OPERATOR'S MANUAL

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NOTICE REGARDING NON-TWI PARTS

WARNING

Use of non-TWI parts or modifications of any Time Warner Interactive game circuitry may adversely affect the safety of your game, and may cause injury to you and your players.

You may void the game warranty (printed on the inside back cover of this manual) if you do any of the following:

- Substitute non-Time Warner Interactive (TWI) parts in the game.
- Modify or alter any circuits in the game by using kits or parts not supplied by Time Warner Interactive.

FCC COMPLIANCE

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of Federal Communications Commission (FCC) Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area or modification to this equipment is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference. If you suspect interference from a Time Warner Interactive game at your location, check the following:

- All ground wires in the game are properly connected as shown in the game wiring diagram.
- The power cord is properly plugged into a grounded three-wire outlet.
- On games provided with an Electromagnetic Interference (EMI) ground plane, be sure that the game printed-circuit boards (PCBs) are properly installed on the EMI ground plane and that the end board is securely installed with all screws in place and tightened.

If you are still unable to solve the interference problem, please contact Customer Service at Time Warner Interactive. See the inside front cover of this manual for service in your area.
SAFETY SUMMARY

The following safety precautions apply to all game operators and service personnel. Specific warnings and cautions will be found in this manual whenever they apply.

WARNING

Properly Ground the Game. Players may receive an electrical shock if this game is not properly grounded! To avoid electrical shock, do not plug in the game until it has been inspected and properly grounded. This game should only be plugged into a grounded three-wire outlet. If you have only a Two-wire outlet, we recommend you hire a licensed electrician to install a three-wire grounded outlet.

AC Power Connection. Before you plug in the game, be sure that the game's power supply can accept the AC line voltage in your location. The line voltage requirements are listed in Chapter 1 of this manual.

Disconnect Power During Repairs. To avoid electrical shock, disconnect the game from the AC power before removing or repairing any part of the game.

Use Only Time Warner Interactive (TWi) Parts. To maintain the safety of your TWi game, use only TWi parts when you repair it. Using non-TWi parts or modifying the game circuitry may be dangerous, and could injure you and your players.

Use the Proper Fuses. To avoid electrical shock, use replacement fuses which are specified in the parts list for this game. Replacement fuses must match those replaced in fuse type, voltage rating, and current rating. In addition, the fuse cover must be in place during game operation.

CAUTION

Properly Attach All Connectors. Make sure that the connectors on each printed circuit board (PCB) are properly plugged in. The connectors are keyed to fit only one way. If they do not slip on easily, do not force them. If you reverse a connector, it may damage your game and void your warranty.

Ensure the Proper AC Line Frequency. Games manufactured for operation on 60 Hz line power (used in Europe). If a 60 Hz machine operates on 50 Hz line power, the fluorescent line ballast transformer will overheat and cause a potential fire hazard. Check the product identification label on your machine for the line frequency required.

ABOUT NOTES, CAUTIONS, AND WARNINGS

In TWi publications, notes, cautions and warnings have the following meaning:

NOTE — A highlighted piece of information.

CAUTION — Equipment and/or parts can be damaged or destroyed if instructions are not followed. You will void the warranty on TWi primed-circuit boards and parts thereon, if equipment or parts are damaged or destroyed due to failure of following instructions.

WARNING — Players and/or technicians can be killed or injured if instructions are not followed.

Précautions de'Emploi Générales

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PRÉCAUTIONS DE L'EMPLOI GÉNÉRALES

Les précautions d'emploi ci-dessous s'adressent à toutes les personnes susceptibles d'utiliser ou de réparer ce jeu. La présente notice renferme également d'autres mises en garde et avertissements spécifiques.

MISES EN GARDE

Mettez le jeu à la terre. Les joueurs risquent de recevoir une décharge électrique si le jeu n'est pas correctement mis à la terre.
Pour éviter les décharges électriques, assurez-vous que le jeu est correctement mis à la terre avant de le brancher. Branchez-le uniquement dans une prise triplée à mise à la terre. Si vous n'avez pas de prise triplée, il est recommandé de faire appel à un électricien pour en installer une. Si la console de commande n'est pas correctement mise à la terre, les joueurs risquent de recevoir une décharge électrique. Si une réparation quelconque a été faite sur la console de commande, assurez-vous que le fil de mise à la terre est solidement attaché à l'intérieur de la console. Ceci fait, verrouillez le jeu.

Branchement sur secteur. Avant de brancher le jeu, assurez-vous que son bloc d'alimentation est compatible avec la tension secteur locale. Les conditions d'alimentation du jeu apparaissent au premier chapitre de la présente notice.

Débranchez le jeu du secteur avant toute réparation. Pour éviter les décharges électriques, débranchez le jeu du secteur avant de le démonter ou de le réparer.

Utilisez uniquement des pièces TWi. Pour éviter les risques d'accidents, utilisez toujours des pièces TWi pour réparer le jeu. L'emploi de pièces d'autres marques ou la modification du circuit du jeu sont potentiellement dangereux pour le réparateur et pour les joueurs.

Utilisez les fusibles appropriés. Pour éviter les décharges électriques, remplacez les fusibles par ceux indiqués dans la nomenclature du jeu. Les fusibles de rechange doivent être du même type, de la même tension et de la même intensité que ceux d'origine.

ATTENTION

Attachez correctement tous les connecteurs. Assurez-vous que tous les connecteurs sont bien enfilés dans les cartes circuits. Ces connecteurs sont dotés d'un détrompeur qui évite les erreurs de branchement. S'ils s'enfilent difficilement, ne forcez pas. Si vous branchez un connecteur à l'envers, vous risquez d'endommager le jeu et d'annuler la garantie.

Vérifiez la fréquence de ligne du courant secteur. Les jeux fabriqués pour fonctionner à une fréquence de ligne de 60 Hz (fréquence utilisée en Amérique du Nord) ne doivent pas être utilisés dans les pays dont le courant a une fréquence de 50 Hz (Europe). Si vous branchez un appareil conçu pour une fréquence de 60 Hz sur un courant d'une fréquence de 50 Hz, le transformateur ballast de l'éclairage fluorescent surchauffera, ce qui présente des risques d'incendie. Vérifiez la fréquence de ligne requise par votre machine ; elle est indiquée sur sa plaque signalétique.

REMARQUES, AVERTISSEMENTS ET MISES EN GARDE

Dans les publications d'TWi, les conventions, en ce qui concerne les remarques, avertissements et mises en garde, sont les suivantes:

REMARQUE — Sert à attirer l'attention sur un point particulier.

AVERTISSEMENT — Le non-respect des directives présente des risques d'endommagement et/ou de destruction pour le matériel et/ou les pièces. En cas d'endommagement et/ou de destruction du matériel ou des pièces, résultant du non-respect des directives, la garantie offerte sur les cartes circuits TWi et les pièces connexes TWi sera annulée.

MISE EN GARDE — Le non-respect des directives présente des risques de blessures ou d'accidents mortels pour les joueurs et/ou les réparateurs.
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NOTE: The Hoop It Up Game PCB schematic diagram is not published in this manual. However, it is available free of charge by calling or writing to Time Warner Interactive Customer Service. See the inside front cover for our address and telephone numbers.

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THIS MANUAL IS written for operators and service personnel. It provides information for setting up, playing, testing, and maintaining your Hoop It Up™ game.

Hoop It Up is a two-player basketball redemption game featuring real basketball controls that shoot air-activated balls into miniature hoops and nets.

Chapter 1 of this manual contains set-up and game play information. Chapter 2 contains a description of the test functions and option settings. The test modes are important in the Hoop It Up game. Using the tests, you can troubleshoot the large light-emitting diode (LED) score displays, the game printed-circuit board, and the controls. You should regularly do these tests to keep your game in peak condition and at top earnings. Chapter 3 contains a troubleshooting table, plus maintenance and repair procedures for the game components. If you have problems with your game, use this chapter to troubleshoot and repair it. Chapter 4 contains the illustrations and Score Board PCB parts list. Chapter 5 contains the game wiring diagram and the Score Board PCB schematic diagram. Copies of the game PCB schematic are available free of charge by contacting our Customer Service Dept.: see the inside front cover of this manual for the address and telephone numbers.
Make note of the power consumption when you set up this game so that you do not overload your electrical circuit. See Table 1-1 for the power consumption and the other important specifications of this game.

- Be sure to switch the power OFF before replacing any parts or connecting/disconnecting the electrical connectors.
- Do not attempt to repair the printed-circuit boards (PCB) yourself. This will void the warranty. The PCBs contain sensitive components that could easily be damaged by the small internal voltage of a multi-meter. Always return the faulty PCB to your distributor for repair.
- When unplugging the game from the electrical outlet, grasp the plug, NOT the cable.
- Make complete connections to all the PCBs and other parts of the circuit. Insufficient insertion of ICs and connectors will lead to unreliability and possible damage to the machine.

**Table 1-1 Game Specifications**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input Current</td>
<td>3 Amps</td>
</tr>
<tr>
<td>Linr Fuse Rating</td>
<td>3 Amps, 250 V, Slow-Blow</td>
</tr>
<tr>
<td>Line Voltage</td>
<td>120 to 132 VAC, 60 Hz</td>
</tr>
<tr>
<td>Temperature</td>
<td>37°F to 100°F (5°C to 36°C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>Not to exceed 95% relative</td>
</tr>
<tr>
<td>Width*</td>
<td>31.25 inches (80 cm)</td>
</tr>
<tr>
<td>Depth*</td>
<td>35 inches (69 cm)</td>
</tr>
<tr>
<td>Height*</td>
<td>75 inches (190 cm)</td>
</tr>
<tr>
<td>Weight*</td>
<td>350 lbs. (159 kg)</td>
</tr>
</tbody>
</table>

*Unboxed

**Controls and Switch Locations**

All the controls are located in the lower rear of the cabinet or behind the coin doors. The following paragraphs describe these locations in more detail.

Three small potentiometers are mounted on the Hoop It Up game PCB. To adjust these, you need a small (jeweler's) flathead or Phillips-head screwdriver.

**Power On/Off Switch and Main Fuse**

The power on/off switch is a toggle switch located on the power entry module, above the cabinet's lower rear panel. This is also the location of the game's main fuse.

**Ticket Dispensers**

Two ticket dispensers, one for each player, are standard in the Hoop It Up game. Servicing information on the mechanisms is provided in the Deltronic Labs ticket dispenser manual, which was included in your Hoop It Up game.

**Liquid-Crystal Display and Keypad**

These components are mounted on the Hoop It Up Game PCB located inside the lower rear access panel. (Refer to Figure 1-1 for the locations of all operator controls on the game PCB.) Use the keypad to set the game parameters (options), game cost, and to perform the test functions.

To access the game PCB, unlock the lower rear panel and press the appropriate keypad pushbuttons while the power is...
turned on. You may need a flashlight to read the LCD. A small LCD contrast adjustment potentiometer is available next to the LCD; this brightens or darkens the display (see further details in the following section).

Refer to Chapter 2 of this manual for more information on the game parameters and test functions.

Adjust Contrast of LCD

Turning this potentiometer (labeled LCD Contrast) all the way counterclockwise increases the contrast to maximum. This maximizes the legibility of the characters shown on the LCD.

Volume Control

The volume adjustment potentiometer is on the game PCB. Turning this potentiometer in small increments adjusts the current volume setting.

Balance

This potentiometer is intended for eliminating sound distortion in Hoop It Up. It should be set about in the middle. If you hear distorted sound, turn this potentiometer until the sound improves.

Ticket Counter

The mechanical ticker counter is located inside the upper coin door. It is mounted against the internal wood panel. Note that a separate resettable ticker counter is available in the game software. Refer to Chapter 2 for more details.

Coin Counter

The mechanical coin counter is located below the coin box inside the lower coin door. Again, a separate resettable coin counter is available in the game software. Refer to Chapter 2 for more details.

Setting the Coin, Ticket and Game Options

The Hoop It Up coin and game options are set in the test modes. Please refer to Chapter 2 for the recommended settings and the procedure for setting the options.
Game Play

The goal is to achieve the highest score possible before the game timer sounds, ending the game. For ticker dispensing, players are awarded tickets based on score and number of triple baskets, which are operator adjustable. An audio cue of “That’s a new record!” will be sounded when a player’s score is equal to or greater than the prior high score. The high score is displayed and retained indefinitely, unless reset through the option menu. (Refer to Chapter 2 for details on how to reset the high score.)

In a head-to-head competition, if the scores are tied, the game will go into overtime, extending the game timer another 10 seconds. The first player to score a barker wins. If players are unable to score during the extended time, the game will end in a tie.

Advanced Game Mode

During an advanced game, players must attempt to shoot balls into whichever baskets are lit by red LEDs. Double and triple baskets are awarded after first scoring a lit basket. There are no bonus points given during an advanced game.

To enter the advanced game mode, players must hold the start button down while inserting coins and then release it. At this point, the start button should be lit, indicating credit for coin(s) inserted. To start an advanced game, press the start button.

1. When selecting the advanced game, coins must be inserted one game at a time.
2. For head-to-head competition, only one player needs to select the advanced game if both players want to be in the advanced game mode.
3. The advanced game mode cannot be accessed if there are existing cred-
ics on the game. The game defaults to normal game mode for the remaining credits unless players insert additional coins to activate the advanced game mode.
CHAPTER 2

Test Functions

INTRODUCTION

USE THE HOOP IT UP” test functions to check the condition of the game circuitry and controls. You will see the test-function information on the liquid-crystal display (LCD) installed on the game-printed-circuit board. Also, you can use the LCD and keypad to set the game parameters and game cost. Perform the test when you first set up the game, each time you collect the money, or when you suspect game problems. This chapter describes the messages displayed in the rest functions and explains each of the tests. The test descriptions and explanations are arranged in the order they appear as you step through the entire sequence.
Using the Liquid-Crystal Display on the Game PCB

All accounting displays, option adjustments, and tests are made using the keypad with eight pushbuttons located on the Hoop It Up Game Printed-Circuit Board (PCB). The liquid-crystal display next to these pushbuttons shows which test or option you are currently using. Refer to Figure 2-1 for the locations of the LCD, keypad, and other user controls on the game board.

Figure 2-1 Detailed View of Keypad

Attract-Mode (Accounting) Functions

Four accounting functions are available in the attract mode. They are listed in Table 2-1 and show the accounting data for Hoop It Up. To step through the sequence, press the NEXT or LAST button several times. Be sure to wait at least one second for each function to appear on the LCD.

<table>
<thead>
<tr>
<th>Function</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coins</td>
<td>Number of coins played</td>
</tr>
<tr>
<td>Tickets</td>
<td>Number of tickets dispensed</td>
</tr>
<tr>
<td>T/C Ratio</td>
<td>Tickets-dispensed-to-coins-played ratio</td>
</tr>
<tr>
<td>Triples</td>
<td>Number of triple baskets made</td>
</tr>
</tbody>
</table>

Table 2-1 Summary of Accounting Functions

Program Modes

You can enter the Program Mode only when the game is in the attract mode with no credits entered. To do so, press the PROG key on the PCB keypad. The first mode displayed is the Set Parameters mode. If you press the PROG key repeatedly, the remaining three modes (Set Cost $/Game, Test Functions, and Display Memory) are also displayed. The game cycles through this sequence each time you press the PROG key.

To enter one of the four modes, press the NEXT key. To exit from the Program Mode and return the game to the attract mode, press the RUN key. Press the PROG key to enter the next mode.

NOTE
Adjusting the Payout Percentage

Three of the parameters listed below should be adjusted to achieve your desired payout percentage. The parameters are Games Time(s), Bonus Tickets and Points/Ticket. For the Bonus Tickets parameter, we recommend using 5 tickets. However, you could set this number to 4 or even 3 tickets, if you find that your average triples are too high. You should average 1-2 triples per game, based on our recommended settings. Use the accounting functions to determine your average number of triples per game.

Set Parameters Mode

Pressing the NEXT key causes GAME = HoopItUp REV xx to be momentarily displayed. Then the first parameter — GAMETIME(s) — is displayed. You can select another parameter by pressing the NEXT or LAST key.

To change the values displayed in any of the parameters, press the INC (increment) or DEC (decrement) key. Then press
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Recommended Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Game Time(s)</td>
<td>45 seconds</td>
</tr>
<tr>
<td>Attract Repeat Time</td>
<td>45 seconds</td>
</tr>
<tr>
<td>Award 1</td>
<td>03 points</td>
</tr>
<tr>
<td>Award 2</td>
<td>03 points</td>
</tr>
<tr>
<td>Award 3</td>
<td>03 points</td>
</tr>
<tr>
<td>Bonus Award (Bonus Pay)</td>
<td>03 points</td>
</tr>
<tr>
<td>Bonus Tickets</td>
<td>05 tickets</td>
</tr>
<tr>
<td>Game 2 Basket</td>
<td>03 points</td>
</tr>
<tr>
<td>Minimum Tickets (Min. Payout)</td>
<td>01 ticket</td>
</tr>
<tr>
<td>Miss Time(s)</td>
<td>05 seconds</td>
</tr>
</tbody>
</table>

( ) = European version

Table 2-2 Summary of Recommended Settings for All Parameters

- **Game Time(s)**
  - Game clock timer adjustment (number of seconds for game duration). Recommended: 45 seconds.

- **Attract Repeat Time**
  - Initiates the attract-mode audio every x seconds. Recommended: 45 seconds.

- **Award 1**
  - Point value for top baskets in Game 1. Recommended: 03.

- **Award 2**
  - Point value for middle baskets in Game 1. Recommended: 03.

- **Award 3**
  - Point value for bottom baskets in Game 1. Recommended: 03.

- **Bonus Award (Bonus Pay In European Version)**
  - Additional points or tokens granted for making a triple basket. Recommended: 03.

- **Bonus Tkt**
  - Number of tickets dispensed for making a triple basket. Recommended: 05.

- **Ticket Sound On? (Payout Sound On?)**
  - 1 [on]

- **Enable Tickets? (Enable Pay?)**
  - 1 [enabled]

- **Points/Ticket (Points/Pay)**
  - 012 points

- **Attract Ball Load**
  - Every 2 minutes

- **Reset Ticket/Coin**
  - 0 [don’t reset]

- **Reset Triple?**
  - 0 [don’t reset]

- **Reset High Score?**
  - 0 [don’t reset]

- **(Select Tkt/Coin)**
  - 0 = Tickets [also available is 1 = token or coin hopper]

- **Tkt Mech Selector**
  - 0 = Deltronics [also available is 1 = Coin Controls]

- **Game 2 Basket** (Advanced Game Basket)
  - Point value for each basket in advanced games. Recommended: 03.

- **Min Tickets (Min. Payout In European Version)**
  - Minimum number of tickets or tokens to be paid for any game. Recommended: 01.

- **Miss Time(s)**
  - Number of seconds to wait for a basket before playing the “bad” message. If a score is received within this time, a “good” message will be played. Recommended: 05.

- **Tune On?**
  - 1 = Yes

- **Tkt Sound On? (Payout Sound On? In European Version)**
  - Special ticket- or token-dispensing audio to be turned on (1) or off (0). Recommended: 1.

- **Enable Tkt? (Enable Pay? In European Version)**
  - Ticket or token payout to be enabled (1) or disabled (0). Recommended: 1.

- **Points/Tkt (Points/Pay In European Version)**
  - Score value required to earn one ticket or token. Recommended: 012.
Attract Load
Attract-mode feature: loads one ball into each shooter every x minutes. Recommended: 2.

Reset Tkt/Coin
This parameter affects the first three accounting functions listed in Table 2-1. To clear internal software, ticker and coin counters and the tickets-to-coins ratio, choose 1: to leave the counters intact, choose 0. Recommended: 0.

NOTE
Both mechanical counters are not affected by this parameter.

Reset Triple?
Clears the internal triple basket counter (1) or leaves the counter intact (0). Recommended: 0.

Reset HI Score?
Clears the high score and resets it to zero (1) or leaves the high score intact (0). Recommended: 0.

Sel Tkt/Coin (Appears Only In European Version)
Available in the European version only, this parameter allows you to select ticket dispensing (0) or a coin/token hopper (1). Recommended: 0.

Tkt Mech Sel
Allows you to select which brand of ticker-dispensing mechanism you have installed in your game: 0 = Deltronics, 1 = Coin Controls. Recommended: 0.

Set Cost $/Game
The 12 parameters in this mode determine the number of coins required for 1-12 games. The game is shipped with these settings: 1 game/1 coin, 2 games/2 coins, 12 games/12 coins.

You must not set any of the coins to 0. Also, the number must not decrease in value as the number of games increases.

For example, if you set 1 game/3 coins, then you must set 2 games/4 coins, 3 games/6 coins, etc.

To select one of the 12 parameters, press the NEXT or LAST key. To change the coinage values displayed next to each parameter, use the INC or DEC keys. To select the column of the number you want to change, press the ENTER key to move left, and the EXIT key to move right. To exit this mode, press either the PROG or RUN key.

Test Functions

LED Display Test
Turns on all the LEDs (light-emitting diodes) on the backboard, and steps through the digits 0 through 9 on all four displays. This way you can check that they are all working.

Sound Test
Cycles through all audio. This test is mainly for Time Warner Interactive Customer Service use, so that they can check that the audio circuitry is working properly. Press INC to select the next sound, then press ENTER to hear it. Note: The Channel 1 sounds should work, but the Channel 2 sounds do not, because this game uses one channel of audio.

Memory Test
A self-running test of all memory components. When completed, you should see the message Memory OK. Press EXIT when you are done.

Tickets A Test
Tests the left ticker dispenser, by dispensing two tickets from the mechanism.

Tickets B Test
Tests the right ticker dispenser, by dispensing two tickets from the mechanism.

Port B Outputs, Port C Inputs, Extended Inputs, Extended Outputs. 250MA Out J1-07, and 125MA Out J6-02
The remaining tests allow technicians to test various outputs and inputs. These tests are for Time Warner Interactive Customer Service use only.

Display Memory
This test is for Time Warner Interactive Customer Service use. To check the contents of memory during troubleshooting, "&
Troubleshooting
& Maintenance

This chapter contains maintenance, troubleshooting and repair procedures for your Hoop It Up game. The maintenance section gives information on cleaning the parts. The troubleshooting section contains several tables to help determine the source of a problem and the steps necessary to repair it. The repair section contains the steps necessary to remove and install the serviceable parts. Together, these three sections provide a complete guide to servicing your Hoop It Up game.
Maintenance Procedures

Introduction

This section describes the maintenance procedures for all of the major assemblies and components of the game. The maintenance procedures should be performed regularly. We recommend every 3-4 months.

One of the important parts associated with the ball shooter is the spanker, a thin metal blade just behind the ball shooter. The spanker is raised every time one of the rotor prongs pass by it. The spanker assures that the ball shooter is always loaded. Without the spanker, two balls can become wedged together at the high end of the ball shooter ramp, preventing any balls from reaching the air cylinder, the lowest part of the ramp.

<table>
<thead>
<tr>
<th>Problem</th>
<th>Suggested Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Coin Mechanism Problems</strong></td>
<td></td>
</tr>
<tr>
<td>1. Check the wiring connections to the coin mechanism.</td>
<td></td>
</tr>
<tr>
<td>2. Check the voltage to the + side of the mechanism.</td>
<td></td>
</tr>
<tr>
<td>3. Check the fuses on the power supply.</td>
<td></td>
</tr>
<tr>
<td><strong>Ticket Dispenser Problems</strong></td>
<td></td>
</tr>
<tr>
<td>1. Check for jammed tickets.</td>
<td></td>
</tr>
<tr>
<td>2. Use the test functions to check the left (A) or right (B) ticket dispenser.</td>
<td></td>
</tr>
<tr>
<td>3. In the Set Parameters : test, make sure Enable Ticket Payout is turned on (1).</td>
<td></td>
</tr>
<tr>
<td>4. Check the harnesses and connectors.</td>
<td></td>
</tr>
<tr>
<td>5. If you took the ticket dispenser apart, have you reassembled it correctly?</td>
<td></td>
</tr>
<tr>
<td>6. Make sure all of the parts of the ticket dispenser are in good order. Repair or replace pairs as needed. Refer to the Deltronic Labs ticket dispenser manual that was included in your Hoop It up game.</td>
<td></td>
</tr>
<tr>
<td><strong>Basket &amp; Microswitch Problems</strong></td>
<td></td>
</tr>
<tr>
<td>1. If players cannot easily make triple baskets gently bend the iron of the top basket slightly upwards.</td>
<td></td>
</tr>
<tr>
<td>2. If the ball comes to rest on a switch wire, the wire restricted its travel. Check by pressing on the clear disc. If the hole in the net is not large enough to allow the wire to move completely unrestricted, use scissors to cut one of the net strings below the wire.</td>
<td></td>
</tr>
<tr>
<td>3. Check for proper operation of the switch wires. By dropping a few balls from above the ticket slot straight downwards. All three switch wires should register scores and should allow the balls to fall all the way down, scoring a triple basket.</td>
<td></td>
</tr>
<tr>
<td><strong>Ball Shooter Problems</strong></td>
<td></td>
</tr>
<tr>
<td>1. If the ball shooter motor spins constantly, the optical sensor wire is probably broken, or if not, the optical sensor itself is defective.</td>
<td></td>
</tr>
<tr>
<td>2. If one ball shooter consistently shoots balls to the right or left of the basket, you need to adjust the right/left tilt of that shooter. (This procedure should be necessary only if you reinstall the entire ball shooter assembly.)</td>
<td></td>
</tr>
<tr>
<td>3. If both ball shooters consistently shoot balls to the right or left of the basket, you probably need to adjust the right/left tilt of the entire game. Use the bubble level inside the bottom of the game, and adjust all four adjustable glides (feet) until the bubble is in the center of the bubble circle.</td>
<td></td>
</tr>
<tr>
<td>4. Make sure the spanker is working: it should be bent upwards with each quarter-rotation of the rotor. The spanker ensures that the ball shooter always is fed with balls.</td>
<td></td>
</tr>
<tr>
<td>5. If the ball shooter doesn't shoot balls, foam of other debris is probably trapped inside the shooter. Otherwise the spring or piston is broken.</td>
<td></td>
</tr>
<tr>
<td><strong>Sound Problems</strong></td>
<td></td>
</tr>
<tr>
<td>1. Check the speaker volume setting: make sure the volume isn't tuned all the way down. The volume is controlled with the small volume control on the Game PCB.</td>
<td></td>
</tr>
<tr>
<td>2. Check the Sound Test in the Tests: Functions. This test cycles through all audio.</td>
<td></td>
</tr>
<tr>
<td>3. Check the harness connections on the speaker.</td>
<td></td>
</tr>
<tr>
<td>4. Check the resistance of the speaker for 4 Ohms</td>
<td></td>
</tr>
</tbody>
</table>

Table 3-1 General Troubleshooting
**WARNING**

Before performing any maintenance or repairs, please observe all of the following safety precautions:

1. Turn the game's power off.
2. Unplug the power cord from the electrical socket.
3. Secure loose clothing such as ties and long sleeves that could get caught within the game. Secure long hair.
4. Remove all metal jewelry such as watches and necklaces that could conduct electricity from the game's power sources.

---

**Cleaning Procedure for Coin Mechanisms**

Regular use of the coin mechanism can result in a build-up of residue and dirt. To clean the coin mechanism, perform the following steps (please refer to Chapter 4 for detailed part information on the coin door):

1. Open the upper coin door.
2. Open the gate on the door that covers the magnet. Use the blade of a screwdriver to scrape away any metal filings that have collected on the magnet.
3. Clean the loose dust and dirt from the coin mechanism with a lint-free rag or a soft brush.
4. Clean the din and residue from the coin path with a toothbrush. Hot, soapy water may be used to help dissolve dirt and residue.
5. Blow out all the loose dirt, and dry the coin mechanism with compressed air.
6. Close the gate on the door covering the magnet. Then close the upper coin door.

**CAUTION**

Never lubricate the coin mechanism with oil or grease.

---

**Cleaning Procedure for Ball Shooter**

It is possible for the ball shooter assembly to become dogged with tiny particles of foam from inside the basketball control. If this occurs, you will need a can of compressed air, preferably with a thin nozzle tube, and a clean cloth. Follow these steps and refer to Figure 4-6:

1. Unlatch the control panel. Loosen and remove the hose clamp that is attached to the hose connector (the bottom metal cylinder under the ball shooter).
2. Insert a screwdriver or pen into the metal tube, and push the white piston inside until it reaches the upper end.
3. While holding the piston in, spray compressed air into all four cylinder exhaust holes (see Figure 44 for their locations). Any debris inside should be swept past the screwdriver into your hand.
4. Unlock the upper rear access panel, open the backboard, and reach into the playfield area. Using a lint-free cloth, wipe any debris from the ball shooter around the white piston.

**CAUTION**

Never lubricate the ball shooter with WD-40 or any other lubricant. The shooter will become clogged and stop working if you use any lubricant. Simply keep the ball shooter clean and free of any debris by blowing air through the four cylinder exhaust holes as described in the previous steps.

---

**Troubleshooting Procedures**

You should pinpoint the cause of a malfunction by using the test procedures described in Chapter 2. Any repairs other than minor procedures such as bulb replacement or mechanism cleaning, should be referred to qualified service personnel.

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**Repair Procedures**

**Introduction**

This section describes the repair procedures for all of the major assemblies and components of the...
game. Before performing any repairs, use Table 3-1 to help discover the source of the problem. The Maintenance Procedures section can also be a good starting point for fixing many game problems before beginning what might be unnecessary repairs.

**Ball Shooter Spring and Piston**

If you have blown air into the ball shooter and it still does not work, this indicates that the spring or piston has failed. To replace either of these parts, follow these steps and refer to Figure 4-6:

1. Unlock the control panel.
2. Remove the hear-shrink tubing that is used to seal the bottom of the ball shooter against air leakage.
3. Remove the set screw and spring lock washer that secure the metal hose connector to the bottom of the ball shooter.
4. Carefully lower the hose and its connector. With your other hand, catch the piston and spring before they fall out of the ball shooter.
5. Insert a new piston and/or spring into the ball shooter. The large end of the piston must face down. With one hand, hold the piston inside the ball shooter.
6. With your other hand, insert the hose connector into the bottom of the ball shooter. Reinstall the set screw and spring lock washer.
7. Reseal the area next to the set screw by using tape.

**Replacing the Ball Shooter Motor or Optics**

To replace either the motor or the optics in the ball shooter, you may be able to leave the ball shooter assembly installed in the game. However, access is much easier if you remove the ball shooter assembly from the game.

1. Unlock the upper rear access panel and open the backboard. Unscrew the three hold-down screws along the bottom edge of the divider.net.
2. Remove the three screws that secure the floor-panel metal ramp. Lift up the ramp and slide it out from under the ball shooters.
3. Unlatch and open the control panel. Disconnect the motor harness assembly under the ball shooter.
4. Loosen the screw on the hose where it is attached to the hose connector (under the ball shooter). Slide the hose off from the hose connector.
5. Remove the four nuts from underneath the ball shooter assembly.
6. Being careful so that you don't tear the decal on top of the spanker, gently lift up the spanker blade. Remove the ball shooter assembly. At this point the motor or optics can be replaced on the ball shooter.
7. If you need to replace the optics, remove the hot-melt adhesive that secures both halves of the optical system. Then pull...
the LED and optical sensor on the shooter frame.

**Ball Shooter Right/Left Tilt Adjustment**

If the ball shooter consistently shoots balls to the right or left of the baskets, you need to adjust the right/left tilt of the ball shooter assembly. This procedure should be necessary only if you reinstall the entire ball shooter.

To adjust the ball shooter, you will need a 1/4-inch open or box-end wrench. Follow these steps and refer to Figure 3-1:

1. Reassemble the ball shooter parts as shown in Figure 4-6, if necessary. Then reinstall the shooter into the playfield as described in the previous section. Do not yet latch the control panel shut.
2. Allowing each ball to settle completely into the ball shooter, shoot several balls at the baskets. Check where most of the balls hit the backboard.
3. If the balls are all shooting to the right of the baskets, swing down the control panel. Adjust the right/left tilt by loosening the right front locknut under the shooter. Then tighten the left front locknut. Continue shooting balls and adjusting the locknuts until most of the balls hit the center of the backboard. Once the adjustment is satisfactory, snug the right front locknut against the playfield. If the balls shoot to the left, reverse the previous adjustment procedure.

**Basketball Control**

Over time, the Spalding basketball cover will become worn. You should replace it before it wears through, to avoid players destroying the foam underneath. The control will still operate correctly if the ball is worn smooth. To replace the cover, refer to Figure 4-4 and 4-5, and follow these steps:

1. Open the control by releasing both spring draw latches. These are located inside and above the upper coin door.
2. Remove the four locknuts and flat washers under the basketball (bellows) assembly, and the four spacers and carriage bolts above the basketball. Lift the assembly up.
3. For ease in handling, you may want to remove the hose that is attached directly to the bottom of the manifold place.
4. Loosen all four hose clamp screws, and remove the hose clamp set completely. Remove the basketball cover from the manifold place.
5. Install a new basketball cover, making sure its cut edge is completely flush with the manifold plate.
6. Reinstall the remaining parts in the reverse order, making sure the reed valve is properly placed (completely flat on the manifold plate).

**Speaker**

The Hoop It Up game speaker is located under the control panel, at the front of the game. The speaker provides the music and sounds for the game and self-tests. Speaker failure can be the cause of distorted or no sound. To replace the speaker, follow these steps and refer to Figure 4-1:

1. Remove the four screws securing the speaker grille. Remove the speaker grille by pulling it out; then set it aside.
2. Remove the four speaker mounting screws, and lift out the speaker.
3. Disconnect the harness from the speaker, including the earth ground clip.
4. Replace and reinstall the speaker in the reverse order.

**Attraction Panel Fluorescent Light**

To replace the attraction-panel light bulb, follow these removal and installation steps:

1. Remove the three Phillips-head screws securing the upper attraction retainer at the top of the game. Lift out the attraction shield and graphics film.
2. Remove the cardboard retaining clips one at a time by pressing on the circular tab and pulling the clips toward you.
3. Rotate the bulb toward you while gently pulling on the bulb to remove it.
4. Install a new fluorescent light and rotate it 90° to lock it in place. Reinstall the retaining clips.
5. Close up the attraction panel area by replacing the graphics film, the shield, and the upper retainer.

**Playfield Incandescent Lights**

To replace either of the playfield area incandescent light bulbs, follow these removal and installation steps:

1. To gain access to the incandescent lights, first remove the fluorescent light (see the previous section).
2. Reach in above the "eggcrate" light diffuser and unscrew the incandescent light bulb.
3. Screw in a new light bulb into the socket. Reinstall the fluorescent light.
4. Reinstall the attraction shield, graphics film, and retainer.

**Backboard and Playfield Components**

The replaceable parts on the backboard are the nets, microswitches, and Ping-Pong-type basketballs on the playfield. To replace these parts, open the upper rear access panel, and follow the instructions below.
Nets

The string nets should be replaced if they become torn or dirty. To replace a net, follow these steps and refer to Figure 4-3:

1. Open the backboard panel by removing the three upper screws and swinging the panel open. Remove the hoop by unscrewing the two screws on the hoop’s bracket.
2. Slightly push down on the left side of the hoop, next to its attachment bracket. Slide the old net around the hoop and remove it at the open (left) end.
3. Thread each loop of the new net over the open end of the hoop. Make sure you do not stretch the net too much before all the loops are on the hoop; otherwise you may unravel the net. Evenly distribute the loops around the hoop.
4. Reinstall the hoop and net by threading the switch wire and disc through the rearmost net hole. Then reattach the hoop with the screws you removed earlier.

Microswitches

Note that new switches are shipped pre-assembled with the switch wire and plastic disc attached. Replace the defective microswitch as follows (refer to Figure 4-3):

1. Unplug the two harness connectors for the backboard assembly that are working on.
2. Remove the backboard assembly by unscrewing the two #10 x¾-inch screws attached to the rearmost edge of the blue backpost. Lift out the backboard assembly towards the front of the game.
3. Remove the two screws from the defective switch. (A rectangular access hole is provided for each switch.) Slide our the switch towards the rear of the backboard assembly. You will have to slightly squeeze the clear disc to make it fit through the opening.
4. Reinstall the new switch, wire, and disc by carefully sliding the disc through the opening. Turn the switch 90° and secure it with the two screws.
5. Reinstall the backboard assembly by resecuring the two screws into the backpost. Plug the two harness connectors together again.

Basketballs

Open the backboard panel, and put no more than 6 basketballs on each side of the playfield, or near the ball shooter. Loading more than 6 balls will cause the ball shooter to jam up, and players will not be able to aim the balls correctly at the hoops. You should have at least 5 balls on each side of the playfield.

NOTE

We recommend using only high-quality basketballs, which will be less likely to crack. Such balls have no visible seams. These balls should be readily available in toy stores. If you cannot easily find these balls, call Customer Service for sources. In an emergency you can use white table tennis balls, which are the same size and weight.

System logic Assemblies

This section describes the repair and maintenance procedures for the major assemblies and components related to the system’s logic and electronics. This includes the printed-circuit boards (PCBs) and the power supply. These components are housed in the bottom of the game cabinet, behind the lower rear access panel. We recommend that this procedure be performed by qualified service personnel only.

Hoop It Up Game PCB

The Hoop It Up game PCB is responsible for the game sounds and game play. Failure of the game PCB may result in erratic or no game play. If this is the case, repair or replace the game PCB by following the removal and installation steps below:

1. Make sure the power to the game is turned off. Unlock the cabinet’s lower rear access panel.
2. Remove the four nut/washer assemblies that secure the metal game-PCB cover.
3. Disconnect the harness connectors from the game PCB.
4. Unfasten the six screws that secure the game PCB to the inside wall of the cabinet. Remove the game PCB.

CAUTION

Before handling static-sensitive components, properly ground yourself to remove any static charge buildup.

5. Reinstall the game PCB by following the previous steps in the reverse order. Be sure to reinstall the game PCB cover, since this is required to meet FCC EMI emission requirements.
Power Supply

The power supply is responsible for providing power to all of the game assemblies that require it. Failure of the power supply may result in erratic game play or no power at all. To remove the power supply assembly, perform the following steps:

**WARNING**

The power supply can contain high voltages even after the power is turned off. To avoid injury, observe all of the safety precautions before working on the power supply. (Refer to the warning in the Maintenance Procedures section at the beginning of this chapter.)

1. Unlock and remove the lower rear door of the cabinet.
2. Disconnect the wiring harnesses from the power supply.
3. Unfasten the two screws that secure the power supply assembly to the cabinet floor, and remove the power supply assembly.
4. Re-install the power supply assembly by following the previous steps in the reverse order.
This chapter provides information you need to order parts for your game. When you order parts, give the part number, part name, the number of this manual, and the serial number of your game. With this information, we can fill your order rapidly and correctly. We hope this will create less downtime and more profit from your games. Time Warner Interactive Customer Service phone numbers are listed on the inside front cover of this manual.
Figure 4-1 Cabinet-Mounted Assemblies, Front View

054529-01
Attraction Shield
054717-01
Attraction Film
054537-01
Plex Mounting Bracket
(below the lower retainer)

054713-02
Right Side Attraction
Decal
054718-01
Scoreboard Decal
A054219-01
Backboard
Assy.
054719-02
Inner Back Panel
Decal
054533-01
Playfield Door Hinge

054531-01
Side Shield
Retainer
054719-01
Outer Back Panel
Decal
054724-01
Ticket Sign
054263-01
Rear Floor
Panel (Ramp)
054715-01
Playfield Decal
178423-001
2" Cloth Carpet
Tape (30" required)
054718-01
Ramp Decal
102055-001
Playfield Damper Pad
054712-01
Side Panel
Decal

Items Not Shown:
A053415-01
Fluorescent Lamp
Factory Assy.
178003-001
16' 15 Watt
Fluorescent Light
178232-001
Fluorescent Lamp
Retaining Clip
A054404-01
Hoop It Up Game
PCB Assy.
054529-01
PCB Mounting Plate
054795-01
Control Hose

054772-01
Door and Ticket
Dispenser w/ Bin Assy.
75-51203
#10-24 x 1 1/4" Lg.
Bk. Cam Gage Bolt
177028-0040
#10-24 Nut/ Washer
Assy.
175001-1040
#10 218 x 500" Flat Washer

A054490-02 Rev C
### Items Not Shown:
- **A054494-01**
  - Hoop It Up Game PCB Assy.
- **179250-001**
  - 250V Medium-Base Lamp Receptacle
- **175002-001**
  - 20W 120V Soft White Medium-Base Incandescent Lamp

#### Parts and Assemblies:
- **054529-01**
  - White Light Panel
- **054520-01**
  - PCB Cover
- **A044072-01**
  - 12V Ticket Counter
- **A054364-01**
  - Ground Braid Assy.
- **A054365-01**
  - Right PCB Display Assy.
- **A054305-02**
  - Left PCB Display Assy.
- **A054352-01**
  - Main Harness Assy.
- **A054353-01**
  - AC Harness Assy.
- **A054354-01**
  - Door Harness Assy.
- **A054355-01**
  - Light harness Assy.

#### Additional Parts:
- **054513-01**
  - Left Attract Side Decal
- **054512-01**
  - Playfield Door
- **054510-01**
  - PCB Access Door
  - **176020-220**
    - #8 x 1 1/4" Lg X-Rec. Blk. LPW Screw
  - **37-403**
    - Hoop It Up Self-Test Label
- **178197-001**
  - Lock & Key Assy.
  - **TM-403**
    - Hoop It Up Operator’s Manual
- **043339-01**
  - Leg Lever Plate
  - **178285-004**
    - 3/8" x 1 1/2" Adjustable Guide
  - **146008-4022**
    - 4 Amp 250V 3AG Slow Fuse

#### Other Parts:
- **178399-001**
  - 0.050" D. Circular Level
- **178399-002**
  - Circular Level: Flange (not shown)
- **A054562-01**
  - Power Supply Assy.
  - **178015-112**
    - #10 x 3/4" X-Rec. Tapping Pan Screw
  - **177026-0038**
    - 8-32 Nut/Washer Assy.

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#### Figure 4-2 Cabinet-Mounted Assemblies, Rear View

A054490-02 Rev. C
Figure 4-3 Backboard Assembly
A054219-01 Rev. B
Figure 4-4 Control Panel Assembly

A054491-01 Rev. C
054726-01
Control Cover

054225-01
Closed-Cell Foam

054224-01
Open-Cell Foam

053487-01
Valve Plate

053488-01
Reed Valve

178244-244
Hose Clamp (4 Places)

75-2912S
8-32 X .75 Stl/Cadmum X-Rec Round-Hd Screw (4 Places)

178319-6002
1/2' Round Spacer (4 Places)

053011-01
Manifold Plate

177010-238
8:32 Hex Locknut (4 Places)

**CAUTION**
When installing the reed valve, make sure that it remains absolutely flat on the manifold plate.

**Figure 4-5 Bellows (Basketball) Control Assembly**
A054220-01 (Left) or A054220-02 (Right) Rev B
Figure 4-6 Ball Shooter Assembly

A054221-01 Rev. A
Figure 4-7 Over/Under Coin Door Assembly

171093-001
Figure 4-7 Over/Under Coin Door Assembly

171093-001
Figure 5-1 Hoop It Up Game Wiring Diagram
054551-01 Rev. A
Figure 5-1  Hoop It Up Game Wiring Diagram

054551-01  Rev. A