

SPACE SHUTTLE

SPACE SHUTTLE (16-535) FUSE LIST

Power Supply Board D-8345			
F1	100V Display Power Input	1/4A, 250V, SB	
F2	Solenoids	2 1/2A, 250V, SB	
F3	Controlled lamps 18V	8A, 250V, SB	
F4	Flippers	Not used	
F5	5V & 12V Logic Power Input	7A, 250V, SB	
F6	5V & 12V Logic Power Input	7A, 250V, SB	
F7	G.I. (can be jumpered)	20A, 250V, SB	
Flipper Power Supply Board C-9939			
F2	Flipper Power	5A, 250V, SB	
Playfield fuses			
Back Box fuses			
F1	General Illumination (Violet)	5A, 250V, SB	
F2	General Illumination (Yellow)	5A, 250V, SB	
F3	General Illumination (Brown)	5A, 250V, SB	
F4	General Illumination (Green)	5A, 250V, SB	
F5	Bridge Rectifier 18V	8A, 250V, SB	
F6	Bridge Rectifier 34V	8A, 250V, SB	
LINE FILTER			
Foreign	(220V)	4A, 250V, SB	
Domestic	(110V)	8A, 250V, SB	

LAMP MATRIX

		Red ←				Yellow (B+) →			
Column	1 Yellow-Brown 1J7-1 Q23	2 Yellow-Red 1J7-2 Q24	3 Yellow-Orange 1J7-3 Q25	4 Yellow-Black 1J7-4 Q26	5 Yellow-Green 1J7-6 Q27	6 Yellow-Blue 1J7-7 Q28	7 Yellow-Violet 1J7-8 Q29	8 Yellow-Grey 1J7-9 Q30	
Row	1 Red-Brown 1J6-1 Q31	2 Red-Black 1J6-2 Q32	3 Red-Orange 1J6-3 Q33	4 Red-Yellow 1J6-5 Q34	5 Red-Green 1J6-6 Q35	6 Red-Blue 1J6-7 Q36	7 Red-Violet 1J6-8 Q37	8 Red-Grey 1J6-9 Q38	
1	Game Over	2X	S	Left Jet Bumper	Spinner 1000	Outlane Shuttle Arrow	Stop & Score Playfield	Bonus 8,000	
2	Match	3X	H	Right Jet Bumper	Spinner 2000	Shuttle 20,000	Bonus 1,000	Bonus 9,000	
3	Tilt	4X	U	Bottom Jet Bumper	Spinner 4000	Shuttle 50,000	Bonus 2,000	Bonus 10,000	
4	High-Score-To-Date	5X	T	Gate Open	Extra Ball When Lit	Shuttle 100,000	Bonus 3,000	Bonus 20,000	
5	Shoot Again (Insert)	6X	T	U Lane	Shoot Again (Playfield)	50,000 Bonus Hold Over	Bonus 4,000	Bonus 30,000	
6	Ball-In-Play	7X	L	S Lane	Stop & Score (Insert)	100,000 + Outlanes	Bonus 5,000	Bonus 40,000	
7	Up Post	Flipper Return Lanes	E	A Lane	Insert Tail Eng	Extra Ball	Bonus 6,000	Bonus 50,000	
8	Release Multiball When lit	Left Lock	Right Lock	Bonus Hold Over	Insert Tail Eng	Scores Special	Bonus 7,000	Bonus 60,000	

SOLENOID/FLASHER TABLE

Sol. No.	Function	Solenoid Type	Wire Color 1	Connections		Driver Transistor	Solenoid Part Number Flashlamp Type	
				CPU Board	Playfield / Cabinet		Playfield	Insert
01	Outhole Kicker	Controlled	Gry-Brn	1J11-1	8P3-1	Q47	SA-23-850-DC	
02	Ball Release	Controlled	Gry-Red	1J11-3	8P3-2	Q48	SG 1-23-850-DC	
03	Left Eject-Hole	Controlled	Gry-Orn	1J11-4	8P3-3	Q49	SG 1-23-850-DC	
04	Right Eject-Hole	Controlled	Gry-Yel	1J11-5	8P3-4	Q50	SG 1-23-850-DC	
05	"T" Drop-Target Reset	Controlled	Gry-Grn	1J11-6	8P3-5	Q39	SA 5-24-750-DC	
06	3-Bank Drop-Target Reset	Controlled	Gry-Blu	1J11-7	8P3-6	Q40	SA 3-23-850-DC	
07	Up Post	Controlled	Gry-Vio	1J11-8	8P3-7	Q41	SG-23-850-DC	
08	Down Post	Controlled	Gry-Blk	1J11-9	8P3-8	Q42	SM-29-1100-DC	
09	Space Flash-Lamps	Controlled	Brn-Blk	1J12-1	8P3-9	Q54	#63 Flashlamps	
10	Shuttle Flash-Lamps	Controlled	Brn-Red	1J12-2	8P3-10	Q55	#63 Flashlamps	
11	Playfield General Illumination Relay	Controlled	Brn-Orn	1J12-4	3P7-1	Q56	5580-09555-00 3	
12	Not Used	Controlled	Brn-Yel	1J12-5	8P3-12	Q57		
13	Gate	Controlled	Brn-Grn	1J12-6	8P3-13	Q58	SZ-35-4000-DC	
14	Insert Flash-Lamps	Controlled	Brn-Blu	1J12-7	8P3-14	Q59		#63 Flashlamps
15	Bell	Controlled	Brn-Vio	1J12-8	7P1-17	Q60	SM-29-1000-DC	
16	Coin-Lockout Relay	Controlled	Brn-Gry	1J12-9	7P1-18, 7P2-4	Q61	SM-35-4000-DC	
17	Left Slingshot	Special #1	Blu-Brn	1J19-7	8P3-17	Q75	SG1-23-850-DC	
18	Right Slingshot	Special #2	Blu-Red	1J19-4	8P3-18	Q77	SG1-23-850-DC	
19	Left Jet Bumper	Special #3	Blu-Orn	1J19-3	8P3-19	Q79	SG1-23-850-DC	
20	Lower Jet Bumper	Special #4	Blu-Yel	1J19-6	8P3-20	Q81	SG1-23-850-DC	
21	Right Jet Bumper	Special #5	Blu-Grn	1J19-8	8P3-21	Q83	SG1-23-850-DC	
22	Not Used	Special #6	Blu-Blk	1J19-9	8P3-22	Q85		
Flipper Circuits								
	Right Flipper	Flipper	Orn-Vio	1J19-1	7P1-7		FL23-600-30/2600-50VDC	
	Right Flipper switch 2	Switch	Blu-Vio		7J1-8, 8P3-34			
	Left Flipper	Flipper	Orn-Gry	1J19-2	7P1-9		FL23-600-30/2600-50VDC	
	Left Flipper switch 2	Switch	Blu-Gry		7J1-10, 8P3-32			

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-8245 in the backbox.

SWITCH MATRIX

		White →				Green →			
Column	1 Green-Brown 1J8-1 Q7	2 Green-Red 1J8-2 Q8	3 Green-Orange 1J8-3 Q9	4 Green-Yellow 1J8-4 Q10	5 Green-Black 1J8-5 Q11	6 Green-Blue 1J8-7 Q12	7 Green-Violet 1J8-8 Q13	8 Green-Grey 1J8-9 Q14	
Row	1 White-Brown 1J10-9	2 White-Red 1J10-8	3 White-Orange 1J10-7	4 White-Yellow 1J10-6	5 White-Green 1J10-5	6 White-Blue 1J10-3	7 White-Violet 1J10-2	8 White-Grey 1J10-1	
1	Plump Bob Tilt	Outhole	S Target	Left Jet Bumper	Left Drop Target	Flipper (Lane Change)	Playfield Tilt	Not Used	
2	Ball Roll Tilt	Top Ball Ramp	H Target	Right Jet Bumper	Center Drop Target	Bottom Left Stand-Up	Not Used	Not Used	
3	Credit Button	Middle Ball Ramp	U Target	Lower Jet Bumper	Right Drop Target	Middle-Left Lower Stand-Up	Not Used	Not Used	
4	Right Coin Switch	Lower Ball Ramp	T Drop Target	Left Outlane	Ball Shooter Lane	Middle-Left Upper Stand-Up	Not Used	Not Used	
5	Center Coin Switch	Right Outlane	T Target	U Lane	Spinner	Ramp (Lower Switch)	Not Used	Not Used	
6	Left Coin Switch	Left Flipper Return	L Target	S Lane	Ramp Bull's Eye	Center Stand-Up	Not Used	Not Used	
7	Slam Tilt	Right Flipper Return	E Target	A Lane	Left Slingshot	Upper Right Stand-Up	Not Used	Not Used	
8	High Score Reset	Left Eject Hole	Right Eject Hole	Ramp (Upper Switch)	Right Slingshot	Lower Right Stand-Up	Not Used	Not Used	