

Front fan and fan holder installation

Introduction

This document describes how to install a front card guide and front fan in the HP xw and HP Z Workstation series.

Kit contents

- Warranty information
- Fan
- Fan holder for HP xw9300 Workstations
- Combination card guide/fan holder for the HP xw6000 Workstation series
- Combination card guide/fan holder for the HP xw4000 Workstation series and HP Z400 Workstations

Before you begin

To view *QuickSpecs* and determine the compatibility of this product with your HP workstation, see <http://www.hp.com/go/productbulletin>.

 **NOTE:** Only workstations having non-factory-integrated, high power PCI cards require the additional cooling provided by the optional front chassis fan included in this kit. The optional front chassis fan is not recommended for use on workstations that have hard drives mounted in the optical bays because this might reduce long term reliability of these hard drives. HP recommends that your environmental temperature not exceed 27°C (80°F) if this fan is installed in your workstation and you have hard drives installed in the optical bay area.

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Warnings and cautions

⚠ **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!** ⚡ 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!** 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.

⚠ **WARNING!** To reduce the risk of serious injury, read the *Safety & Comfort Guide*. It describes proper workstation setup, posture, health, and work habits for computer users, and provides important electrical and mechanical safety information. This guide is located at <http://www.hp.com/ergo> and on the documentation CD (if one is included with the product).

⚠ **CAUTION:** Static electricity can damage the electronic components of the workstation. Before beginning these procedures, be sure you discharge static electricity by briefly touching a grounded metal object.

⚠ **CAUTION:** To prevent damage to the workstation, 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 Workstation products. They have been extensively tested for reliability and are manufactured to high quality standards.

Step 1—Preparing for component installation

 **NOTE:** Workstation models vary. All illustrations are examples only.

Accessing the internal components of the workstation

1. If you need help preparing the workstation for this installation, consult the removal and replacement procedures in the service guide for your workstation at http://www.hp.com/support/workstation_manuals.
 **NOTE:** For the HP Z Workstation series, these procedures are also available in the *User Guide* on the *Documentation and Diagnostics CD* that shipped with your workstation.
2. Power down the workstation, and then disconnect the power cord.
3. Power down all external devices, and then disconnect them from the workstation.
4. Remove the side access panel.

Removing components

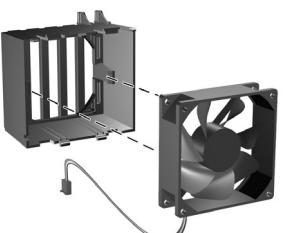
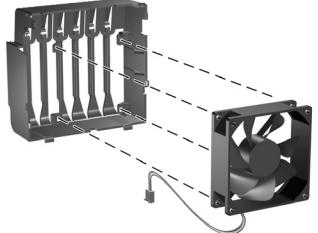
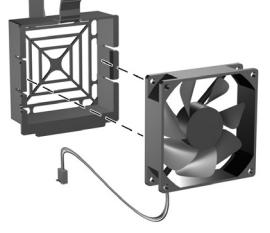
- ▲ If present, remove the card support to enable access to the system board connectors.

Step 2—Installing the front fan and fan holder

After preparing the workstation for component installation, perform the following steps to install the front fan and fan holder.

1. Identify the front fan holder specified for your workstation.

Table 1 Identifying the front fan and fan holder

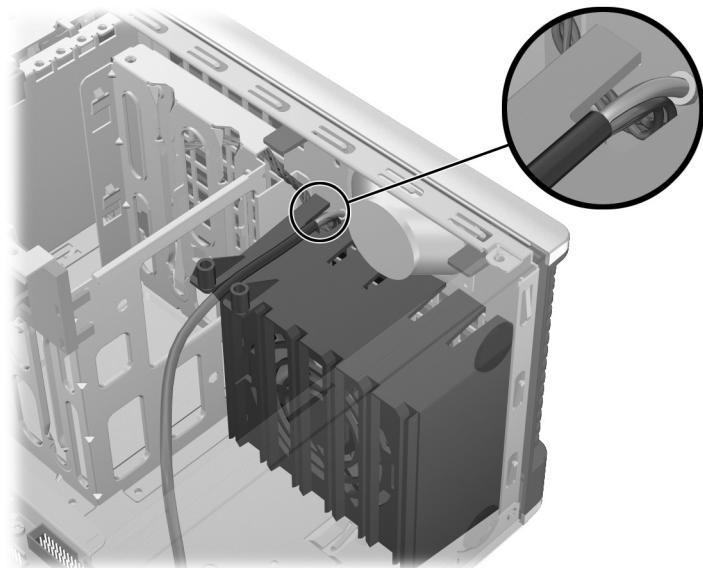
HP xw4000 Workstation series	HP xw6000 Workstation series	HP xw9300 Workstations
HP Z400 Workstations		
		

2. Align the fan with the label facing inward, toward the holder.
3. Position the wire to enable maximum length to reach the system board.
4. Insert the fan into the holder. If an airflow indicator is present on the fan, make sure it points toward the holder and the rear of the chassis.

- Lower the front fan holder and fan assembly into the chassis and snap it into place. Ensure cables are routed properly to avoid damage to the cables.

CAUTION: Clamping a cable between the card guide and the chassis might damage the cable.

Figure 1 Routing the cables

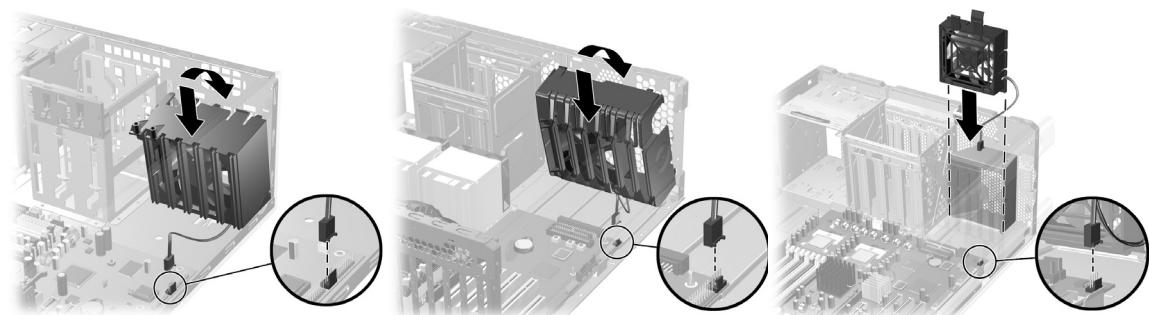


- Plug the front fan connector into the front chassis fan header on the system board.

NOTE: To locate system board components, see the service label on the side access panel.

Table 2 Installing the front fan and fan holder

HP xw4000 Workstation series	HP xw6000 Workstation series	HP xw9300 Workstations
HP Z400 Workstations		



Step 3—Reassembling the workstation

1. Reinstall the side access panel.
2. Reconnect external devices and power cord.
3. Restore power to the workstation and all external devices.

Japanese 日本語

This document is available in Japanese. See http://www.hp.com/support/workstation_manuals, then select your workstation product and select **Japanese** from the drop down **Manual Language** menu.

このドキュメントは日本語版が用意されています。http://www.hp.com/support/workstation_manualsにアクセスし、ご使用のワークステーション製品を選択し、**Manual Language** ドロップダウンメニューから **Japanese** を選択してください。