



FUSE LIST

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

LAMP MATRIX

Column Row	Red ← Yellow (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 CN7-8 Q66	7 Yellow-Violet CN7-8 Q65	8 Yellow-Grey CN7-9 Q64
1 Red-Brown CN6-1 Q72	Ball in Play	Cannon Red	Red Target (Center)	Yellow Target (Center)	Blue Target (Center)	Flipper Return Lanes (Left & Right)	Ion Cannon (Tip)	Bonus 4K Yellow
2 Red-Black CN6-2 Q73	Match	Cannon Yellow	Red Target (Right)	Red Target (Right)	Blue Target (Right)	Bonus Holds	Bonus 1K Red	Bonus 8K Yellow
3 Red-Orange CN6-3 Q74	Blast Again	Cannon Blue	Hot Dog Red	Hot Dog Yellow	Hot Dog Blue	2X	Bonus 2K Red	Bonus 16K Yellow
4 Red-Yellow CN6-5 Q75	W	Ramp Green Shield	Lock Red Eject	Lock Yellow Eject	Lock Blue Eject	3X	Bonus 4K Red	Bonus 1K Blue
5 Red-Green CN6-6 Q76	A	Ramp Orange Arrow	Red Eject Clear Arrow	Yellow Eject Clear Arrow	Blue Eject Clear Arrow	4X	Bonus 8K Red	Bonus 2K Blue
6 Red-Blue CN6-7 Q77	R	Ramp Amber Arrow	Red Eject Amber Arrow	Yellow Eject Amber Arrow	Blue Eject Amber Arrow	5X	Bonus 16K Red	Bonus 4K Blue
7 Red-Violet CN6-8 Q78	Ramp Multiplier	Ramp Clear Arrow	Red Eject Orange Arrow	Yellow Eject Orange Arrow	Blue Eject Orange Arrow	Laser Kick	Bonus 1K Yellow	Bonus 8K Blue
8 Red-Grey CN6-9 Q79	Return To Base	Red Target (Left)	Yellow Target (Left)	Blue Target (Left)	Left Outlane	Right Outlane	Bonus 2K Yellow	Bonus 16K Blue

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	#89
1R	Ramp Multiplier Flasher		Gry-Brn	Blk-Brn	to diode board	Orn	4M-9	32V R	#89
2L	Red Hot Dog Flasher	Q45	CPU to DB	Vio-Red	CPU CN11-3	Brn	4M-8	32V L	#89
2R	Green Shield Flasher		Gry-Red	Blk-Red	to diode board	Orn	4M-9	32V R	#89
3L	Yellow Hot Dog Flasher	Q44	CPU to DB	Vio-Orn	CPU CN11-4	Brn	4M-8	32V L	#89
3R	Warriors (Back Glass) Flasher		Gry-Orn	Blk-Orn	to diode board	Orn	3F2-6	32V R	#89
4L	Blue Hot Dog Flasher	Q43	CPU to DB	Vio-Yel	CPU CN11-5	Brn	4M-8	32V L	#89
4R	Laser Wire (Back Glass) Flasher		Gry-Yel	Blk-Yel	to diode board	Orn	3F2-6	32V R	#89
5L	Ion Cannon Flasher	Q42	CPU to DB	Vio-Grn	CPU CN11-6	Brn	4M-8	32V L	#89
5R	Knocker		Gry-Grn	Blk-Grn	to diode board	Orn	-	32V R	23-800
6L	Mars Yellow	Q41	CPU to DB	Vio-Blu	CPU CN11-7	Brn	4M-8	32V L	23-800
6R	Not Used		Gry-Blu		to diode board				
7L	Mars Red Flasher	Q40	CPU to DB	Vio-Blk	CPU CN11-8	Brn	4M-8	32V L	#89
7R	Not Used		Gry-Vio		to diode board				
8L	Mars Blue Flasher	Q39	CPU to DB	Vio-Gry	CPU CN11-9	Brn	4M-8	32V L	#89
8R	Not Used		Gry-Blk		to diode board				
9	Ball Trough Eject	Q30	CPU	Brn-Blk	CN12-1	Red	PS CN3-6	32V	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		PS CN3-6	32V	Relay: 24VDC
12	Red Eject	Q27	CPU	Brn-Yel	CN12-5	Red	PS CN3-6	32V	27-1500
13	Yellow Eject	Q26	CPU	Brn-Grn	CN12-6	Red	PS CN3-6	32V	27-1500
14	Blue Eject	Q25	CPU	Brn-Blu	CN12-7	Red	PS CN3-6	32V	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	23-840
17	Blue Pop Bumper	Q8	CPU	Blu-Orn	CN19-3	Red	PS CN3-6	32V	23-800
18	Yellow Pop Bumper	Q9	CPU	Blu-Red	CN19-4	Red	PS CN3-6	32V	23-800
19	Left Slingshot	Q10	CPU	Blu-Yel	CN19-6	Red	PS CN3-6	32V	23-800
20	Red Pop Bumper	Q11	CPU	Blu-Brn	CN19-7	Red	PS CN3-6	32V	23-800
21	Right Slingshot	Q12	CPU	Blu-Grn	CN19-8	Red	PS CN3-6	32V	23-800
22	Not Used	Q13	CPU	Blu-Blk	CN19-9				
Flipper Circuits		FPS	To EOS	EOS-Coil	Coil-Button	Button-CPU	CPU	Coil	
	Left flipper	CN3-1,2	Gry-Yel 4M/F4-5		Blu-Gry 4M/F1-23	Orn-Gry 1M/F5-24	CN19-2	23-620/30-2600 (090-5000-00)	
	Right flipper	CN3-5,6	Blu-Yel 4M/F4-3		Blu-Vio 4M/F1-21	Orn-Vio 1M/F5-21	CN19-1	23-620/30-2600 (090-5000-00)	

SWITCH MATRIX

Column Row	White → Green							
	1 Green-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
1 White-Brown CN10-9	Plump Bob Tilt	Playfield Tilt	Laser Kick	Red Eject	Yellow Eject	A	Yellow Star (Upper Right)	Not Used
2 White-Red CN10-8	Ball Roll Tilt	Ball Trough 3	Left Flipper Return Lane	Red Star	Yellow Star	R	Blue Star (Upper Right)	Not Used
3 White-Orange CN10-7	Start Button	Ball Trough 2	Right Flipper Return Lane	Red Spinner	Blue Target (Left)	Pop Bumper Red	Yellow Spinner	Not Used
4 White-Yellow CN10-6	Right Coin Switch	Ball Trough 1	Right Outlane	Not Used	Blue Target (Center)	Pop Bumper Yellow	Shooter Lane	Not Used
5 White-Green CN10-5	Center Coin Switch	Outhole	10 Point Rubber Right (2 Switches)	Ramp	Blue Target (Right)	Pop Bumper Blue	Not Used	Not Used
6 White-Blue CN10-3	Left Coin Switch	Right Slingshot	Red Target (Left)	Yellow Target (Left)	Blue Eject	Right Flipper (EOS)	Not Used	Not Used
7 White-Violet CN10-2	Slam Tilt	Left Slingshot	Red Target (Center)	Yellow Target (Center)	Blue Star	Left Flipper (EOS)	Not Used	Not Used
8 White-Grey CN10-1	Not Used	Not Used	Red Target (Right)	Yellow Target (Right)	W	Red Star (Upper Right)	Not Used	Not Used