S9000 Installation and Maintenance

MK2A-S9000-0001 [B]
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<td>4-12</td>
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How do you use this guide? (Circle one.) Only as a reference All the time Not at all
Why do you use the guide this way? ____________________________________________________________________________
This guide tells you everything you need to do your job. (Circle one.) Yes No
If no, what is missing? ______________________________________________________________________________________

Ease-of-Use
Which do you use the most to find information? (Circle one.) Table of Contents Index
How clear, concise, and easy to follow are the procedures? __________________________________________________________________________
How could these procedures be easier to follow? ____________________________________________________________________________

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Are the topics within each chapter grouped properly? __________________________________________________________________________
Is the document organized so topics are easy to find? Yes No
If no, which topics were not easy to find? ________________________________________________________________________________

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Telephone _________________________ E-mail _____________________________
Chapter 1
Overview

This section includes the following topics:

- Installation Requirements
- Required Parts
- Required Tools
- Installation Checklist
Installation Requirements
This section includes requirements applicable to the S9000 cabinet.

Specifications and Digital Images
The following table provides descriptions and figures of S9000 machines:

### S9000 Descriptions

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALPHA S9000</td>
<td>(S9-15x--15) X indicates the number of reels. 15 indicates a 15 inch, flat panel display in a 17 inch, oval top box.</td>
</tr>
<tr>
<td>ALPHA Elite™ S9C (S9-15xA-TG)</td>
<td>X indicates the number of reels. A indicates the Alpha Game Platform® and a door with a 6.3 inch flat panel display. The top box does not contain a monitor. TG indicates a 17 inch, oval top box with a player participation panel and a glass game theme panel.</td>
</tr>
</tbody>
</table>
**S9000 Descriptions**

**ALPHA Elite™ S9C**  
(S9-1SxC-TG)  
X indicates the number of reels. C indicates an S6000 to Alpha PCI Convertor board and a door with a 6.3 inch flat panel display. TG indicates a 17 inch, oval top box with a player participation panel and a glass game theme panel.

![ALPHA Elite™ S9C](image)

**ALPHA Elite™ S9E**  
(S9-1Sx--20)  
X indicates the number of reels. 20 indicates a 20 inch, flat panel display in a 17 inch oval top box.

![ALPHA Elite™ S9E](image)

**ALPHA Elite™ V20**  
(S9-1V20-OG)  
V20 indicates a video cabinet with a 20.1 inch monitor in the door. OG indicates a 17 inch, oval top box and a glass game theme panel. The top box does not contain a monitor.

![ALPHA Elite™ V20](image)
### S9000 Descriptions

| **ALPHA Elite™ V20/20**  
| **(S9-1V20-20)**  
| V20 indicates a video cabinet with a 20.1 inch monitor in the door. 20 indicates a 20 inch, flat panel display in a 17 inch oval top box. This cabinet configuration supports server based gaming. |

| **ALPHA Elite™ V32**  
| **(S9-1V32-7G)**  
| V32 indicates a video cabinet with a 32 inch portrait monitor. The top box does not contain a monitor. 7G indicates a 7 inch oval top box and a glass game theme panel. The top box does not contain a monitor. |
Physical Specifications

The following topics are included in this section:

- Specification Summaries for S9-1S Machines
- Specification Summaries for S9-1V Machines

Specification Summaries for S9-1S Machines

The following table displays specifications for individual S9-1S machines:

<table>
<thead>
<tr>
<th>Specification Summary for S9-1S Machines</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Description</strong></td>
</tr>
<tr>
<td><strong>Electrical Specifications</strong></td>
</tr>
<tr>
<td>Line Voltage at 60 Hz</td>
</tr>
<tr>
<td><strong>Current @ 120 VAC</strong></td>
</tr>
<tr>
<td>Idle State</td>
</tr>
<tr>
<td>Operating State</td>
</tr>
<tr>
<td>Fuse Limited Rated Current</td>
</tr>
<tr>
<td><strong>Power</strong></td>
</tr>
<tr>
<td>Idle State</td>
</tr>
<tr>
<td>Operating State</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
</tr>
<tr>
<td>BTU/Hr</td>
</tr>
<tr>
<td><strong>Mechanical Specifications</strong></td>
</tr>
<tr>
<td>Weight</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
</tr>
<tr>
<td>Height, without Tower Light</td>
</tr>
<tr>
<td>Width</td>
</tr>
<tr>
<td>Depth</td>
</tr>
<tr>
<td><strong>Operating Environment (Recommended)</strong></td>
</tr>
<tr>
<td>Temperature Range</td>
</tr>
<tr>
<td>Humidity (Maximum)</td>
</tr>
</tbody>
</table>

**CAUTION:** To prevent temperature and humidity related stress on the machine, operate the machine within the recommended guidelines. Operating the machine outside the recommended guideline may increase the required maintenance.
**Specification Summaries for S9-1V Machines**

The following table displays specifications for S9-1V machines:

*Specification Summary for S9-1V Machines*

<table>
<thead>
<tr>
<th>Description</th>
<th>S9-1V20-OG</th>
<th>S9-1V20-20</th>
<th>S9-1V32-7G</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical Specifications</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Line Voltage at 60 Hz</td>
<td>120 VAC</td>
<td>120 VAC</td>
<td>120 VAC</td>
</tr>
<tr>
<td><strong>Current @ 120 VAC</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idle State</td>
<td>2.0 A</td>
<td>2.0 A</td>
<td>2.0 A</td>
</tr>
<tr>
<td>Operating State</td>
<td>2.5 A</td>
<td>2.5 A</td>
<td>2.5 A</td>
</tr>
<tr>
<td>Fuse Limited Rated Current</td>
<td>6.3 A</td>
<td>6.3 A</td>
<td>6.3 A</td>
</tr>
<tr>
<td><strong>Power</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idle State</td>
<td>240 W</td>
<td>240 W</td>
<td>240 W</td>
</tr>
<tr>
<td>Operating State</td>
<td>300 W</td>
<td>300 W</td>
<td>300 W</td>
</tr>
<tr>
<td><strong>Power Consumption</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTU/Hr</td>
<td>870</td>
<td>870</td>
<td>870</td>
</tr>
<tr>
<td><strong>Mechanical Specifications</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>250 Lbs. (113.64 Kg)</td>
<td>265 Lbs. (120.45 Kg)</td>
<td>285 Lbs. (129.55 Kg)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Height, without Tower Light</td>
<td>52.10 Inches (132.33 cm)</td>
<td>52.10 Inches (132.33 cm)</td>
<td>59.05 Inches (150.00 cm)</td>
</tr>
<tr>
<td>Width</td>
<td>21.50 Inches (54.61 cm)</td>
<td>21.50 Inches (54.61 cm)</td>
<td>21.50 Inches (54.61 cm)</td>
</tr>
<tr>
<td>Depth</td>
<td>22.86 Inches (58.06 cm)</td>
<td>22.86 Inches (58.06 cm)</td>
<td>22.86 Inches (58.06 cm)</td>
</tr>
<tr>
<td><strong>Operating Environment (Recommended)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Temperature Range</td>
<td>4 - 40 Degrees Celsius (39.2 - 104 Degrees Fahrenheit)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity (Maximum)</td>
<td>90%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

CAUTION: To prevent temperature and humidity related stress on the machine, operate the machine within the recommended guidelines. Operating the machine outside the recommended guideline may increase the required maintenance.
Flammable Weights

The following tables display flammable weights for specific S9000 machines:

- Flammable Weights for S9-1Sx--15
- Flammable Weights for S9-1SxC-TG
- Flammable Weights for S9-1V20-OG
- Flammable Weights for S9-1V32-7G

Flammable Weights for S9-1Sx--15

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Flammable Weight</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Item Description</td>
<td>Pounds</td>
<td>Kilograms</td>
</tr>
<tr>
<td>Bezel, Arm Rests, Coin Chute, and Miscellaneous Items</td>
<td>6.1</td>
<td>2.77</td>
</tr>
<tr>
<td>Reels, (Quantity of 5)</td>
<td>1</td>
<td>0.45</td>
</tr>
<tr>
<td>Reel Tapes, (Quantity of 5)</td>
<td>0.2</td>
<td>0.09</td>
</tr>
<tr>
<td>Buttons, (Quantity of 13)</td>
<td>0.2</td>
<td>0.09</td>
</tr>
<tr>
<td>Boards</td>
<td>5.2</td>
<td>2.36</td>
</tr>
<tr>
<td>Cables</td>
<td>3.3</td>
<td>1.50</td>
</tr>
<tr>
<td>15 Inch Monitor</td>
<td>3.4</td>
<td>1.55</td>
</tr>
<tr>
<td>Medium Density Fiberboard (MDF) Base</td>
<td>4.8</td>
<td>2.18</td>
</tr>
<tr>
<td>CC16 Coin Acceptor</td>
<td>0.3</td>
<td>0.14</td>
</tr>
<tr>
<td>Standard Hopper</td>
<td>2.04</td>
<td>0.93</td>
</tr>
<tr>
<td>Totals</td>
<td>26.54</td>
<td>12.06</td>
</tr>
</tbody>
</table>
### Flammable Weights for S9-1SxC-TG

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Flammable Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pounds</td>
</tr>
<tr>
<td>Bezel, Arm Rests, Coin Chute, and Miscellaneous Items</td>
<td>6.1</td>
</tr>
<tr>
<td>Reels, (Quantity of 5)</td>
<td>0.6</td>
</tr>
<tr>
<td>Reel Tapes, (Quantity of 5)</td>
<td>0.2</td>
</tr>
<tr>
<td>Buttons, (Quantity of 13)</td>
<td>0.2</td>
</tr>
<tr>
<td>Boards</td>
<td>5.2</td>
</tr>
<tr>
<td>Cables</td>
<td>3.3</td>
</tr>
<tr>
<td>6.3 Inch Monitor</td>
<td>2.8</td>
</tr>
<tr>
<td>Medium Density Fiberboard (MDF) Base</td>
<td>4.8</td>
</tr>
<tr>
<td>CC16 Coin Acceptor</td>
<td>0.3</td>
</tr>
<tr>
<td>Standard Hopper</td>
<td>2.04</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>25.54</strong></td>
</tr>
</tbody>
</table>

### Flammable Weights for S9-1V20-OG

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Flammable Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pounds</td>
</tr>
<tr>
<td>Bezel, Arm Rests, Coin Chute, and Miscellaneous Items</td>
<td>5.9</td>
</tr>
<tr>
<td>Boards</td>
<td>4.8</td>
</tr>
<tr>
<td>Cables</td>
<td>2.8</td>
</tr>
<tr>
<td>Buttons, (Quantity of 13)</td>
<td>0.2</td>
</tr>
<tr>
<td>20 Inch Monitor</td>
<td>3.7</td>
</tr>
<tr>
<td>Medium Density Fiberboard (MDF) Base</td>
<td>4.8</td>
</tr>
<tr>
<td>CC16 Coin Acceptor</td>
<td>0.3</td>
</tr>
<tr>
<td>Standard Hopper</td>
<td>2.04</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>24.54</strong></td>
</tr>
</tbody>
</table>
### Flammable Weights for S9-1V32-7G

<table>
<thead>
<tr>
<th>Item Description</th>
<th>Flammable Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pounds</td>
</tr>
<tr>
<td>Bezel, Arm Rests, Coin Chute, and Miscellaneous Items</td>
<td>5.9</td>
</tr>
<tr>
<td>Boards</td>
<td>4.8</td>
</tr>
<tr>
<td>Cables</td>
<td>2.8</td>
</tr>
<tr>
<td>Buttons, (Quantity of 13)</td>
<td>0.2</td>
</tr>
<tr>
<td>32 Inch Monitor</td>
<td>11.0</td>
</tr>
<tr>
<td>Medium Density Fiberboard (MDF) Base</td>
<td>4.8</td>
</tr>
<tr>
<td>CC16 Coin Acceptor</td>
<td>0.3</td>
</tr>
<tr>
<td>Standard Hopper</td>
<td>2.04</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>31.84</strong></td>
</tr>
</tbody>
</table>
Example of Overall Dimensions

The following is an example of overall dimensions for the S9-1SxC-TG:

![Overall Dimension Example - S9-1SxC-TG](image)

**Figure 1:** Overall Dimension Example - S9-1SxC-TG

Depth (not shown)
22.86 Inches
(58.06 cm)
Mounting Detail

The following diagram displays cabinet mounting dimensions:

Figure 2: Cabinet Mounting Dimensions
Required Parts

This installation may require the following additional parts:

- Locks (quantity 5 to 7, depending on your machine configuration).
- Category 5 network cables, for linking game controllers, if required (quantity and length depending on your machine configuration and your floor plan).

Lock and Cam Specification

Purchase locks for installation in each machine cabinet before installing machines. Single or dual lock configurations are possible. All lock openings are 5/8 inch (1.59 cm) by 3/4 inch (1.91 cm). The locks are 90 degree rotations. Locks 1 and 1/8 inch (2.86 cm) long can be used with spacers to maintain the 1/2 inch (1.27 cm) lock length.

NOTE: See your S9000 Assemblies, Parts, and Hardware guide for additional lock and cam details.

Figure 3: Lock and CAM Details

TIP: To avoid delays, purchase your machine locks well before your planned installation date. Purchase several spare machine locks from your lock manufacturer and keep them available.

Required Tools

This installation requires the following tools:

- tools for locks
Installation Checklist

Use the following checklist to prepare to install the machine:

**Pre-Installation Steps**

Complete the following steps before installing the machine:

- Purchase, assemble, and install power and network cabling for the desired floor plan.
- Purchase and receive locks.

**Installation Steps**

Complete the following steps to install the machine. See *Installation Instructions* on page 2 - 1 for details.

- Unpacking and Inspecting the Machine
- Installing the Machine
- Installing Locks
- Powering On the Machine
Chapter 2

Installation

Installation Instructions

This section includes the following installation instructions:

- Unpacking and Inspecting the Machine
- Installing the Machine
  - Installing Locks
  - Powering On the Machine
Unpacking and Inspecting the Machine

Use the following instructions to unpack and inspect the machine:

STEP 1. Remove any plastic packaging.

- **TIP:** To prevent damage to the front of the machine, remove the packaging while standing at the back of the machine. If any marks are made on the back of the cabinet while opening the packaging, then use shoe polish to minimize the appearance of marks.

STEP 2. Verify that the serial numbers on the cabinet match the shipping documents associated with the installation.

- **CAUTION:** Serial numbers on the cabinet must match the shipping documents that are associated with the installation. Never remove serial numbers from any Bally equipment.

STEP 3. Inspect the cabinet for any shipping damage, such as broken glass, dents, or scratches.

STEP 4. Inspect the corners of the glass panels for shipping damage.

STEP 5. Unpack and remove all loose parts from any boxes or bags containing cables, lock cams, and mounting hardware.

STEP 6. Remove all plastic or paper packing materials from any interior assemblies, such as a printer.

STEP 7. Inspect the interior cables and ensure they are firmly connected.

STEP 8. Inspect the circuit board assemblies and CompactFlash for loose connections and ensure they are firmly attached.

- **TIP:** During shipping, cables may become disconnected and circuit boards may become unseated. Ensure they are firmly attached before proceeding.

STEP 9. If there is damage to the machine or there are any missing parts, then contact your Bally Technologies Distributor or Customer Service Representative for Return Merchandise Authorization (RMA) information.
Installing the Machine

Use the following instructions to move and connect the machine:

STEP 1. If the tower light has been installed, then go to the next step.

If the tower light has not been installed, then install the tower light in the top box.

Figure 1: Tower Light

STEP 2. If the glass in the top box has already been installed, then go to the next step.

If the glass has not been installed, then complete the following steps:

- Verify the design on the glass for the top box matches the software for the game.
- Install the glass in the top box.

STEP 3. Move the machine to the desired location, using a lifting and moving device, such as a hand truck.

CAUTION: The machines are heavy. To prevent injuries and damage, always wear a back brace, work with a partner and do not use the tower light to move the machine.

TIP: To move the machine easily over a carpeted area, use a hand truck with solid tires, not air-filled. The machine can be made lighter for lifting by removing the monitor before lifting it, and then replacing it at a later time.

STEP 4. Place the machine at the desired location. Do not place the machine on any wires or cables.

STEP 5. Open the cabinet door and verify that the cables are not pinched under the machine or any neighboring machines.

STEP 6. Secure the machine to the base. Fasten securely to the wall, floor or adjacent object.

STEP 7. Route the power cable through a cut-out in the base, at the left, right, or rear of the machine as appropriate for the floor plan layout.

STEP 8. Connect the power cord.
Installing Locks

Use the following instructions to install locks on the machine:

STEP 1. If the door, stand, and other high-security locks have already been installed, then go to the next section.

If the door, stand, and other high-security locks have not been installed or if your cabinet contains locks used for shipping purposes only, then order locks from a reliable lock supplier. See S9000 Assemblies, Parts, and Hardware in the S9000 Operator’s Instruction Manual for additional lock cam information.

STEP 2. Use the instructions provided by your lock manufacturer to install locks on the main door, OS chip, main processor unit, and any other appropriate areas on your machine. (Machine configurations may vary.)

TIP: Put the key in the open position to remove the entire lock before removing the nut to disassemble it.
**Powering On the Machine**

Use the following instructions to start the machine:

**STEP 1.** Press the main power switch to supply power to the system.

**STEP 2.** Press the cabinet power switch to supply power to the cabinet components.

**STEP 3.** If the Operating System CompactFlash has not been installed, then insert the Operating System CompactFlash in the top socket.

**STEP 4.** If the Game CompactFlash has not been installed, then insert the Game CompactFlash in the bottom socket.

**STEP 5.** Flip the µ-ATX power switch to supply power to the logic board.

**STEP 6.** The machine is now ready for configuration. See *Alpha Game Platform*® *Setup and Operation* in the *S9000 Operator's Instruction Manual* for instructions.
Chapter 3

Relocating the Cabinet

Relocate a Machine

Use the following instructions to relocate a machine:

STEP 1. Ensure the new location has appropriate power and network cabling installed.

NOTE: Changes in floor configuration may require rerunning power and Category 5 network cables.

STEP 2. Flip the µ-ATX power switch off to power off the logic board.

STEP 3. Press the cabinet switch to power off the cabinet components.

STEP 4. Press the main power switch to power off the system.

STEP 5. Unplug and remove the power and network cables.

STEP 6. Place the machine at the desired location. Do not place the machine on any wires or cables.

STEP 7. To remove the machine from service, stop here.

To relocate and restart the machine, go to the next step.

STEP 8. Open the cabinet door and verify that no cables are pinched at any location.

STEP 9. Secure the machine to the base.

STEP 10. Connect and route the power and network cables through the cut-out provided at the left, right, or rear of the base as appropriate for the floor plan.

STEP 11. Press the main power switch to supply power to the cabinet.
STEP 12. Press the cabinet power switch to supply power to the cabinet components.

STEP 13. Flip the µ-ATX power switch on to supply power to the logic board.
Chapter 4

Periodic Maintenance

This section provides periodic maintenance information for all machine models and the following components:

- Cabinet
- Machine Door
- Coin Entry
- Coin Hopper
- Bill Acceptor
- Handle Mechanism
- Reel Drive
- Monitor
- Printer
- Main Processing Unit (MPU)

**NOTE:** Machine configurations may vary.
Periodic Maintenance Schedule

The following table indicates the recommended periodic maintenance schedule:

<table>
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<tr>
<th>Assembly</th>
<th>Maintenance Item</th>
<th>Service Interval (Days)</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>30</td>
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<tr>
<td>Cabinet</td>
<td>Cabinet Interior</td>
<td>X</td>
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<tr>
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<td>LEDs and Lamps</td>
<td></td>
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<tr>
<td></td>
<td>Locks and Key Switches</td>
<td></td>
</tr>
<tr>
<td>Machine Door</td>
<td>Player Panel Buttons</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>All Glass</td>
<td></td>
</tr>
<tr>
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<td>Coin Acceptor</td>
<td></td>
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<tr>
<td></td>
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</tr>
<tr>
<td></td>
<td>Coin Diverter Inspection</td>
<td></td>
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<td>Coin Switch</td>
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</tr>
<tr>
<td></td>
<td>Coin Bowl and Pinwheel</td>
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</tr>
<tr>
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<tr>
<td></td>
<td>Bill Path</td>
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<td></td>
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<tr>
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<tr>
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<td></td>
</tr>
<tr>
<td>Printer</td>
<td>EPROM or EEPROM (Flash Upgrade)</td>
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<tr>
<td></td>
<td>Print Head</td>
<td></td>
</tr>
<tr>
<td>MPU</td>
<td>EPROM, Operating System and Game CompactFlash</td>
<td>X</td>
</tr>
</tbody>
</table>
Cabinet

Use the following instructions to maintain the cabinet components:

Cabinet Interior

- Vacuum the inside of the cabinet.
- Remove all dust and debris from the coin chutes.
- Remove loose coins to keep them from shorting electrical connections.
- Inspect the cabinet wiring for pinched or frayed wires.
- Confirm that the mounting hardware fully secures the cabinet to the stand.
- Inspect the power cord for signs of overheating.

LEDs and Lamps

- Replace any burned out LEDs or lamps. Faulty starters may cause flickering fluorescents. All fluorescents illuminate when switching on the machine power.
- Inspect ballasts for overheating.
- Locate burned out button LEDs and feature lamps by playing the machine or by activating the Output Test as described in the Alpha Game Platform® Setup and Operation guide.

Cabinet Exterior

The laminate or powder coat exterior of the cabinet requires little maintenance except for occasional dusting. Avoid abrasive cleansers.

Locks and Key Switches

- Check connections of Key Switches for loose or frayed wires.
- Add a small amount of graphite if the key does not turn easily.
- Check that all lock hardware is secure, yet allowing the lock to work smoothly.
Machine Door

Use the following instructions to maintain the machine door components:

Player Panel Buttons

Use a dry, lint-free cloth to clean the buttons. If a cleaning solution is necessary, use a mild glass cleaner. Avoid abrasive cleansers.

All Glass

Use a dry, lint-free cloth to remove the dust from the glass. Use a mild glass cleaner if necessary. Avoid abrasive cleansers or anything that will damage the protective laminate on the inside of the Display Glass and Feature Glass. Replace faded decals.
Coin Entry

Use the following instructions to maintain the coin entry components:

**Coin Acceptor**

- Disassemble and clean to remove metal coin fragments.
- Adjust and calibrate according to the manufacturer specifications.
- Inspect connections for frayed or broken wires.

**COD Board Optics**

The Coin Optic Decoder Board uses an infrared emitter and detector to monitor coins. The emitter and detector are on the same side of the COD board. The emitter shines through the assembly and reflects back to the detector using a prism. Use a lint-free cloth to clean the prism. Check the prism bracket to ensure that the prism is secure.

**Coin Diverter Inspection**

With power off, the Coin Diverter Assembly should pivot freely. Activate the Output Test as described in the *Alpha Game Platform® Setup and Operation* guide, to verify operation.
**Coin Hopper**

Use the following instructions to maintain the coin hopper components:

**Coin Switch**

Upright and Bartop machines use optical switches to count coins from the hopper. Use a dry, lint-free cloth to clean the lenses.

Check the adjustment of the micro switch on slant machines.

**Hopper Test**

Activate the Hopper Test as described in the *Alpha Game Platform® Setup and Operation* guide. The hopper will dispense 10 coins.

**Coin Bowl and Pinwheel**

- Remove the coin bowl and pinwheel and clean thoroughly to remove coin metal fragments.
- Inspect the hopper knife for excessive wear. Replace, if necessary.
- Inspect the coin probe for broken or frayed wires.
Bill Acceptor

Use the following instructions to maintain the bill acceptor components:

**EPROM or EEPROM (Flash Memory)**

Verify the EPROM or EEPROM (flash upgrade) version is correct and is the latest revision. For example, there may be a newer version available for the changing currency. Replace, if necessary.

**Bill Path**

Open the acceptor and transport components. Use a dry lint-free cloth to remove any debris.

**Timing Belts**

Replace frayed or worn belts.

**Sensor**

Replace dirty, clouded, or scratched lenses as they may degrade the performance of the acceptor. Clean the sensors with a dry lint-free cloth. If cleaning requires a solvent, then use a weak solution of water and mild dish detergent. Allow the lenses to dry completely before closing the acceptor and transport assembly.

Activate the Bill Acceptor Test as described in the *Alpha Game Platform® Setup and Operation* guide, to verify operation.
Handle Mechanism

Use the following instructions to maintain the handle mechanism components:

Release Solenoid and Ratchet

The handle mechanism consists of a ratchet assembly, an optic sensor, a release solenoid, and an arm assembly. Inspect the handle mechanism for proper function and to ensure handle arm is secure.

Press the pseudo coin button to energize the handle release solenoid and allow the handle to move. Pull the handle and check for smooth ratchet operation. The reels should spin when the handle is in the full forward position. Release the handle and ensure it returns and locks into its original upright position.

CAUTION: The handle mechanism is factory lubricated and does not require additional lubrication or adjustment.
Reel Drive

Use the following instructions to maintain the reel drive components:

Reel Optics

Optical sensors monitor the reel positions. Clean the reel optics with a dry lint-free cloth or swab. Dirty reel optics can cause reel movement tilts on some machine configurations.

Reel Strip

Clean each reel strip with a soft cloth moistened with warm water. Use new tape to reattach any reel strips that are showing signs of separation.
Monitor

Use the following instructions to maintain the monitor components:

**Viewable Area**

Abrasive or ammonia-based cleaners can damage the material bonding the Micro Touch® touch screen to the monitor. Clean the monitor with an antistatic nonabrasive cloth and a cleaner recommended for laptop computer screens.

**Position, Color, and Size**

Check for correct horizontal and vertical alignment by ensuring that all text and images are within the borders of the monitor bezel. Use the monitor color and screen size diagnostics as described in the Alpha Game Platform® Setup and Operation guide.

**Touch Screen Calibration**

Settings for the touch screen will change over time, or with any adjustment made to the monitor. Calibrate the touch screen according to the directions described in the Alpha Game Platform® Setup and Operation guide.
Printer

Use the following instructions to maintain the printer components:

EPROM or EEPROM (Flash Upgrade)

Verify the firmware, EPROM or EEPROM (flash upgrade) version is correct and is the latest revision. Replace, if necessary.

Print Head

After opening the unit, the ticket path is accessible for cleaning or clearing tickets. Use a soft brush to clean the paper dust from inside the printer and chassis area. Also remove the paper dust from the sensor optics. If streaking on the printed ticket is evident, the thermal print head may need cleaning.

Cleaning cards are available for thermal printers through TransAct Technologies Incorporated or can be purchased direct from Enefco International Ltd. at (888) 578-0141.
Main Processing Unit (MPU)

Use the following instructions to maintain the MPU components:

**EPROM or CompactFlash**

Verify the EPROM or CompactFlash (Operating System and Game) software version is correct. Replace, if necessary.
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