

INSTALLATION SECTION

Contents

1. Installation Outline	INST01-01-10
1.1 Before Starting Installation Work.....	INST01-01-10
1.1.1 Note at the Time of the Unpacking	INST01-01-10
1.1.2 Note when Installing and Removing Parts	INST01-01-10
1.1.3 Note at the Time of Cable Routing	INST01-01-30
1.1.4 Installation of the Adaptable Firmware	INST01-01-40
1.1.5 Note at the Time Restarting.....	INST01-01-40
1.1.6 Note when Completing a Maintenance Work	INST01-01-40
1.1.7 Notes while the Storage System is Being Started	INST01-01-40
1.1.8 Note at the Time of Installation Work.....	INST01-01-40
1.1.9 Notes when Handling the Flash Module Drive (FMD)	INST01-01-50
1.2 Model List.....	INST01-02-10
1.2.1 Model List of DW800	INST01-02-10
1.2.2 Disk Drive Model	INST01-02-210
1.2.3 MPC Window Display and Conversion Table of Option Type Names	INST01-02-240
1.2.4 Program Product Model Names	INST01-02-241
1.3 Configuration of Installing Storage System.....	INST01-03-10
1.3.1 Channel Board, NAS Module, and Disk Board Option Installation Rule	INST01-03-30
1.3.2 Cache Memory Installation Rule	INST01-03-40
1.3.3 Drive Installation Order.....	INST01-03-60
1.3.4 Notes for Installing Flash Drives (SSD).....	INST01-03-90
1.3.5 Notes for Installing Flash Module Drive Boxes.....	INST01-03-100
1.3.6 Notes for Flash Module Drive (FMD) Mix Installation and Spare Drive	INST01-03-110
1.4 How to Open/Close Rear Door or Attach/Remove Front Bezel/Rear Door.....	INST01-04-10
1.4.1 How to Attach/Remove the Front Bezel	INST01-04-10
1.4.1.1 In Case of CBSS/CBSL/DBS/DBL/DBF/CHBB.....	INST01-04-20
1.4.1.2 In Case of CBLM/CBLH.....	INST01-04-40
1.4.1.3 In Case of DB60	INST01-04-60
1.4.2 How to Open/Close the Door of the RKU Rack Frame	INST01-04-100
1.5 Power On/Off Procedure.....	INST01-05-10
1.5.1 Storage System Power On	INST01-05-10
1.5.2 Storage System Power Off (Planned Shutdown)	INST01-05-40
1.5.2.1 Planned Shutdown of the Storage System that GAD Uses	INST01-05-50
1.6 Connecting the Maintenance PC	INST01-06-10
1.6.1 Attachment / Removal Procedure of Maintenance PC	INST01-06-10
1.6.1.1 Attachment Procedure of Maintenance PC.....	INST01-06-10
1.6.1.2 Removal Procedure of Maintenance PC	INST01-06-30
1.6.2 Connecting to the Storage System.....	INST01-06-40
1.6.3 Starting Web Console.....	INST01-06-80
1.6.4 Stopping Web Console.....	INST01-06-100
2. Installation.....	INST02-01-10
2.1 Procedures for Installing Storage System.....	INST02-01-10

2.2 Unpacking and Installing the Rack Frame	INST02-02-10
2.2.1 Unpacking and Installing the RKU Rack Frame	INST02-02-10
2.2.1.1 Size	INST02-02-160
2.2.1.2 Installation	INST02-02-170
2.3 Installing Rails	INST02-03-10
2.4 Unpacking Storage Systems	INST02-04-10
2.5 Removing Components	INST02-05-10
2.5.1 Removing Drives	INST02-05-20
2.5.1.1 Removing Drives for CBSL/DBL/DBF	INST02-05-20
2.5.1.2 Removing Drives for CBSS/DBS	INST02-05-40
2.5.1.3 Removing Drives for DB60	INST02-05-50
2.5.2 Removing BKMf (CBLM/CBLH)	INST02-05-60
2.5.3 Removing Controller Board and the Built-in Parts	INST02-05-70
2.5.3.1 Removing Controller Board for CBSS/CBSL	INST02-05-70
2.5.3.2 Removing Controller Board for CBLM/CBLH and Built-in Parts	INST02-05-80
2.5.4 Removing ENC	INST02-05-90
2.5.4.1 Removing ENC for DBS/DBL/DBF	INST02-05-90
2.5.4.2 Removing ENC for DB60	INST02-05-110
2.5.5 Removing Power Supply	INST02-05-120
2.5.5.1 Removing Power Supply (DKCPS) for CBSS/CBSL	INST02-05-120
2.5.5.2 Removing Power Supply (DKCPS) for CBLM/CBLH	INST02-05-130
2.5.5.3 Removing Power Supply (DBPS) for DBS/DBL/DBF	INST02-05-140
2.5.5.4 Removing Power Supply (DBPS) for DB60	INST02-05-150
2.5.6 Removing Built-in Parts from the Channel Board Box	INST02-05-160
2.5.6.1 Removing Switch Package (SWPK)	INST02-05-160
2.5.6.2 Removing PCIe-cable Connecting Package (PCP)	INST02-05-170
2.5.6.3 Removing Channel Board	INST02-05-180
2.5.6.4 Removing CHBBPS	INST02-05-190
2.6 Mounting on a Rack Frame	INST02-06-10
2.6.1 Mounting Storage System on a Special Lifter	INST02-06-10
2.6.2 Mounting Storage System on Rack Frame	INST02-06-30
2.7 Fastening Storage System	INST02-07-10
2.7.1 Fixing Controller Chassis	INST02-07-10
2.7.2 Fixing Drive Box (DBS/DBL)	INST02-07-20
2.7.3 Fixing Drive Box (DB60)	INST02-07-50
2.7.4 Fixing Drive Box (DBF)	INST02-07-70
2.7.5 Fixing Channel Board Box	INST02-07-90
2.8 Installing Components	INST02-08-10
2.8.1 Installing Drive	INST02-08-20
2.8.1.1 Installing Drive for CBSL/DBL/DBF	INST02-08-20
2.8.1.2 Installing Drive for CBSS/DBS	INST02-08-50
2.8.1.3 Installing Drive for DB60	INST02-08-70
2.8.2 Installing Controller Board and the Built-in Parts	INST02-08-80
2.8.2.1 Installing Controller Board and Built-in Parts for CBSS/CBSL	INST02-08-80
2.8.2.2 Installing Controller Board and the Built-in Parts for CBLM/CBLH	INST02-08-90

2.8.3 Installing BKMF (CBLM/CBLH)	INST02-08-110
2.8.4 Installing ENC	INST02-08-120
2.8.4.1 Installing ENC for DBS/DBL/DBF	INST02-08-120
2.8.4.2 Installing ENCs for DB60	INST02-08-130
2.8.5 Installing Power Supply (DKCPS)	INST02-08-140
2.8.5.1 Installing Power Supply (DKCPS) for CBSS/CBSL	INST02-08-140
2.8.5.2 Installing Power Supply (DKCPS) for CBLM/CBLH	INST02-08-150
2.8.5.3 Installing Power Supply (DBPS) for DBS/DBL/DBF	INST02-08-160
2.8.5.4 Installing Power Supply (DBPS) for DB60	INST02-08-170
2.8.6 Installing Built-in Parts of the Channel Board Box	INST02-08-180
2.8.6.1 Installing Switch Package (SWPK)	INST02-08-180
2.8.6.2 Installing PCIe-cable Connecting Package (PCP)	INST02-08-190
2.8.6.3 Installing Channel Board	INST02-08-200
2.8.6.4 Installing CHBBPS	INST02-08-210
2.9 Installing CMA	INST02-09-10
2.10 Connecting Cables	INST02-10-10
2.10.1 Connecting Interface Cables	INST02-10-100
2.10.1.1 Connecting Fibre Channel Cables	INST02-10-110
2.10.1.2 Connecting iSCSI Cables/NAS Cables	INST02-10-130
2.10.1.3 Connecting PCIe Cables	INST02-10-141
2.10.2 Connecting SAS Cables	INST02-10-150
2.10.2.1 Precautions when Connecting SAS Cables	INST02-10-150
2.10.2.2 Connecting SAS Cables	INST02-10-160
2.10.3 Connecting Power Cables	INST02-10-260
2.10.3.1 Connecting AC Power Cable	INST02-10-260
2.10.3.2 Connecting DC Power Cable	INST02-10-271
2.10.4 Connecting Power Cables (Rack Frame PDU)	INST02-10-280
2.11 Routing Cables for DB60	INST02-11-10
2.12 Attaching Decoration Panels	INST02-12-10
2.13 Setting External Covers	INST02-13-10
2.14 Attaching Logo	INST02-14-10
2.15 Powering ON the SVP	INST02-15-10
2.16 Network Setting of SVP	INST02-16-10
2.17 Connecting the Maintenance PC to SVP with LAN Cables	INST02-17-10
2.18 Using the Initial Startup Tool	INST02-18-10
2.19 Controlling Air Filters	INST02-19-10
2.19.1 Editing Air Filter Replacement Notice	INST02-19-10
2.20 Setting IP Address of the Storage System and the SVP Manually	INST02-20-10
3. Adding Optional Components	INST03-01-10
3.1 Before Starting Addition of Optional Components	INST03-01-10
3.1.1 Cache Capacity and the Number of Required Options	INST03-01-20
3.2 Procedures for Adding Optional Component	INST03-02-10
3.2.1 Unpacking	INST03-02-50
3.3 Adding Drives	INST03-03-10

3.3.1 Before Adding Drives.....	INST03-03-10
3.3.2 Adding Work of Drives	INST03-03-50
3.3.3 Recognizing Drives by Maintenance Utility	INST03-03-130
3.4 Adding Drive Boxes.....	INST03-04-10
3.4.1 Estimated Work Time	INST03-04-10
3.4.2 Parts List	INST03-04-20
3.4.2.1 DW-F800-DBS/DBSC/DBSD	INST03-04-20
3.4.2.2 DW-F800-DBL/DBLC/DBLD	INST03-04-30
3.4.2.3 DW-F800-DB60	INST03-04-40
3.4.2.4 DW-F800-DBF	INST03-04-50
3.4.3 Adding Drive Boxes (DW-F800-DBS/DBL).....	INST03-04-60
3.4.4 Adding Drive Boxes (DW-F800-DB60)	INST03-04-280
3.4.5 Adding Flash Module Drive Boxes (DW-F800-DBF)	INST03-04-470
3.5 Adding Channel Board (CHB).....	INST03-05-10
3.5.1 Adding Channel Board for CBSS/CBSL	INST03-05-10
3.5.2 Adding Channel Board for CBLM/CBLH.....	INST03-05-80
3.5.3 Adding Channel Board for Channel Board Box	INST03-05-150
3.6 Adding NAS Module.....	INST03-06-10
3.6.1 Adding NAS Module for CBLM/CBLH	INST03-06-10
3.7 Adding Disk Board (DKB)/Replacing Disk Board (DKB) (Type Change)	INST03-07-10
3.7.1 Adding Disk Board/Replacing Disk Board (DKB) (Type Change) for CBLM/CBLH.....	INST03-07-10
3.8 Adding Cache Memory/Cache Flash Memory/Battery	INST03-08-10
3.8.1 Adding Cache Memory for CBSS/CBSL.....	INST03-08-10
3.8.2 Adding Cache Memory/Cache Flash Memory/Battery for CBLM/CBLH.....	INST03-08-130
3.8.3 Adding Batteries for NAS Modules (CBLM/CBLH)	INST03-08-350
3.9 Adding Shared Memory (SM).....	INST03-09-10
3.9.1 Adding Shared Memory for CBSS/CBSL.....	INST03-09-20
3.9.2 Adding Shared Memory for CBLM/CBLH	INST03-09-50
3.10 Changing the Type of Small Form-Factor Pluggable (SFP).....	INST03-10-10
3.10.1 Changing the Type of Small Form-Factor Pluggable (SFP) for CBSS/CBSL....	INST03-10-10
3.10.2 Changing the Type of Small Form-Factor Pluggable (SFP) (Changing Types) for CBLM/CBLH.....	INST03-10-90
3.10.3 Changing the Type of Small Form-Factor Pluggable (SFP) (Changing Types) for Channel Board Box.....	INST03-10-160
3.11 Adding PDUs for a Rack and PDU Power Codes	INST03-11-10
3.11.1 Procedure for Adding PDUs for a Rack and PDU Power Codes	INST03-11-20
3.11.2 Procedure for Adding PDUs for a Rack	INST03-11-60
3.12 Adding Channel Board Box.....	INST03-12-10
3.13 Replace Controller Board for CBSS/CBSL (Type Change).....	INST03-13-10
3.14 Replacing (Type Change) Channel Board (CHB)	INST03-14-10
3.14.1 Replacing (Type Change) Channel Board (CHB) for CBSS/CBSL	INST03-14-30
3.14.2 Replacing (Type Change) Channel Board (CHB) for CBLM/CBLH.....	INST03-14-120
3.14.3 Replacing (Type Change) Channel Board (CHB) for Channel Board Box	INST03-14-220

4. Removing Storage System	INST04-01-10
4.1 Before Starting the Removal Work	INST04-01-10
4.2 Procedures for the Removal Work	INST04-02-10
4.3 Removing Drives	INST04-03-10
4.3.1 Before Removing Drives	INST04-03-10
4.3.2 Removing Work Drives	INST04-03-70
4.3.3 Checking the Drive Removal by Maintenance Utility	INST04-03-150
4.4 Removing Drive Boxes	INST04-04-10
4.4.1 Estimated Work Time	INST04-04-10
4.4.2 Parts List	INST04-04-20
4.4.2.1 DW-F800-DBS/DBSC/DBSD	INST04-04-20
4.4.2.2 DW-F800-DBL/DBLC/DBLD	INST04-04-30
4.4.2.3 DW-F800-DB60	INST04-04-40
4.4.2.4 DW-F800-DBF	INST04-04-50
4.4.3 Removing Drive Boxes (DW-F800-DBS/DBL)	INST04-04-60
4.4.4 Removing Drive Boxes (DW-F800-DB60)	INST04-04-230
4.4.5 Removing Flash Module Drive Boxes (DW-F800-DBF)	INST04-04-430
4.5 Removing Channel Boards (CHB)	INST04-05-10
4.5.1 Removing Channel Boards for CBSS/CBSL	INST04-05-10
4.5.2 Removing Channel Boards for CBLM/CBLH	INST04-05-70
4.5.3 Removing Channel Boards for Channel Board Box	INST04-05-130
4.6 Removing NAS Module	INST04-06-10
4.6.1 Removing NAS Module for CBLM/CBLH	INST04-06-10
4.7 Removing Disk Board (DKB)	INST04-07-10
4.7.1 Removing Disk Boards for CBLM/CBLH	INST04-07-10
4.8 Removing Cache Memory/Cache Flash Memory/Battery	INST04-08-10
4.8.1 Removing Cache Memory for CBSS/CBSL	INST04-08-10
4.8.2 Removing Cache Memory/Cache Flash Memory/Battery for CBLM/CBLH	INST04-08-310
4.8.3 Removing Batteries for NAS Modules (CBLM/CBLH)	INST04-08-690
4.9 Removing Shared Memory (SM)	INST04-09-10
4.9.1 Removing Shared Memory for CBSS/CBSL	INST04-09-10
4.9.2 Removing Shared Memory for CBLM/CBLH	INST04-09-40
4.10 Removing PDUs for a Rack and PDU Power Codes	INST04-10-10
4.10.1 Removing PDUs for a Rack and PDU Power Codes	INST04-10-20
4.10.2 Procedure for Removing PDUs for a Rack	INST04-10-60
4.11 Removing Channel Board Box	INST04-11-10
5. Upgrading the Storage System	INST05-01-10
5.1 Arranged Parts Required for Upgrade	INST05-01-10
5.2 Before Starting Upgrade Work	INST05-02-10
5.3 Upgrade Operation Procedure	INST05-03-10
5.4 Upgrade Work	INST05-04-10
5.5 Procedure for Adding Cache Memories and Batteries Along with the Upgrade from CBLM2 to CBLM3 when Installing NAS Modules	INST05-05-10

6. New Installation (Auto Define Configuration, All Firmwares)	INST06-01-10
6.1 Flow of New Installation	INST06-01-20
6.2 Procedure of New Installation of the Firmware	INST06-02-10
6.2.1 Prerequisites	INST06-02-10
6.2.2 Maintenance PC Connection.....	INST06-02-10
6.2.3 Updating Firmware of GUM.....	INST06-02-20
6.2.4 New Installation	INST06-02-100
6.2.5 Post Processing	INST06-02-240
6.2.6 Check Procedure.....	INST06-02-250
6.3 Troubleshooting of New Installation of the Firmware	INST06-03-10
7. Installing / Removing the NAS Unified Firmware.....	INST07-01-10
7.1 New Installation of the NAS Unified Firmware	INST07-01-10
7.1.1 New Installation Procedure	INST07-01-10
7.1.2 Restoration Procedure When a Failure Occurs During New Installation.....	INST07-01-110
7.2 Removing the NAS Unified Firmware	INST07-02-10
7.2.1 Removal procedure	INST07-02-10
7.2.2 Restoration Procedure When Failure Occurs during Removal	INST07-02-120
7.3 Re-installing the NAS Unified Firmware.....	INST07-03-10
7.3.1 Re-installation Procedure	INST07-03-10
7.3.2 Restoration Procedure When a Failure Occurs During Re-Installation	INST07-03-100

NOTICE: Unless otherwise stated, "firmware version" in this section indicates DKCMAIN firmware.

1. Installation Outline

1.1 Before Starting Installation Work

The direction word "Note" indicates points to be checked on the work. Read and understand them well before performing the installation.

Take notice of the following when performing an installation work for the Storage System.

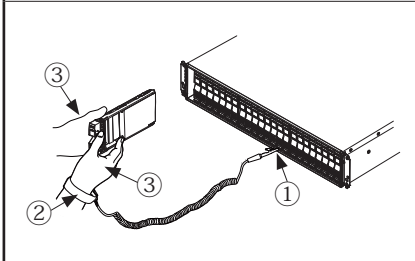
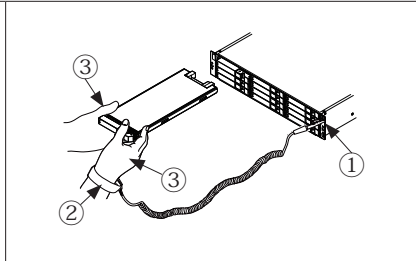
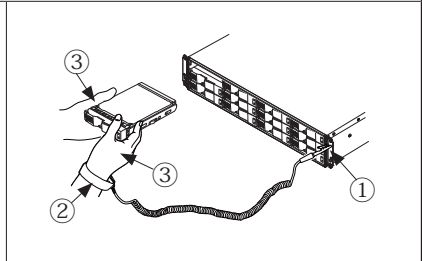
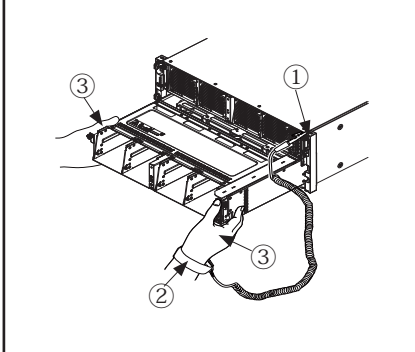
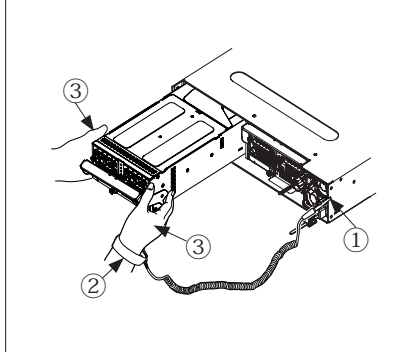
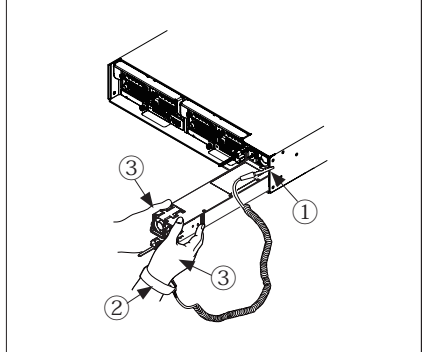
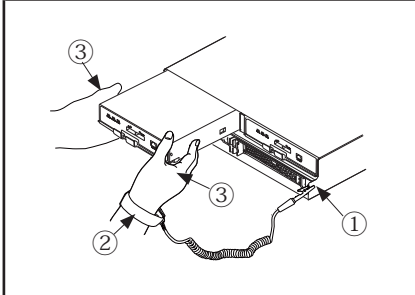
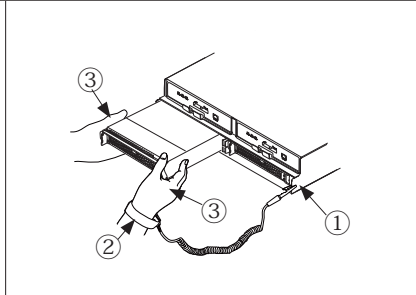
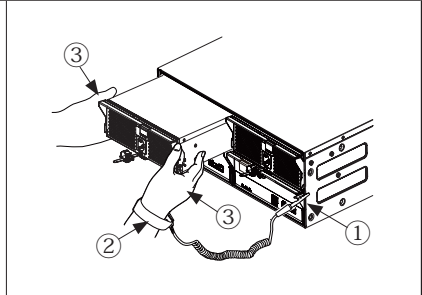
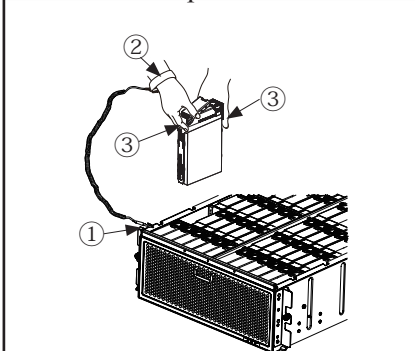
1.1.1 Note at the Time of the Unpacking

- Unpack it indoors.
Especially, do Unpack it indoors it in such places with the outdoor dust, the direct sunlight, and the infiltration of rainwater.
- Work on the unpacking in the place where a rapid difference of temperature does not occur. It may have dew condensation when it is unpacked in the place where a difference of temperature is extreme. Further, if the Storage System remains at high or low temperature in transport, it may not operate after turning on the power.
- Check that dummy parts are inserted firmly in the chassis. When they are not inserted firmly, re-tighten the fixing screws (blue) on metal dummies.
For plastic dummies, make sure the following points:
 - Dummy (Chanel Board/Disk Board): The dummy is inserted so that there is no gap between the board and the chassis.
 - Dummy (drive): The dummy is locked.
 - Dummy (cache flash memory): The dummy is set straight in the slot. If the dummy protrudes from the front face of the Controller Board, the dummy is not inserted properly. Remove and reinsert the dummy so that the springs on the dummy do not get caught in the slot.

1.1.2 Note when Installing and Removing Parts

- Generally, each part is equipped with high-precision components. Remove and install the part gently so as not to give it any shock.
- Be sure to put on the wrist strap before starting work in order to protect from electrostatic discharge.
- When you install parts support its metal part with your hand that has the wrist strap. You can discharge static electricity by touching the metal plate.

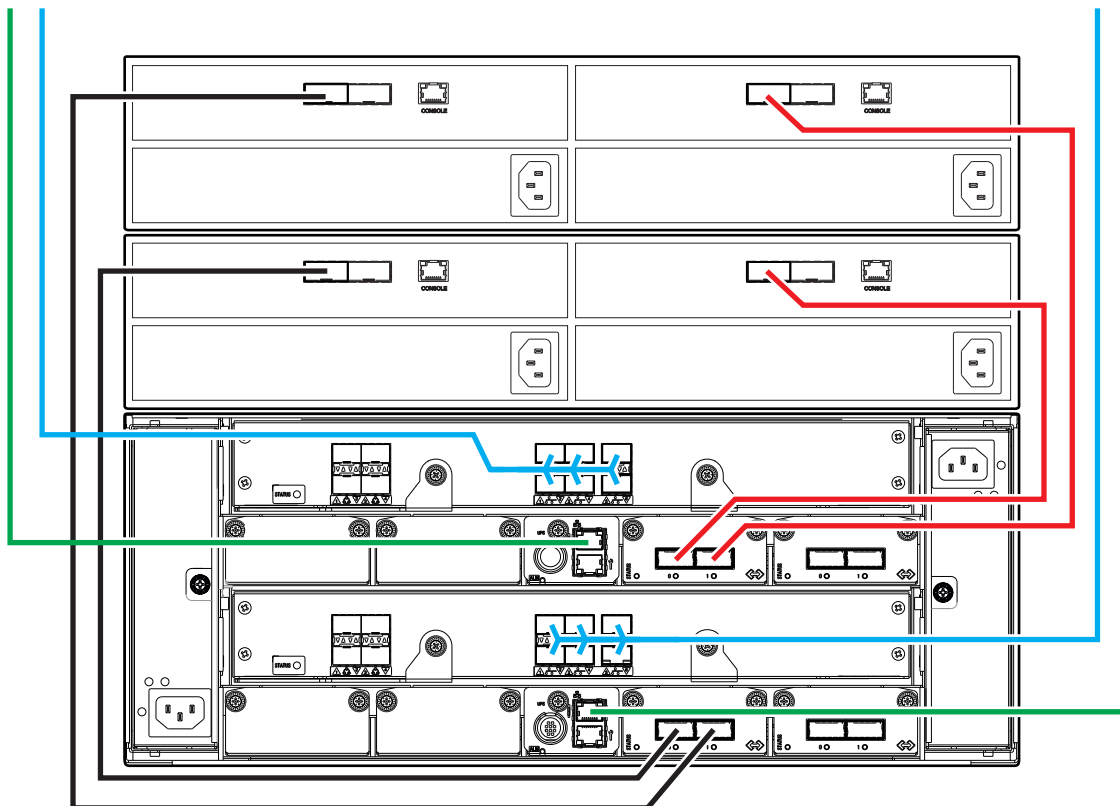
Table 1-1 Attaching the Wrist Strap

Front view		
		
Front view		Rear view
		
Rear view		
		
Top view		① : The clip side of wrist strap: Connect this to the metal part on the frame of the Storage System ② : A wrist strap (Be sure to wear this before starting maintenance.) ③ : Support the part by touching its metal part (metal plate) with your fingers
		

1.1.3 Note at the Time of Cable Routing

1. Handling of cables on the floor
 - Protect cables which cannot be accommodated by the Storage System and thus laid on the floor or cables which cross a passage with cable protecting, etc.
 - Do not make inter-Storage System cables apart from the floor but lay them on the floor.
2. Handling of under-floor cables when the Storage System is installed on the free access floor.
 - Give excess lengths to cables routed under the floor so that they can easily be laid on the slab. Do not make them to be hung dangling.
3. How to route cables
 - Give adequate margin of length to cables to withstand earthquakes, etc.
 - Route cables giving them excess lengths lest they should disturb replacement of part to be done for maintenance. (When full width modules are installed, see [Figure 1-1](#) as a routing example.)
 - When using cable protecting duct, be careful not to damage or break cables by catching them.
4. Be sure to insert or pull out a cable connector holding it with your hand. If you pull a cable, a trouble may be caused.
5. When bending the interface cable and SAS cable to connect it, give it a bend with a long radius (not less than 30 mm) so as not to apply the cable and the connector excessive stresses.

Figure 1-1 Routing Example when Full Width Modules are Installed



NOTE: When full width modules such as NAS Modules are installed, route the cables horizontally so that they do not disturb module replacement.

1.1.4 Installation of the Adaptable Firmware

It is required to install the adaptable firmware depending on the parts to be installed.

Check the adaptable firmware revision referring to OPTION & FIRMWARE VERSION SECTION “[1. Relationship between option and Firmware version](#)”.

1.1.5 Note at the Time Restarting

When restarting the Storage System, turn off the main switch (after the POWER LED lights off), and then turn on the main switch after waiting for one minute or more.

1.1.6 Note when Completing a Maintenance Work

- It is required to make all the external covers closed to operate the Storage System properly.
- The external covers have effect of preventing the release of radio waves and the noise of disturbance waves.

1.1.7 Notes while the Storage System is Being Started

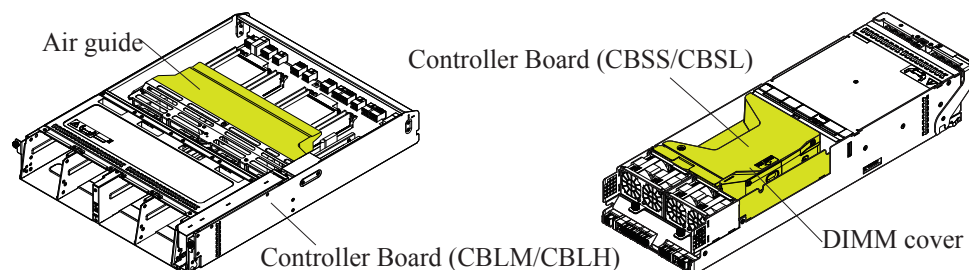
Because the status where the Storage System is being started is in the middle of the transition to the status of the Storage System power turned on (Ready status) from the status of the Storage System power turned off, do not perform the following work while the Storage System is being started.

- Installing or removing the parts
- Inserting or pulling out the cables
- Restarting the Storage System

Also, the setting function or the reference function using the Web Console cannot be executed to the Storage System which is being started.

1.1.8 Note at the Time of Installation Work

- Do not put anything on the air guide of the CBLM/CBLH Controller Board and the DIMM cover of the CBSS/CBSL at the time of work. It may cause breakage.

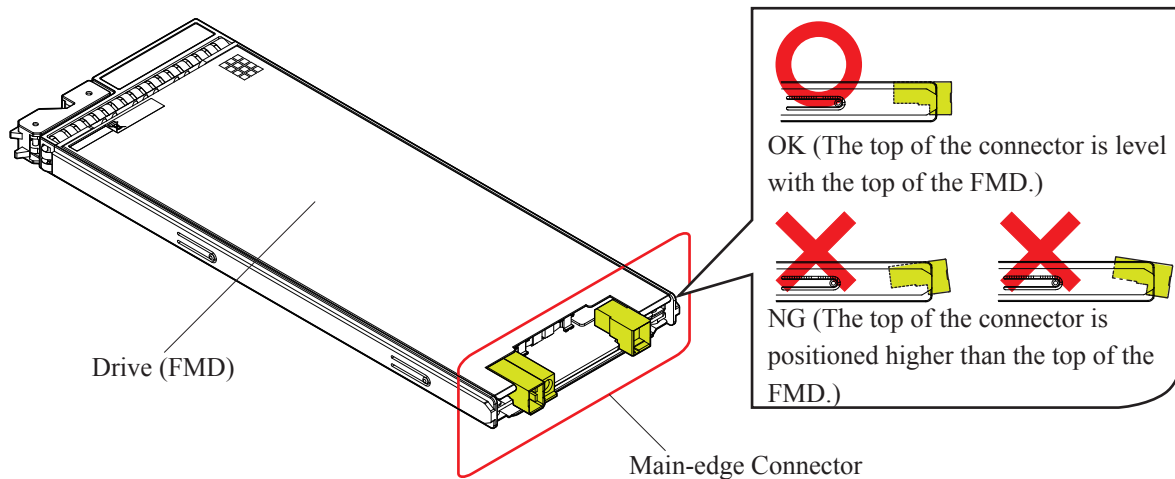


1.1.9 Notes when Handling the Flash Module Drive (FMD)

1. Be sure to check that the main edge connector of the drive (FMD) has no deformation, damage, float or sticking of dust before installing the drive (FMD).

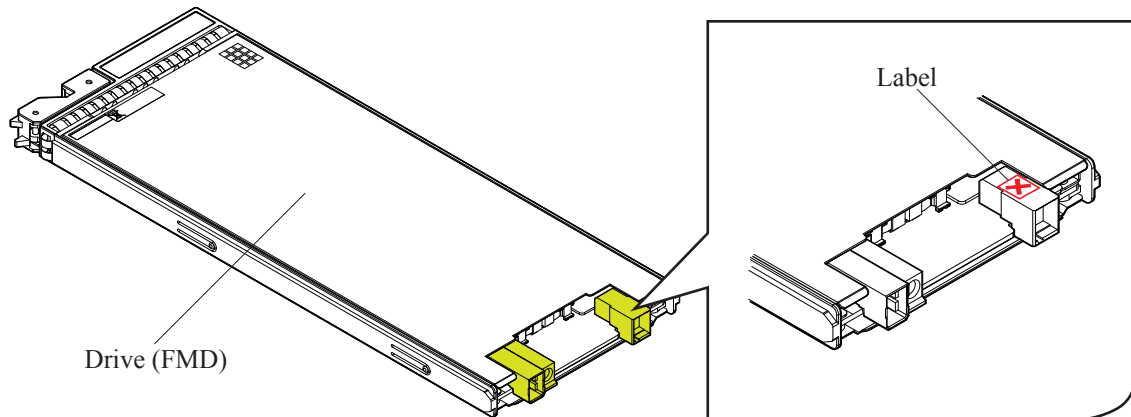
Figure 1-2 Checking connectors

How to check for float of the connector



2. When there is a float or a position gap in a connector, mark it with a label, etc.

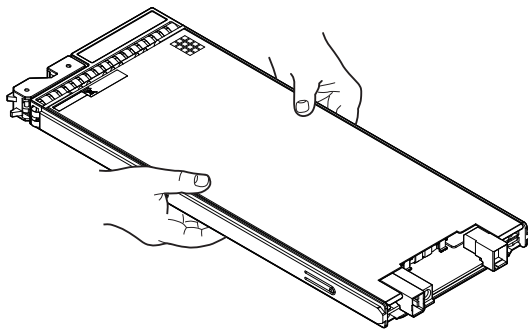
Figure 1-3 Marking of defective connectors



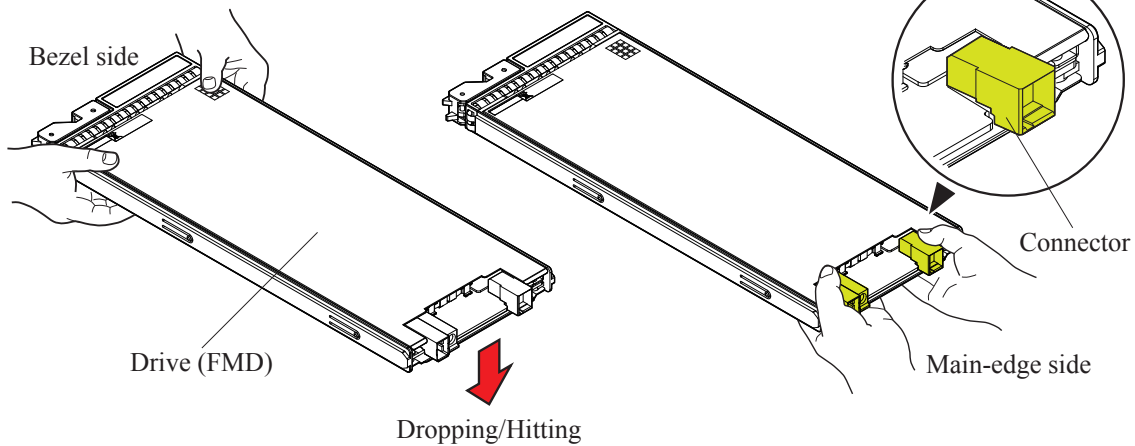
- When holding the drive (FMD), hold the middle part of the drive (FMD) with both hands. Holding the main-edge side or bezel side of the drive (FMD) may cause a breakdown of the drive (FMD) by dropping it under its weight or hitting it against something. Moreover, holding the main-edge side or bezel side of the drive (FMD) may cause a loosening or disconnecting of the connector.

Figure 1-4 Handling of the Drive (FMD) (at maintenance)

Right handling

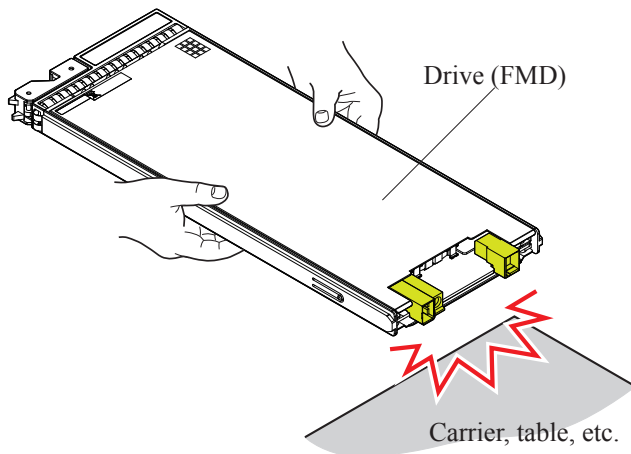


Wrong handling



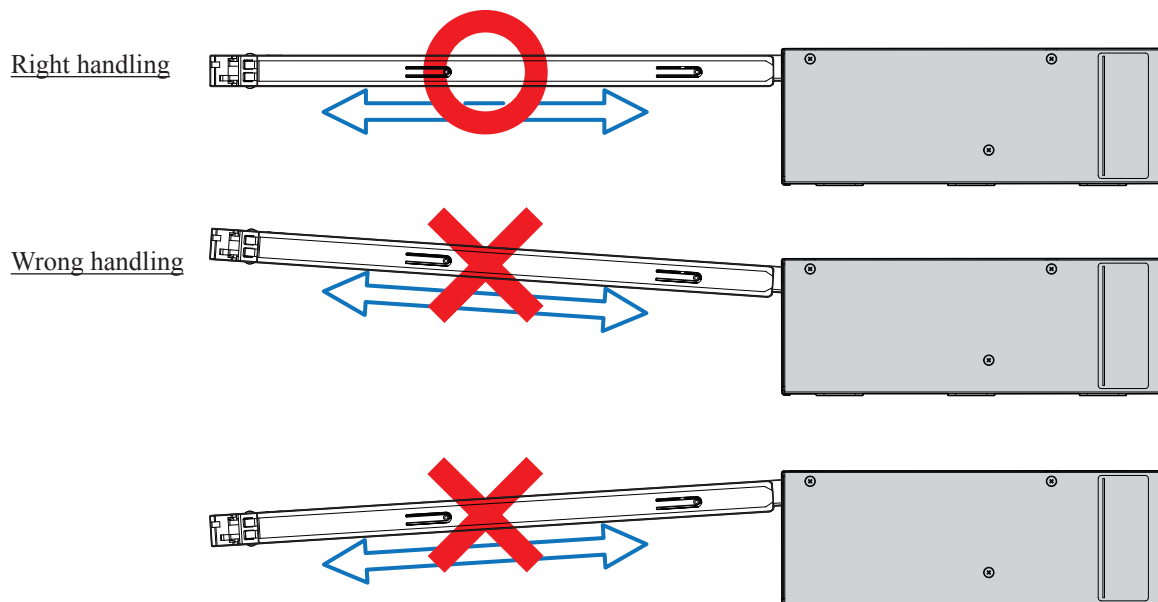
4. When moving the drive (FMD), be careful not to hit it against device or something.
Hitting the main-edge connector against the device or something may cause damage, distortion or float on the main edge connector.

Figure 1-5 Handling of the Drive (FMD) (at moving)



5. Installing and removing the drive (FMD) at an angle may damage the connector. When installing and removing the drive (FMD), install and remove it straight horizontally.

Figure 1-6 Handling of the Drive (FMD) (at Installation and Removal)



1.2 Model List

1.2.1 Model List of DW800

Table 1-2 through Table 1-5 show the model list of DW800.

Table 1-2 Model List of VSP G200

Name	Model		Parts Name	Numbers
Controller Chassis (CBSS)	Components	DW800-CBSS	• Controller Chassis (CBSS) × 1 • Power Supply (AC) × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • BKM × 2 • Front Bezel (CBSS) × 1 • Binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLS	Controller Board	2
		DW-F800-CTLSE	Controller Board (Encryption)	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	4
		DKC-F810I-CM16G	Cache Memory (16 GB)	4
		DW-F800-BM10	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	2-4
		DW-F800-2HF16	Optical 16 Gbps Channel Board	2-4
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	2-4
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	2-4
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	2-4
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-16
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-16
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-16
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-16
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-16
		DKC-F810I-300KCM (*2)/DKC-F810I-300KCMC (*1)	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600JCM (*2)/DKC-F810I-600JCMC (*1)	600 GB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600KGM	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM (*2)/DKC-F810I-1R2JCMC (*1)	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-480MGM	480 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Controller Chassis (CBSSD)	Components	DW800-CBSSD	• Controller Chassis (CBSSD) × 1 • Power Supply (DC) × 2 • BKM × 2 • Front Bezel (CBSSD) × 1 • Air Filter × 1 • Binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLS	Controller Board	2
		DW-F800-CTLSE	Controller Board (Encryption)	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	4
		DKC-F810I-CM16G	Cache Memory (16 GB)	4
		DW-F800-BM10	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	2-4
		DW-F800-2HF16	Optical 16 Gbps Channel Board	2-4
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	2-4
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	2-4
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	2-4
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-16
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-16
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-16
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-16
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-16
		DKC-F810I-300KCM (*2)/DKC-F810I-300KCMC (*1)	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS)	0-24
		DKC-F810I-600JCM (*2)/DKC-F810I-600JCMC (*1)	600 GB/10 kmin-1 2.5-inch (6 Gbps SAS)	0-24
		DKC-F810I-600KGM (*2)	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM (*2)/DKC-F810I-1R2JCMC (*1)	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-480MGM	480 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Controller Chassis (CBSL)	Components	DW800-CBSL	• Controller Chassis (CBSL) × 1 • Power Supply (AC) × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • BKM × 2 • Front Bezel (CBSL) × 1 • Binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLS	Controller Board	2
		DW-F800-CTLSE	Controller Board (Encryption)	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	4
		DKC-F810I-CM16G	Cache Memory (16 GB)	4
		DW-F800-BM10	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	2-4
		DW-F800-2HF16	Optical 16 Gbps Channel Board	2-4
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	2-4
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	2-4
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	2-4
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-16
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-16
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-16
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-16
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-16
		DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC (*1)	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS)	0-12
		DKC-F810I-1R8J6M (*1)	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC (*1)	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS)	0-12
		DKC-F810I-6R0H9M (*1)	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS)	0-12
		DKC-F810I-10RH9M (*1)	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS)	0-12
		DKC-F810I-400M6M	400 GB SAS-SSD-MLC (*1)	0-12

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Controller Chassis (CBSLD)	Components	DW800-CBSLD	• Controller Chassis (CBSLD) × 1 • Power Supply (DC) × 2 • BKM × 2 • Front Bezel (CBSLD) × 1 • Air Filter × 1 • Binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLS	Controller Board	2
		DW-F800-CTLSE	Controller Board (Encryption)	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	4
		DKC-F810I-CM16G	Cache Memory (16 GB)	4
		DW-F800-BM10	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	2-4
		DW-F800-2HF16	Optical 16 Gbps Channel Board	2-4
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	2-4
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	2-4
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	2-4
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-16
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-16
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-16
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-16
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-16
		DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R8J6M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-6R0H9M (*2)	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		HT-F40SD-10RH9M	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-400M6M	400 GB SAS-SSD-MLC (*1)	0-12

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Drive Box (DBS)	Components	DW-F800-DBS/ DW-F800-DBSC	• Drive Box (DBS) × 1 • ENC × 2 • Power Supply (AC) (*2) for DW-F800-DBS/Power Supply (AC) for DW-F800-DBSC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBS) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-300KCM (*2)/ DKC-F810I-300KCMC	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600JCM (*2)/ DKC-F810I-600JCMC	600 GB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600KGM	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM (*2)/ DKC-F810I-1R2JCMC	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-480MGM	480 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Drive Box (DBSD)	Components	DW-F800-DBSD	• Drive Box (DBSD) × 1 • ENC × 2 • Power Supply (DC) × 2 • Front Bezel (DBSD) × 1 • Air Filter × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-300KCM (*2)/ DKC-F810I-300KCMC	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600JCM (*2)/ DKC-F810I-600JCMC	600 GB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600KGM (*2)	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM (*2)/ DKC-F810I-1R2JCMC	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-480MGM	480 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name		Model	Parts Name	Numbers
Drive Box (DBL)	Components	DW-F800-DBL/ DW-F800-DBLC	• Drive Box (DBL) × 1 • ENC × 2 • Power Supply (AC) (*2) for DW-F800-DBL/Power Supply (AC) for DW-F800-DBLC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBL) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R8J6M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-6R0H9M	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-10RH9M	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-400M6M	400GB SAS-SSD-MLC (*1)	0-12
Drive Box (DBLD)	Components	DW-F800-DBLD	• Drive Box (DBLD) × 1 • ENC × 2 • Power Supply (DC) × 2 • Front Bezel (DBLD) × 1 • Air Filter × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R8J6M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-6R0H9M	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-10RH9M	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-400M6M	400GB SAS-SSD-MLC (*1)	0-12

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name		Model	Parts Name	Numbers
Drive Box (DB60)	Components	DW-F800-DB60/ DW-F800-DB60C	• Drive Box (DB60) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DB60/ Power Supply for DW-F800-DB60C × 2 • Power cable (2.5 m) × 2 • SAS cable (DW-F800-SCQ3) (3 m) × 2 • Front Bezel (DB60) × 1 • Repeat binder (two types) × 6 • Hook and loop fastener × 12 • Rail kit (DW-F800-RRDB60) (including CMA) × 1	1
	Options	DKC-F810I-1R2J7M (*2)/ DKC-F810I-1R2J7MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-1R8J8M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-4R0H4M (*2)/ DKC-F810I-4R0H4MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-6R0HLM	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-10RHLM	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-400M8M	400 GB SAS-SSD-MLC (*1)	0-60
Drive Box (DBF)	Components	DW-F800-DBF	• Drive Box (DBF) × 1 • ENC × 2 • Power Supply (AC) × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBF) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDBF) × 1	1
	Options	DKC-F710I-1R6FM	1.75 TB (1.6 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R6FN	1.75 TB (1.6 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F710I-3R2FM	3.5 TB (3.2 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-3R2FN	3.5 TB (3.2 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-6R4FN	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-7R0FP	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-14RFP	14 TB (12.8 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using. The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

Table 1-3 Model List of VSP G400, G600

Name		Model	Parts Name	Numbers
Controller Chassis (CBLM)	Components	DW800-CBL	• Controller Chassis (CBLM) × 1 • Power Supply × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • BKMf × 8 • LAN Board × 2 • Front Bezel (CBLM) × 1 • Repeat binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLM	Controller Board	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	8-16
		DKC-F810I-CM16G	Cache Memory (16 GB)	8-16
		DW-F800-BM20	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	0-16
		DW-F800-2HF16	Optical 16 Gbps Channel Board	0-16
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	0-16
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	0-16
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	0-16
		DW-F800-NAS	NAS Module	0-2
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-64
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-64
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-64
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-64
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-64
		DW-F800-1PS10	SW SFP (10 G) (for NAS Module)	0-12
		DW-F800-BS12G	Disk Board	0-2
		DW-F800-BS12GE	Disk Board (Encryption)	0-2
		DW-F800-BAT	Battery	0-14

(To be continued)

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Drive Box (DBS)	Components	DW-F800-DBS/ DW-F800-DBSC	• Drive Box (DBS) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DBS/ Power Supply for DW-F800-DBSC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBS) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-300KCM(*2)/ DKC-F810I-300KCMC	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600JCM(*2)/ DKC-F810I-600JCMC	600 GB/10 kmin-1 2.5-inch 6 Gbps SAS) (*1)	0-24
		DKC-F810I-600KGM	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM(*2)/ DKC-F810I-1R2JCMC	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-480MGM	480 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

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Name		Model	Parts Name	Numbers
Drive Box (DBL)	Components	DW-F800-DBL/ DW-F800-DBLC	• Drive Box (DBL) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DBL/ Power Supply for DW-F800-DBLC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBL) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R8J6M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-6R0H9M	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-10RH9M	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-400M6M	400 GB SAS-SSD-MLC (*1)	0-12

(To be continued)

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

(Continued from the preceding page)

Name		Model	Parts Name	Numbers
Drive Box (DB60)	Components	DW-F800-DB60/ DW-F800-DB60C	• Drive Box (DB60) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DB60/ Power Supply for DW-F800-DB60C × 2 • Power cable (2.5 m) × 2 • SAS cable (DW-F800-SCQ3) (3 m) × 2 • Front Bezel (DB60) × 1 • Repeat binder (two types) × 6 • Hook and loop fastener × 12 • Rail kit (DW-F800-RRDB60) (including CMA) × 1	1
	Options	DKC-F810I-1R2J7M (*2)/ DKC-F810I-1R2J7MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-1R8J8M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-4R0H4M (*2)/ DKC-F810I-4R0H4MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-6R0HLM	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-10RHLM	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
Drive Box (DBF)	Components	DW-F800-DBF	• Drive Box (DBF) × 1 • ENC × 2 • Power Supply × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBF) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDBF) × 1	1
	Options	DKC-F710I-1R6FM	1.75 TB (1.6 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R6FN	1.75 TB (1.6 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F710I-3R2FM	3.5 TB (3.2 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-3R2FN	3.5 TB (3.2 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-6R4FN	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-7R0FP	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-14RFP	14 TB (12.8 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

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Table 1-4 Model List of VSP G800

Name		Model	Parts Name	Numbers
Controller Chassis (CBLH)	Components	DW800-CBL	• Controller Chassis (CBLH) × 1 • Power Supply × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • BKMFB × 8 • LAN Board × 2 • Front Bezel (CBLH) × 1 • Repeat binder (two types) × 4 • Rail kit (DW-F800-RRCB) × 1 • SAS cable label × 2	1
	Options	DW-F800-CTLH	Controller Board	2
		DKC-F810I-CM8G	Cache Memory (8 GB)	8-16
		DKC-F810I-CM16G	Cache Memory (16 GB)	8-16
		DKC-F810I-CM32G	Cache Memory (32 GB)	8-16
		DW-F800-BM30	Cache Flash Memory	2
		DW-F800-4HF8	Optical 8 Gbps Channel Board	0-22
		DW-F800-2HF16	Optical 16 Gbps Channel Board	0-22
		DW-F800-4HF32R	Optical 32 Gbps Channel Board	0-22
		DW-F800-2HS10S	iSCSI 10 Gbps Optic Channel Board	0-22
		DW-F800-2HS10B	iSCSI 10 Gbps Copper Channel Board	0-22
		DW-F800-NAS	NAS Module	0-2
		DKC-F810I-1PL8	SFP for 8 Gbps Longwave	0-88
		DKC-F810I-1PS8	SFP for 8 Gbps Shortwave	0-88
		DKC-F810I-1PL16	SFP for 16 Gbps Longwave	0-88
		DKC-F810I-1PS16	SFP for 16 Gbps Shortwave	0-88
		DKC-F810I-1PS32	SFP for 32 Gbps Shortwave	0-88
		DW-F800-1PS10	SW SFP (10 G) (for NAS Module)	0-12
		DW-F800-1HP8	PCIe Channel Board	2
		DW-F800-PC1F	PCIe cable (1.5 m)	2
		DW-F800-BS12G	Disk Board	0-8
		DW-F800-BS12GE	Disk Board (Encryption)	0-8
		DW-F800-BAT	Battery	0-14

(To be continued)

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

(Continued from the preceding page)

Name	Model		Parts Name	Numbers
Drive Box (DBS)	Components	DW-F800-DBS/ DW-F800-DBSC	• Drive Box (DBS) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DBS/ Power Supply for DW-F800-DBSC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBS) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-300KCM(*2)/ DKC-F810I-300KCMC	300 GB/15 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600JCM(*2)/ DKC-F810I-600JCMC	600 GB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-600KGM	600 GB/15 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-1R2JCM(*2)/ DKC-F810I-1R2JCMC	1.2 TB/10 kmin-1 2.5-inch (6 Gbps SAS) (*1)	0-24
		DKC-F810I-1R8JGM	1.8 TB/10 kmin-1 2.5-inch (12 Gbps SAS) (*1)	0-24
		DKC-F810I-200MEM	200 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-400MEM	400 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-960MGM	960 GB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MEM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-1R9MGM	1.9 TB SAS-SSD-MLC (*1)	0-24
		DKC-F810I-3R8MGM	3.8 TB SAS-SSD-MLC (*1)	0-24

(To be continued)

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

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Name		Model	Parts Name	Numbers
Drive Box (DBL)	Components	DW-F800-DBL/ DW-F800-DBLC	• Drive Box (DBL) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DBL/ Power Supply for DW-F800-DBLC × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBL) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDB) × 1	1
	Options	DKC-F810I-1R2J5M (*2)/ DKC-F810I-1R2J5MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R8J6M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-4R0H3M (*2)/ DKC-F810I-4R0H3MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-12
		DKC-F810I-6R0H9M	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-10RH9M	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-12
		DKC-F810I-400M6M	400GB SAS-SSD-MLC (*1)	0-12

(To be continued)

*1: The drive capacity values are calculated as 1 G byte = 1,000,000,000 bytes. This definition is different from that calculated as 1 k byte = 1,024 bytes, which are actually displayed on PCs that you are using.

The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

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Name		Model	Parts Name	Numbers
Drive Box (DB60)	Components	DW-F800-DB60/ DW-F800-DB60C	• Drive Box (DB60) × 1 • ENC × 2 • Power Supply (*2) for DW-F800-DB60/ Power Supply for DW-F800-DB60C × 2 • Power cable (2.5 m) × 2 • SAS cable (DW-F800-SCQ3) (3 m) × 2 • Front Bezel (DB60) × 1 • Repeat binder (two types) × 6 • Hook and loop fastener × 12 • Rail kit (DW-F800-RRDB60) (including CMA) × 1	1
	Options	DKC-F810I-1R2J7M (*2)/ DKC-F810I-1R2J7MC	1.2 TB/10 kmin ⁻¹ 2.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-1R8J8M	1.8 TB/10 kmin ⁻¹ 2.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-4R0H4M (*2)/ DKC-F810I-4R0H4MC	4 TB/7200 min ⁻¹ 3.5-inch (6 Gbps SAS) (*1)	0-60
		DKC-F810I-6R0HLM	6 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-10RHLM	10 TB/7200 min ⁻¹ 3.5-inch (12 Gbps SAS) (*1)	0-60
		DKC-F810I-400M8M	400GB SAS-SSD-MLC (*1)	0-60
Drive Box (DBF)	Components	DW-F800-DBF	• Drive Box (DBF) × 1 • ENC × 2 • Power Supply × 2 • Power cable (0.9 m) × 2 • Power cable (2.5 m) × 2 • Front Bezel (DBF) × 1 • Repeat binder (two types) × 8 • Omega clip × 8 • Rail kit (DW-F800-RRDBF) × 1	1
	Options	DKC-F710I-1R6FM	1.75 TB (1.6 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-1R6FN	1.75 TB (1.6 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F710I-3R2FM	3.5 TB (3.2 TiB) MLC (FMD) (6 Gbps SAS) (*1)	0-12
		DKC-F810I-3R2FN	3.5 TB (3.2 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-6R4FN	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-7R0FP	7 TB (6.4 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12
		DKC-F810I-14RFP	14 TB (12.8 TiB) MLC (FMD) (12 Gbps SAS) (*1)	0-12

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The RAID group capacity values displayed in the Web Console are calculated as 1 k byte = 1,024 bytes.

*2: Contains BNST.

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Name	Model		Parts Name	Numbers
Channel Board Box (CHBB)	Components	DW-F800-CHBB	• PCP × 2 • IOEXBX × 1 • Power Supply × 2 • SWPK × 2 (FAN × 10) • PCIe Channel Board × 2 • PCIe cable (1.5 m) × 2 • Front Bezel × 1 • Accessories kit × 1	1

Table 1-5 List of Accessory Parts

No.	Classification	Model	Name	Constitution/Specification
1	Power cable	A-F6516-J1H	Power cable for AC Power Supply	2.5 m, 2-pole power cable with grounding terminal (AC 125 V, 13 A for Single-phase)
		A-F6516-J1K	Power cable for AC Power Supply	2.5 m, 2-pole power cable with grounding terminal (AC 125 V, 13 A for Single-phase)
		A-F6516-J2H	Power cable for Mounting chassis	2.5 m inlet type (AC 250 V, 10 A for Single-phase)
		A-F6516-J2H5	Power cable	5.0 m inlet type (AC 200 V for Single-phase)
		A-F6516-J2H10	Power cable	10.0 m inlet type (AC 200 V for Single-phase)
		A-F6516-P620	Power cable	Power cable for PDU (1)
		A-F6516-P630	Power cable	Power cable for PDU (1)
		DW-F800-J4DC	Power cable(DC)	Power cable for DC (1.5 m)
		DW-F800-J4DC3	Power cable(DC)	Power cable for DC (3.0 m)
2	Optical cable	A-6515-GM5L	LC-LC Optical Cable	LC-LC optical cable for Optical (5 m)
		A-6515-GM10L	LC-LC Optical Cable	LC-LC optical cable for Optical (10 m)
		A-6515-GM20L	LC-LC Optical Cable	LC-LC optical cable for Optical (20 m)
		A-6515-GM30L	LC-LC Optical Cable	LC-LC optical cable for Optical (30 m)
		A-6515-GM50L	LC-LC Optical Cable	LC-LC optical cable for Optical (50 m)
		A-6515-GM1JL	LC-LC Optical Cable	LC-LC optical cable for Optical (100 m)
		A-6515-HM5L	LC-LC Optical Cable	LC-LC optical cable for Optical (5 m)
		A-6515-HM10L	LC-LC Optical Cable	LC-LC optical cable for Optical (10 m)
		A-6515-HM20L	LC-LC Optical Cable	LC-LC optical cable for Optical (20 m)
		A-6515-HM30L	LC-LC Optical Cable	LC-LC optical cable for Optical (30 m)
		A-6515-HM50L	LC-LC Optical Cable	LC-LC optical cable for Optical (50 m)
		A-6515-HM100L	LC-LC Optical Cable	LC-LC optical cable for Optical (100 m)
		A-6515-HM200L	LC-LC Optical Cable	LC-LC optical cable for Optical (200 m)
		A-6515-HM300L	LC-LC Optical Cable	LC-LC optical cable for Optical (300 m)
		A-6515-JM5L	LC-LC Optical Cable	LC-LC optical cable for Optical (5 m)
		A-6515-JM10L	LC-LC Optical Cable	LC-LC optical cable for Optical (10 m)
		A-6515-JM20L	LC-LC Optical Cable	LC-LC optical cable for Optical (20 m)
		A-6515-JM30L	LC-LC Optical Cable	LC-LC optical cable for Optical (30 m)
		A-6515-JM50L	LC-LC Optical Cable	LC-LC optical cable for Optical (50 m)
		A-6515-JM100L	LC-LC Optical Cable	LC-LC optical cable for Optical (100 m)
		A-6515-JM200L	LC-LC Optical Cable	LC-LC optical cable for Optical (200 m)
		A-6515-JM300L	LC-LC Optical Cable	LC-LC optical cable for Optical (300 m)
		A-6515-GS10L	LC-LC Optical Cable	LC-LC optical cable for Optical (10 m)
		A-6515-GS20L	LC-LC Optical Cable	LC-LC optical cable for Optical (20 m)
		A-6515-GS30L	LC-LC Optical Cable	LC-LC optical cable for Optical (30 m)
		A-6515-GS50L	LC-LC Optical Cable	LC-LC optical cable for Optical (50 m)
		A-6515-GS1JL	LC-LC Optical Cable	LC-LC optical cable for Optical (100 m)

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No.	Classification	Model	Name	Constitution/Specification
3	SAS cable	DW-F800-SCQ1	SAS cable	SAS cable 1 m (including omega clips (2))
		DW-F800-SCQ1F	SAS cable	SAS cable 1.5 m (including omega clips (2))
		DW-F800-SCQ3	SAS cable	SAS cable 3 m (including omega clips (2))
		DW-F800-SCQ5	SAS cable	SAS cable 5 m (including omega clips (2))
		DW-F800-SCQ10A	SAS Optical cable	SAS Optical cable (10 m)
		DW-F800-SCQ30A	SAS Optical cable	SAS Optical cable (30 m)
		DW-F800-SCQ1HA	SAS Optical cable	SAS Optical cable (100 m)
4	Decoration panel	A-F6516-FIHT	Decoration panel	Panel to cover free space (1 EIA) of the RKU rack frame.
5	Stabilizer	A-F6516-STBL	Stabilizer (for RKU)	Installation to the DB60 is performed when mounting it on the RKU rack frame.
6	Rack frame	A-6516-RKU	Rack frame	Rack frame (It is necessary to order the rail.)
7	PDU for the Rack frame	A-F6516-PDU6	PDU for the Rack frame	Power distribution box for RKU rack. PDU (2)
		DW-F800-PDU6	PDU for the Rack frame	Power distribution box for rack frame. PDU (2), Bracket (2), Cable clamp (1)

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1.2.2 Disk Drive Model

Table 1-6 MPC Window Display of Disk Type Name

Disk Drive Model	MPC Window	Drive Form Factor
DKS5C-K300SS	DKS5C-K300SS	2.5 inch SAS HDD
DKR5C-K300SS	DKR5C-K300SS	2.5 inch SAS HDD
DKS5D-K300SS	DKS5D-K300SS	2.5 inch SAS HDD
DKS5E-K300SS	DKS5E-K300SS	2.5 inch SAS HDD
DKR5D-J600SS	DKR5D-J600SS	2.5 inch SAS HDD
DKS5E-J600SS	DKS5E-J600SS	2.5 inch SAS HDD
DKR5G-J600SS	DKR5G-J600SS	2.5 inch SAS HDD
DKS5H-J600SS	DKS5H-J600SS	2.5 inch SAS HDD
DKR5C-K600SS	DKR5C-K600SS	2.5 inch SAS HDD
DKS5D-K600SS	DKS5D-K600SS	2.5 inch SAS HDD
DKS5E-K600SS	DKS5E-K600SS	2.5 inch SAS HDD
DKR5E-J1R2SS	DKR5E-J1R2SS	2.5 inch SAS HDD
DKS5F-J1R2SS	DKS5F-J1R2SS	2.5 inch SAS HDD
DKR5G-J1R2SS	DKR5G-J1R2SS	2.5 inch SAS HDD
DKS5H-J1R2SS	DKS5H-J1R2SS	2.5 inch SAS HDD
DKR5G-J1R8SS	DKR5G-J1R8SS	2.5 inch SAS HDD
DKS5H-J1R8SS	DKS5H-J1R8SS	2.5 inch SAS HDD
DKR2E-H4R0SS	DKR2E-H4R0SS	3.5 inch SAS HDD
DKS2E-H4R0SS	DKS2E-H4R0SS	3.5 inch SAS HDD
DKS2H-H4R0SS	DKS2H-H4R0SS	3.5 inch SAS HDD
DKR2G-H4R0SS	DKR2G-H4R0SS	3.5 inch SAS HDD
DKS2F-H6R0SS	DKS2F-H6R0SS	3.5 inch SAS HDD
DKS2H-H6R0SS	DKS2H-H6R0SS	3.5 inch SAS HDD
DKR2G-H6R0SS	DKR2G-H6R0SS	3.5 inch SAS HDD
DKR2H-H10RSS	DKR2H-H10RSS	3.5 inch SAS HDD
SLB5B-M200SS	SLB5B-M200SS	2.5 inch SSD
SLR5D-M200SS	SLR5D-M200SS	2.5 inch SSD
SLB5C-M200SS	SLB5C-M200SS	2.5 inch SSD
SLB5E-M200SD	SLB5E-M200SS	2.5 inch SSD
SLB5B-M400SS	SLB5B-M400SS	2.5 inch SSD
SLR5D-M400SS	SLR5D-M400SS	2.5 inch SSD
SLB5C-M400SS	SLB5C-M400SS	2.5 inch SSD
SLB5E-M400SD	SLB5E-M400SS	2.5 inch SSD
SLB5F-M480SD	SLB5F-M480SS	2.5 inch SSD
SLB5F-M960SD	SLB5F-M960SS	2.5 inch SSD
SLB5D-M1R9SD	SLB5D-M1R9SS	2.5 inch SSD
SLB5E-M1R9SD	SLB5E-M1R9SS	2.5 inch SSD
SLB5F-M3R8SS	SLB5F-M3R8SS	2.5 inch SSD

(To be continued)

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Disk Drive Model	MPC Window	Drive Form Factor
NFH1A-P1R6SS	NFH1A-P1R6SS	Flash Module Drive
NFH1C-P1R6SS	NFH1C-P1R6SS	Flash Module Drive
NFH1D-P1R6SS	NFH1D-P1R6SS	Flash Module Drive
NFHAE-Q1R6SS	NFHAE-Q1R6SS	Flash Module Drive
NFH1B-P3R2SS	NFH1B-P3R2SS	Flash Module Drive
NFH1C-P3R2SS	NFH1C-P3R2SS	Flash Module Drive
NFH1D-P3R2SS	NFH1D-P3R2SS	Flash Module Drive
NFHAE-Q3R2SS	NFHAE-Q3R2SS	Flash Module Drive
NFHAE-Q6R4SS	NFHAE-Q6R4SS	Flash Module Drive
NFHAF-Q6R4SS	NFHAF-Q6R4SS	Flash Module Drive
NFHAF-Q13RSS	NFHAF-Q13RSS	Flash Module Drive

The following table shows recommended setting models on the Maintenance PC when different types of Disk Drives (same number of rotations and same capacity) to be added are mixed in the ECC.

Mixed Disk Type Name	Recommended Setting Model
DKS5x-K300SS	DKS5C-K300SS
DKR5x-K300SS	
DKR5x-J600SS	DKR5D-J600SS
DKS5x-J600SS	
DKR5x-K600SS	DKR5C-K600SS
DKS5x-K600SS	
DKR5x-J1R2SS	DKR5E-J1R2SS
DKS5x-J1R2SS	
DKR5x-J1R8SS	DKR5G-J1R8SS
DKS5x-J1R8SS	
DKR2x-H4R0SS	DKS2E-H4R0SS
DKS2x-H4R0SS	
DKS2x-H6R0SS	DKS2F-H6R0SS
DKR2x-H6R0SS	
DKR2x-H10RSS	DKR2H-H10RSS
SLB5x-M200SS	SLB5B-M200SS
SLB5x-M200SD	
SLR5x-M200SS	
SLB5x-M400SS	SLB5B-M400SS
SLB5x-M400SD	
SLR5x-M400SS	
SLB5x-M480SD	SLB5F-M480SS
SLB5x-M960SD	SLB5F-M960SS
SLB5x-M1R9SD	SLB5D-M1R9SS
SLB5x-M3R8SS	SLB5F-M3R8SS
NFH1x-P1R6SS	NFH1A-P1R6SS
NFHAX-Q1R6SS	NFHAE-Q1R6SS
NFH1x-P3R2SS	NFH1B-P3R2SS
NFHAX-Q3R2SS	NFHAE-Q3R2SS
NFHAE-Q6R4SS	NFHAE-Q6R4SS
NFHAF-Q6R4SS	NFHAF-Q6R4SS
NFHAX-Q13RSS	NFHAF-Q13RSS

x: A, B, C, ...

The following table shows Drives compatible with the Drives to be replaced by Drive replacement.

Drives before replacement	Drives after replacement
DKS5x-K300SS	DKR5x-K300SS
	DKS5x-K300SS
DKR5x-K300SS	DKR5x-K300SS
	DKS5x-K300SS
DKR5x-J600SS	DKR5x-J600SS
	DKS5x-J600SS
DKS5x-J600SS	DKR5x-J600SS
	DKS5x-J600SS
DKR5x-K600SS	DKR5x-K600SS
	DKS5x-K600SS
DKS5x-K600SS	DKR5x-K600SS
	DKS5x-K600SS
DKR5x-J1R2SS	DKR5x-J1R2SS
	DKS5x-J1R2SS
DKS5x-J1R2SS	DKR5x-J1R2SS
	DKS5x-J1R2SS
DKR5x-J1R8SS	DKR5x-J1R8SS
	DKS5x-J1R8SS
DKS5x-J1R8SS	DKR5x-J1R8SS
	DKS5x-J1R8SS
DKS2x-H4R0SS	DKR2x-H4R0SS
	DKS2x-H4R0SS
DKR2x-H4R0SS	DKR2x-H4R0SS
	DKS2x-H4R0SS
DKS2x-H6R0SS	DKR2x-H6R0SS
	DKS2x-H6R0SS
DKR2x-H6R0SS	DKR2x-H6R0SS
	DKS2x-H6R0SS
DKR2x-H10RSS	DKR2x-H10RSS
SLB5x-M200SS	SLB5x-M200SS
	SLB5x-M200SD
	SLR5x-M200SS
SLB5x-M200SD	SLB5x-M200SS
	SLB5x-M200SD
	SLR5x-M200SS
SLR5x-M200SS	SLB5x-M200SS
	SLB5x-M200SD
	SLR5x-M200SS
SLB5x-M400SS	SLB5x-M400SS
	SLB5x-M400SD
	SLR5x-M400SS
SLB5x-M400SD	SLB5x-M400SS
	SLB5x-M400SD
	SLR5x-M400SS

x: A, B, C, ...

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Drives before replacement	Drives after replacement
SLR5x-M400SS	SLB5x-M400SS
	SLB5x-M400SD
	SLR5x-M400SS
SLB5x-M480SD	SLB5x-M480SD
SLB5x-M960SD	SLB5x-M960SD
SLB5x-M1R9SD	SLB5x-M1R9SD
SLB5x-M3R8SS	SLB5x-M3R8SS
NFH1x-P1R6SS	NFH1x-P1R6SS
NFHAx-Q1R6SS	NFHAx-Q1R6SS
NFH1x-P3R2SS	NFH1x-P3R2SS
NFHAx-Q3R2SS	NFHAx-Q3R2SS
NFHAE-Q6R4SS	NFHAE-Q6R4SS
NFHAF-Q6R4SS	NFHAF-Q6R4SS
NFHAx-Q13RSS	NFHAx-Q13RSS

x: A, B, C, ...

1.2.3 MPC Window Display and Conversion Table of Option Type Names

Table 1-7 Window Display of Channel Board (CHB/NAS Module)

Model Number	MPC Window
DW-F800-4HF8	8 G 4Port FC
DW-F800-2HF16	16 G 2Port FC
DW-F800-4HF32R	32 G Ready 4Port FC
DW-F800-2HS10S	10 G 2Port iSCSI (Optic)
DW-F800-2HS10B	10 G 2Port iSCSI (Copper)
DW-F800-NAS	NAS Module

Table 1-8 Window Display of Disk Board (DKB)

Model Number	MPC Window
DW-F800-BS12G	Disk Board
DW-F800-BS12GE	Encryption

Table 1-9 Window Display of Cache Memory

Model Number	MPC Window
DKC-F810I-CM8G	8 GB
DKC-F810I-CM16GB	16 GB
DKC-F810I-CM32GB	32 GB

1.2.4 Program Product Model Names

Table 1-10 List of Program Product Model Names of VSP G200

Program Product	License	Model Names	Explanation
Hitachi Storage Virtualization Operating System	Base	P-002H-J2C1E0	This is a program product to manage the resources of VSP G200 and provide the basic setting of the Storage System and the basic function considered necessary for the operation.
Hitachi Remote Replication	Base	P-002H-J2C2E0	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	Usage restrictions of 180 days	P-002H-J2C2ETRM	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
Hitachi Local Replication	Base	P-002H-J2C3E0	This is a program product to achieve ShadowImage and Thin Image.
	Usage restrictions of 180 days	P-002H-J2C3ETRM	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
Hitachi Data Mobility	Base	P-002H-J2C4E0	This is a program product to achieve the hierarchy control in the virtual volume.
Hitachi Encryption Key	Base	P-002H-J2C5E0	This is a program product to achieve the encryption function.
Hitachi Volume Migration	Usage restrictions of 180 days	P-002H-J2C7ETRM	This is a program product to migrate data from an old model using the virtualization function (Universal Volume Manager) of the externally connected Storage System. This is a license with usage restrictions of 180 days.
Hitachi Performance Analytics	Base	P-002H-J2C8E0	This is a program product to manage the Storage System operation.
Hitachi Remote Replication Extended (*1)	Base	P-002H-J2C6E0	This is a program product to provide the Universal Replicator function that ensures the consistency of the data backed up by multiple Storage Systems.
active flash	Base	P-002H-J2C9E0	This is a program product to control volume tiers in real time.
global-active device	Base	P-002H-J2CBE0	This is a program product to retain the identical data by creating volume pairs in two Storage Systems.
nondisruptive migration	Base	P-002H-J2CCE0	This is a program product to migrate the data for replacing the Storage System.
dedupe and compression	Base	P-002H-J2CEK0	This is a program product to provide the compression and deduplication functions.

*1: The name of "Hitachi Disaster Recovery Extended" is applied when the firmware version is less than 83-03-21-x0/xx.

Table 1-11 List of Program Product Model Names of VSP G600/G400

Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
Hitachi Storage Virtualization Operating System	Base	P-002H-J2B1E0	P-002H-J2B1E1	This is a program product to manage the resources of VSP G600/G400 and provide the basic setting of the Storage System and the basic function considered necessary for the operation.
	5 TB Block	P-002H-J2B1E005	P-002H-J2B1E005	
	10 TB Block	P-002H-J2B1E010	P-002H-J2B1E010	
	20 TB Block	P-002H-J2B1E020	P-002H-J2B1E020	
	40 TB Block	P-002H-J2B1E040	P-002H-J2B1E040	
	80 TB Block	P-002H-J2B1E080	P-002H-J2B1E080	
	120 TB Block	P-002H-J2B1E120	P-002H-J2B1E120	
	Unlimited	P-002H-J2B1EUL	P-002H-J2B1EUL	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
	Usage restrictions of 180 days	P-002H-J2B1ETRM	P-002H-J2B1ETRM	
	Upgrade	P-002H-J2B1EUP6	—	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.
Hitachi Remote Replication	Base	P-002H-J2B2E0	P-002H-J2B2E1	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	5 TB Block	P-002H-J2B2E005	P-002H-J2B2E005	
	10 TB Block	P-002H-J2B2E010	P-002H-J2B2E010	
	20 TB Block	P-002H-J2B2E020	P-002H-J2B2E020	
	40 TB Block	P-002H-J2B2E040	P-002H-J2B2E040	
	80 TB Block	P-002H-J2B2E080	P-002H-J2B2E080	
	120 TB Block	P-002H-J2B2E120	P-002H-J2B2E120	
	Unlimited	P-002H-J2B2EUL	P-002H-J2B2EUL	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
	Usage restrictions of 180 days	P-002H-J2B2ETRM	P-002H-J2B2ETRM	
	Upgrade	P-002H-J2B2EUP6	—	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.

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Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
Hitachi Local Replication	Base	P-002H-J2B3E0	P-002H-J2B3E1	This is a program product to achieve ShadowImage and Thin Image.
	5 TB Block	P-002H-J2B3E005	P-002H-J2B3E005	
	10 TB Block	P-002H-J2B3E010	P-002H-J2B3E010	
	20 TB Block	P-002H-J2B3E020	P-002H-J2B3E020	
	40 TB Block	P-002H-J2B3E040	P-002H-J2B3E040	
	80 TB Block	P-002H-J2B3E080	P-002H-J2B3E080	
	120 TB Block	P-002H-J2B3E120	P-002H-J2B3E120	
	Unlimited	P-002H-J2B3EUL	P-002H-J2B3EUL	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
	Usage restrictions of 180 days	P-002H-J2B3ETRM	P-002H-J2B3ETRM	
Hitachi Data Mobility	Upgrade	P-002H-J2B3EUP6	—	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.
	Base	P-002H-J2B4E0	P-002H-J2B4E1	This is a program product to achieve the hierarchy control in the virtual volume.
	5 TB Block	P-002H-J2B4E005	P-002H-J2B4E005	
	10 TB Block	P-002H-J2B4E010	P-002H-J2B4E010	
	20 TB Block	P-002H-J2B4E020	P-002H-J2B4E020	
	40 TB Block	P-002H-J2B4E040	P-002H-J2B4E040	
	80 TB Block	P-002H-J2B4E080	P-002H-J2B4E080	
	120 TB Block	P-002H-J2B4E120	P-002H-J2B4E120	
	Unlimited	P-002H-J2B4EUL	P-002H-J2B4EUL	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.
	Upgrade	P-002H-J2B4EUP6	—	
Hitachi Encryption Key	Base	P-002H-J2B5E0	P-002H-J2B5E1	This is a program product to achieve the encryption function.
	Upgrade	P-002H-J2B5EUP6	—	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.

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Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
Hitachi Volume Migration	Usage restrictions of 180 days	P-002H-J2B7ETRM	P-002H-J2B7ETRM	This is a program product to migrate data from an old model using the virtualization function (Universal Volume Manager) of the externally connected Storage System. This is a license with usage restrictions of 180 days.
Hitachi Performance Analytics	Base	P-002H-J2B8E0	P-002H-J2B8E1	This is a program product to manage the Storage System operation.
	5 TB Block	P-002H-J2B8E005	P-002H-J2B8E005	
	10 TB Block	P-002H-J2B8E010	P-002H-J2B8E010	
	20 TB Block	P-002H-J2B8E020	P-002H-J2B8E020	
	40 TB Block	P-002H-J2B8E040	P-002H-J2B8E040	
	80 TB Block	P-002H-J2B8E080	P-002H-J2B8E080	
	120 TB Block	P-002H-J2B8E120	P-002H-J2B8E120	
	Unlimited	P-002H-J2B8EUL	P-002H-J2B8EUL	This is a license to upgrade the program product when upgrading VSP G400 to VSP G600.
	Upgrade	P-002H-J2B8EUP6	—	
Hitachi Model upgrade license	Base	P-002H-J2BAE0	—	This is a program product to upgrade VSP G400 to VSP G600.
Hitachi Remote Replication Extended (*1)	Base	P-002H-J2B6E0	P-002H-J2B6E1	This is a program product to provide the Universal Replicator function that ensures the consistency of the data backed up by multiple Storage Systems.
	5 TB Block	P-002H-J2B6E005	P-002H-J2B6E005	
	10 TB Block	P-002H-J2B6E010	P-002H-J2B6E010	
	20 TB Block	P-002H-J2B6E020	P-002H-J2B6E020	
	40 TB Block	P-002H-J2B6E040	P-002H-J2B6E040	
	80 TB Block	P-002H-J2B6E080	P-002H-J2B6E080	
	120 TB Block	P-002H-J2B6E120	P-002H-J2B6E120	
	Unlimited	P-002H-J2B6EUL	P-002H-J2B6EUL	This is a license to upgrade the corresponding PP when upgraded from VSP G400 to VSP G600.
	Upgrade	P-002H-J2B6EUP6	—	

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Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
active flash	Base	P-002H-J2B9E0	P-002H-J2B9E1	This is a program product to control volume tiers in real time.
	5 TB Block	P-002H-J2B9E005	P-002H-J2B9E005	
	10 TB Block	P-002H-J2B9E010	P-002H-J2B9E010	
	20 TB Block	P-002H-J2B9E020	P-002H-J2B9E020	
	40 TB Block	P-002H-J2B9E040	P-002H-J2B9E040	
	80 TB Block	P-002H-J2B9E080	P-002H-J2B9E080	
	120 TB Block	P-002H-J2B9E120	P-002H-J2B9E120	
	Unlimited	P-002H-J2B9EUL	P-002H-J2B9EUL	
	Upgrade	P-002H-J2B9EUP6	—	This is a license to upgrade the corresponding PP when upgraded from VSP G400 to VSP G600.
global-active device	Base	P-002H-J2BBE0	P-002H-J2BBE1	This is a program product to provide the Universal Replicator function that ensures the consistency of the data backed up by multiple Storage Systems.
	5 TB Block	P-002H-J2BBE005	P-002H-J2BBE005	
	10 TB Block	P-002H-J2BBE010	P-002H-J2BBE010	
	20 TB Block	P-002H-J2BBE020	P-002H-J2BBE020	
	40 TB Block	P-002H-J2BBE040	P-002H-J2BBE040	
	80 TB Block	P-002H-J2BBE080	P-002H-J2BBE080	
	120 TB Block	P-002H-J2BBE120	P-002H-J2BBE120	
	Unlimited	P-002H-J2BBEUL	P-002H-J2BBEUL	
	Upgrade	P-002H-J2BBEUP6	—	This is a license to upgrade the corresponding program product when upgraded from VSP G400 to VSP G600.
nondisruptive migration	Base	P-002H-J2BCE0	P-002H-J2BCE1	This is a program product to migrate the data for replacing the Storage System.
dedupe and compression	Base	P-002H-J2BEK0	P-002H-J2BEK1	This is a program product to provide the compression and deduplication functions.

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Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
Hitachi NAS Storage Virtualization Operating System	Base	— (*2)	— (*2)	This is a program product to manage the resources of VSP G400 and VSP G600 file data and block data. It provides basic settings of the Storage System and basic functions to be required for the operation.
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.
	Upgrade	— (*2)	—	This is license to upgrade the corresponding program product when upgraded from VSP G400 to VSP G600.
Hitachi NAS Remote Replication	Base	— (*2)	— (*2)	This is a program product to provide copying to a remote site using Remote Replication or File System Rollback
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.
	Upgrade	— (*2)	—	This is license to upgrade the corresponding program product when upgraded from VSP G400 to VSP G600.
Hitachi NAS Local Replication	Base	— (*2)	— (*2)	This is a program product to create an internal data replica and snapshot using ShadowImage, Thin Image, File System Recover from Snapshot or File Clone.
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.
	Upgrade	— (*2)	—	This is license to upgrade the corresponding program product when upgraded from VSP G400 to VSP G600.

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INST01-02-245A

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Program Product	License	Model Names		Explanation
		VSP G600	VSP G400	
Hitachi NAS Data Mobility	Base	— (*2)	— (*2)	This is a program product to provide migration of old data in the file system to another file system in VSP G400 and VSP G600 or to the external NFS server.
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.
	Upgrade	— (*2)	—	This is license to upgrade the corresponding program product when upgraded from VSP G400 to VSP G600.
Hitachi NAS Enterprise Virtual Server	Base	— (*2)	— (*2)	This is a program product to provide the function to add up to 64 Enterprise Virtual Servers (EVS) to VSP G400 and VSP G600 and to set a link with an independent external server for each EVS.
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.
Hitachi NAS Premium Deduplication	Base	— (*2)	— (*2)	This is a program product to provide the function to improve the processing performance of the deduplication function.
	Trial	— (*2)	— (*2)	This is a trial license usable at the time of NAS introduction.

*1: The name of “Hitachi Disaster Recovery Extended” is applied when the firmware version is less than 83-03-21-x0/xx.

*2: For the details of each NAS-related Model Names, contact “Hitachi Data Systems”.

Table 1-12 List of Program Product Model Names of VSP G800

Program Product	License	Model Names	Explanation
Hitachi Storage Virtualization Operating System	Base	P-002H-J2A1E0	This is a program product to manage the resources of VSP G800 and provide the basic setting of the Storage System and the basic function considered necessary for the operation.
	5 TB Initial	P-002H-J2A1EB05	
	10 TB Initial	P-002H-J2A1EB10	
	20 TB Initial	P-002H-J2A1EB20	
	40 TB Initial	P-002H-J2A1EB40	
	80 TB Initial	P-002H-J2A1EB80	
	5 TB Block	P-002H-J2A1E005	
	10 TB Block	P-002H-J2A1E010	
	20 TB Block	P-002H-J2A1E020	
	40 TB Block	P-002H-J2A1E040	
	80 TB Block	P-002H-J2A1E080	
	120 TB Block	P-002H-J2A1E120	
	Unlimited	P-002H-J2A1EUL	
	Usage restrictions of 180 days	P-002H-J2A1ETRM	
			This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
Hitachi Remote Replication	Base	P-002H-J2A2E0	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	5 TB Initial	P-002H-J2A2EB05	
	10 TB Initial	P-002H-J2A2EB10	
	20 TB Initial	P-002H-J2A2EB20	
	40 TB Initial	P-002H-J2A2EB40	
	5 TB Block	P-002H-J2A2E005	
	10 TB Block	P-002H-J2A2E010	
	20 TB Block	P-002H-J2A2E020	
	40 TB Block	P-002H-J2A2E040	
	60 TB Block	P-002H-J2A2E060	
	Unlimited	P-002H-J2A2EUL	
	Usage restrictions of 180 days	P-002H-J2A2ETRM	
			This is a license with usage restrictions of 180 days used for data migration at the time of replacement.

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Program Product	License	Model Names	Explanation
Hitachi Local Replication	Base	P-002H-J2A3E0	This is a program product to achieve ShadowImage and Thin Image.
	5 TB Initial	P-002H-J2A3EB05	
	10 TB Initial	P-002H-J2A3EB10	
	20 TB Initial	P-002H-J2A3EB20	
	40 TB Initial	P-002H-J2A3EB40	
	5 TB Block	P-002H-J2A3E005	
	10 TB Block	P-002H-J2A3E010	
	20 TB Block	P-002H-J2A3E020	
	40 TB Block	P-002H-J2A3E040	
	60 TB Block	P-002H-J2A3E060	
	Unlimited	P-002H-J2A3EUL	
	Usage restrictions of 180 days	P-002H-J2A3ETRM	This is a license with usage restrictions of 180 days used for data migration at the time of replacement.
Hitachi Data Mobility	Base	P-002H-J2A4E0	This is a program product to achieve the hierarchy control in the virtual volume.
	5 TB Initial	P-002H-J2A4EB05	
	10 TB Initial	P-002H-J2A4EB10	
	20 TB Initial	P-002H-J2A4EB20	
	40 TB Initial	P-002H-J2A4EB40	
	80 TB Initial	P-002H-J2A4EB80	
	5 TB Block	P-002H-J2A4E005	
	10 TB Block	P-002H-J2A4E010	
	20 TB Block	P-002H-J2A4E020	
	40 TB Block	P-002H-J2A4E040	
	80 TB Block	P-002H-J2A4E080	
	120 TB Block	P-002H-J2A4E120	
	Unlimited	P-002H-J2A4EUL	
Hitachi Encryption Key	Base	P-002H-J2A5E0	This is a program product to achieve the encryption function.

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Program Product	License	Model Names	Explanation
Hitachi Volume Migration	Usage restrictions of 180 days	P-002H-J2A7ETRM	This is a program product to migrate data from an old model using the virtualization function (Universal Volume Manager) of the externally connected Storage System. This is a license with usage restrictions of 180 days.
Hitachi Performance Analytics	Base	P-002H-J2A8E0	This is a program product to manage the Storage System operation.
	5 TB Initial	P-002H-J2A8EB05	
	10 TB Initial	P-002H-J2A8EB10	
	20 TB Initial	P-002H-J2A8EB20	
	40 TB Initial	P-002H-J2A8EB40	
	80 TB Initial	P-002H-J2A8EB80	
	5 TB Block	P-002H-J2A8E005	
	10 TB Block	P-002H-J2A8E010	
	20 TB Block	P-002H-J2A8E020	
	40 TB Block	P-002H-J2A8E040	
	80 TB Block	P-002H-J2A8E080	
	120 TB Block	P-002H-J2A8E120	
	Unlimited	P-002H-J2A8EUL	
Hitachi Remote Replication Extended (*1)	Base	P-002H-J2A6E0	This is a program product to provide the Universal Replicator function that ensures the consistency of the data backed up by multiple Storage Systems.
	5 TB Initial	P-002H-J2A6EB05	
	10 TB Initial	P-002H-J2A6EB10	
	20 TB Initial	P-002H-J2A6EB20	
	40 TB Initial	P-002H-J2A6EB40	
	5 TB Block	P-002H-J2A6E005	
	10 TB Block	P-002H-J2A6E010	
	20 TB Block	P-002H-J2A6E020	
	40 TB Block	P-002H-J2A6E040	
	60 TB Block	P-002H-J2A6E060	
	Unlimited	P-002H-J2A6EUL	
active flash	Base	P-002H-J2A9E0	This is a program product to control volume tiers in real time.
	5 TB Initial	P-002H-J2A9EB05	
	10 TB Initial	P-002H-J2A9EB10	
	20 TB Initial	P-002H-J2A9EB20	
	40 TB Initial	P-002H-J2A9EB40	
	80 TB Initial	P-002H-J2A9EB80	
	5 TB Block	P-002H-J2A9E005	
	10 TB Block	P-002H-J2A9E010	
	20 TB Block	P-002H-J2A9E020	
	40 TB Block	P-002H-J2A9E040	
	80 TB Block	P-002H-J2A9E080	
	120 TB Block	P-002H-J2A9E120	
	Unlimited	P-002H-J2A9EUL	

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Program Product	License	Model Names	Explanation
global-active device	Base	P-002H-J2ABE0	This is a program product to retain the identical data by creating volume pairs in two Storage Systems.
	5 TB Initial	P-002H-J2ABEB05	
	10 TB Initial	P-002H-J2ABEB10	
	20 TB Initial	P-002H-J2ABEB20	
	40 TB Initial	P-002H-J2ABEB40	
	5 TB Block	P-002H-J2ABE005	
	10 TB Block	P-002H-J2ABE010	
	20 TB Block	P-002H-J2ABE020	
	40 TB Block	P-002H-J2ABE040	
	60 TB Block	P-002H-J2ABE060	
	Unlimited	P-002H-J2ABEUL	
nondisruptive migration	Base	P-002H-J2ACE0	This is a program product to migrate the data for replacing the Storage System.
dedupe and compression	Base	P-002H-J2AEK0	This is a program product to provide the compression and deduplication functions.
Hitachi NAS Storage Virtualization Operating System	Base	— (*2)	This is a program product to manage the resources of VSP G800 file data and block data. It provides basic settings of the Storage System and basic functions to be required for the operation.
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.
Hitachi NAS Remote Replication	Base	— (*2)	This is a program product to provide copying to a remote site using Remote Replication or File System Rollback
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.
Hitachi NAS Local Replication	Base	— (*2)	This is a program product to create an internal data replica and snapshot using File System Recover from Snapshot or File Clone.
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.
Hitachi NAS Data Mobility	Base	— (*2)	This is a program product to provide migration of old data in the file system to another file system in VSP G800 or to the external NFS server.
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.
Hitachi NAS Enterprise Virtual Server	Base	— (*2)	This is a program product to provide the function to add up to 64 Enterprise Virtual Servers (EVS) to VSP G800 and to set a link with an independent external server for each EVS.
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.

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Program Product	License	Model Names	Explanation
Hitachi NAS Premium Deduplication	Base	— (*2)	This is a program product to provide the function to improve the processing performance of the deduplication function.
	Trial	— (*2)	This is a trial license usable at the time of NAS introduction.

*1: The name of “Hitachi Disaster Recovery Extended” is applied when the firmware version is less than 83-03-21-x0/xx.

*2: For the details of each NAS-related Model Names, contact “Hitachi Data Systems”.

Table 1-13 List of program product model names of VSP F400

Program Product	Media Kit	Model names	Explanation
Hitachi Storage Virtualization Operating System	F410 SVOS (w/ 1.6 TB)	P-002H-J3C1E1A	This is a program product to manage the resources of VSP F4x0 and provide the basic setting of the storage system and the basic function considered necessary for the operation.
	F410 SVOS (w/ 3.2 TB)	P-002H-J3C1E1B	
	F410 SVOS (w/ 6.4 TB)	P-002H-J3C1E1C	
	F420 SVOS (w/ 1.6 TB)	P-002H-J3C1E2A	
	F420 SVOS (w/ 3.2 TB)	P-002H-J3C1E2B	
	F420 SVOS (w/ 6.4 TB)	P-002H-J3C1E2C	
	F440 SVOS (w/ 1.6 TB)	P-002H-J3C1E4A	
	F440 SVOS (w/ 3.2 TB)	P-002H-J3C1E4B	
	F440 SVOS (w/ 6.4 TB)	P-002H-J3C1E4C	
	F410 to F420 SVOS Upg (w/ 1.6 TB)	P-002H-J3C1E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F410 to VSP F420.
	F410 to F420 SVOS Upg (w/ 3.2 TB)	P-002H-J3C1E2BU	
	F410 to F420 SVOS Upg (w/ 6.4 TB)	P-002H-J3C1E2CU	
	F420 to F440 SVOS Upg (w/ 1.6 TB)	P-002H-J3C1E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F420 to VSP F440.
	F420 to F440 SVOS Upg (w/ 3.2 TB)	P-002H-J3C1E4BU	
	F420 to F440 SVOS Upg (w/ 6.4 TB)	P-002H-J3C1E4CU	
Hitachi Remote Replication	F410 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3C2E1A	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	F410 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3C2E1B	
	F410 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3C2E1C	
	F420 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3C2E2A	
	F420 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3C2E2B	
	F420 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3C2E2C	
	F440 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3C2E4A	
	F440 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3C2E4B	
	F440 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3C2E4C	

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Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication	F410 to F420 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3C2E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F410 to VSP F420.
	F410 to F420 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3C2E2BU	
	F410 to F420 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3C2E2CU	
	F420 to F440 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3C2E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F420 to VSP F440.
	F420 to F440 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3C2E4BU	
	F420 to F440 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3C2E4CU	
Hitachi Performance Analytics	F410 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3C3E1A	This is a program product to manage the storage system operation.
	F410 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3C3E1B	
	F410 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3C3E1C	
	F420 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3C3E2A	
	F420 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3C3E2B	
	F420 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3C3E2C	
	F440 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3C3E4A	
	F440 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3C3E4B	
	F440 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3C3E4C	
	F410 to F420 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3C3E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F410 to VSP F420.
	F410 to F420 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3C3E2BU	
	F410 to F420 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3C3E2CU	
	F420 to F440 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3C3E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F420 to VSP F440.
	F420 to F440 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3C3E4BU	
	F420 to F440 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3C3E4CU	
Hitachi Encryption Key	F4x0 Hitachi Encryption	P-002H-J3C4E1A	This is a program product to achieve the encryption function.

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Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication Extended (*1)	F410 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3C6E1A	This is the program product to realize the configuration that ensures the data backup consistency by Universal Replicator among multiple systems.
	F410 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3C6E1B	
	F410 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3C6E1C	
	F420 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3C6E2A	
	F420 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3C6E2B	
	F420 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3C6E2C	
	F440 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3C6E4A	
	F440 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3C6E4B	
	F440 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3C6E4C	
	F410 to F420 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3C6E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F410 to VSP F420.
	F410 to F420 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3C6E2BU	
	F410 to F420 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3C6E2CU	
	F420 to F440 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3C6E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F420 to VSP F440.
	F420 to F440 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3C6E4BU	
	F420 to F440 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3C6E4CU	

*1: The name of "Hitachi Disaster Recovery Extended" is applied when the firmware version is less than 83-03-21-x0/xx.

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Program Product	Media Kit	Model names	Explanation
global-active device	Base License	P-002H-J3C9E0	This is a program product to retain the identical data by creating volume pairs in two Storage Systems.
	1TB Block	P-002H-J3C9E001	
	Base License Upgrade to F600	P-002H-J3C9EUP6	
	1TB Block Upgrade to F600	P-002H-J3C9EU01	

Table 1-14 List of program product model names of VSP F600

Program Product	Media Kit	Model names	Explanation
Hitachi Storage Virtualization Operating System	F610 SVOS (w/ 1.6 TB)	P-002H-J3B1E1A	This is a program product to manage the resources of VSP F6x0 and provide the basic setting of the storage system and the basic function considered necessary for the operation.
	F610 SVOS (w/ 3.2 TB)	P-002H-J3B1E1B	
	F610 SVOS (w/ 6.4 TB)	P-002H-J3B1E1C	
	F620 SVOS (w/ 1.6 TB)	P-002H-J3B1E2A	
	F620 SVOS (w/ 3.2 TB)	P-002H-J3B1E2B	
	F620 SVOS (w/ 6.4 TB)	P-002H-J3B1E2C	
	F640 SVOS (w/ 1.6 TB)	P-002H-J3B1E4A	
	F640 SVOS (w/ 3.2 TB)	P-002H-J3B1E4B	
	F640 SVOS (w/ 6.4 TB)	P-002H-J3B1E4C	
	F610 to F620 SVOS Upg (w/ 1.6 TB)	P-002H-J3B1E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F610 to VSP F620.
	F610 to F620 SVOS Upg (w/ 3.2 TB)	P-002H-J3B1E2BU	
	F610 to F620 SVOS Upg (w/ 6.4 TB)	P-002H-J3B1E2CU	
	F620 to F640 SVOS Upg (w/ 1.6 TB)	P-002H-J3B1E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F620 to VSP F640.
	F620 to F640 SVOS Upg (w/ 3.2 TB)	P-002H-J3B1E4BU	
	F620 to F640 SVOS Upg (w/ 6.4 TB)	P-002H-J3B1E4CU	
Hitachi Remote Replication	F610 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3B2E1A	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	F610 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3B2E1B	
	F610 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3B2E1C	
	F620 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3B2E2A	
	F620 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3B2E2B	
	F620 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3B2E2C	
	F640 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3B2E4A	
	F640 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3B2E4B	
	F640 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3B2E4C	

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Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication	F610 to F620 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3B2E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F610 to VSP F620.
	F610 to F620 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3B2E2BU	
	F610 to F620 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3B2E2CU	
	F620 to F640 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3B2E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F620 to VSP F640.
	F620 to F640 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3B2E4BU	
	F620 to F640 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3B2E4CU	
Hitachi Performance Analytics	F610 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3B3E1A	This is a program product to manage the storage system operation.
	F610 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3B3E1B	
	F610 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3B3E1C	
	F620 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3B3E2A	
	F620 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3B3E2B	
	F620 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3B3E2C	
	F640 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3B3E4A	
	F640 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3B3E4B	
	F640 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3B3E4C	
	F610 to F620 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3B3E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F610 to VSP F620.
	F610 to F620 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3B3E2BU	
	F610 to F620 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3B3E2CU	
	F620 to F640 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3B3E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F620 to VSP F640.
	F620 to F640 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3B3E4BU	
	F620 to F640 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3B3E4CU	
Hitachi Encryption Key	F6x0 Hitachi Encryption	P-002H-J3B4E1A	This is a program product to achieve the encryption function.

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Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication Extended (*1)	F610 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3B6E1A	This is the program product to realize the configuration that ensures the data backup consistency by Universal Replicator among multiple systems.
	F610 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3B6E1B	
	F610 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3B6E1C	
	F620 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3B6E2A	
	F620 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3B6E2B	
	F620 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3B6E2C	
	F640 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3B6E4A	
	F640 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3B6E4B	
	F640 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3B6E4C	
	F610 to F620 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3B6E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F610 to VSP F620.
	F610 to F620 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3B6E2BU	
	F610 to F620 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3B6E2CU	
	F620 to F640 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3B6E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F620 to VSP F640.
	F620 to F640 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3B6E4BU	
	F620 to F640 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3B6E4CU	

*1: The name of "Hitachi Disaster Recovery Extended" is applied when the firmware version is less than 83-03-21-x0/xx.

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Program Product	Media Kit	Model names	Explanation
global-active device	Base License	P-002H-J3B9E0	This is a program product to retain the identical data by creating volume pairs in two Storage Systems.
	1TB Block	P-002H-J3B9E001	

Table 1-15 List of program product model names of VSP F800

Program Product	Media Kit	Model names	Explanation
Hitachi Storage Virtualization Operating System	F810 SVOS (w/ 1.6 TB)	P-002H-J3A1E1A	This is a program product to manage the resources of VSP F8x0 and provide the basic setting of the storage system and the basic function considered necessary for the operation.
	F810 SVOS (w/ 3.2 TB)	P-002H-J3A1E1B	
	F810 SVOS (w/ 6.4 TB)	P-002H-J3A1E1C	
	F820 SVOS (w/ 1.6 TB)	P-002H-J3A1E2A	
	F820 SVOS (w/ 3.2 TB)	P-002H-J3A1E2B	
	F820 SVOS (w/ 6.4 TB)	P-002H-J3A1E2C	
	F840 SVOS (w/ 1.6 TB)	P-002H-J3A1E4A	
	F840 SVOS (w/ 3.2 TB)	P-002H-J3A1E4B	
	F840 SVOS (w/ 6.4 TB)	P-002H-J3A1E4C	
	F810 to F820 SVOS Upg (w/ 1.6 TB)	P-002H-J3A1E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F810 to VSP F820.
	F810 to F820 SVOS Upg (w/ 3.2 TB)	P-002H-J3A1E2BU	
	F810 to F820 SVOS Upg (w/ 6.4 TB)	P-002H-J3A1E2CU	
	F820 to F840 SVOS Upg (w/ 1.6 TB)	P-002H-J3A1E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F820 to VSP F840.
	F820 to F840 SVOS Upg (w/ 3.2 TB)	P-002H-J3A1E4BU	
	F820 to F840 SVOS Upg (w/ 6.4 TB)	P-002H-J3A1E4CU	
Hitachi Remote Replication	F810 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3A2E1A	This is a program product to achieve TrueCopy (synchronization) and Universal Replicator.
	F810 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3A2E1B	
	F810 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3A2E1C	
	F820 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3A2E2A	
	F820 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3A2E2B	
	F820 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3A2E2C	
	F840 Hitachi Remote Replication (w/ 1.6 TB)	P-002H-J3A2E4A	
	F840 Hitachi Remote Replication (w/ 3.2 TB)	P-002H-J3A2E4B	
	F840 Hitachi Remote Replication (w/ 6.4 TB)	P-002H-J3A2E4C	

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Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication	F810 to F820 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3A2E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F810 to VSP F820.
	F810 to F820 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3A2E2BU	
	F810 to F820 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3A2E2CU	
	F820 to F840 Hitachi Remote Replication Upg (w/ 1.6 TB)	P-002H-J3A2E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F820 to VSP F840.
	F820 to F840 Hitachi Remote Replication Upg (w/ 3.2 TB)	P-002H-J3A2E4BU	
	F820 to F840 Hitachi Remote Replication Upg (w/ 6.4 TB)	P-002H-J3A2E4CU	
Hitachi Performance Analytics	F810 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3A3E1A	This is a program product to manage the storage system operation.
	F810 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3A3E1B	
	F810 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3A3E1C	
	F820 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3A3E2A	
	F820 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3A3E2B	
	F820 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3A3E2C	
	F840 Hitachi Analytics (w/ 1.6 TB)	P-002H-J3A3E4A	
	F840 Hitachi Analytics (w/ 3.2 TB)	P-002H-J3A3E4B	
	F840 Hitachi Analytics (w/ 6.4 TB)	P-002H-J3A3E4C	
	F810 to F820 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3A3E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F810 to VSP F820.
	F810 to F820 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3A3E2BU	
	F810 to F820 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3A3E2CU	
	F820 to F840 Hitachi Analytics Upg (w/ 1.6 TB)	P-002H-J3A3E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F820 to VSP F840.
	F820 to F840 Hitachi Analytics Upg (w/ 3.2 TB)	P-002H-J3A3E4BU	
	F820 to F840 Hitachi Analytics Upg (w/ 6.4 TB)	P-002H-J3A3E4CU	
Hitachi Encryption Key	F8x0 Hitachi Encryption	P-002H-J3A4E1A	This is a program product to achieve the encryption function.

(Continued from the preceding page)

Program Product	Media Kit	Model names	Explanation
Hitachi Remote Replication Extended (*1)	F810 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3A6E1A	This is the program product to realize the configuration that ensures the data backup consistency by Universal Replicator among multiple systems.
	F810 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3A6E1B	
	F810 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3A6E1C	
	F820 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3A6E2A	
	F820 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3A6E2B	
	F820 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3A6E2C	
	F840 Hitachi Remote Replication Extended (*1) (w/ 1.6 TB)	P-002H-J3A6E4A	
	F840 Hitachi Remote Replication Extended (*1) (w/ 3.2 TB)	P-002H-J3A6E4B	
	F840 Hitachi Remote Replication Extended (*1) (w/ 6.4 TB)	P-002H-J3A6E4C	
	F810 to F820 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3A6E2AU	This is a license to upgrade the corresponding program product when upgraded from VSP F810 to VSP F820.
	F810 to F820 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3A6E2BU	
	F810 to F820 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3A6E2CU	
	F820 to F840 Hitachi Remote Replication Extended (*1) Upg (w/ 1.6 TB)	P-002H-J3A6E4AU	This is a license to upgrade the corresponding program product when upgraded from VSP F820 to VSP F840.
	F820 to F840 Hitachi Remote Replication Extended (*1) Upg (w/ 3.2 TB)	P-002H-J3A6E4BU	
	F820 to F840 Hitachi Remote Replication Extended (*1) Upg (w/ 6.4 TB)	P-002H-J3A6E4CU	

*1: The name of "Hitachi Disaster Recovery Extended" is applied when the firmware version is less than 83-03-21-x0/xx.

(Continued from the preceding page)

Program Product	Media Kit	Model names	Explanation
global-active device	Base License	P-002H-J3A9E0	This is a program product to retain the identical data by creating volume pairs in two Storage Systems.
	1TB Block	P-002H-J3A9E001	

1.3 Configuration of Installing Storage System

1. VSP Gx00 models

This Storage System is model that mounts CBSS/CBSL/CBLM/CBLH of Controller Chassis, and DBS/DBL/DB60/DBF of Drive Boxes on the RKU rack frame.

CBSS/CBSL is a Storage System with Drives installed.

CBLM/CBLH is a Storage System with no Drives installed.

Install CBLM/CBLH and one or more Drive Boxes in combination.

Table 1-16 lists the Maximum Mountable Number of Drive Boxes for Controller Chassis.

For the installation mixing different types of Drive Boxes for the Controller Chassis, install Drive Boxes (DBS/DBL/DB60/DBF) in the range of the maximum number of Drives that the Controller Chassis can recognize.

Table 1-16 Maximum Mountable Number of Drive Boxes for Controller Chassis

Controller Chassis	Number of Mounted DBS	Number of Mounted DBL	Number of Mounted DB60	Number of Mounted DBF
CBSS/CBSL	7	7	4	7
CBLM2	16	16	8	16
CBLM3	24	24	12	24
CBLH	48	48	24	48

Figure 1-7 Configuration (CBSS_CBSL+DBS/DBL/DB60/DBF)

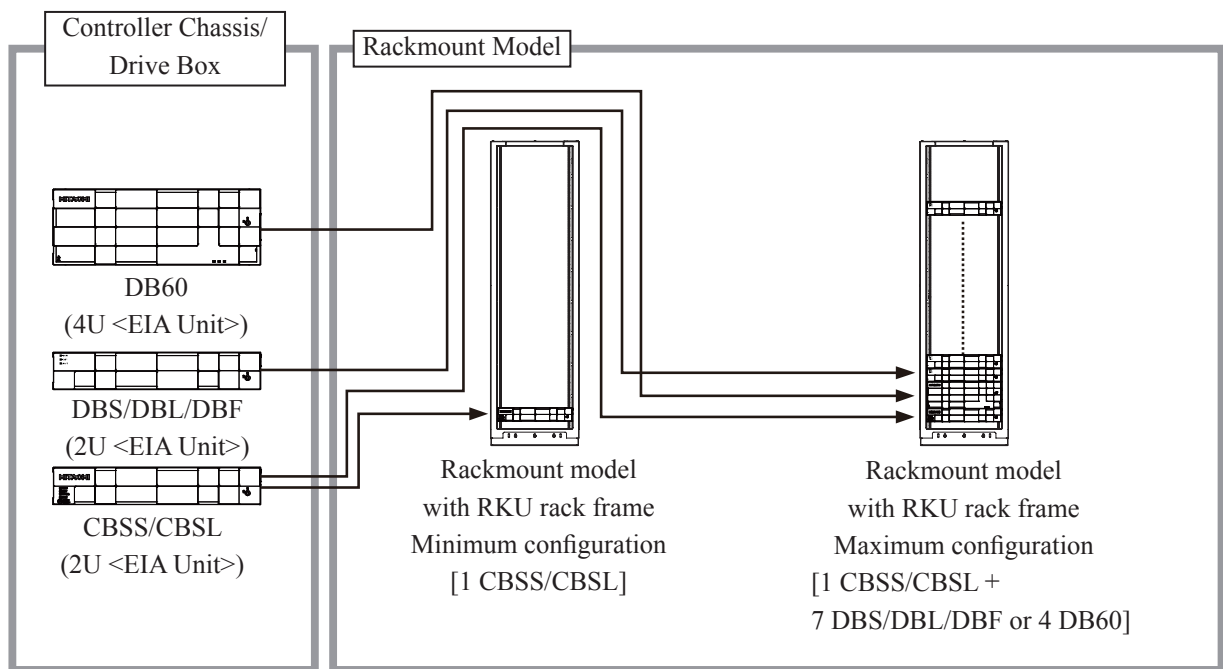
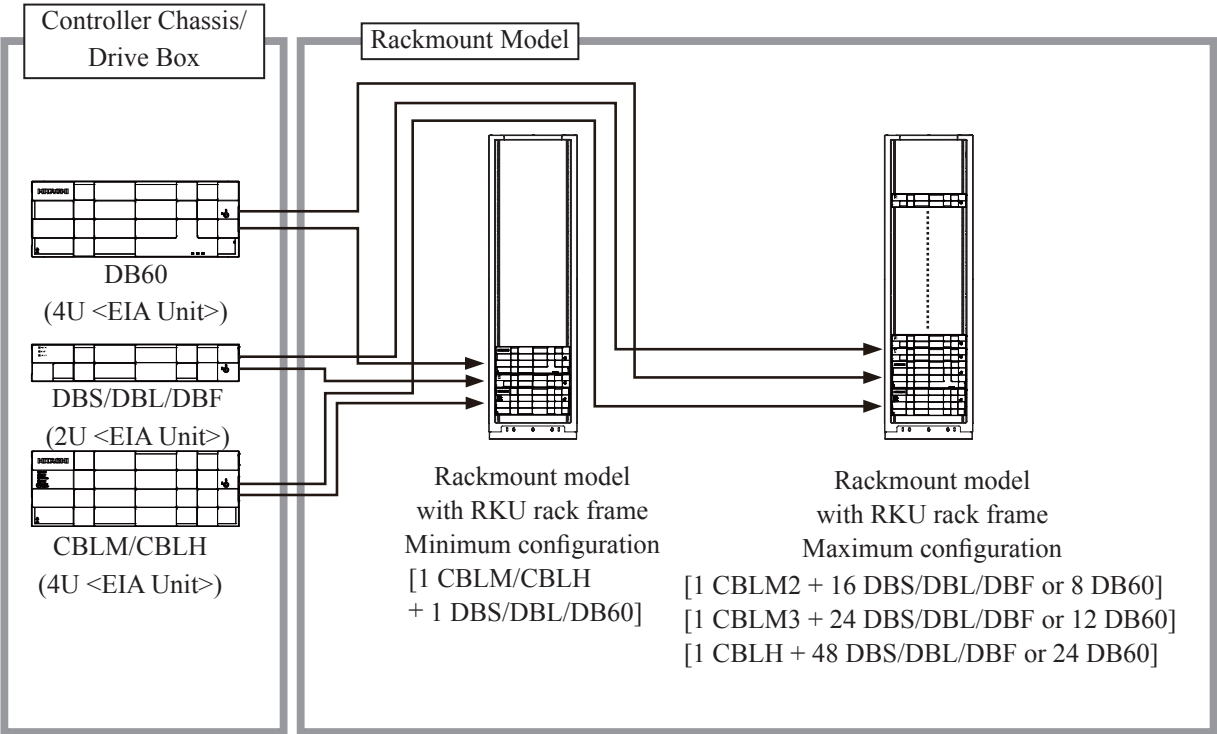


Figure 1-8 Configuration (CBLM_CBLH+DBS/DBL/DB60/DBF)



2. VSP Fx00 models

This Storage System is model that mounts CBLM/CBLH of Controller Chassis, and DBF of Drive Boxes on the RKU rack frame.

CBLM/CBLH is a Storage System with no Drives installed.

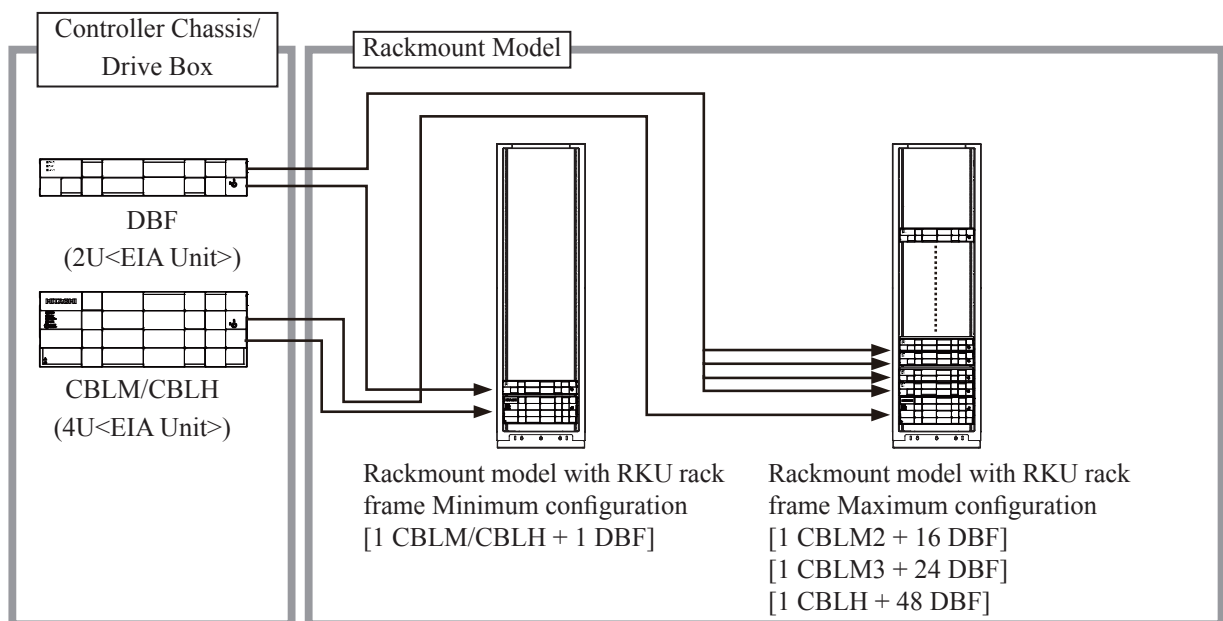
Install CBLM/CBLH and one or more Drive Boxes in combination.

Table 1-17 lists the Maximum Mountable Number of Drive Boxes for Controller Chassis.

Table 1-17 Maximum Mountable Number of Drive Boxes for Controller Chassis

Controller Chassis	Number of Mounted DBF
CBLM2	16
CBLM3	24
CBLH	48

Figure 1-9 Configuration (CBLM_CBLH+DBF)



1.3.1 Channel Board, NAS Module, and Disk Board Option Installation Rule

The Channel Board options can be installed also in the Disk Board slots in addition to the Channel Board slots in CBLM/CBLH.

After the dedicated Channel Board slots are fully added, the Channel Board options can be added in the Disk Board slots.

In case of the CBLH, you can expand the Channel Boards by mounting the Channel Board Box (CHBB).

The order of Channel Board installation is shown in [Table 1-18](#).

When installing NAS Modules, the diskless configuration is not allowed.

[Table 1-18](#) and [Table 1-19](#) show the Channel Board installation rules when NAS module is installed or not installed.

Table 1-18 Channel Board Installation Rule When NAS Module Is Not Installed

Controller Chassis or Channel Board Box	Installation Order	Installation Slot Location	
		Diskless Model (NAS Module is not installed)	Disk-in Model (NAS Module is not installed)
CBSS/CBSL	1	—	1A/2A (CHB-1A/2A)
	2	—	1B/2B (CHB-1B/2B)
CBLM	1	1A/2A (CHB-1A/2A)	1A/2A (CHB-1A/2A)
	2	1B/2B (CHB-1B/2B)	1B/2B (CHB-1B/2B)
	3	1C/2C (CHB-1C/2C)	1C/2C (CHB-1C/2C)
	4	1D/2D (CHB-1D/2D)	1D/2D (CHB-1D/2D)
	5	1E/2E (CHB-1E/2E) (*1)	1E/2E (CHB-1E/2E) (*1)
	6	1F/2F (CHB-1F/2F) (*1)	1F/2F (CHB-1F/2F) (*1)
	7	1G/2G (CHB-1G/2G) (*1)	1G/2G (CHB-1G/2G) (*1)
	8	1H/2H (CHB-1H/2H)	—
CBLH	1	1A/2A (CHB-1A/2A)	1A/2A (CHB-1A/2A)
	2	1B/2B (CHB-1B/2B)	1B/2B (CHB-1B/2B)
	3	1C/2C (CHB-1C/2C)	1C/2C (CHB-1C/2C)
	4	1D/2D (CHB-1D/2D)	1D/2D (CHB-1D/2D)
	5	1E/2E (CHB-1E/2E)	1E/2E (CHB-1E/2E)
	6	1F/2F (CHB-1F/2F)	1F/2F (CHB-1F/2F)
	7	1G/2G (CHB-1G/2G)	—
	8	1H/2H (CHB-1H/2H)	—
CHBB	1	1J/2J (CHB-1J/2J)	1J/2J (CHB-1J/2J)
	2	1K/2K (CHB-1K/2K)	1K/2K (CHB-1K/2K)
	3	1L/2L (CHB-1L/2L)	1L/2L (CHB-1L/2L)
	4	1M/2M (CHB-1M/2M)	1M/2M (CHB-1M/2M)

*1: When the firmware version is 83-02-01-x0/xx or later.

Table 1-19 Channel Board Installation Rule When NAS Module Is Installed

Controller Chassis or Channel Board Box	Installation Order	Installation Slot Location	
		Diskless Model (NAS Module is installed) (*1)	Disk-in Model (NAS Module is installed) (*1)
CBSS/CBSL	1	—	—
	2	—	—
CBLM	1	—	1A/1B/1C/1D 2A/2B/2C/2D (NAS Module-1 • 2)
	2	—	1E/2E (CHB-1E/2E)(*2)
	3	—	1F/2F (CHB-1F/2F)(*2)
	4	—	1G/2G (CHB-1G/2G)(*2)
	5	—	—
	6	—	—
	7	—	—
	8	—	—
CBLH	1	—	1A/1B/1C/1D 2A/2B/2C/2D (NAS Module-1 • 2)
	2	—	1E/2E (CHB-1E/2E)
	3	—	1F/2F (CHB-1F/2F)
	4	—	—
	5	—	—
	6	—	—
	7	—	—
	8	—	—
CHBB	1	—	1J/2J (CHB-1J/2J)
	2	—	1K/2K (CHB-1K/2K)
	3	—	1L/2L (CHB-1L/2L)
	4	—	1M/2M (CHB-1M/2M)

*1: The NAS Module installed disk-in model should meet the following conditions.

- Firmware version is 83-03-21-x0/xx or later
- Only CBLM and CBLH are supported
- Diskless configuration is not allowed when the NAS Module is installed

*2: When the firmware version is 83-02-01-x0/xx or later.

The order of Disk Board installation is shown in [Table 1-20](#).

Table 1-20 Disk Board Installation Rule

Controller Chassis	Installation Order	Installation Slot Location (*1)
CBLM	1	1H/2H (DKB-1H/2H)
CBLH	1	1G/2G (DKB-1G/2G)
		1H/2H (DKB-1H/2H)
		1E/2E (DKB-1E/2E)
	2	1F/2F (DKB-1F/2F)

*1: The Disk Board installation rule is the same even when the NAS Module is installed.

1.3.2 Cache Memory Installation Rule

Cache Memory (DIMM) is installed in the Controller Boards and NAS Modules of CBSS/CBSL/CBLM/CBLH.

The data of Shared Memory, to which the Storage System configuration information is written, is saved in the Cache Memory on the Controller Board. Shared Memory capacity plus Cache Memory capacity equals Total Cache Memory Capacity necessary for the Storage System. The Shared Memory capacity must be allocated to CMG0 (Cache Memory Group 0).

Refer to [Table 3-2](#) for the Cache Memory installation pattern of CBSS/CBSL and [Table 3-3](#) for that of CBLM/CBLH.

Figure 1-10 Cache Memory Location (CBSS/CBSL)

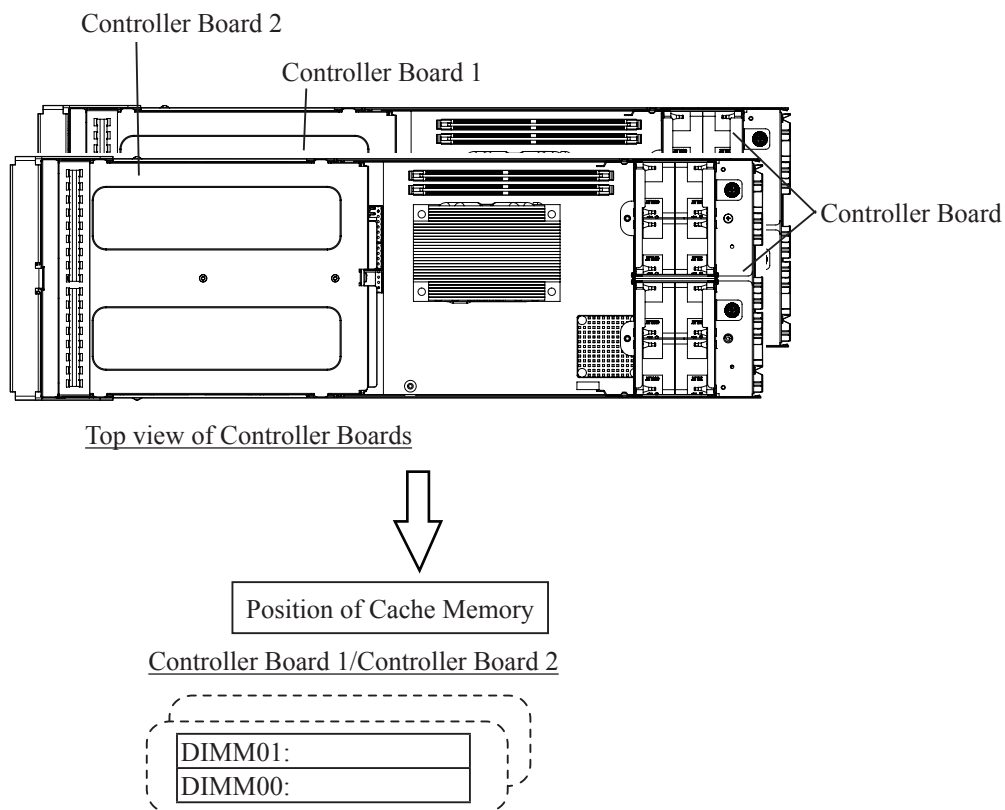
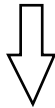
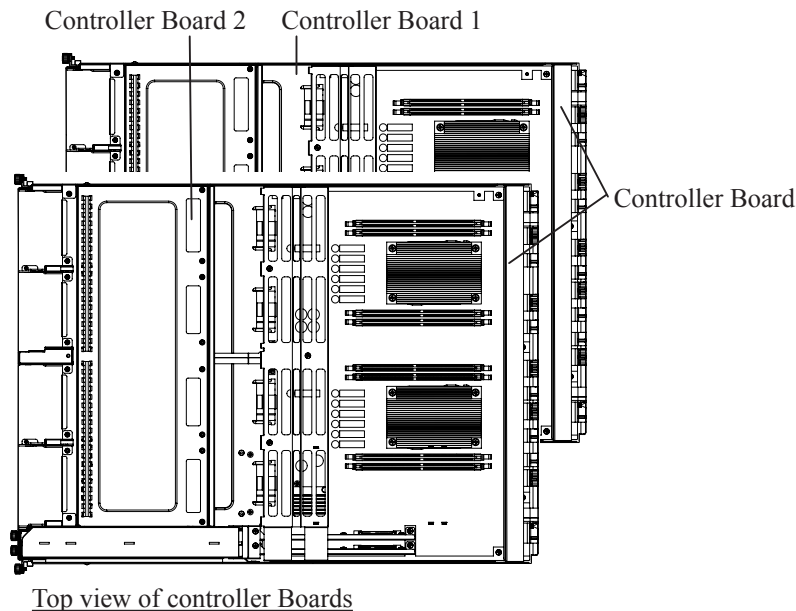
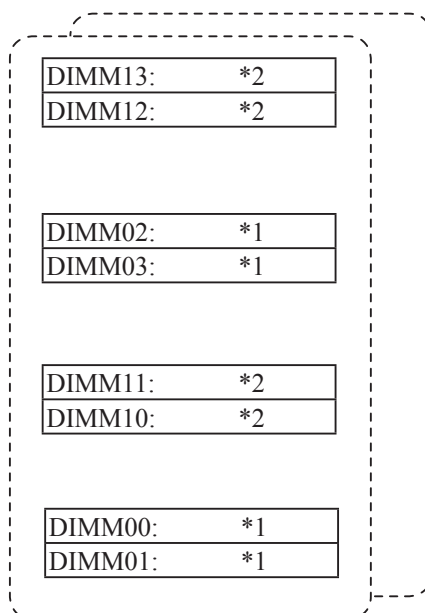


Figure 1-11 Cache Memory Location (CBLM/CBLH)



Position of Cache Memory

Controller Board 1/Controller Board 2



*1 : Belonging to CMG0 (Cache Memory Group 0).

*2 : Belonging to CMG1 (Cache Memory Group 1).

Be sure to install DIMM in CMG0.

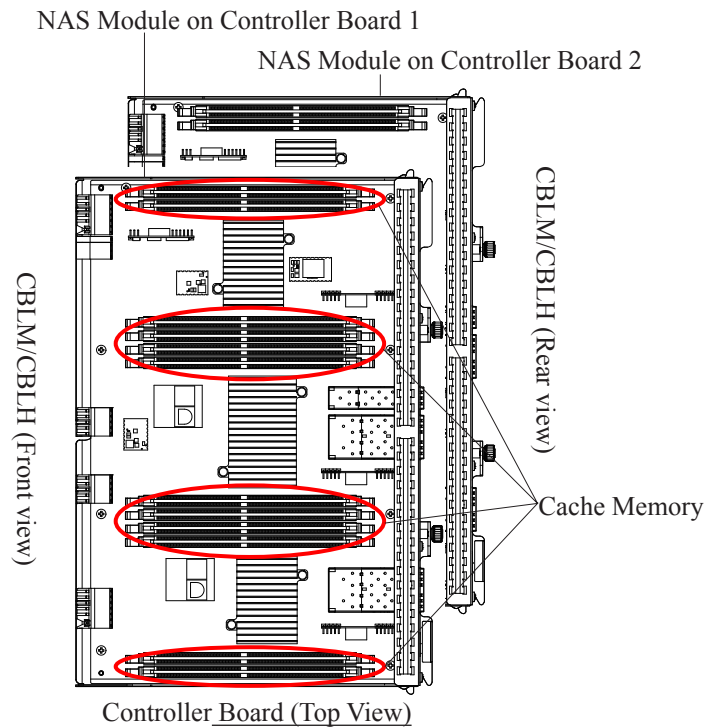
CMG1 is an additional slot of DIMM.

Install DIMM in sets of four.

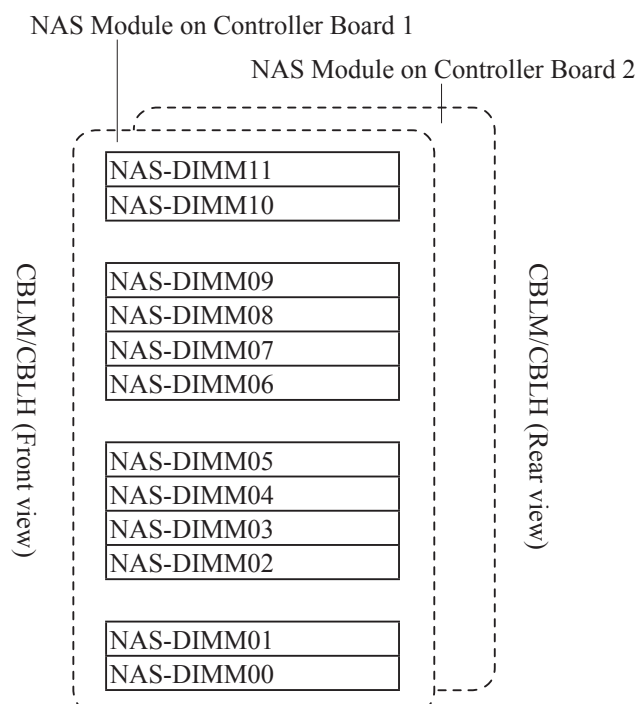
Cache Memory Location on the NAS Module(only when the NAS Module is installed)

NOTE: The Cache Memories on the NAS Module are only for the processing on the NAS Module and not included in the total Cache Memory capacity of the Storage System.

Figure 1-12 Cache Memory Location on the NAS Module



Cache Memory Location

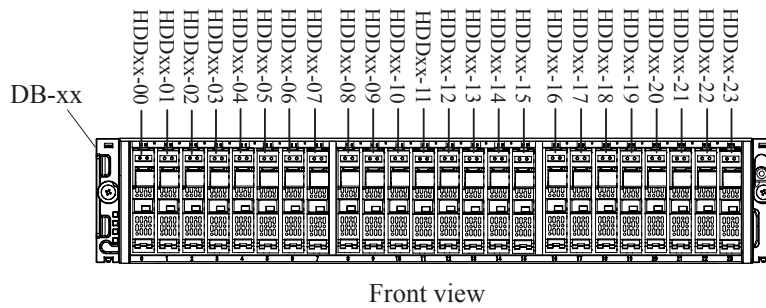


1.3.3 Drive Installation Order

1. In case of CBSS/DBS

Drives are installed in 00 to 23 in order.

Figure 1-13 Drive Position of CBSS/DBS



*1 : The name in parentheses in the Maintenance PC messages shows HDDxx-yy here.

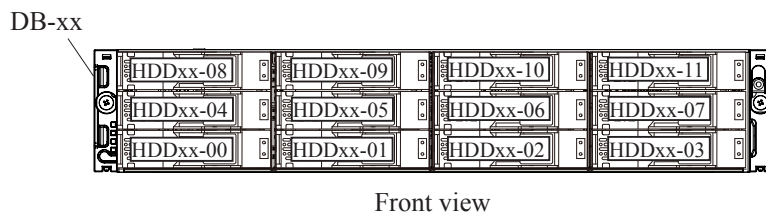
*2 : DB-xx

↳ DB No. (00, 01, 02, ..., 47)

2. In case of CBSL/DBL

Drives are installed in 00 to 11 in order.

Figure 1-14 Drive Position of CBSL/DBL



*1 : The name in parentheses in the Maintenance PC messages shows HDDxx-yy here.

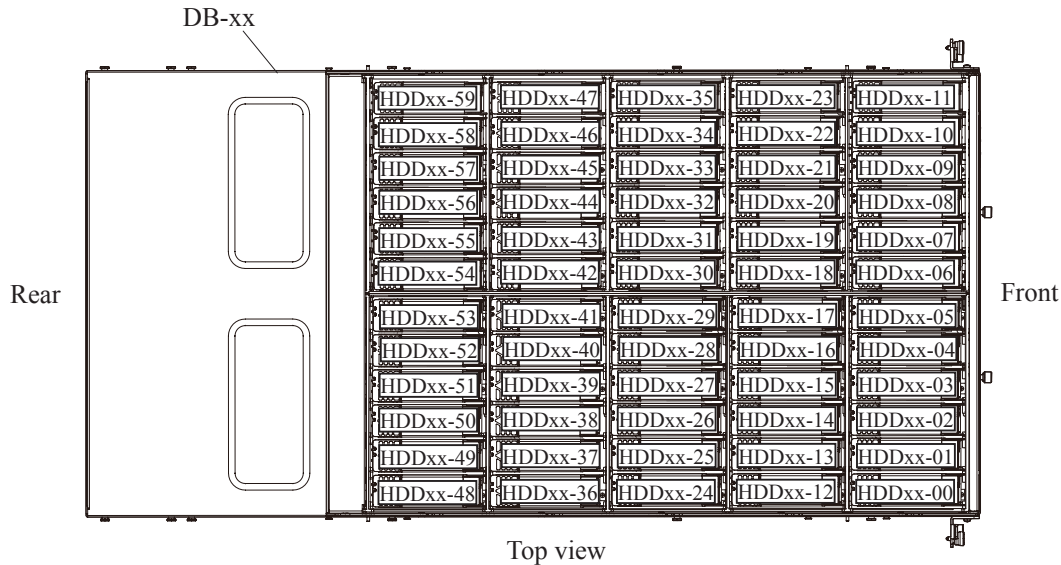
*2 : DB-xx

↳ DB No. (00, 01, 02, ..., 47)

3. In Case of Drive Box (DB60)

Drives are installed in 00 to 59 in order.

Figure 1-15 Drive Position of Drive Box (DB60)



*1 : The name in parentheses in the Maintenance PC messages shows HDDxx-yy here.

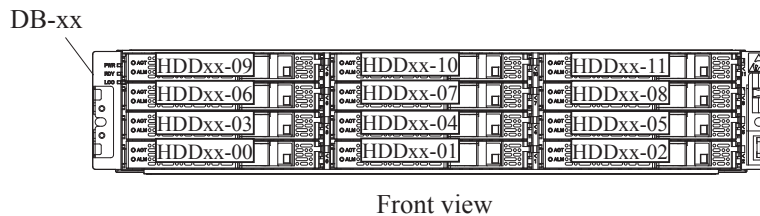
*2 : DB-xx

↳ DB No. (00, 01, 02, ..., 23)

4. In case of DBF

Drives are installed in 00 to 11 in order.

Figure 1-16 Drive Position of DBF



*1 : The name in parentheses in the Maintenance PC messages shows HDDxx-yy here.

*2 : DB-xx

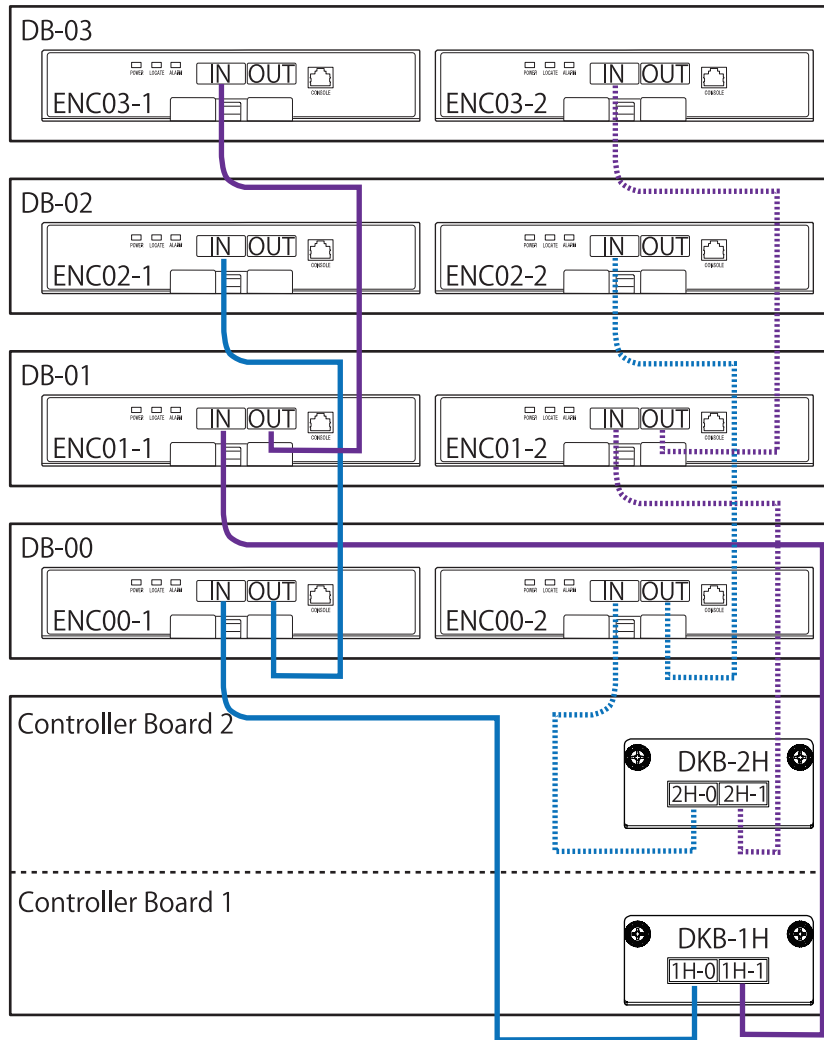
↳ DB No. (00, 01, 02, ..., 47)

This page is for editorial purpose only.

5. Connection of Disk Board and Drive Box

The connection of the Disk Board and the Drive Box is shown below.

Figure 1-17 Connection Diagram of Disk Board and Drive Box (DBS/DBL/DB60/DBF)



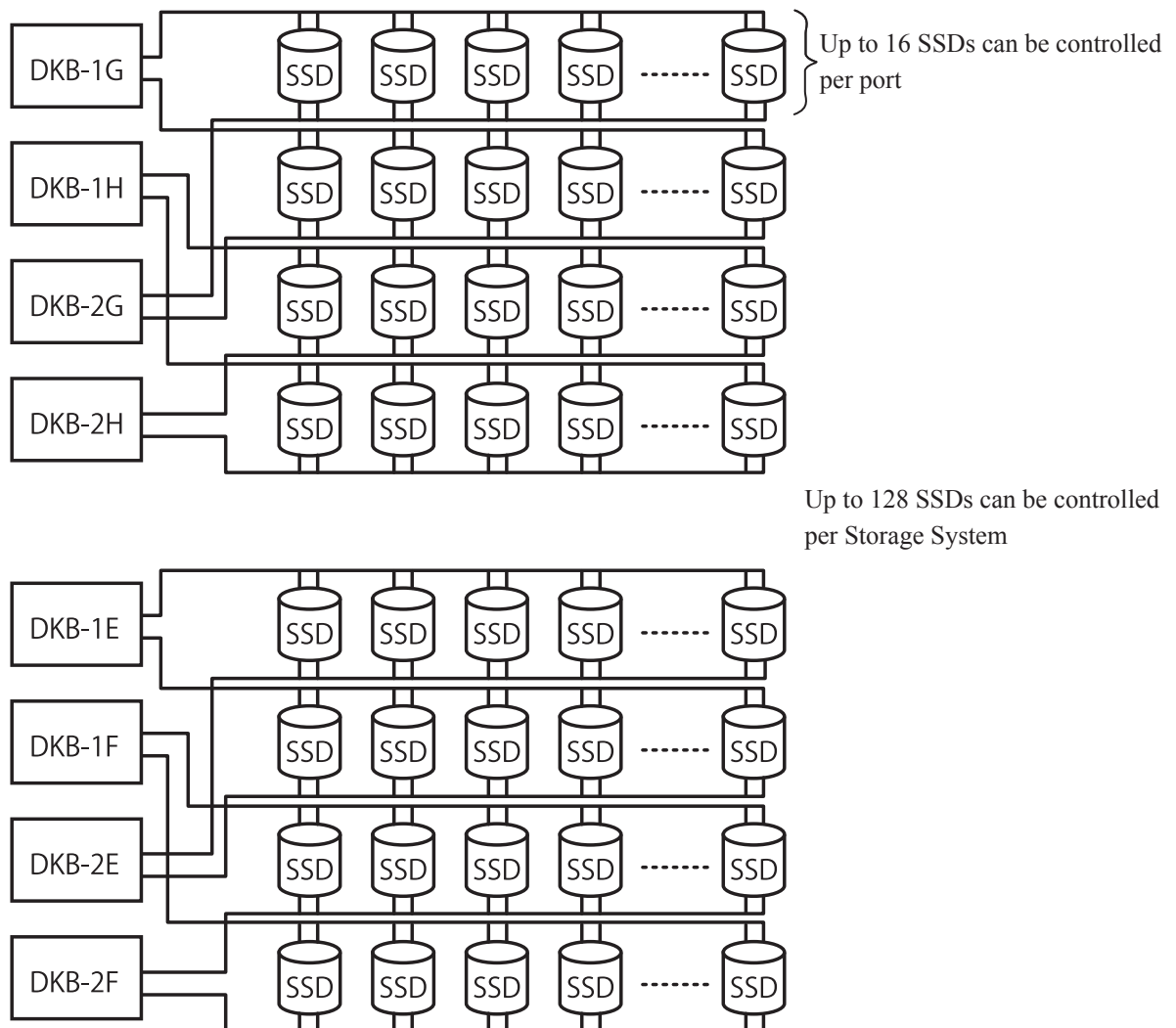
1.3.4 Notes for Installing Flash Drives (SSD)

When the firmware version is 83-01-03-x0/xx or more, there is no installation restriction of the Flash Drives. Only the firmware version 83-01-01-x0/xx has the following restrictions.

The Flash Drives that can be controlled with the Storage System are 128 Drives or less.

However, the Flash Drives that can be controlled with one port of the Disk Board (DKB) are 16 Drives or less.

Figure 1-18 Flash Drive Installation Specifications



1.3.5 Notes for Installing Flash Module Drive Boxes

1. VSP Gx00 models

Up to 48 DBFs (Flash Module Drive Boxes) can be connected to the Controller Chassis.

Table 1-21 Maximum Number of Installable DBFs and Flash Module Drives (FMDs)

Controller Chassis	Maximum number of installable DBFs	Maximum number of installable FMDs (including Spare Drives)
CBSS1/CBSL1	7	84
CBLM2	16	192
CBLM3	24	288
CBLH	48	576

2. VSP Fx00 models

Up to 48 DBFs (Flash Module Drive Boxes) can be connected to the Controller Chassis.

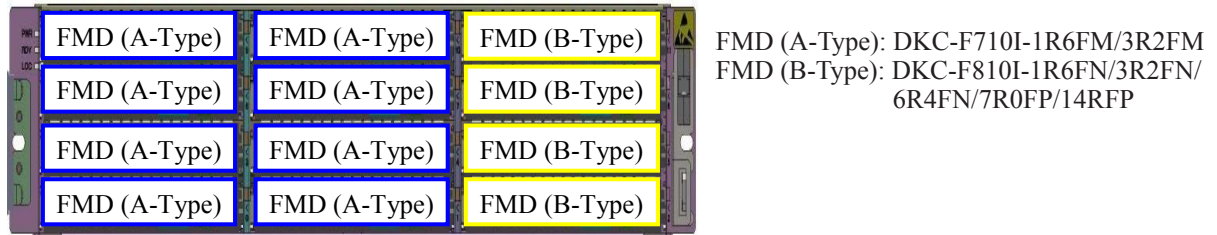
Table 1-22 Maximum Number of Installable DBFs and Flash Module Drives (FMDs)

Controller Chassis	Maximum number of installable DBFs	Maximum number of installable FMDs (including Spare Drives)
CBLM2	16	192
CBLM3	24	288
CBLH	48	576

1.3.6 Notes for Flash Module Drive (FMD) Mix Installation and Spare Drive

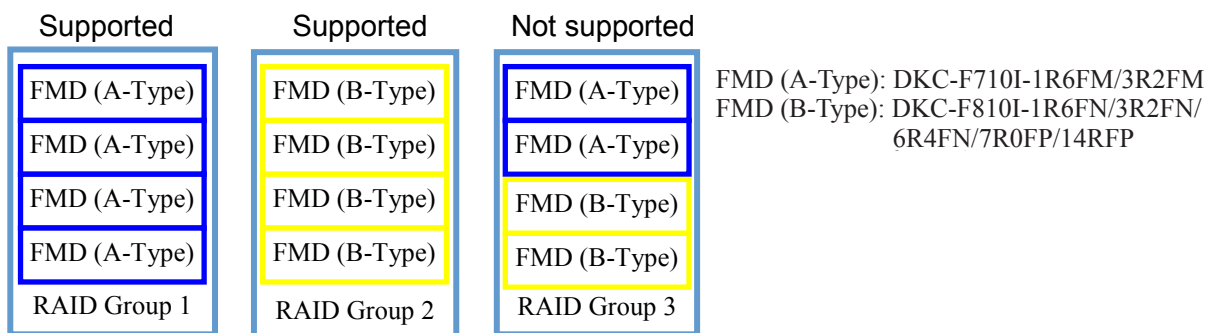
1. The different types of FMDs can be installed in the same DBF.

Figure 1-19 FMD Mix Installation



2. The different types of FMDs cannot be mixed in one RAID group.

Figure 1-20 Rule of FMD RAID Group



3. A different type of FMD cannot be used as a spare drive.
DKC-F810I-1R6FN/3R2FN/6R4FN/7R0FP/14RFP (B-Type FMD) cannot be used as a spare drive of DKC-F710I-1R6FM/3R2FM (A-Type FMD).
DKC-F710I-1R6FM/3R2FM (A-Type FMD) cannot be used as a spare drive of DKC-F810I-1R6FN/3R2FN/6R4FN/7R0FP/14RFP (B-Type FMD).

Table 1-23 List of FMDs that can be used as spare drives

Spare Drive		FMD (A-Type)		FMD (B-Type)				
		1R6FM	3R2FM	1R6FN	3R2FN	6R4FN	7R0FP	14RFP
FMD (A-Type)	1R6FM	○	○	×	×	×	×	×
	3R2FM	×	○	×	×	×	×	×
FMD (B-Type)	1R6FN	×	×	○	○	○	○	○
	3R2FN	×	×	×	○	○	○	○
	6R4FN	×	×	×	×	○	○	○
	7R0FP	×	×	×	×	○	○	○
	14RFP	×	×	×	×	×	×	○

○ : Usable × : Unusable

1.4 How to Open/Close Rear Door or Attach/Remove Front Bezel/Rear Door

1.4.1 How to Attach/Remove the Front Bezel

CAUTION

Attach or remove the Front Bezel carefully following the procedure. Otherwise, you may hurt your fingers by pinching them.

- 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 [“1.1.2 Note when Installing and Removing Parts”](#).
 - The Front Bezels of CBSS/CBSL/DBS/DBL/DBF/CHBB, CBLM/CBLH and DB60 are different in size.
 - When installing or removing the Front Bezel, try not to operate the main switch incorrectly with the hook or the ON/OFF button of the Front Bezel.

1.4.1.1 In Case of CBSS/CBSL/DBS/DBL/DBF/CHBB

A key is necessary to attach or remove a Front Bezel.

1. Procedure for removal

- (1) Insert the key into the keyhole on the Front Bezel and release the Lock of the Front Bezel (①).
- (2) Pull the key toward you while holding the lower right portion of the Front Bezel, and then remove the right side of the Front Bezel from the ball catch (②).

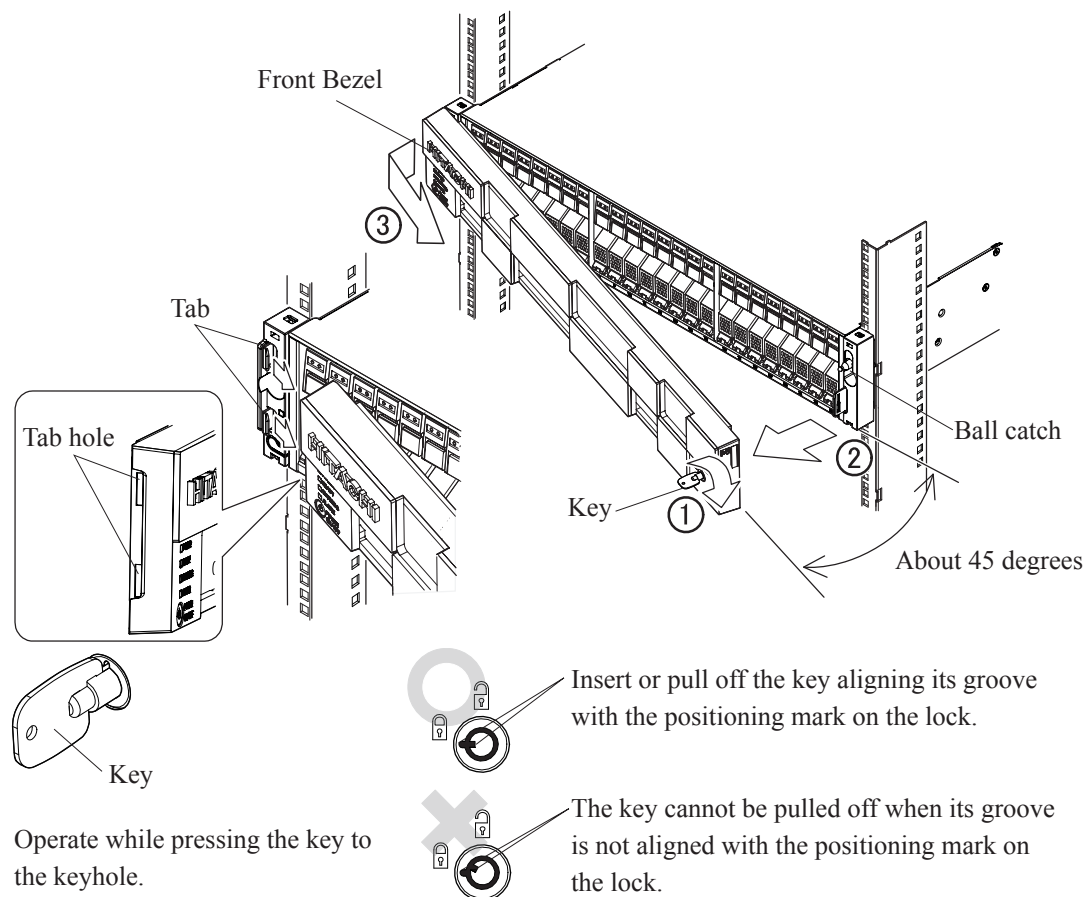
NOTE : When removing the Front Bezel, work with the opening angle between the Front Bezel and the Storage System of up to 45 degrees.

Do not force the Front Bezel open too wide. Otherwise, a damage of Front Bezel may be caused.

- (3) Remove the Front Bezel from the left tabs while pulling, and then remove it (③).

NOTE: When removing Front Bezel, don't push left side of Front Bezel.

Figure 1-21 Procedure for Removing Front Bezel (CBSS/CBSL/DBS/DBL/DBF/CHBB)



NOTE : • When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.

- When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock.

When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused.

2. Procedure for attachment

- (1) Unlock the Front Bezel with the key, and hold the key and bottom of Front Bezel with your both hands.
- (2) Insert the tabs on the left front side of the Storage System into the tab holes on the Front Bezel (①).

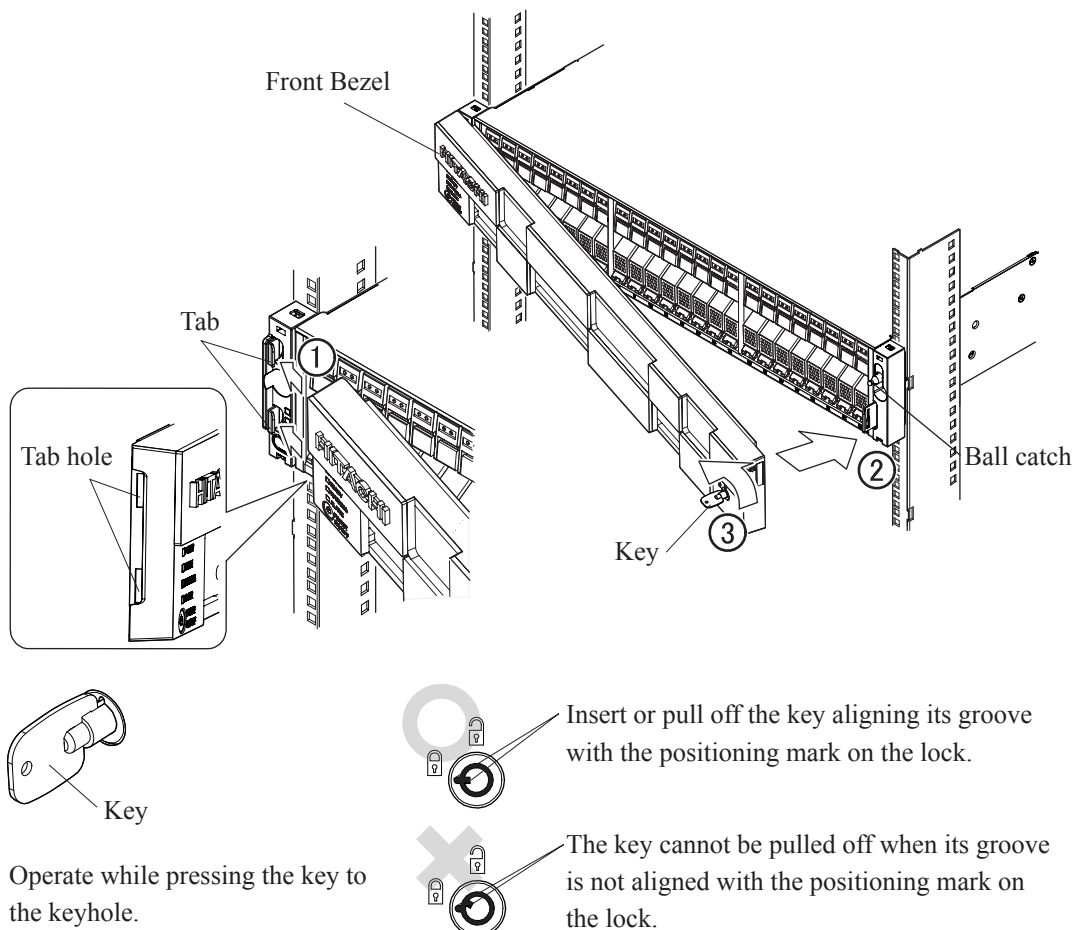
NOTE: When inserting Front Bezel, don't push left side of Front Bezel.

- (3) Fix the Front Bezel by pressing the right side of the Front Bezel to engage it with the ball catch on the front side of the Storage System (②).

NOTE: When fixing Front Bezel, don't push left side of Front Bezel.

- (4) Lock the Front Bezel with the key (③).

Figure 1-22 Procedure for Attaching Front Bezel (CBSS/CBSL/DBS/DBL/DBF/CHBB)



- NOTE :
- When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.
 - When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock.
When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused.

1.4.1.2 In Case of CBLM/CBLH

A key is necessary to attach or remove a Front Bezel.

1. Procedure for removal

- (1) Insert the key into the keyhole on the Front Bezel and release the Lock of the Front Bezel (①).
- (2) Pull the key toward you while holding the lower right part of the Front Bezel, and then remove the right side of the Front Bezel from the ball catch (②).

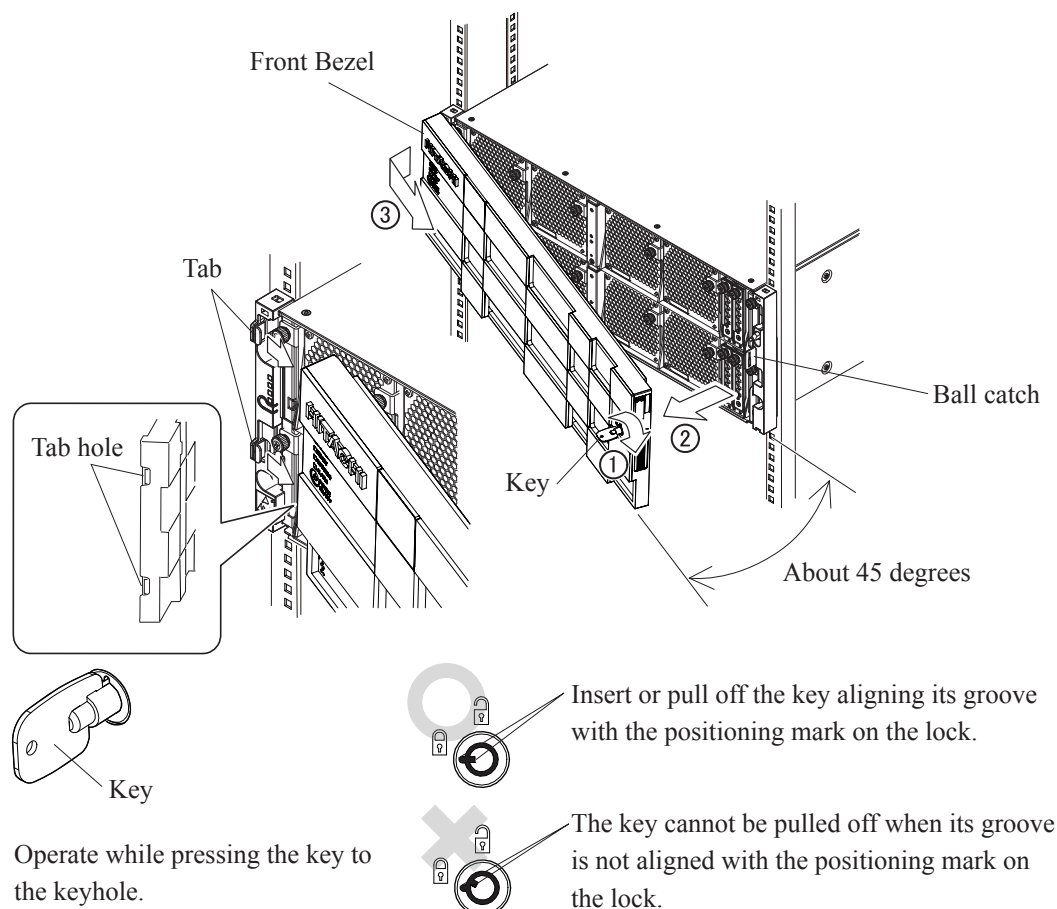
NOTE : When removing the Front Bezel, work with the opening angle between the Front Bezel and the Storage System of up to 45 degrees.

Do not force the Front Bezel open too wide. Otherwise, a damage of Front Bezel may be caused.

- (3) Remove the Front Bezel from the left tabs while pulling, and then remove it (③).

NOTE: When removing Front Bezel, don't push left side of Front Bezel.

Figure 1-23 Procedure for Removing Front Bezel (CBLM/CBLH)



NOTE : • When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.

- When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock.

When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused.

2. Procedure for attachment

- (1) Unlock the Front Bezel with the key, and hold the key and bottom of Front Bezel with your both hands.
- (2) Insert the tabs on the left front side of the Storage System into the tab holes on the Front Bezel (①).

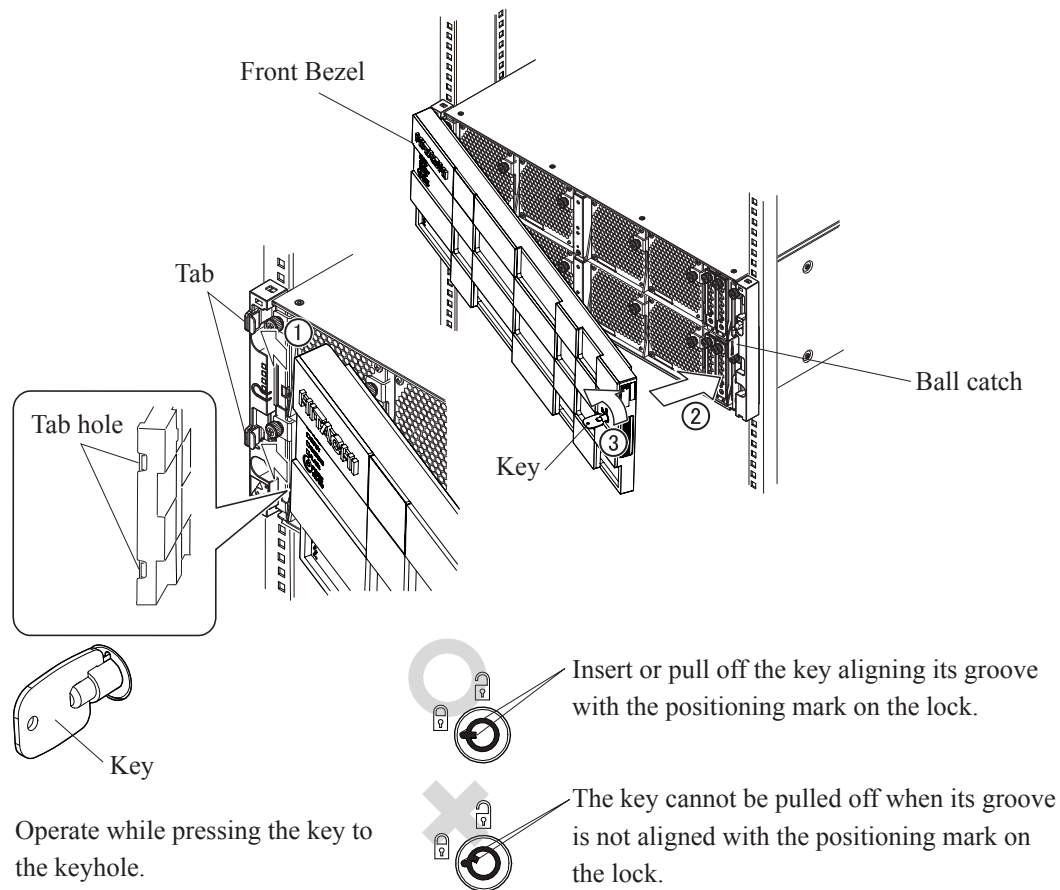
NOTE: When inserting Front Bezel, don't push left side of Front Bezel.

- (3) Fix the Front Bezel by pressing the right side of the Front Bezel to engage it with the ball catch on the front side of the Storage System (②).

NOTE: When fixing Front Bezel, don't push left side of Front Bezel.

- (4) Lock the Front Bezel with the key (③).

Figure 1-24 Procedure for Attaching Front Bezel (CBLM/CBLH)



- NOTE :
- When inserting and turning the key, have it inserted completely. If you turn the key while pulling it towards you, a damage of it may be caused.
 - When removing the key after locking up the Front Bezel, pull it off aligning its groove with the positioning mark on the lock.
When the key is pulled off in the state where its groove is not aligned with the positioning mark on the lock, a damage of the lock may be caused.

1.4.1.3 In Case of DB60

⚠ CAUTION

- Be careful of the workers on the other side when pulling out or storing the DB60.
- Do not pull out multiple DB60s at a time because the rack may fall over.
- Do not put objects on the DB60 which has been pulled out of the rack or use it as working space because the rack may fall over.

NOTE : Check that the stabilizer is attached to the front side of the rack.

If the stabilizer is not attached, attach it to the rack.

1. How to pull out the DB60 from out of the rack frame

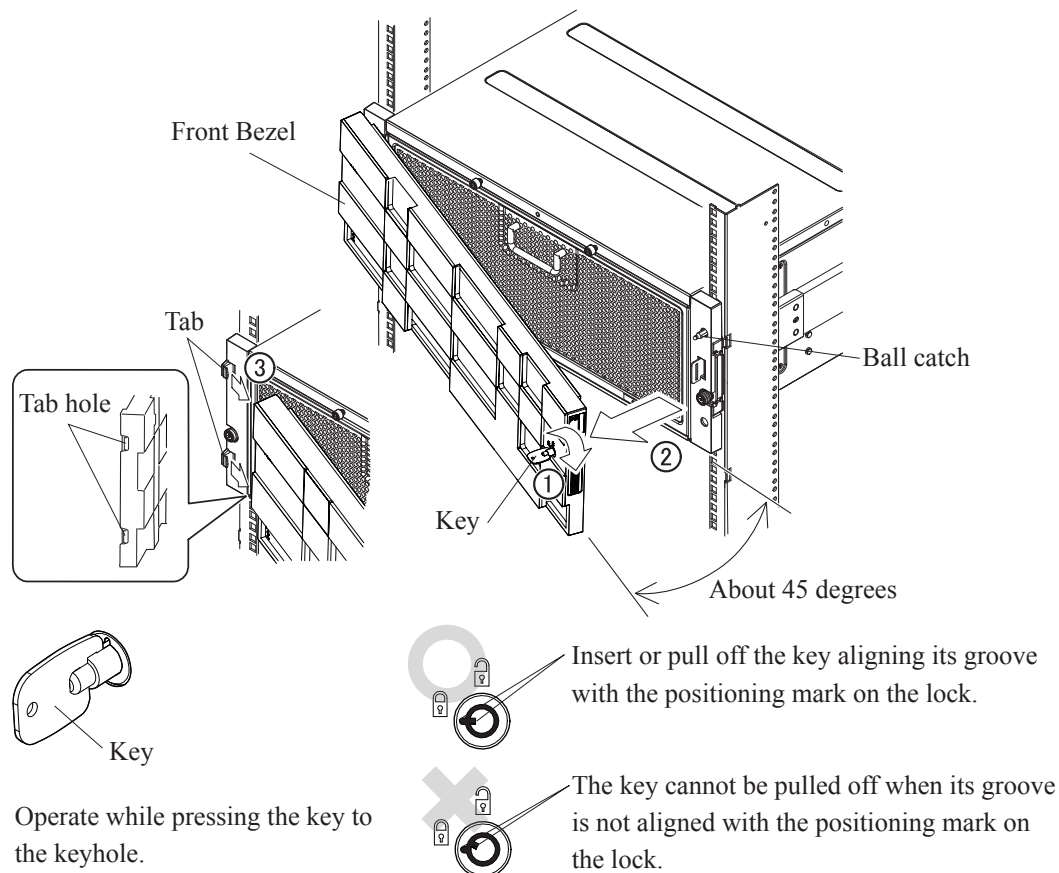
- (1) Insert the key into the keyhole on the Front Bezel and release the lock of the Front Bezel (①).
- (2) Pull the key toward you while holding the lower right portion of the Front Bezel, and then remove the right side of the Front Bezel from the ball catches (②).

NOTE : When removing the Front Bezel, work with the opening angle between the Front Bezel and the Storage System of up to 45 degrees.

Do not force the Front Bezel open too wide. Otherwise, a damage of Front Bezel may be caused.

- (3) Remove the Front Bezel from the left tabs and then remove it (③).

Figure 1-25 Procedure for Removing Front Bezel (DB60)

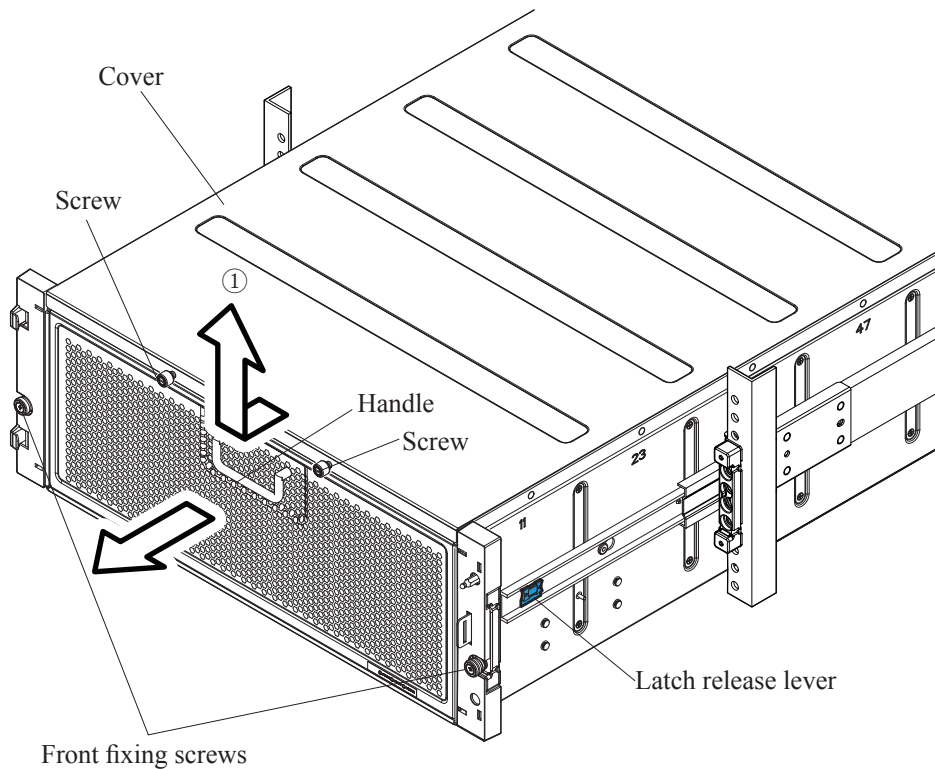


- (4) Loosen two front fixing screws.
- (5) Hold the handle in the front of the Drive Box and pull out slowly until it stops.

NOTE : Be careful not to hit your head on the Storage System which was pulled out.

- (6) Loosen two screws and slide the cover on the top of the DB60 to the direction shown by the arrow ① and remove it.

Figure 1-26 How to Pull Out the DB60



2. How to store the DB60 in the rack frame.

- (1) Attach the top cover of DB60 by sliding it in the direction shown by the arrow (①) and tightening the two screws by hand.

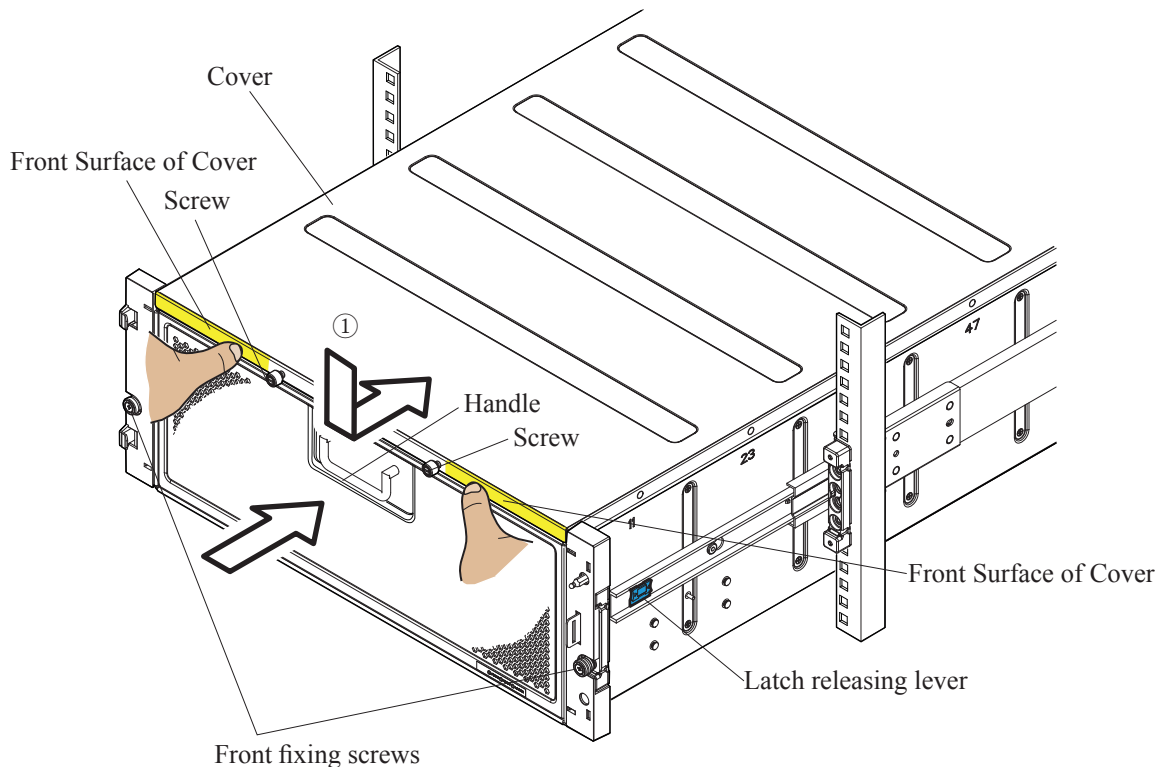
Press the front surface of the cover with your hands away from the top surface of the cover when attaching the cover.

NOTE : • Pressing the top surface of the cover might distort the cover.

- Do not drop a screw in the Storage System.
- If you dropped it, remove it immediately.
- If you leave it, the parts will short out and it will cause a fire or a failure.

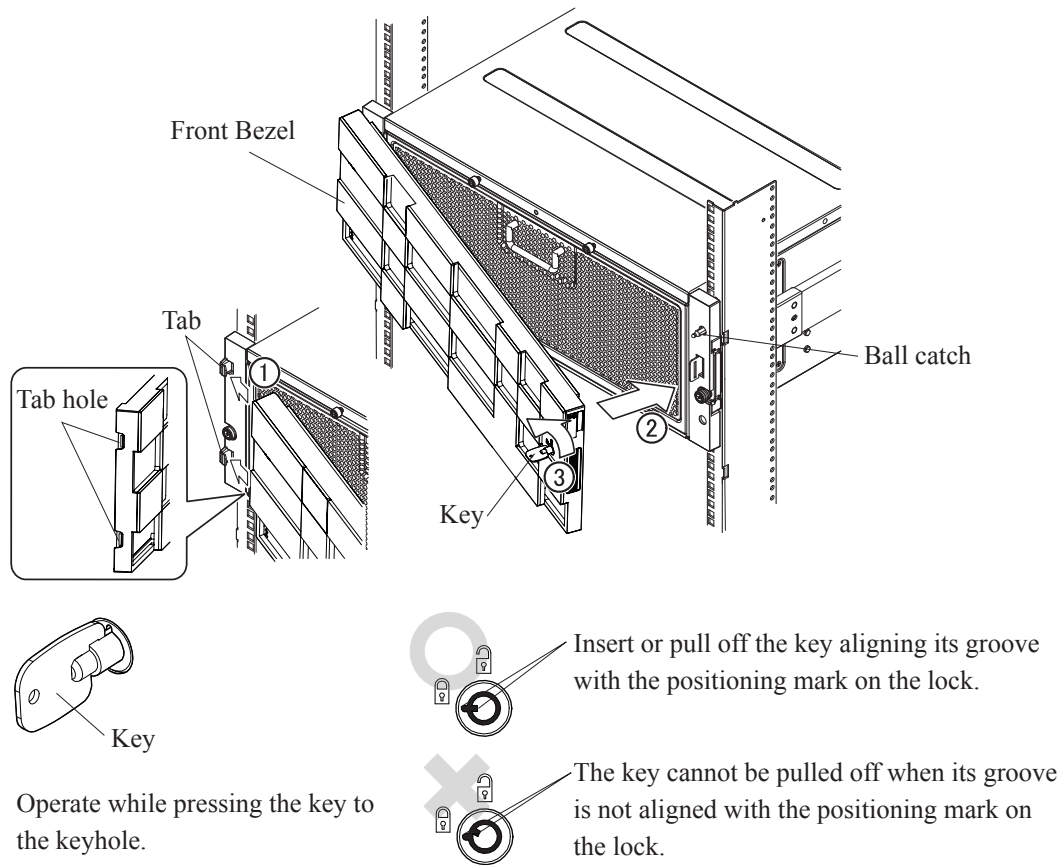
- (2) Release the lock by sliding the latch releasing lever which is located in the right and left rails, and push the front side of the DB60 gently all the way into the rack frame.
- (3) Tighten two front fixing screws by hand to fix it.

Figure 1-27 How to Store DB60



- (4) Unlock the Front Bezel with the key, and hold the key and bottom of Front Bezel with your both hands.
- (5) Insert the tabs on the left front side of the Storage System into the tab holes on the Front Bezel (①).
- (6) Fix the Front Bezel by pressing the right side of the Front Bezel to engage it with the ball catch on the front side of the Storage System (②).
- (7) Lock the Front Bezel with the key (③).

Figure 1-28 Procedure for Attaching Front Bezel (DB60)



1.4.2 How to Open/Close the Door of the RKU Rack Frame

⚠ CAUTION

Open or close the door carefully following the procedure. Otherwise, you may hurt your fingers by pinching them.

For information about the Hitachi Universal V2 rack used with HDS VSP storage systems, refer to the Hitachi Universal V2 Rack Reference Guide (MK-94HM8035).

For the procedure for removing and installing the Front Bezel, refer to [“1.4.1 How to Attach/Remove the Front Bezel”](#).

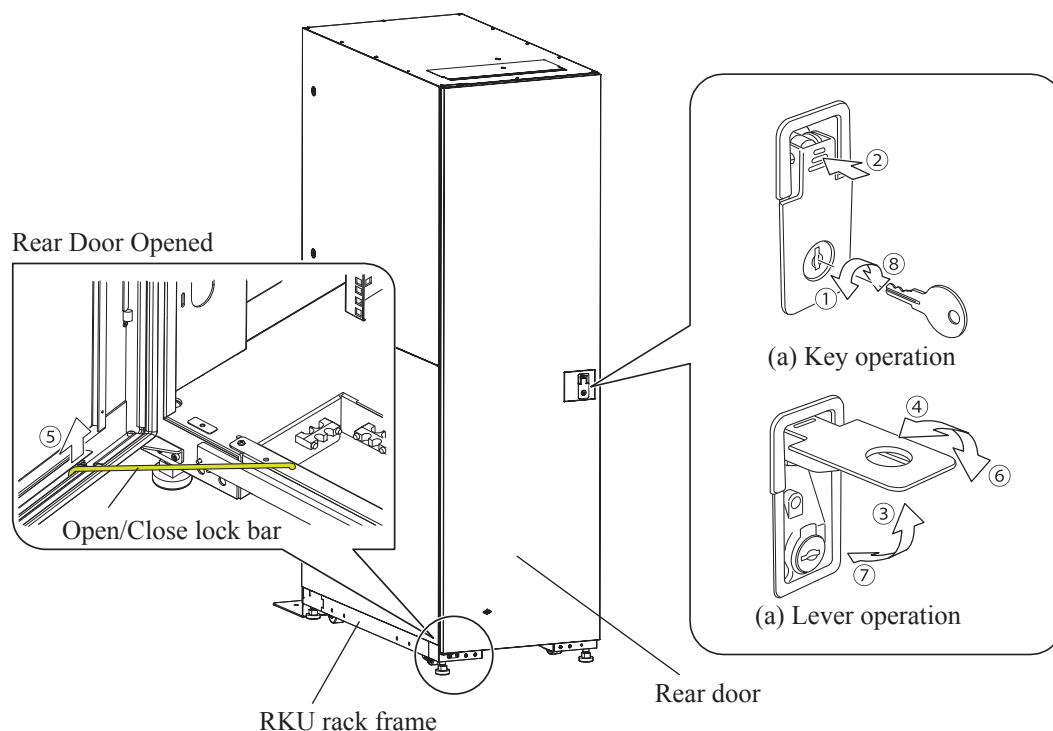
1. Procedure for opening the door

- (1) Insert the key to the keyhole on the rear door, and turn the key to the left to open lock (①).
- (2) Push the upper part of the lever, and raise the lower part of the lever toward (② , ③).
- (3) Turn the lever to the left and pull the lever toward to open the rear door (④).

2. Procedure for closing the door

- (1) Lift the open/close lock bar on the bottom of the back of the rear door to release the lock (⑤).
- (2) Close the door, and push and turn the lever to the right (⑥).
- (3) Push down the lever and push the lower part of the lever (⑦).
- (4) Insert the key to the keyhole on the door and turn the key to the right to lock (⑧).

Figure 1-29 Procedure for Opening/Closing the Rear Door



1.5 Power On/Off Procedure

The Drive may emit mechanical sound “click-clack” when the Drive is started (spun up) immediately after the Storage System powering on and when the Drive is powered off (spun down). However, since there is no problem if the WARNING LED (amber) on the Controller Chassis is not lighting up or blinking at low speed or the ALARM LED (red) on the Controller Chassis is not lighting up or blinking, use the Storage System as it is.

NOTICE: The profile data written by the profile tool is initialized by the power off procedure, so the external volume that performs the mapping of the external storage system connected by using the profile tool is blocked after the power on procedure. When SIM = efd000 is reported and the external volume is blocked by the power on/off procedure, perform the recovery procedure according to TROUBLESHOOTING SECTION “[11.2.1 Recovery Procedure for Path Failure While Device is Blocked \(SIM = 21d0-xy, efd000\)](#)”.

1.5.1 Storage System Power On

1. Turn on the main breakers at the PDUs on the Rack frames. (See [Figure 1-30](#))

The Storage System is in a standby mode when the PDU breaker is in a power-on state and the power of Storage System is off, therefore the FANs of the Storage System continue to operate. Execute this operation just before the power-on processing. When the standby electricity must be controlled, because the standby electricity exists in the equipment under this condition.

2. Turn on the main switch. (See [Figure 1-31](#))

Press the main switch on the front of the Storage System to the ON position for approximately 3 seconds. When connecting a remote adapter (a power interlock mode is UPS interlock mode 3), the Storage System starts up interlocking with the power input of the remote adapter.

3. Check that the READY LED (green) on the Controller Chassis lights up. (See [Figure 1-31](#)) See the following table for the standard time to turn on the LED.

Table 1-24 Standard Lighting Time

No.	Model name	Normal Time
1	VSP G200	About 16 minutes later
2	VSP G400, G600	About 24 minutes later
3	VSP G800	About 33 minutes later

4. When NAS Modules are installed, log into NAS Manager, check the node status, and then check whether the system is running normally.
 - For how to log into NAS Manager see MAINTENANCE PC SECTION “[6.1 Logging into/Logging out NAS Manager](#)”.
 - To check the node status, see MAINTENANCE PC SECTION “[6.3 Confirming the Node Status](#)”.

NOTICE:

- When turning off and then on the power, check that the same HDD firmware version is displayed in the Current pane and CFM Version pane after the READY LED lights solid. (See [MPC05-1110](#))
- If the power is turned off during the HDD firmware update, the HDD firmware version might not be consistent.
If the HDD firmware version is not consistent, update the HDD firmware. (See [FIRM03-30](#))

NOTICE: If you perform power-on after power-off of the storage system with Capacity Saving (Dedupe and Compression) used, check the state of all DP-VOLs with Capacity Saving enabled after the status of the storage system becomes READY. For the check procedure, refer to [Virtual Volumes] tab in [Pools: Volume] tabs or “Logical Devices” window in “Provisioning Guide”. If the DP-VOLs with Capacity Saving enabled are blocked, perform the LDEV format on the DP-VOLs. (See [TRBL21-70.](#))

Figure 1-30 PDU Breaker

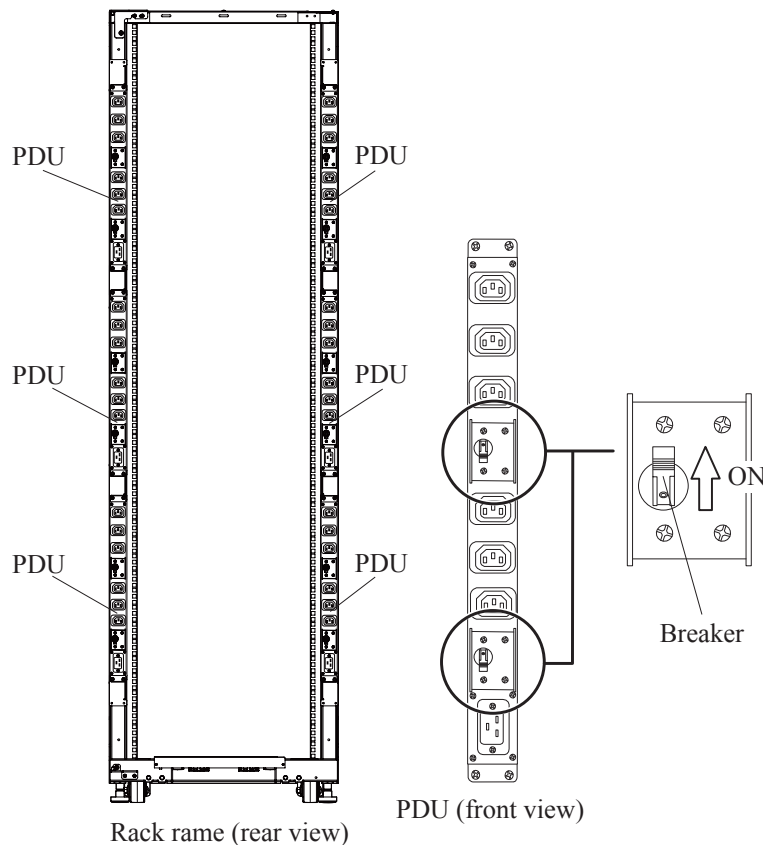


Figure 1-31 MAIN Switch on the Front Side of CBSS/CBSL

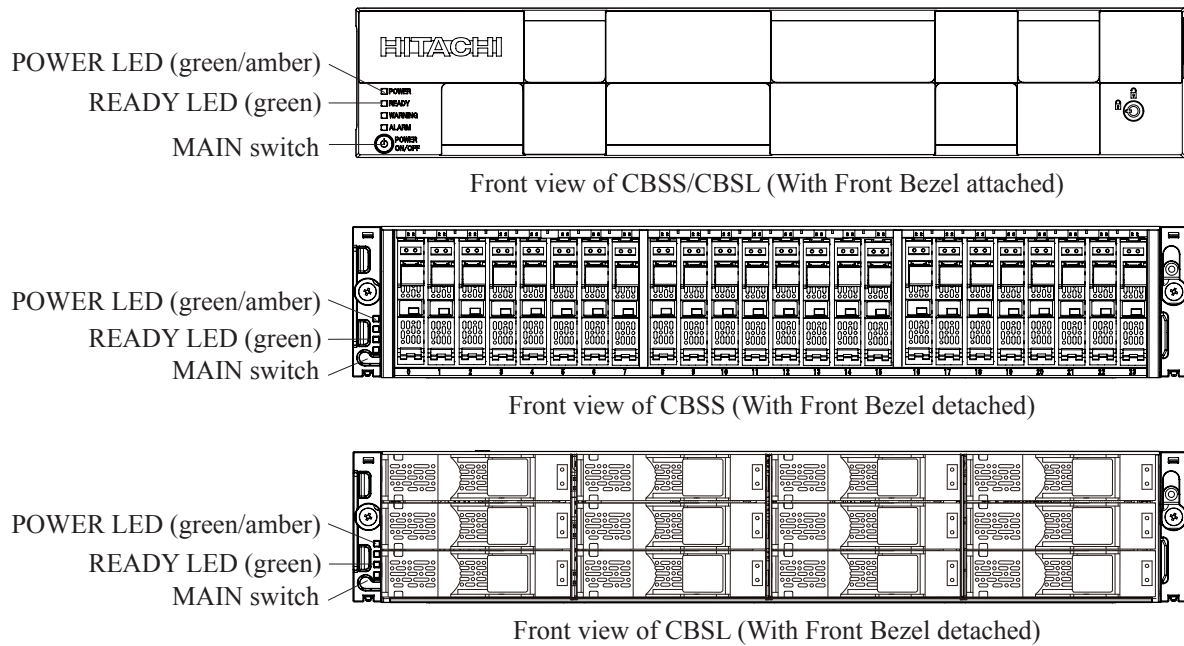
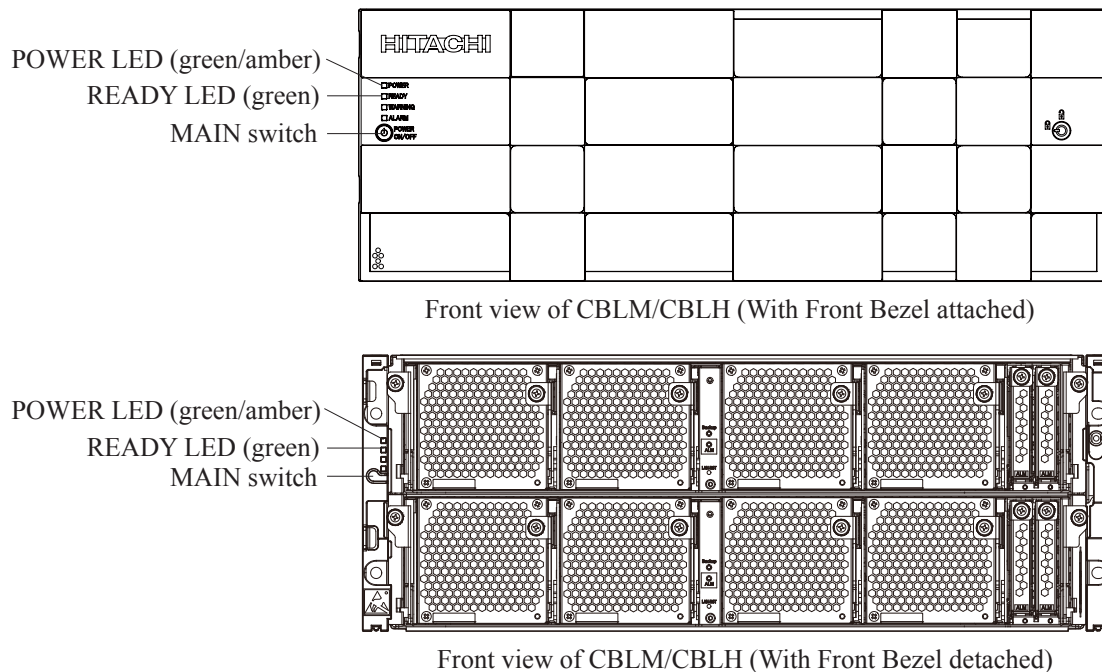


Figure 1-32 MAIN Switch on the Front Side of CBLM/CBLH



1.5.2 Storage System Power Off (Planned Shutdown)

NOTICE: Confirm that maintenance operations (except for configuration information setting) have been completed before powering OFF the Storage System.

When turning the breaker off before or during a power-off operation, an emergency processing that transfers data to the SSD is performed with the battery.

Make sure the power is completely turned off after executing the following procedures because the emergency processing drains the batteries and prolongs the next power-on time according to the remaining battery charge.

1. Turn off the main switch.

Press the main switch of the Controller Chassis for about three seconds until the POWER LED on the front of the Controller Chassis changes from solid green to blinking.

2. Release the main switch and the POWER LED returns to solid green after blinking for about three seconds.

The POWER LED is lit solid green during power-off processing.

The POWER LED changes from green to amber when the power-off processing is completed.

Refer to the following table for the standard time to turn on the LED in amber.

Table 1-25 Standard Lighting Time

No.	Model name	Normal Time	Including Destaging Time (Maximum)
1	VSP G200	About 20 minutes	About 260 minutes
2	VSP G400, G600	About 20 minutes	About 290 minutes
3	VSP G800	About 25 minutes	About 290 minutes

3. Power off the Storage System in the following procedure (AC input completely turned off).

- (1) If the power cables of the Storage System are connected to the PDU, check if a power cable of other Storage System such as a switch is connected to the PDU.

If the power cable of other Storage System is not connected, power off the breakers of the PDU.

If the power cable of other Storage System is connected to the PDU, check whether the other Storage System can be powered off. If the other Storage System cannot be powered off, remove two power cables (four power cables for DB60) from the power supply of the Controller Chassis side and Drive Box side.

- (2) If power cables are connected to something other than PDU, remove two power cables of the Controller Chassis and Drive Box, or turn off the input power.

1.5.2.1 Planned Shutdown of the Storage System that GAD Uses

Planned shutdown of the storage system that GAD uses and startup operation after the planned shutdown are explained.

1. Planned shutdown of the storage system

Table 1-26 shows “Planned shutdown patterns of the storage system”.

And Figure 1-33 shows operation outline of planned shutdown patterns.

Table 1-26 Planned Shutdown Patterns of the Storage System

× : To be performed

— : Not performed

Planned shutdown patterns of the storage system	Storage system to be powered off (*1)			Storage system to continue I/O		Storage system in which a GAD pair is suspended		Disconnection of Quorum disk (*2)
	Primary site	Secondary site	External (*3)	Primary site	Secondary site	Primary site	Secondary site	
A	×	×	×	—	—	×	—	×
B	×	×	—	—	—	×	—	—
C	×	—	×	—	×	—	×	×
D	×	—	—	—	×	—	×	—
E	—	×	×	×	—	×	—	×
F	—	×	—	×	—	×	—	—
G (*4)	—	—	×	×	—	×	—	×
H (*5)	—	—	×	—	×	—	×	×

*1: The order of power off of the storage system is not regulated. Power off is available from wherever “ × ” is marked.

*2: SIM of Quorum disk blockade may be reported on storage system of primary and/or secondary site by disconnection of Quorum disk.

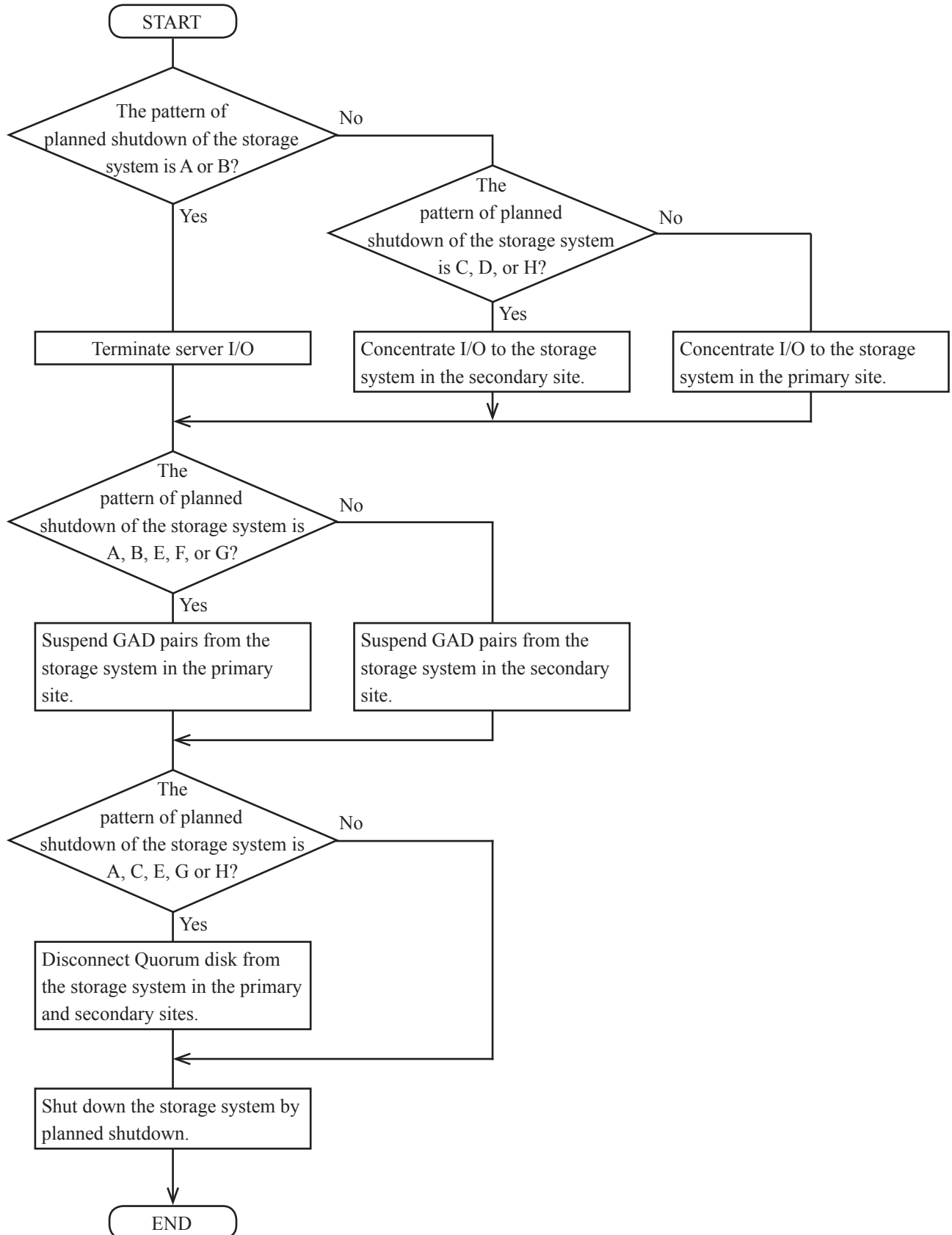
*3: External storage systems for Quorum disk.

*4: I/O continues in the storage system of the primary site when the external storage system is stopped.

*5: I/O continues in the storage system of the secondary site when the external storage system is stopped.

For operation procedures, refer to the description on planned shutdown of the storage system in the “Global-Active Device User Guide”.

Figure 1-33 Operation Outline of Planned Shutdown Patterns of the Storage System



2. Startup of the storage system after planned shutdown

Table 1-27 shows “Startup patterns of the storage system after planned shutdown”.

And Figure 1-34 shows operation outline (flow) of startup patterns of the storage system after planned shutdown”.

Table 1-27 Startup Patterns of the Storage System After Planned Shutdown

× : To be performed

— : Not performed

Startup patterns of the storage system after planned shutdown	Storage system to be powered on (*1)			Storage system to continue I/O		Storage system in which GAD pairs are resynchronized		Connect Quorum disk (*2)
	Primary site	Secondary site	External (*3)	Primary site	Secondary site	Primary site	Secondary site	
A	×	×	×	(*4)	(*4)	×	—	×
B	×	×	—	(*4)	(*4)	×	—	—
C	×	—	×	(*4)	×	—	×	×
D	×	—	—	(*4)	×	—	×	—
E	—	×	×	×	(*4)	×	—	×
F	—	×	—	×	(*4)	×	—	—
G (*6)	—	—	×	×	(*4)	×	—	×
H (*7)	—	—	×	(*4)	×	—	×	×

*1: The order of power on of the storage system is not regulated. Power on is available from wherever “ × ” is marked.

*2: In case of SIM of Quorum disk blockade was reported on storage system of primary or secondary site by disconnection of Quorum disk, please delete the SIM after connection of Quorum disk.

*3: External storage systems for Quorum disk.

*4: Storage system in which I/O restarts.

*5: A GAD pair is resynchronized in the storage system of the secondary site by swapping the primary volume for the secondary volume (Swap resync).

*6: I/O continues in the storage system of the primary site when the external storage system is stopped.

*7: I/O continues in the storage system of the secondary site when the external storage system is stopped.

For operation procedures, refer to the description on planned shutdown of the storage system in the “Global-Active Device User Guide”.

Figure 1-34 Operation Outline in Startup Patterns After Planned Shutdown of the Storage System

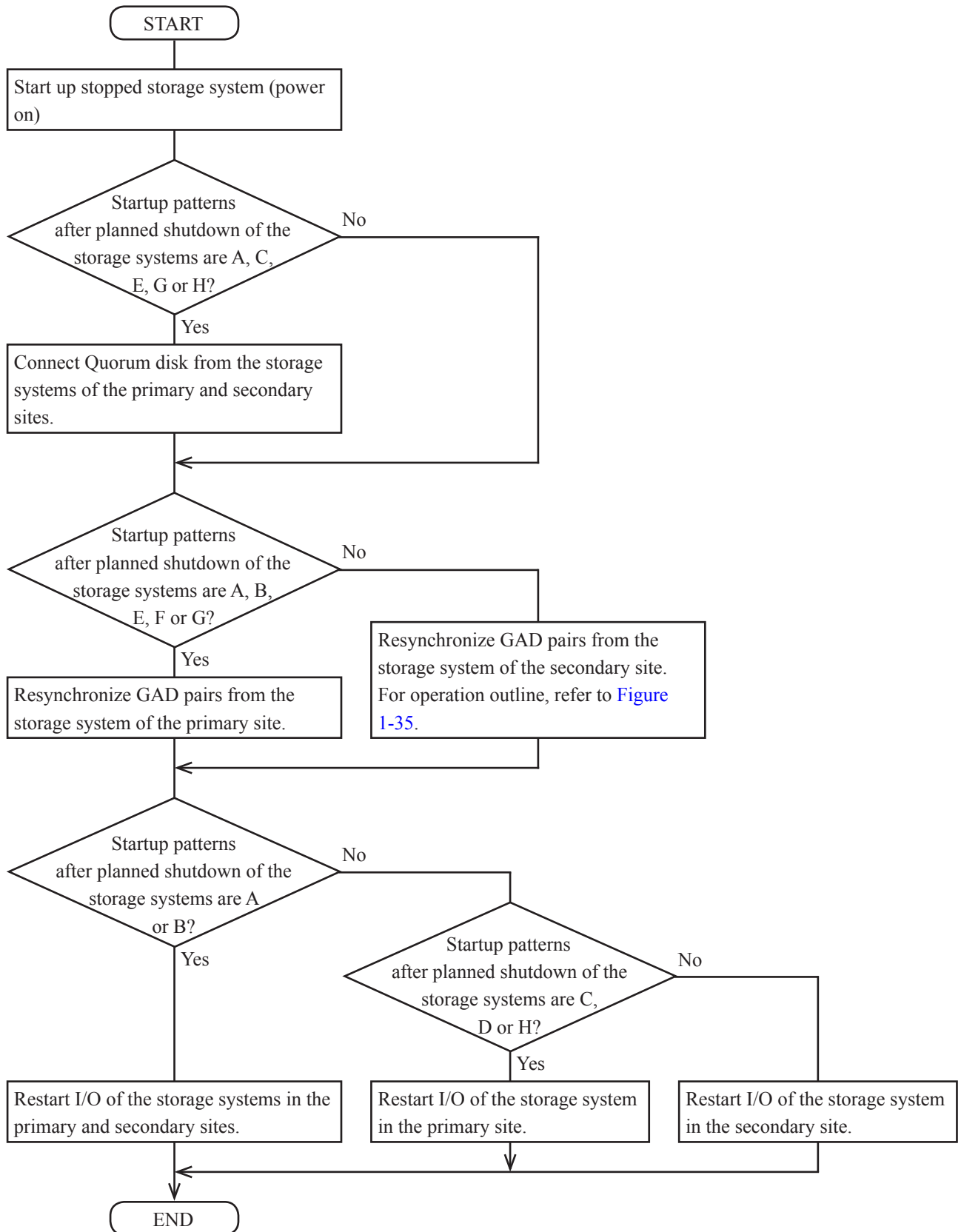
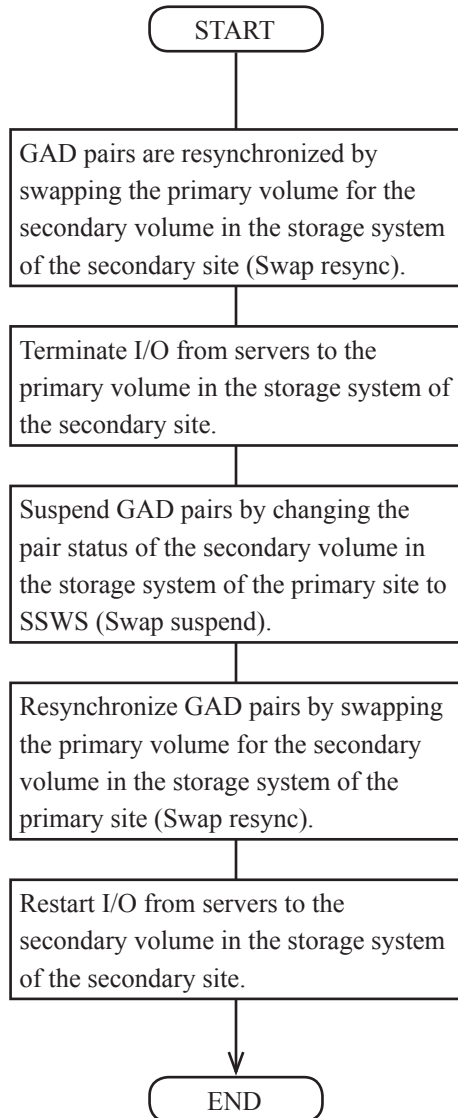


Figure 1-35 Resynchronization of GAD Pairs from the Storage System in the Secondary Site



1.6 Connecting the Maintenance PC

1.6.1 Attachment / Removal Procedure of Maintenance PC

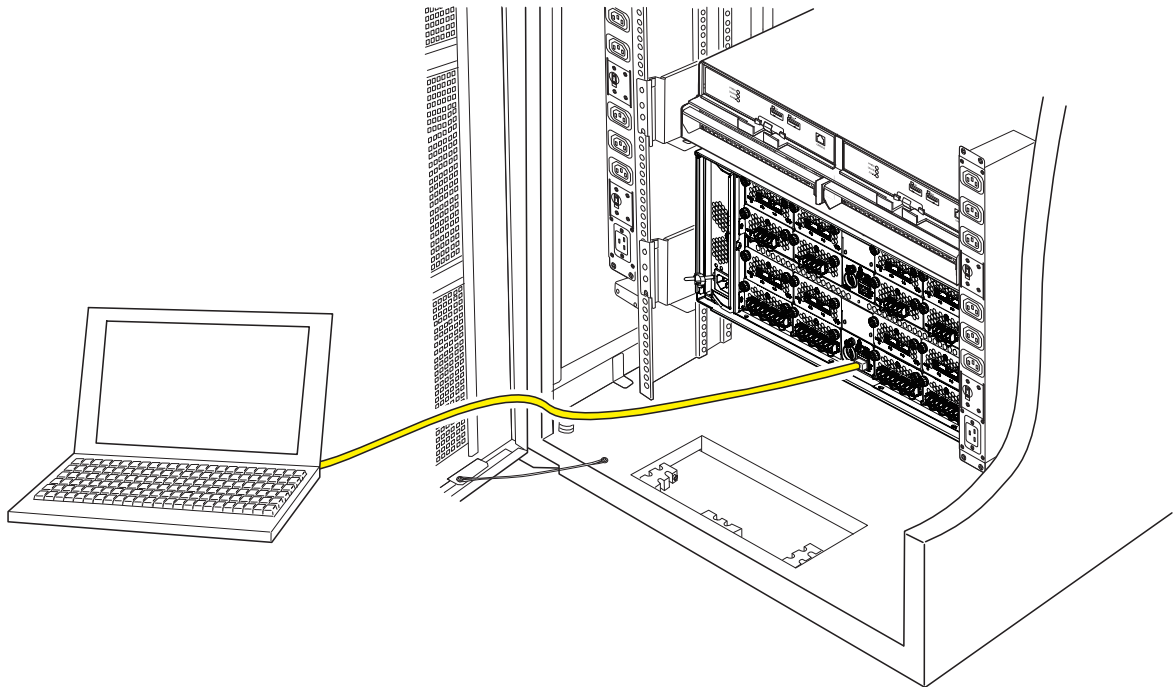
1.6.1.1 Attachment Procedure of Maintenance PC

1. Connect a power cable and LAN cable to the Maintenance PC
2. Connect the LAN cable to the maintenance LAN port at the Controller Board. (Refer to [Figure 1-36.](#))

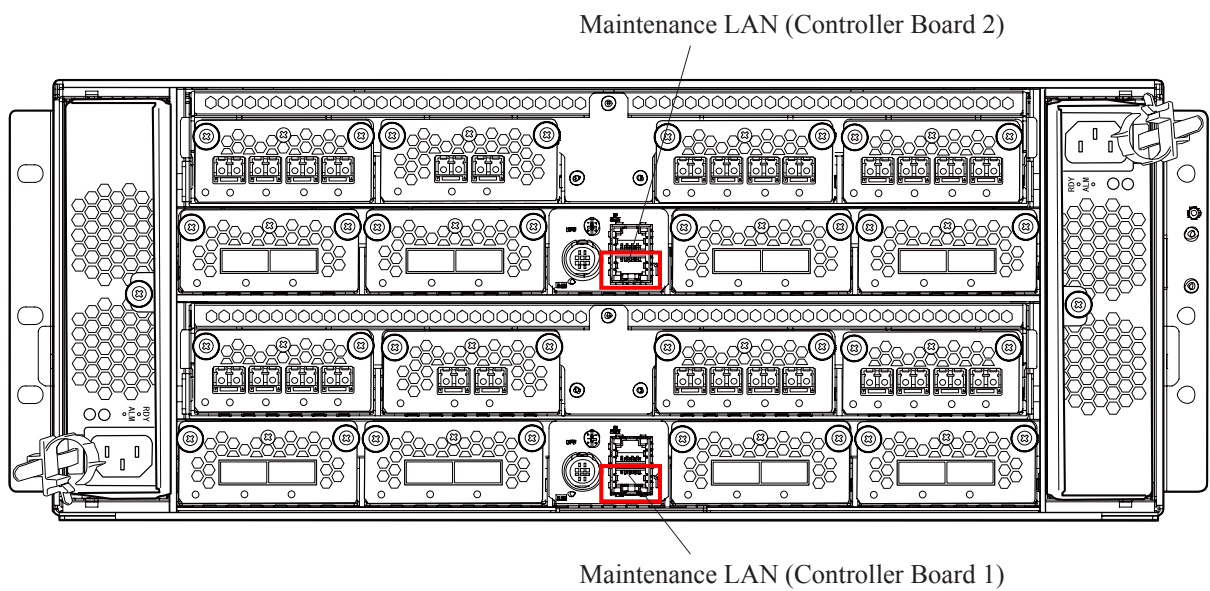
NOTE : For new installation of the Firmware, Controller Board 1 and 2 must be normal.
Connect the LAN cable to the Controller Board 1 side.

3. Connect the power cable of the Maintenance PC to a 100V AC outlet prepared by customers.
4. Turn on the power supply of the Maintenance PC.

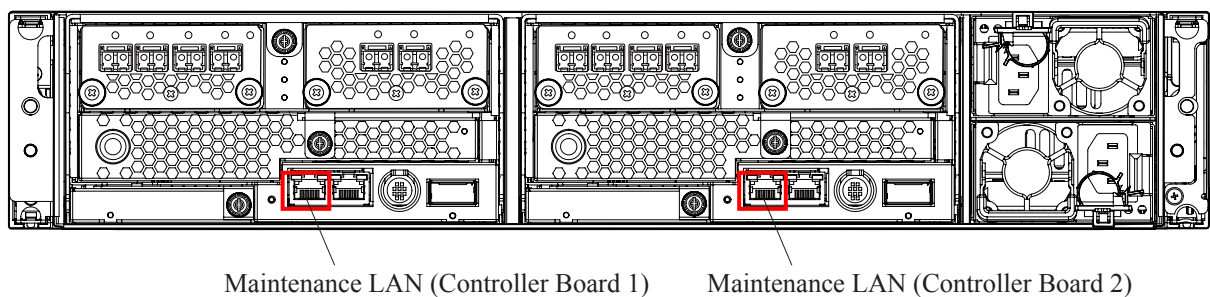
Figure 1-36 Connection of Cables



- CBLM/CBLH (Rear view)



- CBSS/CBSL (Rear view)

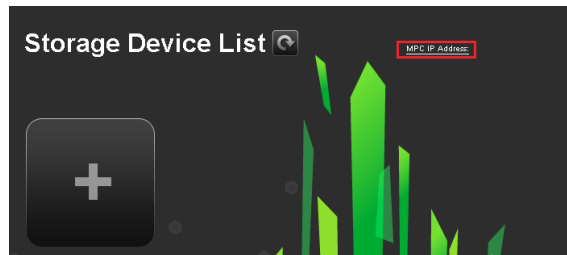


1.6.1.2 Removal Procedure of Maintenance PC

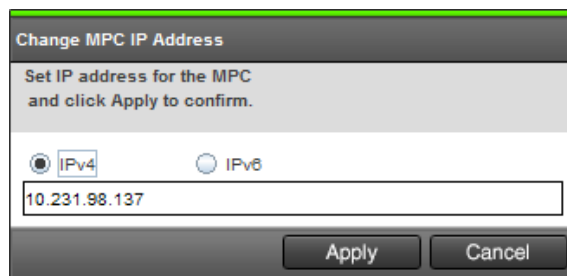
1. Power off the Maintenance PC.
2. Disconnect the power cable from the 100V AC outlet prepared by customers.
3. Disconnect the LAN cable from the Maintenance LAN port at the CTL. (Refer to [Figure 1-36.](#))
4. Disconnect the power cable and LAN cable from the Maintenance PC.

1.6.2 Connecting to the Storage System

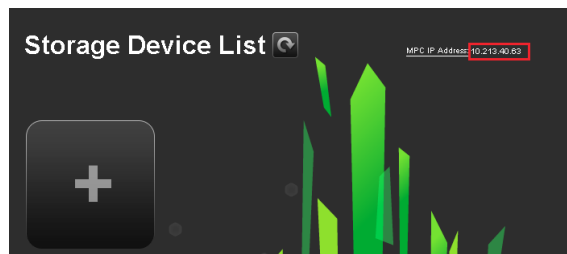
1. Right-click the connection icon “Storage Device List” on the desktop of the Maintenance PC and select [Run as administrator].
2. Set an IP Address.
 - (1) Click the [MPC IP Address] link in the “Storage Device List” window.



- (2) Enter the IP address set in MAINTENANCE PC SECTION “[1.3.1 IP Address Setting Method of Maintenance PC](#)” into the “Change MPC IP Address” window and click the [Apply] button.



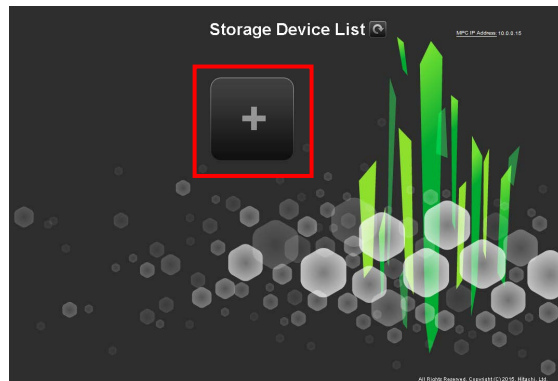
- (3) Check that the IP address is displayed beside the [MPC IP Address] link.



3. Create a Storage System icon.

If the icon already exists, go to [“1.6.3 Starting Web Console”](#)

- (1) Click the plus button in the displayed “Storage Device List” window.



- (2) Perform the Storage System settings in the “Add System” window.
Enter all the items, and then click the [Apply] button.
See the [INST01-06-61](#) to perform it manually.

- When selecting [Auto Discovery]

Item	Description
Software Selection	Specify “Software\productname.inf” in the setup media by the [Browse] button and acquire the installation information.
System Selection	Select the input method of the Storage System information. • [Auto Discovery] (default selection): Acquire the Storage System information automatically. • [Manual]: Set each of the displayed items, [System Type], [Software Version] and [Serial Number].
IP Address (CTL1)	• Select a type of IP address of the maintenance port of CTL1. [IPv4] (Default) [IPv6] • Enter the CTL1 IP address in a format corresponding to the selected IP address.
IP Address (CTL2)	• Select a type of IP address of the maintenance port of CTL2. [IPv4] (Default) [IPv6] • Enter the CTL2 IP address in a format corresponding to the selected IP address.
System Name	Enter a Storage System display name. The number of characters you can enter is zero to 180.
Description	Enter the description of the Storage System. The number of characters you can enter is zero to 180.
User Name	Enter a user name. The number of characters you can enter is one to 256. Only alphanumeric characters and signs (! # \$ % & ' * + - . / = ? @ ^ _ ` { } ~) are usable.
Password	Enter a password. The number of characters you can enter is six to 256.
Not start service after addition immediately	Select whether to connect the registered Storage System immediately. If the checkbox is unchecked, the service starts and Web Console gets ready to start immediately. (Default is unchecked)

- When selecting [Manual]

Add System

Set values for the new System and click [Apply] to confirm.

System Selection: ☐ Auto Discovery ☒ **Manual**

System Type:

Software Version:

Serial Number:
(6-digit Number)

IP Address (CTL1): ☒ IPv4 ☐ IPv6

IP Address (CTL2): ☒ IPv4 ☐ IPv6

System Name:
(Max, 180 characters)

Description:
(Max, 180 characters, or blank)

User Name:
(Max, 256 characters)

Password:
(Max, 256 characters)

☐ Not start service after addition immediately

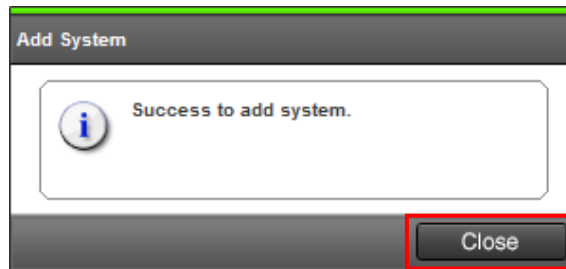
Item	Description
Software Selection	Specify “Software\productname.inf” in the setup media by the [Browse] button and acquire the installation information.
System Selection	Select the input method of the Storage System information. • [Auto Discovery] (default selection): Acquire the Storage System information automatically. • [Manual]: Set each of the displayed items, [System Type], [Software Version] and [Serial Number].
System Selection - System Type	Select a Storage System type. [VSP G800 and VSP F800] [VSP G400/G600 and VSP F400/F600] [VSP G200]

(To be continued)

(Continued from preceding page)

Item	Description						
System Selection - Software Version	Select the Software version, which is supported by the selected System Type in the setup media. The Config version is in parentheses of the Software version. A phrase to identify whether the software is designed for use in Japan or for global use is displayed at the end of the software version. <Example> xx-xx-xx-xx/xx(xx-xx-xx/60) for Japan domestic xx-xx-xx-xx/xx(xx-xx-xx/00) for global • Notes: When a Config version model is 60, “for Japan domestic” is displayed; when a Config version model is 00, “for global” is displayed. Select the corresponding model of the Config version (last two digits after “/”) from the following models depending on the model name of the Storage System. <table> <tr> <th>Model name of the Storage System</th><th>Model of Config version to be selected</th></tr> <tr> <td>HT-40SB, HT-40SC, HT-40SD</td><td>60</td></tr> <tr> <td>DW800</td><td>00</td></tr> </table>	Model name of the Storage System	Model of Config version to be selected	HT-40SB, HT-40SC, HT-40SD	60	DW800	00
Model name of the Storage System	Model of Config version to be selected						
HT-40SB, HT-40SC, HT-40SD	60						
DW800	00						
System Selection - Serial Number	Enter the serial number. The serial number consists of a six digit number beginning with “4”. Only numbers are usable.						
IP Address (CTL1)	Enter the CTL1 IP address. Select IPv4 (Default) or IPv6, and then enter the IP address.						
IP Address (CTL2)	Enter the CTL2 IP address. Select IPv4 (Default) or IPv6, and then enter the IP address.						
System Name	Set the display name of the storage system. The number of characters you can enter up to 180.						
Description	Enter the description of the Storage System. The number of characters you can enter is zero to 180.						
User Name	Enter a user name.						
Password	Enter the password of the Storage System.						
Not start service after addition immediately	Select whether to connect the registered Storage System immediately. If the checkbox is unchecked, the service starts and Web Console gets ready to start immediately. (Default is unchecked)						

- (3) The confirmation message is displayed. Click the [Close] button.



- (4) A Storage System icon is added.



Table 1-28 Icon Display Item

Item	Displayed Description
Storage System Display Name	Display a display name of the Storage System.
Login user name	Display a login user name in the form of "Log in as [user name]".
Storage System type	Display a model type of the Storage System.
Storage System serial number	Display the Storage System serial number.
CTL1 IP address	Display the set CTL1 IP address.
CTL2 IP address	Display the set CTL2 IP address.
Software version	Display the applied software version.
Config version	Display the applied Config version.
Service start	Display whether the service starts automatically when starting the Maintenance PC.
Description	Display the descriptive text entered by a user.

4. Eject media

Remove the media from the DVD drive.

1.6.3 Starting Web Console

1. Click the [Start Service] button of the Storage System icon.

NOTE : When Starting Service is [Auto], the service starts automatically after starting the Maintenance PC. Go to [Step 4](#).

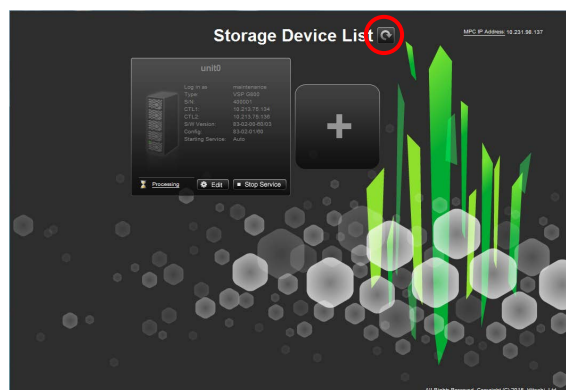


2. The message “Start the service. Is it OK?” is displayed. Click the [Confirm] button.

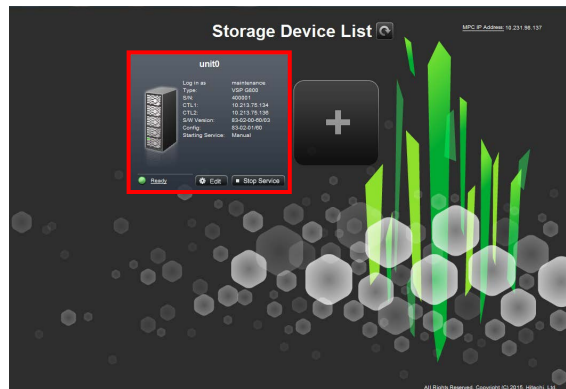
3. The message “The service started” is displayed. Click the [Close] button.

4. Click the refresh button () beside the title of “Storage Device List” and update the Storage System icon to the enable operation status.

- 10 to 20 minutes is needed for changing the Storage System icon to the enable operation status.
- If the Storage System icon is not changed to the enable operation status after 10 minutes, refer to TROUBLESHOOTING SECTION “[3.29 MPC Failure Recovery](#)” and “[3.28.1.5 Background Service Log](#)”.



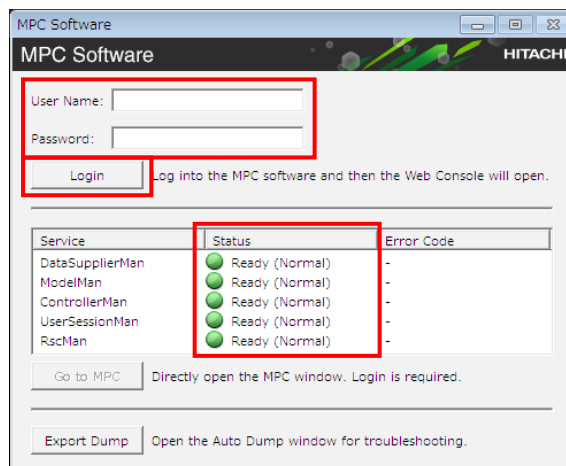
5. Click the Storage System icon.



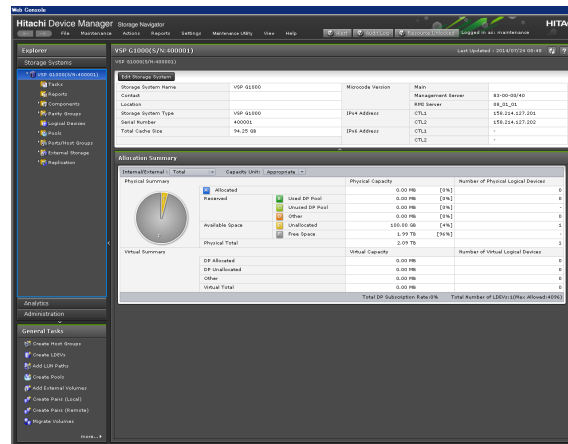
NOTE: When the Firmware version is less than 83-01-21-x0/xx, the [Stop Service] button is not displayed.

6. "MPC Software" is displayed and the service status is checked automatically.
Enter a user name and password and click the [Login] button.
When all become [Ready (Normal)], go to [Step 7](#).

NOTE: If not logged in, the "Web Console" window is not displayed. Check that the [Login] button is inactive.



7. Web Console starts.

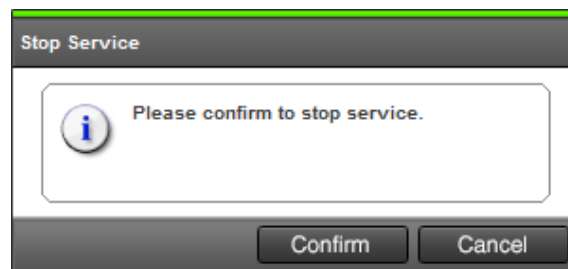


1.6.4 Stopping Web Console

1. Click the [Stop Service] button of the Storage System icon which is running Web Console.



2. The confirmation message is displayed. Click the [Confirm] button.



3. Click the [×] button in the upper right of the Web Console window to stop Web Console.