

Model # 485

FUSE LIST

Power Supply Board D-7999			Sound Board D-8066 (Type-1A)		
F1	100V Display Power Input	0.25A, 250V, SB	F1	Power Input	4A, 250V, SB
F2	Solenoids	2.5A, 250V, SB	Back Box		
F3	Controlled lamps 18V	8A, 250V	Fuse Card	General Illumination	20A, 250V
F4	Not Used		BR1	Bridge Rectifier 18V	8A, 250V, SB
F5	5V Logic Power	4A, 250V	BR2	Bridge Rectifier 34V	8A, 250V, SB
Line Filter			Under Playfield		
Foreign	(220-230V)	4A, 250V, SB	F1	Flippers	10A, 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	Outhole	Controlled	Gry-Brn	2J11-4	8P3-1	Q15	SA-23-900-DC
2	Left Center Drop Target Reset	Controlled	Gry-Red	2J11-5	8P3-2	Q17	SG-23-900-DC
3	Left Bank Bottom Drop Target Reset	Controlled	Gry-Orn	2J11-7	8P3-3	Q19	SG-23-900-DC
4	Left Bank Top Drop Target Reset	Controlled	Gry-Yel	2J11-8	8P3-4	Q21	SG-23-900-DC
5	Right Bank Top Drop Target Reset	Controlled	Gry-Grn	2J11-9	8P3-5	Q23	SG-23-900-DC
6	Right Bank Bottom Drop Target Reset	Controlled	Gry-Blu	2J11-3	8P3-6	Q25	SG-23-900-DC
7	Right Center Drop Target Reset	Controlled	Gry-Vio	2J11-2	8P3-7	Q27	SA3-23-900-DC
8	Not Used	Controlled	Gry-Blk	2J11-1	8P3-8	Q29	
9	Sound (10 Points)	Controlled	Brn-Blk	2J9-9	8P3-9	Q31	
10	Sound (100 Points)	Controlled	Brn-Red	2J9-7	8P3-10	Q33	
11	Sound (1,000 Points)	Controlled	Brn-Orn	2J9-1	3P7-1	Q35	
12	Sound (10,000 Points)	Controlled	Brn-Yel	2J9-2	8P3-12	Q37	
13	Sound (Alternator)	Controlled	Brn-Grn	2J9-3	8P3-13	Q39	
14	Credit Knocker	Controlled	Brn-Blu	2J9-4	8P3-14	Q41	SA2-23-900-DC
15	Not Used	Controlled	Brn-Vio	2J9-5	7P1-17	Q43	
16	Coin Lockout Coil	Controlled	Brn-Gry	2J9-6	7P1-18, 7P2-4	Q45	SM-35-4000-DC
17	Left Jet Bumper	Special #1	Blu-Brn	2J12-7	8P3-17	Q2	SG-23-900-DC
		Sp. Switch #1	Orn-Brn	2J13-5	8P3-24	IC6	
18	Center Jet Bumper	Special #2	Blu-Red	2J12-4	8P3-18	Q4	SG-23-900-DC
		Sp. Switch #2	Orn-Red	2J13-3	8P3-25	IC6	
19	Right Jet Bumper	Special #3	Blu-Orn	2J12-3	8P3-19	Q6	SG-23-900-DC
		Sp. Switch #3	Orn-Blk	2J13-2	8P3-26	IC6	
20	Left Slingshot	Special #4	Blu-Yel	2J12-6	8P3-20	Q8	SG-23-900-DC
		Sp. Switch #4	Orn-Yel	2J13-4	8P3-27	IC6	
21	Right Slingshot	Special #5	Blu-Grn	2J12-8	8P3-21	Q10	SG-23-900-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	8P3-3		SFL-20-300 / 30-800-DC
	Right Flipper switch ²	Switch	Orn-Vio	2P12-1	7P1-7		
	Left Flipper	Flipper	Blu-Gry	7J1-10	8P3-4		SFL-20-300 / 30-800-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.							

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	Not Used 1	1 9	Extra Ball When Lit 17	2X 25	5.000 Bonus 33	Not Used 41	Not Used 48	#1 Player Up 57
2 Red-Blk 2J7-2 Q49	Not Used 2	2 10	P 18	3X 26	6.000 Bonus 34	Not Used 42	1 Can Play 50	#2 Player Up 58
3 Red-Orn 2J7-3 Q51	Not Used 3	3 11	H 19	4X 27	7.000 Bonus 35	Not Used 43	2 Can Play 51	#3 Player Up 59
4 Red-Yel 2J7-4 Q53	Not Used 4	4 12	O 20	5X 28	8.000 Bonus 36	Not Used 44	3 Can Play 52	#4 Player Up 60
5 Red-Grn 2J7-5 Q55	Not Used 5	5 13	E 21	1.000 Bonus 29	9.000 Bonus 37	Spinner 1,000 45	4 Can Play 53	Tilt 61
6 Red-Blu 2J7-6 Q57	Not Used 6	Not Used 14	N 22	2.000 Bonus 30	Not Used 38	Left Outlane Special 46	Match 54	Game Over 62
7 Red-Vio 2J7-9 Q61	Not Used 7	Not Used 15	I 23	3.000 Bonus 31	10.000 Bonus 39	Right Outlane Special 47	Ball in Play 55	Shoot Again (Backbox) 63
8 Red-Gry 2J7-8 Q59	Not Used 8	Not Used 16	X 24	4.000 Bonus 32	20.000 Bonus 40	Shoot Again (Playfield) 48	Credits (Playfield) 56	High Score 64

SWITCH MATRIX

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