IMPORTANT NOTICE:

THERE ARE 2 DIFFERENT VERSIONS OF THIS GAME

1.) BAYTEK VERSION: MAIN BOARD IN FRONT OF CABINET
2.) SEIDEL VERSION: MAIN BOARD IN BACK OF CABINET

PLEASE MAKE SURE THAT YOU ARE USING THE CORRECT VERSION FOR YOUR TROUBLESHOOTING

BAYTEK GAMES VERSION –ST TROUBLESHOOTING & DIAGNOSTICS SECTION

Troubleshooting Strategy

Use common sense and a systematic method of troubleshooting to determine the exact problem, probable cause and remedy. Use the process of elimination to find the faulty component. Always check for the simple and obvious causes first such as unplugged, loose or broken wires and bad sensors, bent, pinched, stuck or jammed components.

READ - IMPORTANT: If the problem cannot be resolved using the steps in the following chart, it could be caused by a faulty main board, or the software associated with that board. The problem may be isolated by installing a Gen 5 board, and/or sound and software chips, from another Gen 5 game to see if the problem persists. Insure that the software chip is from an identical game or additional problems may result. See the Service and Repair Section.

Troubleshooting Chart – Bay-Tek Version

Problem	Probable Cause	Remedy
No power to the game.	a. Unplugged. b. Circuit breaker tripped. c. Power supply unplugged. d. Bad power supply.	a. Check wall outlet. b. Reset power strip breaker switch or building circuit breaker. c. Insure unit is plugged into power strip. d. See power supply diagnostic below.
No Audio	a. Volume too low. b. Loose wire at control or speaker. c. Defective Potentiometer. d. Main circuit board malfunction.	a. Increase the volume at the volume control at the inside of the front door panel. b. Check audio cable connections to speaker, volume control and main circuit board. Check continuity. c. Replace pot. (A5PO1K) d. Replace main board with board from another Gen 5 game if possible to isolate the problem to the main circuit board.
Fluorescent Lighting not functioning properly.	a. Fixture unplugged. b. Lamp out. c. Fixture faulty.	a. Plug power cable into power strip. b. Replace burned fluorescent tube. c. Replace entire fixture.
Upper displays not functioning properly.	a. Cable problem. b. Circuit board faulty.	a. Check for proper connection to main board. Check continuity. Replace white (or grey) cable. b. Replace tickets owed board. (AABD2603)

Troubleshooting Chart – Bay-Tek Version

Problem		Probable Cause	Remedy
Upper backlighting not functioning properly.		a. Cable problem. b. Lamp(s) out. c. Lamp circuit board faulty.	a. Check for proper connection to main board. Check continuity. Replace grey cable. b. Replace burned out lamps. c. Replace board – AABD2705.
Wheel not rotating.		a. Motor unplugged. b. Loose or broken wires. c. Motor faulty.	a. Reconnect motor wiring. b. Check for loose or broken wiring at connectors for motor and main circuit board. Check continuity from plug to crimped ends. c. Replace motor – AAMO2700.
Game doesn't score. **Check for coin up sound – Yippee Yahoo At coin drop**	No coin up sound	a. Switch bad in coin mech b. Disconnected, loose or broken wires. c. No game sounds at all.	a. Replace switch – AASW2700. b. Check connectors. Check for continuity. c. Go to No Audio section to restore sound.
	Yes –Coin up sound	a. Coin taking too long to get to sensor board. b. Slot sensor board not seeing coin. c. Slot sensor board bad.	a. Clean ramp. b. Green LED should be ON only when sensor is blocked. c. Replace chip – ULN2803 Replace board – AABD9616.
Game scores wrong values		a. Game is scoring too soon – before coin reaches Slot sensor board.	a. Slot sensor board is bad – Align/clean sensors, replace chip, replace board.
Tickets do not dispense or Wrong amount dispensed. **Check for the correct amount of tickets adding up on Tickets Owed Display**	Tickets Owed Display is adding up correct	a. Disconnected, loose or broken wires. b. Opto Sensor on ticket dispenser dirty. c. Faulty ticket dispenser. d. Notch on tickets cut too shallow.	a. Check connectors. Check for continuity. b. Blow dust from sensor and clean with isopropyl alcohol. c. Replace with working dispenser to isolate the problem. d. Flip tickets and load upside-down to have large cut notch toward opto sensor.
	Tickets Owed Display is not adding correctly	a. Incorrect dipswitch settings. b. Game is scoring too soon – before coin reaches Slot sensor board.	a. Check settings on main Gen 5 board. b. Slot sensor board is bad – Align/clean sensors, replace chip, replace board.

Troubleshooting Chart – Bay-Tek Version		
Problem	**Probable Cause**	**Remedy**
Error Codes		
Err. 2 Game is seeing some, but not all wheel positions.	a. Silver dots not reflecting. b. Wheel Position Sensor board not reading all silver dots. c. Wheel is wobbling out of sensor range. d. Wheel Position Board not aligned correctly.	Clean and shine up silver dots. Clean/Replace Wheel Position Sensor – AASE2700 Replace silver dot board – A5BD2701. Adjust wheel on motor shaft to eliminate wobble. Position board for black optos to be directly below motor shaft.
Err. 3 Wheel Speed Fault. (Displayed only if dipswitch set to enable. Bank 1 (S1) #8.	a. Loose wheel. b. Faulty wheel motor. c. Score Wheel too far away, or too close to Wheel Position Sensor. d. Wheel Position Sensor board not reading any silver dots	a. Check the setscrew on the wheel hub to insure that it is tight. b. Replace the wheel motor. c. Reposition wheel on shaft of motor – so silver dots are about 3/8 inch away from sensor. d. Clean/Replace Wheel Position Sensor – AASE2700 Replace silver dot board – A5BD2701.
Err. 4 Coin Sensor Fault – Game is reading coin at Slot Sensor board at wrong time.	a. Coin is not triggering coin switch. b. Alignment of the sensor emitter and detector. The green LED on the board will come on steady if out of alignment. c. Faulty sensor board.	a. Yippee, Yahoo must sound before coin is allowed to score. b. Check all emitters and detectors for proper alignment. Bend by hand. c. Replace chip – ULN2803 Replace board – AABD9616.

Diagnose Code Wheel – Bay-Tek Version

The Code Wheel, attached to the back side of the wheel, must work properly to identify slot location and ticket payout.
To check for proper operation;

1. Shut off power to the game.
2. Set dipswitch #8 bank 2 (S2) to the ON position.
3. Turn power back on.
4. Press the red “Reset” button on the ticket tray for 5 seconds. This will start the diagnostic program.
5. The ticket display will count up from zero to 15.
6. If a slot number is skipped each time the wheel rotates past the coin slot hole, that means that the position code wheel is faulty and must be replaced.
7. Replace the wheel assembly and retest.
8. Be sure to turn power off to the game before moving the dipswitch to Off.

SEIDEL VERSION –ST TROUBLESHOOTING & DIAGNOSTICS SECTION

Troubleshooting Strategy

Use common sense and a systematic method of troubleshooting to determine the exact problem, probable cause and remedy. Use the process of elimination to find the faulty component. Always check for the simple and obvious causes first such as unplugged, loose or broken wires and bad sensors, bent, pinched, stuck or jammed components.

READ - IMPORTANT: If the problem cannot be resolved using the steps in the following chart, it could be caused by a faulty main board, or the software associated with that board. The problem may be isolated by installing a board, and/or sound and software chips, from another game to see if the problem persists. Ensure that the software chip is from an identical game or additional problems may result. See the Service and Repair Section.

Troubleshooting Chart – Seidel Version

Problem	Probable Cause	Remedy
Power to Motor – No Power to rest of game.	a. 5 Amp fuse on top of power supply is blown.	a. Replace fuse.
5 Amp fuse continues to blow.	a. Filter board in front of game is faulty. b. Light bulbs or sockets failed. c. Loose or broken wires.	a. Replace diodes on board. Replace board – AABD9901. b. Remove bulbs to test. Replace bulbs (A5LA5020) if needed. c. Check for loose or broken wiring at connectors for motor and main circuit board. Check continuity from plug to crimped ends.
No Audio	a. Volume too low. b. Loose wire at control or speaker. c. Faulty main board sound eprom.	a. Increase the volume with the small pot on main board. b. Check audio cable connections to speaker and main circuit board. Check continuity. c. Replace U22 on main board.
Fluorescent Lighting not functioning properly.	a. Fixture unplugged. b. Lamp out. c. Fixture faulty.	a. Plug power cable into top of power supply. b. Replace burned fluorescent tube. c. Replace entire fixture.

Troubleshooting Chart – Seidel Version

Problem		Probable Cause	Remedy
Upper displays not functioning properly.		a. Cable problem. b. 4 Wire jumper from main board unplugged. c. Main ST8 eprom bad. d. Circuit board faulty. e. Note: Sometimes a faulty display board will damage the ST 8 eprom.	a. Check for proper connection to main board. Check continuity. b. Check jumper for continuity. Ensure wires are not frayed as they solder into main board. c. Replace eprom – AAMC-ST. d. Replace tickets owed board. e. Replace both the Display and the ST8 eprom at same time.
Wheel not rotating.		a. Motor unplugged. b. Blown fuse in power supply. c. Loose or broken wires. d. Motor faulty.	a. Reconnect motor to top of power supply. b. Replace fuse. c. Check for loose or broken wiring at connectors for motor and main circuit board. Check continuity from plug to crimped ends. d. Replace motor – AAMO2700.
Game doesn't score. **Check for coin up sound – Yippie Yahoo At coin drop**	No coin up sound	a. Switch bad in coin mech. b. Disconnected, loose or broken wires. c. No game sounds at all.	a. Replace switch – AASW2700. b. Check connectors. Check for continuity. c. Go to No Audio section to restore sound.
	Yes –Coin up sound	a. Coin taking too long to get to sensor board. b. Slot sensor board not seeing coin. c. Slot sensor board bad.	a. Clean ramp. b. Green LED should be ON only when sensor is blocked. c. Replace chip – ULN2803 Replace board – AABD9616.
Game scores wrong values		a. Game is scoring too soon – before coin reaches Slot sensor board.	a. Slot sensor board is bad – Align/clean sensors, replace chip, replace board.

Troubleshooting Chart – Seidel Version

Problem		Probable Cause	Remedy
Tickets do not dispense or Wrong amount dispensed. **Check for the correct amount of tickets adding up on Tickets Owed Display**	Tickets Owed Display is adding up correct	a. Disconnected, loose or broken wires. b. Opto Sensor on ticket dispenser dirty. c. Faulty ticket dispenser. d. Notch on tickets cut too shallow. e. Door Interlock switch is not actuating against door. f. Missing Resistor on game harness to ticket dispenser. g. No 12 Volt power to ticket dispenser. Power goes through a filter board in front of cabinet near ticket counter. h. Faulty main board.	a. Check connectors. Check for continuity. b. Blow dust from sensor and clean with isopropyl alcohol. c. Replace with working dispenser to isolate the problem. d. Flip tickets and load upside-down to have large cut notch toward opto sensor. e. Check operation, replace if needed – A5SW5020. f. Install 2.2 KOhm resistor between Red and White/Black wires that plug into ticket dispenser. g. Replace diodes on filter board. Replace filter board – AABD9901. h. Replace main board.
	Tickets Owed Display is not adding correctly	a. Incorrect dipswitch settings. b. Game is scoring too soon – before coin reaches Slot sensor board.	a. Check settings on main board. Make sure Bank #2 , dipswitch # 4 is off. b. Slot sensor board is bad – Align/clean sensors, replace chip, replace board.

Troubleshooting Chart – Seidel Version

Problem	Probable Cause	Remedy
Error Codes		
Err. 2 Game is seeing some, but not all wheel positions.	a. Silver dots not reflecting. b. Wheel Position Sensor board not reading all silver dots. c. Wheel is wobbling out of sensor range. d. Wheel Position Board not aligned correctly.	a. Clean and shine up silver dots. b. Clean/Replace Wheel Position Sensor – AASE2700 Replace silver dot board – A5BD2701. c. Adjust wheel on motor shaft to eliminate wobble. d. Position board for black optos to be directly below motor shaft.
Err. 3 Wheel Speed Fault. (Displayed only if dipswitch set to enable. Bank 1 (S1) #8.	a. Loose wheel. b. Faulty wheel motor. c. Score Wheel too far away, or too close to Wheel Position Sensor. d. Wheel Position Sensor board not reading any silver dots.	a. Check the setscrew on the wheel hub to insure that it is tight. b. Replace the wheel motor. c. Reposition wheel on shaft of motor – so silver dots are about 3/8 inch away from sensor. d. Clean/Replace Wheel Position Sensor – AASE2700 Replace silver dot board – A5BD2701.
Err. 4 Coin Sensor Fault – Game is reading coin at Slot Sensor board at wrong time.	a. Coin is not triggering coin switch. b. Alignment of the sensor emitter and detector. The green LED on the board will come on steady if out of alignment. c. Faulty sensor board. d. Power Supply too weak.	a. Yippee, Yahoo must sound before coin is allowed to score. b. Check all emitters and detectors for proper alignment. Bend by hand. c. Replace chip – ULN2803 Replace board – AABD9616. d. Check for at least 10 1/2 Volts DC on power supply. Replace power supply - A5PS1001.

Diagnose Code Wheel – Seidel Version

The Code Wheel, attached to the back side of the wheel, must work properly to identify slot location and ticket payout.

To check for proper operation;

1. Turn on power to the game.
2. Inside front door – Push and hold the white door interlock switch and the black reset switch simultaneously and then release. The displays should show all 8's.
3. Press the black reset button again. This will start the diagnostic program.
4. The ticket display will cycle from zero to 9 and then A to F.
5. If all slot numbers are showing as the wheel turns, then the slot sensor board / silver dot board combination is operating properly.

Diagnose Power Supply

Use the following procedure to check the power supply for Gen 5 games.

Check the small green LED light on the power supply circuit board. If the light is out there is a short somewhere. If the light dims, there is an overload in one of the circuits such as a bad motor.

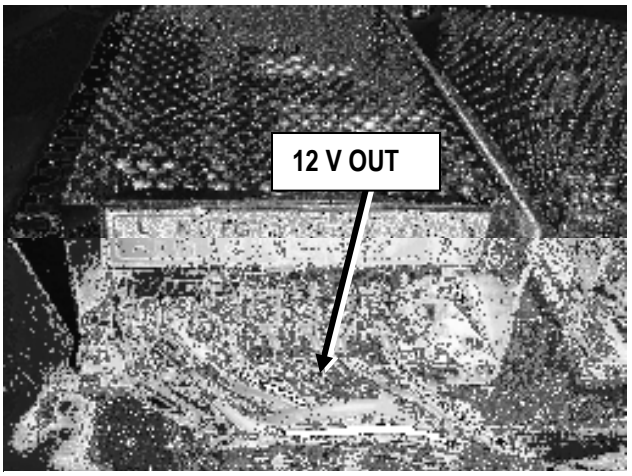

Figure 1 Power Supply

Turn power OFF. Disconnect all 12 volt output wires only. Turn power ON.

Green LED Light comes ON.

Green LED Light remains OFF.

Replace Power Supply.

Turn power OFF. Unplug all outputs from the Gen 5 Circuit Board. Reconnect the 12 volt output wires to the Power Supply. Turn power ON.

Green LED Light comes ON.

Green LED Light remains OFF.

Short in Main Board - Replace.

Turn power OFF. Reconnect the outputs at the Main Circuit Board one at a time. Wait 3 minutes between tests to turn power ON.

Green LED Light remains OFF.

That cable or related component is shorted out. See Jumper Cable Pin-Outs to see which component might be at fault.

Green LED Light dims.

A related component such as a solenoid is causing an overload. See Jumper Cable Pin-Outs beginning on page 18 to see which component might be at fault.

Green LED Light comes ON.

That cable is OK.