PERIODIC CHECK SECTION

Contents

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	DKC DKU	Reference Page
1	Check of DC voltage	• Digital voltmeter • Voltage check fixture	Once per year	5 min. per logical part	DKC DKU	PERIOD 02-10 to PERIOD 02-30
2	Check of air filter	• Vacuum cleaner	Once per year	10 min.	DKC DKU	PERIOD 03-10
3	Check and Replacement of battery	• Philips screwdriver	Once per year	Check time: 10 min. per DKC. Replacement time: 10 min. per battery.	DKC	PERIOD 04-10 to PERIOD 04-20

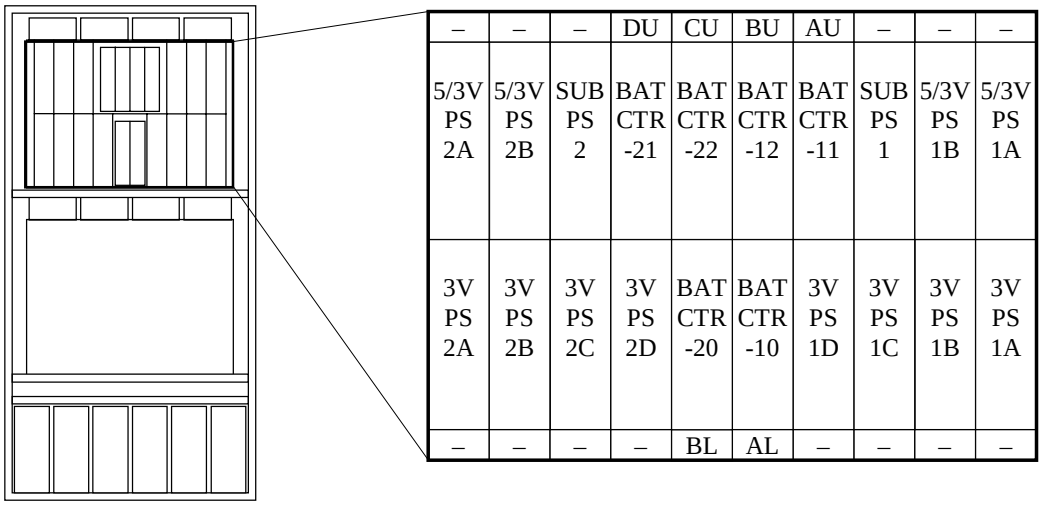
2. Check of DC Voltage

a. Measure DC +3.3V, DC +5V, and DC +12V 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 PERIOD 02-10
   Fig. 2-1 'Location of Power Supplies' on PERIOD 02-20
   Fig. 2-2 'Location of Voltage Check Point' on PERIOD 02-30

Table 2-1 Range of Acceptable DC Voltage

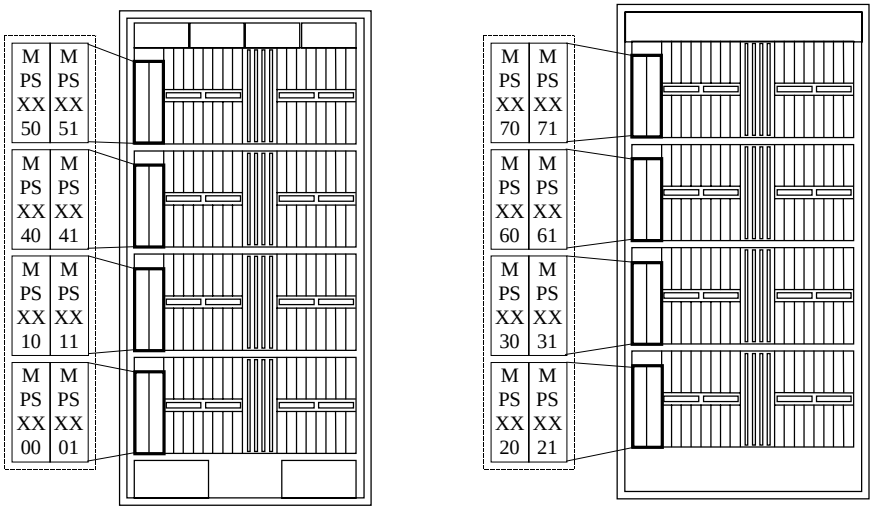
No.	Logic Part	Standard DC Voltage (Between +DC and GRD)	Acceptable Range (Between +DC and GRD)	Power Supply Location	Remarks
1	Cluster 1	+5V/+3.3V	5V : +4.95V to +5.30V	5/3VPS1A	
2		(5/3VPS)	3.3V : +3.30V to +3.57V	5/3VPS1B	
3		+3.3V	3.3V : +3.30V to +3.57V	3VPS1A	
4		(3VPS)		3VPS1B	
5				3VPS1C	
6				3VPS1D	
7		+5V/+12V	5V : +4.90V to +5.20V	SUBPS1	
8		(SUBPS)	12V : +11.83V to +12.57V		
9	Cluster 2	+5V/+3.3V	5V : +4.95V to +5.30V	5/3VPS2A	
10		(5/3VPS)	3.3V : +3.30V to +3.57V	5/3VPS2B	
11		+3.3V	3.3V : +3.30V to +3.57V	3VPS2A	
12		(3VPS)		3VPS2B	
13				3VPS2C	
14				3VPS2D	
15		+5V/+12V	5V : +4.90V to +5.20V	SUBPS2	
16		(SUBPS)	12V : +11.83V to +12.57V		
17	HDU-××0	+5V/+12V	5V : +4.85V to +5.35V	MPS××00	
18		(Multi PS)	12V : +11.45V to +12.65V	MPS××01	
19	HDU-××1	+5V/+12V	5V : +4.85V to +5.35V	MPS××10	
20		(Multi PS)	12V : +11.45V to +12.65V	MPS××11	
21	HDU-××2	+5V/+12V	5V : +4.85V to +5.35V	MPS××20	
22		(Multi PS)	12V : +11.45V to +12.65V	MPS××21	
23	HDU-××3	+5V/+12V	5V : +4.85V to +5.35V	MPS××30	
24		(Multi PS)	12V : +11.45V to +12.65V	MPS××31	
25	HDU-××4	+5V/+12V	5V : +4.85V to +5.35V	MPS××40	
26		(Multi PS)	12V : +11.45V to +12.65V	MPS××41	
27	HDU-××5	+5V/+12V	5V : +4.85V to +5.35V	MPS××50	
28		(Multi PS)	12V : +11.45V to +12.65V	MPS××51	
29	HDU-××6	+5V/+12V	5V : +4.85V to +5.35V	MPS××60	
30		(Multi PS)	12V : +11.45V to +12.65V	MPS××61	
31	HDU-××7	+5V/+12V	5V : +4.85V to +5.35V	MPS××70	
32		(Multi PS)	12V : +11.45V to +12.65V	MPS××71	

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 [REP01-180].



–	–	–	DU	CU	BU	AU	–	–	–
5/3V PS 2A	5/3V PS 2B	SUB PS 2	BAT CTR -21	BAT CTR -22	BAT CTR -12	BAT CTR -11	SUB PS 1	5/3V PS 1B	5/3V PS 1A
3V PS 2A	3V PS 2B	3V PS 2C	3V PS 2D	BAT CTR -20	BAT CTR -10	3V PS 1D	3V PS 1C	3V PS 1B	3V PS 1A
–	–	–	–	BL	AL	–	–	–	–

Rear View of DKC

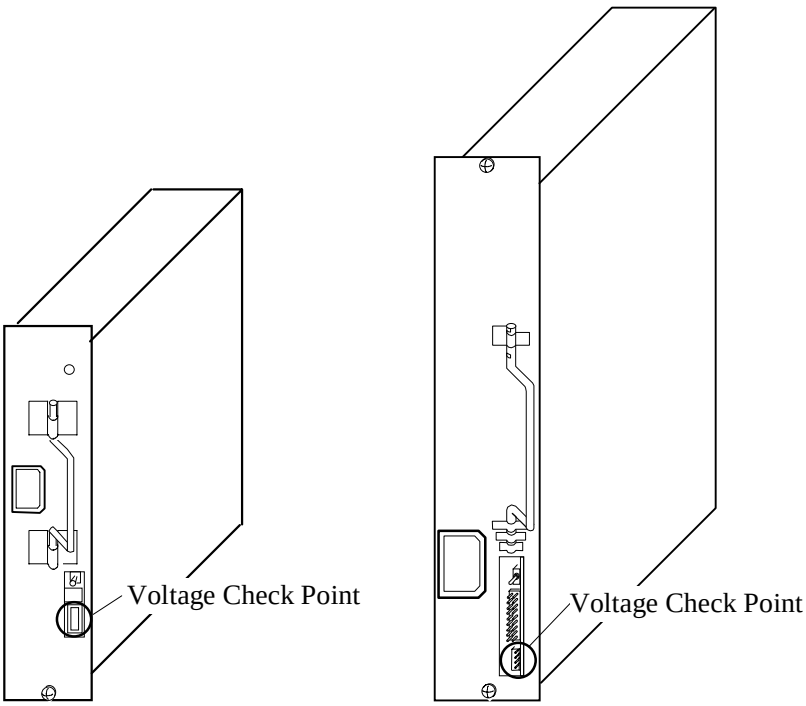


Front View of DKU

Rear View of DKU

Note) XX: DKU Location No.
R1, R2, L1, L2

Fig.2-1 Location of Power Supplies



Voltage Check Point

Pin No.	DC Voltage			
	5/3VPS	3VPS	SUBPS	MPS
1	+5V	+3.3V	+12V	+12V
2	+3.3V	—	+5V	+5V
3	—	—	—	—
4	GRD	GRD	GRD	GRD

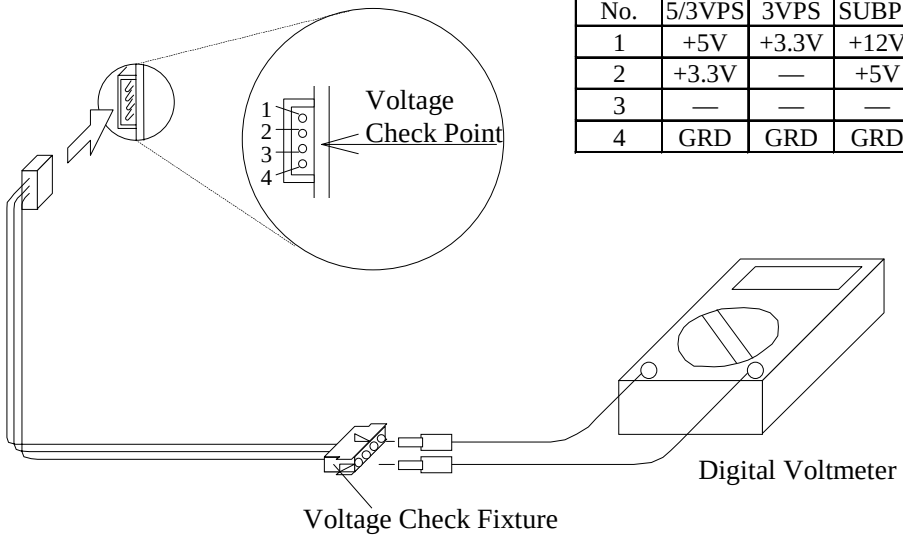


Fig. 2-2 Location of Voltage Check Point

3. Cleaning of Air Filter

3.1 DKC

Clean the air filters located at the bottom of the Front and Rear Logic Boxes and inside the front and rear doors.
The location of the air filters are shown in Fig. 3.1-1.

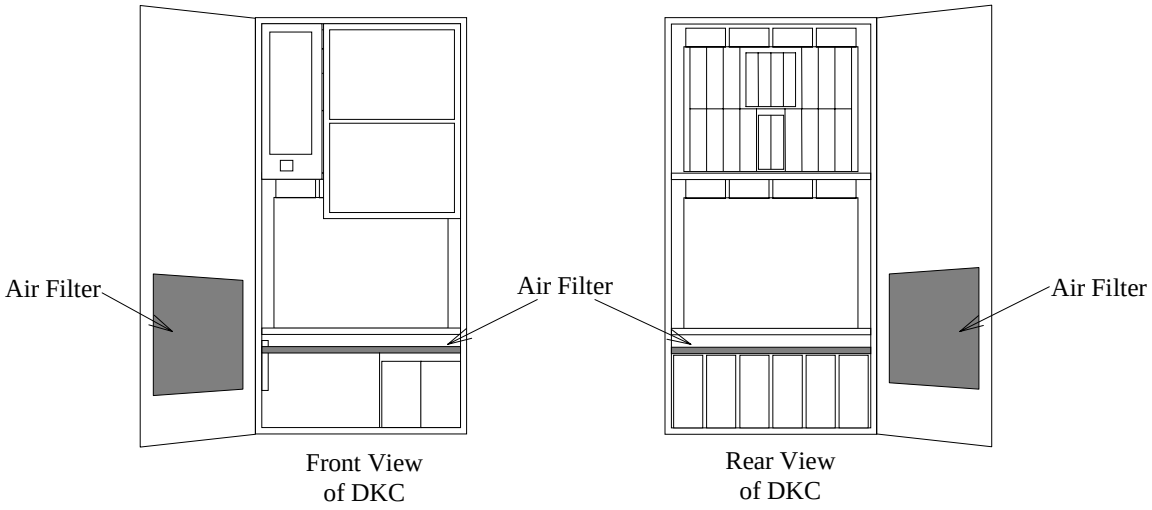


Fig. 3.1-1 Air Filter Location in DKC

3.2 DKU

Clean the air filters located inside the front and rear doors.
The location of the air filters are shown in Fig. 3.2-1.

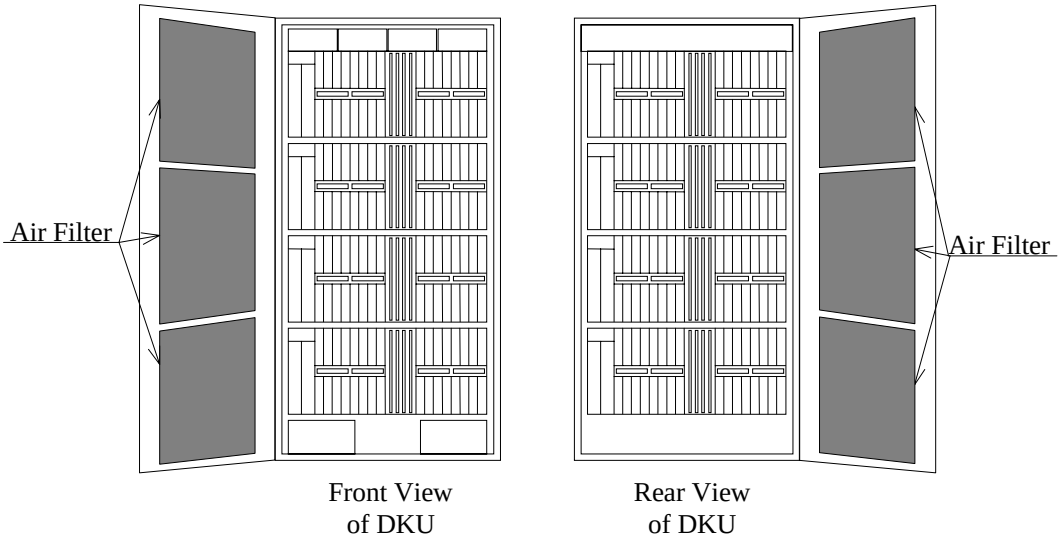
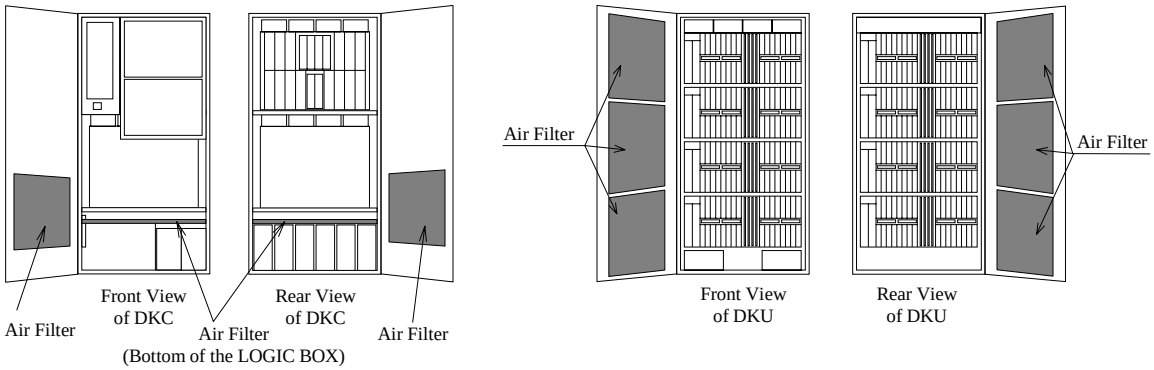


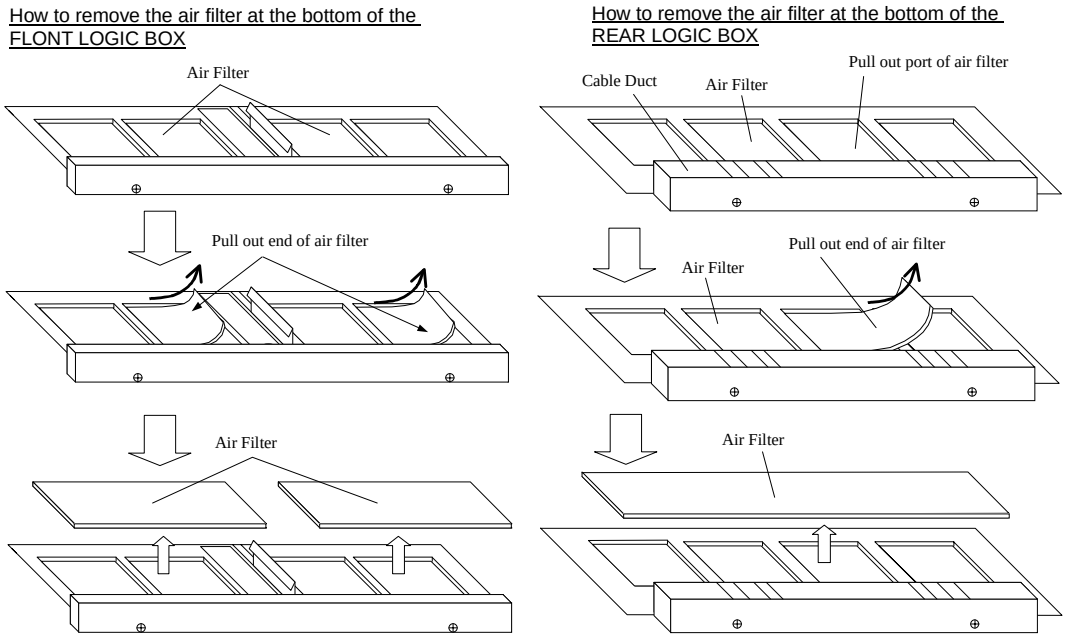
Fig. 3.2-1 Air Filter Location in DKU

How to remove and reinstall the air filter



(1) How to remove the air filter at the bottom of the Front Logic Box
Take out the air filter following the procedure below after removing the cover of the Logic Box, and then clean them.

When taking out or reinstalling the air filter, work carefully not to catch the channel I/F and DEV I/F cables by it.



(2) How to remove the air filter on the door

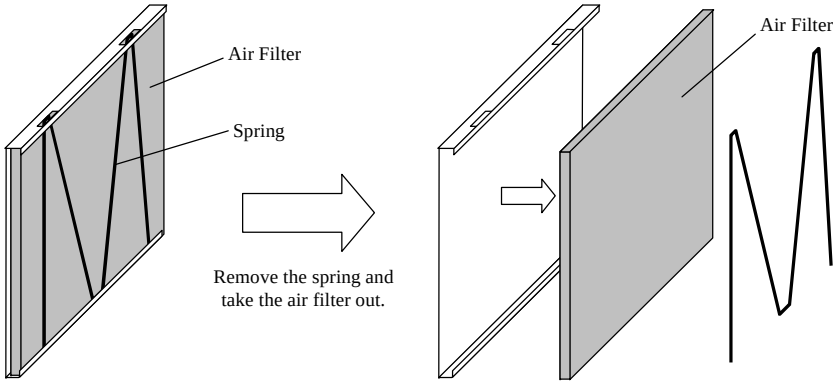


Fig. 3-3 How to Remove Air Filter

4. Check and Replacement of Battery

4.1 Type of battery

The DKC has the batteries shown in Table 4.1-1 and Fig. 4.1-1.

Table 4.1-1 Batteries used in DKC

No.	Battery Name	Logic Part
1	BATTERY-10	Cluster 1 Shared Memory
2	BATTERY-11	Cluster 1 Cache Memory
3	BATTERY-12	Cluster 1 Cache Memory
4	BATTERY-20	Cluster 2 Shared Memory
5	BATTERY-21	Cluster 2 Cache Memory
6	BATTERY-22	Cluster 2 Cache Memory

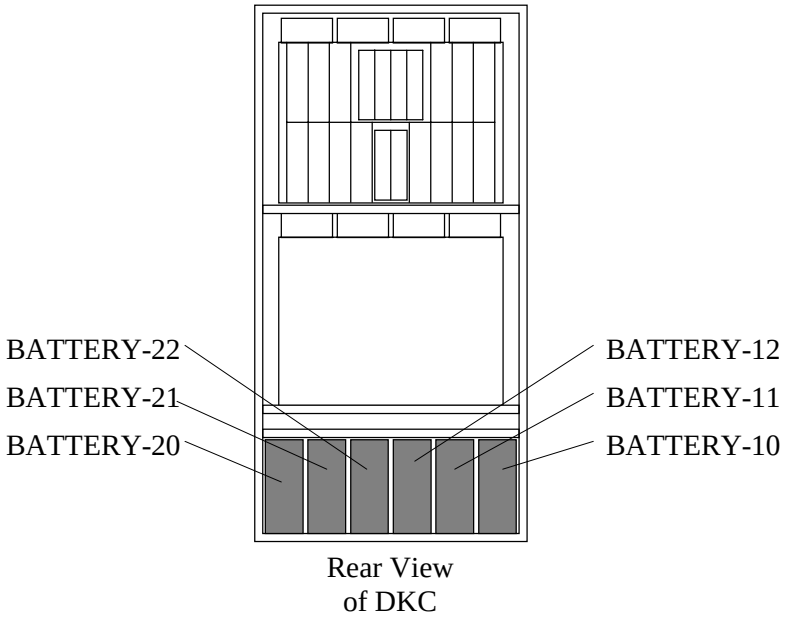


Fig. 4.1-1 Battery Location

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 SM	2.5 years
2	For CM	

(2) Replacing the battery
The battery must be replaced before the service life above expires. For the replacement procedure, refer to the Replacement Section (Work ID RT14 on page REP01-170).
When the replacement is completed, set the warning SIM concerning the battery that demands the next periodic replacement following the directions given on page SVP02-1290 in the SVP Section.

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

Table 4.2-2 Specifications for Batteries Stored for Maintenance

No.	Battery type	Allowable storage period	Allowable times of refilling charges*1	Time when refilling charge is to be done	Method of refilling charge
1	For SM and For CM	Six months (when stored at 25°C or lower)	Once	Until the time shown on the left elapses after the production date written on the label affixed to the battery	Mount the battery in the DKC and apply power to it for longer than 48 hours.
2		Three months (when stored at 25°C to 32°C)	Three times		

*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.
*2: When the storage environment exceeds 32°C the batteries must be discarded.

Dispose of the battery that has been stored longer than the storable period after the refilling charge.

(4) 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.