

USER REPLACE SECTION

Contents

UREP01-10	1. How to operate the SVP (PC)
UREP01-10	1.1 How to use Windows
UREP01-40	1.2 Running the SVP by Specifying a File Name
UREP01-50	1.3 Connection to the SVP
UREP01-70	1.4 Disconnecting the SVP
UREP02-10	2. UserReplace feature
UREP02-10	2.1 Creating an account for user maintenance
UREP02-21	2.2 Changing an account for user maintenance
UREP02-30	2.3 Deleting the account for user maintenance
UREP02-50	2.4 Initial settings of the account for user maintenance
UREP02-60	2.5 Performing UserReplace
UREP02-130	2.6 Actions in the case of error or failure
UREP03-10	3. Hardware operations
UREP03-10	3.1 Attaching the Wrist Strap
UREP03-20	3.2 Procedure for opening and closing doors
UREP03-30	3.3 Procedure for opening and closing the EMC Cover
UREP03-60	3.4 Procedure of replacing HDD canister
UREP04-10	4. Descriptions of windows and dialog boxes
UREP04-10	4.1 Main window
UREP04-60	4.2 Guidance dialog box

1. How to operate the SVP (PC)

1.1 How to use Windows

(1) Common expression

In this manual, “select” has the following meaning, and “(CL)” is added to “select”.

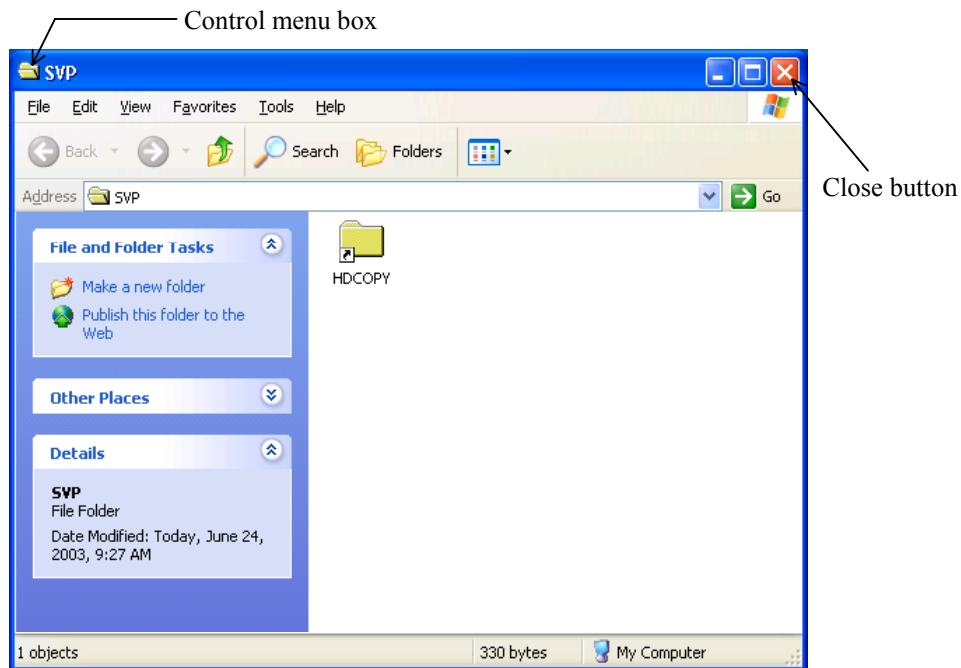
(CL) Click: Quickly press and release the left mouse button.

Example: Select (CL) [Guidance] in the ‘RAID Maintenance Viewer’ window.

(2) Close

“Close” means to close the application window.

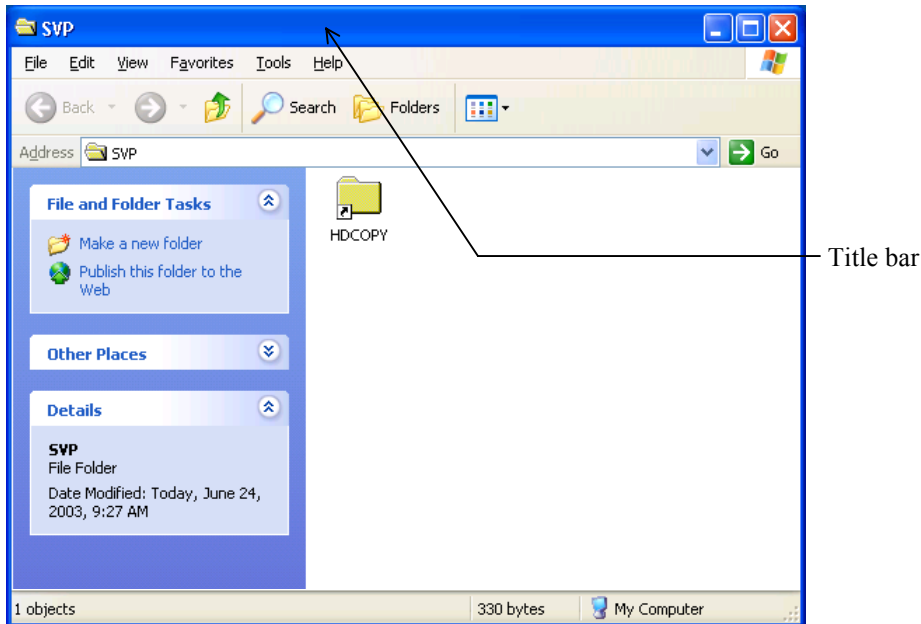
(Double-click the control menu box of the window or click the close button for window.)



(3) Moving the Window

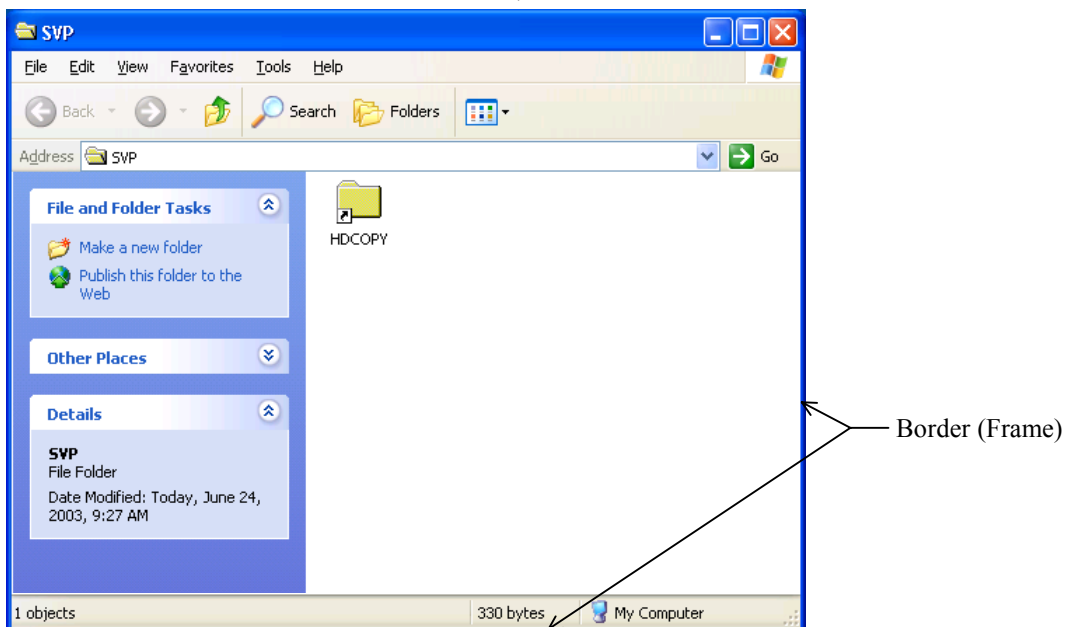
Move the pointer to the title bar with the trackball.

While pressing the button, move the window with the trackball or touchpad (DR) to a desired position and release the button.



(4) Changing the window size

Move the pointer to the window border (frame) (the pointer changes to the double-headed arrow). While pressing the button, move the border (the border changes to the broken line) until the window becomes a desired size, and release the button.



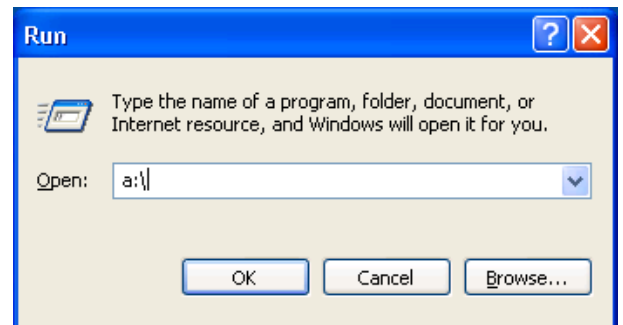
- (5) Switching the screen (when two or more screens are opened)
While pressing the [ALT] key, press [TAB] key (or [ESC] key) until your desired window title is displayed, and release the [ALT] key.

1.2 Running the SVP by Specifying a File Name

- (1) <Select [Run]>
Select (CL) [Run...] from the [Start] menu.



- (2) <Entering a file name>
Enter a file name in the “Open” box and select (CL) the [OK] button.



1.3 Connection to the SVP

To connect to the SVP (PC), execute Remote Desktop Connection from the console PC by following the procedure below.

- (1) Executing Remote Desktop Connection
Select (CL) [Run...] from the [Start] menu.
Enter "mstsc.exe" in the Open field, and
select (CL) [OK].



- (2) Establishing the connection
Enter the IP address of the SVP (PC) or host
name in the Computer field, and select (CL)
[Connect].



Note: When executing the connection, make sure that the local disk drive automatic setting has been set. To check the setting, select (CL) [Options], and then the Local Resources tab in the Remote Desktop Connection window. In the tab display, check that the Disk drives item is selected.



- (3) Logging on
Enter a user name and password, and select
(CL) [OK].
You will be logged on to the SVP (PC).



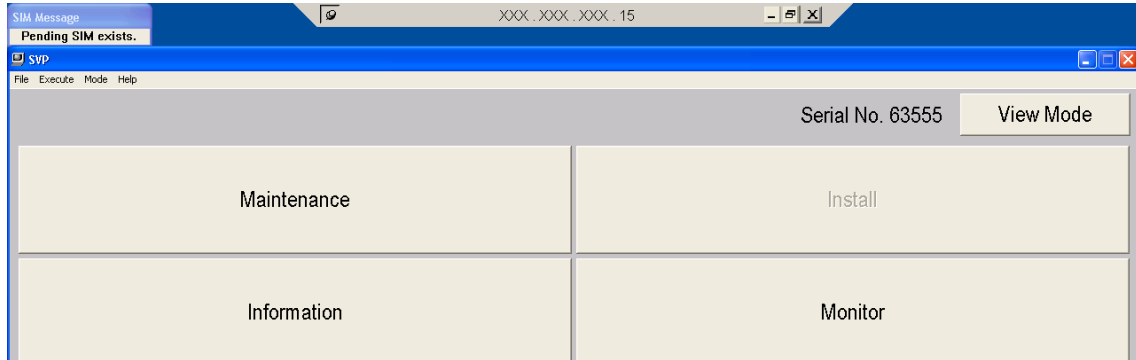
1.4 Disconnecting the SVP

Disconnect the Console PC from the SVP.

(1) Disconnection

Move the pointer to the upper central portion of the window. Select (CL) the mark “×” on the bar displayed.

The SVP window on the Console PC is closed.



2. UserReplace feature

This function is only available for the HP version.

2.1 Creating an account for user maintenance

(1) <Connection to the SVP>

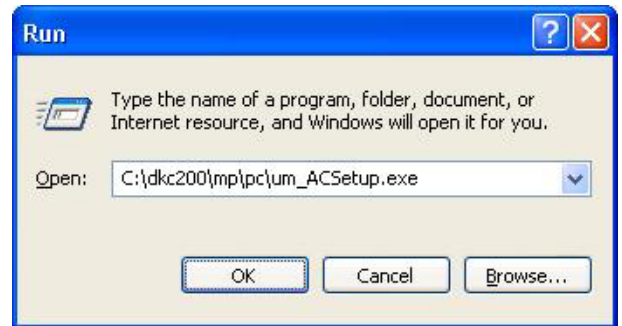
Use the Remote Desktop Connection from the Console PC to connect to the SVP.
See “1.3 Connection to the SVP”.

Enter the user name and password of the account of maintenance personnel and select (CL) [OK].



(2) <Starting UserMaintenance Setup>

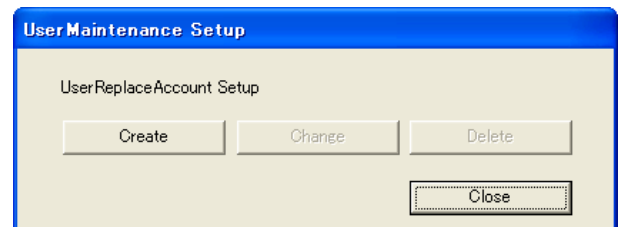
Select (CL) [Run...] from [Start].
Enter “C:\dkc200\mp\pc\um_ACSetup.exe”
in the “Open” box and select (CL) [OK].



(3) <Starting dialog box>

Display the ‘UserMaintenance Setup’ dialog box.

Select (CL) [Create] in the ‘UserMaintenance Setup’ dialog box.

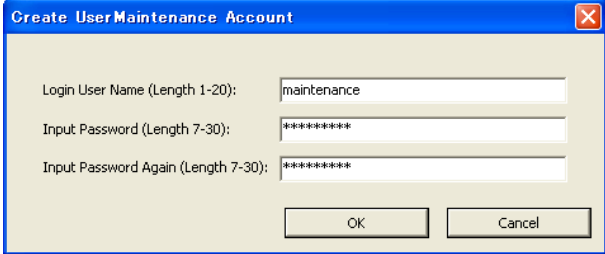


Note: When the account of UserReplace exists, you cannot select (CL) [Create].

(4) <Execution>

Display the 'Create UserMaintenance Account' dialog box.

Enter the user name and password of the account of UserReplace in "Login User Name" and "Input Password".
Enter the password in "Input Password Again" again for confirmation.



After that, select (CL) [OK].

Note: Enter the user name using 1 to 20 characters.

Enter the password using 7 to 30 characters.

Only alphanumeric characters and the following symbols can be used for the user name and the password: - _ . ()

Note: When the 'Create UserMaintenance Account' dialog is displayed, the default user name and password are entered.

(5) <Execution check>

A message confirming the creation appears.

Select (CL) [OK].

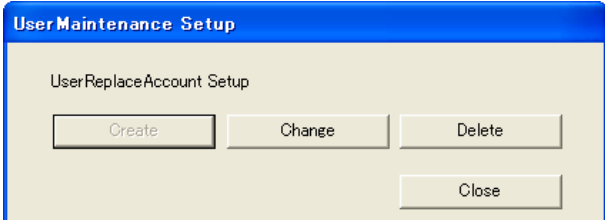
(6) <Completion check>

A message indicating that the creation was completed appears.

Select (CL) [OK].

(7) <Post-processing>

Select (CL) [Close] to close the 'UserMaintenance Setup' dialog box.



2.2 Changing an account for user maintenance

(1) <Connection to SVP>

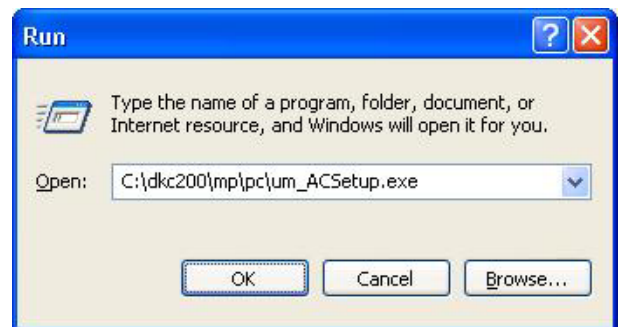
Use the Remote Desktop Connection from the Console PC to connect to the SVP.
See “1.3 Connection to the SVP”.

Enter the user name and password of the account of maintenance personnel and select (CL) [OK].



(2) <Starting UserMaintenance Setup>

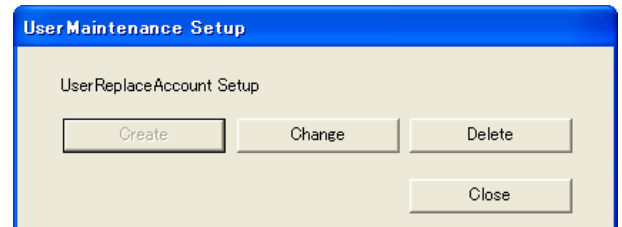
Select (CL) [Run...] from [Start].
Enter “C:\dkc200\mp\pc\um_ACSetup.exe”
in the “Open” box and select (CL) [OK].



(3) <Starting dialog box>

Display the ‘UserMaintenance Setup’ dialog box.

Select (CL) [Change] in the ‘UserMaintenance Setup’ dialog box.



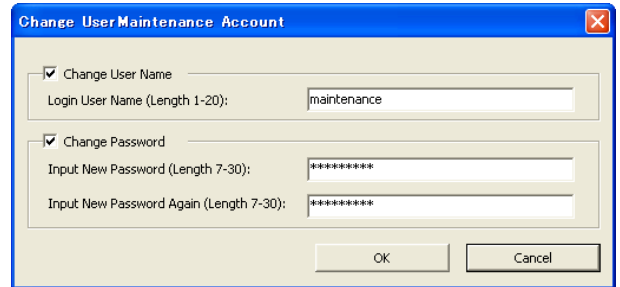
Note: When the account of UserReplace does not exist, you cannot select (CL) [Change].

(4) <Execution>

Display the 'Change UserMaintenance Account' dialog box.

To change the user name of the account of UserReplace, select (CL) "Change User Name" and enter a user name in "Login User Name".

To change the password of the account of UserReplace, select (CL) "Change Password" and enter a password in "Input Password". Enter the password in "Input Password Again" again for confirmation.



After that, select (CL) [OK].

Note: Enter the user name using 1 to 20 characters.

Enter the password using 7 to 30 characters.

Only alphanumeric characters and the following symbols can be used for the user name and the password: - _ . ()

(5) <Execution check>

A message confirming the creation appears.

Select (CL) [OK].

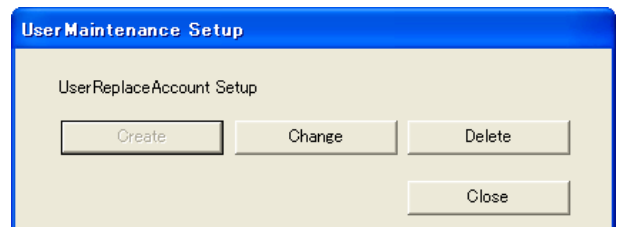
(6) <Completion check>

A message indicating that the creation was completed appears.

Select (CL) [OK].

(7) <Post-processing>

Select (CL) [Close] to close the 'UserMaintenance Setup' dialog box.



2.3 Deleting the account for user maintenance

(1) <Connection to the SVP>

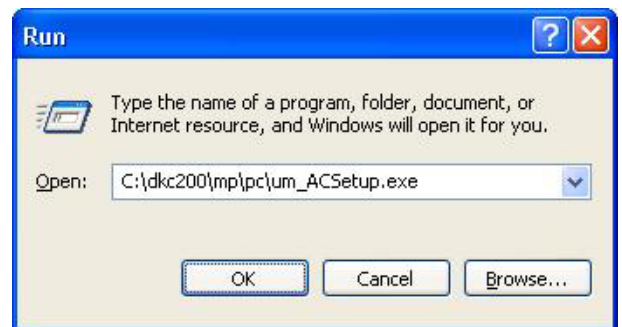
Use the Remote Desktop Connection from the Console PC to connect to the SVP.
See “1.3 Connection to the SVP”.

Enter the user name and password of the account of maintenance personnel and select (CL) [OK].



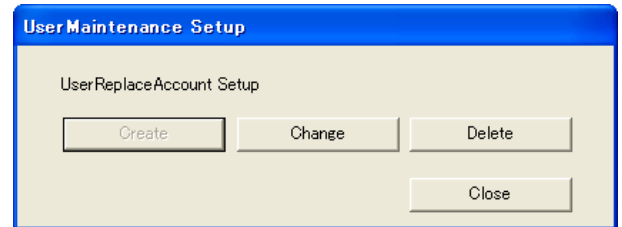
(2) <Starting UserMaintenance Setup>

Select (CL) [Run...] from [Start].
Enter “C:\dkc200\mp\pc\um_ACSetup.exe”
in the “Open” box and select (CL) [OK].



(3) <Starting dialog box>

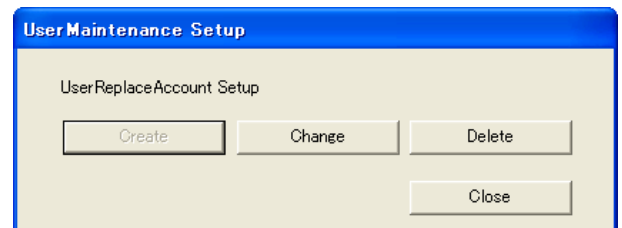
Display the ‘UserMaintenance Setup’ dialog box.



(4) <Execution>

Select (CL) [Delete] in the ‘UserMaintenance Setup’ dialog box.

Note: When the account of UserReplace does not exist, you cannot select (CL) [Delete].



(5) <Execution check>

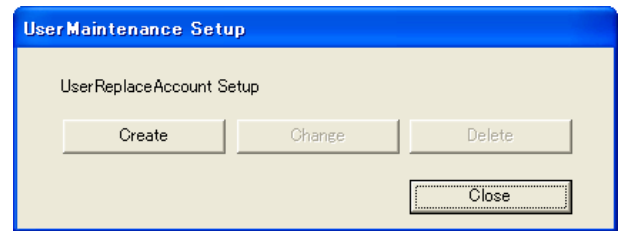
A message confirming the deletion appears.
Select (CL) [OK].

(6) <Completion check>

A message indicating that the deletion was completed appears.
Select (CL) [OK].

(7) <Post-processing>

Select (CL) [Close] to close the
'UserMaintenance Setup' dialog box.



2.4 Initial settings of the account for user maintenance

This processing is performed automatically only when the user logs into the SVP (PC) with the account for user maintenance for the first time.

(1) <Connection to the SVP>

Use the Remote Desktop Connection from the Console PC to connect to the SVP.
See “1.3 Connection to the SVP”.

Enter the user name and password of the account of UserReplace and select (CL) [OK].

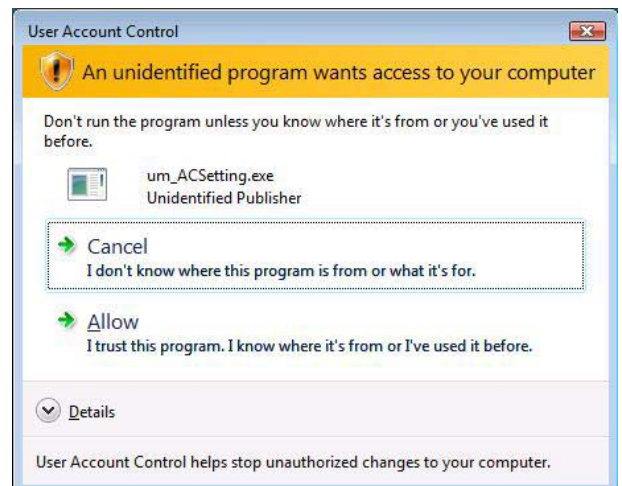


CAUTION

Perform the following <Start check> only when the OS of the SVP (PC) is Windows Vista. In the case of Windows Vista, be sure to follow the procedure described in <Start check>. When the following procedure is not performed, a serious problem, such as a system down and data loss, could occur.

(2) <Start check>

In the ‘User Account Control’ dialog box, select (CL) [Allow].



 **CAUTION**

When an SVP operation is performed while performing the initial settings of the account for user maintenance after being connected to the SVP, a serious problem, such as a system down and data loss, could occur.

Until you log off Windows at <Completion check> described below, do not perform any SVP operation.

(3) <Completion check>

A message indicating that the initial settings of the account for user maintenance were completed appears.

Select (CL) [OK].

Note: When you select (CL) [OK], the account for user maintenance is automatically logged off, and the SVP is disconnected.

2.5 Performing UserReplace

CAUTION

When ending operation of UserReplace, please close by invoking [Log off] button of 'RAID Maintenance Viewer' window without closing remote desktop connection.

(1) <Connection to the SVP>

Use the Remote Desktop Connection from the Console PC to connect to the SVP.
See "1.3 Connection to the SVP".

Enter the user name and password of the account of UserReplace and select (CL) [OK].

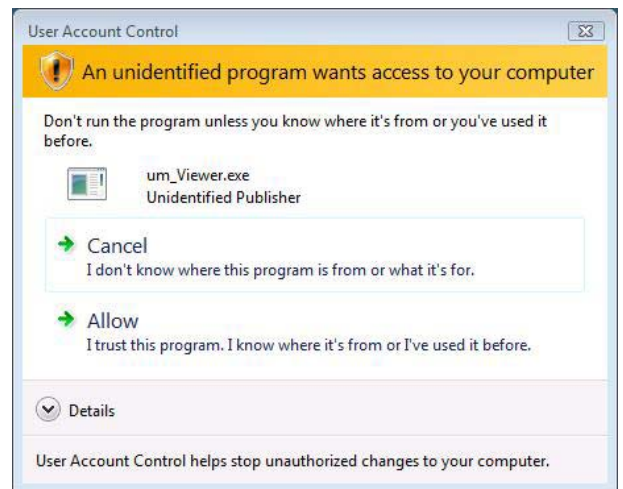


CAUTION

Perform the following <Start check> only when the OS of the SVP (PC) is Windows Vista. In the case of Windows Vista, be sure to follow the procedure described in <Start check>.

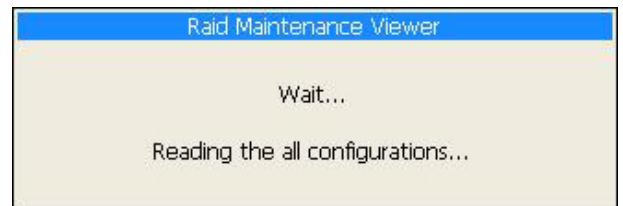
(2) <Start check>

In the 'User Account Control' dialog box, select (CL) [Allow].



(3) <Start condition check>

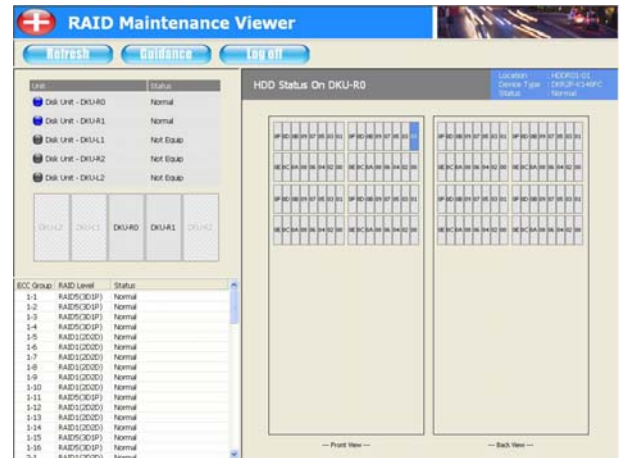
The following message appears.
"Wait..."



(4) <Start of window>

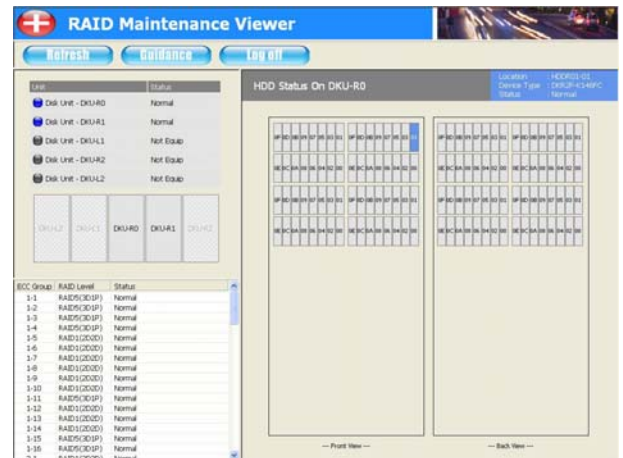
The 'RAID Maintenance Viewer' window is displayed.

For details of the 'RAID Maintenance Viewer' window, see "4. Descriptions of windows and dialog boxes".

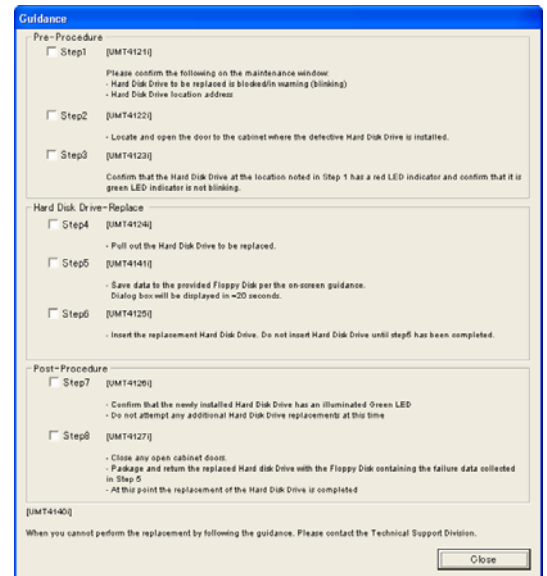


(5) <Displaying Guidance>

In the 'RAID Maintenance Viewer' window, select (CL) [Guidance].



For the next operations, follow the 'Guidance' dialog box to proceed with UserReplace.



Notice:

- (1) Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will ensure that the IC and LSI on the package are protected from static electricity.

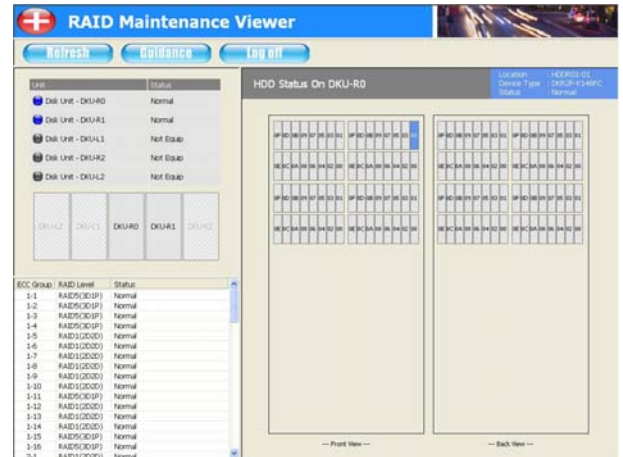
For how to attach the wrist strap, see “3.1 Attaching the Wrist Strap”.

- (2) HDD is a precise component. Be careful in handling HDD to avoid vibration and impact.

- (6) <Step1: Check the HDD to be replaced>
Confirm in the ‘RAID Maintenance Viewer’ window that the HDD to be replaced is blinking.

Confirm in the ‘RAID Maintenance Viewer’ window the installation location of the HDD to be replaced.

When the operation is completed, select (CL) [Step1] in the ‘Guidance’ dialog box and proceed to “(7) <Step2: Open the DKU>”.



- (7) <Step2: Open the DKU>

Open the door of the DKU in which the HDD to be replaced is installed.

For how to open and close the door, see “3.2 Procedure for opening and closing doors” and “3.3 Procedure for opening and closing the EMC Cover”.

When the operation is completed, select (CL) [Step2] in the ‘Guidance’ dialog box and proceed to “(8) <Step3: Check the lamp>”.

(8) <Step3: Check the lamp>

Confirm that the red lamp of the HDD to be replaced is lit and a green lamp is not blinking.
For how to check the lamp, see “3.4 Procedure of replacing HDD canister (1) (a)”.

When the operation is completed, select (CL) [Step3] in the ‘Guidance’ dialog box and proceed to “(9) <Step4: Remove HDD>”.

(9) <Step4: Remove HDD>

Remove the HDD to be replaced.

For how to remove it, see “3.4 Procedure of replacing HDD canister (1) (b)”.

When the operation is completed, select (CL) [Step4] in the ‘Guidance’ dialog box and proceed to “(10) <Step5: Collect the log information>”.

(10) <Step5: Collect the log information>

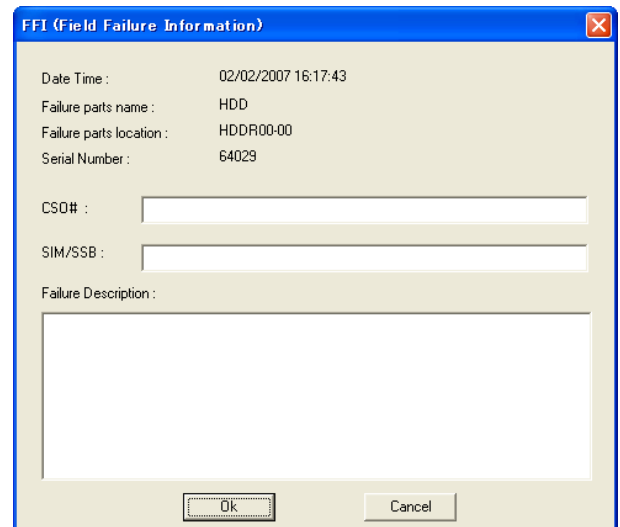
In approximately 20 seconds after HDD is removed, the FFI window appears. Collect the log information by following the procedure.

 **CAUTION**

Be sure to collect the log information before performing <Step6: Insert HDD>.
The log information collected here is necessary for investigating hardware problems.

Select (CL) [OK] without entering anything in the FFI window.

Note: If the FFI window is not displayed, hold down [ALT] and press [TAB] to display the FFI window.



Date Time :	02/02/2007 16:17:43
Failure parts name :	HDD
Failure parts location :	HDDR00-00
Serial Number :	64029
CSQ# :	<input type="text"/>
SIM/SSB :	<input type="text"/>
Failure Description :	<input type="text"/>

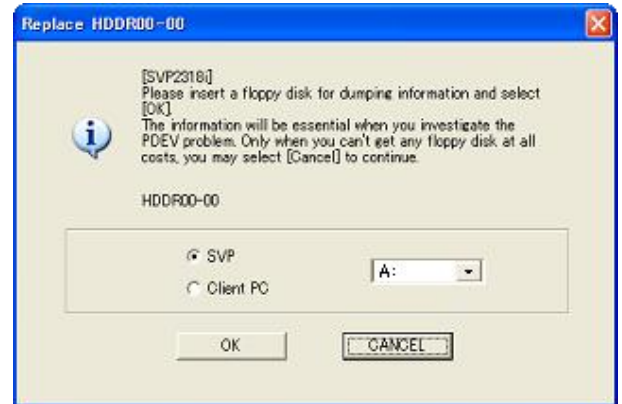
Ok Cancel

In the A drive, insert a floppy disk for storing log information.

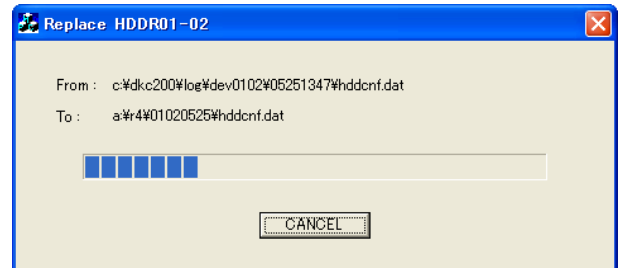
In the log information acquisition window, select (CL) [Client PC], 'A:' drive, and then [OK].

Note: The above instruction is for the case that the floppy disk of the console PC is 'A'. If the floppy disk drive is D, select (CL) 'D:'.

Note: Please use the floppy disk enclosed with the new HDD.



The progress of collecting log information is displayed.



A message indicating that collecting log information is completed appears. Remove the floppy disk from the floppy disk drive and select (CL) [OK].

When the operation is completed, select (CL) [Step5] in the 'Guidance' dialog box and proceed to "(11) <Step6: Insert HDD>".

(11) <Step6: Insert HDD>

Insert a new HDD to the location from which HDD was removed.

For how to insert it, see "3.4 Procedure of replacing HDD canister (2)" and "3.4 Procedure of replacing HDD canister (3)".

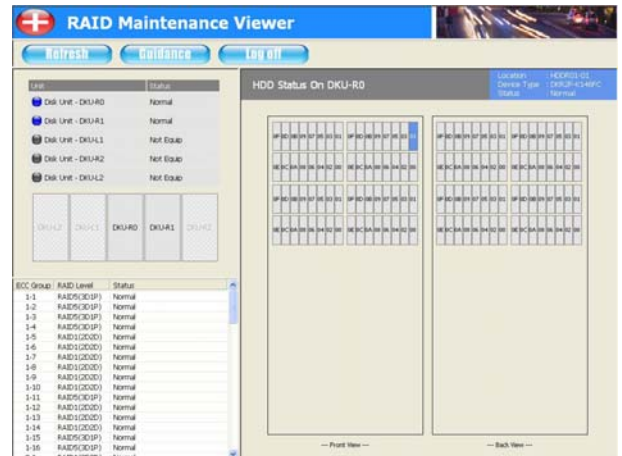
When the operation is completed, select (CL) [Step6] in the 'Guidance' dialog box and proceed to "(12) <Step7: Check the completion of replacement>".

(12) <Step7: Check the completion of replacement>

In the 'RAID Maintenance Viewer' window, select (CL) [Refresh] and confirm in "HDU information view" that the replaced HDD is lit.

When it is not lit, select (CL) [Refresh] again after a few minutes and confirm that it is lit.

Note: Do not replace other HDD until all the operations through "(12) <Step7: Check the completion of replacement>" are completed.



When the operation is completed, select (CL) [Step7] in the 'Guidance' dialog box and proceed to "(13) <Step8: Post-processing of replacement>".

(13) <Step8: Post-processing of replacement>

Close the opened door of the DKU.

For how to open and close the door, see "3.2 Procedure for opening and closing doors" and "3.3 Procedure for opening and closing the EMC Cover".

Send the removed HDD and the floppy disk that contains the log information to the Technical Support Division.

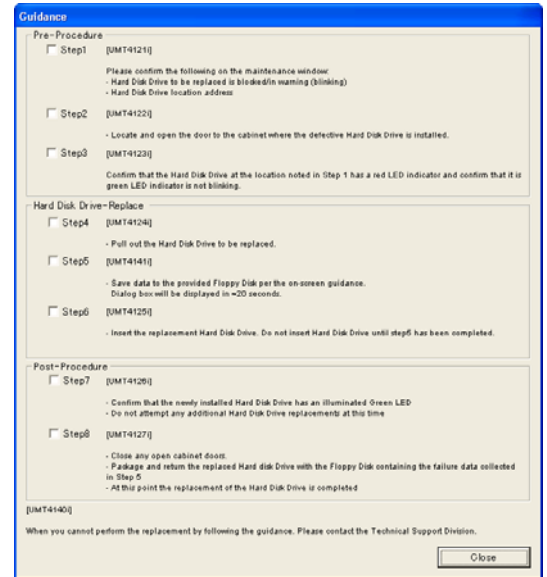
When the operation is completed, select (CL) [Step8] in the 'Guidance' dialog box.

(14) <Confirm the completion>

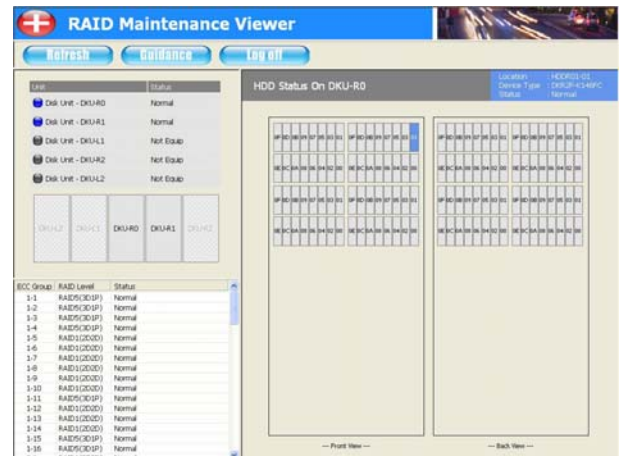
Confirm that the check boxes of [Step1] to [Step8] in the 'Guidance' dialog box are checked. If not, perform the operations again from "(6) <Step1: Check the HDD to be replaced>".

(15) <Post-processing>

Select (CL) [Close] in the 'Guidance' dialog box to close the 'Guidance' dialog box.



In the 'RAID Maintenance Viewer' window, select (CL) [Log off].



A message confirming the completion is displayed. Select (CL) [OK].

Note: When you select (CL) [OK], the account for user maintenance is automatically logged off, and the Console PC and the SVP are disconnected.

2.6 Actions in the case of error or failure

When a warning, failure, or other error status is displayed, report the displayed content to the Technical Support Division and follow the instructions from the Technical Support Division.

3. Hardware operations

3.1 Attaching the Wrist Strap

- (1) To protect the IC and LSI on the PCB from static electricity damage, put on the wrist straps and connect them into the ground wires on the DKU and connect them into the ground wires on the DKC before starting work.

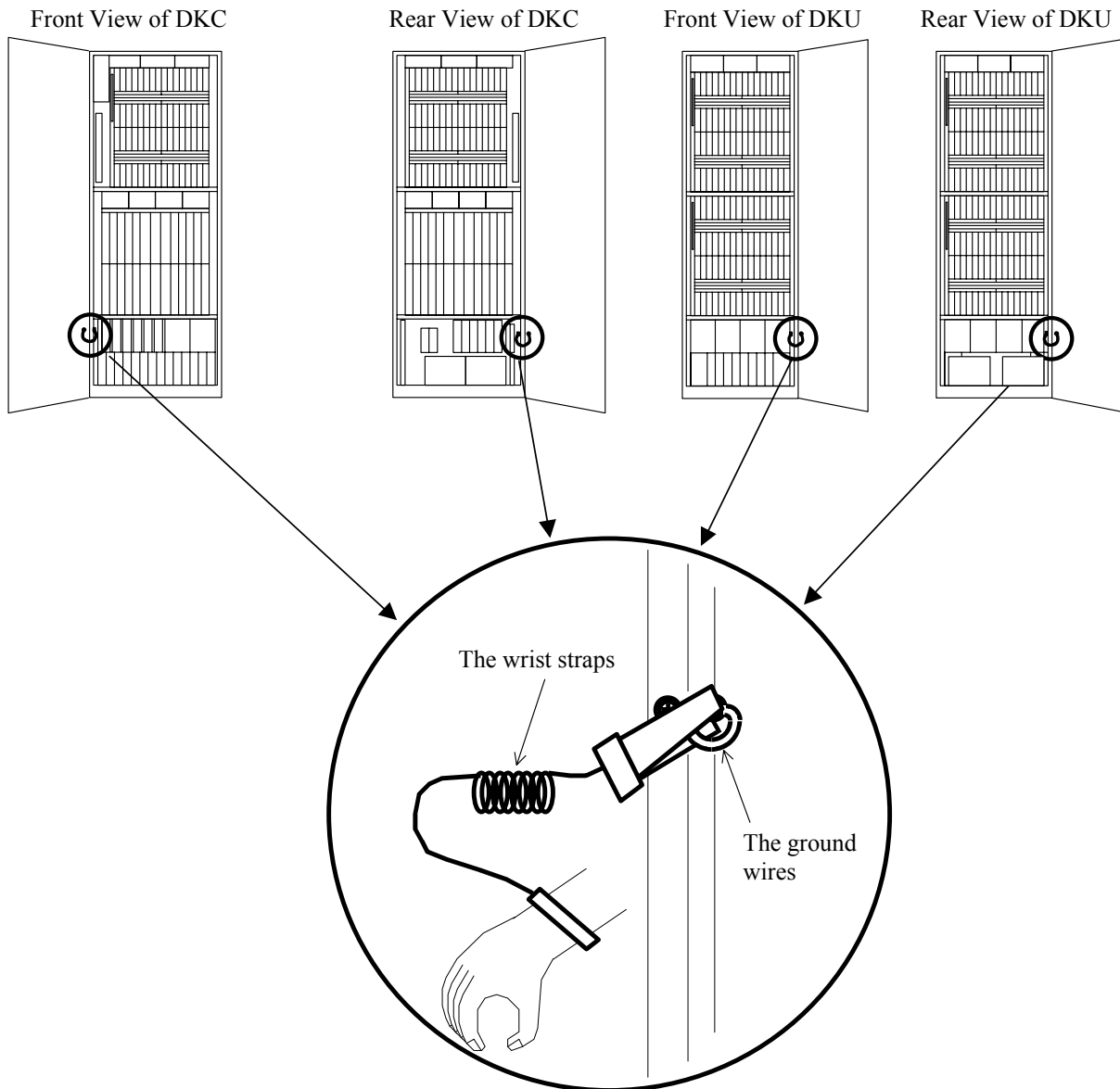


Fig. 3.1-1 Location of Ground Wire

3.2 Procedure for opening and closing doors

Note: In the configuration with DKU-L1, you cannot open the doors of DKC and DKU structurally at the same time. If you open them forcibly, paint peeling or scratches may occur.

(1) DKC front door

- To open

Insert an Allen wrench (M6), turn the door latch to unlock, and open the door. In that case, check that the door of DKU-L1 is closed.

- To close

Close the door, and turn the door latch with an Allen wrench (M6) to lock it.

(2) DKU front door

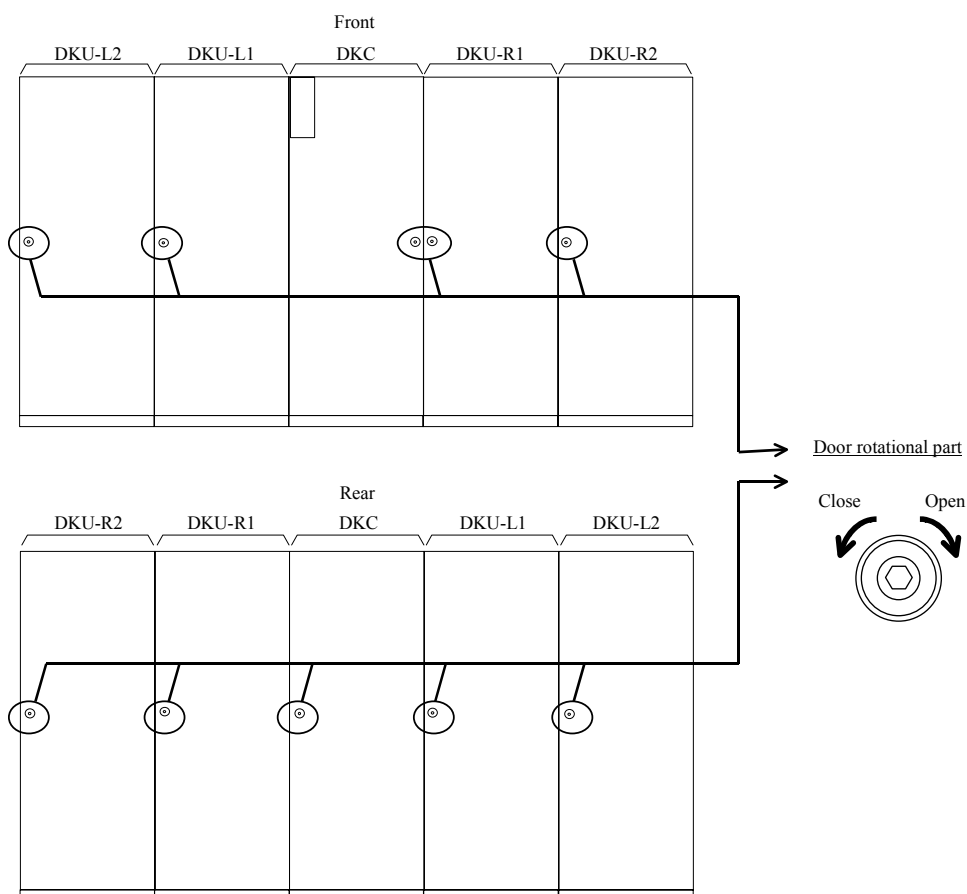
- To open

Insert an Allen wrench (M6), turn the door latch to unlock, and open the door. In case of DKU-L1, check that the door of the adjacent DKC is closed.

(3) DKC/DKU rear door

Insert an Allen wrench (M6), turn the door latch to unlock, and open the door.

Close the door, and turn the door latch with an Allen wrench (M6) to lock it.



3.3 Procedure for opening and closing the EMC Cover

The attachment position of the EMC Cover is shown in the following figure.

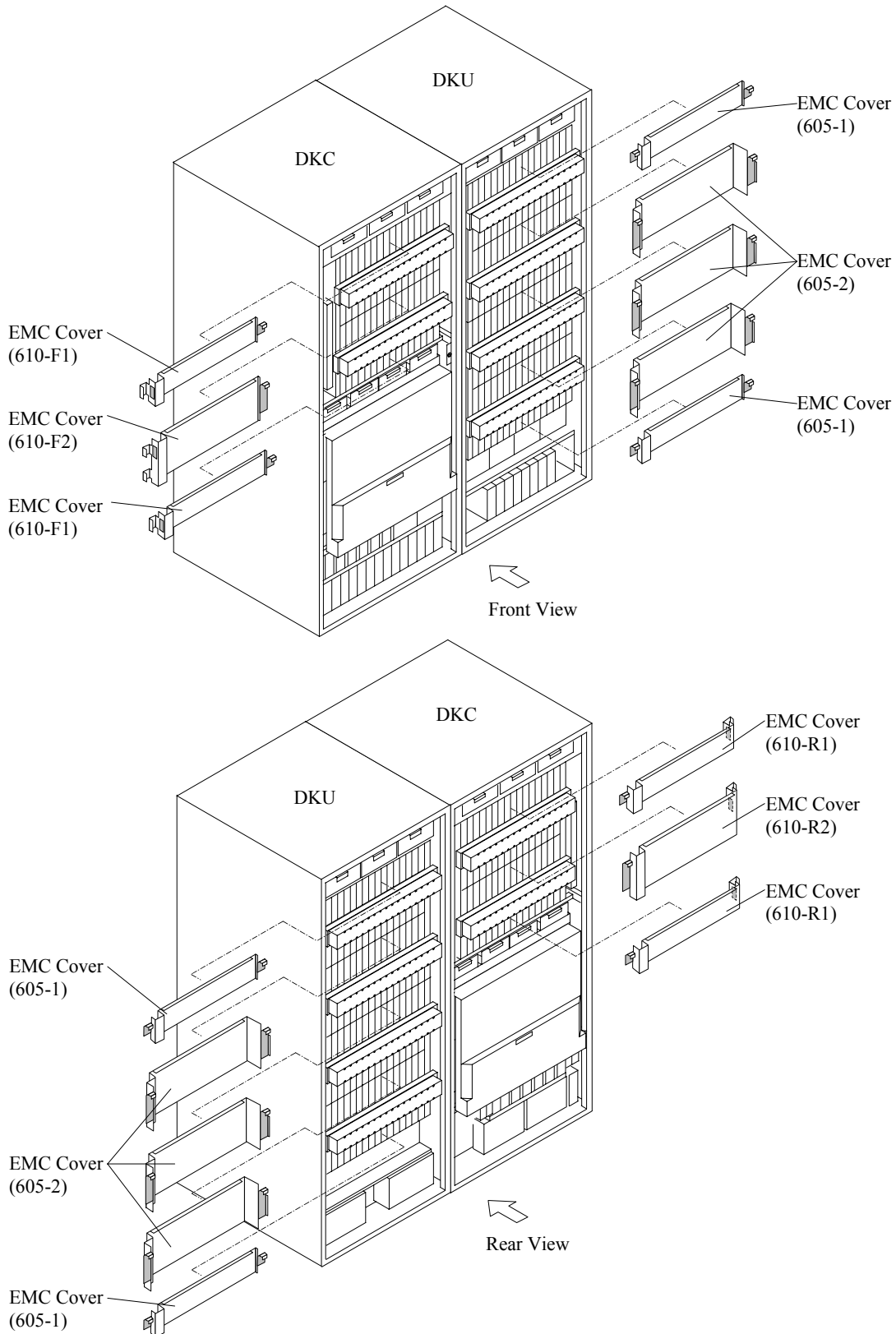


Fig. 3.3-1 Attachment Position of EMC Covers

Attachment of EMC Cover

- a. Put the bottom of the EMC Cover on the shelf of the HDD BOX.
- b. Raise the EMC Cover, push the fielded fastener tape firmly, and install it.

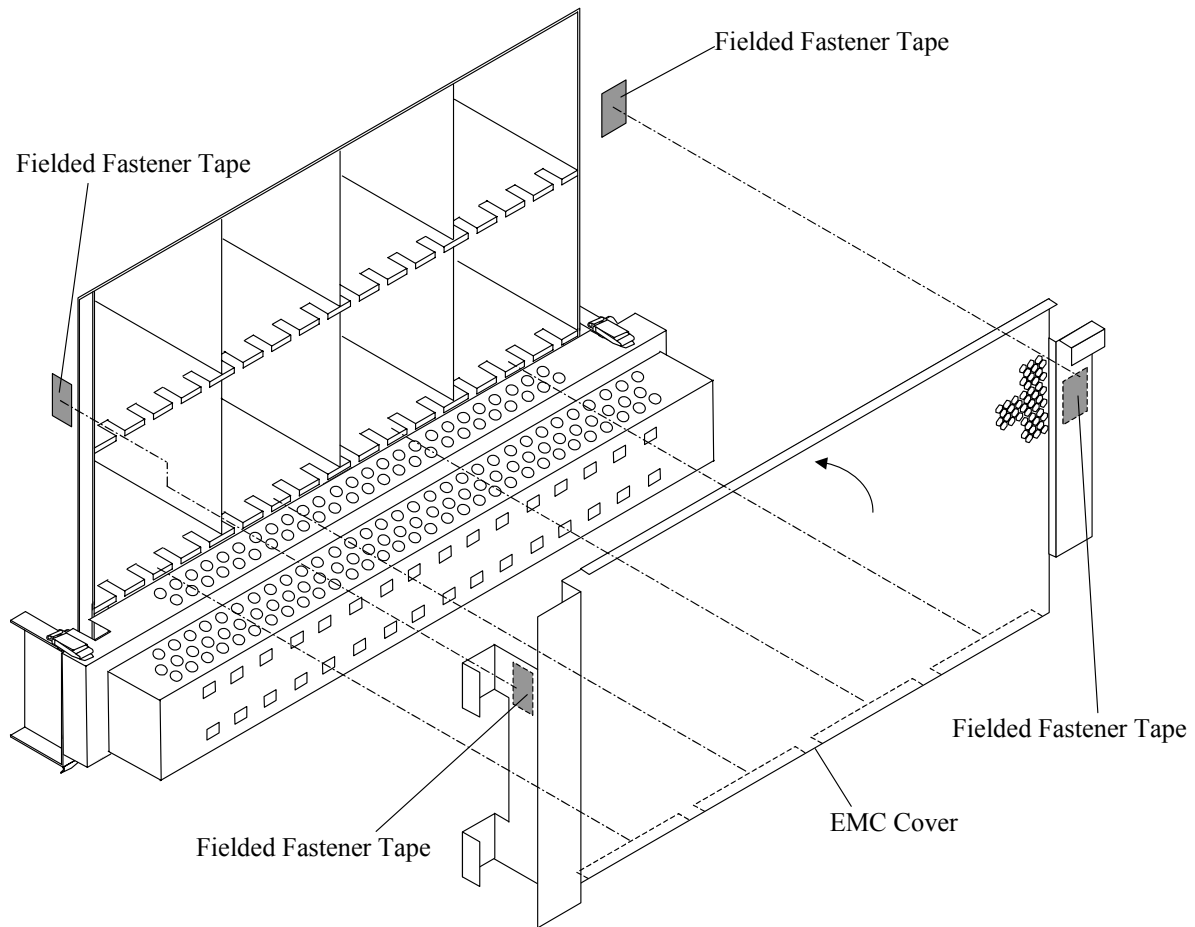


Fig. 3.3-2 Attachment of EMC Cover

Removal of EMC Cover

- a. Hold the EMC Cover handle, pull it toward you, and remove the EMC Cover from the fielded fastener tape.

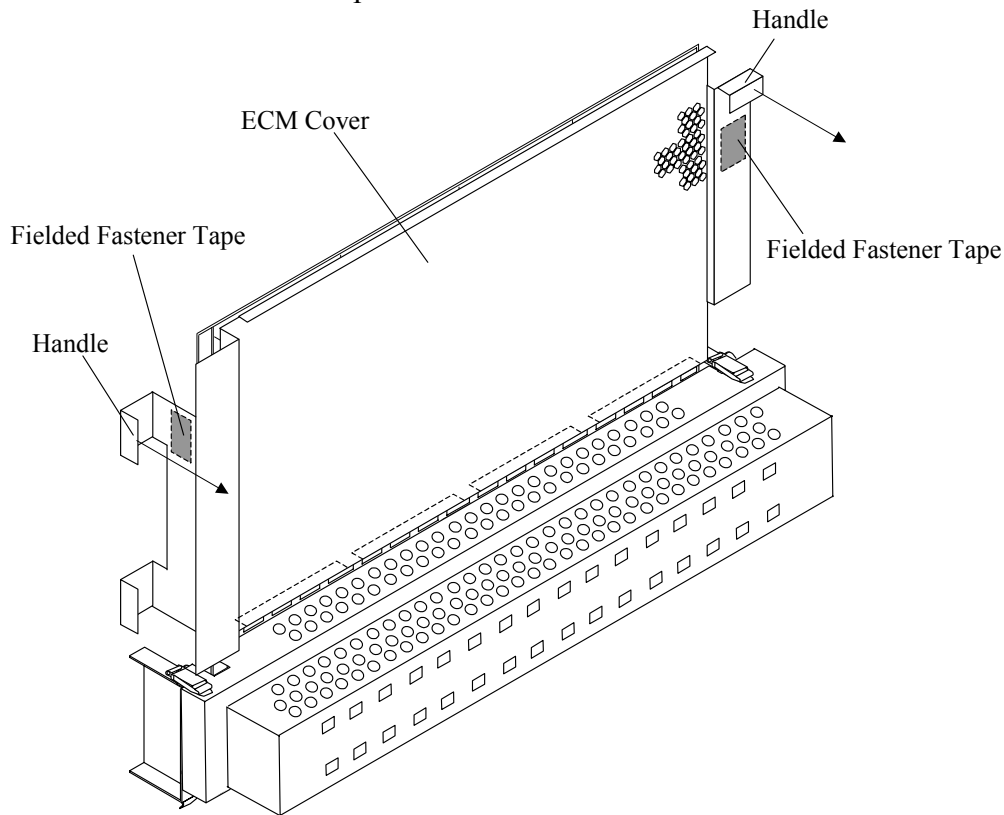


Fig. 3.3-3 Removal of EMC Cover

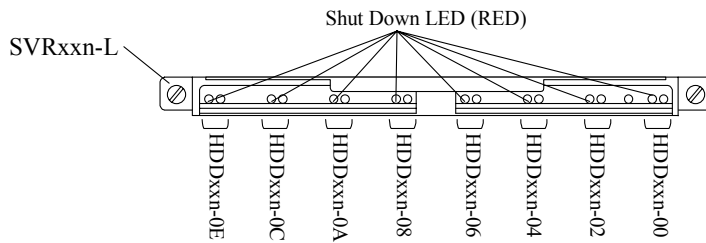
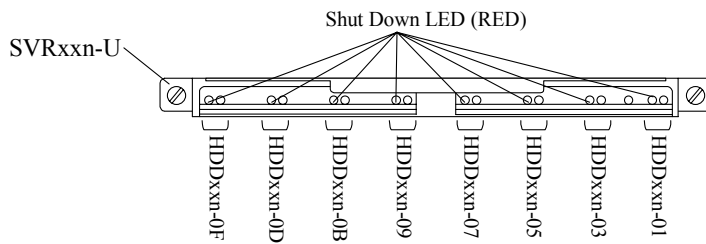
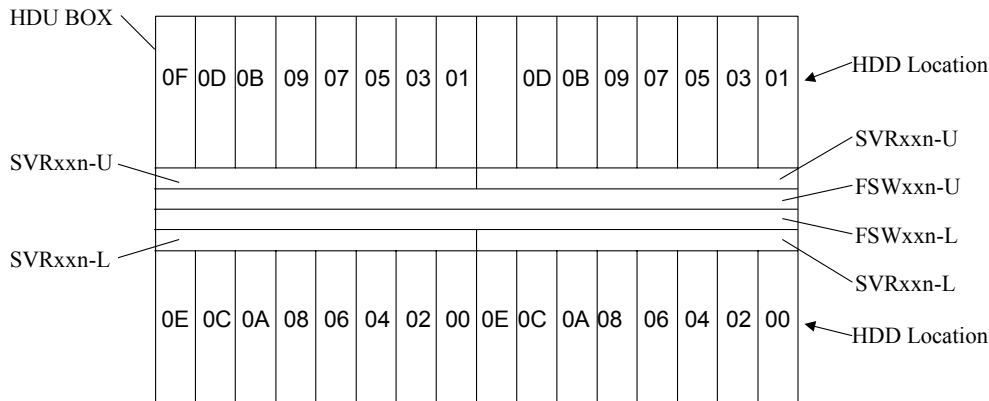
3.4 Procedure of replacing HDD canister

Replace the HDD canister by following the procedure.

Note: Replace the HDD canister in the subsystem power on status.

(1) Procedure of replacing the HDD canister

(a) Confirm that the Shut Down LED on the SVR package corresponding to the HDD canister is lit.



(Note) SVRxxn-U
 → HDU Box Location: 0, 1, 2...E, F
 → DKU Location: R0, R1, R2, L1, L2

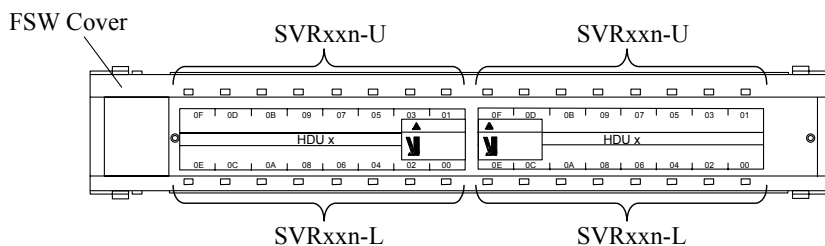


Fig. 3.4-1 Checking of Shut Down LED

- (b) After pushing up the stopper on the front side of the HDD canister, pull the handle toward you to remove the HDD canister.

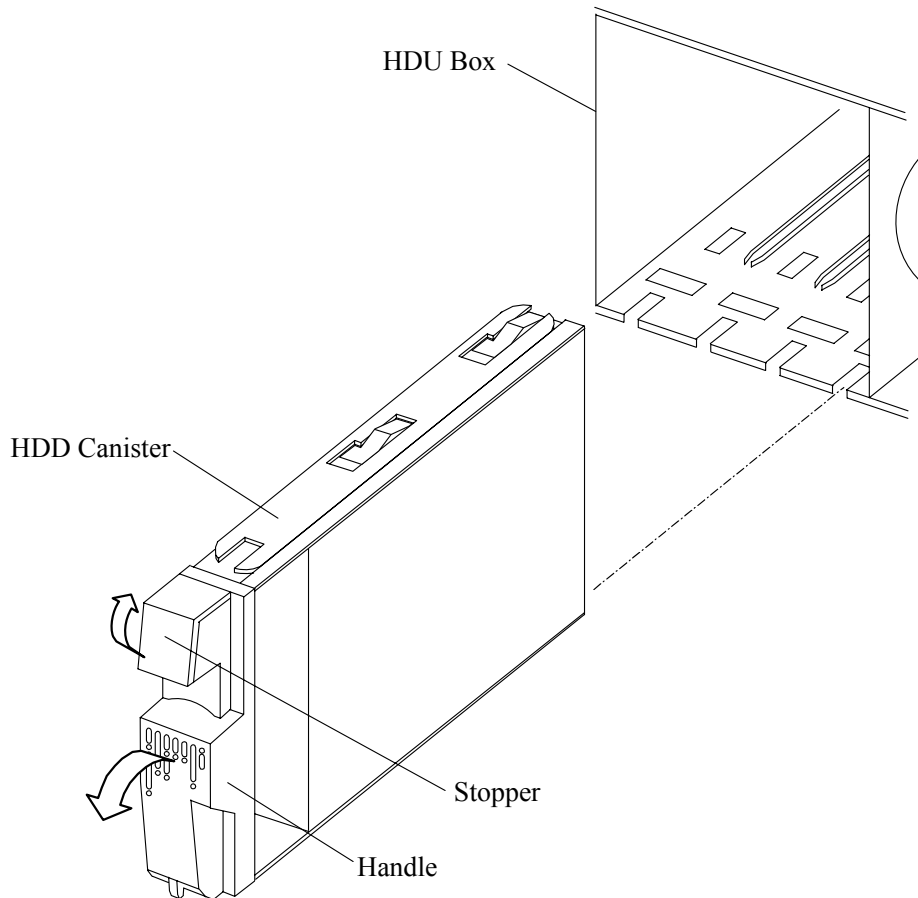
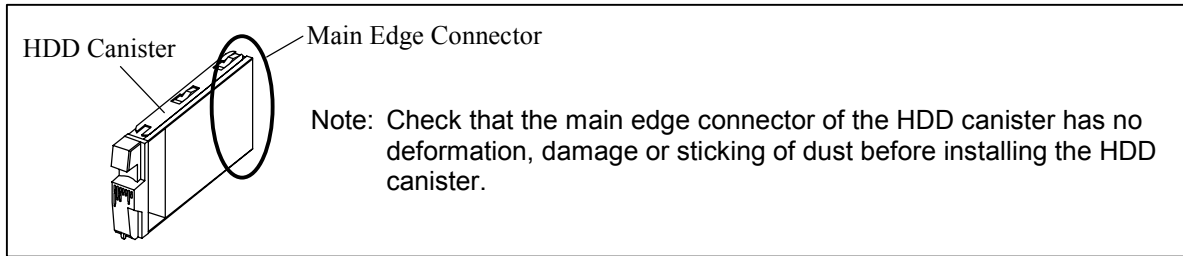
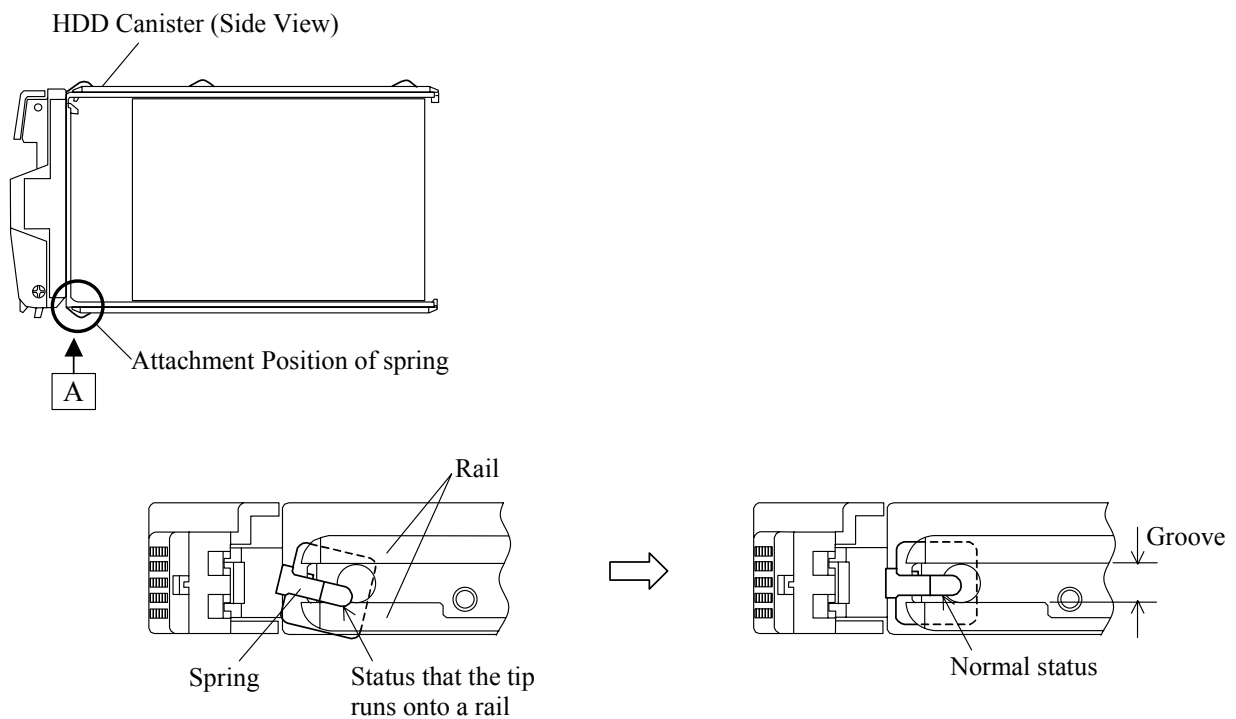


Fig. 3.4-2 Removal of HDD Canister

- (2) Check the condition of the HDD canister before installing it.



- (a) Confirm that a spring of the lower part of the HDD canister does not run onto a rail. If it runs onto a rail, correct the position so that it may fit in a groove.



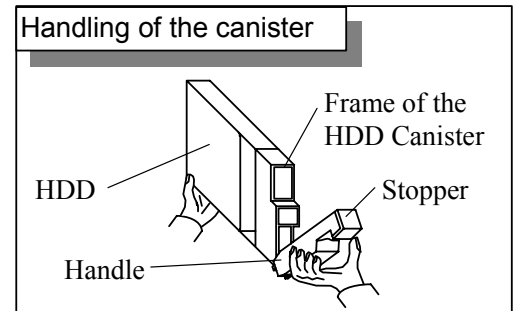
Viewed from A

Fig. 3.4-3 Confirmation of Spring Condition

(3) Procedure of installing HDD canister

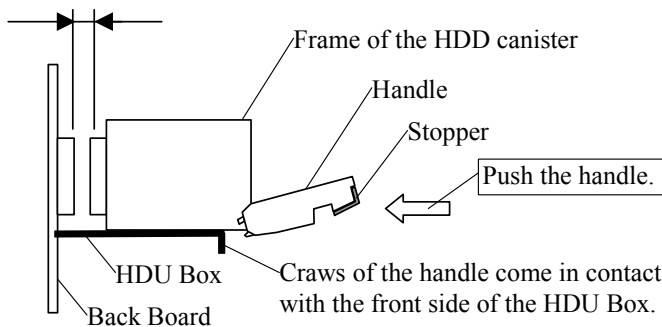
Note on the installation: Do not insert the HDD canister by pushing its frame.

- (a) Insert the HDD canister into the HDU Box holding its handle.
(Insert the canister until the claws that are located at the bottom of the handle come in contact with the front side of the HDU Box.)
- (b) Turn the handle at a stroke by pushing its top with your thumb.
(Turn the handle until it latches with the stopper. Do not stop the handle on its way of turning.)



(a) Insert the HDD canister into the HDU Box holding its handle.

A gap exists between the connectors.



(b) Turn the handle at a stroke by pushing its top with your thumb.
(Do not stop the handle on its way of turning.)

The connectors have been coupled.

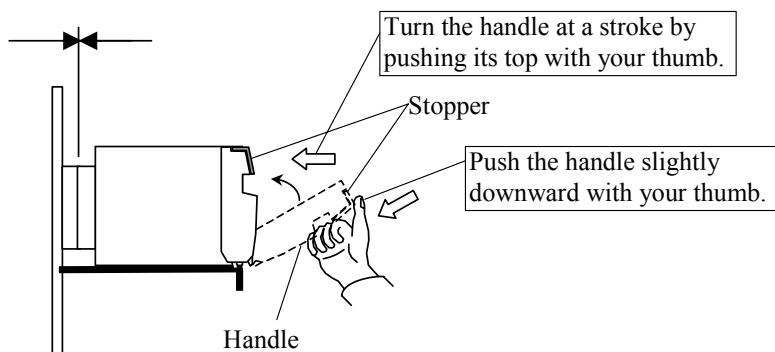


Fig. 3.4-4 Method of Installing HDD Canister

4. Descriptions of windows and dialog boxes

4.1 Main window

Table 4.1-1 Parts of Main window

#	Item	Content
(1)	Button bar	Button items that can be operated with this feature
(2)	Subsystem information view	Displays the state of each part
(3)	List	Displays the ECC group status
(4)	HDD information view	Displays the HDD status

(1) Button bar

Table 4.1-2 Button bar

Button	Processing
Refresh	Updates the information displayed in 'RAID Maintenance Viewer'.
Guidance	Displays the 'Guidance' dialog box.
Log off	Exits 'RAID Maintenance Viewer' and logs off the account for user maintenance.

(2) Subsystem information view

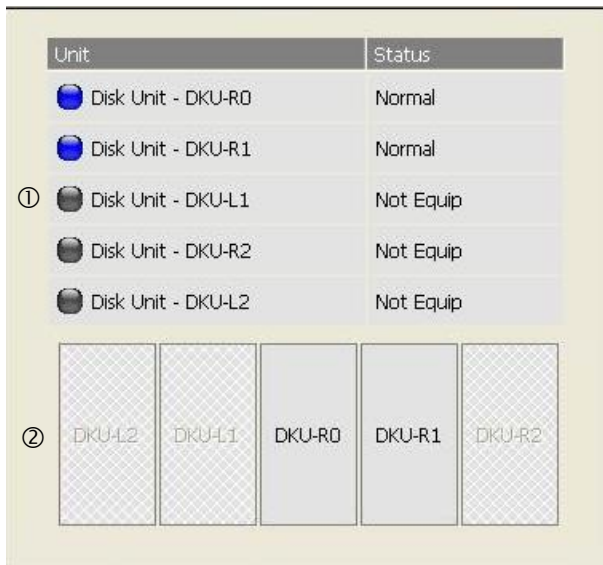


Table 4.1-3 Subsystem information view

#	Item	Content
①	List	Displayed information: Each DKU status is displayed in the list. "Normal" : Normal status "Warning" : Error status "Not equip" : Not installed
		Selecting an item: The detailed information on the target DKU is displayed in the HDU information view.
②	Image	Displayed information: An installation image of each DKU status is displayed. Lit : Normal status Blinking : Error status OFF : Not installed
		Selecting an item: The detailed information on the target DKU is displayed in the HDU information view.

- (3) List
ECC group statuses are listed.

Table 4.1-4 Subsystem information view

Item	Content
RAID Level	"RAID1(2D2D)" : RAID level 1 2D2D "RAID5(3D1P)" : RAID level 5 3D1P "RAID5(7D1P)" : RAID level 5 7D1P "RAID6(6D2P)" : RAID level 6 6D2P "Unknown" : Unused level
Status	"Normal" : Normal "Failed" : Blocked due to a failure "Blocked" : Blocked due to maintenance "Warning" : Mixed states "Copying" : Copy is in progress "CorrectionAccess" : Correction access "Unknown" : Unknown state "Not equip" : Not installed

(4) HDU information view

Select (CL) the subsystem information view to display this view.

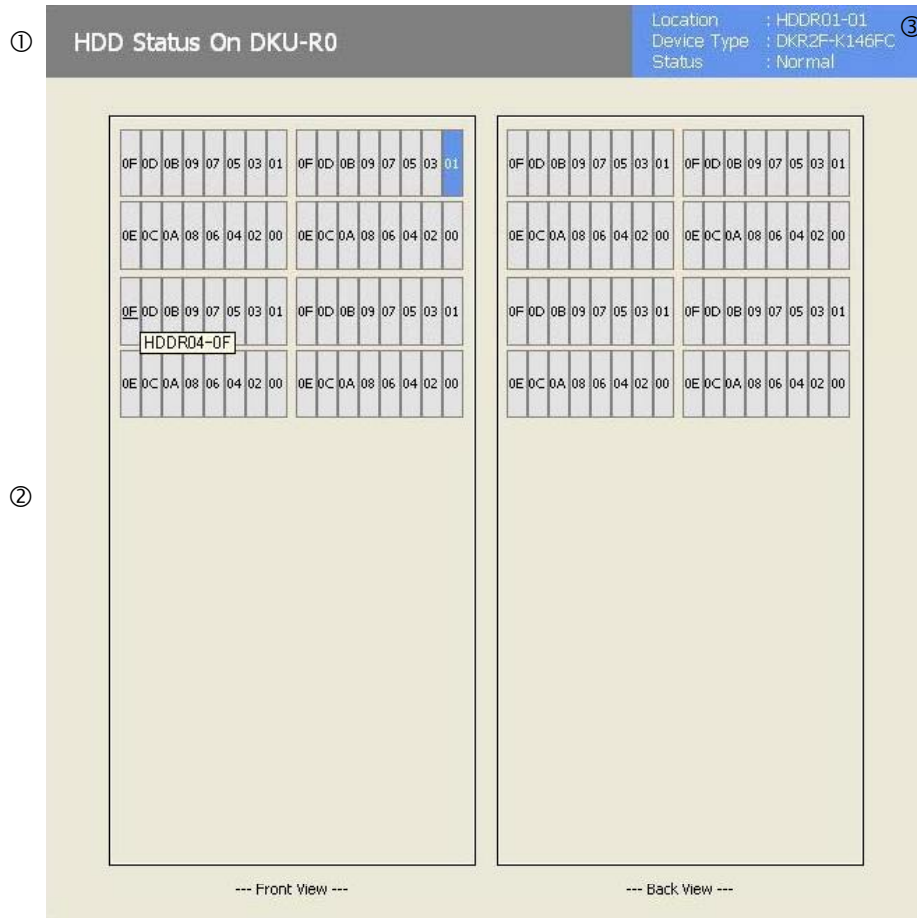


Table 4.1-5 HDU information view

#	Item	Content
①	Title	Displayed information: The title of the view is displayed.
②	Image	<p>Displayed information: An installation image of each part status is displayed.</p> <p>Lit : Normal status Blinking : Error status OFF : Not installed</p> <p>Selecting an item: The detailed information on the target HDU is displayed in the HDD Detail.</p>
③	HDD Detail	<p>Displayed information: The Location Name and Device Type and following Status of the HDD is displayed.</p> <p>Normal : Normal Failed : Blocked due to a failure Blocked : Blocked due to maintenance Unknown : Unknown state</p>

Images of frames are displayed as follows. Note that nothing is displayed in the HDU information view when it is initially displayed.

• DKC

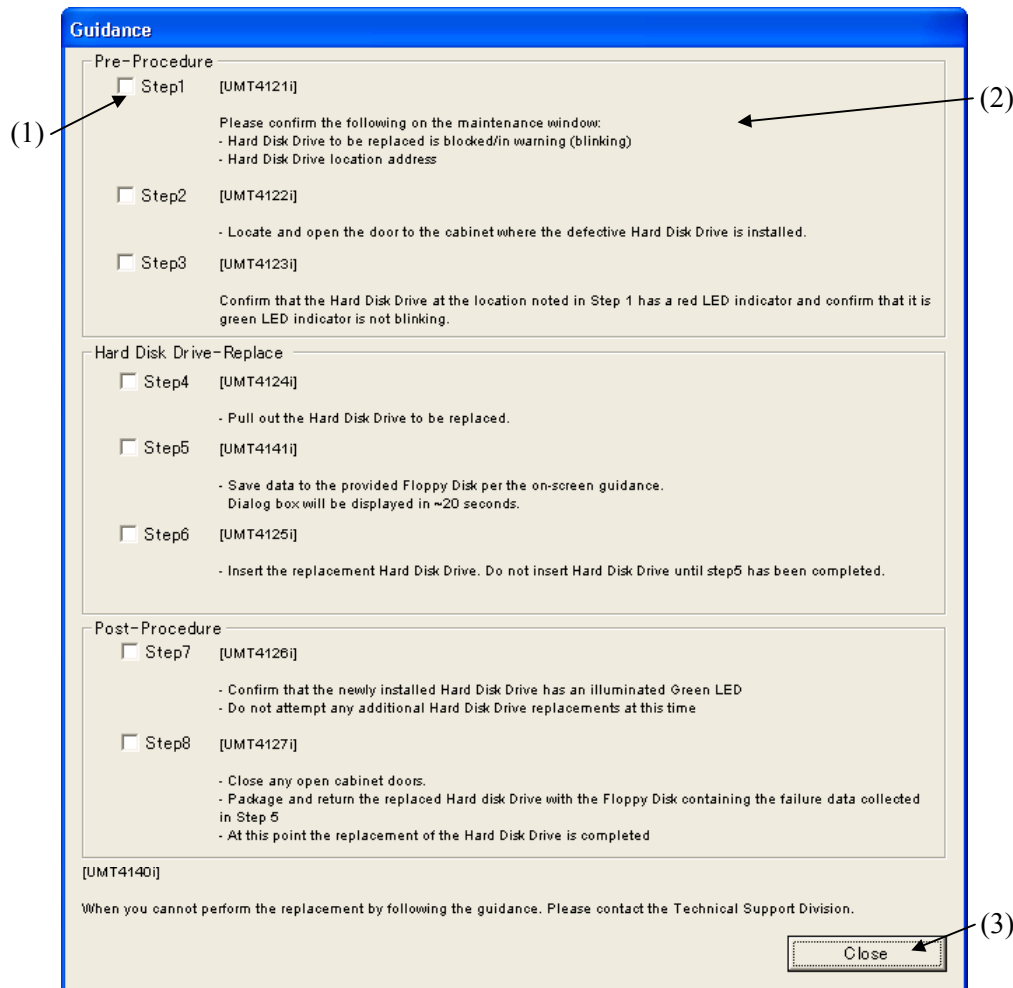


• DKU



4.2 Guidance dialog box

Select (CL) [Guidance] to display the dialog box in 'RAID Maintenance Viewer'.



- (1) Check
The step numbers and check boxes are displayed. When you select (CL) a check box, the box is checked. After completing a step, select (CL) the check box of the step.
- (2) Execution content
The description of UserReplace is displayed.
- (3) [Close] button
The 'Guidance' dialog box is closed.