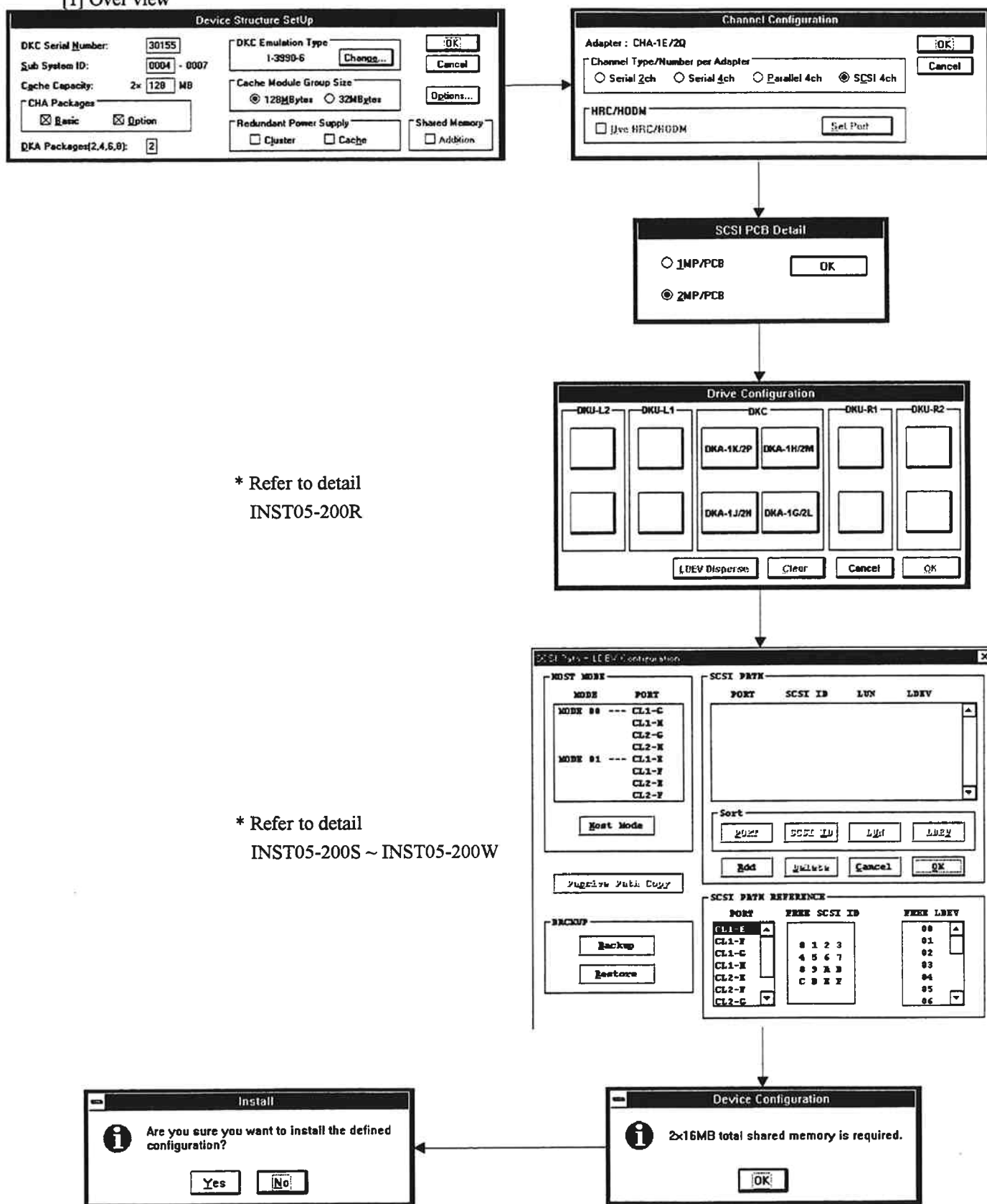


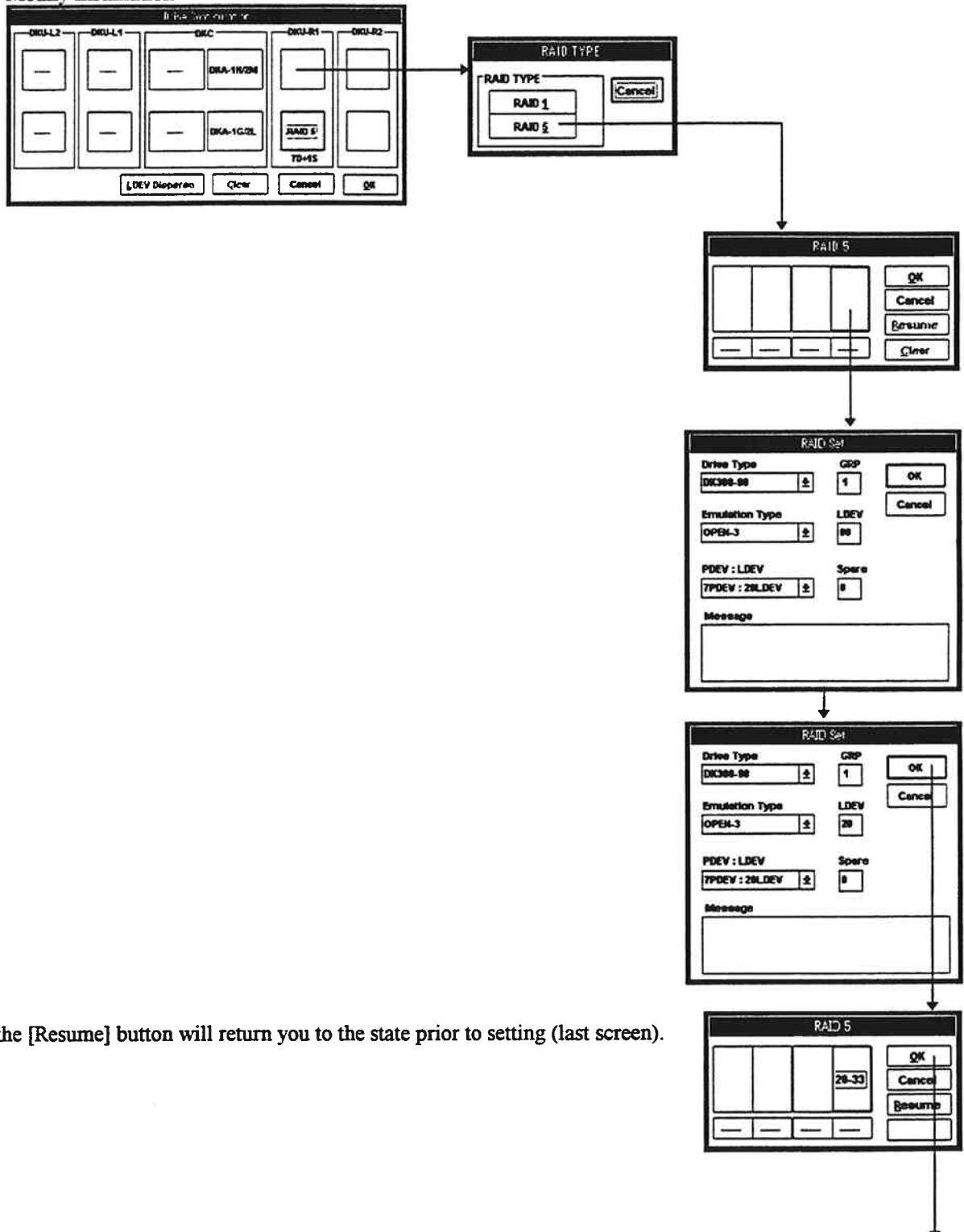
15-7. <Drive structure adjustment SCSI Path-LDEV configuration definition> After SVP version is 01-07-2X/00

[1] Over view



15-8. (1) Drive structure install configuration setting (Group)

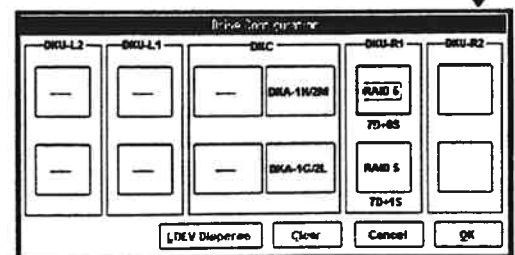
Modify installation



Pressing the [Resume] button will return you to the state prior to setting (last screen).

- When the Group button is pressed
 - In the 'RAID Set' screen, the setting will be at the top of the empty Group, no matter which empty Group button is pressed.

Go to INST200Q Step 15-7.



<SVP displays "SCSI Path-LDEV Configuration" screen>

(1) 'SCSI Path-LDEV Configuration' window

(1.1) <SCSI PATH> section (top of the window)

Path display : Indicates the current status of definitions to be added, deleted and sorted. Each line represents a SCSI Path definition.

PORT : PORT No.
SCSI ID : SCSI ID
LUN : LUN No.
LDEV : LDEV ID

PORT	SCSI ID	LUN	LDEV
CL1-E	0	0	00
CL1-E	0	0	00
CL1-E	1	0	01
CL1-E	2	0	02
CL1-E	3	0	03
CL1-E	4	0	04
CL1-E	5	0	05

PORT	FREE SCSI ID	FREE LDEV
CL1-E	1 2 3	06
CL1-E	4 5 6 7	07
CL1-E	8 9 A B	08
CL1-E	C D E F	09
CL1-E		10

Character strings having the following meanings are displayed before LDEV ID:

' ' : Assignment to (one) Path
'*' : Assignment to (multiple) Paths

(Reference) An example of assigning multiple Paths includes assignment to alternate Paths.

[PORT] button : Sorts path items in the SCSI PATH display section in ascending order by PORT No.
The sorting priority is given as PORT → SCSI ID → LUN → LDEV.
[SCSI ID] button : Sorts path items in the SCSI PATH display section in ascending order by SCSI ID.
The sorting priority is given as SCSI ID → PORT → LUN → LDEV.
[LUN] button : Sorts path items in the SCSI PATH display section in ascending order by LUN No.
The sorting priority is given as LUN → PORT → SCSI ID → LDEV.
[LDEV] button : Sorts path items in the SCSI PATH display section in ascending order by LDEV No.
The sorting priority is given as LDEV → PORT → SCSI ID → LUN.
[ADD] [Delete] : Adds or deletes definitions, or quits the program. For more information, see later.
[Cancel] [OK]

If no sort operation is performed, the default priority is given as PORT → SCSI ID → LUN → LDEV.

(1.2) <SCSI PATH REFERENCE> section (bottom of the window)

PORT display : Displays the ports installed.
FREE SCSI ID display : Displays the SCSI ID not used with the port selected in PORT display.
FREE LDEV display : Displays the LDEV ID of an undefined path (The requirement is OPEN-LDEV).

(1.3) <HOST MODE> section (left top of the window)

HOST MODE display : Displays the host identification data defined for the port installed.
[Host Mode] button : Defines the host identification data.

(1.4) <BACKUP> section (left bottom of the window)

[Backup] button : Output the displaying data to the backup file.
[Restore] button : Reads the data from the backup file and displays it.

(1.5) [Passive Path Copy] button :

Automatically create the alternative path from Cluster-1 to Cluster-2.

(2) Definition add operation

(2.1) 'Set SCSI Path Parameter' window

When the [ADD] button is selected in the 'SCSI Path-LDEV Configuration' window, the 'Set SCSI Path Parameter' window appears as shown to the right.

Definitions can be added in this window through the following operations:

1. Select PORT No. in the PORT display column
(multiple selections allowed).
2. Select SCSI IDs in the SCSI ID display column
(multiple selections allowed).
3. Select LUN No. in the LUN display column
(multiple selections allowed).
4. Select LDEV IDs in the LDEV display column
(multiple selections allowed).

[PORT] display column : Displays PORT No. installed.

[SCSI ID] display column : Displays SCSI IDs.

[LUN] display column : Displays LUNs.

[LDEV] display column : Displays LDEV ID to which OPEN-LDEV is assigned.

The character string with the following meaning is displayed before LDEV ID:

' ' : Pass not assigned.

'*' : One path assigned.

'**' : Multiple paths assigned.

[Cancel] button : Cancels the selected content and returns to the 'SCSI Path-LDEV Configuration' window.

[OK] button : Sets path(s) according to the selected content and displays the 'Add SCSI Path' window for confirming an addition.

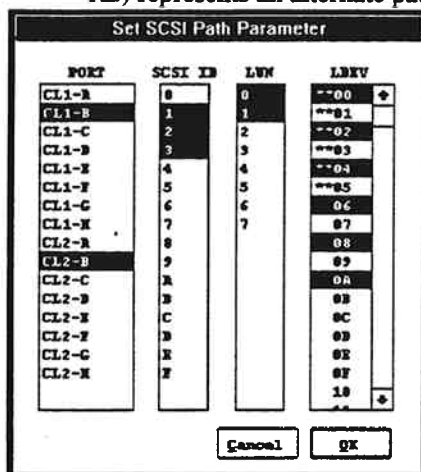
(2.1.1) Continuous assignment of LDEV IDs

In the selected state shown below, the following paths are actually defined: The same symbol (such as X1 or X2) represents an alternate path.

	PORT	SCSI ID	LUN	LDEV
X1	CL1-B	1	0	0A
X2	CL1-B	1	1	0B
X3	CL1-B	2	0	0C
X4	CL1-B	2	1	0D
X5	CL1-B	3	0	0E
X6	CL1-B	3	1	0F
(X1)	CL2-B	1	0	0A
(X2)	CL2-B	1	1	0B
(X3)	CL2-B	2	0	0C
(X4)	CL2-B	2	1	0D
(X5)	CL2-B	3	0	0E
(X6)	CL2-B	3	1	0F

(2.1.2) Arbitrary assignment of LDEV IDs

In the selected state shown below, the following paths are actually defined: The same symbol (such as X1 or X2) represents an alternate path



	PORT	SCSI ID	LUN	LDEV
X1	CL1-B	1	0	00
X2	CL1-B	1	1	02
X3	CL1-B	2	0	04
X4	CL1-B	2	1	06
X5	CL1-B	3	0	08
X6	CL1-B	3	1	0A
(X1)	CL2-B	1	0	00
(X2)	CL2-B	1	1	02
(X3)	CL2-B	2	0	04
(X4)	CL2-B	2	1	06
(X5)	CL2-B	3	0	08
(X6)	CL2-B	3	1	0A

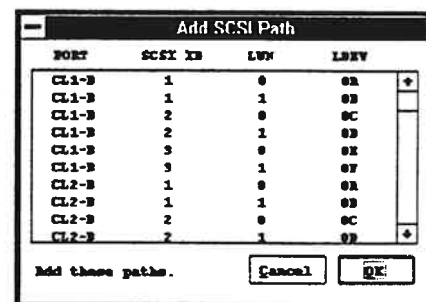
(2.2) 'Add SCSI Path' window

When the [OK] button is selected in the 'Set SCSI Path Parameter' window, the definition add confirmation window appears as shown to the right.

Added path display column : Displays all the Paths set in the 'Set SCSI Path Parameter' window.

[Cancel] button : Returns to the 'Set SCSI Path Parameter' window without adding any paths displayed, and prompts the operator for modifying.

[OK] button : Adds the displayed path(s) to the 'SCSI Path-LDEV Configuration' window.



(2.3) Error message

If one of PORT, SCSI ID, LUN and LDEV is not selected, the message 'xxx is not Selected. Please select xxx.' is displayed to prompt operator for making a selection.

xxx --- PORT, SCSI ID, LUN, LDEV



If PORT and LDEV are the same as the existing definitions, the setting is considered to be the same even when SCSI ID and LUN are different. The error message shown right is displayed to prohibit double definition.



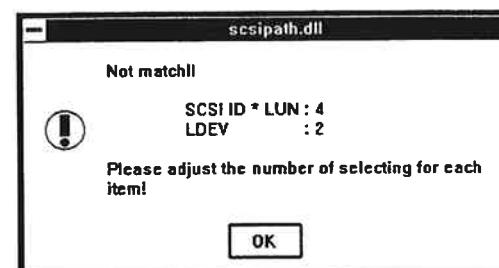
If PORT, SCSI ID and LUN are the same as the existing definitions, no access to different LDEVs is allowed. If this restriction is violated, the message shown to the right is displayed to indicate that those have been entered.



If LDEVs beginning with the selected LDEV ID cannot be selected by the given number in continuous assignment (overflow), the message shown to the right is displayed.



In arbitrary assignment of LDEVs, LDEVs need to be selected by the number of (SCSI IDs) x (LUNs). If LDEVs are not matched in number, the message shown to the right is displayed to prompt the operator to correct one of SCSI IDs, LUNs and LDEVs.



If the total of existing paths and newly added ones is over 1000 paths, the message shown to the right is displayed to prompt the operator to correct the number of newly added paths.



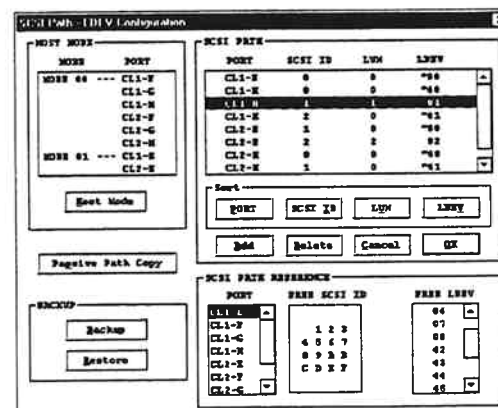
(3) Definition delete operation

(3.1) 'SCSI Path-LDEV Configuration' window

Definitions can be deleted in this window through the following operations:

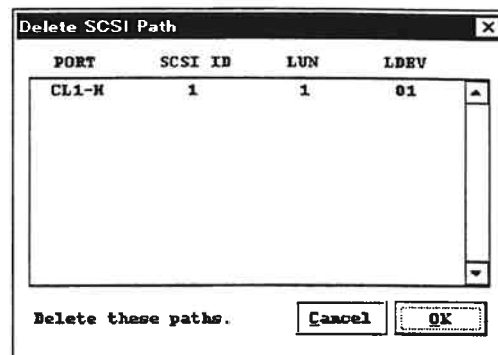
1. Select definitions to be deleted from the path display column (multiple selections allowed).
2. Select the [Delete] button.

[Delete] button : Displays the 'Delete SCSI Path' window for confirming deletion of the selected definition.



(3.2) 'Delete SCIS Path' window

When the [Delete] button is selected in the 'SCSI Path LDEV Configuration' window, the definition delete confirmation window appears as shown to the right.



Deleted path display column : Displays all the paths set in the 'SCSI Path-LDEV Configuration' window.

[Cancel] button : Returns to the 'SCSI Path-LDEV Configuration' window without deleting any paths displayed, and prompts the operator for modifying.

[OK] button : Deletes the displayed path(s) from the 'SCSI Path-LDEV Configuration' window.

(3.3) Error message

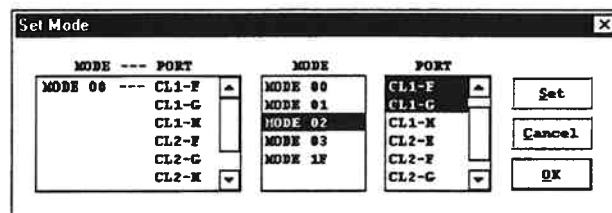
If no definition is selected when the [Delete] button is clicked, the message shown to the right is displayed.



(4) Change of the definition of host identification data

(4-1) 'Set Mode' window

When the [Host Mode] is selected (CL) in the 'SCSI Path-LDEV Configuration' window, 'Set Mode' window is displayed as shown on the right.



MODE---PORT display :

Displays the host identification data defined to the port as a list.

MODE display : Displays the data which can be defined as the host identification data. (multiple selection is not allowable.)

PORT display : Displays ports for the CHS installed. (multiple selection is allowable.)

[Set] button : Set the host identification data to the port according to the selection and displays the 'MODE xx' window for confirmation of the setting.

xx-----The value assigned to the selected host identification data.

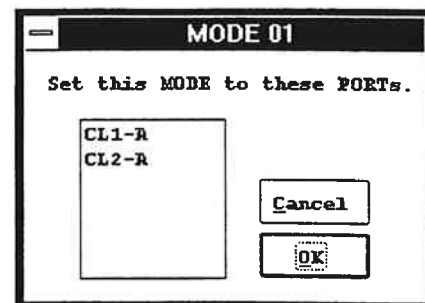
[Cancel] button : Ignores all operations for change and returns the screen to the 'SCSI Path-LDEV Configuration' window.

[OK] button : Displays the settings in the <HOST MODE> section of the 'SCSI Path-LDEV Configuration' window.

(4-2) 'MODE xx' window

When [Set] is selected (CL) in the 'Set Mode' window, the setting confirmation screen as shown on the right is displayed.

- Title of window : Displays the host identification data selected.
- PORT display area : Displays the port selected.
- [Cancel] button : Returns to the 'Set Mode' window without change of host identification data.
- [OK] button : Assigns the host identification data displayed in the title of window to the port displayed in the PORT display area and returns to the 'Set Mode' window and updates the MODE---PORT display in the 'Set Mode' window.



If you select mode 01, 02 or 03, SVP will set the same mode to the target port in Cluster-2.

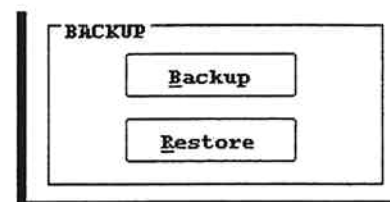
(5) Backup/Restore function

(5.1) [Backup] button

Creates the backup file (one file) for the SCSI path definition data and host identification data which are displayed.

If the backup file has already existed, the confirmation message for overwriting is displayed.

This button can be selected at any time.



(5.2) [Restore] button

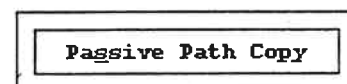
Reads the backup file and displays the data in the 'SCSI Path-LDEV Configuration' window. The read data which does not meet the installation of CHS or the setting of LDEV is not displayed.

(6) Passive path automatic definition

(6.1) [Passive Path Copy] button

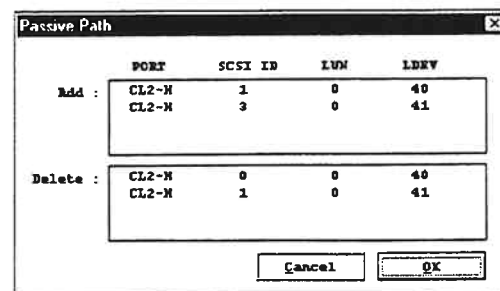
If you select a path in Cluster-1, and select this button, SVP can create an alternative path to the same port in the Cluster-2 automatically.

After creating the path, please confirm it in "Passive Path" window.



(6.2) 'Passive Path' window

- Add area : Display the paths which are created automatically.
- Delete area : Display the other paths than the paths which are created automatically in the Cluster-2.
- [OK] button : Add the path into Add area and delete the same path from Delete area.
- [Cancel] button : Go back to the 'SCSI Path-LDEV configuration' window.



(7) Quitting SCSI path definition

To quit SCSI path definition, select the [Cancel] button in the 'SCSI Path-LDEV Configuration' window.

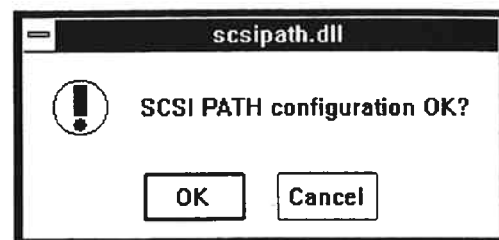
When the [Cancel] button is selected, the message shown to the right is displayed. To quit SCSI path definition, select [Yes].



(8) Exit from SCSI path definition

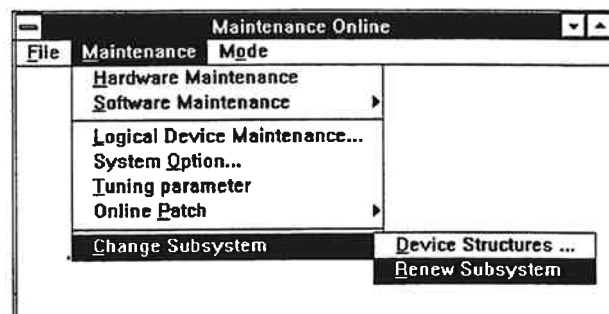
To exit from SCSI path definition, select the [OK] button in the 'SCSI Path-LDEV Configuration' window.

When the [OK] button is selected, the message shown to the right is displayed. To exit from SCSI path definition, select [OK].



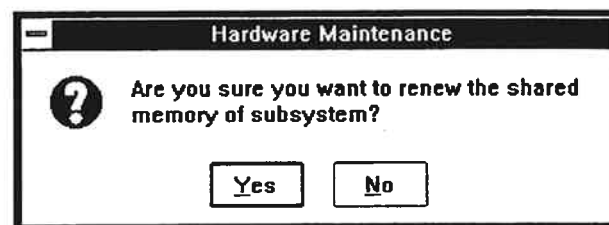
16.

Select [Change Subsystem] from [Maintenance] on 'Maintenance Online', then select [Renew Subsystem] (DR).



17. <Renew Subsystem Confirmation>

Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?".



18. <Follow the applicable Install or Deinstall procedure>

The steps that are not subject to installation (de-installation) are automatically skipped. See the page shown below for the subsequent SVP procedures.

[In case of cache memory]

Installation : Go to INST05-235 (c).

De-installation : Go to INST05-315 (c).

[In case of DKC additional power supplies and CL redundant power supplies Installation/De-Installation]

Non-Disruptive Installation : Go to INST02-20A step (3)-4.

Non-Disruptive De-Installation: Go to INST02-32 step (9)-2.

Disruptive Installation : Go to INST02-41 step (13)-2.

Disruptive De-Installation : Go to INST02-51 step (7)-2.

[In case of CHAs Installation/De-Installation]

Non-Disruptive Installation : Go to INST02-20A step (4)-3.

Non-Disruptive De-Installation: Go to INST02-32 step (8)-2.

Disruptive Installation : Go to INST02-41 step (14)-2.

Disruptive De-Installation : Go to INST02-50 step (6)-2.

[In case of Cache redundant power supply Installation/De-Installation]

Non-Disruptive Installation : Go to INST02-21 step (8)-2.

Non-Disruptive De-Installation: Go to INST02-31 step (6)-2.

Disruptive Installation : Go to INST02-41 step (16)-2.

Disruptive De-Installation : Go to INST02-50 step (4)-2.

[In case of DKAs Installation/De-Installation]

Non-Disruptive Installation : Go to INST02-21 step (11)-5.

Non-Disruptive De-Installation: Go to INST02-30 step (3)-2.

Disruptive Installation : Go to INST02-41 step (17)-2.

Disruptive De-Installation : Go to INST02-50 step (3)-2.

[In case of HDD canisters Installation/De-Installation]

Non-Disruptive Installation : Go to INST02-22 step (12)-3.

Non-Disruptive De-Installation: Go to INST02-30 step (2)-2.

Disruptive Installation : Go to INST02-41 step (18)-2.

Disruptive De-Installation : Go to INST02-50 step (2)-2.

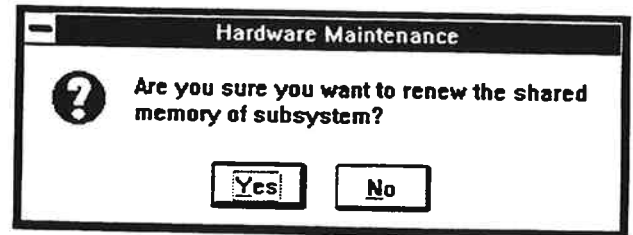
3.5.3.3 System Update Processing (SVP Procedure)

3.5.3.3.1 Installation system update processing

(a) Power supply installation

1. <Start installation>

Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

BLANK

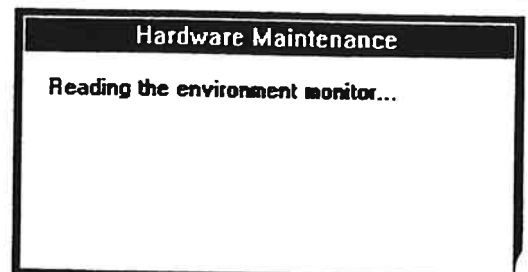
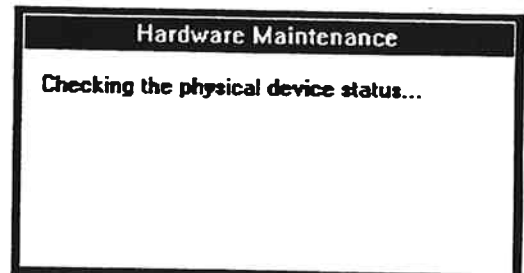
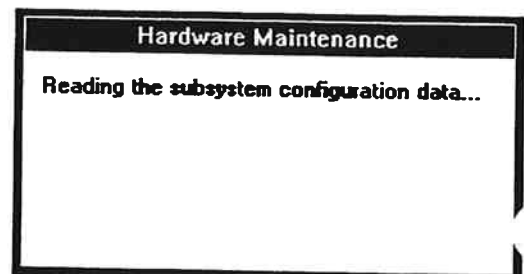
3.

"Reading the subsystem configuration data..."

"Checking the physical device status..."

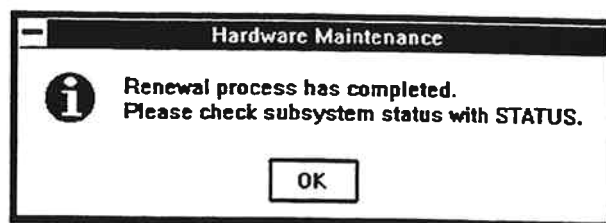
"Reading the environment monitor..."

are displayed.



4. <End of system update processing>

"Renewal process has completed. Please check subsystem status with STATUS." is displayed when recovery processing on all installed components is completed. Select [OK] in response to this message (CL).



The screen returns to 'Maintenance Online'.

5. <Return to General flow page>

[In case of DKC additional power supplies and CL redundant power supplies Installation]

Non-Disruptive Installation : Go to INST02-20A step (3)-5.

Disruptive Installation : Go to INST02-41 step (13)-3.

[In case of Cache redundant power supply Installation]

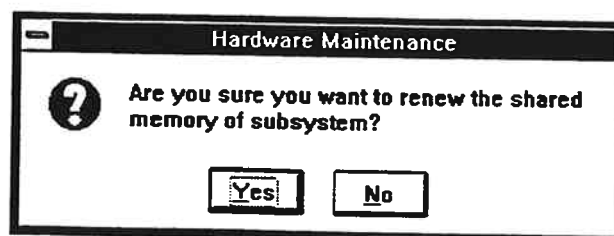
Non-Disruptive Installation : Go to INST02-21 step (8)-3.

Disruptive Installation : Go to INST02-41 step (16)-3.

(b) CHA (DKA) installation

1. <Start installation>

Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



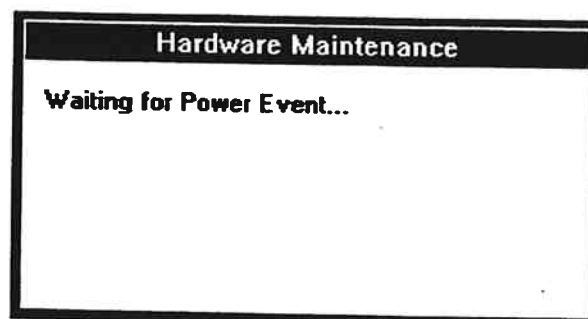
2. <Check that hardware components are installed>

Select [OK] (CL) after making sure that all hardware components are installed correctly in response to "Please install the units in the system before starting this process. If installation has been completed, push OK."



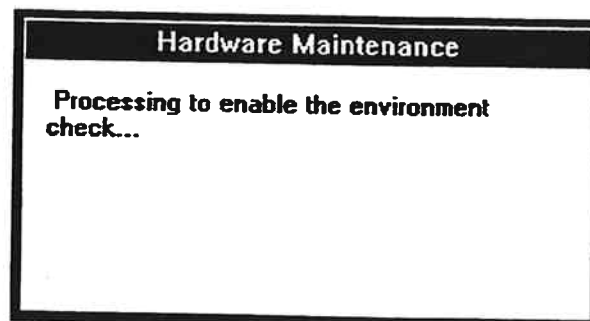
3.

"Waiting for Power Event..." is displayed.



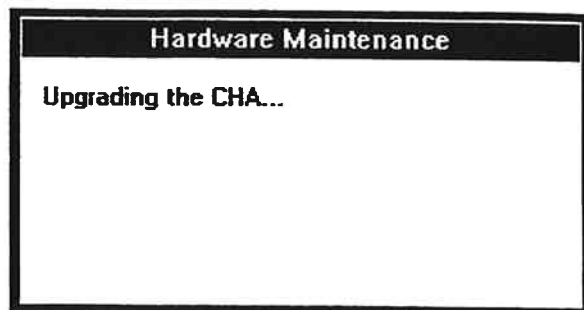
[When upgrading a subsystem of 2 DKA boards to a subsystem of 4 or more DKA boards.]

"Processing to enable the environment check..." is displayed.



4. <Include CHA/DKA>

"Upgrading the CHA/DKA..." is displayed and the inclusion procedure is automatically performed.
When the CHA/DKA inclusion processing is completed, an inline test is automatically started with message "CHA/DKA inline test in progress".



5. <DKU PATH INLINE>

When DKA is installed, DKU PATH INLINE is run.

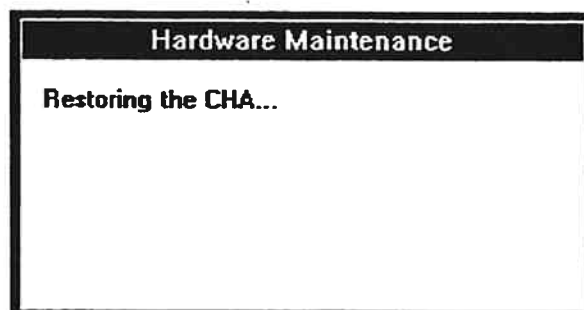
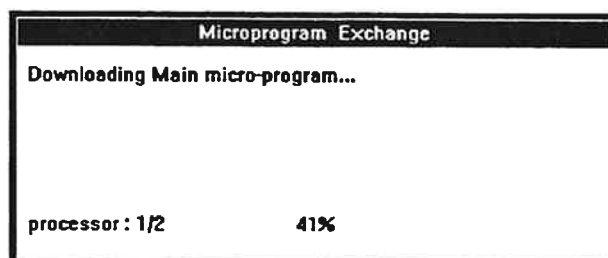
6. <Reading subsystem status...>

7. <Downloading microprogram>

Microprograms are automatically downloaded for each processor.

When DKA was installed, MAIN and RAM BOOT Micro Programs are downloaded.

When CHA was installed, LCP (MCP), LCDG, MAIN, RAM BOOT Micro Programs are downloaded.



8. <CHA/DKA is restored>

CHA/DKA recovery processing is automatically executed.
When the recovery processing is completed, one of the messages listed below appears.



9. <End of system update processing>

"Renewal process has completed. Please check subsystem status with STATUS." is displayed when recovery processing on all installed components is completed. Select [OK] in response to this message (CL).



The screen returns to 'Maintenance Online'.

10. <Return to General flow page>

[In case of CHAs Installation]

Non-Disruptive Installation : Go to INST02-20A step (4)-4.

Disruptive Installation : Go to INST02-41 step (14)-3.

[In case of DKAs Installation]

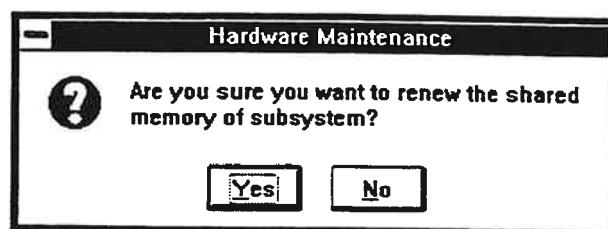
Non-Disruptive Installation : Go to INST02-21 step (11)-6.

Disruptive Installation : Go to INST02-41 step (17)-3.

(c) Cache installation

1. <Start installation>

Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

BLANK

3.

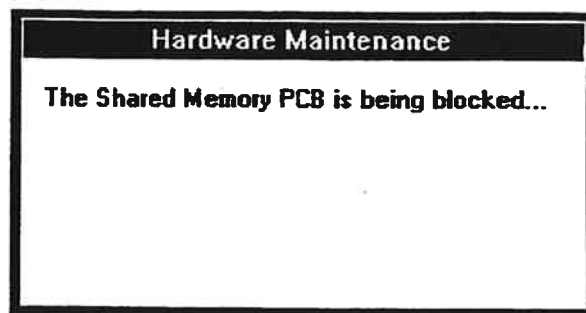
BLANK

4.

BLANK

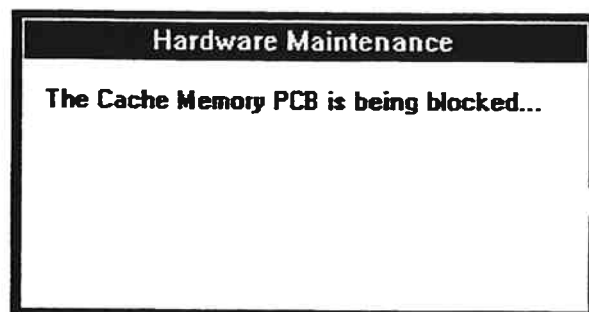
5.

"The Shared Memory PCB is being blocked..." is displayed.



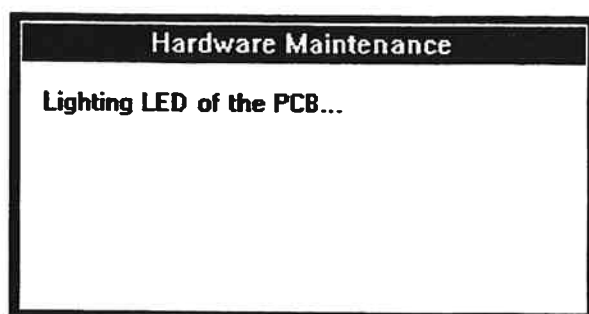
6. <Include Cache Memory>

"The cache memory PCB is being blocked" is displayed.



7.

"Lighting LED of the PCB..." is displayed.



8. <Perform cache hardware installation>

When "Replace or insert the Memory PCBs of cluster-x.
When completed, select [OK]" is displayed, install
hardware components according to the cache hardware
installation procedure.



Go to the pages listed in the table below.

Cluster No.	Flowchart Page
Cluster 1	INST02-52 step ②
Cluster 2	INST02-52 step ④

9.

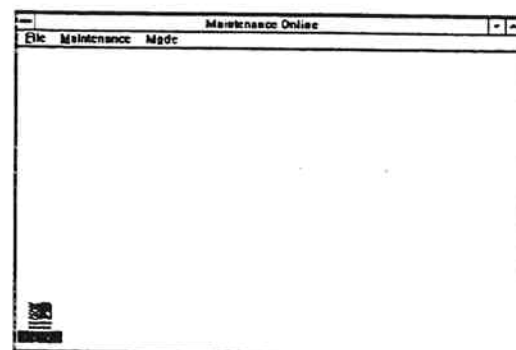
After installation of cache memory on one side is completed, select [OK] in response to "Replace or insert the Memory PCBs of cluster-x. When completed, select [OK]." (CL).



10. <Cache CUDG executes>

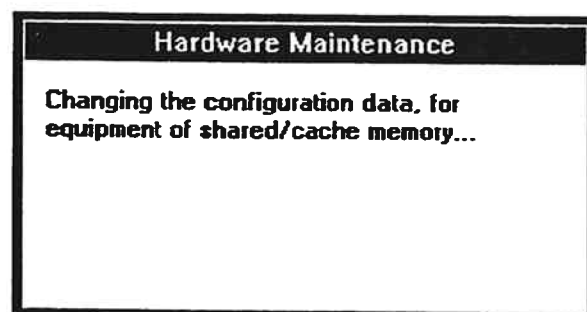
Diagnosis ICON shown in the right figure is displayed.

When CUDG is completed, right figure disappears and recovery processing is automatically started with message [Restoring].



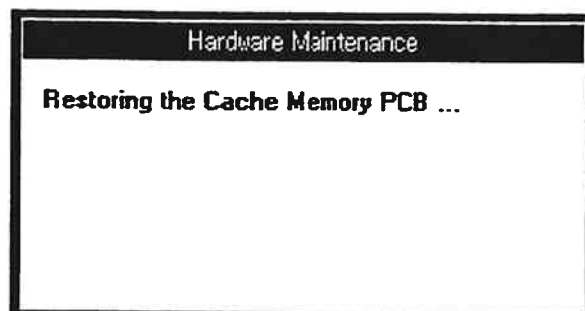
11.

"Changing the configuration date, for equipment of shared/cache memory..." is displayed



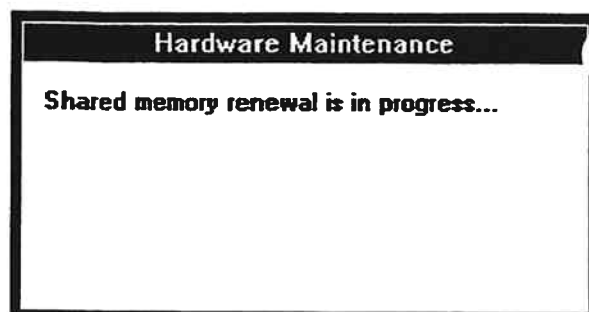
12.

"Restoring the Cache Memory PCB" is displayed.



13.

"Shared memory renewal is in progress" is displayed.

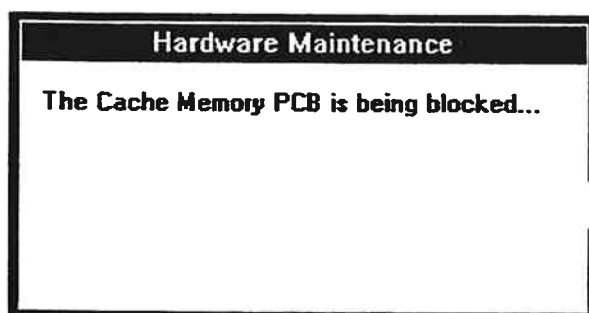


14. <Recover one side of cache>

When recovery processing is completed,
"The Cache Memory PCB is being blocked." message
appears.

Processing proceeds to blocking of the other side of
CACHE Memory.

Subsequently, repeat steps 5 to 13 for the other side of
cache.



15.

BLANK

16. <End of system update processing>

"Renewal process has completed. Please check
subsystem status with STATUS." is displayed when
recovery processing on all installed components is
completed. Select [OK] in response to this message
(CL).



The screen returns to 'Maintenance Online'.

17. <Return to General flow page>

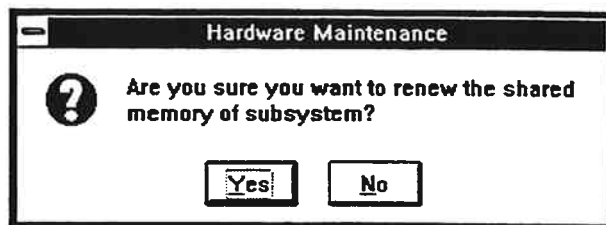
[In case of Cache Memory and Shared Memory Installation]

Go to INST02-53 step ⑥

(d) HDD installation

1. <Start installation>

Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2. <Check that hardware components are installed>

Select [OK] (CL) after making sure that all hardware components are installed correctly in response to "Please install the units in the system before starting this process. If installation has been completed, push OK."



3.

BLANK

4. <Include physical drives>

"Upgrading the physical device..."

"Changing the subsystem configuration data..."

"Upgrading the logical device..."

"Changing the logical device configuration data..." are displayed.

Hardware Maintenance

Upgrading the physical device...

Hardware Maintenance

Changing the subsystem configuration data...

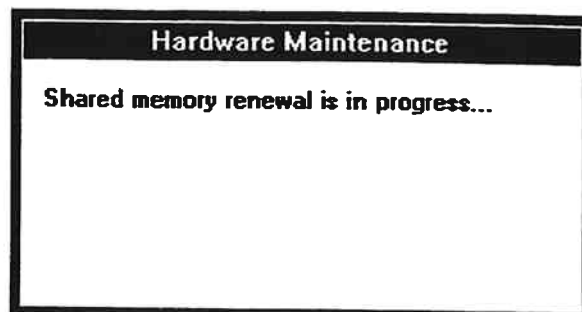
Hardware Maintenance

Upgrading the logical device...

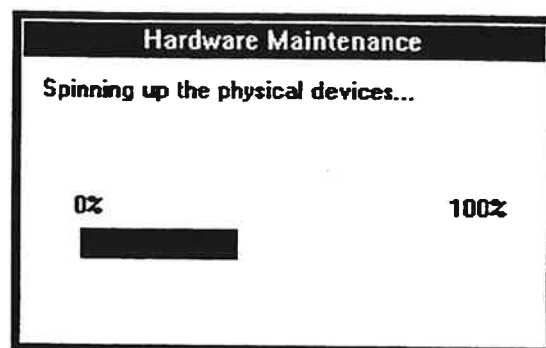
Hardware Maintenance

Changing the logical device configuration data...

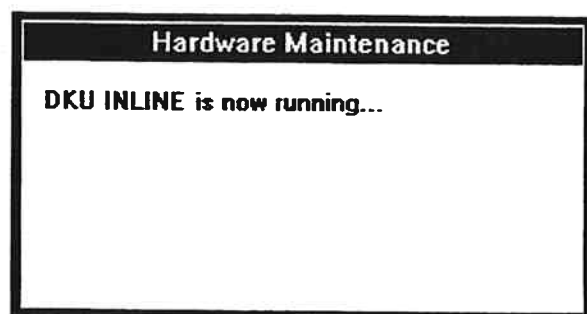
5. <Update of the system configuration>
 "The Shared Memory PCB is being blocked"
 "Shared memory renewal is in progress..." is displayed.



6. "Spinning up the physical devices..." is displayed.

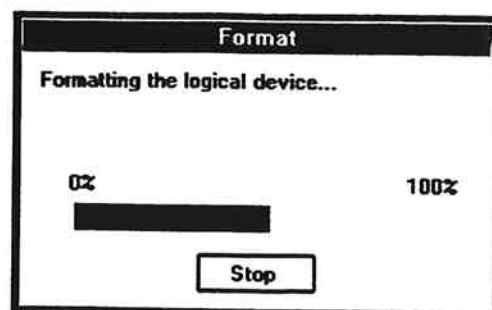


7. <Execute DKU INLINE test>
 "DKU INLINE is now running..."
 repeat the process for each installed Physical device.

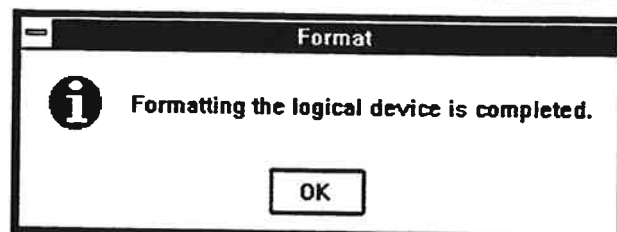


8. <LDEV FORMAT>

"Formatting the logical device..." is displayed.



After finishing the format of the logical device, "Formatting the logical device is completed" is displayed.



9. <End of system update processing>

"Renewal process has completed. Please check subsystem status with STATUS." is displayed when recovery processing on all installed components is completed. Select [OK] in response to this message (CL).



The screen returns to 'Maintenance Online'.

10. <Return to General flow page>

[In case of HDD Installation in change of the Device control value]

Non-Disruptive Installation : Go to INST02-22 step (12)-7.

Disruptive Installation : Go to INST02-42 step (18)-6.

[In case of HDD Installation in no change of the Device control value]

Non-Disruptive Installation : Go to INST02-22 step (12)-14.

Disruptive Installation : Go to INST02-42 step (18)-13.

(e) SCSI channel path installation

1. <Confirm vary off channel path>

After you confirm that you have varied off the concerned channel path(s), select (CL) [OK].



2. <System configuration is updated>

"The port is being blocked..."

"Changing the subsystem configuration data..."

"Reading the subsystem configuration data..."

"Restoring the port..."

are displayed.

Repeat above messages for the changing port(s).

3. <Return to General flow page>

[In case of SCSI channel path installation]

Non-Disruptive Installation : Go to INST02-20A step (4-1)-3

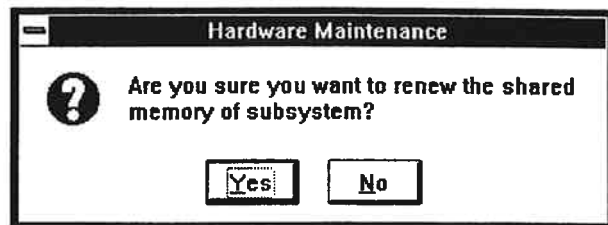
Disruptive Installation : Go to INST02-41 step (14-1)-3

3.5.3.3.2 De-installation system update processing

(a) HDD de-installation

1. <Start de-installation>

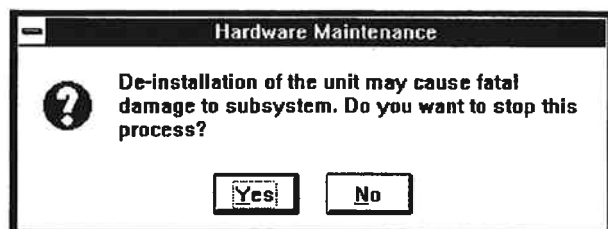
Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

Select [No] in response to "De-installation of the unit may cause fatal damage to subsystem. Do you want to stop this process?" (CL).

'Enter password' is displayed.



3.

NOTICE

This is a special (exceptional) operation that can cause a serious failure such as a system down or a data loss if a wrong part to be removed is selected, and requires an input of a password. Ask the technical support center about the appropriateness of the operation, and input the password after getting an approval of executing the operation.

Enter the password in response to 'Enter password' and select [OK] (CL).

Password is needed for this operation.

Please call Technical Support Center to obtain password and authorization.



4.

BLANK

5. <Maintenance-block of PCBs other than cache or shared memory>

At this moment, maintenance blocking is performed on PCBs other than memory systems with message "Checking the physical device status..." shown in the right figure.

This processing is carried out on each component that is subject to de-installation.

Hardware Maintenance

Checking the physical device status...

6. <Update device structure information about PCBs other than cache or shared memory>

"De-installation of the logical device..." and "Lighting LED of the PCB..." shown in the right figure is displayed and the device structure information update processing is performed on the current component. When the update processing is completed, the device structure information on the current component is set to [EMPTY] and the shut down LED on the PCB is lit.

Hardware Maintenance

De-installation of the logical device...

When the update of device structure information on all PCBs other than those on the memory systems is completed, automatically one of the two following message is displayed.

Then proceed with the related procedure for each message.

7. <Physical Drive blocking>

"Spinning down the physical devices..."

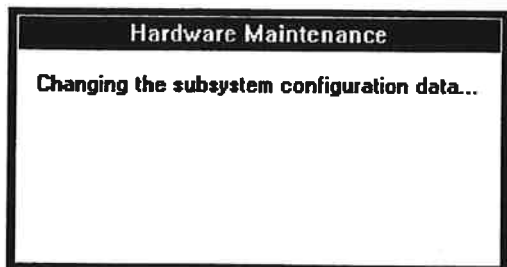
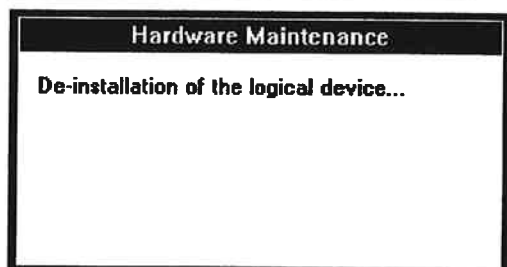
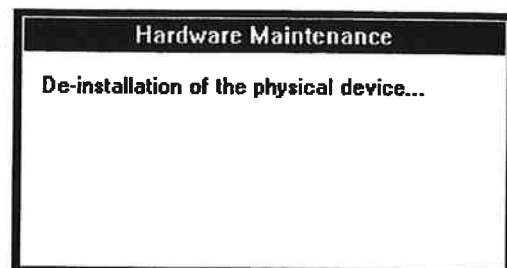
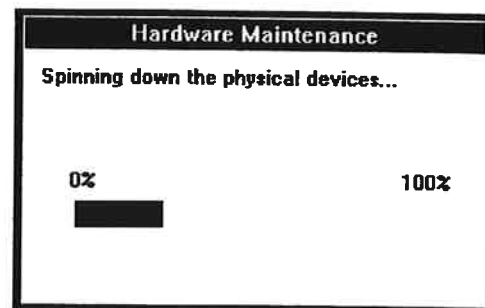
"De-installation of the physical devices..."

"Changing the subsystem configuration data..."

"De-installation of the logical device..."

"Changing the logical device configuration data..."

are displayed.

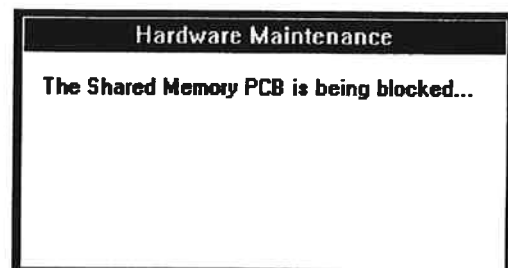


8. <System configuration is updated>

"The Shared Memory PCB is being blocked..."

"Shared memory renewal is in progress..."

Shown in the right figures are displayed and the update processing is performed on the current component.

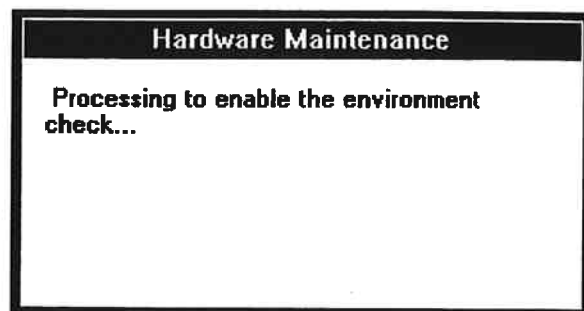


9.

Select [OK] in response to "If de-installation of the CHA/DKA, the physical devices or the redundant power supply has been completed, press OK." shown in the right figure (CL).

Selecting [OK] causes the next message to be displayed.

"Processing to enable the environment check..." is displayed.



10. <Check the end of de-installation procedure>

"Renewal process has completed. Please check subsystem status with STATUS." shown in the right figure displayed. Select [OK] in response to this message (CL).

The screen returns to 'Maintenance Online'.



11. <Return to General flow page>

[In case of HDD canisters De-Installation]

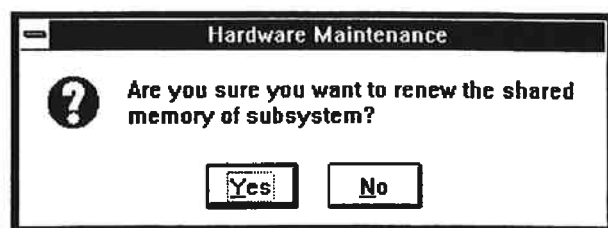
Non-Disruptive De-Installation: Go to INST02-30 step (2)-3.

Disruptive De-Installation : Go to INST02-50 step (2)-3.

(b) CHA (DKA) de-installation

1. <Start de-installation>

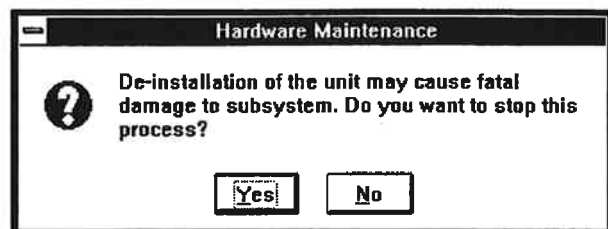
Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

Select [No] in response to "De-installation of the unit may cause fatal damage to subsystem. Do you want to stop this process?" (CL).

'Enter password' is displayed.



3.

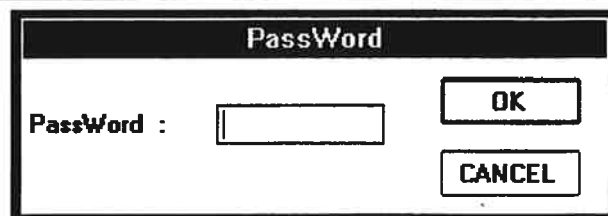
NOTICE

This is a special (exceptional) operation that can cause a serious failure such as a system down or a data loss if a wrong part to be removed is selected, and requires an input of a password. Ask the technical support center about the appropriateness of the operation, and input the password after getting an approval of executing the operation.

Enter the password in response to 'Enter password' and select [OK] (CL).

Password is needed for this operation.

Please call Technical Support Center to obtain password and authorization.



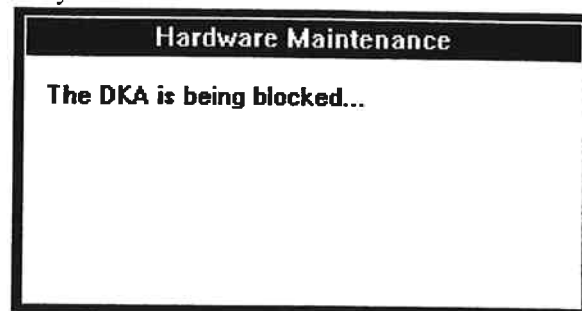
4.

BLANK

5. <Maintenance-block of PCBs other than cache or shared memory>

At this moment, maintenance blocking is performed on PCBs other than memory systems with message "The CHA (DKA) is being blocked..." shown in the right figure.

This processing is carried out on each component that is subject to de-installation.

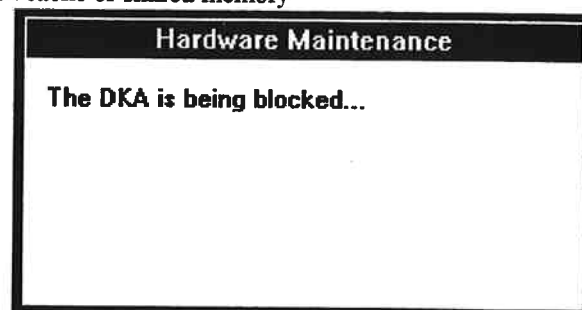


6. <Update device structure information about PCBs other than cache or shared memory>

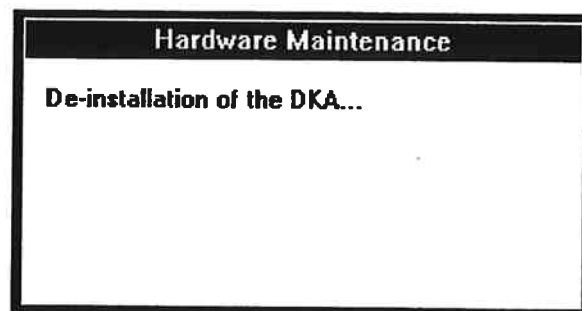
"The CHA (DKA) is being blocked..."

"De-installation of the CHA (DKA)..." and

"Lighting LED of the PCB..." shown in the right figure is displayed and the device structure information update processing is performed on the current component. When the update processing is completed, the device structure information on the current component is set to [EMPTY] and the shut down LED on the PCB is lit.



When the update of device structure information on all PCBs other than those on the memory systems is completed, automatically one of the two following message is displayed.



7.

BLANK

8. <System configuration is updated>

"The Shared Memory PCB is being blocked..."

"Shared memory renewal is in progress..."

Shown in the right figures are displayed and the update processing is performed on the current component.

Hardware Maintenance

The Shared Memory PCB is being blocked...

Hardware Maintenance

Shared memory renewal is in progress...

[When downgrading a subsystem of 4 or more DKA boards to a subsystem of 2 DKA boards.]

"Reading the environment monitor..." is displayed.

Hardware Maintenance

Reading the environment monitor...

"Processing to disable the environment check..." is displayed.

Hardware Maintenance

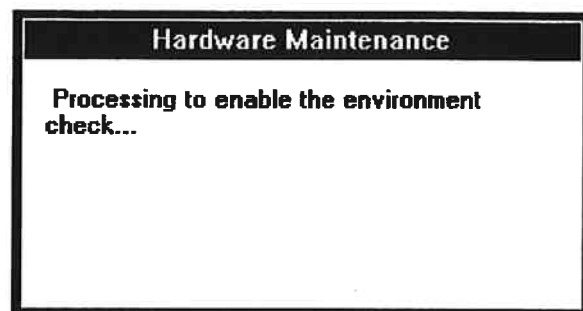
Processing to disable the environment check...

9.

Select [OK] in response to "If de-installation of the CHA/DKA, the physical devices or the redundant power supply has been completed, press OK." shown in the right figure (CL).

Selecting [OK] causes the next message to be displayed.

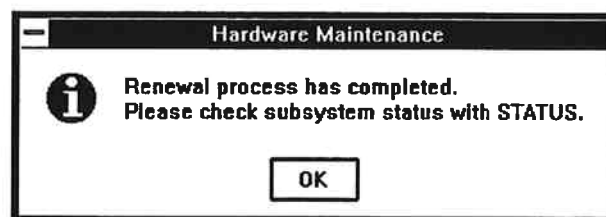
"Processing to enable the environment check..." is displayed.



10. <Check the end of de-installation procedure>

"Renewal process has completed. Please check subsystem status with STATUS." shown in the right figure displayed. Select [OK] in response to this message (CL).

The screen returns to 'Maintenance Online'.



11. <Return to General flow page>

[In case of DKAs Installation]

Non-Disruptive De-Installation: Go to INST02-30 step (3)-3.

Disruptive De-Installation : Go to INST02-50 step (3)-3.

[In case of CHAs De-Installation]

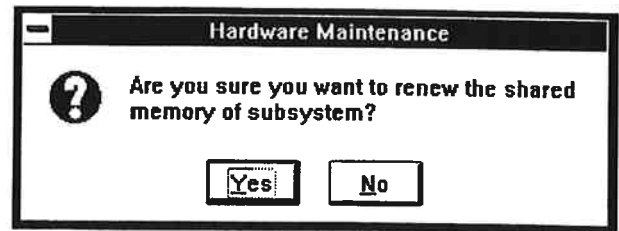
Non-Disruptive De-Installation: Go to INST02-32 step (8)-3.

Disruptive De-Installation : Go to INST02-50 step (6)-3.

(c) Cache de-installation

1. <Start de-installation>

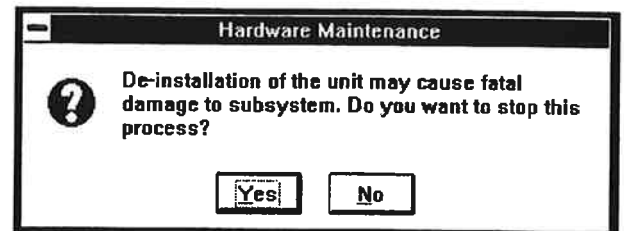
Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

Select [No] in response to "De-installation of the unit may cause fatal damage to subsystem. Do you want to stop this process?" (CL).

'Enter password' is displayed.



3.

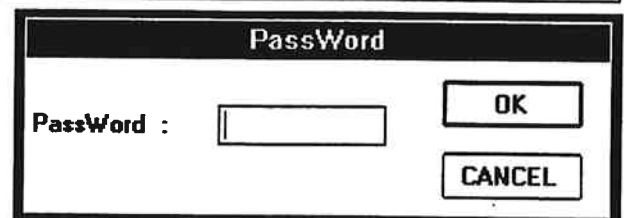
NOTICE

This is a special (exceptional) operation that can cause a serious failure such as a system down or a data loss if a wrong part to be removed is selected, and requires an input of a password. Ask the technical support center about the appropriateness of the operation, and input the password after getting an approval of executing the operation.

Enter the password in response to 'Enter password' and select [OK] (CL).

Password is needed for this operation.

Please call Technical Support Center to obtain password and authorization.



4.

BLANK

5. <Memory blocking on one side>

When blocking of one side of shared memory and Cache memory is completed, "The Cache Memory PCB is being blocked..." "The Shared Memory PCB is being blocked..." shown in the right figure disappears.

Hardware Maintenance

The Cache Memory PCB is being blocked...

Hardware Maintenance

The Shared Memory PCB is being blocked...

6.

"Lighting LED of the PCB..." is displayed.

Hardware Maintenance

Lighting LED of the PCB...

7. <Perform cache hardware de-installation>

When "Replace or pull out the Memory PCBs of cluster-x. When completed, select [OK]." is displayed, perform hardware de-installation steps according to the cache hardware de-installation procedure.

Go to the pages listed in the table below.

Cluster No.	Flowchart Page
Cluster 1	INST02-54 step ②
Cluster 2	INST02-54 step ④

Hardware Maintenance



Replace or pull out the Memory PCBs of cluster-1. When completed, select [OK].

OK

8.

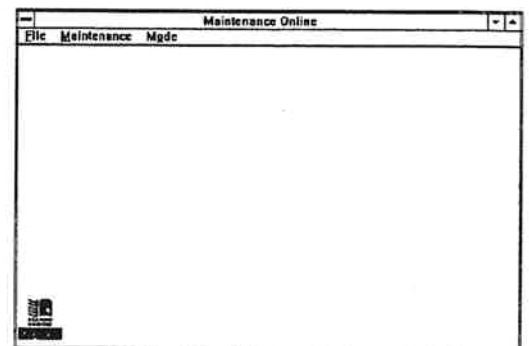
After the hardware procedure for one side of cache memory is completed, select [OK] in response to "Replace or pull out the Memory PCBs of cluster-x. When completed, select [OK].".

"INLINE CUDG is running" is displayed.



9. <Cache CUDG executes>

Diagnosis ICON shown in the right figure is displayed.

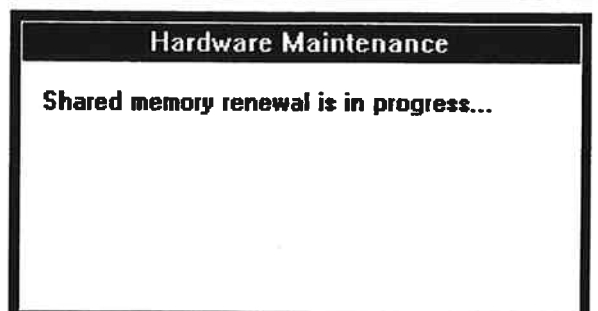
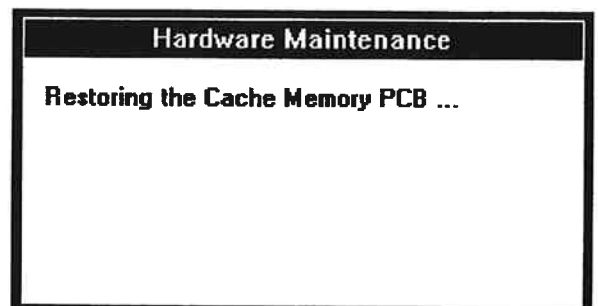


10.

When CUDG is completed, recovery processing is automatically started with message.

"Restoring the Cache Memory PCB..."

"Shared memory renewal is in progress..."



11.

When the recovery processing is complete, processing proceeds to blocking of the other side of shared memory.

Subsequently, repeat steps 5 to 9 for the other side of cache.

12.

When all cache recovery operations are completed,

“Renewal process has completed. Please check subsystem status with STATUS.” message appears.

13. <Check the end of de-installation procedure>

“Renewal process has completed. Please check subsystem status with STATUS.” shown in the right figure displayed. Select [OK] in response to this message (CL).



The screen returns to 'Maintenance Online'.

14. <Return to General flow page>

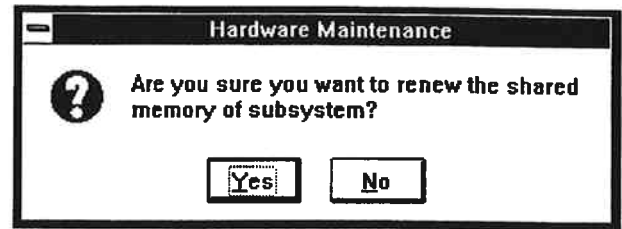
[In case of Cache Memory and Shared Memory De-Installation]

Go to INST02-55 step ⑥

(d) Power supply de-installation

1. <Start de-installation>

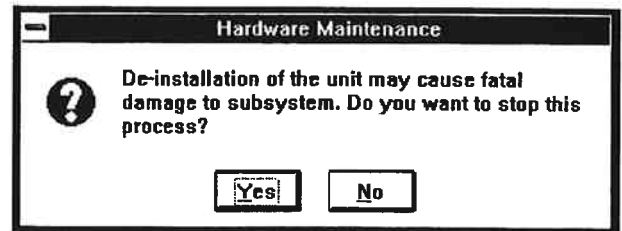
Select [Yes] in response to "Are you sure you want to renew the shared memory of subsystem?" (CL).



2.

Select [No] in response to "De-installation of the unit may cause fatal damage to subsystem. Do you want to stop this process?" (CL).

'Enter password' is displayed.



3.

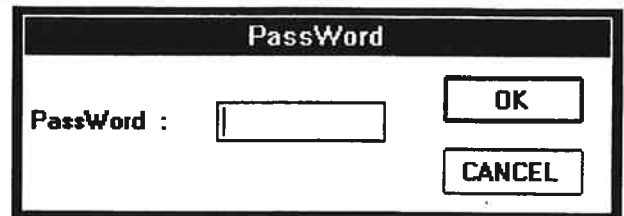
NOTICE

This is a special (exceptional) operation that can cause a serious failure such as a system down or a data loss if a wrong part to be removed is selected, and requires an input of a password. Ask the technical support center about the appropriateness of the operation, and input the password after getting an approval of executing the operation.

Enter the password in response to 'Enter password' and select [OK] (CL).

Password is needed for this operation.

Please call Technical Support Center to obtain password and authorization.



4.

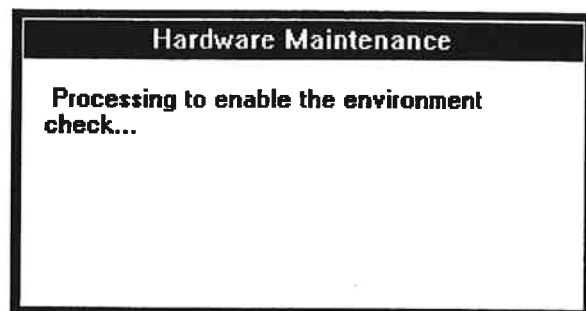
BLANK

5.

Select [OK] in response to "If de-installation of the CHA/DKA, the physical devices or the redundant power supply has been completed, press OK." shown in the right figure (CL).

Selecting [OK] causes the next message to be displayed.

"Processing to enable the environment check..." is displayed.



6. <Check the end of de-installation procedure>

"Renewal process has completed. Please check subsystem status with STATUS." shown in the right figure displayed. Select [OK] in response to this message (CL).

The screen returns to 'Maintenance Online'.



7. <Return to General flow page>

[In case of DKC additional power supplies and CL redundant power supplies De-Installation]

Non-Disruptive De-Installation: Go to INST02-32 step (9)-3.

Disruptive De-Installation : Go to INST02-51 step (7)-3.

[In case of Cache redundant power supply De-Installation]

Non-Disruptive De-Installation: Go to INST02-31 step (6)-3.

Disruptive De-Installation : Go to INST02-50 step (4)-3.

(e) SCSI channel path de-installation

1. <Confirm vary off channel path>

After you confirm that you have varied off the concerned channel path(s), select (CL) [OK].



2. <System configuration is updated>

"The port is being blocked..."

"Changing the subsystem configuration data..."

"Reading the subsystem configuration data..."

"Restoring the port..."

are displayed.

Repeat above messages for the changing port(s).

3. <Return to General flow page>

[In case of SCSI channel path De-installation]

Non-Disruptive De-installation : Go to INST02-50 step (6-0)-3

Disruptive De-installation : Go to INST02-32 step (8-0)-3

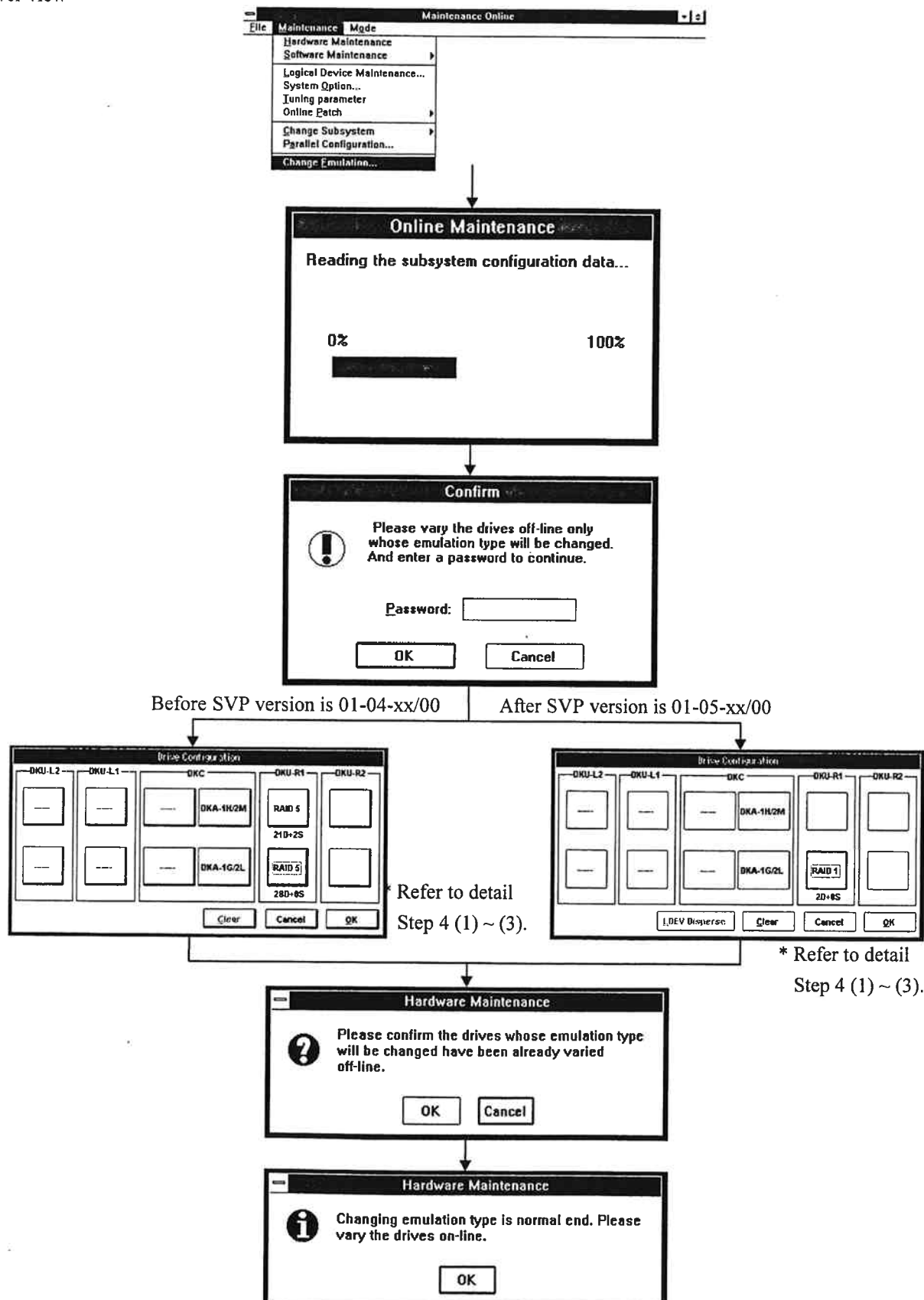
3.5.3.4 Setting up the Change Emulation

Perform the following procedure to change the emulation type between 3390-3 and 3390-3R.

In other cases, de-install HDD Canister according to the procedure described in installation/de-installation section and change the emulation type when installation is performed.

If DK309-180 (DKU-F305I-1804/1801) is set, go to INST08-360.

Over view

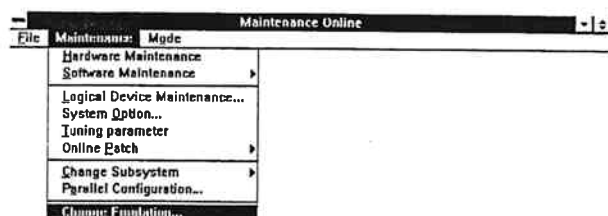


1. <Start [Maintenance Online]>
Perform SCSI cable connection (disconnection) steps 1 to 4 explained in 3.5.3.1 (see page INST05-110).

This step is not required if the screen is already shown.

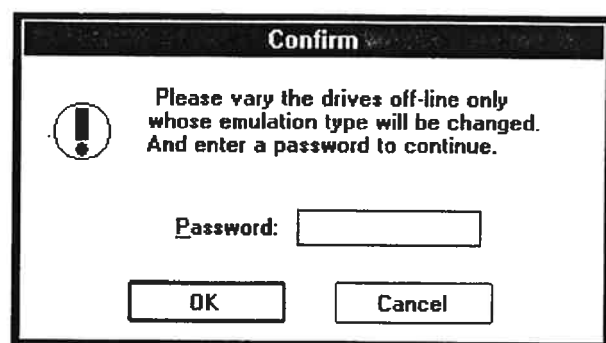
2. <Start Change Emulation type>
Select [Change Subsystem] from [Maintenance] on 'Maintenance Online', then select [Change Emulation...] (DR).

'Confirm' is opened.



3. Enter the password and select [OK] (CL).

If [Cancel] is selected, terminate the Change Emulation procedure.
'Maintenance Online' is automatically displayed next.



NOTICE

This is a special (exceptional) operation that can cause a serious failure such as a system down or a data loss if a wrong drive for which the emulation type is to be changed is selected, and requires an input of a password. Ask the technical support center about the appropriateness of the operation, and input the password after getting an approval of executing the operation.

4. <Drive Configuration Display>

SVP displays 'Drive Configuration'.

SVP displays the DKU-L1 and L2 status on the left side, and the DKU-R1 and R2 status on the right side.

The information on each button means as follows.

- Format "___" : not to be able to setup
 nothing : not setup yet
 RAID level : already setup
 blink : changing the emulation type

Below the button, SVP displays the drive configuration information.

Format mD+nS

m = The number of data drives

n = The number of spare drives

SVP displays the configuration status on the center of this display.

Format "___" : not implemented

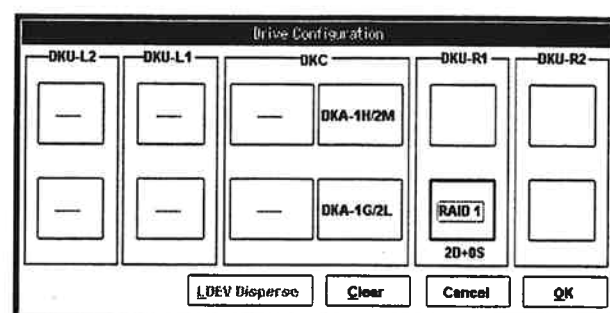
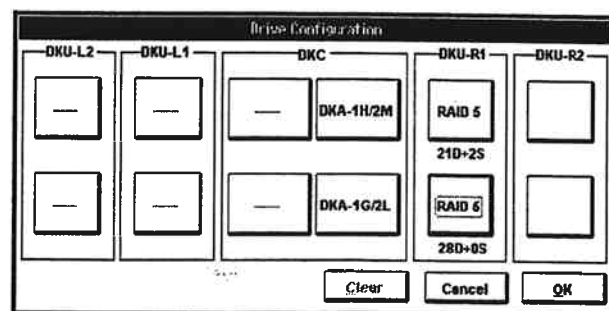
DKA name : already implemented

(Note) B4 unit means that is a half side of DKU.

In this configuration, SVP cannot process other operation until the mode is set from 3390-3 to 3390-3R or from 3390-3R to 3390-3 by the first operation and finishes the drive configuration.

Next, push a B4 button that you want to change the emulation type. The following table shows the display sequence after pushing the button.

	Next display sequence
 not setup	not action
 cannot setup	not action
 already setup	go to "Group setup display".



(1) Group setup display

After pushing the button on the drive configuration display, SVP displays a RAID 5 group setup display.

In this RAID 5 group setup display, there are two kinds of button, one is large button that means a group, other is small button that means spare.

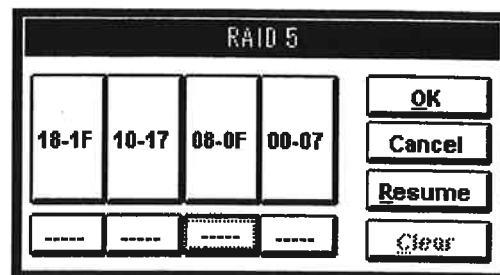
<Group button> Format

nothing : not implemented
LDEV number : already implemented
blink : already changed the emulation type

<Spare button> Format

"...." : not implemented
"Spare" : already implemented

- If you push the group button displayed nothing, or push the spare button displayed as "...", SVP does not act any more.
- If you push the spare button displayed as "Spare", SVP does not act any more.
- If you push the group button displayed LDEV number, SVP opens RAID set display.



- ❖ SVP collectively changes LDEV ID by each 32 boundary units including the number which the selected group already had.
- ❖ If the Raid type is RAID 1, SVP changes all LDEV ID at a time.
- ❖ If you select a group that has 3390-3R when you change the mode from 3390-3 to 3390-3R when you change the mode from 3390-3 to 3390-3R, SVP displays the message that you cannot change.
- ❖ If you select a group that has 3390-3 when you change the mode from 3390-3R to 3390-3, SVP displays the message that you cannot change.
- ❖ If the selected group is setup other emulation type except 3390-3 and 3390-3R, or if the group has already setup other emulation type in 32 boundary units, SVP displays the message that you cannot change the type.
- ❖ If the 3390-3 or 3390-3R are not defined in the "\\dkc200\\config\\drv*.txt", SVP displays the message that you cannot operate.

- If "Cancel" button is pushed, SVP cancel the setup, closes the group setup display, and return to the "Drive configuration" display.
- If "Resume" button is pushed, SVP goes back to the previous state.



(2) Drive configuration setup display

When you push the group button on the group setup display, SVP opens the 'RAID Set' displays.

(a) If you select the group which can change the emulation type, 'RAID Set' display has the following items.

- Drive Type : Display the drive type.
 Emulation Type : Display the emulation type including "3390-3" and "3390-3R".
 PDEV:LDEV : Display the relationship between PDEV number and LDEV number.
 GRP : Display "1"
 LDEV : Display the first LDEV number which group has bounded by 32.
 Spare : Display the number of Spare drives which selected group has.

RAID Set			
Drive Type	DK306-45	GRP	1
Emulation Type	3390-3	LDEV	00
PDEV : LDEV	7PDEV : 8LDEV	Spare	0
			OK
			Cancel

(b) If you select the group which cannot change the emulation type, 'RAID Set' display has the following items.

- Drive Type : Display the drive type.
 Emulation Type : Display the emulation type which the group cannot select.
 PDEV:LDEV : Display the relationship between PDEV number and LDEV number.
 GRP : Display "1"
 LDEV : Display the first LDEV number which group has bounded by 32.
 Spare : Display the number of Spare drives which selected group has.

RAID Set			
Drive Type	DK306-45	GRP	1
Emulation Type	3390-2	LDEV	88
PDEV : LDEV	7PDEV : 8LDEV	Spare	0
			OK
			Cancel

Please push [OK] if you finish setting the emulation type. If you stop setting the emulation type, please push [Cancel]. After "Cancel" SVP closes 'RAID Set' display and returns to the 'Drive configuration' display.

RAID Set			
Drive Type	DK306-45	GRP	1
Emulation Type	3390-3R	LDEV	00
PDEV : LDEV	7PDEV : 8LDEV	Spare	0
			OK
			Cancel

RAID Set			
Drive Type	DK308-90	GRP	1
Emulation Type	3390-3	LDEV	20
PDEV : LDEV	2PDEV : 3LDEV	Spare	0
			OK
			Cancel
Message			

❖ If you push [OK] without changing the emulation type, SVP displays the message that you does not change the type, and return to the 'RAID Set' display.



❖ If you change the emulation type that is not allowed by limit.ini, SVP displays the message that you cannot setup the intermixed, and return to the 'RAID Set' display.



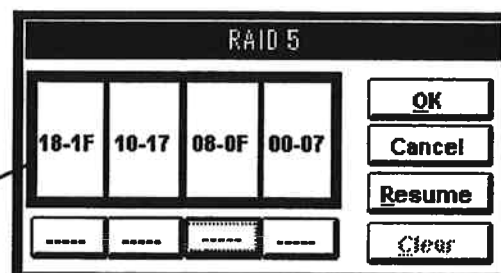
❖ If you change the emulation type that the group has mixed emulation type, SVP displays the message that you cannot setup the intermixed type, and return to the 'RAID Set' display.



(3) After setup the type

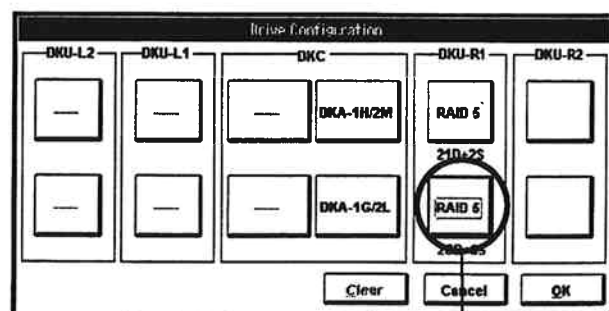
If [OK] is pushed on the 'RAID Set' display, SVP displays the "Group setup display" blinking the LDEV number which group was changed the emulation type.

Blink



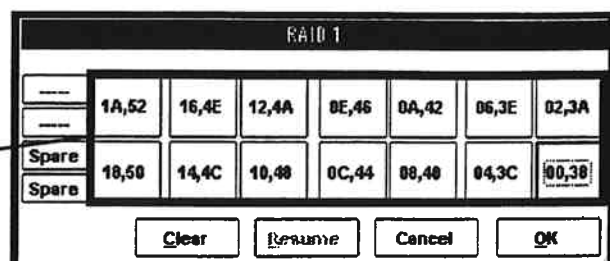
If [OK] button is pushed on the "group setup display", SVP displays the "Drive configuration display" blinking the RAID type and drive configuration information which group has changed the emulation type.

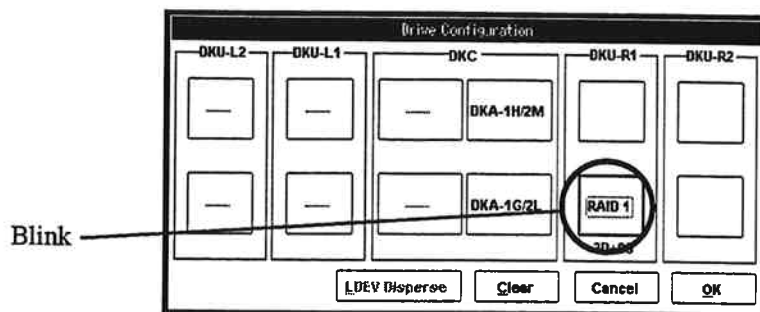
If you finish setting all B4 units which you want to change, please push [OK]. If you stop setting, push [Cancel] button.



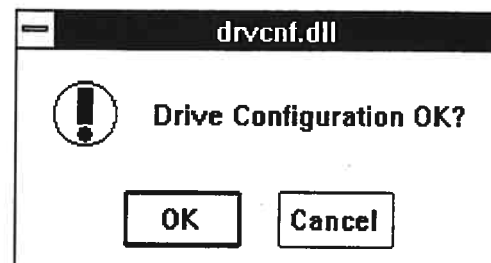
Blink

Blink





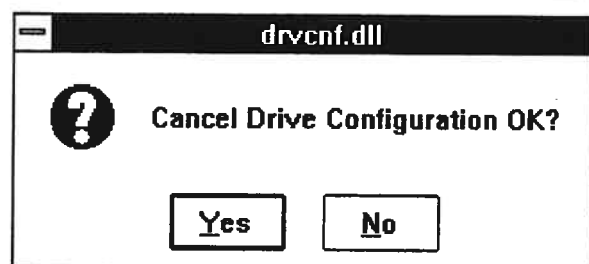
If you push [OK] on the "Drive configuration display", SVP displays the message, "Drive Configuration OK?". If you want to proceed to the next step, please push [OK], if you want to return to the configuration display, push [Cancel].



If you did not change the emulation type and push [OK] on the "Drive configuration display", SVP displays the message that you had not changed the type yet.

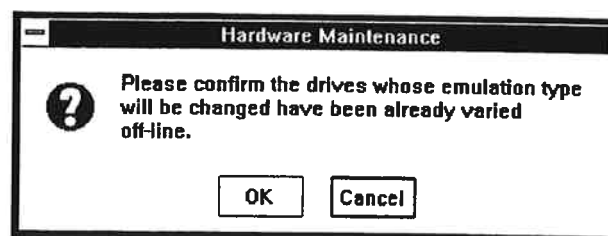


If you push [Cancel] on the "Drive configuration display", SVP displays the message, "Cancel Drive Configuration OK?". If you stop setting the emulation type, push [Yes]. If you want to reset the type and return to the "Drive configuration display", push [No].



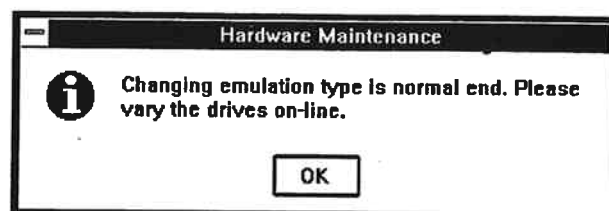
5. <Drive vary Off-line>

Check the drives whose emulation type will be changed have been already varied off-line, and select [OK] (CL).
If you select [Cancel], terminate the change emulation procedure.



6. <Drive vary On-line>

Change emulation processing is complete.
Please vary the drives on-line, select [OK] (CL).

**Note:**

If the message "Changing emulation type is failed" is displayed, see TROUBLE SHOOTING SECTION.



3.5.4 System Tuning SVP Procedure

3.5.4.1 System Tuning

NOTICE

Powering off/on is required owing to the performance of this operation.

Overview

This function modify the part of established subsystem configuration data.

The data to be modified is control data closely related to a host device, so the data can not be modified on on-line.

After modification of the data, power DKC off and on.

The data to be modified is listed below.

'Device Structure Setup' ----- DKC Serial Number/Sub System ID/DKC Emulation Type

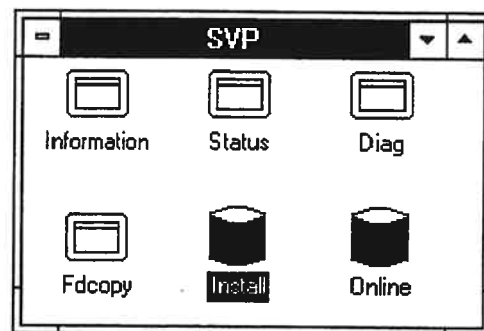
'Channel Configuration' ----- Channel Speed/Device Address/LDEV Control Drives

'System Option Setup' ----- Spare Disk Recovering/Dynamic Sparing

1. <Start [Install]>

Select [Install] from 'SVP' (DC).

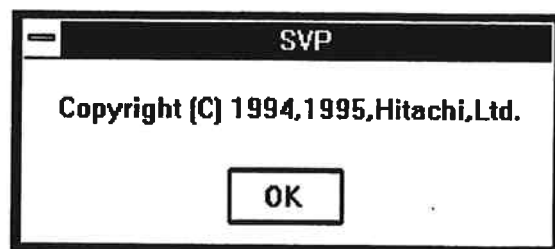
'SVP' is displayed.



2.

Select [OK] from 'SVP' (CL).

'Install' is opened.



3. <Change SVP mode>

Select [Modify] from [Mode] on 'Install' (DR).

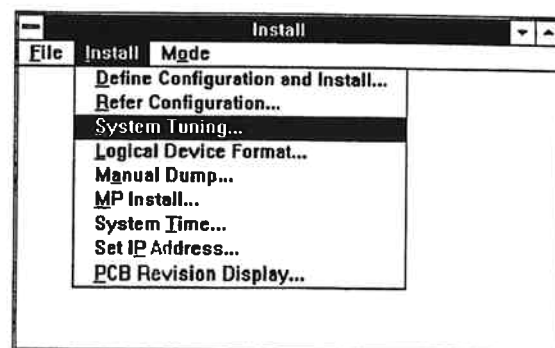


The SVP is switched into the Modify mode.

4. <Specify beginning of installation>

Select [System Tuning...] from [Install] on 'Install' (DR)

Message "This operation will be unavoidable subsystem turning off. You need the password to continue."



5.

NOTICE

Powering off/on is required owing to the performance of this operation.

Ask the technical support center about the appropriateness of the operation, and input a password after getting an approval of executing the operation.

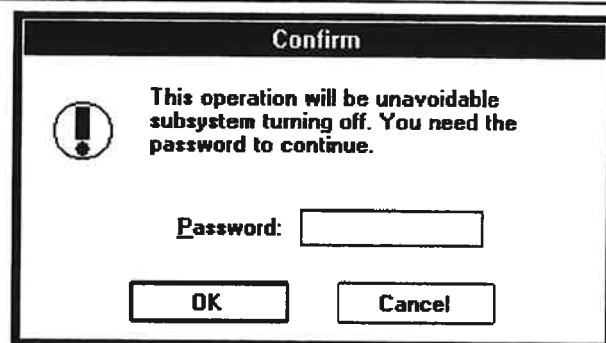
Enter the password and select [OK] (CL).

Password is needed for this operation.

Please call Technical Support Center to obtain password and authorization.

If [Cancel] is selected (CL), terminate the installation procedure.

'Device Structure Setup' is automatically displayed next.



6. <Define configuration information>

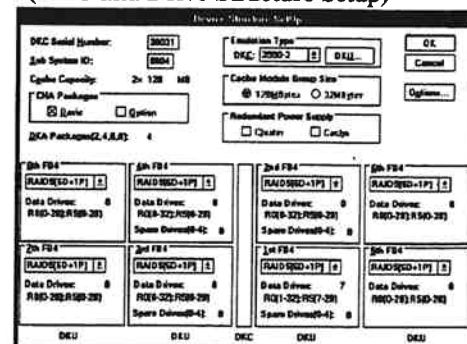
Define the device configuration information from 'Device Structure Setup' according to the device configuration worksheet. When you select [OK] (CL), 'Channel Configuration' is automatically displayed.

This procedure finishes when you select [Cancel] (CL).

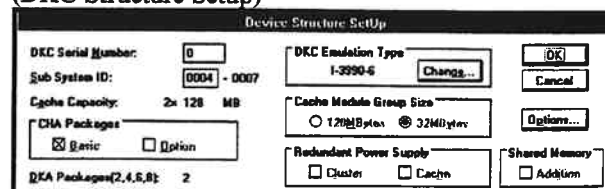
If [Options...] is selected (CL), 'System Option Setup' is automatically displayed.

If [Change...] is selected (CL), 'DKC Emulation' is displayed.

(DKC and Drive Structure Setup)



(DKC Structure Setup)



*When the DKC Structure Setup Screen is displayed, go to Step 11-1 (INST05-371).

7. <System option setup>

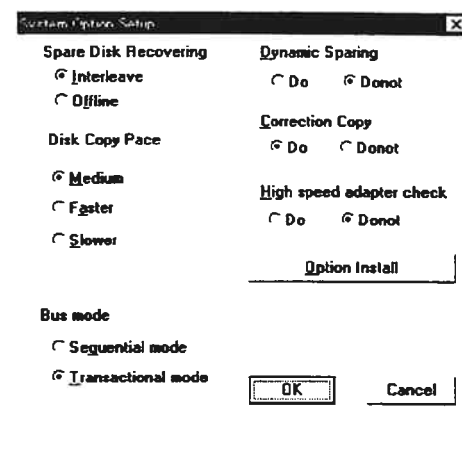
Define the device configuration information from 'System Option Setup' according to the device configuration worksheet.

After setting up all items, select [OK] (CL).

The next message screen is displayed.

When you select [Cancel] (CL), 'System Option Setup' is closed and 'Device Structure Setup' appears again.

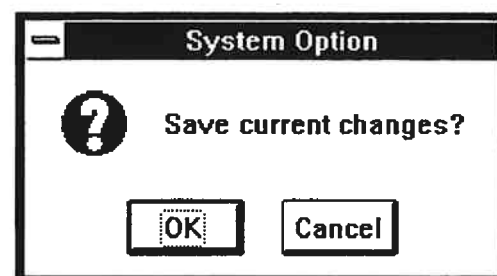
[Option Install] button is in order to install feature option (See SVP 10.3).



8. <Save system option>

Select [OK] (CL) in response to confirmation message "Save current change?".

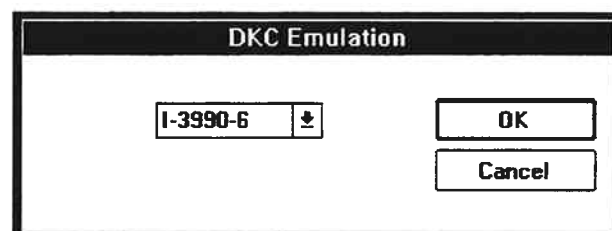
Go to step 6.



9. <Set DKC emulation type>

Define the device configuration information from 'DKC Emulation' according to the device configuration worksheet.

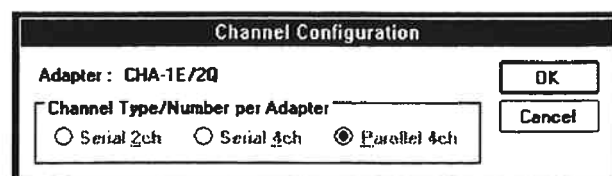
Selecting (CL) [OK] or [Cancel] returns the screen to step 6.



10.

When you select [Parallel 4ch] from this screen, the next 'Channel Configuration' is displayed. Processing skips to step 12 if you select another item.

Selecting [Cancel] (CL) returns the screen to step 6.



11. <Set Parallel CH>

Define the device configuration information from 'Channel Configuration' according to the device configuration worksheet.

After setting up all items, select [OK] (CL).

The next message screen is displayed. Go to step 12 (INST05-380).

Selecting [Cancel] (CL) returns the screen to step 10.

Channel Configuration

Adapter : CHA-1E Control: 128 ± devices

Channel A
Channel Speed: 3MB/s ± Device Address: 00

Channel B
Channel Speed: 3MB/s ± Device Address: 00

Channel C
Channel Speed: 3MB/s ± Device Address: 00

Channel D
Channel Speed: 3MB/s ± Device Address: 00

OK Cancel

11-1.

- When you select [Parallel 4ch] from this screen, the next 'Channel Configuration' is displayed.

Processing skips to step 11-4 if you select another item.

- When you select [Serial 2ch] or [Serial 4ch] from this screen. If you want to establish this DKS as MCU, select (CL) [Use HRC & HODM] and select (CL) [Set Port...] button and go to step 11-2.

Selecting [Cancel] (CL) returns the screen to step 6.

Channel Configuration

Adapter : CHA-1E/2Q

Channel Type/Number per Adapter
☐ Serial 2ch ☒ Serial 4ch ☐ Parallel 4ch ☐ SCSI 4ch

HRC/HODM
☐ Use HRC/HODM Set Port ...

OK Cancel

11-2. <Set RCP Port>

Check (CL) the port that you want to establish RCP port and select (CL) [Close].

The screen returns to step 11-1.

HRC/HODM Port

CL1[CHA-1E]
☐ CH A
☐ CH B
☐ CH C
☐ CH D

CL2[CHA-2Q]
☐ CH A
☐ CH B
☐ CH C
☐ CH D

Close

11-3. <Set Parallel CH>

Define the device configuration information from 'Channel Configuration' according to the device configuration worksheet.

After setting up all items, select [OK] (CL).

The next screen is displayed.

Selecting [Cancel] (CL) returns the screen to step 11-1.

Channel Configuration

Adapter : CHA-1E Control: 128 ± devices

Channel A
Channel Speed: 3MB/s ± Device Address: 00

Channel B
Channel Speed: 3MB/s ± Device Address: 00

Channel C
Channel Speed: 3MB/s ± Device Address: 00

Channel D
Channel Speed: 3MB/s ± Device Address: 00

OK Cancel

11-4. <Drive Configuration information for RAID 5>

The 'Drive Configuration' screen appears.

The B4 status of DKU-L1 and DKU-L2 is shown on the left side of the screen. The B4 status of DKU-R1 and DKU-R2 is shown on the right side.

The current status is shown on the buttons as follows.

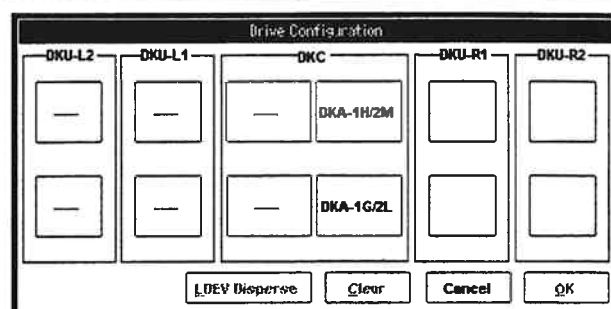
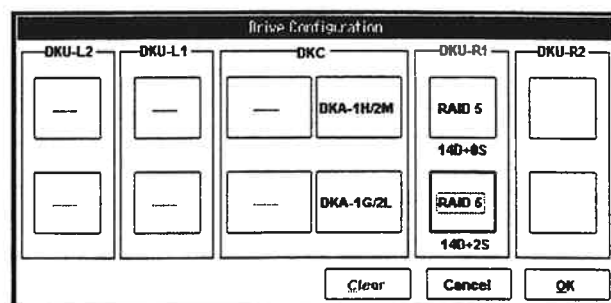
- : Installation disabled
- Blank : Uninstalled
- RAID level : Installed

The drive configuration is shown in the format "Data drive count + Spare drive count" under the buttons.

The DKA status is the middle of the screen as follows.

- : Uninstalled
- DKA name : Installed

* DKU is divided into upper and lower section. B4 indicates either of these sections. To define the drive configuration for a section, click the B4 button for the section.



Selecting [Cancel] (CL) returns the screen to step 6 (INST05-360).

Selecting [OK] (CL), go to step 12 (INST05-380).

When SCSI path is used, go to step 11-5 (INST05-374).

If this message is appeared, reading data is broken.
Please call Technical Support Center.



(1) Group setting information

The 'RAID 5' screen appears if you select the RAID TYPE button in the 'RAID TYPE' screen or if you select the B4 button for which the RAID level is set (or for which another B4 is set in the same DKA) in the 'Drive Configuration' screen.

The group status is shown on the vertically displayed buttons in the 'RAID 5' screen as follows.

Blank : Uninstalled

LDEV number : Installed

The spare drive status is shown on the horizontally displayed buttons as follows.

"..." : Uninstalled

"Spare" : Installed

Clicking the group button or spare button for installed status displays the 'RAID Set' screen (the spare button is only selectable for DKU-R1 B4 or DKU-L1 B4). Clicking the OK or Cancel button cancels the settings, clears the 'RAID 5' screen, and redisplay the 'Drive Configuration' screen.

(2) Drive configuration information

Select the group button or spare button for uninstalled status in the 'RAID 5' screen to display the 'RAID Set' screen. In the 'RAID Set' screen, select and set the following.

- PDEV : LDEV

Installed a PDEV count and its associated LDEV count.

- Emulation Type

Installed an emulation type.

- Drive Type

Installed a drive type.

- GRP

Installed the number of consecutive groups to be installed.

- LDEV

Installed the first LDEV number to be assigned to the selected group.

- Spare

Installed the number of spares to be assigned to selected B4.

A blank is displayed when the invalid data is installed.

Clicking the OK or Cancel button clears the 'RAID Set' screen and redisplay the 'RAID 5' screen (INST05-373 (1)).

11-5. <SVP displays "SCSI Path-LDEV Configuration" screen>

(1) 'SCSI Path-LDEV Configuration' window

(1.1) <SCSI PATH> section (top of the window)

Path display : Indicates the current status of definitions to be added, deleted and sorted. Each line represents a SCSI Path definition.

PORT : PORT No.
SCSI ID : SCSI ID
LUN : LUN No.
LDEV : LDEV ID

Character strings having the following meanings are displayed before LDEV ID:

' ' : Assignment to (one) Path
 '*' : Assignment to (multiple) Paths

(Reference) An example of assigning multiple Paths includes assignment to alternate Paths.

[PORT] button : Sorts path items in the SCSI PATH display section in ascending order by PORT No.
 The sorting priority is given as PORT → SCSI ID → LUN → LDEV.
 [SCSI ID] button : Sorts path items in the SCSI PATH display section in ascending order by SCSI ID.
 The sorting priority is given as SCSI ID → PORT → LUN → LDEV.
 [LUN] button : Sorts path items in the SCSI PATH display section in ascending order by LUN No.
 The sorting priority is given as LUN → PORT → SCSI ID → LDEV.
 [LDEV] button : Sorts path items in the SCSI PATH display section in ascending order by LDEV No.
 The sorting priority is given as LDEV → PORT → SCSI ID → LUN.

If no sort operation is performed, the default priority is given as PORT → SCSI ID → LUN → LDEV.

(1.2) <SCSI PATH REFERENCE> section (bottom of the window)

PORT display : Displays the ports installed.
FREE SCSI ID display : Displays the SCSI ID not used with the port selected in PORT display.
FREE LDEV display : Displays the LDEV ID of an undefined path (The requirement is OPEN-LDEV).

(1.3) <HOST MODE> section (left top of the window)

PORT-MODE display : Displays the host mode to the installed ports.

Selecting [Cancel] (CL) returns the screen to step 6 (INST05-360).

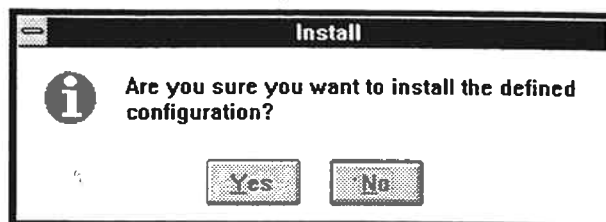
Selecting [OK] (CL), go to step 12 (INST05-380).

12. <Include configuration information>

Select [Yes] (CL) in response to the confirmation message "Are you sure you want to install the defined configuration?".

"Wait..." is displayed, then "Turn off the subsystem" is displayed.

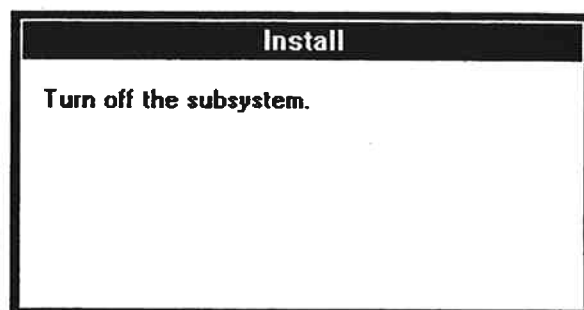
Selecting [No] (CL) suppresses the configuration inclusion processing and terminates the installation procedure.



13.

Make sure that "Turn off the subsystem" is displayed and perform the power-off procedure from the DKC maintenance panel.

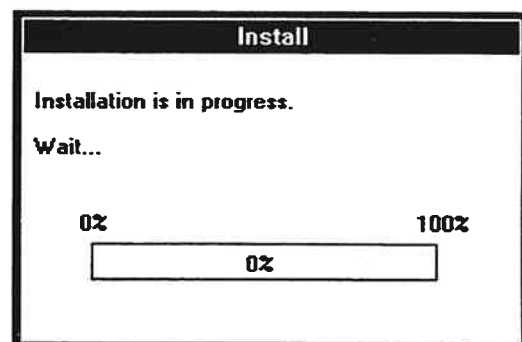
After a while "Installation is progress." is displayed.



14.

This step causes the contents of the SVP HD to be loaded into SM and FM.

When this procedure is completed, message "Please insert config FD in FDD." is displayed.



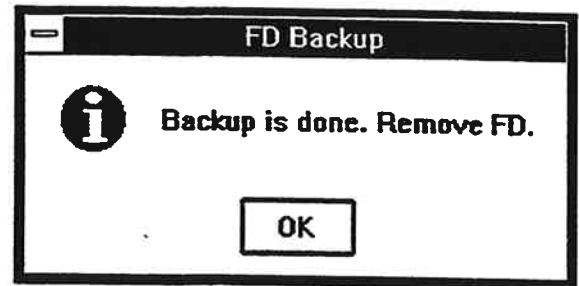
15.

Insert the configuration FD into FDD, select [OK].



16.

When this procedure is completed, message "Backup is done. Remove FD." is displayed.
Remove the FD, select [OK].

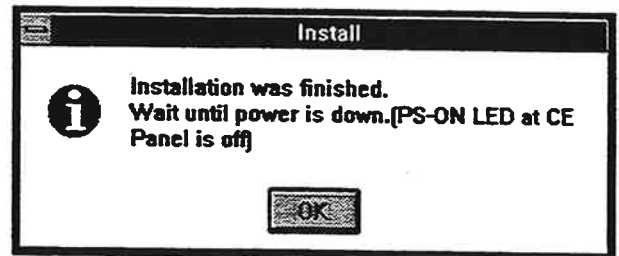


17.

After making sure that DKC power is turned off, select [OK] (CL) in response to "Installation was finished."
The initial INSTALL screen is restored.

Note:

SVP power will not turn off even when DKC is powered off.



18.

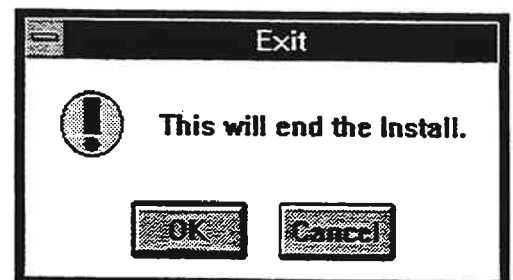
"Please reboot PC" is displayed.
Select [OK] (CL).



19.

Close 'Install'.

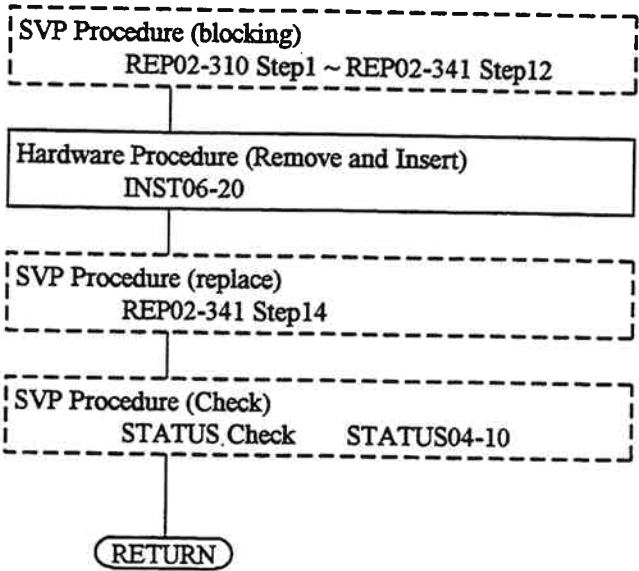
Select [OK] in response to "This will end the Install.".



This completes the installation from SVP procedure. Proceed with the check procedure in 3.5.2.3, "Check Procedure" (on page INST05-81).

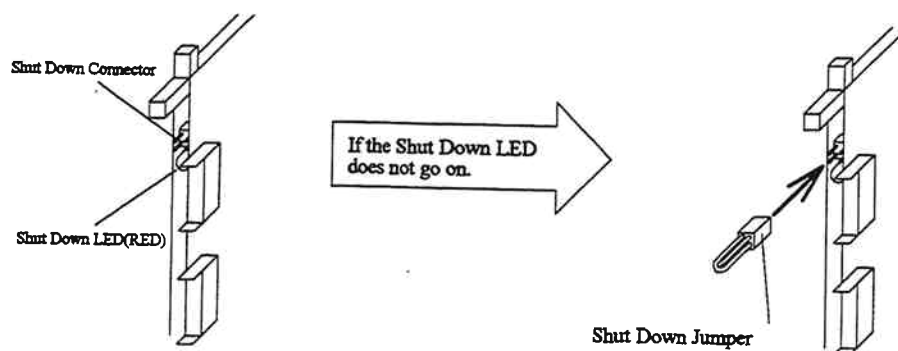
3.6 Remove and Insert the PCB

3.6.1 Procedure to Remove and Insert the PCB



<Hardware Drocedure>

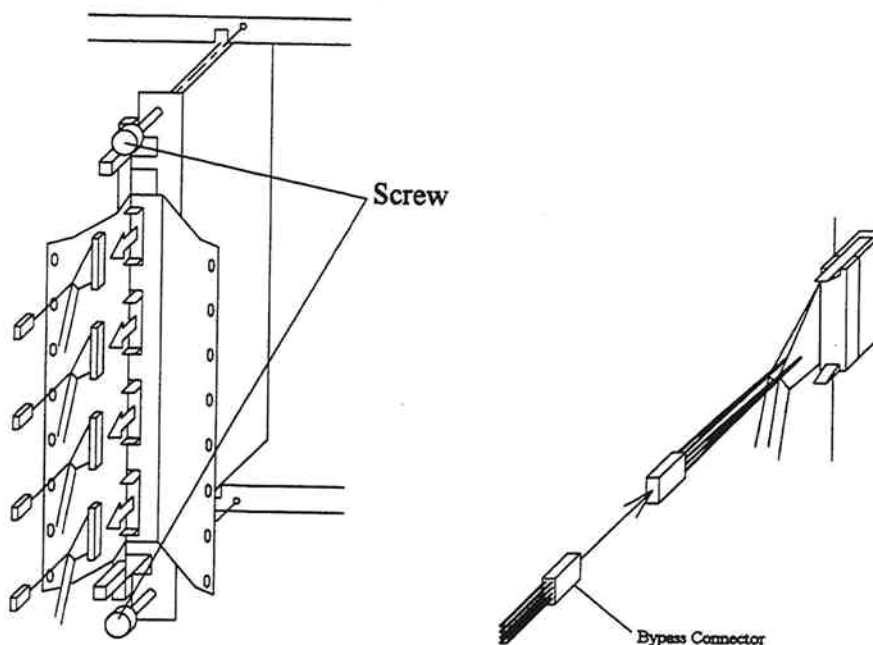
1. Check that the Shut Down LED is on. If not, connect the Shut Down Jumper to the Shut Down Connector.(only hot replace)



2. Remove the PCB.

Note: If the DKC is connecting with the other DKC, the bypass connectors must be inserted to all CH cables that connect to the PCB to be removed.

- a. Disconnect the CH cables from the target Channel Adapter PCB.
- b. Remove the two screws and remove the target Channel Adapter PCB.
- c. If the Shut Down Jumper is used, remove it.



3. Insert the target PCB to the correct location and fasten the two screws.

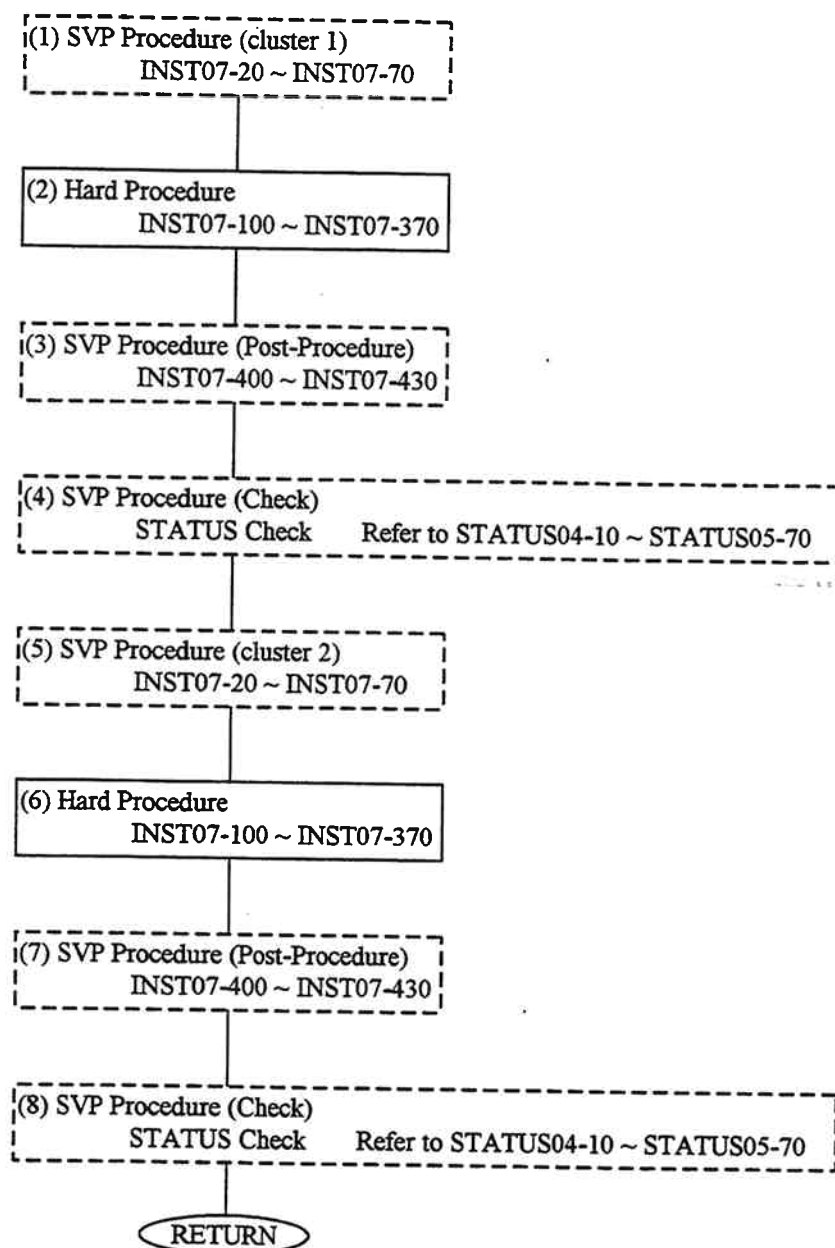
4. Connect the CH cables to the target PCB. Then fix the cable cover with buttons.

Note: If the bypass connectors are used, remove them.

5. Return INST06-10.

3.7 Procedure for High speed CHA/DKA exchange

3.7.1 Outline of the procedure



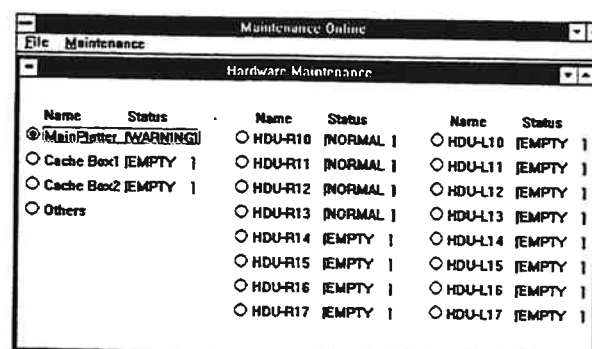
3.7.2 Pre-Procedure (SVP Procedure)

— OUTLINE —

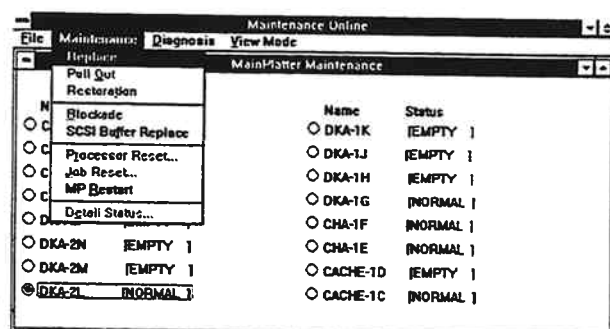
- ① Select CHA/DKA (status check).
- ② Specify Replacement.
- ③ Place package into blocked state.

1. <Set path offline>
Set the path offline from HOST when replacing CHA.

2. <Select main platter containing PCB>
Select [MainPlatter] from 'Hardware Maintenance' (CL) and select [Maintenance] from [Maintenance] (DR).



3. <Specify Replacement of CHA/DKA P/K>
Select [CHAnn] or [DKAnn] to be replaced from 'MainPlatter Maintenance' (CL) and select [Replace] from [Maintenance] (DR).



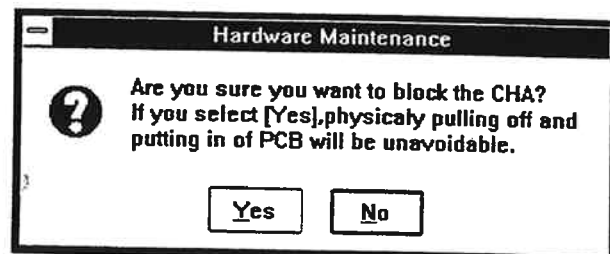
4. <CHA/DKA blocking>

Select [Yes] (CL) in response to:

* For CHA

"Are you sure you want to block the CHA? If you select [Yes], physicaly pulling off and putting in of PCB will be unavoidable."

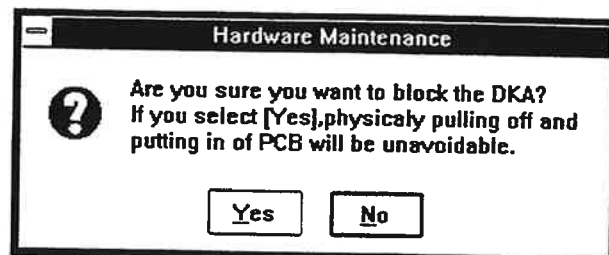
Go to step 5.



* For DKA

"Are you sure you want to block the DKA? If you select [Yes], physicaly pulling off and putting in of PCB will be unavoidable."

Go to step 6.



5. <Confirm Channel Path offline>

Select [OK] (CL) in response to:

"Please confirm you have already varied offline the concerned channel paths. If OK, press return."



6. <Caution message for system down>

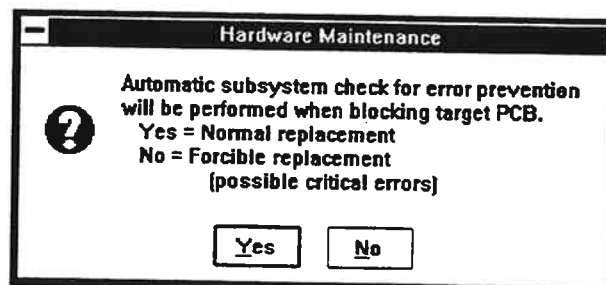
Select [Yes] (CL) in response to:

"Automatic subsystem check for error prevention will be performed when blocking target PCB.

Yes = Normal replacement

No = Forcible replacement

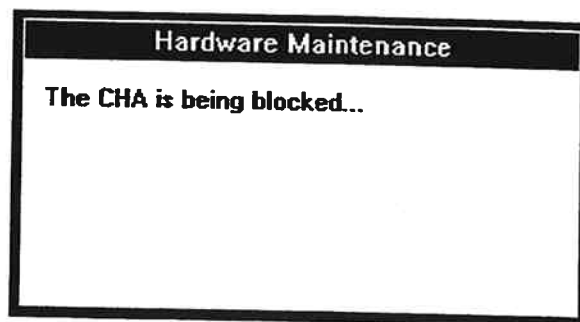
(Possible critical errors)"



7. <CHA/DKA blocking>

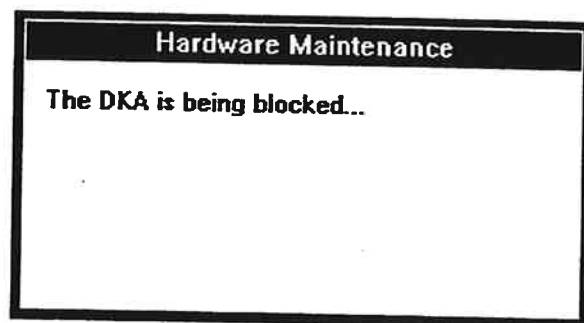
* For CHA

"The CHA is being blocked..."



* For DKA

"The DKA is being blocked..."



<<Error>>

Analyze the error referring to the instructions in TRBL05-10 if the following message is displayed:

"Change of Arbiter master is rejected.

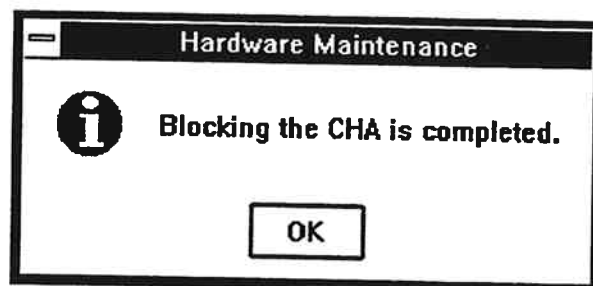
Error Code = xx, MP Code = xx"

8. <End of CHA/DKA blocking>

Select [OK] (CL) in response to:

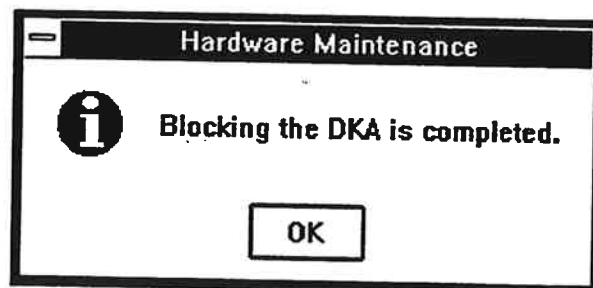
* For CHA

"Blocking the CHA is completed."



* For DKA

"Blocking the DKA is completed."



9. <Removal of CHA/DKA>

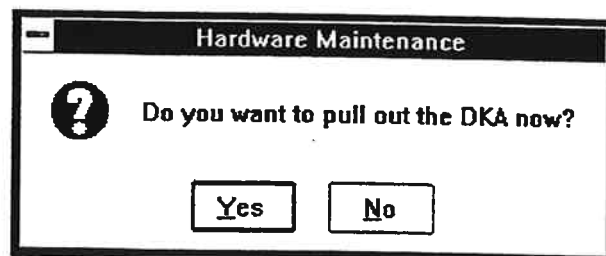
Select [Yes] (CL) in response to:

* For CHA

"Do you want to pull out the CHA now?"

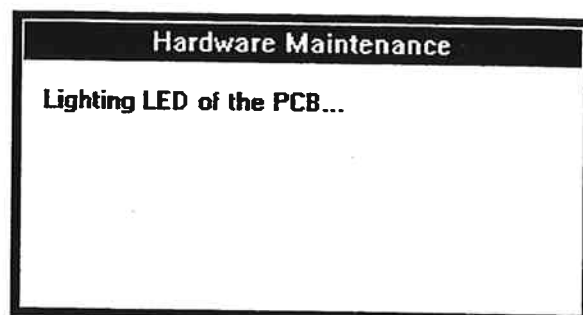
* For DKA

"Do you want to pull out the DKA now?"



10. <Turn on LED>

"Lighting LED of the PCB ..." is displayed.



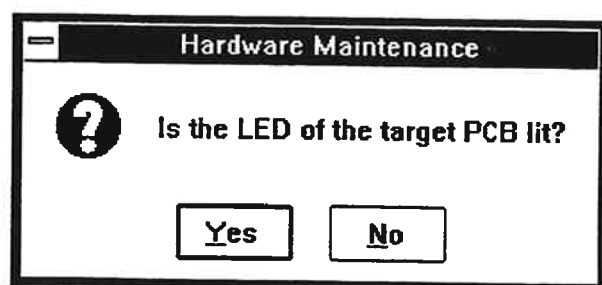
11. <Check to see if shut down LED is lit>

Select

* [Yes] if LED is on

* [No] if LED is off

in response to "Is the LED of the target PCB lit?".



<Forcing shut down LED on>

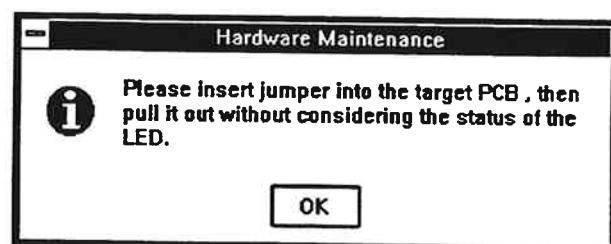
If [No] is selected:

Insert a jumper in response to "Please insert jumper into the target PCB, then pull it out without considering the status of the LED". (Refer to INST07-250)

For CHA INST07-240

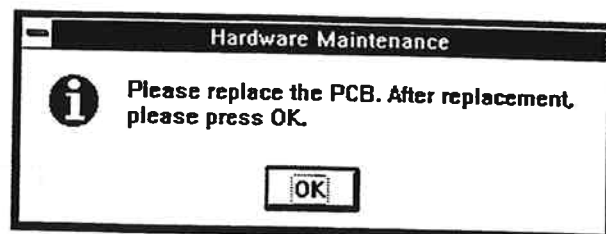
For DKA (5E) INST07-100

For DKA (50E) INST07-170



12. <Beginning of CHA/DKA Replacement>

"Please replace the PCB. After replacement, please press OK." is displayed. Select [OK] after replacing the PCBs (Step 13.)



13. <Replace CHA / DKA>

For CHA	Go to INST07-240
For DKA (5E)	Go to INST07-100
For DKA (50E)	Go to INST07-170

14.

Select [OK] (CL) in response to "Please replace the PCB..." (step 12)
"Waiting for Power Event..." is displayed.

Blank sheet

Blank sheet

3.7.3 Installation of High Speed Upgrade Kit(DKC-F210I-5E)

Notice

Confirm the type of the Redundant Power Supply at 5VPS12 and 5VPS22 (PS BOX location). If the type is HS05060C-PX, change the PS to HS05070C-V referring to "Parts Replacement Process Table (Work ID = RT22)" in "REPLACE Section".

3.7.3.1 Flowchart

