



FUSE LIST

Power Supply Board fuses 520-5047-03			Power Supply Board 520-5047-03 F1 F2 F4 F5 F6	CPU Board 520-5003-04
F1	5V & 12V Logic Power Input	7A, 250V, SB		
F2	5V & 12V Logic Power Input	7A, 250V, SB		
F3	Not used			
F4	18V Controlled lamps	8A, 250V, SB		
F5	34V Solenoids	4A, 250V, SB		
F6	34V Solenoids	5A, 250V, SB		
Back Box fuses				
F1	18VDC Controlled lamps	8A, 250V, SB		
F2	34VDC Solenoids	8A, 250V, SB		
F3	18VDC Display	8A, 250V, SB		
Playfield Power Board fuses 520-5021-05			F3	
F1	General Illumination (Violet)	5A, 250V, SB	F1	
F2	General Illumination (Green)	5A, 250V, SB	F2 F3 F4	F5
F3	General Illumination (Yellow)	5A, 250V, SB		
F4	General Illumination (Brown)	5A, 250V, SB		
F5	Flipper Power & 50V coils	5A, 250V, SB		
F6	34V Flashers (Right)	3A, 250V, SB	F7 F6 F8	Playfield Power Board 520-5021-05
F7	34V Coils (Left)	3A, 250V, SB		
F8	50V Coils	4A, 250V, SB		
F9	50V Laser Kick	5A, 250V, SB		
Solid State Flipper Board fuses 520-5080-00 (2x)				Sound Board 520-5126-02
F1	Coil A (right flipper)	3A, 250V, SB		
F2	Coil (hold power)	3A, 250V, SB		
F3	Coil B (lower left flipper)	3A, 250V, SB		
F4	Coil (hold power)	3A, 250V, SB		
			Line Filter	
			Foreign	(220V)
			Domestic	(110V)
				4A, 250V, SB
				8A, 250V, SB

Switched, CPU Controlled Auxiliary & Constant Power Solenoids								
Coil No.	Coil or Flashlamp Description	Drive Transistor	CPU wire	CPU connection	PPB wire	PPB connection	Power Line	Power Description
1L	5-Ball Assembly Lockout	Q46	Gry-Brn	CN11-1	Vio-Brn	J2-10	Brn	34V L
1R	2 insert, 1 back pnl, 1 dr tgt. flashers		(to PPB)	to PPB J1-1	Blk-Brn	J9-5	Orn	34V R
2L	Trough Up-Kicker	Q45	Gry-Red	CN11-3	Vio-Red	J2-9	Brn	34V L
2R	2 insert, 2 lower left flashers		(to PPB)	to PPB J1-2	Blk-Red	J9-6	Orn	34V R
3L	Ball (Auto) Launch	Q5 PPB	Gry-Orn	CN11-4	Wht-Orn/Vio-Orn	J2-8 J8-1/J8-2	Yel-Vio	50V
3R	2 insert, 2 upper right flipper flasher	Q44 CPU	(to PPB)	to PPB J1-3	Blk-Orn	J9-7	Orn	34V R
4L	Upper Ball Launch	Q1 PPB	Gry-Yel	CN11-5	Wht-Yel/Vio-Yel	J2-7 J8-11/J8-12	Yel-Vio	50V
4R	1 insert, 3 upper left flipper flashers	Q43 CPU	(to PPB)	to PPB J1-4	Blk-Yel	J9-8	Orn	34V R
5L	Top VUK	Q4 PPB	Gry-Grn	CN11-6	Wht-Grn/Vio-Grn	J2-6 J8-3/J8-4	Yel-Vio	50V
5R	2 insert, 1 back pnl, 1 top plfd flasher	Q42 CPU	(to PPB)	to PPB J1-5	Blk-Grn	J9-9	Orn	34V R
6L	Bottom Super VUK	Q3 PPB	Gry-Blu	CN11-7	Wht-Blu/Vio-Blu	J2-5 J8-5/J8-6	Yel-Vio	50V
6R	2 insert, lower right flashers	Q41 CPU	(to PPB)	to PPB J1-6	Blk-Blu	J9-10	Orn	34V R
7L	Super Scoop (Shark)	Q2 PPB	Gry-Vio	CN11-8	Wht-Vio/Vio-Blk	J2-3 J8-7/J8-8	Yel-Vio	50V
7R	1 insert, 3 Turbo Bumpers flashers	Q40 CPU	(to PPB)	to PPB J1-7	Blk-Vio	J9-11	Orn	34V R
8L	Knocker	Q39	Gry-Blk	CN11-9	Vio-Gry	J2-2	Brn	34V L
8R	2 insert, lower ramp flashers		(to PPB)	to PPB J1-8	Blk-Gry	J9-12	Orn	34V R
9	Upper Control Gate	Q30	Brn-Blk	CN12-1			Red	34V
10	L/R Power Relay	Q29	Blk-Red	CN12-2		J6-7	Red-Wht	34V
11	General Illumination Relay (PSB)	Q28	Brn-Orn	CN12-4		(PSB) CN7-1	Red	34V
12	Trap Door	Q27	Brn-Yel	CN12-5			Red	34V
13	Upper left & right flippers	Q26	Brn-Grn	CN12-6				---
14	Lower Control Gate	Q25	Brn-Blu	CN12-7			Red	34V
15	Not used	Q24	Brn-Vio	CN12-8			Red	34V
16	3-Bank Drop Target Reset	Q23	Brn-Gry	CN12-9			Red	34V
17	Left Turbo Bumper	Q11	Blu-Brn	CN19-7			Red	34V
18	Bottom Turbo Bumper	Q9	Blu-Red	CN19-4			Red	34V
19	Right Turbo Bumper	Q8	Blu-Orn	CN19-3			Red	34V
20	Left Slingshot	Q10	Blu-Yel	CN19-6			Red	34V
21	Right Slingshot	Q12	Blu-Grn	CN19-8			Red	34V
22	Laser Kick	Q13	Blu-Blk	CN19-9			Red	34V
Flipper Circuits (SSFB)		SSFB Drive Transistor	SSFB to coil	SSFB Connection	SSFB to Flipperswitch	SSFB Sw. Connect	SSFB Power Wire	Power Description
SSFB 1	Lower Right Flipper (coil "A")	SR1, Q2-Q3	Blu-Yel	CN2-4,5	Blu-Vio	CN1-7	Blk-Wht / Blk-Wht	CN2-11, 12 50VDC
SSFB 1	Lower Left Flipper (coil "B")	SR2, Q10-Q9	Gry-Yel	CN2-1,2	Blu-Gry	CN1-10	Gry / Gry Grn	CN2-9, 10 8VAC
SSFB 2	Upper Right Flipper (coil "C")	SR3, Q2-Q3	Brn-Yel	CN2-4,5	Gry-Vio	CN1-7	Blk-Wht / Blk-Wht	CN2-11, 12 50VDC
SSFB 2	Upper Left Flipper (coil "D")	SR3, Q10-Q9	Blk-Yel	CN2-1,2	Gry-Blk	CN1-10	Gry / Gry Grn	CN2-9, 10 8VAC

LAMP MATRIX

Column (*)	Red ← Yellow (B+) →							
	1 YEL-BRN (41) CN7-1 Q71	2 YEL-RED (42) CN7-2 Q70	3 YEL-ORN (43) CN7-3 Q69	4 YEL-BLK (40) CN7-4 Q68	5 YEL-GRN (45) CN7-6 Q67	6 YEL-BLU (46) CN7-7 Q66	7 YEL-VIO (47) CN7-8 Q65	8 YEL-GRY (48) CN7-9 Q64
1 RED-BRN (21) CN6-1 Q72	10 Million + Video Mode 1	Shoot Again 9	5-Bank S-U S 17	Special (Left & Right Outlanes) 25	Lock 1 (Left Ramp Enter) 33	Guard G 41	Guard A 49	Guard D 57
2 RED-BLK (20) CN6-2 Q73	0 Million + Laser Kick 2	Left Turbo Bumper 10	5-Bank S-U H 18	Laser Kick (Left Outlane) 26	Lock 2 (Left Ramp Enter) 34	Mitch 42	C.J. 50	Stephanie 58
3 RED-ORN (23) CN6-3 Q74	30 Million + Shark 3	Shark Super VUK (middle left) 11	5-Bank S-U A 19	Shark Jackpot 27	Lock 3 (Left Ramp Enter) 35	CPR 43	Diver Trapped 51	Tidal Wave 59
4 RED-YEL (24) CN6-5 Q75	50 Million + Lite Extra Ball 4	Right Ramp Enter 12	5-Bank S-U R 20	Jackpot (Side Ramp) 28	ATV (Left Ramp, Left Target) 36	Surf Board (Left Ramp) 44	Surf Board (Upper VUK) 52	Surf Board (Spinner) 60
5 RED-GRN (25) CN6-6 Q76	100 Million + Earth Quake 5	Spell IRONMAN 13	5-Bank S-U K 21	Helicopter (Stand-Up Center Ramp) 29	Rescue Truck (Left Ramp, Right Target) 37	Guard U 45	Guard R 53	Tidal Wave (Left Orbit) 61
6 RED-BLU (26) CN6-7 Q77	Search & Rescue Mystery 6	Shark Flip 14	Lite (3-Bank Drops) 22	Extra Ball (Upper VUK) 30	S Rollover 38	Matt 46	Caroline 54	Earth Quake (Upper VUK) 62
7 RED-VIO (27) CN6-8 Q78	Ball Launch Button 7	Laser (2-Bank Stand-Up Top) 15	Lock (3-Bank Drops) 23	Wave Runner (Right Ramp, Left Target) 31	P Rollover 39	Copter Rescue 47	Shark Cove 55	Tidal Wave (Spinner) 63
8 RED-GRY (28) CN6-9 Q79	Extra Ball Buy-in / League Button 8	Kick (2-Bank Stand-Up Bottom) 16	Squid Pops (Inner Right Return Lane) 24	Scarab (Right Ramp, Right Target) 32	F Rollover 40	Surf Board (Right Ramp) 48	Surf Board (Right Ramp) 56	Start Button 64

(*) 2 digit number in parentheses indicates resistor/wire color code number displayed during diagnostics.

SWITCH MATRIX

Column (*)	White → Green →							
	1 GRN-BRN (51) CN8-1 Q55	2 GRN-RED (52) CN8-2 Q54	3 GRN-ORN (53) CN8-3 Q53	4 GRN-YEL (54) CN8-4 Q52	5 GRN-BLK (50) CN8-5 Q51	6 GRN-BLU (56) CN8-7 Q50	7 GRN-VIO (57) CN8-8 Q49	8 GRN-GRY (58) CN8-9 Q48
1 WHT-BRN (91) CN10-9	Plump Bob Tilt 1	2-Bank Stand-Up (Top) 9	5-Bank S-U S 17	Left Ramp Enter 25	Left Return Lane 33	Left Turbo Bumper 41	Center Ramp Exit 49	Left Outlane 57
2 WHT-RED (92) CN10-8	4th Coin Switch 2	Trough #1 (Left) 10	5-Bank S-U H 18	Left Ramp Exit 26	Not Used 34	Bottom Turbo Bumper 42	Ball Launch Button 50	Right Outlane 58
3 WHT-ORN (93) CN10-7	Credit Button 3	Trough #2 11	5-Bank S-U A 19	Not Used 27	Not Used 35	Right Turbo Bumper 43	Not Used 51	Right Outer Return Lane 59
4 WHT-YEL (94) CN10-6	Right Coin Switch 4	Trough #3 12	5-Bank S-U R 20	Right Ramp Enter 28	Left Ramp, Left Stand-Up 36	Upper VUK 44	Spinner 52	Right Inner Return Lane 60
5 WHT-GRN (95) CN10-5	Center Coin Switch 5	Trough #4 13	5-Bank S-U K 21	Not Used 29	Left Ramp, Right Stand-Up 37	Left Orbit Rollover 45	2-Bank Stand-Up (Bottom) 53	Left Slingshot 61
6 WHT-BLU (96) CN10-3	Left Coin Switch 6	Trough #5 (Right) 14	3-Bank Drops (Top) 22	Right Ramp Exit 30	Top Lane Left Rollover 38	Lower Super VUK (Under Arch) 46	Upper Right Shark Fin Flipper 54	Right Slingshot 62
7 WHT-VIO (97) CN10-2	Slam Tilt 7	5-Ball Trough VUK (Opto) 15	3-Bank Drops (Middle) 23	Right Ramp, Left Stand-Up 31	Top Lane Middle Rollover 39	Upper Ball Launch 47	Under Playfield Ramp Enter 55	Left Flipper (via SSFB) 63
8 WHT-GRY (98) CN10-1	Extra Ball Buy-In League Button 8	Shooter Lane 16	3-Bank Drops (Bottom) 24	Right Ramp, Right Stand-Up 32	Top Lane Right Rollover 40	Center Ramp Stand-Up 48	Shark Super Scoop 56	Right Flipper (via SSFB) 64

(*) 2 digit number in parentheses indicates resistor/wire color code number displayed during diagnostic