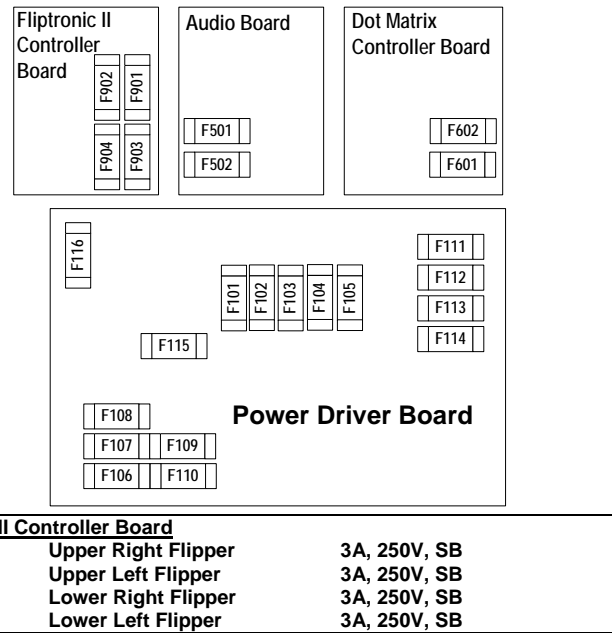


### FUSE LIST

### TWILIGHT ZONE (50020)

POWER DRIVER BOARD		
F101	+50V DC General (Left Flipper)	3A, 250V, SB
F102	+50V DC General (Right Flipper)	3A, 250V, SB
F103	Solenoids #25 to #28	3A, 250V, SB
F104	Solenoids #9 to #16	3A, 250V, SB
F105	Solenoids #1 to #8	3A, 250V, SB
F106	G.I. #5 White-Violet	5A, 250V, SB
F107	G.I. #4 White-Green	5A, 250V, SB
F108	G.I. #3 White-Yellow	5A, 250V, SB
F109	G.I. #2 White-Orange	5A, 250V, SB
F110	G.I. #1 White-Brown	5A, 250V, SB
F111	Flasher Secondary	5A, 250V, SB
F112	Solenoid Secondary	7A, 250V, SB
F113	+5V Logic	5A, 250V, SB
F114	+18V Lamp Matrix	8A, 32V, N.B.
F115	+12V Lamp Matrix	3/4A, 250V, FB
F116	+12V Secondary	3A, 250V, SB
Audio Board		
F501	-25V	3A, 250V, SB
F502	+25V	3A, 250V, SB
Dot Matrix Controller Board		
F601	+62V	3/8A, 250V, FB
F602	-113V & -125V	3/8A, 250V, FB
LINE FILTER		
Foreign		5A, 250V, SB
Domestic		8A, 250V, NB



### SOLENOID/FLASHER TABLE

Sol No.	Function	Solenoid Type	Voltage Connections			Drive Xistor	Drive Connections			Drive Wire Color	Coil/Flashlamp Type	
			Playfield	Backbox	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	SLOT KICKOUT	High Power	J107-3			Q82	J130-1			VIO-BRN	AE-24-900	Insert
02	ROCKET KICKER	High Power	J107-3			Q80	J130-2			VIO-RED	AE-23-800	
03	AUTO-FIRE KICKER	High Power	J107-3			Q78	J130-4			VIO-ORG	AE-23-800	
04	GUMBALL POPPER	High Power	J107-3			Q76	J130-5			VIO-YEL	AE-23-800	
05	RIGHT RAMP DIVERTER	High Power	J107-3			Q64	J130-6			VIO-GRN	AE-26-1200	
06	GUMBALL DIVERTER	High Power	J107-3			Q66	J130-7			VIO-BLU	AE-26-1500	
07	KNOCKER	High Power	J107-3	J107-3		Q68		J130-8		VIO-BLK		AE-23-800
08	OUTHOLE	High Power	J107-3			Q70	J130-9			VIO-GRY	AE-27-1200	
09	BALL RELEASE	Low Power	J107-2			Q58	J127-1			BRN-BLK	AE-26-1200	
10	RIGHT SLINGSHOT	Low Power	J107-2			Q56	J127-3			BRN-RED	AE-27-1200	
11	LEFT SLINGSHOT	Low Power	J107-2			Q54	J127-4			BRN-ORG	AE-27-1200	
12	LOWER JET BUMPER	Low Power	J107-2			Q52	J127-5			BRN-YEL	AE-26-1200	
13	LEFT JET BUMPER	Low Power	J107-2			Q50	J127-6			BRN-GRN	AE-26-1200	
14	RIGHT JET BUMPER	Low Power	J107-2			Q48	J127-7			BRN-BLU	AE-26-1200	
15	LOCK RELEASE	Low Power	J107-2			Q46	J127-8			BRN-VIO	AE-27-1200	
16	SHOOTER DIVERTER	Low Power	J107-2			Q44	J127-9			BRN-GRY	SZ-33-3300	
17	BUMPERS (2)	Flasher	J107-6			Q42	J125-1			BLK-BRN	#906	
18	POWER PAYOFF (2)	Flasher	J107-6			Q40	J125-2			BLK-RED	#906	
19	MINI-PLAYFIELD (2)	Flasher	J107-6			Q38	J125-3			BLK-ORG	#906	
20	UPPER LEFT RAMP	Flasher	J107-6			Q36	J125-5			BLK-YEL	#906	
21	LEFT MAGNET	Flasher	J109-5			Q28	J125-6			BLU-GRN	20-9247	
22	THIRD MAGNET (PROTO)	Flasher	J109-5			Q30	J125-7			BLU-BLK	20-9247	
23	LOWER RIGHT MAGNET	Flasher	J109-5			Q34	J125-8			BLU-VIO	20-9247	
24	GUMBALL MOTOR	Flasher	J109-7			Q32	J125-9			BLU-GRY	14-7984	
25	LEFT MINI MAGNET	Gen. Purpose	J109-7			Q26	J124-1			BLU-BRN	20-9247	
26	RIGHT MINI MAGNET	Gen. Purpose	J109-6			Q24	J124-2			BLU-RED	20-9247	
27	LEFT RAMP DIVERTER	Gen. Purpose	J109-6			Q22	J124-3			BLU-ORG	AR-26-1500	
28	INSIDE RAMP	Gen. Purpose	J109-6			Q20	J124-5			BLU-YEL	#906	
37	UPPER RIGHT FLIPPER	Flasher	J109-6				* J4-1			BRN-WHT	#906	
38	GUMBALL MACHINE HIGH	Flasher	J109-6				* J4-2			RED-WHT	#906	
39	GUMBALL MACHINE MIDDLE	Flasher	J109-6				* J4-3			ORG-WHT	#906	
40	GUMBALL MACHINE LOW	Flasher	J109-6				* J4-5			YEL-WHT	#906	
41	UPPER RIGHT RAMP	Flasher	J109-6				* J3-5			GRN-WHT	#906	
42	CLOCK REVERSE	Flasher	**J1-5				** J1-2			BLU-WHT	A-16120	
43	CLOCK FORWARD	Flasher	** J1-5				** J1-1			VIO-WHT	A-16120	
44	CLOCK SWITCH STROBE	Flasher	J107-6				* J5-1			GRY-WHT	---	

General Illumination		Voltage Connections			Drive Xistor	Drive Connections			Drive Wire	Bulb Type	
		Playfield	Insert	Cabinet		Playfield	Insert	Cabinet		Playfield	Insert
01	PLAYFIELD LEFT	G.I.	J121-1		Q18	J121-7			WHT-BRN	#44	
02	MINI-PLAYFIELD & INSERT	G.I.	J121-2	J120-2	Q10	J121-8	J120-8		WHT-ORG	#555	#555
03	CLOCK & INSERT	G.I.	J121-3	J120-3	Q14	J121-9	J120-9		WHT-YEL	#86	#555
04	INSERT MAIN	G.I.		J120-5	Q16		J120-10		WHT-GRN		#555
05	PLAYFIELD RIGHT	G.I.	J121-6		Q12	J121-11			WHT-VIO	#44	

Flipper Circuits		Power	Playfield Voltage Connection	Drive Transistors Power	Hold	Playfield Drive Connections	Drive Wire Colors	Hold	Coil Part No.	Coil Colors
30		Hold	J907-9 (BLU-YEL)			J902-11	ORG-GRN			
31	LOWER LEFT FLIPPER		J907-7 (GRY-YEL)	Q3	Q9	J902-9	BLU-GRY		FL-15411	BLUE
32		Hold	J907-7 (GRY-YEL)			J902-7	ORG-BLU			
33	UPPER RIGHT FLIPPER		J907-6 (BLU-YEL)	Q2	Q7	J902-6	BLK-YEL		FL-11753	YELLOW
34		Hold	J907-6 (BLU-YEL)			J902-4	ORG-VIO			
35	UPPER LEFT FLIPPER		J907-8 (GRY-YEL)	Q1	Q5	J902-3	BLK-BLU		FL-11722	GREEN
36		Hold	J907-8 (GRY-YEL)			J902-1	ORG-GRY			

\* From 8 Driver PCB, A-16100

\*\* From D.C. Motor Control Assembly, A-16120

### LAMP MATRIX

Column	Yellow (B+) → Red							
	1 Yellow-Brown J133-1 Q98	2 Yellow-Red J137-2 Q97	3 Yellow-Orange J137-3 Q96	4 Yellow-Black J137-4 Q95	5 Yellow-Green J137-5 Q94	6 Yellow-Blue J137-6 Q93	7 Yellow-Violet J137-7 Q92	8 Yellow-Grey J137-9 Q91
1 Red-Brown J133-1 Q90	CAMERA (DOOR) 11	DOOR PANEL "LOCK 2" 21	LEFT EXTRA BALL 31	SPIRAL "2 MILLION" 41	LEFT RAMP BONUS X 51	LEFT JET BUMPER 61	LOWER RIGHT 5 MILLION 71	LEFT SPIRAL 81
2 Red-Black J133-2 Q89	HITCH HICKER (DOOR) 12	GREED (DOOR) 22	DOOR PANEL "LOCK 1" 32	SPIRAL LEFT BATTLE POWER 42	LEFT RAMP MULTIBALL 52	LOWER JET BUMPER 62	MIDDLE RIGHT 5 MILLION 2 72	CLOCK MILLIONS 82
3 Red-Orange J133-4 Q88	CLOCK CHAOS (DOOR) 13	10 MILLION (DOOR) 23	LEFT INLANE 1 33	SPIRAL "4 MILLION" 43	LEFT RAMP "SUPER SKILL" 53	RIGHT JET BUMPER 63	MIDDLE RIGHT 5 MILLION 1 73	PIANO YELLOW 83
4 Red-Yellow J133-5 Q87	SUPER SKILL (DOOR) 14	BATTLE THE POWER (DOOR) 24	DOOR HANDLE 34	SPIRAL RIGHT BATTLE POWER 44	LEFT POWERBALL 54	MIDDLE LEFT 5 MILLION 64	POWER PAYOFF 74	PIANO RED 84
5 Red-Green J133-6 Q86	FAST LOCK (DOOR) 15	THE SPIRAL (DOOR) 25	LEFT INLANE 2 35	SPIRAL 10 MILLION 45	THE CAMERA 55	UPPER LEFT 5 MILLION 65	UPPER RIGHT 5 MILLION 75	SLOT MACHINE 85
6 Red-Blue J133-7 Q85	LITE GUMBALL (DOOR) 16	CLOCK MILLION (DOOR) 26	DOOR PANEL "GUM" 36	SPIRAL "EXTRA BALL" 46	RIGHT RAMP THE POWER 56	RIGHT SPECIAL 66	MINI PLAYFIELD 500,000 76	RIGHT LANE GUMBALL 86
7 Red-Violet J133-8 Q84	TOWN SQUARE MADNESS (DOOR) 17	SUPER SLOT (DOOR) 27	LOWER LEFT 5 MILLION 37	SHOOT AGAIN 47	LOCK EXTRA BALL 57	RIGHT POWERBALL 67	MINI PLAYFIELD 1,000,000 77	BUY-IN BUTTON 87
8 Red-Grey J133-9 Q83	LIGHT EXTRA BALL (DOOR) 18	DOOR PANEL "BALL" 28	DEAD END 38	RIGHT INLANE 48	LOCK ARROW 58	RIGHT LANE SPIRAL 68	MINI PLAYFIELD 750,000 78	START BUTTON 88

J1XX = Power Driver Board

### SWITCH MATRIX

DEDICATED GROUNDED SWITCHES	Column	Green → White → Green								FLIPPER GROUNDED SWITCHES	
		1 Green-Brown J206-1 U20-18	2 Green-Red J206-2 U20-17	3 Green-Orange J206-3 U20-16	4 Green-Yellow J206-4 U20-15	5 Green-Black J206-5 U20-14	6 Green-Blue J206-6 U20-13	7 Green-Violet J206-7 U20-12	8 Green-Grey J206-9 U20-11		9 Grey-White *J5-1
Orange-Brown J205-1 LEFT COIN CHUTE D1	1 White-Brown J208-1 U18-11	RIGHT INLANE 11	SLAM TILT 21	LEFT JET BUMPER 31	DEAD END 41	GUMBALL POPPER LANE 51	LOWER SKILL 61	NOT USED 71	LOWER RIGHT MAGNET 81	Clock 15 Minutes 91	Black-Green J906-1 Lower Right Flipper E.O.S. F1
Orange-Red J205-2 CENTER COIN CHUTE D2	2 White-Red J208-2 U18-9	RIGHT OUTLANE 12	COIN DOOR CLOSED 22	RIGHT JET BUMPER 32	THE CAMERA 42	HITCH HIKER 52	CENTER SKILL 62	AUTO-FIRE KICKER 72	THIRD MAGNET (PROTO) 82	Clock 0 Minutes 92	Blue-Violet J905-1 Lower Right Flipper Opto F2
Orange-Black J205-3 RIGHT COIN CHUTE D3	3 White-Orange J208-3 U18-5	START BUTTON 13	BUY-IN BUTTON 23	LOWER JET BUMPER 33	PLAYER PIANO 43	LEFT RAMP ENTER 53	UPPER SKILL 63	RIGHT RAMP 73	LEFT MAGNET 83	Clock 45 Minutes 93	Black-Blue J906-3 Lower Left Flipper E.O.S. F3
Orange-Yellow J205-4 4 <sup>th</sup> COIN CHUTE D4	4 White-Yellow J208-4 U18-7	PLUMB BOB TILT 14	ALWAYS CLOSED 24	LEFT SLING 34	MINI PLAYFIELD ENTER 44	LEFT RAMP 54	UPPER RIGHT 5 MILLION 64	GUMBALL POPPER 74	CENTER LOCK 84	Clock 30 Minutes 94	Blue-Gray J905-2 Lower Left Flipper Opto F4
Orange-Green J205-6 Normal Function Srv Crdts D5	5 White-Green J208-5 U19-11	RIGHT TROUGH 15	FAR LEFT TROUGH 25	RIGHT SLING 4 35	MINI PLAYFIELD LEFT (2) 45	GUMBALL GENEVA 55	POWER PAYOFF (2) 65	MINI PLAYFIELD TOP 75	UPPER LOCK 85	Clock Hour 1 95	Black-Violet J906-4 Upper Right Flipper E.O.S. F5
Orange-Blue J205-7 Normal Function Volume Dn D6	6 White-Blue J208-7 U19-9	CENTER TROUGH 16	TROUGH PROXIMITY 26	LEFT OUTLANE 36	MINI PLAYFIELD RIGHT (2) 46	GUMBALL EXIT 56	MIDDLE RIGHT 5 MILLION 1 66	MINI PLAYFIELD EXIT 76	NOT USED 86	Clock Hour 2 96	Black-Yellow J905-3 Lower Right Flipper Opto F6
Orange-Violet J205-8 Normal Function Volume Up D7	7 White-Violet J208-8 U19-5	LEFT TROUGH 17	BALL SHOOTER 27	LEFT INLANE 1 37	CLOCK MILLIONS 47	SLOT PROXIMITY 57	MIDDLE RIGHT 5 MILLION 2 67	MIDDLE LEFT 5 MILLION 77	GUMBALL ENTER 87	Clock Hour 3 97	Black-Gray J906-5 Upper Left Flipper E.O.S. F7
Orange-Grey J205-9 Normal Function Begin Test D8	8 White-Grey J208-9 U19-7	OUTHOLE 18	ROCKET KICKER 28	LEFT INLANE 2 38	LOWER LEFT 5 MILLION 48	SLOT KICKOUT 58	LOWER RIGHT 5 MILLION 68	UPPER LEFT 5 MILLION 78	LOWER LOCK 88	Clock Hour 4 98	Black-Blue J905-5 Upper Left Flipper Opto F8

J2XX = CPU Board; J9XX = Fliptronic II Board;

= OPTO, TYPICALLY CLOSED

\* Located on 8 driver PCB, A-16100, in backbox