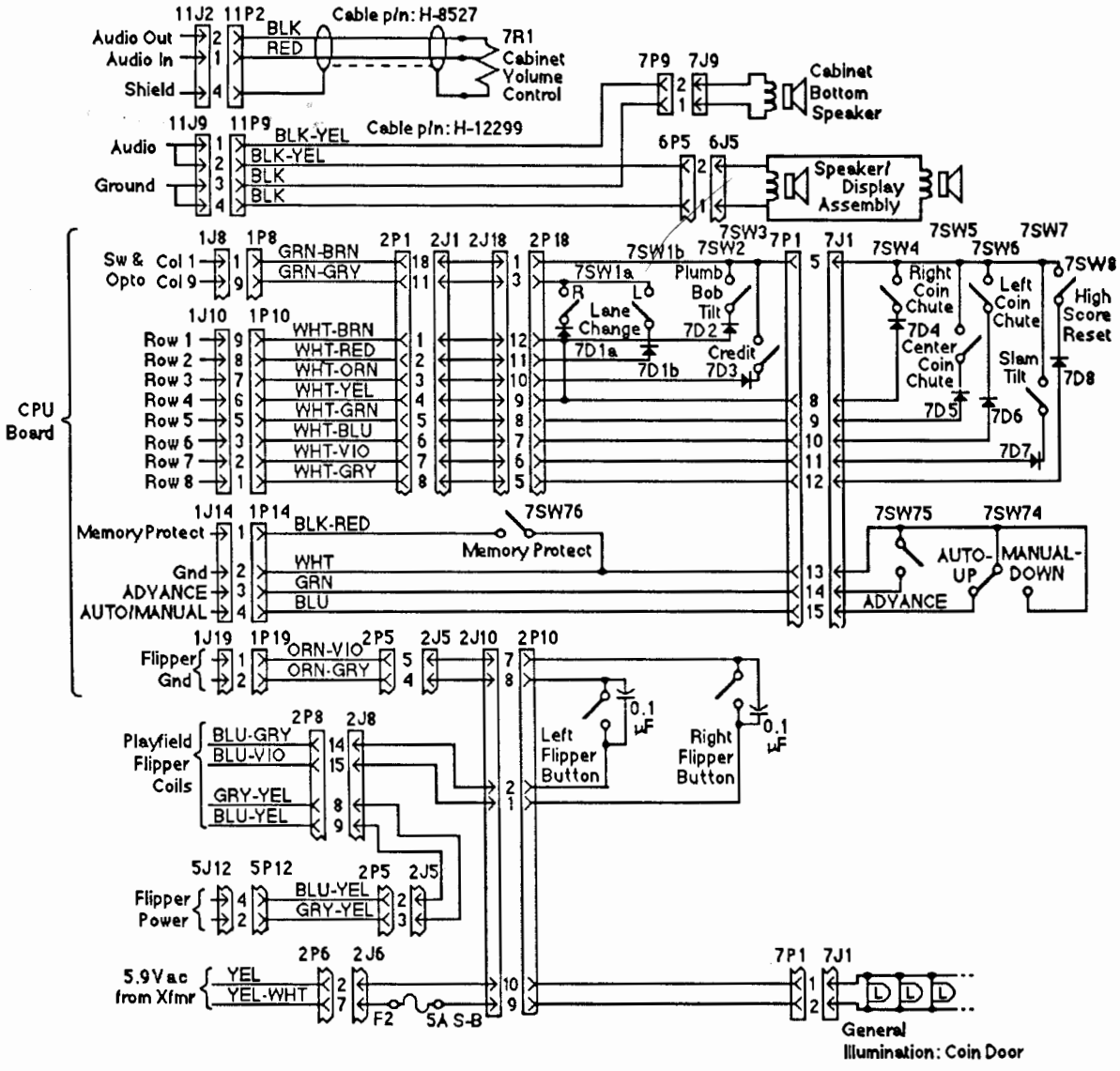
Section 3
Reference Diagrams & Schematics

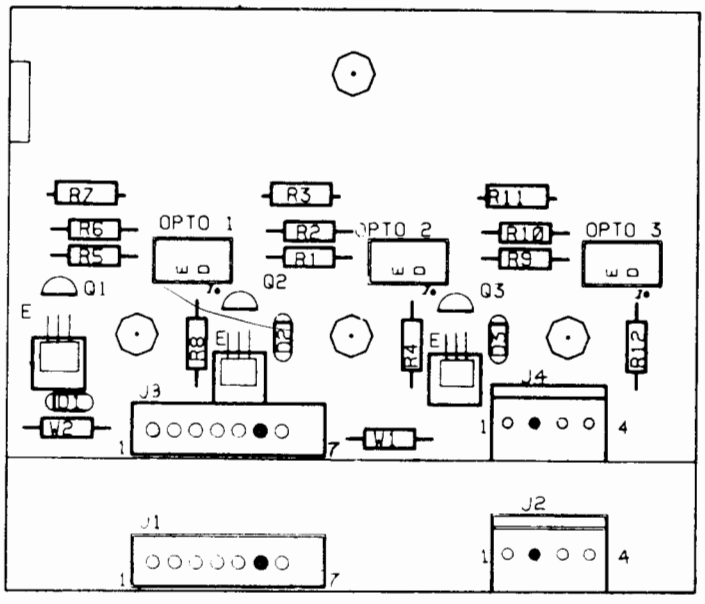
- Diagrams and Schematics:

  Cabinet Wiring
  3-Bank Opto Board
  Power Supply Board
  System 11B CPU Board
  Master Display Board
  Audio Board
  Aux Power Driver Board
  Backbox Interconnect Board
  Controlled, Special, & Switched Solenoids
  Power Wiring
  Game Circuit Boards Interboards Signals

- Diagnostic Test Flowchart

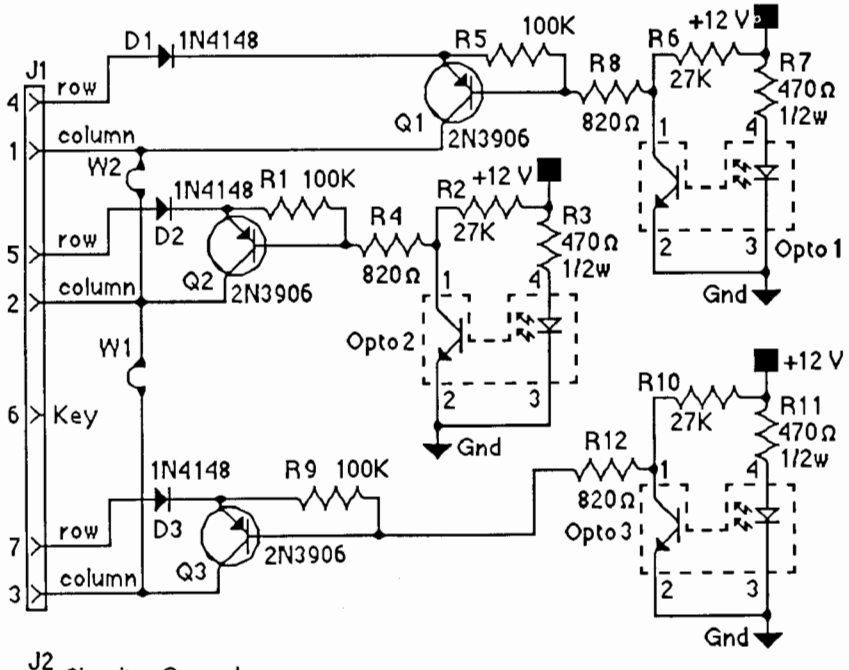


TAXI Cabinet Wiring

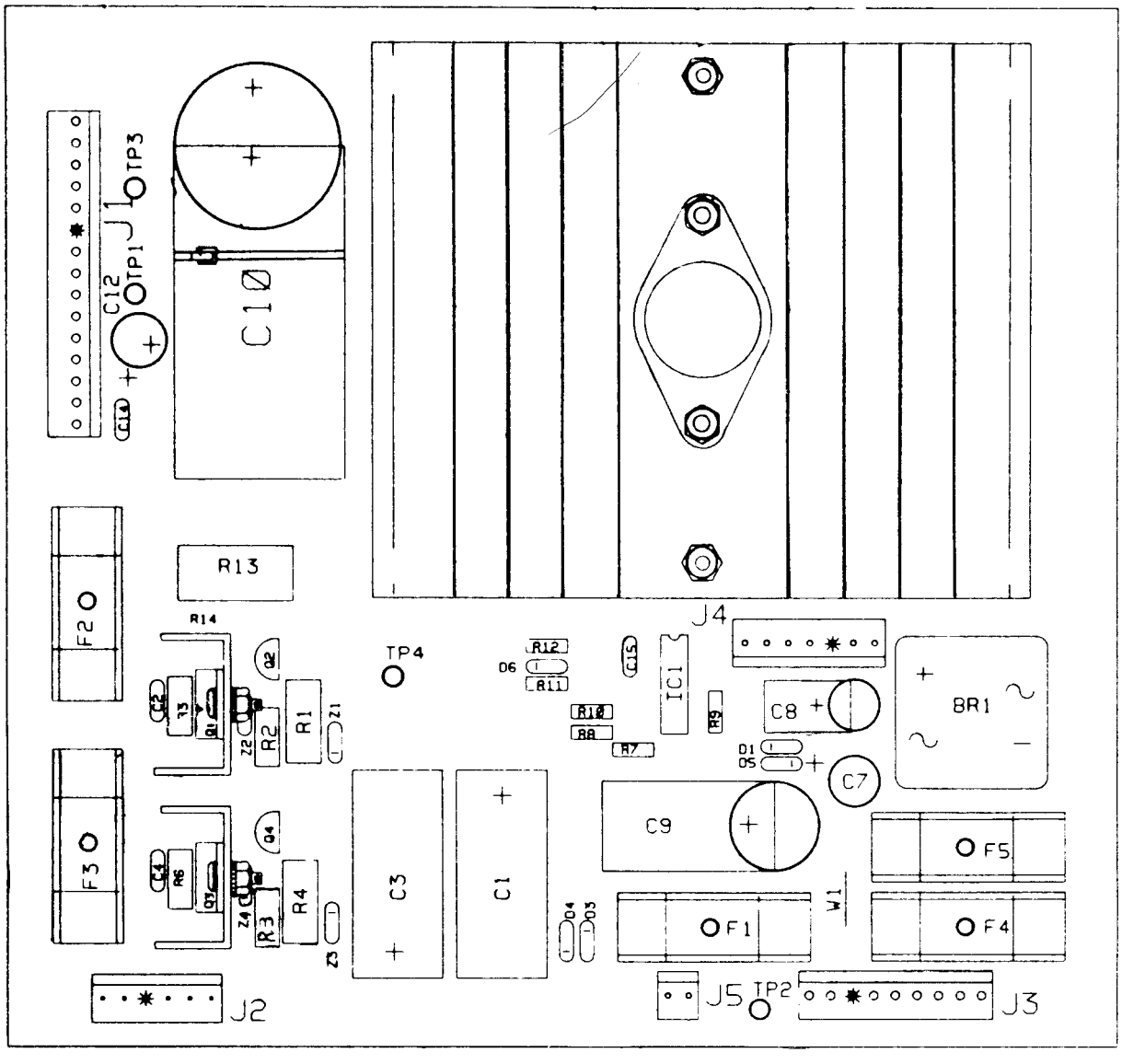


3-Bank Drop Target Opto Board

p/n C-11318-1

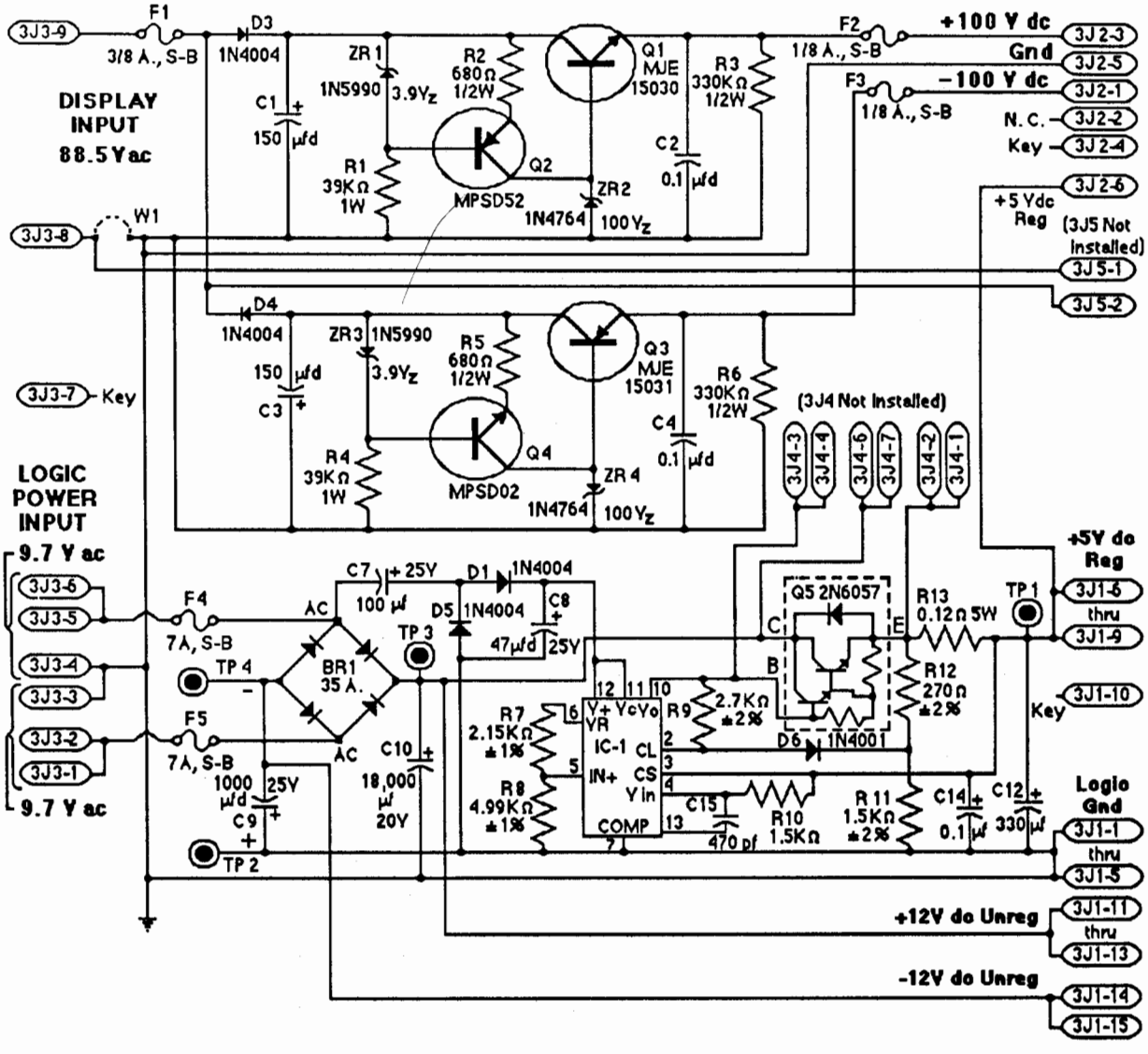


3-Bank Drop Target Opto Board Schematic

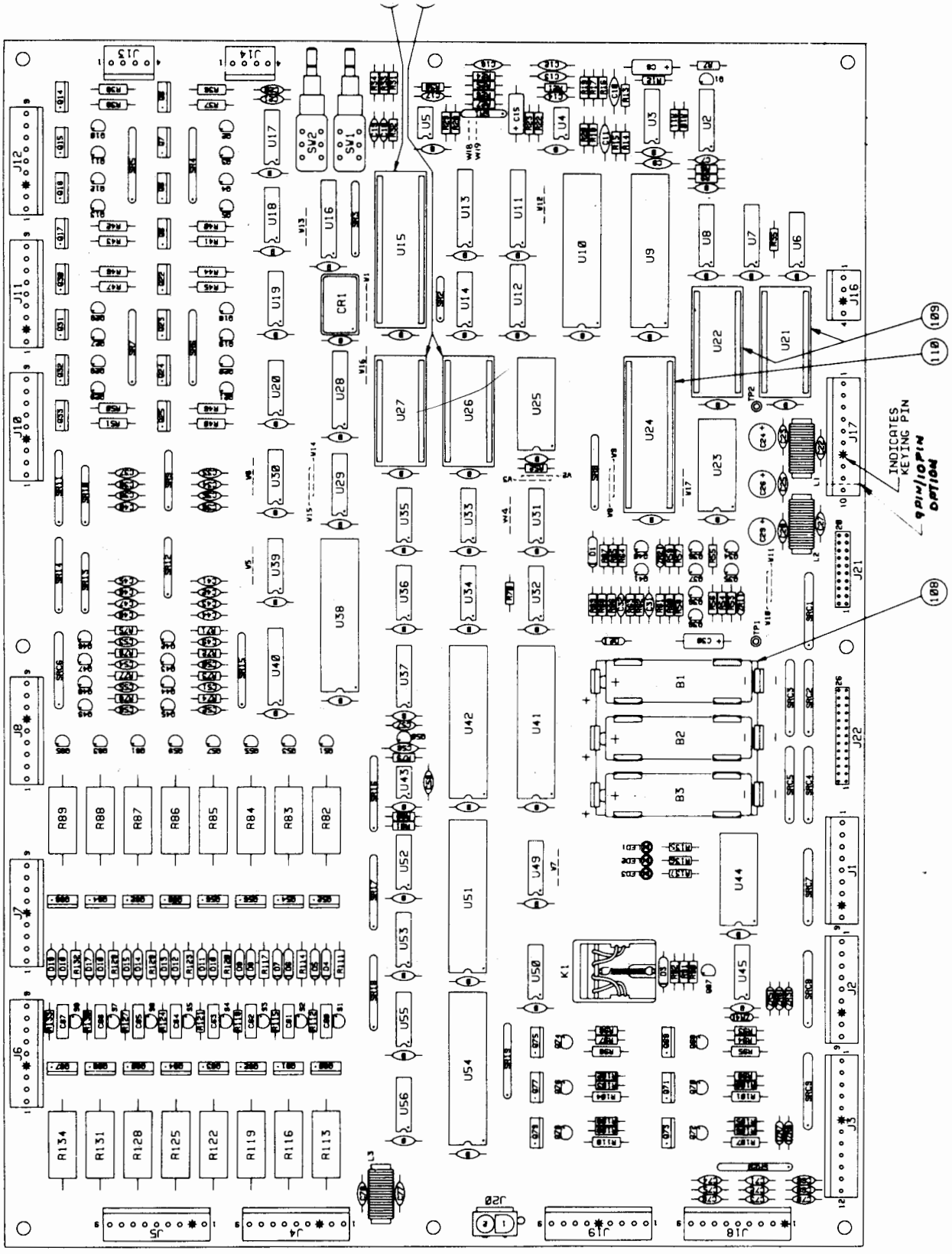


Power Supply Board

p/n D-12246



Power Supply Board Schematic



System 11B CPU Board (D-11883)

TAXI ROM and Jumper Table

Game	System 11B CPU Rev.	P/N - U15 Game µP	P/N - U27 G. ROM 1	P/N - U26 G. ROM 2	P/N - U21 S. ROM 1	P/N - U22 S. ROM 2	P/N - U24 Sound µP	Jumpers
BIG GUNS	-	5400-09150-00	A-5343-557-2	A-5343-557-1	A-5343-557-4	A-5343-557-3	5400-09150-00	W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19
SPACE STATION	-		A-5343-552-2	A-5343-552-1	A-5343-552-4	A-5343-552-3		W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19
CYCLONE	-		A-5343-564-2	A-5343-564-1	A-5343-564-4	A-5343-564-3		W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19
BANZAI RUN	-		A-5343-566-2	A-5343-566-1	A-5343-566-4	A-5343-566-3		W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19
SWORDS OF FURY	-		A-5343-559-2	A-5343-559-1	A-5343-559-4	A-5343-559-3		W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19
TAXI	-		A-5343-553-2	A-5343-553-1	A-5343-553-4	A-5343-553-3		W1, 2, 4, 5, 7, 8, 11, 14, 16, 17, and 19

TAXI Solenoid Table

Sol. No.	Function	Solenoid Type	Wire [1] Color	Connections: CPU Bd	Connections: Playfield/ Cabinet	Driver Trnstr	Solenoid Part Number Flashlamp Type i=Insert Bd; p=Playfield; d=Dome
01A[3]	Outhole Kicker	Switched	Vio-Brn	1P11-1	5J1-9: 5J4-9 (A)	Q33	AE-23-800
01C[3]	Pin•Bot Flasher	Switched	Blk-Brn	(Gry-Brn)	5J5-9 (C)	Q33	#89 flashlamps 1p,1i
02A[3]	Ball Release (Shtr Lane Feeder)	Switched	Vio-Red	1P11-3	5J1-7: 5J4-8 (A)	Q25	AE-23-800
02C[3]	Dracula Flasher	Switched	Blk-Red	(Gry-Red)	5J5-8 (C)	Q25	#89 flashlamps 1p,1i
03A[3]	Catapult	Switched	Vio-Orn	1P11-4	5J1-6: 5J4-7 (A)	Q32	AL-23-800
03C[3]	Marilyn Flasher	Switched	Blk-Orn	(Gry-Orn)	5J5-7(C)	Q32	#89 flashlamps 1p,1i
04A[3]	Middle 3-bank Dr Tgt	Switched	Vio- Yel	1P11-5	5J1-5: 5J4-6 (A)	Q24	AE-26-1200
04C[3]	Santa Flasher	Switched	Blk-Yel	(Gry-Yel)	5J5-5 (C)	Q24	#89 flashlamps 1p,1i
05A[3]	Top Eject Hole	Switched	Vio-Grn	1P11-6	5J1-4: 5J4-5 (A)	Q31	AE-23-800
05C[3]	Gorbie Flasher	Switched	Blk-Grn	(Gry-Grn)	5J5-4 (C)	Q31	#89 flashlamps 1p,1i
06A[3]	Right 3-bank Dr Tgt	Switched	Vio-Blu	1P11-7	5J1-3: 5J4-4 (A)	Q23	AE-26-1200
06C[3]	Left Ramp Flasher	Switched	Blk-Blu	(Gry-Blu)	5J5-3 (C)	Q23	#89, #906 flashlamps 1p,1d
07A[3]	Spinout Kickbig	Switched	Vio-Blk	1P11-8	5J1-2: 5J4-2 (A)	Q30	AE-26-1500
07C[3]	Right Ramp Flasher	Switched	Blk-Vio	(Gry-Vio)	5J5-2 (C)	Q30	#89 , #906 flashlamps 1p,1d
08A[3]	Right Lock (Eject Hole)	Switched	Vio-Gry	1P11-9	5J1-1: 5J4-1 (A)	Q22	AE-26-1500
08C[3]	Spinout Flasher	Switched	Blk-Gry	(Gry-Blk)	5J5-1 (C)	Q22	#89 flashlamps 2p
09	Top Ball Gate	Controlled	Brn-Blk	1P12-1	5J2-9: 5J6-9: 2J4-3	Q17	SM1-35-4000-DC
10	Insert Gen Illumin Relay	Controlled	Brn-Red	1P12-2	5J2-8: 5J6-8: 2J4-5	Q9	5580-12145-01 [4]
11	Playfield Gen Illum	Controlled	Brn-Orn	1P12-4	5J2-6: 5J6-7: 2J4-6	Q16	5580-12145-01 [4]
12	A/C Select Relay	Controlled	Brn-Yel	1P12-5	5J2-5	Q8	5580-09555-01 [5]
13	Bell	Controlled	Brn-Grn	1P12-6	5J2-4: 5J6-5	Q15	SM-26-600-DC
14	Knocker	Controlled	Brn-Blu	1P12-7	5J2-4: 5J6-3	Q7	AE-26-1200
15	JACKPOT Flasher	Controlled	Brn-Vio	1P12-8	5J2-2: 5J6-2	Q14	#89 flashlamp 1p,2i
16	JOYRIDE Flasher	Controlled	Brn-Gry	1P12-9	5J2-1: 5J6-1	Q6	#89 flashlamp 1p
17	Left Jet Bumper	Special #1	Blu-Brn	1P19-7	5J3-7: 5J7-7	Q75	AE-23-800
18	Left Kicker ("sling")	Special #2	Blu-Red	1P19-4	5J3-6: 5J7-6	Q71	AE-26-1500
19	Right Jet Bumper	Special #3	Blu-Orn	1P19-3	5J3-3: 5J7-3	Q73	AE-23-800
20	Right Kicker ("sling")	Special #4	Blu-Yel	1P19-6	5J3-4: 5J7-5	Q69	AE-26-1500
21	Lower Jet Bumper	Special #5	Blu-Grn	1P19-8	5J3-2:5J7-2	Q77	AE-23-800
22	Not Used	Special #6	Blu-Blk	1P19-9	5J3-1: 5J7-1	Q79	
-	Right Flipper	-	Orn-Vio	1P19-1	2J3-1: 2J18-10: 7P1-15	-	
	Lower Right Flipper		[Blu-Vio] [2]		[7P1-16: 2J18-6: 2J17-4]		FL11630/50VDC
-	Left Flipper	-	Orn-Gry	1P19-2	2J3-2: 2J18-9: 7P1-18	-	
	Lower Left Flipper		[Blu-Gry] [2]		[7P1-19,2J18-5:2J17-3]		FL11630/50VDC

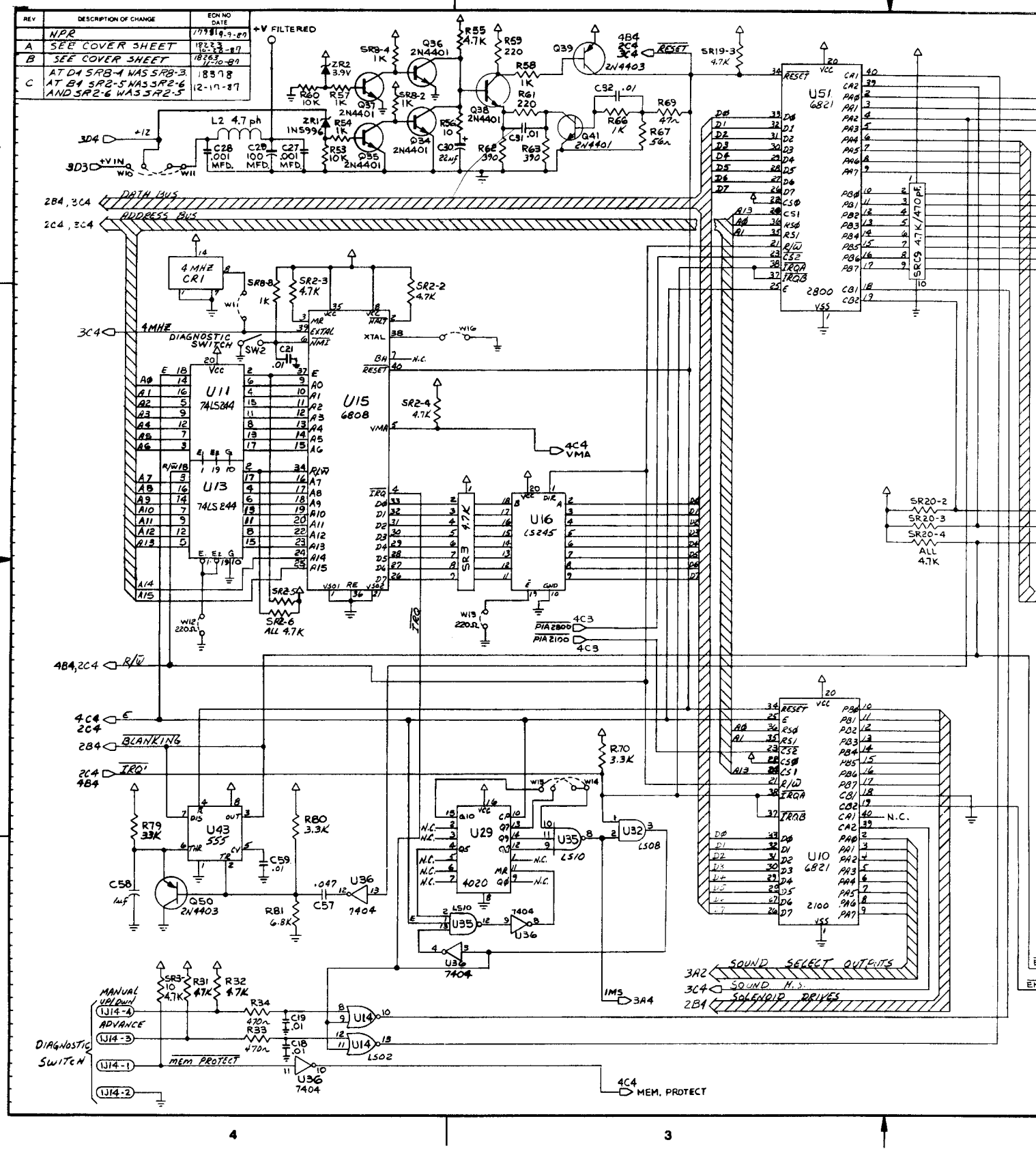
Notes: 1. Wire colors, except flipper Orn-Vio and Orn-Gry, are ground connections (to coil terminal with unbanded end of diode). Flipper Orn-Vio and Orn-Gry wires connect from CPU Board to flipper switch. 2. Flipper connections shown in braces are from flipper switch to flipper coil. 3. "A" circuits are pulsed, when Sol. 12 is de-energized; "C" circuits are pulsed, with Sol. 12 energized. Wire colors in brackets are those from respective A and C terminals corresponding to the J1-terminal connection listed for the Aux Power Driver Bd, which controls the device pulsing by Sol. 12.
4. Relay is mounted on Relay Bd, p/n C-11998-1. 5. Relay is mounted on Aux Power Driver Bd, D-12247 in the backbox.

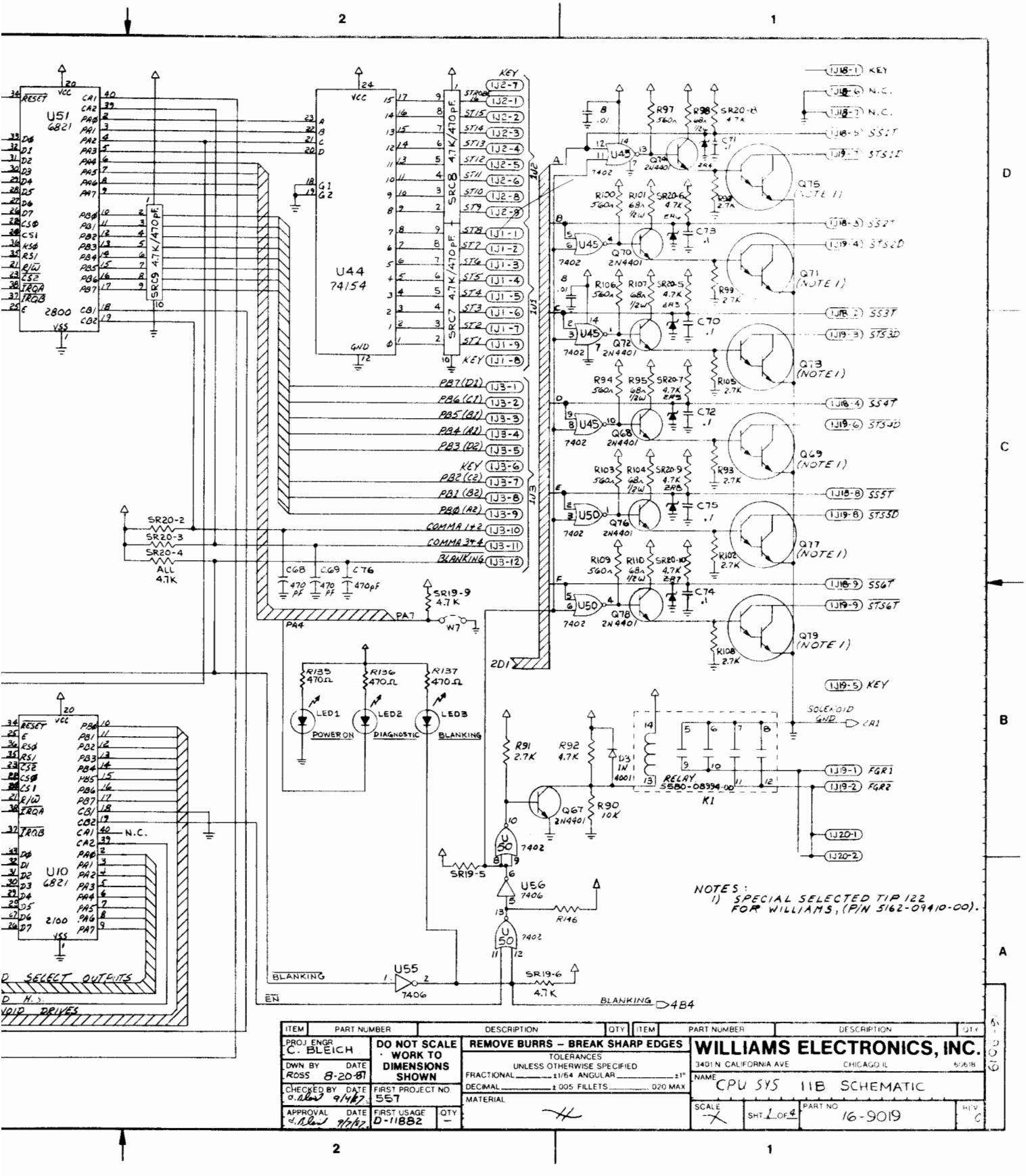
TAXI Lamp-Matrix Table

ROW \ COLUMN	1 Q66 YEL-BRN 1J7-1	2 Q64 YEL-RED 1J7-2	3 Q62 YEL-ORN 1J7-3	4 Q60 YEL-BLK 1J7-4	5 Q58 YEL-GRN 1J7-6	6 Q56 YEL-BLU 1J7-7	7 Q54 YEL-VIO 1J7-8	8 Q52 YEL-GRY 1J7-9
Q80 1 RED-BRN 1J6-1	JOYRIDE 10,000 1	AIRPORT 20K 9	PIN•BOT (Center) 17	PIN•BOT 25	2X cab 33	AIRPORT RIDE (Right) 41	JACKPOT (left above Meter) 49	SPINOUT 1,000 57
Q81 2 RED-BLK 1J6-2	JOYRIDE Spot Pasngr 2	AIRPORT 40K 10	DRACULA (Center) 18	DRACULA 26	4X cab 34	AIRPORT RIDE (Left) 42	JACKPOT (right above Meter) 50	SPINOUT 5,000 58
Q82 3 RED-ORN 1J6-3	JOYRIDE Mystery 3	AIRPORT 60K 11	MARILYN (Center) 19	MARILYN 27	3X cab 35	JOYRIDE 43	METER (left below Meter) 51	SPINOUT 10,000 59
Q83 4 RED-YEL 1J6-5	JOYRIDE EXTRA BALL 4	AIRPORT 80K 12	SANTA (Center) 20	SANTA 28	5X cab 36	JACKPOT When Lit 44	METER (right below Meter) 52	SPINOUT 25,000 60
Q84 5 RED-GRN 1J6-6	JOYRIDE SPECIAL 5	AIRPORT 100K 13	GORBIE (Center) 21	GORBIE 29	SPECIAL W/L (L Outlane) 37	1 MILLION When Lit 45	RED Traffic Light 53	SPINOUT 50,000 61
Q85 6 RED-BLU 1J6-7	Williams Pinball Palace (upr l) 6	C (Top Lane) 14	1 Express Lane (left) 22	RIDE AGAIN 30	BONUS W/L (L Return Lane) 38	EXTRA BALL W/L 46	YELLOW Traffic Light 54	SPINOUT 75,000 62
Q86 7 RED-VIO 1J6-8	Williams Pinball Palace (mid l) 7	A (Top Lane) 15	2 Express Lane (right) 23	Passengers Carried 31	SPECIAL W/L (R Outlane) 39	CARRY PASSENGERS W/L 47	GREEN Traffic Light 55	SPINOUT 100,000 63
Q87 8 RED-GRY 1J6-9	Williams Pinball Palace (lwr l) 8	B (Top Lane) 16	RAISE JACKPOT 24	LOCK 32	BONUS W/L (R Return Lane) 40	RELEASE 48	Williams Pinball Palace (upr r) 56	Williams Pinball Palace (lwr r) 64

TAXI Switch-Matrix Table

ROW \ COLUMN	1 Q45 GRN-BRN 1J8-1	2 Q49 GRN-RED 1J8-2	3 Q44 GRN-ORN 1J8-3	4 Q48 GRN-YEL 1J8-4	5 Q43 GRN-BLK 1J8-5	6 Q47 GRN-BLU 1J8-7	7 Q42 GRN-VIO 1J8-8	8 Q46 GRN-GRY 1J8-9
1 WHT-BRN 1J10-9	Plumb Bob Tilt 1	Playfield Tilt 9	Left Jet Bumper 17	Left Ramp Entry 25	Right Ramp Exit 33	41	49	Lane Change Right 57
2 WHT-RED 1J10-8	2	Outhole 10	Left Kicker ("sling") 18	Right Ramp Entry 26	Left Ramp Exit 34	42	50	Lane Change Left 58
3 WHT-ORN 1J10-7	Credit Button 3	Ball Trough #1 11	Right Jet Bumper 19	Mdl 3-Bank DT (left) 27	Catapult 35	SPINOUT Kickbig 43	51	59
4 WHT-YEL 1J10-6	Left Coin Chute 4	Ball Trough #2 12	Right Kicker ("sling") 20	Mdl 3-Bank DT (mid) 28	Right Eject 36	"Spins" Counter 44	52	60
5 WHT-GRN 1J10-5	Center Coin Chute 5	Top Eject Hole 13	Lower Jet Bumper 21	Mdl 3-Bank DT (right) 29	Left Outlane 37	45	53	61
6 WHT-BLU 1J10-3	Right Coin Chute 6	C Top Lane 14	Ball Shooter 22	R 3-Bank DT (top) 30	Left Return Lane 38	46	54	62
7 WHT-VIO 1J10-2	Slam Tilt 7	A Top Lane 15	Top Lane Entry 23	R 3-Bank DT (mid) 31	Right Outlane 39	47	55	63
8 WHT-GRY 1J10-1	High Score Reset 8	B Top Lane 16	Carry Pasengers 24	R 3-Bank DT (bottom) 32	Right Return Lane 40	48	56	64


REV | DESCRIPTION OF CHANGE | ECN NO DATE
NPR | 179819-9-87
A | SEE COVER SHEET | 18223 10-22-87
B | SEE COVER SHEET | 18263 11-10-87
C | AT D4 SR8-4 WAS SR8-3. AT B4 SR2-5 WAS SR2-6 AND SR2-6 WAS SR2-5 | 18378 12-10-87
+V FILTERED
L2 4.7 ph
C28 .001 MFD.
C29 100 MFD.
C27 .001 MFD.
ZR1 IN5996
ZR2 3.9V
Q36 2N4401
Q37 2N4401
Q34 2N4401
Q35 2N4401
Q38 2N4401
Q39 2N4403
Q41 2N4401
Q50 2N4403
R55 4.7K
R59 220
R58 1K
R61 220
R60 10K
R57 1K
R54 1K
R53 10K
R56 10
R68 390
R63 390
R66 1K
R67 56Ω
R69 47Ω
C30 22μF
C31 .01
C32 .01
SR8-4 1K
SR8-2 1K
SR8-8 1K
SR19-3 4.7K
SR2-3 4.7K
SR2-2 4.7K
SR2-4 4.7K
SR2-5
SR2-6 ALL 4.7K
SR3 4.7K
SR20-2
SR20-3
SR20-4 ALL 4.7K
SR9 4.7K/470pF
4 MHZ CR1
DIAGNOSTIC SWITCH
SW2
C21 .01
U11 74LS244
U13 74LS244
U15 6808
U16 LS245
U51 6821
U10 6821
2800
2100
U29 4020
U43 555
U35 LS10
U32 LS08
U36 7404
U14 LS02
R79 33K
R80 3.3K
R81 6.8K
R70 3.3K
C58 1μF
C59 .01
C57 .047
R31 47K
R32 4.7K
R34 470Ω
R33 470Ω
C19 .01
C18 .01
W11
W12 220Ω
W13 220Ω
W14
W16
W17
W18
W19
W20
W21
W22
3D4 +12
3D3 +VIN
2B4, 3C4 DATA BUS
2C4, 3C4 ADDRESS BUS
3C4 4MHZ
4C4 VMA
4B4, 2C4 R/W
4C4 2C4 E
2B4 BLANKING
2C4 4B4 IRQ'
IRQ
RESET
4C3 PIA 2800
4C3 PIA 2100
IMS 3A4
4C4 MEM. PROTECT
3A2 SOUND SELECT OUTPUTS
3C4 SOUND M.S.
2B4 SOLENOID DRIVES
MANUAL UP/DOWN (J14-4)
ADVANCE (J14-3)
DIAGNOSTIC SWITCH (J14-1)
(J14-2)
MEM. PROTECT
N.C.

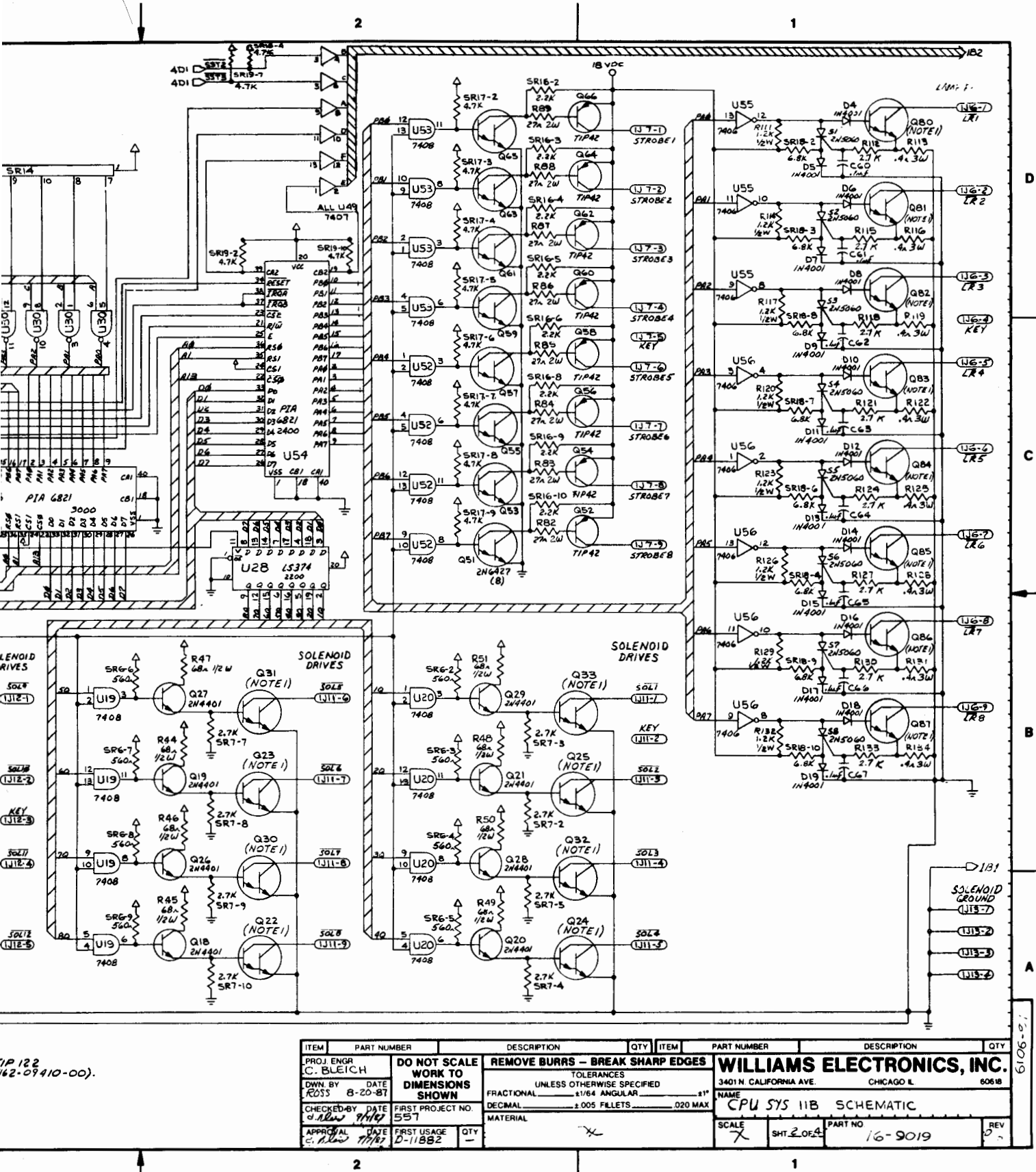


ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY

PROJ ENGR C. BLEICH
DWN BY ROSS DATE 8-20-87
CHECKED BY DATE 9/4/87
APPROVAL DATE 9/5/87
DO NOT SCALE · WORK TO DIMENSIONS SHOWN
FIRST PROJECT NO 557
FIRST USAGE D-11882
QTY —
REMOVE BURRS – BREAK SHARP EDGES
TOLERANCES UNLESS OTHERWISE SPECIFIED
FRACTIONAL ±1/64 ANGULAR ±1°
DECIMAL ± .005 FILLETS .020 MAX
MATERIAL

WILLIAMS ELECTRONICS, INC.
3401 N. CALIFORNIA AVE CHICAGO IL 60618
NAME CPU SYS 11B SCHEMATIC
SCALE X
SHT 1 OF 4
PART NO 16-9019
REV C

System 11B CPU Schematic (16-9019, Sheet 1 of 4)



System 11B CPU Schematic (16-9019, Sheet 2 of 4)

REV	DESCRIPTION OF CHANGE	ECN NO DATE
-	NPR	17981 9-9-87
A	SEE COVER SHEET	18223 10-28-87
B	SEE COVER SHEET	18269 11-10-87
C	AT A4 C77 WAS C78 AND C78 WAS C77	18398 12-17-87
D	R71 THRU R78 WAS 1.5K Q42 THRU Q49 WAS 2N3904	19092 5-12-88

SWITCH MATRIX INPUT

SWITCH MATRIX DRIVES

SOLENOID DRIVES

LAMP GND RETURN

LAMP VOLTAGE

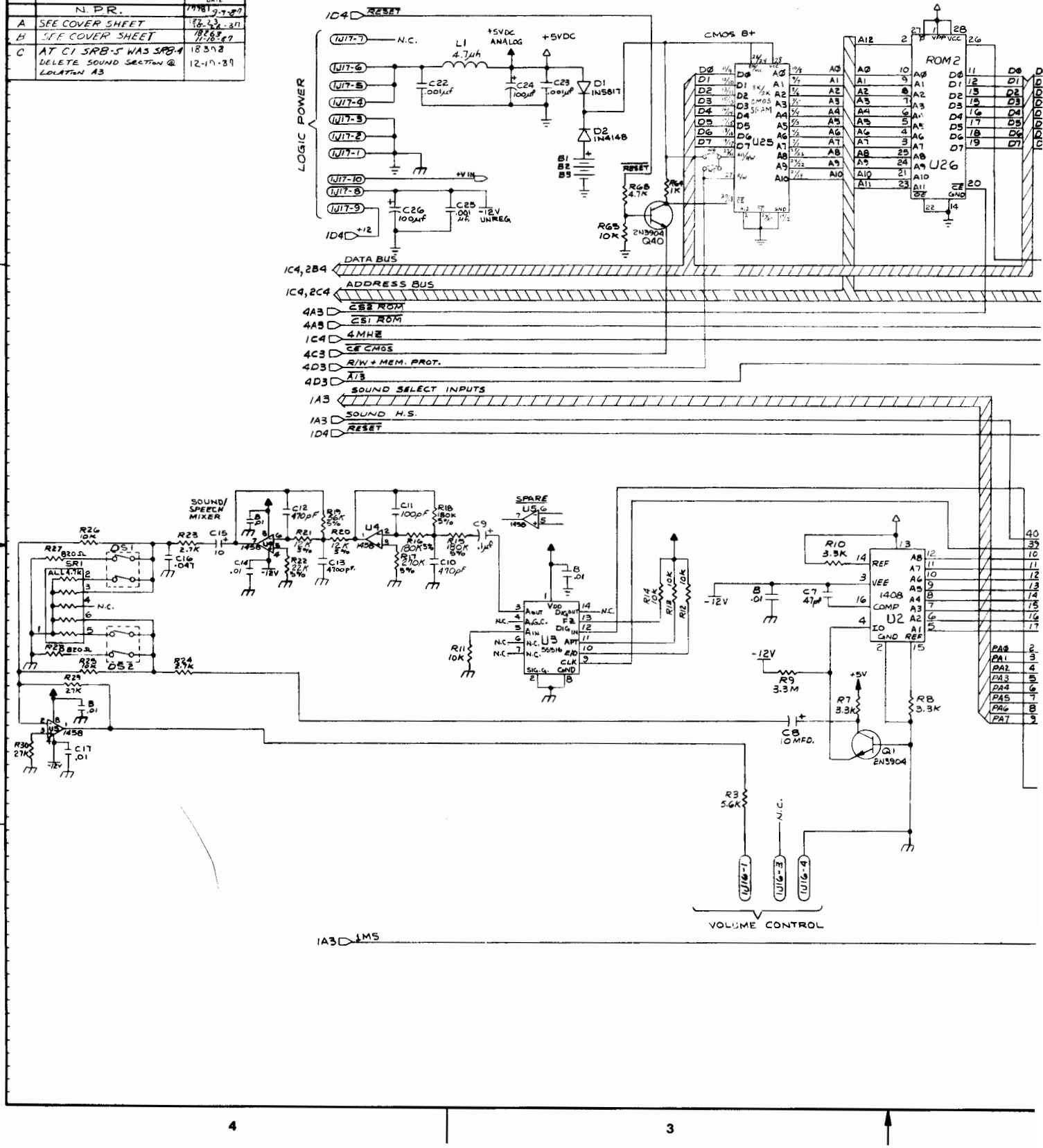
U38 PIA 6821 3000

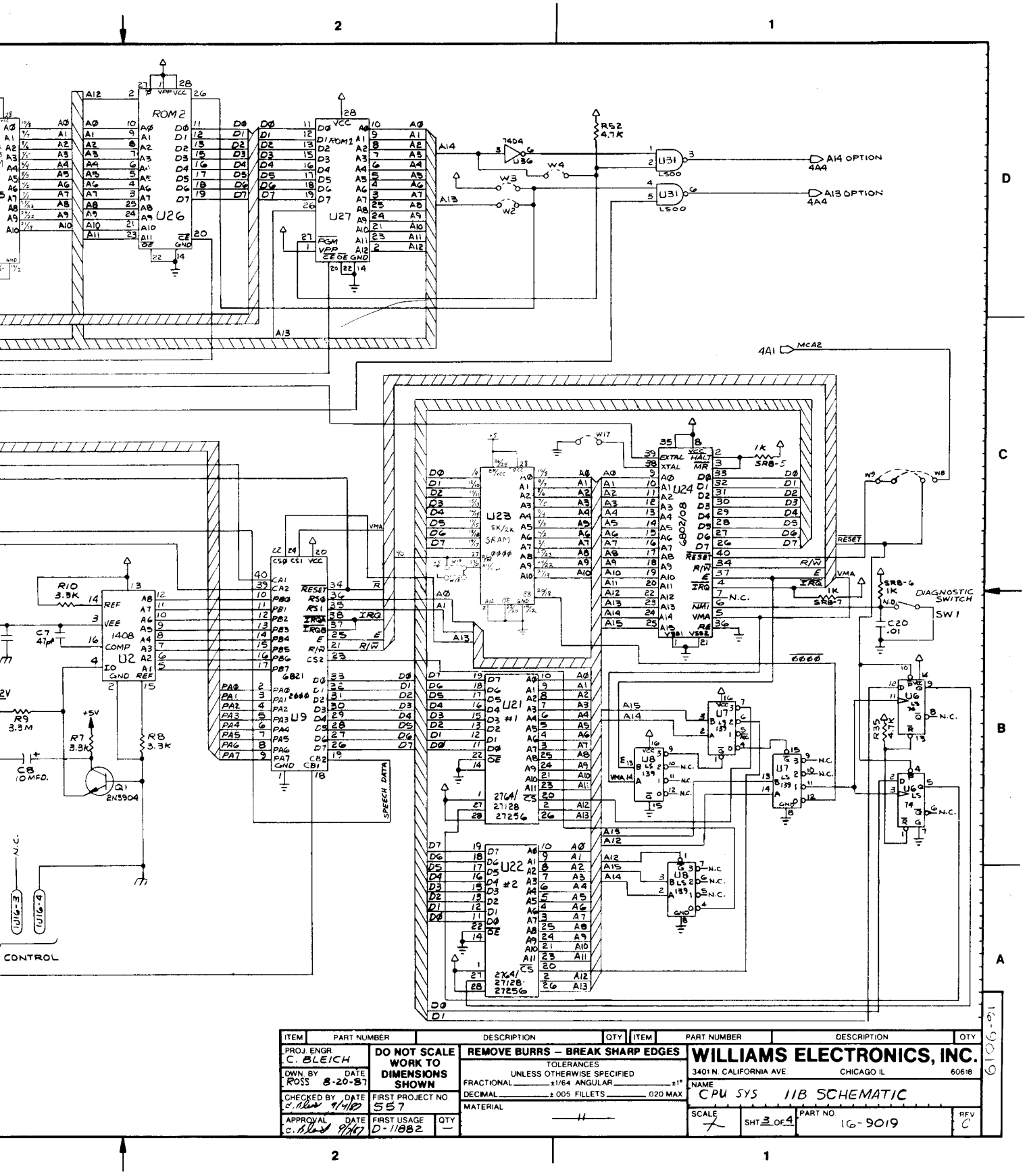
U40 F/LS 244

U28

NOTES:
1) SPECIAL SELECTED TIP 122 FOR WILLIAMS, (P/N 5162-09410-00).

REV	DESCRIPTION OF CHANGE	ECN NO DATE
	N.P.R.	19781 9-9-87
A	SEE COVER SHEET	18823 10-8-87
B	SEE COVER SHEET	18869 11-18-87
C	AT C1 SAB-5 WAS SAB-4 DELETE SOUND SECTION @ LOCATION A3	18398 12-11-87

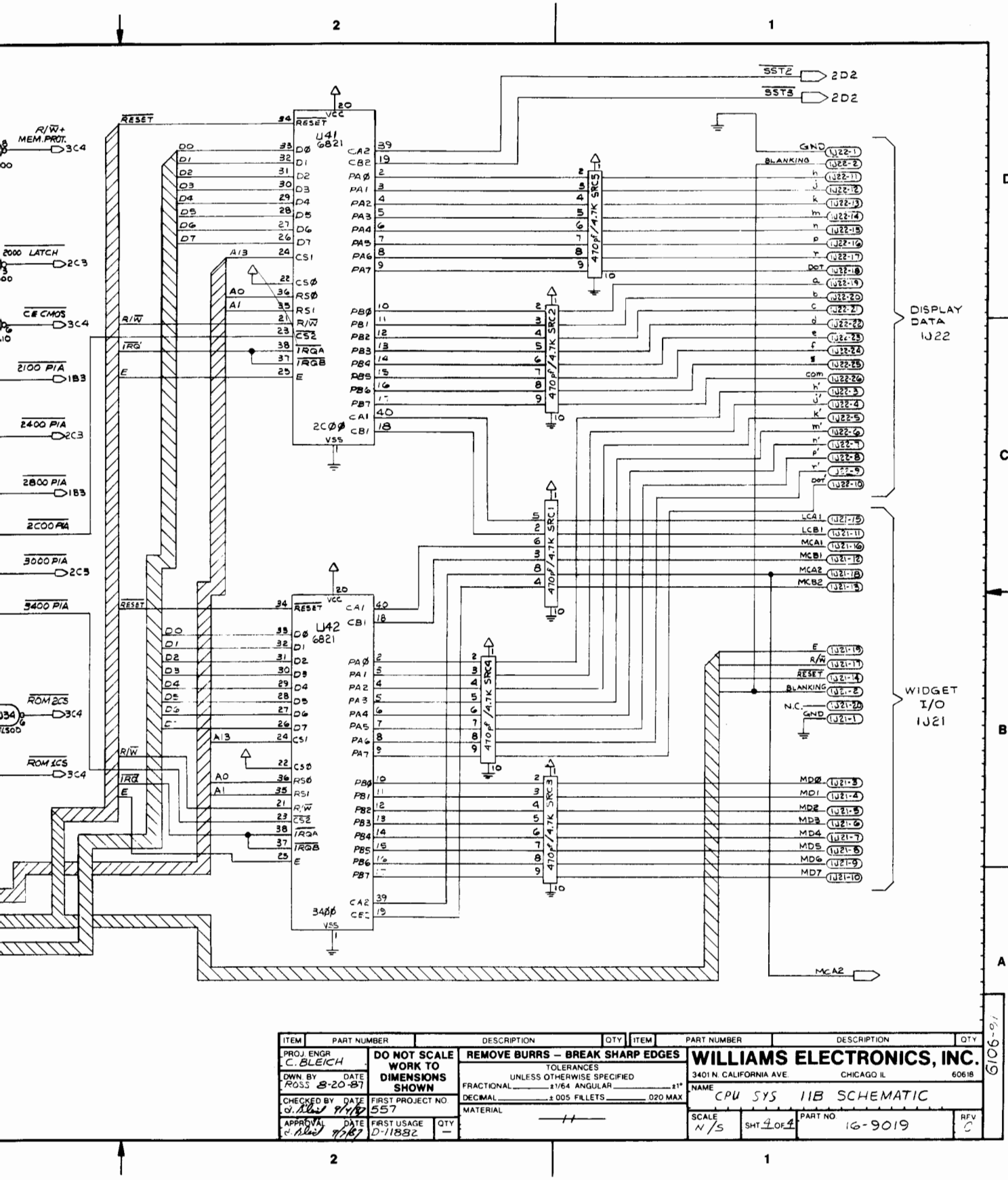




ITEM	PART NUMBER	DESCRIPTION	QTY	ITEM	PART NUMBER	DESCRIPTION	QTY
PROJ. ENGR. C. BLEICH	DO NOT SCALE WORK TO DIMENSIONS SHOWN	REMOVE BURRS – BREAK SHARP EDGES		WILLIAMS ELECTRONICS, INC.			
DWN. BY ROSS DATE 8-20-87		TOLERANCES UNLESS OTHERWISE SPECIFIED FRACTIONAL ±1/64 ANGULAR ±1° DECIMAL ± .005 FILLETS .020 MAX		3401 N. CALIFORNIA AVE. CHICAGO IL 60618			
CHECKED BY C. Bleich DATE 9/4/87	FIRST PROJECT NO. 557	MATERIAL		NAME CPU SYS 11B SCHEMATIC			
APPROVAL C. Bleich DATE 9/9/87	FIRST USAGE D-11882	QTY —		SCALE X	SHT 3 OF 4	PART NO. 16-9019	REV C

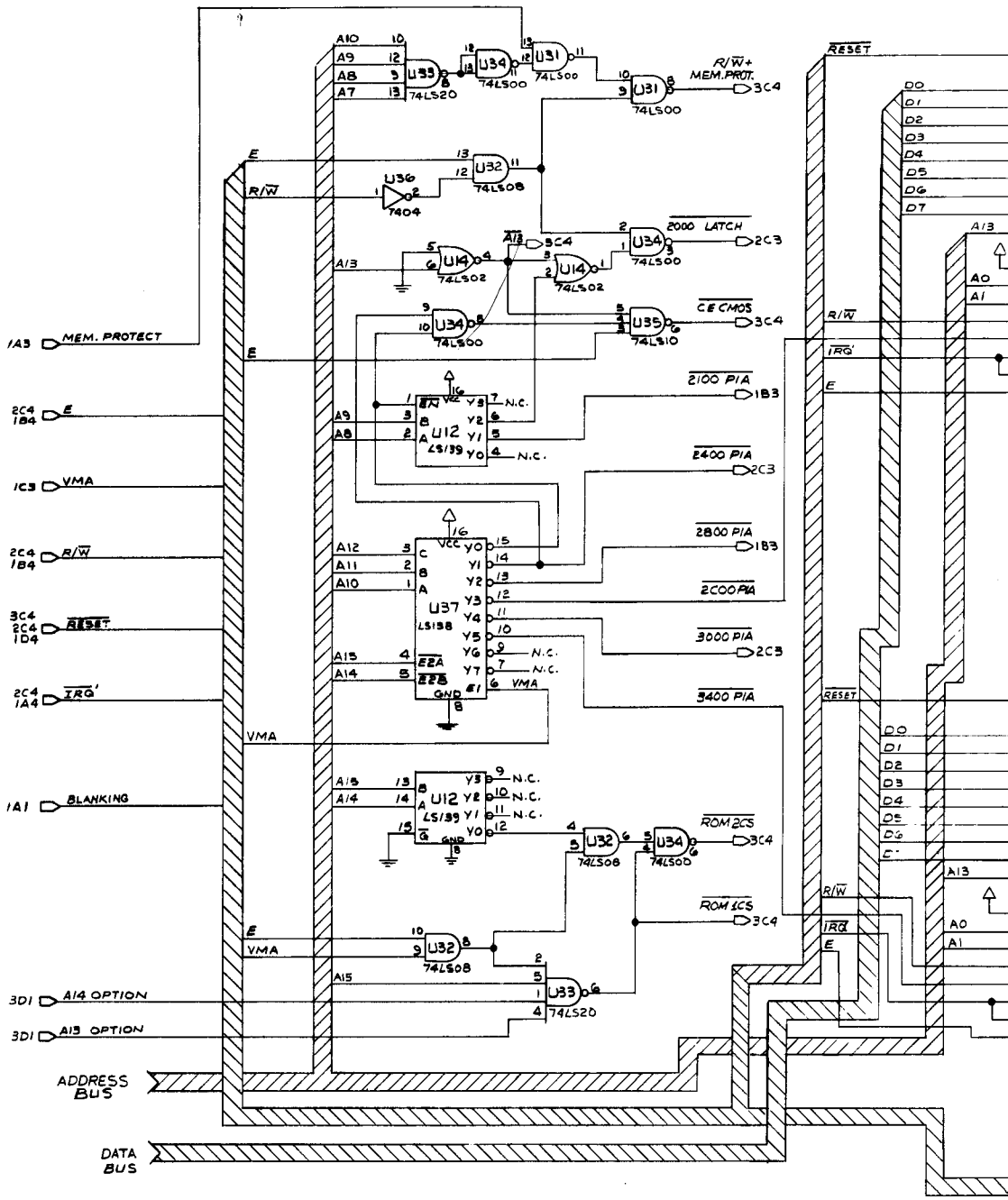
16-9019

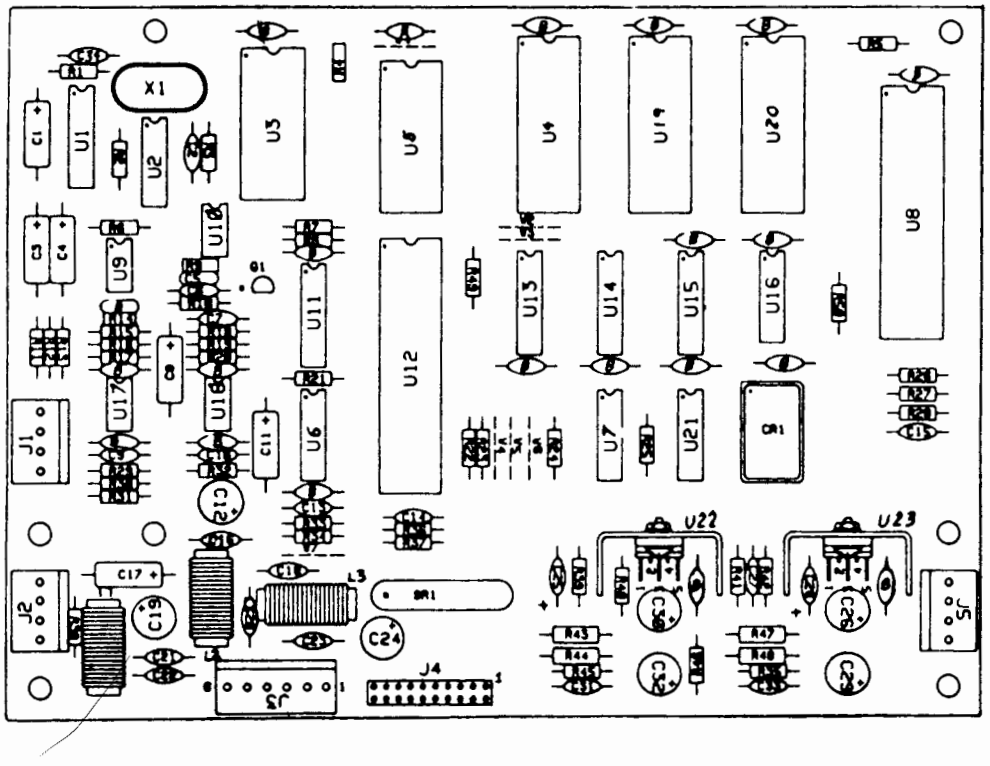
System 11B CPU Schematic (16-9019, Sheet 3 of 4)



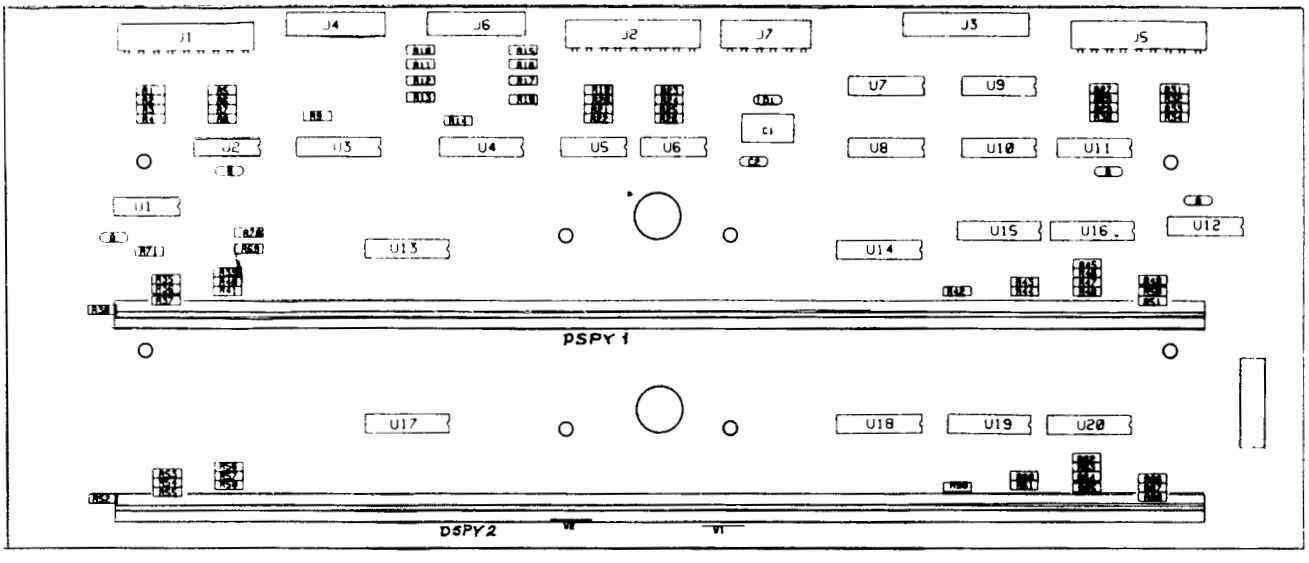
System 11B CPU Schematic (16-9019, Sheet 4 of 4)

REV	DESCRIPTION OF CHANGE	ECN NO DATE
-	N. P. R.	19981 9-9-87
A	SEE COVER SHEET	19222 10-23-87
B	SEE COVER SHEET	19263 11-18-87
C	SEE SHEET 1-3	19598 12-11-87

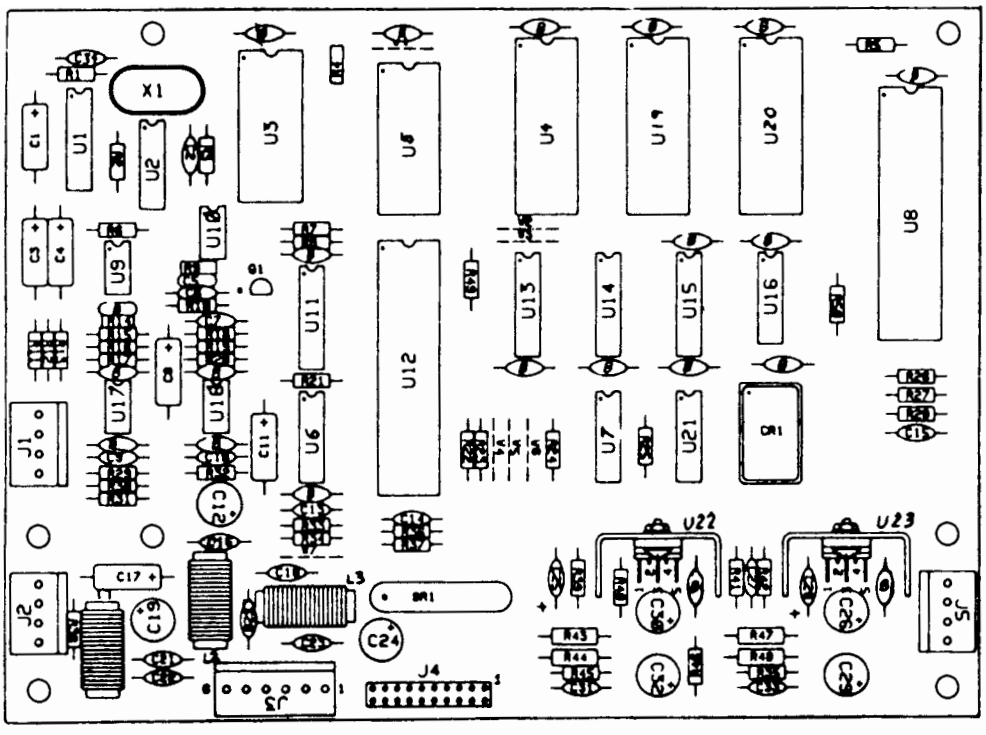




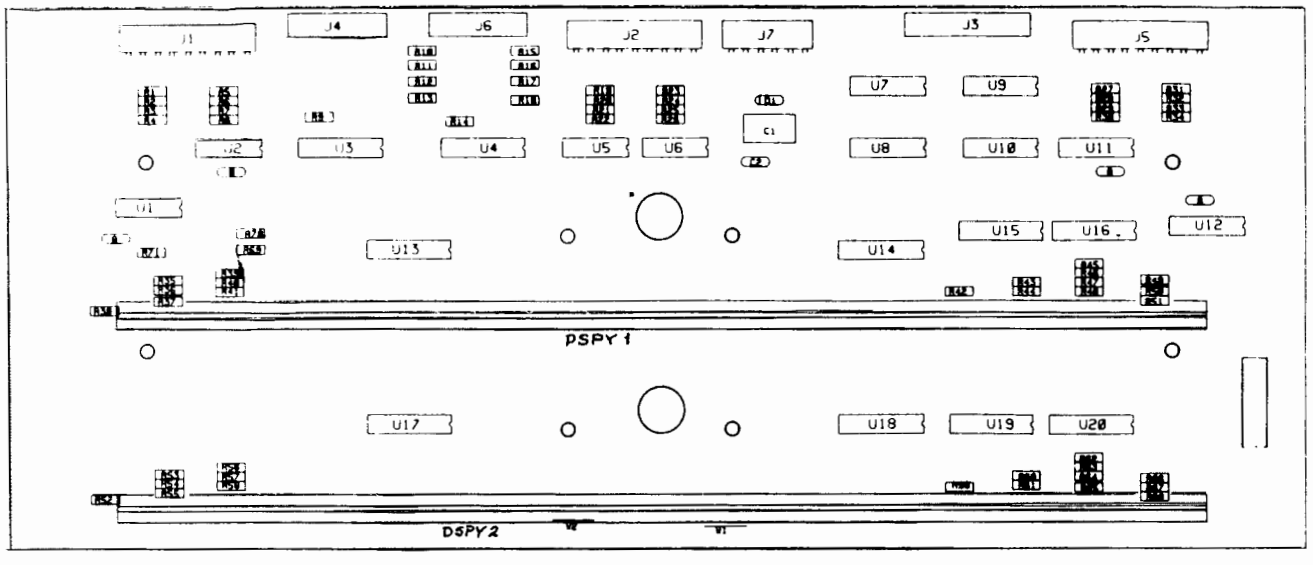
Audio Board Assembly
p/n D-11581-553



Master Display Board
p/n D-12232-2

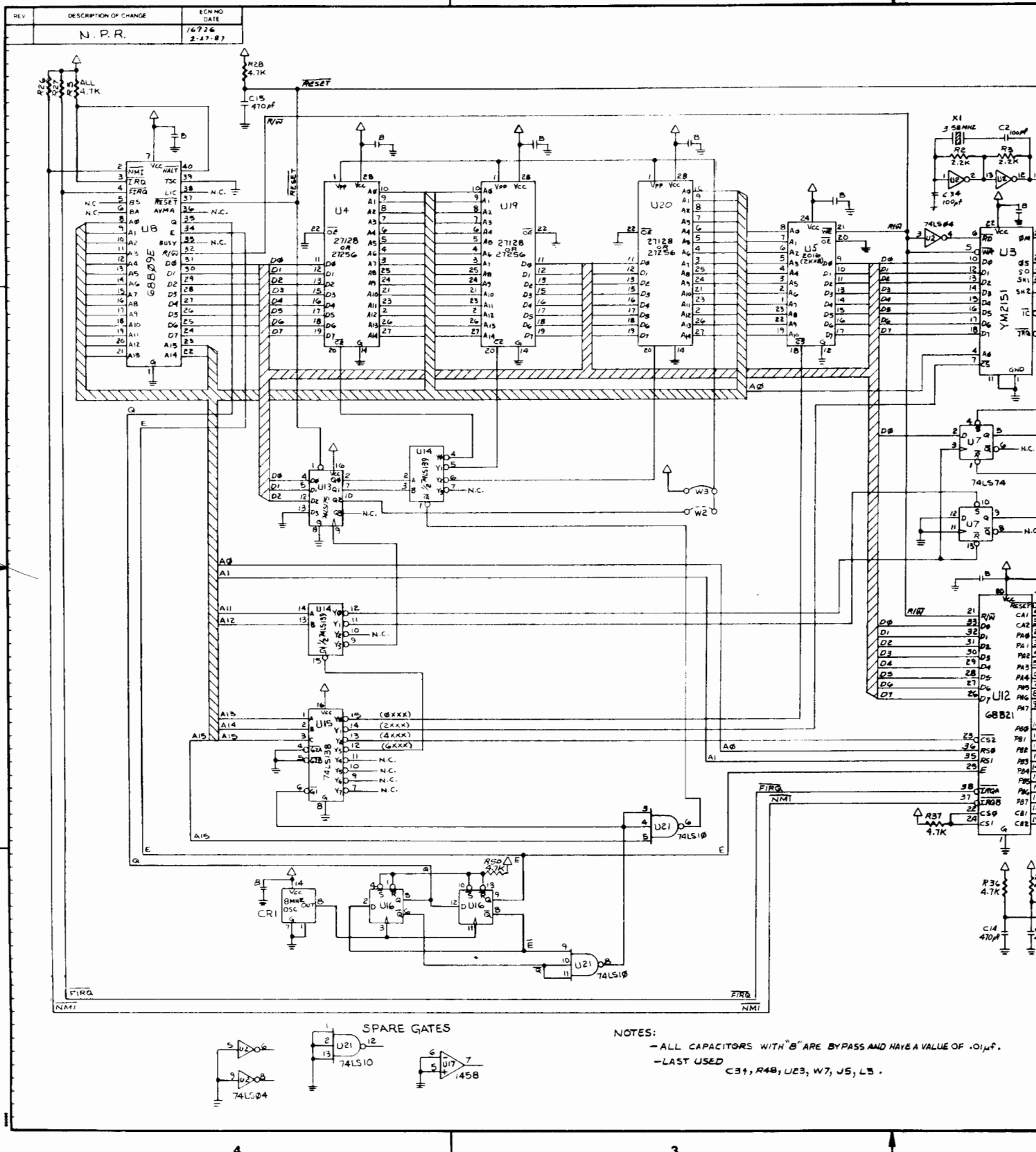


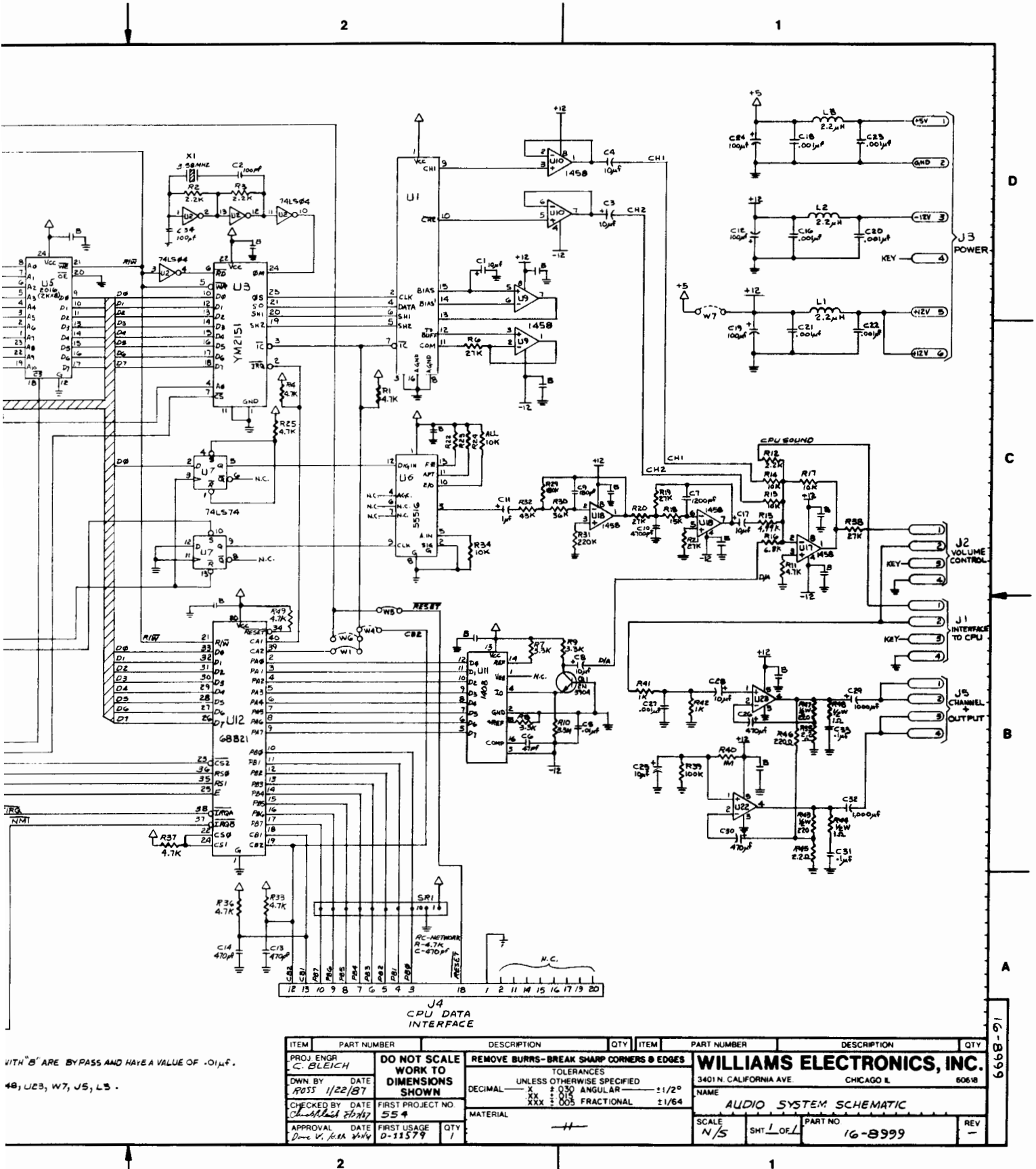
Audio Board Assembly
p/n D-11581-553



Master Display Board
p/n D-12232-2

REV	DESCRIPTION OF CHANGE	ECN NO DATE
	N. P. R.	16726 2-27-87

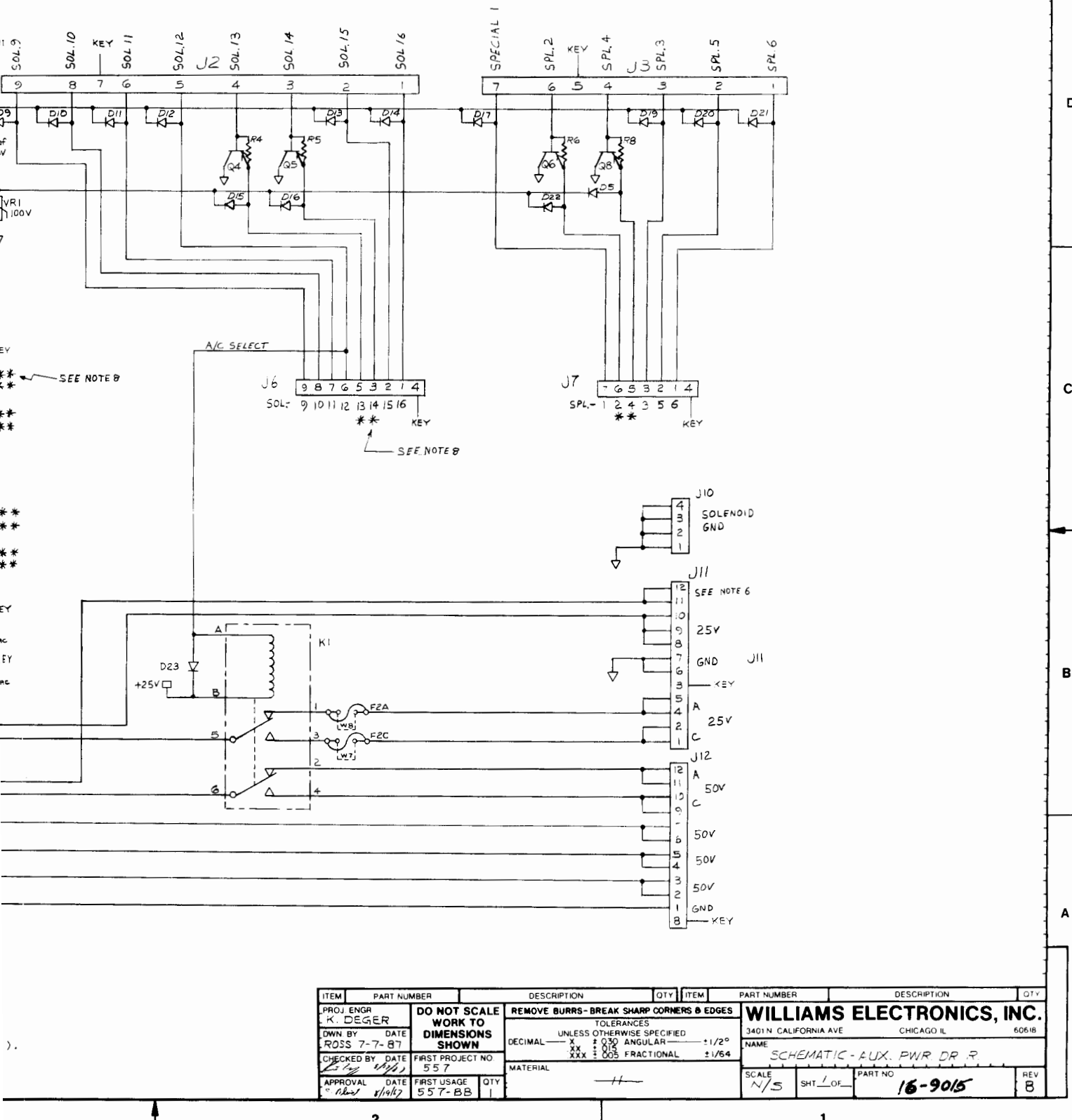




WITH "B" ARE BYPASS AND HAVE A VALUE OF .01μf.

48, U23, W7, J5, L3.

Audio Board (D-11581) Schematic



ITEM	PART NUMBER	DESCRIPTION	QTY

ITEM	PART NUMBER	DESCRIPTION	QTY

PROJ. ENGR: K. DEGER
DWN. BY / DATE: ROSS 7-7-87
CHECKED BY / DATE:
APPROVAL / DATE:

DO NOT SCALE WORK TO DIMENSIONS SHOWN

FIRST PROJECT NO: 557
FIRST USAGE: 557-BB
QTY: 1

REMOVE BURRS - BREAK SHARP CORNERS & EDGES

TOLERANCES
UNLESS OTHERWISE SPECIFIED
DECIMAL — X ± .030 ANGULAR — ±1/2°
XX ± .015
XXX ± .005 FRACTIONAL ±1/64

MATERIAL —

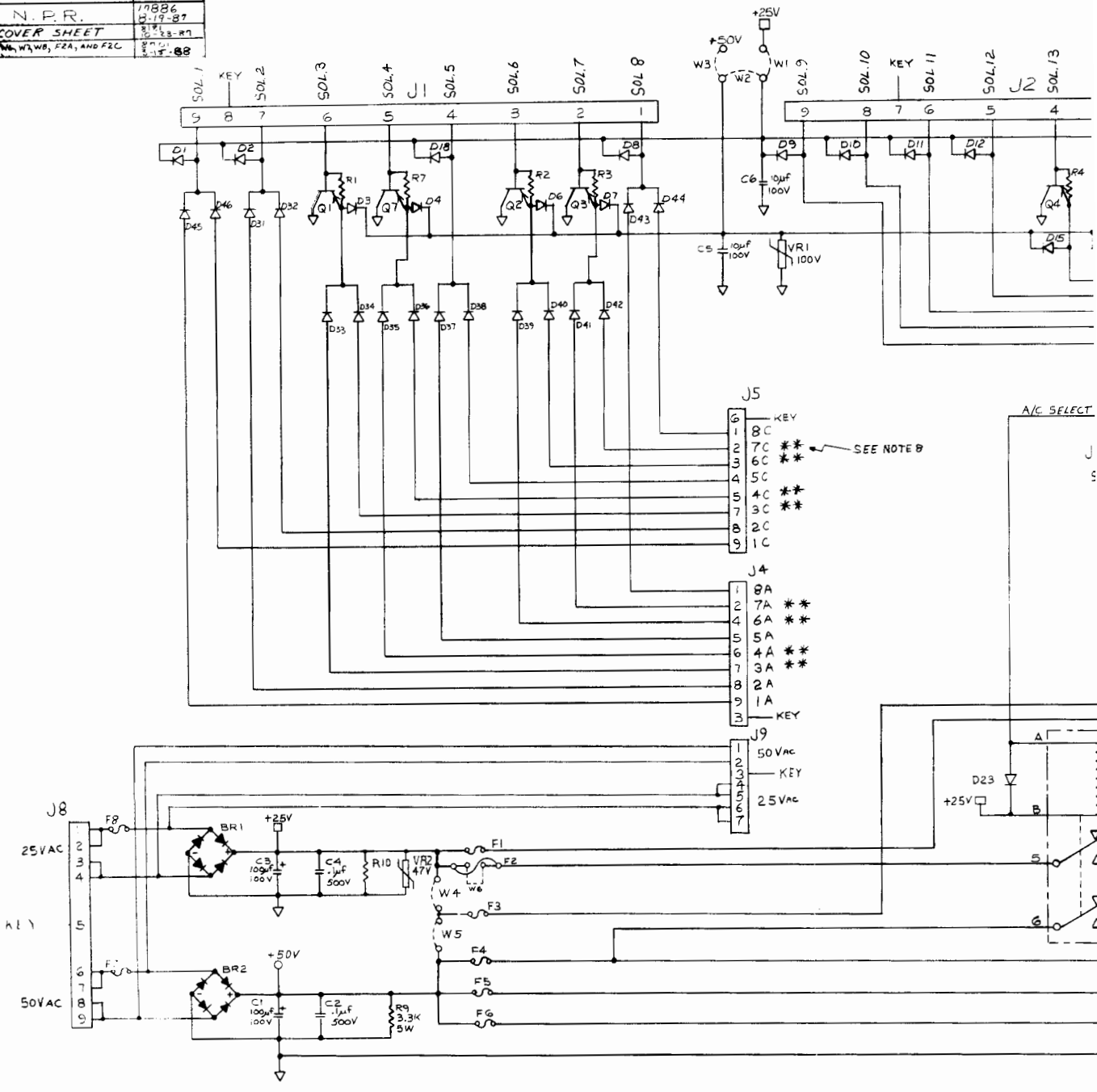
WILLIAMS ELECTRONICS, INC.
3401 N. CALIFORNIA AVE CHICAGO IL 60618

NAME: SCHEMATIC - AUX. PWR DR. P.

SCALE: N/S
SHT 1 OF
PART NO: 16-9015
REV: B

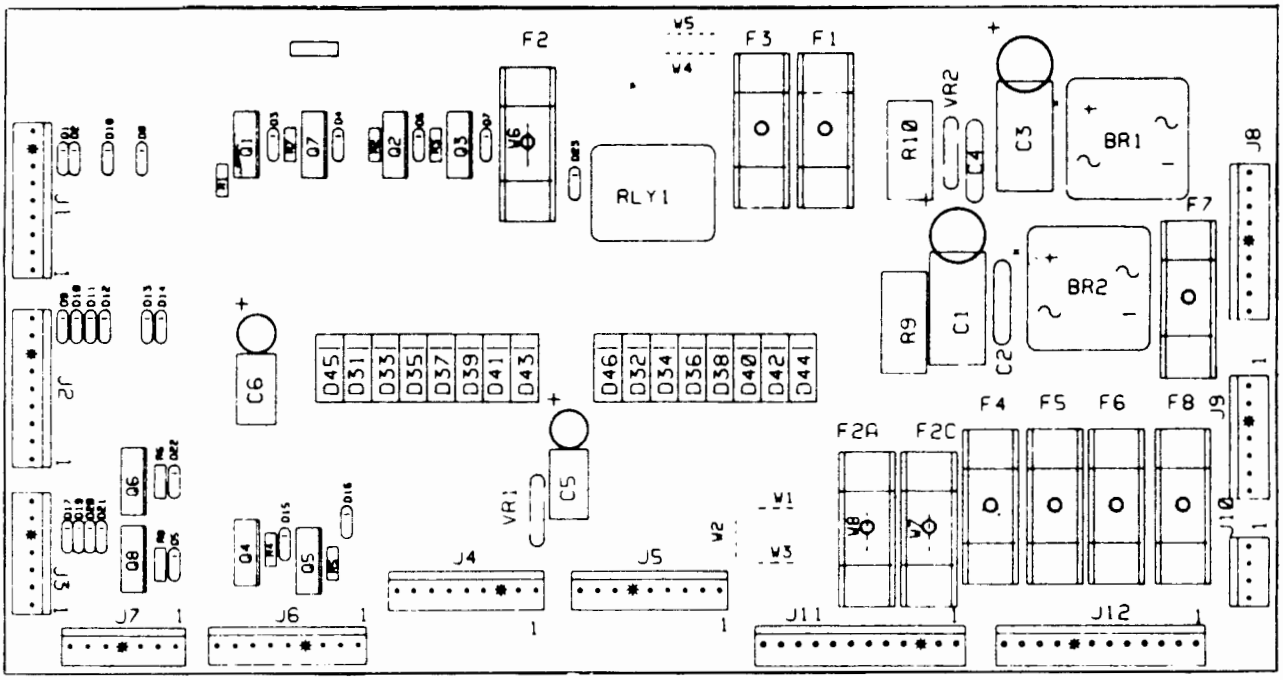
TAXI 76 Aux Power Driver Board Schematic

REV	DESCRIPTION OF CHANGE	ECN NO DATE
	N. P. R.	17886 8-19-87
A	SEE COVER SHEET	18[illegible] 10-23-87
B	ADDED W4, W5, W6, F2A, AND F2C	[illegible] 8-15-88

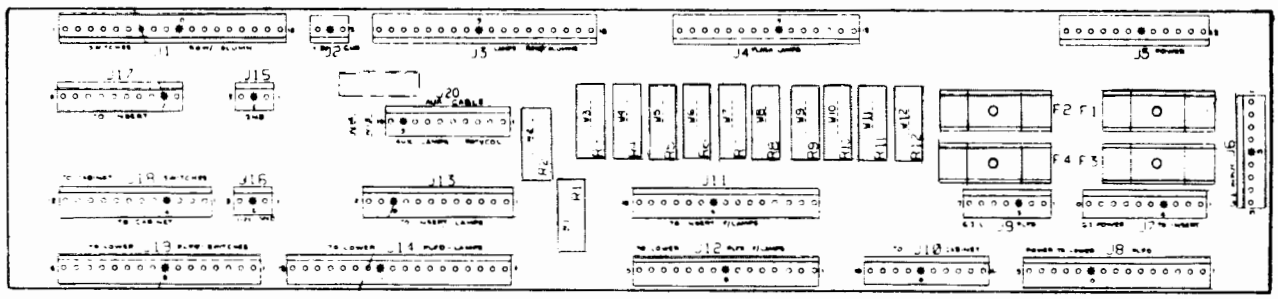


NOTES:

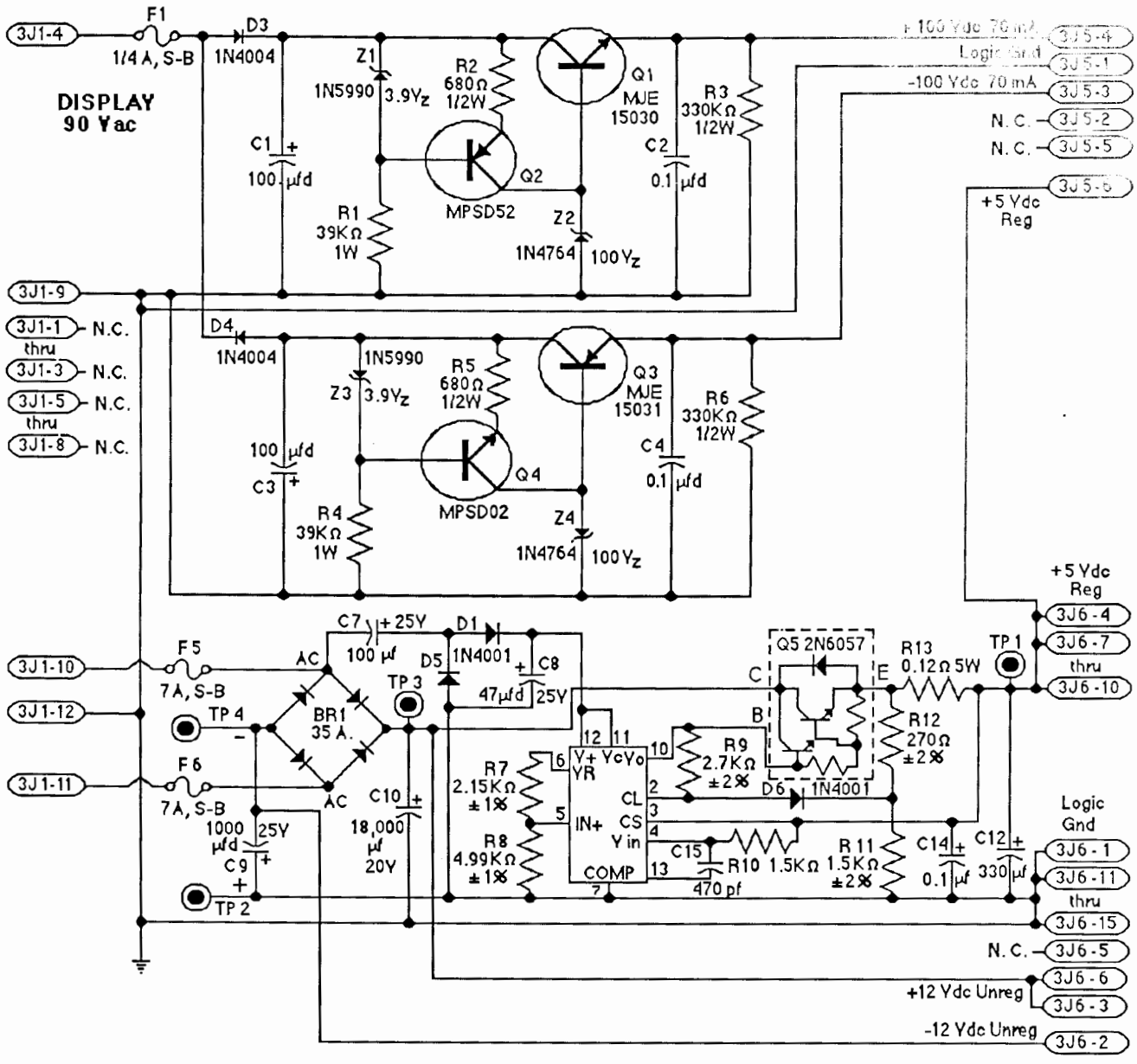
1. R1-R8, 220Ω 1/4 W
2. Q1-Q8, TIP-36C
3. D1-D29, IN4003
4. D31-D46, MR501
5. BR1, BR2, 35A 250V
6. W1, W3, W4 JUMPERS SELECT COMBINATION OF 25V AND 50V COILS; W2, W3, W5 JUMPERS SELECT 50V COILS.
7. F1-F8, SEE APPROPRIATE ASSEMBLY FOR FUSE VALUES (D-11813-).
8. *, 50V COILS ONLY; **, 50V COIL OR FLASH LAMP ONLY.
9. VOLTAGES SPECIFIED UNDER FULL LOAD CONDITIONS.



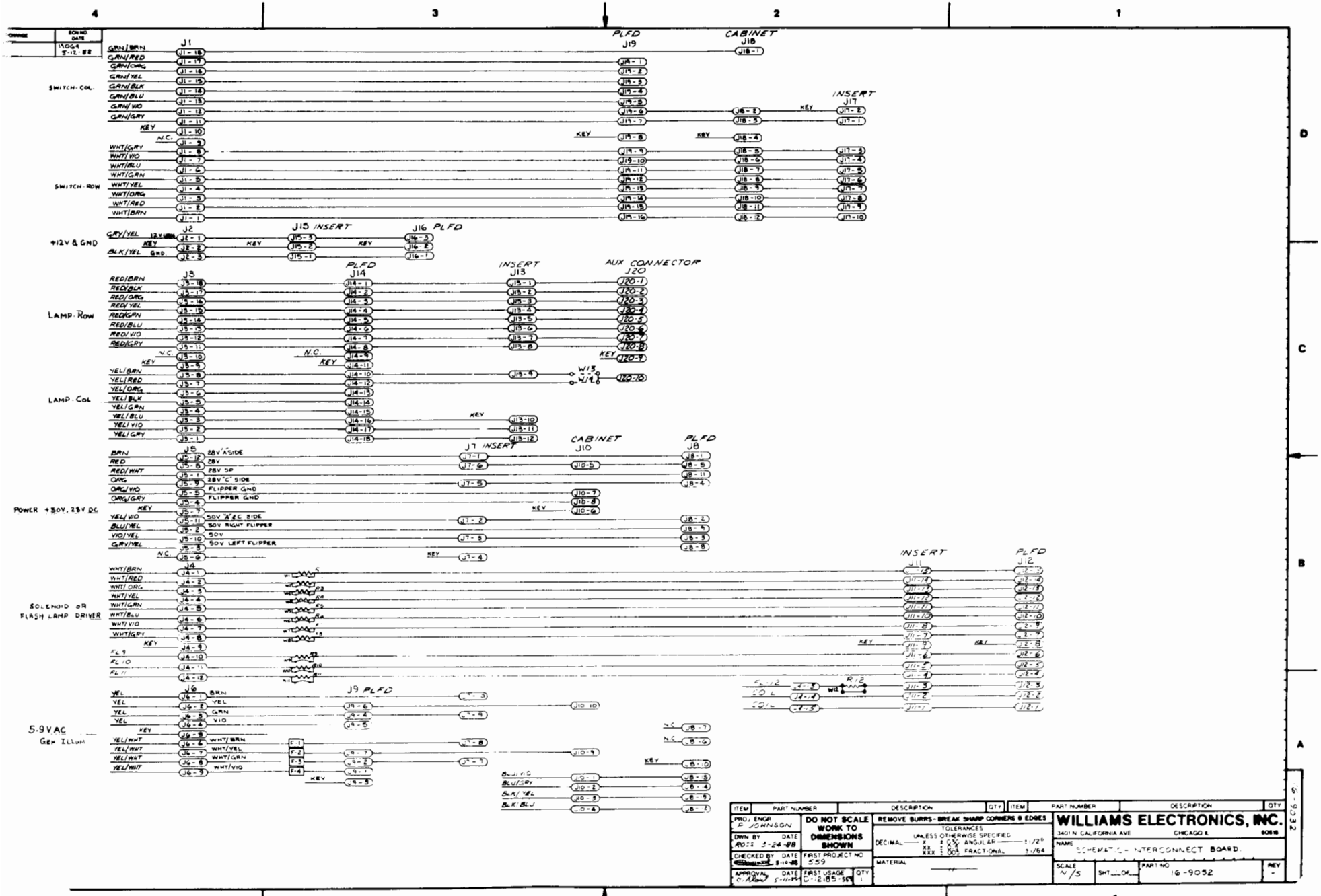
Aux Power Driver Unit Board
p/n D-12247-566



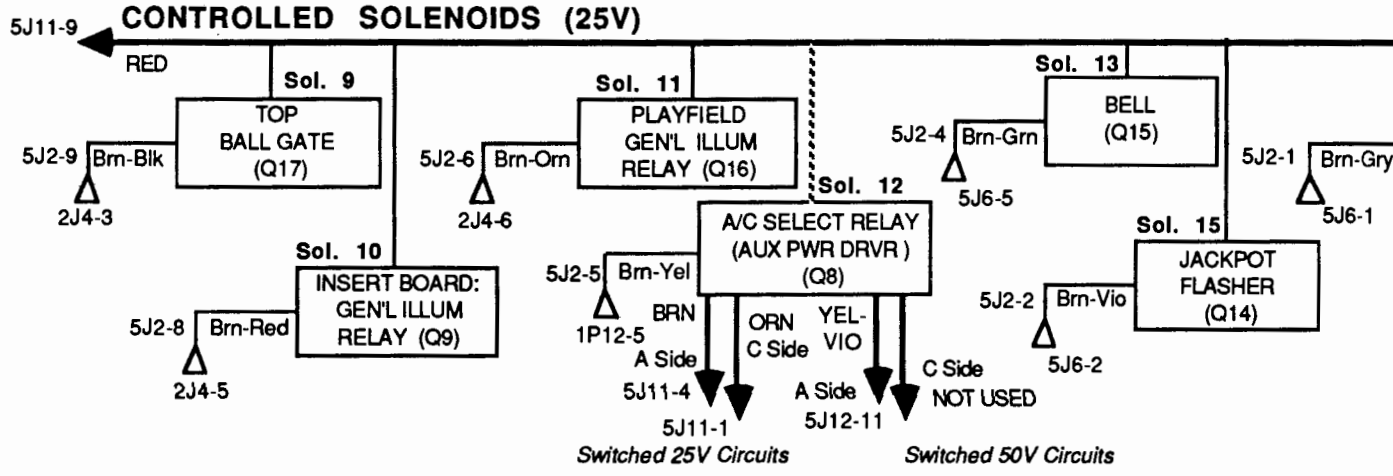
Backbox Interconnect Board
p/n D-12185-553

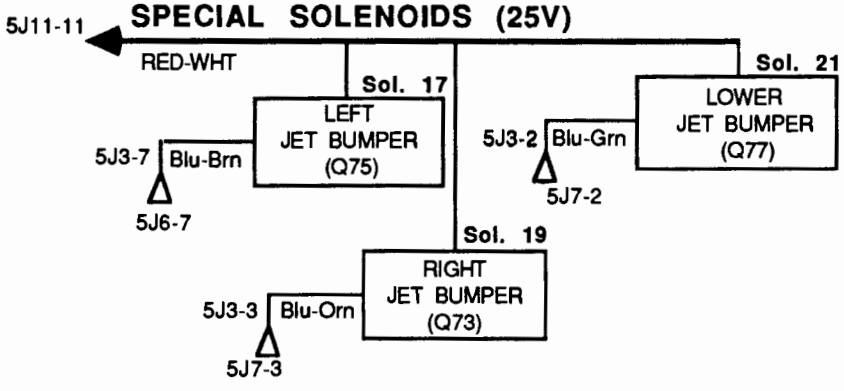


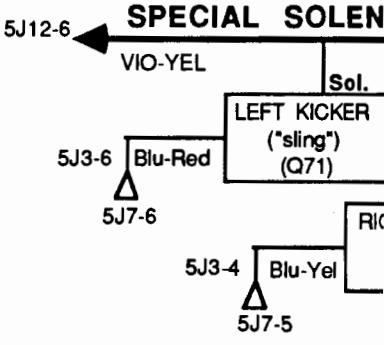
Power Supply Board (D-12246) Schematic

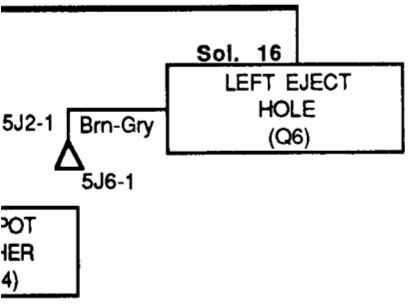


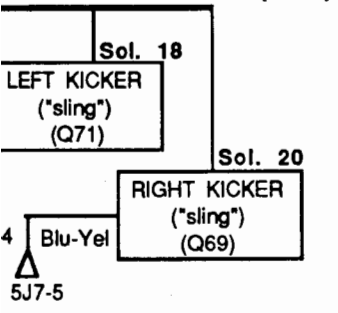
Master Display Board (D-12232-2) Schematic

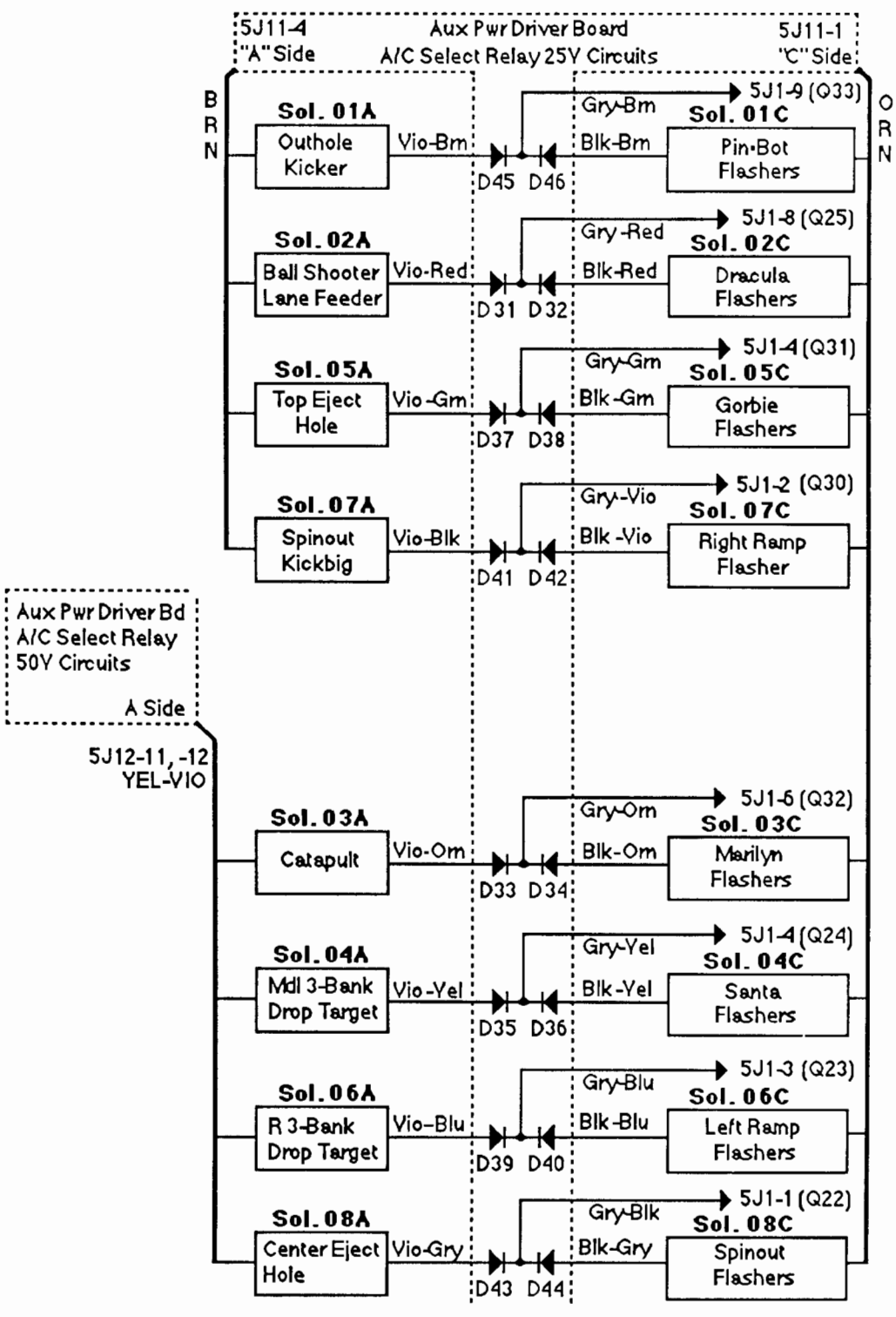

5J11-9
CONTROLLED SOLENOIDS (25V)
RED
Sol. 9
TOP BALL GATE (Q17)
5J2-9 Brn-Blk
2J4-3
Sol. 10
INSERT BOARD: GEN'L ILLUM RELAY (Q9)
5J2-8 Brn-Red
2J4-5
Sol. 11
PLAYFIELD GEN'L ILLUM RELAY (Q16)
5J2-6 Brn-Orn
2J4-6
Sol. 12
A/C SELECT RELAY (AUX PWR DRVR) (Q8)
5J2-5 Brn-Yel
1P12-5
BRN
A Side
5J11-4
5J11-1
ORN
C Side
YEL-VIO
A Side
5J12-11
C Side
NOT USED
Switched 25V Circuits
Switched 50V Circuits
Sol. 13
BELL (Q15)
5J2-4 Brn-Grn
5J6-5
Sol. 15
JACKPOT FLASHER (Q14)
5J2-2 Brn-Vio
5J6-2
5J2-1 Brn-Gry
5J6-1


5J11-11
SPECIAL SOLENOIDS (25V)
RED-WHT
Sol. 17
LEFT JET BUMPER (Q75)
5J3-7 Blu-Brn
5J6-7
Sol. 19
RIGHT JET BUMPER (Q73)
5J3-3 Blu-Orn
5J7-3
Sol. 21
LOWER JET BUMPER (Q77)
5J3-2 Blu-Grn
5J7-2

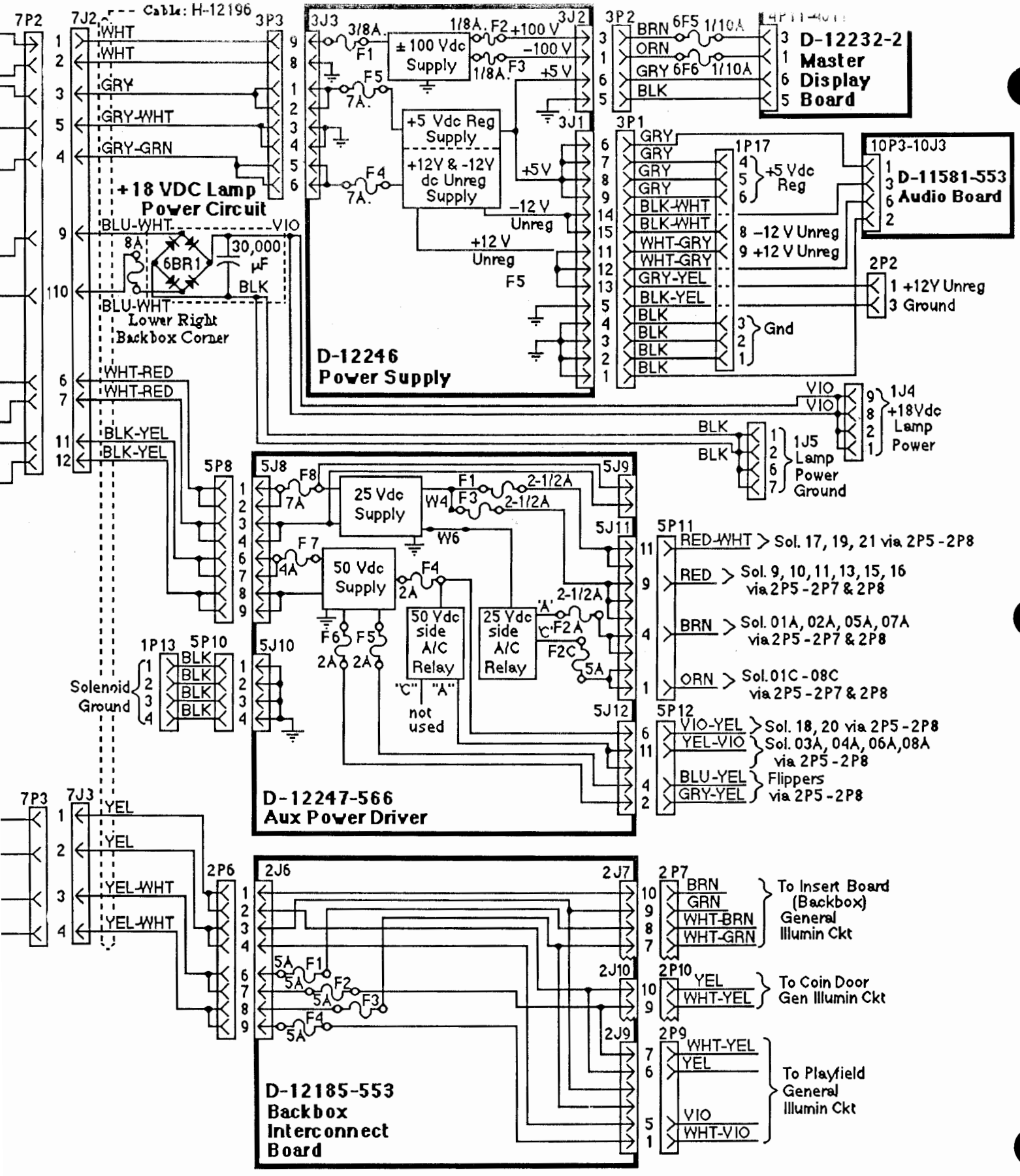

5J12-6
SPECIAL SOLEN
VIO-YEL
Sol.
LEFT KICKER ("sling") (Q71)
5J3-6 Blu-Red
5J7-6
5J3-4 Blu-Yel
5J7-5



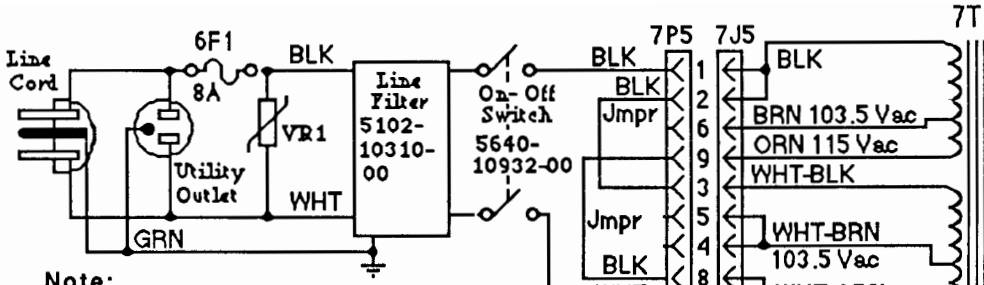




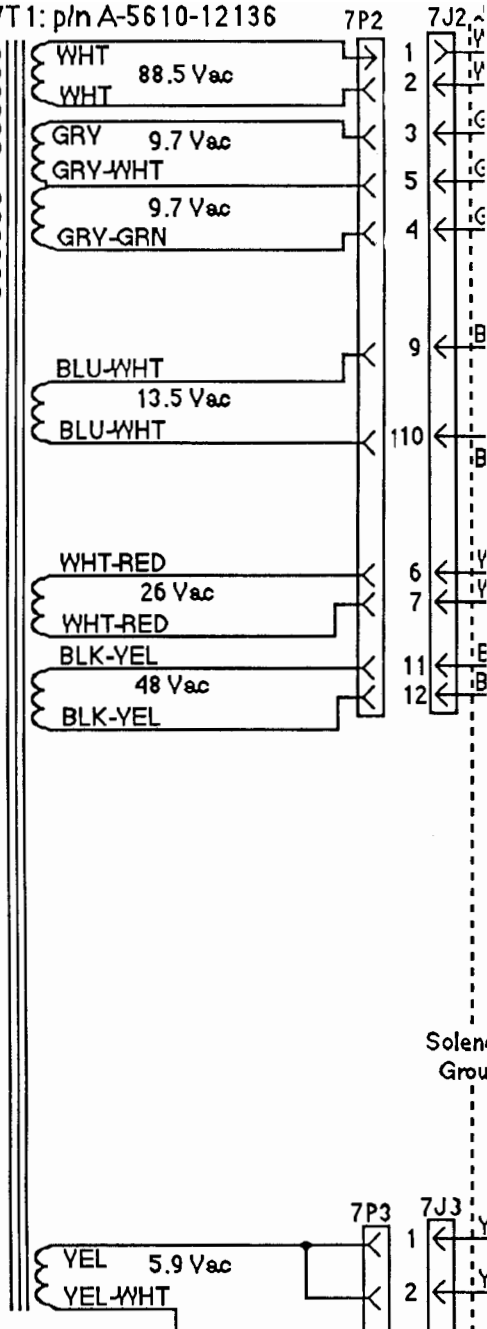
Controlled, Special, and Switched Solenoids

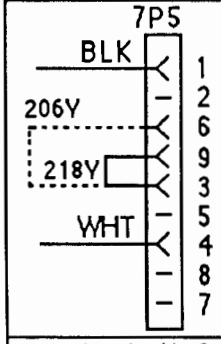
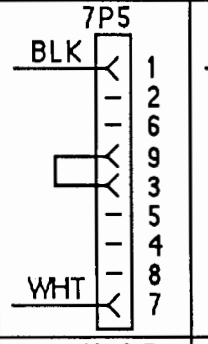
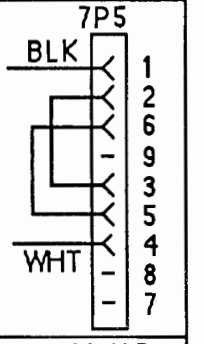


Power Wiring Diagram

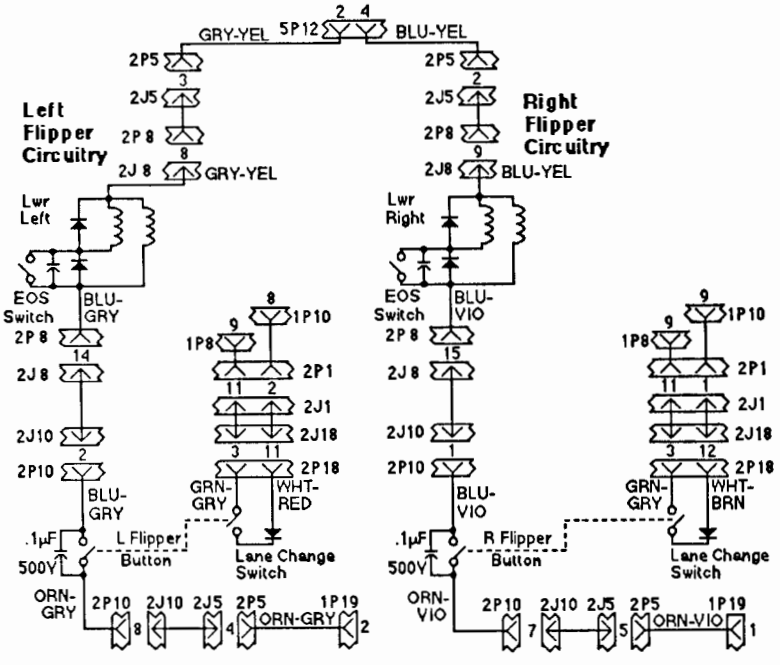


Note:
Transformer Jumpers shown are for 115 V ac.
See Transformer Jumper Chart for other voltage jumper connections.



TRANSFORMER JUMPER CHART		
206/218 VAC	230 VAC	103.5 VAC
		
FUSE (6F1): 4A, S-B	4A, S-B	8A, N-B
VARISTOR: 275V	275V	130V

275V Varistor: 5017-09063-00
130V Varistor: 5017-09044-00
4A, S-B Fuse: 5731-06314-00 (for 220V)
8A, N-B Fuse: 5730-09252-00 (for 115V)



INTERCONNECT BOARD INTERBOARD SIGNALS

(Continued)

Connector	Wire Color	Signal Designation/Description
2J1-1	WHT-BRN	Switch Row 1
2J1-2	WHT-RED	Switch Row 2
2J1-3	WHT-ORG	Switch Row 3
2J1-4	WHT-YEL	Switch Row 4
2J1-5	WHT-GRN	Switch Row 5
2J1-6	WHT-BLU	Switch Row 6
2J1-7	WHT-VIO	Switch Row 7
2J1-8	WHT-GRY	Switch Row 8
2J1-9	---	No Connection
2J1-10	Key Pin	No Connection
2J1-11	GRN-GRY	Switch Col 8 (Q46)
2J1-12	GRN-VIO	Switch Col 7 (Q42)
2J1-13	GRN-BLU	Switch Col 6 (Q47)
2J1-14	GRN-BLK	Switch Col 5 (Q43)
2J1-15	GRN-YEL	Switch Col 4 (Q48)
2J1-16	GRN-ORG	Switch Col 3 (Q44)
2J1-17	GRN-RED	Switch Col 2 (Q49)
2J1-18	GRN-BRN	Switch Col 1 (Q45)
2J4-1	WHT/BRN	Solenoid 01C
2J4-2	WHT/RED	Solenoid 02C
2J4-3	WHT/ORG	Solenoid 03C
2J4-4	WHT/YEL	Solenoid 04C
2J4-5	WHT/GRN	Solenoid 05C
2J4-6	WHT/BLU	Solenoid 06C
2J4-7	WHT/VIO	Solenoid 07C
2J4-8	WHT/GRY	Solenoid 08C
2J4-9	Key Pin	No Connection
2J4-10	BRN/VIO	Solenoid 15
2J4-11	BRN/GRY	Solenoid 16
2J4-12	BRN/BLK	Solenoid 9
2J4-13	BRN/RED	Solenoid 10
2J4-14	BRN/ORG	Solenoid 11
2J4-15	BRN/BLU	Solenoid 14
2J6-1	YEL	Transformer: 6V ac
2J6-2	YEL	Transformer: 6V ac
2J6-3	YEL	Transformer: 6V ac
2J6-4	YEL	Transformer: 6V ac
2J6-5	Key Pin	No Connection
2J6-6	YEL/WHT	Transformer: 6V ac
2J6-7	YEL/WHT	Transformer: 6V ac
2J6-8	YEL/ WHT	Transformer: 6V ac
2J6-9	YEL/WHT	Transformer: 6V ac
2J8-1	BRN	+25 Vdc / Sol. Power "A"
2J8-2	YEL/VIO	+50 Vdc / Sol. Power "A"
2J8-3	VIO/YEL	+50 Vdc / Sol. Power
2J8-4	ORG	+25 Vdc / Sol. Power "C"
2J8-5	RED	+25 Vdc / Sol.Power
2J8-6	---	No Connection
2J8-7	---	No Connection
2J8-8	GRY/YEL	+50 Vdc / Flippers
2J8-9	BLU/YEL	+50 Vdc / Flippers
2J8-10	KeyPin	No Connection
2J8-11	RED/WHT	+50 Vdc / Sol. Power
2J8-12	---	No Connection
2J8-13	---	No Connection
2J8-14	BLU/GRY	Lwr L Flipper Switch
2J8-15	BLU/VIO	Lwr R Flipper Switch
2J10-1	BLU/VIO	Lwr R Flipper Switch
2J10-2	BLU/GRY	Lwr L Flipper Switch
2J10-3		
2J10-4		
2J10-5	---	No Connection
2J10-6	Key Pin	No Connection
2J10-7	---	No Connection
2J10-8	---	No Connection
2J10-9	WHT/YEL	Gen Illum Power: 6V ac
2J10-10	YEL	Transformer: 6V ac
2J2-1	GRY/YEL	CPU Power: +12 Vdc Unreg
2J2-2	Key Pin	No Connection
2J2-3	BLK/YEL	Logic Ground
2J3-1	YEL/GRY	Lamp Col 8 (Q51/52)
2J3-2	YEL /VIO	Lamp Col 7 (Q53/54)
2J3-3	YEL/BLU	Lamp Col 6 (Q55/56)
2J3-4	YEL/GRN	Lamp Col 5 (Q57/58)
2J3-5	YEL/BLK	Lamp Col 4 (Q59/60)
2J3-6	YEL/ORG	Lamp Col 3 (Q61/62)
2J3-7	YEL/RED	Lamp Col 2 (Q63/64)
2J3-8	YEL/BRN	Lamp Col 1 (Q65/66)
2J3-9	Key Pin	No Connection
2J3-10	---	No Connection
2J3-11	RED/GRY	Lamp Row 8 (Q87)
2J3-12	RED/VIO	Lamp Row 7 (Q86)
2J3-13	RED/BLU	Lamp Row 6 (Q85)
2J3-14	RED/GRN	Lamp Row 5 (Q84)
2J3-15	RED/YEL	Lamp Row 4 (Q83)
2J3-16	RED/ORG	Lamp Row 3 (Q82)
2J3-17	RED/BLK	Lamp Row 2 (Q81)
2J3-18	RED/BRN	Lamp Row 1 (Q80)
2J5-1	RED/WHT	+50 Vdc / Sol. Power
2J5-2	BLU/YEL	+50 Vdc / Flippers
2J5-3	GRY/YEL	+50 Vdc / Flippers
2J5-4	ORG/GRY	Flipper Ground
2J5-5	ORG/VIO	Flipper Ground
2J5-6	---	No Connection
2J5-7	Key Pin	No Connection
2J5-8	RED	+25 Vdc / Sol.Power
2J5-9	ORG	+25 Vdc / Sol. Power "C"
2J5-10	VIO/YEL	+50 Vdc / Sol. Power
2J5-11	YEL/VIO	+50 Vdc / Sol. Power "A"
2J5-12	BRN	+25 Vdc / Sol. Power "A"
2J7-1	---	No Connection
2J7-2	---	No Connection
2J73	---	No Connection
2J7-4	Key Pin	No Connection
2J7-5	ORG	+25 Vdc / Sol. Power "C"
2J7-6	RED	+25 Vdc / Sol. Power
2J7-7	WHT/GRN	Solenoid 05C
2J7-8	WHT/BRN	Solenoid 01C
2J7-9	GRN	Gen Illum Power: 6V ac
2J7-10	BRN	+25 Vdc / Sol. Power "A"
2J9-1	WHT/VIO	Gen Illum Power: 6V ac
2J9-2	---	No Connection
2J9-3	Key Pin	No Connection
2J9-4	---	No Connection
2J9-5	VIO	Gen Illum Power: 6V ac
2J9-6	YEL	Transformer: 6V ac
2J9-7	WHT/YEL	Gen Illum Power: 6V ac
2J11-1	---	No Connection
2J11-2	---	No Connection
2J11-3	BRN/RED	Solenoid 10
2J11-4	---	No Connection
2J11-5	---	No Connection
2J11-6	BRN/VIO	Solenoid 15
2J11-7	---	No Connection
2J11-8	BLK/VIO	Solenoid 07C
2J11-9	Key Pin	No Connection
2J11-10	BLK/BLU	Solenoid 06C
2J11-11	BLK/GRN	Solenoid 05C
2J11-12	BLK/YEL	Solenoid 04C
2J11-13	BLK/ORG	Solenoid 03C
2J11-14	BLK/RED	Solenoid 02C
2J11-15	BLK/BRN	Solenoid 01C
2J12-1	BRN/BLU	Solenoid 14
2J12-2	BRN/ORG	Solenoid 11
2J12-3	---	No Connection
2J12-4	BRN/BLK	Solenoid 9
2J12-5	BRN/GRY	Solenoid 16
2J12-6	BRN/VIO	Solenoid 15
2J12-7	BLK/GR	Solenoid 08C
2J12-8	Key Pin	No Connection
2J12-9	BLK/VIO	Solenoid 07C
2J12-10	BLK/BLU	Solenoid 06C
2J12-11	BLK/GRN	Solenoid 05C
2J12-12	BLK/YEL	Solenoid 04C
2J12-13	BLK/ORG	Solenoid 03C
2J12-14	BLK/RED	Solenoid 02C
2J12-15	BLK/BRN	Solenoid 01C
2J14-1	RED/BRN	Lamp Row 1 (Q80)
2J14-2	RED/BLK	Lamp Row 2 (Q81)
2J14-3	RED/ORG	Lamp Row 3 (Q82)
2J14-4	RED/YEL	Lamp Row 4 (Q83)
2J14-5	RED/GRN	Lamp Row 5 (Q84)
2J14-6	RED/BLU	Lamp Row 6 (Q85)
2J14-7	RED/VIO	Lamp Row 7 (Q86)
2J14-8	RED/GRY	Lamp Row 8 (Q87)
2J14-9	---	No Connection
2J14-10	---	No Connection
2J14-11	Key Pin	No Connection
2J14-12	YEL/RED	Lamp Col 2 (Q63/64)
2J14-13	YEL/ORG	Lamp Col 3 (Q61/62)
2J14-14	YEL/BLK	Lamp Col 4 (Q59/60)
2J14-15	YEL/GRN	Lamp Col 5 (Q57/58)
2J14-16	YEL/BLU	Lamp Col 6 (Q55/56)
2J14-17	---	No Connection
2J14-18	YEL/GRY	Lamp Col 8 (Q51/52)
2J19-1	GRN/RED	Switch Col 2 (Q49)
2J19-2	GRN/ORG	Switch Col 3 (Q44)
2J19-3	GRN/YEL	Switch Col 4 (Q48)
2J19-4	GRN/BLK	Switch Col 5 (Q43)
2J19-5	GRN/BLU	Switch Col 6 (Q47)
2J19-6	GRN/VIO	Switch Col 7 (Q42)
2J19-7	---	No Connection
2J19-8	Key Pin	No Connection

RD INTERBOARD SIGNALS
ontinued)

escription	Connector	Wire Color	Signal Designation/Description
	2J13-1	RED/BRN	Lamp Row 1 (Q80)
	2J13-2	RED/BLK	Lamp Row 2 (Q81)
	2J13-3	RED/ORG	Lamp Row 3 (Q82)
	2J13-4	RED/YEL	Lamp Row 4 (Q83)
	2J13-5	RED/GRN	Lamp Row 5 (Q84)
	2J13-6	RED/BLU	Lamp Row 6 (Q85)
	2J13-7	RED/VIO	Lamp Row 7 (Q86)
	2J13-8	RED/GRY	Lamp Row 8 (Q87)
	2J13-9	YEL/BRN	Lamp Col 1 (Q65/66)
	2J13-10	YEL/BLU	Lamp Col 6 (Q55/56)
	2J13-11	YEL/VIO	Lamp Col 7 (Q53/54)
	2J13-12	YEL/GRY	Lamp Col 8 (Q51/52)
	2J15	Not Applicable	
	2J16-1	BLK/YEL	Logic Ground
	2J16-2	Key Pin	No Connection
	2J16-3	GRY/YEL	CPU: Power: +12 Vdc Unreg
	2J17	Not Applicable	
	2J18-1	GRN/BRN	Switch Col 1 (Q45)
	2J18-2	---	No Connection
	2J18-3	GRN/GRY	Switch Col 8 (Q46)
	2J18-4	Key Pin	No Connection
	2J18-5	WHT/GRY	Switch Row 8
	2J18-6	WHT/VIO	Switch Row 7
	2J18-7	WHT/BLU	Switch Row 6
	2J18-8	WHT/GRN	Switch Row 5
	2J18-9	WHT/YEL	Switch Row 4
	2J18-10	WHT/ORG	Switch Row 3
	2J18-11	WHT/RED	Switch Row 2
	2J18-12	WHT/BRN	Switch Row 1
	2J20	Not Applicable	
	2J19-9	WHT/GRY	Switch Row 8
	2J19-10	WHT/VIO	Switch Row 7
	2J19-11	WHT/BLU	Switch Row 6
	2J19-12	WHT/GRN	Switch Row 5
	2J19-13	WHT/YEL	Switch Row 4
	2J19-14	WHT/ORG	Switch Row 3
	2J19-15	WHT/RED	Switch Row 2
	2J19-16	WHT/BRN	Switch Row 1

AUX POWER DRIVER INTERBOARD SIGNALS

Connector	Wire Color	Signal Designation/Description
5J1-1	GRY-BLK	CPU: Solenoid 8 (Q22) / 1J11-9
5J1-2	GRY-VIO	CPU: Solenoid 7 (Q30) / 1J11-8
5J1-3	GRY-BLU	CPU: Solenoid 6 (Q23) / 1J11-7
5J1-4	GRY-GRN	CPU: Solenoid 5 (Q31) / 1J11-6
5J1-5	GRY-YEL	CPU: Solenoid 4 (Q24) / 1J11-5
5J1-6	GRY-ORG	CPU: Solenoid 3 (Q32) / 1J11-4
5J1-7	GRY-RED	CPU: Solenoid 2 (Q25) / 1J11-3
5J1-8	Key Pin	No Connection
5J1-9	GRY-BRN	CPU: Solenoid 1 (Q33) / 1J11-1
5J3-1	BLU-BLK	CPU: Spl Solnd 6 (Q79) / 1J19-9
5J3-2	BLU-GRN	CPU: Spl Solnd 5 (Q77) / 1J19-8
5J3-3	BLU-ORN	CPU: Spl Solnd 3 (Q73) / 1J19-3
5J3-4	BLU-YEL	CPU: Spl Solnd 4 (Q69) / 1J19-6
5J3-5	Key Pin	No Connection
5J3-6	BLU-RED	CPU: Spl Solnd 2 (Q71) / 1J19-4
5J3-7	BLU-BRN	CPU: Spl Solnd 1 (Q75) / 1J19-7
5J5-1	WHT-GRY	Solenoid 08C
5J5-2	WHT-VIO	Solenoid 07C
5J5-3	WHT-BLU	Solenoid 06C
5J5-4	WHT-GRN	Solenoid 05C
5J5-5	WHT-YEL	Solenoid 04C
5J5-6	Key Pin	No Connection
5J5-7	WHT-ORN	Solenoid 03C
5J5-8	WHT-RED	Solenoid 02C
5J5-9	WHT-BRN	Solenoid 01C
5J7-1	BRN-GRY	Spl Solnd 6
5J7-2	BRN-VIO	Spl Solnd 5
5J7-3	BRN-BLU	Spl Solnd 4
5J7-4	Key Pin	No Connection
5J7-5	BRN-ORN	Spl Solnd 3
5J7-6	BRN-RED	Spl Solnd 2
5J7-7	BRN-BLK	Spl Solnd 1
5J9-1	—	No Connection
5J9-2	—	No Connection
5J9-3	Key Pin	No Connection
5J9-4	—	No Connection
5J9-5	WHT-BLU	25 Vac: Ferris Wheel Motor
5J9-6	—	No Connection
5J9-7	WHT-BLU	25 Vac: Ferris Wheel Motor
5J12-1	—	No Connection
5J12-2	GRY-YEL	+50 Vdc / Flippers
5J12-3	—	No Connection
5J12-4	BLU/YEL	+50 Vdc / Flippers
5J12-5	—	No Connection
5J12-6	VIO-YEL	+50 Vdc / Sol. 18 & 20
5J12-7	—	No Connection
5J12-8	Key Pin	No Connection
5J12-9	—	No Connection
5J12-10	—	No Connection
5J12-11	YEL-VIO	+50 Vdc (A solnd) / Sol. 03A, 04A, &
5J12-12	—	No Connection

Connector	Wire Color	Signal Designation/Description
5J2-1	BRN-GRY	CPU: Solenoid 16 (Q6) / 1J12-
5J2-2	BRN-VIO	CPU: Solenoid 15 (Q14) / 1J12
5J2-3	BRN/BLU	CPU: Solenoid 14 (Q7) / 1J12-7
5J2-4	—	No Connection
5J2-5	BRN-YEL	CPU: Solenoid 12 (Q15) / 1J12-5
5J2-6	BRN-ORG	CPU: Solenoid 11 (Q16) / 1J12-
5J2-7	Key Pin	No Connection
5J2-8	BRN-RED	CPU: Solenoid 10 (Q9) / 1J12-2
5J2-9	BRN-BLK	CPU: Solenoid 9 (Q17) / 1J12-1
5J4-1	VIO-GRY	Solenoid 08A
5J4-2	VIO-BLK	Solenoid 07A
5J4-3	Key Pin	No Connection
5J4-4	VIO-BLU	Solenoid 06A
5J4-5	VIO-GRN	Solenoid 05A
5J4-6	VIO-YEL	Solenoid 04A
5J4-7	VIO-ORN	Solenoid 03A
5J4-8	VIO-RED	Solenoid 02A
5J4-9	VIO-BRN	Solenoid 01A
5J6-1	BRN-GRY	Solenoid 16
5J6-2	BRN-VIO	Solenoid 15
5J6-3	BRN-BLU	Solenoid 14
5J6-4	Key Pin	No Connection
5J6-5	—	Solenoid 13
5J6-6	—	Solenoid 12
5J6-7	BRN-ORN	Solenoid 11
5J6-8	BRN-RED	Solenoid 10
5J6-9	BRN-BLK	Solenoid 9
5J8-1	WHT-RED	Transformer: 26V ac / 7J2-6
5J8-2	WHT-RED	Transformer: 26V ac / 7J2-6
5J8-3	WHT-RED	Transformer: 26V ac / 7J2-7
5J8-4	WHT-RED	Transformer: 26V ac / 7J2-7
5J8-5	Key Pin	No Connection
5J8-6	BLK-YEL	Transformer: 48V ac / 7J2-11
5J8-7	BLK-YEL	Transformer: 48V ac / 7J2-11
5J8-8	BLK-YEL	Transformer: 48V ac / 7J2-12
5J8-9	BLK-YEL	Transformer: 48V ac / 7J2-12
5J10-1	BLK	Solnd Gnd / 1J13-1
5J10-2	BLK	Solnd Gnd / 1J13-2
5J10-3	BLK	Solnd Gnd / 1J13-3
5J10-4	BLK	Solnd Gnd / 1J13-4
5J11-1	ORN	+25 Vdc (C solnd) / Sol. 01C thr
5J11-2	—	No Connection
5J11-3	Key Pin	No Connection
5J11-4	BRN	+25 Vdc (A solnd)/Sol. 01A, 05
5J11-5	—	No Connection
5J11-6	—	No Connection
5J11-7	—	No Connection
5J11-8	—	No Connection
5J11-9	RED	+25 Vdc / Sol. 9,10,11, &
5J11-10	—	No Connection
5J11-11	RED-WHT	+50 Vdc / Sol. 17, 19, 21
5J11-12	—	No Connection

LY INTERBOARD SIGNALS

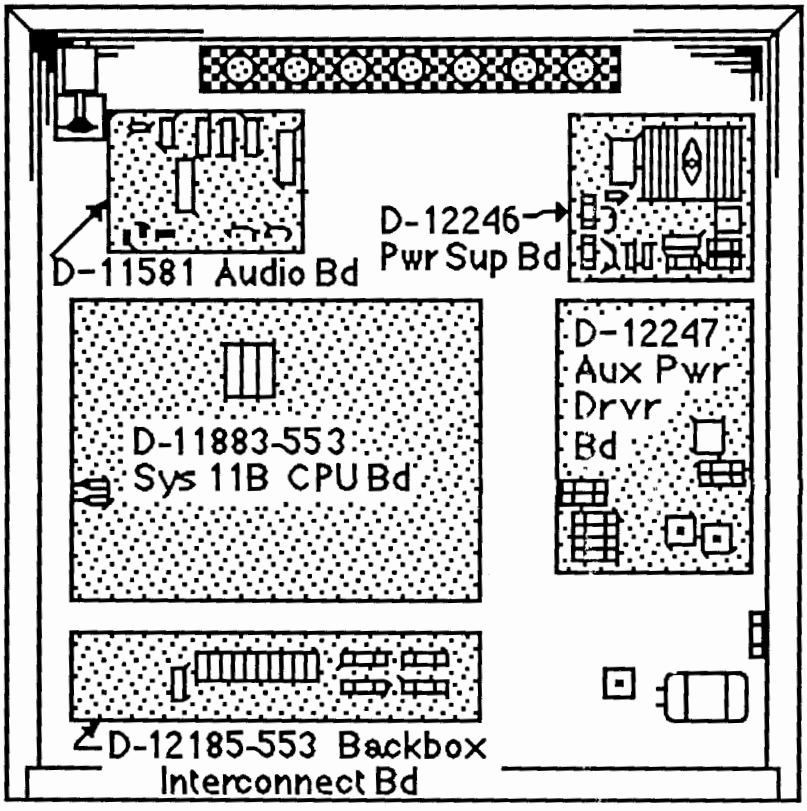
iption	Connector	Wire Color	Signal Designation/Description
	3J2-1	ORG	Display Power: -100V dc / 4J2-1
	3J2-2	---	No Connection
	3J2-3	BRN	Display Power: +100V dc / 4J2-3
	3J2-4	Key Pin	No Connection
	3J2-5	BLK	Ground (Display ckt) / 4J2-5
17-4	3J2-6	GRY	Display Power: +5V dc /4J2-6
	3J3-1	GRY	Transformer: 19.4V ac, 1Ø, C. T.
	3J3-2	GRY	Transformer: 19.4V ac, 1Ø, C. T.
	3J3-3	GRY/WHT	Transformer: 19.4V ac, C. T. com
1J17-9	3J3-4	GRY/WHT	Transformer: 19.4V ac, C. T. com
1J17-9	3J3-5	GRY/GRN	Transformer: 19.4V ac, 1Ø, C. T.
	3J3-6	GRY/GRN	Transformer: 19.4V ac, 1Ø, C. T.
1J17-8	3J3-7	Key Pin	No Connection
1J17-8	3J3-8	WHT	Transformer: 88.5V ac
	3J3-9	WHT	Transformer: 88.5V ac

D INTERBOARD SIGNALS

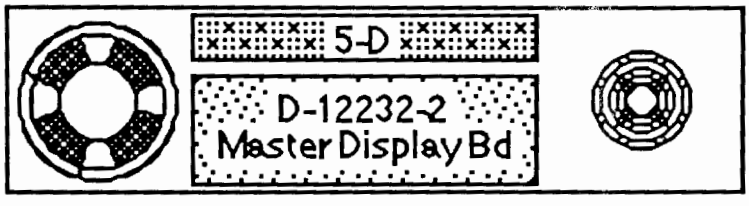
iption	Connector	Wire Color	Signal Designation/Description
1J16-1	11J2-1	RED	Signal Level (to Vol Cntrl)
1J16-2	11J2-2	BLK	Signal Level (from Vol Cntrl)
	11J2-3	—	No Connection
	11J2-4	shield	Ground
	11J4	Ribbon Cable from CPU 1J21	
6-2	11J5-1	BLK-YEL / Speaker	
	11J5-2	BLK-YEL / Speaker	
	11J5-3	BLK / Speaker	
16-6	11J5-4	BLK / Speaker	

AY INTERBOARD SIGNALS

iption	Connector	Wire Color	Signal Designation/Description
1J1-1	4J3	Ribbon Cable from CPU 1J22	
1J1-2			
1J1-3	4J4	Ribbon Cable to Meter Display	
1J1-4			
1J1-5	4J5-1	BLU-BRN	D1 / Display BCD / 1J3-1
1J1-6	4J5-2	BLU-RED	C1 / Display BCD / 1J3-2
1J1-7	4J5-3	BLU-ORG	B1 / Display BCD / 1J3-3
	4J5-4	BLU-YEL	A1 / Display BCD / 1J3-4
1J1-9	4J5-5	BLU-GRN	D2 / Display BCD / 1J3-5
	4J5-6	Key Pin	No Connection
1J2-1	4J5-7	BLU-BLK	C2 / Display BCD / 1J3-7
1J2-2	4J5-8	BLU-VIO	B2 / Display BCD / 1J3-8
1J2-3	4J5-9	BLU-GRY	A2 / Display BCD / 1J3-9
1J2-4			
1J2-5	4J7-1	ORG	Display Power: -100V dc / 3J5-3
1J2-6	4J7-2	---	No Connection
	4J7-3	BRN	Display Power: +100V dc / 3J5-4
J2-8	4J7-4	Key Pin	No Connection
J2-9	4J7-5	BLK	Ground / 3J5-1
	4J7-6	GRY	Power: +5V dc / 3J5-6



Backbox



Display/Speaker Panel

SYSTEM-11B CPU INTERBOARD SIGNALS

Connector	Wire Color	Signal Designation/Description
1J1-1	BRN-GRY	ST-8: Display Digit Strobe / 4J3-1
1J1-2	BRN-VIO	ST-7: Display Digit Strobe / 4J3-2
1J1-3	BRN-BLU	ST-6: Display Digit Strobe / 4J3-3
1J1-4	BRN-GRN	ST-5: Display Digit Strobe / 4J3-4
1J1-5	BRN-YEL	ST-4: Display Digit Strobe / 4J3-5
1J1-6	BRN-ORG	ST-3: Display Digit Strobe / 4J3-6
1J1-7	BRN-RED	ST-2: Display Digit Strobe / 4J3-7
1J1-8	Key Pin	No Connection
1J1-9	BRN-BLK	ST-1: Display Digit Strobe / 4J3-9
1J3-1	BLU-BRN	D1 / Display BCD / 4J5-1
1J3-2	BLU-RED	C1 / Display BCD / 4J5-2
1J3-3	BLU-ORG	B1 / Display BCD / 4J5-3
1J3-4	BLU-YEL	A1 / Display BCD / 4J5-4
1J3-5	BLU-GRN	D2 / Display BCD / 4J5-5
1J3-6	Key Pin	No Connection
1J3-7	BLU-BLK	C2 / Display BCD / 4J5-7
1J3-8	BLU-VIO	B2 / Display BCD / 4J5-8
1J3-9	BLU-GRY	A2 / Display BCD / 4J5-9
1J3-10	---	No Connection
1J3-11	---	No Connection
1J3-12	---	No Connection
1J5-1	---	No Connection
1J5-2	Key Pin	No Connection
1J5-3	BLK	Ground (Lamp Ckt)
1J5-4	BLK	Ground (Lamp Ckt)
1J5-5	---	No Connection
1J5-6	---	No Connection
1J5-7	---	No Connection
1J5-8	BLK	Ground (Lamp Ckt)
1J5-9	BLK	Ground (Lamp Ckt)
1J7-1	YEL-BRN	Lamp Col 1 (Q65/66)
1J7-2	YEL-RED	Lamp Col 2 (Q63/64)
1J7-3	YEL-ORG	Lamp Col 3 (Q61/62)
1J7-4	YEL-BLK	Lamp Col 4 (Q59/60)
1J7-5	Key Pin	No Connection
1J7-6	YEL-GRN	Lamp Col 5 (Q57/58)
1J7-7	YEL-BLU	Lamp Col 6 (Q55/56)
1J7-8	YEL-VIO	Lamp Col 7 (Q53/54)
1J7-9	YEL-GRY	Lamp Col 8 (Q51/52)
1J10-1	WHT-GRY	Switch Row 8
1J10-2	WHT-VIO	Switch Row 7
1J10-3	WHT-BLU	Switch Row 6
1J10-4	Key Pin	No Connection
1J10-5	WHT-GRN	Switch Row 5
1J10-6	WHT-YEL	Switch Row 4
1J10-7	WHT-ORG	Switch Row 3
1J10-8	WHT-RED	Switch Row 2
1J11-9	WHT-BRN	Switch Row 1
1J12-1	BRN-BLK	Solenoid 9 (Q17) / 5J2-9
1J12-2	BRN-RED	Solenoid 10 (Q9) / 5J2-8
1J12-3	Key Pin	No Connection
1J12-4	BRN-ORG	Solenoid 11 (Q16) / 5J2-6
1J12-5	BRN-YEL	Solenoid 12 (Q8) / 5J2-5
1J12-6	BRN-GRN	Solenoid 13 (Q15) / Mys. Whl Mtr Cntrl
1J12-7	BRN-BLU	Solenoid 14 (Q7) / Mys. Whl Mtr Cntrl
1J12-8	BRN-VIO	Solenoid 15 (Q14) / 5J2-2
1J12-9	BRN-GRY	Solenoid 16 (Q6) / 5J2-1
1J16-1	RED	Volume Control Input / 11J1-1
1J16-2	BLK	Volume Control Output / 11J1-2
1J16-3	Key Pin	No Connection
1J16-4	WHT	Signal Ground - CPU / 11J1-4
1J18-1	---	No Connection
1J18-2	ORN-BLK	Spl Solnd Sw 3
1J18-3	ORN-RED	Spl Solnd Sw 2
1J18-4	ORN-YEL	Spl Solnd Sw 4
1J18-5	ORN-BRN	Spl Solnd Sw 1
1J18-6	Key Pin	No Connection
1J18-7	WHT	Spl Solnd Sw Ground
1J18-8	ORN-GRN	Spl Solnd Sw 5
1J18-9	ORN-BLU	Spl Solnd Sw 6
1J21		Ribbon Cable to Audio Board 11J4
1J22		Ribbon Cable to Master Display Board 4J3

Connector	Wire Color	Signal Designation/Description
1J2-1	VIO-GRY	ST-16: Display Digit Strobe / 4J4-1
1J2-2	VIO-BLK	ST-15: Display Digit Strobe / 4J4-2
1J2-3	VIO-BLU	ST-14: Display Digit Strobe / 4J4-3
1J2-4	VIO-GRN	ST-13: Display Digit Strobe / 4J4-4
1J2-5	VIO-YEL	ST-12: Display Digit Strobe / 4J4-5
1J2-6	VIO-ORG	ST-11: Display Digit Strobe / 4J4-6
1J2-7	Key Pin	No Connection
1J2-8	VIO-RED	ST-10: Display Digit Strobe / 4J4-8
1J2-9	VIO-BRN	ST-9: Display Digit Strobe / 4J4-9
1J4-1	VIO	Lamp +18V dc Power
1J4-2	VIO	"
1J4-3	Key Pin	No Connection
1J4-4	---	No Connection
1J4-5	---	No Connection
1J4-6	---	No Connection
1J4-7	---	No Connection
1J4-8	VIO	Lamp +18V dc Power
1J4-9	VIO	"
1J6-1	RED-BRN	Lamp Row 1 (Q80)
1J6-2	RED-BLK	Lamp Row 2 (Q81)
1J6-3	RED-ORG	Lamp Row 3 (Q82)
1J6-4	Key Pin	No Connection
1J6-5	RED-YEL	Lamp Row 4 (Q83)
1J6-6	RED-GRN	Lamp Row 5 (Q84)
1J6-7	RED-BLU	Lamp Row 6 (Q85)
1J6-8	RED-VIO	Lamp Row 7 (Q86)
1J6-9	RED-GRY	Lamp Row 8 (Q87)
1J8-1	GRN-BRN	Switch Col 1 (Q45)
1J8-2	GRN-RED	Switch Col 2 (Q49)
1J8-3	GRN-ORG	Switch Col 3 (Q44)
1J8-4	GRN-YEL	Switch Col 4 (Q48)
1J8-5	GRN-BLK	Switch Col 5 (Q43)
1J8-6	Key Pin	No Connection
1J8-7	GRN-BLU	Switch Col 6 (Q47)
1J8-8	GRN-VIO	Switch Col 7 (Q42)
1J8-9	GRN-GRY	Switch Col 8 (Q46)
1J9		Not Applicable
1J11-1	GRY-BRN	Solenoid 1 (Q33) / 5J1-9
1J11-2	Key Pin	No Connection
1J11-3	GRY-RED	Solenoid 2 (Q25) / 5J1-7
1J11-4	GRY-ORG	Solenoid 3 (Q32) / 5J1-6
1J11-5	GRY-YEL	Solenoid 4 (Q24) / 5J1-5
1J11-6	GRY-GRN	Solenoid 5 (Q31) / 5J1-4
1J11-7	GRY-BLU	Solenoid 6 (Q23) / 5J1-3
1J11-8	GRY-VIO	Solenoid 7 (Q30) / 5J1-2
1J11-9	GRY-BLK	Solenoid 8 (Q22) / 5J1-1
1J13-1	BLK	Solenoid Ground / 5J10-1
1J13-2	BLK	" / 5J10-2
1J13-3	BLK	" / 5J10-3
1J13-4	BLK	" / 5J10-4
1J14-1	BLK-RED	Memory Protect / 7J1-4
1J14-2	WHT	Ground / 7J1-3
1J14-3	GRN	ADVANCE Switch / 7J1-1
1J14-4	BLU	AUTO/MANUAL Switch / 7J1-2
1J17-1	BLK	Ground / 3J6-11
1J17-2	BLK	" / 3J6-12
1J17-3	BLK	" / 3J6-13
1J17-4	GRY	Power: +5V dc / 3J6-7
1J17-5	GRY	" / 3J6-8
1J17-6	GRY	" / 3J6-9
1J17-7	Key Pin	No Connection
1J17-8	BLK-WHT	Power: -12V dc Unreg / 3J6-2
1J17-9	WHT-GRY	Power: +12V dc Unreg / 3J6-6
1J19-1	ORN-VIO	Flipper Ground
1J19-2	ORN-GRY	Flipper Ground
1J19-3	BLU-ORN	Spl Solnd 3 (Q73) / 5J3-3
1J19-4	BLU-RED	Spl Solnd 2 (Q71) / 5J3-6
1J19-5	Key Pin	No Connection
1J19-6	BLU-YEL	Spl Solnd 4 (Q69) / 5J3-4
1J19-7	BLU-BRN	Spl Solnd 1 (Q75) / 5J3-7
1J19-8	BLU-GRN	Spl Solnd 5 (Q77) / 5J3-2
1J19-9	BLU-BLK	Spl Solnd 6 (Q79) / 5J3-1

POWER SUPPLY INTE

Connector	Wire Color	Signal Designation/Description
3J1-1	BLK	Ground / 1J17-1
3J1-2	BLK	Ground / 1J17-2
3J1-3	BLK	Ground / 1J17-3
3J1-4	BLK	No Connection
3J1-5	BLK-YEL	Logic Ground
3J1-6	GRY	CPU Pwr: +5V dc Reg / 1J17-4
3J1-7	GRY	" / 1J17-5
3J1-8	GRY	" / 1J17-6
3J1-9	GRY	No Connection
3J1-10	Key Pin	No Connection
3J1-11	WHT-GRY	CPU Pwr: +12V dc Unreg / 1J17-9
3J1-12	WHT-GRY	CPU Pwr: +12V dc Unreg / 1J17-9
3J1-13	GRY-YEL	CPU Power: +12V dc Unreg
3J1-14	BLK-WHT	CPU Pwr: -12V dc Unreg / 1J17-8
3J1-15	BLK-WHT	CPU Pwr: -12V dc Unreg / 1J17-8

AUDIO BOARD INTER

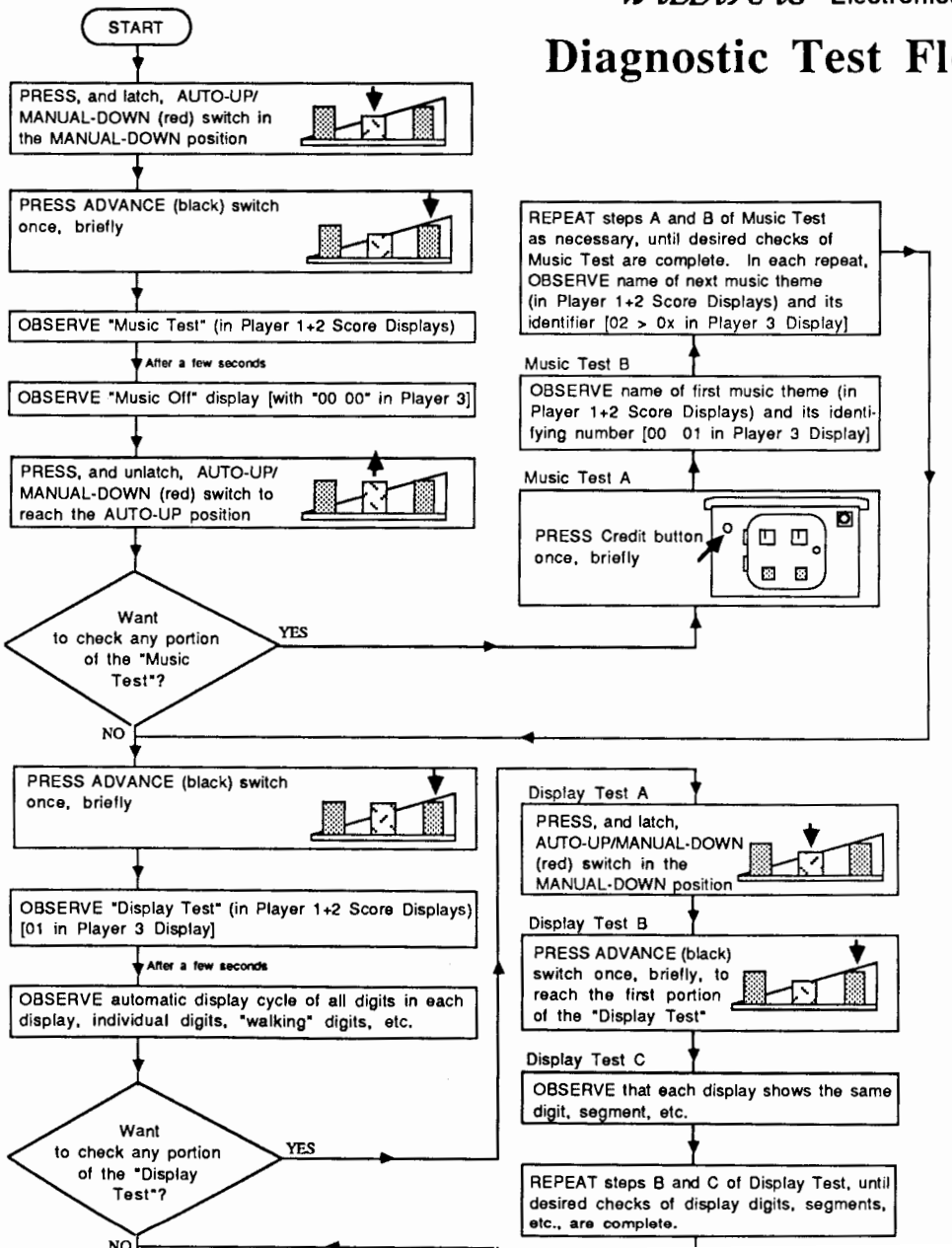
Connector	Wire Color	Signal Designation/Description
11J1-1	RED	Sound Input (from CPU) / 1J16-1
11J1-2	BLK	Sound Input (from CPU) / 1J16-2
11J1-3	---	No Connection
11J1-4	WHT	Ground / 1J16-4
11J3-1	GRY	Power: +5 Vdc / 3J6-7
11J3-2	BLK	Ground / 3J6-11
11J3-3	BLK-WHT	Power: -12 Vdc Unreg / 3J6-2
11J3-4	Key Pin	No Connection
11J3-5	---	No Connection
11J3-6	WHT-GRY	Power: +12 Vdc Unreg / 3J6-6

MASTER DISPLAY INT

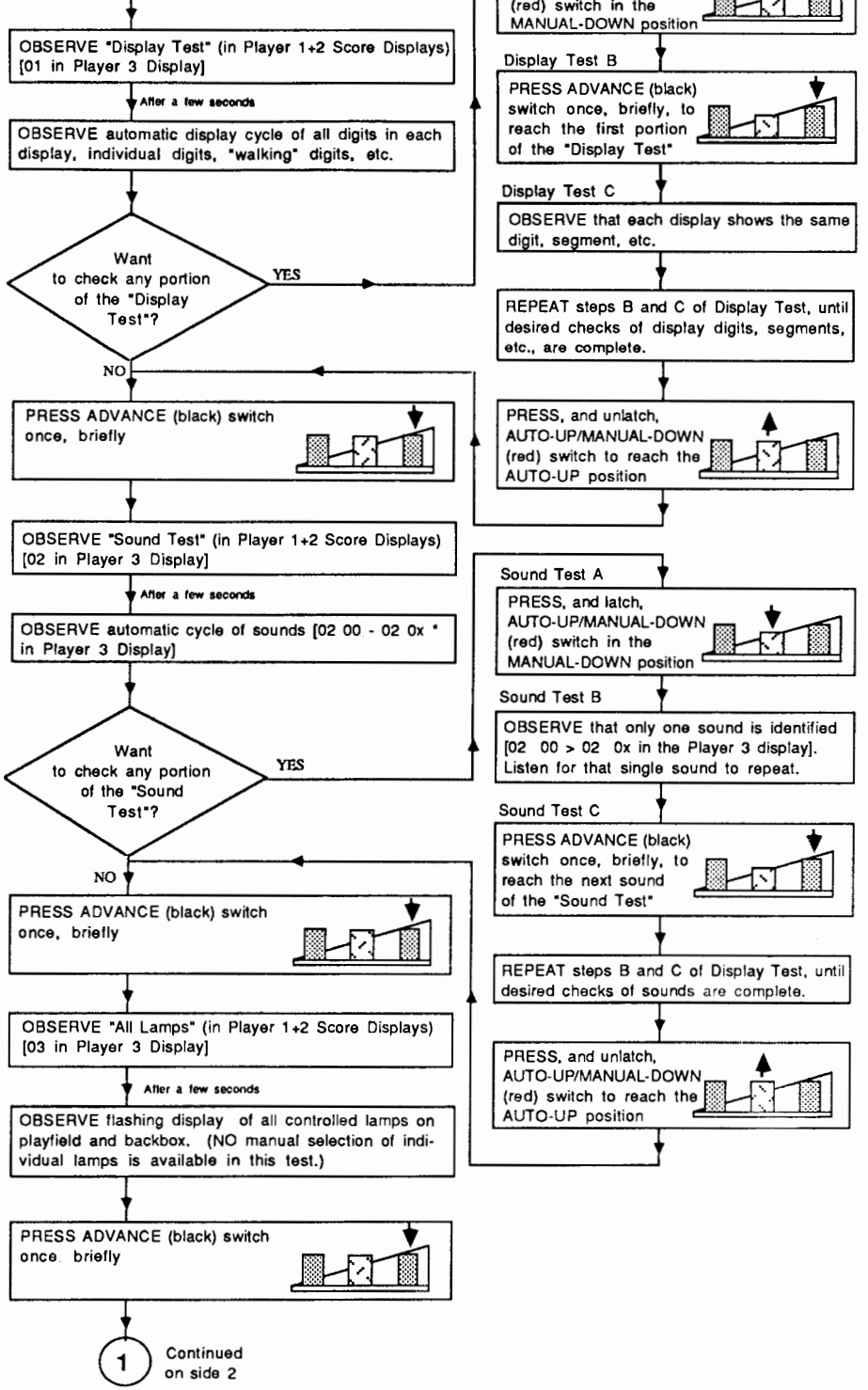
Connector	Wire Color	Signal Designation/Description
4J1-1	BRN-GRY	ST-8: Digit Display Strobe / 1J1-1
4J1-2	BRN-VIO	ST-7: Display Digit Strobe / 1J1-2
4J1-3	BRN-BLU	ST-6: Display Digit Strobe / 1J1-3
4J1-4	BRN-GRN	ST-5: Display Digit Strobe / 1J1-4
4J1-5	BRN-YEL	ST-4 :Display Digit Strobe / 1J1-5
4J1-6	BRN-ORG	ST-3: Display Digit Strobe / 1J1-6
4J1-7	BRN-RED	ST-2: Display Digit Strobe / 1J1-7
4J1-8	Key Pin	No Connection
4J1-9	BRN-BLK	ST-1: Display Digit Strobe / 1J1-9
4J2-1	VIO-GRY	ST-16: Digit Display Strobe / 1J2-1
4J2-2	VIO-BLK	ST-15: Display Digit Strobe / 1J2-2
4J2-3	VIO-BLU	ST-14: Display Digit Strobe / 1J2-3
4J2-4	VIO-GRN	ST-13: Display Digit Strobe / 1J2-4
4J2-5	VIO-YEL	ST-12: Display Digit Strobe / 1J2-5
4J2-6	VIO-ORG	ST-11: Display Digit Strobe / 1J2-6
4J2-7	Key Pin	No Connection
4J2-8	VIO-RED	ST-8: Display Digit Strobe / 1J2-8
4J2-9	VIO-BRN	ST-9: Display Digit Strobe / 1J2-9

WILLIAMS Electronics Games

Diagnostic Test Flowchart



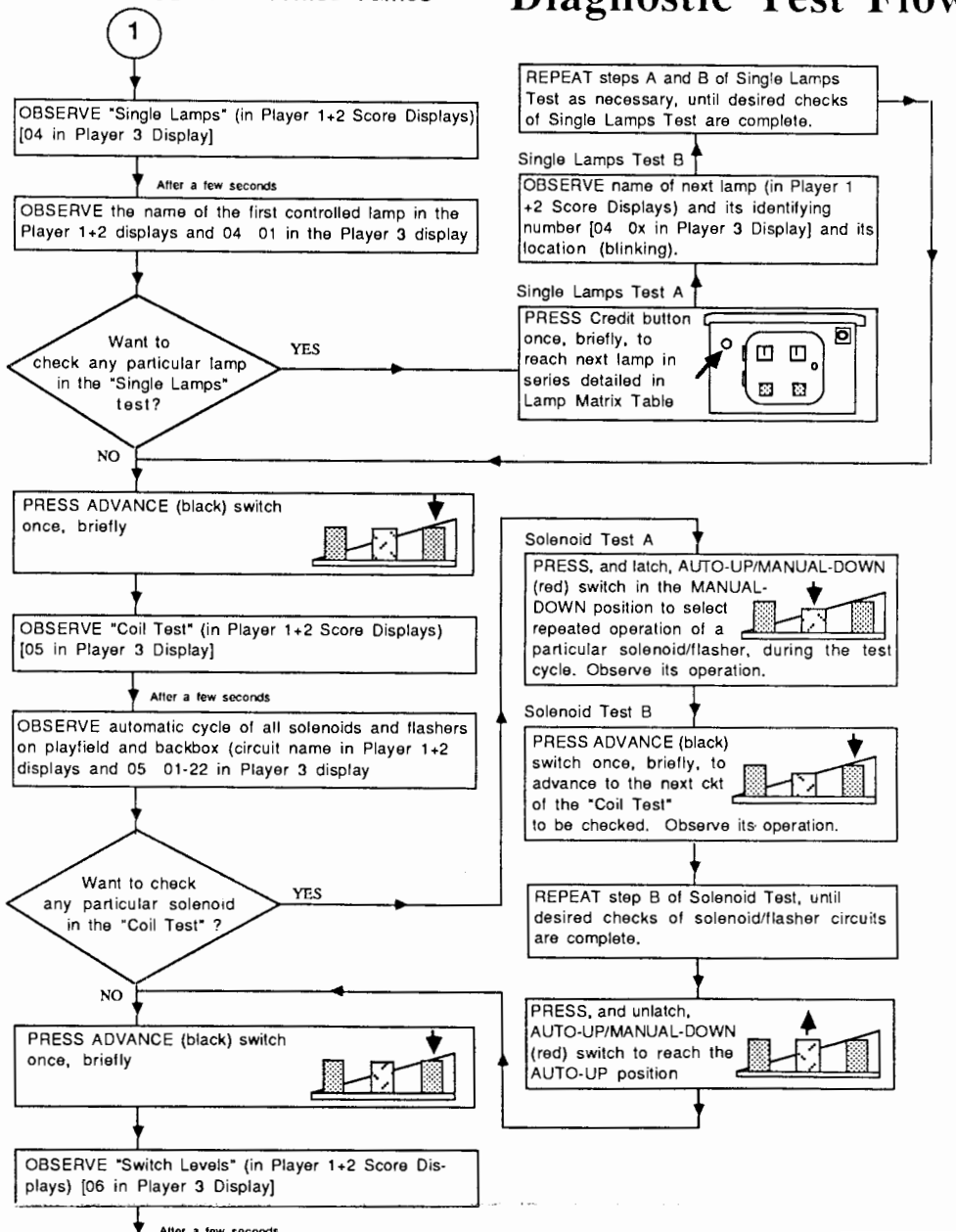
Diagnostic Test Flowchart (Side 1)



WILLIAMS Electronics Games

Diagnostic Test Flowchart

Side 2



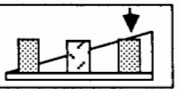
Want to check any particular solenoid in the "Coil Test" ?

YES

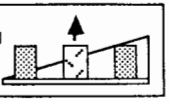
REPEAT step B of Solenoid Test, until desired checks of solenoid/flasher circuits are complete.

NO

PRESS ADVANCE (black) switch once, briefly



PRESS, and unlatch, AUTO-UP/MANUAL-DOWN (red) switch to reach the AUTO-UP position

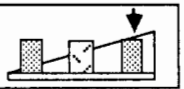


OBSERVE "Switch Levels" (in Player 1+2 Score Displays) [06 in Player 3 Display]

After a few seconds

OBSERVE name and number (06 xx) of each switch that is presently actuated, if any

PRESS ADVANCE (black) switch once, briefly



OBSERVE "Switch Edges" (in Player 1+2 Score Displays) [07 in Player 3 Display]

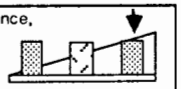
Want to check any particular switch?

YES

OPERATE any switch listed in the Switch Matrix Table to check whether its operation is detected by the CPU for use in the game program. OBSERVE the switch's name and number in the Player Score displays, verifying proper switch operation. Select and operate switches, until desired checks of switch circuits are complete.

NO

PRESS ADVANCE (black) switch once, briefly, to proceed to special game tests, if any; otherwise, exit Test/Diagnostic program.

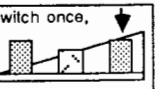


OBSERVE Game name and number in Player 1+2 Score Displays and Id 00 in Player 3 Display, showing the exit from the Test/Diagnostic portion of the game program

Go to Audits and Adjustments or Go to Game Over?

Audits/Adjustments

PRESS ADVANCE (black) switch once, briefly, to advance to the Id 01 display, which tells about changes from Factory Settings. Press ADVANCE switch again to advance to Audit Items (Au 01 > 44) and then to Adjustment Items (Ad 01 > 70).



OBSERVE desired data in Audit Items (to determine game operations and earnings). CHANGE desired Adjustment Items (to enhance the game play and earnings). Refer to game manual for details.

Proceed to Ad 70, press ADVANCE again, briefly, to reach Attract Mode, ready to play.

Game Over

TOGGLE game On-Off switch to Off, then to ON.

Game is in Attract Mode, ready to play.

WARNINGS & NOTICES

WARNING

FOR SAFETY AND RELIABILITY, *WILLIAMS ELECTRONICS GAMES, Inc.* does not recommend or authorize any substitute parts or modifications of *WILLIAMS'* equipment. Use of Non-*WILLIAMS'* parts, or modifications of game circuitry, may adversely affect game play, or may cause injuries.

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This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

WARNING

FCC STICKER. Check the back of your **TAXI** game to verify that an FCC-certification sticker was attached to your game at the factory.

All games that leave *WILLIAMS'* plants have been tested and found to comply with FCC Rules. Because the sticker is proof of this fact, legal repercussions to the owner and distributor of the game may result, if the sticker is missing. If you receive any *WILLIAMS* game, manufactured after December 1982, that has no FCC sticker, call *WILLIAMS'* for advice or write us a note on your Game Registration Card. Be sure that the card bears your game's serial number.

RF Interference Notice

CABLE HARNESS PLACEMENTS and ground strap routing on this game have been designed to keep RF radiation and conduction within levels accepted by the FCC Rules.

TO MAINTAIN THESE LEVELS, reposition harnesses and reconnect ground straps to their original placements, if they become disconnected during maintenance.

Notice

FOR SERVICE...

CALL your authorized
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Williams®
ELECTRONICS GAMES, INC.
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Chicago, IL 60618

WARNING: **Transport this game ONLY with hinged backbox down!**