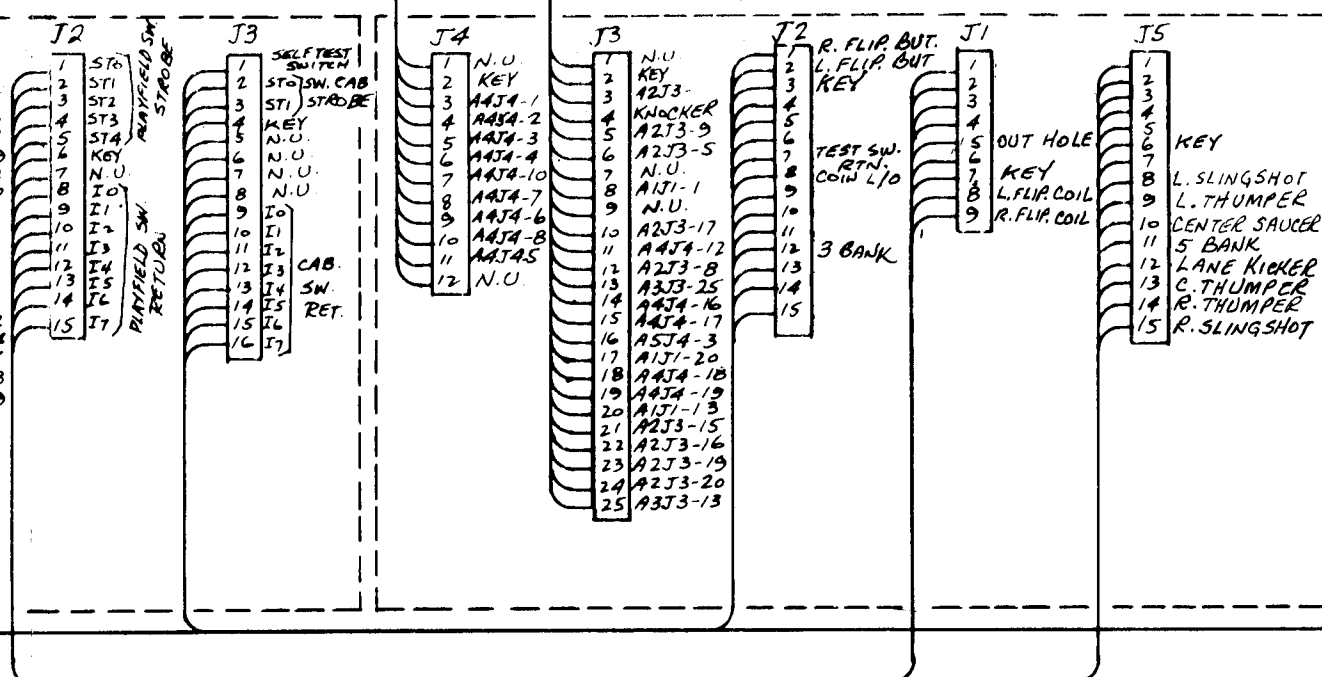
SEE INDIVIDUAL SCHEMATIC DRAWING

P = PLAYER
P.U. = PLAYER UP
C.B. = COLLECT BONUS
A.B. = ADVANCE BONUS

A2 TRANSFORMER



VOLTAGE REGULATOR / SOLEN. DRIVER A3



DRAWINGS FOR WIRE COLORS.

SHEET 1 OF 3 SHEET

STERN ELECTRONICS INC.

1725 DIVERSEY BLVD. CHICAGO 60614

WIRING DIAGRAM

FOR ELECTRONAMO

DRN. J. J.

DATE

AM'T

MAT

FIN.

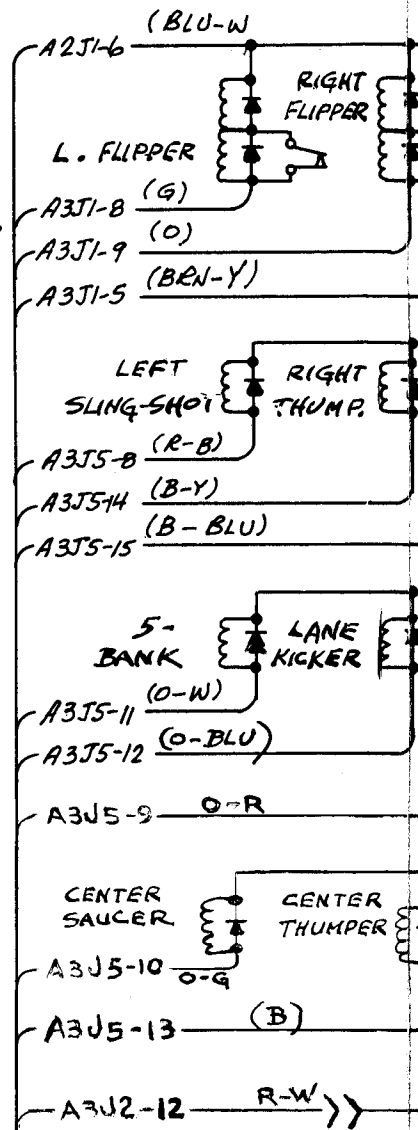
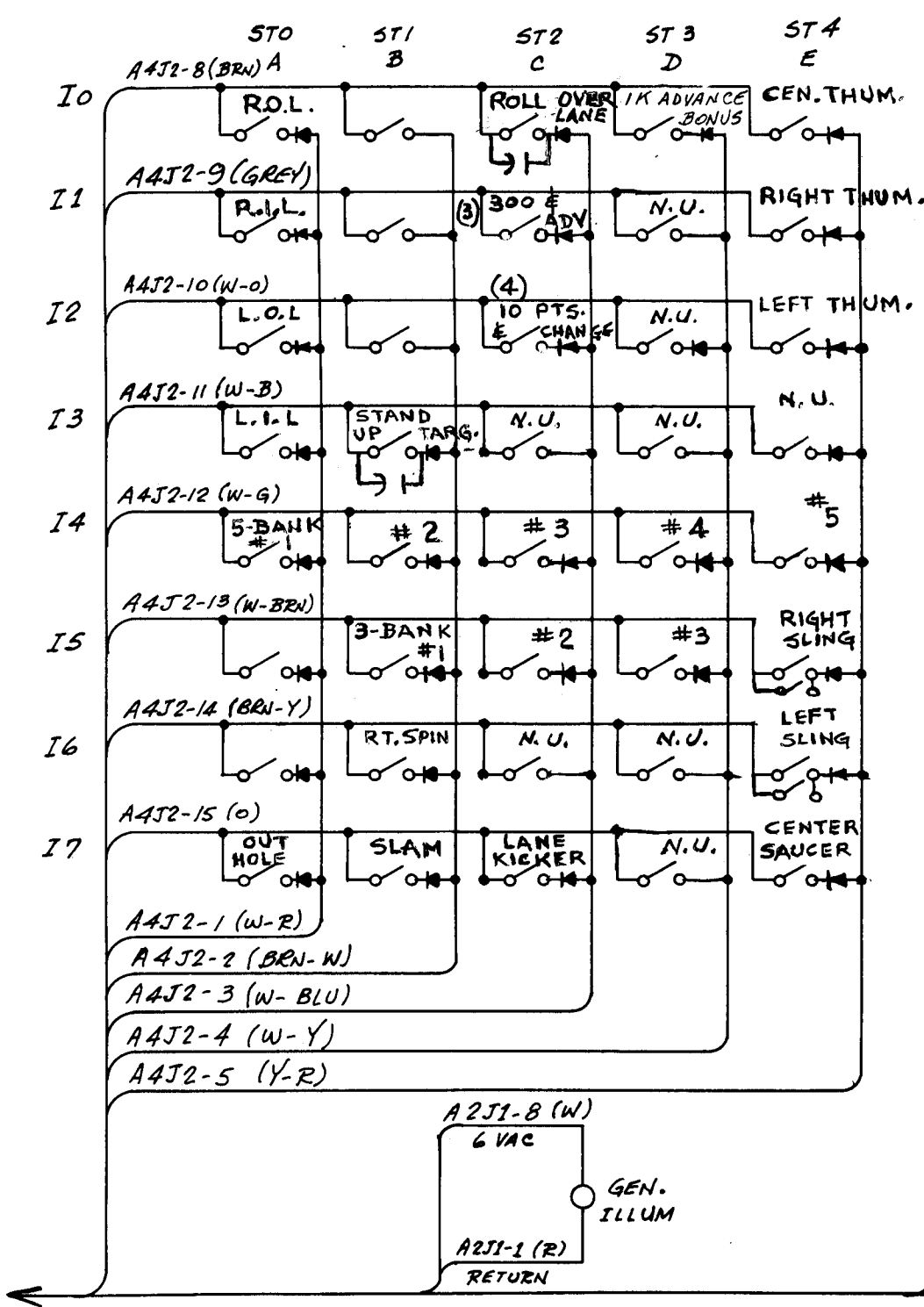
APPR.

SCALE: 1/4"

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 $\pm 30^\circ$ unless otherwise specified.

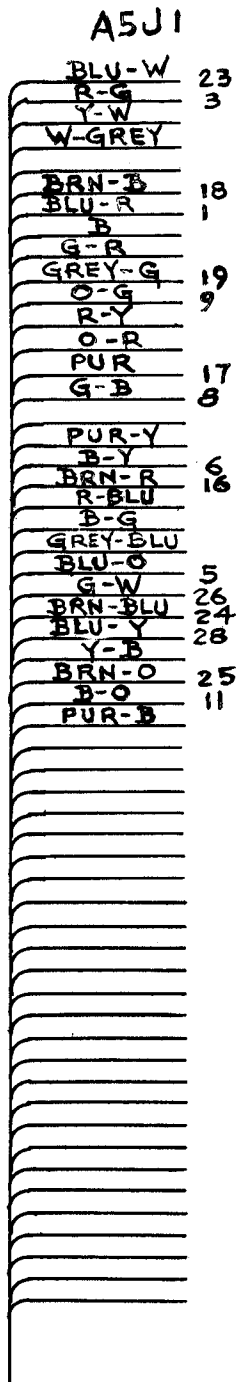
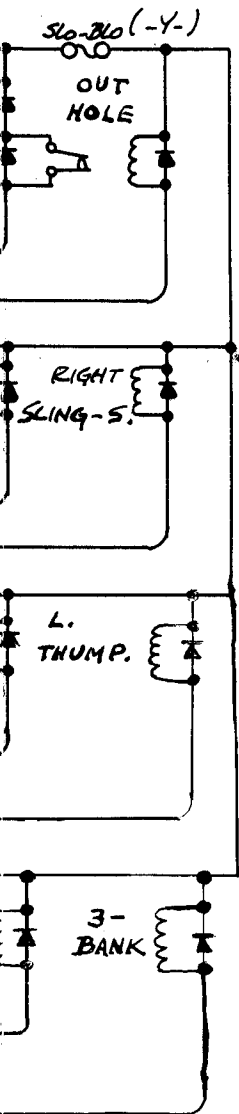
DATE



PLAYFIELD

N/U = NOT USED
 ALL DIODES ARE 1N-4004
 ALL CAPS. ARE .05 MF 100 V. DISC

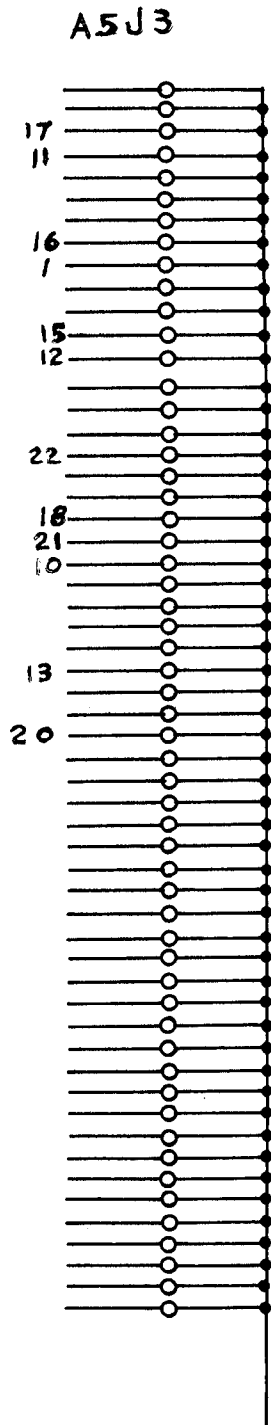
ISSUE	CHANGE



ADVANCE BONUS NO. 1
 " " NO. 2
 " " NO. 3
 " " NO. 4

COLLECT BONUS 1000
 " " 2000
 " " 3000
 " " 4000
 " " 5000
 " " 6000
 " " 7000
 " " 8000
 " " 9000
 " " 10000

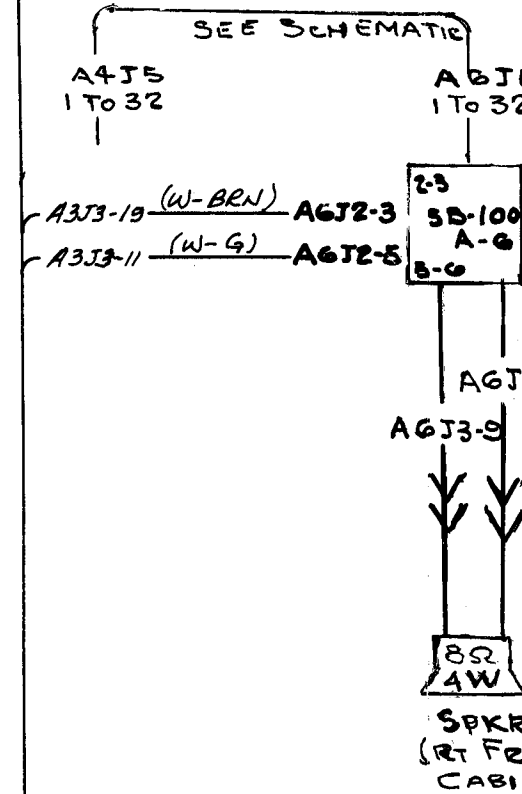
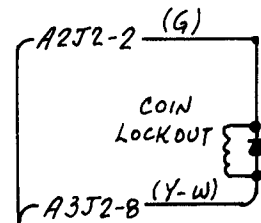
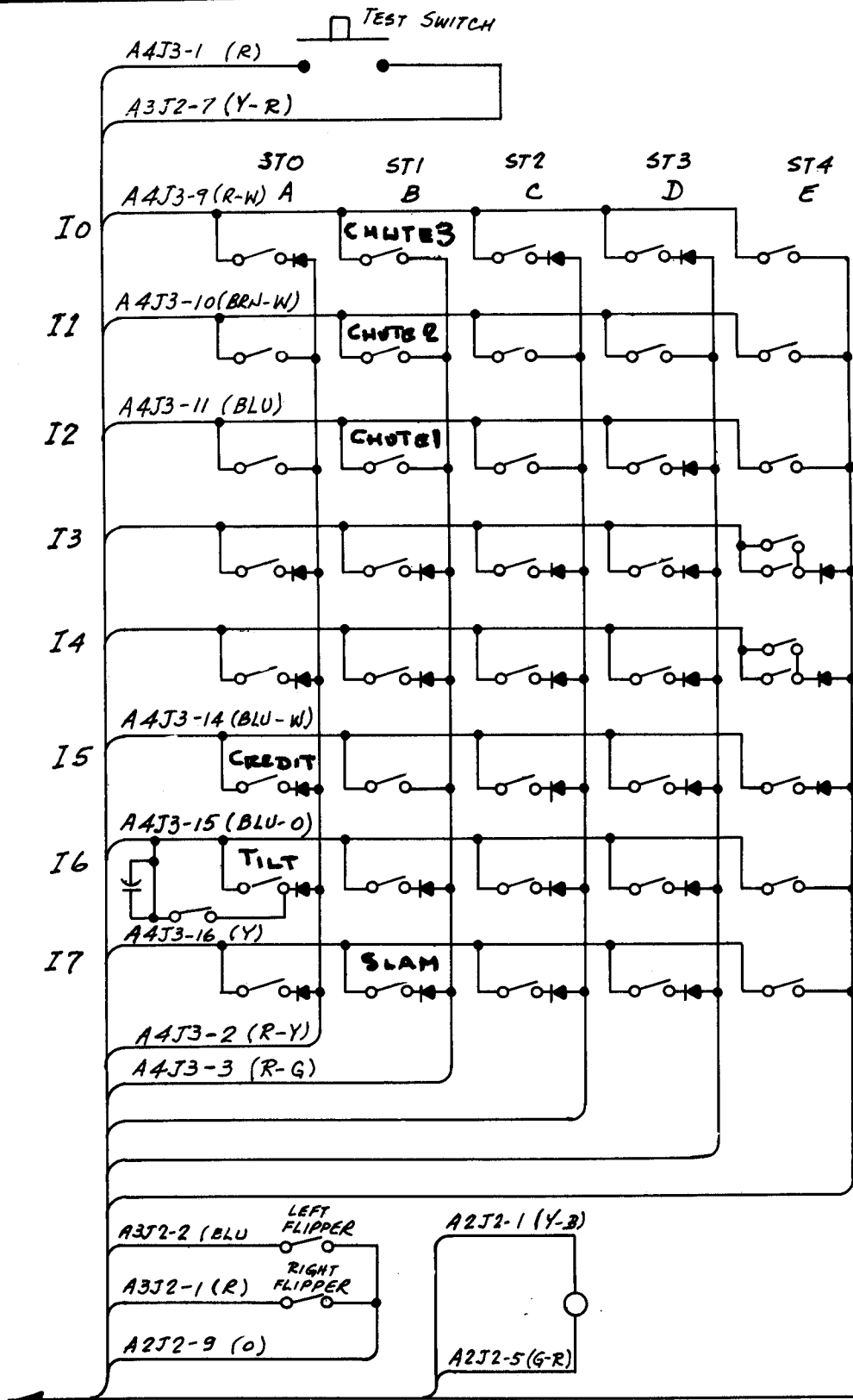
DOUBLE
 EJECT. POCKET
 EXTRA BALL
 EXTRA BALL LANE
 LEFT RETURN LANE
 QUINTUPLE
 ROLL OVER BUTTON
 SHOOT AGAIN
 5-TARGET BANK
 SPINNER
 TRIPLE
 2 X
 3 X
 5 X



A2J1-7 (BLU) FEATURE LAMP BUS

D

SCALE: <i>LD</i>			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 $\pm 30^\circ$ unless otherwise specified.					
DATE					
STERN ELECTRONICS INC. 1725 DIVERSEY BLVD. CHICAGO 60614					
WIRING DIAGRAM					
FOR ELECTRONAMO					
DRN. J.J.		DATE		AM'T <i>LD</i>	
MAT <i>LD</i>		FIN. <i>LD</i>		APPR.	



N/U = NOT USED
ALL DIODES ARE 1N-4004

ISSUE	CHANGE



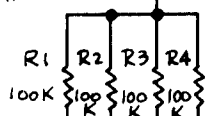
JACK PIN NO.	FROM
1	A4J3-9
2	A4J3-10
3	A4J3-11
4	A4J3-12
5	A4J3-13
6	A4J3-14
7	A4J3-15
8	A4J3-16
10	A4J3-2
11	A4J3-3
15	A2J2-2
16	A3J2-8
17	A2J2-1
18	A2J2-5
19	A4J3-1
20	A3J2-7

APPR.

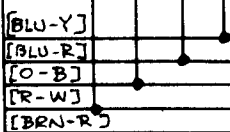
Figure 1

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.

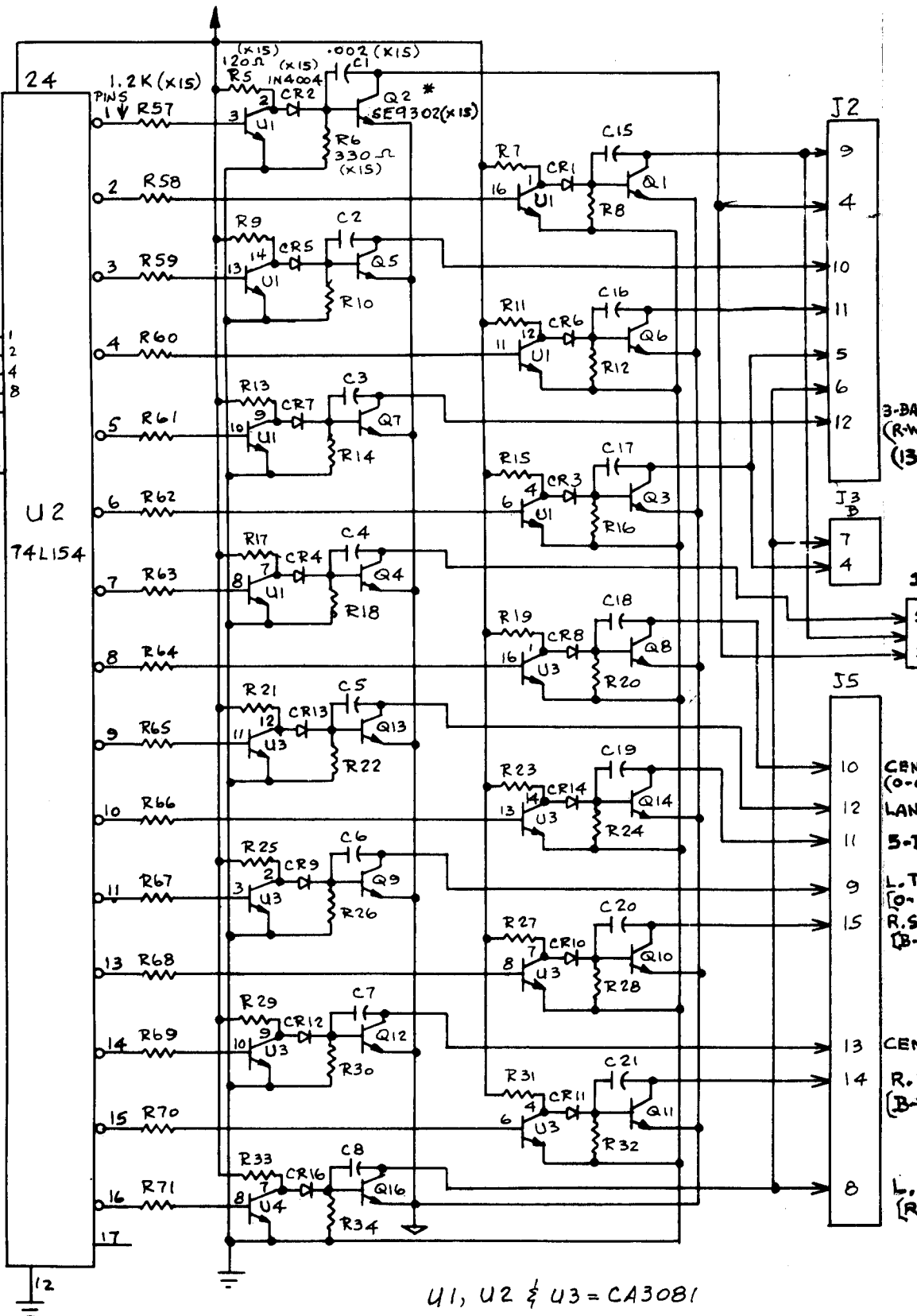
PINS 3, 4, 5 & 6
MOMENTARY
SOLENOID DATA



J4



PIN 7
SOLENOID BANK SELECT
LOW WHEN SELECTED



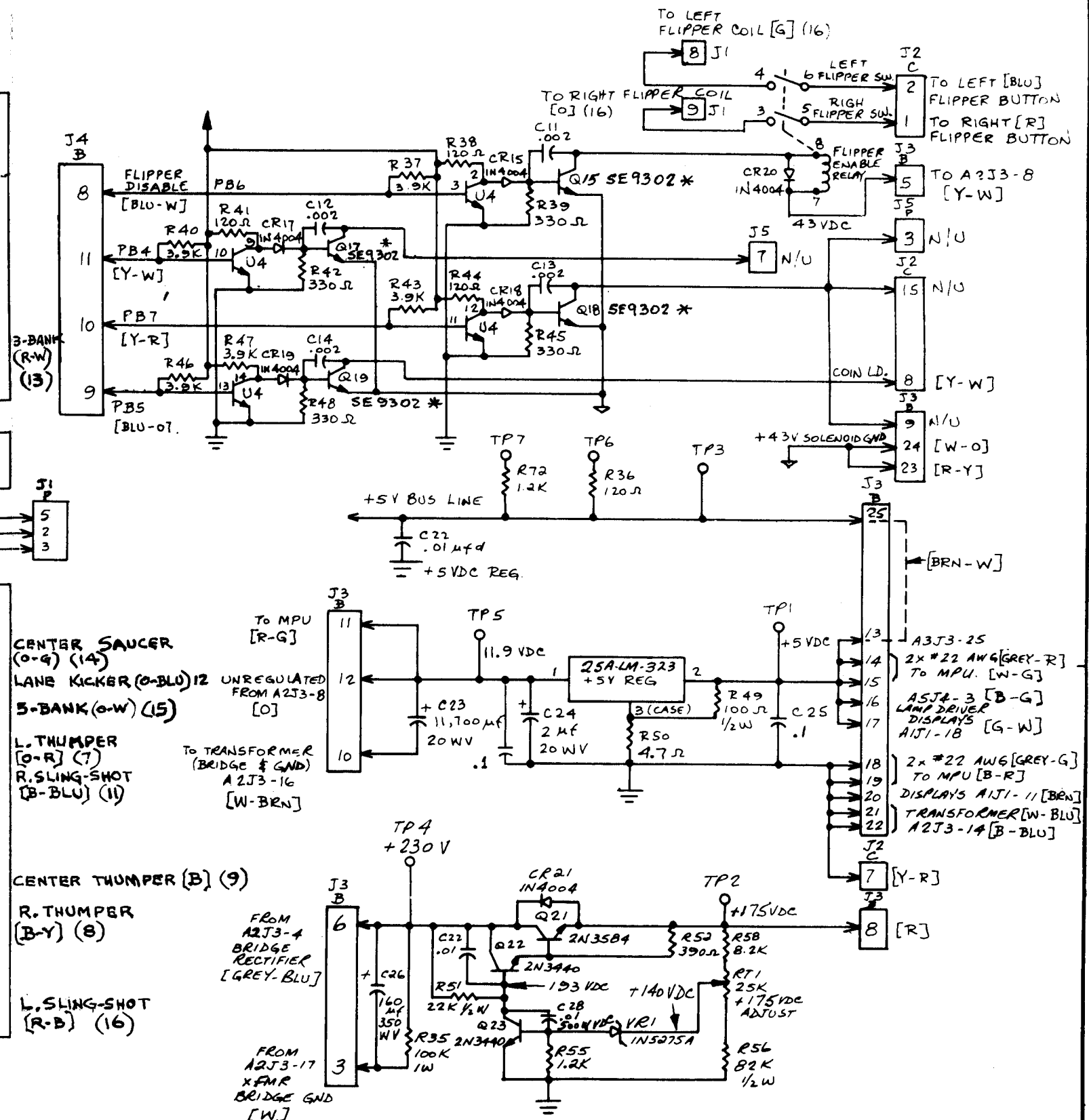
U1, U2 & U3 = CA3081

* 5E9302 SUBSTITUTE X44E198

[BRN-Y] = WIRE COLOR

(8) = SOLENOID TEST DISPLAY NO.

ISSUE	CHANGE



STERN ELECTRONICS INC.

1725 DIVERSEY BLVD. CHICAGO 60614

SOLENOID DRIVER
VOLTAGE REGULATOR SCHEMATIC

FOR ELECTRONAMO SOLID STATE

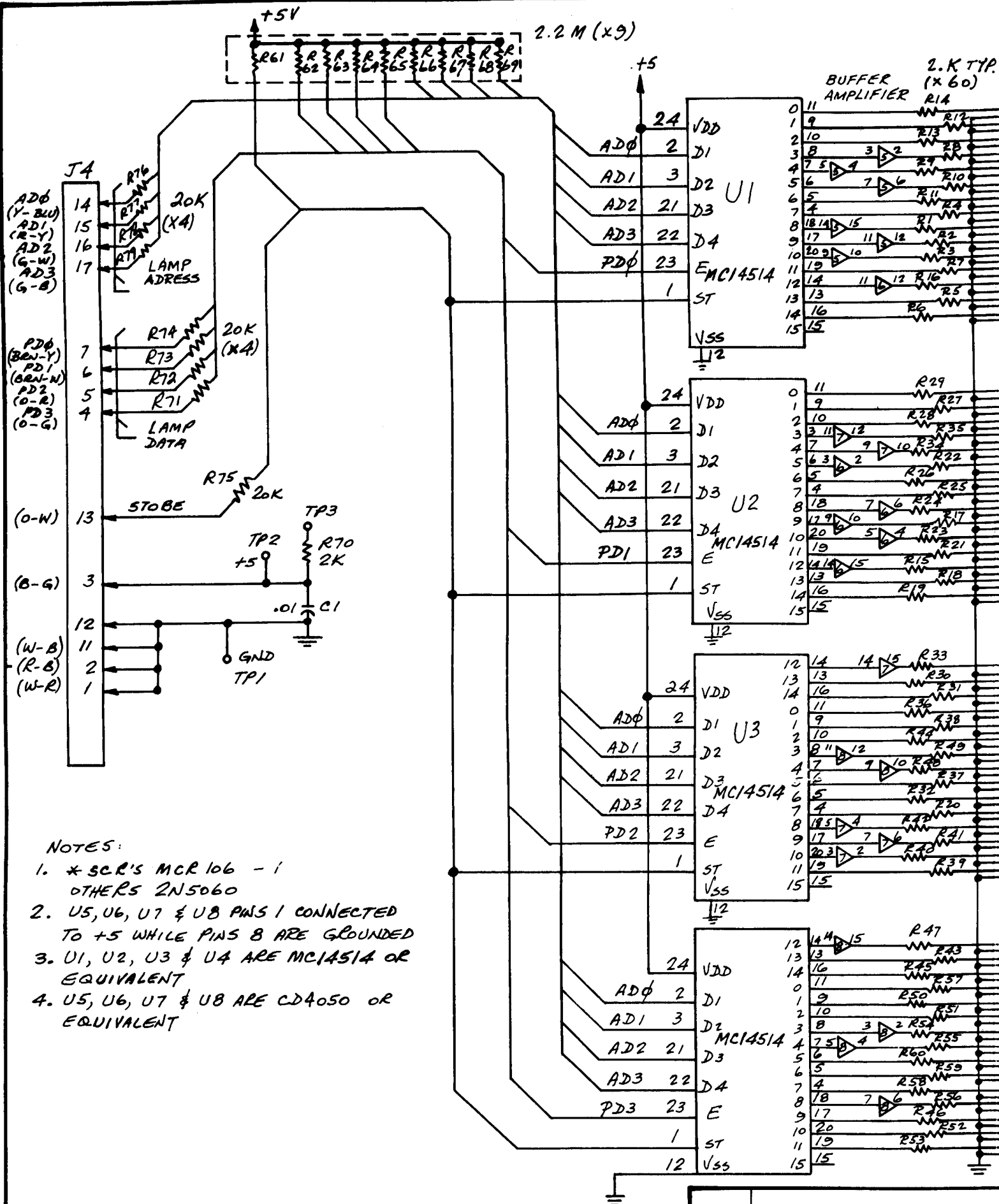
DRN. J.T.	DATE 9-20-77	AM'T
MAT	FIN.	APPR.

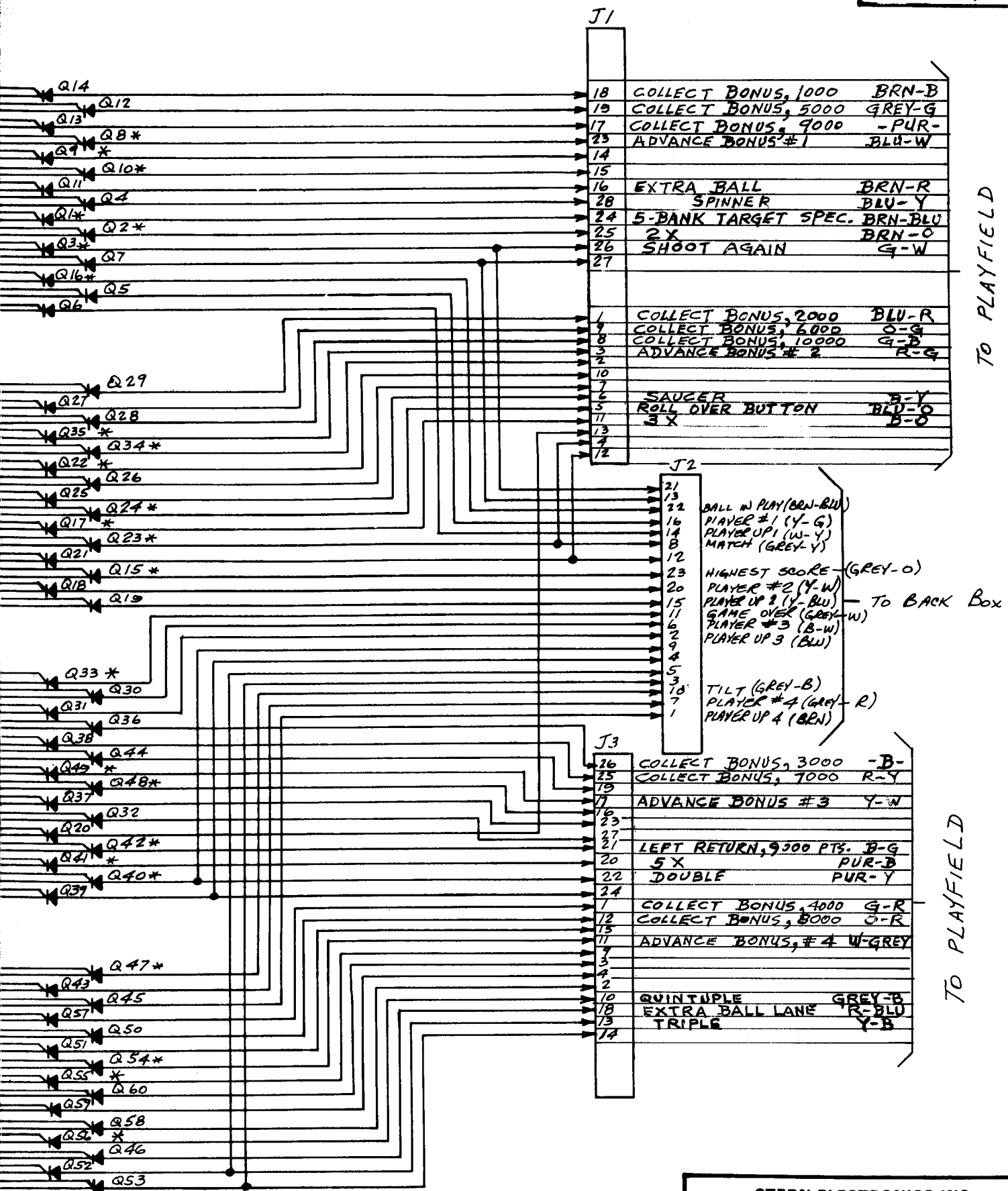
SCALE:

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 $\pm 30^\circ$ unless otherwise specified.

DATE





STERN ELECTRONICS INC.

1725 DIVERSEY BLVD. CHICAGO 60614

LAMP DRIVER SCHEMATIC

FOR LECTRONAMO SOLID STATE

DRN. C.W.

DATE 7-19-78

AMT CWS

MAT CWS

FIN. CWS

APPR.

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 $\pm 30^\circ$ unless otherwise specified.

DATE