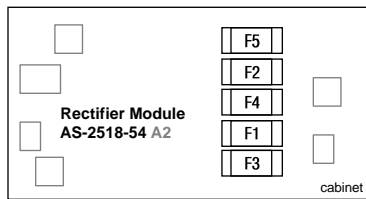
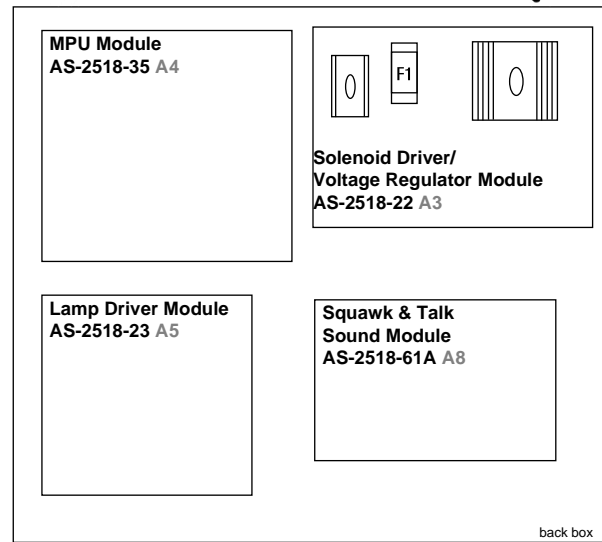


Fuse List

Rectifier Module AS-2518-54		
F1	6.5V Switched illumination	20A, 250V
F2	230V Display power input	0.75A, 250V
F3	5V Unregulated input	4A, 250V
F4	43V Solenoids (3 flippers)	6A, 250V
F5	6.5V General illumination	20A, 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



Aux. Lamp Driver Module AS-2518-52 A9
Insert



Coil Table

Sol. No	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Left Slingshot	Momentary	83	Blk-Yel	A3J5-14	Q11	AO-26-1200
2	Right Slingshot	Momentary	18	Red-Blk	A3J5-8, J2-6, J3-7	Q16	AO-26-1200
3	Thumper Bumper Top Left	Momentary	78	Orn-Blk	A3J5-11	Q14	AN-26-1200
4	Thumper Bumper Bottom Left	Momentary	71	Orn-Red	A3J5-9	Q9	AN-26-1200
5	Thumper Bumper Top Right	Momentary	74	Orn-Grn	A3J5-15	Q10	AN-26-1200
6	Thumper Bumper Bottom Right	Momentary	67	Brn-Orn	A3J5-13	Q12	AN-26-1200
7	Knocker	Momentary	85	Blk-Wht	A3J2-5, J3-7	Q3	AR-26-1200
8	Outhole Kicker	Momentary	81	Blk-Red	A3J2-12	Q7	AO-27-1300
9	Single Drop Target Reset	Momentary	67	Brn-Orn	A3J2-4, J1-3	Q2	AO-27-1300
10	Left 3 Drop Target Reset	Momentary	18	Red-Blk	A3J2-9, J1-2	Q1	NO-26-1900
11	Top 3 Drop Target Reset	Momentary	81	Blk-Red	A3J2-10	Q5	NO-26-1900
12	Saucer	Momentary	91	Gry-Red	A3J2-11	Q6	AO-27-1300
13	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
14	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
15	Right Outlane Flipper	Continuous	80	Blk	A3J5-3, J2-15, J3-9	Q18	AO-27-1300
		Momentary	95	Gry-Wht	A3J1-5	Q4	
		Momentary	85	Blk-Wht	A3J5-10	Q8	
		Momentary	80	Blk	A3J5-12	Q13	
		Continuous	81	Blk-Red	A3J5-7	Q17	
Flipper Circuits	Power Wire	Flipper Coil Wire	Flipper Button Wire	Coil			
Left Flipper	60 (Brn)	40 (Grn)	A3J1-8	20 (Blu)	A3J2-2	AQ-25-500/34-4500	
Right Flipper	60 (Brn)	70 (Orn)	A3J1-9	10 (Red)	A3J2-1	AQ-25-500/34-4500	
Upper Right Flipper	60 (Brn)	85 (Blk-Wht)			(to lower right flipper)	AQ-26-600/34-4500	

Controlled Lamps Chart

SCR	connector	lamp description	code	wire color	tr type	SCR	connector	lamp description	code	wire color	tr type
Q05	A5J2-16	Backglass "E"	34	Yel-Grn	2N5060	Q51	A5J3-15	Outlane Special (Left)	53	Wht-Yel	2N5060
Q18	A5J2-20	Backglass "M"	98	Gry-Blk	2N5060	Q44	A5J3-19	Outlane Special (Right)	67	Brn-Orn	2N5060
Q30	A5J2-6	Backglass "B"	85	Blk-Wht	2N5060	Q11	A5J1-16	Playfield "E"	90	Gry	2N5060
Q43	A5J2-7	Backglass "R"	91	Gry-Red	2N5060	Q26	A5J1-7	Playfield "M"	34	Yel-Gm	2N5060
Q06	A5J2-14	Backglass "Y"	12	Red-Blu	2N5060	Q32	A5J3-27	Playfield "B"	40	Gm	2N5060
Q19	A5J2-15	Backglass "O"	23	Blu-Yel	2N5060	Q59	A5J3-4	Playfield "R"	14	Red-Grn	2N5060
Q31	A5J2-2	Backglass "N"	20	Blu	2N5060	Q04	A5J1-28	Playfield "Y"	78	Orn-Blk	2N5060
Q16	A5J2-22	Ball-in-Play (Back Box)	62	Brn-Blu	MCR-106	Q25	A5J1-6	Playfield "O"	25	Blu-Wht	2N5060
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q20	A5J1-13	Playfield "N"	96	Gry-Gm	2N5060
Q29	A5J1-1	Bonus 2K	41	Gm-Red	2N5060	Q21	A9J3-4	Right Flipper Button Release Ball	95	Gry-Wht	MCR-106
Q36	A5J3-26	Bonus 3K	43	Gm-Yel	2N5060	Q10	A5J1-15	Rollover Button (Bottom)	13	Red-Yel	MCR-106
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q22	A5J1-10	Rollover Button (Middle)	23	Blu-Yel	MCR-106
Q12	A5J1-19	Bonus 5K	60	Brn	2N5060	Q37	A5J3-23	Rollover Button (Top)	98	Gry-Blk	2N5060
Q27	A5J1-9	Bonus 6K	43	Gm-Yel	2N5060	Q03	A5J2-21	Same Player Shoot Again (Back Box)	47	Gm-Orn	MCR-106
Q38	A5J3-25	Bonus 7K	36	Yel-Brn	2N5060	Q40	A5J3-22	Same Player Shoot Again (Playfield)	23	Blu-Yel	MCR-106
Q50	A5J3-12	Bonus 8K	21	Blu-Red	2N5060	Q60	A5J3-3	Saucer Arrow	81	Blk-Red	2N5060
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q01	A9J2-7	Single Drop Target 20K	10	Red	MCR-106
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q08	A9J2-14	Single Drop Target 30K	12	Red-Blu	MCR-106
Q08	A5J1-23	Bonus 20K	12	Red-Blu	MCR-106	Q27	A9J3-14	Single Drop Target Release Ball	26	Blu-Gm	MCR-106
Q35	A5J1-3	Bonus 40K	45	Gm-Wht	MCR-106	Q15	A9J3-8	Single Drop Target Spots Multiplier	13	Red-Yel	MCR-106
Q09	A5J1-14	Bonus Multiplier 2X	54	Wht-Gm	MCR-106	Q22	A9J3-15	Spinner Arrow	14	Red-Gm	MCR-106
Q34	A5J1-2	Bonus Multiplier 3X	52	Wht-Blu	MCR-106	Q20	A9J3-7	Spots Letter Center Ball	82	Blk-Blu	MCR-106
Q48	A5J3-16	Bonus Multiplier 4X	25	Blu-Wht	MCR-106	Q39	A5J3-24	Thumper Bumper (Bottom Left)	72	Orn-Blu	2N5060
Q55	A5J3-9	Bonus Multiplier 5X	15	Red-Wht	MCR-106	Q07	A5J1-27	Thumper Bumper (Bottom Right)	53	Wht-Yel	2N5060
Q49	A5J3-17	Bonus Special	13	Red-Yel	MCR-106	Q53	A5J3-14	Thumper Bumper (Top Left)	84	Blk-Gm	2N5060
Q13	A9J2-13	Captive Balls Left Center (2)	40	Gm	MCR-106	Q21	A5J1-12	Thumper Bumper (Top Right)	61	Brn-Red	2N5060
Q06	A9J2-6	Captive Balls Right Center (1)	45	Gm-Wht	MCR-106	Q47	A5J2-10	Tilt (Back Box)	35	Yel-Wht	MCR-106
Q17	A9J3-9	Center Left Lower Target	53	Wht-Gm	MCR-106	Q58	A5J3-2	to Lamp Flasher Driver	95	Gry-Wht	2N5060
Q24	A9J3-16	Center Left Upper Target	56	Wht-Brn	MCR-106	Q07	A9J2-5	Top Center Lane Arrow	60	Brn	MCR-106
Q10	A9J2-15	Center Right Lower Target	52	Wht-Blu	MCR-106	Q14	A9J2-12	Top Center Lane L. & R. Blue Shields	62	Brn-Blu	MCR-106
Q03	A9J2-8	Center Right Upper Target	51	Wht-Red	MCR-106	Q04	A9J2-10	Top Drop Targets Collect Bonus	80	Blk	MCR-106
Q52	A5J3-13	Credit Indicator	35	Yel-Wht	2N5060	Q18	A9J3-11	Top Drop Targets Extra Ball	70	Orn	MCR-106
Q28	A9J3-13	Flipsave When Flashing	96	Gry-Brn	MCR-106	Q25	A9J3-18	Top Drop Targets Special	72	Orn-Blu	MCR-106
Q33	A5J2-11	Game Over (Back Box)	95	Gry-Wht	MCR-106	Q12	A9J2-17	Top Drop Targets Spots Letter (Bottom)	43	Gm-Yel	MCR-106
Q15	A5J2-23	High Score to Date (Back Box)	97	Gry-Orn	MCR-106	Q19	A9J3-10	Top Drop Targets Spots Letter (Left)	25	Blu-Wht	MCR-106
Q42	A5J3-21	Lane "1"	30	Yel	MCR-106	Q05	A9J2-9	Top Drop Targets Spots Letter (Right)	54	Wht-Gm	MCR-106
Q56	A5J3-10	Lane "2"	91	Gry-Red	MCR-106	Q11	A9J2-18	Top Drop Targets Spots Multiplier	57	Wht-Orn	MCR-106
Q01	A5J1-24	Lane "A"	50	Wht	MCR-106	Q02	A5J1-25	Top Lanes 25K Arrow	75	Orn-Wht	MCR-106
Q24	A5J1-5	Lane "B"	48	Gm-Blk	MCR-106	Q17	A5J1-11	Top Lanes 50K Arrow	65	Brn-Wht	MCR-106
Q02	A9J2-4	Left Drop Targets 25K	15	Red-Wht	MCR-106	Q41	A5J3-20	Top Lanes Extra Ball Arrow	64	Brn-Gm	MCR-106
Q09	A9J2-11	Left Drop Targets 50K	18	Red-Blk	MCR-106	Q46	A5J3-18	Top Lanes Special Arrow	56	Wht-Brn	2N5060
Q16	A9J3-3	Left Drop Targets Extra Ball	20	Blu	MCR-106	Q45	A5J2-1		60	Brn	2N5060
Q23	A9J3-12	Left Drop Targets Special	21	Blu-Red	MCR-106	Q54	A5J3-11		20	Blu	MCR-106
Q23	A5J2-8	Match (Back Box)	70	Orn	MCR-106	Q26	A9J3-17		68	Brn-Blk	MCR-106

A9 = Aux. Lamp Driver Board AS-2518-52



Switch Matrix

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-Gm (54) A4J3-9 Red-Wht (15)	10 Point Rebound (4)	Coin Chute III (Right)	Single Drop Target	3 Left Drop Targets (Upper)	Right Center Inside Target
RETURN I 1 A4J2-9 Brn-Yel (63) A4J3-10 Brn-Wht (65)	Rollover Button (3)	Coin Chute I (Left)	Spinner	3 Left Drop Targets (Center)	Left Center Inside Target
RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)	Right Flipper Button	Coin Chute II (Middle)	Top Center Rollover	3 Left Drop Targets (Lower)	Right Slingshot
RETURN I 3 A4J2-11 Orn-Blk (78) A4J3-12 Blu-Red (21)	Saucer	"A" Rollover Lane	3 Top Drop Targets (Upper)	Left Side Captive Ball Target	Left Slingshot
RETURN I 4 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23)	#1 Left and Right of Outhole	"B" Rollover Lane	3 Top Drop Targets (Center)	Center Right Upper Target	Right Bottom Thumper Bumper
RETURN I 5 A4J2-13 Wht-Brn (56) A4J3-14 Blu-Wht (25)	Credit Button	Right Outlane	3 Top Drop Targets (Lower)	Center Right Lower Target	Right Top Thumper Bumper
RETURN I 6 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27)	Tilt (3)	Left Outlane	#1 Rollover	Center Left Lower Target	Left Bottom Thumper Bumper
RETURN I 7 A4J2-15 Wht-Blu (52) A4J3-16 Yel (30)	Outhole	Slam (2)	#2 Rollover	Center Left Upper Target	Left Top Thumper Bumper