

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
Blk-Orn-Orn (033)	1 Amp Slo-Blo	Brn	Small transformer primary fuse	Bottom Board
Yel-Blk-Blk (400)	1 Amp Slo-Blo	Yel-Yel-Yel (444)	Sound Board 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)	7½ Amp	Red-Orn-Orn (233)	G.I. Playfield (via Tilt Relay) & Coin Chute 6VAC	Bottom Board
Red-Blu-Blu (266)	7½ Amp	Red-Red-Red (222)	G.I. Name & Scene Lights 6VAC	Bottom Board
Red-Pur-Pur (277)	2 Amp Slo-Blo	?	Left Drop Target Bank Reset	Playfield
			Right Drop Target Bank Reset	
Red-Pur-Pur (277)	1 Amp Slo-Blo	Red-Red-Red (222)	Outhole	Playfield
			Kickout Hole	

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	Spin Target Red-Orn-Orn (233) SW.10	Red "A" Drop Target Grn-Pur-Pur (577) SW.20	Black "A" Drop Target Orn-Slt-Slt (388) SW.30	Pop Bumper (2) Blk-Pur-Pur (077) SW.40	Left Return Rollover Red-Grn-Grn (255) SW.50	Not Used SW.60	Not Used SW.70
STROBE 1 A1J7-3 A1J6-4 Blk-Red-Red (022)	#1 Coin Chute Brn-Red-Red (122) SW.01	Heart Rollover Brn-Blu-Blu (166) SW.11	Black "K" Drop Target Yel-Pur-Pur (477) SW.21	Red "K" Drop Target Yel-Slt-Slt (488) SW.31	Kickout Hole Orn-Blu-Blu (366) SW.41	Outside Rollovers (2) Red-Brn-Brn (211) SW.51	Not Used SW.61	Not Used SW.71
STROBE 2 A1J7-4 A1J6-5 Blk-Orn-Orn (033)	#2 Coin Chute Brn-Orn-Orn (133) SW.02	Club Rollover Brn-Pur-Pur (177) SW.12	Red "Q" Drop Target Grn-Pur-Pur (577) SW.22	Black "Q" Drop Target Grn-Slt-Slt (588) SW.32	Left Side Rollover Brn-Brn-Brn (111) SW.42	Not Used 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	Diamond Rollover Brn-Slt-Slt (188) SW.13	Black "J" Drop Target Blu-Pur-Pur (677) SW.23	Red "J" Drop Target Blu-Slt-Slt (688) SW.33	30 Point Contacts (4) Pur-Slt-Slt (788) SW.43	Not Used SW.53	Not Used SW.63	Not Used SW.73
STROBE 4 A1J7-6 Blk-Grn-Grn (055)	Tilt Blu-Blu-Blu (666) SW.04	Spade Rollover Slt-Blu-Blu (866) SW.14	Red "10" Drop Target Slt-Pur-Pur (877) SW.24	Black "10" Drop Target Slt-Slt-Slt (888) SW.34	Extra Ball Target Red-Red-Red (222) SW.44	Not Used SW.54	Not Used SW.64	Not Used SW.74

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)	2 Amp Slo-Blo	Red-Red-Red (222)	Red-Blk-Blk (200)	A3J4-6	Q32	2N6043	A-16570
Sol. 6	Kickout Hole	Controlled				Red-Blu-Blu (266)	A3J4-5	Q31	2N6043	A-17891
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. 7	Left Drop Target Bank Reset	Controlled	Red-Pur-Pur (277)	1 Amp Slo-Blo	?	Orn-Blk-Blk (300)	A3J4-4	Q30 - UPT	2N6043 - 2N5875	A-17891
Sol. 8	Right Drop Target Bank Reset	Controlled				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
	Left Kicking Rubber	Directly	Orn-Red-Red (322)					Switch		A-1496
	Right Kicking Rubber	Directly	Orn-Red-Red (322)					Switch		A-1496
	Coin Lockout	Directly	Red-Pur-Pur (277)				A6J1-11	Directly wired to ground		A-16890
	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

UPT = Under Playfield Transistor

D. Gottlieb & Co.

ASTEROID ANNIE and the ALIENS



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	Ace of Hearts	455	Yel-Grn-Grn	MPS-A13
Q06	J5-14	L06	King of Hearts	466	Yel-Blu-Blu	MPS-A13
Q07	J5-12	L07	Queen of Hearts	500	Grn-Blk-Blk	MPS-A13
Q08	J5-11	L08	Jack of Spades	511	Grn-Brn-Brn	MPS-A13
Q09	J5-9	L09	10 of Hearts	522	Grn-Red-Red	MPS-A13
Q10	J5-10	L10	Ace of Clubs	533	Grn-Orn-Orn	MPS-A13
Q11	J5-8	L11	King of Clubs	544	Grn-Yel-Yel	MPS-A13
Q12	J5-7	L12	Queen of Clubs	566	Grn-Blu-Blu	MPS-A13
Q13	J5-5	L13	Jack of Clubs	600	Blu-Blk-Blk	MPS-A13
Q14	J5-6	L14	10 of Clubs	611	Blu-Brn-Brn	MPS-A13
Q15	J5-4	L15	Ace of Diamonds	622	Blu-Red-Red	MPS-A13
Q16	J5-3	L16	King of Diamonds	633	Blu-Orn-Orn	MPS-A13
Q17	J5-1	L17	Queen of Diamonds	644	Blu-Yel-Yel	MPS-A13
Q18	J5-2	L18	Jack of Diamonds	655	Blu-Grn-Grn	MPS-A13
Q19	J3-20	L19	10 of Diamonds	700	Pur-Blk-Blk	MPS-A13
Q20	J3-18	L20	Ace of Spades	711	Pur-Brn-Brn	MPS-A13
Q21	J3-16	L21	King of Spades	722	Pur-Red-Red	MPS-A13
Q22	J3-17	L22	Queen of Spades	733	Pur-Orn-Orn	MPS-A13
Q23	J3-15	L23	Jack of Spades	744	Pur-Yel-Yel	MPS-A13
Q24	J3-14	L24	10 of Spades	755	Pur-Grn-Grn	MPS-A13
Q33	J3-12	L25	Heart	800	Slt-Blk-Blk	MPS-A13
Q34	J3-13	L26	Club	811	Slt-Brn-Brn	MPS-A13
Q35	J3-11	L27	Diamond	822	Slt-Red-Red	MPS-A13
Q36	J3-9	L28	Spade	833	Slt-Orn-Orn	MPS-A13
Q37	J3-7	L29	Heart Rollover	844	Slt-Yel-Yel	MPS-A13
Q38	J3-8	L30	Club Rollover	855	Slt-Grn-Grn	MPS-A13
Q39	J3-6	L31	Diamond Rollover	111	Brn-Brn-Brn	MPS-A13
Q40	J3-5	L32	Spade Rollover	333	Orn-Orn-Orn	MPS-A13
Q41	J3-4	L33	Left Side Rollover	444	Yel-Yel-Yel	MPS-A13
Q42	J3-3	L34	Spin Target	555	Grn-Grn-Grn	MPS-A13
Q43	J3-2	L35	Extra Ball	666	Blu-Blu-Blu	MPS-A13
Q44	J3-1	L36	Special	777	Pur-Pur-Pur	MPS-A13
Q32	J4-6	Solenoid 1	Outhole Kicker	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	Kickout Hole	266	Red-Blu-Blu	2N6043
Q30	J4-4	Solenoid 7	Left Drop Target Bank Reset	300	Orn-Blk-Blk	2N6043 - 2N5875
Q29 - Q45	J4-2	Solenoid 8	Right Drop Target Bank Reset	311	Orn-Brn-Brn	MPS-U45 - 2N3055

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