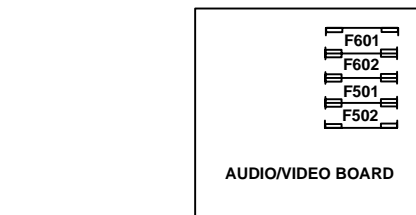


ATTACK FROM MARS (50041)

FUSE LIST

POWER DRIVER BOARD

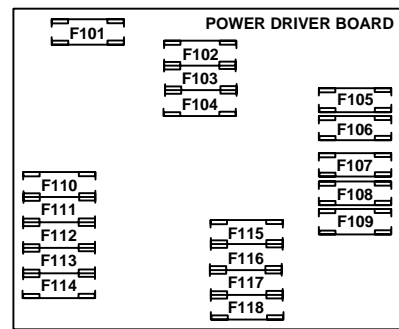
F101	Regulated 12V	T0.63A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V
F105	+5V Logic	T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V
F107	Flasher Secondary	T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V
F109	Unregulated 12V	T4.0A, 250V
F110	G.I. #5 White-Violet	T4.0A, 250V
F111	G.I. #4 White-Green	T4.0A, 250V
F112	G.I. #3 White-Yellow	T4.0A, 250V
F113	G.I. #2 White-Orange	T4.0A, 250V
F114	G.I. #1 White-Brown	T4.0A, 250V
F115	+50V Flippers	T4.0A, 250V
F116	+50V Flippers	T4.0A, 250V
F117	+50V Flippers	T4.0A, 250V
F118	+50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.

AUDIO/VIDEO BOARD

F501	-25V	T2.5A, 250V
F502	+25V	T2.5A, 250V
F601	+62V	T0.25A, 250V
F602	-113V & -125V	T0.25A, 250V



LINE FILTER

Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid/Flashlamp	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	AUTO PLUNGER	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-23-800	
02	TROUGH EJECT	High Power	J133-2			Q68	J116-2			VIO-RED	AE-26-1500	
03	LEFT POPPER	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-23-800	
04	RIGHT POPPER	High Power	J133-2			Q67	J116-5			VIO-YEL	AE-25-1000	
05	LEFT ALIEN LOW	High Power	J133-2			Q70	J116-6			VIO-GRN	AE-26-1500	
06	LEFT ALIEN HIGH	High Power	J133-2			Q66	J116-7			VIO-BLU		AE-23-800
07	KNOCKER	High Power		J133-2		Q69		J116-8		VIO-BLK	AE-26-1500	
08	RIGHT ALIEN HIGH	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-26-1200	
09	LEFT SLINGSHOT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1200	
10	RIGHT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-26-1200	
11	LEFT JET	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-26-1200	
12	BOTTOM JET	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	TOP JET	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	RIGHT ALIEN LOW	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1500	
15	SAUCER SHAKE	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-26-1500	
16	DROP TARGET	Low Power	J133-2			Q45	J114-9			BRN-GRY	AE-26-1200	
17	RIGHT RAMP HIGH (2)	Flasher	J133-6	J134-5		Q28	J111-1	J112-1		BLK-BRN	#906	#906
18	LEFT RAMP LOW (2)	Flasher	J133-6	J134-5		Q32	J111-2	J112-2		BLK-RED	#906	#906
19	RIGHT SIDE HIGH (2)	Flasher	J133-6	J134-5		Q27	J111-3	J112-3		BLK-ORG	#906	#906
20	RIGHT SIDE LOW	Flasher	J133-6			Q31	J111-4			BLK-YEL	#89	
21	CENTER ARROW	Flasher	J133-6			Q26	J111-5			BLU-GRN	#906	
22	JETS	Flasher	J134-6			Q30	J111-6			BLU-BLK	#89	
23	SAUCER DOME	Flasher	J134-6			Q25	J111-7			BLU-VIO	#906	
24	MOTOR BANK	Flasher	J133-6			Q29	J111-8			BLU-GRY	14-8023	
25	LEFT RAMP LEFT (2)	Gen. Purpose	J133-6	J134-5		Q16	J109-1	J107-1		BLU-BRN	#906	#906
26	LEFT RAMP RIGHT (2)	Gen. Purpose	J133-6	J134-5		Q15	J109-2	J107-3		BLU-RED	#906	#906
27	LEFT SIDE HIGH (2)	Gen. Purpose	J133-6	J134-5		Q14	J109-3	J107-4		BLU-ORG	#906	#906
28	LEFT SIDE LOW	Gen. Purpose	J133-6			Q13	J109-4			BLU-YEL	#89	
33	RIGHT GATE	High Power	J119-6,7			Q84	J120-6			YEL-VOI	A-14406	
34	LEFT GATE	Low Power	J119-6,7			Q86	J120-4			ORG-VIO	A-14406	
35	DIVERTER POWER	High Power	J119-8,9			Q81	J120-3			YEL-GRY	A-20099	
36	DIVERTER HOLD	Low Power	J119-8,9			Q83	J120-1			ORG-GRY	A-20099	
37	L.E.D CLOCK	Flasher	J140-2				J110-1			BRN-WHT	A-20670	
38	L.E.D DATA	Flasher	J140-2				J110-3			VIO-WHT	A-20670	
39	STOBE LIGHT	Flasher	J140-2					J110-4		ORG-WHT	A-20718	

General Illumination

01	BOTTOM PLAYFIELD	G.I.	J105-1	J106-1		Q5	J105-7	J106-7		WHT-BRN	#44	#555
02	MIDDLE PLAYFIELD	G.I.	J105-2			Q4	J105-8			WHT-ORG	#44, #555	
03	TOP PLAYFIELD	G.I.	J105-3			Q3	J105-9			WHT-YEL	#44, #555	
04	+TOP INSERT	G.I.		J106-5		-		J106-10		WHT-GRN		#555
05	+BOTTOM INSERT	G.I.		J106-6		-		J106-11		WHT-VIO		#555

Flipper Circuits	Power	Hold	Voltage Connection		Drive Xistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
			Playfield	Backbox	Power	Hold	Playfield	Backbox	Power	Hold		
29	LOWER RIGHT FLIPPER		J119-1 (RED-GRN)		Q90		J120-13		YEL-GRN		FL-11629	BLUE
30			J119-1 (RED-GRN)		Q92		J120-11		ORG-GRN			
31	LOWER LEFT FLIPPER		J119-4 (RED-BLU)		Q67		J120-9		YEL-BLU		FL-11629	BLUE
32			J119-4 (RED-BLU)		Q69		J120-7		ORG-BLU			
33	UPPER RIGHT FLIPPER		J119-6 (RED-VIO)		Q84		J120-6		YEL-VIO		SEE	ABOVE
34			J119-6 (RED-VIO)		Q86		J120-4		ORG-VIO			
35	UPPER LEFT FLIPPER		J119-8 (RED-GRY)		Q81		J120-3		YEL-GRY		SEE	ABOVE
36			J119-8 (RED-GRY)		Q83		J120-1		ORG-GRY			

J1xx = Power Driver Board;

+ These G.I. strings do not brighten and dim, they are always ON.

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J121-1 Q96	Yellow-Red J121-2 Q100	Yellow-Orange J121-3 Q95	Yellow-Black J121-4 Q99	Yellow-Green J121-5 Q94	Yellow-Blue J121-6 Q98	Yellow-Violet J121-7 Q93	Yellow-Grey J121-8 Q97
1	Red-Brown J125-1 Q104	SUPER JETS 11	BIG-O-BEAM 1 21	TRACTOR BEAM 1 31	RIGHT LOOP ARROW 41	ATTACK MARS 51	MARTIA(N) TARGET 61	CAPTURE 1 71	SHOOT AGAIN 81
2	Red-Black J125-2 Q108	SUPER JACKPOT 12	BIG-O-BEAM 2 22	TRACTOR BEAM 2 32	CENTER RAMP ARROW 42	D.C. U.S.A. 52	MARTI(A)N TARGET 62	CAPTURE 2 72	LEFT OUTLANE 82
3	Red-Orange J125-4 Q103	MARTIAN ATTACK MULTIBALL 13	BIG-O-BEAM 3 23	TRACTOR BEAM 3 33	LEFT TOP LANE 43	LONDON ENGLAND 53	ATOMIC BLASTER 1 63	CAPTURE 3 73	LEFT RETURN 83
4	Red-Yellow J125-5 Q107	ANNIHILATION 14	LEFT RAMP JACKPOT 24	RIGHT RAMP JACKPOT 34	RIGHT TOP LANE 44	LIGHT LOCK 54	ATOMIC BLASTER 2 64	LEFT LOOP JACKPOT 74	RIGHT RETURN 84
5	Red-Green J125-6 Q102	RETURN TO BATTLE 15	LEFT RAMP ARROW 25	RIGHT RAMP ARROW 35	LEFT MOTOR BANK 45	LOCK 1 55	ATOMIC BLASTER 3 65	LEFT LOOP ARROW 75	RIGHT OUTLANE 85
6	Red-Blue J125-7 Q106	CONQUER MARS 16	LOCK 2 26	MARTIAN ATTACK 36	CENTER MOTOR BANK 46	PISA ITALY 56	RIGHT LOOP JACKPOT 66	(M)ARTIAN TARGET 76	LAUNCH BUTTON 86
7	Red-Violet J125-8 Q101	5-WAY COMBO 17	LOCK 3 27	RULE UNIVERSE 37	RIGHT MOTOR BANK 47	BERLIN GERMANY 57	EXTRA BALL 67	M(A)RTIAN TARGET 77	NOT USED 87
8	Red-Grey J125-9 Q105	DROP TARGET 18	CENTER RAMP JACKPOT 28	STROKE OF LUCK 38	MAR(T)IAN TARGET 48	PARIS FRANCE 58	MART(I)AN TARGET 68	MA(R)TIAN TARGET 78	START BUTTON 88

J1XX = Power Driver Board

SWITCH MATRIX

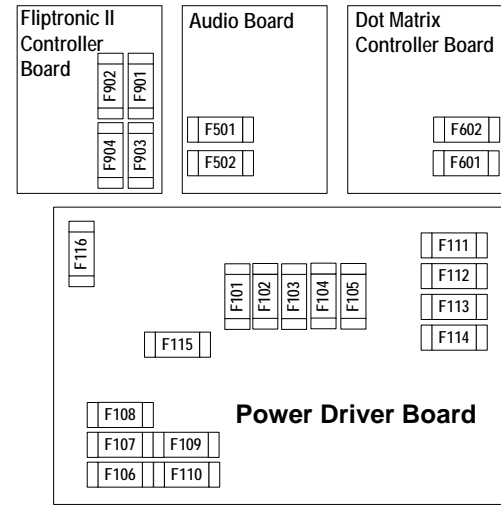
DEDICATED GROUNDED SWITCHES	Column	Row	1	2	3	4	5	6	7	8	FLIPPER GROUNDED SWITCHES	
			Green-Brown J206-1 U20-18	Green-Red J206-2 U20-17	Green-Orange J206-3 U20-16	Green-Yellow J206-4 U20-15	Green-Black J206-5 U20-14	Green-Blue J206-6 U20-13	Green-Violet J206-7 U20-12	Green-Grey J206-9 U20-11		
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	D1	1	White-Brown J208-1 U18-11	LAUNCH BUTTON 11	SLAM TILT 21	TROUGH EJECT 31	MARTI(A)N TARGET 41	LEFT SLING SHOT 51	LEFT RAMP ENTER 61	RIGHT LOOP HIGH 71	NOT USED 81	Black-Green J208-13 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	D2	2	White-Red J208-2 U18-9	NOT USED 12	COIN DOOR CLOSED 22	TROUGH BALL 1 32	MARTIA(N) TARGET 42	RIGHT SLING SHOT 52	CENTER RAMP ENTER 62	RIGHT LOOP LOW 72	NOT USED 82	Blue-Violet J212-12 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	D3	3	White-Orange J208-3 U18-5	START BUTTON 13	NOT USED 23	TROUGH BALL 2 33	MAR(T)IAN TARGET 43	LEFT JET 53	RIGHT RAMP ENTER 63	LEFT LOOP HIGH 73	NOT USED 83	Black-Blue J208-12 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4 th COIN CHUTE U17-9	D4	4	White-Yellow J208-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	TROUGH BALL 3 34	MART(I)AN TARGET 44	BOTTOM JET 54	LEFT RAMP EXIT 64	LEFT LOOP LOW 74	NOT USED 84	Blue-Gray J212-11 Lower Left Flipper Opto
Orange-Green J205-6 Normal Function U16-9	D5	5	White-Green J208-5 U19-11	NOT USED 15	NOT USED 25	TROUGH BALL 4 35	LEFT MOTOR BANK 45	RIGHT JET 55	RIGHT RAMP EXIT 65	LEFT SAUCER TARGET 75	NOT USED 85	Black-Violet J208-11 Upper Right Flipper E.O.S. (NOT USED)
Orange-Blue J205-7 Normal Function U16-11	D6	6	White-Blue J208-7 U19-9	LEFT OUTLANE 16	LEFT RETURN 26	LEFT POPPER 36	CENTER MOTOR BANK 46	(M)ARTIAN TARGET 56	MOTOR BANK DOWN 66	RIGHT SAUCER TARGET 76	NOT USED 86	Black-Yellow J212-10 Upper Right Flipper Opto
Orange-Violet J205-8 Normal Function U16-7	D7	7	White-Violet J208-8 U19-5	RIGHT RETURN 17	RIGHT OUTLANE 27	RIGHT POPPER 37	RIGHT MOTOR BANK 47	M(A)RTIAN TARGET 57	MOTOR BANK UP 67	DROP TARGET 77	NOT USED 87	Black-Gray J208-10 Upper Left Flipper E.O.S. (NOT USED)
Orange-Grey J205-9 Normal Function U16-5	D8	8	White-Grey J208-9 U19-7	SHOOTER LANE 18	NOT USED 28	LEFT TOP LANE 38	RIGHT TOP LANE 48	MA(R)TIAN TARGET 58	NOT USED 68	CENTER TROUGH 78	NOT USED 88	Black-Blue J212-9 Upper Left Flipper Opto

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

BRAM STOKER'S DRACULA (50001)

FUSE LIST

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB Not Used
F102	+50V DC General (Right Flipper)	3A, 250V, SB Not Used
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Switch Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V Circuit	3A, 250V, SB
F502	+25V Circuit	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V Circuit	3/8A, 250V, FB
F602	-113V & -125V Circuits	3/8A, 250V, FB
LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	SHOOTER	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-23-800	
02	COFFIN POPPER	High Power	J107-3			Q80	J130-2			VIO-RED	AE-24-900	
03	CASTLE POPPER	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-26-1500	
04	RIGHT RAMP DOWN	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-26-1200	
05	CRYPT POPPER	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-25-1500	
06	WIRE RAMP BALL POPPER	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-23-800	
07	KNOCKER	High Power	J107-3			Q68	J130-8			VIO-BLK	AE-23-800	
08	SHOOTER RAMP ENTRY	High Power	J107-2			Q70	J130-9			VIO-GRY	AE-26-1500	
09	LEFT SLINGSHOT	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	RIGHT SLINGSHOT	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-26-1200	
11	LEFT JET BUMPER	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-26-1200	
12	RIGHT JET BUMPER	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-26-1200	
13	BOTTOM JET BUMPER	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	RIGHT RAMP UP	Low Power	J107-2			Q48	J127-7			BRN-BLU	SM1-28-900	
15	OUTHOLE	Low Power	J107-2			Q46	J127-8			BRN-VIO	AE-27-1200	
16	TROUGH	Low Power	J107-2			Q44	J127-9			BRN-GRY	AE-26-1200	
17	T.R. CORNER / DRACULA FL	Flasher	J107-6	J106-5		Q42	J126-1	J125-1		BLK-BRN	#906(3)	#906(1)
18	JACKPOT / STOKER FLASHER	Flasher	J107-6	J106-5		Q40	J126-2	J125-2		BLK-RED	#906(1)	#906(1)
19	3-BANK / HOUSE FLASHER	Flasher	J107-6	J106-5		Q38	J126-3	J125-3		BLK-ORG	#89(1)	#906(1)
20	T.L. CORNER / MINA FLASHER	Flasher	J107-6	J106-5		Q36	J126-4	J125-4		BLK-YEL	#89(1) #906(1)	#906(1)
21	CASTLE / HELSING FLASHER	Flasher	J107-6	J106-5		Q28	J126-5	J125-5		BLU-GRN	#89(2)	#906(1)
22	L. RAMP / L. LOGO FLASHER	Flasher	J107-6	J106-5		Q30	J126-6	J125-6		BLU-BLK	#906(1)	#906(1)
23	R. RAMP / R. LOGO FLASHER	Flasher	J107-6	J106-5		Q34	J126-7	J125-7		BLU-VIO	#906(1)	#906(1)
24	ASYLUM / RENFIELD FLASHER	Flasher	J107-6	J106-5		Q32	J126-8	J125-8		BLU-GRY	#89(1)	#906(1)
25	LEFT DROP TARGET	Low Power	J107-1			Q26	*J122-1			BLU-BRN	AE-26-1200	
26	SPEAKER PANEL FLASHER	Low Power		J106		Q24		J128-2		BLU-RED		#906(3)
27	MAGNET	Low Power	J107-1			Q22	*J122-3			BLU-ORG	20-9831	
28	MAGNET'S MOTOR	Low Power	J107-6			Q20	J122-4			BLU-YEL	14-7981	
General Illumination		Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type		
		Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox	
01	LOWER PLAYFIELD / INSERT	G.I.	J121-1	J120-1		Q18	J121-7	J120-7		WHT-BRN	#555	#555
02	UPPER PLAYFIELD / INSERT	G.I.	J121-2	J120-2		Q10	J121-8	J120-8		WHT-ORG	#555	#555
03	CENTER PLAYFIELD / INSERT	G.I.	J121-3	J120-3		Q14	J121-9	J120-9		WHT-YEL	#555	#555
04	INSERT	G.I.		J120-5		Q16		J120-10		WHT-GRN		#555
05	INSERT	G.I.		J120-6	J119-3	Q12		J120-11	J119-1	WHT-VIO		#555
Flipper Circuits		Playfield Voltage Connection		Drive Transistors Power Hold		Playfield Drive Connections		Drive Wire Colors		Coil Part No.		Coil Colors
	LOWER LEFT FLIPPER	Flipper	J907-6, 7 (GRY-YEL)	Q3	Q9	J902-7, 9	BLU-GRY	ORG-BLU	FL-15411		ORANGE	
	LOWER RIGHT FLIPPER	Flipper	J907-8, 9 (BLU-YEL)	Q4	Q11	J902-11, 13	BLU-VIO	ORG-GRN	FL-15411		ORANGE	
33	UP / DOWN POST DIVERTER	Up Lt. Fl. Power	J907-2		Q1	J902-3	BLK-BLU		AE-26-1500			
34	RIGHT GATE	Up Lt. Fl. Hold	J907-1		Q5	J902-1		ORG-GRY	AE-26-1500			
35	DIS. CASTLE RELEASE POST	Up Rt. Fl. Power	J907-5		Q2	J902-6	BLK-YEL		AE-26-1500			
36	LEFT BALL GATE ACTUATOR	Up Lt. Fl. Hold	J907-4		Q7	J902-4		ORG-VIO	A-14406			

* J122-1, 3 have tieback diodes at J122-5,8 respectively.

LAMP MATRIX

Column	Red ← Yellow (B+) →							
	1 Yellow-Brown J137-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J137-7 Q92	8 Yellow-Gray J137-8 Q91
1 Red-Brown J133-1 Q90	NOT USED	COFFIN LOCK 1	R. LANE: VIDEO "V" 31	RIGHT RETURN 41	COFFIN LAMP 1 51	LEFT SKILL 100K 61	DRACULA "C" 71	RATS MODE 81
2 Red-Black J133-2 Q89	NOT USED	COFFIN LOCK 2 22	R. LANE: VIDEO "I" 32	RIGHT DRAIN 42	COFFIN LAMP 2 52	MIDDLE SKILL 1 MILLION 62	DRACULA "L" 72	DRACULA "A" 82
3 Red-Orange J133-4 Q88	NOT USED	DRACULA "A" 23	R. LANE: VIDEO "D" 33	COFFIN MULTIBALL 43	MAGNET 53	RIGHT SKILL 100K 63	LEFT 3-BANK TOP 73	TOP-LEFT HOLE: MYSTERY 83
4 Red-Yellow J133-5 Q87	NOT USED	R. RAMP: 0.5 MILLION 24	R. LANE: VIDEO "E" 34	PLAYFIELD 2X 44	SHOOT AGAIN 54	TOP 3-LANE LEFT 64	LEFT 3-BANK MIDDLE 74	TOP-LEFT HOLE: CARRIAGE 84
5 Red-Green J133-6 Q86	NOT USED	R. RAMP: 1 MILLION 25	R. LANE: VIDEO "O" 35	CASTLE MULTIBALL 45	LOVE NEVER DIES 55	TOP 3-LANE MIDDLE 65	LEFT 3-BANK BOTTOM 75	TOP-LEFT HOLE: EXTRA BALL 85
6 Red-Blue J133-7 Q85	R. RAMP LOCK 16	R. RAMP: 2.5 MILLION 26	DRACULA "R" 36	PLAYFIELD 3X 46	COFFIN LAMP 3 56	TOP 3-LANE RIGHT 66	MIDDLE 3-BANK LEFT 76	TOP-LEFT HOLE: JACKPOT 86
7 Red-Violet J133-8 Q84	DRACULA FACE 17	R. RAMP: DOUBLE 27	LEFT DRAIN 37	MIST MULTIBALL 47	L. RAMP ENTER 57	DRACULA "U" 67	MIDDLE 3-BANK MIDDLE 77	LAUNCH BALL 87
8 Red-Grey J133-9 Q83	R. RAMP: 2 MILLION 18	R. RAMP: 1.5 MILLION 28	LEFT RETURN 38	DRACULA "D" 48	L. RAMP LOCK 58	JET INSERT 68	MIDDLE 3-BANK RIGHT 78	GAME START 88

J1XX = Power Driver Board

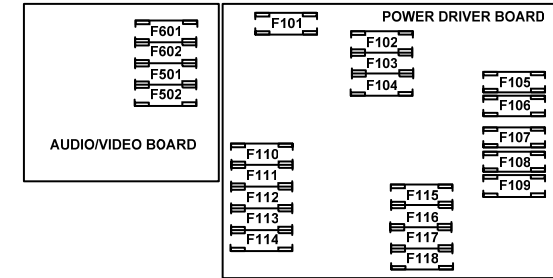
SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	White → Green ←								
		1 Green-Brown J207-1 U20-18	2 Green-Red J207-2 U20-17	3 Green-Orange J207-3 U20-16	4 Green-Yellow J207-4 U20-15	5 Green-Black J207-5 U20-14	6 Green-Blue J207-6 U20-13	7 Green-Violet J207-7 U20-12	8 Green-Grey J207-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J209-1 U18-11	NOT USED	SLAM TILT 21	UNDER SHOOTER RAMP 31	TROUGH 1-BALL 41	OPTO TOP-RIGHT LANE 51	LEFT JET 61	OPTO CASTLE POPPER 71	MAGNET LEFT 81	BLACK-GREEN J906-1 LOWER RIGHT E.O.S. SWITCH F1
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J209-2 U18-9	NOT USED	COIN DOOR CLOSED 22	NOT USED 32	TROUGH 2-BALLS 42	OPTO MAGNET LEFT POCKET 52	RIGHT JET 62	OPTO COFFIN POPPER 72	BALL ON MAGNET 82	BLUE-VIOLET J906-2 LOWER RIGHT FLIPPER OPTO F2
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J209-3 U18-5	START BUTTON 13	TICKET OPTO. 23	NOT USED 33	TROUGH 3-BALLS 43	OPTO CASTLE 1 53	BOTTOM JET 63	OPTO LEFT RAMP ENTRY 73	MAGNET RIGHT 83	BLACK-BLUE J906-3 LOWER LEFT E.O.S. SWITCH F3
Orange-Yellow J205-4 4 th COIN CHUTE U17-9	4 White-Yellow J209-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	LAUNCH BALL 34	TROUGH 4-BALLS 44	OPTO CASTLE 2 54	LEFT SLING 64	NOT USED 74	LEFT RAMP SCORE 84	BLUE-GRAY J905-2 LOWER LEFT FLIPPER OPTO F4
Orange-Green J205-6 Normal Function Srv Crdts	5 White-Green J209-5 U19-11	LEFT DROP TARGET 15	TOP 3-LANE LEFT 25	LEFT DRAIN 35	NOT USED 45	OPTO WIRE RAMP POPPER 55	RIGHT SLING 65	NOT USED 75	LEFT RAMP DIVERTED 85	BLACK-VIOLET J906-4 UPPER RIGHT E.O.S. SWITCH F5
Orange-Blue J205-7 Normal Function Volume Dn	6 White-Blue J209-7 U19-9	LEFT DROP SCORE 16	TOP 3-LANE MIDDLE 26	LEFT RETURN 36	NOT USED 46	OPTO CRYPT POPPER 56	LEFT 3-BANK TOP 66	NOT USED 76	MIDDLE 3-BANK LEFT 86	BLACK-YELLOW J905-3 UPPER RIGHT FLIPPER OPTO F6
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J209-8 U19-5	SHOOTER LANE 17	TOP 3-LANE RIGHT 27	RIGHT RETURN 37	NOT USED 47	OPTO CASTLE 3 57	LEFT 3-BANK MIDDLE 67	RIGHT RAMP UP 77	MIDDLE 3-BANK MIDDLE 87	BLACK-GRAY J906-5 UPPER LEFT E.O.S. SWITCH F7
Orange-Grey J205-9 Normal Function Begin Test	8 White-Grey J209-9 U19-7	NOT USED 18	RIGHT RAMP SCORE 28	RIGHT DRAIN 38	OUTHOLE 48	MYSTERY HOLE 58	LEFT 3-BANK BOTTOM 68	NOT USED 78	MIDDLE 3-BANK RIGHT 88	BLACK-BLUE J905-5 UPPER LEFT FLIPPER OPTO F8

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

FUSE LIST

AUDIO/VIDEO BOARD			POWER DRIVER BOARD		
F501	-25V	T2.5A, 250V	F101	Regulated 12V	T0.63A, 250V
F502	+25V	T2.5A, 250V	F102	Solenoids #9 to #16	T4.0A, 250V
F601	+62V	T0.25A, 250V	F103	Solenoids #1 to #8	T4.0A, 250V
F602	-113V & -125V	T0.25A, 250V	F104	Solenoids #25 to #28	T4.0A, 250V
LINE FILTER			F105	+5V Logic	T4.0A, 250V
Foreign			F106	+18V Lamp Matrix	T5.0A, 250V
Domestic			F107	Flasher Secondary	T4.0A, 250V
			F108	Solenoid Secondary	T6.3A, 250V
			F109	Unregulated 12V	T4.0A, 250V
			F110	G.I. #5 White-Violet	T4.0A, 250V
			F111	G.I. #4 White-Green	T4.0A, 250V
			F112	G.I. #3 White-Yellow	T4.0A, 250V
			F113	G.I. #2 White-Orange	T4.0A, 250V
			F114	G.I. #1 White-Brown	T4.0A, 250V
			F115	+50V Flippers	T4.0A, 250V
			F116	+50V Flippers	T4.0A, 250V
			F117	+50V Flippers	T4.0A, 250V
			F118	+50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	AUTO PLUNGER	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-23-800	
02	KICKBACK	High Power	J133-2			Q68	J116-2			VIO-RED	AE-23-800	
03	2-WAY POPPER UP	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-23-800	
04	2-WAY POPPER DOWN	High Power	J133-2			Q67	J116-5			VIO-YEL	AE-23-800	
05	RAMP DIVERTER	High Power	J133-2			Q70	J116-6			VIO-GRN	AE-26-1500	
06	VOLCANO POPPER	High Power	J133-2			Q66	J116-7			VIO-BLU	AE-23-800	
07	KNOCKER	High Power		J133-2		Q69		J116-8		VIO-BLK		AE-23-800
08	TOP LOOP POST	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-26-1500	
09	TROUGH EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-26-1200	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-26-1200	
12	LEFT JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	RIGHT JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	BOTTOM JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	GORILLA RIGHT	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-25-1000	
16	GORILLA LEFT	Low Power	J133-3			Q45	J113-9			BRN-GRY	AE-25-1000	
17	AMY FLASHER	Flasher	J133-6	J134-5		Q28	J111-1	J112-1		BLK-BRN	#906	#906
18	LEFT RAMP FLASHER	Flasher	J133-6			Q32	J111-2			BLK-RED	#89	
19	2-WAY POPPER FLASHER	Flasher	J133-6			Q27	J111-3			BLK-ORG	#89	
20	SKILL SHOT FLASHER	Flasher	J133-6	J134-5		Q31	J111-4	J112-5		BLK-YEL	#89	#906
21	GRAY GORILLA FLASHERS	Flasher	J133-2	J134-5		Q26	J111-5	J112-6		BLU-GRN	#906	#906
22	MAP EJECT	Flasher	J133-1			Q30	J111-6			BLU-BLK	AE-26-1200	
23	LEFT GATE	Flasher	J133-1			Q25	J111-7			BLU-VIO	A-14406	
24	RIGHT GATE	Flasher	J133-1			Q29	J111-8			BLU-GRY	A-14406	
25	LOWER RIGHT FLASHER	Gen. Purpose	J133-6			Q16	J109-1			BLU-BRN	#89	#906
26	RIGHT RAMP FLASHER	Gen. Purpose	J133-6			Q15	J109-2			BLU-RED	#89	
27	VOLCANO FLASHERS	Gen. Purpose	J133-6	J134-5		Q14	J109-3	J107-4		BLU-ORG	#89(2)#906	#906
28	PRMTR DFNS FLASHERS	Gen. Purpose	J133-6	J134-5		Q13	J109-4	J107-5		BLU-YEL	#89	#906

General Illumination	Voltage Connections	Drive Xistor	Drive Connections	Drive Wire	Bulb Type						
					Playfield	Insert					
01	PLAYFIELD GORILLA	G.I.	J105-1	J106-1	Q5	J105-7	J106-7	WHT-BRN	#555		
02	PLAYFIELD TOP	G.I.	J105-2		Q4	J105-8		WHT-ORG	#44		
03	PLAYFIELD BOTTOM	G.I.	J105-3	J106-3	Q3	J105-9	J106-9	WHT-YEL	#44		
04	*BACKBOX STRING 1	G.I.		J106-5	Q2		J106-10	WHT-GRN		#555	
05	*BACKBOX STRING 2	G.I.		J106-6	J104-3	Q1	J106-11	J104-1	WHT-VIO		#555

Flipper Circuits	Voltage Connection	Drive Transistors	Drive Connections	Drive Wire	Coil Part No.	Coil Colors		
							Playfield	Power
29	LOWER RIGHT FLIPPER	Power	J119-1 (RED-GRN)	Q90	J120-13	YEL-GRN	FL-11629	BLUE
31	LOWER LEFT FLIPPER	Hold	J119-1 (RED-GRN)	Q92	J120-11	ORG-GRN	FL-11629	BLUE
32		Power	J119-4 (RED-BLU)	Q67	J120-9	YEL-BLU		
33	UPPER LEFT POST	Power	J119-6 (RED-VIO)	Q84	J120-7	YEL-VIO	AE-27-1200	
34	MYSTERY EJECT	Hold	J119-6 (RED-VIO)	Q86	J120-4	ORG-VIO	AE-26-1200	
35	UPPER LEFT FLIPPER	Power	J119-8 (RED-GRY)	Q81	J120-3	YEL-GRY	FL-11630	RED
36		Hold	J119-8 (RED-GRY)	Q83	J120-1	ORG-GRY		

J1XX = POWER DRIVER BOARD
 24-6549 = #44 BULB; 24-8704 = #89 BULB; 24-8768 = #555 BULB; 24-8802 = #906 BULB;
 *These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column	Yellow (B+) → Red							
	1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-8 Q97
1 Red-Brown J125-1 Q104	(C)ONGO	ZI(N)J	AUTOFIRE	DIAMOND LEFT LOOP	LEFT RAMP 1	DIAMOND INNER LOOP	"TRAVI"	(H)IPPO
2 Red-Black J125-2 Q108	C(O)NGO	ZIN(J)	RIGHT RAMP EXTRA BALL	"WE ARE"	LEFT RAMP 2	(G)RAY	"COM"	H(I)PPO
3 Red-Orange J125-4 Q103	CO(N)GO	JET EXTRA COLLECT	RIGHT RAMP "COLLECT"	LEFT LOOP EXTRA BALL	LEFT RAMP 3	G(R)AY	"MINE SHAFT"	HI(P)PO
4 Red-Yellow J125-5 Q107	CON(G)O	JUNGLE JACKPOT	DIAMOND RIGHT RAMP	LEFT LOOP "LOCK"	DIAMOND LEFT RAMP	GR(A)Y	UPPER LOOP "LOCK"	HIP(P)O
5 Red-Green J125-6 Q102	CONG(O)	SKILL FIRE	LEFT EJECT EYE	LEFT BANK BOTTOM	LEFT RAMP JACKPOT	GRA(Y)	DIAMOND UPPER LOOP	HIPP(O)
6 Red-Blue J125-7 Q106	(A)MY	"YOU"	DIAMOND LEFT EJECT	"SKILL SHOT"	(Z)INJ	WATCHING	SATELLITE RIGHT	SHOOT AGAIN
7 Red-Violet J125-8 Q101	A(M)Y	"MAP"	"MYSTERY"	LEFT BANK CENTER	Z(I)NJ	SATELLITE LEFT	SATELLITE CENTER	NOT USED
8 Red-Grey J125-9 Q105	AM(Y)	DIAMOND RIGHT EJECT	RIGHT RAMP JACKPOT	LEFT BANK TOP	"KICKBACK"	"SUPER SCORE"	PERIMETER DEFENSE	START BUTTON

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	White → Green								FLIPPER GROUNDED SWITCHES	
		1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11		
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	D1	1 White-Brown J208-1 U18-11	INNER LEFT LOOP	SLAM TILT	TROUGH EJECT	LOCK BALL 1	"TRAVI"	LEFT SLINGSHOT	(A)MY	NOT USED	Black-Green J208-13 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	D2	2 White-Red J208-2 U18-9	UPPER LOOP	COIN DOOR CLOSED	TROUGH BALL 1	LOCK BALL 2	"COM"	RIGHT SLINGSHOT	A(M)Y	NOT USED	Blue-Violet J212-12 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	D3	3 White-Orange J208-3 U18-5	START BUTTON	NOT USED	TROUGH BALL 2	LOCK BALL 3	2-WAY POPPER	LEFT JET BUMPER	AM(Y)	NOT USED	Black-Blue J208-12 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4TH COIN CHUTE U17-9	D4	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	"MINE SHAFT"	"WE ARE" STANDUP TARGET	RIGHT JET BUMPER	(C)ONGO	NOT USED	Blue-Gray J212-11 Lower Left Flipper Opto
Orange-Green J205-6 U16-9 Normal Function Srv Crdts	D5	5 White-Green J208-5 U19-11	JET EXIT	RIGHT EJECT RUBBER	TROUGH BALL 4	LEFT LOOP	WATCHING STANDUP TARGET	BOTTOM JET BUMPER	C(O)NGO	NOT USED	Black-Violet J208-11 Upper Right Flipper E.O.S.
Orange-Blue J205-7 U16-11 Normal Function Volume Dn	D6	6 White-Blue J208-7 U19-9	LEFT OUTLANE	LEFT RETURN LANE	VOLCANO STACK	LEFT BANK TOP	PERIMETER DEFENSE	NOT USED	CO(N)GO	NOT USED	Black-Yellow J212-10 Upper Right Flipper Opto
Orange-Violet J205-8 U16-7 Normal Function Volume Up	D7	7 White-Violet J208-8 U19-5	RIGHT RETURN LANE	RIGHT OUTLANE	"MYSTERY" EJECT	LEFT BANK CENTER	LEFT RAMP ENTER	RIGHT RAMP ENTER	CON(G)O	NOT USED	Black-Gray J208-10 Upper Left Flipper E.O.S.
Orange-Grey J205-9 U16-5 Normal Function Begin Test	D8	8 White-Grey J208-9 U19-7	SHOOTER LANE	"YOU" STANDUP TARGET	RIGHT EJECT	LEFT BANK BOTTOM	LEFT CAPTIVE BALL	RIGHT RAMP EXIT	CONG(O)	NOT USED	Black-Blue J212-9 Upper Left Flipper Opto

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

The Getaway (50004)

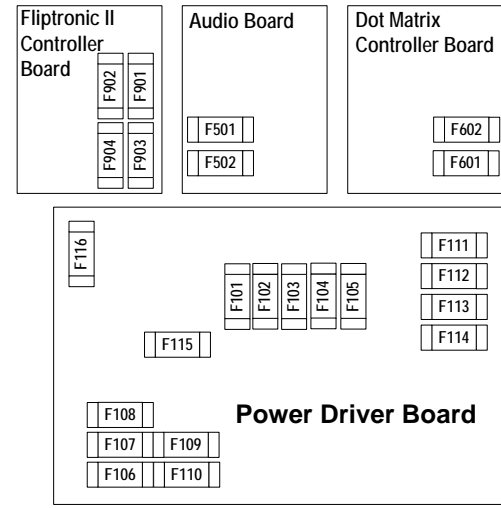
FUSE LIST

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB Not Used
F102	+50V DC General (Right Flipper)	3A, 250V, SB Not Used
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Switch Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB

Audio Board		
F501	-25V Circuit	3A, 250V, SB
F502	+25V Circuit	3A, 250V, SB

Dot Matrix Controller Board		
F601	+62V Circuit	3/8A, 250V, FB
F602	-113V & -125V Circuits	3/8A, 250V, FB

LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	Diverter High	High Power	J107-3			Q82	J130-1			VIO-BRN	A-14701	
02	Up Ramp	High Power	J107-3			Q80	J130-2			VIO-RED	AE-26-1200	
03	Down Ramp	High Power	J107-3			Q78	J130-4			VIO-ORG	SM1-28-900-DC	
04	Locker (Disappearing Post)	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-26-1200	
05	Left Slingshot	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-26-1500	
06	Right Slingshot	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-26-1500	
07	Knocker	High Power		J107-3		Q68	J130-8			VIO-BLK	AE-23-800	
08	Kickback	High Power	J107-3			Q70	J130-9			VIO-GRY	AE-23-800	
09	Eject Hole	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	Diverter Low	Low Power	J107-3			Q56	J127-3			BRN-RED	A-14701	
11	Ball Release (Trough)	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-27-1200	
12	Plunger Kicker	Low Power	J107-2			Q52	J127-5			BRN-YEL	A-14789	
13	Top Jet Bumper	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	Left Jet Bumper	Low Power	J107-2			Q48	J127-7			BRN-BLU	AE-26-1200	
15	Bottom Jet Bumper	Low Power	J107-2			Q46	J127-8			BRN-VIO	AE-26-1200	
16	Outhole	Low Power	J107-2			Q44	J127-9			BRN-GRY	AE-26-1200	
17	Right Bank Flasher	Flasher	J107-6			Q42	J126-1			BLK-BRN	#89	#906
18	Supercharger Flasher	Flasher	J107-6			Q40	J126-2	J125-2		BLK-RED		#906
19	Left Slingshot Flasher	Flasher	J107-6			Q38	J126-3	J125-3		BLK-ORG	#89	#906
20	Free Ride Flasher	Flasher	J107-6			Q36	J126-4			BLK-YEL		#906
21	Left Ramp Flasher	Flasher	J107-6			Q28	J126-5	J125-6		BLU-GRN	#89	#906
22	Left Bank Flasher	Flasher	J107-6			Q30	J126-6			BLU-BLK	#89	-
23	Flipper Flasher	Flasher	J107-6			Q34	J126-7	J125-8		BLU-VIO	#89	#906
24	Right Slingshot Flasher	Flasher	J107-6			Q32	J126-8	J125-9		BLU-GRY	#89	#906
25	Enable 1	Low Power	J107-1			Q26	J122-1			BLU-BRN	A-15685	
26	Enable 2	Low Power	J107-1			Q24	J122-2			BLU-RED	A-15685	
27	Revolving Lamp	Low Power			J106-5	Q22	J122-4		J123-4	BLU-ORG	14-7971	
28	Enable 3	Low Power	J107-1			Q20	J122-4			BLU-YEL	A-15685	

General Illumination	Voltage Connections	Drive Xistor	Drive Connections	Drive Wire	Bulb Type	
					Playfield	Backbox
01	Playfield G.I.	G.I.	J120-1	Q18	J120-7	#555 #555
02	Playfield G.I.	G.I.	J120-2	Q10	J120-8	#555 #555
03	Insert G.I.	G.I.	J120-3	Q14	J121-9	#555 #555
04	Insert G.I.	G.I.	J121-5	Q16	J121-10	#555 #555
05	Insert G.I.	G.I.	J121-6	Q12	J121-11	#555 #555

Flipper Circuits	Playfield Voltage Connection	Drive Transistors Power Hold	Playfield Drive Connections	Drive Wire Colors Power Hold	Coil Part No.	Coil Colors
LOWER RIGHT FLIPPER	Flipper	J907-8, 9 (BLU-YEL)	Q4 Q11	J902-11, 13	BLU-VIO ORG-GRN	FL-15629 BLUE
UPPER RIGHT FLIPPER	Flipper	J907-4, 5 (BLU-YEL)	Q2 Q7	J902-4, 6	BLK-BLU ORG-VOI	FL-11630 RED

LAMP MATRIX

Column	Red ← Yellow (B+) →							
	1 Yellow-Brown J137-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J137-7 Q92	8 Yellow-Gray J137-8 Q91
1 Red-Brown J133-1 Q90	FREEWAY 1	2X	TOP RED	TACH 1	SHOOT AGAIN	RIGHT RETURN LANE	4 TH GEAR	TACH 9
2 Red-Black J133-2 Q89	FREEWAY 2	4X	TOP YELLOW	TACH 2	KICKBACK	LEFT RETURN LANE	5 TH GEAR	TACH 10
3 Red-Orange J133-4 Q88	FREEWAY 3	HOLD BONUS	TOP GREEN	TACH 3	TACH 11	SIX BANK BOTTOM	STOP LIGHT RED	MIDDLE RED
4 Red-Yellow J133-5 Q87	FREEWAY 4	6X	RIGHT FREEWAY	TACH 4	TACH 12	SIX BANK MIDDLE	STOP LIGHT YELLOW	MIDDLE YELLOW
5 Red-Green J133-6 Q86	FREEWAY 5	8X	SPECIAL	TACH 5	TACH 13	SIX BANK TOP	STOP LIGHT GREEN	MIDDLE GREEN
6 Red-Blue J133-7 Q85	SPEED	GET AWAY	VIDEO MODE	BOTTOM RED	TACH 14	SUPER CHARGER	1 ST GEAR	TACH 6
7 Red-Violet J133-8 Q84	LEFT FREEWAY	SPEED MILLIONS	RANDOM LAMP	BOTTOM YELLOW	TACH 15	RED LINE MANIA	2 ND GEAR	TACH 7
8 Red-Grey J133-9 Q83	LOCK	SUPER JACKPOT	EXTRA BALL	BOTTOM GREEN	SHIFT	START BUTTON	3 RD GEAR	TACH 8

J1XX = Power Driver Board

SWITCH MATRIX

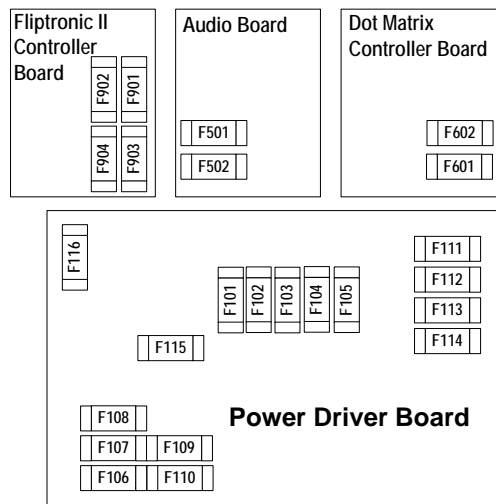
DEDICATED GROUNDED SWITCHES	Column	White → Green ←								FLIPPER GROUNDED SWITCHES
		1 Green-Brown J207-1 U20-18	2 Green-Red J207-2 U20-17	3 Green-Orange J207-3 U20-16	4 Green-Yellow J207-4 U20-15	5 Green-Black J207-5 U20-14	6 Green-Blue J207-6 U20-13	7 Green-Violet J207-7 U20-12	8 Green-Grey J207-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J209-1 U18-11	NOT USED	SLAM TILT	LEFT SLING	TOP YELLOW	TOP GREEN	TOP JET	TOP LOOP	OPTO 1	BLACK-GREEN J906-1 LOWER RIGHT E.O.S. SWITCH
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J209-2 U18-9	NOT USED	COIN DOOR CLOSED	RIGHT SLING	MIDDLE YELLOW	MIDDLE GREEN	LEFT JET	MIDDLE LOOP	OPTO 2	BLUE-VIOLET J905-1 LOWER RIGHT FLIPPER BUTTON
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J209-3 U18-5	START BUTTON	TICKET OPTO.	GEAR SHIFTER LOW	BOTTOM YELLOW	BOTTOM GREEN	BOTTOM JET	BOTTOM LOOP	OPTO 3	BLACK-BLUE J906-3 LOWER LEFT E.O.S. SWITCH
Orange-Yellow J205-4 4 TH COIN CHUTE U17-9	4 White-Yellow J209-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	GEAR SHIFTER HIGH	RIGHT BANK BOTTOM	RAMP DOWN	NOT USED	TOP LOCK	OPTO MADE LOOP	BLUE-GRAY J905-2 LOWER LEFT FLIPPER BUTTON
Orange-Green J205-6 Normal Function Srv Crdts	5 White-Green J209-5 U19-11	LEFT FREEWAY BOTTOM	LEFT OUTLANE	NOT USED	RIGHT BANK MIDDLE	OUTHOLE	MADE UP/DOWN RAMP	MIDDLE LOCK	ENTER LEFT RAMP	BLACK-VIOLET J906-4 UPPER RIGHT E.O.S. SWITCH
Orange-Blue J205-7 Normal Function Volume Dn	6 White-Blue J209-7 U19-9	LEFT FREEWAY TOP	LEFT FLIPPER LANE	TOP RED	RIGHT BANK TOP	LEFT TROUGH	NOT USED	BOTTOM LOCK	LEFT BANK BOTTOM	BLACK-YELLOW J905-3 UPPER RIGHT FLIPPER BUTTON
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J209-8 U19-5	RIGHT FREEWAY BOTTOM	RIGHT FLIPPER LANE	MIDDLE RED	NOT USED	CENTER TROUGH	MADE LEFT RAMP	EJECT HOLE	LEFT BANK MIDDLE	BLACK-GRAY J906-5 UPPER LEFT E.O.S. SWITCH
Orange-Grey J205-9 Normal Function Begin Test	8 White-Grey J209-9 U19-7	RIGHT FREEWAY TOP	RIGHT OUTLANE	BOTTOM RED	NOT USED	RIGHT TROUGH	NOT USED	SHOOTER	LEFT BANK TOP	BLACK-BLUE J905-5 UPPER LEFT FLIPPER BUTTON

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

FUSE LIST

INDIANA JONES (50017)

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB
F102	+50V DC General (Right Flipper)	3A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Lamp Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V	3A, 250V, SB
F502	+25V	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V	3/8A, 250V, FB
F602	-113V & -125V	3/8A, 250V, FB
LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Coil/Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	BALL POPPER	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-26-1200	Insert
02	BALL LAUNCH	High Power	J107-3			Q80	J130-2			VIO-RED	AE-23-800	
03	TOTEM DROP UP	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-26-1200	
04	BALL RELEASE	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-26-1500	
05	CENTER DROP BANK	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-26-1200	
06	IDOL RELEASE	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-26-1500	
07	KNOCKER	High Power	J107-3			Q68	J130-8			VIO-BLK	AE-23-800	
08	LEFT EJECT	High Power	J107-3			Q70	J130-9			VIO-GRY	AE-26-1200	
09	LEFT JET BUMPER	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	RIGHT JET BUMPER	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-26-1200	
11	BOTTOM JET BUMPER	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-26-1200	
12	LEFT SLINGSHOT	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-27-1200	
13	RIGHT SLINGSHOT	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-27-1200	
14	LEFT CONTROL GATE	Low Power	J107-2			Q48	J127-7			BRN-BLU	A-14406	
15	RIGHT CONTROL GATE	Low Power	J107-2			Q46	J127-8			BRN-VIO	A-14406	
16	TOTEM DROP DOWN	Low Power	J107-2			Q44	J127-9			BRN-GRY	SM1-26-600	
17	ETERNAL LIFE	Flasher	J107-6	J106-5		Q42	J126-1	J125-1		BLK-BRN	#906	#906 (3)
18	LIGHT JACKPOT	Flasher	J107-6			Q40	J126-2			BLK-RED	#906	
19	SUPER JACKPOT	Flasher	J107-6			Q38	J126-3			BLK-ORG	#89	
20	JACKPOT	Flasher	J107-6	J106-5		Q36	J126-4	J125-5		BLK-YEL	#89	#906 (2)
21	PATH OF ADVENTURE	Flasher	J107-6	J106-5		Q28	J126-5	J125-6		BLU-GRN	#89	#906 (4)
22	MINI MOTOR LEFT	Low Power	J118-2			Q30	J126-6			BLU-BLK		
23	MINI MOTOR RIGHT	Low Power	J118-2			Q34	J126-7			BLU-VIO	14-7988	
24	PLANE GUN LEDS	Flasher	J118-2	J106-5		Q32	J126-8			BLU-GRY	A-16834	
25	DOGFIGHT HURRY UP	Gen. Purpose	J107-6			Q26	J122-1			BLU-BRN	#89	
26	RIGHT RAMP	Gen. Purpose	J107-6	J106-5		Q24	J122-2	J124-2		BLU-RED	#89 (3)	#906
27	LEFT RAMP	Gen. Purpose	J107-6	J106-5		Q22	J122-3	J124-3		BLU-ORG	#89	#906
28	SUBWAY RELEASE	Gen. Purpose	J107-1			Q20	J122-4			BLU-YEL	AE-26-1500	
37	LEFT SIDE FLASHER	Low Power	J107-6	J106-5		Q16	* J4-2	J4-2		BRN-WHT	#89 (2)	#906
38	RIGHT SIDE FLASHER	Low Power	J107-6	J106-5		Q15	* J4-4	J4-4		BLK-WHT	#89 (2)	#906
39	SPECIAL FLASHER	Low Power	J107-6			Q14	* J4-5			ORG-WHT	#89 (2)	
40	TOTEM MULTIBALL	Low Power	J107-6			Q13	* J4-6			YEL-WHT	#89	
41	JACKPOT MULTIPLIER FLSH	Low Power	J107-6			Q9	* J3-2			GRN-WHT	#89	
42	WHEEL MOTOR	Low Power	J118-2			Q10	* J3-3			BLU-WHT	14-7982	
General Illumination			Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
			Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	TOP PLAYFIELD	G.I.	J121-1			Q18	J121-7			WHT-BRN	#44	
02	BOTTOM PLAYFIELD	G.I.	J121-2			Q10	J121-8			WHT-ORG	#44	
03	INSERT TOP	G.I.		J120-3		Q14		J120-9		WHT-YEL		#555
04	INSERT BOTTOM	G.I.		J120-4		Q16		J120-10		WHT-GRN		#555
05	RETURN LANE / COIN	G.I.	J121-6		J119-3	Q12	J121-11		J119-1	WHT-VIO	#44	
Flipper Circuits			Playfield Voltage Connection		Drive Transistors		Playfield Drive Connections		Drive Wire Colors		Coil Part No. / Colors	
			Power	Hold	Power	Hold	Power	Hold	Power	Hold	Part No.	Colors
29	LOWER RIGHT FLIPPER		J907-9 (BLU-YEL)		Q4		J902-13		BLU-VIO		FL-11629	BLUE
30			J907-9 (BLU-YEL)		Q11		J902-11		ORG-GRN			
31	LOWER LEFT FLIPPER		J907-7 (GRY-YEL)		Q3		J902-9		BLU-GRY		FL-11629	BLUE
32			J907-7 (GRY-YEL)		Q9		J902-7		ORG-BLU			
33	DIVERTER		J907-1 (BLU-YEL)		Q2		J902-6		BLK-YEL		FL-11753-1	YELLOW
34			J907-1 (BLU-YEL)		Q7		J902-4		ORG-VIO			
35	TOP LOCKUP		J907-4 (GRY-YEL)		Q1		J902-3		BLK-BLU		A-15943	BROWN
36			J907-4 (GRY-YEL)		Q5		J902-1		ORG-GRY			

* From 8 Driver PCB, A-16100

** From D.C. Motor Control Assembly, A-16120

LAMP MATRIX

Column	Yellow (B+) → Red							
	1 Yellow-Brown J137-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J137-7 Q92	8 Yellow-Grey J137-9 Q91
1 Red-Brown J133-1 Q90	MODE START 11	TANK CHASE 21	LEFT RAMP ARROW 31	MINE CART 41	CHOOSE WISELY 51	(I)NDY 61	MINI TOP LEFT 71	MINI MIDDLE BOTTOM LEFT 81
2 Red-Black J133-2 Q89	HAND OF FATE 12	ADVEN(T)URE LIGHT 22	CASTLE GRUNEWALD 32	ARK JACKPOT 42	RIGHT PLANE TOP 52	(N)DY 62	MINI TOP RIGHT 72	MINI MIDDLE BOTTOM RIGHT 82
3 Red-Orange J133-4 Q88	EJECT EXTRA BALL 13	ADV(E)NTURE LIGHT 23	LEFT PLANE TOP 33	RAVEN BAR 43	ROPE BRIDGE 53	IN(D)Y 63	MINI MIDDLE TOP LEFT 73	MINI BOTTOM LEFT 83
4 Red-Yellow J133-5 Q87	AD(V)ENTURE LIGHT 14	ADVE(N)TURE LIGHT 24	MONKEY BRAINS 34	RIGHT PLANE MIDDLE 44	ADVENT(U)RE LIGHT 54	IND(Y) 64	MINI MIDDLE TOP RIGHT 74	MINI BOTTOM RIGHT 84
5 Red-Green J133-6 Q86	A(D)VENTURE LIGHT 15	STEAL THE STONES 25	LEFT PLANE MIDDLE 35	BONUS 6 X 45	ADVENTU(R)E LIGHT 55	WILLIE 65	MINI ARROW TOP 75	MINI BOTTOM ARROW 85
6 Red-Blue J133-7 Q85	(A)DVENTURE LIGHT 16	GRAIL JACKPOT 26	SALLAH 36	RIGHT PLANE BOTTOM 46	ADVENTUR(E) LIGHT 56	BONUS 2 X 66	MARION 76	TOTEM TOP ARROW 86
7 Red-Violet J133-8 Q84	SHOOT AGAIN 17	STREETS OF CAIRO 27	BONUS 4 X 37	WELL OF SOULS 47	THE 3 CHALLENGES 57	SHORTY 67	BONUS 8 X 77	CENTER LOCK 87
8 Red-Grey J133-9 Q83	GET THE IDOL 18	STONES JACKPOT 28	LEFT PLANE BOTTOM 38	LEFT LOOP 48	RIGHT LOOP 58	RIGHT RAMP ARROW 68	DR. JONES 78	START BUTTON 88

J1XX = Power Driver Board

SWITCH MATRIX

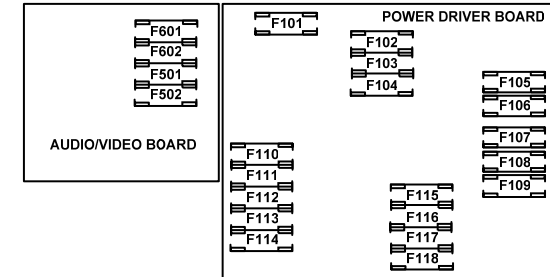
Column	Green → White								FLIPPER GROUNDED SWITCHES		
	1 Green-Brown J207-1 U20-18	2 Green-Red J207-2 U20-17	3 Green-Orange J207-3 U20-16	4 Green-Yellow J207-4 U20-15	5 Green-Black J207-5 U20-14	6 Green-Blue J207-6 U20-13	7 Green-Violet J207-7 U20-12	8 Green-Grey J207-9 U20-11		9 Grey-White *J5-4 Q11	
Orange-Brown J205-1 LEFT COIN CHUTE	1 White-Brown J209-1 U18-11	SINGLE DROP TARGET 11	SLAM TILT 21	LEFT EJECT 31	LEFT RAMP ENTER 41	ADVENT-(U)RE TARGET 51	(A)DVENT-URE TARGET 61	CAPTIVE BALL FRONT 71	TROUGH 6 81	WHEEL POSITION 1 91	Black-Green J906-1 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE	2 White-Red J209-2 U18-9	BUY-IN BUTTON 12	COIN DOOR CLOSED 22	EXIT IDOL 32	RIGHT RAMP ENTER 42	ADVENT-(U)RE TARGET 52	A(D)VENT-URE TARGET 62	MINI TOP HOLE 72	TROUGH 5 82	WHEEL POSITION 2 92	Black-Violet J905-1 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE	3 White-Orange J209-3 U18-5	START BUTTON 13	TICKET OPTO 23	LEFT SLINGSHOT 33	TOP IDOL ENTER 43	ADVENT-(U)RE TARGET 53	AD(V)ENT-URE TARGET 63	MINI BOTTOM HOLD 73	TROUGH 4 83	WHEEL POSITION 3 93	Black-Blue J906-3 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4 TH COIN CHUTE	4 White-Yellow J209-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	GUN TRIGGER 34	RIGHT POPPER 44	LEFT LOOP TOP 54	CAPTIVE BALL BACK 64	RIGHT RAMP MADE 74	TROUGH 3 84	MINI PLAYFIELD LEFT LIMIT 94	Black-Gray J905-2 Lower Left Flipper Opto
Orange-Green J205-6	5 White-Green J209-5 U19-11	LEFT OUTLANE 15	(I)NDY LANE 25	LEFT JET 35	CENTER ENTER 45	LEFT LOOP BOTTOM 55	MINI TOP LEFT 65	MINI TOP RIGHT 75	TROUGH 2 85	MINI PLAYFIELD RIGHT LIMIT 95	Black-Violet J906-4 Upper Right Flipper E.O.S.
Orange-Blue J205-7	6 White-Blue J209-7 U19-9	LEFT RETURN LANE 16	(N)DY LANE 26	RIGHT JET 36	TOP POST 46	RIGHT LOOP TOP 56	MINI MIDDLE TOP LEFT 66	MINI MIDDLE TOP RIGHT 76	TROUGH 1 86		Black-Yellow J905-3 Upper Right Flipper Opto
Orange-Violet J205-8	7 White-Violet J209-8 U19-5	RIGHT RETURN LANE 17	IN(D)Y LANE 27	BOTTOM JET 37	SUBWAY LOCKUP 47	RIGHT LOOP BOTTOM 57	MINI MIDDLE BOTTOM LEFT 67	MINI MIDDLE BOTTOM RIGHT 77	TOP TROUGH 87		Black-Gray J906-5 Upper Left Flipper E.O.S.
Orange-Grey J205-9	8 White-Grey J209-9 U19-7	RIGHT OUTLANE TOP 18	IND(Y) LANE 28	CENTER STANDUP 38	RIGHT SLINGSHOT 48	RIGHT OUTLANE BOTTOM 58	MINI BOTTOM LEFT 68	MINI BOTTOM RIGHT 78	SHOOTER 88		Black-Blue J905-5 Upper Left Flipper Opto

J2XX = CPU Board; J9XX = Fliptronic II Board;

= OPTO, TYPICALLY CLOSED *Located on 8 driver PCB, A-16100, in backbox

FUSE LIST

AUDIO/VIDEO BOARD		POWER DRIVER BOARD	
F501 -25V	T2.5A, 250V	F101 Regulated 12V	T0.63A, 250V
F502 +25V	T2.5A, 250V	F102 Solenoids #9 to #16	T4.0A, 250V
F601 +62V	T0.25A, 250V	F103 Solenoids #1 to #8	T4.0A, 250V
F602 -113V & -125V	T0.25A, 250V	F104 Solenoids #25 to #28	T4.0A, 250V
		F105 +5V Logic	T4.0A, 250V
		F106 +18V Lamp Matrix	T5.0A, 250V
		F107 Flasher Secondary	T4.0A, 250V
		F108 Solenoid Secondary	T6.3A, 250V
		F109 Unregulated 12V	T4.0A, 250V
		F110 G.I. #5 White-Violet	T4.0A, 250V
		F111 G.I. #4 White-Green	T4.0A, 250V
		F112 G.I. #3 White-Yellow	T4.0A, 250V
		F113 G.I. #2 White-Orange	T4.0A, 250V
		F114 G.I. #1 White-Brown	T4.0A, 250V
		F115 +50V Flippers	T4.0A, 250V
		F116 +50V Flippers	T4.0A, 250V
		F117 +50V Flippers	T4.0A, 250V
		F118 +50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.

SOLENOID/FLASHER TABLE

Sol. No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	AUTO PLUNGER	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-23-800	
02	TROUGH EJECT	High Power	J133-2			Q68	J116-2			VIO-RED	AE-26-1500	
03	LEFT POPPER	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-26-1200	
04	CASTLE	High Power	J133-2			Q67	J116-5			VIO-YEL	AE-26-1500	
05	CASTLE GATE POWER	High Power	J133-2			Q70	J116-6			VIO-GRN	A-20099	
06	CASTLE GATE HOLD	High Power				Q66	J116-7			VIO-BLU		
07	KNOCKER	High Power		J133-2		Q69		J116-8		VIO-BLK	AE-23-800	
08	CATAPULT	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-23-800	
09	RIGHT EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-27-1200	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-26-1200	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-26-1200	
12	LEFT JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	BOTTOM JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	RIGHT JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	TOWER DIVERTER PWR	Low Power	J133-3			Q41	J113-8			BRN-VIO	A-20099	
16	TOWER DIVERTER HOLD	Low Power		J134-5		Q45	J113-9			BRN-GRY		
17	LEFT SIDE LOW FLSHRS	Flasher	J133-6	J134-5		Q28	J111-1	J112-1		BLK-BRN	#906	#906
18	LEFT RAMP FLASHERS	Flasher	J133-6	J134-5		Q32	J111-2	J112-2		BLK-RED	#89	#906
19	LEFT SIDE HIGH FLASHERS	Flasher	J133-6	J134-5		Q27	J111-3	J112-3		BLK-ORG	#906	#906
20	RIGHT SIDE HIGH FLASHERS	Flasher	J133-6			Q31	J111-4	J112-4		BLK-YEL	#906	#906
21	RIGHT RAMP FLASHERS	Flasher	J133-6			Q26	J111-5			BLU-GRN	#906	#89
22	CASTLE RIGHT SIDE FLASHERS	Flasher	J133-6			Q30	J111-6			BLU-BLK	#906 (2)	
23	RIGHT SIDE LOW FLASHERS	Flasher	J133-6			Q25	J111-7			BLU-VIO	#906	#89
24	MOAT FLASHERS	Flasher	J133-6			Q29	J111-8			BLU-GRY	#89 (2)	
25	CASTLE LEFT SIDE FLASHS	Gen. Purpose	J133-6			Q16	J109-1	J108-1		BLU-BRN	#906 (2)	
26	*TOWER LOCK POST	Gen. Purpose	J133-1			Q15	J109-2	J108-2		BLU-RED	AE-27-1200	
27	*RIGHT GATE	Gen. Purpose	J133-1			Q14	J109-3	J108-3		BLU-ORG	A-14406	
28	*LEFT GATE	Gen. Purpose	J133-1			Q13	J109-4			BLU-YEL	A-14406	

General Illumination	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Bulb Type	
		Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	BOTTOM PLAYFIELD	G.I.	J106-1	J105-1	Q5	J106-7	J105-7		WHT-BRN	#44	#555
02	MIDDLE PLAYFIELD	G.I.		J105-2	Q4		J105-8		WHT-ORG		#555
03	TOP PLAYFIELD	G.I.		J105-3	Q3		J105-9		WHT-YEL		#555
04	**TOP INSERT	G.I.	J105-5		Q2	J106-10			WHT-GRN	#44	
05	**BOTTOM INSERT	G.I.	J105-6		Q1	J106-11		J104-1	WHT-VIO	#44	

Flipper Circuits	Solenoid Type	Voltage Connections		Drive Transistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
		Playfield	Power	Hold	Playfield	Power	Hold	Playfield	Power		
29	LOWER RIGHT FLIPPER	Power	J119-1 (RED-GRN)	Q90		J120-13		YEL-GRN		FL-11629	BLUE
30		Hold	J119-1 (RED-GRN)		Q92		J120-11		ORG-GRN		
31	LOWER LEFT FLIPPER	Power	J119-4 (RED-BLU)	Q67		J120-9		YEL-BLU		FL-11629	BLUE
32		Hold	J119-4 (RED-BLU)		Q69		J120-7		ORG-BLU		
33	LEFT TROLL	Power	J119-6 (RED-VIO)	Q84		J120-6		YEL-VIO		FL-11753	YELLOW
34		Hold	J119-6 (RED-VIO)		Q86		J120-4		ORG-VIO		
35	RIGHT TROLL	Power	J119-8 (RED-GRY)	Q81		J120-3		YEL-GRY		FL-11753	YELLOW
36		Hold	J119-8 (RED-GRY)		Q83		J120-1		ORG-GRY		

Motor Circuit	Solenoid Type	Voltage Connections	Drive Gates	Drive Connections	Drive Wire Color	Device Part Number
37	DRAWBRIDGE MOTOR	J139-2	U3A, U3B	J110-1	BRN-WHT	14-8015

J1XX = POWER DRIVER BOARD

*Tieback diodes for solenoids 26 through 28 are at J109-6, J109-8, and J109-9 respectively

**These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column	Yellow (B+) → Red							
	1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-8 Q97
1 Red-Brown J125-2 Q104	RIGHT BANK TOP 11	RIGHT LOOP JACKPOT 21	TROLLS 31	LEFT LOOP JACKPOT 41	CENTER ARROW 51	FRANCOIS D'GRIMM 61	HOWARD HURTZ 71	RIGHT OUTLANE 81
2 Red-Black J125-2 Q108	RIGHT BANK MIDDLE 12	RIGHT JOUST VICTORY 22	EXTRA BALL 32	LEFT JOUST VICTORY! 42	BATTLE FOR THE KINGDOM 52	KING OF PAYNE 62	MAGIC SHIELD 72	RIGHT RETURN 82
3 Red-Orange J125-4 Q103	RIGHT BANK BOTTOM 13	RIGHT CLASH! 23	MERLIN'S MAGIC 33	LEFT CLASH! 43	MASTER OF TROLLS 53	EARL OF EGO 63	SIR PSYCHO 73	LEFT RETURN 83
4 Red-Yellow J125-5 Q107	RIGHT RAMP JACKPOT 14	RIGHT CHARGE! 24	TROLL MADNESS 34	LEFT CHARGE! 44	DEFENDER OF DAMSELS 54	LEFT RAMP JACKPOT 64	DUKE OF BOURBON 74	LEFT OUTLANE 84
5 Red-Green J125-6 Q102	SAVE THE DAMSEL (2) 15	PATRON OF THE PEASANTS 25	DAMSEL MADNESS 35	CATAPULT JACKPOT 45	LEFT TOP LANE 55	REVOLTING PEASANTS 65	CASTLE LOCK 2 75	CASTLE LOCK 3 85
6 Red-Blue J125-7 Q106	DRAGON DEATH 16	CATAPULT ACE 26	PEASANT MADNESS 36	CATAPULT SLAM! 46	RIGHT TOP LANE 56	UGLY RIOT! 66	CASTLE LOCK 1 76	SHOOT AGAIN 86
7 Red-Violet J125-8 Q101	DRAGON SNACK 17	JOUST CHAMPION 27	CATAPULT MADNESS 37	BAM! 47	LEFT TROLL TARGET 57	ANGRY MOB! 67	SUPER JACKPOT 77	LAUNCH BUTTON 87
8 Red-Grey J125-9 Q105	DRAGON BREATH 18	CASTLE CRUSHER 28	JOUST MADNESS 38	WAM! 48	RIGHT TROLL TARGET 58	RABBLE ROUSER 68	SUPER JETS (2) 78	START BUTTON 88

J1XX = Power Driver Board

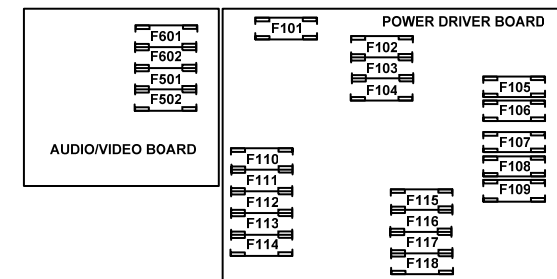
SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Green → White								FLIPPER GROUNDED SWITCHES
		1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J208-1 U18-11	LAUNCH BALL 11	SLAM TILT 21	TROUGH EJECT 31	MOAT ENTER 41	LEFT SLINGSHOT 51	LEFT RAMP ENTER 61	RIGHT BANK TOP 71	NOT USED 81	Black-Green J208-13 Lower Right Flipper E.O.S. F1
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J208-2 U18-9	CATAPULT TARGET 12	COIN DOOR CLOSED 22	TROUGH BALL 1 32	NOT USED 42	RIGHT SLINGSHOT 52	LEFT RAMP EXIT 62	RIGHT BANK MIDDLE 72	NOT USED 82	Blue-Violet J212-12 Lower Right Flipper Opto F2
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON 13	NOT USED 23	TROUGH BALL 2 33	NOT USED 43	LEFT JET BUMPER 53	RIGHT RAMP ENTER 63	RIGHT BANK BOTTOM 73	NOT USED 83	Black-Blue J208-12 Lower Left Flipper E.O.S. F3
Orange-Yellow J205-4 4 TH COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	TROUGH BALL 3 34	CASTLE LOCK 44	RIGHT JET BUMPER 54	RIGHT RAMP EXIT 64	LEFT TROLL UP 74	NOT USED 84	Blue-Gray J212-11 Lower Left Flipper Opto F4
Orange-Green J205-6 Normal Function U16-9 Srv Crdts	5 White-Green J208-5 U19-11	LEFT TROLL TARGET 15	RIGHT TROLL TARGET 25	TROUGH BALL 4 35	LEFT TROLL (UNDER PLAYFIELD) 45	MIDDLE JET BUMPER 55	LEFT LOOP LOW 65	RIGHT TROLL UP 75	NOT USED 85	Black-Violet J208-11 Upper Right Flipper E.O.S. F5
Orange-Blue J205-7 Normal Function Volume Dn	6 White-Blue J208-7 U19-9	LEFT OUTLANE 16	LEFT RETURN LANE 26	LEFT POPPER 36	RIGHT TROLL (UNDER PLAYFIELD) 46	DRAW-BRIDGE UP 56	LEFT LOOP HIGH 66	NOT USED 76	NOT USED 86	Black-Yellow J212-10 Upper Right Flipper Opto F6
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT RETURN LANE 17	RIGHT OUTLANE 27	CASTLE GATE 37	LEFT TOP LANE 47	DRAW-BRIDGE DOWN 57	RIGHT LOOP LOW 67	NOT USED 77	NOT USED 87	Black-Gray J208-10 Upper Left Flipper E.O.S. F7
Orange-Grey J205-9 Normal Function Begin Test	8 White-Grey J208-9 U19-7	SHOOTER LANE 18	RIGHT EJECT 28	CATAPULT 38	RIGHT TOP LANE 48	TOWER EXIT 58	RIGHT LOOP HIGH 68	NOT USED 78	NOT USED 88	Black-Blue J212-9 Upper Left Flipper Opto F8

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

FUSE LIST

AUDIO/VIDEO BOARD			POWER DRIVER BOARD			
F501 -25V	T2.5A, 250V		F101 Regulated 12V	T0.63A, 250V	F110 G.I. #5 White-Violet	T4.0A, 250V
F502 +25V	T2.5A, 250V		F102 Solenoids #9 to #16	T4.0A, 250V	F111 G.I. #4 White-Green	T4.0A, 250V
F601 +62V	T0.25A, 250V		F103 Solenoids #1 to #8	T4.0A, 250V	F112 G.I. #3 White-Yellow	T4.0A, 250V
F602 -113V & -125V	T0.25A, 250V		F104 Solenoids #25 to #28	T4.0A, 250V	F113 G.I. #2 White-Orange	T4.0A, 250V
			F105 +5V Logic	T4.0A, 250V	F114 G.I. #1 White-Brown	T4.0A, 250V
			F106 +18V Lamp Matrix	T5.0A, 250V	F115 +50V Flippers	T4.0A, 250V
			F107 Flasher Secondary	T4.0A, 250V	F116 +50V Flippers	T4.0A, 250V
			F108 Solenoid Secondary	T6.3A, 250V	F117 +50V Flippers	T4.0A, 250V
			F109 Unregulated 12V	T4.0A, 250V	F118 +50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	AUTO PLUNGER	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-24-900	
02	BRIDE POST	High Power	J133-2			Q68	J116-2			VIO-RED	AE-26-1500	
03	MUMMY COFFIN	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-27-1200	
04	NOT USED	High Power				Q67				VIO-YEL	--	
05	LEFT GATE	High Power	J133-2			Q70	J116-6			VIO-GRN	A-14406	
06	RIGHT GATE	High Power	J133-2			Q66	J116-7			VIO-BLU	A-14406	
07	NOT USED	High Power				Q69				VIO-BLK	--	
08	RAMP LOCK POST	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-27-1200	
09	TROUGH EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-26-1200	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-26-1200	
12	LEFT JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	RIGHT JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	BOTTOM JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	LEFT EJECT	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-30-2000	
16	RIGHT POPPER	Low Power	J133-3			Q45	J113-9			BRN-GRY	AE-25-1000	
17	WOLFMAN FLASHERS	Flasher	J133-6	J134-5		Q28	J111-1	J112-1		BLK-BRN	#906 (2)	#906
18	BRIDE FLASHERS	Flasher	J133-6	J134-5		Q32	J111-2	J112-2		BLK-RED	#89	#906
19	FRANKENSTEIN FLASHERS	Flasher	J133-6	J134-5		Q27	J111-3	J112-3		BLK-ORG	#906 (2)	#906
20	DRACULA COFFIN FLASHERS	Flasher	J133-6	J134-5		Q31	J111-4	J112-5		BLK-YEL	#89	#906
21	CREATURE FLASHERS	Flasher	J133-6			Q26	J111-5			BLU-GRN	#906 (2)	
22	JETS/MUMMY FLASHERS	Flasher	J133-6	J134-5		Q30	J111-6	J112-7		BLU-BLK	#906 (2)	#906
23	RIGHT POPPER FLASHER	Flasher	J133-6			Q25	J111-7			BLU-VIO	#906	
24	FRANK ARROW FLASHER	Flasher	J133-6			Q29	J111-8			BLU-GRY	#906	
25	MONSTERS OF ROCK FLSHR	Gen. Purpose	J133-6	J134-5		Q16	J109-1			BLU-BRN	#906	#906
26	WOLFMAN LOOP FLASHERS	Gen. Purpose	J133-6			Q15	J109-2	J108-1		BLU-RED	#906 (2)	
27	FRANKENSTEIN MOTOR	Gen. Purpose	J140-2			Q14	J109-3			BLU-ORG	14-8015	
28	UP/DOWN BANK MOTOR	Gen. Purpose	J140-2			Q13	J109-4			BLU-YEL	14-8015	

Flipper Circuits	Solenoid Type	Playfield Voltage Connection	Drive Xistors		Playfield Drive Connectors	Drive Wire Colors		Coil Part No.	Coil Colors
			Power	Hold		Power	Hold		
29		J119-1 (RED-GRN)	Q90		J120-13	YEL-GRN		FL-11629	BLUE
30	LOWER RIGHT FLIPPER	J119-1 (RED-GRN)		Q92	J120-11	ORG-GRN			
31		J119-4 (RED-BLU)	Q67		J120-9	YEL-BLU		FL-11629	BLUE
32	LOWER LEFT FLIPPER	J119-4 (RED-BLU)		Q69	J120-7	ORG-BLU			
33		J119-6 (RED-VIO)	Q84		J120-6	YEL-VIO		--	--
34	NOT USED	J119-6 (RED-VIO)		Q86	J120-4	ORG-VIO			
35		J119-8 (RED-GRY)	Q81		J120-3	YEL-GRY		--	--
36	NOT USED	J119-8 (RED-GRY)		Q83	J120-1	ORG-GRY			

Dracula Motor	Solenoid Type	Playfield Voltage Connection	Drive Gates		Playfield Drive Connectors	Drive Wire Colors		Device Part Number
			Power	Hold		Power	Hold	
37	DRACULA MOTOR FORWARD	J141-2	U3A, U3B		J110-1	BRN-WHT		14-8034
38	DRACULA MOTOR BACKWARD	J141-2	U3C, U3D		J110-3	ORG-WHT		

General Illumination	Solenoid Type	Voltage Connections			Drive Xistor	Voltage Connections			Drive Wire	Bulb Type	
		Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	BOTTOM PLAYFIELD	G.I.	J105-1		Q5	J105-7			WHT-BRN	#44	
02	TOP RIGHT PLAYFIELD	G.I.	J105-2		Q4	J105-8			WHT-ORG	#44	
03	TOP LEFT PLAYFIELD	G.I.	J105-3		Q3	J105-9			WHT-YEL	#44	
04	*TOP INSERT PANEL	G.I.		J106-5	Q2		J106-10		WHT-GRN		#555
05	*BOTTOM INSERT PANEL	G.I.		J106-6	Q1		J106-11	J104-1	WHT-VIO		#555

*These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J121-1 Q96	Yellow-Red J121-2 Q100	Yellow-Orange J121-3 Q95	Yellow-Black J121-4 Q99	Yellow-Green J121-5 Q94	Yellow-Blue J121-6 Q98	Yellow-Violet J121-7 Q93	Yellow-Grey J121-8 Q97
1 Red-Brown J125-1 Q104	MONSTER MOSH PIT	RIGHT RAMP ARROW	QUARTER MOON (2)	LEFT RETURN	GIUITAR	CREATURE	LEFT FRANK ARM	MUCK	
2 Red-Black J125-2 Q108	HALF MOON (2)	ROCK C.D.	LEFT BLUE TARGET	LEFT OUTLANE	DRUMS	BRIDE	LEFT FRANK LEG	SEAWEED	
3 Red-Orange J125-4 Q103	FRANK ARROW	RIGHT RETURN	TOMB TREASURE	THREE QUARTERS MOON (2)	BASS GUITAR	FRANKEN-STEIN	FRANK TORSO	ALGAE	
4 Red-Yellow J125-5 Q107	DRAC-ATTACK	FULL MOON FEVER (2)	DRACULA STANDUP TOP	RIGHT BLUE TARGET	KEYBOARD	MUMMY	FRANK HEAD	POND SCUM	
5 Red-Green J125-6 Q102	EXTRA BALL	RIGHT GARGLE	RIGHT TOP LANE	LEFT RAMP ARROW	MICRO-PHONE	WOLFMAN	RIGHT FRANK LEG	CENTER LOOP ARROW 2	
6 Red-Blue J125-7 Q106	MONSTERS OF ROCK	RIGHT WARM UP	CENTER TOP LANE	LEFT PRIMP	SAXOPHONE	DRACULA	RIGHT FRANK ARM	CENTER LOOP ARROW 1	
7 Red-Violet J125-8 Q101	MONSTER BASH	RIGHT PRIMP	LEFT TOP LANE	LEFT WARM UP	CENTER LOOP ARROW 3	RIGHT OUTLANE	LEFT LOOP ARROW	LAUNCH BUTTON	
8 Red-Grey J125-9 Q105	MUMMY MAYHEM	RIGHT LOOP ARROW	DRACULA STANDUP BOTTOM	LEFT GARGOYLE	CENTER BLUE TARGET	SHOOT AGAIN	NOT USED	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Row	1	2	3	4	5	6	7	8	FLIPPER GROUNDED SWITCHES
			Green-Brown J206-1 U20-18	Green-Red J206-2 U20-17	Green-Orange J206-3 U20-16	Green-White J206-4 U20-15	Green-Black J206-5 U20-14	Green-Blue J206-6 U20-13	Green-Violet J206-7 U20-12	Green-Grey J206-8 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J208-1 U18-11	LAUNCH BUTTON	SLAM TILT	TROUGH EJECT	NOT USED	LEFT SLINGSHOT	LEFT LOOP LOW	RIGHT RAMP ENTER	UP/DOWN BANK UP		BLACK-GREEN J208-13 LOWER RIGHT FLIPPER E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Black J208-2 U18-9	DRACULA STANDUP TOP	COIN DOOR CLOSED	TROUGH BALL 1	LEFT FLIPPER OPTO	RIGHT SLINGSHOT	LEFT LOOP HIGH	RIGHT RAMP EXIT	UP/DOWN BANK DOWN		BLUE-VIOLET J212-12 LOWER RIGHT FLIPPER OPTO
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON	TOMB TREASURE	TROUGH BALL 2	RIGHT FLIPPER OPTO	LEFT JET BUMPER	RIGHT LOOP LOW	RIGHT RAMP LOCK	FRANK TABLE DOWN		BLACK-BLUE J208-12 LOWER LEFT FLIPPER E.O.S.
Orange-Yellow J205-4 4TH COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	LEFT BLUE TARGET	RIGHT JET BUMPER	RIGHT LOOP HIGH	DRACULA POSITION 5	FRANK TABLE UP		BLUE-GRAY J212-11 LOWER LEFT FLIPPER OPTO
Orange-Green J205-6 U16-9 Normal Function Srv Crdts	5 White-Green J208-5 U19-11	DRACULA STANDUP BOTTOM	DRACULA TARGET	TROUGH BALL 4	CENTER BLUE TARGET	BOTTOM JET BUMPER	CENTER LOOP	DRACULA POSITION 4	LEFT UP/DOWN BANK TARGET		BLACK-VIOLET J208-11 UPPER RIGHT FLIPPER E.O.S.
Orange-Blue J205-7 U16-11 Normal Function Volume Dn	6 White-Blue J208-7 U19-9	LEFT OUTLANE	LEFT RETURN LANE	RIGHT POPPER	RIGHT BLUE TARGET	LEFT TOP LANE	LEFT RAMP ENTER	DRACULA POSITION 3	RIGHT UP/DOWN BANK TARGET		BLACK-YELLOW J212-10 UPPER RIGHT FLIPPER OPTO
Orange-Violet J205-8 U16-7 Normal Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT RETURN LANE	RIGHT OUTLANE	NOT USED	LEFT FLIPPER PROXIMITY SENSOR	CENTER TOP LANE	LEFT RAMP EXIT	DRACULA POSITION 2	FRANK HIT		BLACK-GRAY J212-10 CENTER SPINNER
Orange-Grey J205-9 U16-5 Normal Function Begin Test	8 White-Grey J208-9 U19-8	SHOOTER LANE	LEFT EJECT	NOT USED	RIGHT FLIPPER PROXIMITY SENSOR	RIGHT TOP LANE	CENTER RAMP ENTER	DRACULA POSITION 1	NOT USED		BLACK-BLUE J208-10 UPPER LEFT FLIPPER OPTO

J2XX = CPU Board

= OPTO, TYPICALLY CLOSED

NO GOOD GOFERS (50061)

FUSE LIST

POWER DRIVER BOARD

F101	Regulated 12V	T0.63A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V
F105	+5V Logic	T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V
F107	Flasher Secondary	T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V
F109	Unregulated 12V	T4.0A, 250V
F110	G.I. #5 White-Violet	T4.0A, 250V
F111	G.I. #4 White-Green	T4.0A, 250V
F112	G.I. #3 White-Yellow	T4.0A, 250V
F113	G.I. #2 White-Orange	T4.0A, 250V
F114	G.I. #1 White-Brown	T4.0A, 250V
F115	+50V Flippers	T4.0A, 250V
F116	+50V Flippers	T4.0A, 250V
F117	+50V Flippers	T4.0A, 250V
F118	+50V Flippers	T4.0A, 250V

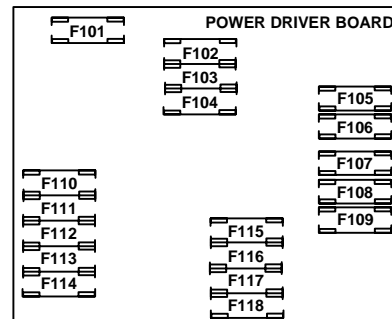
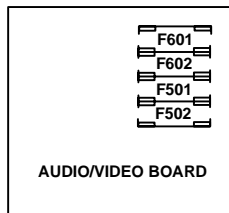
CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.

AUDIO/VIDEO BOARD

F501	-25V	T2.5A, 250V
F502	+25V	T2.5A, 250V
F601	+62V	T0.25A, 250V
F602	-113V & -125V	T0.25A, 250V

LINE FILTER

Foreign	T4.0A, 250V
Domestic	T5.0A, 250V



SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid/Flashlamp	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	AUTO FIRE	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-23-800	
02	KICKBACK	High Power	J133-2	J134-3		Q68	J116-2			VIO-RED	AE-23-800	
03	CLUBHOUSE KICKER	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-23-800	
04	LEFT GOFER UP	High Power	J133-2			Q67	J116-5			VIO-YEL	LE-22-925	
05	RIGHT GOFER UP	High Power	J133-2			Q70	J116-6			VIO-GRN	LE-22-925	
06	JET POPPER	High Power	J133-2			Q66	J116-7			VIO-BLU	AE-27-1200	
07	LEFT EJECT	High Power	J133-2			Q69	J116-8			VIO-BLK	AE-24-900	
08	UPPER RIGHT EJECT	High Power	J133-2			Q65	J116-9			VIO-GRY	AE-27-1200	
09	TROUGH EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-27-1200	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-27-1200	
12	TOP JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	MIDDLE JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	BOTTOM JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	LEFT GOFER DOWN	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-30-2000	
16	RIGHT GOFER DOWN	Low Power	J133-3			Q45	J114-9			BRN-GRY	AE-30-2000	
17	JET FLASHER	Flasher	J133-6			Q28	J111-1			BLK-BRN	#906	
18	LOWER LEFT FLASHER	Flasher	J133-6			Q32	J111-2			BLK-RED	#906	
19	LEFT SPINNER FLASHER	Flasher	J133-6			Q27	J111-3			BLK-ORG	#906	
20	RIGHT SPINNER FLASHER	Flasher	J133-6			Q31	J111-4			BLK-YEL	#906, #89	
21	LOWER RIGHT FLASHER	Flasher	J133-2			Q26	J111-5			BLU-GRN	#89	
22	NOT USED	Flasher				Q30				BLU-BLK		
23	NOT USED	Flasher				Q25				BLU-VIO		
24	UNDERGROUND PASS	Flasher	J133-1			Q29	J111-8			BLU-GRY	AE-27-1200	
25	SAND TRAP FLASHER	Gen. Purpose	J133-6			Q16	J109-1			BLU-BRN	#906 (2)	
26	WHEEL FLASHER	Gen. Purpose	J133-6			Q15	J109-2			BLU-RED	#906	
27	LEFT RAMP DOWN	Gen. Purpose	J133-1			Q14	J109-3			BLU-ORG	SM1-28-900	
28	RIGHT RAMP DOWN	Gen. Purpose	J133-1			Q13	J109-4			BLU-YEL	SM1-28-900	

General Illumination

01	LEFT SIDE STRING	G.I.	J105-1			Q5	J105-7			WHT-BRN	#555, #545	
02	RIGHT SIDE STRING	G.I.	J105-2			Q4	J105-8			WHT-ORG	#555, #545	
03	GOFER SPOTLIGHT	G.I.	J105-3			Q3	J105-9			WHT-YEL	#44	#555
04	*ILLUMINATION STRING 4	G.I.		J106-5		Q2		J106-10		WHT-GRN	#44	
05	*ILLUMINATION STRING 5	G.I.		J106-6	J104-3	Q1		J106-11	J104-1	WHT-VIO	#44	

Flipper Circuits

Sol No.	Function	Solenoid Type	Voltage Connection		Drive Xistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
			Playfield	Backbox	Power	Hold	Playfield	Backbox	Power	Hold		
29	LOWER RIGHT FLIPPER	Power	J119-1 (RED-GRN)		Q90		J120-13		YEL-GRN		FL-11629	BLUE
30	LOWER RIGHT FLIPPER	Hold	J119-1 (RED-GRN)			Q92	J120-11		ORG-GRN			
31	LOWER RIGHT FLIPPER	Power	J119-4 (RED-BLU)		Q67		J120-9		YEL-BLU		FL-11629	BLUE
32	LOWER LEFT FLIPPER	Hold	J119-4 (RED-BLU)			Q69	J120-7		ORG-BLU			
33	UPPER RIGHT FLIPPER	Power	J119-6 (RED-VIO)		Q84		J120-6		YEL-VIO		FL-11630	RED
34	UPPER RIGHT FLIPPER	Hold	J119-6 (RED-VIO)			Q86	J120-4		ORG-VIO			
35	BALL LAUNCH RAMP	Power	J119-8 (RED-GRY)		Q81		J120-3		YEL-GRY		B-13522	YELLOW
36	NOT USED	Hold	J119-8 (RED-GRY)			Q83	J120-1		ORG-GRY			

Motor Circuit

Sol No.	Function	Solenoid Type	Voltage Connection	Drive Gates	Drive Connections	Drive Wire Color	Device Part Number
37	WHEEL SPIN (CCW)	Low Power	J139-2	U3A U3B	J110-1	BRN-WHT	SEE MANUAL
38	WHEEL SPIN (CLOCK-WISE)	Low Power	J139-2	U3C U3D	J110-3	ORG-WHT	SEE MANUAL

Auxiliary Circuit

Sol No.	Function	Solenoid Type	Voltage Connection	Drive Gates	Drive Connections	Drive Wire Color	Device Part Number
42	UPPER RIGHT 1 FLASHER	Flasher	J4-1	Q2	J4-2	BLU-BRN	#906
43	UPPER RIGHT 2 FLASHER	Flasher	J4-1	Q4	J4-3	BLU-RED	#906
44	UPPER RIGHT 3 FLASHER	Flasher	J4-1	Q6	J4-4	BLU-ORG	#906
45	UPPER PLAYFIELD RIGHT	Flasher	J4-1	Q8	J4-5	BLU-ORG	#906 (2)
46	UPPER PLAYFIELD LEFT	Flasher	J4-1	Q10	J4-7	BLU-GRN	#906
47	UPPER LEFT 1 FLASHER	Flasher	J4-1	Q12	J4-8	BLU-BLK	#906
48	UPPER LEFT 2 FLASHER	Flasher	J4-1	Q14	J4-9	BLU-VIO	#906
49	UPPER LEFT 3 FLASHER	Flasher	J4-1	Q16	J4-10	BLU-GRY	#906

LAMP MATRIX

Column	1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-8 Q97
1 Red-Brown J125-1 Q104	OUTLANE EXTRA BALL	HOLE 5	HOLE 6	DRIVING RANGE	(K)ICK	4 STROKES	ADVANCE TRAP	SIDE RAMP DRIVE
2 Red-Black J125-2 Q108	KICKBACK	HOLE 4	HOLE 7	INCREASE GOLF CART	K(I)CK	3 STROKES	CENTER DRIVE	EXTRA BALL
3 Red-Orange J125-4 Q103	LOWER DRIVING RANGE	HOLE 3	HOLE 2	INCREASE BUZZ VALUE	KIC(C)K	2 STROKES	CENTER LOCK	MULTIBALL
4 Red-Yellow J125-5 Q107	SHOOT AGAIN	HIT BUD	HIT BUZZ	INCREASE BUD VALUE	KIC(K)	5 STROKES	GET T.N.T.	JACKPOT
5 Red-Green J125-6 Q102	SPECIAL	HOLE 1	HOLE 9	NEWTON DRIVE	SKILL SHOT	7 STROKES	CENTER RAISE GOFER	PUTT OUT
6 Red-Blue J125-7 Q106	WHEEL VALUE	2X	4X	COLLECT	RIGHT RAISE GOFER	6 STROKES	RIGHT SPINNER	TOP JET BUMPER
7 Red-Violet J125-8 Q101	JET LIGHTNING	CART PATH 2	CART PATH 4	RIP OFF	RIGHT RAMP LOCK	LEFT SPINNER	RIGHT LOOP DRIVE	MIDDLE JET BUMPER
8 Red-Grey J125-9 Q105	HOLE 8	5X CART PATH	3X	LEFT LOOP DRIVE	RIGHT RAMP DRIVE	TRAP READY	BOTTOM JET BUMPER	START BUTTON

J1XX = Power Driver Board

SWITCH MATRIX

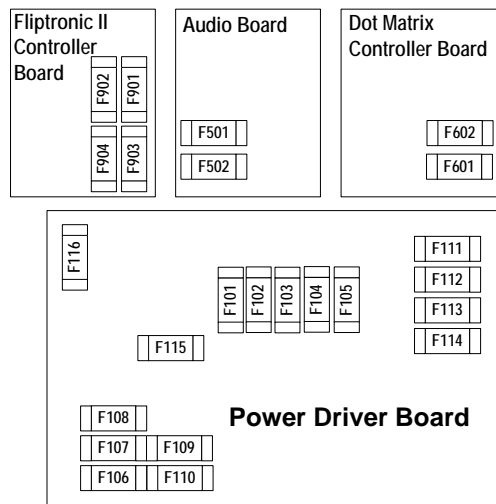
DEDICATED GROUNDED SWITCHES	Column	1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11	FLIPPER GROUNDED SWITCHES
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J208-1 U18-11	NOT USED	SLAM TILT	TROUGH EJECT	LEFT GOFER DOWN	LEFT SLING	LEFT SPINNER	LEFT CART PATH	K-I-C-K ADVANCE	Black-Green J208-13 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J208-2 U18-9	LEFT RAMP MAKE	COIN DOOR CLOSED	TROUGH BALL 1	RIGHT GOFER DOWN	RIGHT SLING	RIGHT SPINNER	RIGHT CART PATH	(K)ICK	Blue-Violet J212-12 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON	JET ADVANCE STANDUP	TROUGH BALL 2	NOT USED	TOP JET BUMPER	INNER WHEEL OPTO	RIGHT RAMP MAKE	(K)ICK	Black-Blue J208-12 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4TH COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	PUTT OUT POPPER	MIDDLE JET BUMPER	OUTER WHEEL OPTO	GOLF CART	KI(C)K	Blue-Gray J212-11 Lower Left Flipper Opto
Orange-Green J205-6 Normal Function Srv Crdts	5 White-Green J208-5 U19-11	CENTER RAMP MAKE	UNDERGROUND PASS	TROUGH BALL 4	RIGHT POPPER JAM	BOTTOM JET BUMPER	LEFT GOFER 1	RIGHT GOFER 1	KIC(K)	Black-Violet J208-11 Upper Right Flipper E.O.S.
Orange-Blue J205-7 Normal Function Volume On	6 White-Blue J208-7 U19-9	LEFT OUTLANE	LEFT IN-LANE	TROUGH BALL 5	RIGHT POPPER	TOP SKILL SHOT	LEFT GOFER 2	RIGHT GOFER 2	CAPTIVE BALL	Black-Yellow J212-10 Upper Right Flipper Opto
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT IN-LANE	RIGHT OUTLANE	TROUGH BALL 6	LEFT RAMP DOWN	MIDDLE SKILL SHOT	BEHIND LEFT GOFER	ADVANCE TRAP VALUE	NOT USED	Black-Gray J208-10 Upper Left Flipper E.O.S.
Orange-Grey J205-9 Normal Function Begin J2	8 White-Grey J208-9 U19-7	BALL SHOOTER	KICK BACK	JET POPPER	RIGHT RAMP DOWN	LOWER SKILL SHOT	HOLE-IN ONE MADE	SAND TRAP EJECT	NOT USED	Black-Blue J212-9 Upper Left Flipper Opto

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

FUSE LIST

STAR TREK: The Next Generation (50023)

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB
F102	+50V DC General (Right Flipper)	3A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Lamp Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V	3A, 250V, SB
F502	+25V	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V	3/8A, 250V, FB
F602	-113V & -125V	3/8A, 250V, FB
LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Coil/Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	LEFT GUN KICKER	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-23-800	Insert
02	RIGHT GUN KICKER	High Power	J107-3			Q80	J130-2			VIO-RED	AE-23-800	
03	LEFT GUN POPPER	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-23-800	
04	RIGHT GUN POPPER	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-23-800	
05	LEFT POPPER	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-23-800	
06	PLUNGER	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-23-800	
07	KNOCKER	High Power		J107-3		Q68		J130-8		VIO-BLK		AE-23-800
08	KICKER	High Power	J107-3			Q70	J130-9			VIO-GRY	AE-23-800	
09	LEFT SLINGSHOT	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	RIGHT SLINGSHOT	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-26-1200	
11	TROUGH	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-26-1500	
12	LEFT JET BUMPER	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-26-1200	
13	RIGHT JET BUMPER	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	BOTTOM JET BUMPER	Low Power	J107-2			Q48	J127-7			BRN-BLU	AE-26-1200	
15	TOP DIVERTER	Low Power	J107-2			Q46	J127-8			BRN-VIO	AE-25-1000	
16	BORG KICKER	Low Power	J107-2			Q44	J127-9			BRN-GRY	AL-23-800	
17	LEFT GUN MOTOR	Low Power	J118-2			Q42	J126-1			BLK-BRN	A-17562	
18	RIGHT GUN MOTOR	Low Power	J118-2			Q40	J126-2			BLK-RED	A-17562	
19	NOT USED					Q38				BLK-ORG		
20	JETS FLASHER	Flasher	J107-6			Q36	J126-4			BLK-YEL	#89	
21	RIGHT POPPER FLASHER	Flasher	J107-6	J106-5		Q28	J126-5	J125-6		BLU-GRN	#89	#906
22	MIDDLE RAMP FLASHER	Flasher	J107-6			Q30	J126-6			BLU-BLK	#89 (2)	
23	SHIELDS FLASHER	Flasher	J107-6	J106-5		Q34	J126-7	J125-8		BLU-VIO	#906 (3)	#906
24	AUTOFIRE FLASHER	Flasher	J107-6			Q32	J126-8			BLU-GRY	#906	
25	EXIT UNDERGRND FLASHER	Gen. Purpose	J107-6	J106-5		Q26	J122-1	J124-1		BLU-BRN	#89	#906
26	RIGHT BORG FLASHER	Gen. Purpose	J107-6	J106-5		Q24	J122-2	J124-2		BLU-RED	#906 (2)	#906
27	LEFT BORG FLASHER	Gen. Purpose	J107-6	J106-5		Q22	J122-3	J124-3		BLU-ORG	#906 (2)	#906
28	CENTER BORG FLASHER	Gen. Purpose	J107-6	J106-5		Q20	J122-4	J124-5		BLU-YEL	#906 (2)	#906
37	UNDER DIVERTER TOP	Low Power	J107-1			Q16	* J4-2			BRN-WHT	AE-25-1000	
38	UNDER DIVERTER BOTTOM	Low Power	J107-1			Q15	* J4-4			BLK-WHT	AE-25-1000	
39	TOP DROP UP	Low Power	J107-1			Q14	* J4-5			ORG-WHT	AE-26-1200	
40	TOP DROP DOWN	Low Power	J107-1			Q13	* J4-6			YEL-WHT	SM1-26-600	
41	ROMULAN FLASHERS	Low Power	J107-6	J106-5		Q9	* J3-2	* J3-2		GRN-WHT	#906	#906
42	RIGHT RAMP FLASHERS	Low Power	J107-6	J106-5		Q10	* J3-3	* J3-3		BLU-WHT	#89	#906
General Illumination			Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
			Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	SHIELDS G.I.	G.I.	J121-1			Q18	J121-7			WHT-BRN	#44	
02	INSERT G.I.	G.I.		J120-2		Q10		J120-8		WHT-ORG		#555
03	INSERT G.I.	G.I.		J120-3		Q14		J120-9		WHT-YEL		#555
04	PLAYFIELD G.I.	G.I.	J121-5			Q16	J121-10			WHT-GRN	#44	
05	RETURN LANE / COIN	G.I.	J121-6		J119-3	Q12	J121-11		J119-1	WHT-VIO	#44	
Flipper Circuits			Playfield Voltage Connection		Drive Transistors		Playfield Drive Connections		Drive Wire Colors		Coil Part No. / Colors	
			Power	Hold	Power	Hold	Power	Hold	Power	Hold	Part No.	Colors
29	LOWER RIGHT FLIPPER		J907-7 (BLU-YEL)		Q4		J902-13		BLU-VIO		FL-11629	BLUE
30			J907-7 (BLU-YEL)		Q11		J902-11		ORG-GRN			
31	LOWER LEFT FLIPPER		J907-9 (GRY-YEL)		Q3		J902-9		BLU-GRY		FL-11629	BLUE
32			J907-9 (GRY-YEL)		Q9		J902-7		ORG-BLU			
33	UPPER RIGHT FLIPPER		J907-1 (BLU-YEL)		Q2		J902-6		BLK-YEL		FL-11629	BLUE
34			J907-1 (BLU-YEL)		Q7		J902-4		ORG-VIO			
35	NOT USED		J907-4 (GRY-YEL)		Q1		J902-3		BLK-BLU		NOT USED	NOT USED
36			J907-4 (GRY-YEL)		Q5		J902-1		ORG-GRY			

* From 8 Driver PCB, A-16100; J4-1 = Tieback Diode J1XX-X = Power Driver Board, J9XX-X = Fliptronic II Board

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J137-1 Q98	Yellow-Red J137-2 Q97	Yellow-Orange J137-3 Q96	Yellow-Black J137-4 Q95	Yellow-Green J137-5 Q94	Yellow-Blue J137-6 Q93	Yellow-Violet J137-7 Q92	Yellow-Grey J137-9 Q91
1 Red-Brown J133-1 Q90	LEFT BANK TOP	SHIP MODE 3	TOP LANE LEFT	Q	LEFT RETURN LANE	GENERIC 3	GENERIC 2	RIGHT RETURN LANES	
2 Red-Black J133-2 Q89	LEFT BANK MIDDLE	SHIP MODE 4	TOP LANE CENTER	GENERIC 1	LEFT LAUNCHER	INCREASE WARP	TOP 3-BANK LEFT	RIGHT LAUNCHER	
3 Red-Orange J133-4 Q88	SHIP MODE 1	SHIP MODE 5	TOP LANE RIGHT	RIGHT LOCK	ADVANCE IN RANK	SPINNER	TOP 3-BANK CENTER	MILLION JETS	
4 Red-Yellow J133-5 Q87	SHIP MODE 2	RIGHT BANK TOP	BONUS 2 X	HOLODECK	GENERIC 6	GENERIC 7	TOP 3-BANK RIGHT	KICKBACK	
5 Red-Green J133-6 Q86	LEFT BANK BOTTOM	RIGHT BANK MIDDLE	BONUS 4 X	RIGHT 2 X SHUTTLE	SUPER	LEFT MILLIONS	LEFT LOCK	BORG LOCK	
6 Red-Blue J133-7 Q85	FINAL FRONTIER	COMMAND DECISION	MULTIPLIERS HELP	GENERIC 4	JACKPOT	JACKPOT X	GENERIC 5	BORG JACKPOT	
7 Red-Violet J133-8 Q84	SHOOT AGAIN	SHIP MODE 6	BONUS 8 X	RIGHT MILLIONS	EXTRA BALL	RIFT	WORM HOLE	BUY-IN	
8 Red-Grey J133-9 Q83	SHIP MODE 7	RIGHT BANK BOTTOM	BONUS 10X	LEFT 2 X SHUTTLE	START MISSION	TIME	BORG SHIP	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	1	2	3	4	5	6	7	8	9	FLIPPER GROUNDED SWITCHES
		Green-Brown J207-1 U20-18	Green-Red J207-2 U20-17	Green-Orange J207-3 U20-16	Green-Yellow J207-4 U20-15	Green-Black J207-5 U20-14	Green-Blue J207-6 U20-13	Green-Violet J207-7 U20-12	Green-Grey J207-9 U20-11	Violet-White *J5-1 Q11	
Orange-Brown J205-1 LEFT COIN CHUTE	1 White-Brown J209-1 U18-11	BUY-IN BUTTON	SLAM TILT	BORG LOCK	UNDER LEFT LOCK SWITCH 1	LEFT BANK TOP	TROUGH 1	LEFT JET	TIME	NOT USED	Black-Green J906-1 Lower Right Flipper E.O.S. F1
Orange-Red J205-2 CENTER COIN CHUTE	2 White-Red J209-2 U18-9	RIGHT FIRE BUTTON	COIN DOOR CLOSED	UNDER LEFT GUN SWITCH 2	UNDER LEFT LOCK SWITCH 3	LEFT BANK MIDDLE	TROUGH 2	RIGHT JET	RIFT	LEFT GUN MARK	Black-Violet J905-1 Lower Right Flipper Opto F2
Orange-Black J205-3 RIGHT COIN CHUTE	3 White-Orange J209-3 U18-5	START BUTTON	MADE MIDDLE RAMP	UNDER RIGHT GUN SWITCH 2	UNDER LEFT LOCK SWITCH 4	LEFT BANK BOTTOM	TROUGH 3	BOTTOM JET	MADE LEFT RAMP	NOT USED	Black-Blue J906-3 Lower Left Flipper E.O.S. F3
Orange-Yellow J205-4 4 TH COIN CHUTE	4 White-Yellow J209-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	RIGHT GUN SHOOTER	LEFT OUTER LOOP	RIGHT BANK TOP	TROUGH 4	RIGHT SLING	Q	NOT USED	Black-Gray J905-2 Lower Left Flipper Opto F4
Orange-Green J205-6 Normal Function Srv Crdts	5 White-Green J209-5 U19-11	LEFT OUTLANE	ENTER RIGHT RAMP	UNDER LEFT LOCK SWITCH 2	UNDER TOP HOLE	RIGHT BANK MIDDLE	TROUGH 5	LEFT SLING	LEFT 2 X SHUTTLE	RIGHT GUN HOME	Black-Violet J906-4 Upper Right Flipper E.O.S. F5
Orange-Blue J205-7 Normal Function Volume Dn	6 White-Blue J209-7 U19-9	LEFT RETURN LANE	LEFT 45° TARGET	UNDER LEFT GUN SWITCH 1	UNDER LEFT HOLE	RIGHT BANK BOTTOM	TROUGH 6	TOP LANE LEFT	RIGHT 2 X SHUTTLE	RIGHT GUN MARK	Black-Yellow J905-3 Upper Right Flipper Opto F6
Orange-Violet J205-8 Normal Function Volume Up	7 White-Violet J209-8 U19-5	RIGHT RETURN LANE	CENTER 45° TARGET	UNDER RIGHT GUN SWITCH 1	UNDER BORG HOLE	TOP DROP TARGET	TROUGH TOP	TOP LANE CENTER	MADE RIGHT RAMP	LEFT GUN HOME	Black-Gray J906-5 Spinner F7
Orange-Grey J205-9 Normal Function Begin Test	8 White-Grey J209-9 U19-7	RIGHT OUTLANE	RIGHT 45° TARGET	LEFT GUN SHOOTER	BORG ENTRY	RIGHT OUTER LOOP	SHOOTER	TOP LANE RIGHT	ENTER LEFT RAMP	NOT USED	Black-Blue J905-5 Not Used F8

J2XX = CPU Board; J9XX = Fliptronic II Board;

█ = OPTO, TYPICALLY CLOSED *Located on 8 driver PCB, A-16100, in backbox

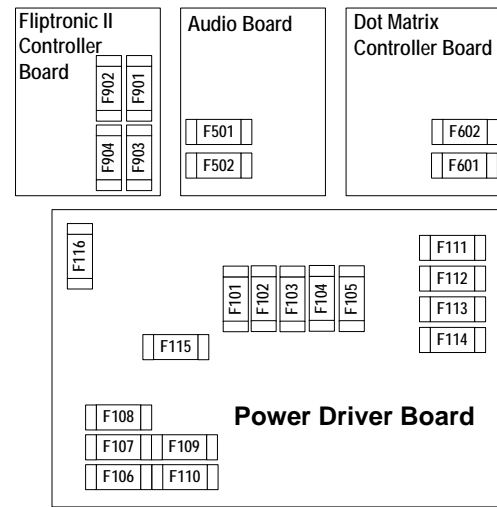
FUSE LIST

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB
F102	+50V DC General (Right Flipper)	3A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Lamp Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB

Audio Board		
F501	-25V	3A, 250V, SB
F502	+25V	3A, 250V, SB

Dot Matrix Controller Board		
F601	+62V	3/8A, 250V, FB
F602	-113V & -125V	3/8A, 250V, FB

LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	BALL TROUGH	High Power	J107-2			Q82	J130-1			VIO-BRN	AE-26-1500	
02	MAGNET DIVERTER	High Power	J107-2			Q80	J130-2			VIO-RED	20-10179	
03	TRAP DOOR UP	High Power	J107-2			Q78	J130-4			VIO-ORG	A-20099	
04	SUBWAY POPPER	High Power	J107-2			Q76	J130-5			VIO-YEL	AE-26-1200	
05	RIGHT DRAIN MAGNET	High Power	J107-2			Q64	J130-6			VIO-GRN	20-10197	
06	CENTER LOOP POST	High Power	J107-2			Q66	J130-7			VIO-BLU	AE-27-1200	
07	KNOCKER	High Power		J107-2		Q68		J130-8		VIO-BLK		AE-23-800
08	TOP DIVERTER POST	High Power	J107-2			Q70	J130-9			VIO-GRY	AE-27-1200	
09	LEFT SLINGSHOT	Low Power	J107-3			Q58	J127-1			BRN-BLK	AE-27-1200	
10	RIGHT SLINGSHOT	Low Power	J107-3			Q56	J127-3			BRN-RED	AE-27-1200	
11	BOTTOM JET BUMPER	Low Power	J107-3			Q54	J127-4			BRN-ORG	AE-26-1200	
12	MIDDLE JET BUMPER	Low Power	J107-3			Q52	J127-5			BRN-YEL	AE-26-1200	
13	TOP JET BUMPER	Low Power	J107-3			Q50	J127-6			BRN-GRN	AE-26-1200	
14	TRAP DOOR HOLD	Low Power	J107-2			Q48	J127-7			BRN-BLU	A-20099	
15	LEFT UP/DOWN GATE	Low Power	J107-3			Q46	J127-8			BRN-VIO	A-14406	
16	RIGHT UP/DOWN GATE	Low Power	J107-3			Q44	J127-9			BRN-GRY	A-14406	
17	BOX CLOCKWISE	Flasher	J116-2			Q42	J126-1			BLK-BRN	14-8018	
18	BOX COUNTER CLOCKWISE	Flasher	J116-2			Q40	J126-2			BLK-RED	14-8018	
19	NOT USED	Flasher	J116-2			Q38	J126-3			BLK-ORG	--	
20	RETURN LANE FLASHER	Flasher	J107-6			Q36	J126-4			BLK-YEL	#89 (2)	
21	TOP KICKOUT	Flasher	J107-1			Q28	+ J126-5			BLU-GRN	AE-27-1200	
22	NOT USED	Flasher	J107-6			Q30	J126-6			BLU-BLK	--	
23	NOT USED	Flasher	J107-6			Q34	J126-7			BLU-VIO	--	
24	TRAP DOOR FLASHER	Flasher	J107-6			Q32	J126-8			BLU-GRY	#89 (2)	
25	SPIRIT RING FLASHER	Gen. Purpose	J107-6	J106-5		Q26	J122-1	J124-1		BLU-BRN	#906, #89	#906
26	SAW FLASHER	Gen. Purpose	J107-6	J106-5		Q24	J122-2	J124-2		BLU-RED	#906, #89(2)	#906
27	JET FLASHER	Gen. Purpose	J107-6	J106-5		Q22	J122-3	J124-3		BLU-ORG	#906, #89(2)	#906
28	BOX FLASHER	Gen. Purpose	J107-6	J106-5		Q20	J122-4	J124-5		BLU-YEL	#906, #89(2)	#906
33	CUBE MAGNET	High Power	J907-6,7			Q2	J902-6			YEL-VIO	20-10197	
34	SUB BALL RELEASE	Low Power	J907-6,7			Q7	J902-4			ORG-VIO	AE-27-1200	
35	LEFT DRAIN MAGNET	High Power	J907-8,9			Q1	J902-3			YEL-GRY	20-10197	

General Illumination		Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
		Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	ILLUMINATION STRING 1	G.I.	J120-7		Q18		J120-7		WHT-BRN		#555
02	ILLUMINATION STRING 2	G.I.	J120-2		Q10		J120-8		WHT-ORG		#555
03	ILLUMINATION STRING 3	G.I.	J121-3		Q14	J121-9			WHT-YEL	#44	
04	ILLUMINATION STRING 4	G.I.	J131-5		Q16	J121-10			WHT-GRN	#44	
05	ILLUMINATION STRING 5	G.I.	J121-6		Q12	J121-11			WHT-VIO	#44	

Flipper Circuits		Power	Playfield Voltage Connection	Drive Transistors Power	Hold	Playfield Drive Connections			Drive Wire Colors	Coil Part No.	Coil Colors
						Playfield	Insert	Cabinet			
29	LOWER RIGHT FLIPPER	Power	J907-1 (RED-GRN)	Q4		J902-13			YEL-GRN	FL-11629	BLUE
30		Hold	J907-1 (RED-GRN)		Q11		J902-11			ORG-GRN	
31	LOWER LEFT FLIPPER	Power	J907-4 (RED-BLU)	Q3		J902-9			YEL-BLU	FL-11629	BLUE
32		Hold	J907-4 (RED-BLU)		Q9		J902-7			ORG-BLU	
33		Power	J907-6 (RED-VIO)	Q2		J902-6			YEL-VIO	--	--
34	NOT USED	Hold	J907-6 (RED-VIO)		Q7	J902-4			ORG-VIO		
35		Power	J907-8 (RED-GRY)	Q1		J902-3			YEL-GRY	--	--
36	NOT USED	Hold	J907-8 (RED-GRY)		Q5	J920-1			ORG-GRY		

J1xx = Power Driver Board

J9xx = Fliptronic II Board + Tieback Diode J126-13

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J137-1 Q98	Yellow-Red J137-2 Q97	Yellow-Orange J137-3 Q96	Yellow-Black J137-4 Q95	Yellow-Green J137-5 Q94	Yellow-Blue J137-6 Q93	Yellow-Violet J137-7 Q92	Yellow-Grey J137-9 Q91
1 Red-Brown J133-1 Q90	(T)HEATRE	HAUNTED BASEMENT	MA(G)IC	EXTRA BALL	TRUNK HIT 2	TIGER SAW	HAT MAGIC	SPECIAL	
2 Red-Black J133-2 Q89	T(H)EATRE	META-MORPHISIS AWARD	MAG(C)	VANISH	HURRY UP	LEVITATE WOMAN	SPIRIT AWARD	NOT USED	
3 Red-Orange J133-4 Q88	TH(E)ATRE	RIGHT SPELL MAGIC	LIFT TRAPDOOR	SPELL THEATRE	TRUNK ESCAPE	GRAND FINALE	THEATRE	NOT USED	
4 Red-Yellow J133-5 Q87	THE(A)TRE	SPIRIT RING	CENTER SPELL MAGIC	JACKPOT	LOCK BALL	TRUNK ESCAPE	MULTI-BALL	NOT USED	
5 Red-Green J133-6 Q86	THEA(T)RE	ADVANCE CLOCK	LEVITATE AWARD	SAFE AWARD	HAT TRICK AWARD	SPIRIT CARDS	MIDNIGHT	LAMP IN CUBE	
6 Red-Blue J133-7 Q85	THEAT(R)E	JACKET AWARD	MAG(I)C	TIGER SAW AWARD	START ILLUSION	SAFE ESCAPE	ILLUSIONS	SHOOT AGAIN	
7 Red-Violet J133-8 Q84	THEATR(E)	M(A)GIC	TOP ROLLOVER 1	START FINALE	START MULTIBALL	META-MORPHISIS	SAW MULTI-BALL	BUY-IN	
8 Red-Grey J133-9 Q83	(M)AGIC	TRUNK HIT 3	TOP ROLLOVER 2	TRUNK HIT 1	LITE VANISH	STRAIT JACKET	HOCUS POCUS	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Row	1	2	3	4	5	6	7	8	FLIPPER GROUNDED SWITCHES
			Green-Brown J207-1 U20-18	Green-Red J207-2 U20-17	Green-Orange J207-3 U20-16	Green-Yellow J207-4 U20-15	Green-Black J207-5 U20-14	Green-Blue J207-6 U20-13	Green-Violet J207-7 U20-12	Green-Grey J207-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	D1	1 White-Brown J209-1 U18-11	NOT USED	SLAM TILT	TROUGH JAM	LOCK 1	LEFT BANK TARGET	LEFT SLING	CENTER RAMP EXIT	LOOP RIGHT	Black-Green J906-1 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	D2	2 White-Red J209-2 U18-9	NOT USED	COIN DOOR CLOSED	TROUGH BALL 1	LOCK 2	CAPTIVE BALL REST	RIGHT SLING	NOT USED	CENTER RAMP TARGETS	Black-Violet J905-1 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	D3	3 White-Orange J209-3 U18-5	START BUTTON	BUY-IN	TROUGH BALL 2	LOCK 3	RIGHT LANE ENTER	BOTTOM JET	RIGHT RAMP EXIT	VANISH LOCK 1	Black-Blue J906-3 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4TH COIN CHUTE U17-9	D4	4 White-Yellow J209-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	POPPER	LEFT LANE ENTER	MIDDLE JET	RIGHT RAMP EXIT 2	VANISH LOCK 2	Black-Gray J905-2 Lower Left Flipper Opto
Orange-Green J205-6 Normal Function Srv Crdts	D5	5 White-Green J209-5 U19-11	SHOOTER LANE	LEFT OUTLANE	TROUGH BALL 4	LEFT DRAIN EDDY	CUBE POSITION 4	TOP JET	CENTER RAMP ENTER	TRUNK HIT	Black-Violet J906-4 Upper Right Flipper E.O.S.
Orange-Blue J205-7 Normal Function Volume Dn	D6	6 White-Blue J209-7 U19-9	NOT USED	LEFT RETURN LANE	SUBWAY OPTO	NOT USED	CUBE POSITION 1	TOP LANE 1	RIGHT RAMP ENTER	RIGHT LANE EXIT	Black-Yellow J905-3 Upper Right Flipper Opto
Orange-Violet J205-8 Normal Function Volume Up	D7	7 White-Violet J209-8 U19-5	NOT USED	RIGHT RETURN LANE	SPINNER	SUBWAY MICRO	CUBE POSITION 2	TOP LANE 2	CAPTIVE BALL TOP	LEFT LANE EXIT	Black-Gray J906-5 Upper Left Flipper E.O.S.
Orange-Grey J205-9 Normal Function Begin Test	D8	8 White-Grey J209-9 U19-7	NOT USED	RIGHT OUTLANE	RIGHT LOWER TARGET	RIGHT DRAIN EDDY	CUBE POSITION 3	NOT USED	LOOP LEFT	NOT USED	Black-Blue J905-5 Upper Left Flipper Opto

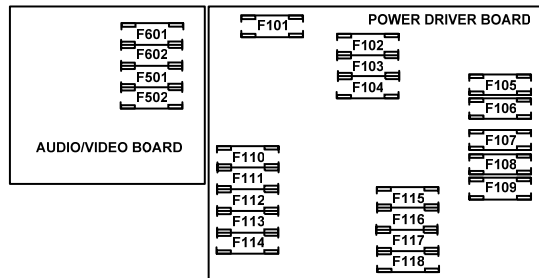
J2XX = CPU Board; J9XX = Fliptronic II Board

= OPTO, TYPICALLY CLOSED

ARABIAN NIGHTS (50047)

FUSE LIST

AUDIO/VIDEO BOARD			POWER DRIVER BOARD					
F501	-25V	T2.5A, 250V	F101	Regulated 12V	T0.63A, 250V	F110	G.I. #5 White-Violet	T4.0A, 250V
F502	+25V	T2.5A, 250V	F102	Solenoids #9 to #16	T4.0A, 250V	F111	G.I. #4 White-Green	T4.0A, 250V
F601	+62V	T0.25A, 250V	F103	Solenoids #1 to #8	T4.0A, 250V	F112	G.I. #3 White-Yellow	T4.0A, 250V
F602	-113V & -125V	T0.25A, 250V	F104	Solenoids #25 to #28	T4.0A, 250V	F113	G.I. #2 White-Orange	T4.0A, 250V
LINE FILTER Foreign T4.0A, 250V Domestic T5.0A, 250V			F105	+5V Logic	T4.0A, 250V	F114	G.I. #1 White-Brown	T4.0A, 250V
			F106	+18V Lamp Matrix	T5.0A, 250V	F115	+50V Flippers	T4.0A, 250V
			F107	Flasher Secondary	T4.0A, 250V	F116	+50V Flippers	T4.0A, 250V
			F108	Solenoid Secondary	T6.3A, 250V	F117	+50V Flippers	T4.0A, 250V
			F109	Unregulated 12V	T4.0A, 250V	F118	+50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	LEFT CAGE	High Power	J133-2			Q72	J116-1			VIO-BRN	A-20099	
02	RIGHT CAGE	High Power	J133-2			Q68	J116-2			VIO-RED	A-20099	
03	VANISH DROP	High Power	J133-2			Q71	J116-4			VIO-ORG	FL-11753	
04	LOCK EJECT	High Power	J133-2			Q67	J116-5			VIO-YEL	AE-27-1200	
05	BAZAAR EJECT	High Power	J133-2			Q70	J116-6			VIO-GRN	AE-25-1000	
06	LOCK MAGNET	High Power	J133-2			Q66	J116-7			VIO-BLU	20-10197	
07	KNOCKER	High Power	J133-2	J133-2		Q69		J116-8		VIO-BLK		AE-23-800
08	RAMP MAGNET COIL	High Power	J133-1			Q65	J116-9			VIO-GRY	20-10197	
09	TROUGH EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-27-1200	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-27-1200	
12	LEFT JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	RIGHT JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	MIDDLE JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	LEFT KICKER	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-27-1200	
16	LEFT EJECT FLASHER	Low Power	J133-6	J134-5		Q45	J113-9	J114-5		BRN-GRY	#89 (2)	#906
17	INLANE FLASHERS	Flasher	J133-6			Q28	J111-1			BLK-BRN	#89 (2)	
18	FINAL BATTLE FLASHER	Flasher	J133-6			Q32	J111-2			BLK-RED	#906	
19	LEFT LOOP FLASHER	Flasher	J133-6			Q27	J111-3			BLK-ORG	#906	
20	BAZAAR FLASHER	Flasher	J133-6			Q31	J111-4			BLK-YEL	#89	
21	RAMP DIVERTOR	Low Power	J133-2			Q26	J111-5			BLU-GRN	AE-30-2000	
22	RUB LAMP FLASHER	Flasher	J133-6			Q30	J111-6			BLU-BLK	#906	
23	MAGIC LAMP FLASHERS	Flasher	J133-6			Q25	J111-7			BLU-VIO	#906	
24	RIGHT LOOP FLASHER	Flasher	J133-6			Q29	J111-8			BLU-GRY	#906	
25	START TALE FLASHERS	Gen. Purpose	J133-6	J134-5		Q16	J109-1	J108-1		BLU-BRN	#906	#906
26	JET FLASHERS	Gen. Purpose	J133-6	J134-5		Q15	J109-2	J108-2		BLU-RED	#906	#906
27	TOP LOOP FLASHER	Gen. Purpose	J133-6	J134-5		Q14	J109-3	J108-3		BLU-ORG	#906	#906
28	RAMP FLASHER	Gen. Purpose	J133-6			Q13	J109-4			BLU-YEL	#906	

General Illumination

01	ILLUMINATION STRING 1	G.I.		J106-1		Q5		J105-7		WHT-BRN	#44	
02	ILLUMINATION STRING 2	G.I.		J106-2		Q4		J105-8		WHT-ORG	#44	
03	ILLUMINATION STRING 3	G.I.		J106-3		Q3		J105-9		WHT-YEL	#44	
04	ILLUMINATION STRING 4	G.I.	J105-5			Q2	J106-10			WHT-GRN		#555
05	ILLUMINATION STRING 5	G.I.	J105-6		J104-3	Q1	J106-11		J104-1	WHT-VIO		#555

Flipper Circuits	Power	Hold	Voltage Connection		Drive Transistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
			Playfield	Power	Hold	Playfield	Power	Hold	Power	Hold		
29			J119-1 (RED-GRN)	Q90			J120-13		YEL-GRN		FL-11629	BLUE
30	LOWER RIGHT FLIPPER	Hold	J119-1 (RED-GRN)		Q92		J120-11		ORG-GRN			
31			J119-4 (RED-BLU)	Q67			J120-9		YEL-BLU		FL-11629	BLUE
32	LOWER LEFT FLIPPER	Hold	J119-4 (RED-BLU)		Q69		J120-7		ORG-BLU			
33	LEFT DIVERTOR POWER	Power	J119-6 (RED-VIO)	Q84			J120-6		YEL-VIO		FL-11753	YELLOW
34	LEFT DIVERTOR HOLD	Hold	J119-6 (RED-VIO)		Q86		J120-4		ORG-VIO			
35	VANISH MAGNET	Power	J119-8 (RED-GRY)	Q81			J120-3		YEL-GRY		20-10197	
36	LOOP POST DIVERTOR	Hold	J119-8 (RED-GRY)		Q83		J120-1		ORG-GRY		AE-27-1200	

J1XX = POWER DRIVER BOARD

*These general illumination strings do not brighten and dim, they are always on

LAMP MATRIX

Column	Row	Yellow (B+) → Red							
		1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-8 Q97
1 Red-Brown J125-1 Q104	JEWEL 1 (LEFT)	JACKPOT	MAGIC CARPET	SMOKE 6	SMOKE 14 (TOP)	MAKE A WISH	ACTION 2	EXTRA BALL	
2 Red-Black J125-2 Q108	JEWEL 2	(G)ENIE	ACTION 3	SMOKE 7	LAMP-15	(B)AZAAR	LEFT LOCK	ACTION 5	
3 Red-Orange J125-4 Q103	JEWEL 3	G(E)NIE	RAMP ARROW RIGHT	SMOKE 8	LAMP-30	B(A)ZAAR	HAREM ADVANCE	RIGHT LOCK	
4 Red-Yellow J125-5 Q107	JEWEL 4	GE(N)IE	RAMP ARROW LEFT	SMOKE 9	LAMP-60	BA(Z)AAR	LEFT TIGER LOOP	RIGHT TIGER LOOP	
5 Red-Green J125-6 Q102	JEWEL 5	GEN(I)E 1	SMOKE 1 (BOTTOM)	SMOKE 10	SMOKE 4	BAZ(A)AR	ACTION 1	CAPTIVE BALL RIGHT	
6 Red-Blue J125-7 Q106	JEWEL 6	GENI(E)	SMOKE 2	SMOKE 11	SMOKE 5	BAZA(A)R	WISH 1	ACTION 4	
7 Red-Violet J125-8 Q101	JEWEL 7 (RIGHT)	MULTIBALL	SMOKE 3	SMOKE 12	SHOOT STAR RIGHT	BAZAA(R)	WISH 2	CAPTIVE BALL LEFT	
8 Red-Grey J125-9 Q105	SHOOT AGAIN	OUTLANE SPECIAL	AMULET	SMOKE 13	SHOOT STAR LEFT	CENTER LOCK	WISH 3	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

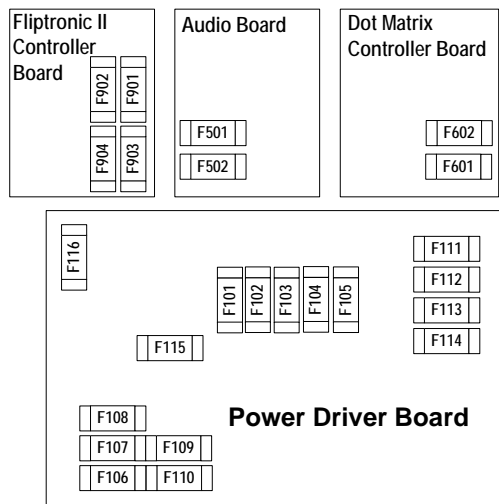
DEDICATED GROUNDED SWITCHES	Column	Row	White → Green								FLIPPER GROUNDED SWITCHES
			1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J208-1 U18-11	HAREM PASSAGE	SLAM TILT	TROUGH EJECT	RAMP MADE LEFT	LEFT SLING	LEFT STANDUPS	NOT USED	NOT USED	Black-Green J208-13 Lower Right Flipper E.O.S.	
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J208-2 U18-9	VANISH TUNNEL	COIN DOOR CLOSED	TROUGH BALL 1	GENIE TARGET	RIGHT SLING	RIGHT STANDUPS	NOT USED	NOT USED	Blue-Violet J212-12 Lower Right Flipper Opto	
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON	GENIE STANDUP TARGET	TROUGH BALL 2	LEFT LOOP	LEFT JET	TOP SKILL	NOT USED	NOT USED	Black-Blue J208-12 Lower Left Flipper E.O.S.	
Orange-Yellow J205-4 4TH COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	INNER LOOP LEFT	RIGHT JET	MIDDLE SKILL	NOT USED	NOT USED	Blue-Gray J212-11 Lower Left Flipper Opto	
Orange-Green J205-6 U16-9 Normal Function Test Function Srv Crdts	5 White-Green J208-5 U19-11	RAMP ENTER	BAZAAR EJECT	TROUGH BALL 4	INNER LOOP RIGHT	MIDDLE JET	BOTTOM SKILL	NOT USED	NOT USED	Black-Violet J208-11 Upper Right Flipper E.O.S.	
Orange-Blue J205-7 U16-11 Normal Function Test Function Volume On	6 White-Blue J208-7 U19-9	LEFT OUTLANE	LEFT INLANE	LEFT CAGE OPTO	MINI STANDUPS	LAMP SPIN CCW	LOCK 1 (BOTTOM)	NOT USED	NOT USED	Black-Yellow J212-10 Upper Right Flipper Opto	
Orange-Violet J205-8 U16-7 Normal Function Test Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT INLANE	RIGHT OUTLANE	RIGHT CAGE OPTO	RAMP MADE RIGHT	LAMP SPIN CW	LOCK 2 (MIDDLE)	NOT USED	NOT USED	Black-Gray J208-10 Upper Left Flipper E.O.S.	
Orange-Grey J205-9 U16-5 Normal Function Test Function Begin Test	8 White-Grey J208-9 U19-7	BALL SHOOTER	LEFT WIRE MAKE	LEFT EJECT	RIGHT CAPTIVE BALL	LEFT CAPTIVE BALL	LOCK 3 (TOP)	NOT USED	NOT USED	Black-Blue J212-9 Upper Left Flipper Opto	

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

FUSE LIST

TWILIGHT ZONE (50020)

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB
F102	+50V DC General (Right Flipper)	3A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Lamp Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V	3A, 250V, SB
F502	+25V	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V	3/8A, 250V, FB
F602	-113V & -125V	3/8A, 250V, FB
LINE FILTER		
Foreign	5A, 250V, SB	
Domestic	8A, 250V, SB	



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Coil/Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	SLOT KICKOUT	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-24-900	Insert
02	ROCKET KICKERR	High Power	J107-3			Q80	J130-2			VIO-RED	AE-23-800	
03	AUTO-FIRE KICKER	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-23-800	
04	GUMBALL POPPER	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-23-800	
05	RIGHT RAMP DIVERTER	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-26-1200	
06	GUMBALL DIVERTER	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-26-1500	
07	KNOCKER	High Power	J107-3	J107-3		Q68		J130-8		VIO-BLK		AE-23-800
08	OUTHOLE	High Power	J107-3			Q70	J130-9			VIO-GRY	AE-27-1200	
09	BALL RELEASE	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	RIGHT SLINGSHOT	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-27-1200	
11	LEFT SLINGSHOT	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-27-1200	
12	LOWER JET BUMPER	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-26-1200	
13	LEFT JET BUMPER	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	RIGHT JET BUMPER	Low Power	J107-2			Q48	J127-7			BRN-BLU	AE-26-1200	
15	LOCK RELEASE	Low Power	J107-2			Q46	J127-8			BRN-VIO	AE-27-1200	
16	SHOOTER DIVERTER	Low Power	J107-2			Q44	J127-9			BRN-GRY	SZ-33-3300	
17	BUMPERS (2)	Flasher	J107-6			Q42	J125-1			BLK-BRN	#906	
18	POWER PAYOFF (2)	Flasher	J107-6			Q40	J125-2			BLK-RED	#906	
19	MINI-PLAYFIELD (2)	Flasher	J107-6			Q38	J125-3			BLK-ORG	#906	
20	UPPER LEFT RAMP	Flasher	J107-6			Q36	J125-5			BLK-YEL	#906	
21	LEFT MAGNET	Flasher	J109-5			Q28	J125-6			BLU-GRN	20-9247	
22	THIRD MAGNET (PROTO)	Flasher	J109-5			Q30	J125-7			BLU-BLK	20-9247	
23	LOWER RIGHT MAGNET	Flasher	J109-5			Q34	J125-8			BLU-VIO	20-9247	
24	GUMBALL MOTOR	Flasher	J109-6			Q32	J125-9			BLU-GRY	14-7984	
25	LEFT MINI MAGNET	Gen. Purpose	J109-5			Q26	J124-1			BLU-BRN	20-9247	
26	RIGHT MINI MAGNET	Gen. Purpose	J109-7			Q24	J124-2			BLU-RED	20-9247	
27	LEFT RAMP DIVERTER	Gen. Purpose	J109-7			Q22	J124-3			BLU-ORG	AR-26-1500	
28	INSIDE RAMP	Gen. Purpose	J109-6			Q20	J124-5			BLU-YEL	#906	
37	UPPER RIGHT FLIPPER	Flasher	J109-6				* J4-1			BRN-WHT	#906	
38	GUMBALL MACHINE HIGH	Flasher	J109-6				* J4-2			RED-WHT	#906	
39	GUMBALL MACHINE MIDDLE	Flasher	J109-6				* J4-3			ORG-WHT	#906	
40	GUMBALL MACHINE LOW	Flasher	J109-6				* J4-5			YEL-WHT	#906	
41	UPPER RIGHT RAMP	Flasher	J109-6				* J3-5			GRN-WHT	#906	
42	CLOCK REVERSE	Flasher	** J1-5				** J1-2			BLU-WHT	A-16120	
43	CLOCK FORWARD	Flasher	** J1-5				** J1-1			VIO-WHT	A-16120	
44	CLOCK SWITCH STROBE	Flasher	J107-8				* J5-1			GRY-WHT	---	

General Illumination		Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
		Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	PLAYFIELD LEFT	G.I.	J121-1		Q18	J121-7			WHT-BRN	#44	
02	MINI-PLAYFIELD & INSERT	G.I.	J121-2	J120-2	Q10	J121-8	J120-8		WHT-ORG	#555	#555
03	CLOCK & INSERT	G.I.	J121-3	J120-3	Q14	J121-9	J120-9		WHT-YEL	#86	#555
04	INSERT MAIN	G.I.		J120-5	Q16		J120-10		WHT-GRN		#555
05	PLAYFIELD RIGHT	G.I.	J121-6		Q12	J121-11			WHT-VIO	#44	

Flipper Circuits		Power	Playfield Voltage Connection	Drive Transistors Power	Hold	Playfield Drive Connections	Drive Wire Colors	Hold	Coil Part No.	Coil Colors
30		Hold	J907-9 (BLU-YEL)			J902-11	ORG-GRN			
31	LOWER LEFT FLIPPER	Power	J907-7 (GRY-YEL)	Q3		J902-9	BLU-GRY		FL-15411	ORANGE
32		Hold	J907-7 (GRY-YEL)		Q9	J902-7	ORG-BLU			
33	UPPER RIGHT FLIPPER	Power	J907-4 (BLU-YEL)	Q2		J902-6	BLK-YEL		FL-11722	GREEN
34		Hold	J907-4 (BLU-YEL)		Q7	J902-4	ORG-VIO			
35	UPPER LEFT FLIPPER	Power	J907-1 (GRY-YEL)	Q1		J902-3	BLK-BLU		FL-11753	YELLOW
36		Hold	J907-1 (GRY-YEL)		Q5	J902-1	ORG-GRY			

* From 8 Driver PCB, A-16100

** From D.C. Motor Control Assembly, A-16120

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J133-1 Q98	Yellow-Red J137-2 Q97	Yellow-Orange J137-3 Q96	Yellow-Black J137-4 Q95	Yellow-Green J137-5 Q94	Yellow-Blue J137-6 Q93	Yellow-Violet J137-7 Q92	Yellow-Grey J137-9 Q91
1 Red-Brown J133-1 Q90	CAMERA (DOOR)	DOOR PANEL "LOCK 2"	LEFT EXTRA BALL	SPIRAL "2 MILLION"	LEFT RAMP BONUS X	LEFT JET BUMPER	LOWER RIGHT 5 MILLION	LEFT SPIRAL	
2 Red-Black J133-2 Q89	HITCH HICKER (DOOR)	GREED (DOOR)	DOOR PANEL "LOCK 1"	SPIRAL LEFT BATTLE POWER	LEFT RAMP MULTIBALL	LOWER JET BUMPER	MIDDLE RIGHT 5 MILLION 1	CLOCK MILLIONS	
3 Red-Orange J133-4 Q88	CLOCK CHAOS (DOOR)	10 MILLION (DOOR)	LEFT INLANE 1	SPIRAL "4 MILLION"	LEFT RAMP "SUPER SKILL"	RIGHT JET BUMPER	MIDDLE RIGHT 5 MILLION 2	PIANO YELLOW	
4 Red-Yellow J133-5 Q87	SUPER SKILL (DOOR)	BATTLE THE POWER (DOOR)	DOOR HANDLE	SPIRAL RIGHT BATTLE POWER	LEFT POWERBALL	MIDDLE LEFT 5 MILLION	POWER PAYOFF	PIANO RED	
5 Red-Green J133-6 Q86	FAST LOCK (DOOR)	THE SPIRAL (DOOR)	LEFT INLANE 2	SPIRAL 10 MILLION	THE CAMERA	UPPER LEFT 5 MILLION	UPPER RIGHT 5 MILLION	SLOT MACHINE	
6 Red-Blue J133-7 Q85	LITE GUMBALL (DOOR)	CLOCK MILLION (DOOR)	DOOR PANEL "GUM"	SPIRAL "EXTRA BALL"	RIGHT RAMP THE POWER	RIGHT SPECIAL	MINI PLAYFIELD 500,000	RIGHT LANE GUMBALL	
7 Red-Violet J133-8 Q84	TOWN SQUARE MADNESS (DOOR)	SUPER SLOT (DOOR)	LOWER LEFT 5 MILLION	SHOOT AGAIN	LOCK EXTRA BALL	RIGHT POWERBALL	MINI PLAYFIELD 1,000,000	BUY-IN BUTTON	
8 Red-Grey J133-9 Q83	LIGHT EXTRA BALL (DOOR)	DOOR PANEL "BALL"	DEAD END	RIGHT INLANE	LOCK ARROW	RIGHT LANE SPIRAL	MINI PLAYFIELD 750,000	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Row	1	2	3	4	5	6	7	8	9	FLIPPER GROUNDED SWITCHES
			Green-Brown J206-1 U20-18	Green-Red J206-2 U20-17	Green-Orange J206-3 U20-16	Green-Yellow J206-4 U20-15	Green-Black J206-5 U20-14	Green-Blue J206-6 U20-13	Green-Violet J206-7 U20-12	Green-Grey J206-9 U20-11	Grey-White *J5-1	
Orange-Brown J205-1 LEFT COIN CHUTE	White-Brown J208-1 U18-11	RIGHT INLANE	SLAM TILT	LEFT JET BUMPER	DEAD END	GUMBALL POPPER LANE	LOWER SKILL	NOT USED	LOWER RIGHT MAGNET	Clock 15 Minutes	Black-Green J906-1 Lower Right Flipper E.O.S.	
Orange-Red J205-2 CENTER COIN CHUTE	White-Red J208-2 U18-9	RIGHT OUTLANE	COIN DOOR CLOSED	RIGHT JET BUMPER	THE CAMERA	HITCH HIKER	CENTER SKILL	AUTO-FIRE KICKER	THIRD MAGNET (PROTO)	Clock 0 Minutes	Black-Violet J905-1 Lower Right Flipper Opto	
Orange-Black J205-3 RIGHT COIN CHUTE	White-Orange J208-3 U18-5	START BUTTON	BUY-IN BUTTON	LOWER JET BUMPER	PLAYER PIANO	LEFT RAMP ENTER	UPPER SKILL	RIGHT RAMP	LEFT MAGNET	Clock 45 Minutes	Black-Blue J906-3 Lower Left Flipper E.O.S.	
Orange-Yellow J205-4 4 th COIN CHUTE	White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	LEFT SLING	MINI PLAYFIELD ENTER	LEFT RAMP	UPPER RIGHT 5 MILLION	GUMBALL POPPER	CENTER LOCK	Clock 30 Minutes	Black-Gray J905-2 Lower Left Flipper Opto	
Orange-Green J205-6 Normal Function Srv Crdts	White-Green J208-5 U19-11	RIGHT TROUGH	FAR LEFT TROUGH	RIGHT SLING 4	MINI PLAYFIELD LEFT (2)	GUMBALL GENEVA	POWER PAYOFF (2)	MINI PLAYFIELD TOP	UPPER LOCK	Clock Hour 1	Black-Violet J906-4 Upper Right Flipper E.O.S.	
Orange-Blue J205-7 Normal Function Volume Dn	White-Blue J208-7 U19-9	CENTER TROUGH	TROUGH PROXIMITY	LEFT OUTLANE	MINI PLAYFIELD RIGHT (2)	GUMBALL EXIT	MIDDLE RIGHT 5 MILLION 1	MINI PLAYFIELD EXIT	NOT USED	Clock Hour 2	Black-Yellow J905-3 Upper Right Flipper Opto	
Orange-Violet J205-8 Normal Function Volume Up	White-Violet J208-8 U19-5	LEFT TROUGH	BALL SHOOTER	LEFT INLANE 1	CLOCK MILLIONS	SLOT PROXIMITY	MIDDLE RIGHT 5 MILLION 2	MIDDLE LEFT 5 MILLION	GUMBALL ENTER	Clock Hour 3	Black-Gray J906-5 Upper Left Flipper E.O.S.	
Orange-Grey J205-9 Normal Function Begin Test	White-Grey J208-9 U19-7	OUTHOLE	ROCKET KICKER	LEFT INLANE 2	LOWER LEFT 5 MILLION	SLOT KICKOUT	LOWER RIGHT 5 MILLION	UPPER LEFT 5 MILLION	LOWER LOCK	Clock Hour 4	Black-Blue J905-5 Upper Left Flipper Opto	

J2XX = CPU Board; J9XX = Fliptronic II Board;

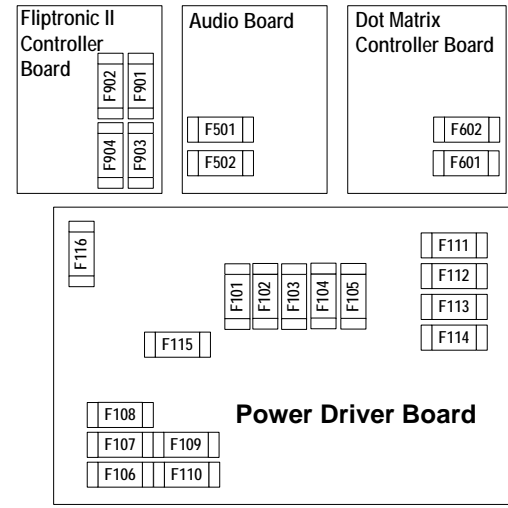
= OPTO, TYPICALLY CLOSED

* Located on 8 driver PCB, A-16100, in backbox

WHITEWATER (50018)

FUSE LIST

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB Not Used
F102	+50V DC General (Right Flipper)	3A, 250V, SB Not Used
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Switch Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V Circuit	3A, 250V, SB
F502	+25V Circuit	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V Circuit	3/8A, 250V, FB
F602	-113V & -125V Circuits	3/8A, 250V, FB
LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, SB



Fliptronic II Controller Board		
F901	Upper Right Flipper	3A, 250V, SB
F902	Upper Left Flipper	3A, 250V, SB
F903	Lower Right Flipper	3A, 250V, SB
F904	Lower Left Flipper	3A, 250V, SB

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid Part Number Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	OUTHOLE	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-27-1200	
02	BALL SERVE	High Power	J107-3			Q80	J130-2			VIO-RED	AE-26-1200	
03	WHIRLPOOL POPPER	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-23-800	
04	LOCKUP POPPER	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-23-800	
05	KICKBACK	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-23-800	
06	RAMP DIVERTER	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-26-1200	
07	KNOCKER	High Power	J107-3			Q68	J130-8			VIO-BLK	AE-23-800	
08	BACKGLASS (2)	High Power		J106-5		Q70		J131-5		VIO-GRY		#906 (2)
09	WET WILLIE HEAD	Low Power		J106-5		Q58		J129-1		BRN-BLK		#906
10	LEFT SLING	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-27-1200	
11	RIGHT SLING	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-27-1200	
12	LEFT JET BUMPER	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-26-1200	
13	RIGHT JET BUMPER	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	CENTER JET BUMPER	Low Power	J107-2			Q48	J127-7			BRN-BLU	AE-26-1200	
15	BACKGLASS RAFT	Low Power		J106-5		Q46		J128-3		BRN-VIO		#906 (2)
16	BACKGLASS RIDERS	Low Power		J106-5		Q44		J128-5		BRN-GRY		#906 (2)
17	BIGFOOT BODY	Flasher	J107-6	J106-5		Q42	J126-1	J125-1		BLK-BRN	#89	#906
18	RIGHT MOUNTAINS	Flasher	J107-6	J106-5		Q40	J126-2	J125-2		BLK-RED	#89	#906
19	LEFT MOUNTAINS	Flasher	J107-6			Q38	J126-3			BLK-ORG	#89	-
20	UPPER LEFT PLAYFIELD	Flasher	J107-6	J106-5		Q36	J126-4	J125-5		BLK-YEL	#89	#906
21	INSANITY FALLS	Flasher	J107-6			Q28	J126-5			BLU-GRN	#89	-
22	WHIRLPOOL POPPER	Flasher	J107-6			Q30	J126-6			BLU-BLK	#89	-
23	WHIRLPOOL ENTER	Flasher	J107-6			Q34	J126-7			BLU-VIO	#89	-
24	BIGFOOT CAVE	Flasher	J107-6	J106-5		Q32	J126-8	J125-9		BLU-GRY	#89	#906
25	BIGFOOT DRIVE	Low Power	J107-1			Q26	J122-1			BLU-BRN	A-15680	
26	BIGFOOT ENABLE	Low Power	J118-2,3			Q24	J122-2			BLU-RED	A-15680	
27	CHASE LAMP CLOCK	Low Power		J105-4,5; J118-2,3		Q22		J123-4		BLU-ORG	A-15761	
28	CHASE LAMP DATA	Low Power		J105-4,5; J118-2,3		Q20		J123-5		BLU-YEL	A-15761	
General Illumination		Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type		
		Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox	
01	PLAYFIELD UPPER	G.I.	J120-1			Q18	J121-7			WHT-BRN	#555	#555
02	PLAYFIELD CENTER	G.I.	J120-2			Q10	J121-8			WHT-ORG	#555	#555
03	PLAYFIELD LOWER	G.I.	J120-3	J121-3		Q14	J121-9	J120-9		WHT-YEL	#555	#555
04	BACKGLASS BOAT	G.I.		J121-5		Q16		J120-10		WHT-GRN	#555	#555
05	BACKGLASS SKY	G.I.		J121-6	J119-3	Q12		J120-11	J119-1	WHT-VIO	#555	#555
Flipper Circuits		Playfield Voltage Connection		Drive Transistors Power Hold		Playfield Drive Connections		Drive Wire Colors Power Hold		Coil Part No.	Coil Colors	
	LOWER LEFT FLIPPER	Flipper	J907-6, 7 (GRY-YEL)	Q3	Q9	J902-7, 9		BLU-GRY ORG-BLU	FL-15629		BLUE	
	LOWER RIGHT FLIPPER	Flipper	J907-8, 9 (BLU-YEL)	Q4	Q11	J902-11, 13		BLU-VIO ORG-GRN	FL-15629		BLUE	
	UPPER RIGHT FLIPPER	Flipper	J907-4, 5 (BLU-YEL)	Q2	Q7	J902-4, 6		BLK-BLU ORG-VOI	FL-11630		RED	

LAMP MATRIX

Column	Row	1	2	3	4	5	6	7	8
		Yellow-Brown J137-1 Q98	Yellow-Red J137-2 Q97	Yellow-Orange J137-3 Q96	Yellow-Black J137-4 Q95	Yellow-Green J137-5 Q94	Yellow-Blue J137-6 Q93	Yellow-Violet J137-7 Q92	Yellow-Gray J137-8 Q91
1 Red-Brown J133-1 Q90	SHOOT AGAIN	RIVER 1ST "R"	RAFT 7	3-BANK CENTER	HAZARD 1	RAFT 1	WHIRLPOOL 1	LIGHT EXTRA BALL	
2 Red-Black J133-2 Q89	KICKBACK	RIVER "I"	RAFT 8	3-BANK LOWER	HAZARD 5	RAFT 2	WHIRLPOOL 2	ADVANCE RAFT	
3 Red-Orange J133-4 Q88	LEFT OUTLANE	RIVER "V"	WET WILLIE	LOCK RELEASE	HAZARD 6	RAFT 3	WHIRLPOOL 3	MYSTERY	
4 Red-Yellow J133-5 Q87	LEFT FLIPPER LANE	RIVER "E"	RAMP MILLIONS	3-BANK TOP	HAZARD 7	RAFT 4	WHIRLPOOL 4	BOLDER 5 X AWARD	
5 Red-Green J133-6 Q86	RIGHT FLIPPER LANE	RIVER 2ND "R"	HAZARD 5	HAZARD 4	WHIRLPOOL LIT	RAFT 5	WHIRLPOOL 5	NOT USED	
6 Red-Blue J133-7 Q85	RIGHT OUTLANE	HAZARD 3	LEFT LIGHT LOCK	RIGHT LIGHT LOCK	EXTRA BALL	RAFT 6	WHIRLPOOL 6	NOT USED	
7 Red-Violet J133-8 Q84	LIGHTS WHIRLPOOL	LOCK 1	2 X MULTIPLIER	4 X MULTIPLIER	WHIRL CHALLENGE	2-BANK UPPER	MULTI JACKPOT	NOT USED	
8 Red-Grey J133-9 Q83	6 X MULTIPLIER	LOCK 2	3 X MULTIPLIER	5 X MULTIPLIER	BOLDER MAN OVER	2-BANK LOWER	BIGFOOT JACKPOT	START BUTTON	

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Row	1	2	3	4	5	6	7	8	FLIPPER GROUNDED SWITCHES
			Green-Brown J207-1 U20-18	Green-Red J207-2 U20-17	Green-Orange J207-3 U20-16	Green-Yellow J207-4 U20-15	Green-Black J207-5 U20-14	Green-Blue J207-6 U20-13	Green-Violet J207-7 U20-12	Green-Grey J207-9 U20-11	
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	White-Brown J209-1 U18-11	NOT USED	SLAM TILT	RIVER 2ND "R"	LIGHT LOCK LEFT	LEFT SLING	WHIRL POOL POPPER	RAPIDS RAMP MAIN	NOT USED	BLACK-GREEN J906-1	
Orange-Red J205-2 CENTER COIN CHUTE U17-7	White-Red J209-2 U18-9	NOT USED	COIN DOOR CLOSED	RIVER "E"	LIGHT LOCK RIGHT	RIGHT SLING	WHIRL POOL EXIT	NOT USED	NOT USED	BLUE-VIOLET J905-1	
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	White-Orange J209-3 U18-5	START BUTTON	TICKET OPTO.	RIVER "V"	LEFT LOOP	BALL SHOOTER	LOCKUP RIGHT	HOT FOOT UPPER	NOT USED	BLACK-BLUE J906-3	
Orange-Yellow J205-4 4" COIN CHUTE U17-9	White-Yellow J209-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	RIVER "I"	RIGHT LOOP	LOWER JET ARENA	LOCKUP CENTER	HOT FOOT LOWER	NOT USED	BLUE-GRAY J905-2	
Orange-Green J205-6 Normal Function Srv Crdts	White-Green J209-5 U19-11	OUTHOLE	LEFT OUTLANE	RIVER 1ST "R"	SECRET PASSAGE	RIGHT JET ARENA	LOCKUP LEFT	DISASTER DROP MAIN	NOT USED	BLACK-VIOLET J906-4	
Orange-Blue J205-7 Normal Function Volume Dn	White-Blue J209-7 U19-9	LEFT JET BUMPER	LEFT FLIPPER LANE	3-BANK TOP	LEFT RAMP ENTER	EXTRA BALL	LEFT RAMP MAIN	RIGHT TROUGH	BIGFOOT OPTO 1	BLACK-YELLOW J905-3	
Orange-Violet J205-8 Normal Function Volume Up	White-Violet J209-8 U19-5	RIGHT JET BUMPER	RIGHT FLIPPER LANE	3-BANK CENTER	RAPIDS ENTER	CANYON MAIN	NOT USED	CENTER TROUGH	BIGFOOT OPTO 2	BLACK-GRAY J906-5	
Orange-Grey J205-9 Normal Function Begin Test	White-Grey J209-9 U19-7	CENTER JET BUMPER	RIGHT OUTLANE	3-BANK LOWER	CANYON ENTRANCE	BIGFOOT CAVE	DISASTER DROP ENTER	LEFT TROUGH	NOT USED	BLACK-BLUE J905-5	

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

WHIRLWIND Matrix Label

LAMP MATRIX

Column \ Row	1 Yellow-Brown 1J7-1 Q66	2 Yellow-Red 1J7-2 Q64	3 Yellow-Orange 1J7-3 Q62	4 Yellow-Black 1J7-4 Q60	5 Yellow-Green 1J7-6 Q58	6 Yellow-Blue 1J7-7 Q56	7 Yellow-Violet 1J7-8 Q54	8 Yellow-Gray 1J7-9 Q52
1 Red-Brown 1J6-1 Q80	MIDDLE STANDUP	LEFT OUTLANE	S ARROW	TOLL 1	BOTTOM JETS LEFT	RIGHT RAMP LOCK	LEFT RETURN LANE	SHOOT AGAIN
2 Red-Black 1J6-2 Q81	UP JETS ON (BACKGLASS)	RIGHT OUTLANE	S W ARROW	TOLL 2	BOTTOM JETS TOP	RIGHT RAMP DOUBLE	LEFT LOOP	2 X
3 Red-Orange 1J6-3 Q82	250K (BACKGLASS)	TOP DROP 50K	W ARROW	TOLL 3	BOTTOM JETS RIGHT	LEFT RAMP MILLION PLUS	LEFT STANDUP	3 X
4 Red-Yellow 1J6-5 Q83	EX BALL ON (BACKGLASS)	TOP DROP 75K	N W ARROW	TOLL 4	TOP JETS LEFT	LEFT RAMP MILLION	INNER LOOP ARROW	4 X
5 Red-Green 1J6-6 Q84	3-BANK 100K (BACKGLASS)	TOP DROP 100K	N ARROW	TOLL 5	TOP JETS RIGHT	LEFT RAMP RELEASE	RIGHT RAMP LEFT STANDUP	5 X
6 Red-Blue 1J6-7 Q85	500K (BACKGLASS)	TOP DROP 150K	N E ARROW	TOLL 30	TOP JETS BOTTOM	SHILL SHOT RIGHT	RIGHT RAMP RIGHT STANDUP	6 X LITES EXTRA BALL
7 Red-Violet 1J6-8 Q86	LITE MILLION (BACKGLASS)	TOP DROP QUICK	E ARROW	TOLL 20	LEFT CELLAR SIGN	SKILL SHOT MIDDLE	RIGHT LOOP	6 X LITES SPECIAL
8 Red-Grey 1J6-9 Q87	LOW JETS ON (BACKGLASS)	TOP DROP EXTRA BALL	S E ARROW	TOLL 10	RIGHT CELLAR SIGN	SKILL SHOT LEFT	RIGHT STANDUP	RIGHT SPINNER

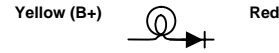
J1XX = Power Driver Board

SWITCH MATRIX

Column \ Row	1 Green-Brown 1J8-1 Q45	2 Green-Red 1J8-2 Q49	3 Green-Orange 1J8-3 Q44	4 Green-Yellow 1J8-4 Q48	5 Green-Black 1J8-5 Q43	6 Green-Blue 1J8-7 Q47	7 Green-Violet 1J8-8 Q42	8 Green-Grey 1J8-9 Q45
1 White-Brown 1J10-9	PLUMB BOB TILT		LEFT OUTLANE	RIGHT STANDUP	ENTER LEFT RAMP	SPINNER	TOP JETS LEFT	FLIPPER RIGHT
2 White-Red 1J10-8	C SIDE POWER A/C RELAY	OUTHOLE	LEFT RETURN LANE	TOP SINGLE DROP TARGET	LEFT RAMP SCORE TOP	RIGHT RAMP DOWN	TOP JETS RIGHT	FLIPPER LEFT
3 White-Orange 1J10-7	GAME START	BALL TROUGH #1 (LEFT)	RIGHT CELLAR	3-BANK DROP LOWER	LEFT RAMP SCORE BOTTOM	TOP RIGHT EJECT	TOP JETS MIDDLE	SHOOTER LANE
4 White-Yellow 1J10-6	RIGHT COIN CHUTE	BALL TROUGH #2 (MIDDLE)	LEFT CELLAR	3-BANK DROP MIDDLE	LEFT LOOP TOP	RIGHT RAMP SCORE TOP	BOTTOM JETS LEFT	LEFT 110 POINT
5 White-Green 1J10-5	CENTER COIN CHUTE	BALL TROUGH #3 (RIGHT)	LEFT STANDUP	3-BANK DROP TOP	LEFT LOOP BOTTOM	RIGHT RAMP SCORE BOTTOM	BOTTOM JETS RIGHT	RIGHT 110 POINT
6 White-Blue 1J10-3	LEFT COIN CHUTE		LEFT LOCK 1 LOWER	MIDDLE STANDUP	RIGHT LOOP TOP		BOTTOM JETS TOP	
7 White-Violet 1J10-2	SLAM TILT	RIGHT RETURN LANE	LEFT LOCK 2 MIDDLE		RIGHT LOOP BOTTOM	LEFT STANDUP RIGHT RAMP	BOTTOM LEFT SLING	
8 White-Grey 1J10-1	HIGH SCORE RESET	RIGHT OUTLANE	LEFT LOCK 3 TOP		INNER LOOP	RIGHT STANDUP RIGHT RAMP	BOTTOM RIGHT SLING	

Creature From The Black Lagoon

LAMP MATRIX



Column Row	1 Yellow-Brown J137-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J138-7 Q92	8 Yellow-Gray J138-9 Q91
1 Red-Brown J133-1 Q90	(P)-A-I-D 11	(K)-I-S-S 21	START MEGA MENU 31	LIPS 41	SNACK BAR 51	FREE PASS 61	C 71	(F)-I-L-M 81
2 Red-Black J133-2 Q89	P-(A)-I-D 12	K-(I)-S-S 22	PLAYGROUND AWARD 32	LEFT SEARCH 42	CENTER SEARCH 52	BUILD COMBO 62	R 72	F-(I)-L-M 82
3 Red-Orange J133-4 Q88	P-A-(I)-D 13	K-I-(S)-S 23	LITE BIG MILLIONS 33	LEFT VIDEO 43	COLA 53	UNLIMITED MILLIONS 63	E 73	F-I-(L)-M 83
4 Red-Yellow J133-5 Q87	P-A-I-(D) 14	K-I-S-(S) 24	SLIDE 34	LEFT START MOVIE 44	HOTDOG 54	CREATURE FEATURE 64	A 74	F-I-L-(M) 84
5 Red-Green J133-6 Q86	LEFT JET 15	10 MILLION 25	RIGHT SEARCH 35	COMBO AWARD 45	SUPER JACKPOT 55	EXTRA BALL COUNTDOWN 65	T 75	START COMBO 85
6 Red-Blue J133-7 Q85	RIGHT JET 16	20 MILLION 26	RIGHT VIDEO 36	PARKING O.K. 46	JACKPOT 56	BIG MILLIONS 66	U 76	POPCORN 86
7 Red-Violet J133-8 Q84	BOTTOM JET 17	30 MILLION 27	RIGHT START MOVIE 37	MOVE YOUR CAR 47	RESCUE 57	MOVIE MADNESS 67	R 77	ICE CREAM 87
8 Red-Gray J133-9 Q83	ADMIT ONE 18	SPECIALS 28	MEGA MENU 38	EXTRA BALL 48	MULTIBALL RESTART 58	SNACK ATTACK 68	E 78	START BUTTON 88

J1XX = Power Driver Board

SWITCH MATRIX

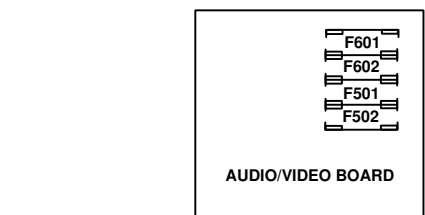


Column Row	1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Gray J206-9 U20-11	FLIPPER GROUNDED SWITCHES	
Orange-Brown J205-1 LEFT COIN CHUTE D1	1 White-Brown J208-1 U18-11	NOT USED 11	SLAM TILT 21	NOT USED 31	COLA 41	LEFT OUTLANE 51	RIGHT RAMP EXIT 61	NOT USED 71	NOT USED 81	Black-Green J906-1 Right Flipper E.O.S. F1
Orange-Red J205-2 CENTER COIN CHUTE D2	2 White-Red J208-2 U18-9	NOT USED 12	COIN DOOR 22	NOT USED 32	HOTDOG 42	LEFT RETURN LANE 52	LEFT RAMP EXIT 62	NOT USED 72	NOT USED 82	Blue-Violet J905-1 Right Flipper Opto F2
Orange-Black J205-3 RIGHT COIN CHUTE D3	3 White-Orange J208-3 U18-5	CREDIT START BUTTON 13	NOT USED 23	BOTTOM JET 33	POPCORN 43	START COMBO 53	CENTER LANE EXIT 63	NOT USED 73	NOT USED 83	Black-Blue J906-3 Left Flipper E.O.S. F3
Orange-Yellow J205-4 4 TH COIN CHUTE D4	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT 14	NOT USED 24	RIGHT POPPER 34	ICE CREAM 44	RIGHT OUTLANE 54	UPPER RAMP 64	NOT USED 74	NOT USED 84	Blue-Gray J905-2 Left Flipper Opto F4
Orange-Green J205-6 Normal Function Test Function Srv Crdts Escape D5	5 White-Green J208-5 U19-11	TOP LEFT ROLLOVER 15	P of P-A-I-D 25	RIGHT RAMP ENTER 35	LEFT JET 45	OUTHOLE 55	BOWL 65	NOT USED 75	NOT USED 85	Black-Violet J906-4 Upper Right Flipper E.O.S. F5
Orange-Blue J205-7 Normal Function Test Function Volume Dn Down D6	6 White-Blue J208-7 U19-9	LEFT SUBWAY 16	A of P-A-I-D 26	LEFT RAMP ENTER 36	RIGHT JET 46	RIGHT TROUGH 56	SHOOTER 66	NOT USED 76	NOT USED 86	Black-Yellow J905-3 Upper Right Flipper Opto F6
Orange-Violet J205-8 Normal Function Test Function Volume Up Up D7	7 White-Violet J208-8 U19-5	CENTER SUBWAY 17	I of P-A-I-D 27	LOWER RIGHT POPPER 37	LEFT SLINGSHOT 47	CENTER TROUGH 57	NOT USED 67	NOT USED 77	NOT USED 87	Black-Gray J906-5 Upper Left Flipper E.O.S. F7
Orange-Gray J205-9 Normal Function Test Function Begin Test Enter D8	8 White-Gray J208-9 U19-7	CENTER SHOT 18	D of P-A-I-D 28	RAMP UP/DOWN 38	RIGHT SLINGSHOT 48	LEFT TROUGH 58	NOT USED 68	NOT USED 78	NOT USED 88	Black-Blue J905-5 Left Flipper Opto F8

SCARED STIFF (50048)

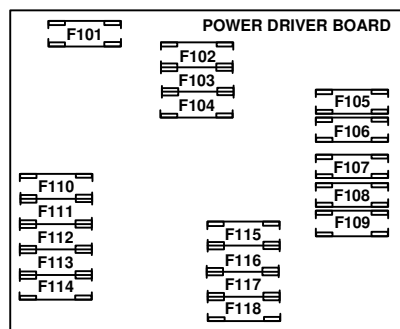
FUSE LIST

POWER DRIVER BOARD		
F101	Regulated 12V	T0.63A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V
F105	+5V Logic	T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V
F107	Flasher Secondary	T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V
F109	Unregulated 12V	T4.0A, 250V
F110	G.I. #5 White-Violet	T4.0A, 250V
F111	G.I. #4 White-Green	T4.0A, 250V
F112	G.I. #3 White-Yellow	T4.0A, 250V
F113	G.I. #2 White-Orange	T4.0A, 250V
F114	G.I. #1 White-Brown	T4.0A, 250V
F115	+50V Flippers	T4.0A, 250V
F116	+50V Flippers	T4.0A, 250V
F117	+50V Flippers	T4.0A, 250V
F118	+50V Flippers	T4.0A, 250V



CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.

AUDIO/VIDEO BOARD		
F501	-25V	T2.5A, 250V
F502	+25V	T2.5A, 250V
F601	+62V	T0.25A, 250V
F602	-113V & -125V	T0.25A, 250V



LINE FILTER	
Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Solenoid/Flashlamp	
			Playfield	Backbox	Cabinet		Playfield	Backbox	Cabinet		Playfield	Backbox
01	AUTO PLUNGER	High Power	J133-2			Q72	J116-1			VIO-BRN	AE-23-800	
02	LOOP GATE	High Power	J133-2			Q68	J116-2			VIO-RED	A-14406	
03	RIGHT POPPER	High Power	J133-2			Q71	J116-4			VIO-ORG	AE-24-900	
04	COFFING POPPER	High Power	J133-2			Q67	J116-5			VIO-YEL	AE-23-800	
05	COFFIN DOOR	High Power	J133-2			Q70	J116-6			VIO-GRN	AE-26-1500	
06	CRATE KICKOUT	High Power	J133-2			Q66	J116-7			VIO-BLU	AE-24-900	
07	*KNOCKER	High Power		J133-2		Q69		J116-8		VIO-BLK		AE-23-800
08	CRATE POST POWER	High Power	J133-2			Q65	J116-9			VIO-GRY	FL-11629	
09	TROUGH EJECT	Low Power	J133-3			Q44	J113-1			BRN-BLK	AE-26-1500	
10	LEFT SLINGSHOT	Low Power	J133-3			Q48	J113-3			BRN-RED	AE-25-1000	
11	RIGHT SLINGSHOT	Low Power	J133-3			Q43	J113-4			BRN-ORG	AE-25-1000	
12	CENTER JET BUMPER	Low Power	J133-3			Q47	J113-5			BRN-YEL	AE-26-1200	
13	UPPER JET BUMPER	Low Power	J133-3			Q42	J113-6			BRN-GRN	AE-26-1200	
14	LOWER JET BUMPER	Low Power	J133-3			Q46	J113-7			BRN-BLU	AE-26-1200	
15	UPPER SLINGSHOT	Low Power	J133-3			Q41	J113-8			BRN-VIO	AE-26-1200	
16	CRATE POST HOLD	Low Power	J133-2			Q45	J114-9			BRN-GRY	FL-11629	
17	TOP JET FLASHER	Flasher	J133-6	J134-5		Q28	J111-1	J112-1		BLK-BRN	#555	#89
18	MIDDLE LEFT FLASHER	Flasher	J133-6	J134-5		Q32	J111-2	J112-2		BLK-RED	#555	#89
19	LOWER JET FLASHER	Flasher	J133-6	J134-5		Q27	J111-3	J112-3		BLK-ORG	#555	#89
20	PLAYFIELD BOLTS	Flasher	J133-6			Q31	J111-4			BLK-YEL	#89 (2)	
21	SKULL FLASHER LEFT	Flasher	J133-6			Q26	J111-5			BLU-GRN	#906	
22	UPPER RIGHT FLASHER	Flasher	J134-6			Q30	J111-6			BLU-BLK	#906	
23	LEFT RAMP FLASHER	Flasher	J134-6			Q25	J111-7			BLU-VIO	#906	
24	CENTER LEFT FLASHER	Flasher	J133-6			Q29	J111-8			BLU-GRY	#906	
25	SKULL FLASHER RIGHT	Gen. Purpose	J133-6			Q16	J109-1			BLU-BRN	#906	
26	CENTER TV	Gen. Purpose	J133-6	J134-5		Q15	J109-2	J107-3		BLU-RED	#906	#89
27	UPPER LEFT FLASHER	Gen. Purpose	J133-6			Q14	J109-3			BLU-ORG	#906	
28	CENTER RIGHT FLASHER	Gen. Purpose	J133-6			Q13	J109-4			BLU-YEL	#906	
33	LEFT DIVERTER POWER	High Power	J119-6.7			Q84	J120-6			YEL-VOI	A-20099	
34	RIGHT DIVERTER HOLD	Low Power	J119-6.7			Q86	J120-4			ORG-VIO	A-20099	
35	LOWER LEFT FLASHER	High Power	J133-6			Q81	J120-3			YEL-GRY	#906	
36	LOWER RIGHT FLASHER	Low Power	J133-6			Q83	J120-1			ORG-GRY	#906	
37	**AUX LAMP CLOCK	L.P.D.C.	J141-2				J110-1			BRN-WHT	A-20781	
38	**AUX LAMP DATA	L.P.D.C.	J141-2				J110-3			ORG-WHT	A-20781	
39	*SPIDER WHEEL 1 (1.8V)	L.P.D.C.		J141-2				J110-4		YEL-WHT		14-8024
40	*SPIDER WHEEL 2 (1.8V)	L.P.D.C.		J141-2				J110-5		GRN-WHT		14-8024

General Illumination

01	UPPER PLAYFIELD	G.I.	J105-1			Q5	J105-7			WHT-BRN	#44	
02	CENTER PLAYFIELD	G.I.	J105-2			Q4	J105-8			WHT-ORG	#44	
03	LOWER PLAYFIELD	G.I.	J105-3			Q3	J105-9			WHT-YEL	#44	
04	+ILLUMINATION STRING 4	G.I.		J106-7				J106-10		WHT-GRN		#44
05	+ILLUMINATION STRING 5	G.I.		J106-6				J106-11		WHT-VIO		#44

Flipper Circuits

Sol No.	Function	Power	Voltage Connection		Drive Xistors		Drive Connections		Drive Wire Colors		Coil Part No.	Coil Colors
			Playfield	Backbox	Power	Hold	Playfield	Backbox	Power	Hold		
29			J119-1 (RED-GRN)		Q90		J120-13		YEL-GRN		FL-11629	BLUE
30	LOWER RIGHT FLIPPER	Hold	J119-1 (RED-GRN)			Q92	J120-11		ORG-GRN			
31			J119-4 (RED-BLU)		Q67		J120-9		YEL-BLU		FL-11629	BLUE
32	LOWER LEFT FLIPPER	Hold	J119-4 (RED-BLU)			Q69	J120-7		ORG-BLU			
33			J119-6 (RED-VIO)		Q84		J120-6		YEL-VIO		SEE	ABOVE
34	UPPER RIGHT FLIPPER	Hold	J119-6 (RED-VIO)			Q86	J120-4		ORG-VIO		SEE	ABOVE
35			J119-8 (RED-GRY)		Q81		J120-3		YEL-GRY		SEE	ABOVE
36	UPPER LEFT FLIPPER	Hold	J119-8 (RED-GRY)			Q83	J120-1		ORG-GRY			

J1xx = Power Driver Board; L.P.D.C = Lower Power Device Controls
+ These G.I. strings do not brighten and dim, they are always ON. * Located in Backbox **Located under Playfield

LAMP MATRIX

Column	Yellow (B+) → Red							
	1 Yellow-Brown J121-1 Q96	2 Yellow-Red J121-2 Q100	3 Yellow-Orange J121-3 Q95	4 Yellow-Black J121-4 Q99	5 Yellow-Green J121-5 Q94	6 Yellow-Blue J121-6 Q98	7 Yellow-Violet J121-7 Q93	8 Yellow-Grey J121-8 Q97
1 Red-Brown J125-1 Q104	STIFF LEVEL 7	STIFF LEVEL 8	CRATE LEFT EYE	LEFT LEAPER	RAMP ITEM	LABORATORY ITEM	WEB AWARD 7	WEB AWARD 15
2 Red-Black J125-2 Q108	STIFF LEVEL 6	STIFF LEVEL 9	CRATE CENTER LEFT	LEFT RAMP JACKPOT	COFFIN MULTIBALL ITEM	CRATE ITEM	WEB AWARD 8	WEB AWARD 16
3 Red-Orange J125-4 Q103	STIFF LEVEL 5	SCARED STIFF	CRATE CENTER RIGHT	LIGHT LOCK	LEAPER ITEM	SKULL ITEM	WEB AWARD 9	WEB AWARD 1
4 Red-Yellow J125-5 Q107	STIFF LEVEL 4	CENTER LEAPER	CRATE RIGHT EYE	RAMP RIGHT EYE	COFFIN SPOTLIGHT	WEB AWARD 2	WEB AWARD 10	LEFT SKULL LANE
5 Red-Green J125-6 Q102	STIFF LEVEL 3	THREE BANK LOWER	LEFT OUTLANE	RIGHT OUTLANE	SHOOT AGAIN	WEB AWARD 3	WEB AWARD 11	CENTER SKULL LANE
6 Red-Blue J125-7 Q106	STIFF LEVEL 2	THREE BANK MIDDLE	RIGHT LEAPER	SKILL SHOT	LOCK LAMP	WEB AWARD 4	WEB AWARD 12	RIGHT SKULL LANE
7 Red-Violet J125-8 Q101	STIFF LEVEL 1	THREE BANK UPPER	RIGHT RAMP JACKPOT	CRATE JACKPOT	LEFT LOOP CENTER	WEB AWARD 5	WEB AWARD 13	BUY IN
8 Red-Grey J125-9 Q105	RAMP LEFT EYE	SPIDER POPPER	LIGHT SPIN SPIDER	EXTRA BALL	LEFT LOOP UPPER	WEB AWARD 6	WEB AWARD 14	START BUTTON

J1XX = Power Driver Board

SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	White → Green								FLIPPER GROUNDED SWITCHES	
	Column	1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12		8 Green-Grey J206-9 U20-11
Orange-Brown J205-1 LEFT COIN CHUTE U17-5	1 White-Brown J208-1 U18-11	NOT USED	SLAM TILT	TROUGH EJECT	COFFIN LEFT	LEFT SLING SHOT	THREE BANK UPPER	LEFT SKULL LANE	NOT USED	Black-Green J208-13 Lower Right Flipper E.O.S.
Orange-Red J205-2 CENTER COIN CHUTE U17-7	2 White-Red J208-2 U18-9	WHEEL INDEX	COIN DOOR CLOSED	TROUGH BALL 1	COFFIN CENTER	RIGHT SLING SHOT	THREE BANK MIDDLE	CENTER SKULL LANE	NOT USED	Blue-Violet J212-12 Lower Right Flipper Opto
Orange-Black J205-3 RIGHT COIN CHUTE U17-11	3 White-Orange J208-3 U18-5	START BUTTON	BUY IN BUTTON	TROUGH BALL 2	COFFIN RIGHT	UPPER JET BUMPER	THREE BANK LOWER	RIGHT SKULL LANE	NOT USED	Black-Blue J208-12 Lower Left Flipper E.O.S.
Orange-Yellow J205-4 4 th COIN CHUTE U17-9	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT	ALWAYS CLOSED	TROUGH BALL 3	LEFT RAMP ENTER	CENTER JET BUMPER	LEFT LEAPER	SECRET PASSAGE	NOT USED	Blue-Gray J212-11 Lower Left Flipper Opto
Orange-Green J205-6 U16-9 Normal Function Srv Crdts	5 White-Green J208-5 U19-11	NOT USED	EXTRA BALL LANE	TROUGH BALL 4	RIGHT RAMP ENTER	LOWER JET BUMPER	CENTER LEAPER	NOT USED	NOT USED	Black-Violet J208-11 Upper Right Flipper E.O.S.
Orange-Blue J205-7 U16-11 Normal Function Volume Dn	6 White-Blue J208-7 U19-9	KICK BACK	LEFT FLIPPER LANE	RIGHT POPPER	LEFT RAMP MADE	UPPER SLING SHOT	RIGHT LEAPER	NOT USED	NOT USED	Black-Yellow J212-10 Upper Right Flipper Opto
Orange-Violet J205-8 U16-7 Normal Function Volume Up	7 White-Violet J208-8 U19-5	RIGHT FLIPPER LANE	RIGHT OUTLANE	LEFT KICKOUT	RIGHT RAMP MADE	CRATE SENSOR	LEFT RAMP 10 POINT	NOT USED	NOT USED	Black-Gray J208-10 Upper Left Flipper E.O.S.
Orange-Grey J205-9 U16-5 Normal Function Begin Test	8 White-Grey J208-9 U19-7	SHOOTER LANE	SINGLE STANDUP	CRATE ENTRANCE	COFFIN ENTRANCE	LEFT LOOP	RIGHT LOOP	NOT USED	NOT USED	Black-Blue J212-9 Upper Left Flipper Opto

J2XX = CPU Board = OPTO, TYPICALLY CLOSED

WPC FUSE LIST

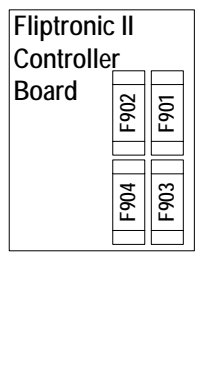
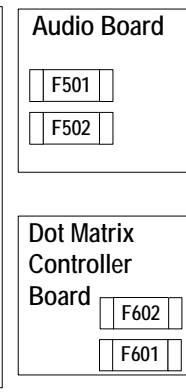
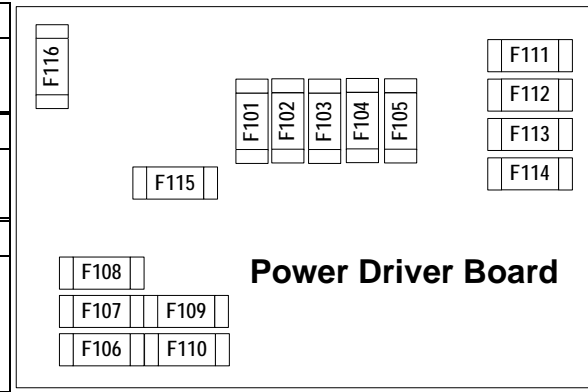
CAUTION! For continued protection against risk of fire, replace only with the same type of fuse having the same ratings.

Power Driver Board			
F101	+50V DC General (Lt. Flipper)	3A, 250V, SB	F109 G.I. #2 White-Orange 5A, 250V, SB
F102	+50V DC General (Rt. Flipper)	3A, 250V, SB	F110 G.I. #1 White-Brown 5A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB	F111 Flasher Secondary 5A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB	F112 Solenoid Secondary 7A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB	F113 +5V Logic 5A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB	F114 +18V Lamp Matrix 8A, 32V, N.B.
F107	G.I. #4 White-Green	5A, 250V, SB	F115 +12V Lamp Matrix 3/4A, 250V, FB
F108	G.I. #3 White-Yellow	5A, 250V, SB	F116 +12V Secondary 3A, 250V, SB

Audio Board	
F501	-25V 3A, 250V, SB
F502	+25V 3A, 250V, SB

Dot Matrix Controller Board	
F601	3/8A, 250V, FB +62V
F602	3/8A, 250V, FB -113V & -125V

Fliptronic II Controller Board	
F901	3A, 250V, SB Upper Right Flipper
F902	3A, 250V, SB Upper Left Flipper
F903	3A, 250V, SB Lower Right Flipper
F904	3A, 250V, SB Lower Left Flipper



WPC FUSE LIST

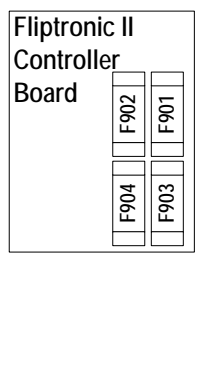
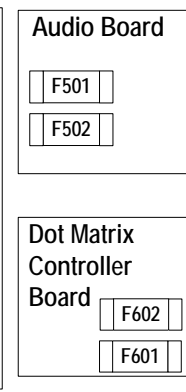
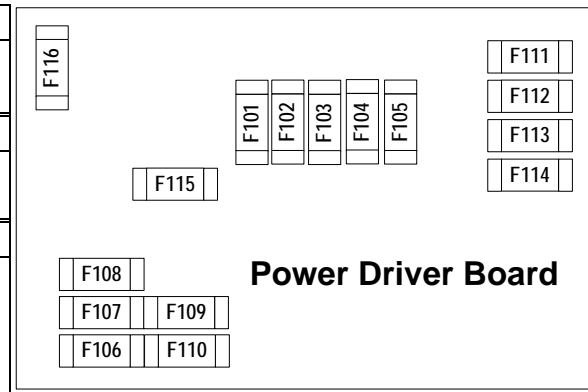
CAUTION! For continued protection against risk of fire, replace only with the same type of fuse having the same ratings.

Power Driver Board			
F101	+50V DC General (Lt. Flipper)	3A, 250V, SB	F109 G.I. #2 White-Orange 5A, 250V, SB
F102	+50V DC General (Rt. Flipper)	3A, 250V, SB	F110 G.I. #1 White-Brown 5A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB	F111 Flasher Secondary 5A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB	F112 Solenoid Secondary 7A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB	F113 +5V Logic 5A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB	F114 +18V Lamp Matrix 8A, 32V, N.B.
F107	G.I. #4 White-Green	5A, 250V, SB	F115 +12V Lamp Matrix 3/4A, 250V, FB
F108	G.I. #3 White-Yellow	5A, 250V, SB	F116 +12V Secondary 3A, 250V, SB

Audio Board	
F501	-25V 3A, 250V, SB
F502	+25V 3A, 250V, SB

Dot Matrix Controller Board	
F601	3/8A, 250V, FB +62V
F602	3/8A, 250V, FB -113V & -125V

Fliptronic II Controller Board	
F901	3A, 250V, SB Upper Right Flipper
F902	3A, 250V, SB Upper Left Flipper
F903	3A, 250V, SB Lower Right Flipper
F904	3A, 250V, SB Lower Left Flipper



WPC FUSE LIST

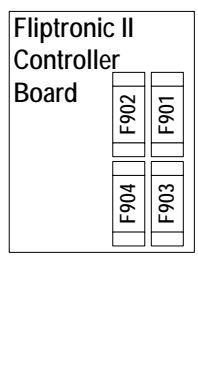
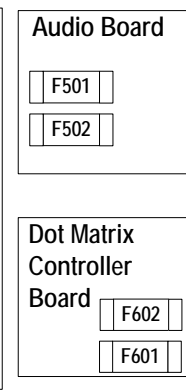
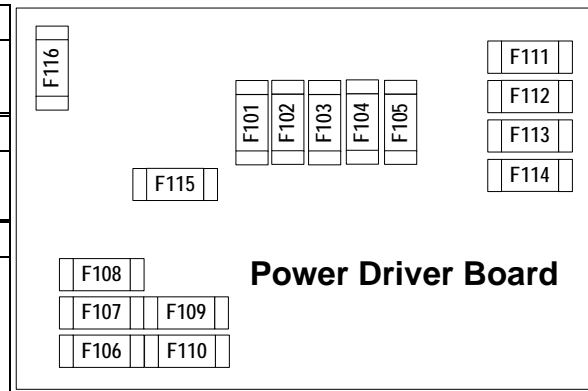
CAUTION! For continued protection against risk of fire, replace only with the same type of fuse having the same ratings.

Power Driver Board			
F101	+50V DC General (Lt. Flipper)	3A, 250V, SB	F109 G.I. #2 White-Orange 5A, 250V, SB
F102	+50V DC General (Rt. Flipper)	3A, 250V, SB	F110 G.I. #1 White-Brown 5A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB	F111 Flasher Secondary 5A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB	F112 Solenoid Secondary 7A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB	F113 +5V Logic 5A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB	F114 +18V Lamp Matrix 8A, 32V, N.B.
F107	G.I. #4 White-Green	5A, 250V, SB	F115 +12V Lamp Matrix 3/4A, 250V, FB
F108	G.I. #3 White-Yellow	5A, 250V, SB	F116 +12V Secondary 3A, 250V, SB

Audio Board	
F501	-25V 3A, 250V, SB
F502	+25V 3A, 250V, SB

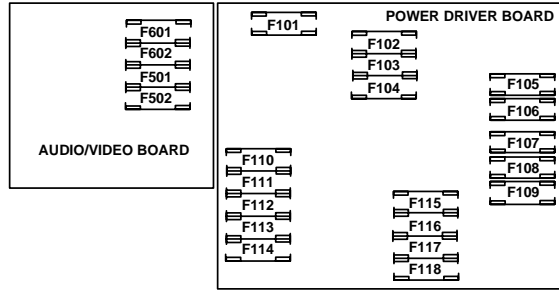
Dot Matrix Controller Board	
F601	3/8A, 250V, FB +62V
F602	3/8A, 250V, FB -113V & -125V

Fliptronic II Controller Board	
F901	3A, 250V, SB Upper Right Flipper
F902	3A, 250V, SB Upper Left Flipper
F903	3A, 250V, SB Lower Right Flipper
F904	3A, 250V, SB Lower Left Flipper



WPC-95 FUSE LIST

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.



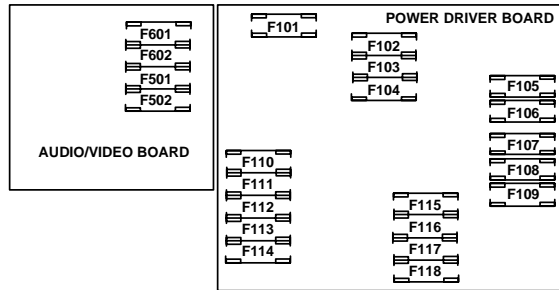
AUDIO/VIDEO BOARD			
F501	-25V	T2.5A, 250V	
F502	+25V	T2.5A, 250V	
F601	+62V	T0.25A, 250V	
F602	-113V & -125V	T0.25A, 250V	

LINE FILTER	
Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

POWER DRIVER BOARD			
F101	Regulated 12V	T0.63A, 250V	F110 G.I. #5 White-Violet T4.0A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V	F111 G.I. #4 White-Green T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V	F112 G.I. #3 White-Yellow T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V	F113 G.I. #2 White-Orange T4.0A, 250V
F105	+5V Logic	T4.0A, 250V	F114 G.I. #1 White-Brown T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V	F115 +50V Flippers T4.0A, 250V
F107	Flasher Secondary	T4.0A, 250V	F116 +50V Flippers T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V	F117 +50V Flippers T4.0A, 250V
F109	Unregulated 12V	T4.0A, 250V	F118 +50V Flippers T4.0A, 250V

WPC-95 FUSE LIST

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.



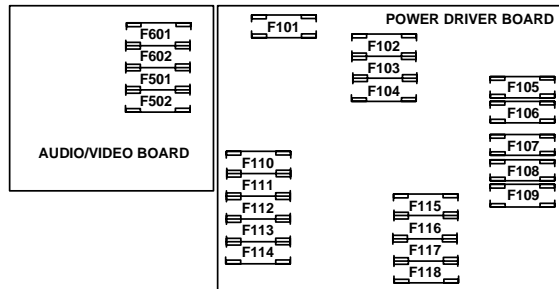
AUDIO/VIDEO BOARD			
F501	-25V	T2.5A, 250V	
F502	+25V	T2.5A, 250V	
F601	+62V	T0.25A, 250V	
F602	-113V & -125V	T0.25A, 250V	

LINE FILTER	
Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

POWER DRIVER BOARD			
F101	Regulated 12V	T0.63A, 250V	F110 G.I. #5 White-Violet T4.0A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V	F111 G.I. #4 White-Green T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V	F112 G.I. #3 White-Yellow T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V	F113 G.I. #2 White-Orange T4.0A, 250V
F105	+5V Logic	T4.0A, 250V	F114 G.I. #1 White-Brown T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V	F115 +50V Flippers T4.0A, 250V
F107	Flasher Secondary	T4.0A, 250V	F116 +50V Flippers T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V	F117 +50V Flippers T4.0A, 250V
F109	Unregulated 12V	T4.0A, 250V	F118 +50V Flippers T4.0A, 250V

WPC-95 FUSE LIST

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
ATTENTION: UTILISER UN FUSIBLE DE RECHARGE DE MEME TYPE.



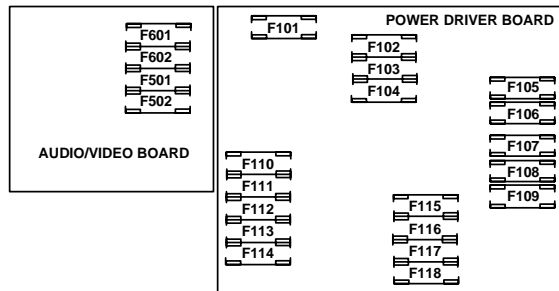
AUDIO/VIDEO BOARD			
F501	-25V	T2.5A, 250V	
F502	+25V	T2.5A, 250V	
F601	+62V	T0.25A, 250V	
F602	-113V & -125V	T0.25A, 250V	

LINE FILTER	
Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

POWER DRIVER BOARD			
F101	Regulated 12V	T0.63A, 250V	F110 G.I. #5 White-Violet T4.0A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V	F111 G.I. #4 White-Green T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V	F112 G.I. #3 White-Yellow T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V	F113 G.I. #2 White-Orange T4.0A, 250V
F105	+5V Logic	T4.0A, 250V	F114 G.I. #1 White-Brown T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V	F115 +50V Flippers T4.0A, 250V
F107	Flasher Secondary	T4.0A, 250V	F116 +50V Flippers T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V	F117 +50V Flippers T4.0A, 250V
F109	Unregulated 12V	T4.0A, 250V	F118 +50V Flippers T4.0A, 250V

WPC-95 FUSE LIST

CAUTION: FOR CONTINUED PROTECTION AGAINST RISK OF FIRE, REPLACE ONLY WITH THE SAME TYPE OF FUSE HAVING THE SAME ELECTRICAL RATINGS.
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AUDIO/VIDEO BOARD			
F501	-25V	T2.5A, 250V	
F502	+25V	T2.5A, 250V	
F601	+62V	T0.25A, 250V	
F602	-113V & -125V	T0.25A, 250V	

LINE FILTER	
Foreign	T4.0A, 250V
Domestic	T5.0A, 250V

POWER DRIVER BOARD			
F101	Regulated 12V	T0.63A, 250V	F110 G.I. #5 White-Violet T4.0A, 250V
F102	Solenoids #9 to #16	T4.0A, 250V	F111 G.I. #4 White-Green T4.0A, 250V
F103	Solenoids #1 to #8	T4.0A, 250V	F112 G.I. #3 White-Yellow T4.0A, 250V
F104	Solenoids #25 to #28	T4.0A, 250V	F113 G.I. #2 White-Orange T4.0A, 250V
F105	+5V Logic	T4.0A, 250V	F114 G.I. #1 White-Brown T4.0A, 250V
F106	+18V Lamp Matrix	T5.0A, 250V	F115 +50V Flippers T4.0A, 250V
F107	Flasher Secondary	T4.0A, 250V	F116 +50V Flippers T4.0A, 250V
F108	Solenoid Secondary	T6.3A, 250V	F117 +50V Flippers T4.0A, 250V
F109	Unregulated 12V	T4.0A, 250V	F118 +50V Flippers T4.0A, 250V