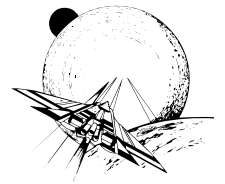


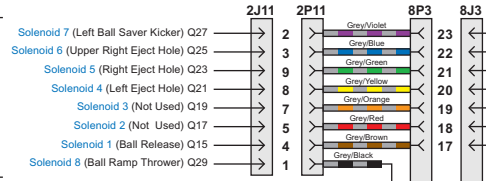
FIREPOWER

Playfield Solenoid Wiring Diagram (System 6)

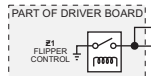
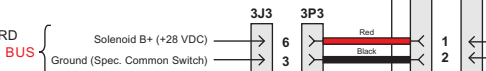


BOARD CONNECTIONS:	
1	CPU BOARD
2	DRIVER BOARD
3	POWER SUPPLY BOARD
4	MASTER DISPLAY BOARD
5	SLAVE DISPLAY BOARD
6	BACKBOX
7	CABINET
8	PLAYFIELD
9	INSERT BOARD
10	SOUND BOARD
11	NOT ASSIGNED
12	SPEECH MODULE

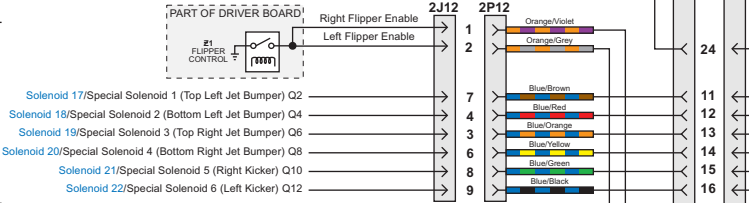
2 DRIVER BOARD 2J11 SOLENOID DRIVE 1-8



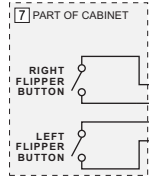
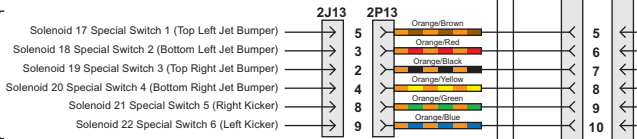
3 POWER SUPPLY BOARD 3J3 SOLENOID POWER BUS



2 DRIVER BOARD 2J11 SPECIAL SOLENOIDS DRIVE 1-8



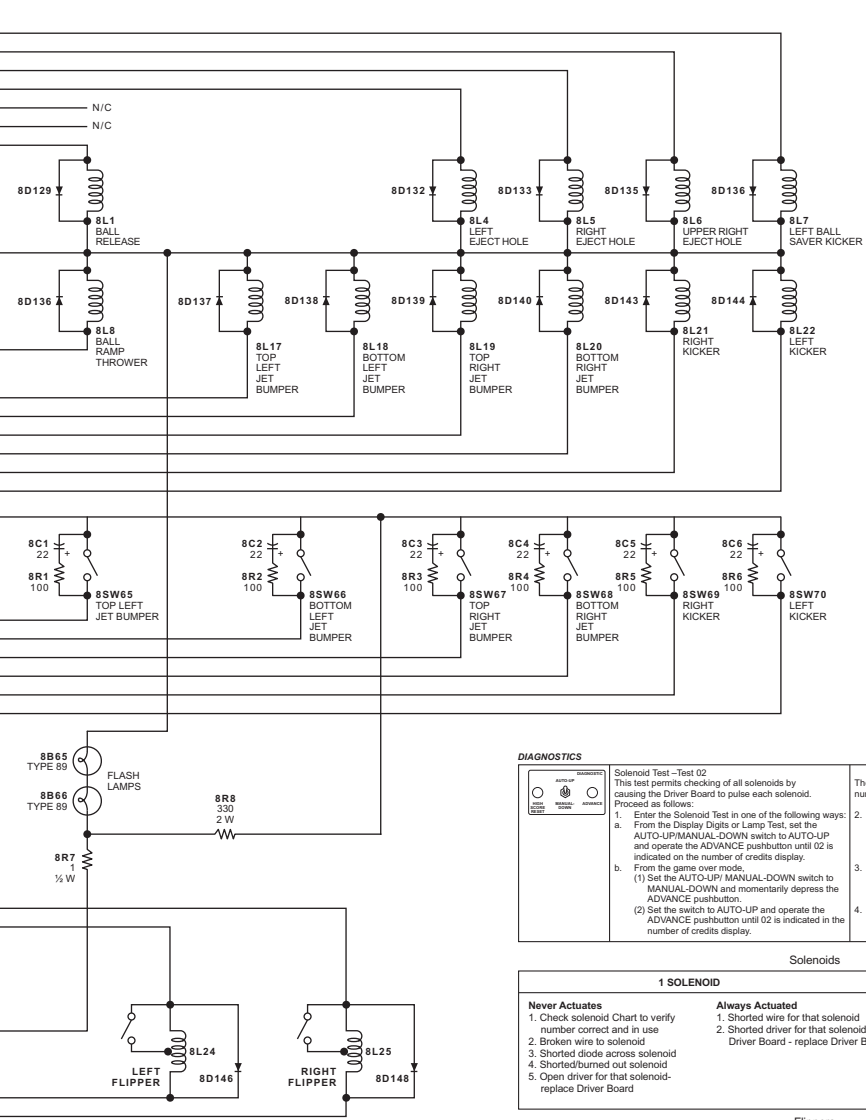
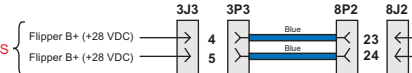
2 DRIVER BOARD 2J13 SPECIAL SWITCH INPUTS



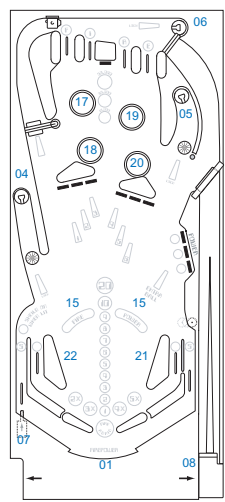
2 DRIVER BOARD 2J9 SOLENOID DRIVE 9-16



3 POWER SUPPLY BOARD 3J3 SOLENOID POWER BUS



PLAYFIELD SOLENOID LOCATOR



No.	Function	Location
Solenoid 1	Ball Release	1 SOLENOID 1-16 DRIVERS
Solenoid 4	Left Eject Hole	4 SOLENOID 1-16 DRIVERS
Solenoid 5	Right Eject Hole	5 SOLENOID 1-16 DRIVERS
Solenoid 6	Upper Right Eject Hole	6 SOLENOID 1-16 DRIVERS
Solenoid 7	Left Ball Saver Kicker	7 SOLENOID 1-16 DRIVERS
Solenoid 8	Ball Ramp Thrower	8 SOLENOID 1-16 DRIVERS
Solenoid 15	Flash Lamps	15 SOLENOID 1-16 DRIVERS
Solenoid 17	Top Left Jet Bumper	1 SPECIAL SOLENOID DRIVERS
Solenoid 18	Bottom Left Jet Bumper	2 SPECIAL SOLENOID DRIVERS
Solenoid 19	Top Right Jet Bumper	3 SPECIAL SOLENOID DRIVERS
Solenoid 20	Bottom Right Jet Bumper	4 SPECIAL SOLENOID DRIVERS
Solenoid 21	Right Kicker	5 SPECIAL SOLENOID DRIVERS
Solenoid 22	Left Kicker	6 SPECIAL SOLENOID DRIVERS

DIAGNOSTICS

<p>Solenoid Test - Test 02 This test permits checking of all solenoids by causing the Driver Board to pulse each solenoid. Proceed as follows: 1. Enter the Solenoid Test in one of the following ways: a. From the Display Digits or Lamp Test, set the AUTO-UP/MANUAL-DOWN switch to AUTO-UP and operate the ADVANCE pushbutton until 02 is indicated on the number of credits display. b. From the game over mode: (1) Set the AUTO-UP/MANUAL-DOWN switch to MANUAL-DOWN and momentarily depress the ADVANCE pushbutton. (2) Set the switch to AUTO-UP and operate the ADVANCE pushbutton until 02 is indicated in the number of credits display.</p>	<p>The ball in play display should indicate each solenoid number as it is being pulsed.</p> <ol style="list-style-type: none"> To repeatedly pulse solenoids one at a time set the switch to MANUAL-DOWN and momentarily depress the ADVANCE pushbutton. The solenoid number indicated in the ball in play display should be pulsed repeatedly. Each time the ADVANCE pushbutton is depressed, the next solenoid will be indicated in the ball in play display and will be pulsed. If no further tests are required, turn the game OFF and back ON to return to the game over mode.
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Solenoids		
1 SOLENOID	ALL SOLENOIDS	ALL SOLENOIDS
<p>Never Actuates</p> <ol style="list-style-type: none"> Check solenoid Chart to verify number correct and in use Broken wire to solenoid Shorted diode across solenoid Shorted/burned out solenoid Open driver for that solenoid - replace Driver Board 	<p>Always Actuated</p> <ol style="list-style-type: none"> Shorted wire for that solenoid Shorted driver for that solenoid on Driver Board - replace Driver Board 	<p>Never Actuated</p> <ol style="list-style-type: none"> Check for +28 VDC on Power Supply fuse 3F2 to ground Check fuse 3F2 on Power Supply Check Connectors 3J3 and 3J4 on Power Supply Check Connector 2J9 2J10, 2J 11, 2J12 for broken/shorted wires. Replace Driver Board

Flippers	
ONE FLIPPER	ALL FLIPPERS
<p>Never Operates</p> <ol style="list-style-type: none"> Switch contacts on flipper button open or out of adjustment. Shorted diode across coil. <p>Flipper Weak</p> <ol style="list-style-type: none"> Switch contacts on flipper button out of adjustment or pitted contacts. End of stroke switch on solenoid not adjusted properly. Check connections on solenoid and check for bind. 	<p>Never Operates</p> <ol style="list-style-type: none"> Check Fuse 3F4 on Power Supply and 8P2 connection. Diode or resistor in driver circuit shorted. Relay 2Z1 on driver board faulty. Other fault in driver circuit. Replace driver board. <p>Operates with Game Over, etc.</p> <ol style="list-style-type: none"> Replace Driver Board
<p>END-OF-STROKE ACTIVATED FLIPPER</p> <p>Never Operates</p> <ol style="list-style-type: none"> End-of-stroke switch contacts on actuating flipper open or out of adjustment. Check wiring from actuating flipper end-of-stroke switch to flipper coil. Shorted diode across coil. <p>Flipper Weak</p> <ol style="list-style-type: none"> End-of-stroke switch on actuating flipper out of adjustment or pitted contacts. End-of stroke switch on flipper not adjusted properly. Check connections on solenoid and check for bind. 	<p>DUAL-ACTION FLIPPER PAIR</p> <p>Never Operates</p> <ol style="list-style-type: none"> Check connectors from switches to backbox to Driver Board. Switch contacts on flipper button open or out of adjustment.