Sun StorEdge™ T3 and T3+ Array Telco Rack Installation Guide

Sun Microsystems, Inc.
901 San Antonio Road
Palo Alto, CA 94303-4900 U.S.A.
650-960-1300

Part No. 806-5133-11
August 2001, Revision A

Send comments about this document to: docfeedback@sun.com

Copyright 2001 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, CA 94303-4900 U.S.A. All rights reserved.

This product or document is distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X / Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, AnswerBook2, docs.sun.com, SunDocs, Sun StorEdge, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Federal Acquisitions: Commercial Software—Government Users Subject to Standard License Terms and Conditions.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2001 Sun Microsystems, Inc., 901 San Antonio Road, Palo Alto, CA 94303-4900 Etats-Unis. Tous droits réservés.

Ce produit ou document est distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées des systèmes Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X / Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, AnswerBook2, docs.sun.com, SunDocs, Sun StorEdge, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

LA DOCUMENTATION EST FOURNIE "EN L'ETAT" ET TOUTES AUTRES CONDITIONS, DECLARATIONS ET GARANTIES EXPRESSES OU TACITES SONT FORMELLEMENT EXCLUES, DANS LA MESURE AUTORISEE PAR LA LOI APPLICABLE, Y COMPRIS NOTAMMENT TOUTE GARANTIE IMPLICITE RELATIVE A LA QUALITE MARCHANDE, A L'APTITUDE A UNE UTILISATION PARTICULIERE OU A L'ABSENCE DE CONTREFAÇON.

Please
Recycle

Adobe PostScript

Rack Installation

The *Sun StorEdge T3 and T3+ Array Telco Rack Installation Guide* describes how to install a Sun StorEdge™ T3 and T3+ array in a telco rack using the telco rackmount kit. The rackmount kit for this rack is seven rack units (*RUs*) high, providing space for two arrays. You can install up to ten arrays in a telco rack using five rackmount kits.

This document includes information only on mounting an array in a rack; it does not include instructions on how to perform a complete array installation. For instructions on cabling the array, configuring the drive volumes, and other installation information, refer to Chapter 2 of the *Sun StorEdge T3 and T3+ Array Installation, Operation, and Service Manual*.

Note – Before beginning the installation, refer to the requirements for operating a Sun StorEdge T3 and T3+ array in a standard 19-inch EIA / RETMA rack as described in Appendix A of the *Sun StorEdge T3 and T3+ Array Site Preparation and Planning Guide*. Make sure that the rack you are using meets the specified requirements.

This document contains the following sections:

- "Rackmount Kit Contents" on page 2
- "Related Documentation" on page 2
- "Accessing Sun Documentation Online" on page 3
- "Installation Guidelines" on page 3
- "Attaching the Support Plate to the Array" on page 3
- "Suitable Rack Configurations" on page 6
- "Attaching the Side Rails to a 4-Post Rack" on page 7
- "Attaching a Side Rails to a 2-Post Rack" on page 10
- "Installing the Array in the Rack" on page 12

Rackmount Kit Contents

The following table lists the items that are supplied with the telco rackmount kit. The kit contains the hardware items required to install two Sun StorEdge T3 and T3+ arrays on a telco rack.

TABLE 1 Telco Rackmount Kit

Part Number	Item Description	Quantity
340-6528-01	Telco right rail	1
340-6529-01	Telco left rail	1
340-6530-01	Telco rear bracket	4
340-6031-01	Support plate	2
240-3017-01	Screw, 10-32x3/8 in.	12
240-3840-01	Screw, 12-24x1/2 in.	8
240-3768-01	Screw, 10-32x5/16 in.	8

Related Documentation

The following table lists other related documents that can help you with the installation process.

TABLE 2 Related Documentation

Application	Title	PartNumber
Preparing for the installation	*Sun StorEdge T3 Disk Tray Site Preparation and Planning Guide*	806-4212
Installation overview	*Sun StorEdge T3 Disk Tray Installation Task Map*	806-1061
Installing, operating, and servicing	*Sun StorEdge T3 Disk Tray Installation, Operation, and Service Manual*	806-1062
Administration	*Sun StorEdge T3 Disk Tray Administrator's Guide*	806-1063
Release notes	*Sun StorEdge T3 Disk Tray Release Notes*	806-1497

Accessing Sun Documentation Online

The SunDocs[SM] product documentation web site enables you to access a select group of Sun technical documentation on the Web. You can browse the SunDocs archive or search for a specific book title or subject at:

```
http://www.sun.com/products-n-solutions/hardware/docs
```

Installation Guidelines

Follow these guidelines when installing the array:

- Prepare the location following the instructions in the *Sun StorEdge T3 and T3+ Array Site Preparation and Planning Guide*.
- Install the array in the first empty slot at the bottom of the rack. If you are installing more than one array, continue installing arrays from the bottom up.
- If you are installing a array partner group, install the master unit in the lowest empty slot available, and install the alternate master unit in the next slot up. Install all array partner groups in this order.
- Use two people to lift and install the array.

Caution – This procedure requires two people to lift and move the array. Use care to avoid injury. An array can weigh up to 67 pounds (30 kg).

Attaching the Support Plate to the Array

1. **With the aid of an assistant, invert the array so that the bottom faces up and the front faces you.**

2. **Using a Phillips screwdriver, remove the four screws that secure the feet to the array (**FIGURE 1**).**

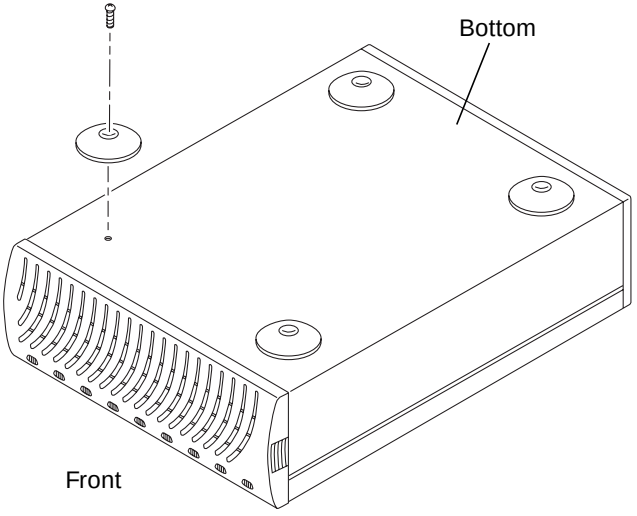

FIGURE 1 Removing the Feet

3. **Secure the support plate to the array using four screws (part number 240-3768-01) provided in the rackmount kit (**FIGURE 2**).**

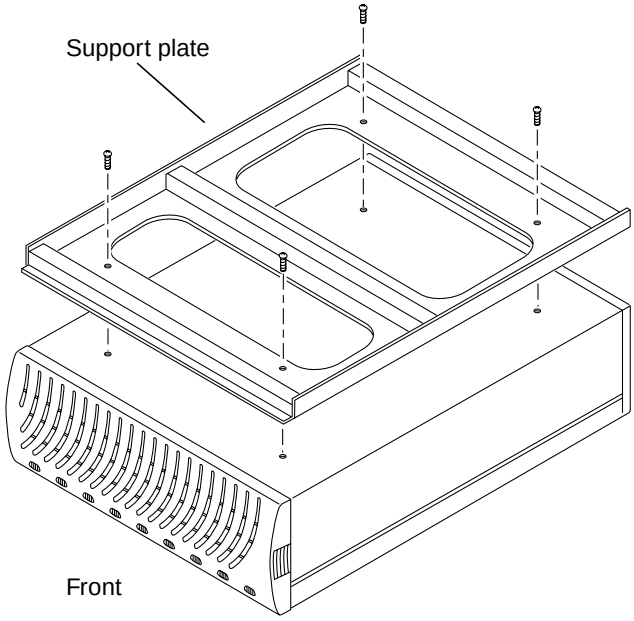

FIGURE 2 Attaching the Support Plate to the Array

4. With the aid of an assistant, restore the array to the upright position.

Suitable Rack Configurations

This rackmount kit is suitable for use in the following rack configurations:

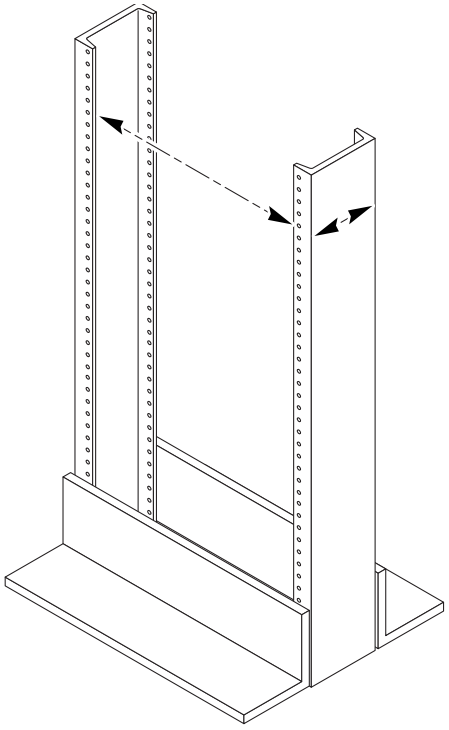

FIGURE 3 2-Post Telco Rack Configuration

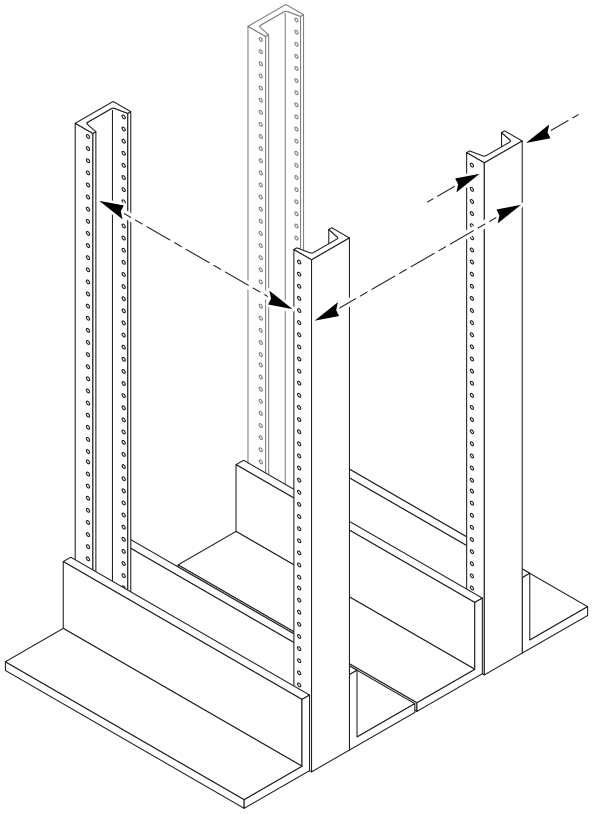

FIGURE 4 4-Post Telco Rack Configuration

Attaching the Side Rails to a 4-Post Rack

1. **Secure the rack with rigid connections stably to the floor and ceiling as appropriate (refer to the rack manufacturer's installation instructions).**

2. **Prepare the side rails by loosely attaching the brackets to both of the side rails (**FIGURE 5**) using eight screws (part number 240-3017-01) provided in the rackmount kit.**

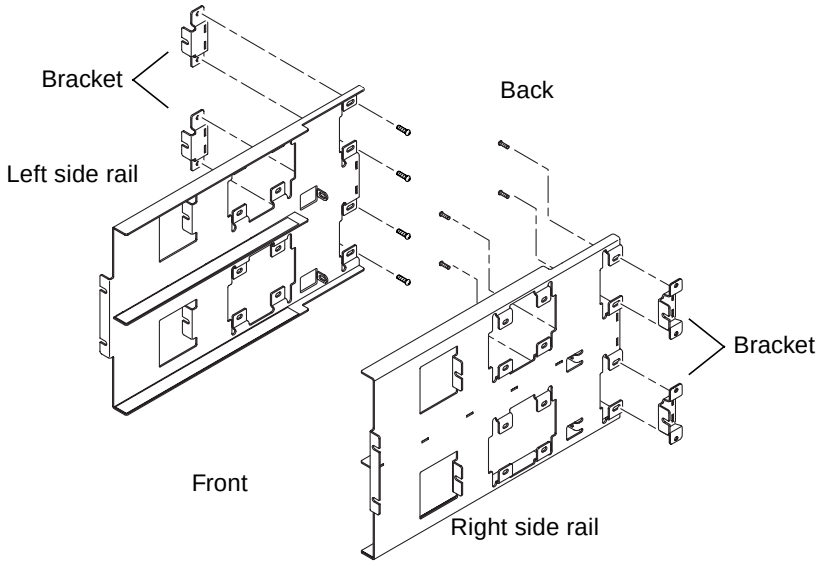

FIGURE 5 Attaching the Brackets to the Side Rails

3. **Position the left side rail in the rack in the lowest empty slot, aligning the holes in the rail with the holes in the rack (**FIGURE 6**).**

4. **Secure the left side rail to the rack.**

   a. **Tighten the screws of the brackets at the back of the rail.**

   b. **Secure the front of the rail using two screws (part number 240-3840-01) provided in the rackmount kit.**

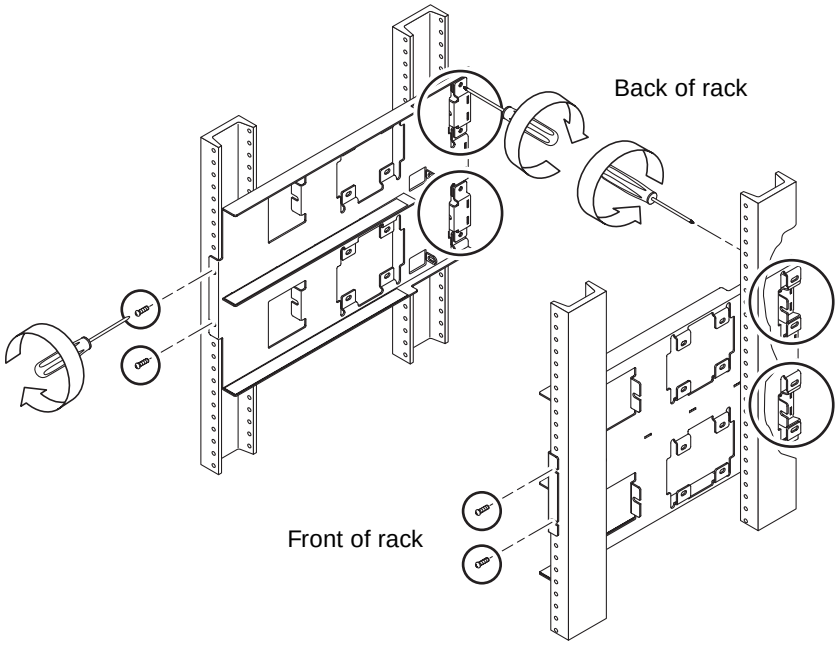

FIGURE 6 Attaching the Side Rails to the Rack

c. Secure the back of the rail (FIGURE 7**) using two screws (part number 240-3840-01) provided in the rackmount kit.**

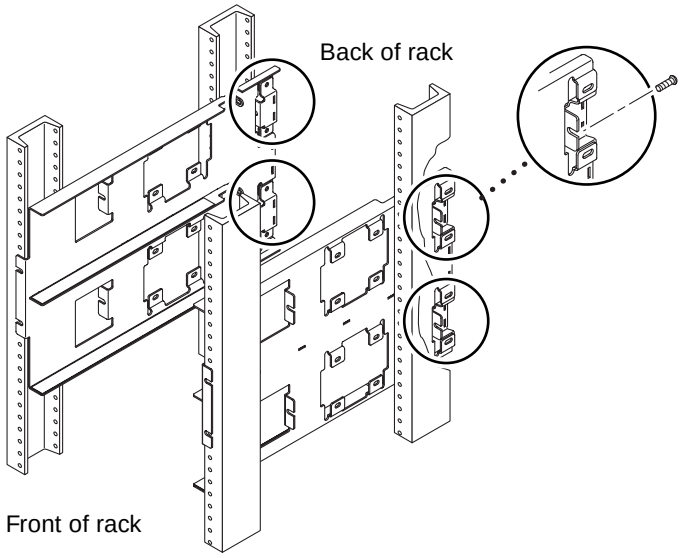

FIGURE 7 Securing the Back of the Side Rails

5. **Repeat Step 3 and Step 4 to attach the right rail to the rack.**

   Make sure you align the left rail with the right rail.

Attaching a Side Rails to a 2-Post Rack

1. **Secure the rack stably with rigid connections to the floor and ceiling as appropriate (refer to the rack manufacturer's installation instructions**

Note – Rear brackes are optional for 2-post rack configurations.

---

2. **Position the left side rail in the rack to the lowest empty slot, aligning the rail with the holes in the rack.**

3. **Secure the left side rail to the rack.**

   Secure the front of the rail using two screws (part number 240-3840-01) provided in the rackmount kit.

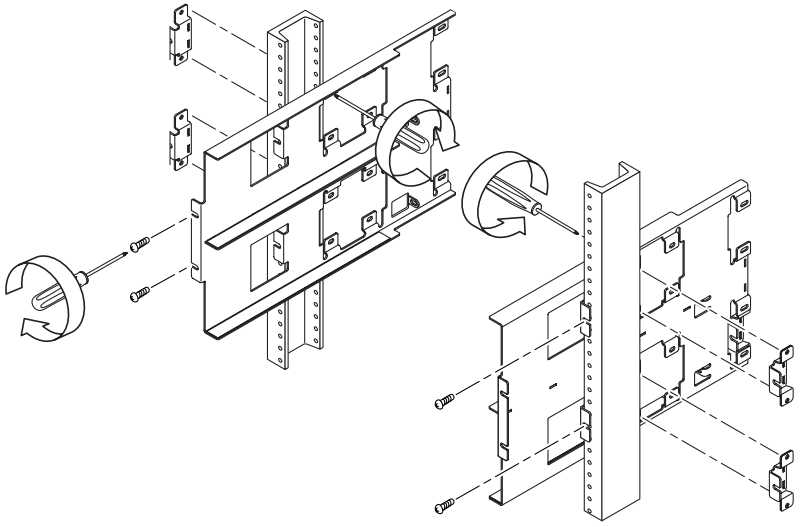

FIGURE 8 Attaching side rails to a 2-post rack.

4. **Repeat Step 3 to attach the right rail to the rack.**

   Make sure to align the left rail with the right rail.

Note – Brackets are optional for 2-post configurations.

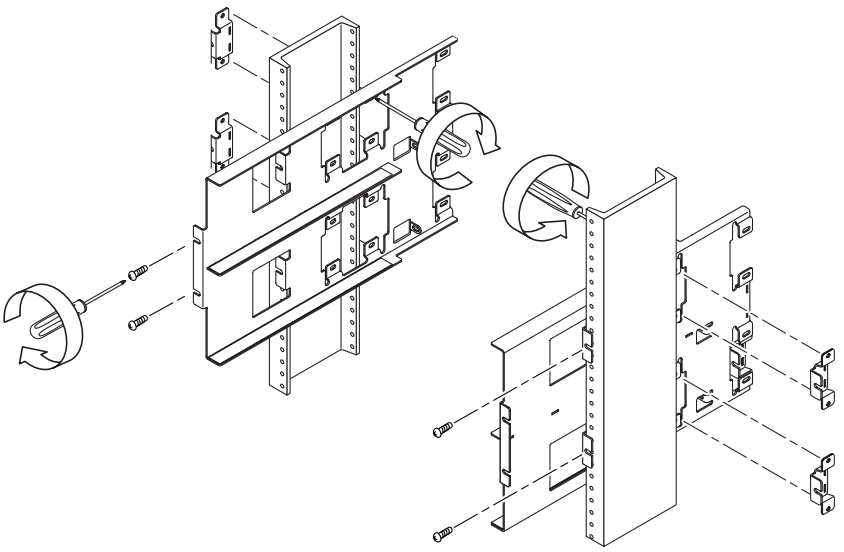

FIGURE 9 Alternate rack configuration: attaching side rails to a 2-post 5” and 6” rack.

Note – Brackets are optional only for 2-post 3” and 6” rack configurations.

Installing the Array in the Rack

Caution – The rack can become front-heavy while a array is being installed. Unless your rack is bolted to the floor, ensure that the stabilizer legs are extended before proceeding. Failure to extend the legs can result in the rack tipping forward and injuring personnel.

Caution – This installation requires two people to lift and move the array. Use care to avoid injury. A array with a support plate attached can weigh up to 87 pounds (39 kg).

---

1. **With the aid of an assistant, lift the array (one person on each side) and approach the rack with the back of the array entering the front of the rack.**

2. **Align the array with the side rails, and slide the array in the rack (**FIGURE 10**).**

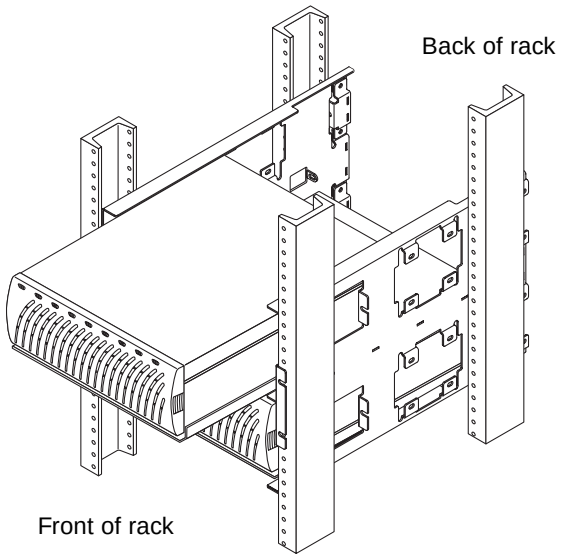

FIGURE 10 Sliding the Array in the Rack

3. **Secure the array to the side rails by inserting two screws (part number 240-3017-01) into the support plate at the back of the array chassis (**FIGURE 11**).**

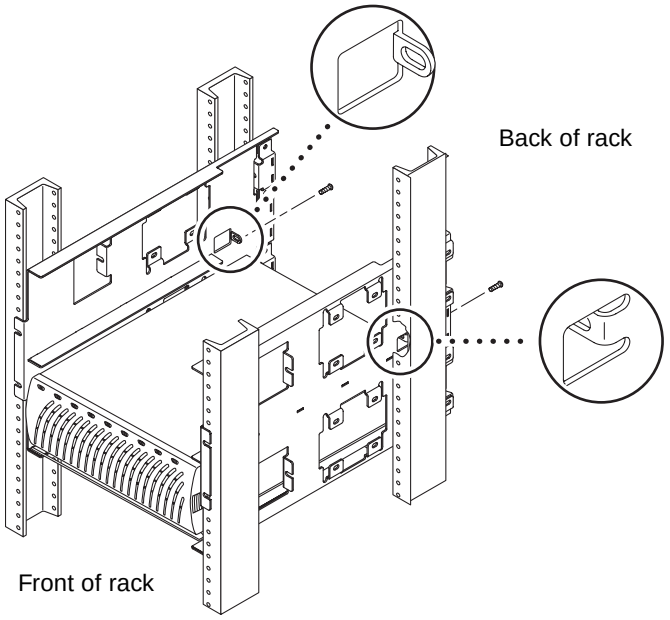

FIGURE 11 Securing the Array to the Side Rails

4. **Repeat Step 1 through Step 3 to install a second array (**FIGURE 12**).**

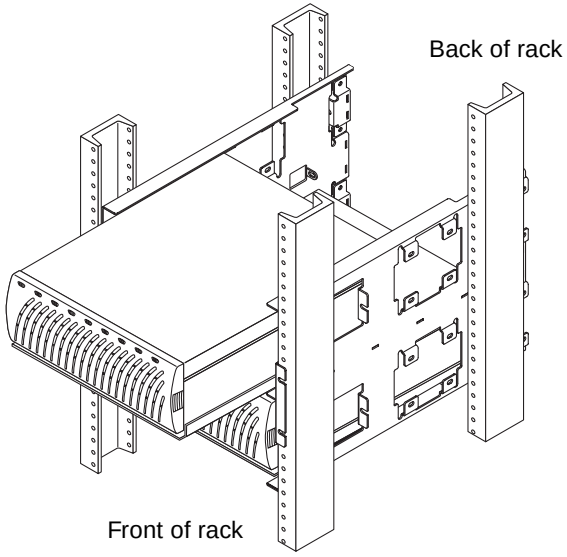

FIGURE 12 Installing a Second Array

After you have installed the array in the rack, refer to Chapter 2 of the *Sun StorEdge T3 and T3+ Array Installation, Operation, and Service Manual* for instructions about how to cable the arrays.

Caution – If you need to remove the array, make sure you have someone to assist you; one of you should be positioned at the front of the rack and the other one should be at the back. The person at the back of the rack can push it forward slightly after removing the mounting screws. The person at the front of the rack should be ready to take hold and stabilize the tray once it starts to move forward. Use two people to pull it out of the rails completely.