

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	7½ Amp	Wht-Red	G.I. Name & Scene Lights 6VAC	Bottom Board
Red	2 Amp Slo-Blo	Red-Wht	Red Target Bank Reset	Playfield
Red	1 Amp Slo-Blo	Yel-Red	White Target Bank Reset	Playfield

D. Gottlieb & Co.

CHARLIE'S ANGELS



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	#1 White Drop Target Purple-White-Black SW.10	#1 Rollover Button Brown-White-Red SW.20	#1 Red Drop Target White-Blue-Red SW.30	"C" Rollover (2) White-Blue SW.40	Pop Bumpers (2) Blue-White-Red SW.50	Not Used SW.60	Not Used SW.70
STROBE 1 A1J7-3 A1J6-4 Orange	#1 Coin Chute Orange-White SW.01	#2 White Drop Target Purple-Red SW.11	#2 Rollover Button Orange-Black SW.21	#2 Red Drop Target Brown-White-Black SW.31	"H" Rollover White-Orange SW.41	Not Used SW.51	Not Used SW.61	Not Used SW.71
STROBE 2 A1J7-4 A1J6-5 Brown	#2 Coin Chute Brown-White SW.02	#3 White Drop Target Green-White-Red SW.12	#3 Rollover Button Brown-Black SW.22	#3 Red Drop Target Brown-White-White SW.32	"I" Rollover White-Brown SW.42	Not Used SW.52	Not Used SW.62	Not Used SW.72
STROBE 3 A1J7-7 A1J6-6 Green	Replay Button Green-White SW.03	Left Return Rollover Orange-Red SW.13	#4 Rollover Button Yellow-White-Black SW.23	#4 Red Drop Target White-Green-Red SW.33	Right Return Rollover Green-Red SW.43	Not Used SW.53	Not Used SW.63	Not Used SW.73
STROBE 4 A1J7-6 Purple	Tilt Purple-White SW.04	Left & Right Outside Rollovers (2) Yellow-Black SW.14	#5 Rollover Button Slate-Black SW.24	#5 Red Drop Target White-Yellow SW.34	Bullseye Target Blue-White-Black SW.44	10 Point Switches (6) ? 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			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	Outhole	Controlled	Red			Blu-Red	A3J4-6	Q32	2N6043	A-16570
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				Yel-Red	A3J4-5	Q31	2N6043	
Sol. 7	White Target Bank Reset	Controlled	Red	1 Amp Slo-Blo	Yel-Red	Blu-Blk	A3J4-4	Q30	2N6043	A-18102
Sol. 8	Red Target Bank Reset	Controlled	Red	2 Amp Slo-Blo	Red-Wht	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
	Left Kicking Rubber	Directly	Brn-Blk					Switch		A-5194
	Right 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

Lamps and solenoids

transistor	connector	code	description	wire color	transistor type
Q01	J5-18	L01	Game Over Relay (Q)	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 (T)	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	5000 When Lit (White Drop Targets)	Wht-Pur	MPS-A13
Q06	J5-14	L06	5000 When Lit (Red Drop Targets)	Wht-Yel	MPS-A13
Q07	J5-12	L07	Advance Bonus Multiplier	Blu-Wht-Red	MPS-A13
Q08	J5-11	L08	Advance Bonus Multiplier	Orn-Wht-Red	MPS-A13
Q09	J5-9	L09	#5 Rollover Button	Brn-Wht-Red	MPS-A13
Q10	J5-10	L10	Advance Bonus Multiplier	Grn-Wht-Red	MPS-A13
Q11	J5-8	L11	#4 Rollover Button	Pur-Wht-Red	MPS-A13
Q12	J5-7	L12	#3 Rollover Button	Yel-Wht-Red	MPS-A13
Q13	J5-5	L13	#1 Rollover Button	Blu-Wht-Blk	MPS-A13
Q14	J5-6	L14	#2 Rollover Button	Orn-Wht-Blk	MPS-A13
Q15	J5-4	L15	Right "C" Rollover	Brn-Wht-Blk	MPS-A13
Q16	J5-3	L16	"I" Rollover	Grn-Wht-Blk	MPS-A13
Q17	J5-1	L17	Left "C" Rollover	Pur-Wht-Blk	MPS-A13
Q18	J5-2	L18	"H" Rollover	Yel-Wht-Blk	MPS-A13
Q19	J3-20	L19	Scores Bonus	Wht-Blu-Red	MPS-A13
Q20	J3-18	L20	Left Special	Wht-Orn-Red	MPS-A13
Q21	J3-16	L21	Extra Ball	Wht-Brn-Red	MPS-A13
Q22	J3-17	L22	Right Special	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	5X Bonus	Brn-Wht-Wht	MPS-A13
Q42	J3-3	L34	4X Bonus	Grn-Wht-Wht	MPS-A13
Q43	J3-2	L35	3X Bonus	Pur-Wht-Wht	MPS-A13
Q44	J3-1	L36	2X Bonus	Yel-Wht-Wht	MPS-A13
Q32	J4-6	Solenoid 1	Outhole	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	White Target Bank Reset	Blu-Blk	2N6043
Q29 - Q45	J4-2	Solenoid 8	Red Target Bank Reset	Orn-Blk	MPS-U45 - 2N3055