



Exercise Workbook



Objective To familiarize the participants with how to locate items in manuals.

Instructions Identify where the following are located in the appropriate manual.

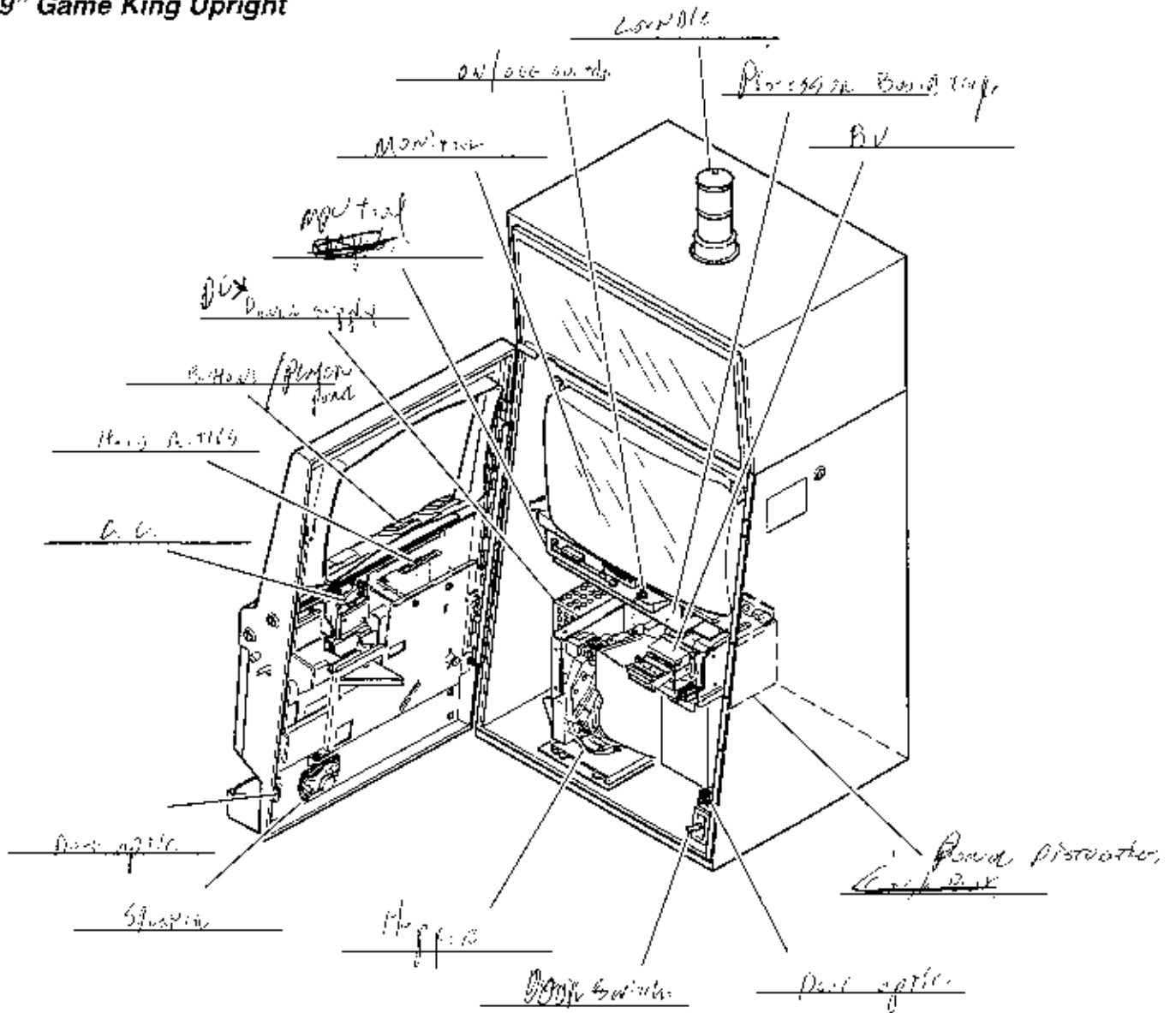
Fill in the boxes

Item	Manual	Section	Page(s)
Using Menus - <i>Example</i>	Software	2.1	2-2 thru 2-3
Resolution of Flickering Fluorescent	Troubleshooting	5.2.2	5.2.7
Glossary	App	App	Glossary 1 thru 16
How to Perform a Hopper Test	Software	2.2	2-35
Reading Error Codes	Troubleshooting	4	4.1 - 4.17
How to Remove the Coin-In Assembly	Maintenance	5	5-16
Accounting Menu	Software	2-2.1	2-5 - 2.24
Adjustment of the Pinwheel Coin Wiper	Maintenance	7	7.8 - 7.9
Nonfunctioning Switches	Troubleshooting	5.2.2	5-6
Service Light Modes	Troubleshooting		
How to Clear a Bill Jam in the Transport Assembly			
Adjustment of the Video Monitor			
Input and Output Tests			
Clearing an Error Code			

Note: page numbers may vary slightly depending on machine type.

Manual Set Used: _____

19" Game King Upright



iGame Plus / Game King 17" Upright

Service Light

Control

Monitor

Speaker Panel
Speaker

F/P

Power Switch

F/P

Control F/P

Main Switch

Switch

Relay

Power Supply

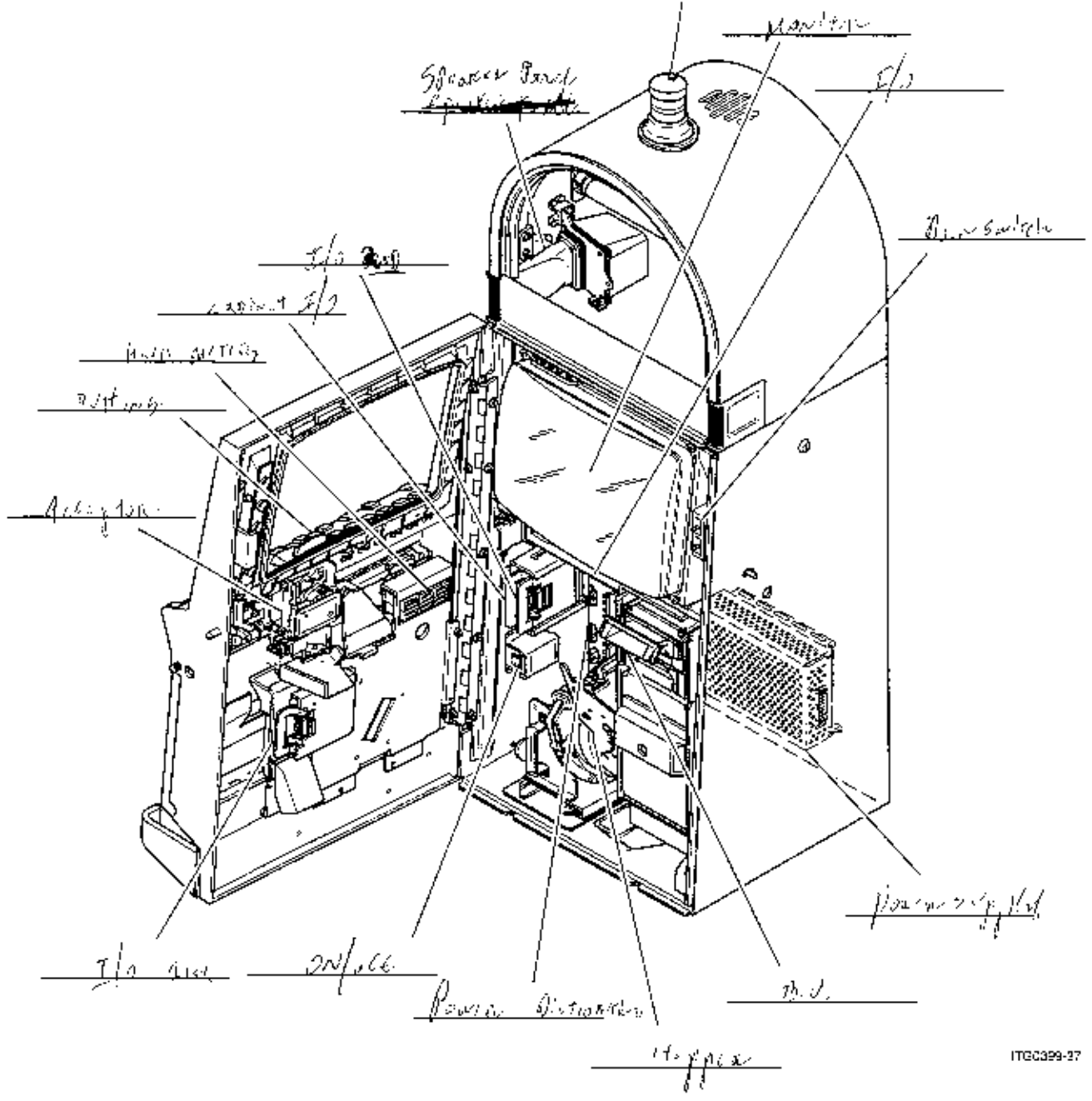
F/P

Control

Power Distribution

M.S.

Typical



Instructions

Answer the questions

Locate the fuses in each machine. Fill in the blanks with the appropriate information.

1. When replacing fuses in any machine always use a fuse with right amp rating rating or amp, lower. Never replace a fuse with a higher rating than designated.
2. What causes a fast blow fuse to blow? Short circuit or wiring error
3. What causes a slow blow fuse to blow? Overload
4. Why do some fuses have ceramic inside? to protect the fuse

Game King / iGame – 115V Machine

Fuse	AMPs	Slow or Fast	What happens when this fuse is unplugged?	What does it protect?
F-1				
F-2				
F-3				

Vision Series– 115V Machine

Fuse	AMPs	Slow or Fast	What happens when this fuse is unplugged?	What does it protect?
F-1				

Instructions

1. Go to a machine with your partner.
2. Remove the coin comparitor.
3. Remove the sample coin.
4. Replace the sample coin.
5. Replace the coin comparitor.
6. Make sure the game resets and works properly so that play can resume.

Instructions

1. Go to a machine with your partner.
2. Without hurting the machine get a coin-in jam message to appear on the screen.

How did you do it?

3. Change machines and resolve their coin-in jam.

What was the fix?

4. Make sure to test your fix so that game play can continue.

Instructions

1. Go to a machine with your partner.
2. Remove the bill acceptor.
3. Set up the testing area per calibration instructions.
4. Perform automatic calibration of the WBA.
5. Replace the bill acceptor.
6. Make sure the game resets and works properly so that play can resume.

REFER TO THE WBA
CALIBRATION MANUAL: 821-271-XX

For this exercise you will need black and white test paper and a harness.

1. Set the DIP switches

DIP SWITCH NUMBER							
8	7	6	5	4	3	2	1
ON	ON	ON	ON	OFF	OFF	OFF	OFF

2. Connect the adjustment harness between the connector on the WBA chassis and the connector on the transport assembly. The WBA will perform its start-up routine. Make sure the motor has stopped before performing calibration.
3. Insert the black end of test paper into the sensor assembly. The WBA will automatically calibrate the optical sensors by moving the test paper in and out of the sensor assembly.
4. Observe the flashing LED indicator on the harness. The LED flashes rapidly if calibration was successful. The LED will flash slowly if not. Repeat the calibration if it did not work.

Instructions

1. Go to a machine with your partner.
2. Remove the bill acceptor.
3. Set up the test area.
4. Perform the test by following the test sheet and instructors directions.
5. Make sure to test your fix so that game play can continue.

FOR MORE DETAILED TESTS
CONTACT JCM TO GET A COPY
OF THEIR WBA MANUAL

This sampling of tests was chosen for this exercise to help to troubleshoot components. To perform these tests you need to install the JCM test & calibration harness.

The LED in the test harness will give one of three possible indications:

Test Successful

The indicator light will be off.

Test Not Successful (error code received)

The indicator light will blink slowly, pause for 1 second, then repeat the blinking code again.

The number of times the indicator blinks between pauses will relate to a specific item in the WBA manual troubleshooting section.

Test Not Successful (return code received)

The indicator light will blink faster than it does for the error code received.

The indicator will blink, then pause for a second, then repeat the blinking code again.

Just like in the error code section though, these blinks will relate to a chart in the WBA manual.

To test your WBA

1. Set DIP switch 8 to ON, all others to OFF. (This puts the WBA in test mode).
2. Select a test from the list below
3. Set the DIP switch for the chosen test.
4. Set DIP switch 8 to OFF to perform test.
5. Stop the test by setting DIP switch 8 to ON.

Instructions

1. Go to a machine with your partner.
2. Remove the monitor from the machine.
3. Replace the monitor.
4. Make sure the game resets and works properly so that play can resume.

Instructions

1. Go to a machine with your partner.
2. Enter the machine software.
3. Adjust the calibration on the touchscreen.
4. Make sure to test your fix so that game play can continue.

Instructions

Please match the definition to the term on the left by putting the correct letter in the space provided.

Terms and Definitions

K	Bill Acceptor	a. The gateway that connects the processor board, connectors and all machine components together.
M	Diverter	b. Device that allows data to be re-written.
G H	Base PROM	c. Error in machine operation that suspends game play.
A	Motherboard	d. An alphanumeric display unit used as status indicator.
J	Key Switch	e. IGT proprietary I/O controller capable of handling 256 inputs and 256 outputs.
D	Seven Segment Display	f. A type of central processing unit that usually has fewer instructions that can be completed in 1-2 clock pulses.
N	Game PROM	g. Chip that contains payable information.
O	Self-test Switch	h. A communication device with four receiver/transmitter channels in one single package.
L	Stepper Motor	i. IGT proprietary interface for communicating with controlled devices (e.g., bill validators, touchscreens, displays, etc.).
C	Tilt	j. Used to reset a jackpot and access the attendant menu.
I	NETPLEX	k. Assembly that accepts valid paper bills and causes the host machine to issue credits.
E	RISC Processor	l. A motor used for precision motion control.
B	EPROM/Flash	m. The portion of the coin-in assembly that channels coins to either the hopper or the drop box.
F	QUART	n. Chip that contains game instructions.
V	SENET	o. Used to access the machine's setup options (operate menu).

Instructions

Go to a machine. Fill in the boxes with the appropriate information.

Menu		Data	Meter Reading	
Game King	Vision		Game King	Vision
		Coin-In		
		Coin-Out		
		Coin to Drop		
		Games Played		
		Total Bills		
		Total \$1 Bills		
		Total \$5 Bills		
		Games Since Last Bill Door Open		
		Games Won		
		Games Lost		
		Jackpot		
		Cancelled Credits		
		Game Version		
		Base Version		
		Bonus Won		
		Coin-In Jams		
		Bill Door Opens		

Instructions

Go to a machine. Answer the questions.

Questions

1. Which test do you use when testing a player panel switch?
2. Where do you find this test in the menu structure? List the steps taken to access it.
3. What happens when the switch is working?
4. Which test page do you use when testing the button lights?
5. Which test page do you use to check "Door Optics?"
6. Perform a "Touchscreen Calibration."
7. How many "Video Tests" are there in Game King Diagnostics?
8. Perform a "Bill Acceptor" test.
9. Which test do you use when testing the service light (candle)?
10. What are you testing under the "Quarts/Processor Outputs" test?
11. What are these LEDs used for?
12. Which test page do you use when testing coin-in optics?
13. Perform an auto-configure of the "NETPLEX."
14. Which test do you use when testing the VFD?

Instructions

1. Go to a machine with a partner.
2. Enter the Game History option on that machine.
3. Answer the first three questions about the 10th game back.
4. Find Bills In and answer the fourth question.
5. Repeat for each machine in the room.

Questions

1. Was the game a winner or loser?

Machine 1	
Machine 2	
Machine 3	
Machine 4	

2. How many coins were bet?

Machine 1	
Machine 2	
Machine 3	
Machine 4	

3. If the game was a winner, how much was won?

Machine 1	
Machine 2	
Machine 3	
Machine 4	

4. What were the last three bills accepted?

Machine 1	
Machine 2	
Machine 3	
Machine 4	

Instructions

1. Go to a machine with a partner.
2. Enter the set-up menu for your machine.
3. Set up the following specifications.
4. Perform tests.

Specifications

Mode	Set to the following specifications
Sound Levels	Mid-Range
Attract Delay	50 Seconds
Bill Acceptor Pay Mode	Credit Only
Bill Acceptor	Enabled
Bill Acceptor Tilt	No Tilt
Maximum Hopper Pay	100
Bill Reject Limit	4
Partial Pay Amount	200
Progressive Option	Stand Alone
Set Clock	Current Time
Perform Hopper Test	
Perform Paytable Test	