Bally MIDWAY™

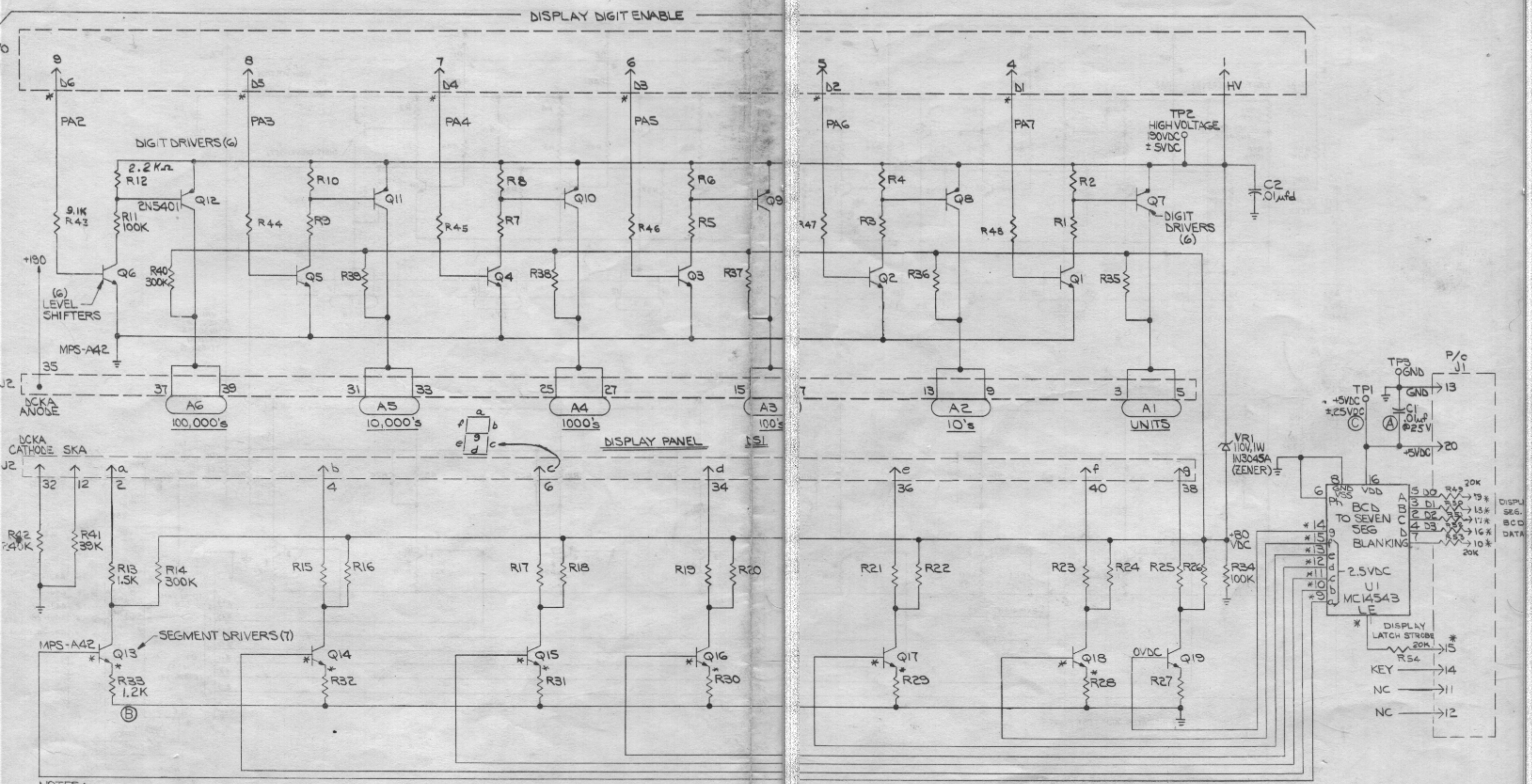
GAME No. 0370
Form No. 0370-00300-0000

# CENTAUR II

Bally MIDWAY™ MFG. CO

10601 W Belmont Ave • Franklin Park, Illinois 60131
Telephone (312) 451-9200

FLIPPERSPILL.COM




NOTES:

1. UNLESS OTHERWISE SPECIFIED ALL RESISTORS ARE ± 5%, 1/4W.
2. PREFIX ALL REFERENCE DESIG. WITH ASSEMBLY REFERENCE DESIG. "A1"
3. * INDICATES 'AID' TEST POINT.

| | | | | | |
|---|---|---|---|---|---|
| 3 | C | WAS VAC | 6-20-88 | J.D. | |
| 2 | B | WAS 1K | 3-29-80 | J.D. | |
| 1 | A | WAS 500V | 4-5-79 | J.D. | |
| NO. | LET. | CHANGE | DATE | BY | CK. |

| DEPT. | DESCRIPTION | TOOL No. |
|---|---|---|

G PART NO. W-1184-1c

DIE SIZE — C.C. — FT. PER M — LBS. PER M —

ALL DESIGN, OPERATIVE AND PROCESS DATA PERTAINING TO THE ARTICLE SHOWN ON THIS SHEET IS THE PROPERTY OF BALLY MFG. CORP. CHICAGO, ILL. THIS INFORMATION IS DISCLOSED IN CONFIDENCE AND IS NOT TO BE COPIED, REPRODUCED, REVEALED TO OR APPROPRIATED OTHERS, IN PART OR IN WHOLE, WITHOUT THE EXPRESS CONSENT OF THE OWNERS. THE PRINT IS LOANED AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THE INTEREST OF THE OWNERS, AND MUST BE RETURNED ON DEMAND.

REMOVE ALL BURRS

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ±
DECIMALS ±
ANGLES ±

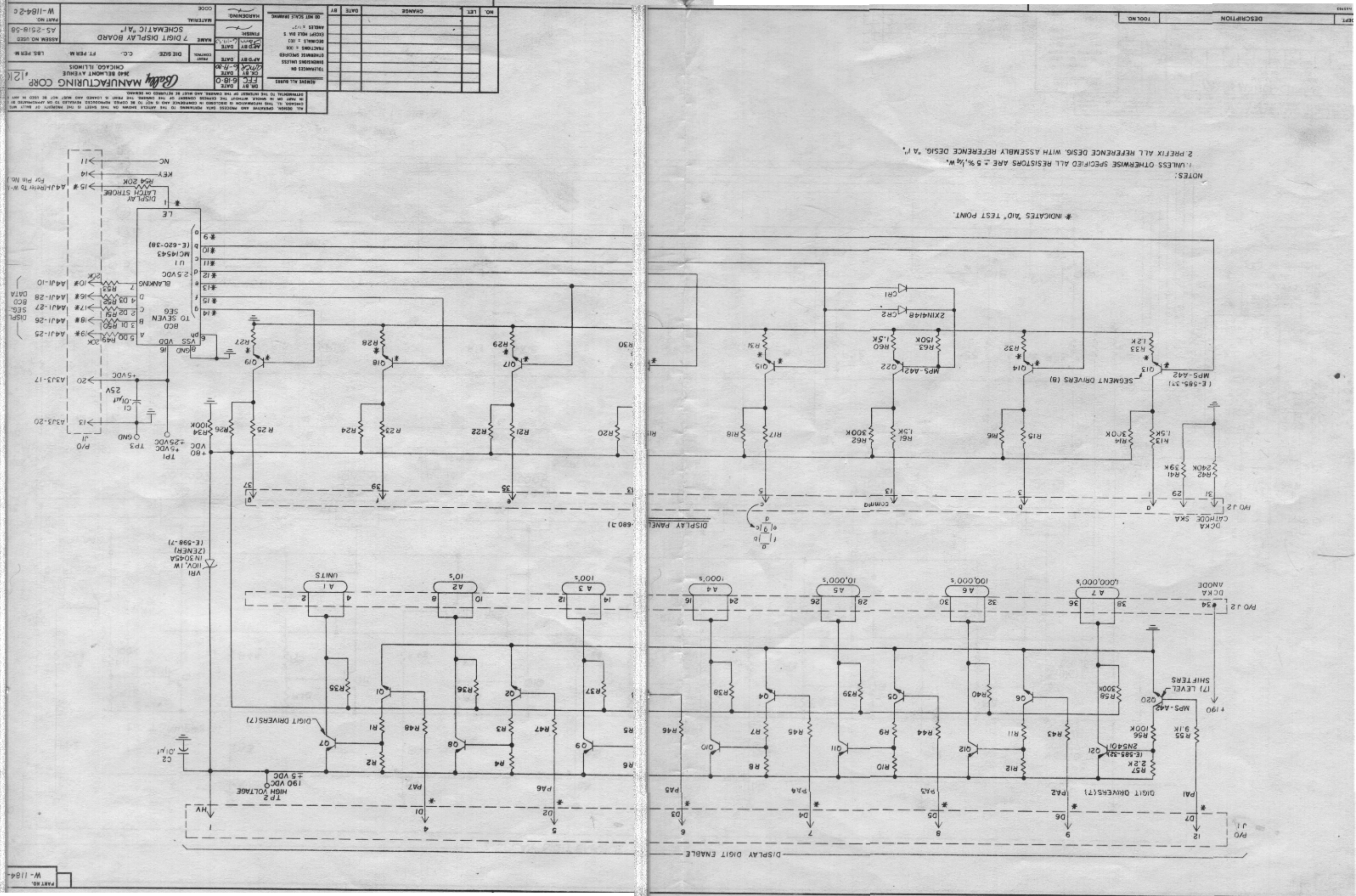
DO NOT SCALE DRAWING

DR. BY DS DATE 2-27-7
CK. BY EDW DATE 7-8-7
APD BY DATE
APD BY DATE

FINISH
HARDENING

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

NAME 6 DIGIT DISPLAY BOARD SCHEMATIC "A"
MATERIAL
ASSEM. NO. USED ON/W AS-2518-21
PART NO. W-1184-1c




| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|
| | | | | |

REVISE ALL QUOTES

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .008
DECIMALS ± .003
EXCEPT HOLE DIA. ±
ANGLES ± 1/2°
DO NOT SCALE DRAWING

DR. BY FJC DATE 6-18-0
CK. BY DATE 6-8-80
APD BY DATE
APD BY DATE

Gabby MANUFACTURING CORP.
3440 BELMONT AVENUE
CHICAGO, ILLINOIS

PART CONTROL
DIE SIZE C.C. FT. PER M. LBS. PER M.

NAME 7 DIGIT DISPLAY BOARD
SCHEMATIC "A1"

ASSEM NO. USED AS-2518-58

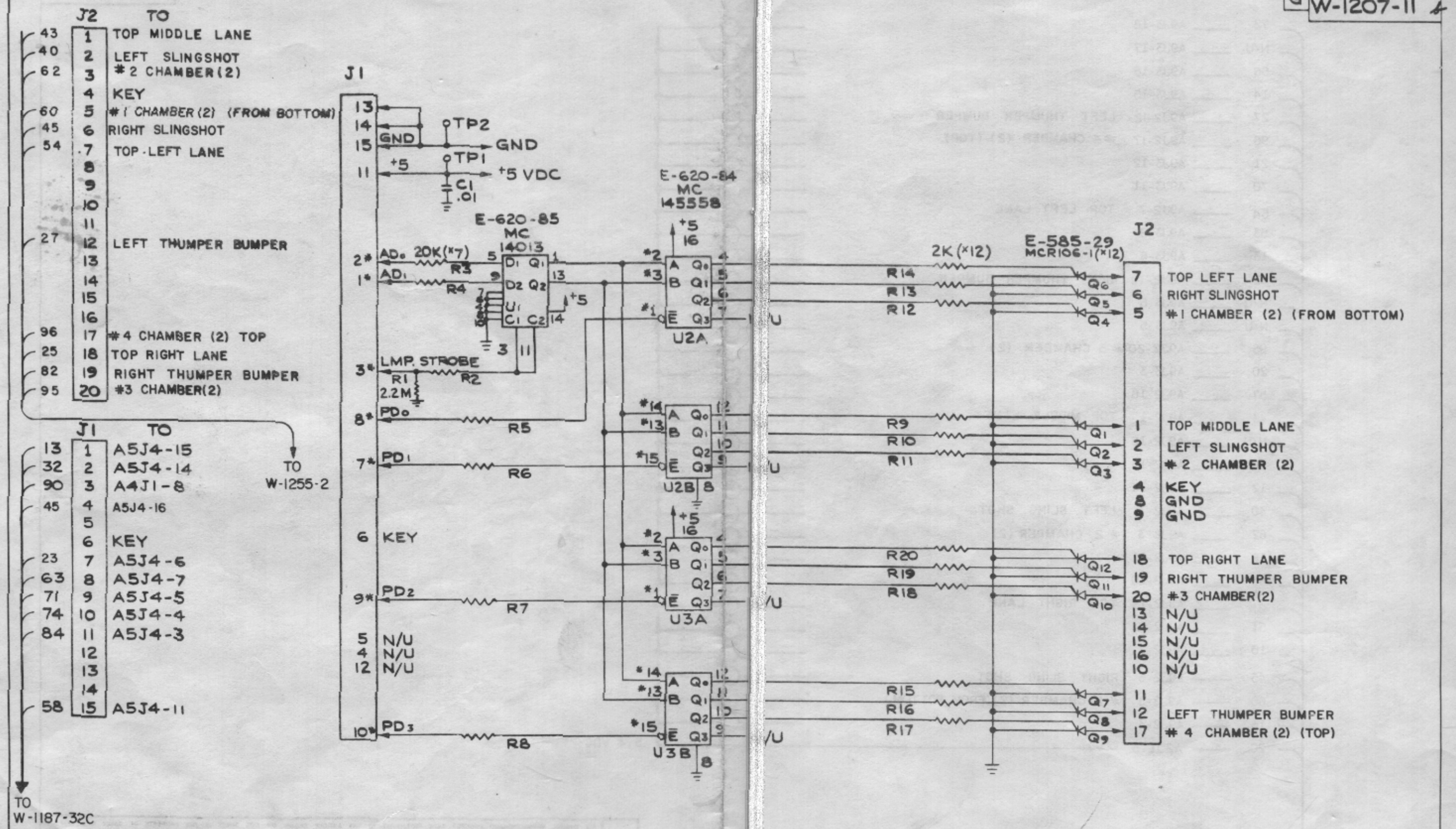
FINISH
HARDENING
MATERIAL
CODE

PART NO. W-1184-2 c

ALL DESIGN, ENGINEERING AND PROCESS DATA PERTAINING TO THE ARTICLE SHOWN ON THIS SHEET IS THE PROPERTY OF GABBY MFG CHICAGO IL. THIS INFORMATION IS DISCLOSED IN CONFIDENCE AND IS NOT TO BE COPIED REPRODUCED OR TO BE UNDERSTOOD BY ANY ON IN WHOLE WITHOUT THE EXPRESS CONSENT OF THE OWNER. THE PRINT IS LOANED AND MUST NOT BE USED IN ANY SETTIMENTAL TO THE INTEREST OF THE OWNER. AND MUST BE RETURNED ON DEMAND.

PART NO. W-1184-

G PART NO W-1207-11 4




## NOTES:

1. * INDICATES "AID" TEST POINT.
2. ALL RESISTORS ARE 1/4 W, ± 5%
3. VOLTAGES SHOWN ARE FOR A GAME UP CONDITION.
4. SCR'S ARE MCR-106-1, (E-585-29)
5. PREFIX ALL REFERENCE DESIGNATION WITH "A9".

ALL DESIGN, OPERATIVE AND PROCESS DATA PERTAINING TO THE ARTICLE SHOWN ON THIS SHEET IS THE PROPERTY OF BALLY MFG. CORP. CHICAGO, ILL. THIS INFORMATION IS DISCLOSED IN CONFIDENCE AND IS NOT TO BE COPIED, REPRODUCED, REVEALED TO OR APPROPRIATED BY OTHERS, IN PART OR IN WHOLE, WITHOUT THE EXPRESS CONSENT OF THE OWNERS. THE PRINT IS LOANED AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THE INTEREST OF THE OWNERS, AND MUST BE RETURNED ON DEMAND.

| | | | |
|---|---|---|---|
| REMOVE ALL BURRS | DR. BY Δ.V. | DATE 7-10-81 | Bally MANUFACTURING CORP. 2640 BELMONT AVENUE CHICAGO, ILLINOIS #1239 |
| TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED FRACTIONS ± .008 DECIMALS ± .003 EXCEPT HOLE DIA S ANGLES ± 1/2° | CK. BY | DATE | |
| | AP'D BY JD | DATE 7-22-81 | PRINT CONTROL |
| | AP'D BY | DATE 7/22/81 | NAME (A9) AUXILIARY LAMP DRIVER BOARD — ASSEM NO. USED — SCALE ~ |
| DO NOT SCALE DRAWING | FINISH: | | |
| | HARDENING: | | MATERIAL — PART NO. W-1207-11 4 |

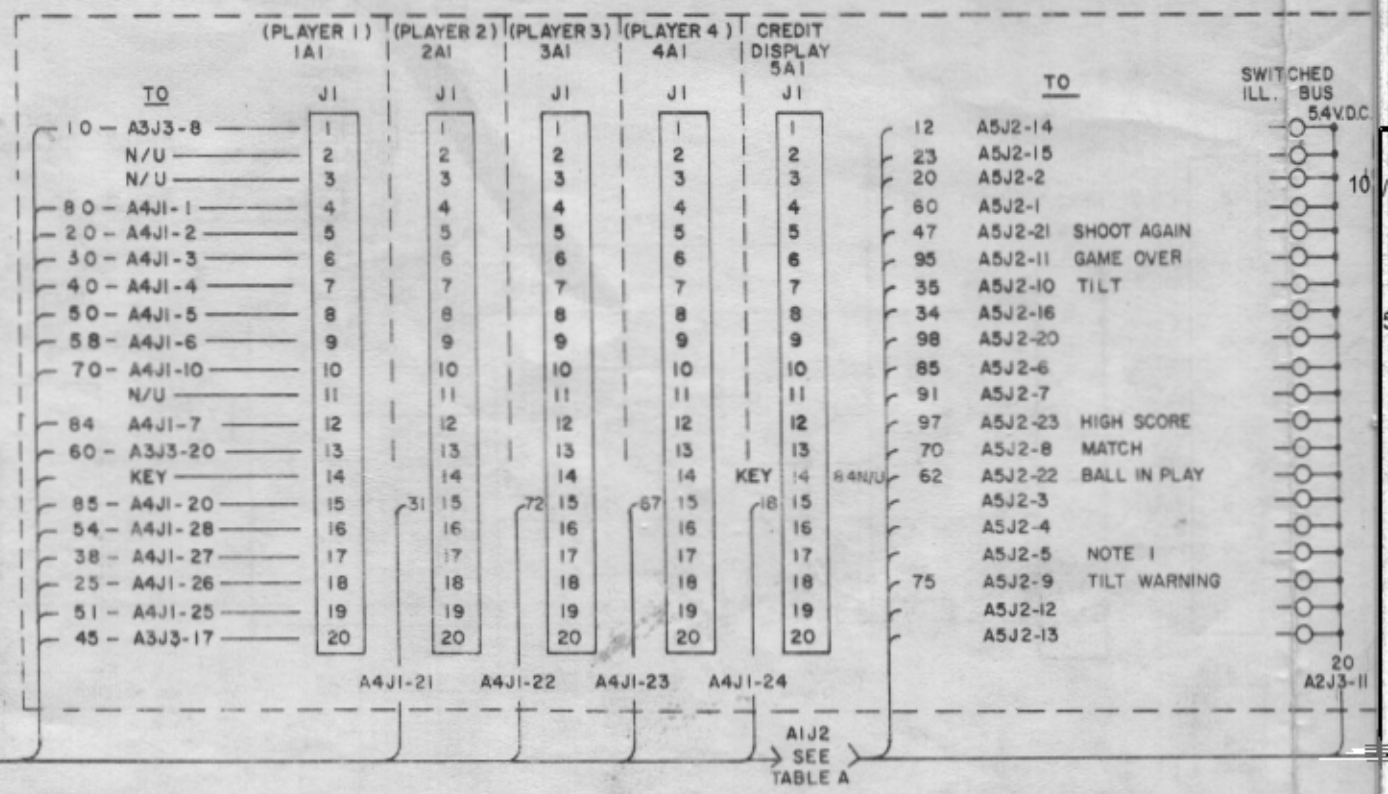
| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

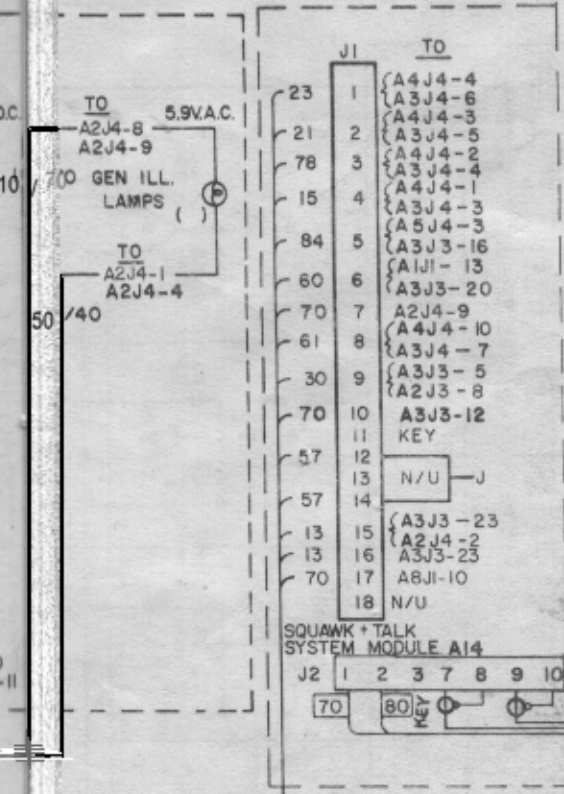
| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|

W-1187-32

| LE A | AIJ2 | |
|---|---|---|
| ROM | PIN | WIRE |
| 5-11 | 1 | 20 |
| 2-14 | 2 | 12 |
| 4-1 | 3 | 50 |
| 4-8 | 4 | 10 |
| 2-23 | 5 | 97 |
| 2-15 | 6 | 23 |
| 2-22 | 7 | 62 |
| 2-8 | 8 | 70 |
| 2-1 | 9 | 60 |
| 2-2 | 10 | 20 |
| 2-11 | 11 | 95 |
| 2-21 | 12 | 47 |
| 2-10 | 13 | 35 |
| 2-7 | 14 | 91 |
| 2-6 | 15 | 85 |
| 2-20 | 16 | 98 |
| 2-16 | 17 | 34 |
| 4-4 | 18 | 40 |
| 4-9 | 19 | 70 |
| 2-13 | 20 | |
| 4-5 | 21 | 72 |
| 2-9 | 22 | 75 |
| 14-16 | 23 | 96 |
| 11-7 | 24 | 70 |

INSERT TO BACK CAB PLUG

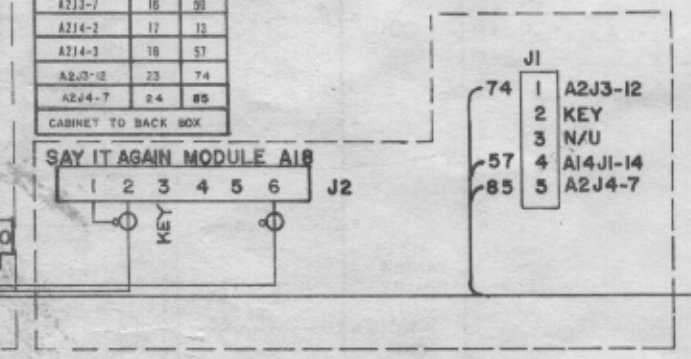


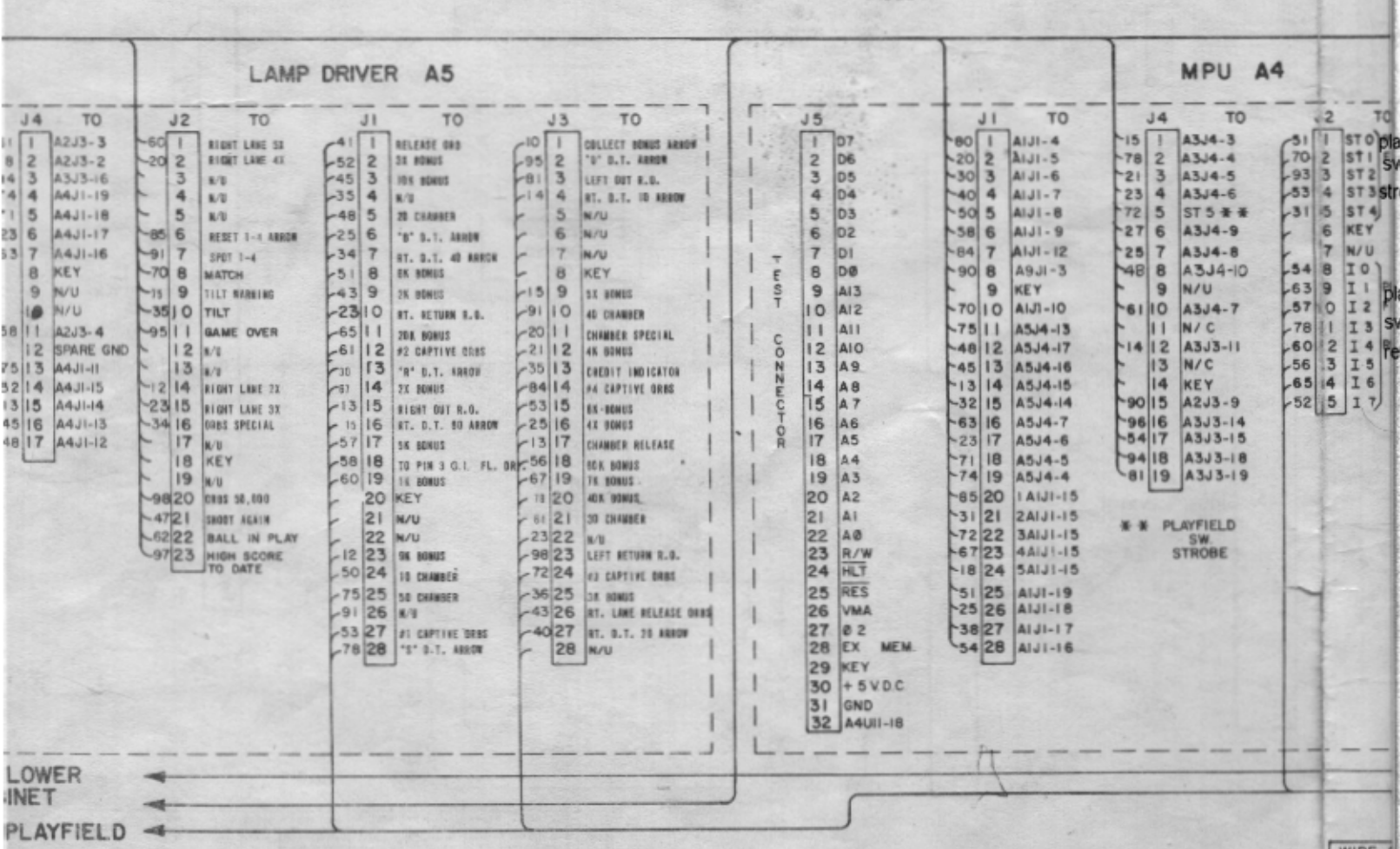



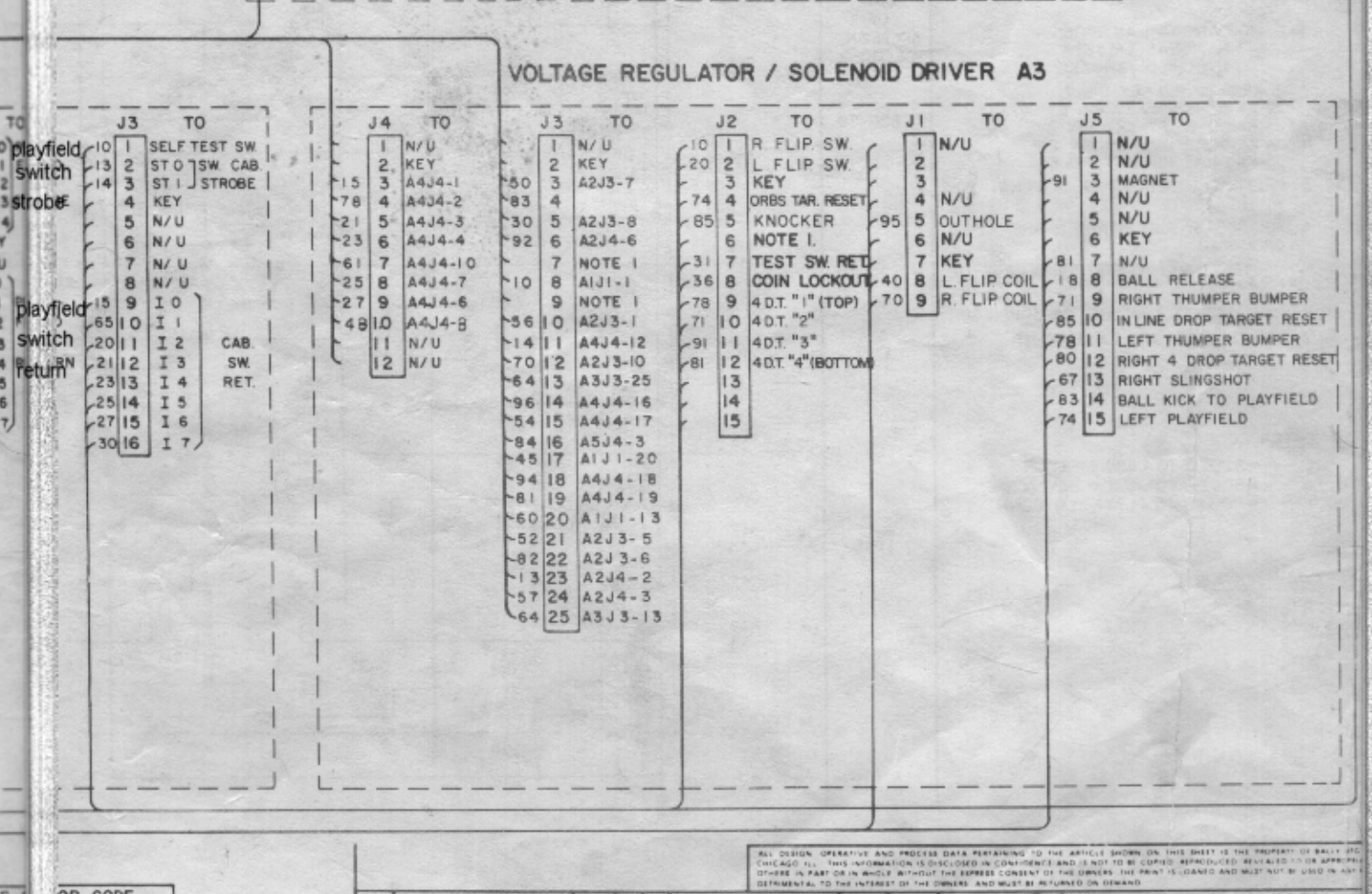

| 24 PIN PLUG | | |
|---|---|---|
| FROM | PIN | WIRE |
| A2J4-4 | 1 | 49 |
| A2J4-1 | 2 | 50 |
| A2J3-2 | 3 | 16 |
| A2J3-3 | 4 | 51 |
| A2J4-6 | 5 | 82 |
| A2J3-11 | 6 | 20 |
| A2J3-10 | 7 | 70 |
| A2J3-8 | 8 | 38 |
| A2J4-9 | 9 | 70 |
| A2J4-8 | 10 | 10 |
| A2J3-6 | 11 | 60 |
| A2J4-4 | 12 | 58 |
| A2J3-5 | 13 | 52 |
| A2J3-6 | 14 | 62 |
| A2J3-1 | 15 | 58 |
| A2J3-7 | 16 | 38 |
| A2J4-2 | 17 | 13 |
| A2J4-3 | 18 | 57 |
| A2J3-12 | 23 | 74 |
| A2J4-7 | 24 | 85 |
| CABINET TO BACK BOX | | |

| 12 PIN PLUG | | |
|---|---|---|
| FROM | PIN | WIRE |
| A8J3-16 | 1 | 25 |
| A8J3-14 | 2 | 27 |
| A8J2-13 | 3 | 48 |
| A8J2-17 | 4 | 43 |
| A8J2-8 | 5 | 45 |
| A8J2-9 | 6 | 54 |
| A8J2-5 | 7 | 60 |
| A8J2-12 | 8 | 62 |
| A8J3-7 | 9 | 82 |
| A8J3-4 | 10 | 95 |
| A8J3-13 | 11 | 96 |
| | 12 | |
| PANEL TO BACK BOX | | |

| 12 PIN PLUG | | |
|---|---|---|
| FROM | PIN | WIRE |
| A5J2-14 | 1 | 12 |
| A5J2-2 | 2 | 35 |
| A5J2-15 | 3 | 23 |
| A5J2-18 | 4 | 34 |
| A5J2-1 | 5 | 30 |
| A4J4-5 | 6 | 72 |
| A5J2-6 | 7 | 63 |
| A5J2-7 | 8 | 91 |
| A4J4-10 | 9 | 96 |
| A5J2-28 | 10 | 98 |
| PANEL TO BACK BOX | | |




NOTES:

1. THESE PINS ARE RESERVED FOR FUTURE USE.
2. WIRE COLOR ARE SHOWN FOR ALL CONNECTOR PINS, SOME WIRE MAY NOT BE USED IN ALL GAMES.
3. * INDICATES AID TEST POINT.

WIRE CODE
1-RED
2-BLUE
3-YELLOW
4-GREEN
5-WHITE
6-BROWN
7-ORANGE
8-BLACK
9-GRAY
0-NO TRACE

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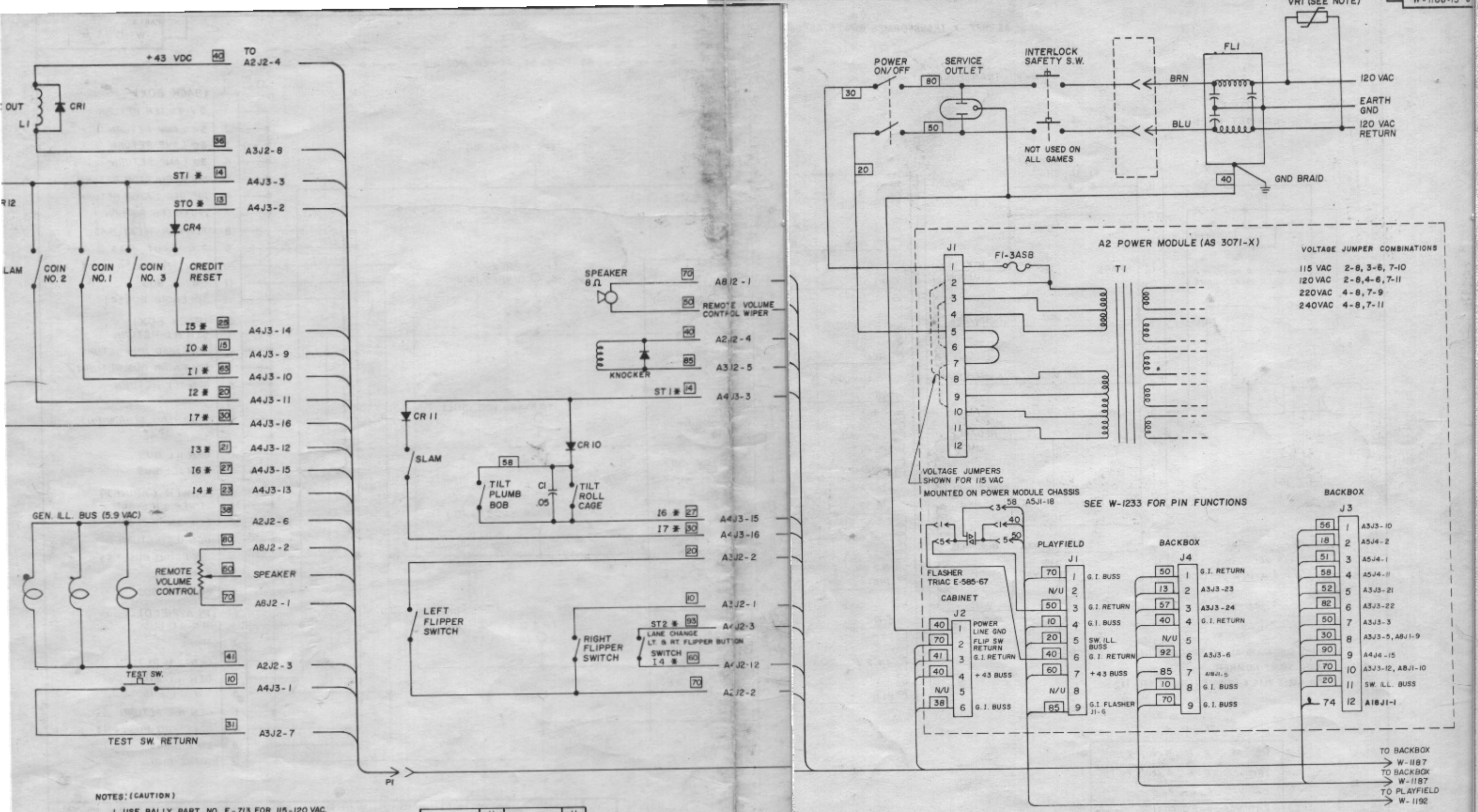
| LET | CHANGE | DATE | BY | CK |
|---|---|---|---|---|

REMOVE ALL BURRS
TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS - 1/64
DECIMALS - .005
ANGLES - 2°
DO NOT SCALE DRAWING

DR BY TG DATE 6-20-8
CK BY DATE
APD BY DATE
APD BY DATE
FINISH
HARDENING

Bally MANUFACTURING CORP.
3640 BELMONT AVENUE
CHICAGO, ILLINOIS

PRINT CONTROL
NAME WIRING DIAGRAM BACKBOX
MATERIAL CENTAUR
ASSEM. NO USED ON
PART NO W-1187-




NOTES: (CAUTION)

1. USE BALLY PART NO. E-713 FOR 115-120 VAC.
2. USE BALLY PART NO. E-713-1 FOR 220-240 VAC.
3. * INDICATES AID TEST POINT.

| TO | J1 PIN | TO | J1 PIN |
|---|---|---|---|
| A4J3-9 | 1 | A4J3-3 | 11 |
| A4J3-10 | 2 | A2J2-4 | 15 |
| A4J3-11 | 3 | A3J2-8 | 16 |
| A4J3-12 | 4 | A2J2-6 | 17 |
| A4J3-13 | 5 | A2J2-3 | 18 |
| A4J3-14 | 6 | A4J3-1 | 19 |
| A4J3-15 | 7 | A3J2-7 | 20 |
| A4J3-16 | 8 | SPEAKER | 9 |
| A4J3-2 | 10 | A8J2-1 | 12 |
| DOOR PLUG | | A8J2-2 | 13 |

A7 CABINET ASS'Y. WIRING

NOTE: DIODES ARE IN4004, ( -587-6)

| DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|

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| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|

REMOVE ALL BURRS
TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .005
DECIMALS ± .003
EXCEPT HOLE DIA ±
ANGLES ±
DO NOT SCALE DRAWING

DR. BY | DATE
CK. BY | DATE
APD BY | DATE
APD BY | DATE
FINISH:
HARDENING

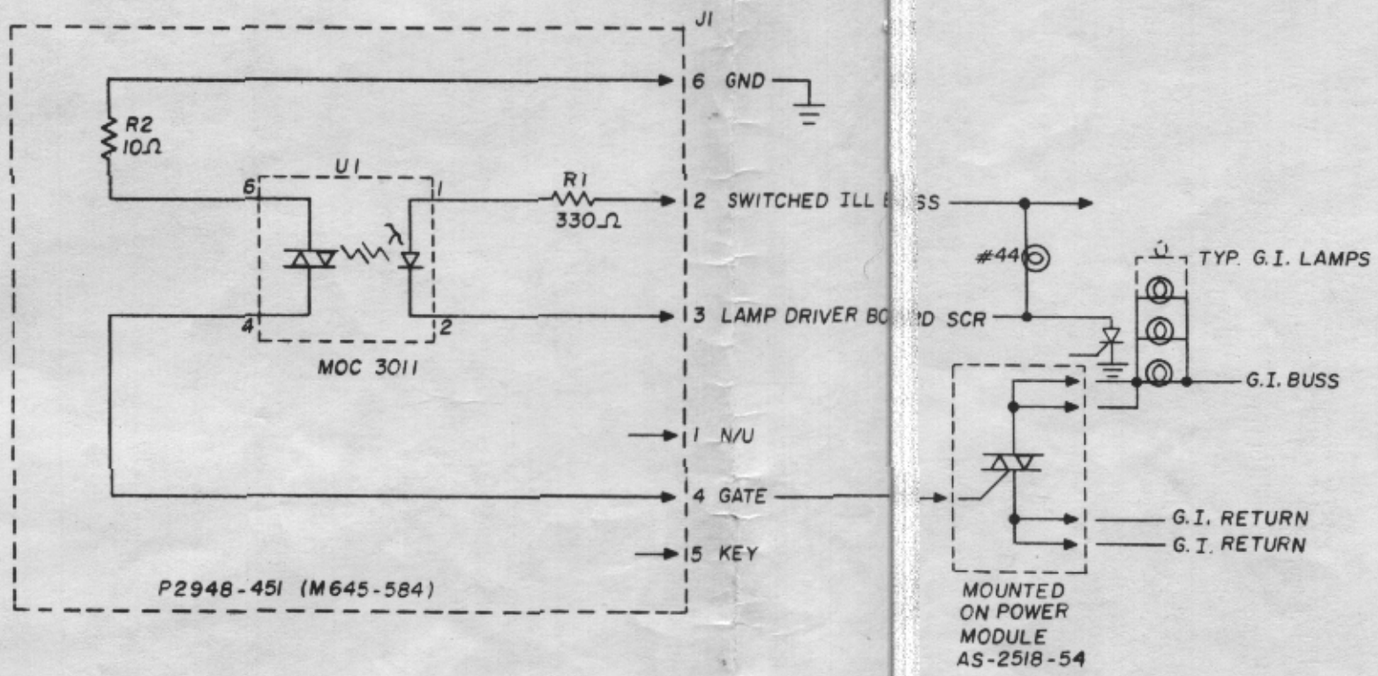
Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

#1239

PRINT CONTROL | DIE SIZE | C.C. | FT. PER M. | LBS. PER M.

NAME: WIRING DIAGRAM - CABINET
ASSEM NO. USED
MATERIAL: CENTAUR
CODE
PART NO. W-1186-15

PART NO. W-1253 b




| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|

ALL DESIGN, OPERATIVE AND PROCESS DATA PERTAINING TO THE ARTICLE SHOWN ON THIS SHEET IS THE PROPERTY OF BALLY MFG. CORP. CHICAGO, ILL. THIS INFORMATION IS DISCLOSED IN CONFIDENCE AND IS NOT TO BE COPIED, REPRODUCED, REVEALED TO OR APPROPRIATED BY OTHERS, IN PART OR IN WHOLE, WITHOUT THE EXPRESS CONSENT OF THE OWNERS. THE PRINT IS LOANED AND MUST NOT BE USED IN ANY MANNER DETRIMENTAL TO THE INTEREST OF THE OWNERS, AND MUST BE RETURNED ON DEMAND.

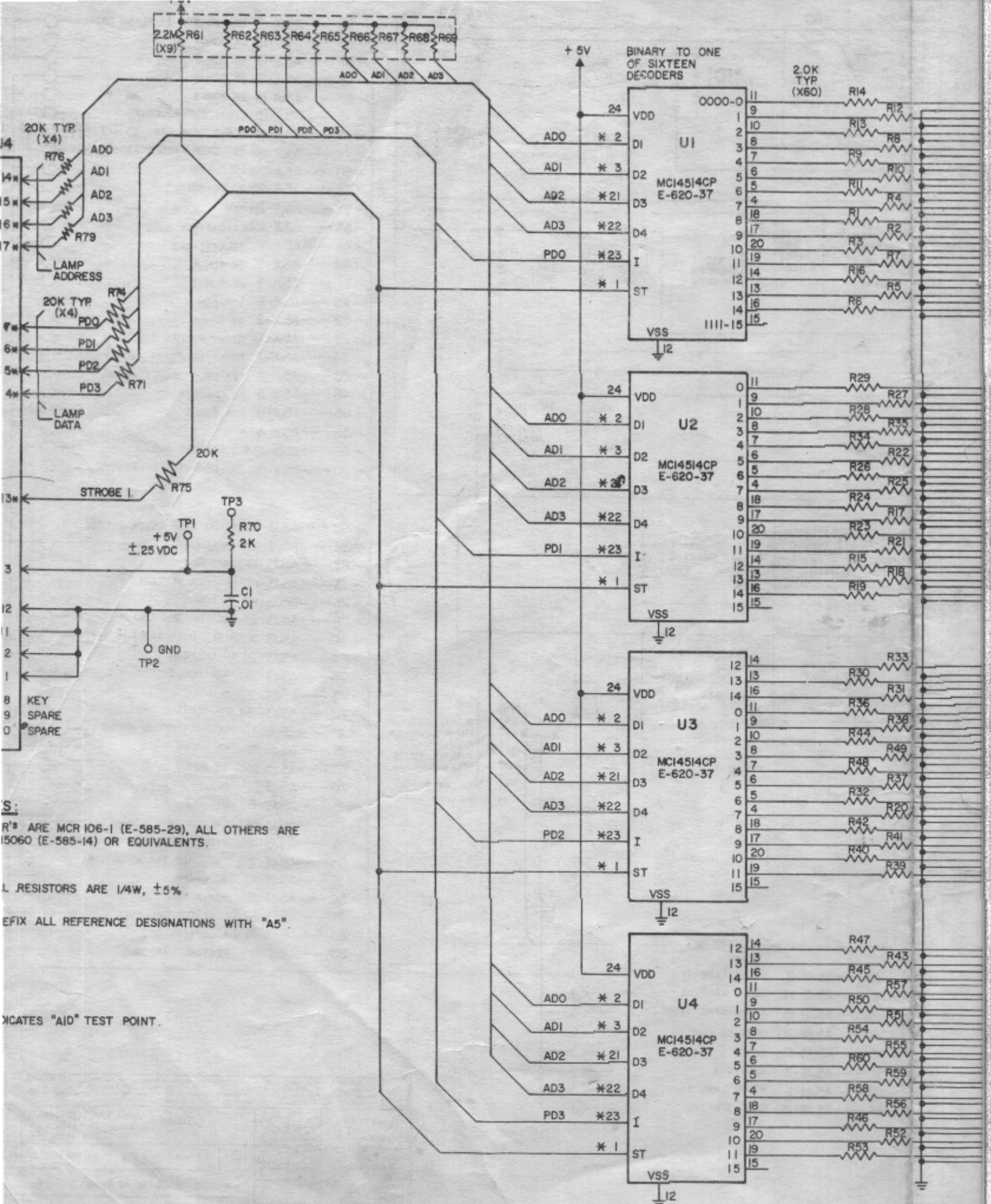
OVE ALL BURRS
CES ON
ONS UNLESS
SE SPECIFIED
4S ± .008
S ± .003
HOLE DIA 'S
± 1/2°
SCALE DRAWING

| | |
|---|---|
| DR. BY FFC | DATE 1-22-81 |
| CK. BY | DATE |
| AP'D BY | DATE 1-22-81 |
| AP'D BY | DATE 1-22-81 |
| FINISH: | |
| HARDENING: | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS
#1219

| PRINT CONTROL | DIE SIZE- | C.C.- | FT. PER M- | LBS. PER M- |
|---|---|---|---|---|

| NAME | ASSEM. NO. USED | SCALE |
|---|---|---|
| G I FLASHER (SCHEMATIC) | AS-2518-68 | |
| MATERIAL / CODE | PART NO. W-1253 b | |




S:

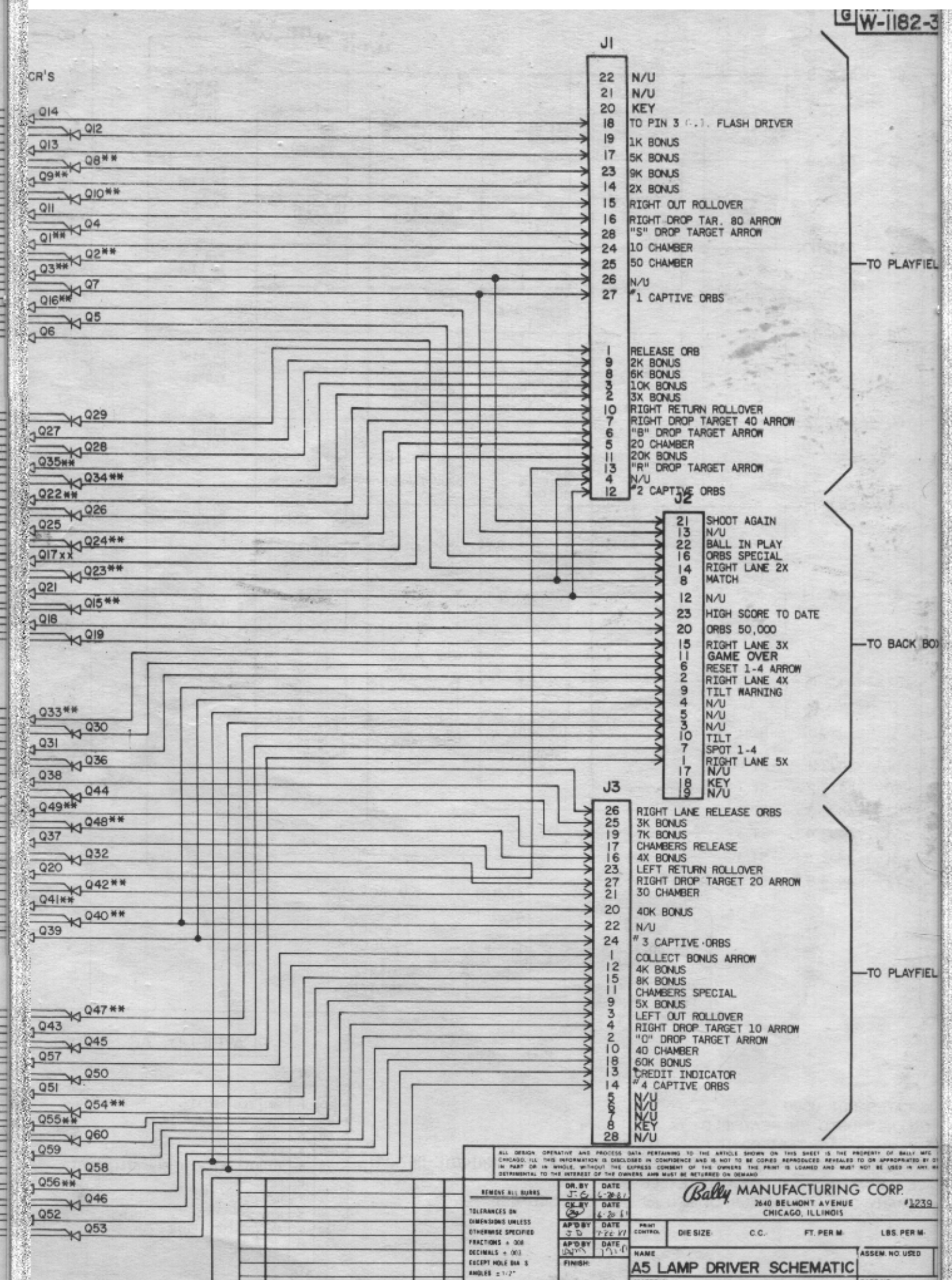
R'S ARE MCR 106-1 (E-585-29), ALL OTHERS ARE 15060 (E-585-14) OR EQUIVALENTS.

L RESISTORS ARE 1/4W, ±5%.

EFIX ALL REFERENCE DESIGNATIONS WITH "A5".

DICATES "AID" TEST POINT.

| DESCRIPTION | TOOL NO. |
|---|---|

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REMOVE ALL BURRS

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED FRACTIONS ± .008 DECIMALS ± .003 EXCEPT HOLE DIA ± ANGLES ± 1/2°

DO NOT SCALE DRAWING

| | | |
|---|---|---|
| DR. BY J.C. | DATE 6-20-81 | |
| CK. BY | DATE 6-26-81 | |
| AP'D BY | DATE 7-22-81 | |
| AP'D BY | DATE | |
| FINISH: | | |
| HARDENING: | | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS
#1239

| PRINT CONTROL | DIE SIZE | C.C. | FT. PER M. | LBS. PER M. |
|---|---|---|---|---|

NAME: A5 LAMP DRIVER SCHEMATIC

ASSEM. NO. USED

MATERIAL CODE: CENTAUR

PART NO. W-1182-3

| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|

PART NO. W-1255-2 b

| | | |
|---|---|---|
| 72 | A9J3-18 | |
| N/U | A9J3-17 | |
| 56 | A9J3-16 | |
| 14 | A9J3-15 | |
| 27 | A9J2-12 | LEFT THUMPER BUMPER |
| 96 | A9J2-17 | #4 CHAMBER (2) (TOP) |
| 21 | A9J3-12 | |
| 70 | A9J3-11 | |
| 54 | A9J2-7 | TOP LEFT LANE |
| 53 | A9J3-9 | |
| 13 | A9J3-8 | |
| 82 | A9J2-19 | RIGHT THUMPER BUMPER |
| N/U | A9J3-6 | |
| N/U | A9J3-5 | |
| 95 | A9J2-20 | #3 CHAMBER (2) |
| 20 | A9J3-3 | |
| 57 | A9J2 18 | |
| 43 | A9J2-1 | TOP MIDDLE LANE |
| N/U | A9J2-16 | |
| 52 | A9J2-15 | |
| 12 | A9J2-14 | |
| 40 | A9J2-2 | LEFT SLING SHOT |
| 62 | A9J2-3 | #2 CHAMBER (2) |
| 18 | A9J2-11 | |
| 80 | A9J2-10 | |
| 25 | A9J2-18 | TOP RIGHT LANE |
| 51 | A9J2-8 | |
| 10 | A9J2-7 | |
| 45 | A9J2-6 | RIGHT SLING SHOT |
| 60 | A9J2-5 | #1 CHAMBER (2)(FROM BOTTOM) |
| 15 | A9J2-4 | |
| 20 | A2J1-5 | 5.4 VDC |

TO W-1207-11

| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

| NO. | LET. | CHANGE | DATE |
|---|---|---|---|

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REMOVE ALL BURRS

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .008
DECIMALS ± .003
EXCEPT HOLE DIA.'S
ANGLES ± 1/2°

DO NOT SCALE DRAWING

| | | |
|---|---|---|
| DR. BY | DATE | |
| CK. BY | DATE | |
| AP'D BY JD | DATE 7-22-81 | |
| AP'D BY | DATE 7-22-81 | |
| FINISH: | | |
| HARDENING: | | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

1239

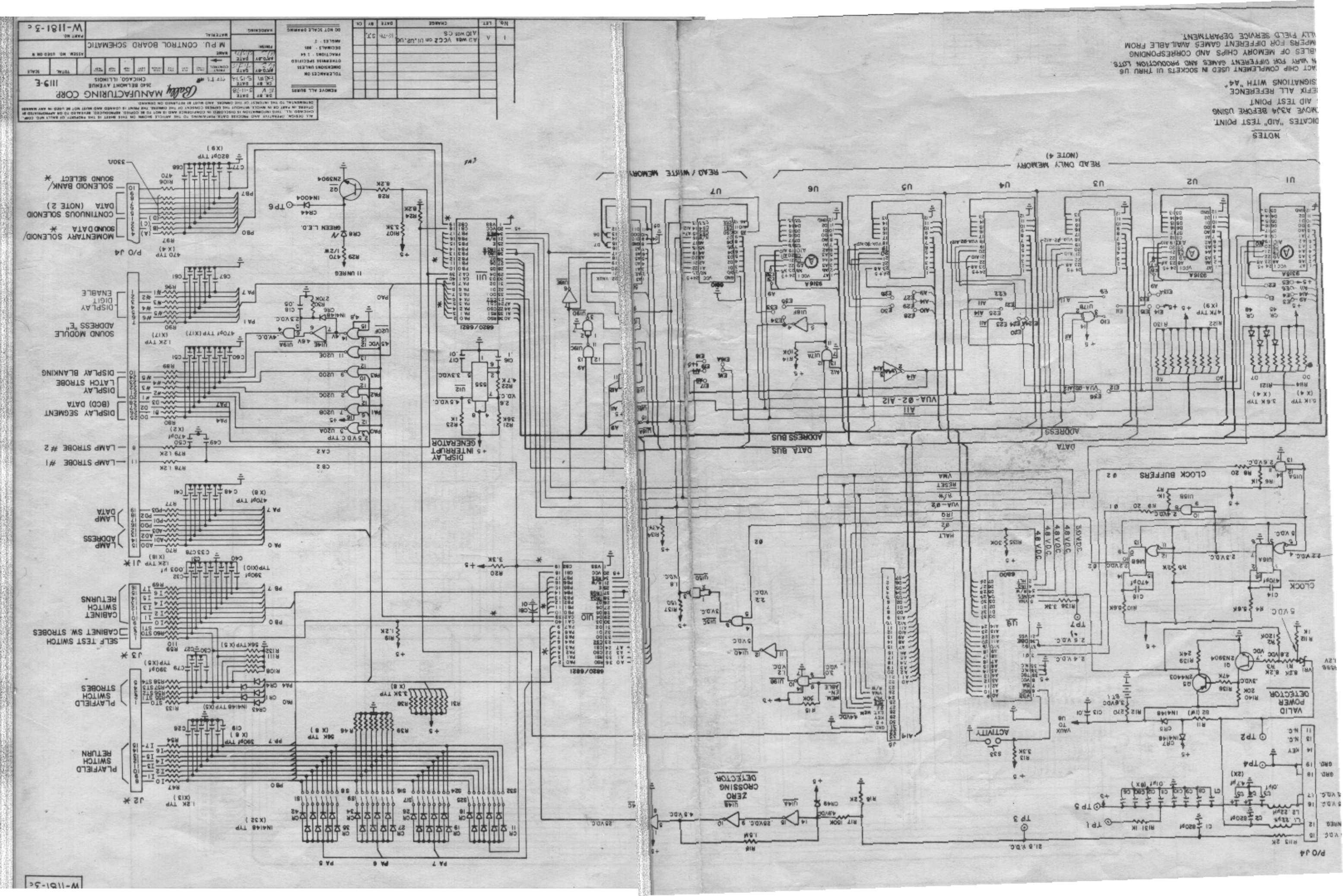
| PRINT CONTROL | DIE SIZE- | C.C.- | FT. PER M- | LBS. PER M- |
|---|---|---|---|---|

NAME: WIRING DIAGRAM PLAYFIELD

ASSEM. NO. USED | SCALE

MATERIAL CODE: CENTAUR

PART NO. W-1255-2 b


NOTES
INDICATES "AID" TEST POINT.
REMOVE A534 BEFORE USING
AID TEST POINT
PREFIX ALL REFERENCE
SIGNATIONS WITH "A4"
CONTACT CHIP COMPLEMENT USED IN SOCKETS U1 THRU U6
WARN FOR DIFFERENT GAMES AVAILABLE FROM
IMPERS FOR MEMORY CHIPS AND CORRESPONDING
BLES OF MEMORY FOR DIFFERENT GAMES AND PRODUCTION LOTS.
ALLY FIELD SERVICE DEPARTMENT.
READ ONLY MEMORY
(NOTE 4)
READ / WRITE MEMORY
DATA BUS
ADDRESS BUS
DISPLAY INTERRUPT +5 GENERATOR
ZERO CROSSING DETECTOR
VALID POWER DETECTOR
CLOCK BUFFERS
CLOCK
ACTIVITY
P/O J4
MOMENTARY SOLENOID/ SOUND DATA
SOLENOID BANK/ SOUND SELECT
CONTINUOUS SOLENOID DATA (NOTE 2)
DISPLAY DIGIT ENABLE
SOUND MODULE ADDRESS
DISPLAY SEGMENT (BCD) DATA
DISPLAY LATCH STROBE
DISPLAY BLANKING
LAMP STROBE #1
LAMP STROBE #2
LAMP ADDRESS
LAMP DATA
CABINET SWITCH RETURNS
SELF TEST SWITCH
CABINET SW. STROBES
PLAYFIELD SWITCH STROBES
PLAYFIELD SWITCH RETURN
GREEN L.E.D.
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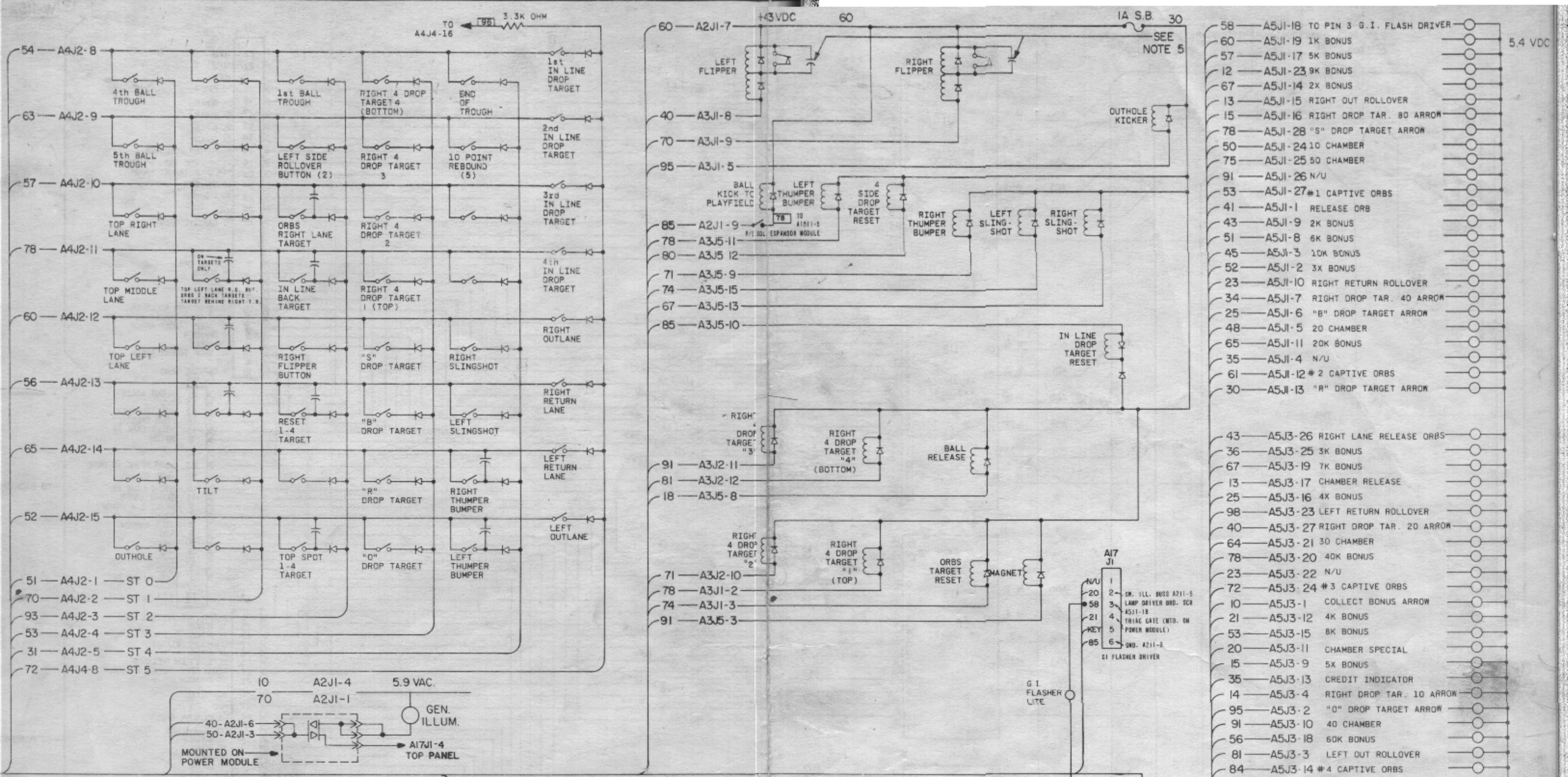
CHICAGO ILL. THIS INFORMATION IS DISCLOSED IN CONFIDENCE AND IS NOT TO BE COPIED REPRODUCED REVEALED TO ANYONE/REPRO
DUCED IN PART OR IN WHOLE WITHOUT THE EXPRESS CONSENT OF THE OWNER. THE RIGHT IS LOANED AND MUST BE USED IN ANY MANNER
DETRIMENTAL TO THE INTEREST OF THE OWNER AND MUST BE RETURNED ON DEMAND.
Bally MANUFACTURING CORP.
3640 BELMONT AVENUE
CHICAGO, ILLINOIS
1119-E
M PU. CONTROL BOARD SCHEMATIC
W-1181-3 c




## PLAYFIELD A6

J1

| | | |
|---|---|---|
| 20 | 1 | SW. ILL. BUSS |
| 83 | 2 | SOL. BUS (A3J5-14) |
| 85 | 3 | GRND. |
| 85 | 4 | GRND. |
| 78 | 5 | TO BALL KICK TO PLAYFIELD COIL |
| | 6 | KEY |
| | 7 | N/U |
| | 8 | N/U |
| 30 | 9 | 43 VDC SOL. BUSS |
| | 10 | |

A15 SOLENOID EXPANDER

TO W-1187-32

OTES

INDICATES NOT USED
N/U = NOT USED ON PLAYFIELD
* INDICATES AID TEST POINT
COIL DIODES ARE IN4004 (E-587-6) SWITCH DIODES ARE IN4148 (E-587-14)
ALL CAPACITORS ARE .05 MFD. (E-586-80)
GERMANY ONLY - CAPACITOR .01 MFD. @ 500 V. (E-586-65)

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REMOVE ALL BURRS
TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .005
DECIMALS ± .003
EXCEPT HOLE DIA. .5
ANGLES ± 1/2°
DO NOT SCALE DRAWING

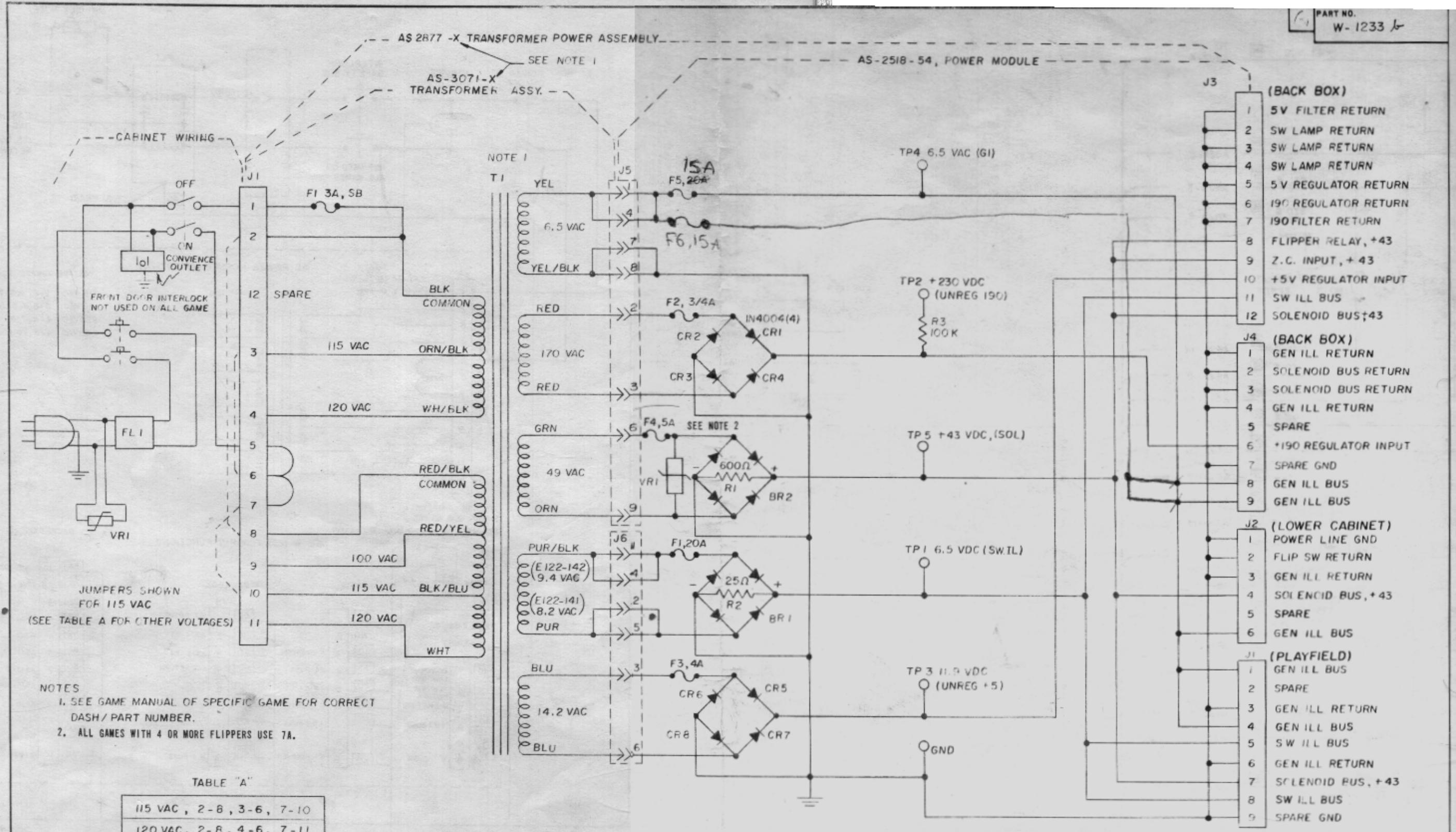
| | | |
|---|---|---|
| DR. BY J.G. | DATE 6-22-81 | |
| CK. BY | DATE | |
| APD BY J.D. | DATE 7-22-81 | |
| APD BY | DATE | |
| FINISH | | |
| HARDENING | | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS
1239

PRINT CONTROL | DIE SIZE - CC - FT PER M - LBS PER M -

NAME: WIRING DIAGRAM PLAYFIELD
ASSEM NO USE | SCA
MATERIAL: CENTAUR
CODE
PART NO: W-1192-32c

PART NO. W-1233 b




NOTES

1. SEE GAME MANUAL OF SPECIFIC GAME FOR CORRECT DASH/PART NUMBER.
2. ALL GAMES WITH 4 OR MORE FLIPPERS USE 7A.

TABLE "A"

| |
|---|
| 115 VAC, 2-8, 3-6, 7-10 |
| 120 VAC, 2-8, 4-6, 7-11 |
| 220 VAC, 4-8, 7-9 |
| 240 VAC, 4-8, 7-11 |

| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|

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REMOVE ALL BURRS

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .008
DECIMALS ± .003
EXCEPT HOLE DIA'S
ANGLES ± 1/2°

DO NOT SCALE DRAWING

| | |
|---|---|
| DR. BY FFC | DATE 7-10-80 |
| CK. BY AMCR | DATE 7-11-80 |
| AP'D BY | DATE |
| AP'D BY | DATE 7-11-80 |
| FINISH: | |
| HARDENING: | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

FEB 20 1981

# 1196

| PRINT CONTROL | DIE SIZE- | C.C.- | FT. PER M- | LBS. PER M- |
|---|---|---|---|---|

NAME: POWER SUPPLY SCHEMATIC

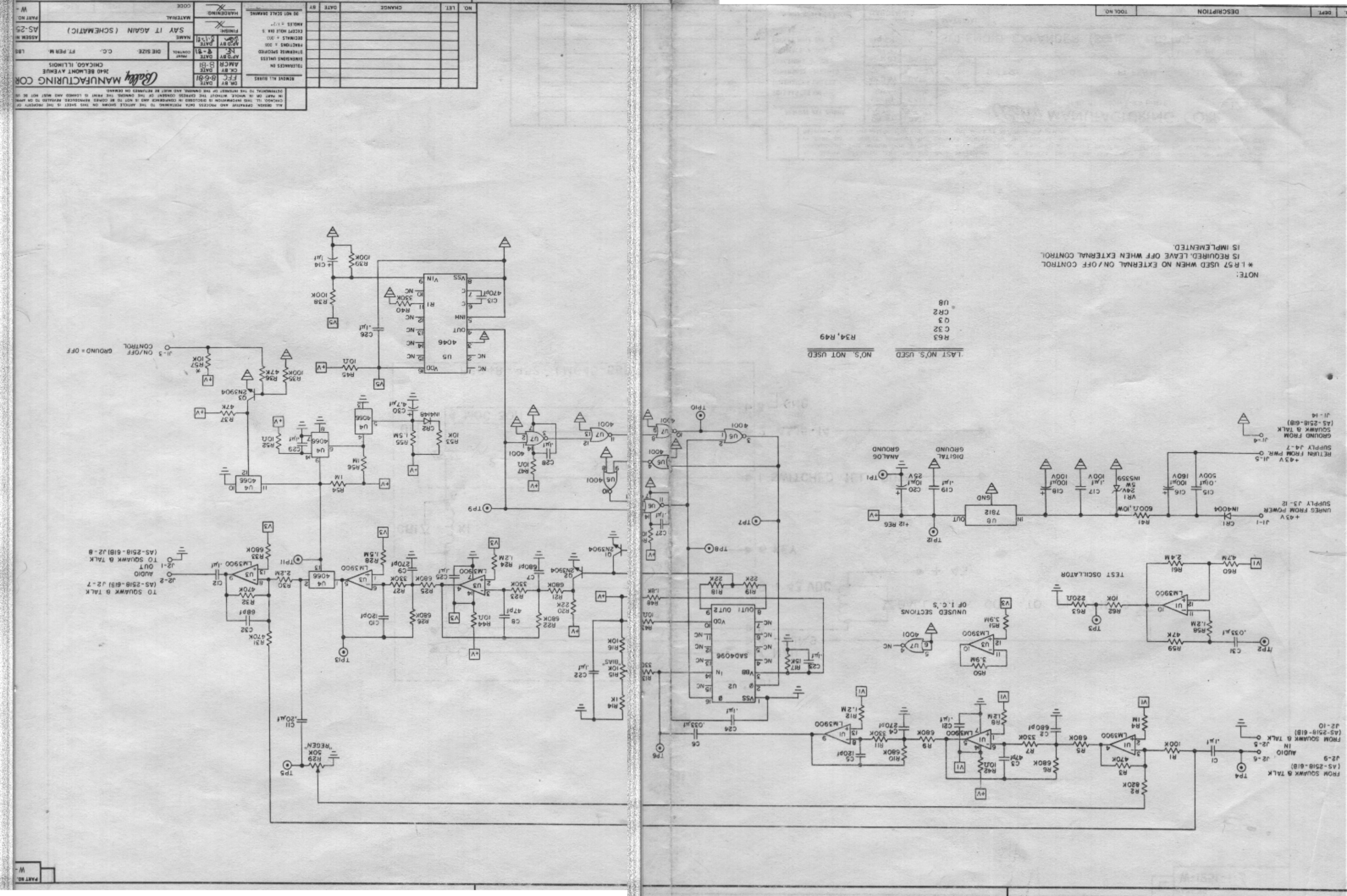
ASSEM. NO. USED

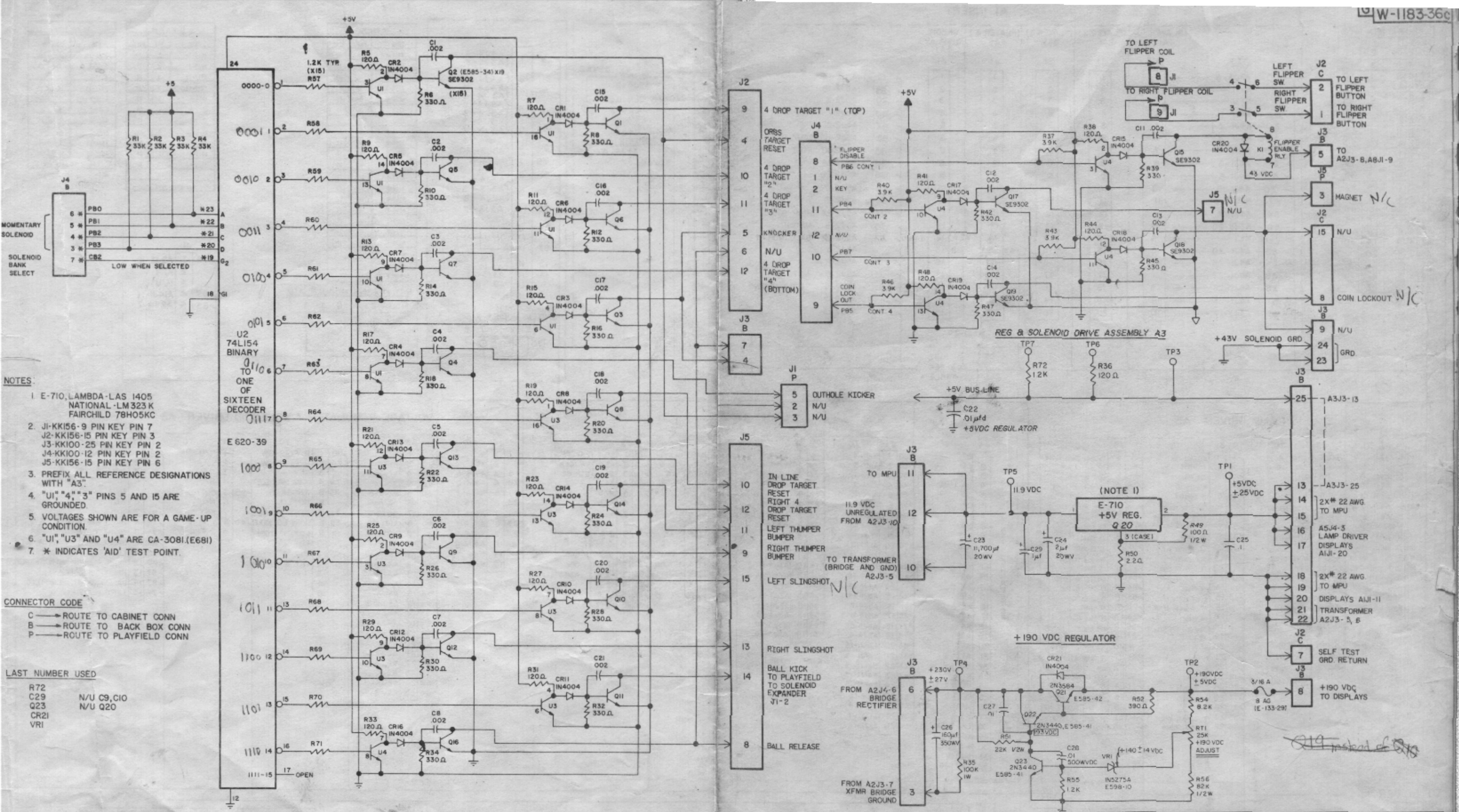
SCALE

MATERIAL

CODE

PART NO. W-1233 b


Bally MANUFACTURING CORP.
3640 BELMONT AVENUE
CHICAGO, ILLINOIS
SAY IT AGAIN (SCHEMATIC)
AS-2518-618
W-
LAST NO'S. USED
R63
C32
Q3
CR2
U8
NO'S. NOT USED
R34, R49
NOTE:
* LR57 USED WHEN NO EXTERNAL ON/OFF CONTROL IS REQUIRED. LEAVE OFF WHEN EXTERNAL CONTROL IS IMPLEMENTED.
UNUSED SECTIONS OF I.C.'S
TEST OSCILLATOR
AUDIO IN
FROM SQUAWK & TALK (AS-2518-618) J2-10
FROM SQUAWK & TALK (AS-2518-618) J2-9
AUDIO OUT
TO SQUAWK & TALK (AS-2518-618) J2-8
TO SQUAWK & TALK (AS-2518-618) J2-7
ON/OFF CONTROL
GROUND = OFF
"REGEN"
UNREG FROM POWER SUPPLY J3-12
GROUND FROM SQUAWK & TALK (AS-2518-618) J1-14
RETURN FROM PWR. SUPPLY J4-7
DIGITAL GROUND
ANALOG GROUND
+43V
+12 REG
SAD4096
4046
LM3900
7812
4066
2N3904
IN4004
IN5359
IN4148
DESCRIPTION
TOOL NO.
DEPT.
NO.
LET.
CHANGE
DATE
BY
DO NOT SCALE DRAWING
NAME
SAY IT AGAIN (SCHEMATIC)
ASSEM NO.
AS-25
MATERIAL
PART NO.
W-
CODE
FINISH
HARDENING
DIE SIZE
C.C.
FT. PER M.
LBS.




NOTES:

1. E-710, LAMBDA-LAS 1405
   NATIONAL-LM323K
   FAIRCHILD 78H05KC
2. J1-KK156-9 PIN KEY PIN 7
   J2-KK156-15 PIN KEY PIN 3
   J3-KK100-25 PIN KEY PIN 2
   J4-KK100-12 PIN KEY PIN 2
   J5-KK156-15 PIN KEY PIN 6
3. PREFIX ALL REFERENCE DESIGNATIONS WITH "A3".
4. "U1", "4", "3" PINS 5 AND 15 ARE GROUNDED.
5. VOLTAGES SHOWN ARE FOR A GAME-UP CONDITION.
6. "U1", "U3" AND "U4" ARE CA-3081.(E681)
7. * INDICATES 'AID' TEST POINT.

CONNECTOR CODE

C → ROUTE TO CABINET CONN
B → ROUTE TO BACK BOX CONN
P → ROUTE TO PLAYFIELD CONN

LAST NUMBER USED

| | |
|---|---|
| R72 | |
| C29 | N/U C9, C10 |
| Q23 | N/U Q20 |
| CR21 | |
| VR1 | |

| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

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REMOVE ALL BURRS
TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED: FRACTIONS ± .005; DECIMALS ± .003; EXCEPT HOLE DIA'S; ANGLES ± 1°
DO NOT SCALE DRAWING

| NO. | LET | CHANGE | DATE | BY |
|---|---|---|---|---|

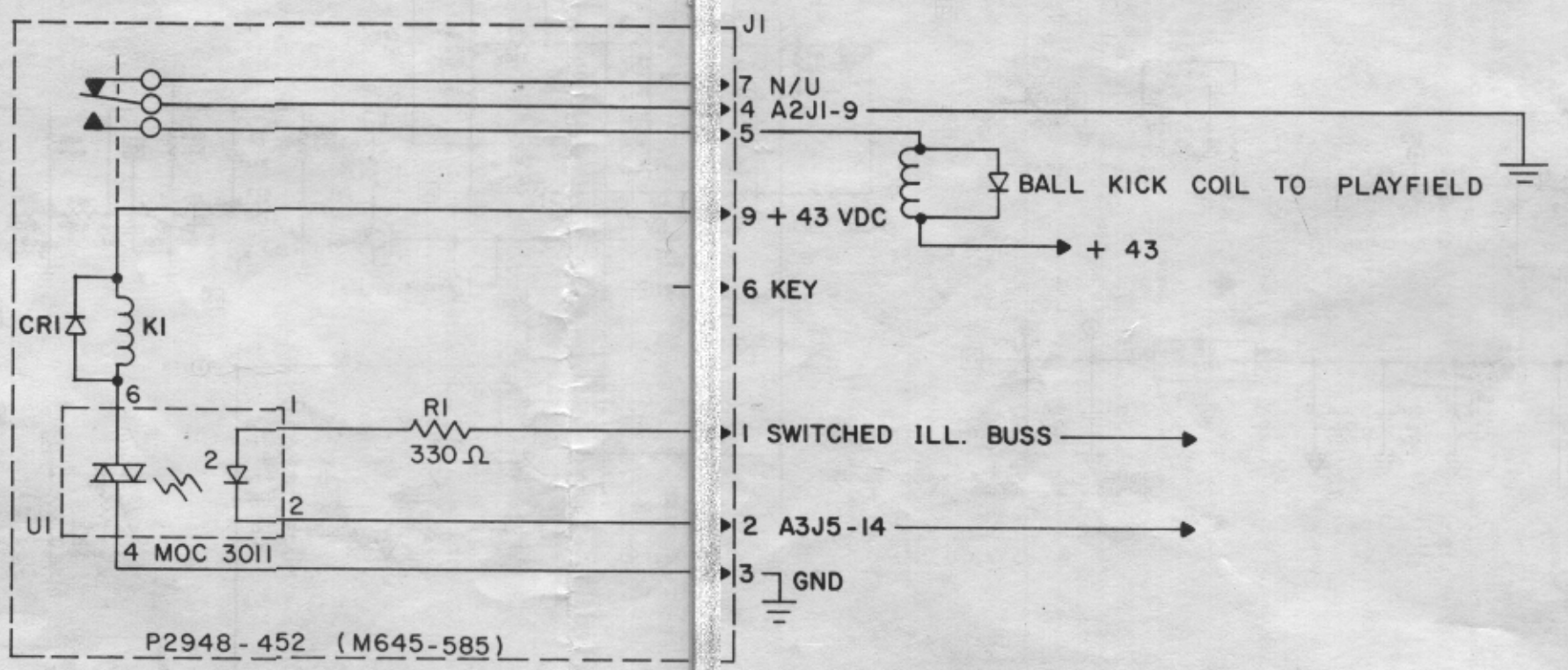
DR. BY — DATE
CK. BY — DATE
APP'D BY — DATE
APP'D BY — DATE
FINISH:
HARDENING:

Bally MANUFACTURING CORP. #1239
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

PRINT CONTROL | DIE SIZE: | C.C.: | FT. PER M: | LBS. PER M:

NAME: SOLENOID DRIVER VOLTAGE REGULATOR SCHEMATIC
ASSEM. NO. USED | SCALE
MATERIAL CODE: CENTAUR
PART NO. W-1183-36c

PART NO. W-1251-1 b

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REMOVE ALL BURRS

TOLERANCES ON DIMENSIONS UNLESS OTHERWISE SPECIFIED
FRACTIONS ± .008
DECIMALS ± .003
EXCEPT HOLE DIA 'S
ANGLES ± 1/2°

DO NOT SCALE DRAWING

| | | |
|---|---|---|
| DR. BY JCG | DATE 10-5-81 | |
| CK. BY | DATE 10-5-81 | |
| AP'D BY J.D. | DATE 10-6-81 | |
| AP'D BY | DATE | |
| FINISH: | | |
| HARDENING: | | |

Bally MANUFACTURING CORP.
2640 BELMONT AVENUE
CHICAGO, ILLINOIS

# 1239

PRINT CONTROL | DIE SIZE- | C.C.- | FT. PER M- | LBS. PER M-

NAME: SOLENOID EXPANDER (SCHEMATIC)

ASSEM. NO. USED: AS-2518-66

SCALE

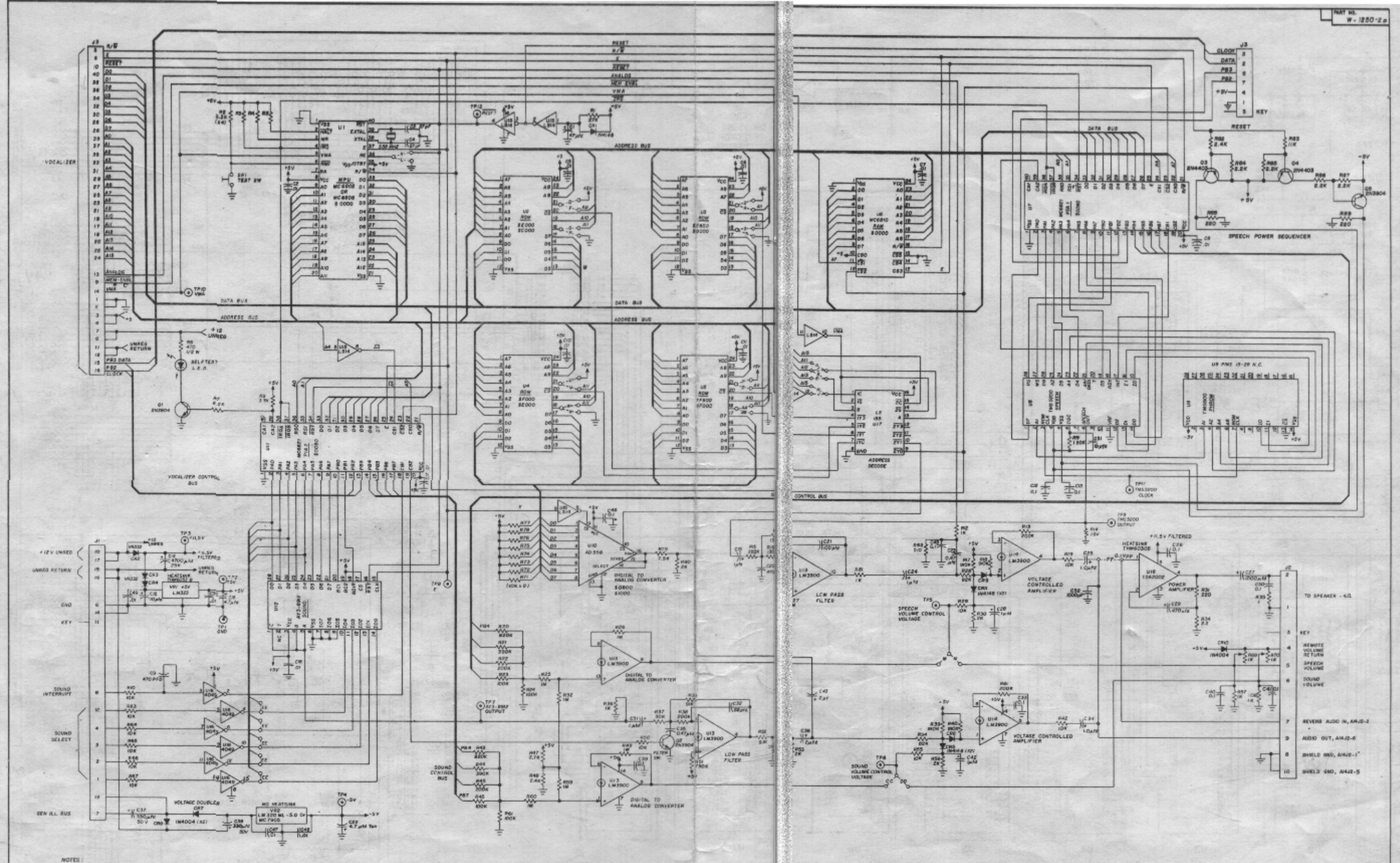
MATERIAL

CODE

PART NO. W-1251-1 b

| OPER. | DEPT. | DESCRIPTION | TOOL NO. |
|---|---|---|---|

| NO | LET | CHANGE | DATE | BY |
|---|---|---|---|---|




NOTES:

1. UNLESS OTHERWISE INDICATED ALL RESISTOR VALUES ARE IN OHMS.

LAST NUMBERS USED
R89
C51 ← C52
CR10
U18
VR 2
Q5
TP12
FF

SQUAWK & TALK TEST POINTS
TP1 - GND
TP2 - +5VDC
TP3 - +11.5VDC
TP4 - -5VDC
TP5 - SPEECH VOLUME CONTROL VOLTAGE
TP6 - SOUND VOLUME CONTROL VOLTAGE
TP7 - AY3-8912 OUTPUT
TP8 - E PULSE
TP9 - TMS 5200 OUTPUT
TP10 - VMA
TP11 - TMS 5200 CLOCK
TP12 - RESET

SQUAWK & TALK JUMPER
FROM-ROM JUMPER
2716 9316 A,B,C,D
2532 9332 C,F,G,
NO VOCALIZER H
WITH VOCALIZER J
6808 MPU K (WITH
6802 MPU L (NO 6
NO AY3-8912 EE
NO "SAY IT AGAIN" FF

COMPUTER VOLUME CONTROL Y,X,BB
REMOTE VOLUME CONTROL Y,Y,AA

| | SPEECH | SOUND |
|---|---|---|
| | CC | M |
| | DD | N |

| NO. | LET. | CHANGE | DATE | BY |
|---|---|---|---|---|
| | A | ADDED CAP 52 | 2-82 | |

Bally MANUFACTURING CORP.
8640 BELMONT AVENUE
CHICAGO, ILLINOIS

NAME: SQUAWK & TALK SCHEMATIC A8
ASSEM NO USED: A9-2518-6B
SCALE: NONE
PART NO.: W-1250-2 p