

Basic Rail Kit Install Guide for Intel® Server Chassis

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

Intel® Server Chassis SR1400, Intel® Server Chassis SR1500,

Intel® Server Chassis SR2400, Intel® Server Chassis SR2500,

Intel® Server Chassis SR1450, Intel® Server Chassis SR1550

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Intel® server boards contain a number of high-density VLSI and power delivery components that need adequate airflow for cooling. Intel's own chassis are designed and tested to meet the intended thermal requirements of these components when the fully integrated system is used together. It is the responsibility of the system integrator that chooses not to use Intel developed server building blocks to consult vendor datasheets and operating parameters to determine the amount of airflow required for their specific application and environmental conditions. Intel Corporation can not be held responsible if components fail or the server board does not operate correctly when used outside any of their published operating or non-operating limits.

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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 Warnung und 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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1 Rail Kit Installation Instructions

Use the instructions in this installation guide to install the rail kit to the Intel® Server Chassis SR1400, Intel® Server Chassis SR1500, Intel® Server Chassis SR1450, Intel® Server Chassis SR1550, Intel® Server Chassis SR2400, or the Intel® Server Chassis SR2500.

Before You Begin

Before installing the rail 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(s) from the chassis or wall outlet.
3. Label and disconnect all peripheral cables and all telecommunications 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.

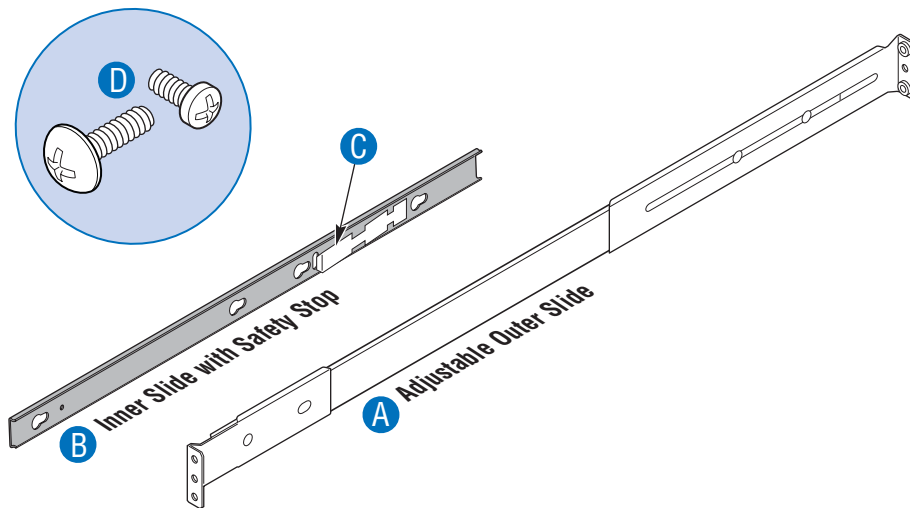
Tools and Supplies Needed

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

Kit Content List

Each Rack Mount Kit contains the following:

- Outer Rail Slide Assembly (2). See letter “A” in [Figure 1](#).
- Inner Rail Slide (2). See letter “B” in [Figure 1](#).
- Rail Safety Stop (one each on inner slides). See letter “C” in [Figure 1](#).
- Outer Slide Rail Screws (8 #10-32 x 1/2). See letter “D” in [Figure 1](#).
- Inner Slide Rail Screw (8 #6-32 x 1/4). See letter “D” in [Figure 1](#).
- Rack Screws (2 #10-32 x 3/4). See letter “D” in [Figure 1](#).



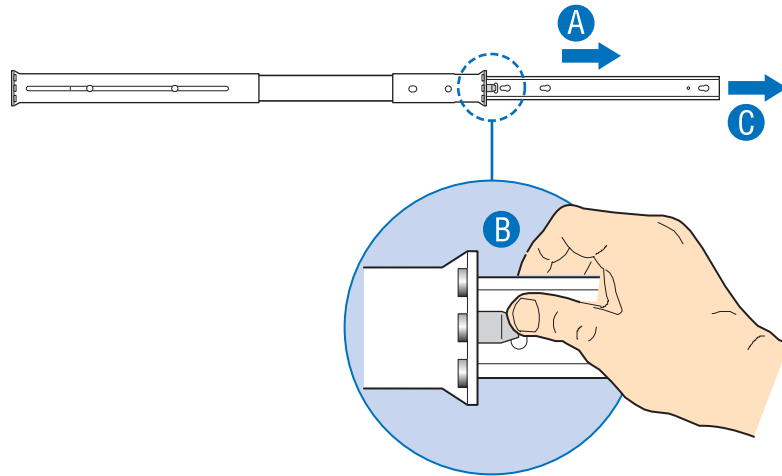
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Figure 1. Rail Kit Components

Installation Instructions

Remove the Inner Rail from the Rail Assembly

1. Extend the inner rail until it locks. See letter “A” in Figure 2.
2. Depress the spring safety lock to release the inner rail. See letter “B” in Figure 2.
3. Remove the inner rail from the rail assembly. See letter “C” in Figure 2.



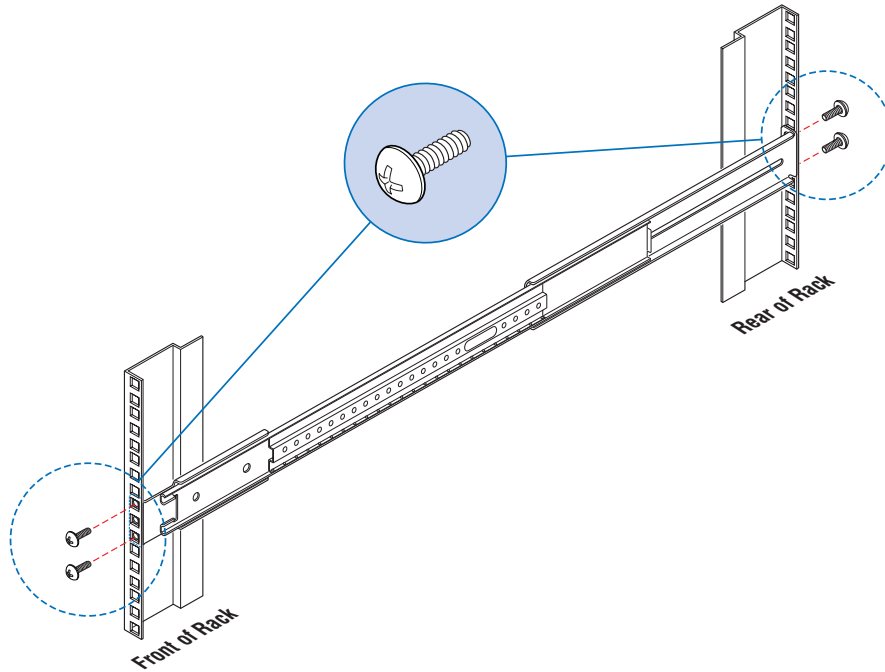
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Figure 2. Removing the Inner Rail from the Rail Assembly

Install Outer Rail Slides to Rack Posts

1. Attach the outer rail slides to the rack posts using two #10-32 x 1/2 screws at the front posts, and two #10-32 x 1/2 screws at the rear posts. See letter “A” in [Figure 3](#).

Note: The rail flanges mount to the inside of each post.

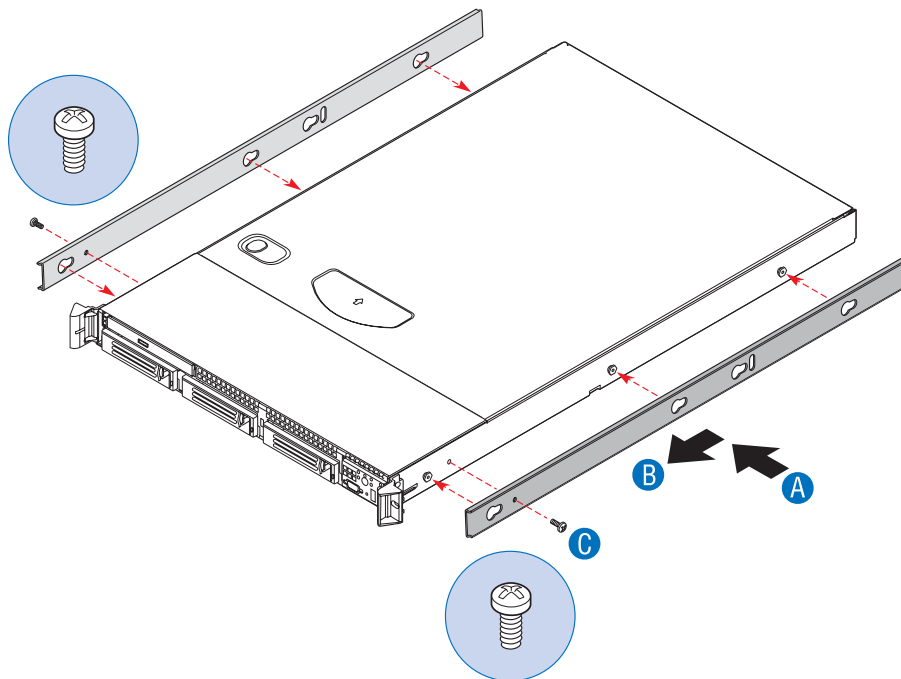


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Figure 3. Installing the Outer Rail Slides to the Rack Posts

Attach Inner Rails to Server Chassis Sidewalls

1. Insert the inner rails over the server chassis sidewall studs. See letter “A” in [Figure 4](#).
2. Slide the inner rails toward the front of the server chassis. See letter “B” in [Figure 4](#).
3. Secure the inner rails with one #6-32 x 1/4 screw for each rail. See letter “C” in [Figure 4](#).



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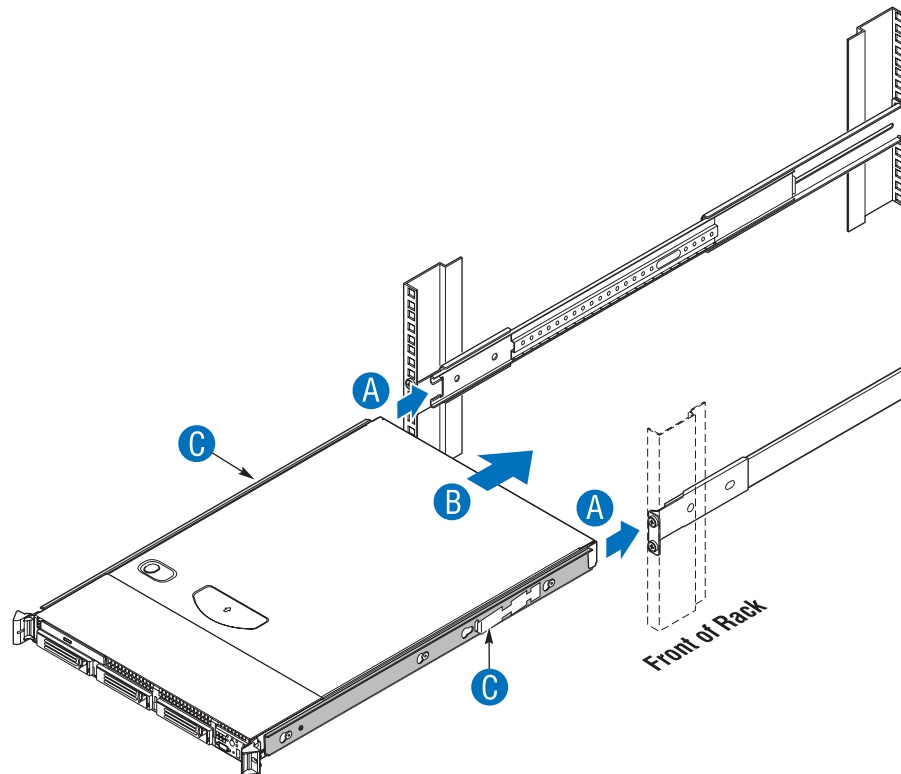
Figure 4. Attaching the Inner Rails to the Server Chassis Sidewalls

Install the Server Chassis into the Rack

1. Align the inner rails (attached to the server chassis) with the outer rail assemblies (attached to the rack). See letter “A” in [Figure 5](#).

Note: The inner slides must be positioned all the way forward in the rails to ensure proper installation of the server.

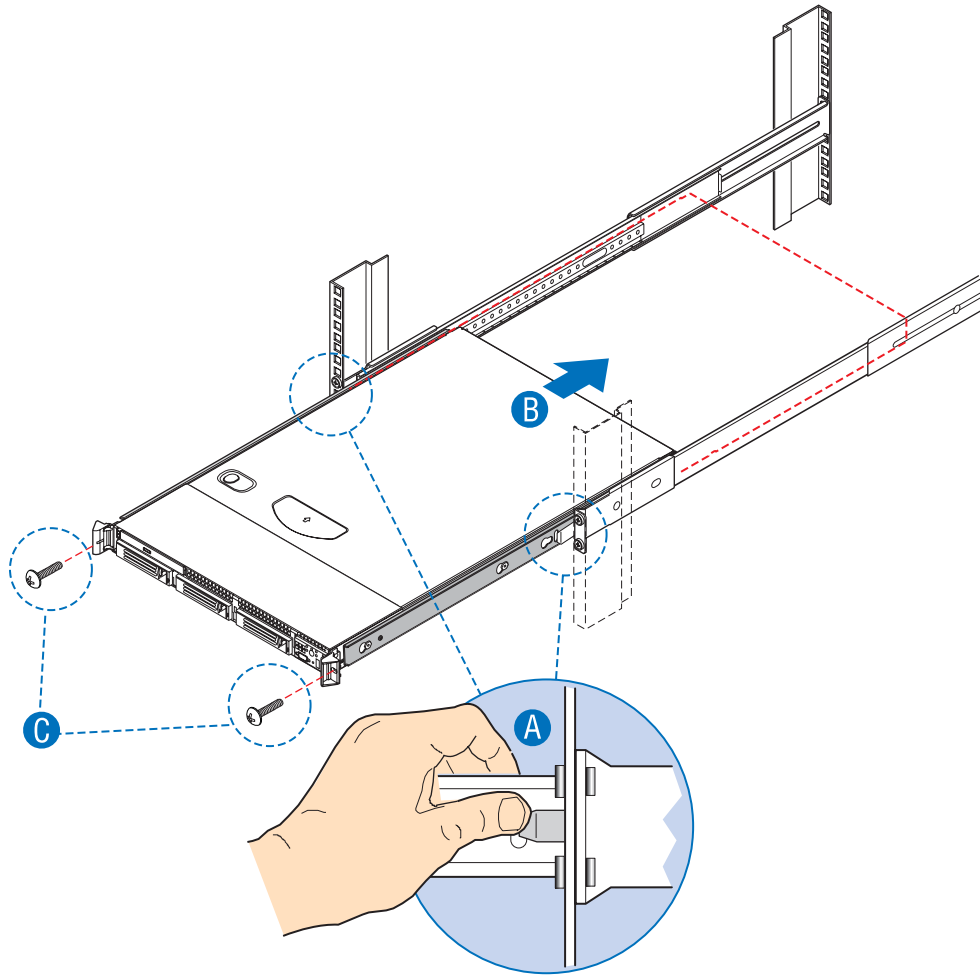
2. Engage the matching rails and slide the server chassis into the rack (see letter “B” in [Figure 5](#)) until the two safety stops lock into position (see letter “C” in [Figure 5](#)).



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Figure 5. Installing the Server Chassis into the Rack

3. Depress the two safety locks (one on each side). See letter “A” in [Figure 6](#).
4. Slide the server chassis all the way into the rack. See letter “B” in [Figure 6](#).
5. Use the rack screws (#10-32 x 3/4) to secure the chassis and rack handles into the rack. See letter “C” in [Figure 6](#).



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Figure 6. Installing the Server Chassis into the Rack

