Rev.0 REP(RISW)00-00 Copyright © 2019, Hitachi, Ltd.

# [ISW REPLACEMENT PROCESSING - RISW]

Rev.0 Copyright © 2019, Hitachi, Ltd.

#### REP(RISW)01-10

1. Connecting the Maintenance PC

Connect the Maintenance PC to the SSVP, and then log in to the SVP.

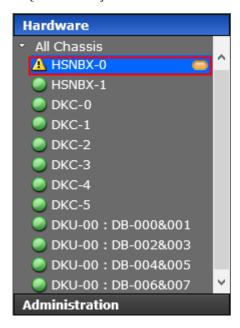
- "Attachment/Removal Procedure of Maintenance PC" (INST(IN)13-02-10)
- "Connection to the SVP" (SVP01-30)
- 2. Starting the SVP window

From the menu of Web Console, click [Maintenance Components] - [Maintenance Other Components].

3. Changing the operation mode Change the mode to [View Mode].

4. Starting Maintenance Utility
In the SVP window, click [Maintenance Utility]. (See "Starting Maintenance Utility" (MU01-10).)

- 5. Selecting replacement parts by Maintenance Utility.
  - (1) <Main window> Select [HSNBX-X] in the main window.

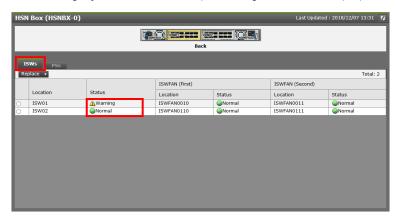


Rev.0 Copyright © 2019, Hitachi, Ltd.

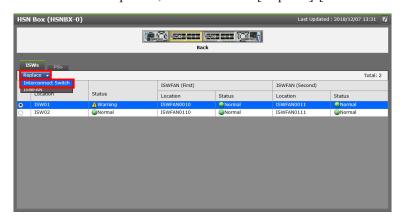
# REP(RISW)01-20

# (2) <HSNBX window>

Click the [ISWs] tab in the ISWxx window to display a ISW status. See "Alert Display Related to FRU (Field Replacement Unit)" (MU02-10) for [Status].



(3) <Select ISWxx> Select ISWxx to be replaced, and then clicks [Replace]-[Interconnect Switch].



Rev.0.1 Copyright © 2019, Hitachi, Ltd.

#### REP(RISW)01-30

(4) <Block ISW>

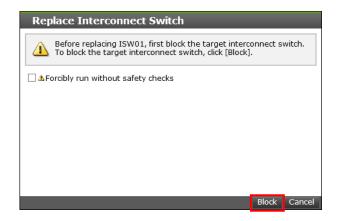
# **A** CAUTION

About "Forcibly run without safety checks":

If you check this checkbox and execute the maintenance, the system may go down. Do not check it unless instructed by the message, the manual or the contact described in the manual.

Click [Block] after checking that the ISWxx to be replaced is correct. If a message other than the described is displayed, refer to Message Section (MSG00-00).

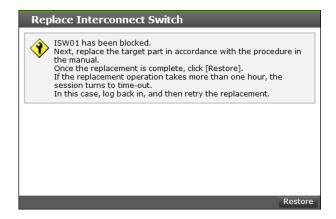
NOTE: The error list window is displayed if multiple errors are detected by the prior check. If it is displayed, click the text of "Error Code" and recover the failures or the blockade in accordance with the details of the displayed errors.



(5) <Check the beginning of ISWxx replacement>
Check that the ISWxx is blocked and becomes ready for replacing.

NOTE: Do not click [Restore] at this time.

Click [Restore] after completing the replacement work.

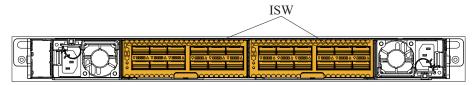


Rev.1.1 Copyright © 2019, Hitachi, Ltd.

#### REP(RISW)01-40

#### 6. ISW Replacement Processing

Location	Function Name of Component		Part Name
Rear of HSNBX	1	ISW	ISW



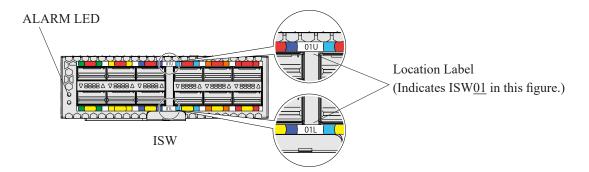
Rear view of HSNBX

**NOTICE:** To prevent part failures caused by static electrical charge built up on your own body, be sure to wear a wrist strap connected to the Storage System before starting and do not take it off until you finish. See "Note on Installing and Removing Parts" (REP(GE)01-30).

(1) Check that the ALARM LED (red) on the ISW to be replaced lights up.

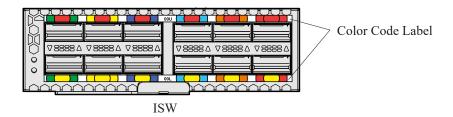
When the LED does not light up, check the location of the ISW to be replaced in the Maintenance
Utility window, and verify the location labels of the ISW.

Figure 1-1 Locations of ALARM LED and Location Labels



- (2) Remove all the cables connected to the ISW.
- (3) Attach the color code label of the same color as that for the ISW to be replaced to the new ISW.

Figure 1-2 Attaching Color Code Label

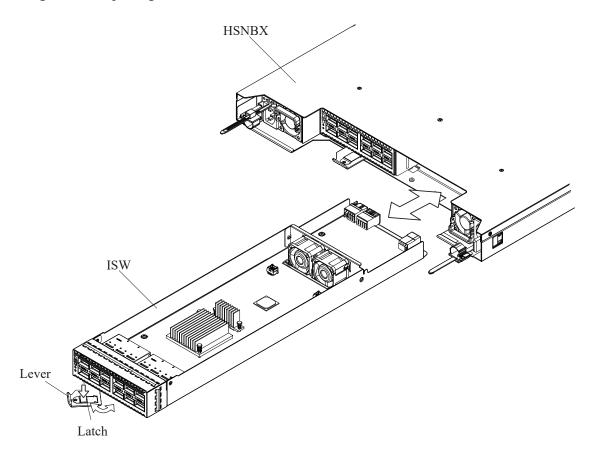


Rev.0 Copyright © 2019, Hitachi, Ltd.

#### REP(RISW)01-50

- (4) Replacing the ISW
  - (a) Open the lever while pressing its latch securing the ISW.
  - (b) Open the lever completely until the ISW is pulled out toward you.
  - (c) Remove the ISW by pulling it out while holding it with your hands.
  - (d) Open the lever on the new ISW completely toward you.
  - (e) Insert the ISW fully and push the lever until the latch on the lever clicks and is locked.

Figure 1-3 Replacing the ISW



(5) Connect the X-Path cables to the new HIE.

Connect the X-path cables according to "X-path Cable Diagram" (LOC05-70).

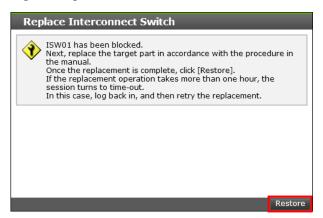
NOTE: • Check that the latches clicks and the cables are firmly connected.

• When connecting an X-path cable, be careful not to damage the edge of the cable (see "Precautions when Connecting X-Path Cables" (INST(IN)09-02-10)).

Rev.0.1 Copyright © 2019, Hitachi, Ltd.

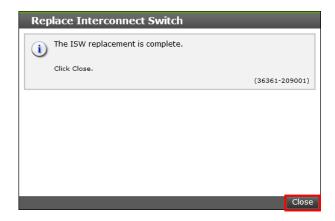
#### REP(RISW)01-60

- 7. Restoring replacement parts by Maintenance Utility
  - (1) <Restore replacement parts> Click [Restore].



(2) <Check replacement parts restoration>Check that the following message is displayed and click [Close].If a message other than the described is displayed, refer to Message Section (MSG00-00).

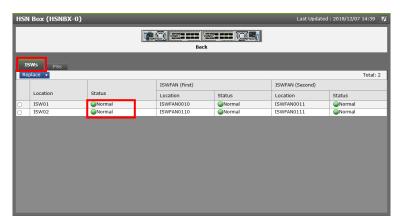
- NOTE: If the replacement fails, check the statuses of the general-purpose LEDs and the PORT LEDs on the HIE (see "HIE" in "Other Switches and LEDs" (LOC03-130)).
  - If the replacement fails due to incorrect connections of X-path cables, identify the cause of failure, and correct the incorrect connections (see "Recovery Procedure for Blocked CTL/HIE/ISW/X-path" (TRBL03-56-10)).



Rev.0 Copyright © 2019, Hitachi, Ltd.

# REP(RISW)01-70

(3) <Check ISW restoration>
Click the [ISWs] tab in the Controller Chassis window and check that a Status of the replaced ISWxx is "Normal".



- 8. Closing Maintenance Utility
  - (1) Click [Logout] to close the window.
  - (2) <Get the error information>
    Collect small system dumps by referring to "Dump/Auto Dump" (SVP02-09-10).
  - (3) Refer to the "Use of OnlineDumpTool" (SVP02-21-10), please upload the error information.

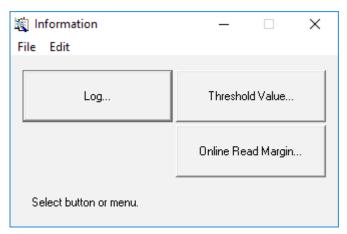
**DKC910I** 

REP(RISW)01-80

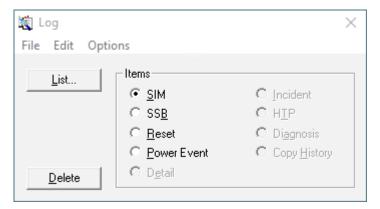
Rev.0

#### 9. Completing the SIM log

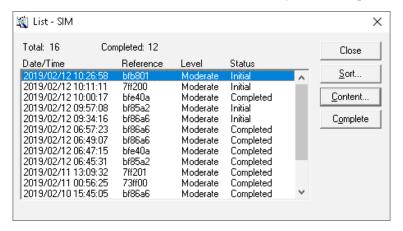
- (1) Change the mode to [Modify Mode], and then select [Information].
- (2) In the Information window, click [Log...].



(3) In the Log window, select [SIM] and then [List...].



(4) In the List-SIM window, select the data for which you end the process, and then click [Complete].

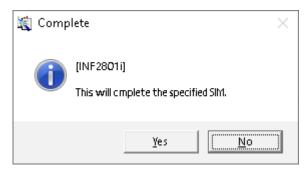


Copyright © 2019, Hitachi, Ltd.

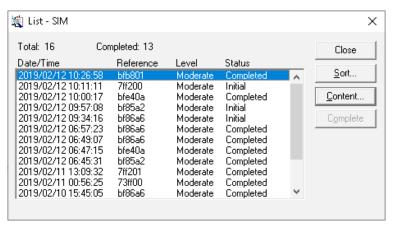
Rev.0.1 Copyright © 2019, Hitachi, Ltd.

#### REP(RISW)01-90

(5) In the Complete window, click [Yes].



(6) In the List-SIM window, confirm that the "Status" of the data has become "Completed".



(7) In the List-SIM window, click [Close].Close the Log window, then the Information window.Change the mode from [Modify Mode] to [View Mode].

NOTE: If the MESSAGE LED is lit on the HSNPANEL after you complete all SIMs, display SIMs to check that SIM statuses are "Completed". If SIM statuses are not "Completed", wait for five minutes, and then perform the procedure for completing the SIM log again.

#### 10. Checking Normality

Perform the normality check according to "Checking Normality (TRBL02-06-10)".