

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	

MPU Module
AS-2518-17 A4

F1

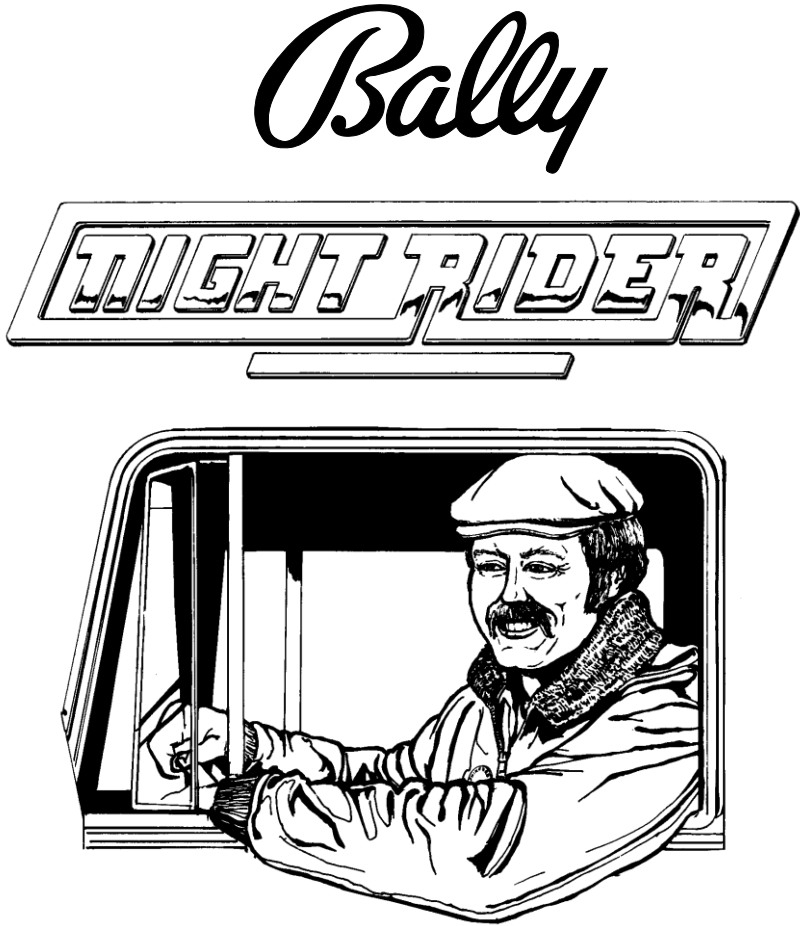
Solenoid Driver/
Voltage Regulator Module
AS-2518-16 A3

Lamp Driver Module
AS-2518-14 A5

Rectifier Board
AS-2518-18 A2

F1	F2	F3	F4	F5	F6

back box



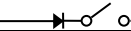
Controlled Lamps Chart

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	Q03	A5J2-21	Same Player Shoot Again (Back Box)	47	Gm-Orn	MCR-106
Q19	A5J2-15	2nd Player Up	32	Yel-Blu	2N5060	Q51	A5J3-15	Same Player Shoot Again (Playfield)	23	Blu-Yel	2N5060
Q31	A5J2-2	3rd Player Up	20	Blu	2N5060	Q54	A5J3-11	Spinner (Left)	20	Blu	MCR-106
Q45	A5J2-1	4th Player Up	68	Brn-Blk	2N5060	Q55	A5J3-9	Spinner (Right)	15	Red-Wht	MCR-106
Q09	A5J1-14	Advance When Lit Center Target	54	Wht-Grn	MCR-106	Q49	A5J3-17	Thumper Bumper (Left)	27	Blu-Orn	MCR-106
Q16	A5J2-22	Ball-in-Play	62	Brn-Blu	MCR-106	Q48	A5J3-16	Thumper Bumper (Right)	25	Blu-Wht	MCR-106
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q47	A5J2-10	Tilt	98	Gry-Blk	MCR-106
Q29	A5J1-1	Bonus 2K	41	Gm-Red	2N5060	Q01	A5J1-24	Top Arrow 1, 1K & Double Bonus	50	Wht	MCR-106
Q36	A5J3-26	Bonus 3K	38	Yel-Blk	2N5060	Q24	A5J1-5	Top Arrow 2, 50	48	Gm-Blk	MCR-106
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q42	A5J3-21	Top Arrow 3, 3K	30	Yel	MCR-106
Q12	A5J1-19	Bonus 5K	60	Brn	2N5060	Q56	A5J3-10	Top Arrow 4, 50	91	Gry-Red	MCR-106
Q27	A5J1-9	Bonus 6K	52	Wht-Blu	2N5060	Q02	A5J1-25	Top Arrow 5, 5K	90	Gry	MCR-106
Q38	A5J3-25	Bonus 7K	36	Yel-Brn	2N5060	Q04	A5J1-28		78	Orn-Blk	2N5060
Q50	A5J3-12	Bonus 8K	21	Blu-Red	2N5060	Q07	A5J1-27		53	Wht-Yel	2N5060
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q08	A5J1-23		56	Wht-Bm	MCR-106
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q11	A5J1-16		12	Red-Blu	2N5060
Q05	A5J2-16	Can Play 1	34	Yel-Grn	2N5060	Q17	A5J1-11		65	Brn-Wht	MCR-106
Q18	A5J2-20	Can Play 2	35	Yel-Wht	2N5060	Q20	A5J1-13		96	Gry-Brn	2N5060
Q30	A5J2-6	Can Play 3	85	Blk-Wht	2N5060	Q21	A5J1-12		61	Brn-Red	2N5060
Q43	A5J2-7	Can Play 4	91	Gry-Red	2N5060	Q22	A5J1-10		23	Blu-Yel	MCR-106
Q52	A5J3-13	Credit Indicator	13	Red-Yel	2N5060	Q25	A5J1-6		25	Blu-Wht	2N5060
Q44	A5J3-19	Double Bonus	53	Wht-Yel	2N5060	Q26	A5J1-7		34	Yel-Grn	2N5060
Q59	A5J3-4	Extra Ball When Lit (Left)	14	Red-Grn	2N5060	Q37	A5J3-23		98	Gry-Blk	2N5060
Q32	A5J3-27	Extra Ball When Lit (Right)	40	Grn	2N5060	Q39	A5J3-24		72	Orn-Blu	2N5060
Q33	A5J2-11	Game Over	95	Gry-Wht	MCR-106	Q40	A5J3-22		23	Blu-Yel	MCR-106
Q15	A5J2-23	High Score to Date	97	Gry-Orn	MCR-106	Q41	A5J3-20		64	Brn-Gm	MCR-106
Q10	A5J1-15	Left & Right Special	56	Wht-Brn	MCR-106	Q46	A5J3-18		56	Wht-Bm	2N5060
Q23	A5J2-8	Match	93	Gry-Yel	MCR-106	Q53	A5J3-14		84	Blk-Gm	2N5060
Q35	A5J1-3	Return Lane Left	45	Gm-Wht	MCR-106	Q58	A5J3-2		95	Gry-Wht	2N5060
Q34	A5J1-2	Return Lane Right	53	Wht-Yel	MCR-106	Q60	A5J3-3		81	Blk-Red	2N5060

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	A3J3-4, J2-5	Q3	AR-26-1200
3	Saucer	Momentary	40	Grn	A3J5-10	Q8	AO-27-1300
4	Chime 10	Momentary	81	Blk-Red	A3J2-4, J1-3	Q2	CN-31-2000
5	Chime 100	Momentary	81	Blk-Red	A3J2-9, J1-2	Q1	CN-31-2000
6	Chime 1000	Momentary	67	Brn-Orn	A3J2-10	Q5	CN-31-2000
7	Chime Extra	Momentary	74	Orn-Grn	A3J2-11	Q6	CN-31-2000
8	Left Thumper Bumper	Momentary	71	Orn-Red	A3J5-9	Q9	AN-26-1200
9	Right Thumper Bumper	Momentary	85	Blk-Wht	A3J5-15	Q10	AN-26-1200
10	Bottom Thumper Bumper	Momentary	80	Blk	A3J5-13	Q12	AN-26-1200
11	Left Slingshot	Momentary	83	Blk-Yel	A3J5-8, J2-6, J3-7,	Q16	AN-26-1200
12	Right Slingshot	Momentary	18	Red-Blk	A3J5-14	Q11	AN-26-1200
13	Left Drop Target Reset	Momentary	65	Brn-Wht	A3J5-12	Q13	NO-26-2300
14	Right Drop Target Reset	Momentary	70	Orn	A3J5-11	Q14	NO-26-2300
15	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
16	Flipper enabling relay	Continuous	--	--	--	Q15	48V Relay
		Momentary	81	Blk-Red	A3J2-12	Q7	
		Continuous	67	Brn-Orn	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 (Gm)	A3J1-8		A3J2-2	AQ-25-500/34-5050
	Right Flipper	60 (Brn)	70 (Orn)	A3J1-9		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)		Left Drop Target A (Top) 1	Coin Chute III (Right) 9	Left & Right Top Targets 17	Right Drop Target A (Top) 25	Not Used 33
RETURN I 1 A4J2-9 Wht-Brn (56) A4J3-10 Brn-Wht (65)		Left Drop Target B 2	Coin Chute I (Left) 10	Score 100 Points (General Purpose) 18	Right Drop Target B 26	Not Used 34
RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)		Left Drop Target C 3	Coin Chute II (Middle) 11	Score 10 Points (General Purpose) 19	Right Drop Target C 27	Not Used 35
RETURN I 3 A4J2-11 Wht-Blk (58) A4J3-12 Blu-Red (21)		Left Drop Target D 4	Not Used 12	Right Spinner 20	Right Drop Target D 28	Right Slingshot 36
RETURN I 4 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23)		Left Drop Target E (Bottom) 5	Not Used 13	Left Spinner 21	Right Drop Target E (Bottom) 29	Left Slingshot 37
RETURN I 5 A4J2-13 Brn-Yel (63) A4J3-14 Blu-Wht (25)		Credit Button 6	Not Used 14	Top Saucer 22	Center Target 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 Flipper Feeder Lane 23	Right Outlane 31	Right Thumper Bumper 39
RETURN I 7 A4J2-15 Orn (70) A4J3-16 Yel (30)		Outhole 8	Slam (2) 16	Left Flipper Feeder Lane 24	Left Outlane 32	Left Thumper Bumper 40