# Installing an HP Solenoid Lock and Hood Sensor

#### Introduction

The side access panel Solenoid Lock is designed to prevent unauthorized removal of the computer cover. The side access panel may be locked by using a local or remote signal-controlled solenoid.

The Hood Sensor is designed to notify the user of any removal of the computer cover.

#### **Kit contents**

- Solenoid Lock assembly, including solenoid, bracket, and cable
- Two tamper-resistant screws
- Solenoid Lock FailSafe Key
- Sensor and power cable
- Sensor bracket
- Two sensor bracket screws
- Warranty information
- This installation guide

## Before you begin

To determine the compatibility of this product with your HP computer, see *QuickSpecs* online at <u>http://www.hp.com/go/productbulletin</u>.

#### Installing the Solenoid Lock and Hood Sensor in HP Workstations

Installations in HP Workstations, such as the HP Z600 Workstation series, may be different. Complete installation and removal procedures for this product are included in the service guide for your workstation model, available at <u>http://www.hp.com/support/manuals</u>.



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# Warnings and cautions

- ▲ WARNING! Any surface or area of the equipment marked with this symbol indicates the presence of a hot surface or hot component. If this surface is contacted, the potential for injury exists. To reduce the risk of injury from a hot component, enable the surface to cool before touching.
- ▲ WARNING! Any surface or area of the equipment marked with this symbol indicates the presence of an electrical shock hazard. To reduce the risk of injury from electrical shock, do not open any enclosed area marked with this symbol.
- ▲ WARNING! To reduce the risk of electric shock or damage to your equipment:
  - Do not disable the power cord grounding plug. The grounding plug is an important safety feature.
  - Plug the power cord in a grounded (earthed) outlet that is easily accessible at all times.
  - Disconnect power from the equipment by unplugging the power cord from the electrical outlet.
- ▲ WARNING! To reduce the risk of serious injury, read the Safety & Comfort Guide. It describes proper computer setup, posture, health, and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located at <u>http://www.hp.com/ergo</u> and on the documentation CD (if one is included with the product).
- ▲ WARNING! If a product is shipped in packaging marked with this symbol, , the product must always be lifted by two persons to avoid personal injury due to product weight.
- △ CAUTION: Static electricity can damage the electronic components of the computer. Before beginning these procedures, be sure you discharge static electricity by briefly touching a grounded metal object.
- △ CAUTION: To prevent damage to the computer, observe the following Electrostatic Discharge (ESD) precautions while performing the system parts removal and replacement procedures:
  - Work on a static-free mat.

— Wear a static strap to ensure that any accumulated electrostatic charge is discharged from your body to the ground.

— Create a common ground for the equipment you are working on by connecting the static-free mat, static strap, and peripheral units to that piece of equipment.

NOTE: HP accessories are for use in HP computer products. They have been extensively tested for reliability and are manufactured to high quality standards.

# **Installing the Hood Sensor**

NOTE: Computer models vary, and all illustrations are examples only. For product-specific information, see the service guide for your HP computer at <u>http://www.hp.com/support/manuals</u> before beginning installation.

The attachment point for the Hood Sensor may be located on the front panel, back panel, or sheet metal of the computer chassis, the plastic fan-duct housing, or the expansion card guide.

- 1. If necessary, install the Hood Sensor bracket, using the screws provided in the kit.
- NOTE: If the computer has two holes for mounting the bracket, use both of the screws provided in the kit. If the computer has only one hole, only one screw is needed.
- 2. Push the Hood Sensor up through the rectangular hole in the bracket, chassis, card guide or fan duct housing, and then slide it forward or backwards (1) in the rectangular hole until it locks into place.
- Plug the loose end of the Hood Sensor cable into the appropriate connector on the system board (2). Be sure to route the cable so it does not interfere with other system board connectors or computer components.
- NOTE: To locate system components on HP Workstations, see the service label on the side access panel.



Figure 1 Installing the Hood Sensor

## **Installing the Solenoid Lock**

NOTE: Computer models vary, and all illustrations are examples only. For product-specific information, see the service guide for your HP computer at <a href="http://www.hp.com/support/manuals">http://www.hp.com/support/manuals</a> before beginning installation.

The attachment point for the Solenoid Lock may be located on the back panel or the top panel of the computer chassis.

1. Ensure that the security pin in the Solenoid Lock assembly is in the OFF position, as illustrated. If the pin is up, push it down to the OFF position.

Figure 2 Security pin in the OFF position



- 2. Install the new lock assembly (1) on the inside of the rear panel or top panel of the computer using the two tamper-resistant screws (2) and the FailSafe Key included in this kit.
- NOTE: On some computer models, the Solenoid Lock may look different than the one pictured, or may be installed on the other side of the system fan grill or on the top panel of the computer.
- Plug the loose end of the Solenoid Lock cable into the appropriate connector on the system board (3). Be sure to route the cable so it is not interfering with other system board connectors or computer components.
- NOTE: To locate system components on HP Workstations, see the service label on the side access panel. On some HP Workstations, such as the HP Z600 Workstation series, the Solenoid Lock cable does not connect to the system board.



Figure 3 Installing the Solenoid Lock assembly

### **Reassembling the computer**

- 1. Replace the side access panel.
- 2. Reconnect the power cord to the computer and plug the power cord into a power outlet.

# **Activating the Solenoid Lock**

- NOTE: The Hood Sensor does not require activation. It is recognized and activated automatically by the computer.
  - 1. Turn on or restart the computer.
  - 2. Repeatedly press and release the F10 key until the Computer Setup Utilities menu appears.
  - NOTE: If you do not press the F10 key at the appropriate time, you must turn the computer off, then on again, and press the F10 key again to access Computer Setup.
  - 3. Select Security > Smart Cover > Lock.
  - 4. Before exiting, select File > Save Changes and Exit.

#### **Remote security management**

It is possible to remotely lock and unlock the Solenoid Lock using Remote Access Software. Refer to <u>www.hp.com/go/hpcmi</u> for tools you can use to remotely manage the computer and BIOS settings in a networked environment.

# **Disabling and removing the Solenoid Lock**

There are two methods to disable the Solenoid Lock.

- If you can access the F10 Setup utility, follow the steps in <u>Disabling the Solenoid Lock via the</u> F10 Setup Utility on page 6.
- If a Solenoid Lock is installed but you cannot access the F10 utility, follow the steps in <u>Disabling</u> the Solenoid Lock mechanically on page 6.

#### **Disabling the Solenoid Lock via the F10 Setup Utility**

- 1. Turn on or restart the computer.
- 2. Repeatedly press and release the F10 key until the Computer Setup Utilities menu appears.
- NOTE: If you do not press the F10 key at the appropriate time, you must turn the computer off, then on again, and press the F10 key again to access Computer Setup.
- 3. Select Security > Smart Cover > Unlock.
- 4. Before exiting, select File > Save Changes and Exit.
- 5. Remove the computer side access panel to access the internal components of the computer.
- 6. Using the FailSafe Key included in this kit, remove the two tamper-resistant screws that secure the Solenoid Lock to the chassis.
- 7. Unplug the Solenoid Lock cable from the system board and remove the lock assembly.

#### **Disabling the Solenoid Lock mechanically**

- NOTE: If the Solenoid Lock is locked and disabled mechanically, the new lock will be automatically locked as soon as the computer is restarted.
  - 1. Exit all software applications, shut down the operating system software, turn off the computer and any external devices, and then disconnect the power cord from the power outlet.
  - 2. Lay the computer on its side with the cover facing up.
  - 3. Using the FailSafe Key included in this kit, remove the two tamper-resistant screws that secure the Solenoid Lock to the chassis.
  - 4. After the screws are removed, the Solenoid Lock will fall inside the chassis.
  - 5. Remove the computer side access panel to access the internal components of the computer.
  - 6. Unplug the Solenoid Lock cable from the system board and remove the lock assembly.