

Model # 510
FUSE LIST

Power Supply Board D-8345			Sound Board D-8223 (Type-2)		
F1	100V Display Power Input	0.25A, 250V, SB	F1	Power Input	4A, 250V, SB
F2	Solenoids	2.5A, 250V, SB	F2	Power Input	4A, 250V, SB
F3	Controlled lamps 18V	8A, 250V, SB	Back Box		
F4	Flippers and Magnets	20A, 250V SB	BR1	Bridge Rectifier 18V	8A, 250V, SB
F5	5V & 12V Logic Power Input	7A, 250V, SB	BR2	Bridge Rectifier 34V	8A, 250V, SB
F6	5V & 12V Logic Power Input	7A, 250V, SB	Line Filter		
F7	General Illumination	20A, 250V	Foreign	(220-230V)	4A, 250V, SB
			Domestic	(110-120V)	8A, 250V, SB

SOLENOID/FLASHER TABLE

Sol. No.	Function	Solenoid Type	Wire Color ¹	Connections		Driver Transistor	Solenoid Part Number
				Driver Board	Playfield / Cabinet		
1	B Drop Target Reset	Controlled	Gry-Brn	2J11-4	8P3-1	Q15	SA5-24-750-DC
2	A Drop Target Reset	Controlled	Gry-Red	2J11-5	8P3-2	Q17	SA5-24-750-DC
3	RR Drop Target Reset	Controlled	Gry-Orn	2J11-7	8P3-3	Q19	SA5-24-750-DC
4	A Drop Target Reset	Controlled	Gry-Yel	2J11-8	8P3-4	Q21	SA5-24-750-DC
5	C Drop Target Reset	Controlled	Gry-Grn	2J11-9	8P3-5	Q23	SA5-24-750-DC
6	O Drop Target Reset	Controlled	Gry-Blu	2J11-3	8P3-6	Q25	SA5-24-750-DC
7	R Drop Target Reset	Controlled	Gry-Vio	2J11-2	8P3-7	Q27	SA5-24-750-DC
8	A Drop Target Reset	Controlled	Gry-Blk	2J11-1	8P3-8	Q29	SA5-24-750-DC
9	B-A-RR Drop Target Bank Release	Controlled	Brn-Blk	2J9-9	8P3-9	Q31	SA6-24-750-DC
10	A-C-O-R-A Drop Target Bank Release	Controlled	Brn-Red	2J9-7	8P3-10	Q33	SA6-24-750-DC
11	Outhole	Controlled	Brn-Orn	2J9-1	3P7-1	Q35	SA3-23-850-DC
12	Ball Release	Controlled	Brn-Yel	2J9-2	8P3-12	Q37	SG1-23-850-DC
13	Top Left Corner Eject Hole	Controlled	Brn-Grn	2J9-3	8P3-13	Q39	SG1-23-850-DC
14	Upper Left Eject Hole	Controlled	Brn-Blu	2J9-4	8P3-14	Q41	SG1-23-850-DC
15	Bell	Controlled	Brn-Vio	2J9-5	7P1-17	Q43	SM-29-1000-DC
16	Coin Lockout Coil	Controlled	Brn-Gry	2J9-6	7P1-18, 7P2-4	Q45	SM-35-4000-DC
17	Top Eject Hole Gate	Special #1	Blu-Brn	2J12-7	8P3-17	Q2	SM-35-4000-DC
		Sp. Switch #1	Orn-Brn	2J13-5	8P3-24	IC6	
18	Left Jet Bumper	Special #2	Blu-Red	2J12-4	8P3-18	Q4	SG1-23-850-DC
		Sp. Switch #2	Orn-Red	2J13-3	8P3-25	IC6	
19	Right Jet Bumper	Special #3	Blu-Orn	2J12-3	8P3-19	Q6	SG1-23-850-DC
		Sp. Switch #3	Orn-Blk	2J13-2	8P3-26	IC6	
20	Bottom Jet Bumper	Special #4	Blu-Yel	2J12-6	8P3-20	Q8	SG1-23-850-DC
		Sp. Switch #4	Orn-Yel	2J13-4	8P3-27	IC6	
21	Left Slingshot	Special #5	Blu-Grn	2J12-8	8P3-21	Q10	SG1-23-850-DC
		Sp. Switch #5	Orn-Grn	2J13-8	8P3-28	IC7	
22	Right Slingshot	Special #6	Blu-Blk	2J12-9	8P3-22	Q12	SG1-23-850-DC
		Sp. Switch #6	Orn-Blu	2J13-5	8P3-29	IC7	
Flipper Circuits							
	Right Flipper	Flipper	Blu-Vio	7P1-8	8P3-34		SFL-19-400 / 30-750-DC
	Right Flipper switch ²	Switch	Orn-Vio	2P12-1	7P1-7		
	Left Flipper	Flipper	Blu-Gry	7J1-10	8P3-32		SFL-19-400 / 30-750-DC
	Left Flipper switch ²	Switch	Orn-Gry	2P12-2	7P1-9		
Notes:							
1. Wire colors, except flipper Orn-Vio and Orn-Gry, are ground connections (to coil terminal with unbanded end of diode). Flipper Orn-Vio and Orn-Gry wires connect from CPU Board to flipper button switch on cabinet.							
2. Flipper connections are from flipper button switch to flipper coil.							
3. Relay is mounted on Power Supply Board D-8345 in the backbox.							



LAMP MATRIX

Column Row	Red ← Yellow (B+) →							
	1 Yel-Brn 2J5-8 Q63	2 Yel-Red 2J5-9 Q65	3 Yel-Orn 2J5-6 Q67	4 Yel-Blk 2J5-7 Q69	5 Yel-Grn 2J5-3 Q71	6 Yel-Blu 2J5-5 Q73	7 Yel-Vio 2J5-1 Q75	8 Yel-Gry 2J5-2 Q77
1 Red-Brn 2J7-1 Q47	Shoot Again (Backbox) 1	B 9	1 17	Spinner 25	Upper Right Bull's-Eye Target 20,000 33	Right Bull's-Eye Target 2X 41	Super 5X Bonus Multiplier 49	Bonus 4,000 57
2 Red-Blk 2J7-2 Q49	Ball in Play 2	A 10	2 18	Shoot Again (Playfield) 26	Upper Right Bull's-Eye Target 40,000 34	Right Bull's-Eye Target 3X 42	2X Bonus Multiplier 50	Bonus 5,000 58
3 Red-Orn 2J7-3 Q51	Tilt 3	RR 11	3 19	Lower Eject Hole 30 27	Upper Right Bull's-Eye Target Extra Ball 35	Right Bull's-Eye Target 4X 43	3X Bonus Multiplier 51	Bonus 6,000 59
4 Red-Yel 2J7-4 Q53	Game Over 4	A 12	4 20	Lower Eject Hole 60 28	Left Bull's-Eye Target 5,000 36	Right Bull's-Eye Target 5X 44	4X Bonus Multiplier 52	Bonus 7,000 60
5 Red-Grn 2J7-5 Q55	Match 5	C 13	5 21	Lower Eject Hole 90 29	Left Bull's-Eye Target 10,000 37	Right Bull's-Eye Target 10,000 45	5X Bonus Multiplier 53	Bonus 8,000 61
6 Red-Blu 2J7-6 Q57	High Score 6	O 14	6 22	Lower Eject Hole Lock Arrow 30	Left Bull's-Eye Target 15,000 38	Super 2X Bonus Multiplier 46	Bonus 1,000 54	Bonus 9,000 62
7 Red-Vio 2J7-9 Q61	B-A-RR Drop Target Bank 7	R 15	Left Special 23	Upper Eject Hole Lock Arrow 31	Left Bull's-Eye Target 20,000 39	Super 3X Bonus Multiplier 47	Bonus 2,000 55	Bonus 10,000 63
8 Red-Gry 2J7-8 Q59	A-C-O-R-A Drop Target Bank 8	A 16	Right Special 24	Upper Eject Hole Collect Bonus 32	Left Bull's-Eye Target 25,000 40	Super 4X Bonus Multiplier 48	Bonus 3,000 56	Bonus 20,000 64

SWITCH MATRIX

Column Row	White → Green ←							
	1 Grn-Brn 2J2-9 IC17	2 Grn-Red 2J2-8 IC17	3 Grn-Orn 2J2-7 IC17	4 Grn-Yel 2J2-6 IC17	5 Grn-Blk 2J2-5 IC18	6 Grn-Blu 2J2-3 IC18	7 Grn-Vio 2J2-2 IC18	8 Grn-Gry 2J2-1 IC18
1 Wht-Brn 2J3-9 IC15	Plumb Bob Tilt 1	"Baracora" Lane Rollover 9	1/4 Lane Rollover 17	Spinner 25	Upper Right Bull's-Eye Target 33	B Drop Target 41	Not Used 49	Not Used 57
2 Wht-Red 2J3-8 IC15	Ball Roll Tilt 2	Upper Eject Hole 10	2/5 Lane Rollover 18	Right Turnaround 26	Left Flipper Lane Change 34	A Drop Target 42	Not Used 50	Not Used 58
3 Wht-Orn 2J3-7 IC15	Credit Button 3	Lower Eject Hole 11	3/6 Lane Rollover 19	Left Bull's-Eye Target 27	Right Flipper Lane Change 35	RR Drop Target 43	Not Used 51	Not Used 59
4 Wht-Yel 2J3-6 IC15	Right Coin Chute 4	Outhole 12	Left Jet Bumper 20	Right Bull's-Eye Target 28	Playfield Tilt 36	A Drop Target 44	Not Used 52	Not Used 60
5 Wht-Grn 2J3-5 IC16	Center Coin Chute 5	Left Ball Trough 13	Right Jet Bumper 21	Left Slingshot 29	Upper Right Rebound 37	C Drop Target 45	Not Used 53	Not Used 61
6 Wht-Blu 2J3-4 IC16	Left Coin Chute 6	Center Ball Trough 14	Bottom Jet Bumper 22	Right Slingshot 30	Lower Rebound 38	O Drop Target 46	Not Used 54	Not Used 62
7 Wht-Vio 2J3-3 IC16	Slam Tilt 7	Right Ball Trough 15	Left Outlane 23	Left Flipper Return Lane 31	5-Bank Rebound 39	R Drop Target 47	Not Used 55	Not Used 63
8 Wht-Gry 2J3-1 IC16	High Score Reset 8	Ball Shooter Lane 16	Right Outlane 24	Right Flipper Return Lane 32	Lower Left Rebound 40	A Drop Target 48	Not Used 56	Not Used 64