

Model # 516
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	10A, 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	Left Drop Target Bank Reset	Controlled	Gry-Brn	2J11-4	8P3-1	Q15	SA3-23-850-DC
2	Center Drop Target Bank Reset	Controlled	Gry-Red	2J11-5	8P3-2	Q17	SA3-23-850-DC
3	Upper Drop Target Bank Release	Controlled	Gry-Orn	2J11-7	8P3-3	Q19	SA6-24-750-DC
4	Outhole	Controlled	Gry-Yel	2J11-8	8P3-4	Q21	SA-23-850-DC
5	Upper Drop Target Left Reset	Controlled	Gry-Grn	2J11-9	8P3-5	Q23	SA5-24-750-DC
6	Upper Drop Target Center Reset	Controlled	Gry-Blu	2J11-3	8P3-6	Q25	SA5-24-750-DC
7	Upper Drop Target Right Reset	Controlled	Gry-Vio	2J11-2	8P3-7	Q27	SA5-24-750-DC
8	General Illumination Relay	Controlled	Gry-Blk	2J11-1	8P3-8	Q29	5580-09555-00 ³
9	Not Used	Controlled	Brn-Blk	2J9-9	8P3-9	Q31	
10	Not Used	Controlled	Brn-Red	2J9-7	8P3-10	Q33	
11	Not Used	Controlled	Brn-Orn	2J9-1	3P7-1	Q35	
12	Not Used	Controlled	Brn-Yel	2J9-2	8P3-12	Q37	
13	Not Used	Controlled	Brn-Grn	2J9-3	8P3-13	Q39	
14	Not Used	Controlled	Brn-Blu	2J9-4	8P3-14	Q41	
15	Knocker	Controlled	Brn-Vio	2J9-5	7P1-17	Q43	SA-2-23-850-DC
16	Coin Lockout Coil	Controlled	Brn-Gry	2J9-6	7P1-18, 7P2-4	Q45	SM-29-1000-DC
17	Left Jet Bumper	Special #1	Blu-Brn	2J12-7	8P3-17	Q2	SG-23-850-DC
		Sp. Switch #1	Orn-Brn	2J13-5	8P3-24	IC6	
18	Right Jet Bumper	Special #2	Blu-Red	2J12-4	8P3-18	Q4	SG-23-850-DC
		Sp. Switch #2	Orn-Red	2J13-3	8P3-25	IC6	
19	Center 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	Left Slingshot	Special #4	Blu-Yel	2J12-6	8P3-20	Q8	SG1-23-850-DC
		Sp. Switch #4	Orn-Yel	2J13-4	8P3-27	IC6	
21	Right 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	Not Used	Special #6	Blu-Blk	2J12-9	8P3-22	Q12	
		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	Left Spinner Arrow 9	Right Special Special 17	Right Drop Target Special 25	3X Bonus Multiplier 33	1 - 1,000 Bonus 41	2 - 1,000 Bonus 49	3 - 1,000 Bonus 57
2 Red-Blk 2J7-2 Q49	Ball in Play 2	Upper Spinner Arrow 10	Collect Bonus 18	25,000 26	4X Bonus Multiplier 34	1 - 2,000 Bonus 42	2 - 2,000 Bonus 50	3 - 2,000 Bonus 58
3 Red-Orn 2J7-3 Q51	Tilt 3	Right Spinner Arrow 11	Top Left Target Extra Ball 19	50,000 27	"1" 10,000 Right Ball Gate 35	1 - 3,000 Bonus 43	2 - 3,000 Bonus 51	3 - 3,000 Bonus 59
4 Red-Yel 2J7-4 Q53	Game Over 4	X Lane 12	Left Drop Target Extra Ball 20	70,000 28	"2" 10,000 Right Ball Gate 36	1 - 4,000 Bonus 44	2 - 4,000 Bonus 52	3 - 4,000 Bonus 60
5 Red-Grn 2J7-5 Q55	Match 5	Y Lane 13	Center Drop Target Extra Ball 21	Extra Ball 29	"3" 10,000 Right Ball Gate 37	1 - 5,000 Bonus 45	2 - 5,000 Bonus 53	3 - 5,000 Bonus 61
6 Red-Blu 2J7-6 Q57	High Score 6	Z Lane 14	Right Drop Target Extra Ball 22	Special 30	Right "7,000" 38	1 - 6,000 Bonus 46	2 - 6,000 Bonus 54	3 - 6,000 Bonus 62
7 Red-Vio 2J7-9 Q61	Not Used 7	Shoot Again (Playfield) 15	Left Drop Target Special 23	1X Bonus Multiplier 31	Top Left Target 39	1 - 7,000 Bonus 47	2 - 7,000 Bonus 55	3 - 7,000 Bonus 63
8 Red-Gry 2J7-8 Q59	Double Score / Bonus Advance 8	Left Special 16	Center Drop Target Special 24	2X Bonus Multiplier 32	Left "7,000" 40	Not Used 48	Not Used 56	Not Used 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	Outhole 9	Y 17	Right Flipper Return Lane 25	Upper Drop Target Bank (Left) 33	Not Used 41	Not Used 49	Not Used 57
2 Wht-Red 2J3-8 IC15	Ball Roll Tilt 2	Left Spinner 10	Z 18	Right Outlane 26	Upper Drop Target Bank (Center) 34	Not Used 42	Not Used 50	Not Used 58
3 Wht-Orn 2J3-7 IC15	Credit Button 3	Upper Right Spinner 11	Top Left Target 19	Left Drop Target Bank (Left) 27	Upper Drop Target Bank (Right) 35	Not Used 43	Not Used 51	Not Used 59
4 Wht-Yel 2J3-6 IC15	Left Coin Chute 4	Lower Right Spinner 12	Left Slingshot 20	Left Drop Target Bank (Center) 28	Lane Change 36	Not Used 44	Not Used 52	Not Used 60
5 Wht-Grn 2J3-5 IC16	Center Coin Chute 5	Left Jet Bumper 13	Right Slingshot 21	Left Drop Target Bank (Right) 29	Left Upper Rollunder 37	Not Used 45	Not Used 53	Not Used 61
6 Wht-Blu 2J3-4 IC16	Right Coin Chute 6	Right Jet Bumper 14	Right Ball Exit 22	Right Drop Target Bank (Left) 30	Right Upper Rollunder 38	Not Used 46	Not Used 54	Not Used 62
7 Wht-Vio 2J3-3 IC16	Slam Tilt 7	Center Jet Bumper 15	Left Outlane 23	Right Drop Target Bank (Center) 31	Playfield Tilt 39	Not Used 47	Not Used 55	Not Used 63
8 Wht-Gry 2J3-1 IC16	High Score Reset 8	X 16	Left Flipper Return Lane 24	Right Drop Target Bank (Right) 32	Not Used 40	Not Used 48	Not Used 56	Not Used 64