

Model # 500

FUSE LIST

Power Supply Board D-7999			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	Back Box		
F4	Flippers and Magnets	20A, 250V SB	F1	Logic AC	4A, 250V
F5	5V Logic Power	4A, 250V	F2	Logic AC	4A, 250V
Line Filter			F3	General Illumination	20A, 250V
Foreign	(220-230V)	4A, 250V, SB	BR1	Bridge Rectifier 18V	8A, 250V, SB
Domestic	(110-120V)	8A, 250V, SB	BR2	Bridge Rectifier 34V	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	Outhole	Controlled	Gry-Brn	2J11-4	8P3-1	Q15	SA-23-850-DC
2	Lower Left 3-Bank Drop Target Reset	Controlled	Gry-Red	2J11-5	8P3-2	Q17	SA3-23-850-DC
3	Lower Right 3-Bank Drop Target Reset	Controlled	Gry-Orn	2J11-7	8P3-3	Q19	SA3-23-850-DC
4	Upper Left 3-Bank Drop Target Reset	Controlled	Gry-Yel	2J11-8	8P3-4	Q21	SA3-23-750-DC
5	Upper Right 3-Bank Drop Target Reset	Controlled	Gry-Grn	2J11-9	8P3-5	Q23	SA3-23-750-DC
6	Ball Release	Controlled	Gry-Blu	2J11-3	8P3-6	Q25	SG-23-750-DC
7	Multi-Ball Release	Controlled	Gry-Vio	2J11-2	8P3-7	Q27	SG-23-750-DC
8	Lower Eject Hole	Controlled	Gry-Blk	2J11-1	8P3-8	Q29	SG-23-750-DC
9	Right Magnet Relay	Controlled	Brn-Blk	2J9-9	8P3-9	Q31	SM-35-4000-DC
10	Left Magnet Relay	Controlled	Brn-Red	2J9-7	8P3-10	Q33	SM-35-4000-DC
11	General Illumination Relay	Controlled	Brn-Orn	2J9-1	3P7-1	Q35	5580-09555-00 ³
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	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	Left Slingshot	Special #1	Blu-Brn	2J12-7	8P3-17	Q2	SA-23-850-DC
		Sp. Switch #1	Orn-Brn	2J13-5	8P3-24	IC6	
18	Right Slingshot	Special #2	Blu-Red	2J12-4	8P3-18	Q4	SA-23-850-DC
		Sp. Switch #2	Orn-Red	2J13-3	8P3-25	IC6	
19	Jet Bumper	Special #3	Blu-Orn	2J12-3	8P3-19	Q6	SA-23-850-DC
		Sp. Switch #3	Orn-Blk	2J13-2	8P3-26	IC6	
20	Not Used	Special #4	Blu-Yel	2J12-6	8P3-20	Q8	
		Sp. Switch #4	Orn-Yel	2J13-4	8P3-27	IC6	
21	Not Used	Special #5	Blu-Grn	2J12-8	8P3-21	Q10	
		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							
	Lower 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		
	Upper Right Flipper	Flipper	Blk-Yel	7P1-31	8P3-33		SFL-19-400 / 30-750-DC
	Lower 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		
	Upper Left Flipper	Flipper	Blk-Blu	7P1-30	8P3-31		SFL-19-400 / 30-750-DC
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 the bottom of 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	Right Magna-Save 9	Bottom Left 3-Bank 17	Bottom Left 3-Bank Lower Arrow 25	Top Left 3-Bank Lower Arrow 33	Left Ramp Rollunder Extra Ball W/L 41	"2" Bonus 49	"10" Bonus 57
2 Red-Blk 2J7-2 Q49	Ball in Play 2	Left Magna-Save 10	Bottom Right 3-Bank 18	Bottom Left 3-Bank Center Arrow 26	Top Left 3-Bank Center Arrow 34	Left Lock 42	"3" Bonus 50	"20" Bonus 58
3 Red-Orn 2J7-3 Q51	Tilt 3	Left Outlane 11	Top Left 3-Bank 19	Bottom Left 3-Bank Upper Arrow 27	Top Left 3-Bank Upper Arrow 35	Not Used 43	"4" Bonus 51	"30" Bonus 59
4 Red-Yel 2J7-4 Q53	Game Over 4	Right Outlane 12	Top Right 3-Bank 20	2X Scoring 28	Jet Bumper 36	Not Used 44	"5" Bonus 52	"40" Bonus 60
5 Red-Grn 2J7-5 Q55	Match 5	Right Spinner 13	Center Lock 21	Bottom Right 3-Bank Right Arrow 29	Top Right 3-Bank Lower Arrow 37	Not Used 45	"6" Bonus 53	Bonus Multiplier 2X 61
6 Red-Blu 2J7-6 Q57	High Score 6	Ramp Rollunder 14	Turnaround Extra Ball 22	Bottom Right 3-Bank Center Arrow 30	Top Right 3-Bank Center Arrow 38	Not Used 46	"7" Bonus 54	Bonus Multiplier 3X 62
7 Red-Vio 2J7-9 Q61	Credits (Playfield) 7	Right Flipper Return Lane 15	Turnaround Special 23	Bottom Right 3-Bank Left Arrow 31	Top Right 3-Bank Upper Arrow 39	Shoot Again (Playfield) 47	"8" Bonus 55	Bonus Multiplier 4X 63
8 Red-Gry 2J7-8 Q59	Bonus Ball Time 8	Left Flipper Return Lane 16	Lower Playfield Eject Hole 24	3X Scoring 32	Right Lock 40	"1" Bonus 48	"9" Bonus 56	Bonus Multiplier 5X 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	Right Magnet Button 9	Right Ball Trough 17	Lower Left 3-Bank Lower Target 25	Top Left 3-Bank Lower Target 33	Lockup Trough Bottom 41	Not Used 49	Not Used 57
2 Wht-Red 2J3-8 IC15	Ball Roll Tilt 2	Left Magnet Button 10	Center Ball Trough 18	Lower Left 3-Bank Center Target 26	Top Left 3-Bank Center Target 34	Lockup Trough Center 42	Not Used 50	Not Used 58
3 Wht-Orn 2J3-7 IC15	Credit Button 3	Left Outlane 11	Left Ball Trough 19	Lower Left 3-Bank Upper Target 27	Top Left 3-Bank Upper Target 35	Lockup Trough Top 43	Not Used 51	Not Used 59
4 Wht-Yel 2J3-6 IC15	Right Coin Chute 4	Right Outlane 12	Outhole 20	Lower Left 3-bank Rebounce 28	Jet Bumper 36	Left Ramp Rollover 44	Not Used 52	Not Used 60
5 Wht-Grn 2J3-5 IC16	Center Coin Chute 5	Left Spinner 13	Left Slingshot 21	Lower Right 3-Bank Right Target 29	Top Right 3-Bank Lower Target 37	Ball Shooter Lane 45	Not Used 53	Not Used 61
6 Wht-Blu 2J3-4 IC16	Left Coin Chute 6	Right Ramp Rollunder 14	Right Slingshot 22	Lower Right 3-Bank Center Target 30	Top Right 3-Bank Center Target 38	Playfield Tilt 46	Not Used 54	Not Used 62
7 Wht-Vio 2J3-3 IC16	Slam Tilt 7	Right Flipper Return Lane 15	Turnaround 23	Lower Right 3-Bank Left Target 31	Top Right 3-Bank Upper Target 39	Not Used 47	Not Used 55	Not Used 63
8 Wht-Gry 2J3-1 IC16	High Score Reset 8	Left Flipper Return Lane 16	Lower Playfield Eject Hole 24	Lower Right 3-bank Rebounce 32	Top Right 3-bank Rebounce 40	Not Used 48	Not Used 56	Not Used 64