Replacing a Failed Power-Fan Canister in the E5612 or the E5624 Controller-Drive Tray

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Before you replace the power-fan canister in the E5612 or the E5624 controller-drive tray, 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.

Figure 1. Power-Fan Canister and Controller Canister
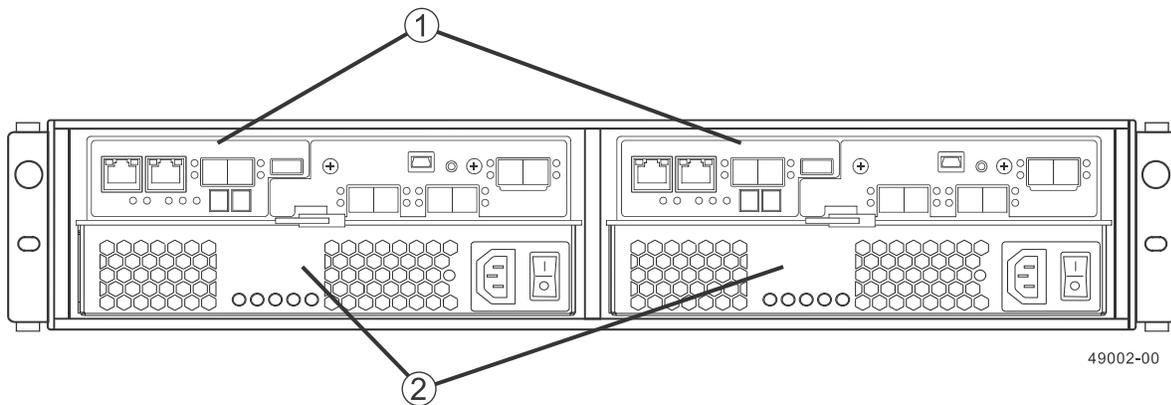
1. Controller Canister
2. Power-Fan Canister

Removing a Power-Fan Canister from the E5612 or the E5624 Controller-Drive Tray

1. 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 toolbar, select **Monitor** > **Health** > **Collect Support Data Manually**. 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 Programming Guide*.

NOTE Gathering support data can temporarily impact performance on your storage array.

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2. Did the Recovery Guru direct you to replace a failed power-fan canister?

   - **Yes** – Go to step 4.

   - **No** – Run the Recovery Guru to identify the failed component, and go to step 3.

3. If the Recovery Guru has directed you to replace the power-fan canister and the blue Power Service Action Allowed LED is not on, use one of these methods to prepare the power-fan canister for removal.

   - On the GUI, click 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**.

   - On the command line, type this command and press Enter:

SMcli <*ctrl_IP1*> <*ctlr_IP2*> -c "Set tray [*trayID*] [powerfanCanister [left|right] service Allowed Indicator=on;"

   In this command:

   - <*ctlr_IP1*> <*ctlr_IP2*> are the identifiers of the controllers in the controller-drive tray.

   - [*trayID*] is the identifier of the controller-drive tray that contains the power-fan canister you want to replace. Controller-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.

4. Put on antistatic protection.

5. Unpack the new power-fan canister.

   a. Set the new power-fan canister on a flat, static-free surface near the controller-drive tray with the top cover up.

   b. Save all the packing materials in case you need to return the power-fan canister.

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

   If a fault is detected, the amber Controller 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.
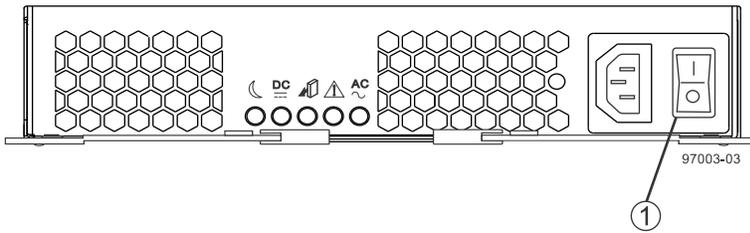
Figure 2. Power-Fan Canister Service Action LEDs
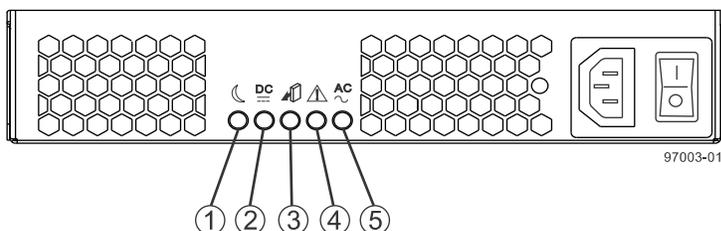
   a. Standby Power-Fan LED (Green)

   b. Power-Fan DC Power LED (Green)

   c. Power-Fan Service Action Allowed LED (Blue)

   d. Power-Fan Service Action Required LED (Amber)

   e. Power-Fan AC Power LED (Green)

7. 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

8. Remove the plastic strain relief from the power cord.

9. Unplug the power cord from the failed power-fan canister.

10. Remove the power-fan canister from the controller-drive tray (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.

    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 a Power-Fan Canister
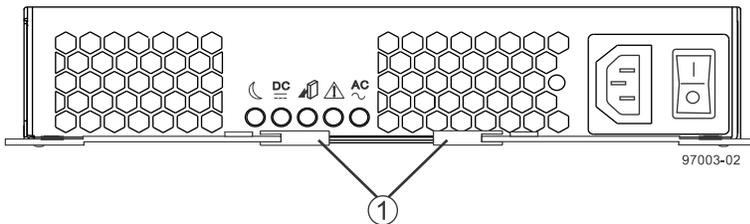
1. Power-Fan Canister Latches

Installing a Power-Fan Canister in the E5612 or the E5624 Controller-Drive Tray

1. Put on antistatic protection.

2. Slide the replacement power-fan canister all the way into the controller-drive tray. Rotate the power-fan canister latches towards the center to lock the power-fan canister into place.

3. Make sure that the Power switch on the replacement power-fan canister is turned off, and then plug in the power cord.

4. Attach the plastic strain relief to the power cord, and make sure that it fits snugly up against the power-fan canister.

5. Turn on the Power switch on the replacement power-fan canister.

6. Check the green Input AC Power LED and the amber Power Service Action Required LED on the new power-fan canister (Figure 5).

Figure 5. Power-Fan Canister Service Action LEDs
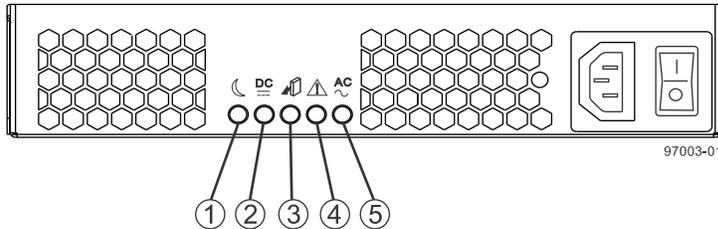
a. Standby Power-Fan LED (Green)

b. Power-Fan DC Power LED (Green)

c. Power-Fan Service Action Allowed LED (Blue)

d. Power-Fan Service Action Required LED (Amber)

e. Power-Fan AC Power LED (Green)

7. 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 9.

   - **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 8.

8. Did this action correct the problem?

   - **Yes** – Go to step 9.

   - **No** – If the problem has not been resolved, contact your Technical Support Representative.

9. Check the status of all of the trays in the storage array.

10. 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 Technical Support Representative.

   - **No** – Go to step 11.

11. Remove the antistatic protection.

12. 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 Manually**. 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 Programming Guide*.

   NOTE Gathering support data can temporarily impact performance on your storage array.

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