

# Nighthawk Video Card Replacement Instructions

### Tools/equipment required for Video Card Replacement:

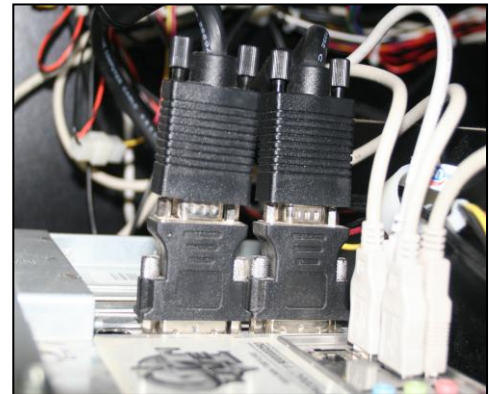
- New Video Card
- ¼-inch Hex Nut Driver (no longer than 9 inches)
- Standard/Flat Head Screwdriver (long)
- Flashlight (optional)

1. Make sure all power to the cabinet is OFF.
2. Remove any cables and adapters from the video card outputs. A long-handled 3/16-inch flathead screw driver works best to loosen the DVI to VGA adapters. See VGA Connections at right.
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. See System Box below.
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. See System Box below.
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. Disconnect the ribbon cable from the motherboard and clear it from the video card. Note the orientation. If applicable, remove the black and orange cable from the video card.
7. Remove the ¼-inch screw holding the card to the system box and set aside. See Video Card Screw.

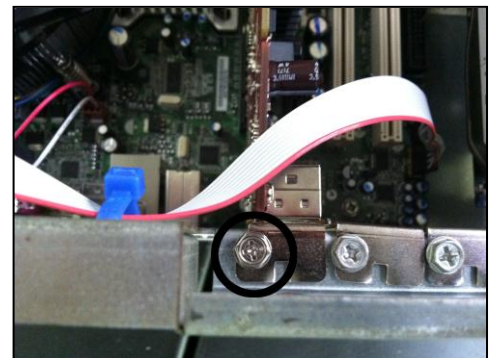
### VGA Connections



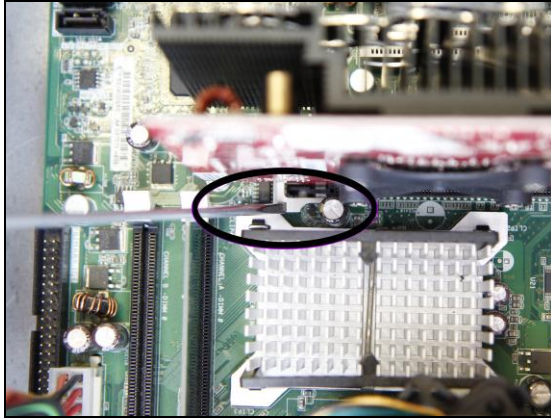
### System Box



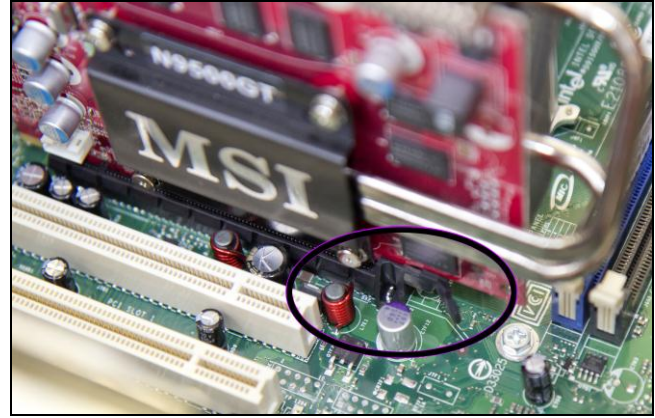
### Video Card Screw



- Carefully remove the video card, touching it only on the edges, and set it in a safe spot away from liquids, dust or debris. There are two types of plastic mounting clips used in the system box: push clip (white or beige) and swing clip (black or brown). Depending on the year of your system box you may have either a push clip or a swing clip. See images below for releasing each type of clip.



**Push Clip** – Use a screwdriver to push down on the clip and release the video card.



**Swing Clip** – Use a screwdriver or your finger to swing the clip aside and release the video card.

- Carefully insert the new video card by lining up the edge of the video card to the connector on the motherboard. Press until it is firmly seated. Be sure both sides are inside the connector and the locking clip is engaged.
- Reattach the video card to the system box using the ¼-inch hex nuts.
- Reattach the ribbon cable. Be sure it is connected to all pins. If necessary, reattach the orange and black cable to the video card.
- Reattach the video adapters and VGA cables or any other disconnected video cables.

### Troubleshooting Guide

Problem	Possible Solution
CPU fan not spinning	Check AC power cord to cabinet
	Check AC power cord to System
	Check power switch on cabinet
	Check power switch on supply
	Check 24 pin at connector to mother board
Fans spin, no video	Check video cable at system box
	Check 4 pin processor power connector to mother board
No leds on IO board	Check USB cable
	Check both 4 pin connectors at interconnect board
No bootable device found	Check SATA data cable to Hard drive
	Check SATA power cable to Hard drive
Clicking noise	Check cable routing near fans
No Audio	Check ribbon cable at interconnect board
	Check ribbon cable at mother board