

Fuse List:

Wire in	Value	Wire out	description	location
Orn	5 Amp Slo-Blo	Blu	115V Primary Fuse	Bottom Board
	2½ Amp Slo-Blo		230V Primary Fuse	Bottom Board
Wht-Yel	¼ Amp Slo-Blo	Blu-Wht-Red	Displays 69VAC	Bottom Board
Yel	5 Amp Slo-Blo	Red-Wht	Coils 25VAC	Bottom Board
Blu-Blk	5 Amp Slo-Blo	Orn-Blk	Controlled lamps 8VAC	Bottom Board
Yel-Red	10 Amp	Brn-Red	G.I. Playfield (via Tilt Relay) & Coin Chute 6VAC	Bottom Board
Yel-Red	10 Amp	Wht-Red	G.I. Name & Scene Lights 6VAC	Bottom Board
Red	½ Amp Slo-Blo	Blu-Orn	Out Hole	Playfield
Brn-Blk	2 Amp Slo-Blo	Red-Yel	Target Bank Reset	Playfield
			Roto Unit	Playfield

D. Gottlieb & Co.



Switch Matrix

	RETURN 0 A1J7-12 & A1J6-3 Yellow	RETURN 1 A1J7-13 Blue-White	RETURN 2 A1J7-14 Orange-White	RETURN 3 A1J7-17 Brown-White	RETURN 4 A1J7-16 Green-White	RETURN 5 A1J7-15 Purple-White	RETURN 6 A1J7-11 Yellow-White	RETURN 7 A1J7-10 Yellow-Black
STROBE 0 A1J7-2 A1J6-8 Blue	Test Button Blue-White SW.00	Spinning Target Yellow SW.10	#1 Drop Target Slate-Green SW.20	#3 Drop Target Orange-Green SW.30	#5 Drop Target Yellow-Green SW.40	#2 Drop Target Maroon-Yellow SW.50	#4 Drop Target Yellow-Black SW.60	Not Used SW.70
STROBE 1 A1J7-3 A1J6-4 Orange	#1 Coin Chute Orange-White SW.01	Left Target Maroon-Green SW.11	Pop Bumper Switch (2) White-Blue SW.21	10 Point Switches (8) Orange-Blue SW.31	Right Rollover, Right Return Rollover Slate-Black SW.41	Lower Bulls-Eye Target Orange-White SW.51	Upper Bulls-Eye Target Blue-White SW.61	Not Used SW.71
STROBE 2 A1J7-4 A1J6-5 Brown	#2 Coin Chute Brown-White SW.02	*A* Rollover Green-White SW.12	Not Used SW.22	Roto Unit Brown-Black SW.32	Roto Unit SW.42	Roto Unit SW.52	Roto Unit SW.62	Not Used SW.72
STROBE 3 A1J7-7 A1J6-6 Green	Replay Button Green-White SW.03	*B* Rollover Yellow-Black SW.13	Not Used SW.23	Roto Unit Orange-Black SW.33	Roto Unit SW.43	Roto Unit SW.53	Roto Unit SW.63	Not Used SW.73
STROBE 4 A1J7-6 Purple	Tilt Purple-White SW.04	*C* Rollover Blue-Black SW.14	Not Used SW.24	Roto Unit Yellow-Blue SW.34	Roto Unit SW.44	Roto Unit SW.54	Roto Unit SW.64	Not Used SW.74

Lamps and solenoids

transistor	connector	code	description	wire color	transistor type
Q01	J5-18	L01	Game Over Relay	Wht-Blu	MPS-U45
Q Relay			Match / Game Over Light	Yel-Blk	
Q Relay			Ball in Play	Pur-Red	
Q02	J5-19	L02	Tilt Relay	Wht-Orn	MPS-U45
T Relay			Tilt Light	Wht-Brn-Blk	
Q03	J5-17	L03	High Game to Date	Wht-Brn	MPS-U45
Q04	J5-15	L04	Same Player Shoot Again	Wht-Grn	MPS-U45
Q05	J5-13	L05	Extra Ball	Wht-Pur	MPS-A13
Q06	J5-14	L06	Special	Wht-Yel	MPS-A13
Q07	J5-12	L07	Right 10X	Blu-Wht-Red	MPS-A13
Q08	J5-11	L08	Center 10X	Orn-Wht-Red	MPS-A13
Q09	J5-9	L09	Right "Hit"	Brn-Wht-Red	MPS-A13
Q10	J5-10	L10	Left 10X	Grn-Wht-Red	MPS-A13
Q11	J5-8	L11	Center "Hit"	Pur-Wht-Red	MPS-A13
Q12	J5-7	L12	Left "Hit"	Yel-Wht-Red	MPS-A13
Q13	J5-5	L13	*B* Rollover	Blu-Wht-Blk	MPS-A13
Q14	J5-6	L14	*C* Rollover	Orn-Wht-Blk	MPS-A13
Q15	J5-4	L15	*A* Rollover	Brn-Wht-Blk	MPS-A13
Q16	J5-3	L16	Upper Bulls-Eye Target	Grn-Wht-Blk	MPS-A13
Q17	J5-1	L17	Spinning Target	Pur-Wht-Blk	MPS-A13
Q18	J5-2	L18	Lower Bulls-Eye Target	Yel-Wht-Blk	MPS-A13
Q19	J3-20	L19	5X Bonus	Wht-Blu-Red	MPS-A13
Q20	J3-18	L20	4X Bonus	Wht-Orn-Red	MPS-A13
Q21	J3-16	L21	3X Bonus	Wht-Brn-Red	MPS-A13
Q22	J3-17	L22	2X Bonus	Wht-Grn-Red	MPS-A13
Q23	J3-15	L23	1,000 Bonus	Wht-Pur-Red	MPS-A13
Q24	J3-14	L24	2,000 Bonus	Wht-Yel-Red	MPS-A13
Q33	J3-12	L25	3,000 Bonus	Wht-Blu-Blk	MPS-A13
Q34	J3-13	L26	4,000 Bonus	Wht-Orn-Blk	MPS-A13
Q35	J3-11	L27	5,000 Bonus	Wht-Brn-Blk	MPS-A13
Q36	J3-9	L28	6,000 Bonus	Wht-Grn-Blk	MPS-A13
Q37	J3-7	L29	7,000 Bonus	Wht-Pur-Blk	MPS-A13
Q38	J3-8	L30	8,000 Bonus	Wht-Yel-Blk	MPS-A13
Q39	J3-6	L31	9,000 Bonus	Blu-Wht-Wht	MPS-A13
Q40	J3-5	L32	10,000 Bonus	Orn-Wht-Wht	MPS-A13
Q41	J3-4	L33	20,000 Bonus	Brn-Wht-Wht	MPS-A13
Q42	J3-3	L34	#5 Drop Target	Grn-Wht-Wht	MPS-A13
Q43	J3-2	L35	#3 Drop Target	Pur-Wht-Wht	MPS-A13
Q44	J3-1	L36	#1 Drop Target	Yel-Wht-Wht	MPS-A13
Q32	J4-6	Solenoid 1	Out Hole	Blu-Red	2N6043
Q25	J2-1	Solenoid 2	Knocker	Orn-Red	2N6043
Q26	J2-2	Solenoid 3	10's chime	Orn-Blk	2N6043
Q27	J2-3	Solenoid 4	100's chime	Grn-Red	2N6043
Q28	J2-4	Solenoid 5	1000's chime	Pur-Red	2N6043
Q31	J4-5	Solenoid 6	Not Used	Yel-Red	2N6043
Q30	J4-4	Solenoid 7	Roto Unit	Blu-Blk	2N6043
Q29 - Q45	J4-2	Solenoid 8	Drop Target Bank Reset	Orn-Blk	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			Wht-Blu	A3J5-18	Q01	MPS-U45	A-16890
L02	Tilt Relay	Controlled	Red			Wht-Orn	A3J5-19	Q02	MPS-U45	A-16890
Sol. 1	Out Hole	Controlled	Red	½ Amp Slo-Blo	Blu-Orn	Blu-Red	A3J4-6	Q32	2N6043	A-5195
Sol. 2	Knocker	Controlled	Red			Orn-Red	A3J2-1	Q25	2N6043	A-5195
Sol. 3	10's chime	Controlled				Orn-Blk	A3J2-2	Q26	2N6043	Sound Board
Sol. 4	100's chime	Controlled				Grn-Red	A3J2-3	Q27	2N6043	Sound Board
Sol. 5	1000's chime	Controlled				Pur-Red	A3J2-4	Q28	2N6043	Sound Board
Sol. 6	Not Used	Controlled	Red			Yel-Red	A3J4-5	Q31	2N6043	
Sol. 7	Roto Unit	Controlled				Blu-Blk	A3J4-4	Q30 - UPT	2N6043 - 2N5875	A-17891
Sol. 8	Drop Target Bank Reset	Controlled	Brn-Blk	2 Amp Slo-Blo	Red-Yel	Orn-Blk	A3J4-2	Q29 - Q45	MPS-U45 - 2N3055	A-17891
	Left Pop Bumper	Directly	Brn-Blk					Switch		A-1496
	Right Pop Bumper	Directly	Brn-Blk					Switch		A-1496
	Kicking Rubber	Directly	Brn-Blk					Switch		A-5194
	Coin Lockout	Directly	Red				A6J1-11	Directly wired to ground		A-16890
	Left Flipper	Directly	Brn-Blk			Grn-Blk	A6J5-4	Button		A-17875
	Right Flipper	Directly	Brn-Blk			Pur-Blk	A6J5-5	Button		A-17875

2N6043 can be replaced with a TIP 102

UPT = Under Playfield Transistor