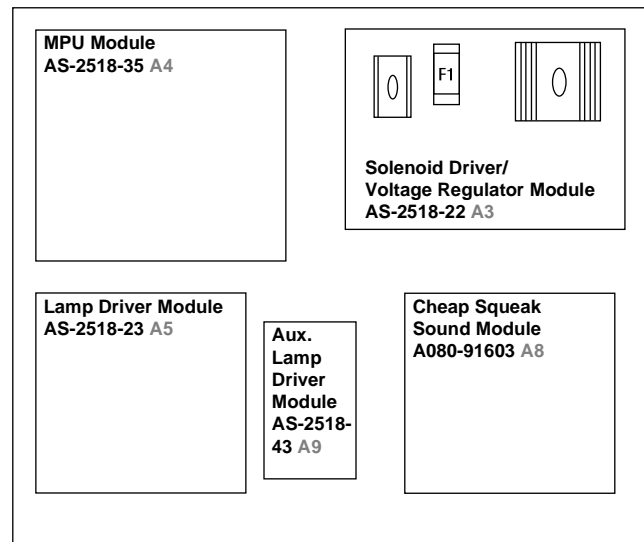
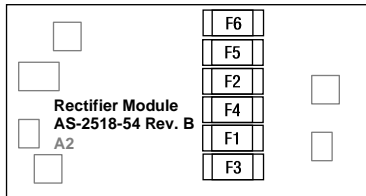


Bally

CYBERNAUT

Fuse List

Rectifier Module AS-2518-54 Rev. B		
F1	6.5V Switched illumination	20A, 250V, SB
F2	230V Display power input	0.75A, 250V, SB
F3	5V Unregulated input	4A, 250V, SB
F4	43V Solenoids	5A, 250V, SB
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, SB
Under the Playfield fuses		
F1	Solenoids	1A, 250V, SB
Transformer Module		
F1	Main fuse	3A, 250V, SB



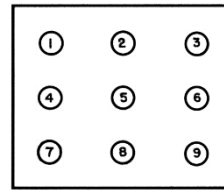
Coil Table

Sol. No.	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Saucer	Momentary	82	Blk-Blu	A3J5-12	Q13	AO-27-1300
2	Drop Target Reset	Momentary	75	Orn-Wht	A3J5-11	Q14	NO-25-2600
3	Thumper Bumper	Momentary	72	Orn-Blu	A3J5-9	Q9	AN-26-1200
4	Left Slingshot	Momentary	74	Orn-Grn	A3J5-15	Q10	AO-26-1200
5	Right Slingshot	Momentary	67	Brn-Orn	A3J5-13	Q12	AO-26-1200
6	Outhole	Momentary	83	Blk-Yel	A3J5-14	Q11	AN-26-1200
7	Knocker	Momentary	85	Blk-Wht	A3 J2-6, J3-7, J5-8	Q16	AR-26-1200
8	Left Gate	Continuous	81	Blk-Red	A3J5-7	Q17	GA-34-4000
9	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
10	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
11	Right Gate	Continuous	811	Blk-Vio	A3J2-15, J3-9, J5-3	Q18	GA-34-4000
		Momentary			A3J1-2, J2-9	Q1	--
		Momentary			A3J1-3, J2-4	Q2	--
		Momentary			A3J2-5, J3-7	Q3	--
		Momentary			A3J1-5	Q4	--
		Momentary			A3J2-10	Q5	--
		Momentary			A3J2-11	Q6	--
		Momentary			A3J2-12	Q7	--
		Momentary			A3J5-10	Q8	--
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)	57 (Wht-Orn)	A3J1-9	10 (Red)	A3J2-1	AQ-25-500/34-4500
	Upper Left Flipper	Brn (60)	90 (Gry)		(to lower left 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
Q01	A5J1-24	"B" Left Rollover Lane	50	Wht	MCR-106	Q57	A5J3-1	ION #1	10	Red	2N5060
Q24	A5J1-5	"L" Target	48	Grn-Blk	MCR-106	Q50	A5J3-12	ION #2	26	Blu-Brn	2N5060
Q42	A5J3-21	"A" Target	64	Brn-Grn	MCR-106	Q51	A5J3-15	ION #3	53	Wht-Yel	2N5060
Q56	A5J3-10	"S" Target	91	Gry-Red	MCR-106	Q36	A5J3-26	ION #4	47	Grn-Orn	2N5060
Q02	A5J1-25	"T" Right Rollover Lane	75	Orn-Wht	MCR-106	Q38	A5J3-25	ION #5	34	Yel-Gm	2N5060
Q14	A5J1-18	Advance Multiplier Arrow	58	Wht-Blk	2N5060	Q44	A5J3-19	ION #6	67	Brn-Orn	2N5060
Q16	A5J2-22	Ball in Play (Back Box)	62	Brn-Blu	MCR-106	Q29	A5J1-1	ION #7	41	Grn-Red	2N5060
Q11	A5J1-16	Blast 50K	15	Red-Wht	2N5060	Q27	A5J1-9	ION #8	47	Grn-Orn	2N5060
Q26	A5J1-7	Blast 100K	34	Yel-Grn	2N5060	Q28	A5J1-8	ION #9	--	Pink	2N5060
Q32	A5J3-27	Blast 150K	40	Gm	2N5060	Q25	A5J1-6	ION 90K	29	Blu-Gry	2N5060
Q59	A5J3-4	Blast 200K	14	Red-Gm	2N5060	Q20	A5J1-13	ION Extra Ball	30	Yel	2N5060
Q13	A5J1-17	Blast Special	37	Yel-Orn	2N5060	Q58	A5J3-2	ION Special	95	Gry-Wht	2N5060
Q06	A9J2-7	Blast "B"	10	Red	MCR-106	Q04	A9J2-5	ION Bonus 90K	--	Pink	MCR-106
Q02	A9J2-2	Blast "L"	12	Red-Blu	MCR-106	Q10	A9J2-3	ION Bonus 180K	52	Wht-Blu	MCR-106
Q12	A9J2-18	Blast "A"	13	Red-Yel	MCR-106	Q10	A9J2-20	ION Bonus 270K	53	Wht-Yel	MCR-106
Q07	A9J2-11	Blast "S"	14	Red-Gm	MCR-106	Q09	A9J2-17	ION Bonus Special	96	Gry-Brn	MCR-106
Q05	A9J2-6	Blast "T"	15	Red-Wht	MCR-106	Q23	A5J2-8	Match (Back Box)	82	Blk-Blu	MCR-106
Q08	A5J1-23	Bonus 5K	12	Red-Blu	MCR-106	Q53	A5J3-14	Rollover #1	84	Blk-Gm	2N5060
Q35	A5J1-3	Bonus 10K	45	Gm-Wht	MCR-106	Q39	A5J3-24	Rollover #2	72	Orn-Blu	2N5060
Q49	A5J3-17	Bonus 15K	13	Red-Yel	MCR-106	Q21	A5J1-12	Rollover #3	61	Brn-Red	2N5060
Q54	A5J3-11	Bonus 20K	20	Blu	MCR-106	Q07	A5J1-27	Rollover #4	53	Wht-Yel	2N5060
Q09	A5J1-14	Bonus 25K	67	Brn-Orn	MCR-106	Q41	A5J3-20	Saucer Bonus	78	Orn-Blk	MCR-106
Q34	A5J1-2	Bonus 30K	52	Wht-Blu	MCR-106	Q03	A5J1-26, J2-21	Shoot Again (Playfield & Back Box)	91, 47	Gry-Red, Gm-Orn	MCR-106
Q48	A5J3-16	Bonus 35K	25	Blu-Wht	MCR-106	Q05	A5J2-16	Target 500	34	Yel-Gm	2N5060
Q55	A5J3-9	Bonus 40K	15	Red-Wht	MCR-106	Q18	A5J2-20	Target 1000	93	Gry-Yel	2N5060
Q10	A5J1-15	Bonus 45K	13	Red-Yel	MCR-106	Q30	A5J2-6	Target 1500	85	Blk-Wht	2N5060
Q22	A5J1-10	Bonus 50K	23	Blu-Yel	MCR-106	Q43	A5J2-7	Target 2000	91	Gry-Red	2N5060
Q37	A5J3-23	Bonus 100K	59	Wht-Gry	2N5060	Q47	A5J2-10	Tilt (Back Box)	37	Yel-Orn	MCR-106
Q60	A5J3-3	Bonus 200K	81	Blk-Red	2N5060	Q06	A5J2-14	Tube 10K	12	Red-Blu	2N5060
Q01	A9J2-1	Bonus Multiplier 2X	40	Gm	MCR-106	Q19	A5J2-15	Tube 20K	29	Blu-Gry	2N5060
Q11	A9J2-19	Bonus Multiplier 3X	20	Blu	MCR-106	Q31	A5J2-2	Tube 30K	--	Pink	2N5060
Q08	A9J2-12	Bonus Multiplier 4X	26	Blu-Brn	MCR-106	Q45	A5J2-1	Tube 40K	60	Brn	2N5060
Q04	A5J1-28	Bonus Special	78	Orn-Blk	2N5060	Q40	A5J3-22	Tube 50K	23	Blu-Yel	MCR-106
Q52	A5J3-13	Credit Indicator	30	Yel	2N5060	Q12	A5J1-19	Tube Special	60	Brn	2N5060
Q33	A5J2-11	Game Over (Back Box)	95	Gry-Wht	MCR-106	Q17	A5J1-11		65	Brn-Wht	MCR-106
Q15	A5J2-23	High Score to Date (Back Box)	97	Gry-Orn	MCR-106	Q46	A5J3-18		56	Wht-Brn	2N5060

A9 = Aux. Lamp Driver Board AS-2518-43



ION MATRIX VIEW (TOP)

Switch Matrix

Column	STROBE 0 A4J2-1 Pink (-) A4J3-2 Red-Yel (13)	STROBE 1 A4J2-2 Orn (70) A4J3-3 Red-Gm (14)	STROBE 2 A4J2-3 Gry-Yel (93) A4-J3-5 (not used)	STROBE 3 A4J2-4 Wht-Yel (53) A4-J3-6 (not used)	STROBE 4 A4J2-5 Yel-Red (31) A4-J3-7 (not used)	STROBE 5 A4J2-7 Wht-Vio (51) A4-J3-8 (not used)
RETURN I0 A4J2-8 Wht-Grn (54) A4J3-9 Red-Wht (15)	Thumper Bumper	Coin Chute III (Right)	Rollover Button	Not Used	"B" Return Lane	Not Used
RETURN I1 A4J2-9 Brn-Yel (63) A4J3-10 Brn-Wht (65)	Left Slingshot	Coin Chute I (Left)	Top Right Target	Not Used	"L" Target	Not Used
RETURN I2 A4J2-10 Yel-Orn (37) A4J3-11 Blu (20)	Right Slingshot	Coin Chute II (Middle)	Top Middle Target	Not Used	"A" Target	Not Used
RETURN I3 A4J2-11 Orn-Blk (78) A4J3-12 (not used)	Right Outlane	Tube Switch	Top Left Target	Rebound Special	"S" Target	Not Used
RETURN I4 A4J2-12 Brn (60) A4J3-13 (not used)	Saucer	Left Outlane	Drop Target #1 (Right)	Rollover Button #1 (Right)	"T" Return Lane	Not Used
RETURN I5 A4J2-13 Gry-Brn (96) A4J3-14 Blu-Wht (25)	Credit Button	Shooter Lane	Drop Target #2	Rollover Button #2	Not Used	Not Used
RETURN I6 A4J2-14 Brn-Gry (69) A4J3-15 Blu-Orn (27)	Rebound	Tilt	Drop Target #3	Rollover Button #3	Not Used	Not Used
RETURN I7 A4J2-15 Wht-Blu (52) A4J3-16 Yel (30)	Outhole	Slam	Drop Target #4	Rollover Button #4	Not Used	Not Used