SAFETY SECTION

FCC STATEMENT Federal Communications Commission (FCC) Statement

WARNING : This equipment generates , uses , and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual , may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Part 15 of FCC Rules , which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

"EINE LEICHT ZUGÄNGLICHE TRENN-VORRICHTUNG,MIT EINER KONTAKT-ÖFFNUNGSWEITE VON MINDESTENS 3mm IST IN DER UNMITTELBAREN NÄHE DER VERBRAUCHERANLAGE ANZUORDEN (4-POLIGE ABSCHALTUNG)."

Maschinen lärm informations verordnung 3. GSGV, 18.01.1991: Der ”höchste” Schalldruckpegel beträt 70 db(A) oder weniger gemäß ISO 7779.

CLASS 1 LASER PRODUCT

Warning
This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Table of Contents

Safety Summary

1 General Safety Guidelines

Read the following safety guidelines carefully and follow them when you conduct maintenance of the machine.

1.1 Before starting maintenance

- Maintenance of the machine must be done only by trained and qualified field engineers.
- Read and follow the safety guidelines and procedures in this manual and the related manuals.
- In this manual and on the machine, hazard warnings are provided to aid you in preventing or reducing the risk of death, personal injury, or product damage.
  Understand and follow these hazard warnings fully.
- The hazard warnings which appear on the warning labels on the machine or in the manual have one of the following alert headings consisting of an alert symbol and a signal word, DANGER, WARNING, or CAUTION.

⚠ DANGER:	indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
⚠ WARNING:	indicates a potentially hazardous situation which, if not avoided, can result in death or serious injury.
⚠ CAUTION:	indicates a hazardous situation which, if not avoided, will or can result in minor or moderate injury, or serious damage of product.
⚠	The alert symbol shown left precedes every signal word for hazard warnings, and appears in safety related descriptions in the manual.

The signal ward 'NOTICE' is used to present warnings which are not directly related to personal injury hazards.

- When warning labels become dirty or start peeling off, replace them.
- If any physical accident such as abnormal noise, smell, smoke or falling down occurs on the Disk Subsystem while running, immediately power off the Disk Subsystem by pulling one of the UNIT EMERGENCY POWER OFF switch on the Disk Subsystem.
- Keep in mind that the hazard warnings in this manual or on the machine cannot cover every possible case, as it is impossible to predict and evaluate all circumstances before hand.
  Be alert and use your common sense.

⚠ SAFETY SUMMARY (Continued)

1.2 UNIT EMERGENCY POWER OFF switch

A UNIT EMERGENCY POWER OFF switch is provided on the operator panel on the front side of the DKC for an emergency powering off. When any abnormality such as an abnormal sound or smell or emitting smoke is perceived, power off the disk subsystem by operating the switch following the procedure below. The procedure for operating the switch is as follows.
For recovery of EPO switch, refer to page SAFETY01-21.

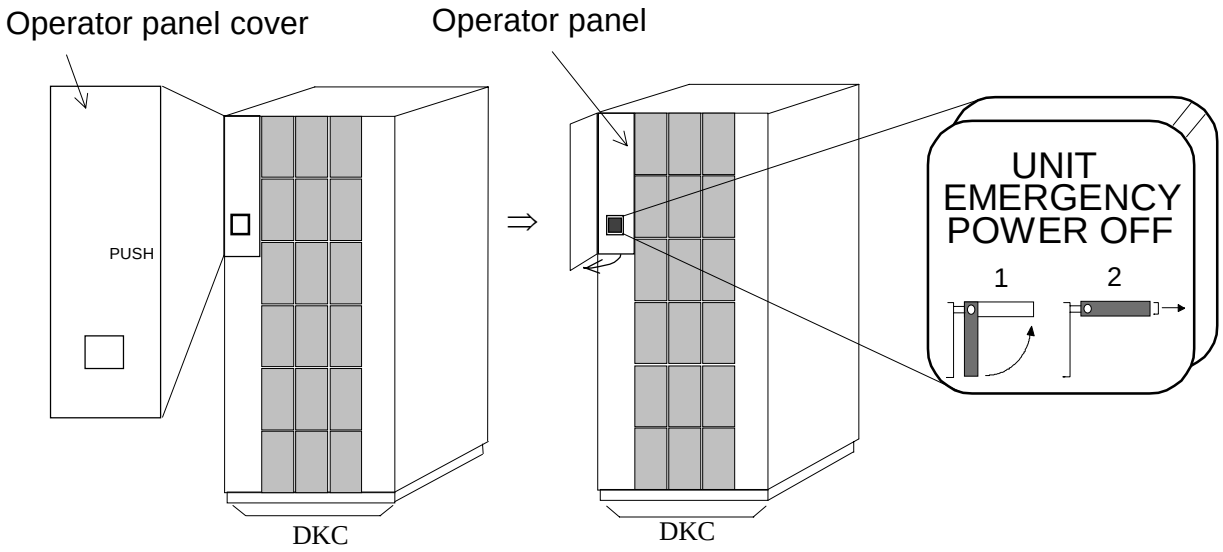

Fig. 1.2-1 Operation of UNIT EMERGENCY POWER OFF switch

- Push the operator panel cover at the portion where a sign "PUSH" is marked, open the operator panel cover, then operate the EMERGENCY POWER OFF switch.
- In using a UNIT EMERGENCY POWER OFF switch, first pull it up and then pull it toward you as illustrated.
- Pulling a UNIT EMERGENCY POWER OFF switch on the Disk Controller instantly shuts down, neglecting the systems power off sequence. Jobs in process are aborted and their integrity after recovery is not guaranteed. Therefore, this method should be used only in an emergency and not in usual maintenance.
- UNIT EMERGENCY POWER OFF switch on the Disk Controller only provide partial power off capability, and AC input power present at primary circuit yet. Therefore, do not use the switches on these units unless powering off of the own unit is obviously enough and safe as an emergency measure.
- When pulled, a UNIT EMERGENCY POWER OFF switch locks itself to prevent further powering on and requires a trained and qualified field engineer for recovery.

Recovery of EPO switch

(1) Remove the EPO switch.
(See REP03-300 to REP03-320 in the REPLACE SECTION.)
(2-a) Push down (PUSH-A) the spring mounted in the removed EPO switch. (See Fig.1.2-2)
(2-b) Then push (PUSH-B) the plunger into the EPO switch. (See Fig.1.2-2)
(3) Attach the EPO switch.
(See REP03-300 to REP03-320 in the REPLACE SECTION.)

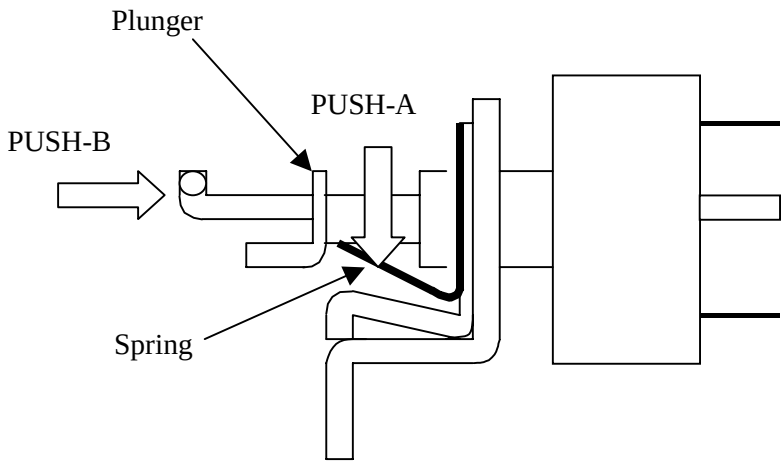

Fig. 1.2-2 Emergency condition

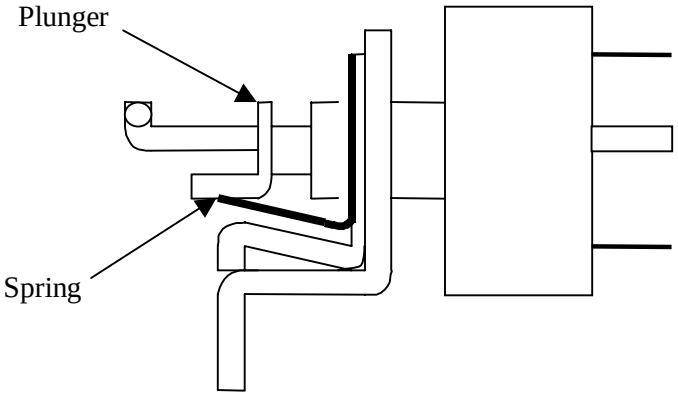

Fig. 1.2-3 Normal condition

⚠ SAFETY SUMMARY (Continued)

1.3 During work

- For each procedure, follow the given sequence of steps.
- Use the spare parts, consumable and materials for maintenance which are specified in the manual; otherwise, personal injury or damage of the machine, as well as deterioration of the product's quality, may result.
- Use the special tools and instruments specified for the work in the manual or commercially available tools and instruments which fit the purpose.
- Use measurement instruments and powered tools which are properly calibrated or periodically inspected.
- Keep the maintenance area neat and tidy.
- Always put away parts, materials or tools when not in use.
- Wear an eye protector where liquid may splash or anything may fly about.
- When lifting anything heavy, hold it close to yourself and keep your back erect, to prevent injury to your back or spine.
  When lifting anything, for the weight of which CAUTION is indicated, use a proper lifting tool or have somebody help you.
- Keep a soldering iron and its stand away from you to prevent accidental contact and burns.
- When using sharp objects or cutting tools, make sure that no part of your body lies in the path of the blade bit, or point.
- Before finishing you work, make sure that all parts removed during maintenance have been installed back in their original positions in the machine.
  Make sure that no tool or foreign material is left in the machine.

⚠ SAFETY SUMMARY (Continued)

1.4 Prevention of electric shocks

- Before starting work, make sure that, unless otherwise specifically instructed, there is no potential electric hazard in the maintenance area such as insufficient grounding or a wet floor.
- Before starting work, note where the emergency power-off switches are located and make sure you know how to operate them.
- Unless otherwise specifically instructed, cut off all power sources to the machine before stating maintenance. Just switching off the machine power supplies is usually not enough.
  When power is fed from a wall or floor outlet, unplug the power supply cord, or turn off the switch on the power distribution panel or board.
  Attach a notice on the panel or board prohibiting the use of the switch.
  If the machine power has been already turned off, make sure yourself that these conditions are satisfied.
- Do not touch any uninsulated conductor or surface, where so instructed, which remains charged for a limited time after the external power supply to the machine is disconnected.
- When working on a machine which has a grounding terminal, make sure that the terminal is properly connected to the facility's ground.
- When working close to a hazardously energized part, do not work alone; work with another person who can immediately turn off the power in an emergency.
- Do not wear any metallic item such as a wrist watch with a metallic surface, or metallic accessories.
  If you wear eyeglasses with a metallic frame, take care not to let the frame touch an uninsulated surface.
- Make sure that your hands and arms are dry.
- Unless otherwise specifically instructed, use only one hand when it is necessary to work near an exposed live electric circuit.
  This prevents the completion of the circuit through both hands even if you accidentally touch the circuit.
- Do not use a dental mirror near an exposed live electric circuit.
  The mirror surface is conductive and can become hazardous even if it is made of plastic.
- Unless otherwise specifically instructed, do not supply power to any subassembly such as a power supply unit or a motor while it is removed from the machine.

⚠ SAFETY SUMMARY (Continued)

1.5 Preventing being caught by rotating or moving parts

- Tuck in your tie, scarf, shirt, or any other loose clothing so that it will not be caught by a rotating or moving part.
- Tie up long hair.
- Unless otherwise specifically instructed, do not supply power to any device with rotating or moving parts which are not properly covered.
- When instructed to supply power to any device with rotating or moving parts whose covers have been removed, work with another person who can immediately turn off the power in an emergency.

1.6 Procedures in an emergency

1.6.1 For electric shock

- Do not be panicked. Do not become another victim through contact with the injured person.
- First, shut off the electric current passing through the victim.
  Use the emergency power-off switch if there is one, or otherwise a normal power-off switch.
  If this cannot be done, push the victim away from the source of the electric current by using a nonconductive object such as a dry wooden stick.
- Then, call an ambulance.
- If the victim is unconscious, artificial respiration may be necessary.
  A proper method for performing artificial respiration or resuscitation should be learned beforehand.
- If the victim's heart is not beating, cardio-pulmonary resuscitation should be performed by a trained and qualified person.

1.6.2 For outbreak of fire

- First, shut off all the power from the machine using the emergency power-off switch if there is one, or otherwise the normal power-off switch.
- If the fire continues burning after the power is shut off, take suitable actions including the use of a fire extinguisher or a call for the fire department.

SAFETY SUMMARY (Continued)

2 Hazard Warning Statements

The following are the hazard warning statements contained in this manual.

2.1 DANGER Statements

- The DKC and the basic DKU commonly have Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Two Power Supply Cords. Similarly, each of the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices.
  (LOCATION04-10, LOCATION04-20)
- The DKC has Two Main Disconnect Devices (Two Main Breaker CB200s for Dual Power Lines) so that AC Power of the unit can be supplied from the separate power distribution board with Two Power Supply Cords. Similarly, each of the 1st DKU, the 2nd DKU, the 3rd DKU, and the 4th DKU also has Two Main Disconnect Devices (Two Main Breaker CB101s for Dual Power Lines).
  (LOCATION04-40, LOCATION04-60)

2.2 WARNING Statements

- Do not touch the internal parts of the AC power cable, the AC Box, or the Breaker Box. Line voltage is present even if the circuit breaker is off.
  (INST03-DKU-240, INST03-CHK-10)

- Be Careful of Electric Shock.
  (REP03-770, REP03-780,REP03-1020, REP03-1030, REP03-1040, REP03-1090, REP03-1100, REP03-1160, REP03-1180, REP03-1250, REP03-1260, REP03-1330, REP03-1340)

2.3 CAUTION Statements

- Perform The Power Cable Kit with care.
  (INST03-PCK-10, INST04-PCK-10)

- Hazardous rotating mechanism.
  (REP03-420, REP03-700)

- Paying attention to falls.
  (REP03-580)

- Watching for short-circuits.
  (REP03-580)

- Perform the UPS Connection Kit with care.
  (INST03-UPS-80, INST03-UPS-90, INST04-UPS-70, INST04-UPS-80)