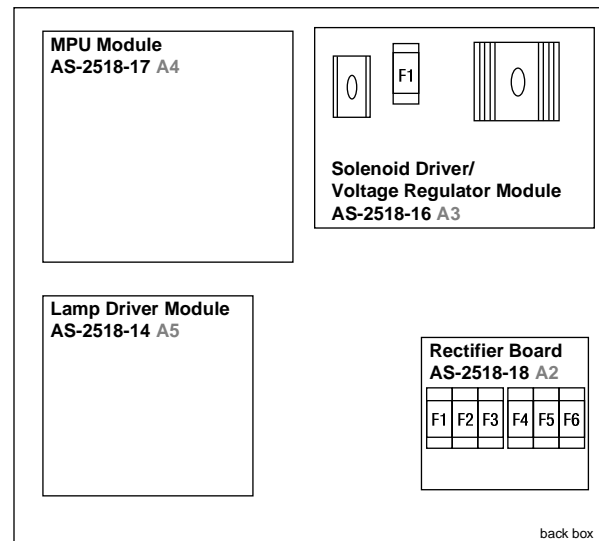


Fuse List

Rectifier Board AS-2518-18		
F1	6.5V Switched illumination	10A, 250V
F2	230V Display power input	0.75A, 250V
F3	5V Unregulated input	4A, 250V
F4	43V Solenoids (2 flippers)	5A, 250V
F5	6.5V General illumination	20A, 250V
F6	Main fuse	3A, 250V, SB
Sol. Dr./Volt. Reg. AS-2518-16		
F1	190V Display power output	0.25A, 250V
Under the Playfield fuses		
F1	Solenoids	1A, 250V, SB



Controlled Lamps Chart

SCR	connector	lamp description	code	wire color	tr type	SCR	connector	lamp description	code	wire color	tr type
Q06	A5J2-14	1st Player Up	12	Red-Blu	2N5060	Q51	A5J3-15	Double Bonus	53	Wht-Yel	2N5060
Q19	A5J2-15	2nd Player Up	23	Blu-Yel	2N5060	Q60	A5J3-3	Drop Targets Double Bonus	81	Blk-Red	2N5060
Q31	A5J2-2	3rd Player Up	20	Blu	2N5060	Q37	A5J3-23	Drop Targets Extra Ball	98	Gry-Blk	2N5060
Q45	A5J2-1	4th Player Up	60	Bm	2N5060	Q22	A5J1-10	Drop Targets Special	32	Yel-Blu	MCR-106
Q16	A5J2-22	Ball-in-Play	62	Brn-Blu	MCR-106	Q33	A5J2-11	Game Over	95	Gry-Wht	MCR-106
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q15	A5J2-23	High Score to Date	97	Gry-Orn	MCR-106
Q29	A5J1-1	Bonus 2K	41	Gm-Red	2N5060	Q07	A5J2-13	Jump 1 (Backbox)	53	Wht-Yel	2N5060
Q36	A5J3-26	Bonus 3K	38	Yel-Blk	2N5060	Q21	A5J2-12	Jump 2 (Backbox)	61	Brn-Red	2N5060
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q40	A5J2-4	Jump 3 (Backbox)	23	Blu-Yel	MCR-106
Q12	A5J1-19	Bonus 5K	60	Bm	2N5060	Q53	A5J2-3	Jump 4 (Backbox)	84	Blk-Gm	2N5060
Q27	A5J1-9	Bonus 6K	52	Wht-Blu	2N5060	Q23	A5J2-8	Match	93	Gry-Yel	MCR-106
Q38	A5J3-25	Bonus 7K	36	Yel-Bm	2N5060	Q56	A5J3-10	Outlane Special Left	91	Gry-Red	MCR-106
Q50	A5J3-12	Bonus 8K	21	Blu-Red	2N5060	Q42	A5J3-21	Outlane Special Right	30	Yel	MCR-106
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q03	A5J2-21	Same Player Shoot Again (Back Box)	47	Gm-Orn	MCR-106
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q58	A5J3-2	Spinner Left	95	Gry-Wht	2N5060
Q05	A5J2-16	Can Play 1	34	Yel-Gm	2N5060	Q20	A5J1-13	Spinner Right	96	Gry-Bm	2N5060
Q18	A5J2-20	Can Play 2	35	Yel-Wht	2N5060	Q48	A5J3-16	Thumper Bumper Bottom	25	Blu-Wht	MCR-106
Q30	A5J2-6	Can Play 3	85	Blk-Wht	2N5060	Q55	A5J3-9	Thumper Bumper Top & Middle	15	Red-Wht	MCR-106
Q43	A5J2-7	Can Play 4	91	Gry-Red	2N5060	Q47	A5J2-10	Tilt	98	Gry-Blk	MCR-106
Q11	A5J1-16	Center Super "S"	12	Red-Blu	2N5060	Q08	A5J1-23	Top Super "S" & Center Arrow	56	Wht-Bm	MCR-106
Q26	A5J1-7	Center Super "U"	34	Yel-Gm	2N5060	Q35	A5J1-3	Top Super "U" & Center Arrow	45	Gm-Wht	MCR-106
Q32	A5J3-27	Center Super "P"	40	Gm	2N5060	Q49	A5J3-17	Top Super "P" & Center Arrow	27	Blu-Orn	MCR-106
Q59	A5J3-4	Center Super "E"	14	Red-Gm	2N5060	Q54	A5J3-11	Top Super "E" & Center Arrow	20	Blu	MCR-106
Q04	A5J1-28	Center Super "R"	78	Orn-Blk	2N5060	Q09	A5J1-14	Top Super "R" & Center Arrow	54	Wht-Gm	MCR-106
Q52	A5J3-13	Credit Indicator	13	Red-Yel	2N5060	Q10	A5J1-15		13	Red-Yel	MCR-106
Q01	A5J1-24	Cycle "C" Top Lane	50	Wht	MCR-106	Q34	A5J1-2		43	Gm-Yel	MCR-106
Q24	A5J1-5	Cycle "Y" Top Lane	48	Gm-Blk	MCR-106	Q25	A5J1-6		25	Blu-Wht	2N5060
Q02	A5J1-25	Cycle "C" Target	90	Gry	MCR-106	Q44	A5J3-19		67	Bm-Orn	2N5060
Q17	A5J1-11	Cycle "L" Target	65	Brn-Wht	MCR-106	Q39	A5J3-24		72	Orn-Blu	2N5060
Q41	A5J3-20	Cycle "E" Target	64	Brn-Gm	MCR-106	Q46	A5J3-18		56	Wht-Bm	2N5060

Coil Table

Sol. No	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Outthole kicker	Momentary	63	Brn-Yel	A3J1-5	Q4	AN-26-1200
2	Knocker	Momentary	83	Blk-Yel	A3J3-4, J2-5	Q3	AR-26-1200
3	Saucer	Momentary	74	Orn-Gm	A3J5-10	Q8	AO-26-1200
4	Chime 10	Momentary	58	Wht-Blk	A3J2-9, J1-2	Q1	CN-31-2000
5	Chime 100	Momentary	57	Wht-Orn	A3J2-10	Q5	CN-31-2000
6	Chime 1000	Momentary	56	Wht-Brn	A3J2-11	Q6	CN-31-2000
7	Chime Extra	Momentary	54	Wht-Gm	A3J2-12	Q7	CN-31-2000
8	Top Thumper Bumper	Momentary	75	Orn-Wht	A3J5-12	Q13	AN-26-1200
9	Middle Thumper Bumper	Momentary	78	Orn-Blk	A3J5-11	Q14	AN-26-1200
10	Bottom Thumper Bumper	Momentary	71	Orn-Red	A3J5-9	Q9	AN-26-1200
11	Left Slingshot	Momentary	85	Blk-Wht	A3J5-15	Q10	AN-26-1200
12	Right Slingshot	Momentary	83	Blk-Yel	A3J5-14	Q11	AN-26-1200
13	Drop Target Reset	Momentary	80	Blk	A3J5-13	Q12	NO-27-2300
14	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
15	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
		Momentary	50	Wht	A3J1-3, J2-4	Q2	
		Momentary	18	Red-Blk	A3J5-8, J2-6, J3-7,	Q16	
		Continuous	81	Blk-Red	A3J5-7	Q17	
		Continuous			A3J5-3, J2-15, J3-9	Q18	
Flipper Circuits		Power Wire	Flipper Coil Wire		Flipper Button Wire		Coil
	Left Flipper	60 (Brn)	40 (Gm)	A3J1-8	20 (Blu)	A3J2-2	AQ-25-500/34-5050
	Right Flipper	60 (Brn)	70 (Orn)	A3J1-9	10 (Red)	A3J2-1	AQ-25-500/34-5050

Switch Matrix

strobe (ST) → ← return (I)

Column	STROBE 0 A4J2-1 Wht-Red (51) A4J3-2 Red-Yel (13)	STROBE 1 A4J2-2 Gry-Yel (93) A4J3-3 Red-Gm (14)	STROBE 2 A4J2-3 Wht-Blu (52)	STROBE 3 A4J2-4 Wht-Yel (53)	STROBE 4 A4J2-5 Yel-Red (31)	
Row	RETURN I 0 A4J2-8 Wht-Gm (54) A4J3-9 Red-Wht (15)	Drop Target A 1	Coin Chute III (Right) 9	CYCLE Target E 17	Left & Right "EK" Bumpers 25	Not Used 33
RETURN I 1 A4J2-9 Wht-Brn (56) A4J3-10 Brn-Wht (65)	Drop Target B 2	Coin Chute I (Left) 10	CYCLE Target L 18	Top Red Targets & General Purpose 100 Points 26	Not Used 34	
RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)	Drop Target C 3	Coin Chute II (Middle) 11	CYCLE Target C 19	Not Used 27	Not Used 35	
RETURN I 3 A4J2-11 Wht-Blk (58) A4J3-12 Blu-Red (21)	Drop Target D 4	Not Used 12	CYCLE Top Lane Y 20	Not Used 28	Right Slingshot 36	
RETURN I 4 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23)	Drop Target E 5	Not Used 13	CYCLE Top Lane C 21	Top Hole Saucer 29	Left Slingshot 37	
RETURN I 5 A4J2-13 Brn-Yel (63) A4J3-14 Blu-Wht (25)	Credit Button 6	Not Used 14	Center Target 22	Right Spinner 30	Bottom Thumper Bumper 38	
RETURN I 6 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27)	Tilt (3) 7	Not Used 15	Right Outlane 23	Left Spinner 31	Middle Thumper Bumper 39	
RETURN I 7 A4J2-15 Om (70) A4J3-16 Yel (30)	Outthole 8	Slam (2) 16	Left Outlane 24	Left & Right Flipper Feeder Lanes 32	Top Thumper Bumper 40	