



Upgrading and Servicing Guide

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Removing and Replacing a CD/DVD Drive



Removing and Replacing a CD/DVD Drive



5 – 10 minutes

Before You Begin

Observe the following requirements before removing and replacing the CD/DVD drive.

Tools Needed

- Magnetic-tip Phillips screwdriver #2
- Magnetic-tip Phillips screwdriver #00



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 Shut down the computer.



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



- 4 Unplug all attached cables from the side and bottom of the computer.



- 5 Set down a blanket, towel, or other soft cloth on a firm surface, to protect the screen from scratches or other damage. Place the computer face-down on the soft surface.



- 8 Lift the two feet to detach the back cover.



- 9 Lift the back cover off the computer.

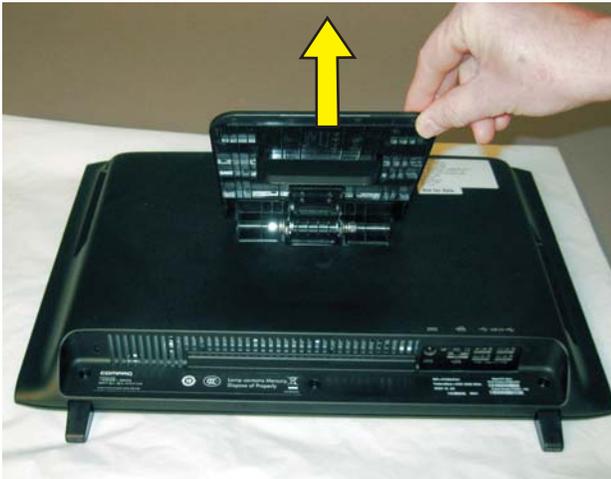


- 10 Locate the CD/DVD drive compartment on the back of the computer.



Removing the CD/DVD Drive

- 6 Lift the stand so that the bottom screw is accessible.



- 7 Remove the six screws attaching the back cover to the computer.

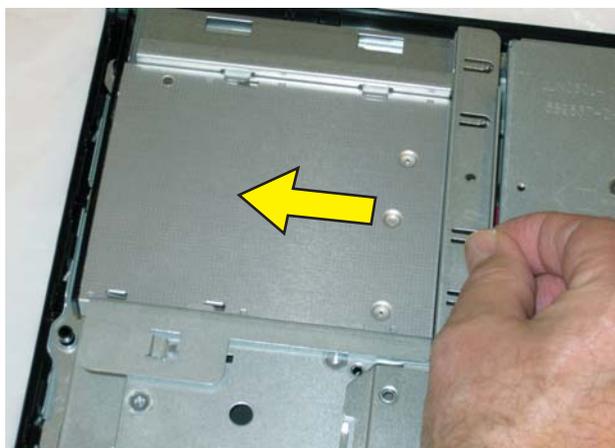


- 11** Use a #2 Phillips screwdriver to remove the screw that secures the CD/DVD cover.

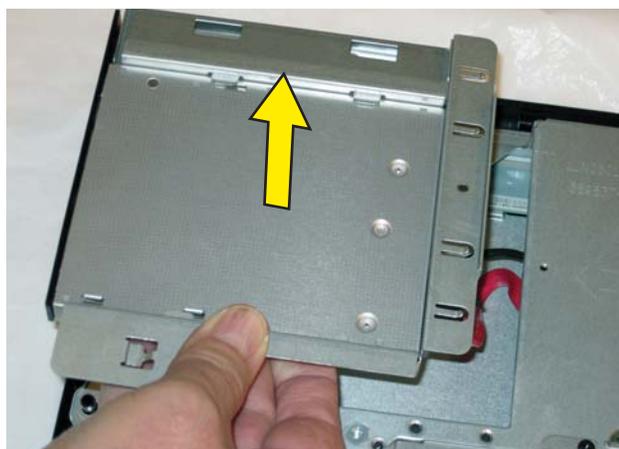


TIP: The screw is very small and can be lost easily. Use caution when you remove it. Work over a surface where you can retrieve a screw if it falls.

- 12** Push the CD/DVD drive in the direction indicated by the arrow engraved on the computer.



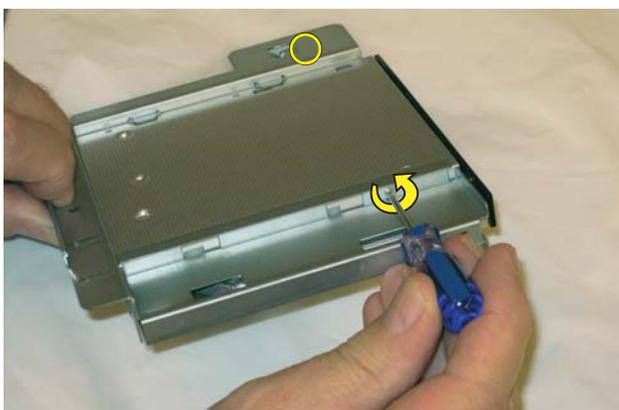
- 13** Lift the CD/DVD drive out of the compartment.



- 14** Disconnect the CD/DVD drive cable.



- 15** Use a #00 Phillips screwdriver to remove the screws from the sides of the CD/DVD drive cage. There is one screw located on each side.

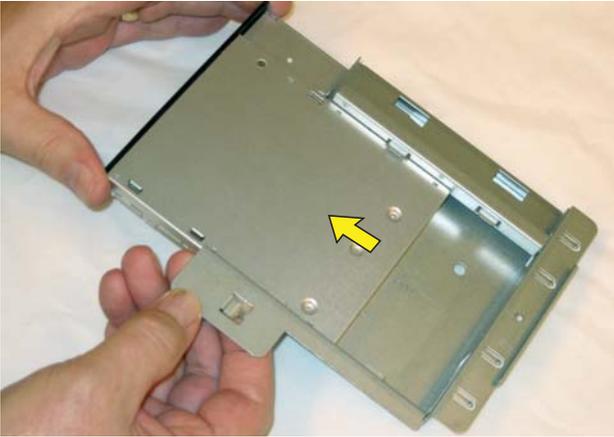


TIP: The screws are very small and can be lost easily. Use caution when you remove them. Work over a surface where you can retrieve a screw if it falls.

- 16** Use a #00 Phillips screwdriver to remove the screw at the back of the CD/DVD drive cage.



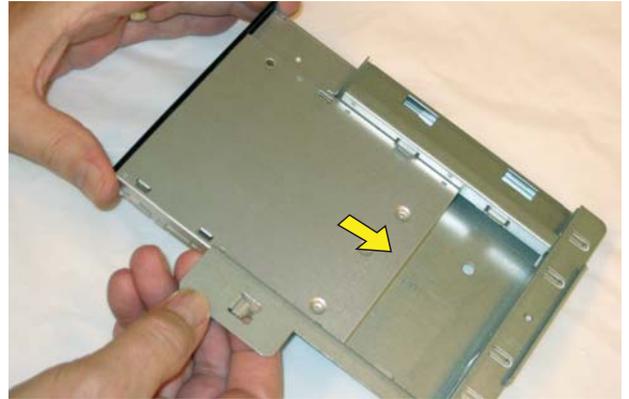
- 17 Slide the CD/DVD drive forward to remove it from the cage.



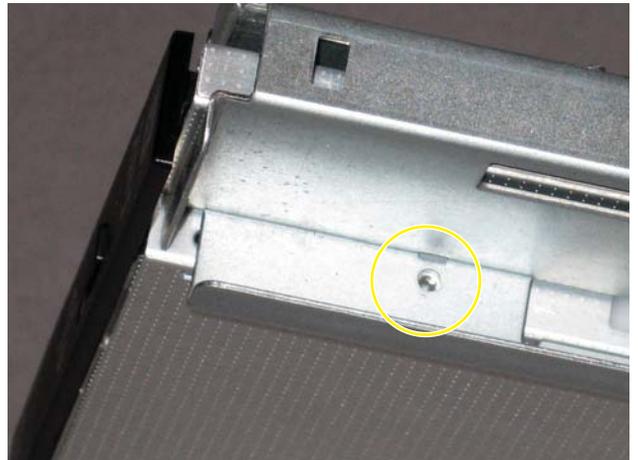
TASK COMPLETED

Installing a New CD/DVD Drive

- 1 Insert the new CD/DVD drive into the cage. Orient the CD/DVD drive so that the connection for the cable aligns with the opening at the rear of the cage.



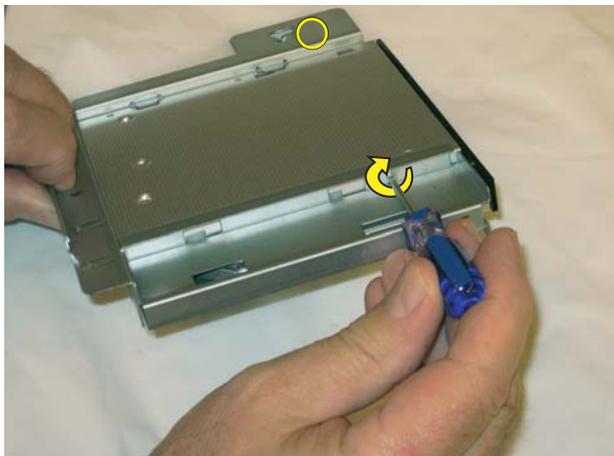
- 2 Align the screw holes on the CD/DVD drive with the screw holes on the cage.



- 3 Insert and tighten the screw on the back of the CD/DVD cage.



- 4 Insert and tighten the screw at the sides of the CD/DVD cage.



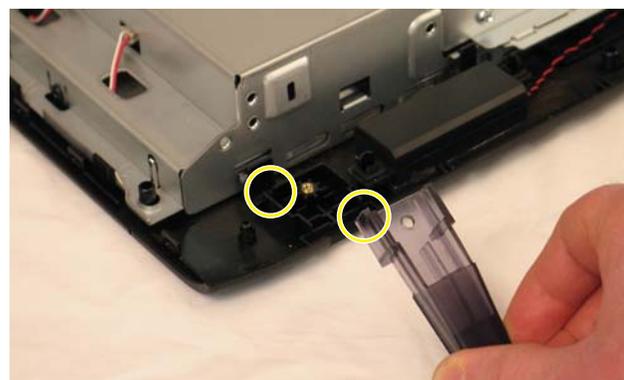
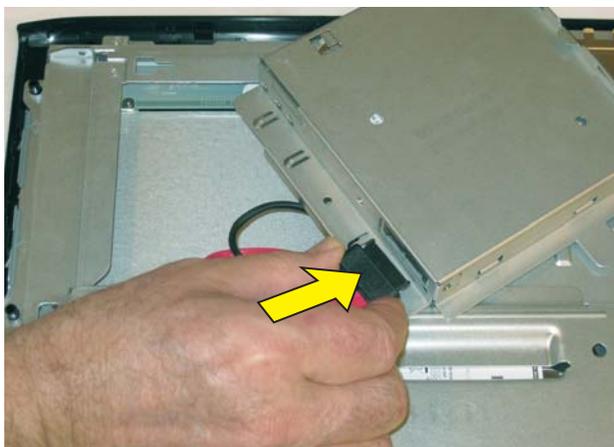
- 7 Replace the CD/DVD drive cover screw.



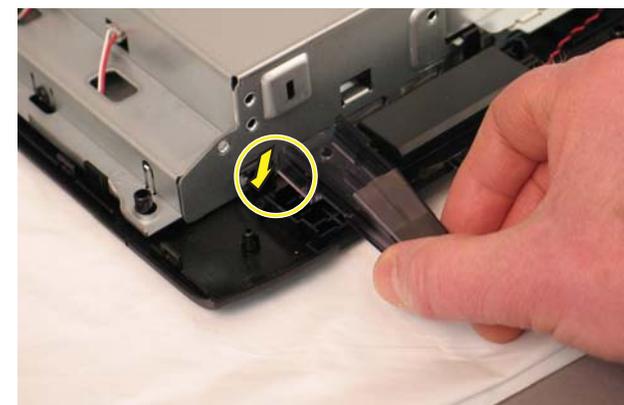
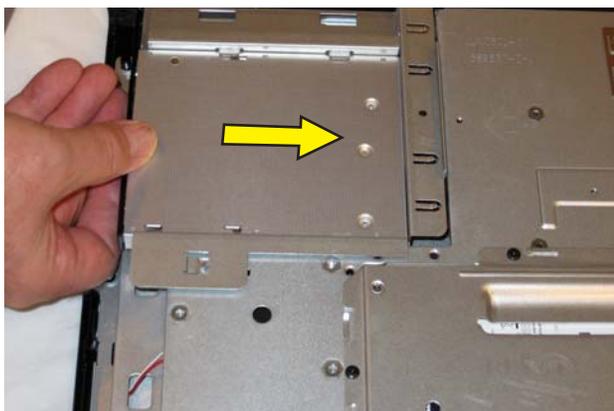
TIP: Do not over-tighten these screws. It is easy to strip the screw heads.

- 8 Before replacing the back cover, make sure the two computer feet are properly positioned in place.

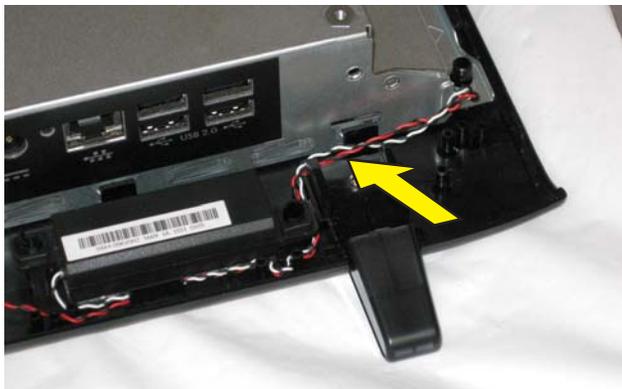
- 5 Connect the cable to the rear of the CD/DVD drive.



- 6 Insert the CD/DVD drive cage, sliding it forward until the screw holes on the cage and computer align.



9 Ensure the wire at the bottom of the computer clears the foot.



12 Return the computer to the upright position.



10 Position the back cover over the back of the computer and snap into place.



13 Reconnect any cables that were disconnected for this procedure.



11 Replace the six screws on the back cover.



14 Plug the power cord into the bottom of the computer.



TASK COMPLETED



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 and impact. Do not bang or drop it. Do not touch the circuit board. Static electricity can damage the drive.

Tools Needed

- Magnetic-tip 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 Shut down the computer.



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



- 4 Unplug all attached cables from the side and bottom of the computer.



- 5 Set down a blanket, towel, or other soft cloth on a firm surface, to protect the screen from scratches or other damage. Place the computer face-down on the soft surface.

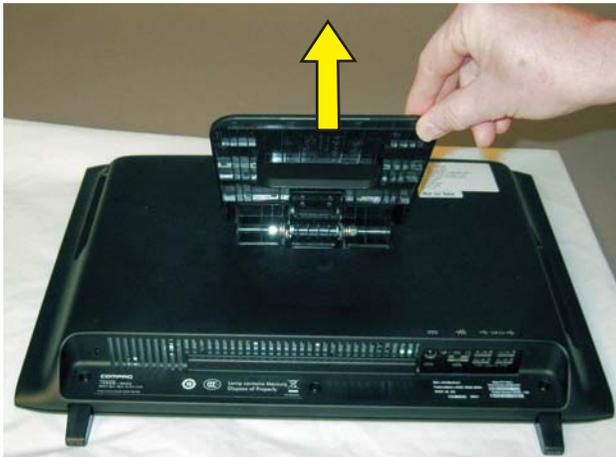


- 8 Grasp each foot between the thumb and index finger. Press the top of the foot down with your thumb while pulling the bottom of the foot up with your finger. This releases the back cover.



Removing the Hard Disk Drive

- 6 Lift the stand so that the bottom screw is accessible.



- 9 Lift the back cover off the computer.



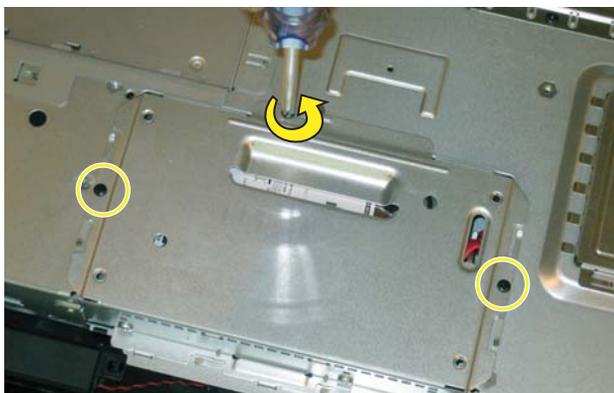
- 7 Remove the six screws attaching the back cover to the computer.



- 10 Locate the hard disk drive compartment on the back of the computer.

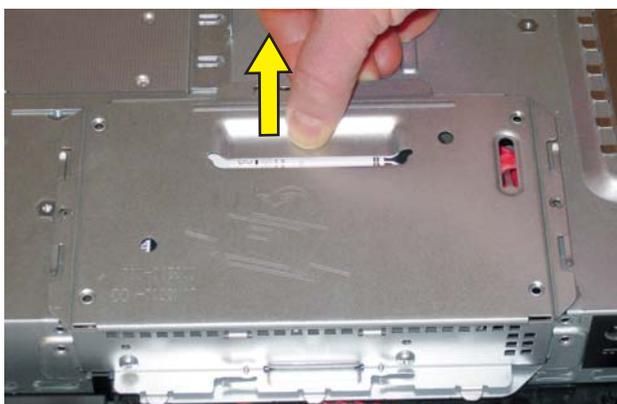


- 11 Use a #2 Phillips screwdriver to remove the three screws that secure the hard disk drive.



TIP: The screws are very small and can be lost easily. Use caution when you remove them. Work over a surface where you can retrieve a screw if it falls.

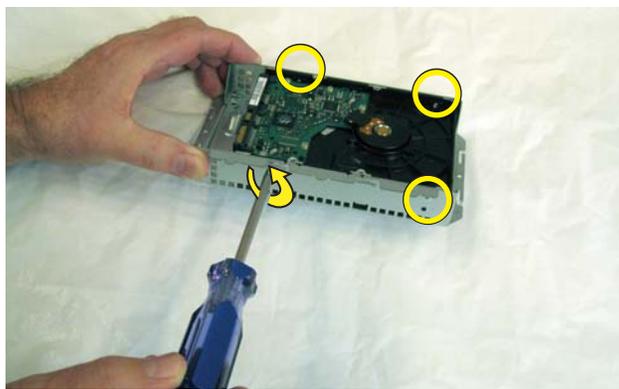
- 12 Insert a finger or thumb into the opening and lift the hard disk drive up and out of the computer, as shown in the engraving on the hard drive cage.



- 13 Turn the hard disk drive over and disconnect the cable connector from the back of the hard disk drive.



- 14 Remove the screws on one side of the hard disk drive cage.



- 15 Remove the hard disk drive from 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.

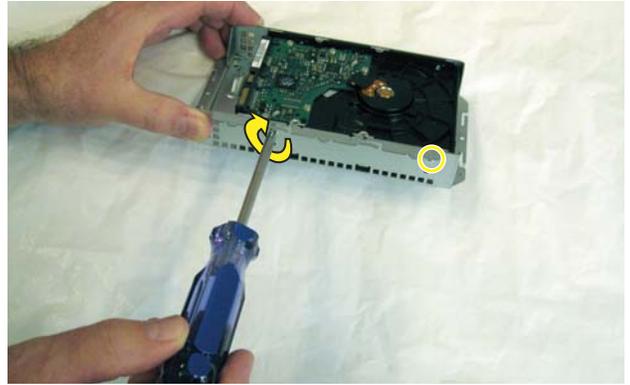
- 1 Insert the new hard disk drive into the cage. Make sure that the hard drive is inserted with the label facing up.



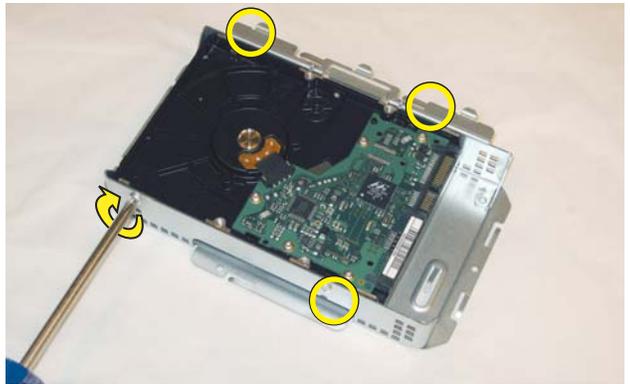
- 2 Align the hard disk drive screw holes with the screw holes on the hard drive cage.



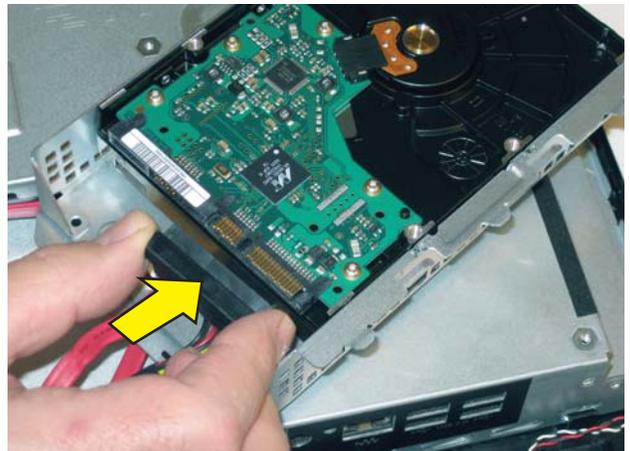
- 3 Replace and tighten the two screws on one side of the cage.



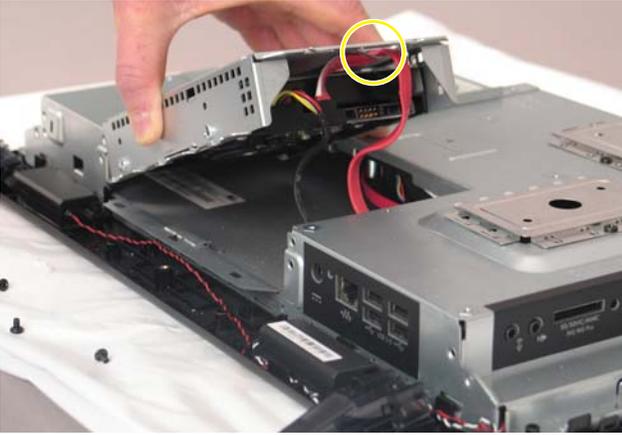
- 4 Replace and tighten the screws on the other side of the cage.



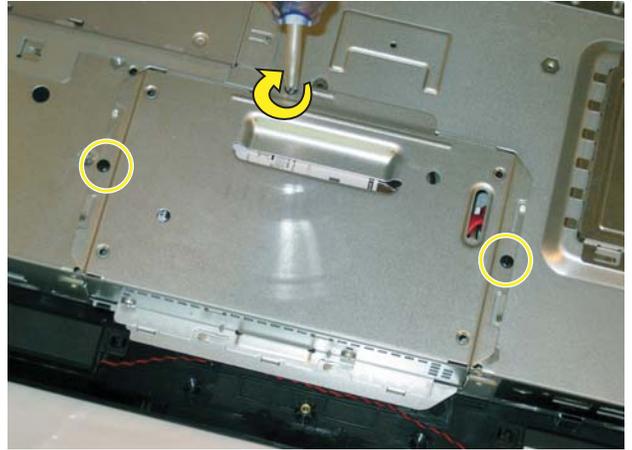
- 5 Turn the hard drive cage over and reconnect the cable connector to the back of the hard disk drive.



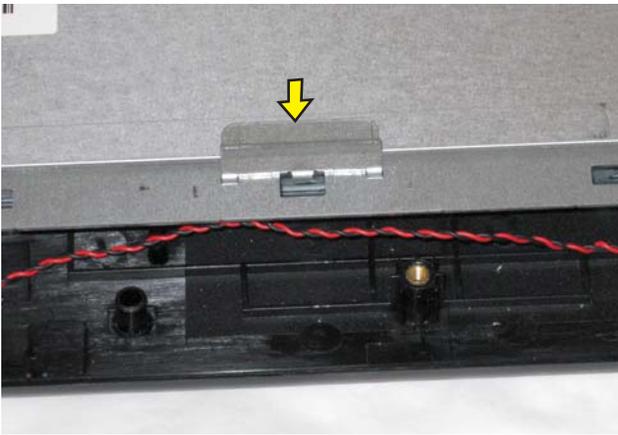
6 Slide the cable beneath the cable retainer.



9 Replace the screws securing the hard disk drive cage to the computer.



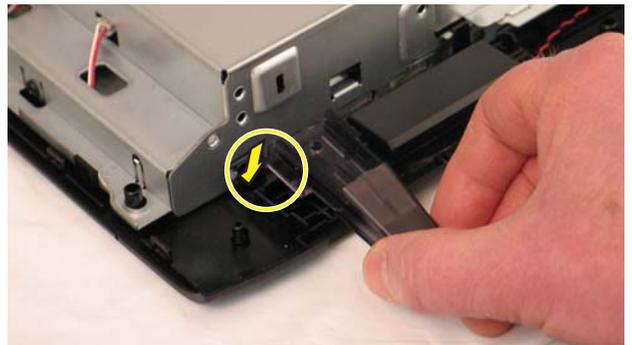
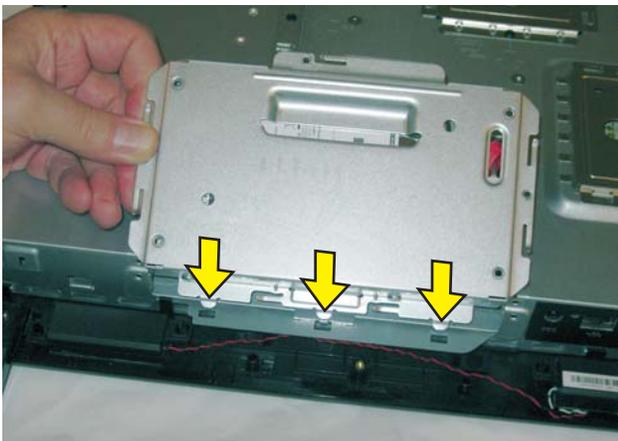
7 Ensure the lower bracket is in place before replacing the hard disk drive cage into the computer.



10 Before replacing the back cover, make sure the two computer feet are properly positioned in place.



8 Make sure that the slots on the bottom of the cage line up with the tabs on the bottom of the hard drive bay and push the hard drive cage into the bay. If the drive gets stuck, push the cage gently until it moves into place.



- 11** Ensure the wire at the bottom of the computer clears the foot.



- 12** Position the back cover over the back of the computer and snap into place.



- 13** Replace the six screws on the back cover.



- 14** Return the computer to the upright position.



- 15** Reconnect any cables that were disconnected for this procedure.



- 16** Plug the power cord into the bottom of the computer.



TASK COMPLETED



Installing Memory



Installing Memory



5 – 10 MINUTES

Before You Begin

Observe the following requirements installing memory cards.

Tools Needed

- Magnetic-tip 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 Shut down the computer.



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



- 4 Unplug all attached cables from the side and bottom of the computer.



- 5 Set down a blanket, towel, or other soft cloth on a firm surface, to protect the screen from scratches or other damage. Place the computer face-down on the soft surface.

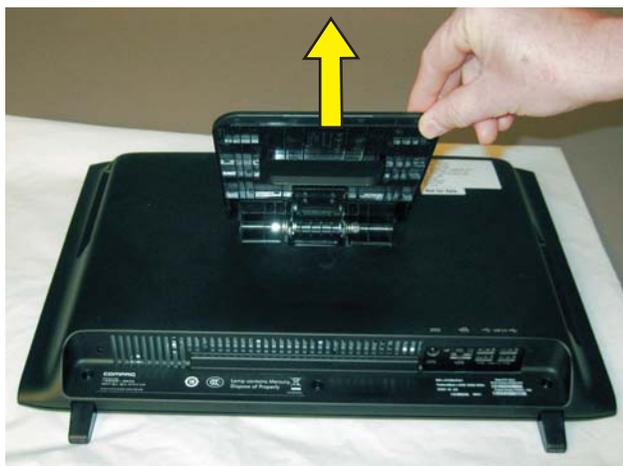


- 8 Grasp each foot between the thumb and index finger. Press the top of the foot down with your thumb while pulling the bottom of the foot up with your finger. This releases the back cover.



Installing the Memory

- 6 Lift the stand so that the bottom screw is accessible.



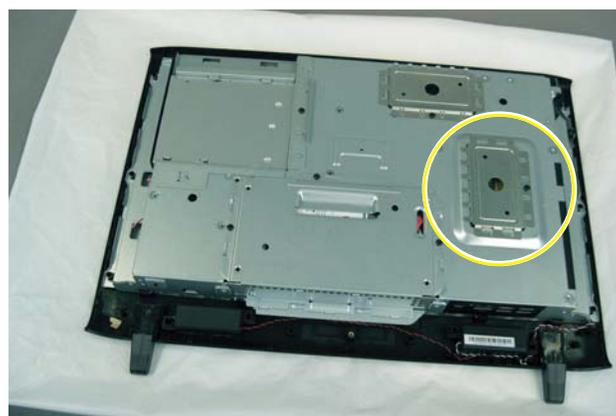
- 9 Lift the back cover off the computer.



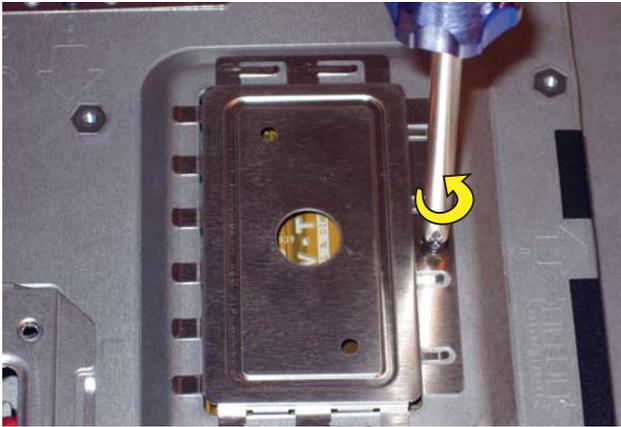
- 7 Remove the six screws attaching the back cover to the computer.



- 10 Locate the memory compartment on the back of the computer.

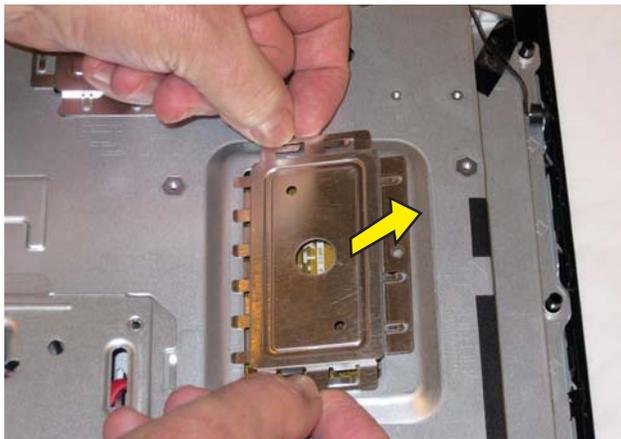


- 11** Use a #2 Phillips screwdriver to remove the screw that secures the memory cover.



TIP: The screw is very small and can be lost easily. Use caution when you remove it. Work over a surface where you can retrieve a screw if it falls.

- 12** Slide the memory cover in the direction indicated by the arrow engraved on the computer. Remove the cover.



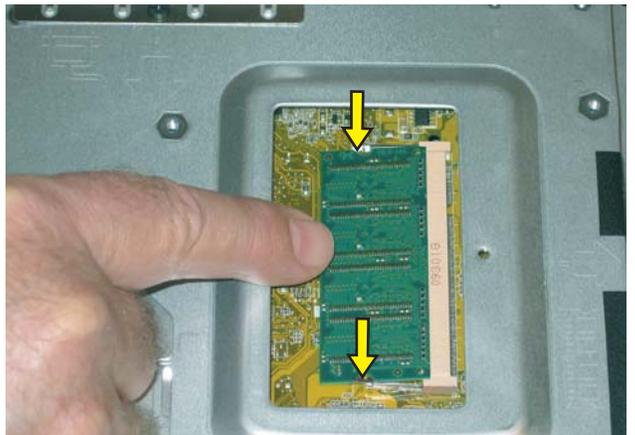
- 13** Orient the new card so that the notch on the edge of the card faces forward.



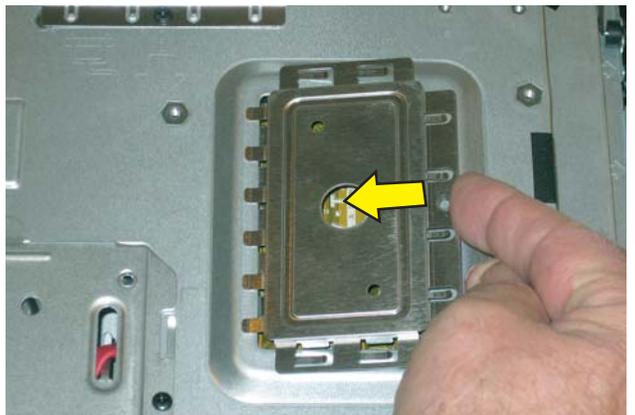
- 14** Holding the card by its edges, slide it all the way into the slot.



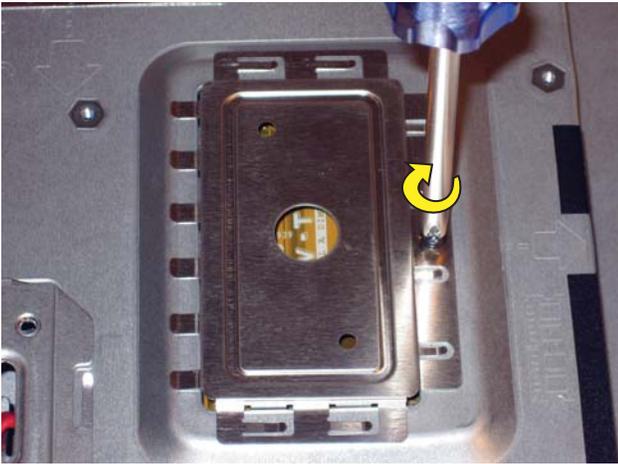
- 15** Make sure the card is pressed all the way into the socket and then gently push down on the card to snap it into place.



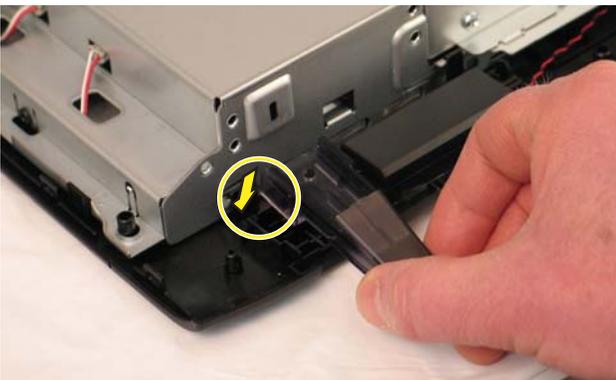
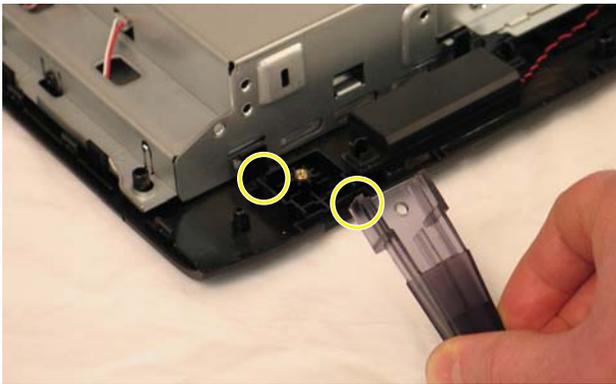
- 16** Slide the memory cover into place.



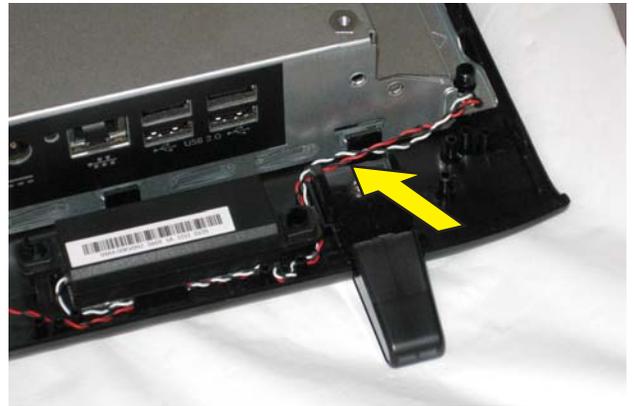
17 Replace the memory cover screw.



18 Before replacing the back cover, make sure the computer feet are properly positioned in place.



19 Ensure the wire at the bottom of the computer clears the foot.



20 Position the back cover over the back of the computer and snap into place.



21 Replace the six screws on the back cover.



22 Return the computer to the upright position.



23 Reconnect any cables that were disconnected for this procedure.



24 Plug the power cord into the bottom of the computer.



TASK COMPLETED

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 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-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 may be less.
- Because the memory uses dual channels, you should use the same DIMM type for both sockets.



Removing and Replacing a Stand



Removing and Replacing a Stand



5 – 10 minutes

Before You Begin

Observe the following requirements before removing and replacing the stand.

Tools Needed

- Magnetic-tip 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 Shut down the computer.



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



- 4 Unplug all attached cables from the side and bottom of the computer.



- 5 Set down a blanket, towel, or other soft cloth on a firm surface, to protect the screen from scratches or other damage. Place the computer face-down on the soft surface.

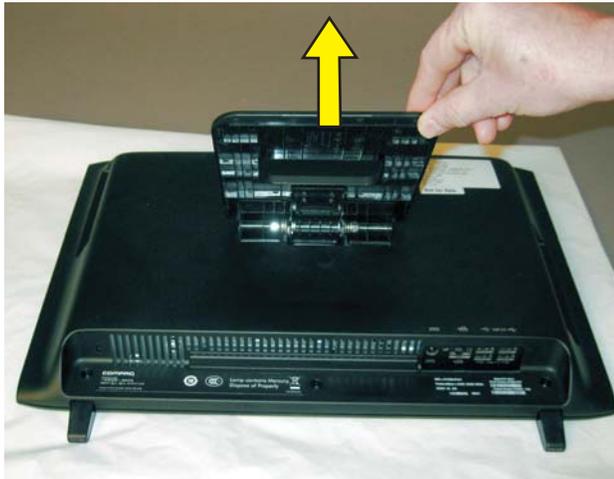


- 8 Grasp each foot between the thumb and index finger. Press the top of the foot down with your thumb while pulling the bottom of the foot up with your finger. This releases the back cover.



Removing the Stand

- 6 Lift the stand so that the bottom screw is accessible.



- 9 Lift the back cover off the computer.



- 7 Remove the six screws attaching the back cover to the computer.



- 10 Push the stand down so that it lays flat against the back cover.

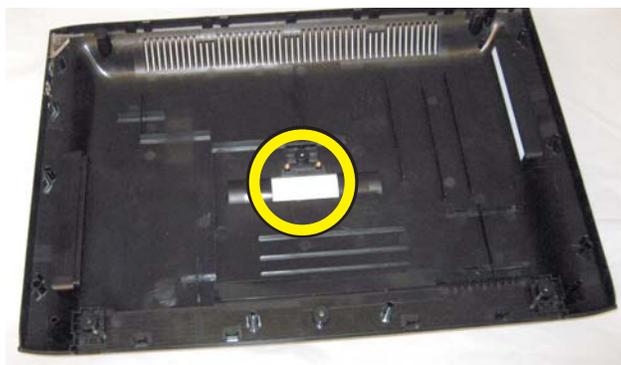


- 11 Turn the back cover over and use a #2 Phillips screwdriver to remove the two screws that secure the stand.



Installing a New Stand

- 1 Insert the new stand into the opening on the back cover.



- 12 Slide the stand out of the back cover.



- 13 Remove the stand.



- 2 Align the screw holes on the stand with the screw holes on the back cover.



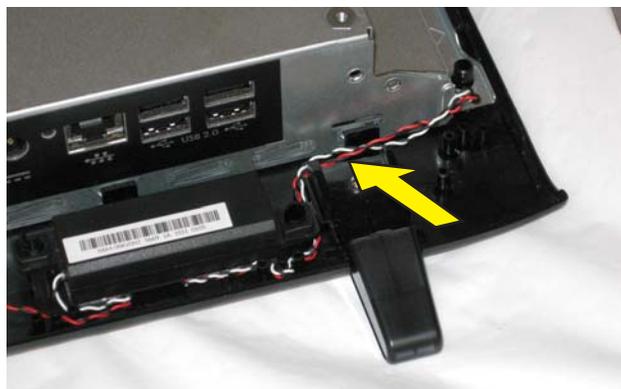
- 3** Insert and tighten the screws to secure the stand to the back cover.



- 4** Before replacing the back cover, make sure the two computer feet are properly positioned in place.



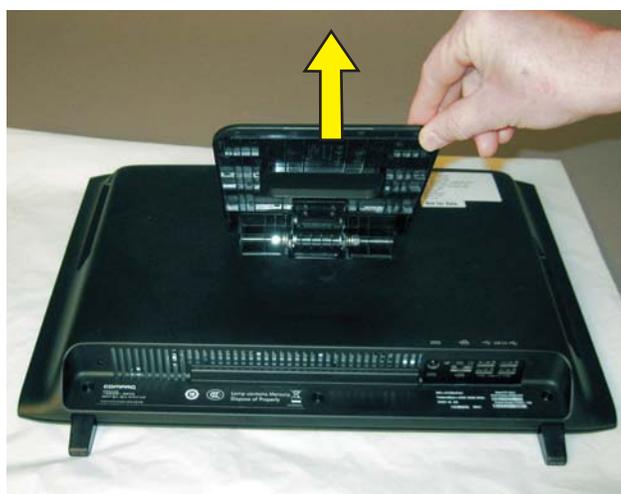
- 5** Ensure the wire at the bottom of the computer clears the foot.



- 6** Position the back cover over the back of the computer and snap into place.



- 7** Lift the stand so that the bottom screw hole is visible.



8 Replace the six screws on the back cover.



11 Plug the power cord into the bottom of the computer.



9 Return the computer to the upright position.



TASK COMPLETED

10 Reconnect any cables that were disconnected for this procedure.

