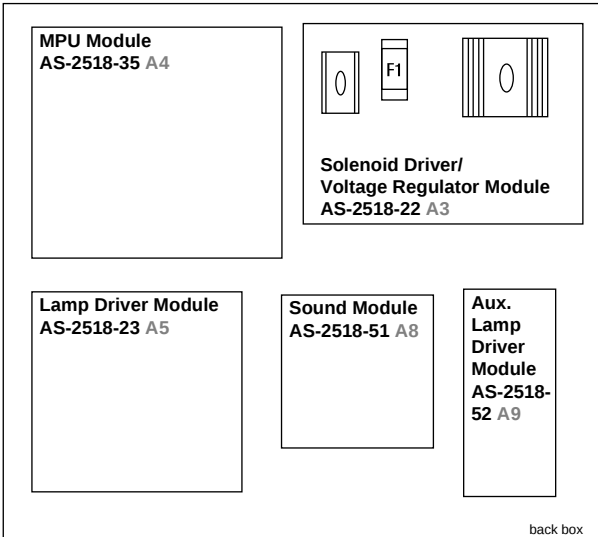
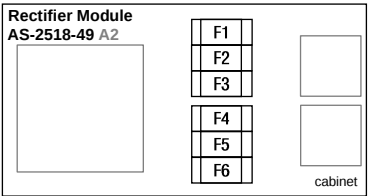


Bally SPACE INVADERS

Fuse List

Rectifier Module AS-2518-49		
F1	6.5V Switched illumination	20A, 250V
F2	230V Display power input	0.75A, 250V
F3	5V Unregulated input	4A, 250V
F4	43V Solenoids (4 flippers)	7A, 250V
F5	6.5V General illumination	20A, 250V
F6	Main fuse	5A, 250V, SB
Sol. Dr./Volt. Reg. AS-2518-22		
F1	190V Display power output	0.25A, 250V
Under the Playfield fuses		
F1	Solenoids	1A, 250V, SB



Coil Table

Sol. No	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Outhole Kicker	Momentary	95	Gry-Wht	A3J1-5	Q4	AN-26-1200
2	Knocker	Momentary	85	Blk-Wht	A3J2-5, J3-7	Q3	AR-26-1200
3	Left Slingshot	Momentary	83	Blk-Yel	A3J5-14	Q11	AN-26-1200
4	Right Slingshot	Momentary	18	Red-Blk	A3J5-8, J2-6, J3-7,	Q16	AN-26-1200
5	Left Thumper Bumper	Momentary	71	Orn-Red	A3J5-9	Q9	AN-26-1200
6	Right Thumper Bumper	Momentary	85	Blk-Wht	A3J5-15	Q10	AN-26-1200
7	Bottom Thumper Bumper	Momentary	80	Blk	A3J5-13	Q12	AN-26-1200
8	3-Bank Drop Target Reset	Momentary	74	Orn-Grn	A3J5-10	Q8	NO-26-1900
9	Single Drop Target Reset	Momentary	75	Orn-Wht	A3J5-12	Q13	AR-26-1200
10	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
11	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
		Momentary	67	Brn-Orn	A3J1-2, J2-9	Q1	
		Momentary	81	Blk-Red	A3J1-3, J2-4	Q2	
		Momentary	67	Brn-Orn	A3J2-10	Q5	
		Momentary	74	Orn-Grn	A3J2-11	Q6	
		Momentary	81	Blk-Red	A3J2-12	Q7	
		Momentary	78	Orn-Blk	A3J5-11	Q14	
		Continuous	91	Gry-Red	A3J5-7	Q17	
		Continuous	81	Blk-Red	A3J5-3, J2-15, J3-9	Q18	
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 Left Flipper	60 (Brn)	81 (Blk-Red)		(to lower left flipper)		AQ-25-500/34-4500
	Upper Right Flipper	60 (Brn)	81 (Blk-Red)		(to lower right flipper)		AQ-25-500/34-4500

Controlled Lamps Chart

SCR	connector	lamp description	code	wire color	tr type	SCR	connector	lamp description	code	wire color	tr type
Q09	A5J1-14	(1-5) 20K	54	Wht-Grn	MCR-106	Q03	A9J2-8	Door Frame Top & Right #1	51	Wht-Red	MCR-106
Q34	A5J1-2	(1-5) 40K	43	Grn-Yel	MCR-106	Q10	A9J2-15	Door Frame Top & Right #2	52	Wht-Blu	MCR-106
Q48	A5J3-16	(1-5) 60K	25	Blu-Wht	MCR-106	Q17	A9J3-9	Door Frame Top & Right #3	53	Wht-Grn	MCR-106
Q55	A5J3-9	(1-5) Special	15	Red-Wht	MCR-106	Q24	A9J3-16	Door Frame Top & Right #4	56	Wht-Brn	MCR-106
Q16	A5J2-22	Ball-in-Play (Back Box)	62	Brn-Blu	MCR-106	Q05	A5J2-16	Drop Target 10K	34	Yel-Grn	2N5060
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q18	A5J2-20	Drop Target 15K	35	Yel-Wht	2N5060
Q29	A5J1-1	Bonus 2K	52	Wht-Blu	2N5060	Q30	A5J2-6	Drop Target 20K	85	Blk-Wht	2N5060
Q36	A5J3-26	Bonus 3K	38	Yel-Blk	2N5060	Q43	A5J2-7	Drop Target 25K	91	Gry-Red	2N5060
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q06	A5J2-14	Drop Target Special	12	Red-Blu	2N5060
Q12	A5J1-19	Bonus 5K	60	Brn	2N5060	Q45	A5J2-1	Extra Ball Left Lane	60	Brn	2N5060
Q27	A5J1-9	Bonus 6K	43	Grn-Yel	2N5060	Q31	A5J2-2	Extra Ball Right Lane	20	Blu	2N5060
Q38	A5J3-25	Bonus 7K	36	Yel-Brn	2N5060	Q33	A5J2-11	Game Over (Back Box)	95	Gry-Wht	MCR-106
Q50	A5J3-12	Bonus 8K	21	Blu-Red	2N5060	Q15	A5J2-23	High Score to Date (Back Box)	97	Gry-Orn	MCR-106
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q07	A5J1-27	Hoop 5K	53	Wht-Yel	2N5060
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q08	A5J1-23	Hoop 2X	56	Wht-Brn	MCR-106
Q44	A5J3-19	Bonus 20K	67	Brn-Orn	2N5060	Q35	A5J1-3	Hoop 3X, Bonus 2X	45	Grn-Wht	MCR-106
Q25	A5J1-6	Bonus Increase 50K Arrow	25	Blu-Wht	2N5060	Q49	A5J3-17	Hoop 4X, Bonus 3X	27	Blu-Orn	MCR-106
Q51	A5J3-15	Bonus Multiplier 5X	53	Wht-Yel	2N5060	Q54	A5J3-11	Hoop 5X, Bonus 4X	20	Blu	MCR-106
Q01	A5J1-24	Clone Chamber 10K	50	Wht	MCR-106	Q10	A5J1-15	Hoop 25K	13	Red-Yel	MCR-106
Q24	A5J1-5	Clone Chamber 20K	48	Grn-Blk	MCR-106	Q04	A5J1-28	Hoop Target #5	78	Orn-Blk	2N5060
Q42	A5J3-21	Clone Chamber 30K	30	Yel	MCR-106	Q39	A5J3-24	Hoop Left Special	72	Orn-Blu	2N5060
Q56	A5J3-10	Clone Chamber 40K	91	Gry-Red	MCR-106	Q21	A5J1-12	Hoop Right Special	61	Brn-Red	2N5060
Q02	A5J1-25	Clone Chamber 50K	90	Gry	MCR-106	Q23	A5J2-8	Match (Back Box)	93	Gry-Yel	MCR-106
Q46	A5J3-18	Clone Chamber Top	56	Wht-Brn	2N5060	Q03	A5J2-21	Same Player Shoot Again (Back Box)	47	Grn-Orn	MCR-106
Q26	A9J3-17	Creature #1	68	Brn-Blk	MCR-106	Q40	A5J3-22	Same Player Shoot Again (Playfield)	32	Yel-Blu	MCR-106
Q06	A9J2-6	Creature #2	45	Grn-Wht	MCR-106	Q58	A5J3-2	Small Flipper Feed Lane Left	95	Gry-Wht	2N5060
Q19	A9J3-10	Creature #3	25	Blu-Wht	MCR-106	Q20	A5J1-13	Small Flipper Feed Lane Right	96	Gry-Brn	2N5060
Q20	A9J3-7	Creature #5	82	Blk-Blu	MCR-106	Q53	A5J3-14	Spinner 1000	84	Blk-Grn	2N5060
Q13	A9J2-13	Creature #6	40	Grn	MCR-106	Q11	A5J1-16	Target #1 (from left)	12	Red-Blu	2N5060
Q05	A9J2-9	Creature #7	54	Wht-Grn	MCR-106	Q26	A5J1-7	Target #2	34	Yel-Grn	2N5060
Q27	A9J3-14	Creature #8	26	Blu-Grn	MCR-106	Q32	A5J3-27	Target #3	40	Gm	2N5060
Q52	A5J3-13	Credit Indicator	13	Red-Yel	2N5060	Q59	A5J3-4	Target #4	14	Red-Grn	2N5060
Q01	A9J2-7	Door Frame Bottom & Left #1	10	Red	MCR-106	Q41	A5J3-20	Target #5 Arrow	64	Brn-Grn	MCR-106
Q08	A9J2-14	Door Frame Bottom & Left #2	12	Red-Blu	MCR-106	Q17	A5J1-11	Target Increase 50K Arrow	65	Brn-Wht	MCR-106
Q15	A9J3-8	Door Frame Bottom & Left #3	13	Red-Yel	MCR-106	Q47	A5J2-10	Tilt (Back Box)	98	Gry-Blk	MCR-106
Q22	A9J3-15	Door Frame Bottom & Left #4	14	Red-Grn	MCR-106	Q22	A5J1-10	Top Left Rollover	23	Blu-Yel	MCR-106
Q04	A9J2-10	Door Frame Bottom & Right #5	80	Blk	MCR-106	Q37	A5J3-23	Top Center Rollover	98	Gry-Blk	2N5060
Q11	A9J2-18	Door Frame Bottom & Right #6	57	Wht-Orn	MCR-106	Q60	A5J3-3	Top Right Rollover	81	Blk-Red	2N5060
Q18	A9J3-11	Door Frame Bottom & Right #7	70	Orn	MCR-106	Q19	A5J2-15		23	Blu-Yel	2N5060
Q25	A9J3-18	Door Frame Bottom & Right #8	72	Orn-Blu	MCR-106	Q07	A9J2-5		60	Brn	MCR-106
Q02	A9J2-4	Door Frame Top & Left #5	15	Red-Wht	MCR-106	Q12	A9J2-17		43	Gm-Yel	MCR-106
Q09	A9J2-11	Door Frame Top & Left #6	18	Red-Blk	MCR-106	Q14	A9J2-12		62	Brn-Blu	MCR-106
Q16	A9J3-3	Door Frame Top & Left #7	20	Blu	MCR-106	Q21	A9J3-4		95	Gry-Wht	MCR-106
Q23	A9J3-12	Door Frame Top & Left #8	21	Blu-Red	MCR-106	Q28	A9J3-13		96	Gry-Brn	MCR-106

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

Switch Matrix

		strobe (ST)  return (I)				
Row	Column	STROBE 0 A4J2-1 Wht-Red (51) A4J3-2 Red-Yel (13)	STROBE 1 A4J2-2 Gry-Yel (93) A4J3-3 Red-Grn (14)	STROBE 2 A4J2-3 Wht-Blu (52)	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) 1	Coin Chute III (Right) 9	#5 Hoop Target 17	Right Out Rollover 25	Upper Right Flipper 33
		RETURN I 1 A4J2-9 Wht-Brn (56) A4J3-10 Brn-Wht (65) 2	Coin Chute I (Left) 10	#4 Target (From Right) 18	Right Extra Ball Lane 26	Single Drop Target 34
		RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20) 3	Coin Chute II (Middle) 11	#3 Target 19	Right Small Flipper Feed Lane 27	Upper Left Flipper 35
		RETURN I 3 A4J2-11 Wht-Blk (58) A4J3-12 Blu-Red (21) 4	Not Used 12	#2 Target 20	Left Small Flipper Feed Lane 28	Right Slingshot 36
		RETURN I 4 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23) 5	Not Used 13	#1 Target (From Left) 21	Left Extra Ball Lane 29	Left Slingshot 37
		RETURN I 5 A4J2-13 Brn-Yel (63) A4J3-14 Blu-Wht (25) 6	Not Used 14	Top Right Rollover 22	Left Outlane 30	Bottom Thumper Bumper 38
		RETURN I 6 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27) 7	Clone Chamber Target 15	Top Center Rollover 23	Collect Bonus Rollover 31	Right Thumper Bumper 39
		RETURN I 7 A4J2-15 Orn (70) A4J3-16 Yel (30) 8	Slam (2) 16	Top Left Rollover 24	Hoop Rollover Button (2) 32	Left Thumper Bumper 40