Slimline USB Floppy/CD-ROM/DVD-ROM Drive Kit Install Guide:
Intel® Server Chassis SC5400
Intel® Entry Server Chassis SC5299-E

A Guide for Technically Qualified Assemblers of Intel® Identified Subassemblies/Products

D51604-002

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Safety Information

Important Safety Instructions

Read all caution and safety statements in this document before performing any of the instructions. See also Intel Server Boards and Server Chassis Safety Information on the *Intel® Server Deployment Toolkit CD* and/or at http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

Wichtige Sicherheitshinweise

Lesen Sie zunächst sämtliche Warnund Sicherheitshinweise in diesem Dokument, bevor Sie eine der Anweisungen ausführen. Beachten Sie hierzu auch die Sicherheitshinweise zu Intel-Serverplatinen und Servergehäusen auf der *Intel® Server Deployment Toolkit CD* oder unter http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

Consignes de sécurité

Lisez attention toutes les consignes de sécurité et les mises en garde indiquées dans ce document avant de suivre toute instruction. Consultez Intel Server Boards and Server Chassis Safety Information sur le *Intel® Server Deployment Toolkit CD* ou bien rendez-vous sur le site http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

Instrucciones de seguridad importantes

Lea todas las declaraciones de seguridad y precaución de este documento antes de realizar cualquiera de las instrucciones. Vea Intel Server Boards and Server Chassis Safety Information en el *Intel® Server Deployment Toolkit CD* y/o en http://support.intel.com/support/motherboards/server/sb/cs-010770.htm.

重要安全指导

在执行任何指令之前，请阅读本文档中的所有注意事项及安全声明。 和/或 http://support.intel.com/support/motherboards/server/safecert.htm 上的 Intel Server Boards and Server Chassis Safety Information（《Intel 服务器主板与服务器机箱安全信息》）。

Warnings

Heed safety instructions: Before working with your server product, whether you are using this guide or any other resource as a reference, pay close attention to the safety instructions. You must adhere to the assembly instructions in this guide to ensure and maintain compliance with existing product certifications and approvals. Use only the described, regulated components specified in this guide. Use of other products / components will void the UL listing and other regulatory approvals of the product and will most likely result in noncompliance with product regulations in the region(s) in which the product is sold.

System power on/off: The power button DOES NOT turn off the system AC power. To remove power from system, you must unplug the AC power cord from the wall outlet. Make sure the AC power cord is unplugged before you open the chassis, add, or remove any components.

Hazardous conditions, devices and cables: Hazardous electrical conditions may be present on power, telephone, and communication cables. Turn off the server and disconnect the power cord, telecommunications systems, networks, and modems attached to the server before opening it. Otherwise, personal injury or equipment damage can result.

Electrostatic discharge (ESD) and ESD protection: ESD can damage disk drives, boards, and other parts. We recommend that you perform all procedures in this chapter only at an ESD workstation. If one is not available, provide some ESD protection by wearing an antistatic wrist strap attached to chassis ground any unpainted metal surface on your server when handling parts.

ESD and handling boards: Always handle boards carefully. They can be extremely sensitive to ESD. Hold boards only by their edges. After removing a board from its protective wrapper or from the server, place the board component side up on a grounded, static free surface. Use a conductive foam pad if available but not the board wrapper. Do not slide board over any surface.

Installing or removing jumpers: A jumper is a small plastic encased conductor that slips over two jumper pins. Some jumpers have a small tab on top that you can grip with your fingertips or with a pair of fine needle nosed pliers. If your jumpers do not have such a tab, take care when using needle nosed pliers to remove or install a jumper; grip the narrow sides of the jumper with the pliers, never the wide sides. Gripping the wide sides can damage the contacts inside the jumper, causing intermittent problems with the function controlled by that jumper. Take care to grip with, but not squeeze, the pliers or other tool you use to remove a jumper, or you may bend or break the pins on the board.

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Slimline USB Floppy/CD-ROM/DVD-ROM Drive Kit Install Guide

1   Installation Information

This Slimline USB Floppy/CD-ROM/DVD-ROM Drive Kit supports the following slimline drives in the Intel® Server Chassis SC5400 or Intel® Entry Server Chassis SC5299-E:

- A USB slimline floppy drive AND
- A slimline CD-ROM drive OR slimline DVD-ROM drive

This accessory kit is required to connect a slimline floppy drive, slimline CD-ROM drive or slimline DVD-ROM drive to the server board.

Note: *You can install either a slimline CD-ROM drive OR a slimline DVD-ROM drive. You cannot install both.*

Note: *Standard floppy drives are not supported.*

Before You Begin

Before installing this kit, observe these safety guidelines:

1. Turn off all peripheral devices connected to the server.
2. Turn off the server by pressing the power button on the front of the chassis. Then unplug the AC power cord from the chassis or wall outlet.
3. Label and disconnect all peripheral cables and all telecommunication lines connected to I/O connectors or ports on the back of the chassis.
4. Provide electrostatic discharge (ESD) protection by wearing an anti-static wrist strap attached to a chassis ground - any unpainted metal surface - when handling components.

Kit Content List (AXXCDUSBFDBRK)

Each Slimline USB Floppy/CD-ROM/DVD-ROM Drive Kit contains the following items:

- Backplane board
- Drive bay with drive cage
- USB cable
- Floppy power adapter cable
- Screws:
  - Fastener "A"
  - Fastener "CD"

— Fastener "FDU"

Note: *Slimline floppy drives, slimline CD-ROM drives and/or slimline DVD-ROM drives are not included with this kit. For a list of supported drives for the Intel® Server Chassis SC5400, see http://support.intel.com/support/motherboards/server/chassis/SC5400. For a list of supported drives for the Intel® Entry Server Chassis SC5299-E, see http://support.intel.com/support/motherboards/server/chassis/SC5299-E. Refer to the documentation that came with your slimline drive for additional installation information and requirements.*

Tools and Supplies Needed

- Phillips* (cross head) screwdriver (#1 bit and #2 bit)
- Anti-static wrist strap and conductive foam pad (recommended)

Installation Instructions

Note: *Refer to the instructions that came with your slimline drive(s) for additional installation requirements and instructions.*

Preparing Slimline Drive Assembly for Installation into a Server Chassis
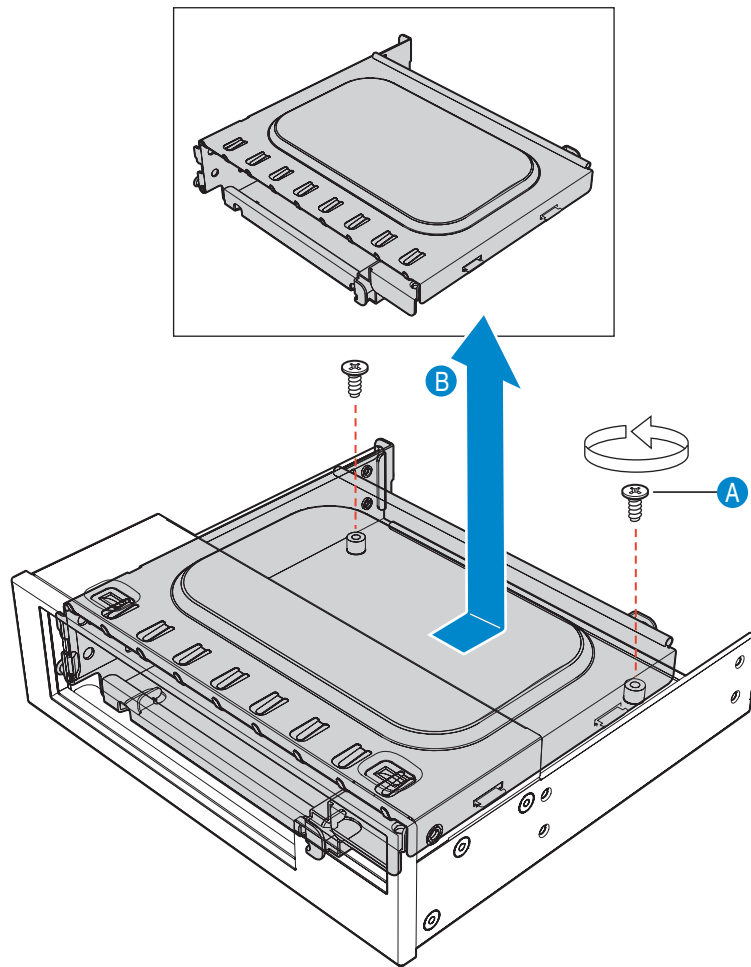
Unpack Contents of Kit

1. Unpack the contents of the Slimline USB Floppy/CD-ROM/DVD-ROM Drive Kit. (See "Kit Content List (AXXCDUSBFDBRK)" on page 1 for a complete list of kit contents.)

Remove Drive Cage from Drive Bay

1. Remove the two screws (see letter "A" in the following figure) that attach the drive cage to the drive bay.
2. Tilt the rear of the drive cage up (see letter "B").
3. Pull the drive cage back.
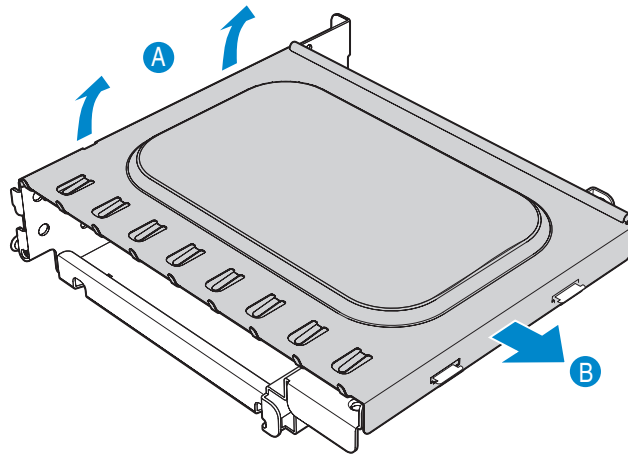
4. Lift the drive cage up and out of the drive bay.

AF000486

Figure 1. Removing Drive Cage from Drive Bay

Remove Cage Top from Drive Cage

1. Face the front of the drive cage.

2. Pull out slightly on the rolled lip at the left side of the cage top.

3. Disengage the cage top from the tabs at the left side (see letter "A" in the following figure).

4. Lift the left side of the cage top.

5. Disengage the cage top from the tabs on the right side of the drive cage.
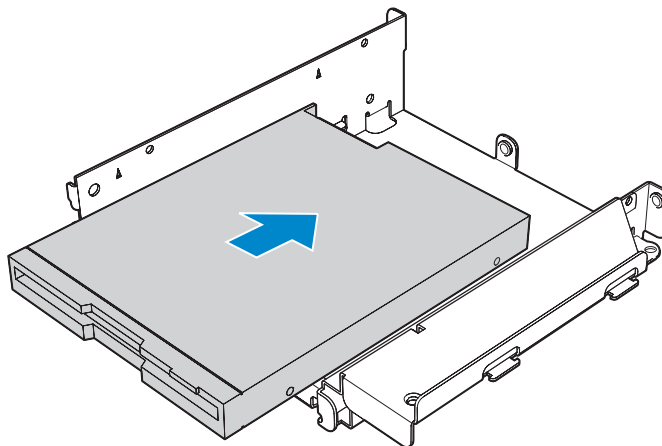
6. Remove the cage top (see letter "B").

AF000492

Figure 2. Removing Cage Top from Drive Cage

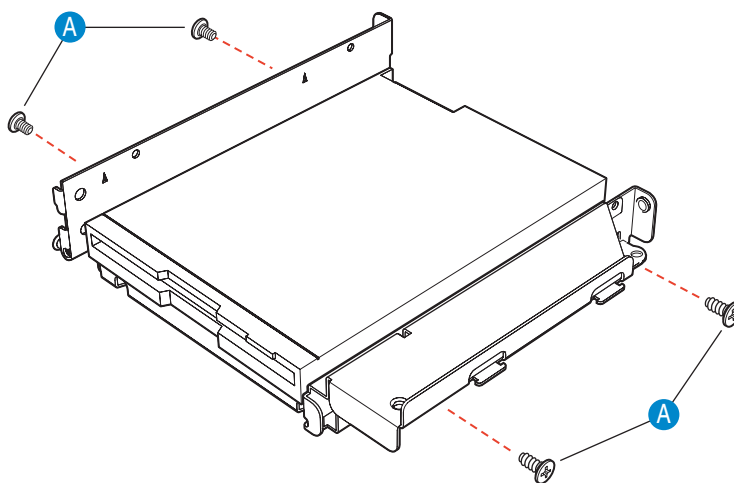## Install Slimline USB Floppy Drive

1. Insert the slimline floppy drive into the bottom tray of the drive cage.

AF000494

Figure 3. Inserting Slimline Floppy Drive into Drive Cage

2. Line up the screw holes on the left and right sides of the slimline floppy drive with the corresponding holes in the drive cage (see letter "A" in the following figure). The front of the slimline floppy drive will extend slightly out from the front of the drive cage.

3. Use four screws from the bag marked "FDU" to attach the drive to the drive cage (two screws on each side). Do not completely tighten these screws until the CD-ROM/ DVD-ROM drive is inserted into the drive cage.

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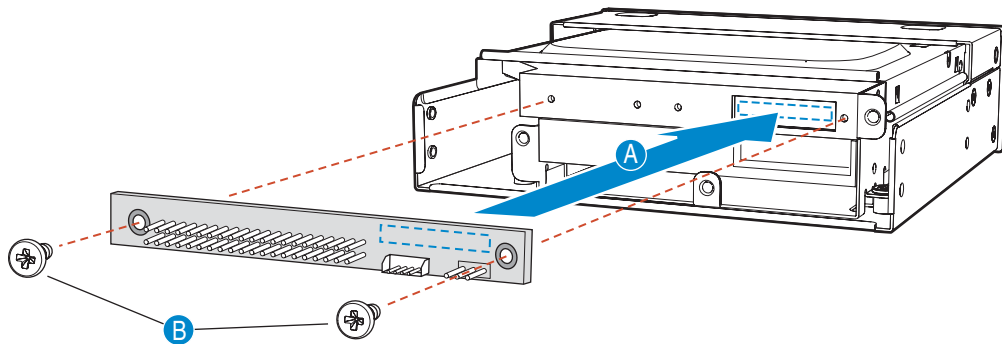**Figure 4. Securing Slimline Floppy Drive to Drive Cage**

Install Slimline CD-ROM or DVD-ROM Drive

Note: *You can install either a slimline CD-ROM drive OR a slimline DVD-ROM drive.You cannot install both.*

Note: *For Intel supplied CD-ROM/DVD-ROM drives, the correct setting is "No Jumper".*

Note: *For non-Intel supplied CD-ROM/DVD-ROM drives, see the documentation that came with your slimline drive for master/slave jumper settings.*
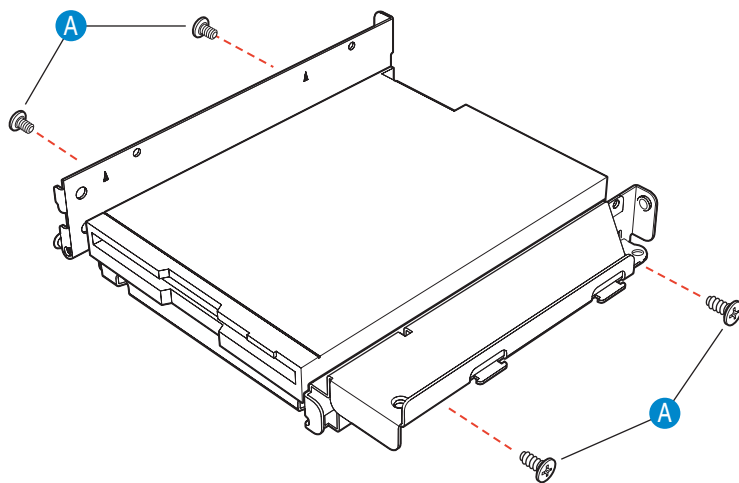
1. Turn the drive cage so that the metal flange at the side of the drive extends to the right.

2. Lay the slimline CD-ROM drive or the slimline DVD-ROM drive in the drive cage, with the front of the drive facing you. The slimline CD-ROM drive/DVD-ROM drive lies on top of the slimline floppy drive.

3. Insert the backplane connector into the drive connector (see letter "A" in the following figure).

4. Use two screws from the bag marked "A" to secure backplane to slimline CD-ROM/DVD-ROM drive (see letter "B").

AF000490

Figure 5. Attaching Backplane to Slimline CD-ROM/DVD-ROM Drive

5. Line up the screw holes on the left and right sides of the slimline CD-ROM/DVD-ROM drive with the corresponding screws on the drive cage (see letter "A" in the following figure). The front of the slimline drive will extend slightly from the front of the drive cage.

6. Use four screws from the bag marked "CD" to attach the drive to each side of the drive cage (two screws on each side).
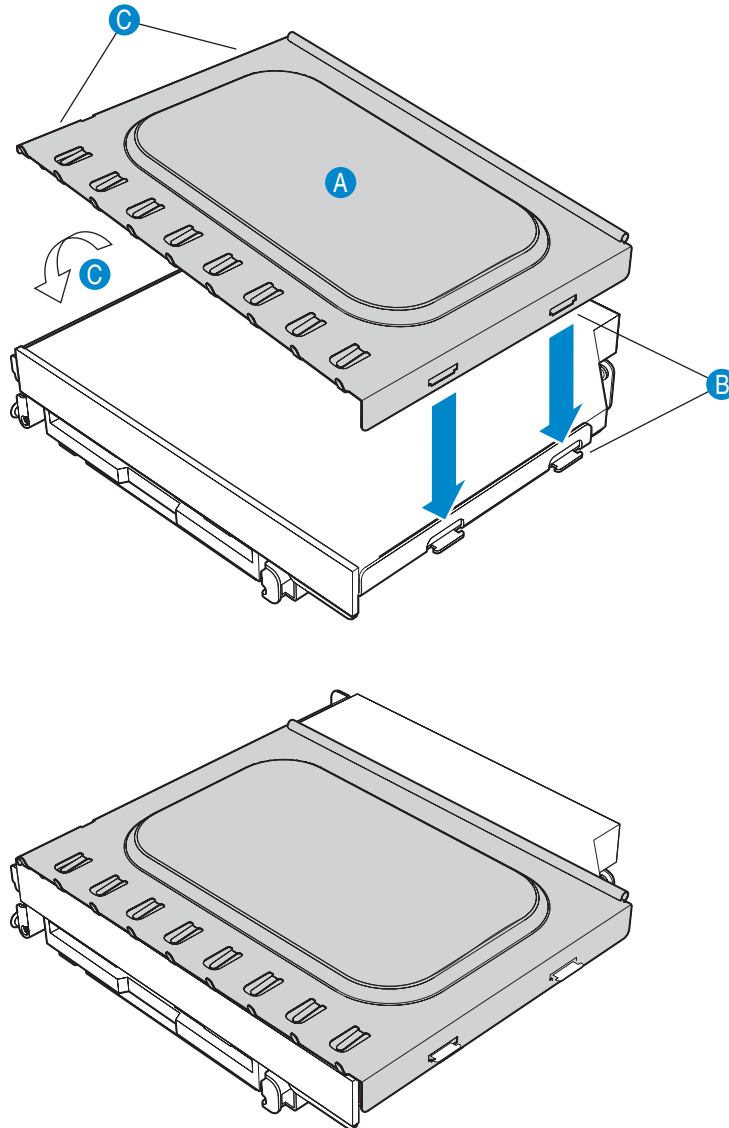

AF000487

Figure 6. Securing Slimline CD-ROM Drive or Slimline DVD-ROM Drive to Drive Cage

Re-install Cage Top on Drive Cage

1. Hold the cage top (see letter "A" in the following figure) at a downward angle toward the drive cage.

2. Engage the slots at the right side of the cage top to the tabs at drive cage base (see letter "B").

3. Rotate the cage top downward at the left side to engage the left tabs (see letter "C").

AF000488

Figure 7. Installing the Cage Top to the Drive Cage

Insert Drive Cage into Drive Bay

1. Insert the front of the device cage into the drive bay then lower the back of the drive cage (see letter "A" in the following figure). When properly positioned, the front of the cage will be flush and the screw holes in the drive cage will match the screw holes in the bottom of the drive bay.

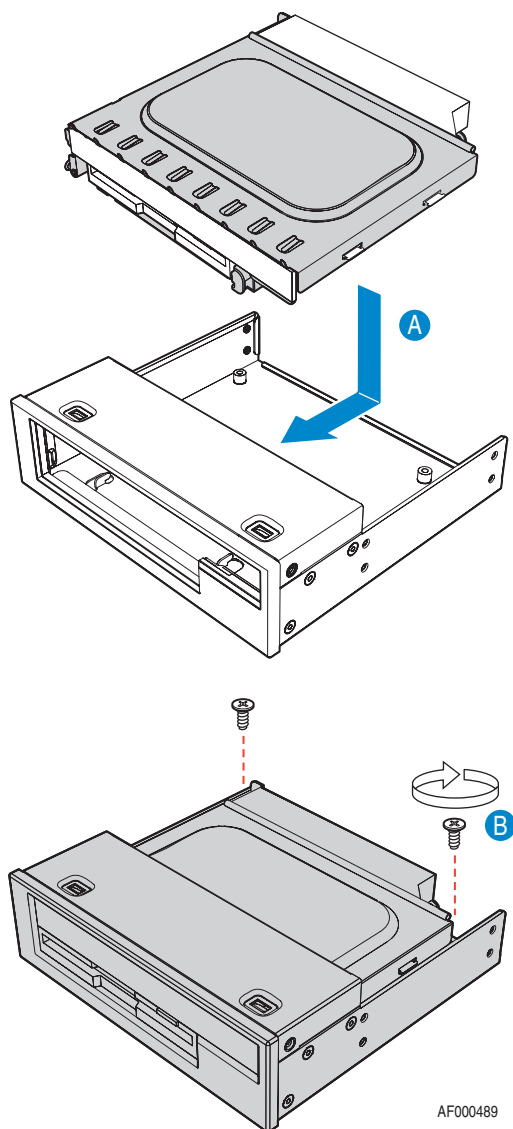2. Use two screws to secure the drive cage to the drive bay (see letter "B").

Figure 8. Inserting Drive Cage into Drive Bay

3. This completes the preparatory steps to set up the slimline drive assembly. If you are installing the slimline drive assembly into an Intel® Server Chassis SC5400, proceed with the instructions in "Installing the Slimline Drive Assembly into an Intel® Server Chassis SC5400" on page 10. If you are installing the slimline drive assembly into an Intel® Entry Server Chassis SC5299-E, proceed with the instructions in "Installing

the Slimline Drive Assembly into an Intel® Entry Server Chassis SC5299-E" on page 16.

Installing the Slimline Drive Assembly into an Intel® Server Chassis SC5400

Note: *This section only applies to installing the slimline drive assembly into an Intel® Server Chassis SC5400. If you are installing the slimline drive assembly into an Intel® Entry Server Chassis SC5299-E, follow the instructions under "Installing the Slimline Drive Assembly into an Intel® Entry Server Chassis SC5299-E" on page 16.*

Remove Chassis Cover

1. Unplug all power cables from the chassis.

2. Unplug all peripheral cables from the chassis.

3. If present, remove the screw from the back of the chassis cover (see letter "A" in the following figure).

4. Release the latch (see letter "B").
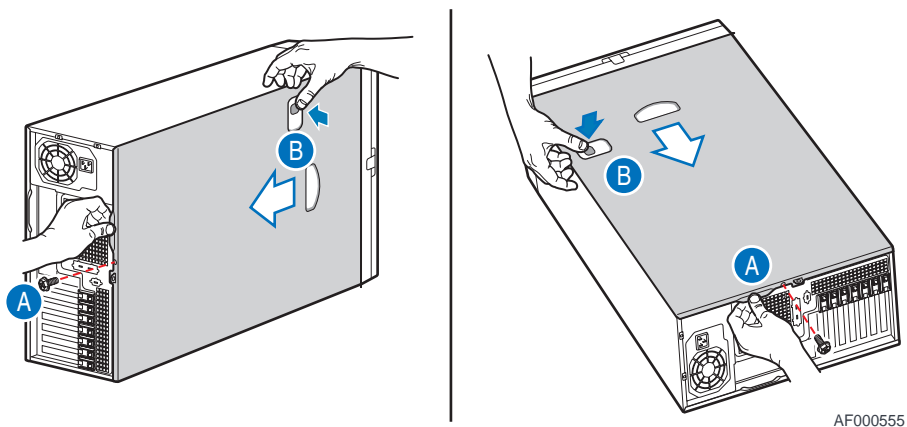
5. Remove the chassis cover.

AF000555

Figure 9. Removing Chassis Cover from Intel® Server Chassis SC5400
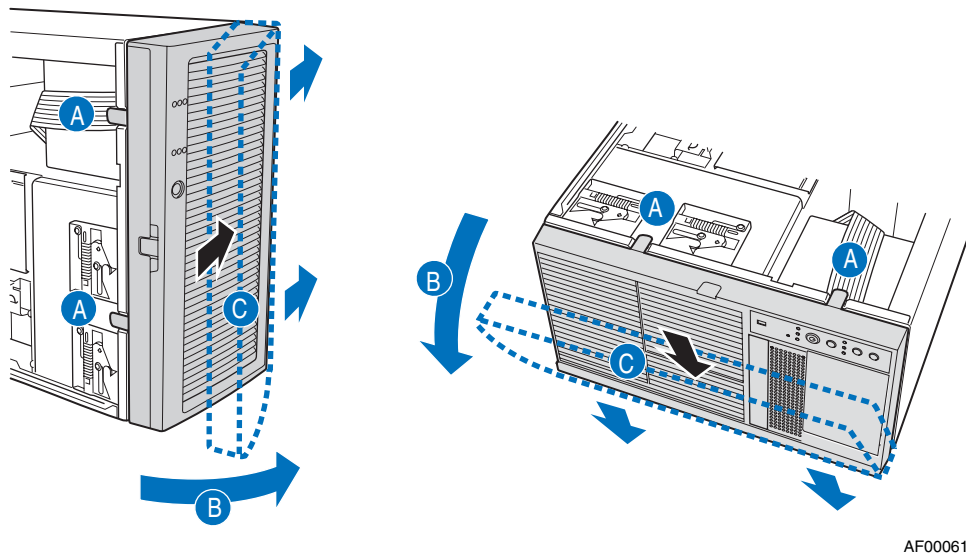
Remove Bezel Assembly

The bezel assembly consists of two parts, an inner bezel door and an outer bezel door. Both parts comprise the bezel assembly in the pedestal configuration. In the rack configuration, only the inner bezel door is used.

To remove the bezel assembly:

1. Release the two plastic tabs (see letter "A" in the following figure) on the left side of the bezel assembly to disengage the tabs.

2. Rotate the bezel assembly (see letter "B") no more than 40 degrees outward.

3. At a 40-degree angle, push the bezel assembly away from the chassis (see letter "C").

4. If the bezel assembly does not immediately disconnect from the chassis, tap the left-hand side of the bezel assembly to disengage the bezel hooks on the right-hand side of the chassis.

Caution: *Do not rotate the bezel assembly more than 40 degrees or you will damage the bezel hooks on the right-hand side of the bezel assembly.*
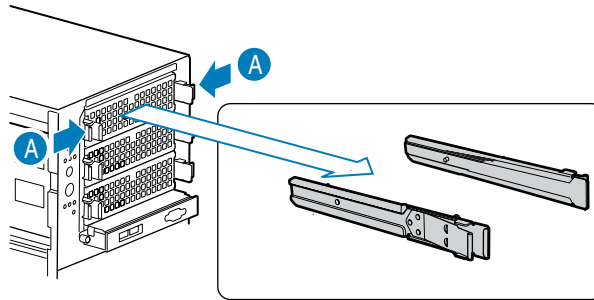

AF000610

Figure 10. Removing Bezel Assembly from Intel® Server Chassis SC5400

Remove EMI Shield/Slide Assembly

1. Press in on the side latches (see letter "A" in the following figure) to remove the EMI shield/slide assembly from the upper device bay.
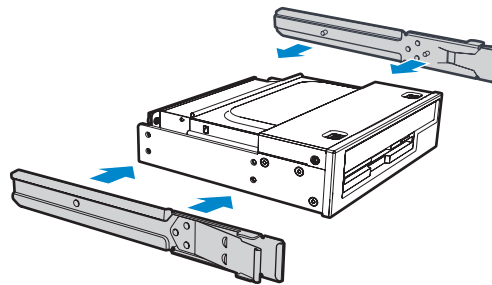

AF000634

Figure 11. Removing EMI Shield/Slide Assembly from Intel® Server Chassis SC5400

Attach Drive Rails to Slimline Drive Assembly

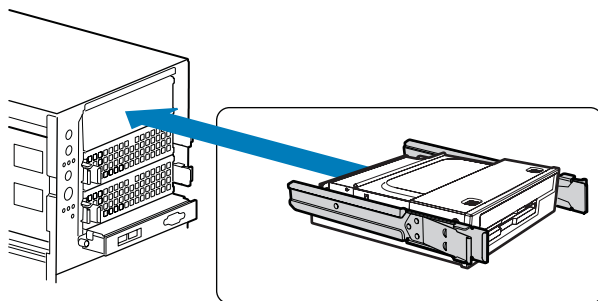1. Attach the drive rails to the slimline drive assembly using the top set of holes.

AF000485

Figure 12. Attaching Drive Rails to Slimline Drive Assembly

Insert Slimline Drive Assembly into Server Chassis

1. Slide the slimline drive assembly into the server chassis.
2. Make sure that the drive rails are using the correct slots in the chassis.
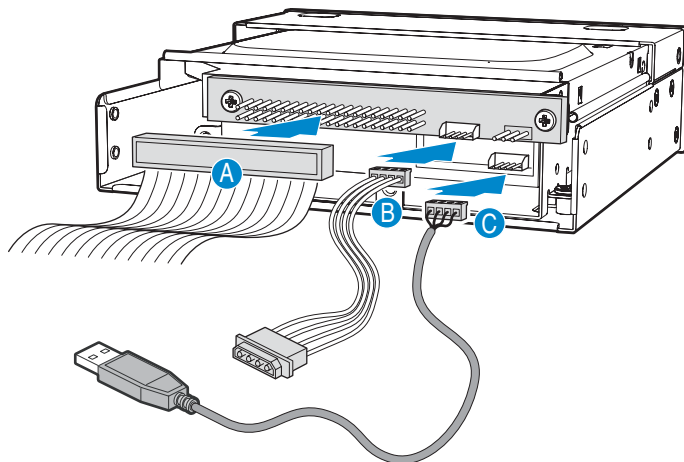

AF000633

Figure 13. Inserting Slimline Drive Assembly into Intel® Server Chassis SC5400

Make Cable Connections

1. Connect the IDE cable (see letter "A" in the following figure) from the chassis to the slimline drive backplane.
2. Connect the power adapter cable (see letter "B") from a power connection to the slimline drive backplane.
3. Connect the USB cable (see letter "C") from the server board to the slimline drive backplane.

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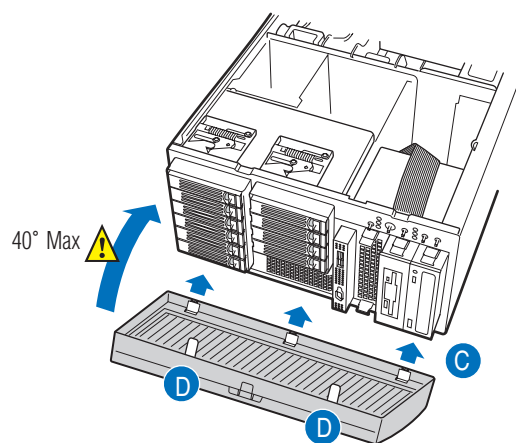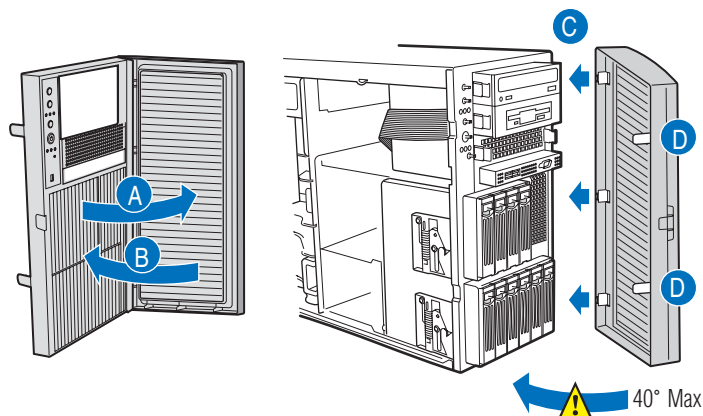
Figure 14. Cable Connections

Re-install Bezel Assembly

Note: *Both the outer bezel door and inner bezel door are used when the chassis is configured for the pedestal position. For rack-configured systems, only the inner bezel door is used.*

1. For a pedestal-configured system, open the outer bezel door of the bezel assembly (see letter "A" in the following figure).

2. For both pedestal- and rack-configured systems, remove the filler panel from the inner bezel door that corresponds to the installed slimline drive assembly.

3. For pedestal-configured systems, close the outer bezel door (see letter "B").

4. Fit the right edge of the bezel assembly against the right side of chassis and engage plastic bezel hooks (see letter "C") into raised metal slots at chassis edge.

   Caution: *Do not attach bezel assembly to chassis at more than a 40-degree angle or you will damage the bezel hooks on the right side of the bezel assembly.*

5. Rotate bezel assembly toward chassis and latch the two plastic tabs (see letter "D") on left side of bezel assembly to chassis.

Figure 15. Re-installing Bezel Assembly on Intel® Server Chassis SC5400

Re-install Chassis Cover

1. Replace the chassis cover.

2. Slide the chassis cover forward.

3. (Optional) Secure the chassis cover to the chassis with screw (see letter "A" in the following figure).
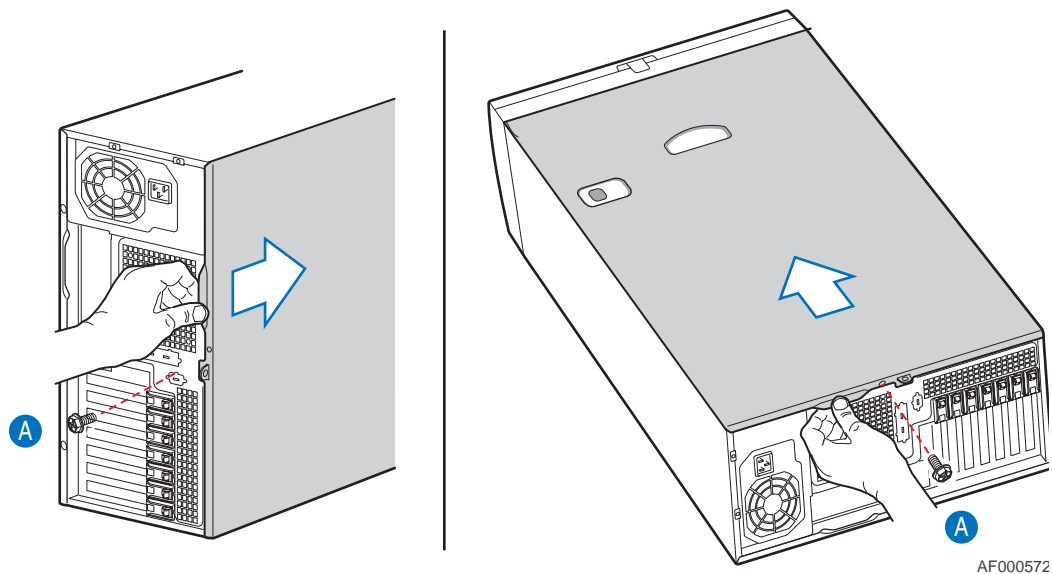

Figure 16. Re-installing Chassis Cover on Intel® Server Chassis SC5400

4. Reconnect all peripheral devices and the AC power cord.

5. Power up the system.

Installing the Slimline Drive Assembly into an Intel® Entry Server Chassis SC5299-E

Note: *This section only applies to installing the slimline drive assembly into an Intel® Entry Server Chassis SC5299-E. If you are installing the slimline drive assembly into an Intel® Server Chassis SC5400, follow the instructions under "Installing the Slimline Drive Assembly into an Intel® Entry Server Chassis SC5299-E" on page 16.*

Remove Chassis Cover

1. Unplug all power cables from the chassis.

2. Unplug all peripheral cables from the chassis.

3. If present, remove the two screws securing the chassis cover to the chassis (see letter "A" in the following figure). Push in on latch with your right hand (see letter "B") and with your left hand, grasp the rear cover clasp and slide the chassis cover rearward to remove from chassis (see letter "C").
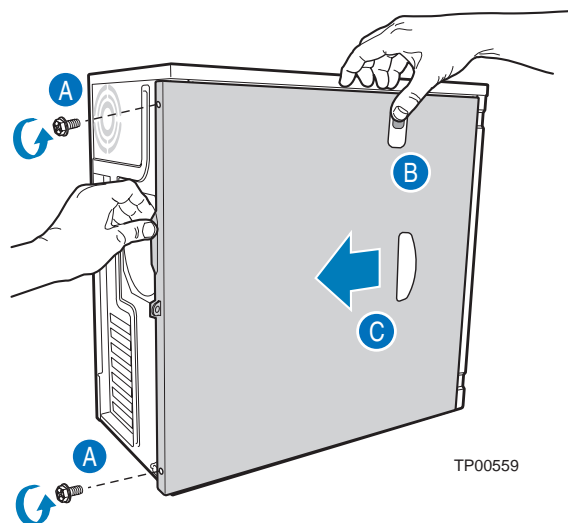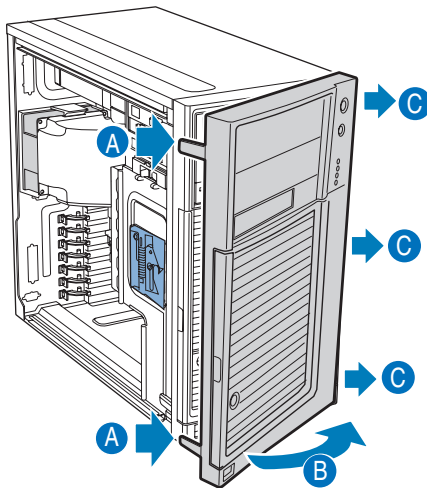

Figure 17. Removing Chassis Cover from Intel® Entry Server Chassis SC5299-E

Remove Bezel Assembly

1. Disengage the two bezel tabs from the left side of the chassis (see letter "A" in the following figure).

2. Rotate the left side of the bezel assembly outward slightly (see letter "B").

3. Disengage the three clips that attach the right side of the bezel assembly to the chassis (see letter "C") and remove chassis cover.
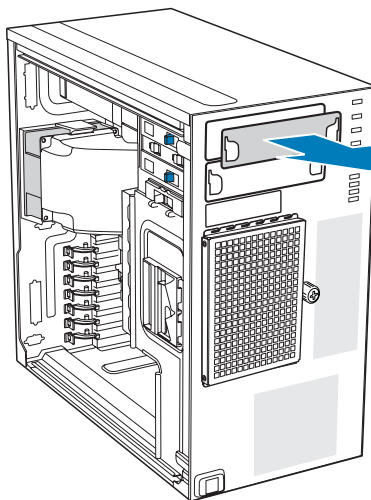

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Figure 18. Removing Bezel Assembly from Intel® Entry Server Chassis SC5299-E

Remove EMI Shield

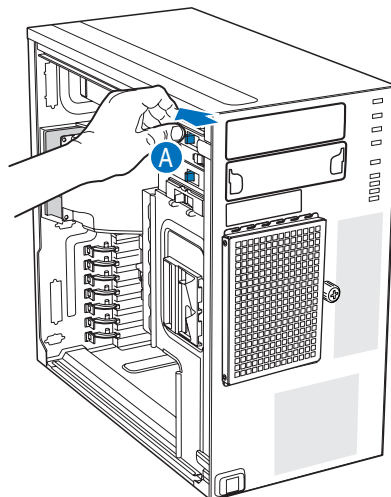1. Remove the EMI shield from an empty 5.25-in drive bay.

AF000632

Figure 19. Removing EMI Shield from Intel® Entry Server Chassis SC5299-E

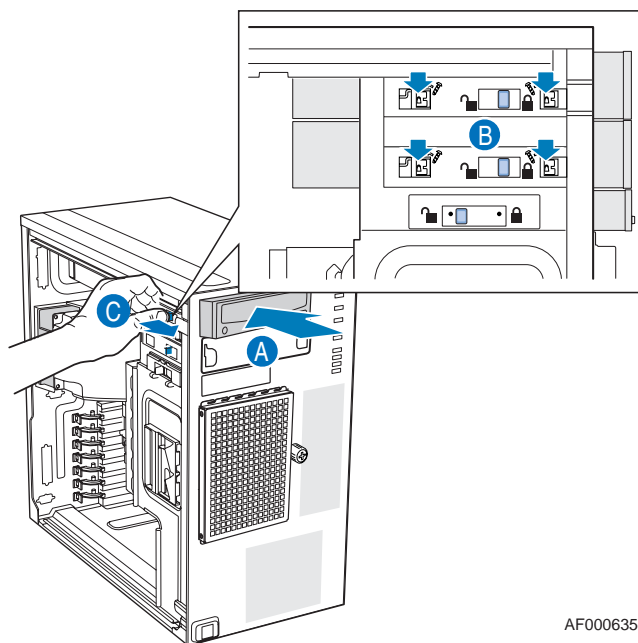## Insert Slimline Drive Assembly into Chassis

1. Move latch to the "unlock" position (see letter "A" in the following figure).

AF000636

Figure 20. Unlocking Device Bay Latch on Intel® Entry Server Chassis SC5299-E

2. Insert slimline drive assembly into the 5.25-in drive bay opening in the chassis (see letter "A" in the following figure).

3. Line up holes in slimline drive assembly with holes in chassis (see letter "B").

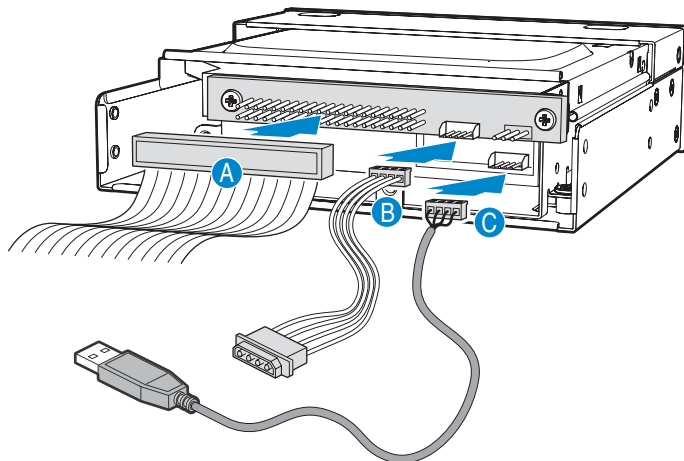4. Move latch to the "lock" position (see letter "C").

AF000635

Figure 21. Inserting Slimline Drive Assembly into Intel® Entry Server Chassis SC5299-E

Make Cable Connections

1. Connect the IDE cable (see letter "A" in the following figure) from the chassis to the slimline drive backplane.

2. Connect the power adapter cable (see letter "B") from a power connection to the slimline drive backplane.

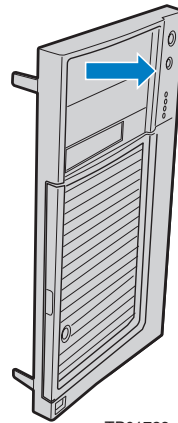3. Connect the USB cable (see letter "C") from the server board to the slimline drive backplane.

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Figure 22. Cable Connections
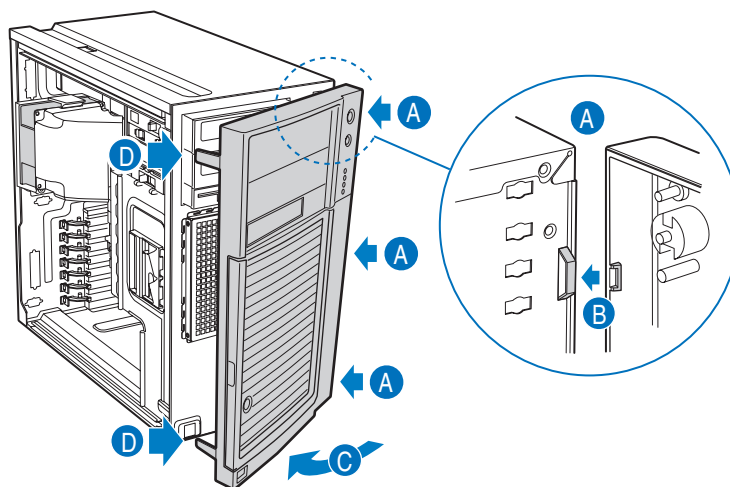
Re-install Bezel Assembly

1. Remove filler panel from the bezel assembly that corresponds with the position of the installed slimline drive assembly.

TP01723

Figure 23. Removing Filler Panel from Bezel Assembly of Intel® Entry Server Chassis SC5299-E

2. Line up the three clips on the right side of the bezel assembly with the corresponding slots on the right side of the chassis (see letter "A" in the following figure).

3. Engage the clips with the slots (see letter "B").

4. Rotate the left side of the bezel assembly towards the chassis (see letter "C").

5. Snap the two bezel tabs into the corresponding recesses at the left edge of the chassis front panel (see letter "D").

TP02035

Figure 24. Re-installing Bezel Assembly on Intel® Entry Server Chassis SC5299-E

Re-install Chassis Cover

1. Slide the chassis cover on the chassis and latch securely (see letter "A" in the following figure).

2. (Optional) Secure the chassis cover to the chassis with screw (see letter "B" in the following figure).
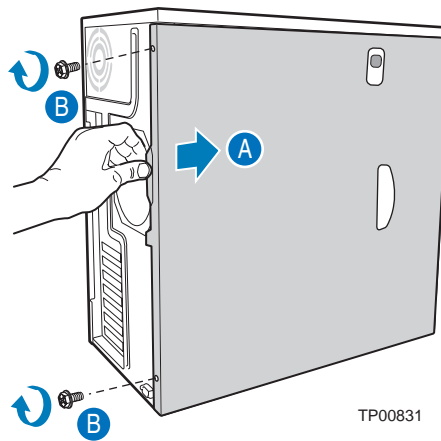

Figure 25. Re-installing Chassis Cover on Intel® Entry Server Chassis SC5299-E

3. Reconnect all peripheral devices and the AC power cord.

4. Power up the system