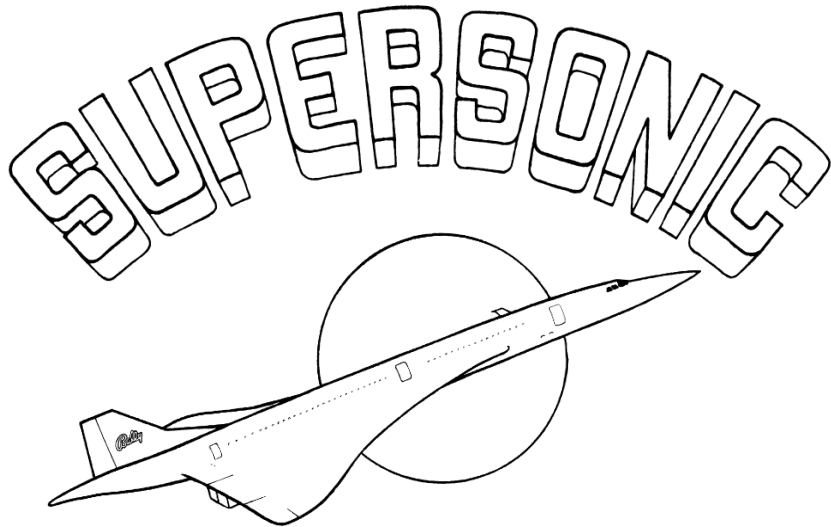
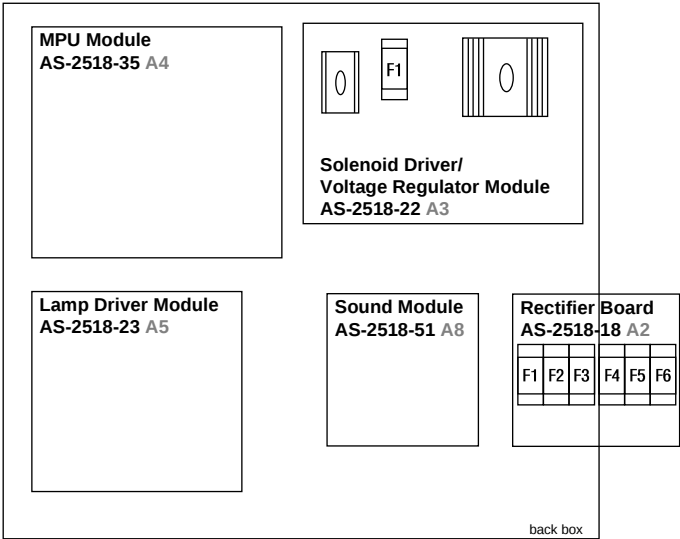




Fuse List

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. Req. AS-2518-22		
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	Q48	A5J3-16	Left Lane #2	25	Blu-Wht	MCR-106
Q19	A5J2-15	2nd Player Up	32	Yel-Blu	2N5060	Q25	A5J1-6	Left Lane #3	25	Blu-Wht	2N5060
Q31	A5J2-2	3rd Player Up	20	Blu	2N5060	Q20	A5J1-13	Left Lane #4	96	Gry-Brn	2N5060
Q45	A5J2-1	4th Player Up	60	Brn	2N5060	Q58	A5J3-2	Left Lane #5	95	Gry-Wht	2N5060
Q16	A5J2-22	Ball-in-Play (Back Box)	62	Brn-Blu	MCR-106	Q23	A5J2-8	Match (Back Box)	93	Gry-Yel	MCR-106
Q14	A5J1-18	Bonus 1K	58	Wht-Blk	2N5060	Q60	A5J3-3	Opens Gate When Lit	20	Blu	2N5060
Q29	A5J1-1	Bonus 2K	41	Grn-Red	2N5060	Q46	A5J3-18	Outlane Left	56	Wht-Brn	2N5060
Q36	A5J3-26	Bonus 3K	38	Yel-Blk	2N5060	Q41	A5J3-20	Outlane Right	64	Brn-Grn	MCR-106
Q57	A5J3-1	Bonus 4K	10	Red	2N5060	Q03	A5J2-21	Same Player Shoot Again (Back Box)	47	Grn-Orn	MCR-106
Q12	A5J1-19	Bonus 5K	60	Brn	2N5060	Q40	A5J3-22	Same Player Shoot Again (Playfield)	23	Blu-Yel	MCR-106
Q27	A5J1-9	Bonus 6K	52	Wht-Blu	2N5060	Q56	A5J3-10	Saucer 2X	91	Gry-Red	MCR-106
Q38	A5J3-25	Bonus 7K	36	Yel-Brn	2N5060	Q42	A5J3-21	Saucer 3X, Bonus Multiplier 2X	30	Yel	MCR-106
Q50	A5J3-12	Bonus 8K	21	Blu-Red	2N5060	Q24	A5J1-5	Saucer 5X, Bonus Multiplier 3X	48	Grn-Blk	MCR-106
Q13	A5J1-17	Bonus 9K	57	Wht-Orn	2N5060	Q07	A5J1-27	Side Target 3K	53	Wht-Yel	2N5060
Q28	A5J1-8	Bonus 10K	51	Wht-Red	2N5060	Q22	A5J1-10	Spinner 1K When Lit	45	Gm-Wht	MCR-106
Q44	A5J3-19	Bonus 20K	67	Brn-Orn	2N5060	Q11	A5J1-16	Star #1	12	Red-Blu	2N5060
Q01	A5J1-24	Bonus Multiplier 5X	50	Wht	MCR-106	Q34	A5J1-2	Star #2	43	Gm-Yel	MCR-106
Q05	A5J2-16	Can Play 1	34	Yel-Grn	2N5060	Q26	A5J1-7	Star #3	34	Yel-Grn	2N5060
Q18	A5J2-20	Can Play 2	35	Yel-Wht	2N5060	Q32	A5J3-27	Star #4	40	Grn	2N5060
Q30	A5J2-6	Can Play 3	85	Blk-Wht	2N5060	Q59	A5J3-4	Star #5	14	Red-Grn	2N5060
Q43	A5J2-7	Can Play 4	91	Gry-Red	2N5060	Q17	A5J1-11	Thumper Bumpers Bottom	65	Brn-Wht	MCR-106
Q21	A5J1-12	Center Target 3K	61	Brn-Red	2N5060	Q02	A5J1-25	Thumper Bumpers Left & Right	90	Gry	MCR-106
Q52	A5J3-13	Credit Indicator	13	Red-Yel	2N5060	Q47	A5J2-10	Tilt (Back Box)	98	Gry-Blk	MCR-106
Q39	A5J3-24	Drop Target Extra Ball	72	Orn-Blu	2N5060	Q08	A5J1-23	Top Lane #1	13	Red-Yel	MCR-106
Q53	A5J3-14	Drop Target Special	84	Blk-Grn	2N5060	Q09	A5J1-14	Top Lane #2	54	Wht-Grn	MCR-106
Q33	A5J2-11	Game Over (Back Box)	95	Gry-Wht	MCR-106	Q35	A5J1-3	Top Lane #3	32	Yel-Blu	MCR-106
Q37	A5J3-23	Gate Open	27	Blu-Orn	2N5060	Q49	A5J3-17	Top Lane #4	98	Gry-Blk	MCR-106
Q15	A5J2-23	High Score to Date (Back Box)	97	Gry-Orn	MCR-106	Q54	A5J3-11	Top Lane #5	81	Blk-Red	MCR-106
Q10	A5J1-15	Jet Stream & Star 1K	15	Red-Wht	MCR-106	Q55	A5J3-9	Top Lanes 3K When Lit	56	Wht-Brn	MCR-106
Q04	A5J1-28	Left Lane #1	78	Orn-Blk	2N5060	Q51	A5J3-15		53	Wht-Yel	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	A3J2-5, J3-7	Q3	AR-26-1200
3	Saucer	Momentary	74	Orn-Grn	A3J5-10	Q8	AO-27-1300
4	Left Thumper Bumper	Momentary	75	Orn-Wht	A3J5-12	Q13	AN-26-1200
5	Right Thumper Bumper	Momentary	78	Orn-Blk	A3J5-11	Q14	AN-26-1200
6	Bottom Thumper Bumper	Momentary	71	Orn-Red	A3J5-9	Q9	AN-26-1200
7	Left Slingshot	Momentary	85	Blk-Wht	A3J5-15	Q10	AN-26-1200
8	Right Slingshot	Momentary	80	Blk	A3J5-13	Q12	AN-26-1200
9	Drop Target Reset	Momentary	83	Blk-Yel	A3J5-14	Q11	NO-24-1400
10	Gate Relay	Continuous	91	Gry-Red	A3J5-7	Q17	GA-34-4000
11	Coin Lockout	Continuous	36	Yel-Brn	A3J2-8	Q19	FO-36-7000
12	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	18	Red-Blk	A3J5-8, J2-6, J3-7,	Q16	
		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

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-Gm (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)		Drop Target "E" (Bottom) 1	Coin Chute III (Right) 9	Spinner 17	Not Used 25	Bottom Thumper Bumper 33
RETURN I 1 A4J2-9 Wht-Brn (56) A4J3-10 Brn-Wht (65)		Drop Target "D" 2	Coin Chute I (Left) 10	#5 Top Rollover & #5 Target 18	#5 Star 26	#5 Left Lane Rollover Button 34
RETURN I 2 A4J2-10 Wht-Orn (57) A4J3-11 Blu (20)		Drop Target "C" 3	Coin Chute II (Middle) 11	#4 Top Rollover & #4 Target 19	#4 Star 27	#4 Left Lane Rollover Button 35
RETURN I 3 A4J2-11 Wht-Blk (58) A4J3-12 Blu-Red (21)		Drop Target "B" 4	Top Rollover Button 12	#3 Top Rollover & #3 Target 20	#3 Star 28	#3 Left Lane Rollover Button 36
RETURN I 4 A4J2-12 Brn (60) A4J3-13 Blu-Yel (23)		Drop Target "A" (Top) 5	Drop Target Rebound 13	#2 Top Rollover 21	#2 Star 29	#2 Left Lane Rollover Button 37
RETURN I 5 A4J2-13 Brn-Yel (63) A4J3-14 Blu-Wht (25)		Credit Button 6	Right Outlane 14	#1 Top Rollover & #1 Target 22	#1 Star 30	#1 Left Lane Rollover Button 38
RETURN I 6 A4J2-14 Brn-Wht (65) A4J3-15 Blu-Orn (27)		Tilt (3) 7	Left Outlane 15	Left & Right Flipper Feed Lane & Top Right Rebound 23	Right Slingshot 31	Right Thumper Bumper 39
RETURN I 7 A4J2-15 Orn (70) A4J3-16 Yel (30)		Outhole 8	Slam (2) 16	Saucer 24	Left Slingshot 32	Left Thumper Bumper 40