

# ***PERIODIC CHECK SECTION***

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## 1. PERIODIC CHECK LIST

The following table shows the items of the periodic check for the unit.  
When the parts are replaced, refer to 'REPLACE SECTION' of this manual.

Table 1-1 Periodic Check List

No.	Item	Tools	Frequency of Periodic Check	Check Time	Reference Page
1	Cleaning of air filter	• Vacuum cleaner	Once per year	10 min. per Unit.	<a href="#">PERIOD02-10</a>
2	Check of battery		Once per year	10 min. per Unit.	<a href="#">PERIOD03-10</a> to <a href="#">PERIOD03-20</a>
3	Replacement of battery	• Philips screwdriver	Once per 3 years	11 min. per battery.	<a href="#">PERIOD03-40</a>

## 2. Cleaning the Air Filter

### 2.1 Air Filter Location

The location of the air filters are shown in Fig. 2.1-1.

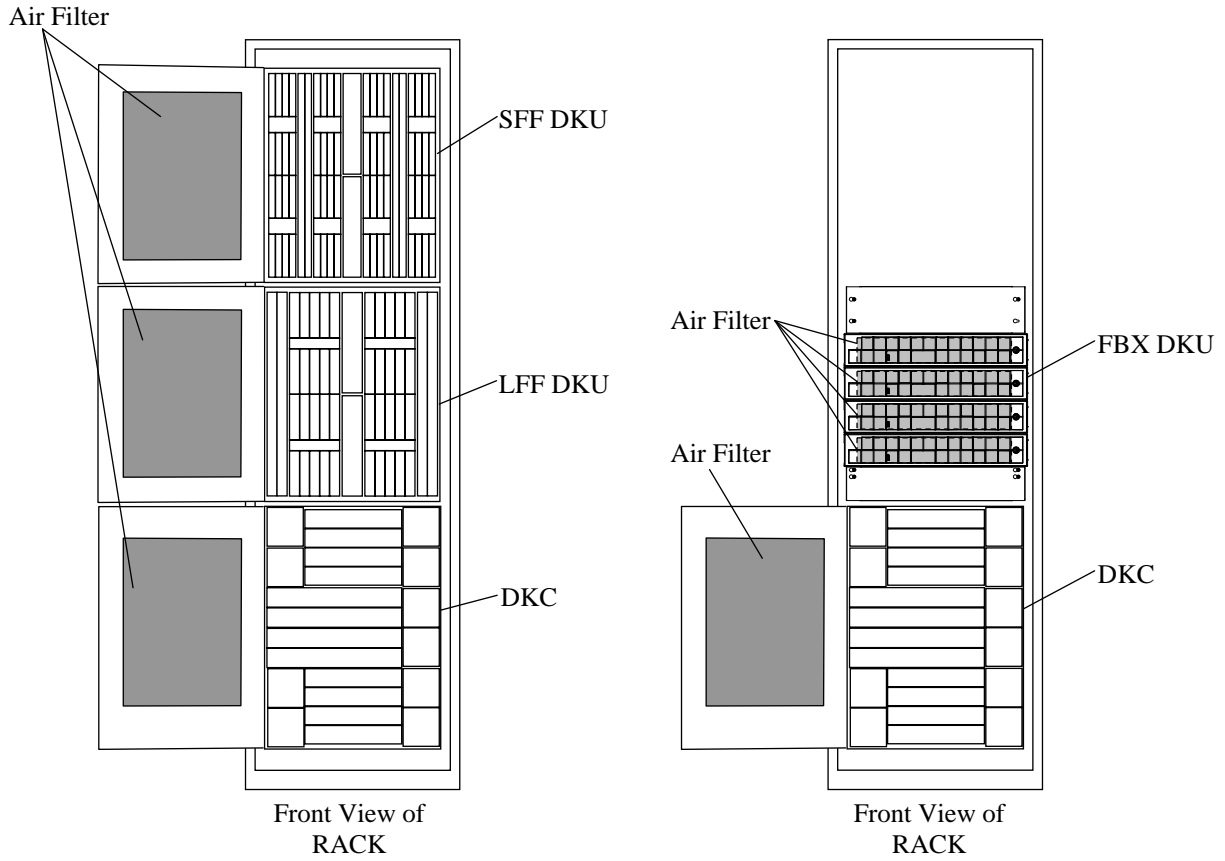
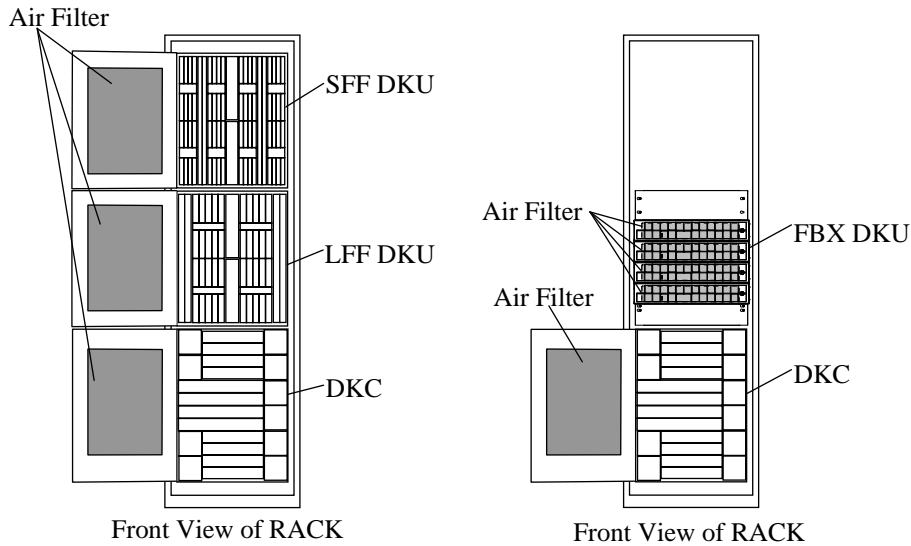


Fig. 2.1-1 Air Filter Location

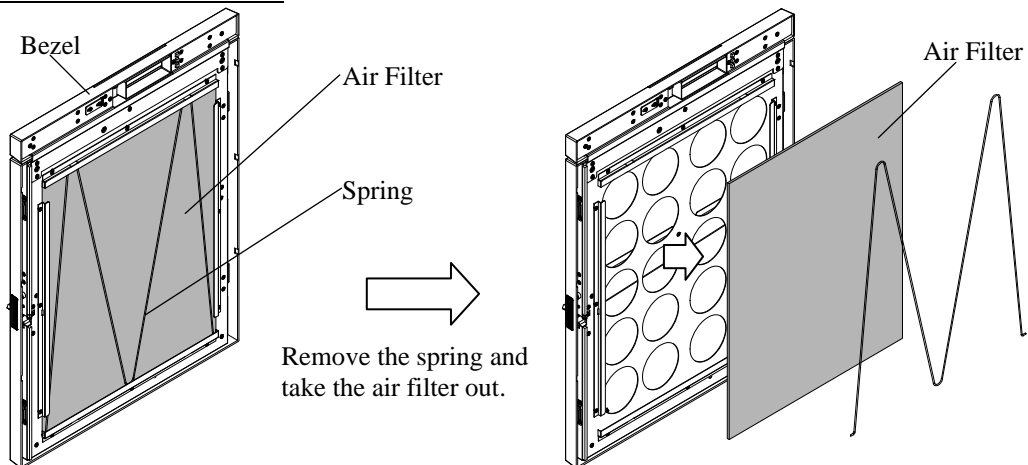
## 2.2 How to remove and re-install the air filter

For bezel opening-closing procedure, refer to INSTALLATION SECTION ([INST03-01-10 through 52](#)).

1. Remove the spring and take the air filter out.
2. Clear the air filter.
3. Attach the air filter with the spring.



### DKC/LFF DKU/SFF DKU



### FBX DKU

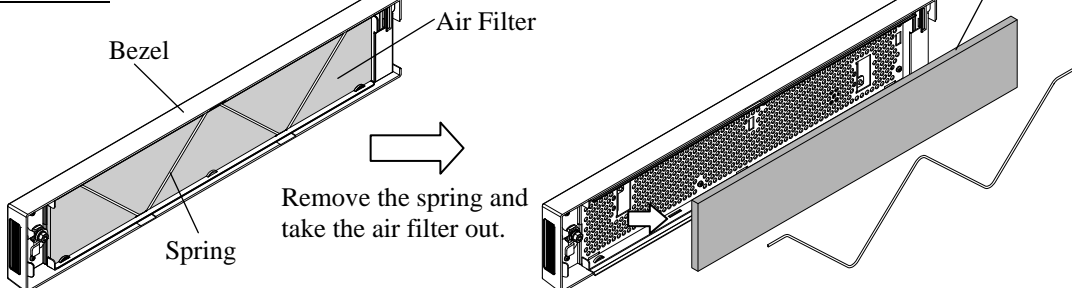


Fig. 2.2-1 Removal of Air Filter

### 3. Check and Replacement of Battery

#### 3.1 Installation Location of Battery

The Basic Rack has the batteries shown in Fig. 3.1-1.

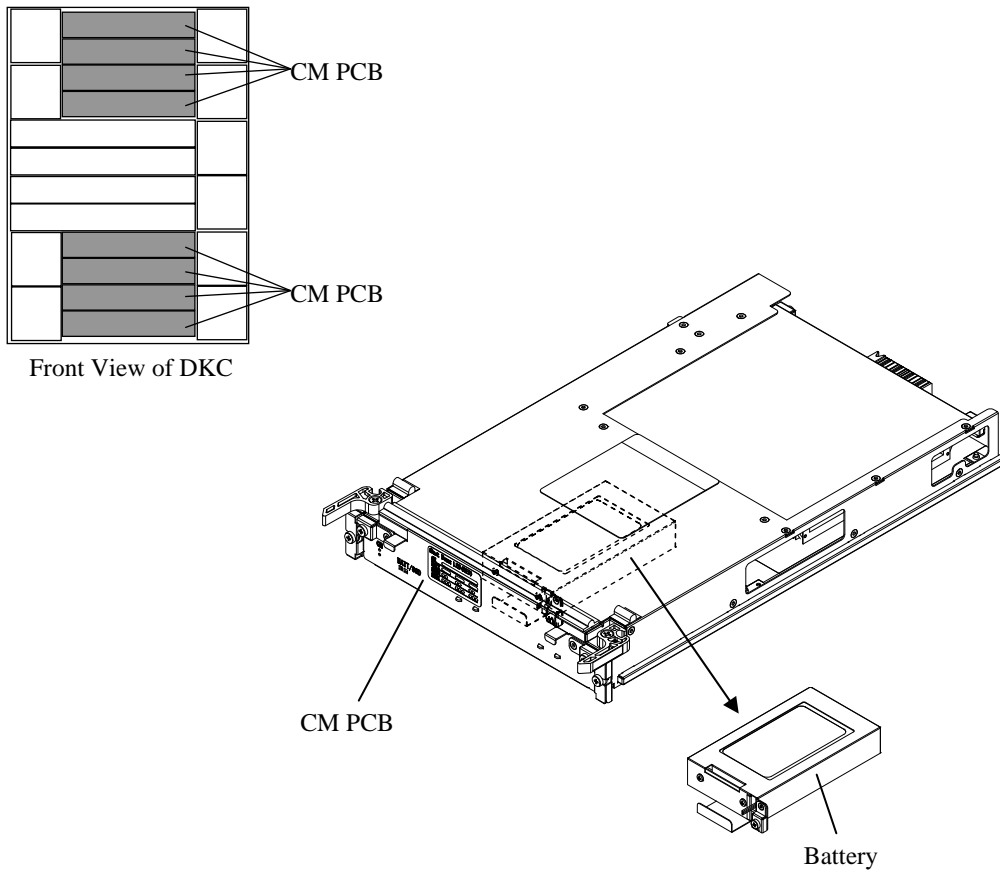


Fig. 3.1-1 Battery Location

## 3.2 Inspecting Battery

### CAUTION

- Execute all inspections without removing the battery.
- Be sure to wear your wrist strap and attach to ground prior to performing the following work. This will ensure that the IC and LSI on the PCB are protected from static electricity. Refer to “Attaching the Wrist Strap” in [INST03-01-60](#).

#### (1) Periodic Check of the battery

Execute the annual check of the battery that is installed in the subsystem on the following items.

- ① Check whether Battery Warning SIM (SIMRC=FFFA0X) and Battery Life Warning SIM (SIMRC=7C0100) has been issued.
- ② Check whether there is any abnormality in the external appearance such as battery fluid leaks.
  - ②-1 Loosen the two screws, and remove the plate of the CM PCB.

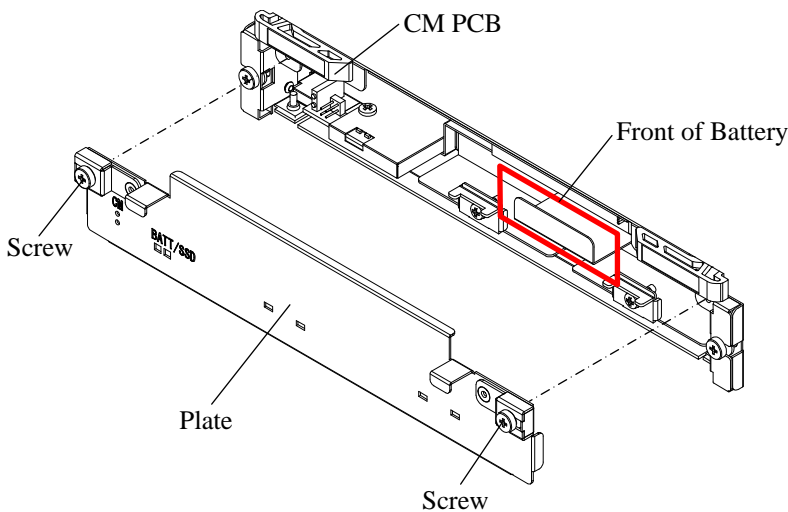


Fig. 3.2-1 Plate Removing

- ②-2 Check whether there is any liquid adhesion or rust on the front of the battery, and replace the battery when there is abnormality. Refer to Work ID RTC7 on the page [REP01-240](#) of REPLACE SECTION for the replacement procedure.
  - ②-3 Install the plate in the CM PCB, and secure it with the two screws.

③ Check the date of Battery Warning SIM <sup>\*1</sup> (Battery Life Warning SIM) of all the CM PCBs.

③-1 Check the date with reference to the page [SVP03-1370](#) of SVP SECTION.

Note: At this time, do not select the check box of [Battery Life Warning SIM] and [Set ...] button.



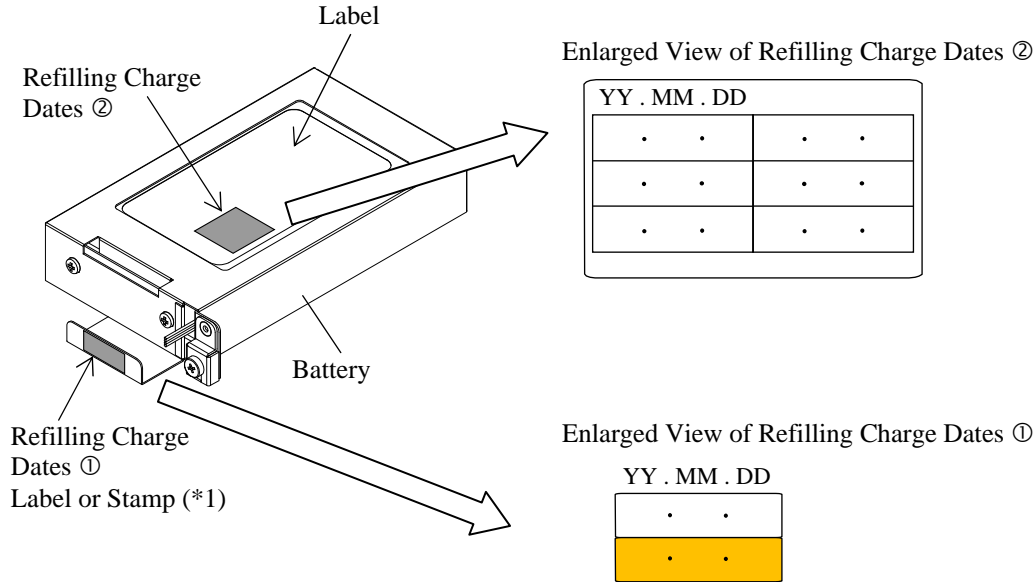
Replace date approaches

③-2 Replace the battery when the replace date approaches.

\*1: The battery must be replaced before reaching the end of the battery life (three years). Battery Warning SIM must be set per battery that is installed in each cache memory adapter to execute the periodic replacement maintenance before reaching the end of the life (three years) of the battery in the subsystem.

### 3.3 Replacing the battery

- (1) Inspection of battery being stored (Batteries installed in the stored Rack are included)  
Allowable storage period and specifications for refilling charge of batteries stored as maintenance parts are shown in the following table.



[Check of refilling charge dates]

When refilling charge dates ① are written, check them.

When refilling charge dates ① are not written, check refilling charge dates ②.

[After refilling charge]

Write the refilling charge date on both ① and ②.

\*1: Some batteries don't have the label for refilling charge dates ①. When the label is not attached, directly stamp the refilling charge date on the same metal part of the battery.

Date of the latest refilling charge	Shipment from the factory			The first refilling charge						The second refilling charge					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Months elapsed															
	Allowable period of storage at the HDS/HP: 12 months at the longest														
	Period of storage at the manufacture: 3 months at the longest (①)			Period of storage at the HDS/HP: 6 months (②)						Period of storage at the HDS/HP: 6 months (③)					
	← Charging is done within 3 months before shipment.			← Charging is done within 3 months before shipment.						← Charging is done within 3 months before shipment.					
	Discard the battery when it has been stored for 9 months (①+②) after the latest refilling charge.									Discard the battery when it has been stored for 6 months (③) after the first refilling charge.					

Fig.3.3-1 Storage Period and Refilling Charge Specifications for Spare Batteries

Table 3.3-1 Specifications for Spare Batteries

No.	Allowable storage period	Allowable times of refilling charges	Time when refilling charge is to be done	Method of refilling charge
1	Six months (when stored at 25°C or lower)	Two times	Refer to Fig. 3.3-1.	Mount the battery in the CM PCB and apply power to it for longer than 3 hours.

\*1: When the refilling charge is done, update the production date of the battery written on the label to the date when the refilling charge is done.

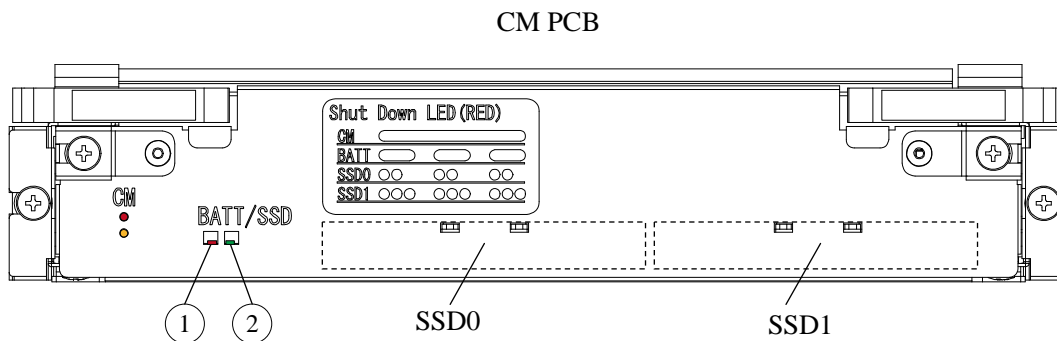


Table 3.3-2 Function of Other Switches and LEDs

No.	Parts Name	Class	Function
1	BATTERY REPLACE	LED (Red)	This LED (Red) indicates the status of replacing battery. <ul style="list-style-type: none"> <li>• Blinking (ON: about one second, OFF: about one second): The battery can be replaced.</li> <li>• Going out: The battery cannot be replaced.</li> </ul>
2	BATTERY CHARGE	LED (Green)	This LED (Green) indicates the status of battery. <ul style="list-style-type: none"> <li>• Lighting: The battery charge is completed.</li> <li>• High-Speed Blinking (ON: about one second, OFF: about one second): The battery is charging.</li> <li>• Medium-Speed Blinking (ON: about two seconds, OFF: about two seconds): The subsystem is powered on and the data in cache memory is saved in SSD.</li> <li>• Low-Speed Blinking (ON: about one second, OFF: about five seconds): The battery is discharging.</li> <li>• Going out: The power is off. The battery discharge is completed. The battery has trouble.</li> </ul> <p>After the power is turned on, the Battery Box is started to be charged and the LED blinks. Though the LED becomes kept on after the charge is completed, it repeats the operation that indicates the refilling charge (blink) and completion of the refilling charge (being kept on) after that.</p>

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- (2) The battery must be replaced before the service life (3 years). For the replacement procedure, refer to the REPLACE SECTION (Work ID RTC7 on page [REP01-240](#)).  
When the replacement is completed, set the warning SIM concerning the battery that demands the next periodic replacement following the directions given on page [SVP02-1370](#) in the SVP SECTION.
  
- (3) When re-installing the Rack, replace all the batteries.

**CAUTION**

The Battery is an industrial waste. Dispose of it following the directions given by the manufacturer.