

Fuse List:

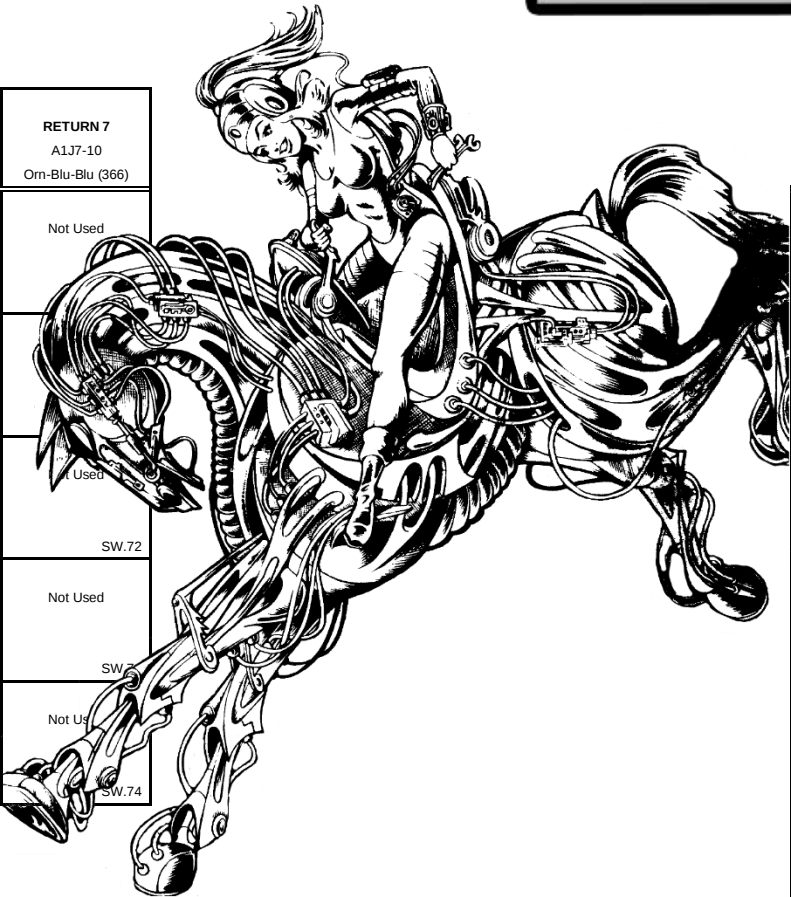
Wire in	Value	Wire out	description	location
Blk-Red-Red (022)	5 Amp Slo-Blo	Blk-Brn-Brn (011)	115V Primary Fuse	Bottom Board
	2½ Amp Slo-Blo		230V Primary Fuse	Bottom Board
Yel-Blu-Blu (466)	¼ Amp Slo-Blo	Grn-Blk-Blk (500)	Displays 69VAC	Bottom Board
Blk-Blu-Blu (066)	5 Amp Slo-Blo	Red-Slt-Slt (288)	Coils 25VAC	Bottom Board
Orn-Blk-Blk (300)	5 Amp Slo-Blo	Orn-Brn-Brn (311)	Controlled lamps 8VAC	Bottom Board
Red-Blu-Blu (266)	10 Amp	Red-Orn-Orn (233)	G.I. Playfield (via Tilt Relay) & Coin Chute 6VAC	Bottom Board
Red-Blu-Blu (266)	10 Amp	Red-Red-Red (222)	G.I. Name & Scene Lights 6VAC	Bottom Board
Red-Pur-Pur (277)	2 Amp Slo-Blo	Red-Slt-Slt (288)	Target Bank Reset	Playfield

D. Gottlieb & Co.



Switch Matrix

	RETURN 0 A1J7-12 & A1J6-3 Blk- Blu-Blu (066)	RETURN 1 A1J7-13 Brn-Blk-Blk (100)	RETURN 2 A1J7-14 Brn-Red-Red (122)	RETURN 3 A1J7-17 Brn-Orn-Orn (133)	RETURN 4 A1J7-16 Brn-Yel-Yel (144)	RETURN 5 A1J7-15 Brn-Grn-Grn (155)	RETURN 6 A1J7-11 Brn-Blu-Blu (166)	RETURN 7 A1J7-10 Orn-Blu-Blu (366)
STROBE 0 A1J7-2 A1J6-8 Blk-Brn-Brn (011)	Test Button Brn-Blk-Blk (100) SW.00	Left & Right Rollover (2) Maroon SW.10	#1 Rollover Red-Grn-Grn (255) SW.20	#1 Drop Target Pur-Pur-Pur (777) SW.30	Center Pop Bumper Pur-Blk-Blk (700) SW.40	Not Used SW.50	Not Used SW.60	Not Used
STROBE 1 A1J7-3 A1J6-4 Blk-Red-Red (022)	#1 Coin Chute Brn-Red-Red (122) SW.01	Return Rollover Brn-Grn-Grn (155) SW.11	#2 Rollover Red-Blu-Blu (266) SW.21	#2 Drop Target Orn-Blk SW.31	Right Hole Red-Yel-Yel (244) SW.41	Not Used SW.51	Not Used SW.61	
STROBE 2 A1J7-4 A1J6-5 Blk-Orn-Orn (033)	#2 Coin Chute Brn-Orn-Orn (133) SW.02	Rollover Button (3) Pur-Red-Red (722) SW.12	#3 Rollover Orn-Blu-Blu (366) SW.22	#3 Drop Target Brn-Blk SW.32	Left Hole Red-Brn-Brn (211) SW.42	Rollunder Gate Yel-Blk-Blk (400) SW.52	Not Used SW.62	Not Used SW.72
STROBE 3 A1J7-7 A1J6-6 Blk-Yel-Yel (044)	Replay Button Brn-Yel-Yel (144) SW.03	10 Point Switches (7) Pur-Orn-Orn (733) SW.13	#4 Rollover Gm-Blu-Blu (566) SW.23	#4 Drop Target Blu-Yel-Yel (644) SW.33	Left & Right Pop Bumpers (2) Pur-Brn-Brn (711) SW.43	Not Used SW.53	Not Used SW.63	Not Used SW.74
STROBE 4 A1J7-6 Blk-Grn-Grn (055)	Tilt Brn-Blu-Blu (166) SW.04	Not Used SW.14	Not Used SW.24	#5 Drop Target Yel-Red-Red (422) SW.34	Not Used SW.44	Not Used SW.54	Not Used SW.64	Not Used



Lamps and solenoids

transistor	connector	code	description	wire code	wire color	transistor type
Q01	J5-18	L01	Game Over Relay (Q)	400	Yel-Blk-Blk	MPS-U45
Q Relay			Match / Game Over Light	366	Orn-Blu-Blu	
Q Relay			Ball in Play	255	Red-Grn-Grn	
Q02	J5-19	L02	Tilt Relay (T)	411	Yel-Brn-Brn	MPS-U45
T Relay			Tilt Light	822	Slt-Red-Red	
Q03	J5-17	L03	High Game to Date	422	Yel-Red-Red	MPS-U45
Q04	J5-15	L04	Same Player Shoot Again	433	Yel-Orn-Orn	MPS-U45
Q05	J5-13	L05	1X Bonus	455	Yel-Grn-Gm	MPS-A13
Q06	J5-14	L06	5X Bonus	466	Yel-Blu-Blu	MPS-A13
Q07	J5-12	L07	2X Bonus	500	Grn-Blk-Blk	MPS-A13
Q08	J5-11	L08	3X Bonus	511	Grn-Brn-Brn	MPS-A13
Q09	J5-9	L09	Special	522	Grn-Red-Red	MPS-A13
Q10	J5-10	L10	4X Bonus	533	Grn-Orn-Orn	MPS-A13
Q11	J5-8	L11	Extra Ball	544	Grn-Yel-Yel	MPS-A13
Q12	J5-7	L12	Right Hole	566	Grn-Blu-Blu	MPS-A13
Q13	J5-5	L13	#1 Rollover Button	600	Blu-Blk-Blk	MPS-A13
Q14	J5-6	L14	Left Hole	611	Blu-Brn-Brn	MPS-A13
Q15	J5-4	L15	#2 Rollover Button	622	Blu-Red-Red	MPS-A13
Q16	J5-3	L16	#3 Rollover Button	633	Blu-Orn-Orn	MPS-A13
Q17	J5-1	L17	Not Used	644	Blu-Yel-Yel	MPS-A13
Q18	J5-2	L18	#4 Rollover Button	655	Blu-Grn-Gm	MPS-A13
Q19	J3-20	L19	Not Used	700	Pur-Blk-Blk	MPS-A13
Q20	J3-18	L20	Not Used	711	Pur-Brn-Brn	MPS-A13
Q21	J3-16	L21	Not Used	722	Pur-Red-Red	MPS-A13
Q22	J3-17	L22	Not Used	733	Pur-Orn-Orn	MPS-A13
Q23	J3-15	L23	1,000 Bonus	744	Pur-Yel-Yel	MPS-A13
Q24	J3-14	L24	2,000 Bonus	755	Pur-Grn-Grn	MPS-A13
Q33	J3-12	L25	3,000 Bonus	800	Slt-Blk-Blk	MPS-A13
Q34	J3-13	L26	4,000 Bonus	811	Slt-Brn-Brn	MPS-A13
Q35	J3-11	L27	5,000 Bonus	822	Slt-Red-Red	MPS-A13
Q36	J3-9	L28	6,000 Bonus	833	Slt-Orn-Orn	MPS-A13
Q37	J3-7	L29	7,000 Bonus	844	Slt-Yel-Yel	MPS-A13
Q38	J3-8	L30	8,000 Bonus	855	Slt-Grn-Grn	MPS-A13
Q39	J3-6	L31	9,000 Bonus	111	Brn-Brn-Brn	MPS-A13
Q40	J3-5	L32	10,000 Bonus	333	Orn-Orn-Orn	MPS-A13
Q41	J3-4	L33	20,000 Bonus	444	Yel-Yel-Yel	MPS-A13
Q42	J3-3	L34	Not Used	555	Grn-Grn-Grn	MPS-A13
Q43	J3-2	L35	Not Used	666	Blu-Blu-Blu	MPS-A13
Q44	J3-1	L36	Not Used	777	Pur-Pur-Pur	MPS-A13
Q32	J4-6	Solenoid 1	Outhole	200	Red-Blk-Blk	2N6043
Q25	J2-1	Solenoid 2	Knocker	211	Red-Brn-Brn	2N6043
Q26	J2-2	Solenoid 3	10's chime	311	Orn-Brn-Brn	2N6043
Q27	J2-3	Solenoid 4	100's chime	244	Red-Yel-Yel	2N6043
Q28	J2-4	Solenoid 5	1000's chime	255	Red-Grn-Grn	2N6043
Q31	J4-5	Solenoid 6	Right Hole	266	Red-Blu-Blu	2N6043
Q30	J4-4	Solenoid 7	Left Hole	300	Orn-Blk-Blk	2N6043
Q29 - Q45	J4-2	Solenoid 8	Target Bank Reset	311	Orn-Brn-Brn	MPS-U45 - 2N3055

Solenoids

	Solenoid description	Solenoid Type	Power Wire	Fuse	Transfer Wire	Coil Wire Color	Connector	Driver Transistor	Transistor Type	Coil Type
L01	Game Over Relay	Controlled	Red-Pur-Pur (277)			Yel-Blk-Blk (400)	A3J5-18	Q01	MPS-U45	A-16890
L02	Tilt Relay	Controlled	Red-Pur-Pur (277)			Yel-Brn-Brn (411)	A3J5-19	Q02	MPS-U45	A-16890
Sol. 1	Outhole	Controlled	Red-Pur-Pur (277)			Red-Blk-Blk (200)	A3J4-6	Q32	2N6043	A-16570
Sol. 2	Knocker	Controlled	Red-Pur-Pur (277)			Red-Brn-Brn (211)	A3J2-1	Q25	2N6043	A-5195
Sol. 3	10's chime	Controlled				Orn-Brn-Brn (311)	A3J2-2	Q26	2N6043	Sound Board
Sol. 4	100's chime	Controlled				Red-Yel-Yel (244)	A3J2-3	Q27	2N6043	Sound Board
Sol. 5	1000's chime	Controlled				Red-Grn-Grn (255)	A3J2-4	Q28	2N6043	Sound Board
Sol. 6	Right Hole	Controlled	Red-Pur-Pur (277)			Red-Blu-Blu (266)	A3J4-5	Q31	2N6043	A-5195
Sol. 7	Left Hole	Controlled	Red-Pur-Pur (277)			Orn-Blk-Blk (300)	A3J4-4	Q30	2N6043	A-16570
Sol. 8	Target Bank Reset	Controlled	Red-Pur-Pur (277)	2 Amp Slo-Blo	Red-Slt-Slt (288)	Orn-Brn-Brn (311)	A3J4-2	Q29 - Q45	MPS-U45 - 2N3055	A-17891
	Left Pop Bumper	Directly	Orn-Red-Red (322)					Switch		A-1496
	Right Pop Bumper	Directly	Orn-Red-Red (322)					Switch		A-1496
	Center Pop Bumper	Directly	Orn-Red-Red (322)					Switch		A-1496
	Kicking Rubber	Directly	Orn-Red-Red (322)					Switch		A-5194
	Coin Lockout	Directly	Red-Pur-Pur (277)				A6J1-11	Directly wired to ground		A-16890
	Lower Left Flipper	Directly	Orn-Yel-Yel (344)				A6J5-4	Button		A-17875
	Upper Left Flipper	Directly	Orn-Yel-Yel (344)				A6J5-4	Button		A-17875
	Right Flipper	Directly	Orn-Grn-Grn (355)				A6J5-5	Button		A-17875

2N6043 can be replaced with a TIP 102