



**FUSE LIST**

<b>Power Supply Board 520-5000-00</b>			<b>Sound Board 520-5002-00</b>	
F1	5V & 12V Logic Power Input	7A, 250V, SB		
F2	5V & 12V Logic Power Input	7A, 250V, SB	<b>CPU Board 520-5003-00</b>	
F3	100V Display Power Input	1/4A, 250V, SB		
F4	Controlled lamps 18V	8A, 250V, SB		
F5	Solenoids 1-16	5A, 250V, SB		
F6	Special Solenoids 17-22	5A, 250V, SB	<b>Flipper Power Supply Board 520-5001-00</b>	
F1	Flipper Power	5A, 250V, SB		
<b>Playfield fuses</b>				
Kickback		5A, 250V, SB		
<b>Back Box fuses</b>				
2F1	General Illumination (Brown)	5A, 250V, SB		
2F2	General Illumination (Yellow)	5A, 250V, SB		
2F3	General Illumination (Green)	5A, 250V, SB		
2F4	General Illumination (Violet)	5A, 250V, SB		
<b>LINE FILTER</b>				
Foreign	(220V)	4A, 250V, SB		
Domestic	(110V)	8A, 250V, SB		

**LAMP MATRIX**

		Red ←				Yellow (B+) →			
<b>Column</b>	1 Yellow-Brown CN7-1 Q71	2 Yellow-Red CN7-2 Q70	3 Yellow-Orange CN7-3 Q69	4 Yellow-Black CN7-4 Q68	5 Yellow-Green CN7-6 Q67	6 Yellow-Blue CN7-7 Q66	7 Yellow-Violet CN7-8 Q65	8 Yellow-Grey CN7-9 Q64	
<b>Row</b>	1 Red-Brown CN6-1 Q72	2 Red-Black CN6-2 Q73	3 Red-Orange CN6-3 Q74	4 Red-Yellow CN6-5 Q75	5 Red-Green CN6-6 Q76	6 Red-Blue CN6-7 Q77	7 Red-Violet CN6-8 Q78	8 Red-Grey CN6-9 Q79	
1	Ball in Play 1	Cannon Red 9	Red Target (Center) 17	Yellow Target (Center) 25	Blue Target (Center) 33	Flipper Return Lanes (Left & Right) 41	Ion Cannon (Tip) 49	Bonus 4K Yellow 57	
2	Match 2	Cannon Yellow 10	Red Target (Right) 18	Red Target (Right) 26	Blue Target (Right) 34	Bonus Holds 42	Bonus 1K Red 50	Bonus 8K Yellow 58	
3	Blast Again 3	Cannon Blue 11	Hot Dog Red 19	Hot Dog Yellow 27	Hot Dog Blue 35	2X 43	Bonus 2K Red 51	Bonus 16K Yellow 59	
4	W 4	Ramp Green Shield 12	Lock Red Eject 20	Lock Yellow Eject 28	Lock Blue Eject 36	3X 44	Bonus 4K Red 52	Bonus 1K Blue 60	
5	A 5	Ramp Orange Arrow 13	Red Eject Clear Arrow 21	Yellow Eject Clear Arrow 29	Blue Eject Clear Arrow 37	4X 45	Bonus 8K Red 53	Bonus 2K Blue 61	
6	R 6	Ramp Amber Arrow 14	Red Eject Amber Arrow 22	Yellow Eject Amber Arrow 30	Blue Eject Amber Arrow 38	5X 46	Bonus 16K Red 54	Bonus 4K Blue 62	
7	Ramp Multiplier 7	Ramp Clear Arrow 15	Red Eject Orange Arrow 23	Yellow Eject Orange Arrow 31	Blue Eject Orange Arrow 39	Laser Kick 47	Bonus 1K Yellow 55	Bonus 8K Blue 63	
8	Return To Base 8	Red Target (Left) 16	Yellow Target (Left) 24	Blue Target (Left) 32	Left Outlane 40	Right Outlane 48	Bonus 2K Yellow 56	Bonus 16K Blue 64	

**Switched, CPU Controlled Auxiliary & Constant Power Solenoids**

Coil No.	Coil or Flashlamp Description	Drive Transistor (D.T.)	On Which Board?	D.T. Control Line	D.T. Control Line Connect	Power Line	Power Line Connection	Power Description	Coil or Flash Type
1L	Explosion Flasher	Q46	CPU to DB	Vio-Brn	CPU CN11-1	Brn	4M-8	32V L	Bulb #89
1R	Ramp Multiplier Flasher		Gry-Brn	Blk-Brn	to diode board	Orn	4M-9	32V R	Bulb #89
2L	Red Hot Dog Flasher	Q45	CPU to DB	Vio-Red	CPU CN11-3	Brn	4M-8	32V L	Bulb #89
2R	Green Shield Flasher		Gry-Red	Blk-Red	to diode board	Orn	4M-9	32V R	Bulb #89
3L	Yellow Hot Dog Flasher	Q44	CPU to DB	Vio-Orn	CPU CN11-4	Brn	4M-8	32V L	Bulb #89
3R	Warriors (Back Glass) Flasher		Gry-Orn	Blk-Orn	to diode board	Orn	3F2-6	32V R	Bulb #89
4L	Blue Hot Dog Flasher	Q43	CPU to DB	Vio-Yel	CPU CN11-5	Brn	4M-8	32V L	Bulb #89
4R	Laser Wire (Back Glass) Flasher		Gry-Yel	Blk-Yel	to diode board	Orn	3F2-6	32V R	Bulb #89
5L	Ion Cannon Flasher	Q42	CPU to DB	Vio-Grn	CPU CN11-6	Brn	4M-8	32V L	Bulb #89
5R	Knocker		Gry-Grn	Blk-Grn	to diode board	Orn	-	32V R	Coil: 23-800
6L	Mars Yellow	Q41	CPU to DB	Vio-Blu	CPU CN11-7	Brn	4M-8	32V L	Coil: 23-800
6R	Not Used		Gry-Blu						
7L	Mars Red Flasher	Q40	CPU to DB	Vio-Blk	CPU CN11-8	Brn	4M-8	32V L	Bulb #89
7R	Not Used		Gry-Vio						
8L	Mars Blue Flasher	Q39	CPU to DB	Vio-Gry	CPU CN11-9	Brn	4M-8	32V L	Bulb #89
8R	Not Used		Gry-Blk						
9	Ball Trough Eject	Q30	CPU	Brn-Blk	CN12-1	Red	PS CN3-6	32V	Coil: 23-840
10	L/R Power Relay	Q29	CPU	Brn-Red	CN12-2	Red	PS CN3-6	32V	Relay: 24VDC
11	General Illumination Relay	Q28	CPU	Brn-Orn	CN12-4	Red	PS CN3-6	32V	Relay: 24VDC
12	Red Eject	Q27	CPU	Brn-Yel	CN12-5	Red	PS CN3-6	32V	Coil: 27-1500
13	Yellow Eject	Q26	CPU	Brn-Grn	CN12-6	Red	PS CN3-6	32V	Coil: 27-1500
14	Blue Eject	Q25	CPU	Brn-Blu	CN12-7	Red	PS CN3-6	32V	Coil: 27-1500
15	Laser Kick (Relay)	Q24	CPU	Brn-Vio	CN12-8	Red (Relay) Blu-Yel (Coil)	PS CN3-6 FPS CN3-6	32V (Relay) 50V (Coil)	Relay: 24VDC Coil: 23-900
16	Outhole	Q23	CPU	Brn-Gry	CN12-9	Red	PS CN3-6	32V	Coil: 23-840
17	Red Pop Bumper	Q11	CPU	Blu-Brn	CN19-7	Red	PS CN3-6	32V	Coil: 23-800
18	Yellow Pop Bumper	Q9	CPU	Blu-Red	CN19-4	Red	PS CN3-6	32V	Coil: 23-800
19	Blue Pop Bumper	Q8	CPU	Blu-Orn	CN19-3	Red	PS CN3-6	32V	Coil: 23-800
20	Left Slingshot	Q10	CPU	Blu-Yel	CN19-6	Red	PS CN3-6	32V	Coil: 23-800
21	Right Slingshot	Q12	CPU	Blu-Grn	CN19-8	Red	PS CN3-6	32V	Coil: 23-800
22	Not Used	Q13	CPU	Blu-Blk	CN19-9				
<b>Flipper Circuits</b>									
	Right flipper	Flipper	Gry-Yel	CN3-1 (FSP)				23-620/30-2600	
	Right flipper button	Switch	Blu-Vio	CN19-1 (CPU)			1M/F5-21, 4F/M1-21		
	Left flipper	Flipper	Blu-Yel	CN3-6 (FSP)				23-620/30-2600	
	Left flipper button	Switch	Blu-Gry	CN19-2 (CPU)			1M/F5-24, 4F/M1-23		

**SWITCH MATRIX**

		White →				Green ←			
<b>Column</b>	1 White-Brown CN8-1 Q55	2 Green-Red CN8-2 Q54	3 Green-Orange CN8-3 Q53	4 Green-Yellow CN8-4 Q52	5 Green-Black CN8-5 Q51	6 Green-Blue CN8-7 Q50	7 Green-Violet CN8-8 Q49	8 Green-Grey CN8-9 Q48	
<b>Row</b>	1 White-Brown CN10-9	2 White-Red CN10-8	3 White-Orange CN10-7	4 White-Yellow CN10-6	5 White-Green CN10-5	6 White-Blue CN10-3	7 White-Violet CN10-2	8 White-Grey CN10-1	
1	Plump Bob Tilt 1	Playfield Tilt 9	Laser Kick 17	Red Eject 25	Yellow Eject 33	A 41	Yellow Star (Upper Right) 49	Not Used 57	
2	Ball Roll Tilt 2	Ball Trough 3 10	Left Flipper Return Lane 18	Red Star 26	Yellow Star 34	R 42	Blue Star (Upper Right) 50	Not Used 58	
3	Start Button 3	Ball Trough 2 11	Right Flipper Return Lane 19	Red Spinner 27	Blue Target (Left) 35	Pop Bumper Red 43	Yellow Spinner 51	Not Used 59	
4	Right Coin Switch 4	Ball Trough 1 12	Right Outlane 20	Not Used 28	Blue Target (Center) 36	Pop Bumper Yellow 44	Shooter Lane 52	Not Used 60	
5	Center Coin Switch 5	Outhole 13	10 Point Rubber Right (2 Switches) 21	Ramp 29	Blue Target (Right) 37	Pop Bumper Blue 45	Not Used 53	Not Used 61	
6	Left Coin Switch 6	Right Slingshot 14	Red Target (Left) 22	Yellow Target (Left) 30	Blue Eject 38	Right Flipper (EOS) 46	Not Used 54	Not Used 62	
7	Slam Tilt 7	Left Slingshot 15	Red Target (Center) 23	Yellow Target (Center) 31	Blue Star 39	Left Flipper (EOS) 47	Not Used 55	Not Used 63	
8	Not Used 8	Not Used 16	Red Target (Right) 24	Yellow Target (Right) 32	W 40	Red Star (Upper Right) 48	Not Used 56	Not Used 64	