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Upgrading and Servicing Guide

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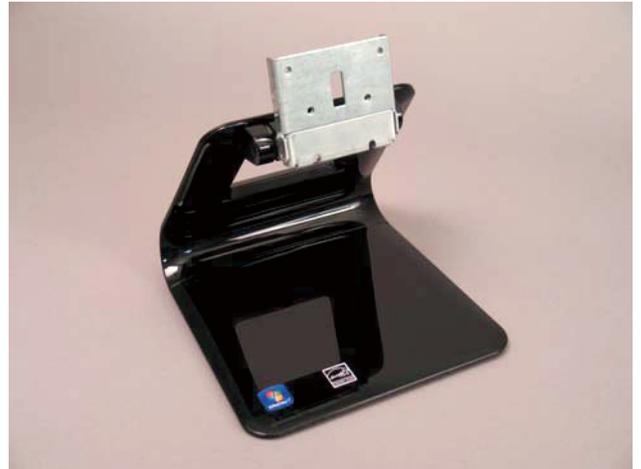
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Removing the Stand for Wall Mounting



Removing the Stand for Wall Mounting



5-10 minutes

The computer can be mounted on a wall by attaching a wall-mounting device (sold separately) to the back of the computer. The four mounting holes on the back of the computer are compliant with the VESA 100 mm spacing standard for mounting compatible devices. Before you can install the wall-mounting device, you need to remove the stand.

Before You Begin

Observe the following requirements before removing and replacing the computer stand.

Tools Needed

- Flathead screwdriver
- Phillips screwdriver #2



CAUTION: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.



WARNING:

- **Never open the cover with the power cord attached or power applied. You may damage your computer.**
- **Avoid touching sharp edges inside the computer.**

IMPORTANT: Computer features may vary by model.

Computer Preparation

- 1 Remove any media (CD, DVD, and memory cards) from the computer.

- 2 Press the power button to turn off the computer.



- 3 Unplug the computer by disconnecting the power cord in back.



- 4 Unplug all attached cables from the back of the computer.



- 5 Lay the computer down on a flat surface, covered with a soft cloth to protect the screen from scratches or other damage.

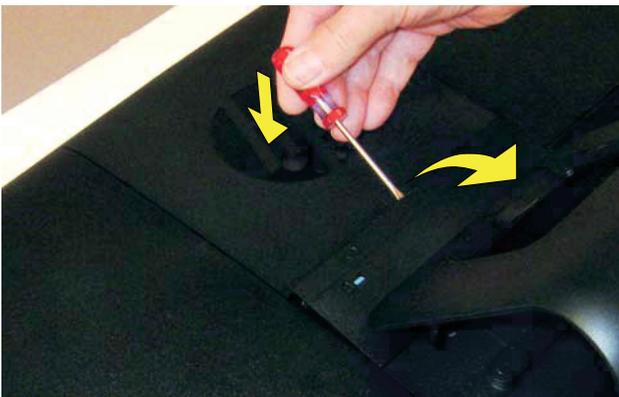


- 8 Use a screwdriver to remove the four screws holding the stand to the computer.



Removing the Stand

- 6 Remove the back cover above the stand at the back of the computer. Insert a flathead screwdriver or other object with a flat tip into the slot to pry it off.



- 9 Slide the stand assembly forward slightly, toward the top of the computer.



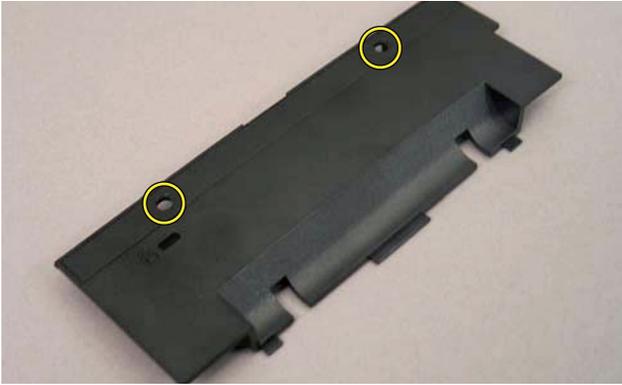
- 7 There are four screws attaching the stand to the computer.



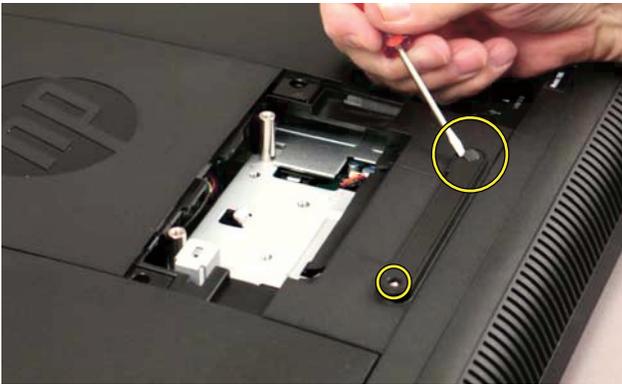
- 10 Lift and slide the stand assembly backwards to remove it from the computer.



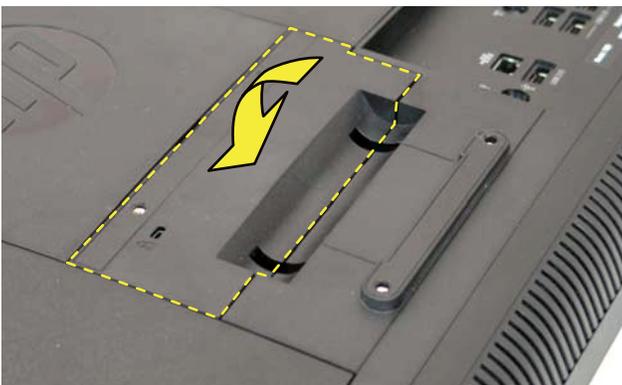
11 Use a flathead screwdriver to remove the plastic tabs covering the two screw holes on the back cover.



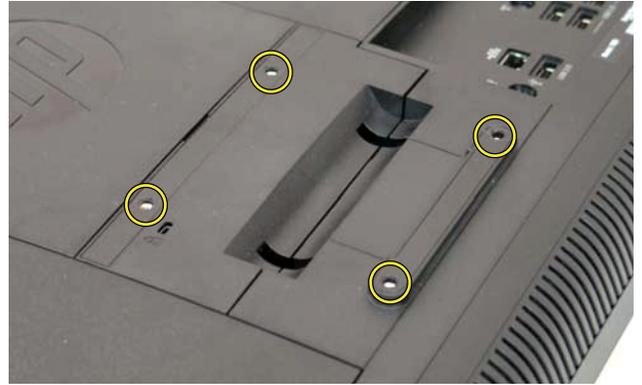
12 Use a flathead screwdriver to remove the plastic tabs covering the two screw holes below the back cover.



13 Replace the back cover on to the computer.



14 There are four holes for screws to be used to attach the wall mounting device to the computer.

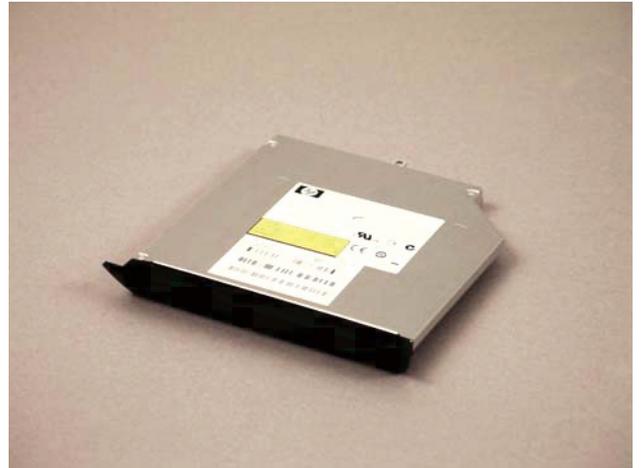


15 Follow the wall-mounting hardware manufacturer's instructions on how to wall-mount the computer.

TASK COMPLETED



Removing and Replacing a CD/DVD Drive



Removing and Replacing a CD/DVD Drive



10 - 15 minutes

Before You Begin

Observe the following requirements before removing and replacing the hard disk drive.

Tools Needed

- Flathead screwdriver
- Phillips screwdriver #1



CAUTION: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.



WARNING:

- **Never open the cover with the power cord attached or power applied. You may damage your computer.**
 - **Avoid touching sharp edges inside the computer.**
-

IMPORTANT: Computer features may vary by model.

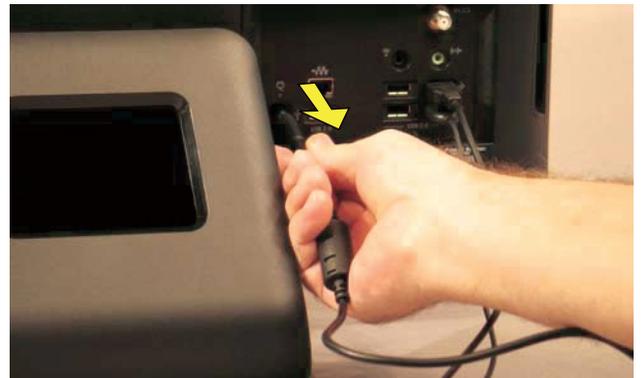
Computer Preparation

- 1 Remove any media (CD, DVD, and memory cards) from the computer.

- 2 Press the power button to turn off the computer.



- 3 Unplug the computer by disconnecting the power cord from the back of the computer.



- 4 Unplug all attached cables from the back of the computer.



- 5 Lay the computer down on a flat surface, covered with a soft cloth to protect the screen from scratches or other damage.

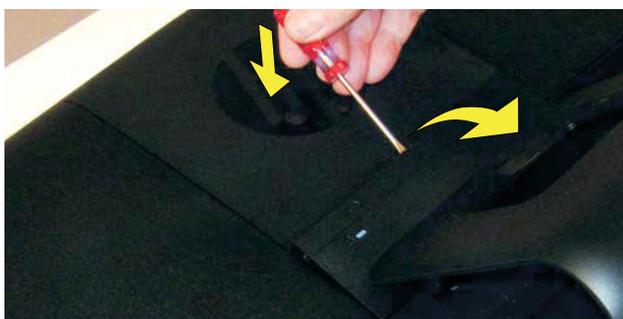


- 8 Slide the side cover off the computer in the direction indicated by the arrow.



Removing the CD/DVD Drive

- 6 Remove the back cover above the stand at the back of the computer. Insert a flathead screwdriver or other object with a flat tip into the slot to pry it off.



- 9 Markings on the CD/DVD drive cover indicate the location of the screw.



- 7 The left and right side covers on the back of the computer have a tab with an arrow indicating the direction to remove each cover.



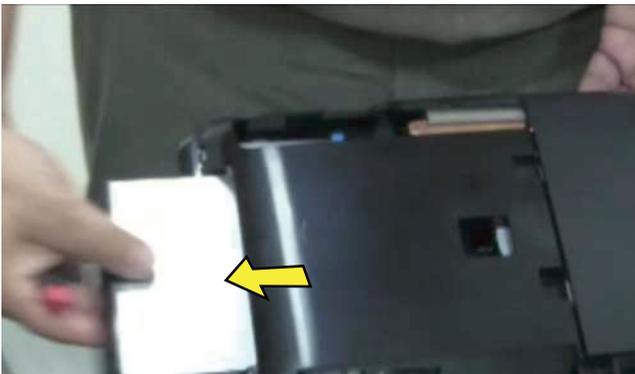
- 10 Remove the screw for the CD/DVD drive.



- 11** Insert a finger, or a screwdriver, in the slot and push the CD/DVD drive out.



- 12** Slide the CD/DVD drive out of the computer.



TASK COMPLETED

Installing a New CD/DVD Drive

NOTE: The replacement CD/DVD drive may not look exactly the same as the original drive due to different manufacturers or models. Hewlett-Packard always provides quality parts that meet or exceed your original computer specifications.

- 1** Slide the replacement CD/DVD drive into the computer, placing the notched edge toward the top of the computer.



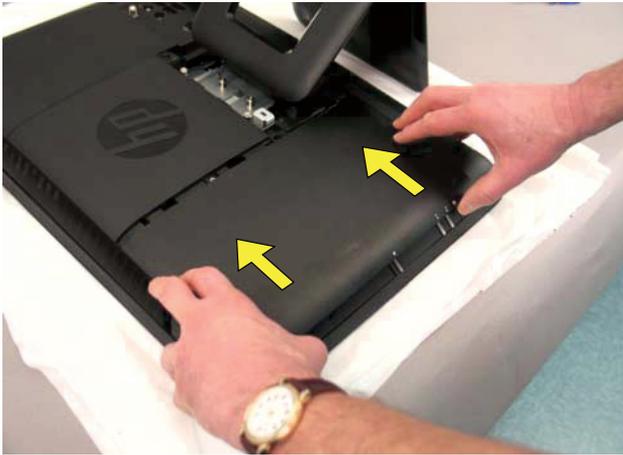
- 2** Push the CD/DVD drive in until it stops.



- 3** Replace the screw on the CD/DVD drive.



4 Replace the side cover.



8 Reconnect all the cables.



5 Replace the back cover above the stand.



TASK COMPLETED

6 Place the computer in an upright position.

7 Plug in the power cord.





Removing and Replacing a Hard Disk Drive



Removing and Replacing a Hard Disk Drive



10 - 15 minutes

Before You Begin

Observe the following requirements before removing and replacing the hard disk drive.

IMPORTANT: A hard disk drive is extremely sensitive to shock impact. Do not bang or drop it. Do not touch the circuit board. Static electricity can damage the drive.

Tools Needed

- Flathead screwdriver
- Phillips screwdrivers #1, #2



CAUTION: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.



WARNING:

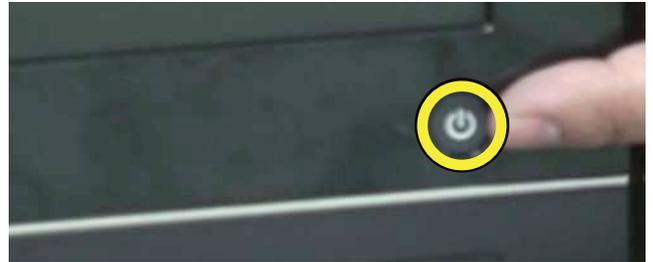
- **Never open the cover with the power cord attached or power applied. You may damage your computer.**
 - **Avoid touching sharp edges inside the computer.**
-

IMPORTANT: Computer features may vary by model.

Computer Preparation

- 1 Remove any media (CD, DVD, and memory cards) from the computer.

- 2 Press the power button to turn off the computer.



- 3 Unplug the computer by disconnecting the power cord from the back of the computer.



- 4 Unplug all attached cables from the back of the computer.



- 5 Lay the computer down on a flat surface, covered with a soft cloth to protect the screen from scratches or other damage.

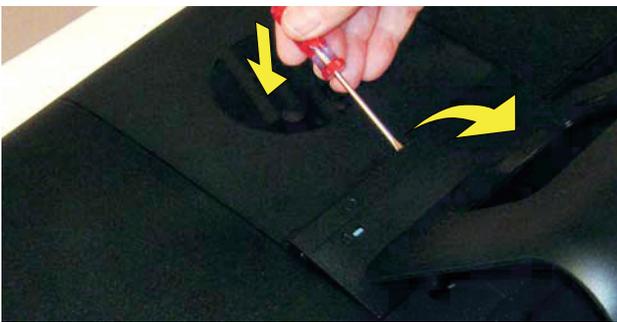


- 8 Slide the side cover off the computer in the direction indicated by the arrow.

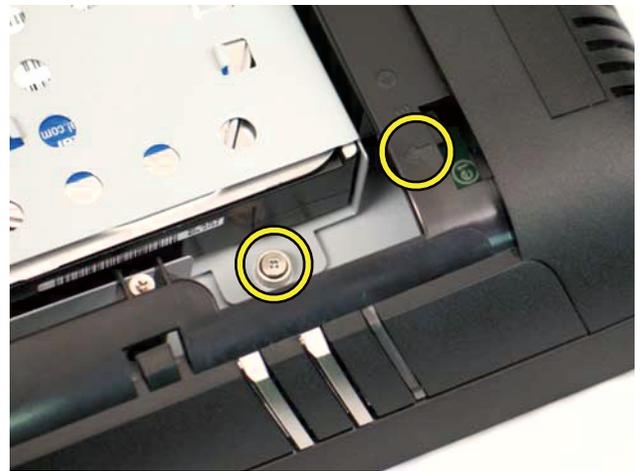


Removing the Hard Disk Drive

- 6 Remove the back cover above the stand at the back of the computer. Insert a flathead screwdriver or other object with a flat tip into the slot to pry it off.



- 9 Markings on the lower portion of the computer indicate the location of the screw for the hard disk drive.



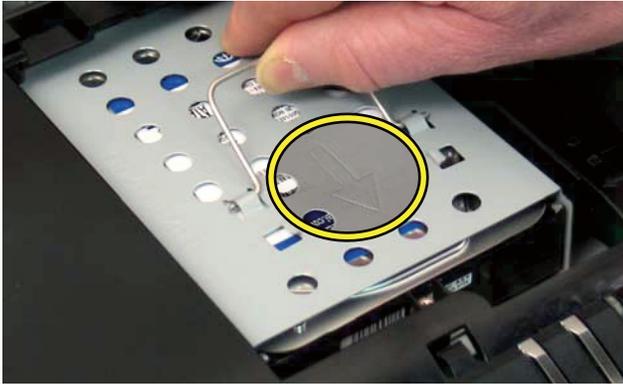
- 7 The left and right side covers on the back of the computer have a tab with an arrow indicating the direction to remove each cover.



- 10 Use a #1 Phillips screwdriver to loosen the screw on the hard disk drive cage. (The screw should not be removed completely.)



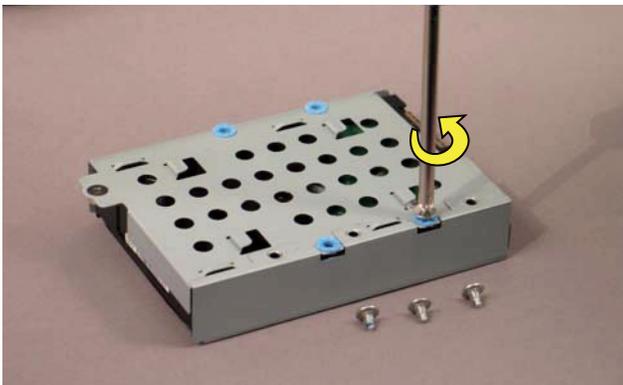
- 11** Grasp the metal handle on the hard disk drive cage to slide the cage in the direction indicated by the arrow on the cage.



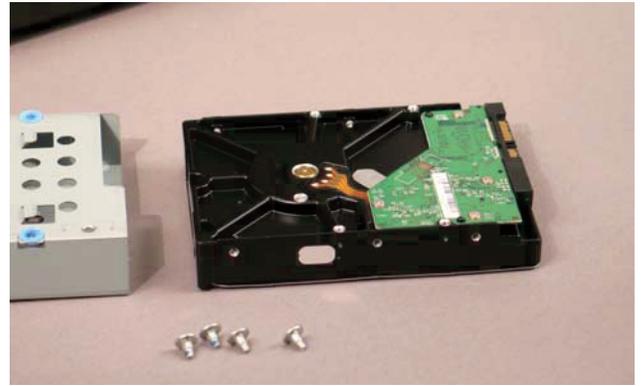
- 12** Lift out the hard disk drive.



- 13** To remove the hard disk drive from the cage, unscrew the four screws on the cage using a #2 Phillips screw driver.



- 14** Slide the hard disk drive out of the cage.

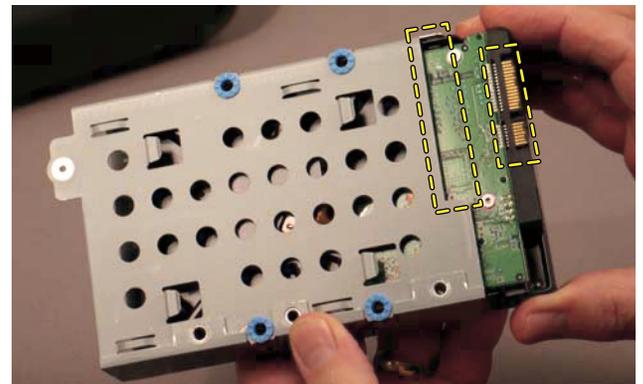


TASK COMPLETED

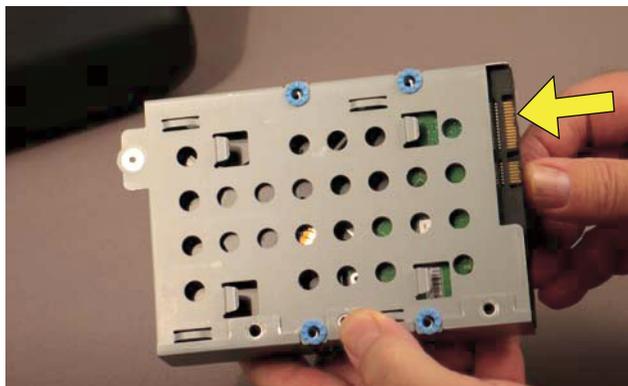
Installing a New Hard Disk Drive

NOTE: The replacement hard drive may not look exactly the same as the original drive due to different manufacturers or models. Hewlett-Packard always provides quality parts that meet or exceed your original computer specifications.

- 1** Align the hard disk drive so the connectors will be placed at the notched side of the cage.



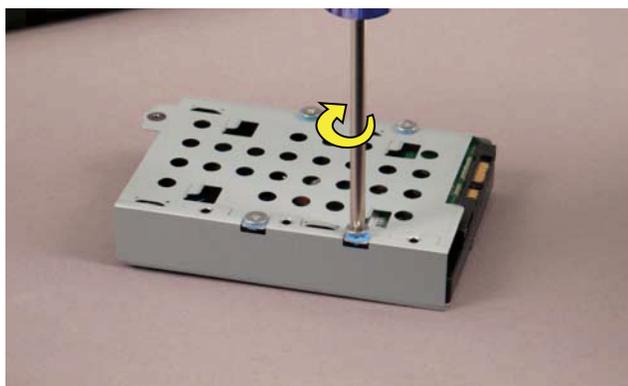
2 Slide the replacement hard disk drive into the cage.



5 Tighten the screw.



3 Replace the four screws on the hard disk drive cage.



6 Replace the side cover.



4 Grasp the cage by the handle and slide the hard disk drive back into the hard disk drive bay until it stops.



7 Replace the back cover above the stand.



8 Place the computer in an upright position.

9 Plug the power cord.



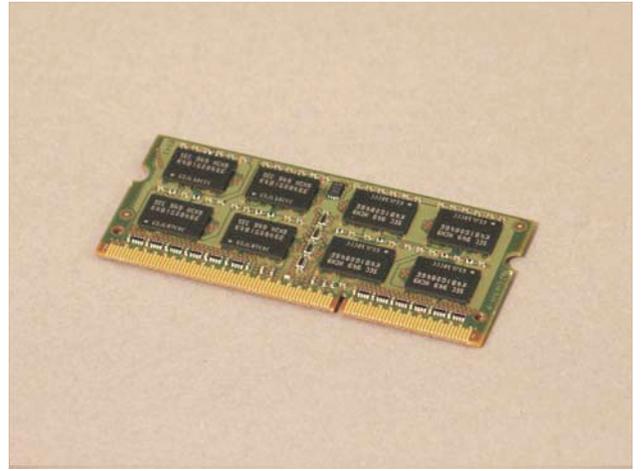
10 Reconnect all the cables.



TASK COMPLETED



Upgrading or Replacing Memory



Upgrading or Replacing Memory



10 - 15 minutes

Before You Begin

Observe the following requirements before removing and replacing memory cards.

Tools Needed

- Flathead screwdriver



CAUTION: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.



WARNING:

- **Never open the cover with the power cord attached or power applied. You may damage your computer.**
 - **Avoid touching sharp edges inside the computer.**
-

IMPORTANT: Computer features may vary by model.

Computer Preparation

- 1 Remove any media (CD, DVD, and memory cards) from the computer.

- 2 Press the power button to turn off the computer.



- 3 Unplug the computer by disconnecting the power cord in back.



- 4 Unplug all attached cables from the back of the computer.

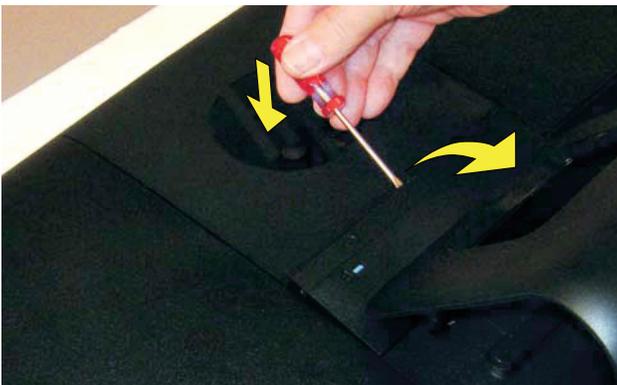


- 5 Lay the computer down on a flat surface, covered with a soft cloth to protect the screen from scratches or other damage.

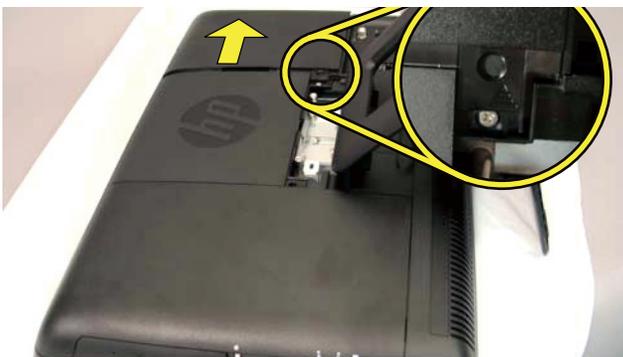


Removing the Memory

- 6 Remove the back cover above the stand at the back of the computer. Insert a screwdriver or other object with a flat tip into the slot to pry it off.



- 7 The left and right side covers on the back of the computer have a tab with an arrow indicating the direction to remove each cover.

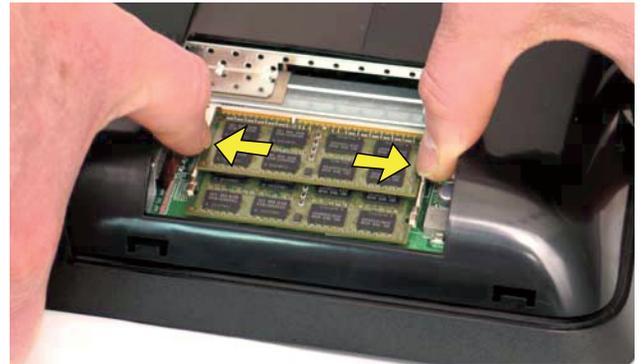


- 8 Slide the cover off the compute in the direction indicated by the arrow.

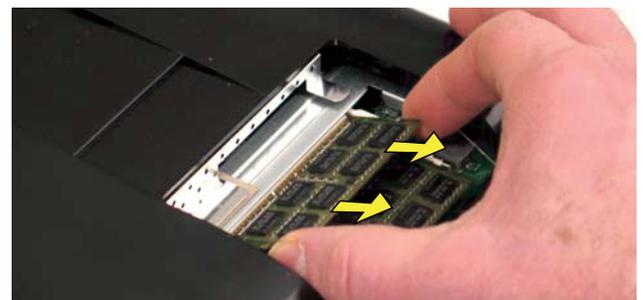


IMPORTANT: If you are removing both cards, you must remove the upper one before removing the lower one.

- 9 Use your fingers to press outwards on the retaining clips at the left and right sides of the top memory card to release it.



- 10 Holding the memory card by its edges, remove it from the compartment.



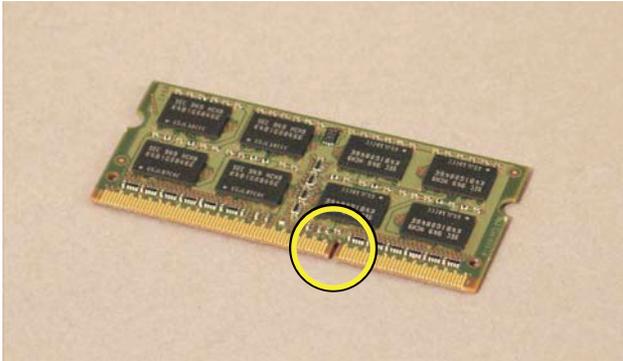
- 11 If you need to remove the lower memory card, repeat steps 9 and 10.

TASK COMPLETED

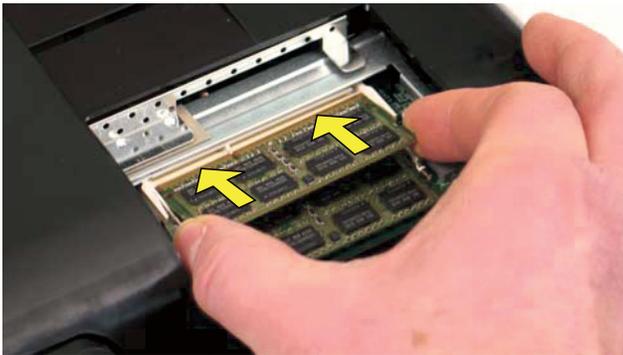
Installing a New Memory Card

NOTE: The replacement memory card may not look exactly the same as the original drive due to different manufacturers or models. Hewlett-Packard always provides quality parts that meet or exceed your original computer specifications.

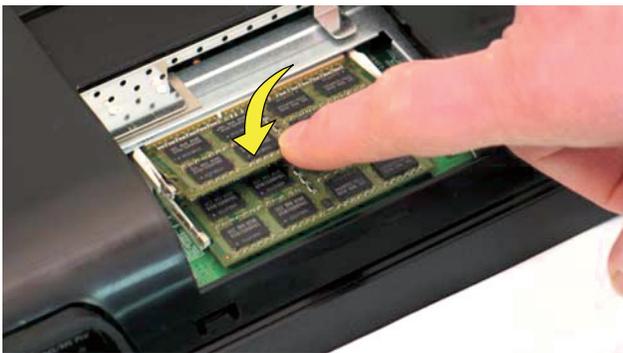
- 1 Orient the new memory card so that the notch on the edge of the card faces forward and is on the right.



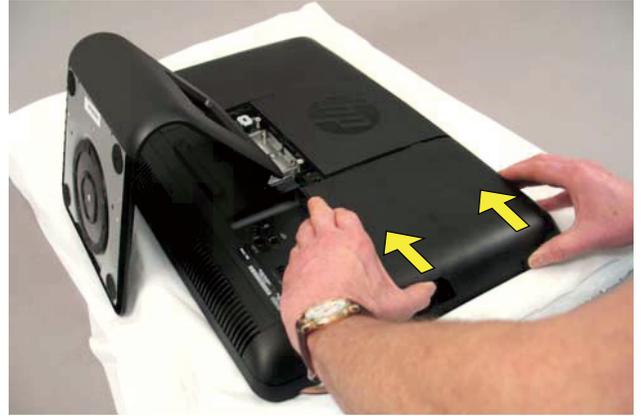
- 2 Holding the card by its edges, slide it all the way into the slot.



- 3 Make sure the card is pressed all the way into the socket and then gently push down on the card to snap it into place.



- 4 Replace the side cover.



- 5 Replace the back cover above the stand.



- 6 Place the computer in an upright position.

- 7 Plug in the power cord.



- 8 Reconnect all the cables.



- 9 Return the computer to the upright position and turn on the computer.



Troubleshooting

If the computer displays a memory error after you have turned it back on, check the following:

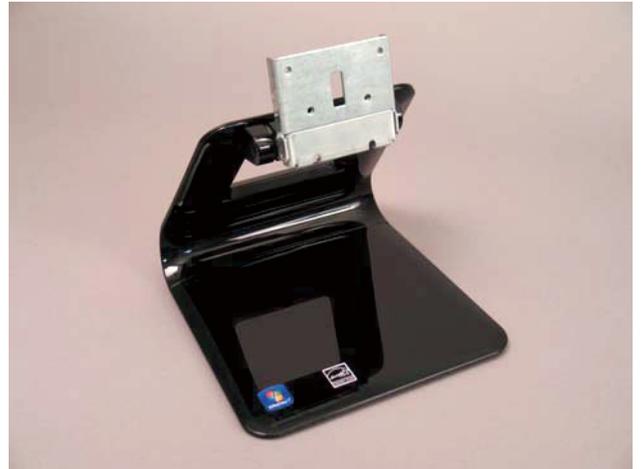
- Turn the computer off and unplug the power cord, then open up the memory compartment and make sure the memory card is firmly seated. To install it correctly, make sure it is inserted all the way into the compartment and then push down on it to snap it into place.
- Verify that the memory installed is compatible with this computer. SO-DIMMs are small outline dual inline memory modules. They are smaller and thinner than most other DIMMs, so that they take less space in the case.

SO-DIMM modules must meet the following requirements:

- 200-pin DDR2-DIMM
- PC2-4200 (533 MHz) DDR2-SDRAM or PC2-5300 (667 MHz) DDR2-SDRAM
- Unbuffered, non-ECC (64-bit) DIMMs
- 1.8 V memory only
- 4.0 GB maximum installable memory. Actual available memory that can be used in Windows will be less.
- Because the memory uses dual channels, you should use the same DIMM type for both sockets.



Removing and Replacing a Computer Stand



Removing and Replacing a Computer Stand



5-10 minutes

Before You Begin

Observe the following requirements before removing and replacing the computer stand.

Tools Needed

- Flathead screwdriver
- Phillips screwdriver #2



CAUTION: Static electricity can damage the electronic components inside the computer. Discharge static electricity by touching the metal cage of the computer before touching any internal parts or electronic components.



WARNING:

- **Never open the cover with the power cord attached or power applied. You may damage your computer.**
 - **Avoid touching sharp edges inside the computer.**
-

IMPORTANT: Computer features may vary by model.

Computer Preparation

- 1 Remove any media (CD, DVD, and memory cards) from the computer.

- 2 Press the power button to turn off the computer.



- 3 Unplug the computer by disconnecting the power cord in back.



- 4 Unplug all attached cables from the back of the computer.



- 5 Lay the computer down on a flat surface, covered with a soft cloth to protect the screen from scratches or other damage.

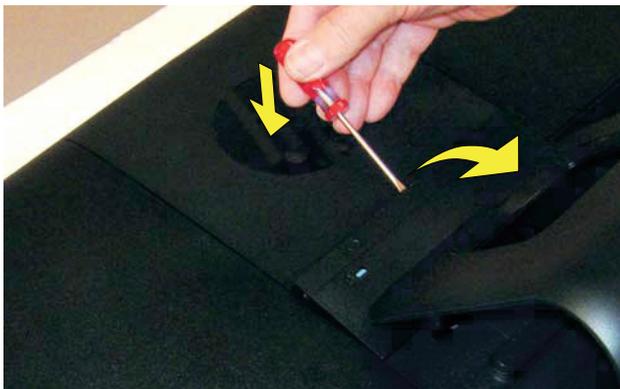


- 8 Use a screwdriver to remove the four screws holding the stand to the computer.



Removing the Stand

- 6 Remove the back cover above the stand at the back of the computer. Insert a flathead screwdriver or other object with a flat tip into the slot to pry it off.



- 9 Slide the stand assembly forward slightly, toward the top of the computer.



- 7 There are four screws attaching the stand to the computer.



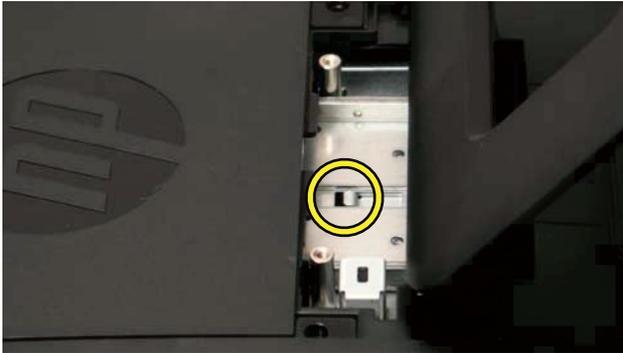
- 10 Lift and slide the stand assembly backwards to remove it from the computer.



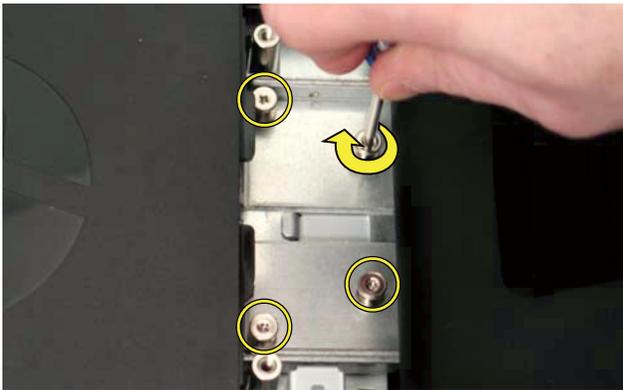
TASK COMPLETED

Installing a New Stand

- 1 Align the slot in the new stand assembly with the tab on the computer. Slide the stand in until it aligns with the four screw holes.



- 2 Replace the four screws.



- 3 Replace the back cover above the stand.



- 4 Place the computer in an upright position.
- 5 Plug in the power cord.



- 6 Reconnect all the cables.



TASK COMPLETED