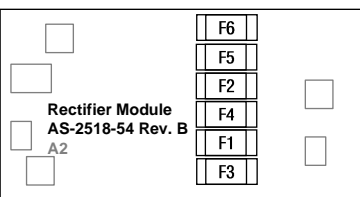
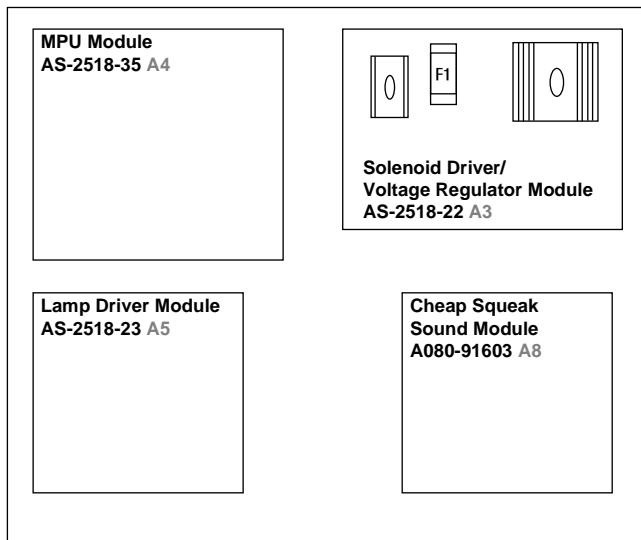




Fuse List

Rectifier Module AS-2518-54 Rev. B		
F1	6.5V Switched illumination	20A, 250V
F2	230V Display power input	0.75A, 250V
F3	5V unregulated input	4A, 250V
F4	43V Solenoids	5A, 250V
F5	6.5V General illumination	15A, 250V
F6	6.5V General illumination	15A, 250V
Sol. Dr./Volt. Reg. AS-2518-22		
F1	190V Display power output	0.25A, 250V
Under the Playfield fuses		
F1	Solenoids	1A, 250V, SB
Transformer Module		
F1	Main fuse	3A, 250V, SB
F2	Motor circuit	1A, 250V



Controlled Lamps Chart

SCR	connector	lamp description	code	wire color	tr type	SCR	connector	lamp description	code	wire color	tr type
Q16	A5J2-22	Ball-In-Play	62	Brn-Blu	MCR-106	Q42	A5J3-21	Mushroom Arrow Left	64	Brn-Grn	MCR-106
Q08	A5J1-23	Bonus 5K	12	Red-Blu	MCR-106	Q56	A5J3-10	Mushroom Arrow Right	91	Gry-Red	MCR-106
Q35	A5J1-3	Bonus 10K	45	Grn-Wht	MCR-106	Q41	A5J3-20	Playfield Value Double	78	Orn-Blk	MCR-106
Q49	A5J3-17	Bonus 15K	13	Red-Yel	MCR-106	Q46	A5J3-18	Playfield Value Triple	56	Wht-Brn	2N5060
Q54	A5J3-11	Bonus 20K	93	Gry-Yel	MCR-106	Q24	A5J1-5	Releases Ball	48	Grn-Blk	MCR-106
Q09	A5J1-14	Bonus 25K	67	Brn-Orn	MCR-106	Q27	A5J1-9	Right Saucer 30K Bottom	43	Grn-Yel	2N5060
Q34	A5J1-2	Bonus 30K	52	Wht-Blu	MCR-106	Q38	A5J3-25	Right Saucer 30K Middle	36	Yel-Brn	2N5060
Q48	A5J3-16	Bonus 35K	25	Blu-Wht	MCR-106	Q50	A5J3-12	Right Saucer 30K Top	21	Blu-Red	2N5060
Q55	A5J3-9	Bonus 40K	15	Red-Wht	MCR-106	Q03	A5J1-26, J2-21	Same Player Shoot Again	91, 47	Gry-Red, Grn-Orn	MCR-106
Q10	A5J1-15	Bonus 45K	31	Yel-Red	MCR-106	Q58	A5J3-2	Special Arrow Right	95	Gry-Wht	2N5060
Q11	A5J1-16	Bonus 50K	15	Red-Wht	2N5060	Q47	A5J2-10	Tilt	35	Yel-Wht	MCR-106
Q26	A5J1-7	Bonus 100K	34	Yel-Grn	2N5060	Q22	A5J1-10	Top & Middle Thumper Bumper	32	Yel-Blu	MCR-106
Q32	A5J3-27	Bonus 150K	40	Grn	2N5060	Q02	A5J1-25		75	Orn-Wht	MCR-106
Q59	A5J3-4	Bonus Special	14	Red-Grn	2N5060	Q04	A5J1-28		78	Orn-Blk	2N5060
Q52	A5J3-13	Credit Indicator	35	Yel-Wht	2N5060	Q05	A5J2-16		34	Yel-Grn	2N5060
Q33	A5J2-11	Game Over	95	Gry-Wht	MCR-106	Q06	A5J2-14		12	Red-Blu	2N5060
Q15	A5J2-23	High Score to Date	97	Gry-Orn	MCR-106	Q07	A5J1-27		53	Wht-Yel	2N5060
Q37	A5J3-23	Left Kicker Arrow	98	Gry-Blk	2N5060	Q17	A5J1-11		65	Brn-Wht	MCR-106
Q14	A5J1-18	Left Saucer 10K	58	Wht-Blk	2N5060	Q18	A5J2-20		96	Gry-Brn	2N5060
Q29	A5J1-1	Left Saucer 20K	41	Grn-Red	2N5060	Q19	A5J2-15		23	Blu-Yel	2N5060
Q36	A5J3-26	Left Saucer 30K	43	Grn-Yel	2N5060	Q20	A5J1-13		30	Yel	2N5060
Q57	A5J3-1	Left Saucer 40K	10	Red	2N5060	Q21	A5J1-12		61	Brn-Red	2N5060
Q12	A5J1-19	Left Saucer 50K	60	Brn	2N5060	Q25	A5J1-6		94	Gry-Grn	2N5060
Q01	A5J1-24	Lites Right Special	50	Wht	MCR-106	Q30	A5J2-6		95	Gry-Wht	2N5060
Q23	A5J2-8	Match	82	Blk-Blu	MCR-106	Q31	A5J2-2				2N5060
Q60	A5J3-3	Motor Control via Solenoid Expander	81	Blk-Red	2N5060	Q39	A5J3-24		72	Orn-Blu	2N5060
Q13	A5J1-17	Multiplier 2X	57	Wht-Orn	2N5060	Q40	A5J3-22		23	Blu-Yel	MCR-106
Q28	A5J1-8	Multiplier 3X	51	Wht-Red	2N5060	Q43	A5J2-7		91	Gry-Red	2N5060
Q44	A5J3-19	Multiplier 4X	67	Brn-Orn	2N5060	Q45	A5J2-1		60	Brn	2N5060
Q51	A5J3-15	Multiplier 5X	53	Wht-Yel	2N5060	Q53	A5J3-14		84	Blk-Grn	2N5060

Coil Table

Sol. No	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Saucer Left	Momentary	48	Grn-Blk	A3J1-3, J2-4	Q2	AO-27-1300
2	Saucer Right	Momentary	511	Wht-Vio	A3J1-2, J2-9	Q1	AO-27-1300
3	Side Return Kicker	Momentary	95	Gry-Wht	A3J1-5	Q4	AE23-800
4	Thumper Bumper Top	Momentary	85	Blk-Wht	A3J5-10	Q8	AN-26-1200
5	Thumper Bumper Middle	Momentary	80	Blk	A3J5-12	Q13	AN-26-1200
6	Thumper Bumper Bottom	Momentary	78	Orn-Blk	A3J5-11	Q14	AN-26-1200
7	Slingshot Left	Momentary	71	Orn-Red	A3J5-9	Q9	AO-26-1200
8	Slingshot Right	Momentary	74	Orn-Grn	A3J5-15	Q10	AO-26-1200
9	Outhole	Momentary	67	Brn-Orn	A3J5-13	Q12	AN-26-1200
10	Ball Release	Momentary	83	Blk-Yel	A3J5-14	Q11	AO-27-1300
11	Knocker	Momentary	85	Blk-Wht	A3 J2-6, J3-7, J5-8	Q16	AR-26-1200
12	Gate	Continuous	91	Gry-Red	A3J5-7	Q17	GA-34-4000
13	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
14	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
		Momentary			A3J2-10	Q5	--
		Momentary			A3J2-11	Q6	--
		Momentary			A3J2-12	Q7	--
		Momentary			A3J2-5, J3-7	Q3	--
		Continuous			A3J2-15, J3-9, J5-3	Q18	--
Flipper Circuits		Power Wire	Flipper Coil Wire		Flipper Button Wire		Coil
	Left Flipper	Brn (60)	40 (Grn)	A3J1-8	20 (Blu)	A3J2-2	AQ-25-500/34-4500
	Right Flipper	Brn (60)	70 (Orn)	A3J1-9	10 (Red)	A3J2-1	AQ-25-500/34-4500

Switch Matrix

strobe (ST) return (I)

Column	STROBE 0 A4J2-1 Wht-Red (51) A4J3-2 Red-Yel (13)	STROBE 1 A4J2-2 Orn (70) A4J3-3 Red-Gm (14)	STROBE 2 A4J2-3 Gry-Yel (93)	STROBE 3 A4J2-4 Wht-Yel (53)	STROBE 4 A4J2-5 Yel-Red (31)
RETURN I 0 A4J2-8 Wht-Grn (54) A4J3-9 Red-Wht (15)	Right Slingshot 1	Coin Chute III (Right) 9	Top Lane 20K 17	Boop Ball Target 25	Not Used 33
RETURN I 1 A4J2-9 Brn-Yel (63) A4J3-10 Brn-Wht (65)	Left Slingshot 2	Coin Chute I (Left) 10	1000 Points Buttons 18	Not Used 26	Not Used 34
RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)	Bottom Thumper Bumper 3	Coin Chute II (Middle) 11	Kicker Off (2x) 19	Not Used 27	Not Used 35
RETURN I 3 A4J2-11 Orn-Blk (78) A4J3-12 (not used)	Middle Thumper Bumper 4	Right Mushroom 12	Kicker On 20	Trough #3 Right 28	Not Used 36
RETURN I 4 A4J2-12 Brn (60) A4J3-13 (not used)	Top Thumper Bumper 5	Middle Mushroom cap. 13	Right Outlane 21	Trough #2 Center 29	Not Used 37
RETURN I 5 A4J2-13 Wht-Brn (56) A4J3-14 Blu-Wht (25)	Credit Button 6	Left Mushroom 14	Left Outlane 22	Trough #1 Left 30	Not Used 38
RETURN I 6 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27)	Rebounds (6) 7	Tilt 15	Right Saucer 23	Gate Lane 31	Not Used 39
RETURN I 7 A4J2-15 Wht-Blu (52) A4J3-16 Yel (30)	Outhole 8	Slam 16	Left Saucer 24	Top Lane 10K 32	Not Used 40