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FIPS Security Seal

Procedures for Brocade VDX 6740 and 6740T

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Document conventions

Text formatting conventions

The following text formatting conventions may be used in the flow of the text to highlight specific words or phrases.

Format	Description
bold text	Identifies command names Identifies keywords and operands Identifies the names of user-manipulated GUI elements Identifies text to enter at the GUI
<i>italic text</i>	Identifies emphasis Identifies variables and modifiers Identifies paths and Internet addresses Identifies document titles
code	Identifies CLI output Identifies command syntax examples

Command syntax conventions

The following text formatting conventions identify command syntax components.

Convention	Description
bold text	Identifies command names, keywords, and command options.
<i>italic text</i>	Identifies a variable.
value	In Fibre Channel products, a fixed value provided as input to a command option is printed in plain text, for example, --show WWN

Convention	Description
[]	Syntax components displayed within square brackets are optional. Default responses to system prompts are enclosed in square brackets.
{x y z}	A choice of required parameters is enclosed in curly brackets separated by vertical bars. You must select one. In Fibre Channel products, square brackets may be used instead for this purpose.
x y	A vertical bar separates mutually exclusive elements.
< >	Nonprinting characters, for example, passwords, are enclosed in angle brackets.
...	Repeat the previous element. For example, member[member...]
\	Indicates a "soft" line break in command examples. If a backslash separates two lines of a command input, enter the entire command at the prompt without the backslash.
<i>italic text</i>	Identifies a variable.
bold text	Identifies command names, keywords, and command options.

Notes, cautions, and warnings

The following notices and statements may be used in this document. They are listed below in order of increasing severity of potential hazards.

NOTE

A note provides a tip, guidance, or advice, emphasizes important information, or provides a reference to related information.



CAUTION

A Caution statement alerts you to situations that can be potentially hazardous to you or cause damage to hardware, firmware, software, or data.



DANGER

A Danger statement indicates conditions or situations that can be potentially lethal or extremely hazardous to you. Safety labels are also attached directly to products to warn of these conditions or situations

Brocade resources

Related publications

You can download additional publications supporting your product from the Brocade website at www.brocade.com.

- Adapter documentation is available on the [Downloads and Documentation for Brocade Adapters](#) page. Select your platform and scroll down to the documentation section.
- For all other products, select the Brocade product to open the individual product page, click the Brocade product name or image to open the individual product page. The user manuals are available in the resources module at the bottom of the page under the Documentation category.

Additional Brocade resources

To get up-to-the-minute information, go to [MyBrocade](#). You can register at no cost to obtain a user ID and password.

Release Notes are available on [MyBrocade](#) under Product Downloads.

White papers, online demonstrations, and data sheets are available through the [Brocade website](#).

Getting technical help

For product support information and the latest information on contacting the Technical Assistance Center, go to <http://www.brocade.com/services-support/index.html>.

Contact Brocade Support 24x7

Use one of the following methods to contact the Brocade Technical Assistance Center.

Online	Telephone	Email
Preferred method of contact for non-urgent issues: <ul style="list-style-type: none">• My Cases through MyBrocade• Software downloads and licensing tools• Knowledge Base	Required for Sev 1-Critical and Sev 2-High issues: <ul style="list-style-type: none">• Continental US: 1-800-752-8061• Europe, Middle East, Africa, and Asia Pacific: +800-AT FIBREE (+800 28 34 27 33)• For areas unable to access toll free number: +1-408-333-6061• Toll-free numbers are available in many countries.	support@brocade.com Please include: <ul style="list-style-type: none">• Problem summary• Serial number• Installation details• Environment description

Document feedback

Quality is our first concern at Brocade and we have made every effort to ensure the accuracy and completeness of this document. However, if you find an error or an omission, or you think that a topic needs further development, we want to hear from you. You can provide feedback in two ways:

- Through the online feedback form in the HTML documents posted on www.brocade.com.
- By sending your feedback to documentation@brocade.com.

Provide the publication title, part number, and as much detail as possible, including the topic heading and page number if applicable, as well as your suggestions for improvement

General Procedures for Applying Tamper-Evident Seals

This document provides instructions for applying FIPS-compliant tamper-evident security seals to specific blades, switches, and enterprise platforms.



Wear a grounded ESD strap when handling a control or port blade. The chassis has a grounding connection above the power connectors.

Hold the port blade by the edges of the metal pan. Do not use the ejectors to hold a control or port blade.

Disassembling any part of a port blade voids the part warranty and regulatory certifications. There are no user-serviceable parts inside the port blade.

Before you begin to apply tamper-evident seals, ensure that you have the following items:

- Electrostatic discharge (ESD) grounding strap (as recommended in the hardware manual).
- Tamper-Evident Seals Kit (part number XBR-000195ABC123).

Store the seals in a plastic bag in a cool, dry location between 15° and 20°C (60° and 70°F) and less than 50 percent relative humidity.

The effective life of seals is two years. After every two years, you should discard the old seals and replace with new seals.

Seal application instructions

For all seal applications, comply with the following instructions.

1. The surface where you apply a tamper-evident seal must be clean and dry. Use ethyl alcohol to clean the surface at each sealing location. Prior to applying a new seal to an area that shows seal residue, use consumer-strength adhesive remover to remove the residue. Then use ethyl alcohol to clean off any residual adhesive remover before applying a new seal.
2. Do not use bare fingers to handle the labels. Slowly peel the backing from each seal, taking care not to touch the adhesive.
3. Use very firm pressure across the entire seal surface to ensure maximum adhesion.
4. Allow a minimum of 24 hours for the adhesive to cure. Tamper evidence might not be apparent until the adhesive cures.

Tamper evidence information

When a tamper-evident seal is removed from the surface to which it has been applied, several tamper indications are apparent:

- The seal that has been removed shows a checkerboard destruct pattern.
- The graphics printed within the seal are uniquely split between the removed seal and the residue left on the surface. The residue is visible under ultraviolet light.

Applying Tamper-Evident Seals on the Brocade VDX 6740

Twenty (20) tamper-evident seals are required to complete the physical security requirements for the –R and –F configurations of the Brocade VDX 6740 models.

1. **Front:** Apply one (1) seal over the screws along the bottom port-side surface of the chassis. Refer to **Figure 1** for details on how to position each seal.

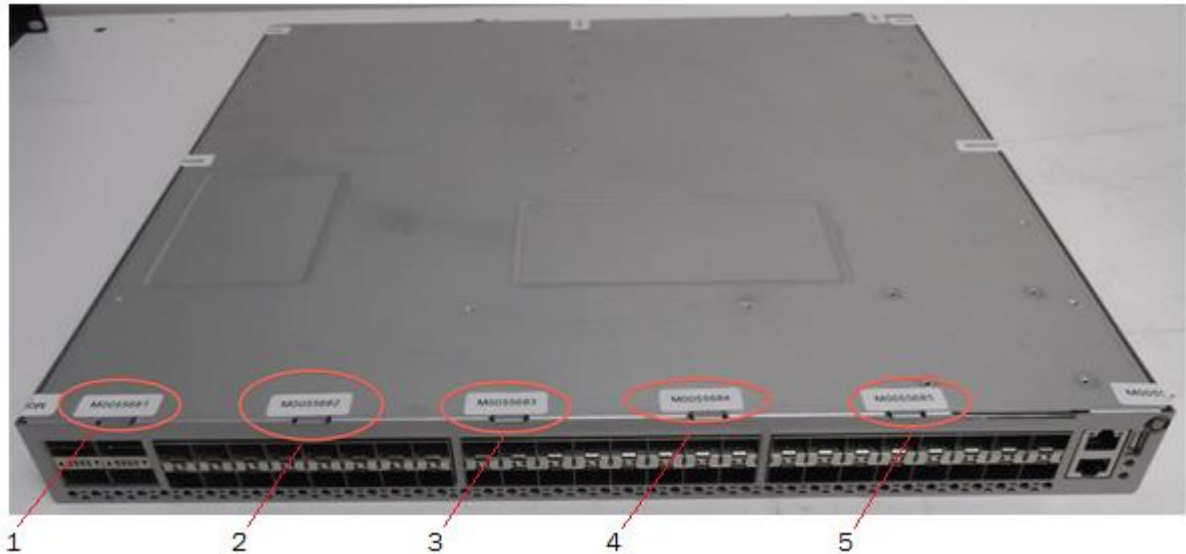


Figure 1. VDX 6740 bottom port-side seal locations

2. **Left side:** Apply three (3) seals across the seam between the left side of the top cover and the bottom of the chassis. Each seal must wrap across a 90-degree angle from the bottom of the chassis to the side of the top cover. Refer to **Figure 2** for details on how to position each seal.



Figure 2. Brocade VDX 6740 bottom left-side seal locations

3. **Right side:** Apply three (3) seals across the seam between the right side of the top cover and the bottom of the chassis. Each seal must wrap across a 90-degree angle from the bottom of the chassis to the side of the top cover. Refer to **Figure 3** for details on how to position each seal.

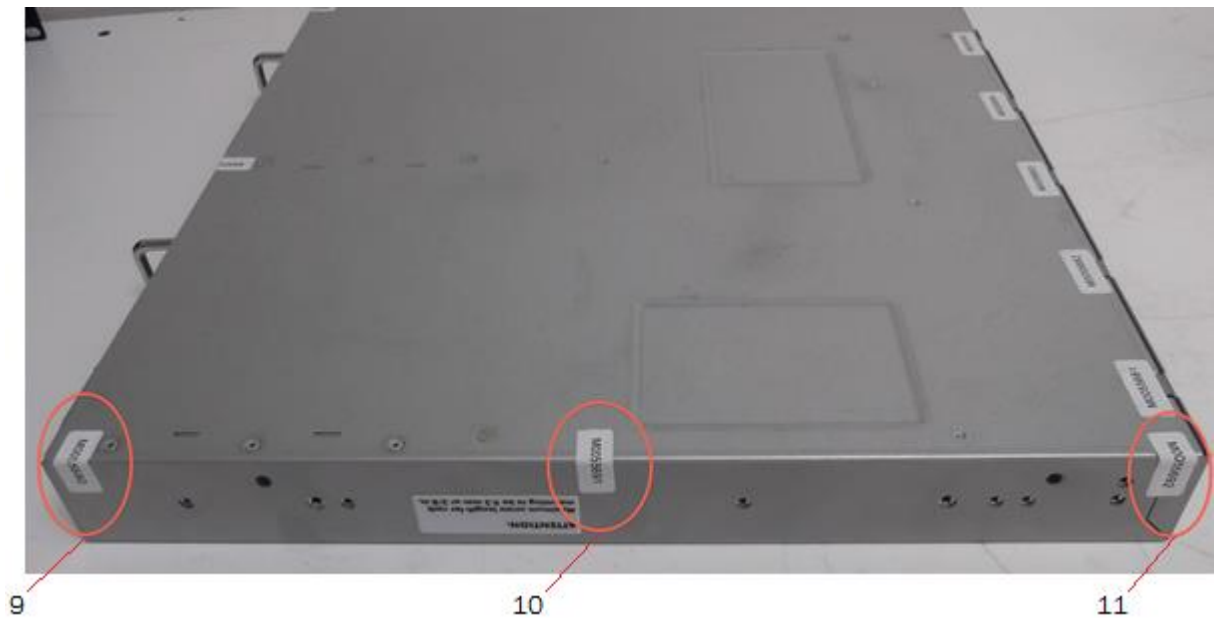


Figure 3. Brocade VDX 6740 bottom right-side seal locations

4. **Rear:** Apply three (3) seals wrap across a 90-degree angle from the top of the chassis to the external surface of the combination power supply and fan module. Apply two (2) seals wrap across a 90-degree angle from the bottom of the chassis to the external surface of the combination power supply and fan module. Apply one (1) seal bridges the seam between the chassis and the combination power supply and fan module on the left side of the non-port side of the chassis. Refer to **Figure 4** for details on how to position each seal.

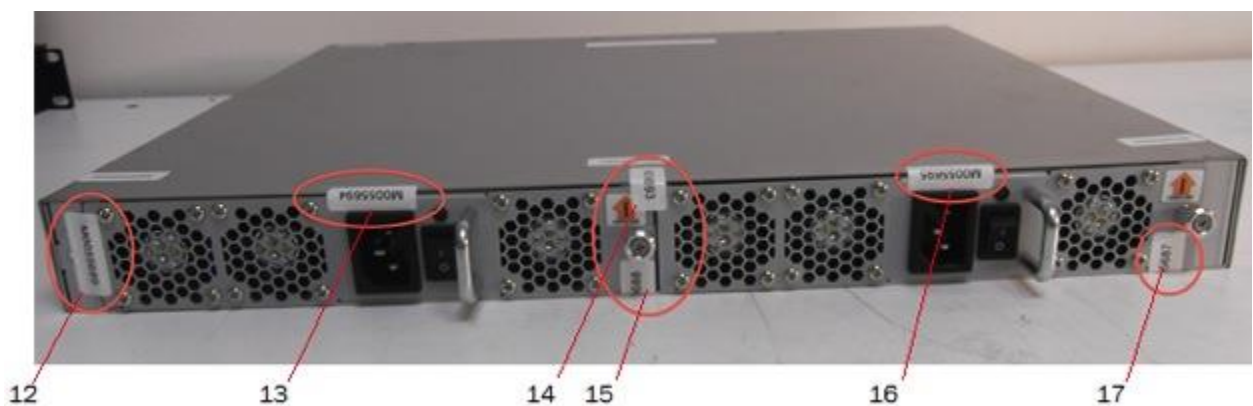


Figure 4. Brocade VDX 6740 rear seal locations

5. **Top non-port-side:** Apply one (1) seal over the screws along the top non-port-side surface of the chassis. Three (3) seals are required to complete this step. Refer to **Figure 5** for details on how to position each seal.

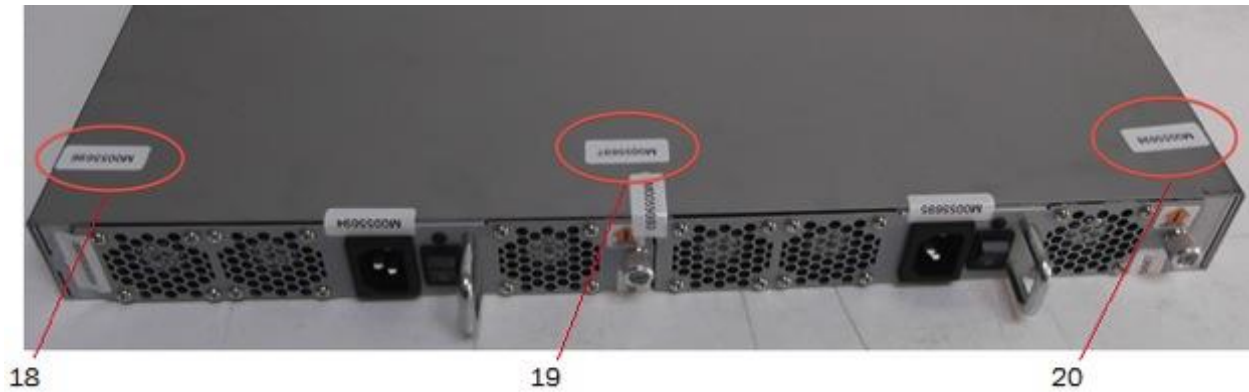


Figure 5. Brocade VDX 6740 top non-port-side seal locations

Applying Tamper-Evident Seals on the Brocade VDX 6740T

Twenty-nine (29) tamper-evident seals are required to complete the physical security requirements for the VDX 6740T and the variant of VDX 6740T.

1. **Bottom:** Apply one (1) seal over the screws along the bottom port-side surface of the chassis. Refer to **Figure 6** for details on how to position each seal.



Figure 6. Brocade VDX 6740T bottom port-side seal locations

2. **Left side:** Apply three (3) seals across the seam between the left side of the top cover and the bottom of the chassis. Each seal must wrap across a 90-degree angle from the bottom of the chassis to the side of the top cover. Refer to **Figure 7** for details on how to position each seal.



Figure 7. Brocade VDX 6740T bottom left-side seal locations

3. **Right side:** Apply three (3) seals across the seam between the right side of the top cover and the bottom of the chassis. Each seal must wrap across a 90-degree angle from the bottom of the chassis to the side of the top cover. Refer to **Figure 8** for details on how to position each seal.



Figure 8 Brocade VDX 6740T bottom right-side seal locations

4. **Bottom non-port-side:** Apply seven (7) seals to bottom non-port-side fan and power supply of the chassis. Seals 1 and 2 must wrap across a 90-degree angle from the bottom of the chassis to just above the captive screw on each power supply assembly. Seals 3-7 must wrap across a 90-degree angle from the bottom of the chassis and along the front of each fan assembly. Refer to **Figure 9** on details on how to position each seal.

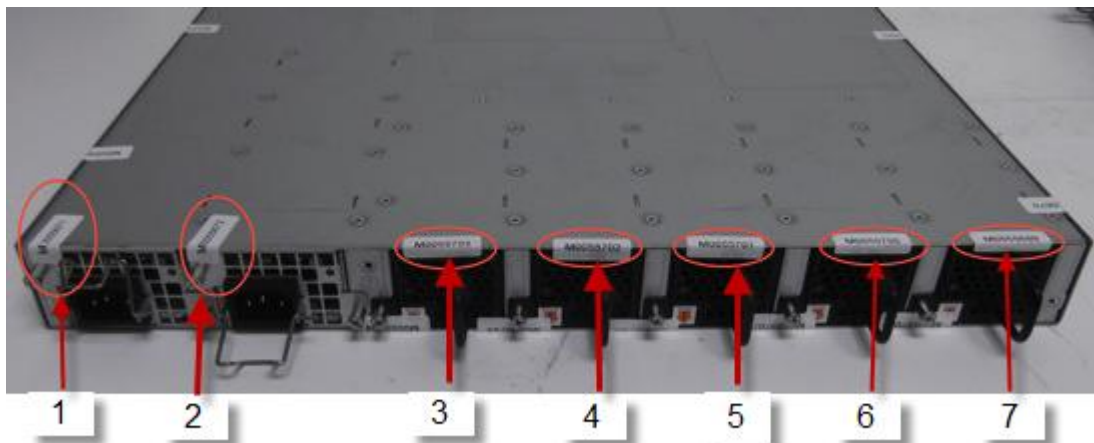


Figure 9. Brocade VDX 6740T bottom non-port-side fan and power supply seal locations

5. **Rear:** Apply six (6) seals over each of the six screws along the top non-port-side surface of the chassis. Apply five (5) seals, wrapping them across a 90-degree angle from the top of the chassis and along the front of the unit, centering above each fan assembly captive screw. When placed between fan assemblies, the edge of each seal should secure the seam for both fan assemblies as shown in **Figure 10**.

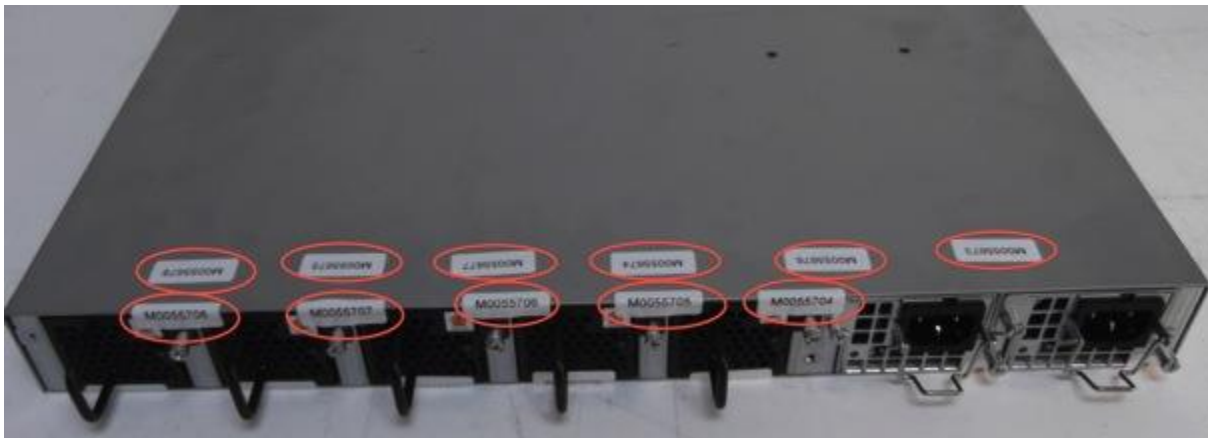


Figure 10 Brocade VDX 6740T non-port-side top cover and power supply seal locations