



# OWNERS AND SERVICE MANUAL

INNOVATIVE CONCEPTS IN ENTERTAINMENT INC.

# TABLE OF CONTENTS

|                                    |              |
|------------------------------------|--------------|
| INTRODUCTION.....                  | PAGE 3       |
| • GAME FEATURES                    |              |
| • GAME PLAY                        |              |
| ASSEMBLY.....                      | PAGE 4 - 5   |
| • SAFETY PRECAUTIONS               |              |
| • GAME SET-UP                      |              |
| CUSTOMIZING YOUR GAME.....         | PAGE 6 - 8   |
| • ENTERING SET-UP MODE             |              |
| • CHANGING GAME SETTINGS           |              |
| • PROGRAMMING MODES                |              |
| QUICK TROUBLESHOOTING.....         | PAGE 9       |
| MAINTENANCE & TROUBLESHOOTING..... | PAGE 10 - 14 |
| • OPERATIONAL BACKGROUND           |              |
| • MECHANICAL REPAIR                |              |
| • MECHANICAL MAINTENANCE           |              |
| • ELECTRONIC & ELECTRICAL REPAIR   |              |
| OPTIONAL ACCESSORIES.....          | PAGE 15      |
| • TICKET DISPENSER                 |              |
| • DOLLAR BILL VALIDATOR            |              |
| ABOUT LINKING.....                 | PAGE 16      |
| PARTS LISTING.....                 | PAGE 17      |

# INTRODUCTION

## GAME FEATURES

**NBA HOOPS™** is a revolutionary concept in Coin Operated basketball games. You will see that this game includes many features which make it the obvious choice for your location

**NBA HOOPS™ PLAY.** **NBA HOOPS™** incorporates a STATIONARY basket that is user friendly and realistic. Fun and easy to play for players of all ages, yet challenging enough for even the expert basketball players. Practice your basketball skills and try to better your last score or compete against three other players.

**CONTROL PANEL.** Attractive LED displays are used to display all scoring and vital information such as time, credits and high score. The control panel is laid out in a convenient user friendly fashion, making it easy for players to operate.

**HEAVY DUTY CONSTRUCTION** is incorporated throughout the game by using only heavy gage metals and plastics. The game can be assembled and disassembled many times without any harm to the game. You will appreciate this feature if you move your games often.

**HIGH TECH GAME ELECTRONICS.** Solid state electronics are used throughout the game for their rugged reliability as well as making it virtually impossible to connect harnessing the wrong way. Heavy duty optical sensors are used throughout.

Digital sound effects are used for optimum dependability. Over twenty sound effects are incorporated into the sound effect circuitry. The game electronics have been highly integrated into the Main PC Board assembly, making it easy to repair games. The game has a full feature self-test system to make troubleshooting easier.

**OPTIONS.** A ticket dispenser and/or a dollar bill validator can be ordered with your game.

## GAME PLAY

**NBA HOOPS™** is an electromechanical coin operated amusement game designed to be played by one to four players.

**NBA HOOPS™** is a game similar to the traditional basketball games already on the market. However, we have made this an even more exciting game. The net remains stationary as the player shoots over and over. Two points are awarded for each basket scored. When 10 seconds remain in the game, it awards the player three points for all baskets scored.

**LINKING** is a popular option used in locations where more than one game is to be used. The games are "linked" to add direct head to head action between the game players. This option is built into each Main PC Board, and is easy as connecting a phone line and setting a number in the programming mode.

# ASSEMBLY

## BEFORE YOU BEGIN

**WARNING: WHEN INSTALLING THIS GAME, A 3 PRONG GROUNDED A.C. RECEPTACLE MUST BE USED. FAILURE TO DO SO COULD RESULT IN INJURY TO YOURSELF OR OTHERS. FAILURE TO USE A GROUNDED RECEPTACLE COULD ALSO CAUSE IMPROPER GAME OPERATION, OR DAMAGE TO THE ELECTRONICS**

**DO NOT DEFEAT OR REMOVE THE GROUNDING PRONG ON THE POWER CORD FOR THE SAME REASON AS GIVEN ABOVE. USING AN IMPROPERLY GROUNDED GAME COULD VOID YOUR WARRANTY.**

**HAVE A QUALIFIED ELECTRICIAN CHECK YOUR A.C. RECEPTACLE TO BE SURE THE GROUND IS FUNCTIONING PROPERLY.**

## TOOLS NEEDED

Before you start, you will need the following items:

- 7/16" Combination Wrench
- 7/16" Deep Well Socket
- Ratchet
- Side Cutters
- Adjustable Pliers
- #2 Square Drive Bit
- 5/32" Security Wrench

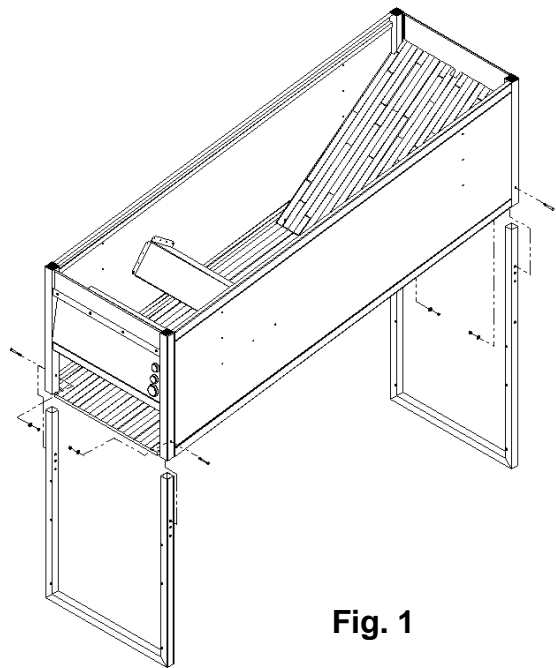
If you plan on moving your game often, or would like to speed up assembly, a cordless Drill is a good idea.

Your game requires a **MINIMUM CEILING HEIGHT** of 96" (8 feet). Check clearance before proceeding.

## SET-UP

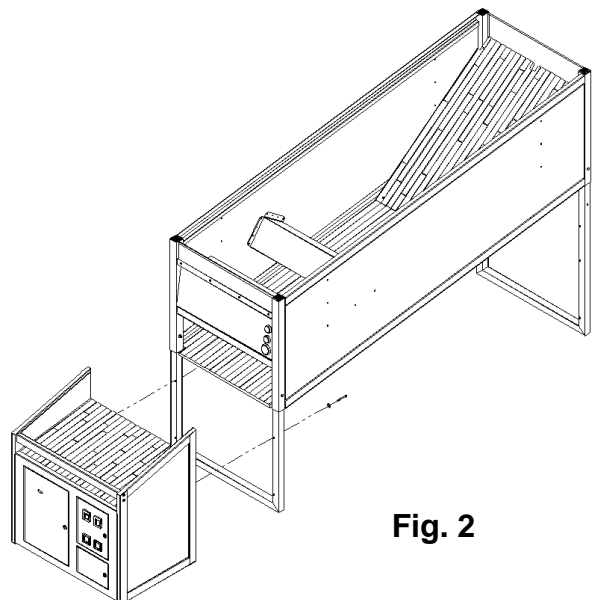
1. To begin, remove the game from the shipping containers.
2. Locate the main framework of the game. It may be easier to assembly if the framework is laid on its side.
3. Locate the two "U" shaped legs, and insert them into the bottom of the frame. At the front of the frame, use the set of holes closer to the bottom of the legs. At the rear of the frame, use the holes closer to the top of the legs. Secure with (4) 1/4-20 X 2 1/2" bolts, (8) flat washers and (4) Nylock nuts. (See Fig. 1)
4. Stand the frame up and move it into its permanent position. It is a good idea to carry the frame rather than slide it.

**NOTE: IT WOULD BE A GOOD IDEA TO GET HELP WHEN LIFTING THE GAME TO THE UPRIGHT POSITION. THREE PEOPLE RECOMMENDED. THIS WILL KEEP THE GAME FROM SLIDING WHEN LIFTED.**



**Fig. 1**

5. Move the cabinet to the front of the frame and bolt it to the frame by installing the mounting bolts through the back of the front legs and into the front cabinet's mounting holes. Secure with (4) 1/4-20 X 3" security head Allen bolts and 4 flat black washers. (See Fig. 2)

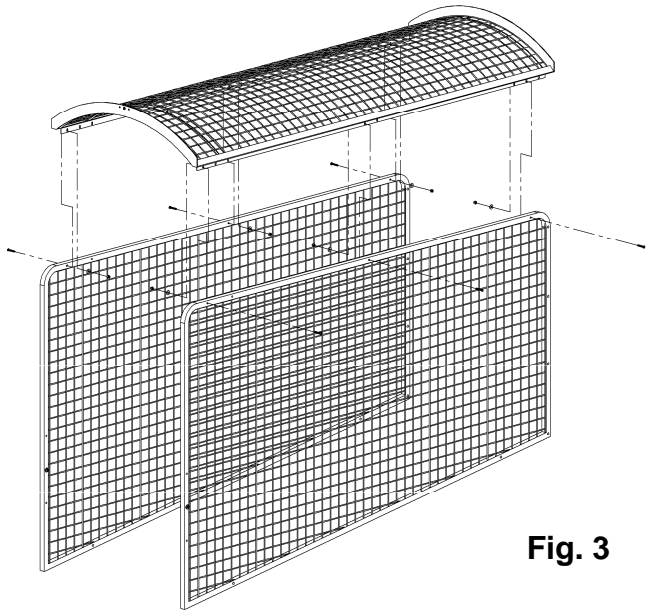


**Fig. 2**

6. Locate the harness that is tie wrapped up at the front of the frame. Cut the tie wrap and feed the harness through the frame and into the opening in the rear of the cabinet. Connect the harness to the connector located inside the cabinet.

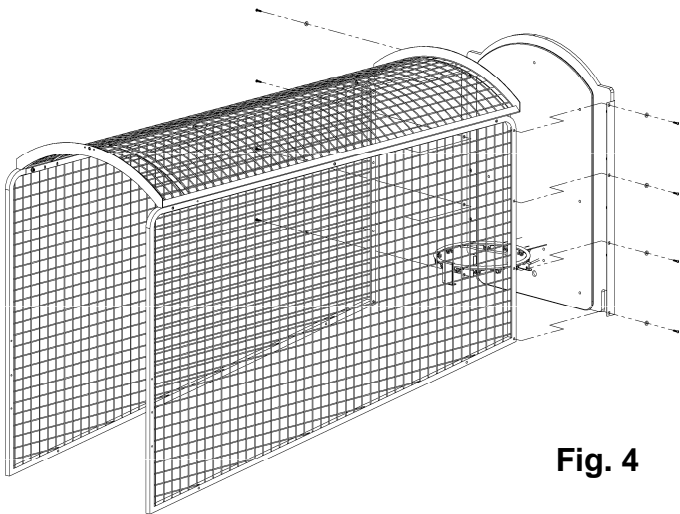
# ASSEMBLY

7. Assemble the cage framework using the two large frame sides and the top. Assemble using (6) 1/4-20 X 1 1/2" button head bolts, (12) flat washers and (6) 1/4-20 Nylock nuts. (See Fig. 3)



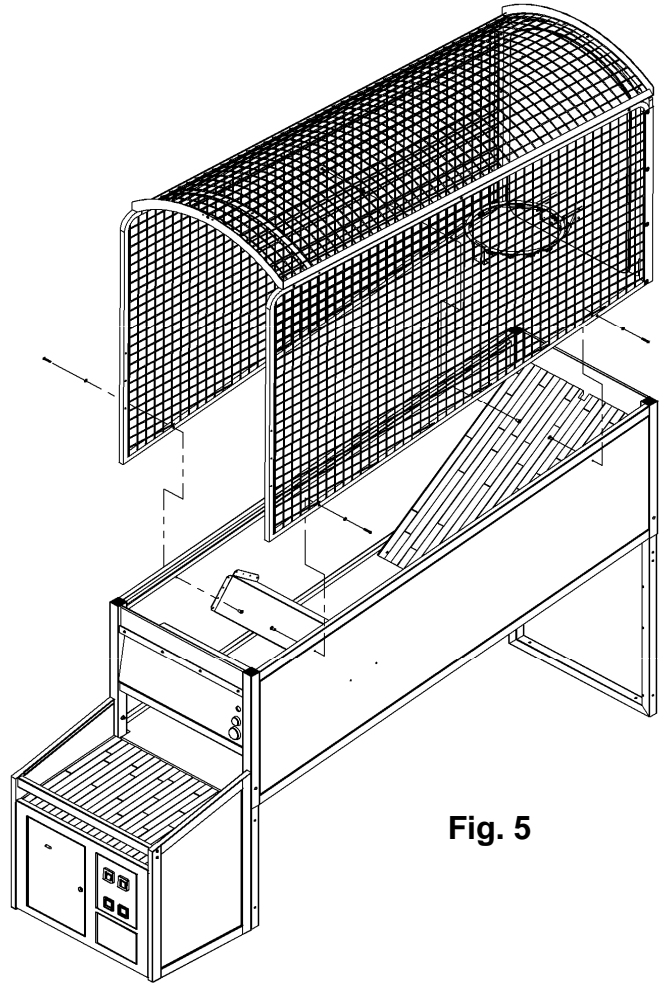
**Fig. 3**

8. Attach the backboard assembly to the cage framework using (8) 1/4-20 x 1" button head screws and (6) flat black washers. (See Fig. 4)



**Fig. 4**

9. Install the Cage Frame assembly to the game. Install by lifting the frame outside the game to mounting hole and secure with (4) 1/4-20 X 1 1/2" button head screws, (4) flat black washers (from the outside of the Cage Frame) and (4) 1/4-20 joint connectors. (from the inside of the cabinet) (See Fig. 5)



**Fig. 5**

10. Feed the black/gray sensor cable through the backboard harness hole. Feed the green/yellow ground wire from the hoop through the same hole. Connect the three single pin mate-lock connectors from the black/gray sensor cable into the gray chassis cable, and the green/yellow wires that all run along the right hand side of the game. Connect the single pin mate-lock connectors as follows:

White to White  
Black to Black  
Red to Red  
Green/Yellow to Green/Yellow

**NOTE: DO NOT OVER TIGHTEN THE BOLTS IN THE PIPES, OR THE INSERTS COULD BE DAMAGED. BE CAREFUL NOT TO CROSS THREAD THE BOLTS IN THE PIPES.**

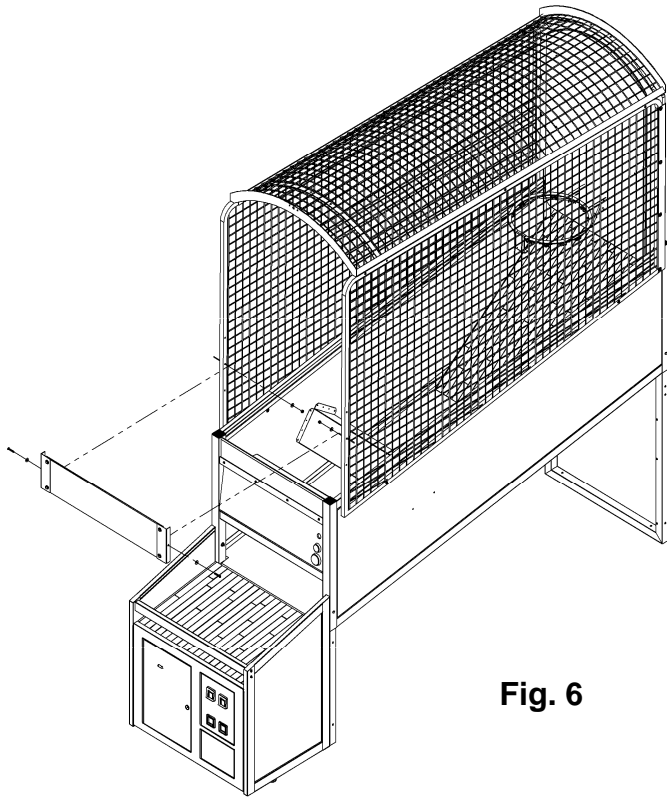
# ASSEMBLY

## LINKING

11. Install the rebound guard using (2) 1/4-20 X 1 1/2" button head screws, (4) flat washers and (2) Nylock nuts. (See Fig. 6)

For linking hook-up instructions, see Option #19 under "Customizing".

THANK YOU FOR YOUR PURCHASE OF THE  
**NBA HOOPS™** BASKETBALL GAME.



**Fig. 6**

12. Put the basketballs into the game. BE SURE THAT THEY ARE NOT OVER INFLATED. THIS COULD CAUSE THE BALL GATE TO OSCILLATE EXCESSIVELY.
13. Plug the game in and follow the game set-up procedures listed in this manual.
14. Open the control panel on the game by removing the 3 Allen head bolts and washers that secure the panel to the frame. Tilt the panel forwards, and connect the battery harness to the Main Board. The battery connector will be the only one loose in the cabinet. Reattach the control panel.
15. Test the game completely after set-up, and call our service department if you have any problems, questions or comments.

### **I.C.E. SERVICE DEPARTMENT**

**716-759-0360**

NORMAL BUSINESS HOURS ARE:

MONDAY – FRIDAY, 9:00 AM TO 6:00 PM EST

# CUSTOMIZING YOUR GAME

## CUSTOMIZING YOUR GAME

This section will discuss subjects such as setting up credits, time per game, awards, etc. the section below will show how to enter into the programming mode and how to adjust many of the game's operating parameters.

### ENTERING SET-UP MODE

You must enter set-up mode to adjust all of the game features. This can be accomplished in the following manner:

1. Open the game's coin door. This is the upper door located on the upper right side of the lower cabinet.
2. Locate the Counter / Programming button. It is located on the left hand side of the bracket that is attached to the cash box enclosure. The Counter / Programming button instruction decal is located on the cash box enclosure. This will give you a brief description of the features outlined below, as well as how to use them.
3. Press the Counter / Programming button.
4. If you wish to only read the "Counter", look at the "Player" displays to get the latest counter information. The display should be read from the bottom left (Player#4) position. Once you are done reading the counter, press the Counter / Programming button once again to return to game play.

### CHANGING GAME SETTINGS

WHEN YOU PUSH THE Counter / Programming button, you will notice that along with the counter numbers shown in the "Player #" locations, there is a #1 shown in the "Credits / Time Left" display. This is the counter's "mode" number. Each programmable "mode" on the game has a number associated with it.

1. To advance through the different modes, press the "Start" button. Each push of the button will advance you to the next mode. Whenever you are done with any programming changes, push the Counter / Programming button to return to normal game play.
2. The current value for each mode will be shown in the "Player #4" location.
3. To change the shown value to a lower number, press the middle "Player Select" button.

## PROGRAMMING

### MODE #1 COUNTER

The counter is used to keep a running total of games played on the machine since it was first built. This counter is not re-settable unless power is removed from the battery backup on the PC Board. (small round battery)

NOTE: If power is removed from the PC Board, all other custom game settings will have to be re-entered.

### MODE #2 COIN MECHANISM #1

This adjusts the amount of coins needed to receive 1 credit on the game's LEFT HAND COIN MECHANISM. Set this number to reflect how many coins per credit. Example: 2 Quarters per credit—enter the number 2.

### MODE #3 COIN MECHANISM #2

This adjusts how many coins are required to receive 1 credit on the game's RIGHT HAND COIN MECHANISM. This mechanism is set differently, so it can be used for fractional credits. For normal use, set a "1" for this mode. If you wish to use this for coins with a different value than that of coin mech #1, contact our service department for set-up information for your particular application.

### FREE PLAY

You can set your game up for free play by adjusting the coins per credit for coin 1 to "0".

### MODE #4 CREDITS PER DOLLAR BILL

This option controls how many credits you will receive for each dollar bill inserted.

### MODE #5 CURRENT CREDITS

This displays the credits currently in the game. You can manually remove or add credits to the game by changing the value of this number.

### MODE #6 TIME PER CREDIT

This adjusts, in seconds, how long each game will last. The game can be adjusted from 20 to 99 seconds. The recommended time is 40 seconds.

# CUSTOMIZING YOUR GAME

## MODE #7 GAME POINTS PER AWARD

This adjusts how many tickets are given away for the game. The number displayed sets the points required to win an award. Setting this number to "0" will turn off the dispenser.

## MODE #8 NOT USED

## MODE #9 NOT USED

## MODE #10 JUST FOR PLAYING

This feature is valuable in 2 respects.....

1. This can be set to any value desired, so that if a player, especially a young child who can not get the minimum points required to earn awards, can still be dispensed.
2. This setting can give a predetermined amount of tickets or cards per game, REGARDLESS of points scored, if the "points per award" and "winner" settings are set to "0".

## MODE #11 AWARD THRESHOLD

This mode is used to set the minimum number of points needed to get any awards whatsoever. Set the number to match the score you wish to achieve before awards are dispensed. Setting this number to "0" turns the option off.

## MODE #12 WINNER AWARDS

This setting is used by itself if you want the WINNER ONLY to get awards in a multiple player game. The number of awards dispensed is determined by the number selected. A setting of "0" will turn off this option. The winner awards are in addition to any other awards being dispensed.

## MODE #13 NOT USED

## MODE #14 ATTRACT MODE ON / OFF / TYPE

Use this setting to control the type of attract mode you would like. Setting a "1" gives you attract mode sound only. Setting a "0" turns the attract mode off.

## MODE #15 ATTRACT INTERVAL

This determines the length of time between attract modes. Change this number to change the amount of time in MINUTES between attract modes. Setting this number to "0" turns this option off.

## MODE #16 FREE GAME THRESHOLD

This option allows you to select a POINT THRESHOLD, where a free game will be awarded for the game. Once this threshold is reached, a FREE GAME will be awarded to the player, playing the game at that time. The free game is awarded immediately after completion of the paid game where the threshold had been broken.

Setting the value of this option to "0", turns the option off. Any other value sets that as the threshold value. We recommend 40 POINTS as a good starting point for the game.

## MODE #17 NOT USED

## MODE #18 NOT USED

## MODE #19 LINKING STATION I.D.'S

NOTE: FAILURE TO OBSERVE THE INSTRUCTIONS LISTED BELOW WILL RESULT IN IMPROPER OPERATION OF ANY GAMES WHICH HAVE BEEN LINKED TOGETHER.

Each linked game must be connected with a modular phone line. Use no longer than a 12 ft. cord to link the games together.

Connect the games together by snapping a phone line jack on the back of the Main PC Board on the first game. Connect the cord to the jack on the back of the Main PC Board on the second game. When more than 2 games are linked, connect another phone cord to the back of the Main PC Board on the second game and run it to the preceding game and so on.



# CUSTOMIZING YOUR GAME

When the linking option is used, each game must have it's own unique "I.D. Number" so that the games can properly link and talk to each other. Enter Mode #19 on all games, then set a number that is different for each game. The number used may be 0 through 13. the numbers 14 and 15 are reserved for the Jackpot Marquee. (Sold as a separate option)

Observe that game I.D.'s on all games are different, then exit programming mode on all games at the same time.

## MODE #20 CREDIT DISCOUNTING

This mode enables the game to give the players an extra game when multiple coins are inserted. The number shown will be how many coins must be inserted for an extra game. Example: setting a "6" would mean that for every 6 coins inserted, an extra game would be given. Setting a "0" turns this mode off. The default value for this mode is "0".

## MODE #21 NOT USED

## MODE #22 BEACON LIGHT POINT THRESHOLD

This option allows you to select a point threshold, where the optional point beacon light will turn on. Once this point threshold value is reached, the beacon light will turn on.

Setting the value to "0" turns the option off. Any other value sets that as the threshold value.

**NOTE: WHEN SETTING UP MULTIPLE GAMES IN THE SAME LOCATION, IT IS A GOOD IDEA TO TURN THE ATTRACT MODE OFF ON ALL BUT 1 GAME.**

## BURN IN SELF TEST MODE

This allows you to enter the BURN-IN SELF TEST MODE, which can be very handy in problem diagnostics. To enter this mode, press and hold the GAME SELECT and START buttons at the same time WHEN IN MODE #1.

Perform the following tests when in this mode:

1. Press the face panel push buttons to check for their proper operation. An audible sound will be heard if working properly.

2. The face panel push buttons should light if they are working correctly.
3. Move the coin mech micro switch wires. An audible sound will be heard if they are working correctly.
4. Throw a ball into the basket. If the sensor is working correctly, an audible sound will be heard.

To exit the self test mode, press the "Counter / Programming" button inside the coin door.

## GAME TESTING

It is easy and advisable to test your game after installation. After the game is set up and all options have been set up correctly, perform the following tests:

1. Test for proper acceptance of money.
2. Test for proper dispensing of tickets, if you have set that option.
3. Test for proper game play, including proper scoring.
4. Test for proper retention of game memory, when the game power is shut off and turned back on.
5. Be sure to check your electronic game counter and write down any information you may wish to record.
6. When testing linked games, be sure all of the game scores show up properly.

# QUICK TROUBLESHOOTING

| PROBLEM   | PROBABLE CAUSE   | SOLUTION   |
|---|--|--|
| NO SPOTLIGHT  | BAD FUSE AT POWER MODULE<br>GAME UNPLUGGED<br>TRIPPED CIRCUIT BREAKER<br>DAMAGED POWER CORD<br>BURNED OUT BULB<br>GAME WIRING BAD                                  | INSPECT MAIN FUSES<br>CHECK POWER CORD<br>CHECK BREAKER BOX<br>REPLACE CORD<br>REPLACE BULB<br>CHECK WITH VOLTMETER  |
| BALL GATE WILL NOT OPEN OR CLOSE                        | BAD OR LOOSE MICROSWITCH<br>BAD FUSE ON MAIN PC BOARD<br>BAD WIRING TO SWITCH OR MOTOR<br>BAD MAIN PC BOARD<br>BAD GEAR BOX<br>BALL GATE STOP IMPROPERLY SET       | CHECK OR RETIGHTEN<br>CHECK ALL FUSES<br>CHECK WITH VOLTMETER<br>REPAIR OR REPLACE PC BOARD<br>REPLACE GEAR BOX<br>RE-ADJUST UNTIL CAM TOUCHES MICROSWITCH         |
| PUSHBUTTONS DO NOT LIGHT OR WORK PROPERLY               | BAD BULB IN BUTTON<br>BAD MICROSWITCH IN BUTTON<br>BAD WIRING TO MAIN PC BOARD<br>BLOWN FUSE ON MAIN PC BOARD<br>BAD MAIN PC BOARD<br>BUTTON STUCK SHUT            | CHANGE LIGHT BULB<br>REPLACE MICROSWITCH<br>CHECK WITH VOLTMETER<br>CHECK ALL FUSES<br>REPLACR MAIN PC BOARD<br>REMOVE AND CLEAN BUTTON                            |
| BALLS DO NOT SCORE CORRECTLY                            | BAD SENSOR<br>SENSOR DIRTY<br>REFLECTIVE STRIP DIRTY<br>BAD HARNESSING OR WIRING<br>BAD MAIN PC BOARD<br>BAD BATTERY   | REPLACE SENSOR<br>CLEAN (USE NO SOLVENTS)<br>CLEAN (USE NO SOLVENTS)<br>CHECK WITH VOLTMETER<br>REPLACE MAIN PC BOARD<br>CHECK CHARGING CIRCUIT OR REPLACE BATTERY |
| GAME DOES NOT TAKE OR ADD MONEY CORRECTLY               | BAD MAIN PC BOARD<br>BAD MICROSWITCH OR DBV<br>BAD WIRING TO MICROSWITCH OR DBV<br>GAME PROGRAMMING SET WRONG  | REPLACE MAIN PC BOARD<br>REPLACE SWITCH OR DBV<br>CHECK WITH VOLTMETER<br>RESET GAME PROGRAMMING   |
| GAME DOES NOT DISPENSE TICKETS CORRECTLY                | BAD TICKET DISPENSER<br>BAD WIRING TO DISPENSER<br>OUT OF TICKETS<br>TICKET SENSOR IS DIRTY<br>DISPENSER JAMMED<br>GAME PROGRAMMING SET WRONG<br>BAD MAIN PC BOARD | REPLACE TICKET DISPENSER<br>CHECK WITH VOLTMETER<br>ADD TICKETS<br>CLEAN SENSOR ON DISPENSER<br>REMOVE TICKET JAM<br>RESET PROGRAMMING<br>REPLACE MAIN PC BOARD    |
| NO OR LOW GAME SOUND                                    | VOLUME TURNED DOWN<br>DEFECTIVE VOLUME POT<br>BAD SPEAKER<br>BAD WIRING TO MAIN PC BOARD<br>BAD MAIN PC BOARD  | TURN UP VOLUME<br>REPLACE POT<br>REPLACE SPEAKER<br>CHECK WITH VOLTMETER<br>REPLACE MAIN PC BOARD  |
| BALLS DO NOT DISPENSE QUICKLY ENOUGH OR JAM IN THE GAME | GAME HAS EITHER TOO MANY OR TOO FEW BALLS  | GAME IS DESIGNED TO WORK WITH 7 BALLS  |
| ALARM GOES OFF FREQUENTLY                               | BALL GATE CAN NOT CLOSE<br>BALL SENSOR WORKING INCORRECTLY<br>BAD MAIN PC BOARD<br>BALLS JAMMED IN GATE  | (SEE BALL GATE)<br>(SEE BALL SENSORS)<br>REPLACE MAIN PC BOARD<br>TOO MANY BALLS IN GAME   |
| DISPLAY LED'S DO NOT WORK PROPERLY                      | BAD MAIN PC BOARD<br>BAD FUSE ON MAIN PC BOARD   | REPLACE PC BOARD<br>CHECK ALL FUSES  |
| GAME WILL NOT RETAIN CUSTOM PROGRAM SETTINGS            | BAD MAIN PC BOARD<br>BAD OR WEAK MEMORY BATTERY  | REPLACE PC BOARD<br>REPLACE BATTERY ON MAIN PC BOARD   |
| LINKED GAMES NOT SCORING OR WORKING CORRECTLY           | GAME ID'S SET THE SAME   | CHANGE ALL GAMES TO DIFFERENT ID NUMBERS   |

# MAINTENANCE & TROUBLESHOOTING

## OPERATIONAL BACKGROUND

The following will outline the basic operating principles of the NBA HOOPS™ basketball game.

The game incorporates a Reflex Photoelectric polarized sensor detection system for counting balls that go through the hoop.

The ball gate uses micro switches to determine positioning of the gate, which are activated by the cam on the ball gate shaft.

The gear motor uses a combination of hardware and software control to protect against over current damage. When an over current condition is detected, the motor will shut off automatically. The game microprocessor will then decide whether or not the motor should be turned on. It will also determine at that time which way the motor should run.

## MECHANICAL REPAIR

**IMPORTANT: USE ONLY ICE REPLACEMENT PARTS WHEN SERVICING YOUR GAME. USING NON-ICE APPROVED PARTS COULD VOID YOUR WARRANTY, AND COULD CAUSE SERIOUS DAMAGE TO THE GAME OR INJURY TO OTHERS.**

**IF YOU HAVE ANY QUESTIONS REGARDING REPAIR AFTER READING THIS SECTION, CALL OUR SERVICE DEPARTMENT BEFORE PROCEEDING AT:**

### **I.C.E. SERVICE DEPARTMENT**

**716-759-0360**

**NORMAL BUSINESS HOURS ARE:**

**MONDAY – FRIDAY, 9:00 AM TO 6:00 PM EST**

### **BALL GATE SERVICE:**

- Remove both battery and AC power
- Unfasten the (6) square drive screws and remove the ball gate housing, located on the right hand side of the ball gate assembly.
- Unbolt the control panel from the front of the game to gain access to the control panel.
- Unplug the two mate-lock connectors (2 pin connector with the yellow/black and brown/white wires and the three pin connector with the red, black and blue wires) located to the right of the transformer. Cut any tie-wraps holding the harnessing.
- Remove the two bolts that hold the ball gate bearing in place, located on the left hand side of the assem-

bly. (Hint: a long extension on a ratchet can be helpful for this operation.)

- Pull the ball gate from the end by the bearing towards you. (the front of the game)
- The gear motor can now be pulled away from the retaining bracket.
- Remove the two Allen head set screws to remove the ball gate from the gear motor.
- NOTE: When removing wires from the micro switches or motor, it is VERY important to make sure all wires are returned to their proper terminals. Failure to do so will result in improper operation of the ball gate and could damage the game. The wires are color coded so it will be easy to document where each wire goes.
- IMPORTANT: Mark the position of the micro switch mounting bracket so that the switch actuators will line up correctly with the cam on the ball gate when the unit is re-assembled.
- Use thread locking compound on the Allen head set screws when re-assembling the ball gate to the gear motor.
- Assemble in reverse order of disassembly. Tighten all hardware securely.
- Re-test for proper operation
- Temporarily shut off AC power, reconnect battery and turn AC power back on.

### **LIGHT BULB REPLACEMENT:**

- **WARNING: TURN OFF GAME POWER BEFORE REPLACING THE LIGHT BULB.**
- Replace the bulb by removing the screws that secure the control panel to the game. Carefully remove the control panel, and set it on the front of the game. Replace the light bulb and install the control panel to the game.

### **REPLACEMENT BULB:**

**110 WATT ROUGH SERVICE SPOTLIGHT**

### **HOOP SENSOR REPLACEMENT:**

- Turn off all AC power to the game and unplug the battery back-up circuitry. (disconnect the 2 pin mate-lock connector from the PC Board)
- Standing in the ball return tray, unscrew the (2) screws and remove the bracket that contains the sensor from the bracket on the back of the hoop.

# MAINTENANCE & TROUBLESHOOTING

- Disconnect the single mate lock connectors from the gray sensor cable behind the backboard. Remove the gray wire feeding through the backboard harness hole. Remove the sensor assembly. Note how the sensor cable is attached.
- Remove the sensor from the bracket by pushing the (2) tabs on the top of the sensor, through the bracket. Snap in the new sensor.
- Reattach the sensor bracket to the hoop bracket and reconnect the sensor cable. Be sure to route the sensor cable in the same manner.

## MECHANICAL MAINTENANCE

IMPORTANT: FOLLOW THE SUGGESTED MAINTENANCE TO ENSURE THE BEST OPERATION POSSIBLE FOR YOUR GAME.

### GENERAL CLEANING

Clean the surfaces of the cabinet and decals with a commercial cleaner such as 409™ or Fantastic™. Do NOT use cleaners such as Wildcat pinball cleaner or alcohol. It can take the finish off of the decals. Use Pledge™ on all plastic and painted surfaces. This product works especially well on clear plastics. Please note that other spray polishes do not work as well.

### BASKETBALLS

The basketballs should be checked every week for proper inflation. A bicycle tire pump and inflating needle can be purchased at any sporting goods store and most large discount stores.

Keeping the balls properly inflated will make it more difficult to pull them past the ball gate. It will also create more realistic basketball action when interacting with the hoop. Any 8" basketball will work with this game.

NOTE: DO NOT OVER-INFLATE THE BASKETBALLS. THIS CAN CAUSE DAMAGE TO THE BALL AND SHORTEN THE LIFE OF THE BALLS.

## ELECTRONIC AND ELECTRICAL REPAIR

The following section will describe repair procedures and trouble shooting hints for the game electronics.

Please read the section "Operational Background" in the beginning of Maintenance and Trouble Shooting to get a

good understanding of the game's basic operating parameters.

WARNING: EXERCISE CAUTION WHENEVER WORKING WITH ELECTRONICS, THEY CAN BE VERY SUSCEPTIBLE TO DAMAGE FROM SHORT CIRCUITING, OR PHYSICAL ABUSE. ALWAYS UNPLUG THE GAME WHEN WORKING ON HIGH VOLTAGE AREAS OF THE GAME, SUCH AS THE TRANSFORMER.

USE EXTREME CAUTION WHEN USING VOLTME-TERS TO DO CIRCUIT CHECKS IF THE GAME POWER HAS BEEN LEFT ON.

ALWAYS REMOVE THE BATTERY BACK-UP POWER WHEN WORKING ON THE GAME. THIS IS NECESSARY AS SOME CIRCUITS ARE CONSTANTLY UNDER POWER FROM THE BATTERY.

WHEN USING A VOLTMETER, BE SURE IS SET TO THE CORRECT VOLTAGE OR RESISTANCE RANGE BEFORE USING. THIS CAN PREVENT POSSIBLE DAMAGE TO THE PC BOARD OR MISDIAGNOSIS.

ALWAYS REMOVE POWER TO THE GAME WHEN PLUGGING OR UNPLUGGING PC BOARDS.

IT IS NECESSARY TO USE ICE REPLACEMENT PARTS TO CONTINUE WARRANTY COVERAGE. USE OF NON-ICE APPROVED PARTS WILL NOT ONLY VOID YOUR WARRANTY, BUT COULD CAUSE SERIOUS HARM TO THE GAME, OR CAUSE SERIOUS BODILY INJURY.

IF YOU HAVE ANY QUESTIONS REGARDING REPAIR AFTER READING THIS SECTION, CALL OUR SERVICE DEPARTMENT BEFORE PROCEEDING AT:

### I.C.E. SERVICE DEPARTMENT

**716-759-0360**

NORMAL BUSINESS HOURS ARE:  
MONDAY – FRIDAY, 9:00 AM TO 6:00 PM EST

### FUSES

Fuses are the first items that should be checked when the game is inoperable or works incorrectly.

There are 5 fuses in the game. Two fuses are located in the electronics control panel on a fuse block to the right of the fan, above the transformer.

To check or service the fuses, FIRST REMOVE THE POWER CORD. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH. Using a small flat blade screwdriver, pry the fuse from the fuse block. Pull the fuse from the fuse block and test the fuses. Be sure to replace the fuses with the same type and value.

# MAINTENANCE & TROUBLESHOOTING

There are 3 fuses located on the Main PC Board. These fuses protect the low voltage sides of the game, the 5 volt and 12 volt sides, AC & DC. Be sure game power is off when checking or replacing these fuses. Replace the Main PC Board fuses with the original type and value. USE SLO-BLO MDQ TYPE fuses only.

Other types of slo-blo fuses may cause unexpected problems with the game.

## TRANSFORMER

ALL AC POWER MUST BE REMOVED FROM THE GAME WHEN SERVICING THIS COMPONENT. IT IS A GOOD IDEA TO ACTUALLY REMOVE THE POWER CORD FROM THE WALL OR FLOOR OUTLET WHEN CHANGING THE TRANSFORMER.

CAREFULLY document where each color wire goes BEFORE removing any wires.

Remove the 4 screws that hold the transformer to the game frame.

Replace and reconnect the transformer.

TAKE ANY FAST-ONS THAT WERE ON THE OLD TRANSFORMER COVERING THE UNUSED AC TERMINALS OFF AND TRANSFER THEM TO THE NEW TRANSFORMER. THIS IS NECESSARY AS THE LEADS ON THE TRANSFORMER HAVE POWER ON THEM.

## CHANGING AC VOLTAGES

When you receive your game from the factory, it should be set to the proper AC voltage. If for some reason however, it needs to be set to a different AC voltage, follow these directions.

Unplug the game from the AC outlet.

The AC input taps for the transformer are located on the front left hand side of the transformer, as viewed from the opening of the access door.

The AC taps can be further identified by the fact that there are 5 taps in a row. (The only place on the transformer where there are 5 taps in a row.)

The bottom tap is the 0 volt tap. One side of the AC line should always be left attached to this terminal.

The 5 taps FROM THE BOTTOM OF THE TRANSFORMER UP are as follows:

240 VAC  
210 VAC  
115 VAC  
90 VAC  
0 VAC

These numbers are also indicated on the transformer itself.

The AC wire that is on one of the above taps is the only wire you should move. Please use a blank fast-on, on any open terminals, to protect against shock hazards.

## MAIN PC BOARD

IMPORTANT: BEFORE REMOVING THE MAIN PC BOARD OR CHANGING THE MEMORY BATTERY, GO INTO THE OPTIONS MODE AND RECORD YOUR COUNTER AND GAME SETTINGS, SO THEY CAN BE RE-ENTERED AFTER SERVICING HAS BEEN COMPLETED.

The Main PC Board is located on the back of the Control Panel. Remove the 3 bolts that hold the panel to the game and flip the Control Panel out.

Remove all AC power before removing the Main PC Board.

Disconnect all mate-lock connectors from the PC Board.

Remove the 6 retaining fasteners and remove the PC Board.

Install in the reverse order.

If you are installing a new memory battery or new PC Board, after installation, reset all custom game programming into system memory.

## BALL SENSORS

Proper operation of the Basketball sensor is crucial to the proper operation of the game. If you find that there is no scoring or sound when a basket is made during a normal game then you should follow the Sensor troubleshooting hints provided below.

The basketball sensor is an optical device that uses a 90-degree reflector to minimize changes in ambient light conditions of your game during the day. The system comprises 4 total components for proper operation. The first component is the main board, second is the harness that connects the main board to the third component, the optical sensor, and finally the reflector. All of these components need to work properly for scoring to be achieved during game play.

The optical sensor transmits a polarized beam of near-infrared light to the reflector, which turns the light 90 degrees and returns the reflected beam back to the sensor. This sensor is located on the back of the hoop. You will find that there is a visible red light that is facing toward the

# MAINTENANCE & TROUBLESHOOTING

player and points to the reflector. On the back of the sensor you will find another light that indicates the status of the sensor. There are 4 conditions that this light can be in.

**Condition 1** is a solid red light. This is the normal condition indicating that all is well with the sensor. It is transmitting light and receiving enough light to operate properly. You should then block the light by placing a basketball in the hoop and the light should go green. If the light doesn't turn green then you probably have a bad sensor. If the light goes green and you do not get any scoring during the game then you should look into the main board or harness for the problem.

**Condition 2** is a blinking red light. This condition is a fringing light condition. This means that the sensor has enough light, but just barely, to work properly. The game will probably still work in this state but needs to be adjusted. See adjusting of the reflector below.

**Condition 3** is a green light indicating the sensor believes it is being blocked all the time. It was not blocked from power up or condition 4 would occur. This is generally a bad sensor.

**Condition 4** is no light at all. This means that the sensor may not have power so you should check the harness for proper connections. It can also mean that the sensor has never seen a beam from itself.

Adjusting of the sensor. A blank white piece of paper is necessary to adjust the sensor. You place the paper in front of the reflector at the other end of the hoop. You should see a red circle of light. This circle indicates the target of the optic sensor. The circle should be pointed to the middle of the reflector strip if the paper was not in the way. If it is not, then you need to bend the bracket holding the sensor up (towards the hoop) until it is. When you remove the paper you should see a solid red light on the back of the sensor. This indicates all is well. Proceed to testing the sensor by placing a ball in the hoop and seeing that the sensor indicates green. If so then continue to test the sensor by playing a game. If scoring doesn't occur properly then look to the main board or harness for the problem.

# OPTIONAL ACCESSORIES

## OVERVIEW

IF YOU DO NOT FIND ANSWERS TO YOUR QUESTIONS IN THIS SECTION, REFER TO THE ACCOMPANYING MANUAL FOR YOUR PARTICULAR PRODUCT, OR CALL OUR SERVICE DEPARTMENT.

### **I.C.E. SERVICE DEPARTMENT**

**716-759-0360**

**NORMAL BUSINESS HOURS ARE:**

**MONDAY – FRIDAY, 9:00 AM TO 6:00 PM EST**

## TICKET DISPENSER

Refer to the supplied service manual for all information other than software settings.

The ticket dispenser comes pre-set from the factory to dispense 1 ticket for every 5 points scored. In addition to this, if the game player did not score enough points to get 1 ticket, the game is preset to give the player 1 ticket "just for playing".

These settings can be adjusted by changing the ticket options in the "GAME OPTIONS" mode. If you change the memory battery or Main PC Board, you may have to reset the value for these options.

You can also set the game up so that the winner of MULTIPLE player games ONLY, wins tickets or that a certain amount of points must be scored BEFORE ANY tickets will be dispensed. This is the threshold option.

## DOLLAR BILL VALIDATOR

Refer to the supplied manual for all information other than software settings.

The validator normally requires no adjustments other than checking to see that the proper voltage is present. This Validator runs on 12 volt DC power, with a minimum of 11.5 volts DC. The Validator will not work correctly with voltages below that specified.

The validator may work improperly or not at all if it is not grounded properly.

The unit should be cleaned periodically to ensure proper operation. Blow out as much dirt as possible. Then use a cotton swab (Q-Tip) to get into the front opening to remove any remaining dirt or debris. Clean the stacker belts with a rubber rejuvenator. Clean any other dirt from the unit with isopropyl alcohol.

That game comes from the factory pre-set at 2 credits per bill. You can change this by entering the "GAME OPTIONS" screen. (see GAME OPTIONS settings section for more information)

# ABOUT LINKING

With LINKING it will be possible for your customers to enjoy exciting Head to Head competition when two or more **NBA HOOPS™** games are connected together. In fact, you can link as many as fourteen **NBA HOOPS™** games together.

Game linking is accomplished through the “Link” button located in the upper right hand corner of the control panel. When enough money is inserted into the game to create one or more credits, the “Link” button will begin to flash. If a player on another game pushes their “Link” button, the games are now linked together. Once the games are linked together, they become 1 player only games. When any of the players push the “Start” button, the game begins.

When the game is over, the top four players are ranked on the display. The game spotlight will flash for the winner.

## TICKET SETTINGS

Ticket settings will work in the same fashion as a regular **NBA HOOPS™** game. Be sure all of the games linked together are set EXACTLY the same. Using different settings could yield unexpected results.

**NOTE: WHEN LINKING 1 OR MORE GAMES TOGETHER, IT IS ADVISIBLE TO TURN THE ATTRACT MODE OFF ON ALL BUT 1 GAME. THIS WILL ELIMINATE STRANGE SOUNDS FROM MORE THAN 1 ATTRACT MODE PLAYING, BUT NOT AT THE SAME TIME.**



# PARTS LISTINGS

## MECHANICAL PARTS

|              |                                |
|--------------|--------------------------------|
| NB1005NP     | Coin door panel, frame         |
| HF1006AX     | Coin door assembly             |
| HF1007       | Ticket door                    |
| HF1008       | Cash box door                  |
| BB1009       | Cash box enclosure (Galv.)     |
| HF1016-P200  | Sensor Bracket                 |
| HF1019       | Bracket (backboard side)       |
| HF1039A-P200 | Hoop (15 inch)                 |
| HF1054       | Frame, red                     |
| NB1055-P100  | Cage Side                      |
| NB1056-P100  | Cage Top                       |
| NB1058       | Ball stop rail (Specify color) |
| NB1060-P100  | Ball Deflector                 |
| HF1062       | Rebound guard mtg. bracket     |
| HS3001       | Basketball                     |
| NB3008       | Basketball Net - White         |
| BB5001       | Cash box                       |
| 5014         | Door lock                      |
| 6459         | Allen wrench (security)        |
| PC60615A     | #2 square drive bit            |

## GRAPHICS & DECALS

|        |                                       |
|--------|---------------------------------------|
| HF7001 | Programming decal                     |
| BB7004 | Warning power disconnect decal        |
| HF7005 | Front cabinet decal                   |
| HF7008 | Decal I.C.E. logo                     |
| 7031   | "Suitable for indoor use only" decal  |
| 7032   | "Caution replace fuse.....) decal     |
| 7033   | "Warning disconnect power.....) decal |
| 7035   | "On/off" decal                        |
| 7039   | "Caution hot surface" decal           |
| 7041   | "6 amp warning" decal                 |
| NB7011 | Decal (NBA Logo - Ticket Door)        |
| NB7012 | Decal (Backing Board)                 |
| NB7013 | Decal (NBA Logo - Rear)               |
| NB9001 | Service manual                        |

## ELECTRICAL & ELECTRONIC PARTS

|         |                                |
|---------|--------------------------------|
| 2007    | Speaker                        |
| 2364X   | Fan assembly                   |
| BT2002  | Transformer                    |
| BB2005  | Micro switch                   |
| BB2008  | Ball gate motor (3269)         |
| BB2023  | Long life lamp bulb (5000 hr.) |
| BT2027X | 20 ft. line cord               |
| HF2034X | Main PC Board                  |
| NB2004  | Button - Select                |
| NB2005  | Button - Start                 |
| NB3004X | Net sensor assembly            |
| PC20407 | Battery, 3.2 volt              |



## Contacts at SEGA

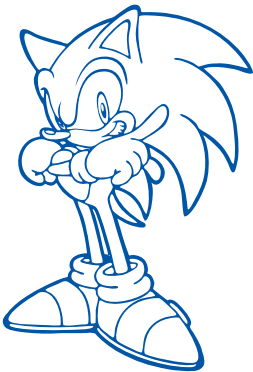
**SEGA**<sup>®</sup>

### **Machine Sales**

Telephone: +44 (0) 208 391 8090

Fax: +44 (0) 208 391 8099

[www.sega-amusements.co.uk](http://www.sega-amusements.co.uk)



### **SEGA Spares**

Telephone: +44 (0) 208 391 8060

Fax: +44 (0) 208 391 8096

[www.segatotalsolutions.com](http://www.segatotalsolutions.com)

### **Customer Services**

Telephone: +44 (0) 208 391 8065

Fax: +44 (0) 208 391 8096