

# ***PERIODIC CHECK SECTION***

## Contents

- [PERIOD01-10](#) 1. PERIODIC CHECK LIST
- [PERIOD02-10](#) 2. Confirmation Method of DC Voltage
- [PERIOD03-10](#) 3. Cleaning of Air Filter
  - [PERIOD03-10](#) 3.1 Air Filter Location
  - [PERIOD03-20](#) 3.2 How to remove and re-install the air filter
- [PERIOD04-10](#) 4. Check and Replacement of Battery
  - [PERIOD04-10](#) 4.1 Type and Backup Duration Time of battery
  - [PERIOD04-20](#) 4.2 Inspecting Battery
  - [PERIOD04-30](#) 4.3 Replacing the battery

## 1. PERIODIC CHECK LIST

The following table shows the items of the periodic check for the DKC and DKU.  
When the parts are replaced, refer to 'PARTS REPLACEMENT SECTION' of this manual.

Table 1-1 Periodic Check List

No.	Item	Tools	Frequency of Periodic Check	Check Time	Reference Page
1	Check of air filter	· Vacuum cleaner	Once per year	10 min. per DKC. 10 min. per DKU.	<a href="#">PERIOD 03-10</a>
2	Check of battery		Once per year	10 min. per DKC. 10 min. per DKU.	<a href="#">PERIOD 04-10</a> to <a href="#">PERIOD 04-20</a>
3	Replacement of battery	· Philips screwdriver · Hexagon wrench	Once per 3 years	11 min. per battery.	<a href="#">PERIOD 04-30</a>

Table 1-2 Confirmation

No.	Item	Tools	Occasion to check	Check Time	Reference Page
1	Confirmation of DC voltage	· Digital voltmeter · Voltage check fixture	Check the voltage when the Technical Support Division instructs to do that. (The check is not required at the time of the periodical inspection.)	5 min. per logical part	<a href="#">PERIOD 02-10</a> to <a href="#">PERIOD 02-20</a>

## 2. Confirmation Method of DC Voltage

- a. Measure DC +56V current at the check point with a digital voltmeter.

Refer to the following table and figure:

Table 2-1 'Range of Acceptable DC Voltage' on PERIOD02-10

Fig. 2-1 'Location of Voltage Check Point' on [PERIOD02-20](#)

Table 2-1 Range of Acceptable DC Voltage

No.		Standard DC Voltage (Between +DC and GRD)	Acceptable Range (Between +DC and GRD)	Power Supply Location	Remarks
1	DKC	+56V (DKCPS)	+54V to +58V	PS-11	
2				PS-12	
3				PS-13	
4				PS-14	
5				PS-21	
6				PS-22	
7				PS-23	
8				PS-24	
9	DKU	+56V (DKUPS)	+53.67V to +59.33V	DKUPS-xx0	
10				DKUPS-xx1	
11				DKUPS-xx2	
12				DKUPS-xx3	

- b. To check the output voltage of the power supplies, measure it with the voltmeter, by connecting the voltmeter to the voltage check point.  
 If the output voltage of the power supply is not within the acceptable DC voltage, replace it to the spare part. Refer to REPLACE SECTION [[REP01-190](#), [200](#)].

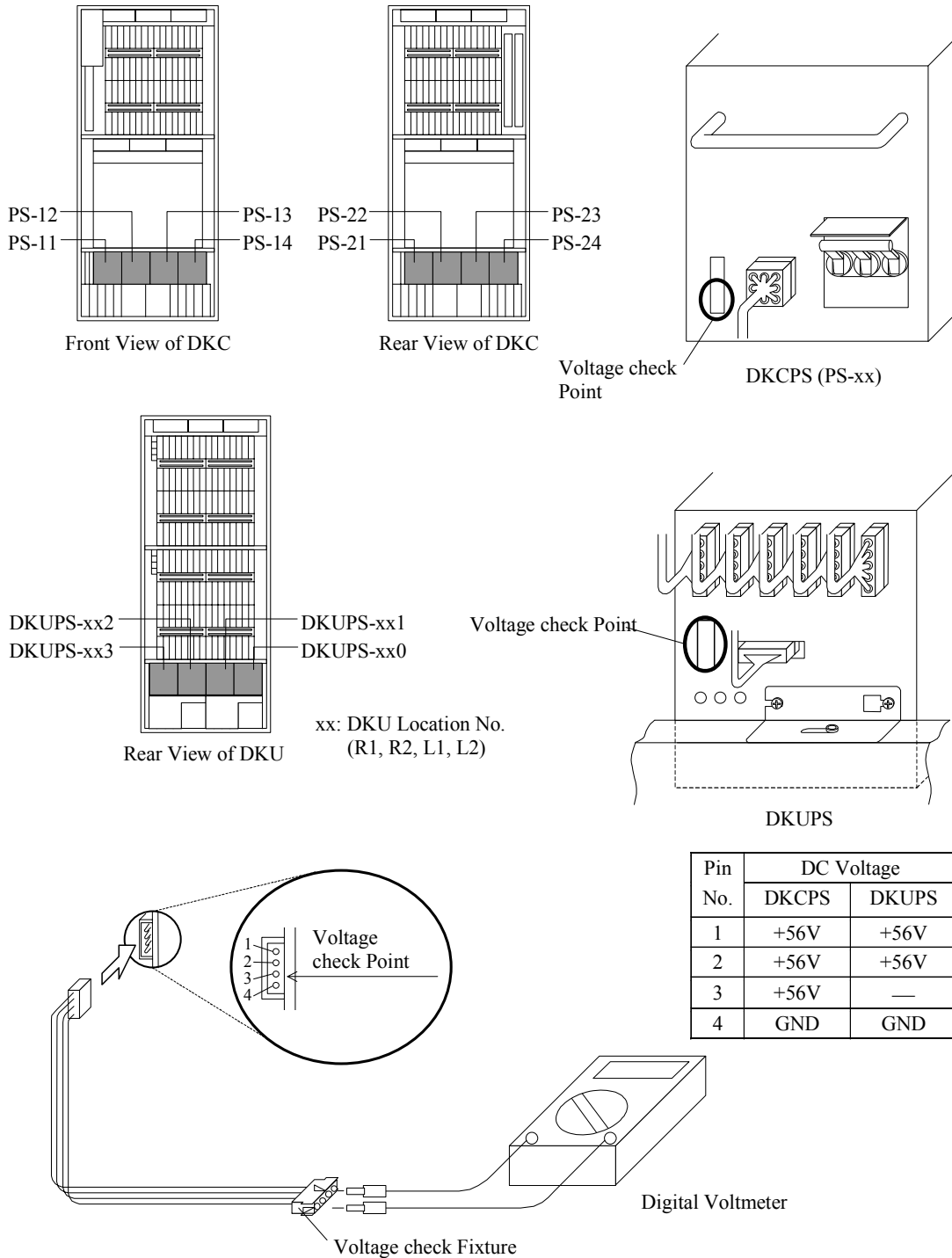


Fig. 2-1 Location of Voltage Check Point

### 3. Cleaning of Air Filter

#### 3.1 Air Filter Location

The location of the air filters are shown in Fig. 3.1-1.

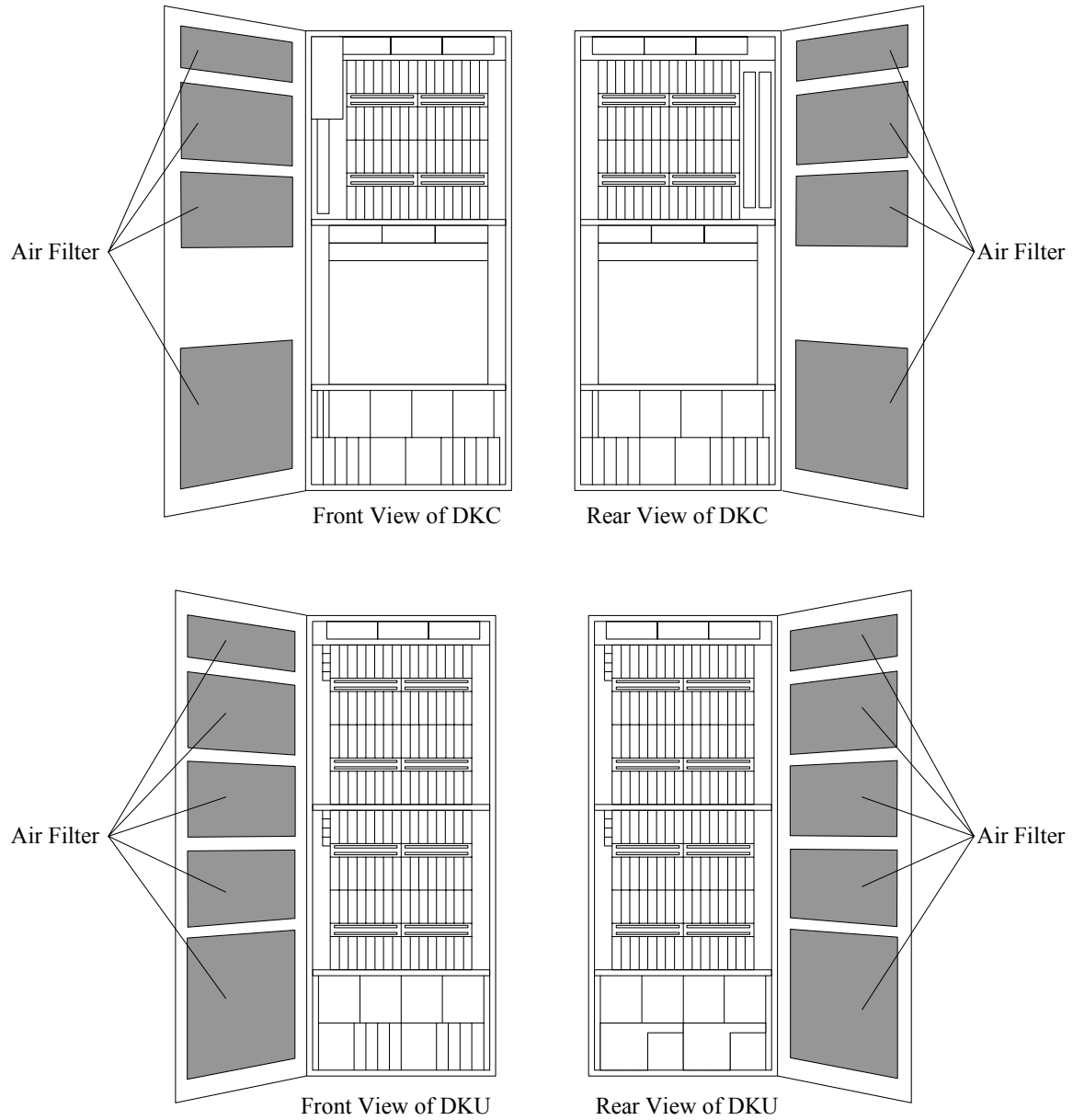


Fig. 3.1-1 Air Filter Location

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

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

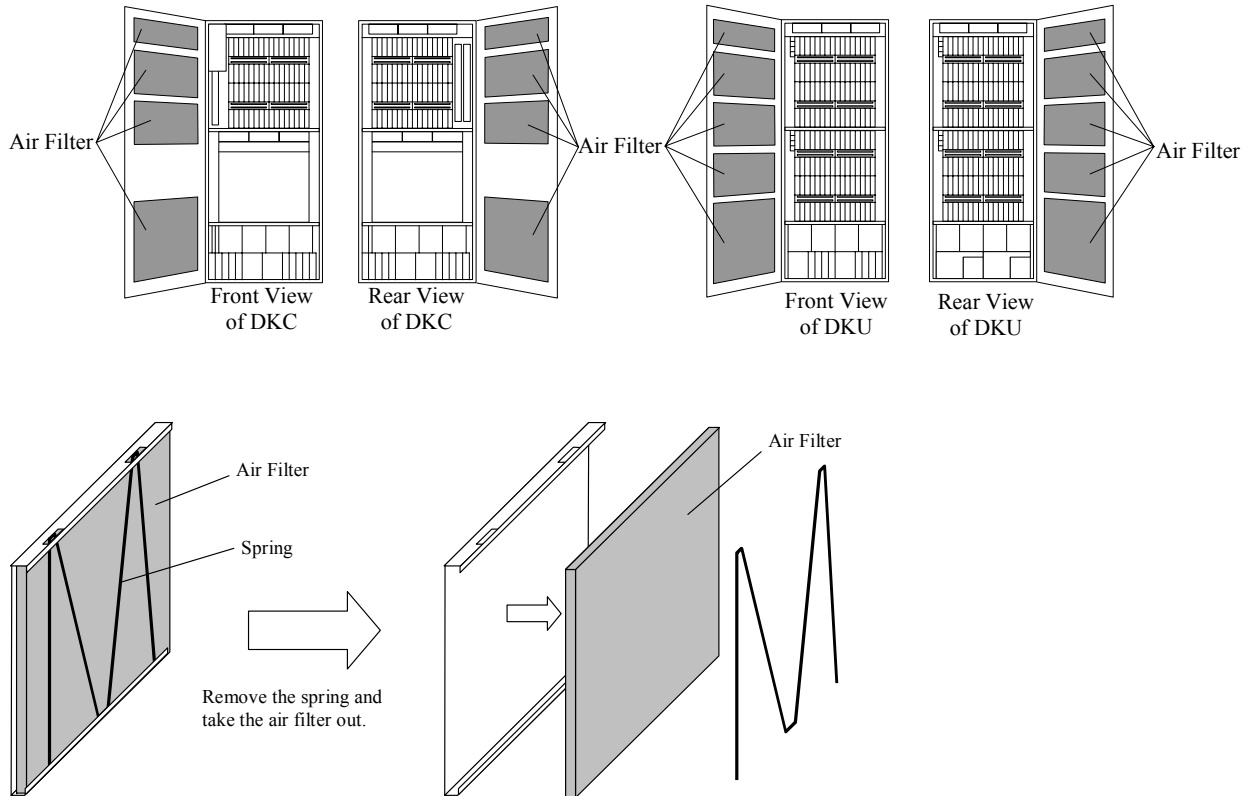


Fig. 3.2-1 Removal of Air Filter

## 4. Check and Replacement of Battery

### 4.1 Type and Backup Duration Time of battery

The DKC has the batteries shown in Fig. 4.1-1. The Backup duration time of battery is shown in Table 4.1-1.

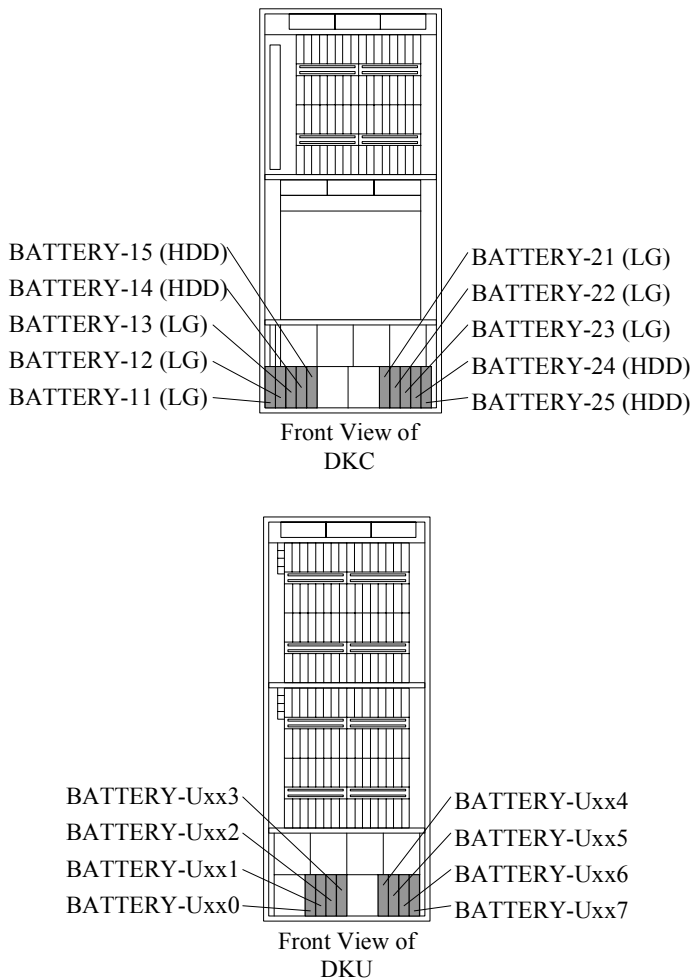


Fig. 4.1-1 Battery Location

Table 4.1-1 Battery Backup Duration Time

Mode	Battery Backup Duration Time				
	① Subsystem Operating	② Data de-stage process	③ Power off process	④ SM/CM backup duration time	
				CM capacity 4 to 128GB	CM capacity 132 to 256GB
De-stage Mode	1 minute	8 minutes	5 minutes	24 hours	18 hours
Back-up Mode	1 minute	—	—	48 hours	36 hours

## 4.2 Inspecting Battery

(1) Periodic inspection of the battery

Inspect the batteries installed in the subsystem on the following matters once a year.

- ① Check if no SIM concerning the battery has been issued.
- ② Check if no trouble such as liquid leakage is observed in the external appearance.
- ③ Check if the working days of the battery is within the service life of the battery shown in the table below referring to the maintenance history and production date shown in the label affixed on the battery.

Table 4.2-1 Battery Specifications

No.	Battery type	Service life
1	For DKC	3 years
2	For DKU	

### 4.3 Replacing the battery

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

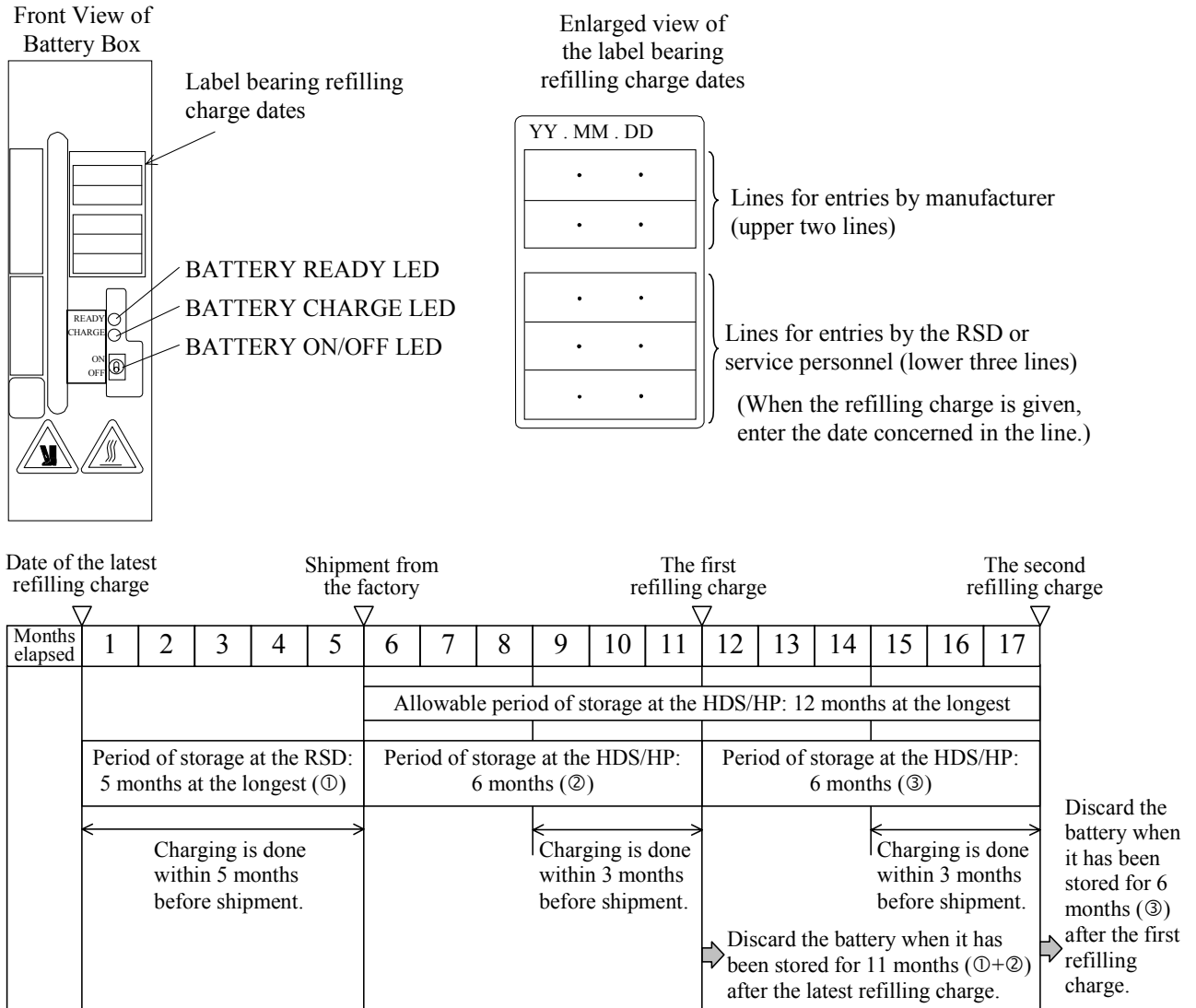


Fig.4.3-1 Storage Period and Refilling Charge Specifications for Spare Batteries

Table 4.3-1 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. 4.3-1.	Mount the battery in the DKC or DKU and apply power to it for longer than 24 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 4.3-2 Function of Other Switches and LEDs

No.	Parts Name	Class	Function
1	BATTERY READY LED	LED (Green)	Indicates that the BATTERY is powered on. If the LED go out after the powering on, replace the Battery Box.
2	BATTERY CHARGE LED	LED (Amber)	This LED shows the state of BATTERY. Lighting ----- The battery charge is completed. Blinking ----- The battery is charging. 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.
3	BATTERY ON/OFF	Switch	Used to power on/off the BATTERY.

- (2) The battery must be replaced before the service life shown in Table 4.2-1. For the replacement procedure, refer to the Replacement Section (Work ID RT10 on page [REP01-190](#), RT23 on page [REP01-200](#)).

When the replacement is completed, set the warning SIM concerning the battery that demands the next periodic replacement following the directions given on page [SVP02-1100](#) in the SVP Section.

- (3) When re-installing the DKC, replace all the batteries.

 **CAUTION**

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