

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

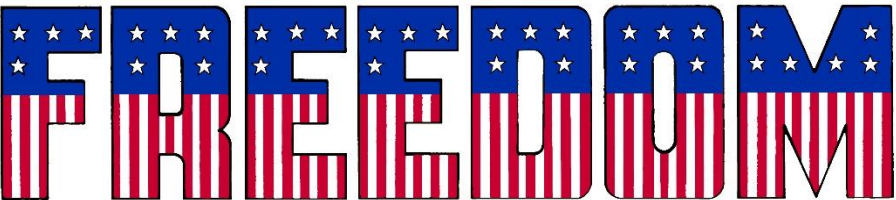
Solenoid Driver/  
Voltage Regulator Module  
AS-2518-16 A3

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  | Q26 | A5J1-7    | Thumper Bumper (Bottom)   | 50   | Wht        | 2N5060  |
| Q19 | A5J2-15   | 2nd Player Up                       | 23   | Blu-Yel    | 2N5060  | Q32 | A5J3-27   | Thumper Bumper (Right)    | 40   | Grn        | 2N5060  |
| Q31 | A5J2-2    | 3rd Player Up                       | 20   | Blu        | 2N5060  | Q59 | A5J3-4    | Thumper Bumper (Top)      | 14   | Red-Grn    | 2N5060  |
| Q45 | A5J2-1    | 4th Player Up                       | 60   | Brn        | 2N5060  | Q47 | A5J2-10   | Tilt                      | 98   | Gry-Blk    | MCR-106 |
| Q16 | A5J2-22   | Ball-in-Play                        | 62   | Brn-Blu    | MCR-106 | Q08 | A5J1-23   | Wheel 1 (Double Bonus)    | 90   | Gry        | MCR-106 |
| Q14 | A5J1-18   | Bonus 1K                            | 58   | Wht-Blk    | 2N5060  | Q35 | A5J1-3    | Wheel 2 (5K)              | 45   | Gm-Wht     | MCR-106 |
| Q29 | A5J1-1    | Bonus 2K                            | 41   | Grn-Red    | 2N5060  | Q49 | A5J3-17   | Wheel 3 (Advance Bonus 3) | 45   | Brn-Wht    | MCR-106 |
| Q36 | A5J3-26   | Bonus 3K                            | 38   | Yel-Blk    | 2N5060  | Q54 | A5J3-11   | Wheel 4 (500)             | 20   | Blu        | MCR-106 |
| Q57 | A5J3-1    | Bonus 4K                            | 10   | Red        | 2N5060  | Q09 | A5J1-14   | Wheel 5 (Lite Spin)       | 54   | Wht-Grn    | MCR-106 |
| Q12 | A5J1-19   | Bonus 5K                            | 60   | Brn        | 2N5060  | Q34 | A5J1-2    | Wheel 6 (500)             | 43   | Gm-Yel     | MCR-106 |
| Q27 | A5J1-9    | Bonus 6K                            | 52   | Wht-Blu    | 2N5060  | Q48 | A5J3-16   | Wheel 7 (Double Bonus)    | 25   | Blu-Wht    | MCR-106 |
| Q38 | A5J3-25   | Bonus 7K                            | 36   | Yel-Brn    | 2N5060  | Q55 | A5J3-9    | Wheel 8 (500)             | 15   | Red-Wht    | MCR-106 |
| Q50 | A5J3-12   | Bonus 8K                            | 21   | Blu-Red    | 2N5060  | Q10 | A5J1-15   | Wheel 9 (Advance Bonus 3) | 15   | Red-Wht    | MCR-106 |
| Q13 | A5J1-17   | Bonus 9K                            | 57   | Wht-Orn    | 2N5060  | Q22 | A5J1-10   | Wheel 10 (5K)             | 53   | Wht-Yel    | MCR-106 |
| Q28 | A5J1-8    | Bonus 10K                           | 51   | Wht-Red    | 2N5060  | Q17 | A5J1-11   |                           | 65   | Brn-Wht    | MCR-106 |
| Q05 | A5J2-16   | Can Play 1                          | 34   | Yel-Grn    | 2N5060  | Q21 | A5J1-12   |                           | 61   | Brn-Red    | 2N5060  |
| 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  | Q11 | A5J1-16   |                           | 12   | Red-Blu    | 2N5060  |
| Q43 | A5J2-7    | Can Play 4                          | 91   | Gry-Red    | 2N5060  | Q01 | A5J1-24   |                           | 50   | Wht        | MCR-106 |
| Q60 | A5J3-3    | Credit Indicator                    | 13   | Red-Yel    | 2N5060  | Q02 | A5J1-25   |                           | 90   | Gry        | MCR-106 |
| Q37 | A5J3-23   | Double Bonus                        | 31   | Yel-Red    | 2N5060  | Q07 | A5J1-27   |                           | 53   | Wht-Yel    | 2N5060  |
| Q33 | A5J2-11   | Game Over                           | 95   | Gry-Wht    | MCR-106 | Q04 | A5J1-28   |                           | 78   | Orn-Blk    | 2N5060  |
| Q15 | A5J2-23   | High Score to Date                  | 97   | Gry-Orn    | MCR-106 | Q25 | A5J1-6    |                           | 25   | Blu-Wht    | 2N5060  |
| Q23 | A5J2-8    | Match                               | 93   | Gry-Yel    | MCR-106 | Q52 | A5J3-13   |                           | 13   | Red-Yel    | 2N5060  |
| Q03 | A5J2-21   | Same Player Shoot Again (Back Box)  | 47   | Gm-Orn     | MCR-106 | Q53 | A5J3-14   |                           | 84   | Blk-Gm     | 2N5060  |
| Q03 | A5J1-26   | Same Player Shoot Again (Playfield) | 91   | Gry-Red    | MCR-106 | Q46 | A5J3-18   |                           | 56   | Wht-Brn    | 2N5060  |
| Q51 | A5J3-15   | Special                             | 23   | Blu-Yel    | 2N5060  | Q44 | A5J3-19   |                           | 67   | Brn-Orn    | 2N5060  |
| Q42 | A5J3-21   | Spinners 100 Points                 | 30   | Yel        | MCR-106 | Q58 | A5J3-2    |                           | 95   | Gry-Wht    | 2N5060  |
| Q24 | A5J1-5    | Spinners 1000 Points                | 48   | Gm-Blk     | MCR-106 | Q41 | A5J3-20   |                           | 64   | Brn-Gm     | MCR-106 |
| Q56 | A5J3-10   | Switched Bumper ???                 | 91   | Gry-Red    | MCR-106 | Q40 | A5J3-22   |                           | 23   | Blu-Yel    | MCR-106 |

Coil Table

| Sol. No          | Solenoid description          | Solenoid Type | Wire Code         | Wire Color | Connector           | Driver Transistor | Solenoid Coil Type |
|------------------|-------------------------------|---------------|-------------------|------------|---------------------|-------------------|--------------------|
| 1                | Outhole Kicker                | Momentary     | 63                | Brn-Yel    | A3J1-5              | Q4                | AN-26-1200         |
| 2                | Knocker                       | Momentary     | 85                | Blk-Wht    | A3J3-4, J2-5        | Q3                | AR-26-1200         |
| 3                | Saucer (scores Wheel Value)   | Momentary     | 83                | Blk-Yel    | A3J5-14             | Q11               | AO-27-1300         |
| 4                | Top Hole (Scores Wheel Value) | Momentary     | 74                | Orn-Grn    | A3J5-10             | Q8                | AO-27-1300         |
| 5                | Chime 10                      | Momentary     | 81                | Blk-Red    | A3J2-4, J1-3        | Q2                | CN-31-2000         |
| 6                | Chime 100                     | Momentary     | 81                | Blk-Red    | A3J2-9, J1-2        | Q1                | CN-31-2000         |
| 7                | Chime 1000                    | Momentary     | 67                | Brn-Orn    | A3J2-10             | Q5                | CN-31-2000         |
| 8                | Chime Extra                   | Momentary     | 74                | Orn-Grn    | A3J2-11             | Q6                | CN-31-2000         |
| 9                | Top Thumper Bumper            | Momentary     | 78                | Orn-Blk    | A3J5-12             | Q13               | AN-26-1200         |
| 10               | Right Thumper Bumper          | Momentary     | 75                | Orn-Wht    | A3J5-11             | Q14               | AN-26-1200         |
| 11               | Bottom Thumper Bumper         | Momentary     | 71                | Orn-Red    | A3J5-9              | Q9                | AN-26-1200         |
| 12               | Left Slingshot                | Momentary     | 85                | Blk-Wht    | A3J5-15             | Q10               | AN-26-1200         |
| 13               | Right Slingshot               | Momentary     | 18                | Red-Blk    | A3J5-8, J2-6, J3-7, | Q16               | AN-26-1200         |
| 14               | Drop Target Reset             | Momentary     | 80                | Blk        | A3J5-13             | Q12               | 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 (Grn)          | A3J1-8     | 20 (Blu)            | A3J2-2            | AQ-25-500/34-5050  |
|                  | Right Flipper                 | 60 (Brn)      | 70 (Orn)          | A3J1-9     | 10 (Red)            | A3J2-1            | AQ-25-500/34-5050  |

Switch Matrix

|                                                            |  | strobe (ST)  return (I)                                |                                                        |                                         |                                 |                                 |
|------------------------------------------------------------|--|--------------------------------------------------------|--------------------------------------------------------|-----------------------------------------|---------------------------------|---------------------------------|
| Column                                                     |  | STROBE 0<br>A4J2-1 Wht-Red (51)<br>A4J3-2 Red-Yel (13) | STROBE 1<br>A4J2-2 Gry-Yel (93)<br>A4J3-3 Red-Grn (14) | STROBE 2<br>A4J2-3 Wht-Blu (52)         | STROBE 3<br>A4J2-4 Wht-Yel (53) | STROBE 4<br>A4J2-5 Yel-Red (31) |
| Row                                                        |  |                                                        |                                                        |                                         |                                 |                                 |
| RETURN I 0<br>A4J2-8 Wht-Grn (54)<br>A4J3-9 Red-Wht (15)   |  | Drop Target 1 (Bottom) 1                               | Coin Chute III (Right) 9                               | Not Used 17                             | Not Used 25                     | Not Used 33                     |
| RETURN I 1<br>A4J2-9 Wht-Brn (56)<br>A4J3-10 Brn-Wht (65)  |  | Drop Target 2 2                                        | Coin Chute I (Left) 10                                 | Left & Right Outlane 18                 | Not Used 26                     | Not Used 34                     |
| RETURN I 2<br>A4J2-10 Wht-Orn (57)<br>A4J3-11 Blu (20)     |  | Drop Target 3 3                                        | Coin Chute II (Middle) 11                              | Score 100 Points (General Purpose) 19   | Not Used 27                     | Not Used 35                     |
| RETURN I 3<br>A4J2-11 Wht-Blk (58)<br>A4J3-12 Blu-Red (21) |  | Drop Target 4 4                                        | Not Used 12                                            | Score 10 Points (General Purpose) 20    | Right Slingshot 28              | Not Used 36                     |
| RETURN I 4<br>A4J2-12 Brn (60)<br>A4J3-13 Blu-Yel (23)     |  | Drop Target 5 (Top) 5                                  | Not Used 13                                            | Wheel Rollover 21                       | Bottom Thumper Bumper 29        | Not Used 37                     |
| RETURN I 5<br>A4J2-13 Brn-Yel (63)<br>A4J3-14 Blu-Wht (25) |  | Credit Button 6                                        | Not Used 14                                            | Advance Bonus & Flipper Feeder Lanes 22 | Right Thumper Bumper 30         | Not Used 38                     |
| RETURN I 6<br>A4J2-14 Brn-Wht (65)<br>A4J3-15 Blu-Orn (27) |  | Tilt (3) 7                                             | Not Used 15                                            | Spinner 23                              | Top Thumper Bumper 31           | Not Used 39                     |
| RETURN I 7<br>A4J2-15 Orn (70)<br>A4J3-16 Yel (30)         |  | Outhole 8                                              | Slam (2) 16                                            | Collect Wheel Value Saucers 24          | Left Slingshot 32               | Not Used 40                     |