Legacy Cabinets to PowerPutt GOLF Update Instructions

**WARNING:** Part 1 of this update is *only* necessary if your system box has a serial number *below* 420000. If your serial number is above 420000 you *do not* need to install the Memory Module (DIMM). If you do not need a memory update move on to Part 2: Install the Security Chip.

See the image at right for the location of the six-digit serial number on your system box below the bar code.

**SYSTEM REQUIREMENTS:**
**MUST HAVE 1 GIGABYTE (GB) OF MEMORY**

To find the memory on your machine:
- Enter the Operator Setup Mode using the Setup button located on the coin vault. From the main menu, select *Trouble Shooting Shortcuts > System Tests > Hardware/Software > System Info*
- CPU Information line displays the amount of memory on the game. 1024 or 896 MB = 1 Gigabyte (No Memory Upgrade needed)
- CPU Information line displays 512 MB or 256 MB = Less than 1 Gigabyte (Memory Upgrade needed)

Videos detailing these instructions are available via YouTube on IT’s web site:
- RAM Card Installation - [http://www.youtube.com/watch?v=8VgrRMbb6rM](http://www.youtube.com/watch?v=8VgrRMbb6rM)
- Update Installation - [http://www.youtube.com/watch?v=8pOHvVD hegk](http://www.youtube.com/watch?v=8pOHvVD hegk)

**UPDATE KIT CONTENTS:**
- New Security Chip labeled **PPG-US**
- 1 GB Dual In-line Memory Module (DIMM)
- Update Memory Stick labeled PowerPutt Golf Version **2.01.XX**
- New Cabinet Marquee
NOTICE:
Although this PowerPutt GOLF update process is similar to previous updates, it does require replacing the DIMM, which will take additional time and tools to complete. Please read the enclosed instructions carefully before installation.

Follow the steps below in the exact order listed to prevent damage to the Nighthawk System Box.

Part 1: 1 GB Memory Upgrade Procedure
This update is only necessary if your system box has a serial number below 420000.

Tools/equipment required for Memory Upgrade:
- 1 GB DIMM
- ¼-inch Hex Nut Driver (no longer than 9 inches)
- Standard/Flat Head Screwdriver
- Flashlight (optional)

1. Turn OFF all power to the cabinet.
2. Open the cabinet door housing the Nighthawk system box.

System Box
The Nighthawk System Box houses most of the game electronics and hardware in one box that can be easily installed. As with all electronic equipment, the system box should be handled with extreme care. Shock, severe temperature, or sudden impacts can damage the internal components that require costly repair.

Note: Be sure power to the cabinet is OFF when performing any of the procedures below. For added safety remove the power cord from the back of the cabinet (optional).

System Box Removal (Showpiece Cabinet)
- Unlock the control panel and open to expose the Nighthawk system box.
- Disconnect all connections to the system box. Be sure all wires and connectors are clear and out of the way. Label the connectors for easy reconnection.
- Loosen the 6 ¼-inch hex-head screws that secure the system box.
- Carefully lift the system box up out of the cabinet.

System Box (Dedicated Cabinet)
- It is not necessary to remove the system box from dedicated cabinets.

Note: The USB cables can connect to any of the USB ports on the back of the system box.
3. Locate the three hex nut screws on the system box (below the warning sticker). Using a ¼-inch hex nut driver loosen the screws but do not remove them.

4. Locate the three hex nut screws on the opposite side of the system box. Using a ¼-inch hex nut driver remove the screws and set them aside in a safe place.

5. Using a standard head screwdriver remove the security labels on both sides of the system box. Please note that if the machine’s service history includes a software or memory upgrade transaction, opening the system box will not void the warranty absent evidence of negligence.

**WARNING:** Electrostatic discharge (ESD) can damage components. To provide some ESD protection, wear an ESD wrist strap connected to the Nighthawk system box. Another method is to discharge yourself by touching the metal system box while your feet are flat on the ground before touching any components.

6. Remove the top of the system box and locate the DIMM slots located adjacent to the fan.

**Note:** It is possible that the video card on your machine may sit on top of the thumb latch for the DIMM. If this is the case please remove the video card using steps 6-8 of the Nighthawk Video Card Replacement Instructions on IT’s web site:
http://amusement.itsgames.com/Amusement/Support/ServiceParts/

7. Push down on the two white or beige thumb latches securing the DIMM on either side. Make sure the latches are pushed outward to the open position. **You must remove any and all DIMM before moving to Step 8.**
8. Carefully remove the new DIMM from its protective packaging. Do not touch any part of the DIMM other than the sides of the card.

9. Position the new DIMM into slot 0 (zero) on the motherboard. Align the small notch at the bottom edge of the DIMM with the key/slot in the socket. (The key/slot should prevent inserting the DIMM backwards.) Typically the bar code label faces away from the fan.

10. Insert the bottom edge of the DIMM into the socket. Push down on the top edge of the DIMM until the retaining thumb latches snap into place. Do not force the DIMM into the slot. Make sure the latches are firmly in place.

11. If the video card was removed in step 6, replace it.
12. Slide the top of the system box back in place.
13. Replace the three hex nuts on the top panel of the system box and tighten them.
14. Tighten the three hex nuts at the opposite side of the system box (below the warning sticker).
15. If you have a showpiece cabinet, reinstall the system box. See System Box Replacement below.
16. Turn ON the machine to ensure the new memory is recognized. Let the game boot up completely to the game mode.

Note: On boot up an Intel screen may appear indicating that an increase in memory occurred. Within a few seconds this screen will disappear and the game should continue to boot as expected. Proceed to Part 2: Install the Security Chip.

System Box Replacement (Showpiece)
- Unlock the control panel and open to expose the inside of the cabinet.
- Align the system box onto the 6 mounting screws of the internal slanted panel. The connection ports face up. Once the system box is in place, tighten the 6 ¼-inch hex-head screws to secure the box to the panel.
Part 2: Installing the Security Chip

Complete a Collection (Recommended)
1. Enter the Operator Menu screens and complete a collection on the machine. Your earnings may reset during this installation.

Install the Security Chip
1. Turn OFF all power to the game.
2. Carefully remove the socketed security chip found at U101 on the I/O Board. It is extremely important to note the orientation of the chip (with the small circular indentation on the same side as the USB ports).
3. Make sure the new chip is oriented the same as the old chip before inserting it into the U101 socket. Be sure the chip is seated properly with no bent pins.

If the Security Chip is damaged, DO NOT THROW IT AWAY. It is required when purchasing a replacement.

Location of the I/O Board wall mounted inside a dedicated cabinet.

Example of a KIT I/O Board with a security chip. Some I/O Boards may not have the JAMMA Connector.
Part 3: Install Memory Stick

Please remember it is important to KEEP the memory stick for future updates. The memory stick can be used for an unlimited number of updates. DO NOT DISCARD.

There are two methods for updating a dedicated cabinet and one for a Showpiece cabinet:

- Method 1 is performed from the back of the dedicated cabinet.
- Method 2 is performed on all Showpiece models.

Select a method and follow the instructions below:

**Method 1: Update from Back (Dedicated Cabinet)**

1. Ensure all power to the machine is OFF and money has been collected.
2. Remove the back door to the cabinet.
3. Locate an open USB port on the system box. If there are no open ports, unplug the USB cable that is routed to the control panel.  
   
   **WARNING: Do Not Unplug the USB cables from the I/O Board or CID.**

4. Insert the Update Memory Stick into the now open USB port.
5. Continue with Part 4 on next page to complete the update.

**Method 2: Update from Under Control Panel (Showpiece Cabinet)**

1. Ensure all power to the machine is OFF and money has been collected.
2. Turn the key at the back of the Showpiece cabinet to unlock the control panel box and lift up the hinged control panel.
3. Locate the open USB port on the back of the system box.
4. Insert the memory stick into the port.
5. Continue with Part 4 to complete the update.

Part 4: Perform Software Update

1. Turn ON power to game. **It is important to prevent losing power or turning off the game during this software update!**
2. The game should automatically detect the memory stick and run the Installer program.
   
   **WARNING: If Error Message 6 or 12 displays, the wrong USB cable was disconnected.**  
   Turn OFF power, replace the cable, select a different USB port and try again.  
   If the initial update speed is not ideal, more than one reboot may occur.

3. The Installer program reads the Security Chip, in addition to the CID, I/O Board and Nighthawk chassis to make sure this upgrade is possible.
4. Press **Start** when prompted to begin the installation of the software upgrade.  
   **Note:** The upgrade takes about 20-30 minutes to complete so please be patient.
Important! Do not lose power or turn off the game after the Start button has been pressed or any time while the update is in progress.

5. When the install is complete, the Installer prompts to turn OFF the game, remove the memory stick, reconnect the original USB cable, and then turn the game back ON.

6. Once complete, enter the System Setup menus and verify that the software version is Version 2.01.XX.

Marquee Installation
1. Slide the rectangular marquee mounting frame from its position on the two upright posts.
2. Remove any one of the four side pieces of the mounting frame.
3. Remove the current plastic laminate marquee from the mounting frame, but do not remove the cardboard.
4. Slide the updated marquee into place and reassemble the side piece or pieces. Make sure all of the surrounding pieces of the mounting frame are tight and the plastic laminate is smooth against the cardboard.
5. Slide the fully assembled marquee back into position.

System Box Filter Cleaning
A clean filter is very important for proper cooling and optimal performance of the hardware. Be sure to clean this filter regularly.

1. With the back door removed, slide out the ventilation filter located on the underside of the system box.
2. Thoroughly clean the filter so it is free of dust and debris.
3. Insert the filter back into the slots of the bracket located on the underside of the system box.