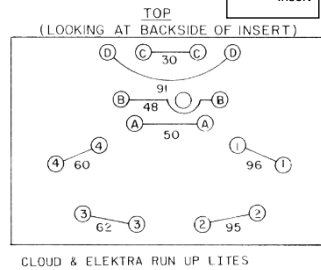
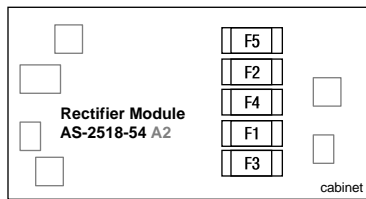


Bally ELEKTRA

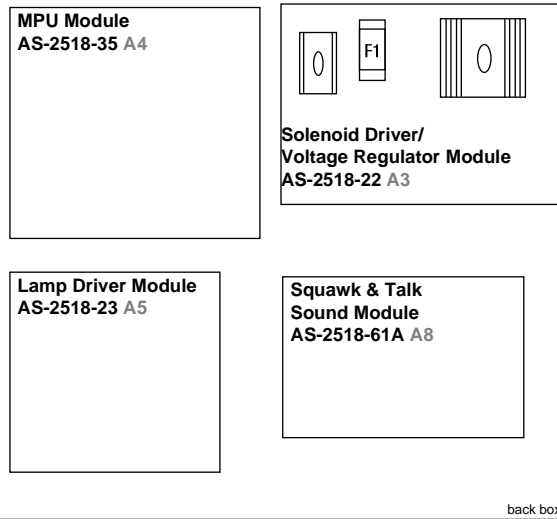


Fuse List

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 (4 flippers)	7A, 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



Controlled Lamps Chart

SCR	connector	lamp description	code	wire color	tr type	SCR	connector	lamp description	code	wire color	tr type
Q54	A5J3-11	10 Elektra Units	20	Blu	MCR-106	Q33	A5J2-11	Game Over (Back Box)	95	Gry-Wht	MCR-106
Q16	A5J2-22	Ball-in-Play (Back Box)	62	Brn-Blu	MCR-106	Q15	A5J2-23	High Score to Date (Back Box)	97	Gry-Orn	MCR-106
Q10	A5J1-15	Blue Target #1 (Bottom)	13	Red-Yel	MCR-106	Q39	A5J3-24	Left Outlane 10 Elektra Units	72	Orn-Blu	2N5060
Q22	A5J1-10	Blue Target #2	23	Blu-Yel	MCR-106	Q23	A5J2-8	Match (Back Box)	82	Blk-Blu	MCR-106
Q37	A5J3-23	Blue Target #3	98	Gry-Blk	2N5060	Q11	A5J1-16	Middle Targets #1 (Left)	15	Red-Wht	2N5060
Q60	A5J3-3	Blue Target #4	81	Blk-Red	2N5060	Q26	A5J1-7	Middle Targets #2 (Center)	34	Yel-Gm	2N5060
Q59	A5J3-4	Blue Target #5 (Top)	14	Red-Gm	2N5060	Q32	A5J3-27	Middle Targets #3 (Right)	40	Gm	2N5060
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q21	A5J1-12	Outlane Special (Left)	61	Brn-Red	2N5060
Q29	A5J1-1	Bonus 2K	41	Gm-Red	2N5060	Q07	A5J1-27	Outlane Special (Right)	53	Wht-Yel	2N5060
Q36	A5J3-26	Bonus 3K	52	Wht-Blu	2N5060	Q20	A5J1-13	Right Saucer Arrow	30	Yel	2N5060
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q13	A9J2-13	Rollover Button Arrow Left (Lower Playfield)	40	Gm	MCR-106
Q12	A5J1-19	Bonus 5K	60	Brn	2N5060	Q06	A9J2-6	Rollover Button Arrow Right (Lower Playfield)	45	Gm-Wht	MCR-106
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	Q55	A5J3-9	Special Rollover Button	15	Red-Wht	MCR-106
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q25	A5J1-6	Spinner Arrow (Left)	25	Blu-Wht	2N5060
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q04	A5J1-28	Spinner Arrow (Right)	78	Orn-Blk	2N5060
Q44	A5J3-19	Bonus 20K	67	Brn-Orn	2N5060	Q04	A9J2-10	Target Arrow #1 Left (Lower Playfield)	80	Blk	MCR-106
Q02	A5J1-25	Bonus Multiplier 2X	75	Orn-Wht	MCR-106	Q11	A9J2-18	Target Arrow #2 Left (Lower Playfield)	57	Wht-Orn	MCR-106
Q17	A5J1-11	Bonus Multiplier 3X	65	Brn-Wht	MCR-106	Q18	A9J3-11	Target Arrow #3 Left (Lower Playfield)	70	Orn	MCR-106
Q41	A5J3-20	Bonus Multiplier 5X	78	Orn-Blk	MCR-106	Q05	A9J2-9	Target Arrow #4 Right (Lower Playfield)	54	Wht-Gm	MCR-106
Q51	A5J3-15	Bonus Special	53	Wht-Yel	2N5060	Q12	A9J2-17	Target Arrow #5 Right (Lower Playfield)	43	Gm-Yel	MCR-106
Q28	A9J3-13	Cloud #1 (Back Box)	96	Gry-Brn	MCR-106	Q19	A9J3-10	Target Arrow #6 Right (Lower Playfield)	25	Blu-Wht	MCR-106
Q21	A9J3-4	Cloud #2 (Back Box)	95	Gry-Wht	MCR-106	Q47	A5J2-10	Tilt (Back Box)	35	Yel-Wht	MCR-106
Q14	A9J2-12	Cloud #3 (Back Box)	62	Brn-Blu	MCR-106	Q26	A9J3-17	Tilt (Back Box)	38	Yel-Blk	MCR-106
Q07	A9J2-5	Cloud #4 (Back Box)	60	Brn	MCR-106	Q27	A9J3-14	to Aux. Driver (Playfield)	27	Blu-Orn	MCR-106
Q53	A5J3-14	Collect Bonus Gate Arrow	84	Blk-Gm	2N5060	Q45	A5J2-1	to Aux. Driver (Insert Panel)	60	Brn	2N5060
Q52	A5J3-13	Credit Indicator	35	Yel-Wht	2N5060	Q20	A9J3-7	to Solenoid Expander J1-9	82	Blk-Blu	MCR-106
Q01	A5J1-24	Elektra A (Back Box)	50	Wht	MCR-106	Q05	A5J2-16	Top Left Lane Rollover Button #1	34	Yel-Gm	2N5060
Q24	A5J1-5	Elektra B (Back Box)	48	Gm-Blk	MCR-106	Q18	A5J2-20	Top Left Lane Rollover Button #2	98	Gry-Blk	2N5060
Q42	A5J3-21	Elektra C (Back Box)	30	Yel	MCR-106	Q30	A5J2-6	Top Left Lane Rollover Button #3	85	Blk-Wht	2N5060
Q56	A5J3-10	Elektra D (Back Box)	91	Gry-Red	MCR-106	Q43	A5J2-7	Top Left Lane Rollover Button #4	96	Gry-Brn	2N5060
Q01	A9J2-7	Elektra Bonus 5K	10	Red	MCR-106	Q06	A5J2-14	Top Left Lane Rollover Button #5	12	Red-Blu	2N5060
Q08	A9J2-14	Elektra Bonus 10K	12	Red-Blu	MCR-106	Q19	A5J2-15	Top Left Lane Rollover Button #6	23	Blu-Yel	2N5060
Q15	A9J3-8	Elektra Bonus 15K	13	Red-Yel	MCR-106	Q58	A5J3-2	Top Saucer Arrow	95	Gry-Wht	2N5060
Q22	A9J3-15	Elektra Bonus 20K	14	Red-Gm	MCR-106	Q08	A5J1-23	Top Target #1	12	Red-Blu	MCR-106
Q02	A9J2-4	Elektra Bonus 25K	15	Red-Wht	MCR-106	Q35	A5J1-3	Top Target #2	45	Gm-Wht	MCR-106
Q09	A9J2-11	Elektra Bonus 30K	18	Red-Blk	MCR-106	Q49	A5J3-17	Top Target #3	13	Red-Yel	MCR-106
Q16	A9J3-3	Elektra Bonus 35K	20	Blu	MCR-106	Q09	A5J1-14	Top Target Arrow #4	67	Brn-Orn	MCR-106
Q23	A9J3-12	Elektra Bonus 40K	21	Blu-Red	MCR-106	Q34	A5J1-2	Top Target Arrow #5	52	Wht-Blu	MCR-106
Q03	A9J2-8	Elektra Bonus 45K	51	Wht-Red	MCR-106	Q48	A5J3-16	Top Target Arrow #6	25	Blu-Wht	MCR-106
Q10	A9J2-15	Elektra Bonus 50K	52	Wht-Blu	MCR-106	Q31	A5J2-2		67	Brn-Orn	2N5060
Q17	A9J3-9	Elektra Bonus 100K	53	Wht-Gm	MCR-106	Q46	A5J3-18		56	Wht-Brn	2N5060
Q24	A9J3-16	Elektra Bonus Multiplier 2X	56	Wht-Brn	MCR-106	Q25	A9J3-18		72	Orn-Blu	MCR-106

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

Coil Table

Sol. No	Solenoid description	Solenoid Type	Wire Code	Wire Color	Connector	Driver Transistor	Solenoid Coil Type
1	Knocker	Momentary	85	Blk-Wht	A3J2-5, J3-7	Q3	AR-26-1200
2	Top Saucer	Momentary	78	Orn-Blk	A3J5-11	Q14	AO-27-1300
3	Right Saucer	Momentary	71	Orn-Red	A3J5-9	Q9	AO-27-1300
4	Left Slingshot	Momentary	85	Blk-Wht	A3J5-10	Q8	AO-26-1200
5	Right Slingshot	Momentary	80	Blk	A3J5-12	Q13	AO-26-1200
6	Inline Drop Target Reset	Momentary	74	Orn-Gm	A3J5-15	Q10	NO-26-1900
7	Outhole	Momentary	95	Gry-Wht	A3J1-5	Q4	AO-27-1300
8	Saucer (Lower Level)	Momentary	67	Brn-Orn	A3J5-13	Q12	AO-27-1300
9	Gate	Continuous	81	Blk-Red	A3J5-7	Q17	GA-34-4000
10	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
11	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
		Momentary			A3J1-2, J2-9	Q1	
		Momentary			A3J1-3, J2-4	Q2	
		Momentary			A3J2-10	Q5	
		Momentary			A3J2-11	Q6	
		Momentary			A3J2-12	Q7	
		Momentary			A3J5-14	Q11	
		Momentary			A3J2-6, J3-7, J5-8	Q16	
		Continuous			A3J2-15, J3-9, J5-3	Q18	
Flipper Circuits	Power Wire	Flipper Coil Wire	Flipper Button Wire		Coil		
Left Flipper	67 (Brn-Orn)	40 (Gm)	A3J1-8	20 (Blu)	A3J2-2	AQ-25-500/34-4500	
Right Flipper	67 (Brn-Orn)	70 (Orn)	A3J1-9	10 (Red)	A3J2-1	AQ-25-500/34-4500	
Top Left Flipper	67 (Brn-Orn)	85 (Blk-Wht)		(to lower left flipper)		AQ-25-500/34-4500	
Top Right Flipper	67 (Brn-Orn)	83 (Blk-Yel)		(to lower right flipper)		AQ-25-500/34-4500	
Lower Level Left Flipper	81 (Blk-Red)	40 (Gm)	Upper and lower playfield flippers are switched via solenoid expander board.			AQ-25-500/34-4500	
Lower Level Right Flipper	81 (Blk-Red)	70 (Orn)				AQ-25-500/34-4500	

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 10 A4J2-8 Wht-Gm (54) A4J3-9 Red-Wht (15)	1	9	17	25	33
RETURN 11 A4J2-9 Brn-Yel (63) A4J3-10 Brn-Wht (65)	2	10	18	26	34
RETURN 12 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)	3	11	19	27	35
RETURN 13 A4J2-11 Orn-Blk (78) A4J3-12 Blu-Red (21)	4	12	20	28	36
RETURN 14 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23)	5	13	21	29	37
RETURN 15 A4J2-13 Wht-Brn (56) A4J3-14 Blu-Wht (25)	6	14	22	30	38
RETURN 16 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27)	7	15	23	31	39
RETURN 17 A4J2-15 Wht-Blu (52) A4J3-16 Yel (30)	8	16	24	32	40