



StorNext QM1200/QS1200/QS2400 Base System

Replacing a Power-Fan Canister



StorNext QM1200/QS1200/QS2400 Base System, Replacing a Power-Fan Canister, 6-67555-02 Rev B, April 2015, Product of USA.

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Replacing a Power-Fan Canister in the StorNext QM1200/QS1200/QS2400 Base System

Before you start to replace the power-fan canister in the StorNext QM1200/QS1200/QS2400 Base System, gather antistatic protection and a replacement power-fan canister.

ATTENTION Possible equipment damage – If you perform this procedure with the power turned on, you must complete it within three minutes to prevent the possibility of overheating the equipment.

You can determine whether you have a failed power-fan canister in two ways:

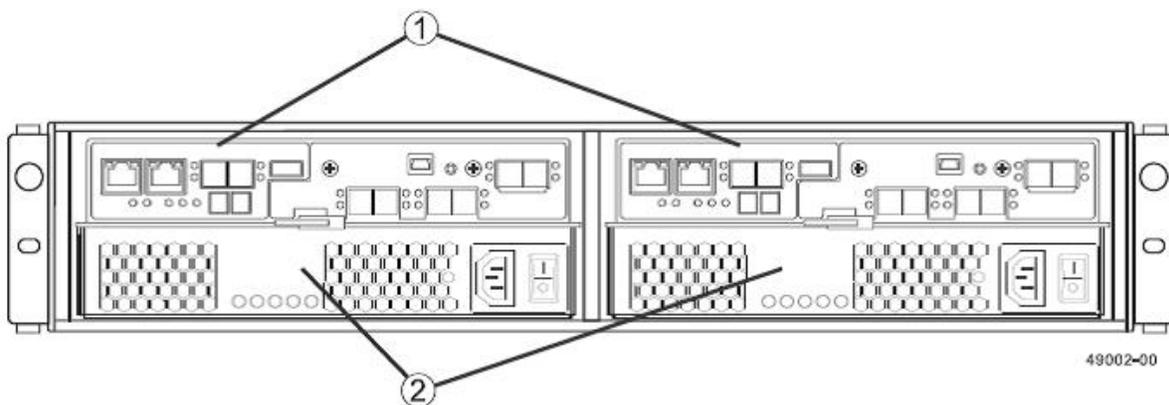
- The Recovery Guru directs you to replace a failed power-fan canister.
- You locate the failed power-fan canister by checking the Power Service Action Required LED.

ATTENTION Possible hardware damage – To prevent electrostatic discharge damage to the tray, use proper antistatic protection when handling tray components.

Locating the Failed Power-Fan Canister

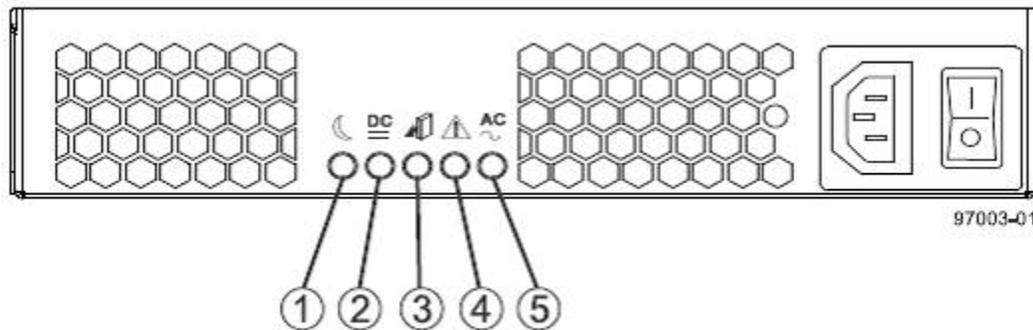
1. Refer to [Figure 1](#) to locate the power-fan canister within the base system.

Figure 1 Power-Fan Canister Locations



1. Controller Canister
2. Power-Fan Canister

2. Check the Power Service Action Required LED to locate the failed power-fan canister ([Figure 2](#)).

Figure 2 Power-Fan Canister Service Action LEDs

1. Standby Power-Fan LED (Green)
2. Power-Fan DC Power LED (Green)
3. Power-Fan Service Action Allowed LED (Blue)
4. Power-Fan Service Action Required LED (Amber)
5. Power-Fan AC Power LED (Green)

Gathering Support Data/Unpacking Power-Fan Canister

3. Gather support data about your storage array by using one of these methods:
 - Use the storage management software to collect and save a support bundle of your storage array. From the Array Management Window, select **Monitor >> Health >> Collect Support Data**. Then name and specify a location on your system where you want to store the support bundle.
 - Use the command line interface (CLI) to run the `save storageArray supportData` command to gather comprehensive support data about the storage array. For more information about this command, refer to *Command Line Interface and Script Commands*. Running this command can temporarily impact performance on your storage array.
4. Did the Recovery Guru direct you to replace a failed power-fan canister?
 - **Yes** – Go to step 6.
 - **No** – Run the Recovery Guru to identify the failed component, and go to step 5.
5. If the Recovery Guru has directed you to replace the power-fan canister and the blue Power-Fan Service Action Allowed LED is not on, use either the command line or the GUI to prepare the power-fan canister for removal
 - a. On the command line, type this command and press Enter:


```
SMcli <ctrl_IP1> <ctrl_IP2> -c "Set tray [trayID] powerfanCanister [left|right] service Allowed Indicator=on;"
```

In this command:

 - `<ctrl_IP1> <ctrl_IP2>` are the identifier of the controller to which the expansion unit is assigned.
 - `[trayID]` is the identifier of the expansion unit that contains the power-fan canister that you want to replace. Drive tray ID values are 0 to 99. Be sure to type the square brackets around the identifier.
 - `[left|right]` is the identifier of the power-fan canister you want to replace. Valid values are `left` or `right`. Be sure to type the square brackets around the value.
 - b. On the GUI, click on the image of the tray that contains the power-fan canister you want to replace. From the Array Management Window toolbar, select **Hardware >> Prepare for Removal**.
6. Put on antistatic protection.

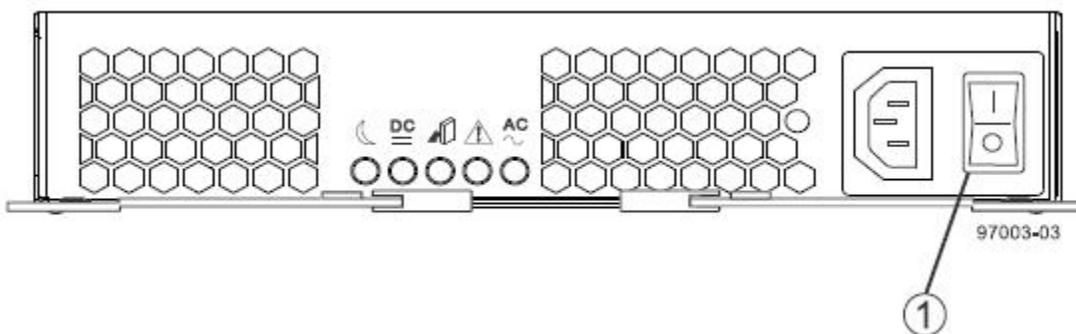
7. Unpack the new power-fan canister.
 - a. Set the new power-fan canister on a flat, static-free surface near the base system.
 - b. Save all packing materials in case you need to return the power-fan canister.

Removing the Power-Fan Canister

NOTE If a fault is detected, the amber Power-Fan Service Action Required LED is on. If you can safely remove the power-fan canister, the blue Power-Fan Service Action Allowed LED is on.

1. Turn off the Power switch on the power-fan canister that has failed (Figure 3).

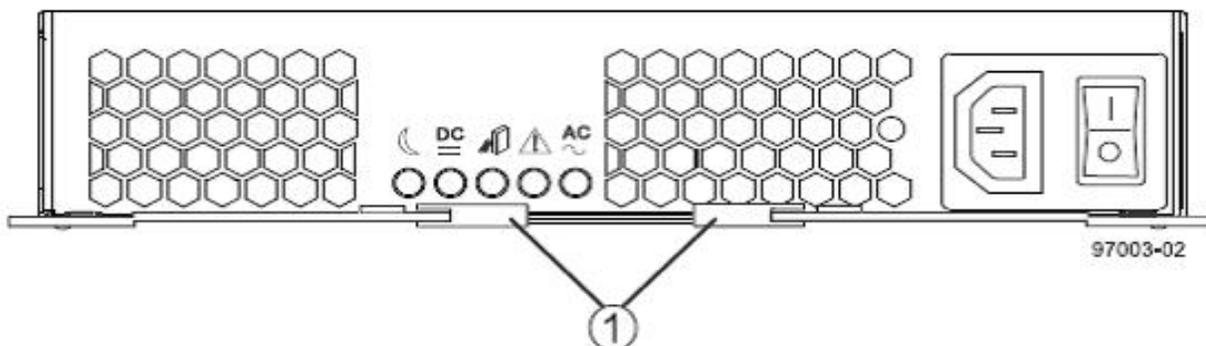
Figure 3 Power Switch on the Power-Fan Canister



1. Power Switch
2. Remove the plastic strain relief from the power cord.
3. Unplug the power cord from the failed power-fan canister.
4. Remove the power-fan canister from the base system (Figure 4).
 - a. Rotate the power-fan canister latches outward to disengage the power-fan canister.
 - b. Use the power-fan canister latches as handles to pull the power-fan canister out of the drive tray.

NOTE While removing the power-fan canister, you might notice an increase in fan speed. The fan speed returns to normal after you have replaced the power-fan canister.

Figure 4 Removing and Replacing a Power-Fan Canister



1. Power-Fan Canister Latches

Installing the Power-Fan Canister

1. Slide the replacement power-fan canister all the way into the tray. Rotate the power-fan canister latches towards the center to lock the power-fan canister into place.
2. Make sure that the Power switch on the replacement power-fan canister is turned off, and plug in the power cord.
3. Attach the plastic strain relief to the power cord, and make sure that it fits snugly up against the power-fan canister.
4. Turn on the Power switch on the replacement power-fan canister.
5. Check the green Input AC Power LED and the amber Power Service Action Required LED on the new power-fan canister (Figure 2).
6. Based on the LED status, perform one of these actions:
 - The Input AC Power LED is on, and the Power Service Action Required LED is off – Go to step 8.
 - The Input AC Power LED is off, or the Power Service Action Required LED is on – Check that the power-fan canister is installed correctly. Reinstall the power-fan canister. Go to step 7.
7. Did this action correct the problem?
 - **Yes** – Go to step 8.
 - **No** – If the problem has not been resolved, contact your Customer and Technical Support representative.
8. Check the status of all of the trays in the storage array.
9. Does any component have a Needs Attention status?
 - **Yes** – Click the **Recovery Guru** toolbar button in the Array Management Window, and complete the recovery procedure. If the problem has not been resolved, contact your Customer and Technical Support representative.
 - **No** – Go to step 10
10. Remove the antistatic protection.
11. Gather support data about your updated storage array by using one of these methods:
 - Use the storage management software to collect and save a support bundle of your storage array. From the Array Management Window toolbar, select **Monitor >> Health >> Collect Support Data**. Then name and specify a location on your system where you want to store the support bundle.
 - Use the CLI to run the `save storageArray supportData` command to gather comprehensive support data about the storage array. For more information about this command, refer to *Command Line Interface and Script Commands*. Running this command can temporarily impact performance on your storage array.